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REPORT NO. 1532

A COMPENDIUM OF BALLISTIC PROPERTIES OF PROJECTILES OF POSSIBLE INTEREST IN SMALL ARMS

by

L. C. MacAllister
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BALLISTIC RESEARCH LABORATORIES

REPORT NO. 1532

FEBRUARY 1971

A COMPENDIUM OF BALLISTIC PROPERTIES OF PROJECTILES OF POSSIBLE INTEREST IN SMALL ARMS

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ABERDEEN PROVING GROUND, MARYLAND

BALLISTIC RESEARCH LABORATORIES

REPORT NO. 1532

MacAllister/Reiter/Grollman/Thrailkill/emj
Aberdeen Proving Ground, Md.
February 1971

A COMPENDIUM OF BALLISTIC PROPERTIES OF PROJECTILES OF POSSIBLE INTEREST IN SMALL ARMS

ABSTRACT

The report is a compendium of the ballistic properties of projectile shapes of possible interest in small arms applications. The shapes cover a range of L/D ranging from conventional bullets (~3.5) to that of flechettes (~20) and include such shapes as cones, cone cylinders, and cone flares. The ballistic properties are mapped over a range of calibers and projectile densities. A drag-reducing tracer is included as one of the prime design considerations as a means of reducing base drag. Tabulations include velocity, energy, angle of fall, time of flight, and height as a function of range, with constraints on recoil momentum. Aerodynamic coefficients are also included.

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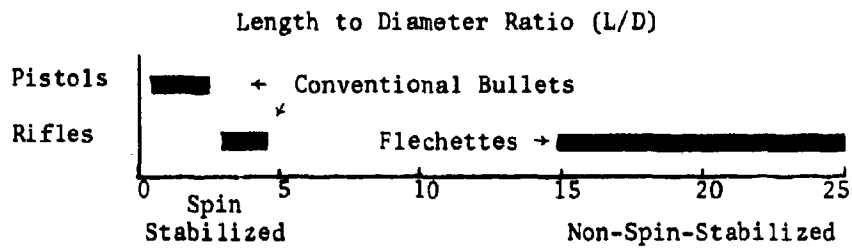
I. INTRODUCTION

The Ballistic Research Laboratories have traditionally been a source of information on artillery projectiles and systems. As small arms systems began to undergo critical scrutiny, the Ballistic Research Laboratories were drawn into the studies and asked to furnish inputs to the Army Materiel Systems Analysis Agency and other agencies concerned. These exercises have usually involved evaluations of generally similar projectiles, from the same or similar weapons, or a few quite different candidate systems in a particular role. Thus the candidates and constraints were quite specific, and the scope of the BRL studies were correspondingly limited. In spite of the large number of highly constrained studies undertaken, no comprehensive small arms projectile study exists. In point of fact, each of these evaluations suggested that peripheral avenues should also have been investigated, at least by a limited paper study, but the necessary inputs, theoretical or experimental, did not exist or were not adequate. There have been a number of areas of concern, but two are oft repeated. These are:

(1) That currently available information on small calibers is limited to a relatively few, generally similar, conventional bullets and a few, generally similar, flechette shapes. This "spectrum" of small arms projectiles can be viewed as follows.



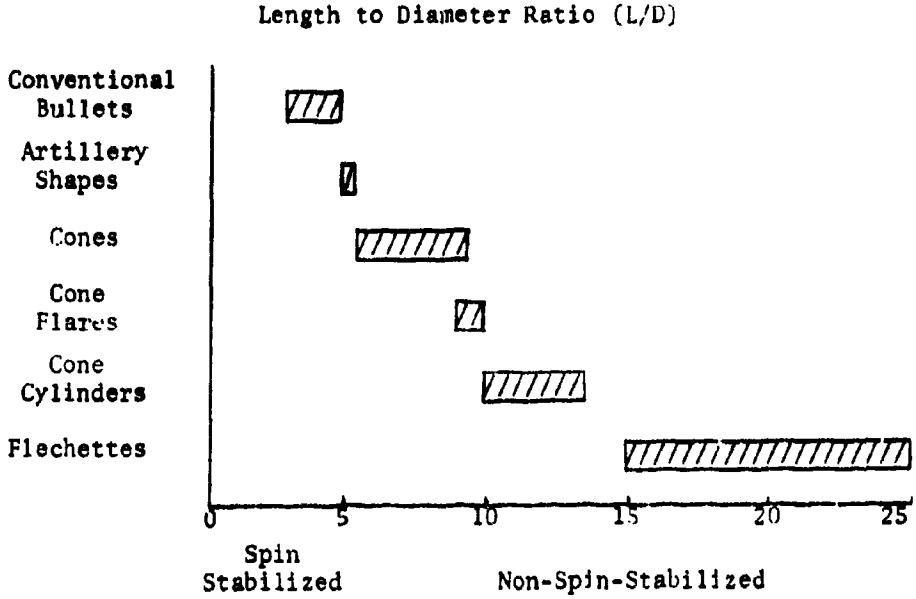
Thus there is information on low L/D full-bore projectiles and on the very high L/D, subcaliber, fin-stabilized, saboted projectiles--and nothing to permit considerations of the in-betweens or permutations of options available for conventional bullets and flechettes.

(2) The possible effect of the tracer on the flight characteristics was not a part of exterior considerations and/or was not available.

It is the intent of this report to present a more comprehensive treatment of small-caliber projectiles, filling in the aforementioned voids and some others. Obviously it is impossible to produce a "handbook of effectiveness" because such an effort would have to include such things as the various measures of effectiveness, considerations of particular targets, terminal ballistics, wound ballistics, interior and exterior ballistics, etc. The permutations would be far too large to handle in any manageable fashion. It did appear, however, that the interior and exterior ballistics aspects could be handled in a general fashion.

In a final evaluation of a given weapon system, in a given role and against a specified target, the hit probability P(H) and the probability of incapacitation given a hit P(I/H), all as a function of cost, weight, etc., are the final arbiters. To obtain P(H) and P(I/H), however, specific interior and exterior ballistics inputs are essential, and in general the initial input to terminal effectiveness is the remaining energy of the projectile. N.B. The terminal energy is only an input, not necessarily a direct measure of effectiveness.

The Ballistic Research Laboratories, as part of an in-house program on small arms, undertook a study in the areas of interior and exterior ballistics which could be done with relative generality and uniform accuracy and which would provide as outputs those characteristics most readily used as inputs in effectiveness studies. A major part of the interest was in possible designs "between" bullets and flechettes with permutations of options around each type of projectile considered. The spectrum of "possible" small arms projectiles was expanded as shown on the following page.



The shapes which were considered are illustrated in Figure 1 and described in Section II-A. The identification code shown on the shapes in Figure 1 is as follows:

CB = conventional bullet
AR = artillery shape
C = cone
CC = cone cylinder
CF = cone flare
FL = flechette
SC = subcaliber

The numbers following designate types within the class, identified by the letter prefixes.

Although there was available measured data on some bullets and some flechettes, for the sake of relative uniformity, interior and exterior ballistic computations were used rather than mixing computed and measured results within the same framework. The computations were done at the highest level of complexity possible considering the lack of definition in a general problem of this nature and the necessity to undertake the computation of almost one thousand cases.

The tracer question addressed in this report is not the classical one associated with ball and tracer ammunition, known frequently as tracer matching. This classical question arises from the following sorts of events. A ball round is selected for a weapon. A companion tracer round is designed and tested. It is observed that the tracer round, though with the same muzzle velocity as the ball round, travels faster and further than the ball. The tracer matching exercise then consists of degrading the performance of the tracer round until its trajectory "matches" that of the ball. The degradation process consists of increasing the drag of the tracer round. A drag increase is necessary because the tracer, by adding heat and/or mass at the base of the projectile, has reduced the base drag component. If a tracer, whose function is to produce light, is an effective way of reducing base drag, hence overall drag, should not drag-reducing tracers be considered? It is in this context that tracers are addressed in this study. Drag-reducing tracers are considered, as a component of projectile design, as means of reducing base drag in the same manner as is boat-tailing, for example. A drag-reducing tracer, as conceived for this study, in no way compromises the light-producing function of conventional tracers. Both functions, light production and drag reduction, could be performed by a tracer of appropriate design.

The work was performed by a team involving members from the Exterior Ballistics Laboratory and the Interior Ballistics Laboratory, with assistance from the office of the Technical Director, the Vulnerability Laboratory, the Army Materiel Systems Analysis Agency, and the U. S. Army Small Arms Systems Agency in setting up logical ground rules, limits, and outputs.

II. DISCUSSION OF VARIABLES, CONSTRAINTS, AND OUTPUTS

The exercise consisted of generating ballistic data on the shapes shown in Figure 1 as a function of those variables to which performance is most sensitive. The variables included, for example, initial velocity, density of projectile, methods of drag reduction, etc. These

variables and the constraints applied provided the bounds or limits for mapping. The choice of variables and the constraints are discussed in this section.

The overall consideration that the desired utility was primarily for the rifle and/or light machine gun roles placed natural constraints on most of the variables used in the mapping. Beyond this, it was necessary to space the variables so that various properties or conditions could be interpolated reasonably. In those instances where it did not interfere with logical spacing or limits, points were selected so that they could be identified, in part, with existing systems. Thus the caliber range included 5.56 mm and 7.62 mm, and the center of the weight spectrum for the full bore study was a homogeneous lead projectile. Thus the user of the results can identify with known data in some areas and make a judgment whether the computed results are pessimistic or optimistic for his purpose. With the definition of a caliber and weight spectrum and a span of initial impulses ranging from the level of SPIW to just below that of the M-14, it was possible to conduct the full-bore diameter projectile phase of the mapping. This was done for the inert projectile and for a projectile with a drag-reducing tracer. All projectiles, except the conventional flechette, were treated in this phase. This was done without excluding cases that seemed dubious for rifle or light machine gun application. Concession was made to reality, however, in that those projectiles that lacked reasonable bore riding surface were saboted to provide two calibers of cylindrical riding surface and tarage losses in muzzle energy subtracted. It is probably true that many of the interpolated designs are of interest only as subcaliber projectiles and a separate phase involving one specially designed projectile, in various sizes, was considered over the bore caliber spectrum, again with and without drag-reducing tracer.

A. The Shape Spectrum

All the shapes discussed in this section are shown in Figure 1.

The usual lead bullet is relatively short, $L/D \leq 4.5$, while the usual subcaliber fin-stabilized flechette is long, $L/D \sim 20$. In between

these two areas there are a variety of possibilities. To anchor the bullet end of the spectrum, three bullet shapes were chosen; nominally these can be identified with the 5.56-mm M-193, the 5.56-mm I.W.K., and the 7.62-mm M-118 match bullet. Two of these are boattailed, and one has a square base.

Because spin stabilization is possible with projectiles of L/D higher than that of conventional bullets (artillery projectiles have L/D's of up to 6), two so-called artillery types were introduced. These have an L/D of 5.5, one model is boattailed, and the other has a square base. These two are scaled down versions of the present and a proposed version of the long-range 175 mm-shell. These two complete the spin-stabilized portion of the spectrum of projectiles of more or less conventional shape.

The high L/D end of the shape spectrum was a clean version of the SPIW flechette. In between the artillery shapes (L/D = 5.5) and the flechette (L/D ~ 20), a number of geometrically simple shapes were introduced: cones with rather low volumes, cone cylinders with higher volumes, and cone flares with yet higher volumes. These selections were all biased toward the lower drag, high-head-length end of the choices of possibilities and have L/D's ranging from 5.7 to 13.5. In that there are a variety of drag levels, volumes, and lengths involved, the use of geometrically simple models does not appear to be a limitation--ogival-cylinder configurations, for example, should be readily interpolatable.

For the purpose of the computations, all projectiles were assumed smooth and to have cleanly cut pointed ogives, cylindrical sections, and boattails. Thus the rounding of junctions and the bulging of tapered areas, common to lead-core bullets, for example, were not reproduced.

B. The Size Spectrum

The size consideration has two facets. The bore size considerations were 5.56 mm, 6.5 mm, and 7.62 mm. In the full-bore projectile phase, these, of course, determined the size of the projectile. In the sub-caliber phase, the same bore size range was used, but the projectile

diameter was varied from 2.54 mm (about a 50 percent subcaliber in a 5.56 mm) in small increments up to 7.62 mm. The same size projectiles (not same relative size) were used in all boros as subcalibor projcctiles up to the point that they could be housed in the given caliber. Thus there are 13 cases for the 5.56 mm and 17 for the 7.62 mm. This mesh had much closer spacing than the full bore because it was felt that there was less known about the expected variations and it might consequently prove more difficult to interpolate logically.

C. The Weight Spectrum

The method of choosing the weight spectrum of the full-caliber phase was conveniently selected by specifying homogeneous shapes of materials with densities equal to that of steel, lead, and tungsten. This has the twofold advantage of identifying with conventially used or proposed materials as well as establishing a range of densities in which projectiles of composite materials will fall. For example, A.P. or A.P.-I-T will have average densities in between or involve small extrapolation.

The possible exception was considered to be the mass-stabilized subcaliber projectile which might be a "light-heavy" metal composite whose total weight would be limited by stability considerations. In this case a trial design was felt to be the only solution, and this was the approach taken. While the design used for the weight estimation was a practical projectile in the stability and structural sense, it represents a particular case and in some situations, if other considerations warranted it, higher weights might be achieved without undue stability penalties. The large number of possible parameters in a multi-metal design, however, would have pyramided the effort; consequently only one design was used in the study, and its equivalent density is about 4.08 gm/cc. All subcaliber projectiles required saboting, and a two bore caliber long plastic one was assumed.

D. Recoil Momenta Spectrum

For a given projectile (or projectiles) having specified shapes, weights, etc., a variety of initial conditions are available for

comparative performance, e.g., equal muzzle velocity, equal muzzle energy, equal recoil momentum, etc. Recall that the ultimate item of interest is effectiveness, i.e., P_I, the probability of incapacitation, as a function of weight, cost, etc.; and that P(I) = P(H) x P(I/H) where P(H) is the probability of a hit and P(I/H) is the probability of incapacitation given a hit. Recall further that the ballistic properties tabulated in this report bear more directly on the latter term P(I/H) and less directly on the former P(H). It is prudent then to select initial conditions that relate most directly and importantly to the hit probability term P(H). Recent work, BRL Report 1764, for example, points out that the aiming error, and hence hit probability, is a fairly strong function of the recoil momentum of the weapon. Hence recoil momenta, rather than initial energy or an arbitrary range of velocities, was selected as one of the constraints defining initial conditions. Discussions with systems analysis agencies and using agencies indicated that the recoil level of the M-14 was probably too high while that of some of the SPIW candidates represents a reasonable lower bound. The points finally selected, i.e., 0.8, 1.2, and 2.1 pound-seconds, can be roughly identified with the SPIW, the M-16, and something slightly less than the M-14 (actually about that of the AK 48). This choice results in slightly more emphasis on the lower end of the spectrum, but this is where the guidance led.

E. Tracer Effect

The inclusion of tracer effect in the scenario requires a different type of consideration from those previously discussed, in that a technical assumption is required because the behavior is not completely understood.[1,2,3,6,7,8,9,10*] It is known that live tracers usually produce drag changes and these changes are usually that of decreasing drag. Observed changes have been from approximately three percent of total drag for larger projectiles and up to 20 percent for some bullets. It can be shown that this cannot be a momentum thrust effect (as a rocket), and the limited available data suggest that it is more akin to a base pressure

**References are listed on page 626.*

change induced by mass and/or heat injection. If this is the mechanism, then it operates only on the base drag component of the total drag, and the reductions in total drag previously cited correspond to 50 to 75 percent decreases in the base drag coefficient. In that the observed effects were produced by devices never designed specifically to decrease drag, some further decreases should be possible if one set out with that as the prime design objective. Other evidence, however, suggests that changes of the base drag component by much more than 100 percent are improbable. With these evidences in mind, a value of 100 percent in base drag reduction was assumed for this study. This implies that the base pressure is raised to one atmosphere. This is, admittedly, a very convenient assumption in that the change to the drag-reducing tracer condition involves only omitting the computed base drag.

While mass and/or heat injection, with consequent base drag reduction, seems to be the most probable mechanism, and the level of reduction assumed does not seem too overly optimistic, the very nature of the assumption has the effect of favoring certain configurations. The maximum benefit will occur for those configurations and in the velocity ranges for which the base drag is highest. A momentum thrust model would have yielded results that were less configuration-sensitive. The nature of the assumption suggested inclusion of some shapes in the study, e.g., cone-flares, that otherwise would not have been considered because of their high base drag. If the assumption were to be substantially incorrect, then some of the configurations would be less attractive than they appear here.

Because the drag-reducing tracer was beneficial, it was assumed to last for essentially the duration of the flight, and enough combustible material was assumed present to last for the longest expected flight time (~3 secs). Even this amount did not perturb the weight or inertial properties of the full-bore projectiles very much, and the effect on launch weight was neglected. Thus the tracer and non-tracer round of the same size are assumed to have the same launch weight, but tracer mass was allowed to burn away during the flight. In the case of bi-metal

subcaliber projectiles the relative volume required by the tracer was higher and, because the projectiles were mass-ballasted, this influenced their stability. Under these conditions the tracer volume and mass were considered more completely in the design and in the computations.

F. Trajectory Constraints

The maximum range of interest, for computational purposes, was selected to be 1100 meters. This more than covers the range of interest for the rifle role and is more the range of interest for light machine guns. The trajectories were adjusted in elevation angle so as to cause projectile impact to occur at 1100 meters. A maximum elevation angle of 100 mils was applied and in those cases where an elevation of 100 mils would not yield 1100 meters, the computed trajectory was terminated at ground impact.

G. Computational Procedure

Within the framework of the preceding constraints and ground rules, the aerodynamic properties of the shapes were computed. The process and results are discussed in the appendix on Exterior Ballistics. The inertia properties for each case also had to be computed, and these are given on the facing page of each tabular section with a sketch of the projectile.

The projectile mass and any auxiliary launch mass were used with the momentum constraints and interior ballistic contribution to determine initial launch conditions. Point mass trajectories were then computed for all the cases. The point mass trajectory involves only drag and gravity, it being implicitly assumed that the projectile is stable and well behaved. The fact that a trajectory could be or was computed for a given case does not imply that the projectile involved is readily made stabilizable; indeed, the fact that a trajectory was computed does not imply that the projectile of a material of the given density could even be launched in one piece.

For those cases where spin stabilization is the probable mode, an ancillary computation was made to determine the twist necessary to yield

a gyroscopic stability factor of 1.4. The computed twist rate is for a homogeneous projectile of the given density. If the given density is achieved by bi-metal construction, or other forms of non-equal distribution of mass, then the tabulated twist rate does not apply.

Further discussion is given in the appendix on Exterior Ballistics.

H. Tabulated Outputs

The most immediately useful tabulated output is probably the remaining energy as a function of range. As previously noted, this is the starting point for most terminal effects computations, for both soft and many hard targets, and these are the penultimate steps in effectiveness or systems analysis. In some circumstances, the velocity is also important in determining terminal effects. The remainder of the trajectory information, height, angle, and time of flight, are involved more in estimating the hit probability against some types of targets.

Some factors of the "differential effects" type are also included, and the usefulness of these may not be so immediately obvious. They are of interest, of course, to the specialist, but in addition they do transmit general information as to the sensitivity of the particular design to change. The sensitivity factors include:

1. The increase in drag due to a unit change in level of yaw.

2. The change in velocity (at each point on the trajectory) due to a one percent increase in drag.

These factors are useful, for example, in the following considerations. The trajectories were run assuming a zero level of yaw, and the relative magnitude of the sensitivity factor between cases indicates the relative sensitivity of the compared cases to, for example, poor launching that induces large yaw. Again, where it is suspected that an average level of yaw may exist over most of the trajectory, the sensitivity factors can be used to determine velocity degradation. Though the sensitivity factors are expressed as drag change as a function of yaw, or velocity change as as function of drag change, they are more general-purpose factors than

the units would suggest. Actually the second factor means a change in retardation, or $\frac{\rho \pi d^2 C_D}{8m}$, where

ρ = air density
d = projectile diameter
C_D = drag coefficient
m = mass of projectile .

This second sensitivity factor serves to reflect a one percent change in air density, or a one percent change in cross sectional area, or, in the reciprocal sense, a one percent change in projectile mass, or any combination that alters the retardation by one percent. Hence departures from the ideal, which do occur in the real world, due to manufacture, launch, etc., may be assessed in a general way through the use of the sensitivity factors.

The corrective term given for velocity change per percentage of drag change permits construction of new cases where the drag change is as much as ±5 percent, retaining essentially the accuracy of the original table.

III. DISCUSSION OF OBSERVATIONS DERIVED FROM STUDY

A. Introduction

As previously noted, it was not the object of the study to produce an effectiveness study per se. Rather, the objective was to provide information essential to effectiveness studies by mapping projectiles, or classes of projectiles, which might be useful in small arms applications. To this end, the effort has been directed more to covering less conventional areas, although a few conventional bullets and a standard flechette are included as base lines.

In the discussions that follow, the remaining energy will be used as a criterion of "goodness" and, as a result, the discussion will have many of the features of an effectiveness presentation. It must not be so construed. At the expense of being overly cautious, let it be

recognized that, though some of the outputs (remaining energy primarily) appear similar to those presented in effectiveness studies, they are not that. Remaining energy, for example, is a measure of effectiveness if and only if all other related factors are assumed to be equal. The burden of making this assumption rests with the user of the information, and indeed for minor perturbations around a given design this assumption may be sufficiently valid for some purposes.

B. General Observations

In a general survey of the cases mapped, a few elements stand out. Some of these are inherent in the physics of the situation, some are influenced by the assumptions used, but some were, in degree at least, surprising enough to note.

1. The drag-reducing tracer yields significant decreases in drag and retardation in many cases and always yields some improvement. Figures 2 through 10 show the effect for full-bore projectiles at a range of 400 meters, and Figures 11 through 19 show the effect at 1100 meters. Figures 20 through 37 show the effect for the subcaliber projectiles at the same two ranges. Showing the effect at two selected ranges is not intended to tell the complete story--the tabulated data do that. A range of 400 meters was selected as an example because it is a reasonable range of interest for rifles. Indeed the QMA for the future rifles specifies an interest in engaging point personnel targets for a range of at least 400 meters.

The 1100-meter range was chosen because it is a range of interest for light machine guns and also to provide better insight to the 400-meter data. For example, many projectiles have quite similar performance (remaining energy) at 400 meters, but at 1100 meters a quite different picture emerges. These disparities in behavior should be an invitation to consult the tabulated data for the details between 400 and 1100 meters.

Our explanation of the effect of the drag-reducing tracer in decreasing drag, consequently increasing energy down-range, is based, we think, on realistic assumptions. In fact, drag reductions of this magnitude have

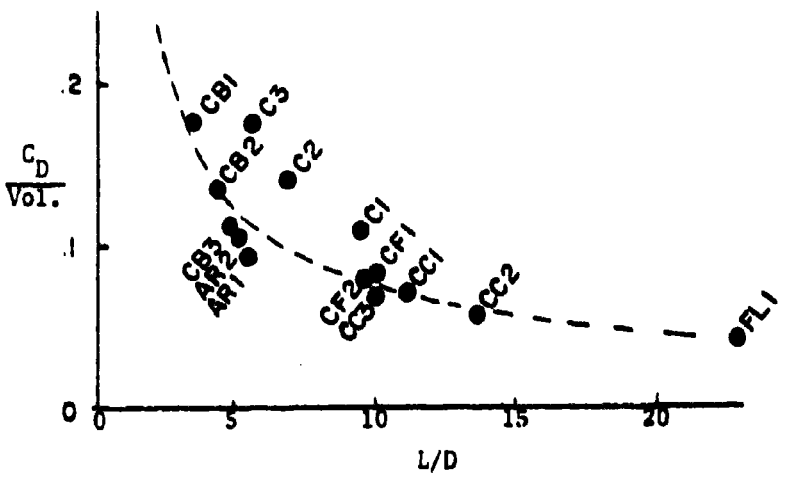
been observed, in limited testing, for some conventional tracers which were, of course, not designed as drag reducers. Some examples are:

a. The Hispano Suiza 20-mm round[5]

b. The M-246 tracer round for Vulcan

c. The NATO family of 7.62 mm, M-62[4]

2. Low-drag artillery shapes (AR-1, AR-2) and some intermediate shapes can have sufficiently lower drag than some conventional bullets to the degree that composite projectiles with the average density of steel (and, of course, a homogeneous steel projectile) can have less velocity fall off than some current lead projectiles. They are also often lighter in weight and hence can have greater initial velocity and energy, for a given level of impulse. A convenient way of viewing the shape spectrum and for getting a feel for how some of the shapes of intermediate L/D compare with flechettes and bullets is as follows:



Thus if one were working on the outer limits of L/D, flechettes for example, and if for some reason it was desirous to decrease L/D, then from exterior ballistic considerations there would be little penalty--over a fairly broad range of L/D.

3. Despite the fact that the general trend of an initial impulse limitation is to favor light, and hence lower density projectiles, there are cases where high-density projectiles appear quite favorably--particularly for small projectiles at longer ranges. In addition, it is apparent that average projectile densities between those of homogeneous steel, lead, or tungsten are optimum in some cases and composite metal projectiles are a way of achieving this optimum. In 7.62 mm and larger sizes, bullets involving three or more materials are not unusual. Where composite projectiles are indicated anyway, consideration should also be given to whether the amount and portioning of the materials can be managed so as to achieve a more optimum design as well as serving their original purpose.

C. Usefulness of the Tabulated Data

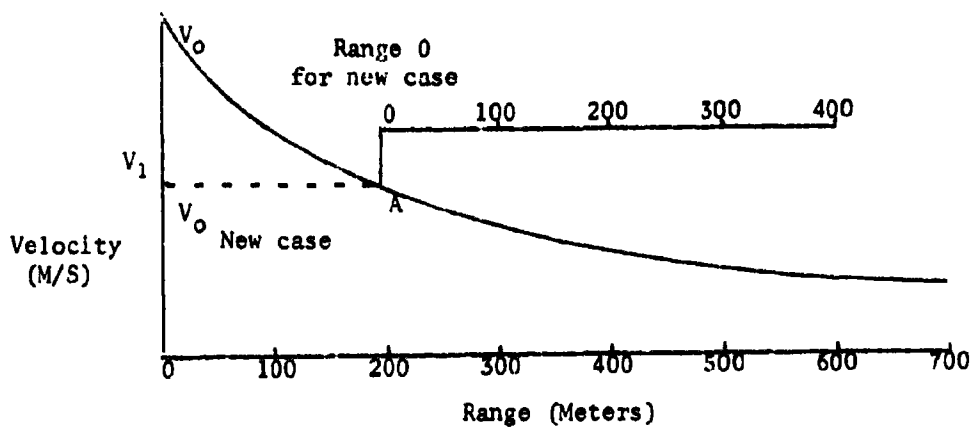
At first glance it might appear that the tabulated data are for very specific projectiles under specific constraints, i.e., specific and unique data points. In that the study was a mapping exercise, they should more correctly be viewed as coordinate points within the map. As such, the data provide a means of exploring more territory than that represented by the cases in the tables. No attempt will be made in this section to illustrate or even list the many and varied ways the data can be used. A few illustrations will be cited or illustrated hopefully to induce the reader to think of others. In addition to the simple and elementary examples used here, a separate appendix is devoted to the solution of sample problems utilizing the tabulated data.

The results tabulated are primarily the trajectories, the remaining velocity, and the remaining energy for the various particular cases. Secondarily, those results that were necessary to obtain the earlier ones, such as the computed aerodynamic data and the computed inertial properties, are also given. These results can be used in various wonderful ways. Among these are:

1. Subfamilies of the actual cases can be plotted to determine trends or sensitivities. For example, for a given caliber and shape, one can investigate the effect of a particular parameter, e.g., bullet weight (or density) on remaining velocity and energy.

2. New concepts or proposals arise, many of which may be near a given case or bounded between two cases. Hence the proposed performance can be often roughly checked or missing elements of performance generally determined rather quickly. Further, the proposed performance can be judged, in the comparative sense, within the context of the full spectrum of small arms projectiles.

3. Many new cases can be interpolated between those tabulated and are implicit in the cases given. For example, the high impulse case for a given projectile and caliber contains the velocity and energy history information for all lower impulse cases--although over a shorter range. The following illustrates this feature for velocity:



The curve is for a tabulated case where the muzzle velocity is V_o. If, for the same projectile, one is interested in a lower initial velocity, say V_1, one simply comes across to the intersection at A and constructs a new range table with origin at point A.

These three examples of how the tabulated data can be used are cited simply as representative of more that can be found in the appendix devoted to that purpose.

To the degree that we have chosen wisely our variables and their magnitudes, the report should present a very comprehensive coverage of the shapes of projectiles that might be of interest in small arms. At the very least, we have brought together under one cover a wealth of information, under comparable conditions, which either did not exist before or was scattered in hundreds of references.

IV. GUIDE TO SECTIONS AND PAGES

The tabulated data are presented in sections--each section devoted to one of the shapes of Figure 1 and containing all data relevant to that particular shape. The sections are ordered (roughly) in increasing L/D. The following is a listing of the order with a brief description of each shape:

Symbol	Description	L/D (Approx.)	Page
CB-1	M-193 type, blunt nose, ogive head, short boattail	3.6	71
CB-2	M-118 type, less blunt, ogive head, longer boattail	4.2	101
CB-3	IWK type, least blunt, ogive head, no boattail	5.0	131
AR-1	Long secant ogive, boattail	5.5	161
AR-2	Longer secant ogive, no boattail	5.5	191
C-1	6° total angle cone	9.5	221
C-2	8° total angle cone	7.2	251
C-3	10° total angle cone	5.7	281
CF-1	8° total angle cone, 4° total angle flare	8.4	311
CF-2	10° total angle cone, 4° total angle flare	7.6	341
CC-1	6° total angle cone, 2-caliber cylinder	11.5	371
CC-2	6° total angle cone, 4-caliber cylinder	13.9	401
CC-3	8° total angle cone, 3-caliber cylinder	10.2	431
FL-1	M-144 type	21.4	461
SC-1	Bimetal similar to CC-1	11.5	491

Each page within a section is numbered serially in the lower right-hand corner, e.g., CB-1-1, CB-2-2, AR-2-3, etc. The first three pages of each section contain details describing the particular shape treated in that section. Page No. 1 of each section contains a sketch with physical dimensions and aerodynamic data. Page No. 2 shows drag coefficient (C_{D_0}) vs. Mach number. On page 3 is normal force coefficient, center of pressure vs. Mach number and static moment coefficient vs. Mach number.

Each page of ballistic data, within a section, contains a heading describing the projectile pertinent to the data on that page and the constraints on the trajectory. The ballistic data in the top center of the page is the data for the projectile without a drag-reducing tracer. The tabulation in the lower portion is that for the projectile with a drag-reducing tracer.

The information in the heading is as follows:

Caliber:	Bore diameter of weapon
Impulse:	Recoil momentum of weapon due to projectile, sabot, and propellant gases with no compensating device at the muzzle
Projectile Weight:	Flight projectile weight as it leaves the muzzle
Projectile Diameter:	Diameter of the projectile (Diameter of a cone flare is the diameter at the juncture of the cone section and the flare.)
Average Density:	As represented, this is the density of a homogeneous body with the volume of this shape and size.
Drag Reducer Weight:	Weight of drag reducing tracer Zero for non-tracer trajectory
Charge Weight:	Weight of propellant charge necessary to attain tabulated muzzle velocity. (See appendix, Interior Ballistics, for assumptions.)
Sabot Weight:	Weight of 2-caliber nonmetallic sabot

Twist Rate:	Rifling necessary (in units of revolutions/ inch of travel) to stabilize the homogeneous body of the tabulated density. Nonhomogeneous projectiles, of the same average density, would require a different twist rate. N.A. appears if stabilization is by other than spin, or if the launch velocity is less than Mach 1.0. The latter convention was adopted on the assumption that velocities lower than this are of no interest in the rifle role.
Pct Drag Change/ (Deg Yaw)**2:	(Read percent drag change per degree yaw squared) A measure of the sensitivity of drag due to yaw. For example, if Pct. Drag Change/(Deg. Yaw)**2 is, say, 0.78, then a 2^{0} yaw will induce an effect of $(2)^{2} \times 0.78 = 3.12\%$ drag change.

The information in the tables is as follows:

The data in the tables represent a point mass trajectory for the projectile, under the conditions, described in the heading. The angle of fire is that required to reach 1100 meters with 100 mils as the maximum allowable angle of elevation.

Columnar data is: range, height, time of flight, angle of fall, velocity, energy, and change in velocity for a unit change (%) in drag. Note that there are two lines for zero range. They differ in that the energy in line one includes the sabot weight and line two only the projectile weight. The angle of fall is the angle of the velocity vector with respect to the horizontal. The D(V)/D (percent drag change) is the change in remaining velocity at the given range for an increase of one percent in drag.

The tabular values in the lower half are for the same round but with a drag-reducing tracer.

Each section is concerned with one shape and the parameters of caliber, impulse, and density were varied in the same sequence for each shape. As a consequence, comparable conditions are found on the same section page number within each section as follows for full-bore projectiles:

Section Page No.	Caliber (mm)	Impulse (lb. sec.)	Average Density gm/cc
4	5.56	.8	7.8 (steel)
5	5.56	1.2	7.8 "
6	5.56	2.1	7.8 "
7	5.56	.8	11.0 (lead)
8	5.56	1.2	11.0 "
9	5.56	2.1	11.0 "
10	5.56	.8	16.7 (tungsten)
11	5.56	1.2	16.7 "
12	5.56	2.1	16.7 "
13	6.50	.8	7.8
14	6.50	1.2	7.8
15	6.50	2.1	7.8
16	6.50	.8	11.0
17	6.50	1.2	11.0
18	6.50	2.1	11.0
19	6.50	.8	16.7
20	6.50	1.2	16.7
21	6.50	2.1	16.7
22	7.62	.8	7.8
23	7.62	1.2	7.8
24	7.62	2.1	7.8
25	7.62	.8	11.0
26	7.62	1.2	11.0
27	7.62	2.1	11.0
28	7.62	.8	16.7
29	7.62	1.2	16.7
30	7.62	2.1	16.7

For subcaliber projectiles there are small departures from the format just described. These are:

(1) The flechette does not have a trajectory associated with a drag-reducing tracer.

(2) The bi-metal subcaliber is concerned with one shape but with emphasis on diameter as a prime variant.

As a consequence, the tabulations are best viewed in this fashion:

Caliber (mm)	Projectile Weight (grams)	Projectile Diameter (mm)	Impulse 0.8 lb.sec. See page No.	Impulse 1.2 lb.sec. See page No.	Impulse 2.1 lb.sec. See page No.
5.56	.27	2.54	4	5	6
5.56	.46	3.05	7	8	9
5.56	.52	3.18	10	11	12
5.56	.59	3.30	13	14	15
5.56	.73	3.56	16	17	18
5.56	.81	3.68	19	20	21
5.56	.90	3.81	22	23	24
5.56	1.10	4.06	25	26	27
5.56	1.32	4.32	28	29	30
5.56	1.56	4.57	31	32	33
5.56	1.84	4.83	34	35	36
5.56	2.14	5.08	37	38	39
5.56	2.82	5.56	40	41	42
6.50	.27	2.54	43	44	45
6.50	.46	3.05	46	47	48
6.50	.52	3.18	49	50	51
6.50	.59	3.30	52	53	54
6.50	.73	3.56	55	56	57
6.50	.81	3.68	58	59	60
6.50	.90	3.81	61	62	63
6.50	1.10	4.06	64	65	66
6.50	1.32	4.32	67	68	69
6.50	1.56	4.57	70	71	72
6.50	1.84	4.83	73	74	75
6.50	2.14	5.08	76	77	78
6.50	2.82	5.56	79	80	81
6.50	3.68	6.10	82	83	84

Caliber (mm)	Projectile Weight (grams)	Projectile Diameter (mm)	Impulse 0.8 lb.sec. See page No.	Impulse 1.2 lb.sec. See page No.	Impulse 2.1 lb.sec. See page No.
7.62	.27	2.54	85	86	87
7.62	.46	3.05	88	89	90
7.62	.52	3.18	91	92	93
7.62	.59	3.30	94	95	96
7.62	.73	3.56	97	98	99
7.62	.81	3.68	100	101	102
7.62	.90	3.81	103	104	105
7.62	1.10	4.06	106	107	108
7.62	1.32	4.32	109	110	111
7.62	1.56	4.57	112	113	114
7.62	1.84	4.83	115	116	117
7.62	2.14	5.08	118	119	120
7.62	2.82	5.56	121	122	123
7.62	3.68	6.10	124	125	126
7.62	4.70	6.60	127	128	129
7.62	5.86	7.11	130	131	132
7.62	7.45	7.62	133	134	135

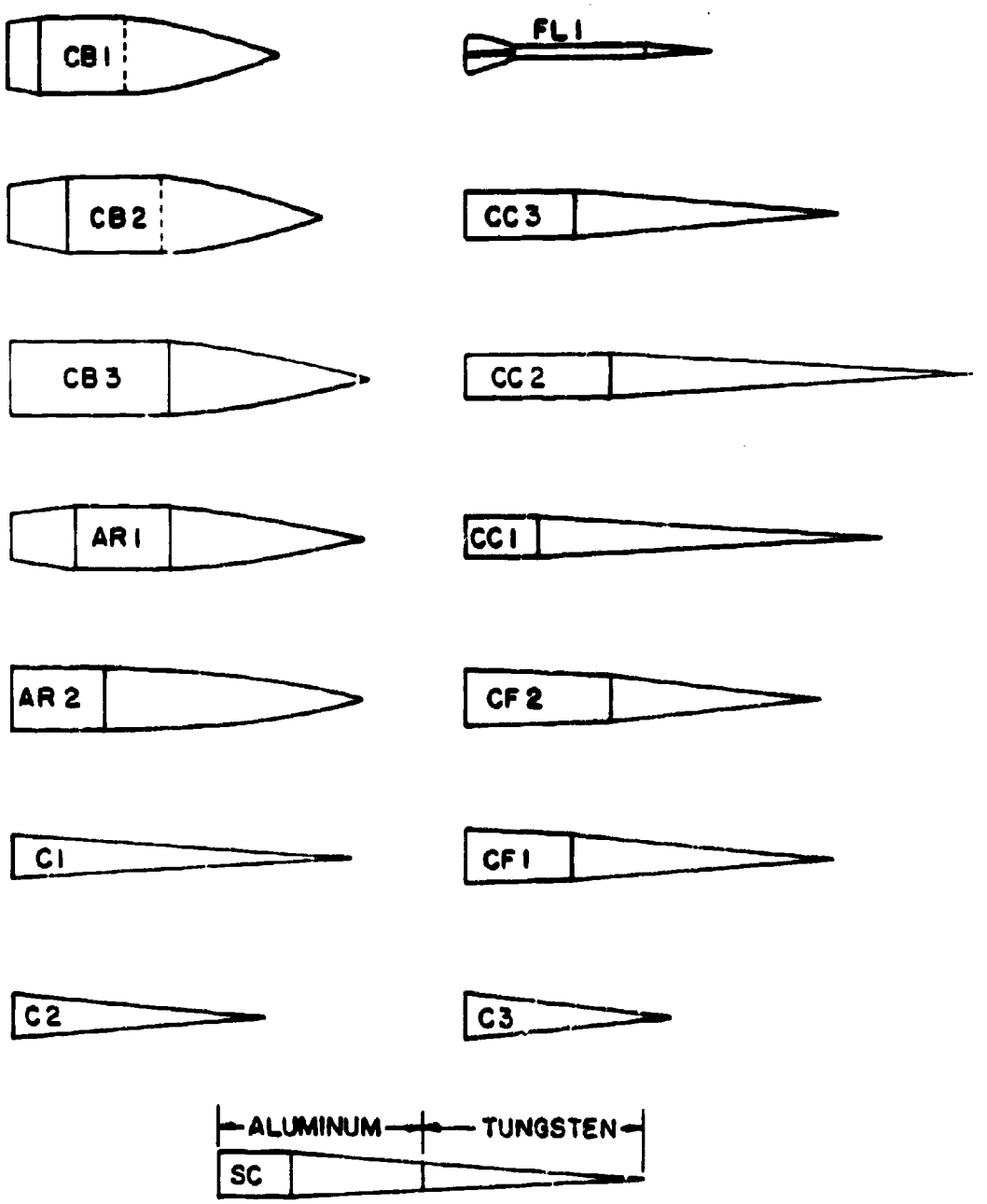


Figure 1. Projectile Shapes Considered in Study

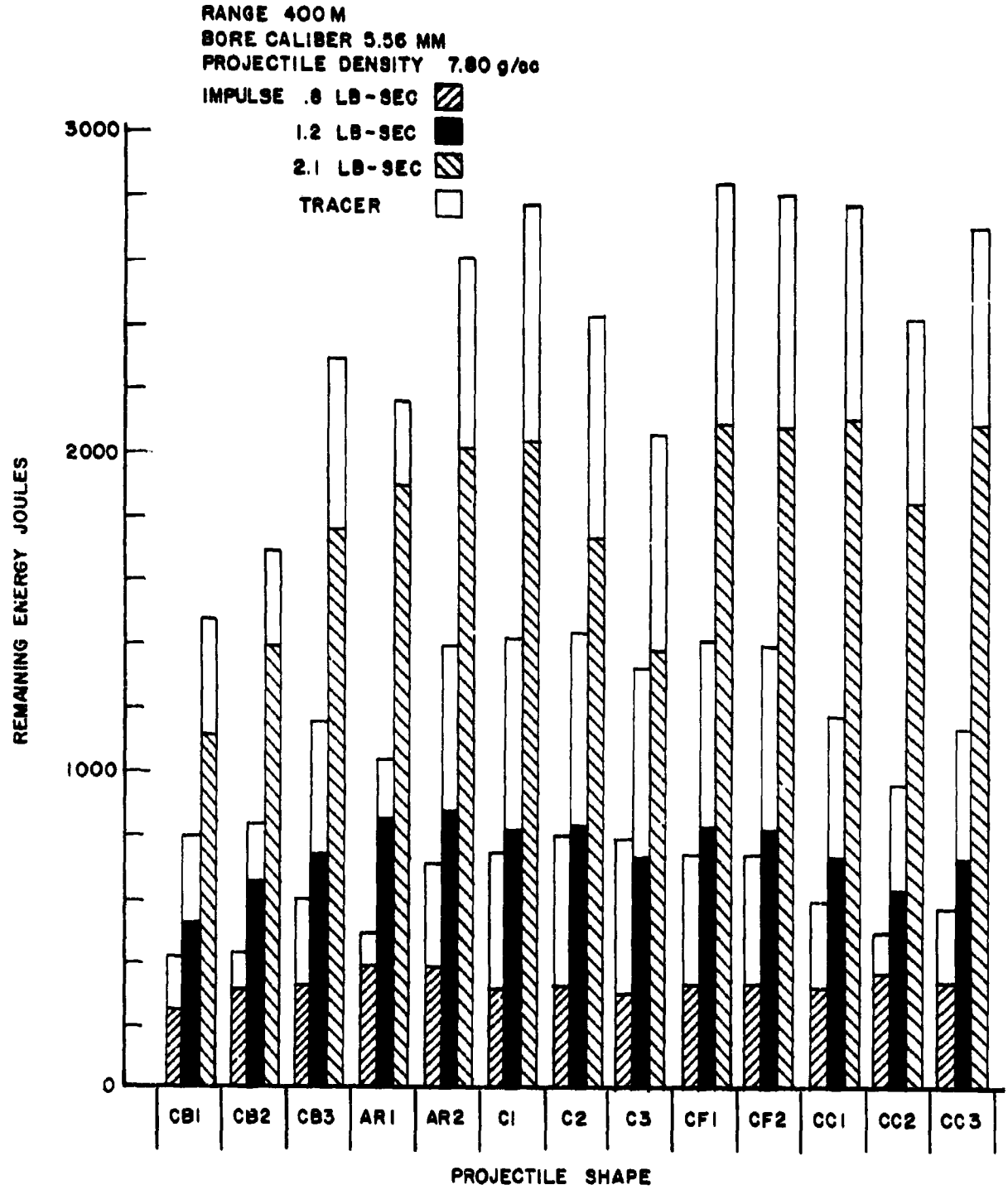


Figure 2. Remaining Energy for Full Bore Projectiles.

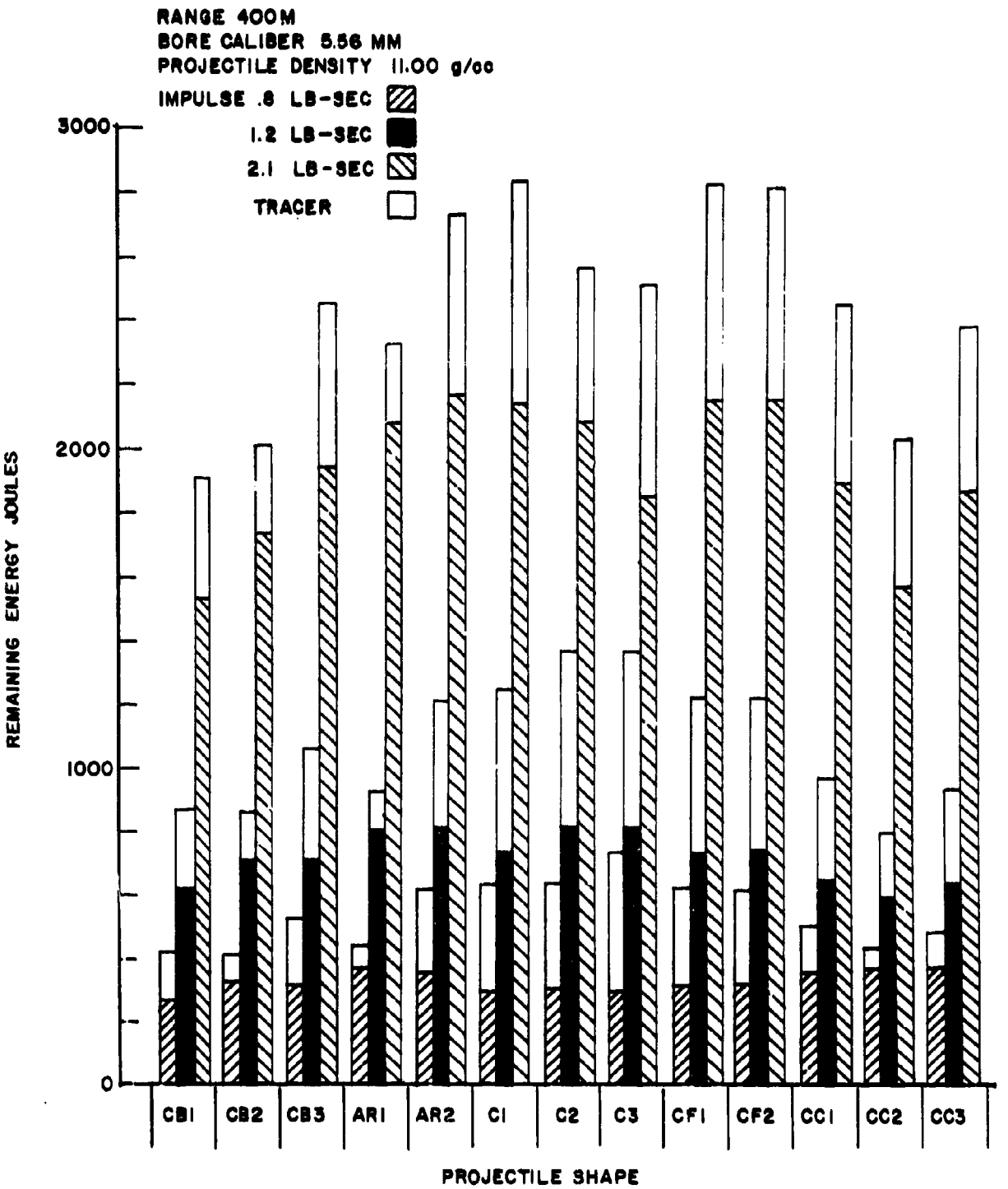


Figure 3. Remaining Energy for Full Bore Projectiles.

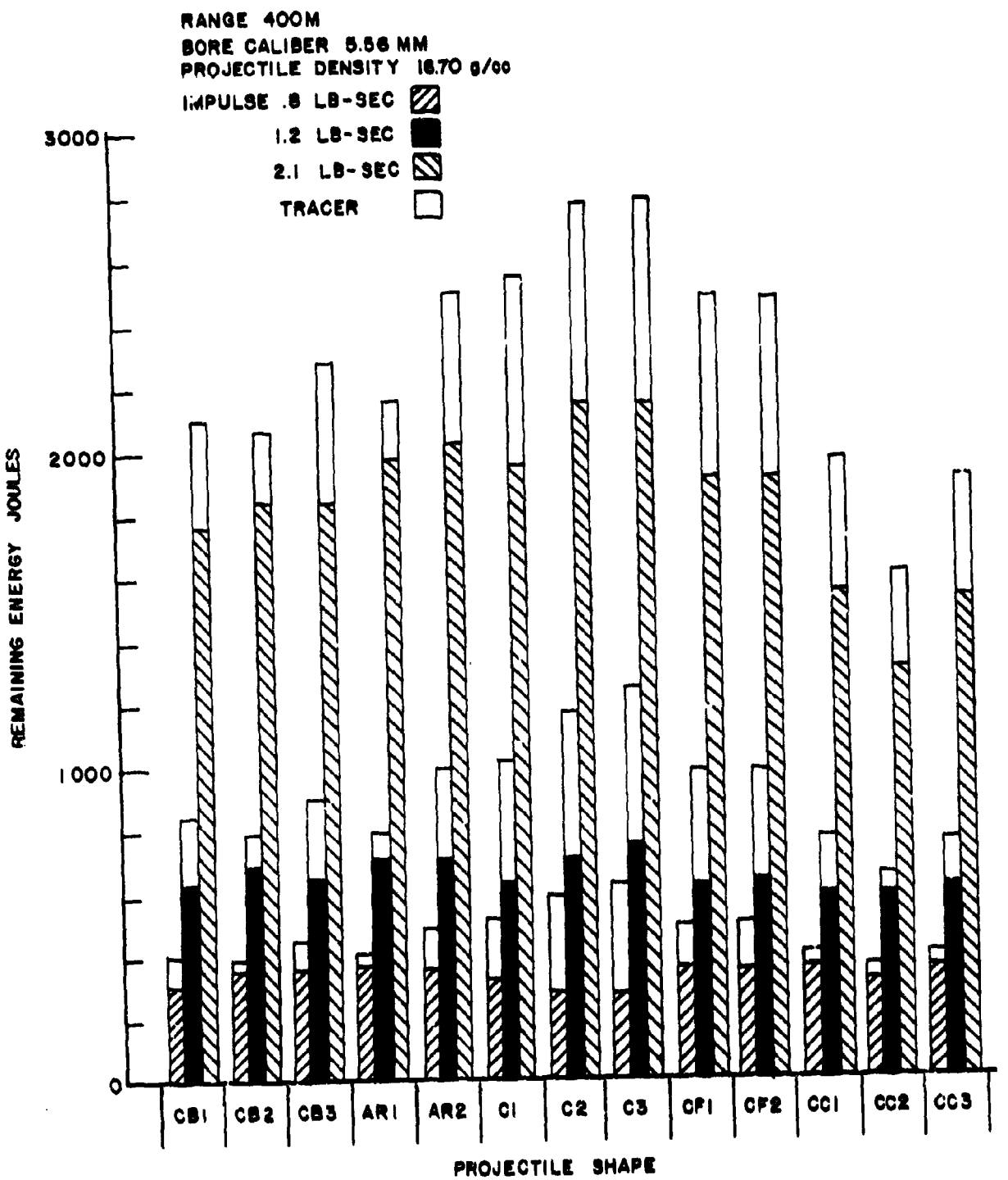


Figure 4. Remaining Energy for Full Bore Projectiles.

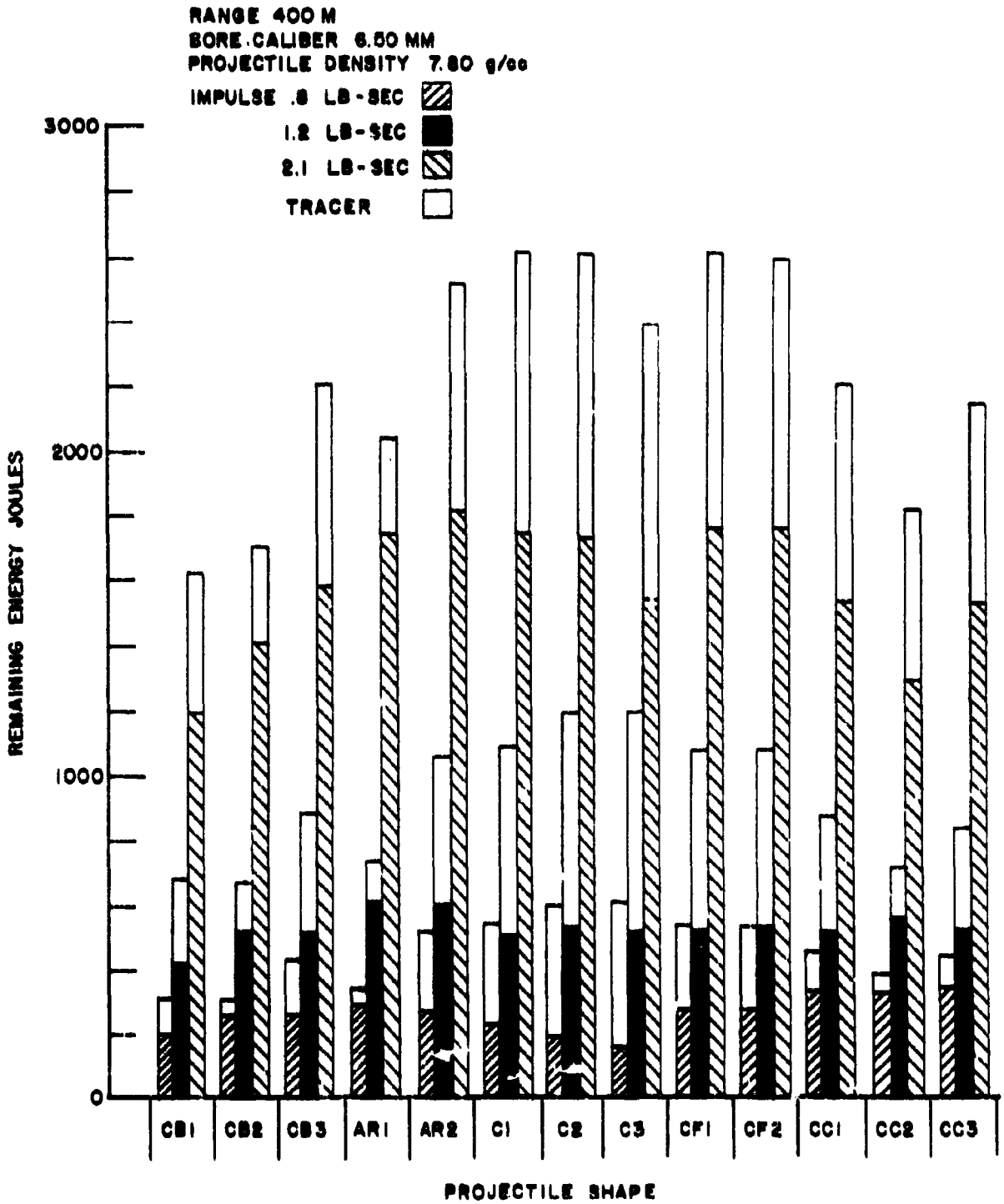
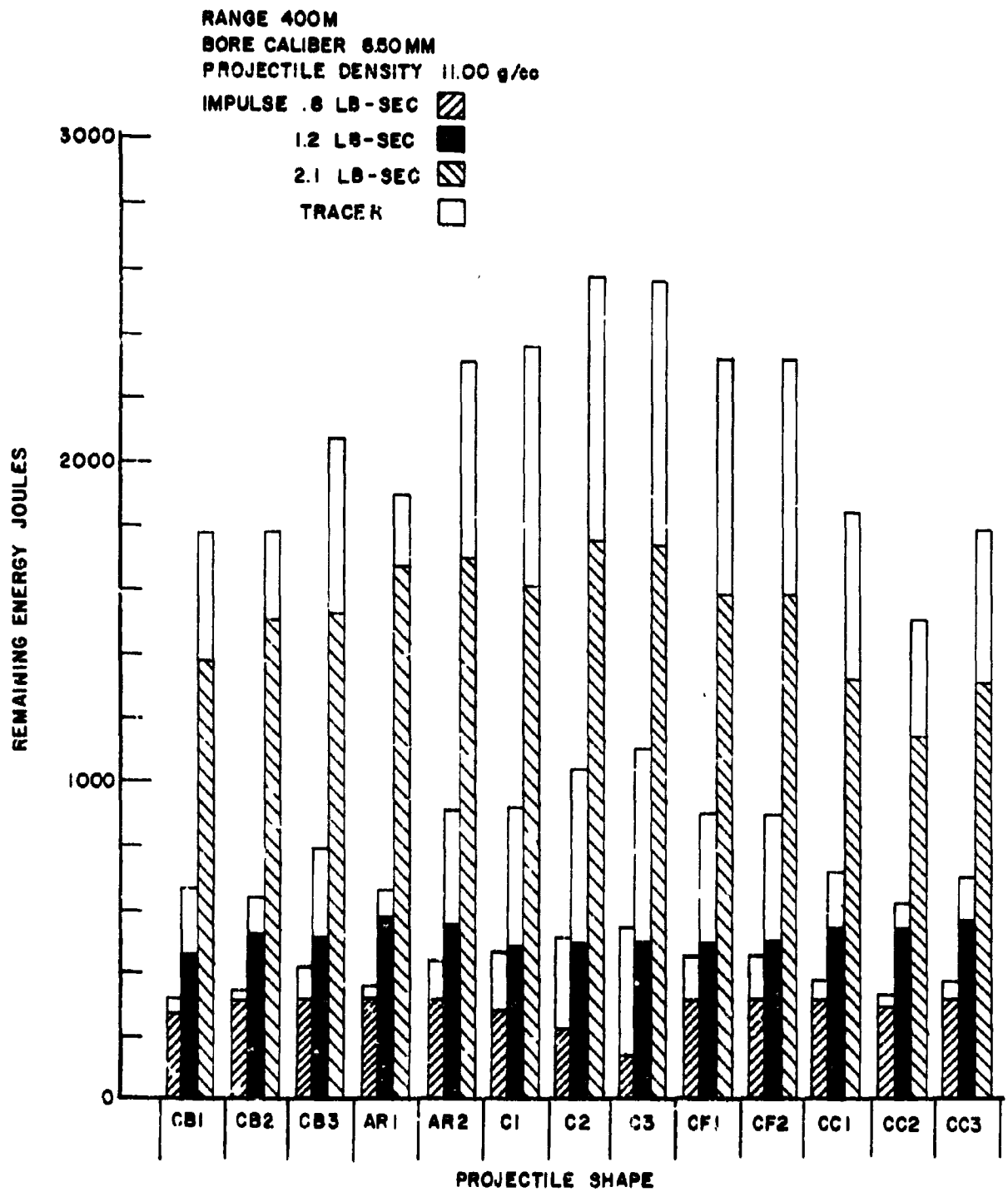


Figure 5. Remaining Energy for Full Bore Projectiles.



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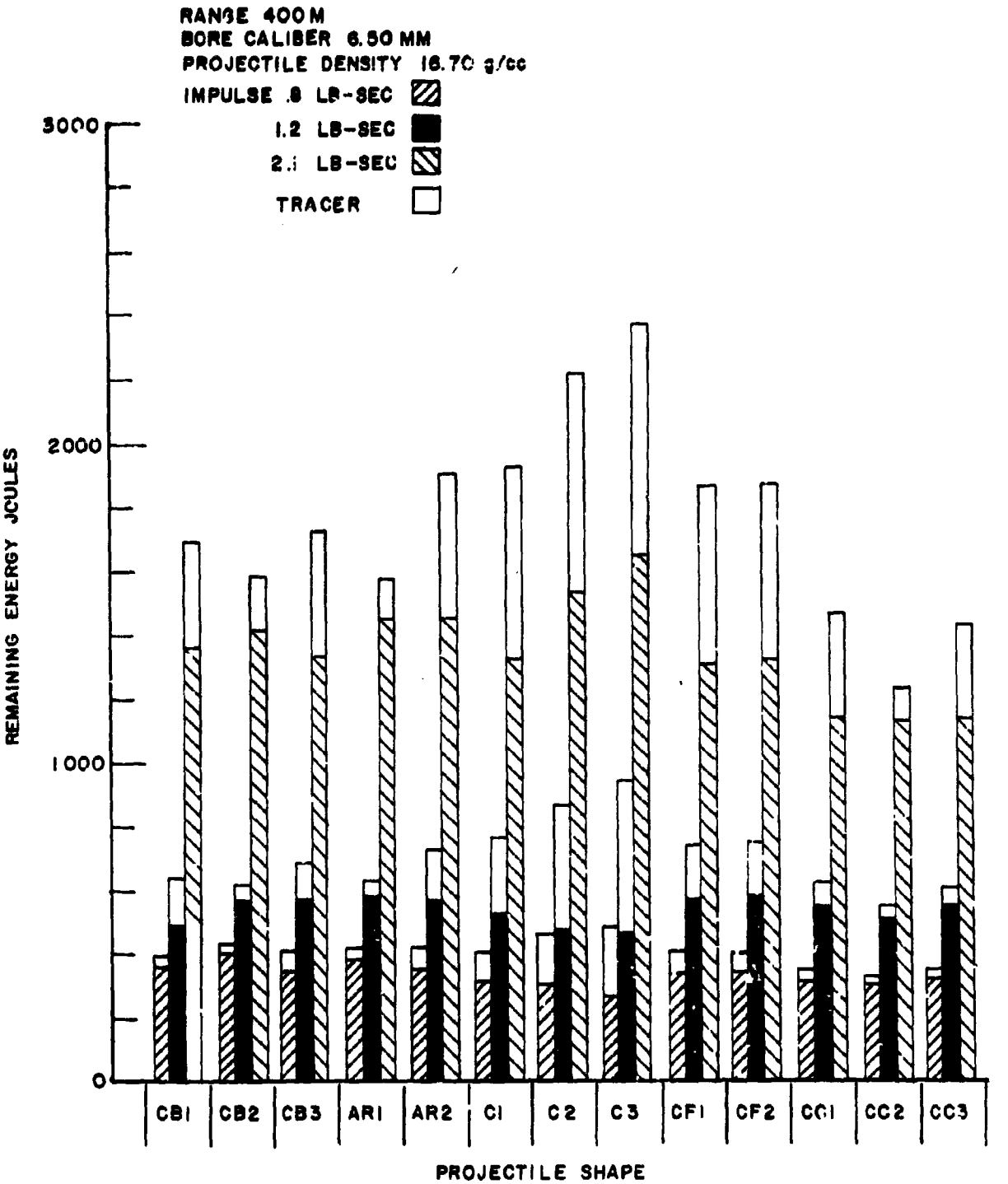

Figure 7. Remaining Energy for Full Bore Projectiles.

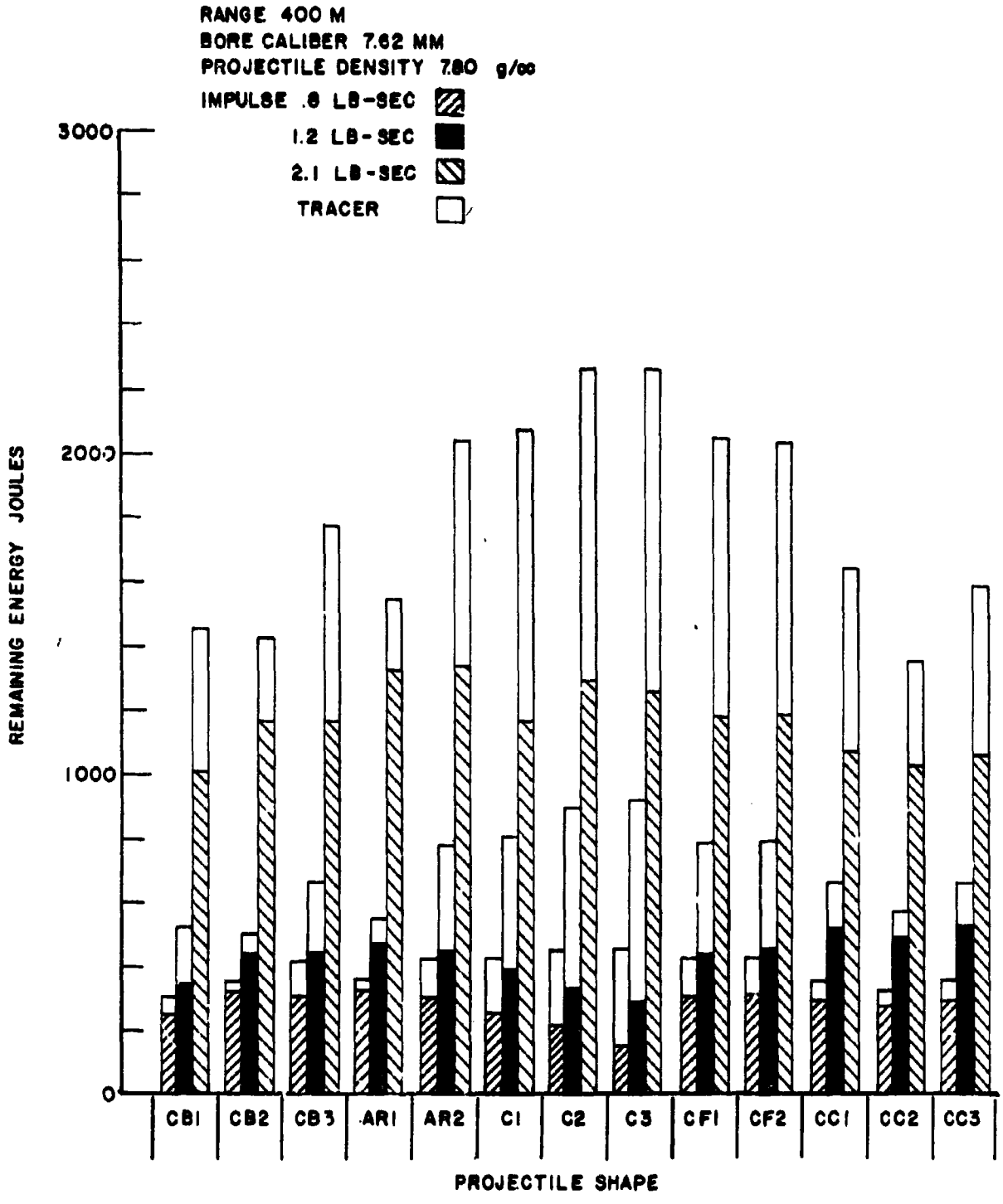

Figure 8. Remaining Energy for Full Bore Projectiles.

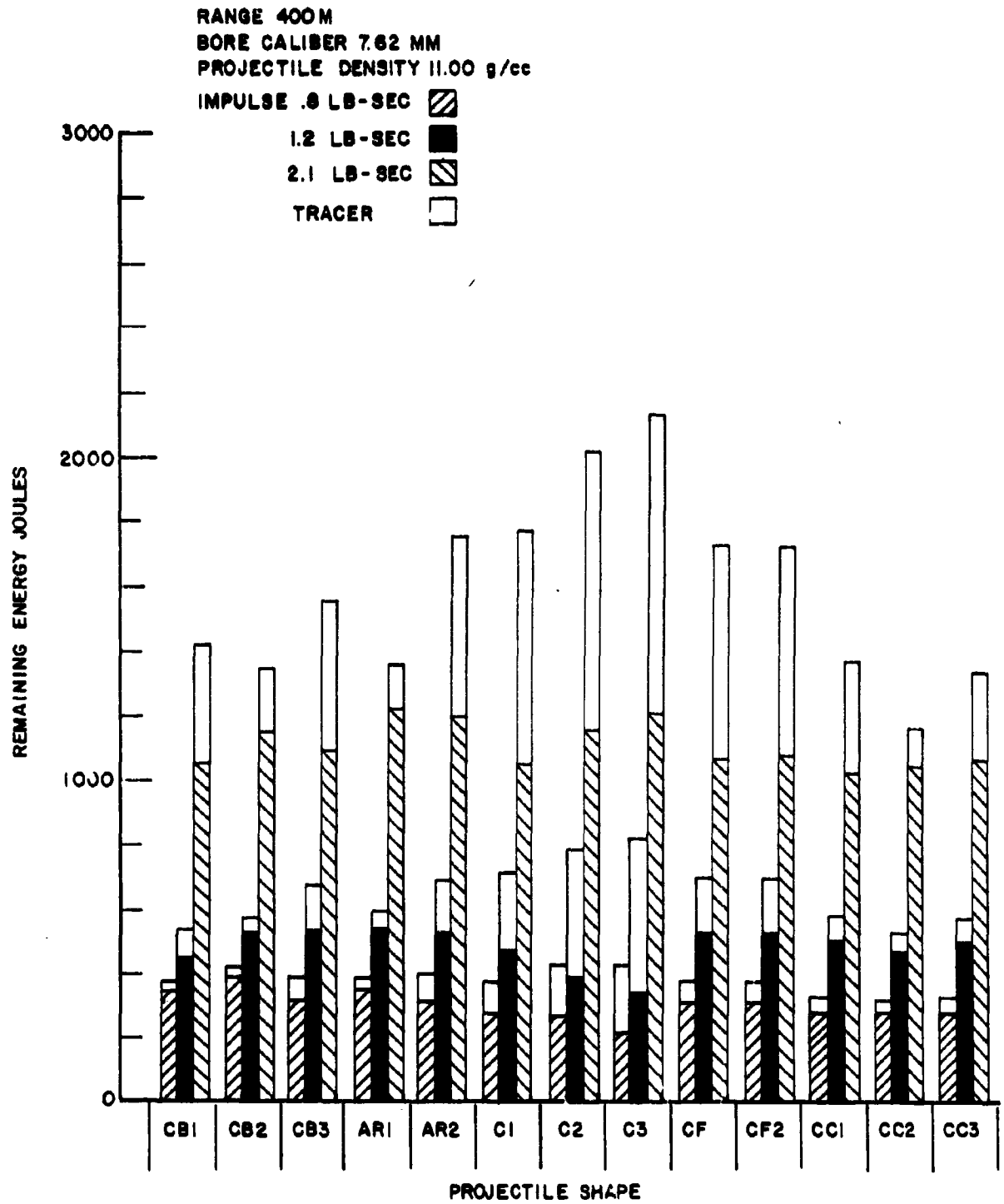

Figure 9. Remaining Energy for Full Bore Projectiles.

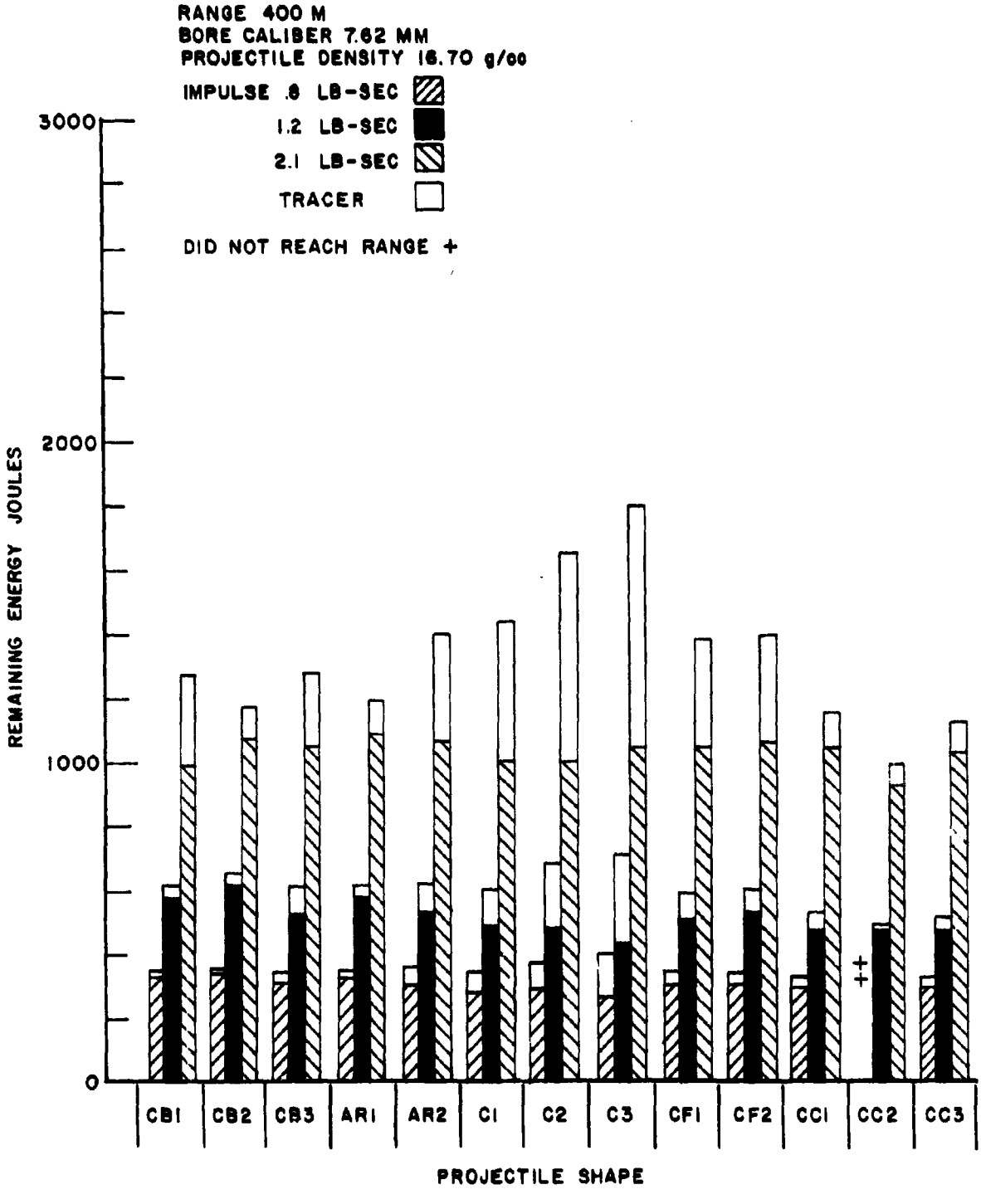

Figure 10. Remaining Energy for Full Bore Projectiles.

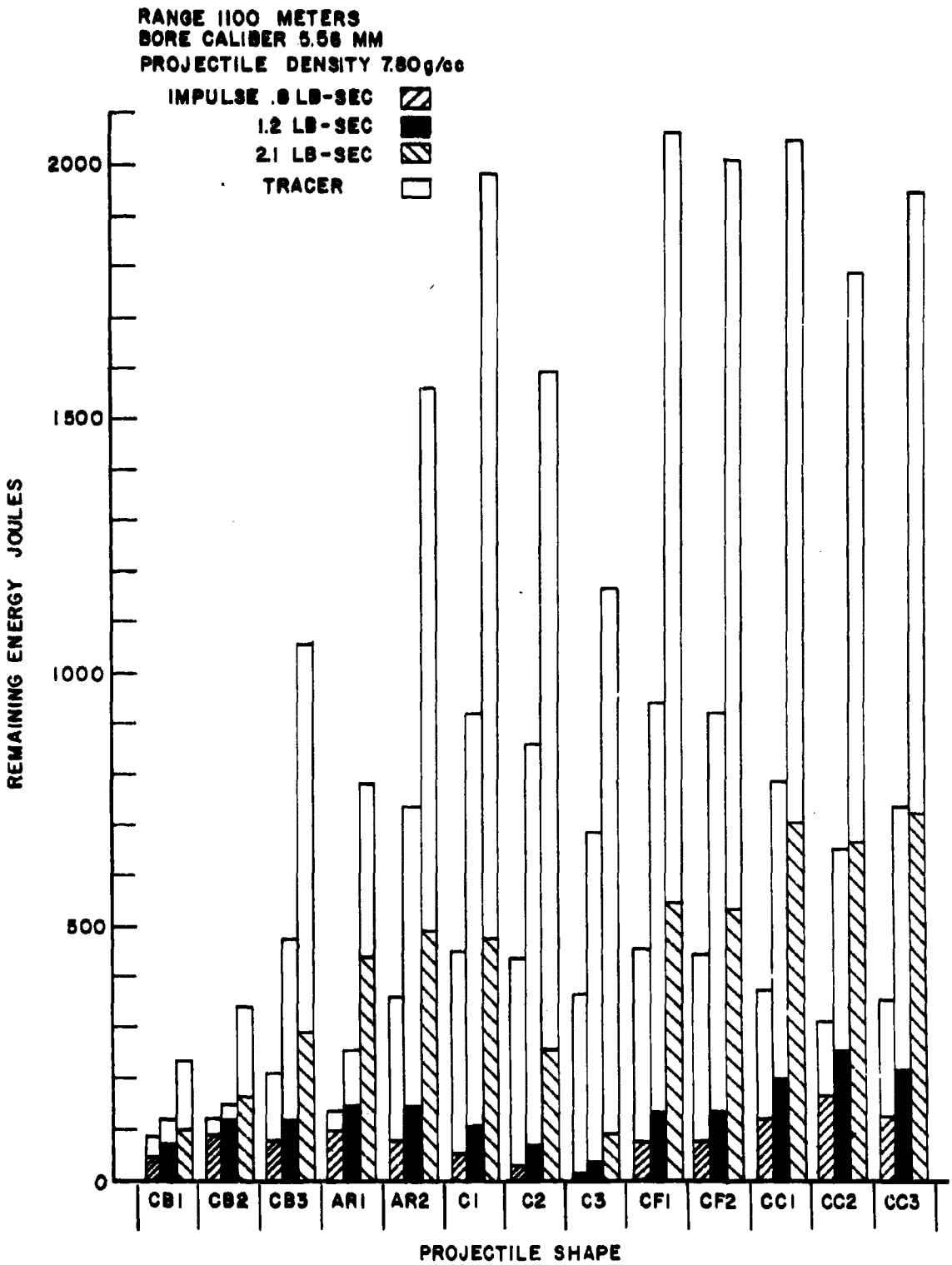

Figure 11. Remaining Energy For Full Bore Projectiles.

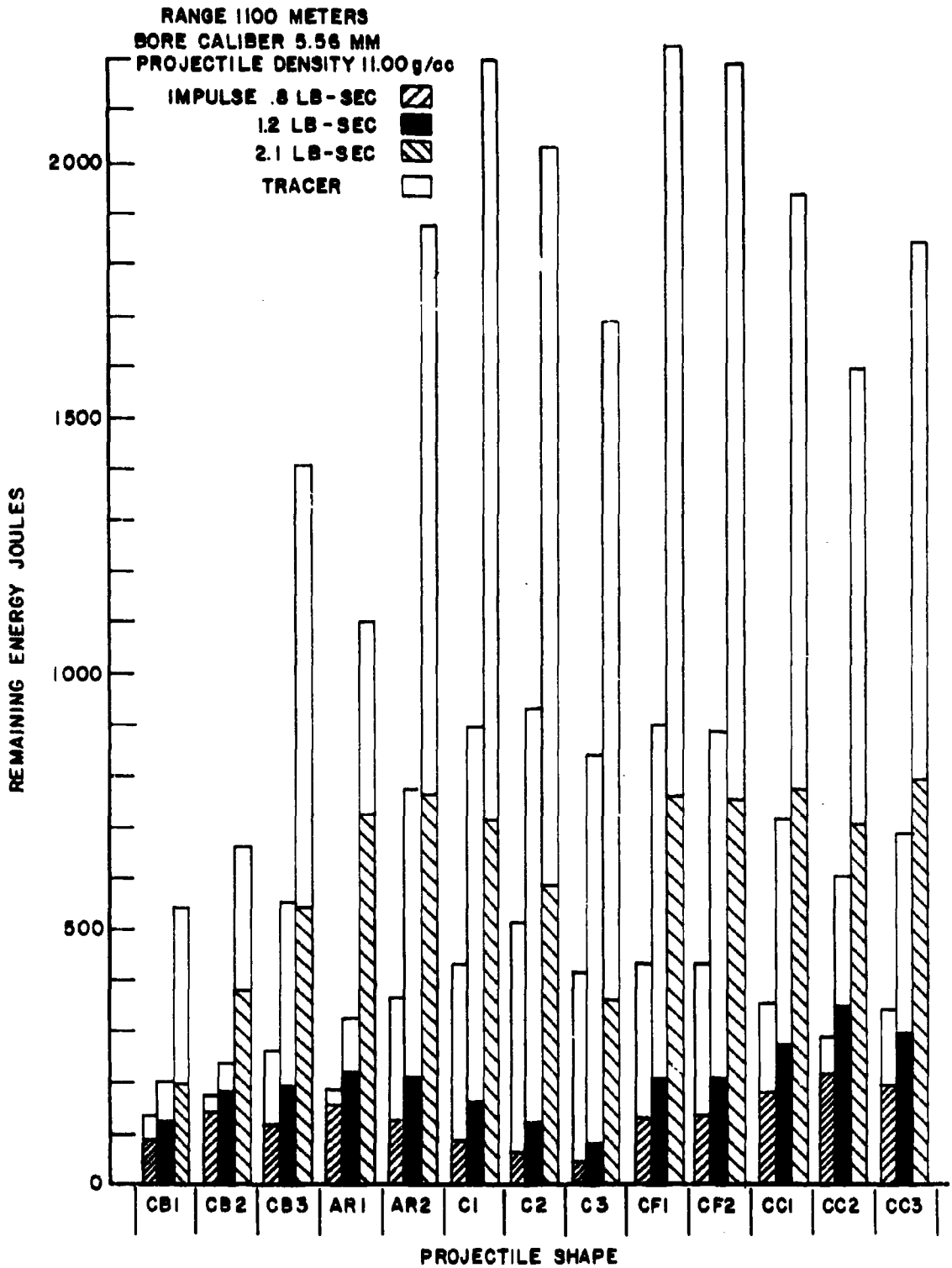

Figure 12. Remaining Energy For Full Bore Projectiles.

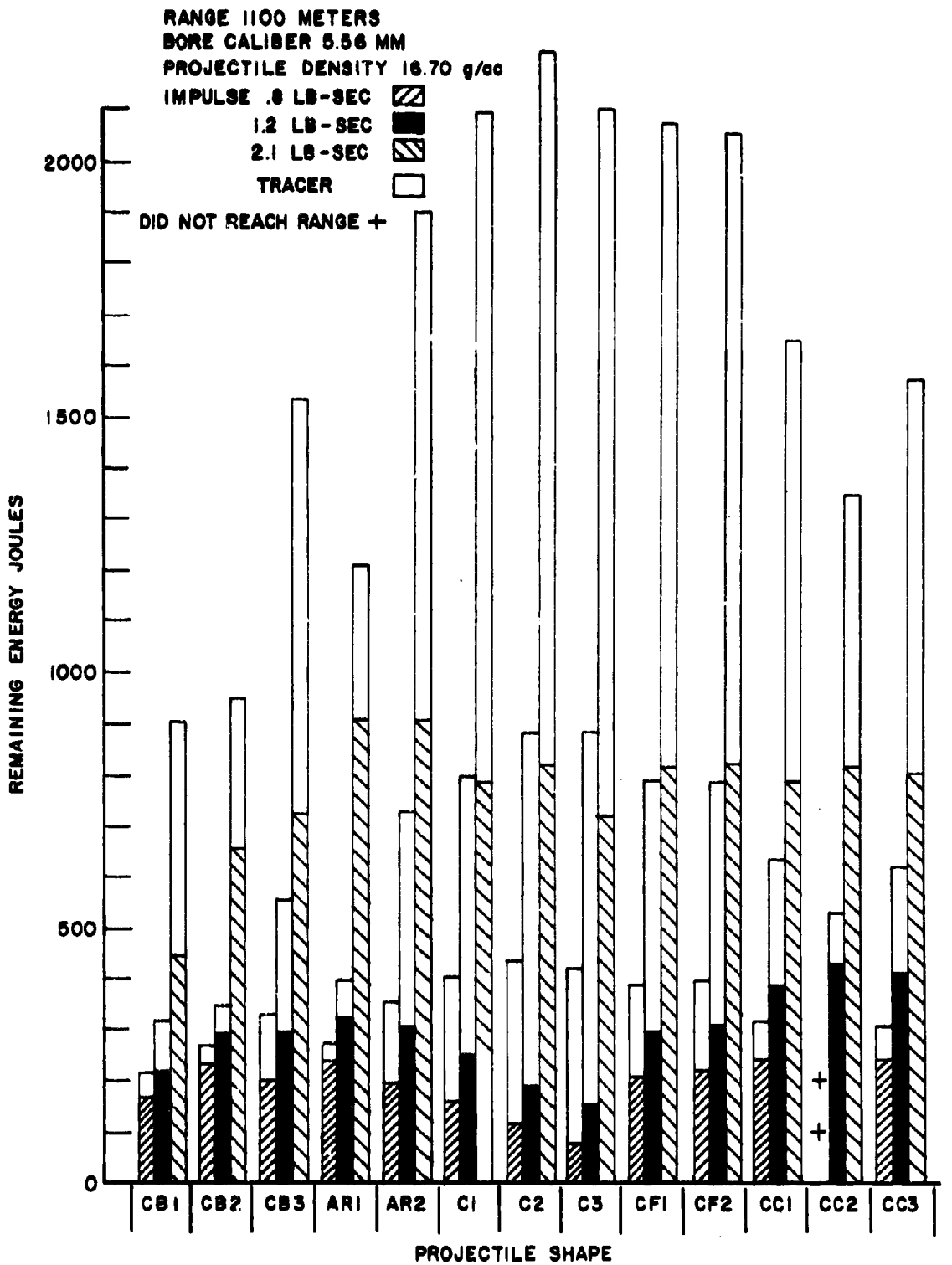

Figure 13. Remaining Energy For Full Bore Projectiles.

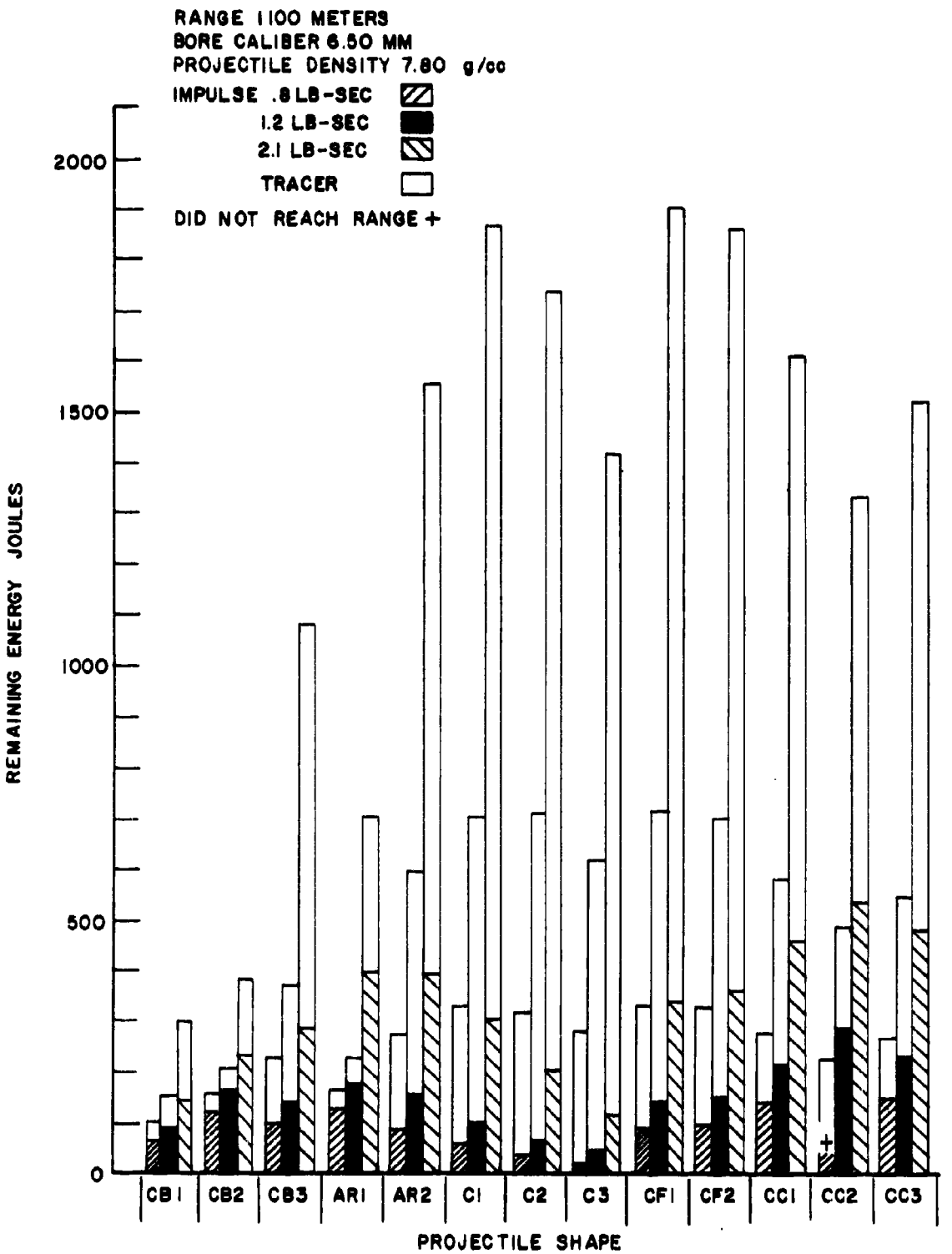

Figure 14. Remaining Energy For Full Bore Projectiles.

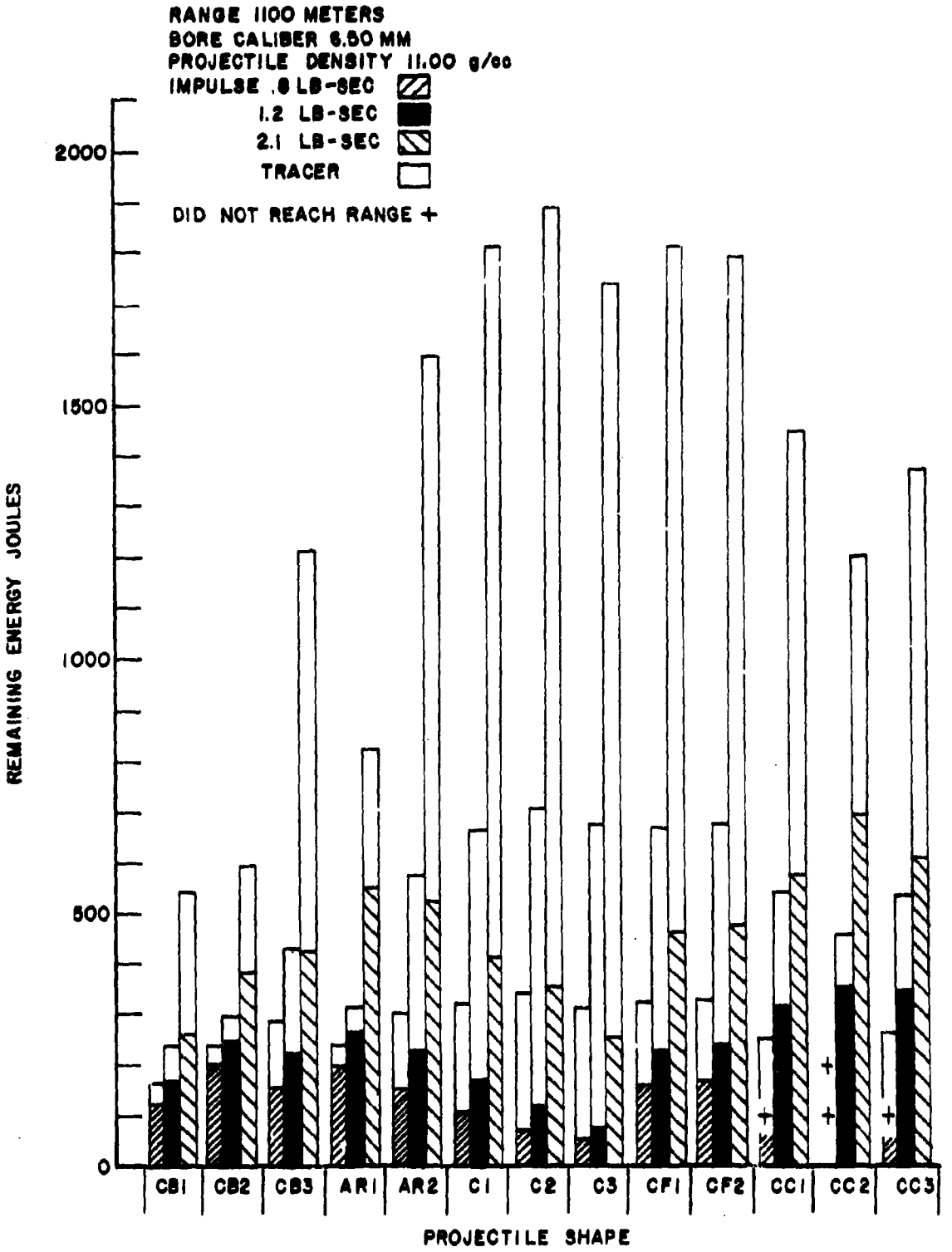

Figure 15. Remaining Energy For Full Bore Projectiles.

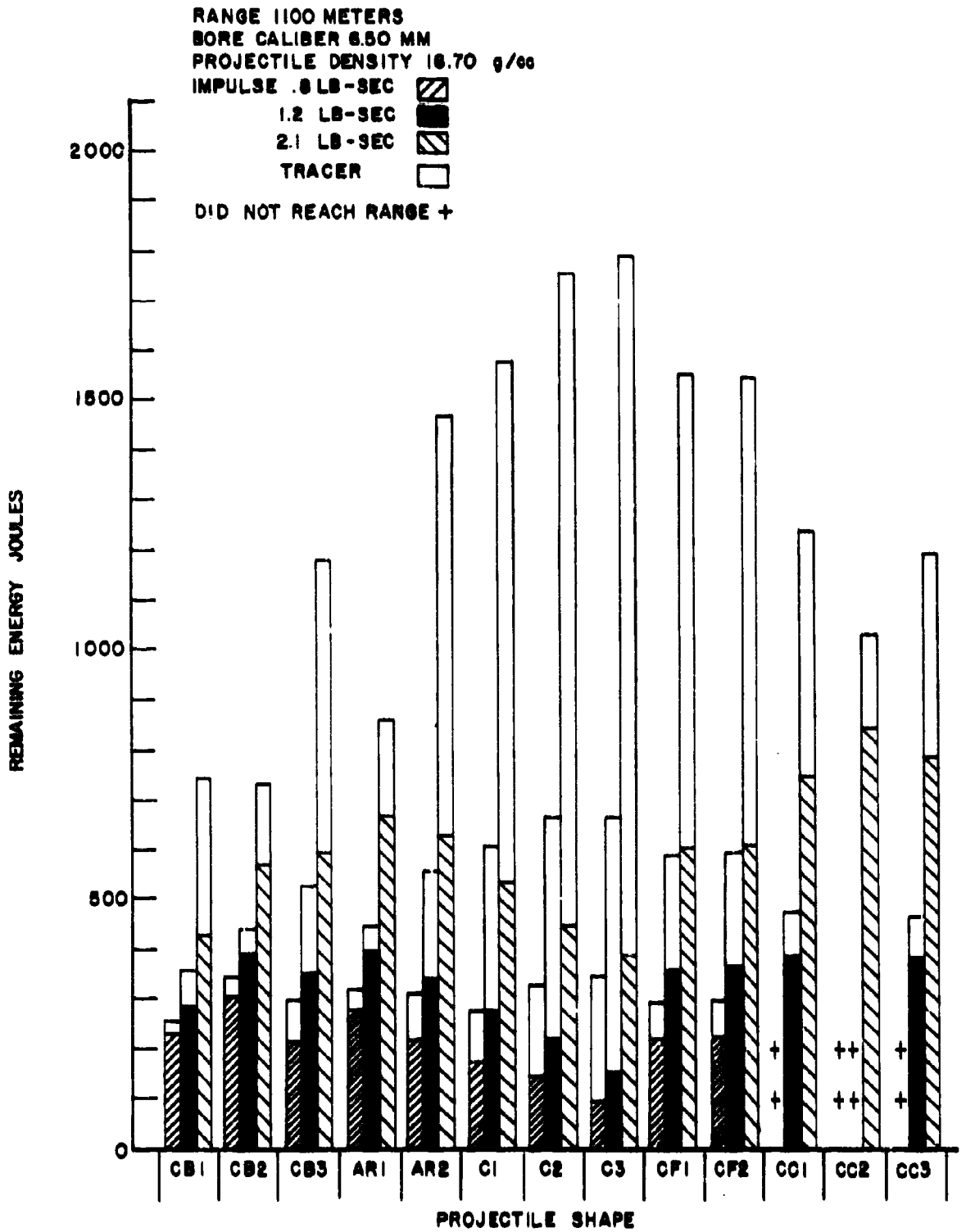

Figure 16. Remaining Energy For Full Bore Projectiles.

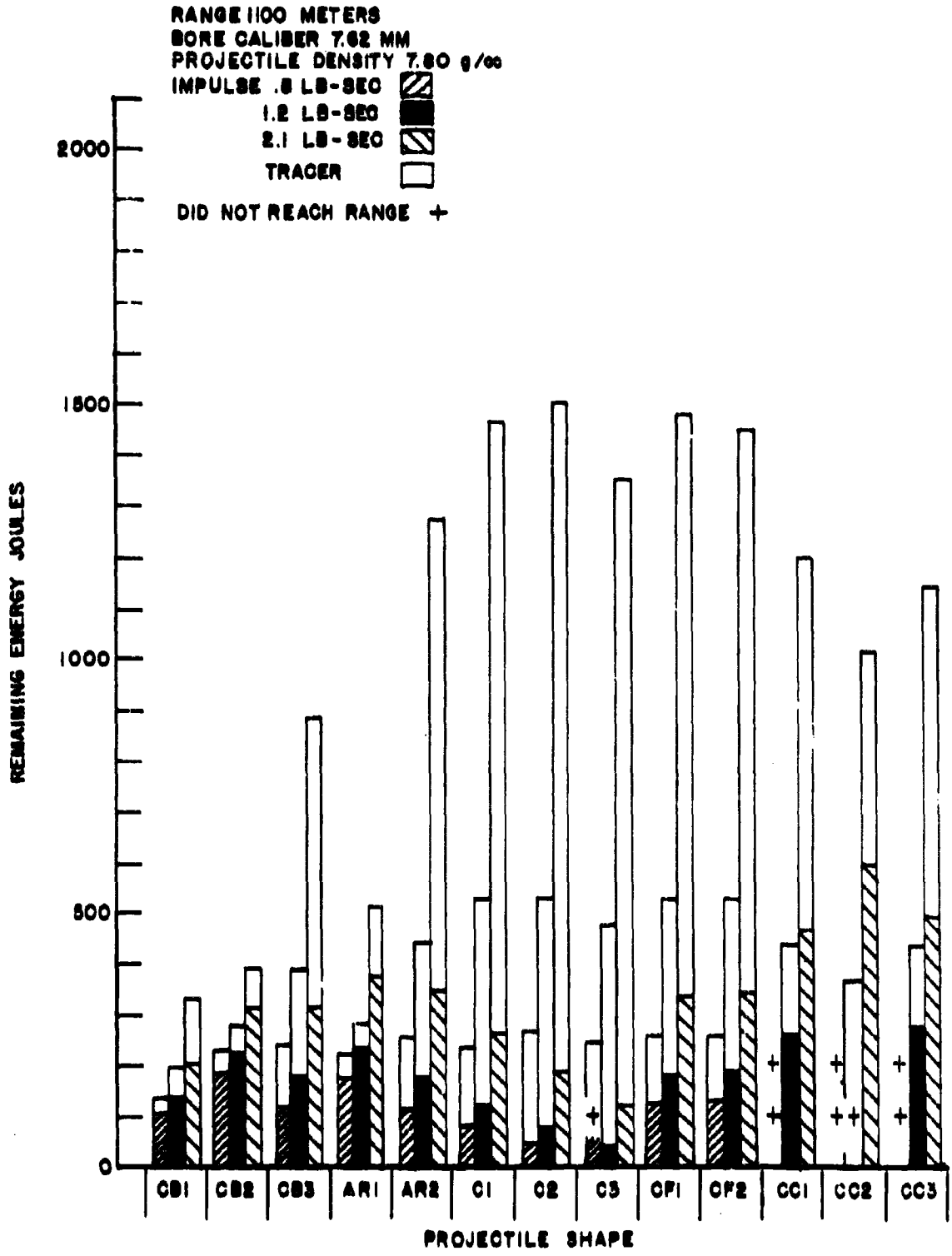

Figure 17 Remaining Energy For Full Bore Projectiles.

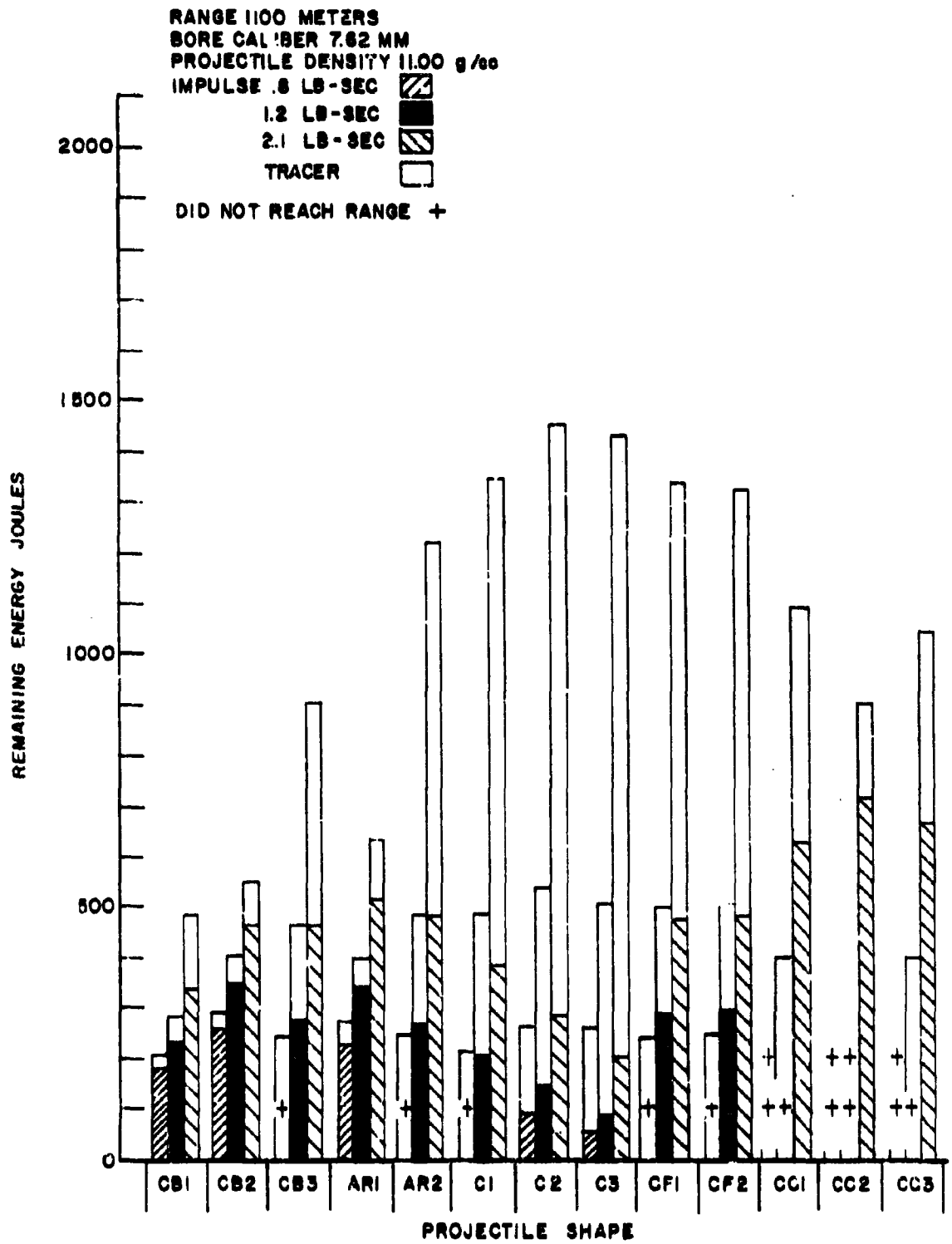

Figure 18. Remaining Energy For Full Bore Projectiles.

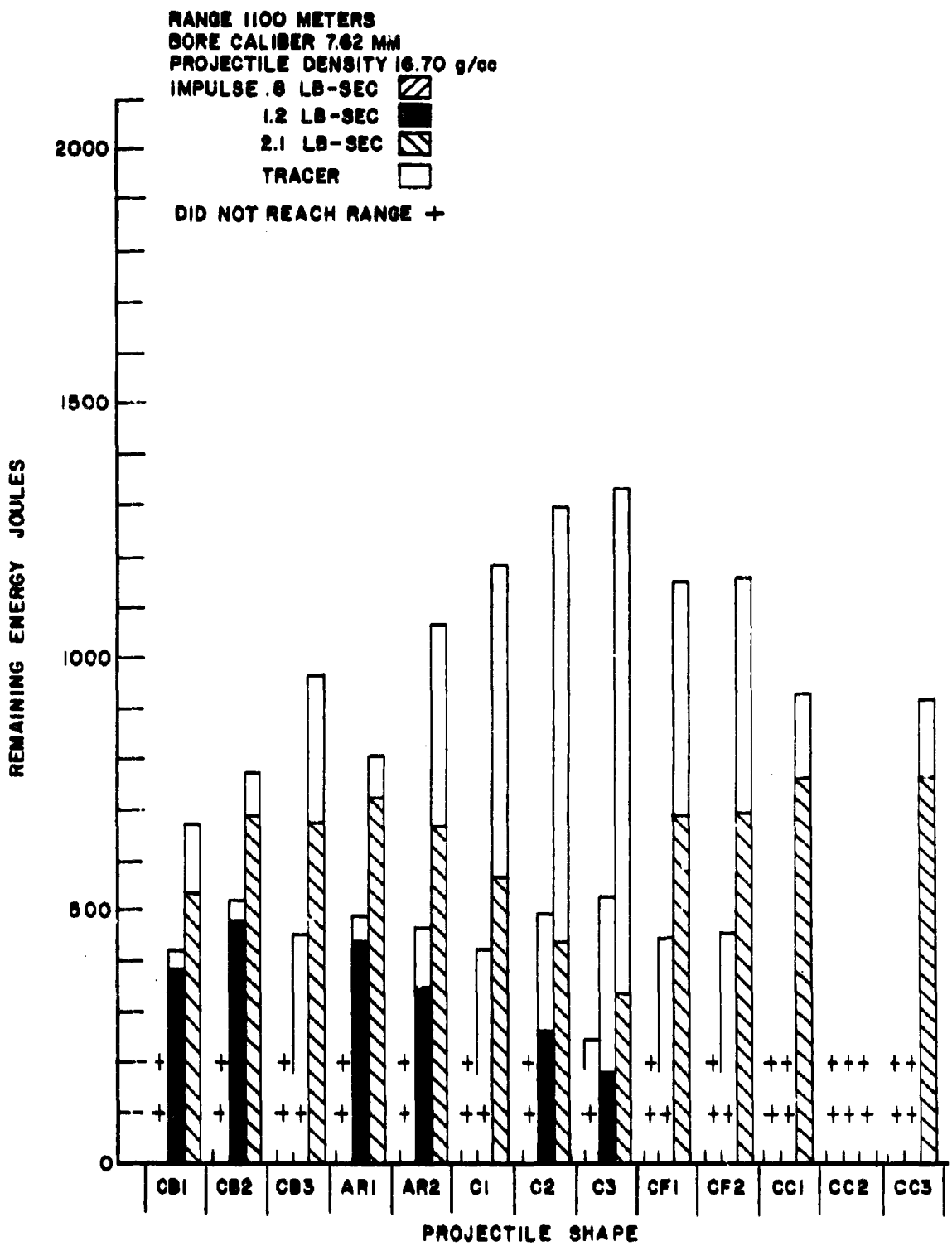

Figure 19. Remaining Energy For Full Bore Projectiles.

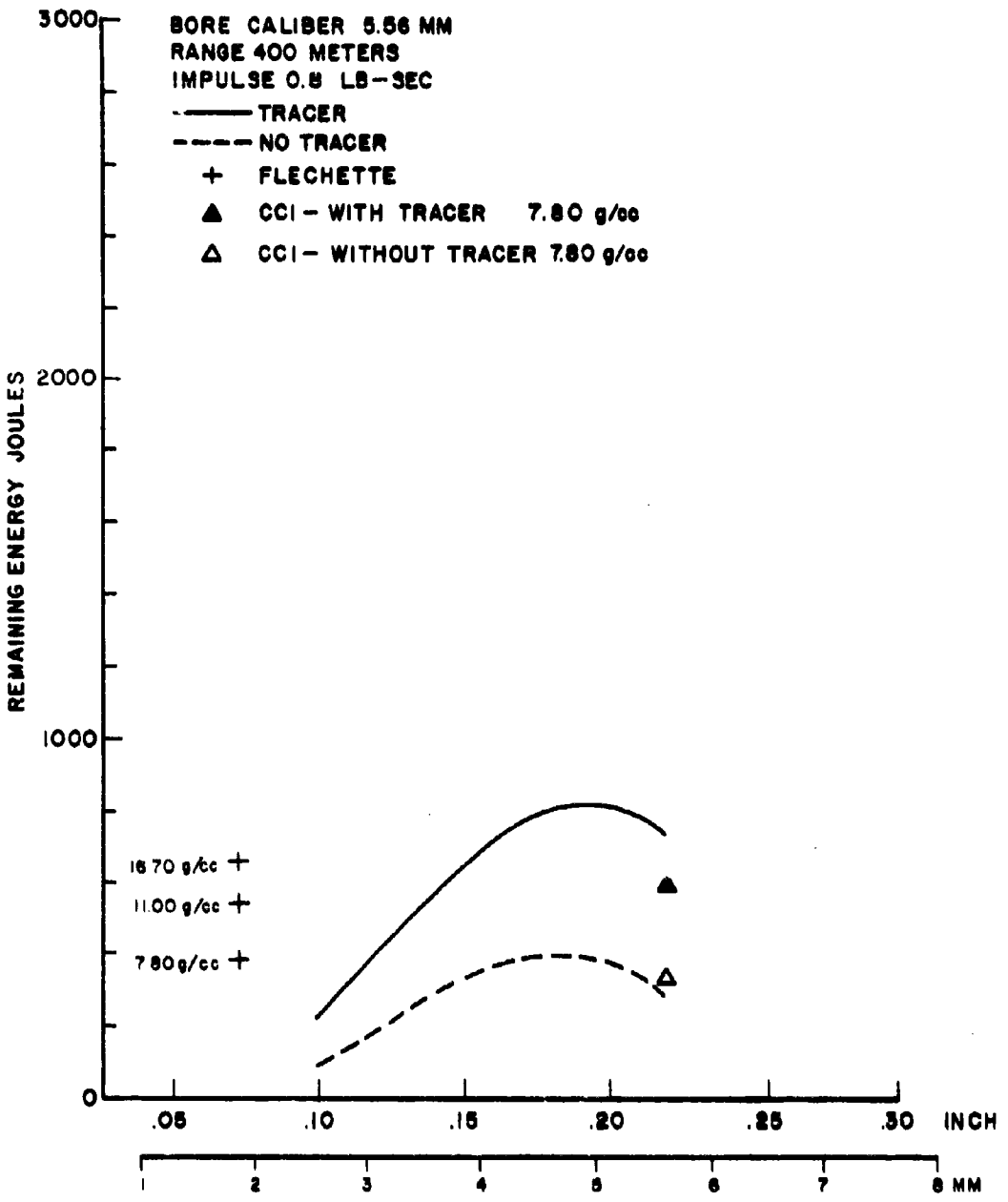

Figure 20. Remaining Energy For Sub Caliber Projectiles.

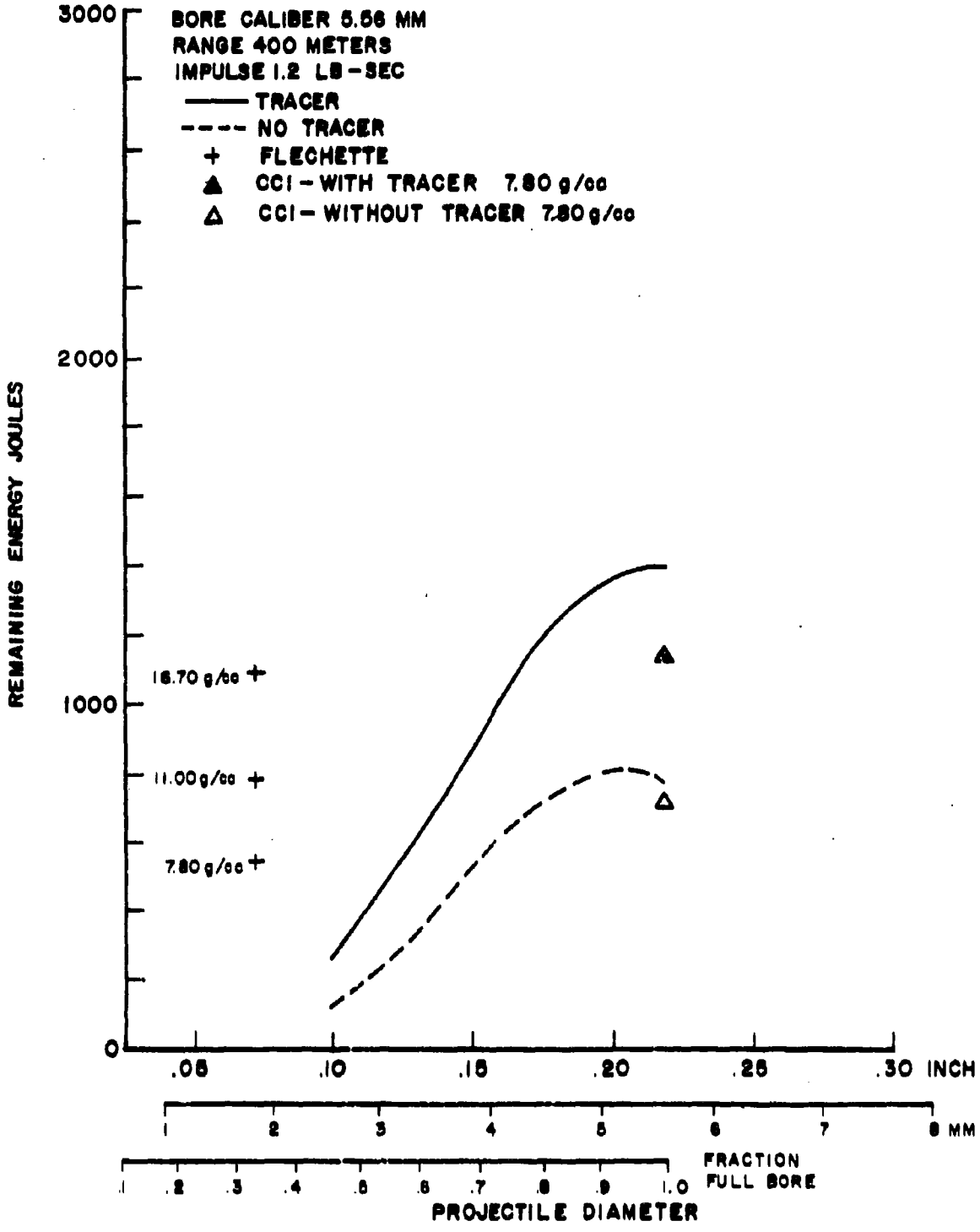

Figure 21. Remaining Energy for Sub Caliber Projectiles.

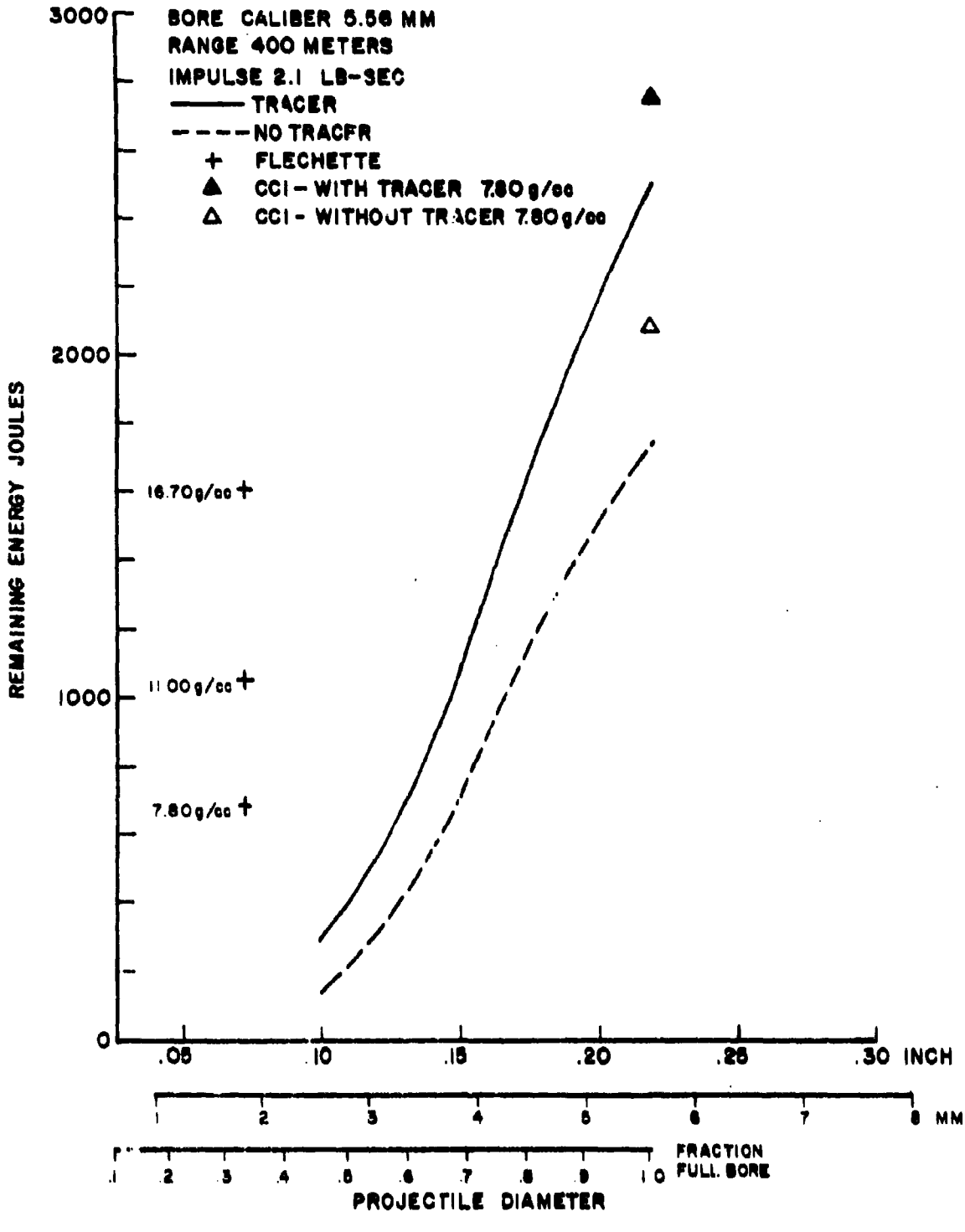

Figure 22. Remaining Energy For Sub Caliber Projectiles.

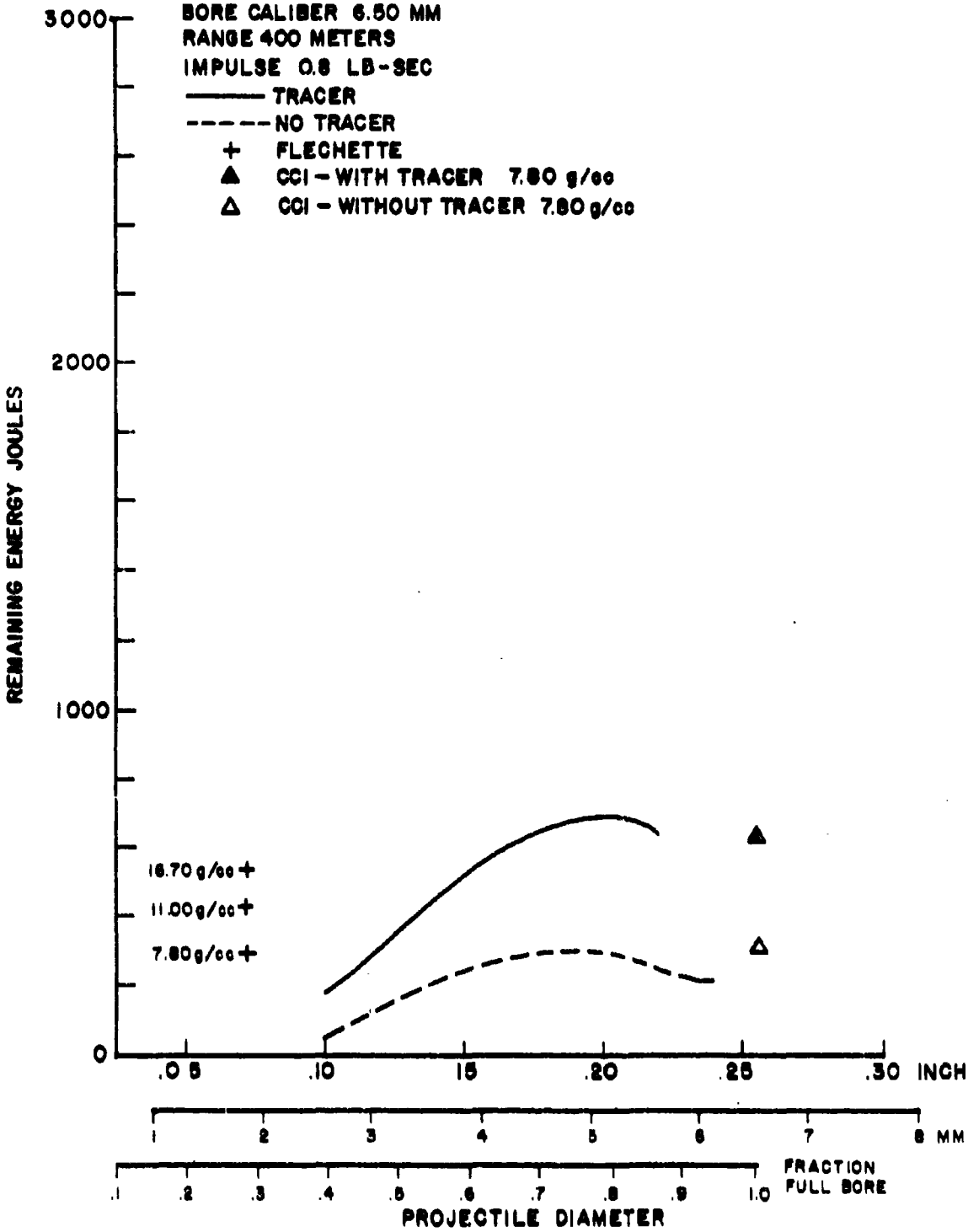

Figure 23. Remaining Energy For Sub Caliber Projectiles.

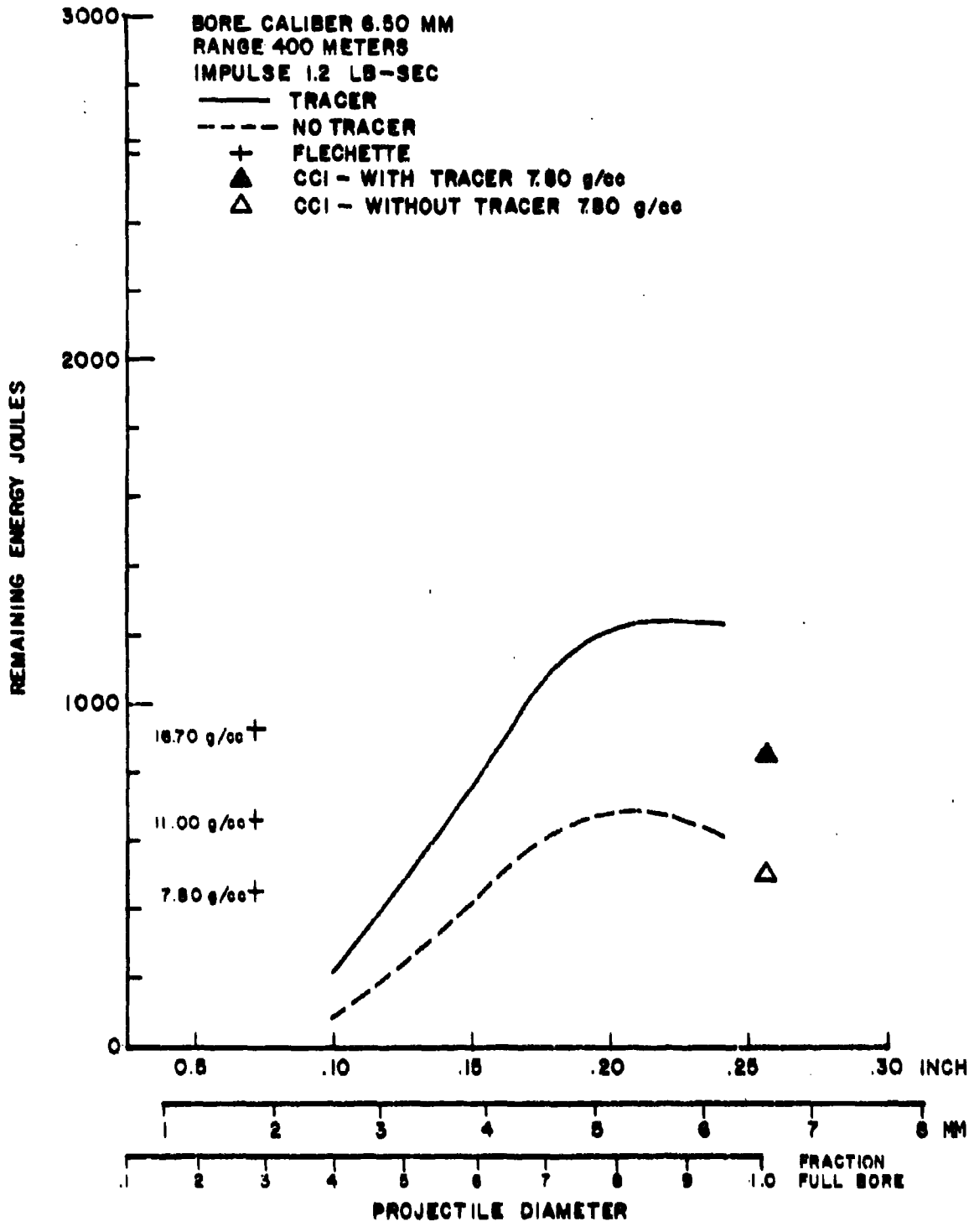

Figure 24. Remaining Energy For Sub Caliber Projectiles.

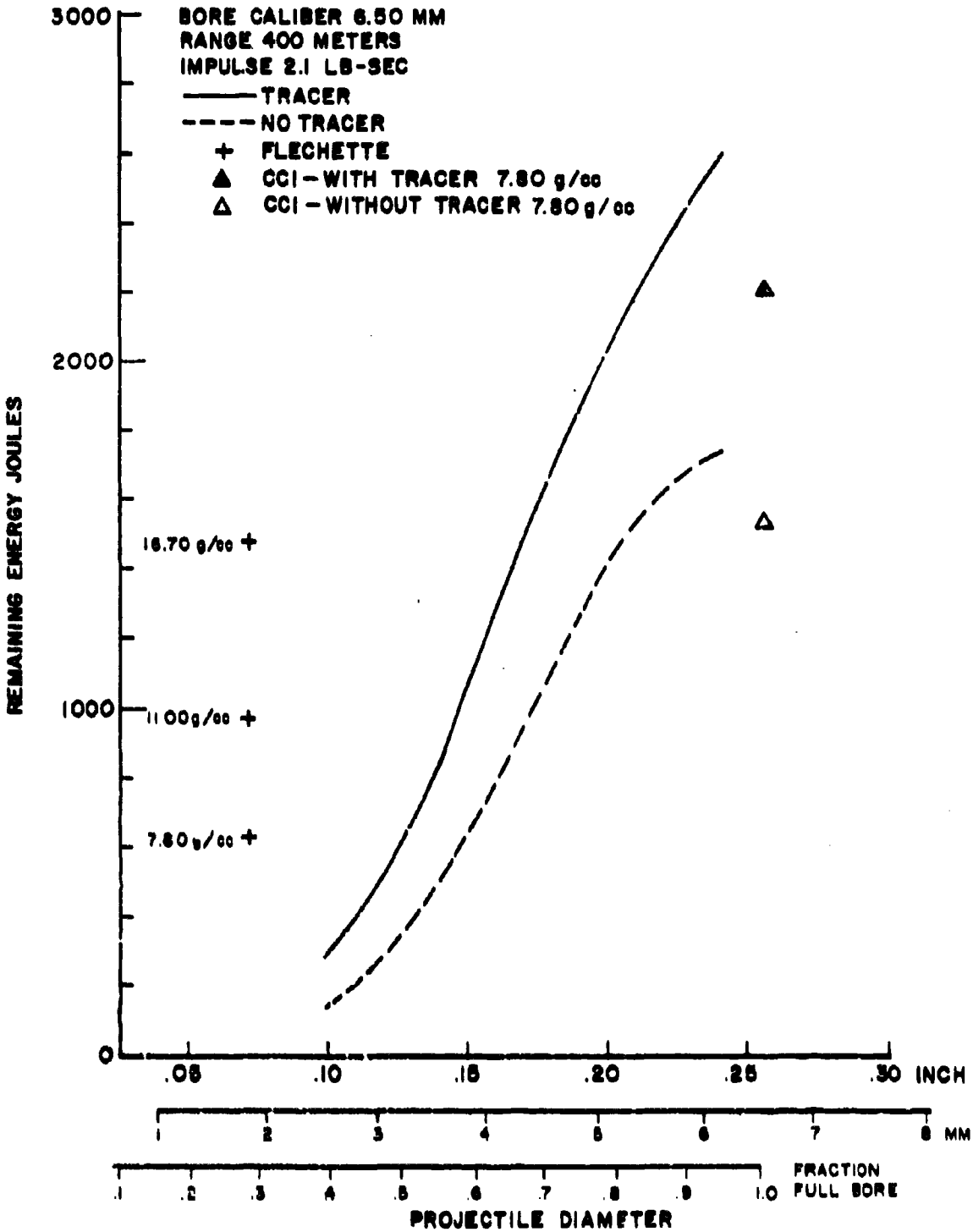

Figure 25. Remaining Energy For Sub Caliber Projectiles.

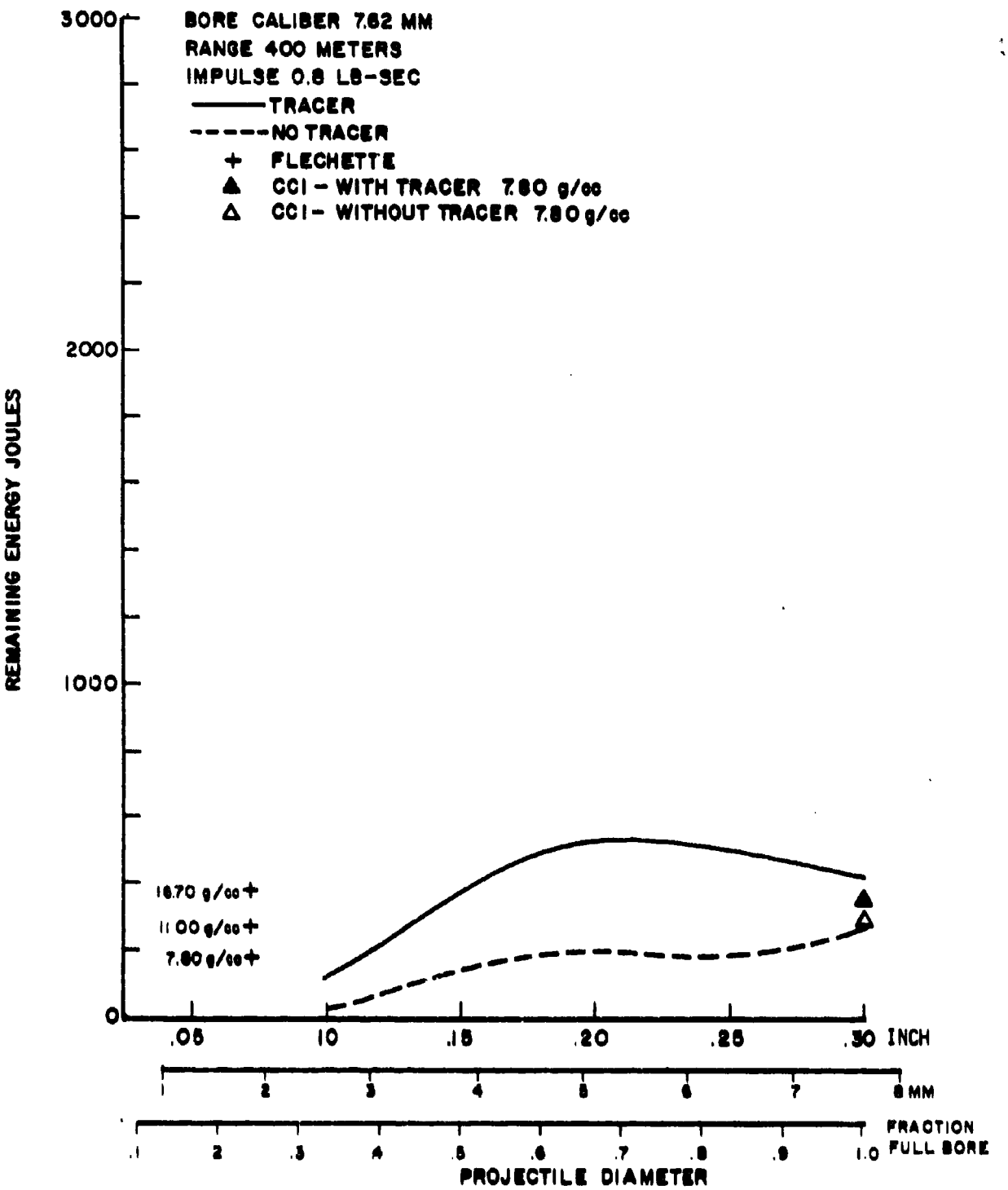

Figure 26. Remaining Energy For Sub Caliber Projectiles.

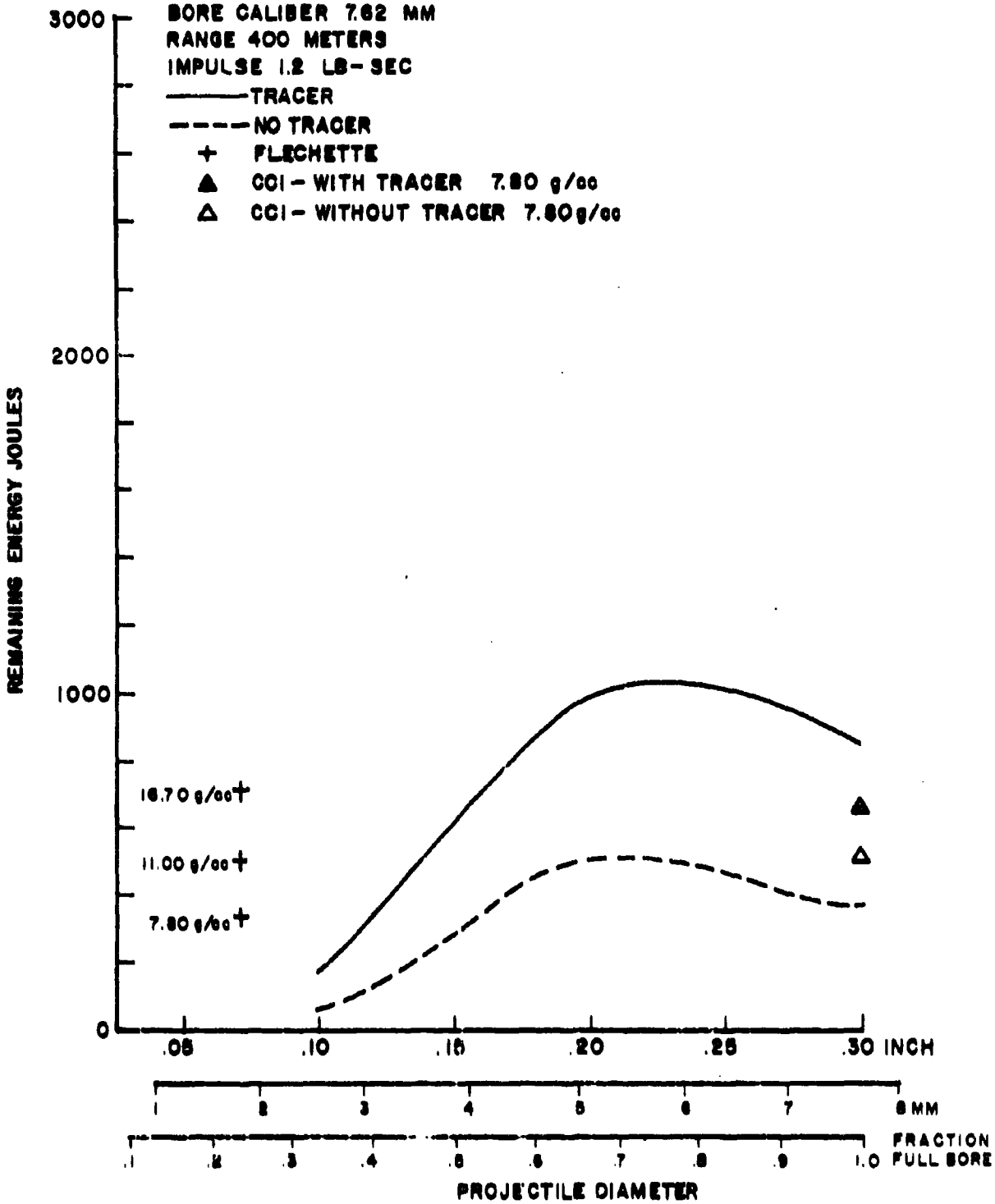

Figure 27. Remaining Energy For Sub Caliber Projectiles.

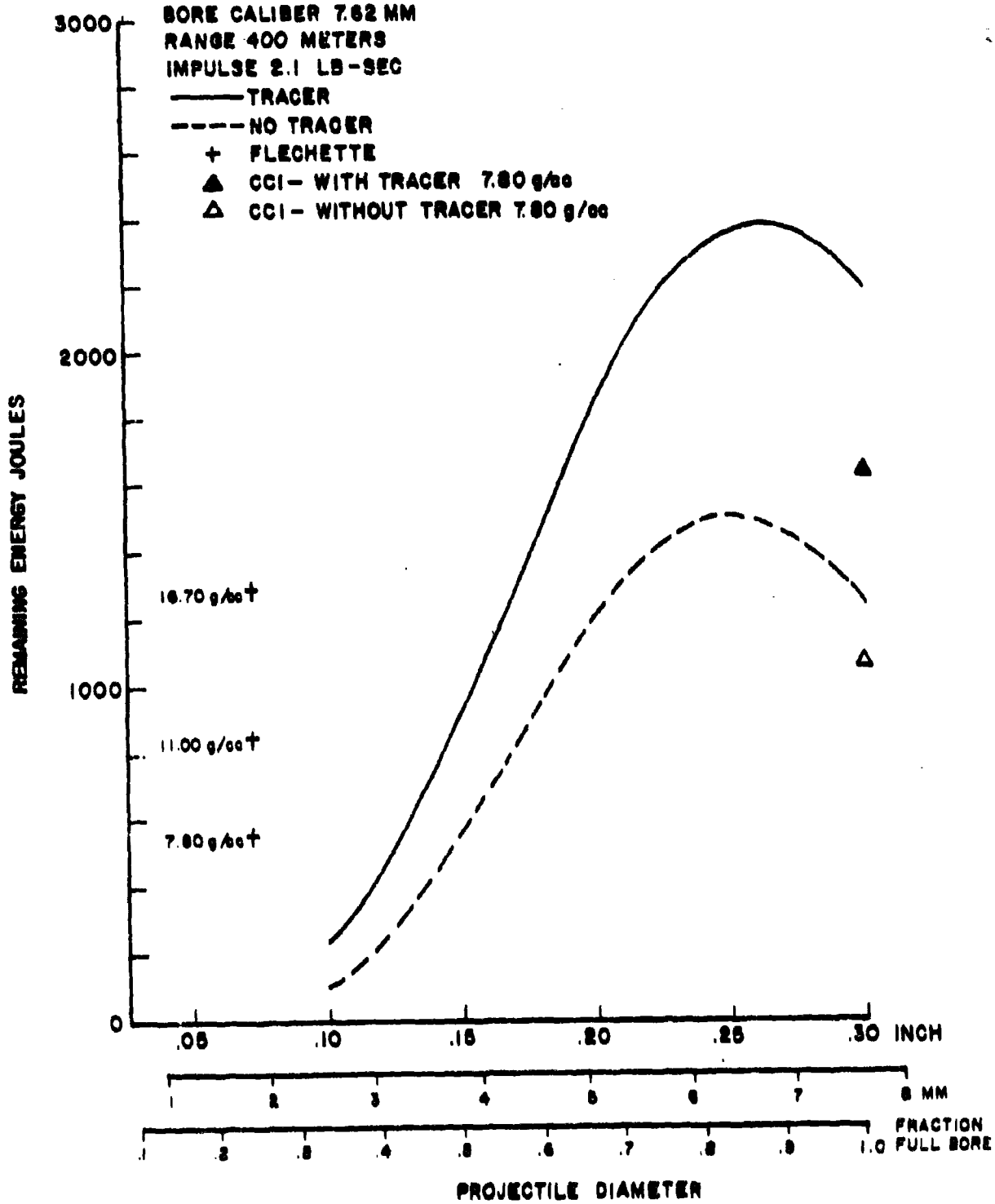

Figure 28. Remaining Energy For Sub Caliber Projectiles.

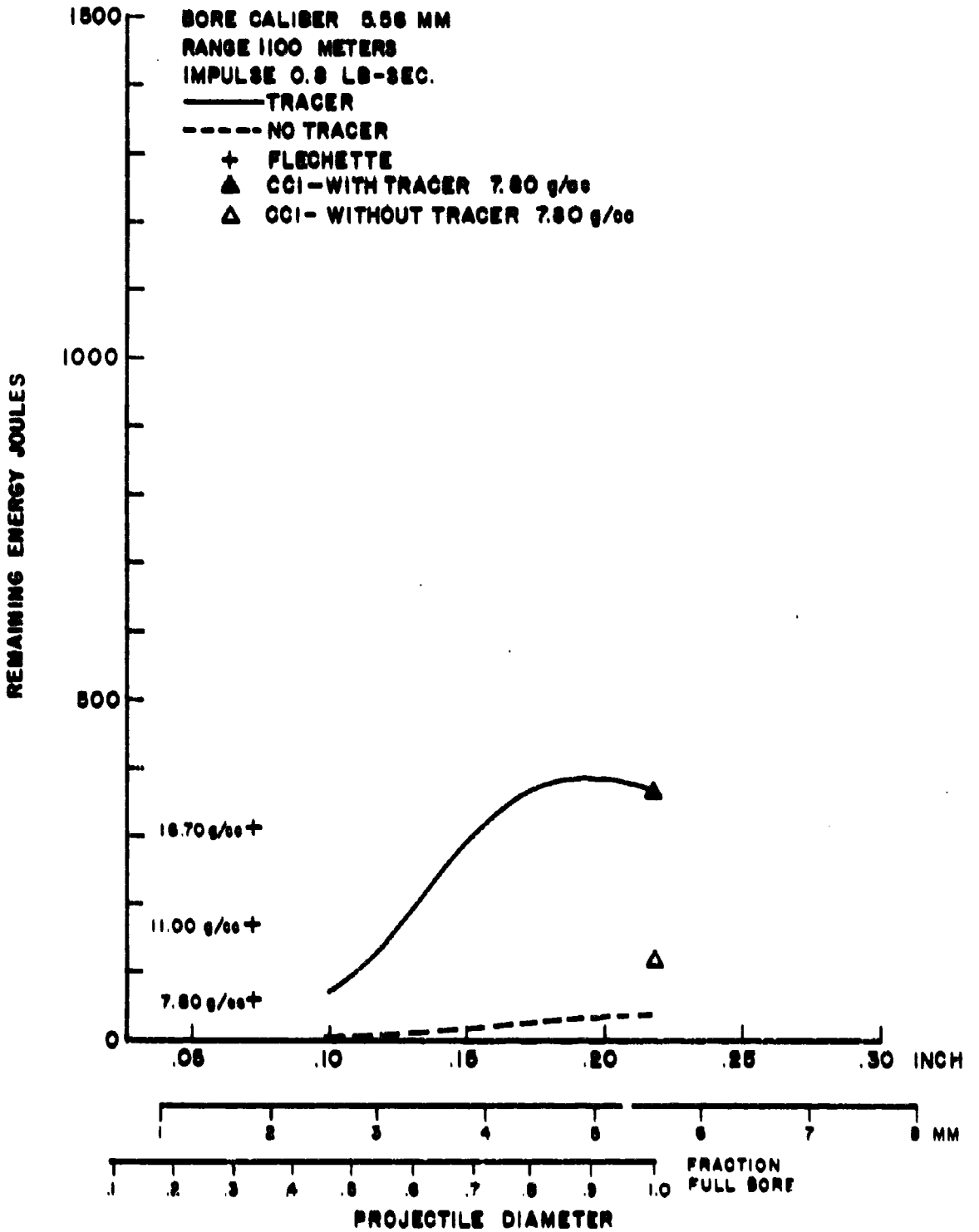

Figure 29. Remaining Energy For Sub Caliber Projectiles.

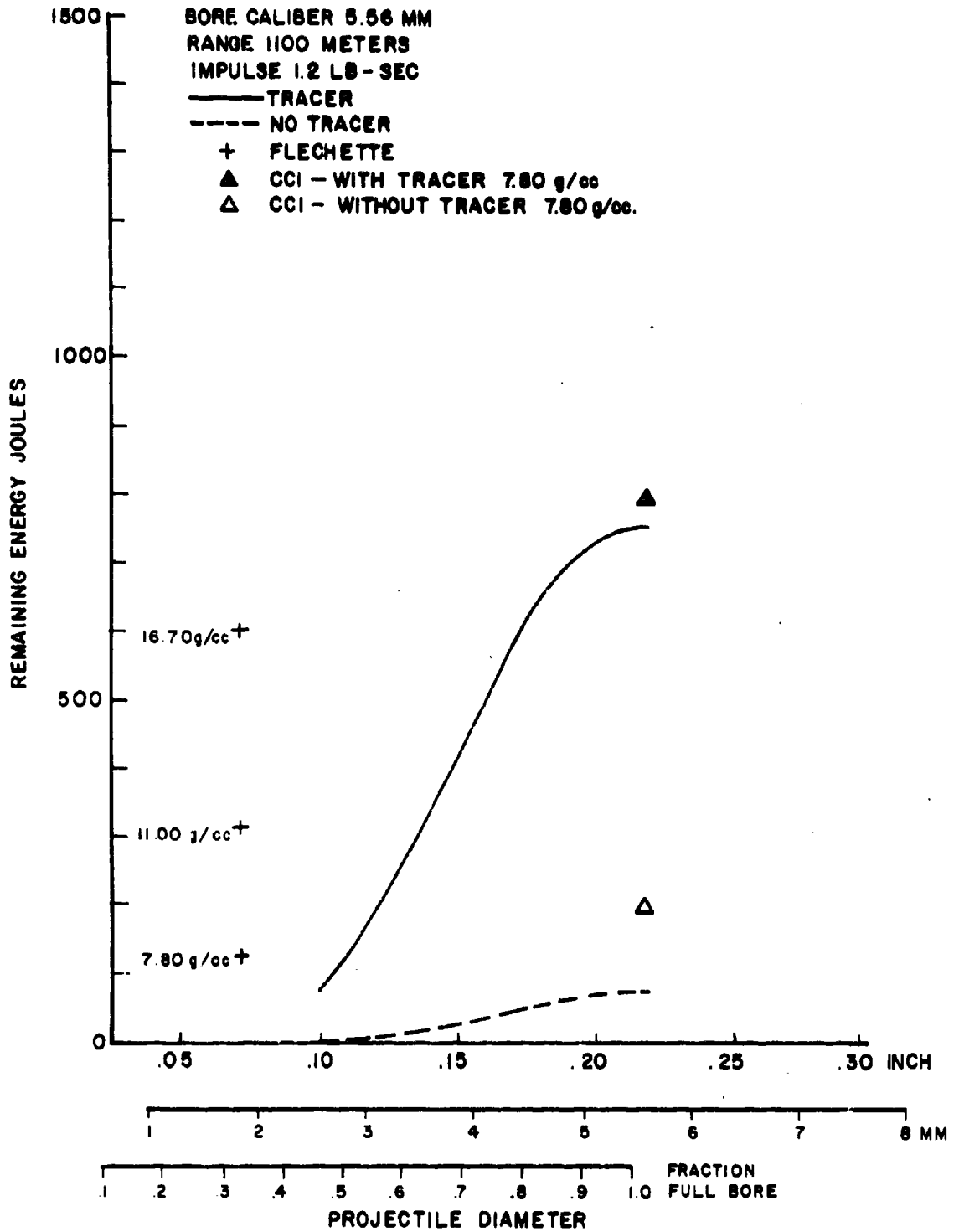

Figure 30. Remaining Energy For Sub Caliber Projectiles

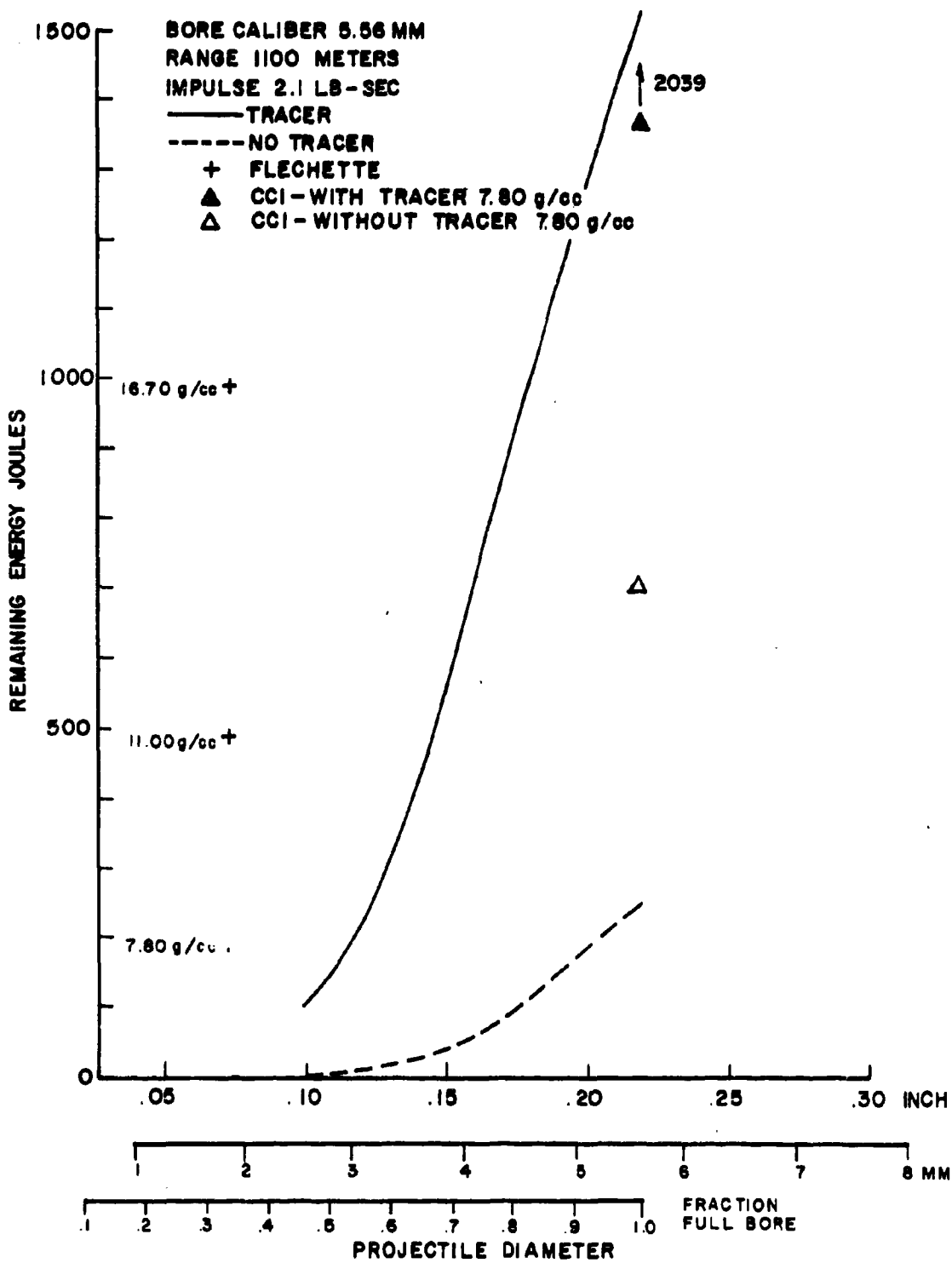

Figure 31. Remaining Energy For Sub Caliber Projectiles.

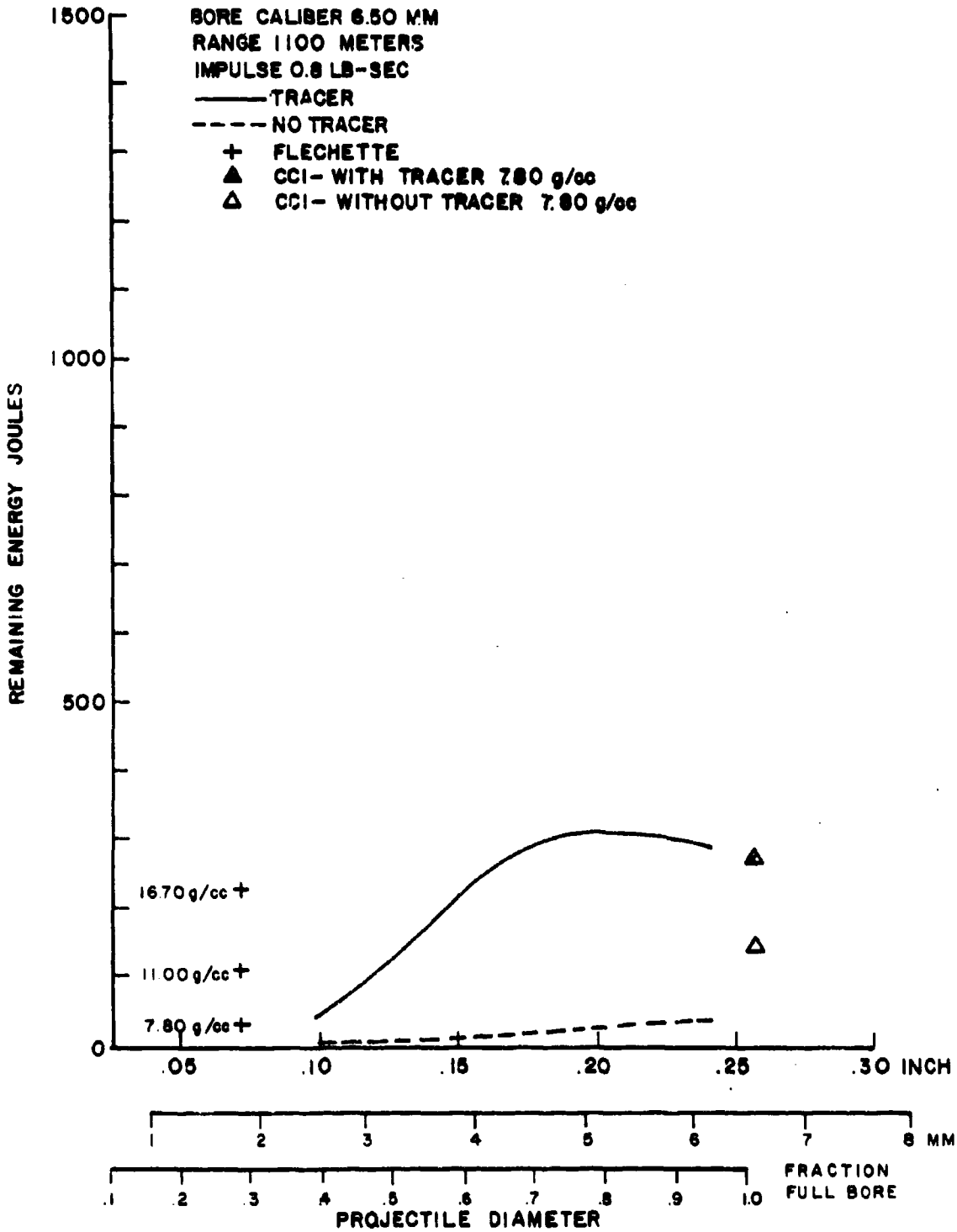

Figure 32. Remaining Energy For Sub Caliber Projectiles.

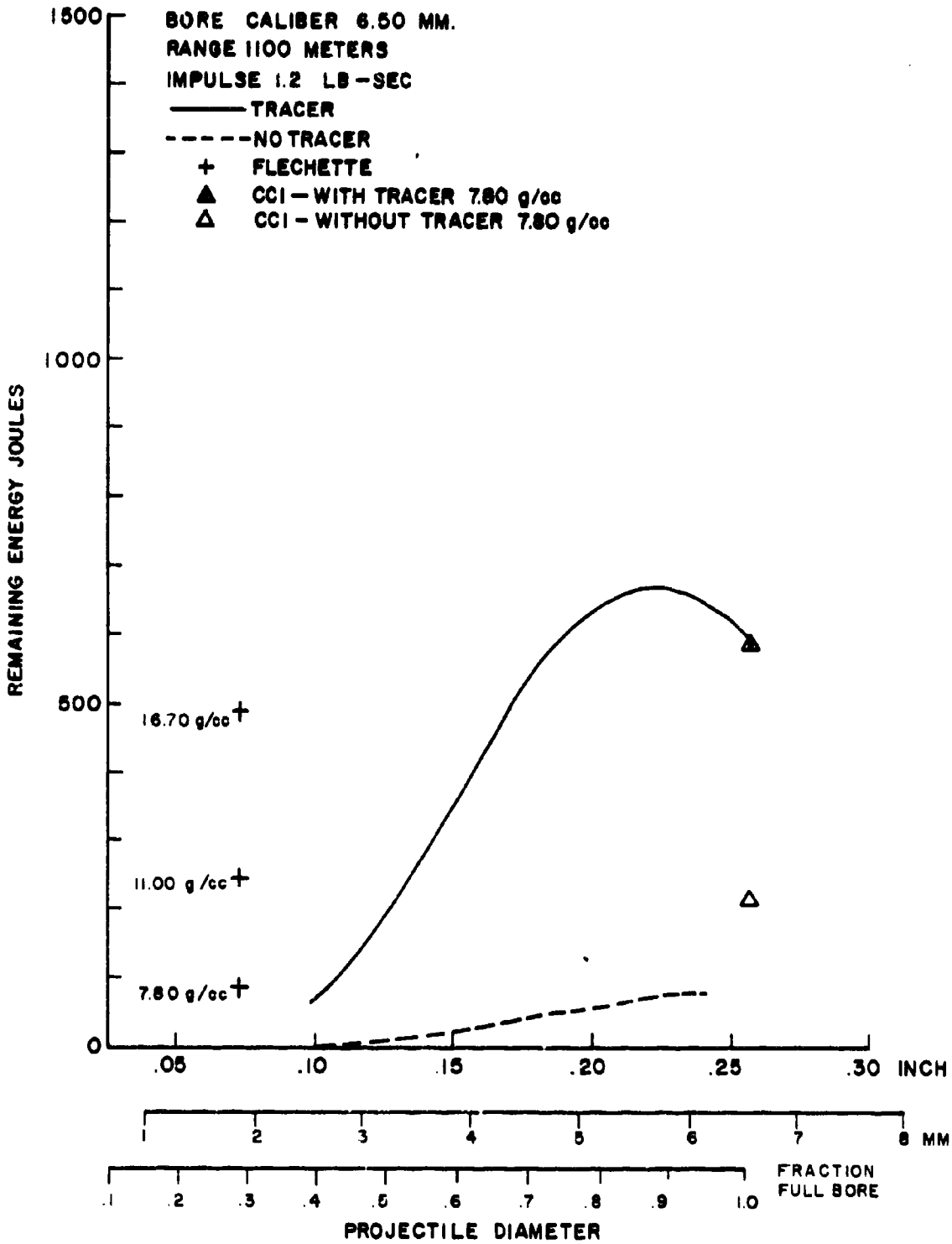

Figure 33. Remaining Energy For Sub Caliber Projectiles.

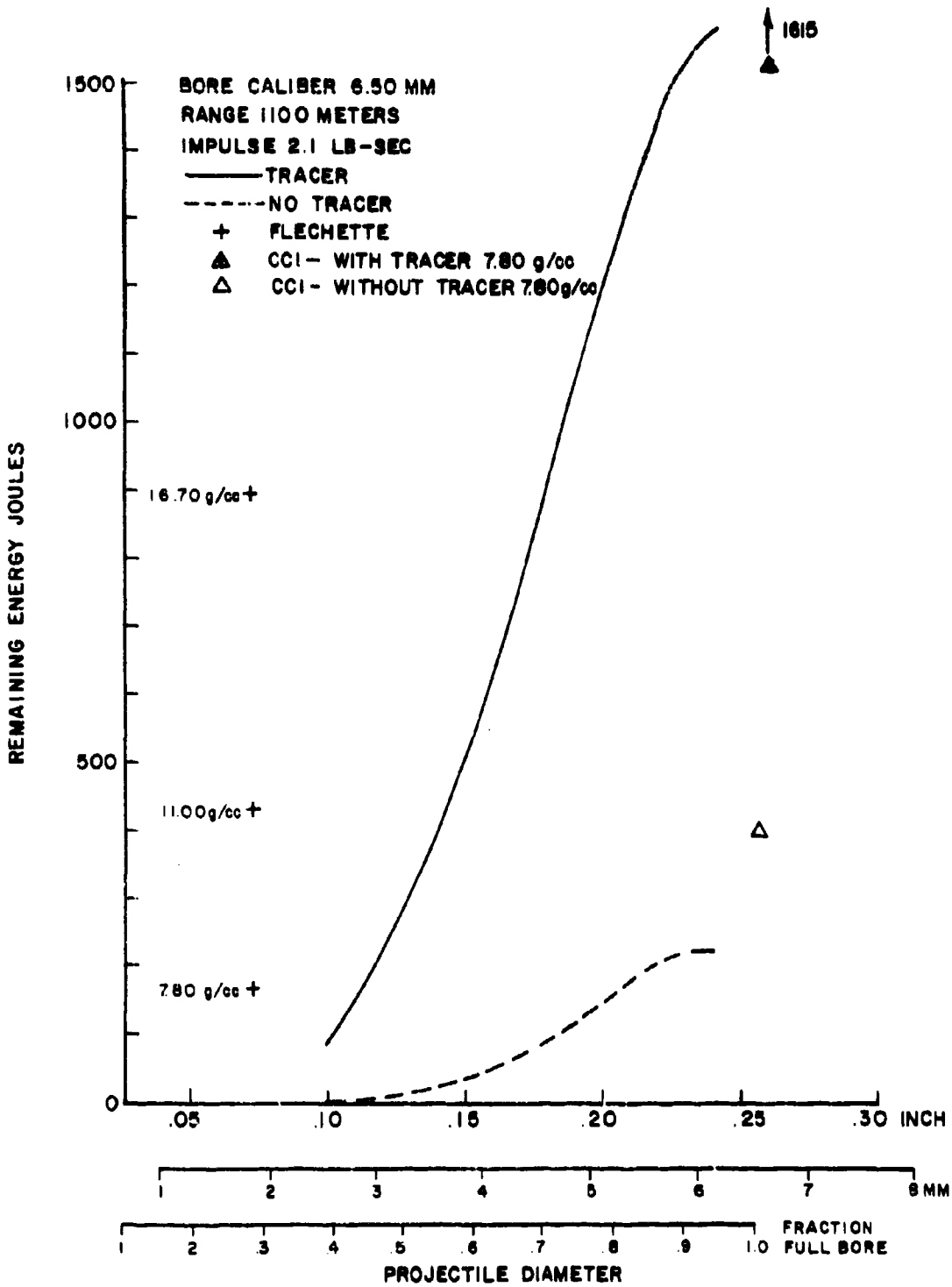

Figure 34. Remaining Energy For Sub Caliber Projectiles.

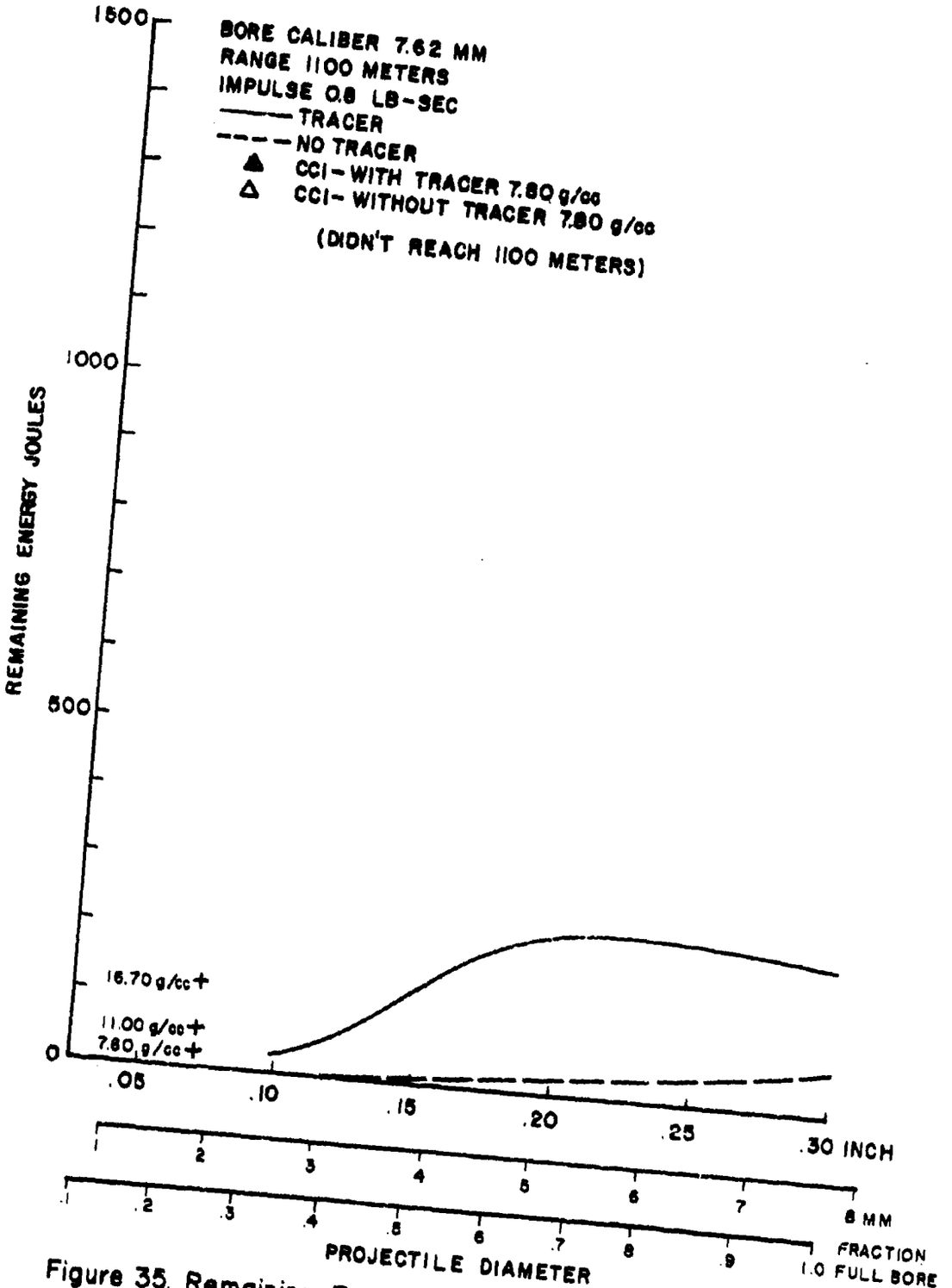

Figure 35. Remaining Energy For Sub Caliber Projectiles.

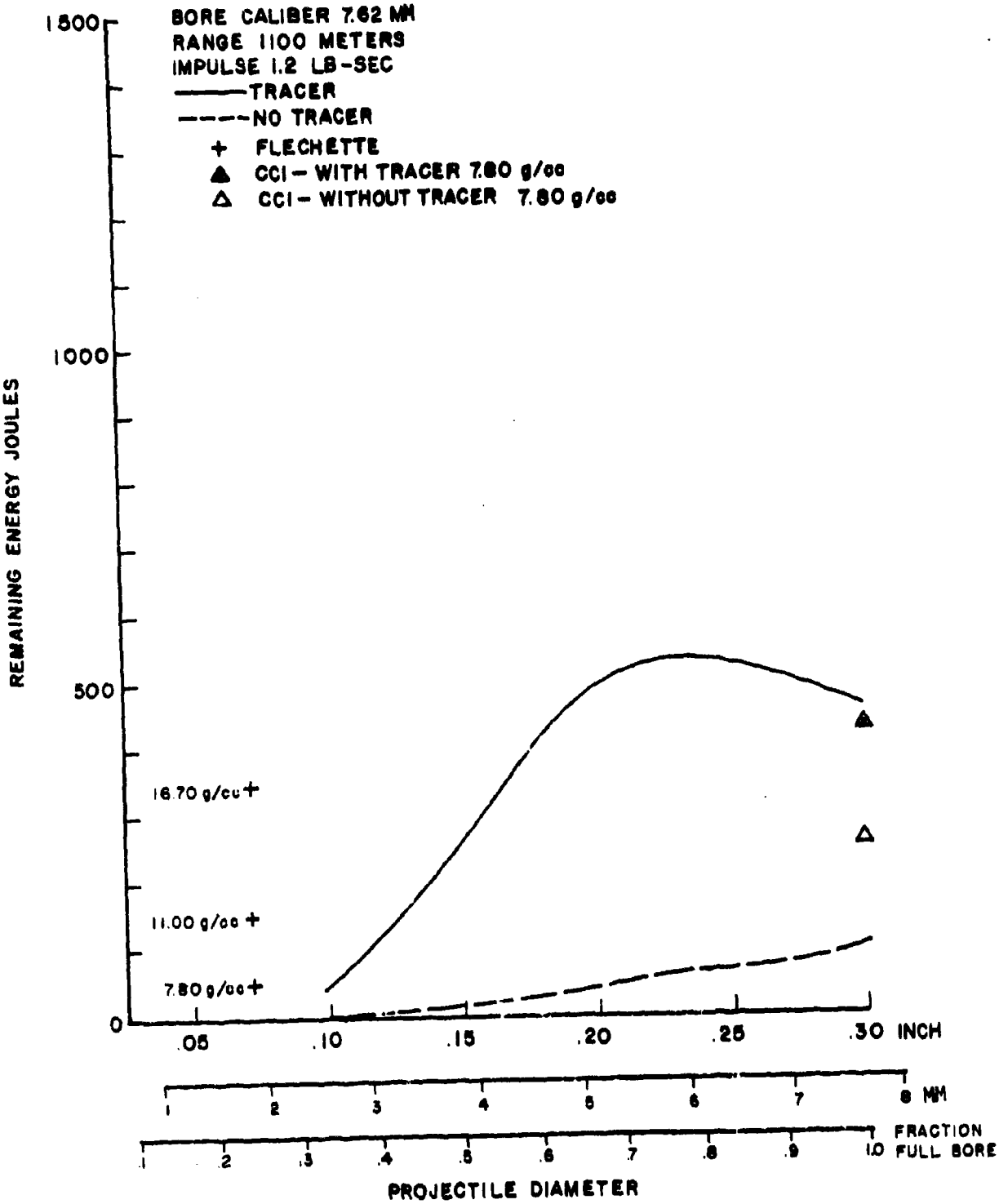

Figure 36. Remaining Energy For Sub Caliber Projectiles.

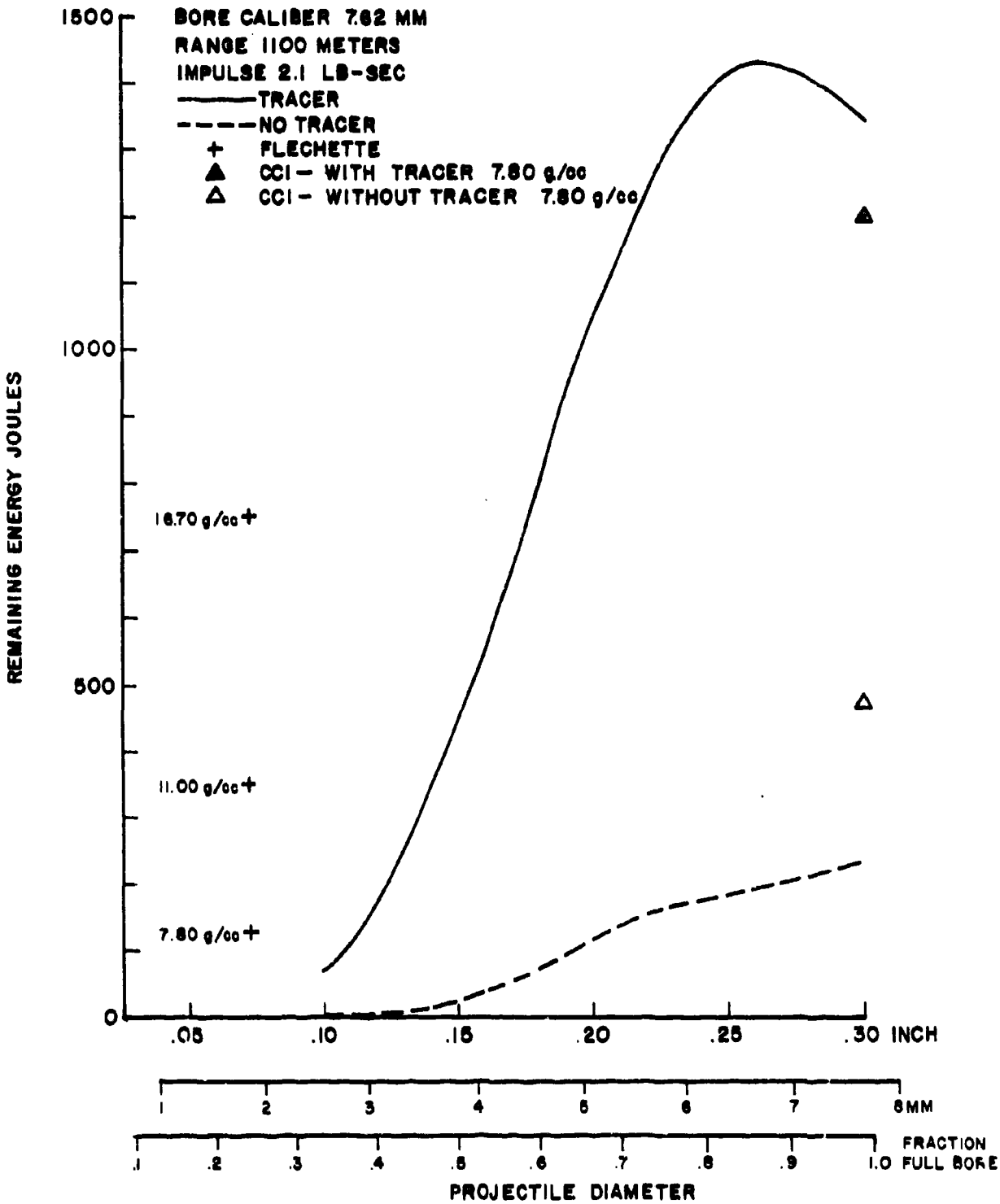

Figure 37. Remaining Energy For Sub Caliber Projectiles.

TABULATED DATA

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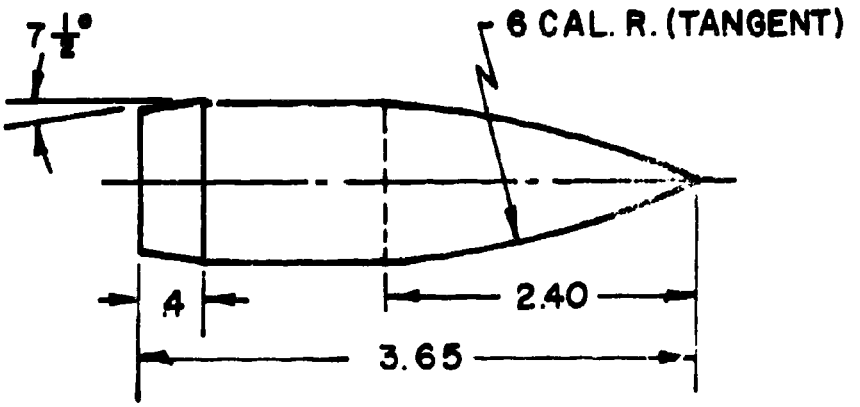
CB 1



ALL DIMENSIONS ARE IN CALIBERS

Axial Radius of Gyration	= 0.328 Cal.	Wetted Area	= 9.02 Cal.^{2}
Transverse Radius of Gyration	= 0.847 Cal.	Volume	= 1.97 Cal.^{3}
Center of Mass (Nose)	= 2.30 Cal.	Length	= 3.65 Cal.

Mach No.	C_{D_0}	C_{D_B}	C_{D_0} (Tracer)	$C_{D_{SF_T}}$	C_{D_W}	C_{N_α}	CP_N	C_{M_α}
.4 *	.165		.127			1.9	1.13	2.23
.8 *	.155		.117			2.0	1.15	2.30
.92*	.188		.143			2.3	1.28	2.35
1.02*	.260		.247			2.6	1.40	2.34
1.1 *	.432		.264			2.75	1.50	2.20
1.2 *	.432		.261			2.9	1.56	2.16
1.5 *	.393		.257			3.0	1.61	2.06
2.0	.339	.115	.224	.042	.182	2.9	1.63	1.94
2.5 *	.297		.209			2.75	1.62	1.86
3.0 *	.265		.192			2.62	1.62	1.78
3.5 *	.238		.178			2.55	1.60	1.78
4.0 *	.215		.164			2.52	1.59	1.78
4.5 *	.196		.154			2.50	1.59	1.78

$C_{D_{\alpha^2}}$ (Mach = 2.5) = 2.90

*Estimated data

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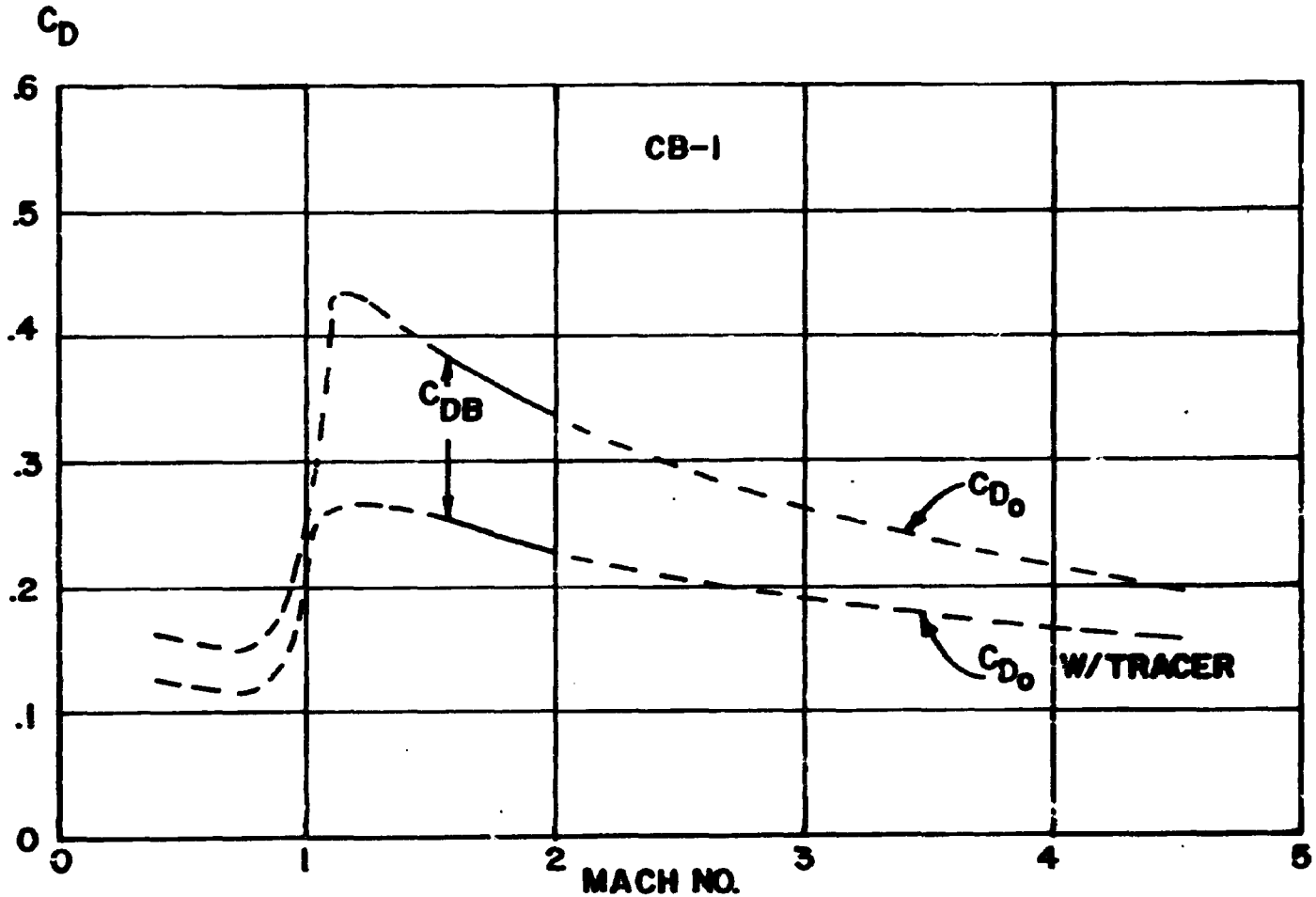
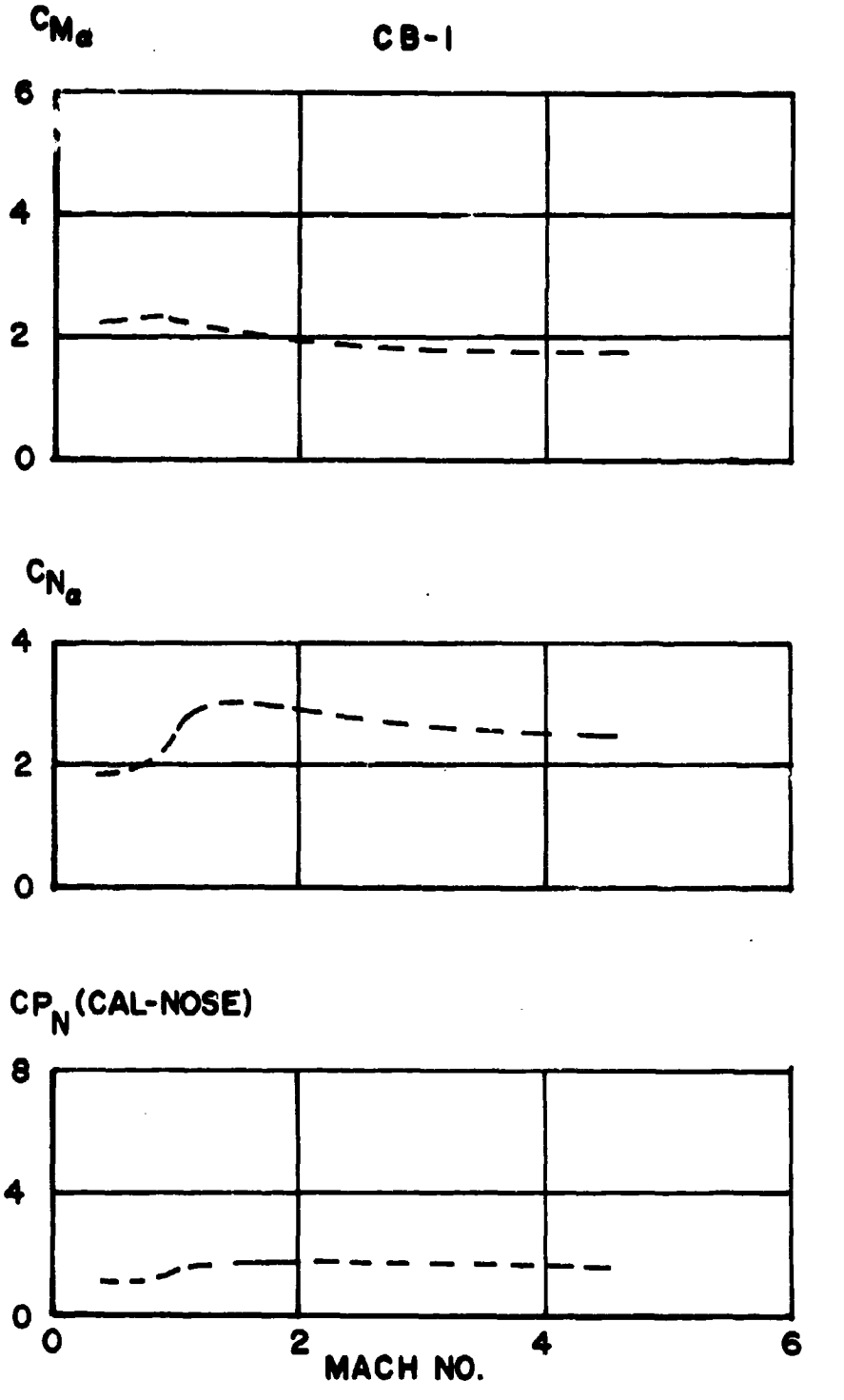


CB-1-2



CB-1-3

TYPE CB 1 CALIBER 5.56 MM AVERAGE DENSITY 7.80 GRAMS/CC.
PROJ. WT 2.632 GRAMS PROJ. DIA. 5.56 MM IMPULSE 0.8 LB. SEC.
DRAG RDCR. WT. 0.000 GRAMS CHG. WT. 0.96 GRAMS SABOT WT. 0.000 GRAMS
TWIST RATE REV./ 9.8 IN. PCT. DRAG CHANGE / (DEG. YAW)**2 0.76

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	35.9	923	1121	0.0
0	0.00	0.00	35.9	923	1121	0.0
50	1.75	0.06	35.3	850	952	-0.7
100	3.47	0.12	34.6	780	801	-1.4
150	5.14	0.19	33.7	712	667	-2.0
200	6.77	0.26	32.6	647	551	-2.6
250	8.34	0.34	31.3	584	449	-3.1
300	9.84	0.43	29.6	525	363	-3.5
350	11.25	0.53	27.6	469	290	-3.9
400	12.55	0.64	25.0	417	228	-4.2
450	13.70	0.77	21.8	369	179	-4.3
500	14.68	0.92	17.6	331	144	-3.8
550	15.43	1.07	12.7	310	126	-2.4
600	15.93	1.24	7.3	295	114	-1.9
650	16.14	1.41	1.2	281	104	-1.8
700	16.04	1.59	-5.4	269	95	-1.8
750	15.61	1.78	-12.6	257	87	-1.8
800	14.80	1.98	-20.5	246	80	-1.8
850	13.59	2.19	-29.2	235	73	-1.8
900	11.94	2.41	-38.6	225	67	-1.9
950	9.80	2.64	-48.9	215	61	-1.9
1000	7.13	2.87	-60.1	206	56	-1.9
1050	3.88	3.12	-72.5	197	51	-1.9
1100	0.00	3.38	-85.9	188	47	-2.0

DRAG RDCR. WT. 0.151 GRAMS PCT. DRAG CHANGE / (DEG. YAW)**2 1.19

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	21.3	923	1121	0.0
0	0.00	0.00	21.3	923	1121	0.0
50	1.03	0.06	20.6	871	998	-0.5
100	2.03	0.11	19.9	821	885	-1.0
150	2.99	0.18	19.1	773	783	-1.4
200	3.91	0.24	18.3	727	692	-1.8
250	4.78	0.32	17.3	682	609	-2.2
300	5.60	0.39	16.1	640	534	-2.5
350	6.36	0.47	14.8	598	466	-2.9
400	7.06	0.56	13.3	558	405	-3.2
450	7.67	0.65	11.6	519	350	-3.5
500	8.20	0.75	9.6	482	302	-3.7
550	8.61	0.86	7.3	448	259	-3.8
600	8.91	0.98	4.6	415	223	-3.9
650	9.07	1.10	1.4	385	191	-4.0
700	9.05	1.24	-2.2	357	164	-3.9
750	8.85	1.38	-6.4	333	143	-3.7
800	8.43	1.53	-11.2	317	128	-3.0
850	7.76	1.70	-16.4	304	118	-2.4
900	6.83	1.86	-22.0	292	108	-2.1
950	5.61	2.04	-28.1	282	100	-2.1
1000	4.08	2.22	-34.6	272	93	-2.0
1050	2.22	2.41	-41.6	263	87	-2.0
1100	0.00	2.60	-49.1	254	81	-2.0

TYPE CB 1 CALIBER 5.56 MM AVERAGE DENSITY 7.80 GRAMS/CC.

PROJ. WT 2.632 GRAMS PROJ. DIA. 5.56 MM IMPULSE 1.2 LB. SEC.

DRAG RDCR. WT. 0.000 GRAMS CHG. WT. 1.79 GRAMS SABOT WT. 0.000 GRAMS

TWIST RATE REV./ 9.9 IN. PCT. DRAG CHANGE / (DEG. YAW)**2 0.76

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	21.0	1207	1917	0.0
0	0.00	0.00	21.0	1207	1917	0.0
50	1.02	0.04	20.6	1127	1672	-0.8
100	2.02	0.09	20.2	1049	1448	-1.5
150	3.00	0.14	19.7	973	1246	-2.3
200	3.96	0.19	19.1	899	1063	-2.9
250	4.88	0.25	18.4	827	900	-3.6
300	5.77	0.31	17.6	757	755	-4.1
350	6.62	0.38	16.7	690	627	-4.7
400	7.41	0.46	15.5	626	516	-5.1
450	8.14	0.54	14.1	565	419	-5.5
500	8.80	0.64	12.4	506	337	-5.8
550	9.36	0.74	10.2	452	268	-6.0
600	9.80	0.86	7.4	400	211	-6.2
650	10.08	0.99	3.9	355	166	-6.1
700	10.17	1.14	-0.5	323	137	-5.0
750	10.03	1.30	-5.6	305	122	-3.1
800	9.62	1.47	-11.3	290	111	-2.5
850	8.92	1.64	-17.5	277	101	-2.3
900	7.91	1.83	-24.3	265	92	-2.2
450	6.54	2.02	-31.8	254	85	-2.2
1000	4.79	2.22	-39.9	243	77	-2.2
1050	2.62	2.43	-48.7	232	71	-2.3
1100	0.00	2.66	-58.4	222	65	-2.3

DRAG RDCR. WT. 0.151 GRAMS PCT. DRAG CHANGE / (DEG. YAW)**2 1.19

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	11.2	1207	1917	0.0
0	0.00	0.00	11.2	1207	1917	0.0
50	0.54	0.04	10.9	1147	1731	-0.6
100	1.07	0.09	10.5	1089	1558	-1.2
150	1.57	0.13	10.0	1032	1399	-1.7
200	2.05	0.18	9.5	977	1252	-2.2
250	2.51	0.24	9.0	923	1117	-2.7
300	2.93	0.29	8.3	871	994	-3.1
350	3.33	0.35	7.6	821	881	-3.5
400	3.69	0.41	6.9	773	780	-3.8
450	4.00	0.48	6.0	726	688	-4.2
500	4.28	0.55	5.0	682	605	-4.4
550	4.50	0.63	3.8	639	531	-4.7
600	4.66	0.71	2.5	597	463	-5.0
650	4.75	0.80	1.0	557	402	-5.2
700	4.76	0.89	-0.7	518	347	-5.4
750	4.68	0.99	-2.7	481	299	-5.6
800	4.50	1.10	-5.1	446	257	-5.6
850	4.19	1.21	-7.8	414	220	-5.6
900	3.74	1.34	-10.9	383	189	-5.6
950	3.12	1.47	-14.6	356	162	-5.5
1000	2.31	1.62	-18.8	332	141	-5.0
1050	1.28	1.77	-23.6	316	127	-4.2
1100	0.00	1.94	-28.8	303	116	-3.3

TYPE CB 1 CALIBER 5.56 MM AVERAGE DENSITY 7.80 GRAMS/CC.

PROJ. WT 2.632 GRAMS PROJ. DIA. 5.56 MM IMPULSE 2.1 LB. SEC.

DRAG RDCR. WT. 0.000 GRAMS CHG. WT. 4.03 GRAMS SABOT WT. 0.000 GRAMS

TWIST RATE REV./ 9.9 IN. PCT. DRAG CHANGE / (DEG. YAW)**2 0.76

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	10.4	1554	3178	0.0
0	0.00	0.00	10.4	1554	3178	0.0
50	0.51	0.03	10.2	1469	2841	-0.8
100	1.00	0.07	10.0	1386	2571	-1.7
150	1.49	0.11	9.7	1303	2244	-2.5
200	1.96	0.14	9.4	1222	1964	-3.2
250	2.41	0.19	9.0	1142	1715	-4.0
300	2.85	0.23	8.6	1063	1487	-4.7
350	3.26	0.28	8.1	987	1281	-5.3
400	3.65	0.33	7.6	912	1095	-5.9
450	4.01	0.39	6.9	840	928	-6.5
500	4.33	0.45	6.2	770	780	-7.0
550	4.62	0.52	5.2	702	649	-7.4
600	4.85	0.60	4.1	638	535	-7.8
650	5.03	0.68	2.8	576	436	-8.1
700	5.13	0.77	1.1	517	351	-8.3
750	5.14	0.87	-1.0	461	280	-8.4
800	5.03	0.99	-3.7	409	221	-8.5
850	4.78	1.12	-7.1	362	173	-8.3
900	4.34	1.26	-11.3	327	141	-7.3
950	3.67	1.42	-16.3	308	125	-5.1
1000	2.74	1.59	-21.9	293	113	-3.4
1050	1.53	1.76	-28.0	279	103	-3.0
1100	0.00	1.95	-34.7	267	94	-2.8

DRAG RDCR. WT. 0.151 GRAMS PCT. DRAG CHANGE / (DEG. YAW)**2 1.19

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	5.7	1554	3178	0.0
0	0.00	0.00	5.7	1554	3178	0.0
50	0.27	0.03	5.4	1488	2910	-0.7
100	0.53	0.07	5.2	1422	2659	-1.3
150	0.79	0.10	4.9	1358	2423	-1.9
200	1.02	0.14	4.7	1296	2203	-2.5
250	1.25	0.18	4.4	1234	1997	-3.1
300	1.45	0.22	4.0	1173	1804	-3.6
350	1.64	0.27	3.6	1114	1626	-4.1
400	1.81	0.31	3.2	1057	1461	-4.6
450	1.96	0.36	2.7	1001	1309	-5.0
500	2.09	0.41	2.2	946	1169	-5.4
550	2.19	0.47	1.6	893	1040	-5.8
600	2.25	0.52	0.9	842	924	-6.1
650	2.29	0.59	0.2	793	817	-6.4
700	2.28	0.65	-0.7	745	722	-6.7
750	2.23	0.72	-1.6	700	635	-6.9
800	2.13	0.79	-2.7	656	558	-7.0
850	1.98	0.87	-3.9	614	487	-7.2
900	1.76	0.96	-5.4	573	424	-7.4
950	1.46	1.05	-7.0	533	366	-7.6
1000	1.08	1.14	-8.9	495	315	-7.7
1050	0.60	1.25	-11.1	459	271	-7.7
1100	0.00	1.36	-13.6	426	232	-7.6

TYPE CB 1 CALIBER 5.56 MM AVERAGE DENSITY 11.00 GRAMS/CC.

PROJ. WT 3.712 GRAMS PROJ. DIA. 5.56 MM IMPULSE 0.8 LB. SEC.

DRAG RDCR. WT. 0.000 GRAMS CHG. WT. 0.79 GRAMS SABOT WT. 0.000 GRAMS

TWIST RATE REV./ 11.3 IN. PCT. DRAG CHANGE / (DEG. YAW)**2 0.76

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	37.6	708	930	0.0
0	0.00	0.00	37.6	708	930	0.0
50	1.82	0.07	36.5	662	812	-0.5
100	3.59	0.15	35.3	617	705	-0.9
150	5.29	0.24	33.9	573	604	-1.3
200	6.92	0.33	32.3	531	523	-1.7
250	8.45	0.42	30.3	491	447	-2.0
300	9.89	0.53	28.1	452	379	-2.3
350	11.21	0.65	25.4	415	320	-2.6
400	12.39	0.77	22.3	381	269	-2.7
450	13.39	0.91	18.5	350	227	-2.8
500	14.20	1.06	14.1	327	198	-2.3
550	14.78	1.21	9.2	312	181	-1.6
600	15.10	1.38	3.9	301	168	-1.4
650	15.16	1.55	-1.9	291	157	-1.4
700	14.92	1.72	-8.0	281	147	-1.4
750	14.37	1.90	-14.5	272	138	-1.3
800	13.50	2.09	-21.5	264	129	-1.4
850	12.27	2.28	-28.9	256	122	-1.4
900	10.67	2.48	-36.7	248	114	-1.4
950	8.67	2.69	-45.1	240	107	-1.5
1000	6.24	2.90	-54.0	233	101	-1.5
1050	3.36	3.12	-63.5	226	95	-1.5
1100	0.00	3.34	-73.6	219	89	-1.6

DRAG RDCR. WT. 0.151 GRAMS PCT. DRAG CHANGE / (DEG. YAW)**2 1.19

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	25.5	708	930	0.0
0	0.00	0.00	25.5	708	930	0.0
50	1.23	0.07	24.5	677	850	-0.3
100	2.40	0.15	23.4	647	775	-0.6
150	3.52	0.23	22.1	617	709	-0.9
200	4.57	0.31	20.7	588	640	-1.1
250	5.56	0.40	19.2	560	579	-1.4
300	6.46	0.49	17.5	533	523	-1.6
350	7.28	0.59	15.7	506	471	-1.9
400	8.00	0.69	13.6	480	424	-2.0
450	8.62	0.79	11.3	455	381	-2.2
500	9.12	0.91	8.8	432	342	-2.3
550	9.49	1.03	6.0	410	307	-2.5
600	9.71	1.15	2.8	388	275	-2.6
650	9.77	1.28	-0.7	368	247	-2.6
700	9.64	1.42	-4.6	349	222	-2.6
750	9.32	1.57	-8.9	333	202	-2.5
800	8.78	1.72	-13.5	321	187	-2.1
850	8.00	1.88	-18.5	311	175	-1.8
900	6.97	2.04	-23.9	302	165	-1.6
950	5.66	2.21	-29.5	294	156	-1.6
1000	4.08	2.38	-35.4	287	148	-1.6
1050	2.20	2.56	-41.6	279	140	-1.5
1100	0.00	2.74	-48.2	273	133	-1.5

TYPE CB 1 CALIBER 5.56 MM AVERAGE DENSITY 11.00 GRAMS/CC.

PROJ. WT 3.712 GRAMS PROJ. DIA. 5.56 MM IMPULSE 1.2 LB. SEC.

DRAG RDCR. WT. 0.000 GRAMS CHG. WT. 1.49 GRAMS SABOT WT. 0.000 GRAMS

TWIST RATE REV./ 11.7 IN. PCT. DRAG CHANGE / (DEG. YAW)**2 0.76

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	20.6	965	1728	0.0
0	0.00	0.00	20.6	965	1728	0.0
50	1.00	0.05	20.0	912	1545	-0.5
100	1.97	0.11	19.4	861	1375	-1.0
150	2.90	0.17	18.7	811	1219	-1.5
200	3.80	0.23	17.9	761	1076	-2.0
250	4.65	0.30	16.9	713	945	-2.4
300	5.46	0.37	15.9	667	825	-2.8
350	6.22	0.45	14.7	622	717	-3.2
400	6.91	0.53	13.3	578	620	-3.5
450	7.52	0.62	11.7	536	533	-3.8
500	8.06	0.72	9.8	495	455	-4.0
550	8.49	0.83	7.6	457	387	-4.3
600	8.80	0.94	5.0	420	327	-4.5
650	8.98	1.07	1.9	385	275	-4.6
700	8.99	1.20	-1.8	353	232	-4.5
750	8.80	1.35	-6.1	329	201	-4.0
800	8.39	1.50	-11.0	314	183	-2.9
850	7.73	1.67	-16.3	302	170	-2.1
900	6.80	1.84	-21.9	292	158	-1.9
950	5.58	2.01	-28.0	282	148	-1.9
1000	4.05	2.19	-34.5	274	139	-1.8
1050	2.20	2.38	-41.3	265	131	-1.8
1100	0.00	2.57	-48.7	257	123	-1.8

DRAG RDCR. WT. 0.151 GRAMS PCT. DRAG CHANGE / (DEG. YAW)**2 1.19

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	12.7	965	1728	0.0
0	0.00	0.00	12.7	965	1728	0.0
50	0.61	0.05	12.1	927	1594	-0.4
100	1.19	0.11	11.5	890	1468	-0.7
150	1.74	0.17	10.8	854	1350	-1.1
200	2.26	0.23	10.1	819	1240	-1.4
250	2.74	0.29	9.4	784	1137	-1.7
300	3.18	0.35	8.5	751	1042	-2.0
350	3.57	0.42	7.6	719	953	-2.3
400	3.92	0.49	6.6	687	871	-2.5
450	4.22	0.57	5.5	657	794	-2.7
500	4.47	0.64	4.2	627	723	-3.0
550	4.65	0.73	2.9	597	656	-3.2
600	4.76	0.81	1.4	569	594	-3.4
650	4.79	0.90	-0.2	541	536	-3.6
700	4.75	1.00	-2.0	514	483	-3.8
750	4.61	1.10	-4.0	488	435	-3.9
800	4.37	1.20	-6.2	462	390	-4.0
850	4.01	1.31	-8.7	439	351	-4.1
900	3.52	1.43	-11.4	416	315	-4.2
950	2.90	1.55	-14.4	394	282	-4.2
1000	2.11	1.68	-17.8	373	253	-4.2
1050	1.16	1.82	-21.6	354	227	-4.2
1100	0.00	1.97	-25.8	337	205	-4.0

TYPE CB 1 CALIBER 5.56 MM AVERAGE DENSITY 11.00 GRAMS/CC.

PROJ. WT 3.712 GRAMS PROJ. DIA. 5.56 MM IMPULSE 2.1 LB. SEC.

DRAG RDCR. WT. 0.000 GRAMS CHG. WT. 3.49 GRAMS SABOT WT. 0.000 GRAMS

TWIST RATE REV./ 11.8 IN. PCT. DRAG CHANGE / (DEG. YAW)**2 0.76

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	8.2	1353	3398	0.0
0	0.00	0.00	8.2	1353	3398	0.0
50	0.39	0.04	7.9	1295	3111	-0.6
100	0.77	0.08	7.6	1237	2839	-1.2
150	1.14	0.12	7.2	1180	2583	-1.7
200	1.48	0.16	6.8	1123	2342	-2.2
250	1.81	0.21	6.4	1068	2117	-2.8
300	2.12	0.26	6.0	1013	1906	-3.3
350	2.40	0.31	5.4	960	1710	-3.7
400	2.65	0.36	4.9	907	1528	-4.2
450	2.88	0.42	4.2	856	1360	-4.6
500	3.08	0.48	3.5	806	1205	-5.0
550	3.23	0.54	2.7	757	1062	-5.4
600	3.35	0.61	1.8	709	933	-5.8
650	3.41	0.68	0.7	662	815	-6.1
700	3.42	0.76	-0.5	617	708	-6.3
750	3.37	0.84	-1.9	574	611	-6.6
800	3.24	0.94	-3.6	532	525	-6.8
850	3.02	1.03	-5.5	491	448	-7.0
900	2.71	1.14	-7.7	453	381	-7.1
950	2.27	1.25	-10.4	416	321	-7.1
1000	1.69	1.38	-13.5	382	270	-7.1
1050	0.95	1.52	-17.3	351	228	-6.9
1100	0.00	1.66	-21.7	327	199	-6.1

DRAG RDCR. WT. 0.151 GRAMS PCT. DRAG CHANGE / (DEG. YAW)**2 1.19

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	5.6	1353	3398	0.0
0	0.00	0.00	5.6	1353	3398	0.0
50	0.27	0.04	5.3	1309	3176	-0.4
100	0.52	0.08	5.0	1265	2965	-0.9
150	0.76	0.12	4.7	1221	2764	-1.3
200	0.98	0.16	4.3	1178	2572	-1.7
250	1.19	0.20	4.0	1136	2390	-2.1
300	1.37	0.25	3.5	1095	2218	-2.5
350	1.54	0.29	3.1	1055	2056	-2.8
400	1.68	0.34	2.6	1015	1902	-3.2
450	1.80	0.39	2.1	976	1758	-3.5
500	1.90	0.44	1.6	937	1621	-3.8
550	1.97	0.50	1.0	900	1493	-4.1
600	2.01	0.56	0.4	863	1373	-4.4
650	2.01	0.61	-0.3	828	1261	-4.6
700	1.98	0.68	-1.1	793	1156	-4.9
750	1.91	0.74	-1.9	759	1059	-5.1
800	1.80	0.81	-2.8	726	969	-5.3
850	1.65	0.88	-3.8	695	885	-5.4
900	1.44	0.95	-4.9	664	807	-5.6
950	1.18	1.03	-6.1	633	734	-5.8
1000	0.85	1.11	-7.4	604	667	-6.0
1050	0.46	1.19	-8.8	575	603	-6.1
1100	0.00	1.28	-10.4	547	545	-6.3

TYPE CB 1 CALIBER 5.56 MM AVERAGE DENSITY 16.70 GRAMS/CC.
PROJ. WT 5.635 GRAMS PROJ. DIA. 5.56 MM IMPULSE 0.8 LB. SEC.
DRAG RDCR. WT. 0.000 GRAMS CHG. WT. 0.60 GRAMS SABOT WT. 0.000 GRAMS
TWIST RATE REV./ 13.5 IN. PCT. DRAG CHANGE / (DEG. YAW)**2 0.76

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	46.4	504	716	0.0
0	0.00	0.00	46.4	504	716	0.0
50	2.23	0.10	44.3	478	644	-0.3
100	4.35	0.21	42.0	453	577	-0.5
150	6.35	0.32	39.4	428	517	-0.7
200	8.22	0.44	36.5	405	461	-0.9
250	9.94	0.57	33.3	382	411	-1.1
300	11.49	0.71	29.7	361	367	-1.2
350	12.85	0.85	25.6	342	330	-1.3
400	14.00	1.00	21.2	328	303	-1.1
450	14.92	1.15	16.3	317	284	-0.9
500	15.60	1.31	11.2	309	269	-0.8
550	16.03	1.48	5.9	302	257	-0.8
600	16.18	1.64	0.3	295	245	-0.8
650	16.06	1.82	-5.6	288	234	-0.9
700	15.64	1.99	-11.8	282	224	-0.9
750	14.91	2.17	-18.2	276	215	-0.9
800	13.85	2.35	-24.9	271	206	-0.9
850	12.47	2.54	-31.8	265	198	-0.9
900	10.73	2.73	-39.1	260	190	-1.0
950	8.63	2.93	-46.6	255	183	-1.0
1000	6.16	3.12	-54.5	249	175	-1.0
1050	3.28	3.33	-62.7	244	168	-1.1
1100	0.00	3.53	-71.2	240	162	-1.1

DRAG RDCR. WT. 0.151 GRAMS PCT. DRAG CHANGE / (DEG. YAW)**2 1.19

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	37.1	504	716	0.0
0	0.00	0.00	37.1	504	716	0.0
50	1.77	0.10	35.0	487	668	-0.2
100	3.44	0.21	32.9	471	623	-0.3
150	5.00	0.31	30.5	455	581	-0.5
200	6.43	0.43	28.0	439	542	-0.6
250	7.73	0.54	25.3	424	505	-0.7
300	8.92	0.66	22.5	410	470	-0.9
350	9.95	0.79	19.4	396	438	-1.0
400	10.83	0.91	16.1	382	408	-1.1
450	11.53	1.05	12.5	369	380	-1.2
500	12.06	1.19	8.7	356	354	-1.2
550	12.39	1.33	4.6	345	331	-1.3
600	12.52	1.48	0.3	335	311	-1.2
650	12.42	1.63	-4.3	326	295	-1.1
700	12.10	1.78	-9.1	319	282	-1.1
750	11.54	1.94	-14.1	312	270	-1.0
800	10.72	2.10	-19.3	306	260	-0.9
850	9.64	2.27	-24.8	301	250	-1.0
900	8.30	2.44	-30.4	296	241	-1.0
950	6.67	2.61	-36.2	291	232	-1.0
1000	4.75	2.78	-42.2	286	224	-1.0
1050	2.53	2.96	-48.4	281	217	-1.0
1100	0.00	3.14	-54.9	275	208	-1.1

TYPE CB 1 CALIBER 5.56 MM AVERAGE DENSITY 16.70 GRAMS/CC.

PROJ. WT 5.635 GRAMS PROJ. DIA. 5.56 MM IMPULSE 1.2 LB. SEC.

DRAG RDCR. WT. 0.000 GRAMS CHG. WT. 1.17 GRAMS SABOT WT. 0.000 GRAMS

TWIST RATE REV./ 13.9 IN. PCT. DRAG CHANGE / (DEG. YAW)**2 0.76

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	26.3	701	1385	0.0
0	0.00	0.00	26.3	701	1385	0.0
50	1.26	0.07	25.2	670	1266	-0.3
100	2.47	0.15	24.0	640	1156	-0.6
150	3.63	0.23	22.8	611	1052	-0.9
200	4.71	0.31	21.4	582	955	-1.1
250	5.72	0.40	19.8	554	865	-1.4
300	6.66	0.49	18.1	527	782	-1.6
350	7.50	0.59	16.2	500	705	-1.9
400	8.25	0.69	14.1	474	634	-2.1
450	8.89	0.80	11.8	449	569	-2.3
500	9.41	0.92	9.1	425	509	-2.4
550	9.79	1.04	6.2	401	454	-2.6
600	10.02	1.17	2.9	379	405	-2.7
650	10.08	1.30	-0.8	358	362	-2.7
700	9.95	1.45	-4.9	340	326	-2.6
750	9.60	1.60	-9.4	326	300	-2.3
800	9.03	1.75	-14.2	316	282	-1.8
850	8.21	1.91	-19.4	308	268	-1.5
900	7.14	2.08	-24.7	301	255	-1.3
950	5.79	2.24	-30.4	294	244	-1.3
1000	4.16	2.42	-36.3	288	233	-1.3
1050	2.24	2.59	-42.5	282	223	-1.3
1100	0.00	2.77	-48.9	276	214	-1.3

DRAG RDCR. WT. 0.151 GRAMS PCT. DRAG CHANGE / (DEG. YAW)**2 1.19

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	18.9	701	1385	0.0
0	0.00	0.00	18.9	701	1385	0.0
50	0.90	0.07	17.8	681	1305	-0.2
100	1.75	0.15	16.7	661	1228	-0.4
150	2.54	0.22	15.5	641	1155	-0.6
200	3.28	0.30	14.3	621	1085	-0.8
250	3.95	0.38	13.0	602	1018	-1.0
300	4.55	0.47	11.5	583	955	-1.1
350	5.08	0.56	10.0	565	894	-1.3
400	5.54	0.65	8.4	546	836	-1.5
450	5.91	0.74	6.7	528	782	-1.6
500	6.20	0.84	4.8	511	730	-1.8
550	6.39	0.94	2.8	494	681	-1.9
600	6.48	1.04	0.7	477	635	-2.0
650	6.47	1.15	-1.6	461	592	-2.1
700	6.34	1.26	-4.0	445	552	-2.2
750	6.08	1.37	-6.6	430	514	-2.3
800	5.70	1.49	-9.4	415	479	-2.4
850	5.17	1.61	-12.4	401	446	-2.5
900	4.49	1.74	-15.6	387	415	-2.5
950	3.64	1.87	-19.1	373	386	-2.6
1000	2.62	2.01	-22.8	361	360	-2.6
1050	1.41	2.15	-26.8	349	336	-2.6
1100	0.00	2.29	-31.0	338	315	-2.5

TYPE CB 1 CALIBER 5.56 MM AVERAGE DENSITY 16.70 GRAMS/CC.

PROJ. WT 5.635 GRAMS PROJ. DIA. 5.56 MM IMPULSE 2.1 LB. SEC.

DRAG RDCR. WT. 0.000 GRAMS CHG. WT. 2.82 GRAMS SABOT WT. 0.000 GRAMS

TWIST RATE REV./ 14.5 IN. PCT. DRAG CHANGE / (DEC. YAW)**2 0.76

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	9.5	1064	3190	0.0
0	0.00	0.00	9.5	1064	3190	0.0
50	0.45	0.05	9.0	1028	2977	-0.4
100	0.89	0.10	8.5	992	2775	-0.7
150	1.29	0.15	8.0	957	2582	-1.1
200	1.67	0.20	7.4	923	2398	-1.4
250	2.03	0.26	6.8	888	2223	-1.7
300	2.35	0.31	6.2	855	2058	-2.0
350	2.64	0.37	5.5	822	1902	-2.3
400	2.89	0.44	4.7	789	1753	-2.6
450	3.10	0.50	3.9	757	1613	-2.9
500	3.27	0.57	2.9	725	1481	-3.2
550	3.40	0.64	2.0	694	1357	-3.4
600	3.47	0.71	0.9	664	1241	-3.7
650	3.49	0.79	-0.3	634	1132	-3.9
700	3.45	0.87	-1.6	604	1029	-4.1
750	3.34	0.96	-3.1	576	934	-4.3
800	3.16	1.04	-4.6	548	846	-4.5
850	2.89	1.14	-6.4	521	764	-4.7
900	2.54	1.24	-8.3	494	688	-4.8
950	2.08	1.34	-10.5	469	619	-4.9
1000	1.52	1.45	-12.9	444	555	-5.1
1050	0.83	1.57	-15.6	420	496	-5.2
1100	0.00	1.69	-18.6	396	443	-5.2

DRAG RDCR. WT. 0.151 GRAMS PCT. DRAG CHANGE / (DEG. YAW)**2 1.19

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	7.4	1064	3190	0.0
0	0.00	0.00	7.4	1064	3190	0.0
50	0.35	0.05	7.0	1038	3033	-0.3
100	0.68	0.10	6.5	1012	2881	-0.5
150	0.99	0.15	6.0	986	2736	-0.8
200	1.27	0.20	5.5	961	2596	-1.0
250	1.53	0.25	4.9	936	2462	-1.2
300	1.76	0.30	4.3	911	2333	-1.5
350	1.95	0.36	3.7	887	2209	-1.7
400	2.12	0.42	3.0	863	2090	-1.9
450	2.26	0.48	2.3	839	1977	-2.1
500	2.36	0.54	1.6	816	1868	-2.3
550	2.42	0.60	0.8	794	1765	-2.5
600	2.45	0.66	0.0	771	1666	-2.7
650	2.44	0.73	-0.8	749	1572	-2.8
700	2.38	0.80	-1.7	728	1483	-3.0
750	2.27	0.87	-2.7	707	1397	-3.2
800	2.12	0.94	-3.7	686	1316	-3.3
850	1.92	1.01	-4.8	666	1239	-3.4
900	1.66	1.09	-6.0	646	1165	-3.6
950	1.34	1.17	-7.2	627	1094	-3.7
1000	0.96	1.25	-8.5	607	1027	-3.9
1050	0.52	1.33	-9.9	588	962	-4.0
1100	0.00	1.42	-11.4	569	901	-4.2

TYPE CB 1 CALIBER 6.50 MM AVERAGE DENSITY 7.80 GRAMS/CC.

PROJ. WT 4.212 GRAMS PROJ. DIA. 6.50 MM IMPULSE 0.8 LB. SEC.

DRAG RDCR. WT. 0.000 GRAMS CHG. WT. 0.73 GRAMS SABOT WT. 0.000 GRAMS

TWIST RATE REV./ 11.0 IN. PCT. DRAG CHANGE / (DEG. YAW)**2 0.76

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	52.2	639	860	0.0
0	0.00	0.00	52.2	639	860	0.0
50	2.53	0.08	50.9	586	722	-0.5
100	4.99	0.17	49.3	535	602	-1.0
150	7.37	0.27	47.3	486	498	-1.4
200	9.64	0.38	45.0	440	408	-1.8
250	11.78	0.50	42.1	397	336	-2.1
300	13.77	0.63	38.6	358	269	-2.3
350	15.57	0.78	34.3	328	226	-1.9
400	17.13	0.93	29.4	310	203	-1.3
450	18.45	1.10	23.9	297	186	-1.2
500	19.48	1.27	18.0	285	171	-1.2
550	20.22	1.45	11.7	274	158	-1.2
600	20.63	1.64	4.8	264	147	-1.2
650	20.68	1.83	-2.7	254	136	-1.3
700	20.36	2.03	-10.7	245	126	-1.3
750	19.63	2.24	-19.3	236	117	-1.4
800	18.46	2.45	-28.7	227	109	-1.4
850	16.82	2.68	-38.7	219	101	-1.5
900	14.66	2.91	-49.6	210	93	-1.5
950	11.94	3.15	-61.3	203	86	-1.5
1000	8.63	3.41	-74.0	195	80	-1.6
1050	4.66	3.67	-87.6	188	74	-1.6
1100	0.00	3.94	-102.3	181	69	-1.6

DRAG RDCR. WT. 0.241 GRAMS PCT. DRAG CHANGE / (DEG. YAW)**2 1.19

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	36.4	639	860	0.0
0	0.00	0.00	36.4	639	860	0.0
50	1.76	0.08	35.2	604	766	-0.3
100	3.49	0.17	33.7	569	680	-0.7
150	5.07	0.26	32.1	536	602	-1.0
200	6.60	0.35	30.2	504	531	-1.3
250	8.03	0.46	28.1	473	467	-1.5
300	9.36	0.56	25.7	444	411	-1.7
350	10.56	0.68	23.0	416	360	-1.9
400	11.62	0.80	20.0	390	316	-2.1
450	12.52	0.94	16.5	366	277	-2.2
500	13.23	1.08	12.5	344	244	-2.2
550	13.74	1.23	8.0	327	220	-1.9
600	14.02	1.38	3.1	314	202	-1.6
650	14.05	1.55	-2.1	303	188	-1.4
700	13.82	1.71	-7.7	293	175	-1.4
750	13.30	1.89	-13.7	284	164	-1.4
800	12.47	2.07	-20.1	276	154	-1.4
850	11.32	2.25	-26.9	268	144	-1.4
900	9.83	2.44	-34.1	260	135	-1.4
950	7.98	2.64	-41.7	252	127	-1.4
1000	5.74	2.84	-49.8	245	119	-1.5
1050	3.09	3.05	-58.4	237	111	-1.6
1100	0.00	3.26	-67.7	228	103	-1.7

TYPE CB 1 CALIBER 6.50 MM AVERAGE DENSITY 7.80 GRAMS/CC.
PROJ. WT 4.212 GRAMS PROJ. DIA. 6.50 MM IMPULSE 1.2 LB. SEC.
DRAG RDCR. WT. 0.000 GRAMS CHG. WT. 1.39 GRAMS SABOT WT. 0.000 GRAMS
TWIST RATE REV./ 11.4 IN. PCT. DRAG CHANGE / (DEG. YAW)**2 0.76

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	31.7	880	1631	0.0
0	0.00	0.00	31.7	880	1631	0.0
50	1.54	0.06	31.1	819	1413	-0.6
100	3.05	0.12	30.2	760	1215	-1.2
150	4.51	0.19	29.3	702	1036	-1.7
200	5.93	0.27	28.2	647	881	-2.2
250	7.28	0.35	26.9	593	741	-2.7
300	8.57	0.43	25.4	542	618	-3.1
350	9.77	0.53	23.5	493	512	-3.4
400	10.87	0.64	21.2	447	420	-3.7
450	11.85	0.76	18.4	403	342	-3.9
500	12.68	0.89	15.0	363	278	-4.0
550	13.32	1.03	10.8	331	231	-3.6
600	13.74	1.19	6.0	313	206	-2.4
650	13.91	1.35	0.6	299	188	-1.8
700	13.80	1.52	-5.2	287	173	-1.7
750	13.40	1.70	-11.5	276	160	-1.7
800	12.67	1.88	-18.3	266	149	-1.7
850	11.60	2.08	-25.7	256	138	-1.7
900	10.15	2.27	-33.6	247	128	-1.7
950	8.30	2.48	-42.1	237	119	-1.8
1000	6.02	2.70	-51.3	229	110	-1.8
1050	3.26	2.92	-61.2	220	102	-1.8
1100	0.00	3.15	-71.9	212	95	-1.9

DRAG RDCR. WT. 0.241 GRAMS PCT. DRAG CHANGE / (DEG. YAW)**2 1.19

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	19.4	880	1631	0.0
0	0.00	0.00	19.4	880	1631	0.0
50	0.94	0.06	18.8	837	1473	-0.4
100	1.84	0.12	18.0	795	1328	-0.8
150	2.70	0.18	17.2	755	1195	-1.2
200	3.53	0.25	16.2	716	1074	-1.5
250	4.30	0.32	15.2	678	963	-1.9
300	5.02	0.40	14.1	642	861	-2.2
350	5.68	0.48	12.8	606	766	-2.5
400	6.28	0.57	11.3	571	680	-2.8
450	6.80	0.66	9.7	538	601	-3.0
500	7.24	0.75	7.9	505	530	-3.2
550	7.58	0.85	5.8	474	466	-3.4
600	7.81	0.96	3.4	445	409	-3.5
650	7.92	1.08	0.7	417	359	-3.6
700	7.88	1.20	-2.3	391	315	-3.7
750	7.69	1.33	-5.8	366	275	-3.7
800	7.31	1.48	-9.8	344	243	-3.6
850	6.73	1.62	-14.3	327	218	-3.2
900	5.92	1.78	-19.1	314	200	-2.6
950	4.86	1.94	-24.4	303	186	-2.2
1000	3.53	2.11	-30.0	293	174	-2.0
1050	1.92	2.28	-36.0	284	162	-2.0
1100	0.00	2.46	-42.4	275	152	-1.9

TYPE CB 1 CALIBER 6.50 MM AVERAGE DENSITY 7.80 GRAMS/CC.

PROJ. WT 4.212 GRAMS PROJ. DIA. 6.50 MM IMPULSE 2.1 LB. SEC.

DRAG RDCR. WT. 0.000 GRAMS CHG. WT. 3.29 GRAMS SABOT WT. 0.000 GRAMS

TWIST RATE REV./ 11.6 IN. PCT. DRAG CHANGE / (DEG. YAW)**2 0.76

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	13.8	1269	3391	0.0
0	0.00	0.00	13.8	1269	3391	0.0
50	0.67	0.04	13.5	1200	3032	-0.7
100	1.33	0.08	13.1	1132	2698	-1.4
150	1.96	0.13	12.7	1065	2388	-2.0
200	2.58	0.18	12.2	999	2103	-2.6
250	3.17	0.23	11.7	935	1842	-3.2
300	3.73	0.28	11.1	873	1604	-3.7
350	4.26	0.34	10.4	812	1388	-4.2
400	4.75	0.41	9.6	753	1194	-4.7
450	5.20	0.48	8.6	696	1019	-5.1
500	5.60	0.55	7.5	640	864	-5.5
550	5.94	0.63	6.2	587	726	-5.9
600	6.21	0.72	4.6	536	605	-6.2
650	6.40	0.82	2.7	488	501	-6.4
700	6.48	0.93	0.4	442	411	-6.5
750	6.44	1.05	-2.5	398	334	-6.6
800	6.24	1.18	-6.0	359	271	-6.5
850	5.85	1.33	-10.3	329	228	-5.7
900	5.23	1.48	-15.2	311	204	-4.1
950	4.36	1.65	-20.6	298	187	-2.9
1000	3.22	1.82	-26.5	286	172	-2.5
1050	1.77	2.00	-32.8	275	159	-2.4
1100	0.00	2.18	-39.7	265	148	-2.3

DRAG RDCR. WT. 0.241 GRAMS PCT. DRAG CHANGE / (DEG. YAW)**2 1.19

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	7.9	1269	3391	0.0
0	0.00	0.00	7.9	1269	3391	0.0
50	0.38	0.04	7.6	1217	3116	-0.5
100	0.75	0.08	7.2	1166	2856	-1.0
150	1.09	0.13	6.9	1115	2613	-1.5
200	1.42	0.17	6.4	1066	2385	-2.0
250	1.73	0.22	6.0	1018	2173	-2.4
300	2.01	0.27	5.5	971	1975	-2.8
350	2.27	0.32	4.9	925	1792	-3.2
400	2.49	0.38	4.3	881	1621	-3.6
450	2.69	0.44	3.6	837	1463	-3.9
500	2.86	0.50	2.9	795	1318	-4.2
550	2.98	0.56	2.0	754	1186	-4.5
600	3.06	0.63	1.1	715	1064	-4.7
650	3.10	0.70	0.1	677	953	-4.9
700	3.08	0.78	-1.1	641	851	-5.1
750	3.00	0.86	-2.4	605	758	-5.4
800	2.85	0.94	-3.8	570	672	-5.6
850	2.63	1.03	-5.5	536	593	-5.8
900	2.33	1.13	-7.3	503	522	-5.9
950	1.93	1.23	-9.4	472	459	-6.0
1000	1.42	1.34	-11.8	443	402	-6.0
1050	0.78	1.46	-14.5	415	353	-6.0
1100	0.00	1.58	-17.6	389	309	-5.9

TYPE CH 1 CALIBER 6.50 MM AVERAGE DENSITY 11.00 GRAMS/CC.

PROJ. WT 5.940 GRAMS PROJ. DIA. 6.50 MM IMPULSE 0.8 LB. SEC.

DRAG RDCR. WT. 0.000 GRAMS CHG. WT. 0.57 GRAMS SABOT WT. 0.000 GRAMS

TWIST RATE REV./ 12.7 IN. PCT. DRAG CHANGE / (DEG. YAW)**2 0.76

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	56.7	483	693	0.0
0	0.00	0.00	56.7	483	693	0.0
50	2.73	0.11	54.4	450	602	-0.3
100	5.34	0.22	51.7	419	521	-0.6
150	7.81	0.35	48.7	389	449	-0.9
200	10.11	0.48	45.1	361	387	-1.1
250	12.23	0.62	41.0	337	338	-1.1
300	14.13	0.78	36.4	321	306	-0.9
350	15.80	0.94	31.3	310	285	-0.7
400	17.21	1.10	26.0	300	268	-0.8
450	18.35	1.27	20.2	292	252	-0.8
500	19.20	1.44	14.2	283	238	-0.8
550	19.74	1.62	7.8	276	226	-0.9
600	19.96	1.81	1.0	268	214	-0.9
650	19.85	1.99	-6.1	261	203	-0.9
700	19.37	2.19	-13.6	254	192	-1.0
750	18.51	2.39	-21.5	248	182	-1.0
800	17.26	2.59	-29.9	241	173	-1.1
850	15.58	2.80	-38.7	235	164	-1.1
900	13.46	3.02	-48.0	229	155	-1.1
950	10.86	3.24	-57.8	223	147	-1.2
1000	7.78	3.47	-68.2	217	140	-1.2
1050	4.17	3.70	-79.1	211	132	-1.2
1100	0.00	3.94	-90.6	206	126	-1.3

DRAG RDCR. WT. 0.241 GRAMS PCT. DRAG CHANGE / (DEG. YAW)**2 1.19

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	45.2	483	693	0.0
0	0.00	0.00	45.2	483	693	0.0
50	2.17	0.11	42.9	462	633	-0.2
100	4.22	0.22	40.5	442	578	-0.4
150	6.14	0.33	37.8	422	527	-0.6
200	7.93	0.45	34.9	404	481	-0.7
250	9.56	0.58	31.7	386	438	-0.9
300	11.04	0.71	28.2	368	399	-1.0
350	12.33	0.85	24.3	352	365	-1.1
400	13.42	1.00	20.1	338	335	-1.1
450	14.30	1.15	15.6	327	312	-1.0
500	14.95	1.30	10.7	317	293	-0.9
550	15.36	1.46	5.6	309	278	-0.9
600	15.51	1.63	0.3	302	265	-0.9
650	15.39	1.79	-5.3	295	252	-0.9
700	14.99	1.97	-11.2	288	240	-0.9
750	14.29	2.14	-17.4	282	229	-0.9
800	13.29	2.32	-23.8	276	219	-1.0
850	11.96	2.50	-30.5	270	210	-1.0
900	10.30	2.69	-37.4	265	201	-1.0
950	8.29	2.88	-44.7	260	192	-1.0
1000	5.92	3.08	-52.3	254	183	-1.1
1050	3.16	3.28	-60.3	247	173	-1.2
1100	0.00	3.48	-68.7	240	164	-1.2

TYPE CB 1 CALIBER 6.50 MM AVERAGE DENSITY 11.00 GRAMS/CC.

PROJ. WT 5.940 GRAMS PROJ. DIA. 6.50 MM IMPULSE 1.2 LB. SEC.

DRAG RDCR. WT. 0.000 GRAMS CHG. WT. 1.13 GRAMS SABOT WT. 0.000 GRAMS

TWIST RATE REV./ 13.2 IN. PCT. DRAG CHANGE / (DEG. YAW)**2 0.76

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	35.5	672	1341	0.0
0	0.00	0.00	35.5	672	1341	0.0
50	1.72	0.08	34.4	633	1191	-0.4
100	3.37	0.16	33.0	595	1052	-0.7
150	4.96	0.24	31.5	559	927	-1.1
200	6.47	0.34	29.8	523	813	-1.4
250	7.89	0.44	27.9	489	710	-1.7
300	9.21	0.54	25.6	456	617	-2.0
350	10.40	0.66	23.0	424	534	-2.2
400	11.47	0.78	20.1	394	461	-2.4
450	12.37	0.91	16.6	366	398	-2.5
500	13.09	1.05	12.6	341	346	-2.5
550	13.61	1.20	8.0	324	311	-2.0
600	13.88	1.36	3.1	312	289	-1.5
650	13.91	1.52	-2.2	302	271	-1.3
700	13.67	1.69	-7.9	293	256	-1.3
750	13.14	1.86	-13.8	285	241	-1.3
800	12.31	2.04	-20.2	277	228	-1.3
850	11.17	2.23	-26.8	270	216	-1.3
900	9.68	2.41	-33.9	263	205	-1.3
950	7.84	2.61	-41.3	256	195	-1.3
1000	5.63	2.80	-49.1	249	185	-1.4
1050	3.02	3.01	-57.4	243	175	-1.4
1100	0.00	3.22	-66.1	236	166	-1.4

DRAG RDCR. WT. 0.241 GRAMS PCT. DRAG CHANGE / (DEG. YAW)**2 1.19

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	25.0	672	1341	0.0
0	0.00	0.00	25.0	672	1341	0.0
50	1.20	0.08	23.9	646	1239	-0.3
100	2.34	0.15	22.6	621	1143	-0.5
150	3.42	0.24	21.3	596	1052	-0.7
200	4.43	0.32	19.8	572	967	-1.0
250	5.37	0.41	18.2	548	887	-1.2
300	6.22	0.51	16.5	525	812	-1.4
350	6.98	0.60	14.6	502	742	-1.6
400	7.65	0.70	12.5	480	678	-1.7
450	8.21	0.81	10.2	459	619	-1.9
500	8.66	0.92	7.8	439	565	-2.0
550	8.98	1.04	5.0	419	515	-2.1
600	9.16	1.16	2.1	401	469	-2.2
650	9.19	1.29	-1.2	383	427	-2.3
700	9.05	1.42	-4.8	366	389	-2.4
750	8.72	1.56	-8.7	350	356	-2.4
800	8.20	1.71	-12.9	336	327	-2.3
850	7.46	1.86	-17.5	325	305	-2.0
900	6.48	2.02	-22.4	315	287	-1.8
950	5.26	2.18	-27.6	308	273	-1.6
1000	3.79	2.34	-33.0	300	260	-1.5
1050	2.04	2.51	-38.6	293	247	-1.5
1100	0.00	2.68	-44.6	287	236	-1.5

TYPE CB 1 CALIBER 6.50 MM AVERAGE DENSITY 11.00 GRAMS/CC.

PROJ. WT 5.940 GRAMS PROJ. DIA. 6.50 MM IMPULSE 2.1 LB. SEC.

DRAG RDCR. WT. 0.000 GRAMS CHG. WT. 2.74 GRAMS SABOT WT. 0.000 GRAMS

TWIST RATE REV./ 13.8 IN. PCT. DRAG CHANGE / (DEG. YAW)**2 0.76

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	14.2	1027	3133	0.0
0	0.00	0.00	14.2	1027	3133	0.0
50	0.68	0.05	13.7	981	2858	-0.5
100	1.34	0.10	13.1	936	2600	-0.9
150	1.97	0.16	12.5	891	2358	-1.3
200	2.57	0.21	11.9	848	2133	-1.7
250	3.14	0.27	11.1	805	1923	-2.1
300	3.67	0.34	10.3	763	1728	-2.5
350	4.16	0.41	9.4	722	1547	-2.9
400	4.60	0.48	8.4	682	1380	-3.2
450	4.99	0.55	7.3	643	1227	-3.5
500	5.32	0.63	6.0	605	1086	-3.8
550	5.58	0.72	4.5	568	957	-4.1
600	5.77	0.81	2.9	532	840	-4.3
650	5.87	0.91	1.0	497	735	-4.5
700	5.87	1.01	-1.2	464	640	-4.7
750	5.75	1.12	-3.7	432	555	-4.8
800	5.51	1.24	-6.6	402	479	-5.0
850	5.12	1.37	-9.9	373	413	-5.0
900	4.54	1.51	-13.8	347	358	-4.8
950	3.77	1.66	-18.2	328	319	-4.3
1000	2.77	1.82	-23.0	315	294	-3.3
1050	1.51	1.98	-28.3	305	276	-2.5
1100	0.00	2.14	-33.8	296	260	-2.1

DRAG RDCR. WT. 0.241 GRAMS PCT. DRAG CHANGE / (DEG. YAW)**2 1.19

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	9.5	1027	3133	0.0
0	0.00	0.00	9.5	1027	3133	0.0
50	0.45	0.05	9.0	994	2930	-0.3
100	0.88	0.10	8.5	961	2737	-0.7
150	1.29	0.15	7.9	928	2554	-1.0
200	1.66	0.21	7.3	897	2381	-1.3
250	2.01	0.27	6.7	866	2217	-1.5
300	2.32	0.32	6.0	835	2062	-1.8
350	2.60	0.39	5.2	805	1916	-2.1
400	2.84	0.45	4.4	776	1778	-2.3
450	3.04	0.51	3.6	748	1649	-2.5
500	3.20	0.58	2.7	720	1528	-2.8
550	3.31	0.65	1.6	693	1414	-3.0
600	3.37	0.73	0.6	667	1307	-3.2
650	3.37	0.80	-0.6	641	1207	-3.4
700	3.31	0.88	-1.9	616	1112	-3.6
750	3.20	0.97	-3.2	591	1022	-3.7
800	3.01	1.05	-4.7	566	938	-3.9
850	2.74	1.14	-6.4	542	860	-4.1
900	2.39	1.24	-8.1	519	786	-4.2
950	1.95	1.34	-10.1	496	718	-4.3
1000	1.41	1.44	-12.2	474	655	-4.4
1050	0.77	1.55	-14.5	453	597	-4.5
1100	0.00	1.66	-17.1	433	545	-4.5

TYPE CB 1 CALIBER 6.50 MM AVERAGE DENSITY 16.70 GRAMS/CC.

PROJ. WT 9.018 GRAMS PROJ. DIA. 6.50 MM IMPULSE 0.8 LB. SEC.

DRAG RDCR. WT. 0.000 GRAMS CHG. WT. 0.37 GRAMS SABOT WT. 0.000 GRAMS

TWIST RATE REV./ 14.8 IN. PCT. DRAG CHANGE / (DEG. YAW)**2 0.76

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	66.7	346	540	0.0
0	0.00	0.00	66.7	346	540	0.0
50	3.17	0.15	62.4	332	498	-0.1
100	6.13	0.30	57.7	322	468	-0.2
150	8.84	0.46	52.7	314	445	-0.2
200	11.31	0.62	47.6	307	426	-0.3
250	13.51	0.78	42.2	301	409	-0.3
300	15.45	0.95	36.5	295	393	-0.4
350	17.10	1.12	30.7	289	378	-0.4
400	18.46	1.30	24.6	284	364	-0.4
450	19.52	1.48	18.3	279	351	-0.5
500	20.26	1.66	11.8	274	338	-0.5
550	20.67	1.84	5.0	269	326	-0.5
600	20.75	2.03	-2.0	264	315	-0.6
650	20.47	2.22	-9.3	260	304	-0.6
700	19.84	2.41	-16.8	255	294	-0.6
750	18.82	2.61	-24.6	251	284	-0.7
800	17.42	2.81	-32.7	247	274	-0.7
850	15.61	3.02	-41.1	242	265	-0.7
900	13.39	3.23	-49.7	238	256	-0.8
950	10.73	3.44	-58.7	234	247	-0.8
1000	7.63	3.65	-68.0	230	239	-0.8
1050	4.05	3.87	-77.6	226	230	-0.9
1100	0.00	4.10	-87.5	222	223	-0.9

DRAG RDCR. WT. 0.241 GRAMS PCT. DRAG CHANGE / (DEG. YAW)**2 1.19

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	61.1	346	540	0.0
0	0.00	0.00	61.1	346	540	0.0
50	2.90	0.15	56.8	337	512	-0.1
100	5.57	0.30	52.3	329	488	-0.1
150	8.03	0.45	47.6	323	467	-0.2
200	10.24	0.61	42.7	317	450	-0.2
250	12.22	0.77	37.6	311	434	-0.3
300	13.93	0.93	32.3	306	420	-0.3
350	15.39	1.09	26.9	302	406	-0.3
400	16.58	1.26	21.4	297	393	-0.4
450	17.49	1.43	15.6	293	381	-0.4
500	18.11	1.60	9.7	288	369	-0.4
550	18.44	1.78	3.6	284	358	-0.5
600	18.47	1.96	-2.7	280	348	-0.5
650	18.18	2.13	-9.1	276	338	-0.5
700	17.57	2.32	-15.8	273	328	-0.5
750	16.63	2.50	-22.6	269	319	-0.5
800	15.36	2.69	-29.6	265	310	-0.6
850	13.73	2.88	-36.8	262	301	-0.6
900	11.75	3.07	-44.2	258	292	-0.7
950	9.40	3.27	-51.8	253	282	-0.7
1000	6.67	3.47	-59.7	249	272	-0.7
1050	3.54	3.67	-67.9	245	263	-0.8
1100	0.00	3.88	-76.4	240	254	-0.8

TYPE CB 1 CALIBER 6.50 MM AVERAGE DENSITY 16.70 GRAMS/CC.

PROJ. WT 9.018 GRAMS PROJ. DIA. 6.50 MM IMPULSE 1.2 LB. SEC.

DRAG RDCR. WT. 0.000 GRAMS CHG. WT. 0.85 GRAMS SABOT WT. 0.000 GRAMS

TWIST RATE REV./ 15.7 IN. PCT. DRAG CHANGE / (DEG. YAW)**2 0.76

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	46.2	478	1030	0.0
0	0.00	0.00	46.2	478	1030	0.0
50	2.21	0.11	43.9	456	939	-0.2
100	4.31	0.22	41.4	435	854	-0.4
150	6.28	0.34	38.6	415	776	-0.6
200	8.10	0.46	35.6	395	704	-0.8
250	9.77	0.59	32.2	376	638	-0.9
300	11.26	0.73	28.5	359	580	-1.0
350	12.56	0.87	24.4	343	529	-1.1
400	13.66	1.02	20.0	330	491	-1.0
450	14.53	1.17	15.2	320	462	-0.9
500	15.16	1.33	10.2	313	441	-0.8
550	15.54	1.49	5.0	306	423	-0.7
600	15.65	1.66	-0.4	300	406	-0.7
650	15.50	1.83	-6.1	294	390	-0.8
700	15.06	2.00	-12.0	289	376	-0.8
750	14.33	2.17	-18.1	283	362	-0.8
800	13.29	2.35	-24.4	278	349	-0.8
850	11.94	2.53	-31.0	273	337	-0.8
900	10.25	2.72	-37.8	269	325	-0.9
950	8.23	2.91	-44.8	264	314	-0.9
1000	5.86	3.10	-52.1	260	304	-0.9
1050	3.12	3.29	-59.7	255	293	-1.0
1100	0.00	3.49	-67.5	251	283	-1.0

DRAG RDCR. WT. 0.241 GRAMS PCT. DRAG CHANGE / (DEG. YAW)**2 1.19

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	38.0	478	1030	0.0
0	0.00	0.00	38.0	478	1030	0.0
50	1.81	0.11	35.7	464	971	-0.1
100	3.50	0.22	33.3	451	914	-0.3
150	5.08	0.33	30.8	438	861	-0.4
200	6.53	0.44	28.1	425	810	-0.5
250	7.84	0.56	25.2	412	763	-0.6
300	9.00	0.69	22.2	400	718	-0.7
350	10.02	0.81	19.0	388	675	-0.8
400	10.87	0.94	15.6	377	635	-0.9
450	11.55	1.08	12.0	366	597	-1.0
500	12.05	1.22	8.1	355	563	-1.0
550	12.35	1.36	4.0	345	531	-1.1
600	12.45	1.51	-0.3	337	504	-1.1
650	12.33	1.66	-4.8	329	480	-1.0
700	11.98	1.81	-9.5	322	460	-1.0
750	11.40	1.97	-14.4	316	443	-0.9
800	10.57	2.13	-19.5	311	428	-0.9
850	9.49	2.29	-24.7	306	414	-0.8
900	8.15	2.46	-30.2	301	401	-0.9
950	6.54	2.62	-35.7	297	388	-0.9
1000	4.65	2.79	-41.5	292	376	-0.9
1050	2.47	2.96	-47.4	288	365	-0.9
1100	0.00	3.14	-53.6	283	352	-1.0

TYPE CB 1 CALIBER 6.50 MM AVERAGE DENSITY 16.70 GRAMS/CC.

PROJ. WT 9.018 GRAMS PROJ. DIA. 6.50 MM IMPULSE 2.1 LB. SEC.

DRAG RDCR. WT. 0.000 GRAMS CHG. WT. 2.16 GRAMS SABOT WT. 0.000 GRAMS

TWIST RATE REV./ 16.4 IN. PCT. DRAG CHANGE / (DEG. YAW)**2 0.76

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	19.5	753	2557	0.0
0	0.00	0.00	19.5	753	2557	0.0
50	0.94	0.07	18.6	726	2376	-0.3
100	1.83	0.14	17.6	699	2206	-0.5
150	2.67	0.21	16.6	673	2044	-0.8
200	3.45	0.29	15.4	648	1891	-1.0
250	4.18	0.37	14.2	622	1746	-1.3
300	4.85	0.45	12.8	597	1610	-1.5
350	5.44	0.53	11.4	573	1481	-1.7
400	5.97	0.62	9.8	549	1360	-1.9
450	6.41	0.71	8.1	526	1248	-2.1
500	6.76	0.81	6.2	503	1142	-2.3
550	7.02	0.91	4.1	481	1044	-2.4
600	7.17	1.02	1.8	459	952	-2.6
650	7.21	1.13	-0.6	438	866	-2.8
700	7.11	1.25	-3.4	418	787	-2.9
750	6.88	1.37	-6.4	398	714	-3.0
800	6.50	1.50	-9.7	379	648	-3.1
850	5.94	1.63	-13.3	361	588	-3.1
900	5.19	1.78	-17.3	345	536	-3.1
950	4.24	1.92	-21.7	332	496	-2.8
1000	3.07	2.08	-26.4	322	467	-2.3
1050	1.66	2.24	-31.4	314	444	-1.9
1100	0.00	2.40	-36.6	307	426	-1.6

DRAG RDCR. WT. 0.241 GRAMS PCT. DRAG CHANGE / (DEG. YAW)**2 1.19

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	14.7	753	2557	0.0
0	0.00	0.00	14.7	753	2557	0.0
50	0.70	0.07	13.8	735	2432	-0.2
100	1.36	0.14	12.9	717	2313	-0.4
150	1.96	0.21	11.9	699	2199	-0.5
200	2.52	0.28	10.8	682	2090	-0.7
250	3.03	0.35	9.7	665	1985	-0.9
300	3.48	0.43	8.6	648	1884	-1.0
350	3.87	0.51	7.3	631	1786	-1.2
400	4.20	0.59	6.0	614	1692	-1.3
450	4.47	0.67	4.7	598	1602	-1.5
500	4.67	0.76	3.2	582	1516	-1.6
550	4.79	0.84	1.7	566	1433	-1.7
600	4.84	0.93	0.1	550	1353	-1.9
650	4.81	1.02	-1.6	535	1277	-2.0
700	4.70	1.12	-3.4	519	1205	-2.1
750	4.49	1.22	-5.3	505	1135	-2.2
800	4.19	1.32	-7.3	490	1069	-2.3
850	3.78	1.42	-9.4	476	1007	-2.4
900	3.27	1.53	-11.7	462	948	-2.5
950	2.64	1.64	-14.1	448	893	-2.6
1000	1.89	1.75	-16.7	435	840	-2.7
1050	1.02	1.87	-19.4	422	790	-2.7
1100	0.00	1.99	-22.3	410	744	-2.8

TYPE CB 1 CALIBER 7.62 MM AVERAGE DENSITY 7.80 GRAMS/CC.

PROJ. WT 6.778 GRAMS PROJ. DIA. 7.62 MM IMPULSE 0.0 LB. SEC.

DRAG RDCR. WT. 0.000 GRAMS CHG. WT. 0.51 GRAMS SABOT WT. 0.000 GRAMS

TWIST RATE REV./ 12.4 IN. PCT. DRAG CHANGE / (DEG. YAW)**2 0.76

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	71.4	434	638	0.0
0	0.00	0.00	71.4	434	638	0.0
50	3.44	0.12	68.5	397	534	-0.4
100	6.72	0.25	65.0	363	447	-0.6
150	9.82	0.40	60.9	335	380	-0.7
200	12.70	0.55	56.1	317	340	-0.6
250	15.33	0.71	51.0	305	315	-0.6
300	17.70	0.88	45.4	294	292	-0.6
350	19.79	1.05	39.4	284	273	-0.7
400	21.57	1.23	33.0	274	255	-0.7
450	23.02	1.42	26.1	266	239	-0.8
500	24.13	1.61	18.8	257	224	-0.8
550	24.86	1.81	11.0	249	210	-0.9
600	25.20	2.01	2.7	241	197	-1.0
650	25.12	2.22	-6.2	233	185	-1.0
700	24.59	2.44	-15.7	226	173	-1.1
750	23.58	2.66	-25.8	219	162	-1.1
800	22.06	2.90	-36.6	212	152	-1.1
850	19.98	3.14	-48.1	205	142	-1.2
900	17.33	3.39	-60.4	198	133	-1.2
950	14.04	3.64	-73.5	192	125	-1.2
1000	10.09	3.91	-87.5	186	117	-1.3
1050	5.43	4.18	-102.4	180	110	-1.3
1100	0.00	4.47	-118.3	174	103	-1.3

DRAG RDCR. WT. 0.389 GRAMS PCT. DRAG CHANGE / (DEG. YAW)**2 1.19

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	57.8	434	638	0.0
0	0.00	0.00	57.8	434	638	0.0
50	2.77	0.12	55.0	411	571	-0.2
100	5.40	0.24	51.9	389	511	-0.4
150	7.86	0.38	48.4	368	457	-0.6
200	10.14	0.52	44.5	349	409	-0.7
250	12.23	0.66	40.2	333	371	-0.8
300	14.09	0.82	35.5	321	343	-0.7
350	15.71	0.97	30.5	310	321	-0.7
400	17.08	1.14	25.1	302	302	-0.7
450	18.18	1.31	19.5	293	284	-0.7
500	18.99	1.48	13.5	285	268	-0.8
550	19.50	1.66	7.2	278	254	-0.8
600	19.70	1.84	0.6	271	240	-0.8
650	19.56	2.03	-6.4	264	228	-0.9
700	19.07	2.22	-13.7	258	216	-0.9
750	18.21	2.41	-21.4	251	204	-1.0
800	16.97	2.62	-29.6	245	193	-1.0
850	15.31	2.82	-38.1	239	183	-1.0
900	13.23	3.03	-47.1	232	173	-1.1
950	10.69	3.25	-56.7	225	161	-1.2
1000	7.66	3.48	-66.9	217	150	-1.2
1050	4.11	3.72	-77.9	210	141	-1.3
1100	0.00	3.96	-89.6	203	131	-1.3

TYPE CB 1 CALIBER 7.62 MM AVERAGE DENSITY 7.80 GRAMS/CC.
PROJ. WT 6.778 GRAMS PROJ. DIA. 7.62 MM IMPULSE 1.2 LB. SEC.
DRAG RDCR. WT. 0.000 GRAMS CHG. WT. 1.04 GRAMS SABOT WT. 0.000 GRAMS
TWIST RATE REV./ 12.9 IN. PCT. DRAG CHANGE / (DEG. YAW)**2 0.76

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	48.8	604	1236	0.0
0	0.00	0.00	48.8	604	1236	0.0
50	2.36	0.09	47.4	560	1061	-0.4
100	4.65	0.18	45.6	517	905	-0.8
150	6.84	0.28	43.6	476	768	-1.2
200	8.93	0.39	41.2	437	647	-1.5
250	10.89	0.51	38.3	400	542	-1.8
300	12.69	0.64	34.9	366	454	-2.0
350	14.31	0.78	30.8	337	385	-2.0
400	15.71	0.94	26.2	318	343	-1.4
450	16.88	1.10	21.0	306	317	-1.1
500	17.78	1.26	15.5	295	294	-1.1
550	18.39	1.44	9.5	285	275	-1.1
600	18.71	1.62	3.1	276	257	-1.1
650	18.70	1.80	-3.7	267	241	-1.1
700	18.35	1.99	-10.9	258	226	-1.2
750	17.63	2.19	-18.7	250	212	-1.2
800	16.52	2.39	-26.9	242	199	-1.3
850	14.99	2.60	-35.7	234	186	-1.3
900	13.01	2.82	-45.1	227	175	-1.4
950	10.56	3.04	-55.1	220	164	-1.4
1000	7.59	3.27	-65.8	213	153	-1.4
1050	4.09	3.51	-77.2	206	144	-1.5
1100	0.00	3.76	-89.4	200	135	-1.5

DRAG RDCR. WT. 0.389 GRAMS PCT. DRAG CHANGE / (DEG. YAW)**2 1.19

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	35.5	604	1236	0.0
0	0.00	0.00	35.5	604	1236	0.0
50	1.71	0.08	34.0	575	1117	-0.3
100	3.34	0.17	32.4	546	1007	-0.6
150	4.89	0.27	30.7	518	905	-0.8
200	6.35	0.37	28.7	491	812	-1.1
250	7.71	0.47	26.5	465	727	-1.3
300	8.95	0.58	24.1	441	651	-1.5
350	10.07	0.70	21.4	417	582	-1.6
400	11.05	0.82	18.3	395	520	-1.8
450	11.87	0.95	14.9	374	465	-1.9
500	12.52	1.09	11.2	354	416	-2.0
550	12.97	1.24	7.0	337	375	-1.9
600	13.20	1.39	2.4	323	345	-1.6
650	13.20	1.54	-2.6	313	321	-1.4
700	12.95	1.71	-7.9	303	302	-1.3
750	12.43	1.87	-13.5	295	284	-1.3
800	11.63	2.05	-19.4	287	268	-1.3
850	10.53	2.22	-25.6	279	253	-1.3
900	9.12	2.40	-32.2	272	240	-1.3
950	7.38	2.59	-39.1	266	227	-1.3
1000	5.29	2.78	-46.3	259	215	-1.3
1050	2.84	2.98	-54.0	253	204	-1.4
1100	0.00	3.18	-62.0	244	191	-1.5

TYPE CB 1 CALIBER 7.62 MM AVERAGE DENSITY 7.80 GRAMS/CC.
PROJ. WT 6.778 GRAMS PROJ. DIA. 7.62 MM IMPULSE 2.1 LB. SEC.
DRAG RDCR. WT. 0.000 GRAMS CHG. WT. 2.55 GRAMS SABOT WT. 0.000 GRAMS
TWIST RATE REV./ 13.5 IN. PCT. DRAG CHANGE / (DEG. YAW)**2 0.76

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	22.9	936	2969	0.0
0	0.00	0.00	22.9	936	2969	0.0
50	1.11	0.06	22.3	882	2639	-0.5
100	2.19	0.11	21.6	830	2336	-1.0
150	3.23	0.18	20.8	779	2057	-1.5
200	4.24	0.24	20.0	729	1803	-2.0
250	5.19	0.31	19.0	681	1572	-2.4
300	6.10	0.39	17.8	634	1363	-2.8
350	6.94	0.47	16.5	589	1174	-3.2
400	7.72	0.56	14.9	545	1006	-3.5
450	8.41	0.65	13.1	503	857	-3.8
500	9.00	0.76	10.9	463	726	-4.0
550	9.48	0.87	8.4	424	611	-4.2
600	9.83	0.99	5.4	388	511	-4.4
650	10.01	1.13	1.7	356	429	-4.3
700	10.00	1.28	-2.6	330	369	-3.8
750	9.76	1.43	-7.4	314	334	-2.7
800	9.27	1.59	-12.7	302	309	-2.0
850	8.52	1.76	-18.4	291	288	-1.9
900	7.48	1.94	-24.4	282	269	-1.8
950	6.13	2.12	-31.0	273	252	-1.8
1000	4.44	2.30	-37.9	264	236	-1.8
1050	2.41	2.50	-45.3	256	222	-1.8
1100	0.00	2.70	-53.2	248	208	-1.8

DRAG RDCR. WT. 0.389 GRAMS PCT. DRAG CHANGE / (DEG. YAW)**2 1.19

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	14.1	936	2969	0.0
0	0.00	0.00	14.1	936	2969	0.0
50	0.68	0.05	13.5	898	2728	-0.4
100	1.32	0.11	12.8	860	2503	-0.7
150	1.94	0.17	12.1	824	2293	-1.1
200	2.52	0.23	11.4	788	2097	-1.4
250	3.06	0.30	10.5	754	1915	-1.7
300	3.55	0.37	9.6	721	1747	-2.0
350	4.00	0.44	8.6	688	1591	-2.2
400	4.40	0.51	7.5	657	1447	-2.5
450	4.74	0.59	6.3	626	1312	-2.8
500	5.02	0.67	4.9	596	1186	-3.0
550	5.23	0.76	3.5	566	1070	-3.2
600	5.37	0.85	1.8	537	962	-3.4
650	5.42	0.94	0.0	509	863	-3.6
700	5.37	1.04	-2.0	482	773	-3.8
750	5.22	1.15	-4.3	457	692	-3.9
800	4.95	1.26	-6.8	432	618	-3.9
850	4.56	1.38	-9.7	409	552	-4.0
900	4.01	1.51	-12.8	387	493	-4.0
950	3.30	1.64	-16.4	366	439	-4.0
1000	2.41	1.78	-20.3	347	393	-4.0
1050	1.32	1.93	-24.7	331	357	-3.7
1100	0.00	2.08	-29.4	319	330	-3.1

TYPE CB 1 CALIBER 7.62 MM AVERAGE DENSITY 11.00 GRAMS/CC.

PROJ. WT 9.559 GRAMS PROJ. DIA. 7.62 MM IMPULSE 0.8 LB. SEC.

DRAG RDCR. WT. 0.000 GRAMS CHG. WT. 0.33 GRAMS SABOT WT. 0.000 GRAMS

TWIST RATE NA PCT. DRAG CHANGE / (DEG. YAW)**2 0.76

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	76.6	331	524	0.0
0	0.00	0.00	76.6	331	524	0.0
50	3.65	0.15	71.9	319	485	-0.1
100	7.06	0.31	66.8	309	457	-0.2
150	10.22	0.48	61.4	301	433	-0.2
200	13.10	0.65	55.8	293	411	-0.3
250	15.69	0.82	49.8	286	391	-0.4
300	17.99	1.00	43.6	279	373	-0.4
350	19.97	1.18	37.0	273	356	-0.4
400	21.62	1.36	30.1	267	340	-0.5
450	22.93	1.55	23.0	261	325	-0.5
500	23.87	1.75	15.4	255	310	-0.6
550	24.44	1.95	7.5	249	296	-0.6
600	24.61	2.15	-0.7	243	283	-0.7
650	24.37	2.36	-9.3	238	270	-0.7
700	23.70	2.57	-18.4	232	258	-0.8
750	22.57	2.79	-27.9	227	246	-0.8
800	20.96	3.01	-37.8	222	235	-0.8
850	18.86	3.24	-48.1	217	225	-0.9
900	16.24	3.47	-59.0	212	215	-0.9
950	13.06	3.71	-70.4	207	205	-0.9
1000	9.32	3.96	-82.2	203	196	-1.0
1050	4.97	4.21	-94.7	198	188	-1.0
1100	0.00	4.46	-107.7	194	180	-1.0

DRAG RDCR. WT. 0.389 GRAMS PCT. DRAG CHANGE / (DEG. YAW)**2 1.19

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	69.4	331	524	0.0
0	0.00	0.00	69.4	331	524	0.0
50	3.30	0.15	64.7	322	495	-0.1
100	6.36	0.31	59.8	315	471	-0.1
150	9.17	0.47	54.6	308	451	-0.2
200	11.73	0.64	49.3	302	432	-0.2
250	14.01	0.80	43.7	296	414	-0.3
300	16.01	0.97	37.8	290	397	-0.3
350	17.73	1.15	31.8	285	381	-0.4
400	19.14	1.33	25.5	280	367	-0.4
450	20.23	1.51	19.0	275	353	-0.4
500	21.00	1.69	12.3	270	340	-0.5
550	21.44	1.88	5.3	265	327	-0.5
600	21.52	2.07	-2.0	260	315	-0.6
650	21.24	2.26	-9.5	256	303	-0.6
700	20.59	2.46	-17.2	251	292	-0.6
750	19.55	2.66	-25.3	247	281	-0.7
800	18.11	2.86	-33.6	242	270	-0.7
850	16.25	3.07	-42.3	238	259	-0.8
900	13.96	3.29	-51.3	233	247	-0.8
950	11.21	3.50	-60.8	229	236	-0.8
1000	7.99	3.73	-70.8	221	225	-0.9
1050	4.26	3.98	-81.2	216	215	-0.9
1100	0.00	4.19	-92.1	211	205	-0.9

TYPE CB 1 CALIBER 7.62 MM AVERAGE DENSITY 11.00 GRAMS/CC.

PROJ. WT 9.559 GRAMS PROJ. DIA. 7.62 MM IMPULSE 1.2 LB. SEC.

DRAG RDCR. WT. 0.000 GRAMS CHG. WT. 0.31 GRAMS SABOT WT. 0.000 GRAMS

TWIST RATE REV./ 14.8 IN. PCT. DRAG CHANGE / (DEG. YAW)**2 0.76

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	55.6	456	994	0.0
0	0.00	0.00	55.6	456	994	0.0
50	2.67	0.11	53.0	429	879	-0.3
100	5.20	0.23	50.1	403	775	-0.5
150	7.59	0.36	46.8	378	683	-0.7
200	9.80	0.50	43.1	355	603	-0.9
250	11.82	0.64	38.9	336	539	-0.9
300	13.62	0.80	34.3	322	495	-0.8
350	15.18	0.95	29.3	312	465	-0.7
400	16.49	1.12	24.0	304	441	-0.7
450	17.54	1.28	18.4	296	418	-0.7
500	18.30	1.46	12.6	288	398	-0.7
550	18.78	1.63	6.4	282	379	-0.8
600	18.94	1.81	0.0	275	362	-0.8
650	18.77	1.99	-6.8	269	348	-0.8
700	18.27	2.18	-13.8	263	330	-0.9
750	17.42	2.38	-21.2	257	316	-0.9
800	16.19	2.57	-29.0	251	302	-0.9
850	14.58	2.77	-37.1	246	288	-1.0
900	12.55	2.98	-45.5	240	276	-1.0
950	10.11	3.19	-54.4	235	263	-1.0
1000	7.21	3.41	-63.7	229	252	-1.1
1050	3.85	3.63	-73.4	224	241	-1.1
1100	0.00	3.85	-83.5	219	230	-1.1

DRAG RDCR. WT. 0.389 GRAMS PCT. DRAG CHANGE / (DEG. YAW)**2 1.19

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	45.8	456	994	0.0
0	0.00	0.00	45.8	456	994	0.0
50	2.19	0.11	43.3	439	919	-0.2
100	4.25	0.23	40.6	422	850	-0.3
150	6.17	0.35	37.7	406	785	-0.5
200	7.94	0.47	34.5	391	725	-0.6
250	9.56	0.61	31.1	376	670	-0.7
300	11.00	0.74	27.4	362	619	-0.8
350	12.25	0.88	23.5	348	573	-0.9
400	13.30	1.03	19.2	337	534	-0.9
450	14.14	1.18	14.7	327	502	-0.9
500	14.74	1.33	9.9	319	476	-0.8
550	15.11	1.49	4.8	312	454	-0.8
600	15.22	1.66	-0.4	305	435	-0.8
650	15.07	1.82	-5.9	299	417	-0.8
700	14.64	1.99	-11.6	293	400	-0.8
750	13.93	2.16	-17.5	288	384	-0.8
800	12.92	2.34	-23.7	282	369	-0.9
850	11.61	2.52	-30.1	277	355	-0.9
900	9.98	2.70	-36.7	272	341	-0.9
950	8.01	2.88	-43.6	268	329	-0.9
1000	5.70	3.07	-50.7	262	316	-1.0
1050	3.04	3.27	-58.1	256	301	-1.0
1100	0.00	3.46	-65.9	250	287	-1.1

TYPE CB 1 CALIBER 7.62 MM AVERAGE DENSITY 11.00 GRAMS/CC.

PROJ. WT 9.559 GRAMS PROJ. DIA. 7.62 MM IMPULSE 2.1 LB. SEC.

DRAG RDCR. WT. 0.000 GRAMS CHG. WT. 2.09 GRAMS SABOT WT. 0.000 GRAMS

TWIST RATE REV./ 15.5 IN. PCT. DRAG CHANGE / (DEG. YAW)**2 0.76

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	27.3	719	2471	0.0
0	0.00	0.00	27.3	719	2471	0.0
50	1.32	0.07	26.3	685	2241	-0.3
100	2.58	0.15	25.2	651	2028	-0.7
150	3.78	0.23	23.9	619	1829	-1.0
200	4.93	0.31	22.5	587	1644	-1.3
250	6.00	0.40	21.0	555	1474	-1.5
300	6.99	0.49	19.3	525	1318	-1.8
350	7.89	0.59	17.4	496	1174	-2.0
400	8.70	0.69	15.2	467	1043	-2.3
450	9.39	0.80	12.8	440	924	-2.5
500	9.95	0.92	10.0	413	816	-2.7
550	10.37	1.04	6.9	388	719	-2.8
600	10.63	1.18	3.4	364	634	-2.9
650	10.71	1.32	-0.6	343	563	-2.8
700	10.57	1.47	-5.1	327	512	-2.4
750	10.21	1.62	-9.9	316	477	-1.9
800	9.60	1.78	-15.1	307	451	-1.5
850	8.73	1.95	-20.5	299	428	-1.4
900	7.59	2.12	-26.3	292	407	-1.4
950	6.16	2.29	-32.3	285	388	-1.4
1000	4.43	2.47	-38.6	278	370	-1.4
1050	2.38	2.65	-45.2	272	353	-1.4
1100	0.00	2.84	-52.1	266	338	-1.4

DRAG RDCR. WT. 0.389 GRAMS PCT. DRAG CHANGE / (DEG. YAW)**2 1.19

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	19.1	719	2471	0.0
0	0.00	0.00	19.1	719	2471	0.0
50	0.91	0.07	18.1	696	2314	-0.2
100	1.78	0.14	17.1	674	2165	-0.4
150	2.59	0.22	15.9	652	2024	-0.7
200	3.34	0.30	14.7	630	1889	-0.9
250	4.04	0.38	13.4	608	1761	-1.1
300	4.66	0.46	12.0	587	1639	-1.3
350	5.22	0.55	10.5	567	1524	-1.4
400	5.70	0.64	8.9	546	1414	-1.6
450	6.10	0.73	7.2	526	1311	-1.8
500	6.40	0.83	5.3	507	1214	-1.9
550	6.62	0.93	3.3	488	1124	-2.1
600	6.73	1.03	1.1	470	1039	-2.2
650	6.73	1.14	-1.3	452	961	-2.3
700	6.61	1.25	-3.8	435	888	-2.4
750	6.36	1.37	-6.6	418	820	-2.5
800	5.98	1.49	-9.5	402	757	-2.6
850	5.44	1.62	-12.7	387	698	-2.6
900	4.73	1.75	-16.2	372	644	-2.7
950	3.85	1.89	-20.0	358	595	-2.7
1000	2.78	2.03	-24.1	344	552	-2.7
1050	1.50	2.18	-28.4	333	515	-2.5
1100	0.00	2.33	-33.0	324	486	-2.3

TYPE CB 1 CALIBER 7.62 MM AVERAGE DENSITY 16.70 GRAMS/CC.
PROJ. WT 14.512 GRAMS PROJ. DIA. 7.62 MM IMPULSE 0.8 LB. SEC.
DRAG RDCR. WT. 0.000 GRAMS CHG. WT. 0.29 GRAMS SABOT WT. 0.000 GRAMS
TWIST RATE NA PCT. DRAG CHANGE / (DEG. YAW)**2 0.76

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	100.0	244	432	0.0
0	0.00	0.00	100.0	244	432	0.0
50	4.71	0.21	91.5	240	418	0.0
100	9.00	0.42	82.7	236	405	-0.1
150	12.84	0.63	73.6	233	393	-0.1
200	16.23	0.85	64.2	229	380	-0.1
250	19.14	1.07	54.5	225	368	-0.2
300	21.58	1.29	44.5	222	357	-0.2
350	23.51	1.52	34.2	218	346	-0.2
400	24.93	1.75	23.6	215	335	-0.3
450	25.82	1.99	12.6	212	325	-0.3
500	26.16	2.22	1.3	208	315	-0.3
550	25.94	2.47	-10.4	205	306	-0.4
600	25.14	2.71	-22.5	202	296	-0.4
650	23.74	2.96	-34.9	199	288	-0.4
700	21.71	3.21	-47.7	196	279	-0.4
750	19.05	3.47	-60.8	193	271	-0.5
800	15.73	3.73	-74.4	190	263	-0.5
850	11.73	4.00	-88.4	188	256	-0.5
900	7.03	4.27	-102.8	185	248	-0.5
950	1.61	4.54	-117.6	182	242	-0.5
964	0.00	4.62	-121.7	182	240	-0.5

DRAG RDCR. WT. 0.389 GRAMS PCT. DRAG CHANGE / (DEG. YAW)**2 1.19

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	100.0	244	432	0.0
0	0.00	0.00	100.0	244	432	0.0
50	4.71	0.21	91.5	241	421	0.0
100	9.00	0.42	82.8	238	410	-0.1
150	12.85	0.63	73.9	235	399	-0.1
200	16.26	0.84	64.7	232	389	-0.1
250	19.21	1.06	55.4	229	378	-0.1
300	21.70	1.28	45.8	227	369	-0.2
350	23.70	1.50	35.9	224	359	-0.2
400	25.22	1.73	25.8	221	350	-0.2
450	26.24	1.95	15.5	219	341	-0.2
500	26.74	2.18	4.9	216	332	-0.3
550	26.72	2.42	-5.9	213	324	-0.3
600	26.16	2.65	-17.0	211	315	-0.3
650	25.06	2.89	-28.3	209	307	-0.3
700	23.38	3.13	-40.0	206	299	-0.4
750	21.13	3.38	-52.0	203	290	-0.4
800	18.27	3.63	-64.3	199	281	-0.4
850	14.80	3.88	-77.1	197	273	-0.4
900	10.69	4.14	-90.2	194	265	-0.5
950	5.93	4.40	-103.7	191	257	-0.5
1000	0.48	4.66	-117.7	188	250	-0.5
1004	0.00	4.69	-118.8	188	249	-0.5

TYPE CB 1 CALIBER 7.62 MM AVERAGE DENSITY 16.70 GRAMS/CC.

PROJ. WT 14.512 GRAMS PROJ. DIA. 7.62 MM IMPULSE 1.2 LB. SEC.

DRAG RDCR. WT. 0.000 GRAMS CHG. WT. 0.49 GRAMS SABOT WT. 0.000 GRAMS

TWIST RATE NA PCT. DRAG CHANGE / (DEG. YAW)**2 0.76

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	67.6	328	781	0.0
0	0.00	0.00	67.6	328	781	0.0
50	3.21	0.15	62.8	320	743	-0.1
100	6.17	0.31	57.8	313	712	-0.1
150	8.89	0.47	52.7	308	687	-0.2
200	11.34	0.64	47.3	302	663	-0.2
250	13.53	0.81	41.7	297	640	-0.3
300	15.44	0.98	36.0	292	619	-0.3
350	17.06	1.15	30.0	287	599	-0.3
400	18.38	1.32	23.8	283	580	-0.4
450	19.40	1.50	17.5	278	562	-0.4
500	20.10	1.68	10.9	274	545	-0.4
550	20.48	1.87	4.2	270	529	-0.5
600	20.52	2.05	-2.8	266	513	-0.5
650	20.21	2.24	-9.9	262	498	-0.5
700	19.54	2.44	-17.3	258	484	-0.5
750	18.51	2.63	-24.9	254	469	-0.6
800	17.10	2.83	-32.8	251	456	-0.6
850	15.30	3.03	-40.8	247	442	-0.6
900	13.10	3.23	-49.1	243	429	-0.7
950	10.48	3.44	-57.7	240	417	-0.7
1000	7.43	3.65	-66.5	236	405	-0.7
1050	3.94	3.87	-75.6	233	393	-0.7
1100	0.00	4.08	-85.0	229	382	-0.8

DRAG RDCR. WT. 0.389 GRAMS PCT. DRAG CHANGE / (DEG. YAW)**2 1.19

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	63.3	328	781	0.0
0	0.00	0.00	63.3	328	781	0.0
50	3.00	0.15	58.6	322	753	-0.1
100	5.75	0.31	53.7	317	728	-0.1
150	8.27	0.47	48.7	313	706	-0.1
200	10.53	0.63	43.5	308	686	-0.2
250	12.54	0.79	38.1	304	666	-0.2
300	14.28	0.96	32.7	300	648	-0.2
350	15.74	1.13	27.0	296	630	-0.3
400	16.93	1.30	21.3	292	613	-0.3
450	17.83	1.47	15.4	289	597	-0.3
500	18.44	1.64	9.3	285	581	-0.4
550	18.75	1.82	3.1	282	567	-0.4
600	18.74	2.00	-3.3	278	552	-0.4
650	18.43	2.18	-9.8	275	539	-0.4
700	17.78	2.36	-16.5	272	526	-0.4
750	16.81	2.55	-23.3	269	513	-0.5
800	15.50	2.74	-30.3	266	500	-0.5
850	13.84	2.92	-37.5	263	489	-0.5
900	11.82	3.12	-44.8	259	475	-0.6
950	9.44	3.31	-52.3	255	461	-0.6
1000	6.69	3.51	-60.1	252	447	-0.6
1050	3.54	3.71	-68.1	248	434	-0.7
1100	0.00	3.91	-76.4	244	421	-0.7

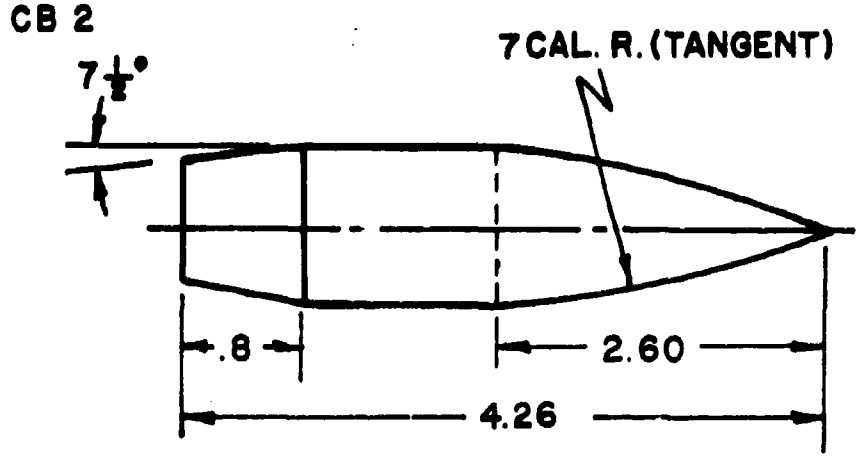
TYPE CB 1 CALIBER 7.62 MM AVERAGE DENSITY 16.70 GRAMS/CC.
PROJ. WT 14.512 GRAMS PROJ. DIA. 7.62 MM IMPULSE 2.1 LB. SEC.
DRAG RDCR. WT. 0.000 GRAMS CHG. WT. 1.59 GRAMS SABOT WT. 0.000 GRAMS
TWIST RATE REV./ 18.5 IN. PCT. DRAG CHANGE / (DEG. YAW)**2 0.76

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	38.5	512	1902	0.0
0	0.00	0.00	38.5	512	1902	0.0
50	1.84	0.10	36.6	493	1762	-0.2
100	3.59	0.20	34.4	474	1630	-0.4
150	5.22	0.31	32.1	456	1506	-0.5
200	6.74	0.42	29.6	438	1389	-0.7
250	8.13	0.54	26.9	420	1280	-0.9
300	9.38	0.66	23.9	403	1178	-1.0
350	10.48	0.79	20.7	386	1084	-1.1
400	11.41	0.92	17.2	371	997	-1.3
450	12.17	1.06	13.4	356	919	-1.3
500	12.73	1.20	9.3	342	851	-1.4
550	13.09	1.35	4.9	331	797	-1.2
600	13.22	1.50	0.2	323	756	-1.1
650	13.12	1.66	-4.7	316	723	-0.9
700	12.77	1.82	-9.8	310	697	-0.8
750	12.16	1.98	-15.1	305	673	-0.8
800	11.29	2.15	-20.6	299	650	-0.8
850	10.15	2.32	-26.2	294	629	-0.9
900	8.72	2.49	-32.1	290	609	-0.9
950	7.00	2.66	-38.1	285	590	-0.9
1000	4.98	2.84	-44.4	281	572	-0.9
1050	2.65	3.02	-50.8	276	554	-0.9
1100	0.00	3.20	-57.5	272	538	-0.9

DRAG RDCR. WT. 0.389 GRAMS PCT. DRAG CHANGE / (DEG. YAW)**2 1.19

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	31.3	512	1902	0.0
0	0.00	0.00	31.3	512	1902	0.0
50	1.49	0.10	29.3	499	1808	-0.1
100	2.88	0.20	27.3	487	1719	-0.2
150	4.16	0.30	25.1	475	1633	-0.4
200	5.34	0.41	22.8	463	1552	-0.5
250	6.41	0.52	20.5	452	1474	-0.6
300	7.35	0.63	17.9	440	1400	-0.7
350	8.17	0.75	15.3	429	1329	-0.8
400	8.86	0.87	12.5	419	1262	-0.9
450	9.40	0.99	9.6	408	1198	-0.9
500	9.80	1.11	6.5	398	1137	-1.0
550	10.05	1.24	3.3	388	1079	-1.1
600	10.13	1.37	-0.1	378	1024	-1.2
650	10.04	1.50	-3.7	368	971	-1.2
700	9.77	1.64	-7.5	359	922	-1.3
750	9.31	1.78	-11.5	350	877	-1.3
800	8.65	1.93	-15.6	342	836	-1.3
850	7.78	2.07	-20.0	335	799	-1.3
900	6.70	2.22	-24.5	329	768	-1.2
950	5.38	2.38	-29.3	323	740	-1.1
1000	3.83	2.53	-34.1	318	716	-1.1
1050	2.04	2.69	-39.2	313	694	-1.0
1100	0.00	2.85	-44.3	309	674	-1.0

CB 2



ALL DIMENSIONS ARE IN CALIBERS

Axial Radius of Gyration = 0.325 Cal. Wetted Area = 10.53 Cal.^{2}

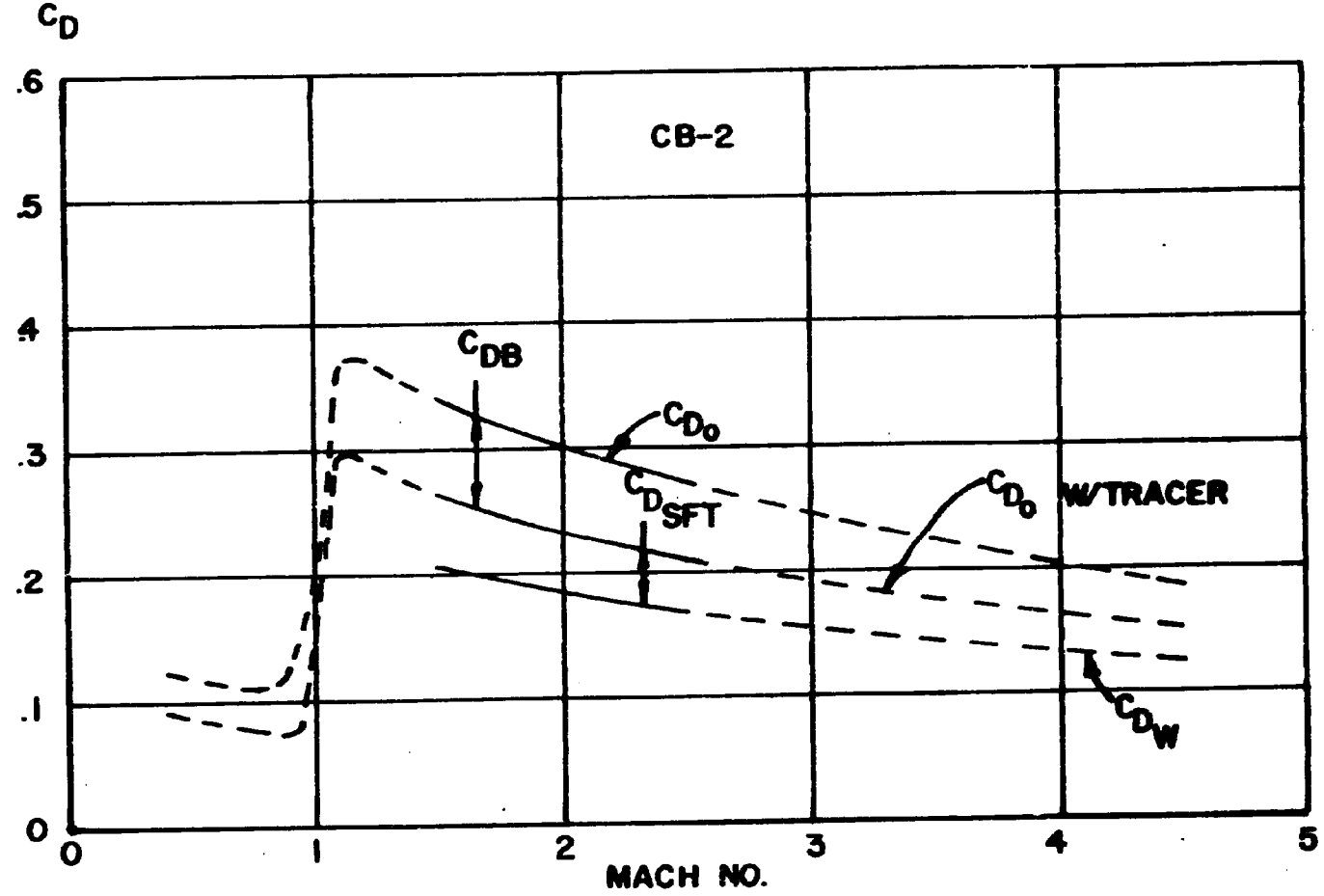
Transverse Radius of Gyration = 0.972 Cal. Volume = 2.28 Cal.^{3}

Center of Mass (Nose) = 2.61 Cal. Length = 4.26 Cal.

Mach No.	C_{D_0}	C_{D_B}	C_{D_0} (Tracer)	$C_{D_{SF_T}}$	C_{D_W}	C_{N_α}	CP_N	C_{M_α}
.4*	.122		.094			1.80	.99	2.92
.8*	.107		.074			1.64	.43	3.58
.95*	.152		.076			1.54	.06	3.93
1.1*	.369		.293			1.70	.59	3.44
1.2*	.369		.293			1.88	.88	3.25
1.5	.340	.076	.264	.055	.209	2.22	1.32	2.87
2.0	.303	.070	.232	.048	.184	2.81	1.75	2.42
2.5	.274	.062	.212	.043	.169	3.15	1.90	2.24
3.0*	.247	.053	.194	.038	.156	3.48	1.99	2.16
3.5*	.225	.047	.178	.034	.144	3.66	2.02	2.16
4.0*	.204	.041	.163	.030	.133	3.66	2.02	2.16
4.5*	.188	.036	.152	.028	.124	3.66	2.02	2.16

$C_{D_{\alpha^2}}$ (Mach = 2.5) = 6.75

*Estimated data



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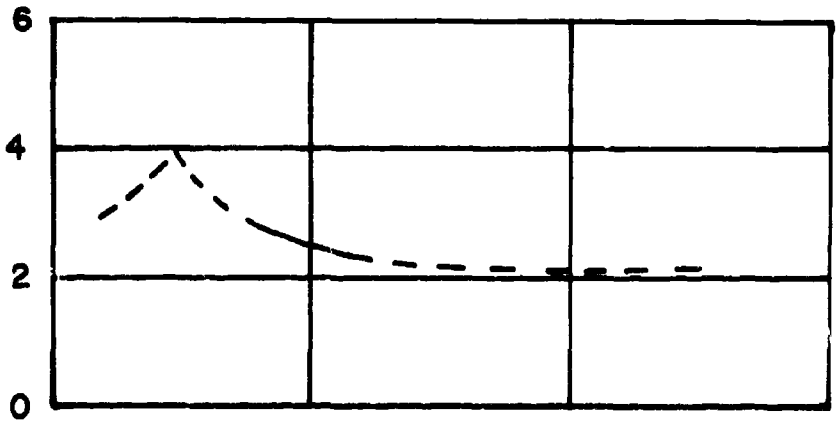
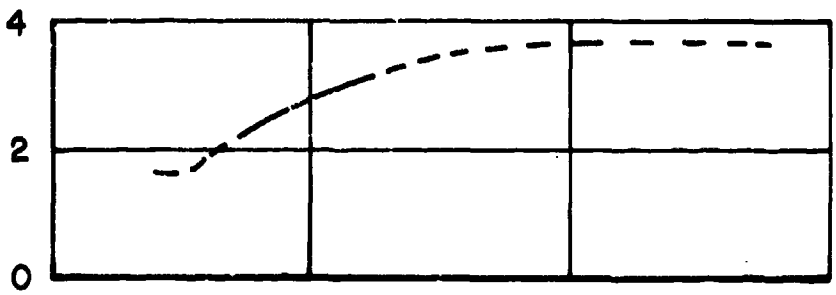
CB-2-2

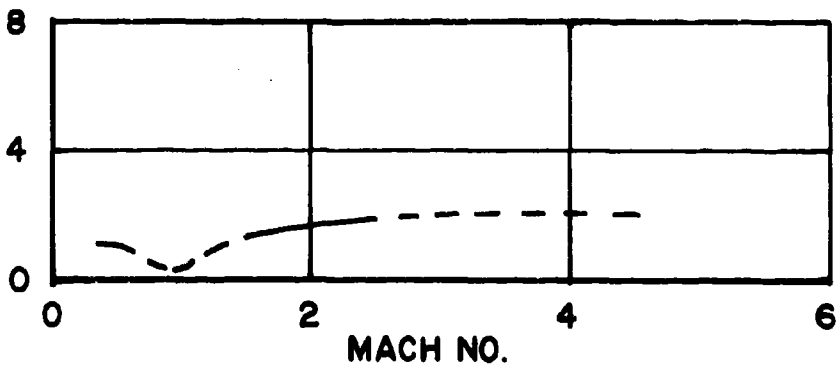
C_{M_α} CB-2



C_{N_α}



CP_N (CAL-NOSE)



CB-2-3

TYPE CB 2 CALIBER 5.56 MM AVERAGE DENSITY 7.80 GRAMS/CC.

PROJ. WT 3.047 GRAMS PROJ. DIA. 5.56 MM IMPULSE 0.8 LB. SEC.

DRAG RDCR. WT. 0.000 GRAMS CHG. WT. 0.88 GRAMS SABOT WT. 0.000 GRAMS

TWIST RATE REV./ 6.1 IN. PCT. DRAG CHANGE / (DEG. YAW)**2 0.76

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	30.2	827	1042	0.0
0	0.00	0.00	30.2	827	1042	0.0
50	1.46	0.06	29.4	772	908	-0.5
100	2.89	0.13	28.5	719	787	-1.0
150	4.27	0.20	27.5	668	680	-1.5
200	5.59	0.28	26.3	619	584	-1.9
250	6.85	0.36	24.9	572	499	-2.3
300	8.03	0.45	23.2	528	425	-2.6
350	9.12	0.55	21.3	486	360	-2.9
400	10.12	0.66	19.0	446	303	-3.2
450	10.99	0.78	16.2	408	253	-3.4
500	11.71	0.91	12.9	373	212	-3.5
550	12.25	1.05	9.0	345	181	-3.1
600	12.59	1.20	4.5	325	161	-2.5
650	12.70	1.35	-0.4	311	147	-2.0
700	12.55	1.52	-5.8	299	137	-1.7
750	12.13	1.69	-11.6	290	128	-1.5
800	11.42	1.86	-17.7	281	120	-1.4
850	10.40	2.04	-24.2	273	114	-1.4
900	9.05	2.23	-31.1	266	108	-1.3
950	7.35	2.42	-38.3	260	103	-1.3
1000	5.29	2.61	-45.9	253	97	-1.4
1050	2.85	2.82	-53.9	246	92	-1.4
1100	0.00	3.02	-62.4	240	88	-1.4

DRAG RDCR. WT. 0.151 GRAMS PCT. DRAG CHANGE / (DEG. YAW)**2 1.12

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	23.0	827	1042	0.0
0	0.00	0.00	23.0	827	1042	0.0
50	1.11	0.06	22.2	784	936	-0.4
100	2.18	0.13	21.4	743	839	-0.8
150	3.21	0.20	20.4	703	749	-1.2
200	4.18	0.27	19.3	664	668	-1.5
250	5.11	0.35	18.1	626	593	-1.9
300	5.97	0.43	16.8	589	525	-2.2
350	6.75	0.52	15.2	554	463	-2.5
400	7.46	0.61	13.5	519	407	-2.7
450	8.08	0.71	11.5	486	356	-3.0
500	8.60	0.82	9.3	454	310	-3.2
550	8.99	0.93	6.7	424	269	-3.4
600	9.25	1.05	3.7	394	232	-3.5
650	9.36	1.18	0.2	367	201	-3.6
700	9.28	1.33	-3.7	346	178	-3.1
750	8.99	1.47	-8.1	331	163	-2.4
800	8.48	1.63	-12.8	320	152	-1.9
850	7.74	1.79	-17.9	312	144	-1.6
900	6.74	1.95	-23.1	305	137	-1.3
950	5.47	2.11	-28.6	299	132	-1.1
1000	3.94	2.28	-34.3	294	126	-1.1
1050	2.12	2.45	-40.2	288	121	-1.2
1100	0.00	2.63	-46.3	283	117	-1.2

TYPE CB 2 CALIBER 5.56 MM AVERAGE DENSITY 7.80 GRAMS/CC.
PROJ. WT 3.047 GRAMS PROJ. DIA. 5.56 MM IMPULSE 1.2 LB. SEC.
DRAG RDCR. WT. 0.000 GRAMS CHG. WT. 1.66 GRAMS SABOT WT. 0.000 GRAMS
TWIST RATE REV./ 8.2 IN. PCT. DRAG CHANGE / (DEG. YAW)**2 0.76

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	16.9	1104	1857	0.0
0	0.00	0.00	16.9	1104	1857	0.0
50	0.42	0.05	16.5	1041	1652	-0.6
100	1.62	0.10	16.0	980	1463	-1.2
150	2.39	0.15	15.4	920	1290	-1.8
200	3.13	0.20	14.8	862	1132	-2.3
250	3.84	0.27	14.1	806	989	-2.8
300	4.51	0.33	13.2	751	860	-3.2
350	5.14	0.40	12.3	699	744	-3.6
400	5.72	0.47	11.2	649	642	-4.0
450	6.25	0.55	9.9	601	550	-4.3
500	6.70	0.64	8.4	555	470	-4.6
550	7.07	0.73	6.7	512	399	-4.8
600	7.36	0.83	4.6	470	337	-5.0
650	7.53	0.95	2.1	431	283	-5.1
700	7.57	1.07	-0.8	394	237	-5.2
750	7.45	1.20	-4.4	361	199	-5.1
800	7.14	1.34	-8.5	337	173	-4.3
850	6.62	1.50	-13.1	319	155	-3.4
900	5.85	1.66	-18.3	306	143	-2.7
950	4.83	1.82	-23.8	296	133	-2.2
1000	3.52	2.00	-29.7	286	125	-2.0
1050	1.92	2.17	-36.0	278	118	-1.9
1100	0.00	2.35	-42.6	271	112	-1.7

DRAG RDCR. WT. 0.151 GRAMS PCT. DRAG CHANGE / (DEG. YAW)**2 1.12

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	11.8	1104	1857	0.0
0	0.00	0.00	11.8	1104	1857	0.0
50	0.57	0.05	11.4	1054	1692	-0.5
100	1.12	0.09	10.9	1005	1537	-1.0
150	1.64	0.15	10.4	958	1394	-1.4
200	2.14	0.20	9.8	911	1260	-1.8
250	2.61	0.26	9.2	866	1137	-2.2
300	3.05	0.32	8.5	822	1023	-2.6
350	3.45	0.38	7.7	779	918	-3.0
400	3.81	0.44	6.8	737	822	-3.3
450	4.13	0.51	5.9	697	734	-3.6
500	4.39	0.59	4.8	658	654	-3.9
550	4.60	0.67	3.6	620	580	-4.1
600	4.75	0.75	2.2	584	513	-4.4
650	4.82	0.84	0.6	548	452	-4.6
700	4.82	0.93	-1.2	514	396	-4.8
750	4.72	1.03	-3.2	481	347	-5.0
800	4.51	1.14	-5.5	449	302	-5.1
850	4.18	1.25	-8.1	418	261	-5.3
900	3.72	1.38	-11.2	389	225	-5.4
950	3.09	1.51	-14.8	362	195	-5.2
1000	2.27	1.65	-18.8	343	174	-4.6
1050	1.25	1.80	-23.3	329	160	-3.6
1100	0.00	1.96	-28.0	318	149	-2.8

TYPE CB 2 CALIBER 5.56 MM AVERAGE DENSITY 7.80 GRAMS/CC.

PROJ. WT 3.047 GRAMS PROJ. DIA. 5.56 MM IMPULSE 2.1 LB. SEC.

DRAG RDCR. WT. 0.000 GRAMS CHG. WT. 3.81 GRAMS SABOT WT. 0.000 GRAMS

TWIST RATE REV./ 8.2 IN. PCT. DRAG CHANGE / (DEG. YAW)**2 0.76

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	7.7	1474	3310	0.0
0	0.00	0.00	7.7	1474	3310	0.0
50	0.37	0.03	7.4	1405	3007	-0.7
100	0.73	0.07	7.2	1337	2722	-1.4
150	1.07	0.11	6.9	1270	2456	-2.0
200	1.40	0.15	6.5	1203	2206	-2.6
250	1.72	0.19	6.2	1138	1974	-3.2
300	2.01	0.24	5.8	1075	1759	-3.8
350	2.29	0.29	5.3	1012	1562	-4.3
400	2.54	0.34	4.8	952	1381	-4.8
450	2.76	0.39	4.2	893	1215	-5.3
500	2.96	0.45	3.5	836	1064	-5.7
550	3.12	0.51	2.8	780	927	-6.1
600	3.23	0.58	1.9	727	805	-6.4
650	3.31	0.65	0.9	676	695	-6.7
700	3.33	0.73	-0.3	627	598	-6.9
750	3.28	0.81	-1.7	580	512	-7.1
800	3.17	0.90	-3.4	535	436	-7.3
850	2.97	1.00	-5.2	492	369	-7.4
900	2.66	1.10	-7.5	452	311	-7.4
950	2.24	1.22	-10.1	414	261	-7.5
1000	1.68	1.34	-13.3	378	218	-7.4
1050	0.94	1.48	-17.1	349	185	-6.9
1100	0.00	1.63	-21.5	328	164	-5.7

DRAG RDCR. WT. 0.151 GRAMS PCT. DRAG CHANGE / (DEG. YAW)**2 1.12

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	5.5	1474	3310	0.0
0	0.00	0.00	5.5	1474	3310	0.0
50	0.26	0.03	5.2	1418	3063	-0.6
100	0.51	0.07	5.0	1364	2829	-1.1
150	0.75	0.11	4.7	1310	2608	-1.6
200	0.98	0.15	4.4	1256	2399	-2.1
250	1.19	0.19	4.1	1204	2201	-2.6
300	1.38	0.23	3.7	1152	2014	-3.1
350	1.55	0.27	3.3	1101	1839	-3.5
400	1.71	0.32	2.9	1051	1674	-4.0
450	1.84	0.37	2.4	1002	1521	-4.4
500	1.95	0.42	1.9	954	1378	-4.8
550	2.03	0.47	1.3	908	1245	-5.1
600	2.09	0.53	0.7	862	1123	-5.4
650	2.11	0.59	0.0	818	1010	-5.7
700	2.09	0.65	-0.8	775	906	-6.0
750	2.03	0.72	-1.7	734	810	-6.3
800	1.93	0.79	-2.7	693	723	-6.5
850	1.78	0.86	-3.8	654	643	-6.7
900	1.57	0.94	-5.0	616	570	-6.9
950	1.30	1.03	-6.4	580	503	-7.0
1000	0.95	1.12	-8.0	544	443	-7.2
1050	0.52	1.21	-9.8	510	388	-7.3
1100	0.00	1.31	-11.9	477	339	-7.4

TYPE CB 2 CALIBER 5.56 MM AVERAGE DENSITY 11.00 GRAMS/CC.
PROJ. WT 4.296 GRAMS PROJ. DIA. 5.56 MM IMPULSE 0.8 LB. SEC.
DRAG RDCR. WT. 0.000 GRAMS CHG. WT. 0.72 GRAMS SABOT WT. 0.000 GRAMS
TWIST RATE REV./ 5.9 IN. PCT. DRAG CHANGE / (DEG. YAW)**2 0.76

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	35.2	629	850	0.0
0	0.00	0.00	35.2	629	850	0.0
50	1.69	0.08	33.8	595	761	-0.3
100	3.32	0.17	32.3	563	680	-0.6
150	4.87	0.26	30.7	531	606	-0.9
200	6.33	0.36	28.8	501	539	-1.2
250	7.69	0.46	26.7	472	478	-1.4
300	8.95	0.57	24.3	444	423	-1.7
350	10.08	0.69	21.6	417	373	-1.9
400	11.07	0.81	18.5	391	328	-2.0
450	11.90	0.94	15.0	367	289	-2.1
500	12.54	1.08	11.1	348	260	-1.9
550	12.99	1.23	6.8	332	237	-1.7
600	13.21	1.38	2.1	320	220	-1.5
650	13.19	1.54	-3.0	310	207	-1.3
700	12.92	1.70	-8.3	302	196	-1.2
750	12.38	1.87	-13.9	295	187	-1.1
800	11.56	2.04	-19.8	288	179	-1.1
850	10.44	2.22	-25.9	282	171	-1.1
900	9.02	2.40	-32.3	277	165	-1.0
950	7.28	2.58	-39.0	272	158	-1.0
1000	5.20	2.77	-45.9	267	153	-1.0
1050	2.78	2.96	-53.0	262	147	-1.0
1100	0.00	3.15	-60.4	257	142	-1.1

DRAG RDCR. WT. 0.151 GRAMS PCT. DRAG CHANGE / (DEG. YAW)**2 1.12

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	29.3	629	850	0.0
0	0.00	0.00	29.3	629	850	0.0
50	1.41	0.08	28.0	603	780	-0.3
100	2.75	0.17	26.6	577	715	-0.5
150	4.02	0.25	25.0	553	654	-0.7
200	5.21	0.35	23.3	528	597	-1.0
250	6.31	0.44	21.4	505	544	-1.2
300	7.31	0.55	19.4	482	495	-1.4
350	8.21	0.65	17.1	459	449	-1.6
400	9.00	0.76	14.6	437	407	-1.7
450	9.65	0.88	11.9	416	367	-1.9
500	10.17	1.00	8.8	395	331	-2.1
550	10.52	1.13	5.5	375	298	-2.2
600	10.71	1.27	1.7	358	271	-2.1
650	10.70	1.41	-2.3	345	251	-1.8
700	10.48	1.56	-6.7	334	235	-1.6
750	10.05	1.71	-11.3	325	223	-1.4
800	9.38	1.87	-16.1	318	213	-1.2
850	8.47	2.03	-21.2	312	205	-1.0
900	7.31	2.19	-26.4	308	198	-0.9
950	5.89	2.35	-31.7	303	192	-0.8
1000	4.20	2.52	-37.2	299	187	-0.8
1050	2.24	2.69	-42.9	295	182	-0.8
1100	0.00	2.86	-48.7	292	176	-0.9

TYPE CB 2 CALIBER 5.56 MM AVERAGE DENSITY 11.00 GRAMS/CC.

PROJ. WT 4.296 GRAMS PROJ. DIA. 5.56 MM IMPULSE 1.2 LB. SEC.

DRAG RDCR. WT. 0.000 GRAMS CHG. WT. 1.37 GRAMS SABOT WT. 0.000 GRAMS

TWIST RATE REV./ 8.3 IN. PCT. DRAG CHANGE / (DEG. YAW)**2 0.76

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	18.9	867	1615	0.0
0	0.00	0.00	18.9	867	1615	0.0
50	0.91	0.06	18.2	827	1468	-0.4
100	1.79	0.12	17.4	787	1332	-0.8
150	2.62	0.19	16.6	749	1205	-1.1
200	3.42	0.25	15.7	712	1089	-1.5
250	4.16	0.33	14.6	676	981	-1.8
300	4.85	0.40	13.5	641	882	-2.1
350	5.49	0.48	12.2	607	791	-2.4
400	6.07	0.57	10.7	574	708	-2.6
450	6.55	0.66	9.1	542	631	-2.9
500	6.95	0.75	7.3	511	562	-3.1
550	7.27	0.85	5.3	482	499	-3.3
600	7.48	0.96	3.0	453	442	-3.4
650	7.57	1.07	0.4	426	390	-3.6
700	7.53	1.20	-2.5	400	343	-3.7
750	7.33	1.32	-5.8	375	302	-3.8
800	6.96	1.46	-9.6	354	269	-3.6
850	6.39	1.61	-13.8	337	245	-3.1
900	5.61	1.76	-18.4	324	226	-2.6
950	4.59	1.91	-23.2	314	212	-2.2
1000	3.33	2.08	-28.5	305	200	-1.9
1050	1.80	2.24	-34.0	298	190	-1.7
1100	0.00	2.41	-39.8	291	182	-1.6

DRAG RDCR. WT. 0.151 GRAMS PCT. DRAG CHANGE / (DEG. YAW)**2 1.12

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	14.6	867	1615	0.0
0	0.00	0.00	14.6	867	1615	0.0
50	0.70	0.06	13.9	836	1499	-0.3
100	1.37	0.12	13.2	805	1390	-0.6
150	2.00	0.18	12.4	775	1288	-0.9
200	2.59	0.25	11.5	746	1191	-1.2
250	3.14	0.32	10.6	717	1100	-1.4
300	3.63	0.39	9.6	689	1015	-1.7
350	4.08	0.46	8.5	661	935	-1.9
400	4.47	0.54	7.3	635	860	-2.1
450	4.80	0.62	6.0	608	789	-2.4
500	5.06	0.70	4.6	582	723	-2.6
550	5.25	0.79	3.1	557	661	-2.8
600	5.37	0.88	1.4	533	604	-2.9
650	5.40	0.98	-0.5	509	550	-3.1
700	5.33	1.08	-2.5	486	500	-3.3
750	5.16	1.19	-4.7	463	454	-3.4
800	4.87	1.30	-7.2	441	411	-3.6
850	4.46	1.41	-9.9	419	371	-3.7
900	3.91	1.54	-12.9	398	334	-3.8
950	3.21	1.66	-16.2	378	301	-3.9
1000	2.33	1.80	-19.9	360	273	-3.7
1050	1.27	1.94	-23.9	344	252	-3.3
1100	0.00	2.09	-28.2	335	235	-2.8

TYPE CB 2 CALIBER 5.56 MM AVERAGE DENSITY 11.00 GRAMS/CC.

PROJ. WT 4.296 GRAMS PROJ. DIA. 5.56 MM IMPULSE 2.1 LB. SEC.

DRAG RDCR. WT. 0.000 GRAMS CHG. WT. 3.25 GRAMS SABOT WT. 0.000 GRAMS

TWIST RATE REV./ 9.8 IN. PCT. DRAG CHANGE / (DEG. YAW)**2 0.76

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	7.4	1255	3383	0.0
0	0.00	0.00	7.4	1255	3383	0.0
50	0.36	0.04	7.1	1208	3135	-0.5
100	0.70	0.08	6.8	1162	2899	-0.9
150	1.02	0.13	6.4	1116	2675	-1.4
200	1.33	0.17	6.0	1071	2464	-1.8
250	1.61	0.22	5.5	1027	2265	-2.2
300	1.87	0.27	5.0	984	2078	-2.6
350	2.11	0.32	4.5	941	1902	-3.0
400	2.31	0.38	3.9	899	1737	-3.3
450	2.49	0.43	3.2	858	1582	-3.7
500	2.64	0.49	2.5	818	1438	-4.0
550	2.75	0.56	1.7	779	1304	-4.3
600	2.81	0.62	0.9	741	1179	-4.6
650	2.84	0.69	-0.1	704	1065	-4.8
700	2.81	0.76	-1.1	668	959	-5.0
750	2.73	0.84	-2.3	633	862	-5.3
800	2.59	0.92	-3.6	600	772	-5.5
850	2.39	1.01	-5.1	567	691	-5.6
900	2.10	1.10	-6.8	535	616	-5.8
950	1.73	1.19	-8.6	505	548	-5.9
1000	1.27	1.30	-10.7	476	486	-6.0
1050	0.70	1.40	-13.0	447	430	-6.1
1100	0.00	1.52	-15.7	420	379	-6.1

DRAG RDCR. WT. 0.151 GRAMS PCT. DRAG CHANGE / (DEG. YAW)**2 1.12

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	6.0	1255	3383	0.0
0	0.00	0.00	6.0	1255	3383	0.0
50	0.29	0.04	5.7	1218	3184	-0.4
100	0.56	0.08	5.3	1181	2993	-0.7
150	0.81	0.13	5.0	1144	2809	-1.1
200	1.05	0.17	4.6	1108	2634	-1.4
250	1.27	0.22	4.2	1073	2466	-1.8
300	1.46	0.26	3.7	1038	2306	-2.1
350	1.63	0.31	3.2	1003	2154	-2.4
400	1.78	0.36	2.7	969	2009	-2.7
450	1.91	0.42	2.2	936	1872	-3.0
500	2.00	0.47	1.6	903	1742	-3.3
550	2.07	0.53	0.9	871	1619	-3.5
600	2.10	0.58	0.3	839	1503	-3.8
650	2.10	0.65	-0.5	808	1393	-4.0
700	2.07	0.71	-1.3	778	1290	-4.2
750	1.99	0.77	-2.1	749	1193	-4.5
800	1.87	0.84	-3.1	720	1101	-4.6
850	1.70	0.91	-4.1	691	1015	-4.8
900	1.48	0.99	-5.1	664	935	-5.0
950	1.21	1.06	-6.3	637	859	-5.2
1000	0.87	1.14	-7.6	610	789	-5.3
1050	0.47	1.23	-9.0	584	722	-5.5
1100	0.00	1.32	-10.6	559	660	-5.6

TYPE CB 2 CALIBER 5.56 MM AVERAGE DENSITY 16.70 GRAMS/CC.

PROJ. WT 6.523 GRAMS PROJ. DIA. 5.56 MM IMPULSE 0.8 LB. SEC.

DRAG RDCR. WT. 0.000 GRAMS CHG. WT. 0.53 GRAMS SABOT WT. 0.000 GRAMS

TWIST RATE REV./ 10.1 IN. PCT. DRAG CHANGE / (DEG. YAW)**2 0.76

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	46.8	448	655	0.0
0	0.00	0.00	46.8	448	655	0.0
50	2.24	0.11	44.2	430	603	-0.2
100	4.34	0.23	41.4	412	554	-0.3
150	6.30	0.36	38.3	395	510	-0.5
200	8.10	0.49	35.0	379	468	-0.6
250	9.74	0.62	31.4	364	432	-0.7
300	11.18	0.76	27.5	351	402	-0.7
350	12.43	0.91	23.3	340	377	-0.7
400	13.47	1.06	18.8	331	357	-0.7
450	14.28	1.21	14.1	323	340	-0.7
500	14.86	1.37	9.2	316	325	-0.7
550	15.19	1.53	4.1	310	312	-0.7
600	15.26	1.69	-1.2	304	302	-0.7
650	15.07	1.85	-6.7	299	292	-0.7
700	14.61	2.02	-12.4	294	283	-0.7
750	13.86	2.19	-18.2	290	274	-0.7
800	12.82	2.37	-24.3	286	267	-0.7
850	11.48	2.54	-30.5	282	259	-0.7
900	9.84	2.72	-36.8	278	253	-0.7
950	7.87	2.90	-43.4	275	246	-0.7
1000	5.58	3.09	-50.1	272	240	-0.7
1050	2.96	3.27	-56.9	268	235	-0.7
1100	0.00	3.46	-63.9	265	229	-0.7

DRAG RDCR. WT. 0.151 GRAMS PCT. DRAG CHANGE / (DEG. YAW)**2 1.12

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	42.5	448	655	0.0
0	0.00	0.00	42.5	448	655	0.0
50	2.03	0.11	40.0	434	613	-0.1
100	3.92	0.23	37.2	420	573	-0.3
150	5.68	0.35	34.3	406	536	-0.4
200	7.29	0.48	31.1	392	500	-0.5
250	8.73	0.61	27.8	379	467	-0.6
300	10.01	0.74	24.2	367	437	-0.7
350	11.11	0.88	20.4	357	412	-0.7
400	12.02	1.02	16.3	348	391	-0.7
450	12.72	1.17	12.1	340	374	-0.7
500	13.21	1.32	7.7	333	359	-0.7
550	13.48	1.47	3.1	327	346	-0.6
600	13.52	1.62	-1.6	322	335	-0.6
650	13.32	1.78	-6.5	318	325	-0.6
700	12.88	1.94	-11.5	314	317	-0.6
750	12.20	2.10	-16.6	31:	310	-0.5
800	11.26	2.26	-21.9	308	303	-0.5
850	10.05	2.42	-27.2	305	297	-0.5
900	8.59	2.59	-32.6	302	292	-0.5
950	6.86	2.75	-38.1	300	287	-0.5
1000	4.85	2.92	-43.8	297	281	-0.5
1050	2.57	3.09	-49.5	293	274	-0.6
1100	0.00	3.26	-55.4	289	266	-0.6

TYPE CB 2 CALIBER 5.56 MM AVERAGE DENSITY 16.70 GRAMS/CC.
PROJ. WT 6.523 GRAMS PROJ. DIA. 5.56 MM IMPULSE 1.2 LB. SEC.
DRAG RDCR. WT. 0.000 GRAMS CHG. WT. 1.07 GRAMS SABOT WT. 0.000 GRAMS
TWIST RATE REV./ 7.4 IN. PCT. DRAG CHANGE / (DEG. YAW)**2 0.76

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	26.8	623	1266	0.0
0	0.00	0.00	26.8	623	1266	0.0
50	1.28	0.08	25.5	601	1177	-0.2
100	2.50	0.17	24.0	579	1094	-0.4
150	3.65	0.25	22.5	558	1015	-0.6
200	4.71	0.35	20.8	537	941	-0.8
250	5.69	0.44	19.0	517	872	-1.0
300	6.58	0.54	17.1	497	806	-1.2
350	7.37	0.64	15.0	478	745	-1.3
400	8.05	0.75	12.7	459	688	-1.5
450	8.62	0.86	10.2	441	634	-1.6
500	9.06	0.98	7.6	423	584	-1.8
550	9.37	1.10	4.7	406	537	-1.9
600	9.52	1.22	1.5	389	493	-2.0
650	9.52	1.35	-2.0	373	454	-2.1
700	9.34	1.49	-5.7	359	420	-2.0
750	8.96	1.63	-9.7	347	392	-1.9
800	8.39	1.78	-14.0	336	369	-1.7
850	7.60	1.93	-18.5	328	350	-1.6
900	6.58	2.08	-23.3	320	334	-1.5
950	5.32	2.24	-28.3	313	320	-1.3
1000	3.81	2.40	-33.5	308	309	-1.2
1050	2.04	2.57	-38.9	302	298	-1.2
1100	0.00	2.73	-44.4	298	289	-1.1

DRAG RDCR. WT. 0.151 GRAMS PCT. DRAG CHANGE / (DEG. YAW)**2 1.12

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	23.1	623	1266	0.0
0	0.00	0.00	23.1	623	1266	0.0
50	1.10	0.08	21.7	606	1196	-0.2
100	2.13	0.17	20.3	589	1130	-0.3
150	3.10	0.25	18.9	572	1066	-0.5
200	3.99	0.34	17.3	556	1005	-0.7
250	4.79	0.43	15.6	540	947	-0.8
300	5.52	0.53	13.9	524	892	-0.9
350	6.16	0.62	12.0	508	839	-1.1
400	6.70	0.72	10.0	493	789	-1.2
450	7.14	0.83	7.9	478	741	-1.4
500	7.48	0.93	5.6	463	695	-1.5
550	7.70	1.04	3.2	449	651	-1.6
600	7.80	1.15	0.6	434	609	-1.7
650	7.77	1.27	-2.1	420	570	-1.8
700	7.60	1.39	-5.0	406	532	-1.9
750	7.28	1.52	-8.2	393	497	-2.0
800	6.80	1.65	-11.5	380	464	-2.1
850	6.16	1.78	-15.1	367	434	-2.1
900	5.33	1.92	-18.9	357	409	-2.0
950	4.31	2.06	-22.9	348	388	-1.8
1000	3.09	2.21	-27.2	340	371	-1.7
1050	1.65	2.36	-31.6	333	356	-1.5
1100	0.00	2.51	-36.2	328	343	-1.4

TYPE CB 2 CALIBER 5.56 MM AVERAGE DENSITY 16.70 GRAMS/CC.

PROJ. WT 6.523 GRAMS PROJ. DIA. 5.56 MM IMPULSE 2.1 LB. SEC.

DRAG RDCR. WT. 0.000 GRAMS CHG. WT. 2.60 GRAMS SABOT WT. 0.000 GRAMS

TWIST RATE REV./ 10.2 IN. PCT. DRAG CHANGE / (DEG. YAW)**2 0.76

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	10.0	962	3018	0.0
0	0.00	0.00	10.0	962	3018	0.0
50	0.48	0.05	9.5	934	2846	-0.3
100	0.93	0.11	8.9	906	2680	-0.5
150	1.35	0.16	8.3	879	2522	-0.8
200	1.75	0.22	7.6	852	2370	-1.1
250	2.10	0.28	6.9	826	2225	-1.3
300	2.43	0.34	6.1	800	2088	-1.6
350	2.71	0.41	5.3	774	1956	-1.8
400	2.95	0.47	4.5	749	1832	-2.0
450	3.15	0.54	3.6	725	1713	-2.2
500	3.31	0.61	2.6	701	1601	-2.4
550	3.41	0.68	1.5	677	1495	-2.6
600	3.46	0.76	0.4	654	1394	-2.8
650	3.46	0.83	-0.8	631	1299	-3.0
700	3.39	0.92	-2.1	609	1208	-3.1
750	3.26	1.00	-3.5	587	1123	-3.3
800	3.06	1.09	-5.0	565	1043	-3.4
850	2.78	1.18	-6.7	545	967	-3.6
900	2.41	1.27	-8.4	524	896	-3.7
950	1.96	1.37	-10.3	504	830	-3.8
1000	1.41	1.47	-12.3	485	767	-3.9
1050	0.76	1.57	-14.5	466	708	-4.0
1100	0.00	1.68	-16.9	447	653	-4.1

DRAG RDCR. WT. 0.151 GRAMS PCT. DRAG CHANGE / (DEG. YAW)**2 1.12

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	8.7	962	3018	0.0
0	0.00	0.00	8.7	962	3018	0.0
50	0.41	0.05	8.2	940	2881	-0.2
100	0.80	0.11	7.6	918	2749	-0.4
150	1.16	0.16	7.0	897	2621	-0.6
200	1.49	0.22	6.3	876	2498	-0.8
250	1.79	0.28	5.7	855	2380	-1.0
300	2.05	0.33	5.0	835	2266	-1.2
350	2.28	0.40	4.2	814	2156	-1.4
400	2.47	0.46	3.5	794	2051	-1.6
450	2.62	0.52	2.7	775	1949	-1.8
500	2.74	0.59	1.8	755	1852	-1.9
550	2.81	0.65	0.9	736	1758	-2.1
600	2.83	0.72	0.0	717	1668	-2.3
650	2.81	0.79	-1.0	698	1582	-2.4
700	2.74	0.87	-2.1	680	1499	-2.6
750	2.62	0.94	-3.2	662	1420	-2.7
800	2.44	1.02	-4.4	644	1343	-2.9
850	2.20	1.10	-5.6	627	1270	-3.0
900	1.90	1.18	-6.9	609	1200	-3.1
950	1.53	1.26	-8.3	592	1133	-3.3
1000	1.10	1.35	-9.8	576	1069	-3.4
1050	0.59	1.43	-11.3	559	1008	-3.5
1100	0.00	1.52	-13.0	543	949	-3.6

TYPE CB 2 CALIBER 6.50 MM AVERAGE DENSITY 7.80 GRAMS/CC.
PROJ. WT 4.888 GRAMS PROJ. DIA. 6.50 MM IMPULSE 0.8 LB. SEC.
DRAG RDCR. WT. 0.000 GRAMS CHG. WT. 0.66 GRAMS SABOT WT. 0.000 GRAMS
TWIST RATE REV./ 6.0 IN. PCT. DRAG CHANGE / (DEG. YAW)**2 0.76

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	46.3	566	783	0.0
0	0.00	0.00	46.3	566	783	0.0
50	2.24	0.09	44.7	528	682	-0.4
100	4.38	0.19	42.7	492	592	-0.7
150	6.43	0.30	40.5	457	511	-1.0
200	8.36	0.41	37.9	424	440	-1.3
250	10.15	0.53	34.9	393	378	-1.5
300	11.79	0.66	31.4	365	325	-1.7
350	13.24	0.81	27.4	342	287	-1.5
400	14.48	0.96	22.9	326	259	-1.3
450	15.49	1.11	18.0	313	239	-1.1
500	16.25	1.27	12.8	303	224	-1.0
550	16.74	1.44	7.1	294	211	-1.0
600	16.95	1.61	1.2	286	200	-1.0
650	16.86	1.79	-5.1	279	191	-0.9
700	16.45	1.97	-11.6	273	182	-0.9
750	15.72	2.16	-18.5	267	174	-0.9
800	14.64	2.35	-25.7	261	166	-0.9
850	13.21	2.54	-33.2	255	159	-1.0
900	11.39	2.74	-41.0	250	152	-1.0
950	9.18	2.94	-49.2	244	145	-1.1
1000	6.56	3.15	-57.8	239	139	-1.1
1050	3.51	3.36	-66.8	233	133	-1.1
1100	0.00	3.58	-76.2	228	127	-1.2

DRAG RDCR. WT. 0.241 GRAMS PCT. DRAG CHANGE / (DEG. YAW)**2 1.12

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	38.9	566	783	0.0
0	0.00	0.00	38.9	566	783	0.0
50	1.87	0.09	37.3	537	703	-0.3
100	3.66	0.19	35.4	508	629	-0.6
150	5.35	0.29	33.4	480	561	-0.8
200	6.94	0.40	31.1	453	499	-1.1
250	8.40	0.51	28.5	427	442	-1.3
300	9.74	0.63	25.6	402	391	-1.5
350	10.92	0.76	22.3	378	345	-1.7
400	11.93	0.89	18.6	357	307	-1.6
450	12.74	1.04	14.5	341	280	-1.4
500	13.35	1.19	10.0	330	260	-1.2
550	13.73	1.34	5.3	320	245	-1.0
600	13.87	1.50	0.3	313	233	-0.9
650	13.76	1.66	-4.9	307	224	-0.8
700	13.40	1.83	-10.3	302	216	-0.7
750	12.76	1.99	-15.9	297	209	-0.7
800	11.84	2.16	-21.6	292	202	-0.8
850	10.64	2.33	-27.5	288	195	-0.8
900	9.15	2.51	-33.7	283	188	-0.8
950	7.35	2.69	-40.0	279	182	-0.8
1000	5.23	2.87	-46.5	274	175	-0.9
1050	2.78	3.05	-53.3	270	169	-1.0
1100	0.00	3.24	-60.3	263	161	-1.0

TYPE CB 2 CALIBER 6.50 MM AVERAGE DENSITY 7.80 GRAMS/CC.
PROJ. WT 4.888 GRAMS PROJ. DIA. 6.50 MM IMPULSE 1.2 LB. SEC.
DRAG RDCR. WT. 0.000 GRAMS CHG. WT. 1.27 GRAMS SABOT WT. 0.000 GRAMS
TWIST RATE REV./ 7.1 IN. PCT. DRAG CHANGE / (DEG. YAW)**2 0.76

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	28.1	785	1506	0.0
0	0.00	0.00	28.1	785	1506	0.0
50	1.36	0.07	27.2	739	1335	-0.5
100	2.67	0.14	26.2	695	1181	-0.9
150	3.93	0.21	25.1	652	1040	-1.3
200	5.14	0.29	23.9	611	913	-1.6
250	6.28	0.37	22.5	572	799	-2.0
300	7.34	0.46	20.8	534	696	-2.3
350	8.32	0.56	18.9	497	605	-2.5
400	9.20	0.67	16.8	463	523	-2.8
450	9.97	0.78	14.2	429	451	-3.0
500	10.60	0.90	11.3	398	387	-3.2
550	11.08	1.03	7.9	369	332	-3.2
600	11.38	1.17	4.0	346	292	-2.9
650	11.47	1.32	-0.4	328	263	-2.4
700	11.34	1.47	-5.3	315	242	-2.0
750	10.96	1.64	-10.5	304	227	-1.7
800	10.31	1.80	-16.1	296	214	-1.5
850	9.38	1.97	-22.0	288	202	-1.4
900	8.16	2.15	-28.2	280	192	-1.4
950	6.63	2.33	-34.7	274	183	-1.3
1000	4.76	2.52	-41.5	268	175	-1.3
1050	2.56	2.70	-48.6	262	168	-1.3
1100	0.00	2.90	-56.0	256	161	-1.3

DRAG RDCR. WT. 0.241 GRAMS PCT. DRAG CHANGE / (DEG. YAW)**2 1.12

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	21.9	785	1506	0.0
0	0.00	0.00	21.9	785	1506	0.0
50	1.05	0.07	21.0	750	1372	-0.3
100	2.07	0.13	20.1	715	1247	-0.7
150	3.03	0.21	19.1	682	1131	-1.0
200	3.94	0.28	18.0	649	1024	-1.3
250	4.79	0.36	16.7	617	925	-1.6
300	5.58	0.44	15.3	586	833	-1.8
350	6.30	0.53	13.8	556	748	-2.1
400	6.94	0.62	12.1	526	670	-2.3
450	7.49	0.72	10.2	498	599	-2.5
500	7.94	0.82	8.0	470	533	-2.7
550	8.28	0.93	5.7	443	473	-2.9
600	8.50	1.05	3.0	417	419	-3.1
650	8.58	1.17	-0.1	392	369	-3.3
700	8.49	1.30	-3.6	369	326	-3.3
750	8.23	1.44	-7.4	350	293	-3.0
800	7.77	1.59	-11.7	336	269	-2.4
850	7.09	1.74	-16.3	325	251	-2.0
900	6.18	1.90	-21.1	317	238	-1.7
950	5.03	2.06	-26.2	310	227	-1.4
1000	3.62	2.22	-31.5	305	219	-1.2
1050	1.95	2.38	-36.9	300	211	-1.1
1100	0.00	2.55	-42.6	295	204	-1.1

TYPE CB 2 CALIBER 6.50 MM AVERAGE DENSITY 7.80 GRAMS/CC.
PROJ. WT 4.888 GRAMS PROJ. DIA. 6.50 MM IMPULSE 2.1 LB. SEC.
DRAG RDCR. WT. 0.000 GRAMS CHG. WT. 3.04 GRAMS SABOT WT. 0.000 GRAMS
TWIST RATE REV./ 9.7 IN. PCT. DRAG CHANGE / (DEG. YAW)**2 0.76

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	11.5	1165	3317	0.0
0	0.00	0.00	11.5	1165	3317	0.0
50	0.56	0.04	11.2	1110	3012	-0.5
100	1.10	0.09	10.7	1056	2727	-1.1
150	1.61	0.14	10.3	1004	2463	-1.6
200	2.10	0.19	9.7	952	2217	-2.0
250	2.57	0.24	9.2	902	1988	-2.5
300	3.01	0.30	8.5	853	1777	-2.9
350	3.41	0.36	7.8	805	1583	-3.3
400	3.77	0.43	7.0	758	1406	-3.7
450	4.10	0.49	6.0	714	1245	-4.0
500	4.37	0.57	5.0	670	1098	-4.3
550	4.59	0.64	3.8	629	966	-4.6
600	4.75	0.72	2.5	588	846	-4.8
650	4.84	0.81	0.9	550	739	-5.1
700	4.85	0.91	-0.9	513	643	-5.2
750	4.76	1.01	-2.9	477	557	-5.4
800	4.57	1.12	-5.3	443	481	-5.5
850	4.25	1.23	-8.0	411	413	-5.6
900	3.79	1.36	-11.2	381	354	-5.6
950	3.15	1.50	-14.9	355	307	-5.3
1000	2.33	1.64	-19.1	335	274	-4.6
1050	1.28	1.79	-23.8	320	251	-3.7
1100	0.00	1.95	-28.9	309	233	-3.0

DRAG RDCR. WT. 0.241 GRAMS PCT. DRAG CHANGE / (DEG. YAW)**2 1.12

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	8.5	1165	3317	0.0
0	0.00	0.00	8.5	1165	3317	0.0
50	0.41	0.04	8.1	1122	3072	-0.4
100	0.80	0.09	7.7	1079	2840	-0.9
150	1.16	0.14	7.2	1037	2620	-1.3
200	1.51	0.19	6.8	995	2413	-1.6
250	1.83	0.24	6.2	955	2218	-2.0
300	2.12	0.29	5.7	915	2036	-2.4
350	2.39	0.35	5.0	876	1865	-2.7
400	2.62	0.40	4.4	838	1705	-3.0
450	2.82	0.47	3.6	801	1557	-3.3
500	2.98	0.53	2.8	765	1418	-3.6
550	3.10	0.60	1.9	730	1289	-3.9
600	3.18	0.67	0.9	696	1170	-4.1
650	3.20	0.74	-0.2	662	1059	-4.3
700	3.17	0.82	-1.4	630	957	-4.5
750	3.08	0.90	-2.7	598	862	-4.8
800	2.92	0.99	-4.2	567	774	-4.9
850	2.68	1.08	-5.8	538	694	-5.1
900	2.36	1.17	-7.6	509	620	-5.2
950	1.94	1.27	-9.7	480	552	-5.4
1000	1.42	1.38	-12.0	453	490	-5.5
1050	0.78	1.49	-14.5	427	434	-5.6
1100	0.00	1.61	-17.5	401	382	-5.7

TYPE CR 2 CALIBER 6.50 MM AVERAGE DENSITY 11.00 GRAMS/CC.

PROJ. WT 6.894 GRAMS PROJ. DIA. 6.50 MM IMPULSE 0.8 LB. SEC.

DRAG RDCR. WT. 0.000 GRAMS CHG. WT. 0.50 GRAMS SABOT WT. 0.000 GRAMS

TWIST RATE REV./ 9.5 IN. PCT. DRAG CHANGE / (DEG. YAW)**2 0.76

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	54.4	428	631	0.0
0	0.00	0.00	54.4	428	631	0.0
50	2.60	0.12	51.5	405	566	-0.2
100	5.06	0.25	48.3	384	508	-0.4
150	7.34	0.38	44.7	364	457	-0.6
200	9.44	0.52	40.8	348	417	-0.6
250	11.34	0.67	36.4	335	386	-0.6
300	13.02	0.82	31.8	324	361	-0.6
350	14.46	0.98	26.9	315	341	-0.6
400	15.66	1.14	21.7	307	325	-0.6
450	16.60	1.30	16.3	300	311	-0.6
500	17.26	1.47	10.6	294	298	-0.6
550	17.64	1.64	4.7	288	287	-0.6
600	17.73	1.82	-1.4	283	277	-0.6
650	17.51	2.00	-7.7	278	267	-0.6
700	16.98	2.18	-14.3	274	258	-0.6
750	16.12	2.36	-21.0	270	250	-0.7
800	14.92	2.55	-28.0	265	243	-0.7
850	13.37	2.74	-35.2	261	235	-0.7
900	11.46	2.93	-42.7	257	228	-0.7
950	9.19	3.13	-50.3	253	221	-0.8
1000	6.52	3.33	-58.3	249	214	-0.8
1050	3.47	3.53	-66.4	245	207	-0.8
1100	0.00	3.74	-74.9	241	201	-0.9

DRAG RDCR. WT. 0.241 GRAMS PCT. DRAG CHANGE / (DEG. YAW)**2 1.12

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	48.6	428	631	0.0
0	0.00	0.00	48.6	428	631	0.0
50	2.32	0.12	45.7	410	579	-0.2
100	4.49	0.24	42.6	393	530	-0.3
150	6.50	0.37	39.2	376	485	-0.5
200	8.34	0.51	35.6	361	447	-0.6
250	9.99	0.65	31.6	349	416	-0.6
300	11.44	0.80	27.3	339	392	-0.6
350	12.67	0.95	22.9	331	372	-0.6
400	13.69	1.10	18.2	324	356	-0.5
450	14.46	1.26	13.3	318	343	-0.5
500	15.00	1.42	8.3	313	332	-0.5
550	15.28	1.58	3.1	309	322	-0.5
600	15.31	1.74	-2.2	305	314	-0.4
650	15.07	1.90	-7.6	301	306	-0.4
700	14.56	2.07	-13.2	298	299	-0.5
750	13.78	2.24	-18.9	295	291	-0.5
800	12.71	2.41	-24.7	291	284	-0.5
850	11.35	2.58	-30.7	288	277	-0.6
900	9.70	2.76	-36.8	285	271	-0.6
950	7.75	2.93	-43.0	282	264	-0.6
1000	5.49	3.11	-49.4	278	256	-0.7
1050	2.91	3.30	-56.0	275	248	-0.7
1100	0.00	3.48	-62.8	269	240	-0.7

TYPE CB 2 CALIBER 6.50 MM AVERAGE DENSITY 11.00 GRAMS/CC.
PROJ. WT 6.894 GRAMS PROJ. DIA. 6.50 MM IMPULSE 1.2 LB. SEC.
DRAG RDCR. WT. 0.000 GRAMS CHG. WT. 1.03 GRAMS SABOT WT. 0.000 GRAMS
TWIST RATE REV./ 7.0 IN. PCT. DRAG CHANGE / (DEG. YAW)**2 0.76

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	34.5	595	1220	0.0
0	0.00	0.00	34.5	595	1220	0.0
50	1.66	0.09	33.1	567	1109	-0.3
100	3.25	0.18	31.4	540	1006	-0.5
150	4.75	0.27	29.6	514	911	-0.8
200	6.16	0.37	27.6	489	823	-1.0
250	7.46	0.48	25.4	464	742	-1.2
300	8.65	0.59	23.0	440	668	-1.4
350	9.72	0.70	20.3	417	600	-1.6
400	10.64	0.83	17.3	395	538	-1.8
450	11.41	0.96	13.9	374	483	-1.9
500	12.01	1.09	10.1	356	437	-1.8
550	12.41	1.24	6.0	341	402	-1.6
600	12.60	1.39	1.5	329	374	-1.5
650	12.56	1.54	-3.2	319	352	-1.3
700	12.29	1.70	-8.2	311	334	-1.2
750	11.76	1.86	-13.5	304	319	-1.1
800	10.96	2.03	-19.1	298	305	-1.0
850	9.89	2.20	-24.8	292	293	-1.0
900	8.54	2.37	-30.8	286	283	-1.0
950	6.88	2.55	-37.0	281	273	-1.0
1000	4.91	2.73	-43.4	277	264	-1.0
1050	2.62	2.91	-50.1	272	255	-1.0
1100	0.00	3.10	-56.9	268	248	-1.0

DRAG RDCR. WT. 0.241 GRAMS PCT. DRAG CHANGE / (DEG. YAW)**2 1.12

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	29.5	595	1220	0.0
0	0.00	0.00	29.5	595	1220	0.0
50	1.41	0.09	28.0	573	1132	-0.2
100	2.75	0.17	26.5	552	1049	-0.4
150	4.01	0.27	24.8	532	971	-0.6
200	5.18	0.36	22.9	511	898	-0.8
250	6.26	0.46	20.9	492	828	-1.0
300	7.24	0.57	18.8	472	763	-1.2
350	8.10	0.67	16.4	453	702	-1.3
400	8.85	0.79	13.9	434	645	-1.5
450	9.47	0.90	11.1	416	591	-1.6
500	9.95	1.03	8.1	398	541	-1.8
550	10.27	1.16	4.8	381	495	-1.9
600	10.43	1.29	1.2	366	454	-1.9
650	10.40	1.43	-2.6	353	421	-1.7
700	10.17	1.57	-6.8	342	395	-1.5
750	9.74	1.72	-11.2	333	375	-1.4
800	9.08	1.87	-15.8	326	358	-1.2
850	8.19	2.03	-20.6	319	343	-1.1
900	7.07	2.19	-25.6	314	332	-1.0
950	5.69	2.35	-30.7	310	322	-0.9
1000	4.06	2.51	-36.0	306	313	-0.8
1050	2.16	2.67	-41.4	303	306	-0.8
1100	0.00	2.84	-46.9	299	298	-0.8

TYPE CB 2 CALIBER 6.50 MM AVERAGE DENSITY 11.00 GRAMS/CC.
PROJ. WT 6.894 GRAMS PROJ. DIA. 6.50 MM IMPULSE 2.1 LB. SEC.
DRAG RDCR. WT. 0.000 GRAMS CHG. WT. 2.52 GRAMS SABOT WT. 0.000 GRAMS
TWIST RATE REV./ 9.7 IN. PCT. DRAG CHANGE / (DEG. YAW)**2 0.76

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	13.7	924	2943	0.0
0	0.00	0.00	13.7	924	2943	0.0
50	0.66	0.06	13.1	889	2722	-0.4
100	1.28	0.11	12.4	854	2513	-0.7
150	1.88	0.17	11.7	820	2316	-1.0
200	2.44	0.23	10.9	786	2131	-1.3
250	2.95	0.30	10.1	754	1958	-1.6
300	3.43	0.37	9.2	722	1796	-1.9
350	3.86	0.44	8.2	691	1645	-2.2
400	4.23	0.51	7.1	660	1504	-2.4
450	4.56	0.59	5.9	631	1372	-2.7
500	4.82	0.67	4.6	602	1250	-2.9
550	5.01	0.76	3.1	574	1137	-3.1
600	5.13	0.85	1.5	547	1032	-3.3
650	5.17	0.94	-0.2	521	935	-3.4
700	5.11	1.04	-2.2	495	845	-3.6
750	4.96	1.14	-4.3	470	763	-3.7
800	4.70	1.25	-6.7	447	687	-3.9
850	4.31	1.37	-9.3	423	618	-4.0
900	3.79	1.49	-12.3	401	554	-4.1
950	3.12	1.61	-15.6	380	497	-4.1
1000	2.27	1.75	-19.2	361	448	-4.0
1050	1.24	1.89	-23.2	345	411	-3.7
1100	0.00	2.04	-27.6	332	381	-3.2

DRAG RDCR. WT. 0.241 GRAMS PCT. DRAG CHANGE / (DEG. YAW)**2 1.12

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	11.1	924	2943	0.0
0	0.00	0.00	11.1	924	2943	0.0
50	0.53	0.05	10.5	896	2768	-0.3
100	1.03	0.11	9.8	869	2600	-0.5
150	1.49	0.17	9.1	842	2441	-0.8
200	1.93	0.23	8.4	816	2290	-1.0
250	2.32	0.29	7.6	790	2146	-1.3
300	2.68	0.36	6.8	765	2008	-1.5
350	2.99	0.42	5.9	740	1878	-1.7
400	3.27	0.49	5.0	716	1755	-1.9
450	3.49	0.56	4.0	692	1638	-2.1
500	3.66	0.64	2.9	668	1527	-2.3
550	3.78	0.71	1.7	645	1422	-2.5
600	3.84	0.79	0.5	622	1322	-2.7
650	3.84	0.87	-0.8	600	1228	-2.9
700	3.76	0.96	-2.3	578	1139	-3.1
750	3.62	1.05	-3.8	557	1055	-3.2
800	3.40	1.14	-5.5	536	976	-3.4
850	3.09	1.23	-7.3	515	902	-3.5
900	2.69	1.33	-9.3	495	832	-3.6
950	2.19	1.44	-11.4	475	766	-3.7
1000	1.58	1.54	-13.7	456	704	-3.9
1050	0.85	1.66	-16.2	437	646	-4.0
1100	0.00	1.77	-18.9	419	592	-4.1

TYPE CB 2 CALIBER 6.50 MM AVERAGE DENSITY 16.70 GRAMS/CC.
PROJ. WT 10.467 GRAMS PROJ. DIA. 6.50 MM IMPULSE 0.8 LB. SEC.
DRAG RDCR. WT. 0.000 GRAMS CHG. WT. 0.28 GRAMS SABOT WT. 0.000 GRAMS
TWIST RATE NA PCT. DRAG CHANGE / (DEG. YAW)**2 0.76

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	69.9	309	500	0.0
0	0.00	0.00	69.9	309	500	0.0
50	3.31	0.16	64.6	304	485	0.0
100	6.34	0.33	59.1	300	471	-0.1
150	9.11	0.50	53.5	296	458	-0.1
200	11.60	0.67	47.7	292	446	-0.2
250	13.79	0.84	41.7	288	434	-0.2
300	15.69	1.02	35.6	285	424	-0.2
350	17.29	1.19	29.4	281	414	-0.2
400	18.58	1.37	23.0	278	404	-0.3
450	19.55	1.55	16.5	275	395	-0.3
500	20.19	1.74	9.8	272	387	-0.3
550	20.51	1.92	2.9	269	379	-0.3
600	20.49	2.11	-4.0	266	371	-0.3
650	20.12	2.30	-11.1	264	364	-0.4
700	19.40	2.49	-18.4	261	356	-0.4
750	18.31	2.68	-25.8	258	349	-0.4
800	16.87	2.87	-33.4	256	342	-0.4
850	15.04	3.07	-41.1	253	335	-0.5
900	12.83	3.27	-49.0	250	328	-0.5
950	10.23	3.47	-57.0	248	321	-0.5
1000	7.23	3.67	-65.3	245	315	-0.5
1050	3.83	3.88	-73.7	243	309	-0.5
1100	0.00	4.09	-82.2	240	302	-0.6

DRAG RDCR. WT. 0.241 GRAMS PCT. DRAG CHANGE / (DEG. YAW)**2 1.12

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	64.6	309	500	0.0
0	0.00	0.00	64.6	309	500	0.0
50	3.04	0.16	59.3	306	491	0.0
100	5.83	0.33	54.0	304	482	0.0
150	8.34	0.49	48.5	302	474	-0.1
200	10.59	0.66	43.0	299	467	-0.1
250	12.56	0.83	37.4	297	459	-0.1
300	14.26	1.00	31.7	295	452	-0.1
350	15.67	1.17	25.9	293	444	-0.2
400	16.80	1.34	20.0	290	437	-0.2
450	17.63	1.51	14.0	288	430	-0.2
500	18.17	1.68	8.0	286	423	-0.2
550	18.42	1.86	1.8	284	416	-0.2
600	18.36	2.04	-4.4	282	410	-0.2
650	17.99	2.21	-10.7	280	403	-0.3
700	17.31	2.39	-17.1	278	397	-0.3
750	16.31	2.57	-23.7	276	391	-0.3
800	14.99	2.76	-30.3	274	385	-0.3
850	13.34	2.94	-37.0	272	379	-0.3
900	11.36	3.12	-43.8	270	371	-0.4
950	9.03	3.31	-50.7	267	364	-0.4
1000	6.39	3.50	-57.8	264	356	-0.4
1050	3.37	3.69	-65.1	261	349	-0.4
1100	0.00	3.88	-72.4	259	342	-0.5

TYPE CB 2 CALIBER 6.50 MM AVERAGE DENSITY 16.70 GRAMS/CC.
PROJ. WT 10.467 GRAMS PROJ. DIA. 6.50 MM IMPULSE 1.2 LB. SEC.
DRAG RDCR. WT. 0.000 GRAMS CHG. WT. 0.74 GRAMS SABOT WT. 0.000 GRAMS
TWIST RATE REV./ 11.7 IN. PCT. DRAG CHANGE / (DEG. YAW)**2 0.76

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	47.7	424	941	0.0
0	0.00	0.00	47.7	424	941	0.0
50	2.27	0.12	44.8	409	876	-0.1
100	4.40	0.24	41.8	395	815	-0.3
150	6.37	0.37	38.4	381	750	-0.4
200	8.17	0.51	34.9	368	707	-0.5
250	9.79	0.65	31.0	356	663	-0.6
300	11.22	0.79	27.0	346	626	-0.6
350	12.44	0.94	22.7	337	595	-0.6
400	13.45	1.09	18.2	329	568	-0.6
450	14.23	1.24	13.5	323	545	-0.6
500	14.77	1.40	8.6	317	525	-0.6
550	15.07	1.56	3.5	311	507	-0.6
600	15.12	1.72	-1.7	306	492	-0.6
650	14.90	1.88	-7.1	302	478	-0.6
700	14.42	2.05	-12.7	298	465	-0.6
750	13.66	2.22	-18.4	294	452	-0.6
800	12.62	2.39	-24.3	290	441	-0.6
850	11.29	2.56	-30.3	287	430	-0.6
900	9.65	2.74	-36.4	283	420	-0.6
950	7.72	2.92	-42.7	280	411	-0.6
1000	5.47	3.10	-49.2	277	402	-0.6
1050	2.90	3.28	-55.7	274	394	-0.6
1100	0.00	3.46	-62.4	271	386	-0.6

DRAG RDCR. WT. 0.241 GRAMS PCT. DRAG CHANGE / (DEG. YAW)**2 1.12

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	44.0	424	941	0.0
0	0.00	0.00	44.0	424	941	0.0
50	2.09	0.12	41.1	412	888	-0.1
100	4.04	0.24	38.1	401	838	-0.2
150	5.83	0.37	34.9	389	791	-0.3
200	7.47	0.50	31.5	378	746	-0.4
250	8.93	0.63	27.9	368	705	-0.5
300	10.21	0.77	24.1	359	670	-0.5
350	11.30	0.91	20.2	351	639	-0.5
400	12.19	1.06	16.0	344	613	-0.6
450	12.87	1.20	11.7	338	591	-0.6
500	13.34	1.35	7.2	332	571	-0.5
550	13.58	1.51	2.6	327	554	-0.5
600	13.60	1.66	-2.1	323	539	-0.5
650	13.38	1.82	-7.0	319	525	-0.5
700	12.92	1.97	-11.9	316	513	-0.5
750	12.22	2.13	-17.0	312	503	-0.5
800	11.26	2.29	-22.2	310	493	-0.5
850	10.05	2.46	-27.4	307	484	-0.5
900	8.57	2.62	-32.8	305	476	-0.4
950	6.84	2.78	-38.2	303	469	-0.4
1000	4.83	2.95	-43.7	300	462	-0.4
1050	2.56	3.12	-49.3	297	450	-0.5
1100	0.00	3.29	-55.0	293	439	-0.5

TYPE CB 2 CALIBER 6.50 MM AVERAGE DENSITY 16.70 GRAMS/CC.
PROJ. WT 10.467 GRAMS PROJ. DIA. 6.50 MM IMPULSE 2.1 LB. SEC.
DRAG RDCR. WT. 0.000 GRAMS CHG. WT. 1.98 GRAMS SABOT WT. 0.000 GRAMS
TWIST RATE REV./ 8.6 IN. PCT. DRAG CHANGE / (DEG. YAW)**2 0.76

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	20.8	668	2335	0.0
0	0.00	0.00	20.8	668	2335	0.0
50	0.99	0.08	19.7	648	2200	-0.2
100	1.93	0.15	18.4	629	2071	-0.4
150	2.81	0.24	17.1	610	1947	-0.6
200	3.61	0.32	15.8	591	1830	-0.7
250	4.35	0.40	14.3	573	1718	-0.9
300	5.02	0.49	12.7	555	1612	-1.1
350	5.61	0.58	11.0	537	1511	-1.2
400	6.11	0.68	9.3	520	1416	-1.4
450	6.52	0.78	7.3	503	1326	-1.5
500	6.83	0.88	5.3	487	1240	-1.7
550	7.04	0.98	3.1	471	1159	-1.8
600	7.14	1.09	0.8	455	1082	-1.9
650	7.13	1.20	-1.7	439	1009	-2.0
700	6.98	1.32	-4.4	424	941	-2.1
750	6.70	1.44	-7.3	409	876	-2.2
800	6.28	1.56	-10.4	395	815	-2.3
850	5.69	1.69	-13.7	381	759	-2.4
900	4.94	1.83	-17.3	368	708	-2.4
950	4.01	1.96	-21.1	356	664	-2.3
1000	2.88	2.11	-25.1	346	627	-2.2
1050	1.55	2.26	-29.4	337	596	-2.0
1100	0.00	2.40	-33.9	330	569	-1.8

DRAG RDCR. WT. 0.241 GRAMS PCT. DRAG CHANGE / (DEG. YAW)**2 1.12

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	18.2	668	2335	0.0
0	0.00	0.00	18.2	668	2335	0.0
50	0.86	0.08	17.0	653	2229	-0.2
100	1.67	0.15	15.8	638	2127	-0.3
150	2.42	0.23	14.6	623	2028	-0.4
200	3.10	0.31	13.3	608	1932	-0.6
250	3.72	0.40	11.9	594	1840	-0.7
300	4.27	0.48	10.4	580	1752	-0.9
350	4.75	0.57	8.9	566	1666	-1.0
400	5.15	0.66	7.3	552	1585	-1.1
450	5.47	0.75	5.6	538	1506	-1.2
500	5.70	0.85	3.8	524	1430	-1.3
550	5.85	0.94	2.0	511	1358	-1.5
600	5.90	1.04	0.0	498	1288	-1.6
650	5.86	1.14	-2.1	485	1221	-1.7
700	5.71	1.25	-4.2	472	1156	-1.8
750	5.45	1.35	-6.5	460	1095	-1.9
800	5.08	1.46	-9.0	447	1035	-2.0
850	4.58	1.58	-11.5	435	978	-2.1
900	3.95	1.69	-14.2	423	924	-2.2
950	3.19	1.81	-17.1	411	872	-2.3
1000	2.28	1.94	-20.2	399	822	-2.3
1050	1.22	2.07	-23.4	388	776	-2.4
1100	0.05	2.20	-26.8	377	731	-2.5

TYPE CB 2 CALIBER 7.62 MM AVERAGE DENSITY 7.80 GRAMS/CC.
PROJ. WT 7.853 GRAMS PROJ. DIA. 7.62 MM IMPULSE 0.8 LB. SEC.
DRAG RDCR. WT. 0.000 GRAMS CHG. WT. 0.44 GRAMS SABOT WT. 0.000 GRAMS
TWIST RATE REV./ 9.0 IN. PCT. DRAG CHANGE / (DEG. YAW)**2 0.76

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	64.5	386	585	0.0
0	0.00	0.00	64.5	386	585	0.0
50	3.08	0.13	60.9	382	573	-0.2
100	5.98	0.28	56.9	378	561	-0.3
150	8.66	0.43	52.4	374	549	-0.4
200	11.12	0.58	47.6	370	537	-0.4
250	13.34	0.74	42.5	366	525	-0.4
300	15.29	0.91	37.0	362	513	-0.5
350	16.97	1.08	31.3	358	501	-0.5
400	18.37	1.25	25.3	354	489	-0.5
450	19.46	1.43	19.0	350	477	-0.5
500	20.24	1.61	12.5	346	465	-0.6
550	20.69	1.79	5.7	342	453	-0.6
600	20.80	1.98	-1.3	338	441	-0.6
650	20.56	2.17	-8.7	334	429	-0.7
700	19.95	2.37	-16.3	330	417	-0.7
750	18.96	2.57	-24.2	326	405	-0.7
800	17.57	2.77	-32.5	322	393	-0.8
850	15.78	2.98	-41.0	318	381	-0.8
900	13.55	3.19	-49.9	314	369	-0.8
950	10.88	3.40	-59.2	310	358	-0.9
1000	7.74	3.62	-68.8	306	346	-0.9
1050	4.12	3.85	-78.7	302	334	-0.9
1100	0.00	4.08	-89.1	297	322	-1.0

DRAG RDCR. WT. 0.389 GRAMS PCT. DRAG CHANGE / (DEG. YAW)**2 1.12

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	56.6	386	585	0.0
0	0.00	0.00	56.6	386	585	0.0
50	2.69	0.13	53.0	382	573	-0.2
100	5.20	0.27	49.1	378	561	-0.3
150	7.52	0.42	44.9	374	548	-0.3
200	9.61	0.57	40.4	370	536	-0.4
250	11.48	0.72	35.7	366	524	-0.4
300	13.12	0.88	30.7	362	512	-0.4
350	14.50	1.04	25.6	358	500	-0.4
400	15.63	1.20	20.3	354	488	-0.4
450	16.49	1.37	14.8	350	476	-0.4
500	17.08	1.54	9.2	346	464	-0.4
550	17.40	1.71	3.4	342	452	-0.4
600	17.42	1.88	-2.5	338	440	-0.5
650	17.16	2.05	-8.6	334	428	-0.5
700	16.58	2.23	-14.9	330	416	-0.5
750	15.70	2.41	-21.3	326	404	-0.6
800	14.50	2.59	-27.9	322	392	-0.6
850	12.97	2.78	-34.7	318	380	-0.6
900	11.10	2.96	-41.7	314	368	-0.7
950	8.88	3.15	-48.9	310	357	-0.7
1000	6.30	3.35	-56.4	306	345	-0.8
1050	3.35	3.55	-64.2	302	333	-0.8
1100	0.00	3.75	-72.3	298	321	-0.8

TYPE CB 2 CALIBER 7.62 MM AVERAGE DENSITY 7.80 GRAMS/CC.
PROJ. WT 7.853 GRAMS PROJ. DIA. 7.62 MM IMPULSE 1.2 LB. SEC.
DRAG RDCR. WT. 0.000 GRAMS CHG. WT. 0.94 GRAMS SABOT WT. 0.000 GRAMS
TWIST RATE REV./ 7.0 IN. PCT. DRAG CHANGE / (DEG. YAW)**2 0.76

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	45.3	535	1124	0.0
0	0.00	0.00	45.3	535	1124	0.0
50	2.18	0.10	43.5	504	996	-0.3
100	4.27	0.20	41.4	474	881	-0.6
150	6.25	0.31	39.0	445	776	-0.9
200	8.10	0.42	36.3	417	682	-1.1
250	9.81	0.55	33.2	390	598	-1.3
300	11.36	0.68	29.7	366	525	-1.4
350	12.73	0.82	25.8	346	471	-1.3
400	13.89	0.97	21.4	331	430	-1.2
450	14.83	1.12	16.7	319	399	-1.1
500	15.53	1.28	11.6	309	375	-1.0
550	15.97	1.45	6.2	301	355	-0.9
600	16.14	1.62	0.5	293	338	-0.9
650	16.02	1.79	-5.4	287	323	-0.9
700	15.61	1.96	-11.6	281	309	-0.9
750	14.89	2.14	-18.1	275	297	-0.9
800	13.84	2.33	-24.8	270	286	-0.9
850	12.46	2.52	-31.8	265	275	-0.9
900	10.72	2.71	-39.1	260	265	-0.9
950	8.62	2.90	-46.6	255	255	-0.9
1000	6.15	3.10	-54.5	250	246	-1.0
1050	3.28	3.30	-62.6	245	236	-1.0
1100	0.00	3.51	-71.1	241	228	-1.0

DRAG RDCR. WT. 0.389 GRAMS PCT. DRAG CHANGE / (DEG. YAW)**2 1.12

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	39.0	535	1124	0.0
0	0.00	0.00	39.0	535	1124	0.0
50	1.87	0.10	37.2	511	1022	-0.2
100	3.65	0.20	35.2	487	928	-0.5
150	5.32	0.30	32.9	464	840	-0.7
200	6.88	0.41	30.5	441	758	-0.9
250	8.32	0.53	27.8	419	683	-1.1
300	9.61	0.65	24.8	397	613	-1.3
350	10.75	0.78	21.5	377	551	-1.4
400	11.71	0.92	17.8	359	498	-1.4
450	12.49	1.06	13.7	343	453	-1.2
500	13.06	1.21	9.4	334	429	-1.1
550	13.41	1.36	4.7	328	405	-1.0
600	13.53	1.51	-0.1	318	386	-0.9
650	13.41	1.67	-5.2	315	371	-0.8
700	13.03	1.84	-10.4	307	354	-0.7
750	12.39	2.00	-15.8	303	348	-0.7
800	11.49	2.17	-21.3	298	337	-0.7
850	10.31	2.33	-27.0	294	327	-0.7
900	8.84	2.51	-32.8	290	317	-0.7
950	7.09	2.68	-38.8	286	308	-0.8
1000	5.04	2.86	-45.0	283	299	-0.8
1050	2.68	3.03	-51.4	278	289	-0.8
1100	0.00	3.22	-58.0	273	277	-0.9

TYPE CB 2 CALIBER 7.62 MM AVERAGE DENSITY 7.80 GRAMS/CC.
PROJ. WT 7.853 GRAMS PROJ. DIA. 7.62 MM IMPULSE 2.1 LB. SEC.
DRAG RDCR. WT. 0.000 GRAMS CHG. WT. 2.34 GRAMS SABOT WT. 0.000 GRAMS
TWIST RATE REV./ 8.3 IN. PCT. DRAG CHANGE / (DEG. YAW)**2 0.76

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	21.0	838	2757	0.0
0	0.00	0.00	21.0	838	2757	0.0
50	1.01	0.06	20.2	797	2496	-0.4
100	1.99	0.13	19.4	758	2254	-0.8
150	2.92	0.19	18.5	719	2031	-1.1
200	3.80	0.26	17.5	682	1826	-1.5
250	4.64	0.34	16.3	646	1638	-1.8
300	5.41	0.42	15.1	611	1465	-2.1
350	6.12	0.50	13.7	577	1306	-2.4
400	6.75	0.58	12.1	544	1162	-2.6
450	7.31	0.69	10.3	513	1031	-2.8
500	7.76	0.79	8.3	482	913	-3.0
550	8.12	0.90	6.0	453	805	-3.2
600	8.35	1.01	3.4	425	708	-3.4
650	8.45	1.13	0.4	398	622	-3.5
700	8.40	1.26	-3.0	373	545	-3.6
750	8.16	1.40	-6.8	352	485	-3.3
800	7.73	1.55	-11.0	333	441	-2.8
850	7.09	1.70	-15.7	322	408	-2.4
900	6.20	1.86	-20.7	312	382	-2.1
950	5.06	2.02	-25.9	303	361	-1.8
1000	3.66	2.19	-31.5	296	343	-1.6
1050	1.98	2.36	-37.4	289	328	-1.5
1100	0.00	2.53	-43.5	283	314	-1.5

DRAG RDCR. WT. 0.389 GRAMS PCT. DRAG CHANGE / (DEG. YAW)**2 1.12

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	16.3	838	2757	0.0
0	0.00	0.00	16.3	838	2757	0.0
50	0.78	0.06	15.6	806	2551	-0.3
100	1.53	0.12	14.8	776	2357	-0.6
150	2.23	0.19	13.9	745	2175	-0.9
200	2.89	0.26	13.0	716	2004	-1.2
250	3.51	0.33	12.0	687	1843	-1.4
300	4.07	0.40	10.8	659	1693	-1.7
350	4.58	0.48	9.6	631	1552	-1.9
400	5.02	0.56	8.3	604	1420	-2.1
450	5.40	0.65	6.9	578	1298	-2.3
500	5.70	0.74	5.3	552	1182	-2.5
550	5.93	0.83	3.6	527	1076	-2.6
600	6.08	0.93	1.7	503	976	-2.7
650	6.10	1.03	-0.3	479	884	-2.8
700	6.04	1.13	-2.6	455	799	-2.8
750	5.85	1.23	-5.2	433	720	-2.8
800	5.53	1.34	-8.0	410	647	-2.8
850	5.07	1.46	-11.1	389	580	-2.7
900	4.45	1.62	-14.6	369	521	-2.7
950	3.65	1.76	-18.4	350	469	-2.6
1000	2.65	1.91	-22.6	332	423	-2.5
1050	1.44	2.06	-27.1	315	382	-2.4
1100	0.00	2.21	-31.8	299	345	-2.0

TYPE CB 2 CALIBER 7.62 MM AVERAGE DENSITY 11.00 GRAMS/CC.
PROJ. WT 11.075 GRAMS PROJ. DIA. 7.62 MM IMPULSE 0.8 LB. SEC.
DRAG RDCR. WT. 0.000 GRAMS CHG. WT. 0.27 GRAMS SABOT WT. 0.000 GRAMS
TWIST RATE NA PCT. DRAG CHANGE / (DEG. YAW)**2 0.76

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	79.0	296	485	0.0
0	0.00	0.00	79.0	296	485	0.0
50	3.74	0.17	73.2	291	469	0.0
100	7.19	0.34	67.2	286	453	-0.1
150	10.34	0.52	61.0	282	439	-0.1
200	13.18	0.70	54.6	277	426	-0.2
250	15.70	0.88	48.0	273	414	-0.2
300	17.89	1.07	41.2	270	403	-0.2
350	19.74	1.25	34.2	266	392	-0.3
400	21.25	1.44	27.1	262	381	-0.3
450	22.40	1.64	19.7	259	371	-0.3
500	23.18	1.83	12.1	255	361	-0.4
550	23.59	2.03	4.4	252	351	-0.4
600	23.61	2.23	-3.6	248	341	-0.4
650	23.24	2.43	-11.8	245	332	-0.4
700	22.45	2.64	-20.3	242	323	-0.5
750	21.25	2.84	-29.0	238	314	-0.5
800	19.61	3.06	-37.9	235	306	-0.5
850	17.53	3.27	-47.1	232	298	-0.6
900	14.99	3.49	-56.5	229	290	-0.6
950	11.98	3.71	-66.2	226	282	-0.6
1000	8.49	3.93	-76.1	223	274	-0.6
1050	4.50	4.16	-86.3	220	267	-0.7
1100	0.00	4.39	-96.8	217	260	-0.7

DRAG RDCR. WT. 0.389 GRAMS PCT. DRAG CHANGE / (DEG. YAW)**2 1.12

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	72.8	296	485	0.0
0	0.00	0.00	72.8	296	485	0.0
50	3.43	0.17	67.0	291	475	0.0
100	6.58	0.34	61.2	290	464	-0.1
150	9.44	0.52	55.2	287	454	-0.1
200	12.00	0.69	49.1	285	445	-0.1
250	14.26	0.87	42.8	282	435	-0.1
300	16.21	1.05	36.5	279	426	-0.2
350	17.84	1.23	30.0	276	417	-0.2
400	19.15	1.41	23.4	274	408	-0.2
450	20.14	1.59	16.7	271	399	-0.2
500	20.79	1.78	9.8	269	391	-0.3
550	21.10	1.96	2.8	266	383	-0.3
600	21.07	2.15	-4.3	263	375	-0.3
650	20.68	2.34	-11.6	261	367	-0.3
700	19.93	2.54	-19.0	258	359	-0.3
750	18.83	2.73	-26.5	256	351	-0.4
800	17.33	2.93	-34.2	253	344	-0.4
850	15.46	3.13	-42.1	250	336	-0.4
900	13.20	3.33	-50.2	247	329	-0.5
950	10.53	3.53	-58.5	245	322	-0.5
1000	7.45	3.74	-67.1	242	315	-0.5
1050	3.95	3.95	-75.8	240	308	-0.6
1100	0.00	4.16	-84.9	237	300	-0.6

TYPE CB 2 CALIBER 7.62 MM AVERAGE DENSITY 11.00 GRAMS/CC.
PROJ. WT 11.075 GRAMS PROJ. DIA. 7.62 MM IMPULSE 1.2 LB. SEC.
DRAG RDCR. WT. 0.000 GRAMS CHG. WT. 0.70 GRAMS SABOT WT. 0.000 GRAMS
TWIST RATE REV./ 10.9 IN. PCT. DRAG CHANGE / (DEG. YAW)**2 0.76

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	54.7	405	908	0.0
0	0.00	0.00	54.7	405	908	0.0
50	2.61	0.13	51.5	386	827	-0.2
100	5.05	0.26	48.0	369	754	-0.3
150	7.32	0.40	44.1	354	694	-0.4
200	9.39	0.54	40.0	342	646	-0.5
250	11.25	0.69	35.6	331	607	-0.5
300	12.88	0.84	30.9	322	574	-0.5
350	14.28	1.00	25.9	314	548	-0.5
400	15.43	1.16	20.8	308	525	-0.5
450	16.32	1.33	15.4	302	505	-0.5
500	16.94	1.49	9.8	297	487	-0.5
550	17.29	1.66	4.0	292	471	-0.6
600	17.34	1.84	-1.9	287	456	-0.6
650	17.10	2.01	-8.1	283	442	-0.6
700	16.55	2.19	-14.4	278	429	-0.6
750	15.69	2.37	-21.0	274	417	-0.6
800	14.49	2.56	-27.7	271	406	-0.6
850	12.97	2.74	-34.6	267	395	-0.6
900	11.10	2.93	-41.7	264	385	-0.6
950	8.88	3.12	-49.0	260	375	-0.7
1000	6.30	3.31	-56.5	257	365	-0.7
1050	3.34	3.51	-64.1	253	355	-0.7
1100	0.00	3.71	-72.0	250	346	-0.8

DRAG RDCR. WT. 0.389 GRAMS PCT. DRAG CHANGE / (DEG. YAW)**2 1.12

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	49.6	405	908	0.0
0	0.00	0.00	49.6	405	908	0.0
50	2.36	0.13	46.4	390	842	-0.1
100	4.56	0.26	43.0	376	781	-0.3
150	6.58	0.39	39.4	363	726	-0.4
200	8.42	0.53	35.4	352	682	-0.4
250	10.06	0.68	31.2	344	646	-0.4
300	11.49	0.82	26.9	335	616	-0.5
350	12.71	0.98	22.4	328	591	-0.5
400	13.69	1.13	17.7	322	569	-0.4
450	14.44	1.29	12.8	316	551	-0.4
500	14.95	1.44	7.8	314	536	-0.4
550	15.21	1.60	2.6	310	524	-0.4
600	15.21	1.77	-2.6	307	514	-0.4
650	14.95	1.93	-8.0	304	506	-0.4
700	14.43	2.10	-13.5	301	498	-0.4
750	13.63	2.26	-19.1	298	492	-0.4
800	12.56	2.43	-24.8	295	486	-0.5
850	11.21	2.60	-30.6	292	481	-0.5
900	9.57	2.78	-36.5	289	476	-0.5
950	7.63	2.95	-42.5	286	471	-0.5
1000	5.40	3.12	-48.7	282	466	-0.6
1050	2.86	3.30	-55.0	279	461	-0.6
1100	0.00	3.48	-61.6	274	452	-0.6

TYPE CB 2 CALIBER 7.62 MM AVERAGE DENSITY 11.00 GRAMS/CC.
PROJ. WT 11.075 GRAMS PROJ. DIA. 7.62 MM IMPULSE 2.1 LB. SEC.
DRAG RDCR. WT. 0.000 GRAMS CHG. WT. 1.91 GRAMS SABOT WT. 0.000 GRAMS
TWIST RATE REV./ 8.1 IN. PCT. DRAG CHANGE / (DEG. YAW)**2 0.76

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	27.4	638	2254	0.0
0	0.00	0.00	27.4	638	2254	0.0
50	1.31	0.08	26.1	613	2082	-0.2
100	2.56	0.16	24.7	589	1920	-0.5
150	3.74	0.25	23.2	565	1769	-0.7
200	4.84	0.34	21.6	542	1627	-0.9
250	5.86	0.43	19.8	520	1495	-1.1
300	6.79	0.53	17.9	498	1372	-1.3
350	7.61	0.64	15.8	476	1257	-1.5
400	8.34	0.74	13.5	456	1150	-1.7
450	8.94	0.86	10.9	436	1051	-1.8
500	9.41	0.97	8.2	416	958	-2.0
550	9.75	1.10	5.2	397	873	-2.1
600	9.92	1.22	1.8	379	796	-2.2
650	9.95	1.36	-1.8	363	728	-2.2
700	9.75	1.50	-5.8	349	673	-2.0
750	9.37	1.65	-10.0	337	629	-1.8
800	8.77	1.80	-14.5	327	594	-1.6
850	7.95	1.95	-19.3	319	564	-1.5
900	6.88	2.11	-24.4	312	539	-1.4
950	5.57	2.27	-29.6	306	518	-1.3
1000	3.99	2.44	-35.0	300	499	-1.2
1050	2.13	2.61	-40.7	295	482	-1.1
1100	0.00	2.78	-46.5	290	466	-1.1

DRAG RDCR. WT. 0.389 GRAMS PCT. DRAG CHANGE / (DEG. YAW)**2 1.12

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	23.3	638	2254	0.0
0	0.00	0.00	23.3	638	2254	0.0
50	1.11	0.08	22.0	619	2118	-0.2
100	2.16	0.16	20.6	600	1989	-0.4
150	3.14	0.25	19.2	581	1866	-0.6
200	4.05	0.34	17.7	563	1748	-0.7
250	4.88	0.43	16.1	545	1637	-0.9
300	5.62	0.52	14.3	527	1531	-1.0
350	6.27	0.62	12.3	510	1431	-1.2
400	6.82	0.73	10.1	493	1335	-1.4
450	7.26	0.84	7.6	476	1245	-1.5
500	7.60	0.96	4.9	460	1159	-1.7
550	7.82	1.08	1.9	444	1078	-1.8
600	8.04	1.21	-1.4	428	1001	-1.9
650	8.02	1.35	-4.8	413	928	-2.0
700	7.88	1.49	-8.4	397	860	-2.1
750	7.55	1.64	-12.2	383	796	-2.2
800	7.07	1.80	-16.2	369	738	-2.2
850	6.41	1.96	-20.5	357	690	-2.2
900	5.58	2.13	-25.0	347	651	-2.2
950	4.49	2.30	-29.8	338	619	-2.2
1000	3.22	2.48	-35.3	331	592	-2.3
1050	1.73	2.66	-41.0	325	569	-2.4
1100	0.00	2.84	-47.1	320	550	-2.3

TYPE CB 2 CALIBER 7.62 MM AVERAGE DENSITY 16.70 GRAMS/CC.
PROJ. WT 16.813 GRAMS PROJ. DIA. 7.62 MM IMPULSE 0.8 LB. SEC.
DRAG RDCR. WT. 0.000 GRAMS CHG. WT. 0.31 GRAMS SABOT WT. 0.000 GRAMS
TWIST RATE NA PCT. DRAG CHANGE / (DEG. YAW)**2 0.76

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	100.0	220	407	0.0
0	0.00	0.00	100.0	220	407	0.0
50	4.66	0.23	89.6	218	399	0.0
100	8.81	0.46	78.9	215	390	0.0
150	12.42	0.69	68.1	213	383	-0.1
200	15.50	0.93	57.0	211	375	-0.1
250	18.02	1.17	45.7	209	367	-0.1
300	19.98	1.41	34.1	207	360	-0.1
350	21.36	1.65	22.3	205	353	-0.1
400	22.17	1.90	10.3	203	346	-0.1
450	22.37	2.15	-1.9	201	340	-0.1
500	21.98	2.40	-14.4	199	333	-0.1
550	20.96	2.65	-27.1	197	327	-0.1
600	19.32	2.90	-40.0	196	321	-0.1
650	17.03	3.16	-53.2	194	316	-0.1
700	14.09	3.42	-66.6	192	310	-0.1
750	10.48	3.68	-80.3	190	305	-0.1
800	6.19	3.95	-94.2	189	300	-0.1
850	1.21	4.21	-108.3	187	295	-0.1
861	0.00	4.27	-111.5	187	294	-0.1

DRAG RDCR. WT. 0.389 GRAMS PCT. DRAG CHANGE / (DEG. YAW)**2 1.12

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	100.0	220	407	0.0
0	0.00	0.00	100.0	220	407	0.0
50	4.66	0.23	89.6	218	400	0.0
100	8.81	0.46	79.0	217	393	0.0
150	12.44	0.69	68.3	215	386	0.0
200	15.52	0.93	57.4	213	380	-0.1
250	18.07	1.16	46.3	212	374	-0.1
300	20.08	1.40	35.0	210	368	-0.1
350	21.53	1.64	23.5	209	362	-0.1
400	22.41	1.88	11.8	207	356	-0.1
450	22.73	2.12	0.0	206	350	-0.1
500	22.46	2.36	-11.8	204	345	-0.1
550	21.61	2.61	-23.8	203	339	-0.1
600	20.16	2.86	-35.9	202	334	-0.1
650	18.11	3.11	-48.0	200	329	-0.1
700	15.45	3.36	-60.6	199	324	-0.1
750	12.16	3.61	-73.4	198	317	-0.1
800	8.23	3.87	-86.5	196	314	-0.1
850	3.65	4.13	-99.8	195	309	-0.1
885	0.00	4.31	-109.4	192	302	-0.1

TYPE CB 2 CALIBER 7.62 MM AVERAGE DENSITY 16.70 GRAMS/CC.
PROJ. WT 16.813 GRAMS PROJ. DIA. 7.62 MM IMPULSE 1.2 LB. SEC.
DRAG RDCR. WT. 0.000 GRAMS CHG. WT. 0.41 GRAMS SABOT WT. 0.000 GRAMS
TWIST RATE NA PCT. DRAG CHANGE / (DEG. YAW)**2 0.76

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	74.0	294	727	0.0
0	0.00	0.00	74.0	294	727	0.0
50	3.49	0.17	68.2	291	710	0.0
100	6.69	0.34	62.2	287	695	-0.1
150	9.60	0.52	56.1	284	680	-0.1
200	12.20	0.70	49.8	281	666	-0.1
250	14.49	0.88	43.4	279	653	-0.1
300	16.47	1.06	36.9	276	640	-0.2
350	18.12	1.24	30.3	273	628	-0.2
400	19.44	1.42	23.6	271	617	-0.2
450	20.43	1.61	16.7	268	606	-0.2
500	21.08	1.80	9.7	266	595	-0.2
550	21.38	1.98	2.6	264	584	-0.3
600	21.34	2.17	-4.7	261	574	-0.3
650	20.93	2.37	-12.0	259	564	-0.3
700	20.16	2.56	-19.6	257	554	-0.3
750	19.01	2.76	-27.2	254	544	-0.3
800	17.49	2.98	-35.0	252	535	-0.4
850	15.58	3.15	-42.9	250	525	-0.4
900	13.28	3.35	-51.0	248	516	-0.4
950	10.58	3.56	-59.2	246	507	-0.4
1000	7.47	3.76	-67.5	244	499	-0.4
1050	3.94	3.97	-76.0	241	490	-0.5
1100	0.00	4.18	-84.7	239	482	-0.5

DRAG ROCK. WT. 0.389 GRAMS PCT. DRAG CHANGE / (DEG. YAW)**2 1.12

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	70.0	294	727	0.0
0	0.00	0.00	70.0	294	727	0.0
50	3.30	0.17	64.2	292	716	0.0
100	6.31	0.34	58.3	290	706	0.0
150	9.03	0.52	52.4	288	696	-0.1
200	11.45	0.69	46.3	286	686	-0.1
250	13.57	0.87	40.2	284	676	-0.1
300	15.39	1.04	34.0	283	666	-0.1
350	16.91	1.22	27.7	281	657	-0.1
400	18.14	1.40	21.3	279	648	-0.1
450	19.08	1.58	14.8	277	639	-0.2
500	19.73	1.76	8.2	276	630	-0.2
550	19.82	1.94	1.7	274	621	-0.2
600	19.74	2.12	-5.0	272	612	-0.2
650	19.33	2.31	-11.8	270	604	-0.2
700	18.58	2.49	-18.7	269	596	-0.2
750	17.50	2.68	-25.6	267	588	-0.2
800	16.07	2.87	-32.7	266	580	-0.3
850	14.30	3.06	-39.8	264	571	-0.3
900	12.17	3.25	-47.0	263	563	-0.3
950	9.68	3.44	-54.4	261	555	-0.3
1000	6.83	3.63	-61.9	259	547	-0.4
1050	3.60	3.83	-69.6	257	539	-0.4
1100	0.00	4.03	-77.3	255	532	-0.4

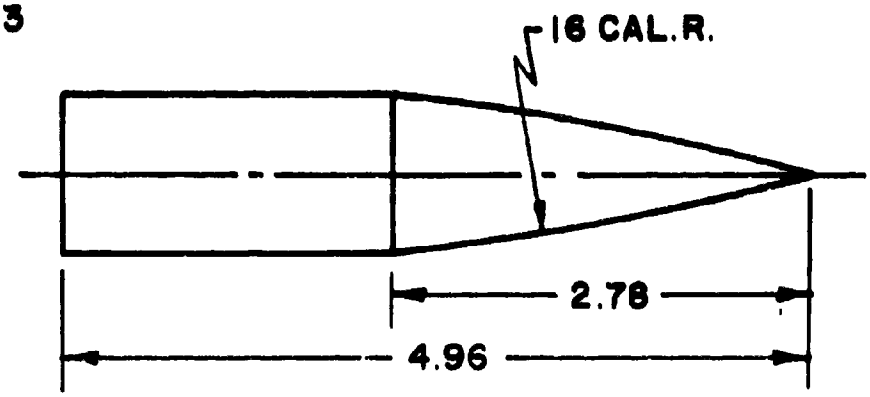
TYPE CB 2 CALIBER 7.62 MM AVERAGE DENSITY 16.70 GRAMS/CC.
PROJ. WT 16.813 GRAMS PROJ. DIA. 7.62 MM IMPULSE 2.1 LB. SEC.
DRAG RDCR. WT. 0.000 GRAMS CHG. WT. 1.41 GRAMS SABOT WT. 0.000 GRAMS
TWIST RATE REV./ 13.9 IN. PCT. DRAG CHANGE / (DEG. YAW)**2 0.76

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	41.1	454	1733	0.0
50	0.00	0.00	41.1	454	1733	0.0
100	1.96	0.11	38.6	441	1632	-0.1
150	3.79	0.23	35.9	428	1537	-0.3
200	5.48	0.35	33.1	415	1446	-0.4
250	7.04	0.47	30.1	402	1360	-0.5
300	8.44	0.59	26.9	390	1279	-0.6
350	9.68	0.73	23.5	378	1202	-0.7
400	10.75	0.86	19.9	367	1130	-0.8
450	11.64	1.00	16.1	357	1063	-0.8
500	12.34	1.14	12.1	348	1001	-0.8
550	12.83	1.28	7.9	340	943	-0.8
600	13.11	1.43	3.5	334	890	-0.8
650	13.18	1.58	-1.1	327	841	-0.8
700	13.01	1.74	-5.8	322	795	-0.7
750	12.61	1.90	-10.8	317	752	-0.7
800	11.96	2.06	-15.8	312	712	-0.7
850	11.06	2.22	-21.0	308	675	-0.7
900	9.90	2.38	-26.4	304	641	-0.7
950	8.48	2.55	-31.8	300	609	-0.7
1000	6.78	2.71	-37.5	297	580	-0.7
1050	4.81	2.88	-43.2	294	553	-0.7
1100	2.55	3.05	-49.0	290	528	-0.7
1150	0.00	3.23	-55.0	287	505	-0.7

DRAG RDCR. WT. 0.389 GRAMS PCT. DRAG CHANGE / (DEG. YAW)**2 1.12

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	37.9	454	1733	0.0
50	0.00	0.00	37.9	454	1733	0.0
100	1.80	0.11	35.5	443	1632	-0.2
150	3.48	0.23	32.9	432	1537	-0.3
200	5.03	0.34	30.1	422	1446	-0.3
250	6.44	0.46	27.3	412	1360	-0.4
300	7.70	0.59	24.3	402	1279	-0.5
350	8.82	0.71	21.1	393	1202	-0.6
400	9.78	0.84	17.8	384	1130	-0.7
450	10.57	0.97	14.3	374	1063	-0.7
500	11.18	1.11	10.6	366	1001	-0.8
550	11.61	1.25	6.8	358	943	-0.8
600	11.85	1.39	2.8	350	890	-0.8
650	11.90	1.53	-1.3	343	841	-0.8
700	11.73	1.68	-5.6	336	795	-0.7
750	11.36	1.83	-10.0	330	752	-0.7
800	10.76	1.98	-14.5	324	712	-0.7
850	9.94	2.13	-19.1	318	675	-0.7
900	8.89	2.28	-23.9	312	641	-0.6
950	7.60	2.44	-28.8	306	609	-0.6
1000	6.07	2.60	-33.7	301	580	-0.6
1050	4.30	2.76	-38.8	296	553	-0.6
1100	2.28	2.92	-43.9	291	528	-0.5
1150	0.00	3.08	-49.1	286	505	-0.6

CB 3



ALL DIMENSIONS ARE IN CALIBERS

Axial Radius of Gyration = 0.332 Cal. Wetted Area = 12.01 Cal.^{2}

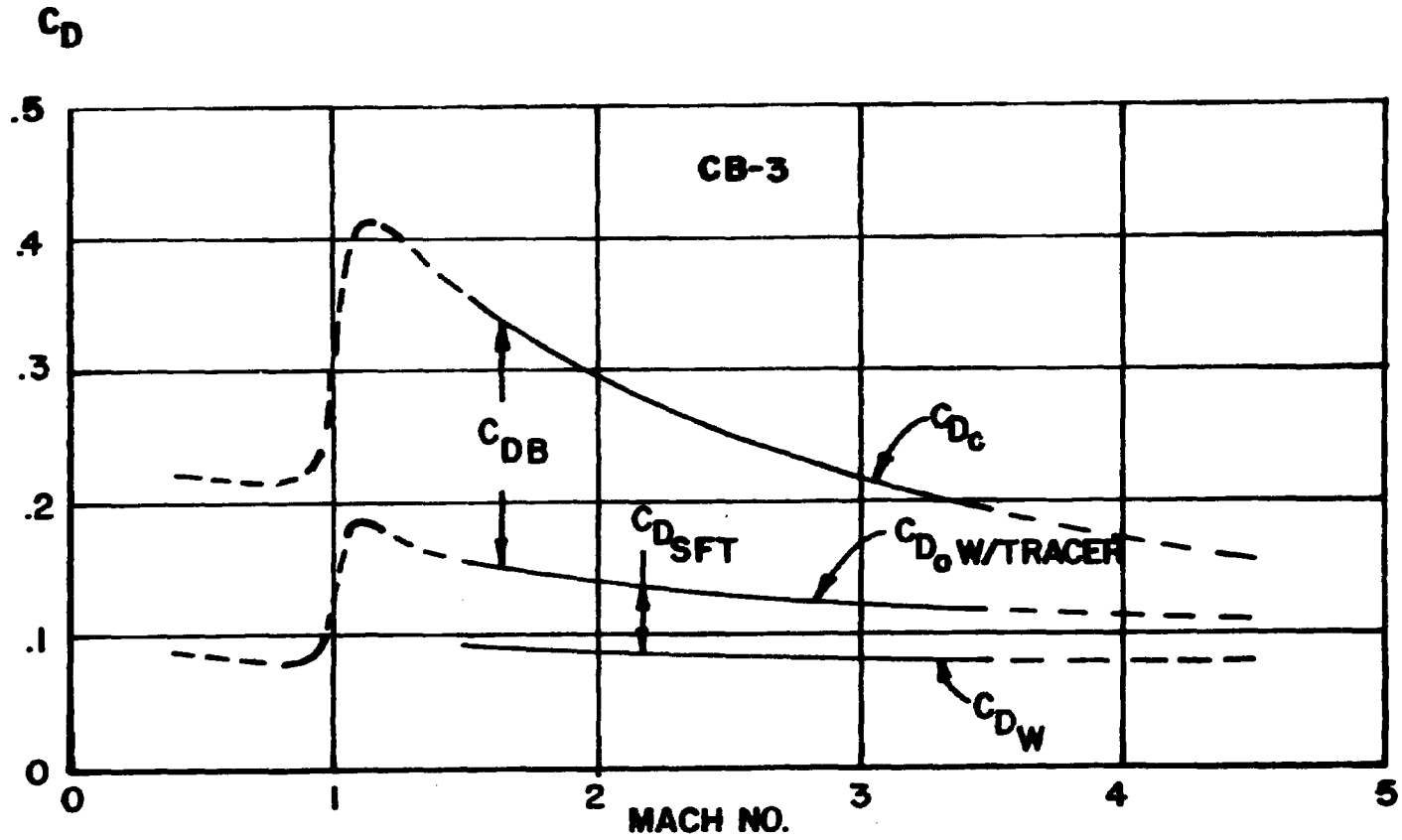
Transverse Radius of Gyration = 1.11 Cal. Volume = 2.64 Cal.^{3}

Center of Mass (Nose) = 3.21 Cal. Length = 4.96 Cal.

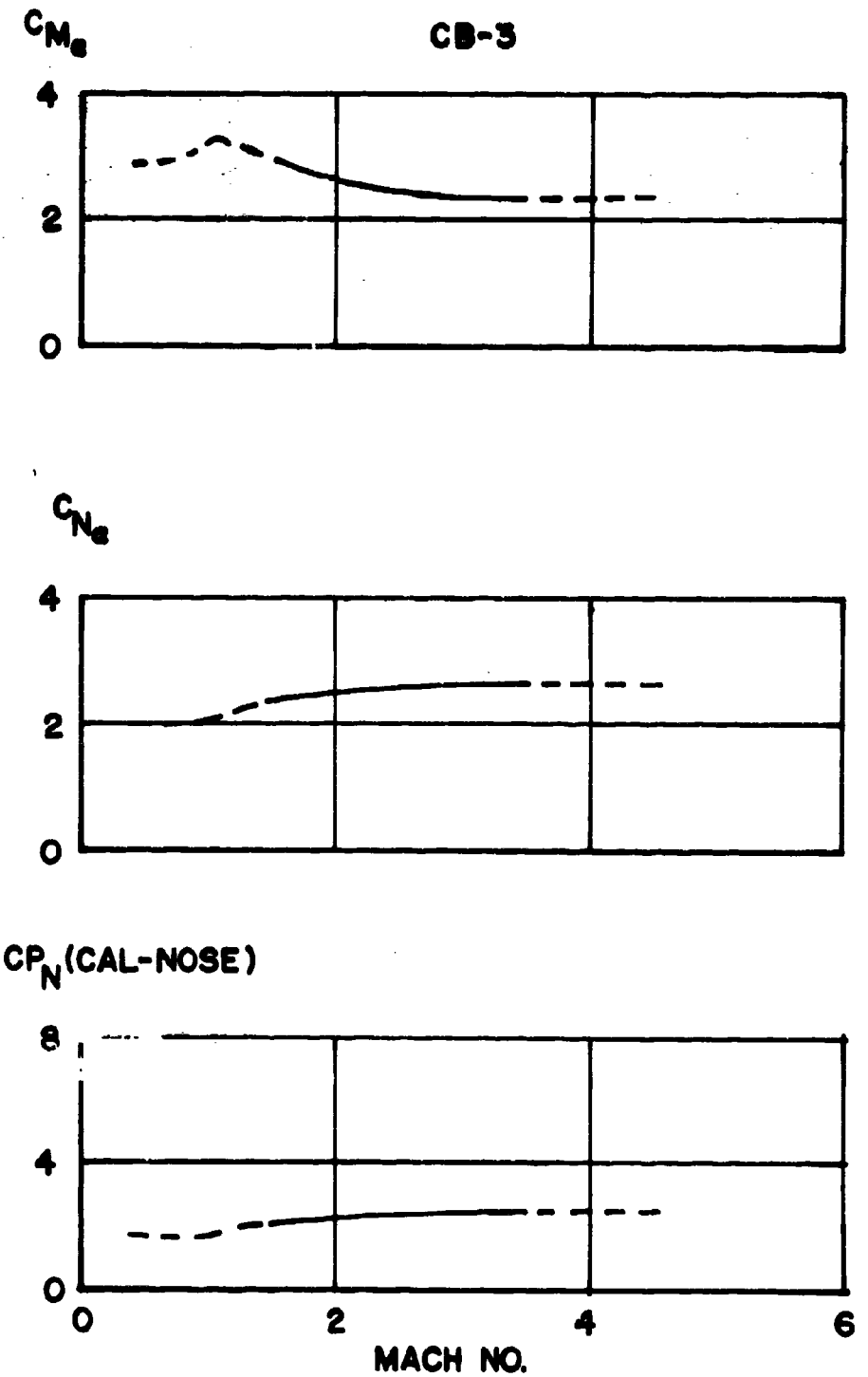
Mach No.	C_{D_0}	C_{D_B}	C_{D_0} (Tracer)	$C_{D_{SF_T}}$	C_{D_W}	C_{N_α}	CP_N	C_{M_α}
.40*	.225		.090			1.98	1.76	2.87
.80*	.213		.078			1.98	1.74	2.92
.90*	.224		.079			2.02	1.70	3.05
.95*	.240		.085			2.04	1.67	3.15
1.00*	.315		.129			2.09	1.68	3.20
1.05*	.385		.165			2.16	1.72	3.21
1.10*	.406		.186			2.22	1.75	3.22
1.5	.357	.201	.155	.061	.095	2.67	2.10	2.97
2.0	.298	.156	.142	.053	.088	2.95	2.30	2.63
2.5	.252	.121	.131	.048	.084	3.12	2.42	2.45
3.0	.220	.096	.124	.043	.081	3.18	2.47	2.36
3.5	.195	.078	.117	.038	.079	3.18	2.48	2.33
4.0*	.174	.060	.114	.034	.080	3.18	2.48	2.33
4.5*	.158	.047	.111	.029	.082	3.18	2.48	2.33

$C_{D_{\alpha^2}}$ (Mach = 2.5) = 6.75

*Estimated data



CB-3-2


C_{M_α}
CB-3
4
2
0
C_{N_α}
4
2
0
CP_N(CAL-NOSE)
8
4
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0
2
4
6
MACH NO.

TYPE CB 3 CALIBER 5.56 MM AVERAGE DENSITY 7.80 GRAMS/CC.

PROJ. WT 3.534 GRAMS PROJ. DIA. 5.56 MM IMPULSE 0.8 LB. SEC.

DRAG RDCR. WT. 0.000 GRAMS CHG. WT. 0.81 GRAMS SABOT WT. 0.000 GRAMS

TWIST RATE REV./ 7.4 IN. PCT. DRAG CHANGE / (DEG. YAW)**2 0.81

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	34.9	736	957	0.0
0	0.00	0.00	34.9	736	957	0.0
50	1.69	0.07	33.9	693	847	-0.4
100	3.33	0.14	32.8	650	746	-0.8
150	4.91	0.22	31.6	608	654	-1.2
200	6.43	0.31	30.1	567	569	-1.6
250	7.87	0.40	28.4	528	492	-2.0
300	9.22	0.50	26.5	489	423	-2.3
350	10.47	0.61	24.3	453	362	-2.6
400	11.60	0.72	21.6	418	308	-2.8
450	12.59	0.85	18.5	384	261	-3.0
500	13.42	0.98	14.8	354	221	-3.1
550	14.05	1.13	10.5	331	193	-2.6
600	14.45	1.28	5.7	314	174	-2.1
650	14.60	1.45	0.4	299	158	-1.9
700	14.49	1.62	-5.5	286	145	-1.9
750	14.07	1.80	-11.9	273	132	-1.9
800	13.32	1.98	-18.8	261	121	-2.0
850	12.22	2.18	-26.5	250	110	-2.0
900	10.72	2.38	-34.9	239	101	-2.0
950	8.79	2.60	-44.0	228	92	-2.0
1000	6.40	2.82	-54.1	218	84	-2.1
1050	3.48	3.06	-65.0	209	77	-2.1
1100	0.00	3.30	-77.0	200	70	-2.1

DRAG RDCR. WT. 0.151 GRAMS PCT. DRAG CHANGE / (DEG. YAW)**2 1.57

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	16.9	736	957	0.0
0	0.00	0.00	16.9	736	957	0.0
50	0.81	0.07	16.0	715	902	-0.2
100	1.57	0.14	15.0	694	849	-0.4
150	2.28	0.21	13.9	674	799	-0.6
200	2.93	0.29	12.8	654	752	-0.8
250	3.53	0.37	11.5	634	706	-1.0
300	4.07	0.45	10.3	615	663	-1.2
350	4.54	0.53	8.9	596	622	-1.3
400	4.95	0.61	7.4	577	583	-1.5
450	5.28	0.70	5.9	559	546	-1.6
500	5.53	0.79	4.2	541	512	-1.8
550	5.70	0.89	2.5	524	479	-1.9
600	5.78	0.98	0.6	507	447	-2.0
650	5.76	1.08	-1.4	490	418	-2.2
700	5.65	1.19	-3.6	473	389	-2.3
750	5.42	1.30	-5.9	457	362	-2.5
800	5.08	1.41	-8.4	441	336	-2.6
850	4.61	1.52	-11.0	425	312	-2.7
900	4.01	1.64	-13.9	409	288	-2.8
950	3.26	1.77	-17.0	393	266	-2.9
1000	2.35	1.90	-20.4	378	246	-3.0
1050	1.27	2.03	-24.0	364	227	-3.1
1100	0.00	2.17	-27.9	351	211	-3.0

TYPE CB 3 CALIBER 5.56 MM AVERAGE DENSITY 7.80 GRAMS/CC.
PROJ. WT 3.534 GRAMS PROJ. DIA. 5.56 MM IMPULSE 1.2 LB. SEC.
DRAG RDCR. WT. 0.000 GRAMS CHG. WT. 1.53 GRAMS SABOT WT. 0.000 GRAMS
TWIST RATE REV./ 7.8 IN. PCT. DRAG CHANGE / (DEG. YAW)**2 0.81

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	16.9	999	1763	0.0
0	0.00	0.00	16.9	999	1763	0.0
50	0.82	0.05	16.4	952	1602	-0.5
100	1.61	0.11	15.8	906	1450	-0.9
150	2.37	0.16	15.2	860	1307	-1.4
200	3.10	0.22	14.5	815	1174	-1.8
250	3.80	0.28	13.7	770	1048	-2.2
300	4.45	0.35	12.8	726	932	-2.6
350	5.05	0.42	11.8	683	824	-3.0
400	5.61	0.50	10.6	641	725	-3.4
450	6.10	0.58	9.3	599	634	-3.7
500	6.53	0.67	7.8	559	551	-4.1
550	6.87	0.76	6.1	519	476	-4.3
600	7.13	0.86	4.1	481	409	-4.6
650	7.28	0.97	1.8	445	350	-4.8
700	7.31	1.08	-1.0	410	297	-4.9
750	7.19	1.21	-4.2	377	251	-5.0
800	6.90	1.35	-8.0	348	214	-4.9
850	6.41	1.50	-12.4	327	189	-4.1
900	5.68	1.65	-17.3	311	171	-3.2
950	4.71	1.82	-22.8	297	155	-2.8
1000	3.45	1.99	-28.7	283	142	-2.8
1050	1.89	2.17	-35.2	271	130	-2.7
1100	0.00	2.36	-42.4	259	119	-2.7

DRAG RDCR. WT. 0.151 GRAMS PCT. DRAG CHANGE / (DEG. YAW)**2 1.57

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	8.6	999	1763	0.0
0	0.00	0.00	8.6	999	1763	0.0
50	0.41	0.05	8.1	973	1672	-0.3
100	0.79	0.10	7.5	947	1584	-0.5
150	1.15	0.16	7.0	922	1500	-0.7
200	1.48	0.21	6.4	898	1419	-1.0
250	1.77	0.27	5.7	873	1343	-1.2
300	2.04	0.33	5.0	850	1270	-1.4
350	2.27	0.39	4.3	826	1200	-1.6
400	2.47	0.45	3.6	803	1133	-1.8
450	2.63	0.51	2.8	781	1069	-2.0
500	2.75	0.58	1.9	758	1008	-2.2
550	2.83	0.64	1.0	737	950	-2.4
600	2.86	0.71	0.1	715	895	-2.6
650	2.84	0.78	-0.9	694	842	-2.7
700	2.78	0.85	-2.0	674	792	-2.9
750	2.66	0.93	-3.1	653	745	-3.0
800	2.48	1.01	-4.3	634	699	-3.2
850	2.25	1.09	-5.6	614	656	-3.3
900	1.94	1.17	-7.0	595	615	-3.4
950	1.57	1.26	-8.4	576	576	-3.6
1000	1.13	1.34	-10.0	558	540	-3.7
1050	0.61	1.44	-11.6	540	505	-3.8
1100	0.00	1.53	-13.4	523	472	-3.9

TYPE CB 3 CALIBER 5.56 MM AVERAGE DENSITY 7.80 GRAMS/CC.

PROJ. WT 3.534 GRAMS PROJ. DIA. 5.56 MM IMPULSE 2.1 LB. SEC.

DRAG RDCR. WT. 0.000 GRAMS CHG. WT. 3.57 GRAMS SABOT WT. 0.000 GRAMS

TWIST RATE REV./ 7.8 IN. PCT. DRAG CHANGE / (DEG. YAW)**2 0.81

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	6.3	1384	3385	0.0
0	0.00	0.00	6.3	1384	3385	0.0
50	0.30	0.04	6.1	1334	3145	-0.5
100	0.60	0.08	5.8	1284	2914	-1.0
150	0.87	0.11	5.5	1235	2694	-1.5
200	1.13	0.16	5.1	1186	2484	-2.0
250	1.38	0.20	4.7	1137	2284	-2.4
300	1.60	0.24	4.3	1089	2094	-2.9
350	1.81	0.29	3.9	1041	1915	-3.3
400	1.99	0.34	3.4	994	1745	-3.8
450	2.15	0.39	2.9	947	1585	-4.2
500	2.28	0.45	2.3	901	1433	-4.6
550	2.38	0.50	1.7	855	1292	-5.0
600	2.45	0.56	0.9	810	1159	-5.4
650	2.48	0.63	0.1	765	1035	-5.8
700	2.47	0.69	-0.8	721	920	-6.2
750	2.41	0.77	-1.8	678	813	-6.5
800	2.30	0.84	-3.0	636	715	-6.8
850	2.13	0.92	-4.3	595	625	-7.1
900	1.89	1.01	-5.8	554	543	-7.4
950	1.58	1.10	-7.5	515	469	-7.5
1000	1.16	1.20	-9.6	477	402	-7.7
1050	0.64	1.31	-12.0	441	344	-7.8
1100	0.00	1.43	-14.7	406	292	-7.8

DRAG RDCR. WT. 0.151 GRAMS PCT. DRAG CHANGE / (DEG. YAW)**2 1.57

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	4.2	1384	3385	0.0
0	0.00	0.00	4.2	1384	3385	0.0
50	0.20	0.04	3.9	1351	3225	-0.3
100	0.39	0.07	3.6	1319	3071	-0.6
150	0.56	0.11	3.4	1288	2925	-0.9
200	0.72	0.15	3.0	1257	2784	-1.2
250	0.86	0.19	2.7	1226	2649	-1.5
300	0.99	0.23	2.4	1196	2520	-1.8
350	1.10	0.28	2.0	1167	2397	-2.0
400	1.19	0.32	1.6	1138	2278	-2.3
450	1.27	0.36	1.3	1110	2164	-2.6
500	1.32	0.41	0.8	1082	2055	-2.8
550	1.36	0.46	0.4	1054	1951	-3.0
600	1.37	0.50	-0.1	1027	1850	-3.2
650	1.36	0.55	-0.6	1000	1754	-3.5
700	1.32	0.60	-1.1	974	1662	-3.7
750	1.26	0.66	-1.6	948	1574	-3.9
800	1.18	0.71	-2.2	923	1490	-4.1
850	1.06	0.76	-2.8	898	1410	-4.2
900	0.92	0.82	-3.4	874	1333	-4.4
950	0.74	0.88	-4.1	850	1260	-4.6
1000	0.53	0.94	-4.8	826	1190	-4.7
1050	0.28	1.00	-5.6	803	1123	-4.9
1100	0.00	1.06	-6.4	780	1059	-5.0

TYPE CB 3 CALIBER 5.56 MM AVERAGE DENSITY 11.00 GRAMS/CC.
PROJ. WT 4.984 GRAMS PROJ. DIA. 5.56 MM IMPULSE 0.8 LB. SEC.
DRAG RDCR. WT. 0.000 GRAMS CHG. WT. 0.65 GRAMS SABOT WT. 0.000 GRAMS
TWIST RATE REV./ 8.4 IN. PCT. DRAG CHANGE / (DEG. YAW)**2 0.81

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	42.1	557	773	0.0
0	0.00	0.00	42.1	557	773	0.0
50	2.02	0.09	40.4	529	697	-0.3
100	3.96	0.19	38.5	502	627	-0.5
150	5.80	0.29	36.4	475	562	-0.8
200	7.53	0.40	34.0	449	503	-1.0
250	9.14	0.51	31.4	424	448	-1.2
300	10.62	0.64	28.5	400	399	-1.4
350	11.94	0.77	25.2	377	354	-1.6
400	13.08	0.90	21.4	355	315	-1.7
450	14.04	1.05	17.2	338	284	-1.6
500	14.78	1.20	12.7	324	262	-1.4
550	15.28	1.35	7.7	313	244	-1.2
600	15.54	1.52	2.5	303	228	-1.3
650	15.53	1.69	-3.2	293	214	-1.3
700	15.23	1.86	-9.2	283	200	-1.3
750	14.63	2.04	-15.6	275	188	-1.4
800	13.70	2.22	-22.5	266	176	-1.4
850	12.43	2.41	-29.7	258	165	-1.4
900	10.78	2.61	-37.5	250	155	-1.5
950	8.75	2.82	-45.8	242	146	-1.5
1000	6.29	3.03	-54.6	234	137	-1.5
1050	3.38	3.24	-64.0	227	128	-1.6
1100	0.00	3.47	-74.0	220	120	-1.6

DRAG RDCR. WT. 0.151 GRAMS PCT. DRAG CHANGE / (DEG. YAW)**2 1.57

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	26.1	557	773	0.0
0	0.00	0.00	26.1	557	773	0.0
50	1.24	0.09	24.4	544	738	-0.1
100	2.40	0.18	22.7	532	704	-0.2
150	3.47	0.28	20.9	520	672	-0.4
200	4.45	0.38	19.0	508	641	-0.5
250	5.33	0.48	17.0	496	611	-0.6
300	6.12	0.58	14.9	484	582	-0.7
350	6.80	0.68	12.8	473	553	-0.8
400	7.37	0.79	10.5	461	526	-0.9
450	7.83	0.90	8.1	450	500	-1.0
500	8.17	1.01	5.5	438	474	-1.1
550	8.38	1.13	2.9	427	450	-1.2
600	8.45	1.25	0.0	416	426	-1.3
650	8.39	1.37	-2.9	405	403	-1.4
700	8.17	1.49	-6.1	394	381	-1.5
750	7.80	1.62	-9.4	383	360	-1.6
800	7.26	1.75	-12.8	373	340	-1.7
850	6.55	1.89	-16.5	363	322	-1.7
900	5.65	2.03	-20.4	354	306	-1.7
950	4.55	2.17	-24.5	346	292	-1.6
1000	3.25	2.32	-28.8	339	280	-1.5
1050	1.74	2.47	-33.2	333	270	-1.4
1100	0.00	2.62	-37.8	328	261	-1.2

TYPE CB 3 CALIBER 5.56 MM AVERAGE DENSITY 11.00 GRAMS/CC.

PROJ. WT 4.984 GRAMS PROJ. DIA. 5.56 MM IMPULSE 1.2 LB. SEC.

DRAG RDCR. WT. 0.000 GRAMS CHG. WT. 1.26 GRAMS SABOT WT. 0.000 GRAMS

TWIST RATE REV./ 8.9 IN. PCT. DRAG CHANGE / (DEG. YAW)**2 0.81

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	21.4	773	1489	0.0
0	0.00	0.00	21.4	773	1489	0.0
50	1.03	0.07	20.6	742	1371	-0.3
100	2.02	0.13	19.6	711	1259	-0.6
150	2.96	0.21	18.6	680	1153	-0.9
200	3.85	0.28	17.5	650	1053	-1.2
250	4.68	0.36	16.2	620	959	-1.5
300	5.44	0.44	14.9	591	871	-1.7
350	6.14	0.53	13.4	562	788	-2.0
400	6.76	0.62	11.7	534	711	-2.2
450	7.29	0.72	9.9	507	640	-2.5
500	7.73	0.82	7.8	480	574	-2.7
550	8.06	0.93	5.5	454	514	-2.9
600	8.27	1.04	2.9	429	459	-3.0
650	8.35	1.16	0.1	405	408	-3.2
700	8.28	1.29	-3.2	381	363	-3.3
750	8.04	1.42	-6.8	359	322	-3.4
800	7.62	1.56	-10.9	341	290	-3.1
850	6.98	1.71	-15.4	327	266	-2.7
900	6.11	1.87	-20.2	315	248	-2.3
950	5.00	2.03	-25.4	305	232	-2.1
1000	3.62	2.20	-31.0	295	217	-2.0
1050	1.96	2.37	-36.9	286	203	-2.0
1100	0.00	2.55	-43.3	277	191	-2.0

DRAG RDCR. WT. 0.151 GRAMS PCT. DRAG CHANGE / (DEG. YAW)**2 1.57

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	12.8	773	1489	0.0
0	0.00	0.00	12.8	773	1489	0.0
50	0.61	0.07	11.9	757	1429	-0.2
100	1.17	0.13	11.1	742	1370	-0.3
150	1.69	0.20	10.1	727	1314	-0.5
200	2.17	0.27	9.2	712	1259	-0.6
250	2.60	0.34	8.2	697	1207	-0.7
300	2.97	0.41	7.1	683	1156	-0.9
350	3.30	0.49	6.0	668	1107	-1.0
400	3.57	0.56	4.9	654	1060	-1.1
450	3.78	0.64	3.7	640	1014	-1.3
500	3.93	0.72	2.4	626	970	-1.4
550	4.03	0.80	1.1	612	927	-1.5
600	4.05	0.88	-0.2	599	886	-1.6
650	4.01	0.97	-1.7	586	847	-1.7
700	3.90	1.05	-3.1	573	809	-1.8
750	3.71	1.14	-4.7	560	772	-1.9
800	3.45	1.23	-6.3	547	737	-2.0
850	3.10	1.32	-8.0	535	703	-2.1
900	2.67	1.42	-9.8	522	670	-2.2
950	2.15	1.52	-11.7	510	639	-2.3
1000	1.53	1.62	-13.7	498	609	-2.4
1050	0.82	1.72	-15.7	486	579	-2.5
1100	0.00	1.82	-17.9	475	551	-2.6

TYPE CB 3 CALIBER 5.56 MM AVERAGE DENSITY 11.00 GRAMS/CC.

PROJ. WT 4.984 GRAMS PROJ. DIA. 5.56 MM IMPULSE 2.1 LB. SEC.

DRAG RDCR. WT. 0.000 GRAMS CHG. WT. 3.01 GRAMS SABOT WT. 0.000 GRAMS

TWIST RATE REV./ 9.3 IN. PCT. DRAG CHANGE / (DEG. YAW)**2 0.81

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	7.4	1151	3301	0.0
0	0.00	0.00	7.4	1151	3301	0.0
50	0.36	0.04	7.1	1117	3107	-0.3
100	0.69	0.09	6.6	1082	2920	-0.7
150	1.01	0.14	6.2	1049	2740	-1.0
200	1.30	0.19	5.7	1015	2567	-1.3
250	1.57	0.24	5.2	982	2402	-1.7
300	1.82	0.29	4.7	949	2242	-2.0
350	2.04	0.34	4.1	916	2089	-2.3
400	2.23	0.40	3.5	883	1943	-2.6
450	2.39	0.45	2.8	851	1804	-2.9
500	2.51	0.51	2.1	819	1671	-3.2
550	2.60	0.58	1.3	787	1544	-3.5
600	2.65	0.64	0.5	756	1423	-3.8
650	2.66	0.71	-0.4	725	1308	-4.1
700	2.62	0.78	-1.4	694	1200	-4.3
750	2.53	0.85	-2.5	664	1097	-4.6
800	2.39	0.93	-3.7	634	1001	-4.8
850	2.18	1.01	-5.0	604	910	-5.0
900	1.91	1.10	-6.4	575	825	-5.3
950	1.57	1.18	-8.0	547	745	-5.4
1000	1.14	1.28	-9.8	519	672	-5.6
1050	0.62	1.38	-11.7	492	603	-5.8
1100	0.00	1.48	-13.9	466	541	-5.9

DRAG RDCR. WT. 0.151 GRAMS PCT. DRAG CHANGE / (DEG. YAW)**2 1.57

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	5.5	1151	3301	0.0
0	0.00	0.00	5.5	1151	3301	0.0
50	0.26	0.04	5.1	1131	3185	-0.2
100	0.50	0.09	4.7	1111	3071	-0.4
150	0.72	0.13	4.3	1091	2961	-0.6
200	0.92	0.18	3.8	1071	2854	-0.8
250	1.10	0.23	3.4	1052	2751	-1.0
300	1.25	0.28	2.9	1033	2650	-1.1
350	1.39	0.32	2.5	1014	2552	-1.3
400	1.50	0.37	2.0	995	2458	-1.5
450	1.59	0.42	1.4	977	2366	-1.7
500	1.65	0.48	0.9	958	2277	-1.8
550	1.68	0.53	0.4	940	2191	-2.0
600	1.69	0.58	-0.2	922	2108	-2.1
650	1.67	0.64	-0.8	905	2027	-2.3
700	1.62	0.69	-1.4	887	1948	-2.4
750	1.54	0.75	-2.1	870	1873	-2.6
800	1.43	0.81	-2.8	853	1800	-2.7
850	1.28	0.87	-3.5	837	1729	-2.8
900	1.10	0.93	-4.2	820	1660	-3.0
950	0.88	0.99	-4.9	804	1594	-3.1
1000	0.63	1.05	-5.7	788	1529	-3.2
1050	0.33	1.12	-6.6	772	1467	-3.4
1100	0.00	1.18	-7.4	756	1407	-3.5

TYPE CB 3 CALIBER 5.56 MM AVERAGE DENSITY 16.70 GRAMS/CC.
PROJ. WT 7.567 GRAMS PROJ. DIA. 5.56 MM IMPULSE 0.8 LB. SEC.
DRAG RDCR. WT. 0.000 GRAMS CHG. WT. 0.46 GRAMS SABOT WT. 0.000 GRAMS
TWIST RATE REV./ 9.8 IN. PCT. DRAG CHANGE / (DEG. YAW)**2 0.81

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	55.9	398	599	0.0
0	0.00	0.00	55.9	398	599	0.0
50	2.67	0.13	52.6	383	554	-0.2
100	5.17	0.26	49.1	368	511	-0.3
150	7.49	0.40	45.2	354	474	-0.4
200	9.61	0.54	41.1	342	443	-0.4
250	11.52	0.69	36.7	332	417	-0.5
300	13.21	0.85	32.0	324	396	-0.5
350	14.67	1.00	27.2	316	378	-0.5
400	15.88	1.16	22.0	309	361	-0.6
450	16.83	1.33	16.7	302	346	-0.6
500	17.51	1.49	11.1	296	331	-0.7
550	17.92	1.66	5.3	289	317	-0.7
600	18.03	1.84	-0.8	283	304	-0.7
650	17.84	2.02	-7.2	277	291	-0.8
700	17.33	2.20	-13.8	272	279	-0.8
750	16.49	2.39	-20.7	266	268	-0.8
800	15.30	2.58	-28.0	260	257	-0.9
850	13.74	2.77	-35.5	255	246	-0.9
900	11.82	2.97	-43.3	250	236	-1.0
950	9.50	3.17	-51.5	245	227	-1.0
1000	6.76	3.38	-60.0	240	217	-1.0
1050	3.61	3.59	-68.9	235	209	-1.1
1100	0.00	3.80	-78.1	230	200	-1.1

DRAG RDCR. WT. 0.151 GRAMS PCT. DRAG CHANGE / (DEG. YAW)**2 1.57

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	44.1	398	599	0.0
0	0.00	0.00	44.1	398	599	0.0
50	2.09	0.13	40.9	391	578	-0.1
100	4.02	0.26	37.5	384	557	-0.1
150	5.78	0.39	34.2	377	536	-0.2
200	7.37	0.52	30.6	370	517	-0.3
250	8.78	0.66	26.9	364	498	-0.3
300	10.01	0.80	23.0	358	482	-0.4
350	11.04	0.94	19.1	352	466	-0.4
400	11.88	1.08	15.0	347	452	-0.4
450	12.51	1.23	10.8	342	440	-0.4
500	12.94	1.37	6.4	338	428	-0.4
550	13.15	1.52	2.0	334	418	-0.4
600	13.14	1.67	-2.5	330	409	-0.4
650	12.90	1.82	-7.2	327	400	-0.4
700	12.44	1.98	-11.9	324	393	-0.4
750	11.74	2.13	-16.7	321	385	-0.4
800	10.81	2.29	-21.5	319	379	-0.4
850	9.63	2.45	-26.5	316	372	-0.4
900	8.22	2.61	-31.5	314	366	-0.5
950	6.55	2.77	-36.7	311	360	-0.5
1000	4.63	2.93	-41.9	309	354	-0.5
1050	2.44	3.09	-47.2	304	342	-0.6
1100	0.00	3.26	-52.7	297	328	-0.7

TYPE CB 3 CALIBER 5.56 MM AVERAGE DENSITY 16.70 GRAMS/CC.
PROJ. WT 7.567 GRAMS PROJ. DIA. 5.56 MM IMPULSE 1.2 LB. SEC.
DRAG RDCR. WT. 0.000 GRAMS CHG. WT. 0.97 GRAMS SABOT WT. 0.000 GRAMS
TWIST RATE REV./ 10.3 IN. PCT. DRAG CHANGE / (DEG. YAW)**2 0.81

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	32.5	552	1153	0.0
0	0.00	0.00	32.5	552	1153	0.0
50	1.55	0.09	30.8	534	1077	-0.2
100	3.02	0.19	28.9	515	1005	-0.4
150	4.39	0.29	27.0	498	937	-0.5
200	5.67	0.39	24.9	480	872	-0.7
250	6.84	0.49	22.7	463	810	-0.9
300	7.90	0.60	20.2	446	752	-1.0
350	8.83	0.72	17.6	429	698	-1.1
400	9.63	0.84	14.8	413	647	-1.3
450	10.28	0.96	11.8	398	598	-1.4
500	10.79	1.09	8.5	382	553	-1.5
550	11.12	1.22	4.9	368	511	-1.6
600	11.27	1.36	1.1	354	474	-1.7
650	11.23	1.51	-3.0	342	443	-1.6
700	10.98	1.65	-7.4	332	417	-1.4
750	10.51	1.81	-12.1	324	397	-1.3
800	9.80	1.96	-17.0	316	379	-1.2
850	8.85	2.12	-22.1	309	362	-1.2
900	7.64	2.29	-27.4	303	346	-1.2
950	6.16	2.45	-33.0	296	332	-1.3
1000	4.40	2.62	-38.8	290	318	-1.3
1050	2.35	2.80	-44.9	284	305	-1.3
1100	0.00	2.98	-51.3	278	292	-1.3

DRAG RDCR. WT. 0.151 GRAMS PCT. DRAG CHANGE / (DEG. YAW)**2 1.57

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	22.9	552	1153	0.0
0	0.00	0.00	22.9	552	1153	0.0
50	1.08	0.09	21.2	544	1118	-0.1
100	2.08	0.18	19.5	536	1084	-0.2
150	3.00	0.28	17.8	528	1051	-0.2
200	3.83	0.37	15.9	520	1019	-0.3
250	4.56	0.47	14.1	512	988	-0.4
300	5.21	0.57	12.1	504	957	-0.5
350	5.76	0.67	10.1	496	927	-0.5
400	6.21	0.77	8.1	488	898	-0.6
450	6.55	0.87	5.9	481	869	-0.7
500	6.79	0.98	3.7	473	841	-0.8
550	6.92	1.09	1.5	465	814	-0.8
600	6.94	1.19	-0.9	458	787	-0.9
650	6.84	1.30	-3.3	450	761	-1.0
700	6.63	1.42	-5.8	443	735	-1.0
750	6.28	1.53	-8.4	435	710	-1.1
800	5.81	1.65	-11.1	428	686	-1.2
850	5.20	1.76	-13.9	421	662	-1.2
900	4.46	1.88	-16.7	413	639	-1.3
950	3.57	2.01	-19.7	406	616	-1.4
1000	2.54	2.13	-22.8	399	594	-1.4
1050	1.35	2.26	-26.0	392	572	-1.5
1100	0.00	2.38	-29.3	385	552	-1.5

TYPE CB 3 CALIBER 5.56 MM AVERAGE DENSITY 16.70 GRAMS/CC.

PROJ. WT 7.567 GRAMS PROJ. DIA. 5.56 MM IMPULSE 2.1 LB. SEC.

DRAG RDCR. WT. 0.000 GRAMS CHG. WT. 2.39 GRAMS SABOT WT. 0.000 GRAMS

TWIST RATE REV./ 11.2 IN. PCT. DRAG CHANGE / (DEG. YAW)**2 0.81

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	11.6	862	2811	0.0
0	0.00	0.00	11.6	862	2811	0.0
50	0.55	0.06	10.9	841	2675	-0.2
100	1.07	0.12	10.2	820	2543	-0.4
150	1.55	0.18	9.4	799	2415	-0.6
200	1.99	0.24	8.6	778	2290	-0.8
250	2.39	0.31	7.7	757	2170	-1.0
300	2.76	0.38	6.8	737	2054	-1.2
350	3.07	0.45	5.9	716	1942	-1.4
400	3.34	0.52	4.9	696	1834	-1.6
450	3.56	0.59	3.8	676	1730	-1.8
500	3.72	0.66	2.7	656	1630	-2.0
550	3.83	0.74	1.5	637	1534	-2.2
600	3.88	0.82	0.2	617	1441	-2.3
650	3.86	0.90	-1.1	598	1353	-2.5
700	3.78	0.99	-2.5	579	1268	-2.7
750	3.62	1.08	-4.1	560	1187	-2.8
800	3.39	1.17	-5.7	542	1110	-3.0
850	3.07	1.26	-7.5	523	1036	-3.1
900	2.66	1.36	-9.4	505	966	-3.3
950	2.16	1.46	-11.4	488	900	-3.4
1000	1.55	1.56	-13.6	470	837	-3.5
1050	0.84	1.67	-15.9	453	778	-3.6
1100	0.00	1.78	-18.5	437	722	-3.7

DRAG RDCR. WT. 0.151 GRAMS PCT. DRAG CHANGE / (DEG. YAW)**2 1.57

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	9.0	862	2811	0.0
0	0.00	0.00	9.0	862	2811	0.0
50	0.42	0.06	8.3	851	2739	-0.1
100	0.81	0.12	7.6	840	2668	-0.2
150	1.17	0.18	6.9	829	2598	-0.3
200	1.49	0.24	6.2	818	2530	-0.4
250	1.78	0.30	5.4	808	2464	-0.5
300	2.03	0.36	4.6	797	2398	-0.6
350	2.23	0.43	3.8	787	2335	-0.7
400	2.41	0.49	3.0	776	2272	-0.8
450	2.54	0.55	2.2	766	2211	-0.9
500	2.62	0.62	1.3	756	2151	-1.0
550	2.67	0.69	0.4	745	2093	-1.1
600	2.67	0.75	-0.5	735	2036	-1.2
650	2.63	0.82	-1.4	725	1980	-1.3
700	2.54	0.89	-2.4	715	1925	-1.4
750	2.40	0.96	-3.4	706	1872	-1.5
800	2.22	1.03	-4.4	696	1820	-1.6
850	1.98	1.11	-5.4	686	1769	-1.6
900	1.70	1.18	-6.5	677	1719	-1.7
950	1.36	1.25	-7.6	667	1671	-1.8
1000	0.96	1.33	-8.8	658	1623	-1.9
1050	0.51	1.41	-9.9	649	1577	-2.0
1100	0.00	1.48	-11.1	639	1531	-2.0

TYPE CB 3 CALIBER 6.50 MM AVERAGE DENSITY 7.80 GRAMS/CC.

PROJ. WT 5.663 GRAMS PROJ. DIA. 6.50 MM IMPULSE 0.8 LB. SEC.

DRAG RDCR. WT. 0.000 GRAMS CHG. WT. 0.59 GRAMS SABOT WT. 0.000 GRAMS

TWIST RATE REV./ 8.1 IN. PCT. DRAG CHANGE / (DEG. YAW)**2 0.81

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	57.4	502	714	0.0
0	0.00	0.00	57.4	502	714	0.0
50	2.77	0.10	55.3	470	626	-0.3
100	5.43	0.21	52.9	439	546	-0.6
150	7.96	0.33	50.1	410	475	-0.9
200	10.35	0.46	46.9	381	412	-1.1
250	12.57	0.59	43.2	355	357	-1.3
300	14.59	0.74	39.0	335	317	-1.2
350	16.40	0.89	34.3	319	289	-1.0
400	17.96	1.05	29.2	306	266	-1.0
450	19.26	1.22	23.7	294	245	-1.1
500	20.28	1.39	17.7	283	227	-1.1
550	20.99	1.57	11.2	272	210	-1.2
600	21.38	1.76	4.2	262	194	-1.2
650	21.40	1.95	-3.4	252	180	-1.3
700	21.04	2.16	-11.5	243	167	-1.3
750	20.27	2.37	-20.4	234	154	-1.4
800	19.04	2.59	-29.9	225	143	-1.4
850	17.33	2.81	-40.2	216	132	-1.5
900	15.10	3.05	-51.3	208	123	-1.5
950	12.29	3.29	-63.2	200	114	-1.5
1000	8.88	3.55	-76.2	193	105	-1.5
1050	4.80	3.81	-90.1	186	98	-1.6
1100	0.00	4.09	-105.2	179	90	-1.6

DRAG RDCR. WT. 0.241 GRAMS PCT. DRAG CHANGE / (DEG. YAW)**2 1.57

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	35.1	502	714	0.0
0	0.00	0.00	35.1	502	714	0.0
50	1.67	0.10	33.0	488	673	-0.1
100	3.24	0.21	30.9	474	634	-0.3
150	4.70	0.31	28.6	460	596	-0.4
200	6.05	0.42	26.2	446	560	-0.5
250	7.27	0.54	23.6	433	526	-0.7
300	8.37	0.65	20.8	419	493	-0.8
350	9.32	0.78	17.9	406	461	-0.9
400	10.12	0.90	14.8	393	431	-1.0
450	10.77	1.03	11.4	380	403	-1.1
500	11.24	1.16	7.8	368	376	-1.2
550	11.54	1.30	4.0	356	353	-1.2
600	11.64	1.44	0.0	347	333	-1.2
650	11.54	1.59	-4.3	338	317	-1.1
700	11.22	1.74	-8.8	331	303	-1.0
750	10.68	1.89	-13.4	325	292	-0.9
800	9.91	2.05	-18.2	320	282	-0.9
850	8.90	2.21	-23.2	315	273	-0.8
900	7.65	2.37	-28.3	311	264	-0.9
950	6.14	2.53	-33.5	306	256	-0.9
1000	4.36	2.69	-38.9	302	248	-0.9
1050	2.32	2.86	-44.5	297	240	-0.9
1100	0.00	3.03	-50.3	292	230	-1.1

TYPE CB 3 CALIBER 6.50 MM AVERAGE DENSITY 7.80 GRAMS/CC.

PROJ. WT 5.663 GRAMS PROJ. DIA. 6.50 MM IMPULSE 1.2 LB. SEC.

DRAG RDCR. WT. 0.000 GRAMS CHG. WT. 1.17 GRAMS SABOT WT. 0.000 GRAMS

TWIST RATE REV./ 8.6 IN. PCT. DRAG CHANGE / (DEG. YAW)**2 0.81

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	32.5	698	1380	0.0
0	0.00	0.00	32.5	698	1380	0.0
50	1.57	0.07	31.4	662	1239	-0.4
100	3.09	0.15	30.2	626	1108	-0.7
150	4.54	0.23	28.9	590	987	-1.1
200	5.92	0.32	27.4	556	875	-1.4
250	7.22	0.41	25.6	522	772	-1.7
300	8.44	0.51	23.7	490	679	-1.9
350	9.59	0.62	21.5	458	595	-2.2
400	10.64	0.73	18.9	428	519	-2.4
450	11.41	0.85	16.0	399	451	-2.6
500	12.11	0.98	12.6	371	390	-2.8
550	12.64	1.12	8.7	347	341	-2.7
600	12.97	1.27	4.3	329	306	-2.3
650	13.07	1.43	-0.5	315	280	-1.9
700	12.92	1.59	-5.8	302	258	-1.8
750	12.50	1.76	-11.5	290	239	-1.8
800	11.80	1.93	-17.6	279	221	-1.8
850	10.77	2.12	-24.3	269	205	-1.8
900	9.41	2.30	-31.5	259	190	-1.8
950	7.69	2.50	-39.2	249	176	-1.9
1000	5.56	2.71	-47.6	240	163	-1.9
1050	3.01	2.92	-56.6	231	151	-1.9
1100	0.00	3.14	-66.4	222	140	-2.0

DRAG RDCR. WT. 0.241 GRAMS PCT. DRAG CHANGE / (DEG. YAW)**2 1.57

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	17.4	698	1380	0.0
0	0.00	0.00	17.4	698	1380	0.0
50	0.83	0.07	16.3	681	1310	-0.2
100	1.60	0.15	15.2	663	1243	-0.3
150	2.32	0.22	14.0	646	1179	-0.5
200	2.98	0.30	12.8	630	1118	-0.7
250	3.58	0.38	11.5	613	1059	-0.8
300	4.11	0.46	10.2	597	1003	-1.0
350	4.58	0.55	8.7	581	949	-1.1
400	4.97	0.64	7.2	566	898	-1.2
450	5.29	0.73	5.6	550	849	-1.4
500	5.53	0.82	3.9	535	802	-1.5
550	5.68	0.91	2.1	521	757	-1.6
600	5.74	1.01	0.2	506	715	-1.7
650	5.71	1.11	-1.8	492	674	-1.9
700	5.57	1.21	-3.9	478	635	-2.0
750	5.33	1.32	-6.2	463	597	-2.1
800	4.98	1.43	-8.6	450	561	-2.2
850	4.50	1.54	-11.1	436	526	-2.3
900	3.89	1.66	-13.8	422	493	-2.4
950	3.15	1.78	-16.7	409	461	-2.5
1000	2.26	1.90	-19.8	395	431	-2.6
1050	1.21	2.03	-23.1	382	402	-2.7
1100	0.00	2.17	-26.7	370	375	-2.8

TYPE CB 3 CALIBER 6.50 MM AVERAGE DENSITY 7.80 GRAMS/CC.

PROJ. WT 5.663 GRAMS PROJ. DIA. 6.50 MM IMPULSE 2.1 LB. SEC.

DRAG RDCR. WT. 0.000 GRAMS CHG. WT. 2.81 GRAMS SABOT WT. 0.000 GRAMS

TWIST RATE REV./ 9.1 IN. PCT. DRAG CHANGE / (DEG. YAW)**2 0.81

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	11.4	1061	3187	0.0
0	0.00	0.00	11.4	1061	3187	0.0
50	0.55	0.05	10.9	1021	2949	-0.4
100	1.07	0.10	10.4	980	2722	-0.8
150	1.57	0.15	9.9	941	2505	-1.2
200	2.04	0.20	9.3	901	2299	-1.6
250	2.48	0.26	8.6	862	2104	-1.9
300	2.89	0.32	7.9	824	1921	-2.3
350	3.27	0.38	7.2	785	1747	-2.7
400	3.60	0.45	6.3	748	1582	-3.0
450	3.89	0.52	5.4	710	1429	-3.4
500	4.13	0.59	4.3	674	1285	-3.7
550	4.32	0.67	3.2	638	1151	-4.0
600	4.46	0.75	1.9	602	1027	-4.3
650	4.51	0.83	0.4	567	912	-4.5
700	4.50	0.92	-1.2	534	806	-4.8
750	4.40	1.02	-3.1	501	710	-5.0
800	4.20	1.12	-5.2	469	622	-5.1
850	3.89	1.23	-7.7	438	544	-5.3
900	3.45	1.35	-10.5	409	473	-5.4
950	2.87	1.48	-13.7	381	410	-5.5
1000	2.11	1.61	-17.4	355	356	-5.4
1050	1.17	1.76	-21.6	334	316	-4.9
1100	0.00	1.91	-26.3	319	289	-4.0

DRAG RDCR. WT. 0.241 GRAMS PCT. DRAG CHANGE / (DEG. YAW)**2 1.57

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	7.0	1061	3187	0.0
0	0.00	0.00	7.0	1061	3187	0.0
50	0.33	0.05	6.5	1038	3048	-0.2
100	0.64	0.10	6.0	1015	2914	-0.5
150	0.93	0.15	5.5	993	2784	-0.7
200	1.19	0.20	5.0	970	2659	-0.9
250	1.42	0.25	4.5	949	2539	-1.1
300	1.63	0.30	3.9	927	2423	-1.3
350	1.81	0.36	3.3	906	2312	-1.5
400	1.96	0.41	2.7	885	2205	-1.7
450	2.08	0.47	2.0	864	2102	-1.8
500	2.17	0.53	1.4	844	2003	-2.0
550	2.22	0.59	0.6	824	1908	-2.2
600	2.24	0.65	-0.1	805	1816	-2.4
650	2.22	0.71	-0.9	785	1728	-2.5
700	2.16	0.78	-1.7	766	1644	-2.7
750	2.06	0.84	-2.6	747	1563	-2.8
800	1.92	0.91	-3.5	729	1485	-3.0
850	1.73	0.98	-4.5	711	1410	-3.1
900	1.49	1.05	-5.5	693	1338	-3.2
950	1.20	1.13	-6.6	675	1270	-3.4
1000	0.86	1.20	-7.7	658	1204	-3.5
1050	0.46	1.28	-8.9	641	1141	-3.6
1100	0.00	1.36	-10.1	624	1081	-3.7

TYPE CB 3 CALIBER 6.50 MM AVERAGE DENSITY 11.00 GRAMS/CC.
PROJ. WT 7.986 GRAMS PROJ. DIA. 6.50 MM IMPULSE 0.8 LB. SEC.
DRAG RDCR. WT. 0.000 GRAMS CHG. WT. 0.43 GRAMS SABOT WT. 0.000 GRAMS
TWIST RATE REV./ 9.3 IN. PCT. DRAG CHANGE / (DEG. YAW)**2 0.81

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	66.4	381	580	0.0
0	0.00	0.00	66.4	381	580	0.0
50	3.18	0.13	62.8	362	523	-0.2
100	6.17	0.28	58.8	345	476	-0.3
150	8.95	0.42	54.4	332	440	-0.4
200	11.51	0.58	49.7	321	412	-0.4
250	13.84	0.74	44.8	312	388	-0.5
300	15.91	0.90	39.5	303	366	-0.5
350	17.71	1.07	33.9	294	346	-0.6
400	19.23	1.24	27.9	286	327	-0.6
450	20.45	1.42	21.7	278	310	-0.7
500	21.36	1.60	15.0	271	293	-0.8
550	21.93	1.79	8.1	264	278	-0.8
600	22.15	1.98	0.7	257	263	-0.9
650	22.00	2.18	-7.1	250	249	-0.9
700	21.45	2.38	-15.4	243	236	-0.9
750	20.49	2.59	-24.0	237	223	-1.0
800	19.09	2.80	-33.2	230	212	-1.0
850	17.23	3.02	-42.9	224	200	-1.1
900	14.88	3.25	-53.1	218	190	-1.1
950	12.01	3.48	-63.9	212	180	-1.1
1000	8.59	3.72	-75.3	207	171	-1.2
1050	4.60	3.97	-87.3	201	162	-1.2
1100	0.00	4.22	-100.0	196	153	-1.2

DRAG RDCR. WT. 0.241 GRAMS PCT. DRAG CHANGE / (DEG. YAW)**2 1.57

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	49.4	381	580	0.0
0	0.00	0.00	49.4	381	580	0.0
50	2.34	0.13	45.9	372	552	-0.1
100	4.50	0.27	42.2	364	527	-0.2
150	6.48	0.41	38.3	356	504	-0.2
200	8.26	0.55	34.3	349	484	-0.3
250	9.85	0.70	30.1	343	466	-0.3
300	11.22	0.84	25.8	337	450	-0.3
350	12.38	0.99	21.3	332	436	-0.3
400	13.32	1.14	16.7	328	424	-0.3
450	14.02	1.30	12.0	324	413	-0.3
500	14.50	1.45	7.2	320	404	-0.4
550	14.73	1.61	2.3	317	394	-0.4
600	14.72	1.77	-2.8	314	385	-0.4
650	14.46	1.93	-7.9	310	377	-0.4
700	13.95	2.09	-13.1	307	368	-0.5
750	13.18	2.25	-18.5	304	360	-0.5
800	12.14	2.42	-24.0	301	353	-0.5
850	10.83	2.59	-29.5	298	345	-0.5
900	9.25	2.76	-35.2	295	337	-0.5
950	7.38	2.93	-41.0	292	330	-0.6
1000	5.23	3.10	-47.0	286	316	-0.7
1050	2.77	3.28	-53.3	278	299	-0.8
1100	0.00	3.46	-59.9	270	283	-0.8

TYPE CB 3 CALIBER 6.50 MM AVERAGE DENSITY 11.00 GRAMS/CC.
PROJ. WT 7.986 GRAMS PROJ. DIA. 6.50 MM IMPULSE 1.2 LB. SEC.
DRAG RDCR. WT. 0.000 GRAMS CHG. WT. 0.93 GRAMS SABOT WT. 0.000 GRAMS
TWIST RATE REV./ 9.7 IN. PCT. DRAG CHANGE / (DEG. YAW)**2 0.81

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	41.2	528	1113	0.0
0	0.00	0.00	41.2	528	1113	0.0
50	1.98	0.10	39.4	505	1017	-0.2
100	3.86	0.20	37.3	482	927	-0.5
150	5.64	0.30	35.1	460	843	-0.7
200	7.31	0.42	32.6	438	766	-0.9
250	8.84	0.53	29.8	417	694	-1.0
300	10.24	0.66	26.8	396	627	-1.2
350	11.47	0.79	23.5	377	566	-1.4
400	12.54	0.92	19.8	358	512	-1.5
450	13.41	1.07	15.7	342	468	-1.4
500	14.08	1.21	11.2	330	434	-1.3
550	14.52	1.37	6.5	319	40[illegible]	-1.1
600	14.74	1.53	1.5	310	384	-1.1
650	14.66	1.69	-3.9	301	363	-1.1
700	14.34	1.86	-9.5	293	343	-1.2
750	13.73	2.03	-15.5	285	324	-1.2
800	12.82	2.21	-21.8	277	307	-1.3
850	11.59	2.39	-28.5	270	291	-1.3
900	10.02	2.58	-35.6	263	276	-1.3
950	8.10	2.77	-43.0	256	261	-1.4
1000	5.80	2.97	-50.8	249	248	-1.4
1050	3.11	3.18	-59.1	242	235	-1.4
1100	0.00	3.39	-67.9	236	222	-1.5

DRAG RDCR. WT. 0.241 GRAMS PCT. DRAG CHANGE / (DEG. YAW)**2 1.57

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	27.4	528	1113	0.0
0	0.00	0.00	27.4	528	1113	0.0
50	1.30	0.10	25.6	518	1069	-0.1
100	2.51	0.19	23.7	508	1027	-0.2
150	3.63	0.29	21.[illegible]	497	985	-0.3
200	4.65	0.39	19.7	487	945	-0.4
250	5.56	0.50	17.5	477	906	-0.5
300	6.37	0.60	15.3	468	868	-0.6
350	7.07	0.71	13.0	458	831	-0.7
400	7.64	0.82	10.5	448	795	-0.8
450	8.10	0.94	8.0	438	760	-0.9
500	8.43	1.05	5.3	429	726	-1.0
550	8.63	1.17	2.5	419	693	-1.0
600	8.69	1.29	-0.4	410	662	-1.1
650	8.60	1.41	-3.4	400	631	-1.2
700	8.36	1.54	-6.6	391	602	-1.3
750	7.96	1.67	-9.9	382	573	-1.4
800	7.39	1.80	-13.5	373	546	-1.4
850	6.64	1.94	-17.1	365	520	-1.5
900	5.72	2.08	-21.0	357	498	-1.5
950	4.60	2.22	-25.0	350	477	-1.4
1000	3.27	2.36	-29.1	343	459	-1.3
1050	1.74	2.51	-33.5	338	444	-1.3
1100	0.00	2.66	-37.9	333	430	-1.2

TYPE CB 3 CALIBER 6.50 MM AVERAGE DENSITY 11.00 GRAMS/CC.
PROJ. WT 7.986 GRAMS PROJ. DIA. 6.50 MM IMPULSE 2.1 LB. SEC.
DRAG RDCR. WT. 0.000 GRAMS CHG. WT. 2.32 GRAMS SABOT WT. 0.000 GRAMS
TWIST RATE REV./ 10.5 IN. PCT. DRAG CHANGE / (DEG. YAW)**2 0.81

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	15.5	828	2738	0.0
0	0.00	0.00	15.5	828	2738	0.0
50	0.74	0.06	14.7	801	2561	-0.3
100	1.44	0.12	13.9	774	2391	-0.5
150	2.11	0.19	13.0	747	2228	-0.8
200	2.73	0.26	12.1	721	2073	-1.1
250	3.30	0.33	11.1	694	1925	-1.3
300	3.82	0.40	10.0	669	1785	-1.5
350	4.29	0.48	8.9	643	1651	-1.8
400	4.70	0.56	7.6	618	1523	-2.0
450	5.04	0.64	6.3	593	1403	-2.3
500	5.31	0.73	4.8	568	1289	-2.5
550	5.51	0.82	3.2	544	1182	-2.7
600	5.63	0.91	1.4	520	1081	-2.8
650	5.66	1.01	-0.5	497	987	-3.0
700	5.58	1.11	-2.7	475	900	-3.2
750	5.40	1.22	-5.0	453	818	-3.3
800	5.10	1.33	-7.5	431	743	-3.5
850	4.67	1.45	-10.4	410	673	-3.6
900	4.09	1.58	-13.5	390	608	-3.7
950	3.36	1.71	-16.9	371	549	-3.8
1000	2.44	1.85	-20.8	353	497	-3.7
1050	1.33	1.99	-24.9	338	457	-3.4
1100	0.00	2.14	-29.5	326	426	-3.0

DRAG RDCR. WT. 0.241 GRAMS PCT. DRAG CHANGE / (DEG. YAW)**2 1.57

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	10.5	828	2738	0.0
0	0.00	0.00	10.5	828	2738	0.0
50	0.50	0.06	9.7	814	2645	-0.1
100	0.95	0.12	9.0	800	2554	-0.3
150	1.38	0.19	8.2	787	2467	-0.4
200	1.76	0.25	7.3	773	2381	-0.5
250	2.10	0.32	6.5	760	2298	-0.7
300	2.40	0.38	5.6	747	2218	-0.8
350	2.65	0.45	4.7	734	2139	-0.9
400	2.86	0.52	3.8	721	2063	-1.0
450	3.03	0.59	2.8	708	1990	-1.1
500	3.14	0.66	1.8	695	1918	-1.3
550	3.21	0.73	0.7	683	1849	-1.4
600	3.22	0.81	-0.4	671	1781	-1.5
650	3.18	0.88	-1.5	658	1716	-1.6
700	3.08	0.96	-2.7	646	1652	-1.7
750	2.93	1.04	-3.9	634	1591	-1.8
800	2.71	1.12	-5.2	623	1531	-1.9
850	2.43	1.20	-6.5	611	1473	-2.0
900	2.08	1.28	-7.8	600	1417	-2.1
950	1.67	1.36	-9.3	588	1362	-2.2
1000	1.19	1.45	-10.7	577	1310	-2.2
1050	0.63	1.54	-12.3	566	1259	-2.3
1100	0.00	1.63	-13.9	555	1209	-2.4

TYPE CB 3 CALIBER 6.50 MM AVERAGE DENSITY 16.70 GRAMS/CC.
PROJ. WT 12.124 GRAMS PROJ. DIA. 6.50 MM IMPULSE 0.8 LB. SEC.
DRAG RDCR. WT. 0.000 GRAMS CHG. WT. 0.28 GRAMS SABOT WT. 0.000 GRAMS
TWIST RATE NA PCT. DRAG CHANGE / (DEG. YAW)**2 0.81

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	95.5	277	465	0.0
0	0.00	0.00	95.5	277	465	0.0
50	4.53	0.18	88.8	272	448	0.0
100	8.74	0.37	81.9	267	432	-0.1
150	12.59	0.56	74.8	262	416	-0.1
200	16.09	0.75	67.4	257	401	-0.2
250	19.21	0.95	59.7	253	387	-0.2
300	21.95	1.15	51.7	248	373	-0.3
350	24.29	1.35	43.4	243	359	-0.3
400	26.21	1.56	34.8	239	346	-0.3
450	27.71	1.77	25.9	235	334	-0.4
500	28.76	1.99	16.7	230	322	-0.4
550	29.34	2.21	7.1	226	310	-0.5
600	29.45	2.43	-2.8	222	299	-0.5
650	29.07	2.66	-13.1	218	289	-0.5
700	28.17	2.89	-23.8	214	279	-0.5
750	26.73	3.12	-34.9	211	269	-0.6
800	24.74	3.36	-46.3	207	260	-0.6
850	22.18	3.61	-58.2	203	251	-0.6
900	19.03	3.85	-70.5	200	242	-0.7
950	15.25	4.11	-83.2	196	234	-0.7
1000	10.84	4.37	-96.4	193	226	-0.7
1050	5.76	4.63	-110.0	190	218	-0.7
1100	0.00	4.90	-124.1	187	211	-0.7

DRAG RDCR. WT. 0.241 GRAMS PCT. DRAG CHANGE / (DEG. YAW)**2 1.57

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	79.8	277	465	0.0
0	0.00	0.00	79.8	277	465	0.0
50	3.76	0.18	73.2	275	458	0.0
100	7.20	0.36	66.6	273	451	0.0
150	10.30	0.55	59.8	271	444	-0.1
200	13.08	0.73	53.0	269	438	-0.1
250	15.51	0.92	46.1	267	431	-0.1
300	17.60	1.11	39.0	266	424	-0.1
350	19.34	1.30	31.9	264	418	-0.1
400	20.73	1.49	24.7	262	412	-0.1
450	21.77	1.68	17.4	260	406	-0.2
500	22.44	1.87	9.9	258	400	-0.2
550	22.74	2.07	2.4	257	394	-0.2
600	22.68	2.26	-5.2	255	388	-0.2
650	22.23	2.46	-13.0	253	383	-0.2
700	21.41	2.66	-20.8	252	377	-0.2
750	20.19	2.86	-28.7	250	372	-0.3
800	18.59	3.06	-36.8	248	364	-0.3
850	16.58	3.26	-45.1	243	351	-0.3
900	14.16	3.47	-53.7	239	339	-0.4
950	11.31	3.68	-62.6	235	327	-0.4
1000	8.01	3.90	-71.9	230	315	-0.4
1050	4.25	4.12	-81.5	226	304	-0.5
1100	0.00	4.34	-91.4	222	294	-0.5

TYPE CB 3 CALIBER 6.50 MM AVERAGE DENSITY 16.70 GRAMS/CC.
PROJ. WT 12.124 GRAMS PROJ. DIA. 6.50 MM IMPULSE 1.2 LB. SEC.
DRAG RDCR. WT. 0.000 GRAMS CHG. WT. 0.64 GRAMS SABOT WT. 0.000 GRAMS
TWIST RATE REV./ 11.4 IN. PCT. DRAG CHANGE / (DEG. YAW)**2 0.81

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	56.7	377	862	0.0
0	0.00	0.00	56.7	377	862	0.0
50	2.70	0.14	53.1	364	803	-0.1
100	5.21	0.27	49.2	353	755	-0.2
150	7.53	0.42	45.1	343	712	-0.3
200	9.64	0.57	40.7	334	676	-0.3
250	11.52	0.72	36.1	327	646	-0.4
300	13.18	0.87	31.3	320	620	-0.4
350	14.60	1.03	26.3	314	596	-0.4
400	15.77	1.19	21.2	308	574	-0.5
450	16.68	1.36	15.8	302	552	-0.5
500	17.32	1.52	10.2	296	532	-0.6
550	17.68	1.69	4.4	291	513	-0.6
600	17.75	1.87	-1.6	286	495	-0.6
650	17.52	2.04	-7.9	280	477	-0.7
700	16.98	2.22	-14.3	276	460	-0.7
750	16.12	2.41	-21.0	271	444	-0.7
800	14.92	2.59	-28.0	266	429	-0.8
850	13.38	2.78	-35.2	261	414	-0.8
900	11.48	2.98	-42.6	257	399	-0.8
950	9.20	3.17	-50.3	252	385	-0.9
1000	6.54	3.37	-58.3	248	372	-0.9
1050	3.48	3.58	-66.6	243	359	-0.9
1100	0.00	3.79	-75.2	239	347	-1.0

DRAG RDCR. WT. 0.241 GRAMS PCT. DRAG CHANGE / (DEG. YAW)**2 1.57

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	46.7	377	862	0.0
0	0.00	0.00	46.7	377	862	0.0
50	2.20	0.13	43.1	371	835	-0.1
100	4.23	0.27	39.4	366	809	-0.1
150	6.07	0.41	35.6	360	785	-0.2
200	7.73	0.55	31.7	355	763	-0.2
250	9.19	0.69	27.7	351	742	-0.2
300	10.45	0.83	23.6	346	723	-0.3
350	11.50	0.98	19.4	342	706	-0.3
400	12.35	1.13	15.1	339	690	-0.3
450	12.98	1.27	10.7	335	675	-0.3
500	13.40	1.42	6.2	332	662	-0.3
550	13.59	1.58	1.6	329	650	-0.3
600	13.56	1.73	-3.1	326	639	-0.3
650	13.30	1.88	-7.8	324	628	-0.3
700	12.80	2.04	-12.6	322	618	-0.3
750	12.06	2.19	-17.5	319	609	-0.3
800	11.09	2.35	-22.4	317	600	-0.4
850	9.87	2.51	-27.4	315	591	-0.4
900	8.41	2.67	-32.5	313	582	-0.4
950	6.69	2.83	-37.6	311	574	-0.4
1000	4.72	2.99	-42.8	309	566	-0.4
1050	2.49	3.15	-48.2	303	545	-0.5
1100	0.00	3.32	-53.7	297	525	-0.6

TYPE CB 3 CALIBER 6.50 MM AVERAGE DENSITY 16.70 GRAMS/CC.

PROJ. WT 12.124 GRAMS PROJ. DIA. 6.50 MM IMPULSE 2.1 LB. SEC.

DRAG RDCR. WT. 0.000 GRAMS CHG. WT. 1.80 GRAMS SABOT WT. 0.000 GRAMS

TWIST RATE REV./ 12.2 IN. PCT. DRAG CHANGE / (DEG. YAW)**2 0.81

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	25.5	593	2132	0.0
0	0.00	0.00	25.5	593	2132	0.0
50	1.22	0.09	24.0	577	2016	-0.2
100	2.36	0.17	22.5	561	1906	-0.3
150	3.42	0.26	20.9	545	1799	-0.5
200	4.41	0.36	19.1	529	1697	-0.6
250	5.30	0.45	17.3	514	1600	-0.8
300	6.10	0.55	15.3	499	1507	-0.9
350	6.81	0.65	13.3	484	1417	-1.0
400	7.41	0.76	11.1	469	1332	-1.2
450	7.90	0.87	8.7	454	1251	-1.3
500	8.27	0.98	6.2	440	1174	-1.4
550	8.51	1.09	3.5	426	1101	-1.5
600	8.62	1.21	0.7	412	1031	-1.6
650	8.59	1.34	-2.3	399	966	-1.7
700	8.40	1.46	-5.6	386	903	-1.8
750	8.05	1.60	-9.0	373	844	-1.9
800	7.52	1.73	-12.7	361	790	-2.0
850	6.80	1.87	-16.7	350	742	-2.0
900	5.89	2.02	-20.9	340	702	-1.8
950	4.76	2.17	-25.3	332	668	-1.7
1000	3.41	2.32	-30.0	325	639	-1.6
1050	1.82	2.48	-34.0	318	614	-1.4
1100	0.00	2.63	-39.8	312	591	-1.4

DRAG RDCR. WT. 0.241 GRAMS PCT. DRAG CHANGE / (DEG. YAW)**2 1.57

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	19.0	593	2132	0.0
0	0.00	0.00	19.0	593	2132	0.0
50	0.89	0.08	17.5	586	2078	-0.1
100	1.72	0.17	16.0	578	2025	-0.1
150	2.47	0.26	14.5	571	1973	-0.2
200	3.15	0.35	13.0	564	1923	-0.3
250	3.75	0.44	11.4	557	1873	-0.4
300	4.27	0.53	9.8	550	1825	-0.4
350	4.71	0.62	8.1	543	1778	-0.5
400	5.06	0.71	6.4	536	1731	-0.6
450	5.33	0.80	4.6	529	1686	-0.6
500	5.52	0.90	2.8	522	1642	-0.7
550	5.61	1.00	0.9	515	1599	-0.7
600	5.62	1.09	-1.0	509	1556	-0.8
650	5.52	1.19	-2.9	502	1515	-0.9
700	5.34	1.29	-4.9	495	1474	-0.9
750	5.05	1.39	-7.0	489	1434	-1.0
800	4.66	1.50	-9.1	482	1394	-1.1
850	4.16	1.60	-11.3	475	1356	-1.1
900	3.56	1.71	-13.5	469	1318	-1.2
950	2.84	1.82	-15.9	462	1281	-1.2
1000	2.01	1.92	-18.2	456	1244	-1.3
1050	1.07	2.03	-20.7	450	1208	-1.4
1100	0.00	2.15	-23.2	443	1173	-1.4

TYPE CB 3 CALIBER 7.62 MM AVERAGE DENSITY 7.80 GRAMS/CC.
PROJ. WT 9.103 GRAMS PROJ. DIA. 7.62 MM IMPULSE 0.8 LB. SEC.
DRAG RDCR. WT. 0.000 GRAMS CHG. WT. 0.36 GRAMS SABOT WT. 0.000 GRAMS
TWIST RATE REV./ 7.3 IN. PCT. DRAG CHANGE / (DEG. YAW)**2 0.81

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	83.7	344	539	0.0
0	0.00	0.00	83.7	344	539	0.0
50	4.01	0.15	79.2	329	491	-0.1
100	7.79	0.31	74.4	316	456	-0.2
150	11.32	0.47	69.3	305	424	-0.3
200	14.59	0.63	63.7	295	396	-0.4
250	17.58	0.81	57.8	285	370	-0.5
300	20.26	0.98	51.4	276	346	-0.6
350	22.63	1.17	44.6	267	324	-0.6
400	24.64	1.36	37.4	258	303	-0.7
450	26.29	1.56	29.6	250	284	-0.8
500	27.55	1.76	21.3	242	266	-0.8
550	28.38	1.97	12.5	234	249	-0.9
600	28.77	2.19	3.0	226	233	-0.9
650	28.67	2.41	-7.1	219	218	-1.0
700	28.07	2.65	-17.9	212	204	-1.0
750	26.92	2.89	-29.4	205	191	-1.0
800	25.18	3.13	-41.7	198	179	-1.1
850	22.81	3.39	-54.8	192	167	-1.1
900	19.78	3.66	-68.9	186	157	-1.1
950	16.04	3.93	-83.8	180	147	-1.2
1000	11.53	4.22	-99.8	174	138	-1.2
1050	6.20	4.51	-116.8	169	129	-1.2
1100	0.00	4.81	-135.0	163	121	-1.2

DRAG RDCR. WT. 0.389 GRAMS PCT. DRAG CHANGE / (DEG. YAW)**2 1.57

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	58.2	344	539	0.0
0	0.00	0.00	58.2	344	539	0.0
50	2.76	0.15	53.9	337	516	-0.1
100	5.30	0.30	49.4	331	497	-0.1
150	7.61	0.45	44.8	326	481	-0.1
200	9.70	0.60	40.1	322	467	-0.2
250	11.54	0.76	35.2	317	454	-0.2
300	13.15	0.92	30.1	313	441	-0.2
350	14.50	1.08	25.0	309	429	-0.3
400	15.60	1.24	19.7	305	417	-0.3
450	16.44	1.41	14.3	302	406	-0.3
500	17.00	1.57	8.7	298	395	-0.4
550	17.29	1.74	3.0	294	384	-0.4
600	17.30	1.91	-2.8	291	374	-0.4
650	17.02	2.09	-8.8	287	364	-0.5
700	16.44	2.26	-14.9	284	354	-0.5
750	15.56	2.44	-21.2	280	345	-0.5
800	14.36	2.62	-27.7	277	335	-0.5
850	12.84	2.80	-34.3	273	326	-0.6
900	11.00	2.99	-41.1	270	318	-0.6
950	8.81	3.17	-48.2	261	297	-0.8
1000	6.27	3.37	-55.7	253	278	-0.8
1050	3.34	3.57	-63.8	244	260	-0.9
1100	0.00	3.78	-72.5	236	243	-0.9

TYPE CB 3 CALIBER 7.62 MM AVERAGE DENSITY 7.80 GRAMS/CC.
PROJ. WT 9.103 GRAMS PROJ. DIA. 7.62 MM IMPULSE 1.2 LB. SEC.
DRAG RDCR. WT. 0.000 GRAMS CHG. WT. 0.84 GRAMS SABOT WT. 0.000 GRAMS
TWIST RATE REV./ 9.4 IN. PCT. DRAG CHANGE / (DEG. YAW)**2 0.81

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	55.2	475	1027	0.0
0	0.00	0.00	55.2	475	1027	0.0
50	2.66	0.11	52.9	448	915	-0.5
100	5.19	0.22	50.3	423	813	-0.5
150	7.59	0.35	47.3	398	721	-0.7
200	9.83	0.48	43.9	374	637	-0.9
250	11.90	0.61	40.1	352	565	-1.0
300	13.77	0.76	35.9	335	511	-1.0
350	15.42	0.91	31.2	322	471	-0.9
400	16.84	1.07	26.2	310	439	-0.9
450	18.00	1.23	20.9	300	409	-0.9
500	18.89	1.40	15.1	290	382	-1.0
550	19.48	1.58	9.0	280	358	-1.1
600	19.77	1.76	2.4	271	335	-1.1
650	19.72	1.95	-4.6	263	314	-1.1
700	19.31	2.14	-12.1	254	294	-1.2
750	18.53	2.34	-20.1	246	275	-1.2
800	17.34	2.55	-28.6	238	258	-1.3
850	15.72	2.76	-37.7	230	241	-1.3
900	13.63	2.98	-47.5	223	226	-1.4
950	11.06	3.21	-57.9	216	212	-1.4
1000	7.95	3.45	-69.0	209	199	-1.4
1050	4.28	3.69	-80.8	202	186	-1.4
1100	0.00	3.94	-93.4	196	174	-1.5

DRAG RDCR. WT. 0.389 GRAMS PCT. DRAG CHANGE / (DEG. YAW)**2 1.57

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	36.6	475	1027	0.0
0	0.00	0.00	36.6	475	1027	0.0
50	1.74	0.11	34.3	463	975	-0.1
100	3.37	0.22	32.0	451	924	-0.2
150	4.88	0.33	29.4	440	876	-0.3
200	6.26	0.44	26.8	428	829	-0.5
250	7.51	0.56	24.0	417	784	-0.6
300	8.62	0.68	21.0	405	741	-0.7
350	9.57	0.81	17.9	394	699	-0.8
400	10.37	0.94	14.6	383	660	-0.9
450	11.01	1.07	11.1	373	622	-1.0
500	11.47	1.21	7.4	362	587	-1.0
550	11.74	1.35	3.5	353	557	-1.0
600	11.81	1.49	-0.6	345	531	-1.0
650	11.68	1.64	-4.9	338	508	-0.9
700	11.33	1.79	-9.4	332	489	-0.9
750	10.77	1.94	-14.0	327	473	-0.8
800	9.97	2.09	-18.7	322	459	-0.8
850	8.93	2.25	-23.6	318	446	-0.7
900	7.66	2.41	-28.6	314	433	-0.7
950	6.13	2.57	-33.8	310	421	-0.6
1000	4.35	2.73	-39.0	306	410	-0.8
1050	2.31	2.89	-44.4	302	399	-0.8
1100	0.00	3.06	-50.0	296	382	-1.1

TYPE CB 3 CALIBER 7.62 MM AVERAGE DENSITY 7.80 GRAMS/CC.
PROJ. WT 9.103 GRAMS PROJ. DIA. 7.62 MM IMPULSE 2.1 LB. SEC.
DRAG RDCR. WT. 0.000 GRAMS CHG. WT. 2.15 GRAMS SABOT WT. 0.000 GRAMS
TWIST RATE REV./ 10.2 IN. PCT. DRAG CHANGE / (DEG. YAW)**2 0.81

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	23.9	747	2540	0.0
0	0.00	0.00	23.9	747	2540	0.0
50	1.15	0.07	23.0	715	2327	-0.3
100	2.26	0.14	22.0	684	2127	-0.6
150	3.31	0.21	20.8	653	1939	-0.9
200	4.30	0.29	19.6	622	1761	-1.2
250	5.23	0.38	18.3	595	1595	-1.5
300	6.10	0.46	16.8	562	1440	-1.8
350	6.88	0.55	15.1	534	1295	-2.0
400	7.58	0.65	13.2	505	1162	-2.2
450	8.18	0.75	11.2	478	1040	-2.5
500	8.68	0.86	8.8	451	927	-2.7
550	9.05	0.97	6.2	426	825	-2.8
600	9.29	1.09	3.3	401	731	-3.0
650	9.38	1.22	0.0	377	647	-3.1
700	9.30	1.36	-3.7	355	573	-3.2
750	9.02	1.51	-7.9	337	517	-2.8
800	8.52	1.66	-12.5	323	476	-2.4
850	7.80	1.81	-17.5	312	443	-2.1
900	6.82	1.98	-22.8	301	413	-2.0
950	5.56	2.19	-28.5	291	386	-2.0
1000	4.03	2.32	-34.6	282	362	-2.0
1050	2.18	2.50	-41.1	273	339	-2.0
1100	0.00	2.69	-48.0	264	317	-2.0

DRAG RDCR. WT. 0.389 GRAMS PCT. DRAG CHANGE / (DEG. YAW)**2 1.57

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	13.9	747	2540	0.0
0	0.00	0.00	13.9	747	2540	0.0
50	0.66	0.07	13.0	731	2432	-0.2
100	1.28	0.14	12.1	716	2328	-0.3
150	1.85	0.21	11.1	701	2228	-0.5
200	2.37	0.28	10.0	686	2131	-0.6
250	2.83	0.35	8.9	671	2038	-0.7
300	3.25	0.43	7.8	656	1948	-0.9
350	3.60	0.51	6.6	642	1861	-1.0
400	3.90	0.58	5.4	627	1777	-1.1
450	4.14	0.67	4.1	613	1696	-1.3
500	4.31	0.75	2.7	600	1618	-1.4
550	4.41	0.83	1.3	586	1544	-1.5
600	4.44	0.92	-0.2	572	1472	-1.6
650	4.40	1.01	-1.7	559	1402	-1.7
700	4.28	1.10	-3.4	546	1336	-1.8
750	4.08	1.19	-5.1	533	1272	-1.9
800	3.79	1.28	-6.9	521	1211	-2.0
850	3.41	1.38	-8.8	508	1152	-2.1
900	2.94	1.48	-10.8	496	1095	-2.2
950	2.37	1.58	-12.9	483	1040	-2.3
1000	1.69	1.69	-15.0	471	987	-2.4
1050	0.90	1.80	-17.4	459	935	-2.5
1100	0.00	1.91	-19.8	447	886	-2.6

TYPE CB 3 CALIBER 7.62 MM AVERAGE DENSITY 11.00 GRAMS/CC.
PROJ. WT 12.837 GRAMS PROJ. DIA. 7.62 MM IMPULSE 0.8 LB. SEC.
DRAG RDCR. WT. 0.000 GRAMS CHG. WT. 0.28 GRAMS SABOT WT. 0.000 GRAMS
TWIST RATE NA PCT. DRAG CHANGE / (DEG. YAW)**2 0.81

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	100.0	266	454	0.0
0	0.00	0.00	100.0	266	454	0.0
50	4.75	0.19	92.8	260	433	-0.1
100	9.12	0.39	85.2	254	413	-0.1
150	13.12	0.59	77.2	248	393	-0.2
200	16.71	0.79	68.9	242	375	-0.2
250	19.88	1.00	60.1	236	357	-0.3
300	22.61	1.22	50.9	230	341	-0.3
350	24.88	1.44	41.3	225	325	-0.4
400	26.66	1.66	31.1	220	310	-0.4
450	27.93	1.89	20.5	214	295	-0.5
500	28.67	2.13	9.4	209	282	-0.5
550	28.85	2.37	-2.2	205	269	-0.5
600	28.45	2.62	-14.5	200	256	-0.6
650	27.43	2.87	-27.3	195	245	-0.6
700	25.77	3.13	-40.7	191	234	-0.6
750	23.43	3.40	-54.7	186	223	-0.7
800	20.39	3.67	-69.4	182	213	-0.7
850	16.60	3.95	-84.8	178	204	-0.7
900	12.03	4.23	-100.9	174	195	-0.7
950	6.65	4.52	-117.8	170	186	-0.8
1000	0.42	4.82	-135.4	167	178	-0.8
1003	0.00	4.84	-136.5	166	178	-0.8

DRAG RDCR. WT. 0.389 GRAMS PCT. DRAG CHANGE / (DEG. YAW)**2 1.57

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	89.9	266	454	0.0
0	0.00	0.00	89.9	266	454	0.0
50	4.25	0.19	82.8	264	445	0.0
100	8.14	0.38	75.5	261	436	0.0
150	11.67	0.57	68.2	259	427	-0.1
200	14.84	0.77	60.6	256	419	-0.1
250	17.63	0.96	53.0	254	410	-0.1
300	20.04	1.16	45.2	252	402	-0.1
350	22.06	1.36	37.2	250	394	-0.2
400	23.69	1.56	29.1	247	386	-0.2
450	24.92	1.77	20.9	245	379	-0.2
500	25.74	1.97	12.5	243	371	-0.2
550	26.14	2.18	3.9	241	364	-0.2
600	26.12	2.39	-4.8	239	356	-0.3
650	25.68	2.60	-13.6	236	349	-0.3
700	24.79	2.81	-22.6	234	343	-0.3
750	23.46	3.02	-31.8	232	335	-0.3
800	21.67	3.24	-41.3	226	319	-0.4
850	19.40	3.47	-51.3	221	304	-0.4
900	16.63	3.70	-61.8	216	290	-0.5
950	13.33	3.93	-72.7	211	277	-0.5
1000	9.48	4.17	-84.2	206	264	-0.6
1050	5.04	4.42	-96.3	201	252	-0.6
1100	0.00	4.67	-108.9	197	241	-0.6

TYPE CB 3 CALIBER 7.62 MM AVERAGE DENSITY 11.00 GRAMS/CC.
PROJ. WT 12.837 GRAMS PROJ. DIA. 7.62 MM IMPULSE 1.2 LB. SEC.
DRAG RDCR. WT. 0.000 GRAMS CHG. WT. 0.59 GRAMS SABOT WT. 0.000 GRAMS
TWIST RATE REV./ 10.8 IN. PCT. DRAG CHANGE / (DEG. YAW)**2 0.81

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	65.9	361	836	0.0
0	0.00	0.00	65.9	361	836	0.0
50	3.14	0.14	61.9	347	772	-0.1
100	6.08	0.29	57.6	335	720	-0.2
150	8.80	0.44	53.0	325	679	-0.3
200	11.29	0.60	48.2	317	644	-0.3
250	13.54	0.76	43.1	309	612	-0.4
300	15.52	0.92	37.7	301	583	-0.4
350	17.24	1.09	32.1	294	555	-0.5
400	18.67	1.26	26.2	287	529	-0.6
450	19.81	1.44	20.0	280	505	-0.6
500	20.63	1.62	13.4	274	482	-0.6
550	21.13	1.80	6.6	268	460	-0.7
600	21.28	1.99	-0.5	261	439	-0.7
650	21.08	2.19	-8.0	255	419	-0.8
700	20.50	2.38	-15.8	250	400	-0.8
750	19.53	2.59	-24.0	244	382	-0.9
800	18.14	2.79	-32.6	238	365	-0.9
850	16.33	3.01	-41.6	233	348	-0.9
900	14.06	3.22	-51.1	228	332	-1.0
950	11.31	3.45	-60.9	223	317	-1.0
1000	8.07	3.67	-71.3	217	303	-1.0
1050	4.31	3.91	-82.1	212	290	-1.1
1100	0.00	4.15	-93.4	208	277	-1.1

DRAG RDCR. WT. 0.389 GRAMS PCT. DRAG CHANGE / (DEG. YAW)**2 1.57

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	51.4	361	836	0.0
0	0.00	0.00	51.4	361	836	0.0
50	2.43	0.14	47.5	355	806	-0.1
100	4.67	0.28	43.5	349	778	-0.1
150	6.70	0.43	39.3	343	753	-0.2
200	8.52	0.57	35.0	338	731	-0.2
250	10.13	0.72	30.6	334	711	-0.2
300	11.53	0.87	26.0	330	693	-0.2
350	12.69	1.03	21.4	326	677	-0.2
400	13.63	1.18	16.7	323	663	-0.3
450	14.33	1.34	11.8	320	649	-0.3
500	14.79	1.49	6.9	317	636	-0.3
550	15.01	1.65	1.9	314	624	-0.3
600	14.98	1.81	-3.2	312	611	-0.3
650	14.70	1.97	-8.4	309	600	-0.4
700	14.16	2.14	-13.7	306	588	-0.4
750	13.36	2.30	-19.1	303	577	-0.4
800	12.29	2.46	-24.5	301	566	-0.4
850	10.95	2.63	-30.1	298	555	-0.4
900	9.34	2.80	-35.8	296	545	-0.5
950	7.45	2.97	-41.6	293	535	-0.5
1000	5.27	3.14	-47.5	287	512	-0.6
1050	2.79	3.32	-53.7	280	488	-0.7
1100	0.00	3.50	-60.2	273	465	-0.7

TYPE CB 3 CALIBER 7.62 MM AVERAGE DENSITY 11.00 GRAMS/CC.
PROJ. WT 12.837 GRAMS PROJ. DIA. 7.62 MM IMPULSE 2.1 LB. SEC.
DRAG RDCR. WT. 0.000 GRAMS CHG. WT. 1.73 GRAMS SABOT WT. 0.000 GRAMS
TWIST RATE REV./ 11.5 IN. PCT. DRAG CHANGE / (DEG. YAW)**2 0.81

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	32.8	566	2056	0.0
0	0.00	0.00	32.8	566	2056	0.0
50	1.57	0.09	31.2	545	1909	-0.2
100	3.06	0.18	29.5	525	1769	-0.4
150	4.47	0.28	27.6	505	1638	-0.6
200	5.77	0.38	25.6	486	1513	-0.8
250	6.98	0.49	23.4	466	1397	-1.0
300	8.07	0.60	21.0	448	1287	-1.1
350	9.04	0.71	18.4	429	1184	-1.3
400	9.87	0.83	15.5	412	1088	-1.4
450	10.56	0.95	12.5	394	998	-1.6
500	11.10	1.08	9.1	378	915	-1.7
550	11.46	1.22	5.4	361	839	-1.8
600	11.63	1.36	1.5	347	774	-1.7
650	11.61	1.51	-2.8	335	722	-1.6
700	11.36	1.66	-7.4	326	681	-1.4
750	10.88	1.81	-12.3	317	646	-1.3
800	10.16	1.97	-17.3	309	615	-1.3
850	9.19	2.14	-22.7	302	589	-1.3
900	7.94	2.30	-28.3	295	558	-1.3
950	6.41	2.48	-34.2	288	532	-1.3
1000	4.59	2.65	-40.4	281	508	-1.4
1050	2.46	2.83	-46.8	275	485	-1.4
1100	0.00	3.02	-53.6	269	463	-1.4

DRAG RDCR. WT. 0.389 GRAMS PCT. DRAG CHANGE / (DEG. YAW)**2 1.57

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	22.4	566	2056	0.0
0	0.00	0.00	22.4	566	2056	0.0
50	1.06	0.09	20.8	557	1988	-0.1
100	2.04	0.18	19.1	548	1921	-0.2
150	2.94	0.27	17.4	539	1856	-0.3
200	3.75	0.37	15.7	530	1793	-0.4
250	4.48	0.46	13.9	521	1732	-0.4
300	5.12	0.56	12.0	512	1673	-0.5
350	5.66	0.66	10.1	503	1615	-0.6
400	6.11	0.76	8.1	495	1559	-0.7
450	6.46	0.86	6.0	486	1503	-0.8
500	6.70	0.96	3.8	478	1450	-0.9
550	6.84	1.07	1.6	469	1397	-0.9
600	6.87	1.18	-0.7	461	1346	-1.0
650	6.78	1.28	-3.1	452	1296	-1.1
700	6.57	1.40	-5.6	444	1247	-1.2
750	6.24	1.51	-8.2	436	1199	-1.2
800	5.78	1.63	-10.9	427	1153	-1.3
850	5.18	1.74	-13.6	419	1108	-1.4
900	4.45	1.86	-16.5	411	1064	-1.5
950	3.57	1.99	-19.6	403	1022	-1.5
1000	2.54	2.11	-22.7	395	981	-1.6
1050	1.35	2.24	-26.0	387	941	-1.7
1100	0.00	2.37	-29.4	379	902	-1.7

TYPE CB 3 CALIBER 7.62 MM AVERAGE DENSITY 16.70 GRAMS/CC.
PROJ. WT 19.489 GRAMS PROJ. DIA. 7.62 MM IMPULSE 0.8 LB. SEC.
DRAG RDCR. WT. 0.000 GRAMS CHG. WT. 0.32 GRAMS SABOT WT. 0.000 GRAMS
TWIST RATE NA PCT. DRAG CHANGE / (DEG. YAW)**2 0.81

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	100.0	200	390	0.0
0	0.00	0.00	100.0	200	390	0.0
50	4.61	0.25	87.3	197	377	0.0
100	8.58	0.51	74.2	193	365	-0.1
150	11.89	0.77	60.6	190	353	-0.1
200	14.53	1.04	46.6	187	341	-0.1
250	16.46	1.31	32.1	184	331	-0.1
300	17.67	1.58	17.1	181	320	-0.2
350	18.13	1.86	1.7	178	310	-0.2
400	17.83	2.14	-14.3	176	301	-0.2
450	16.72	2.43	-30.7	173	292	-0.2
500	14.80	2.72	-47.6	170	283	-0.3
550	12.04	3.02	-65.1	168	275	-0.3
600	8.40	3.32	-83.1	166	267	-0.3
650	3.86	3.62	-101.6	163	260	-0.3
686	0.00	3.85	-115.2	162	254	-0.3

DRAG RDCR. WT. 0.389 GRAMS PCT. DRAG CHANGE / (DEG. YAW)**2 1.57

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	100.0	200	390	0.0
0	0.00	0.00	100.0	200	390	0.0
50	4.61	0.25	87.4	199	384	0.0
100	8.60	0.51	74.7	197	378	0.0
150	11.95	0.76	61.7	196	372	0.0
200	14.66	1.02	48.6	195	366	0.0
250	16.73	1.27	35.4	193	361	-0.1
300	18.13	1.53	21.9	192	356	-0.1
350	18.88	1.80	8.3	191	351	-0.1
400	18.95	2.06	-5.5	190	346	-0.1
450	18.34	2.32	-19.4	189	342	-0.1
500	17.04	2.59	-33.5	188	337	-0.1
550	15.05	2.86	-47.8	187	333	-0.1
600	12.34	3.13	-62.3	185	326	-0.1
650	8.92	3.40	-77.1	182	316	-0.2
700	4.75	3.68	-92.4	179	307	-0.2
748	0.00	3.95	-107.6	177	299	-0.2

TYPE CB 3 CALIBER 7.62 MM AVERAGE DENSITY 16.70 GRAMS/CC.
PROJ. WT 19.489 GRAMS PROJ. DIA. 7.62 MM IMPULSE 1.2 LB. SEC.
DRAG RDCR. WT. 0.000 GRAMS CHG. WT. 0.43 GRAMS SABOT WT. 0.000 GRAMS
TWIST RATE NA PCT. DRAG CHANGE / (DEG. YAW)**2 0.81

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	100.0	264	679	0.0
0	0.00	0.00	100.0	264	679	0.0
50	4.74	0.19	92.7	260	658	0.0
100	9.12	0.39	85.2	256	637	-0.1
150	13.12	0.58	77.4	252	617	-0.1
200	16.73	0.79	69.4	248	597	-0.2
250	19.94	0.99	61.1	244	579	-0.2
300	22.74	1.20	52.6	240	561	-0.2
350	25.10	1.41	43.8	236	543	-0.3
400	27.03	1.62	34.7	232	526	-0.3
450	28.51	1.84	25.3	229	510	-0.3
500	29.51	2.06	15.6	225	494	-0.4
550	30.03	2.28	5.6	222	479	-0.4
600	30.06	2.51	-4.7	218	465	-0.4
650	29.57	2.74	-15.4	215	451	-0.4
700	28.56	2.97	-26.3	212	437	-0.5
750	26.98	3.21	-37.7	209	424	-0.5
800	24.85	3.46	-49.3	206	412	-0.5
850	22.14	3.70	-61.3	202	399	-0.5
900	18.83	3.95	-73.7	199	388	-0.6
950	14.89	4.20	-86.4	197	377	-0.6
1000	10.32	4.46	-99.5	194	366	-0.6
1050	5.10	4.72	-113.0	191	356	-0.6
1093	0.00	4.95	-125.1	189	347	-0.6

DRAG RDCR. WT. 0.389 GRAMS PCT. DRAG CHANGE / (DEG. YAW)**2 1.57

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	86.7	264	679	0.0
0	0.00	0.00	86.7	264	679	0.0
50	4.09	0.19	79.5	262	670	0.0
100	7.82	0.38	72.2	261	661	0.0
150	11.18	0.58	64.8	259	652	0.0
200	14.18	0.77	57.3	258	643	-0.1
250	16.81	0.96	49.8	256	634	-0.1
300	19.07	1.16	42.1	254	626	-0.1
350	20.95	1.36	34.3	253	618	-0.1
400	22.44	1.56	26.5	251	609	-0.1
450	23.55	1.76	18.5	250	601	-0.1
500	24.26	1.96	10.5	248	594	-0.1
550	24.57	2.16	2.3	247	586	-0.2
600	24.49	2.36	-5.9	246	578	-0.2
650	24.00	2.57	-14.2	244	571	-0.2
700	23.10	2.77	-22.7	243	564	-0.2
750	21.78	2.98	-31.2	241	557	-0.2
800	20.04	3.19	-39.9	238	541	-0.3
850	17.86	3.40	-48.8	234	525	-0.3
900	15.24	3.61	-58.1	231	509	-0.3
950	12.16	3.83	-67.6	227	494	-0.4
1000	8.61	4.05	-77.4	224	479	-0.4
1050	4.56	4.28	-87.5	221	465	-0.4
1100	0.00	4.51	-97.9	217	451	-0.4

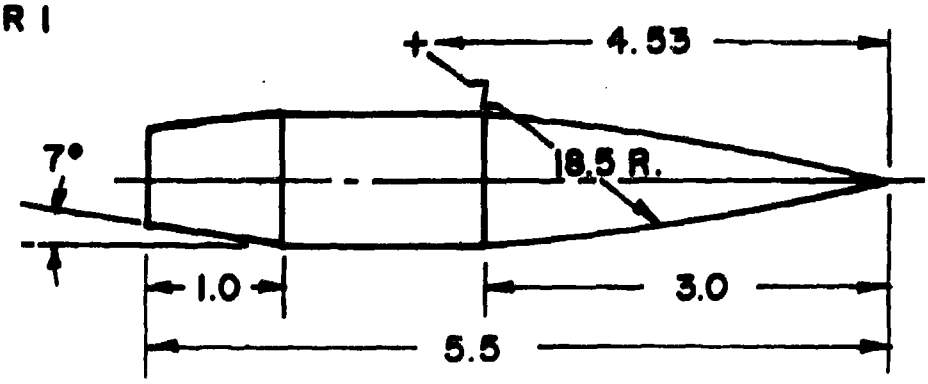
TYPE CB 3 CALIBER 7.62 MM AVERAGE DENSITY 16.70 GRAMS/CC.
PROJ. WT 19.489 GRAMS PROJ. DIA. 7.62 MM IMPULSE 2.1 LB. SEC.
DRAG RDCR. WT. 0.000 GRAMS CHG. WT. 1.22 GRAMS SABOT WT. 0.000 GRAMS
TWIST RATE REV./ 13.5 IN. PCT. DRAG CHANGE / (DEG. YAW)**2 0.81

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	49.0	404	1590	0.0
0	0.00	0.00	49.0	404	1590	0.0
50	2.33	0.13	45.9	393	1502	-0.1
100	4.50	0.26	42.6	381	1418	-0.2
150	6.51	0.39	39.0	370	1338	-0.3
200	8.34	0.53	35.3	360	1264	-0.4
250	9.97	0.67	31.3	351	1198	-0.5
300	11.41	0.81	27.1	342	1141	-0.5
350	12.64	0.96	22.8	335	1091	-0.5
400	13.65	1.11	18.2	328	1049	-0.5
450	14.43	1.26	13.5	322	1012	-0.5
500	14.97	1.42	8.6	317	978	-0.5
550	15.27	1.58	3.5	312	946	-0.6
600	15.32	1.74	-1.7	307	916	-0.6
650	15.11	1.91	-7.1	302	887	-0.6
700	14.63	2.07	-12.7	297	859	-0.7
750	13.87	2.24	-18.4	292	833	-0.7
800	12.82	2.41	-24.4	288	807	-0.7
850	11.48	2.59	-30.5	283	783	-0.8
900	9.84	2.77	-36.8	279	759	-0.8
950	7.87	2.95	-43.3	275	736	-0.8
1000	5.59	3.13	-50.0	271	715	-0.8
1050	2.97	3.32	-57.0	267	694	-0.9
1100	0.00	3.51	-64.1	263	673	-0.9

DRAG RDCR. WT. 0.389 GRAMS PCT. DRAG CHANGE / (DEG. YAW)**2 1.57

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	40.7	404	1590	0.0
0	0.00	0.00	40.7	404	1590	0.0
50	1.92	0.12	37.6	394	1548	-0.1
100	3.69	0.25	34.4	384	1507	-0.1
150	5.30	0.38	31.2	388	1467	-0.2
200	6.75	0.51	27.8	383	1427	-0.2
250	8.03	0.64	24.4	378	1389	-0.3
300	9.14	0.77	20.8	373	1351	-0.3
350	10.07	0.91	17.2	368	1315	-0.3
400	10.83	1.04	13.4	364	1280	-0.4
450	11.40	1.18	9.6	359	1248	-0.4
500	11.78	1.32	5.7	355	1218	-0.4
550	11.96	1.46	1.7	351	1190	-0.4
600	11.95	1.61	-2.4	347	1163	-0.4
650	11.73	1.75	-6.6	344	1139	-0.5
700	11.31	1.90	-10.9	341	1116	-0.5
750	10.67	2.05	-15.2	338	1095	-0.5
800	9.82	2.20	-19.6	335	1076	-0.5
850	8.75	2.35	-24.1	332	1057	-0.5
900	7.46	2.50	-28.7	330	1041	-0.5
950	5.94	2.65	-33.1	327	1025	-0.5
1000	4.20	2.80	-38.0	325	1011	-0.4
1050	2.21	2.96	-42.8	323	997	-0.4
1100	0.00	3.11	-47.6	318	969	-0.5

AR 1



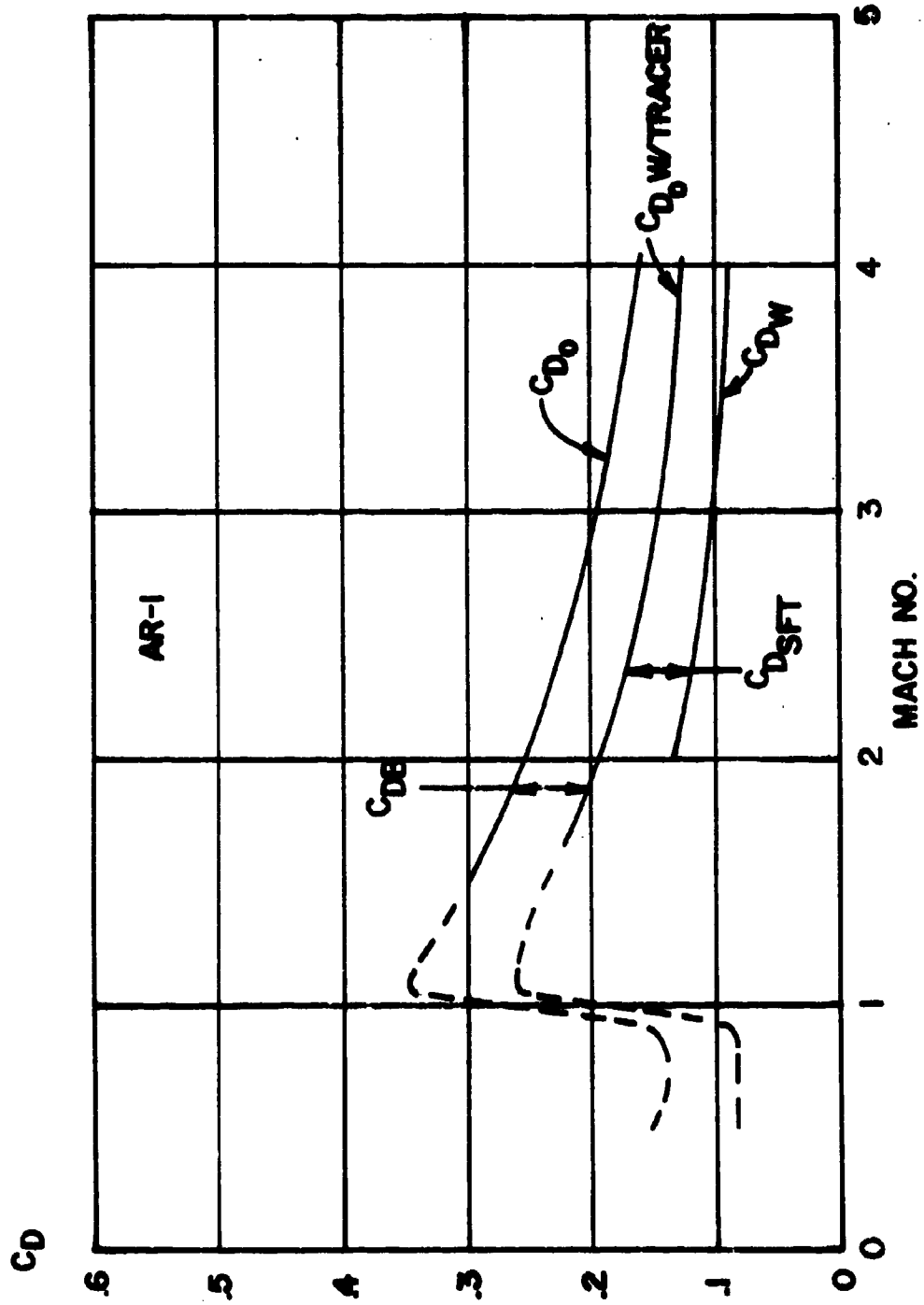
ALL DIMENSIONS ARE IN CALIBERS

Axial Radius of Gyration = 0.322 Cal.
Transverse Radius of Gyration = 1.20 Cal.
Center of Mass (Nose) = 3.44 Cal.
Wetted Area = 13.05 Cal.^{2}
Volume = 2.79 Cal.^{3}
Length = 5.5 Cal.

Mach No.	C_{D_0}	C_{D_B}	C_{D_0} (Tracer)	$C_{D_{SF_T}}$	C_{D_W}	C_{N_α}	CP_N	C_{M_α}
.5 *	.153		.081			1.42	.83	3.7
.8 *	.138		.081			1.40	.62	3.95
.9 *	.156		.081			1.35	.37	4.15
.95*	.219		.140			1.25	.00	4.31
1.0 *	.281		.198			1.19	.20	3.86
1.05*	.346		.257			1.60	1.09	3.75
1.1 *	.346		.257			1.78	1.36	3.70
1.5 *	.300		.239			2.28	1.90	3.52
2.0	.255	.060	.195	.057	.138	2.38	2.06	3.28
2.5	.218	.054	.164	.049	.115	2.39	2.17	3.04
3.0	.192	.046	.146	.043	.103	2.39	2.25	2.83
3.5	.174	.039	.135	.039	.096	2.39	2.29	2.74
4.0	.157	.034	.123	.035	.089	2.39	2.30	2.72

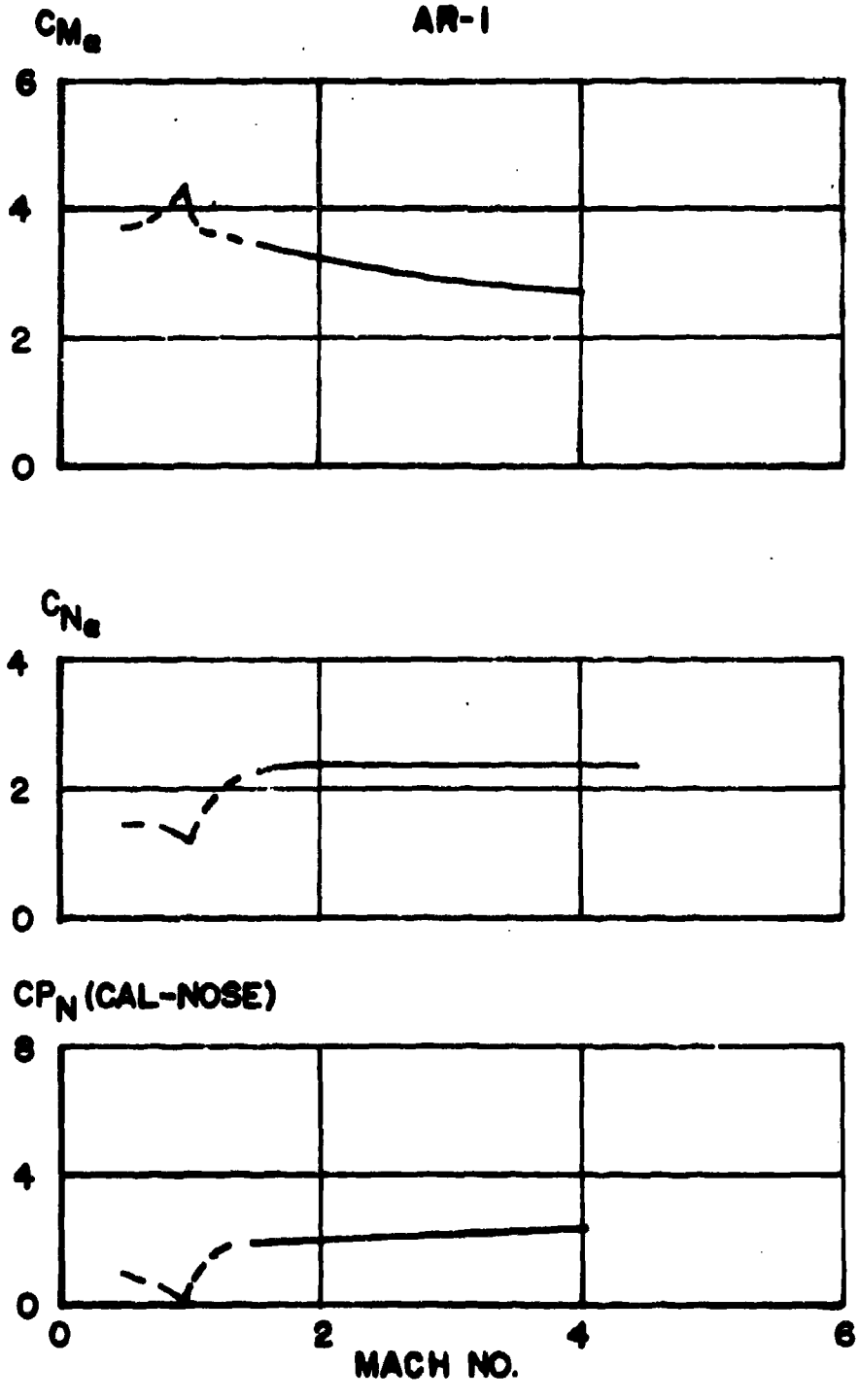
$C_{D_{\alpha^2}}$ (Mach = 2.5) = 2.40 (1/radian squared)

*Estimated data



AR-1-2

AR-1



TYPE AR 1 CALIBER 5.56 MM AVERAGE DENSITY 7.80 GRAMS/CC.
PROJ. WT 3.446 GRAMS PROJ. DIA. 5.56 MM IMPULSE 0.8 LB. SEC.
DRAG RDCR. WT. 0.000 GRAMS CHG. WT. 0.82 GRAMS SABOT WT. 0.000 GRAMS
TWIST RATE REV./ 5.8 IN. PCT. DRAG CHANGE / (DEG. YAW)**2 0.84

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	28.7	751	972	0.0
0	0.00	0.00	28.7	751	972	0.0
50	1.39	0.07	27.8	712	874	-0.4
100	2.73	0.14	26.8	674	783	-0.8
150	4.02	0.22	25.6	637	699	-1.1
200	5.24	0.30	24.3	600	621	-1.4
250	6.40	0.38	22.8	565	550	-1.8
300	7.49	0.48	21.3	531	485	-2.0
350	8.48	0.57	19.5	497	426	-2.3
400	9.38	0.68	17.6	465	373	-2.6
450	10.16	0.79	15.6	434	326	-2.8
500	10.81	0.91	13.4	404	284	-3.0
550	11.33	1.04	11.1	376	246	-3.2
600	11.75	1.17	8.7	349	213	-3.4
650	11.78	1.32	6.3	323	183	-3.5
700	11.68	1.48	3.8	299	157	-3.7
750	11.34	1.64	1.3	276	134	-3.8
800	10.71	1.81	-1.2	254	114	-3.9
850	9.79	1.97	-3.7	234	97	-4.0
900	8.56	2.17	-6.2	215	82	-4.1
950	6.98	2.36	-8.8	198	69	-4.2
1000	5.04	2.56	-11.4	182	58	-4.3
1050	2.72	2.76	-14.1	168	49	-4.4
1100	0.00	2.96	-16.9	154	41	-4.5

DRAG RDCR. WT. 0.151 GRAMS PCT. DRAG CHANGE / (DEG. YAW)**2 1.12

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	22.1	751	972	0.0
0	0.00	0.00	22.1	751	972	0.0
50	1.06	0.07	21.5	712	896	-0.3
100	2.08	0.14	20.7	674	823	-0.6
150	3.05	0.21	19.8	637	755	-0.9
200	3.96	0.29	18.7	601	690	-1.1
250	4.81	0.37	17.6	566	629	-1.4
300	5.59	0.45	16.3	532	573	-1.7
350	6.30	0.54	14.9	499	521	-1.9
400	6.93	0.64	13.4	468	474	-2.2
450	7.47	0.74	11.8	438	431	-2.4
500	7.91	0.84	10.1	409	392	-2.7
550	8.25	0.95	8.4	382	357	-2.9
600	8.45	1.06	6.6	356	325	-3.1
650	8.52	1.18	4.7	331	296	-3.3
700	8.44	1.31	2.8	308	270	-3.5
750	8.19	1.45	0.8	286	246	-3.7
800	7.74	1.60	-1.2	265	224	-3.9
850	7.08	1.74	-3.2	246	204	-4.1
900	6.20	1.90	-5.3	228	187	-4.3
950	5.06	2.06	-7.4	211	171	-4.5
1000	3.66	2.23	-9.5	196	157	-4.7
1050	1.98	2.40	-11.7	182	144	-4.9
1100	0.00	2.58	-13.9	169	132	-5.1

TYPE AR 1 CALIBER 5.56 MM AVERAGE DENSITY 7.80 GRAMS/CC.
PROJ. WT 3.446 GRAMS PROJ. DIA. 5.56 MM IMPULSE 1.2 LB. SEC.
DRAG RDCR. WT. 0.000 GRAMS CHG. WT. 1.55 GRAMS SABOT WT. 0.000 GRAMS
TWIST RATE REV./ 6.1 IN. PCT. DRAG CHANGE / (DEG. YAW)**2 0.84

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	13.5	1017	1782	0.0
0	0.00	0.00	13.5	1017	1782	0.0
50	0.65	0.05	13.0	975	1638	-0.4
100	1.28	0.10	12.5	933	1500	-0.8
150	1.87	0.16	11.9	892	1371	-1.2
200	2.44	0.21	11.2	851	1249	-1.6
250	2.98	0.28	10.5	811	1134	-2.0
300	3.47	0.34	9.7	771	1025	-2.4
350	3.93	0.40	8.8	732	924	-2.7
400	4.34	0.47	7.8	694	829	-3.1
450	4.70	0.55	6.7	656	742	-3.4
500	5.00	0.63	5.5	619	661	-3.7
550	5.24	0.71	4.1	583	586	-4.0
600	5.41	0.80	2.5	548	518	-4.2
650	5.50	0.89	0.8	515	456	-4.4
700	5.49	0.99	-1.3	482	400	-4.6
750	5.38	1.10	-3.6	450	349	-4.8
800	5.15	1.22	-6.2	420	304	-4.9
850	4.78	1.34	-9.2	391	263	-5.0
900	4.25	1.47	-12.8	363	227	-5.1
950	3.53	1.62	-16.8	336	195	-5.1
1000	2.60	1.77	-21.4	311	167	-5.2
1050	1.43	1.93	-26.5	286	142	-5.2
1100	0.00	2.09	-32.1	263	121	-5.1

DRAG RDCR. WT. 0.151 GRAMS PCT. DRAG CHANGE / (DEG. YAW)**2 1.12

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	10.0	1017	1782	0.0
0	0.00	0.00	10.0	1017	1782	0.0
50	0.48	0.05	9.5	985	1670	-0.3
100	0.93	0.10	9.0	953	1563	-0.6
150	1.36	0.15	8.4	922	1460	-0.9
200	1.76	0.21	7.8	890	1362	-1.2
250	2.13	0.27	7.2	860	1268	-1.5
300	2.47	0.33	6.5	829	1179	-1.8
350	2.77	0.39	5.7	799	1093	-2.1
400	3.03	0.45	4.9	768	1010	-2.4
450	3.25	0.52	4.0	738	932	-2.7
500	3.43	0.59	3.0	709	858	-3.0
550	3.56	0.66	2.0	679	787	-3.3
600	3.63	0.73	0.9	650	720	-3.5
650	3.65	0.81	-0.4	621	657	-3.7
700	3.61	0.90	-1.7	593	597	-4.0
750	3.49	0.98	-3.2	565	541	-4.2
800	3.30	1.07	-4.9	537	489	-4.4
850	3.02	1.17	-6.7	510	440	-4.6
900	2.65	1.27	-8.7	484	396	-4.8
950	2.18	1.38	-11.0	458	355	-4.9
1000	1.59	1.49	-13.5	434	318	-4.9
1050	0.87	1.61	-16.3	411	284	-5.0
1100	0.00	1.73	-19.4	388	253	-5.0

TYPE AR 1 CALIBER 5.56 MM AVERAGE DENSITY 7.80 GRAMS/CC.
PROJ. WT 3.446 GRAMS PROJ. DIA. 5.56 MM IMPULSE 2.1 LB. SEC.
DRAG RDCR. WT. 0.000 GRAMS CHG. WT. 3.61 GRAMS SABOT WT. 0.000 GRAMS
TWIST RATE REV./ 6.3 IN. PCT. DRAG CHANGE / (DEG. YAW)**2 0.84

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	5.5	1400	3377	0.0
0	0.00	0.00	5.5	1400	3377	0.0
50	0.26	0.04	5.2	1354	3157	-0.5
100	0.51	0.07	4.9	1308	2946	-0.9
150	0.75	0.11	4.6	1262	2744	-1.4
200	0.96	0.15	4.3	1217	2551	-1.8
250	1.17	0.20	3.9	1174	2368	-2.2
300	1.35	0.24	3.6	1128	2193	-2.6
350	1.52	0.28	3.1	1084	2026	-3.0
400	1.67	0.33	2.7	1042	1869	-3.4
450	1.79	0.38	2.2	999	1720	-3.8
500	1.89	0.43	1.7	957	1579	-4.2
550	1.97	0.48	1.1	916	1445	-4.6
600	2.01	0.54	0.5	875	1319	-4.9
650	2.03	0.60	-0.2	834	1200	-5.3
700	2.00	0.66	-0.9	794	1087	-5.6
750	1.94	0.72	-1.8	755	982	-5.9
800	1.84	0.79	-2.7	716	883	-6.3
850	1.69	0.86	-3.7	678	792	-6.6
900	1.49	0.94	-4.9	641	707	-6.8
950	1.23	1.02	-6.2	604	629	-7.0
1000	0.90	1.11	-7.6	569	557	-7.2
1050	0.49	1.20	-9.3	534	491	-7.4
1100	0.00	1.29	-11.1	501	432	-7.5

DRAG RDCR. WT. 0.151 GRAMS PCT. DRAG CHANGE / (DEG. YAW)**2 1.12

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	4.5	1400	3377	0.0
0	0.00	0.00	4.5	1400	3377	0.0
50	0.21	0.04	4.2	1363	3202	-0.4
100	0.41	0.07	3.9	1327	3032	-0.7
150	0.60	0.11	3.6	1291	2868	-1.1
200	0.77	0.15	3.3	1256	2711	-1.4
250	0.93	0.19	3.0	1220	2560	-1.8
300	1.07	0.23	2.6	1186	2414	-2.1
350	1.19	0.28	2.3	1151	2274	-2.4
400	1.30	0.32	1.9	1117	2140	-2.7
450	1.38	0.37	1.5	1084	2012	-3.0
500	1.45	0.41	1.0	1051	1890	-3.3
550	1.49	0.46	0.6	1018	1773	-3.6
600	1.51	0.51	0.1	986	1662	-3.9
650	1.51	0.56	-0.5	954	1554	-4.2
700	1.48	0.62	-1.0	922	1451	-4.4
750	1.42	0.67	-1.6	891	1353	-4.7
800	1.33	0.73	-2.3	859	1259	-5.0
850	1.20	0.79	-3.0	829	1170	-5.2
900	1.05	0.85	-3.7	798	1084	-5.5
950	0.85	0.91	-4.6	768	1002	-5.8
1000	0.61	0.98	-5.4	737	923	-6.0
1050	0.33	1.05	-6.4	707	849	-6.3
1100	0.00	1.12	-7.4	678	779	-6.5

TYPE AR 1 CALIBER 5.56 MM AVERAGE DENSITY 11.00 GRAMS/CC.
PROJ. WT 4.859 GRAMS PROJ. DIA. 5.56 MM IMPULSE 0.0 LB. SEC.
DRAG RDCR. WT. 0.000 GRAMS CHG. WT. 0.66 GRAMS SABOT WT. 0.000 GRAMS
TWIST RATE REV./ 6.6 IN. PCT. DRAG CHANGE / (DEG. YAW)**2 0.84

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	36.8	569	787	0.0
0	0.00	0.00	36.8	569	787	0.0
50	1.77	0.09	35.2	544	720	-0.2
100	3.45	0.18	33.4	520	658	-0.5
150	5.04	0.28	31.5	497	600	-0.7
200	6.54	0.39	29.3	474	546	-0.9
250	7.93	0.49	27.0	452	495	-1.1
300	9.19	0.61	24.4	430	449	-1.3
350	10.32	0.73	21.6	409	406	-1.5
400	11.31	0.85	18.4	388	366	-1.6
450	12.13	0.98	14.9	368	329	-1.8
500	12.78	1.12	11.1	350	298	-1.8
550	13.22	1.27	6.8	335	273	-1.7
600	13.45	1.42	2.2	322	252	-1.6
650	13.43	1.58	-2.8	311	234	-1.5
700	13.17	1.74	-8.2	301	220	-1.4
750	12.63	1.91	-13.9	292	207	-1.3
800	11.81	2.09	-19.9	283	197	-1.3
850	10.68	2.26	-26.2	276	188	-1.2
900	9.24	2.45	-32.8	272	180	-1.1
950	7.46	2.63	-39.7	266	172	-1.1
1000	5.34	2.82	-46.9	261	165	-1.1
1050	2.86	3.02	-54.4	255	158	-1.1
1100	0.00	3.21	-62.3	250	152	-1.2

DRAG RDCR. WT. 0.151 GRAMS PCT. DRAG CHANGE / (DEG. YAW)**2 1.12

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	31.1	569	787	0.0
0	0.00	0.00	31.1	569	787	0.0
50	1.49	0.09	29.5	550	733	-0.2
100	2.90	0.18	27.8	530	682	-0.4
150	4.22	0.28	25.9	511	633	-0.6
200	5.44	0.38	24.0	493	588	-0.7
250	6.57	0.48	21.8	475	545	-0.9
300	7.59	0.59	19.5	457	505	-1.0
350	8.49	0.70	17.0	440	467	-1.2
400	9.26	0.82	14.4	424	432	-1.3
450	9.90	0.94	11.5	407	399	-1.4
500	10.39	1.06	8.3	392	369	-1.6
550	10.72	1.19	5.0	377	340	-1.7
600	10.88	1.33	1.3	362	314	-1.7
650	10.85	1.47	-2.7	349	292	-1.7
700	10.62	1.61	-6.9	338	273	-1.6
750	10.18	1.76	-11.4	328	256	-1.5
800	9.51	1.92	-16.2	319	242	-1.5
850	8.59	2.08	-21.3	311	230	-1.4
900	7.43	2.24	-26.5	304	219	-1.3
950	6.00	2.41	-32.1	298	210	-1.2
1000	4.29	2.58	-37.8	292	202	-1.2
1050	2.29	2.75	-43.8	287	195	-1.1
1100	0.00	2.93	-50.0	283	184	-1.1

TYPE AR 1 CALIBER 5.56 MM AVERAGE DENSITY 11.00 GRAMS/CC.
PROJ. WT 4.859 GRAMS PROJ. DIA. 5.56 MM IMPULSE 1.2 LB. SEC.
DRAG RDCR. WT. 0.000 GRAMS CHG. WT. 1.28 GRAMS SABOT WT. 0.000 GRAMS
TWIST RATE REV./ 6.9 IN. PCT. DRAG CHANGE / (DEG. YAW)**2 0.84

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	18.0	788	1509	0.0
0	0.00	0.00	18.0	788	1509	0.0
50	0.86	0.06	17.2	760	1403	-0.3
100	1.69	0.13	16.3	732	1303	-0.6
150	2.47	0.20	15.3	705	1207	-0.8
200	3.19	0.27	14.3	678	1117	-1.1
250	3.87	0.35	13.3	651	1031	-1.3
300	4.49	0.43	11.9	625	950	-1.6
350	5.04	0.51	10.6	599	873	-1.8
400	5.53	0.59	9.1	574	801	-2.0
450	5.94	0.68	7.6	550	734	-2.2
500	6.28	0.78	5.8	525	671	-2.4
550	6.52	0.87	3.9	502	612	-2.6
600	6.67	0.98	1.9	479	557	-2.8
650	6.71	1.08	-0.4	456	506	-2.9
700	6.63	1.19	-3.0	435	459	-3.1
750	6.42	1.31	-5.7	413	415	-3.2
800	6.07	1.44	-8.8	393	374	-3.3
850	5.57	1.57	-12.2	375	337	-3.4
900	4.88	1.71	-16.0	354	305	-3.4
950	4.00	1.85	-20.2	338	278	-3.2
1000	2.90	2.00	-24.8	325	256	-2.9
1050	1.58	2.16	-29.7	313	238	-2.7
1100	0.00	2.32	-34.9	303	223	-2.4

DRAG RDCR. WT. 0.151 GRAMS PCT. DRAG CHANGE / (DEG. YAW)**2 1.12

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	14.7	788	1509	0.0
0	0.00	0.00	14.7	788	1509	0.0
50	0.70	0.06	13.9	767	1427	-0.2
100	1.37	0.13	13.0	745	1348	-0.4
150	1.98	0.20	12.1	724	1272	-0.6
200	2.56	0.27	11.1	704	1198	-0.8
250	3.08	0.34	10.1	683	1129	-1.0
300	3.55	0.42	9.0	662	1061	-1.2
350	3.96	0.49	7.8	642	996	-1.4
400	4.32	0.57	6.6	622	933	-1.6
450	4.61	0.65	5.2	601	873	-1.8
500	4.84	0.74	3.8	581	815	-2.0
550	4.99	0.82	2.3	562	760	-2.2
600	5.07	0.92	0.6	542	707	-2.3
650	5.06	1.01	-1.1	523	657	-2.5
700	4.96	1.11	-3.0	504	610	-2.6
750	4.77	1.21	-5.1	486	566	-2.8
800	4.47	1.31	-7.3	468	524	-2.9
850	4.06	1.42	-9.7	450	485	-3.0
900	3.53	1.54	-12.2	433	448	-3.1
950	2.87	1.65	-15.0	417	414	-3.2
1000	2.07	1.78	-18.0	401	383	-3.2
1050	1.12	1.90	-21.2	385	353	-3.3
1100	0.00	2.04	-24.7	370	325	-3.3

TYPE AR 1 CALIBER 5.56 MM AVERAGE DENSITY 11.00 GRAMS/CC.
PROJ. WT 4.859 GRAMS PROJ. DIA. 5.56 MM IMPULSE 2.1 LB. SEC.
DRAG RDCR. WT. 0.000 GRAMS CHG. WT. 3.05 GRAMS SABOT WT. 0.000 GRAMS
TWIST RATE REV./ 7.4 IN. PCT. DRAG CHANGE / (DEG. YAW)**2 0.84

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	6.6	1169	3320	0.0
0	0.00	0.00	6.6	1169	3320	0.0
50	0.31	0.04	6.2	1138	3144	-0.3
100	0.61	0.09	5.8	1107	2975	-0.6
150	0.89	0.13	5.4	1076	2812	-0.9
200	1.14	0.18	4.9	1045	2655	-1.2
250	1.37	0.23	4.5	1015	2504	-1.5
300	1.58	0.28	4.0	985	2359	-1.8
350	1.77	0.33	3.4	956	2219	-2.1
400	1.93	0.38	2.9	926	2084	-2.4
450	2.06	0.44	2.3	897	1955	-2.6
500	2.16	0.50	1.6	868	1831	-2.9
550	2.23	0.55	1.0	839	1712	-3.2
600	2.26	0.61	0.2	811	1598	-3.4
650	2.26	0.68	-0.6	783	1488	-3.7
700	2.21	0.74	-1.4	755	1384	-3.9
750	2.13	0.81	-2.3	727	1284	-4.2
800	1.99	0.88	-3.3	700	1190	-4.4
850	1.81	0.95	-4.4	673	1100	-4.6
900	1.58	1.03	-5.5	646	1015	-4.8
950	1.28	1.11	-6.8	620	935	-5.0
1000	0.93	1.19	-8.1	595	859	-5.2
1050	0.50	1.28	-9.6	570	788	-5.3
1100	0.00	1.37	-11.2	545	722	-5.5

DRAG RDCR. WT. 0.151 GRAMS PCT. DRAG CHANGE / (DEG. YAW)**2 1.12

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	5.7	1169	3320	0.0
0	0.00	0.00	5.7	1169	3320	0.0
50	0.27	0.04	5.3	1145	3182	-0.2
100	0.52	0.09	4.9	1121	3049	-0.5
150	0.75	0.13	4.5	1097	2919	-0.7
200	0.97	0.18	4.1	1073	2794	-0.9
250	1.16	0.23	3.6	1050	2673	-1.2
300	1.33	0.27	3.2	1027	2555	-1.4
350	1.48	0.32	2.7	1004	2441	-1.6
400	1.60	0.37	2.2	981	2331	-1.8
450	1.70	0.42	1.7	959	2223	-2.0
500	1.77	0.48	1.1	936	2119	-2.2
550	1.81	0.53	0.5	914	2018	-2.5
600	1.83	0.59	-0.1	892	1920	-2.7
650	1.81	0.64	-0.7	870	1826	-2.9
700	1.77	0.70	-1.4	848	1734	-3.0
750	1.68	0.76	-2.1	826	1645	-3.2
800	1.57	0.82	-2.9	805	1559	-3.5
850	1.41	0.89	-3.7	783	1476	-3.7
900	1.22	0.95	-4.5	762	1395	-3.9
950	0.98	1.02	-5.4	740	1317	-4.1
1000	0.70	1.09	-6.3	719	1242	-4.2
1050	0.38	1.16	-7.3	698	1169	-4.4
1100	0.00	1.23	-8.4	677	1100	-4.6

TYPE AR 1 CALIBER 5.56 MM AVERAGE DENSITY 16.70 GRAMS/CC.
PROJ. WT 7.377 GRAMS PROJ. DIA. 5.56 MM IMPULSE 0.8 LB. SEC.
DRAG RDCR. WT. 0.000 GRAMS CHG. WT. 0.47 GRAMS SABOT WT. 0.000 GRAMS
TWIST RATE REV./ 7.9 IN. PCT. DRAG CHANGE / (DEG. YAW)**2 0.84

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	52.2	406	608	0.0
0	0.00	0.00	52.2	406	608	0.0
50	2.49	0.13	49.1	392	568	-0.1
100	4.82	0.26	45.7	379	530	-0.3
150	6.98	0.39	42.1	366	494	-0.4
200	8.95	0.53	38.3	354	462	-0.5
250	10.73	0.67	34.4	343	433	-0.5
300	12.31	0.82	29.8	334	411	-0.6
350	13.66	0.97	25.2	328	395	-0.6
400	14.78	1.13	20.3	317	371	-0.6
450	15.65	1.29	15.2	310	354	-0.6
500	16.28	1.45	9.9	303	339	-0.7
550	16.63	1.62	4.4	297	326	-0.7
600	16.71	1.79	-1.4	292	314	-0.7
650	16.49	1.96	-7.4	287	303	-0.7
700	15.98	2.14	-13.6	282	293	-0.7
750	15.17	2.32	-20.0	278	284	-0.7
800	14.03	2.50	-26.5	274	276	-0.7
850	12.56	2.68	-33.3	270	269	-0.7
900	10.76	2.87	-40.3	266	261	-0.7
950	8.62	3.06	-47.4	263	254	-0.7
1000	6.15	3.25	-54.7	259	248	-0.7
1050	3.25	3.44	-62.3	256	241	-0.8
1100	0.00	3.64	-70.0	252	234	-0.8

DRAG RDCR. WT. 0.151 GRAMS PCT. DRAG CHANGE / (DEG. YAW)**2 1.12

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	47.4	406	608	0.0
0	0.00	0.00	47.4	406	608	0.0
50	2.25	0.12	44.3	396	577	-0.1
100	4.34	0.25	41.0	386	548	-0.2
150	6.27	0.38	37.5	376	519	-0.3
200	8.03	0.52	33.9	366	493	-0.4
250	9.60	0.66	30.1	357	468	-0.4
300	10.98	0.80	26.1	349	446	-0.5
350	12.16	0.94	21.9	341	427	-0.5
400	13.13	1.09	17.5	334	409	-0.5
450	13.88	1.24	12.9	328	393	-0.6
500	14.40	1.40	8.2	322	378	-0.6
550	14.68	1.55	3.3	316	366	-0.6
600	14.73	1.71	-1.8	311	354	-0.6
650	14.51	1.88	-7.0	307	343	-0.6
700	14.04	2.04	-12.4	302	333	-0.6
750	13.30	2.21	-18.0	298	323	-0.6
800	12.28	2.38	-23.7	295	315	-0.6
850	10.98	2.55	-29.5	291	307	-0.6
900	9.39	2.72	-35.5	288	300	-0.6
950	7.51	2.89	-41.6	285	293	-0.6
1000	5.32	3.07	-47.8	282	286	-0.6
1050	2.82	3.25	-54.2	279	278	-0.6
1100	0.00	3.43	-60.8	273	270	-0.6

TYPE AR 1 CALIBER 5.56 MM AVERAGE DENSITY 16.70 GRAMS/CC.
PROJ. WT 7.377 GRAMS PROJ. DIA. 5.56 MM IMPULSE 1.2 LB. SEC.
DRAG RDCR. WT. 0.000 GRAMS CHG. WT. 0.99 GRAMS SABOT WT. 0.000 GRAMS
TWIST RATE REV./ 8.1 IN. PCT. DRAG CHANGE / (DEG. YAW)**2 0.84

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	28.9	563	1169	0.0
0	0.00	0.00	28.9	563	1169	0.0
50	1.38	0.09	27.2	547	1103	-0.2
100	2.67	0.18	25.5	531	1039	-0.3
150	3.88	0.28	23.7	515	979	-0.5
200	5.00	0.38	21.7	500	921	-0.6
250	6.02	0.48	19.7	485	866	-0.8
300	6.93	0.58	17.5	470	813	-0.9
350	7.74	0.69	15.1	455	763	-1.0
400	8.42	0.80	12.7	440	715	-1.2
450	8.98	0.92	10.0	426	670	-1.3
500	9.41	1.04	7.1	412	627	-1.4
550	9.69	1.16	4.1	399	586	-1.5
600	9.81	1.29	0.9	385	547	-1.6
650	9.78	1.42	-2.6	372	511	-1.7
700	9.56	1.56	-6.4	360	477	-1.8
750	9.16	1.70	-10.4	348	448	-1.7
800	8.55	1.85	-14.6	338	422	-1.7
850	7.73	2.00	-19.1	329	400	-1.6
900	6.68	2.15	-23.8	321	380	-1.5
950	5.40	2.31	-28.8	313	362	-1.5
1000	3.86	2.47	-34.0	307	347	-1.4
1050	2.07	2.63	-39.4	300	333	-1.4
1100	0.00	2.80	-45.1	295	320	-1.3

DRAG RDCR. WT. 0.151 GRAMS PCT. DRAG CHANGE / (DEG. YAW)**2 1.12

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	25.5	563	1169	0.0
0	0.00	0.00	25.5	563	1169	0.0
50	1.21	0.09	23.9	550	1116	-0.1
100	2.35	0.18	22.2	537	1064	-0.3
150	3.40	0.28	20.5	525	1014	-0.4
200	4.36	0.37	18.6	512	966	-0.5
250	5.22	0.47	16.7	500	920	-0.6
300	5.99	0.57	14.6	488	875	-0.7
350	6.66	0.68	12.5	476	833	-0.8
400	7.22	0.78	10.2	465	792	-0.9
450	7.67	0.89	7.8	453	753	-1.0
500	7.99	1.00	5.3	442	715	-1.1
550	8.19	1.12	2.7	431	680	-1.2
600	8.26	1.24	0.0	420	646	-1.3
650	8.20	1.36	-3.0	410	613	-1.4
700	7.98	1.48	-6.0	399	582	-1.5
750	7.61	1.61	-9.2	389	552	-1.5
800	7.08	1.74	-12.6	379	524	-1.6
850	6.38	1.87	-16.2	369	497	-1.7
900	5.50	2.01	-19.9	360	471	-1.7
950	4.43	2.15	-23.9	351	449	-1.7
1000	3.17	2.29	-28.0	344	429	-1.6
1050	1.69	2.44	-32.4	336	411	-1.6
1100	0.00	2.59	-36.9	330	394	-1.5

TYPE AR 1 CALIBER 5.56 MM AVERAGE DENSITY 16.70 GRAMS/CC.
PROJ. WT 7.377 GRAMS PROJ. DIA. 5.56 MM IMPULSE 2.1 LB. SEC.
DRAG RDCR. WT. 0.000 GRAMS CHG. WT. 2.43 GRAMS SABOT WT. 0.000 GRAMS
TWIST RATE REV./ 8.7 IN. PCT. DRAG CHANGE / (DEG. YAW)**2 0.84

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	10.4	879	2850	0.0
0	0.00	0.00	10.4	879	2850	0.0
50	0.49	0.06	9.7	860	2728	-0.2
100	0.95	0.12	9.0	841	2610	-0.4
150	1.38	0.18	8.3	822	2494	-0.6
200	1.77	0.24	7.5	804	2382	-0.7
250	2.12	0.30	6.8	785	2273	-0.9
300	2.44	0.37	6.1	767	2168	-1.1
350	2.71	0.43	5.4	748	2065	-1.3
400	2.94	0.50	4.7	730	1966	-1.5
450	3.12	0.57	4.0	712	1870	-1.6
500	3.25	0.64	3.2	694	1777	-1.8
550	3.34	0.71	2.5	676	1688	-1.9
600	3.37	0.78	1.8	659	1602	-2.1
650	3.34	0.86	1.0	642	1518	-2.3
700	3.26	0.94	-0.2	624	1438	-2.4
750	3.11	1.02	-1.4	607	1361	-2.6
800	2.90	1.11	-3.8	591	1287	-2.7
850	2.62	1.19	-5.2	574	1216	-2.8
900	2.26	1.28	-6.6	558	1148	-3.0
950	1.83	1.37	-8.2	542	1082	-3.1
1000	1.31	1.47	-9.8	526	1020	-3.2
1050	0.70	1.56	-11.6	510	960	-3.3
1100	0.00	1.66	-13.5	495	904	-3.4

DRAG RDCR. WT. 0.151 GRAMS PCT. DRAG CHANGE / (DEG. YAW)**2 1.12

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	9.3	879	2850	0.0
0	0.00	0.00	9.3	879	2850	0.0
50	0.44	0.06	8.7	865	2756	-0.1
100	0.85	0.12	8.0	850	2665	-0.3
150	1.23	0.17	7.3	836	2576	-0.4
200	1.57	0.24	6.6	822	2488	-0.6
250	1.87	0.30	5.8	808	2402	-0.7
300	2.14	0.36	5.0	794	2317	-0.8
350	2.37	0.42	4.2	779	2235	-1.0
400	2.56	0.49	3.4	765	2154	-1.1
450	2.70	0.55	2.5	751	2075	-1.3
500	2.81	0.62	1.6	737	1998	-1.4
550	2.87	0.69	0.7	724	1922	-1.5
600	2.88	0.76	-0.3	710	1849	-1.7
650	2.85	0.83	-1.3	696	1777	-1.8
700	2.76	0.90	-2.4	682	1707	-1.9
750	2.62	0.98	-3.5	669	1639	-2.0
800	2.43	1.05	-4.6	655	1573	-2.2
850	2.18	1.13	-5.8	642	1508	-2.3
900	1.88	1.21	-7.0	628	1444	-2.4
950	1.51	1.29	-8.3	615	1383	-2.5
1000	1.07	1.37	-9.7	602	1323	-2.7
1050	0.57	1.45	-11.1	589	1265	-2.8
1100	0.00	1.54	-12.6	575	1208	-2.9

TYPE AR 1 CALIBER 6.50 MM AVERAGE DENSITY 7.80 GRAMS/CC.
PROJ. WT 5.507 GRAMS PROJ. DIA. 6.50 MM IMPULSE 0.8 LB. SEC.
DRAG RDCR. WT. 0.000 GRAMS CHG. WT. 0.61 GRAMS SABOT WT. 0.000 GRAMS
TWIST RATE REV./ 6.4 IN. PCT. DRAG CHANGE / (DEG. YAW)**2 0.84

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	49.4	514	727	0.0
0	0.00	0.00	49.4	514	727	0.0
50	2.38	0.10	47.4	486	650	-0.3
100	4.66	0.21	45.2	459	579	-0.5
150	6.81	0.32	42.7	432	514	-0.8
200	8.84	0.44	39.8	407	455	-1.0
250	10.72	0.57	36.6	382	402	-1.2
300	12.43	0.70	32.9	359	354	-1.4
350	13.95	0.84	28.8	339	316	-1.3
400	15.26	1.00	24.3	323	287	-1.3
450	16.33	1.15	19.2	309	263	-1.2
500	17.15	1.32	13.8	298	244	-1.2
550	17.69	1.49	8.0	288	228	-1.1
600	17.93	1.67	1.7	279	215	-1.0
650	17.86	1.85	-4.8	272	204	-1.0
700	17.46	2.03	-11.8	265	194	-1.0
750	16.71	2.23	-19.1	258	184	-1.0
800	15.59	2.42	-26.7	252	175	-1.1
850	14.09	2.62	-34.8	246	166	-1.1
900	12.17	2.83	-43.3	239	158	-1.1
950	9.83	3.04	-52.3	233	150	-1.2
1000	7.04	3.26	-61.7	227	142	-1.2
1050	3.77	3.48	-71.7	221	135	-1.3
1100	0.00	3.71	-82.1	216	128	-1.3

DRAG RDCR. WT. 0.241 GRAMS PCT. DRAG CHANGE / (DEG. YAW)**2 1.12

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	41.6	514	727	0.0
0	0.00	0.00	41.6	514	727	0.0
50	1.99	0.10	39.6	492	665	-0.2
100	3.89	0.20	37.4	470	606	-0.4
150	5.67	0.31	35.1	449	553	-0.6
200	7.33	0.43	32.5	429	503	-0.8
250	8.86	0.55	29.6	409	457	-1.0
300	10.24	0.67	26.5	390	415	-1.1
350	11.46	0.80	23.1	372	377	-1.3
400	12.50	0.94	19.3	355	343	-1.3
450	13.35	1.08	15.1	341	315	-1.3
500	13.99	1.23	10.7	329	292	-1.2
550	14.40	1.39	5.9	318	273	-1.2
600	14.57	1.55	0.8	309	256	-1.1
650	14.48	1.71	-4.6	301	242	-1.1
700	14.12	1.88	-10.3	293	231	-1.0
750	13.48	2.05	-16.2	287	220	-1.0
800	12.54	2.23	-22.4	282	211	-0.9
850	11.29	2.41	-28.8	277	203	-0.9
900	9.71	2.59	-35.5	272	196	-0.8
950	7.81	2.78	-42.5	268	190	-0.8
1000	5.56	2.97	-49.4	265	132	-0.9
1050	2.97	3.16	-56.7	258	175	-1.1
1100	0.00	3.35	-64.4	251	166	-1.1

TYPE AR 1 CALIBER 6.50 MM AVERAGE DENSITY 7.80 GRAMS/CC.
PROJ. WT 5.507 GRAMS PROJ. DIA. 6.50 MM IMPULSE 1.2 LB. SEC.
DRAG RDCR. WT. 0.000 GRAMS CHG. WT. 1.19 GRAMS SABOT WT. 0.000 GRAMS
TWIST RATE REV./ 6.7 IN. PCT. DRAG CHANGE / (DEG. YAW)**2 0.84

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	27.3	714	1404	0.0
0	0.00	0.00	27.3	714	1404	0.0
50	1.31	0.07	26.2	681	1278	-0.3
100	2.58	0.15	25.1	649	1161	-0.6
150	3.78	0.23	23.9	618	1051	-0.9
200	4.92	0.31	22.5	587	949	-1.2
250	5.99	0.40	21.0	557	854	-1.5
300	6.98	0.49	19.3	528	767	-1.7
350	7.88	0.59	17.4	499	686	-2.0
400	8.68	0.69	15.2	472	612	-2.2
450	9.38	0.80	12.9	445	545	-2.4
500	9.95	0.91	10.2	419	483	-2.6
550	10.38	1.04	7.1	394	427	-2.8
600	10.65	1.17	3.7	370	377	-2.9
650	10.75	1.31	-0.2	348	334	-2.9
700	10.64	1.46	-4.5	330	301	-2.6
750	10.30	1.61	-9.3	316	274	-2.3
800	9.73	1.77	-14.5	303	253	-2.1
850	8.88	1.94	-20.2	293	236	-1.9
900	7.75	2.11	-26.2	284	221	-1.7
950	6.31	2.29	-32.6	276	209	-1.6
1000	4.56	2.48	-39.4	269	199	-1.5
1050	2.46	2.67	-46.4	262	189	-1.4
1100	0.00	2.86	-53.9	255	180	-1.5

DRAG RDCR. WT. 0.241 GRAMS PCT. DRAG CHANGE / (DEG. YAW)**2 1.12

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	21.7	714	1404	0.0
0	0.00	0.00	21.7	714	1404	0.0
50	1.04	0.07	20.7	689	1306	-0.2
100	2.03	0.15	19.6	664	1212	-0.5
150	2.96	0.22	18.4	640	1123	-0.7
200	3.84	0.30	17.1	615	1037	-1.0
250	4.65	0.38	15.8	591	956	-1.2
300	5.39	0.47	14.3	567	879	-1.4
350	6.05	0.56	12.7	544	807	-1.6
400	6.63	0.66	10.9	520	738	-1.8
450	7.12	0.75	9.0	498	674	-2.0
500	7.52	0.86	6.9	476	615	-2.2
550	7.80	0.96	4.5	454	560	-2.3
600	7.97	1.08	2.0	434	510	-2.5
650	8.00	1.19	-0.8	414	464	-2.6
700	7.90	1.32	-3.8	395	421	-2.7
750	7.63	1.45	-7.2	376	382	-2.8
800	7.19	1.58	-10.9	359	346	-2.8
850	6.57	1.73	-15.0	344	317	-2.7
900	5.73	1.88	-19.4	331	293	-2.4
950	4.67	2.03	-24.1	320	273	-2.2
1000	3.37	2.19	-29.1	310	257	-2.0
1050	1.82	2.35	-34.5	302	242	-1.9
1100	0.00	2.52	-40.1	295	230	-1.7

TYPE AR 1 CALIBER 6.50 MM AVERAGE DENSITY 7.80 GRAMS/CC.
PROJ. WT 5.507 GRAMS PROJ. DIA. 6.50 MM IMPULSE 2.1 LB. SEC.
DRAG RDCR. WT. 0.000 GRAMS CHG. WT. 2.86 GRAMS SABOT WT. 0.000 GRAMS
TWIST RATE REV./ 7.2 IN. PCT. DRAG CHANGE / (DEG. YAW)**2 0.84

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	9.4	1081	3218	0.0
0	0.00	0.00	9.4	1081	3218	0.0
50	0.45	0.05	9.0	1044	3003	-0.4
100	0.88	0.10	8.5	1008	2798	-0.7
150	1.29	0.15	8.0	972	2602	-1.1
200	1.67	0.20	7.5	936	2414	-1.4
250	2.02	0.25	6.9	901	2235	-1.8
300	2.35	0.31	6.2	866	2065	-2.1
350	2.64	0.37	5.5	832	1904	-2.4
400	2.89	0.43	4.8	797	1751	-2.7
450	3.11	0.49	4.0	764	1605	-3.0
500	3.29	0.56	3.1	730	1468	-3.3
550	3.42	0.63	2.1	697	1338	-3.6
600	3.50	0.70	1.0	665	1217	-3.9
650	3.52	0.78	-0.2	633	1104	-4.1
700	3.49	0.86	-1.5	602	998	-4.4
750	3.39	0.95	-2.9	572	900	-4.6
800	3.21	1.04	-4.6	542	809	-4.8
850	2.95	1.13	-6.4	513	725	-4.9
900	2.59	1.23	-8.4	485	648	-5.1
950	2.13	1.34	-10.6	458	577	-5.2
1000	1.56	1.45	-13.1	432	513	-5.4
1050	0.85	1.57	-16.0	406	454	-5.5
1100	0.00	1.70	-19.2	382	401	-5.5

DRAG RDCR. WT. 0.241 GRAMS PCT. DRAG CHANGE / (DEG. YAW)**2 1.12

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	7.6	1081	3218	0.0
0	0.00	0.00	7.6	1081	3218	0.0
50	0.36	0.05	7.1	1053	3050	-0.3
100	0.70	0.10	6.7	1025	2889	-0.6
150	1.02	0.14	6.2	998	2734	-0.8
200	1.31	0.20	5.7	970	2585	-1.1
250	1.58	0.25	5.1	943	2440	-1.4
300	1.82	0.30	4.5	916	2301	-1.6
350	2.03	0.36	3.9	889	2167	-1.9
400	2.21	0.41	3.3	863	2038	-2.1
450	2.36	0.47	2.6	837	1914	-2.4
500	2.47	0.53	1.9	811	1795	-2.6
550	2.55	0.60	1.1	785	1680	-2.9
600	2.58	0.66	0.2	759	1570	-3.1
650	2.58	0.73	-0.7	733	1464	-3.3
700	2.53	0.80	-1.6	707	1362	-3.6
750	2.43	0.87	-2.7	682	1265	-3.8
800	2.27	0.94	-3.8	657	1173	-4.0
850	2.07	1.02	-5.0	632	1085	-4.2
900	1.80	1.10	-6.3	608	1001	-4.4
950	1.46	1.19	-7.7	583	921	-4.6
1000	1.05	1.27	-9.2	559	846	-4.8
1050	0.57	1.37	-10.9	536	775	-5.0
1100	0.00	1.46	-12.7	512	708	-5.1

TYPE AR 1 CALIBER 6.50 MM AVERAGE DENSITY 11.00 GRAMS/CC.
PROJ. WT 7.766 GRAMS PROJ. DIA. 6.50 MM IMPULSE 0.8 LB. SEC.
DRAG RDCR. WT. 0.000 GRAMS CHG. WT. 0.44 GRAMS SABOT WT. 0.000 GRAMS
TWIST RATE REV./ 7.5 IN. PCT. DRAG CHANGE / (DEG. YAW)**2 0.84

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	60.7	389	588	0.0
0	0.00	0.00	60.7	389	588	0.0
50	2.90	0.13	57.2	372	537	-0.2
100	5.62	0.27	53.4	356	492	-0.3
150	8.15	0.41	49.3	342	454	-0.4
200	10.46	0.56	44.9	330	422	-0.5
250	12.55	0.72	40.1	319	395	-0.5
300	14.40	0.88	35.1	309	372	-0.6
350	16.00	1.04	29.7	301	352	-0.6
400	17.32	1.21	24.0	293	334	-0.6
450	18.36	1.38	18.1	287	319	-0.6
500	19.09	1.56	11.9	281	306	-0.6
550	19.52	1.74	5.4	275	294	-0.6
600	19.63	1.92	-1.3	270	284	-0.6
650	19.40	2.11	-8.3	265	274	-0.6
700	18.82	2.30	-15.5	261	264	-0.7
750	17.88	2.49	-23.0	256	254	-0.7
800	16.57	2.69	-30.7	251	245	-0.7
850	14.86	2.89	-38.8	247	237	-0.8
900	12.76	3.09	-47.1	242	228	-0.8
950	10.24	3.30	-55.8	238	220	-0.9
1000	7.28	3.52	-64.8	234	212	-0.9
1050	3.87	3.73	-74.1	230	205	-0.9
1100	0.00	3.95	-83.8	225	197	-0.9

DRAG RDCR. WT. 0.241 GRAMS PCT. DRAG CHANGE / (DEG. YAW)**2 1.12

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	54.2	389	588	0.0
0	0.00	0.00	54.2	389	588	0.0
50	2.58	0.13	50.8	376	549	-0.1
100	4.99	0.27	47.1	364	512	-0.3
150	7.21	0.41	43.2	352	480	-0.3
200	9.23	0.55	39.1	342	452	-0.4
250	11.04	0.70	34.7	333	428	-0.4
300	12.64	0.85	30.1	325	407	-0.5
350	14.00	1.01	25.2	318	388	-0.5
400	15.12	1.17	20.2	311	371	-0.5
450	15.98	1.33	14.9	305	356	-0.5
500	16.58	1.49	9.4	300	343	-0.5
550	16.91	1.66	3.8	295	331	-0.6
600	16.96	1.83	-2.1	290	320	-0.6
650	16.71	2.01	-8.1	286	310	-0.6
700	16.16	2.18	-14.3	282	301	-0.6
750	15.31	2.36	-20.7	278	293	-0.6
800	14.14	2.54	-27.2	275	286	-0.6
850	12.64	2.73	-33.9	272	279	-0.6
900	10.81	2.91	-40.7	269	273	-0.6
950	8.65	3.10	-47.8	267	267	-0.6
1000	6.13	3.29	-55.0	264	262	-0.6
1050	3.25	3.48	-62.4	262	257	-0.7
1100	0.00	3.68	-70.1	252	239	-0.7

TYPE AR 1 CALIBER 6.50 MM AVERAGE DENSITY 11.00 GRAMS/CC.
PROJ. WT 7.766 GRAMS PROJ. DIA. 6.50 MM IMPULSE 1.2 LB. SEC.
DRAG RDCR. WT. 0.000 GRAMS CHG. WT. 0.95 GRAMS SABOT WT. 0.000 GRAMS
TWIST RATE REV./ 7.7 IN. PCT. DRAG CHANGE / (DEG. YAW)**2 0.84

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	36.6	540	1132	0.0
0	0.00	0.00	36.6	540	1132	0.0
50	1.76	0.09	34.8	519	1048	-0.2
100	3.42	0.19	32.9	499	968	-0.4
150	4.98	0.29	30.8	480	893	-0.6
200	6.45	0.40	28.6	460	823	-0.8
250	7.79	0.51	26.1	441	757	-0.9
300	9.01	0.63	23.4	423	695	-1.1
350	10.09	0.75	20.5	405	637	-1.3
400	11.02	0.88	17.3	388	583	-1.4
450	11.79	1.01	13.9	371	533	-1.5
500	12.39	1.15	10.0	355	489	-1.6
550	12.78	1.30	5.9	341	451	-1.6
600	12.97	1.44	1.3	329	420	-1.5
650	12.93	1.59	-3.3	318	394	-1.4
700	12.63	1.73	-8.4	309	371	-1.3
750	12.11	1.92	-13.8	301	351	-1.3
800	11.30	2.06	-19.4	293	334	-1.2
850	10.20	2.26	-25.4	287	319	-1.2
900	8.81	2.43	-31.6	281	306	-1.1
950	7.11	2.61	-38.1	275	294	-1.1
1000	5.08	2.80	-44.8	270	284	-1.0
1050	2.71	2.98	-51.8	266	274	-1.0
1100	0.00	3.18	-59.0	261	264	-1.0

DRAG RDCR. WT. 0.241 GRAMS PCT. DRAG CHANGE / (DEG. YAW)**2 1.12

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	31.6	540	1132	0.0
0	0.00	0.00	31.6	540	1132	0.0
50	1.51	0.09	29.9	524	1064	-0.2
100	2.93	0.18	28.0	508	998	-0.3
150	4.26	0.28	26.0	492	936	-0.5
200	5.48	0.38	23.8	476	877	-0.6
250	6.60	0.49	21.5	461	822	-0.7
300	7.60	0.61	19.1	446	769	-0.9
350	8.48	0.73	16.6	432	720	-1.0
400	9.23	0.86	13.8	418	673	-1.1
450	9.84	0.99	10.8	404	629	-1.2
500	10.30	1.13	7.5	391	587	-1.3
550	10.59	1.28	4.0	378	548	-1.4
600	10.72	1.43	0.2	366	511	-1.5
650	10.67	1.59	-3.8	354	476	-1.5
700	10.41	1.76	-7.9	344	443	-1.5
750	9.96	1.93	-12.4	334	413	-1.5
800	9.30	2.11	-17.2	326	385	-1.5
850	8.42	2.30	-22.3	319	360	-1.5
900	7.32	2.50	-27.8	312	337	-1.5
950	5.98	2.71	-33.6	306	316	-1.4
1000	4.38	2.93	-39.8	300	297	-1.3
1050	2.52	3.16	-46.4	295	279	-1.2
1100	0.00	3.42	-53.4	291	263	-1.1

TYPE AR 1 CALIBER 6.50 MM AVERAGE DENSITY 11.00 GRAMS/CC.
PROJ. WT 7.766 GRAMS PROJ. DIA. 6.50 MM IMPULSE 2.1 LB. SEC.
DRAG RDCR. WT. 0.000 GRAMS CHG. WT. 2.36 GRAMS SABOT WT. 0.000 GRAMS
TWIST RATE REV./ 8.2 IN. PCT. DRAG CHANGE / (DEG. YAW)**2 0.84

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	13.3	846	2779	0.0
0	0.00	0.00	13.3	846	2779	0.0
50	0.63	0.06	12.5	822	2621	-0.2
100	1.23	0.12	11.8	797	2469	-0.5
150	1.79	0.19	11.0	773	2322	-0.7
200	2.31	0.25	10.1	749	2181	-1.0
250	2.78	0.32	9.2	726	2046	-1.2
300	3.21	0.39	8.2	702	1916	-1.4
350	3.59	0.46	7.2	679	1792	-1.6
400	3.92	0.54	6.0	657	1674	-1.8
450	4.18	0.61	4.8	634	1562	-2.0
500	4.40	0.69	3.5	612	1454	-2.2
550	4.54	0.78	2.2	590	1353	-2.4
600	4.62	0.86	0.7	569	1256	-2.6
650	4.62	0.95	-0.9	548	1165	-2.7
700	4.53	1.05	-2.7	527	1079	-2.9
750	4.36	1.14	-4.5	507	998	-3.0
800	4.10	1.24	-6.6	487	921	-3.2
850	3.73	1.35	-8.7	468	849	-3.3
900	3.25	1.46	-11.1	449	782	-3.5
950	2.65	1.57	-13.7	430	718	-3.6
1000	1.91	1.69	-16.5	412	659	-3.7
1050	1.04	1.81	-19.6	394	604	-3.8
1100	0.00	1.94	-23.0	377	552	-3.8

DRAG RDCR. WT. 0.241 GRAMS PCT. DRAG CHANGE / (DEG. YAW)**2 1.12

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	11.3	846	2779	0.0
0	0.00	0.00	11.3	846	2779	0.0
50	0.54	0.06	10.6	828	2658	-0.2
100	1.04	0.12	9.9	809	2539	-0.4
150	1.51	0.18	9.1	791	2424	-0.5
200	1.94	0.25	8.3	772	2311	-0.7
250	2.32	0.31	7.4	754	2202	-0.9
300	2.67	0.38	6.5	736	2096	-1.1
350	2.97	0.45	5.6	718	1993	-1.3
400	3.22	0.52	4.6	700	1894	-1.4
450	3.43	0.59	3.5	683	1798	-1.6
500	3.57	0.67	2.4	665	1705	-1.8
550	3.67	0.74	1.3	647	1615	-1.9
600	3.70	0.82	0.0	630	1528	-2.1
650	3.68	0.90	-1.2	613	1444	-2.2
700	3.59	0.98	-2.6	595	1362	-2.4
750	3.43	1.07	-4.1	578	1284	-2.6
800	3.20	1.16	-5.6	561	1209	-2.7
850	2.89	1.25	-7.2	545	1137	-2.8
900	2.50	1.34	-9.0	528	1068	-3.0
950	2.02	1.44	-10.8	512	1001	-3.1
1000	1.45	1.54	-12.8	496	936	-3.3
1050	0.78	1.64	-14.9	480	874	-3.3
1100	0.00	1.74	-17.1	465	813	-3.4

TYPE AR 1 CALIBER 6.50 MM AVERAGE DENSITY 16.70 GRAMS/CC.
PROJ. WT 11.790 GRAMS PROJ. DIA. 6.50 MM IMPULSE 0.8 LB. SEC.
DRAG RDCR. WT. 0.000 GRAMS CHG. WT. 0.28 GRAMS SABOT WT. 0.000 GRAMS
TWIST RATE NA PCT. DRAG CHANGE / (DEG. YAW)**2 0.84

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	83.2	283	472	0.0
0	0.00	0.00	83.2	283	472	0.0
50	3.94	0.18	76.9	279	459	0.0
100	7.56	0.36	70.4	275	447	-0.1
150	10.86	0.54	63.7	272	436	-0.1
200	13.82	0.73	56.9	269	425	-0.1
250	16.44	0.92	49.9	265	415	-0.2
300	18.72	1.11	42.7	262	405	-0.2
350	20.63	1.30	35.3	259	395	-0.2
400	22.19	1.49	27.8	256	386	-0.2
450	23.36	1.69	20.1	253	376	-0.3
500	24.15	1.89	12.1	250	367	-0.3
550	24.55	2.09	4.0	247	358	-0.3
600	24.55	2.29	-4.3	244	350	-0.4
650	24.13	2.50	-12.8	241	341	-0.4
700	23.29	2.71	-21.6	238	333	-0.4
750	22.02	2.92	-30.5	235	325	-0.4
800	20.30	3.14	-39.7	232	317	-0.5
850	18.12	3.35	-49.1	229	310	-0.5
900	15.48	3.57	-58.7	227	303	-0.5
950	12.36	3.79	-68.5	224	295	-0.5
1000	8.75	4.02	-78.6	221	289	-0.6
1050	4.63	4.25	-88.9	219	282	-0.6
1100	0.00	4.48	-99.5	216	275	-0.6

DRAG RDCR. WT. 0.241 GRAMS PCT. DRAG CHANGE / (DEG. YAW)**2 1.12

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	77.2	283	472	0.0
0	0.00	0.00	77.2	283	472	0.0
50	3.64	0.18	70.9	280	463	0.0
100	6.97	0.36	64.5	278	455	0.0
150	9.98	0.54	58.0	276	447	-0.1
200	12.67	0.72	51.4	274	439	-0.1
250	15.03	0.90	44.7	272	432	-0.1
300	17.06	1.09	37.9	270	425	-0.1
350	18.75	1.28	30.9	268	419	-0.1
400	20.09	1.46	23.9	266	412	-0.2
450	21.09	1.65	16.8	264	406	-0.2
500	21.74	1.84	9.6	262	399	-0.2
550	22.03	2.03	2.4	260	393	-0.2
600	21.96	2.22	-5.2	258	387	-0.2
650	21.52	2.43	-12.8	256	381	-0.2
700	20.71	2.62	-20.4	255	375	-0.3
750	19.52	2.81	-28.2	253	370	-0.3
800	17.95	3.01	-36.2	252	366	-0.3
850	15.98	3.21	-44.1	249	358	-0.3
900	13.62	3.42	-52.3	246	349	-0.3
950	10.85	3.62	-60.7	243	341	-0.3
1000	7.67	3.83	-69.2	240	333	-0.3
1050	4.05	4.04	-78.0	237	325	-0.4
1100	0.00	4.25	-87.0	234	317	-0.4

TYPE AR 1 CALIBER 6.50 MM AVERAGE DENSITY 16.70 GRAMS/CC.
PROJ. WT 11.790 GRAMS PROJ. DIA. 6.50 MM IMPULSE 1.2 LB. SEC.
DRAG RDCR. WT. 0.000 GRAMS CHG. WT. 0.66 GRAMS SABOT WT. 0.000 GRAMS
TWIST RATE REV./ 9.2 IN. PCT. DRAG CHANGE / (DEG. YAW)**2 0.84

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	53.4	386	878	0.0
0	0.00	0.00	53.4	386	878	0.0
50	2.54	0.13	50.0	375	828	-0.1
100	4.91	0.27	46.3	364	780	-0.2
150	7.09	0.41	42.4	354	737	-0.3
200	9.07	0.55	38.3	344	699	-0.4
250	10.85	0.70	34.0	336	665	-0.4
300	12.41	0.85	29.5	328	635	-0.5
350	13.74	1.00	24.7	321	608	-0.5
400	14.84	1.16	19.8	315	583	-0.5
450	15.68	1.32	14.6	309	561	-0.5
500	16.27	1.48	9.2	303	541	-0.6
550	16.59	1.65	3.7	298	523	-0.6
600	16.64	1.82	-2.0	293	506	-0.6
650	16.40	1.99	-7.9	289	491	-0.6
700	15.87	2.17	-14.0	284	477	-0.6
750	15.03	2.34	-20.3	281	464	-0.6
800	13.88	2.52	-26.7	277	452	-0.6
850	12.42	2.71	-33.3	274	441	-0.6
900	10.62	2.89	-40.1	270	431	-0.6
950	8.49	3.08	-47.0	267	421	-0.6
1000	6.01	3.26	-54.0	264	411	-0.6
1050	3.19	3.45	-61.3	261	402	-0.7
1100	0.00	3.65	-68.7	258	393	-0.7

DRAG RDCR. WT. 0.241 GRAMS PCT. DRAG CHANGE / (DEG. YAW)**2 1.12

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	49.2	386	878	0.0
0	0.00	0.00	49.2	386	878	0.0
50	2.33	0.13	45.8	378	839	-0.1
100	4.49	0.27	42.2	369	802	-0.2
150	6.47	0.40	38.4	361	767	-0.2
200	8.26	0.54	34.5	354	735	-0.3
250	9.86	0.69	30.4	347	706	-0.3
300	11.25	0.83	26.2	341	680	-0.4
350	12.43	0.98	21.8	335	656	-0.4
400	13.40	1.13	17.3	329	634	-0.4
450	14.13	1.28	12.6	324	613	-0.5
500	14.64	1.44	7.8	319	594	-0.5
550	14.90	1.60	2.8	315	577	-0.5
600	14.91	1.76	-2.3	310	561	-0.5
650	14.67	1.92	-7.6	306	546	-0.5
700	14.17	2.08	-13.0	303	532	-0.5
750	13.40	2.25	-18.5	299	519	-0.5
800	12.36	2.42	-24.2	296	507	-0.5
850	11.04	2.59	-29.9	293	496	-0.5
900	9.43	2.76	-35.8	290	486	-0.5
950	7.53	2.93	-41.9	288	464	-0.5
1000	5.32	3.11	-48.0	284	466	-0.6
1050	2.82	3.29	-54.3	280	454	-0.6
1100	0.00	3.47	-60.7	277	442	-0.6

TYPE AR 1 CALIBER 6.50 MM AVERAGE DENSITY 16.70 GRAMS/CC.
PROJ. WT 11.790 GRAMS PROJ. DIA. 6.50 MM IMPULSE 2.1 LB. SEC.
DRAG RDCR. WT. 0.000 GRAMS CHG. WT. 1.83 GRAMS SABOT WT. 0.000 GRAMS
TWIST RATE REV./ 9.6 IN. PCT. DRAG CHANGE / (DEG. YAW)**2 0.84

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	22.5	607	2172	0.0
0	0.00	0.00	22.5	607	2172	0.0
50	1.07	0.08	21.1	593	2070	-0.1
100	2.07	0.17	19.7	578	1972	-0.3
150	3.00	0.26	18.1	564	1878	-0.4
200	3.85	0.35	16.5	550	1786	-0.6
250	4.62	0.44	14.8	537	1699	-0.7
300	5.31	0.53	13.0	523	1614	-0.8
350	5.91	0.63	11.2	510	1533	-0.9
400	6.41	0.73	9.2	497	1455	-1.0
450	6.81	0.83	7.1	484	1380	-1.2
500	7.11	0.94	4.9	471	1308	-1.3
550	7.30	1.04	2.6	458	1239	-1.4
600	7.37	1.15	0.2	446	1173	-1.5
650	7.32	1.27	-2.4	434	1109	-1.6
700	7.14	1.38	-5.1	422	1048	-1.7
750	6.83	1.50	-8.0	410	990	-1.8
800	6.36	1.63	-11.1	398	935	-1.9
850	5.75	1.76	-14.3	387	882	-2.0
900	4.97	1.89	-17.8	376	832	-2.0
950	4.01	2.02	-21.4	365	784	-2.1
1000	2.87	2.16	-25.3	355	741	-2.1
1050	1.54	2.30	-29.4	345	703	-2.1
1100	0.00	2.45	-33.7	337	669	-2.0

DRAG RDCR. WT. 0.241 GRAMS PCT. DRAG CHANGE / (DEG. YAW)**2 1.12

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	20.4	607	2172	0.0
0	0.00	0.00	20.4	607	2172	0.0
50	0.97	0.08	19.0	596	2091	-0.1
100	1.86	0.17	17.5	585	2012	-0.2
150	2.69	0.25	16.0	573	1935	-0.3
200	3.44	0.34	14.5	562	1860	-0.4
250	4.11	0.43	12.9	551	1787	-0.5
300	4.71	0.52	11.2	541	1716	-0.7
350	5.22	0.62	9.5	530	1647	-0.8
400	5.64	0.71	7.6	519	1580	-0.9
450	5.97	0.81	5.8	508	1515	-1.0
500	6.21	0.91	3.8	498	1453	-1.0
550	6.35	1.01	1.7	488	1392	-1.1
600	6.38	1.11	-0.4	477	1334	-1.2
650	6.31	1.22	-2.7	467	1277	-1.3
700	6.13	1.33	-5.0	458	1223	-1.4
750	5.83	1.44	-7.4	448	1171	-1.5
800	5.41	1.55	-10.0	438	1121	-1.5
850	4.86	1.67	-12.6	429	1072	-1.6
900	4.18	1.79	-15.4	420	1026	-1.7
950	3.36	1.91	-18.3	411	981	-1.7
1000	2.39	2.03	-21.3	402	938	-1.8
1050	1.28	2.15	-24.5	393	897	-1.9
1100	0.00	2.28	-27.8	384	857	-1.9

TYPE AR 1 CALIBER 7.62 MM AVERAGE DENSITY 7.80 GRAMS/CC.

PROJ. WT 8.869 GRAMS PROJ. DIA. 7.62 MM IMPULSE 0.8 LB. SEC.

DRAG RDCR. WT. 0.000 GRAMS CHG. WT. 0.37 GRAMS SABOT WT. 0.000 GRAMS

TWIST RATE REV./ 7.3 IN. PCT. DRAG CHANGE / (DEG. YAW)**2 0.84

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	73.3	351	546	0.0
0	0.00	0.00	73.3	351	546	0.0
50	3.50	0.15	69.1	335	498	-0.1
100	6.78	0.30	64.4	322	458	-0.3
150	9.83	0.46	59.4	310	426	-0.3
200	12.62	0.62	54.0	300	399	-0.4
250	15.13	0.79	48.3	291	375	-0.4
300	17.35	0.97	42.2	283	356	-0.5
350	19.27	1.15	35.8	276	339	-0.5
400	20.87	1.33	29.1	270	324	-0.5
450	22.13	1.52	22.1	264	310	-0.5
500	23.04	1.71	14.8	259	297	-0.6
550	23.59	1.90	7.2	253	284	-0.6
600	23.75	2.10	-0.8	247	271	-0.7
650	23.51	2.31	-9.1	242	260	-0.7
700	22.85	2.52	-17.9	237	248	-0.8
750	21.76	2.73	-27.0	231	238	-0.8
800	20.20	2.95	-36.5	226	227	-0.8
850	18.17	3.17	-46.5	221	217	-0.9
900	15.64	3.40	-56.9	216	208	-0.9
950	12.58	3.63	-67.8	211	199	-0.9
1000	8.97	3.87	-79.2	207	190	-1.0
1050	4.79	4.12	-91.2	202	182	-1.0
1100	0.00	4.37	-103.6	198	174	-1.0

DRAG RDCR. WT. 0.389 GRAMS PCT. DRAG CHANGE / (DEG. YAW)**2 1.12

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	64.2	351	546	0.0
0	0.00	0.00	64.2	351	546	0.0
50	3.05	0.15	60.0	339	509	-0.1
100	5.89	0.30	55.5	329	477	-0.2
150	8.51	0.45	50.8	320	450	-0.3
200	10.88	0.61	45.8	311	426	-0.3
250	13.00	0.77	40.5	304	406	-0.3
300	14.85	0.94	35.0	298	388	-0.4
350	16.43	1.11	29.2	292	372	-0.4
400	17.72	1.28	23.2	287	357	-0.4
450	18.71	1.46	17.0	282	345	-0.4
500	19.39	1.64	10.6	278	335	-0.4
550	19.76	1.82	4.1	274	323	-0.4
600	19.79	2.00	-2.7	270	314	-0.4
650	19.50	2.19	-9.6	266	305	-0.5
700	18.85	2.38	-16.8	263	296	-0.5
750	17.85	2.57	-24.1	260	288	-0.5
800	16.49	2.76	-31.6	256	279	-0.5
850	14.75	2.96	-39.3	253	271	-0.6
900	12.63	3.16	-47.4	250	266	-0.8
950	10.11	3.36	-55.6	245	254	-0.8
1000	7.18	3.57	-64.1	239	243	-0.9
1050	3.81	3.78	-73.0	234	232	-0.9
1100	0.00	4.00	-82.4	229	221	-0.9

TYPE AR 1 CALIBER 7.62 MM AVERAGE DENSITY 7.80 GRAMS/CC.
PROJ. WT 8.869 GRAMS PROJ. DIA. 7.62 MM IMPULSE 1.2 LB. SEC.
DRAG RDCR. WT. 0.000 GRAMS CHG. WT. 0.86 GRAMS SABOT WT. 0.000 GRAMS
TWIST RATE REV./ 7.5 IN. PCT. DRAG CHANGE / (DEG. YAW)**2 0.84

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	48.9	485	1043	0.0
0	0.00	0.00	48.9	485	1043	0.0
50	2.35	0.11	46.7	462	945	-0.2
100	4.58	0.22	44.2	439	854	-0.4
150	6.69	0.33	41.5	417	771	-0.7
200	8.66	0.46	38.5	395	693	-0.8
250	10.47	0.59	35.1	375	623	-1.0
300	12.10	0.72	31.3	355	560	-1.1
350	13.54	0.87	27.2	339	509	-1.1
400	14.77	1.02	22.9	325	468	-1.1
450	15.77	1.18	17.7	313	434	-1.1
500	16.51	1.34	12.4	302	406	-1.0
550	16.99	1.51	6.8	293	382	-1.0
600	17.18	1.68	0.8	285	361	-1.0
650	17.07	1.86	-5.5	278	344	-0.9
700	16.65	2.04	-12.1	272	328	-0.9
750	15.89	2.23	-19.0	266	314	-0.9
800	14.79	2.42	-26.2	261	301	-0.9
850	13.33	2.61	-33.7	255	288	-1.0
900	11.49	2.81	-41.5	249	276	-1.0
950	9.25	3.01	-49.7	244	264	-1.0
1000	6.61	3.22	-58.3	239	253	-1.1
1050	3.53	3.43	-67.3	234	242	-1.1
1100	0.00	3.65	-76.6	229	232	-1.2

DRAG RDCR. WT. 0.389 GRAMS PCT. DRAG CHANGE / (DEG. YAW)**2 1.12

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	42.1	485	1043	0.0
0	0.00	0.00	42.1	485	1043	0.0
50	2.01	0.11	39.9	467	964	-0.2
100	3.92	0.21	37.5	449	891	-0.4
150	5.70	0.33	34.9	432	822	-0.5
200	7.35	0.45	32.2	415	758	-0.7
250	8.85	0.57	29.1	398	698	-0.8
300	10.21	0.70	25.9	383	643	-0.9
350	11.39	0.83	22.3	367	591	-1.1
400	12.40	0.97	18.4	353	546	-1.1
450	13.20	1.11	14.3	341	508	-1.1
500	13.80	1.26	9.9	330	475	-1.1
550	14.17	1.42	5.1	321	448	-1.0
600	14.31	1.57	0.2	313	424	-1.0
650	14.19	1.74	-5.1	305	403	-1.0
700	13.82	1.90	-10.6	299	385	-0.9
750	13.16	2.07	-16.3	293	368	-0.9
800	12.22	2.24	-22.2	287	354	-0.9
850	10.99	2.42	-28.4	283	341	-0.8
900	9.44	2.60	-34.7	278	330	-0.8
950	7.58	2.78	-41.3	274	320	-0.8
1000	5.39	2.96	-48.1	272	238	-0.6
1050	2.87	3.15	-55.0	266	300	-0.9
1100	0.00	3.34	-62.2	260	287	-0.9

TYPE AR 1 CALIBER 7.62 MM AVERAGE DENSITY 7.80 GRAMS/CC.
PROJ. WT 8.869 GRAMS PROJ. DIA. 7.62 MM IMPULSE 2.1 LB. SEC.
DRAG RDCR. WT. 0.000 GRAMS CHG. WT. 2.18 GRAMS SABOT WT. 0.000 GRAMS
TWIST RATE REV./ 7.9 IN. PCT. DRAG CHANGE / (DEG. YAW)**2 0.84

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	20.1	763	2582	0.0
0	0.00	0.00	20.1	763	2582	0.0
50	0.96	0.07	19.2	734	2392	-0.3
100	1.88	0.14	18.2	706	2212	-0.6
150	2.75	0.21	17.2	678	2041	-0.8
200	3.57	0.28	16.0	651	1880	-1.1
250	4.32	0.36	14.8	624	1728	-1.3
300	5.02	0.44	13.5	598	1585	-1.6
350	5.65	0.53	12.0	572	1450	-1.8
400	6.20	0.62	10.4	547	1324	-2.0
450	6.67	0.71	8.6	522	1207	-2.2
500	7.05	0.81	6.7	498	1098	-2.4
550	7.33	0.91	4.6	474	997	-2.6
600	7.51	1.02	2.3	451	902	-2.8
650	7.56	1.14	-0.3	429	815	-2.9
700	7.48	1.26	-3.2	407	735	-3.1
750	7.25	1.38	-6.4	386	661	-3.2
800	6.86	1.51	-9.9	366	593	-3.3
850	6.29	1.66	-13.8	346	531	-3.2
900	5.51	1.80	-18.2	327	474	-3.0
950	4.51	1.96	-23.0	309	423	-2.7
1000	3.27	2.14	-28.0	292	377	-2.4
1050	1.77	2.28	-34.4	275	335	-2.2
1100	0.00	2.45	-39.2	260	299	-2.0

DRAG RDCR. WT. 0.389 GRAMS PCT. DRAG CHANGE / (DEG. YAW)**2 1.12

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	16.3	763	2582	0.0
0	0.00	0.00	16.3	763	2582	0.0
50	0.78	0.07	15.4	741	2434	-0.2
100	1.51	0.13	14.5	720	2292	-0.4
150	2.20	0.21	13.5	698	2155	-0.6
200	2.84	0.28	12.4	677	2023	-0.8
250	3.42	0.35	11.3	656	1897	-1.0
300	3.95	0.43	10.1	636	1775	-1.3
350	4.42	0.51	8.8	616	1659	-1.5
400	4.82	0.59	7.4	596	1547	-1.6
450	5.14	0.68	6.0	577	1440	-1.8
500	5.41	0.77	4.4	558	1338	-2.0
550	5.59	0.86	2.7	540	1241	-2.2
600	5.68	0.96	0.9	522	1150	-2.4
650	5.68	1.06	-1.1	504	1063	-2.5
700	5.58	1.16	-3.3	487	980	-2.7
750	5.37	1.27	-5.7	470	902	-2.8
800	5.04	1.38	-8.3	454	829	-2.9
850	4.59	1.49	-11.0	438	760	-3.0
900	4.00	1.62	-13.9	422	696	-3.1
950	3.25	1.74	-16.9	407	636	-3.2
1000	2.33	1.87	-20.0	392	580	-3.2
1050	1.27	2.01	-24.0	378	528	-3.1
1100	0.00	2.15	-28.1	364	480	-3.0

TYPE AR 1 CALIBER 7.62 MM AVERAGE DENSITY 11.00 GRAMS/CC.
PROJ. WT 12.507 GRAMS PROJ. DIA. 7.62 MM IMPULSE 0.8 LB. SEC.
DRAG RDCR. WT. 0.000 GRAMS CHG. WT. 0.28 GRAMS SABOT WT. 0.000 GRAMS
TWIST RATE NA PCT. DRAG CHANGE / (DEG. YAW)**2 0.84

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	96.1	271	459	0.0
0	0.00	0.00	96.1	271	459	0.0
50	4.56	0.19	89.2	267	445	0.0
100	8.77	0.38	82.1	262	431	-0.1
150	12.63	0.57	74.7	258	417	-0.1
200	16.12	0.76	67.1	254	404	-0.2
250	19.22	0.96	59.2	250	391	-0.2
300	21.93	1.17	51.1	246	378	-0.2
350	24.24	1.37	42.7	242	366	-0.3
400	26.13	1.58	34.0	238	355	-0.3
450	27.58	1.79	25.1	234	343	-0.3
500	28.59	2.01	15.9	231	332	-0.4
550	29.14	2.22	6.3	227	322	-0.4
600	29.21	2.45	-3.6	223	312	-0.4
650	28.79	2.67	-13.7	220	302	-0.5
700	27.86	2.90	-24.3	216	292	-0.5
750	26.41	3.14	-35.1	213	283	-0.5
800	24.41	3.37	-46.3	209	274	-0.6
850	21.86	3.61	-57.9	206	266	-0.6
900	18.72	3.86	-69.8	203	257	-0.6
950	14.99	4.11	-82.2	200	250	-0.6
1000	10.64	4.36	-94.9	197	242	-0.7
1050	5.65	4.62	-108.0	194	235	-0.7
1100	0.00	4.88	-121.5	191	227	-0.7

DRAG RDCR. WT. 0.389 GRAMS PCT. DRAG CHANGE / (DEG. YAW)**2 1.12

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	86.7	271	459	0.0
0	0.00	0.00	86.7	271	459	0.0
50	4.09	0.19	79.8	268	450	0.0
100	7.84	0.37	72.8	266	440	0.0
150	11.25	0.56	65.7	263	431	-0.1
200	14.29	0.75	58.4	261	422	-0.1
250	16.98	0.95	51.0	258	413	-0.1
300	19.30	1.14	43.4	256	404	-0.1
350	21.24	1.34	35.7	253	396	-0.2
400	22.80	1.54	27.8	251	388	-0.2
450	23.98	1.74	19.8	249	380	-0.2
500	24.75	1.94	11.7	246	372	-0.2
550	25.12	2.14	3.4	244	364	-0.2
600	25.09	2.35	-5.1	242	357	-0.3
650	24.63	2.56	-13.7	240	349	-0.3
700	23.74	2.77	-22.5	237	342	-0.4
750	22.43	2.98	-31.7	237	302	-0.2
800	20.66	3.19	-40.7	233	329	-0.3
850	18.43	3.41	-50.0	229	319	-0.3
900	15.75	3.63	-59.7	226	309	-0.3
950	12.58	3.85	-69.6	222	299	-0.4
1000	8.91	4.08	-79.9	219	290	-0.4
1050	4.72	4.31	-90.5	215	281	-0.4
1100	0.00	4.55	-101.5	212	272	-0.5

TYPE AR 1 CALIBER 7.62 MM AVERAGE DENSITY 11.00 GRAMS/CC.
PROJ. WT 12.507 GRAMS PROJ. DIA. 7.62 MM IMPULSE 1.2 LB. SEC.
DRAG RDCR. WT. 0.000 GRAMS CHG. WT. 0.61 GRAMS SABOT WT. 0.000 GRAMS
TWIST RATE REV./ 8.7 IN. PCT. DRAG CHANGE / (DEG. YAW)**2 0.84

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	61.4	368	847	0.0
0	0.00	0.00	61.4	368	847	0.0
50	2.92	0.14	57.5	355	786	-0.1
100	5.65	0.28	53.4	343	734	-0.2
150	8.17	0.43	49.0	332	689	-0.3
200	10.46	0.58	44.3	322	650	-0.4
250	12.52	0.74	39.4	314	616	-0.4
300	14.33	0.90	34.2	306	587	-0.4
350	15.88	1.07	28.8	299	560	-0.5
400	17.15	1.24	23.1	293	537	-0.5
450	18.14	1.41	17.1	287	516	-0.5
500	18.83	1.59	10.9	282	497	-0.5
550	19.22	1.76	4.5	277	481	-0.5
600	19.28	1.95	-2.1	273	465	-0.5
650	19.02	2.13	-8.9	269	451	-0.5
700	18.41	2.32	-15.9	265	438	-0.6
750	17.46	2.51	-23.2	261	424	-0.6
800	16.14	2.70	-30.6	257	412	-0.6
850	14.46	2.90	-38.3	253	399	-0.7
900	12.38	3.10	-46.3	249	387	-0.7
950	9.92	3.30	-54.5	245	375	-0.7
1000	7.04	3.51	-62.9	241	364	-0.8
1050	3.74	3.72	-71.6	238	353	-0.8
1100	0.00	3.93	-80.6	234	342	-0.8

DRAG RDCR. WT. 0.389 GRAMS PCT. DRAG CHANGE / (DEG. YAW)**2 1.12

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	55.8	368	847	0.0
0	0.00	0.00	55.8	368	847	0.0
50	2.65	0.14	52.0	358	800	-0.1
100	5.10	0.28	48.0	349	758	-0.2
150	7.36	0.43	43.8	340	721	-0.3
200	9.40	0.57	39.4	333	688	-0.3
250	11.22	0.73	34.7	326	659	-0.4
300	12.81	0.88	29.9	319	632	-0.4
350	14.16	1.04	24.9	314	608	-0.4
400	15.26	1.20	19.8	308	586	-0.4
450	16.10	1.36	14.4	303	567	-0.4
500	16.68	1.53	8.9	299	549	-0.5
550	16.98	1.70	3.2	294	532	-0.5
600	17.00	1.87	-2.6	290	517	-0.5
650	16.72	2.04	-8.6	287	503	-0.5
700	16.15	2.22	-14.8	283	491	-0.5
750	15.28	2.40	-21.1	280	479	-0.5
800	14.09	2.58	-27.5	277	468	-0.5
850	12.59	2.76	-34.2	276	458	-0.4
900	10.75	2.94	-40.8	273	448	-0.4
950	8.58	3.13	-47.6	269	437	-0.8
1000	6.08	3.31	-54.6	265	424	-0.8
1050	3.22	3.50	-61.8	260	411	-0.8
1100	0.00	3.70	-69.4	256	398	-0.9

TYPE AR 1 CALIBER 7.62 MM AVERAGE DENSITY 11.00 GRAMS/CC.
PROJ. WT 12.907 GRAMS PROJ. DIA. 7.62 MM IMPULSE 2.1 LB. SEC.
DRAG RDCR. WT. 0.000 GRAMS CHG. WT. 1.76 GRAMS SABOT WT. 0.000 GRAMS
TWIST RATE REV./ 9.1 IN. PCT. DRAG CHANGE / (DEG. YAW)**2 0.84

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	29.0	578	2089	0.0
0	0.00	0.00	29.0	578	2089	0.0
50	1.38	0.09	27.4	560	1960	-0.2
100	2.69	0.18	25.8	542	1837	-0.4
150	3.91	0.27	24.0	524	1720	-0.5
200	5.05	0.37	22.1	507	1608	-0.7
250	6.09	0.47	20.1	490	1503	-0.8
300	7.03	0.57	18.0	474	1402	-1.0
350	7.86	0.68	15.7	457	1307	-1.1
400	8.57	0.79	13.2	441	1217	-1.3
450	9.15	0.91	10.5	425	1131	-1.4
500	9.60	1.03	7.7	410	1051	-1.5
550	9.91	1.15	4.6	395	975	-1.7
600	10.06	1.28	1.3	380	904	-1.8
650	10.04	1.42	-2.3	366	837	-1.9
700	9.83	1.55	-6.2	353	778	-1.9
750	9.43	1.70	-10.4	341	728	-1.8
800	8.82	1.85	-14.8	331	684	-1.7
850	7.98	2.00	-19.5	322	646	-1.6
900	6.91	2.16	-24.5	313	613	-1.6
950	5.59	2.32	-29.7	306	584	-1.5
1000	4.01	2.49	-35.2	299	559	-1.4
1050	2.15	2.66	-40.9	293	536	-1.4
1100	0.00	2.83	-46.8	287	515	-1.3

DRAG RDCR. WT. 0.389 GRAMS PCT. DRAG CHANGE / (DEG. YAW)**2 1.12

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	25.3	578	2089	0.0
0	0.00	0.00	25.3	578	2089	0.0
50	1.21	0.09	23.8	564	1985	-0.1
100	2.33	0.18	22.2	549	1885	-0.3
150	3.38	0.27	20.5	535	1788	-0.4
200	4.34	0.36	18.7	521	1694	-0.6
250	5.22	0.46	16.8	508	1604	-0.7
300	5.99	0.56	14.8	494	1518	-0.8
350	6.67	0.66	12.7	481	1436	-0.9
400	7.24	0.77	10.5	468	1358	-1.0
450	7.70	0.88	8.1	455	1284	-1.1
500	8.05	0.99	5.7	443	1213	-1.2
550	8.26	1.10	3.0	430	1145	-1.3
600	8.35	1.22	0.3	418	1081	-1.4
650	8.29	1.34	-2.7	407	1020	-1.5
700	8.09	1.47	-5.8	395	962	-1.6
750	7.73	1.60	-9.1	384	907	-1.7
800	7.21	1.73	-12.6	373	855	-1.8
850	6.51	1.86	-16.3	362	805	-1.8
900	5.62	2.00	-20.2	353	762	-1.8
950	4.54	2.15	-24.3	344	723	-1.7
1000	3.24	2.30	-28.6	336	689	-1.7
1050	1.74	2.45	-33.2	329	659	-1.6
1100	0.00	2.60	-37.9	322	631	-1.5

TYPE AR 1 CALIBER 7.62 MM AVERAGE DENSITY 16.70 GRAMS/CC.
PROJ. WT 18.988 GRAMS PROJ. DIA. 7.62 MM IMPULSE 0.8 LB. SEC.
DRAG RDCR. WT. 0.000 GRAMS CHG. WT. 0.32 GRAMS SABOT WT. 0.000 GRAMS
TWIST RATE NA PCT. DRAG CHANGE / (DEG. YAW)**2 0.84

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	100.0	204	395	0.0
0	0.00	0.00	100.0	204	395	0.0
50	4.62	0.25	87.9	202	386	0.0
100	8.64	0.50	75.4	199	377	0.0
150	12.03	0.75	62.7	197	368	-0.1
200	14.79	1.01	49.6	195	359	-0.1
250	16.90	1.27	36.3	193	351	-0.1
300	18.35	1.53	22.6	190	343	-0.1
350	19.12	1.79	8.6	188	336	-0.1
400	19.19	2.06	-5.4	186	328	-0.1
450	18.56	2.33	-20.2	184	321	-0.2
500	17.20	2.60	-35.2	182	314	-0.2
550	15.10	2.88	-50.4	180	308	-0.2
600	12.25	3.16	-66.0	178	302	-0.2
650	8.62	3.44	-81.8	176	296	-0.2
700	4.19	3.73	-98.0	175	290	-0.3
741	0.00	3.96	-111.4	173	285	-0.3

DRAG RDCR. WT. 0.389 GRAMS PCT. DRAG CHANGE / (DEG. YAW)**2 1.12

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	100.0	204	395	0.0
0	0.00	0.00	100.0	204	395	0.0
50	4.62	0.25	87.9	203	389	0.0
100	8.65	0.50	75.7	201	383	0.0
150	12.06	0.75	63.2	200	377	0.0
200	14.86	1.00	50.6	198	371	0.0
250	17.03	1.25	37.9	197	366	0.0
300	18.57	1.50	24.9	196	360	-0.1
350	19.48	1.76	11.8	194	355	-0.1
400	19.73	2.02	-1.5	193	350	-0.1
450	19.33	2.28	-14.9	192	345	-0.1
500	18.27	2.54	-28.5	191	340	-0.1
550	16.54	2.80	-42.2	190	335	-0.1
600	14.13	3.07	-56.1	189	330	-0.1
650	11.02	3.33	-70.1	187	326	-0.1
700	7.22	3.60	-84.7	186	321	-0.2
750	2.69	3.87	-99.4	184	317	-0.2
776	0.00	4.02	-107.3	183	313	-0.2

TYPE AR 1 CALIBER 7.62 MM AVERAGE DENSITY 16.70 GRAMS/CC.
PROJ. WT 18.988 GRAMS PROJ. DIA. 7.62 MM IMPULSE 1.2 LB. SEC.
DRAG RDCR. WT. 0.000 GRAMS CHG. WT. 0.42 GRAMS SABOT WT. 0.000 GRAMS
TWIST RATE NA PCT. DRAG CHANGE / (DEG. YAW)**2 0.84

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	89.3	269	687	0.0
0	0.00	0.00	89.3	269	687	0.0
50	4.26	0.19	82.3	266	672	0.0
100	8.09	0.38	75.2	263	658	-0.1
150	11.61	0.57	67.9	260	644	-0.1
200	14.76	0.76	60.4	258	630	-0.1
250	17.54	0.96	52.8	255	617	-0.1
300	19.95	1.16	45.1	252	604	-0.1
350	21.97	1.36	37.3	250	591	-0.1
400	23.60	1.56	29.4	247	579	-0.1
450	24.84	1.76	21.4	244	567	-0.1
500	25.68	1.97	13.3	242	555	-0.1
550	26.13	2.17	5.2	239	545	-0.1
600	26.18	2.38	-2.9	237	533	-0.1
650	25.84	2.59	-11.1	234	521	-0.1
700	25.10	2.80	-19.4	232	510	-0.1
750	23.97	3.01	-27.8	229	500	-0.1
800	22.44	3.23	-36.3	227	490	-0.1
850	20.52	3.45	-44.9	225	480	-0.1
900	18.20	3.67	-53.6	223	470	-0.1
950	15.49	3.90	-62.4	220	461	-0.1
1000	12.38	4.13	-71.4	218	452	-0.1
1050	8.88	4.37	-80.5	216	443	-0.1
1100	4.98	4.61	-89.7	214	435	-0.1

DRAG RDCR. WT. 0.389 GRAMS PCT. DRAG CHANGE / (DEG. YAW)**2 1.12

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	83.6	269	687	0.0
0	0.00	0.00	83.6	269	687	0.0
50	4.24	0.19	76.7	267	677	0.0
100	8.04	0.38	69.6	264	668	0.0
150	11.56	0.57	62.4	262	658	-0.1
200	14.78	0.76	55.0	260	649	-0.1
250	17.70	0.96	47.5	257	640	-0.1
300	20.31	1.16	39.9	255	631	-0.1
350	22.61	1.36	32.2	253	622	-0.1
400	24.59	1.56	24.4	251	613	-0.1
450	26.25	1.77	16.5	249	604	-0.1
500	27.59	1.98	8.5	246	595	-0.1
550	28.61	2.19	0.5	244	586	-0.1
600	29.30	2.40	-7.6	242	577	-0.1
650	29.67	2.62	-15.7	240	568	-0.1
700	29.71	2.84	-23.9	238	559	-0.1
750	29.42	3.06	-32.2	236	550	-0.1
800	28.80	3.28	-40.6	234	542	-0.1
850	27.85	3.51	-49.1	232	533	-0.1
900	26.56	3.74	-57.7	230	525	-0.1
950	24.93	3.98	-66.4	228	516	-0.1
1000	22.96	4.22	-75.2	226	508	-0.1
1050	20.64	4.46	-84.1	224	500	-0.1
1100	17.97	4.71	-93.1	222	492	-0.1

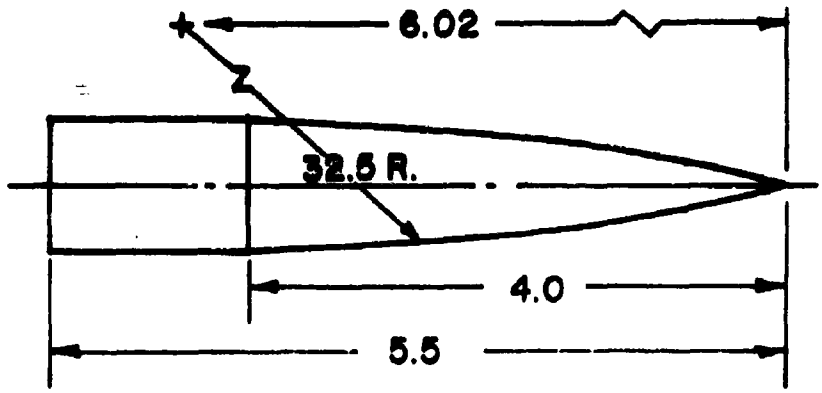
TYPE AR 1 CALIBER 7.62 MM AVERAGE DENSITY 16.70 GRAMS/CC.
PROJ. WT 18.988 GRAMS PROJ. DIA. 7.62 MM IMPULSE 2.1 LB. SEC.
DRAG RDCR. WT. 0.000 GRAMS CHG. WT. 1.26 GRAMS SABOT WT. 0.000 GRAMS
TWIST RATE REV./ 10.8 IN. PCT. DRAG CHANGE / (DEG. YAW)**2 0.84

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	46.2	412	1612	0.0
0	0.00	0.00	46.2	412	1612	0.0
50	2.19	0.12	43.1	402	1534	-0.1
100	4.23	0.25	40.0	393	1459	-0.2
150	6.12	0.38	36.6	382	1388	-0.3
200	7.83	0.51	33.1	373	1319	-0.4
250	9.37	0.65	29.4	363	1254	-0.5
300	10.72	0.79	25.6	355	1195	-0.5
350	11.88	0.93	21.8	347	1141	-0.6
400	12.83	1.07	17.9	339	1091	-0.6
450	13.57	1.22	12.8	332	1050	-0.6
500	14.09	1.38	8.2	326	1010	-0.6
550	14.38	1.53	3.4	320	973	-0.7
600	14.43	1.69	-1.5	315	940	-0.7
650	14.23	1.85	-6.5	310	910	-0.7
700	13.78	2.01	-12.0	305	882	-0.7
750	13.06	2.18	-17.4	300	856	-0.7
800	12.08	2.34	-23.1	296	832	-0.7
850	10.81	2.51	-28.8	292	810	-0.7
900	9.25	2.69	-34.8	288	789	-0.7
950	7.40	2.86	-40.9	284	770	-0.7
1000	5.25	3.04	-47.1	281	753	-0.7
1050	2.78	3.22	-53.5	278	736	-0.7
1100	0.00	3.40	-60.0	276	721	-0.7

DRAG RDCR. WT. 0.389 GRAMS PCT. DRAG CHANGE / (DEG. YAW)**2 1.12

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	42.6	412	1612	0.0
0	0.00	0.00	42.6	412	1612	0.0
50	2.02	0.12	39.6	404	1551	-0.1
100	3.88	0.25	36.5	397	1493	-0.2
150	5.60	0.37	33.2	389	1436	-0.2
200	7.15	0.50	29.9	382	1382	-0.3
250	8.53	0.64	26.4	375	1329	-0.4
300	9.74	0.77	22.8	368	1278	-0.4
350	10.76	0.91	19.0	362	1230	-0.5
400	11.61	1.05	15.1	356	1186	-0.5
450	12.25	1.19	11.1	350	1144	-0.5
500	12.69	1.34	6.8	345	1104	-0.6
550	12.93	1.48	2.6	340	1067	-0.6
600	12.95	1.63	-1.9	335	1031	-0.6
650	12.75	1.78	-6.4	331	998	-0.6
700	12.32	1.94	-11.1	327	967	-0.6
750	11.66	2.09	-16.0	323	938	-0.6
800	10.76	2.25	-20.9	319	911	-0.6
850	9.61	2.41	-26.0	316	885	-0.6
900	8.22	2.57	-31.2	313	861	-0.6
950	6.56	2.73	-36.5	309	838	-0.6
1000	4.65	2.90	-41.9	307	817	-0.6
1050	2.46	3.06	-47.4	304	797	-0.7
1100	0.00	3.23	-53.1	295	808	-0.7

AR 2



ALL DIMENSIONS ARE IN CALIBERS

Axial Radius of Gyration = 0.321 Cal. Wetted Area = 12.08 Cal.^{2}

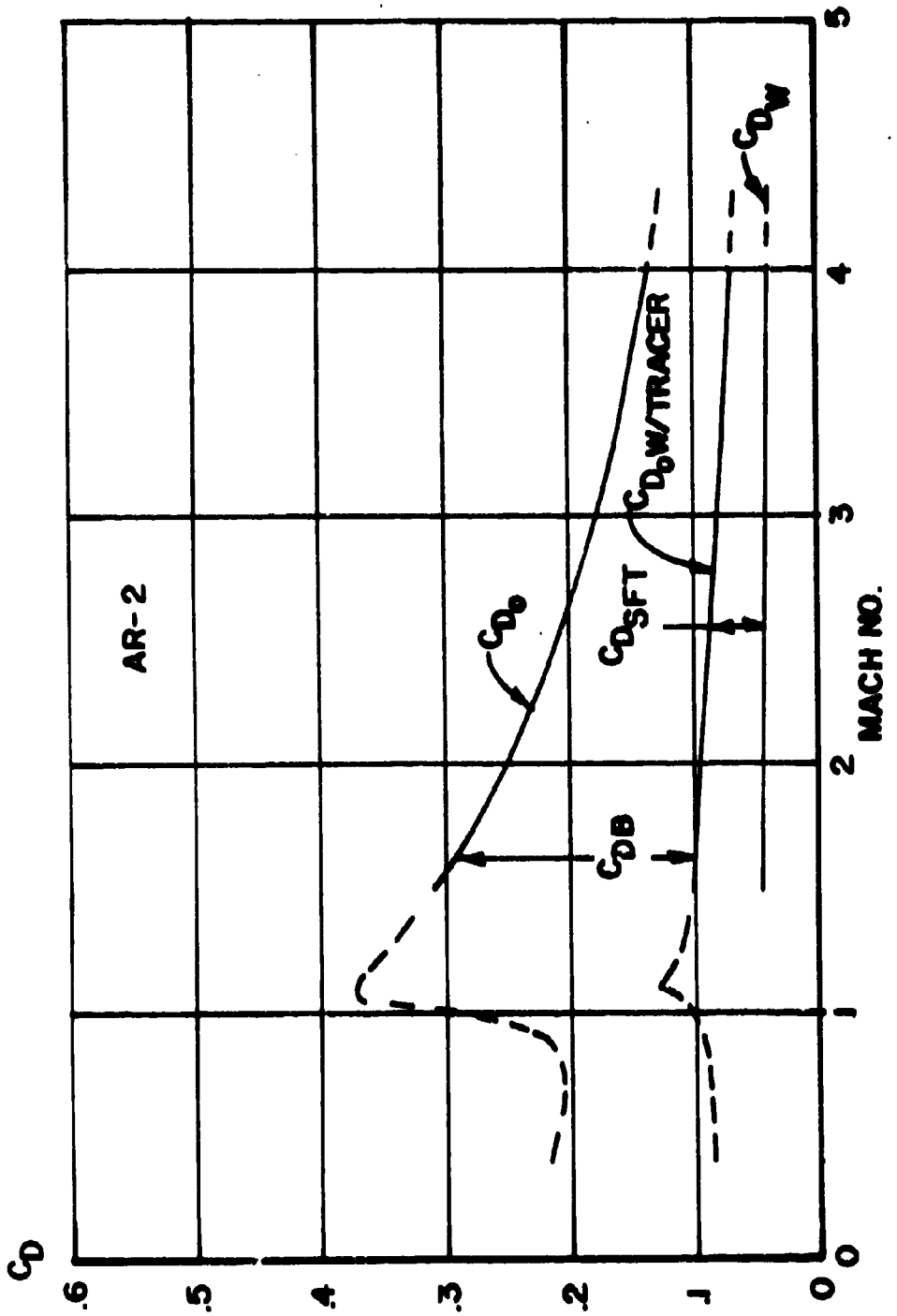
Transverse Radius of Gyration = 1.17 Cal. Volume = 2.51 Cal.^{3}

Center of Mass (Nose) = 3.75 Cal. Length = 5.5 Cal.

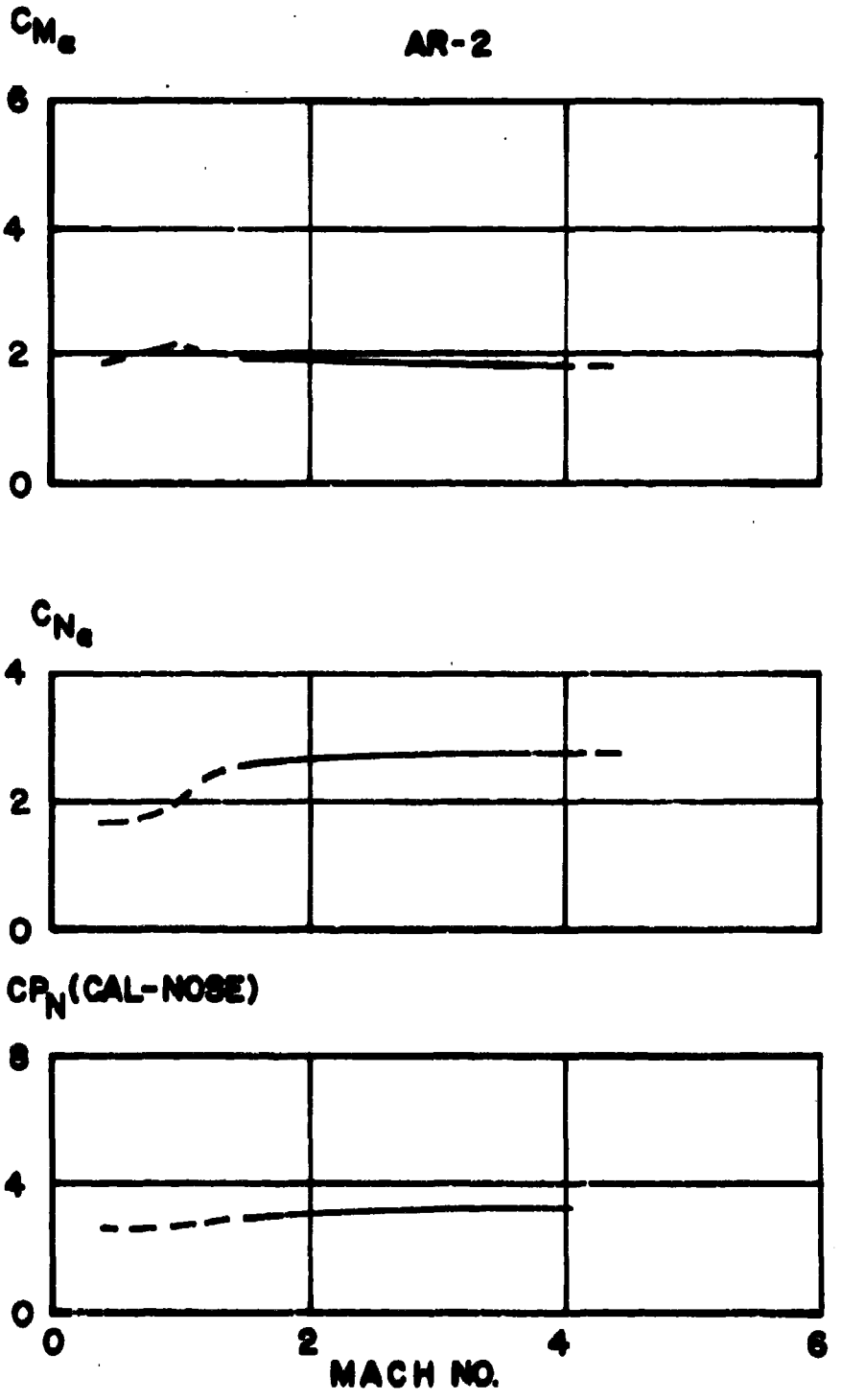
Mach No.	C_{D_0}	C_{D_B}	C_{D_0} (Tracer)	$C_{D_{SF_T}}$	C_{D_W}	C_{N_α}	CP_N	C_{M_α}
.4 *	.219		.084			1.65	2.60	1.90
.8 *	.206		.071			1.78	2.60	2.05
.9 *	.217		.072			1.87	2.62	2.1
1.0 *	.280		.097			1.96	2.65	2.15
1.05*	.368		.125			2.02	2.70	2.12
1.1 *	.373		.130			2.08	2.75	2.10
1.5	.312	.209	.103	.056	.047	2.57	2.97	2.00
2.0	.255	.160	.095	.050	.046	2.69	3.03	1.92
2.5	.211	.123	.088	.044	.044	2.76	3.07	1.87
3.0	.179	.097	.082	.040	.042	2.78	3.08	1.86
3.5	.155	.078	.077	.036	.041	2.78	3.08	1.86
4.0	.137	.065	.072	.032	.040	2.78	3.07	1.86
4.3 *	.126	.057	.069	.030	.039	2.78	3.07	1.86

$C_{D_{\alpha^2}}$ (Mach = 2.5) = 2.34

*Estimated data



AR-2-2



AR-2-3

TYPE AR 2 CALIBER 5.56 MM AVERAGE DENSITY 7.80 GRAMS/CC.
PROJ. WT 3.364 GRAMS PROJ. DIA. 5.56 MM IMPULSE 0.8 LB. SEC.
DRAG RDCR. WT. 0.000 GRAMS CHG. WT. 0.89 GRAMS SABOT WT. 0.000 GRAMS
TWIST RATE REV./ 7.5 IN. PCT. DRAG CHANGE / (DEG. YAW)**2 0.86

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	29.6	765	984	0.0
0	0.00	0.00	29.6	765	984	0.0
50	1.43	0.07	28.7	726	886	-0.4
100	2.82	0.14	27.7	687	793	-0.8
150	4.15	0.21	26.6	648	707	-1.1
200	5.43	0.29	25.3	611	627	-1.5
250	6.64	0.38	23.9	575	553	-1.9
300	7.78	0.47	22.3	537	485	-2.2
350	8.83	0.56	20.4	501	423	-2.5
400	9.79	0.67	18.3	467	367	-2.8
450	10.63	0.78	15.8	433	316	-3.0
500	11.34	0.90	12.9	401	270	-3.3
550	11.90	1.03	9.6	368	229	-3.5
600	12.28	1.17	5.6	342	197	-3.7
650	12.45	1.32	1.1	320	173	-3.8
700	12.38	1.48	-4.0	301	158	-4.0
750	12.06	1.65	-9.6	292	144	-4.1
800	11.44	1.82	-15.7	276	131	-4.2
850	10.52	2.00	-22.4	267	120	-4.3
900	9.25	2.20	-29.7	255	109	-4.4
950	7.60	2.40	-37.8	244	100	-4.5
1000	5.53	2.61	-46.9	233	91	-4.6
1050	3.02	2.83	-56.3	223	83	-4.7
1100	0.00	3.06	-66.9	212	76	-2.3

DRAG RDCR. WT. 0.151 GRAMS PCT. DRAG CHANGE / (DEG. YAW)**2 2.01

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	13.1	765	984	0.0
0	0.00	0.00	13.1	765	984	0.0
50	0.62	0.07	12.7	750	944	-0.2
100	1.20	0.14	12.3	734	903	-0.3
150	1.73	0.21	11.8	719	867	-0.4
200	2.22	0.27	10.4	704	831	-0.6
250	2.65	0.34	9.3	690	798	-0.7
300	3.04	0.42	8.3	675	762	-0.8
350	3.37	0.49	7.3	661	729	-0.9
400	3.65	0.57	6.3	647	698	-1.0
450	3.86	0.65	5.3	633	667	-1.1
500	4.02	0.73	4.3	618	638	-1.2
550	4.11	0.81	3.3	606	610	-1.3
600	4.14	0.89	2.2	592	583	-1.4
650	4.10	0.98	1.0	578	556	-1.5
700	3.98	1.06	-0.2	566	531	-1.6
750	3.79	1.15	-1.5	554	507	-1.7
800	3.52	1.24	-2.9	541	483	-1.8
850	3.17	1.33	-4.3	529	461	-1.9
900	2.73	1.43	-5.8	517	440	-2.0
950	2.19	1.53	-7.4	505	419	-2.1
1000	1.56	1.63	-9.0	493	399	-2.2
1050	0.84	1.74	-10.7	481	379	-2.3
1100	0.00	1.84	-12.3	469	360	-2.6

TYPE AR 2 CALIBER 5.56 MM AVERAGE DENSITY 7.80 GRAMS/CC.
PROJ. WT 3.364 GRAMS PROJ. DIA. 5.56 MM IMPULSE 1.2 LB. SEC.
DRAG RDCR. WT. 0.000 GRAMS CHG. WT. 1.57 GRAMS SABOT WT. 0.000 GRAMS
TWIST RATE REV./ 7.5 IN. PCT. DRAG CHANGE / (DEG. YAW)**2 0.86

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	13.0	1034	1798	0.0
0	0.00	0.00	13.0	1034	1798	0.0
50	0.63	0.05	12.6	994	1661	-0.4
100	1.23	0.10	12.0	953	1528	-0.8
150	1.81	0.15	11.4	913	1402	-1.2
200	2.36	0.21	10.8	873	1281	-1.6
250	2.87	0.27	10.1	833	1167	-2.0
300	3.36	0.33	9.4	793	1058	-2.4
350	3.80	0.40	8.5	754	955	-2.8
400	4.20	0.46	7.6	715	859	-3.2
450	4.55	0.54	6.6	676	768	-3.5
500	4.85	0.61	5.4	638	684	-3.8
550	5.09	0.69	4.1	600	605	-4.1
600	5.26	0.78	2.6	563	533	-4.4
650	5.36	0.87	1.0	527	467	-4.7
700	5.38	0.97	-0.8	492	406	-4.9
750	5.32	1.07	-2.8	457	352	-5.2
800	5.19	1.19	-5.1	424	302	-5.4
850	4.98	1.31	-7.8	392	258	-5.6
900	4.70	1.44	-10.8	361	219	-5.8
950	4.34	1.59	-14.3	336	190	-5.9
1000	3.90	1.74	-18.3	318	170	-6.0
1050	3.38	1.90	-23.1	303	154	-6.0
1100	2.79	2.07	-28.7	289	140	-6.0

DRAG RDCR. WT. 0.151 GRAMS PCT. DRAG CHANGE / (DEG. YAW)**2 2.01

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	6.8	1034	1798	0.0
0	0.00	0.00	6.8	1034	1798	0.0
50	0.63	0.05	6.4	1015	1733	-0.2
100	1.23	0.10	5.9	997	1670	-0.4
150	1.81	0.15	5.4	979	1609	-0.7
200	2.36	0.21	4.8	961	1549	-0.9
250	2.87	0.27	4.3	943	1491	-1.1
300	3.36	0.33	3.7	926	1434	-1.3
350	3.80	0.40	3.1	908	1380	-1.5
400	4.20	0.46	2.4	891	1327	-1.7
450	4.55	0.54	1.7	874	1275	-1.9
500	4.85	0.61	0.9	857	1225	-2.1
550	5.09	0.69	0.0	840	1176	-2.3
600	5.26	0.78	-1.0	824	1130	-2.4
650	5.36	0.87	-2.0	807	1085	-2.6
700	5.38	0.97	-3.2	791	1041	-2.7
750	5.32	1.07	-4.5	775	999	-2.8
800	5.19	1.19	-6.0	760	958	-2.9
850	4.98	1.31	-7.7	744	918	-3.0
900	4.70	1.44	-9.6	729	879	-3.1
950	4.34	1.59	-11.8	714	842	-3.2
1000	3.90	1.74	-14.3	699	806	-3.2
1050	3.38	1.90	-17.2	684	772	-3.2
1100	2.79	2.07	-20.5	669	738	-3.2

TYPE AR 2 CALIBER 5.56 MM AVERAGE DENSITY 7.80 GRAMS/CC.
PROJ. WT 3.364 GRAMS PROJ. DIA. 5.56 MM IMPULSE 2.1 LB. SEC.
DRAG RDCR. WT. 0.000 GRAMS CHG. WT. 3.65 GRAMS SABOT WT. 0.000 GRAMS
TWIST RATE REV./ 7.5 IN. PCT. DRAG CHANGE / (DEG. YAW)**2 0.86

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	5.0	1415	3368	0.0
0	0.00	0.00	5.0	1415	3368	0.0
50	0.24	0.04	4.7	1374	3175	-0.4
100	0.46	0.07	4.4	1333	2988	-0.8
150	0.67	0.11	4.1	1292	2806	-1.2
200	0.87	0.15	3.8	1251	2630	-1.6
250	1.05	0.18	3.5	1210	2458	-2.0
300	1.23	0.22	3.2	1169	2292	-2.4
350	1.37	0.25	2.8	1128	2131	-2.9
400	1.49	0.29	2.4	1087	1976	-3.3
450	1.60	0.32	1.9	1047	1827	-3.7
500	1.69	0.36	1.4	1006	1683	-4.0
550	1.75	0.39	0.9	966	1545	-4.4
600	1.79	0.43	0.4	925	1413	-4.8
650	1.80	0.47	-0.2	885	1286	-5.2
700	1.78	0.50	-0.9	845	1165	-5.6
750	1.72	0.54	-1.6	806	1049	-6.0
800	1.63	0.58	-2.4	768	939	-6.3
850	1.49	0.62	-3.3	729	835	-6.7
900	1.31	0.66	-4.3	692	736	-7.0
950	1.08	0.70	-5.3	655	643	-7.3
1000	0.79	0.74	-6.5	619	556	-7.6
1050	0.43	0.78	-7.8	584	475	-7.8
1100	0.00	0.82	-9.2	550	401	-8.1

DRAG RDCR. WT. 0.151 GRAMS PCT. DRAG CHANGE / (DEG. YAW)**2 2.01

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	3.5	1415	3368	0.0
0	0.00	0.00	3.5	1415	3368	0.0
50	0.24	0.04	3.2	1374	3175	-0.4
100	0.46	0.07	2.9	1333	2988	-0.8
150	0.67	0.11	2.6	1292	2806	-1.2
200	0.87	0.15	2.3	1251	2630	-1.6
250	1.05	0.18	2.0	1210	2458	-2.0
300	1.23	0.22	1.7	1169	2292	-2.4
350	1.37	0.25	1.3	1128	2131	-2.9
400	1.49	0.29	0.9	1087	1976	-3.3
450	1.60	0.32	0.4	1047	1827	-3.7
500	1.69	0.36	-0.1	1006	1683	-4.0
550	1.75	0.39	-0.7	966	1545	-4.4
600	1.79	0.43	-1.3	925	1413	-4.8
650	1.80	0.47	-2.0	885	1286	-5.2
700	1.78	0.50	-2.8	845	1165	-5.6
750	1.72	0.54	-3.6	806	1049	-6.0
800	1.63	0.58	-4.5	768	939	-6.3
850	1.49	0.62	-5.5	729	835	-6.7
900	1.31	0.66	-6.6	692	736	-7.0
950	1.08	0.70	-7.8	655	643	-7.3
1000	0.79	0.74	-9.1	619	556	-7.6
1050	0.43	0.78	-10.5	584	475	-7.8
1100	0.00	0.82	-12.0	550	401	-8.0

TYPE AR 2 CALIBER 5.56 MM AVERAGE DENSITY 11.00 GRAMS/CC.
PROJ. WT 4.744 GRAMS PROJ. DIA. 5.56 MM IMPULSE 0.8 LB. SEC.
DRAG RDCR. WT. 0.000 GRAMS CHG. WT. 0.67 GRAMS SABOT WT. 0.000 GRAMS
TWIST RATE REV./ 8.7 IN. PCT. DRAG CHANGE / (DEG. YAW)**2 0.86

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	37.7	580	798	0.0
0	0.00	0.00	37.7	580	798	0.0
50	1.81	0.09	36.1	554	728	-0.3
100	3.54	0.18	34.4	528	662	-0.5
150	5.19	0.28	32.5	503	601	-0.7
200	6.74	0.38	30.5	478	543	-1.0
250	8.18	0.49	28.2	454	489	-1.2
300	9.50	0.60	25.6	430	440	-1.4
350	10.69	0.72	22.7	407	393	-1.6
400	11.74	0.85	19.6	385	351	-1.8
450	12.61	0.98	16.0	363	313	-2.0
500	13.30	1.12	12.0	344	281	-1.9
550	13.79	1.27	7.6	330	258	-1.6
600	14.05	1.43	2.8	317	238	-1.2
650	14.06	1.59	-2.4	306	222	-1.5
700	13.82	1.75	-7.9	296	208	-1.4
750	13.29	1.92	-13.8	286	194	-1.5
800	12.46	2.10	-20.1	277	182	-1.5
850	11.32	2.28	-26.8	268	171	-1.5
900	9.83	2.47	-34.0	260	160	-1.6
950	7.98	2.67	-41.6	252	150	-1.6
1000	5.75	2.87	-49.8	244	141	-1.6
1050	3.09	3.08	-58.5	236	132	-1.7
1100	0.00	3.30	-67.8	228	124	-1.7

DRAG RDCR. WT. 0.151 GRAMS PCT. DRAG CHANGE / (DEG. YAW)**2 2.01

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	21.0	580	798	0.0
0	0.00	0.00	21.0	580	798	0.0
50	0.99	0.09	19.5	571	772	-0.1
100	1.91	0.18	17.9	562	748	-0.2
150	2.76	0.26	16.3	553	724	-0.3
200	3.52	0.36	14.7	544	700	-0.3
250	4.20	0.45	13.0	536	677	-0.4
300	4.79	0.54	11.2	527	655	-0.5
350	5.30	0.64	9.4	519	634	-0.6
400	5.72	0.74	7.5	510	613	-0.7
450	6.04	0.83	5.5	502	592	-0.7
500	6.26	0.94	3.5	493	572	-0.8
550	6.39	1.04	1.4	485	552	-0.9
600	6.41	1.14	-0.7	477	533	-1.0
650	6.33	1.25	-3.0	468	514	-1.1
700	6.13	1.35	-5.3	460	495	-1.2
750	5.81	1.46	-7.7	452	477	-1.2
800	5.38	1.58	-10.2	444	459	-1.3
850	4.82	1.69	-12.8	435	442	-1.4
900	4.14	1.81	-15.5	427	425	-1.5
930	3.32	1.92	-18.2	419	408	-1.5
1000	2.36	2.04	-21.1	411	392	-1.6
1050	1.26	2.17	-24.2	403	376	-1.7
1100	0.00	2.29	-27.3	395	361	-1.8

TYPE AR 2 CALIBER 5.56 MM AVERAGE DENSITY 11.00 GRAMS/CC.

PROJ. WT 4.744 GRAMS PROJ. DIA. 5.56 MM IMPULSE 1.2 LB. SEC.

DRAG RDCR. WT. 0.000 GRAMS CHG. WT. 1.30 GRAMS SABOT WT. 0.000 GRAMS

TWIST RATE REV./ 8.9 IN. PCT. DRAG CHANGE / (DEG. YAW)**2 0.86

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	17.8	803	1529	0.0
0	0.00	0.00	17.8	803	1529	0.0
50	0.85	0.06	17.0	775	1424	-0.3
100	1.67	0.13	16.1	747	1323	-0.6
150	2.44	0.20	15.2	719	1227	-0.8
200	3.16	0.27	14.2	692	1134	-1.1
250	3.83	0.34	13.1	664	1047	-1.4
300	4.45	0.42	11.9	637	963	-1.6
350	5.00	0.50	10.6	610	884	-1.9
400	5.49	0.58	9.2	584	809	-2.1
450	5.91	0.67	7.7	558	738	-2.3
500	6.25	0.76	6.0	532	672	-2.6
550	6.51	0.86	4.2	507	610	-2.8
600	6.67	0.96	2.1	482	552	-3.0
650	6.72	1.07	-0.1	458	498	-3.2
700	6.66	1.18	-2.7	434	447	-3.3
750	6.47	1.30	-5.4	411	401	-3.5
800	6.13	1.42	-8.6	388	358	-3.7
850	5.63	1.55	-12.1	366	319	-3.8
900	4.95	1.69	-16.0	347	285	-3.7
950	4.06	1.84	-20.4	332	261	-3.3
1000	2.96	2.00	-25.1	319	241	-2.8
1050	1.61	2.16	-30.2	308	225	-2.5
1100	0.00	2.32	-35.7	298	210	-2.4

DRAG RDCR. WT. 0.151 GRAMS PCT. DRAG CHANGE / (DEG. YAW)**2 2.01

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	10.6	803	1529	0.0
0	0.00	0.00	10.6	803	1529	0.0
50	0.50	0.06	9.8	792	1486	-0.1
100	0.96	0.13	9.0	780	1443	-0.2
150	1.39	0.19	8.2	769	1401	-0.3
200	1.77	0.26	7.3	758	1360	-0.4
250	2.11	0.32	6.4	747	1320	-0.5
300	2.40	0.39	5.5	737	1282	-0.6
350	2.66	0.46	4.6	726	1244	-0.7
400	2.86	0.53	3.6	715	1206	-0.8
450	3.02	0.60	2.6	705	1170	-0.9
500	3.13	0.67	1.6	694	1135	-1.0
550	3.18	0.74	0.6	684	1100	-1.1
600	3.19	0.82	-0.5	674	1067	-1.2
650	3.14	0.89	-1.6	663	1034	-1.3
700	3.04	0.97	-2.8	653	1002	-1.4
750	2.88	1.04	-4.0	643	971	-1.5
800	2.66	1.12	-5.2	634	941	-1.6
850	2.38	1.20	-6.5	624	911	-1.7
900	2.04	1.28	-7.8	614	882	-1.7
950	1.63	1.36	-9.1	605	854	-1.8
1000	1.16	1.45	-10.5	595	827	-1.9
1050	0.61	1.53	-11.9	586	801	-2.0
1100	0.00	1.62	-13.4	577	775	-2.0

TYPE AR 2 CALIBER 5.56 MM AVERAGE DENSITY 11.00 GRAMS/CC.
PROJ. WT 4.744 GRAMS PROJ. DIA. 5.56 MM IMPULSE 2.1 LB. SEC.
DRAG RDCR. WT. 0.000 GRAMS CHG. WT. 3.09 GRAMS SABOT WT. 0.000 GRAMS
TWIST RATE REV./ 8.9 IN. PCT. DRAG CHANGE / (DEG. YAW)**2 0.86

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	6.2	1184	3336	0.0
0	0.00	0.00	6.2	1184	3336	0.0
50	0.29	0.04	5.8	1157	3176	-0.3
100	0.57	0.09	5.4	1128	3019	-0.6
150	0.83	0.13	5.0	1099	2866	-0.9
200	1.07	0.18	4.6	1070	2717	-1.2
250	1.28	0.23	4.2	1042	2573	-1.4
300	1.48	0.27	3.7	1013	2434	-1.7
350	1.65	0.32	3.2	984	2298	-2.0
400	1.79	0.38	2.6	956	2166	-2.3
450	1.91	0.43	2.1	927	2038	-2.6
500	2.00	0.48	1.5	899	1915	-2.9
550	2.07	0.54	0.8	870	1796	-3.1
600	2.10	0.60	0.2	842	1681	-3.4
650	2.09	0.66	-0.6	814	1571	-3.7
700	2.05	0.72	-1.3	786	1464	-3.9
750	1.97	0.78	-2.1	758	1361	-4.2
800	1.84	0.85	-3.1	730	1263	-4.4
850	1.68	0.92	-4.1	702	1169	-4.7
900	1.48	1.00	-5.1	675	1080	-4.9
950	1.19	1.07	-6.3	648	995	-5.2
1000	0.86	1.15	-7.5	621	914	-5.4
1050	0.46	1.23	-8.9	594	837	-5.6
1100	0.00	1.32	-10.3	568	765	-5.8

DRAG RDCR. WT. 0.151 GRAMS PCT. DRAG CHANGE / (DEG. YAW)**2 2.01

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	4.6	1186	3336	0.0
0	0.00	0.00	4.6	1186	3336	0.0
50	0.29	0.04	4.3	1157	3176	-0.3
100	0.57	0.09	3.9	1128	3019	-0.6
150	0.83	0.13	3.5	1099	2866	-0.9
200	1.07	0.18	3.1	1070	2717	-1.2
250	1.28	0.23	2.6	1042	2573	-1.4
300	1.48	0.27	2.1	1013	2434	-1.7
350	1.65	0.32	1.5	984	2298	-2.0
400	1.79	0.38	0.9	956	2166	-2.3
450	1.91	0.43	0.3	927	2038	-2.6
500	2.00	0.48	-0.4	899	1915	-2.9
550	2.07	0.54	-1.1	870	1796	-3.1
600	2.10	0.60	-1.9	842	1681	-3.4
650	2.09	0.66	-2.7	814	1571	-3.7
700	2.05	0.72	-3.6	786	1464	-3.9
750	1.97	0.78	-4.5	758	1361	-4.2
800	1.84	0.85	-5.5	730	1263	-4.4
850	1.68	0.92	-6.5	702	1169	-4.7
900	1.48	1.00	-7.6	675	1080	-4.9
950	1.19	1.07	-8.8	648	995	-5.2
1000	0.86	1.15	-10.0	621	914	-5.4
1050	0.46	1.23	-11.4	594	837	-5.6
1100	0.00	1.32	-12.8	568	765	-5.8

TYPE AR 2 CALIBER 5.56 MM AVERAGE DENSITY 16.70 GRAMS/CC.
PROJ. WT 7.203 GRAMS PROJ. DIA. 5.56 MM IMPULSE 0.8 LB. SEC.
DRAG RDCR. WT. 0.000 GRAMS CHG. WT. 0.48 GRAMS SABOT WT. 0.000 GRAMS
TWIST RATE REV./ 10.4 IN. PCT. DRAG CHANGE / (DEG. YAW)**2 0.86

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	52.9	413	614	0.0
0	0.00	0.00	52.9	413	614	0.0
50	2.53	0.12	49.9	398	570	-0.1
100	4.90	0.25	46.6	383	528	-0.3
150	7.10	0.38	43.1	369	489	-0.4
200	9.13	0.52	39.3	355	454	-0.5
250	10.96	0.67	35.1	343	424	-0.6
300	12.58	0.81	30.8	333	400	-0.6
350	13.98	0.97	26.2	325	379	-0.6
400	15.14	1.12	21.3	317	361	-0.6
450	16.07	1.28	16.2	309	344	-0.7
500	16.73	1.45	10.8	302	329	-0.7
550	17.13	1.61	5.2	296	315	-0.7
600	17.25	1.79	-0.6	289	301	-0.8
650	17.08	1.96	-6.7	283	288	-0.8
700	16.59	2.14	-13.1	277	276	-0.8
750	15.79	2.32	-19.7	271	265	-0.9
800	14.66	2.51	-26.7	266	254	-0.9
850	13.18	2.70	-33.9	260	243	-1.0
900	11.34	2.89	-41.5	255	233	-1.0
950	9.11	3.09	-49.3	249	224	-1.0
1000	6.49	3.29	-57.6	244	214	-1.1
1050	3.46	3.50	-66.1	239	206	-1.1
1100	0.00	3.71	-75.1	234	197	-1.1

DRAG RDCR. WT. 0.151 GRAMS PCT. DRAG CHANGE / (DEG. YAW)**2 2.01

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	39.2	413	614	0.0
0	0.00	0.00	39.2	413	614	0.0
50	1.85	0.12	36.3	408	598	-0.1
100	3.56	0.25	33.2	402	582	-0.1
150	5.11	0.37	30.1	397	567	-0.2
200	6.51	0.50	26.9	392	552	-0.2
250	7.75	0.63	23.6	387	537	-0.3
300	8.83	0.76	20.2	382	522	-0.3
350	9.74	0.89	16.7	377	508	-0.4
400	10.48	1.02	13.2	372	494	-0.4
450	11.03	1.16	9.5	367	480	-0.4
500	11.41	1.29	5.7	362	467	-0.5
550	11.60	1.43	1.9	357	455	-0.5
600	11.60	1.57	-2.1	353	443	-0.5
650	11.40	1.72	-6.2	348	432	-0.5
700	11.00	1.86	-10.3	345	422	-0.5
750	10.39	2.01	-14.6	341	413	-0.6
800	9.57	2.16	-18.9	338	404	-0.6
850	8.54	2.30	-23.4	334	396	-0.6
900	7.29	2.45	-27.9	331	388	-0.6
950	5.81	2.61	-32.5	328	381	-0.6
1000	4.11	2.76	-37.2	325	374	-0.6
1050	2.17	2.91	-41.9	322	367	-0.6
1100	0.00	3.07	-46.8	317	355	-0.7

TYPE AR 2 CALIBER 5.56 MM AVERAGE DENSITY 16.70 GRAMS/CC.
PROJ. WT 7.203 GRAMS PROJ. DIA. 5.56 MM IMPULSE 1.2 LB. SEC.
DRAG RDCR. WT. 0.000 GRAMS CHG. WT. 1.00 GRAMS SABOT WT. 0.000 GRAMS
TWIST RATE REV./ 10.7 IN. PCT. DRAG CHANGE / (DEG. YAW)**2 0.86

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	28.7	575	1191	0.0
50						
100						
150						
200	5.00	0.37	21.9	508	928	-0.7
250	6.02	0.47	19.9	491	869	-0.8
300						
350						
400						
450						
500						
550						
600						
650						
700						
750						
800						
850						
900						
950						
1000						
1050						
1100	0.00	2.81	-46.0	289	302	-1.4

DRAG RDCR. WT. 0.191 GRAMS PCT. DRAG CHANGE / (DEG. YAW)**2 2.01

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	19.3	575	1191	0.0
50						
100						
150						
200						
250						
300						
350						
400						
450						
500						
550						
600						
650						
700						
750						
800						
850						
900						
950						
1000						
1050						
1100	0.00	2.16	-23.0	452	724	-1.2

TYPE AR 2 CALIBER 5.56 MM AVERAGE DENSITY 16.70 GRAMS/CC.
PROJ. WT 7.203 GRAMS PROJ. DIA. 5.56 MM IMPULSE 2.1 LB. SEC.
DRAG RDCR. WT. 0.000 GRAMS CHG. WT. 2.46 GRAMS SABOT WT. 0.000 GRAMS
TWIST RATE REV./ 11.0 IN. PCT. DRAG CHANGE / (DEG. YAW)**2 0.86

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	9.9	895	2885	0.0
0	0.00	0.00	9.9	895	2885	0.0
50	0.47	0.06	9.3	876	2769	-0.2
100	0.91	0.11	8.6	858	2649	-0.4
150	1.32	0.17	7.9	839	2536	-0.6
200	1.70	0.23	7.2	820	2425	-0.7
250	2.03	0.30	6.5	802	2316	-0.9
300	2.33	0.36	5.7	783	2210	-1.1
350	2.59	0.42	4.8	765	2107	-1.3
400	2.81	0.49	4.0	747	2007	-1.5
450	2.99	0.56	3.0	728	1910	-1.6
500	3.12	0.63	.1	710	1815	-1.8
550	3.20	0.70	1.1	692	1724	-2.0
600	3.23	0.77	0.0	674	1636	-2.2
650	3.21	0.85	-1.1	656	1550	-2.3
700	3.13	0.92	-2.3	638	1467	-2.5
750	2.99	1.00	-3.6	621	1387	-2.7
800	2.78	1.08	-4.9	603	1310	-2.8
850	2.51	1.17	-6.3	586	1235	-3.0
900	2.17	1.26	-7.8	568	1163	-3.1
950	1.75	1.34	-9.4	551	1094	-3.3
1000	1.26	1.44	-11.1	534	1028	-3.4
1050	0.67	1.53	-12.9	518	965	-3.5
1100	0.00	1.63	-14.9	501	905	-3.6

DRAG RDCR. WT. 0.151 GRAMS PCT. DRAG CHANGE / (DEG. YAW)**2 2.01

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	7.8	895	2885	0.0
0	0.00	0.00	7.8	895	2885	0.0
50	0.37	0.06	7.2	887	2833	-0.1
100	0.70	0.11	6.5	879	2781	-0.2
150	1.01	0.17	5.9	871	2730	-0.2
200	1.28	0.23	5.2	863	2680	-0.3
250	1.52	0.29	4.5	856	2631	-0.4
300	1.73	0.34	3.8	848	2582	-0.5
350	1.90	0.40	3.1	840	2534	-0.5
400	2.04	0.46	2.4	832	2487	-0.6
450	2.15	0.52	1.7	825	2441	-0.7
500	2.22	0.58	1.0	817	2395	-0.8
550	2.25	0.65	0.2	810	2350	-0.8
600	2.25	0.71	-0.4	802	2305	-0.9
650	2.20	0.77	-1.3	795	2261	-1.0
700	2.12	0.83	-2.1	787	2218	-1.0
750	2.00	0.90	-3.0	780	2176	-1.1
800	1.84	0.96	-3.8	772	2134	-1.2
850	1.64	1.03	-4.6	765	2093	-1.2
900	1.40	1.09	-5.5	758	2052	-1.3
950	1.12	1.16	-6.4	751	2012	-1.4
1000	0.79	1.23	-7.3	743	1973	-1.4
1050	0.42	1.29	-8.2	736	1934	-1.5
1100	0.00	1.36	-9.1	729	1896	-1.6

TYPE AR 2 CALIBER 6.50 MM AVERAGE DENSITY 7.80 GRAMS/CC.
PROJ. WT 5.374 GRAMS PROJ. DIA. 6.50 MM IMPULSE 0.8 LB. SEC.
DRAG RDCR. WT. 0.000 GRAMS CHG. WT. 0.62 GRAMS SABOT WT. 0.000 GRAMS
TWIST RATE REV./ 8.5 IN. PCT. DRAG CHANGE / (DEG. YAW)**2 0.86

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	52.9	524	738	0.0
0	0.00	0.00	52.9	524	738	0.0
50	2.55	0.10	50.9	494	655	-0.3
100	5.00	0.20	48.8	464	579	-0.6
150	7.34	0.31	46.3	435	509	-0.9
200	9.55	0.43	43.5	407	446	-1.1
250	11.60	0.56	40.2	380	388	-1.3
300	13.49	0.70	36.5	354	338	-1.5
350	15.19	0.84	32.3	335	301	-1.3
400	16.66	1.00	27.6	319	273	-1.2
450	17.90	1.16	22.5	305	251	-1.2
500	18.87	1.32	16.9	293	231	-1.2
550	19.55	1.50	10.8	282	213	-1.3
600	19.93	1.68	4.3	271	197	-1.3
650	19.98	1.87	-2.8	261	183	-1.4
700	19.66	2.06	-10.4	251	169	-1.4
750	18.95	2.27	-18.7	241	156	-1.5
800	17.82	2.48	-27.6	232	144	-1.5
850	16.24	2.70	-37.3	223	133	-1.5
900	14.15	2.93	-47.8	214	123	-1.6
950	11.54	3.17	-59.1	206	114	-1.6
1000	8.34	3.41	-71.4	198	105	-1.6
1050	4.51	3.67	-84.7	190	97	-1.7
1100	0.00	3.94	-99.0	183	90	-1.7

DRAG RDCR. WT. 0.241 GRAMS PCT. DRAG CHANGE / (DEG. YAW)**2 2.01

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	28.1	524	738	0.0
0	0.00	0.00	28.1	524	738	0.0
50	1.33	0.10	26.2	514	708	-0.1
100	2.57	0.19	24.3	504	680	-0.2
150	3.72	0.30	22.3	494	652	-0.3
200	4.76	0.40	20.2	484	625	-0.4
250	5.70	0.50	18.0	474	598	-0.5
300	6.53	0.61	15.7	464	572	-0.6
350	7.23	0.72	13.4	454	547	-0.7
400	7.83	0.83	10.9	444	523	-0.8
450	8.34	0.94	8.3	434	499	-0.9
500	8.76	1.06	5.6	424	475	-1.0
550	8.87	1.18	2.7	414	453	-1.1
600	8.93	1.30	-0.3	404	431	-1.2
650	8.85	1.43	-3.4	395	410	-1.2
700	8.61	1.55	-6.7	385	389	-1.3
750	8.20	1.69	-10.1	376	370	-1.4
800	7.62	1.82	-13.8	366	351	-1.5
850	6.86	1.96	-17.6	358	334	-1.5
900	5.91	2.10	-21.6	349	318	-1.5
950	4.75	2.25	-25.8	342	304	-1.4
1000	3.39	2.39	-30.1	336	292	-1.3
1050	1.81	2.54	-34.6	330	282	-1.3
1100	0.00	2.70	-39.3	324	272	-1.3

TYPE AR 2 CALIBER 6.50 MM AVERAGE DENSITY 7.80 GRAMS/CC.

PROJ. WT 5.374 GRAMS PROJ. DIA. 6.50 MM IMPULSE 1.2 LB. SEC.

DRAG RDCR. WT. 0.000 GRAMS CHG. WT. 1.21 GRAMS SABOT WT. 0.000 GRAMS

TWIST RATE REV./ 9.7 IN. PCT. DRAG CHANGE / (DEG. YAW)**2 0.86

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	27.7	728	1424	0.0
0	0.00	0.00	27.7	728	1424	0.0
50	1.34	0.07	26.7	695	1297	-0.3
100	2.62	0.14	25.6	662	1177	-0.7
150	3.85	0.22	24.4	629	1064	-1.0
200	5.02	0.30	23.1	597	957	-1.3
250	6.12	0.39	21.6	565	858	-1.6
300	7.14	0.48	20.0	534	767	-1.9
350	8.08	0.58	18.1	504	682	-2.1
400	8.92	0.68	16.0	474	604	-2.4
450	9.65	0.79	13.6	445	532	-2.6
500	10.26	0.90	10.9	417	467	-2.8
550	10.73	1.03	7.9	389	407	-3.0
600	11.03	1.16	4.3	363	354	-3.2
650	11.15	1.30	0.3	341	312	-3.0
700	11.06	1.45	-4.3	324	282	-2.5
750	10.74	1.61	-9.2	310	258	-2.2
800	10.16	1.78	-15.7	298	238	-2.1
850	9.30	1.95	-20.5	286	220	-2.0
900	8.14	2.13	-26.9	275	203	-2.0
950	6.66	2.31	-33.8	264	188	-2.0
1000	4.83	2.51	-41.2	254	174	-2.1
1050	2.62	2.71	-49.2	245	161	-2.1
1100	0.00	2.91	-57.9	235	149	-2.1

DRAG RDCR. WT. 0.241 GRAMS PCT. DRAG CHANGE / (DEG. YAW)**2 2.01

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	13.8	728	1424	0.0
0	0.00	0.00	13.8	728	1424	0.0
50	0.65	0.07	12.8	715	1373	-0.1
100	1.26	0.14	11.8	703	1323	-0.3
150	1.81	0.21	10.8	690	1275	-0.4
200	2.32	0.28	9.7	678	1229	-0.5
250	2.77	0.36	8.6	665	1183	-0.6
300	3.16	0.44	7.5	653	1139	-0.7
350	3.50	0.51	6.3	641	1097	-0.8
400	3.78	0.59	5.0	629	1055	-0.9
450	4.00	0.67	3.7	618	1015	-1.0
500	4.15	0.75	2.4	606	976	-1.1
550	4.24	0.84	1.0	595	939	-1.2
600	4.26	0.92	-0.4	584	903	-1.3
650	4.21	1.01	-1.9	572	867	-1.4
700	4.08	1.10	-3.5	562	833	-1.5
750	3.88	1.19	-5.1	551	800	-1.6
800	3.59	1.28	-6.8	540	769	-1.7
850	3.22	1.37	-8.5	529	738	-1.8
900	2.77	1.47	-10.3	519	708	-1.9
950	2.22	1.56	-12.2	509	679	-1.9
1000	1.58	1.66	-14.2	499	651	-2.0
1050	0.84	1.76	-16.2	488	624	-2.1
1100	0.00	1.87	-18.4	478	597	-2.2

TYPE AR 2 CALIBER 6.50 MM AVERAGE DENSITY 7.80 GRAMS/CC.
PROJ. WT 5.374 GRAMS PROJ. DIA. 6.50 MM IMPULSE 2.1 LB. SEC.
DRAG RDCR. WT. 0.000 GRAMS CHG. WT. 2.89 GRAMS SABOT WT. 0.000 GRAMS
TWIST RATE REV./ 8.8 IN. PCT. DRAG CHANGE / (DEG. YAW)**2 0.86

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	8.9	1098	3239	0.0
0	0.00	0.00	8.9	1098	3239	0.0
50	0.43	0.05	8.5	1063	3037	-0.3
100	0.83	0.09	8.0	1029	2842	-0.7
150	1.22	0.14	7.5	994	2655	-1.0
200	1.58	0.19	7.0	959	2473	-1.4
250	1.91	0.25	6.5	925	2298	-1.7
300	2.21	0.30	5.9	890	2131	-2.1
350	2.49	0.36	5.2	856	1970	-2.4
400	2.73	0.42	4.5	822	1817	-2.7
450	2.93	0.48	3.7	788	1670	-3.1
500	3.10	0.55	2.9	754	1530	-3.4
550	3.22	0.61	2.0	721	1396	-3.7
600	3.30	0.69	0.9	688	1271	-4.0
650	3.32	0.76	-0.2	655	1153	-4.3
700	3.29	0.84	-1.4	622	1041	-4.6
750	3.19	0.92	-2.7	590	936	-4.8
800	3.03	1.01	-4.3	559	839	-5.1
850	2.79	1.10	-6.0	528	749	-5.3
900	2.45	1.20	-7.9	498	665	-5.5
950	2.02	1.30	-10.0	468	589	-5.7
1000	1.48	1.41	-12.4	439	518	-5.9
1050	0.81	1.53	-15.2	411	454	-6.0
1100	0.00	1.66	-18.4	384	396	-6.1

DRAG RDCR. WT. 0.241 GRAMS PCT. DRAG CHANGE / (DEG. YAW)**2 2.01

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	5.7	1098	3239	0.0
0	0.00	0.00	5.7	1098	3239	0.0
50	0.27	0.05	5.3	1082	3141	-0.2
100	0.52	0.09	4.9	1065	3045	-0.3
150	0.75	0.14	4.4	1049	2951	-0.5
200	0.96	0.19	4.0	1033	2860	-0.6
250	1.14	0.24	3.5	1017	2771	-0.8
300	1.30	0.29	3.0	1001	2683	-0.9
350	1.44	0.34	2.5	986	2598	-1.1
400	1.55	0.39	2.0	970	2515	-1.2
450	1.64	0.44	1.4	955	2434	-1.4
500	1.70	0.49	0.9	940	2355	-1.5
550	1.73	0.55	0.3	925	2278	-1.7
600	1.74	0.60	-0.3	910	2203	-1.8
650	1.71	0.66	-0.9	895	2130	-1.9
700	1.66	0.71	-1.5	880	2059	-2.1
750	1.57	0.77	-2.2	866	1990	-2.2
800	1.46	0.83	-2.9	851	1922	-2.3
850	1.30	0.89	-3.6	837	1857	-2.4
900	1.12	0.95	-4.3	823	1793	-2.5
950	0.89	1.01	-5.1	809	1731	-2.7
1000	0.64	1.07	-5.8	795	1670	-2.8
1050	0.34	1.13	-6.6	781	1611	-2.9
1100	0.00	1.20	-7.5	767	1554	-3.0

TYPE AR 2 CALIBER 6.50 MM AVERAGE DENSITY 11.00 GRAMS/CC.
PROJ. WT 7.579 GRAMS PROJ. DIA. 6.50 MM IMPULSE 8 LB. SEC.
DRAG RDCR. WT. 0.000 GRAMS CHG. WT. 0.46 GRAMS SABOT WT. 0.000 GRAMS
TWIST RATE REV./ 9.9 IN. PCT. DRAG CHANGE / (DEG. YAW)**2 0.86

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	63.3	397	597	0.0
0	0.00	0.00	63.3	397	597	0.0
50	3.03	0.13	60.0	378	541	-0.2
100	5.89	0.27	56.3	359	489	-0.4
150	8.56	0.41	52.2	344	447	-0.4
200	11.02	0.56	47.8	331	415	-0.5
250	13.25	0.71	43.1	320	388	-0.5
300	15.25	0.87	38.1	310	364	-0.6
350	16.99	1.03	32.7	301	343	-0.6
400	18.46	1.20	27.0	293	324	-0.7
450	19.65	1.38	21.0	284	306	-0.7
500	20.53	1.55	14.7	276	290	-0.8
550	21.09	1.74	8.0	269	274	-0.8
600	21.31	1.93	0.9	262	259	-0.9
650	21.17	2.12	-6.6	254	245	-0.9
700	20.66	2.32	-14.6	247	232	-1.0
750	19.74	2.52	-23.0	241	220	-1.0
800	18.40	2.73	-31.8	234	208	-1.1
850	16.62	2.95	-41.2	228	196	-1.1
900	14.36	3.17	-51.1	221	186	-1.1
950	11.59	3.40	-61.6	215	176	-1.2
1000	8.30	3.64	-72.7	209	166	-1.2
1050	4.45	3.88	-84.4	204	157	-1.2
1100	0.00	4.13	-96.7	198	149	-1.3

DRAG RDCR. WT. 0.241 GRAMS PCT. DRAG CHANGE / (DEG. YAW)**2 2.01

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	44.5	397	597	0.0
0	0.00	0.00	44.5	397	597	0.0
50	2.10	0.13	41.2	390	576	-0.1
100	4.05	0.26	37.9	384	556	-0.1
150	5.83	0.39	34.5	377	536	-0.2
200	7.43	0.52	30.9	370	517	-0.3
250	8.86	0.66	27.2	364	498	-0.3
300	10.10	0.80	23.3	358	481	-0.4
350	11.15	0.94	19.4	352	465	-0.4
400	12.00	1.08	15.3	347	450	-0.4
450	12.65	1.23	11.0	342	437	-0.4
500	13.09	1.37	6.7	337	425	-0.4
550	13.31	1.52	2.3	333	414	-0.5
600	13.31	1.67	-2.3	329	403	-0.5
650	13.09	1.83	-7.0	325	393	-0.5
700	12.63	1.98	-11.8	321	383	-0.5
750	11.94	2.14	-16.6	318	374	-0.5
800	11.00	2.30	-21.6	315	366	-0.5
850	9.82	2.46	-26.7	311	358	-0.6
900	8.39	2.62	-32.0	308	350	-0.6
950	6.69	2.78	-37.3	305	342	-0.6
1000	4.73	2.95	-42.7	302	336	-0.6
1050	2.51	3.11	-48.3	295	320	-0.8
1100	0.00	3.29	-54.2	287	302	-0.8

TYPE AR 2 CALIBER 6.50 MM AVERAGE DENSITY 11.00 GRAMS/CC.
PROJ. WT 7.579 GRAMS PROJ. DIA. 6.50 MM IMPULSE 1.2 LB. SEC.
DRAG RDCR. WT. 0.000 GRAMS CHG. WT. 0.97 GRAMS SABOT WT. 0.000 GRAMS
TWIST RATE REV./ 10.1 IN. PCT. DRAG CHANGE / (DEG. YAW)**2 0.86

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	37.1	551	1150	0.0
0	0.00	0.00	37.1	551	1150	0.0
50	1.78	0.09	35.4	529	1061	-0.2
100	3.47	0.19	33.5	508	976	-0.4
150	5.07	0.29	31.5	486	896	-0.6
200	6.57	0.40	29.3	465	821	-0.8
250	7.95	0.51	26.9	445	750	-1.0
300	9.20	0.62	24.2	425	683	-1.2
350	10.33	0.74	21.3	405	621	-1.4
400	11.30	0.87	18.1	386	563	-1.5
450	12.11	1.00	14.6	367	510	-1.7
500	12.73	1.14	10.7	350	463	-1.7
550	13.16	1.29	6.4	336	428	-1.5
600	13.37	1.44	1.8	325	399	-1.4
650	13.34	1.59	-3.1	314	374	-1.4
700	13.07	1.76	-8.3	305	353	-1.3
750	12.53	1.92	-13.8	296	333	-1.3
800	11.72	2.09	-19.7	288	314	-1.3
850	10.61	2.27	-25.8	280	297	-1.4
900	9.19	2.45	-32.4	272	281	-1.4
950	7.43	2.64	-39.3	265	266	-1.4
1000	5.33	2.83	-46.6	258	252	-1.5
1050	2.86	3.03	-54.3	251	239	-1.5
1100	0.00	3.23	-62.5	244	226	-1.5

DRAG RDCR. WT. 0.241 GRAMS PCT. DRAG CHANGE / (DEG. YAW)**2 2.01

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	22.5	551	1150	0.0
0	0.00	0.00	22.5	551	1150	0.0
50	1.06	0.09	20.8	544	1118	-0.1
100	2.04	0.18	19.1	536	1087	-0.1
150	2.94	0.28	17.3	529	1056	-0.2
200	3.75	0.37	15.5	521	1026	-0.3
250	4.46	0.47	13.7	514	997	-0.4
300	5.09	0.57	11.8	507	969	-0.4
350	5.62	0.67	9.8	500	941	-0.5
400	6.06	0.77	7.8	493	913	-0.6
450	6.39	0.87	5.7	486	886	-0.6
500	6.62	0.97	3.5	479	859	-0.7
550	6.74	1.08	1.3	471	833	-0.8
600	6.75	1.19	-1.0	464	807	-0.8
650	6.65	1.29	-3.3	457	782	-0.9
700	6.43	1.40	-5.7	450	757	-1.0
750	6.10	1.52	-8.3	443	732	-1.1
800	5.63	1.63	-10.8	436	708	-1.1
850	5.04	1.75	-13.5	429	685	-1.2
900	4.32	1.86	-16.3	422	662	-1.3
950	3.46	1.98	-19.1	415	639	-1.3
1000	2.45	2.10	-22.1	408	618	-1.4
1050	1.30	2.23	-25.1	401	596	-1.4
1100	0.00	2.35	-28.3	395	575	-1.5

TYPE AR 2 CALIBER 6.50 MM AVERAGE DENSITY 11.00 GRAMS/CC.
PROJ. WT 7.579 GRAMS PROJ. DIA. 6.50 MM IMPULSE 2.1 LB. SEC.
DRAG RDCR. WT. 0.000 GRAMS CHG. WT. 2.39 GRAMS SABOT WT. 0.000 GRAMS
TWIST RATE REV./ 10.4 IN. PCT. DRAG CHANGE / (DEG. YAW)**2 0.86

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	12.8	861	2809	0.0
0	0.00	0.00	12.8	861	2809	0.0
50	0.61	0.06	12.2	837	2654	-0.2
100	1.19	0.12	11.4	813	2503	-0.5
150	1.74	0.18	10.6	789	2357	-0.7
200	2.24	0.25	9.8	765	2216	-1.0
250	2.70	0.31	8.9	741	2079	-1.2
300	3.12	0.38	8.0	717	1948	-1.4
350	3.49	0.45	7.0	693	1822	-1.6
400	3.81	0.53	5.9	670	1702	-1.9
450	4.07	0.60	4.8	647	1586	-2.1
500	4.28	0.68	3.5	624	1475	-2.3
550	4.42	0.76	2.2	601	1369	-2.5
600	4.50	0.85	0.7	578	1268	-2.7
650	4.50	0.94	-0.8	556	1172	-2.9
700	4.43	1.03	-2.5	534	1082	-3.1
750	4.27	1.12	-4.3	513	996	-3.3
800	4.02	1.22	-6.3	491	915	-3.4
850	3.66	1.33	-8.5	470	839	-3.6
900	3.20	1.43	-10.8	450	767	-3.7
950	2.61	1.55	-13.4	430	699	-3.9
1000	1.89	1.67	-16.2	410	636	-4.0
1050	1.03	1.79	-19.4	390	578	-4.1
1100	0.00	1.92	-22.8	372	523	-4.2

DRAG RDCR. WT. 0.241 GRAMS PCT. DRAG CHANGE / (DEG. YAW)**2 2.01

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	8.8	861	2809	0.0
0	0.00	0.00	8.8	861	2809	0.0
50	0.42	0.06	8.2	851	2742	-0.1
100	0.80	0.12	7.5	841	2676	-0.2
150	1.15	0.18	6.8	831	2611	-0.3
200	1.47	0.24	6.0	821	2548	-0.4
250	1.74	0.30	5.3	811	2485	-0.5
300	1.99	0.36	4.5	801	2424	-0.6
350	2.19	0.42	3.7	792	2364	-0.7
400	2.36	0.49	2.9	782	2306	-0.8
450	2.48	0.55	2.1	772	2248	-0.9
500	2.57	0.62	1.2	763	2192	-0.9
550	2.61	0.68	0.4	754	2136	-1.0
600	2.61	0.75	-0.5	744	2082	-1.1
650	2.57	0.82	-1.4	735	2029	-1.2
700	2.48	0.89	-2.4	726	1977	-1.3
750	2.34	0.96	-3.3	717	1925	-1.4
800	2.16	1.03	-4.3	707	1876	-1.4
850	1.93	1.10	-5.3	698	1827	-1.5
900	1.65	1.17	-6.4	690	1779	-1.6
950	1.32	1.24	-7.4	681	1732	-1.7
1000	0.93	1.32	-8.5	672	1687	-1.8
1050	0.49	1.39	-9.6	663	1642	-1.8
1100	0.00	1.47	-10.8	654	1598	-1.9

TYPE AR 2 CALIBER 6.50 MM AVERAGE DENSITY 16.70 GRAMS/CC.
PROJ. WT 11.506 GRAMS PROJ. DIA. 6.50 MM IMPULSE 0.8 LB. SEC.
DRAG RDCR. WT. 0.000 GRAMS CHG. WT. 0.28 GRAMS SABOT WT. 0.000 GRAMS
TWIST RATE NA PCT. DRAG CHANGE / (DEG. YAW)**2 0.86

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	88.8	288	477	0.0
0	0.00	0.00	88.8	288	477	0.0
50	4.22	0.18	82.7	283	459	-0.1
100	8.13	0.36	76.3	277	442	-0.1
150	11.72	0.54	69.7	272	426	-0.1
200	14.98	0.72	62.8	267	410	-0.2
250	17.89	0.91	55.7	262	395	-0.2
300	20.44	1.11	48.3	257	381	-0.3
350	22.63	1.30	40.6	253	367	-0.3
400	24.43	1.50	32.6	248	353	-0.4
450	25.83	1.71	24.3	243	341	-0.4
500	26.81	1.91	15.7	239	328	-0.4
550	27.37	2.12	6.8	234	316	-0.5
600	27.48	2.34	-2.5	230	305	-0.5
650	27.12	2.56	-12.1	226	294	-0.6
700	26.29	2.78	-22.0	222	283	-0.6
750	24.96	3.01	-32.4	218	273	-0.6
800	23.11	3.24	-43.1	214	263	-0.6
850	20.73	3.48	-54.2	210	254	-0.7
900	17.78	3.72	-65.8	206	245	-0.7
950	14.26	3.96	-77.7	203	236	-0.7
1000	10.14	4.21	-90.1	199	228	-0.7
1050	5.39	4.47	-103.0	195	220	-0.8
1100	0.00	4.73	-116.3	192	212	-0.8

DRAG RDCR. WT. 0.241 GRAMS PCT. DRAG CHANGE / (DEG. YAW)**2 2.01

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	73.3	288	477	0.0
0	0.00	0.00	73.3	288	477	0.0
50	3.45	0.17	67.3	286	470	0.0
100	6.61	0.35	61.1	284	463	0.0
150	9.46	0.53	54.9	282	457	-0.1
200	12.00	0.71	48.6	280	450	-0.1
250	14.23	0.88	42.2	279	444	-0.1
300	16.14	1.06	35.7	277	437	-0.1
350	17.74	1.25	29.2	275	431	-0.1
400	19.00	1.43	22.5	273	425	-0.1
450	19.95	1.61	15.8	271	419	-0.2
500	20.55	1.80	8.9	270	413	-0.2
550	20.83	1.98	2.0	268	407	-0.2
600	20.75	2.17	-5.0	266	402	-0.2
650	20.34	2.36	-12.1	265	396	-0.2
700	19.57	2.55	-19.3	263	390	-0.2
750	18.45	2.74	-26.5	261	385	-0.3
800	16.97	2.93	-33.9	260	380	-0.3
850	15.13	3.13	-41.4	258	369	-0.3
900	12.91	3.32	-49.2	251	356	-0.4
950	10.31	3.52	-57.2	247	343	-0.4
1000	7.29	3.73	-65.6	242	330	-0.4
1050	3.87	3.94	-74.2	238	319	-0.5
1100	0.00	4.15	-83.2	234	307	-0.5

TYPE AR 2 CALIBER 6.50 MM AVERAGE DENSITY 16.70 GRAMS/CC.
PROJ. WT 11.506 GRAMS PROJ. DIA. 6.50 MM IMPULSE 1.2 LB. SEC.
DRAG RDCR. WT. 0.000 GRAMS CHG. WT. 0.67 GRAMS SABOT WT. 0.000 GRAMS
TWIST RATE REV./ 12.2 IN. PCT. DRAG CHANGE / (DEG. YAW)**2 0.86

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	53.7	393	889	0.0
0	0.00	0.00	53.7	393	889	0.0
50	2.55	0.13	50.3	380	832	-0.1
100	4.94	0.26	46.7	368	779	-0.2
150	7.14	0.40	42.9	356	730	-0.3
200	9.15	0.54	38.9	346	688	-0.4
250	10.96	0.69	34.6	337	653	-0.4
300	12.55	0.84	30.1	329	623	-0.5
350	13.91	1.00	25.4	322	596	-0.5
400	15.04	1.15	20.4	315	571	-0.5
450	15.92	1.31	15.3	309	549	-0.6
500	16.54	1.48	9.9	303	528	-0.6
550	16.90	1.64	4.4	297	508	-0.6
600	16.98	1.81	-1.4	292	489	-0.7
650	16.77	1.99	-7.3	286	472	-0.7
700	16.26	2.16	-13.6	281	455	-0.7
750	15.44	2.34	-20.0	276	438	-0.8
800	14.30	2.52	-26.7	271	423	-0.8
850	12.83	2.71	-33.6	266	408	-0.8
900	11.01	2.90	-40.8	261	393	-0.9
950	8.83	3.09	-48.2	257	379	-0.9
1000	6.28	3.29	-55.9	252	366	-0.9
1050	3.34	3.49	-63.9	248	353	-1.0
1100	0.00	3.69	-72.2	243	341	-1.0

DRAG RDCR. WT. 0.241 GRAMS PCT. DRAG CHANGE / (DEG. YAW)**2 2.01

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	42.0	393	889	0.0
0	0.00	0.00	42.0	393	889	0.0
50	1.98	0.13	38.7	389	868	0.0
100	3.80	0.26	35.4	384	847	-0.1
150	5.46	0.39	32.0	380	827	-0.1
200	6.94	0.52	28.5	375	808	-0.2
250	8.25	0.66	24.9	371	788	-0.2
300	9.38	0.79	21.2	367	770	-0.3
350	10.33	0.93	17.4	363	752	-0.3
400	11.10	1.07	13.6	359	734	-0.3
450	11.67	1.21	9.7	355	718	-0.3
500	12.05	1.35	5.7	351	702	-0.4
550	12.23	1.49	1.6	347	687	-0.4
600	12.21	1.64	-2.6	344	674	-0.4
650	11.98	1.78	-6.9	341	661	-0.4
700	11.54	1.93	-11.2	338	649	-0.4
750	10.88	2.08	-15.6	335	638	-0.4
800	10.01	2.23	-20.1	333	627	-0.4
850	8.92	2.38	-24.6	330	616	-0.5
900	7.60	2.53	-29.3	327	606	-0.5
950	6.05	2.69	-34.0	325	596	-0.5
1000	4.27	2.84	-38.7	323	587	-0.5
1050	2.25	3.00	-43.6	320	578	-0.5
1100	0.00	3.15	-48.6	314	594	-0.6

TYPE AR 2 CALIBER 6.50 MM AVERAGE DENSITY 16.70 GRAMS/CC.

PROJ. WT 11.506 GRAMS PROJ. DIA. 6.50 MM IMPULSE 2.1 LB. SEC.

DRAG RDCR. WT. 0.000 GRAMS CHG. WT. 1.86 GRAMS SABOT WT. 0.000 GRAMS

TWIST RATE REV./ 12.6 IN. PCT. DRAG CHANGE / (DEG. YAW)**2 0.86

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	22.2	619	2204	0.0
0	0.00	0.00	22.2	619	2204	0.0
50	1.06	0.08	20.9	604	2098	-0.1
100	2.05	0.17	19.5	589	1996	-0.3
150	2.97	0.25	18.0	574	1897	-0.4
200	3.81	0.34	16.4	559	1801	-0.6
250	4.58	0.43	14.8	545	1708	-0.7
300	5.27	0.52	13.1	531	1619	-0.9
350	5.86	0.62	11.2	516	1534	-1.0
400	6.37	0.72	9.3	502	1451	-1.1
450	6.78	0.82	7.3	488	1372	-1.3
500	7.09	0.92	5.1	475	1295	-1.4
550	7.29	1.03	2.8	461	1222	-1.5
600	7.37	1.14	0.4	447	1151	-1.6
650	7.33	1.25	-2.2	434	1083	-1.7
700	7.17	1.37	-4.9	421	1019	-1.8
750	6.86	1.49	-7.8	408	957	-2.0
800	6.41	1.62	-10.9	395	898	-2.1
850	5.80	1.74	-14.2	382	842	-2.2
900	5.02	1.88	-17.8	370	788	-2.2
950	4.06	2.01	-21.5	358	739	-2.3
1000	2.91	2.16	-25.5	348	695	-2.3
1050	1.56	2.30	-29.8	339	660	-2.1
1100	0.00	2.45	-34.3	331	629	-1.9

DRAG RDCR. WT. 0.241 GRAMS PCT. DRAG CHANGE / (DEG. YAW)**2 2.01

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	16.3	619	2204	0.0
0	0.00	0.00	16.3	619	2204	0.0
50	0.77	0.08	15.0	614	2165	-0.1
100	1.47	0.16	13.7	608	2126	-0.1
150	2.11	0.25	12.3	603	2088	-0.2
200	2.68	0.33	10.9	598	2050	-0.2
250	3.18	0.41	9.5	592	2013	-0.3
300	3.62	0.50	8.1	587	1977	-0.3
350	3.98	0.58	6.6	582	1941	-0.4
400	4.27	0.67	5.1	577	1906	-0.4
450	4.49	0.76	3.6	572	1871	-0.5
500	4.63	0.84	2.1	567	1836	-0.5
550	4.70	0.93	0.5	562	1803	-0.6
600	4.69	1.02	-1.1	557	1769	-0.6
650	4.60	1.11	-2.7	552	1737	-0.6
700	4.43	1.20	-4.4	547	1705	-0.7
750	4.18	1.30	-6.1	542	1673	-0.7
800	3.84	1.39	-7.8	537	1642	-0.8
850	3.42	1.48	-9.5	532	1611	-0.8
900	2.92	1.58	-11.3	527	1581	-0.9
950	2.32	1.67	-13.1	522	1551	-0.9
1000	1.64	1.77	-15.0	518	1522	-1.0
1050	0.87	1.87	-16.9	513	1493	-1.0
1100	0.00	1.96	-18.8	508	1465	-1.0

TYPE AR 2 CALIBER 7.62 MM AVERAGE DENSITY 7.80 GRAMS/CC.
PROJ. WT 8.666 GRAMS PROJ. DIA. 7.62 MM IMPULSE 0.8 LB. SEC.
DRAG RDCR. WT. 0.000 GRAMS CHG. WT. 0.39 GRAMS SABOT WT. 0.000 GRAMS
TWIST RATE REV./ 9.7 IN. PCT. DRAG CHANGE / (DEG. YAW)**2 0.86

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	80.6	357	552	0.0
0	0.00	0.00	80.6	357	552	0.0
50	3.86	0.14	76.4	339	498	-0.2
100	7.51	0.30	71.9	325	457	-0.3
150	10.93	0.45	67.0	312	423	-0.4
200	14.09	0.60	61.7	301	394	-0.4
250	16.98	0.79	56.0	291	367	-0.5
300	19.59	0.96	49.9	281	343	-0.6
350	21.88	1.14	43.3	272	321	-0.6
400	23.84	1.33	36.3	263	300	-0.7
450	25.44	1.52	28.9	254	280	-0.8
500	26.67	1.72	20.9	246	262	-0.8
550	27.49	1.93	12.3	238	245	-0.9
600	27.88	2.14	3.2	230	229	-1.0
650	27.80	2.36	-6.6	222	214	-1.0
700	27.23	2.59	-17.0	215	200	-1.0
750	26.13	2.83	-28.2	208	187	-1.1
800	24.45	3.07	-40.2	201	175	-1.1
850	22.17	3.33	-53.0	194	163	-1.2
900	19.24	3.59	-66.7	188	153	-1.2
950	15.61	3.86	-81.4	182	143	-1.2
1000	11.23	4.14	-97.0	176	134	-1.2
1050	6.04	4.43	-113.8	170	125	-1.3
1100	0.00	4.74	-131.7	164	117	-1.3

DRAG RDCR. WT. 0.389 GRAMS PCT. DRAG CHANGE / (DEG. YAW)**2 2.01

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	54.3	357	552	0.0
0	0.00	0.00	54.3	357	552	0.0
50	2.57	0.14	50.3	350	530	-0.1
100	4.94	0.29	46.2	344	511	-0.1
150	7.10	0.43	41.9	338	493	-0.2
200	9.05	0.58	37.5	333	477	-0.2
250	10.78	0.73	32.9	328	462	-0.2
300	12.28	0.89	28.2	324	448	-0.3
350	13.55	1.04	23.4	319	435	-0.3
400	14.58	1.20	18.4	315	423	-0.3
450	15.36	1.36	13.3	311	411	-0.4
500	15.88	1.52	8.1	307	400	-0.4
550	16.15	1.68	2.7	304	390	-0.4
600	16.15	1.85	-2.8	300	380	-0.4
650	15.88	2.02	-8.4	297	370	-0.5
700	15.34	2.19	-14.1	293	360	-0.5
750	14.50	2.36	-20.0	290	351	-0.5
800	13.38	2.53	-26.0	286	343	-0.5
850	11.96	2.71	-32.2	283	333	-0.6
900	10.23	2.89	-38.5	280	325	-0.6
950	8.18	3.07	-45.0	274	311	-0.8
1000	5.81	3.25	-51.8	265	290	-0.8
1050	3.10	3.45	-59.2	256	271	-0.9
1100	0.00	3.64	-67.1	247	253	-0.9

TYPE AR 2 CALIBER 7.62 MM AVERAGE DENSITY 7.80 GRAMS/CC.
PROJ. WT 8.666 GRAMS PROJ. DIA. 7.62 MM IMPULSE 1.2 LB. SEC.
DRAG RDCR. WT. 0.000 GRAMS CHG. WT. 0.88 GRAMS SABOT WT. 0.000 GRAMS
TWIST RATE REV./ 9.9 IN. PCT. DRAG CHANGE / (DEG. YAW)**2 0.86

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	51.3	494	1057	0.0
0	0.00	0.00	51.3	494	1057	0.0
50	2.47	0.10	49.1	469	952	-0.3
100	4.82	0.21	46.7	444	854	-0.5
150	7.05	0.33	44.0	420	763	-0.7
200	9.14	0.45	41.0	396	680	-0.9
250	11.08	0.58	37.7	373	604	-1.1
300	12.84	0.72	33.8	352	537	-1.2
350	14.40	0.87	29.6	335	487	-1.1
400	15.74	1.02	25.0	322	448	-1.1
450	16.85	1.18	19.9	310	416	-1.1
500	17.70	1.34	14.5	299	388	-1.1
550	18.28	1.51	8.8	289	362	-1.1
600	18.56	1.69	2.6	279	338	-1.2
650	18.53	1.87	-4.0	270	316	-1.2
700	18.17	2.06	-11.1	261	296	-1.2
750	17.44	2.25	-18.7	253	277	-1.3
800	16.33	2.45	-26.7	245	259	-1.3
850	14.82	2.66	-35.4	237	242	-1.4
900	12.86	2.88	-44.6	229	227	-1.4
950	10.43	3.10	-54.5	221	212	-1.5
1000	7.51	3.33	-65.0	214	198	-1.5
1050	4.04	3.57	-76.3	207	186	-1.5
1100	0.00	3.81	-88.4	200	174	-1.5

DRAG RDCR. WT. 0.389 GRAMS PCT. DRAG CHANGE / (DEG. YAW)**2 2.01

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	30.2	494	1057	0.0
0	0.00	0.00	30.2	494	1057	0.0
50	1.43	0.10	28.2	485	1020	-0.1
100	2.76	0.21	26.0	477	983	-0.2
150	3.99	0.31	23.8	468	946	-0.3
200	5.10	0.42	21.5	460	911	-0.3
250	6.09	0.53	19.0	451	876	-0.4
300	6.97	0.64	16.6	443	842	-0.5
350	7.72	0.76	14.0	435	809	-0.6
400	8.34	0.87	11.3	426	777	-0.7
450	8.83	0.99	8.5	418	745	-0.7
500	9.18	1.11	5.5	410	715	-0.8
550	9.38	1.23	2.5	401	685	-0.9
600	9.43	1.36	-0.7	393	656	-1.0
650	9.32	1.49	-4.0	385	628	-1.1
700	9.04	1.62	-7.4	377	600	-1.1
750	8.60	1.75	-11.0	369	574	-1.2
800	7.97	1.89	-14.8	361	549	-1.2
850	7.15	2.03	-18.7	354	526	-1.2
900	6.14	2.17	-22.7	347	506	-1.2
950	4.93	2.32	-27.0	341	487	-1.2
1000	3.51	2.47	-31.3	336	471	-1.1
1050	1.87	2.62	-35.8	331	456	-1.1
1100	0.00	2.77	-40.4	326	442	-1.1

TYPE AR 2 CALIBER 7.62 MM AVERAGE DENSITY 7.80 GRAMS/CC.
PROJ. WT 8.666 GRAMS PROJ. DIA. 7.62 MM IMPULSE 2.1 LB. SEC.
DRAG RDCR. WT. 0.000 GRAMS CHG. WT. 2.21 GRAMS SABOT WT. 0.000 GRAMS
TWIST RATE REV./ 10.2 IN. PCT. DRAG CHANGE / (DEG. YAW)**2 0.86

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	19.9	777	2616	0.0
0	0.00	0.00	19.9	777	2616	0.0
50	0.96	0.07	19.1	748	2426	-0.3
100	1.87	0.13	18.2	720	2244	-0.6
150	2.74	0.20	17.1	691	2071	-0.8
200	3.56	0.28	16.1	663	1906	-1.1
250	4.32	0.36	14.9	635	1750	-1.4
300	5.02	0.44	13.6	608	1601	-1.6
350	5.65	0.52	12.2	581	1461	-1.9
400	6.22	0.61	10.6	554	1330	-2.1
450	6.70	0.70	8.9	528	1206	-2.4
500	7.09	0.80	7.0	502	1092	-2.6
550	7.39	0.90	4.9	477	984	-2.8
600	7.58	1.01	2.6	452	884	-3.0
650	7.65	1.12	0.0	427	791	-3.2
700	7.59	1.24	-2.9	404	706	-3.3
750	7.37	1.37	-6.1	381	628	-3.5
800	6.99	1.51	-9.8	359	557	-3.6
850	6.42	1.65	-13.9	340	502	-3.4
900	5.63	1.80	-18.4	326	461	-2.8
950	4.62	1.96	-23.3	314	426	-2.5
1000	3.35	2.12	-28.6	303	397	-2.3
1050	1.82	2.29	-34.2	292	371	-2.2
1100	0.00	2.46	-40.3	283	346	-2.2

DRAG RDCR. WT. 0.389 GRAMS PCT. DRAG CHANGE / (DEG. YAW)**2 2.01

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	11.5	777	2616	0.0
0	0.00	0.00	11.5	777	2616	0.0
50	0.54	0.06	10.6	766	2537	-0.1
100	1.04	0.13	9.7	754	2461	-0.2
150	1.50	0.20	8.9	743	2386	-0.3
200	1.91	0.27	7.9	732	2313	-0.4
250	2.28	0.33	7.0	721	2241	-0.5
300	2.60	0.40	6.0	710	2172	-0.7
350	2.87	0.47	5.0	699	2104	-0.8
400	3.10	0.55	4.0	689	2038	-0.9
450	3.27	0.62	2.9	678	1974	-0.9
500	3.39	0.69	1.8	668	1911	-1.0
550	3.45	0.77	0.7	657	1850	-1.1
600	3.46	0.85	-0.5	647	1790	-1.2
650	3.41	0.92	-1.7	637	1732	-1.3
700	3.30	1.00	-3.0	627	1676	-1.4
750	3.13	1.08	-4.3	617	1621	-1.5
800	2.89	1.17	-5.6	607	1567	-1.6
850	2.59	1.25	-7.0	597	1515	-1.7
900	2.22	1.33	-8.4	587	1464	-1.7
950	1.78	1.42	-9.9	578	1415	-1.8
1000	1.26	1.51	-11.4	568	1367	-1.9
1050	0.67	1.60	-13.0	559	1321	-2.0
1100	0.00	1.69	-14.6	550	1276	-2.0

TYPE AR 2 CALIBER 7.62 MM AVERAGE DENSITY 11.00 GRAMS/CC.
PROJ. WT 12.221 GRAMS PROJ. DIA. 7.62 MM IMPULSE 0.8 LB. SEC.
DRAG RDCR. WT. 0.000 GRAMS CHG. WT. 0.28 GRAMS SABOT WT. 0.000 GRAMS
TWIST RATE NA PCT. DRAG CHANGE / (DEG. YAW)**2 0.86

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	100.0	275	462	0.0
0	0.00	0.00	100.0	275	462	0.0
50	4.76	0.18	93.2	268	440	-0.1
100	9.17	0.37	86.1	262	419	-0.1
150	13.23	0.57	78.7	256	399	-0.2
200	16.90	0.77	70.8	250	380	-0.2
250	20.18	0.97	62.6	244	362	-0.3
300	23.05	1.18	54.0	238	345	-0.3
350	25.48	1.39	44.9	232	329	-0.4
400	27.46	1.61	35.4	226	313	-0.4
450	28.96	1.83	25.4	221	298	-0.5
500	29.95	2.06	14.9	216	284	-0.5
550	30.42	2.30	3.9	210	271	-0.6
600	30.33	2.54	-7.6	205	258	-0.6
650	29.68	2.78	-19.8	201	246	-0.6
700	28.47	3.04	-32.5	196	234	-0.7
750	26.71	3.30	-45.8	191	223	-0.7
800	23.88	3.56	-59.8	187	213	-0.7
850	20.59	3.83	-74.5	182	203	-0.8
900	16.55	4.11	-89.9	178	194	-0.8
950	11.74	4.40	-106.0	174	185	-0.8
1000	6.11	4.69	-122.8	170	177	-0.8
1047	0.00	4.97	-139.5	167	170	-0.9

DRAG RDCR. WT. 0.389 GRAMS PCT. DRAG CHANGE / (DEG. YAW)**2 2.01

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	83.4	275	462	0.0
0	0.00	0.00	83.4	275	462	0.0
50	3.93	0.18	76.7	273	453	0.0
100	7.54	0.37	69.9	270	445	0.0
150	10.81	0.55	63.0	268	436	-0.1
200	13.73	0.74	56.0	266	428	-0.1
250	16.31	0.93	48.9	263	420	-0.1
300	18.53	1.12	41.6	261	412	-0.1
350	20.40	1.31	34.2	259	404	-0.2
400	21.89	1.51	26.7	257	396	-0.2
450	23.02	1.70	19.1	254	389	-0.2
500	23.77	1.90	11.3	252	381	-0.2
550	24.13	2.10	3.4	250	374	-0.2
600	24.10	2.30	-4.7	248	367	-0.3
650	23.67	2.50	-12.9	246	360	-0.3
700	22.84	2.71	-21.2	244	353	-0.3
750	21.60	2.91	-29.7	242	346	-0.3
800	19.93	3.12	-38.3	238	334	-0.4
850	17.83	3.34	-47.4	232	318	-0.4
900	15.28	3.55	-56.9	226	303	-0.5
950	12.24	3.78	-66.9	221	288	-0.5
1000	8.70	4.01	-77.4	216	275	-0.6
1050	4.63	4.24	-88.4	210	262	-0.6
1100	0.00	4.49	-100.0	205	250	-0.6

TYPE AR 2 CALIBER 7.62 MM AVERAGE DENSITY 11.00 GRAMS/CC.
PROJ. WT 12.221 GRAMS PROJ. DIA. 7.62 MM IMPULSE 1.2 LB. SEC.
DRAG RDCR. WT. 0.000 GRAMS CHG. WT. 0.63 GRAMS SABOT WT. 0.000 GRAMS
TWIST RATE REV./ 11.5 IN. PCT. DRAG CHANGE / (DEG. YAW)**2 0.86

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	63.2	375	859	0.0
0	0.00	0.00	63.2	375	859	0.0
50	3.01	0.14	59.4	359	789	-0.1
100	5.84	0.28	55.4	346	730	-0.2
150	8.46	0.43	51.1	335	684	-0.3
200	10.85	0.58	46.5	325	644	-0.4
250	13.02	0.73	41.6	316	609	-0.4
300	14.94	0.90	36.5	308	578	-0.5
350	16.60	1.06	31.0	300	550	-0.5
400	17.99	1.23	25.4	293	524	-0.6
450	19.09	1.40	19.4	286	499	-0.6
500	19.89	1.58	13.1	279	476	-0.7
550	20.38	1.76	6.5	272	454	-0.7
600	20.53	1.95	-0.3	266	433	-0.8
650	20.34	2.14	-7.6	260	413	-0.8
700	19.79	2.33	-15.1	254	394	-0.9
750	18.86	2.53	-23.1	248	376	-0.9
800	17.53	2.73	-31.4	242	358	-0.9
850	15.78	2.94	-40.1	237	342	-1.0
900	13.59	3.16	-49.3	231	326	-1.0
950	10.94	3.38	-58.8	226	311	-1.0
1000	7.81	3.60	-68.9	220	297	-1.1
1050	4.17	3.83	-79.4	215	283	-1.1
1100	0.00	4.07	-90.5	210	270	-1.1

DRAG RDCR. WT. 0.389 GRAMS PCT. DRAG CHANGE / (DEG. YAW)**2 2.01

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	47.4	375	859	0.0
0	0.00	0.00	47.4	375	859	0.0
50	2.24	0.13	43.8	369	833	-0.1
100	4.30	0.27	40.1	364	807	-0.1
150	6.18	0.41	36.3	359	783	-0.2
200	7.86	0.55	32.3	354	760	-0.2
250	9.35	0.69	28.3	349	739	-0.2
300	10.64	0.84	24.1	345	720	-0.3
350	11.72	0.98	19.9	341	702	-0.3
400	12.59	1.13	15.5	337	685	-0.3
450	13.25	1.28	11.1	333	669	-0.3
500	13.68	1.43	6.5	330	654	-0.3
550	13.89	1.58	1.9	326	640	-0.4
600	13.87	1.74	-2.9	323	627	-0.4
650	13.61	1.89	-7.7	320	614	-0.4
700	13.12	2.05	-12.6	317	601	-0.4
750	12.38	2.21	-17.6	314	589	-0.4
800	11.39	2.37	-22.7	311	578	-0.4
850	10.15	2.53	-27.9	309	567	-0.5
900	8.66	2.69	-33.2	306	557	-0.5
950	6.90	2.86	-38.6	304	546	-0.5
1000	4.88	3.02	-44.0	301	534	-0.6
1050	2.58	3.19	-49.7	293	508	-0.6
1100	0.00	3.36	-55.7	286	484	-0.7

TYPE AR 2 CALIBER 7.62 MM AVERAGE DENSITY 11.00 GRAMS/CC.
PROJ. WT 12.221 GRAMS PROJ. DIA. 7.62 MM IMPULSE 2.1 LB. SEC.
DRAG RDCR. WT. 0.000 GRAMS CHG. WT. 1.79 GRAMS SABOT WT. 0.000 GRAMS
TWIST RATE REV./ 11.9 IN. PCT. DRAG CHANGE / (DEG. YAW)**2 0.86

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	29.0	589	2120	0.0
0	0.00	0.00	29.0	589	2120	0.0
50	1.39	0.09	27.5	570	1984	-0.2
100	2.70	0.18	26.0	551	1854	-0.4
150	3.94	0.27	24.3	532	1731	-0.6
200	5.09	0.36	22.4	514	1613	-0.7
250	6.14	0.46	20.5	496	1501	-0.9
300	7.10	0.57	18.4	478	1394	-1.1
350	7.94	0.67	16.1	460	1293	-1.2
400	8.68	0.78	13.6	443	1197	-1.4
450	9.28	0.90	11.0	425	1106	-1.5
500	9.76	1.02	8.1	409	1020	-1.7
550	10.08	1.14	5.0	392	939	-1.8
600	10.25	1.27	1.6	376	863	-1.9
650	10.24	1.41	-2.1	360	793	-2.0
700	10.05	1.55	-6.1	346	733	-2.0
750	9.65	1.70	-10.4	335	687	-1.8
800	9.03	1.85	-15.0	325	647	-1.6
850	8.18	2.01	-19.9	317	612	-1.6
900	7.09	2.17	-25.0	308	581	-1.5
950	5.73	2.33	-30.4	301	553	-1.5
1000	4.11	2.50	-36.0	294	527	-1.5
1050	2.21	2.67	-42.0	287	502	-1.5
1100	0.00	2.85	-48.2	280	479	-1.5

DRAG RDCR. WT. 0.389 GRAMS PCT. DRAG CHANGE / (DEG. YAW)**2 2.01

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	18.9	589	2120	0.0
0	0.00	0.00	18.9	589	2120	0.0
50	0.89	0.09	17.4	582	2070	-0.1
100	1.71	0.17	15.9	576	2021	-0.1
150	2.45	0.26	14.4	569	1973	-0.2
200	3.12	0.35	12.8	562	1926	-0.3
250	3.72	0.44	11.2	556	1880	-0.3
300	4.23	0.53	9.6	550	1835	-0.4
350	4.66	0.62	7.9	543	1791	-0.4
400	5.01	0.71	6.2	537	1748	-0.5
450	5.28	0.81	4.5	531	1705	-0.6
500	5.46	0.90	2.7	524	1664	-0.6
550	5.54	1.00	0.8	518	1623	-0.7
600	5.54	1.09	-1.1	512	1583	-0.7
650	5.45	1.19	-3.0	506	1544	-0.8
700	5.26	1.29	-5.0	500	1505	-0.9
750	4.97	1.39	-7.0	494	1467	-0.9
800	4.58	1.49	-9.1	488	1429	-1.0
850	4.09	1.60	-11.2	481	1392	-1.0
900	3.50	1.70	-13.4	475	1356	-1.1
950	2.79	1.81	-15.6	469	1320	-1.2
1000	1.98	1.91	-17.9	463	1284	-1.2
1050	1.05	2.02	-20.3	457	1249	-1.3
1100	0.00	2.13	-22.7	451	1215	-1.3

TYPE AR 2 CALIBER 7.62 MM AVERAGE DENSITY 16.70 GRAMS/CC.
PROJ. WT 18.554 GRAMS PROJ. DIA. 7.62 MM IMPULSE 0.8 LB. SEC.
DRAG RDCR. WT. 0.000 GRAMS CHG. WT. 0.32 GRAMS SABOT WT. 0.000 GRAMS
TWIST RATE NA PCT. DRAG CHANGE / (DEG. YAW)**2 0.86

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	100.0	207	398	0.0
0	0.00	0.00	100.0	207	398	0.0
50	4.63	0.24	88.1	203	384	0.0
100	8.66	0.49	75.9	200	371	-0.1
150	12.08	0.75	63.2	197	359	-0.1
200	14.87	1.00	50.0	193	347	-0.1
250	16.99	1.26	36.5	190	336	-0.2
300	18.44	1.53	22.4	187	325	-0.2
350	19.19	1.80	7.9	184	314	-0.2
400	19.21	2.07	-7.0	181	304	-0.2
450	18.49	2.35	-22.5	178	295	-0.3
500	16.99	2.63	-38.5	176	286	-0.3
550	14.70	2.92	-54.9	173	277	-0.3
600	11.59	3.21	-71.9	170	269	-0.3
650	7.63	3.51	-89.4	168	261	-0.4
700	2.78	3.81	-107.4	165	253	-0.4
725	0.00	3.97	-116.7	164	250	-0.4

DRAG RDCR. WT. 0.389 GRAMS PCT. DRAG CHANGE / (DEG. YAW)**2 2.01

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	100.0	207	398	0.0
0	0.00	0.00	100.0	207	398	0.0
50	4.63	0.24	88.3	206	391	0.0
100	8.68	0.49	76.4	204	385	0.0
150	12.14	0.73	64.3	203	380	0.0
200	15.00	0.98	52.1	201	374	0.0
250	17.25	1.23	39.7	200	369	-0.1
300	18.90	1.48	27.2	199	363	-0.1
350	19.92	1.73	14.5	198	358	-0.1
400	20.31	1.99	1.6	197	353	-0.1
450	20.08	2.24	-11.4	195	349	-0.1
500	19.20	2.50	-24.6	194	344	-0.1
550	17.66	2.76	-37.9	193	339	-0.1
600	15.48	3.02	-51.3	192	335	-0.1
650	12.62	3.28	-65.1	189	324	-0.2
700	9.07	3.55	-79.3	186	314	-0.2
750	4.81	3.82	-94.0	183	305	-0.2
798	0.00	4.09	-108.6	181	296	-0.3

TYPE AR 2 CALIBER 7.62 MM AVERAGE DENSITY 16.70 GRAMS/CC.
PROJ. WT 18.554 GRAMS PROJ. DIA. 7.62 MM IMPULSE 1.2 LB. SEC.
DRAG RDCR. WT. 0.000 GRAMS CHG. WT. 0.42 GRAMS SABOT WT. 0.000 GRAMS
TWIST RATE NA PCT. DRAG CHANGE / (DEG. YAW)**2 0.86

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	94.5	273	691	0.0
0	0.00	0.00	94.5	273	691	0.0
50	4.49	0.19	87.7	269	669	0.0
100	8.63	0.37	80.7	264	648	-0.1
150	12.42	0.57	73.4	260	628	-0.1
200	15.84	0.76	65.9	256	608	-0.2
250	18.89	0.96	58.2	252	588	-0.2
300	21.56	1.16	50.2	248	570	-0.2
350	23.82	1.36	41.9	244	552	-0.3
400	25.67	1.57	33.4	240	534	-0.3
450	27.10	1.78	24.6	236	518	-0.3
500	28.08	1.99	15.5	232	501	-0.4
550	28.61	2.21	6.1	229	486	-0.4
600	28.68	2.43	-3.6	225	471	-0.4
650	28.26	2.65	-13.6	222	456	-0.5
700	27.34	2.88	-23.9	218	442	-0.5
750	25.91	3.11	-34.6	215	428	-0.5
800	23.94	3.35	-45.6	212	415	-0.5
850	21.43	3.58	-56.9	208	403	-0.6
900	18.35	3.83	-68.6	205	391	-0.6
950	14.69	4.07	-80.6	202	379	-0.6
1000	10.42	4.32	-93.0	199	368	-0.6
1050	5.53	4.58	-105.8	196	357	-0.7
1100	0.00	4.83	-119.0	193	347	-0.7

DRAG RDCR. WT. 0.389 GRAMS PCT. DRAG CHANGE / (DEG. YAW)**2 2.01

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	80.6	273	691	0.0
0	0.00	0.00	80.6	273	691	0.0
50	3.80	0.18	73.9	271	682	0.0
100	7.26	0.37	67.0	270	674	0.0
150	10.38	0.56	60.1	268	665	0.0
200	13.17	0.74	53.2	267	656	-0.1
250	15.61	0.93	46.1	265	648	-0.1
300	17.69	1.12	39.0	264	640	-0.1
350	19.43	1.31	31.7	262	632	-0.1
400	20.81	1.50	24.4	261	624	-0.1
450	21.83	1.69	17.0	259	616	-0.1
500	22.48	1.89	9.6	258	608	-0.1
550	22.77	2.08	2.0	256	601	-0.2
600	22.68	2.28	-5.6	255	593	-0.2
650	22.22	2.47	-13.4	254	586	-0.2
700	21.38	2.67	-21.2	252	579	-0.2
750	20.18	2.87	-29.1	251	572	-0.2
800	18.53	3.07	-37.1	249	561	-0.2
850	16.51	3.27	-45.3	245	544	-0.3
900	14.08	3.48	-53.8	241	527	-0.3
950	11.23	3.69	-62.5	237	511	-0.3
1000	7.95	3.90	-71.5	234	495	-0.4
1050	4.21	4.12	-80.8	230	480	-0.4
1100	0.00	4.34	-90.4	226	466	-0.4

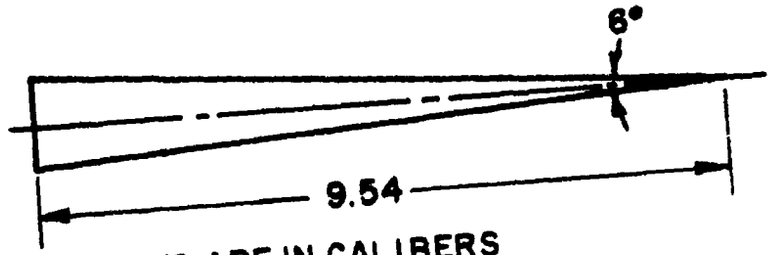
TYPE AR 2 CALIBER 7.62 MM AVERAGE DENSITY 16.70 GRAMS/CC.
PROJ. WT 18.554 GRAMS PROJ. DIA. 7.62 MM IMPULSE 2.1 LB. SEC.
DRAG RDCR. WT. 0.000 GRAMS CHG. WT. 1.29 GRAMS SABOT WT. 0.000 GRAMS
TWIST RATE REV./ 14.3 IN. PCT. DRAG CHANGE / (DEG. YAW)**2 0.86

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	45.9	420	1636	0.0
0	0.00	0.00	45.9	420	1636	0.0
50	2.18	0.12	43.0	409	1551	-0.1
100	4.22	0.24	39.9	398	1469	-0.2
150	6.10	0.37	36.6	387	1390	-0.3
200	7.81	0.50	33.2	376	1314	-0.4
250	9.36	0.64	29.6	366	1242	-0.5
300	10.72	0.78	25.8	356	1175	-0.6
350	11.89	0.92	21.7	347	1117	-0.6
400	12.85	1.07	17.5	339	1068	-0.6
450	13.60	1.21	13.0	332	1025	-0.6
500	14.13	1.37	8.4	326	986	-0.6
550	14.43	1.52	3.6	320	950	-0.7
600	14.49	1.68	-1.3	314	917	-0.7
650	14.30	1.84	-6.5	309	886	-0.7
700	13.86	2.00	-11.8	304	857	-0.7
750	13.13	2.17	-17.3	299	830	-0.7
800	12.17	2.34	-23.0	294	804	-0.8
850	10.90	2.51	-28.8	290	779	-0.8
900	9.34	2.68	-34.9	285	755	-0.8
950	7.48	2.86	-41.1	281	732	-0.9
1000	5.31	3.04	-47.5	277	710	-0.9
1050	2.82	3.22	-54.2	272	688	-0.9
1100	0.00	3.41	-61.0	268	668	-0.9

DRAG RDCR. WT. 0.389 GRAMS PCT. DRAG CHANGE / (DEG. YAW)**2 2.01

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	35.9	420	1636	0.0
0	0.00	0.00	35.9	420	1636	0.0
50	1.69	0.12	33.1	416	1605	0.0
100	3.25	0.24	30.2	412	1574	-0.1
150	4.65	0.36	27.2	408	1543	-0.1
200	5.92	0.49	24.2	405	1513	-0.2
250	7.03	0.61	21.1	401	1483	-0.2
300	7.99	0.74	18.0	397	1454	-0.2
350	8.79	0.86	14.8	393	1425	-0.3
400	9.44	0.99	11.5	389	1397	-0.3
450	9.92	1.12	8.2	386	1368	-0.3
500	10.24	1.25	4.8	382	1341	-0.4
550	10.40	1.38	1.3	378	1313	-0.4
600	10.38	1.51	-2.2	374	1287	-0.4
650	10.18	1.65	-5.8	371	1260	-0.5
700	9.81	1.78	-9.5	367	1235	-0.5
750	9.26	1.92	-13.2	364	1210	-0.5
800	8.52	2.06	-17.0	360	1186	-0.6
850	7.59	2.20	-20.9	357	1163	-0.6
900	6.47	2.34	-24.9	354	1140	-0.6
950	5.16	2.48	-28.9	350	1119	-0.6
1000	3.64	2.62	-33.0	347	1100	-0.6
1050	1.92	2.77	-37.2	345	1081	-0.6
1100	0.00	2.91	-41.5	342	1064	-0.6

C I



ALL DIMENSIONS ARE IN CALIBERS

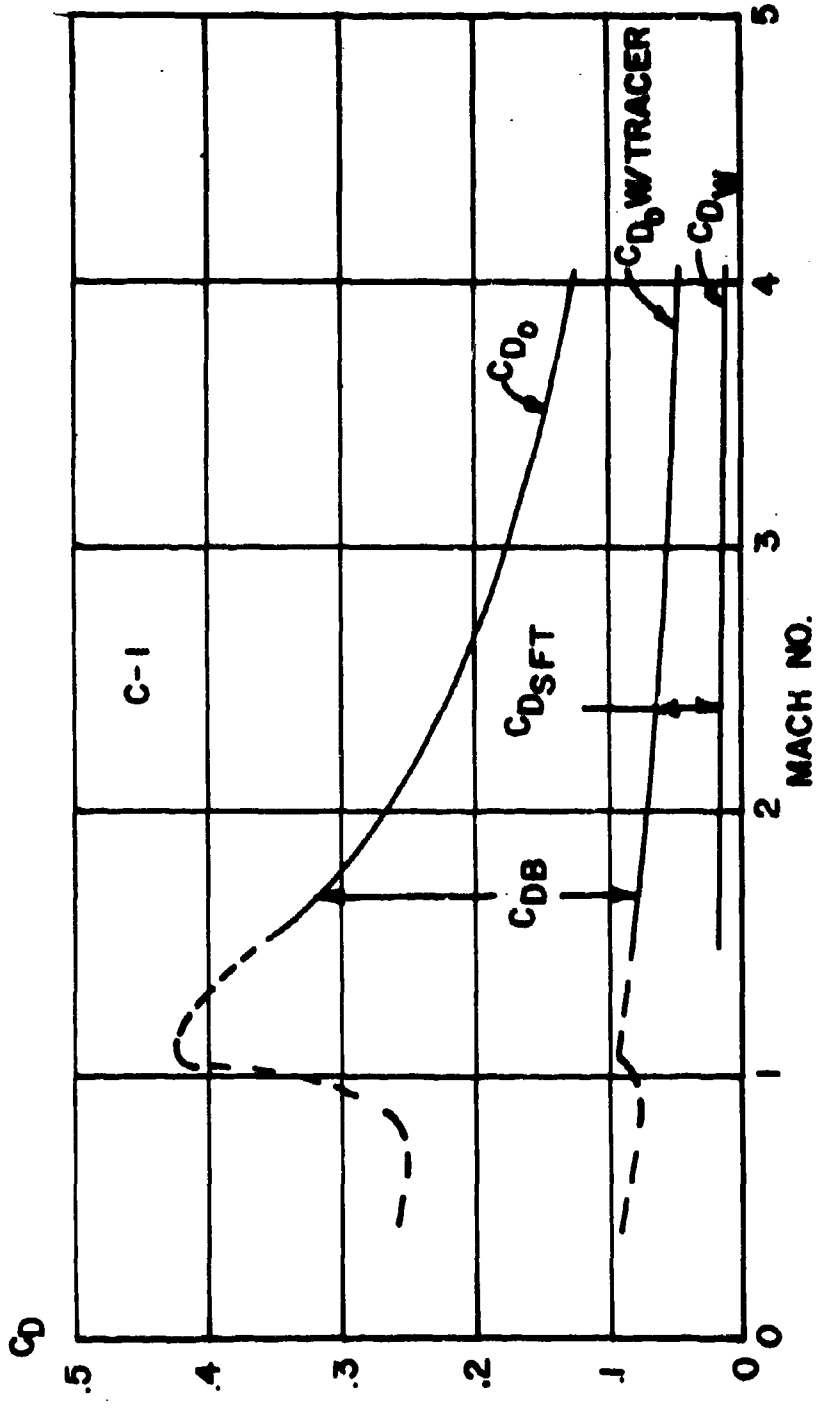
Axial Radius of Gyration = 0.274 Cal.
Transverse Radius of Gyration = 1.86 Cal.
Center of Mass (Nose) = 7.16 Cal.

Wetted Area = 15.01 Cal.^{2}
Volume = 2.50 Cal.^{3}
Length = 9.54 Cal.

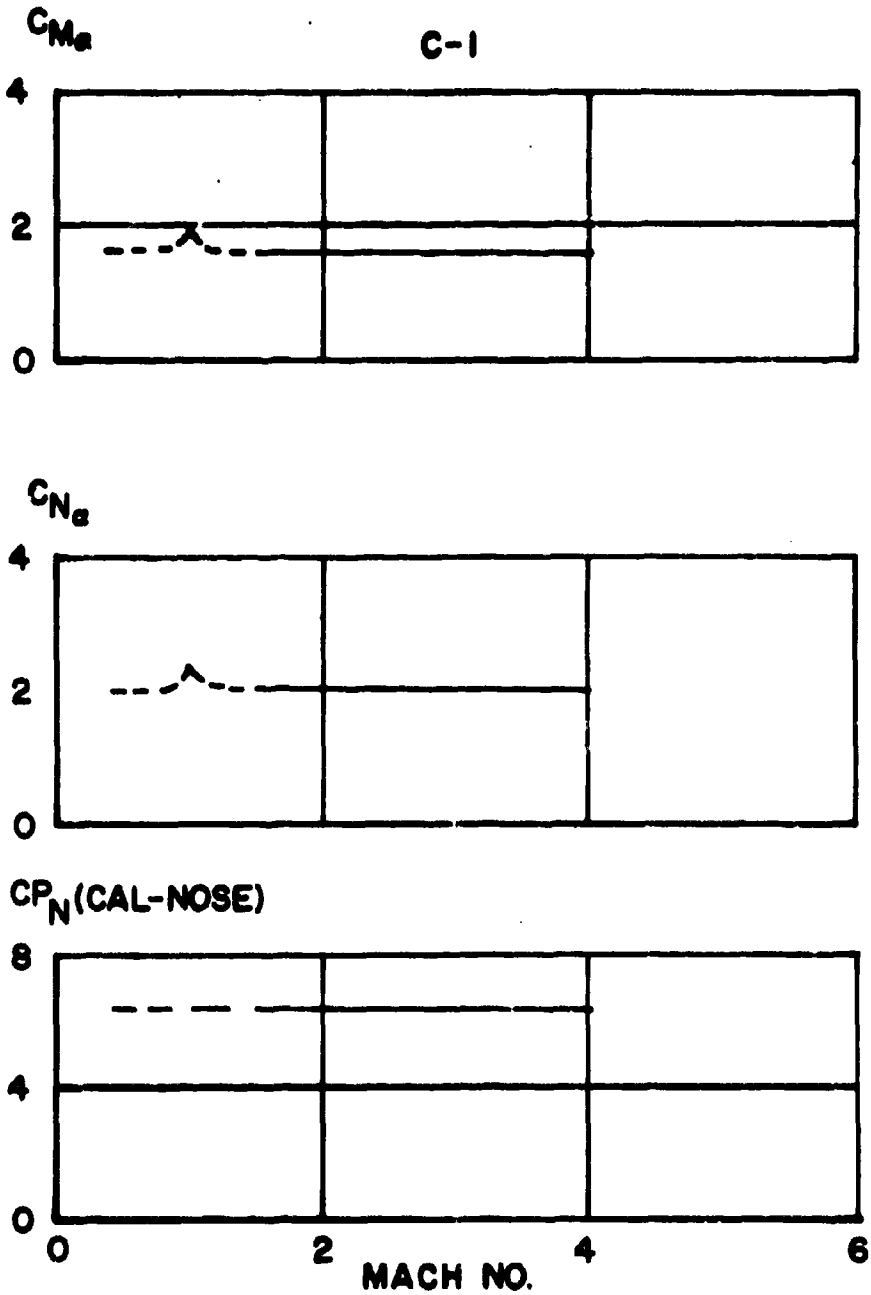
Mach No.	C_{D_0}	C_{D_B}	C_{D_0} (Tracer)	$C_{D_{SF_T}}$	C_{D_W}	C_{N_α}	CP_N	C_{M_α}
.4 *	.263		.093			2.00	6.36	1.60
.8 *	.260		.079			2.00	6.36	1.60
.9 *	.288		.077			2.03	6.36	1.62
.95*	.302		.078			2.14	6.36	1.71
1.0 *	.315		.079			2.34	6.36	1.87
1.05*	.418		.086			2.20	6.36	1.76
1.1 *	.418		.085			2.05	6.36	1.64
1.5	.362	.282	.080	.063	.017	2.00	6.36	1.60
2.0	.269	.199	.070	.055	.015	2.00	6.36	1.60
2.5	.211	.149	.062	.049	.013	1.99	6.36	1.59
3.0	.172	.116	.056	.044	.012	1.99	6.36	1.59
3.5	.144	.093	.051	.039	.011	1.98	6.36	1.58
4.0	.123	.076	.047	.036	.011	1.97	6.36	1.58

$C_{D_{\alpha^2}}$ (Mach = 2.5) = 4.66

*Estimated data



C-1-2



C-1-3

TYPE C 1 CALIBER 5.56 MM AVERAGE DENSITY 7.80 GRAMS/CC.
PROJ. WT 3.349 GRAMS PROJ. DIA. 5.56 MM IMPULSE 0.8 LB. SEC.
DRAG RDCR. WT. 0.000 GRAMS CHG. WT. 0.82 GRAMS SABOT WT. 0.109 GRAMS
TWIST RATE NA PCT. DRAG CHANGE / (DEG. YAW)**2 0.67

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	37.0	749	970	0.0
0	0.00	0.00	37.0	749	939	0.0
50	1.80	0.07	36.1	708	840	-0.4
100	3.54	0.14	35.0	667	746	-0.8
150	5.23	0.22	33.8	626	656	-1.2
200	6.86	0.30	32.5	584	572	-1.7
250	8.42	0.39	30.9	543	493	-2.1
300	9.90	0.49	29.0	502	421	-2.5
350	11.27	0.59	26.9	462	357	-2.8
400	12.54	0.70	24.3	423	300	-3.0
450	13.66	0.83	21.3	387	251	-3.3
500	14.62	0.96	17.6	353	209	-3.4
550	15.39	1.11	13.3	328	180	-2.8
600	15.92	1.27	8.3	307	158	-2.5
650	16.20	1.44	2.7	289	139	-2.5
700	16.18	1.61	-3.7	272	124	-2.4
750	15.84	1.80	-10.8	257	110	-2.3
800	15.12	2.00	-18.9	242	98	-2.3
850	13.98	2.22	-27.9	229	88	-2.4
900	12.37	2.46	-38.0	216	78	-2.4
950	10.24	2.68	-49.3	204	70	-2.4
1000	7.52	2.93	-62.0	193	62	-2.4
1050	4.13	3.20	-76.3	182	55	-2.3
1100	0.00	3.48	-92.3	172	49	-2.3

DRAG RDCR. WT. 0.151 GRAMS PCT. DRAG CHANGE / (DEG. YAW)**2 2.27

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	12.4	749	970	0.0
0	0.00	0.00	12.4	749	939	0.0
50	0.59	0.07	11.5	738	911	-0.1
100	1.13	0.14	10.6	727	883	-0.2
150	1.62	0.20	9.6	716	856	-0.3
200	2.07	0.28	8.6	705	829	-0.4
250	2.47	0.35	7.6	694	803	-0.5
300	2.82	0.42	6.5	684	778	-0.6
350	3.12	0.49	5.5	673	753	-0.7
400	3.36	0.57	4.3	663	729	-0.8
450	3.55	0.64	3.2	652	705	-0.9
500	3.68	0.72	2.0	642	682	-1.0
550	3.75	0.80	0.8	631	659	-1.1
600	3.76	0.88	-0.5	621	637	-1.2
650	3.71	0.96	-1.8	611	616	-1.3
700	3.59	1.04	-3.2	601	595	-1.4
750	3.40	1.13	-4.6	591	574	-1.5
800	3.15	1.21	-6.1	581	554	-1.6
850	2.82	1.30	-7.6	571	535	-1.7
900	2.42	1.39	-9.1	561	516	-1.8
950	1.94	1.48	-10.7	551	498	-1.8
1000	1.37	1.57	-12.4	542	480	-1.9
1050	0.73	1.66	-14.1	532	462	-2.0
1100	0.00	1.76	-15.9	523	446	-2.1

TYPE C 1 CALIBER 5.56 MM AVERAGE DENSITY 7.80 GRAMS/CC.
PROJ. WT 3.349 GRAMS PROJ. DIA. 5.56 MM IMPULSE 1.2 LB. SEC.
DRAG RDCR. WT. 0.000 GRAMS CHG. WT. 1.55 GRAMS SABOT WT. 0.109 GRAMS
TWIST RATE NA PCT. DRAG CHANGE / (DEG. YAW)**2 0.67

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	15.0	1014	1778	0.0
0	0.00	0.00	15.0	1014	1722	0.0
50	0.72	0.05	14.5	975	1591	-0.4
100	1.42	0.10	13.9	935	1464	-0.8
150	2.09	0.16	13.3	895	1342	-1.2
200	2.73	0.21	12.7	855	1225	-1.6
250	3.34	0.27	12.0	815	1113	-2.0
300	3.91	0.34	11.2	775	1005	-2.4
350	4.44	0.40	10.3	734	902	-2.9
400	4.92	0.47	9.3	693	804	-3.3
450	5.36	0.55	8.2	652	712	-3.7
500	5.74	0.63	7.0	611	624	-4.1
550	6.05	0.71	5.5	569	542	-4.6
600	6.28	0.80	3.9	528	466	-5.0
650	6.43	0.90	1.9	487	397	-5.3
700	6.47	1.01	-0.4	447	335	-5.5
750	6.40	1.13	-3.1	410	281	-5.7
800	6.17	1.25	-6.4	374	235	-5.8
850	5.77	1.39	-10.3	343	197	-5.6
900	5.16	1.54	-14.8	320	172	-4.7
950	4.32	1.71	-20.0	300	151	-4.0
1000	3.20	1.88	-25.9	282	134	-3.8
1050	1.77	2.06	-32.6	266	119	-3.6
1100	0.00	2.25	-40.0	252	106	-3.4

DRAG RDCR. WT. 0.151 GRAMS PCT. DRAG CHANGE / (DEG. YAW)**2 2.27

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	6.5	1014	1778	0.0
0	0.00	0.00	6.5	1014	1722	0.0
50	0.31	0.05	6.0	1001	1678	-0.1
100	0.59	0.10	5.5	989	1634	-0.3
150	0.84	0.15	4.9	976	1592	-0.4
200	1.07	0.20	4.4	963	1550	-0.5
250	1.28	0.25	3.9	951	1509	-0.6
300	1.46	0.31	3.3	939	1468	-0.7
350	1.61	0.36	2.7	926	1429	-0.9
400	1.73	0.42	2.1	914	1390	-1.0
450	1.83	0.47	1.5	902	1352	-1.1
500	1.89	0.53	0.9	889	1314	-1.2
550	1.92	0.58	0.3	877	1278	-1.3
600	1.92	0.64	-0.4	865	1242	-1.4
650	1.89	0.70	-1.1	853	1207	-1.5
700	1.83	0.76	-1.7	841	1172	-1.7
750	1.73	0.82	-2.5	830	1138	-1.8
800	1.60	0.88	-3.2	818	1105	-1.9
850	1.43	0.94	-4.0	806	1073	-2.0
900	1.22	1.00	-4.7	795	1041	-2.1
950	0.98	1.07	-5.5	783	1010	-2.2
1000	0.69	1.13	-6.4	771	980	-2.3
1050	0.37	1.20	-7.2	760	950	-2.4
1100	0.00	1.26	-8.1	749	921	-2.5

TYPE C 1 CALIBER 5.56 MM AVERAGE DENSITY 7.80 GRAMS/CC.
PROJ. WT 3.349 GRAMS PROJ. DIA. 5.56 MM IMPULSE 2.1 LB. SEC.
DRAG RDCR. WT. 0.000 GRAMS CHG. WT. 3.61 GRAMS SABOT WT. 0.109 GRAMS
TWIST RATE NA PCT. DRAG CHANGE / (DEG. YAW)**2 0.67

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	4.9	1398	3379	0.0
0	0.00	0.00	4.9	1398	3273	0.0
50	0.23	0.04	4.6	1361	3102	-0.4
100	0.46	0.07	4.4	1324	2935	-0.7
150	0.66	0.11	4.1	1286	2771	-1.1
200	0.86	0.15	3.7	1249	2610	-1.5
250	1.03	0.19	3.4	1211	2454	-1.9
300	1.19	0.23	3.1	1173	2302	-2.3
350	1.34	0.28	2.7	1134	2154	-2.7
400	1.46	0.32	2.3	1096	2010	-3.1
450	1.57	0.37	1.9	1057	1870	-3.5
500	1.65	0.42	1.4	1018	1734	-3.9
550	1.71	0.47	0.9	979	1603	-4.3
600	1.75	0.52	0.3	939	1476	-4.8
650	1.76	0.57	-0.2	899	1353	-5.2
700	1.73	0.63	-0.9	859	1236	-5.6
750	1.68	0.69	-1.6	819	1123	-6.0
800	1.59	0.75	-2.4	779	1015	-6.5
850	1.46	0.82	-3.3	738	911	-6.9
900	1.28	0.89	-4.2	697	813	-7.3
950	1.05	0.96	-5.3	656	721	-7.8
1000	0.77	1.04	-6.6	615	633	-8.2
1050	0.42	1.13	-8.0	573	550	-8.7
1100	0.00	1.22	-9.6	532	473	-9.2

DRAG RDCR. WT. 0.151 GRAMS PCT. DRAG CHANGE / (DEG. YAW)**2 2.27

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	3.2	1398	3379	0.0
0	0.00	0.00	3.2	1398	3273	0.0
50	0.15	0.04	3.0	1384	3205	-0.1
100	0.29	0.07	2.7	1370	3138	-0.3
150	0.42	0.11	2.4	1356	3072	-0.4
200	0.53	0.15	2.2	1342	3007	-0.6
250	0.63	0.18	1.9	1327	2943	-0.7
300	0.72	0.22	1.6	1313	2879	-0.8
350	0.79	0.26	1.3	1300	2817	-1.0
400	0.85	0.30	1.0	1286	2755	-1.1
450	0.90	0.34	0.7	1272	2694	-1.2
500	0.93	0.38	0.4	1258	2634	-1.4
550	0.94	0.42	0.1	1244	2575	-1.5
600	0.94	0.46	-0.3	1230	2517	-1.6
650	0.92	0.50	-0.6	1217	2460	-1.8
700	0.89	0.54	-0.9	1203	2403	-1.9
750	0.84	0.58	-1.3	1189	2348	-2.0
800	0.78	0.62	-1.6	1176	2293	-2.2
850	0.69	0.67	-2.0	1162	2239	-2.3
900	0.59	0.71	-2.4	1149	2186	-2.4
950	0.47	0.75	-2.8	1135	2134	-2.5
1000	0.33	0.80	-3.2	1122	2082	-2.7
1050	0.18	0.84	-3.6	1109	2032	-2.8
1100	0.00	0.89	-4.0	1095	1982	-2.9

TYPE C 1 CALIBER 5.56 MM AVERAGE DENSITY 11.00 GRAMS/CC.
PROJ. WT 4.724 GRAMS PROJ. DIA. 5.56 MM IMPULSE 0.8 LB. SEC.
DRAG RDCR. WT. 0.000 GRAMS CHG. WT. 0.67 GRAMS SABOT WT. 0.109 GRAMS
TWIST RATE NA PCT. DRAG CHANGE / (DEG. YAW)**2 0.67

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	44.3	572	791	0.0
0	0.00	0.00	44.3	572	773	0.0
50	2.14	0.09	42.7	542	695	-0.3
100	4.19	0.18	40.9	513	622	-0.6
150	6.15	0.29	38.9	484	554	-0.9
200	8.01	0.39	36.6	456	492	-1.1
250	9.75	0.50	34.1	429	435	-1.3
300	11.36	0.62	31.5	403	384	-1.6
350	12.81	0.75	27.9	378	337	-1.8
400	14.09	0.89	24.2	354	296	-1.9
450	15.18	1.04	19.9	335	265	-1.6
500	16.05	1.19	15.3	320	241	-1.6
550	16.68	1.35	10.1	305	220	-1.6
600	17.05	1.52	4.5	292	201	-1.6
650	17.13	1.69	-1.6	280	185	-1.6
700	16.89	1.87	-8.2	268	170	-1.6
750	16.32	2.06	-15.5	258	157	-1.6
800	15.37	2.26	-23.3	247	145	-1.7
850	14.03	2.47	-31.8	238	133	-1.7
900	12.25	2.68	-41.0	228	123	-1.7
950	10.00	2.91	-51.0	219	113	-1.8
1000	7.24	3.14	-61.8	210	105	-1.8
1050	3.92	3.38	-73.6	202	96	-1.8
1100	0.00	3.64	-86.3	194	89	-1.8

DRAG RDCR. WT. 0.151 GRAMS PCT. DRAG CHANGE / (DEG. YAW)**2 2.27

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	20.2	572	791	0.0
0	0.00	0.00	20.2	572	773	0.0
50	0.96	0.09	18.7	565	754	-0.1
100	1.83	0.18	17.1	558	735	-0.1
150	2.64	0.27	15.5	552	717	-0.2
200	3.36	0.36	13.8	545	699	-0.3
250	3.99	0.45	12.1	538	681	-0.3
300	4.55	0.54	10.4	532	664	-0.4
350	5.02	0.64	8.6	525	647	-0.5
400	5.40	0.73	6.8	518	630	-0.5
450	5.68	0.83	4.9	512	614	-0.6
500	5.88	0.93	2.9	506	598	-0.6
550	5.98	1.03	1.0	499	582	-0.7
600	5.98	1.13	-1.1	493	567	-0.8
650	5.88	1.23	-3.2	487	552	-0.8
700	5.68	1.34	-5.3	480	537	-0.9
750	5.37	1.44	-7.5	474	523	-0.9
800	4.95	1.55	-9.7	468	509	-1.0
850	4.42	1.65	-12.0	462	495	-1.0
900	3.78	1.76	-14.4	456	482	-1.1
950	3.02	1.87	-16.8	450	469	-1.1
1000	2.14	1.99	-19.3	444	456	-1.2
1050	1.13	2.10	-21.9	438	444	-1.2
1100	0.00	2.21	-24.5	433	432	-1.3

TYPE C 1 CALIBER 5.56 MM AVERAGE DENSITY 11.00 GRAMS/CC.
PROJ. WT 4.724 GRAMS PROJ. DIA. 5.56 MM IMPULSE 1.2 LB. SEC.
DRAG RDCR. WT. 0.000 GRAMS CHG. WT. 1.28 GRAMS SABOT WT. 0.109 GRAMS
TWIST RATE NA PCT. DRAG CHANGE / (DEG. YAW)**2 0.67

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	20.6	792	1516	0.0
0	0.00	0.00	20.6	792	1482	0.0
50	0.99	0.06	19.8	763	1374	-0.3
100	1.94	0.13	18.9	733	1271	-0.6
150	2.85	0.20	17.9	704	1171	-0.9
200	3.70	0.27	16.9	675	1076	-1.2
250	4.51	0.35	15.7	645	984	-1.5
300	5.25	0.43	14.5	616	895	-1.8
350	5.93	0.51	13.1	586	810	-2.1
400	6.54	0.60	11.6	556	730	-2.4
450	7.07	0.69	9.9	526	654	-2.7
500	7.51	0.79	7.9	497	583	-3.0
550	7.85	0.89	5.8	468	518	-3.2
600	8.08	1.00	3.4	440	458	-3.5
650	8.19	1.12	0.6	413	404	-3.7
700	8.15	1.25	-2.5	387	355	-3.8
750	7.94	1.38	-6.1	363	311	-3.9
800	7.56	1.52	-10.1	341	275	-3.9
850	6.96	1.67	-14.6	325	249	-3.9
900	6.12	1.83	-19.6	310	227	-3.8
950	5.04	1.99	-25.0	296	207	-3.7
1000	3.67	2.17	-31.0	284	190	-3.6
1050	2.00	2.35	-37.5	272	175	-3.6
1100	0.00	2.54	-44.5	261	161	-2.5

DRAG RDCR. WT. 0.151 GRAMS PCT. DRAG CHANGE / (DEG. YAW)**2 2.27

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	10.2	792	1516	0.0
0	0.00	0.00	10.2	792	1482	0.0
50	0.48	0.06	9.4	784	1450	-0.1
100	0.93	0.13	8.6	776	1419	-0.2
150	1.33	0.19	7.8	768	1389	-0.3
200	1.69	0.26	6.9	759	1359	-0.3
250	2.01	0.32	6.0	751	1329	-0.4
300	2.29	0.39	5.1	743	1300	-0.5
350	2.52	0.46	4.2	735	1271	-0.6
400	2.71	0.53	3.3	728	1243	-0.6
450	2.85	0.60	2.3	720	1216	-0.7
500	2.94	0.67	1.4	712	1188	-0.8
550	2.99	0.74	0.4	704	1162	-0.9
600	2.99	0.81	-0.6	696	1135	-0.9
650	2.93	0.88	-1.7	689	1110	-1.0
700	2.83	0.95	-2.8	681	1084	-1.1
750	2.67	1.03	-3.8	673	1059	-1.2
800	2.46	1.10	-5.0	666	1035	-1.2
850	2.20	1.18	-6.3	658	1010	-1.3
900	1.88	1.25	-7.5	651	987	-1.3
950	1.50	1.33	-8.9	643	963	-1.4
1000	1.06	1.41	-9.7	636	940	-1.5
1050	0.56	1.49	-10.9	628	918	-1.6
1100	0.00	1.57	-12.2	621	895	-1.6

TYPE C 1 CALIBER 5.56 MM AVERAGE DENSITY 11.00 GRAMS/CC.
PROJ. WT 4.724 GRAMS PROJ. DIA. 5.56 MM IMPULSE 2.1 LB. SEC.
DRAG RDCR. WT. 0.000 GRAMS CHG. WT. 3.06 GRAMS SABOT WT. 0.109 GRAMS
TWIST RATE NA PCT. DRAG CHANGE / (DEG. YAW)**2 0.67

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	6.3	1173	3325	0.0
0	0.00	0.00	6.3	1173	3250	0.0
50	0.30	0.04	5.9	1146	3101	-0.3
100	0.58	0.09	5.5	1119	2955	-0.5
150	0.84	0.13	5.1	1091	2812	-0.8
200	1.08	0.18	4.7	1064	2672	-1.1
250	1.30	0.23	4.2	1036	2535	-1.4
300	1.50	0.28	3.7	1008	2401	-1.7
350	1.67	0.33	3.2	980	2270	-2.0
400	1.82	0.38	2.7	952	2142	-2.2
450	1.94	0.43	2.1	924	2017	-2.5
500	2.03	0.49	1.5	896	1896	-2.8
550	2.09	0.54	0.9	868	1778	-3.1
600	2.12	0.60	0.2	839	1664	-3.4
650	2.12	0.66	-0.5	811	1553	-3.7
700	2.08	0.72	-1.3	782	1445	-4.0
750	2.00	0.79	-2.2	753	1340	-4.3
800	1.88	0.86	-3.1	724	1239	-4.6
850	1.71	0.93	-4.1	695	1142	-4.9
900	1.49	1.00	-5.2	666	1049	-5.2
950	1.21	1.08	-6.3	637	959	-5.5
1000	0.88	1.16	-7.6	608	873	-5.9
1050	0.47	1.24	-9.1	578	790	-6.2
1100	0.00	1.33	-10.6	549	711	-6.5

DRAG RDCR. WT. 0.151 GRAMS PCT. DRAG CHANGE / (DEG. YAW)**2 2.27

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	4.5	1173	3325	0.0
0	0.00	0.00	4.5	1173	3250	0.0
50	0.21	0.04	4.1	1164	3196	-0.1
100	0.40	0.09	3.7	1154	3143	-0.2
150	0.57	0.13	3.3	1145	3090	-0.3
200	0.73	0.17	3.0	1135	3036	-0.4
250	0.87	0.22	2.6	1126	2986	-0.5
300	0.98	0.26	2.2	1116	2935	-0.6
350	1.08	0.31	1.8	1107	2885	-0.7
400	1.16	0.35	1.3	1098	2835	-0.7
450	1.22	0.40	0.9	1088	2785	-0.8
500	1.26	0.44	0.5	1079	2737	-0.9
550	1.28	0.49	0.1	1070	2689	-1.0
600	1.28	0.54	-0.4	1060	2641	-1.1
650	1.25	0.59	-0.8	1051	2594	-1.2
700	1.20	0.63	-1.3	1042	2547	-1.3
750	1.14	0.68	-1.7	1033	2501	-1.4
800	1.04	0.73	-2.2	1024	2456	-1.5
850	0.93	0.78	-2.7	1015	2411	-1.5
900	0.79	0.83	-3.2	1006	2367	-1.6
950	0.63	0.88	-3.7	996	2323	-1.7
1000	0.45	0.93	-4.2	987	2280	-1.8
1050	0.24	0.98	-4.7	978	2238	-1.9
1100	0.00	1.03	-5.2	969	2196	-2.0

TYPE C 1 CALIBER 5.56 MM AVERAGE DENSITY 16.70 GRAMS/CC.
PROJ. WT 7.171 GRAMS PROJ. DIA. 5.56 MM IMPULSE 0.8 LB. SEC.
DRAG RDCR. WT. 0.000 GRAMS CHG. WT. 0.48 GRAMS SABOT WT. 0.109 GRAMS
TWIST RATE NA PCT. DRAG CHANGE / (DEG. YAW)**2 0.67

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	58.1	410	612	0.0
0	0.00	0.00	58.1	410	603	0.0
50	2.78	0.12	55.0	393	554	-0.2
100	5.40	0.25	51.6	376	508	-0.3
150	7.85	0.39	48.0	360	466	-0.5
200	10.11	0.53	43.9	346	430	-0.5
250	12.17	0.68	39.6	335	401	-0.5
300	14.00	0.83	35.0	324	377	-0.6
350	15.60	0.99	30.1	314	354	-0.7
400	16.96	1.15	24.9	305	333	-0.7
450	18.05	1.32	19.4	296	314	-0.8
500	18.86	1.49	13.5	288	297	-0.8
550	19.37	1.66	7.3	280	280	-0.9
600	19.57	1.85	0.7	272	266	-0.9
650	19.44	2.03	-6.2	265	252	-0.9
700	18.96	2.22	-13.5	258	239	-1.0
750	18.12	2.42	-21.2	251	226	-1.0
800	16.88	2.62	-29.4	244	214	-1.1
850	15.23	2.83	-38.0	238	203	-1.1
900	13.15	3.04	-47.0	232	193	-1.1
950	10.62	3.26	-56.6	226	183	-1.2
1000	7.60	3.49	-66.6	220	173	-1.2
1050	4.07	3.72	-77.3	214	164	-1.2
1100	0.00	3.96	-88.4	209	156	-1.3

DRAG RDCR. WT. 0.151 GRAMS PCT. DRAG CHANGE / (DEG. YAW)**2 2.27

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	37.3	410	612	0.0
0	0.00	0.00	37.3	410	603	0.0
50	1.76	0.12	34.3	406	592	0.0
100	3.37	0.25	31.3	403	581	-0.1
150	4.83	0.37	28.2	399	570	-0.1
200	6.13	0.50	25.0	396	560	-0.1
250	7.28	0.62	21.8	393	549	-0.2
300	8.27	0.75	18.5	389	539	-0.2
350	9.10	0.88	15.2	386	529	-0.2
400	9.76	1.01	11.8	382	520	-0.3
450	10.26	1.14	8.3	379	510	-0.3
500	10.58	1.28	4.8	375	501	-0.3
550	10.74	1.41	1.2	372	491	-0.4
600	10.71	1.54	-2.4	369	482	-0.4
650	10.51	1.68	-6.1	365	473	-0.4
700	10.12	1.82	-9.9	362	464	-0.5
750	9.54	1.96	-13.7	359	456	-0.5
800	8.78	2.10	-17.6	356	447	-0.5
850	7.82	2.24	-21.6	353	439	-0.5
900	6.66	2.38	-25.7	350	431	-0.6
950	5.31	2.52	-29.8	347	423	-0.6
1000	3.75	2.67	-34.0	344	415	-0.6
1050	1.98	2.82	-38.3	341	408	-0.6
1100	0.00	2.96	-42.6	338	401	-0.6

TYPE C 1 CALIBER 5.56 MM AVERAGE DENSITY 16.70 GRAMS/CC.
PROJ. WT 7.171 GRAMS PROJ. DIA. 5.56 MM IMPULSE 1.2 LB. SEC.
DRAG RDCR. WT. 0.000 GRAMS CHG. WT. 1.00 GRAMS SABOT WT. 0.109 GRAMS
TWIST RATE NA PCT. DRAG CHANGE / (DEG. YAW)**2 0.67

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	32.0	570	1183	0.0
0	0.00	0.00	32.0	570	1165	0.0
50	1.53	0.09	30.4	551	1087	-0.2
100	2.98	0.18	28.7	531	1011	-0.4
150	4.35	0.28	26.8	512	939	-0.6
200	5.62	0.38	24.9	493	871	-0.8
250	6.79	0.48	22.7	474	806	-0.9
300	7.85	0.59	20.4	456	745	-1.1
350	8.79	0.70	17.9	438	687	-1.3
400	9.61	0.82	15.2	420	633	-1.4
450	10.28	0.94	12.2	403	583	-1.5
500	10.81	1.07	9.0	386	535	-1.7
550	11.17	1.20	5.5	370	491	-1.8
600	11.36	1.34	1.7	355	451	-1.9
650	11.35	1.48	-2.4	342	418	-1.8
700	11.12	1.63	-6.8	331	392	-1.6
750	10.68	1.78	-11.6	320	368	-1.6
800	10.00	1.94	-16.6	311	346	-1.6
850	9.06	2.10	-21.9	302	326	-1.6
900	7.85	2.27	-27.6	293	308	-1.6
950	6.36	2.45	-33.5	285	291	-1.6
1000	4.56	2.62	-39.9	277	276	-1.6
1050	2.45	2.81	-46.5	270	261	-1.6
1100	0.00	2.99	-53.6	263	248	-1.6

DRAG RDCR. WT. 0.151 GRAMS PCT. DRAG CHANGE / (DEG. YAW)**2 2.27

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	19.0	570	1183	0.0
0	0.00	0.00	19.0	570	1165	0.0
50	0.90	0.09	17.5	565	1146	0.0
100	1.72	0.18	15.9	561	1127	-0.1
150	2.46	0.27	14.3	557	1108	-0.1
200	3.12	0.36	12.7	552	1090	-0.2
250	3.71	0.45	11.0	548	1072	-0.2
300	4.21	0.54	9.4	543	1054	-0.3
350	4.63	0.63	7.7	539	1036	-0.3
400	4.96	0.72	5.9	534	1019	-0.3
450	5.21	0.82	4.2	530	1002	-0.4
500	5.38	0.91	2.4	526	985	-0.4
550	5.45	1.01	0.5	521	968	-0.5
600	5.44	1.11	-1.3	517	951	-0.5
650	5.33	1.20	-3.2	513	935	-0.6
700	5.13	1.30	-5.1	509	919	-0.6
750	4.84	1.40	-7.1	504	903	-0.6
800	4.45	1.50	-9.0	500	888	-0.7
850	3.96	1.60	-11.0	496	872	-0.7
900	3.37	1.70	-13.1	492	857	-0.7
950	2.69	1.80	-15.2	488	842	-0.8
1000	1.90	1.91	-17.3	484	828	-0.8
1050	1.00	2.01	-19.4	480	813	-0.9
1100	0.00	2.11	-21.6	476	799	-0.9

TYPE C 1 CALIBER 5.56 MM AVERAGE DENSITY 16.70 GRAMS/CC.
PROJ. WT 7.171 GRAMS PROJ. DIA. 5.56 MM IMPULSE 2.1 LB. SEC.
DRAG RDCR. WT. 0.000 GRAMS CHG. WT. 2.49 GRAMS SABOT WT. 0.109 GRAMS
TWIST RATE NA PCT. DRAG CHANGE / (DEG. YAW)**2 0.67

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	10.3	888	2870	0.0
0	0.00	0.00	10.3	888	2827	0.0
50	0.49	0.06	9.7	869	2710	-0.2
100	0.95	0.12	9.0	851	2595	-0.4
150	1.37	0.17	8.3	832	2482	-0.6
200	1.76	0.24	7.5	813	2371	-0.8
250	2.12	0.30	6.8	794	2262	-0.9
300	2.43	0.36	6.0	775	2155	-1.1
350	2.71	0.43	5.1	756	2050	-1.3
400	2.94	0.49	4.2	737	1948	-1.5
450	3.12	0.56	3.3	718	1849	-1.7
500	3.26	0.63	2.3	699	1752	-1.9
550	3.35	0.71	1.2	680	1658	-2.1
600	3.39	0.78	0.1	661	1566	-2.3
650	3.37	0.86	-1.1	642	1476	-2.5
700	3.30	0.94	-2.3	622	1389	-2.7
750	3.16	1.02	-3.6	603	1303	-2.9
800	2.95	1.10	-5.1	583	1220	-3.1
850	2.67	1.19	-6.6	564	1140	-3.3
900	2.31	1.28	-8.2	545	1063	-3.5
950	1.87	1.37	-10.0	525	989	-3.7
1000	1.35	1.47	-11.8	506	918	-3.8
1050	0.73	1.57	-13.9	487	851	-4.0
1100	0.00	1.68	-16.1	469	787	-4.1

DRAG RDCR. WT. 0.151 GRAMS PCT. DRAG CHANGE / (DEG. YAW)**2 2.27

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	7.6	888	2870	0.0
0	0.00	0.00	7.6	888	2827	0.0
50	0.36	0.06	7.0	882	2791	-0.1
100	0.68	0.11	6.3	877	2754	-0.1
150	0.98	0.17	5.7	871	2718	-0.2
200	1.24	0.23	5.0	866	2682	-0.2
250	1.47	0.29	4.3	860	2647	-0.3
300	1.67	0.34	3.7	855	2612	-0.3
350	1.83	0.40	3.0	849	2577	-0.4
400	1.96	0.46	2.3	843	2543	-0.4
450	2.06	0.52	1.6	838	2509	-0.5
500	2.12	0.58	0.8	833	2475	-0.5
550	2.15	0.64	0.1	827	2441	-0.6
600	2.14	0.70	-0.6	822	2408	-0.7
650	2.10	0.76	-1.4	816	2375	-0.7
700	2.02	0.83	-2.1	811	2343	-0.8
750	1.90	0.89	-2.9	805	2311	-0.8
800	1.74	0.95	-3.7	800	2279	-0.9
850	1.55	1.01	-4.4	795	2247	-0.9
900	1.32	1.08	-5.2	789	2216	-1.0
950	1.05	1.14	-6.0	784	2185	-1.0
1000	0.74	1.20	-6.9	778	2154	-1.1
1050	0.39	1.27	-7.7	773	2124	-1.1
1100	0.00	1.33	-8.5	768	2094	-1.2

TYPE C 1 CALIBER 6.50 MM AVERAGE DENSITY 7.80 GRAMS/CC.
PROJ. WT 5.359 GRAMS PROJ. DIA. 6.50 MM IMPULSE 0.8 LB. SEC.
DRAG RDCR. WT. 0.000 GRAMS CHG. WT. 0.60 GRAMS SABOT WT. 0.171 GRAMS
TWIST RATE NA PCT. DRAG CHANGE / (DEG. YAW)**2 0.67

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	65.3	512	725	0.0
0	0.00	0.00	65.3	512	702	0.0
50	3.16	0.10	63.2	477	611	-0.3
100	6.21	0.21	60.9	444	5[illegible]	-0.7
150	9.14	0.33	58.1	412	454	-0.9
200	11.92	0.45	54.9	381	389	-1.2
250	14.53	0.59	51.2	352	332	-1.4
300	16.95	0.74	46.9	331	293	-1.2
350	19.14	0.89	42.1	312	261	-1.3
400	21.07	1.06	36.7	296	234	-1.3
450	22.73	1.23	30.6	281	211	-1.3
500	24.08	1.41	24.0	267	191	-1.4
550	25.08	1.61	16.6	254	173	-1.4
600	25.70	1.81	8.5	242	157	-1.5
650	25.91	2.02	-0.5	230	142	-1.5
700	25.65	2.24	-10.4	219	129	-1.6
750	24.88	2.48	-21.3	209	117	-1.6
800	23.55	2.72	-33.3	199	106	-1.6
850	21.60	2.98	-46.6	189	96	-1.7
900	18.96	3.25	-61.2	180	87	-1.7
950	15.57	3.54	-77.4	172	79	-1.7
1000	11.33	3.84	-95.2	164	72	-1.7
1050	6.18	4.15	-114.7	156	65	-1.7
1100	0.00	4.48	-136.3	149	59	-1.7

DRAG RDCR. WT. 0.241 GRAMS PCT. DRAG CHANGE / (DEG. YAW)**2 2.27

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	26.6	512	725	0.0
0	0.00	0.00	26.6	512	702	0.0
50	1.26	0.10	24.7	504	680	-0.1
100	2.42	0.20	22.7	497	659	-0.2
150	3.49	0.30	20.6	489	638	-0.2
200	4.45	0.40	18.5	482	618	-0.3
250	5.31	0.51	16.3	474	598	-0.4
300	6.05	0.61	14.1	467	579	-0.4
350	6.69	0.72	11.7	460	560	-0.5
400	7.21	0.83	9.3	453	542	-0.6
450	7.61	0.94	6.9	445	524	-0.6
500	7.89	1.06	4.3	438	507	-0.7
550	8.04	1.17	1.7	432	490	-0.8
600	8.06	1.29	-1.1	425	474	-0.8
650	7.94	1.41	-3.9	418	458	-0.9
700	7.69	1.53	-6.8	411	443	-0.9
750	7.29	1.65	-9.8	405	428	-1.0
800	6.73	1.77	-12.9	398	413	-1.0
850	6.03	1.90	-16.1	392	399	-1.1
900	5.16	2.03	-19.4	385	385	-1.1
950	4.13	2.16	-22.8	379	372	-1.2
1000	2.93	2.29	-26.4	373	359	-1.2
1050	1.56	2.43	-30.0	367	347	-1.3
1100	0.00	2.57	-33.8	360	335	-1.3

TYPE C 1 CALIBER 6.50 MM AVERAGE DENSITY 7.80 GRAMS/CC.
PROJ. WT 5.359 GRAMS PROJ. DIA. 6.50 MM IMPULSE 1.2 LB. SEC.
DRAG RDCR. WT. 0.000 GRAMS CHG. WT. 1.18 GRAMS SABOT WT. 0.171 GRAMS
TWIST RATE NA PCT. DRAG CHANGE / (DEG. YAW)**2 0.67

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	33.7	712	1402	0.0
0	0.00	0.00	33.7	712	1358	0.0
50	1.63	0.07	32.7	677	1229	-0.3
100	3.21	0.15	31.6	642	1105	-0.7
150	4.73	0.23	30.3	607	986	-1.1
200	6.18	0.31	28.8	571	873	-1.4
250	7.56	0.40	27.2	535	768	-1.8
300	8.86	0.50	25.3	500	671	-2.1
350	10.05	0.60	23.2	466	582	-2.4
400	11.13	0.72	20.7	433	503	-2.6
450	12.08	0.83	17.8	402	432	-2.8
500	12.88	0.96	14.5	371	370	-3.0
550	13.51	1.10	10.6	345	318	-3.0
600	13.92	1.25	6.1	325	282	-2.9
650	14.10	1.41	1.1	307	253	-2.3
700	14.03	1.58	-4.5	291	227	-2.3
750	13.66	1.76	-10.7	277	205	-2.2
800	12.98	1.94	-17.6	263	186	-2.2
850	11.94	2.14	-25.2	251	168	-2.2
900	10.50	2.34	-33.5	239	153	-2.2
950	8.64	2.56	-42.7	227	138	-2.2
1000	6.31	2.78	-52.9	216	125	-2.2
1050	3.44	3.02	-64.1	206	114	-2.2
1100	0.00	3.27	-76.5	196	103	-2.2

DRAG RDCR. WT. 0.241 GRAMS PCT. DRAG CHANGE / (DEG. YAW)**2 2.27

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	13.3	712	1402	0.0
0	0.00	0.00	13.3	712	1358	0.0
50	0.63	0.07	12.3	703	1322	-0.1
100	1.21	0.14	11.3	694	1286	-0.2
150	1.73	0.21	10.2	685	1251	-0.3
200	2.21	0.29	9.1	675	1217	-0.4
250	2.65	0.36	8.0	666	1184	-0.4
300	3.00	0.44	6.9	658	1151	-0.5
350	3.31	0.52	5.7	649	1119	-0.6
400	3.56	0.59	4.5	640	1087	-0.7
450	3.76	0.67	3.3	631	1056	-0.8
500	3.89	0.75	2.0	622	1026	-0.9
550	3.96	0.83	0.7	613	996	-1.0
600	3.96	0.91	-0.7	605	967	-1.0
650	3.90	1.00	-2.0	596	938	-1.1
700	3.77	1.08	-3.5	588	910	-1.2
750	3.57	1.17	-4.9	579	883	-1.3
800	3.30	1.25	-6.4	571	857	-1.3
850	2.95	1.34	-8.0	562	830	-1.4
900	2.52	1.43	-9.6	554	805	-1.5
950	2.02	1.52	-11.3	546	780	-1.6
1000	1.43	1.62	-13.0	538	756	-1.6
1050	0.76	1.71	-14.7	530	732	-1.7
1100	0.00	1.80	-16.5	522	709	-1.8

TYPE C 1 CALIBER 6.50 MM AVERAGE DENSITY 7.80 GRAMS/CC.
PROJ. WT 5.359 GRAMS PROJ. DIA. 6.50 MM IMPULSE 2.1 LB. SEC.
DRAG RDCR. WT. 0.000 GRAMS CHG. WT. 2.85 GRAMS SABOT WT. 0.171 GRAMS
TWIST RATE NA PCT. DRAG CHANGE / (DEG. YAW)**2 0.67

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	9.6	1078	3213	0.0
0	0.00	0.00	9.6	1078	3114	0.0
50	0.46	0.05	9.2	1045	2925	-0.3
100	0.90	0.10	8.7	1011	2741	-0.7
150	1.32	0.15	8.2	978	2562	-1.0
200	1.71	0.20	7.6	944	2388	-1.4
250	2.07	0.25	7.1	910	2219	-1.7
300	2.40	0.31	6.4	876	2056	-2.0
350	2.70	0.37	5.8	842	1899	-2.4
400	2.97	0.43	5.0	807	1747	-2.8
450	3.20	0.49	4.2	773	1600	-3.1
500	3.39	0.56	3.4	738	1459	-3.5
550	3.54	0.63	2.4	703	1324	-3.8
600	3.63	0.70	1.3	668	1197	-4.2
650	3.68	0.78	0.1	633	1074	-4.6
700	3.66	0.86	-1.2	598	957	-5.0
750	3.57	0.94	-2.7	562	846	-5.3
800	3.40	1.04	-4.4	527	743	-5.7
850	3.15	1.13	-6.3	492	648	-6.0
900	2.79	1.24	-8.5	458	562	-6.2
950	2.32	1.35	-11.1	425	484	-6.5
1000	1.72	1.47	-14.1	394	416	-6.4
1050	0.95	1.61	-17.5	364	355	-6.4
1100	0.00	1.75	-21.6	339	308	-6.2

DRAG RDCR. WT. 0.241 GRAMS PCT. DRAG CHANGE / (DEG. YAW)**2 2.27

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	5.5	1078	3213	0.0
0	0.00	0.00	5.5	1078	3114	0.0
50	0.26	0.05	5.1	1067	3048	-0.1
100	0.50	0.09	4.6	1056	2983	-0.2
150	0.71	0.14	4.2	1045	2918	-0.3
200	0.91	0.19	3.7	1034	2855	-0.4
250	1.08	0.24	3.2	1023	2793	-0.5
300	1.23	0.29	2.7	1012	2732	-0.7
350	1.35	0.34	2.2	1001	2671	-0.8
400	1.45	0.39	1.7	990	2611	-0.9
450	1.53	0.44	1.2	979	2553	-1.0
500	1.58	0.49	0.7	969	2495	-1.1
550	1.60	0.54	0.2	958	2438	-1.2
600	1.60	0.59	-0.4	947	2382	-1.3
650	1.58	0.65	-0.9	936	2327	-1.4
700	1.52	0.70	-1.5	926	2272	-1.5
750	1.44	0.75	-2.1	915	2219	-1.6
800	1.32	0.81	-2.7	905	2167	-1.7
850	1.18	0.87	-3.3	894	2115	-1.8
900	1.01	0.92	-4.0	884	2064	-1.9
950	0.80	0.98	-4.6	873	2014	-2.0
1000	0.57	1.04	-5.3	863	1965	-2.1
1050	0.30	1.09	-6.0	853	1917	-2.1
1100	0.00	1.15	-6.7	843	1870	-2.2

TYPE C 1 CALIBER 6.50 MM AVERAGE DENSITY 11.00 GRAMS/CC.
PROJ. WT 7.557 GRAMS PROJ. DIA. 6.50 MM IMPULSE 0.8 LB. SEC.
DRAG RDCR. WT. 0.000 GRAMS CHG. WT. 0.45 GRAMS SABOT WT. 0.171 GRAMS
TWIST RATE NA PCT. DRAG CHANGE / (DEG. YAW)**2 0.67

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	72.8	391	591	0.0
0	0.00	0.00	72.8	391	578	0.0
50	3.49	0.13	69.3	370	516	-0.2
100	6.81	0.27	65.4	350	463	-0.4
150	9.92	0.42	61.2	335	423	-0.4
200	12.81	0.57	56.5	321	389	-0.5
250	15.47	0.73	51.4	308	359	-0.6
300	17.87	0.90	46.0	297	333	-0.7
350	19.98	1.07	40.1	286	309	-0.7
400	21.80	1.25	33.8	276	287	-0.8
450	23.30	1.43	26.9	266	268	-0.9
500	24.44	1.62	19.6	257	250	-0.9
550	25.22	1.82	11.8	248	233	-1.0
600	25.60	2.02	3.4	240	217	-1.0
650	25.55	2.24	-5.6	231	202	-1.1
700	25.05	2.46	-15.2	224	189	-1.1
750	24.06	2.68	-25.6	216	176	-1.2
800	22.53	2.92	-36.7	209	164	-1.2
850	20.45	3.16	-48.6	201	153	-1.2
900	17.76	3.42	-61.3	195	143	-1.3
950	14.41	3.68	-75.0	188	134	-1.3
1000	10.38	3.95	-89.6	182	125	-1.3
1050	5.59	4.23	-105.2	176	117	-1.3
1100	0.00	4.52	-122.0	170	109	-1.3

DRAG RDCR. WT. 0.241 GRAMS PCT. DRAG CHANGE / (DEG. YAW)**2 2.27

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	42.8	391	591	0.0
0	0.00	0.00	42.8	391	578	0.0
50	2.02	0.13	39.5	387	564	0.0
100	3.87	0.26	36.1	382	550	-0.1
150	5.56	0.39	32.6	378	537	-0.1
200	7.07	0.52	29.1	373	524	-0.2
250	8.42	0.66	25.5	369	511	-0.2
300	9.57	0.80	21.7	365	498	-0.3
350	10.55	0.93	17.9	361	486	-0.3
400	11.34	1.07	14.1	356	474	-0.3
450	11.93	1.21	10.1	352	463	-0.4
500	12.33	1.36	6.0	348	452	-0.4
550	12.52	1.50	1.8	344	441	-0.4
600	12.51	1.65	-2.4	341	431	-0.4
650	12.29	1.79	-6.8	337	421	-0.5
700	11.85	1.94	-11.2	333	411	-0.5
750	11.20	2.09	-15.8	330	402	-0.5
800	10.31	2.25	-20.4	326	393	-0.6
850	9.20	2.40	-25.1	323	384	-0.6
900	7.85	2.56	-30.0	319	375	-0.6
950	6.26	2.71	-34.9	316	367	-0.6
1000	4.43	2.87	-40.0	313	358	-0.7
1050	2.34	3.03	-45.2	308	346	-0.9
1100	0.00	3.20	-50.7	296	320	-0.9

TYPE C 1 CALIBER 6.50 MM AVERAGE DENSITY 11.00 GRAMS/CC.
PROJ. WT 7.557 GRAMS PROJ. DIA. 6.50 MM IMPULSE 1.2 LB. SEC.
DRAG RDCR. WT. 0.000 GRAMS CHG. WT. 0.95 GRAMS SABOT WT. 0.171 GRAMS
TWIST RATE NA PCT. DRAG CHANGE / (DEG. YAW)**2 0.67

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	42.8	542	1135	0.0
0	0.00	0.00	42.8	542	1110	0.0
50	2.06	0.09	41.1	517	1010	-0.2
100	4.03	0.19	39.1	492	915	-0.5
150	5.90	0.30	36.9	468	828	-0.7
200	7.65	0.41	34.5	444	746	-0.9
250	9.29	0.52	31.9	421	671	-1.1
300	10.78	0.65	28.9	399	602	-1.3
350	12.12	0.77	25.6	378	539	-1.5
400	13.29	0.91	21.9	357	482	-1.6
450	14.27	1.05	17.7	340	437	-1.5
500	15.03	1.20	13.2	326	402	-1.4
550	15.57	1.36	8.3	313	371	-1.4
600	15.85	1.52	3.0	301	343	-1.4
650	15.87	1.69	-2.7	290	318	-1.5
700	15.59	1.87	-8.8	280	296	-1.5
750	15.00	2.05	-15.4	270	276	-1.5
800	14.08	2.24	-22.5	261	258	-1.5
850	12.80	2.43	-30.1	252	240	-1.5
900	11.13	2.64	-38.2	244	224	-1.6
950	9.04	2.84	-46.9	235	209	-1.6
1000	6.52	3.06	-56.3	227	195	-1.6
1050	3.51	3.29	-66.3	220	182	-1.7
1100	0.00	3.52	-77.0	212	170	-1.7

DRAG RDCR. WT. 0.241 GRAMS PCT. DRAG CHANGE / (DEG. YAW)**2 2.27

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	22.0	542	1135	0.0
0	0.00	0.00	22.0	542	1110	0.0
50	1.04	0.09	20.3	536	1086	-0.1
100	1.99	0.19	18.5	531	1062	-0.1
150	2.85	0.28	16.7	525	1039	-0.2
200	3.63	0.38	14.9	519	1016	-0.2
250	4.31	0.47	13.0	514	993	-0.3
300	4.91	0.57	11.1	508	971	-0.3
350	5.41	0.67	9.1	503	949	-0.4
400	5.81	0.77	7.1	498	928	-0.4
450	6.11	0.87	5.1	492	907	-0.5
500	6.31	0.97	3.0	487	886	-0.5
550	6.41	1.08	0.9	481	866	-0.6
600	6.41	1.18	-1.3	476	846	-0.6
650	6.29	1.29	-3.5	471	827	-0.7
700	6.07	1.39	-5.8	466	808	-0.7
750	5.73	1.50	-8.1	461	789	-0.8
800	5.28	1.61	-10.5	456	771	-0.8
850	4.71	1.72	-12.9	450	753	-0.9
900	4.02	1.83	-15.4	445	735	-0.9
950	3.21	1.95	-18.0	440	718	-0.9
1000	2.27	2.06	-20.6	436	701	-1.0
1050	1.20	2.18	-23.2	431	685	-1.0
1100	0.00	2.29	-26.0	426	668	-1.1

TYPE C 1 CALIBER 6.50 MM AVERAGE DENSITY 11.00 GRAMS/CC.

PROJ. WT 7.557 GRAMS PROJ. DIA. 6.50 MM IMPULSE 2.1 LB. SEC.

DRAG RDCR. WT. 0.000 GRAMS CHG. WT. 2.36 GRAMS SABOT WT. 0.171 GRAMS

TWIST RATE NA PCT. DRAG CHANGE / (DEG. YAW)**2 0.67

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	14.1	849	2785	0.0
0	0.00	0.00	14.1	849	2784	0.0
50	0.67	0.06	13.4	825	2570	-0.2
100	1.31	0.12	12.6	800	2420	-0.5
150	1.91	0.18	11.8	776	2273	-0.7
200	2.47	0.25	10.9	751	2130	-1.0
250	2.99	0.32	10.0	726	1992	-1.2
300	3.46	0.39	9.0	701	1859	-1.5
350	3.88	0.46	8.0	677	1730	-1.7
400	4.24	0.54	6.9	652	1606	-2.0
450	4.55	0.61	5.6	627	1485	-2.3
500	4.80	0.70	4.3	602	1368	-2.5
550	4.98	0.78	2.9	576	1256	-2.8
600	5.09	0.87	1.3	551	1148	-3.0
650	5.12	0.96	-0.4	526	1046	-3.3
700	5.06	1.06	-2.3	501	950	-3.5
750	4.90	1.16	-4.4	477	860	-3.7
800	4.63	1.27	-6.7	453	776	-3.8
850	4.24	1.38	-9.3	430	699	-4.0
900	3.73	1.50	-12.1	408	628	-4.1
950	3.06	1.63	-15.3	386	563	-4.2
1000	2.23	1.76	-18.9	365	503	-4.3
1050	1.22	1.90	-22.8	346	453	-4.2
1100	0.00	2.05	-27.2	332	415	-3.7

DRAG RDCR. WT. 0.241 GRAMS PCT. DRAG CHANGE / (DEG. YAW)**2 2.27

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	8.6	849	2785	0.0
0	0.00	0.00	8.6	849	2724	0.0
50	0.41	0.06	7.9	842	2676	-0.1
100	0.78	0.12	7.2	835	2630	-0.1
150	1.11	0.18	6.5	828	2584	-0.2
200	1.41	0.24	5.7	821	2538	-0.3
250	1.68	0.30	5.0	814	2493	-0.4
300	1.91	0.36	4.2	807	2449	-0.4
350	2.10	0.42	3.5	800	2405	-0.5
400	2.25	0.49	2.7	793	2361	-0.6
450	2.37	0.55	1.9	786	2319	-0.6
500	2.44	0.61	1.1	779	2276	-0.7
550	2.48	0.68	0.2	772	2235	-0.8
600	2.47	0.74	-0.6	765	2194	-0.8
650	2.42	0.81	-1.5	758	2153	-0.9
700	2.33	0.88	-2.4	751	2113	-1.0
750	2.20	0.94	-3.3	745	2074	-1.0
800	2.03	1.01	-4.2	738	2035	-1.1
850	1.80	1.08	-5.1	731	1996	-1.1
900	1.54	1.15	-6.0	724	1958	-1.2
950	1.23	1.22	-7.0	718	1921	-1.3
1000	0.87	1.29	-8.0	711	1884	-1.3
1050	0.46	1.36	-9.0	704	1848	-1.4
1100	0.00	1.43	-10.0	698	1812	-1.4

TYPE C 1 CALIBER 6.50 MM AVERAGE DENSITY 16.70 GRAMS/CC.
PROJ. WT 11.473 GRAMS PROJ. DIA. 6.50 MM IMPULSE 0.8 LB. SEC.
DRAG RDCR. WT. 0.000 GRAMS CHG. WT. 0.28 GRAMS SABOT WT. 0.171 GRAMS
TWIST RATE NA PCT. DRAG CHANGE / (DEG. YAW)**2 0.67

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	98.5	285	473	0.0
0	0.00	0.00	98.5	285	466	0.0
50	4.69	0.18	92.2	278	444	-0.1
100	9.07	0.36	85.6	272	423	-0.1
150	13.11	0.55	78.6	265	404	-0.2
200	16.79	0.74	71.3	259	385	-0.2
250	20.12	0.94	63.7	253	367	-0.3
300	23.05	1.14	55.7	247	350	-0.3
350	25.59	1.34	47.4	241	334	-0.4
400	27.70	1.55	38.6	236	319	-0.4
450	29.38	1.76	29.4	230	305	-0.5
500	30.59	1.98	19.8	225	291	-0.5
550	31.31	2.21	9.7	220	278	-0.6
600	31.53	2.44	-0.9	215	265	-0.6
650	31.22	2.67	-12.0	210	253	-0.6
700	30.36	2.92	-23.5	205	242	-0.7
750	28.91	3.16	-35.7	201	231	-0.7
800	26.85	3.41	-48.3	196	221	-0.7
850	24.16	3.67	-61.6	192	211	-0.8
900	20.79	3.94	-75.5	188	202	-0.8
950	16.73	4.21	-90.0	184	193	-0.8
1000	11.93	4.48	-105.2	180	185	-0.8
1050	6.37	4.77	-121.0	176	177	-0.9
1100	0.00	5.06	-137.5	172	170	-0.9

DRAG RDCR. WT. 0.241 GRAMS PCT. DRAG CHANGE / (DEG. YAW)**2 2.27

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	75.9	285	473	0.0
0	0.00	0.00	75.9	285	466	0.0
50	3.57	0.18	69.7	283	459	0.0
100	6.85	0.35	63.4	281	451	0.0
150	9.80	0.53	57.0	279	444	-0.1
200	12.44	0.71	50.5	277	437	-0.1
250	14.76	0.90	44.0	275	430	-0.1
300	16.76	1.08	37.3	273	423	-0.1
350	18.43	1.26	30.5	271	417	-0.1
400	19.76	1.45	23.7	269	410	-0.2
450	20.75	1.63	16.7	267	404	-0.2
500	21.40	1.82	9.6	265	398	-0.2
550	21.70	2.01	2.5	263	391	-0.2
600	21.64	2.20	-4.8	261	385	-0.2
650	21.23	2.39	-12.2	259	379	-0.2
700	20.45	2.59	-19.6	257	373	-0.3
750	19.30	2.78	-27.2	256	368	-0.3
800	17.78	2.98	-34.9	254	362	-0.3
850	15.88	3.18	-42.8	248	347	-0.4
900	13.58	3.38	-51.1	243	331	-0.4
950	10.86	3.59	-59.8	237	316	-0.5
1000	7.71	3.80	-68.9	232	302	-0.5
1050	4.09	4.02	-78.4	227	288	-0.6
1100	0.00	4.25	-88.4	221	275	-0.6

TYPE C 1 CALIBER 6.50 MM AVERAGE DENSITY 16.70 GRAMS/CC.
PROJ. WT 11.473 GRAMS PROJ. DIA. 6.50 MM IMPULSE 1.2 LB. SEC.
DRAG RDCR. WT. 0.000 GRAMS CHG. WT. 0.67 GRAMS SABOT WT. 0.171 GRAMS
TWIST RATE NA PCT. DRAG CHANGE / (DEG. YAW)**2 0.67

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	58.1	390	886	0.0
0	0.00	0.00	58.1	390	873	0.0
50	2.77	0.13	54.7	376	810	-0.1
100	5.37	0.27	51.0	362	752	-0.3
150	7.78	0.41	47.1	349	701	-0.4
200	9.99	0.55	42.9	339	660	-0.4
250	11.99	0.70	38.4	330	624	-0.5
300	13.76	0.86	33.7	321	591	-0.5
350	15.30	1.01	28.7	313	561	-0.6
400	16.58	1.18	23.5	305	533	-0.6
450	17.60	1.34	17.9	297	506	-0.7
500	18.34	1.51	12.1	290	482	-0.7
550	18.79	1.69	6.0	283	459	-0.8
600	18.94	1.87	-0.3	276	438	-0.8
650	18.76	2.05	-7.0	270	419	-0.8
700	18.25	2.24	-14.0	264	400	-0.9
750	17.39	2.43	-21.4	258	382	-0.9
800	16.15	2.62	-29.0	252	365	-0.9
850	14.54	2.83	-37.1	247	349	-1.0
900	12.52	3.03	-45.5	241	333	-1.0
950	10.07	3.24	-54.3	236	318	-1.0
1000	7.19	3.46	-63.5	230	304	-1.1
1050	3.84	3.68	-73.1	225	291	-1.1
1100	0.00	3.90	-83.2	220	278	-1.1

DRAG RDCR. WT. 0.241 GRAMS PCT. DRAG CHANGE / (DEG. YAW)**2 2.27

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	40.5	390	886	0.0
0	0.00	0.00	40.5	390	873	0.0
50	1.90	0.13	37.2	387	859	0.0
100	3.65	0.26	33.8	384	845	-0.1
150	5.22	0.39	30.4	381	831	-0.1
200	6.63	0.52	26.9	378	818	-0.1
250	7.86	0.65	23.4	375	805	-0.1
300	8.93	0.79	19.8	373	792	-0.2
350	9.81	0.92	16.2	370	779	-0.2
400	10.52	1.06	12.5	367	766	-0.2
450	11.04	1.19	8.8	364	754	-0.3
500	11.38	1.33	5.0	361	742	-0.3
550	11.54	1.47	1.1	359	730	-0.3
600	11.50	1.61	-2.8	356	718	-0.3
650	11.27	1.75	-6.8	353	707	-0.3
700	10.84	1.90	-10.8	350	695	-0.4
750	10.22	2.04	-14.9	348	684	-0.4
800	9.39	2.18	-19.0	345	674	-0.4
850	8.35	2.33	-23.3	343	664	-0.4
900	7.11	2.47	-27.5	340	653	-0.4
950	5.66	2.62	-31.9	338	644	-0.5
1000	3.99	2.77	-36.3	336	634	-0.5
1050	2.11	2.92	-40.7	333	625	-0.5
1100	0.00	3.07	-45.3	328	604	-0.6

TYPE C 1 CALIBER 6.50 MM AVERAGE DENSITY 16.70 GRAMS/CC.
PROJ. WT 11.473 GRAMS PROJ. DIA. 6.50 MM IMPULSE 2.1 LB. SEC.
DRAG RDCR. WT. 0.000 GRAMS CHG. WT. 1.85 GRAMS SABOT WT. 0.171 GRAMS
TWIST RATE NA PCT. DRAG CHANGE / (DEG. YAW)**2 0.67

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	24.5	613	2188	0.0
0	0.00	0.00	24.5	613	2156	0.0
50	1.17	0.08	23.1	596	2040	-0.2
100	2.27	0.17	21.6	580	1928	-0.3
150	3.29	0.26	20.1	563	1819	-0.5
200	4.24	0.35	18.5	546	1713	-0.7
250	5.11	0.44	16.8	530	1611	-0.8
300	5.89	0.53	14.9	513	1512	-1.0
350	6.58	0.63	13.0	497	1418	-1.1
400	7.17	0.74	10.9	481	1328	-1.3
450	7.65	0.84	8.7	465	1242	-1.4
500	8.02	0.95	6.3	450	1161	-1.6
550	8.27	1.06	3.7	435	1083	-1.7
600	8.39	1.18	1.0	420	1010	-1.8
650	8.37	1.30	-2.0	405	941	-1.9
700	8.20	1.43	-5.1	391	875	-2.0
750	7.87	1.56	-8.5	377	813	-2.1
800	7.37	1.69	-12.2	363	755	-2.2
850	6.68	1.83	-16.1	350	704	-2.2
900	5.79	1.98	-20.3	340	662	-2.1
950	4.70	2.13	-24.8	331	627	-1.9
1000	3.37	2.28	-29.5	322	594	-1.8
1050	1.81	2.44	-34.4	313	564	-1.8
1100	0.00	2.60	-39.6	306	536	-1.8

DRAG RDCR. WT. 0.241 GRAMS PCT. DRAG CHANGE / (DEG. YAW)**2 2.27

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	16.1	613	2188	0.0
0	0.00	0.00	16.1	613	2156	0.0
50	0.76	0.08	14.8	609	2126	0.0
100	1.45	0.16	13.4	605	2097	-0.1
150	2.07	0.25	12.0	601	2068	-0.1
200	2.63	0.33	10.6	597	2040	-0.2
250	3.12	0.41	9.2	593	2012	-0.2
300	3.54	0.50	7.8	589	1984	-0.2
350	3.89	0.58	6.4	585	1956	-0.3
400	4.16	0.67	4.9	581	1929	-0.3
450	4.37	0.76	3.4	577	1902	-0.4
500	4.50	0.84	1.9	573	1875	-0.4
550	4.56	0.93	0.4	570	1849	-0.4
600	4.54	1.02	-1.2	566	1823	-0.5
650	4.45	1.11	-2.8	562	1797	-0.5
700	4.28	1.20	-4.4	558	1772	-0.5
750	4.03	1.29	-6.0	554	1746	-0.6
800	3.70	1.38	-7.6	550	1721	-0.6
850	3.29	1.47	-9.3	547	1696	-0.6
900	2.80	1.56	-11.0	543	1672	-0.7
950	2.23	1.65	-12.7	539	1648	-0.7
1000	1.57	1.75	-14.4	535	1624	-0.7
1050	0.83	1.84	-16.1	532	1600	-0.8
1100	0.00	1.93	-17.9	528	1577	-0.8

TYPE C 1 CALIBER 7.62 MM AVERAGE DENSITY 7.80 GRAMS/CC.
PROJ. WT 8.627 GRAMS PROJ. DIA. 7.62 MM IMPULSE 0.8 LB. SEC.
DRAG RDCR. WT. 0.000 GRAMS CHG. WT. 0.37 GRAMS SABOT WT. 0.277 GRAMS
TWIST RATE NA PCT. DRAG CHANGE / (DEG. YAW)**2 0.67

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	97.5	350	545	0.0
0	0.00	0.00	97.5	350	528	0.0
50	4.69	0.15	93.2	332	474	-0.2
100	9.16	0.30	88.4	316	430	-0.3
150	13.39	0.47	83.1	301	391	-0.4
200	17.34	0.64	77.4	288	357	-0.5
250	20.99	0.81	71.0	275	327	-0.6
300	24.32	1.00	64.2	264	300	-0.7
350	27.29	1.19	56.7	253	276	-0.8
400	29.88	1.40	48.5	242	253	-0.8
450	32.05	1.61	39.6	232	233	-0.9
500	33.76	1.83	30.0	223	214	-1.0
550	34.98	2.06	19.5	213	196	-1.0
600	35.66	2.30	8.0	205	180	-1.1
650	35.76	2.55	-4.5	196	166	-1.1
700	35.22	2.81	-18.0	188	153	-1.1
750	33.98	3.08	-32.7	180	140	-1.2
800	31.99	3.36	-48.8	173	129	-1.2
850	29.18	3.66	-66.2	166	119	-1.2
900	25.47	3.97	-85.1	159	109	-1.2
950	20.79	4.29	-105.6	153	101	-1.3
1000	15.05	4.62	-127.8	147	93	-1.3
1050	8.15	4.97	-151.9	141	86	-1.3
1100	0.00	5.34	-177.9	136	80	-1.3

DRAG RDCR. WT. 0.389 GRAMS PCT. DRAG CHANGE / (DEG. YAW)**2 2.27

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	54.9	350	545	0.0
0	0.00	0.00	54.9	350	528	0.0
50	2.59	0.14	50.8	345	513	0.0
100	4.98	0.29	46.5	341	499	-0.1
150	7.16	0.44	42.2	336	485	-0.1
200	9.12	0.59	37.7	332	471	-0.2
250	10.86	0.74	33.1	328	458	-0.2
300	12.37	0.89	28.4	323	445	-0.2
350	13.65	1.05	23.5	319	433	-0.3
400	14.68	1.21	18.6	315	421	-0.3
450	15.47	1.37	13.5	311	409	-0.4
500	16.01	1.53	8.3	307	398	-0.4
550	16.29	1.69	2.9	303	387	-0.4
600	16.30	1.86	-2.6	300	376	-0.5
650	16.04	2.03	-8.2	296	366	-0.5
700	15.50	2.20	-14.0	292	355	-0.5
750	14.67	2.37	-19.9	288	345	-0.6
800	13.54	2.54	-26.0	284	336	-0.6
850	12.12	2.72	-32.3	281	326	-0.6
900	10.38	2.90	-38.7	277	317	-0.7
950	8.32	3.08	-45.3	270	300	-0.9
1000	5.93	3.27	-52.5	258	275	-0.9
1050	3.16	3.47	-60.3	247	252	-1.0
1100	0.00	3.68	-68.9	237	231	-1.1

TYPE C 1 CALIBER 7.62 MM AVERAGE DENSITY 7.80 GRAMS/CC.
PROJ. WT 8.627 GRAMS PROJ. DIA. 7.62 MM IMPULSE 1.2 LB. SEC.
DRAG RDCR. WT. 0.000 GRAMS CHG. WT. 0.86 GRAMS SABOT WT. 0.277 GRAMS
TWIST RATE NA PCT. DRAG CHANGE / (DEG. YAW)**2 0.67

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	61.3	483	1039	0.0
0	0.00	0.00	61.3	483	1006	0.0
50	2.96	0.11	59.0	454	890	-0.3
100	5.79	0.22	56.4	426	784	-0.5
150	8.49	0.34	53.5	399	688	-0.8
200	11.04	0.47	50.1	373	602	-1.0
250	13.41	0.61	46.3	350	527	-1.1
300	15.58	0.76	42.0	331	474	-1.0
350	17.53	0.91	37.2	316	430	-1.1
400	19.23	1.08	31.9	301	391	-1.1
450	20.66	1.25	26.1	288	357	-1.2
500	21.80	1.42	19.8	276	328	-1.2
550	22.61	1.61	13.0	264	301	-1.3
600	23.07	1.80	5.5	253	277	-1.3
650	23.14	2.00	-2.6	243	254	-1.4
700	22.81	2.21	-11.4	233	234	-1.4
750	22.02	2.43	-21.1	223	215	-1.5
800	20.73	2.66	-31.5	214	198	-1.5
850	18.92	2.90	-42.9	205	182	-1.5
900	16.52	3.15	-55.2	197	167	-1.5
950	13.49	3.41	-68.6	189	154	-1.6
1000	9.76	3.68	-83.2	181	142	-1.6
1050	5.29	3.96	-99.0	174	131	-1.6
1100	0.00	4.26	-116.2	167	120	-1.6

DRAG RDCR. WT. 0.389 GRAMS PCT. DRAG CHANGE / (DEG. YAW)**2 2.27

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	28.9	483	1039	0.0
0	0.00	0.00	28.9	483	1006	0.0
50	1.37	0.10	26.7	477	979	-0.1
100	2.62	0.21	24.5	470	952	-0.1
150	3.77	0.32	22.2	464	925	-0.2
200	4.81	0.43	19.9	458	899	-0.2
250	5.72	0.54	17.5	452	874	-0.3
300	6.52	0.65	15.0	446	850	-0.4
350	7.20	0.76	12.4	440	826	-0.4
400	7.75	0.87	9.8	434	802	-0.5
450	8.16	0.99	7.1	428	779	-0.5
500	8.45	1.11	4.4	422	757	-0.6
550	8.60	1.23	1.5	417	735	-0.6
600	8.61	1.35	-1.4	411	714	-0.7
650	8.47	1.47	-4.4	405	693	-0.7
700	8.18	1.59	-7.5	400	673	-0.8
750	7.74	1.72	-10.6	394	653	-0.8
800	7.15	1.85	-13.9	389	634	-0.9
850	6.39	1.98	-17.2	383	615	-0.9
900	5.46	2.11	-20.7	378	597	-1.0
950	4.37	2.24	-24.2	373	579	-1.0
1000	3.10	2.38	-27.9	367	561	-1.0
1050	1.64	2.51	-31.6	362	544	-1.1
1100	0.00	2.65	-35.5	357	528	-1.1

TYPE C 1 CALIBER 7.62 MM AVERAGE DENSITY 7.80 GRAMS/CC.
PROJ. WT 8.627 GRAMS PROJ. DIA. 7.62 MM IMPULSE 2.1 LB. SEC.
DRAG RDCR. WT. 0.000 GRAMS CHG. WT. 2.18 GRAMS SABOT WT. 0.277 GRAMS
TWIST RATE NA PCT. DRAG CHANGE / (DEG. YAW)**2 0.67

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	23.6	760	2571	0.0
0	0.00	0.00	23.6	760	2491	0.0
50	1.14	0.07	22.7	730	2300	-0.3
100	2.22	0.14	21.7	700	2116	-0.6
150	3.26	0.21	20.6	671	1940	-0.9
200	4.25	0.29	19.5	641	1771	-1.2
250	5.18	0.37	18.2	610	1607	-1.5
300	6.04	0.45	16.8	580	1451	-1.8
350	6.83	0.54	15.2	550	1303	-2.1
400	7.53	0.63	13.5	519	1164	-2.4
450	8.15	0.73	11.5	490	1035	-2.7
500	8.66	0.84	9.3	461	916	-2.9
550	9.06	0.95	6.8	433	808	-3.1
600	9.33	1.07	3.9	406	710	-3.3
650	9.45	1.20	0.7	380	622	-3.4
700	9.40	1.33	-3.0	355	544	-3.5
750	9.16	1.48	-7.2	336	486	-3.2
800	8.69	1.63	-11.9	320	440	-2.7
850	7.99	1.79	-17.0	305	401	-2.6
900	7.03	1.96	-22.7	291	366	-2.5
950	5.77	2.13	-28.8	279	335	-2.5
1000	4.20	2.32	-35.5	267	308	-2.4
1050	2.29	2.51	-42.4	256	284	-2.4
1100	0.00	2.71	-50.7	246	261	-2.4

DRAG RDCR. WT. 0.389 GRAMS PCT. DRAG CHANGE / (DEG. YAW)**2 2.27

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	11.2	760	2571	0.0
0	0.00	0.00	11.2	760	2491	0.0
50	0.53	0.07	10.3	752	2436	-0.1
100	1.01	0.13	9.4	744	2381	-0.2
150	1.45	0.20	8.5	736	2327	-0.2
200	1.85	0.27	7.6	728	2275	-0.3
250	2.20	0.34	6.6	720	2222	-0.4
300	2.50	0.41	5.7	712	2171	-0.5
350	2.76	0.48	4.7	704	2121	-0.6
400	2.97	0.55	3.6	696	2072	-0.6
450	3.12	0.62	2.6	688	2023	-0.7
500	3.23	0.70	1.5	680	1975	-0.8
550	3.28	0.77	0.4	673	1928	-0.8
600	3.28	0.84	-0.7	665	1882	-0.9
650	3.22	0.92	-1.8	657	1837	-1.0
700	3.11	1.00	-3.0	649	1792	-1.1
750	2.94	1.07	-4.2	642	1748	-1.1
800	2.71	1.15	-5.4	634	1705	-1.2
850	2.42	1.23	-6.7	627	1663	-1.3
900	2.06	1.31	-8.0	619	1621	-1.3
950	1.65	1.39	-9.3	612	1580	-1.4
1000	1.16	1.48	-10.6	604	1540	-1.5
1050	0.62	1.56	-12.0	597	1501	-1.5
1100	0.00	1.64	-13.4	590	1462	-1.6

TYPE C 1 CALIBER 7.62 MM AVERAGE DENSITY 11.00 GRAMS/CC.
PROJ. WT 12.166 GRAMS PROJ. DIA. 7.62 MM IMPULSE 0.8 LB. SEC.
DRAG RDCR. WT. 0.000 GRAMS CHG. WT. 0.28 GRAMS SABOT WT. 0.277 GRAMS
TWIST RATE NA PCT. DRAG CHANGE / (DEG. YAW)**2 0.67

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	100.0	272	460	0.0
0	0.00	0.00	100.0	272	450	0.0
50	4.75	0.19	93.0	264	423	-0.1
100	9.15	0.38	85.6	256	398	-0.2
150	13.17	0.58	77.8	248	375	-0.2
200	16.79	0.79	69.4	241	352	-0.3
250	19.99	1.00	60.5	233	332	-0.4
300	22.73	1.21	51.1	226	312	-0.4
350	25.00	1.44	41.0	220	294	-0.5
400	26.75	1.67	30.4	213	276	-0.5
450	27.97	1.91	19.0	207	260	-0.6
500	28.62	2.15	7.0	201	245	-0.6
550	28.65	2.41	-5.8	195	231	-0.7
600	28.04	2.67	-19.3	189	218	-0.7
650	26.74	2.94	-33.7	184	205	-0.7
700	24.72	3.21	-49.0	178	193	-0.8
750	21.92	3.50	-65.2	173	182	-0.8
800	18.30	3.79	-82.5	168	172	-0.8
850	13.81	4.09	-100.5	163	163	-0.8
900	8.39	4.41	-119.7	159	154	-0.9
950	1.99	4.73	-140.1	155	145	-0.9
964	0.00	4.82	-146.0	153	143	-0.9

DRAG RDCR. WT. 0.389 GRAMS PCT. DRAG CHANGE / (DEG. YAW)**2 2.27

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	87.0	272	460	0.0
0	0.00	0.00	87.0	272	450	0.0
50	4.11	0.19	80.2	269	441	0.0
100	7.88	0.37	73.2	267	431	0.0
150	11.31	0.56	66.2	264	422	-0.1
200	14.38	0.75	58.9	262	413	-0.1
250	17.10	0.94	51.6	259	404	-0.1
300	19.45	1.14	44.1	257	396	-0.1
350	21.42	1.33	36.4	254	388	-0.2
400	23.02	1.53	28.6	252	379	-0.2
450	24.23	1.73	20.6	249	371	-0.2
500	25.05	1.93	12.5	247	363	-0.2
550	25.46	2.14	4.3	245	356	-0.3
600	25.47	2.34	-4.2	242	348	-0.3
650	25.06	2.55	-12.8	240	341	-0.3
700	24.22	2.76	-21.5	238	334	-0.3
750	22.95	2.97	-30.4	235	327	-0.3
800	21.23	3.19	-39.7	229	309	-0.4
850	19.05	3.41	-49.5	222	291	-0.5
900	16.37	3.64	-59.9	215	273	-0.6
950	13.16	3.87	-71.0	209	257	-0.6
1000	9.39	4.12	-82.8	203	242	-0.6
1050	5.01	4.37	-95.3	197	228	-0.7
1100	0.00	4.63	-108.6	191	215	-0.7

TYPE C 1 CALIBER 7.62 MM AVERAGE DENSITY 11.00 GRAMS/CC.
PROJ. WT 12.166 GRAMS PROJ. DIA. 7.62 MM IMPULSE 1.2 LB. SEC.
DRAG RDCR. WT. 0.000 GRAMS CHG. WT. 0.62 GRAMS SABOT WT. 0.277 GRAMS
TWIST RATE NA PCT. DRAG CHANGE / (DEG. YAW)**2 0.67

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	71.2	370	852	0.0
0	0.00	0.00	71.2	370	833	0.0
50	3.41	0.14	67.4	353	757	-0.2
100	6.62	0.28	63.2	339	698	-0.3
150	9.61	0.43	58.7	327	650	-0.3
200	12.38	0.59	53.8	316	606	-0.4
250	14.90	0.75	48.6	305	567	-0.5
300	17.15	0.92	43.1	295	531	-0.6
350	19.13	1.09	37.2	286	498	-0.6
400	20.80	1.27	30.9	278	468	-0.7
450	22.16	1.45	24.2	269	441	-0.7
500	23.18	1.64	17.1	261	415	-0.8
550	23.84	1.83	9.6	254	391	-0.8
600	24.12	2.03	1.6	246	369	-0.9
650	23.99	2.24	-6.9	239	347	-0.9
700	23.44	2.45	-15.9	232	327	-1.0
750	22.43	2.67	-25.5	225	308	-1.0
800	20.93	2.90	-35.7	219	291	-1.1
850	18.92	3.13	-46.4	212	274	-1.1
900	16.37	3.37	-57.8	206	258	-1.1
950	13.24	3.62	-69.9	200	244	-1.2
1000	9.49	3.87	-82.8	194	230	-1.2
1050	5.09	4.13	-96.4	189	217	-1.2
1100	0.00	4.40	-110.8	184	205	-1.2

DRAG RDCR. WT. 0.389 GRAMS PCT. DRAG CHANGE / (DEG. YAW)**2 2.27

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	46.5	370	852	0.0
0	0.00	0.00	46.5	370	833	0.0
50	2.19	0.14	42.8	366	815	0.0
100	4.20	0.27	39.0	363	798	-0.1
150	6.02	0.41	35.2	359	781	-0.1
200	7.65	0.55	31.3	355	764	-0.1
250	9.09	0.69	27.3	352	748	-0.2
300	10.33	0.84	23.2	349	733	-0.2
350	11.37	0.98	19.1	345	718	-0.2
400	12.20	1.13	14.8	342	703	-0.3
450	12.82	1.27	10.5	339	689	-0.3
500	13.23	1.42	6.1	336	675	-0.3
550	13.43	1.57	1.6	333	662	-0.3
600	13.40	1.72	-2.9	330	649	-0.4
650	13.15	1.87	-7.5	327	636	-0.4
700	12.66	2.03	-12.3	324	624	-0.4
750	11.95	2.18	-17.1	321	611	-0.4
800	10.99	2.34	-22.0	318	599	-0.5
850	9.79	2.50	-27.0	315	588	-0.5
900	8.35	2.66	-32.1	312	576	-0.5
950	6.66	2.82	-37.2	309	565	-0.5
1000	4.70	2.98	-42.5	307	554	-0.6
1050	2.49	3.15	-48.0	297	521	-0.7
1100	0.00	3.32	-53.8	288	488	-0.8

TYPE C 1 CALIBER 7.62 MM AVERAGE DENSITY 11.00 GRAMS/CC.
PROJ. WT 12.166 GRAMS PROJ. DIA. 7.62 MM IMPULSE 2.1 LB. SEC.
DRAG RDCR. WT. 0.000 GRAMS CHG. WT. 1.77 GRAMS SABOT WT. 0.277 GRAMS
TWIST RATE NA PCT. DRAG CHANGE / (DEG. YAW)**2 0.67

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	33.0	581	2100	0.0
0	0.00	0.00	33.0	581	2053	0.0
50	1.58	0.09	31.4	559	1904	-0.2
100	3.08	0.18	29.8	538	1760	-0.4
150	4.50	0.27	28.0	517	1623	-0.6
200	5.83	0.37	26.0	495	1493	-0.8
250	7.06	0.48	23.9	475	1371	-1.0
300	8.18	0.58	21.6	454	1256	-1.2
350	9.18	0.70	19.0	435	1149	-1.4
400	10.05	0.81	16.3	415	1049	-1.5
450	10.78	0.94	13.2	396	956	-1.7
500	11.35	1.07	9.9	378	869	-1.8
550	11.75	1.20	6.2	360	790	-1.9
600	11.96	1.34	2.2	345	724	-1.9
650	11.97	1.49	-2.2	332	673	-1.7
700	11.76	1.64	-6.8	321	627	-1.6
750	11.30	1.80	-11.8	310	586	-1.6
800	10.60	1.97	-17.2	300	549	-1.6
850	9.62	2.14	-22.9	291	515	-1.6
900	8.35	2.31	-29.0	282	484	-1.6
950	6.78	2.49	-35.5	274	456	-1.6
1000	4.87	2.68	-42.4	266	429	-1.6
1050	2.62	2.87	-49.7	258	405	-1.7
1100	0.00	3.06	-57.4	250	382	-1.7

DRAG RDCR. WT. 0.389 GRAMS PCT. DRAG CHANGE / (DEG. YAW)**2 2.27

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	18.6	581	2100	0.0
0	0.00	0.00	18.6	581	2053	0.0
50	0.87	0.09	17.1	576	2016	-0.1
100	1.67	0.17	15.6	571	1979	-0.1
150	2.40	0.26	14.0	566	1943	-0.1
200	3.05	0.35	12.4	561	1907	-0.2
250	3.62	0.44	10.8	556	1872	-0.2
300	4.12	0.53	9.2	551	1837	-0.3
350	4.53	0.62	7.5	546	1802	-0.3
400	4.86	0.71	5.9	541	1768	-0.4
450	5.11	0.81	4.1	536	1735	-0.4
500	5.27	0.90	2.4	532	1702	-0.5
550	5.35	0.99	0.6	527	1670	-0.5
600	5.33	1.09	-1.2	522	1638	-0.6
650	5.23	1.19	-3.1	517	1606	-0.6
700	5.04	1.28	-5.0	512	1575	-0.7
750	4.76	1.38	-8.9	508	1545	-0.7
800	4.38	1.48	-10.8	503	1515	-0.7
850	3.90	1.58	-10.8	498	1485	-0.8
900	3.32	1.68	-12.9	494	1456	-0.8
950	2.65	1.78	-14.9	489	1427	-0.9
1000	1.87	1.89	-17.0	484	1399	-0.9
1050	0.99	1.99	-19.2	480	1372	-1.0
1100	0.00	2.09	-21.4	475	1344	-1.0

TYPE C 1 CALIBER 7.62 MM AVERAGE DENSITY 16.70 GRAMS/CC.
PROJ. WT 18.470 GRAMS PROJ. DIA. 7.62 MM IMPULSE 0.8 LB. SEC.
DRAG RDCR. WT. 0.000 GRAMS CHG. WT. 0.32 GRAMS SABOT WT. 0.277 GRAMS
TWIST RATE NA PCT. DRAG CHANGE / (DEG. YAW)**2 0.67

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	100.0	205	394	0.0
0	0.00	0.00	100.0	205	388	0.0
50	4.62	0.25	87.9	201	374	0.0
100	8.64	0.50	75.2	197	357	-0.1
150	12.01	0.76	62.0	193	343	-0.1
200	14.72	1.02	48.3	189	329	-0.2
250	16.74	1.29	33.9	185	316	-0.2
300	18.04	1.56	19.0	181	303	-0.2
350	18.60	1.84	3.5	178	291	-0.2
400	18.38	2.12	-12.6	174	280	-0.3
450	17.35	2.41	-29.4	171	269	-0.3
500	15.48	2.71	-46.9	168	259	-0.3
550	12.74	3.01	-65.0	164	250	-0.4
600	9.09	3.33	-83.8	161	241	-0.4
650	4.48	3.63	-103.3	159	232	-0.4
691	0.00	3.89	-119.8	156	226	-0.4

DRAG RDCR. WT. 0.389 GRAMS PCT. DRAG CHANGE / (DEG. YAW)**2 2.27

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	100.0	205	394	0.0
0	0.00	0.00	100.0	205	388	0.0
50	4.63	0.25	88.0	203	382	0.0
100	8.66	0.49	75.9	202	375	0.0
150	12.08	0.74	63.5	200	369	0.0
200	14.90	0.99	51.0	199	363	-0.1
250	17.09	1.25	38.3	198	357	-0.1
300	18.66	1.50	25.4	196	352	-0.1
350	19.58	1.76	12.3	195	346	-0.1
400	19.87	2.01	-0.9	194	341	-0.1
450	19.49	2.27	-14.3	192	336	-0.1
500	18.46	2.53	-27.9	191	331	-0.1
550	16.76	2.80	-41.7	190	326	-0.1
600	14.37	3.06	-55.6	188	320	-0.2
650	11.28	3.33	-70.0	185	308	-0.2
700	7.48	3.60	-85.0	181	296	-0.2
750	2.92	3.88	-100.5	178	285	-0.3
778	0.00	4.04	-109.5	176	279	-0.3

TYPE C 1 CALIBER 7.62 MM AVERAGE DENSITY 16.70 GRAMS/CC.
PROJ. WT 18.470 GRAMS PROJ. DIA. 7.62 MM IMPULSE 1.2 LB. SEC.
DRAG RDCR. WT. 0.000 GRAMS CHG. WT. 0.42 GRAMS SABOT WT. 0.277 GRAMS
TWIST RATE NA PCT. DRAG CHANGE / (DEG. YAW)**2 0.67

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	100.0	271	688	0.0
0	0.00	0.00	100.0	271	678	0.0
50	4.75	0.19	93.1	266	651	-0.1
100	9.15	0.38	85.8	260	625	-0.1
150	13.19	0.57	78.3	255	600	-0.2
200	16.86	0.77	70.5	250	576	-0.2
250	20.11	0.97	62.3	245	554	-0.2
300	22.97	1.18	53.8	240	532	-0.3
350	25.40	1.39	44.9	235	511	-0.3
400	27.38	1.61	35.7	231	491	-0.4
450	28.90	1.83	26.1	226	472	-0.4
500	29.94	2.05	16.2	222	453	-0.4
550	30.48	2.28	5.8	217	436	-0.5
600	30.51	2.51	-5.0	213	419	-0.5
650	29.99	2.75	-16.3	209	403	-0.5
700	28.91	2.99	-27.9	205	387	-0.6
750	27.24	3.24	-40.1	201	373	-0.6
800	24.97	3.49	-52.7	197	359	-0.6
850	22.06	3.74	-65.8	193	345	-0.7
900	18.50	4.01	-79.4	190	333	-0.7
950	14.25	4.27	-93.5	186	320	-0.7
1000	9.29	4.54	-108.2	183	309	-0.7
1050	3.59	4.82	-123.4	180	298	-0.7
1078	0.00	4.98	-132.3	178	292	-0.8

DRAG RDCR. WT. 0.389 GRAMS PCT. DRAG CHANGE / (DEG. YAW)**2 2.27

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	82.8	271	688	0.0
0	0.00	0.00	82.8	271	678	0.0
50	3.90	0.19	76.0	269	669	0.0
100	7.47	0.37	69.0	267	659	0.0
150	10.69	0.56	62.0	266	650	0.0
200	13.56	0.75	54.9	264	641	-0.1
250	16.08	0.94	47.7	262	632	-0.1
300	18.24	1.13	40.4	261	623	-0.1
350	20.04	1.32	33.0	259	614	-0.1
400	21.48	1.52	25.5	257	605	-0.1
450	22.55	1.71	17.9	256	597	-0.1
500	23.24	1.91	10.2	254	589	-0.2
550	23.55	2.11	2.4	253	581	-0.2
600	23.48	2.30	-5.4	251	573	-0.2
650	23.03	2.50	-13.4	250	565	-0.2
700	22.17	2.71	-21.5	248	557	-0.2
750	20.92	2.91	-29.6	246	550	-0.2
800	19.26	3.11	-37.9	243	535	-0.3
850	17.19	3.32	-46.6	238	514	-0.3
900	14.69	3.53	-55.5	234	494	-0.4
950	11.74	3.75	-64.8	229	475	-0.4
1000	8.32	3.97	-74.5	225	457	-0.4
1050	4.41	4.19	-84.6	220	440	-0.5
1100	0.00	4.42	-95.1	216	423	-0.5

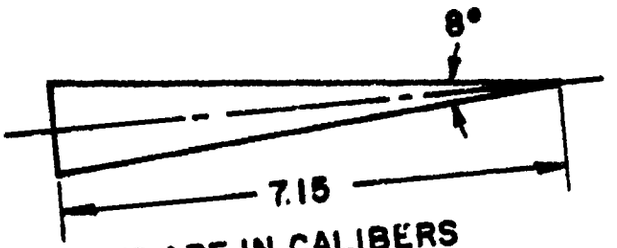
TYPE C 1 CALIBER 7.62 MM AVERAGE DENSITY 16.70 GRAMS/CC.
PROJ. WT 18.470 GRAMS PROJ. DIA. 7.62 MM IMPULSE 2.1 LB. SEC.
DRAG RDCR. WT. 0.000 GRAMS CHG. WT. 1.27 GRAMS SABOT WT. 0.277 GRAMS
TWIST RATE NA PCT. DRAG CHANGE / (DEG. YAW)**2 0.67

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	49.2	416	1622	0.0
0	0.00	0.00	49.2	416	1598	0.0
50	2.35	0.12	46.2	403	1503	-0.1
100	4.54	0.25	43.1	391	1413	-0.2
150	6.57	0.38	39.7	379	1327	-0.4
200	8.44	0.51	36.1	367	1245	-0.5
250	10.12	0.65	32.3	356	1170	-0.6
300	11.61	0.79	28.2	346	1105	-0.6
350	12.89	0.94	23.9	337	1051	-0.6
400	13.96	1.09	19.4	329	1003	-0.6
450	14.80	1.24	14.7	322	957	-0.7
500	15.41	1.40	9.8	315	915	-0.7
550	15.77	1.56	4.7	308	876	-0.8
600	15.87	1.73	-0.7	301	839	-0.8
650	15.70	1.89	-6.4	295	804	-0.8
700	15.25	2.06	-12.2	289	771	-0.9
750	14.50	2.24	-18.3	283	740	-0.9
800	13.45	2.42	-24.7	278	711	-0.9
850	12.08	2.60	-31.3	272	684	-0.9
900	10.38	2.79	-38.2	267	658	-1.0
950	8.34	2.98	-45.3	262	633	-1.0
1000	5.94	3.17	-52.8	257	609	-1.0
1050	3.16	3.37	-60.5	252	586	-1.1
1100	0.00	3.57	-68.5	247	564	-1.1

DRAG RDCR. WT. 0.389 GRAMS PCT. DRAG CHANGE / (DEG. YAW)**2 2.27

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	34.9	416	1622	0.0
0	0.00	0.00	34.9	416	1598	0.0
50	1.64	0.12	32.0	413	1576	0.0
100	3.14	0.24	29.1	411	1555	-0.1
150	4.49	0.36	26.1	408	1534	-0.1
200	5.70	0.49	23.1	405	1513	-0.1
250	6.76	0.61	20.0	403	1492	-0.1
300	7.66	0.74	16.9	400	1472	-0.2
350	8.42	0.86	13.8	398	1452	-0.2
400	9.02	0.99	10.6	395	1432	-0.2
450	9.46	1.11	7.4	393	1413	-0.2
500	9.74	1.24	4.1	390	1393	-0.3
550	9.87	1.37	0.8	388	1374	-0.3
600	9.83	1.50	-2.5	385	1355	-0.3
650	9.62	1.63	-5.9	383	1337	-0.3
700	9.26	1.76	-9.4	380	1318	-0.3
750	8.71	1.89	-12.8	378	1300	-0.4
800	8.00	2.03	-16.4	375	1282	-0.4
850	7.12	2.16	-19.9	373	1265	-0.4
900	6.05	2.29	-23.5	370	1247	-0.4
950	4.81	2.43	-27.2	368	1230	-0.5
1000	3.39	2.57	-30.9	366	1213	-0.5
1050	1.79	2.70	-34.7	363	1196	-0.5
1100	0.00	2.84	-38.5	361	1180	-0.5

C 2



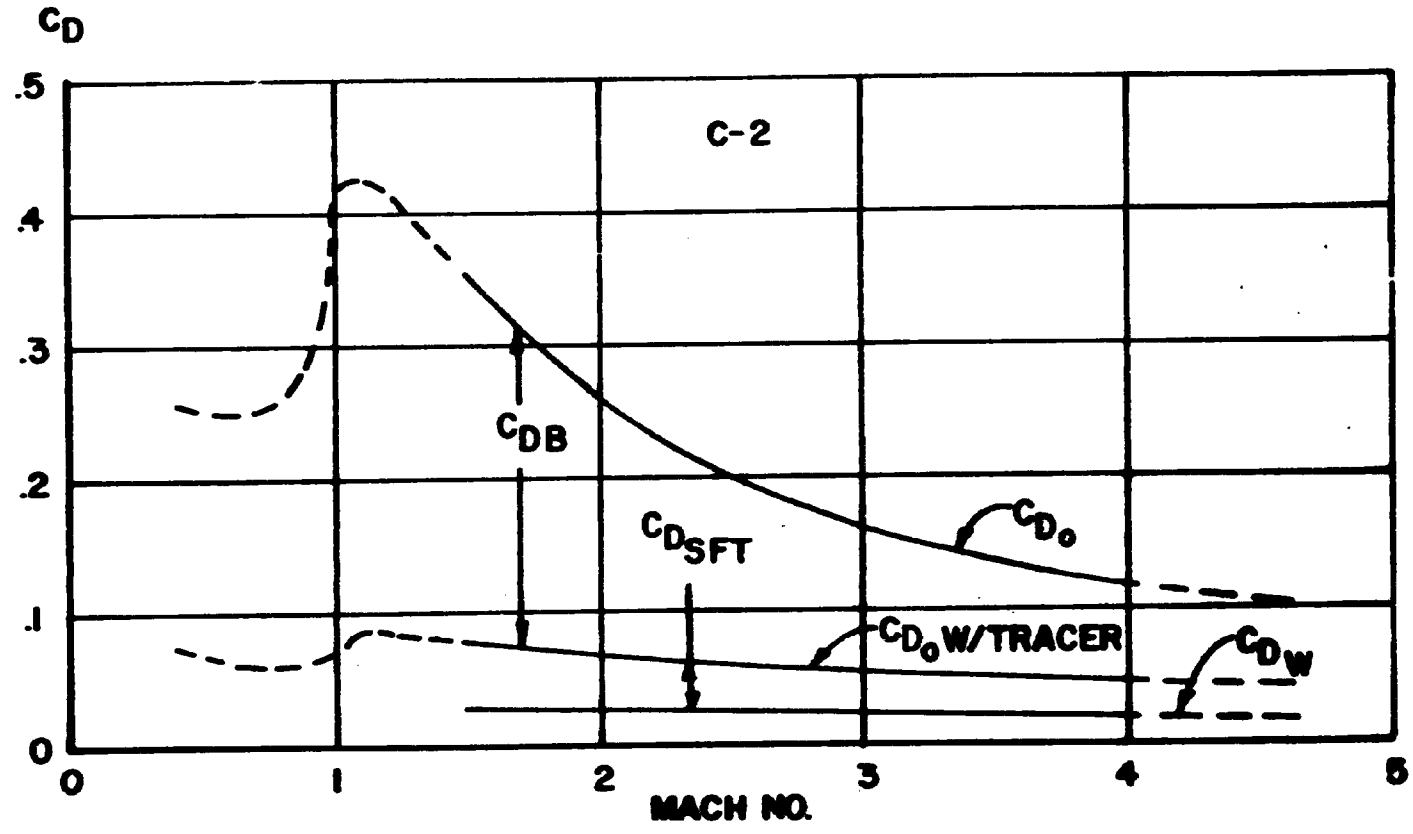
ALL DIMENSIONS ARE IN CALIBERS

Axial Radius of Gyration = 0.274 Cal.
Transverse Radius of Gyration = 1.40 Cal.
Center of Mass (Nose) = 5.36 Cal.
Wetted Area = 11.26 Cal.^{2}
Volume = 1.87 Cal.^{3}
Length = 7.15 Cal.

Mach No.	C_{D_0}	C_{D_B}	C_{D_0} (Tracer)	$C_{D_{SF_T}}$	C_{D_W}	C_{N_α}	CP_N	C_{M_α}
.4 *	.256		.074			2.00	4.77	1.18
.7 *	.250		.061			2.00	4.77	1.18
.8 *	.258		.064			2.00	4.77	1.18
.9 *	.290		.066			2.03	4.77	1.20
.95*	.321		.067			2.14	4.77	1.26
1.0 *	.412		.069			2.34	4.77	1.38
1.05*	.422		.079			2.20	4.77	1.30
1.1 *	.422		.079			2.05	4.77	1.21
1.5	.353	.276	.077	.050	.027	2.00	4.77	1.18
2.0	.258	.191	.067	.044	.024	1.99	4.77	1.17
2.5	.201	.141	.060	.039	.021	1.98	4.77	1.17
3.0	.163	.109	.054	.035	.020	1.98	4.77	1.17
3.5	.137	.087	.050	.031	.019	1.97	4.77	1.16
4.0	.117	.071	.046	.029	.018	1.96	4.77	1.16
4.6 *	.101	.067	.044	.028	.016	1.95	4.77	1.15

$C_{D_{\alpha^2}}$ (Mach = 2.5) = 4.48 (1/radian squared)

*Estimated data



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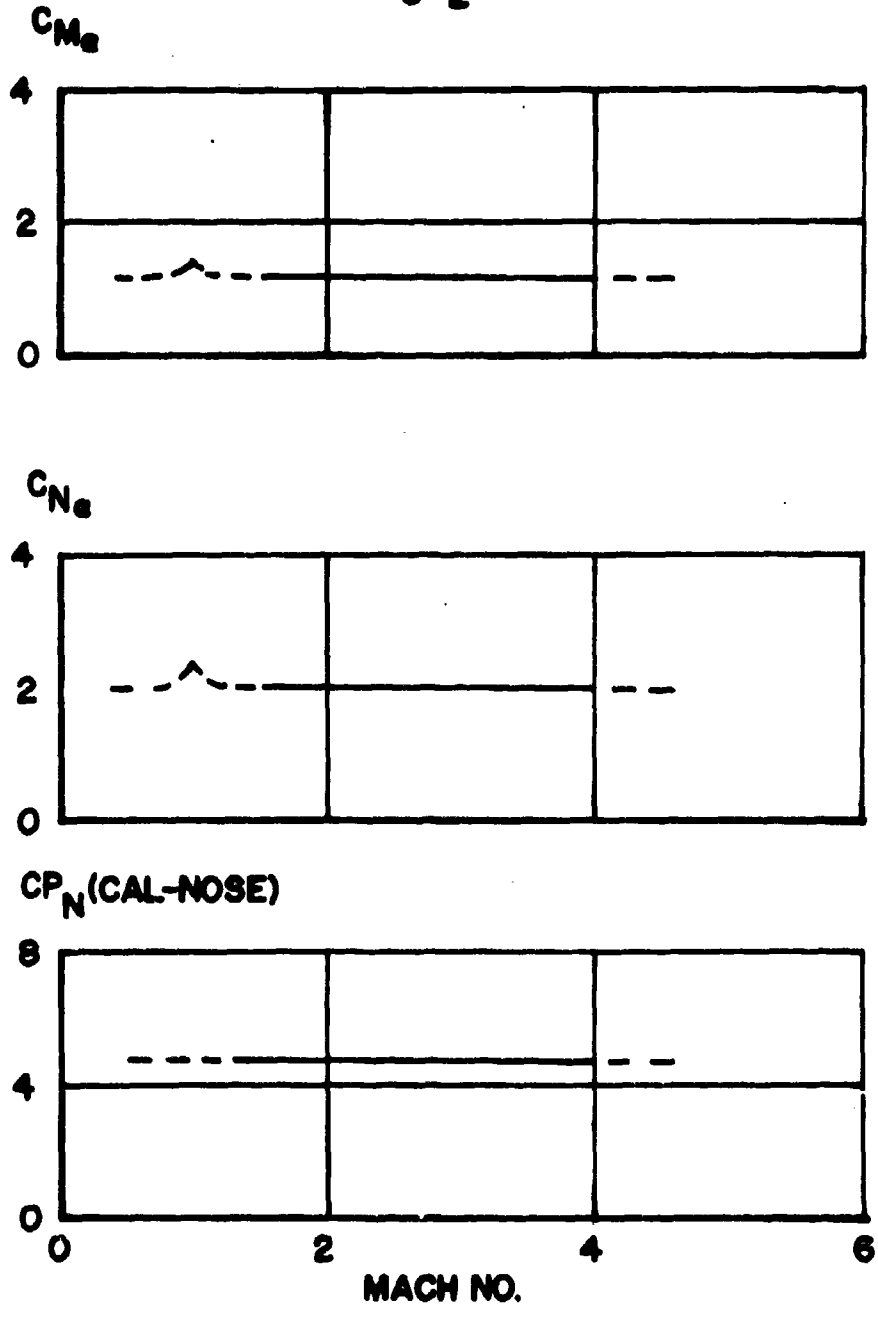
C-2-2

C-2



TYPE C 2 CALIBER 5.56 MM AVERAGE DENSITY 7.80 GRAMS/CC.
PROJ. WT 2.506 GRAMS PROJ. DIA. 5.56 MM IMPULSE 0.8 LB. SEC.
DRAG RDCR. WT. 0.000 GRAMS CHG. WT. 0.96 GRAMS SABOT WT. 0.142 GRAMS
TWIST RATE NA PCT. DRAG CHANGE / (DEG. YAW)**2 0.68

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	33.4	919	1118	0.0
0	0.00	0.00	33.4	919	1058	0.0
50	1.62	0.06	32.7	868	944	-0.5
100	3.21	0.12	32.0	817	836	-1.0
150	4.77	0.18	31.2	765	733	-1.6
200	6.28	0.25	30.3	713	636	-2.1
250	7.74	0.32	29.2	660	546	-2.6
300	9.15	0.40	28.0	607	461	-3.2
350	10.49	0.48	26.5	553	383	-3.8
400	11.76	0.58	24.7	499	312	-4.3
450	12.92	0.69	22.5	447	250	-4.7
500	13.96	0.80	19.6	397	198	-5.0
550	14.84	0.94	16.0	351	154	-5.1
600	15.53	1.09	11.5	313	124	-4.5
650	15.96	1.26	6.0	289	105	-3.5
700	16.11	1.44	-0.5	268	90	-3.1
750	15.91	1.63	-7.9	253	80	-2.5
800	15.33	1.83	-16.1	239	71	-2.3
850	14.32	2.05	-25.5	222	62	-2.7
900	12.81	2.28	-36.4	206	53	-2.9
950	10.73	2.53	-49.0	192	46	-2.9
1000	7.97	2.80	-63.7	178	40	-2.9
1050	4.44	3.10	-80.7	165	34	-2.8
1100	0.00	3.41	-100.5	153	29	-2.7

DRAG RDCR. WT. 0.151 GRAMS PCT. DRAG CHANGE / (DEG. YAW)**2 2.27

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	8.6	919	1118	0.0
0	0.00	0.00	8.6	919	1058	0.0
50	0.41	0.05	8.0	903	1021	-0.2
100	0.78	0.11	7.4	888	985	-0.3
150	1.13	0.17	6.7	872	950	-0.5
200	1.44	0.23	6.0	857	916	-0.6
250	1.73	0.28	5.4	842	882	-0.8
300	1.97	0.34	4.6	826	850	-0.9
350	2.19	0.41	3.9	811	818	-1.0
400	2.36	0.47	3.1	796	787	-1.2
450	2.50	0.53	2.3	782	757	-1.3
500	2.59	0.60	1.5	767	728	-1.5
550	2.65	0.66	0.6	752	700	-1.6
600	2.66	0.73	-0.3	738	672	-1.7
650	2.63	0.80	-1.2	723	645	-1.9
700	2.55	0.87	-2.2	709	619	-2.0
750	2.43	0.94	-3.2	695	594	-2.1
800	2.25	1.01	-4.3	681	569	-2.2
850	2.02	1.08	-5.4	667	546	-2.3
900	1.73	1.16	-6.5	653	523	-2.5
950	1.39	1.24	-7.7	640	500	-2.6
1000	0.99	1.32	-8.9	626	478	-2.7
1050	0.53	1.40	-10.2	613	457	-2.8
1100	0.00	1.48	-11.6	600	437	-2.9

TYPE C 2 CALIBER 5.56 MM AVERAGE DENSITY 7.80 GRAMS/CC.
PROJ. WT 2.506 GRAMS PROJ. DIA. 5.56 MM IMPULSE 1.2 LB. SEC.
DRAG RDCR. WT. 0.000 GRAMS CHG. WT. 1.79 GRAMS SABOT WT. 0.142 GRAMS
TWIST RATE NA PCT. DRAG CHANGE / (DEG. YAW)**2 0.68

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	12.8	1203	1916	0.0
0	0.00	0.00	12.8	1203	1813	0.0
50	0.62	0.04	12.5	1154	1670	-0.5
100	1.23	0.09	12.1	1105	1531	-1.0
150	1.81	0.13	11.7	1056	1397	-1.5
200	2.37	0.18	11.2	1006	1269	-2.0
250	2.91	0.23	10.7	956	1146	-2.5
300	3.42	0.29	10.1	906	1028	-3.0
350	3.90	0.34	9.4	855	915	-3.6
400	4.35	0.40	8.7	803	809	-4.1
450	4.76	0.47	7.9	751	707	-4.7
500	5.13	0.54	6.9	699	612	-5.2
550	5.45	0.61	5.8	646	524	-5.8
600	5.71	0.69	4.5	593	440	-6.4
650	5.90	0.78	3.0	539	364	-7.0
700	6.01	0.88	1.1	485	295	-7.5
750	6.01	0.99	-1.3	434	236	-7.8
800	5.88	1.11	-4.3	385	185	-8.0
850	5.58	1.25	-8.2	340	145	-7.9
900	5.08	1.40	-13.0	308	119	-6.7
950	4.31	1.57	-18.7	283	101	-5.2
1000	3.24	1.76	-25.4	265	88	-4.3
1050	1.81	1.95	-33.0	250	78	-3.6
1100	0.00	2.16	-41.4	235	69	-3.3

DRAG RDCR. WT. 0.151 GRAMS PCT. DRAG CHANGE / (DEG. YAW)**2 2.27

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	4.8	1203	1916	0.0
0	0.00	0.00	4.8	1203	1813	0.0
50	0.22	0.04	4.4	1185	1759	-0.2
100	0.43	0.08	4.0	1168	1706	-0.4
150	0.62	0.13	3.7	1150	1654	-0.5
200	0.80	0.17	3.3	1133	1602	-0.7
250	0.95	0.22	2.9	1116	1552	-0.9
300	1.08	0.26	2.5	1098	1504	-1.0
350	1.20	0.31	2.1	1081	1456	-1.2
400	1.29	0.35	1.6	1064	1409	-1.4
450	1.36	0.40	1.2	1047	1363	-1.5
500	1.41	0.45	0.7	1030	1319	-1.7
550	1.44	0.50	0.2	1014	1275	-1.8
600	1.44	0.55	-0.3	997	1232	-2.0
650	1.42	0.60	-0.8	981	1191	-2.1
700	1.38	0.65	-1.3	964	1150	-2.3
750	1.31	0.70	-1.8	948	1110	-2.4
800	1.21	0.76	-2.4	932	1072	-2.6
850	1.08	0.81	-3.0	916	1034	-2.7
900	0.93	0.86	-3.6	900	997	-2.9
950	0.74	0.92	-4.2	884	961	-3.0
1000	0.53	0.98	-4.9	868	926	-3.1
1050	0.28	1.04	-5.5	853	892	-3.3
1100	0.00	1.09	-6.2	837	859	-3.4

TYPE C 2 CALIBER 5.56 MM AVERAGE DENSITY 7.80 GRAMS/CC.
PROJ. WT 2.506 GRAMS PROJ. DIA. 5.56 MM IMPULSE 2.1 LB. SEC.
DRAG RDCR. WT. 0.000 GRAMS CHG. WT. 4.03 GRAMS SABOT WT. 0.142 GRAMS
TWIST RATE NA PCT. DRAG CHANGE / (DEG. YAW)**2 0.68

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	4.6	1550	3181	0.0
0	0.00	0.00	4.6	1550	3010	0.0
50	0.22	0.03	4.3	1503	2830	-0.5
100	0.43	0.07	4.1	1456	2655	-0.9
150	0.62	0.10	3.9	1408	2486	-1.4
200	0.81	0.14	3.6	1361	2321	-1.9
250	0.98	0.17	3.3	1314	2162	-2.4
300	1.14	0.21	3.0	1266	2008	-2.9
350	1.28	0.25	2.7	1218	1858	-3.4
400	1.41	0.30	2.4	1169	1713	-3.9
450	1.52	0.34	2.0	1120	1573	-4.4
500	1.61	0.39	1.6	1071	1437	-4.9
550	1.68	0.43	1.1	1021	1307	-5.4
600	1.72	0.48	0.6	972	1183	-6.0
650	1.75	0.54	0.0	921	1063	-6.6
700	1.74	0.59	-0.6	870	949	-7.1
750	1.70	0.65	-1.3	819	841	-7.7
800	1.62	0.71	-2.1	767	738	-8.3
850	1.50	0.78	-3.0	715	640	-8.9
900	1.34	0.85	-4.0	662	550	-9.4
950	1.12	0.93	-5.3	609	465	-10.1
1000	0.83	1.02	-6.8	555	386	-10.7
1050	0.46	1.11	-8.6	501	315	-11.3
1100	0.00	1.22	-10.8	449	253	-11.7

DRAG RDCR. WT. 0.151 GRAMS PCT. DRAG CHANGE / (DEG. YAW)**2 2.27

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	2.7	1550	3181	0.0
0	0.00	0.00	2.7	1550	3010	0.0
50	0.13	0.03	2.5	1530	2930	-0.2
100	0.25	0.07	2.3	1509	2851	-0.4
150	0.36	0.10	2.1	1489	2774	-0.6
200	0.46	0.13	1.9	1469	2698	-0.8
250	0.54	0.17	1.6	1450	2625	-1.0
300	0.62	0.20	1.4	1430	2553	-1.2
350	0.68	0.24	1.1	1411	2482	-1.4
400	0.74	0.27	0.9	1392	2413	-1.5
450	0.78	0.31	0.6	1373	2346	-1.7
500	0.80	0.35	0.4	1354	2280	-1.9
550	0.82	0.38	0.1	1335	2216	-2.0
600	0.82	0.42	-0.2	1316	2153	-2.2
650	0.81	0.46	-0.5	1298	2091	-2.4
700	0.78	0.50	-0.8	1280	2031	-2.6
750	0.74	0.54	-1.1	1261	1972	-2.7
800	0.68	0.58	-1.4	1243	1913	-2.9
850	0.61	0.62	-1.8	1225	1856	-3.1
900	0.52	0.66	-2.1	1207	1801	-3.2
950	0.42	0.70	-2.4	1189	1746	-3.4
1000	0.30	0.74	-2.8	1171	1693	-3.6
1050	0.16	0.79	-3.2	1153	1640	-3.7
1100	0.00	0.83	-3.6	1136	1589	-3.9

TYPE C 2 CALIBER 5.56 MM AVERAGE DENSITY 11.00 GRAMS/CC.

PROJ. WT 3.539 GRAMS PROJ. DIA. 5.56 MM IMPULSE 0.8 LB. SEC.

DRAG RDCR. WT. 0.000 GRAMS CHG. WT. 0.79 GRAMS SABOT WT. 0.142 GRAMS

TWIST RATE NA PCT. DRAG CHANGE / (DEG. YAW)**2 0.68

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	37.4	713	935	0.0
0	0.00	0.00	37.4	713	899	0.0
50	1.81	0.07	36.4	676	807	-0.4
100	3.57	0.15	35.2	638	720	-0.8
150	5.27	0.23	33.9	600	637	-1.1
200	6.91	0.32	32.5	562	558	-1.5
250	8.46	0.41	30.8	523	484	-1.9
300	9.93	0.51	28.8	486	417	-2.3
350	11.29	0.61	26.5	449	356	-2.6
400	12.53	0.73	23.8	413	302	-2.8
450	13.62	0.86	20.6	379	254	-3.1
500	14.55	0.99	16.8	347	213	-3.2
550	15.27	1.14	12.3	321	182	-2.9
600	15.75	1.31	7.1	301	160	-2.4
650	15.97	1.48	1.3	284	143	-2.3
700	15.87	1.66	-5.3	270	129	-2.1
750	15.45	1.85	-12.4	259	119	-1.7
800	14.66	2.04	-20.2	249	109	-1.7
850	13.47	2.25	-28.6	238	100	-1.8
900	11.85	2.46	-37.9	226	91	-2.0
950	9.75	2.69	-48.1	215	82	-2.3
1000	7.11	2.93	-59.5	204	73	-2.3
1050	3.89	3.18	-72.2	193	66	-2.3
1100	0.00	3.45	-86.3	184	60	-2.2

DRAG RDCR. WT. 0.151 GRAMS PCT. DRAG CHANGE / (DEG. YAW)**2 2.27

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	13.5	713	935	0.0
0	0.00	0.00	13.5	713	899	0.0
50	0.64	0.07	12.5	703	873	-0.1
100	1.22	0.14	11.4	693	848	-0.2
150	1.76	0.21	10.4	684	823	-0.3
200	2.25	0.29	9.3	674	799	-0.4
250	2.68	0.36	8.2	664	776	-0.5
300	3.05	0.44	7.0	655	753	-0.6
350	3.37	0.52	5.9	645	730	-0.7
400	3.63	0.59	4.6	636	708	-0.8
450	3.83	0.67	3.4	626	686	-0.8
500	3.97	0.75	2.1	617	665	-0.9
550	4.04	0.84	0.8	608	645	-1.0
600	4.05	0.92	-0.6	598	624	-1.1
650	3.99	1.00	-2.0	589	605	-1.2
700	3.86	1.09	-3.5	580	585	-1.3
750	3.66	1.18	-5.0	571	567	-1.3
800	3.38	1.26	-6.6	562	548	-1.4
850	3.03	1.35	-8.2	553	530	-1.5
900	2.59	1.44	-9.8	544	513	-1.6
950	2.07	1.54	-11.5	536	496	-1.7
1000	1.47	1.63	-13.3	527	479	-1.7
1050	0.78	1.73	-15.1	518	463	-1.8
1100	0.00	1.82	-17.0	510	447	-1.9

TYPE C 2 CALIBER 5.56 MM AVERAGE DENSITY 11.00 GRAMS/CC.
PROJ. WT 3.535 GRAMS PROJ. DIA. 5.56 MM IMPULSE 1.2 LB. SEC.
DRAG RDCR. WT. 0.000 GRAMS CHG. WT. 1.50 GRAMS SABOT WT. 0.142 GRAMS
TWIST RATE NA PCT. DRAG CHANGE / (DEG. YAW)**2 0.68

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	15.1	972	1737	0.0
0	0.00	0.00	15.1	972	1670	0.0
50	0.73	0.05	14.6	936	1549	-0.4
100	1.43	0.11	14.0	900	1432	-0.7
150	2.10	0.16	13.3	864	1320	-1.1
200	2.74	0.22	12.6	828	1211	-1.5
250	3.34	0.28	11.9	791	1107	-1.8
300	3.91	0.35	11.0	754	1006	-2.2
350	4.43	0.42	10.1	717	909	-2.6
400	4.91	0.49	9.1	680	817	-3.0
450	5.33	0.56	7.9	643	730	-3.4
500	5.69	0.64	6.7	605	646	-3.8
550	5.99	0.73	5.2	566	567	-4.2
600	6.21	0.82	3.5	528	493	-4.6
650	6.34	0.92	1.6	490	425	-4.9
700	6.37	1.03	-0.6	453	363	-5.2
750	6.28	1.14	-3.3	417	308	-5.4
800	6.05	1.27	-6.4	383	259	-5.6
850	5.65	1.40	-10.1	350	217	-5.6
900	5.05	1.55	-14.6	323	185	-5.3
950	4.22	1.71	-19.7	304	163	-4.4
1000	3.13	1.88	-25.4	286	145	-3.7
1050	1.73	2.06	-31.9	271	130	-3.5
1100	0.00	2.25	-39.0	260	119	-3.0

DRAG RDCR. WT. 0.151 GRAMS PCT. DRAG CHANGE / (DEG. YAW)**2 2.27

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	6.9	972	1737	0.0
0	0.00	0.00	6.9	972	1670	0.0
50	0.33	0.05	6.4	961	1630	-0.1
100	0.63	0.10	5.9	949	1590	-0.2
150	0.90	0.16	5.3	938	1551	-0.3
200	1.15	0.21	4.7	927	1513	-0.5
250	1.37	0.27	4.1	915	1475	-0.6
300	1.56	0.32	3.5	904	1438	-0.7
350	1.72	0.38	2.9	893	1402	-0.8
400	1.85	0.43	2.3	882	1366	-0.9
450	1.95	0.49	1.6	871	1331	-1.0
500	2.02	0.55	1.0	860	1296	-1.1
550	2.05	0.61	0.3	849	1263	-1.2
600	2.05	0.66	-0.4	838	1230	-1.3
650	2.02	0.72	-1.1	828	1198	-1.4
700	1.95	0.79	-1.9	817	1166	-1.5
750	1.84	0.85	-2.6	806	1135	-1.6
800	1.70	0.91	-3.4	796	1104	-1.7
850	1.52	0.97	-4.2	785	1074	-1.8
900	1.30	1.04	-5.0	774	1044	-1.9
950	1.04	1.10	-5.9	764	1015	-2.0
1000	0.74	1.17	-6.8	754	987	-2.1
1050	0.39	1.23	-7.6	743	959	-2.2
1100	0.00	1.30	-8.6	733	932	-2.3

TYPE C 2 CALIBER 5.56 MM AVERAGE DENSITY 11.00 GRAMS/CC.
PROJ. WT 3.535 GRAMS PROJ. DIA. 5.56 MM IMPULSE 2.1 LB. SEC.
DRAG RDCR. WT. 0.000 GRAMS CHG. WT. 3.51 GRAMS SABOT WT. 0.142 GRAMS
TWIST RATE NA PCT. DRAG CHANGE / (DEG. YAW)**2 0.68

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	4.9	1359	3395	0.0
0	0.00	0.00	4.9	1359	3264	0.0
50	0.23	0.04	4.6	1325	3105	-0.3
100	0.45	0.08	4.3	1292	2948	-0.7
150	0.66	0.11	4.0	1257	2795	-1.0
200	0.85	0.16	3.7	1223	2645	-1.4
250	1.02	0.20	3.3	1189	2499	-1.7
300	1.18	0.24	3.0	1155	2356	-2.1
350	1.32	0.28	2.6	1120	2216	-2.4
400	1.44	0.33	2.2	1085	2080	-2.8
450	1.54	0.38	1.7	1050	1948	-3.2
500	1.62	0.42	1.3	1015	1820	-3.5
550	1.67	0.47	0.8	979	1695	-3.9
600	1.70	0.53	0.2	944	1574	-4.3
650	1.70	0.58	-0.4	908	1456	-4.7
700	1.68	0.64	-1.0	872	1342	-5.0
750	1.62	0.69	-1.7	835	1233	-5.4
800	1.52	0.76	-2.4	799	1128	-5.8
850	1.39	0.82	-3.2	762	1026	-6.3
900	1.22	0.89	-4.1	725	929	-6.7
950	1.00	0.96	-5.1	688	836	-7.1
1000	0.72	1.03	-6.3	650	748	-7.4
1050	0.39	1.11	-7.5	612	663	-7.9
1100	0.00	1.20	-8.9	574	583	-8.4

DRAG RDCR. WT. 0.151 GRAMS PCT. DRAG CHANGE / (DEG. YAW)**2 2.27

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	3.4	1359	3395	0.0
0	0.00	0.00	3.4	1359	3264	0.0
50	0.16	0.04	3.1	1346	3200	-0.1
100	0.31	0.07	2.8	1333	3136	-0.3
150	0.44	0.11	2.5	1320	3073	-0.4
200	0.56	0.15	2.3	1307	3011	-0.5
250	0.66	0.19	2.0	1294	2949	-0.6
300	0.75	0.23	1.7	1281	2889	-0.8
350	0.83	0.27	1.4	1268	2829	-0.9
400	0.89	0.31	1.0	1255	2771	-1.0
450	0.94	0.35	0.7	1242	2713	-1.2
500	0.97	0.39	0.4	1229	2656	-1.3
550	0.98	0.43	0.1	1216	2599	-1.4
600	0.98	0.47	-0.3	1204	2544	-1.5
650	0.97	0.51	-0.6	1191	2489	-1.6
700	0.93	0.55	-1.0	1179	2436	-1.8
750	0.88	0.60	-1.4	1166	2383	-1.9
800	0.81	0.64	-1.7	1153	2330	-2.0
850	0.72	0.68	-2.1	1141	2279	-2.1
900	0.62	0.73	-2.5	1129	2228	-2.3
950	0.49	0.77	-2.9	1116	2178	-2.4
1000	0.35	0.82	-3.3	1104	2129	-2.5
1050	0.18	0.86	-3.7	1092	2081	-2.6
1100	0.00	0.91	-4.1	1080	2033	-2.7

TYPE C 2 CALIBER 5.56 MM AVERAGE DENSITY 16.70 GRAMS/CC.
PROJ. WT 5.366 GRAMS PROJ. DIA. 5.56 MM IMPULSE 0.8 LB. SEC.
DRAG RDCR. WT. 0.000 GRAMS CHG. WT. 0.61 GRAMS SABOT WT. 0.142 GRAMS
TWIST RATE NA PCT. DRAG CHANGE / (DEG. YAW)**2 0.68

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	48.2	514	728	0.0
0	0.00	0.00	48.2	514	709	0.0
50	2.32	0.10	46.3	489	642	-0.2
100	4.54	0.20	44.1	465	579	-0.5
150	6.65	0.32	41.6	441	521	-0.7
200	8.63	0.43	38.9	417	467	-0.9
250	10.47	0.56	35.9	394	417	-1.1
300	12.15	0.69	32.5	372	371	-1.3
350	13.65	0.82	28.6	351	330	-1.5
400	14.95	0.97	24.3	332	295	-1.5
450	16.04	1.13	19.6	314	264	-1.3
500	16.87	1.29	14.4	304	248	-1.3
550	17.45	1.46	8.7	292	229	-1.3
600	17.73	1.63	2.7	285	218	-1.3
650	17.71	1.81	-3.9	272	198	-1.3
700	17.35	2.00	-10.8	264	187	-1.1
750	16.65	2.19	-18.2	257	177	-1.1
800	15.57	2.39	-25.9	250	168	-1.1
850	14.10	2.59	-34.1	244	159	-1.2
900	12.22	2.80	-42.8	237	151	-1.2
950	9.90	3.01	-52.0	229	141	-1.4
1000	7.12	3.23	-61.8	221	131	-1.6
1050	3.93	3.46	-72.4	214	123	-1.6
1100	0.00	3.70	-83.7	207	115	-1.6

DRAG RDCR. WT. 0.151 GRAMS PCT. DRAG CHANGE / (DEG. YAW)**2 2.27

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	24.5	514	728	0.0
0	0.00	0.00	24.5	514	709	0.0
50	1.15	0.10	22.6	509	693	-0.1
100	2.21	0.20	20.6	503	678	-0.1
150	3.18	0.30	18.6	498	663	-0.2
200	4.04	0.40	16.6	492	648	-0.2
250	4.80	0.50	14.5	487	633	-0.3
300	5.46	0.60	12.4	482	619	-0.3
350	6.02	0.71	10.2	477	605	-0.4
400	6.47	0.81	8.0	471	592	-0.4
450	6.80	0.92	5.7	466	578	-0.5
500	7.03	1.03	3.4	461	565	-0.5
550	7.14	1.14	1.0	456	553	-0.5
600	7.13	1.25	-1.4	451	540	-0.6
650	7.01	1.36	-3.9	446	528	-0.6
700	6.76	1.47	-6.4	442	516	-0.7
750	6.38	1.58	-9.0	437	504	-0.7
800	5.88	1.70	-11.7	432	493	-0.8
850	5.24	1.82	-14.4	427	481	-0.8
900	4.47	1.93	-17.2	423	470	-0.9
950	3.57	2.05	-20.0	418	460	-1.0
1000	2.52	2.17	-22.9	413	449	-1.0
1050	1.34	2.29	-25.8	409	439	-1.1
1100	0.00	2.42	-28.9	404	429	-1.1

TYPE C 2 CALIBER 5.56 MM AVERAGE DENSITY 16.70 GRAMS/CC.

PROJ. WT 5.366 GRAMS PROJ. DIA. 5.56 MM IMPULSE 1.2 LB. SEC.

DRAG RDCR. WT. 0.000 GRAMS CHG. WT. 1.19 GRAMS SABOT WT. 0.142 GRAMS

TWIST RATE NA PCT. DRAG CHANGE / (DEG. YAW)**2 0.68

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	23.2	714	1404	0.0
0	0.00	0.00	23.2	714	1368	0.0
50	1.12	0.07	22.2	690	1276	-0.2
100	2.18	0.15	21.1	665	1187	-0.5
150	3.19	0.22	19.9	640	1100	-0.7
200	4.14	0.30	18.7	615	1015	-1.0
250	5.02	0.38	17.3	590	934	-1.3
300	5.84	0.47	15.8	565	856	-1.5
350	6.57	0.56	14.2	539	781	-1.8
400	7.23	0.66	12.4	514	710	-2.0
450	7.79	0.76	10.4	490	643	-2.2
500	8.25	0.86	8.2	465	580	-2.4
550	8.60	0.97	5.7	441	522	-2.6
600	8.82	1.09	3.0	418	468	-2.8
650	8.90	1.21	0.0	395	418	-3.0
700	8.82	1.34	-3.4	373	373	-3.1
750	8.57	1.48	-7.2	351	331	-3.2
800	8.12	1.63	-11.5	332	296	-3.2
850	7.44	1.78	-16.2	317	270	-2.8
900	6.53	1.94	-21.4	305	249	-2.5
950	5.35	2.11	-27.0	293	230	-2.3
1000	3.88	2.28	-33.1	282	214	-2.3
1050	2.11	2.46	-39.6	273	199	-2.1
1100	0.00	2.65	-46.5	265	189	-1.9

DRAG RDCR. WT. 0.151 GRAMS PCT. DRAG CHANGE / (DEG. YAW)**2 2.27

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	12.4	714	1404	0.0
0	0.00	0.00	12.4	714	1368	0.0
50	0.58	0.07	11.4	707	1342	-0.1
100	1.12	0.14	10.4	701	1317	-0.1
150	1.60	0.21	9.3	695	1292	-0.2
200	2.03	0.29	8.3	688	1267	-0.3
250	2.42	0.36	7.2	682	1242	-0.3
300	2.75	0.43	6.1	675	1218	-0.4
350	3.02	0.51	5.0	669	1195	-0.4
400	3.24	0.58	3.9	663	1171	-0.5
450	3.41	0.66	2.8	656	1148	-0.6
500	3.52	0.73	1.6	650	1126	-0.6
550	3.57	0.81	0.4	644	1103	-0.7
600	3.57	0.89	-0.8	637	1081	-0.7
650	3.50	0.97	-2.1	631	1059	-0.8
700	3.37	1.05	-3.3	625	1038	-0.9
750	3.18	1.13	-4.6	619	1017	-0.9
800	2.93	1.21	-5.9	613	996	-1.0
850	2.61	1.29	-7.3	607	976	-1.0
900	2.23	1.37	-8.6	601	955	-1.1
950	1.78	1.46	-10.0	595	935	-1.1
1000	1.25	1.54	-11.5	589	916	-1.2
1050	0.66	1.63	-12.9	583	897	-1.3
1100	0.00	1.71	-14.4	577	878	-1.3

TYPE C 2 CALIBER 5.56 MM AVERAGE DENSITY 16.70 GRAMS/CC.
PROJ. WT 5.366 GRAMS PROJ. DIA. 5.56 MM IMPULSE 2.1 LB. SEC.
DRAG RDCR. WT. 0.000 GRAMS CHG. WT. 2.86 GRAMS SABOT WT. 0.142 GRAMS
TWIST RATE NA PCT. DRAG CHANGE / (DEG. YAW)**2 0.68

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	7.0	1081	3218	0.0
0	0.00	0.00	7.0	1081	3135	0.0
50	0.33	0.05	6.6	1058	3003	-0.2
100	0.65	0.09	6.1	1035	2873	-0.5
150	0.94	0.14	5.6	1012	2746	-0.7
200	1.20	0.19	5.1	988	2621	-0.9
250	1.44	0.24	4.6	965	2498	-1.2
300	1.66	0.30	4.1	941	2377	-1.4
350	1.85	0.35	3.5	918	2259	-1.7
400	2.01	0.41	2.9	894	2144	-1.9
450	2.14	0.46	2.2	870	2031	-2.1
500	2.24	0.52	1.6	846	1922	-2.4
550	2.30	0.58	0.9	822	1815	-2.6
600	2.33	0.64	0.1	798	1710	-2.9
650	2.35	0.71	-0.7	774	1607	-3.2
700	2.27	0.77	-1.6	750	1508	-3.4
750	2.17	0.84	-2.5	725	1411	-3.7
800	2.03	0.91	-3.5	701	1317	-3.9
850	1.84	0.98	-4.5	676	1227	-4.2
900	1.60	1.06	-5.7	652	1140	-4.4
950	1.30	1.14	-6.9	627	1054	-4.7
1000	0.93	1.22	-8.2	602	971	-5.0
1050	0.50	1.30	-9.7	576	891	-5.3
1100	0.00	1.39	-11.2	551	815	-5.6

DRAG RDCR. WT. 0.151 GRAMS PCT. DRAG CHANGE / (DEG. YAW)**2 2.27

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	5.2	1081	3218	0.0
0	0.00	0.00	5.2	1081	3135	0.0
50	0.24	0.05	4.8	1073	3088	-0.1
100	0.47	0.09	4.3	1063	3042	-0.2
150	0.67	0.14	3.9	1057	2996	-0.2
200	0.85	0.19	3.4	1049	2950	-0.3
250	1.01	0.24	3.0	1042	2905	-0.4
300	1.14	0.28	2.5	1034	2860	-0.5
350	1.26	0.33	2.0	1026	2816	-0.5
400	1.35	0.38	1.6	1018	2773	-0.6
450	1.41	0.43	1.1	1011	2730	-0.7
500	1.46	0.48	0.6	1003	2688	-0.8
550	1.48	0.53	0.1	995	2645	-0.8
600	1.47	0.58	-0.4	988	2603	-0.9
650	1.44	0.63	-0.9	980	2561	-1.0
700	1.39	0.68	-1.5	972	2521	-1.1
750	1.31	0.73	-2.0	965	2480	-1.1
800	1.20	0.79	-2.5	957	2440	-1.2
850	1.07	0.84	-3.1	950	2401	-1.3
900	0.91	0.89	-3.7	942	2362	-1.4
950	0.73	0.95	-4.2	935	2323	-1.4
1000	0.51	1.00	-4.8	927	2285	-1.5
1050	0.27	1.05	-5.4	920	2247	-1.6
1100	0.00	1.11	-6.0	912	2210	-1.6

TYPE C 2 CALIBER 6.50 MM AVERAGE DENSITY 7.80 GRAMS/CC.
PROJ. WT 4.009 GRAMS PROJ. DIA. 6.50 MM IMPULSE 0.8 LB. SEC.
DRAG RDCR. WT. 0.000 GRAMS CHG. WT. 0.73 GRAMS SABOT WT. 0.224 GRAMS
TWIST RATE NA PCT. DRAG CHANGE / (DEG. YAW)**2 0.68

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	62.5	637	859	0.0
0	0.00	0.00	62.5	637	813	0.0
50	3.04	0.08	61.2	591	700	-0.5
100	6.01	0.17	59.6	545	595	-0.9
150	8.89	0.27	57.8	499	498	-1.4
200	11.68	0.37	55.6	454	413	-1.8
250	14.35	0.49	52.9	411	338	-2.1
300	16.87	0.62	49.6	370	274	-2.4
350	19.21	0.76	45.5	333	222	-2.3
400	21.33	0.92	40.6	307	189	-2.0
450	23.19	1.08	34.9	286	164	-1.9
500	24.75	1.27	28.4	268	144	-1.8
550	25.97	1.46	21.1	255	130	-1.4
600	26.81	1.66	13.0	243	118	-1.5
650	27.24	1.87	4.0	228	104	-1.8
700	27.19	2.10	-6.2	214	92	-2.0
750	26.61	2.34	-17.8	201	81	-2.0
800	25.43	2.59	-31.0	189	71	-2.0
850	23.55	2.87	-46.0	177	63	-2.0
900	20.89	3.16	-63.0	166	55	-2.0
950	17.33	3.47	-82.2	156	49	-2.0
1000	12.76	3.80	-104.1	147	43	-2.0
1050	7.04	4.16	-128.9	138	38	-2.0
1100	0.00	4.54	-156.9	129	34	-1.9

DRAG RDCR. WT. 0.241 GRAMS PCT. DRAG CHANGE / (DEG. YAW)**2 2.27

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	18.1	637	859	0.0
0	0.00	0.00	18.1	637	813	0.0
50	0.86	0.08	16.9	626	784	-0.1
100	1.66	0.16	15.6	615	755	-0.2
150	2.39	0.24	14.2	603	726	-0.3
200	3.05	0.33	12.8	592	699	-0.4
250	3.65	0.41	11.4	582	672	-0.5
300	4.17	0.50	9.9	571	646	-0.6
350	4.62	0.59	8.3	560	621	-0.7
400	4.99	0.68	6.7	549	597	-0.8
450	5.28	0.77	5.0	539	573	-0.9
500	5.49	0.86	3.2	528	550	-1.0
550	5.61	0.96	1.4	518	528	-1.1
600	5.64	1.05	-0.5	508	506	-1.2
650	5.57	1.15	-2.5	498	485	-1.3
700	5.40	1.26	-4.5	488	465	-1.4
750	5.13	1.36	-6.7	478	446	-1.5
800	4.76	1.47	-8.9	469	427	-1.5
850	4.27	1.57	-11.2	459	409	-1.6
900	3.67	1.68	-13.6	450	392	-1.7
950	2.95	1.80	-16.1	441	375	-1.7
1000	2.10	1.91	-18.8	432	359	-1.8
1050	1.12	2.03	-21.5	423	344	-1.8
1100	0.00	2.15	-24.3	414	329	-1.9

TYPE C 2 CALIBER 6.50 MM AVERAGE DENSITY 7.80 GRAMS/CC.

PROJ. WT 4.009 GRAMS PROJ. DIA. 6.50 MM IMPULSE 1.2 LB. SEC.

DRAG RDCR. WT. 0.000 GRAMS CHG. WT. 1.38 GRAMS SABOT WT. 0.224 GRAMS

TWIST RATE NA PCT. DRAG CHANGE / (DEG. YAW)**2 0.68

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	28.7	876	1624	0.0
0	0.00	0.00	28.7	876	1538	0.0
50	1.39	0.06	28.0	832	1389	-0.4
100	2.75	0.12	27.3	788	1246	-0.9
150	4.07	0.19	26.4	744	1109	-1.3
200	5.34	0.26	25.4	699	979	-1.8
250	6.57	0.33	24.4	654	858	-2.3
300	7.74	0.41	23.1	608	742	-2.8
350	8.84	0.49	21.6	562	634	-3.2
400	9.86	0.59	19.9	516	534	-3.7
450	10.80	0.69	17.9	471	445	-4.1
500	11.62	0.80	15.4	427	366	-4.4
550	12.30	0.92	12.3	386	298	-4.6
600	12.83	1.06	8.6	347	241	-4.7
650	13.14	1.21	4.0	316	201	-4.1
700	13.22	1.38	-1.4	294	173	-3.3
750	13.01	1.55	-7.6	275	152	-2.9
800	12.47	1.74	-14.6	261	136	-2.5
850	11.57	1.94	-22.3	248	123	-2.2
900	10.28	2.14	-30.8	235	111	-2.3
950	8.54	2.36	-40.5	220	97	-2.6
1000	6.29	2.60	-51.5	207	86	-2.8
1050	3.47	2.85	-63.9	194	76	-2.8
1100	0.00	3.11	-78.0	182	67	-2.7

DRAG RDCR. WT. 0.241 GRAMS PCT. DRAG CHANGE / (DEG. YAW)**2 2.27

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	9.1	876	1624	0.0
0	0.00	0.00	9.1	876	1538	0.0
50	0.43	0.06	8.4	863	1491	-0.1
100	0.83	0.12	7.7	850	1444	-0.3
150	1.19	0.18	7.0	837	1399	-0.4
200	1.52	0.24	6.3	824	1355	-0.5
250	1.81	0.30	5.6	811	1311	-0.6
300	2.07	0.36	4.8	798	1269	-0.8
350	2.29	0.42	4.0	786	1227	-0.9
400	2.47	0.49	3.2	773	1187	-1.0
450	2.61	0.55	2.3	761	1147	-1.1
500	2.70	0.62	1.5	748	1108	-1.2
550	2.76	0.68	0.5	736	1071	-1.4
600	2.76	0.75	-0.4	724	1034	-1.5
650	2.73	0.82	-1.4	711	998	-1.6
700	2.64	0.89	-2.4	699	963	-1.7
750	2.50	0.97	-3.4	687	929	-1.8
800	2.32	1.04	-4.5	676	896	-1.9
850	2.08	1.11	-5.6	664	863	-2.0
900	1.78	1.19	-6.7	652	832	-2.1
950	1.43	1.27	-7.9	640	801	-2.2
1000	1.01	1.35	-9.2	629	771	-2.3
1050	0.54	1.43	-10.5	617	742	-2.4
1100	0.00	1.51	-11.8	606	714	-2.5

TYPE C 2 CALIBER 6.50 MM AVERAGE DENSITY 7.80 GRAMS/CC.

PROJ. WT 4.009 GRAMS PROJ. DIA. 6.50 MM IMPULSE 2.1 LB. SEC.

DRAG RDCR. WT. 0.000 GRAMS CHG. WT. 3.28 GRAMS SABOT WT. 0.224 GRAMS

TWIST RATE NA PCT. DRAG CHANGE / (DEG. YAW)**2 0.68

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	7.7	1265	3387	0.0
0	0.00	0.00	7.7	1265	3208	0.0
50	0.37	0.04	7.3	1224	3002	-0.4
100	0.72	0.08	7.0	1183	2803	-0.8
150	1.06	0.12	6.6	1141	2609	-1.3
200	1.37	0.17	6.2	1099	2421	-1.7
250	1.67	0.22	5.8	1057	2239	-2.1
300	1.95	0.26	5.3	1014	2063	-2.5
350	2.20	0.31	4.8	972	1893	-3.0
400	2.42	0.37	4.3	929	1729	-3.5
450	2.62	0.42	3.7	885	1571	-3.9
500	2.78	0.48	3.0	842	1420	-4.3
550	2.92	0.54	2.3	798	1276	-4.8
600	3.02	0.61	1.4	753	1138	-5.3
650	3.07	0.67	0.5	709	1007	-5.8
700	3.07	0.75	-0.6	664	884	-6.3
750	3.02	0.83	-1.8	618	767	-6.8
800	2.91	0.91	-3.2	572	656	-7.4
850	2.72	1.00	-4.9	526	555	-7.8
900	2.44	1.10	-6.8	481	463	-8.3
950	2.05	1.21	-9.2	437	382	-8.5
1000	1.54	1.33	-12.1	394	315	-8.6
1050	0.87	1.46	-15.7	353	252	-8.6
1100	0.00	1.61	-20.1	322	208	-8.1

DRAG RDCR. WT. 0.241 GRAMS PCT. DRAG CHANGE / (DEG. YAW)**2 2.27

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	4.1	1265	3387	0.0
0	0.00	0.00	4.1	1265	3208	0.0
50	0.19	0.04	3.8	1224	3002	-0.2
100	0.37	0.08	3.5	1234	3048	-0.3
150	0.53	0.12	3.1	1219	2971	-0.5
200	0.68	0.16	2.8	1204	2895	-0.6
250	0.81	0.20	2.4	1189	2820	-0.8
300	0.93	0.25	1.9	1173	2746	-0.9
350	1.02	0.29	1.4	1158	2674	-1.0
400	1.10	0.33	1.3	1143	2603	-1.2
450	1.16	0.38	0.8	1129	2534	-1.3
500	1.20	0.42	0.3	1114	2465	-1.5
550	1.22	0.47	-0.1	1099	2398	-1.6
600	1.22	0.51	-0.7	1084	2332	-1.8
650	1.20	0.56	-1.3	1070	2268	-1.9
700	1.16	0.61	-1.9	1055	2204	-2.0
750	1.10	0.66	-2.6	1041	2142	-2.2
800	1.01	0.70	-3.1	1026	2081	-2.3
850	0.90	0.75	-3.6	1012	2022	-2.4
900	0.77	0.80	-4.1	998	1963	-2.5
950	0.62	0.85	-4.6	984	1906	-2.7
1000	0.44	0.90	-5.1	969	1850	-2.8
1050	0.23	0.95	-5.6	955	1795	-2.9
1100	0.00	1.01	-6.2	942	1741	-3.1

TYPE C 2 CALIBER 6.50 MM AVERAGE DENSITY 11.00 GRAMS/CC.
PROJ. WT 5.654 GRAMS PROJ. DIA. 6.50 MM IMPULSE 0.8 LB. SEC.
DRAG RDCR. WT. 0.000 GRAMS CHG. WT. 0.58 GRAMS SABOT WT. 0.224 GRAMS
TWIST RATE NA PCT. DRAG CHANGE / (DEG. YAW)**2 0.68

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	65.3	487	697	0.0
0	0.00	0.00	65.3	487	670	0.0
50	3.16	0.11	63.1	455	586	-0.3
100	6.19	0.22	60.5	424	509	-0.6
150	9.10	0.34	57.5	395	440	-0.9
200	11.84	0.47	54.0	366	378	-1.1
250	14.40	0.62	50.0	339	325	-1.3
300	16.75	0.77	45.4	318	287	-1.2
350	18.85	0.93	40.2	302	258	-1.1
400	20.68	1.10	34.4	287	233	-1.2
450	22.22	1.28	28.0	274	212	-1.2
500	23.43	1.47	21.1	264	197	-1.0
550	24.29	1.66	13.7	255	183	-1.0
600	24.77	1.86	5.7	248	171	-1.1
650	24.85	2.07	-2.9	237	159	-1.2
700	24.48	2.28	-11.2	227	145	-1.4
750	23.64	2.51	-20.2	217	133	-1.5
800	22.28	2.74	-30.0	207	121	-1.5
850	20.33	2.99	-40.7	198	110	-1.6
900	17.79	3.25	-52.0	189	101	-1.6
950	14.54	3.52	-63.8	181	93	-1.6
1000	10.54	3.80	-76.3	173	85	-1.6
1050	5.72	4.10	-89.3	166	78	-1.6
1100	0.00	4.41	-103.0	159	71	-1.6

DRAG RDCR. WT. 0.241 GRAMS PCT. DRAG CHANGE / (DEG. YAW)**2 2.27

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	28.8	487	697	0.0
0	0.00	0.00	28.8	487	670	0.0
50	1.36	0.10	26.6	480	651	-0.1
100	2.61	0.21	24.4	474	632	-0.1
150	3.76	0.31	22.2	467	614	-0.2
200	4.79	0.42	19.9	460	596	-0.3
250	5.71	0.53	17.5	454	578	-0.3
300	6.51	0.64	15.0	447	561	-0.4
350	7.19	0.76	12.3	441	544	-0.4
400	7.74	0.87	9.4	435	528	-0.5
450	8.16	0.99	7.2	429	513	-0.6
500	8.45	1.10	4.4	423	497	-0.6
550	8.60	1.22	1.6	417	482	-0.7
600	8.61	1.34	-1.6	411	468	-0.7
650	8.48	1.47	-4.3	405	454	-0.8
700	8.20	1.59	-7.4	399	440	-0.8
750	7.76	1.72	-10.6	393	427	-0.9
800	7.16	1.84	-13.9	388	414	-0.9
850	6.41	1.97	-17.3	382	401	-0.9
900	5.48	2.11	-20.7	376	389	-1.0
950	4.38	2.24	-24.3	371	377	-1.0
1000	3.11	2.38	-28.0	366	365	-1.1
1050	1.65	2.51	-31.8	360	354	-1.1
1100	0.00	2.65	-35.7	355	343	-1.1

TYPE C 2 CALIBER 6.50 MM AVERAGE DENSITY 11.00 GRAMS/CC.

PROJ. WT 5.654 GRAMS PROJ. DIA. 6.50 MM IMPULSE 1.2 LB. SEC.

DRAG RDCR. WT. 0.000 GRAMS CHG. WT. 1.14 GRAMS SABOT WT. 0.224 GRAMS

TWIST RATE NA PCT. DRAG CHANGE / (DEG. YAW)**2 0.68

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	34.9	678	1351	0.0
0	0.00	0.00	34.9	678	1300	0.0
50	1.69	0.08	33.8	646	1180	-0.3
100	3.32	0.16	32.5	615	1064	-0.7
150	4.88	0.24	31.1	581	953	-1.0
200	6.37	0.33	29.6	548	849	-1.3
250	7.78	0.42	27.8	515	751	-1.6
300	9.10	0.52	25.8	483	660	-1.9
350	10.32	0.63	23.5	452	577	-2.2
400	11.41	0.74	20.9	421	501	-2.4
450	12.36	0.87	17.8	391	433	-2.7
500	13.16	1.00	14.3	363	372	-2.8
550	13.77	1.14	10.2	337	321	-2.9
600	14.16	1.30	5.5	317	284	-2.5
650	14.31	1.46	0.3	300	255	-2.4
700	14.18	1.63	-5.6	286	231	-2.1
750	13.76	1.81	-12.0	272	209	-2.1
800	13.01	2.00	-18.0	263	195	-1.8
850	11.90	2.19	-26.5	254	182	-1.6
900	10.41	2.39	-34.5	245	169	-1.6
950	8.54	2.60	-43.2	236	158	-1.6
1000	6.17	2.81	-52.5	226	144	-1.9
1050	3.35	3.04	-62.7	216	132	-2.1
1100	0.00	3.28	-73.9	207	121	-2.1

DRAG RDCR. WT. 0.241 GRAMS PCT. DRAG CHANGE / (DEG. YAW)**2 2.27

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	14.5	678	1351	0.0
0	0.00	0.00	14.5	678	1300	0.0
50	0.68	0.07	13.4	670	1267	-0.1
100	1.31	0.13	12.2	662	1235	-0.2
150	1.88	0.23	11.1	655	1203	-0.2
200	2.40	0.30	9.9	648	1172	-0.3
250	2.86	0.38	8.7	637	1142	-0.4
300	3.25	0.46	7.4	629	1112	-0.5
350	3.59	0.54	6.2	621	1082	-0.6
400	3.86	0.62	4.8	613	1054	-0.6
450	4.07	0.70	3.5	606	1025	-0.7
500	4.22	0.79	2.1	597	998	-0.8
550	4.31	0.87	0.7	590	971	-0.9
600	4.33	0.96	-0.8	582	944	-0.9
650	4.29	1.04	-2.3	574	918	-1.0
700	4.17	1.13	-3.8	566	893	-1.1
750	3.98	1.23	-5.4	559	868	-1.1
800	3.71	1.31	-7.0	551	843	-1.2
850	3.37	1.40	-8.7	544	819	-1.2
900	2.95	1.49	-10.4	536	796	-1.3
950	2.47	1.59	-12.1	529	773	-1.4
1000	1.94	1.68	-13.9	521	750	-1.5
1050	1.32	1.78	-15.8	514	728	-1.5
1100	0.00	1.88	-17.7	507	707	-1.6

TYPE C 2 CALIBER 6.50 MM AVERAGE DENSITY 11.00 GRAMS/CC.
PROJ. WT 5.654 GRAMS PROJ. DIA. 6.50 MM IMPULSE 2.1 LB. SEC.
DRAG RDCR. WT. 0.000 GRAMS CHG. WT. 2.76 GRAMS SABOT WT. 0.224 GRAMS
TWIST RATE NA PCT. DRAG CHANGE / (DEG. YAW)**2 0.68

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	9.8	1035	3148	0.0
0	0.00	0.00	9.8	1035	3028	0.0
50	0.47	0.05	9.3	1005	2855	-0.3
100	0.92	0.10	8.8	975	2685	-0.6
150	1.34	0.15	8.3	944	2519	-0.9
200	1.73	0.21	7.7	913	2358	-1.2
250	2.10	0.26	7.1	883	2202	-1.5
300	2.43	0.32	6.4	852	2051	-1.9
350	2.73	0.38	5.7	821	1904	-2.2
400	3.00	0.44	4.9	789	1761	-2.5
450	3.22	0.51	4.1	758	1623	-2.8
500	3.41	0.57	3.2	726	1490	-3.2
550	3.55	0.64	2.2	694	1363	-3.5
600	3.63	0.72	1.1	663	1241	-3.8
650	3.66	0.79	-0.1	630	1123	-4.2
700	3.63	0.88	-1.4	598	1010	-4.6
750	3.53	0.96	-2.9	565	902	-4.9
800	3.36	1.05	-4.5	532	801	-5.2
850	3.10	1.15	-6.4	500	706	-5.5
900	2.74	1.25	-8.5	468	619	-5.8
950	2.27	1.36	-11.0	437	539	-6.0
1000	1.67	1.48	-13.8	407	468	-6.1
1050	0.92	1.61	-17.1	378	403	-6.2
1100	0.00	1.75	-20.8	350	346	-6.3

DRAG RDCR. WT. 0.241 GRAMS PCT. DRAG CHANGE / (DEG. YAW)**2 2.27

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	5.9	1035	3148	0.0
0	0.00	0.00	5.9	1035	3028	0.0
50	0.28	0.05	5.4	1025	2968	-0.1
100	0.53	0.10	4.9	1015	2908	-0.2
150	0.76	0.15	4.5	1005	2849	-0.3
200	0.97	0.20	4.0	995	2791	-0.4
250	1.16	0.25	3.4	985	2734	-0.5
300	1.31	0.30	2.9	975	2677	-0.6
350	1.45	0.35	2.4	965	2622	-0.7
400	1.55	0.40	1.9	956	2567	-0.8
450	1.64	0.45	1.3	946	2513	-0.9
500	1.69	0.51	0.7	936	2459	-1.0
550	1.71	0.56	0.2	926	2407	-1.1
600	1.71	0.62	-0.4	917	2355	-1.2
650	1.68	0.67	-1.0	907	2304	-1.2
700	1.62	0.73	-1.6	898	2254	-1.3
750	1.53	0.78	-2.3	888	2205	-1.4
800	1.41	0.84	-2.9	879	2156	-1.5
850	1.26	0.90	-3.6	869	2108	-1.6
900	1.07	0.95	-4.2	860	2061	-1.7
950	0.86	1.01	-4.9	850	2015	-1.8
1000	0.61	1.07	-5.6	841	1969	-1.9
1050	0.32	1.13	-6.3	832	1925	-1.9
1100	0.00	1.19	-7.1	823	1880	-2.0

TYPE C 2 CALIBER 6.50 MM AVERAGE DENSITY 16.70 GRAMS/CC.
PROJ. WT 8.584 GRAMS PROJ. DIA. 6.50 MM IMPULSE 0.8 LB. SEC.
DRAG RDCR. WT. 0.000 GRAMS CHG. WT. 0.38 GRAMS SABOT WT. 0.224 GRAMS
TWIST RATE NA PCT. DRAG CHANGE / (DEG. YAW)**2 0.68

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	76.1	353	549	0.0
0	0.00	0.00	76.1	353	535	0.0
50	3.64	0.15	71.9	336	485	-0.2
100	7.06	0.30	67.3	322	446	-0.3
150	10.25	0.46	62.3	311	414	-0.3
200	13.18	0.62	56.9	300	386	-0.4
250	15.83	0.79	51.2	290	361	-0.5
300	18.20	0.97	45.0	281	339	-0.5
350	20.25	1.15	38.5	273	319	-0.6
400	21.98	1.33	31.6	266	304	-0.5
450	23.35	1.52	24.4	260	290	-0.6
500	24.37	1.72	16.8	254	276	-0.6
550	25.00	1.92	8.8	248	264	-0.6
600	25.23	2.12	0.5	242	252	-0.7
650	25.05	2.33	-8.2	236	239	-0.8
700	24.43	2.55	-17.4	229	225	-0.9
750	23.34	2.77	-27.2	223	213	-1.0
800	21.75	3.00	-37.6	216	200	-1.0
850	19.64	3.23	-48.6	210	189	-1.1
900	16.97	3.47	-60.3	204	17[illegible]	-1.1
950	13.71	3.72	-72.7	198	168	-1.1
1000	9.82	3.98	-85.8	192	159	-1.2
1050	5.27	4.24	-99.7	187	150	-1.2
1100	0.00	4.52	-114.4	182	142	-1.2

DRAG RDCR. WT. 0.241 GRAMS PCT. DRAG CHANGE / (DEG. YAW)**2 2.27

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	49.9	353	549	0.0
0	0.00	0.00	49.9	353	535	0.0
50	2.35	0.14	45.9	350	524	0.0
100	4.50	0.29	41.8	347	514	-0.1
150	6.45	0.43	37.6	344	505	-0.1
200	8.19	0.58	33.3	341	496	-0.1
250	9.72	0.73	29.0	338	487	-0.1
300	11.03	0.87	24.6	335	478	-0.2
350	12.13	1.02	20.1	333	470	-0.2
400	13.01	1.17	15.5	330	462	-0.2
450	13.65	1.33	10.9	327	455	-0.2
500	14.08	1.48	6.2	325	447	-0.2
550	14.27	1.63	1.4	323	440	-0.3
600	14.22	1.79	-3.4	320	433	-0.3
650	13.94	1.95	-8.3	318	426	-0.3
700	13.41	2.10	-13.3	316	419	-0.3
750	12.64	2.26	-18.3	313	412	-0.3
800	11.62	2.42	-23.2	311	406	-0.4
850	10.34	2.59	-28.7	309	399	-0.4
900	8.81	2.75	-33.9	306	393	-0.4
950	7.02	2.91	-39.3	304	386	-0.4
1000	4.96	3.08	-44.8	298	371	-0.6
1050	2.63	3.25	-50.6	288	347	-0.6
1100	0.00	3.42	-56.8	279	325	-0.7

TYPE C 2 CALIBER 6.50 MM AVERAGE DENSITY 16.70 GRAMS/CC.
PROJ. WT 8.584 GRAMS PROJ. DIA. 6.50 MM IMPULSE 1.2 LB. SEC.
DRAG RDCR. WT. 0.000 GRAMS CHG. WT. 0.87 GRAMS SABOT WT. 0.224 GRAMS
TWIST RATE NA PCT. DRAG CHANGE / (DEG. YAW)**2 0.68

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	47.4	488	1049	0.0
0	0.00	0.00	47.4	488	1022	0.0
50	2.28	0.10	45.2	467	936	-0.2
100	4.44	0.21	42.8	446	855	-0.4
150	6.48	0.33	40.2	426	779	-0.6
200	8.39	0.45	37.3	406	709	-0.8
250	10.15	0.58	34.2	387	643	-1.0
300	11.74	0.71	30.7	368	582	-1.1
350	13.16	0.85	26.8	350	527	-1.1
400	14.37	0.99	22.5	334	478	-1.1
450	15.36	1.15	17.8	318	434	-1.1
500	16.12	1.31	12.8	304	396	-1.1
550	16.62	1.47	7.4	291	363	-1.1
600	16.84	1.64	1.6	279	334	-1.1
650	16.78	1.82	-4.6	268	309	-1.1
700	16.39	2.00	-11.2	258	287	-1.1
750	15.68	2.19	-18.1	249	268	-1.1
800	14.62	2.37	-25.3	241	252	-1.1
850	13.20	2.57	-32.9	234	238	-1.1
900	11.40	2.77	-40.8	228	226	-1.1
950	9.20	2.97	-49.1	223	216	-1.1
1000	6.58	3.18	-57.8	219	208	-1.1
1050	3.52	3.40	-66.9	216	202	-1.1
1100	0.00	3.62	-76.6	214	197	-1.1

DRAG RDCR. WT. 0.241 GRAMS PCT. DRAG CHANGE / (DEG. YAW)**2 2.27

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	26.5	488	1049	0.0
0	0.00	0.00	26.5	488	1022	0.0
50	1.25	0.10	24.4	484	1004	-0.0
100	2.39	0.21	22.2	479	983	-0.1
150	3.43	0.31	20.0	475	964	-0.1
200	4.36	0.42	17.8	470	943	-0.1
250	5.18	0.52	15.5	466	927	-0.1
300	5.88	0.63	13.2	462	909	-0.1
350	6.48	0.74	10.8	457	891	-0.1
400	6.95	0.85	8.4	453	874	-0.1
450	7.30	0.97	6.0	449	857	-0.1
500	7.54	1.09	3.5	445	840	-0.1
550	7.65	1.19	0.9	441	824	-0.1
600	7.63	1.30	-1.7	436	806	-0.1
650	7.49	1.42	-4.3	432	792	-0.1
700	7.22	1.53	-7.0	428	776	-0.1
750	6.81	1.67	-9.8	424	761	-0.1
800	6.26	1.77	-12.6	420	746	-0.1
850	5.58	1.89	-15.4	416	734	-0.1
900	4.76	2.01	-18.3	413	717	-0.1
950	3.79	2.13	-21.3	409	702	-0.1
1000	2.68	2.25	-24.3	405	689	-0.1
1050	1.41	2.38	-27.4	401	675	-0.1
1100	0.00	2.50	-30.5	397	661	-0.1

TYPE C 2 CALIBER 6.50 MM AVERAGE DENSITY 16.70 GRAMS/CC.
PROJ. WT 8.584 GRAMS PROJ. DIA. 6.50 MM IMPULSE 2.1 LB. SEC.
DRAG RDCR. WT. 0.000 GRAMS CHG. WT. 2.19 GRAMS SABOT WT. 0.224 GRAMS
TWIST RATE NA PCT. DRAG CHANGE / (DEG. YAW)**2 0.68

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	16.4	767	2591	0.0
0	0.00	0.00	16.4	767	2525	0.0
50	0.78	0.07	15.5	746	2389	-0.2
100	1.52	0.13	14.6	725	2257	-0.4
150	2.22	0.20	13.6	704	2129	-0.6
200	2.86	0.28	12.6	683	2005	-0.8
250	3.46	0.35	11.5	663	1884	-1.0
300	3.99	0.43	10.3	641	1765	-1.3
350	4.47	0.51	9.1	620	1650	-1.5
400	4.88	0.59	7.7	598	1537	-1.7
450	5.23	0.67	6.3	577	1428	-1.9
500	5.50	0.76	4.7	555	1324	-2.2
550	5.70	0.85	3.0	534	1223	-2.4
600	5.81	0.95	1.2	512	1127	-2.6
650	5.85	1.05	-0.8	491	1035	-2.8
700	5.73	1.15	-3.0	470	944	-2.9
750	5.54	1.26	-5.3	450	858	-3.1
800	5.32	1.38	-7.9	429	774	-3.3
850	4.77	1.50	-10.8	410	720	-3.4
900	4.17	1.62	-13.9	390	653	-3.5
950	3.41	1.73	-17.3	371	592	-3.6
1000	2.49	1.89	-21.1	353	536	-3.7
1050	1.33	2.03	-25.3	336	486	-3.7
1100	0.00	2.19	-30.0	323	447	-3.4

DRAG RDCR. WT. 0.241 GRAMS PCT. DRAG CHANGE / (DEG. YAW)**2 2.27

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	10.4	767	2591	0.0
0	0.00	0.00	10.4	767	2525	0.0
50	0.49	0.07	9.6	746	2389	-0.1
100	0.94	0.13	8.7	725	2257	-0.1
150	1.34	0.20	7.8	704	2129	-0.2
200	1.71	0.26	6.9	684	2005	-0.2
250	2.03	0.33	6.0	663	1884	-0.3
300	2.30	0.40	5.1	643	1767	-0.3
350	2.51	0.47	4.1	623	1654	-0.4
400	2.67	0.54	3.2	603	1545	-0.4
450	2.75	0.61	2.2	583	1441	-0.5
500	2.76	0.68	1.2	564	1341	-0.5
550	2.69	0.76	0.2	545	1246	-0.6
600	2.55	0.83	-0.8	526	1155	-0.6
650	2.34	0.91	-1.8	508	1068	-0.7
700	2.06	0.98	-2.8	490	985	-0.7
750	1.71	1.06	-3.9	472	906	-0.8
800	1.29	1.14	-5.0	455	831	-0.8
850	0.80	1.22	-6.2	438	760	-0.9
900	0.24	1.30	-7.5	422	693	-0.9
950	-0.39	1.38	-8.8	406	630	-1.0
1000	-1.09	1.47	-10.2	391	571	-1.0
1050	-1.89	1.56	-10.7	376	516	-1.1
1100	-2.79	1.66	-11.9	362	465	-1.2

TYPE C 2 CALIBER 7.62 MM AVERAGE DENSITY 7.80 GRAMS/CC.
PROJ. WT 6.451 GRAMS PROJ. DIA. 7.62 MM IMPULSE 0.8 LB. SEC.
DRAG PDCR. WT. 0.000 GRAMS CHG. WT. 0.31 GRAMS SABOT WT. 0.360 GRAMS
TWIST RATE NA PCT. DRAG CHANGE / (DEG. YAW)**2 0.68

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	94.4	432	636	0.0
0	0.00	0.00	94.4	432	602	0.0
50	4.58	0.12	91.5	396	505	-0.4
100	9.00	0.25	88.0	361	421	-0.7
150	13.22	0.40	83.8	331	352	-0.8
200	17.23	0.56	78.9	308	307	-0.8
250	20.97	0.72	73.3	290	271	-0.9
300	24.42	0.90	66.9	274	242	-0.9
350	27.55	1.09	60.0	262	221	-0.8
400	30.31	1.29	52.4	251	203	-0.9
450	32.68	1.49	44.1	240	186	-0.9
500	34.63	1.70	35.0	229	168	-1.2
550	36.11	1.93	24.8	216	150	-1.3
600	37.06	2.17	13.5	205	135	-1.4
650	37.42	2.42	0.9	194	121	-1.4
700	37.13	2.68	-13.2	183	108	-1.5
750	36.11	2.96	-28.9	174	97	-1.5
800	34.27	3.26	-46.4	165	87	-1.5
850	31.53	3.57	-65.9	156	78	-1.5
900	27.77	3.90	-87.6	148	70	-1.5
950	22.88	4.25	-111.7	140	63	-1.5
1000	16.72	4.62	-138.5	133	57	-1.5
1050	9.15	5.01	-168.3	126	51	-1.5
1100	0.00	5.43	-201.3	120	46	-1.5

DRAG RDCR. WT. 0.389 GRAMS PCT. DRAG CHANGE / (DEG. YAW)**2 2.27

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	38.4	432	636	0.0
0	0.00	0.00	38.4	432	602	0.0
50	1.82	0.12	35.7	425	580	-0.1
100	3.50	0.24	32.8	417	559	-0.1
150	5.04	0.36	29.9	410	539	-0.2
200	6.44	0.48	26.9	403	520	-0.3
250	7.68	0.60	23.8	396	501	-0.3
300	8.77	0.73	20.5	390	482	-0.4
350	9.70	0.86	17.2	383	465	-0.5
400	10.46	0.99	13.7	376	447	-0.5
450	11.05	1.13	10.1	370	431	-0.6
500	11.46	1.26	6.4	363	415	-0.6
550	11.69	1.40	2.6	357	399	-0.7
600	11.72	1.54	-1.4	351	385	-0.7
650	11.55	1.69	-5.6	345	371	-0.7
700	11.18	1.83	-9.8	340	358	-0.8
750	10.59	1.98	-14.2	335	347	-0.8
800	9.79	2.13	-18.8	330	336	-0.8
850	8.76	2.29	-23.4	325	325	-0.8
900	7.50	2.44	-28.2	321	315	-0.8
950	6.00	2.60	-33.1	316	306	-0.8
1000	4.25	2.76	-38.2	312	296	-0.9
1050	2.26	2.92	-43.4	308	287	-0.9
1100	0.00	3.08	-48.8	296	265	-1.4

TYPE C 2 CALIBER 7.62 MM AVERAGE DENSITY 7.80 GRAMS/CC.
PROJ. WT 6.451 GRAMS PROJ. DIA. 7.62 MM IMPULSE 1.2 LB. SEC.
DRAG RDCR. WT. 0.000 GRAMS CHG. WT. 1.04 GRAMS SABOT WT. 0.360 GRAMS
TWIST RATE NA PCT. DRAG CHANGE / (DEG. YAW)**2 0.68

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	55.9	601	1230	0.0
0	0.00	0.00	55.9	601	1165	0.0
50	2.71	0.09	54.5	561	1017	-0.4
100	5.35	0.18	52.8	522	879	-0.8
150	7.89	0.28	50.8	483	753	-1.2
200	10.34	0.39	48.5	445	639	-1.5
250	12.65	0.50	45.7	409	538	-1.8
300	14.82	0.63	42.4	373	450	-2.1
350	16.81	0.77	38.5	341	375	-2.2
400	18.60	0.92	33.8	316	322	-1.9
450	20.13	1.09	28.5	297	284	-1.7
500	21.39	1.26	22.5	280	252	-1.7
550	22.33	1.45	15.7	266	228	-1.6
600	22.93	1.64	8.4	255	209	-1.3
650	23.15	1.84	0.3	244	192	-1.4
700	22.96	2.05	-8.4	233	176	-1.5
750	22.32	2.27	-18.1	221	158	-1.8
800	21.17	2.50	-28.9	209	141	-1.9
850	19.47	2.75	-40.9	198	127	-1.9
900	17.14	3.01	-54.3	188	114	-1.9
950	14.11	3.28	-69.3	178	102	-1.9
1000	10.31	3.57	-85.9	169	92	-1.9
1050	5.64	3.87	-104.4	160	83	-1.9
1100	0.00	4.20	-125.0	152	74	-1.9

DRAG RDCR. WT. 0.389 GRAMS PCT. DRAG CHANGE / (DEG. YAW)**2 2.27

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	19.6	601	1230	0.0
0	0.00	0.00	19.6	601	1165	0.0
50	0.93	0.08	18.2	592	1127	-0.1
100	1.78	0.17	16.7	582	1090	-0.2
150	2.57	0.26	15.2	573	1054	-0.3
200	3.28	0.34	13.7	564	1019	-0.4
250	3.91	0.43	12.1	555	984	-0.5
300	4.46	0.52	10.4	546	951	-0.5
350	4.93	0.62	8.7	537	918	-0.6
400	5.32	0.71	7.0	528	887	-0.7
450	5.62	0.81	5.1	519	856	-0.8
500	5.83	0.92	3.2	511	825	-0.9
550	5.95	1.03	1.3	502	796	-0.9
600	5.96	1.10	-0.7	493	768	-1.0
650	5.88	1.20	-2.8	485	740	-1.1
700	5.70	1.31	-5.0	477	714	-1.1
750	5.40	1.41	-7.2	469	688	-1.2
800	5.00	1.52	-9.5	460	663	-1.3
850	4.48	1.63	-11.9	453	639	-1.3
900	3.84	1.74	-14.4	445	616	-1.4
950	3.08	1.86	-17.0	437	593	-1.5
1000	2.19	1.97	-19.6	429	571	-1.5
1050	1.16	2.09	-22.4	422	550	-1.6
1100	0.00	2.21	-25.2	414	529	-1.6

TYPE C 2 CALIBER 7.62 MM AVERAGE DENSITY 7.80 GRAMS/CC.

PROJ. WT 6.451 GRAMS PROJ. DIA. 7.62 MM IMPULSE 2.1 LB. SEC.

DRAG RDCR. WT. 0.000 GRAMS CHG. WT. 2.54 GRAMS SABOT WT. 0.360 GRAMS

TWIST RATE NA PCT. DRAG CHANGE / (DEG. YAW)**2 0.68

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	18.2	933	2964	0.0
0	0.00	0.00	18.2	933	2808	0.0
50	0.88	0.05	17.6	896	2589	-0.4
100	1.73	0.11	16.9	859	2379	-0.7
150	2.54	0.17	16.2	821	2177	-1.1
200	3.32	0.23	15.5	784	1981	-1.5
250	4.06	0.30	14.6	746	1793	-1.9
300	4.76	0.37	13.7	707	1514	-2.3
350	5.41	0.44	12.6	669	1444	-2.7
400	6.00	0.52	11.4	630	1282	-3.1
450	6.53	0.60	10.1	591	1127	-3.5
500	6.99	0.69	8.6	552	982	-3.9
550	7.38	0.78	6.8	512	847	-4.3
600	7.66	0.88	4.7	474	724	-4.6
650	7.84	0.99	2.3	436	614	-4.9
700	7.89	1.11	-0.6	400	516	-5.1
750	7.79	1.24	-4.0	365	431	-5.2
800	7.50	1.39	-8.1	334	360	-5.2
850	7.00	1.54	-12.9	311	313	-4.4
900	6.24	1.71	-18.4	293	276	-3.6
950	5.19	1.88	-24.6	276	246	-3.3
1000	3.83	2.07	-31.5	263	224	-2.9
1050	2.11	2.26	-39.0	252	205	-2.5
1100	0.00	2.47	-47.2	242	189	-2.4

DRAG RDCR. WT. 0.389 GRAMS PCT. DRAG CHANGE / (DEG. YAW)**2 2.27

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	7.6	933	2964	0.0
0	0.00	0.00	7.6	933	2808	0.0
50	0.36	0.05	7.0	921	2736	-0.1
100	0.69	0.11	6.5	910	2665	-0.2
150	0.99	0.16	5.8	898	2595	-0.3
200	1.27	0.22	5.2	887	2527	-0.5
250	1.51	0.28	4.6	876	2460	-0.6
300	1.72	0.33	3.9	864	2394	-0.7
350	1.90	0.39	3.2	853	2330	-0.8
400	2.04	0.45	2.5	842	2267	-0.9
450	2.15	0.51	1.8	831	2204	-1.0
500	2.23	0.57	1.1	820	2144	-1.1
550	2.27	0.63	0.3	809	2084	-1.2
600	2.27	0.70	-0.4	798	2025	-1.3
650	2.23	0.76	-1.2	787	1968	-1.4
700	2.16	0.82	-2.0	776	1911	-1.5
750	2.04	0.89	-2.9	765	1856	-1.6
800	1.88	0.95	-3.8	755	1802	-1.7
850	1.68	1.02	-4.6	744	1749	-1.8
900	1.44	1.09	-5.6	733	1697	-1.9
950	1.15	1.16	-6.5	723	1646	-2.0
1000	0.82	1.23	-7.5	712	1597	-2.1
1050	0.43	1.30	-8.5	702	1548	-2.2
1100	0.00	1.37	-9.5	692	1501	-2.3

TYPE C 2 CALIBER 7.62 MM AVERAGE DENSITY 11.00 GRAMS/CC.
PROJ. WT 9.097 GRAMS PROJ. DIA. 7.62 MM IMPULSE 0.8 LB. SEC.
DRAG RDCR. WT. 0.000 GRAMS CHG. WT. 0.34 GRAMS SABOT WT. 0.360 GRAMS
TWIST RATE NA PCT. DRAG CHANGE / (DEG. YAW)**2 0.68

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	95.5	334	527	0.0
0	0.00	0.00	95.5	334	507	0.0
50	4.58	0.15	90.7	317	457	-0.2
100	8.92	0.32	85.5	303	417	-0.3
150	12.99	0.49	79.8	290	382	-0.4
200	16.77	0.66	73.6	278	351	-0.5
250	20.23	0.85	66.9	268	327	-0.4
300	23.34	1.04	59.7	260	308	-0.5
350	26.09	1.23	52.1	252	290	-0.5
400	28.46	1.43	44.0	245	272	-0.6
450	30.41	1.64	35.4	237	256	-0.7
500	31.93	1.86	26.2	228	237	-0.9
550	32.98	2.08	16.2	219	219	-0.9
600	33.52	2.31	5.4	211	203	-1.0
650	33.51	2.55	-6.2	203	188	-1.0
700	32.90	2.80	-18.8	195	174	-1.1
750	31.65	3.07	-32.4	188	161	-1.1
800	29.71	3.34	-47.1	181	149	-1.1
850	27.02	3.62	-62.9	174	138	-1.2
900	23.51	3.91	-80.0	168	128	-1.2
950	19.13	4.22	-98.4	162	119	-1.2
1000	13.81	4.53	-118.2	156	110	-1.2
1050	7.46	4.86	-139.6	150	103	-1.2
1100	0.00	5.21	-162.6	145	95	-1.2

DRAG RDCR. WT. 0.389 GRAMS PCT. DRAG CHANGE / (DEG. YAW)**2 2.27

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	57.3	334	527	0.0
0	0.00	0.00	57.3	334	507	0.0
50	2.70	0.15	52.8	331	496	0.0
100	5.18	0.30	48.2	327	485	-0.1
150	7.43	0.46	43.5	324	475	-0.1
200	9.45	0.61	38.7	321	465	-0.1
250	11.23	0.77	33.8	318	455	-0.2
300	12.76	0.93	28.8	315	445	-0.2
350	14.05	1.09	23.7	312	435	-0.2
400	15.09	1.25	18.5	309	426	-0.2
450	15.87	1.41	13.2	306	417	-0.3
500	16.38	1.57	7.8	303	408	-0.3
550	16.63	1.74	2.3	300	399	-0.3
600	16.61	1.91	-3.3	297	390	-0.3
650	16.31	2.08	-9.0	294	382	-0.4
700	15.73	2.25	-14.9	291	373	-0.4
750	14.86	2.42	-20.8	288	365	-0.4
800	13.69	2.60	-26.9	285	357	-0.5
850	12.22	2.77	-33.1	283	349	-0.5
900	10.45	2.95	-39.4	280	341	-0.5
950	8.36	3.13	-46.0	277	319	-0.7
1000	5.94	3.32	-53.0	262	300	-0.6
1050	3.16	3.51	-60.5	254	282	-0.6
1100	0.00	3.71	-68.4	247	265	-0.7

TYPE C 2 CALIBER 7.62 MM AVERAGE DENSITY 11.00 GRAMS/CC.
PROJ. WT 9.097 GRAMS PROJ. DIA. 7.62 MM IMPULSE 1.2 LB. SEC.
DRAG RDCR. WT. 0.000 GRAMS CHG. WT. 0.82 GRAMS SABOT WT. 0.360 GRAMS
TWIST RATE NA PCT. DRAG CHANGE / (DEG. YAW)**2 0.68

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	62.3	460	1001	0.0
0	0.00	0.00	62.3	460	962	0.0
50	3.00	0.11	59.8	433	855	-0.3
100	5.88	0.23	57.0	408	756	-0.5
150	8.60	0.36	53.8	383	666	-0.7
200	11.16	0.49	50.2	358	585	-0.9
250	13.52	0.64	46.0	336	515	-1.1
300	15.67	0.79	41.3	319	463	-1.0
350	17.58	0.95	36.2	305	422	-1.0
400	19.22	1.12	30.6	292	387	-1.0
450	20.57	1.29	24.4	280	356	-1.1
500	21.62	1.48	17.8	270	331	-1.0
550	22.32	1.67	10.7	262	312	-0.9
600	22.67	1.86	3.2	254	294	-0.9
650	22.63	2.06	-4.8	247	276	-1.0
700	22.20	2.26	-13.2	239	259	-1.1
750	21.33	2.48	-22.3	230	241	-1.3
800	20.00	2.70	-32.1	222	223	-1.4
850	18.17	2.93	-42.7	213	207	-1.4
900	15.80	3.17	-54.1	205	192	-1.5
950	12.85	3.42	-66.4	198	178	-1.5
1000	9.27	3.68	-79.7	190	165	-1.5
1050	5.00	3.95	-94.1	183	153	-1.5
1100	0.00	4.23	-109.5	176	142	-1.5

DRAG RDCR. WT. 0.389 GRAMS PCT. DRAG CHANGE / (DEG. YAW)**2 2.27

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	31.2	460	1001	0.0
0	0.00	0.00	31.2	460	962	0.0
50	1.47	0.11	28.9	454	938	-0.1
100	2.83	0.22	26.4	449	914	-0.1
150	4.07	0.33	23.9	444	891	-0.2
200	5.18	0.45	21.3	438	868	-0.2
250	6.16	0.56	18.7	433	846	-0.3
300	7.01	0.68	16.0	428	824	-0.3
350	7.73	0.79	13.2	423	803	-0.4
400	8.31	0.91	10.4	417	782	-0.4
450	8.76	1.03	7.5	412	762	-0.5
500	9.05	1.16	4.5	407	742	-0.5
550	9.20	1.28	1.5	402	723	-0.5
600	9.20	1.40	-1.6	397	704	-0.6
650	9.05	1.53	-4.9	393	686	-0.6
700	8.73	1.66	-8.1	388	668	-0.7
750	8.26	1.79	-11.5	383	650	-0.7
800	7.61	1.92	-14.9	378	633	-0.8
850	6.80	2.05	-18.5	374	616	-0.8
900	5.81	2.19	-22.1	369	600	-0.8
950	4.64	2.32	-25.8	364	584	-0.9
1000	3.28	2.46	-29.6	360	568	-0.9
1050	1.74	2.60	-33.5	355	553	-0.9
1100	0.00	2.74	-37.6	351	539	-1.0

TYPE C 2 CALIBER 7.62 MM AVERAGE DENSITY 11.00 GRAMS/CC.
PROJ. WT 9.097 GRAMS PROJ. DIA. 7.62 MM IMPULSE 2.1 LB. SEC.
DRAG RDCR. WT. 0.000 GRAMS CHG. WT. 2.10 GRAMS SABOT WT. 0.360 GRAMS
TWIST RATE NA PCT. DRAG CHANGE / (DEG. YAW)**2 0.68

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	24.8	725	2485	0.0
0	0.00	0.00	24.8	725	2391	0.0
50	1.19	0.07	23.8	698	2215	-0.3
100	2.33	0.14	22.7	671	2047	-0.5
150	3.42	0.22	21.6	643	1883	-0.8
200	4.45	0.30	20.3	616	1724	-1.1
250	5.42	0.38	18.9	588	1571	-1.4
300	6.31	0.47	17.4	560	1425	-1.7
350	7.13	0.56	15.7	532	1286	-2.0
400	7.86	0.66	13.9	504	1155	-2.2
450	8.49	0.76	11.8	477	1033	-2.5
500	9.01	0.87	9.4	450	920	-2.7
550	9.42	0.98	6.8	424	816	-2.9
600	9.69	1.10	3.9	398	721	-3.1
650	9.80	1.23	0.5	374	635	-3.2
700	9.74	1.37	-3.3	350	558	-3.3
750	9.48	1.52	-7.7	330	494	-3.2
800	8.99	1.68	-12.5	314	447	-2.8
850	8.25	1.84	-17.8	300	409	-2.4
900	7.24	2.01	-23.6	287	376	-2.3
950	5.94	2.19	-29.9	276	346	-2.3
1000	4.31	2.37	-36.7	267	324	-2.1
1050	2.34	2.56	-44.0	259	305	-1.8
1100	0.00	2.76	-51.6	251	288	-1.7

DRAG RDCR. WT. 0.389 GRAMS PCT. DRAG CHANGE / (DEG. YAW)**2 2.27

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	12.2	725	2485	0.0
0	0.00	0.00	12.2	725	2391	0.0
50	0.57	0.07	11.2	718	2341	-0.1
100	1.10	0.14	10.2	710	2291	-0.1
150	1.58	0.21	9.2	703	2243	-0.2
200	2.01	0.28	8.2	696	2195	-0.3
250	2.39	0.35	7.2	689	2148	-0.4
300	2.72	0.43	6.1	682	2101	-0.4
350	2.99	0.50	5.0	675	2056	-0.5
400	3.21	0.58	3.9	668	2011	-0.6
450	3.38	0.65	2.8	661	1966	-0.6
500	3.49	0.73	1.6	654	1923	-0.7
550	3.55	0.80	0.4	647	1880	-0.8
600	3.54	0.88	-0.8	640	1837	-0.8
650	3.48	0.96	-2.0	633	1796	-0.9
700	3.36	1.04	-3.3	626	1755	-1.0
750	3.17	1.12	-4.5	619	1715	-1.0
800	2.92	1.20	-5.9	612	1675	-1.1
850	2.60	1.28	-7.2	605	1636	-1.1
900	2.22	1.37	-8.6	599	1598	-1.2
950	1.77	1.45	-10.0	592	1560	-1.3
1000	1.25	1.54	-11.4	585	1523	-1.3
1050	0.66	1.62	-12.9	578	1487	-1.4
1100	0.00	1.71	-14.4	572	1451	-1.5

TYPE C 2 CALIBER 7.62 MM AVERAGE DENSITY 16.70 GRAMS/CC.
PROJ. WT 13.811 GRAMS PROJ. DIA. 7.62 MM IMPULSE 0.8 LB. SEC.
DRAG RDCR. WT. 0.000 GRAMS CHG. WT. 0.29 GRAMS SABOT WT. 0.360 GRAMS
TWIST RATE NA PCT. DRAG CHANGE / (DEG. YAW)**2 0.68

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	100.0	248	436	0.0
0	0.00	0.00	100.0	248	425	0.0
50	4.72	0.20	91.7	243	407	0.0
100	9.02	0.41	83.1	238	391	-0.1
150	12.88	0.63	74.0	232	372	-0.2
200	16.29	0.85	64.5	226	353	-0.2
250	19.22	1.07	54.5	220	335	-0.3
300	21.64	1.30	43.9	215	318	-0.3
350	23.53	1.54	32.9	209	302	-0.4
400	24.86	1.78	21.1	204	287	-0.4
450	25.60	2.03	8.8	199	273	-0.5
500	25.71	2.28	-4.2	194	259	-0.5
550	25.18	2.54	-17.8	189	247	-0.5
600	23.96	2.81	-32.1	184	234	-0.6
650	22.02	3.09	-47.2	180	223	-0.6
700	19.31	3.37	-63.1	175	212	-0.6
750	15.81	3.66	-79.7	171	202	-0.7
800	11.46	3.95	-97.2	167	193	-0.7
850	6.23	4.26	-115.6	163	184	-0.7
900	0.06	4.57	-134.8	159	175	-0.7
900	0.00	4.57	-135.0	159	175	-0.7

DRAG RDCR. WT. 0.389 GRAMS PCT. DRAG CHANGE / (DEG. YAW)**2 2.27

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	100.0	248	436	0.0
0	0.00	0.00	100.0	248	425	0.0
50	4.72	0.20	91.8	246	418	0.0
100	9.03	0.41	83.5	244	411	0.0
150	12.93	0.61	75.1	243	404	0.0
200	16.41	0.82	66.5	241	397	-0.1
250	19.47	1.03	57.8	239	391	-0.1
300	22.09	1.24	49.0	237	384	-0.1
350	24.29	1.45	40.1	236	378	-0.1
400	26.03	1.67	31.0	234	372	-0.1
450	27.33	1.88	21.8	232	366	-0.1
500	28.17	2.10	12.5	231	360	-0.2
550	28.56	2.31	3.0	229	354	-0.2
600	28.47	2.53	-6.6	227	348	-0.2
650	27.92	2.75	-16.3	226	343	-0.2
700	26.88	2.98	-26.2	224	337	-0.2
750	25.35	3.20	-36.3	219	322	-0.3
800	23.31	3.43	-47.0	213	306	-0.3
850	20.73	3.67	-58.3	208	290	-0.4
900	17.58	3.92	-70.1	203	276	-0.4
950	13.83	4.17	-82.6	198	262	-0.5
1000	9.46	4.42	-95.7	193	249	-0.5
1050	4.41	4.69	-109.5	188	237	-0.5
1089	0.00	4.90	-120.7	184	228	-0.6

TYPE C 2 CALIBER 7.62 MM AVERAGE DENSITY 16.70 GRAMS/CC.
PROJ. WT 13.811 GRAMS PROJ. DIA. 7.62 MM IMPULSE 1.2 LB. SEC.
DRAG RDCR. WT. 0.000 GRAMS CHG. WT. 0.51 GRAMS SABOT WT. 0.360 GRAMS
TWIST RATE NA PCT. DRAG CHANGE / (DEG. YAW)**2 0.68

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	75.7	334	790	0.0
0	0.00	0.00	75.7	334	770	0.0
50	3.61	0.15	71.0	322	717	-0.1
100	6.98	0.31	66.1	312	673	-0.2
150	10.10	0.47	60.8	303	634	-0.3
200	12.95	0.64	55.2	294	599	-0.3
250	15.52	0.81	49.3	286	566	-0.4
300	17.79	0.99	43.0	279	536	-0.5
350	19.74	1.17	36.4	272	510	-0.5
400	21.36	1.36	29.5	266	490	-0.4
450	22.63	1.55	22.3	261	470	-0.5
500	23.54	1.74	14.8	256	452	-0.5
550	24.08	1.94	7.0	251	434	-0.6
600	24.23	2.14	-1.1	246	417	-0.6
650	23.97	2.35	-9.5	241	401	-0.6
700	23.29	2.56	-18.3	236	386	-0.7
750	22.18	2.77	-27.5	231	367	-0.8
800	20.60	2.99	-37.1	225	349	-0.9
850	18.53	3.22	-47.2	219	332	-1.0
900	15.96	3.45	-57.9	214	316	-1.0
950	12.85	3.68	-69.1	209	301	-1.0
1000	9.17	3.93	-80.8	204	286	-1.0
1050	4.90	4.18	-93.2	199	273	-1.1
1100	0.00	4.43	-106.1	194	260	-1.1

DRAG RDCR. WT. 0.389 GRAMS PCT. DRAG CHANGE / (DEG. YAW)**2 2.27

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	54.3	334	790	0.0
0	0.00	0.00	54.3	334	770	0.0
50	2.55	0.15	49.8	332	759	0.0
100	4.89	0.30	45.2	329	748	0.0
150	7.00	0.45	40.6	327	737	-0.1
200	8.87	0.61	35.9	325	726	-0.1
250	10.52	0.76	31.2	323	716	-0.1
300	11.93	0.92	26.3	321	706	-0.1
350	13.11	1.07	21.5	319	696	-0.1
400	14.04	1.23	16.5	317	686	-0.2
450	14.73	1.39	11.5	315	677	-0.2
500	15.18	1.55	6.5	313	667	-0.2
550	15.37	1.71	1.3	311	658	-0.2
600	15.31	1.87	-3.9	309	648	-0.2
650	14.99	2.03	-9.1	307	639	-0.3
700	14.42	2.20	-14.4	305	630	-0.3
750	13.58	2.36	-19.8	303	621	-0.3
800	12.48	2.53	-25.3	301	612	-0.3
850	11.10	2.69	-30.8	299	604	-0.3
900	9.46	2.86	-36.4	298	596	-0.3
950	7.53	3.03	-42.1	295	583	-0.4
1000	5.33	3.20	-48.0	286	550	-0.5
1050	2.82	3.38	-54.3	279	521	-0.5
1100	0.00	3.56	-60.9	271	494	-0.7

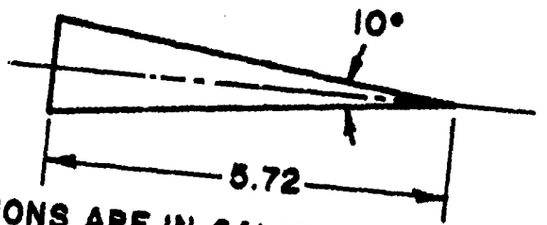
TYPE C 2 CALIBER 7.62 MM AVERAGE DENSITY 16.70 GRAMS/CC.
PROJ. WT 13.811 GRAMS PROJ. DIA. 7.62 MM IMPULSE 2.1 LB. SEC.
DRAG RDCR. WT. 0.000 GRAMS CHG. WT. 1.62 GRAMS SABOT WT. 0.360 GRAMS
TWIST RATE NA PCT. DRAG CHANGE / (DEG. YAW)**2 0.68

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	38.0	522	1931	0.0
0	0.00	0.00	38.0	522	1882	0.0
50	1.82	0.10	36.1	504	1752	-0.2
100	3.54	0.20	34.0	486	1628	-0.4
150	5.16	0.30	31.8	468	1511	-0.5
200	6.66	0.41	29.5	450	1399	-0.7
250	8.05	0.53	26.9	433	1293	-0.9
300	9.30	0.64	24.1	416	1193	-1.0
350	10.42	0.77	21.1	399	1099	-1.2
400	11.38	0.89	17.8	383	1011	-1.3
450	12.17	1.03	14.3	367	928	-1.4
500	12.78	1.17	10.4	351	852	-1.5
550	13.19	1.31	6.2	337	784	-1.6
600	13.38	1.46	1.6	325	729	-1.5
650	13.35	1.62	-3.3	315	684	-1.4
700	13.06	1.78	-8.5	305	644	-1.3
750	12.52	1.95	-14.0	297	608	-1.3
800	11.69	2.12	-19.8	289	575	-1.3
850	10.57	2.30	-26.0	281	545	-1.3
900	9.14	2.48	-32.5	274	517	-1.4
950	7.39	2.66	-39.4	268	495	-1.3
1000	5.28	2.85	-46.5	262	476	-1.1
1050	2.83	3.04	-53.9	257	457	-1.1
1100	0.00	3.24	-61.6	252	440	-1.1

DRAG RDCR. WT. 0.389 GRAMS PCT. DRAG CHANGE / (DEG. YAW)**2 2.27

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	22.6	522	1931	0.0
0	0.00	0.00	22.6	522	1882	0.0
50	1.06	0.10	20.8	518	1851	0.0
100	2.04	0.19	18.9	514	1820	-0.1
150	2.92	0.29	17.0	510	1791	-0.1
200	3.71	0.39	15.1	506	1761	-0.2
250	4.40	0.49	13.1	502	1732	-0.2
300	5.00	0.59	11.1	498	1703	-0.2
350	5.50	0.69	9.1	494	1675	-0.3
400	5.89	0.79	7.0	490	1647	-0.3
450	6.19	0.89	4.9	486	1620	-0.3
500	6.38	1.00	2.8	483	1593	-0.4
550	6.47	1.10	0.6	479	1566	-0.4
600	6.45	1.21	-1.6	475	1540	-0.5
650	6.32	1.31	-3.8	471	1514	-0.5
700	6.08	1.42	-6.1	467	1489	-0.5
750	5.73	1.53	-8.4	464	1464	-0.6
800	5.27	1.63	-10.7	460	1439	-0.6
850	4.69	1.74	-13.1	456	1415	-0.6
900	4.00	1.85	-15.5	453	1391	-0.7
950	3.18	1.96	-18.0	449	1367	-0.7
1000	2.24	2.08	-20.5	446	1344	-0.7
1050	1.18	2.19	-23.0	442	1321	-0.7
1100	0.00	2.30	-25.6	438	1299	-0.8

C 3



ALL DIMENSIONS ARE IN CALIBERS

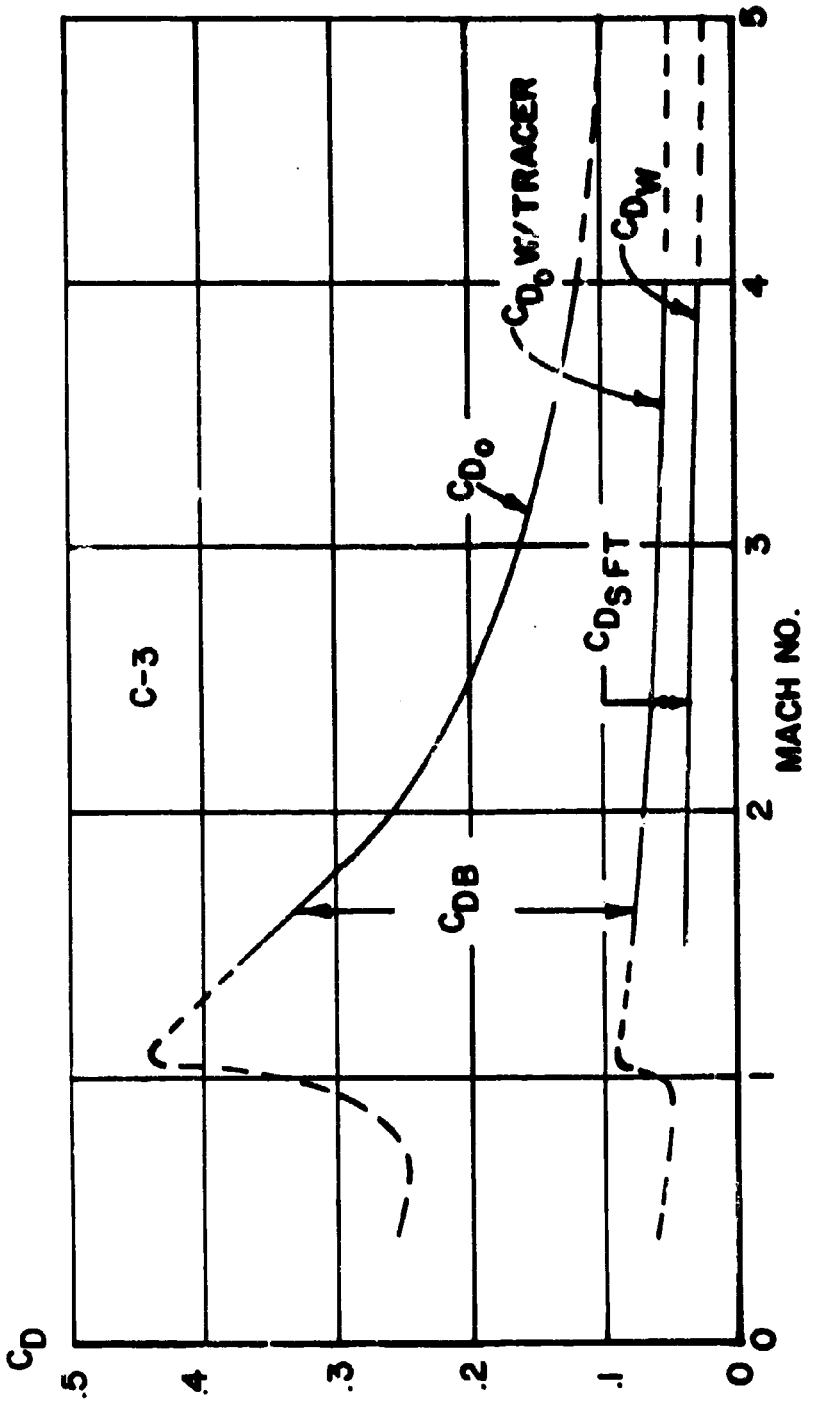
Axial Radius of Gyration = 0.274 Cal.
Transverse Radius of Gyration = 1.12 Cal.
Center of Mass (Nose) = 4.29 Cal.

Wetted Area = 9.01 Cal.^{2}
Volume = 1.50 Cal.^{3}
Length = 5.72 Cal.

Mach No.	C_{D_O}	C_{D_B}	C_{D_O} (Tracer)	$C_{D_{SF_T}}$	C_{D_W}	C_{N_α}	CP_N	C_{M_α}
.40*	.257		.062			2.00	3.81	.96
.70*	.249		.055			2.00	3.81	.96
.80*	.263		.053			2.00	3.81	.96
.90*	.297		.052			2.03	3.81	.97
.95*	.309		.051			2.14	3.81	1.03
1.00*	.335		.063			2.34	3.81	1.12
1.05*	.434		.084			2.20	3.81	1.06
1.10*	.433		.083			2.05	3.81	.98
1.50	.358	.277	.081	.041	.040	2.00	3.81	.96
2.00	.259	.188	.071	.037	.034	1.99	3.81	.96
2.50	.201	.138	.063	.032	.031	1.98	3.81	.95
3.00	.163	.105	.058	.029	.028	1.97	3.81	.95
3.50	.136	.083	.053	.026	.026	1.96	3.81	.94
4.00	.117	.068	.049	.024	.025	1.95	3.81	.94
5.00*	.097	.047	.046	.020	.024	1.93	3.81	.93

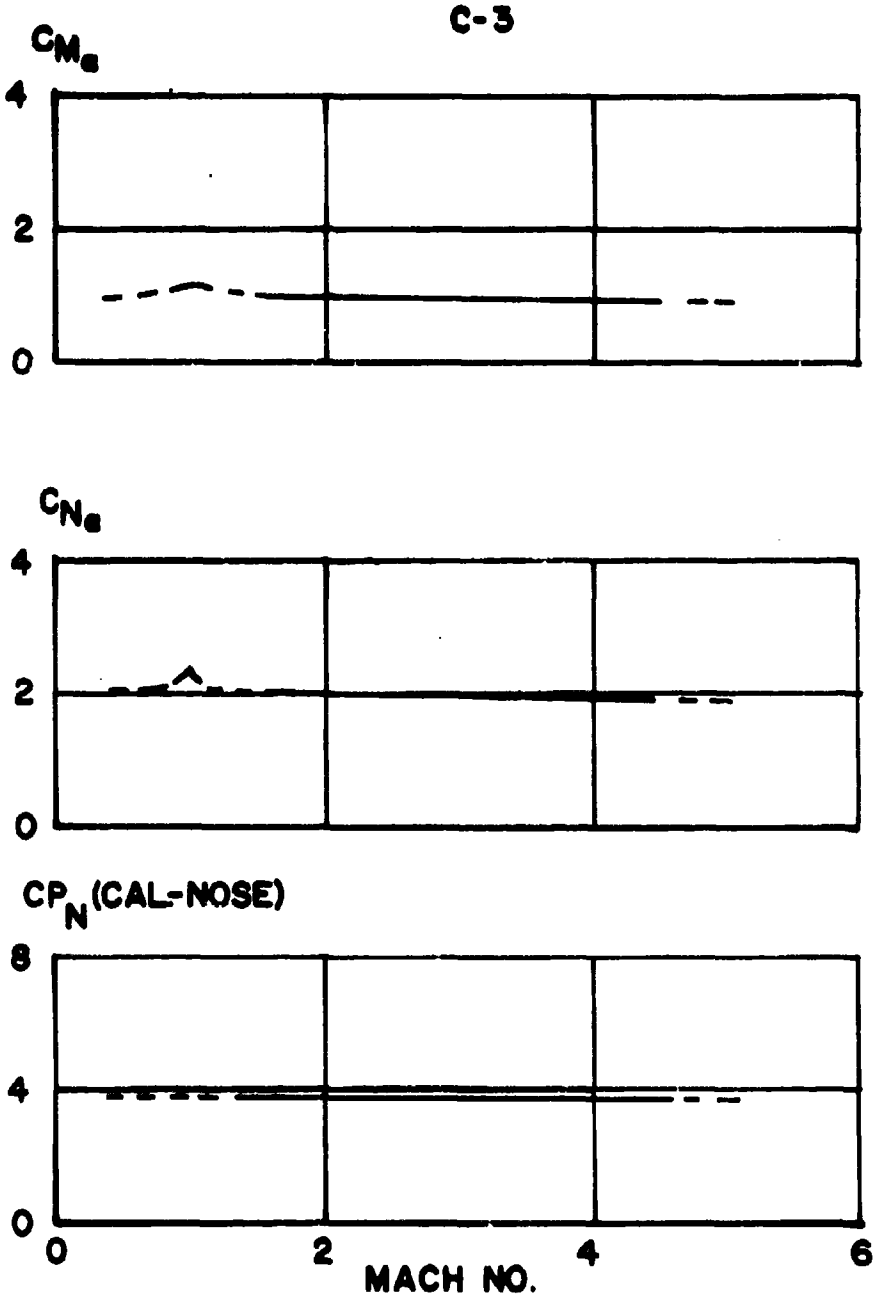
$C_{D_{\alpha^2}}$ (Mach = 2.5) = 4.37 (1/radian squared)

*Estimated data



C-3-2

C-3



TYPE C 3 CALIBER 5.56 MM AVERAGE DENSITY 7.80 GRAMS/CC.
PROJ. WT 2.012 GRAMS PROJ. DIA. 5.56 MM IMPULSE 0.8 LB. SEC.
DRAG RDCR. WT. 0.000 GRAMS CHG. WT. 1.06 GRAMS SABOT WT. 0.175 GRAMS
TWIST RATE NA PCT. DRAG CHANGE / (DEG. YAW)**2 0.66

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	37.7	1051	1208	0.0
0	0.00	0.00	37.7	1051	1111	0.0
50	1.84	0.05	37.2	989	985	-0.6
100	3.65	0.10	36.6	927	864	-1.3
150	5.44	0.16	36.0	863	750	-1.9
200	7.19	0.22	35.3	800	643	-2.6
250	8.90	0.28	34.4	735	543	-3.3
300	10.57	0.35	33.4	670	451	-3.9
350	12.19	0.43	32.2	603	365	-4.7
400	13.73	0.52	30.6	535	288	-5.4
450	15.19	0.62	28.6	468	220	-6.0
500	16.54	0.74	26.0	403	164	-6.4
550	17.74	0.87	22.4	345	120	-6.4
600	18.73	1.02	17.6	307	95	-4.8
650	19.46	1.20	11.7	277	77	-4.1
700	19.87	1.39	4.5	252	64	-3.7
750	19.89	1.59	-4.1	229	53	-3.4
800	19.44	1.82	-14.5	209	44	-3.3
850	18.44	2.07	-27.1	191	37	-3.2
900	16.76	2.35	-42.2	174	30	-3.2
950	14.26	2.65	-60.3	158	25	-3.1
1000	10.78	2.98	-82.2	144	21	-3.0
1050	6.11	3.35	-108.6	132	17	-2.8
1100	0.00	3.75	-140.2	120	15	-2.7

DRAG RDCR. WT. 0.151 GRAMS PCT. DRAG CHANGE / (DEG. YAW)**2 2.10

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	7.1	1051	1208	0.0
0	0.00	0.00	7.1	1051	1111	0.0
50	0.34	0.05	6.6	1029	1064	-0.2
100	0.65	0.10	6.1	1007	1018	-0.4
150	0.94	0.15	5.6	986	974	-0.6
200	1.20	0.20	5.1	964	931	-0.9
250	1.44	0.25	4.5	943	889	-1.1
300	1.65	0.30	4.0	922	849	-1.3
350	1.83	0.36	3.4	901	810	-1.4
400	1.99	0.42	2.7	881	772	-1.6
450	2.11	0.47	2.1	860	736	-1.8
500	2.20	0.53	1.4	840	701	-2.0
550	2.25	0.59	0.7	820	667	-2.2
600	2.27	0.65	-0.1	800	634	-2.4
650	2.25	0.72	-0.9	781	602	-2.5
700	2.19	0.78	-1.7	761	572	-2.7
750	2.09	0.85	-2.6	742	542	-2.9
800	1.94	0.92	-3.6	723	514	-3.0
850	1.75	0.99	-4.5	704	487	-3.2
900	1.51	1.06	-5.6	686	461	-3.3
950	1.22	1.13	-6.7	668	436	-3.4
1000	0.87	1.21	-7.8	650	412	-3.6
1050	0.47	1.29	-9.0	632	389	-3.7
1100	0.00	1.37	-10.3	614	366	-3.9

TYPE C 3 CALIBER 5.56 MM AVERAGE DENSITY 7.80 GRAMS/CC.
PROJ. WT 2.012 GRAMS PROJ. DIA. 5.56 MM IMPULSE 1.2 LB. SEC.
DRAG RDCR. WT. 0.000 GRAMS CHG. WT. 1.97 GRAMS SABOT WT. 0.175 GRAMS
TWIST RATE NA PCT. DRAG CHANGE / (DEG. YAW)**2 0.66

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	14.4	1333	1943	0.0
0	0.00	0.00	14.4	1333	1788	0.0
50	0.70	0.04	14.2	1274	1632	-0.6
100	1.39	0.08	13.8	1214	1482	-1.2
150	2.06	0.12	13.5	1153	1338	-1.8
200	2.71	0.17	13.1	1092	1201	-2.4
250	3.35	0.21	12.6	1031	1069	-3.1
300	3.96	0.26	12.1	969	945	-3.7
350	4.54	0.32	11.6	906	826	-4.4
400	5.10	0.37	10.9	843	715	-5.1
450	5.62	0.43	10.1	779	610	-5.8
500	6.10	0.50	9.3	714	513	-6.5
550	6.53	0.58	8.2	648	423	-7.2
600	6.90	0.66	6.8	581	340	-8.1
650	7.21	0.75	5.2	513	265	-8.8
700	7.41	0.85	3.0	447	201	-9.4
750	7.50	0.97	0.1	384	148	-9.6
800	7.41	1.11	-3.9	332	111	-8.9
850	7.11	1.27	-9.0	297	89	-6.9
900	6.52	1.45	-15.3	268	72	-5.6
950	5.60	1.65	-22.9	244	60	-4.9
1000	4.26	1.86	-32.1	223	50	-4.6
1050	2.43	2.10	-43.2	203	42	-4.3
1100	0.00	2.35	-56.5	185	35	-4.2

DRAG RDCR. WT. 0.151 GRAMS PCT. DRAG CHANGE / (DEG. YAW)**2 2.10

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	4.1	1333	1943	0.0
0	0.00	0.00	4.1	1333	1788	0.0
50	0.20	0.04	3.9	1309	1721	-0.2
100	0.38	0.08	3.6	1284	1656	-0.5
150	0.55	0.12	3.2	1260	1593	-0.7
200	0.70	0.16	2.9	1236	1532	-1.0
250	0.84	0.20	2.6	1213	1472	-1.2
300	0.96	0.24	2.2	1189	1414	-1.4
350	1.06	0.28	1.9	1166	1357	-1.6
400	1.15	0.32	1.5	1142	1302	-1.8
450	1.22	0.37	1.1	1119	1249	-2.1
500	1.26	0.41	0.7	1097	1197	-2.3
550	1.29	0.46	0.3	1074	1147	-2.5
600	1.30	0.51	-0.2	1052	1098	-2.7
650	1.29	0.55	-0.6	1029	1051	-2.9
700	1.25	0.60	-1.1	1007	1006	-3.1
750	1.19	0.65	-1.6	986	961	-3.3
800	1.10	0.71	-2.1	964	918	-3.4
850	0.99	0.76	-2.7	942	877	-3.6
900	0.85	0.81	-3.3	921	836	-3.8
950	0.69	0.87	-3.9	900	797	-4.0
1000	0.49	0.92	-4.5	879	760	-4.2
1050	0.26	0.98	-5.1	859	723	-4.3
1100	0.00	1.04	-5.8	838	688	-4.5

TYPE C 3 CALIBER 5.56 MM AVERAGE DENSITY 7.80 GRAMS/CC.
PROJ. WT 2.012 GRAMS PROJ. DIA. 5.56 MM IMPULSE 2.1 LB. SEC.
DRAG RDCR. WT. 0.000 GRAMS CHG. WT. 4.30 GRAMS SABOT WT. 0.175 GRAMS
TWIST RATE NA PCT. DRAG CHANGE / (DEG. YAW)**2 0.66

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	5.4	1642	2948	0.0
0	0.00	0.00	5.4	1642	2712	0.0
50	0.26	0.03	5.2	1581	2516	-0.6
100	0.51	0.06	5.0	1521	2327	-1.2
150	0.75	0.10	4.8	1461	2147	-1.8
200	0.98	0.13	4.5	1402	1976	-2.4
250	1.20	0.17	4.3	1343	1813	-2.9
300	1.41	0.21	4.0	1283	1657	-3.6
350	1.60	0.25	3.7	1224	1506	-4.2
400	1.77	0.29	3.3	1163	1362	-4.8
450	1.93	0.33	2.9	1102	1225	-5.5
500	2.06	0.38	2.5	1041	1090	-6.1
550	2.18	0.43	2.0	979	965	-6.8
600	2.27	0.48	1.4	917	845	-7.5
650	2.33	0.54	0.8	853	733	-8.2
700	2.36	0.60	0.1	790	627	-8.9
750	2.34	0.66	-0.8	725	528	-9.7
800	2.28	0.74	-1.9	659	437	-10.4
850	2.17	0.82	-3.1	592	353	-11.3
900	1.98	0.91	-4.7	524	276	-12.2
950	1.71	1.01	-6.8	457	210	-12.8
1000	1.32	1.13	-9.6	394	156	-13.0
1050	0.77	1.26	-13.4	338	115	-12.5
1100	0.00	1.42	-18.3	302	92	-10.4

DRAG RDCR. WT. 0.151 GRAMS PCT. DRAG CHANGE / (DEG. YAW)**2 2.10

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	2.6	1642	2948	0.0
0	0.00	0.00	2.6	1642	2712	0.0
50	0.12	0.03	2.4	1614	2618	-0.3
100	0.24	0.06	2.2	1586	2527	-0.6
150	0.34	0.09	2.0	1559	2438	-0.8
200	0.44	0.13	1.8	1531	2352	-1.1
250	0.52	0.16	1.6	1505	2268	-1.3
300	0.60	0.19	1.4	1478	2187	-1.6
350	0.66	0.23	1.1	1452	2108	-1.8
400	0.72	0.26	0.9	1426	2032	-2.1
450	0.76	0.30	0.7	1400	1958	-2.3
500	0.79	0.33	0.4	1375	1886	-2.5
550	0.80	0.37	0.1	1350	1816	-2.7
600	0.81	0.41	-0.2	1325	1749	-3.0
650	0.80	0.45	-0.4	1301	1683	-3.2
700	0.77	0.48	-0.7	1276	1618	-3.4
750	0.74	0.52	-1.1	1252	1556	-3.6
800	0.68	0.56	-1.4	1228	1495	-3.8
850	0.61	0.61	-1.7	1204	1436	-4.0
900	0.53	0.65	-2.1	1180	1378	-4.2
950	0.42	0.69	-2.4	1157	1323	-4.5
1000	0.30	0.73	-2.8	1133	1268	-4.6
1050	0.16	0.78	-3.2	1110	1216	-4.8
1100	0.00	0.82	-3.6	1087	1165	-5.0

TYPE C 3 CALIBER 5.56 MM AVERAGE DENSITY 11.00 GRAMS/CC.
PROJ. WT 2.836 GRAMS PROJ. DIA. 5.56 MM IMPULSE 0.8 LB. SEC.
DRAG RDCR. WT. 0.000 GRAMS CHG. WT. 0.89 GRAMS SABOT WT. 0.175 GRAMS
TWIST RATE NA PCT. DRAG CHANGE / (DEG. YAW)**2 0.66

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	36.0	834	1047	0.0
0	0.00	0.00	36.0	834	986	0.0
50	1.75	0.06	35.3	788	881	-0.5
100	3.46	0.13	34.4	742	781	-0.9
150	5.13	0.20	33.5	696	687	-1.4
200	6.75	0.27	32.4	649	598	-1.9
250	8.31	0.35	31.1	602	513	-2.4
300	9.80	0.44	29.6	553	434	-2.9
350	11.22	0.53	27.8	505	362	-3.4
400	12.53	0.64	25.6	458	298	-3.8
450	13.73	0.75	23.0	413	241	-4.1
500	14.79	0.88	19.7	369	193	-4.3
550	15.66	1.02	15.6	334	158	-4.0
600	16.32	1.18	10.7	308	134	-3.2
650	16.71	1.35	5.1	286	116	-3.0
700	16.81	1.53	-1.5	266	101	-2.8
750	16.56	1.72	-9.1	249	88	-2.7
800	15.91	1.93	-17.7	233	77	-2.6
850	14.81	2.15	-27.5	219	68	-2.6
900	13.20	2.39	-38.7	205	59	-2.6
950	11.00	2.64	-51.4	192	52	-2.5
1000	8.14	2.91	-65.9	180	46	-2.5
1050	4.50	3.20	-82.4	168	40	-2.5
1100	0.00	3.51	-101.3	158	35	-2.4

DRAG RDCR. WT. 0.151 GRAMS PCT. DRAG CHANGE / (DEG. YAW)**2 2.10

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	10.4	834	1047	0.0
0	0.00	0.00	10.4	834	986	0.0
50	0.49	0.06	9.6	820	952	-0.1
100	0.95	0.12	8.9	806	919	-0.3
150	1.36	0.18	8.1	792	887	-0.4
200	1.74	0.25	7.3	779	856	-0.5
250	2.08	0.31	6.5	765	825	-0.7
300	2.38	0.38	5.6	752	796	-0.8
350	2.63	0.45	4.7	738	767	-0.9
400	2.84	0.51	3.8	725	738	-1.1
450	3.01	0.58	2.8	712	711	-1.2
500	3.12	0.65	1.8	699	684	-1.3
550	3.19	0.73	0.7	686	658	-1.4
600	3.20	0.80	-0.3	673	633	-1.5
650	3.16	0.88	-1.5	660	609	-1.6
700	3.07	0.95	-2.6	648	585	-1.8
750	2.91	1.03	-3.9	635	562	-1.9
800	2.70	1.11	-5.1	623	539	-2.0
850	2.42	1.19	-6.4	610	517	-2.1
900	2.08	1.27	-7.8	598	496	-2.2
950	1.67	1.36	-9.2	586	475	-2.3
1000	1.19	1.44	-10.7	574	455	-2.4
1050	0.63	1.53	-12.3	562	436	-2.5
1100	0.00	1.62	-13.9	550	417	-2.6

TYPE C 3 CALIBER 5.56 MM AVERAGE DENSITY 11.00 GRAMS/CC.

PROJ. WT 2.836 GRAMS PROJ. DIA. 5.56 MM IMPULSE 1.2 LB. SEC.

DRAG RDCR. WT. 0.000 GRAMS CHG. WT. 1.67 GRAMS SABOT WT. 0.175 GRAMS

TWIST RATE NA PCT. DRAG CHANGE / (DEG. YAW)**2 0.66

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	13.6	1112	1862	0.0
0	0.00	0.00	13.6	1112	1753	0.0
50	0.66	0.05	13.2	1069	1619	-0.4
100	1.29	0.09	12.7	1025	1489	-0.9
150	1.91	0.14	12.2	981	1365	-1.3
200	2.50	0.20	11.7	937	1244	-1.8
250	3.06	0.25	11.1	892	1128	-2.2
300	3.59	0.31	10.4	847	1017	-2.7
350	4.08	0.37	9.7	802	911	-3.2
400	4.54	0.43	8.9	756	810	-3.7
450	4.96	0.50	7.9	709	714	-4.2
500	5.33	0.57	6.9	663	623	-4.6
550	5.64	0.65	5.7	616	538	-5.2
600	5.89	0.74	4.2	568	457	-5.8
650	6.06	0.83	2.5	519	382	-6.3
700	6.14	0.93	0.5	472	316	-6.7
750	6.11	1.04	-2.0	426	257	-7.0
800	5.94	1.17	-5.1	382	206	-7.2
850	5.61	1.30	-8.9	342	166	-7.0
900	5.07	1.46	-13.6	315	141	-5.8
950	4.28	1.62	-19.0	292	121	-4.8
1000	3.20	1.80	-25.3	272	105	-4.3
1050	1.79	1.99	-32.6	254	91	-4.0
1100	0.00	2.19	-40.9	238	80	-3.8

DRAG RDCR. WT. 0.151 GRAMS PCT. DRAG CHANGE / (DEG. YAW)**2 2.10

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	5.5	1112	1862	0.0
0	0.00	0.00	5.5	1112	1753	0.0
50	0.26	0.05	5.1	1096	1702	-0.2
100	0.50	0.09	4.7	1080	1651	-0.3
150	0.73	0.14	4.3	1064	1602	-0.5
200	0.93	0.19	3.8	1049	1554	-0.6
250	1.10	0.23	3.4	1033	1507	-0.8
300	1.26	0.28	2.9	1017	1460	-0.9
350	1.39	0.33	2.4	1002	1415	-1.1
400	1.50	0.38	1.9	987	1371	-1.2
450	1.58	0.43	1.4	971	1328	-1.4
500	1.64	0.48	0.8	956	1285	-1.5
550	1.67	0.54	0.3	941	1244	-1.7
600	1.68	0.59	-0.3	926	1204	-1.8
650	1.65	0.65	-0.9	911	1164	-1.9
700	1.60	0.70	-1.5	897	1126	-2.1
750	1.52	0.76	-2.1	882	1088	-2.2
800	1.40	0.81	-2.8	867	1051	-2.3
850	1.26	0.87	-3.5	853	1016	-2.4
900	1.08	0.93	-4.2	839	981	-2.6
950	0.86	0.99	-4.9	824	947	-2.7
1000	0.61	1.05	-5.6	810	913	-2.8
1050	0.33	1.12	-6.4	796	881	-2.9
1100	0.00	1.18	-7.2	782	849	-3.1

TYPE C 3 CALIBER 5.56 MM AVERAGE DENSITY 11.00 GRAMS/CC.
PROJ. WT 2.836 GRAMS PROJ. DIA. 5.56 MM IMPULSE 2.1 LB. SEC.
DRAG RDCR. WT. 0.000 GRAMS CHG. WT. 3.83 GRAMS SABOT WT. 0.175 GRAMS
TWIST RATE NA PCT. DRAG CHANGE / (DEG. YAW)**2 0.66

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	4.6	1480	3298	0.0
0	0.00	0.00	4.6	1480	3106	0.0
50	0.22	0.03	4.4	1438	2931	-0.4
100	0.43	0.07	4.1	1396	2761	-0.8
150	0.63	0.11	3.8	1354	2599	-1.3
200	0.81	0.14	3.6	1312	2440	-1.7
250	0.98	0.18	3.3	1270	2286	-2.1
300	1.13	0.22	2.9	1227	2135	-2.6
350	1.27	0.26	2.6	1185	1990	-3.0
400	1.39	0.31	2.2	1142	1848	-3.4
450	1.50	0.35	1.8	1098	1710	-3.9
500	1.58	0.40	1.4	1055	1578	-4.4
550	1.64	0.45	0.9	1011	1450	-4.8
600	1.68	0.50	0.4	967	1326	-5.3
650	1.69	0.55	-0.1	922	1207	-5.8
700	1.68	0.61	-0.8	878	1092	-6.3
750	1.63	0.66	-1.4	833	983	-6.7
800	1.55	0.73	-2.2	787	879	-7.3
850	1.42	0.79	-3.1	741	779	-7.8
900	1.26	0.86	-4.0	695	685	-8.3
950	1.04	0.94	-5.1	648	596	-8.8
1000	0.77	1.02	-6.4	601	511	-9.4
1050	0.42	1.10	-7.9	552	433	-10.1
1100	0.00	1.20	-9.7	504	360	-10.6

DRAG RDCR. WT. 0.151 GRAMS PCT. DRAG CHANGE / (DEG. YAW)**2 2.10

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	3.0	1480	3298	0.0
0	0.00	0.00	3.0	1480	3106	0.0
50	0.14	0.03	2.7	1461	3027	-0.2
100	0.27	0.07	2.5	1443	2949	-0.4
150	0.39	0.10	2.3	1425	2873	-0.5
200	0.49	0.14	2.0	1407	2799	-0.7
250	0.59	0.17	1.8	1389	2726	-0.9
300	0.67	0.21	1.5	1371	2655	-1.1
350	0.74	0.25	1.2	1353	2586	-1.2
400	0.80	0.28	1.0	1336	2517	-1.4
450	0.84	0.32	0.7	1318	2450	-1.6
500	0.87	0.36	0.4	1301	2384	-1.7
550	0.89	0.40	0.1	1284	2320	-1.9
600	0.89	0.44	-0.2	1266	2257	-2.1
650	0.87	0.48	-0.5	1249	2194	-2.2
700	0.84	0.52	-0.9	1232	2134	-2.4
750	0.80	0.56	-1.2	1215	2074	-2.5
800	0.74	0.60	-1.5	1199	2015	-2.7
850	0.66	0.64	-1.9	1182	1958	-2.8
900	0.56	0.69	-2.3	1165	1902	-3.0
950	0.45	0.73	-2.6	1149	1847	-3.1
1000	0.32	0.77	-3.0	1132	1793	-3.3
1050	0.17	0.82	-3.4	1116	1740	-3.4
1100	0.00	0.86	-3.8	1100	1688	-3.6

TYPE C 3 CALIBER 5.56 MM AVERAGE DENSITY 16.70 GRAMS/CC.
PROJ. WT 4.305 GRAMS PROJ. DIA. 5.56 MM IMPULSE 0.8 LB. SEC.
DRAG RDCR. WT. 0.000 GRAMS CHG. WT. 0.70 GRAMS SABOT WT. 0.175 GRAMS
TWIST RATE NA PCT. DRAG CHANGE / (DEG. YAW)**2 0.66

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	43.4	608	828	0.0
0	0.00	0.00	43.4	608	796	0.0
50	2.10	0.08	42.0	576	715	-0.3
100	4.12	0.17	40.4	544	638	-0.6
150	6.07	0.27	38.6	513	565	-1.0
200	7.92	0.37	36.6	481	498	-1.2
250	9.66	0.48	34.3	450	436	-1.5
300	11.28	0.59	31.7	420	380	-1.8
350	12.77	0.72	28.6	391	329	-2.0
400	14.09	0.85	25.1	363	284	-2.2
450	15.23	0.99	21.0	339	248	-2.1
500	16.15	1.14	16.4	321	222	-1.8
550	16.84	1.30	11.3	305	200	-1.8
600	17.26	1.47	5.7	290	181	-1.8
650	17.39	1.65	-0.6	277	165	-1.8
700	17.21	1.83	-7.4	264	151	-1.7
750	16.67	2.03	-14.9	253	138	-1.7
800	15.75	2.23	-23.0	242	126	-1.8
850	14.41	2.44	-31.9	232	116	-1.8
900	12.61	2.66	-41.6	222	107	-1.8
950	10.32	2.89	-52.1	213	98	-1.8
1000	7.49	3.13	-63.6	204	90	-1.8
1050	4.07	3.38	-76.1	196	82	-1.8
1100	0.00	3.64	-89.7	188	76	-1.9

DRAG RDCR. WT. 0.151 GRAMS PCT. DRAG CHANGE / (DEG. YAW)**2 2.10

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	18.3	608	828	0.0
0	0.00	0.00	18.3	608	796	0.0
50	0.86	0.08	16.9	600	774	-0.1
100	1.66	0.17	15.5	592	754	-0.2
150	2.38	0.25	14.0	584	733	-0.2
200	3.03	0.34	12.6	577	713	-0.3
250	3.61	0.43	11.0	569	693	-0.4
300	4.12	0.51	9.5	561	674	-0.5
350	4.55	0.60	7.9	554	655	-0.5
400	4.89	0.69	6.2	546	637	-0.6
450	5.16	0.79	4.5	539	619	-0.7
500	5.34	0.88	2.8	531	601	-0.7
550	5.44	0.97	1.0	524	584	-0.8
600	5.44	1.07	-0.9	516	567	-0.9
650	5.36	1.17	-2.8	509	550	-0.9
700	5.18	1.27	-4.7	502	534	-1.0
750	4.90	1.37	-6.7	495	518	-1.1
800	4.53	1.47	-8.8	488	503	-1.1
850	4.05	1.57	-11.0	481	488	-1.2
900	3.46	1.68	-13.1	474	474	-1.2
950	2.77	1.78	-15.4	467	460	-1.3
1000	1.96	1.89	-17.7	460	446	-1.3
1050	1.04	2.00	-20.1	454	433	-1.4
1100	0.00	2.11	-22.6	447	420	-1.4

TYPE C 3 CALIBER 5.56 MM AVERAGE DENSITY 16.70 GRAMS/CC.

PROJ. WT 4.305 GRAMS PROJ. DIA. 5.56 MM IMPULSE 1.2 LB. SEC.

DRAG RDCR. WT. 0.000 GRAMS CHG. WT. 1.34 GRAMS SABOT WT. 0.175 GRAMS

TWIST RATE NA PCT. DRAG CHANGE / (DEG. YAW)**2 0.66

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	18.7	839	1577	0.0
0	0.00	0.00	18.7	839	1515	0.0
50	0.90	0.06	17.9	809	1409	-0.3
100	1.76	0.12	17.1	779	1306	-0.6
150	2.58	0.19	16.3	749	1206	-0.9
200	3.36	0.26	15.4	718	1110	-1.2
250	4.09	0.33	14.3	688	1018	-1.5
300	4.77	0.40	13.2	657	929	-1.8
350	5.39	0.48	12.0	626	843	-2.2
400	5.95	0.56	10.7	594	760	-2.5
450	6.45	0.65	9.2	562	681	-2.9
500	6.86	0.74	7.5	531	606	-3.2
550	7.19	0.84	5.6	499	536	-3.5
600	7.42	0.94	3.5	468	471	-3.7
650	7.53	1.05	1.0	437	412	-4.0
700	7.52	1.17	-1.8	408	358	-4.2
750	7.36	1.30	-5.0	379	309	-4.3
800	7.03	1.43	-8.7	352	267	-4.4
850	6.51	1.58	-13.0	331	236	-3.9
900	5.76	1.74	-17.9	314	212	-3.3
950	4.76	1.90	-23.2	298	192	-3.1
1000	3.49	2.07	-29.1	284	174	-3.0
1050	1.91	2.25	-35.5	272	159	-2.8
1100	0.00	2.44	-42.6	260	145	-2.7

DRAG RDCR. WT. 0.151 GRAMS PCT. DRAG CHANGE / (DEG. YAW)**2 2.10

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	9.2	839	1577	0.0
0	0.00	0.00	9.2	839	1515	0.0
50	0.43	0.06	8.5	830	1481	-0.1
100	0.83	0.12	7.8	821	1447	-0.2
150	1.20	0.18	7.0	811	1414	-0.3
200	1.53	0.24	6.3	802	1381	-0.4
250	1.82	0.31	5.5	793	1349	-0.5
300	2.07	0.37	4.7	784	1318	-0.5
350	2.28	0.43	3.8	775	1287	-0.6
400	2.45	0.50	3.0	766	1256	-0.7
450	2.58	0.56	2.1	757	1226	-0.8
500	2.66	0.63	1.3	748	1197	-0.9
550	2.71	0.70	0.4	740	1168	-1.0
600	2.71	0.77	-0.6	731	1139	-1.0
650	2.66	0.84	-1.5	722	1112	-1.1
700	2.57	0.90	-2.5	713	1084	-1.2
750	2.43	0.98	-3.5	705	1057	-1.3
800	2.24	1.05	-4.5	696	1031	-1.4
850	2.00	1.12	-5.5	688	1005	-1.4
900	1.71	1.19	-6.6	679	980	-1.5
950	1.36	1.27	-7.7	671	955	-1.6
1000	0.96	1.34	-8.8	663	930	-1.7
1050	0.51	1.42	-10.0	654	906	-1.7
1100	0.00	1.49	-11.2	646	882	-1.8

TYPE C 3 CALIBER 5.56 MM AVERAGE DENSITY 16.70 GRAMS/CC.
PROJ. WT 4.305 GRAMS PROJ. DIA. 5.56 MM IMPULSE 2.1 LB. SEC.
DRAG RDCR. WT. 0.000 GRAMS CHG. WT. 3.19 GRAMS SABOT WT. 0.175 GRAMS
TWIST RATE NA PCT. DRAG CHANGE / (DEG. YAW)**2 0.66

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	5.7	1226	3367	0.0
0	0.00	0.00	5.7	1226	3235	0.0
50	0.27	0.04	5.3	1198	3089	-0.3
100	0.53	0.08	5.0	1170	2945	-0.6
150	0.76	0.13	4.6	1141	2805	-0.9
200	0.98	0.17	4.2	1113	2666	-1.1
250	1.18	0.22	3.8	1084	2531	-1.4
300	1.36	0.26	3.4	1056	2399	-1.7
350	1.51	0.31	2.9	1027	2270	-2.0
400	1.65	0.36	2.4	998	2144	-2.3
450	1.76	0.41	1.9	969	2021	-2.6
500	1.84	0.46	1.4	940	1901	-2.9
550	1.90	0.52	0.8	910	1783	-3.2
600	1.93	0.57	0.2	881	1670	-3.5
650	1.92	0.63	-0.5	851	1560	-3.8
700	1.89	0.69	-1.2	821	1453	-4.2
750	1.81	0.75	-2.0	791	1348	-4.5
800	1.70	0.82	-2.8	761	1247	-4.8
850	1.55	0.88	-3.7	731	1149	-5.2
900	1.35	0.95	-4.7	700	1055	-5.5
950	1.10	1.03	-5.8	670	965	-5.8
1000	0.79	1.10	-6.9	639	878	-6.1
1050	0.43	1.18	-8.2	607	794	-6.5
1100	0.00	1.27	-9.6	576	713	-6.9

DRAG RDCR. WT. 0.151 GRAMS PCT. DRAG CHANGE / (DEG. YAW)**2 2.10

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	4.1	1226	3367	0.0
0	0.00	0.00	4.1	1226	3235	0.0
50	0.19	0.04	3.8	1215	3176	-0.1
100	0.37	0.08	3.4	1204	3117	-0.2
150	0.53	0.12	3.1	1193	3059	-0.3
200	0.68	0.17	2.7	1182	3002	-0.4
250	0.81	0.21	2.4	1171	2946	-0.5
300	0.92	0.25	2.0	1160	2890	-0.6
350	1.01	0.29	1.6	1150	2835	-0.8
400	1.08	0.34	1.3	1139	2781	-0.9
450	1.14	0.38	0.9	1128	2727	-1.0
500	1.18	0.43	0.5	1118	2675	-1.1
550	1.19	0.47	0.1	1107	2623	-1.2
600	1.19	0.52	-0.3	1096	2571	-1.3
650	1.17	0.56	-0.8	1086	2521	-1.4
700	1.13	0.61	-1.2	1075	2471	-1.5
750	1.06	0.66	-1.6	1065	2422	-1.6
800	0.98	0.70	-2.1	1054	2373	-1.7
850	0.87	0.75	-2.5	1044	2325	-1.8
900	0.74	0.80	-3.0	1034	2278	-1.9
950	0.59	0.85	-3.5	1023	2232	-1.9
1000	0.42	0.90	-3.9	1013	2186	-2.0
1050	0.22	0.95	-4.4	1003	2141	-2.1
1100	0.00	1.00	-4.9	993	2097	-2.2

TYPE C 3 CALIBER 6.50 MM AVERAGE DENSITY 7.80 GRAMS/CC.
PROJ. WT 3.214 GRAMS PROJ. DIA. 6.50 MM IMPULSE 0.8 LB. SEC.
DRAG RDCR. WT. 0.000 GRAMS CHG. WT. 0.82 GRAMS SABOT WT. 0.275 GRAMS
TWIST RATE NA PCT. DRAG CHANGE / (DEG. YAW)**2 0.66

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	69.8	744	966	0.0
0	0.00	0.00	69.8	744	890	0.0
50	3.41	0.07	68.8	688	761	-0.6
100	6.77	0.15	67.7	631	641	-1.1
150	10.06	0.23	66.3	573	528	-1.7
200	13.28	0.32	64.6	515	426	-2.3
250	16.41	0.42	62.5	458	337	-2.8
300	19.42	0.54	59.8	403	261	-3.3
350	22.28	0.67	56.3	352	199	-3.5
400	24.94	0.82	51.8	317	161	-2.7
450	27.36	0.99	46.3	289	134	-2.5
500	29.48	1.17	39.8	265	113	-2.4
550	31.25	1.37	32.1	245	96	-2.3
600	32.61	1.58	23.0	226	82	-2.3
650	33.49	1.81	12.4	209	70	-2.3
700	33.81	2.06	0.1	193	60	-2.3
750	33.47	2.33	-14.5	178	51	-2.3
800	32.36	2.62	-31.5	165	44	-2.2
850	30.34	2.94	-51.5	152	37	-2.2
900	27.26	3.28	-74.9	141	32	-2.2
950	22.92	3.65	-102.3	130	27	-2.1
1000	17.12	4.06	-134.3	120	23	-2.1
1050	9.58	4.49	-171.7	111	20	-2.0
1100	0.00	4.97	-215.2	103	17	-1.9

DRAG RDCR. WT. 0.241 GRAMS PCT. DRAG CHANGE / (DEG. YAW)**2 2.10

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	14.3	744	966	0.0
0	0.00	0.00	14.3	744	890	0.0
50	0.68	0.07	13.4	728	850	-0.2
100	1.32	0.14	12.4	712	813	-0.3
150	1.90	0.21	11.4	697	776	-0.5
200	2.44	0.28	10.4	681	741	-0.6
250	2.92	0.36	9.3	666	706	-0.8
300	3.35	0.43	8.1	651	673	-0.9
350	3.73	0.51	6.9	636	641	-1.0
400	4.04	0.59	5.7	621	610	-1.2
450	4.28	0.67	4.3	606	580	-1.3
500	4.47	0.75	2.9	591	551	-1.5
550	4.58	0.84	1.5	577	524	-1.6
600	4.62	0.93	-0.1	563	497	-1.7
650	4.58	1.02	-1.7	548	471	-1.8
700	4.46	1.11	-3.4	534	446	-1.9
750	4.26	1.20	-5.2	521	422	-2.1
800	3.96	1.30	-7.1	507	400	-2.2
850	3.57	1.40	-9.1	494	378	-2.3
900	3.08	1.50	-11.2	481	357	-2.3
950	2.48	1.61	-13.4	468	338	-2.4
1000	1.78	1.72	-15.7	455	319	-2.5
1050	0.95	1.83	-18.2	443	301	-2.5
1100	0.00	1.94	-20.8	431	284	-2.6

TYPE C 3 CALIBER 6.50 MM AVERAGE DENSITY 7.80 GRAMS/CC.
PROJ. WT 3.214 GRAMS PROJ. DIA. 6.50 MM IMPULSE 1.2 LB. SEC.
DRAG RDCR. WT. 0.000 GRAMS CHG. WT. 1.54 GRAMS SABOT WT. 0.275 GRAMS
TWIST RATE NA PCT. DRAG CHANGE / (DEG. YAW)**2 0.66

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	29.4	1008	1773	0.0
0	0.00	0.00	29.4	1008	1633	0.0
50	1.43	0.05	28.9	955	1465	-0.5
100	2.83	0.10	28.3	901	1304	-1.1
150	4.21	0.16	27.6	847	1152	-1.6
200	5.55	0.22	26.9	792	1008	-2.2
250	6.85	0.29	26.0	736	871	-2.8
300	8.10	0.36	25.0	680	744	-3.3
350	9.30	0.44	23.8	624	625	-4.0
400	10.44	0.52	22.4	566	514	-4.6
450	11.51	0.61	20.7	508	414	-5.2
500	12.47	0.72	18.5	451	327	-5.7
550	13.32	0.84	15.7	397	253	-6.0
600	14.01	0.97	12.1	347	193	-6.0
650	14.50	1.12	7.4	313	158	-4.7
700	14.73	1.29	1.8	286	131	-4.0
750	14.67	1.47	-4.8	263	111	-3.6
800	14.25	1.67	-12.7	243	95	-3.4
850	13.42	1.89	-21.9	224	81	-3.2
900	12.09	2.12	-32.6	207	69	-3.2
950	10.20	2.37	-45.2	192	59	-3.1
1000	7.63	2.64	-59.9	177	50	-3.0
1050	4.28	2.94	-77.2	164	43	-3.0
1100	0.00	3.26	-97.5	151	37	-2.9

DRAG RDCR. WT. 0.241 GRAMS PCT. DRAG CHANGE / (DEG. YAW)**2 2.10

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	7.3	1008	1773	0.0
0	0.00	0.00	7.3	1008	1633	0.0
50	0.35	0.05	6.8	990	1572	-0.2
100	0.67	0.10	6.3	971	1512	-0.4
150	0.96	0.15	5.7	953	1454	-0.5
200	1.23	0.21	5.2	935	1398	-0.7
250	1.47	0.26	4.6	917	1343	-0.9
300	1.69	0.32	4.0	899	1290	-1.1
350	1.87	0.37	3.4	882	1238	-1.2
400	2.02	0.43	2.7	864	1187	-1.4
450	2.14	0.49	2.0	847	1139	-1.5
500	2.22	0.55	1.3	830	1091	-1.7
550	2.27	0.61	0.6	813	1045	-1.9
600	2.29	0.67	-0.2	796	1001	-2.0
650	2.26	0.73	-1.0	779	958	-2.2
700	2.20	0.80	-1.9	762	916	-2.3
750	2.09	0.86	-2.7	746	875	-2.5
800	1.94	0.93	-3.6	730	836	-2.6
850	1.74	1.00	-4.6	714	798	-2.7
900	1.50	1.07	-5.6	698	761	-2.9
950	1.21	1.14	-6.7	682	726	-3.0
1000	0.86	1.22	-7.8	666	691	-3.1
1050	0.46	1.30	-8.9	651	658	-3.2
1100	0.00	1.37	-10.1	635	626	-3.4

TYPE C 3 CALIBER 6.50 MM AVERAGE DENSITY 7.80 GRAMS/CC.
PROJ. WT 3.214 GRAMS PROJ. DIA. 6.50 MM IMPULSE 2.1 LB. SEC.
DRAG RDCR. WT. 0.000 GRAMS CHG. WT. 3.59 GRAMS SABOT WT. 0.275 GRAMS
TWIST RATE NA PCT. DRAG CHANGE / (DEG. YAW)**2 0.66

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	7.9	1392	3380	0.0
0	0.00	0.00	7.9	1392	3114	0.0
50	0.38	0.04	7.6	1342	2893	-0.5
100	0.75	0.07	7.3	1291	2678	-1.0
150	1.10	0.11	7.0	1240	2470	-1.5
200	1.44	0.16	6.7	1188	2270	-2.1
250	1.76	0.20	6.3	1137	2076	-2.6
300	2.06	0.24	5.9	1084	1890	-3.1
350	2.34	0.29	5.4	1032	1711	-3.7
400	2.60	0.34	5.0	979	1540	-4.2
450	2.83	0.39	4.4	925	1376	-4.8
500	3.03	0.45	3.8	871	1220	-5.4
550	3.21	0.51	3.1	817	1072	-6.0
600	3.34	0.57	2.3	762	932	-6.6
650	3.44	0.64	1.3	706	801	-7.2
700	3.48	0.71	0.3	650	678	-7.8
750	3.47	0.79	-1.0	592	564	-8.6
800	3.39	0.88	-2.6	534	458	-9.3
850	3.22	0.98	-4.6	476	365	-9.8
900	2.94	1.09	-7.1	421	285	-10.2
950	2.53	1.22	-10.3	368	218	-10.2
1000	1.93	1.37	-14.5	327	172	-9.3
1050	1.10	1.53	-19.6	298	142	-7.6
1100	0.00	1.70	-25.8	273	120	-6.1

DRAG RDCR. WT. 0.241 GRAMS PCT. DRAG CHANGE / (DEG. YAW)**2 2.10

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	3.6	1392	3380	0.0
0	0.00	0.00	3.6	1392	3114	0.0
50	0.17	0.04	3.3	1371	3016	-0.2
100	0.33	0.07	3.0	1349	2921	-0.4
150	0.47	0.11	2.8	1328	2828	-0.6
200	0.60	0.15	2.5	1307	2737	-0.8
250	0.71	0.19	2.2	1287	2648	-1.0
300	0.82	0.23	1.9	1266	2560	-1.2
350	0.90	0.27	1.6	1245	2475	-1.4
400	0.97	0.31	1.2	1225	2392	-1.6
450	1.03	0.35	0.9	1205	2311	-1.8
500	1.07	0.39	0.5	1184	2232	-2.0
550	1.09	0.43	0.2	1164	2155	-2.2
600	1.09	0.48	-0.2	1144	2080	-2.4
650	1.08	0.52	-0.6	1125	2006	-2.6
700	1.04	0.56	-1.0	1105	1934	-2.7
750	0.99	0.61	-1.4	1085	1864	-2.9
800	0.92	0.66	-1.8	1066	1796	-3.1
850	0.82	0.70	-2.3	1047	1730	-3.3
900	0.70	0.75	-2.8	1028	1666	-3.4
950	0.57	0.80	-3.2	1009	1603	-3.6
1000	0.40	0.85	-3.7	990	1542	-3.7
1050	0.21	0.90	-4.3	971	1482	-3.9
1100	0.00	0.95	-4.8	953	1424	-4.1

TYPE C 3 CALIBER 6.50 MM AVERAGE DENSITY 11.00 GRAMS/CC.

PROJ. WT 4.532 GRAMS PROJ. DIA. 6.50 MM IMPULSE 0.8 LB. SEC.

DRAG RDCR. WT. 0.000 GRAMS CHG. WT. 0.67 GRAMS SABOT WT. 0.275 GRAMS

TWIST RATE NA PCT. DRAG CHANGE / (DEG. YAW)**2 0.66

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	66.3	574	792	0.0
0	0.00	0.00	66.3	574	747	0.0
50	3.22	0.09	64.7	533	643	-0.4
100	6.35	0.19	62.8	491	547	-0.8
150	9.39	0.29	60.5	451	461	-1.2
200	12.30	0.41	57.8	412	385	-1.5
250	15.06	0.54	54.6	375	319	-1.8
300	17.65	0.68	50.7	342	265	-1.9
350	20.04	0.83	46.1	318	229	-1.6
400	22.17	0.99	40.8	298	201	-1.6
450	24.04	1.17	34.8	280	177	-1.6
500	25.58	1.35	28.0	264	157	-1.6
550	26.78	1.55	20.4	249	140	-1.6
600	27.58	1.75	11.8	235	125	-1.6
650	27.93	1.97	2.3	222	112	-1.7
700	27.79	2.20	-8.4	210	100	-1.7
750	27.10	2.45	-20.3	199	90	-1.7
800	25.78	2.71	-33.7	188	80	-1.8
850	23.77	2.98	-48.6	178	72	-1.8
900	20.98	3.27	-65.3	168	64	-1.8
950	17.32	3.58	-84.0	159	57	-1.8
1000	12.69	3.90	-104.9	151	51	-1.8
1050	6.96	4.24	-128.2	142	46	-1.8
1100	0.00	4.61	-154.2	135	41	-1.8

DRAG RDCR. WT. 0.241 GRAMS PCT. DRAG CHANGE / (DEG. YAW)**2 2.10

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	22.1	574	792	0.0
0	0.00	0.00	22.1	574	747	0.0
50	1.05	0.09	20.6	564	720	-0.1
100	2.02	0.18	19.0	554	694	-0.2
150	2.91	0.27	17.3	544	668	-0.3
200	3.72	0.36	15.6	535	644	-0.4
250	4.44	0.46	13.8	525	620	-0.5
300	5.08	0.55	12.0	516	596	-0.6
350	5.62	0.65	10.1	506	574	-0.7
400	6.07	0.75	8.1	497	552	-0.7
450	6.42	0.85	6.0	488	531	-0.8
500	6.66	0.95	3.9	479	510	-0.9
550	6.80	1.06	1.7	470	491	-1.0
600	6.83	1.17	-0.7	461	472	-1.0
650	6.75	1.28	-3.0	452	453	-1.1
700	6.54	1.39	-5.5	444	436	-1.2
750	6.21	1.50	-8.1	436	419	-1.2
800	5.75	1.62	-10.8	427	402	-1.3
850	5.16	1.74	-13.6	419	386	-1.4
900	4.43	1.86	-16.5	411	371	-1.4
950	3.55	1.98	-19.5	404	356	-1.5
1000	2.53	2.10	-22.6	396	342	-1.5
1050	1.34	2.23	-25.9	388	328	-1.6
1100	0.00	2.36	-29.2	381	315	-1.6

TYPE C 3 CALIBER 6.50 MM AVERAGE DENSITY 11.00 GRAMS/CC.
PROJ. WT 4.532 GRAMS PROJ. DIA. 6.50 MM IMPULSE 1.2 LB. SEC.
DRAG RDCR. WT. 0.000 GRAMS CHG. WT. 1.29 GRAMS SABOT WT. 0.275 GRAMS
TWIST RATE NA PCT. DRAG CHANGE / (DEG. YAW)**2 0.66

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	31.7	795	1519	0.0
0	0.00	0.00	31.7	795	1432	0.0
50	1.54	0.06	30.9	756	1294	-0.4
100	3.03	0.13	30.0	716	1162	-0.8
150	4.48	0.20	28.9	676	1037	-1.2
200	5.87	0.28	27.8	636	917	-1.6
250	7.21	0.36	26.5	595	803	-2.1
300	8.47	0.45	24.9	554	696	-2.5
350	9.66	0.54	23.2	513	596	-2.9
400	10.75	0.64	21.1	472	505	-3.2
450	11.73	0.76	18.7	433	424	-3.6
500	12.58	0.88	15.7	395	353	-3.8
550	13.27	1.01	12.2	358	291	-4.0
600	13.78	1.15	8.0	330	247	-3.5
650	14.05	1.31	3.0	308	216	-2.9
700	14.07	1.48	-2.6	289	189	-2.8
750	13.80	1.66	-8.9	272	168	-2.6
800	13.20	1.85	-16.1	257	149	-2.5
850	12.22	2.05	-24.1	243	133	-2.5
900	10.82	2.26	-33.1	230	119	-2.4
950	8.96	2.48	-43.1	217	107	-2.4
1000	6.58	2.72	-54.3	205	96	-2.4
1050	3.62	2.97	-66.9	194	85	-2.4
1100	0.00	3.24	-80.9	184	76	-2.4

DRAG RDCR. WT. 0.241 GRAMS PCT. DRAG CHANGE / (DEG. YAW)**2 2.10

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	11.0	795	1519	0.0
0	0.00	0.00	11.0	795	1432	0.0
50	0.52	0.06	10.2	783	1389	-0.1
100	1.00	0.13	9.4	772	1346	-0.2
150	1.44	0.19	8.5	760	1305	-0.3
200	1.84	0.26	7.6	749	1264	-0.5
250	2.19	0.33	6.7	737	1224	-0.6
300	2.50	0.39	5.8	726	1186	-0.7
350	2.76	0.46	4.8	715	1148	-0.8
400	2.98	0.53	3.8	704	1111	-0.9
450	3.14	0.61	2.8	692	1075	-1.0
500	3.26	0.68	1.7	681	1040	-1.1
550	3.32	0.75	0.7	671	1005	-1.2
600	3.33	0.83	-0.5	660	972	-1.3
650	3.28	0.90	-1.6	649	939	-1.4
700	3.18	0.98	-2.8	638	907	-1.5
750	3.01	1.06	-4.1	628	876	-1.6
800	2.79	1.14	-5.4	617	845	-1.7
850	2.50	1.22	-6.7	606	815	-1.8
900	2.14	1.31	-8.1	596	786	-1.9
950	1.71	1.39	-9.5	586	758	-2.0
1000	1.22	1.48	-11.0	575	730	-2.0
1050	0.65	1.57	-12.6	565	704	-2.1
1100	0.00	1.65	-14.1	555	678	-2.2

TYPE C 3 CALIBER 6.50 MM AVERAGE DENSITY 11.00 GRAMS/CC.
PROJ. WT 4.532 GRAMS PROJ. DIA. 6.50 MM IMPULSE 2.1 LB. SEC.
DRAG RDCR. WT. 0.000 GRAMS CHG. WT. 3.07 GRAMS SABOT WT. 0.275 GRAMS
TWIST RATE NA PCT. DRAG CHANGE / (DEG. YAW)**2 0.66

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	8.3	1177	3330	0.0
0	0.00	0.00	8.3	1177	3139	0.0
50	0.40	0.04	8.0	1140	2946	-0.4
100	0.78	0.09	7.6	1103	2758	-0.7
150	1.14	0.13	7.1	1066	2575	-1.1
200	1.49	0.18	6.7	1029	2398	-1.5
250	1.80	0.23	6.2	991	2226	-1.9
300	2.10	0.28	5.7	953	2060	-2.3
350	2.36	0.34	5.1	915	1898	-2.7
400	2.60	0.39	4.5	877	1742	-3.1
450	2.81	0.45	3.8	839	1593	-3.5
500	2.98	0.51	3.1	800	1449	-3.9
550	3.12	0.58	2.2	760	1310	-4.3
600	3.21	0.64	1.3	721	1177	-4.7
650	3.25	0.71	0.3	681	1052	-5.1
700	3.24	0.79	-0.8	641	932	-5.6
750	3.18	0.87	-2.1	600	817	-6.1
800	3.04	0.96	-3.6	559	708	-6.6
850	2.83	1.05	-5.4	518	608	-7.0
900	2.53	1.15	-7.4	477	516	-7.4
950	2.11	1.26	-9.8	437	434	-7.6
1000	1.57	1.38	-12.6	399	361	-7.8
1050	0.88	1.51	-16.1	363	298	-7.9
1100	0.00	1.66	-20.2	333	252	-7.3

DRAG RDCR. WT. 0.241 GRAMS PCT. DRAG CHANGE / (DEG. YAW)**2 2.10

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	4.7	1177	3330	0.0
0	0.00	0.00	4.7	1177	3139	0.0
50	0.22	0.04	4.4	1163	3062	-0.1
100	0.43	0.09	4.0	1149	2987	-0.3
150	0.62	0.13	3.6	1135	2913	-0.4
200	0.78	0.17	3.2	1121	2840	-0.6
250	0.93	0.22	2.8	1107	2768	-0.7
300	1.06	0.26	2.4	1094	2698	-0.8
350	1.17	0.31	2.0	1080	2628	-1.0
400	1.26	0.36	1.5	1066	2561	-1.1
450	1.33	0.40	1.1	1053	2494	-1.2
500	1.37	0.45	0.6	1039	2429	-1.3
550	1.40	0.50	0.2	1026	2365	-1.5
600	1.40	0.55	-0.3	1013	2302	-1.6
650	1.38	0.60	-0.8	1000	2240	-1.7
700	1.33	0.65	-1.3	986	2179	-1.8
750	1.26	0.70	-1.8	973	2120	-2.0
800	1.16	0.75	-2.4	960	2062	-2.1
850	1.04	0.80	-2.9	947	2004	-2.2
900	0.89	0.86	-3.5	934	1948	-2.3
950	0.71	0.91	-4.1	922	1893	-2.4
1000	0.50	0.97	-4.7	909	1839	-2.5
1050	0.27	1.02	-5.3	896	1787	-2.7
1100	0.00	1.08	-5.9	883	1735	-2.8

TYPE C 3 CALIBER 6.50 MM AVERAGE DENSITY 16.70 GRAMS/CC.
PROJ. WT 6.880 GRAMS PROJ. DIA. 6.50 MM IMPULSE 0.8 LB. SEC.
DRAG RDCR. WT. 0.000 GRAMS CHG. WT. 0.48 GRAMS SABOT WT. 0.275 GRAMS
TWIST RATE NA PCT. DRAG CHANGE / (DEG. YAW)**2 0.66

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	72.1	416	619	0.0
0	0.00	0.00	72.1	416	595	0.0
50	3.47	0.12	69.0	391	526	-0.2
100	6.78	0.26	65.6	367	463	-0.5
150	9.91	0.40	61.6	345	410	-0.6
200	12.83	0.55	57.2	328	371	-0.6
250	15.53	0.70	52.3	314	339	-0.7
300	17.97	0.87	47.0	300	310	-0.8
350	20.14	1.04	41.2	288	285	-0.9
400	22.02	1.21	35.0	276	263	-0.9
450	23.57	1.40	28.2	266	243	-0.9
500	24.78	1.59	20.8	256	225	-1.0
550	25.61	1.79	12.9	246	209	-1.0
600	26.04	2.00	4.4	238	194	-1.1
650	26.04	2.21	-4.8	229	180	-1.1
700	25.56	2.43	-14.7	221	168	-1.2
750	24.59	2.66	-25.4	213	156	-1.2
800	23.07	2.90	-36.8	205	145	-1.2
850	20.97	3.15	-49.1	198	135	-1.3
900	18.24	3.41	-62.4	191	125	-1.3
950	14.83	3.68	-76.6	184	116	-1.3
1000	10.69	3.96	-92.0	177	108	-1.4
1050	5.77	4.24	-108.4	171	101	-1.4
1100	0.00	4.54	-126.1	165	94	-1.4

DRAG RDCR. WT. 0.241 GRAMS PCT. DRAG CHANGE / (DEG. YAW)**2 2.10

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	38.3	416	619	0.0
0	0.00	0.00	38.3	416	595	0.0
50	1.81	0.12	35.4	411	580	-0.1
100	3.47	0.24	32.4	406	565	-0.1
150	4.98	0.37	29.3	401	550	-0.1
200	6.34	0.49	26.1	396	536	-0.2
250	7.55	0.62	22.9	391	522	-0.2
300	8.59	0.75	19.6	386	509	-0.3
350	9.47	0.88	16.2	381	495	-0.3
400	10.19	1.01	12.7	377	482	-0.4
450	10.73	1.14	9.2	372	470	-0.4
500	11.09	1.28	5.5	367	457	-0.5
550	11.27	1.42	1.8	363	445	-0.5
600	11.27	1.56	-2.1	358	434	-0.5
650	11.07	1.70	-6.0	354	422	-0.6
700	10.68	1.84	-10.1	350	412	-0.6
750	10.09	1.98	-14.2	346	403	-0.6
800	9.30	2.13	-18.4	343	394	-0.6
850	8.29	2.27	-22.7	339	386	-0.6
900	7.07	2.42	-27.1	336	378	-0.6
950	5.64	2.57	-31.5	333	371	-0.6
1000	3.99	2.72	-36.1	330	364	-0.6
1050	2.11	2.88	-40.7	328	357	-0.6
1100	0.00	3.03	-45.4	323	346	-0.8

TYPE C 3 CALIBER 6.50 MM AVERAGE DENSITY 16.70 GRAMS/CC.
PROJ. WT 6.880 GRAMS PROJ. DIA. 6.50 MM IMPULSE 1.2 LB. SEC.
DRAG RDCR. WT. 0.000 GRAMS CHG. WT. 1.01 GRAMS SABOT WT. 0.275 GRAMS
TWIST RATE NA PCT. DRAG CHANGE / (DEG. YAW)**2 0.66

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	41.3	578	1195	0.0
0	0.00	0.00	41.3	578	1149	0.0
50	1.99	0.09	39.8	551	1043	-0.3
100	3.90	0.18	38.0	523	943	-0.5
150	5.73	0.28	36.1	496	848	-0.8
200	7.45	0.38	34.0	470	759	-1.1
250	9.06	0.49	31.6	444	677	-1.3
300	10.55	0.61	28.9	418	601	-1.5
350	11.90	0.73	25.8	393	531	-1.7
400	13.09	0.86	22.4	369	468	-1.9
450	14.09	1.00	18.5	347	414	-2.0
500	14.90	1.15	14.1	330	375	-1.7
550	15.48	1.31	9.3	315	342	-1.6
600	15.81	1.47	4.0	302	313	-1.6
650	15.88	1.64	-1.7	289	288	-1.6
700	15.65	1.82	-7.9	278	265	-1.6
750	15.10	2.00	-14.7	267	246	-1.6
800	14.21	2.19	-21.9	257	228	-1.6
850	12.95	2.39	-29.8	248	211	-1.6
900	11.29	2.59	-38.2	239	196	-1.6
950	9.20	2.81	-47.3	230	182	-1.7
1000	6.64	3.03	-57.1	222	170	-1.7
1050	3.59	3.26	-67.6	214	158	-1.7
1100	0.00	3.50	-78.9	207	147	-1.7

DRAG RDCR. WT. 0.241 GRAMS PCT. DRAG CHANGE / (DEG. YAW)**2 2.10

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	19.6	578	1195	0.0
0	0.00	0.00	19.6	578	1149	0.0
50	0.93	0.09	18.1	571	1122	-0.1
100	1.78	0.18	16.6	563	1095	-0.1
150	2.55	0.26	15.0	558	1069	-0.2
200	3.25	0.35	13.4	552	1043	-0.3
250	3.87	0.45	11.7	545	1018	-0.3
300	4.40	0.54	10.0	539	993	-0.4
350	4.85	0.63	8.3	533	969	-0.4
400	5.22	0.73	6.5	526	945	-0.5
450	5.50	0.82	4.7	520	921	-0.6
500	5.68	0.92	2.8	514	898	-0.6
550	5.78	1.05	0.9	508	876	-0.7
600	5.78	1.11	-1.1	501	853	-0.7
650	5.68	1.22	-3.1	495	832	-0.8
700	5.48	1.35	-5.2	489	811	-0.8
750	5.18	1.42	-7.3	483	790	-0.9
800	4.78	1.52	-9.4	477	770	-0.9
850	4.26	1.63	-11.7	472	750	-1.0
900	3.64	1.74	-13.9	466	731	-1.0
950	2.91	1.84	-16.3	460	712	-1.1
1000	2.06	1.95	-18.6	454	694	-1.1
1050	1.09	2.06	-21.1	449	676	-1.2
1100	0.00	2.18	-23.6	443	659	-1.2

TYPE C 3 CALIBER 6.50 MM AVERAGE DENSITY 16.70 GRAMS/CC.
PROJ. WT 6.880 GRAMS PROJ. DIA. 6.50 MM IMPULSE 2.1 LB. SEC.
DRAG RDCR. WT. 0.000 GRAMS CHG. WT. 2.47 GRAMS SABOT WT. 0.275 GRAMS
TWIST RATE NA PCT. DRAG CHANGE / (DEG. YAW)**2 0.66

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	12.5	899	2891	0.0
0	0.00	0.00	12.5	899	2780	0.0
50	0.60	0.06	11.9	874	2626	-0.3
100	1.17	0.11	11.2	848	2476	-0.5
150	1.70	0.17	10.5	823	2330	-0.8
200	2.20	0.24	9.8	797	2187	-1.0
250	2.66	0.30	8.9	771	2047	-1.3
300	3.08	0.37	8.1	745	1911	-1.6
350	3.46	0.43	7.1	719	1780	-1.8
400	3.79	0.50	6.1	693	1653	-2.1
450	4.07	0.58	5.1	667	1531	-2.3
500	4.29	0.65	3.9	641	1412	-2.6
550	4.45	0.73	2.6	614	1296	-3.0
600	4.55	0.82	1.2	587	1184	-3.2
650	4.58	0.91	-0.3	560	1077	-3.5
700	4.53	1.00	-2.0	532	975	-3.8
750	4.40	1.09	-3.8	505	878	-4.1
800	4.16	1.19	-5.9	479	788	-4.3
850	3.83	1.30	-8.2	452	703	-4.5
900	3.37	1.42	-10.8	426	626	-4.7
950	2.78	1.54	-13.7	401	554	-4.8
1000	2.03	1.67	-17.0	377	489	-5.0
1050	1.11	1.80	-20.8	354	430	-5.0
1100	0.00	1.95	-25.0	335	387	-4.6

DRAG RDCR. WT. 0.241 GRAMS PCT. DRAG CHANGE / (DEG. YAW)**2 2.10

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	7.8	899	2891	0.0
0	0.00	0.00	7.8	899	2780	0.0
50	0.37	0.06	7.1	891	2728	-0.1
100	0.70	0.11	6.5	883	2677	-0.2
150	1.00	0.17	5.9	875	2626	-0.2
200	1.28	0.23	5.2	866	2576	-0.3
250	1.52	0.28	4.5	858	2526	-0.4
300	1.72	0.34	3.8	850	2478	-0.5
350	1.90	0.40	3.1	842	2430	-0.6
400	2.04	0.46	2.4	834	2382	-0.6
450	2.14	0.52	1.7	827	2336	-0.7
500	2.21	0.58	1.0	819	2289	-0.8
550	2.24	0.64	0.2	811	2244	-0.9
600	2.24	0.71	-0.5	803	2199	-0.9
650	2.20	0.77	-1.3	795	2155	-1.0
700	2.12	0.83	-2.1	787	2111	-1.1
750	2.00	0.90	-2.9	780	2068	-1.2
800	1.84	0.96	-3.8	772	2026	-1.2
850	1.64	1.03	-4.6	764	1985	-1.3
900	1.40	1.09	-5.5	756	1943	-1.4
950	1.12	1.16	-6.4	749	1903	-1.4
1000	0.79	1.22	-7.3	741	1863	-1.5
1050	0.42	1.29	-8.2	734	1824	-1.6
1100	0.00	1.36	-9.1	726	1785	-1.6

TYPE C 3 CALIBER 7.62 MM AVERAGE DENSITY 7.80 GRAMS/CC.

PROJ. WT 5.179 GRAMS PROJ. DIA. 7.62 MM IMPULSE 0.8 LB. SEC.

DRAG RDCR. WT. 0.000 GRAMS CHG. WT. 0.60 GRAMS SABOT WT. 0.443 GRAMS

TWIST RATE NA PCT. DRAG CHANGE / (DEG. YAW)**2 0.66

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	100.0	505	717	0.0
0	0.00	0.00	100.0	505	660	0.0
50	4.87	0.10	97.8	456	539	-0.5
100	9.63	0.22	95.2	409	433	-0.9
150	14.23	0.35	91.8	364	344	-1.3
200	18.65	0.50	87.6	330	281	-1.2
250	22.84	0.66	82.6	304	239	-1.3
300	26.77	0.83	76.7	281	205	-1.3
350	30.38	1.01	69.9	262	177	-1.3
400	33.63	1.21	62.1	244	154	-1.4
450	36.47	1.42	53.1	228	135	-1.4
500	38.84	1.65	42.9	213	118	-1.5
550	40.66	1.89	31.1	199	103	-1.5
600	41.87	2.15	17.7	186	90	-1.6
650	42.37	2.43	2.2	174	78	-1.6
700	42.06	2.73	-15.4	163	68	-1.6
750	40.82	3.05	-35.7	152	60	-1.6
800	38.52	3.39	-58.9	142	52	-1.6
850	34.99	3.75	-85.4	133	46	-1.6
900	30.06	4.14	-115.7	124	40	-1.6
950	23.52	4.56	-150.3	116	35	-1.6
1000	15.12	5.01	-189.6	109	31	-1.5
1050	4.59	5.50	-234.2	103	27	-1.5
1069	0.00	5.69	-252.4	100	26	-1.5

DRAG RDCR. WT. 0.389 GRAMS PCT. DRAG CHANGE / (DEG. YAW)**2 2.10

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	30.7	505	717	0.0
0	0.00	0.00	30.7	505	660	0.0
50	1.46	0.10	28.7	494	630	-0.1
100	2.82	0.20	26.6	483	601	-0.2
150	4.08	0.31	24.5	472	574	-0.3
200	5.22	0.41	22.2	462	547	-0.4
250	6.25	0.52	19.8	452	522	-0.5
300	7.16	0.64	17.3	442	497	-0.6
350	7.95	0.75	14.6	432	474	-0.7
400	8.60	0.87	11.9	422	451	-0.8
450	9.12	0.99	9.0	413	430	-0.8
500	9.49	1.11	6.0	403	409	-0.9
550	9.72	1.24	2.9	394	390	-1.0
600	9.78	1.36	-0.4	385	371	-1.1
650	9.68	1.50	-3.9	376	353	-1.1
700	9.41	1.63	-7.5	367	335	-1.2
750	8.96	1.77	-11.3	359	319	-1.3
800	8.31	1.91	-15.2	351	304	-1.3
850	7.47	2.05	-19.4	344	291	-1.2
900	6.42	2.20	-23.7	338	279	-1.1
950	5.16	2.35	-28.1	332	269	-1.1
1000	3.67	2.50	-32.7	327	260	-1.1
1050	1.95	2.65	-37.5	322	251	-1.0
1100	0.00	2.81	-42.4	317	243	-1.0

TYPE C 3 CALIBER 7.62 MM AVERAGE DENSITY 7.80 GRAMS/CC.
PROJ. WT 5.179 GRAMS PROJ. DIA. 7.62 MM IMPULSE 1.2 LB. SEC.
DRAG RDCR. WT. 0.000 GRAMS CHG. WT. 1.17 GRAMS SABOT WT. 0.443 GRAMS
TWIST RATE NA PCT. DRAG CHANGE / (DEG. YAW)**2 0.66

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	58.6	702	1385	0.0
0	0.00	0.00	58.6	702	1276	0.0
50	2.85	0.07	57.5	654	1108	-0.5
100	5.65	0.15	56.3	605	948	-1.0
150	8.38	0.24	54.8	555	799	-1.5
200	11.03	0.33	53.0	506	632	-2.0
250	13.58	0.44	50.8	457	541	-2.4
300	16.02	0.55	48.2	410	436	-2.8
350	18.31	0.68	44.8	366	347	-3.1
400	20.42	0.83	40.7	331	283	-2.7
450	22.30	0.99	35.7	304	240	-2.3
500	23.92	1.16	29.9	282	206	-2.2
550	25.22	1.34	23.1	263	179	-2.1
600	26.18	1.54	15.3	245	156	-2.1
650	26.72	1.75	6.5	229	136	-2.1
700	26.80	1.97	-3.7	214	119	-2.1
750	26.34	2.22	-15.3	200	104	-2.1
800	25.27	2.49	-28.7	187	91	-2.1
850	23.51	2.75	-43.9	175	79	-2.1
900	20.94	3.05	-61.3	164	69	-2.1
950	17.45	3.36	-81.3	153	61	-2.1
1000	12.90	3.70	-104.1	143	53	-2.1
1050	7.15	4.07	-130.2	134	46	-2.0
1100	0.00	4.46	-159.9	125	41	-2.0

DRAG RDCR. WT. 0.389 GRAMS PCT. DRAG CHANGE / (DEG. YAW)**2 2.10

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	15.3	702	1385	0.0
0	0.00	0.00	15.3	702	1276	0.0
50	0.72	0.07	14.2	689	1226	-0.1
100	1.40	0.15	13.2	676	1178	-0.3
150	2.02	0.22	12.1	663	1131	-0.4
200	2.58	0.30	10.9	650	1086	-0.5
250	3.09	0.37	9.7	637	1041	-0.6
300	3.54	0.45	8.4	624	998	-0.8
350	3.92	0.53	7.1	612	956	-0.9
400	4.24	0.62	5.8	599	916	-1.0
450	4.49	0.70	4.3	587	876	-1.1
500	4.67	0.79	2.9	575	838	-1.2
550	4.78	0.88	1.3	562	801	-1.3
600	4.81	0.96	-0.3	550	765	-1.4
650	4.76	1.06	-2.0	538	731	-1.5
700	4.62	1.15	-3.7	527	697	-1.6
750	4.40	1.25	-5.6	515	665	-1.7
800	4.08	1.34	-7.5	503	634	-1.8
850	3.67	1.45	-9.5	492	604	-1.9
900	3.16	1.55	-11.6	481	576	-2.0
950	2.54	1.65	-13.9	470	548	-2.1
1000	1.81	1.76	-16.2	459	522	-2.1
1050	0.97	1.87	-18.6	449	497	-2.2
1100	0.00	1.98	-21.1	438	473	-2.3

TYPE C 3 CALIBER 7.62 MM AVERAGE DENSITY 7.80 GRAMS/CC.
PROJ. WT 5.179 GRAMS PROJ. DIA. 7.62 MM IMPULSE 2.1 LB. SEC.
DRAG RDCR. WT. 0.000 GRAMS CHG. WT. 2.82 GRAMS SABOT WT. 0.443 GRAMS
TWIST RATE NA PCT. DRAG CHANGE / (DEG. YAW)**2 0.66

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	16.9	1066	3194	0.0
0	0.00	0.00	16.9	1066	2943	0.0
50	0.82	0.05	16.5	1021	2700	-0.4
100	1.62	0.10	16.0	976	2466	-0.9
150	2.39	0.15	15.4	930	2240	-1.4
200	3.13	0.21	14.8	884	2024	-1.8
250	3.85	0.26	14.1	838	1818	-2.3
300	4.52	0.33	13.4	791	1621	-2.8
350	5.16	0.39	12.5	744	1433	-3.3
400	5.76	0.46	11.6	696	1255	-3.8
450	6.30	0.53	10.5	648	1089	-4.3
500	6.79	0.61	9.2	599	930	-4.9
550	7.21	0.70	7.7	550	782	-5.5
600	7.55	0.80	5.9	500	648	-5.9
650	7.79	0.90	3.6	452	529	-6.3
700	7.90	1.02	0.9	405	425	-6.6
750	7.87	1.15	-2.5	361	338	-6.7
800	7.66	1.30	-6.8	328	278	-6.0
850	7.21	1.45	-11.8	302	236	-4.7
900	6.49	1.63	-17.7	280	203	-4.2
950	5.47	1.81	-24.6	261	176	-3.9
1000	4.08	2.01	-32.5	244	154	-3.6
1050	2.28	2.22	-41.5	228	135	-3.5
1100	0.00	2.45	-51.7	213	118	-3.4

DRAG RDCR. WT. 0.389 GRAMS PCT. DRAG CHANGE / (DEG. YAW)**2 2.10

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	6.1	1066	3194	0.0
0	0.00	0.00	6.1	1066	2943	0.0
50	0.29	0.05	5.7	1050	2851	-0.2
100	0.56	0.10	5.2	1034	2761	-0.3
150	0.80	0.14	4.7	1018	2673	-0.5
200	1.03	0.19	4.3	1002	2588	-0.6
250	1.22	0.24	3.8	986	2504	-0.8
300	1.40	0.29	3.2	971	2422	-0.9
350	1.55	0.35	2.7	955	2341	-1.1
400	1.67	0.40	2.1	940	2263	-1.2
450	1.76	0.45	1.6	924	2187	-1.4
500	1.83	0.51	1.0	909	2112	-1.5
550	1.86	0.56	0.3	894	2039	-1.7
600	1.87	0.62	-0.3	879	1968	-1.8
650	1.84	0.68	-0.9	864	1899	-1.9
700	1.78	0.74	-1.6	849	1831	-2.1
750	1.69	0.80	-2.3	834	1765	-2.2
800	1.57	0.86	-3.1	819	1701	-2.3
850	1.40	0.92	-3.8	805	1639	-2.5
900	1.20	0.98	-4.6	790	1578	-2.6
950	0.97	1.04	-5.4	776	1518	-2.7
1000	0.69	1.11	-6.3	762	1461	-2.8
1050	0.36	1.18	-7.1	748	1405	-2.9
1100	0.00	1.24	-8.1	734	1350	-3.1

TYPE C 3 CALIBER 7.62 MM AVERAGE DENSITY 11.00 GRAMS/CC.
PROJ. WT 7.304 GRAMS PROJ. DIA. 7.62 MM IMPULSE 0.8 LB. SEC.
DRAG RDCR. WT. 0.000 GRAMS CHG. WT. 0.44 GRAMS SABOT WT. 0.443 GRAMS
TWIST RATE NA PCT. DRAG CHANGE / (DEG. YAW)**2 0.66

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	98.8	390	589	0.0
0	0.00	0.00	98.8	390	555	0.0
50	4.78	0.13	95.2	359	470	-0.3
100	9.36	0.28	91.0	334	408	-0.4
150	13.73	0.43	86.3	315	362	-0.6
200	17.84	0.60	80.9	297	323	-0.7
250	21.68	0.77	74.9	282	290	-0.8
300	25.20	0.95	68.3	268	261	-0.8
350	28.39	1.15	61.0	255	237	-0.9
400	31.19	1.35	52.9	242	215	-1.0
450	33.57	1.56	43.9	231	195	-1.0
500	35.49	1.78	34.1	220	177	-1.1
550	36.91	2.01	23.3	210	161	-1.1
600	37.77	2.26	11.4	200	146	-1.2
650	38.02	2.51	-1.7	191	133	-1.2
700	37.59	2.78	-16.1	182	121	-1.3
750	36.42	3.07	-32.0	173	110	-1.3
800	34.43	3.36	-49.4	165	100	-1.3
850	31.55	3.67	-68.6	158	91	-1.3
900	27.66	4.00	-89.7	150	82	-1.4
950	22.69	4.34	-112.9	143	75	-1.4
1000	16.50	4.70	-138.4	137	69	-1.4
1050	8.99	5.08	-166.2	131	63	-1.4
1100	0.00	5.47	-196.7	125	57	-1.3

DRAG RDCR. WT. 0.389 GRAMS PCT. DRAG CHANGE / (DEG. YAW)**2 2.10

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	45.2	390	589	0.0
0	0.00	0.00	45.2	390	555	0.0
50	2.14	0.13	41.8	384	537	-0.1
100	4.11	0.26	38.4	378	518	-0.1
150	5.91	0.39	34.8	372	501	-0.2
200	7.53	0.53	31.2	366	484	-0.2
250	8.97	0.67	27.4	360	467	-0.3
300	10.21	0.81	23.4	354	451	-0.3
350	11.27	0.95	19.4	349	437	-0.4
400	12.12	1.10	15.2	344	424	-0.4
450	12.76	1.24	11.0	340	412	-0.4
500	13.20	1.39	6.6	336	401	-0.4
550	13.41	1.54	2.1	332	391	-0.4
600	13.41	1.69	-2.5	328	382	-0.4
650	13.17	1.84	-7.2	325	373	-0.4
700	12.70	2.00	-12.0	322	364	-0.5
750	12.00	2.16	-16.9	318	356	-0.5
800	11.06	2.31	-21.8	315	348	-0.5
850	9.87	2.47	-26.9	312	340	-0.5
900	8.42	2.63	-32.1	309	332	-0.6
950	6.72	2.80	-37.4	306	324	-0.6
1000	4.76	2.96	-42.8	303	317	-0.6
1050	2.53	3.13	-48.5	299	288	-1.0
1100	0.00	3.31	-54.8	273	259	-1.0

TYPE C 3 CALIBER 7.62 MM AVERAGE DENSITY 11.00 GRAMS/CC.
PROJ. WT 7.304 GRAMS PROJ. DIA. 7.62 MM IMPULSE 1.2 LB. SEC.
DRAG RDCR. WT. 0.000 GRAMS CHG. WT. 0.95 GRAMS SABOT WT. 0.443 GRAMS
TWIST RATE NA PCT. DRAG CHANGE / (DEG. YAW)**2 0.66

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	60.6	541	1134	0.0
0	0.00	0.00	60.6	541	1069	0.0
50	2.94	0.10	58.8	506	934	-0.3
100	5.77	0.20	56.7	471	811	-0.7
150	8.50	0.31	54.3	437	698	-1.0
200	11.10	0.43	51.4	404	597	-1.3
250	13.55	0.56	48.1	373	507	-1.6
300	15.83	0.70	44.2	344	433	-1.6
350	17.89	0.85	39.7	323	382	-1.4
400	19.72	1.01	34.7	305	340	-1.4
450	21.29	1.17	29.0	289	305	-1.5
500	22.57	1.35	22.7	274	275	-1.5
550	23.51	1.54	15.7	261	248	-1.5
600	24.10	1.74	8.0	248	225	-1.5
650	24.29	1.94	-0.5	237	205	-1.5
700	24.04	2.16	-9.9	226	186	-1.6
750	23.31	2.39	-20.2	215	169	-1.6
800	22.06	2.62	-31.5	205	154	-1.6
850	20.22	2.87	-43.9	196	140	-1.7
900	17.74	3.14	-57.5	187	127	-1.7
950	14.55	3.41	-72.6	178	116	-1.7
1000	10.59	3.70	-89.1	170	105	-1.7
1050	5.77	4.00	-107.3	162	96	-1.7
1100	0.00	4.32	-127.2	155	87	-1.7

DRAG RDCR. WT. 0.389 GRAMS PCT. DRAG CHANGE / (DEG. YAW)**2 2.10

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	23.9	541	1134	0.0
0	0.00	0.00	23.9	541	1069	0.0
50	1.13	0.09	22.2	533	1035	-0.1
100	2.18	0.19	20.4	525	1002	-0.2
150	3.13	0.28	18.5	517	969	-0.2
200	4.00	0.38	16.6	508	938	-0.3
250	4.77	0.48	14.7	501	907	-0.4
300	5.44	0.58	12.7	493	877	-0.5
350	6.01	0.68	10.6	485	848	-0.5
400	6.48	0.79	8.4	477	820	-0.6
450	6.84	0.89	6.2	470	793	-0.7
500	7.09	1.00	3.9	462	767	-0.7
550	7.23	1.11	1.5	455	741	-0.8
600	7.24	1.22	-1.0	448	716	-0.9
650	7.14	1.33	-3.5	441	692	-0.9
700	6.91	1.45	-6.1	434	669	-1.0
750	6.55	1.56	-8.8	427	646	-1.0
800	6.05	1.68	-11.6	420	624	-1.1
850	5.42	1.80	-14.5	413	603	-1.1
900	4.64	1.92	-17.5	406	582	-1.2
950	3.72	2.05	-20.5	400	562	-1.2
1000	2.64	2.17	-23.7	393	543	-1.3
1050	1.40	2.30	-27.0	387	524	-1.3
1100	0.00	2.43	-30.4	380	506	-1.4

TYPE C 3 CALIBER 7.62 MM AVERAGE DENSITY 11.00 GRAMS/CC.
PROJ. WT 7.304 GRAMS PROJ. DIA. 7.62 MM IMPULSE 2.1 LB. SEC.
DRAG RDCR. WT. 0.000 GRAMS CHG. WT. 2.96 GRAMS SABOT WT. 0.443 GRAMS
TWIST RATE NA PCT. DRAG CHANGE / (DEG. YAW)**2 0.66

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	20.8	847	2779	0.0
0	0.00	0.00	20.8	847	2620	0.0
50	1.00	0.06	20.1	814	2420	-0.3
100	1.97	0.12	19.3	781	2225	-0.7
150	2.89	0.19	18.4	747	2037	-1.0
200	3.78	0.26	17.5	713	1857	-1.4
250	4.61	0.33	16.4	679	1686	-1.7
300	5.39	0.40	15.3	645	1521	-2.1
350	6.12	0.48	14.0	611	1361	-2.4
400	6.77	0.57	12.6	575	1209	-2.8
450	7.36	0.66	11.0	540	1066	-3.2
500	7.86	0.75	9.2	505	932	-3.5
550	8.26	0.86	7.1	471	809	-3.8
600	8.55	0.97	4.6	437	697	-4.1
650	8.72	1.09	1.8	404	596	-4.3
700	8.77	1.21	-1.5	372	507	-4.5
750	8.57	1.35	-5.4	344	433	-4.4
800	8.20	1.50	-9.9	323	382	-3.7
850	7.60	1.66	-15.0	305	340	-3.2
900	6.73	1.83	-20.7	289	305	-3.1
950	5.57	2.01	-27.0	274	275	-2.9
1000	4.09	2.20	-33.9	261	249	-2.8
1050	2.24	2.39	-41.6	249	226	-2.7
1100	0.00	2.60	-50.1	237	205	-2.7

DRAG RDCR. WT. 0.389 GRAMS PCT. DRAG CHANGE / (DEG. YAW)**2 2.10

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	9.2	847	2779	0.0
0	0.00	0.00	9.2	847	2620	0.0
50	0.44	0.06	8.5	837	2554	-0.1
100	0.84	0.12	7.8	826	2489	-0.2
150	1.20	0.18	7.1	816	2426	-0.3
200	1.53	0.24	6.3	806	2363	-0.4
250	1.82	0.30	5.5	796	2302	-0.5
300	2.08	0.37	4.7	786	2242	-0.6
350	2.29	0.43	3.9	776	2182	-0.7
400	2.47	0.50	3.1	766	2124	-0.8
450	2.60	0.56	2.2	756	2067	-0.9
500	2.69	0.63	1.3	746	2012	-1.0
550	2.74	0.70	0.4	737	1957	-1.1
600	2.74	0.76	-0.5	727	1903	-1.2
650	2.69	0.83	-1.5	717	1851	-1.2
700	2.60	0.90	-2.5	708	1799	-1.3
750	2.46	0.98	-3.5	698	1749	-1.4
800	2.27	1.05	-4.5	689	1699	-1.5
850	2.03	1.12	-5.6	679	1651	-1.6
900	1.74	1.19	-6.7	670	1604	-1.7
950	1.39	1.27	-7.8	660	1557	-1.8
1000	0.98	1.35	-9.0	651	1512	-1.8
1050	0.52	1.42	-10.2	642	1467	-1.9
1100	0.00	1.50	-11.4	633	1423	-2.0

TYPE C 3 CALIBER 7.62 MM AVERAGE DENSITY 16.70 GRAMS/CC.
PROJ. WT 11.089 GRAMS PROJ. DIA. 7.62 MM IMPULSE 0.8 LB. SEC.
DRAG RDCR. WT. 0.000 GRAMS CHG. WT. 0.28 GRAMS SABOT WT. 0.443 GRAMS
TWIST RATE NA PCT. DRAG CHANGE / (DEG. YAW)**2 0.66

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	100.0	287	475	0.0
0	0.00	0.00	100.0	287	457	0.0
50	4.77	0.18	93.7	277	426	-0.1
100	9.22	0.36	87.0	268	398	-0.2
150	13.32	0.55	79.8	259	372	-0.3
200	17.06	0.75	72.1	251	349	-0.3
250	20.40	0.95	63.9	243	327	-0.4
300	23.33	1.16	55.1	235	307	-0.4
350	25.82	1.38	45.8	228	288	-0.5
400	27.83	1.60	35.9	221	270	-0.6
450	29.33	1.83	25.3	214	253	-0.6
500	30.30	2.07	14.0	207	238	-0.7
550	30.70	2.32	2.0	201	223	-0.7
600	30.49	2.57	-10.8	194	210	-0.8
650	29.63	2.83	-24.3	188	197	-0.8
700	28.08	3.10	-39.0	183	185	-0.8
750	25.79	3.38	-54.4	177	174	-0.9
800	22.72	3.67	-70.9	172	163	-0.9
850	18.81	3.96	-88.4	166	154	-0.9
900	14.01	4.27	-107.0	161	145	-0.9
950	8.26	4.59	-126.7	157	136	-1.0
1000	1.49	4.91	-147.7	152	128	-1.0
1010	0.00	4.98	-152.0	151	127	-1.0

DRAG RDCR. WT. 0.389 GRAMS PCT. DRAG CHANGE / (DEG. YAW)**2 2.10

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	74.6	287	475	0.0
0	0.00	0.00	74.6	287	457	0.0
50	3.52	0.18	68.5	285	449	0.0
100	6.73	0.35	62.3	283	442	0.0
150	9.64	0.53	56.0	281	435	-0.1
200	12.24	0.71	49.7	279	428	-0.1
250	14.52	0.89	43.2	277	421	-0.1
300	16.48	1.07	36.7	275	415	-0.1
350	18.12	1.25	30.0	273	408	-0.1
400	19.43	1.44	23.3	271	402	-0.1
450	20.40	1.62	16.5	270	395	-0.2
500	21.04	1.81	9.6	268	389	-0.2
550	21.34	1.99	2.5	266	383	-0.2
600	21.30	2.18	-4.6	264	377	-0.2
650	20.90	2.37	-11.8	262	371	-0.2
700	20.14	2.56	-19.1	261	365	-0.2
750	19.03	2.76	-26.5	259	360	-0.3
800	17.55	2.95	-34.0	257	354	-0.3
850	15.69	3.15	-41.7	250	335	-0.4
900	13.45	3.35	-50.0	242	314	-0.5
950	10.79	3.56	-58.7	235	295	-0.5
1000	7.68	3.78	-68.1	227	277	-0.6
1050	4.09	4.00	-78.1	220	259	-0.6
1100	0.00	4.23	-88.7	213	243	-0.7

TYPE C 3 CALIBER 7.62 MM AVERAGE DENSITY 16.70 GRAMS/CC.
PROJ. WT 11.089 GRAMS PROJ. DIA. 7.62 MM IMPULSE 1.2 LB. SEC.
DRAG RDCR. WT. 0.000 GRAMS CHG. WT. 0.67 GRAMS SABOT WT. 0.443 GRAMS
TWIST RATE NA PCT. DRAG CHANGE / (DEG. YAW)**2 0.66

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	70.0	393	891	0.0
0	0.00	0.00	70.0	393	856	0.0
50	3.36	0.13	66.6	372	768	-0.2
100	6.54	0.27	62.7	353	689	-0.4
150	9.52	0.42	58.5	337	629	-0.4
200	12.28	0.57	53.9	323	580	-0.5
250	14.81	0.72	49.0	311	537	-0.6
300	17.09	0.89	43.6	300	498	-0.7
350	19.09	1.06	37.8	289	463	-0.7
400	20.80	1.23	31.6	279	432	-0.8
450	22.20	1.42	25.0	270	404	-0.8
500	23.26	1.61	17.9	261	379	-0.9
550	23.96	1.80	10.4	253	355	-0.9
600	24.28	2.00	2.3	245	333	-1.0
650	24.18	2.21	-6.3	237	313	-1.0
700	23.66	2.42	-15.4	230	294	-1.0
750	22.67	2.64	-25.1	223	276	-1.1
800	21.19	2.87	-35.5	216	259	-1.1
850	19.18	3.11	-46.5	210	244	-1.1
900	16.62	3.35	-58.2	203	229	-1.2
950	13.46	3.60	-70.7	197	215	-1.2
1000	9.66	3.86	-84.0	191	202	-1.2
1050	5.19	4.12	-98.1	185	190	-1.3
1100	0.00	4.40	-113.1	180	179	-1.3

DRAG RDCR. WT. 0.389 GRAMS PCT. DRAG CHANGE / (DEG. YAW)**2 2.10

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	41.6	393	891	0.0
0	0.00	0.00	41.6	393	856	0.0
50	1.96	0.13	38.3	389	837	0.0
100	3.76	0.26	35.0	385	818	-0.1
150	5.39	0.39	31.6	381	800	-0.1
200	6.85	0.52	28.1	377	782	-0.2
250	8.15	0.65	24.5	373	764	-0.2
300	9.26	0.79	20.9	369	747	-0.2
350	10.20	0.93	17.2	365	730	-0.3
400	10.95	1.06	13.4	361	713	-0.3
450	11.51	1.20	9.5	357	697	-0.3
500	11.88	1.34	5.5	353	682	-0.4
550	12.05	1.49	1.5	350	667	-0.4
600	12.03	1.63	-2.6	347	654	-0.4
650	11.80	1.77	-6.8	344	641	-0.4
700	11.36	1.92	-11.1	341	630	-0.4
750	10.72	2.07	-15.4	338	619	-0.4
800	9.86	2.22	-19.8	336	608	-0.4
850	8.78	2.37	-24.3	333	598	-0.4
900	7.48	2.52	-28.9	331	588	-0.4
950	5.95	2.67	-33.5	328	579	-0.5
1000	4.20	2.82	-38.1	326	570	-0.5
1050	2.22	2.98	-42.9	324	562	-0.5
1100	0.00	3.13	-47.8	313	524	-0.7

TYPE C 3 CALIBER 7.62 MM AVERAGE DENSITY 16.70 GRAMS/CC.

PROJ. WT 11.089 GRAMS PROJ. DIA. 7.62 MM IMPULSE 2.1 LB. SEC.

DRAG RDCR. WT. 0.000 GRAMS CHG. WT. 1.86 GRAMS SABOT WT. 0.443 GRAMS

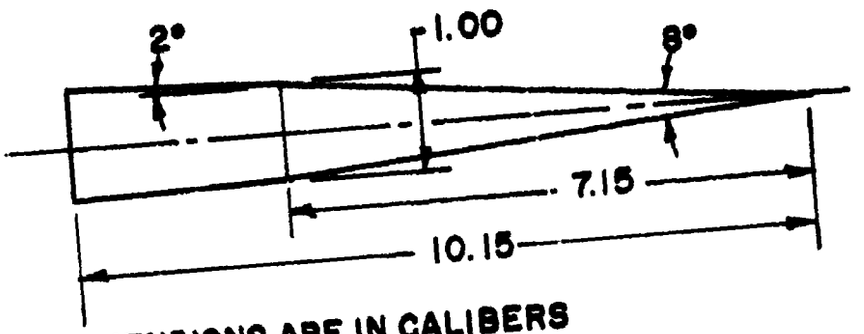
TWIST RATE NA PCT. DRAG CHANGE / (DEG. YAW)**2 0.66

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	31.0	618	2202	0.0
0	0.00	0.00	31.0	618	2118	0.0
50	1.49	0.08	29.7	595	1962	-0.2
100	2.91	0.17	28.2	572	1812	-0.5
150	4.26	0.26	26.6	548	1668	-0.7
200	5.52	0.35	24.9	525	1530	-0.9
250	6.70	0.45	23.0	502	1398	-1.2
300	7.78	0.55	20.9	479	1274	-1.4
350	8.75	0.66	18.6	457	1157	-1.6
400	9.61	0.77	16.1	435	1048	-1.8
450	10.34	0.89	13.3	413	946	-1.9
500	10.92	1.01	10.2	392	851	-2.1
550	11.34	1.14	6.8	371	764	-2.3
600	11.59	1.28	3.0	352	686	-2.3
650	11.64	1.43	-1.3	336	627	-2.1
700	11.47	1.58	-5.9	323	579	-1.9
750	11.06	1.74	-10.8	311	536	-1.9
800	10.41	1.90	-16.2	300	498	-1.9
850	9.48	2.07	-22.0	289	464	-1.8
900	8.26	2.25	-28.2	279	433	-1.8
950	6.72	2.43	-34.8	270	405	-1.8
1000	4.85	2.62	-41.8	262	379	-1.8
1050	2.61	2.81	-49.4	253	356	-1.8
1100	0.00	3.01	-57.4	245	334	-1.8

DRAG RDCR. WT. 0.389 GRAMS PCT. DRAG CHANGE / (DEG. YAW)**2 2.10

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	16.6	618	2202	0.0
0	0.00	0.00	16.6	618	2118	0.0
50	0.78	0.08	15.3	612	2076	-0.1
100	1.50	0.16	13.9	606	2035	-0.1
150	2.15	0.25	12.6	601	1994	-0.2
200	2.73	0.33	11.2	595	1954	-0.2
250	3.25	0.41	9.7	589	1915	-0.3
300	3.69	0.50	8.3	583	1876	-0.3
350	4.07	0.59	6.8	578	1838	-0.4
400	4.37	0.67	5.3	572	1800	-0.5
450	4.59	0.76	3.8	566	1763	-0.5
500	4.74	0.85	2.2	561	1727	-0.6
550	4.81	0.94	0.6	555	1691	-0.6
600	4.81	1.03	-1.1	550	1656	-0.7
650	4.72	1.12	-2.7	544	1621	-0.7
700	4.55	1.21	-4.4	539	1586	-0.8
750	4.29	1.31	-6.2	533	1553	-0.8
800	3.95	1.40	-7.9	528	1519	-0.9
850	3.52	1.50	-9.7	522	1487	-0.9
900	3.00	1.59	-11.6	517	1455	-1.0
950	2.39	1.69	-13.5	512	1423	-1.0
1000	1.69	1.79	-15.4	506	1392	-1.1
1050	0.89	1.89	-17.4	501	1361	-1.1
1100	0.00	1.99	-19.4	496	1332	-1.1

CF 1



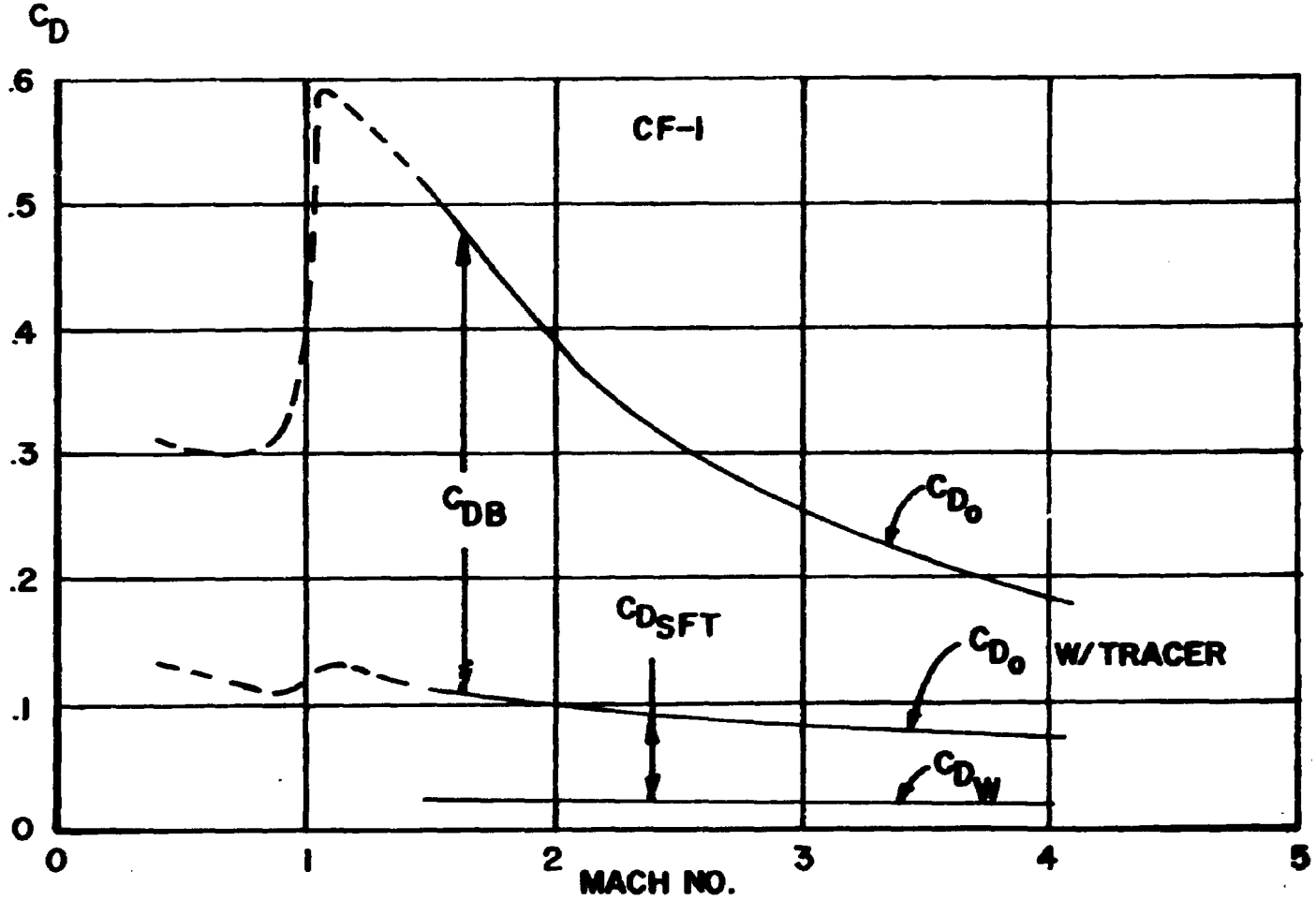
ALL DIMENSIONS ARE IN CALIBERS

Axial Radius of Gyration = 0.351 Cal.
Transverse Radius of Gyration = 2.00 Cal.
Center of Mass (Nose) = 7.41 Cal.
Wetted Area = 21.68 Cal.^{2}
Volume = 4.76 Cal.^{3}
Length = 10.15 Cal.

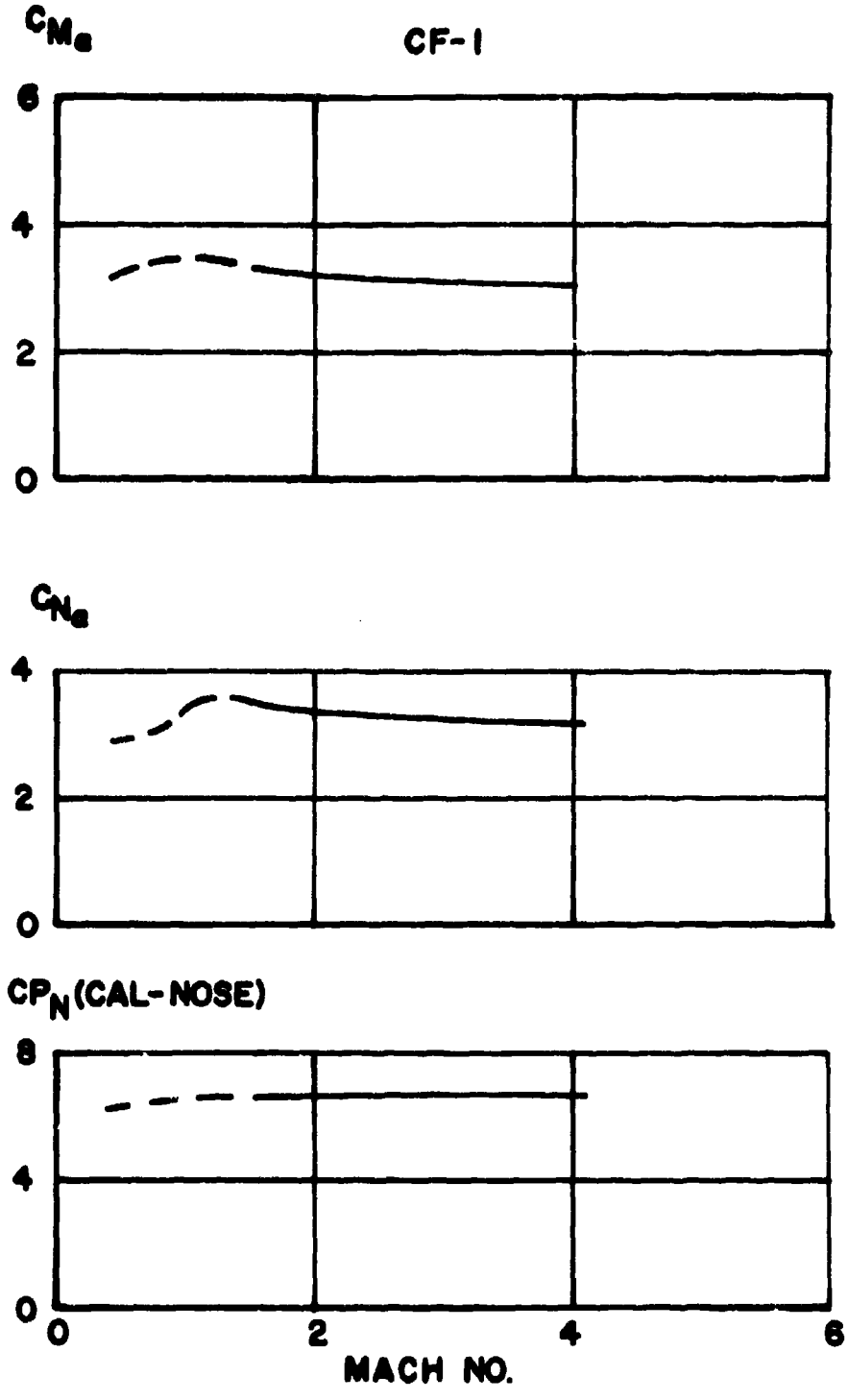
Mach No.	C_{D_0}	C_{D_B}	C_{D_0} (Tracer)	$C_{D_{SF_T}}$	C_{D_W}	C_{N_α}	CP_N	C_{M_α}
.40*	.313		.133			2.92	6.32	3.21
.80*	.303		.113			3.10	6.32	3.46
.90*	.331		.110			3.20	6.33	3.47
.95*	.359		.108			3.30	6.36	3.47
1.00*	.387		.115			3.40	6.38	3.50
1.05*	.589		.133			3.53	6.46	3.50
1.10*	.586		.132			3.59	6.46	3.41
1.50	.514	.400	.114	.090	.025	3.55	6.46	3.37
2.00	.390	.289	.101	.079	.022	3.40	6.46	3.23
2.50	.309	.218	.091	.070	.021	3.33	6.46	3.16
3.00	.253	.170	.083	.063	.020	3.28	6.46	3.12
3.50	.212	.137	.075	.056	.019	3.24	6.47	3.05
4.00	.182	.113	.069	.051	.018	3.21	6.47	3.02

$C_{D_{\alpha^2}}$ (Mach = 2.5) = 7.18 (1/radian squared)

*Estimated data



CF-1-2



CF-1-3

TYPE CF 1 CALIBER 5.56 MM AVERAGE DENSITY 7.80 GRAMS/CC.

PROJ. WT 3.608 GRAMS PROJ. DIA. 4.60 MM IMPULSE 0.8 L3. SEC.

DRAG RDCR. WT. 0.000 GRAMS CHG. WT. 0.79 GRAMS SABOT WT. 0.073 GRAMS

TWIST RATE NA PCT. DRAG CHANGE / (DEG. YAW)**2 0.71

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	34.7	713	936	0.0
0	0.00	0.00	34.7	713	917	0.0
50	1.68	0.07	33.7	675	823	-0.4
100	3.31	0.15	32.5	638	733	-0.8
150	4.87	0.23	31.2	600	649	-1.1
200	6.37	0.32	29.7	562	569	-1.5
250	7.79	0.41	28.0	524	496	-1.9
300	9.12	0.51	26.1	487	428	-2.2
350	10.35	0.61	23.8	451	368	-2.5
400	11.46	0.73	21.1	417	314	-2.8
450	12.42	0.85	18.0	384	266	-2.9
500	13.22	0.99	14.3	354	226	-3.0
550	13.83	1.14	10.1	333	200	-2.4
600	14.21	1.29	5.3	316	181	-2.0
650	14.35	1.45	0.1	302	164	-1.9
700	14.22	1.62	-5.7	288	150	-1.9
750	13.80	1.80	-11.9	276	137	-1.9
800	13.05	1.98	-18.8	264	126	-1.9
850	11.95	2.18	-26.2	253	116	-1.9
900	10.47	2.38	-34.4	243	106	-1.9
950	8.58	2.59	-43.2	233	98	-2.0
1000	6.23	2.81	-52.8	223	90	-2.0
1050	3.38	3.04	-63.3	214	82	-2.0
1100	0.00	3.28	-74.8	205	76	-2.0

DRAG RDCR. WT. 0.151 GRAMS PCT. DRAG CHANGE / (DEG. YAW)**2 2.41

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	13.5	713	936	0.0
0	0.00	0.00	13.5	713	917	0.0
50	0.64	0.07	12.5	703	891	-0.1
100	1.23	0.14	11.5	693	865	-0.2
150	1.76	0.21	10.4	683	840	-0.3
200	2.25	0.29	9.3	674	815	-0.4
250	2.68	0.36	8.2	664	791	-0.5
300	3.06	0.44	7.1	654	767	-0.6
350	3.38	0.52	5.9	645	744	-0.7
400	3.64	0.59	4.7	635	722	-0.8
450	3.84	0.67	3.4	626	700	-0.8
500	3.98	0.75	2.1	616	678	-0.9
550	4.05	0.84	0.8	607	657	-1.0
600	4.06	0.92	-0.6	598	636	-1.1
650	4.00	1.00	-2.0	589	616	-1.2
700	3.87	1.09	-3.5	580	597	-1.3
750	3.66	1.18	-5.0	571	578	-1.3
800	3.39	1.26	-6.6	562	559	-1.4
850	3.03	1.35	-8.2	553	541	-1.5
900	2.59	1.45	-9.8	544	523	-1.6
950	2.08	1.54	-11.6	535	506	-1.6
1000	1.47	1.63	-13.3	527	489	-1.7
1050	0.78	1.73	-15.2	518	473	-1.8
1100	0.00	1.83	-17.0	510	457	-1.9

TYPE CF 1 CALIBER 5.56 MM AVERAGE DENSITY 7.80 GRAMS/CC.
PROJ. WT 3.608 GRAMS PROJ. DIA. 4.60 MM IMPULSE 1.2 LB. SEC.
DRAG RDCR. WT. 0.000 GRAMS CHG. WT. 1.50 GRAMS SABOT WT. 0.073 GRAMS
TWIST RATE NA PCT. DRAG CHANGE / (DEG. YAW)**2 0.71

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	15.2	971	1735	0.0
0	0.00	0.00	15.2	971	1701	0.0
50	0.73	0.05	14.6	934	1574	-0.4
100	1.43	0.11	14.0	897	1451	-0.7
150	2.11	0.16	13.4	860	1333	-1.1
200	2.75	0.22	12.6	822	1220	-1.5
250	3.35	0.29	11.9	785	1111	-1.9
300	3.91	0.35	11.0	747	1007	-2.3
350	4.44	0.42	10.1	710	908	-2.6
400	4.91	0.49	9.0	672	815	-3.0
450	5.33	0.57	7.9	634	726	-3.4
500	5.68	0.65	6.5	596	641	-3.8
550	5.97	0.74	5.0	558	562	-4.2
600	6.18	0.83	3.3	521	489	-4.5
650	6.30	0.93	1.3	484	423	-4.8
700	6.32	1.04	-1.0	448	363	-5.0
750	6.21	1.15	-3.7	414	309	-5.2
800	5.97	1.28	-6.8	381	262	-5.3
850	5.55	1.41	-10.6	352	223	-5.2
900	4.93	1.56	-14.9	331	198	-4.4
950	4.09	1.72	-19.6	315	179	-3.4
1000	3.01	1.88	-24.9	301	163	-3.1
1050	1.65	2.05	-30.7	287	149	-2.9
1100	0.00	2.23	-37.0	275	137	-2.8

DRAG RDCR. WT. 0.151 GRAMS PCT. DRAG CHANGE / (DEG. YAW)**2 2.41

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	7.0	971	1735	0.0
0	0.00	0.00	7.0	971	1701	0.0
50	0.33	0.05	6.4	959	1659	-0.1
100	0.63	0.10	5.9	948	1618	-0.2
150	0.91	0.16	5.3	936	1578	-0.3
200	1.16	0.21	4.8	925	1539	-0.5
250	1.38	0.27	4.2	913	1500	-0.6
300	1.57	0.32	3.6	902	1462	-0.7
350	1.73	0.38	2.9	891	1424	-0.8
400	1.86	0.43	2.3	880	1388	-0.9
450	1.96	0.49	1.6	869	1352	-1.0
500	2.03	0.55	1.0	857	1316	-1.1
550	2.07	0.61	0.3	846	1282	-1.2
600	2.07	0.67	-0.4	836	1248	-1.3
650	2.03	0.73	-1.1	825	1214	-1.4
700	1.96	0.79	-1.9	814	1182	-1.5
750	1.86	0.85	-2.7	803	1149	-1.6
800	1.71	0.91	-3.4	792	1118	-1.7
850	1.53	0.98	-4.2	782	1087	-1.8
900	1.31	1.04	-5.1	771	1057	-1.9
950	1.05	1.11	-5.9	760	1027	-2.0
1000	0.74	1.17	-6.8	750	998	-2.1
1050	0.39	1.24	-7.7	740	970	-2.2
1100	0.00	1.31	-8.6	729	942	-2.3

TYPE CF 1 CALIBER 5.56 MM AVERAGE DENSITY 7.80 GRAMS/CC.
PROJ. WT 3.608 GRAMS PROJ. DIA. 4.60 MM IMPULSE 2.1 LB. SEC.
DRAG RDCR. WT. 0.000 GRAMS CHG. WT. 3.51 GRAMS SABOT WT. 0.073 GRAMS
TWIST RATE NA PCT. DRAG CHANGE / (DEG. YAW)**2 0.71

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	5.0	1358	3394	0.0
0	0.00	0.00	5.0	1358	3327	0.0
50	0.24	0.04	4.8	1323	3157	-0.4
100	0.47	0.08	4.5	1288	2990	-0.7
150	0.68	0.12	4.2	1252	2828	-1.1
200	0.88	0.16	3.8	1216	2669	-1.4
250	1.06	0.20	3.5	1181	2515	-1.8
300	1.23	0.24	3.1	1145	2364	-2.2
350	1.37	0.28	2.7	1109	2217	-2.5
400	1.50	0.33	2.3	1072	2074	-2.9
450	1.60	0.38	1.9	1036	1935	-3.3
500	1.69	0.43	1.4	999	1801	-3.7
550	1.75	0.48	0.9	962	1671	-4.0
600	1.78	0.53	0.3	925	1545	-4.4
650	1.78	0.59	-0.3	888	1423	-4.8
700	1.76	0.64	-1.0	851	1307	-5.2
750	1.70	0.70	-1.7	814	1195	-5.6
800	1.60	0.77	-2.5	776	1087	-6.0
850	1.47	0.83	-3.4	739	984	-6.4
900	1.28	0.90	-4.3	701	886	-6.8
950	1.05	0.98	-5.4	663	794	-7.1
1000	0.77	1.05	-6.6	625	706	-7.5
1050	0.42	1.14	-8.0	588	623	-8.0
1100	0.00	1.22	-9.5	550	545	-8.3

DRAG RDCR. WT. 0.151 GRAMS PCT. DRAG CHANGE / (DEG. YAW)**2 2.41

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	3.4	1358	3394	0.0
0	0.00	0.00	3.4	1358	3327	0.0
50	0.16	0.04	3.1	1345	3260	-0.1
100	0.31	0.07	2.8	1331	3195	-0.3
150	0.44	0.11	2.6	1318	3130	-0.4
200	0.56	0.15	2.3	1305	3066	-0.5
250	0.67	0.19	2.0	1292	3003	-0.7
300	0.76	0.23	1.7	1279	2941	-0.8
350	0.83	0.27	1.4	1266	2880	-0.9
400	0.90	0.31	1.0	1253	2819	-1.0
450	0.94	0.35	0.7	1240	2760	-1.2
500	0.97	0.39	0.4	1227	2701	-1.3
550	0.99	0.43	0.1	1214	2643	-1.4
600	0.99	0.47	-0.3	1201	2586	-1.5
650	0.97	0.51	-0.6	1188	2530	-1.7
700	0.94	0.55	-1.0	1176	2475	-1.8
750	0.88	0.60	-1.4	1163	2420	-1.9
800	0.81	0.64	-1.7	1150	2366	-2.0
850	0.73	0.68	-2.1	1138	2313	-2.1
900	0.62	0.73	-2.5	1125	2261	-2.3
950	0.49	0.77	-2.9	1113	2210	-2.4
1000	0.35	0.82	-3.3	1100	2159	-2.5
1050	0.18	0.86	-3.7	1088	2109	-2.6
1100	0.00	0.91	-4.2	1076	2060	-2.7

TYPE CF 1 CALIBER 5.56 MM AVERAGE DENSITY 11.00 GRAMS/CC.

PROJ. WT 5.088 GRAMS PROJ. DIA. 4.60 MM IMPULSE 0.8 LB. SEC.

DRAG RDCR. WT. 0.000 GRAMS CHG. WT. 0.64 GRAMS SABOT WT. 0.073 GRAMS

TWIST RATE NA PCT. DRAG CHANGE / (DEG. YAW)**2 0.71

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	43.0	542	758	0.0
0	0.00	0.00	43.0	542	747	0.0
50	2.07	0.09	41.2	515	676	-0.3
100	4.05	0.19	39.3	489	609	-0.5
150	5.93	0.30	37.1	464	547	-0.8
200	7.69	0.41	34.6	439	490	-1.0
250	9.32	0.53	[illegible]	414	437	-1.2
300	10.81	0.65	28.6	391	389	-1.4
350	12.15	0.78	25.3	369	346	-1.5
400	13.30	0.92	21.4	349	309	-1.6
450	14.25	1.07	17.1	334	284	-1.3
500	14.98	1.22	12.5	322	264	-1.2
550	15.47	1.38	7.5	311	246	-1.2
600	15.72	1.54	2.2	301	231	-1.2
650	15.69	1.71	-3.5	292	216	-1.3
700	15.37	1.89	-9.6	283	203	-1.3
750	14.75	2.07	-16.1	274	191	-1.3
800	13.80	2.25	-22.9	266	180	-1.3
850	12.50	2.44	-30.2	258	169	-1.4
900	10.84	2.64	-37.9	250	159	-1.4
950	8.78	2.84	-46.2	243	150	-1.4
1000	6.30	3.05	-54.9	236	141	-1.5
1050	3.39	3.27	-64.2	229	133	-1.5
1100	0.00	3.49	-74.0	222	125	-1.5

DRAG RDCR. WT. 0.151 GRAMS PCT. DRAG CHANGE / (DEG. YAW)**2 2.41

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	22.3	542	758	0.0
0	0.00	0.00	22.3	542	747	0.0
50	1.05	0.09	20.5	536	730	-0.1
100	2.02	0.19	18.8	530	713	-0.1
150	2.89	0.28	17.0	524	696	-0.2
200	3.68	0.38	15.1	518	680	-0.2
250	4.38	0.47	13.3	512	664	-0.3
300	4.99	0.57	11.3	506	648	-0.4
350	5.50	0.67	9.4	500	633	-0.4
400	5.91	0.77	7.3	495	617	-0.5
450	6.22	0.87	5.3	489	602	-0.5
500	6.43	0.98	3.2	483	588	-0.6
550	6.54	1.08	1.0	477	573	-0.6
600	6.54	1.19	-1.2	472	559	-0.7
650	6.43	1.29	-3.5	466	545	-0.7
700	6.20	1.40	-5.8	460	531	-0.8
750	5.86	1.51	-8.2	455	518	-0.8
800	5.40	1.62	-10.7	449	505	-0.9
850	4.83	1.73	-13.2	444	492	-0.9
900	4.12	1.85	-15.7	438	479	-1.0
950	3.29	1.96	-18.4	433	467	-1.0
1000	2.33	2.08	-21.1	427	454	-1.1
1050	1.23	2.20	-23.9	422	442	-1.1
1100	0.00	2.32	-26.7	416	431	-1.2

TYPE CF 1 CALIBER 5.56 MM AVERAGE DENSITY 11.00 GRAMS/CC.
PROJ. WT 5.088 GRAMS PROJ. DIA. 4.60 MM IMPULSE 1.2 LB. SEC.
DRAG RDCR. WT. 0.000 GRAMS CHG. WT. 1.23 GRAMS SABOT WT. 0.073 GRAMS
TWIST RATE NA PCT. DRAG CHANGE / (DEG. YAW)**2 0.71

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	21.2	752	1459	0.0
0	0.00	0.00	21.2	752	1439	0.0
50	1.02	0.07	20.3	725	1338	-0.3
100	1.99	0.14	19.3	699	1241	-0.5
150	2.91	0.21	18.2	672	1149	-0.8
200	3.78	0.29	17.1	645	1059	-1.1
250	4.59	0.37	15.8	618	972	-1.3
300	5.33	0.45	14.4	591	890	-1.6
350	6.01	0.54	12.9	564	811	-1.9
400	6.61	0.63	11.3	538	736	-2.1
450	7.12	0.72	9.5	511	663	-2.4
500	7.54	0.82	7.5	485	594	-2.6
550	7.86	0.93	5.2	460	538	-2.8
600	8.06	1.04	2.7	435	481	-3.0
650	8.13	1.16	-0.1	411	429	-3.2
700	8.08	1.28	-3.2	388	382	-3.3
750	7.82	1.42	-6.7	366	340	-3.4
800	7.40	1.56	-10.7	346	305	-3.2
850	6.78	1.70	-15.0	333	282	-2.7
900	5.93	1.86	-19.7	321	262	-2.2
950	4.85	2.02	-24.7	310	244	-2.2
1000	3.51	2.18	-30.1	300	229	-2.1
1050	1.90	2.35	-35.8	290	215	-2.1
1100	0.00	2.52	-42.0	282	202	-2.0

DRAG RDCR. WT. 0.151 GRAMS PCT. DRAG CHANGE / (DEG. YAW)**2 2.41

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	11.2	752	1459	0.0
0	0.00	0.00	11.2	752	1439	0.0
50	0.53	0.07	10.3	745	1410	-0.1
100	1.02	0.13	9.4	737	1382	-0.1
150	1.46	0.20	8.5	730	1354	-0.2
200	1.85	0.27	7.6	723	1326	-0.3
250	2.20	0.34	6.6	716	1299	-0.4
300	2.50	0.41	5.6	709	1273	-0.4
350	2.75	0.48	4.6	702	1247	-0.5
400	2.96	0.55	3.6	695	1221	-0.6
450	3.11	0.63	2.5	688	1196	-0.6
500	3.21	0.70	1.5	681	1171	-0.7
550	3.26	0.77	0.4	674	1146	-0.8
600	3.26	0.85	-0.7	667	1122	-0.8
650	3.20	0.92	-1.9	660	1098	-0.9
700	3.08	1.00	-3.0	653	1075	-1.0
750	2.91	1.08	-4.2	646	1052	-1.0
800	2.68	1.15	-5.4	640	1029	-1.1
850	2.39	1.23	-6.6	633	1006	-1.1
900	2.04	1.31	-7.9	626	984	-1.2
950	1.63	1.39	-9.2	619	963	-1.3
1000	1.15	1.47	-10.5	613	942	-1.3
1050	0.61	1.56	-11.9	606	921	-1.4
1100	0.00	1.64	-13.2	600	900	-1.4

TYPE CF 1 CALIBER 5.56 MM AVERAGE DENSITY 11.00 GRAMS/CC.
PROJ. WT 5.088 GRAMS PROJ. DIA. 4.60 MM IMPULSE 2.1 LB. SEC.
DRAG RDCR. WT. 0.000 GRAMS CHG. WT. 2.96 GRAMS SABOT WT. 0.073 GRAMS
TWIST RATE NA PCT. DRAG CHANGE / (DEG. YAW)**2 0.71

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	6.7	1127	3278	0.0
0	0.00	0.00	6.7	1127	3231	0.0
50	0.32	0.04	6.3	1101	3085	-0.3
100	0.62	0.09	5.9	1076	2943	-0.5
150	0.89	0.14	5.4	1050	2803	-0.8
200	1.15	0.19	4.9	1024	2667	-1.0
250	1.38	0.24	4.5	998	2534	-1.3
300	1.59	0.29	3.9	972	2403	-1.6
350	1.77	0.34	3.4	946	2275	-1.8
400	1.93	0.39	2.8	919	2150	-2.1
450	2.06	0.45	2.2	893	2029	-2.4
500	2.15	0.50	1.6	867	1911	-2.6
550	2.22	0.56	0.9	840	1797	-2.9
600	2.25	0.62	0.2	814	1685	-3.2
650	2.24	0.69	-0.6	787	1577	-3.5
700	2.20	0.75	-1.5	761	1472	-3.7
750	2.11	0.82	-2.4	734	1370	-4.0
800	1.98	0.89	-3.3	707	1272	-4.3
850	1.79	0.96	-4.4	680	1178	-4.5
900	1.56	1.03	-5.5	654	1087	-4.8
950	1.27	1.11	-6.7	627	1000	-5.1
1000	0.92	1.19	-8.0	600	916	-5.4
1050	0.50	1.28	-9.5	573	836	-5.7
1100	0.00	1.37	-11.1	546	759	-5.9

DRAG RDCR. WT. 0.151 GRAMS PCT. DRAG CHANGE / (DEG. YAW)**2 2.41

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	4.8	1127	3278	0.0
0	0.00	0.00	4.8	1127	3231	0.0
50	0.23	0.04	4.4	1118	3180	-0.1
100	0.43	0.09	4.0	1109	3129	-0.2
150	0.62	0.13	3.6	1101	3078	-0.3
200	0.79	0.18	3.2	1092	3028	-0.3
250	0.93	0.23	2.8	1083	2979	-0.4
300	1.06	0.27	2.3	1075	2930	-0.5
350	1.17	0.32	1.9	1066	2882	-0.6
400	1.25	0.37	1.4	1057	2834	-0.7
450	1.31	0.41	1.0	1049	2787	-0.8
500	1.36	0.46	0.5	1040	2740	-0.9
550	1.37	0.51	0.1	1032	2694	-0.9
600	1.37	0.56	-0.4	1023	2649	-1.0
650	1.34	0.61	-0.9	1015	2604	-1.1
700	1.29	0.66	-1.4	1006	2560	-1.2
750	1.22	0.71	-1.9	998	2516	-1.3
800	1.12	0.76	-2.4	990	2472	-1.3
850	1.00	0.81	-2.9	981	2429	-1.4
900	0.85	0.86	-3.4	973	2387	-1.5
950	0.68	0.91	-3.9	964	2345	-1.6
1000	0.48	0.96	-4.5	956	2304	-1.7
1050	0.25	1.02	-5.0	948	2263	-1.7
1100	0.00	1.07	-5.6	940	2223	-1.8

TYPE CF 1 CALIBER 5.56 MM AVERAGE DENSITY 16.70 GRAMS/CC.

PROJ. WT 7.726 GRAMS PROJ. DIA. 4.60 MM IMPULSE 0.8 LB. SEC.

DRAG RDCR. WT. 0.000 GRAMS CHG. WT. 0.44 GRAMS SABOT WT. 0.073 GRAMS

TWIST RATE NA PCT. DRAG CHANGE / (DEG. YAW)**2 0.71

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	56.9	388	587	0.0
0	0.00	0.00	56.9	388	582	0.0
50	2.71	0.13	53.5	373	538	-0.1
100	5.25	0.27	49.8	359	498	-0.3
150	7.60	0.41	45.7	347	464	-0.3
200	9.74	0.56	41.5	337	439	-0.3
250	11.67	0.71	37.0	329	418	-0.4
300	13.37	0.86	32.2	321	399	-0.5
350	14.83	1.02	27.3	314	380	-0.5
400	16.05	1.18	22.1	307	364	-0.6
450	17.00	1.34	16.7	300	348	-0.6
500	17.69	1.51	11.0	294	334	-0.6
550	18.08	1.69	5.1	288	320	-0.7
600	18.19	1.86	-1.1	282	307	-0.7
650	17.98	2.04	-7.5	276	295	-0.7
700	17.46	2.22	-14.2	271	283	-0.8
750	16.60	2.41	-21.1	266	272	-0.8
800	15.39	2.60	-28.3	260	262	-0.8
850	13.82	2.79	-35.9	255	252	-0.9
900	11.87	2.99	-43.7	250	242	-0.9
950	9.53	3.19	-51.8	245	232	-0.9
1000	6.79	3.40	-60.3	241	224	-1.0
1050	3.61	3.61	-69.1	236	215	-1.0
1100	0.00	3.83	-78.2	231	207	-1.0

DRAG RDCR. WT. 0.151 GRAMS PCT. DRAG CHANGE / (DEG. YAW)**2 2.41

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	41.6	388	587	0.0
0	0.00	0.00	41.6	388	582	0.0
50	1.96	0.13	38.2	385	571	0.0
100	3.75	0.26	34.8	381	561	-0.1
150	5.37	0.39	31.4	378	550	-0.1
200	6.83	0.52	27.8	375	540	-0.1
250	8.11	0.66	24.2	371	530	-0.2
300	9.21	0.79	20.6	368	521	-0.2
350	10.13	0.93	16.9	365	511	-0.2
400	10.86	1.07	13.1	362	502	-0.3
450	11.41	1.21	9.2	358	492	-0.3
500	11.77	1.35	5.3	355	483	-0.3
550	11.94	1.49	1.3	352	475	-0.3
600	11.90	1.63	-2.8	349	466	-0.4
650	11.67	1.78	-6.9	346	458	-0.4
700	11.23	1.92	-11.1	344	451	-0.4
750	10.59	2.07	-15.3	341	443	-0.4
800	9.73	2.21	-19.7	338	436	-0.4
850	8.67	2.36	-24.1	336	429	-0.4
900	7.38	2.51	-28.5	333	422	-0.5
950	5.87	2.66	-33.0	331	416	-0.5
1000	4.14	2.81	-37.6	329	410	-0.5
1050	2.19	2.97	-42.3	326	404	-0.5
1100	0.00	3.12	-47.1	320	387	-0.6

TYPE CF 1 CALIBER 5.56 MM AVERAGE DENSITY 16.70 GRAMS/CC.
PROJ. WT 7.726 GRAMS PROJ. DIA. 4.60 MM IMPULSE 1.2 LB. SEC.
DRAG RDCR. WT. 0.000 GRAMS CHG. WT. 0.95 GRAMS SABOT WT. 0.073 GRAMS
TWIST RATE NA PCT. DRAG CHANGE / (DEG. YAW)**2 0.71

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	33.6	538	1129	0.0
0	0.00	0.00	33.6	538	1118	0.0
50	1.61	0.09	31.8	521	1047	-0.2
100	3.12	0.19	29.9	503	978	-0.3
150	4.54	0.29	27.8	486	913	-0.5
200	5.86	0.40	25.7	469	850	-0.7
250	7.06	0.51	23.3	453	791	-0.8
300	8.14	0.62	20.8	436	735	-1.0
350	9.10	0.74	18.1	420	682	-1.1
400	9.92	0.86	15.1	405	632	-1.3
450	10.59	0.98	11.9	389	585	-1.4
500	11.09	1.11	8.5	375	542	-1.5
550	11.42	1.25	4.8	360	502	-1.6
600	11.57	1.39	0.8	348	467	-1.5
650	11.51	1.54	-3.4	338	442	-1.3
700	11.23	1.69	-7.9	330	421	-1.2
750	10.74	1.84	-12.6	322	401	-1.2
800	10.00	2.00	-17.5	315	383	-1.2
850	9.02	2.16	-22.7	308	366	-1.2
900	7.78	2.32	-28.1	301	351	-1.2
950	6.27	2.49	-33.7	295	336	-1.2
1000	4.48	2.66	-39.6	289	322	-1.2
1050	2.39	2.84	-45.7	283	310	-1.3
1100	0.00	3.02	-52.0	277	297	-1.3

DRAG RDCR. WT. 0.151 GRAMS PCT. DRAG CHANGE / (DEG. YAW)**2 2.41

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	21.2	538	1129	0.0
0	0.00	0.00	21.2	538	1118	0.0
50	1.00	0.09	19.5	534	1101	0.0
100	1.91	0.19	17.7	530	1084	-0.1
150	2.74	0.28	15.9	526	1067	-0.1
200	3.47	0.38	14.1	522	1051	-0.2
250	4.12	0.47	12.3	518	1034	-0.2
300	4.68	0.57	10.4	514	1018	-0.2
350	5.14	0.67	8.5	510	1002	-0.3
400	5.51	0.77	6.5	507	986	-0.3
450	5.79	0.87	4.6	503	971	-0.3
500	5.97	0.97	2.6	499	956	-0.4
550	6.05	1.07	0.6	495	940	-0.4
600	6.03	1.17	-1.5	491	925	-0.5
650	5.91	1.27	-3.6	488	910	-0.5
700	5.68	1.37	-5.7	484	896	-0.5
750	5.36	1.48	-7.8	480	881	-0.6
800	4.92	1.58	-10.0	476	867	-0.6
850	4.38	1.69	-12.2	472	853	-0.6
900	3.73	1.79	-14.5	469	839	-0.7
950	2.97	1.90	-16.8	465	825	-0.7
1000	2.10	2.01	-19.1	461	811	-0.7
1050	1.11	2.12	-21.5	458	798	-0.8
1100	0.00	2.23	-23.9	454	785	-0.8

TYPE CF 1 CALIBER 5.56 MM AVERAGE DENSITY 16.70 GRAMS/CC.
PROJ. WT 7.726 GRAMS PROJ. DIA. 4.60 MM IMPULSE 2.1 LB. SEC.
DRAG RDCR. WT. 0.000 GRAMS CHG. WT. 2.35 GRAMS SABOT WT. 0.073 GRAMS
TWIST RATE NA PCT. DRAG CHANGE / (DEG. YAW)**2 0.71

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	11.3	843	2771	0.0
0	0.00	0.00	11.3	843	2745	0.0
50	0.54	0.06	10.6	826	2633	-0.2
100	1.04	0.12	9.8	808	2523	-0.4
150	1.51	0.18	9.1	791	2414	-0.5
200	1.93	0.25	8.2	773	2308	-0.7
250	2.32	0.31	7.4	755	2204	-0.9
300	2.66	0.38	6.5	738	2102	-1.1
350	2.96	0.45	5.6	720	2003	-1.2
400	3.21	0.52	4.6	702	1906	-1.4
450	3.41	0.59	3.5	685	1812	-1.6
500	3.56	0.67	2.4	667	1721	-1.8
550	3.66	0.74	1.3	650	1631	-1.9
600	3.69	0.82	0.1	632	1544	-2.1
650	3.67	0.90	-1.2	614	1458	-2.3
700	3.58	0.98	-2.6	597	1375	-2.5
750	3.43	1.07	-4.0	579	1295	-2.7
800	3.20	1.15	-5.6	561	1217	-2.8
850	2.89	1.25	-7.2	544	1142	-3.0
900	2.50	1.34	-8.9	526	1070	-3.2
950	2.03	1.44	-10.8	509	1000	-3.3
1000	1.45	1.54	-12.8	492	934	-3.5
1050	0.78	1.64	-14.9	475	871	-3.6
1100	0.00	1.75	-17.2	458	811	-3.7

DRAG RDCR. WT. 0.151 GRAMS PCT. DRAG CHANGE / (DEG. YAW)**2 2.41

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	8.4	843	2771	0.0
0	0.00	0.00	8.4	843	2745	0.0
50	0.39	0.06	7.7	838	2711	-0.1
100	0.75	0.12	7.0	833	2678	-0.1
150	1.08	0.18	6.3	828	2644	-0.2
200	1.37	0.24	5.5	823	2611	-0.2
250	1.62	0.30	4.8	818	2578	-0.3
300	1.84	0.36	4.0	813	2546	-0.3
350	2.02	0.42	3.3	808	2513	-0.3
400	2.17	0.49	2.5	803	2481	-0.4
450	2.27	0.55	1.7	798	2450	-0.4
500	2.34	0.61	0.9	793	2418	-0.5
550	2.37	0.67	0.1	788	2387	-0.5
600	2.36	0.74	-0.7	783	2357	-0.6
650	2.31	0.80	-1.5	778	2326	-0.6
700	2.22	0.87	-2.3	773	2296	-0.7
750	2.09	0.93	-3.2	768	2266	-0.7
800	1.92	1.00	-4.0	763	2236	-0.8
850	1.71	1.06	-4.9	758	2207	-0.8
900	1.45	1.13	-5.8	754	2178	-0.9
950	1.16	1.20	-6.6	749	2149	-0.9
1000	0.81	1.26	-7.5	744	2121	-1.0
1050	0.43	1.33	-8.5	739	2092	-1.0
1100	0.00	1.40	-9.4	734	2064	-1.1

TYPE CF 1 CALIBER 6.50 MM AVERAGE DENSITY 7.80 GRAMS/CC.
PROJ. WT 5.764 GRAMS PROJ. DIA. 5.37 MM IMPULSE 0.8 LB. SEC.
DRAG RDCR. WT. 0.000 GRAMS CHG. WT. 0.58 GRAMS SABOT WT. 0.116 GRAMS
TWIST RATE NA PCT. DRAG CHANGE / (DEG. YAW)**2 0.71

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	58.4	487	697	0.0
0	0.00	0.00	58.4	487	684	0.0
50	2.81	0.11	56.1	456	600	-0.3
100	5.51	0.22	53.6	427	524	-0.6
150	8.07	0.34	50.6	398	456	-0.8
200	10.48	0.47	47.2	371	396	-1.1
250	12.71	0.61	43.3	347	347	-1.1
300	14.73	0.76	39.0	331	315	-0.9
350	16.53	0.91	34.2	316	289	-1.0
400	18.09	1.08	29.0	304	266	-1.0
450	19.38	1.24	23.3	292	246	-1.0
500	20.38	1.42	17.3	281	228	-1.1
550	21.07	1.60	10.7	271	212	-1.1
600	21.43	1.79	3.7	261	197	-1.2
650	21.43	1.98	-3.9	252	183	-1.2
700	21.04	2.18	-12.1	243	170	-1.3
750	20.24	2.39	-20.9	234	158	-1.3
800	18.99	2.61	-30.3	226	147	-1.4
850	17.26	2.84	-40.5	218	137	-1.4
900	15.01	3.07	-51.4	210	127	-1.4
950	12.21	3.31	-63.2	202	118	-1.5
1000	8.80	3.57	-75.8	195	110	-1.5
1050	4.75	3.83	-89.4	188	102	-1.5
1100	0.00	4.10	-104.0	182	95	-1.5

DRAG RDCR. WT. 0.241 GRAMS PCT. DRAG CHANGE / (DEG. YAW)**2 2.41

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	29.1	487	697	0.0
0	0.00	0.00	29.1	487	684	0.0
50	1.38	0.10	27.0	480	663	-0.1
100	2.65	0.21	24.8	473	644	-0.1
150	3.81	0.31	22.5	466	624	-0.2
200	4.86	0.42	20.2	460	605	-0.3
250	5.79	0.53	17.8	453	587	-0.3
300	6.60	0.64	15.3	446	569	-0.4
350	7.29	0.76	12.8	440	551	-0.5
400	7.86	0.87	10.1	433	534	-0.5
450	8.29	0.99	7.4	427	517	-0.6
500	8.59	1.11	4.7	420	501	-0.6
550	8.75	1.23	1.8	414	485	-0.7
600	8.77	1.35	-1.2	407	469	-0.8
650	8.64	1.47	-4.2	401	454	-0.8
700	8.36	1.60	-7.4	395	439	-0.9
750	7.92	1.72	-10.7	388	424	-0.9
800	7.32	1.85	-14.0	382	410	-1.0
850	6.56	1.99	-17.5	376	396	-1.0
900	5.61	2.12	-21.1	370	383	-1.1
950	4.49	2.26	-24.8	364	370	-1.1
1000	3.19	2.40	-28.6	358	357	-1.2
1050	1.69	2.54	-32.6	352	345	-1.2
1100	0.00	2.68	-36.7	347	334	-1.2

TYPE CF 1 CALIBER 6.50 MM AVERAGE DENSITY 7.80 GRAMS/CC.
PROJ. WT 5.764 GRAMS PROJ. DIA. 5.37 MM IMPULSE 1.2 LB. SEC.
DRAG RDCR. WT. 0.000 GRAMS CHG. WT. 1.14 GRAMS SABOT WT. 0.116 GRAMS
TWIST RATE NA PCT. DRAG CHANGE / (DEG. YAW)**2 0.71

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	32.7	678	1351	0.0
0	0.00	0.00	32.7	678	1325	0.0
50	1.58	0.08	31.5	646	1202	-0.3
100	3.09	0.16	30.3	613	1085	-0.6
150	4.55	0.24	28.9	581	973	-1.0
200	5.93	0.33	27.3	549	868	-1.3
250	7.23	0.42	25.5	517	770	-1.6
300	8.44	0.52	23.5	485	679	-1.9
350	9.54	0.63	21.3	455	596	-2.1
400	10.52	0.74	18.7	425	521	-2.4
450	11.37	0.86	15.7	397	454	-2.6
500	12.07	0.99	12.3	370	394	-2.7
550	12.58	1.13	8.4	346	345	-2.6
600	12.89	1.28	4.0	330	314	-2.0
650	12.98	1.44	-0.8	316	288	-1.8
700	12.82	1.60	-6.0	304	266	-1.8
750	12.40	1.77	-11.6	292	246	-1.8
800	11.68	1.94	-17.7	281	228	-1.8
850	10.66	2.12	-24.3	271	212	-1.8
900	9.30	2.31	-31.3	261	197	-1.8
950	7.59	2.51	-38.9	252	183	-1.8
1000	5.48	2.71	-47.1	243	170	-1.8
1050	2.97	2.92	-55.8	234	158	-1.9
1100	0.00	3.14	-65.3	226	147	-1.9

DRAG RDCR. WT. 0.241 GRAMS PCT. DRAG CHANGE / (DEG. YAW)**2 2.41

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	14.5	678	1351	0.0
0	0.00	0.00	14.5	678	1325	0.0
50	0.68	0.07	13.4	670	1291	-0.1
100	1.31	0.15	12.2	661	1258	-0.2
150	1.88	0.23	11.1	653	1226	-0.2
200	2.40	0.30	9.9	645	1195	-0.3
250	2.86	0.38	8.7	637	1163	-0.4
300	3.25	0.46	7.4	629	1133	-0.5
350	3.59	0.54	6.2	621	1103	-0.6
400	3.86	0.62	4.8	613	1074	-0.6
450	4.07	0.70	3.5	605	1045	-0.7
500	4.21	0.79	2.1	597	1017	-0.8
550	4.28	0.87	0.7	590	989	-0.9
600	4.29	0.96	-0.8	582	962	-0.9
650	4.22	1.04	-2.3	574	936	-1.0
700	4.07	1.13	-3.8	566	910	-1.1
750	3.85	1.22	-5.4	559	885	-1.1
800	3.55	1.31	-7.0	551	860	-1.2
850	3.18	1.40	-8.7	544	836	-1.3
900	2.72	1.49	-10.4	536	812	-1.3
950	2.17	1.59	-12.1	529	789	-1.4
1000	1.54	1.68	-13.9	522	766	-1.5
1050	0.81	1.78	-15.8	514	744	-1.5
1100	0.00	1.88	-17.7	507	722	-1.6

TYPE CF 1 CALIBER 6.50 MM AVERAGE DENSITY 7.80 GRAMS/CC.

PROJ. WT 5.764 GRAMS PROJ. DIA. 5.37 MM IMPULSE 2.1 LB. SEC.

DRAG RDCR. WT. 0.000 GRAMS CHG. WT. 2.76 GRAMS SABOT WT. 0.116 GRAMS

TWIST RATE NA PCT. DRAG CHANGE / (DEG. YAW)**2 0.71

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	10.0	1034	3143	0.0
0	0.00	0.00	10.0	1034	3081	0.0
50	0.48	0.05	9.6	1003	2899	-0.3
100	0.94	0.10	9.0	972	2720	-0.6
150	1.37	0.15	8.5	940	2546	-0.9
200	1.78	0.21	7.9	908	2378	-1.3
250	2.15	0.26	7.3	877	2215	-1.6
300	2.49	0.32	6.6	845	2058	-1.9
350	2.80	0.38	5.9	813	1905	-2.2
400	3.08	0.44	5.1	781	1758	-2.6
450	3.31	0.51	4.2	749	1616	-2.9
500	3.50	0.58	3.3	717	1480	-3.2
550	3.64	0.65	2.3	685	1351	-3.5
600	3.73	0.72	1.2	653	1227	-3.8
650	3.76	0.80	-0.1	620	1109	-4.2
700	3.73	0.88	-1.4	588	996	-4.5
750	3.63	0.97	-3.0	556	890	-4.8
800	3.45	1.06	-4.7	524	790	-5.1
850	3.18	1.16	-6.6	492	698	-5.4
900	2.81	1.27	-8.8	461	614	-5.6
950	2.33	1.38	-11.3	432	537	-5.7
1000	1.71	1.50	-14.2	403	467	-5.9
1050	0.94	1.63	-17.5	375	406	-5.9
1100	0.00	1.77	-21.3	350	354	-5.8

DRAG RDCR. WT. 0.241 GRAMS PCT. DRAG CHANGE / (DEG. YAW)**2 2.41

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	5.9	1034	3143	0.0
0	0.00	0.00	5.9	1034	3081	0.0
50	0.28	0.05	5.5	1024	3019	-0.1
100	0.54	0.10	5.0	1014	2957	-0.2
150	0.77	0.15	4.5	1004	2897	-0.3
200	0.98	0.20	4.0	993	2837	-0.4
250	1.16	0.25	3.5	983	2778	-0.5
300	1.32	0.30	2.9	973	2720	-0.6
350	1.45	0.35	2.4	964	2662	-0.7
400	1.56	0.40	1.9	954	2606	-0.8
450	1.64	0.46	1.3	944	2550	-0.9
500	1.70	0.51	0.7	934	2495	-1.0
550	1.72	0.56	0.2	924	2442	-1.1
600	1.72	0.62	-0.4	914	2388	-1.2
650	1.69	0.67	-1.0	905	2336	-1.3
700	1.63	0.73	-1.6	895	2285	-1.3
750	1.54	0.78	-2.3	885	2234	-1.4
800	1.42	0.84	-2.9	876	2184	-1.5
850	1.27	0.90	-3.6	866	2135	-1.6
900	1.08	0.96	-4.3	857	2087	-1.7
950	0.86	1.01	-4.9	847	2039	-1.8
1000	0.61	1.07	-5.6	838	1993	-1.9
1050	0.32	1.13	-6.4	828	1947	-2.0
1100	0.00	1.19	-7.1	819	1902	-2.0

TYPE CF 1 CALIBER 6.50 MM AVERAGE DENSITY 11.00 GRAMS/CC.
PROJ. WT 8.129 GRAMS PROJ. DIA. 5.37 MM IMPULSE 0.8 LB. SEC.
DRAG RDCR. WT. 0.000 GRAMS CHG. WT. 0.41 GRAMS SABOT WT. 0.116 GRAMS
TWIST RATE NA PCT. DRAG CHANGE / (DEG. YAW)**2 0.71

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	67.2	371	567	0.0
0	0.00	0.00	67.2	371	559	0.0
50	3.21	0.14	63.3	353	506	-0.2
100	6.22	0.28	59.2	339	468	-0.2
150	9.02	0.43	54.7	329	439	-0.3
200	11.59	0.59	49.9	319	412	-0.4
250	13.92	0.75	44.8	309	389	-0.5
300	15.99	0.91	39.5	301	367	-0.5
350	17.79	1.08	33.8	292	347	-0.6
400	19.31	1.25	27.8	285	329	-0.6
450	20.52	1.43	21.4	277	312	-0.7
500	21.41	1.62	14.7	270	296	-0.7
550	21.96	1.80	7.7	263	281	-0.8
600	22.16	2.00	0.3	256	267	-0.8
650	21.99	2.19	-7.5	250	254	-0.9
700	21.43	2.40	-15.7	243	241	-0.9
750	20.45	2.60	-24.4	237	229	-0.9
800	19.04	2.82	-33.5	231	217	-1.0
850	17.16	3.04	-43.1	225	206	-1.0
900	14.81	3.26	-53.2	220	196	-1.1
950	11.94	3.49	-63.8	214	186	-1.1
1000	8.54	3.73	-75.0	209	177	-1.1
1050	4.57	3.97	-86.8	203	168	-1.1
1100	0.00	4.22	-99.2	198	160	-1.2

DRAG RDCR. WT. 0.241 GRAMS PCT. DRAG CHANGE / (DEG. YAW)**2 2.41

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	47.0	371	567	0.0
0	0.00	0.00	47.0	371	559	0.0
50	2.22	0.14	43.3	367	546	0.0
100	4.25	0.27	39.6	363	533	-0.1
150	6.10	0.41	35.7	358	520	-0.1
200	7.76	0.55	31.8	354	508	-0.2
250	9.22	0.69	27.8	350	496	-0.2
300	10.48	0.84	23.6	347	484	-0.2
350	11.54	0.98	19.4	343	474	-0.2
400	12.39	1.13	15.2	340	464	-0.3
450	13.03	1.28	10.8	336	454	-0.3
500	13.45	1.43	6.3	333	444	-0.3
550	13.65	1.58	1.8	330	435	-0.4
600	13.63	1.73	-2.9	327	426	-0.4
650	13.38	1.88	-7.6	324	418	-0.4
700	12.89	2.04	-12.4	321	409	-0.4
750	12.16	2.20	-17.3	318	401	-0.4
800	11.20	2.35	-22.3	315	393	-0.5
850	9.98	2.51	-27.4	312	385	-0.5
900	8.51	2.68	-32.6	309	377	-0.5
950	6.78	2.84	-37.9	306	369	-0.6
1000	4.80	3.00	-43.3	303	362	-0.6
1050	2.54	3.17	-48.9	294	342	-0.7
1100	0.00	3.34	-54.8	286	323	-0.8

TYPE CF 1 CALIBER 6.50 MM AVERAGE DENSITY 11.00 GRAMS/CC.

PROJ. WT 8.129 GRAMS PROJ. DIA. 5.37 MM IMPULSE 1.2 LB. SEC.

DRAG RDCR. WT. 0.000 GRAMS CHG. WT. 0.91 GRAMS SABOT WT. 0.116 GRAMS

TWIST RATE NA PCT. DRAG CHANGE / (DEG. YAW)**2 0.71

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	42.2	515	1093	0.0
0	0.00	0.00	42.2	515	1078	0.0
50	2.03	0.10	40.3	493	987	-0.2
100	3.95	0.20	38.1	471	901	-0.4
150	5.77	0.31	35.8	449	820	-0.6
200	7.46	0.43	33.2	428	745	-0.8
250	9.02	0.55	30.3	408	676	-1.0
300	10.44	0.67	27.1	388	612	-1.2
350	11.69	0.80	23.6	369	553	-1.3
400	12.76	0.94	19.8	351	502	-1.4
450	13.63	1.09	15.6	338	466	-1.1
500	14.29	1.24	11.1	328	437	-1.1
550	14.72	1.39	6.3	318	411	-1.1
600	14.90	1.55	1.2	309	387	-1.1
650	14.83	1.72	-4.2	300	366	-1.1
700	14.49	1.89	-9.9	292	347	-1.2
750	13.86	2.06	-15.9	284	329	-1.2
800	12.93	2.24	-22.3	277	312	-1.2
850	11.68	2.42	-29.0	270	296	-1.2
900	10.09	2.61	-36.0	263	281	-1.3
950	8.15	2.80	-43.4	256	267	-1.3
1000	5.83	3.00	-51.2	250	254	-1.3
1050	3.12	3.20	-59.4	244	241	-1.4
1100	0.00	3.41	-68.1	237	229	-1.4

DRAG RDCR. WT. 0.241 GRAMS PCT. DRAG CHANGE / (DEG. YAW)**2 2.41

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	24.1	515	1093	0.0
0	0.00	0.00	24.1	515	1078	0.0
50	1.13	0.10	22.2	510	1056	-0.1
100	2.18	0.20	20.2	505	1034	-0.1
150	3.12	0.30	18.3	500	1013	-0.1
200	3.97	0.40	16.3	495	992	-0.2
250	4.72	0.50	14.2	490	972	-0.2
300	5.37	0.60	12.1	485	951	-0.3
350	5.91	0.70	9.9	480	931	-0.3
400	6.34	0.81	7.8	475	911	-0.4
450	6.67	0.91	5.5	471	892	-0.4
500	6.89	1.02	3.3	466	873	-0.5
550	7.00	1.13	0.9	461	854	-0.5
600	6.99	1.24	-1.5	456	836	-0.6
650	6.86	1.35	-3.9	451	817	-0.6
700	6.61	1.46	-6.4	447	799	-0.7
750	6.25	1.57	-8.9	442	782	-0.7
800	5.75	1.69	-11.5	437	764	-0.7
850	5.13	1.80	-14.1	433	747	-0.8
900	4.38	1.92	-16.8	428	730	-0.8
950	3.49	2.03	-19.6	423	714	-0.9
1000	2.47	2.15	-22.4	419	698	-0.9
1050	1.30	2.27	-25.3	414	682	-1.0
1100	0.00	2.39	-28.2	410	666	-1.0

TYPE CF 1 CALIBER 6.50 MM AVERAGE DENSITY 11.00 GRAMS/CC.
PROJ. WT 8.129 GRAMS PROJ. DIA. 5.37 MM IMPULSE 2.1 LB. SEC.
DRAG RDCR. WT. 0.000 GRAMS CHG. WT. 2.28 GRAMS SABOT WT. 0.116 GRAMS
TWIST RATE NA PCT. DRAG CHANGE / (DEG. YAW)**2 0.71

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	15.0	808	2691	0.0
0	0.00	0.00	15.0	808	2654	0.0
50	0.72	0.06	14.2	785	2506	-0.2
100	1.40	0.13	13.4	762	2363	-0.5
150	2.03	0.19	12.5	740	2223	-0.7
200	2.63	0.26	11.6	717	2088	-0.9
250	3.17	0.33	10.6	694	1958	-1.1
300	3.67	0.41	9.5	671	1832	-1.4
350	4.11	0.48	8.4	649	1710	-1.6
400	4.49	0.56	7.1	626	1591	-1.8
450	4.81	0.64	5.8	603	1476	-2.1
500	5.07	0.73	4.4	580	1366	-2.3
550	5.25	0.82	2.8	557	1260	-2.5
600	5.35	0.91	1.1	534	1160	-2.7
650	5.36	1.00	-0.7	512	1064	-2.9
700	5.29	1.10	-2.7	489	973	-3.1
750	5.11	1.21	-4.9	468	889	-3.3
800	4.82	1.32	-7.3	446	809	-3.4
850	4.40	1.43	-9.9	425	735	-3.6
900	3.85	1.55	-12.8	405	666	-3.7
950	3.16	1.68	-16.0	385	603	-3.8
1000	2.29	1.81	-19.5	367	546	-3.8
1050	1.25	1.95	-23.5	349	496	-3.8
1100	0.00	2.10	-27.7	337	461	-3.3

DRAG RDCR. WT. 0.241 GRAMS PCT. DRAG CHANGE / (DEG. YAW)**2 2.41

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	9.4	808	2691	0.0
0	0.00	0.00	9.4	808	2654	0.0
50	0.44	0.06	8.7	802	2610	-0.1
100	0.85	0.12	7.9	795	2567	-0.1
150	1.22	0.19	7.1	789	2524	-0.2
200	1.55	0.25	6.3	782	2482	-0.3
250	1.84	0.32	5.5	776	2440	-0.3
300	2.09	0.38	4.6	770	2399	-0.4
350	2.30	0.45	3.8	763	2358	-0.4
400	2.46	0.51	2.9	757	2318	-0.5
450	2.59	0.58	2.0	751	2278	-0.6
500	2.67	0.64	1.1	745	2239	-0.6
550	2.71	0.71	0.2	738	2200	-0.7
600	2.70	0.78	-0.7	732	2162	-0.7
650	2.65	0.85	-1.6	726	2124	-0.8
700	2.55	0.92	-2.6	720	2087	-0.9
750	2.40	0.99	-3.6	714	2050	-0.9
800	2.21	1.06	-4.5	708	2014	-1.0
850	1.97	1.13	-5.6	702	1978	-1.0
900	1.68	1.20	-6.6	696	1943	-1.1
950	1.34	1.27	-7.6	690	1908	-1.1
1000	0.94	1.35	-8.7	684	1874	-1.2
1050	0.50	1.42	-9.8	678	1840	-1.2
1100	0.00	1.49	-10.9	672	1806	-1.3

TYPE CF 1 CALIBER 6.50 MM AVERAGE DENSITY 16.70 GRAMS/CC.
PROJ. WT 12.341 GRAMS PROJ. DIA. 5.37 MM IMPULSE 0.8 LB. SEC.
DRAG RDCR. WT. 0.000 GRAMS CHG. WT. 0.28 GRAMS SABOT WT. 0.116 GRAMS
TWIST RATE NA PCT. DRAG CHANGE / (DEG. YAW)**2 0.71

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	97.7	272	461	0.0
0	0.00	0.00	97.7	272	457	0.0
50	4.64	0.19	90.8	267	441	0.0
100	8.93	0.38	83.7	263	425	-0.1
150	12.87	0.57	76.3	258	410	-0.1
200	16.43	0.76	68.7	253	396	-0.2
250	19.61	0.96	60.7	249	382	-0.2
300	22.40	1.17	52.5	245	369	-0.3
350	24.77	1.37	44.0	240	356	-0.3
400	26.72	1.58	35.2	236	344	-0.3
450	28.25	1.80	26.1	232	332	-0.4
500	29.28	2.01	16.7	228	321	-0.4
550	29.87	2.24	6.9	224	310	-0.4
600	29.96	2.46	-3.2	220	300	-0.5
650	29.58	2.68	-13.7	216	290	-0.5
700	28.62	2.92	-24.5	213	280	-0.5
750	27.15	3.16	-35.7	209	270	-0.5
800	25.11	3.40	-47.3	205	261	-0.6
850	22.50	3.65	-59.3	202	253	-0.6
900	19.29	3.90	-71.7	199	245	-0.6
950	15.45	4.15	-84.5	196	237	-0.6
1000	10.98	4.41	-97.7	193	229	-0.7
1050	5.83	4.67	-111.4	190	222	-0.7
1100	0.00	4.94	-125.5	187	215	-0.7

DRAG RDCR. WT. 0.241 GRAMS PCT. DRAG CHANGE / (DEG. YAW)**2 2.41

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	82.6	272	461	0.0
0	0.00	0.00	82.6	272	457	0.0
50	3.89	0.19	75.8	270	450	0.0
100	7.45	0.37	68.9	268	443	0.0
150	10.66	0.56	61.9	266	436	-0.1
200	13.53	0.75	54.8	263	430	-0.1
250	16.05	0.94	47.6	261	424	-0.1
300	18.21	1.13	40.4	259	417	-0.1
350	20.01	1.32	33.0	256	411	-0.1
400	21.45	1.51	25.5	254	405	-0.1
450	22.52	1.71	17.9	252	399	-0.2
500	23.23	1.91	10.2	250	393	-0.2
550	23.57	2.10	2.5	248	387	-0.2
600	23.54	2.30	-5.4	246	382	-0.2
650	23.14	2.50	-13.4	244	376	-0.2
700	22.37	2.70	-21.5	242	371	-0.2
750	21.23	2.91	-29.7	240	366	-0.2
800	19.72	3.11	-38.1	238	361	-0.3
850	17.83	3.33	-46.7	236	356	-0.3
900	15.56	3.53	-55.6	234	351	-0.3
950	12.89	3.74	-64.8	232	346	-0.4
1000	9.82	3.96	-74.3	230	341	-0.4
1050	6.36	4.19	-84.2	228	337	-0.5
1100	2.49	4.41	-94.4	226	332	-0.5

TYPE CF 1 CALIBER 6.50 MM AVERAGE DENSITY 16.70 GRAMS/CC.

PROJ. WT 12.341 GRAMS PROJ. DIA. 5.37 MM IMPULSE 1.2 LB. SEC.

DRAG RDCR. WT. 0.000 GRAMS CHG. WT. 0.61 GRAMS SABOT WT. 0.116 GRAMS

TWIST RATE NA PCT. DRAG CHANGE / (DEG. YAW)**2 0.71

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	57.6	369	848	0.0
0	0.00	0.00	57.6	369	840	0.0
50	2.14	0.14	53.8	357	786	-0.1
100	5.28	0.28	49.7	347	741	-0.2
150	7.62	0.43	45.4	338	707	-0.2
200	9.74	0.58	41.0	331	677	-0.3
250	11.64	0.73	36.3	324	650	-0.3
300	13.31	0.88	31.5	318	624	-0.4
350	14.73	1.04	26.5	312	600	-0.4
400	15.91	1.21	21.2	306	577	-0.5
450	16.82	1.37	15.8	300	556	-0.5
500	17.46	1.54	10.1	295	536	-0.5
550	17.81	1.71	4.3	290	517	-0.6
600	17.88	1.88	-1.8	284	499	-0.6
650	17.64	2.06	-8.1	280	482	-0.6
700	17.09	2.24	-14.6	275	466	-0.7
750	16.21	2.43	-21.3	270	450	-0.7
800	15.00	2.61	-28.3	266	435	-0.7
850	13.44	2.80	-35.5	261	421	-0.8
900	11.53	3.00	-42.9	257	407	-0.8
950	9.24	3.19	-50.6	253	394	-0.8
1000	6.56	3.39	-58.6	248	381	-0.9
1050	3.49	3.60	-66.8	244	368	-0.9
1100	0.00	3.80	-75.3	240	356	-0.9

DRAG RDCR. WT. 0.241 GRAMS PCT. DRAG CHANGE / (DEG. YAW)**2 2.41

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	45.0	369	848	0.0
0	0.00	0.00	45.0	369	840	0.0
50	2.12	0.14	41.3	366	827	-0.0
100	4.09	0.27	37.5	363	813	-0.1
150	5.80	0.41	33.7	361	800	-0.1
200	7.36	0.55	29.9	358	788	-0.1
250	8.73	0.69	25.9	355	775	-0.1
300	9.91	0.83	21.9	353	763	-0.2
350	10.89	0.97	17.9	350	751	-0.2
400	11.66	1.12	13.8	348	740	-0.2
450	12.24	1.26	9.6	345	729	-0.2
500	12.61	1.41	5.4	343	718	-0.2
550	12.77	1.55	1.1	341	708	-0.2
600	12.73	1.70	-3.2	338	698	-0.3
650	12.46	1.85	-7.6	336	689	-0.3
700	11.98	2.00	-12.1	334	679	-0.3
750	11.28	2.15	-16.6	332	670	-0.3
800	10.36	2.30	-21.1	330	661	-0.3
850	9.22	2.45	-25.8	328	652	-0.4
900	7.84	2.61	-30.4	326	644	-0.4
950	6.23	2.76	-35.2	324	635	-0.4
1000	4.40	2.92	-40.0	322	627	-0.4
1050	2.32	3.07	-44.8	318	611	-0.5
1100	0.00	3.23	-49.9	312	588	-0.5

TYPE CF 1 CALIBER 6.50 MM AVERAGE DENSITY 16.70 GRAMS/CC.

PROJ. WT 12.341 GRAMS PROJ. DIA. 5.37 MM IMPULSE 2.1 LB. SEC.

DRAG RDCR. WT. 0.000 GRAMS CHG. WT. 1.77 GRAMS SABOT WT. 0.116 GRAMS

TWIST RATE NA PCT. DRAG CHANGE / (DEG. YAW)**2 0.71

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	26.3	580	2095	0.0
0	0.00	0.00	26.3	580	2076	0.0
50	1.25	0.09	24.7	565	1969	-0.2
100	2.43	0.18	23.1	550	1865	-0.3
150	3.52	0.27	21.4	535	1764	-0.4
200	4.53	0.36	19.6	520	1667	-0.6
250	5.45	0.46	17.7	505	1574	-0.7
300	6.28	0.56	15.7	490	1484	-0.9
350	7.00	0.67	13.6	476	1397	-1.0
400	7.61	0.77	11.3	462	1315	-1.1
450	8.11	0.88	8.9	447	1236	-1.3
500	8.49	1.00	6.3	434	1160	-1.4
550	8.74	1.11	3.6	420	1088	-1.5
600	8.85	1.23	0.6	407	1020	-1.6
650	8.81	1.36	-2.5	393	955	-1.7
700	8.61	1.49	-5.8	381	894	-1.8
750	8.24	1.62	-9.4	368	837	-1.9
800	7.70	1.76	-13.2	357	784	-1.9
850	6.96	1.90	-17.2	346	740	-1.8
900	6.01	2.05	-21.5	338	707	-1.6
950	4.85	2.20	-26.0	331	677	-1.4
1000	3.47	2.35	-30.6	325	650	-1.4
1050	1.86	2.51	-35.5	318	625	-1.4
1100	0.00	2.67	-40.5	312	601	-1.4

DRAG RDCR. WT. 0.241 GRAMS PCT. DRAG CHANGE / (DEG. YAW)**2 2.41

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	17.9	580	2095	0.0
0	0.00	0.00	17.9	580	2076	0.0
50	0.84	0.09	16.4	576	2049	0.0
100	1.61	0.17	14.9	573	2023	-0.1
150	2.30	0.26	13.3	569	1997	-0.1
200	2.92	0.35	11.8	566	1971	-0.1
250	3.46	0.44	10.2	562	1945	-0.2
300	3.92	0.53	8.6	559	1920	-0.2
350	4.31	0.62	7.0	555	1895	-0.2
400	4.61	0.71	5.4	552	1870	-0.3
450	4.84	0.80	3.7	548	1846	-0.3
500	4.98	0.89	2.1	545	1821	-0.3
550	5.05	0.98	0.4	541	1797	-0.4
600	5.03	1.07	-1.3	538	1773	-0.4
650	4.92	1.17	-3.1	535	1750	-0.4
700	4.73	1.26	-4.8	531	1727	-0.5
750	4.46	1.36	-6.6	528	1704	-0.5
800	4.09	1.45	-8.4	524	1681	-0.5
850	3.64	1.55	-10.3	521	1658	-0.6
900	3.10	1.64	-12.1	518	1636	-0.6
950	2.46	1.74	-14.0	514	1614	-0.6
1000	1.73	1.84	-15.9	511	1592	-0.7
1050	0.92	1.94	-17.8	508	1571	-0.7
1100	0.00	2.03	-19.8	504	1549	-0.7

TYPE CF 1 CALIBER 7.62 MM AVERAGE DENSITY 7.80 GRAMS/CC.
PROJ. WT 9.282 GRAMS PROJ. DIA. 6.30 MM IMPULSE 0.8 LB. SEC.
DRAG RDCR. WT. 0.000 GRAMS CHG. WT. 0.34 GRAMS SABOT WT. 0.187 GRAMS
TWIST RATE NA PCT. DRAG CHANGE / (DEG. YAW)**2 0.71

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	85.3	334	528	0.0
0	0.00	0.00	85.3	334	518	0.0
50	4.09	0.15	80.7	321	480	-0.1
100	7.93	0.31	75.7	310	446	-0.2
150	11.52	0.48	70.3	300	416	-0.3
200	14.84	0.65	64.5	290	390	-0.4
250	17.86	0.82	58.4	280	365	-0.5
300	20.57	1.00	51.8	272	342	-0.5
350	22.95	1.19	44.8	265	321	-0.6
400	24.97	1.38	37.4	255	302	-0.6
450	26.62	1.58	29.5	247	283	-0.7
500	27.86	1.79	21.0	239	266	-0.8
550	28.68	2.00	12.0	232	250	-0.8
600	29.04	2.22	2.4	225	235	-0.9
650	28.91	2.45	-7.8	218	220	-0.9
700	28.27	2.68	-18.6	211	207	-1.0
750	27.08	2.92	-30.2	205	194	-1.0
800	25.30	3.17	-42.5	198	183	-1.0
850	22.90	3.43	-55.6	192	172	-1.1
900	19.84	3.69	-69.5	186	161	-1.1
950	16.06	3.96	-84.4	181	152	-1.1
1000	11.53	4.25	-100.1	175	143	-1.1
1050	6.19	4.54	-116.9	170	134	-1.2
1100	0.00	4.84	-134.7	165	126	-1.2

DRAG RDCR. WT. 0.389 GRAMS PCT. DRAG CHANGE / (DEG. YAW)**2 2.41

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	58.9	334	528	0.0
0	0.00	0.00	58.9	334	518	0.0
50	2.78	0.15	54.4	330	505	0.0
100	5.34	0.30	49.8	326	492	-0.1
150	7.67	0.46	45.0	323	480	-0.1
200	9.76	0.61	40.2	319	468	-0.1
250	11.61	0.77	35.2	315	456	-0.2
300	13.22	0.93	30.1	312	445	-0.2
350	14.57	1.09	24.9	308	434	-0.2
400	15.66	1.26	19.6	304	423	-0.3
450	16.49	1.42	14.1	301	412	-0.3
500	17.05	1.59	8.5	297	401	-0.3
550	17.34	1.76	2.8	294	391	-0.4
600	17.33	1.93	-3.0	291	381	-0.4
650	17.04	2.10	-9.0	287	371	-0.4
700	16.45	2.28	-15.1	284	362	-0.5
750	15.56	2.45	-21.4	280	353	-0.5
800	14.36	2.63	-27.8	277	343	-0.5
850	12.84	2.82	-34.4	274	335	-0.6
900	10.99	3.00	-41.1	271	326	-0.6
950	8.80	3.19	-48.2	268	318	-0.7
1000	6.26	3.38	-55.4	264	309	-0.8
1050	3.33	3.58	-63.7	261	301	-0.8
1100	0.00	3.79	-72.2	258	292	-0.9

TYPE CF 1 CALIBER 7.62 MM AVERAGE DENSITY 7.80 GRAMS/CC.
PROJ. WT 9.282 GRAMS PROJ. DIA. 6.30 MM IMPULSE 1.2 LB. SEC.
DRAG RDCR. WT. 0.000 GRAMS CHG. WT. 0.82 GRAMS SABOT WT. 0.187 GRAMS
TWIST RATE NA PCT. DRAG CHANGE / (DEG. YAW)**2 0.71

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	56.6	460	1002	0.0
0	0.00	0.00	56.6	460	982	0.0
50	2.72	0.11	54.1	434	876	-0.3
100	5.31	0.23	51.3	409	778	-0.5
150	7.75	0.36	48.1	386	690	-0.7
200	10.03	0.49	44.5	363	611	-0.9
250	12.12	0.63	40.5	344	549	-0.9
300	14.00	0.78	36.1	330	506	-0.8
350	15.66	0.94	31.3	318	470	-0.8
400	17.08	1.10	26.2	307	438	-0.9
450	18.24	1.26	20.7	297	409	-0.9
500	19.12	1.43	14.9	287	383	-1.0
550	19.70	1.61	8.6	278	360	-1.0
600	19.96	1.79	2.0	270	338	-1.0
650	19.89	1.98	-5.1	261	317	-1.1
700	19.47	2.17	-12.6	253	298	-1.1
750	18.65	2.37	-20.7	246	280	-1.2
800	17.44	2.58	-29.2	238	263	-1.2
850	15.79	2.80	-38.3	231	247	-1.3
900	13.68	3.02	-48.0	224	232	-1.3
950	11.08	3.24	-58.3	217	218	-1.3
1000	7.95	3.48	-69.2	210	205	-1.4
1050	4.27	3.72	-80.9	204	193	-1.4
1100	0.00	3.97	-93.2	198	181	-1.4

DRAG RDCR. WT. 0.389 GRAMS PCT. DRAG CHANGE / (DEG. YAW)**2 2.41

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	31.7	460	1002	0.0
0	0.00	0.00	31.7	460	982	0.0
50	1.49	0.11	29.3	454	956	-0.1
100	2.87	0.22	26.8	449	931	-0.1
150	4.13	0.33	24.3	443	906	-0.2
200	5.26	0.45	21.7	437	882	-0.2
250	6.26	0.56	19.1	432	858	-0.3
300	7.13	0.68	16.4	426	835	-0.3
350	7.87	0.80	13.6	421	812	-0.4
400	8.47	0.92	10.7	415	789	-0.4
450	8.92	1.04	7.8	410	767	-0.5
500	9.23	1.16	4.8	404	746	-0.5
550	9.39	1.28	1.7	399	725	-0.6
600	9.40	1.41	-1.5	393	704	-0.6
650	9.25	1.54	-4.8	388	684	-0.7
700	8.93	1.67	-8.2	383	664	-0.7
750	8.45	1.80	-11.6	378	645	-0.8
800	7.80	1.93	-15.2	372	626	-0.8
850	6.97	2.07	-18.8	367	608	-0.9
900	5.96	2.21	-22.6	362	590	-0.9
950	4.77	2.34	-26.4	357	572	-1.0
1000	3.38	2.49	-30.4	352	556	-1.0
1050	1.79	2.63	-34.5	348	540	-1.0
1100	0.00	2.77	-38.7	343	525	-1.0

TYPE CF 1 CALIBER 7.62 MM AVERAGE DENSITY 7.80 GRAMS/CC.

PROJ. WT 9.282 GRAMS PROJ. DIA. 6.30 MM IMPULSE 2.1 LB. SEC.

DRAG RDCR. WT. 0.000 GRAMS CHG. WT. 2.10 GRAMS SABOT WT. 0.187 GRAMS

TWIST RATE NA PCT. DRAG CHANGE / (DEG. YAW)**2 0.71

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	24.0	724	2482	0.0
0	0.00	0.00	24.0	724	2433	0.0
50	1.15	0.07	23.0	697	2252	-0.3
100	2.26	0.14	21.9	669	2078	-0.5
150	3.31	0.22	20.8	642	1911	-0.8
200	4.30	0.30	19.5	614	1749	-1.1
250	5.22	0.38	18.1	586	1595	-1.4
300	6.08	0.47	16.6	559	1448	-1.7
350	6.85	0.56	14.9	531	1310	-1.9
400	7.54	0.66	13.0	504	1180	-2.2
450	8.14	0.76	11.0	478	1058	-2.4
500	8.62	0.87	8.7	452	946	-2.6
550	8.99	0.98	6.1	426	843	-2.8
600	9.22	1.10	3.1	402	749	-3.0
650	9.30	1.23	-0.2	378	664	-3.1
700	9.21	1.37	-3.9	356	589	-3.1
750	8.92	1.51	-8.0	340	535	-2.8
800	8.43	1.66	-12.5	327	495	-2.2
850	7.70	1.82	-17.4	315	460	-2.1
900	6.73	1.98	-22.6	304	430	-2.0
950	5.49	2.15	-28.2	294	402	-2.0
1000	3.97	2.32	-34.1	285	377	-1.9
1050	2.15	2.50	-40.3	276	354	-1.9
1100	0.00	2.68	-47.3	268	332	-1.9

DRAG RDCR. WT. 0.389 GRAMS PCT. DRAG CHANGE / (DEG. YAW)**2 2.41

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	12.2	724	2482	0.0
0	0.00	0.00	12.2	724	2433	0.0
50	0.58	0.07	11.3	717	2381	-0.1
100	1.11	0.14	10.3	709	2328	-0.1
150	1.59	0.21	9.3	702	2281	-0.2
200	2.02	0.28	8.3	695	2232	-0.3
250	2.40	0.35	7.2	688	2184	-0.4
300	2.73	0.43	6.1	680	2136	-0.4
350	3.00	0.50	5.0	673	2090	-0.5
400	3.23	0.58	3.9	666	2044	-0.6
450	3.39	0.65	2.8	659	1998	-0.6
500	3.51	0.73	1.6	652	1954	-0.7
550	3.56	0.80	0.4	645	1910	-0.8
600	3.56	0.88	-0.8	638	1867	-0.8
650	3.49	0.96	-2.0	631	1825	-0.9
700	3.37	1.04	-3.3	624	1783	-1.0
750	3.18	1.12	-4.6	618	1742	-1.0
800	2.93	1.20	-5.9	611	1702	-1.1
850	2.62	1.29	-7.2	604	1662	-1.1
900	2.23	1.37	-8.6	597	1623	-1.2
950	1.78	1.45	-10.0	590	1585	-1.3
1000	1.26	1.54	-11.5	584	1548	-1.3
1050	0.67	1.62	-13.0	577	1511	-1.4
1100	0.00	1.71	-14.5	571	1474	-1.4

TYPE CF 1 CALIBER 7.62 MM AVERAGE DENSITY 11.00 GRAMS/CC.
PROJ. WT 13.090 GRAMS PROJ. DIA. 6.30 MM IMPULSE 0.8 LB. SEC.
DRAG RDCR. WT. 0.000 GRAMS CHG. WT. 0.29 GRAMS SABOT WT. 0.187 GRAMS
TWIST RATE NA PCT. DRAG CHANGE / (DEG. YAW)**2 0.71

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	100.0	259	445	0.0
0	0.00	0.00	100.0	259	439	0.0
50	4.74	0.20	92.4	253	419	-0.1
100	9.09	0.40	84.4	247	400	-0.1
150	13.03	0.60	76.0	242	383	-0.2
200	16.56	0.81	67.3	236	365	-0.2
250	19.64	1.03	58.1	231	349	-0.3
300	22.27	1.25	48.6	226	334	-0.3
350	24.41	1.47	38.5	221	319	-0.3
400	26.05	1.70	28.0	216	305	-0.4
450	27.16	1.93	17.1	211	291	-0.4
500	27.72	2.17	5.6	206	278	-0.5
550	27.70	2.42	-6.4	202	266	-0.5
600	27.08	2.67	-19.0	197	255	-0.5
650	25.83	2.93	-32.1	193	244	-0.6
700	23.92	3.19	-45.9	189	233	-0.6
750	21.32	3.46	-60.2	185	223	-0.6
800	18.00	3.73	-75.2	181	214	-0.7
850	13.92	4.01	-90.8	177	205	-0.7
900	9.05	4.30	-107.1	173	196	-0.7
950	3.36	4.59	-124.1	170	188	-0.7
976	0.00	4.75	-133.4	168	184	-0.7

DRAG RDCR. WT. 0.389 GRAMS PCT. DRAG CHANGE / (DEG. YAW)**2 2.41

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	94.8	259	445	0.0
0	0.00	0.00	94.8	259	439	0.0
50	4.48	0.19	87.3	253	420	0.0
100	8.58	0.39	79.6	248	402	0.0
150	12.30	0.59	71.8	242	385	-0.1
200	15.64	0.79	63.9	237	369	-0.1
250	18.58	0.99	55.8	232	354	-0.1
300	21.12	1.19	47.6	227	339	-0.1
350	23.25	1.40	39.2	222	325	-0.1
400	24.97	1.61	30.7	217	312	-0.2
450	26.26	1.81	22.0	213	299	-0.2
500	27.12	2.02	13.2	208	287	-0.2
550	27.55	2.24	4.2	204	275	-0.2
600	27.53	2.45	-5.0	200	264	-0.3
650	27.06	2.67	-14.3	196	253	-0.3
700	26.13	2.88	-23.8	192	243	-0.3
750	24.73	3.10	-33.5	188	233	-0.3
800	22.85	3.33	-43.6	184	224	-0.4
850	20.45	3.56	-54.1	180	215	-0.4
900	17.53	3.79	-65.2	176	206	-0.5
950	14.05	4.04	-76.7	173	198	-0.5
1000	9.99	4.28	-88.8	169	190	-0.5
1050	5.31	4.54	-101.4	166	182	-0.6
1100	0.00	4.79	-114.6	162	175	-0.6

TYPE CF 1 CALIBER 7.62 MM AVERAGE DENSITY 11.00 GRAMS/CC.
PROJ. WT 13.090 GRAMS PROJ. DIA. 6.30 MM IMPULSE 1.2 LB. SEC.
DRAG RDCR. WT. 0.000 GRAMS CHG. WT. 0.56 GRAMS SABOT WT. 0.187 GRAMS
TWIST RATE NA PCT. DRAG CHANGE / (DEG. YAW)**2 0.71

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	67.0	351	818	0.0
0	0.00	0.00	67.0	351	806	0.0
50	3.19	0.15	62.8	340	755	-0.1
100	6.17	0.29	58.3	330	714	-0.2
150	8.92	0.45	53.6	322	677	-0.3
200	11.43	0.61	48.6	313	643	-0.3
250	13.69	0.77	43.4	306	612	-0.4
300	15.69	0.93	37.9	298	583	-0.4
350	17.42	1.10	32.2	291	556	-0.5
400	18.85	1.28	26.2	285	531	-0.5
450	19.99	1.46	19.9	278	507	-0.6
500	20.81	1.64	13.3	272	485	-0.6
550	21.29	1.82	6.4	266	464	-0.7
600	21.43	2.01	-0.8	260	444	-0.7
650	21.21	2.21	-8.5	255	425	-0.7
700	20.62	2.41	-16.2	249	406	-0.8
750	19.62	2.61	-24.4	244	389	-0.8
800	18.22	2.82	-33.0	238	372	-0.9
850	16.38	3.03	-42.0	233	356	-0.9
900	14.09	3.24	-51.4	228	341	-0.9
950	11.33	3.47	-61.2	223	326	-1.0
1000	8.08	3.69	-71.5	218	312	-1.0
1050	4.31	3.93	-82.2	214	298	-1.0
1100	0.00	4.16	-93.3	209	287	-1.0

DRAG RDCR. WT. 0.389 GRAMS PCT. DRAG CHANGE / (DEG. YAW)**2 2.41

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	50.8	351	818	0.0
0	0.00	0.00	50.8	351	806	0.0
50	2.39	0.14	46.7	340	790	0.0
100	4.58	0.29	42.5	330	775	-0.1
150	6.56	0.43	38.2	322	760	-0.1
200	8.33	0.58	33.8	314	746	-0.1
250	9.89	0.73	29.3	306	733	-0.2
300	11.23	0.88	24.6	299	719	-0.2
350	12.35	1.03	19.8	292	706	-0.2
400	13.25	1.18	14.9	285	694	-0.2
450	13.92	1.34	9.8	278	681	-0.2
500	14.35	1.49	4.4	272	670	-0.3
550	14.55	1.65	-1.2	266	658	-0.3
600	14.51	1.80	-7.0	260	648	-0.3
650	14.22	1.96	-13.0	255	638	-0.3
700	13.69	2.12	-19.4	249	628	-0.4
750	12.91	2.28	-26.0	244	618	-0.4
800	11.87	2.44	-33.0	239	609	-0.4
850	10.57	2.61	-40.2	234	601	-0.4
900	9.01	2.77	-47.6	229	593	-0.4
950	7.18	2.94	-55.2	224	585	-0.5
1000	5.07	3.11	-63.0	219	577	-0.6
1050	2.69	3.28	-71.0	214	569	-0.6
1100	0.00	3.46	-79.2	210	562	-0.7

TYPE CF 1 CALIBER 7.62 MM AVERAGE DENSITY 11.00 GRAMS/CC.
PROJ. WT 13.090 GRAMS PROJ. DIA. 6.30 MM IMPULSE 2.1 LB. SEC.
DRAG RDCR. WT. 0.000 GRAMS CHG. WT. 1.69 GRAMS SABOT WT. 0.187 GRAMS
TWIST RATE NA PCT. DRAG CHANGE / (DEG. YAW)**2 0.71

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	34.0	551	2015	0.0
0	0.00	0.00	34.0	551	1987	0.0
50	1.63	0.09	32.2	532	1849	-0.2
100	3.16	0.19	30.4	512	1717	-0.4
150	4.61	0.29	28.4	493	1592	-0.6
200	5.96	0.39	26.3	474	1473	-0.7
250	7.19	0.50	24.0	456	1361	-0.9
300	8.31	0.61	21.5	438	1255	-1.1
350	9.30	0.73	18.8	420	1155	-1.2
400	10.16	0.85	15.8	403	1062	-1.4
450	10.86	0.98	12.6	386	975	-1.5
500	11.40	1.11	9.1	370	895	-1.6
550	11.75	1.25	5.3	354	822	-1.7
600	11.92	1.39	1.2	342	767	-1.5
650	11.87	1.54	-3.2	333	725	-1.3
700	11.60	1.69	-7.8	324	687	-1.3
750	11.10	1.85	-12.8	316	653	-1.3
800	10.36	2.01	-17.9	308	621	-1.3
850	9.35	2.17	-23.3	301	592	-1.3
900	8.08	2.34	-28.9	294	565	-1.3
950	6.52	2.51	-34.9	287	539	-1.3
1000	4.66	2.69	-41.1	281	516	-1.3
1050	2.49	2.87	-47.6	275	493	-1.3
1100	0.00	3.05	-54.3	269	472	-1.3

DRAG RDCR. WT. 0.389 GRAMS PCT. DRAG CHANGE / (DEG. YAW)**2 2.41

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	20.5	551	2015	0.0
0	0.00	0.00	20.5	551	1987	0.0
50	0.96	0.09	18.8	547	1953	0.0
100	1.84	0.18	17.1	542	1920	-0.1
150	2.64	0.28	15.4	538	1887	-0.1
200	3.36	0.37	13.7	533	1854	-0.2
250	3.98	0.46	11.9	529	1822	-0.2
300	4.52	0.56	10.1	524	1790	-0.3
350	4.98	0.65	8.3	520	1759	-0.3
400	5.34	0.75	6.4	516	1728	-0.3
450	5.61	0.85	4.5	511	1698	-0.4
500	5.78	0.95	2.6	507	1668	-0.4
550	5.85	1.05	0.6	503	1638	-0.4
600	5.82	1.14	-1.4	499	1609	-0.5
650	5.69	1.24	-3.4	494	1580	-0.5
700	5.46	1.35	-5.5	490	1551	-0.6
750	5.12	1.45	-7.6	486	1523	-0.6
800	4.68	1.55	-9.7	482	1495	-0.7
850	4.13	1.66	-11.9	478	1468	-0.7
900	3.47	1.76	-14.1	473	1441	-0.7
950	2.69	1.87	-16.3	469	1414	-0.8
1000	1.78	1.98	-18.6	465	1388	-0.8
1050	0.75	2.08	-20.9	461	1362	-0.9
1100	0.00	2.19	-23.3	457	1336	-0.9

TYPE CF 1 CALIBER 7.62 MM AVERAGE DENSITY 16.70 GRAMS/CC.
PROJ. WT 19.873 GRAMS PROJ. DIA. 6.30 MM IMPULSE 0.8 LB. SEC.
DRAG RDCR. WT. 0.000 GRAMS CHG. WT. 0.33 GRAMS SABOT WT. 0.187 GRAMS
TWIST RATE NA PCT. DRAG CHANGE / (DEG. YAW)**2 0.71

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	100.0	197	389	0.0
0	0.00	0.00	100.0	197	386	0.0
50	4.60	0.26	86.9	194	373	0.0
100	8.54	0.52	73.4	191	362	-0.1
150	11.81	0.78	59.5	188	351	-0.1
200	14.38	1.05	45.1	185	340	-0.1
250	16.23	1.32	30.3	182	329	-0.1
300	17.34	1.60	15.0	178	320	-0.1
350	17.69	1.88	-0.8	177	310	-0.1
400	17.26	2.17	-17.0	174	301	-0.1
450	16.01	2.46	-33.8	172	293	-0.1
500	13.93	2.75	-51.0	169	284	-0.1
550	11.00	3.05	-68.7	167	277	-0.1
600	7.18	3.35	-86.9	165	269	-0.1
650	2.45	3.66	-105.5	162	262	-0.1
673	0.00	3.80	-114.1	161	259	-0.1

DRAG RDCR. WT. 0.389 GRAMS PCT. DRAG CHANGE / (DEG. YAW)**2 2.41

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	100.0	197	389	0.0
0	0.00	0.00	100.0	197	386	0.0
50	4.60	0.26	87.0	196	380	0.0
100	8.56	0.51	73.9	194	374	0.0
150	11.86	0.77	60.6	193	368	0.0
200	14.51	1.03	47.0	192	362	0.0
250	16.48	1.29	33.4	190	357	-0.1
300	17.78	1.56	19.3	189	352	-0.1
350	18.39	1.83	5.4	188	347	-0.1
400	18.31	2.10	-8.8	187	342	-0.1
450	17.53	2.38	-23.2	186	338	-0.1
500	16.04	2.66	-37.7	185	333	-0.1
550	13.82	2.95	-52.5	184	329	-0.1
600	10.88	3.25	-67.4	182	325	-0.1
650	7.19	3.55	-82.8	180	321	-0.1
700	2.73	3.85	-98.6	177	304	-0.2
727	0.00	3.89	-107.3	175	300	-0.2

TYPE CF 1 CALIBER 7.62 MM AVERAGE DENSITY 16.70 GRAMS/CC.
PROJ. WT 19.873 GRAMS PROJ. DIA. 6.30 MM IMPULSE 1.2 LB. SEC.
DRAG RDCR, WT. 0.000 GRAMS CHG. WT. 0.43 GRAMS SABOT WT. 0.187 GRAMS
TWIST RATE NA PCT. DRAG CHANGE / (DEG. YAW)**2 0.71

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	100.0	258	668	0.0
0	0.00	0.00	100.0	258	661	0.0
50	4.73	0.20	92.4	254	641	0.0
100	9.09	0.40	84.5	250	622	-0.1
150	13.04	0.60	76.4	246	603	-0.1
200	16.60	0.80	68.1	243	585	-0.1
250	19.73	1.01	59.4	239	568	-0.2
300	22.44	1.22	50.6	235	551	-0.2
350	24.70	1.44	41.4	232	534	-0.2
400	26.50	1.65	32.0	228	519	-0.3
450	27.84	1.87	22.3	225	503	-0.3
500	28.69	2.10	12.3	222	489	-0.3
550	29.04	2.32	2.0	218	474	-0.4
600	28.88	2.56	-8.7	215	461	-0.4
650	28.19	2.79	-19.6	212	447	-0.4
700	26.95	3.03	-30.9	209	435	-0.4
750	25.16	3.27	-42.4	206	422	-0.5
800	22.78	3.51	-54.4	203	411	-0.5
850	19.82	3.76	-66.6	200	399	-0.5
900	16.24	4.01	-79.2	198	388	-0.5
950	12.02	4.27	-92.2	195	378	-0.5
1000	7.16	4.53	-105.5	192	367	-0.6
1050	1.63	4.79	-119.2	190	358	-0.6
1064	0.00	4.86	-123.0	189	355	-0.6

DRAG RDCR. WT. 0.389 GRAMS PCT. DRAG CHANGE / (DEG. YAW)**2 2.41

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	90.7	258	668	0.0
0	0.00	0.00	90.7	258	661	0.0
50	4.28	0.20	83.2	256	652	0.0
100	8.18	0.39	75.5	253	644	0.0
150	11.70	0.59	67.8	253	639	0.0
200	14.84	0.79	60.0	252	627	-0.1
250	17.59	0.99	52.0	250	618	-0.1
300	19.95	1.19	44.0	249	610	-0.1
350	21.91	1.39	35.9	247	602	-0.1
400	23.48	1.58	27.7	246	594	-0.1
450	24.63	1.80	19.4	244	587	-0.1
500	25.38	2.00	10.9	243	579	-0.1
550	25.71	2.21	2.4	242	572	-0.2
600	25.62	2.43	-6.2	241	564	-0.2
650	25.10	2.65	-14.8	240	557	-0.2
700	24.16	2.88	-23.7	238	550	-0.2
750	22.78	3.12	-32.8	236	541	-0.2
800	20.96	3.36	-42.1	235	526	-0.3
850	18.69	3.62	-51.6	233	511	-0.3
900	15.95	3.88	-61.3	231	496	-0.3
950	12.72	4.15	-71.3	229	482	-0.3
1000	9.00	4.43	-81.6	227	469	-0.4
1050	4.76	4.72	-92.3	225	455	-0.4
1100	0.00	5.02	-103.3	223	443	-0.4

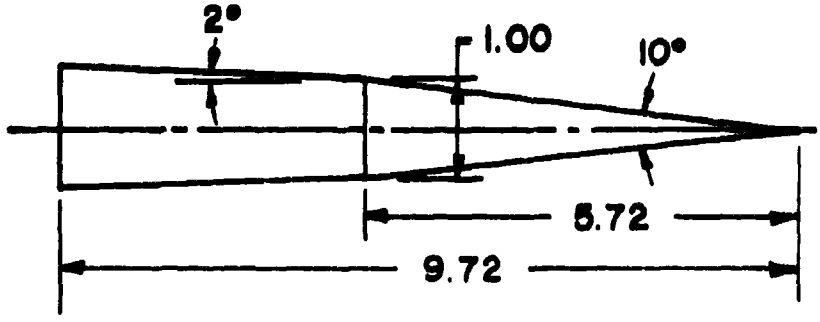
TYPE CF 1 CALIBER 7.62 MM AVERAGE DENSITY 16.70 GRAMS/CC.
PROJ. WT 19.873 GRAMS PROJ. DIA. 6.30 MM IMPULSE 2.1 LB. SEC.
DRAG RDCR. WT. 0.000 GRAMS CHG. WT. 1.19 GRAMS SABOT WT. 0.187 GRAMS
TWIST RATE NA PCT. DRAG CHANGE / (DEG. YAW)**2 0.71

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	50.3	394	1557	0.0
0	0.00	0.00	50.3	394	1543	0.0
50	2.39	0.13	47.0	388	1456	-0.1
100	4.61	0.26	43.5	382	1378	-0.2
150	6.66	0.40	39.8	376	1302	-0.3
200	8.52	0.54	35.9	370	1232	-0.4
250	10.18	0.68	31.7	364	1176	-0.4
300	11.64	0.83	27.4	357	1131	-0.4
350	12.87	0.98	23.0	351	1091	-0.4
400	13.89	1.13	18.5	345	1055	-0.4
450	14.67	1.29	13.8	339	1017	-0.5
500	15.22	1.44	8.6	333	983	-0.5
550	15.52	1.60	3.4	327	952	-0.6
600	15.56	1.77	-1.9	321	922	-0.6
650	15.33	1.93	-7.4	315	893	-0.6
700	14.84	2.10	-13.0	309	866	-0.7
750	14.06	2.27	-18.8	303	840	-0.7
800	13.00	2.44	-24.8	297	815	-0.7
850	11.63	2.62	-31.0	292	791	-0.7
900	9.96	2.80	-37.4	286	768	-0.8
950	7.97	2.98	-43.9	280	746	-0.8
1000	5.65	3.16	-50.7	274	725	-0.8
1050	3.00	3.35	-57.6	268	705	-0.8
1100	0.00	3.54	-64.8	263	685	-0.8

DRAG RDCR. WT. 0.389 GRAMS PCT. DRAG CHANGE / (DEG. YAW)**2 2.41

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	38.9	394	1557	0.0
0	0.00	0.00	38.9	394	1543	0.0
50	2.39	0.13	35.7	388	1456	-0.1
100	4.61	0.26	32.4	382	1378	-0.2
150	6.66	0.40	29.1	376	1302	-0.3
200	8.52	0.54	25.7	370	1232	-0.4
250	10.18	0.68	22.2	364	1176	-0.4
300	11.64	0.83	18.6	357	1131	-0.4
350	12.87	0.98	14.8	351	1091	-0.4
400	13.89	1.13	10.9	345	1055	-0.4
450	14.67	1.29	6.8	339	1017	-0.5
500	15.22	1.44	2.6	333	983	-0.5
550	15.52	1.60	-1.8	327	952	-0.6
600	15.56	1.77	-6.3	321	922	-0.6
650	15.33	1.93	-11.0	315	893	-0.6
700	14.84	2.10	-15.8	309	866	-0.7
750	14.06	2.27	-20.8	303	840	-0.7
800	13.00	2.44	-26.0	297	815	-0.7
850	11.63	2.62	-31.4	292	791	-0.7
900	9.96	2.80	-37.0	286	768	-0.8
950	7.97	2.98	-42.8	280	746	-0.8
1000	5.65	3.16	-48.8	274	725	-0.8
1050	3.00	3.35	-55.0	268	705	-0.8
1100	0.00	3.54	-61.4	263	685	-0.8

CF 2



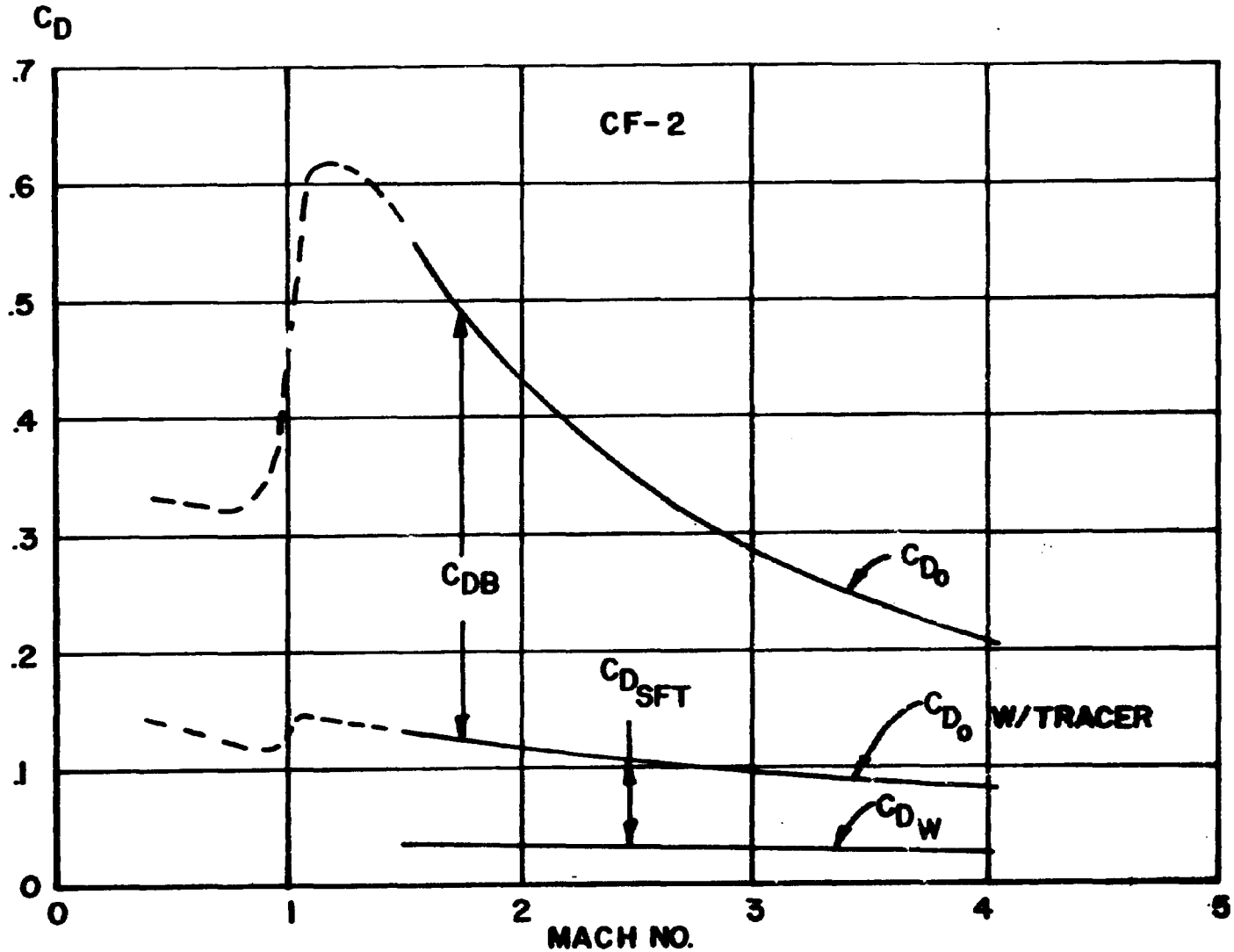
ALL DIMENSIONS ARE IN CALIBERS

Axial Radius of Gyration = 0.377 Cal. Wetted Area = 23.34 Cal.^{2}
Transverse Radius of Gyration = 1.97 Cal. Volume = 5.60 Cal.^{3}
Center of Mass (Nose) = 6.92 Cal. Length = 9.72 Cal.

Mach No.	C_{D_0}	C_{D_B}	C_{D_0} (Tracer)	$C_{D_{SF_T}}$	C_{D_W}	C_{N_α}	CP_N	C_{M_α}
.4 *	.334		.144			3.47	5.62	4.51
.8 *	.322		.122			3.50	5.62	4.55
.9 *	.353		.119			3.53	5.62	4.59
.95*	.419		.118			3.60	5.63	4.64
1.0 *	.485		.130			3.68	5.63	4.67
1.05*	.550		.147			3.88	5.65	4.73
1.1 *	.616		.144			3.95	5.70	4.74
1.2 *	.616		.141			3.92	5.72	4.78
1.5	.572	.440	.132	.097	.035	3.89	5.69	4.78
2.0	.435	.318	.117	.086	.032	3.77	5.68	4.67
2.5	.346	.240	.106	.076	.030	3.75	5.70	4.50
3.0	.284	.188	.096	.068	.028	3.75	5.75	4.39
3.5	.239	.151	.088	.061	.027	3.74	5.78	4.26
4.0	.206	.124	.081	.056	.026	3.74	5.80	4.19

$C_{D_{\alpha^2}}$ (Mach = 2.5) = 8.12 (1/radian squared)

*Estimated data


C_D
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.6
.5
.4
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4
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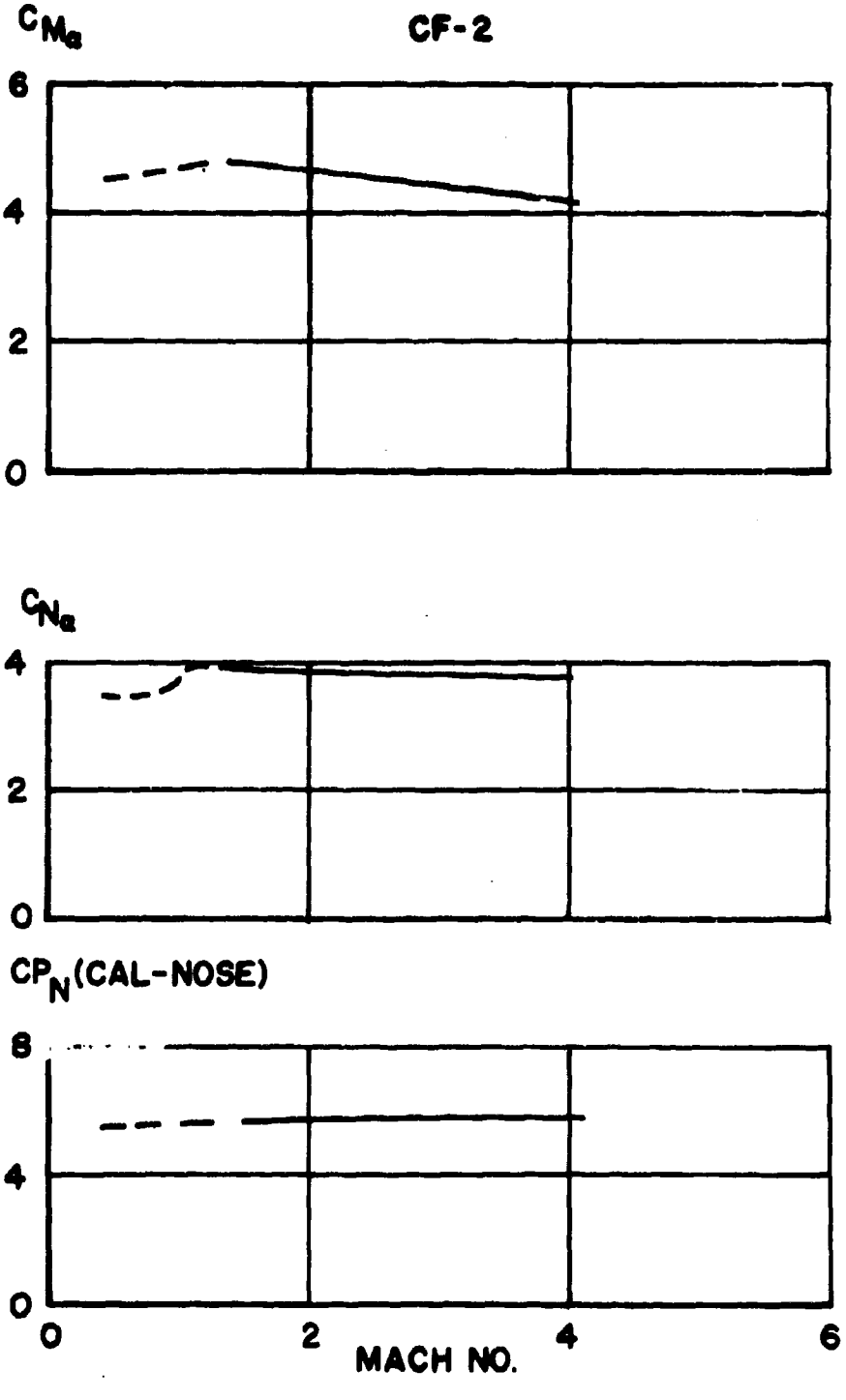
MACH NO.



CF-2-3

TYPE CF 2 CALIBER 5.56 MM AVERAGE DENSITY 7.80 GRAMS/CC.
PROJ. WT 3.578 GRAMS PROJ. DIA. 4.35 MM IMPULSE 0.8 LB. SEC.
DRAG RDCR. WT. 0.000 GRAMS CHG. WT. 0.79 GRAMS SABOT WT. 0.073 GRAMS
TWIST RATE NA PCT. DRAG CHANGE / (DEG. YAW)**2 0.71

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	33.9	717	938	0.0
0	0.00	0.00	33.9	717	920	0.0
50	1.64	0.07	32.9	679	825	-0.4
100	3.23	0.15	31.7	641	735	-0.8
150	4.76	0.23	30.4	603	650	-1.1
200	6.22	0.31	29.0	565	571	-1.5
250	7.60	0.41	27.3	527	497	-1.9
300	8.90	0.50	25.4	490	430	-2.2
350	10.09	0.61	23.1	455	370	-2.5
400	11.17	0.72	20.5	421	317	-2.7
450	12.11	0.85	17.5	389	271	-2.8
500	12.88	0.98	13.9	361	233	-2.9
550	13.47	1.12	9.8	338	204	-2.6
600	13.84	1.28	5.1	319	183	-2.2
650	13.97	1.44	0.0	305	166	-2.0
700	13.84	1.61	-5.6	291	152	-1.9
750	13.42	1.78	-11.8	279	140	-1.9
800	12.69	1.96	-18.4	268	129	-1.8
850	11.61	2.15	-25.7	257	118	-1.9
900	10.17	2.35	-33.5	247	109	-1.9
950	8.32	2.56	-42.1	237	101	-1.9
1000	6.03	2.77	-51.3	228	93	-2.0
1050	3.28	3.00	-61.4	218	85	-2.0
1100	0.00	3.23	-72.3	210	79	-2.0

DRAG RDCR. WT. 0.151 GRAMS PCT. DRAG CHANGE / (DEG. YAW)**2 2.34

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	13.5	717	938	0.0
0	0.00	0.00	13.5	717	920	0.0
50	0.64	0.07	12.5	707	892	-0.1
100	1.23	0.14	11.5	696	865	-0.2
150	1.76	0.21	10.4	686	839	-0.3
200	2.25	0.29	9.3	676	813	-0.4
250	2.68	0.36	8.2	666	788	-0.5
300	3.06	0.44	7.1	655	764	-0.6
350	3.38	0.51	5.9	645	740	-0.7
400	3.65	0.59	4.7	636	717	-0.8
450	3.85	0.67	3.4	626	694	-0.9
500	3.99	0.75	2.1	616	671	-1.0
550	4.07	0.83	0.8	606	650	-1.1
600	4.08	0.92	-0.6	597	628	-1.2
650	4.02	1.00	-2.0	587	608	-1.2
700	3.89	1.09	-3.5	578	588	-1.3
750	3.69	1.18	-5.0	568	568	-1.4
800	3.41	1.26	-6.6	559	549	-1.5
850	3.05	1.35	-8.2	550	530	-1.6
900	2.61	1.45	-9.9	540	512	-1.6
950	2.09	1.54	-11.6	531	494	-1.7
1000	1.49	1.63	-13.4	522	477	-1.8
1050	0.79	1.73	-15.3	514	460	-1.9
1100	0.00	1.83	-17.2	505	444	-1.9

TYPE CF 2 CALIBER 5.56 MM AVERAGE DENSITY 7.80 GRAMS/CC.
PROJ. WT 3.578 GRAMS PROJ. DIA. 4.35 MM IMPULSE 1.2 LB. SEC.
DRAG RDCR. WT. 0.000 GRAMS CHG. WT. 1.50 GRAMS SABOT WT. 0.073 GRAMS
TWIST RATE NA PCT. DRAG CHANGE / (DEG. YAW)**2 0.71

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	15.0	976	1739	0.0
0	0.00	0.00	15.0	976	1704	0.0
50	0.72	0.05	14.4	939	1576	-0.4
100	1.42	0.11	13.8	901	1453	-0.8
150	2.08	0.16	13.2	864	1334	-1.1
200	2.71	0.22	12.5	826	1221	-1.5
250	3.31	0.28	11.7	788	1111	-1.9
300	3.86	0.35	10.9	750	1007	-2.3
350	4.38	0.42	9.9	712	907	-2.7
400	4.84	0.49	8.9	674	814	-3.0
450	5.26	0.57	7.7	636	725	-3.4
500	5.61	0.65	6.4	598	640	-3.8
550	5.89	0.73	4.9	560	561	-4.2
600	6.10	0.83	3.2	523	488	-4.5
650	6.21	0.93	1.3	486	422	-4.8
700	6.22	1.03	-1.0	451	363	-5.0
750	6.12	1.15	-3.7	417	311	-5.1
800	5.87	1.27	-6.8	386	266	-5.1
850	5.45	1.41	-10.4	358	229	-5.0
900	4.85	1.55	-14.6	335	201	-4.4
950	4.02	1.71	-19.3	318	180	-3.8
1000	2.96	1.87	-24.5	303	164	-3.2
1050	1.62	2.04	-30.2	290	150	-2.9
1100	0.00	2.21	-36.4	278	138	-2.8

DRAG RDCR. WT. 0.151 GRAMS PCT. DRAG CHANGE / (DEG. YAW)**2 2.34

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	7.0	976	1739	0.0
0	0.00	0.00	7.0	976	1704	0.0
50	0.33	0.05	6.4	964	1661	-0.1
100	0.63	0.10	5.9	952	1618	-0.2
150	0.91	0.16	5.3	940	1576	-0.4
200	1.16	0.21	4.8	928	1535	-0.5
250	1.38	0.26	4.2	916	1494	-0.6
300	1.57	0.32	3.6	904	1454	-0.7
350	1.73	0.38	3.0	892	1415	-0.8
400	1.87	0.43	2.3	880	1377	-0.9
450	1.97	0.49	1.7	868	1340	-1.0
500	2.04	0.55	1.0	857	1303	-1.2
550	2.07	0.61	0.3	845	1267	-1.3
600	2.07	0.67	-0.4	834	1232	-1.4
650	2.04	0.73	-1.1	822	1198	-1.5
700	1.97	0.79	-1.9	811	1164	-1.6
750	1.87	0.85	-2.7	800	1131	-1.7
800	1.72	0.91	-3.4	789	1098	-1.8
850	1.54	0.98	-4.3	777	1066	-1.9
900	1.32	1.04	-5.1	766	1035	-2.0
950	1.05	1.11	-6.0	755	1005	-2.1
1000	0.75	1.17	-6.8	744	975	-2.2
1050	0.40	1.24	-7.8	734	946	-2.3
1100	0.00	1.31	-8.7	723	918	-2.4

TYPE CF 2 CALIBER 5.56 MM AVERAGE DENSITY 7.80 GRAMS/CC.
PROJ. WT 3.578 GRAMS PROJ. DIA. 4.35 MM IMPULSE 2.1 LB. SEC.
DRAG RDCR. WT. 0.000 GRAMS CHG. WT. 3.52 GRAMS SABOT WT. 0.073 GRAMS
TWIST RATE NA PCT. DRAG CHANGE / (DEG. YAW)**2 0.71

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	5.1	1363	3391	0.0
0	0.00	0.00	5.1	1363	3324	0.0
50	0.24	0.04	4.8	1327	3152	-0.4
100	0.47	0.08	4.5	1291	2983	-0.7
150	0.68	0.11	4.2	1255	2818	-1.1
200	0.88	0.16	3.8	1219	2658	-1.4
250	1.06	0.20	3.5	1183	2502	-1.8
300	1.23	0.24	3.1	1146	2351	-2.2
350	1.38	0.28	2.7	1110	2203	-2.6
400	1.50	0.33	2.3	1073	2059	-2.9
450	1.61	0.38	1.9	1036	1920	-3.3
500	1.69	0.43	1.4	999	1785	-3.7
550	1.75	0.48	0.9	962	1655	-4.1
600	1.79	0.53	0.3	924	1528	-4.5
650	1.79	0.59	-0.3	887	1407	-4.9
700	1.77	0.64	-1.0	849	1290	-5.3
750	1.71	0.70	-1.7	812	1179	-5.6
800	1.61	0.77	-2.5	774	1071	-6.1
850	1.47	0.83	-3.4	736	968	-6.5
900	1.29	0.90	-4.3	698	871	-6.8
950	1.06	0.98	-5.4	660	779	-7.2
1000	0.77	1.05	-6.6	622	692	-7.6
1050	0.42	1.14	-8.0	584	610	-8.0
1100	0.00	1.23	-9.6	546	533	-8.4

DRAG RDCR. WT. 0.151 GRAMS PCT. DRAG CHANGE / (DEG. YAW)**2 2.34

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	3.4	1363	3391	0.0
0	0.00	0.00	3.4	1363	3324	0.0
50	0.16	0.04	3.1	1349	3253	-0.1
100	0.31	0.07	2.9	1335	3184	-0.3
150	0.44	0.11	2.6	1321	3116	-0.4
200	0.56	0.15	2.3	1307	3049	-0.6
250	0.67	0.19	2.0	1293	2983	-0.7
300	0.76	0.23	1.7	1279	2918	-0.8
350	0.84	0.27	1.4	1265	2854	-1.0
400	0.90	0.31	1.1	1252	2790	-1.1
450	0.95	0.35	0.7	1238	2728	-1.2
500	0.98	0.39	0.4	1224	2667	-1.4
550	1.00	0.43	0.1	1211	2607	-1.5
600	0.99	0.47	-0.3	1197	2547	-1.6
650	0.98	0.51	-0.6	1184	2489	-1.7
700	0.94	0.55	-1.0	1170	2431	-1.9
750	0.89	0.60	-1.4	1157	2375	-2.0
800	0.82	0.64	-1.7	1144	2319	-2.1
850	0.73	0.68	-2.1	1131	2265	-2.2
900	0.63	0.73	-2.5	1117	2211	-2.4
950	0.50	0.77	-2.9	1104	2158	-2.5
1000	0.35	0.82	-3.3	1091	2106	-2.6
1050	0.19	0.87	-3.8	1078	2054	-2.7
1100	0.00	0.91	-4.2	1065	2004	-2.8

TYPE CF 2 CALIBER 5.56 MM AVERAGE DENSITY 11.00 GRAMS/CC.
PROJ. WT 5.047 GRAMS PROJ. DIA. 4.35 MM IMPULSE 0.8 LB. SEC.
DRAG RDCR. WT. 0.000 GRAMS CHG. WT. 0.64 GRAMS SABOT WT. 0.073 GRAMS
TWIST RATE NA PCT. DRAG CHANGE / (DEG. YAW)**2 0.71

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	42.0	545	760	0.0
0	0.00	0.00	42.0	545	750	0.0
50	2.02	0.09	40.2	518	678	-0.3
100	3.95	0.19	38.3	492	611	-0.5
150	5.78	0.30	36.1	467	550	-0.8
200	7.50	0.41	33.7	442	494	-1.0
250	9.09	0.52	31.0	419	442	-1.2
300	10.54	0.65	28.0	396	396	-1.3
350	11.83	0.78	24.6	375	354	-1.5
400	12.95	0.91	20.9	356	319	-1.5
450	13.88	1.06	16.7	340	291	-1.4
500	14.59	1.21	12.2	326	268	-1.4
550	15.08	1.36	7.3	314	249	-1.3
600	15.31	1.53	2.1	304	233	-1.3
650	15.28	1.69	-3.5	295	219	-1.2
700	14.97	1.87	-9.4	286	206	-1.3
750	14.36	2.04	-15.7	277	194	-1.3
800	13.43	2.23	-22.4	269	183	-1.3
850	12.16	2.42	-29.5	262	173	-1.3
900	10.53	2.61	-37.0	254	163	-1.4
950	8.53	2.81	-45.0	247	154	-1.4
1000	6.12	3.01	-53.4	240	145	-1.4
1050	3.29	3.23	-62.3	233	137	-1.5
1100	0.00	3.44	-71.8	227	130	-1.5

DRAG RDCR. WT. 0.151 GRAMS PCT. DRAG CHANGE / (DEG. YAW)**2 2.34

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	22.2	545	760	0.0
0	0.00	0.00	22.2	545	750	0.0
50	1.05	0.09	20.5	539	731	-0.1
100	2.01	0.19	18.7	532	714	-0.1
150	2.89	0.28	16.9	526	696	-0.2
200	3.67	0.38	15.1	520	679	-0.2
250	4.37	0.47	13.3	514	663	-0.3
300	4.98	0.57	11.3	508	646	-0.4
350	5.49	0.67	9.4	501	630	-0.4
400	5.90	0.77	7.4	495	614	-0.5
450	6.21	0.87	5.3	489	599	-0.5
500	6.42	0.97	3.2	483	584	-0.6
550	6.53	1.08	1.0	477	569	-0.6
600	6.53	1.18	-1.2	472	555	-0.7
650	6.42	1.29	-3.5	466	540	-0.8
700	6.20	1.40	-5.8	460	527	-0.8
750	5.86	1.51	-8.2	454	513	-0.9
800	5.40	1.62	-10.6	449	500	-0.9
850	4.83	1.73	-13.2	443	487	-1.0
900	4.12	1.84	-15.7	437	474	-1.0
950	3.29	1.96	-18.4	432	461	-1.0
1000	2.33	2.08	-21.1	426	449	-1.1
1050	1.23	2.19	-23.9	421	437	-1.1
1100	0.00	2.31	-26.7	416	426	-1.2

TYPE CF 2 CALIBER 5.56 MM AVERAGE DENSITY 11.00 GRAMS/CC.
PROJ. WT 5.047 GRAMS PROJ. DIA. 4.35 MM IMPULSE 1.2 LB. SEC.
DRAG RDCR. WT. 0.000 GRAMS CHG. WT. 1.24 GRAMS SABOT WT. 0.073 GRAMS
TWIST RATE NA PCT. DRAG CHANGE / (DEG. YAW)**2 0.71

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	20.8	757	1467	0.0
0	0.00	0.00	20.8	757	1446	0.0
50	1.00	0.07	19.9	730	1345	-0.3
100	1.95	0.14	18.9	703	1248	-0.5
150	2.85	0.21	17.8	676	1154	-0.8
200	3.70	0.29	16.7	649	1064	-1.1
250	4.49	0.36	15.5	622	978	-1.4
300	5.22	0.45	14.1	595	895	-1.6
350	5.88	0.53	12.6	568	815	-1.9
400	6.46	0.62	11.0	542	740	-2.1
450	6.96	0.72	9.2	515	669	-2.4
500	7.37	0.82	7.2	489	603	-2.6
550	7.68	0.92	5.0	464	543	-2.8
600	7.87	1.03	2.6	439	487	-2.9
650	7.93	1.15	-0.2	416	437	-3.1
700	7.86	1.27	-3.2	394	391	-3.2
750	7.62	1.40	-6.6	372	350	-3.2
800	7.21	1.54	-10.4	354	316	-3.1
850	6.61	1.69	-14.6	338	288	-2.8
900	5.78	1.84	-19.2	325	266	-2.6
950	4.73	1.99	-24.1	313	247	-2.3
1000	3.43	2.16	-29.4	303	232	-2.2
1050	1.86	2.32	-35.0	294	218	-2.0
1100	0.00	2.50	-40.9	285	205	-2.0

DRAG RDCR. WT. 0.151 GRAMS PCT. DRAG CHANGE / (DEG. YAW)**2 2.34

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	11.2	757	1467	0.0
0	0.00	0.00	11.2	757	1446	0.0
50	0.53	0.07	10.3	749	1416	-0.1
100	1.01	0.13	9.4	742	1387	-0.2
150	1.45	0.20	8.5	734	1358	-0.2
200	1.84	0.27	7.5	727	1329	-0.3
250	2.19	0.34	6.6	719	1301	-0.4
300	2.49	0.41	5.6	712	1273	-0.4
350	2.74	0.48	4.6	704	1246	-0.5
400	2.95	0.55	3.6	697	1219	-0.6
450	3.10	0.62	2.5	690	1193	-0.7
500	3.20	0.70	1.5	682	1167	-0.7
550	3.25	0.77	0.4	675	1141	-0.8
600	3.25	0.84	-0.7	668	1116	-0.9
650	3.19	0.92	-1.8	661	1091	-0.9
700	3.08	1.00	-3.0	654	1067	-1.0
750	2.90	1.07	-4.2	646	1043	-1.1
800	2.67	1.15	-5.4	639	1020	-1.1
850	2.39	1.23	-6.6	632	997	-1.2
900	2.04	1.31	-7.9	625	974	-1.3
950	1.62	1.39	-9.2	618	952	-1.3
1000	1.15	1.47	-10.5	611	930	-1.4
1050	0.61	1.55	-11.9	605	908	-1.4
1100	0.00	1.64	-13.2	598	887	-1.5

TYPE CF 2 CALIBER 5.56 MM AVERAGE DENSITY 11.00 GRAMS/CC.
PROJ. WT 5.047 GRAMS PROJ. DIA. 4.35 MM IMPULSE 2.1 LB. SEC.
DRAG RDCR. WT. 0.000 GRAMS CHG. WT. 2.97 GRAMS SABOT WT. 0.073 GRAMS
TWIST RATE NA PCT. DRAG CHANGE / (DEG. YAW)**2 0.71

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	6.6	1132	3280	0.0
0	0.00	0.00	6.6	1132	3234	0.0
50	0.32	0.04	6.2	1106	3087	-0.3
100	0.61	0.09	5.8	1080	2943	-0.5
150	0.89	0.14	5.4	1054	2802	-0.8
200	1.14	0.19	4.9	1028	2665	-1.0
250	1.38	0.23	4.4	1001	2531	-1.3
300	1.58	0.29	3.9	975	2399	-1.6
350	1.77	0.34	3.4	949	2271	-1.9
400	1.92	0.39	2.8	922	2146	-2.1
450	2.05	0.45	2.2	895	2024	-2.4
500	2.14	0.50	1.6	869	1905	-2.7
550	2.21	0.56	0.9	842	1790	-2.9
600	2.24	0.62	0.2	816	1679	-3.2
650	2.23	0.68	-0.6	789	1570	-3.5
700	2.19	0.75	-1.4	762	1465	-3.8
750	2.10	0.81	-2.3	735	1363	-4.0
800	1.97	0.88	-3.3	708	1265	-4.3
850	1.79	0.96	-4.3	681	1171	-4.6
900	1.56	1.03	-5.5	654	1081	-4.8
950	1.27	1.11	-6.7	627	993	-5.1
1000	0.91	1.19	-8.0	600	909	-5.4
1050	0.49	1.28	-9.4	573	829	-5.7
1100	0.00	1.37	-11.0	546	754	-5.9

DRAG RDCR. WT. 0.151 GRAMS PCT. DRAG CHANGE / (DEG. YAW)**2 2.34

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	4.8	1132	3280	0.0
0	0.00	0.00	4.8	1132	3234	0.0
50	0.23	0.04	4.4	1123	3180	-0.1
100	0.43	0.09	4.0	1114	3126	-0.2
150	0.62	0.13	3.6	1104	3073	-0.3
200	0.79	0.18	3.2	1095	3021	-0.4
250	0.93	0.23	2.8	1086	2969	-0.5
300	1.06	0.27	2.3	1077	2918	-0.5
350	1.17	0.32	1.9	1068	2868	-0.6
400	1.25	0.37	1.5	1059	2818	-0.7
450	1.31	0.41	1.0	1050	2769	-0.8
500	1.36	0.46	0.5	1041	2721	-0.9
550	1.38	0.51	0.1	1032	2673	-1.0
600	1.37	0.56	-0.4	1023	2626	-1.1
650	1.35	0.61	-0.9	1014	2579	-1.2
700	1.30	0.66	-1.4	1005	2533	-1.2
750	1.22	0.71	-1.9	996	2487	-1.3
800	1.12	0.76	-2.4	988	2442	-1.4
850	1.00	0.81	-2.9	979	2398	-1.5
900	0.85	0.86	-3.4	970	2354	-1.6
950	0.68	0.91	-3.9	961	2311	-1.7
1000	0.48	0.96	-4.5	953	2268	-1.7
1050	0.25	1.02	-5.0	944	2226	-1.8
1100	0.00	1.07	-5.6	935	2184	-1.9

TYPE CF 2 CALIBER 5.56 MM AVERAGE DENSITY 16.70 GRAMS/CC.
PROJ. WT 7.662 GRAMS PROJ. DIA. 4.35 MM IMPULSE 0.8 LB. SEC.
DRAG RDCR. WT. 0.000 GRAMS CHG. WT. 0.45 GRAMS SABOT WT. 0.073 GRAMS
TWIST RATE NA PCT. DRAG CHANGE / (DEG. YAW)**2 0.71

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	55.9	391	591	0.0
0	0.00	0.00	55.9	391	586	0.0
50	2.66	0.13	52.5	377	544	-0.1
100	5.15	0.27	48.8	364	507	-0.3
150	7.46	0.41	44.9	352	474	-0.3
200	9.56	0.55	40.8	341	446	-0.4
250	11.46	0.70	36.3	332	422	-0.5
300	13.13	0.85	31.7	323	401	-0.5
350	14.57	1.01	26.8	316	382	-0.5
400	15.76	1.17	21.7	309	365	-0.6
450	16.70	1.33	16.3	302	350	-0.6
500	17.36	1.50	10.7	296	336	-0.6
550	17.75	1.67	4.9	290	322	-0.7
600	17.84	1.84	-1.2	284	310	-0.7
650	17.64	2.02	-7.5	279	298	-0.7
700	17.12	2.20	-14.0	274	287	-0.8
750	16.27	2.39	-20.8	268	276	-0.8
800	15.07	2.58	-27.9	263	266	-0.8
850	13.53	2.77	-35.2	258	256	-0.9
900	11.62	2.96	-42.8	253	246	-0.9
950	9.33	3.16	-50.8	249	237	-0.9
1000	6.64	3.37	-59.0	244	228	-1.0
1050	3.53	3.57	-67.6	240	220	-1.0
1100	0.00	3.78	-76.4	235	212	-1.0

DRAG RDCR. WT. 0.151 GRAMS PCT. DRAG CHANGE / (DEG. YAW)**2 2.34

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	40.9	391	591	0.0
0	0.00	0.00	40.9	391	586	0.0
50	1.93	0.13	37.6	388	575	0.0
100	3.69	0.26	34.3	384	565	-0.1
150	5.29	0.39	30.8	381	555	-0.1
200	6.72	0.52	27.4	378	545	-0.1
250	7.97	0.65	23.8	374	535	-0.2
300	9.06	0.79	20.2	371	525	-0.2
350	9.96	0.92	16.6	368	516	-0.2
400	10.69	1.06	12.9	365	506	-0.3
450	11.23	1.20	9.1	362	497	-0.3
500	11.58	1.34	5.2	358	488	-0.3
550	11.74	1.48	1.3	355	479	-0.3
600	11.71	1.62	-2.7	352	470	-0.4
650	11.48	1.76	-6.7	349	462	-0.4
700	11.05	1.90	-10.9	346	454	-0.4
750	10.42	2.05	-15.1	344	446	-0.4
800	9.58	2.20	-19.3	341	439	-0.4
850	8.53	2.34	-23.7	338	432	-0.5
900	7.27	2.49	-28.1	336	425	-0.5
950	5.78	2.64	-32.5	333	418	-0.5
1000	4.08	2.79	-37.1	331	412	-0.5
1050	2.15	2.94	-41.7	328	406	-0.5
1100	0.00	3.10	-46.4	322	390	-0.6

TYPE CF 2 CALIBER 5.56 MM AVERAGE DENSITY 16.70 GRAMS/CC.
PROJ. WT 7.662 GRAMS PROJ. DIA. 4.35 MM IMPULSE 1.2 LB. SEC.
DRAG RDCR. WT. 0.000 GRAMS CHG. WT. 0.95 GRAMS SABOT WT. 0.073 GRAMS
TWIST RATE NA PCT. DRAG CHANGE / (DEG. YAW)**2 0.71

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	32.H	542	1136	0.0
0	0.00	0.00	32.8	542	1125	0.0
50	1.57	0.09	31.)	524	1054	-0.2
100	3.04	0.19	29.1	507	985	-0.3
150	4.42	0.29	27.1	490	919	-0.5
200	5.70	0.40	24.9	473	857	-0.7
250	6.87	0.50	22.6	457	799	-0.8
300	7.93	0.61	20.2	441	744	-1.0
350	8.85	0.73	17.5	425	692	-1.1
400	9.64	0.85	14.6	410	644	-1.2
450	10.29	0.97	11.5	395	598	-1.3
500	10.78	1.10	8.2	381	556	-1.4
550	11.10	1.24	4.7	368	517	-1.5
600	11.24	1.37	0.8	355	484	-1.5
650	11.19	1.52	-3.3	345	455	-1.4
700	10.92	1.67	-7.6	335	430	-1.4
750	10.45	1.82	-12.2	326	407	-1.3
800	9.74	1.97	-17.0	318	388	-1.3
850	8.78	2.13	-22.0	311	371	-1.3
900	7.58	2.29	-27.3	304	355	-1.2
950	6.11	2.46	-32.8	298	341	-1.2
1000	4.36	2.63	-38.6	292	327	-1.2
1050	2.33	2.80	-44.5	287	315	-1.2
1100	0.00	2.98	-50.7	281	303	-1.3

DRAG RDCR. WT. 0.151 GRAMS PCT. DRAG CHANGE / (DEG. YAW)**2 2.34

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	21.0	542	1136	0.0
0	0.00	0.00	21.0	542	1125	0.0
50	0.99	0.09	19.3	538	1107	0.0
100	1.89	0.19	17.5	534	1090	-0.1
150	2.71	0.28	15.8	530	1072	-0.1
200	3.44	0.37	14.0	525	1055	-0.2
250	4.08	0.47	12.2	521	1038	-0.2
300	4.63	0.57	10.3	517	1021	-0.2
350	5.10	0.66	8.4	513	1004	-0.3
400	5.46	0.76	6.5	509	988	-0.3
450	5.74	0.86	4.6	505	972	-0.4
500	5.92	0.96	2.6	501	956	-0.4
550	6.00	1.06	0.6	497	940	-0.4
600	5.98	1.16	-1.4	493	924	-0.5
650	5.86	1.26	-3.5	489	909	-0.5
700	5.64	1.37	-5.6	485	894	-0.5
750	5.32	1.47	-7.8	481	879	-0.6
800	4.89	1.57	-9.9	477	864	-0.6
850	4.35	1.68	-12.1	474	850	-0.7
900	3.71	1.78	-14.4	470	836	-0.7
950	2.95	1.89	-16.7	466	821	-0.7
1000	2.08	2.00	-19.0	462	808	-0.8
1050	1.10	2.11	-21.3	458	794	-0.8
1100	0.00	2.22	-23.7	455	780	-0.8

TYPE CF 2 CALIBER 5.56 MM AVERAGE DENSITY 16.70 GRAMS/CC.
PROJ. WT 7.662 GRAMS PROJ. DIA. 4.95 MM IMPULSE 2.1 LB. SEC.
DRAG RDCR. WT. 0.000 GRAMS CHG. WT. 2.36 GRAMS SABOT WT. 0.073 GRAMS
TWIST RATE NA PCT. DRAG CHANGE / (DEG. YAW)**2 0.71

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	11.2	848	2781	0.0
0	0.00	0.00	11.2	848	2755	0.0
50	0.53	0.06	10.5	830	2642	-0.2
100	1.03	0.12	9.7	813	2531	-0.4
150	1.49	0.18	9.0	795	2422	-0.5
200	1.91	0.25	8.2	777	2315	-0.7
250	2.29	0.31	7.3	760	2211	-0.9
300	2.63	0.38	6.4	742	2109	-1.1
350	2.92	0.45	5.5	724	2009	-1.2
400	3.17	0.52	4.5	706	1912	-1.4
450	3.37	0.59	3.5	689	1817	-1.6
500	3.52	0.66	2.4	671	1726	-1.8
550	3.62	0.74	1.3	653	1636	-1.9
600	3.65	0.81	0.1	636	1548	-2.1
650	3.63	0.89	-1.2	618	1463	-2.3
700	3.54	0.98	-2.6	600	1379	-2.5
750	3.39	1.06	-4.0	582	1299	-2.7
800	3.16	1.15	-5.5	564	1221	-2.8
850	2.86	1.24	-7.1	547	1145	-3.0
900	2.47	1.33	-8.8	529	1073	-3.2
950	2.00	1.43	-10.7	512	1003	-3.3
1000	1.44	1.53	-12.7	495	937	-3.5
1050	0.77	1.63	-14.8	478	875	-3.6
1100	0.00	1.74	-17.0	461	815	-3.7

DRAG RDCR. WT. 0.151 GRAMS PCT. DRAG CHANGE / (DEG. YAW)**2 2.34

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	8.3	848	2781	0.0
0	0.00	0.00	8.3	848	2755	0.0
50	0.39	0.06	7.6	843	2719	-0.1
100	0.75	0.12	6.9	837	2684	-0.1
150	1.07	0.18	6.2	832	2649	-0.2
200	1.36	0.24	5.5	827	2614	-0.2
250	1.61	0.30	4.8	821	2580	-0.3
300	1.83	0.36	4.0	816	2546	-0.3
350	2.01	0.42	3.3	811	2513	-0.4
400	2.15	0.48	2.5	806	2479	-0.4
450	2.26	0.55	1.7	801	2446	-0.5
500	2.33	0.61	0.9	795	2414	-0.5
550	2.36	0.67	0.1	790	2381	-0.6
600	2.35	0.74	-0.7	785	2349	-0.6
650	2.30	0.80	-1.5	780	2317	-0.7
700	2.21	0.86	-2.3	775	2286	-0.7
750	2.08	0.93	-3.1	770	2255	-0.8
800	1.91	0.99	-4.0	764	2224	-0.8
850	1.70	1.06	-4.9	759	2194	-0.9
900	1.45	1.13	-5.7	754	2164	-0.9
950	1.15	1.19	-6.6	749	2134	-1.0
1000	0.81	1.26	-7.5	744	2104	-1.0
1050	0.43	1.33	-8.4	739	2075	-1.1
1100	0.00	1.39	-9.3	734	2046	-1.1

TYPE CF 2 CALIBER 6.50 MM AVERAGE DENSITY 7.80 GRAMS/CC.
PROJ. WT 5.717 GRAMS PROJ. DIA. 5.08 MM IMPULSE 0.8 LB. SEC.
DRAG RDCR. WT. 0.000 GRAMS CHG. WT. 0.58 GRAMS SABOT WT. 0.116 GRAMS
TWIST RATE NA PCT. DRAG CHANGE / (DEG. YAW)**2 0.71

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	56.7	490	700	0.0
0	0.00	0.00	56.7	490	686	0.0
50	2.73	0.11	54.5	460	604	-0.3
100	5.35	0.22	51.9	431	530	-0.6
150	7.83	0.34	49.1	403	464	-0.8
200	10.16	0.47	45.8	377	405	-1.0
250	12.32	0.60	42.0	354	358	-1.1
300	14.28	0.75	37.8	335	321	-1.1
350	16.03	0.90	33.1	320	292	-1.0
400	17.53	1.06	28.0	307	269	-1.0
450	18.77	1.23	22.5	295	249	-1.0
500	19.74	1.40	16.5	285	231	-1.1
550	20.39	1.58	10.1	275	215	-1.1
600	20.73	1.77	3.3	265	201	-1.1
650	20.71	1.96	-4.1	256	187	-1.2
700	20.32	2.16	-12.0	247	175	-1.2
750	19.53	2.36	-20.5	239	163	-1.3
800	18.31	2.58	-29.6	230	152	-1.3
850	16.63	2.80	-39.3	222	141	-1.4
900	14.45	3.03	-49.8	215	132	-1.4
950	11.74	3.26	-61.0	207	123	-1.4
1000	8.46	3.51	-73.0	200	115	-1.5
1050	4.56	3.76	-85.9	193	107	-1.5
1100	0.00	4.03	-99.7	187	100	-1.5

DRAG RDCR. WT. 0.241 GRAMS PCT. DRAG CHANGE / (DEG. YAW)**2 2.34

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	28.9	490	700	0.0
0	0.00	0.00	28.9	490	686	0.0
50	1.36	0.10	26.8	483	665	-0.1
100	2.62	0.21	24.6	476	645	-0.1
150	3.78	0.31	22.3	469	625	-0.2
200	4.82	0.42	20.0	462	606	-0.3
250	5.74	0.53	17.7	455	587	-0.3
300	6.55	0.64	15.2	448	569	-0.4
350	7.24	0.75	12.7	441	551	-0.5
400	7.80	0.87	10.1	435	534	-0.5
450	8.23	0.98	7.4	428	517	-0.6
500	8.53	1.10	4.6	422	500	-0.7
550	8.69	1.22	1.8	415	484	-0.7
600	8.71	1.34	-1.2	409	468	-0.8
650	8.58	1.47	-4.2	402	453	-0.8
700	8.30	1.59	-7.4	396	438	-0.9
750	7.87	1.72	-10.6	390	424	-0.9
800	7.27	1.85	-13.9	384	410	-1.0
850	6.51	1.98	-17.4	378	396	-1.0
900	5.57	2.11	-20.9	372	383	-1.1
950	4.46	2.25	-24.6	366	370	-1.1
1000	3.16	2.39	-28.4	360	357	-1.2
1050	1.68	2.53	-32.3	354	345	-1.2
1100	0.00	2.67	-36.4	348	334	-1.2

TYPE CF 2 CALIBER 6.50 MM AVERAGE DENSITY 7.80 GRAMS/CC.
PROJ. WT 5.717 GRAMS PROJ. DIA. 5.08 MM IMPULSE 1.2 LB. SEC.
DRAG RDCR. WT. 0.000 GRAMS CHG. WT. 1.15 GRAMS SABOT WT. 0.116 GRAMS
TWIST RATE NA PCT. DRAG CHANGE / (DEG. YAW)**2 0.71

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	32.0	682	1357	0.0
0	0.00	0.00	32.0	682	1330	0.0
50	1.54	0.08	30.8	650	1206	-0.3
100	3.03	0.15	29.6	617	1088	-0.7
150	4.45	0.24	28.2	584	977	-1.0
200	5.80	0.33	26.7	552	871	-1.3
250	7.06	0.42	24.9	520	773	-1.6
300	8.24	0.52	22.9	488	682	-1.9
350	9.32	0.62	20.7	458	600	-2.1
400	10.28	0.74	18.3	429	527	-2.3
450	11.10	0.86	15.3	402	461	-2.5
500	11.78	0.99	12.0	376	403	-2.6
550	12.28	1.12	8.2	353	356	-2.5
600	12.58	1.27	3.9	334	320	-2.3
650	12.67	1.42	-0.7	319	291	-2.0
700	12.51	1.58	-5.9	306	268	-1.9
750	12.09	1.75	-11.4	295	249	-1.8
800	11.39	1.92	-17.4	284	231	-1.7
850	10.39	2.10	-23.8	274	215	-1.7
900	9.07	2.29	-30.6	265	201	-1.7
950	7.39	2.48	-38.0	256	187	-1.8
1000	5.34	2.68	-45.9	247	175	-1.8
1050	2.88	2.88	-54.4	239	163	-1.8
1100	0.00	3.10	-63.4	231	152	-1.8

DRAG RDCR. WT. 0.241 GRAMS PCT. DRAG CHANGE / (DEG. YAW)**2 2.34

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	14.4	682	1357	0.0
0	0.00	0.00	14.4	682	1330	0.0
50	0.68	0.07	13.3	673	1295	-0.1
100	1.31	0.15	12.2	665	1260	-0.2
150	1.88	0.22	11.1	656	1227	-0.3
200	2.40	0.30	9.9	648	1194	-0.3
250	2.85	0.38	8.7	639	1161	-0.4
300	3.25	0.46	7.4	631	1130	-0.5
350	3.59	0.54	6.2	622	1099	-0.6
400	3.86	0.62	4.9	614	1068	-0.7
450	4.07	0.70	3.5	606	1039	-0.7
500	4.21	0.78	2.1	598	1009	-0.8
550	4.29	0.87	0.7	589	981	-0.9
600	4.29	0.95	-0.7	581	953	-1.0
650	4.22	1.04	-2.2	573	926	-1.0
700	4.08	1.13	-3.8	565	899	-1.1
750	3.86	1.22	-5.4	557	873	-1.2
800	3.57	1.31	-7.0	550	847	-1.3
850	3.19	1.40	-8.7	542	822	-1.3
900	2.73	1.49	-10.4	534	798	-1.4
950	2.18	1.59	-12.2	526	774	-1.5
1000	1.55	1.68	-14.0	519	751	-1.5
1050	0.82	1.78	-15.9	511	728	-1.6
1100	0.00	1.88	-17.8	504	706	-1.6

TYPE CF 2 CALIBER 6.50 MM AVERAGE DENSITY 7.80 GRAMS/CC.
PROJ. WT 5.717 GRAMS PROJ. DIA. 5.08 MM IMPULSE 2.1 LB. SEC.
DRAG RDCR. WT. 0.000 GRAMS CHG. WT. 2.77 GRAMS SABOT WT. 0.116 GRAMS
TWIST RATE NA PCT. DRAG CHANGE / (DEG. YAW)**2 0.71

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	9.9	1040	3154	0.0
0	0.00	0.00	9.9	1040	3092	0.0
50	0.48	0.05	9.5	1009	2907	-0.3
100	0.93	0.10	9.0	977	2728	-0.6
150	1.36	0.15	8.4	945	2552	-1.0
200	1.76	0.21	7.8	913	2383	-1.3
250	2.13	0.26	7.2	881	2218	-1.6
300	2.47	0.32	6.6	849	2060	-1.9
350	2.78	0.38	5.8	817	1907	-2.3
400	3.05	0.44	5.1	785	1759	-2.6
450	3.28	0.51	4.2	752	1617	-2.9
500	3.47	0.57	3.3	720	1480	-3.2
550	3.61	0.65	2.3	687	1350	-3.6
600	3.70	0.72	1.2	655	1227	-3.9
650	3.73	0.80	-0.1	623	1108	-4.2
700	3.70	0.88	-1.4	590	995	-4.6
750	3.60	0.97	-2.9	558	889	-4.9
800	3.42	1.06	-4.6	525	789	-5.2
850	3.15	1.16	-6.6	494	697	-5.4
900	2.78	1.26	-8.8	463	614	-5.6
950	2.30	1.37	-11.2	434	539	-5.7
1000	1.69	1.49	-14.1	406	472	-5.7
1050	0.93	1.62	-17.3	380	413	-5.7
1100	0.00	1.76	-21.0	357	363	-5.5

DRAG RDCR. WT. 0.241 GRAMS PCT. DRAG CHANGE / (DEG. YAW)**2 2.34

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	5.9	1040	3154	0.0
0	0.00	0.00	5.9	1040	3092	0.0
50	0.28	0.05	5.4	1029	3026	-0.1
100	0.53	0.10	5.0	1019	2962	-0.2
150	0.77	0.15	4.5	1008	2898	-0.3
200	0.97	0.20	4.0	997	2836	-0.4
250	1.16	0.25	3.5	987	2774	-0.5
300	1.32	0.30	2.9	976	2713	-0.6
350	1.45	0.35	2.4	966	2654	-0.7
400	1.56	0.40	1.9	955	2595	-0.8
450	1.64	0.45	1.3	945	2537	-0.9
500	1.70	0.51	0.8	935	2480	-1.0
550	1.72	0.56	0.2	924	2424	-1.1
600	1.72	0.62	-0.4	914	2368	-1.2
650	1.69	0.67	-1.0	904	2314	-1.3
700	1.63	0.73	-1.6	894	2261	-1.4
750	1.54	0.78	-2.3	884	2208	-1.5
800	1.42	0.84	-2.9	874	2156	-1.6
850	1.27	0.90	-3.6	864	2106	-1.7
900	1.08	0.95	-4.3	854	2056	-1.8
950	0.86	1.01	-4.9	844	2007	-1.9
1000	0.61	1.07	-5.7	834	1959	-2.0
1050	0.32	1.13	-6.4	824	1911	-2.0
1100	0.00	1.19	-7.1	815	1865	-2.1

TYPE CF 2 CALIBER 6.50 MM AVERAGE DENSITY 11.00 GRAMS/CC.
PROJ. WT 8.063 GRAMS PROJ. DIA. 5.08 MM IMPULSE 0.8 LB. SEC.
DRAG RDCR. WT. 0.000 GRAMS CHG. WT. 0.42 GRAMS SABOT WT. 0.116 GRAMS
TWIST RATE NA PCT. DRAG CHANGE / (DEG. YAW)**2 0.71

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	65.8	374	572	0.0
0	0.00	0.00	65.8	374	564	0.0
50	3.15	0.14	62.1	358	515	-0.2
100	6.10	0.28	58.0	343	475	-0.3
150	8.84	0.43	53.6	331	442	-0.4
200	11.36	0.58	48.9	320	413	-0.4
250	13.64	0.74	43.9	311	389	-0.5
300	15.67	0.91	38.5	302	368	-0.5
350	17.43	1.07	32.9	294	349	-0.6
400	18.90	1.25	27.0	287	331	-0.6
450	20.08	1.42	20.8	279	315	-0.7
500	20.94	1.60	14.2	272	299	-0.7
550	21.47	1.79	7.3	266	285	-0.7
600	21.65	1.98	0.0	259	271	-0.8
650	21.47	2.18	-7.6	253	258	-0.8
700	20.91	2.38	-15.6	247	245	-0.9
750	19.94	2.58	-24.0	241	233	-0.9
800	18.55	2.79	-32.9	235	222	-1.0
850	16.71	3.01	-42.2	229	211	-1.0
900	14.41	3.23	-52.0	223	201	-1.0
950	11.61	3.46	-62.2	218	191	-1.1
1000	8.29	3.69	-73.0	213	182	-1.1
1050	4.43	3.93	-84.3	208	174	-1.1
1100	0.00	4.17	-96.2	203	165	-1.1

DRAG RDCR. WT. 0.241 GRAMS PCT. DRAG CHANGE / (DEG. YAW)**2 2.34

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	46.3	374	572	0.0
0	0.00	0.00	46.3	374	564	0.0
50	2.18	0.13	42.7	370	551	0.0
100	4.19	0.27	39.0	366	537	-0.1
150	6.01	0.41	35.2	361	525	-0.1
200	7.64	0.55	31.3	357	512	-0.2
250	9.08	0.69	27.4	353	500	-0.2
300	10.32	0.83	23.3	349	488	-0.2
350	11.37	0.97	19.2	346	477	-0.3
400	12.21	1.12	14.9	342	467	-0.3
450	12.84	1.27	10.6	339	457	-0.3
500	13.25	1.42	6.2	335	447	-0.3
550	13.45	1.57	1.7	332	438	-0.4
600	13.43	1.72	-2.8	329	429	-0.4
650	13.18	1.87	-7.5	326	420	-0.4
700	12.70	2.02	-12.2	323	412	-0.4
750	11.98	2.18	-17.1	320	403	-0.4
800	11.03	2.34	-22.0	317	395	-0.5
850	9.83	2.50	-27.0	314	388	-0.5
900	8.38	2.66	-32.1	311	380	-0.5
950	6.68	2.82	-37.4	308	372	-0.5
1000	4.72	2.98	-42.7	305	365	-0.6
1050	2.50	3.15	-48.1	298	347	-0.7
1100	0.00	3.32	-53.9	290	329	-0.8

TYPE CF 2 CALIBER 6.50 MM AVERAGE DENSITY 11.00 GRAMS/CC.
PROJ. WT 8.063 GRAMS PROJ. DIA. 5.08 MM IMPULSE 1.2 LB. SEC.
DRAG RDCR. WT. 0.000 GRAMS CHG. WT. 0.92 GRAMS SABOT WT. 0.116 GRAMS
TWIST RATE NA PCT. DRAG CHANGE / (DEG. YAW)**2 0.71

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	41.3	518	1097	0.0
0	0.00	0.00	41.3	518	1082	0.0
50	1.98	0.10	39.3	496	990	-0.2
100	3.86	0.20	37.2	474	905	-0.4
150	5.63	0.31	34.9	453	826	-0.6
200	7.28	0.42	32.3	432	753	-0.8
250	8.80	0.54	29.5	412	685	-1.0
300	10.18	0.67	26.4	393	623	-1.1
350	11.40	0.80	23.0	375	567	-1.3
400	12.44	0.93	19.3	358	518	-1.3
450	13.30	1.08	15.3	344	477	-1.3
500	13.94	1.22	10.9	332	444	-1.2
550	14.36	1.38	6.2	321	415	-1.2
600	14.55	1.54	1.2	311	391	-1.2
650	14.48	1.70	-4.1	303	370	-1.1
700	14.15	1.87	-9.7	295	351	-1.1
750	13.53	2.04	-15.6	287	333	-1.2
800	12.62	2.21	-21.8	280	316	-1.2
850	11.40	2.39	-28.3	273	301	-1.2
900	9.84	2.58	-35.2	267	287	-1.2
950	7.95	2.77	-42.4	260	273	-1.3
1000	5.68	2.96	-50.0	254	260	-1.3
1050	3.04	3.16	-57.9	248	247	-1.3
1100	0.00	3.37	-66.3	242	235	-1.4

DRAG RDCR. WT. 0.241 GRAMS PCT. DRAG CHANGE / (DEG. YAW)**2 2.34

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	23.9	518	1097	0.0
0	0.00	0.00	23.9	518	1082	0.0
50	1.13	0.10	22.1	513	1059	-0.1
100	2.16	0.20	20.1	508	1036	-0.1
150	3.10	0.29	18.2	502	1014	-0.2
200	3.95	0.39	16.2	497	992	-0.2
250	4.69	0.50	14.1	492	971	-0.3
300	5.34	0.60	12.1	487	950	-0.3
350	5.88	0.70	9.9	482	929	-0.4
400	6.31	0.81	7.7	477	909	-0.4
450	6.64	0.91	5.5	472	889	-0.4
500	6.86	1.02	3.3	467	870	-0.5
550	6.97	1.12	0.9	462	851	-0.5
600	6.96	1.23	-1.4	457	832	-0.6
650	6.84	1.34	-3.8	452	813	-0.6
700	6.59	1.45	-6.3	447	795	-0.7
750	6.22	1.57	-8.8	443	777	-0.7
800	5.73	1.68	-11.4	438	760	-0.8
850	5.11	1.80	-14.0	433	742	-0.8
900	4.36	1.91	-16.7	428	726	-0.8
950	3.48	2.03	-19.5	424	709	-0.9
1000	2.46	2.15	-22.3	419	693	-0.9
1050	1.30	2.27	-25.2	414	677	-1.0
1100	0.00	2.39	-28.1	410	661	-1.0

TYPE CF 2 CALIBER 6.50 MM AVERAGE DENSITY 11.00 GRAMS/CC.

PROJ. WT 8.063 GRAMS PROJ. DIA. 5.08 MM IMPULSE 2.1 LB. SEC.

DRAG RDCR. WT. 0.000 GRAMS CHG. WT. 2.29 GRAMS SABOT WT. 0.116 GRAMS

TWIST RATE NA PCT. DRAG CHANGE / (DEG. YAW)**2 0.71

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	14.8	813	2703	0.0
0	0.00	0.00	14.8	813	2665	0.0
50	0.71	0.06	14.0	790	2516	-0.2
100	1.38	0.13	13.2	767	2372	-0.5
150	2.01	0.19	12.3	744	2232	-0.7
200	2.59	0.26	11.4	721	2096	-0.9
250	3.13	0.33	10.4	698	1965	-1.1
300	3.62	0.40	9.4	675	1838	-1.4
350	4.05	0.48	8.2	652	1715	-1.6
400	4.43	0.56	7.0	629	1596	-1.8
450	4.74	0.64	5.7	606	1481	-2.1
500	4.99	0.72	4.3	583	1371	-2.3
550	5.17	0.81	2.8	560	1265	-2.5
600	5.27	0.90	1.1	537	1164	-2.7
650	5.28	1.00	-0.7	515	1067	-3.0
700	5.20	1.10	-2.7	492	977	-3.1
750	5.03	1.20	-4.8	471	893	-3.3
800	4.74	1.31	-7.2	450	815	-3.4
850	4.33	1.42	-9.8	429	743	-3.5
900	3.78	1.54	-12.6	409	676	-3.6
950	3.09	1.67	-15.8	391	615	-3.7
1000	2.24	1.80	-19.2	373	559	-3.7
1050	1.22	1.94	-23.0	356	512	-3.6
1100	0.00	2.08	-27.1	342	473	-3.4

DRAG RDCR. WT. 0.241 GRAMS PCT. DRAG CHANGE / (DEG. YAW)**2 2.34

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	9.4	813	2703	0.0
0	0.00	0.00	9.4	813	2665	0.0
50	0.44	0.06	8.6	806	2619	-0.1
100	0.85	0.12	7.8	799	2574	-0.1
150	1.21	0.19	7.1	793	2529	-0.2
200	1.54	0.25	6.3	786	2485	-0.3
250	1.83	0.31	5.4	779	2441	-0.3
300	2.08	0.38	4.6	773	2398	-0.4
350	2.29	0.44	3.8	766	2356	-0.5
400	2.45	0.51	2.9	760	2314	-0.5
450	2.58	0.58	2.0	753	2273	-0.6
500	2.66	0.64	1.2	746	2232	-0.7
550	2.70	0.71	0.2	740	2192	-0.7
600	2.69	0.78	-0.7	733	2152	-0.8
650	2.64	0.85	-1.6	727	2113	-0.8
700	2.54	0.91	-2.6	721	2074	-0.9
750	2.40	0.98	-3.5	714	2036	-1.0
800	2.20	1.05	-4.5	708	1998	-1.0
850	1.96	1.13	-5.5	701	1961	-1.1
900	1.67	1.20	-6.6	695	1925	-1.1
950	1.33	1.27	-7.6	689	1889	-1.2
1000	0.94	1.34	-8.7	683	1853	-1.2
1050	0.50	1.42	-9.7	676	1818	-1.3
1100	0.00	1.49	-10.8	670	1784	-1.4

TYPE CF 2 CALIBER 6.50 MM AVERAGE DENSITY 16.70 GRAMS/CC.
PROJ. WT 12.241 GRAMS PROJ. DIA. 5.08 MM IMPULSE 0.8 LB. SEC.
DRAG RDCR. WT. 0.000 GRAMS CHG. WT. 0.28 GRAMS SABOT WT. 0.116 GRAMS
TWIST RATE NA PCT. DRAG CHANGE / (DEG. YAW)**2 0.71

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	95.8	273	460	0.0
0	0.00	0.00	95.8	273	456	0.0
50	4.55	0.19	89.0	268	441	0.0
100	8.75	0.37	81.9	264	426	-0.1
150	12.60	0.57	74.6	259	412	-0.1
200	16.09	0.76	67.1	255	398	-0.2
250	19.19	0.96	59.3	251	385	-0.2
300	21.91	1.16	51.2	247	372	-0.2
350	24.22	1.36	42.8	242	360	-0.3
400	26.11	1.57	34.2	238	348	-0.3
450	27.57	1.78	25.3	234	337	-0.4
500	28.59	2.00	16.0	231	325	-0.4
550	29.14	2.22	6.5	227	315	-0.4
600	29.22	2.44	-3.4	223	305	-0.4
650	28.81	2.67	-13.6	219	295	-0.5
700	27.89	2.90	-24.2	216	285	-0.5
750	26.44	3.13	-35.0	212	276	-0.5
800	24.45	3.37	-46.3	209	267	-0.6
850	21.89	3.61	-57.9	206	259	-0.6
900	18.76	3.85	-69.9	202	251	-0.6
950	15.02	4.10	-82.3	199	243	-0.6
1000	10.66	4.36	-95.1	196	236	-0.7
1050	5.66	4.62	-108.2	193	228	-0.7
1100	0.00	4.88	-121.8	190	222	-0.7

DRAG RDCR. WT. 0.241 GRAMS PCT. DRAG CHANGE / (DEG. YAW)**2 2.34

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	81.7	273	460	0.0
0	0.00	0.00	81.7	273	456	0.0
50	3.85	0.18	75.0	271	449	0.0
100	7.37	0.37	68.2	269	443	0.0
150	10.55	0.56	61.2	268	437	-0.1
200	13.38	0.74	54.2	266	430	-0.1
250	15.87	0.93	47.1	264	424	-0.1
300	18.01	1.12	39.9	262	418	-0.1
350	19.79	1.31	32.6	261	412	-0.1
400	21.20	1.51	25.2	259	406	-0.1
450	22.26	1.70	17.7	257	400	-0.1
500	22.94	1.90	10.0	255	395	-0.2
550	23.24	2.09	2.3	254	389	-0.2
600	23.17	2.29	-5.5	252	384	-0.2
650	22.71	2.49	-13.4	251	378	-0.2
700	21.86	2.69	-21.4	249	373	-0.2
750	20.62	2.89	-29.5	247	368	-0.2
800	18.97	3.09	-37.7	245	359	-0.3
850	16.92	3.30	-46.2	241	348	-0.3
900	14.44	3.51	-54.9	237	337	-0.4
950	11.53	3.72	-64.0	233	326	-0.4
1000	8.16	3.94	-73.3	229	315	-0.4
1050	4.32	4.16	-83.0	226	305	-0.5
1100	0.00	4.38	-93.0	222	296	-0.5

TYPE CF 2 CALIBER 6.50 MM AVERAGE DENSITY 16.70 GRAMS/CC.
PROJ. WT 12.241 GRAMS PROJ. DIA. 5.08 MM IMPULSE 1.2 LB. SEC.
DRAG RDCR. WT. 0.000 GRAMS CHG. WT. 0.62 GRAMS SABOT WT. 0.116 GRAMS
TWIST RATE NA PCT. DRAG CHANGE / (DEG. YAW)**2 0.71

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	56.6	372	855	0.0
0	0.00	0.00	56.6	372	847	0.0
50	2.69	0.14	52.9	361	798	-0.1
100	5.20	0.28	49.0	351	755	-0.2
150	7.50	0.42	44.8	342	716	-0.3
200	9.59	0.57	40.4	334	682	-0.3
250	11.47	0.72	35.8	326	652	-0.4
300	13.11	0.88	31.0	320	625	-0.4
350	14.52	1.03	26.1	313	600	-0.4
400	15.67	1.20	20.9	307	578	-0.5
450	16.57	1.36	15.5	302	558	-0.5
500	17.19	1.53	9.9	297	538	-0.5
550	17.54	1.70	4.1	292	520	-0.6
600	17.60	1.87	-1.9	287	503	-0.6
650	17.36	2.05	-8.1	282	486	-0.6
700	16.81	2.23	-14.5	277	470	-0.7
750	15.94	2.41	-21.1	273	455	-0.7
800	14.75	2.59	-27.9	268	440	-0.7
850	13.21	2.78	-35.0	264	426	-0.7
900	11.32	2.97	-42.2	260	413	-0.8
950	9.07	3.17	-49.8	256	400	-0.8
1000	6.44	3.36	-57.5	252	387	-0.8
1050	3.42	3.56	-65.6	248	375	-0.9
1100	0.00	3.77	-73.8	244	363	-0.9

DRAG RDCR. WT. 0.241 GRAMS PCT. DRAG CHANGE / (DEG. YAW)**2 2.34

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	44.3	372	855	0.0
0	0.00	0.00	44.3	372	847	0.0
50	2.08	0.14	40.6	369	834	0.0
100	3.99	0.27	37.0	366	820	-0.1
150	5.71	0.41	33.2	364	807	-0.1
200	7.25	0.55	29.4	361	795	-0.1
250	8.60	0.69	25.5	358	782	-0.1
300	9.75	0.83	21.6	356	770	-0.2
350	10.72	0.97	17.6	353	758	-0.2
400	11.48	1.11	13.6	350	746	-0.2
450	12.05	1.25	9.5	348	735	-0.2
500	12.42	1.40	5.3	345	724	-0.2
550	12.58	1.54	1.1	343	713	-0.3
600	12.53	1.69	-3.1	341	703	-0.3
650	12.27	1.84	-7.5	339	693	-0.3
700	11.80	1.98	-11.9	336	683	-0.3
750	11.12	2.13	-16.3	334	674	-0.3
800	10.21	2.28	-20.8	332	665	-0.3
850	9.08	2.43	-25.4	330	656	-0.4
900	7.72	2.59	-30.0	328	647	-0.4
950	6.14	2.74	-34.7	326	639	-0.4
1000	4.33	2.89	-39.4	324	631	-0.4
1050	2.28	3.05	-44.2	321	617	-0.5
1100	0.00	3.21	-49.1	314	592	-0.5

TYPE CF 2 CALIBER 6.50 MM AVERAGE DENSITY 16.70 GRAMS/CC.
PROJ. WT 12.241 GRAMS PROJ. DIA. 5.08 MM IMPULSE 2.1 LB. SEC.
DRAG RDCR. WT. 0.000 GRAMS CHG. WT. 1.78 GRAMS SABOT WT. 0.116 GRAMS
TWIST RATE NA PCT. DRAG CHANGE / (DEG. YAW)**2 0.71

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	25.7	584	2107	0.0
0	0.00	0.00	25.7	584	2087	0.0
50	1.22	0.09	24.2	569	1980	-0.2
100	2.37	0.18	22.6	554	1876	-0.3
150	3.44	0.27	20.9	539	1775	-0.5
200	4.43	0.36	19.2	524	1678	-0.6
250	5.32	0.46	17.3	509	1584	-0.7
300	6.13	0.56	15.3	494	1494	-0.9
350	6.83	0.66	13.2	480	1408	-1.0
400	7.42	0.77	10.9	466	1327	-1.1
450	7.91	0.88	8.6	452	1249	-1.2
500	8.27	0.99	6.0	438	1175	-1.4
550	8.50	1.10	3.4	425	1105	-1.5
600	8.60	1.22	0.5	412	1039	-1.6
650	8.56	1.35	-2.5	399	976	-1.7
700	8.36	1.47	-5.8	387	917	-1.7
750	8.00	1.61	-9.2	375	861	-1.8
800	7.46	1.74	-12.9	364	811	-1.8
850	6.74	1.88	-16.7	354	767	-1.8
900	5.83	2.02	-20.8	345	727	-1.7
950	4.71	2.17	-25.2	336	693	-1.7
1000	3.37	2.32	-29.7	329	662	-1.6
1050	1.80	2.48	-34.4	322	634	-1.5
1100	0.00	2.63	-39.3	315	609	-1.5

DRAG RDCR. WT. 0.241 GRAMS PCT. DRAG CHANGE / (DEG. YAW)**2 2.34

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	17.7	584	2107	0.0
0	0.00	0.00	17.7	584	2087	0.0
50	0.83	0.09	16.2	580	2060	0.0
100	1.59	0.17	14.7	577	2032	-0.1
150	2.28	0.26	13.2	573	2005	-0.1
200	2.89	0.35	11.7	569	1978	-0.1
250	3.43	0.44	10.1	565	1951	-0.2
300	3.89	0.52	8.6	562	1925	-0.2
350	4.27	0.61	7.0	558	1899	-0.3
400	4.57	0.70	5.4	554	1873	-0.3
450	4.80	0.79	3.7	551	1848	-0.3
500	4.94	0.88	2.1	547	1822	-0.4
550	5.01	0.98	0.4	544	1797	-0.4
600	4.99	1.07	-1.3	540	1773	-0.4
650	4.88	1.16	-3.0	536	1748	-0.5
700	4.70	1.26	-4.8	533	1724	-0.5
750	4.42	1.35	-6.6	529	1700	-0.5
800	4.06	1.44	-8.3	526	1677	-0.6
850	3.61	1.54	-10.2	522	1653	-0.6
900	3.07	1.64	-12.0	519	1630	-0.6
950	2.44	1.73	-13.9	515	1607	-0.7
1000	1.72	1.83	-15.8	512	1585	-0.7
1050	0.91	1.93	-17.7	508	1562	-0.7
1100	0.00	2.03	-19.6	505	1540	-0.8

TYPE CF 2 CALIBER 7.62 MM AVERAGE DENSITY 7.80 GRAMS/CC.
PROJ. WT 9.212 GRAMS PROJ. DIA. 5.96 MM IMPULSE 0.8 LB. SEC.
DRAG RDCR. WT. 0.000 GRAMS CHG. WT. 0.34 GRAMS SABOT WT. 0.187 GRAMS
TWIST RATE NA PCT. DRAG CHANGE / (DEG. YAW)**2 0.71

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	83.8	335	527	0.0
0	0.00	0.00	83.8	335	517	0.0
50	4.01	0.15	79.2	322	476	-0.1
100	7.79	0.31	74.2	310	443	-0.2
150	11.30	0.48	68.8	300	414	-0.3
200	14.55	0.65	63.1	290	388	-0.4
250	17.50	0.82	56.9	281	365	-0.4
300	20.14	1.00	50.4	273	343	-0.5
350	22.45	1.19	43.5	265	323	-0.6
400	24.41	1.38	36.2	257	304	-0.6
450	26.00	1.58	28.4	249	286	-0.7
500	27.19	1.78	20.1	242	269	-0.7
550	27.97	1.99	11.3	235	253	-0.8
600	28.29	2.21	1.9	228	239	-0.8
650	28.15	2.43	-8.0	221	225	-0.9
700	27.50	2.66	-18.6	214	211	-0.9
750	26.32	2.90	-29.8	208	199	-1.0
800	24.57	3.14	-41.7	202	188	-1.0
850	22.22	3.39	-54.4	196	177	-1.0
900	19.23	3.65	-67.8	190	167	-1.1
950	15.55	3.92	-82.0	185	157	-1.1
1000	11.16	4.20	-97.1	179	148	-1.1
1050	5.99	4.48	-113.1	174	140	-1.1
1100	0.00	4.78	-130.1	169	132	-1.1

DRAG RDCR. WT. 0.389 GRAMS PCT. DRAG CHANGE / (DEG. YAW)**2 2.34

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	58.4	335	527	0.0
0	0.00	0.00	58.4	335	517	0.0
50	2.76	0.15	53.9	331	504	0.0
100	5.29	0.30	49.3	327	491	-0.1
150	7.60	0.46	44.6	324	479	-0.1
200	9.66	0.61	39.7	320	467	-0.1
250	11.50	0.77	34.8	316	456	-0.2
300	13.08	0.93	29.7	313	445	-0.2
350	14.42	1.09	24.6	309	434	-0.2
400	15.50	1.25	19.3	306	423	-0.3
450	16.31	1.42	13.9	302	413	-0.3
500	16.86	1.58	8.4	299	402	-0.3
550	17.14	1.75	2.7	296	392	-0.4
600	17.13	1.92	-3.1	292	383	-0.4
650	16.84	2.09	-9.0	289	373	-0.4
700	16.25	2.27	-15.0	286	364	-0.5
750	15.37	2.44	-21.2	282	354	-0.5
800	14.17	2.62	-27.6	279	346	-0.5
850	12.67	2.80	-34.1	276	337	-0.5
900	10.84	2.98	-40.7	273	328	-0.6
950	8.68	3.17	-47.6	265	309	-0.7
1000	6.16	3.36	-55.0	257	291	-0.8
1050	3.28	3.56	-62.8	249	273	-0.8
1100	0.00	3.77	-71.1	241	257	-0.9

TYPE CF 2 CALIBER 7.62 MM AVERAGE DENSITY 7.80 GRAMS/CC.
PROJ. WT 9.212 GRAMS PROJ. DIA. 5.96 MM IMPULSE 1.2 LB. SEC.
DRAG RDCR. WT. 0.000 GRAMS CHG. WT. 0.82 GRAMS SABOT WT. 0.187 GRAMS
TWIST RATE NA PCT. DRAG CHANGE / (DEG. YAW)**2 0.71

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	55.0	463	1007	0.0
0	0.00	0.00	55.0	463	987	0.0
50	2.64	0.11	52.6	438	883	-0.2
100	5.16	0.23	49.8	414	789	-0.3
150	7.53	0.35	46.7	391	703	-0.7
200	9.74	0.49	43.2	369	628	-0.8
250	11.78	0.62	39.4	350	566	-0.9
300	13.61	0.77	35.1	335	516	-0.9
350	15.22	0.92	30.5	321	476	-0.9
400	16.60	1.08	25.4	310	443	-0.9
450	17.72	1.25	20.1	300	414	-0.9
500	18.57	1.42	14.3	291	389	-0.9
550	19.12	1.59	8.2	282	365	-1.0
600	19.37	1.77	1.7	273	344	-1.0
650	19.29	1.96	-5.2	265	324	-1.1
700	18.87	2.15	-12.5	257	305	-1.1
750	18.07	2.35	-20.3	250	287	-1.1
800	16.88	2.55	-28.5	242	271	-1.2
850	15.27	2.76	-37.3	235	255	-1.2
900	13.22	2.97	-46.6	228	240	-1.3
950	10.70	3.20	-56.4	222	226	-1.3
1000	7.67	3.43	-66.9	215	213	-1.3
1050	4.12	3.66	-78.0	209	201	-1.4
1100	0.00	3.91	-89.8	203	190	-1.4

DRAG RDCR. WT. 0.389 GRAMS PCT. DRAG CHANGE / (DEG. YAW)**2 2.34

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	31.3	463	1007	0.0
0	0.00	0.00	31.3	463	987	0.0
50	1.48	0.11	28.9	457	961	-0.1
100	2.84	0.22	26.5	451	935	-0.1
150	4.08	0.33	24.0	446	910	-0.2
200	5.20	0.44	21.5	440	885	-0.2
250	6.19	0.56	18.9	434	861	-0.3
300	7.05	0.67	16.2	428	837	-0.3
350	7.78	0.79	13.4	423	814	-0.4
400	8.37	0.91	10.6	417	792	-0.4
450	8.82	1.03	7.7	412	770	-0.5
500	9.13	1.15	4.7	406	748	-0.5
550	9.28	1.28	1.6	401	727	-0.6
600	9.29	1.40	-1.5	396	707	-0.6
650	9.14	1.53	-4.8	390	687	-0.7
700	8.83	1.66	-8.1	385	667	-0.7
750	8.35	1.79	-11.5	380	648	-0.8
800	7.71	1.92	-15.0	375	629	-0.8
850	6.89	2.06	-18.6	370	611	-0.9
900	5.89	2.19	-22.3	365	593	-0.9
950	4.71	2.33	-26.1	360	576	-0.9
1000	3.34	2.47	-30.1	355	559	-1.0
1050	1.77	2.61	-34.1	350	543	-1.0
1100	0.00	2.76	-38.2	345	528	-1.0

TYPE CF 2 CALIBER 7.62 MM AVERAGE DENSITY 7.80 GRAMS/CC.
PROJ. WT 9.212 GRAMS PROJ. DIA. 5.96 MM IMPULSE 2.1 LB. SEC.
DRAG RDCR. WT. 0.000 GRAMS CHG. WT. 2.11 GRAMS SABOT WT. 0.187 GRAMS
TWIST RATE NA PCT. DRAG CHANGE / (DEG. YAW)**2 0.71

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	23.6	728	2491	0.0
0	0.00	0.00	23.6	728	2441	0.0
50	1.13	0.07	22.6	700	2259	-0.3
100	2.22	0.14	21.5	673	2085	-0.6
150	3.25	0.22	20.4	645	1917	-0.8
200	4.22	0.30	19.1	617	1755	-1.1
250	5.12	0.38	17.7	589	1600	-1.4
300	5.96	0.47	16.2	562	1453	-1.7
350	6.72	0.56	14.6	534	1314	-1.9
400	7.39	0.66	12.7	507	1184	-2.2
450	7.97	0.76	10.7	480	1063	-2.4
500	8.44	0.86	8.4	455	953	-2.6
550	8.80	0.98	5.8	430	852	-2.7
600	9.02	1.10	3.0	406	761	-2.9
650	9.09	1.22	-0.2	384	679	-3.0
700	9.00	1.36	-3.8	363	607	-3.0
750	8.72	1.50	-7.8	345	549	-2.8
800	8.24	1.65	-12.2	331	503	-2.5
850	7.53	1.80	-17.0	318	465	-2.3
900	6.58	1.96	-22.1	307	434	-2.1
950	5.37	2.13	-27.6	297	407	-2.0
1000	3.88	2.30	-33.4	288	382	-1.9
1050	2.10	2.47	-39.6	279	359	-1.9
1100	0.00	2.66	-46.2	271	339	-1.9

DRAG RDCR. WT. 0.389 GRAMS PCT. DRAG CHANGE / (DEG. YAW)**2 2.34

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	12.2	728	2491	0.0
0	0.00	0.00	12.2	728	2441	0.0
50	0.57	0.07	11.2	720	2387	-0.1
100	1.10	0.14	10.3	713	2335	-0.2
150	1.58	0.21	9.3	705	2283	-0.3
200	2.01	0.28	8.2	697	2232	-0.3
250	2.39	0.35	7.2	690	2182	-0.4
300	2.72	0.43	6.1	682	2132	-0.4
350	3.00	0.50	5.1	675	2084	-0.5
400	3.22	0.57	3.9	668	2036	-0.6
450	3.39	0.65	2.8	660	1989	-0.7
500	3.50	0.73	1.7	653	1943	-0.7
550	3.56	0.80	0.5	646	1898	-0.8
600	3.56	0.88	-0.7	638	1853	-0.9
650	3.50	0.96	-2.0	631	1809	-0.9
700	3.37	1.04	-3.2	624	1766	-1.0
750	3.19	1.12	-4.5	617	1724	-1.1
800	2.94	1.20	-5.9	610	1682	-1.1
850	2.62	1.28	-7.2	602	1642	-1.2
900	2.24	1.37	-8.6	595	1601	-1.3
950	1.79	1.45	-10.1	588	1562	-1.3
1000	1.26	1.54	-11.5	581	1523	-1.4
1050	0.67	1.62	-13.0	575	1486	-1.4
1100	0.00	1.71	-14.5	568	1448	-1.5

TYPE CF 2 CALIBER 7.62 MM AVERAGE DENSITY 11.00 GRAMS/CC.
PROJ. WT 12.991 GRAMS PROJ. DIA. 5.96 MM IMPULSE 0.8 LB. SEC.
DRAG RDCR. WT. 0.000 GRAMS CHG. WT. 0.29 GRAMS SABOT WT. 0.187 GRAMS
TWIST RATE NA PCT. DRAG CHANGE / (DEG. YAW)**2 0.71

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	100.0	261	449	0.0
0	0.00	0.00	100.0	261	442	0.0
50	4.74	0.19	92.5	255	423	-0.1
100	9.10	0.39	84.7	250	405	-0.1
150	13.06	0.60	76.5	244	388	-0.2
200	16.61	0.80	67.9	239	371	-0.2
250	19.73	1.02	59.0	234	355	-0.3
300	22.41	1.23	49.6	229	340	-0.3
350	24.61	1.45	39.9	224	325	-0.3
400	26.32	1.68	29.7	219	311	-0.4
450	27.52	1.91	19.0	214	298	-0.4
500	28.18	2.15	7.9	210	286	-0.5
550	28.29	2.39	-3.7	205	274	-0.5
600	27.81	2.63	-15.8	201	262	-0.5
650	26.73	2.89	-28.5	197	251	-0.6
700	25.02	3.14	-41.7	193	241	-0.6
750	22.64	3.41	-55.4	189	231	-0.6
800	19.56	3.67	-69.8	185	221	-0.6
850	15.77	3.95	-84.7	181	213	-0.7
900	11.22	4.23	-100.3	177	204	-0.7
950	5.89	4.52	-116.6	174	196	-0.7
998	0.00	4.80	-132.7	170	189	-0.7

DRAG RDCR. WT. 0.389 GRAMS PCT. DRAG CHANGE / (DEG. YAW)**2 2.34

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	92.9	261	449	0.0
0	0.00	0.00	92.9	261	442	0.0
50	4.39	0.19	85.5	259	434	0.0
100	8.41	0.39	78.0	256	425	0.0
150	12.05	0.58	70.3	254	417	-0.1
200	15.31	0.78	62.5	252	409	-0.1
250	18.19	0.98	54.6	250	401	-0.1
300	20.67	1.18	46.5	248	393	-0.1
350	22.76	1.39	38.3	245	386	-0.1
400	24.43	1.59	29.9	243	378	-0.2
450	25.69	1.80	21.4	241	371	-0.2
500	26.53	2.01	12.7	239	364	-0.2
550	26.94	2.22	3.9	237	357	-0.2
600	26.91	2.43	-5.1	235	350	-0.2
650	26.44	2.64	-14.2	233	343	-0.3
700	25.52	2.86	-23.5	231	337	-0.3
750	24.14	3.07	-32.9	228	328	-0.3
800	22.29	3.30	-42.7	223	314	-0.4
850	19.95	3.52	-53.0	218	300	-0.4
900	17.08	3.76	-63.7	214	288	-0.5
950	13.68	3.99	-74.9	209	276	-0.5
1000	9.72	4.24	-86.6	205	264	-0.5
1050	5.17	4.48	-98.7	200	253	-0.6
1100	0.00	4.74	-111.4	196	243	-0.6

TYPE CF 2 CALIBER 7.62 MM AVERAGE DENSITY 11.00 GRAMS/CC.
PROJ. WT 12.991 GRAMS PROJ. DIA. 5.96 MM IMPULSE 1.2 LB. SEC.
DRAG RDCR. WT. 0.000 GRAMS CHG. WT. 0.57 GRAMS SABOT WT. 0.187 GRAMS
TWIST RATE NA PCT. DRAG CHANGE / (DEG. YAW)**2 0.71

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	66.4	353	821	0.0
0	0.00	0.00	66.4	353	809	0.0
50	3.16	0.14	62.2	341	756	-0.1
100	6.11	0.29	57.8	331	711	-0.2
150	8.84	0.45	53.1	322	671	-0.3
200	11.33	0.61	48.1	313	637	-0.3
250	13.57	0.77	42.9	306	607	-0.4
300	15.54	0.93	37.4	299	579	-0.4
350	17.24	1.10	31.7	292	554	-0.5
400	18.66	1.28	25.7	285	529	-0.5
450	19.77	1.45	19.5	279	507	-0.6
500	20.57	1.63	12.9	273	485	-0.6
550	21.04	1.82	6.1	268	465	-0.6
600	21.17	2.01	-1.0	262	446	-0.7
650	20.94	2.20	-8.5	256	427	-0.7
700	20.33	2.40	-16.2	251	410	-0.8
750	19.34	2.60	-24.3	246	393	-0.8
800	17.95	2.80	-32.8	241	376	-0.8
850	16.13	3.01	-41.6	236	361	-0.9
900	13.87	3.23	-50.8	231	346	-0.9
950	11.14	3.45	-60.3	226	332	-0.9
1000	7.94	3.67	-70.3	221	318	-1.0
1050	4.23	3.90	-80.7	217	305	-1.0
1100	0.00	4.14	-91.6	212	293	-1.0

DRAG RDCR. WT. 0.389 GRAMS PCT. DRAG CHANGE / (DEG. YAW)**2 2.34

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	50.2	353	821	0.0
0	0.00	0.00	50.2	353	809	0.0
50	2.37	0.14	46.2	350	793	0.0
100	4.53	0.29	42.1	346	777	-0.1
150	6.50	0.43	37.9	343	762	-0.1
200	8.25	0.58	33.6	340	748	-0.1
250	9.79	0.73	29.2	337	734	-0.1
300	11.12	0.87	24.8	334	720	-0.2
350	12.23	1.02	20.3	332	707	-0.2
400	13.12	1.18	15.7	329	695	-0.2
450	13.77	1.33	11.1	326	683	-0.2
500	14.20	1.48	6.3	324	671	-0.3
550	14.40	1.64	1.5	321	659	-0.3
600	14.36	1.79	-3.3	319	648	-0.3
650	14.07	1.95	-8.3	316	637	-0.3
700	13.55	2.11	-13.3	314	626	-0.3
750	12.77	2.27	-18.5	311	615	-0.4
800	11.74	2.43	-23.6	309	604	-0.4
850	10.46	2.59	-28.9	306	594	-0.4
900	8.91	2.76	-34.3	304	584	-0.4
950	7.10	2.92	-39.7	302	574	-0.5
1000	5.01	3.09	-45.3	299	565	-0.6
1050	2.65	3.26	-51.1	297	555	-0.6
1100	0.00	3.44	-57.2	294	546	-0.6

TYPE CF 2 CALIBER 7.62 MM AVERAGE DENSITY 11.00 GRAMS/CC.

PROJ. WT 12.991 GRAMS PROJ. DIA. 5.96 MM IMPULSE 2.1 LB. SEC.

DRAG RDCR. WT. 0.000 GRAMS CHG. WT. 1.70 GRAMS SABOT WT. 0.187 GRAMS

TWIST RATE NA PCT. DRAG CHANGE / (DEG. YAW)**2 0.71

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	33.2	554	2022	0.0
0	0.00	0.00	33.2	554	1994	0.0
50	1.59	0.09	31.6	534	1855	-0.2
100	3.10	0.19	29.7	515	1723	-0.4
150	4.51	0.29	27.8	496	1598	-0.6
200	5.83	0.39	25.7	477	1480	-0.7
250	7.03	0.50	23.4	459	1369	-0.9
300	8.12	0.61	20.9	441	1265	-1.1
350	9.09	0.72	18.3	424	1168	-1.2
400	9.92	0.84	15.4	407	1078	-1.3
450	10.60	0.97	12.2	391	994	-1.5
500	11.12	1.10	8.8	376	917	-1.6
550	11.47	1.23	5.1	361	848	-1.6
600	11.63	1.38	1.2	349	790	-1.5
650	11.59	1.52	-3.1	338	740	-1.5
700	11.33	1.67	-7.6	328	697	-1.4
750	10.85	1.83	-12.4	319	660	-1.4
800	10.12	1.99	-17.4	311	627	-1.3
850	9.14	2.15	-22.7	304	599	-1.3
900	7.90	2.32	-28.3	297	572	-1.3
950	6.37	2.49	-34.1	290	547	-1.3
1000	4.56	2.66	-40.1	284	524	-1.3
1050	2.44	2.84	-46.5	278	502	-1.3
1100	0.00	3.02	-53.1	272	481	-1.3

DRAG RDCR. WT. 0.389 GRAMS PCT. DRAG CHANGE / (DEG. YAW)**2 2.34

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	20.3	554	2022	0.0
0	0.00	0.00	20.3	554	1994	0.0
50	0.96	0.09	18.7	549	1958	0.0
100	1.83	0.18	17.0	545	1923	-0.1
150	2.63	0.27	15.3	540	1889	-0.1
200	3.34	0.37	13.6	535	1855	-0.2
250	3.97	0.46	11.9	531	1821	-0.2
300	4.51	0.56	10.1	526	1788	-0.3
350	4.96	0.65	8.2	522	1756	-0.3
400	5.32	0.75	6.4	517	1724	-0.4
450	5.59	0.84	4.5	513	1692	-0.4
500	5.76	0.94	2.6	508	1661	-0.4
550	5.85	1.04	0.6	504	1630	-0.5
600	5.83	1.14	-1.3	499	1600	-0.5
650	5.72	1.24	-3.4	495	1570	-0.6
700	5.51	1.34	-5.4	490	1541	-0.6
750	5.20	1.45	-7.5	486	1512	-0.7
800	4.78	1.55	-9.7	482	1484	-0.7
850	4.26	1.65	-11.8	477	1456	-0.7
900	3.63	1.76	-14.0	473	1428	-0.8
950	2.89	1.86	-16.3	469	1401	-0.8
1000	2.04	1.97	-18.6	465	1374	-0.8
1050	1.08	2.08	-20.9	460	1348	-0.9
1100	0.00	2.19	-23.3	456	1322	-0.9

TYPE CF 2 CALIBER 7.62 MM AVERAGE DENSITY 16.70 GRAMS/CC.
PROJ. WT 19.723 GRAMS PROJ. DIA. 5.96 MM IMPULSE 0.8 LB. SEC.
DRAG RDCR. WT. 0.000 GRAMS CHG. WT. 0.39 GRAMS SABOT WT. 0.187 GRAMS
TWIST RATE NA PCT. DRAG CHANGE / (DEG. YAW)**2 0.71

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	100.0	197	386	0.0
0	0.00	0.00	100.0	197	383	0.0
50	4.60	0.26	86.9	194	371	0.0
100	8.54	0.52	73.4	191	360	-0.1
150	11.81	0.78	59.5	188	349	-0.1
200	14.39	1.05	45.2	185	339	-0.1
250	16.25	1.32	30.5	183	329	-0.1
300	17.37	1.60	15.3	180	319	-0.2
350	17.74	1.88	-0.4	177	310	-0.2
400	17.33	2.16	-16.3	175	302	-0.2
450	16.11	2.45	-33.0	172	293	-0.2
500	14.08	2.74	-50.1	170	286	-0.2
550	11.19	3.04	-67.5	168	278	-0.3
600	7.43	3.34	-85.5	166	271	-0.3
650	2.77	3.64	-103.9	164	264	-0.3
676	0.00	3.80	-113.6	163	261	-0.3

DRAG RDCR. WT. 0.389 GRAMS PCT. DRAG CHANGE / (DEG. YAW)**2 2.34

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	100.0	197	386	0.0
0	0.00	0.00	100.0	197	383	0.0
50	4.60	0.26	87.0	196	377	0.0
100	8.56	0.51	73.9	194	371	0.0
150	11.87	0.77	60.6	193	365	0.0
200	14.51	1.03	47.1	192	360	0.0
250	16.49	1.29	33.4	190	355	-0.1
300	17.79	1.56	19.5	189	350	-0.1
350	18.40	1.82	5.5	188	345	-0.1
400	18.33	2.09	-8.7	187	340	-0.1
450	17.55	2.36	-23.0	186	336	-0.1
500	16.07	2.63	-37.6	185	331	-0.1
550	13.86	2.90	-52.3	184	327	-0.1
600	10.93	3.17	-67.1	182	320	-0.1
650	7.26	3.45	-82.4	180	312	-0.2
700	2.82	3.73	-98.1	177	303	-0.2
728	0.00	3.89	-107.1	176	299	-0.2

TYPE CF 2 CALIBER 7.62 MM AVERAGE DENSITY 16.70 GRAMS/CC.
PROJ. WT 19.723 GRAMS PROJ. DIA. 5.96 MM IMPULSE 1.2 LB. SEC.
DRAG RDCR. WT. 0.000 GRAMS CHG. WT. 0.43 GRAMS SABOT WT. 0.187 GRAMS
TWIST RATE NA PCT. DRAG CHANGE / (DEG. YAW)**2 0.71

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	100.0	260	673	0.0
0	0.00	0.00	100.0	260	667	0.0
50	4.74	0.19	92.5	256	647	0.0
100	9.10	0.39	84.8	252	628	-0.1
150	13.07	0.59	76.8	249	610	-0.1
200	16.65	0.80	68.6	245	593	-0.1
250	19.82	1.00	60.2	242	576	-0.2
300	22.56	1.21	51.5	238	559	-0.2
350	24.87	1.42	42.6	235	543	-0.2
400	26.74	1.64	33.4	231	528	-0.3
450	28.15	1.85	23.9	228	513	-0.3
500	29.08	2.08	14.1	225	498	-0.3
550	29.54	2.30	4.1	222	484	-0.3
600	29.49	2.53	-6.2	219	471	-0.4
650	28.93	2.76	-16.8	215	458	-0.4
700	27.84	2.99	-27.7	212	445	-0.4
750	26.21	3.23	-38.9	210	433	-0.4
800	24.02	3.47	-50.5	207	421	-0.5
850	21.25	3.71	-62.3	204	410	-0.5
900	17.89	3.96	-74.5	201	399	-0.5
950	13.93	4.21	-87.0	199	389	-0.5
1000	9.34	4.47	-99.8	196	379	-0.6
1050	4.10	4.72	-113.0	193	369	-0.6
1085	0.00	4.91	-122.5	192	362	-0.6

DRAG RDCR. WT. 0.389 GRAMS PCT. DRAG CHANGE / (DEG. YAW)**2 2.34

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	89.1	260	673	0.0
0	0.00	0.00	89.1	260	667	0.0
50	4.20	0.19	81.6	258	658	0.0
100	8.03	0.39	74.1	257	649	0.0
150	11.48	0.58	66.5	255	641	0.0
200	14.56	0.78	58.8	254	632	-0.1
250	17.26	0.98	51.0	252	624	-0.1
300	19.57	1.18	43.1	251	616	-0.1
350	21.49	1.38	35.1	249	608	-0.1
400	23.02	1.58	27.1	248	600	-0.1
450	24.15	1.78	18.9	247	593	-0.1
500	24.88	1.98	10.6	245	585	-0.1
550	25.20	2.19	2.3	244	578	-0.1
600	25.11	2.39	-6.2	243	571	-0.2
650	24.60	2.60	-14.7	241	564	-0.2
700	23.67	2.81	-23.3	240	557	-0.2
750	22.31	3.02	-32.1	238	549	-0.2
800	20.53	3.23	-41.0	235	534	-0.2
850	18.29	3.44	-50.1	232	519	-0.3
900	15.60	3.66	-59.6	229	505	-0.3
950	12.44	3.88	-69.3	225	491	-0.3
1000	8.80	4.11	-79.2	222	478	-0.4
1050	4.66	4.33	-89.5	219	465	-0.4
1100	0.00	4.56	-100.0	216	453	-0.4

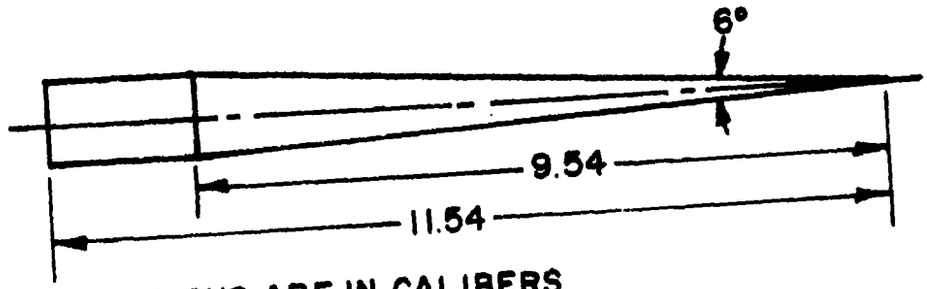
TYPE CF 2 CALIBER 7.62 MM AVERAGE DENSITY 16.70 GRAMS/CC.
PROJ. WT 19.723 GRAMS PROJ. DIA. 5.96 MM IMPULSE 2.1 LB. SEC.
DRAG RDCR. WT. 0.000 GRAMS CHG. WT. 1.20 GRAMS SABOT WT. 0.187 GRAMS
TWIST RATE NA PCT. DRAG CHANGE / (DEG. YAW)**2 0.71

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	49.4	397	1569	0.0
0	0.00	0.00	49.4	397	1554	0.0
50	2.34	0.13	46.1	386	1473	-0.1
100	4.52	0.26	42.7	376	1396	-0.2
150	6.53	0.39	39.0	366	1324	-0.3
200	8.36	0.53	35.2	358	1260	-0.3
250	9.99	0.67	31.2	349	1203	-0.4
300	11.42	0.82	27.0	342	1151	-0.4
350	12.64	0.97	22.7	335	1105	-0.5
400	13.65	1.12	18.1	328	1062	-0.5
450	14.42	1.27	13.4	322	1024	-0.5
500	14.96	1.43	8.5	317	988	-0.6
550	15.26	1.59	3.4	311	956	-0.6
600	15.30	1.75	-1.8	306	926	-0.6
650	15.08	1.91	-7.2	302	899	-0.6
700	14.59	2.08	-12.8	297	872	-0.6
750	13.83	2.25	-18.5	293	847	-0.7
800	12.78	2.42	-24.4	289	822	-0.7
850	11.44	2.60	-30.5	285	799	-0.7
900	9.79	2.77	-36.8	281	777	-0.7
950	7.83	2.95	-43.2	277	755	-0.8
1000	5.55	3.14	-49.8	273	735	-0.8
1050	2.95	3.32	-56.6	269	715	-0.8
1100	0.00	3.51	-63.6	266	696	-0.8

DRAG RDCR. WT. 0.389 GRAMS PCT. DRAG CHANGE / (DEG. YAW)**2 2.34

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	38.3	397	1569	0.0
0	0.00	0.00	38.3	397	1554	0.0
50	1.80	0.13	35.1	395	1534	0.0
100	3.44	0.25	31.9	392	1513	0.0
150	4.93	0.38	28.6	390	1493	-0.1
200	6.25	0.51	25.3	387	1474	-0.1
250	7.41	0.64	21.9	385	1453	-0.1
300	8.40	0.77	18.5	382	1434	-0.1
350	9.22	0.90	15.1	380	1415	-0.2
400	9.88	1.03	11.6	377	1396	-0.2
450	10.36	1.17	8.1	375	1377	-0.2
500	10.67	1.30	4.5	373	1358	-0.2
550	10.81	1.44	0.9	370	1340	-0.3
600	10.77	1.57	-2.8	368	1322	-0.3
650	10.54	1.71	-6.5	366	1304	-0.3
700	10.14	1.84	-10.2	363	1287	-0.3
750	9.54	1.98	-14.1	361	1269	-0.3
800	8.76	2.12	-17.9	359	1252	-0.4
850	7.79	2.26	-21.8	357	1235	-0.4
900	6.63	2.40	-25.8	354	1218	-0.4
950	5.27	2.54	-29.8	352	1202	-0.4
1000	3.71	2.69	-33.8	350	1187	-0.4
1050	1.96	2.83	-37.9	348	1171	-0.4
1100	0.00	2.97	-42.1	346	1157	-0.5

CC I



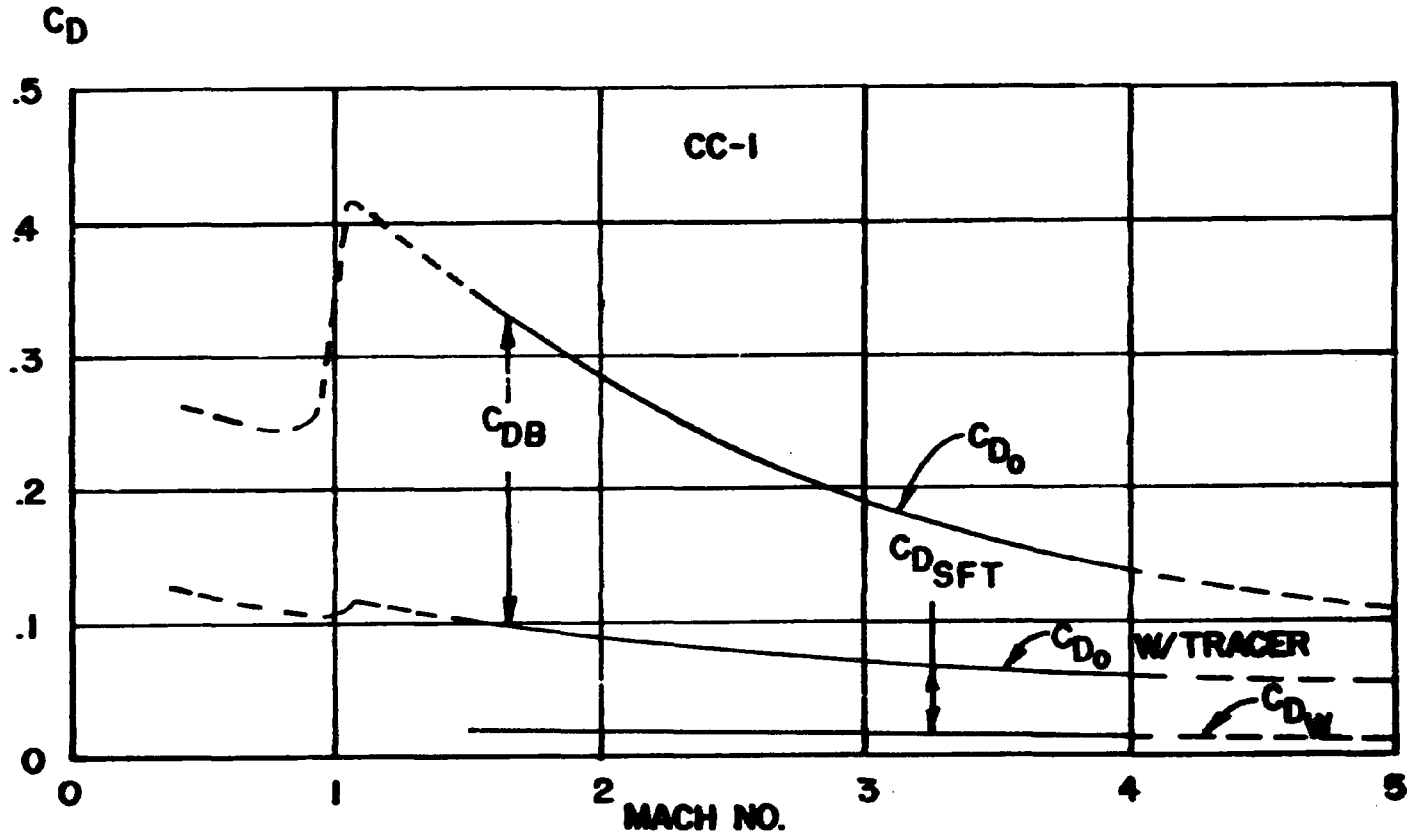
ALL DIMENSIONS ARE IN CALIBERS

Axial Radius of Gyration = 0.307 Cal.
Transverse Radius of Gyration = 2.23 Cal.
Center of Mass (Nose) = 8.46 Cal.
Wetted Area = 21.29 Cal.^{2}
Volume = 4.07 Cal.^{3}
Length = 11.54 Cal.

Mach No.	C_{D_O}	C_{D_B}	C_{D_O} (Tracer)	$C_{D_{SF_T}}$	C_{D_W}	C_{N_α}	CP_N	C_{M_α}
.4 *	.262		.127			2.00	7.15	2.62
.8 *	.243		.108			2.00	7.15	2.62
.9 *	.250		.105			2.03	7.15	2.66
1.0 *	.364		.106			2.34	7.17	3.02
1.05*	.407		.112			2.90	7.18	3.71
1.1 *	.407		.112			2.87	7.20	3.62
1.5	.356	.253	.103	.086	.017	2.73	7.36	3.00
2.0	.283	.193	.090	.076	.015	2.63	7.43	2.71
2.5	.229	.149	.080	.067	.013	2.58	7.46	2.58
3.0	.190	.118	.072	.060	.012	2.53	7.46	2.53
3.5	.161	.096	.065	.054	.011	2.50	7.46	2.50
4.0	.139	.079	.060	.049	.011	2.47	7.46	2.47
4.5 *	.122	.067	.055	.045	.010	2.45	7.46	2.45
5.0 *	.108	.057	.051	.042	.009	2.44	7.46	2.44
5.6 *	.096	.048	.048	.039	.009	2.43	7.46	2.43

$C_{D_{\alpha^2}}$ (Mach = 2.5) = 5.58 (1/radian squared)

*Estimated data


C_D
.5
.4
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CC-1
C_{DB}
C_{D_o}
$C_{D_{SFT}}$
C_{D_o} W/TRACER
C_{D_W}
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2
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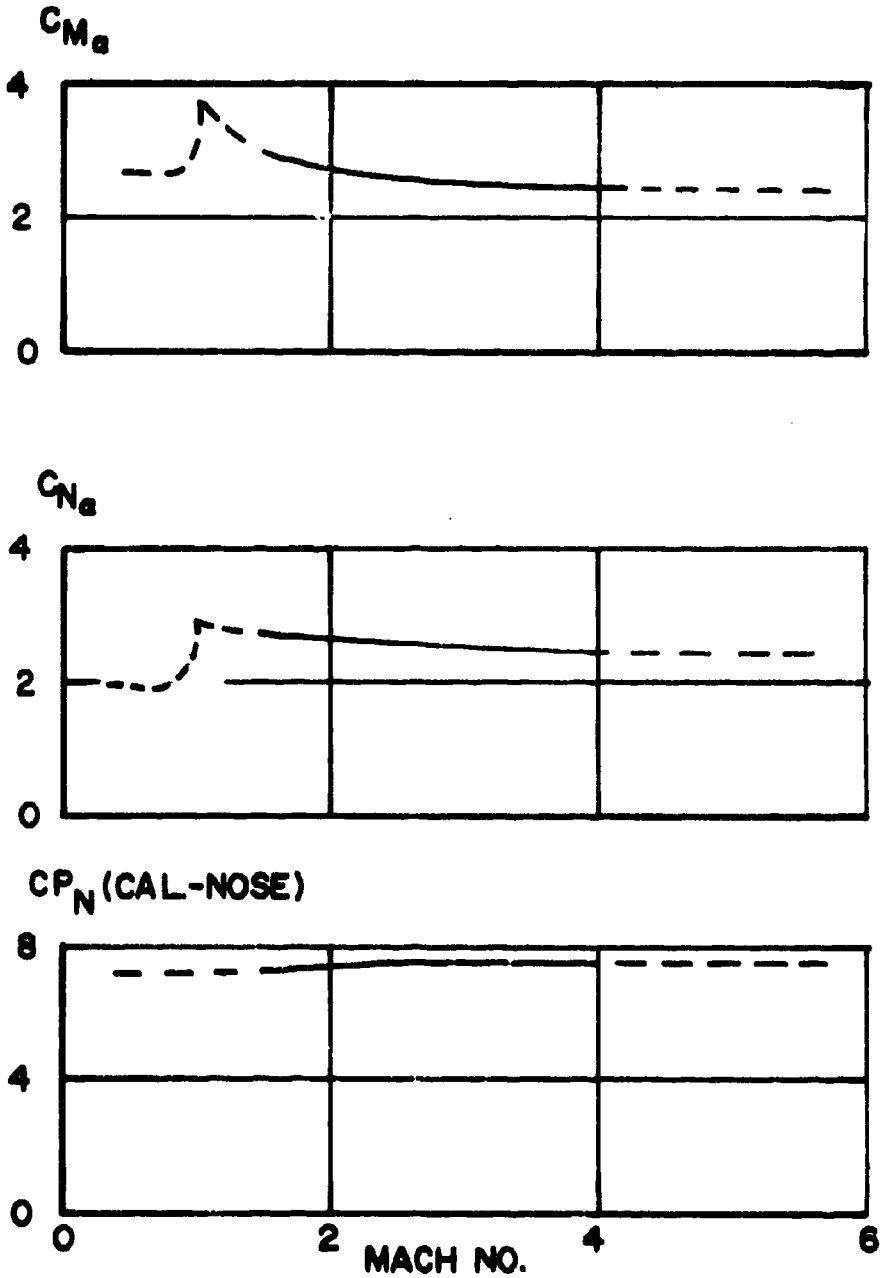
MACH NO.

CC-1



TYPE CC 1 CALIBER 5.56 MM AVERAGE DENSITY 7.80 GRAMS/CC.

PROJ. WT 5.456 GRAMS PROJ. DIA. 5.56 MM IMPULSE 0.8 LB. SEC.

DRAG RDCR. WT. 0.000 GRAMS CHG. WT. 0.61 GRAMS SABOT WT. 0.000 GRAMS

TWIST RATE NA PCT. DRAG CHANGE / (DEG. YAW)**2 0.74

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	46.2	518	732	0.0
0	0.00	0.00	46.2	518	732	0.0
50	2.22	0.10	44.3	493	664	-0.2
100	4.34	0.20	42.1	469	600	-0.5
150	6.35	0.31	39.7	446	542	-0.7
200	8.24	0.43	37.1	423	488	-0.9
250	9.99	0.55	34.1	401	438	-1.1
300	11.59	0.68	30.8	379	393	-1.3
350	13.02	0.81	27.1	359	351	-1.4
400	14.25	0.96	23.1	340	316	-1.4
450	15.28	1.11	18.5	325	288	-1.4
500	16.07	1.26	13.6	312	266	-1.3
550	16.61	1.43	[illegible]	302	248	-1.2
600	16.89	1.60	[illegible]	292	232	-1.2
650	16.87	1.77	-3.4	282	217	-1.3
700	16.55	1.95	-9.9	273	203	-1.3
750	15.90	2.14	-16.9	264	190	-1.3
800	14.90	2.33	-24.3	255	178	-1.4
850	13.52	2.53	-32.2	247	167	-1.4
900	11.74	2.73	-40.7	239	156	-1.5
950	9.53	2.95	-49.7	231	146	-1.5
1000	6.85	3.17	-59.4	223	136	-1.6
1050	3.69	3.40	-69.7	216	127	-1.6
1100	0.00	3.63	-80.8	209	119	-1.6

DRAG RDCR. WT. 0.151 GRAMS PCT. DRAG CHANGE / (DEG. YAW)**2 2.12

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	25.5	518	732	0.0
0	0.00	0.00	25.5	518	732	0.0
50	1.21	0.10	23.6	511	711	-0.1
100	2.32	0.20	21.7	504	691	-0.1
150	3.34	0.30	19.7	497	671	-0.2
200	4.25	0.40	17.6	490	651	-0.3
250	5.07	0.50	15.5	483	632	-0.3
300	5.78	0.60	13.3	476	614	-0.4
350	6.38	0.71	11.1	469	596	-0.5
400	6.87	0.82	8.8	462	578	-0.5
450	7.25	0.93	6.4	455	561	-0.6
500	7.51	1.04	4.0	449	544	-0.7
550	7.65	1.15	1.5	442	528	-0.7
600	7.66	1.26	-1.1	436	512	-0.8
650	7.54	1.38	-3.8	429	496	-0.8
700	7.29	1.50	-6.6	423	481	-0.9
750	6.91	1.62	-9.4	417	466	-0.9
800	6.38	1.74	-12.3	410	452	-1.0
850	5.71	1.86	-15.3	404	438	-1.0
900	4.88	1.98	-18.4	398	424	-1.1
950	3.91	2.11	-21.6	392	411	-1.1
1000	2.77	2.24	-24.9	386	398	-1.2
1050	1.47	2.37	-28.3	380	386	-1.2
1100	0.00	2.50	-31.8	374	373	-1.3

TYPE CC 1 CALIBER 5.56 MM AVERAGE DENSITY 7.80 GRAMS/CC.
PROJ. WT 5.456 GRAMS PROJ. DIA. 5.56 MM IMPULSE 1.2 LB. SEC.
DRAG RDCR. WT. 0.000 GRAMS CHG. WT. 1.19 GRAMS SABOT WT. 0.000 GRAMS
TWIST RATE NA PCT. DRAG CHANGE / (DEG. YAW)**2 0.74

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	23.0	719	1410	0.0
0	0.00	0.00	23.0	719	1410	0.0
50	1.11	0.07	22.0	693	1308	-0.3
100	2.16	0.14	21.0	666	1211	-0.5
150	3.17	0.22	19.8	640	1118	-0.8
200	4.11	0.30	18.5	614	1028	-1.0
250	4.99	0.38	17.1	588	943	-1.3
300	5.79	0.47	15.6	562	862	-1.5
350	6.52	0.56	14.0	537	786	-1.8
400	7.17	0.66	12.2	512	715	-2.0
450	7.72	0.76	10.2	487	648	-2.2
500	8.17	0.86	7.9	463	586	-2.4
550	8.50	0.97	5.5	440	528	-2.6
600	8.71	1.09	2.8	418	476	-2.7
650	8.78	1.21	-0.3	396	427	-2.9
700	8.69	1.34	-3.6	375	384	-3.0
750	8.43	1.48	-7.4	354	343	-3.1
800	7.97	1.63	-11.6	337	309	-3.0
850	7.29	1.78	-16.2	322	283	-2.7
900	6.38	1.94	-21.2	310	262	-2.4
950	5.21	2.10	-26.6	300	245	-2.1
1000	3.78	2.27	-32.4	290	229	-1.8
1050	2.04	2.45	-38.5	280	214	-2.0
1100	0.00	2.63	-45.1	271	200	-2.1

DRAG RDCR. WT. 0.151 GRAMS PCT. DRAG CHANGE / (DEG. YAW)**2 2.12

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	12.8	719	1410	0.0
0	0.00	0.00	12.8	719	1410	0.0
50	0.60	0.07	11.8	710	1376	-0.1
100	1.16	0.14	10.8	702	1342	-0.1
150	1.67	0.21	9.8	693	1309	-0.2
200	2.12	0.29	8.7	685	1276	-0.3
250	2.53	0.36	7.7	677	1244	-0.4
300	2.88	0.43	6.6	668	1213	-0.5
350	3.17	0.51	5.4	660	1182	-0.6
400	3.41	0.58	4.3	652	1152	-0.7
450	3.59	0.66	3.1	643	1122	-0.7
500	3.72	0.74	1.8	635	1093	-0.8
550	3.78	0.82	0.6	627	1065	-0.9
600	3.78	0.90	-0.7	619	1037	-1.0
650	3.72	0.98	-2.0	611	1009	-1.0
700	3.59	1.06	-3.4	603	982	-1.1
750	3.40	1.15	-4.8	595	956	-1.2
800	3.14	1.23	-6.2	587	930	-1.3
850	2.80	1.32	-7.7	579	904	-1.3
900	2.40	1.40	-9.2	572	880	-1.4
950	1.91	1.49	-10.9	564	855	-1.5
1000	1.36	1.58	-12.3	556	831	-1.5
1050	0.72	1.67	-14.0	549	808	-1.6
1100	0.00	1.76	-15.6	541	785	-1.7

TYPE CC 1 CALIBER 5.56 MM AVERAGE DENSITY 7.80 GRAMS/CC.
PROJ. WT 5.456 GRAMS PROJ. DIA. 5.56 MM IMPULSE ?.1 LB. SEC.
DRAG RDCR. WT. 0.000 GRAMS CHG. WT. 2.87 GRAMS SABOT WT. 0.000 GRAMS
TWIST RATE NA PCT. DRAG CHANGE / (DEG. YAW)**2 0.74

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	7.4	1087	3223	0.0
0	0.00	0.00	7.4	1087	3223	0.0
50	0.35	0.05	7.0	1061	3068	-0.3
100	0.69	0.09	6.5	1034	2917	-0.5
150	1.00	0.14	6.1	1008	2769	-0.8
200	1.28	0.19	5.6	981	2625	-1.1
250	1.55	0.25	5.0	954	2485	-1.4
300	1.78	0.30	4.5	928	2347	-1.6
350	1.99	0.35	3.9	901	2214	-1.9
400	2.17	0.41	3.2	874	2085	-2.1
450	2.31	0.47	2.6	848	1960	-2.4
500	2.42	0.53	1.8	821	1839	-2.7
550	2.50	0.59	1.1	794	1721	-2.9
600	2.54	0.65	0.3	768	1608	-3.2
650	2.53	0.72	-0.6	741	1498	-3.5
700	2.48	0.79	-1.6	714	1392	-3.7
750	2.39	0.86	-2.6	688	1292	-4.0
800	2.24	0.93	-3.7	662	1195	-4.2
850	2.04	1.01	-4.9	636	1102	-4.5
900	1.77	1.09	-6.2	610	1014	-4.7
950	1.45	1.18	-7.6	584	929	-4.9
1000	1.04	1.26	-9.1	558	849	-5.2
1050	0.57	1.35	-10.8	533	774	-5.4
1100	0.00	1.45	-12.6	508	703	-5.5

DRAG RDCR. WT. 0.151 GRAMS PCT. DRAG CHANGE / (DEG. YAW)**2 2.12

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	5.3	1087	3223	0.0
0	0.00	0.00	5.3	1087	3223	0.0
50	0.25	0.05	4.9	1077	3161	-0.1
100	0.48	0.09	4.5	1066	3100	-0.2
150	0.69	0.14	4.0	1056	3040	-0.3
200	0.88	0.19	3.6	1046	2980	-0.4
250	1.04	0.24	3.1	1036	2921	-0.5
300	1.18	0.28	2.6	1026	2863	-0.6
350	1.30	0.33	2.1	1016	2806	-0.7
400	1.40	0.38	1.7	1006	2750	-0.8
450	1.47	0.43	1.2	996	2694	-0.9
500	1.52	0.48	0.7	986	2639	-1.0
550	1.54	0.53	0.1	976	2585	-1.1
600	1.54	0.59	-0.4	966	2532	-1.2
650	1.51	0.64	-0.9	956	2479	-1.3
700	1.46	0.69	-1.5	946	2427	-1.4
750	1.38	0.74	-2.1	936	2376	-1.5
800	1.27	0.80	-2.6	927	2326	-1.6
850	1.13	0.85	-3.2	917	2276	-1.6
900	0.96	0.91	-3.8	907	2227	-1.7
950	0.77	0.96	-4.4	898	2179	-1.8
1000	0.54	1.02	-5.1	888	2131	-1.9
1050	0.29	1.07	-5.7	879	2085	-2.0
1100	0.00	1.13	-6.4	869	2039	-2.1

TYPE CC 1 CALIBER 5.56 MM AVERAGE DENSITY 11.00 GRAMS/CU.
PROJ. WT 7.695 GRAMS PROJ. DIA. 5.56 MM IMPULSE 0.8 LB. SEC.
DRAG RDCR. WT. 0.000 GRAMS CHG. WT. 0.45 GRAMS SABOT WT. 0.000 GRAMS
TWIST RATE NA PCT. DRAG CHANGE / (DEG. YAW)**2 0.74

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	59.3	392	591	0.0
0	0.00	0.00	59.3	392	591	0.0
50	2.83	0.13	55.9	377	547	-0.1
100	5.49	0.27	52.3	362	505	-0.3
150	7.96	0.41	48.3	349	467	-0.4
200	10.23	0.55	44.0	336	435	-0.5
250	12.28	0.70	39.5	326	408	-0.5
300	14.10	0.86	34.6	316	385	-0.5
350	15.68	1.02	29.5	308	365	-0.6
400	17.00	1.19	24.1	301	348	-0.6
450	18.04	1.35	18.4	294	332	-0.6
500	18.80	1.53	12.5	287	316	-0.7
550	19.27	1.70	6.2	280	301	-0.7
600	19.42	1.88	-0.3	273	288	-0.8
650	19.24	2.07	-7.1	267	274	-0.8
700	18.72	2.26	-14.3	261	262	-0.9
750	17.84	2.45	-21.8	255	250	-0.9
800	16.58	2.65	-29.7	249	238	-1.0
850	14.93	2.85	-38.0	243	227	-1.0
900	12.86	3.06	-46.6	237	217	-1.0
950	10.35	3.28	-55.7	232	207	-1.1
1000	7.39	3.49	-65.2	226	197	-1.1
1050	3.95	3.72	-75.2	221	188	-1.1
1100	0.00	3.95	-85.6	216	180	-1.2

DRAG RDCR. WT. 0.151 GRAMS PCT. DRAG CHANGE / (DEG. YAW)**2 2.12

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	42.1	392	591	0.0
0	0.00	0.00	42.1	392	591	0.0
50	1.98	0.13	38.8	388	578	0.0
100	3.81	0.26	35.4	384	565	-0.1
150	5.46	0.39	32.0	379	552	-0.1
200	6.95	0.52	28.5	375	540	-0.2
250	8.26	0.66	24.9	371	528	-0.2
300	9.39	0.79	21.2	367	516	-0.2
350	10.35	0.93	17.5	363	504	-0.3
400	11.11	1.07	13.7	359	493	-0.3
450	11.69	1.21	9.8	356	483	-0.3
500	12.07	1.35	5.8	352	472	-0.4
550	12.26	1.49	1.7	348	462	-0.4
600	12.24	1.64	-2.5	345	452	-0.4
650	12.02	1.78	-6.7	341	443	-0.5
700	11.59	1.93	-11.1	338	433	-0.5
750	10.94	2.08	-15.5	334	424	-0.5
800	10.07	2.23	-20.0	331	415	-0.6
850	8.98	2.38	-24.6	327	406	-0.6
900	7.66	2.53	-29.3	324	397	-0.6
950	6.11	2.69	-34.1	321	389	-0.6
1000	4.32	2.85	-39.1	317	381	-0.7
1050	2.28	3.00	-44.1	314	372	-0.7
1100	0.00	3.17	-49.3	306	353	-0.8

TYPE CC 1 CALIBER 5.56 MM AVERAGE DENSITY 11.00 GRAMS/CC.
PROJ. WT 7.695 GRAMS PROJ. DIA. 5.56 MM IMPULSE 1.2 LB. SEC.
DRAG RDCR. WT. 0.000 GRAMS CHG. WT. 0.96 GRAMS SABOT WT. 0.000 GRAMS
TWIST RATE NA PCT. DRAG CHANGE / (DEG. YAW)**2 0.74

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	33.4	544	1139	0.0
0	0.00	0.00	33.4	544	1139	0.0
50	1.60	0.09	31.7	526	1065	-0.2
100	3.11	0.19	29.8	508	995	-0.4
150	4.53	0.29	27.8	491	928	-0.5
200	5.84	0.39	25.7	474	864	-0.7
250	7.05	0.50	23.4	457	804	-0.8
300	8.14	0.61	20.9	441	747	-1.0
350	9.10	0.73	18.2	425	693	-1.1
400	9.93	0.85	15.4	409	643	-1.3
450	10.61	0.97	12.2	393	595	-1.4
500	11.14	1.10	8.9	378	551	-1.5
550	11.49	1.24	5.3	364	509	-1.6
600	11.65	1.38	1.3	350	471	-1.7
650	11.62	1.54	-2.9	338	438	-1.6
700	11.37	1.67	-7.4	327	411	-1.6
750	10.90	1.83	-12.3	317	388	-1.5
800	10.18	1.99	-17.4	309	368	-1.4
850	9.20	2.15	-22.7	302	350	-1.3
900	7.95	2.32	-28.3	295	334	-1.3
950	6.42	2.49	-34.2	288	319	-1.3
1000	4.60	2.67	-40.4	281	304	-1.4
1050	2.46	2.85	-46.9	275	290	-1.4
1100	0.00	3.03	-53.7	268	277	-1.4

DRAG RDCR. WT. 0.151 GRAMS PCT. DRAG CHANGE / (DEG. YAW)**2 2.12

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	21.5	544	1139	0.0
0	0.00	0.00	21.5	544	1139	0.0
50	1.01	0.09	19.8	539	1116	-0.1
100	1.95	0.19	18.1	533	1094	-0.1
150	2.79	0.28	16.3	528	1072	-0.2
200	3.55	0.38	14.5	523	1050	-0.2
250	4.22	0.47	12.7	518	1029	-0.3
300	4.79	0.57	10.8	513	1008	-0.3
350	5.28	0.67	8.9	508	987	-0.4
400	5.67	0.77	6.9	503	967	-0.4
450	5.96	0.87	4.9	498	947	-0.5
500	6.15	0.97	2.9	493	928	-0.5
550	6.25	1.07	0.8	488	908	-0.5
600	6.24	1.17	-1.3	483	889	-0.6
650	6.12	1.28	-3.5	478	871	-0.6
700	5.90	1.38	-5.7	473	853	-0.7
750	5.57	1.49	-8.0	468	835	-0.7
800	5.13	1.59	-10.3	463	817	-0.8
850	4.57	1.70	-12.6	458	800	-0.8
900	3.90	1.81	-15.0	454	783	-0.9
950	3.11	1.92	-17.5	449	766	-0.9
1000	2.20	2.04	-20.0	444	750	-0.9
1050	1.16	2.15	-22.5	440	734	-1.0
1100	0.00	2.26	-25.1	435	718	-1.0

TYPE CC 1 CALIBER 5.56 MM AVERAGE DENSITY 11.00 GRAMS/CC.
PROJ. WT 7.695 GRAMS PROJ. DIA. 5.56 MM IMPULSE 2.1 LB. SEC.
DRAG RDCR. WT. 0.000 GRAMS CHG. WT. 2.37 GRAMS SABOT WT. 0.000 GRAMS
TWIST RATE NA PCT. DRAG CHANGE / (DEG. YAW)**2 0.74

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	11.4	852	2793	0.0
0	0.00	0.00	11.4	852	2793	0.0
50	0.54	0.06	10.7	833	2671	-0.2
100	1.05	0.12	9.9	814	2551	-0.4
150	1.52	0.18	9.2	795	2434	-0.6
200	1.95	0.25	8.4	776	2319	-0.8
250	2.34	0.31	7.5	757	2207	-0.9
300	2.69	0.38	6.6	739	2099	-1.1
350	3.00	0.45	5.7	720	1993	-1.3
400	3.26	0.52	4.7	701	1890	-1.5
450	3.46	0.59	3.7	682	1791	-1.7
500	3.62	0.66	2.5	664	1695	-1.9
550	3.72	0.74	1.4	645	1601	-2.0
600	3.76	0.82	0.1	627	1510	-2.2
650	3.74	0.90	-1.2	608	1423	-2.4
700	3.66	0.98	-2.6	590	1338	-2.6
750	3.50	1.07	-4.0	571	1256	-2.7
800	3.27	1.16	-5.6	553	1178	-2.9
850	2.96	1.25	-7.3	535	1103	-3.1
900	2.56	1.35	-9.1	518	1031	-3.2
950	2.08	1.44	-11.0	500	962	-3.3
1000	1.49	1.55	-13.1	483	897	-3.5
1050	0.80	1.65	-15.3	466	835	-3.6
1100	0.00	1.76	-17.7	449	777	-3.7

DRAG RDCR. WT. 0.151 GRAMS PCT. DRAG CHANGE / (DEG. YAW)**2 2.12

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	8.5	852	2793	0.0
0	0.00	0.00	8.5	852	2793	0.0
50	0.40	0.06	7.8	845	2749	-0.1
100	0.76	0.12	7.1	839	2705	-0.1
150	1.09	0.18	6.3	832	2662	-0.2
200	1.39	0.24	5.6	826	2619	-0.3
250	1.65	0.30	4.9	819	2577	-0.3
300	1.87	0.36	4.1	813	2535	-0.4
350	2.05	0.42	3.4	806	2494	-0.5
400	2.20	0.48	2.6	800	2453	-0.5
450	2.31	0.55	1.8	793	2413	-0.6
500	2.39	0.61	1.0	787	2373	-0.6
550	2.42	0.67	0.2	781	2334	-0.7
600	2.41	0.74	-0.6	774	2295	-0.8
650	2.37	0.80	-1.5	768	2256	-0.8
700	2.28	0.87	-2.3	761	2218	-0.9
750	2.15	0.94	-3.2	755	2181	-0.9
800	1.97	1.00	-4.1	749	2144	-1.0
850	1.76	1.07	-5.0	743	2107	-1.1
900	1.50	1.14	-5.9	736	2071	-1.1
950	1.19	1.20	-6.8	730	2035	-1.2
1000	0.84	1.27	-7.8	724	2000	-1.2
1050	0.44	1.34	-8.7	718	1965	-1.3
1100	0.00	1.41	-9.7	712	1931	-1.3

TYPE CC 1 CALIBER 5.56 MM AVERAGE DENSITY 16.70 GRAMS/CC.

PROJ. WT 11.683 GRAMS PROJ. DIA. 5.56 MM IMPULSE 0.8 LB. SEC.

DRAG RDCR. WT. 0.000 GRAMS CHG. WT. 0.28 GRAMS SABOT WT. 0.000 GRAMS

TWIST RATE NA PCT. DRAG CHANGE / (DEG. YAW)**2 0.74

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	84.6	285	474	0.0
0	0.00	0.00	86.6	285	474	0.0
50	4.11	0.18	80.4	280	459	0.0
100	7.90	0.36	73.9	276	445	-0.1
150	11.37	0.54	67.2	272	431	-0.1
200	14.50	0.73	60.4	267	417	-0.2
250	17.30	0.92	53.2	263	404	-0.2
300	19.73	1.11	45.9	259	392	-0.2
350	21.81	1.30	38.3	255	379	-0.3
400	23.50	1.50	30.5	251	367	-0.3
450	24.80	1.70	22.5	247	356	-0.4
500	25.70	1.91	14.1	243	345	-0.4
550	26.19	2.11	5.5	239	334	-0.4
600	26.25	2.32	-3.3	235	324	-0.4
650	25.86	2.54	-12.3	232	314	-0.5
700	25.02	2.76	-21.9	228	304	-0.5
750	23.71	2.98	-31.7	225	295	-0.5
800	21.91	3.20	-41.7	221	286	-0.6
850	19.61	3.43	-52.1	218	277	-0.6
900	16.80	3.66	-62.8	214	269	-0.6
950	13.44	3.90	-73.8	211	261	-0.6
1000	9.54	4.14	-85.2	208	253	-0.7
1050	5.06	4.38	-96.9	205	245	-0.7
1100	0.00	4.63	-109.0	202	238	-0.7

DRAG RDCR. WT. 0.151 GRAMS PCT. DRAG CHANGE / (DEG. YAW)**2 2.12

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	75.5	285	474	0.0
0	0.00	0.00	75.5	285	474	0.0
50	3.56	0.18	69.3	283	467	0.0
100	6.81	0.35	63.0	281	460	0.0
150	9.75	0.53	56.7	279	453	-0.1
200	12.38	0.71	50.2	277	446	-0.1
250	14.68	0.89	43.6	275	440	-0.1
300	16.66	1.08	37.0	273	433	-0.1
350	18.31	1.26	30.2	271	427	-0.1
400	19.63	1.45	23.4	269	420	-0.1
450	20.60	1.63	16.4	267	414	-0.2
500	21.24	1.82	9.4	265	408	-0.2
550	21.52	2.01	2.2	263	402	-0.2
600	21.46	2.20	-5.0	262	396	-0.2
650	21.03	2.39	-12.4	260	390	-0.2
700	20.25	2.59	-19.8	258	384	-0.3
750	19.09	2.78	-27.4	256	379	-0.3
800	17.56	2.98	-35.1	254	374	-0.3
850	15.66	3.17	-42.9	251	363	-0.3
900	13.36	3.38	-50.9	247	351	-0.4
950	10.65	3.58	-59.3	243	341	-0.4
1000	7.54	3.79	-67.9	239	330	-0.4
1050	3.99	4.00	-76.7	236	320	-0.5
1100	0.00	4.21	-85.8	232	311	-0.5

TYPE CC 1 CALIBER 5.56 MM AVERAGE DENSITY 16.70 GRAMS/CC.
PROJ. WT 11.683 GRAMS PROJ. DIA. 5.56 MM IMPULSE 1.2 LB. SEC.
DRAG RDCR. WT. 0.000 GRAMS CHG. WT. 0.66 GRAMS SABOT WT. 0.000 GRAMS
TWIST RATE NA PCT. DRAG CHANGE / (DEG. YAW)**2 0.74

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	51.7	388	879	0.0
0	0.00	0.00	51.7	388	879	0.0
50	2.46	0.13	48.3	378	835	-0.1
100	4.74	0.26	44.7	368	793	-0.2
150	6.85	0.40	41.0	359	752	-0.3
200	8.76	0.54	37.0	350	715	-0.4
250	10.48	0.69	32.8	341	681	-0.4
300	11.98	0.84	28.4	334	651	-0.4
350	13.27	0.99	23.8	327	624	-0.5
400	14.32	1.14	19.0	320	600	-0.5
450	15.14	1.30	14.1	315	578	-0.5
500	15.71	1.46	8.9	309	559	-0.5
550	16.02	1.62	3.6	304	541	-0.6
600	16.07	1.79	-1.8	300	524	-0.6
650	15.84	1.96	-7.5	295	508	-0.6
700	15.33	2.13	-13.3	290	492	-0.6
750	14.54	2.30	-19.4	286	477	-0.7
800	13.44	2.48	-25.6	281	463	-0.7
850	12.03	2.66	-32.0	277	449	-0.7
900	10.30	2.84	-38.6	273	435	-0.8
950	8.25	3.02	-45.4	269	422	-0.8
1000	5.85	3.21	-52.4	265	409	-0.8
1050	3.11	3.40	-59.6	261	397	-0.9
1100	0.00	3.60	-67.1	257	385	-0.9

DRAG RDCR. WT. 0.151 GRAMS PCT. DRAG CHANGE / (DEG. YAW)**2 2.12

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	40.6	388	879	0.0
0	0.00	0.00	40.6	388	879	0.0
50	1.91	0.13	37.3	385	866	0.0
100	3.65	0.26	33.9	382	853	-0.1
150	5.23	0.39	30.4	380	841	-0.1
200	6.64	0.52	26.9	377	828	-0.1
250	7.88	0.66	23.4	374	816	-0.1
300	8.94	0.79	19.8	372	804	-0.2
350	9.82	0.93	16.2	369	792	-0.2
400	10.53	1.06	12.5	366	780	-0.2
450	11.05	1.20	8.7	364	768	-0.2
500	11.38	1.34	4.9	361	757	-0.3
550	11.53	1.48	1.0	359	746	-0.3
600	11.49	1.62	-2.9	356	735	-0.3
650	11.25	1.76	-6.8	354	725	-0.3
700	10.82	1.90	-10.9	351	715	-0.3
750	10.20	2.04	-14.9	349	705	-0.4
800	9.36	2.19	-19.1	347	695	-0.4
850	8.33	2.33	-23.3	344	685	-0.4
900	7.09	2.48	-27.5	342	675	-0.4
950	5.64	2.62	-31.8	340	666	-0.4
1000	3.98	2.77	-36.2	337	657	-0.5
1050	2.10	2.92	-40.6	335	648	-0.5
1100	0.00	3.07	-45.1	331	630	-0.6

TYPE CC 1 CALIBER 5.56 MM AVERAGE DENSITY 16.70 GRAMS/CC.
PROJ. WT 11.683 GRAMS PROJ. DIA. 5.56 MM IMPULSE 2.1 LB. SEC.
DRAG RDCR. WT. 0.000 GRAMS CHG. WT. 1.84 GRAMS SABOT WT. 0.000 GRAMS
TWIST RATE NA PCT. DRAG CHANGE / (DEG. YAW)**2 0.74

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	20.7	611	2181	0.0
0	0.00	0.00	20.7	611	2181	0.0
50	0.98	0.08	19.4	599	2095	-0.1
100	1.90	0.17	18.0	587	2011	-0.2
150	2.75	0.25	16.5	575	1929	-0.4
200	3.52	0.34	14.9	563	1850	-0.5
250	4.21	0.43	13.3	551	1772	-0.6
300	4.83	0.52	11.6	539	1697	-0.7
350	5.36	0.62	9.9	527	1624	-0.8
400	5.80	0.71	8.0	516	1553	-0.9
450	6.15	0.81	6.1	504	1484	-1.0
500	6.41	0.91	4.1	493	1417	-1.1
550	6.56	1.01	2.0	481	1353	-1.2
600	6.61	1.12	-0.2	470	1291	-1.3
650	6.55	1.23	-2.5	459	1231	-1.4
700	6.37	1.34	-5.0	448	1173	-1.5
750	6.07	1.45	-7.5	437	1118	-1.6
800	5.64	1.57	-10.2	427	1064	-1.7
850	5.08	1.68	-13.0	416	1013	-1.8
900	4.38	1.81	-15.9	406	963	-1.9
950	3.52	1.93	-19.0	396	916	-1.9
1000	2.52	2.06	-22.3	386	871	-2.0
1050	1.34	2.19	-25.8	376	827	-2.1
1100	0.00	2.32	-29.4	367	785	-2.1

DRAG RDCR. WT. 0.151 GRAMS PCT. DRAG CHANGE / (DEG. YAW)**2 2.12

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	16.1	611	2181	0.0
0	0.00	0.00	16.1	611	2181	0.0
50	0.75	0.08	14.7	607	2154	0.0
100	1.44	0.16	13.4	604	2127	-0.1
150	2.07	0.25	12.0	600	2100	-0.1
200	2.62	0.33	10.6	596	2073	-0.1
250	3.11	0.42	9.2	593	2047	-0.2
300	3.53	0.50	7.8	589	2021	-0.2
350	3.87	0.59	6.3	585	1996	-0.3
400	4.15	0.67	4.8	582	1970	-0.3
450	4.35	0.76	3.4	578	1945	-0.3
500	4.48	0.84	1.8	574	1920	-0.4
550	4.54	0.93	0.3	571	1896	-0.4
600	4.52	1.02	-1.2	567	1871	-0.4
650	4.43	1.11	-2.8	564	1847	-0.5
700	4.25	1.20	-4.4	560	1823	-0.5
750	4.01	1.29	-6.0	557	1799	-0.5
800	3.68	1.38	-7.6	553	1776	-0.6
850	3.27	1.47	-9.2	550	1753	-0.6
900	2.78	1.56	-10.9	546	1730	-0.6
950	2.21	1.65	-12.6	543	1707	-0.7
1000	1.56	1.74	-14.3	539	1685	-0.7
1050	0.82	1.84	-16.0	536	1662	-0.7
1100	0.00	1.93	-17.8	532	1640	-0.8

TYPE CC 1 CALIBER 6.50 MM AVERAGE DENSITY 7.80 GRAMS/CC.

PROJ. WT 8.720 GRAMS PROJ. DIA. 6.50 MM IMPULSE 0.8 LB. SEC.

DRAG RDCR. WT. 0.000 GRAMS CHG. WT. 0.38 GRAMS SABOT WT. 0.000 GRAMS

TWIST RATE NA PCT. DRAG CHANGE / (DEG. YAW)**2 0.74

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	74.4	355	549	0.0
0	0.00	0.00	74.4	355	549	0.0
50	3.56	0.14	70.3	339	502	-0.1
100	6.90	0.30	65.7	326	464	-0.2
150	10.02	0.45	60.9	315	433	-0.3
200	12.88	0.61	55.7	305	407	-0.4
250	15.48	0.78	50.2	297	383	-0.4
300	17.81	0.95	44.3	288	362	-0.5
350	19.83	1.13	38.1	280	342	-0.6
400	21.55	1.31	31.6	272	323	-0.6
450	22.93	1.50	24.6	264	305	-0.7
500	23.96	1.69	17.2	257	288	-0.7
550	24.62	1.88	9.5	250	272	-0.8
600	24.89	2.09	1.2	243	257	-0.9
650	24.74	2.30	-7.5	236	242	-0.9
700	24.15	2.51	-16.8	229	229	-0.9
750	23.09	2.73	-26.6	222	216	-1.0
800	21.54	2.96	-37.0	216	204	-1.0
850	19.46	3.20	-48.0	210	192	-1.1
900	16.82	3.44	-59.6	204	182	-1.1
950	13.60	3.69	-72.0	198	171	-1.1
1000	9.74	3.94	-85.1	193	161	-1.2
1050	5.22	4.21	-98.9	187	153	-1.2
1100	0.00	4.48	-113.6	182	144	-1.2

DRAG RDCR. WT. 0.241 GRAMS PCT. DRAG CHANGE / (DEG. YAW)**2 2.12

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	52.9	355	549	0.0
0	0.00	0.00	52.9	355	549	0.0
50	2.50	0.14	48.9	351	535	0.0
100	4.80	0.29	44.7	346	521	-0.1
150	6.89	0.43	40.5	342	507	-0.1
200	8.77	0.58	36.2	338	494	-0.2
250	10.44	0.73	31.8	333	481	-0.2
300	11.89	0.88	27.2	329	469	-0.2
350	13.11	1.03	22.5	325	456	-0.3
400	14.10	1.19	17.7	321	444	-0.3
450	14.86	1.34	12.8	317	433	-0.4
500	15.37	1.50	7.8	313	421	-0.4
550	15.62	1.66	2.6	309	411	-0.4
600	15.63	1.83	-2.7	305	400	-0.5
650	15.37	1.99	-8.1	302	389	-0.5
700	14.84	2.16	-13.6	298	379	-0.5
750	14.03	2.33	-19.3	294	369	-0.6
800	12.95	2.50	-25.2	291	360	-0.6
850	11.57	2.67	-31.2	287	350	-0.6
900	9.89	2.85	-37.3	283	341	-0.6
950	7.91	3.02	-43.6	279	330	-0.7
1000	5.61	3.21	-50.2	271	312	-0.8
1050	2.98	3.39	-57.2	263	294	-0.9
1100	0.00	3.59	-64.6	256	278	-0.9

TYPE CC 1 CALIBER 6.50 MM AVERAGE DENSITY 7.80 GRAMS/CC.
PROJ. WT 8.720 GRAMS PROJ. DIA. 6.50 MM IMPULSE 1.2 LB. SEC.
DRAG RDCR. WT. 0.000 GRAMS CHG. WT. 0.87 GRAMS SABOT WT. 0.000 GRAMS
TWIST RATE NA PCT. DRAG CHANGE / (DEG. YAW)**2 0.74

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	45.4	492	1055	0.0
0	0.00	0.00	45.4	492	1055	0.0
50	2.18	0.10	43.3	471	969	-0.2
100	4.25	0.21	40.9	451	887	-0.4
150	6.20	0.33	38.4	431	812	-0.6
200	8.01	0.44	35.5	412	741	-0.8
250	9.69	0.57	32.5	394	676	-0.9
300	11.20	0.70	29.1	376	615	-1.1
350	12.54	0.84	25.4	358	559	-1.2
400	13.69	0.98	21.3	342	511	-1.2
450	14.63	1.13	16.8	329	471	-1.2
500	15.34	1.28	12.0	317	439	-1.1
550	15.81	1.44	6.9	307	412	-1.1
600	16.02	1.61	1.5	299	389	-1.1
650	15.96	1.78	-4.3	290	367	-1.1
700	15.60	1.99	-10.4	282	347	-1.2
750	14.94	2.13	-16.9	274	327	-1.2
800	13.95	2.32	-23.7	266	309	-1.2
850	12.61	2.51	-31.0	259	292	-1.3
900	10.91	2.70	-38.6	252	276	-1.3
950	8.83	2.91	-46.7	245	261	-1.4
1000	6.33	3.11	-55.3	238	247	-1.4
1050	3.39	3.33	-64.4	231	233	-1.4
1100	0.00	3.55	-74.0	225	220	-1.5

DRAG RDCR. WT. 0.241 GRAMS PCT. DRAG CHANGE / (DEG. YAW)**2 2.12

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	27.4	492	1055	0.0
0	0.00	0.00	27.4	492	1055	0.0
50	1.29	0.10	25.3	486	1029	-0.1
100	2.49	0.21	23.2	480	1003	-0.1
150	3.57	0.31	21.0	474	978	-0.2
200	4.55	0.42	18.8	468	953	-0.2
250	5.41	0.52	16.5	463	929	-0.3
300	6.16	0.63	14.1	457	905	-0.3
350	6.80	0.74	11.7	451	882	-0.4
400	7.31	0.85	9.2	446	859	-0.4
450	7.70	0.97	6.6	440	836	-0.5
500	7.97	1.08	4.0	434	815	-0.6
550	8.10	1.20	1.3	429	793	-0.6
600	8.10	1.32	-1.4	424	772	-0.7
650	7.97	1.43	-4.2	418	752	-0.7
700	7.70	1.55	-7.1	413	732	-0.7
750	7.28	1.68	-10.1	407	713	-0.8
800	6.71	1.80	-13.1	402	694	-0.8
850	6.00	1.93	-16.3	397	675	-0.9
900	5.12	2.05	-19.5	392	657	-0.9
950	4.09	2.18	-22.8	387	639	-1.0
1000	2.90	2.31	-26.2	382	622	-1.0
1050	1.54	2.44	-29.6	377	605	-1.1
1100	0.00	2.58	-33.2	372	588	-1.1

TYPE CC 1 CALIBER 6.50 MM AVERAGE DENSITY 7.80 GRAMS/CC.
PROJ. WT 8.720 GRAMS PROJ. DIA. 6.50 MM IMPULSE 2.1 LB. SEC.
DRAG RDCR. WT. 0.000 GRAMS CHG. WT. 2.21 GRAMS SABOT WT. 0.000 GRAMS
TWIST RATE NA PCT. DRAG CHANGE / (DEG. YAW)**2 0.74

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	16.6	773	2605	0.0
0	0.00	0.00	16.6	773	2605	0.0
50	0.79	0.07	15.7	750	2454	-0.2
100	1.54	0.13	14.8	727	2307	-0.5
150	2.25	0.20	13.8	705	2166	-0.7
200	2.91	0.28	12.8	682	2029	-0.9
250	3.51	0.35	11.7	660	1898	-1.1
300	4.06	0.43	10.5	637	1771	-1.3
350	4.54	0.51	9.2	615	1649	-1.6
400	4.97	0.59	7.9	593	1533	-1.8
450	5.32	0.68	6.4	571	1421	-2.0
500	5.60	0.76	4.8	549	1314	-2.2
550	5.80	0.86	3.1	527	1213	-2.4
600	5.91	0.95	1.2	506	1117	-2.6
650	5.92	1.06	-0.8	485	1027	-2.7
700	5.83	1.16	-3.0	465	942	-2.9
750	5.63	1.27	-5.5	445	863	-3.0
800	5.30	1.39	-8.1	425	789	-3.1
850	4.84	1.51	-11.0	406	720	-3.3
900	4.23	1.63	-14.2	388	657	-3.4
950	3.46	1.76	-17.6	370	597	-3.4
1000	2.51	1.90	-21.5	353	544	-3.5
1050	1.36	2.05	-25.7	338	498	-3.4
1100	0.00	2.20	-30.2	325	461	-3.1

DRAG RDCR. WT. 0.241 GRAMS PCT. DRAG CHANGE / (DEG. YAW)**2 2.12

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	10.7	773	2605	0.0
0	0.00	0.00	10.7	773	2605	0.0
50	0.50	0.07	9.8	765	2553	-0.1
100	0.96	0.13	9.0	758	2501	-0.2
150	1.38	0.20	8.1	750	2449	-0.2
200	1.76	0.26	7.2	743	2399	-0.3
250	2.09	0.33	6.3	735	2349	-0.4
300	2.38	0.40	5.3	728	2301	-0.4
350	2.62	0.47	4.4	720	2252	-0.5
400	2.81	0.54	3.4	713	2205	-0.6
450	2.96	0.61	2.4	706	2158	-0.7
500	3.05	0.68	1.4	698	2113	-0.7
550	3.10	0.75	0.4	691	2067	-0.8
600	3.10	0.83	-0.7	684	2023	-0.9
650	3.04	0.90	-1.8	677	1979	-0.9
700	2.93	0.97	-2.9	669	1936	-1.0
750	2.77	1.05	-4.0	662	1894	-1.1
800	2.55	1.12	-5.2	655	1852	-1.1
850	2.27	1.20	-6.3	648	1811	-1.2
900	1.94	1.28	-7.5	641	1770	-1.3
950	1.55	1.36	-8.8	634	1731	-1.3
1000	1.09	1.44	-10.0	627	1691	-1.4
1050	0.58	1.52	-11.3	620	1653	-1.5
1100	0.00	1.60	-12.6	613	1615	-1.5

TYPE CC 1 CALIBER 6.50 MM AVERAGE DENSITY 11.00 GRAMS/CC.

PROJ. WT 12.298 GRAMS PROJ. DIA. 6.50 MM IMPULSE 0.8 LB. SEC.

DRAG RDCR. WT. 0.000 GRAMS CHG. WT. 0.28 GRAMS SABOT WT. 0.000 GRAMS

TWIST RATE NA PCT. DRAG CHANGE / (DEG. YAW)**2 0.74

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	100.0	274	462	0.0
0	0.00	0.00	100.0	274	462	0.0
50	4.76	0.19	93.2	268	443	-0.1
100	9.17	0.37	86.1	263	425	-0.1
150	13.22	0.57	78.7	257	407	-0.2
200	16.91	0.76	71.0	252	391	-0.2
250	20.20	0.97	63.0	247	375	-0.3
300	23.10	1.17	54.6	242	359	-0.3
350	25.57	1.38	45.9	237	345	-0.3
400	27.60	1.59	36.8	232	331	-0.4
450	29.18	1.81	27.3	227	317	-0.4
500	30.28	2.03	17.4	222	304	-0.5
550	30.89	2.26	7.1	218	292	-0.5
600	30.98	2.49	-3.6	213	280	-0.5
650	30.53	2.73	-14.8	209	269	-0.6
700	29.52	2.97	-26.5	205	258	-0.6
750	27.93	3.22	-38.7	201	248	-0.6
800	25.72	3.47	-51.3	197	238	-0.7
850	22.88	3.73	-64.5	193	228	-0.7
900	19.38	3.99	-78.2	189	219	-0.7
950	15.19	4.26	-92.5	185	211	-0.7
1000	10.27	4.53	-107.4	181	202	-0.8
1050	4.60	4.81	-122.9	178	195	-0.8
1086	0.00	5.02	-134.5	175	189	-0.8

DRAG RDCR. WT. 0.241 GRAMS PCT. DRAG CHANGE / (DEG. YAW)**2 2.12

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	85.0	274	462	0.0
0	0.00	0.00	85.0	274	462	0.0
50	4.01	0.18	78.2	271	452	0.0
100	7.69	0.37	71.4	269	443	0.0
150	11.03	0.56	64.4	266	434	-0.1
200	14.02	0.75	57.3	264	426	-0.1
250	16.66	0.94	50.1	261	417	-0.1
300	18.93	1.13	42.7	259	409	-0.1
350	20.84	1.32	35.1	256	401	-0.2
400	22.38	1.52	27.5	254	393	-0.2
450	23.54	1.72	19.7	252	385	-0.2
500	24.31	1.92	11.7	249	377	-0.2
550	24.69	2.12	3.6	247	370	-0.3
600	24.67	2.32	-4.7	245	362	-0.3
650	24.23	2.53	-13.1	242	355	-0.3
700	23.38	2.73	-21.7	240	348	-0.3
750	22.10	2.94	-30.4	238	341	-0.3
800	20.39	3.16	-39.4	234	329	-0.4
850	18.24	3.37	-48.7	229	319	-0.4
900	15.61	3.59	-58.5	224	303	-0.5
950	12.49	3.82	-68.6	220	291	-0.5
1000	8.87	4.05	-79.1	215	280	-0.6
1050	4.71	4.28	-90.1	211	268	-0.6
1100	0.00	4.53	-101.6	207	258	-0.6

TYPE CC 1 CALIBER 6.50 MM AVERAGE DENSITY 11.00 GRAMS/CC.
PROJ. WT 12.298 GRAMS PROJ. DIA. 6.50 MM IMPULSE 1.2 LB. SEC.
DRAG RDCR. WT. 0.000 GRAMS CHG. WT. 0.62 GRAMS SABOT WT. 0.000 GRAMS
TWIST RATE NA PCT. DRAG CHANGE / (DEG. YAW)**2 0.74

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	59.8	373	856	0.0
0	0.00	0.00	59.8	373	856	0.0
50	2.85	0.14	56.1	361	799	-0.1
100	5.50	0.28	52.1	349	748	-0.2
150	7.96	0.42	47.8	338	703	-0.3
200	10.20	0.57	43.3	329	664	-0.4
	12.22	0.73	38.6	320	631	-0.4
300	13.99	0.89	33.6	313	602	-0.4
350	15.52	1.05	28.4	306	576	-0.5
400	16.78	1.21	22.9	300	553	-0.5
450	17.77	1.38	17.3	294	531	-0.5
500	18.48	1.55	11.4	288	509	-0.6
550	18.89	1.73	5.2	282	489	-0.6
600	18.99	1.91	-1.2	276	470	-0.7
650	18.77	2.09	-7.9	271	451	-0.7
700	18.22	2.28	-14.8	266	434	-0.8
750	17.32	2.47	-22.0	260	416	-0.8
800	16.06	2.66	-29.6	255	400	-0.8
850	14.42	2.86	-37.4	250	384	-0.9
900	12.39	3.06	-45.6	245	369	-0.9
950	9.95	3.27	-54.0	240	355	-0.9
1000	7.08	3.48	-62.9	235	341	-1.0
1050	3.77	3.69	-72.1	231	327	-1.0
1100	0.00	3.91	-81.6	226	315	-1.0

DRAG RDCR. WT. 0.241 GRAMS PCT. DRAG CHANGE / (DEG. YAW)**2 2.12

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	45.3	373	856	0.0
0	0.00	0.00	45.3	373	856	0.0
50	2.14	0.13	41.7	370	839	0.0
100	4.09	0.27	38.0	366	822	-0.1
150	5.87	0.41	34.2	363	806	-0.1
200	7.45	0.55	30.4	359	791	-0.1
250	8.85	0.69	26.5	356	775	-0.2
300	10.06	0.83	22.5	353	761	-0.2
350	11.06	0.97	18.5	350	747	-0.2
400	11.87	1.11	14.3	346	733	-0.3
450	12.47	1.26	10.2	343	719	-0.3
500	12.87	1.41	5.9	340	706	-0.3
550	13.08	1.57	1.5	337	693	-0.3
600	13.09	1.73	-2.9	334	680	-0.4
650	12.91	1.90	-7.4	331	667	-0.4
700	12.50	2.08	-12.0	328	655	-0.4
750	11.80	2.26	-16.7	326	643	-0.4
800	10.81	2.45	-21.4	323	631	-0.5
850	9.50	2.64	-26.2	320	620	-0.5
900	8.10	2.84	-31.2	317	608	-0.5
950	6.43	3.04	-36.2	314	597	-0.5
1000	4.56	3.24	-41.3	312	586	-0.6
1050	2.41	3.45	-46.5	309	576	-0.6
1100	0.00	3.67	-51.9	307	566	-0.7

TYPE CC 1 CALIBER 6.50 MM AVERAGE DENSITY 11.00 GRAMS/CC.
PROJ. WT 12.298 GRAMS PROJ. DIA. 6.50 MM IMPULSE 2.1 LB. SEC.
DRAG RDCR. WT. 0.000 GRAMS CHG. WT. 1.78 GRAMS SABOT WT. 0.000 GRAMS
TWIST RATE NA PCT. DRAG CHANGE / (DEG. YAW)**2 0.74

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	25.9	586	2112	0.0
0	0.00	0.00	25.9	586	2112	0.0
50	1.24	0.09	24.5	570	2000	-0.2
100	2.40	0.18	22.9	555	1893	-0.3
150	3.48	0.27	21.2	539	1780	-0.5
200	4.48	0.36	19.4	524	1680	-0.6
250	5.39	0.46	17.6	509	1584	-0.8
300	6.21	0.56	15.6	494	1502	-0.9
350	6.92	0.66	13.5	479	1414	-1.0
400	7.53	0.77	11.2	465	1330	-1.2
450	8.03	0.88	8.8	451	1250	-1.3
500	8.41	0.99	6.3	437	1173	-1.4
550	8.65	1.10	3.6	423	1101	-1.5
600	8.76	1.22	0.7	410	1032	-1.6
650	8.73	1.35	-2.3	396	967	-1.7
700	8.54	1.48	-5.6	384	905	-1.8
750	8.18	1.61	-9.1	371	846	-1.9
800	7.65	1.75	-12.9	359	791	-2.0
850	6.92	1.89	-16.9	347	741	-2.0
900	6.00	2.03	-21.2	337	698	-1.9
950	4.85	2.19	-25.7	328	660	-1.8
1000	3.48	2.34	-30.5	319	627	-1.7
1050	1.87	2.50	-35.5	312	599	-1.6
1100	0.00	2.66	-40.8	306	574	-1.5

DRAG RDCR. WT. 0.241 GRAMS PCT. DRAG CHANGE / (DEG. YAW)**2 2.12

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	18.1	586	2112	0.0
0	0.00	0.00	18.1	586	2112	0.0
50	0.85	0.09	16.6	581	2077	0.0
100	1.63	0.17	15.1	577	2042	-0.1
150	2.33	0.26	13.6	572	2008	-0.1
200	2.96	0.35	12.0	567	1974	-0.2
250	3.51	0.44	10.5	563	1941	-0.2
300	3.99	0.53	8.8	558	1908	-0.3
350	4.39	0.61	7.3	553	1876	-0.3
400	4.71	0.71	5.6	549	1844	-0.4
450	4.95	0.80	4.0	544	1812	-0.4
500	5.10	0.89	2.3	540	1781	-0.5
550	5.17	0.98	0.5	535	1749	-0.5
600	5.16	1.08	-1.2	531	1720	-0.5
650	5.06	1.17	-3.0	526	1690	-0.6
700	4.87	1.27	-4.8	522	1661	-0.6
750	4.59	1.36	-6.7	517	1632	-0.7
800	4.22	1.46	-8.6	513	1603	-0.7
850	3.76	1.56	-10.5	509	1575	-0.7
900	3.20	1.66	-12.4	504	1547	-0.8
950	2.55	1.76	-14.4	500	1520	-0.8
1000	1.80	1.86	-16.4	496	1493	-0.9
1050	0.95	1.96	-18.5	491	1466	-0.9
1100	0.00	2.06	-20.6	487	1440	-0.9

TYPE CC 1 CALIBER 6.50 MM AVERAGE DENSITY 16.70 GRAMS/CC.
PROJ. WT 18.671 GRAMS PROJ. DIA. 6.50 MM IMPULSE 0.8 LB. SEC.
DRAG RDCR. WT. 0.000 GRAMS CHG. WT. 0.32 GRAMS SABOT WT. 0.000 GRAMS
TWIST RATE NA PCT. DRAG CHANGE / (DEG. YAW)**2 0.74

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	100.0	206	396	0.0
0	0.00	0.00	100.0	206	396	0.0
50	4.63	0.25	88.1	203	385	0.0
100	8.66	0.49	75.7	200	373	-0.1
150	12.07	0.75	63.1	197	363	-0.1
200	14.85	1.00	50.0	194	352	-0.1
250	16.98	1.26	36.6	191	342	-0.1
300	18.43	1.53	22.8	189	333	-0.2
350	19.20	1.79	8.5	186	323	-0.2
400	19.27	2.06	-6.1	184	314	-0.2
450	18.60	2.34	-21.1	181	306	-0.2
500	17.19	2.62	-36.6	179	298	-0.2
550	15.01	2.90	-52.4	176	290	-0.3
600	12.03	3.18	-68.7	174	283	-0.3
650	8.25	3.47	-85.4	172	275	-0.3
700	3.62	3.77	-102.6	170	269	-0.3
734	0.00	3.97	-114.4	168	264	-0.3

DRAG RDCR. WT. 0.241 GRAMS PCT. DRAG CHANGE / (DEG. YAW)**2 2.12

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	100.0	206	396	0.0
0	0.00	0.00	100.0	206	396	0.0
50	4.63	0.24	88.1	204	390	0.0
100	8.67	0.49	76.1	203	384	0.0
150	12.11	0.74	63.9	201	378	0.0
200	14.95	0.99	51.5	200	372	-0.1
250	17.17	1.24	38.9	199	366	-0.1
300	18.77	1.49	26.2	197	361	-0.1
350	19.74	1.75	13.3	196	356	-0.1
400	20.07	2.00	0.2	195	351	-0.1
450	19.75	2.26	-13.1	193	346	-0.1
500	18.78	2.52	-26.5	192	341	-0.1
550	17.15	2.78	-40.1	191	337	-0.1
600	14.84	3.04	-53.9	190	332	-0.2
650	11.85	3.31	-68.0	187	323	-0.2
700	8.16	3.58	-82.4	185	315	-0.2
750	3.74	3.85	-97.2	182	307	-0.2
787	0.00	4.06	-108.4	181	301	-0.2

TYPE CC 1 CALIBER 6.50 MM AVERAGE DENSITY 16.70 GRAMS/CC.
PROJ. WT 18.671 GRAMS PROJ. DIA. 6.50 MM IMPULSE 1.2 LB. SEC.
DRAG RDCR. WT. 0.000 GRAMS CHG. WT. 0.42 GRAMS SABOT WT. 0.000 GRAMS
TWIST RATE NA PCT. DRAG CHANGE / (DEG. YAW)**2 0.74

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	91.7	272	691	0.0
0	0.00	0.00	91.7	272	691	0.0
50	4.34	0.19	84.9	268	672	0.0
100	8.35	0.37	77.9	265	653	-0.1
150	12.00	0.57	70.6	261	636	-0.1
200	15.29	0.76	63.2	257	618	-0.1
250	18.20	0.95	55.5	254	601	-0.2
300	20.74	1.15	47.7	250	585	-0.2
350	22.88	1.35	39.6	247	569	-0.2
400	24.63	1.56	31.3	244	554	-0.3
450	25.95	1.77	22.7	240	539	-0.3
500	26.86	1.97	14.0	237	524	-0.3
550	27.33	2.19	5.0	234	510	-0.4
600	27.34	2.40	-4.3	231	497	-0.4
650	26.90	2.62	-13.8	228	484	-0.4
700	25.99	2.84	-23.6	225	471	-0.4
750	24.59	3.07	-33.6	222	458	-0.5
800	22.69	3.29	-43.9	219	447	-0.5
850	20.28	3.52	-54.5	216	435	-0.5
900	17.34	3.76	-65.4	213	424	-0.5
950	13.85	3.99	-76.5	210	413	-0.5
1000	9.81	4.23	-88.0	208	402	-0.6
1050	5.20	4.48	-99.7	205	392	-0.6
1100	0.00	4.72	-111.7	202	383	-0.6

DRAG RDCR. WT. 0.241 GRAMS PCT. DRAG CHANGE / (DEG. YAW)**2 2.12

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	81.8	272	691	0.0
0	0.00	0.00	81.8	272	691	0.0
50	3.85	0.18	75.0	270	681	0.0
100	7.37	0.37	68.1	269	672	0.0
150	10.55	0.56	61.2	267	663	0.0
200	13.38	0.75	54.1	265	654	-0.1
250	15.86	0.94	47.0	263	645	-0.1
300	17.99	1.13	39.7	262	637	-0.1
350	19.76	1.32	32.4	260	628	-0.1
400	21.17	1.51	25.0	259	620	-0.1
450	22.22	1.71	17.4	257	612	-0.1
500	22.89	1.90	9.8	255	604	-0.2
550	23.18	2.10	2.1	254	596	-0.2
600	23.10	2.29	-5.7	252	588	-0.2
650	22.63	2.49	-13.6	251	581	-0.2
700	21.77	2.69	-21.5	249	573	-0.2
750	20.52	2.89	-29.6	248	566	-0.2
800	18.87	3.10	-37.8	245	559	-0.3
850	16.81	3.30	-46.2	242	541	-0.3
900	14.33	3.51	-54.8	238	527	-0.3
950	11.42	3.72	-63.7	236	513	-0.3
1000	8.07	3.94	-72.8	233	500	-0.4
1050	4.27	4.15	-82.1	230	487	-0.4
1100	0.00	4.37	-91.7	227	474	-0.4

TYPE CC 1 CALIBER 6.50 MM AVERAGE DENSITY 16.70 GRAMS/CC.
PROJ. WT 18.671 GRAMS PROJ. DIA. 6.50 MM IMPULSE 2.1 LB. SEC.
DRAG RDCR. WT. 0.000 GRAMS CHG. WT. 1.28 GRAMS SABOT WT. 0.000 GRAMS
TWIST RATE NA PCT. DRAG CHANGE / (DEG. YAW)**2 0.74

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	43.5	418	1631	0.0
0	0.00	0.00	43.5	418	1631	0.0
50	2.07	0.12	40.6	409	1562	-0.1
100	3.99	0.24	37.6	400	1496	-0.2
150	5.75	0.37	34.4	392	1432	-0.3
200	7.36	0.50	31.0	383	1371	-0.3
250	8.80	0.63	27.6	375	1311	-0.4
300	10.07	0.77	23.9	367	1254	-0.5
350	11.15	0.91	20.1	358	1200	-0.6
400	12.05	1.05	16.2	351	1148	-0.6
450	12.74	1.19	12.0	344	1102	-0.6
500	13.23	1.34	7.7	337	1059	-0.7
550	13.50	1.49	3.2	331	1020	-0.7
600	13.54	1.64	-1.5	325	985	-0.7
650	13.36	1.80	-6.3	320	953	-0.7
700	12.93	1.95	-11.3	315	924	-0.7
750	12.26	2.11	-16.4	310	898	-0.7
800	11.33	2.28	-21.6	306	873	-0.7
850	10.14	2.44	-27.1	302	850	-0.7
900	8.68	2.61	-32.6	298	827	-0.7
950	6.94	2.78	-38.3	294	806	-0.8
1000	4.92	2.95	-44.2	290	785	-0.8
1050	2.61	3.12	-50.2	286	764	-0.8
1100	0.00	3.30	-56.4	282	745	-0.8

DRAG RDCR. WT. 0.241 GRAMS PCT. DRAG CHANGE / (DEG. YAW)**2 2.12

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	34.4	418	1631	0.0
0	0.00	0.00	34.4	418	1631	0.0
50	1.61	0.12	31.5	415	1611	0.0
100	3.09	0.24	28.6	413	1591	0.0
150	4.42	0.36	25.7	411	1571	-0.1
200	5.61	0.48	22.7	408	1551	-0.1
250	6.65	0.61	19.7	406	1532	-0.1
300	7.54	0.73	16.6	403	1512	-0.1
350	8.27	0.86	13.5	401	1493	-0.2
400	8.86	0.98	10.4	398	1475	-0.2
450	9.30	1.11	7.2	396	1456	-0.2
500	9.57	1.23	4.0	393	1438	-0.2
550	9.69	1.36	0.8	391	1420	-0.3
600	9.65	1.49	-2.5	389	1402	-0.3
650	9.45	1.62	-5.9	386	1384	-0.3
700	9.08	1.75	-9.2	384	1367	-0.3
750	8.55	1.88	-12.6	382	1349	-0.3
800	7.85	2.01	-16.1	379	1332	-0.4
850	6.98	2.14	-19.6	377	1316	-0.4
900	5.93	2.28	-23.1	375	1299	-0.4
950	4.72	2.41	-26.7	373	1283	-0.4
1000	3.33	2.54	-30.3	370	1266	-0.5
1050	1.75	2.68	-34.0	368	1251	-0.5
1100	0.00	2.82	-37.7	366	1235	-0.5

TYPE CC 1 CALIBER 7.62 MM AVERAGE DENSITY 7.80 GRAMS/CC.
PROJ. WT 14.048 GRAMS PROJ. DIA. 7.62 MM IMPULSE 0.8 LB. SEC.
DRAG RDCR. WT. 0.000 GRAMS CHG. WT. 0.29 GRAMS SABOT WT. 0.000 GRAMS
TWIST RATE NA PCT. DRAG CHANGE / (DEG. YAW)**2 0.74

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	100.0	249	435	0.0
0	0.00	0.00	100.0	249	435	0.0
50	4.72	0.20	91.7	243	414	-0.1
100	9.02	0.41	83.0	237	393	-0.1
150	12.88	0.63	73.9	231	374	-0.2
200	16.28	0.85	64.3	225	355	-0.2
250	19.19	1.07	54.1	219	338	-0.3
300	21.59	1.31	43.5	214	321	-0.3
350	23.45	1.54	32.3	208	305	-0.4
400	24.75	1.79	20.5	203	290	-0.4
450	25.45	2.03	8.0	198	276	-0.5
500	25.53	2.29	-5.0	193	262	-0.5
550	24.96	2.55	-18.7	188	249	-0.5
600	23.69	2.82	-33.2	184	237	-0.6
650	21.69	3.10	-48.5	179	226	-0.6
700	18.93	3.38	-64.3	175	215	-0.6
750	15.37	3.67	-81.0	171	205	-0.7
800	10.95	3.97	-98.6	167	195	-0.7
850	5.65	4.27	-117.0	163	186	-0.7
896	0.00	4.56	-134.6	159	178	-0.7

DRAG RDCR. WT. 0.389 GRAMS PCT. DRAG CHANGE / (DEG. YAW)**2 2.12

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	100.0	249	435	0.0
0	0.00	0.00	100.0	249	435	0.0
50	4.72	0.20	91.8	246	424	0.0
100	9.03	0.41	83.5	243	414	-0.1
150	12.93	0.62	74.9	240	403	-0.1
200	16.40	0.83	66.2	237	393	-0.1
250	19.43	1.04	57.2	235	383	-0.1
300	22.02	1.25	48.0	232	373	-0.2
350	24.15	1.47	38.6	229	364	-0.2
400	25.81	1.69	29.0	226	354	-0.2
450	27.00	1.91	19.1	224	345	-0.2
500	27.69	2.14	9.1	221	337	-0.3
550	27.88	2.36	-1.3	219	328	-0.3
600	27.56	2.59	-11.9	216	320	-0.3
650	26.72	2.83	-22.7	214	312	-0.3
700	25.34	3.06	-33.8	210	302	-0.4
750	23.40	3.30	-45.4	205	287	-0.4
800	20.88	3.55	-57.6	200	273	-0.5
850	17.74	3.80	-70.4	195	260	-0.5
900	13.95	4.07	-83.9	190	247	-0.5
950	9.49	4.33	-98.0	185	235	-0.6
1000	4.30	4.61	-112.9	181	224	-0.6
1037	0.00	4.81	-124.3	178	216	-0.6

TYPE CC 1 CALIBER 7.62 MM AVERAGE DENSITY 7.80 GRAMS/CC.
PROJ. WT 14.048 GRAMS PROJ. DIA. 7.62 MM IMPULSE 1.2 LB. SEC.
DRAG RDCR. WT. 0.000 GRAMS CHG. WT. 0.52 GRAMS SABOT WT. 0.000 GRAMS
TWIST RATE NA PCT. DRAG CHANGE / (DEG. YAW)**2 0.74

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	74.4	336	793	0.0
0	0.00	0.00	74.4	336	793	0.0
50	3.55	0.15	69.9	325	742	-0.1
100	6.86	0.31	65.0	315	699	-0.2
150	9.93	0.47	59.8	307	662	-0.2
200	12.74	0.63	54.4	299	630	-0.3
250	15.27	0.80	48.7	292	599	-0.4
300	17.52	0.98	42.7	285	570	-0.4
350	19.46	1.16	36.4	278	543	-0.5
400	21.09	1.34	29.7	271	517	-0.5
450	22.38	1.52	22.8	265	493	-0.6
500	23.32	1.72	15.5	258	469	-0.6
550	23.90	1.91	7.8	252	447	-0.7
600	24.09	2.11	-0.4	246	425	-0.7
650	23.88	2.32	-8.7	240	405	-0.8
700	23.24	2.53	-17.5	234	386	-0.8
750	22.15	2.74	-26.9	229	367	-0.9
800	20.60	2.97	-36.7	223	350	-0.9
850	18.55	3.19	-46.9	218	333	-0.9
900	15.99	3.43	-57.7	213	317	-1.0
950	12.88	3.66	-69.1	207	302	-1.0
1000	9.20	3.91	-81.0	202	288	-1.0
1050	4.92	4.16	-93.5	198	274	-1.1
1100	0.00	4.42	-106.6	193	261	-1.1

DRAG RDCR. WT. 0.389 GRAMS PCT. DRAG CHANGE / (DEG. YAW)**2 2.12

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	57.4	336	793	0.0
0	0.00	0.00	57.4	336	793	0.0
50	2.71	0.15	52.9	332	775	0.0
100	5.19	0.30	48.3	329	757	-0.1
150	7.45	0.45	43.6	325	740	-0.1
200	9.48	0.61	38.9	322	723	-0.1
250	11.27	0.77	34.0	318	707	-0.2
300	12.81	0.92	29.0	315	691	-0.2
350	14.11	1.08	23.9	312	675	-0.2
400	15.16	1.24	18.7	308	660	-0.3
450	15.95	1.41	13.4	305	645	-0.3
500	16.48	1.57	8.0	302	631	-0.3
550	16.74	1.74	2.5	299	616	-0.3
600	16.72	1.91	-3.2	295	602	-0.4
650	16.43	2.08	-9.0	292	589	-0.4
700	15.85	2.25	-14.9	289	575	-0.4
750	14.97	2.42	-20.9	286	562	-0.5
800	13.80	2.60	-27.1	283	549	-0.5
850	12.31	2.78	-33.4	280	537	-0.5
900	10.52	2.96	-39.8	277	525	-0.5
950	8.41	3.14	-46.5	274	502	-0.6
1000	5.96	3.33	-53.4	265	478	-0.7
1050	3.17	3.52	-60.7	258	455	-0.8
1100	0.00	3.71	-68.4	252	433	-0.8

TYPE CC 1 CALIBER 7.62 MM AVERAGE DENSITY 7.80 GRAMS/CC.
PROJ. WT 14.048 GRAMS PROJ. DIA. 7.62 MM IMPULSE 2.1 LB. SEC.
DRAG RDCR. WT. 0.000 GRAMS CHG. WT. 1.63 GRAMS SABOT WT. 0.000 GRAMS
TWIST RATE NA PCT. DRAG CHANGE / (DEG. YAW)**2 0.74

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	36.4	526	1943	0.0
0	0.00	0.00	36.4	526	1943	0.0
50	1.74	0.10	34.5	508	1811	-0.2
100	3.39	0.20	32.5	490	1686	-0.4
150	4.94	0.30	30.4	472	1567	-0.5
200	6.37	0.41	28.0	455	1455	-0.7
250	7.69	0.52	25.5	438	1348	-0.8
300	8.88	0.64	22.8	422	1249	-1.0
350	9.93	0.76	19.9	405	1155	-1.1
400	10.84	0.88	16.8	390	1067	-1.3
450	11.58	1.02	13.3	374	984	-1.4
500	12.15	1.15	9.6	360	908	-1.5
550	12.53	1.29	5.6	346	839	-1.5
600	12.70	1.44	1.3	334	781	-1.5
650	12.65	1.59	-3.4	323	733	-1.4
700	12.37	1.75	-8.3	314	692	-1.3
750	11.84	1.91	-13.5	306	657	-1.3
800	11.05	2.08	-19.0	298	625	-1.2
850	9.98	2.25	-24.8	291	595	-1.2
900	8.62	2.42	-30.8	284	567	-1.3
950	6.96	2.60	-37.1	277	540	-1.3
1000	4.98	2.78	-43.8	271	515	-1.3
1050	2.67	2.97	-50.8	264	491	-1.4
1100	0.00	3.16	-58.1	258	468	-1.4

DRAG RDCR. WT. 0.389 GRAMS PCT. DRAG CHANGE / (DEG. YAW)**2 2.12

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	23.2	526	1943	0.0
0	0.00	0.00	23.2	526	1943	0.0
50	1.09	0.10	21.4	521	1903	-0.1
100	2.10	0.19	19.5	515	1862	-0.1
150	3.01	0.29	17.6	510	1823	-0.2
200	3.83	0.39	15.7	505	1784	-0.2
250	4.55	0.49	13.7	500	1746	-0.3
300	5.17	0.59	11.7	495	1708	-0.3
350	5.70	0.69	9.6	489	1672	-0.4
400	6.12	0.79	7.5	484	1635	-0.4
450	6.44	0.90	5.3	479	1600	-0.5
500	6.65	1.00	3.2	474	1565	-0.5
550	6.75	1.11	0.9	469	1531	-0.5
600	6.74	1.21	-1.4	464	1497	-0.6
650	6.62	1.32	-3.7	459	1464	-0.6
700	6.38	1.43	-6.1	454	1431	-0.7
750	6.03	1.54	-8.6	450	1400	-0.7
800	5.55	1.65	-11.1	445	1368	-0.8
850	4.95	1.77	-13.6	440	1338	-0.8
900	4.23	1.88	-16.2	435	1308	-0.9
950	3.37	2.00	-18.9	431	1278	-0.9
1000	2.38	2.11	-21.6	426	1249	-0.9
1050	1.26	2.23	-24.4	421	1221	-1.0
1100	0.00	2.35	-27.2	417	1193	-1.0

TYPE CC 1 CALIBER 7.62 MM AVERAGE DENSITY 11.00 GRAMS/CC.
PROJ. WT 19.811 GRAMS PROJ. DIA. 7.62 MM IMPULSE 0.8 LB. SEC.
DRAG RDCR. WT. 0.000 GRAMS CHG. WT. 0.33 GRAMS SABOT WT. 0.000 GRAMS
TWIST RATE NA PCT. DRAG CHANGE / (DEG. YAW)**2 0.74

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	100.0	198	388	0.0
0	0.00	0.00	100.0	198	388	0.0
50	4.60	0.26	87.0	194	374	0.0
100	8.55	0.52	73.5	191	360	-0.1
150	11.82	0.78	59.5	187	346	-0.1
200	14.39	1.05	45.0	184	334	-0.1
250	16.23	1.33	29.8	180	322	-0.2
300	17.31	1.61	14.2	177	310	-0.2
350	17.61	1.89	-2.1	174	299	-0.2
400	17.10	2.18	-18.9	171	288	-0.2
450	15.74	2.48	-36.4	168	278	-0.3
500	13.51	2.78	-54.5	165	269	-0.3
550	10.38	3.09	-73.2	162	260	-0.3
600	6.31	3.40	-92.6	159	251	-0.3
650	1.26	3.72	-112.6	157	243	-0.4
661	0.00	3.79	-117.1	156	241	-0.4

DRAG RDCR. WT. 0.389 GRAMS PCT. DRAG CHANGE / (DEG. YAW)**2 2.12

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	100.0	198	388	0.0
0	0.00	0.00	100.0	198	388	0.0
50	4.60	0.25	87.1	196	380	0.0
100	8.57	0.51	74.0	194	373	0.0
150	11.88	0.77	60.7	192	365	0.0
200	14.53	1.03	47.1	191	358	-0.1
250	16.50	1.30	33.2	189	351	-0.1
300	17.78	1.56	19.1	187	344	-0.1
350	18.37	1.83	4.7	186	338	-0.1
400	18.24	2.10	-9.9	184	331	-0.1
450	17.40	2.37	-24.7	183	325	-0.1
500	15.81	2.65	-39.8	181	319	-0.2
550	13.48	2.93	-55.2	180	314	-0.2
600	10.39	3.21	-70.9	177	304	-0.2
650	6.51	3.49	-87.1	174	294	-0.2
700	1.81	3.78	-103.9	171	284	-0.3
717	0.00	3.88	-109.8	170	281	-0.3

TYPE CC 1 CALIBER 7.62 MM AVERAGE DENSITY 11.00 GRAMS/CC.
PROJ. WT 19.811 GRAMS PROJ. DIA. 7.62 MM IMPULSE 1.2 LB. SEC.
DRAG RDCR. WT. 0.000 GRAMS CHG. WT. 0.43 GRAMS SABOT WT. 0.000 GRAMS
TWIST RATE NA PCT. DRAG CHANGE / (DEG. YAW)**2 0.74

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	100.0	260	670	0.0
0	0.00	0.00	100.0	260	670	0.0
50	4.74	0.19	92.5	255	646	0.0
100	9.10	0.39	84.7	251	623	-0.1
150	13.06	0.60	76.6	246	601	-0.1
200	16.62	0.80	68.2	242	580	-0.2
250	19.76	1.01	59.5	238	559	-0.2
300	22.47	1.22	50.5	233	539	-0.2
350	24.72	1.44	41.2	229	520	-0.3
400	26.51	1.66	31.5	225	502	-0.3
450	27.81	1.88	21.4	221	484	-0.4
500	28.61	2.11	11.0	217	468	-0.4
550	28.89	2.34	0.3	213	451	-0.4
600	28.63	2.58	-10.9	210	436	-0.5
650	27.82	2.82	-22.4	206	421	-0.5
700	26.43	3.07	-34.4	203	406	-0.5
750	24.44	3.31	-46.8	199	392	-0.5
800	21.83	3.57	-59.6	196	379	-0.6
850	18.58	3.83	-72.9	192	366	-0.6
900	14.66	4.09	-86.7	189	354	-0.6
950	10.05	4.36	-100.9	186	343	-0.6
1000	4.73	4.63	-115.5	183	331	-0.7
1039	0.00	4.85	-127.5	181	323	-0.7

DRAG RDCR. WT. 0.389 GRAMS PCT. DRAG CHANGE / (DEG. YAW)**2 2.12

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	92.7	260	670	0.0
0	0.00	0.00	92.7	260	670	0.0
50	4.37	0.19	85.2	258	658	0.0
100	8.38	0.39	77.7	256	646	0.0
150	12.01	0.59	69.9	254	634	-0.1
200	15.25	0.78	62.1	251	623	-0.1
250	18.11	0.98	54.1	249	612	-0.1
300	20.57	1.19	46.0	247	601	-0.1
350	22.63	1.39	37.8	245	590	-0.1
400	24.28	1.59	29.4	243	580	-0.2
450	25.52	1.80	20.9	241	570	-0.2
500	26.34	2.01	12.3	239	560	-0.2
550	26.72	2.22	3.5	237	550	-0.2
600	26.68	2.43	-5.5	235	540	-0.2
650	26.19	2.64	-14.6	234	531	-0.2
700	25.25	2.86	-23.8	232	522	-0.3
750	23.86	3.08	-33.2	229	510	-0.3
800	21.99	3.30	-42.9	225	492	-0.3
850	19.65	3.52	-52.9	221	475	-0.4
900	16.80	3.75	-63.3	217	459	-0.4
950	13.43	3.98	-74.1	214	443	-0.4
1000	9.52	4.22	-85.2	210	428	-0.5
1050	5.05	4.46	-96.7	206	414	-0.5
1100	0.00	4.71	-108.6	203	400	-0.5

TYPE CC 1 CALIBER 7.62 MM AVERAGE DENSITY 11.00 GRAMS/CC.
PROJ. WT 19.811 GRAMS PROJ. DIA. 7.62 MM IMPULSE 2.1 LB. SEC.
DRAG RDCR. WT. 0.000 GRAMS CHG. WT. 1.20 GRAMS SABOT WT. 0.000 GRAMS
TWIST RATE NA PCT. DRAG CHANGE / (DEG. YAW)**2 0.74

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	51.3	398	1569	0.0
0	0.00	0.00	51.3	398	1569	0.0
50	2.44	0.13	48.1	387	1482	-0.1
100	4.72	0.26	44.6	376	1400	-0.2
150	6.82	0.39	41.0	365	1321	-0.3
200	8.74	0.53	37.1	355	1247	-0.4
250	10.47	0.68	33.0	345	1181	-0.5
300	11.99	0.82	28.7	336	1121	-0.5
350	13.29	0.97	24.2	328	1069	-0.5
400	14.36	1.13	19.5	321	1023	-0.6
450	15.20	1.28	14.5	315	982	-0.6
500	15.79	1.45	9.4	309	945	-0.6
550	16.13	1.61	4.1	303	912	-0.6
600	16.20	1.77	-1.5	298	881	-0.6
650	15.99	1.94	-7.2	293	851	-0.7
700	15.50	2.12	-13.1	288	822	-0.7
750	14.71	2.29	-19.2	283	794	-0.7
800	13.61	2.47	-25.6	278	767	-0.8
850	12.20	2.65	-32.1	274	741	-0.8
900	10.46	2.84	-38.9	269	717	-0.8
950	8.39	3.02	-45.9	264	693	-0.9
1000	5.96	3.21	-53.2	260	670	-0.9
1050	3.17	3.41	-60.7	256	648	-0.9
1100	0.00	3.61	-68.5	251	626	-1.0

DRAG RDCR. WT. 0.389 GRAMS PCT. DRAG CHANGE / (DEG. YAW)**2 2.12

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	39.0	398	1569	0.0
0	0.00	0.00	39.0	398	1569	0.0
50	1.84	0.13	35.9	395	1543	0.0
100	3.52	0.25	32.6	392	1518	-0.1
150	5.04	0.38	29.3	389	1493	-0.1
200	6.40	0.51	26.0	386	1468	-0.1
250	7.59	0.64	22.6	383	1443	-0.2
300	8.62	0.77	19.2	380	1419	-0.2
350	9.48	0.90	15.7	377	1396	-0.2
400	10.16	1.04	12.1	374	1373	-0.2
450	10.67	1.17	8.5	371	1350	-0.3
500	11.00	1.31	4.9	368	1327	-0.3
550	11.15	1.44	1.1	365	1305	-0.3
600	11.12	1.58	-2.6	362	1283	-0.3
650	10.90	1.72	-6.5	359	1263	-0.4
700	10.49	1.86	-10.4	356	1242	-0.4
750	9.88	2.00	-14.4	354	1222	-0.4
800	9.08	2.14	-18.4	351	1203	-0.4
850	8.08	2.29	-22.5	348	1184	-0.4
900	6.88	2.43	-26.6	346	1165	-0.4
950	5.48	2.58	-30.8	343	1147	-0.5
1000	3.86	2.72	-35.1	341	1129	-0.5
1050	2.04	2.87	-39.4	338	1111	-0.5
1100	0.00	3.02	-43.9	335	1089	-0.6

TYPE CC 1 CALIBER 7.62 MM AVERAGE DENSITY 16.70 GRAMS/CC.
PROJ. WT 30.077 GRAMS PROJ. DIA. 7.62 MM IMPULSE 0.8 LB. SEC.
DRAG RDCR. WT. 0.000 GRAMS CHG. WT. 0.39 GRAMS SABOT WT. 0.000 GRAMS
TWIST RATE NA PCT. DRAG CHANGE / (DEG. YAW)**2 0.74

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	100.0	155	361	0.0
0	0.00	0.00	100.0	155	361	0.0
50	4.40	0.33	78.9	153	351	0.0
100	7.75	0.66	57.2	151	342	0.0
150	10.02	0.99	35.0	149	333	-0.1
200	11.18	1.33	12.2	147	325	-0.1
250	11.20	1.67	-11.2	145	317	-0.1
300	10.06	2.02	-35.2	144	310	-0.1
350	7.74	2.37	-59.7	142	303	-0.1
400	4.19	2.72	-84.8	141	297	-0.1
444	0.00	3.04	-107.4	139	292	-0.1

DRAG RDCR. WT. 0.389 GRAMS PCT. DRAG CHANGE / (DEG. YAW)**2 2.12

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	100.0	155	361	0.0
0	0.00	0.00	100.0	155	361	0.0
50	4.41	0.33	79.1	154	355	0.0
100	7.77	0.65	57.8	153	350	0.0
150	10.08	0.98	36.2	152	345	0.0
200	11.32	1.31	14.4	151	340	0.0
250	11.49	1.64	-7.7	150	335	0.0
300	10.56	1.98	-30.1	149	331	-0.1
350	8.53	2.32	-52.7	148	327	-0.1
400	5.38	2.65	-75.5	148	324	-0.1
450	1.10	3.00	-98.6	147	321	-0.1
461	0.00	3.07	-103.7	147	320	-0.1

TYPE CC 1 CALIBER 7.62 MM AVERAGE DENSITY 16.70 GRAMS/CC.
PROJ. WT 30.077 GRAMS PROJ. DIA. 7.62 MM IMPULSE 1.2 LB. SEC.
DRAG RDCR. WT. 0.000 GRAMS CHG. WT. 0.49 GRAMS SABOT WT. 0.000 GRAMS
TWIST RATE NA PCT. DRAG CHANGE / (DEG. YAW)**2 0.74

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	100.0	197	584	0.0
0	0.00	0.00	100.0	197	584	0.0
50	4.60	0.26	87.0	194	569	0.0
100	8.55	0.52	73.6	192	554	0.0
150	11.83	0.78	59.9	190	540	-0.1
200	14.42	1.04	45.8	187	527	-0.1
250	16.32	1.31	31.3	185	514	-0.1
300	17.49	1.59	16.5	183	502	-0.1
350	17.94	1.86	1.4	180	490	-0.2
400	17.62	2.14	-14.1	178	478	-0.2
450	16.54	2.42	-30.0	176	467	-0.2
500	14.67	2.71	-46.3	174	457	-0.2
550	11.99	3.00	-62.9	172	447	-0.2
600	8.49	3.29	-79.9	171	437	-0.2
650	4.13	3.58	-97.2	169	428	-0.3
690	0.00	3.83	-111.5	167	421	-0.3

DRAG RDCR. WT. 0.389 GRAMS PCT. DRAG CHANGE / (DEG. YAW)**2 2.12

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	100.0	197	584	0.0
0	0.00	0.00	100.0	197	584	0.0
50	4.60	0.26	87.0	196	575	0.0
100	8.56	0.51	73.9	194	567	0.0
150	11.87	0.77	60.6	193	559	0.0
200	14.52	1.03	47.1	192	552	0.0
250	16.50	1.29	33.5	191	544	-0.1
300	17.80	1.56	19.7	190	537	-0.1
350	18.43	1.83	5.7	189	531	-0.1
400	18.37	2.09	-8.4	188	524	-0.1
450	17.60	2.36	-22.7	187	518	-0.1
500	16.14	2.62	-37.1	186	512	-0.1
550	13.96	2.88	-51.7	185	506	-0.1
600	11.06	3.14	-66.5	183	497	-0.2
650	7.43	3.41	-81.5	181	486	-0.2
700	3.04	3.72	-96.9	177	470	-0.2
730	0.00	3.89	-106.5	178	470	-0.2

TYPE CC 1 CALIBER 7.62 MM AVERAGE DENSITY 16.70 GRAMS/CC.

PROJ. WT 30.077 GRAMS PROJ. DIA. 7.62 MM IMPULSE 2.1 LB. SEC.

DRAG RDCR. WT. 0.000 GRAMS CHG. WT. 0.72 GRAMS SABOT WT. 0.000 GRAMS

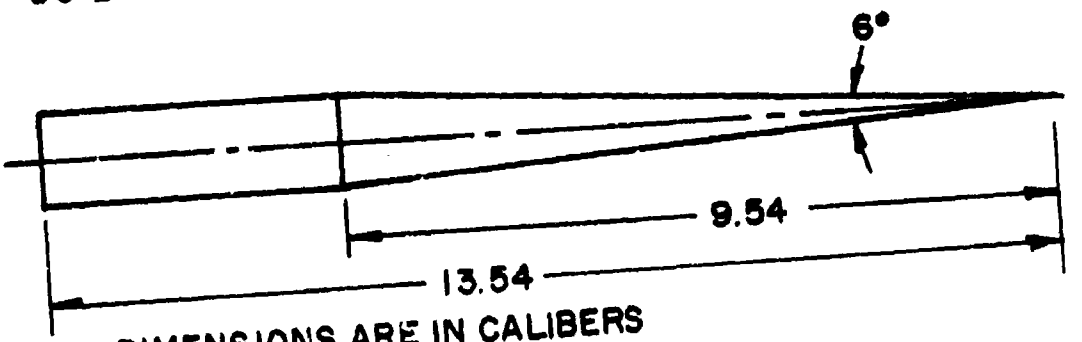
TWIST RATE NA PCT. DRAG CHANGE / (DEG. YAW)**2 0.74

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	78.6	289	1256	0.0
0	0.00	0.00	78.6	289	1256	0.0
50	3.71	0.17	72.5	286	1227	0.0
100	7.12	0.35	66.3	282	1198	-0.1
150	10.23	0.53	60.0	279	1170	-0.1
200	13.01	0.71	53.5	276	1143	-0.1
250	15.48	0.89	46.8	272	1117	-0.2
300	17.61	1.08	40.0	269	1091	-0.2
350	19.40	1.26	33.0	266	1066	-0.2
400	20.85	1.45	25.9	263	1042	-0.2
450	21.95	1.64	18.6	260	1018	-0.3
500	22.68	1.84	11.2	257	995	-0.3
550	23.04	2.03	3.5	254	973	-0.3
600	23.03	2.23	-4.3	251	951	-0.3
650	22.62	2.43	-12.3	248	929	-0.4
700	21.82	2.63	-20.5	246	909	-0.4
750	20.62	2.84	-28.8	243	888	-0.4
800	19.00	3.05	-37.4	240	869	-0.4
850	16.95	3.25	-46.1	238	850	-0.5
900	14.47	3.47	-55.1	235	831	-0.5
950	11.55	3.68	-64.3	233	813	-0.5
1000	8.17	3.90	-73.5	230	795	-0.5
1050	4.32	4.12	-83.1	227	778	-0.6
1100	0.00	4.34	-92.8	225	761	-0.6

DRAG RDCR. WT. 0.389 GRAMS PCT. DRAG CHANGE / (DEG. YAW)**2 2.12

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	71.2	289	1256	0.0
0	0.00	0.00	71.2	289	1256	0.0
50	3.35	0.17	65.2	287	1242	0.0
100	6.40	0.35	59.1	286	1228	0.0
150	9.15	0.52	53.0	284	1214	0.0
200	11.60	0.70	46.8	283	1200	-0.1
250	13.75	0.88	40.5	281	1187	-0.1
300	15.58	1.06	34.1	280	1173	-0.1
350	17.10	1.24	27.7	279	1160	-0.1
400	18.30	1.42	21.3	277	1147	-0.1
450	19.19	1.60	14.7	276	1135	-0.1
500	19.75	1.78	8.1	274	1122	-0.1
550	19.99	1.96	1.4	273	1110	-0.2
600	19.90	2.14	-5.3	271	1098	-0.2
650	19.47	2.33	-12.0	270	1086	-0.2
700	18.71	2.52	-19.0	269	1075	-0.2
750	17.61	2.70	-25.9	267	1063	-0.2
800	16.17	2.89	-33.0	266	1052	-0.2
850	14.38	3.08	-40.0	264	1040	-0.2
900	12.24	3.27	-47.3	263	1029	-0.3
950	9.74	3.46	-54.7	261	1018	-0.3
1000	6.87	3.66	-62.3	260	1007	-0.3
1050	3.63	3.85	-70.0	258	996	-0.3
1100	0.00	4.05	-77.9	257	986	-0.4

CC 2



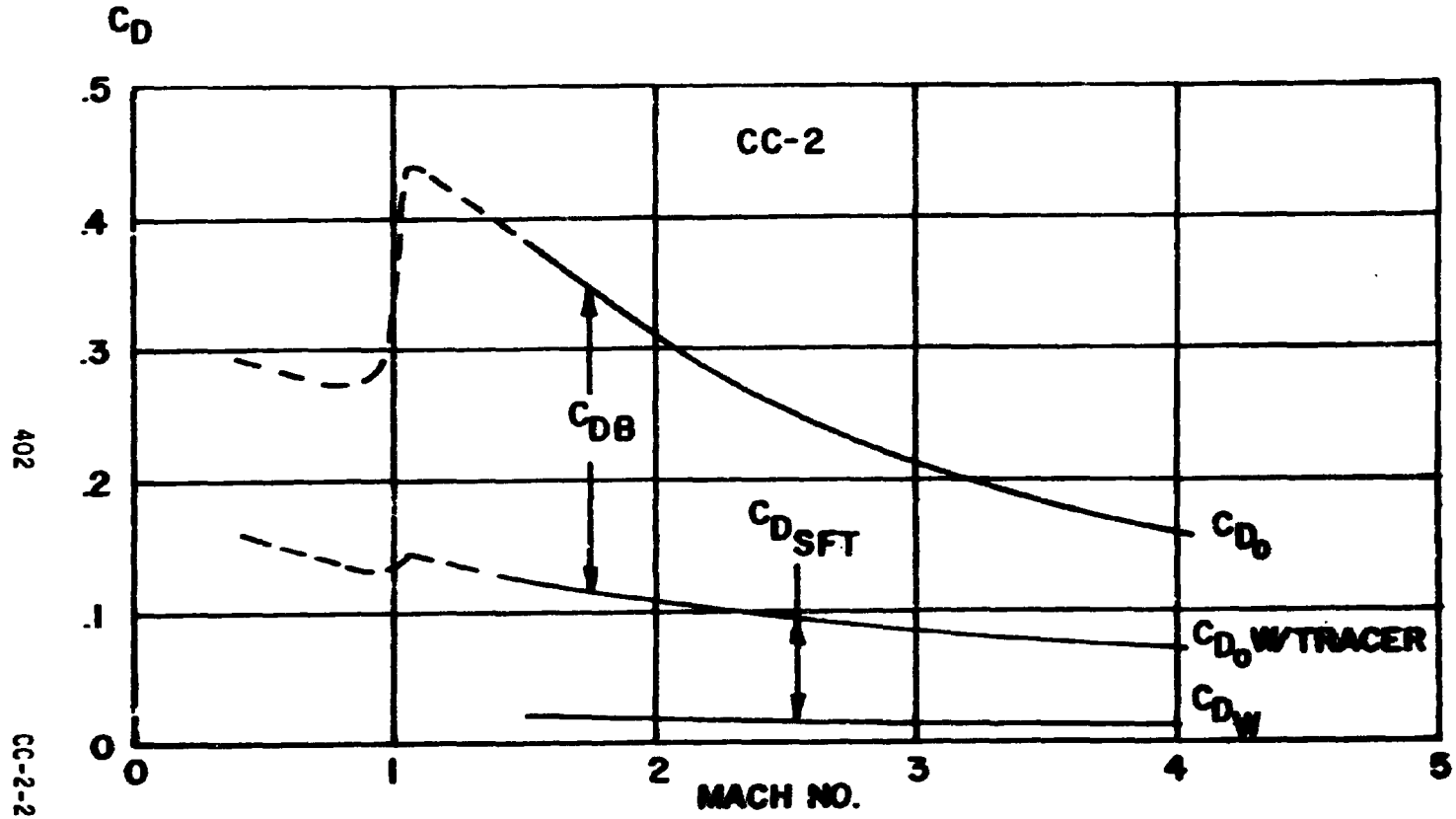
ALL DIMENSIONS ARE IN CALIBERS

Axial Radius of Gyration	= 0.321 Cal.	Wetted Area	= 27.57 Cal.^{2}
Transverse Radius of Gyration	= 2.06 Cal.	Volume	= 5.64 Cal.^{3}
Center of Mass (Nose)	= 9.59 Cal.	Length	= 13.54 Cal.

Mach No.	C_{D_O}	C_{D_B}	C_{D_O} (Tracer)	$C_{D_{SF_T}}$	C_{D_W}	C_{N_α}	CP_N	C_{M_α}
.4 *	.294		.159			2.00	7.25	4.68
.8 *	.271		.136			2.00	7.25	4.68
.9 *	.27?		.132			2.03	7.25	4.75
.95*	.285		.130			2.14	7.26	4.99
1.0 *	.316		.132			2.34	7.27	5.43
1.05*	.433		.139			2.97	7.28	6.86
1.1 *	.433		.137			2.94	7.30	6.73
1.5	.388	.263	.125	.108	.017	2.75	7.46	5.86
2.0	.310	.200	.110	.095	.015	2.60	7.41	5.67
2.5	.253	.155	.098	.084	.014	2.58	7.49	5.42
3.0	.211	.123	.088	.075	.013	2.59	7.60	5.15
3.5	.180	.101	.079	.067	.012	2.61	7.71	4.91
4.0	.156	.084	.072	.061	.011	2.63	7.79	4.73

$C_{D_{\alpha^2}}$ (Mach = 2.5) = 5.58 (1/radian squared)

*Estimated data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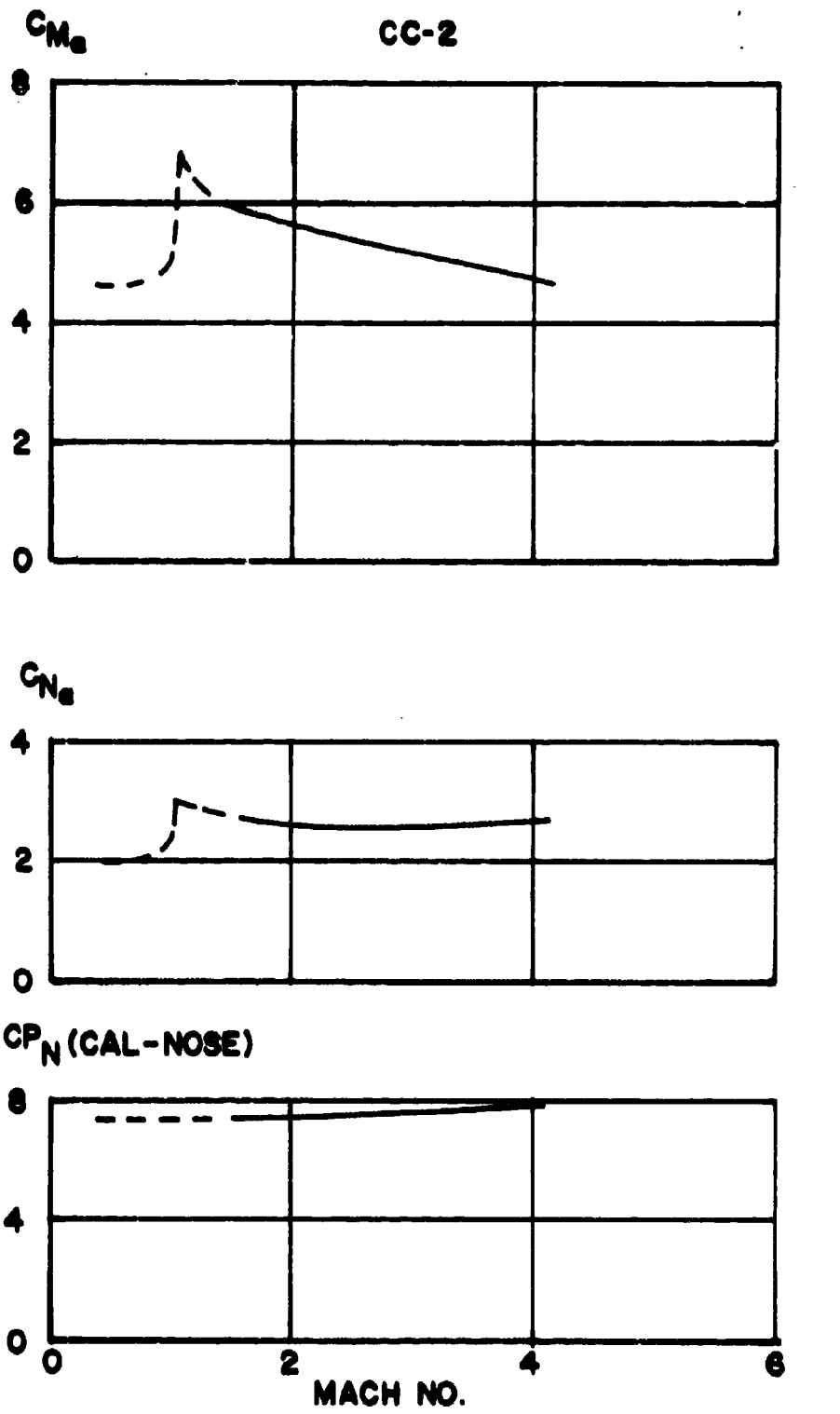


CC-2-3

TYPE CC 2 CALIBER 5.56 MM AVERAGE DENSITY 7.80 GRAMS/CC.
PROJ. WT 7.564 GRAMS PROJ. DIA. 5.56 MM IMPULSE 0.8 LB. SEC.
DRAG RDCR. WT. 0.000 GRAMS CHG. WT. 0.46 GRAMS SABOT WT. 0.000 GRAMS
TWIST RATE NA PCT. DRAG CHANGE / (DEG. YAW)**2 0.67

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	59.4	398	599	0.0
0	0.00	0.00	59.4	398	599	0.0
50	2.84	0.13	56.1	382	550	-0.2
100	5.51	0.26	52.5	366	505	-0.3
150	8.00	0.40	48.6	351	465	-0.4
200	10.28	0.55	44.4	339	434	-0.4
250	12.36	0.70	39.9	329	409	-0.5
300	14.21	0.85	35.2	320	386	-0.5
350	15.81	1.01	30.2	311	366	-0.6
400	17.17	1.17	24.8	303	346	-0.7
450	18.25	1.34	19.2	294	328	-0.7
500	19.05	1.51	13.3	287	311	-0.8
550	19.56	1.69	7.1	279	294	-0.8
600	19.75	1.87	0.5	272	279	-0.9
650	19.61	2.06	-6.5	265	265	-0.9
700	19.11	2.25	-13.8	258	251	-1.0
750	18.25	2.45	-21.5	251	238	-1.0
800	17.00	2.65	-29.7	244	225	-1.1
850	15.34	2.86	-38.3	238	214	-1.1
900	13.24	3.07	-47.4	231	203	-1.2
950	10.69	3.29	-57.0	225	192	-1.2
1000	7.65	3.52	-67.1	219	182	-1.3
1050	4.09	3.75	-77.8	213	172	-1.3
1100	0.00	3.99	-89.0	208	163	-1.3

DRAG RDCR. WT. 0.151 GRAMS PCT. DRAG CHANGE / (DEG. YAW)**2 1.74

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	42.6	398	599	0.0
0	0.00	0.00	42.6	398	599	0.0
50	2.01	0.13	39.4	383	550	-0.1
100	3.87	0.25	36.2	367	505	-0.1
150	5.56	0.38	32.8	352	465	-0.2
200	7.09	0.52	29.3	339	434	-0.2
250	8.44	0.65	25.8	328	409	-0.3
300	9.62	0.79	22.1	317	386	-0.3
350	10.61	0.92	18.3	307	366	-0.4
400	11.42	1.06	14.5	297	346	-0.4
450	12.04	1.20	10.5	288	328	-0.4
500	12.46	1.35	6.4	279	311	-0.5
550	12.67	1.49	2.2	270	294	-0.5
600	12.68	1.64	-2.1	262	279	-0.6
650	12.47	1.79	-6.5	254	265	-0.6
700	12.05	1.94	-11.0	246	251	-0.7
750	11.39	2.09	-15.7	238	238	-0.7
800	10.51	2.24	-20.5	231	225	-0.8
850	9.39	2.40	-25.4	224	214	-0.8
900	8.03	2.56	-30.4	217	203	-0.9
950	6.41	2.72	-35.6	209	192	-0.9
1000	4.54	2.88	-40.9	203	182	-0.9
1050	2.41	3.05	-46.3	196	172	-0.9
1100	0.00	3.22	-52.0	192	163	-1.0

TYPE CC 2 CALIBER 5.56 MM AVERAGE DENSITY 7.80 GRAMS/CC.
PROJ. WT 7.564 GRAMS PROJ. DIA. 5.56 MM IMPULSE 1.2 LB. SEC.
DRAG RDCR. WT. 0.000 GRAMS CHG. WT. 0.97 GRAMS SABOT WT. 0.000 GRAMS
TWIST RATE NA PCT. DRAG CHANGE / (DEG. YAW)**2 0.67

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	34.1	552	1152	0.0
0	0.00	0.00	34.1	552	1152	0.0
50	1.63	0.09	32.4	532	1071	-0.2
100	3.18	0.19	30.6	512	993	-0.4
150	4.63	0.29	28.6	493	920	-0.6
200	5.99	0.39	26.5	474	851	-0.7
250	7.23	0.50	24.1	456	786	-0.9
300	8.36	0.61	21.6	438	725	-1.1
350	9.36	0.73	18.9	420	668	-1.2
400	10.22	0.85	16.0	403	615	-1.4
450	10.93	0.98	12.8	387	566	-1.5
500	11.47	1.11	9.3	371	520	-1.6
550	11.84	1.25	5.5	355	478	-1.7
600	12.02	1.39	1.4	343	444	-1.6
650	11.98	1.54	-3.0	332	417	-1.4
700	11.72	1.69	-7.7	325	394	-1.3
750	11.23	1.85	-12.6	314	373	-1.3
800	10.49	2.01	-17.8	306	353	-1.4
850	9.49	2.17	-23.3	297	334	-1.4
900	8.21	2.34	-29.1	290	317	-1.4
950	6.64	2.52	-35.2	282	301	-1.5
1000	4.76	2.70	-41.7	275	285	-1.5
1050	2.55	2.88	-48.5	267	270	-1.5
1100	0.00	3.07	-55.7	260	257	-1.6

DRAG RDCR. WT. 0.151 GRAMS PCT. DRAG CHANGE / (DEG. YAW)**2 1.74

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	21.7	552	1152	0.0
0	0.00	0.00	21.7	552	1152	0.0
50	1.63	0.09	20.1	545	1124	-0.1
100	3.18	0.19	18.4	539	1097	-0.1
150	4.63	0.29	16.6	532	1070	-0.2
200	5.99	0.39	14.8	526	1044	-0.3
250	7.23	0.50	13.0	520	1018	-0.3
300	8.36	0.61	11.1	513	992	-0.4
350	9.36	0.73	9.2	507	967	-0.4
400	10.22	0.86	7.2	501	943	-0.5
450	10.93	0.98	5.2	494	919	-0.6
500	11.47	1.11	3.2	488	896	-0.6
550	11.84	1.25	1.0	482	873	-0.7
600	12.02	1.39	-1.1	476	851	-0.7
650	11.98	1.54	-3.4	470	829	-0.8
700	11.72	1.69	-5.7	464	807	-0.8
750	11.23	1.85	-8.0	458	786	-0.9
800	10.49	2.01	-10.4	452	766	-0.9
850	9.49	2.17	-12.9	447	746	-1.0
900	8.21	2.34	-15.4	441	726	-1.0
950	6.64	2.52	-18.0	435	707	-1.1
1000	4.76	2.70	-20.7	429	688	-1.1
1050	2.55	2.88	-23.5	424	669	-1.2
1100	0.00	3.07	-26.3	418	652	-1.2

TYPE CC 2 CALIBER 5.56 MM AVERAGE DENSITY 7.80 GRAMS/CC.

PROJ. WT 7.564 GRAMS PROJ. DIA. 5.56 MM IMPULSE 2.1 LB. SEC.

DRAG RDCR. WT. 0.000 GRAMS CHG. WT. 2.39 GRAMS SABOT WT. 0.000 GRAMS

TWIST RATE NA PCT. DRAG CHANGE / (DEG. YAW)**2 0.67

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	11.8	863	2817	0.0
0	0.00	0.00	11.8	863	2817	0.0
50	0.56	0.06	11.1	842	2680	-0.2
100	1.09	0.12	10.3	821	2547	-0.4
150	1.58	0.18	9.6	799	2417	-0.6
200	2.03	0.24	8.8	778	2291	-0.8
250	2.44	0.31	7.9	757	2168	-1.1
300	2.81	0.38	7.0	736	2049	-1.3
350	3.14	0.45	6.1	715	1933	-1.5
400	3.41	0.52	5.1	694	1822	-1.7
450	3.64	0.59	4.0	673	1715	-1.9
500	3.81	0.66	2.9	653	1611	-2.1
550	3.93	0.74	1.7	632	1511	-2.3
600	3.98	0.82	0.4	611	1414	-2.5
650	3.97	0.91	-1.0	591	1321	-2.7
700	3.89	0.99	-2.5	571	1232	-2.8
750	3.74	1.08	-4.1	551	1147	-3.0
800	3.50	1.17	-5.8	531	1065	-3.0
850	3.18	1.27	-7.6	511	988	-3.0
900	2.76	1.37	-9.6	492	915	-3.0
950	2.24	1.47	-11.8	473	847	-3.0
1000	1.62	1.58	-14.1	455	782	-3.0
1050	0.87	1.69	-16.6	437	722	-3.0
1100	0.00	1.81	-19.3	419	665	-3.0

DRAG RDCR. WT. 0.151 GRAMS PCT. DRAG CHANGE / (DEG. YAW)**2 1.74

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	8.5	863	2817	0.0
0	0.00	0.00	8.5	863	2817	0.0
50	0.40	0.06	7.8	842	2762	-0.1
100	0.77	0.12	7.1	847	2706	-0.1
150	1.10	0.18	6.4	838	2656	-0.2
200	1.40	0.24	5.7	830	2604	-0.3
250	1.66	0.30	5.0	822	2552	-0.4
300	1.89	0.36	4.2	814	2501	-0.4
350	2.08	0.42	3.5	806	2451	-0.5
400	2.23	0.48	2.7	798	2402	-0.6
450	2.33	0.54	1.9	790	2353	-0.7
500	2.43	0.61	1.1	782	2305	-0.8
550	2.46	0.67	0.3	774	2258	-0.9
600	2.46	0.74	-0.6	767	2212	-0.9
650	2.41	0.80	-1.4	759	2166	-1.0
700	2.33	0.87	-2.3	751	2121	-1.1
750	2.20	0.94	-3.2	743	2076	-1.2
800	2.02	1.00	-4.1	736	2033	-1.3
850	1.80	1.07	-5.1	728	1989	-1.4
900	1.54	1.14	-6.0	720	1947	-1.4
950	1.23	1.21	-7.0	713	1905	-1.5
1000	0.87	1.28	-8.0	705	1864	-1.5
1050	0.46	1.35	-9.0	698	1823	-1.6
1100	0.00	1.43	-10.0	690	1784	-1.6

TYPE CC 2 CALIBER 5.56 MM AVERAGE DENSITY 11.00 GRAMS/CC.
PROJ. WT 10.667 GRAMS PROJ. DIA. 5.56 MM IMPULSE 0.8 LB. SEC.
DRAG RDCR. WT. 0.000 GRAMS CHG. WT. 0.27 GRAMS SABOT WT. 0.000 GRAMS
TWIST RATE NA PCT. DRAG CHANGE / (DEG. YAW)**2 0.67

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	80.0	305	496	0.0
0	0.00	0.00	80.0	305	496	0.0
50	3.80	0.17	74.6	299	477	-0.1
100	7.33	0.34	68.9	293	459	-0.1
150	10.57	0.51	62.9	288	441	-0.2
200	13.51	0.68	56.8	282	424	-0.2
250	16.14	0.86	50.4	277	408	-0.3
300	18.46	1.05	43.7	271	393	-0.3
350	20.44	1.23	36.8	266	378	-0.4
400	22.07	1.42	29.6	261	364	-0.4
450	23.35	1.62	22.2	256	350	-0.4
500	24.25	1.81	14.4	251	337	-0.5
550	24.78	2.01	6.4	247	324	-0.5
600	24.87	2.22	-2.0	242	312	-0.6
650	24.56	2.43	-10.7	237	300	-0.6
700	23.82	2.64	-19.8	233	289	-0.6
750	22.63	2.86	-29.1	228	278	-0.7
800	20.96	3.08	-38.9	224	268	-0.7
850	18.81	3.30	-49.0	220	258	-0.7
900	16.15	3.53	-59.6	216	248	-0.8
950	12.96	3.77	-70.5	212	239	-0.8
1000	9.22	4.01	-81.9	208	230	-0.8
1050	4.91	4.25	-93.7	204	222	-0.8
1100	0.00	4.50	-105.9	200	214	-0.9

DRAG RDCR. WT. 0.151 GRAMS PCT. DRAG CHANGE / (DEG. YAW)**2 1.74

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	68.4	305	496	0.0
0	0.00	0.00	68.4	305	496	0.0
50	3.23	0.17	63.0	302	486	0.0
100	6.19	0.34	57.5	299	477	-0.1
150	8.87	0.50	51.8	296	467	-0.1
200	11.27	0.67	46.1	294	458	-0.1
250	13.39	0.84	40.2	291	449	-0.1
300	15.23	1.01	34.2	288	440	-0.2
350	16.78	1.18	28.0	285	432	-0.2
400	17.99	1.36	21.6	283	423	-0.2
450	18.92	1.54	15.0	280	415	-0.2
500	19.53	1.73	8.2	277	406	-0.3
550	19.80	1.92	1.2	275	398	-0.3
600	19.80	2.12	-6.0	272	391	-0.3
650	19.47	2.32	-13.4	269	383	-0.3
700	18.74	2.53	-21.0	267	375	-0.4
750	17.69	2.74	-28.9	264	368	-0.4
800	16.30	2.96	-37.1	262	361	-0.4
850	14.54	3.19	-45.6	259	353	-0.4
900	12.43	3.42	-54.4	256	346	-0.5
950	9.93	3.66	-63.5	254	340	-0.5
1000	7.04	3.91	-72.9	251	333	-0.5
1050	3.73	4.16	-82.6	249	327	-0.6
1100	0.00	4.04	-80.5	236	292	-0.7

TYPE CC 2 CALIBER 5.56 MM AVERAGE DENSITY 11.00 GRAMS/CC.
PROJ. WT 10.667 GRAMS PROJ. DIA. 5.56 MM IMPULSE 1.2 LB. SEC.
DRAG RDCR. WT. 0.000 GRAMS CHG. WT. 0.75 GRAMS SABOT WT. 0.000 GRAMS
TWIST RATE NA PCT. DRAG CHANGE / (DEG. YAW)**2 0.67

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	47.6	418	932	0.0
0	0.00	0.00	47.6	418	932	0.0
50	2.27	0.12	44.7	406	879	-0.1
100	4.39	0.25	41.6	394	828	-0.2
150	6.35	0.38	38.2	382	780	-0.3
200	8.14	0.51	34.7	371	734	-0.5
250	9.75	0.65	31.0	360	691	-0.5
300	11.18	0.79	27.0	350	652	-0.6
350	12.41	0.93	22.8	341	621	-0.6
400	13.42	1.08	18.4	334	594	-0.6
450	14.22	1.23	13.8	327	570	-0.6
500	14.78	1.39	9.1	320	548	-0.6
550	15.11	1.54	4.1	314	527	-0.7
600	15.19	1.70	-1.1	308	507	-0.7
650	15.01	1.87	-6.4	302	487	-0.8
700	14.56	2.03	-12.0	297	469	-0.8
750	13.84	2.21	-17.8	291	452	-0.8
800	12.82	2.38	-23.8	286	435	-0.9
850	11.51	2.56	-30.0	280	419	-0.9
900	9.88	2.74	-36.5	275	403	-1.0
950	7.93	2.92	-43.2	270	389	-1.0
1000	5.64	3.11	-50.2	265	374	-1.0
1050	3.00	3.30	-57.5	260	361	-1.0
1100	0.00	3.49	-65.0	255	348	-1.1

DRAG RDCR. WT. 0.151 GRAMS PCT. DRAG CHANGE / (DEG. YAW)**2 1.74

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	36.3	418	932	0.0
0	0.00	0.00	36.3	418	932	0.0
50	1.71	0.12	33.4	414	914	-0.0
100	3.28	0.24	30.4	410	896	-0.1
150	4.70	0.36	27.4	406	879	-0.1
200	5.97	0.49	24.4	403	862	-0.2
250	7.09	0.61	21.3	399	846	-0.2
300	8.06	0.74	18.1	396	830	-0.3
350	8.87	0.87	14.9	393	815	-0.3
400	9.52	0.99	11.6	388	797	-0.3
450	10.01	1.12	8.2	384	781	-0.3
500	10.33	1.26	4.8	380	766	-0.4
550	10.48	1.39	1.3	377	751	-0.4
600	10.47	1.52	-2.2	373	736	-0.4
650	10.27	1.66	-5.9	369	722	-0.5
700	9.89	1.79	-9.6	366	708	-0.5
750	9.34	1.93	-13.5	362	694	-0.5
800	8.59	2.07	-17.5	359	680	-0.6
850	7.66	2.21	-21.7	355	667	-0.6
900	6.53	2.35	-26.1	352	654	-0.6
950	5.20	2.49	-30.7	348	641	-0.6
1000	3.68	2.64	-35.5	345	628	-0.7
1050	1.94	2.78	-40.5	342	616	-0.7
1100	0.00	2.93	-41.8	339	605	-0.7

TYPE CC 2 CALIBER 5.56 MM AVERAGE DENSITY 11.00 GRAMS/CC.
PROJ. WT 10.667 GRAMS PROJ. DIA. 5.56 MM IMPULSE 2.1 LB. SEC.
DRAG RDCR. WT. 0.000 GRAMS CHG. WT. 1.95 GRAMS SABOT WT. 0.000 GRAMS
TWIST RATE NA PCT. DRAG CHANGE / (DEG. YAW)**2 0.67

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	18.9	658	2309	0.0
0	0.00	0.00	18.9	658	2309	0.0
50	0.90	0.08	17.7	643	2207	-0.1
100	1.74	0.16	16.5	629	2108	-0.3
150	2.52	0.24	15.2	614	2011	-0.4
200	3.23	0.32	13.8	600	1917	-0.6
250	3.88	0.40	12.4	585	1826	-0.7
300	4.45	0.49	10.9	571	1737	-0.9
350	4.95	0.58	9.3	556	1651	-1.0
400	5.37	0.67	7.7	542	1568	-1.1
450	5.71	0.76	5.9	528	1488	-1.3
500	5.96	0.86	4.1	514	1411	-1.4
550	6.12	0.96	2.2	501	1337	-1.5
600	6.18	1.06	0.1	487	1265	-1.6
650	6.14	1.16	-2.0	474	1197	-1.7
700	5.99	1.27	-4.3	461	1132	-1.8
750	5.72	1.38	-6.8	448	1070	-1.9
800	5.33	1.49	-9.3	435	1010	-2.0
850	4.81	1.61	-12.0	423	954	-2.1
900	4.16	1.73	-14.9	411	900	-2.2
950	3.36	1.85	-18.0	399	848	-2.3
1000	2.41	1.98	-21.2	387	799	-2.4
1050	1.29	2.11	-24.6	376	753	-2.4
1100	0.00	2.25	-28.3	365	709	-2.5

DRAG RDCR. WT. 0.151 GRAMS PCT. DRAG CHANGE / (DEG. YAW)**2 1.74

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	14.2	658	2309	0.0
0	0.00	0.00	14.2	658	2309	0.0
50	0.67	0.08	13.1	653	2271	-0.1
100	1.28	0.15	11.9	648	2236	-0.1
150	1.84	0.23	10.7	643	2200	-0.2
200	2.33	0.31	9.5	638	2165	-0.2
250	2.77	0.39	8.2	633	2130	-0.3
300	3.15	0.47	7.0	628	2096	-0.3
350	3.46	0.55	5.7	622	2061	-0.4
400	3.71	0.63	4.4	618	2028	-0.4
450	3.90	0.71	3.1	613	1994	-0.4
500	4.02	0.79	1.7	608	1961	-0.5
550	4.07	0.87	0.4	603	1929	-0.5
600	4.06	0.96	-1.0	598	1897	-0.6
650	3.98	1.04	-2.4	593	1865	-0.6
700	3.83	1.13	-3.8	588	1834	-0.7
750	3.62	1.21	-5.3	583	1803	-0.7
800	3.32	1.30	-6.8	578	1773	-0.8
850	2.96	1.38	-8.3	573	1743	-0.8
900	2.52	1.47	-9.8	569	1713	-0.9
950	2.01	1.56	-11.4	564	1684	-0.9
1000	1.42	1.65	-13.0	559	1655	-0.9
1050	0.75	1.74	-14.6	554	1626	-1.0
1100	0.00	1.83	-16.2	550	1598	-1.0

TYPE CC 2 CALIBER 5.56 MM AVERAGE DENSITY 16.70 GRAMS/CC.
PROJ. WT 16.194 GRAMS PROJ. DIA. 5.56 MM IMPULSE 0.8 LB. SEC.
DRAG RDCR. WT. 0.000 GRAMS CHG. WT. 0.30 GRAMS SABOT WT. 0.000 GRAMS
TWIST RATE NA PCT. DRAG CHANGE / (DEG. YAW)**2 0.67

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	100.0	226	414	0.0
0	0.00	0.00	100.0	226	414	0.0
50	4.68	0.22	90.1	223	402	0.0
100	8.86	0.45	79.9	220	391	-0.1
150	12.53	0.68	69.4	217	381	-0.1
200	15.68	0.91	58.7	214	371	-0.1
250	18.29	1.15	47.6	211	361	-0.1
300	20.35	1.39	36.2	208	351	-0.2
350	21.84	1.63	24.6	206	342	-0.2
400	22.76	1.87	12.6	203	333	-0.2
450	23.08	2.12	0.3	200	325	-0.2
500	22.78	2.37	-12.3	198	316	-0.2
550	21.86	2.63	-25.3	195	308	-0.2
600	20.30	2.89	-38.5	193	301	-0.3
650	18.08	3.15	-52.2	190	293	-0.3
700	15.17	3.41	-66.1	188	286	-0.3
750	11.58	3.68	-80.4	186	279	-0.4
800	7.26	3.95	-95.1	184	273	-0.4
850	2.22	4.23	-110.1	181	266	-0.4
870	0.00	4.34	-116.1	181	264	-0.4

DRAG RDCR. WT. 0.151 GRAMS PCT. DRAG CHANGE / (DEG. YAW)**2 1.74

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	100.0	226	414	0.0
0	0.00	0.00	100.0	226	414	0.0
50	4.68	0.22	90.1	224	407	0.0
100	8.87	0.45	80.1	223	401	0.0
150	12.56	0.67	70.0	221	395	0.0
200	15.74	0.90	59.7	219	389	-0.1
250	18.42	1.13	49.2	218	383	-0.1
300	20.58	1.36	38.6	216	377	-0.1
350	22.21	1.59	27.8	215	372	-0.1
400	23.30	1.83	17.0	213	366	-0.1
450	23.84	2.07	5.9	212	361	-0.1
500	23.80	2.31	-5.3	210	356	-0.1
550	23.16	2.56	-16.7	209	351	-0.1
600	21.89	2.81	-28.2	208	346	-0.1
650	19.99	3.07	-39.8	206	341	-0.1
700	17.45	3.33	-51.7	204	336	-0.1
750	14.25	3.60	-63.9	203	331	-0.1
800	10.36	3.87	-76.4	201	326	-0.1
850	5.77	4.15	-89.3	199	321	-0.1
900	0.48	4.44	-102.4	196	316	-0.1
931	0.00	4.61	-110.8	194	312	-0.1

TYPE CC 2 CALIBER 5.56 MM AVERAGE DENSITY 16.70 GRAMS/CC.

PROJ. WT 16.194 GRAMS PROJ. DIA. 5.56 MM IMPULSE 1.2 LB. SEC.

DRAG RDCR. WT. 0.000 GRAMS CHG. WT. 0.41 GRAMS SABOT WT. 0.000 GRAMS

TWIST RATE NA PCT. DRAG CHANGE / (DEG. YAW)**2 0.67

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	73.3	302	738	0.0
0	0.00	0.00	73.3	302	738	0.0
50	3.46	0.17	67.7	298	719	0.0
100	6.65	0.34	62.0	294	701	-0.1
150	9.56	0.51	56.2	290	683	-0.1
200	12.17	0.68	50.2	287	666	-0.1
250	14.48	0.86	44.0	283	649	-0.2
300	16.49	1.03	37.7	280	633	-0.2
350	18.18	1.21	31.2	276	617	-0.2
400	19.55	1.40	24.6	273	601	-0.3
450	20.60	1.58	17.8	269	586	-0.3
500	21.30	1.77	10.8	266	572	-0.3
550	21.66	1.96	3.6	262	558	-0.4
600	21.66	2.15	-3.7	259	544	-0.4
650	21.29	2.34	-11.2	256	531	-0.4
700	20.56	2.54	-19.0	253	518	-0.4
750	19.44	2.74	-26.9	250	505	-0.5
800	17.92	2.94	-35.0	247	493	-0.5
850	16.00	3.15	-43.3	244	481	-0.5
900	13.67	3.35	-51.8	241	469	-0.6
950	10.92	3.56	-60.5	238	458	-0.6
1000	7.73	3.77	-69.5	235	447	-0.6
1050	4.09	3.99	-78.7	232	436	-0.6
1100	0.00	4.21	-88.0	229	426	-0.6

DRAG RDCR. WT. 0.151 GRAMS PCT. DRAG CHANGE / (DEG. YAW)**2 1.74

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	66.3	302	738	0.0
0	0.00	0.00	66.3	302	738	0.0
50	3.12	0.17	60.8	300	729	0.0
100	5.97	0.33	55.2	298	719	0.0
150	8.54	0.50	49.5	296	710	-0.1
200	10.83	0.67	43.8	294	700	-0.1
250	12.84	0.84	38.0	293	691	-0.1
300	14.56	1.01	32.1	291	682	-0.1
350	16.00	1.19	26.2	289	673	-0.1
400	17.13	1.36	20.2	287	664	-0.1
450	17.97	1.54	14.1	285	656	-0.2
500	18.51	1.71	7.9	283	647	-0.2
550	18.74	1.89	1.6	282	639	-0.2
600	18.67	2.07	-4.7	280	630	-0.2
650	18.29	2.25	-11.1	278	622	-0.2
700	17.59	2.43	-17.6	277	614	-0.2
750	16.56	2.61	-24.2	275	607	-0.3
800	15.22	2.79	-30.8	273	599	-0.3
850	13.54	2.97	-37.6	271	591	-0.3
900	11.53	3.16	-44.4	268	578	-0.3
950	9.18	3.35	-51.5	265	564	-0.4
1000	6.46	3.54	-58.6	262	550	-0.4
1050	3.42	3.73	-66.0	259	537	-0.4
1100	0.00	3.92	-73.6	256	524	-0.4

TYPE CC 2 CALIBER 5.56 MM AVERAGE DENSITY 16.70 GRAMS/CC.
PROJ. WT 16.194 GRAMS PROJ. DIA. 5.56 MM IMPULSE 2.1 LB. SEC.
DRAG RDCR. WT. 0.000 GRAMS CHG. WT. 1.45 GRAMS SABOT WT. 0.000 GRAMS
TWIST RATE NA PCT. DRAG CHANGE / (DEG. YAW)**2 0.67

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	33.7	468	1773	0.0
0	0.00	0.00	33.7	468	1773	0.0
50	1.60	0.11	31.4	459	1709	-0.1
100	3.08	0.22	29.0	451	1646	-0.2
150	4.45	0.33	26.5	442	1585	-0.3
200	5.69	0.44	23.9	434	1526	-0.3
250	6.79	0.56	21.2	426	1469	-0.4
300	7.77	0.68	18.4	418	1414	-0.5
350	8.60	0.80	15.5	410	1360	-0.6
400	9.29	0.92	12.4	402	1308	-0.6
450	9.83	1.05	9.2	394	1258	-0.7
500	10.21	1.18	6.0	387	1210	-0.8
550	10.42	1.31	2.6	379	1163	-0.8
600	10.47	1.44	-0.9	372	1118	-0.9
650	10.33	1.58	-4.6	364	1074	-1.0
700	10.02	1.72	-8.5	357	1033	-1.0
750	9.51	1.86	-12.5	351	995	-1.0
800	8.80	2.00	-16.6	345	962	-1.0
850	7.88	2.15	-20.9	340	933	-0.9
900	6.76	2.30	-25.3	335	908	-0.9
950	5.41	2.45	-29.8	330	883	-0.9
1000	3.84	2.60	-34.4	326	860	-0.9
1050	2.04	2.75	-39.2	322	838	-0.9
1100	0.00	2.91	-44.1	318	816	-0.9

DRAG RDCR. WT. 0.151 GRAMS PCT. DRAG CHANGE / (DEG. YAW)**2 1.74

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	27.4	468	1773	0.0
0	0.00	0.00	27.4	468	1773	0.0
50	1.29	0.11	25.1	465	1752	0.0
100	2.46	0.22	22.8	462	1730	-0.1
150	3.52	0.32	20.4	460	1709	-0.1
200	4.47	0.43	18.1	457	1688	-0.1
250	5.29	0.54	15.7	454	1667	-0.1
300	6.00	0.65	13.2	451	1647	-0.2
350	6.59	0.76	10.8	449	1627	-0.2
400	7.06	0.88	8.3	446	1607	-0.2
450	7.41	0.99	5.7	443	1587	-0.2
500	7.63	1.10	3.2	441	1567	-0.3
550	7.72	1.22	0.6	438	1548	-0.3
600	7.69	1.33	-2.0	435	1529	-0.3
650	7.53	1.44	-4.7	433	1510	-0.3
700	7.23	1.56	-7.4	430	1491	-0.4
750	6.81	1.68	-10.1	428	1472	-0.4
800	6.25	1.79	-12.8	425	1454	-0.4
850	5.56	1.91	-15.6	422	1436	-0.4
900	4.73	2.03	-18.4	420	1418	-0.5
950	3.76	2.15	-21.3	417	1400	-0.5
1000	2.65	2.27	-24.2	415	1383	-0.5
1050	1.40	2.39	-27.1	412	1365	-0.5
1100	0.00	2.51	-30.1	410	1348	-0.6

TYPE CC 2 CALIBER 6.50 MM AVERAGE DENSITY 7.80 GRAMS/CC.
PROJ. WT 12.082 GRAMS PROJ. DIA. 6.50 MM IMPULSE 0.8 LB. SEC.
DRAG RDCR. WT. 0.000 GRAMS CHG. WT. 0.28 GRAMS SABOT WT. 0.000 GRAMS
TWIST RATE NA PCT. DRAG CHANGE / (DEG. YAW)**2 0.67

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	100.0	278	467	0.0
0	0.00	0.00	100.0	278	467	0.0
50	4.76	0.18	93.4	272	445	-0.1
100	9.19	0.37	86.4	265	425	-0.1
150	13.26	0.56	79.2	259	405	-0.2
200	16.97	0.76	71.6	253	387	-0.2
250	20.29	0.96	63.6	247	369	-0.3
300	23.21	1.16	55.2	241	352	-0.3
350	25.71	1.37	46.4	236	336	-0.4
400	27.77	1.59	37.2	230	320	-0.4
450	29.36	1.81	27.5	225	305	-0.5
500	30.47	2.03	17.4	220	291	-0.5
550	31.07	2.26	6.8	214	278	-0.6
600	31.13	2.50	-4.3	209	265	-0.6
650	30.64	2.74	-16.0	205	253	-0.6
700	29.56	2.99	-28.2	200	241	-0.7
750	27.86	3.24	-41.0	195	230	-0.7
800	25.53	3.50	-54.4	191	220	-0.7
850	22.51	3.77	-68.5	186	210	-0.8
900	18.79	4.04	-83.2	182	200	-0.8
950	14.32	4.32	-98.6	178	191	-0.8
1000	9.07	4.60	-114.8	174	183	-0.8
1050	3.00	4.90	-131.6	170	175	-0.9
1072	0.00	5.03	-139.5	168	171	-0.9

DRAG RDCR. WT. 0.241 GRAMS PCT. DRAG CHANGE / (DEG. YAW)**2 1.74

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	86.0	278	467	0.0
0	0.00	0.00	86.0	278	467	0.0
50	4.07	0.18	79.4	275	455	0.0
100	7.81	0.37	72.7	271	444	-0.1
150	11.21	0.55	65.9	268	433	-0.1
200	14.28	0.74	58.8	265	422	-0.1
250	16.99	0.93	51.6	262	412	-0.2
300	19.[illegible]	[illegible]12	44.3	259	401	-0.2
350	21.[illegible]	1.32	36.7	256	391	-0.2
400	22.96	1.51	29.0	253	382	-0.2
450	24.19	[illegible]71	21.1	250	372	-0.3
500	25.02	[illegible]91	12.9	247	363	-0.3
550	25.46	2.12	4.6	244	354	-0.3
600	25.48	2.32	-3.9	241	345	-0.3
650	25.08	2.53	-12.6	238	336	-0.4
700	24.24	2.74	-21.5	235	328	-0.4
750	22.96	2.96	-30.7	232	320	-0.4
800	21.23	3.18	-40.1	229	306	-0.5
850	19.02	3.40	-50.0	222	292	-0.5
900	16.32	3.63	-60.4	217	279	-0.6
950	13.09	3.86	-71.3	212	266	-0.6
1000	9.31	4.10	-82.7	207	254	-0.7
1050	4.96	4.35	-94.6	202	242	-0.7
1100	0.00	4.60	-107.1	198	231	-0.7

TYPE CC 2 CALIBER 6.50 MM AVERAGE DENSITY 7.80 GRAMS/CC.
PROJ. WT 12.082 GRAMS PROJ. DIA. 6.50 MM IMPULSE 1.2 LB. SEC.
DRAG RDCR. WT. 0.000 GRAMS CHG. WT. 0.64 GRAMS SABOT WT. 0.000 GRAMS
TWIST RATE NA PCT. DRAG CHANGE / (DEG. YAW)**2 0.67

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	59.6	378	863	0.0
0	0.00	0.00	59.6	378	863	0.0
50	2.84	0.13	56.0	364	802	-0.1
100	5.50	0.27	52.1	352	747	-0.3
150	7.95	0.42	47.9	341	703	-0.3
200	10.20	0.57	43.5	332	667	-0.3
250	12.22	0.72	38.9	324	635	-0.4
300	14.02	0.88	34.0	316	605	-0.5
350	15.56	1.04	28.9	309	577	-0.5
400	16.85	1.20	23.5	302	551	-0.6
450	17.87	1.37	17.9	295	526	-0.6
500	18.61	1.54	12.0	288	502	-0.7
550	19.05	1.72	5.9	282	479	-0.7
600	19.19	1.90	-0.6	275	458	-0.8
650	19.00	2.08	-7.3	269	438	-0.8
700	18.47	2.27	-14.4	263	418	-0.9
750	17.59	2.46	-21.8	257	399	-0.9
800	16.34	2.66	-29.5	251	382	-0.9
850	14.70	2.86	-37.6	246	365	-1.0
900	12.65	3.06	-46.0	240	348	-1.0
950	10.18	3.27	-54.9	235	333	-1.1
1000	7.26	3.49	-64.2	229	318	-1.1
1050	3.88	3.71	-73.9	224	304	-1.1
1100	0.00	3.94	-84.1	219	290	-1.1

DRAG RDCR. WT. 0.241 GRAMS PCT. DRAG CHANGE / (DEG. YAW)**2 1.74

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	45.8	378	863	0.0
0	0.00	0.00	45.8	378	863	0.0
50	2.16	0.13	42.3	374	842	0.0
100	4.15	0.27	38.7	369	822	-0.1
150	5.96	0.40	35.0	365	802	-0.1
200	7.59	0.54	31.2	361	783	-0.2
250	9.02	0.68	27.3	356	764	-0.2
300	10.27	0.82	23.3	352	746	-0.2
350	11.31	0.97	19.2	348	728	-0.3
400	12.16	1.11	15.1	344	711	-0.3
450	12.79	1.26	10.8	340	694	-0.3
500	13.22	1.40	6.5	337	678	-0.4
550	13.43	1.55	2.0	333	662	-0.4
600	13.42	1.70	-2.6	329	647	-0.4
650	13.19	1.86	-7.2	326	632	-0.5
700	12.72	2.01	-12.0	322	618	-0.5
750	12.01	2.17	-16.9	318	604	-0.5
800	11.07	2.33	-21.8	315	590	-0.6
850	9.87	2.49	-26.9	311	576	-0.6
900	8.43	2.65	-32.1	308	563	-0.6
950	6.73	2.81	-37.5	305	550	-0.7
1000	4.76	2.98	-42.9	301	538	-0.7
1050	2.52	3.14	-48.5	295	515	-0.8
1100	0.00	3.32	-54.4	288	491	-0.8

TYPE CC 2 CALIBER 6.50 MM AVERAGE DENSITY 7.80 GRAMS/CC.
PROJ. WT 12.082 GRAMS PROJ. DIA. 6.50 MM IMPULSE 2.1 LB. SEC.
DRAG RDCR. WT. 0.000 GRAMS CHG. WT. 1.80 GRAMS SABOT WT. 0.000 GRAMS
TWIST RATE NA PCT. DRAG CHANGE / (DEG. YAW)**2 0.67

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	26.5	595	2139	0.0
0	0.00	0.00	26.5	595	2139	0.0
50	1.26	0.09	25.0	578	2015	-0.2
100	2.46	0.17	23.5	560	1896	-0.3
150	3.57	0.26	21.8	543	1782	-0.5
200	4.60	0.36	20.1	526	1673	-0.7
250	5.54	0.45	18.2	509	1568	-0.8
300	6.39	0.55	16.2	493	1468	-1.0
350	7.14	0.66	14.1	477	1374	-1.1
400	7.78	0.76	11.8	461	1284	-1.3
450	8.30	0.87	9.4	445	1199	-1.4
500	8.70	0.99	6.8	430	1119	-1.5
550	8.97	1.11	4.0	416	1043	-1.6
600	9.10	1.23	1.0	401	972	-1.7
650	9.08	1.36	-2.2	387	904	-1.8
700	8.89	1.49	-5.7	373	841	-1.9
750	8.52	1.62	-9.4	360	782	-2.0
800	7.97	1.77	-13.4	348	731	-2.0
850	7.22	1.91	-17.6	338	691	-1.8
900	6.25	2.06	-22.1	330	657	-1.6
950	5.05	2.22	-26.8	322	626	-1.6
1000	3.62	2.37	-31.8	314	597	-1.5
1050	1.94	2.53	-37.0	307	570	-1.6
1100	0.00	2.70	-42.4	300	544	-1.6

DRAG RDCR. WT. 0.241 GRAMS PCT. DRAG CHANGE / (DEG. YAW)**2 1.74

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	18.0	595	2139	0.0
0	0.00	0.00	18.0	595	2139	0.0
50	0.85	0.08	16.6	589	2095	-0.1
100	1.63	0.17	15.2	583	2053	-0.1
150	2.34	0.26	13.7	577	2011	-0.2
200	2.98	0.34	12.2	572	1970	-0.2
250	3.54	0.43	10.6	566	1929	-0.3
300	4.02	0.52	9.1	560	1889	-0.3
350	4.43	0.61	7.4	555	1850	-0.4
400	4.76	0.70	5.8	549	1811	-0.5
450	5.00	0.79	4.1	543	1773	-0.5
500	5.17	0.88	2.4	538	1736	-0.6
550	5.25	0.98	0.7	532	1699	-0.6
600	5.24	1.07	-1.1	527	1663	-0.7
650	5.14	1.17	-2.9	521	1627	-0.7
700	4.96	1.26	-4.8	516	1592	-0.8
750	4.68	1.36	-6.7	510	1558	-0.8
800	4.31	1.46	-8.6	505	1524	-0.9
850	3.85	1.56	-10.6	499	1491	-0.9
900	3.28	1.66	-12.6	494	1459	-1.0
950	2.62	1.76	-14.7	489	1427	-1.0
1000	1.85	1.87	-16.8	484	1395	-1.0
1050	0.98	1.97	-19.0	478	1364	-1.1
1100	0.00	2.07	-21.2	473	1334	-1.1

TYPE CC 2 CALIBER 6.50 MM AVERAGE DENSITY 11.00 GRAMS/CC.
PROJ. WT 17.039 GRAMS PROJ. DIA. 6.50 MM IMPULSE 0.8 LB. SEC.
DRAG RDCR. WT. 0.000 GRAMS CHG. WT. 0.31 GRAMS SABOT WT. 0.000 GRAMS
TWIST RATE NA PCT. DRAG CHANGE / (DEG. YAW)**2 0.67

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	100.0	218	405	0.0
0	0.00	0.00	100.0	218	405	0.0
50	4.66	0.23	89.3	214	391	0.0
100	8.78	0.47	78.2	210	377	-0.1
150	12.34	0.71	66.7	207	364	-0.1
200	15.33	0.95	54.8	203	352	-0.1
250	17.72	1.20	42.5	200	339	-0.2
300	19.50	1.46	29.8	196	328	-0.2
350	20.64	1.71	16.6	193	317	-0.2
400	21.12	1.97	2.9	190	306	-0.3
450	20.92	2.24	-11.2	186	296	-0.3
500	20.01	2.51	-25.9	183	286	-0.3
550	18.37	2.79	-41.0	180	277	-0.3
600	15.98	3.07	-56.6	177	268	-0.4
650	12.80	3.35	-72.7	175	259	-0.4
700	8.82	3.64	-89.4	172	251	-0.4
750	4.00	3.94	-106.6	169	244	-0.4
786	0.00	4.15	-119.3	167	238	-0.4

DRAG RDCR. WT. 0.241 GRAMS PCT. DRAG CHANGE / (DEG. YAW)**2 1.74

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	100.0	218	405	0.0
0	0.00	0.00	100.0	218	405	0.0
50	4.66	0.23	89.4	216	397	0.0
100	8.79	0.47	78.6	214	389	0.0
150	12.38	0.70	67.5	212	381	-0.1
200	15.43	0.94	56.3	210	373	-0.1
250	17.91	1.18	44.8	208	366	-0.1
300	19.83	1.42	33.2	206	359	-0.1
350	21.17	1.66	21.3	204	352	-0.1
400	21.92	1.91	9.2	202	345	-0.1
450	22.07	2.16	-3.1	200	339	-0.2
500	21.61	2.41	-15.7	199	332	-0.2
550	20.53	2.66	-28.4	197	326	-0.2
600	18.81	2.92	-41.4	195	320	-0.2
650	16.46	3.17	-54.7	193	311	-0.2
700	13.44	3.44	-68.4	189	301	-0.3
750	9.73	3.70	-82.5	186	292	-0.3
800	5.32	3.98	-97.1	183	283	-0.3
850	0.17	4.25	-112.2	181	274	-0.4
851	0.00	4.26	-112.7	180	273	-0.4

TYPE CC 2 CALIBER 6.50 MM AVERAGE DENSITY 11.00 GRAMS/CC.
PROJ. WT 17.039 GRAMS PROJ. DIA. 6.50 MM IMPULSE 1.2 LB. SEC.
DRAG RDCR. WT. 0.000 GRAMS CHG. WT. 0.41 GRAMS SABOT WT. 0.000 GRAMS
TWIST RATE NA PCT. DRAG CHANGE / (DEG. YAW)**2 0.67

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	84.0	291	721	0.0
0	0.00	0.00	84.0	291	721	0.0
50	3.98	0.17	78.0	286	698	0.0
100	7.66	0.35	71.8	281	675	-0.1
150	11.04	0.53	65.4	277	652	-0.1
200	14.09	0.71	58.7	272	631	-0.2
250	16.80	0.90	51.9	268	611	-0.2
300	19.18	1.09	44.8	263	591	-0.3
350	21.20	1.28	37.5	259	572	-0.3
400	22.86	1.47	29.9	255	553	-0.3
450	24.14	1.67	22.1	251	535	-0.4
500	25.02	1.87	14.0	247	518	-0.4
550	25.51	2.08	5.6	242	501	-0.4
600	25.58	2.28	-3.0	239	485	-0.5
650	25.21	2.50	-11.9	235	469	-0.5
700	24.40	2.71	-21.2	231	454	-0.5
750	23.14	2.93	-30.7	227	439	-0.6
800	21.39	3.15	-40.5	223	425	-0.6
850	19.16	3.38	-50.7	220	412	-0.6
900	16.41	3.61	-61.2	216	399	-0.7
950	13.14	3.84	-72.1	213	386	-0.7
1000	9.33	4.08	-83.3	210	374	-0.7
1050	4.96	4.32	-94.8	206	362	-0.7
1100	0.00	4.57	-106.8	203	351	-0.8

DRAG RDCR. WT. 0.241 GRAMS PCT. DRAG CHANGE / (DEG. YAW)**2 1.74

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	73.7	291	721	0.0
0	0.00	0.00	73.7	291	721	0.0
50	3.48	0.17	67.8	289	709	0.0
100	6.66	0.35	61.7	286	696	0.0
150	9.54	0.52	55.6	284	684	-0.1
200	12.12	0.70	49.3	281	672	-0.1
250	14.39	0.88	43.0	279	661	-0.1
300	16.34	1.06	36.5	277	649	-0.1
350	17.97	1.24	29.9	274	638	-0.2
400	19.28	1.42	23.2	272	627	-0.2
450	20.25	1.61	16.4	270	616	-0.2
500	20.89	1.79	9.5	268	605	-0.2
550	21.19	1.98	2.5	266	595	-0.2
600	21.14	2.17	-4.6	263	585	-0.3
650	20.74	2.36	-11.9	261	575	-0.3
700	19.98	2.55	-19.3	259	565	-0.3
750	18.85	2.75	-26.8	257	555	-0.3
800	17.35	2.94	-34.4	255	546	-0.3
850	15.47	3.14	-42.2	251	531	-0.4
900	13.21	3.34	-50.2	247	514	-0.4
950	10.54	3.55	-58.5	243	497	-0.5
1000	7.46	3.75	-67.1	239	481	-0.5
1050	3.95	3.96	-76.0	236	466	-0.5
1100	0.00	4.18	-85.1	232	451	-0.6

TYPE CC 2 CALIBER 6.50 MM AVERAGE DENSITY 11.00 GRAMS/CC.
PROJ. WT 17.039 GRAMS PROJ. DIA. 6.50 MM IMPULSE 2.1 LB. SEC.
DRAG RDCR. WT. 0.000 GRAMS CHG. WT. 1.39 GRAMS SABOT WT. 0.000 GRAMS
TWIST RATE NA PCT. DRAG CHANGE / (DEG. YAW)**2 0.67

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	39.6	450	1725	0.0
0	0.00	0.00	39.6	450	1725	0.0
50	1.88	0.11	37.1	439	1643	-0.1
100	3.64	0.23	34.5	428	1563	-0.2
150	5.27	0.35	31.7	418	1487	-0.3
200	6.75	0.47	28.7	407	1414	-0.4
250	8.09	0.59	25.6	397	1344	-0.5
300	9.27	0.72	22.4	387	1278	-0.6
350	10.29	0.85	19.0	377	1213	-0.7
400	11.14	0.98	15.4	368	1152	-0.8
450	11.80	1.12	11.6	358	1095	-0.8
500	12.28	1.26	7.6	350	1043	-0.9
550	12.55	1.41	3.4	342	999	-0.8
600	12.62	1.56	-0.9	336	962	-0.8
650	12.46	1.71	-5.4	330	928	-0.8
700	12.09	1.86	-10.1	324	896	-0.8
750	11.48	2.01	-14.9	319	867	-0.8
800	10.63	2.17	-19.9	314	838	-0.9
850	9.53	2.33	-25.1	309	811	-0.9
900	8.18	2.50	-30.4	304	785	-0.9
950	6.55	2.66	-35.9	299	760	-0.9
1000	4.66	2.83	-41.6	294	736	-1.0
1050	2.48	3.00	-47.5	289	712	-1.0
1100	0.00	3.18	-53.6	285	690	-1.0

DRAG RDCR. WT. 0.241 GRAMS PCT. DRAG CHANGE / (DEG. YAW)**2 1.74

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	30.5	450	1725	0.0
0	0.00	0.00	30.5	450	1725	0.0
50	1.44	0.11	28.0	446	1697	0.0
100	2.75	0.22	25.5	443	1670	-0.1
150	3.94	0.34	23.0	439	1643	-0.1
200	5.00	0.45	20.4	436	1616	-0.1
250	5.94	0.57	17.7	433	1590	-0.2
300	6.74	0.68	15.0	429	1564	-0.2
350	7.41	0.80	12.3	426	1539	-0.2
400	7.95	0.92	9.5	422	1513	-0.3
450	8.35	1.04	6.7	419	1489	-0.3
500	8.61	1.16	3.8	416	1464	-0.3
550	8.73	1.28	0.9	412	1440	-0.4
600	8.70	1.40	-2.1	409	1416	-0.4
650	8.53	1.52	-5.1	406	1393	-0.4
700	8.21	1.65	-8.1	403	1370	-0.5
750	7.74	1.77	-11.2	399	1347	-0.5
800	7.11	1.90	-14.4	396	1325	-0.5
850	6.33	2.02	-17.6	393	1303	-0.5
900	5.39	2.15	-20.9	390	1281	-0.6
950	4.29	2.28	-24.2	387	1260	-0.6
1000	3.03	2.41	-27.6	383	1239	-0.6
1050	1.60	2.54	-31.0	380	1218	-0.7
1100	0.00	2.67	-34.5	377	1197	-0.7

TYPE CC 2 CALIBER 6.50 MM AVERAGE DENSITY 16.70 GRAMS/CC.
PROJ. WT 25.868 GRAMS PROJ. DIA. 6.50 MM IMPULSE 0.8 LB. SEC.
DRAG RDCR. WT. 0.000 GRAMS CHG. WT. 0.36 GRAMS SABOT WT. 0.000 GRAMS
TWIST RATE NA PCT. DRAG CHANGE / (DEG. YAW)**2 0.67

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	100.0	169	369	0.0
0	0.00	0.00	100.0	169	369	0.0
50	4.49	0.30	82.3	167	360	0.0
100	8.08	0.60	64.1	165	351	0.0
150	10.78	0.91	45.5	163	342	-0.1
200	12.54	1.22	26.4	161	334	-0.1
250	13.36	1.53	6.8	159	327	-0.1
300	13.20	1.85	-13.2	157	319	-0.1
350	12.06	2.17	-33.7	155	312	-0.1
400	9.89	2.49	-54.6	154	306	-0.1
450	6.69	2.82	-75.9	152	300	-0.2
500	2.42	3.15	-97.7	151	294	-0.2
524	0.00	3.31	-108.2	150	291	-0.2

DRAG RDCR. WT. 0.241 GRAMS PCT. DRAG CHANGE / (DEG. YAW)**2 1.74

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	100.0	169	369	0.0
0	0.00	0.00	100.0	169	369	0.0
50	4.49	0.30	82.4	168	363	0.0
100	8.10	0.60	64.5	166	358	0.0
150	10.82	0.90	46.3	165	353	0.0
200	12.65	1.20	27.9	164	347	0.0
250	13.56	1.51	9.3	163	343	0.0
300	13.56	1.82	-9.6	162	338	-0.1
350	12.62	2.13	-28.7	161	334	-0.1
400	10.74	2.44	-48.0	160	330	-0.1
450	7.90	2.75	-67.5	160	326	-0.1
500	4.10	3.07	-87.2	159	322	-0.1
543	0.00	3.34	-104.6	157	317	-0.1

TYPE CC 2 CALIBER 6.50 MM AVERAGE DENSITY 16.70 GRAMS/CC.
PROJ. WT 25.868 GRAMS PROJ. DIA. 6.50 MM IMPULSE 1.2 LB. SEC.
DRAG RDCR. WT. 0.000 GRAMS CHG. WT. 0.47 GRAMS SABOT WT. 0.000 GRAMS
TWIST RATE NA PCT. DRAG CHANGE / (DEG. YAW)**2 0.67

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	100.0	217	609	0.0
0	0.00	0.00	100.0	217	609	0.0
50	4.66	0.23	89.3	214	595	0.0
100	8.78	0.47	78.3	212	581	0.0
150	12.35	0.71	67.0	209	567	-0.1
200	15.36	0.95	55.5	207	554	-0.1
250	17.79	1.19	43.7	205	541	-0.1
300	19.64	1.44	31.6	202	529	-0.1
350	20.89	1.69	19.2	200	517	-0.2
400	21.53	1.94	6.6	198	505	-0.2
450	21.53	2.19	-6.3	195	494	-0.2
500	20.90	2.45	-19.6	193	483	-0.2
550	19.61	2.71	-33.1	191	473	-0.2
600	17.65	2.97	-46.9	189	463	-0.3
650	15.00	3.24	-61.0	187	453	-0.3
700	11.66	3.51	-75.4	185	444	-0.3
750	7.59	3.78	-90.1	183	435	-0.3
800	2.79	4.05	-105.1	182	427	-0.3
826	0.00	4.20	-113.0	181	423	-0.3

DRAG RDCR. WT. 0.241 GRAMS PCT. DRAG CHANGE / (DEG. YAW)**2 1.74

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	100.0	217	609	0.0
0	0.00	0.00	100.0	217	609	0.0
50	4.66	0.23	89.3	216	603	0.0
100	8.79	0.47	78.3	214	592	0.0
150	12.38	0.70	67.5	213	584	0.0
200	15.42	0.94	56.4	211	576	0.0
250	17.92	1.17	45.2	210	569	-0.1
300	19.86	1.41	33.8	209	561	-0.1
350	21.23	1.65	22.2	207	554	-0.1
400	22.04	1.90	10.6	206	547	-0.1
450	22.27	2.14	-1.2	205	540	-0.1
500	21.92	2.38	-13.2	204	533	-0.1
550	20.98	2.63	-25.3	203	527	-0.1
600	19.44	2.88	-37.5	202	521	-0.1
650	17.30	3.13	-49.9	200	515	-0.2
700	14.54	3.38	-62.5	198	502	-0.2
750	11.16	3.63	-75.4	196	491	-0.2
800	7.13	3.89	-88.5	194	481	-0.2
850	2.44	4.15	-102.0	192	472	-0.2
874	0.00	4.27	-108.4	191	467	-0.2

TYPE CC 2 CALIBER 6.50 MM AVERAGE DENSITY 16.70 GRAMS/CC.
PROJ. WT 25.868 GRAMS PROJ. DIA. 6.50 MM IMPULSE 2.1 LB. SEC.
DRAG RDCR. WT. 0.000 GRAMS CHG. WT. 0.83 GRAMS SABOT WT. 0.000 GRAMS
TWIST RATE NA PCT. DRAG CHANGE / (DEG. YAW)**2 0.67

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	62.3	323	1349	0.0
0	0.00	0.00	62.3	323	1349	0.0
50	2.94	0.16	57.5	319	1319	0.0
100	5.64	0.31	52.5	316	1289	-0.1
150	8.10	0.47	47.4	312	1261	-0.1
200	10.30	0.63	42.3	309	1233	-0.1
250	12.25	0.80	37.0	305	1206	-0.2
300	13.93	0.96	31.5	302	1179	-0.2
350	15.34	1.13	26.0	299	1154	-0.2
400	16.48	1.30	20.3	295	1129	-0.3
450	17.34	1.47	14.6	292	1105	-0.3
500	17.91	1.64	8.6	289	1081	-0.3
550	18.19	1.81	2.6	286	1058	-0.3
600	18.17	1.99	-3.6	283	1036	-0.4
650	17.84	2.17	-9.9	280	1014	-0.4
700	17.20	2.35	-16.3	277	993	-0.4
750	16.25	2.53	-22.9	274	972	-0.4
800	14.96	2.71	-29.6	271	952	-0.5
850	13.34	2.90	-36.5	268	932	-0.5
900	11.39	3.08	-43.5	266	913	-0.5
950	9.08	3.27	-50.6	263	894	-0.5
1000	6.42	3.47	-57.9	260	876	-0.6
1050	3.40	3.66	-65.4	258	858	-0.6
1100	0.00	3.85	-73.0	255	841	-0.6

DRAG RDCR. WT. 0.241 GRAMS PCT. DRAG CHANGE / (DEG. YAW)**2 1.74

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	57.0	323	1349	0.0
0	0.00	0.00	57.0	323	1349	0.0
50	2.68	0.16	52.2	321	1334	0.0
100	5.12	0.31	47.3	320	1320	0.0
150	7.32	0.47	42.4	318	1305	0.0
200	9.28	0.63	37.4	316	1290	-0.1
250	10.99	0.79	32.4	314	1276	-0.1
300	12.46	0.94	27.3	313	1262	-0.1
350	13.67	1.11	22.2	311	1248	-0.1
400	14.64	1.27	17.0	310	1235	-0.1
450	15.34	1.43	11.8	308	1221	-0.1
500	15.79	1.59	6.5	306	1208	-0.2
550	15.98	1.75	1.1	305	1195	-0.2
600	15.91	1.92	-4.3	303	1182	-0.2
650	15.56	2.08	-9.8	302	1169	-0.2
700	14.95	2.25	-15.3	300	1156	-0.2
750	14.07	2.42	-20.9	299	1144	-0.2
800	12.91	2.59	-26.5	297	1132	-0.2
850	11.47	2.75	-32.2	295	1120	-0.3
900	9.76	2.92	-37.9	294	1108	-0.3
950	7.76	3.10	-43.7	292	1089	-0.3
1000	5.47	3.27	-49.7	289	1067	-0.3
1050	2.88	3.44	-55.8	285	1044	-0.4
1100	0.00	3.62	-61.9	283	1023	-0.4

TYPE CC 2 CALIBER 7.62 MM AVERAGE DENSITY 7.80 GRAMS/CC.
PROJ. WT 19.469 GRAMS PROJ. DIA. 7.62 MM IMPULSE 0.8 LB. SEC.
DRAG RDCR. WT. 0.000 GRAMS CHG. WT. 0.32 GRAMS SABOT WT. 0.000 GRAMS
TWIST RATE NA PCT. DRAG CHANGE / (DEG. YAW)**2 0.67

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	100.0	200	389	0.0
0	0.00	0.00	100.0	200	389	0.0
50	4.61	0.25	87.2	196	373	0.0
100	8.57	0.51	73.9	192	357	-0.1
150	11.87	0.78	60.0	189	342	-0.1
200	14.46	1.05	45.5	184	328	-0.2
250	16.32	1.32	30.4	180	315	-0.2
300	17.43	1.60	14.6	176	302	-0.2
350	17.75	1.89	-1.9	172	289	-0.3
400	17.23	2.18	-19.0	169	278	-0.3
450	15.87	2.48	-36.9	166	267	-0.3
500	13.60	2.79	-55.5	162	256	-0.3
550	10.40	3.10	-74.8	159	247	-0.4
600	6.23	3.42	-94.9	156	237	-0.4
650	1.05	3.74	-115.8	153	228	-0.4
659	0.00	3.80	-119.7	153	227	-0.4

DRAG RDCR. WT. 0.389 GRAMS PCT. DRAG CHANGE / (DEG. YAW)**2 1.74

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	100.0	200	389	0.0
0	0.00	0.00	100.0	200	389	0.0
50	4.61	0.25	87.4	198	380	0.0
100	8.59	0.51	74.4	195	370	0.0
150	11.92	0.77	61.2	193	361	-0.1
200	14.60	1.03	47.6	191	352	-0.1
250	16.59	1.29	33.8	189	344	-0.1
300	17.91	1.56	19.6	187	335	-0.1
350	18.51	1.83	5.1	185	327	-0.1
400	18.40	2.10	-9.8	183	320	-0.2
450	17.55	2.37	-24.9	181	312	-0.2
500	15.95	2.65	-40.4	179	305	-0.2
550	13.58	2.93	-56.2	177	298	-0.2
600	10.42	3.22	-72.4	174	288	-0.3
650	6.45	3.51	-89.3	170	277	-0.3
700	1.62	3.81	-106.9	167	266	-0.3
715	0.00	3.90	-112.3	166	263	-0.3

TYPE CC 2 CALIBER 7.62 MM AVERAGE DENSITY 7.80 GRAMS/CC.

PROJ. WT 19.469 GRAMS PROJ. DIA. 7.62 MM IMPULSE 1.2 LB. SEC.

DRAG RDCR. WT. 0.000 GRAMS CHG. WT. 0.43 GRAMS SABOT WT. 0.000 GRAMS

TWIST RATE NA PCT. DRAG CHANGE / (DEG. YAW)**2 0.67

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	100.0	264	678	0.0
0	0.00	0.00	100.0	264	678	0.0
50	4.74	0.19	92.7	259	651	-0.1
100	9.12	0.39	85.1	253	625	-0.1
150	13.11	0.59	77.1	248	601	-0.1
200	16.70	0.79	68.9	243	577	-0.2
250	19.87	1.00	60.3	238	554	-0.2
300	22.62	1.21	51.3	234	532	-0.3
350	24.91	1.43	42.0	229	510	-0.3
400	26.73	1.65	32.2	224	490	-0.4
450	28.07	1.87	22.1	220	471	-0.4
500	28.90	2.10	11.6	215	452	-0.4
550	29.20	2.34	0.6	211	434	-0.5
600	28.95	2.58	-10.8	207	417	-0.5
650	28.14	2.82	-22.7	203	401	-0.5
700	26.72	3.07	-35.1	199	385	-0.6
750	24.68	3.33	-48.0	195	370	-0.6
800	22.00	3.58	-61.4	191	356	-0.6
850	18.65	3.85	-75.3	187	342	-0.7
900	14.59	4.12	-89.8	184	329	-0.7
950	9.80	4.40	-104.9	180	317	-0.7
1000	4.26	4.68	-120.5	177	305	-0.7
1034	0.00	4.87	-131.6	175	297	-0.7

DRAG RDCR. WT. 0.389 GRAMS PCT. DRAG CHANGE / (DEG. YAW)**2 1.74

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	93.1	264	678	0.0
0	0.00	0.00	93.1	264	678	0.0
50	4.40	0.19	85.8	261	663	0.0
100	8.44	0.38	78.4	259	649	-0.1
150	12.11	0.58	70.9	256	634	-0.1
200	15.40	0.78	63.2	253	620	-0.1
250	18.31	0.98	55.3	250	607	-0.1
300	20.83	1.18	47.2	248	593	-0.2
350	22.95	1.38	39.0	245	580	-0.2
400	24.66	1.58	30.6	243	567	-0.2
450	25.96	1.79	22.1	240	555	-0.2
500	26.83	2.00	13.3	238	543	-0.2
550	27.27	2.21	4.4	235	531	-0.3
600	27.26	2.43	-4.7	233	519	-0.3
650	26.81	2.64	-14.0	230	508	-0.3
700	25.89	2.86	-23.5	228	497	-0.3
750	24.50	3.08	-33.2	225	483	-0.4
800	22.62	3.30	-43.3	221	464	-0.4
850	20.24	3.53	-53.8	216	446	-0.5
900	17.34	3.77	-64.7	212	428	-0.5
950	13.89	4.01	-76.1	208	412	-0.5
1000	9.86	4.25	-87.9	204	396	-0.6
1050	5.24	4.50	-100.1	200	380	-0.6
1100	0.00	4.75	-112.9	196	366	-0.6

TYPE CC 2 CALIBER 7.62 MM AVERAGE DENSITY 7.80 GRAMS/CC.

PROJ. WT 19.469 GRAMS PROJ. DIA. 7.62 MM IMPULSE 2.1 LB. SEC.

DRAG RDCR. WT. 0.000 GRAMS CHG. WT. 1.22 GRAMS SABOT WT. 0.000 GRAMS

TWIST RATE NA PCT. DRAG CHANGE / (DEG. YAW)**2 0.67

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	50.8	404	1589	0.0
0	0.00	0.00	50.8	404	1589	0.0
50	2.42	0.13	47.6	392	1494	-0.1
100	4.68	0.26	44.3	380	1405	-0.2
150	6.77	0.39	40.7	368	1320	-0.3
200	8.67	0.53	36.9	357	1240	-0.4
250	10.39	0.67	32.9	347	1174	-0.5
300	11.90	0.82	28.6	339	1117	-0.5
350	13.20	0.97	24.2	331	1069	-0.5
400	14.27	1.12	19.5	324	1024	-0.6
450	15.12	1.27	14.7	318	983	-0.6
500	15.72	1.43	9.6	311	944	-0.6
550	16.06	1.59	4.4	305	908	-0.7
600	16.15	1.76	-1.1	299	872	-0.7
650	15.96	1.93	-6.8	294	839	-0.8
700	15.48	2.10	-12.7	288	807	-0.8
750	14.71	2.28	-18.9	282	776	-0.8
800	13.64	2.46	-25.2	277	746	-0.9
850	12.24	2.64	-31.9	272	718	-0.9
900	10.51	2.82	-38.8	266	691	-0.9
950	8.44	3.01	-46.0	261	665	-1.0
1000	6.00	3.21	-53.4	256	640	-1.0
1050	3.20	3.40	-61.2	251	616	-1.1
1100	0.00	3.61	-69.2	247	592	-1.1

DRAG RDCR. WT. 0.389 GRAMS PCT. DRAG CHANGE / (DEG. YAW)**2 1.74

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	39.1	404	1589	0.0
0	0.00	0.00	39.1	404	1589	0.0
50	1.84	0.12	36.0	400	1557	0.0
100	3.53	0.25	32.8	396	1525	-0.1
150	5.06	0.38	29.6	392	1494	-0.1
200	6.44	0.51	26.3	388	1464	-0.2
250	7.65	0.63	23.0	385	1434	-0.2
300	8.69	0.77	19.6	381	1405	-0.2
350	9.57	0.90	16.1	377	1376	-0.3
400	10.27	1.03	12.5	373	1348	-0.3
450	10.80	1.17	8.9	370	1320	-0.3
500	11.15	1.30	5.2	366	1293	-0.4
550	11.32	1.44	1.5	362	1266	-0.4
600	11.30	1.58	-2.4	359	1240	-0.4
650	11.09	1.72	-6.3	355	1214	-0.5
700	10.69	1.86	-10.3	352	1189	-0.5
750	10.09	2.00	-14.4	348	1165	-0.5
800	9.28	2.15	-18.5	345	1141	-0.5
850	8.28	2.29	-22.8	342	1118	-0.6
900	7.06	2.44	-27.1	338	1096	-0.6
950	5.63	2.59	-31.5	335	1074	-0.6
1000	3.97	2.74	-36.0	332	1053	-0.6
1050	2.10	2.89	-40.6	329	1033	-0.7
1100	0.00	3.04	-45.2	325	1006	-0.8

TYPE CC 2 CALIBER 7.62 MM AVERAGE DENSITY 11.00 GRAMS/CC.
PROJ. WT 27.456 GRAMS PROJ. DIA. 7.62 MM IMPULSE 0.8 LB. SEC.
DRAG RDCR. WT. 0.000 GRAMS CHG. WT. 0.37 GRAMS SABOT WT. 0.000 GRAMS
TWIST RATE NA PCT. DRAG CHANGE / (DEG. YAW)**2 0.67

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	100.0	163	365	0.0
0	0.00	0.00	100.0	163	365	0.0
50	4.45	0.31	80.9	160	353	0.0
100	7.94	0.63	61.1	158	342	0.0
150	10.45	0.95	40.8	155	331	-0.1
200	11.93	1.27	19.7	153	321	-0.1
250	12.37	1.60	-2.0	151	312	-0.1
300	11.73	1.93	-24.3	148	303	-0.1
350	9.98	2.27	-47.3	146	294	-0.2
400	7.07	2.62	-70.9	144	286	-0.2
450	2.99	2.97	-95.2	143	279	-0.2
480	0.00	3.18	-109.8	142	275	-0.2

DRAG RDCR. WT. 0.389 GRAMS PCT. DRAG CHANGE / (DEG. YAW)**2 1.74

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	100.0	163	365	0.0
0	0.00	0.00	100.0	163	365	0.0
50	4.45	0.31	81.0	161	357	0.0
100	7.96	0.62	61.7	160	350	0.0
150	10.51	0.94	42.0	159	344	0.0
200	12.08	1.25	21.9	157	337	-0.1
250	12.66	1.57	1.6	156	331	-0.1
300	12.23	1.89	-19.2	155	326	-0.1
350	10.77	2.22	-40.2	154	320	-0.1
400	8.28	2.55	-61.5	152	315	-0.1
450	4.72	2.88	-83.2	151	311	-0.1
500	0.09	3.21	-105.1	150	304	-0.1
501	0.00	3.21	-105.5	150	304	-0.1

TYPE CC 2 CALIBER 7.62 MM AVERAGE DENSITY 11.00 GRAMS/CC.
PROJ. WT 27.496 GRAMS PROJ. DIA. 7.62 MM IMPULSE 1.2 LB. SEC.
DRAG RDCR. WT. 0.000 GRAMS CHG. WT. 0.48 GRAMS SABOT WT. 0.000 GRAMS
TWIST RATE NA PCT. DRAG CHANGE / (DEG. YAW)**2 0.67

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	100.0	208	594	0.0
0	0.00	0.00	100.0	208	594	0.0
50	4.63	0.24	88.3	205	576	0.0
100	8.68	0.49	76.2	202	558	-0.1
150	12.12	0.74	63.7	199	542	-0.1
200	14.93	0.99	50.9	196	525	-0.1
250	17.11	1.25	37.6	193	510	-0.1
300	18.62	1.51	24.0	190	495	-0.2
350	19.45	1.78	9.9	187	481	-0.2
400	19.59	2.05	-4.6	184	467	-0.2
450	19.00	2.32	-19.5	182	454	-0.2
500	17.67	2.60	-34.8	179	441	-0.3
550	15.57	2.88	-50.6	177	429	-0.3
600	12.69	3.17	-66.8	174	417	-0.3
650	9.00	3.45	-83.4	172	406	-0.3
700	4.48	3.75	-100.5	170	396	-0.3
742	0.00	4.00	-115.3	168	387	-0.4

DRAG RDCR. WT. 0.389 GRAMS PCT. DRAG CHANGE / (DEG. YAW)**2 1.74

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	100.0	208	594	0.0
0	0.00	0.00	100.0	208	594	0.0
50	4.63	0.24	88.4	206	583	0.0
100	8.69	0.49	76.5	204	573	0.0
150	12.15	0.73	64.5	203	563	0.0
200	15.02	0.98	52.2	201	553	-0.1
250	17.28	1.23	39.8	199	543	-0.1
300	18.92	1.48	27.1	198	534	-0.1
350	19.94	1.74	14.3	196	525	-0.1
400	20.32	1.99	1.2	195	516	-0.1
450	20.06	2.25	-12.1	193	508	-0.1
500	19.14	2.51	-25.5	192	500	-0.1
550	17.55	2.77	-39.2	191	492	-0.2
600	15.29	3.03	-53.0	189	483	-0.2
650	12.34	3.30	-67.2	186	470	-0.2
700	8.68	3.57	-81.8	184	458	-0.2
750	4.29	3.85	-96.8	181	445	-0.3
792	0.00	4.08	-109.7	179	435	-0.3

TYPE CC 2 CALIBER 7.62 MM AVERAGE DENSITY 11.00 GRAMS/CC.
PROJ. WT 27.456 GRAMS PROJ. DIA. 7.62 MM IMPULSE 2.1 LB. SEC.
DRAG RDCR. WT. 0.000 GRAMS CHG. WT. 0.74 GRAMS SABOT WT. 0.000 GRAMS
TWIST RATE NA PCT. DRAG CHANGE / (DEG. YAW)**2 0.67

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	71.5	309	1311	0.0
0	0.00	0.00	71.5	309	1311	0.0
50	3.39	0.16	66.2	305	1273	0.0
100	6.51	0.33	60.8	300	1237	-0.1
150	9.35	0.50	55.1	296	1202	-0.1
200	11.92	0.67	49.4	292	1168	-0.2
250	14.20	0.84	43.4	288	1136	-0.2
300	16.18	1.02	37.3	284	1104	-0.2
350	17.86	1.19	31.0	280	1074	-0.3
400	19.23	1.37	24.5	276	1044	-0.3
450	20.27	1.56	17.9	272	1015	-0.3
500	20.98	1.74	11.0	268	988	-0.4
550	21.35	1.93	4.0	265	961	-0.4
600	21.37	2.12	-3.3	261	934	-0.4
650	21.03	2.31	-10.7	257	909	-0.5
700	20.32	2.51	-18.4	254	884	-0.5
750	19.23	2.71	-26.2	250	860	-0.5
800	17.75	2.91	-34.3	247	837	-0.6
850	15.87	3.11	-42.6	244	814	-0.6
900	13.57	3.32	-51.1	240	793	-0.6
950	10.85	3.53	-59.9	237	771	-0.6
1000	7.68	3.74	-68.9	234	751	-0.7
1050	4.07	3.96	-78.2	231	731	-0.7
1100	0.00	4.18	-87.7	228	711	-0.7

DRAG RDCR. WT. 0.389 GRAMS PCT. DRAG CHANGE / (DEG. YAW)**2 1.74

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	63.9	309	1311	0.0
0	0.00	0.00	63.9	309	1311	0.0
50	3.01	0.16	58.7	307	1292	0.0
100	5.76	0.33	53.3	305	1273	0.0
150	8.24	0.49	47.9	303	1254	-0.1
200	10.46	0.66	42.4	300	1236	-0.1
250	12.40	0.82	36.8	298	1217	-0.1
300	14.07	0.99	31.2	296	1200	-0.1
350	15.47	1.16	25.4	294	1182	-0.1
400	16.57	1.33	19.6	292	1165	-0.2
450	17.40	1.50	13.8	290	1148	-0.2
500	17.92	1.68	7.8	288	1131	-0.2
550	18.16	1.85	1.7	286	1115	-0.2
600	18.10	2.03	-4.4	284	1099	-0.2
650	17.73	2.20	-10.6	282	1083	-0.3
700	17.05	2.38	-16.9	280	1067	-0.3
750	16.07	2.56	-23.3	279	1052	-0.3
800	14.77	2.74	-29.8	277	1037	-0.3
850	13.15	2.92	-36.4	275	1023	-0.3
900	11.20	3.10	-43.1	272	1000	-0.4
950	8.92	3.29	-49.9	268	973	-0.4
1000	6.30	3.48	-57.0	265	947	-0.4
1050	3.33	3.67	-64.2	261	921	-0.5
1100	0.00	3.86	-71.6	257	897	-0.5

TYPE CC 2 CALIBER 7.62 MM AVERAGE DENSITY 16.70 GRAMS/CC.
PROJ. WT 41.683 GRAMS PROJ. DIA. 7.62 MM IMPULSE 0.8 LB. SEC.
DRAG RDCR. WT. 0.000 GRAMS CHG. WT. 0.46 GRAMS SABOT WT. 0.000 GRAMS
TWIST RATE NA PCT. DRAG CHANGE / (DEG. YAW)**2 0.67

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	100.0	132	363	0.0
0	0.00	0.00	100.0	132	363	0.0
50	4.21	0.38	71.0	130	354	0.0
100	6.97	0.77	41.3	129	346	0.0
150	8.25	1.16	10.9	128	339	0.0
200	8.02	1.55	-20.2	126	332	-0.1
250	6.26	1.95	-51.8	125	327	-0.1
300	2.93	2.35	-83.9	124	321	-0.1
312	0.00	2.61	-104.4	124	319	-0.1

DRAG RDCR. WT. 0.389 GRAMS PCT. DRAG CHANGE / (DEG. YAW)**2 1.74

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	100.0	132	363	0.0
0	0.00	0.00	100.0	132	363	0.0
50	4.21	0.38	71.1	131	357	0.0
100	6.99	0.77	41.8	130	352	0.0
150	8.31	1.15	12.1	129	347	0.0
200	8.17	1.54	-18.0	129	343	0.0
250	6.54	1.93	-48.3	128	339	0.0
300	3.42	2.32	-78.9	128	337	0.0
338	0.00	2.62	-102.5	127	335	0.0

TYPE CC 2 CALIBER 7.62 MM AVERAGE DENSITY 16.70 GRAMS/CC.
PROJ. WT 41.683 GRAMS PROJ. DIA. 7.62 MM IMPULSE 1.2 LB. SEC.
DRAG RDCR. WT. 0.000 GRAMS CHG. WT. 0.56 GRAMS SABOT WT. 0.000 GRAMS
TWIST RATE NA PCT. DRAG CHANGE / (DEG. YAW)**2 0.67

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	100.0	162	547	0.0
0	0.00	0.00	100.0	162	547	0.0
50	4.45	0.31	80.7	160	535	0.0
100	7.93	0.63	61.1	158	523	0.0
150	10.44	0.94	40.9	157	512	0.0
200	11.95	1.27	20.4	155	501	-0.1
250	12.43	1.59	-0.6	154	491	-0.1
300	11.88	1.92	-22.0	152	482	-0.1
350	10.27	2.25	-43.8	151	474	-0.1
400	7.58	2.58	-65.9	149	465	-0.1
450	3.78	2.92	-88.5	148	458	-0.1
489	0.00	3.19	-106.5	147	452	-0.1

DRAG RDCR. WT. 0.389 GRAMS PCT. DRAG CHANGE / (DEG. YAW)**2 1.74

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	100.0	162	547	0.0
0	0.00	0.00	100.0	162	547	0.0
50	4.45	0.31	80.8	161	539	0.0
100	7.95	0.62	61.4	160	531	0.0
150	10.48	0.94	41.7	159	524	0.0
200	12.04	1.25	21.8	158	518	0.0
250	12.62	1.57	1.7	157	512	0.0
300	12.21	1.89	-18.7	156	506	0.0
350	10.79	2.21	-39.2	156	501	-0.1
400	8.36	2.53	-59.9	155	496	-0.1
450	4.90	2.86	-80.8	154	492	-0.1
500	0.40	3.18	-101.9	153	486	-0.1
504	0.00	3.21	-103.6	153	485	-0.1

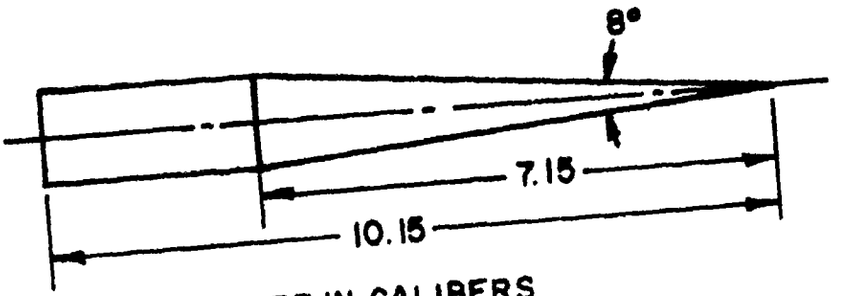
TYPE CC 2 CALIBER 7.62 MM AVERAGE DENSITY 16.70 GRAMS/CC.
PROJ. WT 41.683 GRAMS PROJ. DIA. 7.62 MM IMPULSE 2.1 LB. SEC.
DRAG RDCR. WT. 0.000 GRAMS CHG. WT. 0.79 GRAMS SABOT WT. 0.000 GRAMS
TWIST RATE NA PCT. DRAG CHANGE / (DEG. YAW)**2 0.67

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	100.0	229	1093	0.0
0	0.00	0.00	100.0	229	1093	0.0
50	4.68	0.22	90.4	227	1071	0.0
100	8.89	0.44	80.6	224	1049	0.0
150	12.60	0.67	70.5	222	1028	-0.1
200	15.82	0.89	60.3	220	1008	-0.1
250	18.53	1.12	49.9	218	988	-0.1
300	20.71	1.35	39.2	216	969	-0.1
350	22.38	1.59	28.4	214	950	-0.1
400	23.50	1.82	17.3	211	932	-0.2
450	24.07	2.06	6.0	209	914	-0.2
500	24.09	2.30	-5.5	207	897	-0.2
550	23.54	2.54	-17.2	206	881	-0.2
600	22.40	2.79	-29.1	204	865	-0.2
650	20.68	3.03	-41.2	202	849	-0.2
700	18.36	3.28	-53.6	200	834	-0.3
750	15.42	3.53	-66.2	198	820	-0.3
800	11.85	3.79	-79.0	197	806	-0.3
850	7.65	4.04	-92.0	195	792	-0.3
900	2.79	4.30	-105.3	193	779	-0.3
926	0.00	4.44	-112.3	193	773	-0.3

DRAG RDCR. WT. 0.389 GRAMS PCT. DRAG CHANGE / (DEG. YAW)**2 1.74

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	100.0	229	1093	0.0
0	0.00	0.00	100.0	229	1093	0.0
50	4.68	0.22	90.4	228	1080	0.0
100	8.90	0.44	80.7	226	1067	0.0
150	12.62	0.66	70.9	225	1054	0.0
200	15.87	0.89	61.0	224	1042	0.0
250	18.62	1.11	51.0	223	1030	-0.1
300	20.88	1.34	40.9	222	1019	-0.1
350	22.64	1.56	30.7	220	1008	-0.1
400	23.89	1.79	20.3	219	997	-0.1
450	24.63	2.02	9.9	218	986	-0.1
500	24.86	2.25	-0.7	217	975	-0.1
550	24.57	2.48	-11.3	216	965	-0.1
600	23.76	2.71	-22.1	215	956	-0.1
650	22.41	2.94	-32.9	214	946	-0.1
700	20.53	3.18	-43.9	212	931	-0.2
750	18.10	3.42	-55.1	210	914	-0.2
800	15.12	3.65	-66.4	209	898	-0.2
850	11.57	3.90	-78.0	207	883	-0.2
900	7.45	4.14	-89.8	205	868	-0.2
950	2.74	4.39	-101.8	203	853	-0.2
976	0.00	4.52	-108.2	202	846	-0.3

CC 3



ALL DIMENSIONS ARE IN CALIBERS

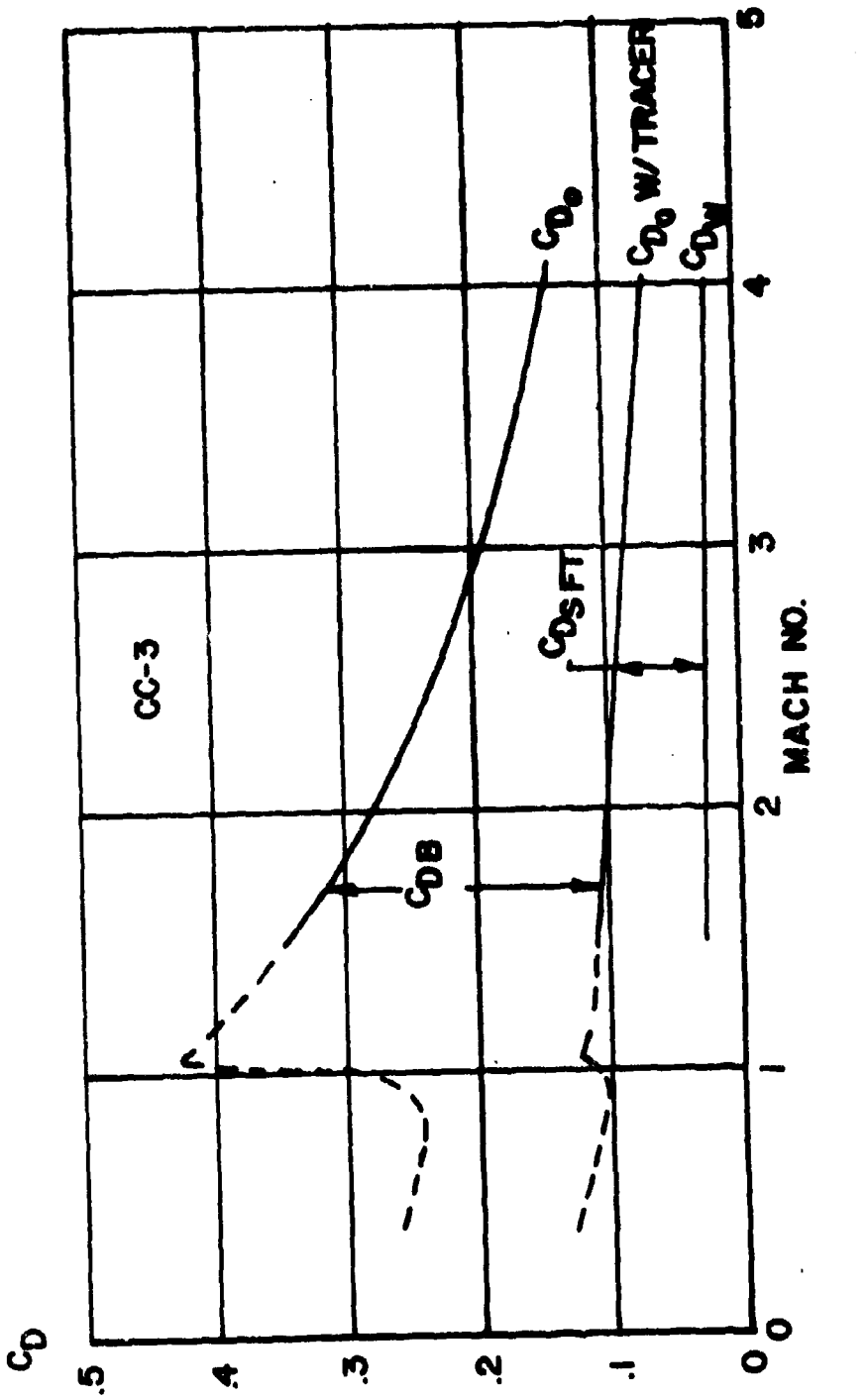
Axial Radius of Gyration = 0.321 Cal.
Transverse Radius of Gyration = 1.99 Cal.
Center of Mass (Nose) = 7.19 Cal.

Wetted Area = 20.68 Cal.^{2}
Volume = 4.23 Cal.^{3}
Length = 10.15 Cal.

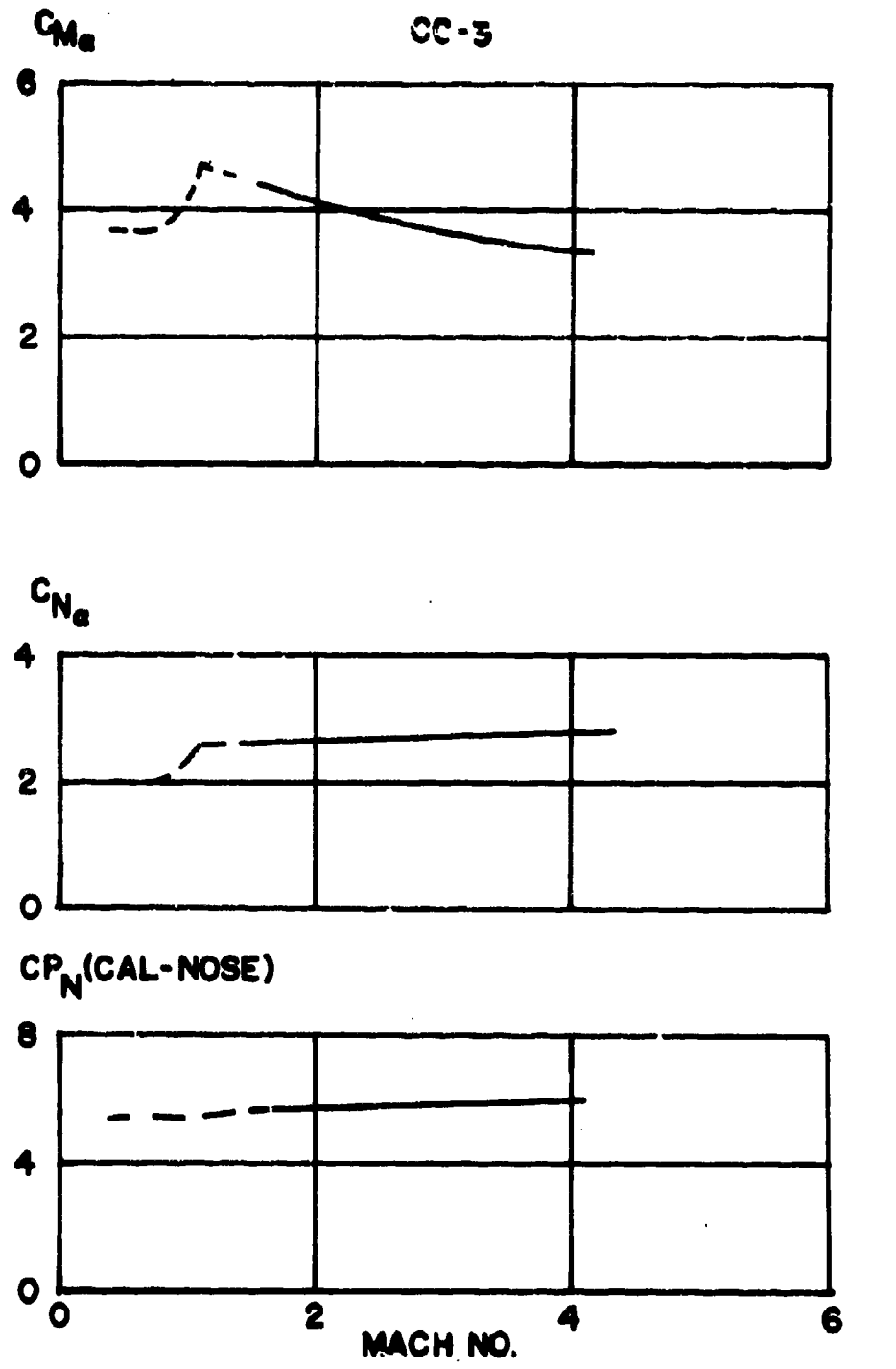
Mach No.	C_{D_O}	C_{D_B}	C_{D_O} (Tracer)	$C_{D_{SF_T}}$	C_{D_W}	C_{N_α}	CP_N	C_{M_α}
.4 *	.262		.127			2.00	5.36	3.66
.8 *	.242		.108			2.00	5.36	3.66
.95*	.258		.103			2.14	5.36	3.92
1.0 *	.294		.111			2.34	5.37	4.26
1.05*	.418		.121			2.46	5.37	4.48
1.1 *	.415		.119			2.52	5.38	4.56
1.5	.349	.236	.113	.086	.027	2.59	5.47	4.46
2.0	.280	.181	.099	.075	.024	2.60	5.60	4.13
2.5	.229	.141	.088	.067	.021	2.63	5.74	3.81
3.0	.191	.112	.079	.060	.020	2.66	5.84	3.59
3.5	.163	.091	.072	.054	.018	2.67	5.90	3.44
4.0	.142	.075	.066	.049	.017	2.68	5.95	3.32

$C_{D_{\alpha^2}}$ (Mach = 2.5) = 5.69

*Estimated data



CC-3-2



CC-3-3

TYPE CC 3 CALIBER 5.56 MM AVERAGE DENSITY 7.80 GRAMS/CC.
PROJ. WT 5.671 GRAMS PROJ. DIA. 5.56 MM IMPULSE 0.8 LB. SEC.
DRAG RDCR. WT. 0.000 GRAMS CHG. WT. 0.59 GRAMS SABOT WT. 0.000 GRAMS
TWIST RATE NA PCT. DRAG CHANGE / (DEG. YAW)**2 0.76

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	46.7	502	715	0.0
0	0.00	0.00	46.7	502	715	0.0
50	2.24	0.10	44.6	479	650	-0.2
100	4.38	0.21	42.4	456	590	-0.5
150	6.40	0.32	39.8	434	534	-0.7
200	8.29	0.44	37.0	412	482	-0.9
250	10.04	0.56	33.9	391	433	-1.1
300	11.62	0.70	30.5	370	389	-1.2
350	13.03	0.84	26.6	351	349	-1.3
400	14.24	0.98	22.4	337	321	-1.1
450	15.23	1.13	17.8	325	299	-1.1
500	15.99	1.29	12.9	314	279	-1.1
550	16.50	1.45	7.7	304	261	-1.1
600	16.74	1.62	2.1	294	245	-1.2
650	16.70	1.79	-3.9	284	229	-1.2
700	16.36	1.97	-10.3	275	215	-1.3
750	15.70	2.15	-17.1	267	202	-1.3
800	14.69	2.35	-24.3	258	189	-1.4
850	13.31	2.54	-32.1	250	178	-1.4
900	11.54	2.75	-40.3	242	167	-1.4
950	9.35	2.95	-49.1	235	156	-1.5
1000	6.72	3.17	-58.4	227	147	-1.5
1050	3.62	3.40	-68.4	220	137	-1.5
1100	0.00	3.63	-79.0	213	129	-1.6

DRAG RDCR. WT. 0.151 GRAMS PCT. DRAG CHANGE / (DEG. YAW)**2 1.97

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	27.5	502	715	0.0
0	0.00	0.00	27.5	502	715	0.0
50	1.30	0.10	25.5	495	693	-0.1
100	2.50	0.20	23.5	487	672	-0.1
150	3.60	0.31	21.3	480	651	-0.2
200	4.60	0.41	19.1	473	631	-0.3
250	5.48	0.52	16.8	466	612	-0.4
300	6.25	0.63	14.5	459	593	-0.4
350	6.91	0.74	12.1	452	575	-0.5
400	7.44	0.85	9.6	445	557	-0.5
450	7.86	0.96	7.0	438	539	-0.6
500	8.14	1.08	4.4	431	522	-0.7
550	8.29	1.19	1.7	425	506	-0.7
600	8.31	1.31	-1.1	418	490	-0.8
650	8.19	1.43	-4.0	412	474	-0.8
700	7.92	1.55	-7.0	405	459	-0.9
750	7.50	1.68	-10.1	399	445	-0.9
800	6.93	1.80	-13.3	393	430	-1.0
850	6.21	1.93	-16.6	387	417	-1.0
900	5.31	2.06	-20.0	381	403	-1.1
950	4.25	2.20	-23.5	375	390	-1.1
1000	3.02	2.33	-27.1	369	377	-1.2
1050	1.60	2.47	-30.9	363	365	-1.2
1100	0.00	2.61	-34.7	357	353	-1.3

TYPE CC 3 CALIBER 5.56 MM AVERAGE DENSITY 7.80 GRAMS/CC.
PROJ. WT 5.671 GRAMS PROJ. DIA. 5.56 MM IMPULSE 1.2 LB. SEC.
DRAG RDCR. WT. 0.000 GRAMS CHG. WT. 1.17 GRAMS SABOT WT. 0.000 GRAMS
TWIST RATE NA PCT. DRAG CHANGE / (DEG. YAW)**2 0.76

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	23.6	698	1381	0.0
0	0.00	0.00	23.6	698	1381	0.0
50	1.13	0.07	22.6	673	1284	-0.2
100	2.22	0.15	21.4	648	1190	-0.5
150	3.24	0.23	20.2	623	1101	-0.7
200	4.20	0.31	18.8	598	1015	-1.0
250	5.09	0.39	17.4	574	934	-1.2
300	5.91	0.48	15.8	550	857	-1.4
350	6.64	0.58	14.1	526	784	-1.7
400	7.29	0.67	12.2	502	716	-1.9
450	7.84	0.78	10.1	479	652	-2.1
500	8.29	0.88	7.8	457	591	-2.3
550	8.61	1.00	5.3	434	535	-2.4
600	8.81	1.11	2.5	413	483	-2.6
650	8.87	1.24	-0.6	392	435	-2.8
700	8.76	1.37	-4.0	371	390	-2.9
750	8.48	1.51	-7.8	352	351	-3.0
800	8.00	1.65	-12.1	337	322	-2.6
850	7.30	1.80	-16.6	325	300	-2.2
900	6.37	1.96	-21.5	314	280	-2.0
950	5.19	2.12	-26.7	304	262	-2.0
1000	3.75	2.29	-32.3	294	246	-2.0
1050	2.03	2.46	-38.3	285	230	-2.0
1100	0.00	2.64	-44.6	276	216	-2.0

DRAG RDCR. WT. 0.151 GRAMS PCT. DRAG CHANGE / (DEG. YAW)**2 1.97

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	13.8	698	1381	0.0
0	0.00	0.00	13.8	698	1381	0.0
50	0.65	0.07	12.7	689	1346	-0.1
100	1.25	0.15	11.7	680	1310	-0.2
150	1.80	0.22	10.6	671	1276	-0.3
200	2.29	0.29	9.5	663	1242	-0.3
250	2.73	0.37	8.3	654	1208	-0.4
300	3.11	0.45	7.1	645	1176	-0.5
350	3.43	0.53	5.9	637	1144	-0.6
400	3.69	0.60	4.7	628	1113	-0.7
450	3.89	0.68	3.4	620	1082	-0.8
500	4.03	0.77	2.1	611	1052	-0.8
550	4.10	0.85	0.7	603	1022	-0.9
600	4.11	0.93	-0.7	594	993	-1.0
650	4.04	1.02	-2.1	586	965	-1.1
700	3.90	1.10	-3.6	578	937	-1.1
750	3.70	1.19	-5.1	570	910	-1.2
800	3.41	1.28	-6.7	562	884	-1.3
850	3.05	1.37	-8.3	553	858	-1.4
900	2.61	1.46	-9.9	546	833	-1.4
950	2.09	1.55	-11.6	538	808	-1.5
1000	1.48	1.64	-13.4	530	784	-1.6
1050	0.78	1.74	-15.2	522	760	-1.6
1100	0.00	1.84	-17.1	514	737	-1.7

TYPE CC 3 CALIBER 5.56 MM AVERAGE DENSITY 7.80 GRAMS/CC.
PROJ. WT 5.671 GRAMS PROJ. DIA. 5.56 MM IMPULSE 2.1 LB. SEC.
DRAG RDCR. WT. 0.000 GRAMS CHG. WT. 2.81 GRAMS SABOT WT. 0.000 GRAMS
TWIST RATE NA PCT. DRAG CHANGE / (DEG. YAW)**2 0.76

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	7.8	1060	3186	0.0
0	0.00	0.00	7.8	1060	3186	0.0
50	0.37	0.05	7.3	1034	3034	-0.3
100	0.72	0.10	6.8	1009	2885	-0.5
150	1.04	0.15	6.3	983	2741	-0.8
200	1.34	0.20	5.8	957	2599	-1.0
250	1.61	0.25	5.2	932	2461	-1.3
300	1.85	0.31	4.6	906	2327	-1.5
350	2.07	0.36	4.0	880	2197	-1.8
400	2.25	0.42	3.3	855	2071	-2.0
450	2.40	0.48	2.6	829	1949	-2.3
500	2.52	0.54	1.9	804	1831	-2.6
550	2.59	0.60	1.1	778	1716	-2.8
600	2.63	0.67	0.2	752	1605	-3.1
650	2.63	0.74	-0.7	727	1499	-3.3
700	2.57	0.81	-1.7	702	1396	-3.5
750	2.47	0.88	-2.7	677	1298	-3.8
800	2.32	0.95	-3.8	652	1204	-4.0
850	2.11	1.03	-5.1	627	1114	-4.2
900	1.83	1.11	-6.4	602	1028	-4.5
950	1.49	1.20	-7.8	578	946	-4.7
1000	1.08	1.29	-9.4	553	868	-4.9
1050	0.58	1.38	-11.1	529	795	-5.1
1100	0.00	1.48	-13.0	506	726	-5.2

DRAG RDCR. WT. 0.151 GRAMS PCT. DRAG CHANGE / (DEG. YAW)**2 1.97

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	5.7	1060	3186	0.0
0	0.00	0.00	5.7	1060	3186	0.0
50	0.27	0.05	5.2	1049	3120	-0.1
100	0.51	0.10	4.8	1039	3056	-0.3
150	0.73	0.14	4.3	1028	2992	-0.3
200	0.93	0.19	3.8	1017	2929	-0.4
250	1.11	0.24	3.3	1007	2867	-0.5
300	1.26	0.29	2.8	996	2806	-0.6
350	1.39	0.34	2.3	986	2746	-0.7
400	1.50	0.39	1.8	975	2686	-0.8
450	1.57	0.45	1.3	965	2628	-0.9
500	1.63	0.50	0.7	954	2570	-1.0
550	1.65	0.55	0.2	944	2514	-1.1
600	1.65	0.60	-0.4	934	2458	-1.2
650	1.62	0.66	-1.0	923	2403	-1.3
700	1.56	0.71	-1.6	913	2349	-1.4
750	1.48	0.77	-2.2	903	2295	-1.5
800	1.36	0.82	-2.8	893	2243	-1.6
850	1.21	0.88	-3.4	883	2191	-1.7
900	1.04	0.94	-4.1	872	2140	-1.8
950	0.83	0.99	-4.7	862	2091	-1.9
1000	0.59	1.05	-5.4	853	2042	-2.0
1050	0.31	1.11	-6.1	843	1993	-2.1
1100	0.00	1.17	-6.8	833	1946	-2.2

TYPE CC 3 CALIBER 5.56 MM AVERAGE DENSITY 11.00 GRAMS/CC.

PROJ. WT 7.998 GRAMS PROJ. DIA. 5.56 MM IMPULSE 0.8 LB. SEC.

DRAG RDCR. WT. 0.000 GRAMS CHG. WT. 0.43 GRAMS SABOT WT. 0.000 GRAMS

TWIST RATE NA PCT. DRAG CHANGE / (DEG. YAW)**2 0.76

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	59.7	380	577	0.0
0	0.00	0.00	59.7	380	577	0.0
50	2.85	0.13	56.1	366	534	-0.1
100	5.51	0.27	52.2	352	495	-0.3
150	7.97	0.42	48.1	341	465	-0.3
200	10.23	0.57	43.6	332	441	-0.3
250	12.26	0.72	39.0	324	419	-0.4
300	14.06	0.88	34.1	316	399	-0.5
350	15.61	1.04	29.0	308	381	-0.5
400	16.90	1.20	23.6	301	363	-0.6
450	17.92	1.37	18.0	294	346	-0.6
500	18.66	1.54	12.1	288	331	-0.7
550	19.11	1.72	5.9	281	316	-0.7
600	19.24	1.90	-0.6	275	302	-0.8
650	19.05	2.08	-7.4	269	289	-0.8
700	18.52	2.27	-14.4	263	276	-0.8
750	17.64	2.46	-21.8	257	264	-0.9
800	16.38	2.66	-29.6	251	252	-0.9
850	14.74	2.86	-37.7	245	241	-1.0
900	12.68	3.07	-46.2	240	230	-1.0
950	10.20	3.28	-55.1	235	220	-1.0
1000	7.28	3.49	-64.3	229	210	-1.1
1050	3.88	3.71	-74.0	224	201	-1.1
1100	0.00	3.94	-84.2	219	192	-1.1

DRAG RDCR. WT. 0.151 GRAMS PCT. DRAG CHANGE / (DEG. YAW)**2 1.97

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	44.9	380	577	0.0
0	0.00	0.00	44.9	380	577	0.0
50	2.12	0.13	41.4	376	564	0.0
100	4.07	0.27	37.9	372	551	-0.1
150	5.84	0.40	34.2	367	538	-0.1
200	7.42	0.54	30.5	363	526	-0.2
250	8.83	0.68	26.6	359	514	-0.2
300	10.04	0.82	22.7	355	502	-0.2
350	11.06	0.96	18.7	351	490	-0.3
400	11.88	1.10	14.6	347	479	-0.3
450	12.49	1.25	10.4	344	469	-0.3
500	12.91	1.39	6.2	340	458	-0.4
550	13.10	1.54	1.8	337	449	-0.4
600	13.08	1.69	-2.7	333	439	-0.4
650	12.84	1.84	-7.2	330	430	-0.4
700	12.38	1.99	-11.9	327	421	-0.5
750	11.69	2.15	-16.6	323	413	-0.5
800	10.76	2.30	-21.4	320	404	-0.5
850	9.59	2.46	-26.3	317	396	-0.5
900	8.18	2.62	-31.3	314	388	-0.6
950	6.52	2.78	-36.5	311	380	-0.6
1000	4.61	2.94	-41.7	308	373	-0.6
1050	2.44	3.10	-47.0	302	359	-0.7
1100	0.00	3.27	-52.6	295	342	-0.8

TYPE CC 3 CALIBER 5.56 MM AVERAGE DENSITY 11.00 GRAMS/CC.
PROJ. WT 7.998 GRAMS PROJ. DIA. 5.56 MM IMPULSE 1.2 LB. SEC.
DRAG RDCR. WT. 0.000 GRAMS CHG. WT. 0.93 GRAMS SABOT WT. 0.000 GRAMS
TWIST RATE NA PCT. DRAG CHANGE / (DEG. YAW)**2 0.76

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	34.6	527	1111	0.0
0	0.00	0.00	34.6	527	1111	0.0
50	1.65	0.10	32.7	510	1041	-0.2
100	3.21	0.20	30.7	494	975	-0.3
150	4.67	0.30	28.6	477	912	-0.5
200	6.02	0.41	26.3	461	851	-0.6
250	7.25	0.52	23.9	445	793	-0.8
300	8.36	0.63	21.3	430	739	-0.9
350	9.34	0.75	18.5	414	687	-1.1
400	10.18	0.87	15.5	399	637	-1.2
450	10.86	1.00	12.2	384	591	-1.3
500	11.38	1.13	8.7	370	547	-1.4
550	11.72	1.27	4.9	356	507	-1.5
600	11.87	1.41	0.8	344	474	-1.5
650	11.80	1.56	-3.5	335	448	-1.3
700	11.52	1.71	-8.1	326	426	-1.2
750	11.01	1.87	-12.9	319	406	-1.2
800	10.26	2.03	-17.9	311	387	-1.2
850	9.26	2.19	-23.2	304	370	-1.2
900	7.99	2.35	-28.8	297	353	-1.3
950	6.44	2.53	-34.6	290	337	-1.3
1000	4.60	2.70	-40.6	284	322	-1.3
1050	2.46	2.88	-47.0	277	308	-1.4
1100	0.00	3.06	-53.6	271	294	-1.4

DRAG RDCR. WT. 0.151 GRAMS PCT. DRAG CHANGE / (DEG. YAW)**2 1.97

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	23.2	527	1111	0.0
0	0.00	0.00	23.2	527	1111	0.0
50	1.09	0.10	21.4	522	1087	-0.1
100	2.10	0.19	19.5	516	1064	-0.1
150	3.01	0.29	17.6	511	1041	-0.2
200	3.83	0.39	15.7	505	1019	-0.2
250	4.55	0.49	13.7	500	997	-0.3
300	5.17	0.59	11.7	495	975	-0.3
350	5.70	0.69	9.6	490	954	-0.4
400	6.12	0.79	7.5	484	933	-0.4
450	6.44	0.90	5.4	479	913	-0.5
500	6.65	1.00	3.2	474	893	-0.5
550	6.76	1.11	0.9	469	874	-0.6
600	6.75	1.22	-1.4	464	854	-0.6
650	6.63	1.32	-3.7	459	836	-0.6
700	6.39	1.43	-6.1	454	817	-0.7
750	6.04	1.54	-8.6	449	799	-0.7
800	5.56	1.65	-11.1	444	781	-0.8
850	4.96	1.77	-13.6	440	764	-0.8
900	4.23	1.88	-16.2	435	747	-0.9
950	3.37	2.00	-18.9	430	730	-0.9
1000	2.39	2.11	-21.6	425	714	-0.9
1050	1.26	2.23	-24.4	421	698	-1.0
1100	0.00	2.35	-27.3	416	682	-1.0

TYPE CC 3 CALIBER 5.56 MM AVERAGE DENSITY 11.00 GRAMS/CC.
PROJ. WT 7.998 GRAMS PROJ. DIA. 5.56 MM IMPULSE 2.1 LB. SEC.
DRAG RDCR. WT. 0.000 GRAMS CHG. WT. 2.32 GRAMS SABOT WT. 0.000 GRAMS
TWIST RATE NA PCT. DRAG CHANGE / (DEG. YAW)**2 0.76

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	12.0	827	2735	0.0
0	0.00	0.00	12.0	827	2735	0.0
50	0.57	0.06	11.2	809	2616	-0.2
100	1.10	0.12	10.4	791	2500	-0.4
150	1.60	0.19	9.6	773	2387	-0.5
200	2.05	0.25	8.8	754	2276	-0.7
250	2.46	0.32	7.9	736	2169	-0.9
300	2.82	0.39	6.9	718	2064	-1.1
350	3.14	0.46	5.9	701	1962	-1.3
400	3.41	0.53	4.9	683	1864	-1.4
450	3.63	0.61	3.8	665	1769	-1.6
500	3.79	0.68	2.6	647	1676	-1.8
550	3.89	0.76	1.4	630	1586	-1.9
600	3.93	0.84	0.1	612	1498	-2.1
650	3.91	0.92	-1.3	595	1414	-2.3
700	3.82	1.01	-2.7	577	1331	-2.4
750	3.65	1.10	-4.3	560	1255	-2.6
800	3.41	1.19	-5.9	543	1180	-2.7
850	3.08	1.28	-7.7	526	1107	-2.9
900	2.67	1.38	-9.5	510	1038	-3.0
950	2.16	1.48	-11.5	493	972	-3.1
1000	1.55	1.58	-13.6	477	909	-3.3
1050	0.83	1.69	-15.9	461	849	-3.4
1100	0.00	1.80	-18.3	445	792	-3.5

DRAG RDCR. WT. 0.151 GRAMS PCT. DRAG CHANGE / (DEG. YAW)**2 1.97

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	9.1	827	2735	0.0
0	0.00	0.00	9.1	827	2735	0.0
50	0.43	0.06	8.3	820	2689	-0.1
100	0.82	0.12	7.6	813	2643	-0.1
150	1.17	0.18	6.8	806	2598	-0.2
200	1.49	0.25	6.0	800	2553	-0.3
250	1.77	0.31	5.3	793	2509	-0.3
300	2.01	0.37	4.5	786	2465	-0.4
350	2.21	0.44	3.6	779	2422	-0.5
400	2.37	0.50	2.8	773	2380	-0.5
450	2.49	0.57	2.0	766	2338	-0.6
500	2.57	0.63	1.1	759	2296	-0.7
550	2.61	0.70	0.2	753	2255	-0.7
600	2.60	0.76	-0.7	746	2215	-0.8
650	2.55	0.83	-1.6	739	2175	-0.9
700	2.46	0.90	-2.5	733	2136	-0.9
750	2.32	0.97	-3.4	726	2097	-1.0
800	2.13	1.04	-4.4	720	2059	-1.0
850	1.90	1.11	-5.3	713	2021	-1.1
900	1.62	1.18	-6.3	707	1984	-1.2
950	1.29	1.25	-7.3	701	1947	-1.2
1000	0.91	1.32	-8.4	694	1911	-1.3
1050	0.48	1.39	-9.4	688	1875	-1.3
1100	0.00	1.47	-10.5	681	1840	-1.4

TYPE CC 3 CALIBER 5.56 MM AVERAGE DENSITY 16.70 GRAMS/CC.
PROJ. WT 12.142 GRAMS PROJ. DIA. 5.56 MM IMPULSE 0.8 LB. SEC.
DRAG RDCR. WT. 0.000 GRAMS CHG. WT. 0.28 GRAMS SABOT WT. 0.000 GRAMS
TWIST RATE NA PCT. DRAG CHANGE / (DEG. YAW)**2 0.76

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	90.8	277	466	0.0
0	0.00	0.00	90.8	277	466	0.0
50	4.31	0.18	84.2	273	452	0.0
100	8.28	0.37	77.4	269	438	-0.1
150	11.91	0.56	70.4	264	425	-0.1
200	15.19	0.75	63.1	260	412	-0.2
250	18.11	0.94	55.6	256	399	-0.2
300	20.66	1.14	47.9	252	387	-0.2
350	22.82	1.34	40.0	249	375	-0.3
400	24.58	1.54	31.8	245	364	-0.3
450	25.93	1.75	23.3	241	353	-0.3
500	26.87	1.96	14.6	237	342	-0.4
550	27.36	2.17	5.6	234	332	-0.4
600	27.41	2.38	-3.7	230	322	-0.4
650	27.00	2.60	-13.2	227	313	-0.5
700	26.11	2.82	-23.1	224	303	-0.5
750	24.74	3.05	-33.2	220	294	-0.5
800	22.85	3.28	-43.7	217	286	-0.5
850	20.44	3.51	-54.5	214	277	-0.6
900	17.50	3.75	-65.6	211	269	-0.6
950	14.00	3.99	-77.0	208	262	-0.6
1000	9.93	4.23	-88.8	205	254	-0.6
1050	5.27	4.48	-100.9	202	247	-0.7
1100	0.00	4.73	-113.3	199	240	-0.7

DRAG RDCR. WT. 0.151 GRAMS PCT. DRAG CHANGE / (DEG. YAW)**2 1.97

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	79.7	277	466	0.0
0	0.00	0.00	79.7	277	466	0.0
50	3.76	0.18	73.2	273	459	0.0
100	7.19	0.36	66.5	273	452	0.0
150	10.29	0.55	59.8	271	445	-0.1
200	13.06	0.73	52.9	269	439	-0.1
250	15.49	0.92	46.0	267	433	-0.1
300	17.58	1.11	39.0	266	426	-0.1
350	19.32	1.30	31.8	264	420	-0.1
400	20.70	1.49	24.6	262	414	-0.1
450	21.73	1.68	17.3	260	408	-0.2
500	22.40	1.87	9.8	258	402	-0.2
550	22.70	2.07	2.3	257	396	-0.2
600	22.63	2.26	-5.3	255	391	-0.2
650	22.18	2.46	-13.1	253	385	-0.2
700	21.35	2.66	-20.9	251	380	-0.2
750	20.13	2.86	-28.9	250	375	-0.3
800	18.52	3.06	-36.9	248	367	-0.3
850	16.51	3.26	-45.2	244	357	-0.3
900	14.09	3.47	-53.7	240	346	-0.4
950	11.24	3.68	-62.5	237	336	-0.4
1000	7.95	3.89	-71.5	233	326	-0.4
1050	4.21	4.11	-80.9	230	317	-0.5
1100	0.00	4.33	-90.5	227	308	-0.5

TYPE CC 3 CALIBER 5.56 MM AVERAGE DENSITY 16.70 GRAMS/CC.
PROJ. WT 12.142 GRAMS PROJ. DIA. 5.56 MM IMPULSE 1.2 LB. SEC.
DRAG RDCR. WT. 0.000 GRAMS CHG. WT. 0.63 GRAMS SABOT WT. 0.000 GRAMS
TWIST RATE NA PCT. DRAG CHANGE / (DEG. YAW)**2 0.76

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	52.6	377	863	0.0
0	0.00	0.00	52.6	377	863	0.0
50	2.49	0.13	48.9	367	820	-0.1
100	4.80	0.27	45.1	358	779	-0.2
150	6.93	0.41	41.2	350	742	-0.2
200	8.85	0.56	37.0	343	712	-0.3
250	10.56	0.71	32.6	336	687	-0.3
300	12.05	0.86	28.1	331	663	-0.3
350	13.32	1.01	23.5	325	642	-0.4
400	14.36	1.16	18.7	320	622	-0.4
450	15.15	1.32	13.7	315	602	-0.4
500	15.71	1.48	8.6	310	584	-0.5
550	16.00	1.64	3.3	305	566	-0.5
600	16.04	1.81	-2.1	301	549	-0.6
650	15.80	1.98	-7.7	296	532	-0.6
700	15.28	2.15	-13.5	292	516	-0.6
750	14.48	2.32	-19.5	287	501	-0.7
800	13.38	2.50	-25.6	283	486	-0.7
850	11.97	2.67	-32.0	279	472	-0.7
900	10.24	2.85	-38.5	275	458	-0.7
950	8.20	3.04	-45.2	271	445	-0.8
1000	5.81	3.22	-52.1	267	432	-0.8
1050	3.08	3.41	-59.2	263	420	-0.8
1100	0.00	3.61	-66.6	259	408	-0.9

DRAG RDCR. WT. 0.151 GRAMS PCT. DRAG CHANGE / (DEG. YAW)**2 1.97

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	43.2	377	863	0.0
0	0.00	0.00	43.2	377	863	0.0
50	2.03	0.13	39.6	374	850	0.0
100	3.89	0.27	36.0	371	837	-0.1
150	5.56	0.40	32.4	369	824	-0.1
200	7.06	0.54	28.7	366	811	-0.1
250	8.38	0.68	24.9	363	799	-0.1
300	9.51	0.81	21.1	360	786	-0.2
350	10.45	0.95	17.2	358	774	-0.2
400	11.20	1.09	13.3	355	762	-0.2
450	11.75	1.24	9.3	353	751	-0.2
500	12.11	1.38	5.2	350	739	-0.3
550	12.27	1.52	1.1	347	728	-0.3
600	12.23	1.67	-3.0	345	718	-0.3
650	11.98	1.81	-7.3	343	707	-0.3
700	11.52	1.96	-11.8	340	697	-0.3
750	10.85	2.11	-15.9	338	688	-0.3
800	9.97	2.25	-20.3	336	678	-0.4
850	8.87	2.40	-24.7	334	669	-0.4
900	7.55	2.55	-29.3	331	660	-0.4
950	6.00	2.70	-33.8	329	651	-0.4
1000	4.23	2.86	-38.5	327	642	-0.4
1050	2.23	3.01	-43.2	325	633	-0.5
1100	0.00	3.17	-48.0	320	613	-0.5

TYPE CC 3 CALIBER 5.56 MM AVERAGE DENSITY 16.70 GRAMS/CC.
PROJ. WT 12.142 GRAMS PROJ. DIA. 5.56 MM IMPULSE 2.1 LB. SEC.
DRAG RDCR. WT. 0.000 GRAMS CHG. WT. 1.80 GRAMS SABOT WT. 0.000 GRAMS
TWIST RATE NA PCT. DRAG CHANGE / (DEG. YAW)**2 0.76

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	21.8	592	2128	0.0
0	0.00	0.00	21.8	592	2128	0.0
50	1.04	0.09	20.4	581	2046	-0.1
100	2.00	0.17	18.9	569	1967	-0.2
150	2.89	0.26	17.3	558	1889	-0.3
200	3.70	0.35	15.6	547	1814	-0.4
250	4.42	0.44	13.9	535	1741	-0.6
300	5.07	0.54	12.2	524	1669	-0.7
350	5.62	0.63	10.3	513	1600	-0.8
400	6.08	0.73	8.4	502	1533	-0.9
450	6.45	0.83	6.3	492	1467	-1.0
500	6.71	0.94	4.2	481	1404	-1.1
550	6.87	1.04	2.0	470	1343	-1.2
600	6.92	1.15	-0.3	460	1283	-1.3
650	6.85	1.26	-2.7	449	1225	-1.4
700	6.66	1.37	-5.2	439	1169	-1.5
750	6.34	1.49	-7.9	429	1115	-1.5
800	5.89	1.61	-10.7	418	1063	-1.6
850	5.30	1.73	-13.6	408	1013	-1.7
900	4.57	1.85	-16.7	399	965	-1.8
950	3.68	1.98	-19.9	389	918	-1.9
1000	2.62	2.11	-23.3	379	873	-1.9
1050	1.40	2.24	-26.8	370	830	-2.0
1100	0.00	2.38	-30.6	361	789	-2.1

DRAG RDCR. WT. 0.151 GRAMS PCT. DRAG CHANGE / (DEG. YAW)**2 1.97

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	17.3	592	2128	0.0
0	0.00	0.00	17.3	592	2128	0.0
50	0.81	0.08	15.8	588	2099	0.0
100	1.55	0.17	14.4	584	2071	-0.1
150	2.22	0.26	12.9	580	2043	-0.1
200	2.82	0.34	11.4	577	2016	-0.2
250	3.34	0.43	9.9	573	1989	-0.2
300	3.79	0.52	8.4	569	1962	-0.3
350	4.16	0.61	6.8	565	1935	-0.3
400	4.46	0.69	5.2	562	1909	-0.3
450	4.68	0.78	3.6	558	1883	-0.3
500	4.82	0.87	2.0	554	1857	-0.4
550	4.88	0.96	0.4	550	1832	-0.4
600	4.87	1.05	-1.3	547	1806	-0.4
650	4.77	1.15	-3.0	543	1782	-0.5
700	4.58	1.24	-4.7	539	1757	-0.5
750	4.32	1.33	-6.4	536	1732	-0.5
800	3.96	1.43	-8.1	532	1708	-0.6
850	3.53	1.52	-9.9	528	1685	-0.6
900	3.00	1.62	-11.7	525	1661	-0.6
950	2.39	1.71	-13.5	521	1638	-0.7
1000	1.68	1.81	-15.4	518	1615	-0.7
1050	0.89	1.90	-17.3	514	1592	-0.7
1100	0.00	2.00	-19.2	511	1569	-0.8

TYPE CC 3 CALIBER 6.50 MM AVERAGE DENSITY 7.80 GRAMS/CC.

PROJ. WT 9.064 GRAMS PROJ. DIA. 6.50 MM IMPULSE 0.8 LB. SEC.

DRAG RDCR. WT. 0.000 GRAMS CHG. WT. 0.36 GRAMS SABOT WT. 0.000 GRAMS

TWIST RATE NA PCT. DRAG CHANGE / (DEG. YAW)**2 0.76

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	74.0	345	539	0.0
0	0.00	0.00	74.0	345	539	0.0
50	3.53	0.15	69.6	334	504	-0.1
100	6.84	0.30	65.0	323	474	-0.2
150	9.92	0.46	60.1	314	447	-0.3
200	12.74	0.62	54.9	305	422	-0.4
250	15.30	0.79	49.3	297	399	-0.4
300	17.59	0.96	43.5	288	377	-0.5
350	19.58	1.13	37.3	281	357	-0.5
400	21.25	1.31	30.8	273	338	-0.6
450	22.60	1.50	23.9	266	320	-0.7
500	23.60	1.69	16.6	258	302	-0.7
550	24.23	1.89	8.9	251	286	-0.8
600	24.47	2.09	0.8	244	271	-0.8
650	24.31	2.30	-7.8	238	256	-0.9
700	23.71	2.51	-16.9	231	243	-0.9
750	22.65	2.73	-26.5	225	230	-1.0
800	21.11	2.95	-36.6	219	217	-1.0
850	19.06	3.19	-47.3	213	205	-1.0
900	16.46	3.42	-58.7	207	194	-1.1
950	13.29	3.67	-70.6	202	184	-1.1
1000	9.52	3.92	-83.3	196	174	-1.1
1050	5.10	4.18	-96.6	191	165	-1.2
1100	0.00	4.45	-110.7	186	156	-1.2

DRAG RDCR. WT. 0.241 GRAMS PCT. DRAG CHANGE / (DEG. YAW)**2 1.97

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	55.7	345	539	0.0
0	0.00	0.00	55.7	345	539	0.0
50	2.63	0.15	51.4	341	525	0.0
100	5.05	0.29	47.1	336	511	-0.1
150	7.25	0.44	42.6	332	498	-0.1
200	9.23	0.60	38.0	328	485	-0.2
250	10.98	0.75	33.3	324	473	-0.2
300	12.50	0.90	28.5	320	462	-0.3
350	13.78	1.06	23.6	317	450	-0.3
400	14.82	1.22	18.5	313	439	-0.3
450	15.61	1.38	13.4	309	428	-0.3
500	16.14	1.54	8.1	306	417	-0.4
550	16.40	1.71	2.7	302	407	-0.4
600	16.40	1.87	-2.9	298	397	-0.4
650	16.13	2.04	-8.5	295	387	-0.5
700	15.57	2.21	-14.4	291	377	-0.5
750	14.72	2.39	-20.3	288	367	-0.5
800	13.58	2.56	-26.4	284	358	-0.6
850	12.13	2.74	-32.7	281	349	-0.6
900	10.37	2.92	-39.1	277	340	-0.6
950	8.30	3.10	-45.7	274	331	-0.7
1000	5.89	3.29	-52.6	270	322	-0.8
1050	3.13	3.48	-60.0	267	313	-0.8
1100	0.00	3.68	-67.8	263	304	-0.9

TYPE CC 3 CALIBER 6.50 MM AVERAGE DENSITY 7.80 GRAMS/CC.
PROJ. WT 9.064 GRAMS PROJ. DIA. 6.50 MM IMPULSE 1.2 LB. SEC.
DRAG RDCR. WT. 0.000 GRAMS CHG. WT. 0.85 GRAMS SABOT WT. 0.000 GRAMS
TWIST RATE NA PCT. DRAG CHANGE / (DEG. YAW)**2 0.76

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	46.4	476	1027	0.0
0	0.00	0.00	46.4	476	1027	0.0
50	2.22	0.11	44.1	457	945	-0.2
100	4.32	0.22	41.6	437	867	-0.4
150	6.30	0.34	38.8	419	795	-0.6
200	8.14	0.46	35.8	400	727	-0.7
250	9.82	0.59	32.6	383	663	-0.9
300	11.33	0.72	29.0	365	604	-1.0
350	12.66	0.86	25.1	349	553	-1.1
400	13.80	1.01	20.8	337	515	-0.9
450	14.71	1.16	16.3	327	484	-0.9
500	15.39	1.31	11.5	317	456	-0.9
550	15.84	1.47	6.4	308	431	-1.0
600	16.02	1.64	1.0	300	407	-1.0
650	15.93	1.81	-4.8	292	385	-1.1
700	15.56	1.98	-10.8	284	364	-1.1
750	14.87	2.16	-17.2	276	345	-1.2
800	13.87	2.34	-23.9	269	327	-1.2
850	12.53	2.53	-31.1	261	310	-1.2
900	10.83	2.73	-38.6	254	293	-1.3
950	8.74	2.93	-46.5	248	278	-1.3
1000	6.26	3.13	-54.9	241	263	-1.4
1050	3.35	3.34	-63.7	234	249	-1.4
1100	0.00	3.56	-73.1	228	236	-1.4

DRAG RDCR. WT. 0.241 GRAMS PCT. DRAG CHANGE / (DEG. YAW)**2 1.97

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	29.6	476	1027	0.0
0	0.00	0.00	29.6	476	1027	0.0
50	1.40	0.11	27.4	470	1000	-0.1
100	2.69	0.21	25.1	464	973	-0.1
150	3.86	0.32	22.7	458	947	-0.2
200	4.92	0.43	20.3	452	922	-0.2
250	5.86	0.54	17.8	446	897	-0.3
300	6.67	0.66	15.3	440	873	-0.3
350	7.36	0.77	12.7	434	850	-0.4
400	7.92	0.89	10.0	429	827	-0.5
450	8.35	1.00	7.3	423	804	-0.5
500	8.64	1.12	4.4	418	782	-0.6
550	8.79	1.24	1.5	412	761	-0.6
600	8.79	1.37	-1.5	407	740	-0.7
650	8.65	1.49	-4.5	401	720	-0.7
700	8.35	1.61	-7.7	396	700	-0.7
750	7.90	1.74	-10.9	391	681	-0.8
800	7.29	1.87	-14.2	385	662	-0.8
850	6.52	2.00	-17.6	380	643	-0.9
900	5.57	2.13	-21.4	375	625	-0.9
950	4.45	2.27	-24.7	370	608	-1.0
1000	3.15	2.40	-28.4	365	591	-1.0
1050	1.67	2.54	-32.2	360	574	-1.0
1100	0.00	2.68	-36.1	355	558	-1.1

TYPE CC 3 CALIBER 6.50 MM AVERAGE DENSITY 7.80 GRAMS/CC.
PROJ. WT 9.064 GRAMS PROJ. DIA. 6.50 MM IMPULSE 2.1 LB. SEC.
DRAG RDCR. WT. 0.000 GRAMS CHG. WT. 2.16 GRAMS SABOT WT. 0.000 GRAMS
TWIST RATE NA PCT. DRAG CHANGE / (DEG. YAW)**2 0.76

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	17.3	750	2549	0.0
0	0.00	0.00	17.3	750	2549	0.0
50	0.83	0.07	16.4	728	2403	-0.2
100	1.61	0.14	15.4	707	2263	-0.4
150	2.34	0.21	14.4	685	2127	-0.6
200	3.02	0.28	13.3	664	1996	-0.9
250	3.64	0.36	12.1	642	1870	-1.1
300	4.21	0.44	10.8	621	1748	-1.3
350	4.71	0.52	9.5	600	1632	-1.5
400	5.14	0.61	8.1	579	1520	-1.7
450	5.51	0.69	6.5	558	1413	-1.9
500	5.79	0.79	4.9	538	1311	-2.1
550	5.99	0.88	3.1	518	1214	-2.2
600	6.10	0.98	1.1	498	1122	-2.4
650	6.10	1.08	-1.0	478	1035	-2.6
700	6.01	1.19	-3.3	459	953	-2.7
750	5.79	1.30	-5.7	439	875	-2.9
800	5.45	1.42	-8.4	421	802	-3.0
850	4.97	1.54	-11.4	403	734	-3.1
900	4.34	1.66	-14.6	385	670	-3.3
950	3.55	1.80	-18.2	367	611	-3.4
1000	2.57	1.94	-22.0	350	556	-3.4
1050	1.39	2.08	-26.3	333	506	-3.1
1100	0.00	2.23	-30.8	328	484	-2.6

DRAG RDCR. WT. 0.241 GRAMS PCT. DRAG CHANGE / (DEG. YAW)**2 1.97

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	11.5	750	2549	0.0
0	0.00	0.00	11.5	750	2549	0.0
50	0.54	0.07	10.6	742	2494	-0.1
100	1.04	0.13	9.7	734	2440	-0.2
150	1.49	0.20	8.7	726	2387	-0.3
200	1.89	0.27	7.8	719	2334	-0.3
250	2.25	0.34	6.8	711	2282	-0.4
300	2.56	0.41	5.8	703	2231	-0.5
350	2.82	0.48	4.8	695	2181	-0.5
400	3.03	0.56	3.7	688	2132	-0.6
450	3.19	0.63	2.6	680	2084	-0.7
500	3.30	0.70	1.6	673	2037	-0.8
550	3.35	0.78	0.4	665	1990	-0.8
600	3.35	0.85	-0.7	658	1944	-0.9
650	3.29	0.93	-1.9	650	1899	-1.0
700	3.18	1.01	-3.1	643	1855	-1.0
750	3.00	1.09	-4.3	635	1811	-1.1
800	2.77	1.17	-5.5	628	1768	-1.2
850	2.47	1.25	-6.8	621	1726	-1.2
900	2.11	1.33	-8.1	613	1684	-1.3
950	1.68	1.41	-9.5	606	1644	-1.4
1000	1.19	1.49	-10.9	599	1604	-1.4
1050	0.63	1.58	-12.3	592	1565	-1.5
1100	0.00	1.66	-13.7	585	1526	-1.6

TYPE CC 3 CALIBER 6.50 MM AVERAGE DENSITY 11.00 GRAMS/CC.
PROJ. WT 12.782 GRAMS PROJ. DIA. 6.50 MM IMPULSE 0.8 LB. SEC.
DRAG RDCR. WT. 0.000 GRAMS CHG. WT. 0.28 GRAMS SABOT WT. 0.000 GRAMS
TWIST RATE NA PCT. DRAG CHANGE / (DEG. YAW)**2 0.76

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	100.0	267	456	0.0
0	0.00	0.00	100.0	267	456	0.0
50	4.75	0.19	92.8	262	438	-0.1
100	9.13	0.38	85.4	256	420	-0.1
150	13.14	0.58	77.7	251	404	-0.1
200	16.77	0.78	69.6	246	388	-0.2
250	19.98	0.99	61.2	241	372	-0.2
300	22.78	1.20	52.4	237	358	-0.3
350	25.13	1.41	43.3	232	344	-0.3
400	27.03	1.63	33.9	227	330	-0.4
450	28.45	1.85	24.0	223	317	-0.4
500	29.38	2.08	13.7	218	305	-0.4
550	29.80	2.31	3.0	214	293	-0.5
600	29.68	2.55	-8.1	210	281	-0.5
650	29.00	2.79	-19.7	206	270	-0.5
700	27.74	3.03	-31.7	202	260	-0.6
750	25.88	3.28	-44.2	198	250	-0.6
800	23.40	3.54	-57.2	194	240	-0.6
850	20.26	3.80	-70.8	190	231	-0.7
900	16.44	4.07	-84.9	187	223	-0.7
950	11.91	4.34	-99.5	183	214	-0.7
1000	6.64	4.61	-114.7	180	206	-0.7
1050	0.60	4.90	-130.4	176	199	-0.7
1055	0.00	4.92	-131.9	176	198	-0.7

DRAG RDCR. WT. 0.241 GRAMS PCT. DRAG CHANGE / (DEG. YAW)**2 1.97

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	89.1	267	456	0.0
0	0.00	0.00	89.1	267	456	0.0
50	4.21	0.19	82.0	265	447	0.0
100	8.07	0.38	74.8	262	438	0.0
150	11.56	0.57	67.5	260	429	-0.1
200	14.70	0.77	60.0	257	421	-0.1
250	17.46	0.96	52.4	255	413	-0.1
300	19.85	1.16	44.7	253	405	-0.1
350	21.85	1.36	36.8	250	397	-0.2
400	23.46	1.56	28.7	248	389	-0.2
450	24.67	1.76	20.5	246	382	-0.2
500	25.47	1.96	12.2	244	374	-0.2
550	25.86	2.17	3.7	241	367	-0.2
600	25.83	2.38	-5.0	239	360	-0.3
650	25.38	2.59	-13.8	237	353	-0.3
700	24.48	2.80	-22.7	235	347	-0.3
750	23.15	3.01	-31.9	233	340	-0.3
800	21.36	3.23	-41.3	228	326	-0.4
850	19.10	3.45	-51.1	224	314	-0.4
900	16.34	3.68	-61.3	219	302	-0.5
950	13.08	3.91	-71.8	215	290	-0.5
1000	9.28	4.15	-82.9	211	279	-0.5
1050	4.93	4.39	-94.3	207	268	-0.6
1100	0.00	4.63	-106.2	703	258	-0.6

TYPE CC 3 CALIBER 6.50 MM AVERAGE DENSITY 11.00 GRAMS/CC.
PROJ. WT 12.782 GRAMS PROJ. DIA. 6.50 MM IMPULSE 1.2 LB. SEC.
DRAG RDCR. WT. 0.000 GRAMS CHG. WT. 0.59 GRAMS SABOT WT. 0.000 GRAMS
TWIST RATE NA PCT. DRAG CHANGE / (DEG. YAW)**2 0.76

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	60.0	362	838	0.0
0	0.00	0.00	60.0	362	838	0.0
50	2.85	0.14	56.1	351	786	-0.1
100	5.51	0.29	51.9	341	745	-0.2
150	7.95	0.43	47.5	333	711	-0.2
200	10.18	0.59	42.9	326	680	-0.3
250	12.17	0.74	38.1	320	653	-0.3
300	13.92	0.90	33.2	313	626	-0.4
350	15.42	1.06	27.9	307	601	-0.4
400	16.67	1.23	22.5	301	578	-0.5
450	17.64	1.39	16.9	295	555	-0.5
500	18.32	1.56	11.0	289	533	-0.6
550	18.72	1.74	4.9	283	513	-0.6
600	18.81	1.92	-1.4	278	493	-0.7
650	18.58	2.10	-8.0	272	475	-0.7
700	18.02	2.29	-14.9	267	457	-0.7
750	17.13	2.47	-22.0	262	439	-0.8
800	15.87	2.67	-29.4	257	423	-0.8
850	14.24	2.86	-37.1	252	407	-0.8
900	12.22	3.06	-45.1	248	392	-0.9
950	9.81	3.27	-53.4	243	377	-0.9
1000	6.98	3.48	-62.1	238	363	-0.9
1050	3.72	3.69	-71.0	234	349	-1.0
1100	0.00	3.90	-80.4	229	336	-1.0

DRAG RDCR. WT. 0.241 GRAMS PCT. DRAG CHANGE / (DEG. YAW)**2 1.97

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	48.1	362	838	0.0
0	0.00	0.00	48.1	362	838	0.0
50	2.27	0.14	44.3	358	821	0.0
100	4.35	0.28	40.4	355	804	-0.1
150	6.23	0.42	36.4	352	788	-0.1
200	7.92	0.56	32.3	348	773	-0.1
250	9.40	0.71	28.1	345	758	-0.2
300	10.68	0.85	23.9	342	743	-0.2
350	11.75	1.00	19.6	339	729	-0.2
400	12.60	1.15	15.2	336	716	-0.2
450	13.24	1.30	10.7	333	703	-0.3
500	13.66	1.45	6.2	330	690	-0.3
550	13.85	1.60	1.6	327	678	-0.3
600	13.82	1.76	-3.1	325	666	-0.3
650	13.55	1.91	-7.9	322	654	-0.4
700	13.04	2.07	-12.8	319	643	-0.4
750	12.30	2.22	-17.7	317	632	-0.4
800	11.31	2.38	-22.7	314	621	-0.4
850	10.07	2.54	-27.8	311	610	-0.4
900	8.58	2.70	-33.0	309	599	-0.5
950	6.83	2.87	-38.3	306	589	-0.5
1000	4.83	3.03	-43.7	303	576	-0.6
1050	2.55	3.20	-49.2	297	553	-0.6
1100	0.00	3.37	-55.0	291	532	-0.7

TYPE CC 3 CALIBER 6.50 MM AVERAGE DENSITY 11.00 GRAMS/CC.
PROJ. WT 12.782 GRAMS PROJ. DIA. 6.50 MM IMPULSE 2.1 LB. SEC.
DRAG RDCR. WT. 0.000 GRAMS CHG. WT. 1.74 GRAMS SABOT WT. 0.000 GRAMS
TWIST RATE NA PCT. DRAG CHANGE / (DEG. YAW)**2 0.76

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	27.1	568	2062	0.0
0	0.00	0.00	27.1	568	2062	0.0
50	1.29	0.09	25.5	553	1957	-0.1
100	2.50	0.18	23.8	539	1855	-0.3
150	3.63	0.27	22.0	524	1757	-0.4
200	4.67	0.37	20.2	510	1663	-0.6
250	5.61	0.47	18.2	496	1572	-0.7
300	6.46	0.57	16.1	482	1485	-0.8
350	7.20	0.68	13.9	468	1401	-1.0
400	7.82	0.79	11.6	454	1320	-1.1
450	8.33	0.90	9.1	441	1243	-1.2
500	8.72	1.01	6.4	428	1169	-1.3
550	8.97	1.13	3.6	415	1098	-1.4
600	9.08	1.26	0.6	402	1031	-1.6
650	9.03	1.38	-2.6	389	966	-1.7
700	8.83	1.51	-6.0	376	905	-1.8
750	8.45	1.65	-9.7	364	848	-1.8
800	7.88	1.79	-13.6	353	795	-1.9
850	7.12	1.93	-17.7	343	752	-1.8
900	6.15	2.08	-22.0	335	718	-1.5
950	4.97	2.23	-26.6	328	687	-1.4
1000	3.55	2.38	-31.3	321	659	-1.4
1050	1.90	2.54	-36.3	315	633	-1.4
1100	0.00	2.70	-41.4	308	608	-1.4

DRAG RDCR. WT. 0.241 GRAMS PCT. DRAG CHANGE / (DEG. YAW)**2 1.97

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	19.4	568	2062	0.0
0	0.00	0.00	19.4	568	2062	0.0
50	0.91	0.09	17.8	563	2025	0.0
100	1.75	0.18	16.2	558	1989	-0.1
150	2.51	0.27	14.6	553	1954	-0.1
200	3.19	0.36	13.0	549	1919	-0.2
250	3.78	0.45	11.3	544	1885	-0.2
300	4.30	0.54	9.6	539	1851	-0.3
350	4.73	0.64	7.9	534	1817	-0.3
400	5.07	0.73	6.1	530	1784	-0.4
450	5.33	0.82	4.3	525	1752	-0.4
500	5.50	0.92	2.5	520	1719	-0.5
550	5.58	1.02	0.6	516	1688	-0.5
600	5.57	1.11	-1.3	511	1657	-0.6
650	5.46	1.21	-3.2	506	1626	-0.6
700	5.26	1.31	-5.2	502	1596	-0.6
750	4.96	1.41	-7.2	497	1566	-0.7
800	4.56	1.51	-9.2	493	1537	-0.7
850	4.07	1.61	-11.3	488	1508	-0.8
900	3.46	1.72	-13.4	484	1480	-0.8
950	2.76	1.82	-15.6	479	1452	-0.8
1000	1.95	1.93	-17.8	475	1425	-0.9
1050	1.03	2.03	-20.0	471	1398	-0.9
1100	0.00	2.14	-22.3	466	1371	-1.0

TYPE CC 3 CALIBER 6.50 MM AVERAGE DENSITY 16.70 GRAMS/CC.
PROJ. WT 19.405 GRAMS PROJ. DIA. 6.50 MM IMPULSE 0.8 LB. SEC.
DRAG RDCR. WT. 0.000 GRAMS CHG. WT. 0.32 GRAMS SABOT WT. 0.000 GRAMS
TWIST RATE NA PCT. DRAG CHANGE / (DEG. YAW)**2 0.76

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	100.0	201	392	0.0
0	0.00	0.00	100.0	201	392	0.0
50	4.61	0.25	87.5	198	381	0.0
100	8.60	0.51	74.5	195	370	-0.1
150	11.94	0.77	61.3	193	360	-0.1
200	14.61	1.03	47.6	190	350	-0.1
250	16.60	1.29	33.6	187	340	-0.1
300	17.90	1.56	19.1	185	331	-0.1
350	18.47	1.83	4.3	182	322	-0.2
400	18.31	2.11	-11.0	180	314	-0.2
450	17.39	2.39	-26.6	177	306	-0.2
500	15.69	2.67	-42.7	175	298	-0.2
550	13.20	2.96	-59.2	173	290	-0.3
600	9.88	3.25	-76.1	171	283	-0.3
650	5.71	3.55	-93.4	169	277	-0.3
700	0.68	3.85	-111.1	167	270	-0.3
706	0.00	3.88	-113.3	167	269	-0.3

DRAG RDCR. WT. 0.241 GRAMS PCT. DRAG CHANGE / (DEG. YAW)**2 1.97

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	100.0	201	392	0.0
0	0.00	0.00	100.0	201	392	0.0
50	4.61	0.25	87.5	200	386	0.0
100	8.61	0.50	74.9	198	380	0.0
150	11.98	0.76	62.1	197	374	0.0
200	14.71	1.01	49.1	195	369	0.0
250	16.80	1.27	35.9	194	363	-0.1
300	18.23	1.53	22.6	193	358	-0.1
350	19.01	1.79	9.0	192	353	-0.1
400	19.12	2.05	-4.7	190	348	-0.1
450	18.55	2.31	-18.6	189	344	-0.1
500	17.30	2.58	-32.6	188	339	-0.1
550	15.35	2.85	-46.8	187	335	-0.1
600	12.70	3.11	-61.2	185	329	-0.2
650	9.33	3.39	-75.9	183	321	-0.2
700	5.23	3.66	-91.0	181	313	-0.2
750	0.37	3.94	-106.5	179	306	-0.2
754	0.00	3.96	-107.6	178	305	-0.2

TYPE CC 3 CALIBER 6.50 MM AVERAGE DENSITY 16.70 GRAMS/CC.
PROJ. WT 19.405 GRAMS PROJ. DIA. 6.50 MM IMPULSE 1.2 LB. SEC.
DRAG RDCR. WT. 0.000 GRAMS CHG. WT. 0.43 GRAMS SABOT WT. 0.000 GRAMS
TWIST RATE NA PCT. DRAG CHANGE / (DEG. YAW)**2 0.76

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	96.7	264	676	0.0
0	0.00	0.00	96.7	264	676	0.0
50	4.58	0.19	89.4	260	658	0.0
100	8.80	0.39	82.0	257	641	-0.1
150	12.64	0.58	74.3	254	624	-0.1
200	16.10	0.78	66.4	250	607	-0.1
250	19.16	0.98	58.3	247	591	-0.2
300	21.83	1.19	50.0	244	576	-0.2
350	24.08	1.39	41.5	240	561	-0.2
400	25.90	1.60	32.7	237	546	-0.2
450	27.29	1.82	23.7	234	532	-0.3
500	28.23	2.03	14.5	231	518	-0.3
550	28.71	2.25	5.0	228	505	-0.3
600	28.72	2.47	-4.7	225	492	-0.4
650	28.25	2.69	-14.7	222	479	-0.4
700	27.28	2.92	-24.9	219	467	-0.4
750	25.80	3.15	-35.5	217	455	-0.4
800	23.80	3.38	-46.2	214	444	-0.5
850	21.26	3.62	-57.3	211	433	-0.5
900	18.17	3.86	-68.6	209	422	-0.5
950	14.52	4.10	-80.3	206	412	-0.5
1000	10.28	4.34	-92.2	203	402	-0.5
1050	5.45	4.59	-104.4	201	392	-0.6
1100	0.00	4.84	-116.9	199	383	-0.6

DRAG RDCR. WT. 0.241 GRAMS PCT. DRAG CHANGE / (DEG. YAW)**2 1.97

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	86.7	264	676	0.0
0	0.00	0.00	86.7	264	676	0.0
50	4.08	0.19	79.5	262	667	0.0
100	7.81	0.38	72.2	261	658	0.0
150	11.18	0.58	64.8	259	650	0.0
200	14.18	0.77	57.3	257	641	-0.1
250	16.80	0.96	49.7	256	633	-0.1
300	19.06	1.16	42.0	254	625	-0.1
350	20.93	1.36	34.3	253	617	-0.1
400	22.42	1.56	26.4	251	609	-0.1
450	23.52	1.76	18.4	250	601	-0.1
500	24.23	1.96	10.4	248	593	-0.1
550	24.55	2.16	2.2	247	586	-0.2
600	24.46	2.36	-6.0	245	578	-0.2
650	23.96	2.57	-14.4	244	571	-0.2
700	23.05	2.77	-22.8	243	564	-0.2
750	21.72	2.98	-31.3	241	558	-0.2
800	19.98	3.19	-40.0	238	544	-0.3
850	17.80	3.40	-48.9	235	530	-0.3
900	15.17	3.61	-58.1	232	517	-0.3
950	12.09	3.83	-67.4	229	504	-0.3
1000	8.55	4.05	-77.1	227	492	-0.4
1050	4.52	4.27	-86.9	224	480	-0.4
1100	0.00	4.50	-97.0	221	468	-0.4

TYPE CC 3 CALIBER 6.50 MM AVERAGE DENSITY 16.70 GRAMS/CC.
PROJ. WT 19.405 GRAMS PROJ. DIA. 6.50 MM IMPULSE 2.1 LB. SEC.
DRAG RDCR. WT. 0.000 GRAMS CHG. WT. 1.23 GRAMS SABOT WT. 0.000 GRAMS
TWIST RATE NA PCT. DRAG CHANGE / (DEG. YAW)**2 0.76

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	45.1	405	1591	0.0
0	0.00	0.00	45.1	405	1591	0.0
50	2.14	0.12	42.0	396	1525	-0.1
100	4.13	0.25	38.8	388	1461	-0.2
150	5.95	0.38	35.4	380	1400	-0.2
200	7.60	0.52	31.9	372	1340	-0.3
250	9.08	0.65	28.2	364	1282	-0.4
300	10.37	0.79	24.5	356	1228	-0.5
350	11.46	0.93	20.5	349	1180	-0.5
400	12.36	1.08	16.1	343	1140	-0.5
450	13.04	1.23	11.8	337	1105	-0.5
500	13.51	1.37	7.3	332	1072	-0.5
550	13.76	1.53	2.7	328	1042	-0.5
600	13.79	1.68	-2.0	323	1014	-0.5
650	13.57	1.84	-6.8	319	987	-0.6
700	13.12	1.99	-11.8	315	961	-0.6
750	12.42	2.15	-16.9	311	936	-0.6
800	11.46	2.32	-22.2	306	911	-0.7
850	10.24	2.48	-27.6	302	888	-0.7
900	8.76	2.65	-33.1	299	865	-0.7
950	7.00	2.82	-38.8	295	843	-0.7
1000	4.96	2.99	-44.6	291	822	-0.8
1050	2.63	3.16	-50.6	287	801	-0.8
1100	0.00	3.33	-56.7	284	781	-0.8

DRAG RDCR. WT. 0.241 GRAMS PCT. DRAG CHANGE / (DEG. YAW)**2 1.97

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	36.8	405	1591	0.0
0	0.00	0.00	36.8	405	1591	0.0
50	1.73	0.12	33.7	402	1571	0.0
100	3.30	0.25	30.6	400	1550	0.0
150	4.73	0.37	27.5	397	1530	-0.1
200	6.00	0.50	24.3	395	1510	-0.1
250	7.11	0.63	21.1	392	1491	-0.1
300	8.07	0.76	17.8	390	1471	-0.1
350	8.86	0.88	14.5	388	1452	-0.2
400	9.49	1.01	11.1	385	1433	-0.2
450	9.95	1.14	7.7	383	1414	-0.2
500	10.25	1.27	4.3	380	1396	-0.2
550	10.38	1.41	0.8	378	1378	-0.2
600	10.34	1.54	-2.7	376	1360	-0.3
650	10.12	1.67	-6.2	373	1342	-0.3
700	9.73	1.81	-9.8	371	1325	-0.3
750	9.16	1.94	-13.5	369	1307	-0.3
800	8.41	2.08	-17.2	366	1290	-0.4
850	7.48	2.22	-20.9	364	1274	-0.4
900	6.36	2.35	-24.7	362	1257	-0.4
950	5.06	2.49	-28.6	359	1240	-0.4
1000	3.56	2.63	-32.5	357	1224	-0.5
1050	1.88	2.77	-36.4	355	1208	-0.5
1100	0.00	2.91	-40.4	353	1193	-0.5

TYPE CC 3 CALIBER 7.62 MM AVERAGE DENSITY 7.80 GRAMS/CC.
PROJ. WT 14.602 GRAMS PROJ. DIA. 7.62 MM IMPULSE 0.4 LB. SEC.
DRAG RDCR. WT. 0.000 GRAMS CHG. WT. 0.29 GRAMS SABOT WT. 0.000 GRAMS
TWIST RATE NA PCT. DRAG CHANGE / (DEG. YAW)**2 0.76

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	100.0	243	431	0.0
0	0.00	0.00	100.0	243	431	0.0
50	4.71	0.21	91.3	237	410	-0.1
100	8.98	0.42	82.4	231	391	-0.1
150	12.79	0.64	72.7	226	372	-0.2
200	16.12	0.87	62.6	220	354	-0.2
250	18.94	1.10	52.1	215	337	-0.3
300	21.22	1.33	41.0	210	321	-0.3
350	22.93	1.58	29.3	205	306	-0.3
400	24.10	1.82	17.1	200	291	-0.4
450	24.63	2.08	4.3	195	277	-0.4
500	24.51	2.34	-9.2	190	264	-0.5
550	23.72	2.60	-23.3	186	252	-0.5
600	22.22	2.87	-38.1	181	240	-0.5
650	19.97	3.15	-53.7	177	229	-0.6
700	16.93	3.44	-70.0	173	219	-0.6
750	13.08	3.73	-87.1	169	209	-0.6
800	8.35	4.03	-105.0	165	199	-0.6
850	2.72	4.34	-123.7	161	190	-0.7
872	0.00	4.48	-132.1	160	187	-0.7

DRAG RDCR. WT. 0.389 GRAMS PCT. DRAG CHANGE / (DEG. YAW)**2 1.97

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	100.0	243	431	0.0
0	0.00	0.00	100.0	243	431	0.0
50	4.71	0.21	91.4	240	420	0.0
100	8.99	0.42	82.7	237	410	-0.1
150	12.84	0.63	73.7	235	400	-0.1
200	16.24	0.85	64.6	232	390	-0.1
250	19.18	1.06	55.2	229	381	-0.1
300	21.66	1.28	45.6	227	371	-0.2
350	23.65	1.50	35.7	224	362	-0.2
400	25.16	1.73	25.7	222	353	-0.2
450	26.17	1.96	15.4	219	345	-0.2
500	26.67	2.18	4.9	217	336	-0.2
550	26.65	2.42	-5.9	214	328	-0.3
600	26.10	2.65	-16.9	212	320	-0.3
650	25.00	2.89	-28.1	210	312	-0.3
700	23.34	3.13	-39.7	206	304	-0.4
750	21.10	3.38	-51.8	204	297	-0.4
800	18.25	3.63	-64.5	201	289	-0.4
850	14.76	3.89	-77.8	198	282	-0.5
900	10.59	4.15	-91.7	196	275	-0.5
950	5.72	4.42	-106.4	193	268	-0.6
1000	0.11	4.70	-121.8	191	261	-0.6
1001	0.00	4.71	-122.0	190	260	-0.6

TYPE CC 3 CALIBER 7.62 MM AVERAGE DENSITY 7.80 GRAMS/CC.
PROJ. WT 14.602 GRAMS PROJ. DIA. 7.62 MM IMPULSE 1.2 LB. SEC.
DRAG RDCR. WT. 0.000 GRAMS CHG. WT. 0.48 GRAMS SABOT WT. 0.000 GRAMS
TWIST RATE NA PCT. DRAG CHANGE / (DEG. YAW)**2 0.76

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	75.6	327	781	0.0
0	0.00	0.00	75.6	327	781	0.0
50	3.60	0.16	70.8	319	742	-0.1
100	6.95	0.31	65.7	311	706	-0.2
150	10.06	0.48	60.4	303	672	-0.2
200	12.89	0.64	54.9	296	640	-0.3
250	15.45	0.82	49.0	289	610	-0.3
300	17.71	0.99	42.9	282	582	-0.4
350	19.66	1.17	36.5	276	555	-0.5
400	21.29	1.35	29.8	269	529	-0.5
450	22.58	1.54	22.7	263	505	-0.6
500	23.52	1.73	15.3	257	482	-0.6
550	24.09	1.93	7.6	251	460	-0.7
600	24.26	2.13	-0.5	245	439	-0.7
650	24.03	2.34	-9.0	239	419	-0.7
700	23.38	2.55	-18.0	234	399	-0.8
750	22.27	2.77	-27.3	228	381	-0.8
800	20.69	2.99	-37.1	223	364	-0.9
850	18.63	3.22	-47.4	218	347	-0.9
900	16.04	3.45	-58.1	213	331	-0.9
950	12.91	3.69	-69.4	208	316	-1.0
1000	9.22	3.93	-81.2	203	302	-1.0
1050	4.92	4.18	-93.6	199	288	-1.0
1100	0.00	4.44	-106.6	194	275	-1.0

DRAG RDCR. WT. 0.389 GRAMS PCT. DRAG CHANGE / (DEG. YAW)**2 1.97

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	60.1	327	781	0.0
0	0.00	0.00	60.1	327	781	0.0
50	2.84	0.15	55.4	324	764	0.0
100	5.44	0.31	50.6	320	747	-0.1
150	7.80	0.47	45.7	317	731	-0.1
200	9.92	0.63	40.7	314	715	-0.1
250	11.80	0.79	35.5	311	700	-0.2
300	13.41	0.95	30.3	308	685	-0.2
350	14.77	1.11	25.0	304	670	-0.2
400	15.86	1.28	19.5	301	655	-0.3
450	16.69	1.44	14.0	298	641	-0.3
500	17.24	1.61	8.3	295	627	-0.3
550	17.50	1.78	2.5	292	613	-0.3
600	17.48	1.95	-3.4	289	600	-0.4
650	17.17	2.13	-9.5	286	587	-0.4
700	16.56	2.30	-15.6	283	574	-0.4
750	15.64	2.48	-21.9	280	561	-0.4
800	14.41	2.66	-28.3	277	549	-0.5
850	12.87	2.84	-34.9	275	537	-0.5
900	10.99	3.02	-41.6	272	523	-0.6
950	8.79	3.21	-48.5	269	499	-0.6
1000	6.23	3.40	-55.8	266	476	-0.7
1050	3.31	3.60	-63.5	263	454	-0.7
1100	0.00	3.80	-71.5	247	433	-0.8

TYPE CC 3 CALIBER 7.62 MM AVERAGE DENSITY 7.80 GRAMS/CC.
PROJ. WT 14.602 GRAMS PROJ. DIA. 7.62 MM IMPULSE 2.1 LB. SEC.
DRAG RDCR. WT. 0.000 GRAMS CHG. WT. 1.58 GRAMS SABOT WT. 0.000 GRAMS
TWIST RATE NA PCT. DRAG CHANGE / (DEG. YAW)**2 0.76

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	37.4	510	1899	0.0
0	0.00	0.00	37.4	510	1899	0.0
50	1.79	0.10	35.5	493	1775	-0.2
100	3.48	0.20	33.3	476	1656	-0.3
150	5.06	0.31	31.1	460	1542	-0.5
200	6.53	0.42	28.6	443	1435	-0.6
250	7.87	0.54	26.0	427	1333	-0.8
300	9.08	0.66	23.1	411	1236	-0.9
350	10.14	0.78	20.1	396	1145	-1.1
400	11.05	0.91	16.7	381	1058	-1.2
450	11.79	1.04	13.2	366	978	-1.3
500	12.34	1.18	9.3	352	904	-1.4
550	12.70	1.33	5.1	341	848	-1.2
600	12.84	1.47	0.7	332	803	-1.1
650	12.77	1.63	-4.0	323	763	-1.1
700	12.46	1.78	-8.9	315	726	-1.1
750	11.90	1.94	-14.0	308	692	-1.1
800	11.08	2.11	-19.4	300	659	-1.2
850	9.99	2.28	-25.1	293	629	-1.2
900	8.62	2.45	-31.1	287	600	-1.3
950	6.98	2.63	-37.3	280	572	-1.3
1000	4.97	2.81	-43.8	274	546	-1.3
1050	2.66	2.99	-50.6	267	522	-1.3
1100	0.00	3.18	-57.8	261	498	-1.4

DRAG RDCR. WT. 0.389 GRAMS PCT. DRAG CHANGE / (DEG. YAW)**2 1.97

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	24.9	510	1899	0.0
0	0.00	0.00	24.9	510	1899	0.0
50	1.18	0.10	23.0	504	1857	-0.1
100	2.26	0.20	21.0	499	1819	-0.1
150	3.24	0.30	19.0	494	1774	-0.2
200	4.12	0.40	16.9	488	1734	-0.2
250	4.90	0.50	14.8	483	1695	-0.3
300	5.57	0.61	12.6	478	1657	-0.3
350	6.14	0.71	10.4	472	1619	-0.4
400	6.59	0.82	8.1	467	1582	-0.4
450	6.94	0.93	5.8	462	1546	-0.5
500	7.17	1.04	3.5	457	1510	-0.5
550	7.29	1.15	1.0	452	1475	-0.6
600	7.28	1.26	-1.4	447	1441	-0.6
650	7.15	1.37	-4.0	442	1408	-0.6
700	6.90	1.48	-6.6	437	1375	-0.7
750	6.52	1.60	-9.2	432	1343	-0.7
800	6.00	1.72	-11.9	427	1312	-0.8
850	5.36	1.83	-14.7	422	1281	-0.8
900	4.57	1.95	-17.5	418	1251	-0.9
950	3.65	2.07	-20.4	413	1221	-0.9
1000	2.58	2.19	-23.4	408	1193	-0.9
1050	1.37	2.32	-26.4	404	1164	-1.0
1100	0.00	2.44	-29.5	399	1137	-1.0

TYPE CC 3 CALIBER 7.62 MM AVERAGE DENSITY 11.00 GRAMS/CC.
PROJ. WT 20.592 GRAMS PROJ. DIA. 7.62 MM IMPULSE 0.8 LB. SEC.
DRAG RDCR. WT. 0.000 GRAMS CHG. WT. 0.33 GRAMS SABOT WT. 0.000 GRAMS
TWIST RATE NA PCT. DRAG CHANGE / (DEG. YAW)**2 0.76

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	100.0	193	384	0.0
0	0.00	0.00	100.0	193	384	0.0
50	4.59	0.26	86.3	189	370	0.0
100	8.48	0.53	72.2	186	356	-0.1
150	11.67	0.80	57.5	183	343	-0.1
200	14.12	1.08	42.2	179	331	-0.1
250	15.81	1.36	26.4	176	320	-0.2
300	16.70	1.65	10.0	173	309	-0.2
350	16.78	1.94	-6.9	170	298	-0.2
400	16.04	2.23	-24.5	167	288	-0.2
450	14.37	2.54	-42.7	164	278	-0.3
500	11.81	2.84	-61.4	162	269	-0.3
550	8.32	3.16	-80.9	159	261	-0.3
600	3.85	3.47	-100.9	157	253	-0.3
636	0.00	3.71	-115.8	155	247	-0.3

DRAG RDCR. WT. 0.389 GRAMS PCT. DRAG CHANGE / (DEG. YAW)**2 1.97

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	100.0	193	384	0.0
0	0.00	0.00	100.0	193	384	0.0
50	4.59	0.26	86.5	191	376	0.0
100	8.50	0.52	72.7	189	368	0.0
150	11.73	0.79	58.6	188	361	0.0
200	14.26	1.06	44.3	186	354	-0.1
250	16.08	1.33	29.8	184	347	-0.1
300	17.18	1.60	15.0	183	341	-0.1
350	17.55	1.88	-0.1	181	335	-0.1
400	17.17	2.15	-15.4	180	329	-0.1
450	16.04	2.43	-30.9	178	323	-0.1
500	14.13	2.71	-46.7	177	317	-0.1
550	11.45	3.00	-62.8	176	312	-0.2
600	7.96	3.28	-79.2	173	302	-0.2
650	3.65	3.58	-96.2	170	292	-0.2
686	0.00	3.79	-108.8	168	286	-0.2

TYPE CC 3 CALIBER 7.62 MM AVERAGE DENSITY 11.00 GRAMS/CC.
PROJ. WT 20.592 GRAMS PROJ. DIA. 7.62 MM IMPULSE 1.2 LB. SEC.
DRAG RDCR. WT. 0.000 GRAMS CHG. WT. 0.43 GRAMS SABOT WT. 0.000 GRAMS
TWIST RATE NA PCT. DRAG CHANGE / (DEG. YAW)**2 0.76

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	100.0	253	659	0.0
0	0.00	0.00	100.0	253	659	0.0
50	4.73	0.20	92.1	249	636	-0.0
100	9.06	0.40	83.8	244	615	-0.1
150	12.97	0.61	75.3	240	594	-0.1
200	16.46	0.82	66.5	236	573	-0.2
250	19.50	1.04	57.4	232	554	-0.2
300	22.09	1.25	47.9	228	535	-0.2
350	24.20	1.46	38.1	224	517	-0.3
400	25.83	1.70	28.0	220	499	-0.3
450	26.95	1.93	17.5	216	482	-0.3
500	27.55	2.16	6.7	213	466	-0.4
550	27.60	2.40	-4.6	209	450	-0.4
600	27.10	2.64	-16.2	206	435	-0.4
650	26.01	2.89	-28.2	202	421	-0.5
700	24.33	3.14	-40.6	199	407	-0.5
750	22.02	3.39	-53.4	196	394	-0.5
800	19.08	3.65	-66.7	192	381	-0.5
850	15.47	3.91	-80.4	189	369	-0.6
900	11.17	4.18	-94.6	186	357	-0.6
950	6.13	4.45	-109.2	183	346	-0.6
1000	0.40	4.73	-124.3	180	335	-0.6
1003	0.00	4.74	-125.3	180	335	-0.6

DRAG RDCR. WT. 0.389 GRAMS PCT. DRAG CHANGE / (DEG. YAW)**2 1.97

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	97.6	253	659	0.0
0	0.00	0.00	97.6	253	659	0.0
50	4.61	0.20	89.7	251	647	0.0
100	8.83	0.40	81.7	249	636	0.0
150	12.64	0.60	73.6	247	625	-0.1
200	16.06	0.81	65.3	245	614	-0.1
250	19.06	1.02	56.9	243	603	-0.1
300	21.65	1.23	48.3	241	593	-0.2
350	23.82	1.43	39.7	239	583	-0.2
400	25.55	1.64	30.9	237	573	-0.2
450	26.85	1.85	21.9	235	563	-0.2
500	27.71	2.06	12.8	233	553	-0.3
550	28.11	2.28	3.6	232	544	-0.3
600	28.06	2.49	-5.8	230	535	-0.3
650	27.54	2.71	-15.3	228	526	-0.4
700	26.56	2.93	-25.0	226	517	-0.4
750	25.09	3.16	-34.9	223	508	-0.4
800	23.13	3.38	-45.1	221	499	-0.4
850	20.66	3.61	-55.7	219	490	-0.4
900	17.66	3.85	-66.6	216	482	-0.4
950	14.12	4.09	-77.9	214	474	-0.4
1000	10.00	4.33	-89.6	212	466	-0.4
1050	5.31	4.57	-101.6	210	458	-0.5
1100	0.00	4.83	-114.1	208	450	-0.5

TYPE CC 3 CALIBER 7.62 MM AVERAGE DENSITY 11.00 GRAMS/CC.
PROJ. WT 20.592 GRAMS PROJ. DIA. 7.62 MM IMPULSE 2.1 LB. SEC.
DRAG RDCR. WT. 0.000 GRAMS CHG. WT. 1.15 GRAMS SABOT WT. 0.000 GRAMS
TWIST RATE NA PCT. DRAG CHANGE / (DEG. YAW)**2 0.76

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	52.3	386	1534	0.0
0	0.00	0.00	52.3	386	1534	0.0
50	2.48	0.13	48.8	375	1450	-0.1
100	4.79	0.27	45.2	365	1370	-0.2
150	6.92	0.41	41.3	355	1295	-0.3
200	8.85	0.55	37.2	346	1232	-0.3
250	10.58	0.70	33.0	339	1181	-0.3
300	12.09	0.84	28.5	332	1136	-0.4
350	13.38	1.00	23.9	326	1095	-0.4
400	14.44	1.15	19.1	320	1056	-0.5
450	15.26	1.31	14.2	315	1020	-0.5
500	15.83	1.47	9.0	309	985	-0.5
550	16.15	1.63	3.7	304	952	-0.6
600	16.20	1.80	-1.8	299	920	-0.6
650	15.98	1.97	-7.4	294	890	-0.7
700	15.48	2.14	-13.3	289	860	-0.7
750	14.68	2.31	-19.4	284	832	-0.7
800	13.58	2.49	-25.7	280	805	-0.8
850	12.16	2.67	-32.2	275	779	-0.8
900	10.42	2.85	-38.9	271	754	-0.8
950	8.35	3.04	-45.8	266	730	-0.8
1000	5.93	3.23	-53.0	262	707	-0.9
1050	3.15	3.42	-60.4	258	684	-0.9
1100	0.00	3.62	-68.0	254	663	-0.9

DRAG RDCR. WT. 0.389 GRAMS PCT. DRAG CHANGE / (DEG. YAW)**2 1.97

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	41.7	386	1534	0.0
0	0.00	0.00	41.7	386	1534	0.0
50	1.96	0.13	38.3	378	1473	-0.1
100	3.76	0.26	34.9	370	1412	-0.1
150	5.38	0.39	31.4	363	1357	-0.1
200	6.84	0.53	27.8	356	1302	-0.1
250	8.11	0.66	24.2	350	1254	-0.2
300	9.21	0.80	20.5	344	1207	-0.2
350	10.13	0.93	16.8	338	1161	-0.2
400	10.86	1.07	13.0	333	1119	-0.2
450	11.41	1.21	9.2	328	1078	-0.3
500	11.78	1.35	5.3	323	1040	-0.3
550	11.93	1.49	1.3	318	1003	-0.3
600	11.89	1.63	-2.8	313	968	-0.3
650	11.66	1.78	-6.9	308	934	-0.4
700	11.22	1.92	-11.1	304	902	-0.4
750	10.57	2.07	-15.5	299	871	-0.4
800	9.72	2.22	-19.9	295	841	-0.4
850	8.65	2.38	-24.6	291	813	-0.4
900	7.37	2.54	-29.5	287	786	-0.5
950	5.86	2.71	-34.6	283	760	-0.5
1000	4.14	2.88	-39.9	279	735	-0.5
1050	2.18	3.07	-45.4	275	711	-0.5
1100	0.00	3.12	-46.9	272	689	-0.6

TYPE CC 3 CALIBER 7.62 MM AVERAGE DENSITY 16.70 GRAMS/CC.
PROJ. WT 31.262 GRAMS PROJ. DIA. 7.62 MM IMPULSE 0.8 LB. SEC.
DRAG RDCR. WT. 0.000 GRAMS CHG. WT. 0.40 GRAMS SABOT WT. 0.000 GRAMS
TWIST RATE NA PCT. DRAG CHANGE / (DEG. YAW)**2 0.76

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	100.0	152	361	0.0
0	0.00	0.00	100.0	152	361	0.0
50	4.38	0.33	78.1	150	351	0.0
100	7.67	0.67	55.6	148	342	0.0
150	9.83	1.01	32.5	146	334	-0.1
200	10.85	1.35	8.8	144	326	-0.1
250	10.69	1.70	-15.4	143	318	-0.1
300	9.33	2.05	-40.2	141	312	-0.1
350	6.73	2.41	-65.5	140	305	-0.1
400	2.87	2.77	-91.4	138	299	-0.1
429	0.00	2.99	-106.8	138	295	-0.1

DRAG RDCR. WT. 0.389 GRAMS PCT. DRAG CHANGE / (DEG. YAW)**2 1.97

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	100.0	152	361	0.0
0	0.00	0.00	100.0	152	361	0.0
50	4.39	0.33	78.2	151	355	0.0
100	7.69	0.66	56.1	150	350	0.0
150	9.90	1.00	33.7	149	345	0.0
200	11.00	1.34	11.0	148	340	0.0
250	10.98	1.68	-11.9	147	336	0.0
300	9.82	2.02	-35.1	146	332	0.0
350	7.52	2.36	-58.6	146	328	-0.1
400	4.07	2.70	-82.2	145	325	-0.1
445	0.00	3.01	-103.4	145	323	-0.1

TYPE CC 3 CALIBER 7.62 MM AVERAGE DENSITY 16.70 GRAMS/CC.
PROJ. WT 31.262 GRAMS PROJ. DIA. 7.62 MM IMPULSE 1.2 LB. SEC.
DRAG RDCR. WT. 0.000 GRAMS CHG. WT. 0.90 GRAMS SABOT WT. 0.000 GRAMS
TWIST RATE NA PCT. DRAG CHANGE / (DEG. YAW)**2 0.76

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	100.0	192	576	0.0
0	0.00	0.00	100.0	192	576	0.0
50	4.58	0.26	86.3	190	562	0.0
100	8.48	0.53	72.2	187	548	0.0
150	11.68	0.80	57.8	185	535	-0.1
200	14.15	1.07	43.0	183	522	-0.1
250	15.89	1.35	27.9	181	510	-0.1
300	16.88	1.63	12.4	178	498	-0.1
350	17.10	1.91	-3.5	176	486	-0.1
400	16.53	2.19	-19.7	174	476	-0.2
450	15.16	2.48	-36.3	173	465	-0.2
500	12.96	2.77	-53.3	171	455	-0.2
550	9.92	3.07	-70.6	169	446	-0.2
600	6.01	3.37	-88.3	167	437	-0.2
650	1.22	3.67	-106.3	166	429	-0.2
661	0.00	3.74	-110.5	165	427	-0.2

DRAG RDCR. WT. 0.389 GRAMS PCT. DRAG CHANGE / (DEG. YAW)**2 1.97

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	100.0	192	576	0.0
0	0.00	0.00	100.0	192	576	0.0
50	4.59	0.26	86.4	191	568	0.0
100	8.49	0.53	72.5	190	560	0.0
150	11.72	0.79	58.6	188	553	0.0
200	14.25	1.06	44.4	187	545	0.0
250	16.07	1.33	30.1	186	538	-0.1
300	17.19	1.60	15.5	185	532	-0.1
350	17.60	1.87	0.9	184	525	-0.1
400	17.28	2.14	-13.9	183	519	-0.1
450	16.23	2.41	-28.9	182	513	-0.1
500	14.44	2.69	-44.1	181	508	-0.1
550	11.90	2.97	-59.3	180	503	-0.1
600	8.61	3.24	-74.8	179	493	-0.1
650	4.54	3.53	-90.6	177	482	-0.1
697	0.00	3.79	-105.8	175	473	-0.2

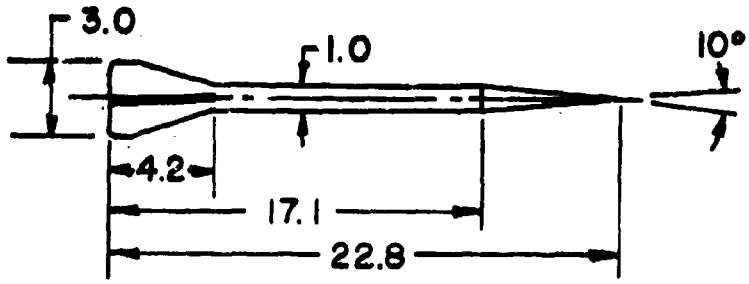
TYPE CC 3 CALIBER 7.62 MM AVERAGE DENSITY 16.70 GRAMS/CC.
PROJ. WT 31.262 GRAMS PROJ. DIA. 7.62 MM IMPULSE 2.1 LB. SEC.
DRAG RDCR. WT. 0.000 GRAMS CHG. WT. 0.73 GRAMS SABOT WT. 0.000 GRAMS
TWIST RATE NA PCT. DRAG CHANGE / (DEG. YAW)**2 0.76

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	82.5	281	1234	0.0
0	0.00	0.00	82.5	281	1234	0.0
50	3.90	0.18	76.1	278	1206	0.0
100	7.48	0.36	69.6	275	1179	-0.1
150	10.74	0.54	62.9	272	1153	-0.1
200	13.66	0.73	56.0	269	1127	-0.1
250	16.24	0.92	49.0	266	1102	-0.1
300	18.48	1.11	41.9	263	1078	-0.2
350	20.35	1.30	34.5	260	1054	-0.2
400	21.87	1.49	27.1	257	1031	-0.2
450	23.01	1.69	19.4	254	1008	-0.3
500	23.77	1.89	11.6	251	986	-0.3
550	24.14	2.09	3.6	248	964	-0.3
600	24.12	2.29	-4.6	246	944	-0.3
650	23.69	2.49	-13.0	243	923	-0.3
700	22.85	2.70	-21.5	240	903	-0.4
750	21.58	2.91	-30.3	238	884	-0.4
800	19.88	3.12	-39.2	235	865	-0.4
850	17.73	3.34	-48.3	233	847	-0.4
900	15.13	3.55	-57.7	230	829	-0.5
950	12.07	3.77	-67.2	228	812	-0.5
1000	8.53	3.99	-76.9	226	795	-0.5
1050	4.51	4.22	-86.8	223	779	-0.5
1100	0.00	4.44	-96.9	221	763	-0.5

DRAG RDCR. WT. 0.389 GRAMS PCT. DRAG CHANGE / (DEG. YAW)**2 1.97

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	75.2	281	1234	0.0
0	0.00	0.00	75.2	281	1234	0.0
50	3.54	0.18	68.8	280	1220	0.0
100	6.76	0.36	62.4	278	1207	0.0
150	9.66	0.54	55.9	277	1194	0.0
200	12.25	0.72	49.3	275	1180	-0.1
250	14.51	0.90	42.7	274	1168	-0.1
300	16.44	1.09	36.0	272	1155	-0.1
350	18.04	1.27	29.2	271	1142	-0.1
400	19.31	1.46	22.4	270	1130	-0.1
450	20.24	1.64	15.5	268	1118	-0.1
500	20.84	1.83	8.5	267	1106	-0.1
550	21.08	2.02	1.5	266	1095	-0.1
600	20.99	2.20	-5.6	264	1083	-0.2
650	20.54	2.39	-12.8	263	1072	-0.2
700	19.74	2.58	-20.0	262	1061	-0.2
750	18.58	2.78	-27.3	261	1050	-0.2
800	17.06	2.97	-34.7	259	1040	-0.2
850	15.17	3.16	-42.2	257	1019	-0.2
900	12.91	3.36	-49.9	254	997	-0.3
950	10.28	3.56	-57.7	251	976	-0.3
1000	7.25	3.76	-65.7	249	955	-0.3
1050	3.83	3.96	-73.8	246	935	-0.3
1100	0.00	4.16	-82.2	244	916	-0.4

FL 1



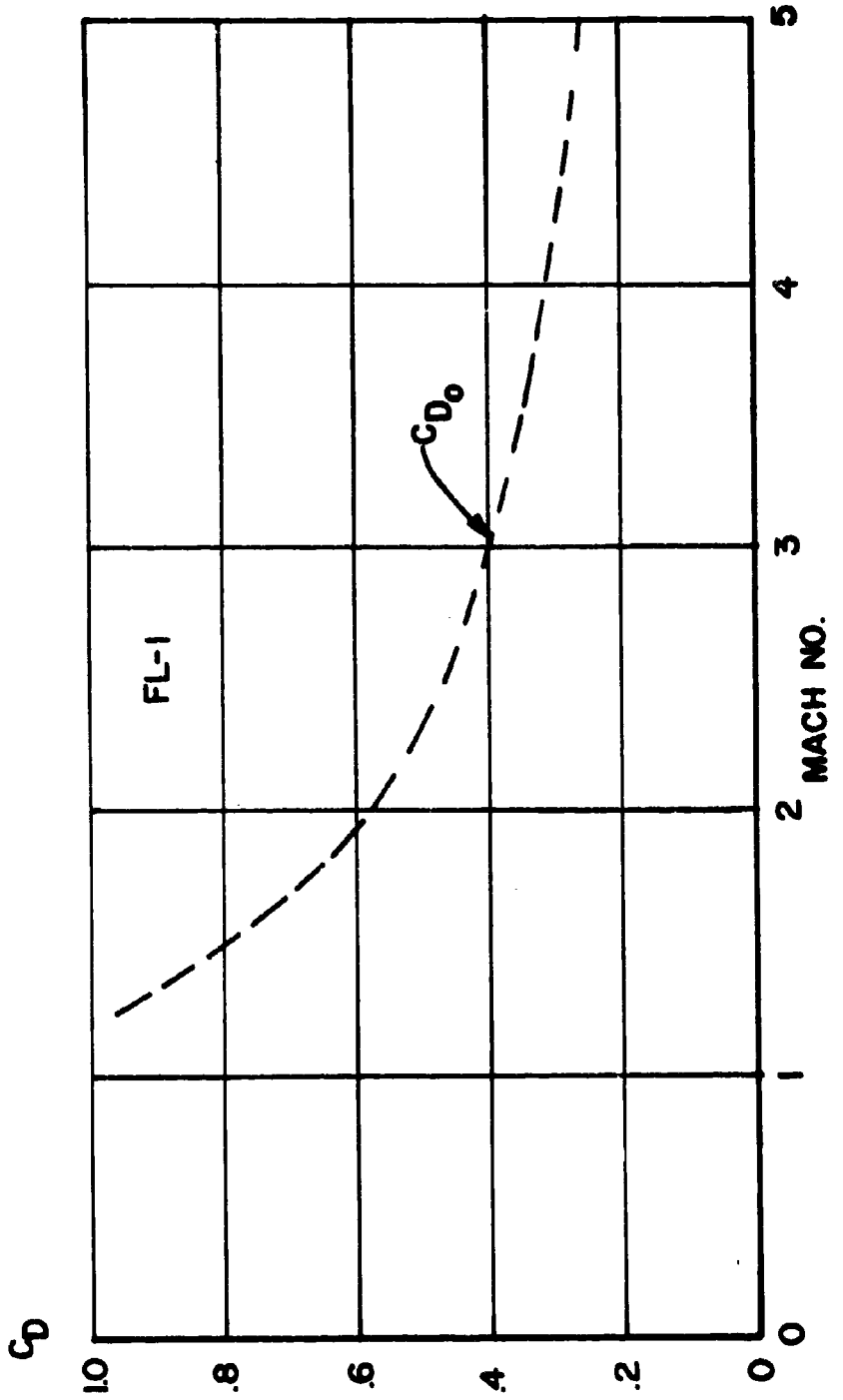
ALL DIMENSIONS ARE IN CALIBERS

Axial Radius of Gyration	= 0.346 Cal.	Wetted Area	= 62.67 Cal.^{2}
Transverse Radius of Gyration	= 5.63 Cal.	Volume	= 14.93 Cal.^{3}
Center of Mass (Nose)	= 12.56 Cal.	Length	= 22.8 Cal.

Mach No.	C_{D_0}	C_{D_B}	C_{D_0} (Tracer)	$C_{D_{SF_T}}$	C_{D_W}	C_{N_α}	CP_N	C_{M_α}
1.25*	.963					4.30	17.21	-20.0
2.00*	.578					16.00	15.56	-48.0
2.60*	.453					14.00	17.80	-73.4
3.42*	.357					12.30	17.13	-56.2
4.20*	.300					10.08	16.71	-41.8
5.5 *	.237					8.80	14.39	-16.1

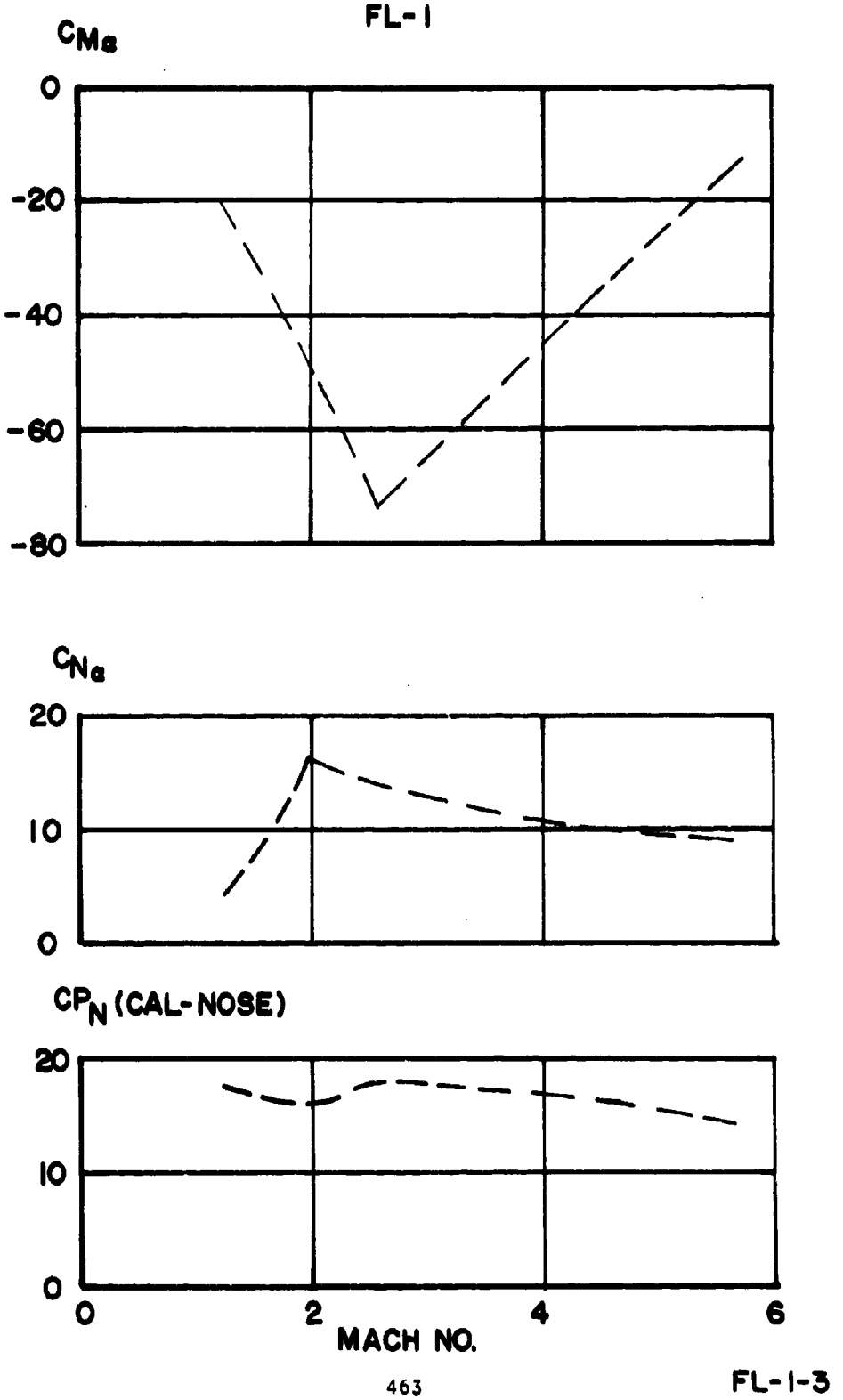
$C_{D_{\alpha^2}}$ (Mach = 2.5) = 5.00 (1/radian squared)

*Estimated data



FL-1-2

FL-1


C_{M_α}
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-20
-40
-60
-80
C_{N_α}
20
10
0
CP_N (CAL-NOSE)
20
10
0
0
2
4
6
MACH NO.

FL-1-3

TYPE FL 1 CALIBER 5.56 MM AVERAGE DENSITY 7.80 GRAMS/CC.

PROJ. WT 0.658 GRAMS PROJ. DIA. 1.78 MM IMPULSE 0.6 LB. SEC.

DRAG RDCR. WT. 0.000 GRAMS CHG. WT. 1.46 GRAMS SABOT WT. 0.490 GRAMS

TWIST RATE NA PCT. DRAG CHANGE / (DEG. YAW)**2 1.16

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	5.2	1480	1257	0.0
0	0.00	0.00	5.2	1480	721	0.0
50	0.25	0.03	5.0	1430	673	-0.5
100	0.49	0.07	4.7	1380	627	-1.0
150	0.72	0.11	4.5	1331	583	-1.5
200	0.93	0.15	4.2	1282	540	-2.0
250	1.13	0.18	3.9	1233	500	-2.4
300	1.32	0.23	3.5	1184	461	-2.9
350	1.48	0.27	3.2	1136	425	-3.4
400	1.63	0.31	2.8	1088	390	-3.8
450	1.76	0.36	2.3	1040	356	-4.3
500	1.86	0.41	1.8	992	324	-4.8
550	1.94	0.46	1.3	945	294	-5.2
600	2.00	0.52	0.7	898	265	-5.6
650	2.02	0.57	0.0	851	238	-6.0
700	2.01	0.63	-0.7	805	213	-6.5
750	1.96	0.70	-1.5	758	189	-7.0
800	1.87	0.77	-2.4	712	167	-7.4
850	1.74	0.84	-3.5	666	146	-7.8
900	1.54	0.92	-4.7	619	126	-8.4
950	1.29	1.00	-6.1	570	107	-9.1
1000	0.95	1.09	-7.8	521	89	-9.8
1050	0.53	1.19	-9.8	472	73	-10.3
1100	0.00	1.31	-12.3	424	59	-10.7

TYPE FL 1 CALIBER 5.56 MM AVERAGE DENSITY 7.80 GRAMS/CC.

PROJ. WT 0.658 GRAMS PROJ. DIA. 1.78 MM IMPULSE 1.2 LB. SEC.

DRAG RDCR. WT. 0.000 GRAMS CHG. WT. 2.52 GRAMS SABOT WT. 0.490 GRAMS

TWIST RATE NA PCT. DRAG CHANGE / (DEG. YAW)**2 1.16

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	3.6	1678	1616	0.0
0	0.00	0.00	3.6	1678	926	0.0
50	0.17	0.03	3.4	1627	871	-0.5
100	0.33	0.06	3.2	1576	817	-1.0
150	0.49	0.09	3.0	1525	765	-1.5
200	0.63	0.13	2.8	1475	715	-2.0
250	0.76	0.16	2.5	1425	668	-2.5
300	0.88	0.20	2.3	1375	622	-3.0
350	0.99	0.23	2.0	1326	578	-3.5
400	1.09	0.27	1.7	1277	536	-3.9
450	1.17	0.31	1.4	1228	496	-4.4
500	1.23	0.35	1.1	1179	457	-4.8
550	1.28	0.40	0.7	1131	421	-5.3
600	1.31	0.44	0.3	1083	386	-5.8
650	1.31	0.49	-0.2	1035	352	-6.3
700	1.30	0.54	-0.7	987	321	-6.7
750	1.26	0.59	-1.2	940	291	-7.1
800	1.19	0.65	-1.8	893	262	-7.5
850	1.09	0.70	-2.5	846	236	-7.9
900	0.96	0.76	-3.2	800	210	-8.4
950	0.79	0.83	-4.0	753	187	-8.9
1000	0.58	0.90	-5.0	707	164	-9.3
1050	0.32	0.97	-6.0	661	144	-9.7
1100	0.00	1.05	-7.3	614	124	-10.2

TYPE FL 1 CALIBER 5.56 MM AVERAGE DENSITY 7.80 GRAMS/CC.

PROJ. WT 0.658 GRAMS PROJ. DIA. 1.78 MM IMPULSE 2.1 LB. SEC.

DRAG ROCK. WT. 0.000 GRAMS CHG. WT. 5.00 GRAMS SABOT WT. 0.490 GRAMS

TWIST RATE NA PCT. DRAG CHANGE / (DEG. YAW)**2 1.16

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	2.7	1853	1971	0.0
0	0.00	0.00	2.7	1853	1130	0.0
50	0.13	0.03	2.6	1802	1068	-0.5
100	0.25	0.06	2.4	1750	1008	-1.0
150	0.37	0.08	2.2	1699	949	-1.5
200	0.47	0.11	2.1	1647	893	-2.1
250	0.57	0.15	1.9	1596	838	-2.6
300	0.66	0.18	1.7	1546	786	-3.0
350	0.74	0.21	1.4	1495	735	-3.5
400	0.81	0.24	1.2	1445	687	-4.0
450	0.86	0.28	1.0	1395	641	-4.5
500	0.91	0.32	0.7	1346	596	-5.0
550	0.94	0.35	0.4	1296	553	-5.4
600	0.96	0.39	0.1	1247	512	-5.9
650	0.96	0.43	-0.2	1199	473	-6.3
700	0.94	0.48	-0.6	1151	436	-6.8
750	0.91	0.52	-1.0	1103	400	-7.2
800	0.86	0.57	-1.4	1054	366	-7.7
850	0.78	0.62	-1.9	1006	333	-8.2
900	0.69	0.67	-2.4	959	302	-8.6
950	0.56	0.72	-3.0	912	274	-9.0
1000	0.41	0.78	-3.6	865	246	-9.4
1050	0.22	0.84	-4.3	819	220	-9.8
1100	0.00	0.90	-5.1	772	196	-10.3

TYPE FL 1 CALIBER 5.56 MM AVERAGE DENSITY 11.00 GRAMS/CC.

PROJ. WT 0.929 GRAMS PROJ. DIA. 1.78 MM IMPULSE 0.... LB. SEC.

DRAG RUCK. WT. 0.000 GRAMS CHG. WT. 1.33 GRAMS SABOT WT. 0.490 GRAMS

TWIST RATE NA PCT. DRAG CHANGE / (DEG. YAW)**2 1.16

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	4.9	1350	1293	0.0
0	0.00	0.00	4.9	1350	847	0.0
50	0.23	0.04	4.6	1315	803	-0.3
100	0.45	0.08	4.3	1280	761	-0.7
150	0.66	0.12	4.0	1245	720	-1.0
200	0.85	0.16	3.7	1211	681	-1.4
250	1.02	0.20	3.3	1177	643	-1.7
300	1.18	0.24	3.0	1143	607	-2.0
350	1.32	0.29	2.6	1109	571	-2.4
400	1.44	0.33	2.1	1075	536	-2.7
450	1.54	0.38	1.7	1041	503	-3.1
500	1.61	0.43	1.2	1007	471	-3.4
550	1.66	0.48	0.7	973	440	-3.7
600	1.69	0.53	0.2	939	410	-4.0
650	1.69	0.58	-0.4	906	381	-4.3
700	1.66	0.64	-1.1	873	354	-4.6
750	1.59	0.70	-1.7	840	328	-4.9
800	1.50	0.76	-2.5	807	303	-5.3
850	1.36	0.82	-3.3	774	278	-5.6
900	1.19	0.89	-4.1	741	255	-5.9
950	0.97	0.96	-5.1	708	233	-6.2
1000	0.70	1.03	-6.1	676	212	-6.5
1050	0.38	1.11	-7.3	643	192	-6.9
1100	0.00	1.19	-8.6	609	172	-7.3

TYPE FL 1 CALIBER 5.56 MM AVERAGE DENSITY 11.00 GRAMS/CC.

PROJ. WT 0.929 GRAMS PROJ. DIA. 1.78 MM IMPULSE 1.2 LB. SEC.

DRAG RDCR. WT. 0.000 GRAMS CHG. WT. 2.35 GRAMS SABOT WT. 0.490 GRAMS

TWIST RATE NA PCT. DRAG CHANGE / (DEG. YAW)**2 1.16

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	3.2	1583	1778	0.0
0	0.00	0.00	3.2	1583	1164	0.0
50	0.15	0.03	3.0	1547	1112	-0.4
100	0.30	0.06	2.8	1511	1061	-0.7
150	0.43	0.10	2.6	1476	1011	-1.1
200	0.56	0.13	2.4	1440	963	-1.4
250	0.67	0.17	2.1	1405	917	-1.8
300	0.77	0.20	1.9	1370	872	-2.1
350	0.86	0.24	1.6	1335	828	-2.5
400	0.93	0.28	1.3	1300	785	-2.8
450	0.99	0.32	1.0	1265	743	-3.1
500	1.04	0.36	0.7	1231	703	-3.5
550	1.07	0.40	0.3	1196	665	-3.8
600	1.08	0.44	0.0	1162	627	-4.1
650	1.07	0.48	-0.4	1128	591	-4.4
700	1.05	0.53	-0.8	1094	556	-4.8
750	1.00	0.58	-1.2	1060	522	-5.1
800	0.94	0.62	-1.7	1026	489	-5.4
850	0.85	0.67	-2.2	992	457	-5.8
900	0.74	0.73	-2.7	958	427	-6.1
950	0.60	0.78	-3.3	925	397	-6.4
1000	0.43	0.83	-3.9	892	369	-6.7
1050	0.23	0.89	-4.5	859	343	-6.9
1100	0.00	0.95	-5.2	826	317	-7.3

TYPE FL 1 CALIBER 5.56 MM AVERAGE DENSITY 11.00 GRAMS/CC.

PROJ. WT 0.929 GRAMS PROJ. DIA. 1.78 MM IMPULSE 2.1 LB. SEC.

DRAG RDCR. WT. 0.000 GRAMS CHG. WT. 4.81 GRAMS SABOT WT. 0.490 GRAMS

TWIST RATE NA PCT. DRAG CHANGE / (DEG. YAW)**2 1.16

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	2.4	1798	2294	0.0
0	0.00	0.00	2.4	1798	1502	0.0
50	0.11	0.03	2.2	1762	1441	-0.4
100	0.22	0.06	2.0	1725	1382	-0.7
150	0.31	0.09	1.9	1689	1325	-1.1
200	0.40	0.12	1.7	1652	1268	-1.5
250	0.48	0.15	1.5	1616	1213	-1.8
300	0.55	0.18	1.3	1580	1160	-2.2
350	0.62	0.21	1.1	1544	1107	-2.5
400	0.67	0.24	0.9	1508	1057	-2.9
450	0.71	0.28	0.7	1473	1007	-3.2
500	0.74	0.31	0.4	1437	960	-3.5
550	0.76	0.35	0.2	1402	915	-3.9
600	0.77	0.38	-0.1	1367	868	-4.2
650	0.76	0.42	-0.4	1332	824	-4.6
700	0.74	0.46	-0.6	1297	781	-4.9
750	0.71	0.50	-0.9	1262	740	-5.2
800	0.66	0.54	-1.3	1228	700	-5.5
850	0.60	0.58	-1.6	1193	661	-5.9
900	0.51	0.62	-2.0	1159	624	-6.2
950	0.42	0.66	-2.4	1125	588	-6.5
1000	0.30	0.71	-2.8	1091	553	-6.8
1050	0.16	0.76	-3.2	1057	519	-7.2
1100	0.00	0.80	-3.7	1023	486	-7.5

TYPE FL 1 CALIBER 5.56 MM AVERAGE DENSITY 16.70 GRAMS/CC.

PROJ. WT 1.411 GRAMS PROJ. DIA. 1.78 MM IMPULSE 0.8 LB. SEC.

DRAG ROCK. WT. 0.000 GRAMS CHG. WT. 1.15 GRAMS SABOT WT. 0.490 GRAMS

TWIST RATE NA PCT. DRAG CHANGE / (DEG. YAW)**2 1.16

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	5.8	1150	1257	0.0
50	0.00	0.00	5.8	1150	933	0.0
50	0.28	0.04	5.4	1128	897	-0.2
100	0.53	0.09	5.0	1105	862	-0.4
150	0.77	0.13	4.6	1083	827	-0.7
200	0.99	0.18	4.2	1060	793	-0.9
250	1.18	0.23	3.7	1038	760	-1.1
300	1.36	0.28	3.3	1015	728	-1.3
350	1.51	0.33	2.8	993	696	-1.6
400	1.63	0.38	2.4	971	665	-1.8
450	1.73	0.43	1.9	949	635	-2.0
500	1.81	0.48	1.1	927	606	-2.2
550	1.85	0.54	0.5	905	578	-2.4
600	1.87	0.59	-0.1	883	551	-2.6
650	1.85	0.65	-0.7	862	524	-2.8
700	1.80	0.71	-1.4	840	498	-3.0
750	1.72	0.77	-2.2	818	472	-3.3
800	1.60	0.83	-2.9	796	448	-3.5
850	1.44	0.90	-3.7	775	423	-3.7
900	1.25	0.96	-4.6	753	400	-3.9
950	1.01	1.03	-5.5	731	377	-4.1
1000	0.72	1.10	-6.5	710	356	-4.3
1050	0.39	1.17	-7.5	689	334	-4.5
1100	0.00	1.24	-8.6	667	314	-4.7

TYPE FL 1 CALIBER 5.56 MM AVERAGE DENSITY 16.70 GRAMS/CC.
PROJ. WT 1.411 GRAMS PROJ. DIA. 1.78 MM IMPULSE 1.2 LB. SEC.
DRAG RDCR. WT. 0.000 GRAMS CHG. WT. 2.10 GRAMS SABOT WT. 0.490 GRAMS
TWIST RATE NA PCT. DRAG CHANGE / (DEG. YAW)**2 1.16

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	3.5	1422	1922	0.0
0	0.00	0.00	3.5	1422	1427	0.0
50	0.17	0.04	3.3	1399	1381	-0.2
100	0.32	0.07	3.0	1376	1335	-0.5
150	0.46	0.11	2.7	1353	1291	-0.7
200	0.59	0.15	2.5	1330	1247	-0.9
250	0.71	0.18	2.2	1307	1204	-1.1
300	0.81	0.22	1.9	1284	1162	-1.4
350	0.89	0.26	1.6	1261	1121	-1.6
400	0.96	0.30	1.2	1238	1081	-1.8
450	1.02	0.34	0.9	1215	1042	-2.0
500	1.06	0.38	0.6	1193	1004	-2.3
550	1.08	0.43	0.2	1170	966	-2.5
600	1.09	0.47	-0.2	1148	929	-2.7
650	1.08	0.51	-0.6	1125	894	-2.9
700	1.04	0.56	-1.0	1103	858	-3.1
750	0.99	0.60	-1.4	1081	824	-3.4
800	0.92	0.65	-1.8	1058	790	-3.6
850	0.83	0.70	-2.3	1036	757	-3.8
900	0.71	0.75	-2.7	1013	724	-4.0
950	0.57	0.80	-3.2	991	693	-4.2
1000	0.41	0.85	-3.6	969	662	-4.4
1050	0.22	0.90	-4.3	947	632	-4.7
1100	0.00	0.95	-4.9	925	603	-4.8

TYPE FL 1 CALIBER 5.56 MM AVERAGE DENSITY 16.70 GRAMS/CC.

PROJ. WT 1.411 GRAMS PROJ. DIA. 1.78 MM IMPULSE 2.1 LB. SEC.

DRAG RDCR. WT. 0.000 GRAMS CHG. WT. 4.48 GRAMS SABOT WT. 0.490 GRAMS

TWIST RATE NA PCT. DRAG CHANGE / (DEG. YAW)**2 1.16

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	2.3	1700	2747	0.0
0	0.00	0.00	2.3	1700	2039	0.0
50	0.11	0.03	2.1	1676	1982	-0.2
100	0.21	0.06	2.0	1652	1926	-0.5
150	0.30	0.09	1.8	1628	1870	-0.7
200	0.39	0.12	1.6	1604	1816	-1.0
250	0.46	0.15	1.4	1581	1763	-1.2
300	0.53	0.18	1.2	1557	1710	-1.4
350	0.58	0.22	1.0	1533	1659	-1.7
400	0.63	0.25	0.8	1510	1608	-1.9
450	0.66	0.28	0.5	1486	1559	-2.1
500	0.69	0.32	0.3	1463	1510	-2.3
550	0.70	0.35	0.1	1440	1462	-2.6
600	0.70	0.39	-0.2	1417	1416	-2.8
650	0.70	0.42	-0.4	1393	1370	-3.0
700	0.67	0.46	-0.7	1370	1325	-3.2
750	0.64	0.49	-1.0	1347	1280	-3.5
800	0.59	0.53	-1.2	1324	1237	-3.7
850	0.51	0.57	-1.5	1301	1194	-3.9
900	0.45	0.61	-1.8	1278	1153	-4.1
950	0.36	0.65	-2.1	1255	1112	-4.3
1000	0.26	0.69	-2.5	1233	1072	-4.6
1050	0.14	0.73	-2.8	1210	1033	-4.8
1100	0.00	0.77	-3.1	1187	995	-5.0

TYPE FL 1 CALIBER 6.50 MM AVERAGE DENSITY 7.80 GRAMS/CC.

PROJ. WT 0.658 GRAMS PROJ. DIA. 1.78 MM IMPULSE 0.0 LB. SEC.

DRAG ROCK. WT. 0.000 GRAMS CHG. WT. 1.31 GRAMS SABOT WT. 0.794 GRAMS

TWIST RATE NA PCT. DRAG CHANGE / (DEG. YAW)**2 1.16

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	7.4	1335	1294	0.0
0	0.00	0.00	7.4	1335	586	0.0
50	0.36	0.04	7.1	1286	544	-0.5
100	0.70	0.08	6.8	1237	503	-1.0
150	1.03	0.12	6.5	1188	465	-1.5
200	1.34	0.16	6.1	1140	428	-1.9
250	1.63	0.21	5.7	1092	392	-2.4
300	1.91	0.25	5.3	1044	359	-2.9
350	2.16	0.30	4.8	996	326	-3.3
400	2.38	0.35	4.3	949	296	-3.8
450	2.58	0.41	3.7	902	267	-4.2
500	2.75	0.47	3.0	855	241	-4.6
550	2.89	0.53	2.3	808	215	-5.1
600	2.99	0.59	1.5	762	191	-5.6
650	3.04	0.66	0.6	716	168	-6.0
700	3.05	0.73	-0.4	670	148	-6.4
750	3.01	0.81	-1.6	623	128	-7.0
800	2.90	0.89	-3.0	574	109	-7.7
850	2.72	0.98	-4.7	525	91	-8.3
900	2.44	1.08	-6.7	476	75	-8.8
950	2.07	1.19	-9.2	428	60	-9.2
1000	1.55	1.32	-12.2	386	49	-9.0
1050	0.87	1.45	-15.9	354	41	-7.9
1100	0.00	1.60	-20.2	328	35	-6.5

TYPE FL 1 CALIBER 6.50 MM AVERAGE DENSITY 7.80 GRAMS/CC.

PROJ. WT 0.658 GRAMS PROJ. DIA. 1.78 MM IMPULSE 1.2 LB. SEC.

DRAG ROCK. WT. 0.000 GRAMS CHG. WT. 2.34 GRAMS SABOT WT. 0.794 GRAMS

TWIST RATE NA PCT. DRAG CHANGE / (DEG. YAW)**2 1.16

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	4.4	1571	1792	0.0
0	0.00	0.00	4.4	1571	812	0.0
50	0.21	0.03	4.1	1520	760	-0.5
100	0.41	0.07	3.9	1470	711	-1.0
150	0.59	0.10	3.7	1420	664	-1.5
200	0.77	0.14	3.4	1371	618	-2.0
250	0.93	0.17	3.1	1321	574	-2.5
300	1.08	0.21	2.9	1272	532	-2.9
350	1.22	0.25	2.5	1223	492	-3.4
400	1.34	0.29	2.2	1175	454	-3.9
450	1.44	0.34	1.8	1127	418	-4.3
500	1.52	0.38	1.4	1079	383	-4.8
550	1.58	0.43	0.9	1031	349	-5.3
600	1.62	0.48	0.5	983	315	-5.7
650	1.63	0.53	-0.1	935	288	-6.2
700	1.62	0.59	-0.7	889	260	-6.6
750	1.58	0.64	-1.4	842	233	-7.0
800	1.50	0.71	-2.1	795	208	-7.5
850	1.38	0.77	-2.9	749	184	-7.9
900	1.22	0.84	-3.9	703	162	-8.3
950	1.01	0.91	-5.0	657	142	-8.7
1000	0.74	0.99	-6.2	609	122	-9.3
1050	0.41	1.08	-7.7	561	103	-10.1
1100	0.00	1.17	-9.4	511	86	-10.8

TYPE FL 1 CALIBER 6.50 MM AVERAGE DENSITY 7.80 GRAMS/CC.

PROJ. WT 0.658 GRAMS PROJ. DIA. 1.78 MM IMPULSE 2.1 LB. SEC.

DRAG RDCR. WT. 0.000 GRAMS CHG. WT. 4.78 GRAMS SABOT WT. 0.794 GRAMS

TWIST RATE NA PCT. DRAG CHANGE / (DEG. YAW)**2 1.16

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	3.0	1791	2329	0.0
0	0.00	0.00	3.0	1791	1055	0.0
50	0.14	0.03	2.8	1740	996	-0.5
100	0.28	0.06	2.6	1688	938	-1.0
150	0.40	0.09	2.5	1637	882	-1.5
200	0.52	0.12	2.3	1586	827	-2.0
250	0.63	0.15	2.1	1535	775	-2.5
300	0.73	0.18	1.9	1485	725	-3.0
350	0.82	0.22	1.6	1435	677	-3.5
400	0.89	0.25	1.4	1385	631	-4.0
450	0.96	0.29	1.1	1336	587	-4.5
500	1.01	0.33	0.8	1286	544	-4.9
550	1.04	0.37	0.5	1237	504	-5.4
600	1.06	0.41	0.2	1189	465	-5.8
650	1.07	0.45	-0.2	1141	428	-6.3
700	1.05	0.50	-0.6	1093	393	-6.7
750	1.02	0.54	-1.1	1044	359	-7.2
800	0.96	0.59	-1.5	997	327	-7.7
850	0.88	0.64	-2.1	949	296	-8.1
900	0.77	0.70	-2.6	902	268	-8.5
950	0.63	0.76	-3.3	856	241	-8.9
1000	0.46	0.82	-4.0	809	215	-9.3
1050	0.25	0.88	-4.8	762	191	-9.8
1100	0.00	0.95	-5.7	716	169	-10.2

TYPE FL 1 CALIBER 6.50 MM AVERAGE DENSITY 11.00 GRAMS/CC.

PROJ. WT 0.929 GRAMS PROJ. DIA. 1.78 MM IMPULSE 0.6 LB. SEC.

DRAG RDCR. WT. 0.000 GRAMS CHG. WT. 1.21 GRAMS SABOT WT. 0.794 GRAMS

TWIST RATE NA PCT. DRAG CHANGE / (DEG. YAW)**2 1.16

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	6.5	1219	1280	0.0
0	0.00	0.00	6.5	1219	690	0.0
50	0.31	0.04	6.1	1185	652	-0.3
100	0.60	0.08	5.8	1151	615	-0.7
150	0.88	0.13	5.4	1117	579	-1.0
200	1.13	0.17	5.0	1083	544	-1.4
250	1.37	0.22	4.5	1048	511	-1.7
300	1.58	0.27	4.1	1014	478	-2.0
350	1.77	0.32	3.6	981	447	-2.4
400	1.93	0.37	3.0	947	417	-2.7
450	2.07	0.43	2.4	914	388	-3.0
500	2.18	0.48	1.8	881	360	-3.3
550	2.26	0.54	1.1	848	334	-3.6
600	2.30	0.60	0.4	815	308	-4.0
650	2.31	0.66	-0.4	782	284	-4.3
700	2.27	0.73	-1.2	749	260	-4.6
750	2.20	0.80	-2.1	716	238	-4.9
800	2.07	0.87	-3.2	684	217	-5.2
850	1.90	0.94	-4.3	651	197	-5.5
900	1.66	1.02	-5.5	617	177	-6.0
950	1.36	1.10	-6.9	583	158	-6.5
1000	0.99	1.19	-8.5	548	140	-6.9
1050	0.54	1.29	-10.3	513	122	-7.3
1100	0.00	1.39	-12.3	479	106	-7.7

TYPE FL 1 CALIBER 6.50 MM AVERAGE DENSITY 11.00 GRAMS/CC.

PROJ. WT 0.929 GRAMS PROJ. DIA. 1.78 MM IMPULSE 1.2 LB. SEC.

DRAG RDCR. WT. 0.000 GRAMS CHG. WT. 2.19 GRAMS SABOT WT. 0.794 GRAMS

TWIST RATE NA PCT. DRAG CHANGE / (DEG. YAW)**2 1.16

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	3.9	1480	1887	0.0
0	0.00	0.00	3.9	1480	1017	0.0
50	0.18	0.03	3.6	1445	969	-0.4
100	0.36	0.07	3.4	1409	923	-0.7
150	0.52	0.11	3.1	1374	877	-1.1
200	0.66	0.14	2.8	1339	833	-1.4
250	0.80	0.18	2.6	1304	790	-1.7
300	0.92	0.22	2.3	1269	749	-2.1
350	1.02	0.26	1.9	1235	708	-2.4
400	1.11	0.30	1.6	1200	667	-2.7
450	1.19	0.34	1.2	1166	632	-3.1
500	1.24	0.39	0.9	1133	595	-3.4
550	1.28	0.43	0.5	1098	560	-3.7
600	1.30	0.48	0.0	1064	526	-4.1
650	1.29	0.52	-0.4	1030	493	-4.4
700	1.27	0.57	-0.9	996	461	-4.7
750	1.22	0.62	-1.4	962	430	-5.1
800	1.14	0.68	-2.0	929	401	-5.4
850	1.01	0.73	-2.6	896	373	-5.7
900	0.90	0.79	-3.2	863	346	-5.9
950	0.73	0.85	-3.9	830	320	-6.3
1000	0.53	0.91	-4.7	797	295	-6.6
1050	0.28	0.97	-5.5	764	271	-6.9
1100	0.00	1.04	-6.4	731	248	-7.2

TYPE FL 1 CALIBER 6.50 MM AVERAGE DENSITY 11.00 GRAMS/CC.

PROJ. WT 0.929 GRAMS PROJ. DIA. 1.78 MM IMPULSE 2.1 LB. SEC.

DRAG MODR. WT. 0.000 GRAMS CHG. WT. 4.60 GRAMS SABOT WT. 0.794 GRAMS

TWIST RATE NA PCT. DRAG CHANGE / (DEG. YAW)**2 1.16

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	2.6	1736	2596	0.0
0	0.00	0.00	2.6	1736	1400	0.0
50	0.12	0.03	2.4	1700	1342	-0.4
100	0.24	0.06	2.2	1663	1285	-0.7
150	0.34	0.09	2.0	1627	1230	-1.1
200	0.44	0.12	1.9	1591	1175	-1.4
250	0.53	0.15	1.7	1555	1121	-1.8
300	0.61	0.18	1.4	1519	1072	-2.1
350	0.67	0.22	1.2	1483	1022	-2.5
400	0.73	0.25	1.0	1448	974	-2.8
450	0.78	0.29	0.7	1413	927	-3.2
500	0.81	0.32	0.5	1377	881	-3.5
550	0.83	0.36	0.2	1342	837	-3.9
600	0.84	0.40	-0.1	1307	794	-4.2
650	0.84	0.44	-0.4	1273	752	-4.5
700	0.82	0.48	-0.7	1238	712	-4.9
750	0.78	0.52	-1.0	1204	673	-5.2
800	0.73	0.56	-1.4	1169	635	-5.5
850	0.66	0.60	-1.8	1135	599	-5.8
900	0.57	0.65	-2.2	1101	563	-6.1
950	0.46	0.69	-2.6	1067	529	-6.5
1000	0.33	0.74	-3.0	1033	496	-6.8
1050	0.18	0.79	-3.5	999	464	-7.1
1100	0.00	0.84	-4.0	966	433	-7.4

TYPE FL 1 CALIBER 6.50 MM AVERAGE DENSITY 16.70 GRAMS/CC.

PROJ. WT 1.411 GRAMS PROJ. DIA. 1.78 MM IMPULSE 0.6 LB. SEC.

DRAG RDCR. WT. 0.000 GRAMS CHG. WT. 1.06 GRAMS SABOT WT. 0.794 GRAMS

TWIST RATE NA PCT. DRAG CHANGE / (DEG. YAW)**2 1.16

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	7.3	1046	1206	0.0
0	0.00	0.00	7.3	1046	772	0.0
50	0.35	0.05	6.9	1024	739	-0.2
100	0.68	0.10	6.4	1001	707	-0.4
150	0.98	0.15	5.9	979	676	-0.7
200	1.25	0.20	5.3	957	646	-0.9
250	1.50	0.25	4.8	935	617	-1.1
300	1.73	0.31	4.2	913	588	-1.3
350	1.92	0.36	3.6	891	560	-1.5
400	2.08	0.42	2.9	870	533	-1.7
450	2.22	0.48	2.3	848	507	-2.0
500	2.31	0.54	1.6	826	481	-2.2
550	2.38	0.60	0.8	804	456	-2.4
600	2.40	0.66	0.0	783	432	-2.6
650	2.38	0.73	-0.8	761	408	-2.8
700	2.33	0.79	-1.7	739	386	-3.0
750	2.23	0.86	-2.7	718	363	-3.2
800	2.08	0.93	-3.7	696	342	-3.4
850	1.88	1.01	-4.7	675	321	-3.6
900	1.62	1.08	-5.9	653	301	-3.9
950	1.31	1.16	-7.1	631	281	-4.1
1000	0.94	1.24	-8.4	609	262	-4.4
1050	0.51	1.32	-9.8	586	243	-4.7
1100	0.00	1.41	-11.3	564	224	-5.0

TYPE FL 1 CALIBER 6.50 MM AVERAGE DENSITY 16.70 GRAMS/CC.

PROJ. WT 1.411 GRAMS PROJ. DIA. 1.78 MM IMPULSE 1.2 LB. SEC.

DRAG RDCR. WT. 0.000 GRAMS CHG. WT. 1.96 GRAMS SABOT WT. 0.794 GRAMS

TWIST RATE NA PCT. DRAG CHANGE / (DEG. YAW)**2 1.16

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	4.1	1327	1941	0.0
0	0.00	0.00	4.1	1327	1242	0.0
50	0.20	0.04	3.8	1304	1200	-0.2
100	0.38	0.08	3.5	1281	1158	-0.5
150	0.54	0.12	3.2	1258	1117	-0.7
200	0.70	0.16	2.9	1235	1077	-0.9
250	0.83	0.20	2.6	1213	1038	-1.1
300	0.95	0.24	2.2	1190	999	-1.4
350	1.06	0.28	1.9	1168	962	-1.6
400	1.14	0.32	1.5	1145	925	-1.8
450	1.21	0.37	1.1	1123	890	-2.0
500	1.26	0.41	0.7	1100	854	-2.2
550	1.29	0.46	0.3	1078	820	-2.5
600	1.29	0.51	-0.2	1056	786	-2.7
650	1.28	0.55	-0.6	1033	753	-2.9
700	1.24	0.60	-1.1	1011	721	-3.1
750	1.18	0.65	-1.6	989	689	-3.3
800	1.10	0.70	-2.1	966	659	-3.6
850	0.99	0.76	-2.7	944	629	-3.8
900	0.85	0.81	-3.2	922	600	-4.0
950	0.68	0.87	-3.8	901	572	-4.2
1000	0.49	0.92	-4.5	879	545	-4.3
1050	0.26	0.98	-5.1	857	518	-4.6
1100	0.00	1.04	-5.8	835	492	-4.8

TYPE FL 1 CALIBER 6.50 MM AVERAGE DENSITY 16.70 GRAMS/CC.

PROJ. WT 1.411 GRAMS PROJ. DIA. 1.78 MM IMPULSE 2.1 LB. SEC.

DRAG RDCR. WT. 0.000 GRAMS CHG. WT. 4.29 GRAMS SABOT WT. 0.794 GRAMS

TWIST RATE NA PCT. DRAG CHANGE / (DEG. YAW)**2 1.16

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	2.5	1638	2958	0.0
0	0.00	0.00	2.5	1638	1893	0.0
50	0.12	0.03	2.3	1614	1838	-0.2
100	0.23	0.06	2.1	1590	1784	-0.5
150	0.33	0.09	1.9	1567	1731	-0.7
200	0.42	0.13	1.7	1543	1680	-0.9
250	0.50	0.16	1.5	1519	1629	-1.2
300	0.58	0.19	1.3	1496	1579	-1.4
350	0.64	0.23	1.1	1472	1530	-1.6
400	0.69	0.26	0.8	1449	1482	-1.9
450	0.73	0.29	0.6	1426	1435	-2.1
500	0.75	0.33	0.4	1403	1388	-2.3
550	0.77	0.37	0.1	1380	1343	-2.5
600	0.77	0.40	-0.2	1357	1298	-2.8
650	0.76	0.44	-0.4	1334	1255	-3.0
700	0.74	0.48	-0.7	1310	1212	-3.2
750	0.70	0.52	-1.0	1288	1170	-3.4
800	0.65	0.55	-1.3	1265	1128	-3.7
850	0.58	0.59	-1.7	1242	1088	-3.9
900	0.50	0.64	-2.0	1219	1049	-4.1
950	0.40	0.68	-2.3	1197	1010	-4.3
1000	0.28	0.72	-2.7	1174	972	-4.5
1050	0.15	0.76	-3.1	1152	936	-4.7
1100	0.00	0.81	-3.4	1129	900	-4.9

TYPE FL 1 CALIBER 7.62 MM AVERAGE DENSITY 7.80 GRAMS/CC.

PROJ. WT 0.658 GRAMS PROJ. DIA. 1.78 MM IMPULSE 0.0 LB. SEC.

DRAG ROCR. WT. 0.000 GRAMS CHG. WT. 1.13 GRAMS SABOT WT. 1.306 GRAMS

TWIST RATE NA PCT. DRAG CHANGE / (DEG. YAW)**2 1.16

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	13.6	1127	1247	0.0
0	0.00	0.00	13.6	1127	418	0.0
50	0.66	0.05	13.2	1079	383	-0.5
100	1.30	0.09	12.7	1031	350	-1.0
150	1.91	0.14	12.3	983	318	-1.4
200	2.50	0.19	11.7	936	288	-1.9
250	3.06	0.25	11.1	889	260	-2.3
300	3.59	0.31	10.4	842	233	-2.8
350	4.09	0.37	9.7	796	208	-3.3
400	4.55	0.43	8.9	749	185	-3.7
450	4.97	0.50	7.9	703	163	-4.2
500	5.33	0.58	6.8	657	142	-4.6
550	5.64	0.65	5.6	610	122	-5.2
600	5.88	0.74	4.1	561	103	-5.8
650	6.05	0.83	2.4	512	86	-6.4
700	6.12	0.94	0.3	463	70	-6.9
750	6.08	1.05	-2.3	415	57	-7.2
800	5.90	1.18	-5.5	377	47	-6.7
850	5.54	1.32	-9.4	347	40	-5.6
900	4.98	1.47	-13.9	322	34	-4.8
950	4.18	1.63	-19.0	301	30	-4.3
1000	3.11	1.80	-25.0	281	26	-4.1
1050	1.73	1.98	-31.7	264	23	-3.8
1100	0.00	2.18	-39.3	249	20	-3.6

TYPE FL 1 CALIBER 7.62 MM AVERAGE DENSITY 7.80 GRAMS/CC.

PROJ. WT 0.658 GRAMS PROJ. DIA. 1.78 MM IMPULSE 1.7 LB. SEC.

DRAG RUCK. WT. 0.000 GRAMS CHG. WT. 2.07 GRAMS SABOT WT. 1.306 GRAMS

TWIST RATE NA PCT. DRAG CHANGE / (DEG. YAW)**2 1.16

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	6.3	1401	1927	0.0
0	0.00	0.00	6.3	1401	646	0.0
50	0.30	0.04	6.0	1351	601	-0.5
100	0.59	0.07	5.7	1302	558	-1.0
150	0.87	0.11	5.4	1253	516	-1.5
200	1.13	0.15	5.1	1204	477	-1.9
250	1.37	0.20	4.7	1156	440	-2.4
300	1.60	0.24	4.4	1108	404	-2.9
350	1.80	0.29	4.0	1060	370	-3.4
400	1.99	0.33	3.6	1012	337	-3.8
450	2.15	0.39	2.9	964	306	-4.3
500	2.28	0.44	2.4	917	277	-4.7
550	2.39	0.49	1.8	871	249	-5.1
600	2.46	0.55	1.1	824	223	-5.6
650	2.50	0.62	0.3	777	199	-6.1
700	2.50	0.68	-0.6	731	176	-6.5
750	2.45	0.75	-1.6	685	154	-6.9
800	2.35	0.83	-2.7	639	134	-7.4
850	2.19	0.91	-4.1	591	115	-8.1
900	1.96	1.00	-5.6	541	96	-8.8
950	1.65	1.10	-7.5	492	80	-9.3
1000	1.23	1.20	-9.8	444	65	-9.8
1050	0.69	1.32	-12.6	399	52	-9.8
1100	0.00	1.45	-16.1	364	44	-9.0

TYPE FL 1 CALIBER 7.62 MM AVERAGE DENSITY 7.80 GRAMS/CC.

PROJ. WT 0.658 GRAMS PROJ. DIA. 1.78 MM IMPULSE 2.1 LB. SEC.

DRAG RDCR. WT. 0.000 GRAMS CHG. WT. 4.44 GRAMS SABOT WT. 1.306 GRAMS

TWIST RATE NA PCT. DRAG CHANGE / (DEG. YAW)**2 1.16

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	3.5	1687	2795	0.0
0	0.00	0.00	3.5	1687	936	0.0
50	0.17	0.03	3.4	1636	880	-0.5
100	0.33	0.06	3.2	1585	826	-1.0
150	0.48	0.09	3.0	1534	774	-1.5
200	0.62	0.13	2.7	1483	724	-2.0
250	0.75	0.16	2.5	1434	676	-2.5
300	0.87	0.20	2.2	1384	630	-3.0
350	0.98	0.23	2.0	1334	586	-3.5
400	1.07	0.27	1.7	1285	543	-3.9
450	1.15	0.31	1.4	1236	503	-4.4
500	1.21	0.35	1.0	1188	464	-4.9
550	1.26	0.40	0.7	1140	427	-5.3
600	1.28	0.44	0.3	1091	392	-5.8
650	1.29	0.49	-0.2	1043	358	-6.3
700	1.27	0.54	-0.7	995	326	-6.7
750	1.24	0.59	-1.2	948	296	-7.1
800	1.17	0.64	-1.8	901	267	-7.5
850	1.07	0.70	-2.4	855	240	-7.9
900	0.94	0.76	-3.1	808	215	-8.4
950	0.78	0.82	-4.0	761	191	-8.9
1000	0.57	0.89	-4.9	715	168	-9.3
1050	0.31	0.96	-5.9	669	147	-9.7
1100	0.00	1.04	-7.1	622	127	-10.2

TYPE FL 1 CALIBER 7.62 MM AVERAGE DENSITY 11.00 GRAMS/CC.
PROJ. WT 0.929 GRAMS PROJ. DIA. 1.78 MM IMPULSE 0.8 LB. SEC.
DRAG RDCR. WT. 0.000 GRAMS CHG. WT. 1.05 GRAMS SABOT WT. 1.306 GRAMS
TWIST RATE NA PCT. DRAG CHANGE / (DEG. YAW)**2 1.16

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	10.6	1036	1199	0.0
0	0.00	0.00	10.6	1036	499	0.0
50	0.51	0.05	10.1	1002	466	-0.3
100	0.99	0.10	9.6	968	436	-0.7
150	1.45	0.15	9.0	935	406	-1.0
200	1.88	0.21	8.4	902	378	-1.3
250	2.28	0.26	7.8	869	351	-1.6
300	2.65	0.32	7.1	836	324	-2.0
350	2.98	0.38	6.4	803	299	-2.3
400	3.28	0.45	5.6	770	275	-2.6
450	3.53	0.51	4.7	737	252	-3.0
500	3.74	0.58	3.7	704	230	-3.3
550	3.90	0.66	2.7	672	210	-3.6
600	4.01	0.73	1.5	639	189	-4.0
650	4.06	0.81	0.2	605	170	-4.4
700	4.04	0.90	-1.2	570	151	-4.8
750	3.94	0.99	-2.9	535	133	-5.2
800	3.76	1.08	-4.7	501	116	-5.6
850	3.48	1.19	-6.9	466	101	-5.9
900	3.09	1.30	-9.4	432	87	-6.2
950	2.57	1.42	-12.3	401	75	-6.2
1000	1.90	1.55	-15.6	375	65	-5.7
1050	1.05	1.69	-19.4	353	58	-5.1
1100	0.00	1.83	-23.6	335	52	-4.5

TYPE FL 1 CALIBER 7.62 MM AVERAGE DENSITY 11.00 GRAMS/CC.

PROJ. WT 0.929 GRAMS PROJ. DIA. 1.78 MM IMPULSE 1.2 LB. SEC.

DRAG RUCR. WT. 0.000 GRAMS CHG. WT. 1.95 GRAMS SABOT WT. 1.306 GRAMS

TWIST RATE NA PCT. DRAG CHANGE / (DEG. YAW)**2 1.16

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	5.2	1318	1941	0.0
0	0.00	0.00	5.2	1318	807	0.0
50	0.25	0.04	4.9	1283	765	-0.3
100	0.48	0.08	4.6	1248	724	-0.7
150	0.70	0.12	4.3	1214	684	-1.0
200	0.91	0.16	3.9	1180	646	-1.4
250	1.09	0.20	3.6	1146	610	-1.7
300	1.26	0.25	3.2	1112	574	-2.0
350	1.41	0.29	2.8	1077	539	-2.4
400	1.54	0.34	2.3	1043	506	-2.7
450	1.64	0.39	1.8	1009	473	-3.1
500	1.73	0.44	1.3	976	442	-3.4
550	1.78	0.49	0.8	942	412	-3.7
600	1.81	0.55	0.2	909	384	-4.0
650	1.81	0.60	-0.4	876	356	-4.3
700	1.78	0.66	-1.1	843	330	-4.6
750	1.71	0.72	-1.8	810	305	-5.0
800	1.61	0.78	-2.6	777	280	-5.3
850	1.47	0.85	-3.5	744	257	-5.6
900	1.28	0.92	-4.4	711	235	-5.9
950	1.05	0.99	-5.5	679	214	-6.2
1000	0.76	1.07	-6.6	646	194	-6.5
1050	0.41	1.15	-7.9	612	174	-7.0
1100	0.00	1.23	-9.3	578	155	-7.5

TYPE FL 1 CALIBER 7.62 MM AVERAGE DENSITY 11.00 GRAMS/CC.

PROJ. WT 0.929 GRAMS PROJ. DIA. 1.78 MM IMPULSE 2.1 LB. SEC.

DRAG RDCR. WT. 0.000 GRAMS CHG. WT. 4.27 GRAMS SABOT WT. 1.306 GRAMS

TWIST RATE NA PCT. DRAG CHANGE / (DEG. YAW)**2 1.16

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	3.0	1632	2976	0.0
0	0.00	0.00	3.0	1632	1237	0.0
50	0.14	0.03	2.8	1596	1183	-0.4
100	0.28	0.06	2.6	1560	1130	-0.7
150	0.40	0.10	2.4	1524	1079	-1.1
200	0.52	0.13	2.2	1488	1029	-1.4
250	0.62	0.16	2.0	1453	980	-1.8
300	0.71	0.20	1.7	1418	933	-2.1
350	0.79	0.23	1.5	1382	888	-2.5
400	0.86	0.27	1.2	1347	843	-2.8
450	0.91	0.31	0.9	1312	800	-3.1
500	0.96	0.35	0.6	1277	758	-3.5
550	0.98	0.39	0.3	1243	717	-3.8
600	0.99	0.43	0.0	1208	678	-4.1
650	0.99	0.47	-0.4	1174	640	-4.5
700	0.96	0.51	-0.8	1140	604	-4.8
750	0.92	0.56	-1.2	1106	568	-5.1
800	0.86	0.60	-1.6	1072	534	-5.5
850	0.78	0.65	-2.0	1038	500	-5.8
900	0.68	0.70	-2.5	1004	468	-6.1
950	0.55	0.75	-3.0	970	437	-6.4
1000	0.39	0.80	-3.6	937	408	-6.7
1050	0.21	0.86	-4.2	904	379	-7.0
1100	0.00	0.91	-4.8	871	352	-7.3

TYPE FL 1 CALIBER 7.62 MM AVERAGE DENSITY 16.70 GRAMS/CC.

PROJ. WT 1.411 GRAMS PROJ. DIA. 1.78 MM IMPULSE 0.8 LB. SEC.

DRAG RDCR. WT. 0.000 GRAMS CHG. WT. 0.94 GRAMS SABOT WT. 1.306 GRAMS

TWIST RATE NA PCT. DRAG CHANGE / (DEG. YAW)**2 1.16

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	10.8	902	1105	0.0
0	0.00	0.00	10.8	902	574	0.0
50	0.51	0.06	10.1	880	547	-0.2
100	0.99	0.11	9.5	859	520	-0.4
150	1.44	0.17	8.8	837	494	-0.7
200	1.86	0.23	8.0	815	467	-0.9
250	2.24	0.30	7.3	793	444	-1.1
300	2.58	0.36	6.5	772	420	-1.3
350	2.87	0.43	5.6	750	397	-1.5
400	3.13	0.49	4.7	728	374	-1.7
450	3.34	0.56	3.7	707	352	-1.9
500	3.50	0.63	2.7	685	332	-2.1
550	3.61	0.71	1.6	664	311	-2.3
600	3.66	0.78	0.4	642	291	-2.6
650	3.66	0.86	-0.8	620	271	-2.9
700	3.59	0.95	-2.2	598	252	-3.1
750	3.45	1.03	-3.6	575	233	-3.4
800	3.24	1.12	-5.2	552	215	-3.7
850	2.95	1.21	-6.9	529	197	-3.9
900	2.57	1.31	-8.8	506	181	-4.1
950	2.09	1.41	-10.8	483	165	-4.4
1000	1.52	1.52	-13.1	461	150	-4.6
1050	0.82	1.63	-15.6	438	135	-4.7
1100	0.00	1.74	-18.3	416	122	-4.9

TYPE FL 1 CALIBER 7.62 MM AVERAGE DENSITY 16.70 GRAMS/CC.

PROJ. WT 1.411 GRAMS PROJ. DIA. 1.78 MM IMPULSE 1.2 LB. SEC.

DRAG RDCR. WT. 0.000 GRAMS CHG. WT. 1.76 GRAMS SABOT WT. 1.306 GRAMS

TWIST RATE NA PCT. DRAG CHANGE / (DEG. YAW)**2 1.16

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	5.4	1185	1908	0.0
0	0.00	0.00	5.4	1185	991	0.0
50	0.26	0.04	5.0	1163	954	-0.2
100	0.50	0.09	4.7	1140	917	-0.4
150	0.72	0.13	4.3	1118	881	-0.7
200	0.92	0.18	3.9	1095	846	-0.9
250	1.10	0.22	3.4	1073	812	-1.1
300	1.26	0.27	3.0	1050	778	-1.3
350	1.40	0.32	2.5	1028	746	-1.6
400	1.51	0.37	2.1	1006	714	-1.8
450	1.61	0.42	1.6	983	682	-2.0
500	1.67	0.47	1.0	961	652	-2.2
550	1.71	0.52	0.5	939	622	-2.4
600	1.73	0.57	-0.1	917	594	-2.6
650	1.71	0.63	-0.7	896	566	-2.8
700	1.67	0.69	-1.4	874	539	-3.0
750	1.59	0.74	-2.0	852	512	-3.3
800	1.48	0.80	-2.7	830	487	-3.5
850	1.33	0.86	-3.5	809	461	-3.7
900	1.15	0.93	-4.3	787	437	-3.9
950	0.93	0.99	-5.1	765	413	-4.1
1000	0.66	1.06	-6.0	744	390	-4.3
1050	0.35	1.13	-6.9	722	368	-4.5
1100	0.00	1.20	-7.9	701	346	-4.7

TYPE FL 1 CALIBER 7.62 MM AVERAGE DENSITY 16.70 GRAMS/CC.

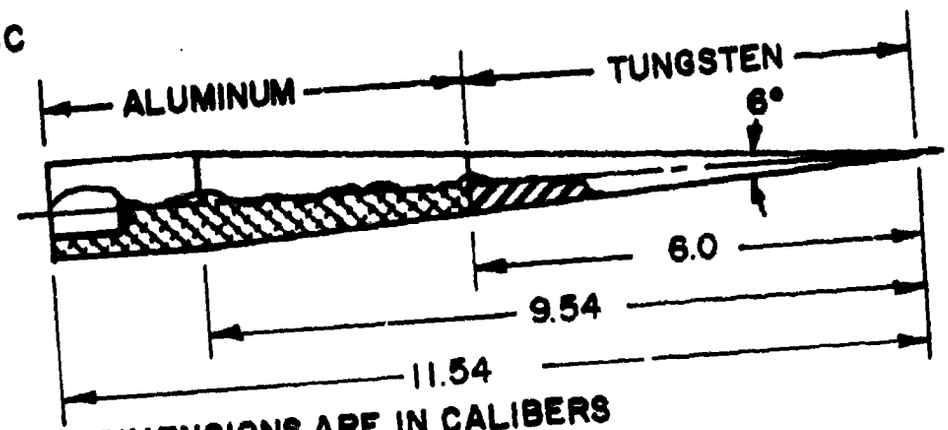
PROJ. WT 1.411 GRAMS PROJ. DIA. 1.78 MM IMPULSE 2.1 LB. SEC.

DRAG RDCR. WT. 0.000 GRAMS CHG. WT. 3.99 GRAMS SABOT WT. 1.306 GRAMS

TWIST RATE NA PCT. DRAG CHANGE / (DEG. YAW)**2 1.16

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	2.9	1537	3209	0.0
0	0.00	0.00	2.9	1537	1667	0.0
50	0.14	0.03	2.7	1513	1616	-0.2
100	0.27	0.07	2.5	1490	1566	-0.5
150	0.38	0.10	2.3	1467	1517	-0.7
200	0.49	0.13	2.0	1443	1470	-0.9
250	0.59	0.17	1.8	1420	1423	-1.2
300	0.67	0.20	1.5	1397	1377	-1.4
350	0.74	0.24	1.3	1374	1332	-1.6
400	0.80	0.28	1.0	1351	1287	-1.8
450	0.85	0.31	0.7	1328	1244	-2.1
500	0.88	0.35	0.4	1305	1201	-2.3
550	0.90	0.39	0.1	1282	1159	-2.5
600	0.90	0.43	-0.2	1259	1118	-2.7
650	0.89	0.47	-0.5	1236	1078	-3.0
700	0.86	0.51	-0.8	1213	1039	-3.2
750	0.82	0.55	-1.2	1191	1000	-3.4
800	0.76	0.60	-1.5	1168	963	-3.6
850	0.68	0.64	-1.9	1146	927	-3.8
900	0.58	0.68	-2.3	1124	891	-4.0
950	0.47	0.73	-2.7	1101	855	-4.3
1000	0.33	0.77	-3.1	1079	821	-4.5
1050	0.18	0.82	-3.6	1056	787	-4.7
1100	0.00	0.87	-4.0	1034	754	-4.9

SC



ALL DIMENSIONS ARE IN CALIBERS

Axial Radius of Gyration = 0.231 Cal.
Transverse Radius of Gyration = 2.62 Cal.
Center of Mass (Nose) = 6.56 Cal.

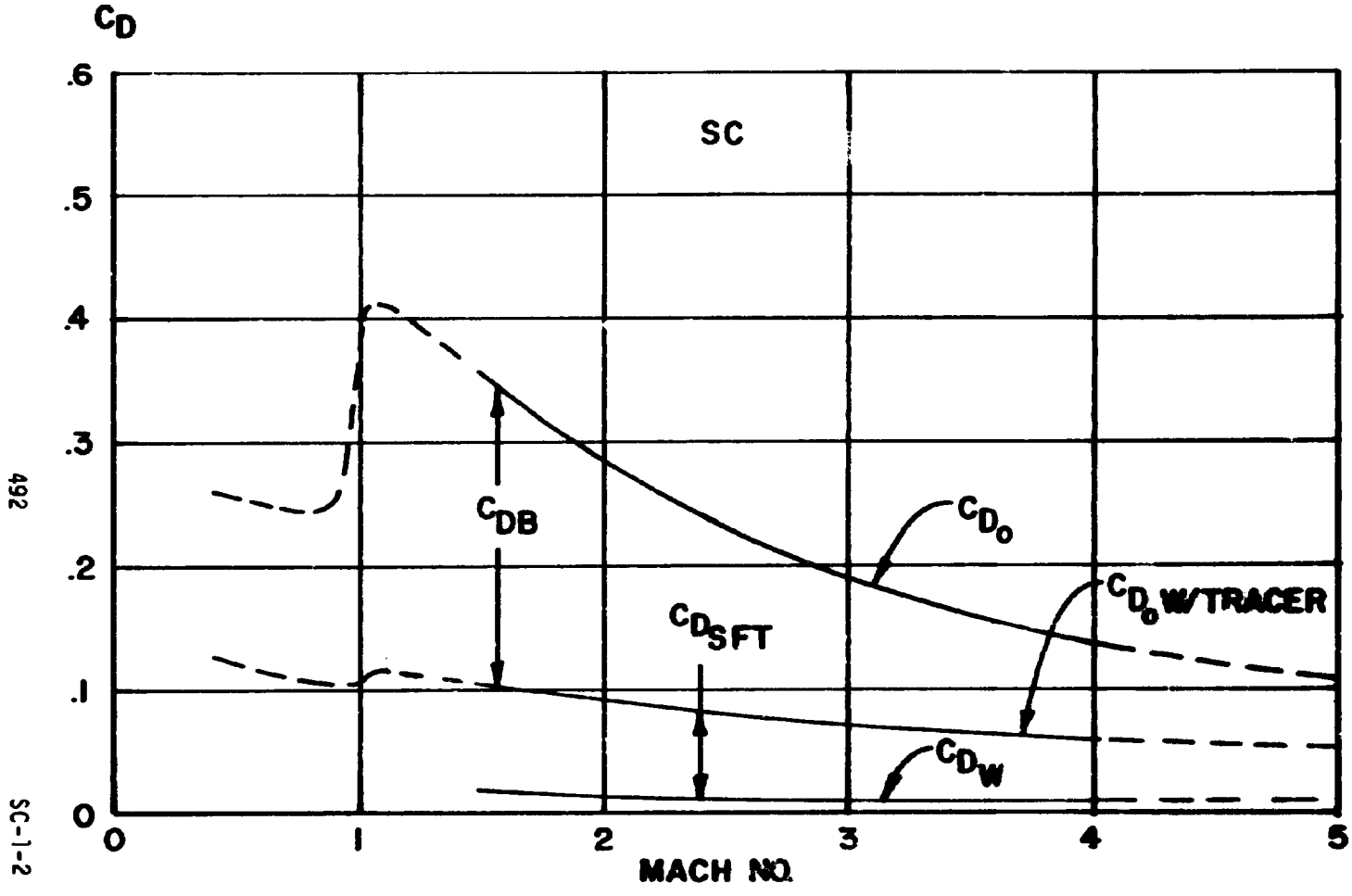
Wetted Area = 21.29 Cal.^{2}
Volume = 4.07 Cal.^{3}
Length = 11.54 Cal.

Mach No.	C_{D_0}	C_{D_B}	C_{D_0} (Tracer)	$C_{D_{SF_T}}$	C_{D_W}	C_{N_α}	CP_N	C_{M_α}
.4 *	.262		.127			2.00	7.15	-1.18
.8 *	.243		.108			2.00	7.15	-1.18
.9 *	.250		.105			2.03	7.15	-1.20
1.0 *	.364		.106			2.34	7.17	-1.43
1.05*	.407		.112			2.90	7.18	-1.80
1.1 *	.407		.112			2.87	7.20	-1.84
1.5	.356	.253	.103	.086	.017	2.73	7.36	-2.18
2.0	.283	.193	.090	.076	.015	2.63	7.43	-2.29
2.5	.229	.149	.080	.067	.013	2.58	7.46	-2.32
3.0	.190	.118	.072	.060	.012	2.53	7.46	-2.28
3.5	.161	.096	.065	.054	.011	2.50	7.46	-2.25
4.0	.139	.079	.060	.049	.011	2.47	7.46	-2.22
4.5 *	.122	.067	.055	.045	.010	2.45	7.46	-2.21
5.0 *	.108	.057	.051	.042	.009	2.44	7.46	-2.20
5.6 *	.096	.048	.048	.039	.009	2.43	7.46	-2.19

$C_{D_{\alpha^2}}$ (Mach = 2.5) = 5.58 (1/radian squared)

*Estimated data

SC-1-1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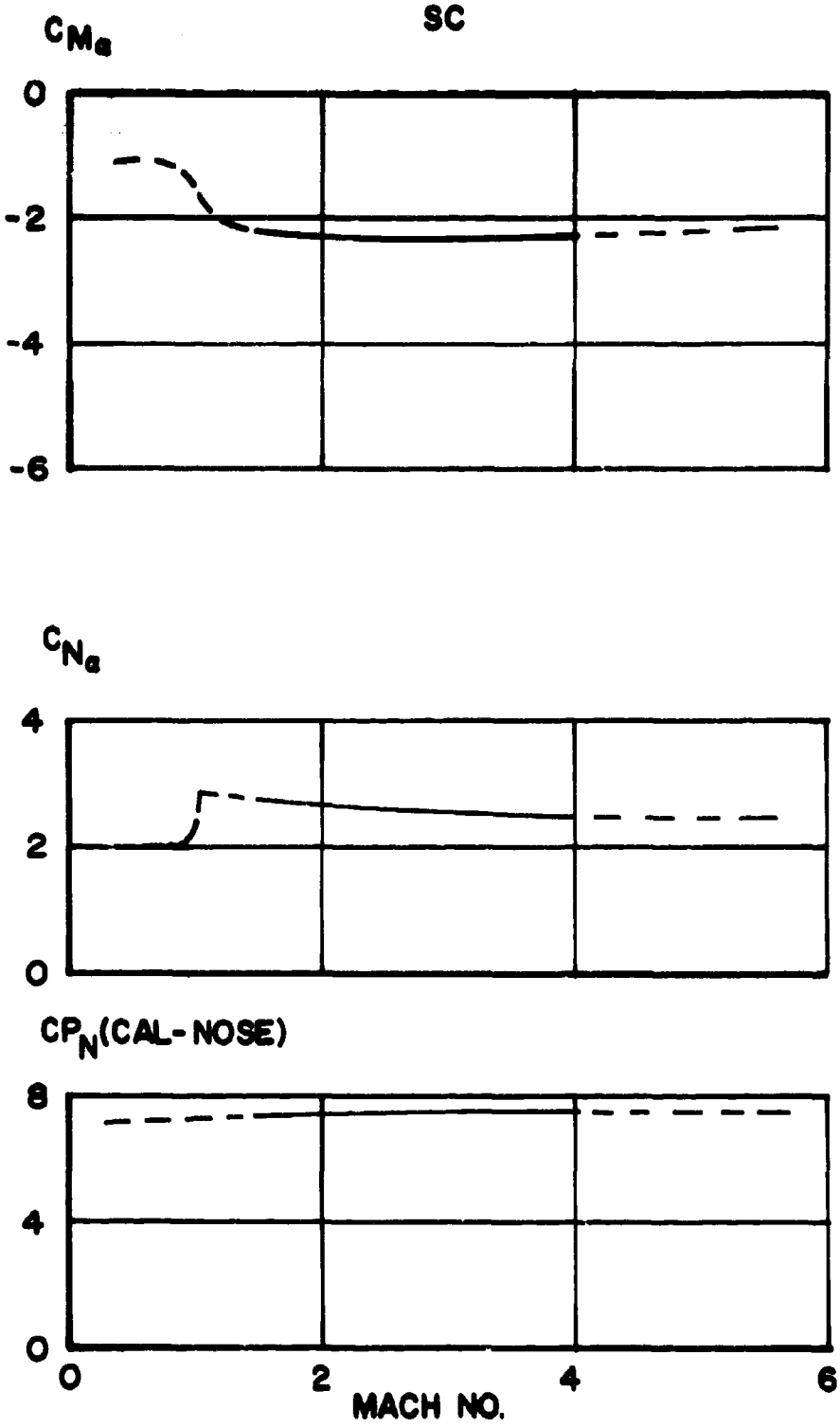
MACH NO.

SC



TYPE SC 1 CALIBER 5.56 MM AVERAGE DENSITY 4.08 GRAMS/CC.

PROJ. WT 0.266 GRAMS PROJ. DIA. 2.54 MM IMPULSE 0.8 LB. SEC.

DRAG RDCR. WT. 0.000 GRAMS CHG. WT. 1.72 GRAMS SABOT WT. 0.434 GRAMS

TWIST RATE NA PCT. DRAG CHANGE / (DEG. YAW)**2 0.74

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	35.0	1713	1027	0.0
0	0.00	0.00	35.0	1713	390	0.0
50	1.72	0.03	34.8	1605	342	-1.1
100	3.42	0.06	34.6	1496	297	-2.2
150	5.12	0.10	34.4	1386	255	-3.3
200	6.80	0.13	34.1	1275	216	-4.5
250	8.47	0.18	33.8	1163	180	-5.6
300	10.12	0.22	33.4	1049	146	-6.8
350	11.75	0.27	32.9	936	116	-8.0
400	13.35	0.33	32.2	822	90	-9.1
450	14.91	0.39	31.3	708	67	-10.3
500	16.43	0.47	30.2	595	47	-11.2
550	17.88	0.56	28.4	488	32	-11.9
600	19.22	0.68	25.8	390	20	-11.9
650	20.39	0.82	21.6	315	13	-10.3
700	21.32	0.99	15.8	272	10	-6.7
750	21.92	1.19	8.0	236	7	-5.7
800	22.08	1.42	-2.4	204	6	-5.3
850	21.64	1.68	-16.4	176	4	-5.0
900	20.40	1.99	-35.2	151	3	-4.7
950	18.08	2.35	-60.7	130	2	-4.3
1000	14.29	2.76	-95.2	112	2	-4.0
1050	8.51	3.25	-141.9	96	1	-3.6
1100	0.00	3.82	-204.9	83	1	-3.3

DRAG RDCR. WT. 0.014 GRAMS PCT. DRAG CHANGE / (DEG. YAW)**2 2.12

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	3.3	1713	1027	0.0
0	0.00	0.00	3.3	1713	390	0.0
50	0.16	0.03	3.1	1662	367	-0.5
100	0.30	0.06	2.9	1612	345	-1.0
150	0.44	0.09	2.7	1562	324	-1.5
200	0.57	0.12	2.5	1513	303	-2.0
250	0.69	0.16	2.3	1464	284	-2.4
300	0.79	0.19	2.0	1416	265	-2.9
350	0.89	0.23	1.8	1368	248	-3.3
400	0.97	0.27	1.5	1321	231	-3.8
450	1.04	0.30	1.2	1274	214	-4.2
500	1.09	0.34	0.9	1227	199	-4.6
550	1.13	0.39	0.5	1181	184	-5.0
600	1.15	0.43	0.1	1136	170	-5.4
650	1.16	0.47	-0.3	1091	157	-5.8
700	1.14	0.52	-0.7	1047	144	-6.2
750	1.10	0.57	-1.2	1003	132	-6.5
800	1.03	0.62	-1.7	960	121	-6.9
850	0.94	0.67	-2.3	918	111	-7.2
900	0.82	0.73	-2.9	877	101	-7.5
950	0.67	0.79	-3.6	836	92	-7.7
1000	0.49	0.85	-4.3	797	83	-8.0
1050	0.27	0.91	-5.1	758	75	-8.2
1100	0.00	0.98	-6.1	720	68	-8.4

TYPE SC 1 CALIBER 5.56 MM AVERAGE DENSITY 4.08 GRAMS/CU.
PROJ. WT 0.266 GRAMS PROJ. DIA. 2.54 MM IMPULSE 1.7 LB. SEC.
DRAG RDCR. WT. 0.000 GRAMS CHG. WT. 2.83 GRAMS SABOT WT. 0.434 GRAMS
TWIST RATE NA PCT. DRAG CHANGE / (DEG. YAW)**2 0.74

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	24.5	1837	1181	0.0
0	0.00	0.00	24.5	1837	448	0.0
50	1.20	0.03	24.3	1730	397	-1.1
100	2.39	0.06	24.2	1622	349	-2.2
150	3.57	0.09	24.0	1513	304	-3.3
200	4.74	0.12	23.7	1403	262	-4.4
250	5.90	0.16	23.4	1292	222	-5.6
300	7.05	0.20	23.1	1180	185	-6.7
350	8.18	0.25	22.7	1067	151	-7.9
400	9.28	0.30	22.2	953	121	-9.1
450	10.36	0.35	21.6	839	94	-10.3
500	11.41	0.42	20.8	725	70	-11.4
550	12.41	0.49	19.7	613	50	-12.4
600	13.34	0.58	18.0	504	34	-13.1
650	14.18	0.69	15.6	404	22	-13.2
700	14.86	0.83	11.7	324	14	-11.9
750	15.31	1.00	6.1	278	10	-8.1
800	15.44	1.19	-1.4	241	8	-6.2
850	15.14	1.41	-11.3	209	6	-5.8
900	14.28	1.67	-24.6	180	4	-5.5
950	12.66	1.97	-42.6	155	3	-5.1
1000	10.01	2.32	-66.9	133	2	-4.7
1050	5.96	2.73	-99.8	114	2	-4.3
1100	0.00	3.20	-144.3	98	1	-3.9

DRAG RDCR. WT. 0.014 GRAMS PCT. DRAG CHANGE / (DEG. YAW)**2 2.12

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	2.7	1837	1181	0.0
0	0.00	0.00	2.7	1837	448	0.0
50	0.13	0.03	2.6	1785	423	-0.5
100	0.25	0.06	2.4	1733	399	-1.0
150	0.37	0.09	2.2	1682	375	-1.5
200	0.47	0.12	2.0	1632	353	-2.0
250	0.57	0.15	1.9	1582	331	-2.5
300	0.66	0.18	1.6	1532	311	-3.0
350	0.74	0.21	1.4	1483	291	-3.4
400	0.80	0.25	1.2	1435	272	-3.9
450	0.86	0.28	0.9	1387	254	-4.3
500	0.90	0.32	0.7	1339	237	-4.8
550	0.93	0.36	0.4	1292	220	-5.2
600	0.95	0.40	0.1	1245	204	-5.6
650	0.95	0.44	-0.3	1199	189	-6.0
700	0.93	0.48	-0.6	1153	175	-6.4
750	0.90	0.52	-1.0	1108	161	-6.8
800	0.85	0.57	-1.4	1063	149	-7.1
850	0.77	0.62	-1.9	1020	137	-7.5
900	0.67	0.67	-2.4	976	125	-7.8
950	0.55	0.72	-2.9	934	114	-8.1
1000	0.40	0.77	-3.5	892	104	-8.4
1050	0.22	0.83	-4.2	851	95	-8.6
1100	0.00	0.89	-4.9	811	86	-8.9

TYPE SC 1 CALIBER 5.56 MM AVERAGE DENSITY 4.08 GRAMS/CC.
PROJ. WT 0.266 GRAMS PROJ. DIA. 2.54 MM IMPULSE 2.1 LB. SEC.
DRAG RDCR. WT. 0.000 GRAMS CHG. WT. 5.34 GRAMS SABOT WT. 0.434 GRAMS
TWIST RATE NA PCT. DRAG CHANGE / (DEG. YAW)**2 0.74

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	18.0	1943	1321	0.0
0	0.00	0.00	18.0	1943	502	0.0
50	0.88	0.03	17.9	1836	448	-1.1
100	1.76	0.05	17.7	1729	397	-2.2
150	2.62	0.08	17.6	1621	349	-3.2
200	3.48	0.12	17.4	1512	304	-4.4
250	4.33	0.15	17.1	1402	261	-5.5
300	5.17	0.19	16.8	1292	222	-6.7
350	5.99	0.23	16.5	1180	185	-7.8
400	6.79	0.27	16.1	1066	151	-9.1
450	7.58	0.32	15.6	953	121	-10.2
500	8.33	0.38	15.0	839	93	-11.4
550	9.05	0.44	14.2	725	70	-12.6
600	9.73	0.52	13.1	612	50	-13.5
650	10.34	0.61	11.4	503	34	-14.3
700	10.85	0.72	9.0	404	22	-14.2
750	11.20	0.86	5.1	323	14	-12.9
800	11.33	1.03	-0.5	278	10	-8.9
850	11.13	1.22	-8.0	241	8	-6.7
900	10.51	1.44	-18.0	208	6	-6.2
950	9.33	1.70	-31.3	180	4	-5.8
1000	7.37	2.00	-49.3	155	3	-5.4
1050	4.39	2.35	-73.7	133	2	-4.9
1100	0.00	2.76	-106.6	114	2	-4.5

DRAG RDCR. WT. 0.014 GRAMS PCT. DRAG CHANGE / (DEG. YAW)**2 2.12

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	2.4	1943	1321	0.0
0	0.00	0.00	2.4	1943	502	0.0
50	0.11	0.03	2.2	1890	474	-0.5
100	0.22	0.05	2.1	1837	448	-1.0
150	0.32	0.08	1.9	1785	423	-1.6
200	0.41	0.11	1.8	1733	398	-2.1
250	0.49	0.14	1.6	1682	375	-2.5
300	0.57	0.17	1.4	1632	353	-3.0
350	0.64	0.20	1.2	1582	331	-3.5
400	0.69	0.23	1.0	1532	311	-3.9
450	0.74	0.26	0.8	1483	291	-4.4
500	0.78	0.30	0.6	1435	272	-4.9
550	0.80	0.33	0.3	1386	254	-5.3
600	0.82	0.37	0.0	1339	236	-5.7
650	0.81	0.41	-0.3	1291	220	-6.1
700	0.80	0.45	-0.6	1245	204	-6.5
750	0.77	0.49	-0.9	1198	189	-6.9
800	0.72	0.53	-1.3	1152	175	-7.3
850	0.66	0.58	-1.7	1107	161	-7.7
900	0.57	0.62	-2.1	1063	148	-8.0
950	0.47	0.67	-2.5	1019	136	-8.3
1000	0.34	0.72	-3.0	976	125	-8.7
1050	0.18	0.77	-3.6	933	114	-9.0
1100	0.00	0.81	-4.2	892	104	-9.2

TYPE SC 1 CALIBER 5.56 MM AVERAGE DENSITY 4.08 GRAMS/CC.

PROJ. WT 0.460 GRAMS PROJ. DIA. 3.05 MM IMPULSE 0.8 LB. SEC.

DRAG RDCR. WT. 0.000 GRAMS CHG. WT. 1.63 GRAMS SABOT WT. 0.382 GRAMS

TWIST RATE NA PCT. DRAG CHANGE / (DEG. YAW)**2 0.74

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	19.5	1637	1129	0.0
0	0.00	0.00	19.5	1637	616	0.0
50	0.95	0.03	19.3	1547	550	-0.9
100	1.89	0.06	19.0	1456	487	-1.8
150	2.82	0.10	18.6	1364	428	-2.8
200	3.74	0.14	18.5	1271	372	-3.7
250	4.64	0.18	18.2	1178	319	-4.7
300	5.53	0.22	17.8	1084	270	-5.7
350	6.39	0.27	17.3	989	225	-6.6
400	7.23	0.32	16.7	894	184	-7.6
450	8.04	0.38	16.0	799	147	-8.5
500	8.81	0.45	15.2	704	114	-9.5
550	9.53	0.53	14.0	611	86	-10.3
600	10.19	0.62	12.4	520	62	-11.0
650	10.75	0.72	10.2	435	43	-11.2
700	11.18	0.85	7.0	358	30	-11.0
750	11.42	1.00	2.4	306	22	-8.9
800	11.40	1.17	-3.7	271	17	-6.2
850	11.05	1.37	-11.3	241	13	-5.4
900	10.27	1.59	-21.1	214	10	-5.2
950	8.95	1.84	-33.5	189	8	-4.9
1000	6.94	2.12	-49.4	167	6	-4.7
1050	4.04	2.44	-69.7	147	5	-4.4
1100	0.00	2.80	-95.9	130	4	-4.1

DRAG RDCR. WT. 0.025 GRAMS PCT. DRAG CHANGE / (DEG. YAW)**2 2.12

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	3.2	1637	1129	0.0
0	0.00	0.00	3.2	1637	616	0.0
50	0.15	0.03	3.0	1595	585	-0.4
100	0.30	0.06	2.8	1554	555	-0.8
150	0.43	0.10	2.6	1513	526	-1.2
200	0.55	0.13	2.4	1473	498	-1.6
250	0.67	0.16	2.1	1432	471	-2.0
300	0.77	0.20	1.9	1392	444	-2.4
350	0.86	0.24	1.6	1353	419	-2.8
400	0.93	0.27	1.3	1313	395	-3.1
450	0.99	0.31	1.0	1274	371	-3.5
500	1.04	0.35	0.7	1235	349	-3.9
550	1.07	0.39	0.4	1197	327	-4.2
600	1.09	0.43	0.0	1159	307	-4.6
650	1.08	0.48	-0.4	1121	287	-4.9
700	1.06	0.52	-0.8	1084	268	-5.2
750	1.02	0.57	-1.2	1047	250	-5.5
800	0.95	0.62	-1.7	1011	232	-5.8
850	0.87	0.67	-2.2	975	216	-6.1
900	0.75	0.72	-2.7	940	201	-6.4
950	0.61	0.78	-3.3	905	186	-6.6
1000	0.44	0.83	-4.0	871	172	-6.9
1050	0.24	0.89	-4.6	837	158	-7.1
1100	0.00	0.95	-5.4	804	146	-7.3

TYPE SC 1 CALIBER 5.56 MM AVERAGE DENSITY 4.08 GRAMS/CC.

PROJ. WT 0.460 GRAMS PROJ. DIA. 3.05 MM IMPULSE 1.? LB. SEC.

DRAG RDCR. WT. 0.000 GRAMS CHG. WT. 2.72 GRAMS SABOT WT. 0.382 GRAMS

TWIST RATE NA PCT. DRAG CHANGE / (DEG. YAW)**2 0.74

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	12.6	1786	1344	0.0
0	0.00	0.00	12.6	1786	734	0.0
50	0.62	0.03	12.5	1696	662	-0.9
100	1.22	0.06	12.3	1606	594	-1.8
150	1.82	0.09	12.1	1516	529	-2.7
200	2.41	0.13	11.9	1425	467	-3.7
250	2.99	0.16	11.6	1333	409	-4.6
300	3.55	0.20	11.3	1240	354	-5.6
350	4.10	0.24	10.9	1146	302	-6.5
400	4.63	0.29	10.5	1052	255	-7.5
450	5.14	0.34	10.0	957	211	-8.5
500	5.62	0.39	9.4	862	171	-9.5
550	6.07	0.45	8.7	767	135	-10.5
600	6.48	0.52	7.7	673	104	-11.3
650	6.83	0.60	6.4	580	77	-12.1
700	7.11	0.70	4.7	490	55	-12.7
750	7.29	0.81	2.1	408	38	-12.7
800	7.31	0.94	-1.5	337	26	-12.0
850	7.12	1.10	-6.6	294	20	-9.1
900	6.65	1.29	-13.2	261	16	-6.5
950	5.82	1.49	-21.5	231	12	-5.9
1000	4.52	1.72	-32.0	205	10	-5.6
1050	2.64	1.98	-45.5	181	8	-5.3
1100	0.00	2.27	-62.8	160	6	-5.0

DRAG RDCR. WT. 0.025 GRAMS PCT. DRAG CHANGE / (DEG. YAW)**2 2.12

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	2.6	1786	1344	0.0
0	0.00	0.00	2.6	1786	734	0.0
50	0.12	0.03	2.4	1743	699	-0.4
100	0.24	0.06	2.3	1700	664	-0.8
150	0.35	0.09	2.1	1658	632	-1.3
200	0.44	0.12	1.9	1616	600	-1.7
250	0.53	0.15	1.7	1575	569	-2.1
300	0.62	0.18	1.5	1534	539	-2.5
350	0.69	0.21	1.3	1493	511	-2.8
400	0.75	0.25	1.0	1452	483	-3.2
450	0.79	0.28	0.8	1412	456	-3.6
500	0.83	0.32	0.5	1372	431	-4.0
550	0.85	0.36	0.3	1333	406	-4.3
600	0.86	0.39	0.0	1293	382	-4.7
650	0.86	0.43	-0.3	1254	359	-5.1
700	0.84	0.47	-0.7	1216	337	-5.4
750	0.81	0.52	-1.0	1177	316	-5.7
800	0.75	0.56	-1.4	1139	296	-6.1
850	0.68	0.60	-1.8	1102	276	-6.4
900	0.59	0.65	-2.2	1065	258	-6.7
950	0.48	0.70	-2.7	1028	240	-7.0
1000	0.35	0.75	-3.2	992	223	-7.2
1050	0.19	0.80	-3.7	956	207	-7.5
1100	0.00	0.85	-4.2	921	192	-7.8

TYPE SC 1 CALIBER 5.56 MM AVERAGE DENSITY 4.08 GRAMS/CC.
PROJ. WT .0.460 GRAMS PROJ. DIA. 3.05 MM IMPULSE 2.1 LB. SEC.
DRAG RDCR. WT. 0.000 GRAMS CHG. WT. 5.23 GRAMS SABOT WT. 0.382 GRAMS
TWIST RATE NA PCT. DRAG CHANGE / (DEG. YAW)**2 0.74

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	8.7	1914	1543	0.0
0	0.00	0.00	8.7	1914	843	0.0
50	0.42	0.03	8.6	1825	766	-0.9
100	0.84	0.05	8.4	1736	693	-1.8
150	1.25	0.08	8.2	1646	623	-2.7
200	1.65	0.12	8.1	1556	557	-3.6
250	2.05	0.15	7.8	1465	493	-4.6
300	2.43	0.18	7.6	1373	434	-5.5
350	2.80	0.22	7.3	1280	377	-6.5
400	3.15	0.26	7.0	1187	324	-7.5
450	3.49	0.31	6.6	1093	275	-8.5
500	3.80	0.35	6.1	999	229	-9.4
550	4.09	0.41	5.6	904	188	-10.5
600	4.36	0.47	4.9	809	150	-11.4
650	4.58	0.53	4.0	714	117	-12.4
700	4.76	0.61	2.9	620	88	-13.1
750	4.87	0.69	1.4	529	64	-13.8
800	4.89	0.80	-0.8	443	45	-14.1
850	4.79	0.92	-3.9	365	31	-13.7
900	4.50	1.07	-8.4	310	22	-11.7
950	3.96	1.24	-14.3	275	17	-8.3
1000	3.09	1.44	-21.7	244	14	-6.6
1050	1.81	1.65	-31.2	216	11	-6.2
1100	0.00	1.90	-43.3	191	8	-5.9

DRAG RDCR. WT. 0.025 GRAMS PCT. DRAG CHANGE / (DEG. YAW)**2 2.12

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	2.2	1914	1543	0.0
0	0.00	0.00	2.2	1914	843	0.0
50	0.10	0.03	2.0	1870	804	-0.4
100	0.20	0.05	1.9	1826	766	-0.9
150	0.29	0.08	1.7	1783	730	-1.3
200	0.37	0.11	1.6	1740	695	-1.7
250	0.45	0.14	1.4	1697	661	-2.1
300	0.52	0.17	1.2	1655	628	-2.5
350	0.58	0.20	1.0	1613	596	-2.9
400	0.63	0.23	0.9	1571	566	-3.3
450	0.67	0.26	0.6	1530	536	-3.7
500	0.70	0.30	0.4	1490	508	-4.1
550	0.71	0.33	0.2	1449	480	-4.5
600	0.72	0.36	-0.1	1409	453	-4.8
650	0.72	0.40	-0.3	1369	428	-5.2
700	0.70	0.44	-0.6	1329	403	-5.5
750	0.67	0.48	-0.9	1290	379	-5.9
800	0.63	0.52	-1.2	1251	356	-6.2
850	0.57	0.56	-1.5	1212	335	-6.6
900	0.49	0.60	-1.9	1174	313	-6.9
950	0.40	0.64	-2.2	1136	293	-7.2
1000	0.29	0.69	-2.6	1098	274	-7.5
1050	0.15	0.73	-3.1	1061	256	-7.8
1100	0.00	0.78	-3.5	1025	238	-8.1

TYPE SC 1 CALIBER 5.56 MM AVERAGE DENSITY 4.08 GRAMS/CC.

PROJ. WT 0.518 GRAMS PROJ. DIA. 5.18 MM IMPULSE 0.8 LB. SEC.

DRAG ROCR. WT. 0.000 GRAMS CHG. WT. 1.60 GRAMS SABOT WT. 0.369 GRAMS

TWIST RATE NA PCT. DRAG CHANGE / (DEG. YAW)**2 0.74

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	18.1	1613	1155	0.0
0	0.00	0.00	18.1	1613	674	0.0
50	0.88	0.03	17.8	1526	603	-0.9
100	1.75	0.07	17.6	1438	536	-1.8
150	2.61	0.10	17.4	1349	472	-2.7
200	3.46	0.14	17.1	1260	412	-3.6
250	4.29	0.18	16.7	1170	355	-4.5
300	5.10	0.23	16.3	1080	302	-5.5
350	5.90	0.27	15.9	989	253	-6.4
400	6.67	0.33	15.3	897	209	-7.3
450	7.41	0.39	14.6	806	168	-8.2
500	8.11	0.45	13.7	714	132	-9.1
550	8.76	0.53	12.6	624	101	-9.9
600	9.35	0.61	11.1	536	74	-10.6
650	9.85	0.71	9.1	452	53	-11.0
700	10.23	0.84	6.1	376	37	-10.8
750	10.44	0.98	1.9	318	26	-9.6
800	10.41	1.15	-3.7	282	21	-6.7
850	10.06	1.34	-10.8	252	16	-5.4
900	9.33	1.55	-19.7	224	13	-5.2
950	8.11	1.78	-30.9	199	10	-5.0
1000	6.27	2.05	-45.0	177	8	-4.7
1050	3.63	2.35	-63.1	157	6	-4.5
1100	0.00	2.69	-86.0	139	5	-4.2

DRAG ROCR. WT. 0.028 GRAMS PCT. DRAG CHANGE / (DEG. YAW)**2 2.12

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	3.2	1613	1155	0.0
0	0.00	0.00	3.2	1613	674	0.0
50	0.15	0.03	3.1	1573	641	-0.4
100	0.30	0.06	2.8	1534	609	-0.8
150	0.44	0.10	2.6	1494	578	-1.2
200	0.56	0.13	2.4	1455	548	-1.6
250	0.67	0.17	2.2	1417	519	-1.9
300	0.78	0.20	1.9	1378	491	-2.3
350	0.86	0.24	1.6	1340	464	-2.7
400	0.94	0.28	1.3	1302	437	-3.0
450	1.00	0.31	1.0	1265	412	-3.4
500	1.05	0.35	0.7	1227	388	-3.7
550	1.08	0.40	0.4	1191	365	-4.1
600	1.09	0.44	0.0	1154	342	-4.4
650	1.09	0.48	-0.4	1118	321	-4.7
700	1.07	0.53	-0.8	1082	300	-5.0
750	1.02	0.58	-1.2	1046	281	-5.3
800	0.96	0.62	-1.7	1012	262	-5.6
850	0.87	0.67	-2.2	977	244	-5.9
900	0.75	0.73	-2.7	943	227	-6.1
950	0.61	0.78	-3.3	909	211	-6.4
1000	0.44	0.84	-4.0	876	196	-6.6
1050	0.24	0.89	-4.6	844	181	-6.9
1100	0.00	0.96	-5.4	811	168	-7.1

TYPE SC 1 CALIBER 5.56 MM AVERAGE DENSITY 4.08 GRAMS/CC.
PROJ. WT .0.518 GRAMS PROJ. DIA. 5.18 MM IMPULSE 1.2 LB. SEC.
DRAG RDCR. WT. 0.000 GRAMS CHG. WT. 2.69 GRAMS SABOT WT. 0.369 GRAMS
TWIST RATE NA PCT. DRAG CHANGE / (DEG. YAW)**2 0.74

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	11.4	1770	1391	0.0
0	0.00	0.00	11.4	1770	812	0.0
50	0.56	0.03	11.3	1684	735	-0.9
100	1.11	0.06	11.1	1597	661	-1.7
150	1.65	0.09	10.9	1510	591	-2.6
200	2.18	0.13	10.6	1422	524	-3.5
250	2.69	0.16	10.4	1333	461	-4.4
300	3.20	0.20	10.1	1244	401	-5.4
350	3.69	0.24	9.7	1154	345	-6.3
400	4.16	0.29	9.3	1063	293	-7.3
450	4.61	0.34	8.8	972	245	-8.2
500	5.03	0.39	8.3	880	201	-9.2
550	5.43	0.45	7.5	789	161	-10.1
600	5.78	0.52	6.6	698	126	-11.0
650	6.08	0.60	5.5	608	96	-11.7
700	6.32	0.68	3.9	520	70	-12.4
750	6.46	0.79	1.7	438	50	-12.6
800	6.48	0.91	-1.5	363	34	-12.3
850	6.31	1.06	-6.0	310	25	-10.4
900	5.88	1.24	-11.8	276	20	-7.4
950	5.13	1.43	-19.2	246	16	-6.0
1000	3.98	1.64	-28.5	219	12	-5.7
1050	2.31	1.88	-40.2	195	10	-5.4
1100	0.00	2.16	-55.0	173	6	-5.1

DRAG RDCR. WT. 0.028 GRAMS PCT. DRAG CHANGE / (DEG. YAW)**2 2.12

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	2.6	1770	1391	0.0
0	0.00	0.00	2.6	1770	812	0.0
50	0.12	0.03	2.4	1729	774	-0.4
100	0.24	0.06	2.3	1688	738	-0.8
150	0.35	0.09	2.1	1647	702	-1.2
200	0.44	0.12	1.9	1607	668	-1.6
250	0.53	0.15	1.7	1567	635	-2.0
300	0.61	0.18	1.5	1528	603	-2.4
350	0.68	0.22	1.3	1488	572	-2.7
400	0.74	0.25	1.0	1449	542	-3.1
450	0.79	0.28	0.8	1411	513	-3.5
500	0.83	0.32	0.5	1372	485	-3.8
550	0.85	0.36	0.3	1334	458	-4.2
600	0.86	0.40	0.0	1296	432	-4.5
650	0.85	0.43	-0.3	1259	407	-4.9
700	0.83	0.48	-0.7	1221	383	-5.2
750	0.80	0.52	-1.0	1184	360	-5.5
800	0.75	0.56	-1.4	1148	338	-5.8
850	0.68	0.60	-1.8	1111	317	-6.2
900	0.59	0.65	-2.2	1076	296	-6.4
950	0.47	0.70	-2.6	1040	277	-6.7
1000	0.34	0.75	-3.1	1005	258	-7.0
1050	0.18	0.80	-3.6	971	241	-7.3
1100	0.00	0.85	-4.2	937	224	-7.5

TYPE SC 1 CALIBER 5.56 MM AVERAGE DENSITY 4.08 GRAMS/CC.
PROJ. WT 0.518 GRAMS PROJ. DIA. 3.18 MM IMPULSE 2.1 LB. SEC.
DRAG RDCR. WT. 0.000 GRAMS CHG. WT. 5.20 GRAMS SABOT WT. 0.369 GRAMS
TWIST RATE NA PCT. DRAG CHANGE / (DEG. YAW)**2 0.74

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	7.7	1905	1611	0.0
0	0.00	0.00	7.7	1905	941	0.0
50	0.38	0.03	7.6	1819	858	-0.9
100	0.75	0.06	7.4	1733	779	-1.7
150	1.11	0.08	7.3	1647	703	-2.6
200	1.46	0.12	7.1	1560	631	-3.5
250	1.81	0.15	6.9	1472	562	-4.4
300	2.14	0.18	6.6	1384	496	-5.3
350	2.46	0.22	6.3	1295	435	-6.2
400	2.77	0.26	6.0	1205	377	-7.2
450	3.05	0.30	5.6	1115	322	-8.1
500	3.32	0.35	5.2	1024	272	-9.1
550	3.57	0.40	4.7	933	225	-10.0
600	3.79	0.46	4.0	841	183	-11.0
650	3.98	0.52	3.3	750	146	-11.9
700	4.12	0.59	2.2	659	113	-12.7
750	4.20	0.67	0.9	570	84	-13.4
800	4.21	0.77	-0.9	484	61	-13.9
850	4.11	0.88	-3.5	405	42	-13.9
900	3.86	1.02	-7.2	336	29	-13.1
950	3.40	1.18	-12.3	295	23	-10.2
1000	2.65	1.36	-18.7	263	18	-7.3
1050	1.55	1.56	-26.0	234	14	-6.4
1100	0.00	1.79	-37.1	209	11	-6.1

DRAG RDCR. WT. 0.028 GRAMS PCT. DRAG CHANGE / (DEG. YAW)**2 2.12

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	2.2	1905	1611	0.0
0	0.00	0.00	2.2	1905	941	0.0
50	0.10	0.03	2.0	1863	899	-0.4
100	0.20	0.05	1.9	1821	858	-0.8
150	0.29	0.08	1.7	1779	819	-1.2
200	0.37	0.11	1.6	1737	781	-1.7
250	0.44	0.14	1.4	1696	744	-2.0
300	0.51	0.17	1.2	1656	708	-2.4
350	0.57	0.20	1.0	1615	674	-2.8
400	0.62	0.23	0.8	1575	641	-3.2
450	0.66	0.26	0.6	1536	608	-3.6
500	0.69	0.30	0.4	1496	577	-3.9
550	0.70	0.33	0.2	1457	547	-4.3
600	0.71	0.36	-0.1	1418	518	-4.7
650	0.71	0.40	-0.3	1380	490	-5.0
700	0.69	0.44	-0.6	1341	463	-5.3
750	0.66	0.47	-0.9	1303	437	-5.7
800	0.62	0.51	-1.2	1266	411	-6.0
850	0.56	0.55	-1.5	1228	387	-6.4
900	0.48	0.60	-1.8	1191	364	-6.7
950	0.39	0.64	-2.2	1154	341	-7.0
1000	0.28	0.68	-2.6	1118	320	-7.3
1050	0.15	0.73	-3.0	1082	300	-7.6
1100	0.00	0.77	-3.4	1047	280	-7.8

TYPE SC 1 CALIBER 5.56 MM AVERAGE DENSITY 4.08 GRAMS/CC.

PROJ. WT 0.590 GRAMS PROJ. DIA. 3.30 MM IMPULSE 0.0 LB. SEC.

DRAG ROCK. WT. 0.000 GRAMS CHG. WT. 1.57 GRAMS SABOT WT. 0.356 GRAMS

TWIST RATE NA PCT. DRAG CHANGE / (DEG. YAW)**2 0.74

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	16.4	1583	1185	0.0
0	0.00	0.00	16.4	1583	739	0.0
50	0.80	0.03	16.2	1500	663	-0.8
100	1.59	0.07	15.9	1416	591	-1.7
150	2.36	0.10	15.7	1332	523	-2.5
200	3.12	0.14	15.4	1247	458	-3.4
250	3.87	0.18	15.0	1161	398	-4.3
300	4.60	0.23	14.6	1075	341	-5.2
350	5.31	0.28	14.1	989	288	-6.1
400	5.99	0.33	13.6	902	240	-7.0
450	6.65	0.39	12.9	815	196	-7.8
500	7.26	0.45	12.1	728	156	-8.7
550	7.83	0.53	11.0	642	121	-9.5
600	8.34	0.61	9.6	557	92	-10.2
650	8.78	0.71	7.7	476	67	-10.6
700	9.10	0.82	5.1	402	48	-10.6
750	9.27	0.96	1.4	337	33	-10.1
800	9.22	1.12	-3.7	297	26	-7.7
850	8.90	1.29	-10.0	266	21	-5.6
900	8.23	1.49	-17.9	239	17	-5.2
950	7.13	1.71	-27.7	214	13	-5.0
1000	5.48	1.96	-39.9	191	11	-4.8
1050	3.17	2.24	-55.3	171	9	-4.6
1100	0.00	2.55	-74.6	152	7	-4.3

DRAG ROCK. WT. 0.032 GRAMS PCT. DRAG CHANGE / (DEG. YAW)**2 2.12

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	3.3	1583	1185	0.0
0	0.00	0.00	3.3	1583	739	0.0
50	0.16	0.03	3.1	1545	704	-0.4
100	0.30	0.06	2.9	1508	670	-0.7
150	0.44	0.10	2.7	1471	637	-1.1
200	0.57	0.13	2.4	1434	605	-1.5
250	0.68	0.17	2.2	1397	574	-1.8
300	0.78	0.20	1.9	1361	544	-2.2
350	0.87	0.24	1.6	1325	515	-2.5
400	0.95	0.28	1.3	1289	487	-2.9
450	1.01	0.32	1.0	1253	461	-3.2
500	1.06	0.36	0.7	1218	435	-3.5
550	1.09	0.40	0.4	1183	410	-3.8
600	1.10	0.44	0.0	1148	386	-4.2
650	1.10	0.49	-0.4	1114	363	-4.5
700	1.07	0.53	-0.8	1080	341	-4.8
750	1.03	0.58	-1.3	1046	319	-5.0
800	0.96	0.63	-1.7	1013	299	-5.3
850	0.87	0.68	-2.2	980	280	-5.6
900	0.75	0.73	-2.8	948	261	-5.8
950	0.61	0.79	-3.3	916	244	-6.1
1000	0.44	0.84	-4.0	884	227	-6.3
1050	0.24	0.90	-4.6	853	211	-6.6
1100	0.00	0.96	-5.3	822	196	-6.8

TYPE SC 1 CALIBER 5.56 MM AVERAGE DENSITY 4.08 GRAMS/CC.

PROJ. WT 0.590 GRAMS PROJ. DIA. 3.30 MM IMPULSE 1.2 LB. SEC.

DRAG ROCR. WT. 0.000 GRAMS CHG. WT. 2.65 GRAMS SABOT WT. 0.356 GRAMS

TWIST RATE NA PCT. DRAG CHANGE / (DEG. YAW)**2 0.74

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	10.1	1749	1447	0.0
0	0.00	0.00	10.1	1749	902	0.0
50	0.49	0.03	9.9	1667	819	-0.8
100	0.97	0.06	9.7	1584	740	-1.7
150	1.45	0.09	9.5	1501	665	-2.5
200	1.91	0.13	9.3	1418	593	-3.4
250	2.36	0.16	9.0	1333	524	-4.2
300	2.80	0.20	8.7	1248	459	-5.1
350	3.22	0.24	8.4	1163	399	-6.0
400	3.63	0.29	8.0	1077	342	-6.9
450	4.01	0.34	7.5	990	289	-7.8
500	4.37	0.39	6.9	903	241	-8.7
550	4.70	0.45	6.3	816	196	-9.6
600	4.99	0.51	5.4	729	157	-10.4
650	5.24	0.59	4.4	643	122	-11.2
700	5.42	0.67	3.0	559	92	-11.9
750	5.53	0.77	1.1	478	67	-12.3
800	5.53	0.88	-1.5	403	48	-12.3
850	5.38	1.02	-5.2	338	34	-11.7
900	5.01	1.17	-10.2	298	26	-9.1
950	4.37	1.35	-16.5	267	21	-6.6
1000	3.38	1.55	-24.4	239	17	-5.8
1050	1.96	1.77	-34.1	214	14	-5.6
1100	0.00	2.02	-46.4	191	11	-5.3

DRAG ROCR. WT. 0.032 GRAMS PCT. DRAG CHANGE / (DEG. YAW)**2 2.12

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	2.6	1749	1447	0.0
0	0.00	0.00	2.6	1749	902	0.0
50	0.12	0.03	2.4	1710	862	-0.4
100	0.24	0.06	2.3	1671	823	-0.8
150	0.35	0.09	2.1	1633	785	-1.1
200	0.44	0.12	1.9	1595	748	-1.5
250	0.53	0.15	1.7	1557	713	-1.9
300	0.61	0.18	1.5	1519	678	-2.2
350	0.68	0.22	1.2	1482	645	-2.6
400	0.74	0.25	1.0	1445	613	-3.0
450	0.79	0.29	0.8	1408	582	-3.3
500	0.82	0.32	0.5	1372	552	-3.6
550	0.84	0.36	0.2	1335	522	-4.0
600	0.85	0.40	-0.1	1299	494	-4.3
650	0.85	0.44	-0.4	1264	467	-4.6
700	0.83	0.48	-0.7	1228	441	-5.0
750	0.79	0.52	-1.0	1193	416	-5.3
800	0.74	0.56	-1.4	1158	391	-5.6
850	0.67	0.60	-1.8	1123	368	-5.9
900	0.58	0.65	-2.2	1089	346	-6.2
950	0.47	0.70	-2.6	1055	324	-6.4
1000	0.33	0.74	-3.1	1022	304	-6.7
1050	0.18	0.79	-3.6	989	284	-6.9
1100	0.00	0.85	-4.1	956	266	-7.2

TYPE SC 1 CALIBER 5.56 MM AVERAGE DENSITY 4.08 GRAMS/CC.
PROJ. WT 0.590 GRAMS PROJ. DIA. 5.30 MM IMPULSE 2.1 LB. SEC.
DRAG ROCK. WT. 0.000 GRAMS CHG. WT. 5.15 GRAMS SABOT WT. 0.356 GRAMS
TWIST RATE NA PCT. DRAG CHANGE / (DEG. YAW)**2 0.74

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	6.7	1893	1695	0.0
0	0.00	0.00	6.7	1893	1057	0.0
50	0.32	0.03	6.5	1811	967	-0.8
100	0.64	0.06	6.4	1730	882	-1.6
150	0.95	0.08	6.2	1647	800	-2.5
200	1.25	0.12	6.0	1565	722	-3.3
250	1.54	0.15	5.8	1482	647	-4.2
300	1.82	0.18	5.5	1398	576	-5.0
350	2.09	0.22	5.3	1313	509	-5.9
400	2.34	0.26	5.0	1228	445	-6.8
450	2.58	0.30	4.6	1142	385	-7.7
500	2.80	0.35	4.2	1056	329	-8.6
550	3.00	0.40	3.7	970	277	-9.5
600	3.17	0.45	3.1	882	230	-10.5
650	3.31	0.51	2.4	796	187	-11.3
700	3.41	0.58	1.5	709	148	-12.2
750	3.47	0.65	0.4	623	114	-12.9
800	3.46	0.74	-1.1	539	86	-13.5
850	3.36	0.84	-3.1	459	62	-13.8
900	3.15	0.96	-6.0	386	44	-13.6
950	2.77	1.10	-10.0	326	31	-12.6
1000	2.16	1.26	-15.3	290	25	-9.6
1050	1.26	1.45	-21.9	260	20	-7.1
1100	0.00	1.65	-30.2	233	16	-6.3

DRAG ROCK. WT. 0.032 GRAMS PCT. DRAG CHANGE / (DEG. YAW)**2 2.12

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	2.1	1893	1695	0.0
0	0.00	0.00	2.1	1893	1057	0.0
50	0.10	0.03	2.0	1853	1012	-0.4
100	0.20	0.05	1.9	1813	968	-0.8
150	0.29	0.08	1.7	1773	926	-1.2
200	0.37	0.11	1.5	1734	885	-1.6
250	0.44	0.14	1.4	1695	845	-1.9
300	0.50	0.17	1.2	1656	806	-2.3
350	0.56	0.20	1.0	1618	769	-2.7
400	0.61	0.23	0.8	1580	733	-3.0
450	0.65	0.26	0.6	1542	698	-3.4
500	0.67	0.30	0.4	1505	664	-3.7
550	0.69	0.33	0.2	1467	631	-4.1
600	0.70	0.36	-0.1	1430	599	-4.4
650	0.69	0.40	-0.3	1394	568	-4.8
700	0.67	0.44	-0.6	1357	539	-5.1
750	0.64	0.47	-0.9	1321	510	-5.4
800	0.60	0.51	-1.2	1285	482	-5.8
850	0.54	0.55	-1.5	1249	455	-6.1
900	0.47	0.59	-1.8	1214	430	-6.4
950	0.38	0.63	-2.2	1178	405	-6.7
1000	0.27	0.68	-2.5	1144	381	-7.0
1050	0.15	0.72	-2.9	1109	358	-7.2
1100	0.00	0.77	-3.3	1075	336	-7.5

TYPE SC 1 CALIBER 5.56 MM AVERAGE DENSITY 4.08 GRAMS/CC.
PROJ. WT 0.732 GRAMS PROJ. DIA. 3.56 MM IMPULSE 0.8 LB. SEC.
DRAG RDCR. WT. 0.000 GRAMS CHG. WT. 1.51 GRAMS SABOT WT. 0.918 GRAMS
TWIST RATE NA PCT. DRAG CHANGE / (DEG. YAW)**2 0.74

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	15.1	1529	1227	0.0
0	0.00	0.00	15.1	1529	856	0.0
50	0.74	0.03	14.9	1451	771	-0.8
100	1.46	0.07	14.6	1373	690	-1.6
150	2.18	0.11	14.4	1294	613	-2.4
200	2.88	0.15	14.1	1214	540	-3.2
250	3.56	0.19	13.7	1134	471	-4.0
300	4.22	0.23	13.3	1053	406	-4.8
350	4.86	0.28	12.8	973	346	-5.7
400	5.48	0.34	12.2	891	291	-6.5
450	6.07	0.40	11.5	810	240	-7.3
500	6.62	0.46	10.7	729	195	-8.1
550	7.12	0.53	9.8	649	154	-8.8
600	7.56	0.62	8.3	570	119	-9.5
650	7.93	0.71	6.5	493	89	-10.0
700	8.20	0.82	4.1	422	65	-10.1
750	8.33	0.95	0.8	357	47	-10.0
800	8.27	1.10	-3.8	311	35	-8.4
850	7.95	1.27	-9.5	281	29	-6.0
900	7.32	1.46	-16.6	254	24	-5.1
950	6.31	1.66	-25.2	229	19	-4.9
1000	4.83	1.89	-35.8	206	16	-4.7
1050	2.77	2.15	-48.8	186	13	-4.6
1100	0.00	2.44	-64.9	167	10	-4.4

DRAG RDCR. WT. 0.039 GRAMS PCT. DRAG CHANGE / (DEG. YAW)**2 2.12

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	3.5	1529	1227	0.0
0	0.00	0.00	3.5	1529	856	0.0
50	0.16	0.03	3.2	1494	817	-0.3
100	0.32	0.07	3.0	1460	779	-0.7
150	0.46	0.10	2.8	1425	742	-1.0
200	0.59	0.14	2.5	1391	707	-1.4
250	0.71	0.17	2.3	1357	672	-1.7
300	0.82	0.21	2.0	1324	639	-2.0
350	0.91	0.25	1.7	1290	607	-2.3
400	0.99	0.29	1.4	1257	575	-2.7
450	1.05	0.33	1.1	1224	545	-3.0
500	1.10	0.37	0.7	1191	516	-3.3
550	1.13	0.41	0.3	1159	488	-3.6
600	1.14	0.46	0.0	1127	461	-3.9
650	1.14	0.50	-0.4	1095	435	-4.1
700	1.11	0.55	-0.9	1063	410	-4.4
750	1.06	0.60	-1.3	1032	386	-4.7
800	0.99	0.64	-1.8	1001	363	-4.9
850	0.89	0.70	-2.3	971	341	-5.2
900	0.77	0.75	-2.9	940	319	-5.4
950	0.63	0.80	-3.5	910	299	-5.7
1000	0.45	0.86	-4.1	881	280	-5.9
1050	0.24	0.92	-4.7	852	261	-6.1
1100	0.00	0.98	-5.5	823	244	-6.3

TYPE SC 1 CALIBER 5.56 MM AVERAGE DENSITY 4.08 GRAMS/CC.

PROJ. WT 0.732 GRAMS PROJ. DIA. 3.56 MM IMPULSE 1.2 LB. SEC.

DRAG RDCR. WT. 0.000 GRAMS CHG. WT. 2.58 GRAMS SABOT WT. 0.318 GRAMS

TWIST RATE NA PCT. DRAG CHANGE / (DEG. YAW)**2 0.74

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	8.8	1713	1540	0.0
0	0.00	0.00	8.8	1713	1074	0.0
50	0.43	0.03	8.7	1636	980	-0.8
100	0.85	0.06	8.5	1559	890	-1.5
150	1.26	0.09	8.2	1481	803	-2.3
200	1.66	0.13	8.0	1403	721	-3.1
250	2.05	0.17	7.7	1324	642	-3.9
300	2.42	0.20	7.4	1245	567	-4.8
350	2.78	0.25	7.1	1165	497	-5.6
400	3.12	0.29	6.7	1085	431	-6.4
450	3.45	0.34	6.2	1004	369	-7.3
500	3.74	0.39	5.7	923	312	-8.1
550	4.01	0.45	5.1	842	259	-8.9
600	4.24	0.51	4.3	761	212	-9.7
650	4.44	0.58	3.3	680	169	-10.5
700	4.57	0.66	2.1	600	132	-11.2
750	4.65	0.75	0.5	523	100	-11.7
800	4.63	0.85	-1.6	449	74	-12.0
850	4.48	0.97	-4.6	382	53	-11.8
900	4.17	1.11	-8.6	326	39	-10.9
950	3.63	1.28	-13.9	292	31	-8.3
1000	2.80	1.46	-20.4	264	25	-6.2
1050	1.62	1.66	-28.4	238	21	-5.7
1100	0.00	1.88	-38.2	215	17	-5.4

DRAG RDCR. WT. 0.039 GRAMS PCT. DRAG CHANGE / (DEG. YAW)**2 2.12

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	2.6	1713	1540	0.0
0	0.00	0.00	2.6	1713	1074	0.0
50	0.13	0.03	2.5	1677	1029	-0.4
100	0.24	0.06	2.3	1641	985	-0.7
150	0.35	0.09	2.1	1605	942	-1.1
200	0.45	0.12	1.9	1570	900	-1.4
250	0.54	0.15	1.7	1535	860	-1.7
300	0.62	0.19	1.5	1500	821	-2.1
350	0.69	0.22	1.2	1465	783	-2.4
400	0.75	0.26	1.0	1431	746	-2.8
450	0.79	0.29	0.8	1397	710	-3.1
500	0.83	0.33	0.5	1363	676	-3.4
550	0.85	0.36	0.2	1329	642	-3.7
600	0.86	0.40	-0.1	1295	610	-4.0
650	0.85	0.44	-0.4	1262	578	-4.3
700	0.83	0.48	-0.7	1229	548	-4.6
750	0.79	0.52	-1.0	1196	519	-4.9
800	0.74	0.57	-1.4	1163	490	-5.2
850	0.66	0.61	-1.8	1131	463	-5.5
900	0.57	0.65	-2.2	1099	437	-5.8
950	0.46	0.70	-2.6	1067	412	-6.0
1000	0.33	0.75	-3.1	1036	387	-6.3
1050	0.18	0.80	-3.5	1005	364	-6.5
1100	0.00	0.85	-4.1	974	342	-6.7

TYPE SC 1 CALIBER 5.56 MM AVERAGE DENSITY 4.08 GRAMS/CC.

PROJ. WT 0.732 GRAMS PROJ. DIA. 5.56 MM IMPULSE 2.1 LB. SEC.

DRAG RDCR. WT. 0.000 GRAMS CHG. WT. 5.07 GRAMS SABOT WT. 0.318 GRAMS

TWIST RATE NA PCT. DRAG CHANGE / (DEG. YAW)**2 0.74

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	5.6	1872	1839	0.0
0	0.00	0.00	5.6	1872	1283	0.0
50	0.27	0.03	5.5	1796	1181	-0.8
100	0.54	0.06	5.3	1719	1082	-1.5
150	0.80	0.09	5.1	1643	988	-2.3
200	1.04	0.12	4.9	1565	897	-3.1
250	1.28	0.15	4.7	1488	811	-3.9
300	1.51	0.18	4.5	1410	728	-4.7
350	1.73	0.22	4.2	1331	649	-5.5
400	1.93	0.26	3.9	1252	574	-6.4
450	2.12	0.30	3.6	1172	503	-7.2
500	2.29	0.34	3.2	1092	436	-8.0
550	2.44	0.39	2.7	1011	374	-8.9
600	2.56	0.44	2.2	930	316	-9.7
650	2.66	0.50	1.6	849	264	-10.6
700	2.73	0.56	0.8	767	216	-11.4
750	2.75	0.63	-0.1	687	173	-12.1
800	2.72	0.71	-1.3	607	135	-12.8
850	2.63	0.80	-2.9	529	102	-13.4
900	2.44	0.90	-5.0	455	76	-13.6
950	2.14	1.02	-7.8	387	55	-13.4
1000	1.67	1.16	-11.8	330	40	-12.5
1050	0.98	1.32	-17.0	294	32	-9.9
1100	0.00	1.50	-23.4	266	26	-7.3

DRAG RDCR. WT. 0.039 GRAMS PCT. DRAG CHANGE / (DEG. YAW)**2 2.12

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	2.1	1872	1839	0.0
0	0.00	0.00	2.1	1872	1283	0.0
50	0.10	0.03	2.0	1835	1232	-0.4
100	0.20	0.05	1.8	1797	1182	-0.7
150	0.28	0.08	1.7	1761	1133	-1.1
200	0.36	0.11	1.5	1724	1086	-1.5
250	0.43	0.14	1.3	1688	1040	-1.8
300	0.50	0.17	1.2	1652	996	-2.2
350	0.55	0.20	1.0	1616	952	-2.5
400	0.60	0.23	0.8	1580	910	-2.8
450	0.64	0.26	0.6	1545	870	-3.2
500	0.66	0.30	0.4	1510	830	-3.5
550	0.68	0.33	0.1	1475	792	-3.8
600	0.68	0.37	-0.1	1441	755	-4.1
650	0.68	0.40	-0.3	1406	719	-4.5
700	0.66	0.44	-0.6	1372	684	-4.8
750	0.63	0.47	-0.9	1338	650	-5.1
800	0.59	0.51	-1.2	1304	617	-5.4
850	0.53	0.55	-1.5	1271	585	-5.7
900	0.46	0.59	-1.8	1238	555	-6.0
950	0.37	0.63	-2.1	1205	525	-6.3
1000	0.26	0.67	-2.5	1172	497	-6.5
1050	0.14	0.72	-2.8	1139	469	-6.8
1100	0.00	0.76	-3.2	1107	443	-7.1

TYPE SC 1 CALIBER 5.56 MM AVERAGE DENSITY 4.08 GRAMS/CC.

PROJ. WT 0.814 GRAMS PROJ. DIA. 5.68 MM IMPULSE 0.8 LB. SEC.

DRAG RDCR. WT. 0.000 GRAMS CHG. WT. 1.47 GRAMS SABOT WT. 0.305 GRAMS

TWIST RATE NA PCT. DRAG CHANGE / (DEG. YAW)**2 0.74

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	14.9	1495	1249	0.0
0	0.00	0.00	14.9	1495	909	0.0
50	0.73	0.03	14.7	1419	820	-0.8
100	1.44	0.07	14.4	1344	734	-1.5
150	2.15	0.11	14.2	1267	653	-2.3
200	2.84	0.15	13.8	1190	576	-3.1
250	3.51	0.19	13.4	1113	503	-3.9
300	4.16	0.24	13.0	1035	435	-4.7
350	4.79	0.29	12.5	956	372	-5.5
400	5.39	0.34	11.9	878	314	-6.3
450	5.96	0.40	11.2	800	260	-7.1
500	6.50	0.47	10.3	721	212	-7.8
550	6.98	0.54	9.3	644	169	-8.5
600	7.41	0.63	7.9	567	131	-9.2
650	7.76	0.72	6.1	494	99	-9.7
700	8.01	0.83	3.7	425	73	-9.8
750	8.12	0.96	0.5	362	53	-9.7
800	8.05	1.11	-4.0	315	40	-8.4
850	7.72	1.27	-9.6	285	33	-6.0
900	7.10	1.46	-16.4	258	27	-5.0
950	6.11	1.66	-24.7	234	22	-4.8
1000	4.66	1.89	-34.8	212	18	-4.7
1050	2.67	2.14	-47.1	191	15	-4.5
1100	0.00	2.41	-62.3	173	12	-4.3

DRAG RDCR. WT. 0.044 GRAMS PCT. DRAG CHANGE / (DEG. YAW)**2 2.12

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	3.6	1495	1249	0.0
0	0.00	0.00	3.6	1495	909	0.0
50	0.17	0.03	3.4	1462	868	-0.3
100	0.33	0.07	3.1	1428	829	-0.7
150	0.48	0.10	2.9	1395	791	-1.0
200	0.61	0.14	2.6	1363	753	-1.3
250	0.74	0.18	2.3	1330	717	-1.6
300	0.85	0.22	2.0	1298	682	-1.9
350	0.94	0.25	1.7	1266	649	-2.2
400	1.02	0.29	1.4	1234	616	-2.5
450	1.09	0.34	1.1	1202	584	-2.8
500	1.14	0.38	0.7	1171	554	-3.1
550	1.17	0.42	0.4	1139	524	-3.4
600	1.18	0.47	0.0	1108	496	-3.7
650	1.17	0.51	-0.5	1078	468	-4.0
700	1.14	0.56	-0.9	1048	442	-4.2
750	1.09	0.61	-1.4	1018	417	-4.5
800	1.02	0.66	-1.9	988	392	-4.7
850	0.92	0.71	-2.4	959	369	-5.0
900	0.80	0.76	-3.0	929	347	-5.2
950	0.64	0.82	-3.6	901	325	-5.5
1000	0.46	0.87	-4.2	872	305	-5.7
1050	0.25	0.93	-4.9	844	285	-5.9
1100	0.00	0.99	-5.6	817	267	-6.1

TYPE SC 1 CALIBER 5.56 MM AVERAGE DENSITY 4.08 GRAMS/CC.
PROJ. WT 0.814 GRAMS PROJ. DIA. 3.68 MM IMPULSE 1.2 LB. SEC.
DRAG RDCR. WT. 0.000 GRAMS CHG. WT. 2.54 GRAMS SABOT WT. 0.305 GRAMS
TWIST RATE NA PCT. DRAG CHANGE / (DEG. YAW)**2 0.74

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	8.5	1688	1593	0.0
0	0.00	0.00	8.5	1688	1159	0.0
50	0.41	0.03	8.3	1614	1059	-0.7
100	0.82	0.06	8.1	1539	963	-1.5
150	1.21	0.10	7.9	1464	872	-2.3
200	1.59	0.13	7.6	1388	784	-3.0
250	1.96	0.17	7.4	1312	700	-3.8
300	2.32	0.21	7.1	1235	621	-4.6
350	2.66	0.25	6.7	1158	546	-5.4
400	2.98	0.29	6.3	1080	475	-6.2
450	3.29	0.34	5.9	1003	409	-7.0
500	3.56	0.39	5.3	924	347	-7.8
550	3.81	0.45	4.7	846	291	-8.6
600	4.03	0.51	3.9	767	239	-9.4
650	4.20	0.58	3.0	689	193	-10.2
700	4.32	0.66	1.8	612	152	-10.8
750	4.38	0.74	0.3	537	117	-11.4
800	4.35	0.84	-1.8	465	88	-11.7
850	4.21	0.96	-4.5	398	64	-11.7
900	3.91	1.10	-8.2	339	47	-11.1
950	3.40	1.25	-13.1	302	37	-9.0
1000	2.62	1.43	-19.2	273	30	-6.6
1050	1.51	1.62	-26.6	248	25	-5.7
1100	0.00	1.83	-35.6	224	20	-5.4

DRAG RDCR. WT. 0.044 GRAMS PCT. DRAG CHANGE / (DEG. YAW)**2 2.12

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	2.7	1688	1593	0.0
0	0.00	0.00	2.7	1688	1159	0.0
50	0.13	0.03	2.5	1653	1111	-0.3
100	0.25	0.06	2.3	1619	1065	-0.7
150	0.36	0.09	2.1	1584	1019	-1.0
200	0.46	0.12	1.9	1550	976	-1.4
250	0.55	0.16	1.7	1517	933	-1.7
300	0.63	0.19	1.5	1483	892	-2.0
350	0.70	0.22	1.3	1450	851	-2.3
400	0.76	0.26	1.0	1417	812	-2.7
450	0.80	0.29	0.8	1384	774	-3.0
500	0.83	0.33	0.5	1351	738	-3.3
550	0.86	0.37	0.2	1318	702	-3.6
600	0.87	0.41	-0.1	1286	668	-3.9
650	0.86	0.45	-0.4	1254	634	-4.2
700	0.84	0.49	-0.7	1222	602	-4.5
750	0.80	0.53	-1.1	1190	570	-4.7
800	0.74	0.57	-1.4	1159	540	-5.0
850	0.67	0.61	-1.8	1127	511	-5.3
900	0.58	0.66	-2.2	1096	483	-5.6
950	0.47	0.71	-2.6	1066	456	-5.8
1000	0.34	0.75	-3.1	1036	430	-6.1
1050	0.18	0.80	-3.6	1006	405	-6.3
1100	0.00	0.85	-4.1	976	381	-6.5

TYPE SC 1 CALIBER 5.56 MM AVERAGE DENSITY 4.08 GRAMS/CC.
PROJ. WT 0.814 GRAMS PROJ. DIA. 5.68 MM IMPULSE 2.1 LB. SEC.
DRAG RDCR. WT. 0.000 GRAMS CHG. WT. 5.02 GRAMS SABOT WT. 0.305 GRAMS
TWIST RATE NA PCT. DRAG CHANGE / (DEG. YAW)**2 0.74

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	5.2	1859	1932	0.0
0	0.00	0.00	5.2	1859	1406	0.0
50	0.25	0.03	5.1	1785	1296	-0.7
100	0.50	0.06	4.9	1711	1191	-1.5
150	0.74	0.09	4.8	1637	1090	-2.2
200	0.97	0.12	4.6	1563	993	-3.0
250	1.19	0.15	4.3	1488	900	-3.8
300	1.40	0.18	4.1	1412	811	-4.5
350	1.60	0.22	3.8	1336	726	-5.3
400	1.78	0.26	3.5	1260	645	-6.1
450	1.95	0.30	3.2	1183	569	-6.9
500	2.10	0.34	2.8	1105	497	-7.8
550	2.24	0.39	2.4	1027	429	-8.6
600	2.34	0.44	1.9	949	366	-9.4
650	2.43	0.50	1.3	870	308	-10.2
700	2.48	0.56	0.5	792	255	-11.0
750	2.49	0.62	-0.3	714	207	-11.8
800	2.45	0.70	-1.4	636	165	-12.4
850	2.36	0.78	-2.8	560	128	-13.0
900	2.18	0.88	-4.7	487	96	-13.4
950	1.90	0.99	-7.1	418	71	-13.4
1000	1.48	1.12	-10.5	356	52	-13.1
1050	0.87	1.27	-15.1	312	39	-11.3
1100	0.00	1.44	-20.8	282	32	-8.6

DRAG RDCR. WT. 0.044 GRAMS PCT. DRAG CHANGE / (DEG. YAW)**2 2.12

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	2.1	1859	1932	0.0
0	0.00	0.00	2.1	1859	1406	0.0
50	0.10	0.03	2.0	1823	1351	-0.4
100	0.20	0.05	1.8	1787	1298	-0.7
150	0.28	0.08	1.7	1752	1246	-1.1
200	0.36	0.11	1.5	1716	1196	-1.4
250	0.43	0.14	1.3	1681	1147	-1.7
300	0.50	0.17	1.2	1646	1099	-2.1
350	0.55	0.20	1.0	1612	1053	-2.4
400	0.60	0.23	0.8	1578	1008	-2.7
450	0.63	0.27	0.6	1544	965	-3.1
500	0.66	0.30	0.4	1510	922	-3.4
550	0.68	0.33	0.1	1476	881	-3.7
600	0.68	0.37	-0.1	1443	841	-4.0
650	0.68	0.40	-0.4	1409	802	-4.3
700	0.66	0.44	-0.6	1376	765	-4.6
750	0.63	0.47	-0.9	1344	728	-4.9
800	0.58	0.51	-1.2	1311	693	-5.2
850	0.53	0.55	-1.5	1279	658	-5.5
900	0.45	0.59	-1.8	1246	625	-5.8
950	0.36	0.63	-2.1	1214	593	-6.1
1000	0.26	0.67	-2.5	1183	562	-6.3
1050	0.14	0.71	-2.8	1151	532	-6.6
1100	0.00	0.76	-3.2	1120	503	-6.9

TYPE SC 1 CALIBER 5.56 MM AVERAGE DENSITY 4.08 GRAMS/CC.

PROJ. WT 0.901 GRAMS PROJ. DIA. 3.81 MM IMPULSE 0.8 LB. SEC.

DRAG RDCR. WT. 0.000 GRAMS CHG. WT. 1.44 GRAMS SABOT WT. 0.292 GRAMS

TWIST RATE NA PCT. DRAG CHANGE / (DEG. YAW)**2 0.74

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	15.0	1458	1267	0.0
0	0.00	0.00	15.0	1458	957	0.0
50	0.73	0.04	14.7	1385	864	-0.7
100	1.45	0.07	14.4	1311	774	-1.5
150	2.15	0.11	14.1	1237	689	-2.2
200	2.83	0.15	13.8	1163	609	-3.0
250	3.50	0.20	13.4	1088	533	-3.8
300	4.15	0.25	12.9	1012	461	-4.5
350	4.78	0.30	12.4	937	395	-5.3
400	5.38	0.35	11.8	861	334	-6.1
450	5.94	0.41	11.1	785	278	-6.8
500	6.47	0.48	10.2	709	227	-7.6
550	6.94	0.55	9.0	635	181	-8.2
600	7.36	0.64	7.6	561	142	-8.9
650	7.70	0.73	5.8	490	108	-9.3
700	7.93	0.84	3.4	424	81	-9.4
750	8.03	0.97	0.2	363	59	-9.3
800	7.94	1.12	-4.2	317	45	-8.2
850	7.61	1.29	-9.7	287	37	-6.0
900	6.98	1.47	-16.4	261	31	-4.9
950	5.98	1.67	-24.5	237	25	-4.7
1000	4.56	1.89	-34.3	216	21	-4.6
1050	2.60	2.13	-46.1	196	17	-4.4
1100	0.00	2.40	-60.5	177	14	-4.3

DRAG RDCR. WT. 0.049 GRAMS PCT. DRAG CHANGE / (DEG. YAW)**2 2.12

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	3.7	1458	1267	0.0
0	0.00	0.00	3.7	1458	957	0.0
50	0.18	0.04	3.5	1426	913	-0.3
100	0.34	0.07	3.3	1394	874	-0.6
150	0.50	0.11	3.0	1363	834	-0.9
200	0.64	0.14	2.7	1331	796	-1.3
250	0.77	0.18	2.4	1300	758	-1.6
300	0.88	0.22	2.1	1269	724	-1.9
350	0.98	0.26	1.8	1238	687	-2.2
400	1.06	0.30	1.5	1207	653	-2.4
450	1.13	0.34	1.1	1177	620	-2.7
500	1.18	0.39	0.8	1147	588	-3.0
550	1.21	0.43	0.4	1117	557	-3.3
600	1.22	0.48	-0.1	1087	528	-3.5
650	1.22	0.52	-0.5	1058	499	-3.8
700	1.19	0.57	-0.9	1029	472	-4.1
750	1.13	0.62	-1.4	1000	445	-4.3
800	1.06	0.67	-1.9	971	420	-4.5
850	0.96	0.72	-2.5	943	395	-4.8
900	0.83	0.78	-3.1	915	372	-5.0
950	0.67	0.83	-3.7	888	350	-5.2
1000	0.48	0.89	-4.3	861	328	-5.4
1050	0.26	0.95	-5.0	834	308	-5.6
1100	0.00	1.01	-5.8	807	288	-5.8

TYPE SC 1 CALIBER 5.56 MM AVERAGE DENSITY 4.08 GRAMS/CC.
PROJ. WT .0.901 GRAMS PROJ. DIA. 3.81 MM IMPULSE 1.2 LB. SEC.
DRAG RDCR. WT. 0.000 GRAMS CHG. WT. 2.49 GRAMS SABOT WT. 0.292 GRAMS
TWIST RATE NA PCT. DRAG CHANGE / (DEG. YAW)**2 0.74

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	8.2	1662	1647	0.0
0	0.00	0.00	8.2	1662	1244	0.0
50	0.40	0.03	8.0	1590	1130	-0.7
100	0.79	0.06	7.8	1518	1038	-1.4
150	1.17	0.10	7.6	1445	940	-2.2
200	1.54	0.13	7.4	1372	848	-2.9
250	1.89	0.17	7.1	1298	759	-3.7
300	2.24	0.21	6.8	1224	675	-4.5
350	2.56	0.25	6.4	1149	595	-5.2
400	2.87	0.30	6.0	1074	520	-6.0
450	3.16	0.34	5.5	999	449	-6.8
500	3.42	0.40	5.0	923	384	-7.6
550	3.65	0.45	4.4	847	323	-8.3
600	3.85	0.52	3.6	772	268	-9.1
650	4.01	0.58	2.7	696	218	-9.8
700	4.12	0.66	1.5	622	174	-10.5
750	4.17	0.74	0.0	548	135	-11.1
800	4.13	0.84	-1.9	478	103	-11.4
850	3.98	0.96	-4.4	412	77	-11.4
900	3.69	1.09	-7.8	353	56	-11.2
950	3.21	1.24	-12.5	311	44	-9.5
1000	2.47	1.41	-18.2	282	36	-7.1
1050	1.42	1.59	-25.1	257	30	-5.7
1100	0.00	1.80	-33.4	233	25	-5.4

DRAG RDCR. WT. 0.049 GRAMS PCT. DRAG CHANGE / (DEG. YAW)**2 2.12

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	2.7	1662	1647	0.0
0	0.00	0.00	2.7	1662	1244	0.0
50	0.13	0.03	2.6	1629	1194	-0.3
100	0.25	0.06	2.4	1595	1145	-0.7
150	0.36	0.09	2.2	1563	1098	-1.0
200	0.47	0.13	2.0	1530	1052	-1.3
250	0.56	0.16	1.7	1497	1007	-1.6
300	0.64	0.19	1.5	1465	963	-1.9
350	0.71	0.23	1.3	1433	921	-2.2
400	0.77	0.26	1.0	1401	880	-2.6
450	0.82	0.30	0.8	1369	840	-2.9
500	0.85	0.34	0.5	1338	801	-3.1
550	0.87	0.37	0.2	1306	763	-3.4
600	0.88	0.41	-0.1	1275	727	-3.7
650	0.87	0.45	-0.4	1244	691	-4.0
700	0.85	0.49	-0.7	1213	657	-4.3
750	0.81	0.53	-1.1	1183	624	-4.6
800	0.76	0.58	-1.5	1152	592	-4.8
850	0.68	0.62	-1.8	1122	561	-5.1
900	0.59	0.67	-2.2	1092	531	-5.4
950	0.47	0.71	-2.7	1063	502	-5.6
1000	0.34	0.76	-3.1	1034	475	-5.8
1050	0.18	0.81	-3.6	1005	448	-6.1
1100	0.00	0.86	-4.1	976	422	-6.3

TYPE SC 1 CALIBER 5.56 MM AVERAGE DENSITY 4.08 GRAMS/CC.

PROJ. WT 0.901 GRAMS PROJ. DIA. 3.81 MM IMPULSE 2.1 LB. SEC.

DRAG RDCR. WT. 0.000 GRAMS CHG. WT. 4.97 GRAMS SABOT WT. 0.292 GRAMS

TWIST RATE NA PCT. DRAG CHANGE / (DEG. YAW)**2 0.74

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	5.0	1844	2027	0.0
0	0.00	0.00	5.0	1844	1531	0.0
50	0.24	0.03	4.8	1773	1415	-0.7
100	0.47	0.06	4.6	1701	1304	-1.4
150	0.70	0.09	4.5	1630	1196	-2.2
200	0.91	0.12	4.3	1558	1093	-2.9
250	1.12	0.15	4.0	1485	994	-3.6
300	1.31	0.19	3.8	1412	898	-4.4
350	1.49	0.22	3.5	1339	807	-5.1
400	1.66	0.26	3.2	1265	721	-5.9
450	1.82	0.30	2.9	1191	638	-6.7
500	1.96	0.34	2.5	1116	561	-7.5
550	2.07	0.39	2.1	1040	488	-8.3
600	2.17	0.44	1.6	965	419	-9.0
650	2.24	0.49	1.0	889	356	-9.9
700	2.28	0.55	0.3	813	298	-10.6
750	2.28	0.62	-0.5	738	245	-11.4
800	2.24	0.69	-1.5	663	198	-12.0
850	2.14	0.77	-2.8	588	156	-12.7
900	1.97	0.86	-4.4	516	120	-13.1
950	1.71	0.96	-6.6	448	90	-13.3
1000	1.33	1.08	-9.5	385	67	-13.1
1050	0.77	1.22	-13.5	331	49	-12.3
1100	0.00	1.38	-18.6	298	40	-9.9

DRAG RDCR. WT. 0.049 GRAMS PCT. DRAG CHANGE / (DEG. YAW)**2 2.12

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	2.1	1844	2027	0.0
0	0.00	0.00	2.1	1844	1531	0.0
50	0.10	0.03	2.0	1809	1473	-0.3
100	0.20	0.06	1.8	1775	1417	-0.7
150	0.28	0.08	1.7	1741	1362	-1.0
200	0.36	0.11	1.5	1706	1309	-1.4
250	0.44	0.14	1.3	1673	1257	-1.7
300	0.50	0.17	1.2	1639	1206	-2.0
350	0.55	0.20	1.0	1606	1157	-2.3
400	0.60	0.23	0.8	1573	1109	-2.6
450	0.64	0.27	0.6	1540	1063	-2.9
500	0.66	0.30	0.3	1507	1018	-3.3
550	0.68	0.33	0.1	1475	974	-3.6
600	0.68	0.37	-0.1	1443	931	-3.9
650	0.68	0.40	-0.4	1410	889	-4.2
700	0.66	0.44	-0.6	1378	849	-4.5
750	0.63	0.48	-0.9	1347	810	-4.7
800	0.58	0.51	-1.2	1315	772	-5.0
850	0.52	0.55	-1.5	1284	735	-5.3
900	0.45	0.59	-1.8	1253	699	-5.6
950	0.36	0.63	-2.1	1222	665	-5.9
1000	0.26	0.67	-2.4	1191	631	-6.1
1050	0.14	0.72	-2.8	1161	599	-6.4
1100	0.00	0.76	-3.2	1130	568	-6.6

TYPE SC 1 CALIBER 5.56 MM AVERAGE DENSITY 4.08 GRAMS/CC.

PROJ. WT 1.095 GRAMS PROJ. DIA. 4.06 MM IMPULSE 0.8 LB. SEC.

DRAG RDCR. WT. 0.000 GRAMS CHG. WT. 1.36 GRAMS SABOT WT. 0.251 GRAMS

TWIST RATE NA PCT. DRAG CHANGE / (DEG. YAW)**2 0.74

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	15.4	1383	1289	0.0
0	0.00	0.00	15.4	1383	1047	0.0
50	0.75	0.04	15.1	1314	946	-0.7
100	1.48	0.08	14.8	1245	848	-1.4
150	2.20	0.12	14.5	1175	756	-2.1
200	2.91	0.16	14.1	1105	668	-2.8
250	3.59	0.21	13.8	1034	586	-3.5
300	4.25	0.26	13.1	964	508	-4.2
350	4.88	0.31	12.6	893	436	-5.0
400	5.49	0.37	11.9	822	370	-5.7
450	6.06	0.43	11.1	751	309	-6.4
500	6.58	0.50	10.1	680	253	-7.0
550	7.05	0.58	8.9	611	204	-7.7
600	7.48	0.67	7.4	542	161	-8.2
650	7.78	0.77	5.5	477	124	-8.6
700	7.99	0.88	2.9	415	94	-8.7
750	8.06	1.01	-0.4	359	71	-8.6
800	7.94	1.16	-4.9	317	55	-7.5
850	7.58	1.32	-10.4	289	46	-5.5
900	6.92	1.50	-16.9	264	38	-4.6
950	5.91	1.70	-24.8	242	32	-4.4
1000	4.48	1.92	-34.1	221	27	-4.3
1050	2.54	2.16	-45.4	202	22	-4.2
1100	0.00	2.42	-58.8	184	19	-4.1

DRAG RDCR. WT. 0.059 GRAMS PCT. DRAG CHANGE / (DEG. YAW)**2 2.12

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	4.1	1383	1289	0.0
0	0.00	0.00	4.1	1383	1047	0.0
50	0.20	0.04	3.8	1354	1002	-0.3
100	0.38	0.07	3.6	1324	959	-0.6
150	0.55	0.11	3.3	1295	916	-0.9
200	0.70	0.15	3.0	1266	875	-1.2
250	0.84	0.19	2.7	1237	835	-1.4
300	0.97	0.23	2.3	1208	796	-1.7
350	1.07	0.27	2.0	1180	759	-2.0
400	1.16	0.32	1.6	1152	724	-2.3
450	1.24	0.36	1.2	1124	687	-2.5
500	1.29	0.41	0.8	1096	653	-2.8
550	1.32	0.45	0.4	1068	620	-3.0
600	1.34	0.50	-0.1	1041	588	-3.3
650	1.33	0.55	-0.6	1014	557	-3.5
700	1.29	0.60	-1.0	987	528	-3.7
750	1.23	0.65	-1.6	961	499	-4.0
800	1.15	0.70	-2.1	934	472	-4.2
850	1.04	0.76	-2.7	908	446	-4.4
900	0.90	0.81	-3.3	883	420	-4.6
950	0.72	0.87	-4.0	857	396	-4.8
1000	0.52	0.93	-4.7	832	373	-5.0
1050	0.28	0.99	-5.4	807	351	-5.2
1100	0.00	1.05	-6.2	783	329	-5.4

TYPE SC 1 CALIBER 5.56 MM AVERAGE DENSITY 4.08 GRAMS/CC.

PROJ. WT 1.095 GRAMS PROJ. DIA. 4.06 MM IMPULSE 1.2 LB. SEC.

DRAG RDCR. WT. 0.000 GRAMS CHG. WT. 2.40 GRAMS SABOT WT. 0.253 GRAMS

TWIST RATE NA PCT. DRAG CHANGE / (DEG. YAW)**2 0.74

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	7.9	1608	1742	0.0
0	0.00	0.00	7.9	1608	1416	0.0
50	0.39	0.03	7.7	1540	1299	-0.7
100	0.76	0.06	7.5	1473	1187	-1.4
150	1.12	0.10	7.3	1404	1079	-2.1
200	1.48	0.14	7.0	1335	976	-2.8
250	1.82	0.17	6.7	1266	878	-3.5
300	2.14	0.22	6.4	1196	784	-4.2
350	2.45	0.26	6.0	1126	695	-4.9
400	2.73	0.30	5.6	1056	611	-5.6
450	3.00	0.35	5.1	985	532	-6.3
500	3.24	0.41	4.6	914	458	-7.1
550	3.46	0.46	3.9	844	390	-7.8
600	3.63	0.52	3.1	773	327	-8.5
650	3.77	0.59	2.2	702	270	-9.2
700	3.86	0.67	1.1	632	219	-9.8
750	3.89	0.75	-0.3	563	174	-10.4
800	3.83	0.85	-2.1	496	135	-10.8
850	3.68	0.95	-4.4	434	103	-10.9
900	3.40	1.08	-7.5	376	77	-10.8
950	2.99	1.22	-11.6	327	59	-10.0
1000	2.26	1.38	-16.8	297	48	-7.9
1050	1.30	1.56	-23.0	271	40	-6.0
1100	0.00	1.75	-30.4	248	34	-5.4

DRAG RDCR. WT. 0.059 GRAMS PCT. DRAG CHANGE / (DEG. YAW)**2 2.12

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	2.9	1608	1742	0.0
0	0.00	0.00	2.9	1608	1416	0.0
50	0.14	0.03	2.7	1577	1361	-0.3
100	0.28	0.06	2.5	1546	1308	-0.6
150	0.38	0.10	2.3	1516	1256	-0.9
200	0.49	0.13	2.0	1486	1206	-1.2
250	0.59	0.16	1.8	1455	1156	-1.5
300	0.67	0.20	1.6	1425	1108	-1.8
350	0.74	0.23	1.3	1395	1062	-2.1
400	0.81	0.27	1.1	1366	1016	-2.4
450	0.86	0.31	0.8	1336	972	-2.7
500	0.89	0.34	0.5	1307	929	-2.9
550	0.91	0.38	0.2	1278	888	-3.2
600	0.92	0.42	-0.1	1249	847	-3.5
650	0.91	0.46	-0.4	1220	808	-3.7
700	0.89	0.50	-0.8	1191	770	-4.0
750	0.84	0.55	-1.1	1163	733	-4.3
800	0.78	0.59	-1.5	1134	697	-4.5
850	0.71	0.64	-1.9	1106	662	-4.8
900	0.61	0.68	-2.3	1079	629	-5.0
950	0.49	0.73	-2.8	1051	597	-5.2
1000	0.35	0.78	-3.2	1024	566	-5.4
1050	0.19	0.83	-3.7	997	536	-5.7
1100	0.00	0.88	-4.2	970	507	-5.9

TYPE SC 1 CALIBER 5.56 MM AVERAGE DENSITY 4.08 GRAMS/CC.
PROJ. WT 1.095 GRAMS PROJ. DIA. 4.06 MM IMPULSE 2.1 LB. SEC.
DRAG RDCR. WT. 0.000 GRAMS CHG. WT. 4.86 GRAMS SABOT WT. 0.253 GRAMS
TWIST RATE NA PCT. DRAG CHANGE / (DEG. YAW)**2 0.74

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	4.6	1812	2213	0.0
0	0.00	0.00	4.6	1812	1798	0.0
50	0.22	0.03	4.4	1745	1668	-0.7
100	0.43	0.06	4.2	1678	1542	-1.3
150	0.64	0.09	4.0	1611	1421	-2.0
200	0.83	0.12	3.8	1544	1305	-2.7
250	1.02	0.15	3.6	1476	1192	-3.4
300	1.19	0.19	3.4	1407	1084	-4.1
350	1.35	0.22	3.1	1339	981	-4.8
400	1.50	0.26	2.8	1269	882	-5.5
450	1.63	0.30	2.5	1200	788	-6.3
500	1.75	0.35	2.1	1130	699	-7.0
550	1.85	0.39	1.7	1059	614	-7.7
600	1.93	0.44	1.2	989	535	-8.5
650	1.98	0.49	0.7	918	461	-9.2
700	2.00	0.55	0.0	847	393	-9.9
750	1.99	0.61	-0.7	776	330	-10.6
800	1.94	0.68	-1.6	705	272	-11.3
850	1.84	0.75	-2.8	635	221	-11.9
900	1.68	0.84	-4.1	566	176	-12.5
950	1.44	0.93	-5.9	499	137	-12.9
1000	1.10	1.04	-8.2	436	104	-13.0
1050	0.64	1.16	-11.2	378	78	-12.8
1100	0.00	1.30	-15.3	329	59	-11.9

DRAG RDCR. WT. 0.059 GRAMS PCT. DRAG CHANGE / (DEG. YAW)**2 2.12

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	2.2	1812	2213	0.0
0	0.00	0.00	2.2	1812	1798	0.0
50	0.10	0.03	2.0	1780	1733	-0.3
100	0.20	0.06	1.9	1748	1671	-0.6
150	0.29	0.09	1.7	1716	1609	-1.0
200	0.37	0.11	1.5	1684	1550	-1.3
250	0.44	0.14	1.3	1653	1491	-1.6
300	0.50	0.18	1.2	1621	1435	-1.9
350	0.56	0.21	1.0	1590	1379	-2.2
400	0.60	0.24	0.8	1559	1326	-2.5
450	0.64	0.27	0.6	1529	1273	-2.8
500	0.67	0.30	0.3	1498	1222	-3.0
550	0.68	0.34	0.1	1468	1174	-3.3
600	0.69	0.37	-0.1	1438	1124	-3.6
650	0.68	0.41	-0.4	1407	1077	-3.9
700	0.66	0.44	-0.6	1378	1031	-4.2
750	0.63	0.48	-0.9	1348	986	-4.4
800	0.58	0.52	-1.2	1318	943	-4.7
850	0.52	0.56	-1.5	1289	901	-5.0
900	0.45	0.59	-1.8	1260	860	-5.2
950	0.36	0.63	-2.1	1231	820	-5.5
1000	0.26	0.68	-2.4	1202	781	-5.8
1050	0.14	0.72	-2.8	1173	744	-6.0
1100	0.00	0.76	-3.2	1145	708	-6.2

TYPE SC 1 CALIBER 5.56 MM AVERAGE DENSITY 4.08 GRAMS/CC.

PROJ. WT 1.315 GRAMS PROJ. DIA. 4.32 MM IMPULSE 0.## LB. SEC.

DRAG ROCK. WT. 0.000 GRAMS CHG. WT. 1.28 GRAMS SABOT WT. 0.220 GRAMS

TWIST RATE NA PCT. DRAG CHANGE / (DEG. YAW)**2 0.14

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	16.7	1298	1294	0.0
0	0.00	0.00	16.7	1298	1108	0.0
50	0.81	0.04	16.4	1233	999	-0.7
100	1.61	0.08	16.1	1167	896	-1.3
150	2.39	0.13	15.7	1101	797	-2.0
200	3.15	0.17	15.2	1035	704	-2.7
250	3.89	0.22	14.6	968	617	-3.3
300	4.61	0.28	14.2	902	535	-4.0
350	5.29	0.33	13.5	835	458	-4.7
400	5.94	0.40	12.7	768	388	-5.3
450	6.54	0.46	11.8	702	324	-6.0
500	7.10	0.54	10.7	636	268	-6.6
550	7.60	0.62	9.4	571	214	-7.2
600	8.02	0.71	7.6	508	170	-7.6
650	8.34	0.82	5.4	448	132	-7.9
700	8.55	0.94	2.5	392	101	-7.9
750	8.59	1.08	-1.2	342	77	-7.7
800	8.42	1.23	-6.0	308	62	-6.3
850	8.00	1.40	-11.7	283	53	-4.7
900	7.27	1.58	-18.5	261	45	-4.2
950	6.18	1.78	-26.5	240	38	-4.1
1000	4.66	2.00	-36.0	220	32	-4.0
1050	2.63	2.24	-47.2	202	27	-4.0
1100	0.00	2.50	-60.5	185	23	-3.9

DRAG ROCK. WT. 0.071 GRAMS PCT. DRAG CHANGE / (DEG. YAW)**2 2.12

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	4.6	1298	1294	0.0
0	0.00	0.00	4.6	1298	1108	0.0
50	0.22	0.04	4.3	1271	1061	-0.3
100	0.43	0.08	4.0	1244	1016	-0.5
150	0.62	0.12	3.7	1217	972	-0.8
200	0.79	0.16	3.3	1190	929	-1.1
250	0.95	0.20	3.0	1163	887	-1.3
300	1.09	0.25	2.6	1137	846	-1.6
350	1.21	0.29	2.2	1111	807	-1.8
400	1.31	0.34	1.8	1085	769	-2.1
450	1.39	0.38	1.4	1059	732	-2.3
500	1.45	0.43	0.9	1033	697	-2.5
550	1.49	0.48	0.4	1008	663	-2.8
600	1.50	0.53	-0.1	983	629	-3.0
650	1.49	0.58	-0.6	958	597	-3.2
700	1.45	0.64	-1.2	933	567	-3.4
750	1.38	0.69	-1.8	909	537	-3.7
800	1.29	0.75	-2.4	885	508	-3.9
850	1.16	0.80	-3.0	861	480	-4.1
900	1.00	0.86	-3.7	837	454	-4.2
950	0.81	0.92	-4.5	814	429	-4.4
1000	0.58	0.98	-5.2	791	404	-4.6
1050	0.31	1.05	-6.1	768	381	-4.8
1100	0.00	1.11	-6.9	745	358	-5.0

TYPE SC 1 CALIBER 5.56 MM AVERAGE DENSITY 4.08 GRAMS/CC.
PROJ. WT 1.315 GRAMS PROJ. DIA. 4.32 MM IMPULSE 1.2 LB. SEC.
DRAG RDCR. WT. 0.000 GRAMS CHG. WT. 2.29 GRAMS SABOT WT. 0.220 GRAMS
TWIST RATE NA PCT. DRAG CHANGE / (DEG. YAW)**2 0.74

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	8.1	1543	1828	0.0
0	0.00	0.00	8.1	1543	1566	0.0
50	0.39	0.03	7.9	1479	1439	-0.6
100	0.78	0.07	7.7	1415	1317	-1.3
150	1.15	0.10	7.4	1350	1199	-1.9
200	1.50	0.14	7.1	1285	1087	-2.6
250	1.85	0.18	6.8	1220	979	-3.3
300	2.17	0.22	6.4	1154	876	-3.9
350	2.48	0.27	6.0	1088	779	-4.6
400	2.77	0.32	5.6	1022	687	-5.3
450	3.04	0.37	5.1	955	600	-6.0
500	3.27	0.42	4.5	889	519	-6.7
550	3.48	0.48	3.8	822	444	-7.3
600	3.65	0.54	3.0	755	375	-8.0
650	3.78	0.61	2.0	689	312	-8.6
700	3.86	0.69	0.9	623	256	-9.2
750	3.88	0.77	-0.6	559	205	-9.7
800	3.81	0.87	-2.4	496	162	-10.1
850	3.65	0.98	-4.7	437	126	-10.3
900	3.35	1.10	-7.7	382	96	-10.2
950	2.89	1.24	-11.6	334	73	-9.7
1000	2.21	1.40	-16.6	303	60	-7.9
1050	1.26	1.57	-22.5	279	51	-6.0
1100	0.00	1.76	-29.5	256	43	-5.2

DRAG RDCR. WT. 0.071 GRAMS PCT. DRAG CHANGE / (DEG. YAW)**2 2.12

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	3.1	1543	1828	0.0
0	0.00	0.00	3.1	1543	1566	0.0
50	0.15	0.03	2.9	1514	1507	-0.3
100	0.28	0.07	2.7	1486	1450	-0.6
150	0.41	0.10	2.4	1458	1395	-0.8
200	0.52	0.13	2.2	1429	1340	-1.1
250	0.63	0.17	1.9	1401	1287	-1.4
300	0.72	0.21	1.7	1373	1236	-1.7
350	0.80	0.24	1.4	1345	1185	-1.9
400	0.86	0.28	1.1	1318	1136	-2.2
450	0.91	0.32	0.8	1290	1089	-2.5
500	0.95	0.36	0.5	1263	1042	-2.7
550	0.97	0.40	0.2	1236	997	-3.0
600	0.98	0.44	-0.1	1209	953	-3.2
650	0.97	0.48	-0.5	1182	911	-3.5
700	0.94	0.52	-0.8	1155	869	-3.7
750	0.90	0.57	-1.2	1129	829	-4.0
800	0.84	0.61	-1.6	1102	790	-4.2
850	0.75	0.66	-2.0	1076	753	-4.4
900	0.65	0.71	-2.5	1050	717	-4.6
950	0.52	0.75	-3.0	1025	681	-4.9
1000	0.37	0.80	-3.4	999	648	-5.1
1050	0.20	0.85	-4.0	974	615	-5.3
1100	0.00	0.91	-4.5	949	583	-5.5

TYPE SC 1 CALIBER 5.56 MM AVERAGE DENSITY 4.08 GRAMS/CC.

PROJ. WT 1.315 GRAMS PROJ. DIA. 4.32 MM IMPULSE 2.1 LB. SEC.

DRAG RDCR. WT. 0.000 GRAMS CHG. WT. 4.73 GRAMS SABOT WT. 0.220 GRAMS

TWIST RATE NA PCT. DRAG CHANGE / (DEG. YAW)**2 0.74

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	4.4	1774	2416	0.0
0	0.00	0.00	4.4	1774	2070	0.0
50	0.21	0.03	4.2	1711	1926	-0.6
100	0.41	0.06	4.0	1648	1787	-1.3
150	0.61	0.09	3.8	1585	1652	-1.9
200	0.79	0.12	3.6	1521	1522	-2.5
250	0.97	0.16	3.4	1457	1397	-3.2
300	1.13	0.19	3.2	1393	1276	-3.9
350	1.28	0.23	2.9	1328	1160	-4.5
400	1.42	0.27	2.6	1263	1049	-5.2
450	1.54	0.31	2.3	1198	943	-5.9
500	1.65	0.35	1.9	1132	842	-6.6
550	1.73	0.39	1.5	1066	747	-7.3
600	1.80	0.44	1.0	999	657	-8.0
650	1.84	0.50	0.5	933	572	-8.7
700	1.85	0.55	-0.1	866	493	-9.3
750	1.83	0.61	-0.9	799	420	-10.0
800	1.78	0.68	-1.7	732	353	-10.7
850	1.67	0.75	-2.7	666	292	-11.3
900	1.52	0.83	-4.0	601	238	-11.8
950	1.29	0.91	-5.5	537	190	-12.3
1000	0.98	1.01	-7.5	475	149	-12.6
1050	0.56	1.13	-10.0	417	115	-12.6
1100	0.00	1.25	-13.3	364	87	-12.3

DRAG RDCR. WT. 0.071 GRAMS PCT. DRAG CHANGE / (DEG. YAW)**2 2.12

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	2.2	1774	2416	0.0
0	0.00	0.00	2.2	1774	2070	0.0
50	0.11	0.03	2.1	1744	1999	-0.3
100	0.20	0.06	1.9	1714	1930	-0.6
150	0.30	0.09	1.7	1684	1863	-0.9
200	0.38	0.12	1.6	1655	1797	-1.2
250	0.45	0.15	1.4	1625	1732	-1.5
300	0.52	0.18	1.2	1596	1670	-1.8
350	0.57	0.21	1.0	1567	1609	-2.0
400	0.62	0.24	0.8	1538	1549	-2.3
450	0.65	0.27	0.6	1509	1491	-2.6
500	0.68	0.31	0.3	1481	1434	-2.9
550	0.69	0.34	0.1	1452	1378	-3.1
600	0.70	0.38	-0.1	1424	1324	-3.4
650	0.69	0.41	-0.4	1396	1272	-3.7
700	0.67	0.45	-0.7	1368	1220	-3.9
750	0.64	0.49	-0.9	1340	1170	-4.2
800	0.59	0.52	-1.2	1312	1122	-4.4
850	0.53	0.56	-1.5	1284	1074	-4.7
900	0.46	0.60	-1.8	1257	1028	-4.9
950	0.37	0.64	-2.1	1230	983	-5.2
1000	0.26	0.68	-2.5	1203	939	-5.4
1050	0.14	0.72	-2.8	1176	897	-5.6
1100	0.00	0.77	-3.2	1149	856	-5.9

TYPE SC 1 CALIBER 5.56 MM AVERAGE DENSITY 4.08 GRAMS/CU.

PROJ. WT 1.562 GRAMS PROJ. DIA. 4.57 MM IMPULSE 0.0 LB. SEC.

DRAG RDCR. WT. 0.000 GRAMS CHG. WT. 1.20 GRAMS SABOT WT. 0.175 GRAMS

TWIST RATE NA PCT. DRAG CHANGE / (DEG. YAW)**2 0.74

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	18.5	1214	1280	0.0
0	0.00	0.00	18.5	1214	1151	0.0
50	0.20	0.04	18.2	1152	1036	-0.6
100	1.78	0.09	17.8	1090	927	-1.3
150	2.65	0.13	17.3	1027	824	-1.9
200	3.49	0.18	16.8	954	726	-2.5
250	4.30	0.24	16.3	901	634	-3.2
300	5.09	0.30	15.6	838	549	-3.8
350	5.84	0.36	14.8	775	470	-4.4
400	6.55	0.42	13.9	713	397	-5.0
450	7.21	0.50	12.8	651	331	-5.6
500	7.81	0.58	11.5	589	271	-6.2
550	8.34	0.67	9.9	529	218	-6.6
600	8.79	0.77	7.9	471	173	-7.0
650	9.12	0.88	5.4	417	136	-7.1
700	9.31	1.01	2.1	366	105	-7.2
750	9.32	1.16	-2.1	325	83	-6.6
800	9.10	1.32	-7.3	298	69	-5.0
850	8.60	1.49	-13.4	276	59	-4.1
900	7.78	1.68	-20.5	255	51	-3.9
950	6.58	1.88	-28.8	235	43	-3.8
1000	4.94	2.10	-38.6	217	37	-3.8
1050	2.78	2.34	-50.1	200	31	-3.7
1100	0.00	2.61	-63.6	185	27	-4.6

DRAG RDCR. WT. 0.084 GRAMS PCT. DRAG CHANGE / (DEG. YAW)**2 2.12

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	5.3	1214	1280	0.0
0	0.00	0.00	5.3	1214	1151	0.0
50	0.25	0.04	4.9	1189	1103	-0.3
100	0.48	0.08	4.6	1164	1056	-0.5
150	0.70	0.13	4.2	1139	1011	-0.7
200	0.90	0.17	3.8	1114	966	-1.0
250	1.08	0.22	3.4	1090	924	-1.2
300	1.24	0.26	3.0	1065	882	-1.5
350	1.37	0.31	2.5	1041	842	-1.7
400	1.49	0.36	2.0	1017	803	-1.9
450	1.58	0.41	1.5	994	765	-2.1
500	1.64	0.46	1.0	970	729	-2.3
550	1.69	0.51	0.5	947	693	-2.6
600	1.70	0.57	-0.1	924	659	-2.8
650	1.69	0.62	-0.7	901	626	-3.0
700	1.64	0.68	-1.3	878	595	-3.2
750	1.57	0.73	-2.0	856	564	-3.4
800	1.46	0.79	-2.7	833	535	-3.5
850	1.31	0.85	-3.4	811	506	-3.7
900	1.13	0.92	-4.2	790	479	-3.9
950	0.91	0.98	-5.0	768	453	-4.1
1000	0.65	1.05	-5.9	747	427	-4.2
1050	0.35	1.12	-6.6	726	403	-4.4
1100	0.00	1.19	-7.8	705	380	-4.6

TYPE SC 1 CALIBER 5.56 MM AVERAGE DENSITY 4.08 GRAMS/CC.

PROJ. WT 1.562 GRAMS PROJ. DIA. 4.57 MM IMPULSE 1.2 LB. SEC.

DRAG RDCR. WT. 0.000 GRAMS CHG. WT. 2.18 GRAMS SABOT WT. 0.175 GRAMS

TWIST RATE NA PCT. DRAG CHANGE / (DEG. YAW)**2 0.74

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	8.5	1475	1889	0.0
0	0.00	0.00	8.5	1475	1699	0.0
50	0.41	0.03	8.3	1414	1562	-0.6
100	0.81	0.07	8.0	1353	1430	-1.2
150	1.20	0.11	7.8	1292	1304	-1.8
200	1.58	0.15	7.4	1230	1182	-2.5
250	1.94	0.19	7.1	1169	1066	-3.1
300	2.28	0.23	6.7	1106	956	-3.7
350	2.60	0.28	6.3	1044	851	-4.4
400	2.90	0.33	5.8	981	752	-5.0
450	3.17	0.38	5.2	918	658	-5.7
500	3.42	0.44	4.6	855	571	-6.3
550	3.63	0.50	3.9	792	490	-6.9
600	3.80	0.57	3.0	729	415	-7.6
650	3.93	0.64	2.0	667	348	-8.1
700	4.00	0.72	0.7	605	288	-8.7
750	4.01	0.80	-0.8	545	232	-9.1
800	3.93	0.90	-2.7	486	185	-9.5
850	3.75	1.01	-5.1	431	145	-9.6
900	3.43	1.13	-8.1	379	112	-9.6
950	2.95	1.27	-12.1	335	87	-9.1
1000	2.25	1.43	-17.0	305	72	-7.5
1050	1.28	1.60	-22.9	281	62	-5.7
1100	0.00	1.79	-29.7	260	53	-5.0

DRAG RDCR. WT. 0.084 GRAMS PCT. DRAG CHANGE / (DEG. YAW)**2 2.12

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	3.4	1475	1889	0.0
0	0.00	0.00	3.4	1475	1699	0.0
50	0.16	0.03	3.1	1448	1637	-0.3
100	0.31	0.07	2.9	1422	1576	-0.5
150	0.44	0.10	2.6	1395	1517	-0.8
200	0.57	0.14	2.4	1369	1460	-1.0
250	0.68	0.18	2.1	1343	1404	-1.3
300	0.78	0.22	1.8	1317	1349	-1.6
350	0.86	0.25	1.5	1291	1295	-1.8
400	0.93	0.29	1.2	1265	1243	-2.1
450	0.99	0.33	0.9	1239	1192	-2.3
500	1.03	0.37	0.6	1214	1143	-2.5
550	1.05	0.42	0.2	1189	1095	-2.8
600	1.06	0.46	-0.1	1163	1048	-3.0
650	1.05	0.50	-0.5	1138	1003	-3.2
700	1.02	0.55	-0.9	1113	959	-3.5
750	0.97	0.59	-1.3	1089	916	-3.7
800	0.90	0.64	-1.8	1064	874	-3.9
850	0.81	0.68	-2.2	1040	834	-4.1
900	0.70	0.73	-2.7	1016	795	-4.3
950	0.56	0.78	-3.2	992	758	-4.5
1000	0.40	0.83	-3.7	968	721	-4.7
1050	0.21	0.89	-4.2	945	686	-4.9
1100	0.00	0.94	-4.8	922	652	-5.1

TYPE SC 1 CALIBER 5.56 MM AVERAGE DENSITY 4.08 GRAMS/CU.
PROJ. WT 1.562 GRAMS PROJ. DIA. 4.57 MM IMPULSE 2.1 LB. SEC.
DRAG ROCK. WT. 0.000 GRAMS CHG. WT. 4.59 GRAMS SABOT WT. 0.175 GRAMS
TWIST RATE NA PCT. DRAG CHANGE / (DEG. YAW)**2 0.74

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	4.3	1733	2608	0.0
0	0.00	0.00	4.3	1733	2345	0.0
50	0.21	0.03	4.1	1674	2187	-0.6
100	0.41	0.06	3.9	1614	2034	-1.2
150	0.60	0.09	3.7	1554	1886	-1.8
200	0.78	0.12	3.5	1494	1743	-2.4
250	0.94	0.16	3.3	1433	1604	-3.0
300	1.10	0.19	3.0	1373	1471	-3.7
350	1.25	0.23	2.8	1311	1343	-4.3
400	1.38	0.27	2.5	1250	1220	-4.9
450	1.50	0.31	2.1	1188	1102	-5.6
500	1.59	0.35	1.8	1126	990	-6.2
550	1.67	0.40	1.3	1063	883	-6.9
600	1.73	0.45	0.9	1001	782	-7.5
650	1.77	0.50	0.3	938	687	-8.2
700	1.77	0.56	-0.3	875	598	-8.8
750	1.75	0.61	-1.0	812	515	-9.4
800	1.69	0.68	-1.8	749	438	-10.1
850	1.58	0.75	-2.8	687	368	-10.7
900	1.43	0.82	-3.9	625	305	-11.2
950	1.21	0.91	-5.4	564	248	-11.7
1000	0.91	1.00	-7.1	504	199	-12.0
1050	0.52	1.11	-9.3	448	157	-12.2
1100	0.00	1.23	-12.2	395	122	-12.1

DRAG ROCK. WT. 0.084 GRAMS PCT. DRAG CHANGE / (DEG. YAW)**2 2.12

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	2.3	1733	2608	0.0
0	0.00	0.00	2.3	1733	2345	0.0
50	0.11	0.03	2.2	1705	2268	-0.3
100	0.21	0.06	2.0	1677	2193	-0.6
150	0.31	0.09	1.8	1649	2120	-0.8
200	0.39	0.12	1.6	1621	2048	-1.1
250	0.47	0.15	1.4	1594	1978	-1.4
300	0.53	0.18	1.2	1566	1909	-1.6
350	0.59	0.21	1.0	1539	1842	-1.9
400	0.64	0.25	0.8	1512	1777	-2.2
450	0.67	0.28	0.6	1485	1713	-2.4
500	0.70	0.31	0.3	1458	1651	-2.7
550	0.71	0.35	0.1	1431	1590	-2.9
600	0.72	0.38	-0.1	1405	1530	-3.2
650	0.71	0.42	-0.4	1378	1472	-3.4
700	0.69	0.46	-0.7	1352	1415	-3.7
750	0.65	0.49	-1.0	1326	1360	-3.9
800	0.61	0.53	-1.2	1300	1306	-4.2
850	0.54	0.57	-1.5	1274	1254	-4.4
900	0.47	0.61	-1.9	1248	1202	-4.6
950	0.38	0.65	-2.2	1222	1152	-4.9
1000	0.27	0.69	-2.5	1196	1104	-5.1
1050	0.14	0.73	-2.9	1171	1057	-5.3
1100	0.00	0.78	-3.3	1146	1011	-5.5

TYPE SC 1 CALIBER 5.56 MM AVERAGE DENSITY 4.08 GRAMS/CC.

PROJ. WT 1.840 GRAMS PROJ. DIA. 4.83 MM IMPULSE 0.0 LB. SEC.

DRAG RDCR. WT. 0.000 GRAMS CHG. WT. 1.12 GRAMS SABOT WT. 0.144 GRAMS

TWIST RATE NA PCT. DRAG CHANGE / (DEG. YAW)**2 0.74

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	21.4	1121	1246	0.0
0	0.00	0.00	21.4	1121	1156	0.0
50	1.04	0.05	21.0	1062	1038	-0.6
100	2.06	0.09	20.6	1003	925	-1.2
150	3.06	0.15	20.0	943	817	-1.8
200	4.03	0.20	19.4	884	718	-2.4
250	4.97	0.26	18.7	824	625	-3.0
300	5.87	0.32	17.9	765	538	-3.6
350	6.74	0.39	17.0	705	458	-4.1
400	7.55	0.46	15.9	647	385	-4.7
450	8.30	0.55	14.6	588	319	-5.2
500	8.98	0.63	13.0	531	260	-5.7
550	9.58	0.73	11.0	477	209	-6.1
600	10.07	0.85	8.6	425	166	-6.3
650	10.42	0.97	5.4	376	130	-6.4
700	10.60	1.11	1.4	334	103	-6.1
750	10.56	1.27	-3.5	306	86	-4.8
800	10.29	1.44	-9.2	284	74	-3.8
850	9.65	1.62	-15.9	263	64	-3.6
900	8.69	1.82	-23.7	244	55	-3.5
950	7.31	2.03	-32.7	227	47	-3.5
1000	5.46	2.26	-43.2	210	41	-3.4
1050	3.06	2.51	-55.4	195	35	-3.4
1100	0.00	2.78	-69.7	180	30	-3.3

DRAG RDCR. WT. 0.099 GRAMS PCT. DRAG CHANGE / (DEG. YAW)**2 2.12

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	6.2	1121	1246	0.0
0	0.00	0.00	6.2	1121	1156	0.0
50	0.29	0.05	5.8	1098	1108	-0.2
100	0.57	0.09	5.4	1075	1061	-0.5
150	0.82	0.14	4.9	1052	1016	-0.7
200	1.05	0.19	4.5	1029	974	-0.9
250	1.26	0.24	4.0	1007	929	-1.1
300	1.45	0.29	3.5	985	887	-1.3
350	1.61	0.34	2.9	962	847	-1.5
400	1.74	0.39	2.4	940	808	-1.8
450	1.85	0.44	1.8	919	770	-2.0
500	1.92	0.50	1.2	897	734	-2.2
550	1.97	0.55	0.6	876	699	-2.3
600	1.99	0.61	-0.1	855	665	-2.5
650	1.97	0.67	-0.8	834	632	-2.7
700	1.92	0.73	-1.5	813	600	-2.9
750	1.83	0.79	-2.3	792	569	-3.1
800	1.70	0.86	-3.1	772	540	-3.2
850	1.54	0.92	-4.0	752	511	-3.4
900	1.32	0.99	-4.9	732	484	-3.6
950	1.07	1.06	-5.9	712	458	-3.7
1000	0.76	1.13	-6.9	693	433	-3.9
1050	0.41	1.21	-7.9	674	409	-4.0
1100	0.00	1.28	-9.1	655	386	-4.1

TYPE SC 1 CALIBER 5.56 MM AVERAGE DENSITY 4.08 GRAMS/CC.

PROJ. WT 1.840 GRAMS PROJ. DIA. 4.83 MM IMPULSE 1.2 LB. SEC.

DRAG RDCR. WT. 0.000 GRAMS CHG. WT. 2.06 GRAMS SABOT WT. 0.143 GRAMS

TWIST RATE NA PCT. DRAG CHANGE / (DEG. YAW)**2 0.74

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	9.4	1396	1932	0.0
0	0.00	0.00	9.4	1396	1793	0.0
50	0.46	0.04	9.2	1338	1648	-0.6
100	0.90	0.07	8.9	1280	1508	-1.2
150	1.33	0.11	8.5	1222	1374	-1.8
200	1.74	0.16	8.2	1163	1243	-2.3
250	2.13	0.20	7.8	1104	1122	-3.0
300	2.51	0.25	7.4	1045	1005	-3.5
350	2.86	0.30	6.9	986	895	-4.1
400	3.19	0.35	6.3	927	790	-4.8
450	3.49	0.40	5.7	867	692	-5.4
500	3.76	0.46	5.0	808	600	-5.9
550	3.99	0.53	4.2	748	515	-6.6
600	4.17	0.60	3.2	689	437	-7.1
650	4.31	0.67	2.1	630	366	-7.6
700	4.38	0.76	0.7	572	301	-8.1
750	4.38	0.85	-1.0	516	245	-8.5
800	4.29	0.95	-3.1	462	196	-8.8
850	4.08	1.07	-5.8	411	155	-8.9
900	3.72	1.20	-9.1	364	122	-8.8
950	3.18	1.34	-13.4	325	97	-8.1
1000	2.41	1.50	-18.5	299	82	-6.4
1050	1.36	1.68	-24.5	278	71	-5.0
1100	0.00	1.86	-31.5	258	61	-4.6

DRAG RDCR. WT. 0.099 GRAMS PCT. DRAG CHANGE / (DEG. YAW)**2 2.12

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	3.7	1396	1932	0.0
0	0.00	0.00	3.7	1396	1793	0.0
50	0.18	0.04	3.5	1371	1729	-0.2
100	0.34	0.07	3.2	1346	1666	-0.5
150	0.49	0.11	2.9	1322	1605	-0.7
200	0.63	0.15	2.6	1297	1545	-1.0
250	0.76	0.19	2.3	1273	1486	-1.2
300	0.86	0.23	2.0	1249	1429	-1.5
350	0.96	0.27	1.7	1224	1373	-1.7
400	1.04	0.31	1.4	1200	1319	-1.9
450	1.10	0.35	1.0	1177	1266	-2.1
500	1.14	0.39	0.6	1153	1214	-2.4
550	1.17	0.44	0.2	1129	1164	-2.6
600	1.17	0.48	-0.2	1106	1116	-2.8
650	1.16	0.53	-0.6	1083	1068	-3.0
700	1.13	0.57	-1.0	1060	1022	-3.2
750	1.07	0.62	-1.5	1037	978	-3.4
800	1.00	0.67	-1.9	1014	935	-3.6
850	0.90	0.72	-2.4	991	893	-3.8
900	0.77	0.77	-2.9	969	852	-4.0
950	0.62	0.82	-3.5	947	813	-4.2
1000	0.44	0.88	-4.1	925	775	-4.4
1050	0.24	0.93	-4.7	903	738	-4.6
1100	0.00	0.99	-5.3	881	702	-4.7

TYPE SC 1 CALIBER 5.56 MM AVERAGE DENSITY 4.08 GRAMS/CC.

PROJ. WT 1.840 GRAMS PROJ. DIA. 4.83 MM IMPULSE 0.0 LB. SEC.

DRAG RDCR. WT. 0.000 GRAMS CHG. WT. 1.12 GRAMS SABOT WT. 0.144 GRAMS

TWIST RATE NA PCT. DRAG CHANGE / (DEG. YAW)**2 0.74

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	21.4	1121	1246	0.0
0	0.00	0.00	21.4	1121	1156	0.0
50	1.04	0.05	21.0	1062	103E	-0.6
100	2.06	0.09	20.6	1003	925	-1.2
150	3.06	0.15	20.0	943	817	-1.8
200	4.03	0.20	19.4	884	718	-2.4
250	4.97	0.26	18.7	824	625	-3.0
300	5.87	0.32	17.9	765	538	-3.6
350	6.74	0.39	17.0	705	458	-4.1
400	7.55	0.46	15.9	647	385	-4.7
450	8.30	0.55	14.6	588	319	-5.2
500	8.98	0.63	13.0	531	260	-5.7
550	9.58	0.73	11.0	477	209	-6.1
600	10.07	0.85	8.6	425	166	-6.3
650	10.42	0.97	5.4	376	130	-6.4
700	10.60	1.11	1.4	334	103	-6.1
750	10.56	1.27	-3.5	306	86	-4.8
800	10.29	1.44	-9.2	284	74	-3.8
850	9.83	1.62	-15.9	263	64	-3.6
900	9.09	1.82	-23.7	244	55	-3.5
950	7.31	2.03	-32.7	227	47	-3.5
1000	5.46	2.26	-43.2	210	41	-3.4
1050	3.06	2.51	-55.4	195	35	-3.4
1100	0.00	2.78	-69.7	180	30	-3.3

DRAG RDCR. WT. 0.099 GRAMS PCT. DRAG CHANGE / (DEG. YAW)**2 2.12

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	6.2	1121	1246	0.0
0	0.00	0.00	6.2	1121	1156	0.0
50	0.29	0.05	5.8	1098	1108	-0.2
100	0.57	0.09	5.4	1075	1061	-0.5
150	0.82	0.14	4.9	1052	1016	-0.7
200	1.05	0.19	4.5	1029	972	-0.9
250	1.26	0.24	4.0	1007	929	-1.1
300	1.45	0.29	3.5	985	887	-1.3
350	1.61	0.34	2.9	962	847	-1.5
400	1.74	0.39	2.4	940	808	-1.8
450	1.85	0.44	1.8	919	770	-2.0
500	1.92	0.50	1.2	897	734	-2.2
550	1.97	0.55	0.6	876	699	-2.3
600	1.99	0.61	-0.1	855	665	-2.5
650	1.97	0.67	-0.8	834	632	-2.7
700	1.92	0.73	-1.5	813	600	-2.9
750	1.83	0.79	-2.3	792	569	-3.1
800	1.70	0.86	-3.1	772	540	-3.2
850	1.54	0.92	-4.0	752	511	-3.4
900	1.32	0.99	-4.9	732	484	-3.6
950	1.07	1.06	-5.9	712	458	-3.7
1000	0.76	1.13	-6.9	693	433	-3.9
1050	0.41	1.21	-7.9	674	409	-4.0
1100	0.00	1.28	-9.1	655	386	-4.1

TYPE SC 1 CALIBER 5.56 MM AVERAGE DENSITY 4.08 GRAMS/CC.

PROJ. WT 1.840 GRAMS PROJ. DIA. 4.83 MM IMPULSE 1.2 LB. SEC.

DRAG RDCR. WT. 0.000 GRAMS CHG. WT. 2.06 GRAMS SABOT WT. 0.143 GRAMS

TWIST RATE NA PCT. DRAG CHANGE / (DEG. YAW)**2 0.74

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	9.4	1396	1932	0.0
50	0.00	0.00	9.4	1396	1793	0.0
100	0.46	0.04	9.2	1338	1648	-0.6
150	0.90	0.07	8.9	1280	1506	-1.2
200	1.33	0.11	8.5	1222	1374	-1.8
250	1.74	0.16	8.2	1163	1249	-2.3
300	2.13	0.20	7.8	1104	1122	-3.0
350	2.51	0.25	7.4	1045	1005	-3.5
400	2.86	0.30	6.9	986	895	-4.1
450	3.19	0.35	6.3	927	790	-4.8
500	3.49	0.40	5.7	867	692	-5.4
550	3.76	0.46	5.0	808	600	-5.9
600	3.99	0.53	4.2	748	515	-6.6
650	4.17	0.60	3.2	689	437	-7.1
700	4.31	0.67	2.1	630	366	-7.6
750	4.38	0.76	0.7	572	301	-8.1
800	4.38	0.85	-1.0	516	245	-8.5
850	4.29	0.95	-3.1	462	196	-8.8
900	4.08	1.07	-5.8	411	155	-8.9
950	3.72	1.20	-9.1	364	122	-8.8
1000	3.18	1.34	-13.4	325	97	-8.1
1050	2.41	1.50	-18.5	299	82	-6.4
1100	1.36	1.68	-24.5	278	71	-5.0
1150	0.00	1.86	-31.5	258	61	-4.6

DRAG RDCR. WT. 0.099 GRAMS PCT. DRAG CHANGE / (DEG. YAW)**2 2.12

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	3.7	1396	1932	0.0
50	0.00	0.00	3.7	1396	1793	0.0
100	0.18	0.04	3.5	1371	1729	-0.2
150	0.34	0.07	3.2	1346	1666	-0.5
200	0.49	0.11	2.9	1322	1605	-0.7
250	0.63	0.15	2.6	1297	1545	-1.0
300	0.76	0.19	2.3	1273	1486	-1.2
350	0.88	0.23	1.9	1249	1429	-1.5
400	0.98	0.27	1.5	1224	1373	-1.7
450	1.04	0.31	1.1	1200	1319	-1.9
500	1.10	0.35	0.6	1177	1266	-2.1
550	1.14	0.39	0.0	1153	1214	-2.4
600	1.17	0.44	-0.6	1129	1164	-2.6
650	1.17	0.48	-1.2	1106	1116	-2.8
700	1.16	0.53	-1.9	1083	1068	-3.0
750	1.13	0.57	-2.6	1060	1022	-3.2
800	1.07	0.62	-3.4	1037	978	-3.4
850	1.00	0.67	-4.2	1014	935	-3.6
900	0.90	0.72	-5.1	991	893	-3.8
950	0.77	0.77	-6.1	969	852	-4.0
1000	0.62	0.82	-7.2	947	813	-4.2
1050	0.44	0.88	-8.4	925	775	-4.4
1100	0.24	0.93	-9.7	903	738	-4.6
1150	0.00	0.99	-11.3	881	702	-4.7

TYPE SC 1 CALIBER 5.56 MM AVERAGE DENSITY 4.08 GRAMS/CC.

PROJ. WT 1.840 GRAMS PROJ. DIA. 4.83 MM IMPULSE 2.1 LB. SEC.

DRAG ROCK. WT. 0.000 GRAMS CHG. WT. 4.43 GRAMS SABOT WT. 0.143 GRAMS

TWIST RATE NA PCT. DRAG CHANGE / (DEG. YAW)**2 0.74

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	4.4	1683	2806	0.0
0	0.00	0.00	4.4	1683	2606	0.0
50	0.21	0.03	4.2	1627	2435	-0.6
100	0.41	0.06	4.0	1570	2268	-1.1
150	0.60	0.09	3.8	1513	2107	-1.7
200	0.79	0.13	3.6	1456	1951	-2.3
250	0.96	0.16	3.3	1399	1800	-2.9
300	1.12	0.20	3.1	1341	1655	-3.5
350	1.26	0.24	2.8	1283	1515	-4.1
400	1.39	0.28	2.4	1225	1380	-4.7
450	1.51	0.32	2.1	1166	1251	-5.3
500	1.60	0.36	1.7	1107	1128	-5.9
550	1.68	0.41	1.3	1048	1011	-6.5
600	1.74	0.46	0.8	989	900	-7.1
650	1.77	0.51	0.3	929	795	-7.7
700	1.77	0.57	-0.4	870	696	-8.3
750	1.74	0.63	-1.1	810	604	-8.9
800	1.68	0.69	-1.9	751	519	-9.5
850	1.57	0.76	-2.9	691	440	-10.1
900	1.41	0.83	-4.0	633	369	-10.6
950	1.18	0.92	-5.4	575	304	-11.1
1000	0.89	1.01	-7.0	518	247	-11.5
1050	0.50	1.11	-9.1	464	198	-11.7
1100	0.00	1.23	-11.7	413	157	-11.7

DRAG ROCK. WT. 0.099 GRAMS PCT. DRAG CHANGE / (DEG. YAW)**2 2.12

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	2.4	1683	2806	0.0
0	0.00	0.00	2.4	1683	2606	0.0
50	0.12	0.04	2.3	1657	2524	-0.3
100	0.22	0.06	2.1	1630	2443	-0.5
150	0.32	0.09	1.9	1604	2364	-0.8
200	0.41	0.12	1.7	1578	2287	-1.0
250	0.49	0.15	1.5	1553	2212	-1.3
300	0.56	0.19	1.3	1527	2138	-1.5
350	0.62	0.22	1.1	1501	2066	-1.8
400	0.67	0.25	0.8	1476	1995	-2.0
450	0.70	0.29	0.6	1451	1926	-2.3
500	0.73	0.32	0.4	1425	1858	-2.5
550	0.75	0.36	0.1	1400	1792	-2.8
600	0.75	0.39	-0.2	1375	1728	-3.0
650	0.74	0.43	-0.4	1350	1665	-3.2
700	0.72	0.47	-0.7	1325	1603	-3.5
750	0.68	0.51	-1.0	1301	1543	-3.7
800	0.63	0.55	-1.3	1276	1484	-3.9
850	0.57	0.58	-1.6	1252	1427	-4.1
900	0.49	0.63	-1.9	1227	1371	-4.4
950	0.39	0.67	-2.3	1203	1316	-4.6
1000	0.28	0.71	-2.6	1179	1263	-4.8
1050	0.15	0.75	-3.0	1155	1212	-5.0
1100	0.00	0.79	-3.4	1132	1161	-5.2

TYPE SC 1 CALIBER 5.56 MM AVERAGE DENSITY 4.08 GRAMS/CC.

PROJ. WT 2.138 GRAMS PROJ. DIA. 5.08 MM IMPULSE 0.6 LB. SEC.

DRAG ROCK. WT. 0.000 GRAMS CHG. WT. 1.05 GRAMS SABOT WT. 0.097 GRAMS

TWIST RATE NA PCT. DRAG CHANGE / (DEG. YAW)**2 0.74

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	24.9	1036	1200	0.0
0	0.00	0.00	24.9	1036	1148	0.0
50	1.21	0.05	24.4	980	1026	-0.6
100	2.39	0.10	23.8	923	910	-1.1
150	3.55	0.16	23.2	866	802	-1.7
200	4.67	0.22	22.5	809	700	-2.3
250	5.76	0.28	21.7	752	605	-2.8
300	6.80	0.35	20.7	696	518	-3.4
350	7.80	0.43	19.6	640	438	-3.9
400	8.73	0.51	18.3	585	365	-4.4
450	9.59	0.60	16.7	530	301	-4.9
500	10.37	0.70	14.7	478	244	-5.2
550	11.03	0.81	12.2	428	196	-5.5
600	11.57	0.93	9.2	382	156	-5.6
650	11.94	1.07	5.3	340	124	-5.5
700	12.08	1.22	0.6	311	103	-4.5
750	11.98	1.39	-5.0	289	89	-3.5
800	11.59	1.57	-11.4	269	78	-3.3
850	10.86	1.76	-18.8	251	67	-3.2
900	9.74	1.97	-27.3	234	58	-3.2
950	8.17	2.19	-37.1	217	51	-3.2
1000	6.08	2.43	-48.5	202	44	-3.2
1050	3.39	2.69	-61.7	188	38	-3.1
1100	0.00	2.96	-76.9	175	33	-3.1

DRAG ROCK. WT. 0.115 GRAMS PCT. DRAG CHANGE / (DEG. YAW)**2 2.12

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	7.3	1036	1200	0.0
0	0.00	0.00	7.3	1036	1148	0.0
50	0.34	0.05	6.8	1015	1100	-0.2
100	0.67	0.10	6.3	993	1053	-0.4
150	0.96	0.15	5.8	972	1008	-0.6
200	1.23	0.20	5.2	951	964	-0.8
250	1.48	0.25	4.7	930	921	-1.0
300	1.70	0.31	4.1	910	880	-1.2
350	1.88	0.36	3.5	889	840	-1.4
400	2.04	0.42	2.8	869	801	-1.6
450	2.16	0.48	2.1	849	764	-1.8
500	2.26	0.54	1.4	829	728	-2.0
550	2.31	0.60	0.7	809	693	-2.2
600	2.33	0.66	-0.1	790	659	-2.3
650	2.31	0.73	-0.9	771	627	-2.5
700	2.25	0.79	-1.8	751	595	-2.7
750	2.15	0.86	-2.7	733	565	-2.8
800	2.00	0.93	-3.6	714	536	-3.0
850	1.80	1.00	-4.7	695	508	-3.1
900	1.55	1.07	-5.7	677	481	-3.3
950	1.25	1.15	-6.8	659	455	-3.4
1000	0.89	1.22	-8.0	641	430	-3.5
1050	0.48	1.30	-9.3	624	406	-3.7
1100	0.00	1.39	-10.6	606	383	-3.8

TYPE SC 1 CALIBER 5.56 MM AVERAGE DENSITY 4.08 GRAMS/CC.
PROJ. WT 2.138 GRAMS PROJ. DIA. 5.08 MM IMPULSE 1.2 LB. SEC.
DRAG RDCR. WT. 0.000 GRAMS CHG. WT. 1.95 GRAMS SABOT WT. 0.097 GRAMS
TWIST RATE N4 PCT. DRAG CHANGE / (DEG. YAW)**2 0.74

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	10.7	1318	1942	0.0
0	0.00	0.00	10.7	1318	1857	0.0
50	0.20	0.04	10.4	1262	1704	-0.6
100	1.02	0.08	10.0	1207	1557	-1.1
150	1.50	0.12	9.7	1151	1416	-1.7
200	1.97	0.17	9.3	1095	1281	-2.3
250	2.42	0.21	8.8	1038	1153	-2.8
300	2.84	0.26	8.3	982	1031	-3.4
350	3.24	0.32	7.8	925	915	-4.0
400	3.61	0.37	7.2	868	806	-4.5
450	3.95	0.43	6.5	812	704	-5.1
500	4.25	0.49	5.7	755	609	-5.7
550	4.51	0.56	4.7	698	521	-6.2
600	4.72	0.64	3.6	642	441	-6.7
650	4.87	0.72	2.3	587	368	-7.2
700	4.95	0.81	0.7	533	301	-7.6
750	4.94	0.91	-1.3	480	247	-7.9
800	4.82	1.02	-3.7	431	198	-8.1
850	4.58	1.14	-6.7	384	156	-8.1
900	4.16	1.28	-10.5	342	125	-7.9
950	3.54	1.43	-15.3	312	104	-6.7
1000	2.67	1.60	-20.8	290	90	-5.2
1050	1.50	1.78	-27.2	270	78	-4.4
1100	0.00	1.97	-34.5	252	68	-4.3

DRAG RDCR. WT. 0.115 GRAMS PCT. DRAG CHANGE / (DEG. YAW)**2 2.12

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	4.2	1318	1942	0.0
0	0.00	0.00	4.2	1318	1857	0.0
50	0.20	0.04	3.9	1295	1791	-0.2
100	0.38	0.08	3.6	1271	1726	-0.5
150	0.55	0.12	3.3	1248	1663	-0.7
200	0.71	0.16	3.0	1225	1601	-0.9
250	0.85	0.20	2.6	1203	1541	-1.1
300	0.97	0.24	2.3	1180	1482	-1.4
350	1.07	0.28	1.9	1157	1425	-1.6
400	1.16	0.33	1.5	1135	1369	-1.8
450	1.23	0.37	1.1	1112	1314	-2.0
500	1.28	0.42	0.7	1090	1261	-2.2
550	1.31	0.46	0.3	1068	1210	-2.4
600	1.31	0.51	-0.2	1046	1160	-2.6
650	1.30	0.56	-0.6	1025	1111	-2.8
700	1.26	0.61	-1.1	1003	1064	-3.0
750	1.20	0.66	-1.6	982	1018	-3.2
800	1.11	0.71	-2.2	961	974	-3.4
850	1.00	0.76	-2.7	939	931	-3.6
900	0.86	0.82	-3.3	919	889	-3.8
950	0.69	0.87	-3.9	898	848	-3.9
1000	0.49	0.93	-4.5	877	809	-4.1
1050	0.26	0.99	-5.2	857	771	-4.3
1100	0.00	1.04	-5.9	837	735	-4.4

TYPE SC 1 CALIBER 5.56 MM AVERAGE DENSITY 4.08 GRAMS/CC.

PROJ. WT 2.138 GRAMS PROJ. DIA. 5.08 MM IMPULSE 2.1 LB. SEC.

DRAG RDCR. WT. 0.000 GRAMS CHG. WT. 4.27 GRAMS SABOT WT. 0.097 GRAMS

TWIST RATE NA PCT. DRAG CHANGE / (DEG. YAW)**2 0.74

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	4.6	1632	2977	0.0
0	0.00	0.00	4.6	1632	2848	0.0
50	0.22	0.03	4.4	1578	2663	-0.5
100	0.43	0.06	4.2	1524	2483	-1.1
150	0.63	0.10	3.9	1470	2309	-1.6
200	0.82	0.13	3.7	1415	2140	-2.2
250	0.99	0.17	3.4	1360	1977	-2.7
300	1.16	0.21	3.1	1305	1820	-3.3
350	1.31	0.24	2.8	1249	1669	-3.9
400	1.44	0.29	2.5	1193	1523	-4.5
450	1.56	0.33	2.1	1138	1384	-5.0
500	1.66	0.37	1.7	1081	1250	-5.6
550	1.74	0.42	1.3	1025	1123	-6.2
600	1.79	0.47	0.8	968	1003	-6.8
650	1.82	0.52	0.2	911	886	-7.4
700	1.82	0.58	-0.4	855	781	-7.9
750	1.79	0.64	-1.2	798	681	-8.5
800	1.72	0.71	-2.0	741	587	-9.1
850	1.60	0.78	-3.0	685	502	-9.6
900	1.43	0.85	-4.1	629	423	-10.1
950	1.20	0.94	-5.5	574	352	-10.5
1000	0.90	1.03	-7.2	520	289	-10.9
1050	0.51	1.13	-9.3	468	234	-11.1
1100	0.00	1.24	-11.8	419	188	-11.2

DRAG RDCR. WT. 0.115 GRAMS PCT. DRAG CHANGE / (DEG. YAW)**2 2.12

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	2.6	1632	2977	0.0
0	0.00	0.00	2.6	1632	2848	0.0
50	0.12	0.03	2.4	1607	2760	-0.2
100	0.23	0.06	2.2	1582	2674	-0.5
150	0.34	0.09	2.0	1558	2590	-0.7
200	0.44	0.13	1.8	1533	2508	-1.0
250	0.52	0.16	1.6	1509	2428	-1.2
300	0.59	0.19	1.3	1485	2349	-1.5
350	0.65	0.23	1.1	1460	2271	-1.7
400	0.70	0.26	0.9	1436	2196	-1.9
450	0.74	0.30	0.6	1412	2121	-2.2
500	0.77	0.33	0.4	1388	2049	-2.4
550	0.79	0.37	0.1	1365	1978	-2.6
600	0.79	0.41	-0.2	1341	1909	-2.8
650	0.78	0.44	-0.5	1317	1841	-3.1
700	0.75	0.48	-0.7	1294	1775	-3.3
750	0.72	0.52	-1.0	1271	1710	-3.5
800	0.66	0.56	-1.4	1247	1647	-3.7
850	0.60	0.60	-1.7	1224	1585	-3.9
900	0.51	0.64	-2.0	1201	1525	-4.1
950	0.41	0.68	-2.4	1178	1466	-4.3
1000	0.29	0.73	-2.7	1155	1409	-4.5
1050	0.16	0.77	-3.1	1133	1353	-4.7
1100	0.00	0.81	-3.5	1110	1299	-4.9

TYPE SC 1 CALIBER 5.56 MM AVERAGE DENSITY 4.08 GRAMS/CC.

PROJ. WT 2.815 GRAMS PROJ. DIA. 5.56 MM IMPULSE 0.0 LB. SEC.

DRAG RDCR. WT. 0.000 GRAMS CHG. WT. 0.91 GRAMS SABOT WT. 0.000 GRAMS

TWIST RATE NA PCT. DRAG CHANGE / (DEG. YAW)**2 0.74

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	33.9	870	1065	0.0
0	0.00	0.00	33.9	870	1065	0.0
50	1.69	0.06	33.2	818	943	-0.5
100	3.26	0.12	32.4	767	827	-1.0
150	4.83	0.19	31.5	715	720	-1.5
200	6.33	0.26	30.4	664	621	-2.0
250	7.82	0.34	29.2	613	529	-2.5
300	9.22	0.43	27.8	563	447	-3.0
350	10.55	0.52	26.0	514	372	-3.4
400	11.78	0.62	24.0	467	307	-4.1
450	12.90	0.73	21.4	423	251	-4.0
500	13.88	0.86	18.3	381	204	-4.2
550	14.70	1.00	14.5	343	165	-4.2
600	15.30	1.15	9.8	315	139	-3.5
650	15.66	1.31	4.4	294	122	-2.8
700	15.73	1.49	-1.6	276	107	-2.6
750	15.48	1.68	-8.6	259	94	-2.6
800	14.86	1.88	-16.7	242	83	-2.6
850	13.83	2.09	-25.8	227	73	-2.7
900	12.32	2.32	-36.2	213	64	-2.7
950	10.27	2.56	-48.0	199	56	-2.7
1000	7.59	2.82	-61.5	186	49	-2.6
1050	4.20	3.10	-76.9	174	43	-2.6
1100	0.00	3.40	-94.5	163	37	-2.6

DRAG RDCR. WT. 0.115 GRAMS PCT. DRAG CHANGE / (DEG. YAW)**2 2.12

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	10.3	870	1065	0.0
0	0.00	0.00	10.3	870	1065	0.0
50	0.49	0.06	9.7	852	1020	-0.2
100	0.95	0.12	9.0	834	977	-0.4
150	1.37	0.18	8.2	816	934	-0.5
200	1.76	0.24	7.5	798	893	-0.7
250	2.11	0.30	6.7	781	853	-0.9
300	2.42	0.37	5.8	763	815	-1.0
350	2.68	0.43	4.9	746	778	-1.2
400	2.91	0.50	4.0	729	741	-1.4
450	3.08	0.57	3.1	712	707	-1.5
500	3.21	0.64	2.1	696	673	-1.7
550	3.29	0.72	1.0	679	641	-1.8
600	3.32	0.79	-0.1	663	609	-1.9
650	3.29	0.87	-1.3	647	579	-2.1
700	3.20	0.94	-2.5	631	550	-2.2
750	3.06	1.02	-3.8	615	522	-2.4
800	2.84	1.11	-5.1	599	495	-2.5
850	2.56	1.19	-6.6	584	469	-2.6
900	2.21	1.28	-8.1	568	445	-2.7
950	1.78	1.37	-9.7	553	421	-2.8
1000	1.27	1.46	-11.3	539	398	-3.0
1050	0.68	1.55	-13.1	524	376	-3.1
1100	0.00	1.65	-15.0	510	355	-3.2

TYPE SC 1 CALIBER 5.56 MM AVERAGE DENSITY 4.08 GRAMS/C..

PROJ. WT 2.815 GRAMS PROJ. DIA. 5.56 MM IMPULSE 1.2 LB. SEC.

DRAG RDCR. WT. 0.000 GRAMS CHG. WT. 1.70 GRAMS SABOT WT. 0.000 GRAMS

TWIST RATE NA PCT. DRAG CHANGE / (DEG. YAW)**2 0.74

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	14.5	1151	1865	0.0
0	0.00	0.00	14.5	1151	1865	0.0
50	0.70	0.04	14.1	1100	1703	-0.5
100	1.38	0.09	13.7	1048	1547	-1.0
150	2.05	0.14	13.2	997	1400	-1.5
200	2.68	0.19	12.7	946	1258	-2.1
250	3.29	0.25	12.1	894	1125	-2.6
300	3.87	0.30	11.4	842	998	-3.1
350	4.41	0.36	10.7	791	880	-3.6
400	4.92	0.43	9.8	739	768	-4.1
450	5.38	0.50	8.8	688	666	-4.6
500	5.79	0.58	7.7	637	571	-5.1
550	6.14	0.66	6.3	586	484	-5.5
600	6.42	0.75	4.8	537	406	-6.0
650	6.61	0.84	2.9	489	337	-6.3
700	6.70	0.95	0.5	443	276	-6.5
750	6.67	1.07	-2.3	400	225	-6.6
800	6.48	1.20	-5.2	359	182	-6.6
850	6.10	1.35	-10.0	326	150	-6.1
900	5.49	1.51	-15.1	303	130	-4.9
950	4.62	1.68	-20.9	284	114	-4.0
1000	3.44	1.86	-27.5	267	100	-3.7
1050	1.92	2.05	-35.0	250	86	-3.6
1100	0.00	2.26	-43.6	234	77	-3.6

DRAG RDCR. WT. 0.115 GRAMS PCT. DRAG CHANGE / (DEG. YAW)**2 2.12

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	5.5	1151	1865	0.0
0	0.00	0.00	5.5	1151	1865	0.0
50	0.26	0.04	5.1	1131	1798	-0.2
100	0.50	0.09	4.7	1110	1733	-0.4
150	0.73	0.13	4.3	1090	1670	-0.6
200	0.93	0.18	3.9	1070	1608	-0.8
250	1.11	0.23	3.4	1051	1547	-1.0
300	1.27	0.28	3.0	1031	1489	-1.2
350	1.41	0.32	2.5	1011	1432	-1.4
400	1.52	0.37	2.0	992	1376	-1.5
450	1.61	0.43	1.5	973	1322	-1.7
500	1.68	0.48	1.0	953	1269	-1.9
550	1.71	0.53	0.4	934	1217	-2.1
600	1.72	0.58	-0.2	916	1167	-2.3
650	1.70	0.64	-0.8	897	1119	-2.4
700	1.65	0.70	-1.4	878	1072	-2.6
750	1.57	0.75	-2.1	860	1026	-2.8
800	1.46	0.81	-2.8	841	982	-2.9
850	1.31	0.87	-3.5	823	939	-3.1
900	1.13	0.93	-4.3	805	898	-3.2
950	0.91	1.00	-5.0	787	857	-3.4
1000	0.65	1.06	-5.9	770	818	-3.5
1050	0.34	1.13	-6.7	752	781	-3.7
1100	0.00	1.19	-7.6	735	744	-3.8

TYPE SC 1 CALIBER 5.56 MM AVERAGE DENSITY 4.08 GRAMS/CC.

PROJ. WT 2.815 GRAMS PROJ. DIA. 5.56 MM IMPULSE 2.1 LB. SEC.

DRAG RDCR. WT. 0.000 GRAMS CHG. WT. 3.86 GRAMS SABOT WT. 0.000 GRAMS

TWIST RATE NA PCT. DRAG CHANGE / (DEG. YAW)**2 0.74

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	5.2	1511	3214	0.0
0	0.00	0.00	5.2	1511	3214	0.0
50	0.25	0.03	5.0	1461	3006	-0.5
100	0.49	0.07	4.8	1412	2809	-1.0
150	0.72	0.10	4.5	1362	2610	-1.5
200	0.94	0.14	4.2	1311	2421	-2.0
250	1.14	0.18	3.9	1261	2236	-2.5
300	1.32	0.22	3.6	1210	2062	-3.0
350	1.49	0.26	3.2	1159	1892	-3.6
400	1.65	0.31	2.9	1108	1729	-4.1
450	1.78	0.35	2.4	1057	1573	-4.6
500	1.89	0.40	2.0	1006	1424	-5.1
550	1.98	0.45	1.4	954	1281	-5.7
600	2.04	0.51	0.9	902	1146	-6.2
650	2.07	0.56	0.2	851	1019	-6.7
700	2.07	0.62	-0.5	799	899	-7.2
750	2.03	0.69	-1.4	747	786	-7.8
800	1.94	0.76	-2.3	696	682	-8.2
850	1.81	0.83	-3.4	645	586	-8.7
900	1.62	0.91	-4.7	595	498	-9.1
950	1.35	1.00	-6.1	545	414	-9.5
1000	1.01	1.10	-8.1	497	347	-9.8
1050	0.57	1.20	-10.4	450	286	-9.9
1100	0.00	1.32	-13.1	407	233	-10.0

DRAG RDCR. WT. 0.115 GRAMS PCT. DRAG CHANGE / (DEG. YAW)**2 2.12

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	3.0	1511	3214	0.0
0	0.00	0.00	3.0	1511	3214	0.0
50	0.14	0.03	2.8	1489	3119	-0.2
100	0.27	0.07	2.5	1467	3026	-0.4
150	0.37	0.10	2.3	1445	2934	-0.7
200	0.50	0.14	2.1	1423	2844	-0.9
250	0.60	0.17	1.8	1401	2756	-1.1
300	0.68	0.21	1.5	1380	2670	-1.3
350	0.75	0.24	1.3	1358	2586	-1.5
400	0.81	0.28	1.0	1337	2503	-1.7
450	0.86	0.32	0.7	1315	2422	-1.9
500	0.89	0.36	0.4	1294	2342	-2.1
550	0.91	0.40	0.1	1273	2264	-2.3
600	0.91	0.44	-0.2	1252	2188	-2.5
650	0.90	0.48	-0.5	1231	2114	-2.7
700	0.87	0.52	-0.8	1210	2041	-2.9
750	0.82	0.56	-1.2	1189	1970	-3.1
800	0.76	0.60	-1.6	1168	1900	-3.3
850	0.68	0.64	-1.9	1147	1832	-3.5
900	0.59	0.69	-2.3	1127	1766	-3.7
950	0.47	0.73	-2.7	1107	1701	-3.9
1000	0.33	0.78	-3.1	1086	1638	-4.0
1050	0.18	0.83	-3.6	1066	1576	-4.2
1100	0.00	0.87	-4.0	1046	1516	-4.4

TYPE SC 1 CALIBER 6.50 MM AVERAGE DENSITY 4.08 GRAMS/CC.

PROJ. WT 0.266 GRAMS PROJ. DIA. 2.54 MM IMPULSE 0.8 LB. SEC.

DRAG ROCK. WT. 0.000 GRAMS CHG. WT. 1.54 GRAMS SABOT WT. 0.726 GRAMS

TWIST RATE NA PCT. DRAG CHANGE / (DEG. YAW)**2 0.74

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	54.6	1559	1205	0.0
0	0.00	0.00	54.6	1559	323	0.0
50	2.68	0.03	54.3	1450	279	-1.1
100	5.34	0.07	54.1	1339	238	-2.2
150	7.99	0.11	53.8	1227	200	-3.4
200	10.63	0.15	53.4	1115	165	-4.5
250	13.24	0.20	53.0	1001	133	-5.7
300	15.83	0.25	52.4	887	104	-6.9
350	18.39	0.31	51.7	773	79	-8.0
400	20.91	0.38	50.7	659	58	-9.1
450	23.37	0.47	49.3	548	40	-10.0
500	25.75	0.57	47.3	444	26	-10.4
550	28.00	0.69	44.0	352	16	-10.2
600	30.06	0.85	39.1	296	12	-7.4
650	31.83	1.03	32.5	256	9	-5.3
700	33.23	1.24	23.7	222	7	-5.0
750	34.12	1.48	11.9	191	5	-4.7
800	34.34	1.77	-4.0	165	4	-4.4
850	33.65	2.09	-25.4	142	3	-4.1
900	31.73	2.48	-54.5	122	2	-3.8
950	28.14	2.92	-93.8	105	1	-3.5
1000	22.27	3.44	-147.1	90	1	-3.2
1050	13.28	4.05	-218.8	78	1	-2.9
1100	0.00	4.76	-314.3	68	1	-2.5

DRAG ROCK. WT. 0.014 GRAMS PCT. DRAG CHANGE / (DEG. YAW)**2 2.12

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	4.2	1559	1205	0.0
0	0.00	0.00	4.2	1559	323	0.0
50	0.20	0.03	3.9	1510	303	-0.5
100	0.39	0.07	3.7	1461	283	-1.0
150	0.57	0.10	3.5	1413	265	-1.4
200	0.75	0.14	3.2	1365	247	-1.9
250	0.88	0.17	2.9	1318	230	-2.4
300	1.02	0.21	2.6	1271	214	-2.8
350	1.15	0.25	2.3	1225	198	-3.2
400	1.26	0.29	2.0	1179	184	-3.7
450	1.35	0.34	1.6	1133	170	-4.1
500	1.42	0.38	1.2	1089	156	-4.5
550	1.47	0.43	0.8	1045	144	-4.8
600	1.50	0.48	0.3	1001	132	-5.2
650	1.51	0.53	-0.2	958	121	-5.5
700	1.49	0.58	-0.8	916	110	-5.9
750	1.44	0.64	-1.4	875	101	-6.2
800	1.36	0.70	-2.1	835	91	-6.5
850	1.25	0.76	-2.9	795	83	-6.8
900	1.09	0.82	-3.7	756	75	-7.0
950	0.89	0.89	-4.6	718	67	-7.2
1000	0.65	0.96	-5.6	681	61	-7.4
1050	0.35	1.04	-6.8	645	54	-7.6
1100	0.00	1.12	-8.0	610	48	-7.8

TYPE SC 1 CALIBER 6.50 MM AVERAGE DENSITY 4.08 GRAMS/CC.

PROJ. WT 0.266 GRAMS PROJ. DIA. 2.54 MM IMPULSE 1.2 LB. SEC.

DRAG RDCR. WT. 0.000 GRAMS CHG. WT. 2.62 GRAMS SABOT WT. 0.726 GRAMS

TWIST RATE NA PCT. DRAG CHANGE / (DEG. YAW)**2 0.74

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	33.1	1733	1489	0.0
0	0.00	0.00	33.1	1733	399	0.0
50	1.62	0.03	32.9	1625	351	-1.1
100	3.23	0.06	32.7	1516	305	-2.2
150	4.83	0.10	32.4	1406	263	-3.3
200	6.42	0.13	32.2	1296	223	-4.5
250	7.99	0.17	31.8	1184	186	-5.6
300	9.55	0.22	31.4	1071	152	-6.8
350	11.08	0.27	31.0	957	122	-8.0
400	12.59	0.32	30.3	843	94	-9.1
450	14.06	0.39	29.5	729	71	-10.3
500	15.49	0.46	28.4	616	50	-11.3
550	16.85	0.55	26.8	507	34	-12.0
600	18.12	0.66	24.4	407	22	-12.1
650	19.23	0.80	20.5	325	14	-11.1
700	20.12	0.97	15.0	280	10	-7.4
750	20.69	1.16	7.6	242	8	-5.8
800	20.84	1.38	-2.2	210	6	-5.5
850	20.42	1.64	-15.5	181	4	-5.1
900	19.29	1.94	-33.3	156	3	-4.8
950	17.07	2.29	-57.3	134	2	-4.4
1000	13.49	2.69	-89.4	115	2	-4.1
1050	8.03	3.16	-134.0	99	1	-3.7
1100	0.00	3.71	-193.7	85	1	-3.4

DRAG RDCR. WT. 0.014 GRAMS PCT. DRAG CHANGE / (DEG. YAW)**2 2.12

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	3.2	1733	1489	0.0
0	0.00	0.00	3.2	1733	399	0.0
50	0.15	0.03	3.0	1682	376	-0.5
100	0.29	0.06	2.8	1632	353	-1.0
150	0.43	0.09	2.6	1582	332	-1.5
200	0.55	0.12	2.4	1532	311	-2.0
250	0.67	0.16	2.2	1483	291	-2.4
300	0.77	0.19	1.9	1435	273	-2.9
350	0.86	0.23	1.7	1387	254	-3.4
400	0.94	0.26	1.4	1339	237	-3.8
450	1.01	0.30	1.1	1292	221	-4.3
500	1.06	0.34	0.8	1245	205	-4.7
550	1.10	0.38	0.5	1199	190	-5.1
600	1.12	0.42	0.1	1153	175	-5.5
650	1.12	0.47	-0.3	1108	162	-5.9
700	1.10	0.51	-0.7	1064	149	-6.2
750	1.06	0.56	-1.1	1020	137	-6.6
800	1.00	0.61	-1.6	977	125	-6.9
850	0.91	0.66	-2.2	934	115	-7.2
900	0.80	0.72	-2.8	893	105	-7.5
950	0.65	0.78	-3.4	852	95	-7.8
1000	0.47	0.84	-4.2	812	86	-8.0
1050	0.26	0.90	-5.0	773	78	-8.3
1100	0.00	0.97	-5.8	734	70	-8.5

TYPE SC 1 CALIBER 6.50 MM AVERAGE DENSITY 4.08 GRAMS/CC.
PROJ. WT 0.266 GRAMS PROJ. DIA. 2.54 MM IMPULSE 2.1 LB. SEC.
DRAG ROCK. WT. 0.000 GRAMS CHG. WT. 5.12 GRAMS SABOT WT. 0.726 GRAMS
TWIST RATE NA PCT. DRAG CHANGE / (DEG. YAW)**2 0.74

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	21.4	1884	1759	0.0
0	0.00	0.00	21.4	1884	472	0.0
50	1.05	0.03	21.2	1777	419	-1.1
100	2.09	0.06	21.1	1669	370	-2.2
150	3.12	0.09	20.9	1561	324	-3.3
200	4.14	0.12	20.7	1451	280	-4.4
250	5.15	0.16	20.4	1341	239	-5.5
300	6.15	0.20	20.1	1229	201	-6.7
350	7.13	0.24	19.7	1117	166	-7.9
400	8.09	0.29	19.3	1004	134	-9.1
450	9.03	0.34	18.7	889	105	-10.3
500	9.93	0.40	18.0	775	80	-11.4
550	10.80	0.47	17.0	662	58	-12.5
600	11.61	0.55	15.7	551	40	-13.4
650	12.33	0.65	13.6	447	26	-13.7
700	12.94	0.78	10.5	354	17	-13.3
750	13.34	0.93	5.6	297	12	-10.2
800	13.47	1.11	-1.0	257	9	-6.9
850	13.22	1.32	-9.7	223	7	-5.2
900	12.48	1.57	-21.5	192	5	-5.8
950	11.06	1.85	-37.2	166	4	-5.4
1000	8.75	2.17	-58.5	142	3	-5.0
1050	5.20	2.55	-87.3	122	2	-4.6
1100	0.00	3.00	-126.2	105	1	-4.2

DRAG ROCK. WT. 0.014 GRAMS PCT. DRAG CHANGE / (DEG. YAW)**2 2.12

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	2.5	1884	1759	0.0
0	0.00	0.00	2.5	1884	472	0.0
50	0.12	0.03	2.4	1831	445	-0.5
100	0.24	0.05	2.2	1779	420	-1.0
150	0.34	0.08	2.1	1728	396	-1.5
200	0.44	0.11	1.9	1677	373	-2.0
250	0.53	0.14	1.7	1626	350	-2.5
300	0.62	0.17	1.5	1576	329	-3.0
350	0.69	0.21	1.3	1527	309	-3.4
400	0.75	0.24	1.1	1478	289	-3.9
450	0.80	0.27	0.9	1429	270	-4.4
500	0.84	0.31	0.6	1381	252	-4.8
550	0.87	0.35	0.3	1334	235	-5.2
600	0.89	0.38	0.1	1286	218	-5.7
650	0.89	0.42	-0.3	1240	203	-6.1
700	0.87	0.47	-0.6	1193	188	-6.5
750	0.84	0.51	-1.0	1148	173	-6.8
800	0.79	0.55	-1.4	1103	160	-7.2
850	0.72	0.60	-1.8	1058	147	-7.6
900	0.63	0.65	-2.2	1015	135	-7.9
950	0.51	0.70	-2.8	971	124	-8.2
1000	0.37	0.75	-3.3	929	113	-8.5
1050	0.20	0.81	-3.9	887	103	-8.8
1100	0.00	0.86	-4.6	847	94	-9.0

TYPE SC 1 CALIBER 0.50 MM AVERAGE DENSITY 4.08 GRAMS/CC.
PROJ. WT .0.460 GRAMS PROJ. DIA. 3.05 MM IMPULSE 0.0 LB. SEC.
DRAG RDCR. WT. 0.000 GRAMS CHG. WT. 1.47 GRAMS SABOT WT. 0.667 GRAMS
TWIST RATE NA PCT. DRAG CHANGE / (DEG. YAW)**2 0.74

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	29.7	1490	1252	0.0
0	0.00	0.00	29.7	1490	511	0.0
50	1.45	0.03	29.5	1398	450	-0.9
100	2.89	0.07	29.2	1306	392	-1.9
150	4.32	0.11	28.9	1213	338	-2.8
200	5.73	0.15	28.5	1119	288	-3.8
250	7.12	0.20	28.1	1025	242	-4.7
300	8.49	0.25	27.6	930	199	-5.7
350	9.83	0.31	26.9	835	160	-6.6
400	11.14	0.37	26.1	740	126	-7.6
450	12.40	0.44	25.1	646	96	-8.4
500	13.60	0.53	23.7	554	71	-9.2
550	14.72	0.63	21.7	466	50	-9.7
600	15.73	0.74	18.9	386	34	-9.7
650	16.57	0.89	14.8	322	24	-8.7
700	17.17	1.05	9.3	284	19	-6.0
750	17.47	1.24	2.3	252	15	-4.9
800	17.38	1.45	-6.5	224	11	-4.7
850	16.80	1.69	-17.9	198	9	-4.5
900	15.59	1.96	-32.3	175	7	-4.3
950	13.57	2.26	-50.9	154	5	-4.1
1000	10.51	2.61	-74.7	136	4	-3.9
1050	6.12	3.00	-105.3	120	3	-3.6
1100	0.00	3.45	-144.7	106	3	-3.4

DRAG RDCR. WT. 0.025 GRAMS PCT. DRAG CHANGE / (DEG. YAW)**2 2.12

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	4.1	1490	1252	0.0
0	0.00	0.00	4.1	1490	511	0.0
50	0.19	0.03	3.8	1450	483	-0.4
100	0.38	0.07	3.6	1410	457	-0.8
150	0.55	0.10	3.3	1370	431	-1.2
200	0.70	0.14	3.0	1330	406	-1.6
250	0.85	0.18	2.8	1291	382	-2.0
300	0.98	0.22	2.4	1252	359	-2.3
350	1.09	0.26	2.1	1214	337	-2.7
400	1.19	0.30	1.8	1176	316	-3.0
450	1.27	0.35	1.4	1138	296	-3.4
500	1.33	0.39	1.0	1101	277	-3.7
550	1.38	0.44	0.6	1064	258	-4.0
600	1.40	0.48	0.1	1027	241	-4.4
650	1.40	0.53	-0.4	991	224	-4.7
700	1.37	0.58	-0.9	956	208	-5.0
750	1.32	0.64	-1.5	921	193	-5.2
800	1.23	0.69	-2.1	886	178	-5.5
850	1.12	0.75	-2.7	852	165	-5.8
900	0.98	0.81	-3.5	819	152	-6.0
950	0.80	0.87	-4.2	786	140	-6.3
1000	0.57	0.94	-5.1	754	128	-6.5
1050	0.31	1.01	-6.0	722	118	-6.7
1100	0.00	1.08	-7.0	691	108	-6.9

TYPE SC 1 CALIBER 6.50 MM AVERAGE DENSITY 4.08 GRAMS/CC.

PROJ. WT 0.460 GRAMS PROJ. DIA. 3.05 MM IMPULSE 1.2 LB. SEC.

DRAG RDCR. WT. 0.000 GRAMS CHG. WT. 2.53 GRAMS SABOT WT. 0.667 GRAMS

TWIST RATE N4 PCT. DRAG CHANGE / (DEG. YAW)**2 0.74

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	16.9	1685	1601	0.0
50	0.00	0.00	16.9	1685	653	0.0
500	0.83	0.03	16.8	1595	585	-0.9
1000	1.65	0.06	16.5	1504	521	-1.8
1500	2.45	0.10	16.3	1413	459	-2.8
2000	3.25	0.13	16.0	1321	401	-3.7
2500	4.03	0.17	15.7	1228	347	-4.7
3000	4.80	0.22	15.4	1134	296	-5.6
3500	5.54	0.26	15.0	1040	249	-6.6
4000	6.27	0.31	14.4	945	205	-7.6
4500	6.97	0.37	13.8	850	166	-8.6
5000	7.63	0.43	13.0	755	131	-9.5
5500	8.25	0.50	12.0	661	100	-10.4
6000	8.81	0.58	10.7	568	74	-11.1
6500	9.30	0.68	8.9	479	53	-11.6
7000	9.66	0.79	6.2	398	36	-11.6
7500	9.91	0.93	2.4	330	25	-10.8
8000	9.91	1.09	-2.9	289	19	-7.9
8500	9.61	1.28	-9.6	257	15	-5.8
9000	8.94	1.48	-18.2	228	12	-5.5
9500	7.80	1.72	-29.1	202	9	-5.2
10000	6.05	1.98	-43.0	178	7	-5.0
10500	3.52	2.28	-60.8	157	5	-4.7
11000	0.00	2.62	-83.7	139	4	-4.4

DRAG RDCR. WT. 0.025 GRAMS PCT. DRAG CHANGE / (DEG. YAW)**2 2.12

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	3.0	1685	1601	0.0
50	0.00	0.00	3.0	1685	653	0.0
500	0.14	0.03	2.8	1643	621	-0.4
1000	0.28	0.06	2.6	1601	589	-0.8
1500	0.40	0.09	2.4	1560	558	-1.2
2000	0.51	0.13	2.2	1519	528	-1.6
2500	0.62	0.16	1.9	1478	501	-2.0
3000	0.71	0.19	1.7	1438	474	-2.4
3500	0.79	0.23	1.4	1398	448	-2.8
4000	0.86	0.26	1.0	1358	423	-3.2
4500	0.92	0.30	0.6	1319	399	-3.5
5000	0.97	0.34	0.2	1279	376	-3.9
5500	0.99	0.38	-0.3	1241	354	-4.3
6000	1.01	0.42	-0.9	1202	333	-4.6
6500	1.00	0.46	-1.6	1164	313	-4.9
7000	0.98	0.51	-2.4	1126	294	-5.3
7500	0.94	0.55	-3.4	1089	276	-5.6
8000	0.88	0.60	-4.6	1052	258	-5.9
8500	0.80	0.65	-6.0	1016	242	-6.2
9000	0.69	0.70	-7.5	980	226	-6.5
9500	0.56	0.75	-9.1	944	211	-6.7
10000	0.41	0.80	-10.7	909	196	-7.0
10500	0.22	0.86	-12.3	875	182	-7.2
11000	0.00	0.92	-13.9	841	168	-7.5

TYPE SC 1 CALIBER 6.50 MM AVERAGE DENSITY 4.08 GRAMS/CC.
PROJ. WT 0.460 GRAMS PROJ. DIA. 3.05 MM IMPULSE 2.1 LB. SEC.
DRAG RDCR. WT. 0.000 GRAMS CHG. WT. 5.02 GRAMS SABOT WT. 0.667 GRAMS
TWIST RATE NA PCT. DRAG CHANGE / (DEG. YAW)**2 0.74

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	10.3	1857	1944	0.0
0	0.00	0.00	10.3	1857	794	0.0
50	0.50	0.03	10.1	1768	719	-0.9
100	1.00	0.06	10.0	1678	648	-1.8
150	1.48	0.09	9.8	1588	580	-2.7
200	1.96	0.12	9.6	1497	516	-3.6
250	2.42	0.15	9.3	1406	455	-4.6
300	2.88	0.19	9.1	1314	397	-5.5
350	3.32	0.23	8.8	1221	343	-6.5
400	3.74	0.27	8.4	1127	292	-7.5
450	4.15	0.32	8.0	1033	245	-8.5
500	4.53	0.37	7.4	938	202	-9.5
550	4.88	0.43	6.8	843	163	-10.5
600	5.20	0.49	6.0	748	129	-11.4
650	5.48	0.56	5.0	654	98	-12.3
700	5.70	0.64	3.9	561	72	-13.0
750	5.84	0.74	2.7	473	51	-13.4
800	5.87	0.86	-1.0	392	35	-13.3
850	5.74	1.00	-4.9	326	24	-12.2
900	5.37	1.16	-10.3	287	19	-9.0
950	4.71	1.35	-17.2	255	15	-6.6
1000	3.67	1.56	-25.9	226	12	-6.1
1050	2.14	1.79	-37.0	200	9	-5.8
1100	0.00	2.06	-51.2	177	7	-5.5

DRAG RDCR. WT. 0.025 GRAMS PCT. DRAG CHANGE / (DEG. YAW)**2 2.12

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	2.3	1857	1944	0.0
0	0.00	0.00	2.3	1857	793	0.0
50	0.11	0.03	2.2	1813	756	-0.4
100	0.22	0.06	2.0	1770	720	-0.9
150	0.31	0.08	1.9	1727	685	-1.3
200	0.40	0.11	1.7	1685	652	-1.7
250	0.49	0.14	1.5	1643	619	-2.1
300	0.56	0.17	1.3	1601	588	-2.5
350	0.62	0.21	1.1	1559	557	-2.9
400	0.67	0.24	0.9	1518	528	-3.3
450	0.72	0.27	0.7	1478	500	-3.7
500	0.75	0.31	0.5	1437	473	-4.0
550	0.77	0.34	0.2	1397	446	-4.4
600	0.78	0.38	-0.0	1357	421	-4.8
650	0.78	0.41	-0.3	1318	396	-5.1
700	0.76	0.45	-0.6	1278	373	-5.5
750	0.73	0.49	-0.9	1240	350	-5.8
800	0.68	0.53	-1.3	1201	329	-6.2
850	0.62	0.58	-1.6	1163	308	-6.5
900	0.53	0.62	-2.0	1125	288	-6.8
950	0.43	0.67	-2.4	1088	269	-7.1
1000	0.31	0.71	-2.9	1051	251	-7.4
1050	0.17	0.76	-3.3	1014	234	-7.7
1100	0.00	0.81	-3.8	978	217	-7.9

TYPE SC 1 CALIBER 6.50 MM AVERAGE DENSITY 4.08 GRAMS/CC.

PROJ. WT .0.518 GRAMS PROJ. DIA. 3.18 MM IMPULSE 0.0 LB. SEC.

DRAG RDCR. WT. 0.000 GRAMS CHG. WT. 1.45 GRAMS SABOT WT. 0.655 GRAMS

TWIST RATE NA PCT. DRAG CHANGE / (DEG. YAW)**2 0.74

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	27.4	1468	1264	0.0
0	0.00	0.00	27.4	1468	554	0.0
50	1.34	0.04	27.2	1380	493	-0.9
100	2.67	0.07	26.9	1291	432	-1.8
150	3.98	0.11	26.6	1201	374	-2.7
200	5.28	0.16	26.2	1110	320	-3.6
250	6.56	0.20	25.8	1020	269	-4.5
300	7.81	0.25	25.2	928	223	-5.5
350	9.04	0.31	24.6	837	181	-6.4
400	10.23	0.37	23.8	745	144	-7.4
450	11.37	0.45	22.8	655	111	-8.1
500	12.46	0.53	21.4	565	83	-8.9
550	13.47	0.62	19.6	480	60	-9.4
600	14.36	0.74	17.0	401	42	-9.5
650	15.13	0.88	13.2	334	29	-9.0
700	15.66	1.04	8.0	293	22	-6.5
750	15.91	1.22	1.5	262	18	-5.0
800	15.79	1.42	-6.7	233	14	-4.7
850	15.23	1.65	-17.6	207	11	-4.5
900	14.09	1.90	-30.1	184	9	-4.4
950	12.22	2.19	-46.7	164	7	-4.2
1000	9.44	2.52	-67.9	145	5	-3.9
1050	5.47	2.88	-94.7	128	4	-3.7
1100	0.00	3.30	-128.9	114	3	-3.5

DRAG RDCR. WT. 0.028 GRAMS PCT. DRAG CHANGE / (DEG. YAW)**2 2.12

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	4.1	1468	1264	0.0
0	0.00	0.00	4.1	1468	554	0.0
50	0.20	0.03	3.9	1429	529	-0.4
100	0.38	0.07	3.6	1391	501	-0.8
150	0.55	0.11	3.3	1353	473	-1.1
200	0.71	0.14	3.1	1315	447	-1.5
250	0.86	0.18	2.8	1277	421	-1.9
300	0.99	0.22	2.5	1240	397	-2.2
350	1.10	0.26	2.1	1203	373	-2.6
400	1.20	0.31	1.8	1166	351	-2.9
450	1.28	0.35	1.4	1130	329	-3.3
500	1.34	0.39	1.0	1094	308	-3.6
550	1.38	0.44	0.5	1059	288	-3.9
600	1.40	0.49	0.1	1024	269	-4.2
650	1.40	0.54	-0.4	989	251	-4.5
700	1.37	0.59	-0.9	955	234	-4.8
750	1.32	0.64	-1.5	921	217	-5.1
800	1.24	0.70	-2.1	888	202	-5.3
850	1.12	0.76	-2.8	855	187	-5.6
900	0.98	0.82	-3.5	823	173	-5.8
950	0.79	0.88	-4.2	791	160	-6.0
1000	0.57	0.94	-5.1	760	147	-6.3
1050	0.31	1.01	-6.0	729	135	-6.5
1100	0.00	1.08	-7.0	699	124	-6.6

TYPE SC 1 CALIBER 6.50 MM AVERAGE DENSITY 4.08 GRAMS/CC.

PROJ. WT 0.518 GRAMS PROJ. DIA. 3.18 MM IMPULSE 1.2 LB. SEC.

DRAG RDCR. WT. 0.000 GRAMS CHG. WT. 2.50 GRAMS SABOT WT. 0.655 GRAMS

TWIST RATE NA PCT. DRAG CHANGE / (DEG. YAW)**2 0.74

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	15.3	1669	1634	0.0
0	0.00	0.00	15.3	1669	722	0.0
50	0.75	0.03	15.2	1582	649	-0.9
100	1.49	0.06	14.9	1495	579	-1.8
150	2.22	0.10	14.7	1407	513	-2.7
200	2.93	0.13	14.4	1318	450	-3.6
250	3.64	0.17	14.1	1228	391	-4.5
300	4.32	0.21	13.8	1138	336	-5.4
350	4.99	0.26	13.4	1047	284	-6.4
400	5.64	0.31	12.9	956	237	-7.3
450	6.26	0.37	12.3	865	194	-8.2
500	6.83	0.43	11.5	773	155	-9.2
550	7.34	0.50	10.6	682	121	-10.0
600	7.89	0.58	9.3	592	91	-10.8
650	8.31	0.67	7.6	505	66	-11.4
700	8.64	0.77	5.3	424	47	-11.5
750	8.83	0.90	2.0	352	32	-11.2
800	8.82	1.06	-2.8	404	24	-9.0
850	8.54	1.23	-8.9	271	19	-6.3
900	7.93	1.43	-16.5	242	15	-5.5
950	6.90	1.65	-26.2	215	12	-5.3
1000	5.34	1.89	-38.3	191	9	-5.1
1050	3.10	2.17	-53.8	170	7	-4.8
1100	0.00	2.49	-73.4	150	6	-4.5

DRAG RDCR. WT. 0.028 GRAMS PCT. DRAG CHANGE / (DEG. YAW)**2 2.12

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	3.0	1669	1634	0.0
0	0.00	0.00	3.0	1669	722	0.0
50	0.14	0.03	2.8	1629	687	-0.4
100	0.28	0.06	2.6	1589	653	-0.8
150	0.40	0.09	2.4	1549	621	-1.2
200	0.51	0.13	2.2	1510	589	-1.6
250	0.62	0.16	2.0	1471	559	-1.9
300	0.71	0.19	1.7	1432	529	-2.3
350	0.79	0.23	1.5	1393	501	-2.7
400	0.86	0.27	1.2	1355	473	-3.1
450	0.92	0.30	0.9	1317	447	-3.4
500	0.96	0.34	0.6	1279	421	-3.8
550	0.99	0.38	0.3	1242	397	-4.1
600	1.00	0.42	0.0	1205	373	-4.4
650	1.00	0.46	-0.4	1168	351	-4.8
700	0.97	0.51	-0.7	1131	329	-5.1
750	0.93	0.55	-1.1	1095	308	-5.4
800	0.87	0.60	-1.6	1060	288	-5.7
850	0.79	0.65	-2.0	1025	269	-6.0
900	0.69	0.70	-2.5	990	251	-6.2
950	0.58	0.75	-3.1	956	234	-6.5
1000	0.40	0.80	-3.6	922	217	-6.8
1050	0.22	0.86	-4.2	888	201	-7.0
1100	0.00	0.91	-4.9	856	187	-7.2

TYPE SC 1 CALIBER 0.50 MM AVERAGE DENSITY 4.08 GRAMS/CC.

PROJ. WT 0.518 GRAMS PROJ. DIA. 3.18 MM IMPULSE 2.1 LB. SEC.

DRAG ROCK. WT. 0.000 GRAMS CHG. WT. 4.98 GRAMS SABOT WT. 0.655 GRAMS

TWIST RATE NA PCT. DRAG CHANGE / (DEG. YAW)**2 0.74

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	9.1	1848	2003	0.0
0	0.00	0.00	9.1	1848	885	0.0
50	0.44	0.03	9.0	1762	805	-0.4
100	0.88	0.06	8.8	1676	728	-1.7
150	1.31	0.09	8.6	1589	654	-2.6
200	1.73	0.12	8.4	1502	584	-3.5
250	2.14	0.15	8.2	1413	518	-4.4
300	2.53	0.19	7.9	1325	455	-5.3
350	2.92	0.23	7.6	1235	396	-6.3
400	3.29	0.27	7.2	1145	340	-7.2
450	3.63	0.32	6.8	1054	288	-8.2
500	3.96	0.37	6.3	963	241	-9.1
550	4.26	0.42	5.7	872	197	-10.1
600	4.53	0.48	5.0	780	158	-11.0
650	4.76	0.55	4.1	689	123	-11.9
700	4.94	0.63	2.9	599	93	-12.6
750	5.05	0.72	1.2	512	68	-13.2
800	5.06	0.82	-1.0	430	48	-13.4
850	4.94	0.95	-4.3	357	33	-13.0
900	4.63	1.10	-8.9	307	24	-10.8
950	4.06	1.28	-14.9	273	19	-7.7
1000	3.16	1.47	-22.4	244	15	-6.3
1050	1.84	1.69	-31.9	217	12	-6.0
1100	0.00	1.93	-43.9	193	10	-5.7

DRAG ROCK. WT. 0.028 GRAMS PCT. DRAG CHANGE / (DEG. YAW)**2 2.12

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	2.3	1848	2003	0.0
0	0.00	0.00	2.3	1848	885	0.0
50	0.11	0.03	2.2	1806	845	-0.4
100	0.21	0.06	2.0	1764	806	-0.8
150	0.31	0.08	1.9	1723	768	-1.2
200	0.40	0.11	1.7	1682	732	-1.6
250	0.48	0.14	1.5	1642	697	-2.0
300	0.55	0.17	1.3	1602	663	-2.4
350	0.61	0.21	1.1	1562	630	-2.8
400	0.67	0.24	0.9	1522	598	-3.2
450	0.71	0.27	0.7	1483	567	-3.5
500	0.74	0.31	0.5	1444	537	-3.9
550	0.76	0.34	0.2	1405	509	-4.1
600	0.77	0.38	-0.1	1367	481	-4.6
650	0.78	0.41	-0.5	1329	454	-4.9
700	0.78	0.45	-0.8	1291	428	-5.3
750	0.77	0.49	-1.2	1253	403	-5.6
800	0.76	0.53	-1.6	1216	379	-6.0
850	0.74	0.57	-2.1	1179	356	-6.3
900	0.72	0.62	-2.6	1142	334	-6.6
950	0.69	0.66	-3.2	1106	313	-6.9
1000	0.65	0.71	-3.8	1070	293	-7.2
1050	0.60	0.76	-4.5	1035	274	-7.4
1100	0.54	0.80	-5.3	1000	255	-7.7

TYPE SC 1 CALIBER 6.50 MM AVERAGE DENSITY 4.08 GRAMS/CC.
PROJ. WT 0.590 GRAMS PROJ. DIA. 3.30 MM IMPULSE 0.6 LB. SEC.
DRAG RDCR. WT. 0.000 GRAMS CHG. WT. 1.42 GRAMS SABOT WT. 0.635 GRAMS
TWIST RATE NA PCT. DRAG CHANGE / (DEG. YAW)**2 0.74

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	24.6	1442	1273	0.0
0	0.00	0.00	24.6	1442	613	0.0
50	1.20	0.04	24.3	1358	544	-0.8
100	2.39	0.07	24.1	1273	478	-1.7
150	3.56	0.11	23.7	1188	416	-2.6
200	4.72	0.16	23.3	1102	358	-3.5
250	5.86	0.21	22.9	1015	304	-4.3
300	6.97	0.26	22.4	928	254	-5.2
350	8.06	0.31	21.7	841	209	-6.1
400	9.11	0.38	20.9	754	168	-7.0
450	10.12	0.45	19.9	668	132	-7.8
500	11.07	0.53	18.7	583	100	-8.5
550	11.95	0.62	17.0	501	74	-9.1
600	12.73	0.73	14.6	424	53	-9.3
650	13.38	0.86	11.1	355	37	-9.1
700	13.82	1.01	6.6	307	28	-7.4
750	14.01	1.18	0.7	275	22	-5.2
800	13.85	1.37	-6.7	247	18	-4.7
850	13.34	1.59	-15.8	221	14	-4.5
900	12.30	1.83	-27.3	198	12	-4.4
950	10.63	2.09	-41.6	177	9	-4.2
1000	8.17	2.39	-59.6	158	7	-4.0
1050	4.71	2.73	-82.2	141	6	-3.8
1100	0.00	3.11	-110.6	125	5	-3.6

DRAG RDCR. WT. 0.032 GRAMS PCT. DRAG CHANGE / (DEG. YAW)**2 2.12

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	4.2	1442	1273	0.0
0	0.00	0.00	4.2	1442	613	0.0
50	0.20	0.04	3.9	1405	582	-0.4
100	0.38	0.07	3.6	1369	552	-0.7
150	0.56	0.11	3.4	1333	523	-1.1
200	0.72	0.15	3.1	1297	495	-1.4
250	0.86	0.19	2.8	1261	468	-1.8
300	0.99	0.23	2.5	1226	441	-2.1
350	1.11	0.27	2.1	1191	416	-2.4
400	1.21	0.31	1.7	1156	392	-2.8
450	1.29	0.35	1.4	1122	369	-3.1
500	1.35	0.40	1.0	1088	347	-3.4
550	1.39	0.45	0.5	1054	325	-3.7
600	1.40	0.49	0.1	1021	305	-4.0
650	1.40	0.54	-0.4	988	285	-4.3
700	1.37	0.59	-1.0	956	266	-4.5
750	1.32	0.65	-1.5	924	249	-4.8
800	1.23	0.70	-2.1	892	232	-5.1
850	1.12	0.76	-2.8	861	215	-5.3
900	0.97	0.82	-3.5	830	200	-5.5
950	0.79	0.88	-4.2	800	186	-5.8
1000	0.57	0.94	-5.1	770	172	-6.0
1050	0.31	1.01	-5.9	741	159	-6.2
1100	0.00	1.08	-6.9	712	147	-6.4

TYPE SC 1 CALIBER 6.50 MM AVERAGE DENSITY 4.08 GRAMS/CC.

PROJ. WT 0.590 GRAMS PROJ. DIA. 3.30 MM IMPULSE 1.2 LB. SEC.

DRAG RDCR. WT. 0.000 GRAMS CHG. WT. 2.47 GRAMS SABOT WT. 0.635 GRAMS

TWIST RATE NA PCT. DRAG CHANGE / (DEG. YAW)**2 0.74

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	13.4	1651	1669	0.0
0	0.00	0.00	13.4	1651	804	0.0
50	0.65	0.03	13.2	1568	725	-0.8
100	1.30	0.06	13.0	1485	650	-1.7
150	1.93	0.10	12.8	1401	579	-2.5
200	2.56	0.14	12.5	1317	511	-3.4
250	3.16	0.17	12.2	1232	447	-4.3
300	3.76	0.22	11.8	1146	387	-5.1
350	4.33	0.26	11.4	1060	331	-6.0
400	4.88	0.31	10.9	973	279	-6.9
450	5.41	0.37	10.4	886	232	-7.8
500	5.91	0.42	9.7	799	186	-8.7
550	6.36	0.49	8.8	712	150	-9.6
600	6.77	0.57	7.7	627	116	-10.3
650	7.12	0.65	6.2	543	87	-11.0
700	7.38	0.75	4.2	463	63	-11.3
750	7.53	0.87	1.4	389	45	-11.3
800	7.52	1.01	-2.5	328	32	-10.4
850	7.27	1.17	-7.8	291	25	-7.8
900	6.74	1.35	-14.4	261	20	-5.8
950	5.85	1.56	-22.0	234	16	-5.4
1000	4.51	1.78	-32.8	210	13	-5.2
1050	2.61	2.03	-45.5	187	10	-4.9
1100	0.00	2.32	-61.5	167	8	-4.7

DRAG RDCR. WT. 0.032 GRAMS PCT. DRAG CHANGE / (DEG. YAW)**2 2.12

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	3.0	1651	1669	0.0
0	0.00	0.00	3.0	1651	804	0.0
50	0.14	0.03	2.8	1613	766	-0.4
100	0.27	0.06	2.6	1575	730	-0.8
150	0.40	0.09	2.4	1537	696	-1.1
200	0.51	0.13	2.2	1500	662	-1.5
250	0.61	0.16	1.9	1463	629	-1.9
300	0.71	0.20	1.7	1426	597	-2.2
350	0.79	0.23	1.5	1389	567	-2.6
400	0.85	0.27	1.2	1353	537	-2.9
450	0.91	0.30	0.9	1317	509	-3.2
500	0.95	0.34	0.6	1281	481	-3.6
550	0.98	0.38	0.3	1245	454	-3.9
600	0.99	0.42	0.0	1210	428	-4.2
650	0.98	0.47	-0.4	1175	404	-4.5
700	0.96	0.51	-0.8	1140	380	-4.8
750	0.92	0.55	-1.2	1106	357	-5.1
800	0.86	0.60	-1.6	1072	335	-5.4
850	0.78	0.65	-2.0	1039	314	-5.7
900	0.67	0.70	-2.5	1005	294	-6.0
950	0.54	0.75	-3.0	973	275	-6.2
1000	0.39	0.80	-3.6	940	257	-6.5
1050	0.21	0.85	-4.1	908	239	-6.7
1100	0.00	0.91	-4.8	877	223	-7.0

TYPE SC 1 CALIBER 6.50 MM AVERAGE DENSITY 4.08 GRAMS/CC.

PROJ. WT 0.590 GRAMS PROJ. DIA. 3.30 MM IMPULSE 2.1 LB. SEC.

DRAG ROCK. WT. 0.000 GRAMS CHG. WT. 4.95 GRAMS SABOT WT. 0.635 GRAMS

TWIST RATE NA PCT. DRAG CHANGE / (DEG. YAW)**2 0.74

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	7.8	1837	2066	0.0
0	0.00	0.00	7.8	1837	995	0.0
50	0.38	0.03	7.7	1755	908	-0.8
100	0.75	0.06	7.5	1673	825	-1.6
150	1.12	0.09	7.3	1591	746	-2.5
200	1.47	0.12	7.1	1508	670	-3.3
250	1.82	0.15	6.9	1424	598	-4.2
300	2.15	0.19	6.6	1340	529	-5.1
350	2.47	0.23	6.3	1255	464	-6.0
400	2.77	0.27	6.0	1169	403	-6.8
450	3.06	0.31	5.6	1083	346	-7.8
500	3.33	0.36	5.1	997	293	-8.6
550	3.57	0.42	4.6	910	244	-9.6
600	3.78	0.47	3.9	823	200	-10.4
650	3.96	0.54	3.1	736	160	-11.3
700	4.09	0.61	2.0	650	124	-12.1
750	4.16	0.69	0.7	565	94	-12.8
800	4.16	0.79	-1.2	484	69	-13.2
850	4.09	0.90	-3.7	408	49	-13.2
900	3.79	1.03	-7.1	342	34	-12.6
950	3.32	1.19	-12.2	300	27	-10.1
1000	2.93	1.37	-18.4	269	21	-7.3
1050	1.50	1.56	-26.2	241	17	-5.2
1100	0.00	1.78	-35.8	216	14	-3.9

DRAG ROCK. WT. 0.032 GRAMS PCT. DRAG CHANGE / (DEG. YAW)**2 2.12

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	2.1	1837	2066	0.0
0	0.00	0.00	2.3	1837	995	0.0
50	0.11	0.03	2.2	1797	952	-0.4
100	0.21	0.06	2.0	1758	910	-0.8
150	0.31	0.08	1.8	1719	869	-1.2
200	0.39	0.11	1.7	1680	830	-1.5
250	0.47	0.14	1.5	1641	792	-1.9
300	0.54	0.17	1.3	1603	755	-2.3
350	0.60	0.21	1.1	1565	720	-2.6
400	0.65	0.24	0.9	1527	685	-3.0
450	0.70	0.27	0.7	1490	651	-3.4
500	0.73	0.31	0.4	1453	619	-3.7
550	0.74	0.34	0.2	1416	588	-4.1
600	0.75	0.38	-0.1	1379	557	-4.4
650	0.75	0.41	-0.3	1343	528	-4.7
700	0.73	0.45	-0.6	1307	500	-5.0
750	0.70	0.49	-0.9	1271	472	-5.4
800	0.65	0.53	-1.2	1235	446	-5.7
850	0.59	0.57	-1.6	1200	420	-6.0
900	0.51	0.61	-1.9	1165	396	-6.3
950	0.41	0.66	-2.3	1130	372	-6.6
1000	0.29	0.70	-2.7	1096	350	-6.9
1050	0.16	0.75	-3.2	1062	328	-7.1
1100	0.00	0.80	-3.6	1029	308	-7.4

TYPE SC 1 CALIBER 6.50 MM AVERAGE DENSITY 4.08 GRAMS/CU.

PROJ. WT 0.732 GRAMS PROJ. DIA. 3.56 MM IMPULSE 0.0 LB. SEC.

DRAG RDCR. WT. 0.000 GRAMS CHG. WT. 1.37 GRAMS SABOT WT. 0.603 GRAMS

TWIST RATE NA PCT. DRAG CHANGE / (DEG. YAW)**2 0.74

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	22.7	1389	1288	0.0
0	0.00	0.00	22.7	1389	706	0.0
50	1.11	0.04	22.4	1310	628	-0.8
100	2.20	0.08	22.1	1231	554	-1.6
150	3.28	0.12	21.8	1151	485	-2.4
200	4.34	0.16	21.4	1070	419	-3.2
250	5.38	0.21	20.9	990	358	-4.0
300	6.40	0.26	20.3	908	302	-4.9
350	7.38	0.32	19.7	827	250	-5.7
400	8.33	0.39	18.9	746	204	-6.5
450	9.24	0.46	17.9	665	162	-7.2
500	10.09	0.54	16.6	586	126	-7.9
550	10.87	0.63	14.9	509	95	-8.5
600	11.55	0.73	12.6	436	70	-8.8
650	12.10	0.86	9.5	370	50	-8.7
700	12.49	1.01	5.3	319	37	-7.7
750	12.61	1.17	-0.2	287	30	-5.4
800	12.45	1.36	-7.0	259	25	-4.6
850	11.91	1.56	-15.2	234	20	-4.4
900	10.93	1.78	-25.4	211	16	-4.3
950	9.40	2.03	-37.9	190	13	-4.2
1000	7.18	2.31	-53.3	171	11	-4.0
1050	4.11	2.63	-72.4	154	9	-3.8
1100	0.00	2.97	-95.9	138	7	-3.7

DRAG RDCR. WT. 0.039 GRAMS PCT. DRAG CHANGE / (DEG. YAW)**2 2.12

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	4.4	1389	1288	0.0
0	0.00	0.00	4.4	1389	706	0.0
50	0.21	0.04	4.1	1355	672	-0.3
100	0.40	0.07	3.8	1322	639	-0.7
150	0.58	0.11	3.5	1288	606	-1.0
200	0.75	0.15	3.2	1255	575	-1.3
250	0.90	0.19	2.9	1222	545	-1.6
300	1.04	0.23	2.5	1190	516	-2.0
350	1.16	0.28	2.2	1157	488	-2.3
400	1.26	0.32	1.8	1125	461	-2.6
450	1.34	0.36	1.4	1093	435	-2.9
500	1.40	0.41	1.0	1062	410	-3.1
550	1.44	0.46	0.5	1031	386	-3.4
600	1.46	0.51	0.0	1000	363	-3.7
650	1.45	0.56	-0.5	969	341	-3.9
700	1.42	0.61	-1.0	939	319	-4.2
750	1.36	0.67	-1.6	910	299	-4.5
800	1.27	0.72	-2.2	880	280	-4.7
850	1.15	0.78	-2.9	851	262	-4.9
900	1.00	0.84	-3.6	823	244	-5.1
950	0.81	0.90	-4.4	795	227	-5.4
1000	0.58	0.96	-5.2	767	211	-5.6
1050	0.31	1.03	-6.1	739	196	-5.8
1100	0.00	1.10	-7.0	712	182	-6.0

TYPE SC 1 CALIBER 6.50 MM AVERAGE DENSITY 4.08 GRAMS/CC.

PROJ. WT 0.732 GRAMS PROJ. DIA. 3.56 MM IMPULSE 1.2 LB. SEC.

DRAG ROCK. WT. 0.000 GRAMS CHG. WT. 2.40 GRAMS SABOT WT. 0.603 GRAMS

TWIST RATE NA PCT. DRAG CHANGE / (DEG. YAW)**2 0.74

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	11.9	1612	1734	0.0
50	0.00	0.03	11.9	1512	951	0.0
100	0.05	0.07	11.9	1435	862	-0.8
150	0.15	0.10	11.9	1357	777	-1.6
200	0.30	0.14	11.9	1278	696	-2.4
250	0.50	0.18	11.9	1200	618	-3.2
300	0.75	0.22	11.9	1122	545	-4.0
350	1.05	0.27	11.9	1044	476	-4.8
400	1.40	0.31	11.9	967	411	-5.6
450	1.80	0.37	11.9	891	351	-6.5
500	2.25	0.43	11.9	817	297	-7.3
550	2.76	0.49	11.9	744	248	-8.1
600	3.33	0.56	11.9	674	204	-8.9
650	3.96	0.64	11.9	607	166	-9.7
700	4.65	0.74	11.9	544	134	-10.5
750	5.41	0.85	11.9	486	107	-11.3
800	6.24	0.98	11.9	433	85	-12.1
850	7.14	1.13	11.9	386	67	-12.9
900	8.12	1.31	11.9	346	53	-13.7
950	9.17	1.52	11.9	313	43	-14.5
1000	10.31	1.78	11.9	288	36	-15.3
1050	11.53	2.09	11.9	271	32	-16.1
1100	12.84	2.47	11.9	263	30	-16.9

DRAG ROCK. WT. 0.039 GRAMS PCT. DRAG CHANGE / (DEG. YAW)**2 2.12

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	11.9	1612	1734	0.0
50	0.00	0.03	11.9	1512	951	0.0
100	0.05	0.07	11.9	1435	862	-0.8
150	0.15	0.10	11.9	1357	777	-1.6
200	0.30	0.14	11.9	1278	696	-2.4
250	0.50	0.18	11.9	1200	618	-3.2
300	0.75	0.22	11.9	1122	545	-4.0
350	1.05	0.27	11.9	1044	476	-4.8
400	1.40	0.31	11.9	967	411	-5.6
450	1.80	0.37	11.9	891	351	-6.5
500	2.25	0.43	11.9	817	297	-7.3
550	2.76	0.49	11.9	744	248	-8.1
600	3.33	0.56	11.9	674	204	-8.9
650	3.96	0.64	11.9	607	166	-9.7
700	4.65	0.74	11.9	544	134	-10.5
750	5.41	0.85	11.9	486	107	-11.3
800	6.24	0.98	11.9	433	85	-12.1
850	7.14	1.13	11.9	386	67	-12.9
900	8.12	1.31	11.9	346	53	-13.7
950	9.17	1.52	11.9	313	43	-14.5
1000	10.31	1.78	11.9	288	36	-15.3
1050	11.53	2.09	11.9	271	32	-16.1
1100	12.84	2.47	11.9	263	30	-16.9

TYPE SC 1 CALIBER 6.50 MM AVERAGE DENSITY 4.08 GRAMS/CC.
PROJ. WT 0.732 GRAMS PROJ. DIA. 3.56 MM IMPULSE 2.1 LB. SEC.
DRAG RDCR. WT. 0.000 GRAMS CHG. WT. 4.87 GRAMS SABOT WT. 0.603 GRAMS
TWIST RATE NA PCT. DRAG CHANGE / (DEG. YAW)**2 0.74

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	6.6	1815	2199	0.0
0	0.00	0.00	6.6	1815	1206	0.0
50	0.32	0.03	6.4	1739	1107	-0.8
100	0.63	0.06	6.3	1662	1011	-1.5
150	0.94	0.09	6.1	1585	920	-2.3
200	1.23	0.12	5.9	1507	832	-3.1
250	1.51	0.15	5.6	1429	748	-3.9
300	1.79	0.19	5.4	1351	668	-4.7
350	2.05	0.23	5.1	1272	592	-5.6
400	2.29	0.27	4.8	1192	520	-6.4
450	2.52	0.31	4.4	1112	453	-7.2
500	2.73	0.36	3.9	1031	389	-8.1
550	2.91	0.41	3.4	950	331	-8.9
600	3.07	0.47	2.8	869	276	-9.8
650	3.19	0.53	2.1	788	227	-10.5
700	3.28	0.59	1.2	707	183	-11.4
750	3.32	0.67	0.1	627	144	-12.0
800	3.29	0.75	-1.4	548	110	-12.6
850	3.19	0.85	-3.3	473	82	-13.0
900	2.97	0.97	-5.9	403	60	-12.9
950	2.60	1.10	-9.6	342	43	-12.4
1000	2.02	1.26	-14.5	302	33	-10.1
1050	1.18	1.43	-20.0	273	27	-7.4
1100	0.00	1.62	-28.0	246	22	-6.2

DRAG RDCR. WT. 0.039 GRAMS PCT. DRAG CHANGE / (DEG. YAW)**2 2.12

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	2.3	1815	2199	0.0
0	0.00	0.00	2.3	1815	1206	0.0
50	0.11	0.03	2.1	1738	1107	-0.4
100	0.21	0.06	2.0	1741	1109	-0.7
150	0.30	0.09	1.8	1705	1062	-1.1
200	0.39	0.11	1.6	1669	1017	-1.4
250	0.47	0.15	1.5	1633	974	-1.8
300	0.54	0.18	1.3	1597	931	-2.1
350	0.60	0.21	1.1	1562	890	-2.5
400	0.65	0.24	0.9	1526	850	-2.8
450	0.69	0.27	0.6	1492	811	-3.1
500	0.72	0.31	0.3	1457	773	-3.5
550	0.73	0.34	0.0	1423	736	-3.8
600	0.74	0.38	-0.4	1388	701	-4.1
650	0.73	0.41	-0.8	1354	667	-4.4
700	0.71	0.45	-1.3	1321	633	-4.7
750	0.68	0.49	-1.8	1287	601	-5.0
800	0.63	0.53	-2.4	1254	570	-5.3
850	0.57	0.57	-3.0	1221	540	-5.6
900	0.49	0.61	-3.8	1188	511	-5.9
950	0.40	0.65	-4.7	1155	483	-6.2
1000	0.29	0.70	-5.7	1123	456	-6.5
1050	0.15	0.74	-6.9	1091	430	-6.7
1100	0.00	0.79	-8.5	1059	405	-7.0

TYPE SC 1 CALIBER 6.50 MM AVERAGE DENSITY 4.08 GRAMS/CC.

PROJ. WT 0.814 GRAMS PROJ. DIA. 3.68 MM IMPULSE 0.0 LB. SEC.

DRAG RDCR. WT. 0.000 GRAMS CHG. WT. 1.34 GRAMS SABOT WT. 0.577 GRAMS

TWIST RATE NA PCT. DRAG CHANGE / (DEG. YAW)**2 0.74

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	21.9	1364	1293	0.0
50	0.00	0.00	21.9	1364	757	0.0
100	1.07	0.04	21.6	1288	674	-0.8
150	2.12	0.08	21.3	1211	596	-1.5
200	3.16	0.12	20.9	1133	522	-2.1
250	4.18	0.17	20.5	1055	453	-3.1
300	5.17	0.22	20.0	977	389	-3.9
350	6.14	0.27	19.4	899	329	-4.7
400	7.08	0.33	18.8	821	274	-5.5
450	7.99	0.39	18.1	742	224	-6.3
500	8.85	0.46	17.4	664	180	-7.0
550	9.65	0.54	16.7	588	141	-7.7
600	10.39	0.61	16.0	513	107	-8.2
650	11.03	0.74	15.2	443	80	-8.5
700	11.54	0.86	14.6	378	58	-8.5
750	11.93	1.00	14.1	325	43	-7.8
800	12.22	1.17	-0.6	292	35	-5.6
850	12.42	1.35	-7.1	265	29	-4.5
900	12.54	1.54	-14.9	240	24	-4.4
950	12.59	1.76	-24.5	217	19	-4.3
1000	12.56	2.01	-36.2	197	16	-4.1
1050	12.47	2.27	-50.5	178	13	-4.0
1100	12.30	2.57	-68.1	160	10	-3.8
1150	12.06	2.90	-89.7	145	9	-3.7

DRAG RDCR. WT. 0.044 GRAMS PCT. DRAG CHANGE / (DEG. YAW)**2 2.12

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	4.5	1364	1293	0.0
50	0.00	0.00	4.5	1364	757	0.0
100	0.21	0.04	4.2	1332	721	-0.3
150	0.41	0.08	3.9	1299	686	-0.6
200	0.60	0.11	3.6	1267	652	-0.9
250	0.77	0.15	3.3	1235	619	-1.2
300	0.92	0.20	3.0	1204	587	-1.5
350	1.06	0.24	2.7	1172	555	-1.8
400	1.18	0.28	2.4	1141	524	-2.1
450	1.29	0.33	2.1	1110	494	-2.4
500	1.37	0.37	1.8	1080	464	-2.7
550	1.43	0.42	1.5	1049	435	-3.0
600	1.47	0.47	1.2	1020	406	-3.3
650	1.49	0.52	0.9	990	378	-3.6
700	1.49	0.57	0.5	961	350	-3.9
750	1.48	0.62	0.2	932	323	-4.1
800	1.45	0.67	-0.1	903	297	-4.3
850	1.41	0.73	-0.5	875	272	-4.5
900	1.36	0.79	-0.8	847	248	-4.7
950	1.30	0.85	-1.2	819	225	-4.8
1000	1.23	0.91	-1.5	792	204	-4.9
1050	1.15	0.98	-1.9	765	184	-5.0
1100	1.06	1.05	-2.3	739	166	-5.1
1150	0.96	1.13	-2.7	713	149	-5.2

TYPE SC 1 CALIBER 6.50 MM AVERAGE DENSITY 4.08 GRAMS/CC.
PROJ. WT 6.814 GRAMS PROJ. DIA. 6.68 MM IMPULSE 1.2 LB. SEC.
DRAG ROCK. WT. 0.000 GRAMS CHG. WT. 2.37 GRAMS SABOT WT. 0.577 GRAMS
TWIST RATE NA PCT. DRAG CHANGE / (DEG. YAW)**2 0.74

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	11.6	1593	1764	0.0
50	0.00	0.00	11.2	1593	1032	-0.0
500	0.55	0.01	11.0	1518	938	-0.7
1000	1.08	0.07	10.8	1443	847	-1.5
1500	1.60	0.10	10.5	1367	760	-2.3
2000	2.12	0.14	10.2	1291	678	-3.1
2500	2.61	0.18	9.9	1214	599	-3.8
3000	3.09	0.22	9.6	1137	525	-4.6
3500	3.55	0.27	9.3	1059	456	-5.3
4000	4.00	0.32	8.9	981	391	-6.0
4500	4.41	0.37	8.6	902	331	-7.1
5000	4.80	0.43	8.4	824	276	-7.8
5500	5.14	0.49	8.0	745	226	-8.8
6000	5.43	0.56	7.6	668	181	-9.8
6500	5.70	0.64	7.3	591	142	-10.8
7000	5.88	0.73	6.9	516	108	-11.8
7500	5.97	0.84	6.5	443	81	-12.8
8000	5.93	0.96	6.4	381	59	-13.8
8500	5.72	1.09	6.3	327	43	-14.8
9000	5.23	1.26	6.2	294	35	-15.8
9500	4.57	1.44	6.1	266	29	-16.7
10000	3.50	1.64	6.0	241	24	-17.7
10500	2.01	1.86	5.9	218	20	-18.7
11000	0.00	2.10	5.8	197	16	-19.7

DRAG ROCK. WT. 0.044 GRAMS PCT. DRAG CHANGE / (DEG. YAW)**2 2.12

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	3.1	1593	1764	0.0
50	0.00	0.00	3.1	1593	1037	0.0
500	0.15	0.01	2.9	1559	987	-0.7
1000	0.28	0.06	2.7	1525	940	-1.5
1500	0.41	0.13	2.5	1492	895	-2.3
2000	0.53	0.21	2.2	1458	853	-3.1
2500	0.65	0.31	2.0	1425	812	-3.8
3000	0.77	0.42	1.7	1392	773	-4.6
3500	0.87	0.54	1.5	1359	736	-5.3
4000	0.96	0.68	1.2	1327	701	-6.0
4500	1.03	0.83	1.0	1294	667	-6.7
5000	1.07	1.00	0.7	1262	635	-7.4
5500	1.08	1.19	0.5	1230	604	-8.1
6000	1.06	1.40	0.2	1198	575	-8.8
6500	1.00	1.64	-0.0	1167	547	-9.5
7000	0.91	1.91	-0.3	1136	520	-10.2
7500	0.78	2.21	-0.6	1105	494	-10.9
8000	0.61	2.55	-0.9	1074	469	-11.6
8500	0.40	2.93	-1.2	1044	445	-12.3
9000	0.14	3.36	-1.5	1014	422	-13.0
9500	-0.17	3.85	-1.8	984	399	-13.7
10000	-0.53	4.41	-2.1	955	378	-14.4
10500	-0.96	5.05	-2.4	926	357	-15.1
11000	-1.46	5.79	-2.7	897	337	-15.8

TYPE SC 1 CALIBER 6.50 MM AVERAGE DENSITY 4.08 GRAMS/CC.

PROJ. WT 0.814 GRAMS PROJ. DIA. 3.68 MM IMPULSE 2.1 LB. SEC.

DRAG ROCK. WT. 0.000 GRAMS CHG. WT. 4.83 GRAMS SABOT WT. 0.577 GRAMS

TWIST RATE NA PCT. DRAG CHANGE / (DEG. YAW)**2 0.74

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	6.1	1803	2260	0.0
0	0.00	0.00	6.1	1803	1322	0.0
50	0.30	0.03	6.0	1729	1216	-0.7
100	0.59	0.06	5.8	1655	1114	-1.5
150	0.87	0.09	5.6	1581	1016	-2.2
200	1.14	0.12	5.4	1506	922	-3.0
250	1.40	0.16	5.1	1430	832	-3.8
300	1.65	0.19	4.9	1355	746	-4.6
350	1.88	0.23	4.6	1278	664	-5.4
400	2.10	0.27	4.3	1201	587	-6.2
450	2.31	0.31	3.9	1124	514	-7.0
500	2.49	0.36	3.5	1046	445	-7.8
550	2.63	0.41	3.0	968	381	-8.6
600	2.79	0.46	2.4	889	322	-9.4
650	2.90	0.52	1.7	811	268	-10.2
700	2.97	0.59	0.9	732	218	-11.0
750	2.99	0.66	-0.2	655	174	-11.7
800	2.96	0.74	-1.5	578	136	-12.3
850	2.85	0.83	-3.2	504	103	-12.8
900	2.65	0.94	-5.5	434	77	-12.9
950	2.31	1.06	-8.6	370	56	-12.7
1000	1.80	1.21	-12.9	320	42	-11.4
1050	1.05	1.37	-18.3	289	34	-8.8
1100	0.00	1.56	-24.9	262	28	-6.6

DRAG ROCK. WT. 0.044 GRAMS PCT. DRAG CHANGE / (DEG. YAW)**2 2.12

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	2.3	1803	2260	0.0
0	0.00	0.00	2.3	1803	1322	0.0
50	0.11	0.03	2.1	1747	1270	-0.4
100	0.21	0.06	2.0	1732	1219	-0.7
150	0.30	0.09	1.8	1697	1169	-1.0
200	0.39	0.12	1.6	1662	1121	-1.4
250	0.47	0.15	1.4	1627	1074	-1.7
300	0.54	0.18	1.3	1593	1029	-2.1
350	0.60	0.21	1.1	1559	985	-2.4
400	0.64	0.24	0.8	1525	942	-2.7
450	0.68	0.27	0.6	1491	900	-3.0
500	0.71	0.31	0.3	1458	860	-3.3
550	0.73	0.34	0.2	1425	820	-3.7
600	0.74	0.38	-0.1	1391	782	-4.0
650	0.73	0.41	-0.4	1359	745	-4.3
700	0.71	0.45	-0.6	1326	709	-4.6
750	0.68	0.49	-0.9	1293	674	-4.9
800	0.63	0.53	-1.2	1261	641	-5.2
850	0.57	0.57	-1.6	1229	608	-5.4
900	0.49	0.61	-1.9	1197	577	-5.7
950	0.39	0.65	-2.3	1166	546	-6.0
1000	0.28	0.70	-2.8	1134	517	-6.3
1050	0.15	0.74	-3.0	1103	489	-6.5
1100	0.00	0.79	-3.5	1073	461	-6.8

TYPE SC 1 CALIBER 6.50 MM AVERAGE DENSITY 4.08 GRAMS/CC.

PROJ. WT 0.901 GRAMS PROJ. DIA. 3.81 MM IMPULSE 0.0 LB. SEC.

DRAG ROCK. WT. 0.000 GRAMS CHG. WT. 1.31 GRAMS SABOT WT. 0.557 GRAMS

TWIST RATE NA PCT. DRAG CHANGE / (DEG. YAW)**2 0.74

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	21.6	1333	1295	0.0
0	0.00	0.00	21.6	1333	800	0.0
50	1.05	0.04	21.3	1259	714	-0.7
100	2.09	0.08	20.9	1185	632	-1.5
150	3.11	0.12	20.5	1110	554	-2.3
200	4.11	0.17	20.1	1034	482	-3.0
250	5.08	0.22	19.7	959	414	-3.8
300	6.03	0.27	19.0	883	351	-4.6
350	6.95	0.33	18.3	807	294	-5.3
400	7.83	0.40	17.5	732	241	-6.1
450	8.67	0.47	16.4	657	194	-6.7
500	9.45	0.55	15.1	583	151	-7.4
550	10.16	0.64	13.4	511	117	-7.9
600	10.77	0.75	11.2	443	88	-8.2
650	11.25	0.87	8.2	380	65	-8.2
700	11.57	1.01	4.2	328	48	-7.7
750	11.66	1.17	-1.0	295	39	-5.6
800	11.47	1.35	-7.3	269	34	-4.5
850	10.93	1.55	-14.9	244	27	-4.3
900	9.99	1.76	-24.2	222	22	-4.2
950	8.54	2.00	-35.4	201	18	-4.1
1000	6.49	2.26	-49.0	183	15	-3.9
1050	3.70	2.55	-65.3	165	12	-3.8
1100	0.00	2.87	-85.7	150	10	-3.6

DRAG ROCK. WT. 0.049 GRAMS PCT. DRAG CHANGE / (DEG. YAW)**2 2.12

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	4.6	1333	1295	0.0
0	0.00	0.00	4.6	1333	800	0.0
50	0.22	0.04	4.4	1302	763	-0.3
100	0.43	0.08	4.0	1271	726	-0.6
150	0.63	0.12	3.7	1240	691	-0.9
200	0.82	0.16	3.4	1209	657	-1.2
250	1.00	0.20	3.0	1179	624	-1.5
300	1.18	0.24	2.7	1149	592	-1.8
350	1.22	0.29	2.3	1119	561	-2.1
400	1.31	0.33	1.9	1090	531	-2.4
450	1.41	0.38	1.5	1060	503	-2.6
500	1.49	0.43	1.0	1031	475	-2.9
550	1.52	0.48	0.5	1002	449	-3.1
600	1.54	0.53	0.0	974	423	-3.4
650	1.53	0.58	-0.5	946	399	-3.7
700	1.49	0.63	-1.1	918	375	-3.9
750	1.43	0.69	-1.7	890	353	-4.1
800	1.33	0.74	-2.4	863	331	-4.3
850	1.21	0.80	-3.1	837	311	-4.6
900	1.04	0.86	-3.8	810	291	-4.8
950	0.85	0.93	-4.6	784	272	-5.0
1000	0.61	0.99	-5.4	758	254	-5.2
1050	0.33	1.06	-6.3	733	237	-5.3
1100	0.00	1.13	-7.3	708	221	-5.5

TYPE SC 1 CALIBER 6.50 MM AVERAGE DENSITY 4.08 GRAMS/CC.

PROJ. WT 0.901 GRAMS PROJ. DIA. 3.81 MM IMPULSE 1.2 LB. SEC.

DRAG RDCR. WT. 0.000 GRAMS CHG. WT. 2.33 GRAMS SABOT WT. 0.557 GRAMS

TWIST RATE NA PCT. DRAG CHANGE / (DEG. YAW)**2 0.14

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	10.8	1569	1795	0.0
0	0.00	0.00	10.8	1569	1109	0.0
50	0.53	0.03	10.6	1497	1009	-0.7
100	1.04	0.07	10.4	1424	913	-1.5
150	1.54	0.10	10.1	1350	821	-2.2
200	2.03	0.14	9.8	1277	734	-3.0
250	2.51	0.18	9.5	1202	651	-3.7
300	2.97	0.22	9.1	1127	572	-4.5
350	3.41	0.27	8.7	1052	499	-5.3
400	3.82	0.32	8.2	977	430	-6.0
450	4.22	0.37	7.6	901	366	-6.8
500	4.58	0.43	7.0	825	307	-7.6
550	4.90	0.49	6.4	750	253	-8.3
600	5.19	0.56	5.2	674	205	-9.0
650	5.42	0.64	3.9	600	162	-9.7
700	5.58	0.73	2.4	527	125	-10.2
750	5.65	0.83	0.3	458	95	-10.5
800	5.61	0.95	-2.5	394	70	-10.5
850	5.40	1.09	-6.3	338	52	-10.0
900	4.99	1.25	-11.2	302	41	-8.0
950	4.30	1.42	-17.2	275	34	-5.9
1000	3.27	1.61	-24.5	250	28	-5.2
1050	1.88	1.82	-33.3	227	23	-5.0
1100	0.00	2.05	-44.0	206	19	-4.9

DRAG RDCR. WT. 0.049 GRAMS PCT. DRAG CHANGE / (DEG. YAW)**2 2.12

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	3.1	1569	1795	0.0
0	0.00	0.00	3.1	1569	1109	0.0
50	0.15	0.03	2.9	1536	1062	-0.3
100	0.29	0.07	2.7	1504	1017	-0.6
150	0.42	0.10	2.5	1472	973	-1.0
200	0.54	0.13	2.3	1439	931	-1.3
250	0.64	0.17	2.0	1407	889	-1.6
300	0.74	0.20	1.8	1376	849	-1.9
350	0.82	0.24	1.5	1344	810	-2.2
400	0.89	0.28	1.2	1313	772	-2.5
450	0.94	0.32	0.9	1281	735	-2.8
500	0.98	0.36	0.6	1250	700	-3.1
550	1.01	0.40	0.3	1220	665	-3.4
600	1.02	0.44	-0.1	1189	632	-3.7
650	1.01	0.48	-0.4	1159	600	-3.9
700	0.98	0.52	-0.8	1129	568	-4.2
750	0.94	0.57	-1.2	1099	538	-4.5
800	0.88	0.62	-1.7	1069	507	-4.7
850	0.79	0.66	-2.1	1040	481	-5.0
900	0.68	0.71	-2.6	1011	455	-5.2
950	0.55	0.76	-3.1	983	429	-5.4
1000	0.39	0.81	-3.6	954	404	-5.7
1050	0.21	0.87	-4.2	926	380	-5.9
1100	0.00	0.92	-4.8	898	357	-6.1

TYPE SC 1 CALIBER 6.50 MM AVERAGE DENSITY 4.08 GRAMS/CC.

PROJ. WT 0.901 GRAMS PROJ. DIA. 3.81 MM IMPULSE 2.1 LB. SEC.

DRAG RDCR. WT. 0.000 GRAMS CHG. WT. 4.78 GRAMS SABOT WT. 0.557 GRAMS

TWIST RATE NA PCT. DRAG CHANGE / (DEG. YAW)**2 0.74

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	5.7	1790	2336	0.0
0	0.00	0.00	5.7	1790	1443	0.0
50	0.28	0.03	5.6	1719	1330	-0.7
100	0.55	0.06	5.4	1647	1222	-1.4
150	0.81	0.09	5.2	1575	1117	-2.2
200	1.06	0.12	5.0	1503	1017	-2.9
250	1.30	0.16	4.7	1430	921	-3.7
300	1.53	0.19	4.5	1357	829	-4.4
350	1.74	0.23	4.2	1283	741	-5.2
400	1.95	0.27	3.9	1209	658	-5.9
450	2.13	0.31	3.5	1134	579	-6.7
500	2.30	0.36	3.1	1059	505	-7.5
550	2.44	0.41	2.6	983	435	-8.3
600	2.56	0.46	2.1	907	371	-9.1
650	2.65	0.52	1.4	832	312	-9.8
700	2.71	0.58	0.6	756	257	-10.6
750	2.72	0.65	-0.4	681	209	-11.3
800	2.68	0.73	-1.6	606	166	-11.9
850	2.57	0.82	-3.1	533	128	-12.5
900	2.38	0.92	-5.1	464	97	-12.8
950	2.07	1.03	-7.8	400	72	-12.7
1000	1.61	1.17	-11.5	342	53	-12.2
1050	0.94	1.32	-16.4	304	42	-10.1
1100	0.00	1.50	-22.3	277	35	-7.6

DRAG RDCR. WT. 0.049 GRAMS PCT. DRAG CHANGE / (DEG. YAW)**2 2.12

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	2.3	1790	2336	0.0
0	0.00	0.00	2.3	1790	1443	0.0
50	0.11	0.03	2.1	1756	1387	-0.3
100	0.21	0.06	2.0	1722	1333	-0.7
150	0.31	0.09	1.8	1688	1281	-1.0
200	0.39	0.12	1.6	1654	1230	-1.3
250	0.47	0.15	1.4	1621	1180	-1.7
300	0.54	0.18	1.2	1588	1131	-2.0
350	0.59	0.21	1.0	1555	1084	-2.3
400	0.64	0.24	0.8	1522	1039	-2.6
450	0.68	0.28	0.6	1489	994	-2.9
500	0.71	0.31	0.4	1457	951	-3.2
550	0.73	0.34	0.1	1425	909	-3.5
600	0.73	0.38	-0.1	1393	868	-3.8
650	0.73	0.42	-0.4	1361	828	-4.1
700	0.71	0.45	-0.6	1329	790	-4.4
750	0.67	0.49	-0.9	1298	752	-4.7
800	0.63	0.53	-1.2	1267	716	-5.0
850	0.56	0.57	-1.6	1236	681	-5.3
900	0.49	0.61	-1.9	1205	647	-5.5
950	0.39	0.65	-2.2	1174	614	-5.8
1000	0.28	0.70	-2.6	1144	582	-6.1
1050	0.15	0.74	-3.0	1114	552	-6.3
1100	0.00	0.79	-3.4	1084	527	-6.6

TYPE SC 1 CALIBER 6.50 MM AVERAGE DENSITY 4.08 GRAMS/CC.
PROJ. WT 1.095 GRAMS PROJ. DIA. 4.06 MM IMPULSE 0.8 LB. SEC.
DRAG RDCR. WT. 0.000 GRAMS CHG. WT. 1.25 GRAMS SABOT WT. 0.525 GRAMS
TWIST RATE NA PCT. DRAG CHANGE / (DEG. YAW)**2 0.74

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	21.9	1262	1290	0.0
50	0.00	0.04	21.9	1262	1290	0.0
100	1.07	0.08	21.8	1262	1290	-0.1
150	2.12	0.13	21.8	1262	1290	-0.1
200	3.16	0.18	21.7	1262	1290	-0.1
250	4.17	0.23	21.6	1262	1290	-0.1
300	5.15	0.28	21.5	1262	1290	-0.1
350	6.11	0.33	21.4	1262	1290	-0.1
400	7.04	0.38	21.3	1262	1290	-0.1
450	7.94	0.43	21.2	1262	1290	-0.1
500	8.81	0.48	21.1	1262	1290	-0.1
550	9.65	0.53	21.0	1262	1290	-0.1
600	10.46	0.58	20.9	1262	1290	-0.1
650	11.25	0.63	20.8	1262	1290	-0.1
700	12.01	0.68	20.7	1262	1290	-0.1
750	12.74	0.73	20.6	1262	1290	-0.1
800	13.44	0.78	20.5	1262	1290	-0.1
850	14.12	0.83	20.4	1262	1290	-0.1
900	14.77	0.88	20.3	1262	1290	-0.1
950	15.39	0.93	20.2	1262	1290	-0.1
1000	15.99	0.98	20.1	1262	1290	-0.1
1050	16.57	1.03	20.0	1262	1290	-0.1
1100	17.12	1.08	19.9	1262	1290	-0.1

DRAG RDCR. WT. 0.059 GRAMS PCT. DRAG CHANGE / (DEG. YAW)**2 2.12

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	5.1	1262	1290	0.0
50	0.00	0.04	5.1	1262	1290	0.0
100	0.24	0.08	4.8	1262	1290	-0.3
150	0.47	0.13	4.4	1262	1290	-0.6
200	0.68	0.17	4.1	1261	1289	-0.8
250	0.87	0.22	3.7	1261	1289	-1.1
300	1.05	0.27	3.3	1261	1289	-1.4
350	1.21	0.32	2.9	1261	1289	-1.7
400	1.34	0.37	2.5	1261	1289	-2.0
450	1.46	0.42	2.1	1261	1289	-2.3
500	1.56	0.47	1.7	1261	1289	-2.6
550	1.62	0.52	1.3	1261	1289	-2.9
600	1.66	0.57	0.9	1261	1289	-3.2
650	1.68	0.62	0.5	1261	1289	-3.5
700	1.67	0.67	0.1	1261	1289	-3.8
750	1.63	0.72	-0.2	1261	1289	-4.1
800	1.56	0.77	-0.6	1261	1289	-4.4
850	1.45	0.82	-1.0	1261	1289	-4.7
900	1.31	0.87	-1.4	1261	1289	-5.0
950	1.13	0.92	-1.8	1261	1289	-5.3
1000	0.92	0.97	-2.2	1261	1289	-5.6
1050	0.66	1.04	-2.6	1261	1289	-5.9
1100	0.35	1.11	-3.0	1261	1289	-6.2
1150	0.00	1.18	-3.4	1261	1289	-6.5

TYPE SC 1 CALIBER 6.50 MM AVERAGE DENSITY 4.08 GRAMS/CC.

PROJ. WT 1.095 GRAMS PROJ. DIA. 4.06 MM IMPULSE 1.2 LB. SEC.

DRAG RDCR. WT. 0.000 GRAMS CHG. WT. 2.24 GRAMS SABOT WT. 0.525 GRAMS

TWIST RATE NA PCT. DRAG CHANGE / (DEG. YAW)**2 0.74

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	10.9	1514	1857	0.0
0	0.00	0.00	10.5	1514	1255	0.0
50	0.51	0.03	10.2	1446	1145	-0.7
100	1.00	0.07	10.0	1377	1039	-1.4
150	1.49	0.11	9.7	1308	937	-2.1
200	1.96	0.15	9.4	1239	840	-2.8
250	2.41	0.19	9.0	1169	749	-3.5
300	2.85	0.23	8.7	1099	661	-4.2
350	3.27	0.28	8.2	1028	579	-4.9
400	3.66	0.33	7.7	958	502	-5.7
450	4.03	0.38	7.1	887	431	-6.4
500	4.37	0.44	6.4	816	365	-7.1
550	4.67	0.51	5.6	745	304	-7.8
600	4.92	0.58	4.6	675	249	-8.5
650	5.13	0.65	3.4	605	200	-9.1
700	5.26	0.74	1.9	537	158	-9.6
750	5.31	0.84	-0.1	471	122	-9.9
800	5.25	0.96	-2.7	410	92	-10.0
850	5.04	1.09	-6.2	355	67	-9.8
900	4.64	1.24	-10.7	314	54	-8.5
950	3.99	1.40	-16.3	287	45	-6.3
1000	3.04	1.59	-22.9	262	38	-5.2
1050	1.73	1.79	-30.9	240	32	-4.9
1100	0.00	2.00	-40.4	219	26	-4.8

DRAG RDCR. WT. 0.059 GRAMS PCT. DRAG CHANGE / (DEG. YAW)**2 2.12

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	3.3	1514	1857	0.0
0	0.00	0.00	3.3	1514	1255	0.0
50	0.16	0.03	3.1	1484	1205	-0.3
100	0.30	0.07	2.9	1454	1156	-0.6
150	0.44	0.10	2.6	1424	1106	-0.9
200	0.56	0.14	2.4	1394	1061	-1.2
250	0.68	0.17	2.1	1364	1016	-1.5
300	0.78	0.21	1.8	1335	972	-1.8
350	0.86	0.25	1.6	1305	929	-2.0
400	0.93	0.29	1.3	1276	887	-2.3
450	0.99	0.33	0.9	1247	847	-2.6
500	1.03	0.37	0.6	1218	807	-2.9
550	1.06	0.41	0.3	1190	769	-3.1
600	1.07	0.45	-0.1	1161	733	-3.4
650	1.06	0.50	-0.5	1133	697	-3.7
700	1.03	0.54	-0.9	1105	662	-3.9
750	0.98	0.59	-1.3	1077	629	-4.1
800	0.91	0.63	-1.7	1050	597	-4.4
850	0.82	0.68	-2.2	1023	566	-4.6
900	0.71	0.73	-2.7	996	536	-4.8
950	0.57	0.78	-3.2	969	507	-5.1
1000	0.41	0.83	-3.8	943	479	-5.3
1050	0.22	0.89	-4.3	917	453	-5.5
1100	0.00	0.94	-4.9	891	427	-5.7

TYPE SC 1 CALIBER 6.50 MM AVERAGE DENSITY 4.08 GRAMS/CC.
PROJ. WT 1.095 GRAMS PROJ. DIA. 4.06 MM IMPULSE 2.1 LB. SEC.
DRAG ROCK. WT. 0.000 GRAMS CHG. WT. 4.67 GRAMS SABOT WT. 0.525 GRAMS
TWIST RATE NA PCT. DRAG CHANGE / (DEG. YAW)**2 0.74

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	5.2	1757	2501	0.0
0	0.00	0.00	5.2	1757	1690	0.0
50	0.25	0.03	5.1	1690	1564	-0.7
100	0.50	0.06	4.9	1623	1442	-1.3
150	0.73	0.09	4.7	1555	1325	-2.0
200	0.96	0.12	4.5	1488	1212	-2.7
250	1.18	0.16	4.2	1419	1103	-3.4
300	1.38	0.19	4.0	1351	999	-4.1
350	1.57	0.23	3.7	1282	899	-4.8
400	1.75	0.27	3.4	1212	804	-5.6
450	1.91	0.31	3.0	1142	714	-6.3
500	2.05	0.36	2.6	1072	629	-7.0
550	2.17	0.41	2.1	1001	549	-7.8
600	2.27	0.46	1.6	930	474	-8.5
650	2.33	0.52	1.0	859	404	-9.2
700	2.37	0.58	0.2	788	340	-9.9
750	2.37	0.64	-0.6	717	282	-10.6
800	2.32	0.72	-1.7	647	230	-11.2
850	2.21	0.80	-3.1	578	183	-11.8
900	2.02	0.89	-4.7	511	143	-12.3
950	1.75	0.99	-6.9	447	109	-12.4
1000	1.35	1.11	-9.8	388	82	-12.3
1050	0.78	1.25	-13.7	336	62	-11.7
1100	0.00	1.41	-18.6	303	50	-9.7

DRAG ROCK. WT. 0.059 GRAMS PCT. DRAG CHANGE / (DEG. YAW)**2 2.12

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	2.3	1757	2501	0.0
0	0.00	0.00	2.3	1757	1690	0.0
50	0.11	0.03	2.2	1725	1629	-0.3
100	0.21	0.06	2.0	1693	1564	-0.6
150	0.31	0.09	1.8	1662	1510	-0.9
200	0.40	0.12	1.6	1631	1453	-1.2
250	0.47	0.15	1.5	1599	1397	-1.6
300	0.54	0.18	1.3	1569	1343	-1.8
350	0.60	0.21	1.0	1538	1290	-2.1
400	0.65	0.25	0.8	1507	1239	-2.4
450	0.69	0.28	0.6	1477	1188	-2.7
500	0.72	0.31	0.4	1447	1139	-3.0
550	0.73	0.35	0.1	1417	1092	-3.3
600	0.74	0.38	-0.1	1387	1046	-3.6
650	0.73	0.42	-0.4	1357	1001	-3.9
700	0.71	0.46	-0.7	1327	957	-4.1
750	0.68	0.50	-1.0	1298	914	-4.4
800	0.63	0.53	-1.3	1269	871	-4.7
850	0.57	0.57	-1.6	1240	833	-4.9
900	0.49	0.62	-1.9	1211	794	-5.2
950	0.39	0.66	-2.3	1182	756	-5.4
1000	0.28	0.70	-2.6	1154	720	-5.7
1050	0.15	0.74	-3.0	1125	684	-5.9
1100	0.00	0.79	-3.4	1097	650	-6.2

TYPE SC 1 CALIBER 6.50 MM AVERAGE DENSITY 4.08 GRAMS/CC.

PROJ. WT 1.319 GRAMS PROJ. DIA. 4.32 MM IMPULSE 0.0 LB. SEC.

DRAG RDCR. WT. 0.000 GRAMS CHG. WT. 1.18 GRAMS SABOT WT. 0.486 GRAMS

TWIST RATE NA PCT. DRAG CHANGE / (DEG. YAW)**2 0.74

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	23.1	1188	1271	0.0
0	0.00	0.00	23.1	1188	928	0.0
50	1.13	0.04	22.7	1122	826	-0.7
100	2.23	0.09	22.3	1056	734	-1.3
150	3.32	0.14	21.8	990	644	-2.0
200	4.38	0.19	21.3	923	560	-2.7
250	5.41	0.25	20.7	856	482	-3.3
300	6.41	0.31	19.9	789	410	-4.0
350	7.37	0.37	19.1	723	343	-4.7
400	8.28	0.45	18.0	657	284	-5.3
450	9.14	0.53	16.7	592	230	-5.9
500	9.93	0.62	15.1	528	183	-6.4
550	10.63	0.72	13.1	467	143	-6.7
600	11.21	0.83	10.5	409	110	-6.9
650	11.65	0.96	7.0	357	84	-6.9
700	11.89	1.11	2.6	317	66	-6.0
750	11.90	1.28	-2.8	291	56	-4.4
800	11.61	1.46	-9.3	268	47	-3.8
850	10.98	1.65	-16.9	246	40	-3.7
900	9.94	1.86	-25.9	226	34	-3.7
950	8.43	2.09	-36.5	208	28	-3.6
1000	6.34	2.35	-49.1	191	24	-3.6
1050	3.57	2.62	-64.1	175	20	-3.5
1100	0.00	2.92	-82.0	160	17	-3.4

DRAG RDCR. WT. 0.071 GRAMS PCT. DRAG CHANGE / (DEG. YAW)**2 2.12

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	5.7	1188	1271	0.0
0	0.00	0.00	5.7	1188	928	0.0
50	0.27	0.04	5.3	1162	887	-0.3
100	0.52	0.09	5.0	1135	846	-0.5
150	0.76	0.13	4.6	1109	807	-0.8
200	0.98	0.18	4.2	1083	769	-1.0
250	1.17	0.22	3.7	1057	733	-1.3
300	1.34	0.27	3.3	1032	697	-1.5
350	1.49	0.32	2.8	1007	663	-1.8
400	1.62	0.37	2.3	982	630	-2.0
450	1.72	0.42	1.7	957	598	-2.2
500	1.80	0.47	1.2	932	567	-2.4
550	1.85	0.53	0.6	908	537	-2.7
600	1.86	0.58	0.0	884	508	-2.9
650	1.85	0.64	-0.7	860	481	-3.1
700	1.81	0.70	-1.4	837	455	-3.3
750	1.72	0.76	-2.1	813	429	-3.5
800	1.61	0.82	-2.9	790	405	-3.7
850	1.45	0.89	-3.7	767	381	-3.9
900	1.26	0.95	-4.6	745	359	-4.0
950	1.01	1.02	-5.5	723	337	-4.2
1000	0.73	1.09	-6.5	701	317	-4.4
1050	0.39	1.17	-7.6	679	297	-4.5
1100	0.00	1.24	-8.7	658	279	-4.7

TYPE SC 1 CALIBER 6.50 MM AVERAGE DENSITY 4.08 GRAMS/CC.

PROJ. WT 1.315 GRAMS PROJ. DIA. 4.32 MM IMPULSE 1.2 LB. SEC.

DRAG ROCK. WT. 0.000 GRAMS CHG. WT. 2.15 GRAMS SABOT WT. 0.486 GRAMS

TWIST RATE NA PCT. DRAG CHANGE / (DEG. YAW)**2 0.74

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	10.5	1454	1904	0.0
0	0.00	0.00	10.5	1454	1390	0.0
50	0.51	0.04	10.3	1390	1270	-0.6
100	1.01	0.07	10.0	1325	1154	-1.3
150	1.50	0.11	9.7	1260	1044	-2.0
200	1.97	0.15	9.4	1194	938	-2.6
250	2.42	0.19	9.0	1128	837	-3.3
300	2.86	0.24	8.6	1062	742	-4.0
350	3.27	0.29	8.1	996	652	-4.6
400	3.66	0.34	7.6	929	568	-5.3
450	4.02	0.40	7.0	862	489	-6.0
500	4.35	0.46	6.2	796	417	-6.7
550	4.64	0.52	5.4	729	350	-7.3
600	4.88	0.59	4.3	663	289	-7.9
650	5.07	0.67	3.1	596	235	-8.5
700	5.19	0.76	1.5	534	187	-9.0
750	5.22	0.86	-0.5	472	147	-9.3
800	5.14	0.98	-3.0	415	113	-9.4
850	4.94	1.10	-6.4	362	86	-9.3
900	4.52	1.25	-10.7	320	67	-8.3
950	3.87	1.42	-16.1	293	57	-6.4
1000	2.94	1.59	-22.4	270	48	-5.1
1050	1.67	1.79	-29.9	248	40	-4.8
1100	0.00	2.00	-38.7	228	34	-4.6

DRAG ROCK. WT. 0.071 GRAMS PCT. DRAG CHANGE / (DEG. YAW)**2 2.12

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	3.6	1454	1904	0.0
0	0.00	0.00	3.6	1454	1390	0.0
50	0.17	0.03	3.3	1426	1336	-0.3
100	0.34	0.07	3.1	1398	1283	-0.6
150	0.47	0.11	2.8	1370	1232	-0.8
200	0.60	0.14	2.5	1342	1182	-1.1
250	0.72	0.18	2.4	1315	1133	-1.4
300	0.83	0.22	2.0	1287	1085	-1.6
350	0.92	0.26	1.6	1260	1039	-1.9
400	1.00	0.30	1.3	1233	994	-2.2
450	1.06	0.34	1.0	1206	950	-2.4
500	1.10	0.38	0.6	1179	908	-2.7
550	1.13	0.42	0.3	1152	867	-2.9
600	1.13	0.47	-0.1	1126	827	-3.2
650	1.12	0.51	-0.5	1100	788	-3.4
700	1.09	0.56	-0.9	1074	751	-3.6
750	1.04	0.61	-1.4	1048	714	-3.9
800	0.97	0.65	-1.8	1022	679	-4.1
850	0.87	0.70	-2.3	997	646	-4.3
900	0.75	0.76	-2.9	972	613	-4.5
950	0.61	0.81	-3.4	947	581	-4.7
1000	0.43	0.86	-4.0	922	551	-4.9
1050	0.23	0.92	-4.6	898	522	-5.1
1100	0.00	0.97	-5.2	874	494	-5.3

TYPE SC 1 CALIBER 6.50 MM AVERAGE DENSITY 4.08 GRAMS/CC.

PROJ. WT 1.915 GRAMS PROJ. DIA. 4.32 MM IMPULSE 2.1 LB. SEC.

DRAG RDCR. WT. 0.000 GRAMS CHG. WT. 4.55 GRAMS SABOT WT. 0.486 GRAMS

TWIST RATE NA PCT. DRAG CHANGE / (DEG. YAW)**2 0.74

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	5.0	1720	2665	0.0
0	0.00	0.00	5.0	1720	1946	0.0
50	0.24	0.03	4.8	1657	1806	-0.6
100	0.47	0.06	4.6	1594	1670	-1.3
150	0.70	0.09	4.4	1530	1540	-1.9
200	0.91	0.13	4.2	1466	1414	-2.6
250	1.11	0.16	3.9	1402	1293	-3.2
300	1.30	0.20	3.7	1337	1176	-3.9
350	1.48	0.24	3.4	1272	1064	-4.6
400	1.64	0.28	3.1	1207	958	-5.2
450	1.78	0.32	2.7	1141	856	-5.9
500	1.91	0.36	2.3	1075	760	-6.6
550	2.01	0.41	1.8	1009	669	-7.3
600	2.10	0.46	1.3	942	584	-8.0
650	2.15	0.52	0.7	875	504	-8.7
700	2.17	0.58	0.0	809	430	-9.3
750	2.16	0.64	-0.8	742	362	-10.0
800	2.10	0.71	-1.8	676	300	-10.6
850	1.99	0.79	-3.0	610	245	-11.2
900	1.81	0.88	-4.5	546	196	-11.7
950	1.55	0.97	-6.4	484	154	-12.0
1000	1.18	1.08	-8.9	425	119	-12.0
1050	0.68	1.21	-12.0	371	91	-11.8
1100	0.00	1.35	-16.2	327	70	-11.0

DRAG RDCR. WT. 0.071 GRAMS PCT. DRAG CHANGE / (DEG. YAW)**2 2.12

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	2.4	1720	2665	0.0
0	0.00	0.00	2.4	1720	1946	0.0
50	0.11	0.03	2.2	1690	1878	-0.3
100	0.22	0.06	2.1	1661	1812	-0.6
150	0.32	0.09	1.9	1631	1747	-0.9
200	0.41	0.12	1.7	1602	1684	-1.2
250	0.49	0.15	1.5	1573	1621	-1.4
300	0.56	0.18	1.3	1544	1563	-1.7
350	0.62	0.22	1.1	1515	1504	-2.0
400	0.67	0.25	0.8	1487	1447	-2.3
450	0.70	0.28	0.6	1458	1391	-2.6
500	0.73	0.32	0.4	1430	1337	-2.8
550	0.75	0.35	0.1	1402	1284	-3.1
600	0.75	0.39	-0.1	1374	1232	-3.4
650	0.74	0.43	-0.4	1346	1182	-3.6
700	0.72	0.46	-0.7	1318	1133	-3.9
750	0.69	0.50	-1.0	1290	1085	-4.1
800	0.64	0.54	-1.3	1263	1039	-4.4
850	0.57	0.58	-1.6	1236	994	-4.6
900	0.49	0.62	-1.9	1209	950	-4.9
950	0.40	0.66	-2.3	1182	907	-5.1
1000	0.28	0.71	-2.7	1155	866	-5.3
1050	0.15	0.75	-3.0	1128	829	-5.6
1100	0.00	0.80	-3.4	1102	787	-5.8

TYPE SC 1 CALIBER 6.50 MM AVERAGE DENSITY 4.08 GRAMS/CC.

PROJ. WT. 1.562 GRAMS PROJ. DIA. 4.57 MM IMPULSE 0.8 LB. SEC.

DRAG RDCR. WT. 0.000 GRAMS CHG. WT. 1.12 GRAMS SABOT WT. 0.441 GRAMS

TWIST RATE NA PCT. DRAG CHANGE / (DEG. YAW)**2 0.74

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	24.9	1114	1242	0.0
0	0.00	0.00	24.9	1114	969	0.0
50	1.21	0.05	24.5	1051	863	-0.6
100	2.40	0.10	24.0	989	764	-1.3
150	3.57	0.15	23.4	926	669	-1.9
200	4.70	0.20	22.6	863	581	-2.5
250	5.81	0.26	22.1	800	500	-3.1
300	6.87	0.33	21.2	737	424	-3.8
350	7.90	0.40	20.2	675	355	-4.4
400	8.86	0.48	19.0	613	293	-4.9
450	9.77	0.56	17.5	552	238	-5.5
500	10.59	0.66	15.7	493	190	-5.9
550	11.31	0.77	13.4	437	149	-6.2
600	11.90	0.89	10.4	385	116	-6.3
650	12.33	1.03	6.6	339	90	-6.1
700	12.54	1.18	1.6	308	74	-4.9
750	12.50	1.35	-4.0	284	63	-3.8
800	12.15	1.54	-10.7	263	54	-3.5
850	11.44	1.73	-18.5	243	46	-3.5
900	10.32	1.95	-27.7	224	39	-3.4
950	8.71	2.18	-38.5	207	33	-3.4
1000	6.52	2.43	-51.1	191	28	-3.3
1050	3.66	2.71	-66.1	176	24	-3.3
1100	0.00	3.00	-83.6	162	20	-3.2

DRAG RDCR. WT. 0.084 GRAMS PCT. DRAG CHANGE / (DEG. YAW)**2 2.12

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	6.4	1114	1242	0.0
0	0.00	0.00	6.4	1114	969	0.0
50	0.31	0.05	6.0	1090	926	-0.2
100	0.59	0.09	5.6	1065	885	-0.5
150	0.86	0.14	5.1	1041	844	-0.7
200	1.10	0.19	4.7	1017	806	-0.9
250	1.32	0.24	4.2	994	768	-1.2
300	1.51	0.29	3.7	970	731	-1.4
350	1.68	0.34	3.1	947	696	-1.6
400	1.82	0.39	2.5	924	662	-1.8
450	1.94	0.45	1.9	901	629	-2.0
500	2.02	0.51	1.3	878	597	-2.3
550	2.07	0.56	0.7	856	566	-2.5
600	2.09	0.62	0.0	834	537	-2.6
650	2.08	0.68	-0.8	812	509	-2.8
700	2.03	0.75	-1.6	790	481	-3.0
750	1.94	0.81	-2.4	769	455	-3.2
800	1.80	0.88	-3.3	748	430	-3.4
850	1.63	0.94	-4.2	727	405	-3.6
900	1.41	1.01	-5.1	706	382	-3.7
950	1.14	1.08	-6.2	686	360	-3.9
1000	0.81	1.16	-7.3	666	339	-4.0
1050	0.44	1.24	-8.4	646	318	-4.2
1100	0.00	1.31	-9.7	626	299	-4.3

TYPE SC 1 CALIBER 6.50 MM AVERAGE DENSITY 4.08 GRAMS/CC.

PROJ. WT 1.562 GRAMS PROJ. DIA. 4.57 MM IMPULSE 1.2 LB. SEC.

DRAG ROCR. WT. 0.000 GRAMS CHG. WT. 2.05 GRAMS SABOT WT. 0.441 GRAMS

TWIST RATE NR PCT. DRAG CHANGE / (DEG. YAW)**2 0.74

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	11.0	1389	1932	0.0
0	0.00	0.00	11.0	1389	1507	0.0
50	0.53	0.04	10.7	1328	1377	-0.6
100	1.05	0.08	10.4	1266	1252	-1.2
150	1.56	0.12	10.1	1205	1133	-1.9
200	2.05	0.16	9.7	1143	1020	-2.5
250	2.52	0.20	9.3	1080	911	-3.1
300	2.97	0.25	8.9	1018	809	-3.8
350	3.40	0.30	8.4	955	712	-4.4
400	3.79	0.36	7.8	892	621	-5.0
450	4.16	0.41	7.1	829	537	-5.7
500	4.50	0.48	6.3	766	458	-6.3
550	4.79	0.55	5.4	703	386	-6.9
600	5.03	0.62	4.3	641	321	-7.4
650	5.22	0.70	2.9	580	264	-8.0
700	5.33	0.79	1.3	520	211	-8.4
750	5.35	0.89	-0.8	463	167	-8.7
800	5.25	1.01	-3.4	409	131	-8.8
850	5.01	1.14	-6.8	359	101	-8.7
900	4.58	1.29	-11.2	321	80	-7.8
950	3.91	1.45	-16.5	295	68	-6.0
1000	2.96	1.63	-22.8	272	58	-4.8
1050	1.67	1.82	-30.0	252	50	-4.5
1100	0.00	2.03	-38.6	233	42	-4.4

DRAG ROCR. WT. 0.084 GRAMS PCT. DRAG CHANGE / (DEG. YAW)**2 2.12

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	3.9	1389	1932	0.0
0	0.00	0.00	3.9	1389	1507	0.0
50	0.18	0.04	3.6	1363	1449	-0.3
100	0.35	0.07	3.3	1337	1393	-0.5
150	0.51	0.11	3.0	1311	1339	-0.8
200	0.66	0.15	2.7	1285	1286	-1.0
250	0.78	0.19	2.4	1259	1234	-1.3
300	0.90	0.23	2.1	1234	1183	-1.5
350	1.00	0.27	1.8	1208	1134	-1.8
400	1.08	0.31	1.4	1183	1086	-2.0
450	1.14	0.35	1.1	1158	1040	-2.3
500	1.19	0.40	0.7	1133	995	-2.5
550	1.22	0.44	0.3	1108	951	-2.7
600	1.23	0.49	-0.1	1083	909	-2.9
650	1.21	0.54	-0.6	1059	867	-3.2
700	1.18	0.58	-1.0	1035	828	-3.4
750	1.12	0.63	-1.5	1011	789	-3.6
800	1.04	0.68	-2.0	987	752	-3.8
850	0.94	0.73	-2.5	964	715	-4.0
900	0.81	0.79	-3.1	940	680	-4.2
950	0.65	0.84	-3.7	917	647	-4.4
1000	0.47	0.89	-4.3	894	614	-4.6
1050	0.25	0.95	-4.9	871	583	-4.8
1100	0.00	1.01	-5.6	849	552	-4.9

TYPE SC 1 CALIBER 6.50 MM AVERAGE DENSITY 4.08 GRAMS/CC.
PROJ. WT 1.562 GRAMS PROJ. DIA. 4.97 MM IMPULSE 2.1 LB. SEC.
DRAG RDCR. WT. 0.000 GRAMS CHG. WT. 4.41 GRAMS SABOT WT. 0.441 GRAMS
TWIST RATE NA PCT. DRAG CHANGE / (DEG. YAW)**2 0.74

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	4.9	1679	2822	0.0
0	0.00	0.00	4.9	1679	2201	0.0
50	0.24	0.03	4.7	1619	2048	-0.6
100	0.46	0.06	4.5	1559	1899	-1.2
150	0.68	0.09	4.3	1499	1755	-1.8
200	0.89	0.13	4.1	1439	1617	-2.4
250	1.08	0.16	3.8	1378	1483	-3.0
300	1.26	0.20	3.5	1317	1354	-3.7
350	1.43	0.24	3.2	1255	1231	-4.3
400	1.59	0.28	2.9	1194	1112	-4.9
450	1.72	0.32	2.5	1131	1000	-5.6
500	1.84	0.37	2.1	1069	892	-6.2
550	1.94	0.42	1.7	1006	791	-6.9
600	2.01	0.47	1.1	944	695	-7.5
650	2.06	0.52	0.5	881	606	-8.2
700	2.07	0.58	-0.2	818	522	-8.8
750	2.05	0.65	-1.0	755	445	-9.4
800	1.98	0.72	-1.9	692	374	-10.0
850	1.87	0.79	-3.1	630	310	-10.6
900	1.69	0.87	-4.5	569	253	-11.1
950	1.44	0.97	-6.2	509	203	-11.5
1000	1.09	1.07	-8.4	453	160	-11.6
1050	0.62	1.19	-11.1	400	125	-11.6
1100	0.00	1.32	-14.7	351	96	-11.3

DRAG RDCR. WT. 0.084 GRAMS PCT. DRAG CHANGE / (DEG. YAW)**2 2.12

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	2.5	1679	2822	0.0
0	0.00	0.00	2.5	1679	2201	0.0
50	0.12	0.03	2.3	1651	2128	-0.3
100	0.23	0.06	2.1	1623	2056	-0.6
150	0.34	0.09	1.9	1596	1985	-0.8
200	0.42	0.12	1.7	1569	1917	-1.1
250	0.50	0.16	1.5	1541	1850	-1.4
300	0.57	0.19	1.3	1514	1784	-1.6
350	0.64	0.22	1.1	1487	1720	-1.9
400	0.69	0.26	0.9	1460	1658	-2.1
450	0.73	0.29	0.6	1434	1597	-2.4
500	0.75	0.33	0.4	1407	1537	-2.7
550	0.77	0.36	0.1	1381	1479	-2.9
600	0.77	0.40	-0.1	1354	1422	-3.2
650	0.77	0.43	-0.4	1328	1366	-3.4
700	0.74	0.47	-0.7	1302	1312	-3.6
750	0.71	0.51	-1.0	1276	1260	-3.9
800	0.65	0.55	-1.3	1250	1208	-4.1
850	0.59	0.59	-1.7	1224	1158	-4.4
900	0.51	0.63	-2.0	1199	1110	-4.6
950	0.41	0.68	-2.3	1174	1062	-4.8
1000	0.29	0.72	-2.7	1148	1016	-5.0
1050	0.15	0.76	-3.1	1123	972	-5.2
1100	0.00	0.81	-3.5	1098	929	-5.5

TYPE SC 1 CALIBER 6.50 MM AVERAGE DENSITY 4.08 GRAMS/CC.

PROJ. WT 1.840 GRAMS PROJ. DIA. 4.83 MM IMPULSE 0.6 LB. SEC.

DRAG RDCR. WT. 0.000 GRAMS CHG. WT. 1.05 GRAMS SABOT WT. 0.389 GRAMS

TWIST RATE NA PCT. DRAG CHANGE / (DEG. YAW)**2 0.74

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	27.4	1038	1201	0.0
0	0.00	0.00	27.4	1038	991	0.0
50	1.33	0.05	26.9	979	881	-0.6
100	2.64	0.10	26.3	919	777	-1.2
150	3.92	0.16	25.7	860	680	-1.8
200	5.17	0.22	25.0	800	589	-2.4
250	6.37	0.28	24.1	740	505	-3.0
300	7.52	0.35	23.2	681	427	-3.5
350	8.62	0.43	22.0	623	357	-4.1
400	9.66	0.52	20.6	565	294	-4.6
450	10.67	0.61	18.8	509	238	-5.1
500	11.55	0.71	16.7	455	191	-5.4
550	12.30	0.83	13.9	405	151	-5.6
600	12.91	0.96	10.5	358	118	-5.7
650	13.33	1.11	6.1	321	93	-5.0
700	13.51	1.27	0.9	297	81	-3.8
750	13.41	1.45	-5.3	275	70	-3.3
800	12.98	1.63	-12.4	256	60	-3.2
850	12.18	1.84	-20.6	237	52	-3.2
900	10.95	2.06	-30.2	220	44	-3.2
950	9.20	2.29	-41.4	204	38	-3.2
1000	6.87	2.55	-54.4	189	33	-3.1
1050	3.84	2.82	-69.5	175	28	-3.1
1100	0.00	3.12	-87.2	162	24	-3.0

DRAG RDCR. WT. 0.099 GRAMS PCT. DRAG CHANGE / (DEG. YAW)**2 2.12

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	7.4	1038	1201	0.0
0	0.00	0.00	7.4	1038	991	0.0
50	0.35	0.05	6.9	1016	948	-0.2
100	0.68	0.10	6.4	993	906	-0.4
150	0.98	0.15	5.9	971	865	-0.7
200	1.26	0.20	5.4	949	826	-0.9
250	1.51	0.25	4.8	927	788	-1.1
300	1.73	0.31	4.2	906	751	-1.3
350	1.92	0.37	3.6	884	715	-1.5
400	2.09	0.42	2.9	863	680	-1.7
450	2.22	0.48	2.2	842	647	-1.9
500	2.31	0.54	1.5	821	615	-2.1
550	2.37	0.60	0.7	801	584	-2.3
600	2.39	0.67	-0.1	780	554	-2.4
650	2.37	0.73	-0.9	760	525	-2.6
700	2.31	0.80	-1.8	740	497	-2.8
750	2.21	0.87	-2.7	721	470	-2.9
800	2.06	0.94	-3.7	701	445	-3.1
850	1.86	1.01	-4.8	682	420	-3.2
900	1.60	1.08	-5.9	663	397	-3.4
950	1.29	1.16	-7.0	644	374	-3.5
1000	0.93	1.24	-8.3	626	353	-3.7
1050	0.50	1.32	-9.6	608	332	-3.8
1100	0.00	1.40	-11.0	590	312	-3.9

TYPE SC 1 CALIBER 6.50 MM AVERAGE DENSITY 4.08 GRAMS/CC.
PROJ. WT 1.840 GRAMS PROJ. DIA. 4.83 MM IMPULSE 1.2 LB. SEC.
DRAG ROCR. WT. 0.000 GRAMS CHG. WT. 1.95 GRAMS SABOT WT. 0.389 GRAMS
TWIST RATE NA PCT. DRAG CHANGE / (DEG. YAW)**2 0.74

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	11.8	1320	1942	0.0
0	0.00	0.00	11.8	1320	1603	0.0
50	0.57	0.04	11.5	1262	1465	-0.6
100	1.13	0.08	11.2	1203	1332	-1.2
150	1.67	0.12	10.8	1145	1206	-1.8
200	2.20	0.17	10.4	1086	1085	-2.4
250	2.70	0.21	10.0	1027	970	-3.0
300	3.18	0.26	9.5	967	861	-3.6
350	3.63	0.32	8.9	906	758	-4.2
400	4.06	0.37	8.3	848	662	-4.8
450	4.45	0.44	7.5	789	572	-5.4
500	4.80	0.50	6.6	729	489	-6.0
550	5.11	0.57	5.6	670	413	-6.5
600	5.36	0.65	4.4	612	344	-7.0
650	5.54	0.74	2.9	554	283	-7.5
700	5.65	0.83	1.1	498	229	-7.9
750	5.66	0.94	-1.1	445	182	-8.1
800	5.54	1.06	-4.0	395	144	-8.1
850	5.27	1.19	-7.6	350	113	-8.0
900	4.79	1.34	-12.2	316	92	-7.0
950	4.07	1.51	-17.6	292	79	-5.3
1000	3.07	1.69	-23.9	271	68	-4.5
1050	1.73	1.88	-31.2	252	58	-4.3
1100	0.00	2.08	-39.7	234	50	-4.2

DRAG ROCR. WT. 0.099 GRAMS PCT. DRAG CHANGE / (DEG. YAW)**2 2.12

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	4.3	1320	1942	0.0
0	0.00	0.00	4.3	1320	1603	0.0
50	0.20	0.04	4.0	1296	1543	-0.2
100	0.39	0.08	3.7	1271	1485	-0.5
150	0.56	0.12	3.3	1247	1428	-0.7
200	0.72	0.16	3.0	1223	1372	-1.0
250	0.86	0.20	2.7	1199	1318	-1.2
300	0.99	0.24	2.3	1175	1265	-1.4
350	1.09	0.28	2.0	1151	1214	-1.7
400	1.18	0.33	1.6	1128	1164	-1.9
450	1.25	0.37	1.2	1105	1115	-2.1
500	1.30	0.42	0.7	1081	1068	-2.3
550	1.33	0.47	0.3	1058	1022	-2.5
600	1.34	0.51	-0.1	1036	978	-2.7
650	1.33	0.56	-0.6	1013	935	-2.9
700	1.29	0.61	-1.1	990	893	-3.1
750	1.23	0.66	-1.6	968	852	-3.3
800	1.14	0.71	-2.2	946	813	-3.5
850	1.03	0.77	-2.8	924	775	-3.7
900	0.89	0.82	-3.4	902	738	-3.9
950	0.71	0.88	-4.0	881	702	-4.1
1000	0.51	0.94	-4.6	859	668	-4.3
1050	0.27	1.00	-5.3	838	635	-4.4
1100	0.00	1.06	-6.1	817	603	-4.6

TYPE SC 1 CALIBER 6.50 MM AVERAGE DENSITY 4.08 GRAMS/CC.
PROJ. WT 1.840 GRAMS PROJ. DIA. 4.83 MM IMPULSE 2.1 LB. SEC.
DRAG RDCR. WT. 0.000 GRAMS CHG. WT. 4.27 GRAMS SABOT WT. 0.389 GRAMS
TWIST RATE NA PCT. DRAG CHANGE / (DEG. YAW)**2 0.74

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	4.9	1633	2972	0.0
0	0.00	0.00	4.9	1633	2454	0.0
50	0.24	0.03	4.7	1576	2287	-0.6
100	0.46	0.06	4.5	1520	2125	-1.1
150	0.68	0.10	4.3	1463	1968	-1.7
200	0.89	0.13	4.1	1405	1817	-2.3
250	1.08	0.17	3.8	1348	1671	-2.9
300	1.26	0.21	3.5	1290	1530	-3.5
350	1.43	0.25	3.2	1231	1392	-4.1
400	1.58	0.29	2.8	1173	1265	-4.7
450	1.71	0.33	2.5	1114	1142	-5.3
500	1.83	0.38	2.0	1055	1024	-5.9
550	1.92	0.43	1.6	996	912	-6.5
600	1.99	0.48	1.0	936	806	-7.1
650	2.03	0.53	0.4	876	707	-7.7
700	2.04	0.59	-0.3	817	614	-8.3
750	2.01	0.66	-1.1	757	528	-8.9
800	1.94	0.72	-2.0	698	446	-9.5
850	1.82	0.80	-3.2	640	376	-10.0
900	1.64	0.88	-4.5	581	311	-10.5
950	1.39	0.97	-6.1	525	253	-10.9
1000	1.05	1.07	-8.2	470	203	-11.1
1050	0.59	1.19	-10.7	419	161	-11.2
1100	0.00	1.31	-13.9	371	126	-11.0

DRAG RDCR. WT. 0.099 GRAMS PCT. DRAG CHANGE / (DEG. YAW)**2 2.12

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	2.6	1633	2972	0.0
0	0.00	0.00	2.6	1633	2454	0.0
50	0.12	0.03	2.4	1607	2375	-0.3
100	0.24	0.06	2.2	1581	2297	-0.5
150	0.34	0.09	2.0	1555	2222	-0.8
200	0.44	0.13	1.8	1530	2148	-1.0
250	0.52	0.16	1.6	1504	2075	-1.3
300	0.60	0.19	1.4	1479	2005	-1.5
350	0.66	0.23	1.1	1453	1935	-1.8
400	0.72	0.26	0.9	1428	1867	-2.0
450	0.76	0.30	0.6	1403	1801	-2.3
500	0.79	0.33	0.4	1378	1736	-2.5
550	0.80	0.37	0.1	1353	1673	-2.7
600	0.81	0.41	-0.2	1328	1611	-3.0
650	0.80	0.45	-0.4	1303	1551	-3.2
700	0.77	0.48	-0.7	1279	1492	-3.4
750	0.73	0.52	-1.1	1254	1435	-3.7
800	0.68	0.56	-1.4	1230	1378	-3.9
850	0.61	0.60	-1.7	1206	1324	-4.1
900	0.52	0.65	-2.1	1182	1271	-4.3
950	0.42	0.69	-2.4	1158	1219	-4.5
1000	0.30	0.73	-2.8	1134	1169	-4.7
1050	0.16	0.78	-3.2	1111	1120	-4.9
1100	0.00	0.82	-3.6	1087	1072	-5.1

TYPE SC 1 CALIBER 6.50 MM AVERAGE DENSITY 4.08 GRAMS/CC.

PROJ. WT 2.138 GRAMS PROJ. DIA. 5.08 MM IMPULSE 0.8 LB. SEC.

DRAG ROCR. WT. 0.000 GRAMS CHG. WT. 0.99 GRAMS SABOT WT. 0.331 GRAMS

TWIST RATE NA PCT. DRAG CHANGE / (DEG. YAW)**2 0.74

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	30.5	967	1154	0.0
0	0.00	0.00	30.5	967	1000	0.0
50	1.48	0.05	29.9	910	886	-0.6
100	2.94	0.11	29.3	853	779	-1.1
150	4.36	0.17	28.6	797	678	-1.7
200	5.74	0.24	27.7	740	585	-2.3
250	7.08	0.31	26.7	683	499	-2.8
300	8.37	0.38	25.6	628	421	-3.3
350	9.59	0.47	24.2	572	350	-3.9
400	10.74	0.56	22.5	519	288	-4.3
450	11.80	0.66	20.4	467	233	-4.7
500	12.75	0.77	17.9	418	187	-4.9
550	13.59	0.90	14.6	372	148	-5.0
600	14.18	1.04	10.6	333	118	-4.8
650	14.59	1.20	5.6	306	100	-3.7
700	14.73	1.37	-0.1	285	87	-3.1
750	14.57	1.55	-6.1	265	75	-3.0
800	14.07	1.75	-14.3	247	65	-3.0
850	13.16	1.96	-23.1	230	57	-3.0
900	11.78	2.18	-33.3	214	49	-3.0
950	9.87	2.42	-45.0	199	42	-2.9
1000	7.34	2.69	-58.6	185	37	-2.9
1050	4.09	2.97	-74.4	172	32	-2.9
1100	0.00	3.27	-92.6	160	27	-2.8

DRAG ROCR. WT. 0.115 GRAMS PCT. DRAG CHANGE / (DEG. YAW)**2 2.12

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	8.5	967	1154	0.0
0	0.00	0.00	8.5	967	1000	0.0
50	0.40	0.05	7.9	946	956	-0.2
100	0.78	0.11	7.4	925	914	-0.4
150	1.13	0.16	6.8	905	873	-0.6
200	1.45	0.22	6.2	885	833	-0.8
250	1.74	0.27	5.5	864	795	-1.0
300	1.99	0.33	4.8	844	758	-1.2
350	2.21	0.39	4.1	825	724	-1.4
400	2.40	0.45	3.3	805	687	-1.6
450	2.55	0.52	2.6	786	654	-1.7
500	2.66	0.58	1.7	766	621	-1.9
550	2.72	0.65	0.9	747	590	-2.1
600	2.75	0.71	-0.1	729	560	-2.2
650	2.72	0.78	-1.0	710	531	-2.4
700	2.65	0.86	-2.0	692	504	-2.6
750	2.53	0.93	-3.1	673	477	-2.7
800	2.36	1.00	-4.2	656	451	-2.9
850	2.13	1.08	-5.4	638	427	-3.0
900	1.84	1.16	-6.7	620	403	-3.1
950	1.48	1.24	-8.0	603	380	-3.3
1000	1.06	1.33	-9.5	586	358	-3.4
1050	0.57	1.41	-11.0	569	338	-3.5
1100	0.00	1.50	-12.5	553	318	-3.6

TYPE SC 1 CALIBER 6.50 MM AVERAGE DENSITY 4.08 GRAMS/CC.

PROJ. WT 12.138 GRAMS PROJ. DIA. 6.08 MM IMPULSE 1.2 LB. SEC.

DRAG ROCK. WT. 0.000 GRAMS CHG. WT. 1.85 GRAMS SABOT WT. 0.331 GRAMS

TWIST RATE NA PCT. DRAG CHANGE / (DEG. YAW)**2 0.74

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	13.0	1251	1932	0.0
0	0.00	0.00	13.0	1251	1673	0.0
50	0.63	0.04	12.7	1195	1526	-0.6
100	1.25	0.08	12.3	1139	1381	-1.1
150	1.85	0.13	11.9	1083	1254	-1.7
200	2.42	0.18	11.5	1027	1127	-2.3
250	2.98	0.23	11.0	970	1000	-2.8
300	3.50	0.28	10.4	913	892	-3.4
350	4.00	0.34	9.8	857	784	-4.0
400	4.47	0.40	9.1	800	684	-4.5
450	4.90	0.46	8.2	743	590	-5.1
500	5.28	0.53	7.2	687	504	-5.6
550	5.61	0.61	6.1	631	426	-6.1
600	5.88	0.69	4.7	576	354	-6.6
650	6.08	0.78	3.0	522	291	-7.0
700	6.18	0.88	1.0	470	236	-7.3
750	6.18	0.99	-1.5	421	189	-7.5
800	6.03	1.12	-4.7	375	150	-7.5
850	5.72	1.26	-8.7	335	120	-7.2
900	5.18	1.42	-13.6	307	101	-5.9
950	4.38	1.59	-19.3	286	87	-4.6
1000	3.28	1.77	-25.9	266	76	-4.1
1050	1.84	1.96	-33.4	248	66	-4.0
1100	0.00	2.17	-42.1	231	57	-4.9

DRAG ROCK. WT. 0.115 GRAMS PCT. DRAG CHANGE / (DEG. YAW)**2 2.12

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	4.7	1251	1932	0.0
0	0.00	0.00	4.7	1251	1673	0.0
50	0.22	0.04	4.4	1228	1611	-0.2
100	0.43	0.08	4.1	1205	1551	-0.5
150	0.62	0.12	3.7	1183	1492	-0.7
200	0.80	0.17	3.3	1160	1434	-0.9
250	0.96	0.21	3.0	1138	1378	-1.1
300	1.09	0.25	2.6	1115	1324	-1.3
350	1.21	0.30	2.2	1093	1271	-1.5
400	1.31	0.35	1.7	1071	1219	-1.8
450	1.39	0.39	1.3	1049	1169	-2.0
500	1.45	0.44	0.8	1028	1120	-2.2
550	1.48	0.49	0.3	1006	1073	-2.4
600	1.49	0.54	-0.2	985	1027	-2.6
650	1.47	0.59	-0.7	963	982	-2.7
700	1.43	0.64	-1.2	942	939	-2.9
750	1.36	0.70	-1.8	922	897	-3.1
800	1.26	0.75	-2.4	901	856	-3.3
850	1.14	0.81	-3.0	880	817	-3.5
900	0.98	0.87	-3.7	860	778	-3.6
950	0.79	0.93	-4.4	840	742	-3.8
1000	0.56	0.99	-5.1	820	706	-4.0
1050	0.30	1.05	-5.9	800	672	-4.1
1100	0.00	1.11	-6.7	781	638	-4.3

TYPE SC 1 CALIBER 6.50 MM AVERAGE DENSITY 4.08 GRAMS/CC.

PROJ. WT 2.138 GRAMS PROJ. DIA. 5.08 MM IMPULSE 2.1 LB. SEC.

DRAG RDCR. WT. 0.000 GRAMS CHG. WT. 4.13 GRAMS SABOT WT. 0.331 GRAMS

TWIST RATE NA PCT. DRAG CHANGE / (DEG. YAW)**2 0.74

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	5.1	1586	3109	0.0
0	0.00	0.00	5.1	1586	2689	0.0
50	0.24	0.03	4.9	1532	2509	-0.5
100	0.48	0.07	4.6	1478	2334	-1.1
150	0.70	0.10	4.4	1423	2165	-1.6
200	0.91	0.14	4.2	1368	2001	-2.2
250	1.11	0.17	3.9	1313	1843	-2.8
300	1.30	0.21	3.6	1257	1690	-3.3
350	1.47	0.25	3.2	1202	1544	-3.9
400	1.62	0.30	2.9	1146	1404	-4.5
450	1.75	0.34	2.5	1090	1269	-5.1
500	1.87	0.39	2.0	1033	1141	-5.6
550	1.96	0.44	1.5	977	1020	-6.2
600	2.03	0.49	1.0	920	905	-6.8
650	2.07	0.55	0.4	863	796	-7.4
700	2.07	0.61	-0.4	806	695	-7.9
750	2.04	0.67	-1.2	750	601	-8.5
800	1.96	0.74	-2.2	693	514	-9.1
850	1.84	0.81	-3.3	637	434	-9.5
900	1.69	0.90	-4.6	582	362	-10.0
950	1.49	0.99	-6.3	528	298	-10.4
1000	1.25	1.09	-8.2	476	242	-10.6
1050	0.99	1.20	-10.7	426	194	-10.7
1100	0.00	1.32	-13.8	380	154	-10.6

DRAG RDCR. WT. 0.115 GRAMS PCT. DRAG CHANGE / (DEG. YAW)**2 2.12

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	2.7	1586	3109	0.0
0	0.00	0.00	2.7	1586	2689	0.0
50	0.13	0.03	2.5	1561	2609	-0.2
100	0.25	0.06	2.3	1537	2523	-0.5
150	0.36	0.10	2.1	1513	2442	-0.7
200	0.46	0.13	1.9	1488	2363	-1.0
250	0.55	0.16	1.7	1464	2285	-1.2
300	0.63	0.20	1.4	1440	2209	-1.4
350	0.70	0.23	1.2	1416	2135	-1.7
400	0.75	0.27	0.9	1392	2062	-1.9
450	0.79	0.31	0.7	1368	1991	-2.1
500	0.82	0.34	0.4	1345	1922	-2.4
550	0.84	0.38	0.1	1321	1853	-2.6
600	0.84	0.42	-0.2	1298	1787	-2.8
650	0.83	0.46	-0.5	1274	1722	-3.0
700	0.81	0.50	-0.8	1251	1658	-3.2
750	0.77	0.54	-1.1	1228	1596	-3.5
800	0.71	0.58	-1.4	1205	1536	-3.7
850	0.64	0.62	-1.8	1182	1477	-3.9
900	0.55	0.66	-2.2	1159	1420	-4.1
950	0.44	0.71	-2.5	1137	1364	-4.3
1000	0.31	0.75	-2.9	1114	1309	-4.5
1050	0.17	0.80	-3.3	1092	1256	-4.7
1100	0.00	0.84	-3.8	1070	1205	-4.9

TYPE SC 1 CALIBER 6.50 MM AVERAGE DENSITY 4.08 GRAMS/CC.

PROJ. WT 2.819 GRAMS PROJ. DIA. 5.56 MM IMPULSE 0.1 LB. SEC.

DRAG RDCR. WT. 0.000 GRAMS CHG. WT. 0.87 GRAMS SABOT WT. 0.220 GRAMS

TWIST RATE NA PCT. DRAG CHANGE / (DEG. YAW)**2 0.74

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	39.1	822	1026	0.0
0	0.00	0.00	39.1	822	951	0.0
50	1.90	0.06	38.3	770	835	-0.5
100	3.76	0.13	37.4	719	727	-1.0
150	5.57	0.20	36.4	668	627	-1.5
200	7.33	0.28	35.1	617	535	-2.0
250	9.02	0.36	33.7	567	452	-2.5
300	10.64	0.46	32.0	516	377	-2.9
350	12.17	0.56	30.0	470	311	-3.3
400	13.58	0.67	27.5	426	255	-3.6
450	14.86	0.79	24.4	383	207	-3.8
500	15.97	0.93	20.6	345	167	-3.9
550	16.88	1.08	16.0	316	141	-3.2
600	17.54	1.25	10.6	295	123	-2.6
650	17.92	1.42	4.5	277	108	-2.4
700	17.98	1.61	-2.4	260	95	-2.5
750	17.67	1.81	-10.3	243	83	-2.5
800	16.95	2.02	-19.3	228	73	-2.5
850	15.76	2.25	-29.6	213	64	-2.5
900	14.03	2.49	-41.3	200	56	-2.5
950	11.69	2.75	-54.7	187	49	-2.5
1000	8.64	3.03	-70.0	175	43	-2.5
1050	4.78	3.32	-87.5	164	38	-2.5
1100	0.00	3.64	-107.5	153	33	-2.4

DRAG RDCR. WT. 0.115 GRAMS PCT. DRAG CHANGE / (DEG. YAW)**2 2.12

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	11.8	822	1026	0.0
0	0.00	0.00	11.8	822	951	0.0
50	0.56	0.06	11.0	804	910	-0.2
100	1.08	0.12	10.2	787	869	-0.3
150	1.56	0.19	9.4	769	830	-0.5
200	2.00	0.25	8.5	752	791	-0.7
250	2.40	0.32	7.6	735	756	-0.8
300	2.75	0.39	6.7	718	721	-1.0
350	3.06	0.46	5.7	701	687	-1.2
400	3.31	0.53	4.6	685	654	-1.3
450	3.52	0.61	3.5	669	622	-1.5
500	3.67	0.68	2.4	652	592	-1.6
550	3.76	0.76	1.2	636	562	-1.8
600	3.79	0.84	-0.1	621	534	-1.9
650	3.76	0.92	-1.4	605	507	-2.0
700	3.66	1.01	-2.8	589	480	-2.2
750	3.50	1.09	-4.3	574	455	-2.3
800	3.25	1.18	-5.8	559	431	-2.4
850	2.93	1.27	-7.5	544	408	-2.5
900	2.53	1.36	-9.2	530	385	-2.6
950	2.04	1.46	-11.0	515	364	-2.7
1000	1.46	1.56	-13.0	501	344	-2.8
1050	0.78	1.66	-15.0	487	324	-2.9
1100	0.00	1.76	-17.2	473	305	-3.0

TYPE SC 1 CALIBER 6.50 MM AVERAGE DENSITY 4.08 GRAMS/CC.

PROJ. WT 2.815 GRAMS PROJ. DIA. 5.56 MM IMPULSE 1.2 LB. SEC.

DRAG ROCK. WT. 0.000 GRAMS CHG. WT. 1.63 GRAMS SABOT WT. 0.220 GRAMS

TWIST RATE NA PCT. DRAG CHANGE / (DEG. YAW)**2 0.74

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	17.0	1098	1830	0.0
0	0.00	0.00	17.0	1098	1697	0.0
50	0.83	0.05	16.6	1047	1542	-0.5
100	1.63	0.10	16.1	995	1395	-1.0
150	2.41	0.15	15.6	944	1254	-1.6
200	3.16	0.20	15.0	892	1120	-2.1
250	3.89	0.26	14.3	840	994	-2.6
300	4.58	0.32	13.6	789	876	-3.1
350	5.22	0.39	12.7	737	765	-3.6
400	5.83	0.46	11.7	686	662	-4.1
450	6.38	0.53	10.6	635	568	-4.6
500	6.87	0.61	9.3	585	481	-5.0
550	7.29	0.70	7.7	535	403	-5.4
600	7.63	0.80	5.7	487	334	-5.8
650	7.86	0.91	3.4	442	274	-6.0
700	7.96	1.03	0.6	398	223	-6.1
750	7.91	1.16	-2.9	358	180	-6.2
800	7.67	1.31	-7.3	325	149	-5.6
850	7.20	1.47	-12.3	303	129	-4.4
900	6.46	1.64	-18.2	284	113	-3.7
950	5.42	1.82	-24.8	266	100	-3.5
1000	4.03	2.02	-32.3	249	87	-3.4
1050	2.24	2.22	-40.9	234	77	-3.4
1100	0.00	2.44	-50.7	219	67	-3.4

DRAG ROCK. WT. 0.115 GRAMS PCT. DRAG CHANGE / (DEG. YAW)**2 2.12

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	6.1	1098	1830	0.0
0	0.00	0.00	6.1	1098	1697	0.0
50	0.29	0.05	5.7	1078	1635	-0.2
100	0.56	0.09	5.3	1058	1574	-0.4
150	0.81	0.14	4.8	1039	1514	-0.6
200	1.04	0.19	4.3	1019	1456	-0.8
250	1.24	0.24	3.9	1000	1400	-1.0
300	1.42	0.29	3.3	980	1345	-1.2
350	1.57	0.34	2.8	961	1292	-1.3
400	1.70	0.39	2.3	942	1240	-1.5
450	1.80	0.45	1.7	923	1190	-1.7
500	1.87	0.50	1.1	904	1141	-1.9
550	1.91	0.56	0.5	886	1093	-2.0
600	1.92	0.61	-0.2	867	1047	-2.2
650	1.90	0.67	-0.9	849	1002	-2.4
700	1.85	0.73	-1.6	831	959	-2.5
750	1.76	0.79	-2.3	813	916	-2.7
800	1.63	0.86	-3.1	795	876	-2.8
850	1.47	0.92	-3.9	777	836	-3.0
900	1.26	0.98	-4.7	760	798	-3.1
950	1.02	1.05	-5.6	742	761	-3.3
1000	0.72	1.12	-6.6	725	725	-3.4
1050	0.39	1.19	-7.5	708	690	-3.6
1100	0.00	1.26	-8.5	691	657	-3.7

TYPE SC 1 CALIBER 6.50 MM AVERAGE DENSITY 4.03 GRAMS/CC.

PROJ. WT 2.815 GRAMS PROJ. DIA. 5.56 MM IMPULSE 2.1 LB. SEC.

DRAG ROCK. WT. 0.000 GRAMS CHG. WT. 3.75 GRAMS SABOT WT. 0.220 GRAMS

TWIST RATE NA PCT. DRAG CHANGE / (DEG. YAW)**2 0.74

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	5.8	1469	3279	0.0
0	0.00	0.00	5.8	1469	3038	0.0
50	0.28	0.03	5.6	1419	2833	-0.5
100	0.55	0.07	5.3	1369	2639	-1.0
150	0.80	0.11	5.0	1319	2449	-1.5
200	1.04	0.15	4.7	1269	2265	-2.0
250	1.27	0.19	4.4	1218	2088	-2.5
300	1.48	0.23	4.1	1167	1918	-3.0
350	1.67	0.27	3.7	1116	1753	-3.6
400	1.84	0.32	3.2	1065	1596	-4.1
450	1.99	0.37	2.8	1013	1446	-4.6
500	2.12	0.42	2.3	962	1301	-5.2
550	2.22	0.47	1.7	910	1166	-5.7
600	2.30	0.53	1.1	859	1036	-6.2
650	2.33	0.59	0.3	807	917	-6.7
700	2.34	0.65	-0.5	755	803	-7.2
750	2.30	0.72	-1.4	704	697	-7.7
800	2.21	0.79	-2.5	653	600	-8.2
850	2.06	0.87	-3.8	602	511	-8.6
900	1.85	0.96	-5.3	553	430	-9.0
950	1.55	1.05	-7.1	504	357	-9.3
1000	1.16	1.16	-9.2	457	294	-9.5
1050	0.65	1.27	-11.9	413	240	-9.6
1100	0.00	1.40	-15.1	372	195	-9.5

DRAG ROCK. WT. 0.115 GRAMS PCT. DRAG CHANGE / (DEG. YAW)**2 2.12

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	5.8	1469	3279	0.0
0	0.00	0.00	5.8	1469	3038	0.0
50	0.15	0.03	5.9	1447	2946	-0.2
100	0.29	0.07	5.7	1425	2856	-0.4
150	0.42	0.10	5.5	1404	2768	-0.7
200	0.53	0.14	5.2	1382	2681	-0.9
250	0.64	0.18	4.9	1360	2597	-1.1
300	0.73	0.21	4.7	1339	2514	-1.3
350	0.80	0.25	4.4	1318	2431	-1.5
400	0.87	0.29	4.1	1296	2351	-1.7
450	0.91	0.33	3.8	1275	2275	-1.9
500	0.95	0.37	3.5	1254	2199	-2.1
550	0.97	0.41	3.1	1233	2124	-2.3
600	0.97	0.45	2.8	1212	2051	-2.5
650	0.96	0.49	2.5	1191	1979	-2.7
700	0.93	0.53	2.1	1170	1910	-2.9
750	0.88	0.58	1.8	1150	1842	-3.1
800	0.82	0.62	1.4	1129	1775	-3.3
850	0.73	0.67	1.1	1109	1710	-3.5
900	0.63	0.71	0.7	1089	1647	-3.6
950	0.50	0.76	0.3	1068	1585	-3.8
1000	0.36	0.80	-0.1	1048	1525	-4.0
1050	0.19	0.85	-0.6	1029	1466	-4.2
1100	0.00	0.90	-1.1	1009	1409	-4.3

TYPE SC 1 CALIBER 6.50 MM AVERAGE DENSITY 4.08 GRAMS/CC.

PROJ. WT 9.681 GRAMS PROJ. DIA. 6.10 MM IMPULSE 0.8 LB. SEC.

DRAG RDCR. WT. 0.000 GRAMS CHG. WT. 0.78 GRAMS SABOT WT. 0.065 GRAMS

TWIST RATE NA PCT. DRAG CHANGE / (DEG. YAW)**2 0.74

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	48.4	703	926	0.0
0	0.00	0.00	48.4	703	909	0.0
50	2.25	0.07	47.3	656	792	-0.5
100	4.64	0.15	46.0	609	684	-0.9
150	6.87	0.24	44.5	563	584	-1.4
200	9.02	0.33	42.4	518	494	-1.8
250	11.08	0.43	40.4	475	415	-2.2
300	13.03	0.54	38.4	433	345	-2.5
350	14.85	0.66	35.5	394	289	-2.7
400	16.51	0.80	31.9	357	239	-2.9
450	17.98	0.94	27.6	327	196	-2.7
500	19.22	1.10	22.6	305	171	-2.2
550	20.20	1.27	16.9	287	152	-2.0
600	20.88	1.45	10.5	271	135	-2.0
650	21.22	1.64	3.2	255	120	-2.0
700	21.19	1.84	-4.9	240	106	-2.1
750	20.73	2.06	-14.1	226	94	-2.1
800	19.80	2.28	-24.4	213	84	-2.2
850	18.32	2.53	-36.1	201	74	-2.2
900	16.24	2.78	-49.3	189	66	-2.2
950	13.46	3.06	-64.3	177	58	-2.2
1000	9.90	3.35	-81.1	167	51	-2.2
1050	5.45	3.66	-100.2	157	45	-2.2
1100	0.00	3.99	-121.8	148	40	-2.1

DRAG RDCR. WT. 0.199 GRAMS PCT. DRAG CHANGE / (DEG. YAW)**2 2.12

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	16.0	703	926	0.0
0	0.00	0.00	16.0	703	909	0.0
50	0.76	0.07	15.0	688	870	-0.2
100	1.47	0.15	13.9	673	831	-0.3
150	2.13	0.22	12.8	658	794	-0.4
200	2.73	0.30	11.6	643	758	-0.6
250	3.27	0.38	10.4	629	723	-0.7
300	3.76	0.46	9.1	615	689	-0.9
350	4.17	0.54	7.7	600	657	-1.0
400	4.52	0.62	6.3	586	625	-1.1
450	4.80	0.71	4.8	572	595	-1.2
500	5.00	0.80	3.3	559	566	-1.4
550	5.13	0.89	1.6	545	538	-1.5
600	5.17	0.98	-0.1	532	511	-1.6
650	5.12	1.08	-1.9	518	485	-1.7
700	4.99	1.17	-3.8	505	460	-1.8
750	4.76	1.27	-5.8	493	436	-1.9
800	4.43	1.38	-7.9	480	413	-2.0
850	3.99	1.48	-10.2	468	392	-2.1
900	3.44	1.59	-12.5	455	371	-2.2
950	2.78	1.70	-15.0	443	351	-2.3
1000	1.98	1.82	-17.6	432	331	-2.3
1050	1.06	1.93	-20.3	420	313	-2.4
1100	0.00	2.06	-23.3	409	296	-2.5

TYPE SC 1 CALIBER 6.90 MM AVERAGE DENSITY 4.08 GRAMS/CC.

PROJ. WT 3.681 GRAMS PROJ. DIA. 6.10 MM IMPULSE 1.2 LB. SEC.

DRAG ROCR. WT. 0.000 GRAMS CHU. WT. 1.48 GRAMS SABOT WT. 0.065 GRAMS

TWIST RATE NA PCT. DRAG CHANGE / (DEG. YAW)**2 0.74

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	22.4	959	1722	0.0
0	0.00	0.00	22.4	959	1692	0.0
50	1.08	0.05	21.8	911	1529	-0.5
100	2.14	0.11	21.2	864	1373	-0.9
150	3.16	0.17	20.4	816	1227	-1.4
200	4.15	0.23	19.9	769	1088	-1.9
250	5.09	0.30	18.7	721	958	-2.4
300	5.99	0.37	17.7	675	837	-2.8
350	6.83	0.45	16.5	628	725	-3.3
400	7.62	0.53	15.2	582	622	-4.1
450	8.33	0.62	13.6	536	529	-4.1
500	8.95	0.72	11.7	492	445	-4.4
550	9.47	0.82	9.4	450	372	-4.7
600	9.88	0.94	6.7	409	308	-4.9
650	10.13	1.07	3.4	371	254	-5.0
700	10.21	1.21	-0.6	336	210	-4.9
750	10.07	1.36	-5.3	313	180	-4.0
800	9.68	1.53	-10.8	294	160	-3.2
850	9.02	1.70	-16.9	277	142	-3.0
900	8.03	1.89	-23.8	262	126	-2.9
950	6.68	2.09	-31.5	246	112	-2.9
1000	4.93	2.30	-40.3	232	99	-2.9
1050	2.72	2.52	-50.1	219	86	-2.9
1100	0.00	2.75	-61.2	206	78	-2.9

DRAG ROCR. WT. 0.199 GRAMS PCT. DRAG CHANGE / (DEG. YAW)**2 2.12

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	8.1	959	1722	0.0
0	0.00	0.00	8.1	959	1692	0.0
50	0.38	0.05	7.5	942	1630	-0.2
100	0.74	0.11	6.9	924	1569	-0.3
150	1.06	0.16	6.3	907	1510	-0.5
200	1.36	0.22	5.7	890	1452	-0.7
250	1.61	0.27	5.1	873	1396	-0.8
300	1.86	0.33	4.4	856	1341	-1.0
350	2.06	0.39	3.7	840	1288	-1.2
400	2.23	0.45	3.0	823	1237	-1.3
450	2.36	0.51	2.2	807	1187	-1.5
500	2.45	0.57	1.4	790	1138	-1.6
550	2.51	0.64	0.6	774	1090	-1.8
600	2.52	0.70	-0.2	758	1044	-1.9
650	2.49	0.77	-1.1	742	1000	-2.1
700	2.42	0.84	-2.0	727	957	-2.2
750	2.30	0.91	-3.0	711	915	-2.3
800	2.14	0.98	-4.0	696	875	-2.5
850	1.92	1.05	-5.1	680	836	-2.6
900	1.65	1.13	-6.2	665	798	-2.7
950	1.33	1.20	-7.3	650	761	-2.8
1000	0.95	1.28	-8.5	635	726	-3.0
1050	0.51	1.36	-9.8	621	692	-3.1
1100	0.00	1.44	-11.1	606	659	-3.2

TYPE SC 1 CALIBER 6.50 MM AVERAGE DENSITY 4.08 GRAMS/CC.

PROJ. WT 3.681 GRAMS PROJ. DIA. 6.10 MM IMPULSE 2.1 LB. SEC.

DRAG RDCR. WT. 0.000 GRAMS CHG. WT. 3.48 GRAMS SABOT WT. 0.065 GRAMS

TWIST RATE NA PCT. DRAG CHANGE / (DEG. YAW)**2 0.74

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	7.0	1347	3393	0.0
0	0.00	0.00	7.0	1347	3339	0.0
50	0.34	0.04	6.7	1301	3114	-0.5
100	0.65	0.08	6.4	1254	2895	-0.9
150	0.96	0.12	6.0	1208	2684	-1.4
200	1.25	0.16	5.7	1161	2480	-1.9
250	1.52	0.20	5.3	1114	2283	-2.4
300	1.78	0.25	4.9	1067	2094	-2.8
350	2.01	0.30	4.4	1020	1911	-3.3
400	2.21	0.35	3.9	972	1740	-3.8
450	2.40	0.40	3.4	925	1574	-4.3
500	2.55	0.46	2.7	877	1416	-4.8
550	2.67	0.51	2.1	830	1267	-5.2
600	2.76	0.58	1.3	782	1126	-5.7
650	2.81	0.64	0.4	735	994	-6.2
700	2.81	0.71	-0.6	688	870	-6.6
750	2.76	0.79	-1.7	641	756	-7.0
800	2.65	0.87	-3.0	595	651	-7.4
850	2.47	0.96	-4.5	549	554	-7.8
900	2.21	1.05	-6.3	504	468	-8.1
950	1.86	1.16	-8.5	461	392	-8.3
1000	1.39	1.27	-11.1	420	325	-8.4
1050	0.78	1.39	-14.2	382	268	-8.4
1100	0.00	1.53	-18.0	346	221	-8.2

DRAG RDCR. WT. 0.199 GRAMS PCT. DRAG CHANGE / (DEG. YAW)**2 2.12

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	3.8	1347	3396	0.0
0	0.00	0.00	3.8	1347	3339	0.0
50	0.34	0.04	3.5	1327	3240	-0.2
100	0.64	0.08	3.2	1308	3143	-0.4
150	0.94	0.11	2.9	1288	3048	-0.6
200	0.63	0.15	2.6	1269	2955	-0.8
250	0.73	0.19	2.3	1250	2863	-1.0
300	0.86	0.23	2.0	1230	2774	-1.2
350	0.99	0.27	1.6	1211	2686	-1.3
400	1.02	0.32	1.3	1192	2600	-1.5
450	1.08	0.36	0.9	1173	2516	-1.7
500	1.12	0.40	0.6	1154	2433	-1.9
550	1.14	0.44	0.2	1135	2353	-2.1
600	1.15	0.49	-0.2	1117	2274	-2.2
650	1.13	0.53	-0.6	1098	2197	-2.4
700	1.10	0.58	-1.0	1079	2121	-2.6
750	1.04	0.63	-1.5	1061	2048	-2.8
800	0.96	0.67	-1.9	1043	1976	-2.9
850	0.86	0.72	-2.4	1024	1906	-3.1
900	0.74	0.77	-2.9	1006	1838	-3.2
950	0.59	0.82	-3.4	988	1771	-3.4
1000	0.42	0.87	-3.9	970	1706	-3.6
1050	0.22	0.93	-4.4	953	1643	-3.7
1100	0.00	0.98	-5.0	935	1581	-3.9

TYPE SC 1 CALIBER 7.62 MM AVERAGE DENSITY 4.08 GRAMS/CC.
PROJ. WT .0.266 GRAMS PROJ. DIA. 2.54 MM IMPULSE 0.6 LB. SEC.
DRAG RDCR. WT. 0.000 GRAMS CHG. WT. 1.29 GRAMS SABOT WT. 1.238 GRAMS
TWIST RATE NA PCT. DRAG CHANGE / (DEG. YAW)**2 0.74

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	100.0	1312	1294	0.0
0	0.00	0.00	100.0	1312	229	0.0
50	4.92	0.04	99.7	1200	191	-1.1
100	9.82	0.08	99.3	1086	157	-2.3
150	14.70	0.13	98.8	972	126	-3.4
200	19.55	0.19	98.2	856	96	-4.6
250	24.37	0.25	97.4	743	73	-5.7
300	29.15	0.32	96.4	630	53	-6.8
350	33.86	0.41	94.8	520	36	-7.7
400	38.48	0.52	92.5	418	23	-8.1
450	42.95	0.65	88.4	332	15	-7.6
500	47.21	0.82	83.5	284	11	-4.9
550	51.15	1.01	76.4	246	8	-4.2
600	54.69	1.23	66.8	213	6	-4.1
650	57.68	1.48	54.0	183	4	-3.9
700	59.93	1.78	36.7	158	3	-3.7
750	61.19	2.12	13.3	136	2	-3.5
800	61.11	2.52	-18.5	116	2	-3.2
850	59.20	2.98	-61.6	100	1	-3.0
900	54.81	3.52	-120.0	86	1	-2.7
950	47.02	4.16	-198.8	74	1	-2.4
1000	34.55	4.90	-303.3	65	1	-2.2
1050	15.62	5.78	-438.5	57	0	-1.8
1080	0.00	6.34	-535.7	54	0	-1.6

DRAG RDCR. WT. 0.014 GRAMS PCT. DRAG CHANGE / (DEG. YAW)**2 2.12

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	6.6	1312	1294	0.0
0	0.00	0.00	6.6	1312	229	0.0
50	0.32	0.04	6.3	1265	213	-0.5
100	0.62	0.08	6.0	1219	197	-0.9
150	0.90	0.12	5.6	1173	183	-1.4
200	1.17	0.16	5.2	1128	169	-1.8
250	1.42	0.21	4.8	1084	155	-2.2
300	1.65	0.26	4.4	1040	143	-2.6
350	1.85	0.31	3.9	997	131	-3.0
400	2.03	0.36	3.4	954	120	-3.4
450	2.19	0.41	2.8	912	110	-3.7
500	2.31	0.47	2.2	871	100	-4.1
550	2.41	0.53	1.5	831	91	-4.4
600	2.47	0.59	0.7	792	82	-4.7
650	2.49	0.65	-0.1	753	74	-5.0
700	2.46	0.72	-1.0	715	67	-5.3
750	2.39	0.79	-2.1	678	60	-5.5
800	2.27	0.87	-3.2	643	54	-5.7
850	2.09	0.95	-4.5	608	48	-6.0
900	1.84	1.03	-5.9	574	43	-6.1
950	1.52	1.12	-7.5	541	38	-6.3
1000	1.11	1.22	-9.4	509	34	-6.4
1050	0.61	1.32	-11.4	478	30	-6.5
1100	0.00	1.43	-13.7	449	26	-6.6

TYPE SC 1 CALIBER 7.62 MM AVERAGE DENSITY 4.08 GRAMS/CC.
PROJ. WT 0.266 GRAMS PROJ. DIA. 2.54 MM IMPULSE 1.2 LB. SEC.
DRAG ROCK. WT. 0.000 GRAMS CHG. WT. 2.31 GRAMS SABOT WT. 1.238 GRAMS
TWIST RATE NA PCT. DRAG CHANGE / (DEG. YAW)**2 0.74

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	55.4	1554	1815	0.0
0	0.00	0.00	55.4	1554	321	0.0
50	2.71	0.03	55.1	1444	277	-1.1
100	5.42	0.07	54.9	1334	236	-2.2
150	8.11	0.11	54.6	1222	198	-3.4
200	10.78	0.15	54.2	1109	163	-4.5
250	13.44	0.20	53.7	996	132	-5.7
300	16.07	0.25	53.2	882	103	-6.9
350	18.66	0.31	52.4	767	78	-8.0
400	21.22	0.38	51.4	654	57	-9.0
450	23.72	0.47	50.0	543	39	-10.0
500	26.13	0.57	47.9	440	26	-10.4
550	28.42	0.70	44.7	349	16	-10.1
600	30.50	0.86	39.7	294	11	-7.2
650	32.30	1.04	33.0	254	9	-5.2
700	33.71	1.25	24.0	220	6	-4.9
750	34.62	1.50	12.1	190	5	-4.7
800	34.84	1.78	-4.0	164	4	-4.4
850	34.14	2.11	-25.8	141	3	-4.1
900	32.19	2.49	-55.2	121	2	-3.8
950	28.55	2.94	-95.2	104	1	-3.5
1000	22.59	3.46	-149.2	89	1	-3.2
1050	13.48	4.08	-221.9	77	1	-2.8
1100	0.00	4.80	-318.6	67	1	-2.5

DRAG ROCK. WT. 0.014 GRAMS PCT. DRAG CHANGE / (DEG. YAW)**2 2.12

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	4.2	1554	1815	0.0
0	0.00	0.00	4.2	1554	321	0.0
50	0.20	0.03	4.0	1505	301	-0.5
100	0.39	0.07	3.8	1456	281	-1.0
150	0.57	0.10	3.5	1408	263	-1.4
200	0.74	0.14	3.3	1360	245	-1.9
250	0.89	0.17	3.0	1313	228	-2.4
300	1.03	0.21	2.7	1266	212	-2.8
350	1.16	0.25	2.3	1220	197	-3.2
400	1.27	0.30	2.0	1174	182	-3.7
450	1.36	0.34	1.6	1129	168	-4.1
500	1.43	0.38	1.2	1084	155	-4.5
550	1.49	0.43	0.8	1040	143	-4.8
600	1.52	0.48	0.3	997	131	-5.2
650	1.52	0.53	-0.2	954	120	-5.5
700	1.50	0.59	-0.8	912	109	-5.9
750	1.45	0.64	-1.4	871	100	-6.2
800	1.37	0.70	-2.1	831	91	-6.5
850	1.26	0.76	-2.9	791	82	-6.7
900	1.10	0.83	-3.7	752	74	-7.0
950	0.90	0.90	-4.7	714	67	-7.2
1000	0.66	0.97	-5.7	678	60	-7.4
1050	0.36	1.04	-6.8	642	54	-7.6
1100	0.00	1.12	-8.1	607	48	-7.8

TYPE SC 1 CALIBER 7.62 MM AVERAGE DENSITY 4.08 GRAMS/CC.

PROJ. WT 10.266 GRAMS PROJ. DIA. 2.54 MM IMPULSE 2.1 LB. SEC.

DRAG RDCR. WT. 0.000 GRAMS CHG. WT. 4.75 GRAMS SABOT WT. 1.238 GRAMS

TWIST RATE NA PCT. DRAG CHANGE / (DEG. YAW)**2 0.74

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	28.9	1780	2382	0.0
0	0.00	0.00	28.9	1780	421	0.0
50	1.41	0.03	28.7	1672	372	-1.1
100	2.82	0.06	28.5	1564	325	-2.2
150	4.21	0.09	28.3	1455	281	-3.3
200	5.60	0.13	28.0	1344	240	-4.4
250	6.97	0.17	27.7	1233	202	-5.6
300	8.33	0.21	27.4	1120	167	-6.8
350	9.66	0.26	26.9	1007	135	-7.9
400	10.97	0.31	26.4	893	106	-9.1
450	12.26	0.37	25.7	779	81	-10.3
500	13.50	0.44	24.7	665	59	-11.3
550	14.68	0.52	23.3	554	41	-12.2
600	15.79	0.62	21.3	449	27	-12.7
650	16.77	0.75	18.2	357	17	-12.3
700	17.55	0.90	13.4	298	12	-9.4
750	18.06	1.03	6.9	258	9	-6.4
800	18.20	1.29	-1.8	223	7	-5.8
850	17.85	1.53	-13.4	193	5	-5.4
900	16.83	1.81	-29.1	166	4	-5.1
950	14.92	2.14	-50.2	143	3	-4.7
1000	11.79	2.51	-78.7	123	2	-4.3
1050	7.02	2.96	-117.3	106	1	-4.0
1100	0.00	3.47	-169.6	91	1	-3.6

DRAG RDCR. WT. 0.014 GRAMS PCT. DRAG CHANGE / (DEG. YAW)**2 2.12

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	2.9	1780	2382	0.0
0	0.00	0.00	2.9	1780	421	0.0
50	0.14	0.03	2.8	1728	397	-0.5
100	0.27	0.06	2.6	1677	373	-1.0
150	0.40	0.09	2.4	1627	351	-1.5
200	0.51	0.12	2.2	1577	330	-2.0
250	0.62	0.15	2.0	1528	309	-2.5
300	0.72	0.18	1.8	1479	290	-2.9
350	0.80	0.22	1.6	1430	271	-3.4
400	0.88	0.25	1.3	1382	253	-3.8
450	0.94	0.29	1.0	1335	235	-4.3
500	0.99	0.33	0.6	1288	219	-4.7
550	1.02	0.37	0.4	1241	203	-5.1
600	1.04	0.41	0.1	1195	188	-5.5
650	1.04	0.45	-0.3	1149	174	-5.9
700	1.02	0.50	-0.7	1104	160	-6.3
750	0.98	0.54	-1.1	1060	148	-6.7
800	0.93	0.59	-1.5	1016	136	-7.0
850	0.84	0.64	-2.0	973	124	-7.3
900	0.74	0.69	-2.6	930	114	-7.6
950	0.60	0.75	-3.2	889	104	-7.9
1000	0.44	0.81	-3.9	848	94	-8.2
1050	0.24	0.87	-4.6	808	85	-8.4
1100	0.00	0.93	-5.4	769	77	-8.7

TYPE SC 1 CALIBER 7.62 MM AVERAGE DENSITY 4.08 GRAMS/CC.

PROJ. WT 0.460 GRAMS PROJ. DIA. 3.05 MM IMPULSE 0.8 LB. SEC.

DRAG RDCR. WT. 0.000 GRAMS CHG. WT. 1.24 GRAMS SABOT WT. 1.166 GRAMS

TWIST RATE NA PCT. DRAG CHANGE / (DEG. YAW)**2 0.74

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	57.2	1259	1289	0.0
0	0.00	0.00	57.2	1259	365	0.0
50	2.80	0.04	56.9	1165	312	-0.9
100	5.59	0.09	56.5	1071	264	-1.9
150	8.36	0.14	56.0	977	219	-2.8
200	11.10	0.19	55.4	881	179	-3.8
250	13.80	0.25	54.7	786	142	-4.8
300	16.47	0.32	53.8	691	110	-5.7
350	19.09	0.39	52.6	598	82	-6.5
400	21.64	0.49	50.9	508	59	-7.2
450	24.09	0.59	48.6	423	41	-7.5
500	26.40	0.72	45.2	349	28	-7.5
550	28.51	0.88	40.4	301	21	-5.5
600	30.33	1.06	34.1	267	16	-4.1
650	31.85	1.26	26.2	237	13	-4.0
700	32.90	1.48	16.1	210	10	-3.9
750	33.40	1.73	3.3	186	8	-3.8
800	33.17	2.02	-13.2	164	6	-3.6
850	32.04	2.35	-34.3	145	5	-3.4
900	29.72	2.71	-61.5	127	4	-3.2
950	25.87	3.13	-96.5	112	3	-3.0
1000	20.06	3.61	-141.4	99	2	-2.8
1050	11.69	4.16	-198.9	88	2	-2.6
1100	0.00	4.78	-272.0	78	1	-2.4

DRAG RDCR. WT. 0.025 GRAMS PCT. DRAG CHANGE / (DEG. YAW)**2 2.12

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	6.2	1259	1289	0.0
0	0.00	0.00	6.2	1259	365	0.0
50	0.30	0.04	5.9	1221	342	-0.4
100	0.58	0.08	5.5	1183	321	-0.8
150	0.84	0.12	5.1	1145	301	-1.1
200	1.08	0.17	4.8	1108	281	-1.5
250	1.31	0.22	4.3	1071	261	-1.8
300	1.51	0.26	3.9	1034	245	-2.2
350	1.69	0.31	3.4	998	228	-2.5
400	1.85	0.36	2.9	963	213	-2.8
450	1.98	0.42	2.3	928	197	-3.1
500	2.08	0.47	1.7	893	182	-3.4
550	2.16	0.53	1.1	860	168	-3.7
600	2.20	0.59	0.4	826	155	-4.0
650	2.20	0.65	-0.4	793	143	-4.3
700	2.17	0.71	-1.2	761	132	-4.5
750	2.09	0.78	-2.1	729	121	-4.8
800	1.97	0.85	-3.1	698	110	-5.0
850	1.80	0.92	-4.2	668	101	-5.2
900	1.57	1.00	-5.4	638	92	-5.4
950	1.28	1.08	-6.6	609	84	-5.5
1000	0.93	1.16	-8.1	580	76	-5.7
1050	0.50	1.25	-9.8	553	69	-5.9
1100	0.00	1.35	-11.7	526	62	-6.0

TYPE SC 1 CALIBER 7.62 MM AVERAGE DENSITY 4.08 GRAMS/CC.
PROJ. WT 0.460 GRAMS PROJ. DIA. 3.05 MM IMPULSE 1.2 LB. SEC.
DRAG RDCR. WT. 0.000 GRAMS CHG. WT. 2.24 GRAMS SABOT WT. 1.166 GRAMS
TWIST RATE NA PCT. DRAG CHANGE / (DEG. YAW)**2 0.74

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	27.9	1512	1859	0.0
0	0.00	0.00	27.9	1512	526	0.0
50	1.36	0.03	27.7	1421	464	-0.9
100	2.72	0.07	27.4	1328	406	-1.8
150	4.06	0.11	27.1	1235	351	-2.8
200	5.38	0.15	26.7	1142	300	-3.8
250	6.68	0.20	26.3	1048	252	-4.7
300	7.97	0.25	25.8	953	209	-5.7
350	9.22	0.30	25.2	858	169	-6.7
400	10.44	0.36	24.4	763	134	-7.6
450	11.63	0.43	23.5	669	103	-8.5
500	12.75	0.52	22.2	576	76	-9.3
550	13.80	0.61	20.4	486	54	-9.9
600	14.75	0.72	17.8	404	38	-10.0
650	15.54	0.86	14.1	334	26	-9.4
700	16.12	1.02	8.9	292	20	-6.7
750	16.41	1.20	2.3	259	15	-5.1
800	16.33	1.41	-6.1	230	12	-4.8
850	15.79	1.64	-16.7	204	10	-4.7
900	14.65	1.90	-30.4	180	7	-4.5
950	12.75	2.19	-47.8	159	6	-4.2
1000	9.88	2.53	-70.3	140	5	-4.0
1050	5.75	2.91	-99.1	124	4	-3.7
1100	0.00	3.34	-136.1	109	3	-3.5

DRAG RDCR. WT. 0.025 GRAMS PCT. DRAG CHANGE / (DEG. YAW)**2 2.12

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	3.9	1512	1859	0.0
0	0.00	0.00	3.9	1512	526	0.0
50	0.19	0.03	3.7	1471	498	-0.4
100	0.36	0.07	3.4	1431	471	-0.8
150	0.53	0.10	3.2	1391	444	-1.2
200	0.68	0.14	2.9	1352	419	-1.6
250	0.82	0.18	2.6	1312	395	-2.0
300	0.94	0.22	2.3	1273	372	-2.3
350	1.05	0.26	2.0	1235	349	-2.7
400	1.14	0.30	1.7	1196	327	-3.1
450	1.22	0.34	1.3	1158	307	-3.4
500	1.28	0.38	0.9	1121	287	-3.7
550	1.32	0.43	0.5	1084	268	-4.1
600	1.34	0.48	0.1	1047	250	-4.4
650	1.34	0.52	-0.4	1011	233	-4.7
700	1.32	0.57	-0.9	975	216	-5.0
750	1.26	0.63	-1.4	940	201	-5.3
800	1.19	0.68	-2.0	905	186	-5.6
850	1.08	0.74	-2.7	870	172	-5.8
900	0.94	0.80	-3.3	837	159	-6.1
950	0.76	0.86	-4.1	804	146	-6.3
1000	0.55	0.92	-4.9	771	134	-6.5
1050	0.30	0.99	-5.8	739	123	-6.7
1100	0.00	1.06	-6.7	708	113	-6.9

TYPE SC 1 CALIBER 7.62 MM AVERAGE DENSITY 4.08 GRAMS/CC.
PROJ. WT 0.460 GRAMS PROJ. DIA. 3.05 MM IMPULSE 2.1 LB. SEC.
DRAG RDCR. WT. 0.000 GRAMS CHG. WT. 4.66 GRAMS SABOT WT. 1.166 GRAMS
TWIST RATE NA PCT. DRAG CHANGE / (DEG. YAW)**2 0.74

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	13.8	1755	2505	0.0
0	0.00	0.00	13.8	1755	709	0.0
50	0.67	0.03	13.7	1665	638	-0.9
100	1.34	0.06	13.5	1575	571	-1.8
150	2.00	0.09	13.2	1484	507	-2.7
200	2.64	0.13	13.0	1393	446	-3.7
250	3.28	0.16	12.7	1300	389	-4.6
300	3.90	0.20	12.4	1207	335	-5.6
350	4.50	0.25	12.0	1114	285	-6.6
400	5.08	0.29	11.6	1019	239	-7.6
450	5.64	0.35	11.1	924	197	-8.5
500	6.18	0.40	10.4	829	158	-9.5
550	6.67	0.47	9.6	734	124	-10.5
600	7.12	0.54	8.5	640	94	-11.3
650	7.51	0.62	7.1	548	69	-12.0
700	7.82	0.72	5.1	461	49	-12.4
750	8.01	0.84	2.3	381	33	-12.2
800	8.04	0.99	-1.9	319	23	-10.9
850	7.82	1.15	-7.5	282	18	-7.8
900	7.29	1.34	-14.6	250	14	-6.0
950	6.37	1.56	-23.6	222	11	-5.7
1000	4.94	1.80	-35.1	196	9	-5.4
1050	2.88	2.07	-49.8	174	7	-5.1
1100	0.00	2.37	-68.6	153	5	-4.8

DRAG RDCR. WT. 0.025 GRAMS PCT. DRAG CHANGE / (DEG. YAW)**2 2.12

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	2.7	1755	2505	0.0
0	0.00	0.00	2.7	1755	709	0.0
50	0.13	0.03	2.5	1712	674	-0.4
100	0.25	0.06	2.4	1670	641	-0.8
150	0.36	0.09	2.2	1628	609	-1.3
200	0.46	0.12	2.0	1586	578	-1.7
250	0.56	0.15	1.8	1545	548	-2.1
300	0.64	0.18	1.6	1504	519	-2.4
350	0.72	0.22	1.3	1464	491	-2.8
400	0.78	0.25	1.1	1423	464	-3.2
450	0.83	0.29	0.8	1383	438	-3.6
500	0.87	0.33	0.6	1344	413	-4.0
550	0.89	0.36	0.3	1304	389	-4.3
600	0.90	0.40	0.0	1265	366	-4.7
650	0.90	0.44	-0.3	1227	343	-5.0
700	0.88	0.48	-0.7	1188	322	-5.4
750	0.85	0.53	-1.0	1150	301	-5.7
800	0.79	0.57	-1.4	1113	282	-6.0
850	0.72	0.62	-1.9	1075	263	-6.3
900	0.62	0.66	-2.3	1039	245	-6.6
950	0.50	0.71	-2.8	1002	228	-6.9
1000	0.36	0.76	-3.3	967	212	-7.2
1050	0.20	0.82	-3.9	931	197	-7.4
1100	0.00	0.87	-4.4	896	182	-7.7

TYPE SC 1 CALIBER 7.62 MM AVERAGE DENSITY 4.08 GRAMS/CC.

PROJ. WT 0.918 GRAMS PROJ. DIA. 3.18 MM IMPULSE 0.6 LB. SEC.

DRAG ROCR. WT. 0.000 GRAMS CHG. WT. 1.23 GRAMS SABOT WT. 1.147 GRAMS

TWIST RATE NA PCT. DRAG CHANGE / (DEG. YAW)**2 0.74

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	51.9	1243	1286	0.0
0	0.00	0.00	51.9	1243	400	0.0
50	2.54	0.04	51.6	1153	345	-0.9
100	5.07	0.09	51.2	1062	292	-1.8
150	7.57	0.14	50.7	971	244	-2.7
200	10.05	0.19	50.1	879	200	-3.7
250	12.49	0.25	49.4	788	161	-4.6
300	14.90	0.32	48.5	696	126	-5.5
350	17.26	0.40	47.3	606	95	-6.3
400	19.55	0.48	45.7	519	70	-7.0
450	21.74	0.59	43.5	437	49	-7.4
500	23.81	0.72	40.3	362	34	-7.4
550	25.69	0.87	35.8	310	25	-6.0
600	27.31	1.04	29.9	276	20	-4.2
650	28.61	1.23	22.5	246	16	-4.0
700	29.50	1.45	13.2	219	12	-3.9
750	29.88	1.69	1.5	195	10	-3.8
800	29.81	1.96	-13.4	173	8	-3.6
850	28.51	2.27	-32.3	153	6	-3.5
900	26.36	2.62	-56.4	136	5	-3.3
950	22.87	3.01	-87.1	120	4	-3.1
1000	17.66	3.45	-126.2	107	3	-2.9
1050	10.25	3.96	-175.8	95	2	-2.7
1100	0.00	4.53	-238.6	84	2	-2.5

DRAG ROCR. WT. 0.028 GRAMS PCT. DRAG CHANGE / (DEG. YAW)**2 2.12

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	6.2	1243	1286	0.0
0	0.00	0.00	6.2	1243	400	0.0
50	0.30	0.04	5.9	1206	377	-0.4
100	0.58	0.08	5.5	1170	354	-0.7
150	0.84	0.13	5.1	1133	332	-1.1
200	1.08	0.17	4.7	1098	311	-1.4
250	1.31	0.22	4.3	1062	291	-1.8
300	1.51	0.27	3.9	1027	272	-2.1
350	1.69	0.31	3.4	993	254	-2.4
400	1.85	0.37	2.8	959	237	-2.7
450	1.97	0.42	2.3	925	220	-3.0
500	2.07	0.47	1.7	892	204	-3.3
550	2.14	0.53	1.0	859	190	-3.6
600	2.18	0.59	0.3	827	175	-3.8
650	2.18	0.65	-0.4	795	162	-4.1
700	2.15	0.72	-1.3	764	149	-4.4
750	2.07	0.78	-2.2	734	138	-4.6
800	1.95	0.85	-3.1	704	126	-4.8
850	1.77	0.93	-4.2	674	116	-5.0
900	1.55	1.00	-5.3	645	106	-5.2
950	1.26	1.08	-6.6	617	97	-5.4
1000	0.91	1.16	-8.0	590	88	-5.5
1050	0.50	1.25	-9.5	563	80	-5.7
1100	0.00	1.34	-11.1	536	73	-5.8

TYPE SC 1 CALIBER 7.62 MM AVERAGE DENSITY 4.08 GRAMS/CC.
PROJ. WT 0.518 GRAMS PROJ. DIA. 3.18 MM IMPULSE 1.2 LB. SEC.
DRAG RDCR. WT. 0.000 GRAMS CHG. WT. 2.22 GRAMS SABOT WT. 1.147 GRAMS
TWIST RATE NA PCT. DRAG CHANGE / (DEG. YAW)**2 0.74

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	25.1	1499	1871	0.0
0	0.00	0.00	25.1	1499	582	0.0
50	1.23	0.03	24.8	1411	516	-0.9
100	2.44	0.07	24.3	1322	453	-1.8
150	3.64	0.11	23.9	1233	394	-2.7
200	4.83	0.15	23.5	1142	338	-3.6
250	5.99	0.20	23.0	1052	287	-4.5
300	7.14	0.25	22.4	960	239	-5.5
350	8.25	0.30	21.7	869	196	-6.4
400	9.34	0.36	20.7	777	157	-7.3
450	10.38	0.43	19.5	686	122	-8.2
500	11.38	0.51	17.9	597	92	-9.0
550	12.30	0.60	15.6	509	67	-9.6
600	13.13	0.71	12.3	428	48	-9.8
650	13.82	0.84	7.0	355	33	-9.7
700	14.32	0.99	1.6	306	24	-7.8
750	14.56	1.16	-6.0	272	19	-5.4
800	14.46	1.36	-15.5	243	15	-4.9
850	13.95	1.58	-27.6	216	12	-4.7
900	12.91	1.82	-42.0	192	10	-4.5
950	11.20	2.10	-62.2	171	8	-4.3
1000	8.65	2.41	-86.9	151	6	-4.1
1050	5.02	2.76	-118.3	134	5	-3.9
1100	0.00	3.16		119	4	-3.6

DRAG RDCR. WT. 0.028 GRAMS PCT. DRAG CHANGE / (DEG. YAW)**2 2.12

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	3.9	1499	1871	0.0
0	0.00	0.00	3.9	1499	582	0.0
50	0.19	0.03	3.7	1460	552	-0.4
100	0.36	0.07	3.4	1421	523	-0.8
150	0.52	0.10	3.2	1383	495	-1.1
200	0.67	0.14	2.9	1345	468	-1.5
250	0.81	0.18	2.6	1307	441	-1.9
300	0.93	0.22	2.3	1269	416	-2.2
350	1.04	0.26	2.0	1232	392	-2.6
400	1.14	0.30	1.7	1195	368	-2.9
450	1.21	0.34	1.3	1159	346	-3.3
500	1.27	0.38	0.9	1123	324	-3.6
550	1.31	0.43	0.5	1087	304	-3.9
600	1.33	0.48	0.1	1051	284	-4.2
650	1.32	0.53	-0.4	1016	265	-4.5
700	1.30	0.58	-0.9	982	247	-4.8
750	1.25	0.63	-1.4	948	230	-5.1
800	1.17	0.68	-2.0	914	214	-5.4
850	1.06	0.74	-2.6	881	198	-5.6
900	0.92	0.79	-3.3	848	184	-5.9
950	0.75	0.85	-4.0	816	170	-6.1
1000	0.54	0.92	-4.8	784	157	-6.3
1050	0.29	0.98	-5.7	753	145	-6.5
1100	0.00	1.05	-6.6	723	133	-6.7

TYPE SC 1 CALIBER 7.62 MM AVERAGE DENSITY 4.08 GRAMS/CC.

PROJ. WT 0.518 GRAMS PROJ. DIA. 3.18 MM IMPULSE 2.1 LB. SEC.

DRAG RDCR. WT. 0.000 GRAMS CHG. WT. 4.64 GRAMS SABOT WT. 1.147 GRAMS

TWIST RATE NA PCT. DRAG CHANGE / (DEG. YAW)**2 0.74

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	12.2	1747	2541	0.0
0	0.00	0.00	12.2	1747	791	0.0
50	0.60	0.03	12.1	1661	715	-0.9
100	1.18	0.06	11.9	1574	642	-1.7
150	1.76	0.09	11.7	1486	571	-2.6
200	2.33	0.13	11.4	1398	507	-3.5
250	2.89	0.16	11.1	1309	444	-4.5
300	3.43	0.20	10.8	1220	386	-5.4
350	3.95	0.25	10.5	1129	331	-6.3
400	4.46	0.29	10.0	1039	280	-7.3
450	4.94	0.34	9.5	947	233	-8.3
500	5.40	0.40	8.9	856	190	-9.2
550	5.82	0.46	8.2	764	151	-10.1
600	6.21	0.53	7.2	673	118	-10.9
650	6.53	0.61	5.9	584	88	-11.7
700	6.79	0.70	4.2	497	64	-12.2
750	6.94	0.81	1.8	417	45	-12.3
800	6.96	0.94	-1.7	346	31	-11.8
850	6.77	1.10	-6.6	301	23	-9.4
900	6.30	1.28	-12.8	268	19	-6.6
950	5.50	1.47	-20.0	239	15	-5.8
1000	4.26	1.70	-30.5	213	12	-5.5
1050	2.47	1.95	-42.9	189	9	-5.3
1100	0.00	2.23	-58.7	168	7	-5.0

DRAG RDCR. WT. 0.028 GRAMS PCT. DRAG CHANGE / (DEG. YAW)**2 0.74

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	2.7	1747	2541	0.0
0	0.00	0.00	2.7	1747	791	0.0
50	0.13	0.03	2.5	1706	754	-0.4
100	0.25	0.06	2.3	1665	718	-0.8
150	0.36	0.09	2.1	1625	683	-1.2
200	0.46	0.12	1.9	1585	650	-1.6
250	0.55	0.15	1.7	1545	617	-2.0
300	0.63	0.18	1.5	1505	585	-2.4
350	0.71	0.22	1.3	1467	555	-2.7
400	0.77	0.25	1.1	1428	525	-3.1
450	0.82	0.29	0.8	1389	496	-3.5
500	0.85	0.33	0.5	1351	470	-3.8
550	0.88	0.38	0.1	1314	444	-4.2
600	0.89	0.40	0.0	1275	418	-4.5
650	0.88	0.44	-0.3	1238	394	-4.9
700	0.86	0.48	-0.7	1201	370	-5.2
750	0.82	0.52	-1.0	1164	348	-5.5
800	0.77	0.57	-1.4	1128	326	-5.8
850	0.70	0.61	-1.8	1092	305	-6.1
900	0.61	0.66	-2.3	1056	286	-6.4
950	0.49	0.71	-2.7	1021	267	-6.7
1000	0.35	0.76	-3.2	986	249	-6.9
1050	0.19	0.81	-3.8	952	231	-7.2
1100	0.00	0.86	-4.3	918	215	-7.5

TYPE SC 1 CALIBER 7.62 MM AVERAGE DENSITY 4.08 GRAMS/CC.

PROJ. WT 0.590 GRAMS PROJ. DIA. 3.30 MM IMPULSE 0.6 LB. SEC.

DRAG RDCR. WT. 0.000 GRAMS CHG. WT. 1.21 GRAMS SABOT WT. 1.134 GRAMS

TWIST RATE NA PCT. DRAG CHANGE / (DEG. YAW)**2 0.74

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	46.4	1219	1281	0.0
0	0.00	0.00	46.4	1219	438	0.0
50	2.27	0.04	46.0	1133	379	-0.9
100	4.52	0.09	45.6	1047	323	-1.7
150	6.75	0.14	45.1	960	272	-2.6
200	8.95	0.19	44.5	873	225	-3.5
250	11.12	0.25	43.8	786	182	-4.4
300	13.25	0.32	42.9	699	144	-5.2
350	15.33	0.40	41.7	614	111	-6.0
400	17.35	0.49	40.4	530	83	-6.7
450	19.27	0.59	38.1	451	60	-7.1
500	21.08	0.71	35.1	379	42	-7.2
550	22.71	0.85	31.0	321	30	-6.4
600	24.11	1.02	25.5	286	24	-4.4
650	25.20	1.20	18.7	257	19	-3.9
700	25.93	1.41	10.2	230	16	-3.8
750	26.18	1.64	-0.3	206	12	-3.7
800	25.86	1.90	-13.6	184	10	-3.6
850	24.81	2.18	-30.1	164	8	-3.5
900	22.84	2.51	-50.9	146	6	-3.3
950	19.73	2.87	-77.1	131	5	-3.2
1000	15.16	3.28	-110.1	116	4	-3.0
1050	8.75	3.74	-151.5	104	3	-2.8
1100	0.00	4.25	-203.4	93	3	-2.6

DRAG RDCR. WT. 0.032 GRAMS PCT. DRAG CHANGE / (DEG. YAW)**2 2.12

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	6.3	1219	1281	0.0
0	0.00	0.00	6.3	1219	438	0.0
50	0.30	0.04	5.9	1184	413	-0.3
100	0.58	0.08	5.6	1150	389	-0.7
150	0.85	0.13	5.2	1116	366	-1.0
200	1.09	0.17	4.8	1082	344	-1.3
250	1.32	0.22	4.3	1048	323	-1.7
300	1.52	0.27	3.8	1015	302	-2.0
350	1.70	0.32	3.3	983	283	-2.3
400	1.84	0.37	2.8	950	264	-2.6
450	1.98	0.42	2.2	918	247	-2.9
500	2.08	0.48	1.6	887	230	-3.1
550	2.15	0.54	1.0	856	214	-3.4
600	2.18	0.60	0.3	825	199	-3.7
650	2.18	0.66	-0.5	795	184	-3.9
700	2.14	0.72	-1.3	766	171	-4.1
750	2.06	0.79	-2.2	737	158	-4.4
800	1.93	0.86	-3.2	708	146	-4.6
850	1.76	0.93	-4.2	680	134	-4.8
900	1.53	1.01	-5.3	652	123	-5.0
950	1.25	1.08	-6.6	625	113	-5.1
1000	0.90	1.17	-7.9	599	104	-5.3
1050	0.49	1.25	-9.3	573	95	-5.5
1100	0.00	1.34	-10.9	548	86	-5.6

TYPE SC 1 CALIBER 7.62 MM AVERAGE DENSITY 4.08 GRAMS/CC.
PROJ. WT 0.590 GRAMS PROJ. DIA. 3.30 MM IMPULSE 1.2 LB. SEC.
DRAG RDCR. WT. 0.000 GRAMS CHG. WT. 2.19 GRAMS SABOT WT. 1.134 GRAMS
TWIST RATE NR PCT. DRAG CHANGE / (DEG. YAW)**2 0.74

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	22.1	1479	1885	0.0
0	0.00	0.00	22.1	1479	645	0.0
50	1.08	0.03	21.9	1395	574	-0.8
100	2.15	0.07	21.6	1311	506	-1.7
150	3.20	0.11	21.3	1225	443	-2.6
200	4.24	0.15	20.9	1140	383	-3.4
250	5.26	0.20	20.5	1053	327	-4.3
300	6.26	0.25	20.0	967	276	-5.2
350	7.23	0.30	19.4	880	228	-6.1
400	8.17	0.36	18.7	793	185	-7.0
450	9.07	0.43	17.8	706	147	-7.8
500	9.92	0.51	16.7	620	113	-8.6
550	10.71	0.59	15.2	536	85	-9.2
600	11.41	0.69	13.1	457	62	-9.6
650	12.00	0.81	10.3	384	44	-9.6
700	12.41	0.95	6.6	325	31	-8.8
750	12.60	1.12	0.9	289	25	-6.2
800	12.49	1.30	-5.8	259	20	-5.0
850	12.01	1.51	-14.1	232	16	-4.7
900	11.08	1.73	-24.5	208	13	-4.6
950	9.58	1.99	-37.5	186	10	-4.4
1000	7.36	2.27	-53.7	166	8	-4.2
1050	4.25	2.59	-74.1	148	6	-4.0
1100	0.00	2.95	-99.8	132	5	-3.8

DRAG RDCR. WT. 0.032 GRAMS PCT. DRAG CHANGE / (DEG. YAW)**2 2.12

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	3.9	1479	1885	0.0
0	0.00	0.00	3.9	1479	645	0.0
50	0.19	0.03	3.7	1442	613	-0.4
100	0.36	0.07	3.4	1405	582	-0.7
150	0.52	0.11	3.2	1369	552	-1.1
200	0.67	0.14	2.9	1333	523	-1.4
250	0.81	0.18	2.6	1297	494	-1.8
300	0.93	0.22	2.3	1261	467	-2.1
350	1.04	0.26	2.0	1226	441	-2.5
400	1.13	0.30	1.6	1191	416	-2.8
450	1.20	0.34	1.3	1156	392	-3.1
500	1.26	0.39	0.9	1122	369	-3.4
550	1.30	0.43	0.5	1088	346	-3.7
600	1.31	0.48	0.0	1054	325	-4.0
650	1.31	0.53	-0.4	1021	304	-4.3
700	1.28	0.58	-0.9	988	285	-4.6
750	1.23	0.63	-1.5	956	266	-4.9
800	1.15	0.68	-2.0	923	248	-5.1
850	1.04	0.74	-2.6	892	231	-5.4
900	0.91	0.79	-3.3	861	215	-5.6
950	0.73	0.85	-4.0	830	200	-5.8
1000	0.53	0.92	-4.7	799	185	-6.1
1050	0.28	0.98	-5.5	770	172	-6.3
1100	0.00	1.05	-6.4	740	159	-6.5

TYPE SC 1 CALIBER 7.62 MM AVERAGE DENSITY 4.08 GRAMS/CC.

PROJ. WT 0.590 GRAMS PROJ. DIA. 3.30 MM IMPULSE 2.1 LB. SEC.

DRAG ROCK. WT. 0.000 GRAMS CHG. WT. 4.60 GRAMS SABOT WT. 1.194 GRAMS

TWIST RATE NA PCT. DRAG CHANGE / (DEG. YAW)**2 0.74

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	10.5	1736	2597	0.0
0	0.00	0.00	10.5	1736	889	0.0
50	0.51	0.03	10.3	1654	807	-0.8
100	1.01	0.06	10.1	1571	728	-1.7
150	1.50	0.09	9.9	1488	653	-2.5
200	1.99	0.13	9.7	1404	581	-3.4
250	2.45	0.16	9.4	1320	514	-4.2
300	2.91	0.20	9.1	1235	450	-5.1
350	3.35	0.25	8.7	1149	389	-6.0
400	3.77	0.29	8.3	1063	333	-6.9
450	4.17	0.34	7.8	976	281	-7.8
500	4.55	0.39	7.3	889	233	-8.7
550	4.89	0.45	6.6	802	190	-9.6
600	5.20	0.52	5.7	716	151	-10.4
650	5.46	0.59	4.6	630	117	-11.2
700	5.65	0.68	3.1	546	88	-11.8
750	5.77	0.78	1.2	465	64	-12.2
800	5.76	0.89	-1.6	392	45	-12.1
850	5.60	1.03	-5.5	330	32	-11.3
900	5.22	1.20	-10.7	292	25	-8.6
950	4.54	1.38	-17.3	262	20	-6.3
1000	3.51	1.58	-25.4	235	16	-5.7
1050	2.03	1.80	-35.5	210	13	-5.5
1100	0.00	2.06	-48.1	188	10	-5.2

DRAG ROCK. WT. 0.032 GRAMS PCT. DRAG CHANGE / (DEG. YAW)**2 2.12

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	2.6	1736	2597	0.0
0	0.00	0.00	2.6	1736	889	0.0
50	0.13	0.03	2.5	1697	849	-0.4
100	0.24	0.06	2.3	1658	810	-0.8
150	0.35	0.09	2.1	1620	773	-1.1
200	0.45	0.12	1.9	1582	736	-1.5
250	0.54	0.15	1.7	1544	701	-1.9
300	0.62	0.19	1.5	1507	667	-2.2
350	0.69	0.22	1.3	1470	634	-2.6
400	0.75	0.25	1.0	1433	603	-2.9
450	0.80	0.29	0.8	1396	572	-3.3
500	0.84	0.33	0.5	1360	542	-3.6
550	0.86	0.36	0.2	1324	513	-4.0
600	0.87	0.40	-0.1	1288	485	-4.3
650	0.86	0.44	-0.4	1252	458	-4.6
700	0.84	0.48	-0.7	1216	433	-4.9
750	0.81	0.52	-1.0	1181	408	-5.3
800	0.75	0.57	-1.4	1147	384	-5.6
850	0.68	0.61	-1.8	1112	361	-5.8
900	0.59	0.66	-2.2	1078	339	-6.1
950	0.48	0.70	-2.7	1044	318	-6.4
1000	0.34	0.75	-3.1	1011	297	-6.7
1050	0.18	0.80	-3.6	978	278	-6.9
1100	0.00	0.85	-4.2	946	260	-7.2

TYPE SC 1 CALIBER 7.62 MM AVERAGE DENSITY 4.08 GRAMS/CC.

PROJ. WT 10.732 GRAMS PROJ. DIA. 3.56 MM IMPULSE 0.8 LB. SEC.

DRAG ROCR. WT. 0.000 GRAMS CHG. WT. 1.18 GRAMS SABOT WT. 1.082 GRAMS

TWIST RATE NA PCT. DRAG CHANGE / (DEG. YAW)**2 0.74

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	40.9	1183	1270	0.0
0	0.00	0.00	40.9	1183	512	0.0
50	2.00	0.04	40.5	1103	445	-0.8
100	3.98	0.09	40.1	1022	382	-1.6
150	5.93	0.14	39.5	941	324	-2.4
200	7.86	0.20	38.9	860	270	-3.2
250	9.76	0.26	38.2	778	224	-4.1
300	11.61	0.33	37.5	697	178	-4.8
350	13.42	0.40	36.1	618	140	-5.6
400	15.16	0.49	34.6	539	106	-6.3
450	16.81	0.59	32.6	465	79	-6.7
500	18.35	0.71	29.9	396	57	-6.9
550	19.74	0.84	26.1	336	41	-6.6
600	20.90	1.00	21.1	299	33	-4.8
650	21.79	1.18	14.8	270	27	-3.8
700	22.35	1.37	7.2	244	22	-3.7
750	22.48	1.59	-2.1	220	18	-3.7
800	22.11	1.83	-13.6	198	14	-3.6
850	21.11	2.10	-27.8	178	12	-3.5
900	19.34	2.39	-45.4	160	9	-3.4
950	16.60	2.72	-67.0	144	8	-3.2
1000	12.67	3.09	-93.9	129	6	-3.1
1050	7.26	3.50	-127.2	116	5	-2.9
1100	0.00	3.96	-168.3	105	4	-2.8

DRAG ROCR. WT. 0.039 GRAMS PCT. DRAG CHANGE / (DEG. YAW)**2 2.12

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	6.4	1183	1270	0.0
0	0.00	0.00	6.4	1183	512	0.0
50	0.31	0.04	6.1	1151	484	-0.3
100	0.60	0.09	5.7	1119	458	-0.6
150	0.87	0.13	5.3	1087	432	-0.9
200	1.12	0.18	4.8	1056	407	-1.2
250	1.34	0.23	4.4	1025	383	-1.5
300	1.55	0.28	3.9	995	360	-1.8
350	1.73	0.33	3.4	964	338	-2.1
400	1.88	0.38	2.8	934	317	-2.4
450	2.01	0.43	2.2	905	297	-2.7
500	2.11	0.49	1.6	876	278	-2.9
550	2.17	0.55	0.9	847	260	-3.2
600	2.21	0.61	0.2	818	243	-3.4
650	2.20	0.67	-0.6	790	226	-3.6
700	2.16	0.74	-1.4	763	210	-3.9
750	2.07	0.80	-2.3	736	195	-4.1
800	1.94	0.87	-3.3	709	181	-4.3
850	1.77	0.94	-4.3	683	168	-4.5
900	1.54	1.02	-5.4	657	155	-4.6
950	1.25	1.10	-6.6	632	143	-4.8
1000	0.90	1.18	-7.9	607	132	-5.0
1050	0.49	1.26	-9.3	582	121	-5.1
1100	0.00	1.35	-10.9	559	111	-5.3

TYPE SC 1 CALIBER 7.62 MM AVERAGE DENSITY 4.08 GRAMS/CC.

PROJ. WT 0.732 GRAMS PROJ. DIA. 3.56 MM IMPULSE 1.2 LB. SEC.

DRAG RDCR. WT. 0.000 GRAMS CHG. WT. 2.14 GRAMS SABOT WT. 1.082 GRAMS

TWIST RATE NA PCT. DRAG CHANGE / (DEG. YAW)**2 0.74

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	19.0	1450	1907	0.0
0	0.00	0.00	19.0	1450	770	0.0
50	0.93	0.04	18.8	1372	689	-0.8
100	1.84	0.07	18.5	1293	612	-1.6
150	2.75	0.11	18.2	1213	539	-2.4
200	3.63	0.16	17.8	1133	470	-3.2
250	4.50	0.20	17.4	1052	405	-4.0
300	5.34	0.25	16.9	972	346	-4.9
350	6.16	0.30	16.3	890	290	-5.7
400	6.95	0.36	15.6	809	240	-6.5
450	7.70	0.43	14.8	728	194	-7.3
500	8.41	0.50	13.7	648	154	-8.0
550	9.05	0.58	12.4	569	118	-8.7
600	9.63	0.68	10.6	492	89	-9.2
650	10.09	0.79	8.2	421	65	-9.4
700	10.42	0.92	4.8	357	47	-9.2
750	10.56	1.07	0.3	311	35	-7.7
800	10.44	1.24	-5.5	280	29	-5.5
850	10.01	1.43	-12.5	253	23	-4.8
900	9.20	1.63	-21.2	229	19	-4.6
950	7.91	1.86	-31.8	206	16	-4.5
1000	6.05	2.12	-44.9	186	13	-4.3
1050	3.47	2.41	-61.1	167	10	-4.1
1100	0.00	2.72	-81.0	150	8	-3.9

DRAG RDCR. WT. 0.039 GRAMS PCT. DRAG CHANGE / (DEG. YAW)**2 2.12

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	3.9	1450	1907	0.0
0	0.00	0.00	3.9	1450	770	0.0
50	0.19	0.04	3.7	1416	733	-0.3
100	0.36	0.07	3.4	1382	698	-0.7
150	0.53	0.11	3.2	1348	664	-1.0
200	0.68	0.14	2.9	1314	631	-1.3
250	0.81	0.18	2.6	1281	599	-1.7
300	0.93	0.22	2.3	1248	568	-2.0
350	1.04	0.26	1.9	1215	538	-2.3
400	1.13	0.31	1.6	1182	509	-2.6
450	1.20	0.35	1.2	1150	481	-2.9
500	1.26	0.39	0.8	1118	454	-3.2
550	1.29	0.44	0.4	1086	429	-3.5
600	1.31	0.48	0.0	1055	404	-3.8
650	1.30	0.53	-0.5	1024	380	-4.0
700	1.27	0.58	-1.0	993	357	-4.3
750	1.22	0.63	-1.5	963	335	-4.6
800	1.14	0.69	-2.0	932	314	-4.8
850	1.03	0.74	-2.6	903	294	-5.0
900	0.89	0.80	-3.3	873	275	-5.3
950	0.72	0.86	-3.9	845	257	-5.5
1000	0.52	0.92	-4.7	816	240	-5.7
1050	0.28	0.98	-5.4	788	223	-5.9
1100	0.00	1.04	-6.3	760	208	-6.1

TYPE SC 1 CALIBER 7.62 MM AVERAGE DENSITY 4.08 GRAMS/CC.

PROJ. WT. 0.732 GRAMS PROJ. DIA. 3.56 MM IMPULSE 2.1 LB. SEC.

DRAG RDCR. WT. 0.000 GRAMS CHG. WT. 4.54 GRAMS SABOT WT. 1.082 GRAMS

TWIST RATE NA PCT. DRAG CHANGE / (DEG. YAW)**2 0.74

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	8.7	1717	2674	0.0
0	0.00	0.00	8.7	1717	1079	0.0
50	0.42	0.03	8.6	1640	980	-0.8
100	0.84	0.06	8.4	1563	894	-1.5
150	1.25	0.09	8.1	1486	808	-2.3
200	1.64	0.13	7.9	1407	725	-3.1
250	2.03	0.16	7.6	1329	646	-3.9
300	2.39	0.20	7.3	1249	571	-4.8
350	2.75	0.25	7.0	1169	501	-5.6
400	3.09	0.29	6.6	1089	434	-6.4
450	3.40	0.34	6.1	1008	372	-7.3
500	3.70	0.39	5.6	927	315	-8.1
550	3.96	0.45	5.0	846	262	-8.9
600	4.19	0.51	4.2	765	214	-9.7
650	4.38	0.58	3.3	684	171	-10.5
700	4.52	0.65	2.0	604	134	-11.2
750	4.58	0.74	0.5	527	102	-11.8
800	4.57	0.85	-1.6	453	75	-12.0
850	4.43	0.97	-4.5	385	54	-11.9
900	4.12	1.11	-8.5	328	39	-11.0
950	3.58	1.27	-13.7	294	32	-8.5
1000	2.77	1.45	-20.1	265	26	-6.1
1050	1.60	1.65	-28.0	239	21	-5.7
1100	0.00	1.87	-37.7	216	17	-5.5

DRAG RDCR. WT. 0.039 GRAMS PCT. DRAG CHANGE / (DEG. YAW)**2 2.12

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	2.6	1717	2674	0.0
0	0.00	0.00	2.6	1717	1079	0.0
50	0.12	0.03	2.4	1681	1034	-0.4
100	0.24	0.06	2.3	1645	989	-0.7
150	0.35	0.09	2.1	1609	947	-1.1
200	0.45	0.12	1.9	1574	905	-1.4
250	0.54	0.15	1.7	1539	864	-1.8
300	0.61	0.19	1.5	1504	825	-2.1
350	0.68	0.22	1.2	1469	787	-2.4
400	0.74	0.25	1.0	1435	750	-2.8
450	0.79	0.29	0.7	1400	714	-3.1
500	0.82	0.33	0.5	1366	679	-3.4
550	0.84	0.36	0.2	1332	646	-3.7
600	0.85	0.40	-0.1	1299	613	-4.0
650	0.84	0.44	-0.4	1265	582	-4.3
700	0.82	0.48	-0.7	1232	551	-4.6
750	0.79	0.52	-1.0	1199	522	-4.9
800	0.73	0.56	-1.4	1167	493	-5.2
850	0.66	0.61	-1.8	1134	466	-5.5
900	0.57	0.65	-2.2	1102	440	-5.8
950	0.46	0.70	-2.6	1071	414	-6.0
1000	0.33	0.75	-3.0	1039	390	-6.3
1050	0.18	0.79	-3.5	1008	367	-6.5
1100	0.00	0.84	-4.0	977	344	-6.8

TYPE SC 1 CALIBER 7.62 MM AVERAGE DENSITY 4.08 GRAMS/CC.

PROJ. WT .0.814 GRAMS PROJ. DIA. 3.68 MM IMPULSE 0.8 LB. SEC.

DRAG ROCR. WT. 0.000 GRAMS CHG. WT. 1.15 GRAMS SABOT WT. 1.089 GRAMS

TWIST RATE NA PCT. DRAG CHANGE / (DEG. YAW)**2 0.74

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	39.6	1157	1260	0.0
0	0.00	0.00	39.6	1157	544	0.0
50	1.93	0.04	39.2	1079	474	-0.8
100	3.85	0.09	38.7	1001	408	-1.6
150	5.73	0.14	38.1	923	346	-2.4
200	7.59	0.20	37.5	844	290	-3.1
250	9.42	0.26	36.7	766	239	-3.9
300	11.20	0.33	35.8	688	192	-4.7
350	12.93	0.41	34.6	611	152	-5.4
400	14.60	0.50	33.1	535	118	-6.0
450	16.18	0.60	31.0	463	87	-6.5
500	17.64	0.71	28.3	397	64	-6.7
550	18.95	0.85	24.6	338	47	-6.5
600	20.05	1.01	19.6	301	37	-4.8
650	20.87	1.18	13.5	273	30	-3.8
700	21.36	1.38	6.1	247	25	-3.6
750	21.45	1.59	-2.9	224	20	-3.6
800	21.06	1.82	-13.9	203	17	-3.5
850	20.06	2.08	-27.4	183	14	-3.4
900	18.32	2.37	-44.0	165	11	-3.3
950	15.69	2.69	-64.3	149	9	-3.2
1000	11.94	3.04	-89.3	134	7	-3.1
1050	6.82	3.44	-120.0	121	6	-2.9
1100	0.00	3.88	-157.6	110	5	-2.8

DRAG ROCR. WT. 0.044 GRAMS PCT. DRAG CHANGE / (DEG. YAW)**2 2.12

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	6.6	1157	1260	0.0
0	0.00	0.00	6.6	1157	544	0.0
50	0.32	0.04	6.3	1126	515	-0.3
100	0.62	0.09	5.9	1096	487	-0.6
150	0.89	0.14	5.4	1065	460	-0.9
200	1.15	0.18	5.0	1035	435	-1.2
250	1.38	0.23	4.5	1006	410	-1.5
300	1.59	0.28	4.0	976	386	-1.8
350	1.78	0.33	3.4	947	363	-2.0
400	1.94	0.39	2.9	919	341	-2.3
450	2.07	0.44	2.3	890	320	-2.5
500	2.17	0.50	1.6	862	300	-2.8
550	2.23	0.56	0.9	835	280	-3.0
600	2.26	0.62	0.2	807	262	-3.3
650	2.26	0.68	-0.6	780	245	-3.5
700	2.21	0.75	-1.5	754	228	-3.7
750	2.12	0.82	-2.4	728	212	-3.9
800	1.99	0.89	-3.4	702	197	-4.1
850	1.81	0.96	-4.4	677	183	-4.3
900	1.57	1.03	-5.5	652	170	-4.5
950	1.27	1.11	-6.8	628	157	-4.6
1000	0.92	1.19	-8.1	604	145	-4.8
1050	0.50	1.28	-9.5	580	134	-4.9
1100	0.00	1.37	-11.0	557	123	-5.1

TYPE SC 1 CALIBER 7.62 MM AVERAGE DENSITY 4.08 GRAMS/CC.

PROJ. WT 0.814 GRAMS PROJ. DIA. 3.68 MM IMPULSE 1.2 LB. SEC.

DRAG ROCK. WT. 0.000 GRAMS CHG. WT. 2.11 GRAMS SABOT WT. 1.069 GRAMS

TWIST RATE NA PCT. DRAG CHANGE / (DEG. YAW)**2 0.74

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	18.2	1427	1917	0.0
0	0.00	0.00	18.2	1427	828	0.0
50	0.89	0.04	18.0	1351	743	-0.8
100	1.76	0.07	17.7	1275	661	-1.5
150	2.63	0.11	17.4	1198	583	-2.3
200	3.47	0.16	17.0	1120	510	-3.1
250	4.29	0.20	16.6	1042	442	-3.9
300	5.10	0.25	16.1	964	378	-4.7
350	5.87	0.31	15.5	886	319	-5.5
400	6.62	0.37	14.8	807	265	-6.3
450	7.33	0.43	13.9	729	216	-7.1
500	7.99	0.50	12.9	651	173	-7.7
550	8.59	0.59	11.5	575	134	-8.4
600	9.12	0.68	9.8	501	102	-8.9
650	9.56	0.79	7.5	431	76	-9.1
700	9.86	0.91	4.3	368	55	-9.1
750	9.97	1.06	0.0	319	41	-8.0
800	9.85	1.23	-5.5	287	34	-5.8
850	9.43	1.41	-12.2	261	28	-4.8
900	8.64	1.61	-20.3	236	23	-4.6
950	7.42	1.83	-30.2	214	19	-4.4
1000	5.66	2.08	-42.3	193	15	-4.3
1050	3.23	2.35	-57.1	174	12	-4.1
1100	0.00	2.65	-75.4	158	10	-4.0

DRAG ROCK. WT. 0.044 GRAMS PCT. DRAG CHANGE / (DEG. YAW)**2 2.12

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	4.0	1427	1917	0.0
0	0.00	0.00	4.0	1427	828	0.0
50	0.19	0.04	3.8	1394	790	-0.3
100	0.37	0.07	3.5	1361	753	-0.7
150	0.54	0.11	3.2	1329	717	-1.0
200	0.69	0.15	2.9	1297	682	-1.3
250	0.83	0.19	2.6	1264	648	-1.6
300	0.95	0.23	2.3	1233	615	-1.9
350	1.06	0.27	2.0	1201	584	-2.2
400	1.15	0.31	1.6	1170	553	-2.5
450	1.22	0.35	1.2	1138	524	-2.8
500	1.28	0.40	0.8	1108	495	-3.1
550	1.31	0.44	0.4	1077	468	-3.4
600	1.33	0.49	0.0	1047	442	-3.6
650	1.32	0.54	-0.5	1017	416	-3.9
700	1.29	0.59	-1.0	987	392	-4.1
750	1.23	0.64	-1.5	958	369	-4.4
800	1.15	0.69	-2.1	929	347	-4.6
850	1.04	0.75	-2.7	900	325	-4.9
900	0.90	0.80	-3.3	872	305	-5.1
950	0.73	0.86	-4.0	844	285	-5.3
1000	0.52	0.92	-4.7	816	267	-5.5
1050	0.28	0.99	-5.5	789	249	-5.7
1100	0.00	1.05	-6.3	762	232	-5.9

TYPE SC 1 CALIBER 7.62 MM AVERAGE DENSITY 4.08 GRAMS/CC.

PROJ. WT 0.014 GRAMS PROJ. DIA. 3.68 MM IMPULSE 2.1 LB. SEC.

DRAG RDCR. WT. 0.000 GRAMS CHG. WT. 4.49 GRAMS SABOT WT. 1.089 GRAMS

TWIST RATE NA PCT. DRAG CHANGE / (DEG. YAW)**2 0.74

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	8.1	1703	2730	0.0
0	0.00	0.00	8.1	1703	1180	0.0
50	0.40	0.03	8.0	1629	1079	-0.7
100	0.78	0.06	7.8	1554	983	-1.5
150	1.16	0.09	7.5	1479	890	-2.3
200	1.52	0.13	7.3	1404	801	-3.0
250	1.88	0.17	7.0	1328	717	-3.8
100	2.22	0.20	6.7	1251	636	-4.6
350	2.54	0.25	6.4	1174	560	-5.4
400	2.85	0.29	6.0	1096	489	-6.2
450	3.14	0.34	5.6	1018	422	-7.0
500	3.40	0.39	5.0	940	359	-7.8
550	3.64	0.44	4.4	862	302	-8.6
600	3.84	0.50	3.7	783	249	-9.4
650	4.00	0.57	2.8	705	202	-10.2
700	4.12	0.66	1.6	628	160	-10.8
750	4.17	0.73	0.2	552	124	-11.5
800	4.14	0.83	-1.7	479	93	-11.8
850	4.01	0.94	-4.2	411	69	-11.8
900	3.72	1.07	-7.7	350	50	-11.5
950	3.24	1.23	-12.4	306	39	-9.7
1000	2.50	1.40	-18.3	279	32	-7.1
1050	1.44	1.59	-25.4	253	26	-5.8
1100	0.00	1.79	-34.0	229	21	-5.5

DRAG RDCR. WT. 0.044 GRAMS PCT. DRAG CHANGE / (DEG. YAW)**2 2.12

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	2.6	1703	2730	0.0
0	0.00	0.00	2.6	1703	1180	0.0
50	0.12	0.03	2.5	1668	1131	-0.3
100	0.24	0.06	2.3	1634	1084	-0.7
150	0.35	0.09	2.1	1599	1038	-1.0
200	0.45	0.12	1.9	1565	994	-1.4
250	0.54	0.15	1.7	1531	951	-1.7
300	0.62	0.19	1.5	1497	909	-2.0
350	0.68	0.22	1.2	1464	868	-2.3
400	0.74	0.26	1.0	1431	829	-2.7
450	0.79	0.29	0.7	1398	790	-3.0
500	0.82	0.33	0.5	1365	753	-3.3
550	0.84	0.36	0.2	1332	717	-3.6
600	0.85	0.40	-0.1	1300	682	-3.9
650	0.84	0.44	-0.4	1267	648	-4.2
700	0.82	0.48	-0.7	1235	615	-4.5
750	0.78	0.52	-1.0	1203	584	-4.8
800	0.73	0.56	-1.4	1172	553	-5.0
850	0.66	0.61	-1.8	1141	523	-5.3
900	0.57	0.65	-2.2	1110	495	-5.6
950	0.46	0.70	-2.6	1079	467	-5.8
1000	0.33	0.75	-3.0	1048	441	-6.1
1050	0.18	0.79	-3.5	1018	416	-6.3
1100	0.00	0.84	-4.0	989	391	-6.6

TYPE SC 1 CALIBER 7.62 MM AVERAGE DENSITY 4.08 GRAMS/CC.
PROJ. WT 0.901 GRAMS PROJ. DIA. 3.81 MM IMPULSE 0.[illegible] LB. SEC.
DRAG RDCR. WT. 0.000 GRAMS CHG. WT. 1.14 GRAMS SABOT WT. 1.037 GRAMS
TWIST RATE NA PCT. DRAG CHANGE / (DEG. YAW)**2 0.74

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	37.8	1137	1252	0.0
0	0.00	0.00	37.8	1137	582	0.0
50	1.85	0.05	37.4	1062	508	-0.8
100	3.67	0.09	36.9	986	438	-1.5
150	5.47	0.15	36.3	910	373	-2.3
200	7.24	0.20	35.7	835	314	-3.0
250	8.98	0.27	34.9	759	259	-3.8
300	10.67	0.34	33.9	684	210	-4.9
350	12.31	0.41	32.7	609	167	-5.2
400	13.89	0.50	31.2	536	129	-5.8
450	15.37	0.60	29.2	467	98	-6.3
500	16.75	0.72	26.5	402	73	-6.5
550	17.97	0.85	22.9	344	53	-6.4
600	18.99	1.01	18.1	306	42	-4.9
650	19.74	1.18	12.2	278	35	-3.7
700	20.18	1.37	5.1	253	29	-3.6
750	20.23	1.58	-3.5	230	24	-3.5
800	19.81	1.80	-14.0	208	20	-3.5
850	18.83	2.06	-26.7	189	16	-3.4
900	17.16	2.33	-42.1	171	13	-3.3
950	14.65	2.64	-60.9	155	11	-3.2
1000	11.12	2.98	-83.9	140	9	-3.1
1050	6.33	3.36	-111.9	127	7	-3.0
1100	0.00	3.77	-146.0	115	6	-2.8

DRAG RDCR. WT. 0.049 GRAMS PCT. DRAG CHANGE / (DEG. YAW)**2 2.12

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	6.8	1137	1252	0.0
0	0.00	0.00	6.8	1137	582	0.0
50	0.32	0.04	6.4	1107	552	-0.3
100	0.63	0.09	6.0	1078	523	-0.6
150	0.91	0.14	5.5	1049	494	-0.9
200	1.17	0.19	5.1	1020	467	-1.1
250	1.41	0.24	4.6	992	441	-1.4
300	1.62	0.29	4.0	963	416	-1.7
350	1.81	0.34	3.5	936	392	-1.9
400	1.97	0.39	2.9	908	369	-2.2
450	2.10	0.45	2.3	881	346	-2.4
500	2.20	0.51	1.6	854	325	-2.7
550	2.27	0.57	0.9	827	305	-2.9
600	2.30	0.63	0.1	801	286	-3.1
650	2.29	0.69	-0.7	775	267	-3.4
700	2.24	0.76	-1.5	750	250	-3.6
750	2.15	0.82	-2.4	724	233	-3.8
800	2.01	0.90	-3.4	700	217	-4.0
850	1.82	0.97	-4.5	675	202	-4.1
900	1.58	1.04	-5.6	651	188	-4.3
950	1.29	1.12	-6.8	628	174	-4.5
1000	0.93	1.20	-8.2	605	161	-4.6
1050	0.50	1.29	-9.6	582	149	-4.8
1100	0.00	1.37	-11.1	560	138	-4.9

TYPE SC 1 CALIBER 7.62 MM AVERAGE DENSITY 4.08 GRAMS/CC.
PROJ. WT 0.901 GRAMS PROJ. DIA. 3.81 MM IMPULSE 1.2 LB. SEC.
DRAG ROCK. WT. 0.000 GRAMS CHG. WT. 2.08 GRAMS SABOT WT. 1.037 GRAMS
TWIST RATE NA PCT. DRAG CHANGE / (DEG. YAW)**2 0.74

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	17.2	1410	1926	0.0
0	0.00	0.00	17.2	1410	895	0.0
50	0.84	0.04	17.0	1337	805	-0.7
100	1.67	0.07	16.7	1263	718	-1.5
150	2.48	0.12	16.3	1188	636	-2.2
200	3.27	0.16	16.0	1113	558	-3.0
250	4.04	0.21	15.5	1038	485	-3.8
300	4.80	0.26	15.0	963	417	-4.5
350	5.52	0.31	14.4	887	354	-5.3
400	6.22	0.37	13.7	811	296	-6.1
450	6.87	0.43	12.9	735	243	-6.8
500	7.49	0.51	11.9	660	196	-7.5
550	8.04	0.59	10.6	586	155	-8.2
600	8.53	0.68	8.9	514	119	-8.7
650	8.92	0.78	6.7	446	90	-9.0
700	9.19	0.90	3.8	383	66	-9.0
750	9.29	1.04	-0.2	330	49	-8.4
800	9.16	1.20	-5.3	297	40	-6.3
850	8.76	1.38	-11.6	270	33	-4.9
900	8.02	1.57	-19.1	245	27	-4.6
950	6.87	1.79	-28.3	223	22	-4.4
1000	5.23	2.02	-39.4	202	18	-4.3
1050	2.98	2.28	-52.6	183	15	-4.2
1100	0.00	2.57	-69.2	166	12	-4.0

DRAG ROCK. WT. 0.049 GRAMS PCT. DRAG CHANGE / (DEG. YAW)**2 2.12

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	4.1	1410	1926	0.0
0	0.00	0.00	4.1	1410	895	0.0
50	0.19	0.04	3.8	1378	855	-0.3
100	0.37	0.07	3.5	1347	816	-0.6
150	0.54	0.11	3.2	1316	778	-0.9
200	0.69	0.15	3.0	1284	741	-1.2
250	0.83	0.19	2.6	1253	705	-1.5
300	0.96	0.23	2.3	1223	670	-1.8
350	1.07	0.27	2.0	1192	637	-2.1
400	1.16	0.31	1.6	1162	605	-2.4
450	1.23	0.36	1.2	1132	573	-2.7
500	1.28	0.40	0.8	1102	543	-3.0
550	1.32	0.45	0.4	1073	514	-3.2
600	1.33	0.49	0.0	1043	486	-3.5
650	1.32	0.54	-0.5	1015	459	-3.7
700	1.29	0.59	-1.0	986	433	-4.0
750	1.24	0.64	-1.5	958	408	-4.2
800	1.15	0.70	-2.1	930	384	-4.5
850	1.04	0.75	-2.7	902	361	-4.7
900	0.90	0.81	-3.3	875	339	-4.9
950	0.73	0.87	-4.0	848	318	-5.1
1000	0.52	0.93	-4.7	821	298	-5.3
1050	0.28	0.99	-5.5	795	279	-5.5
1100	0.00	1.05	-6.3	769	261	-5.7

TYPE SC-1 CALIBER 7.62 MM AVERAGE DENSITY 4.08 GRAMS/CU.

PROJ. WT 10.901 GRAMS PROJ. DIA. 3.81 MM IMPULSE 2.1 LB. SEC.

DRAG ROCK. WT. 0.000 GRAMS CHG. WT. 4.46 GRAMS SABOT WT. 1.037 GRAMS

TWIST RATE NA PCT. DRAG CHANGE / (DEG. YAW)**2 0.74

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	7.5	1692	2773	0.0
0	0.00	0.00	7.5	1692	1289	0.0
50	0.37	0.03	7.4	1620	1182	-0.7
100	0.72	0.06	7.2	1548	1079	-1.4
150	1.07	0.09	6.9	1476	981	-2.2
200	1.41	0.13	6.7	1403	888	-2.9
250	1.73	0.17	6.4	1329	798	-3.7
300	2.04	0.20	6.1	1255	709	-4.5
350	2.34	0.25	5.8	1181	624	-5.2
400	2.62	0.29	5.4	1106	542	-6.0
450	2.88	0.34	5.0	1031	467	-6.8
500	3.11	0.39	4.5	955	397	-7.6
550	3.32	0.44	3.9	879	334	-8.3
600	3.50	0.50	3.2	803	278	-9.1
650	3.64	0.57	2.3	728	229	-9.9
700	3.73	0.64	1.3	653	187	-10.5
750	3.77	0.72	-0.1	579	151	-11.1
800	3.73	0.81	-1.8	507	119	-11.6
850	3.60	0.92	-4.0	439	93	-11.8
900	3.34	1.04	-7.0	377	72	-11.6
950	2.91	1.18	-11.1	326	56	-10.7
1000	2.24	1.35	-16.4	294	46	-8.3
1050	1.29	1.53	-22.8	267	38	-5.3
1100	0.00	1.72	-30.5	243	31	-3.6

DRAG ROCK. WT. 0.049 GRAMS PCT. DRAG CHANGE / (DEG. YAW)**2 2.12

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	2.6	1692	2773	0.0
0	0.00	0.00	2.6	1692	1289	0.0
50	0.12	0.03	2.5	1658	1238	-0.3
100	0.24	0.06	2.5	1625	1188	-0.7
150	0.35	0.09	2.4	1592	1138	-1.0
200	0.45	0.12	2.3	1559	1089	-1.3
250	0.54	0.16	2.1	1526	1041	-1.6
300	0.61	0.19	1.9	1493	994	-1.9
350	0.68	0.22	1.7	1460	948	-2.3
400	0.74	0.26	1.4	1427	902	-2.6
450	0.78	0.29	1.0	1394	858	-2.9
500	0.82	0.33	0.7	1361	814	-3.3
550	0.84	0.37	0.2	1328	772	-3.6
600	0.84	0.40	-0.3	1295	730	-3.8
650	0.84	0.44	-0.9	1262	690	-4.0
700	0.81	0.48	-1.7	1229	650	-4.3
750	0.78	0.52	-2.6	1196	612	-4.6
800	0.72	0.57	-3.6	1163	575	-4.9
850	0.65	0.61	-4.8	1130	539	-5.1
900	0.56	0.65	-6.2	1097	504	-5.4
950	0.45	0.70	-7.8	1064	470	-5.7
1000	0.32	0.74	-9.6	1031	437	-5.9
1050	0.17	0.79	-11.5	998	406	-6.1
1100	0.00	0.84	-13.6	965	376	-6.4

TYPE SC 1 CALIBER 7.62 MM AVERAGE DENSITY 4.08 GRAMS/CC.

PROJ. WT 11.095 GRAMS PROJ. DIA. 4.06 MM IMPULSE 0.0 LB. SEC.

DRAG ROCR. WT. 0.000 GRAMS CHG. WT. 1.99 GRAMS SABOT WT. 0.991 GRAMS

TWIST RATE NA PCT. DRAG CHANGE / (DEG. YAW)**2 0.74

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	36.5	1085	1228	0.0
0	0.00	0.00	36.5	1085	645	0.0
50	1.73	0.05	36.1	1014	564	-0.7
100	3.54	0.10	35.5	944	488	-1.4
150	5.27	0.15	34.9	873	417	-2.1
200	6.97	0.21	34.2	802	352	-2.8
250	8.63	0.28	33.4	731	292	-3.5
300	10.25	0.35	32.3	660	239	-4.2
350	11.81	0.43	31.0	591	191	-4.9
400	13.30	0.52	29.4	523	150	-5.4
450	14.70	0.62	27.3	459	115	-5.8
500	15.98	0.74	24.6	399	87	-6.0
550	17.11	0.88	21.0	345	65	-6.0
600	18.03	1.03	16.2	308	52	-4.7
650	18.69	1.20	10.4	281	43	-3.6
700	19.04	1.39	3.5	258	36	-3.4
750	19.02	1.59	-4.7	236	30	-3.4
800	18.56	1.81	-14.6	215	25	-3.3
850	17.57	2.05	-26.4	196	21	-3.3
900	15.94	2.32	-40.6	179	18	-3.2
950	13.54	2.61	-57.1	163	15	-3.1
1000	10.22	2.93	-78.3	149	12	-3.0
1050	5.79	3.29	-103.0	136	10	-2.9
1100	0.00	3.68	-132.9	124	8	-2.8

DRAG ROCR. WT. 0.059 GRAMS PCT. DRAG CHANGE / (DEG. YAW)**2 2.12

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	7.3	1085	1228	0.0
0	0.00	0.00	7.3	1085	645	0.0
50	0.35	0.05	6.9	1058	612	-0.3
100	0.67	0.09	6.4	1031	581	-0.5
150	0.98	0.14	5.9	1004	551	-0.8
200	1.26	0.19	5.4	978	521	-1.1
250	1.51	0.25	4.9	951	493	-1.3
300	1.74	0.30	4.3	925	466	-1.6
350	1.94	0.35	3.7	900	440	-1.8
400	2.10	0.41	3.1	874	415	-2.0
450	2.24	0.47	2.4	849	391	-2.3
500	2.35	0.53	1.7	824	368	-2.5
550	2.41	0.59	0.9	800	346	-2.7
600	2.44	0.65	0.1	775	325	-2.9
650	2.43	0.72	-0.7	752	305	-3.1
700	2.38	0.79	-1.7	728	286	-3.3
750	2.28	0.86	-2.6	705	268	-3.5
800	2.13	0.93	-3.7	682	250	-3.6
850	1.93	1.00	-4.8	659	234	-3.8
900	1.67	1.08	-6.0	637	218	-4.0
950	1.36	1.16	-7.2	615	203	-4.1
1000	0.98	1.24	-8.6	594	189	-4.3
1050	0.52	1.33	-10.1	573	175	-4.4
1100	0.00	1.42	-11.7	552	163	-4.6

TYPE SC 1 CALIBER 7.62 MM AVERAGE DENSITY 4.08 GRAMS/CC.

PROJ. WT 11.095 GRAMS PROJ. DIA. 4.06 MM IMPULSE 1.2 LB. SEC.

DRAG ROCK. WT. 0.000 GRAMS CHG. WT. 2.01 GRAMS SABOT WT. 0.991 GRAMS

TWIST RATE NA PCT. DRAG CHANGE / (DEG. YAW)**2 0.74

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	16.3	1363	1938	0.0
0	0.00	0.00	16.3	1363	1017	0.0
50	0.79	0.04	16.0	1294	917	-0.7
100	1.58	0.08	15.7	1224	821	-1.4
150	2.34	0.12	15.4	1155	730	-2.1
200	3.09	0.16	15.0	1084	644	-2.8
250	3.81	0.21	14.5	1014	563	-3.5
300	4.52	0.26	14.0	943	487	-4.3
350	5.19	0.32	13.4	872	416	-5.0
400	5.83	0.38	12.7	801	351	-5.7
450	6.44	0.44	11.8	730	292	-6.4
500	7.00	0.52	10.8	660	238	-7.0
550	7.50	0.60	9.5	591	191	-7.6
600	7.94	0.69	7.9	523	150	-8.2
650	8.28	0.79	5.8	458	115	-8.5
700	8.50	0.90	3.1	398	87	-8.5
750	8.57	1.04	-0.6	344	65	-8.3
800	8.44	1.19	-5.4	308	52	-6.8
850	8.04	1.36	-11.2	281	43	-5.0
900	7.34	1.55	-18.1	257	36	-4.5
950	6.26	1.75	-26.3	235	30	-4.3
1000	4.74	1.98	-36.2	215	25	-4.2
1050	2.69	2.22	-48.0	196	21	-4.1
1100	0.00	2.49	-62.2	179	18	-4.0

DRAG ROCK. WT. 0.059 GRAMS PCT. DRAG CHANGE / (DEG. YAW)**2 2.12

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	4.3	1363	1938	0.0
0	0.00	0.00	4.3	1363	1017	0.0
50	0.20	0.04	4.0	1334	973	-0.3
100	0.39	0.08	3.7	1304	930	-0.6
150	0.57	0.11	3.4	1275	889	-0.9
200	0.73	0.15	3.1	1246	848	-1.2
250	0.87	0.19	2.8	1218	809	-1.4
300	1.00	0.24	2.4	1189	771	-1.7
350	1.11	0.28	2.0	1161	734	-2.0
400	1.21	0.32	1.7	1133	699	-2.2
450	1.28	0.37	1.3	1105	664	-2.5
500	1.34	0.41	0.8	1077	631	-2.8
550	1.37	0.46	0.4	1050	599	-3.0
600	1.39	0.51	-0.1	1023	568	-3.2
650	1.38	0.56	-0.6	996	538	-3.5
700	1.34	0.61	-1.1	969	509	-3.7
750	1.28	0.66	-1.6	943	481	-3.9
800	1.19	0.71	-2.2	917	454	-4.2
850	1.08	0.77	-2.8	891	429	-4.4
900	0.93	0.83	-3.5	866	404	-4.6
950	0.75	0.88	-4.1	840	381	-4.8
1000	0.54	0.95	-4.9	816	358	-5.0
1050	0.29	1.01	-5.6	791	336	-5.2
1100	0.00	1.07	-6.5	767	316	-5.3

TYPE SC 1 CALIBER 7.62 MM AVERAGE DENSITY 4.08 GRAMS/CC.
PROJ. WT. 4.095 GRAMS PROJ. DIA. 4.06 MM IMPULSE 2.1 LB. SEC.
DRAG RDCR. WT. 0.000 GRAMS CHG. WT. 4.36 GRAMS SABOT WT. 0.991 GRAMS
TWIST RATE NA PCT. DRAG CHANGE / (DEG. YAW)**2 0.74

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	6.8	1662	2882	0.0
0	0.00	0.00	6.8	1662	1512	0.0
50	0.33	0.03	6.6	1595	1392	-0.7
100	0.65	0.06	6.4	1527	1277	-1.4
150	0.96	0.10	6.2	1459	1166	-2.0
200	1.26	0.13	5.9	1391	1059	-2.7
250	1.55	0.17	5.7	1322	957	-3.4
300	1.82	0.21	5.4	1255	859	-4.2
350	2.08	0.25	5.0	1183	766	-4.9
400	2.32	0.29	4.8	1113	678	-5.6
450	2.54	0.34	4.2	1042	595	-6.3
500	2.74	0.39	3.7	971	517	-7.1
550	2.91	0.44	3.2	900	444	-7.8
600	3.05	0.50	2.5	830	377	-8.5
650	3.16	0.56	1.7	759	315	-9.2
700	3.23	0.63	0.7	688	259	-9.9
750	3.24	0.71	-0.4	618	209	-10.5
800	3.19	0.79	-1.9	550	165	-11.0
850	3.06	0.89	-3.8	484	128	-11.4
900	2.82	1.00	-6.2	422	97	-11.5
950	2.45	1.13	-9.5	365	73	-11.3
1000	1.89	1.28	-13.8	320	56	-10.1
1050	1.09	1.44	-19.2	291	47	-7.9
1100	0.00	1.62	-25.6	267	39	-6.1

DRAG RDCR. WT. 0.059 GRAMS PCT. DRAG CHANGE / (DEG. YAW)**2 2.12

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	2.7	1662	2882	0.0
0	0.00	0.00	2.7	1662	1512	0.0
50	0.13	0.03	2.5	1631	1455	-0.3
100	0.24	0.06	2.3	1600	1400	-0.6
150	0.35	0.09	2.1	1569	1345	-0.9
200	0.45	0.13	1.9	1538	1293	-1.2
250	0.54	0.16	1.7	1508	1241	-1.5
300	0.62	0.19	1.4	1477	1191	-1.8
350	0.69	0.23	1.2	1447	1142	-2.1
400	0.74	0.26	1.0	1417	1094	-2.4
450	0.79	0.30	0.7	1387	1048	-2.7
500	0.82	0.33	0.5	1358	1003	-3.0
550	0.84	0.37	0.2	1328	959	-3.2
600	0.85	0.41	-0.1	1299	917	-3.5
650	0.84	0.45	-0.4	1269	875	-3.8
700	0.82	0.49	-0.7	1240	835	-4.1
750	0.78	0.53	-1.1	1212	796	-4.3
800	0.72	0.57	-1.4	1183	758	-4.6
850	0.65	0.61	-1.8	1155	722	-4.8
900	0.56	0.66	-2.2	1126	686	-5.1
950	0.45	0.70	-2.6	1098	652	-5.3
1000	0.32	0.75	-3.0	1071	619	-5.5
1050	0.17	0.79	-3.4	1043	587	-5.8
1100	0.00	0.84	-3.9	1016	557	-6.0

TYPE SC 1 CALIBER 7.62 MM AVERAGE DENSITY 4.08 GRAMS/CC.

PROJ. WT 1.315 GRAMS PROJ. DIA. 4.32 MM IMPULSE 0.8 LB. SEC.

DRAG ROCR. WT. 0.000 GRAMS CHG. WT. 1.05 GRAMS SABOT WT. 0.933 GRAMS

TWIST RATE NA PCT. DRAG CHANGE / (DEG. YAW)**2 0.74

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	36.3	1032	1197	0.0
0	0.00	0.00	36.3	1032	700	0.0
50	1.77	0.05	35.8	966	613	-0.7
100	3.51	0.10	35.2	899	531	-1.3
150	5.23	0.16	34.5	832	455	-2.0
200	6.91	0.22	33.8	765	385	-2.7
250	8.54	0.29	32.8	699	321	-3.3
300	10.13	0.37	31.7	633	264	-3.9
350	11.66	0.45	30.3	568	212	-4.5
400	13.10	0.54	28.6	505	168	-5.0
450	14.46	0.65	26.3	445	130	-5.4
500	15.69	0.77	23.5	390	100	-5.6
550	16.75	0.91	19.7	340	76	-5.5
600	17.61	1.06	14.8	307	62	-4.2
650	18.20	1.23	9.1	282	52	-3.3
700	18.49	1.42	2.2	260	44	-3.2
750	18.41	1.62	-5.8	239	37	-3.2
800	17.90	1.84	-15.4	219	32	-3.2
850	16.88	2.08	-26.7	201	27	-3.1
900	15.26	2.34	-40.2	185	22	-3.1
950	12.91	2.62	-56.2	169	19	-3.0
1000	9.70	2.93	-75.2	155	16	-3.0
1050	5.46	3.27	-97.9	142	13	-2.9
1100	0.00	3.64	-124.8	130	11	-2.8

DRAG ROCR. WT. 0.071 GRAMS PCT. DRAG CHANGE / (DEG. YAW)**2 2.12

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	7.9	1032	1197	0.0
0	0.00	0.00	7.9	1032	700	0.0
50	0.38	0.05	7.4	1007	666	-0.3
100	0.73	0.10	6.9	982	633	-0.5
150	1.06	0.15	6.4	957	601	-0.7
200	1.36	0.20	5.8	933	570	-1.0
250	1.64	0.26	5.3	909	540	-1.2
300	1.88	0.31	4.6	885	512	-1.4
350	2.09	0.37	4.0	861	484	-1.7
400	2.28	0.43	3.3	837	458	-1.9
450	2.42	0.49	2.6	814	432	-2.1
500	2.53	0.55	1.8	791	408	-2.3
550	2.60	0.62	1.0	769	384	-2.5
600	2.63	0.68	0.1	746	362	-2.7
650	2.62	0.75	-0.8	724	340	-2.9
700	2.56	0.82	-1.8	702	320	-3.0
750	2.45	0.89	-2.9	681	300	-3.2
800	2.29	0.97	-4.0	660	281	-3.4
850	2.07	1.05	-5.2	639	264	-3.5
900	1.79	1.12	-6.4	618	246	-3.7
950	1.45	1.21	-7.8	598	230	-3.8
1000	1.04	1.29	-9.2	578	215	-4.0
1050	0.56	1.38	-10.8	559	200	-4.1
1100	0.00	1.47	-12.4	540	186	-4.2

TYPE SC 1 CALIBER 7.62 MM AVERAGE DENSITY 4.08 GRAMS/CC.

PROJ. WT 1.315 GRAMS PROJ. DIA. 4.32 MM IMPULSE 1.2 LB. SEC.

DRAG ROCK. WT. 0.000 GRAMS CHG. WT. 1.94 GRAMS SABOT WT. 0.934 GRAMS

TWIST RATE NA PCT. DRAG CHANGE / (DEG. YAW)**2 0.74

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	16.0	1314	1941	0.0
0	0.00	0.00	16.0	1314	1136	0.0
50	0.78	0.04	15.7	1249	1026	-0.7
100	1.54	0.08	15.3	1183	921	-1.3
150	2.28	0.12	14.9	1117	821	-2.0
200	3.01	0.17	14.5	1051	727	-2.7
250	3.71	0.22	14.0	985	638	-3.3
300	4.39	0.27	13.5	918	554	-4.0
350	5.04	0.33	12.8	851	477	-4.7
400	5.65	0.39	12.1	785	405	-5.3
450	6.23	0.46	11.2	718	339	-6.0
500	6.76	0.53	10.1	652	280	-6.6
550	7.23	0.61	8.8	587	227	-7.2
600	7.63	0.70	7.2	523	180	-7.7
650	7.94	0.80	5.1	462	141	-8.0
700	8.13	0.92	2.5	406	108	-8.1
750	8.18	1.05	-1.0	353	82	-8.0
800	8.08	1.20	-5.5	315	65	-6.9
850	7.83	1.37	-11.1	289	55	-5.1
900	6.94	1.55	-17.6	266	47	-4.3
950	5.90	1.74	-25.2	245	39	-4.2
1000	4.45	1.96	-34.3	225	33	-4.1
1050	2.51	2.19	-45.1	206	28	-4.0
1100	0.00	2.44	-57.9	189	24	-3.9

DRAG ROCK. WT. 0.071 GRAMS PCT. DRAG CHANGE / (DEG. YAW)**2 2.12

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	4.5	1314	1941	0.0
0	0.00	0.00	4.5	1314	1136	0.0
50	0.21	0.04	4.2	1287	1084	-0.4
100	0.41	0.08	3.9	1259	1042	-0.5
150	0.60	0.12	3.6	1232	997	-0.8
200	0.77	0.16	3.2	1205	953	-1.1
250	0.92	0.20	2.9	1179	911	-1.3
300	1.06	0.24	2.5	1152	869	-1.6
350	1.17	0.29	2.1	1126	830	-1.8
400	1.27	0.33	1.7	1100	791	-2.1
450	1.35	0.38	1.3	1074	753	-2.3
500	1.41	0.43	0.9	1048	717	-2.6
550	1.44	0.47	0.4	1023	682	-2.8
600	1.46	0.52	-0.1	998	648	-3.0
650	1.44	0.57	-0.6	972	616	-3.2
700	1.41	0.63	-1.1	946	584	-3.5
750	1.34	0.68	-1.7	923	554	-3.7
800	1.25	0.73	-2.3	899	524	-3.9
850	1.13	0.79	-2.9	875	496	-4.1
900	0.97	0.85	-3.6	851	469	-4.3
950	0.78	0.91	-4.3	827	443	-4.5
1000	0.56	0.97	-5.1	804	418	-4.6
1050	0.30	1.03	-5.9	781	394	-4.8
1100	0.00	1.10	-6.7	756	371	-5.0

TYPE SC 1 CALIBER .62 MM AVERAGE DENSITY 4.08 GRAMS/CC.

PROJ. WT 1.315 GRAMS PROJ. DIA. 4.32 MM IMPULSE 2.1 LB. SEC.

DRAG RDCR. WT. 0.000 GRAMS CHG. WT. 4.26 GRAMS SABOT WT. 0.933 GRAMS

TWIST RATE NA PCT. DRAG CHANGE / (DEG. YAW)**2 0.74

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	6.3	1630	2987	0.0
0	0.00	0.00	6.3	1630	1747	0.0
50	0.31	0.03	6.1	1567	1614	-0.6
100	0.60	0.06	5.9	1503	1486	-1.3
150	0.89	0.10	5.7	1439	1361	-1.9
200	1.16	0.13	5.4	1374	1242	-2.6
250	1.43	0.17	5.2	1310	1128	-3.2
300	1.67	0.21	4.9	1244	1018	-3.9
350	1.91	0.25	4.5	1179	914	-4.6
400	2.12	0.29	4.1	1113	814	-5.3
450	2.32	0.34	3.7	1046	720	-6.0
500	2.49	0.39	3.2	980	632	-6.6
550	2.64	0.44	2.7	913	549	-7.3
600	2.76	0.50	2.0	847	472	-8.0
650	2.85	0.56	1.3	780	400	-8.7
700	2.89	0.63	0.4	713	335	-9.3
750	2.89	0.70	-0.7	648	278	-9.9
800	2.83	0.78	-2.0	582	229	-10.5
850	2.70	0.87	-3.7	519	187	-10.9
900	2.47	0.98	-5.8	458	152	-11.1
950	2.13	1.09	-8.5	402	122	-11.1
1000	1.64	1.23	-12.1	350	98	-10.8
1050	0.94	1.38	-16.7	313	80	-9.4
1100	0.00	1.55	-22.3	287	67	-7.2

DRAG RDCR. WT. 0.071 GRAMS PCT. DRAG CHANGE / (DEG. YAW)**2 2.12

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	2.7	1630	2987	0.0
0	0.00	0.00	2.7	1630	1747	0.0
50	0.13	0.03	2.5	1601	1684	-0.3
100	0.25	0.06	2.3	1572	1623	-0.6
150	0.36	0.09	2.1	1543	1563	-0.9
200	0.46	0.13	1.9	1514	1505	-1.1
250	0.55	0.16	1.7	1486	1448	-1.4
300	0.63	0.19	1.5	1457	1392	-1.7
350	0.70	0.23	1.2	1429	1338	-2.0
400	0.76	0.26	1.0	1401	1285	-2.2
450	0.80	0.30	0.7	1373	1233	-2.5
500	0.83	0.34	0.4	1345	1183	-2.8
550	0.85	0.38	0.2	1317	1134	-3.0
600	0.86	0.41	-0.1	1290	1088	-3.3
650	0.85	0.45	-0.4	1262	1040	-3.6
700	0.82	0.49	-0.8	1235	995	-3.8
750	0.78	0.53	-1.1	1208	951	-4.1
800	0.73	0.58	-1.4	1181	908	-4.3
850	0.66	0.62	-1.8	1154	867	-4.5
900	0.58	0.66	-2.2	1128	827	-4.8
950	0.48	0.71	-2.6	1102	788	-5.0
1000	0.32	0.75	-3.0	1075	750	-5.2
1050	0.17	0.80	-3.5	1050	714	-5.4
1100	0.00	0.85	-3.9	1024	679	-5.6

TYPE SC L CALIBER 7.62 MM AVERAGE DENSITY 4.08 GRAMS/CC.
PROJ. WT 1.562 GRAMS PROJ. DIA. 4.57 MM IMPULSE 0.6 LB. SEC.
DRAG ROCK. WT. 0.000 GRAMS CHG. WT. 1.00 GRAMS SABOT WT. 0.888 GRAMS
TWIST RATE NA PCT. DRAG CHANGE / (DEG. YAW)**2 0.74

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	37.6	972	1157	0.0
0	0.00	0.00	37.6	972	738	0.0
50	1.83	0.05	37.0	909	645	-0.6
100	3.63	0.11	36.4	846	559	-1.3
150	5.40	0.17	35.6	783	479	-1.9
200	7.13	0.24	34.7	720	405	-2.5
250	8.81	0.31	33.7	658	338	-3.1
300	10.44	0.39	32.4	596	278	-3.7
350	11.99	0.48	30.8	536	224	-4.2
400	13.46	0.58	28.9	478	178	-4.6
450	14.83	0.69	26.4	423	140	-4.9
500	16.05	0.82	23.2	372	108	-5.1
550	17.10	0.96	19.1	329	85	-4.8
600	17.92	1.12	14.0	301	71	-3.5
650	18.47	1.29	8.1	278	60	-3.0
700	18.70	1.48	1.1	257	52	-3.0
750	18.56	1.68	-7.1	237	44	-3.0
800	17.99	1.90	-16.7	219	38	-3.0
850	16.90	2.14	-28.0	202	32	-3.0
900	15.22	2.40	-41.3	186	27	-2.9
950	12.82	2.68	-56.9	172	23	-2.9
1000	9.60	2.98	-75.3	158	20	-2.8
1050	5.38	3.31	-96.9	146	17	-2.8
1100	0.00	3.67	-122.4	134	14	-2.7

DRAG ROCK. WT. 0.084 GRAMS PCT. DRAG CHANGE / (DEG. YAW)**2 2.12

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	8.6	972	1157	0.0
0	0.00	0.00	8.6	972	738	0.0
50	0.42	0.05	8.3	949	702	-0.2
100	0.81	0.11	7.7	926	668	-0.5
150	1.18	0.16	7.1	903	635	-0.7
200	1.51	0.22	6.5	881	603	-0.9
250	1.82	0.27	5.8	858	572	-1.1
300	2.09	0.33	5.1	836	543	-1.3
350	2.33	0.39	4.4	814	514	-1.5
400	2.53	0.46	3.6	793	487	-1.7
450	2.69	0.52	2.8	771	460	-1.9
500	2.81	0.59	1.9	750	435	-2.1
550	2.89	0.65	1.0	729	411	-2.3
600	2.92	0.72	0.1	709	387	-2.5
650	2.90	0.79	-1.0	688	365	-2.6
700	2.83	0.87	-2.0	668	343	-2.8
750	2.71	0.94	-3.2	649	323	-3.0
800	2.53	1.02	-4.4	629	303	-3.1
850	2.29	1.10	-5.7	610	285	-3.3
900	1.98	1.19	-7.1	591	267	-3.4
950	1.60	1.27	-8.6	572	250	-3.5
1000	1.15	1.36	-10.2	554	234	-3.7
1050	0.62	1.45	-11.8	536	210	-3.8
1100	0.00	1.55	-13.6	518	204	-3.9

TYPE SC 1 CALIBER 7.62 MM AVERAGE DENSITY 4.08 GRAMS/CC.

PROJ. WT 1.562 GRAMS PROJ. DIA. 4.57 MM IMPULSE 1.2 LB. SEC.

DRAG RDCR. WT. 0.000 GRAMS CHG. WT. 1.86 GRAMS SABOT WT. 0.888 GRAMS

TWIST RATE NA PCT. DRAG CHANGE / (DEG. YAW)**2 0.74

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	16.3	1257	1935	0.0
0	0.00	0.00	16.3	1257	1234	0.0
50	0.79	0.04	16.0	1195	1115	-0.6
100	1.57	0.08	15.6	1133	1003	-1.2
150	2.33	0.13	15.2	1071	892	-1.9
200	3.06	0.18	14.7	1008	794	-2.5
250	3.78	0.23	14.2	945	698	-3.1
300	4.46	0.28	13.6	882	608	-3.8
350	5.12	0.34	12.9	819	524	-4.4
400	5.73	0.41	12.1	756	447	-5.0
450	6.31	0.47	11.2	694	376	-5.6
500	6.83	0.55	10.0	632	312	-6.2
550	7.30	0.63	8.6	571	254	-6.7
600	7.69	0.73	6.9	511	204	-7.2
650	7.98	0.83	4.8	454	161	-7.5
700	8.15	0.95	2.0	401	126	-7.6
750	8.18	1.08	-1.5	352	97	-7.5
800	8.00	1.23	-6.1	316	78	-6.5
850	7.58	1.40	-11.5	291	66	-4.8
900	6.87	1.57	-17.9	269	57	-4.1
950	5.82	1.77	-25.3	249	48	-4.0
1000	4.37	1.98	-34.1	230	41	-3.9
1050	2.46	2.20	-44.4	212	35	-3.9
1100	0.00	2.45	-56.4	196	30	-3.8

DRAG RDCR. WT. 0.084 GRAMS PCT. DRAG CHANGE / (DEG. YAW)**2 2.12

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	4.9	1257	1935	0.0
0	0.00	0.00	4.9	1257	1234	0.0
50	0.23	0.04	4.5	1232	1183	-0.3
100	0.45	0.08	4.2	1206	1134	-0.5
150	0.65	0.12	3.9	1181	1087	-0.8
200	0.83	0.17	3.5	1156	1040	-1.0
250	0.97	0.21	3.1	1131	995	-1.2
300	1.14	0.25	2.7	1107	952	-1.5
350	1.26	0.30	2.3	1082	909	-1.7
400	1.37	0.35	1.9	1058	868	-1.9
450	1.45	0.39	1.4	1034	828	-2.2
500	1.51	0.44	0.9	1010	790	-2.4
550	1.55	0.49	0.4	986	753	-2.6
600	1.56	0.55	-0.1	963	716	-2.8
650	1.55	0.60	-0.7	939	681	-3.0
700	1.51	0.65	-1.2	916	648	-3.2
750	1.44	0.71	-1.8	893	615	-3.4
800	1.34	0.76	-2.5	871	584	-3.6
850	1.21	0.82	-3.2	848	554	-3.8
900	1.04	0.88	-3.9	826	524	-4.0
950	0.84	0.94	-4.6	804	496	-4.2
1000	0.60	1.01	-5.4	782	469	-4.3
1050	0.32	1.07	-6.3	761	443	-4.5
1100	0.00	1.14	-7.1	740	419	-4.7

TYPE SC 1 CALIBER 7.62 MM AVERAGE DENSITY 4.08 GRAMS/CC.

PROJ. WT 1.562 GRAMS PROJ. DIA. 4.57 MM IMPULSE 2.1 LB. SEC.

DRAG ROCK. WT. 0.000 GRAMS CHG. WT. 4.14 GRAMS SABOT WT. 0.888 GRAMS

TWIST RATE NA PCT. DRAG CHANGE / (DEG. YAW)**2 0.74

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	6.2	1589	3092	0.0
0	0.00	0.00	6.2	1589	1972	0.0
50	0.30	0.03	6.0	1529	1826	-0.6
100	0.59	0.07	5.7	1469	1684	-1.2
150	0.86	0.10	5.5	1408	1548	-1.8
200	1.13	0.14	5.2	1347	1417	-2.4
250	1.38	0.17	5.0	1286	1291	-3.1
300	1.62	0.21	4.6	1224	1170	-3.7
350	1.84	0.26	4.3	1162	1055	-4.3
400	2.04	0.30	3.9	1100	944	-5.0
450	2.23	0.35	3.5	1037	840	-5.6
500	2.39	0.40	3.0	975	742	-6.3
550	2.53	0.45	2.4	912	649	-6.9
600	2.63	0.51	1.8	849	562	-7.6
650	2.71	0.57	1.0	786	482	-8.2
700	2.74	0.63	0.1	723	408	-8.8
750	2.73	0.71	-0.9	661	341	-9.4
800	2.66	0.79	-2.2	599	280	-9.9
850	2.52	0.87	-3.7	539	226	-10.4
900	2.30	0.97	-5.7	480	180	-10.7
950	1.97	1.08	-8.1	425	141	-10.7
1000	1.50	1.21	-11.3	374	109	-10.6
1050	0.86	1.35	-15.3	331	85	-10.0
1100	0.00	1.51	-20.4	302	71	-8.2

DRAG ROCK. WT. 0.084 GRAMS PCT. DRAG CHANGE / (DEG. YAW)**2 2.12

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	2.8	1589	3092	0.0
0	0.00	0.00	2.8	1589	1972	0.0
50	0.13	0.03	2.6	1562	1903	-0.3
100	0.26	0.06	2.4	1535	1837	-0.5
150	0.37	0.10	2.2	1508	1772	-0.8
200	0.48	0.13	2.0	1481	1708	-1.1
250	0.57	0.16	1.8	1454	1646	-1.3
300	0.65	0.20	1.5	1427	1585	-1.6
350	0.72	0.23	1.3	1401	1526	-1.9
400	0.78	0.27	1.0	1374	1468	-2.1
450	0.83	0.31	0.7	1348	1411	-2.4
500	0.86	0.34	0.5	1322	1356	-2.6
550	0.88	0.38	0.2	1296	1302	-2.9
600	0.88	0.42	-0.1	1270	1250	-3.1
650	0.87	0.46	-0.5	1244	1199	-3.3
700	0.85	0.50	-0.8	1219	1149	-3.6
750	0.81	0.54	-1.1	1193	1101	-3.8
800	0.75	0.59	-1.5	1168	1054	-4.0
850	0.67	0.63	-1.9	1143	1008	-4.3
900	0.58	0.67	-2.3	1118	964	-4.5
950	0.47	0.72	-2.7	1093	921	-4.7
1000	0.33	0.77	-3.1	1069	879	-4.9
1050	0.18	0.81	-3.5	1044	839	-5.1
1100	0.00	0.86	-4.0	1020	800	-5.3

TYPE SC 1 CALIBER 7.62 MM AVERAGE DENSITY 4.08 GRAMS/CC.
PROJ. WT 1.840 GRAMS PROJ. DIA. 4.83 MM IMPULSE 0.8 LB. SEC.
DRAG RDCR. WT. 0.000 GRAMS CHG. WT. 0.95 GRAMS SABOT WT. 0.829 GRAMS
TWIST RATE NA PCT. DRAG CHANGE / (DEG. YAW)**2 0.74

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	39.4	913	1113	0.0
0	0.00	0.00	39.4	913	767	0.0
50	1.92	0.06	38.8	853	670	-0.6
100	3.81	0.12	38.0	794	580	-1.2
150	5.65	0.18	37.2	734	496	-1.8
200	7.46	0.25	36.2	675	420	-2.3
250	9.20	0.33	35.0	617	350	-2.9
300	10.89	0.42	33.6	559	288	-3.4
350	12.49	0.51	31.7	503	233	-3.9
400	14.00	0.62	29.5	450	186	-4.3
450	15.39	0.73	26.7	399	147	-4.5
500	16.62	0.87	23.2	353	115	-4.6
550	17.66	1.02	18.7	318	93	-3.9
600	18.45	1.18	13.4	294	80	-3.0
650	18.96	1.36	7.1	273	69	-2.8
700	19.15	1.55	-0.1	254	59	-2.8
750	18.95	1.75	-8.5	235	51	-2.8
800	18.30	1.97	-18.2	218	44	-2.8
850	17.14	2.21	-29.6	202	38	-2.8
900	15.38	2.47	-42.8	187	32	-2.8
950	12.91	2.75	-58.2	173	28	-2.7
1000	9.62	3.05	-76.2	160	24	-2.7
1050	5.38	3.37	-97.3	148	20	-2.6
1100	0.00	3.73	-121.8	137	17	-2.6

DRAG RDCR. WT. 0.099 GRAMS PCT. DRAG CHANGE / (DEG. YAW)**2 2.12

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	9.9	913	1113	0.0
0	0.00	0.00	9.9	913	767	0.0
50	0.47	0.06	9.3	892	731	-0.2
100	0.91	0.11	8.6	870	690	-0.4
150	1.32	0.17	8.0	850	662	-0.6
200	1.70	0.23	7.3	829	629	-0.8
250	2.04	0.29	6.5	808	598	-1.0
300	2.34	0.35	5.7	788	568	-1.2
350	2.60	0.42	4.9	768	538	-1.4
400	2.83	0.48	4.0	748	510	-1.6
450	3.00	0.55	3.1	728	483	-1.8
500	3.14	0.62	2.2	709	457	-1.9
550	3.22	0.69	1.1	690	432	-2.1
600	3.26	0.77	0.1	671	408	-2.3
650	3.24	0.84	-1.1	652	385	-2.4
700	3.16	0.92	-2.3	634	363	-2.6
750	3.02	1.00	-3.6	615	342	-2.7
800	2.82	1.08	-4.9	597	322	-2.9
850	2.54	1.17	-6.4	580	303	-3.0
900	2.20	1.26	-7.9	562	284	-3.1
950	1.78	1.35	-9.5	545	267	-3.3
1000	1.28	1.44	-11.3	528	250	-3.4
1050	0.68	1.53	-13.1	511	234	-3.5
1100	0.00	1.63	-15.1	495	219	-3.6

TYPE SC 1 CALIBER 7.62 MM AVERAGE DENSITY 4.08 GRAMS/CC.

PROJ. WT 1.840 GRAMS PROJ. DIA. 4.83 MM IMPULSE 1.2 LB. SEC.

DRAG ROCK. WT. 0.000 GRAMS CHG. WT. 1.78 GRAMS SABOT WT. 0.029 GRAMS

TWIST RATE NA PCT. DRAG CHANGE / (DEG. YAW)**2 0.74

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	17.1	1197	1913	0.0
0	0.00	0.00	17.1	1197	1318	0.0
50	0.83	0.04	16.7	1138	1192	-0.6
100	1.64	0.09	16.3	1079	1072	-1.2
150	2.43	0.14	15.9	1020	957	-1.8
200	3.20	0.19	15.4	961	849	-2.4
250	3.94	0.24	14.8	901	747	-3.0
300	4.66	0.30	14.1	842	652	-3.6
350	5.33	0.36	13.4	782	563	-4.2
400	5.97	0.43	12.5	723	480	-4.8
450	6.56	0.50	11.4	664	405	-5.3
500	7.10	0.58	10.2	605	337	-5.8
550	7.57	0.66	8.7	548	276	-6.3
600	7.95	0.76	6.8	492	223	-6.7
650	8.24	0.87	4.5	440	178	-6.9
700	8.40	0.99	1.6	390	140	-7.0
750	8.40	1.12	-2.1	345	110	-6.9
800	8.19	1.28	-6.8	313	90	-5.8
850	7.73	1.44	-12.3	290	77	-4.4
900	6.98	1.62	-18.7	269	67	-1.9
950	5.89	1.81	-26.1	250	57	-1.8
1000	4.41	2.02	-34.7	232	49	-1.7
1050	2.47	2.25	-44.8	215	41	-1.7
1100	0.00	2.49	-56.5	199	36	-1.6

DRAG ROCK. WT. 0.099 GRAMS PCT. DRAG CHANGE / (DEG. YAW)**2 2.12

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	5.3	1197	1913	0.0
0	0.00	0.00	5.3	1197	1318	0.0
50	0.25	0.04	5.0	1173	1266	-0.2
100	0.49	0.09	4.6	1150	1214	-0.5
150	0.71	0.13	4.2	1126	1165	-0.7
200	0.90	0.17	3.8	1103	1116	-0.9
250	1.08	0.22	3.4	1080	1066	-1.2
300	1.24	0.27	3.0	1057	1023	-1.4
350	1.38	0.31	2.5	1034	979	-1.6
400	1.49	0.36	2.0	1012	936	-1.8
450	1.58	0.41	1.5	989	894	-2.0
500	1.65	0.46	1.0	967	853	-2.2
550	1.69	0.52	0.5	945	814	-2.4
600	1.70	0.57	-0.1	923	776	-2.6
650	1.68	0.63	-0.7	901	739	-2.8
700	1.64	0.68	-1.3	880	704	-3.0
750	1.56	0.74	-2.0	859	670	-3.2
800	1.45	0.80	-2.7	838	636	-3.4
850	1.31	0.86	-3.4	817	605	-3.5
900	1.13	0.92	-4.2	796	574	-3.7
950	0.91	0.98	-5.0	776	544	-3.9
1000	0.65	1.05	-5.9	756	515	-4.0
1050	0.35	1.12	-6.8	736	488	-4.2
1100	0.00	1.19	-7.7	716	461	-4.3

TYPE SC 1 CALIBER 7.62 MM AVERAGE DENSITY 4.08 GRAMS/CC.

PROJ. WT 1.840 GRAMS PROJ. DIA. 4.83 MM IMPULSE 2.1 LB. SEC.

DRAG RDCR. WT. 0.000 GRAMS CHG. WT. 4.01 GRAMS SABOT WT. 0.829 GRAMS

TWIST RATE NA PCT. DRAG CHANGE / (DEG. YAW)**2 0.74

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	6.1	1546	3190	0.0
50	0.30	0.03	5.9	1489	2040	-0.6
100	0.58	0.07	5.7	1432	1886	-1.1
150	0.86	0.10	5.4	1374	1730	-1.7
200	1.12	0.14	5.2	1316	1595	-2.3
250	1.37	0.18	4.9	1258	1457	-2.9
300	1.60	0.22	4.5	1200	1325	-3.5
350	1.82	0.26	4.2	1141	1198	-4.1
400	2.01	0.30	3.8	1082	1077	-4.7
450	2.19	0.35	3.4	1022	963	-5.3
500	2.34	0.41	3.0	964	855	-5.9
550	2.47	0.46	2.6	906	752	-6.5
600	2.57	0.52	2.1	849	656	-7.1
650	2.63	0.58	1.6	795	567	-7.7
700	2.66	0.64	1.0	745	490	-8.3
750	2.64	0.72	0.4	697	422	-8.9
800	2.56	0.79	-0.2	652	363	-9.5
850	2.42	0.86	-0.8	610	312	-10.1
900	2.23	0.93	-1.4	571	267	-10.7
950	1.97	1.00	-2.0	535	228	-11.3
1000	1.65	1.08	-2.6	501	194	-11.9
1050	1.28	1.16	-3.2	469	164	-12.5
1100	0.86	1.24	-3.8	439	139	-13.1
1150	0.39	1.33	-4.4	411	117	-13.7
1200	0.00	1.42	-5.0	385	98	-14.3
1250		1.52	-5.6	361	82	-14.9
1300		1.62	-6.2	338	69	-15.5
1350		1.73	-6.8	317	58	-16.1
1400		1.84	-7.4	297	48	-16.7
1450		1.96	-8.0	278	40	-17.3
1500		2.08	-8.6	261	34	-17.9
1550		2.21	-9.2	245	28	-18.5
1600		2.34	-9.8	230	24	-19.1
1650		2.48	-10.4	216	20	-19.7
1700		2.63	-11.0	203	17	-20.3
1750		2.78	-11.6	191	14	-20.9
1800		2.94	-12.2	180	12	-21.5
1850		3.11	-12.8	170	10	-22.1
1900		3.28	-13.4	160	9	-22.7
1950		3.46	-14.0	152	7	-23.3
2000		3.65	-14.6	144	6	-23.9
2050		3.85	-15.2	136	5	-24.5
2100		4.06	-15.8	129	4	-25.1
2150		4.28	-16.4	123	4	-25.7
2200		4.51	-17.0	117	3	-26.3
2250		4.75	-17.6	112	3	-26.9
2300		5.00	-18.2	107	2	-27.5
2350		5.26	-18.8	102	2	-28.1
2400		5.53	-19.4	98	2	-28.7
2450		5.81	-20.0	94	1	-29.3
2500		6.10	-20.6	91	1	-29.9

DRAG RDCR. WT. 0.099 GRAMS PCT. DRAG CHANGE / (DEG. YAW)**2 2.12

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	6.1	1546	3190	0.0
50	0.30	0.03	5.9	1489	2040	-0.6
100	0.58	0.07	5.7	1432	1886	-1.1
150	0.86	0.10	5.4	1374	1730	-1.7
200	1.12	0.14	5.2	1316	1595	-2.3
250	1.37	0.18	4.9	1258	1457	-2.9
300	1.60	0.22	4.5	1200	1325	-3.5
350	1.82	0.26	4.2	1141	1198	-4.1
400	2.01	0.30	3.8	1082	1077	-4.7
450	2.19	0.35	3.4	1022	963	-5.3
500	2.34	0.41	3.0	964	855	-5.9
550	2.47	0.46	2.6	906	752	-6.5
600	2.57	0.52	2.1	849	656	-7.1
650	2.63	0.58	1.6	795	567	-7.7
700	2.66	0.64	1.0	745	490	-8.3
750	2.64	0.72	0.4	697	422	-8.9
800	2.56	0.79	-0.2	652	363	-9.5
850	2.42	0.86	-0.8	610	312	-10.1
900	2.23	0.93	-1.4	571	267	-10.7
950	1.97	1.00	-2.0	535	228	-11.3
1000	1.65	1.08	-2.6	501	194	-11.9
1050	1.28	1.16	-3.2	469	164	-12.5
1100	0.86	1.24	-3.8	439	139	-13.1
1150	0.39	1.33	-4.4	411	117	-13.7
1200	0.00	1.42	-5.0	385	98	-14.3
1250		1.52	-5.6	361	82	-14.9
1300		1.62	-6.2	338	69	-15.5
1350		1.73	-6.8	317	58	-16.1
1400		1.84	-7.4	297	48	-16.7
1450		1.96	-8.0	278	40	-17.3
1500		2.08	-8.6	261	34	-17.9
1550		2.21	-9.2	245	28	-18.5
1600		2.34	-9.8	230	24	-19.1
1650		2.48	-10.4	216	20	-19.7
1700		2.63	-11.0	203	17	-20.3
1750		2.78	-11.6	191	14	-20.9
1800		2.94	-12.2	180	12	-21.5
1850		3.11	-12.8	170	10	-22.1
1900		3.28	-13.4	160	9	-22.7
1950		3.46	-14.0	152	7	-23.3
2000		3.65	-14.6	144	6	-23.9
2050		3.85	-15.2	136	5	-24.5
2100		4.06	-15.8	129	4	-25.1
2150		4.28	-16.4	123	4	-25.7
2200		4.51	-17.0	117	3	-26.3
2250		4.75	-17.6	112	3	-26.9
2300		5.00	-18.2	107	2	-27.5
2350		5.26	-18.8	102	2	-28.1
2400		5.53	-19.4	98	2	-28.7
2450		5.81	-20.0	94	1	-29.3
2500		6.10	-20.6	91	1	-29.9

TYPE SC 1 CALIBER 7.62 MM AVERAGE DENSITY 4.08 GRAMS/CC.

PROJ. WT 2.138 GRAMS PROJ. DIA. 5.08 MM IMPULSE 0.6 LB. SEC.

DRAG ROCK. WT. 0.000 GRAMS CHG. WT. 0.91 GRAMS SABOT WT. 0.750 GRAMS

TWIST RATE NA PCT. DRAG CHANGE / (DEG. YAW)**2 0.74

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	41.8	859	1069	0.0
0	0.00	0.00	41.8	859	789	0.0
50	2.04	0.06	41.1	802	686	-0.6
100	4.01	0.12	40.2	745	594	-1.1
150	5.90	0.19	39.3	689	507	-1.7
200	7.69	0.27	38.1	633	429	-2.2
250	9.38	0.35	36.7	578	357	-2.8
300	11.00	0.44	35.1	524	293	-3.2
350	12.47	0.54	33.1	472	238	-3.6
400	13.74	0.66	30.6	422	191	-3.9
450	14.77	0.78	27.4	376	151	-4.1
500	15.43	0.92	23.4	336	121	-4.0
550	15.46	1.08	18.6	308	101	-3.1
600	14.25	1.25	12.9	287	88	-2.6
650	14.73	1.43	6.4	267	76	-2.6
700	13.86	1.62	-1.1	249	66	-2.6
750	14.61	1.83	-9.8	232	57	-2.6
800	13.89	2.06	-19.9	215	50	-2.6
850	17.64	2.30	-31.4	200	43	-2.6
900	15.78	2.56	-44.9	186	37	-2.6
950	13.21	2.83	-60.4	173	32	-2.6
1000	9.82	3.14	-78.4	161	28	-2.6
1050	5.47	3.46	-99.2	149	24	-2.5
1100	0.00	3.81	-123.4	139	21	-2.5

DRAG ROCK. WT. 0.115 GRAMS PCT. DRAG CHANGE / (DEG. YAW)**2 2.12

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	11.1	859	1069	0.0
0	0.00	0.00	11.1	859	789	0.0
50	0.53	0.06	10.4	819	752	-0.2
100	1.02	0.12	9.7	820	717	-0.4
150	1.48	0.18	8.9	800	684	-0.6
200	1.90	0.24	8.1	781	649	-0.8
250	2.28	0.31	7.3	762	617	-0.9
300	2.62	0.38	6.4	743	586	-1.1
350	2.92	0.44	5.5	724	556	-1.3
400	3.16	0.51	4.5	706	528	-1.5
450	3.36	0.59	3.5	688	500	-1.6
500	3.51	0.66	2.4	670	474	-1.8
550	3.61	0.73	1.2	652	449	-1.9
600	3.64	0.81	0.0	634	424	-2.1
650	3.62	0.89	-1.2	617	400	-2.2
700	3.53	0.97	-2.6	600	378	-2.4
750	3.37	1.06	-4.0	583	356	-2.5
800	3.14	1.15	-5.5	566	336	-2.7
850	2.84	1.24	-7.1	550	316	-2.8
900	2.45	1.33	-8.8	533	297	-2.9
950	1.94	1.42	-10.6	518	279	-3.0
1000	1.42	1.52	-12.6	502	262	-3.1
1050	0.76	1.62	-14.6	487	246	-3.2
1100	0.00	1.73	-16.8	472	230	-3.3

TYPE SC 1 CALIBER 7.62 MM AVERAGE DENSITY 4.08 GRAMS/CU.

PROJ. WT 2.138 GRAMS PROJ. DIA. 5.08 MM IMPULSE 1.2 LB. SEC.

DRAG ROCK. WT. 0.000 GRAMS CHG. WT. 1.71 GRAMS SABOT WT. 0.758 GRAMS

TWIST RATE NA PCT. DRAG CHANGE / (DEG. YAW)**2 0.74

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	18.3	1139	1879	0.0
50	0.00	0.00	18.3	1139	1387	0.0
100	1.76	0.09	17.4	1026	1126	-1.1
150	2.60	0.14	16.9	970	1006	-1.7
200	3.42	0.20	16.4	913	891	-2.3
250	4.21	0.25	15.7	856	784	-2.8
300	4.97	0.31	15.0	799	683	-3.4
350	5.69	0.38	14.2	743	590	-4.0
400	6.36	0.45	13.2	686	504	-4.5
450	6.98	0.52	12.0	631	429	-5.0
500	7.54	0.61	10.6	575	354	-5.5
550	8.01	0.70	9.0	521	291	-5.9
600	8.43	0.80	6.9	469	236	-6.3
650	8.71	0.91	4.4	420	189	-6.4
700	8.86	1.04	1.2	374	150	-6.5
750	8.83	1.18	-2.8	335	120	-6.2
800	8.58	1.34	-7.7	307	101	-5.0
850	8.08	1.50	-13.4	286	87	-3.9
900	7.27	1.69	-19.9	266	76	-3.6
950	6.11	1.88	-27.5	248	66	-3.6
1000	4.56	2.09	-36.2	231	57	-3.5
1050	2.55	2.31	-46.3	215	49	-3.5
1100	0.00	2.56	-58.0	200	43	-3.5

DRAG ROCK. WT. 0.119 GRAMS PCT. DRAG CHANGE / (DEG. YAW)**2 2.12

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	18.3	1139	1879	0.0
50	0.00	0.00	18.3	1139	1387	0.0
100	1.76	0.09	17.4	1026	1126	-1.1
150	2.60	0.14	16.9	970	1006	-1.7
200	3.42	0.20	16.4	913	891	-2.3
250	4.21	0.25	15.7	856	784	-2.8
300	4.97	0.31	15.0	799	683	-3.4
350	5.69	0.38	14.2	743	590	-4.0
400	6.36	0.45	13.2	686	504	-4.5
450	6.98	0.52	12.0	631	429	-5.0
500	7.54	0.61	10.6	575	354	-5.5
550	8.01	0.70	9.0	521	291	-5.9
600	8.43	0.80	6.9	469	236	-6.3
650	8.71	0.91	4.4	420	189	-6.4
700	8.86	1.04	1.2	374	150	-6.5
750	8.83	1.18	-2.8	335	120	-6.2
800	8.58	1.34	-7.7	307	101	-5.0
850	8.08	1.50	-13.4	286	87	-3.9
900	7.27	1.69	-19.9	266	76	-3.6
950	6.11	1.88	-27.5	248	66	-3.6
1000	4.56	2.09	-36.2	231	57	-3.5
1050	2.55	2.31	-46.3	215	49	-3.5
1100	0.00	2.56	-58.0	200	43	-3.5

TYPE SC 1 CALIBER 7.62 MM AVERAGE DENSITY 4.08 GRAMS/CC.

PROJ. WT 2.138 GRAMS PROJ. DIA. 5.08 MM IMPULSE 2.1 LB. SEC.

DRAG RDCR. WT. 0.000 GRAMS CHG. WT. 3.89 GRAMS SABOT WT. 0.758 GRAMS

TWIST RATE NA PCT. DRAG CHANGE / (DEG. YAW)**2 0.74

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	6.3	1502	3267	0.0
0	0.00	0.00	6.3	1502	2412	0.0
50	0.30	0.03	6.1	1447	2240	-0.5
100	0.59	0.07	5.8	1393	2074	-1.1
150	0.87	0.11	5.5	1338	1913	-1.7
200	1.14	0.14	5.2	1282	1758	-2.2
250	1.39	0.18	4.9	1227	1609	-2.8
300	1.63	0.23	4.6	1171	1466	-3.3
350	1.85	0.27	4.2	1115	1329	-3.9
400	2.04	0.32	3.8	1058	1198	-4.5
450	2.22	0.36	3.3	1002	1074	-5.1
500	2.37	0.42	2.8	945	956	-5.7
550	2.50	0.47	2.2	888	844	-6.3
600	2.60	0.53	1.5	832	740	-6.8
650	2.68	0.59	0.7	775	642	-7.4
700	2.73	0.66	-0.2	718	552	-7.9
750	2.75	0.73	-1.2	662	469	-8.4
800	2.75	0.81	-2.5	607	394	-8.9
850	2.71	0.89	-4.0	552	326	-9.4
900	2.66	0.99	-5.8	499	266	-9.7
950	2.58	1.10	-8.0	448	214	-9.9
1000	2.48	1.21	-10.6	400	171	-9.9
1050	2.35	1.35	-14.3	356	135	-9.7
1100	2.20	1.50	-18.7	321	110	-9.3

DRAG RDCR. WT. 0.115 GRAMS PCT. DRAG CHANGE / (DEG. YAW)**2 2.12

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	3.1	1502	4267	0.0
0	0.00	0.00	3.1	1502	4412	0.0
50	0.15	0.03	2.9	1478	5334	-0.2
100	0.28	0.07	2.7	1454	2257	-0.5
150	0.41	0.10	2.4	1430	2181	-0.7
200	0.52	0.14	2.2	1406	2108	-1.0
250	0.62	0.17	1.9	1382	2036	-1.2
300	0.71	0.21	1.6	1358	1965	-1.4
350	0.79	0.25	1.4	1335	1896	-1.6
400	0.85	0.28	1.1	1311	1829	-1.9
450	0.90	0.32	0.8	1288	1763	-2.1
500	0.94	0.36	0.5	1265	1699	-2.3
550	0.96	0.40	0.2	1241	1636	-2.5
600	0.96	0.44	-0.2	1218	1575	-2.8
650	0.95	0.48	-0.5	1195	1515	-3.0
700	0.92	0.53	-0.9	1173	1456	-3.2
750	0.88	0.57	-1.2	1150	1400	-3.4
800	0.81	0.61	-1.6	1127	1344	-3.6
850	0.73	0.66	-2.0	1105	1290	-3.8
900	0.63	0.70	-2.4	1083	1238	-4.0
950	0.50	0.75	-2.9	1061	1187	-4.2
1000	0.36	0.80	-3.4	1039	1137	-4.4
1050	0.19	0.85	-3.8	1017	1089	-4.6
1100	0.00	0.90	-4.3	996	1041	-4.7

TYPE SC 1 CALIBER 7.62 MM AVERAGE DENSITY 4.08 GRAMS/CC.

PROJ. WT 2.815 GRAMS PROJ. DIA. 5.56 MM IMPULSE 0.[illegible] LB. SEC.

DRAG ROCK. WT. 0.000 GRAMS CHG. WT. 0.81 GRAMS SABOT WT. 0.648 GRAMS

TWIST RATE NA PCT. DRAG CHANGE / (DEG. YAW)**2 0.74

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	49.4	742	953	0.0
50	0.00	0.00	49.4	742	775	0.0
100	2.40	0.07	48.4	691	671	-0.5
150	4.76	0.15	47.3	640	578	-1.0
200	7.05	0.23	46.0	589	489	-1.5
250	9.27	0.32	44.4	540	410	-2.0
300	11.41	0.41	42.5	491	340	-2.4
350	13.45	0.52	40.2	445	279	-2.7
400	15.36	0.64	37.4	402	227	-3.0
450	17.12	0.77	34.0	361	184	-3.2
500	18.69	0.92	29.8	328	151	-3.0
550	20.03	1.07	24.7	304	130	-2.7
600	21.11	1.24	19.0	285	114	-2.5
650	21.84	1.43	12.4	267	101	-2.2
700	22.32	1.62	4.9	250	88	-2.2
750	22.56	1.82	-3.6	235	78	-2.2
800	22.46	2.04	-13.3	220	68	-2.2
850	22.05	2.28	-24.3	206	60	-2.2
900	21.35	2.53	-36.4	193	52	-2.2
950	20.40	2.80	-51.4	180	46	-2.2
1000	19.19	3.09	-67.8	168	40	-2.2
1050	17.70	3.40	-86.7	158	35	-2.2
1100	15.92	3.73	-108.2	147	31	-2.2
1150	13.84	4.08	-132.8	138	27	-2.2

DRAG ROCK. WT. 0.115 GRAMS PCT. DRAG CHANGE / (DEG. YAW)**2 2.12

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	14.8	742	953	0.0
50	0.00	0.00	14.8	742	775	0.0
100	0.70	0.07	13.9	725	734	-0.2
150	1.36	0.14	12.9	708	695	-0.3
200	1.97	0.21	11.9	692	671	-0.3
250	2.53	0.28	10.8	676	639	-0.3
300	3.03	0.36	9.7	659	604	-0.3
350	3.48	0.43	8.5	643	570	-0.3
400	3.87	0.51	7.3	628	541	-0.3
450	4.20	0.59	6.0	612	511	-0.3
500	4.46	0.68	4.6	596	483	-0.3
550	4.66	0.78	3.1	581	457	-0.3
600	4.80	0.88	1.6	566	432	-0.3
650	4.87	0.99	0.0	551	409	-0.3
700	4.88	1.11	-1.7	537	387	-0.3
750	4.82	1.23	-3.4	522	366	-0.3
800	4.70	1.36	-5.3	508	346	-0.3
850	4.52	1.50	-7.3	494	327	-0.3
900	4.28	1.65	-9.4	480	309	-0.3
950	3.98	1.81	-11.7	467	292	-0.3
1000	3.62	1.98	-14.0	453	276	-0.3
1050	3.21	2.17	-16.5	440	260	-0.3
1100	2.74	2.37	-19.2	428	246	-0.3
1150	2.22	2.59	-22.0	415	234	-0.3

TYPE SC 1 CALIBER 7.62 MM AVERAGE DENSITY 4.08 GRAMS/CC.

PROJ. WT 2.815 GRAMS PROJ. DIA. 5.56 MM IMPULSE 1.2 LB. SEC.

DRAG ROCR. WT. 0.000 GRAMS CHG. WT. 1.52 GRAMS SABOT WT. 0.648 GRAMS

TWIST RATE NA PCT. DRAG CHANGE / (DEG. YAW)**2 0.74

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	22.6	1006	1752	0.0
50	0.00	0.00	22.6	1006	1425	0.0
100	1.10	0.05	22.0	954	1282	-0.5
150	2.16	0.10	21.5	903	1147	-1.0
200	3.20	0.16	20.8	851	1019	-1.5
250	4.21	0.22	20.1	799	899	-2.1
300	5.18	0.29	19.2	748	787	-2.6
350	6.10	0.36	18.3	696	682	-3.1
400	6.97	0.43	17.2	645	586	-3.6
450	7.79	0.51	15.9	595	498	-4.0
500	8.53	0.60	14.3	545	418	-4.5
550	9.20	0.70	12.5	497	348	-4.8
600	9.75	0.80	10.3	451	286	-5.1
650	10.20	0.92	7.9	407	233	-5.3
700	10.50	1.05	4.2	366	189	-5.4
750	10.61	1.19	0.0	331	154	-5.1
800	10.50	1.35	-4.9	307	132	-4.0
850	10.13	1.52	-10.6	287	116	-3.3
900	9.46	1.70	-17.0	269	102	-3.1
950	8.45	1.89	-24.4	253	90	-3.1
1000	7.06	2.09	-32.7	237	79	-3.1
1050	5.23	2.31	-42.3	222	69	-3.1
1100	2.90	2.55	-53.1	208	61	-3.1
	0.00	2.79	-65.5	194	54	-3.0

DRAG ROCR. WT. 0.115 GRAMS PCT. DRAG CHANGE / (DEG. YAW)**2 2.12

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	7.5	1006	1752	0.0
50	0.00	0.00	7.5	1006	1423	0.0
100	0.35	0.05	7.0	957	1369	-0.2
150	0.68	0.10	6.4	908	1219	-0.4
200	0.99	0.15	5.9	949	1263	-0.6
250	1.28	0.21	5.3	930	1212	-0.8
300	1.55	0.26	4.7	911	1162	-0.9
350	1.79	0.32	4.1	892	1114	-1.0
400	2.02	0.37	3.5	874	1068	-1.1
450	2.08	0.43	2.8	855	1022	-1.2
500	2.20	0.49	2.1	837	978	-1.3
550	2.29	0.55	1.4	819	936	-1.4
600	2.36	0.61	0.6	801	894	-1.5
650	2.41	0.68	-0.2	784	854	-1.5
700	2.44	0.74	-1.0	766	816	-1.6
750	2.45	0.81	-1.9	749	778	-1.7
800	2.44	0.87	-2.8	732	742	-1.7
850	2.41	0.94	-3.7	715	707	-1.8
900	2.35	1.01	-4.7	698	673	-1.8
950	2.26	1.09	-5.8	681	641	-1.8
1000	2.15	1.16	-6.9	665	609	-1.9
1050	2.00	1.24	-8.1	648	579	-1.9
1100	1.82	1.31	-9.3	632	550	-1.9
	1.60	1.39	-10.6	616	522	-1.9

TYPE SC 1 CALIBER 7.62 MM AVERAGE DENSITY 4.08 GRAMS/CC.

PROJ. WT 2.815 GRAMS PROJ. DIA. 5.56 MM IMPULSE 2.1 LB. SEC.

DRAG RDCR. WT. 0.000 GRAMS CHG. WT. 3.55 GRAMS SABOT WT. 0.648 GRAMS

TWIST RATE NA PCT. DRAG CHANGE / (DEG. YAW)**2 0.14

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	7.1	1390	3346	0.0
50	0.00	0.00	7.1	1390	2720	-0.0
100	0.34	0.04	6.9	1340	2527	-0.5
150	0.67	0.07	6.6	1290	2341	-1.0
200	0.99	0.11	6.3	1239	2161	-1.5
250	1.29	0.16	5.9	1188	1987	-2.0
300	1.58	0.20	5.6	1137	1821	-2.6
350	1.84	0.24	5.2	1086	1660	-3.1
400	2.08	0.29	4.7	1035	1507	-3.6
450	2.31	0.34	4.2	983	1361	-4.1
500	2.50	0.39	3.7	932	1222	-4.7
550	2.67	0.45	3.1	880	1090	-5.2
600	2.81	0.51	2.4	828	966	-5.7
650	2.91	0.57	1.6	777	849	-6.2
700	2.98	0.64	0.7	725	740	-6.7
750	2.99	0.71	-0.3	674	640	-7.2
800	2.95	0.78	-1.5	623	547	-7.6
850	2.85	0.87	-2.9	573	462	-8.1
900	2.68	0.96	-4.6	524	386	-8.4
950	2.41	1.06	-6.6	476	320	-8.7
1000	2.04	1.17	-9.0	431	262	-8.8
1050	1.54	1.29	-12.0	389	213	-8.8
1100	0.87	1.43	-15.7	349	172	-8.6
	0.00	1.58	-20.2	319	144	-7.8

DRAG RDCR. WT. 0.115 GRAMS PCT. DRAG CHANGE / (DEG. YAW)**2 2.12

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	7.1	1390	3346	0.0
50	0.00	0.00	7.1	1390	2720	-0.0
100	0.34	0.04	6.9	1340	2527	-0.5
150	0.67	0.07	6.6	1290	2341	-1.0
200	0.99	0.11	6.3	1239	2161	-1.5
250	1.29	0.16	5.9	1188	1987	-2.0
300	1.58	0.20	5.6	1137	1821	-2.6
350	1.84	0.24	5.2	1086	1660	-3.1
400	2.08	0.29	4.7	1035	1507	-3.6
450	2.31	0.34	4.2	983	1361	-4.1
500	2.50	0.39	3.7	932	1222	-4.7
550	2.67	0.45	3.1	880	1090	-5.2
600	2.81	0.51	2.4	828	966	-5.7
650	2.91	0.57	1.6	777	849	-6.2
700	2.98	0.64	0.7	725	740	-6.7
750	2.99	0.71	-0.3	674	640	-7.2
800	2.95	0.78	-1.5	623	547	-7.6
850	2.85	0.87	-2.9	573	462	-8.1
900	2.68	0.96	-4.6	524	386	-8.4
950	2.41	1.06	-6.6	476	320	-8.7
1000	2.04	1.17	-9.0	431	262	-8.8
1050	1.54	1.29	-12.0	389	213	-8.8
1100	0.87	1.43	-15.7	349	172	-8.6
	0.00	1.58	-20.2	319	144	-7.8

TYPE SC 1 CALIBER 7.62 MM AVERAGE DENSITY 4.08 GRAMS/CC.

PROJ. WT 3.681 GRAMS PROJ. DIA. 6.10 MM IMPULSE 0.6 LB. SEC.

DRAG REDCR. WT. 0.000 GRAMS CHG. WT. 0.73 GRAMS SABOT WT. 0.499 GRAMS

TWIST RATE NA PCT. DRAG CHANGE / (DEG. YAW)**2 0.74

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	57.8	643	864	0.0
0	0.00	0.00	57.8	643	761	0.0
50	2.81	0.08	56.5	596	655	-0.5
100	5.55	0.17	55.0	551	558	-0.9
150	8.22	0.26	53.2	506	471	-1.3
200	10.78	0.37	51.1	463	394	-1.7
250	13.23	0.48	48.5	422	327	-2.0
300	15.54	0.60	45.4	383	270	-2.3
350	17.69	0.74	41.7	347	222	-2.5
400	19.61	0.89	37.1	320	188	-2.1
450	21.33	1.05	31.9	300	169	-1.8
500	22.76	1.23	26.0	282	147	-1.7
550	23.88	1.41	19.4	266	130	-1.8
600	24.66	1.60	11.9	251	116	-1.9
650	25.04	1.81	3.5	236	103	-1.9
700	24.99	2.03	-6.1	222	91	-2.0
750	24.44	2.26	-16.8	209	81	-2.0
800	23.32	2.50	-28.9	197	71	-2.0
850	21.50	2.77	-42.6	185	63	-2.0
900	19.12	3.04	-58.1	174	56	-2.0
950	15.85	3.34	-75.6	164	49	-2.0
1000	11.65	3.66	-95.4	154	44	-2.0
1050	6.42	3.99	-117.8	145	39	-2.0
1100	0.00	4.35	-143.1	136	34	-2.0

DRAG REDCR. WT. 0.199 GRAMS PCT. DRAG CHANGE / (DEG. YAW)**2 2.12

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	19.5	643	864	0.0
0	0.00	0.00	19.5	643	761	0.0
50	0.93	0.08	18.3	629	722	-0.1
100	1.80	0.16	17.0	614	692	-0.3
150	2.60	0.24	15.7	600	660	-0.4
200	3.34	0.33	14.2	586	628	-0.6
250	4.000	0.41	12.8	572	598	-0.7
300	4.59	0.50	11.2	559	569	-0.8
350	5.10	0.59	9.6	545	541	-0.9
400	5.51	0.68	7.8	533	514	-1.1
450	5.81	0.78	6.0	519	488	-1.2
500	6.13	0.888	4.1	506	463	-1.3
550	6.28	0.98	2.1	493	439	-1.4
600	6.34	1.08	0.0	480	416	-1.5
650	6.29	1.19	-2.2	468	394	-1.6
700	6.13	1.29	-4.6	456	373	-1.7
750	5.85	1.41	-7.0	444	353	-1.8
800	5.45	1.52	-9.6	432	334	-1.9
850	4.91	1.64	-12.4	421	316	-1.9
900	4.24	1.76	-15.3	409	298	-2.0
950	3.42	1.88	-18.4	398	282	-2.1
1000	2.45	2.01	-21.6	387	266	-2.2
1050	1.31	2.14	-25.0	377	251	-2.3
1100	0.00	2.27	-28.7	366	236	-2.3

TYPE SC 1 CALIBER 7.62 MM AVERAGE DENSITY 4.08 GRAMS/CC.

PROJ. WT 3.681 GRAMS PROJ. DIA. 6.10 MM IMPULSE 1.7 LB. SEC.

DRAG ROCR. WT. 0.000 GRAMS CHG. WT. 1.39 GRAMS SABOT WT. 0.499 GRAMS

TWIST RATE NA PCT. DRAG CHANGE / (DEG. YAW)**2 0.74

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	28.0	885	1637	0.0
50	0.00	0.00	28.0	885	1441	0.0
100	1.36	0.06	27.4	838	1291	-0.5
150	2.69	0.12	26.6	790	1149	-1.0
200	3.97	0.18	25.7	742	1015	-1.4
250	5.21	0.25	24.8	695	890	-1.9
300	6.41	0.31	23.7	649	774	-2.3
350	7.54	0.41	22.4	602	667	-2.8
400	8.60	0.50	20.9	556	569	-3.2
450	9.59	0.59	19.1	511	481	-3.6
500	10.48	0.69	17.1	468	403	-3.9
550	11.27	0.80	14.6	427	335	-4.1
600	11.91	0.93	11.5	388	277	-4.3
650	12.40	1.06	7.9	352	228	-4.4
700	12.68	1.21	3.5	320	188	-4.5
750	12.73	1.37	-1.7	292	156	-4.6
800	12.51	1.54	-7.5	268	131	-4.7
850	11.99	1.72	-14.0	248	112	-4.7
900	11.13	1.91	-21.4	233	97	-4.7
950	9.89	2.11	-29.7	224	89	-4.7
1000	8.22	2.31	-39.0	220	85	-4.7
1050	6.05	2.56	-49.6	214	80	-4.7
1100	3.34	2.81	-61.5	196	67	-4.7
1150	0.00	3.07	-74.9	187	64	-4.7

DRAG ROCR. WT. 0.199 GRAMS PCT. DRAG CHANGE / (DEG. YAW)**2 2.12

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	9.6	885	1637	0.0
50	0.00	0.00	9.6	885	1441	0.0
100	0.46	0.06	9.0	838	1286	-0.2
150	0.88	0.12	8.3	791	1142	-0.3
200	1.27	0.17	7.6	744	1010	-0.5
250	1.63	0.24	6.9	698	889	-0.7
300	1.95	0.30	6.1	652	779	-0.8
350	2.24	0.36	5.3	607	681	-1.0
400	2.49	0.43	4.5	563	594	-1.1
450	2.68	0.49	3.6	520	516	-1.3
500	2.84	0.56	2.7	479	447	-1.4
550	2.93	0.63	1.7	439	386	-1.5
600	2.96	0.70	0.6	401	332	-1.7
650	2.93	0.77	-0.5	365	286	-1.8
700	2.84	0.84	-1.8	332	246	-1.9
750	2.69	0.92	-3.2	302	211	-2.0
800	2.48	0.99	-4.8	275	181	-2.1
850	2.20	1.07	-6.6	252	157	-2.2
900	1.86	1.15	-8.6	232	136	-2.3
950	1.46	1.24	-10.8	216	119	-2.4
1000	1.00	1.32	-13.3	203	105	-2.5
1050	0.48	1.40	-16.1	193	94	-2.6
1100	0.00	1.48	-19.2	186	86	-2.7
1150		1.58	-22.7	181	80	-2.8
1200		1.68	-26.6	179	77	-2.9
1250		1.79	-30.9	179	76	-3.0
1300		1.91	-35.7	181	77	-3.1
1350		2.04	-41.0	185	80	-3.2
1400		2.18	-46.8	191	85	-3.3
1450		2.33	-53.2	199	92	-3.4
1500		2.49	-60.2	209	101	-3.5
1550		2.66	-67.8	221	112	-3.6
1600		2.85	-76.0	235	125	-3.7
1650		3.05	-84.8	251	140	-3.8
1700		3.27	-94.3	270	158	-3.9
1750		3.50	-104.4	291	178	-4.0
1800		3.75	-115.2	315	201	-4.1
1850		4.02	-126.7	342	227	-4.2
1900		4.31	-138.9	372	256	-4.3
1950		4.62	-151.8	406	289	-4.4
2000		4.95	-165.5	444	326	-4.5
2050		5.31	-179.9	486	368	-4.6
2100		5.69	-195.1	533	415	-4.7
2150		6.10	-211.1	586	468	-4.8
2200		6.54	-227.9	645	528	-4.9
2250		7.01	-245.5	711	596	-5.0
2300		7.51	-263.9	785	672	-5.1
2350		8.05	-283.1	868	759	-5.2
2400		8.63	-303.1	961	857	-5.3
2450		9.25	-323.9	1066	968	-5.4
2500		9.92	-345.5	1184	1093	-5.5
2550		10.64	-367.9	1318	1234	-5.6
2600		11.41	-391.1	1469	1393	-5.7
2650		12.24	-415.1	1640	1572	-5.8
2700		13.13	-439.9	1833	1774	-5.9
2750		14.09	-465.5	2052	2000	-6.0
2800		15.12	-491.9	2300	2256	-6.1
2850		16.23	-519.1	2582	2545	-6.2
2900		17.42	-547.1	2902	2870	-6.3
2950		18.70	-575.9	3265	3238	-6.4
3000		20.08	-605.5	3677	3653	-6.5
3050		21.57	-635.8	4144	4126	-6.6
3100		23.18	-666.9	4674	4664	-6.7
3150		24.91	-698.8	5276	5276	-6.8
3200		26.78	-731.4	5960	5972	-6.9
3250		28.80	-764.8	6738	6766	-7.0
3300		30.98	-798.9	7624	7674	-7.1
3350		33.34	-833.8	8634	8712	-7.2
3400		35.89	-869.4	9787	9901	-7.3
3450		38.65	-905.7	11107	11267	-7.4
3500		41.64	-942.8	12621	12839	-7.5
3550		44.88	-980.6	14362	14653	-7.6
3600		48.40	-1019.1	16369	16753	-7.7
3650		52.23	-1058.3	18693	19191	-7.8
3700		56.41	-1098.2	21398	22035	-7.9
3750		60.99	-1138.8	24562	25369	-8.0
3800		66.03	-1180.1	28289	29312	-8.1
3850		71.59	-1222.1	32715	33999	-8.2
3900		77.77	-1264.8	38026	39636	-8.3
3950		84.67	-1308.2	44478	46503	-8.4
4000		92.43	-1352.3	52440	54997	-8.5

TYPE SC 1 CALIBER 7.62 MM AVERAGE DENSITY 4.08 GRAMS/CC.

PROJ. WT 3.681 GRAMS PROJ. DIA. 6.10 MM IMPULSE 2.1 LB. SEC.

DRAG ROCK. WT. 0.000 GRAMS CHG. WT. 3.30 GRAMS SABOT WT. 0.499 GRAMS

TWIST RATE NA PCT. DRAG CHANGE / (DEG. YAW)**2 0.74

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	8.5	1274	3392	0.0
0	0.00	0.00	8.5	1274	2987	0.0
50	0.41	0.04	8.2	1227	2772	-0.5
100	0.81	0.08	7.9	1181	2566	-0.9
150	1.19	0.12	7.5	1134	2366	-1.4
200	1.54	0.17	7.1	1087	2173	-1.9
250	1.88	0.22	6.7	1040	1989	-2.4
300	2.20	0.27	6.2	992	1812	-2.8
350	2.49	0.32	5.6	945	1643	-3.3
400	2.76	0.37	5.0	897	1482	-3.8
450	2.99	0.43	4.4	850	1329	-4.3
500	3.19	0.49	3.7	802	1185	-4.7
550	3.36	0.55	2.8	755	1049	-5.2
600	3.48	0.62	1.9	708	921	-5.7
650	3.55	0.70	0.8	661	804	-6.1
700	3.57	0.77	-0.4	614	694	-6.5
750	3.52	0.86	-1.8	568	594	-6.9
800	3.40	0.95	-3.5	523	503	-7.3
850	3.18	1.05	-5.5	479	423	-7.5
900	2.86	1.16	-7.9	438	352	-7.7
950	2.41	1.28	-10.8	398	291	-7.7
1000	1.81	1.41	-14.2	361	239	-7.7
1050	1.02	1.56	-18.5	330	200	-7.2
1100	0.00	1.71	-23.4	307	174	-6.1

DRAG ROCK. WT. 0.199 GRAMS PCT. DRAG CHANGE / (DEG. YAW)**2 2.12

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	4.3	1274	3392	0.0
0	0.00	0.00	4.3	1274	2987	0.0
50	0.20	0.04	4.0	1255	2895	-0.2
100	0.39	0.08	3.6	1235	2805	-0.4
150	0.56	0.12	3.3	1216	2716	-0.6
200	0.72	0.16	3.0	1197	2630	-0.8
250	0.85	0.20	2.6	1178	2545	-0.9
300	0.98	0.25	2.2	1159	2462	-1.1
350	1.08	0.29	1.9	1141	2381	-1.3
400	1.16	0.33	1.5	1122	2302	-1.5
450	1.23	0.38	1.1	1103	2224	-1.7
500	1.28	0.43	0.7	1085	2149	-1.8
550	1.30	0.47	0.2	1066	2074	-2.0
600	1.31	0.52	-0.2	1048	2002	-2.2
650	1.29	0.57	-0.7	1030	1932	-2.4
700	1.25	0.62	-1.2	1012	1863	-2.5
750	1.19	0.67	-1.7	994	1796	-2.7
800	1.10	0.72	-2.2	976	1730	-2.8
850	0.98	0.77	-2.7	958	1666	-3.0
900	0.84	0.82	-3.3	940	1604	-3.2
950	0.68	0.87	-3.8	923	1543	-3.3
1000	0.48	0.93	-4.4	906	1484	-3.5
1050	0.26	0.99	-5.1	808	1426	-3.6
1100	0.00	1.04	-5.7	871	1370	-3.8

TYPE SC 1 CALIBER 7.62 MM AVERAGE DENSITY 4.08 GRAMS/CC.

PROJ. WT 4.698 GRAMS PROJ. DIA. 6.60 MM IMPULSE 0.8 LB. SEC.

DRAG ROCK. WT. 0.000 GRAMS CHG. WT. 0.69 GRAMS SABOT WT. 0.331 GRAMS

TWIST RATE NA PCT. DRAG CHANGE / (DEG. YAW)**2 0.74

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	67.4	553	769	0.0
50	0.00	0.09	65.6	542	715	-0.4
100	6.44	0.20	63.5	472	523	-0.8
150	9.51	0.31	61.1	433	441	-1.1
200	12.44	0.43	58.2	397	370	-1.4
250	15.22	0.56	54.7	363	307	-1.7
300	17.82	0.70	50.5	331	256	-1.7
350	20.18	0.86	45.7	301	213	-1.7
400	22.29	1.03	40.2	274	178	-1.7
450	24.12	1.20	34.1	249	150	-1.7
500	25.64	1.38	27.5	227	126	-1.7
550	26.80	1.57	20.5	207	105	-1.7
600	27.57	1.76	13.2	189	88	-1.7
650	27.90	1.96	5.8	173	73	-1.7
700	27.74	2.17	-1.8	159	61	-1.7
750	27.03	2.38	-9.4	146	51	-1.7
800	25.71	2.60	-16.9	135	43	-1.8
850	23.70	2.83	-24.3	125	36	-1.8
900	20.91	3.06	-31.5	116	30	-1.8
950	17.27	3.30	-38.5	108	25	-1.8
1000	12.65	3.55	-45.3	101	21	-1.8
1050	6.96	3.81	-51.7	94	18	-1.8
1100	0.00	4.07	-57.8	88	15	-1.8

DRAG ROCK. WT. 0.253 GRAMS PCT. DRAG CHANGE / (DEG. YAW)**2 2.12

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	26.1	553	769	0.0
50	0.00	0.09	24.3	542	715	-0.4
100	6.44	0.20	22.2	472	523	-0.8
150	9.51	0.31	19.8	433	441	-1.1
200	12.44	0.43	16.9	397	370	-1.4
250	15.22	0.56	13.4	363	307	-1.7
300	17.82	0.70	9.2	331	256	-1.7
350	20.18	0.86	4.4	301	213	-1.7
400	22.29	1.03	-1.1	274	178	-1.7
450	24.12	1.20	-7.7	249	150	-1.7
500	25.64	1.38	-14.7	227	126	-1.7
550	26.80	1.57	-22.1	207	105	-1.7
600	27.57	1.76	-29.8	189	88	-1.7
650	27.90	1.96	-37.8	173	73	-1.7
700	27.74	2.17	-46.1	159	61	-1.7
750	27.03	2.38	-54.6	146	51	-1.7
800	25.71	2.60	-63.3	135	43	-1.8
850	23.70	2.83	-72.2	125	36	-1.8
900	20.91	3.06	-81.2	116	30	-1.8
950	17.27	3.30	-90.4	108	25	-1.8
1000	12.65	3.55	-99.7	101	21	-1.8
1050	6.96	3.81	-109.2	94	18	-1.8
1100	0.00	4.07	-118.8	88	15	-1.8

TYPE SC 1 CALIBER 7.62 MM AVERAGE DENSITY 4.08 GRAMS/CC.

PROJ. WT 4.698 GRAMS PROJ. DIA. 6.60 MM IMPULSE 1.2 LB. SEC.

DRAG RDCR. WT. 0.000 GRAMS CHG. WT. 1.25 GRAMS SABOT WT. 0.331 GRAMS

TWIST RATE NA PCT. DRAG CHANGE / (DEG. YAW)**2 0.74

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	35.2	767	1479	0.0
0	0.00	0.00	35.2	767	1382	0.0
50	1.71	0.07	34.3	723	1229	-0.4
100	3.37	0.14	33.3	680	1086	-0.9
150	4.98	0.21	32.2	637	953	-1.3
200	6.53	0.30	30.9	594	830	-1.7
250	8.01	0.38	29.3	552	716	-2.1
300	9.41	0.48	27.6	511	614	-2.5
350	10.72	0.58	25.5	471	522	-2.8
400	11.91	0.69	23.0	433	441	-3.0
450	12.98	0.81	20.1	397	370	-3.3
500	13.89	0.94	16.7	363	309	-3.4
550	14.61	1.09	12.5	333	261	-3.3
600	15.11	1.24	7.7	311	228	-2.7
650	15.36	1.41	2.2	294	204	-2.3
700	15.33	1.50	-3.9	279	182	-2.2
750	14.98	1.77	-10.7	264	164	-2.2
800	14.28	1.96	-18.2	250	147	-2.3
850	13.18	2.17	-26.7	237	131	-2.3
900	11.65	2.38	-36.1	224	118	-2.3
950	9.63	2.61	-46.7	212	105	-2.4
1000	7.06	2.86	-58.5	200	94	-2.4
1050	3.87	3.11	-71.6	189	84	-2.4
1100	0.00	3.39	-86.4	179	75	-2.4

DRAG RDCR. WT. 0.253 GRAMS PCT. DRAG CHANGE / (DEG. YAW)**2 2.12

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	12.8	767	1479	0.0
0	0.00	0.00	12.8	767	1382	0.0
50	0.61	0.07	11.9	752	1328	-0.1
100	1.17	0.13	11.0	738	1277	-0.3
150	1.69	0.20	10.1	724	1226	-0.4
200	2.16	0.27	9.1	710	1177	-0.6
250	2.59	0.34	8.1	696	1130	-0.7
300	2.96	0.41	7.1	682	1084	-0.8
350	3.29	0.49	6.0	668	1039	-1.0
400	3.55	0.56	4.8	654	995	-1.1
450	3.77	0.64	3.6	641	953	-1.2
500	3.92	0.72	2.4	627	913	-1.3
550	4.01	0.80	1.1	614	873	-1.5
600	4.03	0.88	-0.3	601	835	-1.6
650	3.99	0.97	-1.7	588	798	-1.7
700	3.88	1.05	-3.2	575	762	-1.8
750	3.69	1.14	-4.7	562	727	-1.9
800	3.42	1.23	-6.3	550	694	-2.0
850	3.08	1.32	-8.0	537	662	-2.1
900	2.65	1.42	-9.8	525	631	-2.2
950	2.13	1.51	-11.6	513	601	-2.3
1000	1.52	1.61	-13.6	501	572	-2.4
1050	0.81	1.71	-15.6	489	544	-2.5
1100	0.00	1.82	-17.8	477	510	-2.6

TYPE SC 1 CALIBER 7.62 MM AVERAGE DENSITY 4.08 GRAMS/CC.

PROJ. WT 4.698 GRAMS PROJ. DIA. 6.60 MM IMPULSE 2.1 LB. SEC.

DRAG ROCK. WT. 0.000 GRAMS CHG. WT. 3.00 GRAMS SABOT WT. 0.331 GRAMS

TWIST RATE NA PCT. DRAG CHANGE / (DEG. YAW)**2 0.74

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/(DIST. DRAG) M/SEC/PCT
0	0.00	0.00	10.9	1145	4296	0.0
50	0.00	0.04	10.9	1145	4080	0.0
100	0.52	0.09	10.5	1102	3891	-0.4
150	1.05	0.14	10.0	1058	3631	-0.9
200	1.58	0.19	9.6	1015	3420	-1.3
250	2.11	0.24	9.1	971	3216	-1.7
300	2.64	0.30	8.5	928	3021	-2.2
350	3.18	0.36	7.9	884	2835	-2.6
400	3.72	0.42	7.2	840	2659	-3.0
450	4.26	0.48	6.5	797	2491	-3.5
500	4.80	0.55	5.7	753	2332	-3.9
550	5.34	0.62	4.9	709	2182	-4.4
600	5.88	0.69	4.0	666	2041	-4.9
650	6.42	0.77	3.1	622	1909	-5.4
700	6.96	0.85	2.1	578	1785	-5.9
750	7.50	0.94	1.1	535	1670	-6.4
800	8.04	1.03	0.0	491	1564	-6.9
850	8.58	1.13	-1.1	447	1466	-7.4
900	9.12	1.23	-2.3	404	1377	-7.9
950	9.66	1.34	-3.5	360	1296	-8.4
1000	10.20	1.46	-4.8	316	1224	-8.9
1050	10.74	1.58	-6.2	273	1160	-9.4
1100	11.28	1.71	-7.6	229	1105	-9.9
1150	11.82	1.85	-9.1	185	1058	-10.4
1200	12.36	1.99	-10.7	142	1020	-10.9
1250	12.90	2.14	-12.4	98	990	-11.4
1300	13.44	2.30	-14.2	55	969	-11.9
1350	13.98	2.47	-16.1	11	956	-12.4

DRAG ROCK. WT. 0.253 GRAMS PCT. DRAG CHANGE / (DEG. YAW)**2 2.12

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/(DIST. DRAG) M/SEC/PCT
0	0.00	0.00	10.9	1145	4296	0.0
50	0.00	0.04	10.9	1145	4080	0.0
100	0.52	0.09	10.5	1102	3891	-0.4
150	1.05	0.14	10.0	1058	3631	-0.9
200	1.58	0.19	9.6	1015	3420	-1.3
250	2.11	0.24	9.1	971	3216	-1.7
300	2.64	0.30	8.5	928	3021	-2.2
350	3.18	0.36	7.9	884	2835	-2.6
400	3.72	0.42	7.2	840	2659	-3.0
450	4.26	0.48	6.5	797	2491	-3.5
500	4.80	0.55	5.7	753	2332	-3.9
550	5.34	0.62	4.9	709	2182	-4.4
600	5.88	0.69	4.0	666	2041	-4.9
650	6.42	0.77	3.1	622	1909	-5.4
700	6.96	0.85	2.1	578	1785	-5.9
750	7.50	0.94	1.1	535	1670	-6.4
800	8.04	1.03	0.0	491	1564	-6.9
850	8.58	1.13	-1.1	447	1466	-7.4
900	9.12	1.23	-2.3	404	1377	-7.9
950	9.66	1.34	-3.5	360	1296	-8.4
1000	10.20	1.46	-4.8	316	1224	-8.9
1050	10.74	1.58	-6.2	273	1160	-9.4
1100	11.28	1.71	-7.6	229	1105	-9.9
1150	11.82	1.85	-9.1	185	1058	-10.4
1200	12.36	1.99	-10.7	142	1020	-10.9
1250	12.90	2.14	-12.4	98	990	-11.4
1300	13.44	2.30	-14.2	55	969	-11.9
1350	13.98	2.47	-16.1	11	956	-12.4

TYPE SC 1 CALIBER 7.62 MM AVERAGE DENSITY 4.08 GRAMS/CC.

PROJ. WT 5.864 GRAMS PROJ. DIA. 7.11 MM IMPULSE 0.8 LB. SEC.

DRAG RDCR. WT. 0.000 GRAMS CHG. WT. 0.56 GRAMS SABOT WT. 0.188 GRAMS

TWIST RATE NA PCT. DRAG CHANGE / (DEG. YAW)**2 0.74

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	78.1	476	686	0.0
0	0.00	0.00	78.1	476	664	0.0
50	3.78	0.11	75.7	440	568	-0.4
100	7.44	0.23	72.9	406	483	-0.7
150	10.95	0.36	69.6	373	409	-1.0
200	14.28	0.50	65.7	344	346	-1.1
250	17.40	0.65	61.2	320	301	-1.1
300	20.28	0.81	56.0	303	269	-1.0
350	22.90	0.98	50.3	288	243	-1.1
400	25.22	1.16	43.9	273	219	-1.1
450	27.21	1.35	36.9	260	198	-1.2
500	28.83	1.54	29.1	247	179	-1.3
550	30.06	1.75	20.5	235	161	-1.4
600	30.84	1.97	10.9	223	145	-1.4
650	31.12	2.20	0.3	211	131	-1.5
700	30.85	2.44	-11.5	201	118	-1.5
750	29.98	2.70	-24.6	190	106	-1.6
800	28.43	2.97	-39.1	181	96	-1.6
850	26.13	3.25	-55.2	172	86	-1.6
900	22.99	3.55	-73.1	163	78	-1.6
950	18.92	3.87	-92.9	155	70	-1.6
1000	13.81	4.20	-115.0	147	63	-1.6
1050	7.55	4.56	-139.4	139	57	-1.6
1100	0.00	4.93	-166.5	132	51	-1.6

DRAG RDCR. WT. 0.316 GRAMS PCT. DRAG CHANGE / (DEG. YAW)**2 2.12

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	34.8	476	686	0.0
0	0.00	0.00	34.8	476	664	0.0
50	1.65	0.11	32.5	466	635	-0.1
100	3.19	0.21	30.2	455	606	-0.2
150	4.61	0.33	27.7	445	578	-0.3
200	5.91	0.44	25.1	435	552	-0.4
250	7.08	0.56	22.4	426	526	-0.5
300	8.12	0.67	19.6	416	501	-0.6
350	9.01	0.80	16.7	407	478	-0.7
400	9.76	0.93	13.6	397	455	-0.7
450	10.35	1.05	10.3	388	433	-0.8
500	10.77	1.18	6.9	379	412	-0.9
550	11.03	1.31	3.4	370	392	-1.0
600	11.11	1.45	-0.4	361	373	-1.0
650	11.00	1.59	-4.3	353	355	-1.1
700	10.70	1.73	-8.4	345	339	-1.1
750	10.19	1.88	-12.6	338	323	-1.2
800	9.46	2.03	-17.1	330	308	-1.2
850	8.51	2.18	-21.8	323	293	-1.3
900	7.33	2.34	-26.7	315	279	-1.3
950	5.89	2.50	-31.9	308	266	-1.3
1000	4.20	2.66	-37.3	301	253	-1.4
1050	2.24	2.83	-42.9	295	241	-1.4
1100	0.00	3.00	-48.8	288	230	-1.5

TYPE SC 1 CALIBER 7.62 MM AVERAGE DENSITY 4.08 GRAMS/CC.

PROJ. WT 5.864 GRAMS PROJ. DIA. 7.11 MM IMPULSE 1.2 LB. SEC.

DRAG ROCK. WT. 0.000 GRAMS CHG. WT. 1.12 GRAMS SABOT WT. 0.188 GRAMS

TWIST RATE NA PCT. DRAG CHANGE / (DEG. YAW)**2 0.74

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	44.0	662	1326	0.0
0	0.00	0.00	44.0	662	1285	0.0
50	2.13	0.08	42.8	622	1135	-0.4
100	4.20	0.16	41.4	583	995	-0.8
150	6.20	0.25	39.8	544	866	-1.2
200	8.11	0.35	38.0	505	749	-1.5
250	9.93	0.45	35.9	469	644	-1.8
300	11.63	0.56	33.4	433	550	-2.1
350	13.21	0.68	30.5	399	468	-2.3
400	14.63	0.81	27.1	367	395	-2.6
450	15.87	0.95	23.1	339	336	-2.6
500	16.89	1.11	18.4	317	294	-2.2
550	17.68	1.27	13.2	300	264	-1.9
600	18.19	1.44	7.3	285	239	-1.8
650	18.39	1.62	0.9	271	216	-1.8
700	18.27	1.81	-6.3	258	195	-1.9
750	17.77	2.01	-14.2	245	176	-1.9
800	16.87	2.22	-23.0	233	159	-2.0
850	15.52	2.44	-32.7	221	143	-2.0
900	13.66	2.67	-43.4	210	129	-2.0
950	11.24	2.91	-55.4	199	117	-2.1
1000	8.21	3.17	-68.6	189	105	-2.1
1050	4.49	3.44	-83.3	180	95	-2.1
1100	0.00	3.73	-99.6	171	85	-2.1

DRAG ROCK. WT. 0.316 GRAMS PCT. DRAG CHANGE / (DEG. YAW)**2 2.12

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	17.2	662	1326	0.0
0	0.00	0.00	17.2	662	1285	0.0
50	0.82	0.08	16.0	649	1235	-0.1
100	1.57	0.15	14.8	637	1187	-0.2
150	2.27	0.23	13.6	625	1139	-0.4
200	2.91	0.31	12.3	612	1094	-0.5
250	[illegible]	0.40	10.9	600	1049	-0.6
300	[illegible]	0.48	9.5	588	1006	-0.7
350	4.41	0.57	8.0	576	964	-0.8
400	4.77	0.65	6.5	565	924	-0.9
450	5.06	0.74	4.9	553	885	-1.0
500	5.26	0.84	3.2	541	847	-1.1
550	5.38	0.93	1.5	530	810	-1.2
600	5.41	1.02	-0.3	519	775	-1.3
650	5.35	1.12	-2.2	508	740	-1.4
700	5.20	1.22	-4.2	497	707	-1.5
750	4.95	1.32	-6.3	486	676	-1.6
800	4.59	1.43	-8.4	475	645	-1.7
850	4.13	1.53	-10.7	465	615	-1.8
900	3.55	1.64	-13.1	454	587	-1.9
950	2.86	1.75	-15.6	444	560	-1.9
1000	2.04	1.87	-18.2	434	533	-2.0
1050	1.09	1.98	-20.9	424	508	-2.1
1100	0.00	2.10	-23.7	414	484	-2.1

TYPE SC 1 CALIBER 7.62 MM AVERAGE DENSITY 4.08 GRAMS/CC.

PROJ. WT 5.864 GRAMS PROJ. DIA. 7.11 MM IMPULSE 2.1 LB. SEC.

DRAG RDCR. WT. 0.000 GRAMS CHG. WT. 2.71 GRAMS SABOT WT. 0.188 GRAMS

TWIST RATE NA PCT. DRAG CHANGE / (DEG. YAW)**2 0.14

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	14.5	1014	3111	0.0
0	0.00	0.00	14.5	1014	3015	0.0
50	0.70	0.05	14.0	974	2779	-0.4
100	1.38	0.10	13.5	933	2552	-0.8
150	2.02	0.16	12.9	892	2334	-1.2
200	2.64	0.21	12.2	852	2127	-1.6
250	3.23	0.28	11.5	811	1930	-2.0
300	3.77	0.34	10.7	771	1741	-2.4
350	4.28	0.41	9.8	730	1563	-2.8
400	4.74	0.48	8.8	690	1395	-3.2
450	5.15	0.55	7.7	650	1238	-3.6
500	5.50	0.63	6.4	610	1091	-4.0
550	5.79	0.71	5.0	571	955	-4.3
600	6.00	0.81	3.4	532	830	-4.7
650	6.12	0.90	1.5	494	716	-4.9
700	6.14	1.01	-0.7	458	615	-5.1
750	6.05	1.12	-3.3	423	525	-5.3
800	5.82	1.24	-6.4	390	445	-5.4
850	5.43	1.38	-9.9	358	376	-5.5
900	4.85	1.52	-14.2	332	323	-5.2
950	4.04	1.68	-19.0	312	285	-4.4
1000	2.99	1.84	-24.4	296	257	-3.6
1050	1.65	2.02	-30.4	281	232	-3.2
1100	0.00	2.20	-37.1	267	210	-3.2

DRAG RDCR. WT. 0.316 GRAMS PCT. DRAG CHANGE / (DEG. YAW)**2 2.12

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	6.8	1014	3111	0.0
0	0.00	0.00	6.8	1014	3015	0.0
50	0.32	0.05	6.3	999	2923	-0.2
100	0.62	0.10	5.8	984	2832	-0.3
150	0.89	0.15	5.2	969	2743	-0.5
200	1.13	0.20	4.7	954	2657	-0.6
250	1.35	0.26	4.1	939	2572	-0.7
300	1.54	0.31	3.6	924	2489	-0.9
350	1.71	0.36	3.0	909	2408	-1.0
400	1.84	0.42	2.4	894	2328	-1.2
450	1.94	0.48	1.7	880	2251	-1.3
500	2.02	0.53	1.1	865	2175	-1.4
550	2.06	0.59	0.4	851	2101	-1.6
600	2.06	0.65	-0.3	837	2029	-1.7
650	2.03	0.71	-1.0	823	1959	-1.8
700	1.97	0.77	-1.8	809	1890	-2.0
750	1.87	0.84	-2.6	795	1823	-2.1
800	1.73	0.90	-3.4	781	1758	-2.2
850	1.55	0.96	-4.2	767	1694	-2.3
900	1.33	1.03	-5.1	753	1632	-2.5
950	1.06	1.10	-6.0	739	1572	-2.6
1000	0.76	1.16	-6.9	726	1513	-2.7
1050	0.40	1.23	-7.9	713	1456	-2.8
1100	0.00	1.30	-8.9	699	1400	-2.9

TYPE SC 1 CALIBER 7.62 MM AVERAGE DENSITY 4.08 GRAMS/CC.

PROJ. WT 7.452 GRAMS PROJ. DIA. 7.62 MM IMPULSE 0.0 LB. SEC.

DRAG RDCR. WT. 0.000 GRAMS CHG. WT. 0.46 GRAMS SABOT WT. 0.000 GRAMS

TWIST RATE NA PCT. DRAG CHANGE / (DEG. YAW)**2 0.74

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	89.4	402	602	0.0
0	0.00	0.00	89.4	402	602	0.0
50	4.32	0.13	86.0	373	517	-0.3
100	8.46	0.27	82.1	345	445	-0.5
150	12.39	0.42	77.7	324	391	-0.6
200	16.09	0.58	72.6	307	352	-0.6
250	19.52	0.75	67.1	293	320	-0.7
300	22.68	0.92	61.0	280	292	-0.8
350	25.51	1.10	54.3	267	266	-0.9
400	28.00	1.30	47.0	255	242	-1.0
450	30.12	1.50	38.9	244	221	-1.0
500	31.82	1.71	30.1	232	201	-1.1
550	33.06	1.93	20.4	222	183	-1.2
600	33.81	2.16	9.7	212	167	-1.2
650	34.01	2.40	-2.0	202	154	-1.3
700	33.61	2.65	-14.8	193	138	-1.3
750	32.54	2.92	-29.0	184	126	-1.4
800	30.75	3.20	-44.5	175	114	-1.4
850	28.15	3.49	-61.6	167	104	-1.4
900	24.68	3.80	-80.3	159	95	-1.4
950	20.23	4.12	-101.0	152	86	-1.4
1000	14.71	4.46	-123.6	145	78	-1.4
1050	8.01	4.82	-148.5	139	72	-1.4
1100	0.00	5.19	-175.7	132	65	-1.4

DRAG RDCR. WT. 0.389 GRAMS PCT. DRAG CHANGE / (DEG. YAW)**2 2.12

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	47.2	402	602	0.0
0	0.00	0.00	47.2	402	602	0.0
50	2.24	0.13	44.1	394	576	-0.1
100	4.33	0.25	40.8	386	551	-0.2
150	6.25	0.39	37.4	377	527	-0.2
200	8.00	0.52	33.8	370	504	-0.3
250	9.56	0.66	30.0	362	482	-0.4
300	10.95	0.80	26.1	354	461	-0.5
350	12.13	0.94	22.1	347	441	-0.5
400	13.11	1.08	17.8	340	423	-0.6
450	13.89	1.23	13.4	333	405	-0.6
500	14.44	1.38	8.8	326	387	-0.7
550	14.76	1.54	4.1	320	371	-0.7
600	14.84	1.70	-0.9	313	355	-0.8
650	14.67	1.86	-6.1	307	340	-0.8
700	14.24	2.02	-11.5	301	326	-0.9
750	13.54	2.19	-17.2	295	312	-0.9
800	12.56	2.36	-23.0	289	298	-1.0
850	11.29	2.54	-29.1	283	285	-1.0
900	9.71	2.72	-35.5	277	272	-1.0
950	7.81	2.90	-42.2	271	261	-1.1
1000	5.57	3.09	-49.1	262	243	-1.4
1050	2.98	3.28	-56.7	250	221	-1.5
1100	0.00	3.49	-65.1	238	200	-1.5

TYPE SC 1 CALIBER 7.62 MM AVERAGE DENSITY 4.08 GRAMS/CC.

PROJ. WT 7.452 GRAMS PROJ. DIA. 7.62 MM IMPULSE 1.2 LB. SEC.

DRAG RDCR. WT. 0.000 GRAMS CHG. WT. 0.98 GRAMS SABOT WT. 0.000 GRAMS

TWIST RATE NA PCT. DRAG CHANGE / (DEG. YAW)**2 0.74

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	53.8	559	1164	0.0
0	0.00	0.00	53.6	559	1164	0.0
50	2.60	0.09	52.1	524	1024	-0.3
100	5.12	0.19	50.1	490	893	-0.7
150	7.53	0.30	47.9	457	779	-1.0
200	9.82	0.41	45.3	426	675	-1.3
250	11.98	0.53	42.4	395	582	-1.5
300	13.98	0.66	38.9	366	500	-1.7
350	15.80	0.81	34.9	340	432	-1.8
400	17.40	0.96	30.3	320	382	-1.6
450	18.77	1.12	25.2	304	345	-1.4
500	19.87	1.29	19.5	290	314	-1.4
550	20.68	1.46	13.3	277	287	-1.4
600	21.17	1.65	6.5	265	262	-1.5
650	21.32	1.84	-1.0	253	239	-1.6
700	21.08	2.04	-9.1	242	218	-1.6
750	20.42	2.25	-18.1	231	198	-1.7
800	19.29	2.46	-27.9	220	181	-1.7
850	17.67	2.71	-38.7	210	165	-1.7
900	15.49	2.95	-50.6	201	150	-1.8
950	12.69	3.21	-63.6	191	137	-1.8
1000	9.24	3.48	-77.9	183	124	-1.8
1050	5.02	3.76	-93.6	174	113	-1.8
1100	0.00	4.05	-110.8	166	103	-1.8

DRAG RDCR. WT. 0.389 GRAMS PCT. DRAG CHANGE / (DEG. YAW)**2 2.12

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	23.9	559	1164	0.0
0	0.00	0.00	23.9	559	1164	0.0
50	1.13	0.09	22.2	549	1120	-0.1
100	2.18	0.18	20.6	538	1076	-0.2
150	3.15	0.28	18.8	528	1034	-0.3
200	4.03	0.37	17.0	518	994	-0.4
250	4.82	0.47	15.1	508	954	-0.5
300	5.51	0.57	13.1	498	916	-0.6
350	6.11	0.67	11.1	489	879	-0.7
400	6.60	0.77	8.9	479	843	-0.8
450	6.99	0.88	6.7	469	809	-0.8
500	7.26	0.99	4.4	460	775	-0.9
550	7.42	1.10	2.0	451	743	-1.0
600	7.46	1.21	-0.5	442	712	-1.1
650	7.38	1.32	-3.1	433	682	-1.2
700	7.16	1.44	-5.9	424	652	-1.2
750	6.81	1.56	-8.7	415	624	-1.3
800	6.31	1.68	-11.7	406	597	-1.4
850	5.67	1.80	-14.8	398	571	-1.4
900	4.88	1.93	-18.0	389	546	-1.5
950	3.92	2.06	-21.4	381	522	-1.6
1000	2.79	2.19	-24.9	373	499	-1.6
1050	1.49	2.33	-28.5	365	476	-1.7
1100	0.00	2.47	-32.4	357	455	-1.7

TYPE SC 1 CALIBER 7.62 MM AVERAGE DENSITY 4.08 GRAMS/CC.
PROJ. WT 7.452 GRAMS PROJ. DIA. 7.62 MM IMPULSE 2.1 LB. SEC.
DRAG RDCR. WT. 0.000 GRAMS CHG. WT. 2.41 GRAMS SABOT WT. 0.000 GRAMS
TWIST RATE NA PCT. DRAG CHANGE / (DEG. YAW)**2 0.74

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	19.8	872	2833	0.0
0	0.00	0.00	19.8	872	2833	0.0
50	0.96	0.06	19.1	835	2600	-0.4
100	1.88	0.12	18.4	799	2377	-0.7
150	2.76	0.18	17.5	762	2163	-1.1
200	3.60	0.25	16.6	725	1960	-1.5
250	4.39	0.32	15.6	689	1769	-1.8
300	5.14	0.40	14.5	653	1588	-2.2
350	5.82	0.48	13.3	617	1418	-2.5
400	6.45	0.56	11.9	581	1259	-2.9
450	6.99	0.65	10.3	546	1111	-3.2
500	7.46	0.74	8.5	512	975	-3.4
550	7.84	0.84	6.5	478	852	-3.7
600	8.10	0.95	4.1	446	740	-3.9
650	8.25	1.07	1.4	415	640	-4.1
700	8.25	1.19	-1.7	385	552	-4.2
750	8.08	1.33	-5.3	357	474	-4.3
800	7.73	1.47	-9.6	333	412	-4.1
850	7.15	1.63	-14.4	314	368	-3.5
900	6.32	1.79	-19.7	299	334	-2.9
950	5.22	1.96	-25.5	286	305	-2.7
1000	3.82	2.14	-31.9	273	278	-2.6
1050	2.09	2.33	-38.9	261	254	-2.6
1100	0.00	2.53	-46.6	249	232	-2.6

DRAG RDCR. WT. 0.389 GRAMS PCT. DRAG CHANGE / (DEG. YAW)**2 2.12

RANGE M	HEIGHT M	TOF SEC	ANG OF FALL MILS	V M/SEC	ENERGY JOULES	D(V)/D(PCT. DRAG) M/SEC/PCT
0	0.00	0.00	9.1	872	2833	0.0
0	0.00	0.00	9.1	872	2833	0.0
50	0.47	0.06	8.5	859	2747	-0.1
100	0.83	0.12	7.8	846	2663	-0.3
150	1.20	0.18	7.1	833	2581	-0.4
200	1.53	0.24	6.4	821	2500	-0.5
250	1.82	0.30	5.6	808	2421	-0.6
300	2.08	0.36	4.8	796	2344	-0.8
350	2.30	0.42	4.0	783	2268	-0.9
400	2.48	0.49	3.2	771	2194	-1.0
450	2.62	0.55	2.3	758	2122	-1.1
500	2.72	0.62	1.5	746	2052	-1.2
550	2.77	0.69	0.5	734	1983	-1.3
600	2.78	0.76	-0.4	722	1916	-1.4
650	2.74	0.83	-1.4	710	1851	-1.5
700	2.65	0.90	-2.4	698	1787	-1.7
750	2.51	0.97	-3.4	686	1725	-1.8
800	2.33	1.04	-4.5	675	1665	-1.9
850	2.08	1.12	-5.6	663	1606	-2.0
900	1.79	1.19	-6.8	651	1548	-2.1
950	1.43	1.27	-8.0	640	1492	-2.2
1000	1.02	1.35	-9.2	629	1437	-2.3
1050	0.54	1.43	-10.5	617	1384	-2.4
1100	0.00	1.51	-11.8	606	1332	-2.5

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APPENDIX A

INTERIOR BALLISTICS

I. INTRODUCTION

Interior ballistics generally is concerned with predicting the pressures in guns necessary to achieve particular velocities for desired weight projectiles. Many reports have been written describing techniques for these computations, and confidence has been obtained by experimental verification. For small arms systems this predictive capability is not so clear cut; uncertainties of initial burning surfaces, composition and burning rates allow limited predictions to be made. Many empirical relationships, however, are in use that allow interpolations between known results to be used. In this appendix some semi-empirical relationships will be described for finding the velocity and charge associated with a given impulse level for a particular projected weight.

It is to be noted that certain constraints normally considered in small arms have not as yet been mentioned. These include maximum pressures, muzzle blast, noise, erosion of the gun tube, and size and weight of the case.

If we consider a rifle as a weapon used for years, we find that compromises have been made. The pressures are low enough to have a man-portable barrel, muzzle blast and noise are not objectionable, and the useful life of the barrel is expected to decrease (because of rapid fire), hence, replaceable barrels. Size and weight of cartridge must also be compatible to the system. The pressure can be reduced by lengthening the gun (for a given velocity), or contained by a better steel, with a higher yield strength for the same weight gun. Muzzle blast and noise can be reduced by muzzle devices, and erosion of the gun tube can be controlled by lining the barrel, use of additives, or cooler propellants. The size of cartridge can be reduced by compacting or molding the charge (hence, lower charge volume), or the weight of the case reduced by going to a lighter metal or even utilizing the caseless concept. It is not intended to rationalize the implied interior ballistics, but to see what

is necessary for our main constraints, and maybe worry later if we are outside the normal rifle for certain situations.

With the above put on the shelf, but not forgotten, let us detail the procedures used in this study.

II. DETERMINATION OF VELOCITY AND CHARGE

The present study required the determination of velocities that a variety of projectiles would attain with certain assigned recoil momenta. In the past few years recoil momenta have been measured for many small arms projectiles, and the results were used to establish semi-empirical relationships. Since then the predictions of recoil momenta for several small arms system studies have been verified when actual firings were conducted.

The basic equations follow:

$$J = \frac{MV}{g(7000)} + 0.023\ (1 - \varepsilon)C \qquad \text{(A-1)}$$

where J = recoil momentum (pound-seconds)
M = weight of projectile (grains)
V = velocity (ft/sec)
g = gravity constant (ft/sec^2)
C = charged weight (grains)
ε = ballistic efficiency

$$\varepsilon = \frac{\frac{MV^2}{2g}}{\frac{FC}{\gamma - 1}} \qquad \text{(A-2)}$$

where F = specific force of propellant (ft-lbs/lb)
γ = ratio of specific heat of propellant gas

Equation (A-2) was simplified for the many situations by assuming a specific force of 360,000 ft-lbs/lb and a gamma of 1.25; hence

$$\varepsilon = \frac{2.48 \times 10^{-10}}{0.023} \frac{MV^2}{C} \qquad \text{(A-3)}$$

Furthermore, in BRL Technical Note No. 1557 by Carroll and Carn, a plot of velocity versus projectile weight to charge weight ratio is shown and was used by Carroll to determine (see Figure A-1):

$$\frac{M}{C} = \frac{11189 - 1.64V}{V - 758} \qquad \text{(A-4)}$$

Equation (A-1) was then simplified to

$$\frac{J}{M} = 2.48 \times 10^{-10} V^2 + 4.45 \times 10^{-6} V - 0.014 + \frac{85.4}{6823 - V} \qquad \text{(A-5)}$$

For the various recoil momentum and projected weights (weight of projectile and sabot), Equation (A-5) was solved to determine the velocity in this study. Note that the charge weight is not a required input to solve Equation (A-5).

The charge weight was determined from Equation (A-4), which is valid only between 1000 to 6000 ft/sec and, indeed, calculates negative charges below 758 ft/sec and above 6823 ft/sec. Few rounds in this study had velocities higher than 6000 ft/sec, and a linear relationship was used for determining the charge weight for low velocity rounds (i.e., the charge at V_1 equals charge weight at 1000 ft/sec × ratio $V_1/1000$). Usually at the low velocities additional propellant would be needed to ensure uniformity, and the amounts are small compared to the weight of the projectile.

The original plan for this study expected to limit the velocities to between 2000 and 5000 ft/sec. Within these limits the above techniques should be adequate to calculate recoil momenta. The implied error due to incorrect charge weight at low velocity is very small, since the recoil momentum is then almost equal to projectile momentum. At the high velocity limit we have no experimental data but believe the method to be sufficiently accurate to enable relative comparison of the few rounds to be made.

III. SABOT WEIGHT DETERMINATION

In order to determine the weight of the sabot required for the sub-caliber, coned, and coned flared projectiles, the following equation was used:

$$S = K\rho \frac{\pi}{4} (D^2 - d^2)D$$

where

S = sabot weight

K = constant

ρ = density of sabot material

D = diameter of bore

d = average diameter of projectile for the rear two caliber lengths

The value of K accounts for the weight of the pusher plate, and thus the density and length of the pusher plate are not required.

Using weights of existing sabots from several systems, K was assumed to be 4 and ρ 252 grains/inch^3 (~ 1 gm/cm^3).

Thus,

$S = 792(D^2 - d^2)D$ (Gives S in grains when D is in inches)

$S = 51.3(D^2 - d^2)D$ (Gives S in grams when D is in inches)

$S = 3.13 \times 10^{-3}(D^2 - d^2)D$ (Gives S in grams when D is in millimeters)

There are not many available rounds to compare calculated and actual sabot weights, but several examples follow:

AAI SPIW:

$S = 792\ (0.22^2 - 0.1^2)\ 0.22 = 6.7$ grains

Actual 5-6 grains

BRL 3 Flechette Pusher - Caliber 0.35:

$S = 792\ (0.35^2 - 3(0.1)^2)\ 0.35 = 25.6$ grains

Actual 25-30 grains

TRW 25mm Sabot Round

$S = 792\ (0.984^2 - 0.590^2)\ 0.984 = 485$ grains

Actual 610 grains

105mm APDS

$S = 792\ (4.13^2 - 2.5^2)\ 4.13 = 35{,}300$ grains

Actual 21,560 grains

IV. TRACER WEIGHT DETERMINATION

The weight assigned to the drag-reducing tracer material was based on the 7.62-caliber (M62), i.e., 0.39 grams, and for the other calibers the weight was scaled as the cube of the caliber.

	Tracer Weight
5.56 caliber	0.151 grams
6.50 caliber	0.241 grams
7.62 caliber	0.389 grams

For the subcaliber projectile (SC1) the assumed weight was 0.32 grams for the caliber 7.62 and again scaled as the cube of the caliber. The difference in weight, for the 7.62, was required by the design of the projectile where the tracer weight was included in the balance for stability.

All tracers were assumed to burn for three seconds, and weight was lost proportional to time.

V. DESK CALCULATION METHODS

For the convenience of the user, several graphs and nomographs are presented to enable rapid estimates to be made for systems which are not considered in the basic report. The reader is cautioned, however, in using this section, since the accurate results are found by using Equations (A-1) and (A-2) in this appendix. The nomographs are to be used only for their simplicity and when insufficient data are available. For rigorous solution there might be errors in values below 2000 ft/sec and above 5000 ft/sec.

Figure A-2 is a simple nomograph showing the relationship of impulse, muzzle velocity, and projected weight. By laying a straight edge on two known quantities, one can read the third (from Equation (A-5)).

Figure A-3, while similar to Figure A-2, is a somewhat more complicated nomograph. Dual values are shown--grams and grains, meters per second and feet per second, pound-seconds and newton-seconds--to aid in conversion from conventional to cgs units. Also, on the right side, an auxiliary nomograph allows computation of sabot weight for a given projectile weight.

Figure A-4 is a nomograph that relates the energy in joules, as a function of projectile weight and velocity. Note that this can be used anywhere in the trajectory (or range) where the velocity can be estimated. Again the key is simple. By laying a straight edge on two known values, one can read the third. This nomograph solves $E = \frac{1}{2}MV^2$.

Figure A-5 shows graphically how the impulse increases with projectile velocity, very much more so than projectile momentum alone, which is linear with velocity.

Figure A-6 is a graph which shows the relationship of velocity and projected weight for the three impulse levels in the basic study. It is useful for interpolation for special cases.

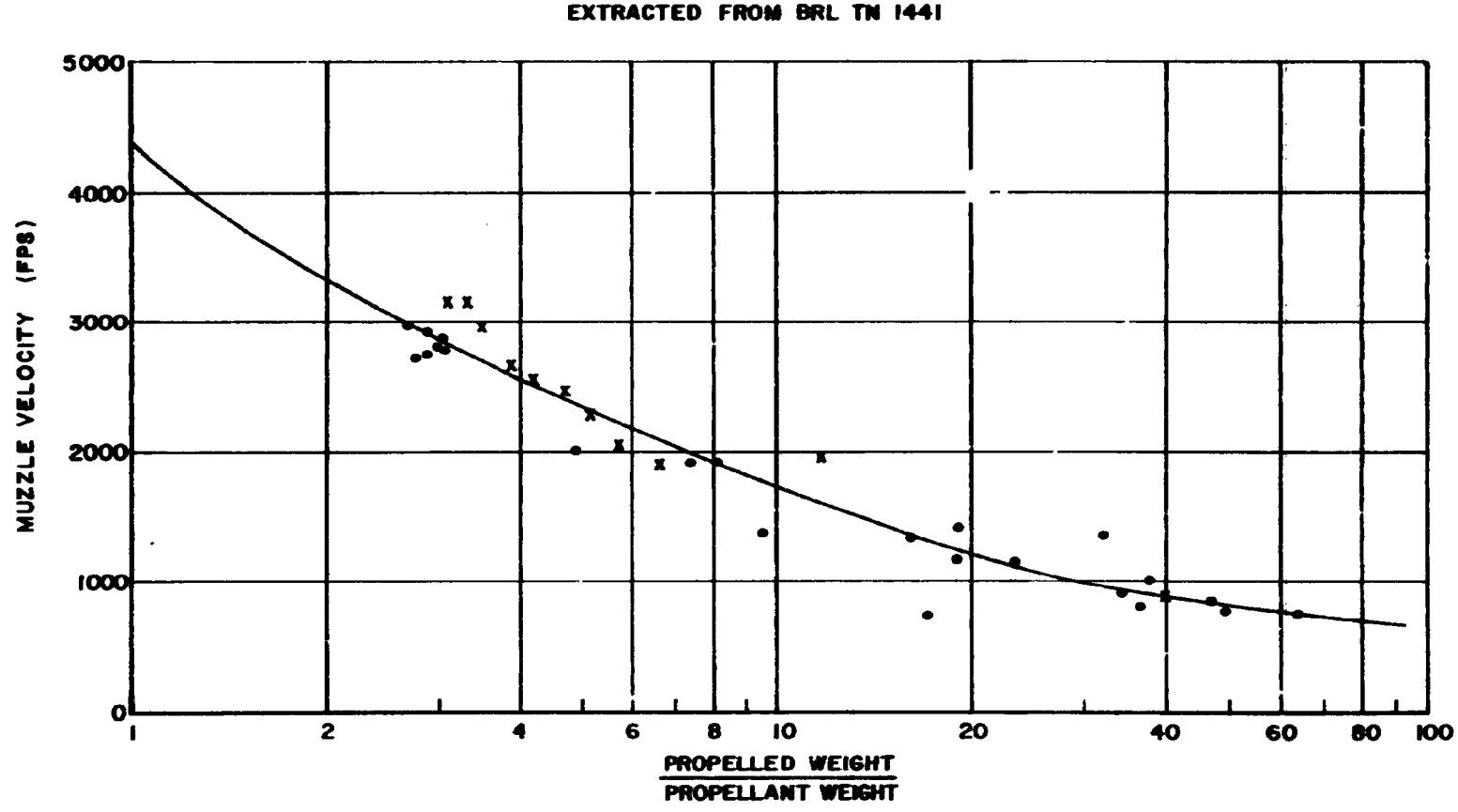

Figure A1 $\frac{\text{Propelled Weight}}{\text{Propellant Weight}}$ vs Muzzle Velocity.

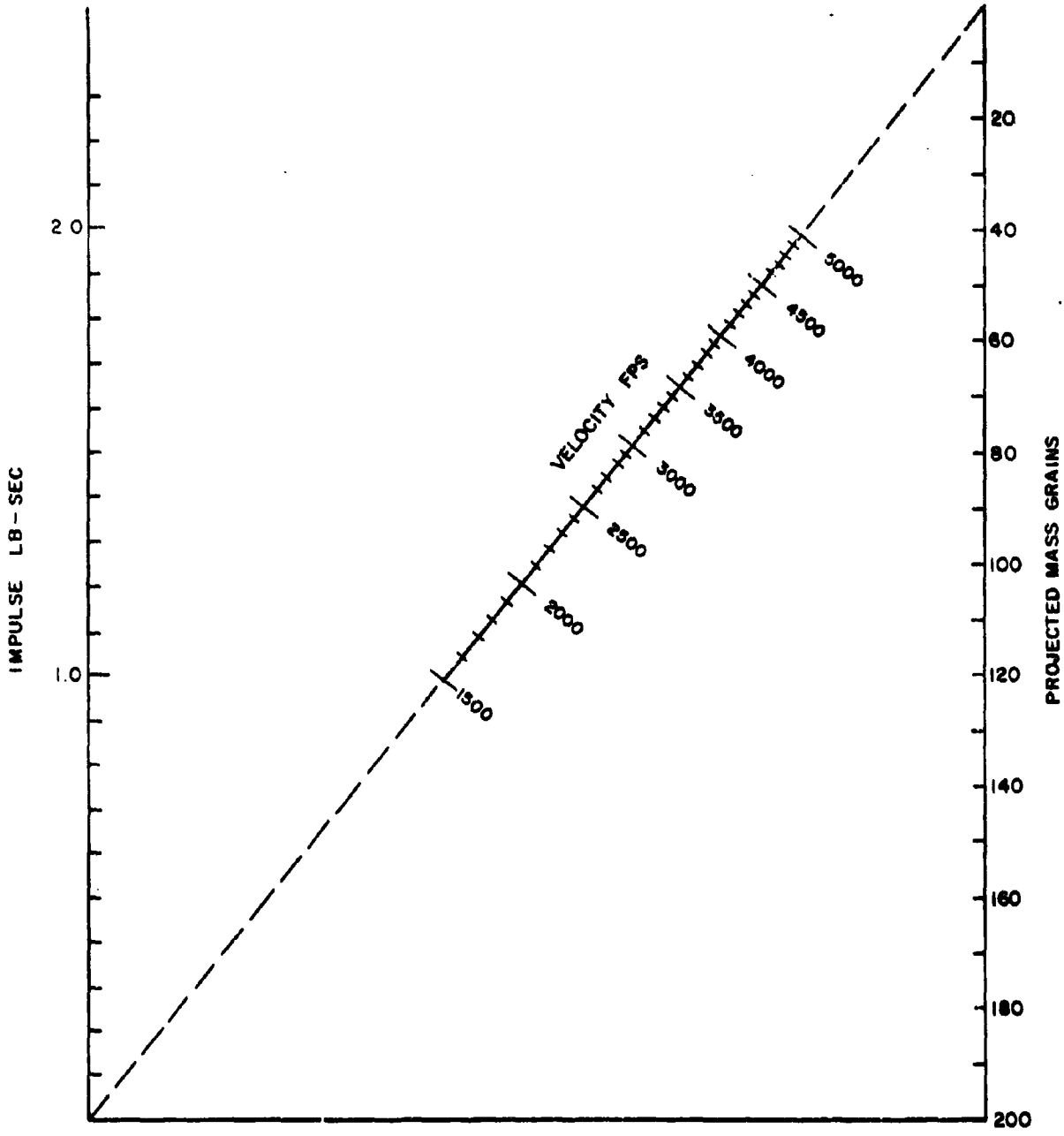

Figure A2 Impulse–Velocity Projectile Weight
(Nomograph)

Figure A3. (1) Nomograph – Projected Weight as a Function of Sabot Fraction of Projectile Weight.

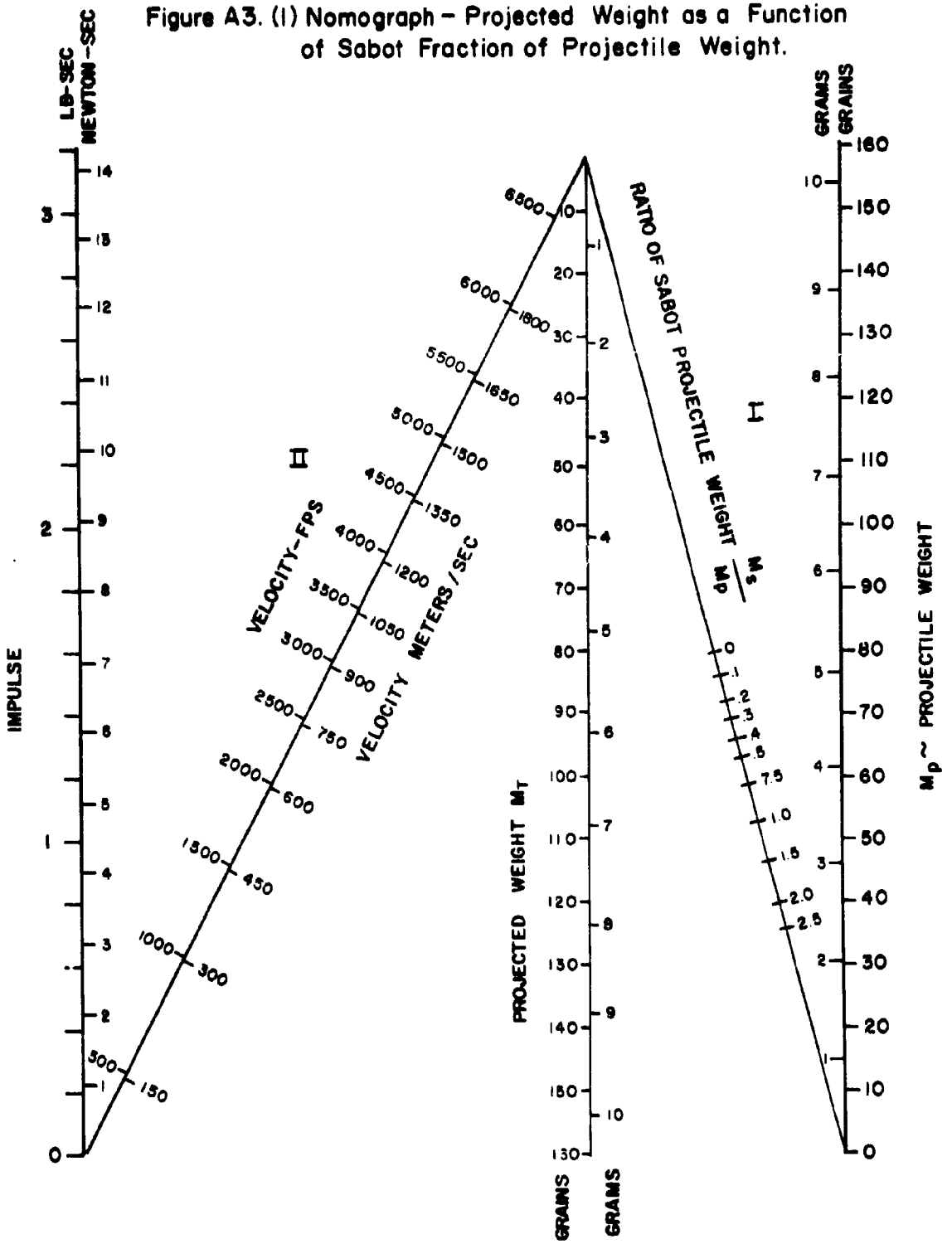

Figure A3. (2) Nomograph – Impulse as a Function of Velocity and Projected Weight.

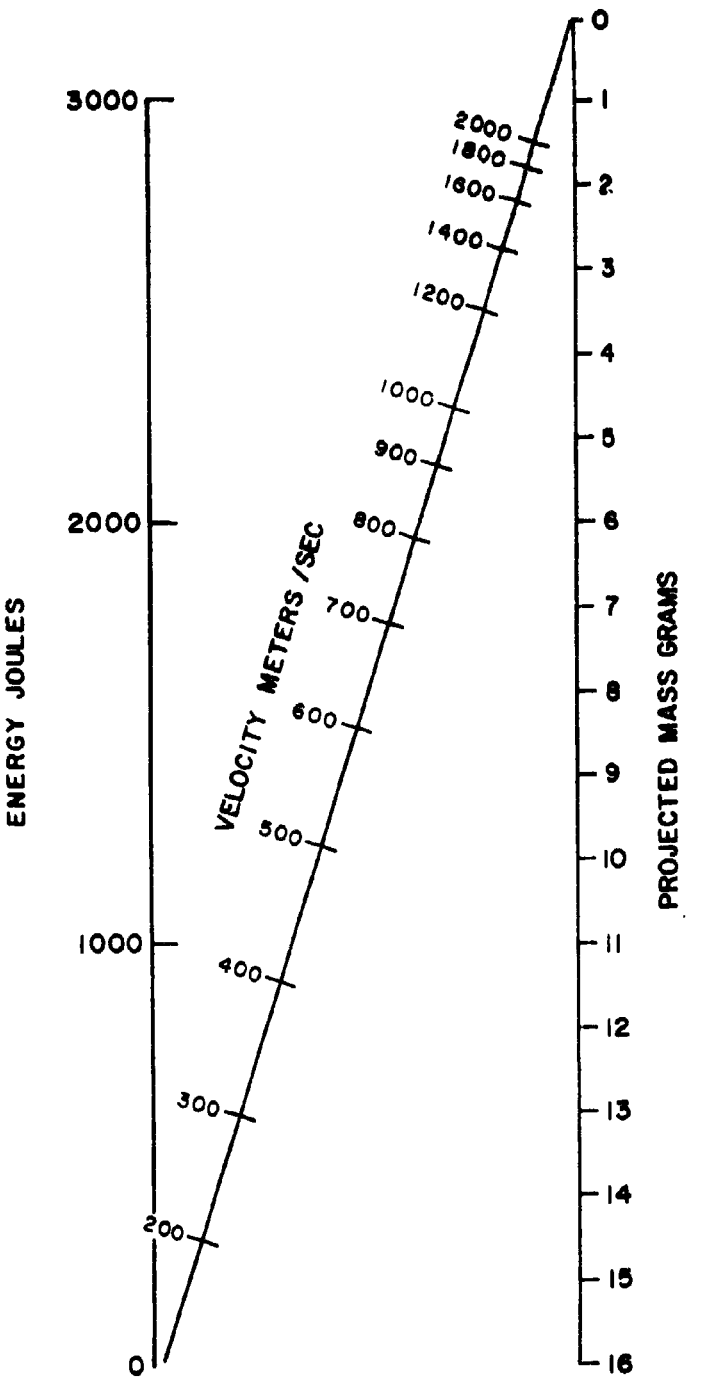

Figure A4. Energy Function of Velocity & Projectile Weight.
(Nomograph)

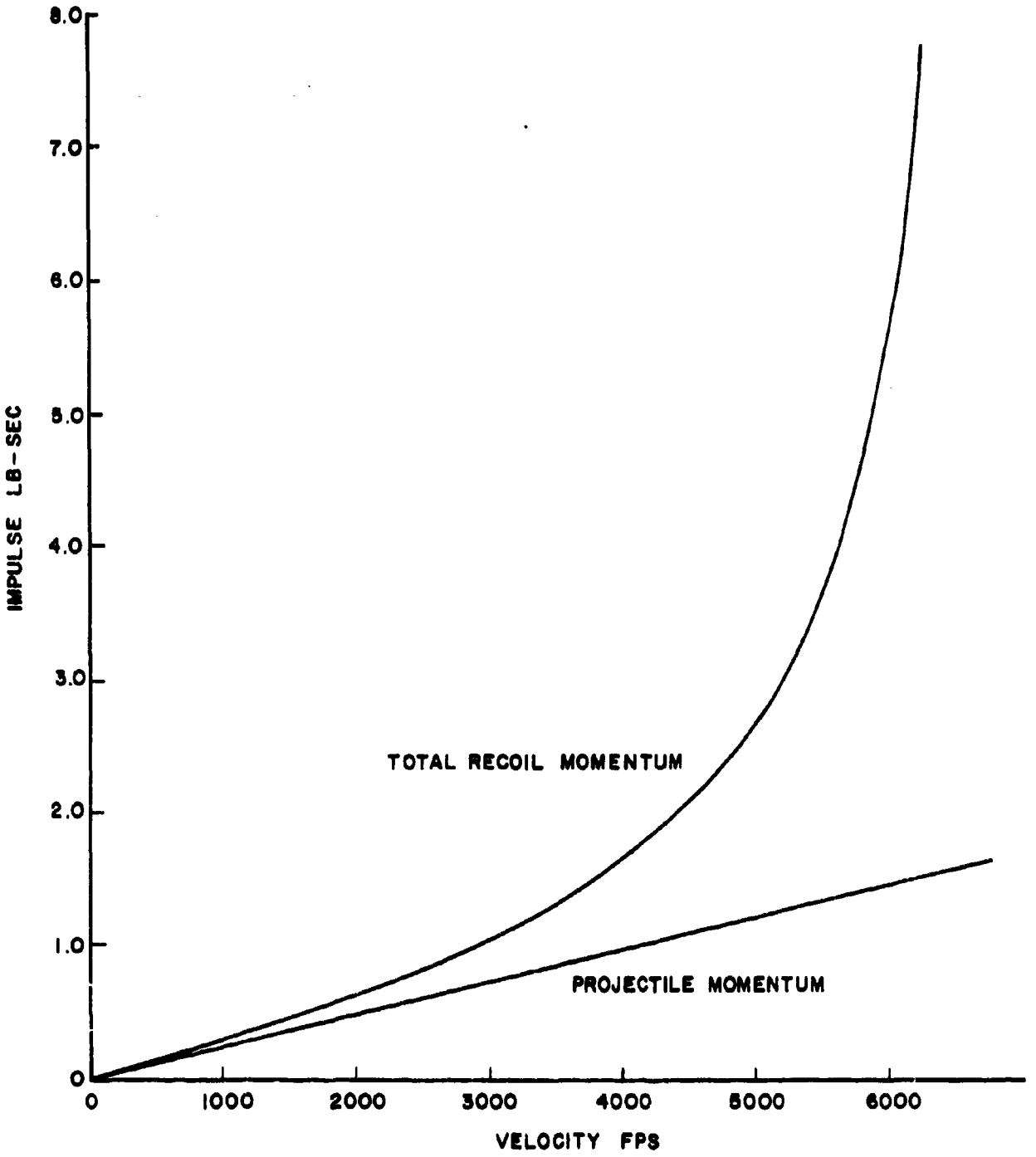

Figure A5 Recoil and Projectile Momentum vs Velocity for 55 Grain (~ 3.56 Grams) Projectile.

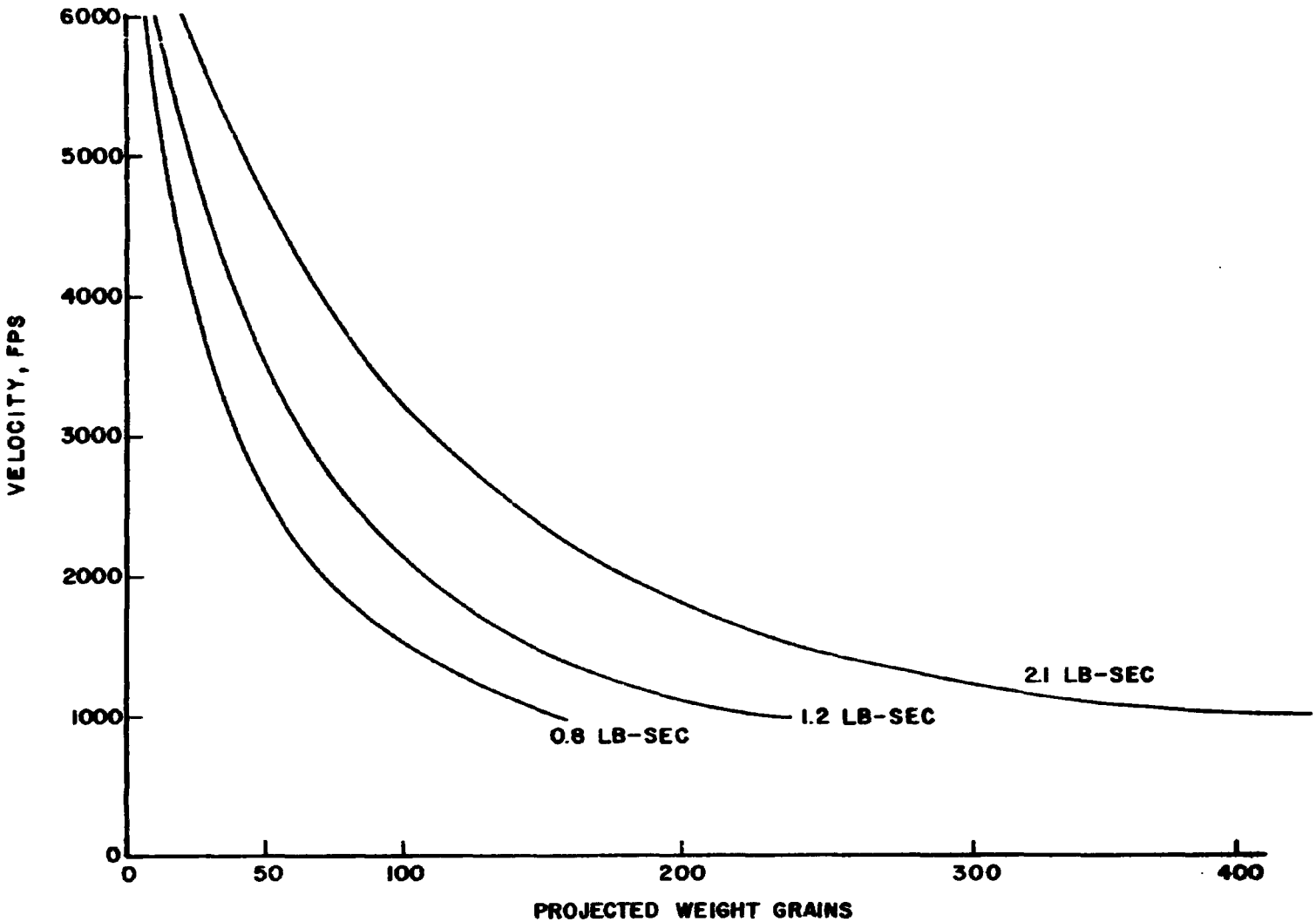

Figure A6 Projected Weight vs Velocity for Different Impulse Levels.

APPENDIX B

EXTERIOR BALLISTICS

I. INTRODUCTION

The application of exterior ballistics in design work is ideally to select an external configuration which will (1) have stable flight and (2) have a minimum (or acceptably low) retardation due to drag. These two criteria have to be attained within the framework of constraints dictated by the interior ballistics (the projecting of the shape) and the terminal ballistics (the production of the desired effect).

With the above in mind, the computations chronologically followed the scheme of first determining the aerodynamic coefficients for the presented shapes and then, with the given spectrum of mean densities, bore diameters and muzzle velocities corresponding to the impulse levels, trajectories were computed to determine the effect of drag on the projectile's flight.

II. BASIS OF COMPUTATIONS

A. Aerodynamic Coefficients

The aerodynamic computations were made using a model involving the Van Dyke hybrid method[1*] for the potential flow, the Van Driest method[2] for the compressible turbulent boundary layer, and the Chapman-Sternberg model[3,4] for the base pressure. The overall model, as used, is limited to pointed projectiles that have reasonably large L/D ratios and high enough velocities so that the flow is supersonic over all parts of the projectile, yet not so high that significant entropy losses occur in the shock wave system. The program yields the drag coefficient, C_D, the components of the drag--skin friction, base drag, and wave drag; the change in drag due to yaw; the normal force and center of pressure; and, given the center of mass position, the static moment. These are obtained under

*References are listed at the end of the Appendix (page 658).

the assumption that the yaw is small. The restriction to a relatively thin, pointed body in a purely supersonic flow is basic to the method. The assumption of a turbulent boundary layer is not; a laminar one could have been assumed with essentially equal ease. The turbulent one is obviously proper for shell and the larger bullets; the smaller bullets could, however, be expected to have laminar layers over about one third of the body, and some flechettes have had laminar flow over most of the body. Excepting the latter case, the turbulent boundary layer assumption seems to give the better result, even if a considerable portion of the flow is laminar. This can in part be ascribed to the following: (1) The relatively low frictional drag level of the laminar applied to the whole projectile leads to a more serious underestimate if part of the full diameter after section is turbulent than the overestimate made by assuming full turbulent flow if part of the nose is laminar. (2) The computation is basically for a smooth body; most real projectiles have rings, bumps, and engraving. The thicker turbulent layers partially immerse these and reduce the added increment of drag, the thin laminar layer does not, and there can be larger incremental drags. Admittedly, the latter effect is fortuitous in the sense that two slightly incorrect assumptions tend to cancel. The assumption that the bullet is pointed has appeared to produce little error for most cases of military bullets that have been studied.

In order to show the general level to which the program reproduces experimental results, and also to show the differences that can be expected to occur between idealized cases and actual bullet data, the computed drag and several experimental drag curves are given in Figure B-1. The computed curve is for an idealized version of the preproduction 5.56mm M193, the CB-1. The ogive has been pointed, the intersections of the ogive and the boattail with the body have been made clean, and no cannelure is used. The first measured case is for a bronze model of the idealized shape insofar as the outer contour was concerned, but it was engraved. Although the test model had a short section of laminar flow, the agreement is very good. The drag curve for a production M193

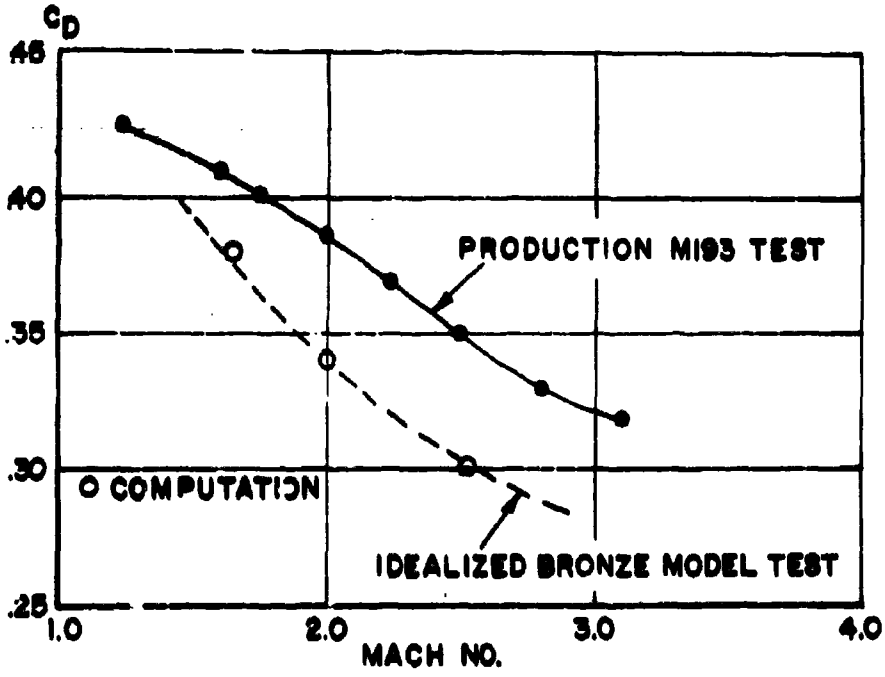

Figure B-1. Comparison of Computed and Measured Drag Coefficients for Undeformed Projectiles and Ball Projectiles

is also given and it is considerably higher. Most of this difference can be attributed to differences between the flight shape and the drawing shape for this relatively soft bullet. Larger, or harder, bullets have yielded differences that were only about five percent higher than that of the idealized shape. Thus it is apparent that a mixture of real and computed data in the study would have yielded biased shape comparisons.

To some degree the flow computation used recognizes violations of the assumptions during the computing process and is self limiting. For the blunter projectiles the valid region can be as small as from Mach 1.4 to slightly over Mach 2, while for the longer ones in the study it ran from just over Mach 1 to Mach 6 and covered the entire range of interest. In those cases where the computation did not cover the range of supersonic interest, the computed curve was continued using the trend of experimental data for similar projectiles. Although subsonic and transonic speeds were not considered as being very relevant to the basic

study, some computed cases used these regions and the same continuation procedure was used. The supersonic extension probably does not influence the realism of the results. Transonic flows are sensitive to the details of the projectile design, and the absolute drag levels are probably more poorly predicted.

B. Tracer Assumption

The assumption of the tracer effect was based on the suggestive behavior of some tests on 20mm, 7.62mm, and 5.56mm projectiles. Characteristically the total drag level of the projectiles fired with functioning tracer was from 20 to 30 percent lower than that for those fired without tracer. The effect varied with Mach number, yielding less difference at the higher speeds. This is also the trend of the drag due to base under-pressure, or base drag. This Mach number trend is shown in Figure B-2 for a 20mm shell with and without tracer operation. Comparing the computed base drag with the actual total drag results indicated that an effective base drag reduction of 50 to 70 percent fitted the results best.

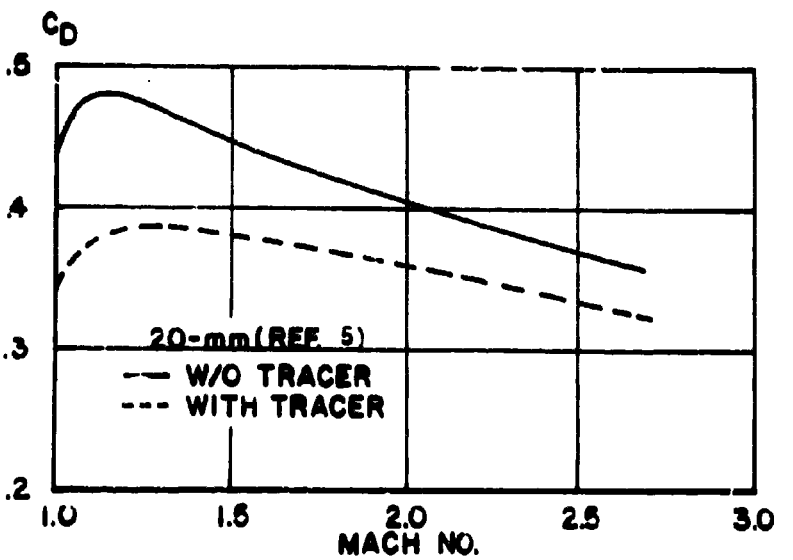

Figure B-2. Drag Coefficient of 20mm Shell With and Without Tracer as a Function of Mach Number

In the case of the 7.62mm tracer round, it was possible to measure the drag changes as a function of range as the tracer element came into operation. At least briefly the increment equaled 100 percent of the computed base drag for this bullet. The drag coefficient history is given in Figure B-3.

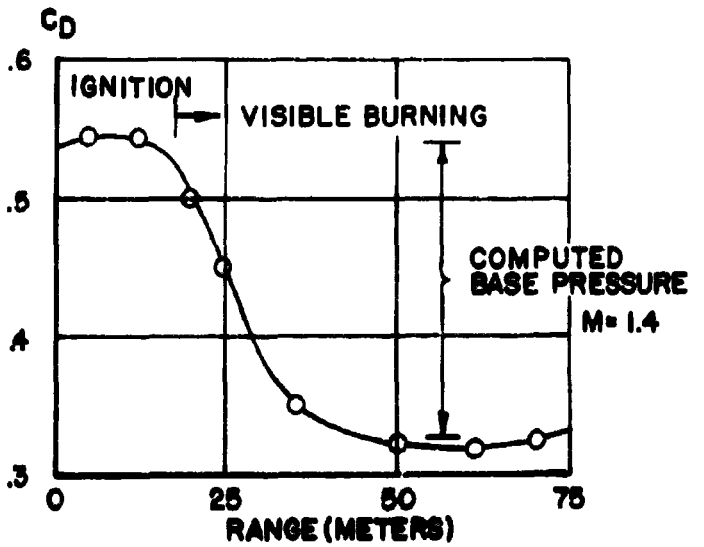

Figure B-3. Drag Coefficient Variation during Tracer Initiation

It has also been noted that the effect is less pronounced with boattailed projectiles, and this is consistent with the assumption that there is, primarily, a modification of the base drag. Testing of missile configurations has indicated that heat or mass addition to the base region can produce favorable base pressure changes, as can heat addition to the boundary layer; it should, however, be noted that the results are not always favorable. The tracer does add both heat and mass to the base region. Attempts have been made to measure the momentum thrust of the tracer, and the thrust levels have appeared too small to produce the observed effects.

The tracer effect, for the purpose of these computations, was assumed to be entirely a base pressure change. It was assumed that the base pressure was raised to one atmosphere, thus effectively canceling

the base drag. This is admittedly a very convenient assumption for the computation, but it is also only slightly more optimistic than the limited experimental results. Therefore, even if the mechanism is not precisely the assumed one, the results should not be too misleading. The nature of the assumption, that it is a base pressure effect, has a predictable result on the computations and this should be noted in case future evidence suggests a change in the assumption. The present assumption must favor those configurations with high base drag components over those with smaller ones. To the degree that the assumption is in error or incomplete the results would be biased similarly. For example, an alternate suggestion that the tracer acted as a pure rocket, essentially a momentum thrust, would yield the result that the tracer effect was primarily independent of configuration, a quite different result from the present one.

C. Stability Considerations

The stabilizability of the projectile, either gyroscopic or static, is not directly considered by the trajectory computation used; it assumes that the projectile flies at essentially zero yaw and, hence, that it is quite stable. The aerodynamics of the shape and the inertial properties of the projectile influence the stability considerations and hence it is impractical to consider the general stability problems for a given shape because of the large number of possible permutations. In some cases, such as the conventional bullet types (CB) and the artillery shapes (AR), it might be anticipated that gyroscopic stabilization of an essentially homogeneous projectile is a probable case and hence that the spin level necessary to yield a particular level of gyroscopic stability factor has directly useful meaning, and this value is provided. In other cases it appeared more probable that multimetal construction would probably be used either (1) to move the center of mass position and change the moments of inertia so that the projectile could be stabilized with a reasonable amount of spin, or (2) to move the center of mass position far enough forward so that the projectile would be statically stable, or stable without spin. Thus, in the cases of the cones, the cone-cylinders, and the cone-flares, with homogeneous center of mass positions,

the spin needed to obtain gyroscopic stability would be impractical in the rifle role and hence is not printed out. If a given shape requires a spin level of one turn in four calibers of travel for stabilization, then it is obviously a greater problem than one that needs only a twist of one turn in six calibers of travel. In those cases where prediction of the spin level to give gyroscopic stability would involve the extrapolated or estimated static moment data in the subsonic and transonic region, no value was given. First, this is beyond the rifle role contemplated. Second, the results could hinge on the cruder results of the assumptions used in these cases.

The projectile is considered to be statically stable if the center of pressure of the normal force is behind the center of mass. If the center of mass position is ahead of the center of pressure position, as is the case of most conventional bullets, the projectile must be spun to provide stability. For the CB and the AR types, the spin level to yield a gyroscopic stability factor of 1.4 is printed out for those cases with Mach numbers above Mach one. For the finned flechette (FL), the fins move the center of pressure behind the center of mass, and the projectile is known to be statically stable. For the remaining cases, C, CC, and CF, the center of pressure is ahead of the homogeneous center of mass point. The aerodynamic data indicate the center of pressure point and hence the degree to which the mass center must be moved to stabilize the projectile statically. Although the possibilities are too numerous to consider, the possibility of shifting the c.m. part way and changing the moments of inertia so that the projectile can be spin-stabilized should not be ignored. The reference level of 1.4 for the stability factor is probably adequate for most ground-to-ground roles but is not necessarily sufficient for air-to-ground roles. Comparison of the indicated twist level required with the range in current use, from as low as one turn in 60 calibers for some rifles to one turn in 18 calibers for tank cannon, assists in placing the computed cases in perspective. The tables, it should be noted, give the twist values per inch, however, as is usual for small arms.

D. Trajectory Model

The trajectory computations were based on a point-mass model; only projectile mass, drag, gravity, the angle of launch, and the muzzle velocity are inputs. The projectile is implicitly assumed to be flying in a stable fashion at small yaw. The equations used in generating the data are given below:

$$\dot{\underset{\rightarrow}{V}} = \frac{1}{2}\frac{\rho S}{m} C_D V \underset{\rightarrow}{V} - \underset{\rightarrow}{g},$$

where

$\underset{\rightarrow}{V}$ = velocity vector of the projectile

$V = |\underset{\rightarrow}{V}|$

$\dot{\underset{\rightarrow}{V}} = d(\underset{\rightarrow}{V})/dt$

ρ = atmospheric density (ICAO Standard - 1962).

The base level for the computations was essentially sea level at 45° North Latitude. For the tracer trajectories, the assumption was made that

$$m = m_o - \frac{m_{tracer}}{3} t \qquad \text{for } t \leq 3 \text{ seconds}$$

$$m = m_o - m_{tracer} \qquad \text{for } t > 3 \text{ seconds}.$$

III. AERODYNAMIC PROPERTIES AND SOME BALLISTIC IMPLICATIONS

The aerodynamic information computed for the program, and estimates for those regions where it could not be computed, are given for each type on the beginning pages of the trajectory results. The nondimensional physical data that were computed, center of mass, volume, wetted area, and radii of gyration, are also given. These have a utility in their own right and can be used to determine the retardations and stability properties of other projectiles that have the same shape but not the same size or the same homogeneous inertial properties as those computed in the program. In the following, some relations will be given

for these computations. Within a reasonable range of sizes, the aerodynamic coefficients tabled are only slightly influenced by size, and these could be used up to 15mm caliber at least.

A. Stability Level

The tables also indicate the twist level necessary to give a stability factor of 1.4 for the various types and sizes in the computed net. This may be too low for some purposes, and possibly higher than desired in a few special cases. The stability factor, s_g, is given by

$$s_g = \frac{2I_x^2 \left(\frac{pd}{V}\right)^2}{\pi I_y \rho\, d^5 C_{M\alpha}} \qquad \text{(B-1)}$$

where (pd/V) is the spin in radians per caliber of travel or $(2\pi/n)$ where n is the twist in calibers per turn. For homogeneous projectiles of different sizes and inertial properties, only new values of the I_x, I_y, and d need be introduced in order to establish new stability factors or the required new spin levels to yield the original stability level. In the case of bimetallic projectiles the center of mass position can also change and the $C_{M\alpha}$ is a function of (c.m. - C_{PN}), where C_{PN} is the center of pressure of the normal force,

$$C_{M\alpha} = (\text{c.m.} - C_{PN})C_{N\alpha}, \qquad (2)$$

where c.m. and C_{PN} are measured from the nose of the projectile. This can also be used to treat the aerodynamically stable cases (those stable without spin) where the center of pressure must lie aft of the center of mass for stability, and $C_{M\alpha}$ is negative. The criterion in this case requires only the relative center of mass to center of pressure position and not the other inertial properties, as does the gyroscopic stability factor. The necessary margin cannot be specified simply for a range of conditions, but it is often considered that design margins less than about ten percent of length are a risk for computed cases.

B. Drag

The present program was concerned with supersonic projectiles, in the sense that they have the shape characteristics of usual supersonic designs. In the next several figures the C_D values for some of the projectiles are plotted against several variables to afford some insight into some of the trends that can be observed in the figures and tables of the main report. Supersonically, pointedness and length of head are important. In Figure B-4 the drag coefficients of some of the computed

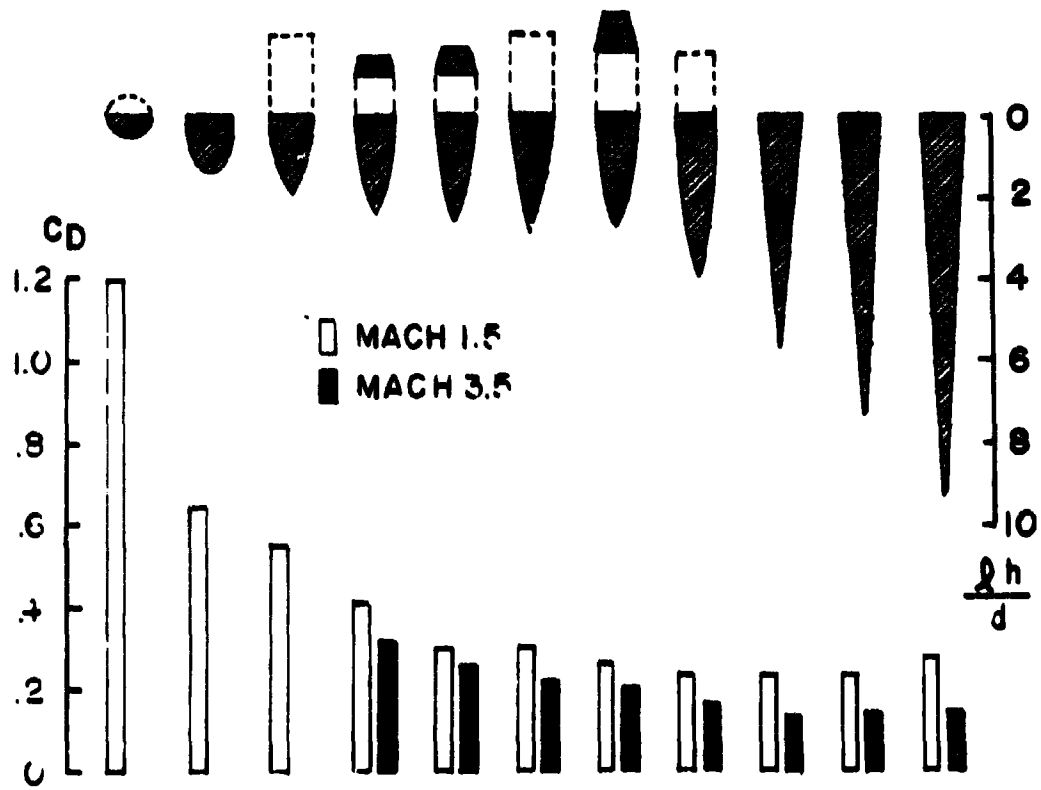

Figure B-4. General Trend of Drag as a Function of Head Length

configurations and of some bluntor shapes are plotted versus head length. The general trend is apparent in spite of the heterogeneous selection of

projectiles. There are large decreases in C_D with increased head length at the blunt end of the scale, but the variation is much weaker for head lengths greater than about three calibers. The trend is more distinct at the higher Mach numbers. Since the computed configurations are all in the middle to high L_h/D range, they are mostly in the relatively flat region of the curve. To show some other variations, the computed configuration data are presented at an enlarged scale in Figure B-5. The

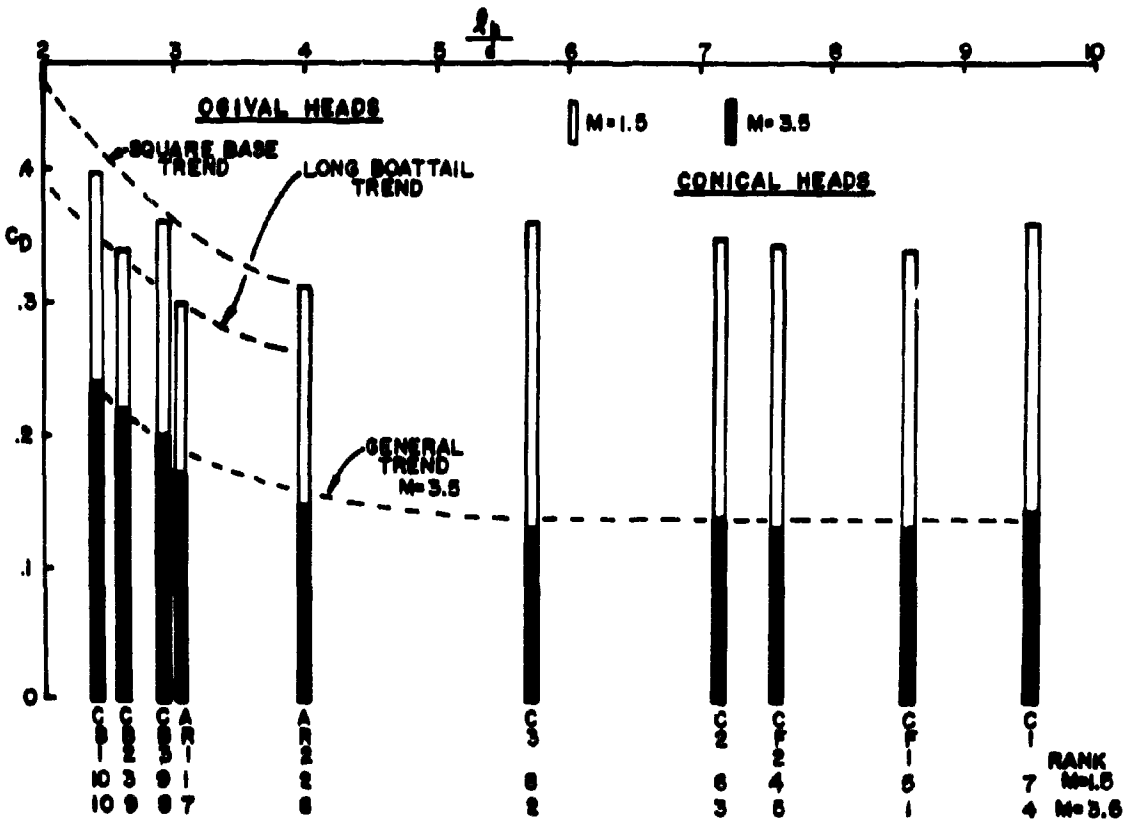

Figure B-5. Trend of Drag Coefficient as a Function of Head Length for the Computed Configurations

results are again plotted against head length and for Mach numbers of 1.5 and 3.5 and are also ranked from the lowest to the highest in drag level. At the lower Mach number the previous trend is recognizable only

at the lower L_h/D values, and other influences are more apparent. The boattailed projectiles are at a lower level and rank well even with shorter ogives, and the shape advantage of the ogive head over the cone is also visible. At the higher Mach numbers, however, the head-length trend reestablishes its dominance.

The general conclusions are: (1) For projectiles with flight Mach numbers of about two or less over most of the trajectory, and which have adequate head length, significant drag gains can be made by the use of optimum head shapes and boattails. (2) For projectiles that have considerably higher average Mach numbers, the head fineness ratio becomes the dominant factor.

The trade-off of boattailing for two cases, the AR-1 and AR-2, is shown in a different form in Figure B-6, and the effect of the assumed

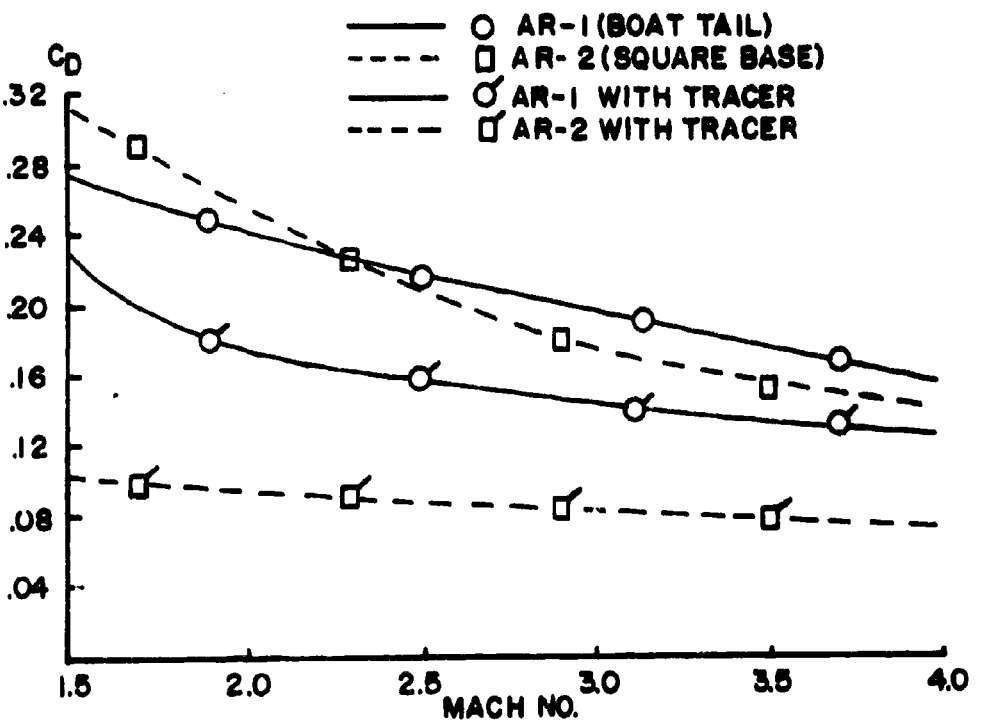

Figure B-6. Drag Coefficients of the Two AR Shapes With and Without Tracer

tracer-drag reducer is also included. In this example the drag coefficient is plotted as a function of Mach number. These two shapes were designed to have the same maximum range when fired from a cannon at a launch Mach number of three. The drag coefficient of the boattailed shape, AR-1, is the lower below about Mach 2.3, and would remain so for subsonic speeds also. Above this Mach number the square-based version with a longer ogive has the lower drag. Obviously an increase in the launch velocity requirement would lead to the square base being the better projectile, and a decrease would favor the boattail. The effect of the tracer assumption, since it reduces the base drag, lowers the drag of the square-base version dramatically, the boattailed version less so. At Mach 2 the AR-2 shows a decrease of 60 percent in the drag coefficient between the ball and tracer version, while the AR-1 shows a decrease of only 25 percent. The effect decreases absolutely as the Mach number increases, as it must from the assumption made, but the percentage improvements remain about the same.

The total drag has three components: the wave, or form drag, the skin friction drag, and the base drag. The variation of these components and their relative size for various types of projectiles explain most of the previous trends. The drag coefficient components for the various types are shown in Figure B-7 as a function of total length-to-diameter ratio for several Mach numbers. It can be seen that the frictional drag component is relatively small; it decreases with increasing Mach number and increases with length because it is related to wetted and not cross sectional area. Over the usual length range of bullets the variations in the frictional drag are not important, but it can become a major component for very long projectiles, such as flechettes. The square-based projectile's largest component is the base drag, more distinctly at Mach 1.5 than at 3.5. The form drag is considerably lower for the higher L_h/D designs. The picture reverses for the boattailed projectile. The direct pressures on the boattail add to the form drag, but the shape has a smaller base area and the base drag is less. This trade-off is Mach number sensitive.

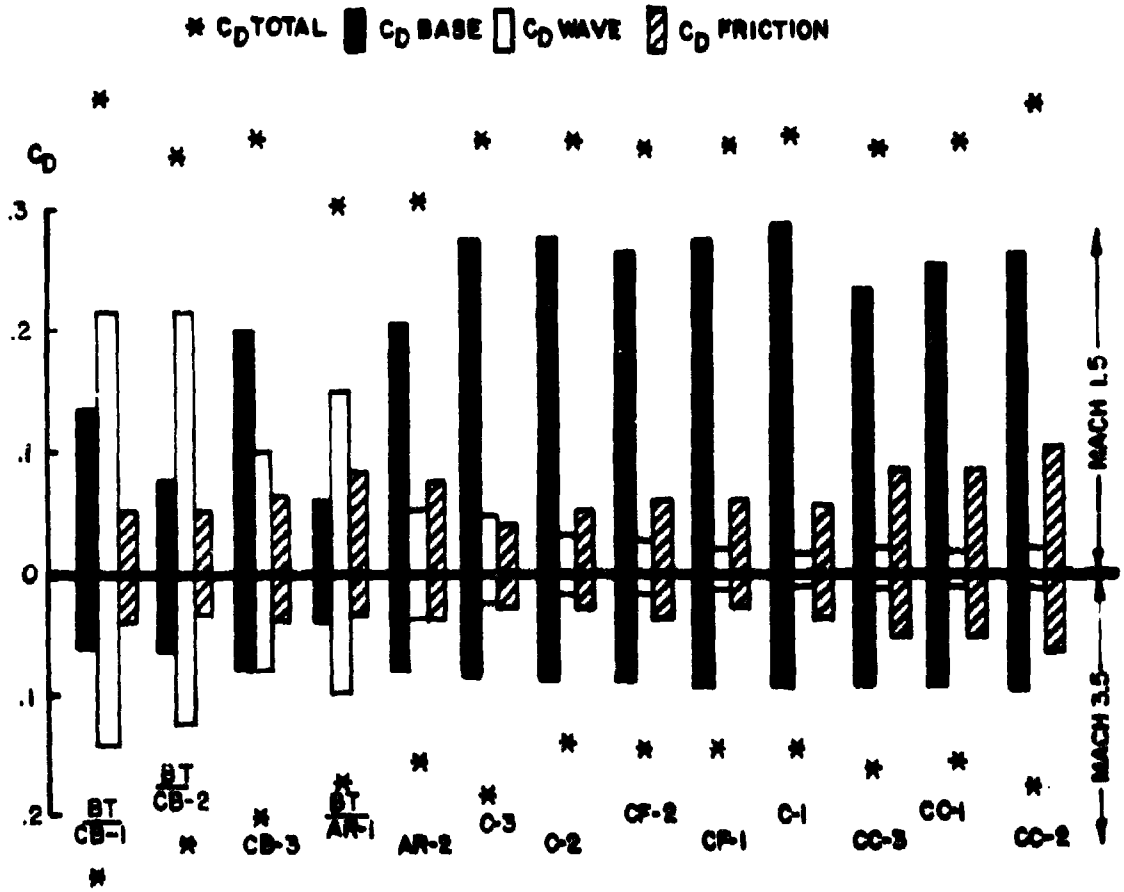

Figure B-7. Variation of the Drag Components as a Function of Length

C. Drag-to-Volume Ratio Considerations

The use of small projectiles, particularly if subcalibered, makes the concentration of more mass behind the smaller area desirable. Consider the previously given retardation factor in the dimensional form

$$\alpha = \frac{\rho \frac{\pi d^2}{4} C_D}{2\rho_p v d^3}, \qquad (3)$$

where ρ = air density, ρ_p = projectile density, d = diameter, and v = volume in cubic calibers.

It is apparent that if one just uses smaller and smaller projectiles of the same form and density the retardation in absolute units will vary as $(\frac{1}{d})$ and increase as the projectile becomes smaller; thus the ability to retain velocity becomes less. The above formula points at some possible ways around the problem; longer, cleaner projectiles improve the C_D/v ratio and higher density projectiles also can mitigate the trend. Some values of C_D/v were given in the main text, page 24, and an expanded version is given in Figure B-8. It is seen that for the shorter projectiles with relatively high C_D values impressive gains are possible by

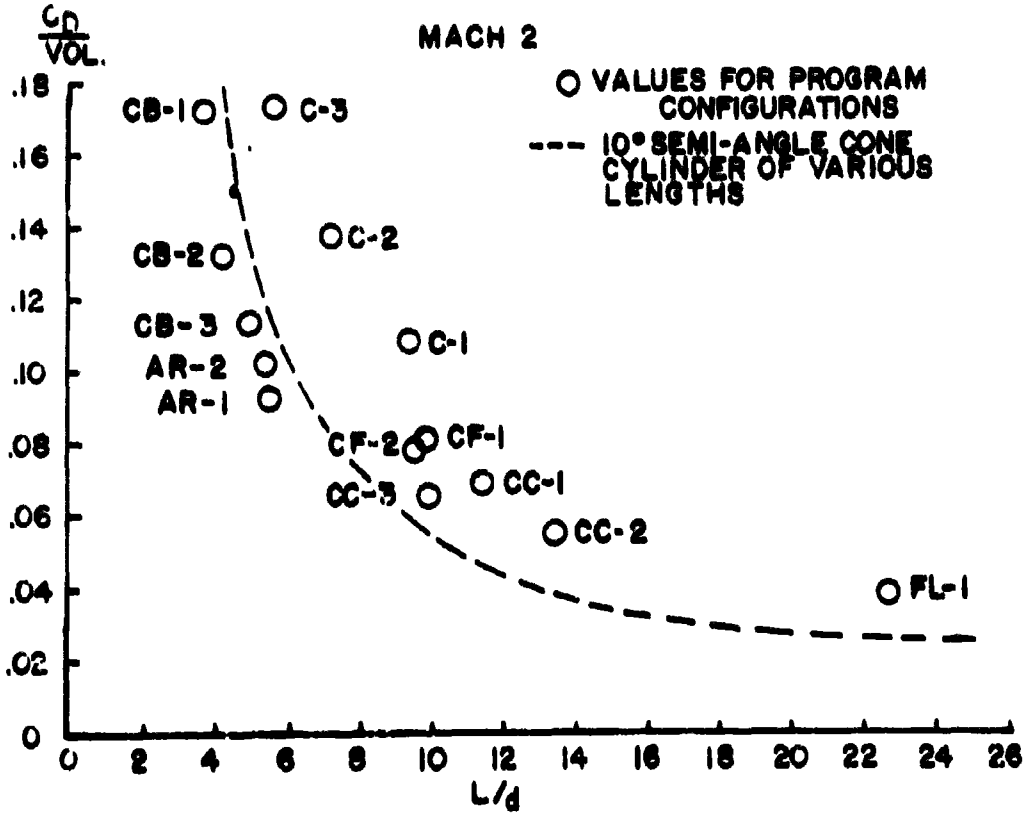

Figure B-8. Typical Variation of the Drag-to-Volume Ratio with Shape

cleaning up and small lengthening. However, once we have a relatively clean projectile on the order of five calibers long, the gains come more slowly. At first C_D/v drops almost linearly as L/D increases, since C_D varies little and the volume is increasing. Beyond the present scale, say for very long flechettes, the skin friction becomes more prominent, and this increases with length so that the drag-to-volume ratio tends to become more constant in this regime.

One can also visualize the curve as multiplied by a ratio of the proposed projectile density to that of lead, and it is apparent that the better 5 to 6 caliber long projectiles have enough C_D/v margin so that as a steel projectile they could have the same retardation as a lead CB-1, or could be about 30 percent smaller if of the same material. This indicates the rationale of the attractiveness of dense, low C_D/v projectiles for the smaller calibers. Since the tracer effect decreases C_D directly, it tends to give lower L/D projectiles with tracer the same performance level as higher L/D ballistic projectiles.

D. Deceleration Factor

The factor $\frac{\rho S C_D}{2m}$ has a particular significance and is often denoted by α and termed the deceleration factor. The previously given differential equation is then:

$$\dot{\underset{\rightarrow}{V}} = -\frac{\rho S C_D}{2m} V \underset{\rightarrow}{V} - \underset{\rightarrow}{g} = -\alpha V \underset{\rightarrow}{V} - \underset{\rightarrow}{g}. \qquad (4)$$

The α is a function of Mach number through the variation of the drag coefficient. If two types of projectiles have the same α function and the same initial conditions, then the integrated velocity histories must be the same. There are several useful rearrangements of the equation:

$$\alpha = \frac{\rho_{air} \pi d^2 C_D}{8 \rho_{proj} v d^3} = \frac{\pi}{8} \rho_{air} \frac{C_D}{v} \frac{1}{\rho_{proj} d} \cdot \quad (1/\text{meter}) \quad (5)$$

These are useful for a homogeneous projectile and v is the volume in

cubic calibers. The drag coefficient and the volume term are a function of the shape alone, while the factor $\rho_{proj}d$ reflects the size and material of the projectile. For a given projectile shape, the α will be the same for all projectiles for which $(\rho_{proj}d)$ is a constant. Thus a given computed case, the 7.62mm, 7.8 gm/cc, AR-2 case for example, also represents a 5.4mm, 11 gm/cc, AR-2 projectile and a 3.56mm, 16.7 gm/cc, AR-2 projectile. The various equivalent cases are tabled below.

Computed Cases		Diameter for Equivalent Cases		
Diameter mm	Density gm/cc	7.80	11.0	16.7
	7.80	-	3.89	2.61
5.56	11.0	7.94	-	3.71
	16.7	11.9	8.44	-
	7.80	-	4.55	3.06
6.50	11.0	9.29	-	4.33
	16.7	13.83	9.88	-
	7.80	-	5.40	3.56
7.62	11.0	10.46	-	5.08
	16.7	16.20	11.58	-

If C_D/v is considered part of the factor that is being held constant, e.g., $\left[\frac{C_D}{v}\frac{1}{\rho_{proj}d}\right]$ = Constant, other possibilities for a constant α factor occur. However, two different projectile shapes are not apt to have drag coefficients that are in constant proportion over an extended range of Mach number. Over a limited range of Mach number the condition can hold well enough to permit the concept to be useful.

Most rifle trajectories have little curvature and are classed as flat fire trajectories. The effect of the gravity component along the

trajectory can be neglected to a first approximation, and this permits a simplified velocity equation:

$$\dot{V} = -\alpha V^2, \text{ and with } \frac{dV}{dz} = V', \frac{V'}{V} = -\alpha. \tag{6}$$

This equation has the solution $V = V_o \text{Exp}(-\alpha z)$. The relation can be used as an interpolation or extrapolation mechanism for the existing computations. Given a plot of a computed case, subscript 1, and a neighboring case of interest, subscript 2, for which $V_{o1} = V_{o2}$ and the ratio α_1/α_2 is nearly constant over the region of interest, then:

$$V_1 = V_{o1}\text{Exp}(-\alpha_1 z) \quad \text{and} \quad V_2 = V_{o2}\text{Exp}(-\alpha_2 z).$$

Considering the condition for which $V_1 = V_2$ yields:

$$\text{Exp}(-\alpha_1 z_1) = \text{Exp}(-\alpha_2 z_2)$$

or
$$\alpha_1 z_1 = \alpha_2 z_2,$$

and
$$z_2 = \frac{\alpha_1}{\alpha_2} z_1. \tag{7}$$

Therefore, the velocity history of 2 is that of projectile 1 replotted on a scaled distance basis. Similarly it is clear that if two of the computed velocity histories are plotted as a function of range on a semilog scale then a third case with a value of α intermediate to the values for the first two can be interpolated, since:

$$\frac{\ln V_1 - \ln V_x}{\ln V_1 - \ln V_2} = \frac{-\alpha_1 + \alpha_x}{-\alpha_1 + \alpha_2}. \tag{8}$$

The concept of scaled distance and a nondimensional α has even further utility. The previous values of α have had the units of 1/range in the physical units used in the integration. However, the equation

$$V = V_o \text{Exp}(-\alpha z)$$

can also be written in terms of the calibers of travel of the projectile, or z/d, to define a nondimensional α:

$$\bar{\alpha}\,(z/d) = \alpha z$$

or
$$\bar{\alpha} = \alpha d = \frac{\pi}{8}\,\rho_{air}\,\frac{C_D}{v}\,\frac{1}{\rho_{proj}}\,. \qquad (9)$$

Thus $V = V_o\,\mathrm{Exp}(-\bar{\alpha}\,z/d)$ represents all projectiles of the same shape and a given material irrespective of caliber size, to within the assumptions used, if the distance scale is in calibers of travel. Examples showing the use and the range of validity of these methods are given in Appendix C.

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APPENDIX C

EXAMPLES AND INTERPOLATION METHODS

The data produced in the report:

(1) Have a direct utility in that they can be examined for trends due to variation of projectile weight, initial impulse, and other parameters, and also provide a network that permits some quick comparisons of proposed cases by gross interpolation.

(2) Provide a basis, through the corrective terms supplied, for creating data for new cases neighboring those computed with essentially the same accuracy as the computed ones.

(3) Provide the basis for considering many apparently quite different cases than those tabulated by the use of various scaling rules.

In this appendix examples illustrating these facets will be given. Those examples chosen for the first purpose are presented as plausible real problems in order to permit some identification and to stimulate thinking up others more germane to the reader's interest. They will also be used to explain in detail some of the trends noted in Section III of the main text. The other examples are chosen primarily as mechanisms to explain clearly particular scaling methods. The first three examples use the tabulated results directly and are based on three hypothetical questions based on the situation stated below.

An existing 6.5mm rifle system is scheduled to be upgraded by product improvement. It currently uses the CB-1 lead projectile, has a dissimilar tracer round, and has an impulse level of 2.1 lb-sec (see CB-1-18). It is considered to have adequate remaining energy (defined as 500 joules for this example) at 750 meters. Possible ammunition and minor rifle changes are to be considered to "improve" the effective range to 1000 meters (in the remaining energy sense alone). Specifically it is asked:

(1) What bullet replacements for CB-1 are available and will any meet the "requirement" at the original impulse level?

(2) What are the problems of obtaining a matching tracer round?

(3) What is the implication of using only a tracer round?

A. Example 1. Investigation of a New Ball Projectile

Since only relatively conventional bullets are postulated, only a review of the tabulated results for the CB-1, CB-2, CB-3, AR-1, and AR-2 6.5mm cases is needed. The results for selected ranges are given in Table C-I and are summarized below:

(1) All of the high-density (16.7 gm/cc) projectiles, except CB-1, which is close, meet the longer range energy requirement; however, the initial energy and velocity levels are lower.

(2) Of the projectiles with the middle density, lead (11.0 gm/cc), only the AR-1 and AR-2 types strictly meet the condition of 500 joules at 1000 meters, but both the CB-2 and CB-3 cases are close. All cases have lower initial energy than the original projectile, although the CB-2 case is nearly equivalent.

(3) Of the projectiles with the lower density, steel (7.8 gm/cc), only the AR-1 and AR-2 shapes meet the condition of 500 joules at 1000 meters range. These cases also have higher energy and velocity than the base case at all points, an obviously attractive condition.

Comments on Example 1: The reasons for the previous rankings are simply explained. Figure B-8 shows that the CB-1 shape has a higher drag-to-volume ratio than the others and that the AR shapes are nearly on the low plateau of the high L/D shapes. Thus, for a given density, the CB-1 has the highest drag-to-weight ratio and loses velocity and energy in flight at a higher rate than the other cases. The CB-1 does have a low volume and hence weight, and under the impulse constraint can have higher initial energy. Assuming that only the projectile momentum and energy are significant (propellant gas energy losses negligible) and using the simplified velocity equation from Appendix B for a constant C_D yields:

$$V = V_o \, \mathrm{Exp}\left(-\frac{\rho_{air} \, S \, C_D}{2\rho_p v d^3} Z\right)$$

$$I_o = m_p V_o = \rho_p v d^3 V_o$$

Table C-1

Remaining Energy for 6.50mm Caliber, 2.1 lb-sec Impulse Cases

		Range → 0		500 m		750 m		1000 m	
	Density gms/cc	Wt. gms	V mps	E Joules	V mps	E Joules	V mps	E Joules	V mps	E Joules
Case										
Base Case CB-1	11.0	5.94	1027	3135	605	1086	432	555	315	294
New Target										500
CB-1	16.7	9.02	753	2557	481	1044	398	714	322	467
CB-2	16.7	10.47	668	2335	487	1240	409	876	346	627
CB-3	16.7	12.12	593	2132	440	1174	373	844	325	639
AR-1	16.7	11.79	607	2172	471	1308	410	990	355	741
AR-2	16.7	11.51	619	2204	475	1295	408	957	348	695
CB-2	11.0	6.89	924	2943	602	1250	470	763	361	448
CB-3	11.0	7.99	828	2738	568	1289	453	818	353	497
AR-1	11.0	7.77	846	2779	612	1454	507	998	412	659
AR-2	11.0	7.58	861	2809	624	1475	513	996	410	636
AR-1	7.8	5.51	1081	3218	730	1468	572	900	432	513
AR-2	7.8	5.37	1098	3239	754	1530	590	936	439	518

$$E_o = \frac{m_p V_o^2}{2} = \frac{I_o^2}{2m_p} = \frac{I_o^2}{2\rho_p v d^3}$$

and the remaining energy becomes:

$$E_R = \frac{\rho_p v d^3}{2} V_o^2 \, \mathrm{Exp}\left\{\left[- \frac{\rho_{air} S C_D}{\rho_p v d^3} \right] Z\right\}$$

The lighter projectiles will have the higher initial energies; however, if their C_D/m_p is larger than competitive projectiles, they will lose velocity more rapidly--this is the case for the CB-1 versus the others at the same density. In general, it loses its advantage within a few hundred meters. Two projectiles can be compared by the ratio of their remaining energies:

$$\frac{E_{R_1}}{E_{R_2}} = \frac{\rho_{p_2} v_2}{\rho_{p_1} v_1} \, \mathrm{Exp} \left\{ - \frac{\rho_{air} S}{d^3} \left[\frac{C_{D_1}}{\rho_{p_1} v_1} - \frac{C_{D_2}}{\rho_{p_2} v_2} \right] Z \right\}$$

For projectiles of the same density, if $\frac{C_{D_1}}{v_1} > \frac{C_{D_2}}{v_2}$ for $V_{o_1} = V_{o_2}$, the exponent is negative and the energy ratio decreases with range and will become less than 1 at some range even if the initial energy ratio was greater than 1. The interesting case occurs when $\frac{C_{D_2}}{v_2}$ is so much smaller than $\frac{C_{D_1}}{v_1}$ that a change to a lighter material is possible and will still leave,

$$\frac{C_{D_1}}{\rho_{p_1} v_1} \geq \frac{C_{D_2}}{\rho_{p_2} v_2} .$$

Now the initial energy ratio will be less unfavorable to projectile 2. If the change can be made and projectile 2 becomes lighter, then it will have the higher initial energy, hence a higher energy at all points. This is the case of the steel AR's versus the lead CB-1. The steel AR's

have an initial energy advantage over the lead CB-3 and CB-2, but their drag-to-volume ratio is not enough to make up the density change and their advantage decreases with range. Since the advantage extends beyond 1000 meters, the practical result, for the postulated problem, is a superiority.

B. Example 2. Matching Tracer Rounds for Example 1

Extending the previous case, consider the possible problems if a matching tracer round is also desired. While it is not essential, it would seem desirable that the tracer projectile be quite similar to the ball projectile. In the comparison of matching trajectories the velocity history of the base case, CB-1, and competitive cases are given for no tracer and for tracer conditions in Figure C-1. This figure shows that all tracer rounds have increased velocity* relative to the nontracer counterparts. The degree of the improvement is most for the square-based CB-3 shape and least for the highly boattailed AR-1 shape. Under the assumptions, the only option is to modify the head shape of the tracer projectile to increase the drag so that it is equivalent to that of the ball projectile. For the AR-1 an 18 percent increase would be required; for the CB-2, 20 percent; and for the CB-1, 35 percent. The square-based CB-3 would need a 65 percent increase. It is apparent that the more boattailed shapes require less drag increase to match. The potential candidates, such as the AR-1, then will be easier to match than was the CB-1.

It should be noted that the simplifying and general assumptions made have an effect. (1) The tracer projectile was assumed to have the same weight and shape as the ball projectile--actually one would expect it to be a little lighter and hence have a higher initial velocity and a higher rate of falloff. (2) The tracer was assumed to operate through the base pressure only, thus differentially influencing square-based and boattailed projectiles. (3) The tracer was assumed not to influence the flow forward of the base--this is the logical first approximation for supersonic flow conditions. However, rocket motors and tracer elements have been observed to produce plumes and induce flow separation forward of the base for steep boattails--this would change the drag level.

In addition to the above, two other occurrences are notable; the first was expected, the second accidental. (1) The remaining energy of the lead CB-1 with tracer is now 655 Joules, well above the "requirement," and hence commitment to only a tracer round would be a technically valid solution. (2) The lead CB-1 tracer has slightly lower initial velocity and a slightly lower rate of falloff than the steel ball AR-1. Decreasing the weight of the CB-1 will increase initial velocity and increase velocity falloff. It would appear that decreasing the weight of the lead CB-1 tracer by about 6 percent would yield a near match--assuming that the quite dissimilar projectile family was acceptable.

C. Example 3. Consideration of a Tracer Projectile as the Prime Round in Example 1

The shape favoritism shown in Example 2 warns that the spectrum of consideration should be reopened. The five shapes given in Table C-I for the ball projectile are given for the tracer condition in Table C-II. The tracer introduction has markedly changed the selections; the square-based projectiles now dominate almost completely. The table shows that all projectile types improve in remaining velocity but that the low-drag square-based models show by far the most dramatic effect. The preferred projectiles are now clearly the AR-2 and, other factors considered, the CB-3. The remaining energy of these projectiles exceeds the hypothetical 1000-meter requirement by so much that if this were the only requirement (an unlikely situation) the initial impulse level of the weapon could be considerably reduced. Again we note that the tracer assumption used has a distinct impact on the magnitude of the effects quoted; however, the differences between the ball and tracer rounds are so large that it is doubtful that modifying the assumptions would change the qualitative picture presented.

The table also shows another significant trend. In this caliber, increases in density of the projectile always yielded improved remaining energy beyond about 500 meters for the ball projectile. For the square-based tracer cases and even the boattailed AR-1, the optimum density at 1000 meters is clearly less than that of tungsten and perhaps lower than

Table C-II

Remaining Energy for 6.5mm Caliber, 2.1 lb-sec Impulse-Tracer Cases

	Range →	0	250 meters	500 meters	750 meters	1000 meters
Case	Density gms/cc	Remaining Energy - Joules				
CB-1	7.8	3391	2173	1318	758	402
CB-1	11.0	3133	2217	1528	1022	655
CB-1	16.7	2557	1985	1516	1135	840
CB-2	7.8	3317	2218	1418	862	490
CB-2	11.0	2943	2146	1527	1055	704
CB-2	16.7	2335	1840	1430	1095	822
CB-3	7.8	3187	2539	2003	1563	1204
CB-3	11.0	2738	2298	1918	1591	1310
CB-3	16.7	2132	1873	1642	1434	1244
AR-1	7.8	3218	2440	1795	1265	846
AR-1	11.0	2779	2202	1705	1284	939
AR-1	16.7	2172	1787	1453	1171	938
AR-2	7.8	3239	2771	2355	1990	1670
AR-2	11.0	2809	2485	2192	1926	1687
AR-2	16.7	2204	2013	1836	1673	1522

that of lead in some cases. Thus, when two methods that optimize remaining kinetic energy are used together, the resultant trend is less obvious.

The concepts that appear in the first three examples are summarized below to reinforce the previous comments of the main text and to enlarge on them. On the sole basis of remaining energy at longer ranges:

(1) Low values of C_D/v are needed.

(2) Relatively long, highly boattailed shapes are the most attractive for ball projectiles with an average Mach number less than about 2.0--stability considerations apart.

(3) The use of the more highly boattailed configurations makes ball and tracer matching with nearly similar configurations easier.

(4) Low-drag, square-based projectiles are favored quite markedly if a tracer projectile is considered either as the prime or as the only round.

(5) Some shell shapes have a sufficient margin of C_D/v over standard bullets that they can afford to have densities equivalent to steel. This results in higher energies over the whole trajectory for a fixed initial impulse. This would be at the expense of higher stabilization twist requirements and, probably, longer rounds.

(6) The tracer-on effects are so large on the low-drag, square-based projectiles that reliability of tracer operation could become a serious factor in accuracy of fire at longer ranges.

In the first three examples there were evidences that various parameters systematically affected the remaining energy as a function of range. The next example will be an explanation of these trends; it will also show the difficulties of focusing too closely on a single variable, or on the use of too simple a model, for the purpose of extrapolating trends.

The next series of examples are devoted to treating cases which are variants of the computed cases. The background for the methods are explained in Appendices A and B.

D. Example 4. Examination of the Drag-to-Weight Ratio on Remaining Energy as a Function of Range for Various Impulse Levels

This problem will be approached by examining a single shape, CB-1, in a single caliber, 5.56mm. This means that the drag-to-weight ratio varies only with the density of the projectile. The remaining energy level as a function of range for the three tabled impulse levels and densities is plotted in Figure C-2. At the lowest impulse level, 0.8 lb-sec, the lightest projectile has the highest energy level until about 275 meters; the heaviest one has the highest energy level beyond about 310 meters. The 1.2 lb-sec impulse level is more distinct; the lightest is "best" until 210 meters, and the heaviest beyond about 400 meters. It would appear, from these cases, that there is an optimum density which will yield maximum remaining energy at a given range. The highest impulse level plot breaks the pattern; the lightweight steel projectile is never in contention, and the lead projectile is superior to the tungsten projectile only to about 100 meters.

Comments on Example 4: Under the simplified assumptions used earlier, constant drag coefficient and no propellant gas energy losses, the initial energy is:

$$E_o = \frac{I_o^2}{2m_p}$$

and the remaining energy is:

$$E_R = \frac{I_o^2}{2m_p} \text{Exp}(-\rho_{air} S\, C_D/m_p)z.$$

As the projectile mass decreases, the momentum level constraint permits the initial energy level to increase. The velocity decay exponent also contains m_p in the denominator, however, and energy is dissipated more rapidly. At short ranges the increased initial energy is more relevant, but as the range increases the dissipation rate will become more important. The equation for E_R can be differentiated with respect to m_p and set equal to zero to yield an optimal condition for a given range of

$z = R$. This yields the simple relation

$$\frac{\rho_{air} S C_D}{m_p} = \frac{1}{R} .$$

Since, for this case, ρ_{air}, S, C_D, and volume are constant, the projectile density factor controls the equation. The longer the range of primary interest, the more dense the projectile should be. This simplified expression predicts about 200 meters as the optimum range of a steel CB-1 and about 350 meters for the lead 5.56mm case. This is in general agreement with the actual results for the two lower impulse computations. The simplified equation is not a function of impulse level so that it is apparent that something has gone wrong with the assumptions for the higher impulse case. The steel and lead CB-1 cases for this impulse level are also very high initial energy and velocity cases, and the gas momentum energy losses are becoming dominant. (See Figure A-5.) The printed cases reveal this fact only indirectly, through the velocity and propellant charge terms, since neither initial energy nor peak pressure was a variable in the net.

The low-impulse, heavy projectile case also furnishes an instance where a strange solution appears; that is, the velocity levels of the optimum case are clearly not in the rifle category. It should be clear that in using the results one should keep in mind the physical system that is being implied--or strange "solutions" can appear. The high-velocity cases were retained because flatness of fire and energy density can also be important in selecting a system, and this suggested that the computations should not be truncated arbitrarily as long as the computational process was still valid. It was recognized that the low-velocity, heavy-bullet case was not strictly in the rifle picture; however, they added little to the total effort, and they do furnish a limited basis for considering carbine and submachine gun cases.

E. Example 5. Comments on the Use of the Same Flechettes in Various Caliber Weapons

The subcaliber flechette with its high velocity, and hence significant gas energy and momentum losses, and the tare of the sabot shows a more complicated behavior than the lower velocity full-bore projectile samples. In Figure C-3 the total projected energy of the flechette and its sabot, as a function of the total projected mass, is given for the three calibers and the three impulse levels. The high impulse level shows the trend most strikingly; initially the energy of the projected parts increases very strongly as the projected mass increases. This is in contrast to what would be expected if the momentum of the projected parts was the dominant factor in the process; then the energy for the projected parts would be:

$$E_{o_{m_p}} \approx \frac{I_o^2}{2(m_p + m_s)} .$$

This would yield a decrease in initial energy for any increase in total mass projected. Instead, the energy increases and peaks in the vicinity of 4 grams and then the curve turns downward as the mass of the projected parts becomes dominant. In Figure C-3, representing the steel, lead, and tungsten, 1.78mm flechette cases are shown on the curves. For the 2.1 lb-sec impulse case, they are all on the rising part of the curve. Obviously the heaviest projectile is best, and it is not heavy enough to yield maximum interior ballistic efficiency. Since the heaviest projectile of the same size will also have the least retardation, the case will also be the best at all ranges.

The shape of the total projected energy curve is dependent on the interior ballistic assumptions made. In the case of the lower impulse constraints, the velocity levels are lower and the curve peaks earlier; in fact, the lowest impulse level of 0.8 lb-sec indicates that the tungsten projectile has a lower total projected energy level than the lead one for the 5.56mm caliber. The steel flechette yields the highest projected total energy in the larger calibers. Because the energy

distribution between the sabot and projectile depends on their relative weights, the maximum flechette initial energy maximizes at a different point than does the projected metal parts energy.

The energy of the flechette is also plotted in Figure C-4. For the 5.56mm, 2.1 lb-sec impulse case the curve has been computed beyond the three different flechette points, and it is seen that the peak is at higher total projected weights than that of the total projected energy because of sabot tare. Excepting possibly the 0.8 lb-sec, 5.56mm case, the tungsten flechette is still too light to develop maximum initial energy. Since this is about the largest flechette of this design, FL-1, that can be housed in the 5.56mm and a density much above that of tungsten is improbable, the tungsten 1.78mm flechette is about the best that can be done even if it is really too light for the higher impulse cases. For the larger calibers, larger size projectiles could be housed, and the results of the fixed size program of FL-1 are not conclusive because the larger size possibilities were not considered. Restricting ourselves to the same size flechette with various densities, the net results are:

(1) The densest 1.78mm flechette of the FL-1 design is always best with initial energy as criteria; however, only in the case of the 5.56mm, 0.8 lb-sec impulse case is it probably near optimum.

(2) For the 1.78mm flechette the densest projectile will also have the highest energy retention, and hence it is also the best at longer ranges--in the remaining energy sense, of course.

(3) The 1.78mm tungsten flechette is nearly optimum only for the 5.56mm case at 0.8 lb-sec impulse; all other cases optimize at heavier weights of projectiles. The larger caliber guns could achieve more optimum performance if larger flechettes, which they could house, were used.

These conclusions would appear to be based on a peculiarity of the high-velocity region; however, the same general trends appear if the momentum of the projected parts dominates and the simplified momentum equation is a good approximation;

$$I_o = (m_s + m_p)V_o$$

and

$$E_o = \frac{I_o^2}{2(m_s + m_p)} .$$

Since we are dealing with a fixed flechette size, the sabot weight, $2\,\rho_s \frac{\pi}{4}(D^2 - d^2)D$, increases with the gun caliber and the sabot losses cut into the energy. Conversely, the increase of projectile weight via the density increase decreases the sabot tare ratio. This is large for the 3-diameter fin span flechette, and hence the net result is a gain.

While this would appear to have disposed of the problem of shooting the same flechette in various guns as being non-optimum; in fact, creating a multitude of flechettes is expensive and the question of what a given flechette would do in a different caliber is valid. For the particular flechette design, in this case the FL-1, the velocity and energy curves are unique for each projectile density. The energy curves are plotted in Figure C-4. One can enter these curves at any point, as will be shown for the velocity curves in Example 7. If the present assumption on total parts projected energy is accepted, then we can investigate the effect of being able to reduce the sabot weight to half of the present assumption. The 5.56mm tungsten case is assumed. If the sabot weight of 0.49 grams is halved, the total projected energy of the sabot and flechette would decrease from 1920 to 1880 Joules due to poorer interior ballistic efficiency, but the better ratio of projectile to sabot mass weight would yield an increase of projectile launch energy from 1430 to 1600 Joules. Entering the tungsten curve in Figure C-4 at this latter point and reading 1100 meters further on yields 750 Joules. This is 25 percent higher than the base case at 1100 meters, and hence the gain by improved saboting is important.

Table C-III

Kinetic Energy (Joules) and Velocity (mps) at the Muzzle for FL-1

		0.8 lb-sec Impulse			1.2 lb-sec Impulse			2.1 lb-sec Impulse		
		Steel	Lead	Tungsten	Steel	Lead	Tungsten	Steel	Lead	Tungsten
	Energy ($m_p + m_s$)	1257	1293	1257	1616	1778	1922	1971	2294	2747
5.56	Energy (m_p)	721	847	933	926	1164	1427	1130	1502	2039
	Velocity	1480	1350	1150	1678	1583	1422	1853	1798	1700
	Energy ($m_p + m_s$)	1294	1280	1206	1792	1887	1941	2329	2596	2958
6.50	Energy (m_p)	586	690	772	812	1017	1242	1055	1400	1893
	Velocity	1335	1219	1046	1571	1480	1327	1791	1736	1638
	Energy ($m_p + m_s$)	1247	1199	1105	1927	1941	1908	2795	2976	3209
7.62	Energy (m_p)	418	499	574	646	807	991	936	1237	1667
	Velocity	1127	1036	902	1401	1318	1185	1687	1632	1537

F. Example 6. Discussion of the Effect of Varying the Diameter of a Subcaliber Projectile

In the design of a subcaliber projectile for a given weapon system, one optimization parameter is subcaliber diameter. The subcaliber case SC-1 for 6.5mm bore diameter will be used for this discussion. This projectile has the exterior profile of CC-1, but has been constructed as a bimetallic projectile--tungsten, aluminum, and tracer material being the materials used. Mass distribution has been chosen to insure static stability; i.e., spin is not necessary. As a result of the choice of distribution, the projectile has an average density of 4.08 gm/cc and is relatively light. With remaining kinetic energy as the criteria, the energy level variation will be discussed at fixed ranges of 0 meters, 400 meters, and 1100 meters (Figure C-5 (a), (b), (c), with and without tracer).

1. Kinetic Energy of Projected Metallic Mass as a Function of Diameter of Projectile.

The plots (a), (b), and (c), Figure C-5, demonstrate kinetic energy as a function of projectile diameter at impulses of 0.8, 1.2, and 2.1 lb-sec, respectively. For projected mass, the combined mass of projectile and sabot, the data for (a) and (b) depicts maxima at 4mm and 5mm, respectively, with (c) not attaining a maximum by full caliber. The initial positive slope of kinetic energy with increasing diameter (which implies increasing projected mass) seems strange, using the simplified argument presented in a previous example. With the constraint of constant impulse,

$$(m_p + m_s)V_o = I_o,$$

then the initial kinetic energy is

$$E_o = \frac{I_o^2}{2(m_s + m_p)} .$$

This implies that increasing projected mass should decrease initial

kinetic energy. However, as in all simple ("crude") arguments, often a term becomes significant and an effect is unexplainable.

Looking back to Figure A-5, one observes that the momentum of the projected mass at high speeds becomes a smaller percentage of total momentum of projected weights and gas combined. This indicates, as A-5 shows, that

$$I_o = (m_p + m_s)V_o + f$$

where f represents a gas tarage and is increasing with velocity increase.

Returning to the plots of kinetic energy, Figure C-4, the shape of the curves state:

(1) For (a) and (b), at the smaller diameters, which is in the higher velocity regime, f is high. The effect of increasing diameter decreases velocity, increasing markedly the interior ballistic efficiency. Thus, initially the total energy increases with increasing diameter. Then, as the velocity decreases further (diameter increases), the gain in efficiency is less and the total energy curve peaks, after which the curve begins to behave qualitatively as the simplified argument implies.

(2) For (c), the increase in ballistic efficiency dominates throughout, and no maximum is attained.

2. Kinetic Energy of Projectile at Muzzle as a Function of Diameter of Projectile.

[Brief Aside: Given a positive function g(x) with a maximum at x_o, if h(x) is a monotonically increasing positive function, then the maximum of G = gh is shifted in the direction of increasing x, i.e.,

$$G'(x_o) = g'(x_o)h(x_o) + g(x_o)h'(x_o) > 0.]$$

The kinetic energy of the projectile is

$$E_{o_p} = \left(\frac{m_p}{m_p + m_s}\right) E_{o_{\text{projected mass}}}$$

By the property in the brief aside, the maxima of (a) and (b) will be shifted toward the larger diameter. For case (c) where h' is always positive, an expansion of the brief aside shows the slope remains positive; i.e., a maximum will not be attained. This indeed is the effect observed.

3. Kinetic Energy of Projectile at a Fixed Range as a Function of Diameter of Projectile.

By equations previously demonstrated (Example 1),

$$E_{R_p} = \frac{m_p V_o^2}{2} \text{ Exp } \left[\frac{-\rho_{air} S C_D^2}{\rho_p v d^3} \right]$$

$$= E_{o_p} \text{ Exp } \left[\frac{-\rho_{air} S C_D^2}{\rho_p v d^3} \right]$$

The exponential is a monotonic increasing function of d, for constant C_D and range. The effect of this function, all other things constant, is again to move the maxima to the right. Observe (a) and (b) at 400 meters and 1100 meters, with tracer. It also keeps the slope of (c) always positive. In summary, if kinetic energy is the criteria for "goodness," then for this example:

(1) The better interior ballistic efficiency indicates larger diameters (decrease gas tarage).

(2) The amount of sabot tarage indicates still larger diameters (decrease sabot tarage).

(3) Retardation favors the larger projectiles and again indicates still larger diameters (decrease retardation).

G. Example 7. Use of the Plotted Velocity, or Energy, Curves of a Computed Case to Obtain the History of a Lower Velocity Case

The flat fire assumption permits the use of the given velocity, or energy, curves over a wider spectrum. Under these conditions, the highest velocity case for a given size, weight, and shape of projectile

contains the histories of all lower velocity cases within its span of velocity. The range coverage will be less than the 1100-meter span of the original case, however. This was noted in the main text because of its utility and is shown in more detail below.

The 5.56mm lead CB-3 case (page CB-3-8) at 1.2 lb-sec impulse is plotted in Figure C-6. This case has a muzzle velocity of 772 mps, while the same bullet at an impulse of 0.8 lb-sec has an initial velocity of 557 mps. If we interpolate the first curve (Figure C-6) for the 557 mps point, it occurs at a range of 359 meters. By picking this as the origin of a new range scale, the second computed case (page CB-3-7) plots on the original curve as is shown. Since $E = mV^2/2$, the remaining energies could be plotted in the same way and new cases similarly investigated.

In order to deal with an unknown case as an example, suppose that it is desired to fire the previous projectile at an impulse level of 1.0 lb-sec. To start the procedure the corresponding muzzle velocity must be determined; this can be done using either the equations or the nomograph (A-3) in Appendix A. The latter indicates that a muzzle velocity of 670 mps corresponds to the 1.0 lb-sec impulse for this bullet. This velocity occurs at 169 meters for the original curve in Figure C-6; the range scale for this new case is set up at the bottom of the figure. If the full range of the original case, 1100 meters, had been plotted, information on this new case would be available for 931 meters without extrapolation. It is, of course, not essential to construct the new scale physically nor to even plot the original, since the tabulated data can be interpolated for the new range zero and each tabulated range point, z_{tab}, taken to correspond to $(z_{tab} - z_o)$ for the new case.

H. Example 8. Construction of the Velocity History for a Neighboring Case Using the Differential Velocity Correction

Assume that there is a companion projectile to the 5.56mm lead CB-3 projectile; it is a jacketed steel and carbide AP projectile weighing 10 percent less than the ball projectile but fired at the same velocity, 773 mps. Having the velocity history of the basic CB-3 case, what is

the velocity history of the companion projectile? Since the projectile weight is in the denominator of the retardation expression, the 10 percent weight change yields an effect equivalent to about an 11 percent drag coefficient change; thus eleven times the listed unit effect, change in velocity for 1 percent change in drag, must be applied. The base case and the postulated AP projectile case derived from it are partially tabled below.

Table C-IV

Base Case			Derived Case	
5.56mm Lead CB-3 (Page CB-3-8)			5.56mm AP Projectile, 10% Lighter	
Range meters	Velocity mps	$\Delta V/\%C_D$ mps	Correction mps	Velocity mps
0	773	0	0	773
200	650	-1.2	11.3	639
400	534	-2.2	24.2	510
600	429	-3.0	33.0	396
800	341	-3.1	34.1	307
1000	295	-2.0	22.0	273

At the correction level of about 10 percent, errors are due primarily to the rounding off of the unit effect, change in velocity for 1 percent change in drag, at 0.1 mps and the velocity at 1 mps, and hence the created case is essentially as accurate as the basic tabulated case. While the correction term can often give adequate results for considerably larger percentage changes, the resultant accuracy level is not readily predictable and hence the use of corrections involving much more than ten times the correction term is not recommended.

The same table would also serve, as noted earlier, if the difference had involved a 10 percent increase of air density, or if it involved another projectile which had a 10 percent higher drag coefficient over the region of interest. Dissimilar projectile shapes are not apt to have similar drag coefficient curves over the entire range of subsonic,

transonic and supersonic speeds. However, for utility purposes when the region of interest is only subsonic or supersonic speeds, it can be assumed dissimilar projectiles have nearly equal or nearly proportional drag curves for a considerable range.

I. Example 9. Effect of Crosswind on the Trajectory

The printed tables also contain the time of flight to each range point. For flat fire conditions this permits a good determination of the crosswind effect on the path of the projectile by multiplying the lag time (time of flight minus vacuum time of flight) by the magnitude of the crosswind velocity. The vacuum time of flight is simply the range divided by the muzzle velocity. The direction of the drift is downwind. Some sample results are given below.

Table C-V

Downwind Deflection for a Crosswind of One Meter per Second
6.5mm Projectiles, 2.1 lb-sec Impulse Cases

	CB-1 (11.0 gm/cc)	AR-1 (11.0 gm/cc)	CB-3 (6.8 gm/cc)	CB-3 (6.8 gm/cc) with Tracer
Range (meters)	Inflection (meters)	Deflection (meters)	Deflection (meters)	Deflection (meters)
0	0	0	0	0
200	0.042	0.030	0.034	0.014
400	0.185	0.139	0.157	0.067
600	0.467	0.329	0.410	0.150
800	0.850	0.609	0.784	0.284
1000	1.312	0.948	1.277	0.467

J. Example 10. Mapping the Velocity History of a Family of Flechettes

The relatively high velocity flechettes furnish a good condition for using the caliber scaling rules for extending the computed cases, since they do fit the flat fire assumption over a wide range. When the

velocity history can be represented by

$$V = V_o \, Exp(-\alpha z)$$

adequately, the equation can also be transformed to a calibers of travel basis (z/d) from the real distance variable z. Thus, as noted in Appendix B, Z = z/d, or

$$\frac{\rho \frac{\pi d^2}{4} C_D z}{2\rho_p v d^3} = \bar{\alpha} (z/d)$$

and

$$\bar{\alpha} = \frac{\rho \frac{\pi}{4} C_D}{2\rho_p v} .$$

The latter is independent of everything but the shape of the projectile and its density. It follows that all projectiles of the same shape and density, if fired at the same velocity, have the same velocity history curves if they are plotted in terms of calibers of travel. Thus the velocity of a 3.56mm flechette at 200 meters will be the same as that of a 1.78mm flechette of similar shape and material at 100 meters, if the launch velocities are the same. A construction on this basis for a range of flechette sizes is given in Figure C-7. On a given material basis, this represents steel flechettes of various sizes. However, we note that the real distance equation for α is invariant whenever the product $(\rho_p d)$ in the denominator is invariant. The steel (7.8 gm/cc) projectile of 1.78mm diameter is also then equivalent to a 3.9 gm/cc model of 3.56mm diameter, or any combination that is equivalent. This has been used to double-code the curves for various size and weight combinations to extend their utility. The procedure can be used to identify the tungsten 1.78mm flechette curve, and this has been done as an extrapolated exceptional case labeled as such in Figure C-7; the actual case, on page FL-1-10, is plotted also. At the plotting scale the difference is not noticeable, although an extrapolation from the 7.8 gm/cc 1.78mm flechette case by over a factor of 2 has been made. It was noted, however, that the flechette case is quite favorable for extrapolation.

Figure C-7 has been constructed so that it can be used to estimate the velocity falloff of various sizes of steel flechettes directly, assuming the muzzle velocity is known. This is done by applying the method of Example 7. In a more indirect manner, the chart may also be used to compare flechettes of the FL-1 type in various sizes and densities. The curves in Figure C-7 also represent constant values of $(\rho_p d)$. For example, an aluminum flechette (2.7 gm/cc) 5.8 millimeters in diameter would have a $(\rho_p d)$ product of 15.7 and hence would have a velocity history curve that would lie midway between curve (b) (13.9 gm mm/cc) and curve (c) (17.4 gm mm/cc) on Figure C-7.

K. Example 11. Computation of Twist Required to Stabilize a Bimetallic Cone Cylinder

Assume that there is a proposed 6.5mm, CC-3 shape projectile whose construction is tungsten (16.7 gm/cc) nose, to the juncture of cone and cylinder, and the cylinder section is aluminum (2.7 gm/cc). What twist is required for a gyroscopic stability factor (s_g) of 1.4, if launched at a velocity corresponding to a Mach number of 1.5?

Physicals		Aerodynamics	
m	= 10.409 gm	C_{N_α}	= 2.59
I_x	= 0.3694 gm cm^2	C_{P_N}	= 5.47 cal
I_y	= 14.6177 gm cm^2	C_{M_α}	= (c.m. - C_{P_N})C_{N_α}
c.m.	= 5.94 cal		= (0.47)2.59 = 1.22

From the equation for s_g on page 647, nondimensional spin (twist) is

$$\frac{pd}{V} = \left[\frac{1.4\,\pi\, I_y \rho d^5 C_{M_\alpha}}{2I_x^2}\right]^{\frac{1}{4}} = 0.0322 \text{ rad/cal.}$$

This is equivalent to 1.0 rev/7.96 in.

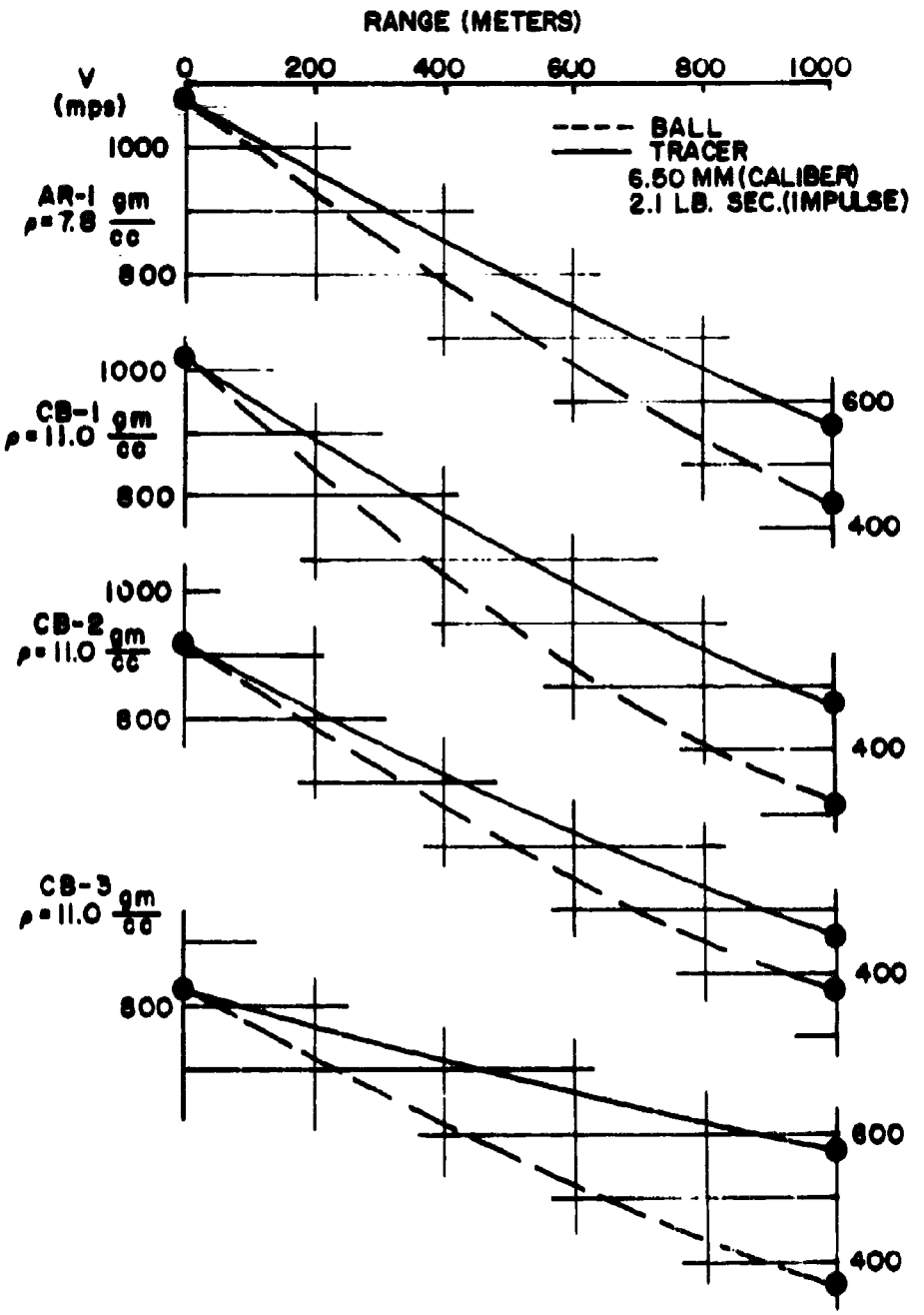


Figure C-1. Remaining Velocity as a Function of Range

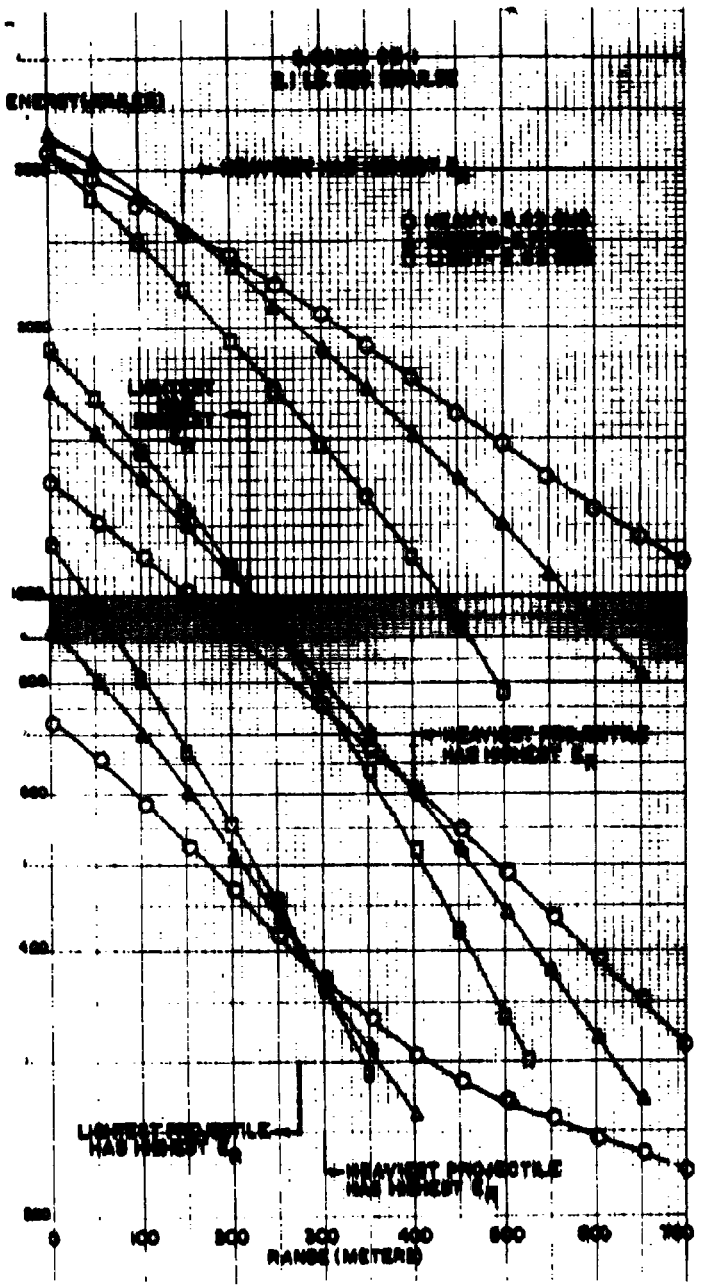


Figure C-2. Remaining Energy as a Function of Range for Various Projectile Weights

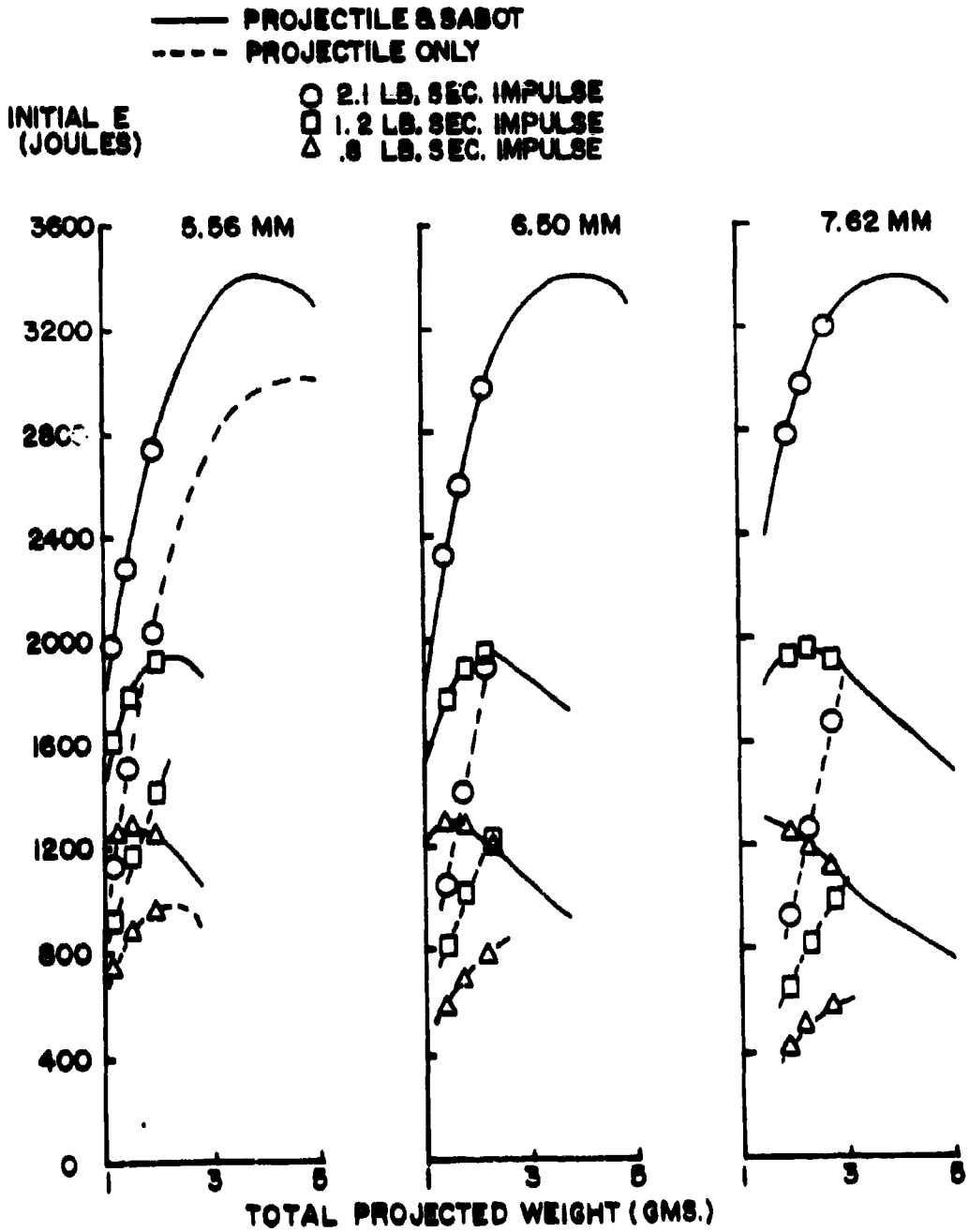


Figure C-3. Initial Energy for Total Projected Weight and Flechette Weight Alone vs Amount of Projected Weight

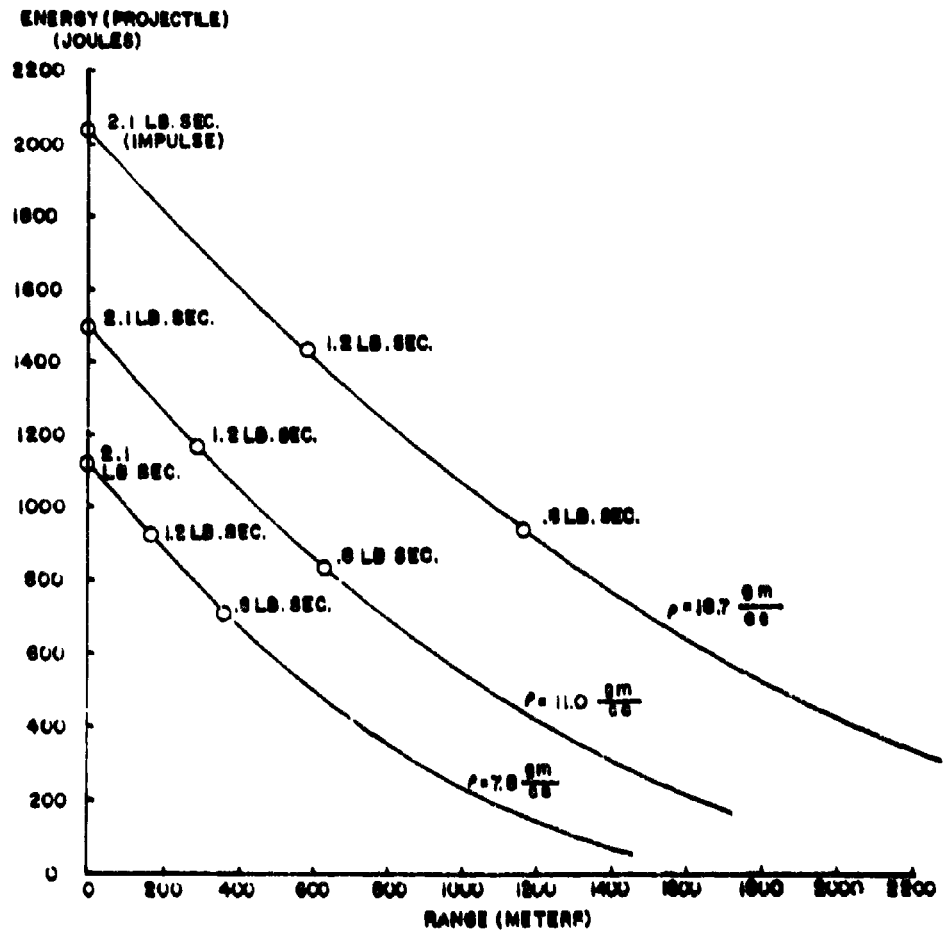


Figure C-4. Energy vs Range for FL-1, for the Three Different Densities. Caliber 5.56mm.

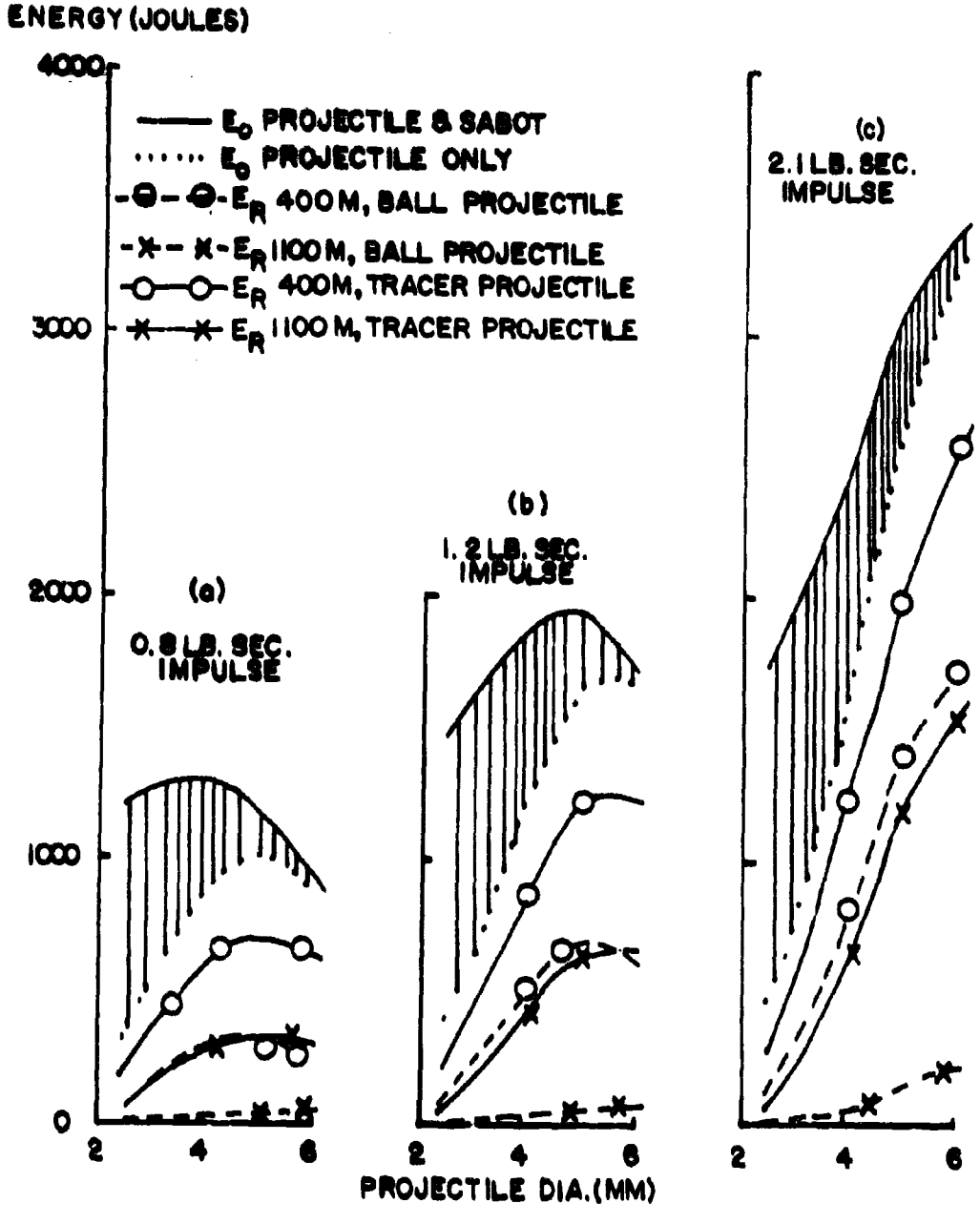


Figure C-5. Energy vs Diameter of Subcaliber Projectile

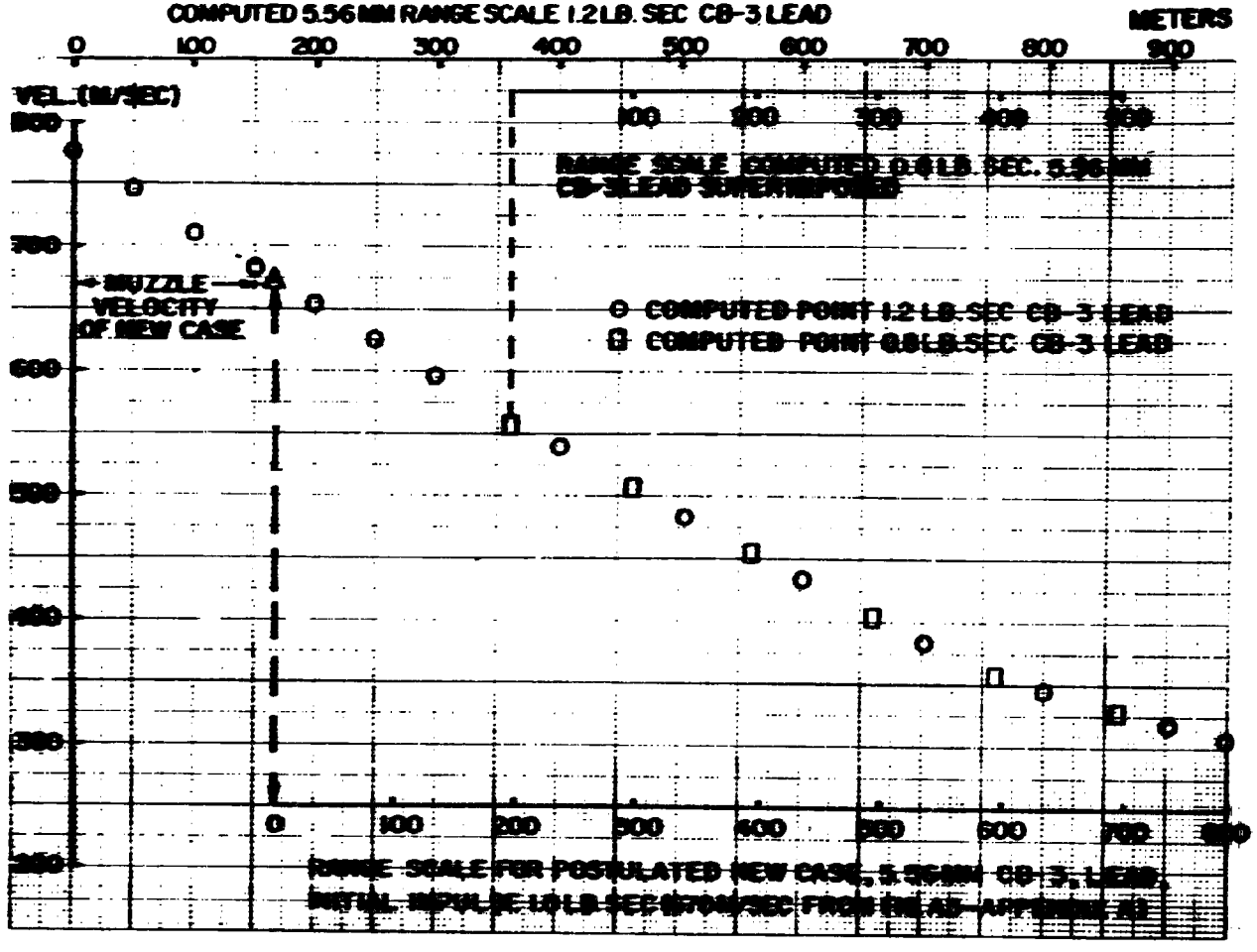


Figure C-6. Velocity vs Range, to Demonstrate Computation of New Case with Lower Muzzle Velocity

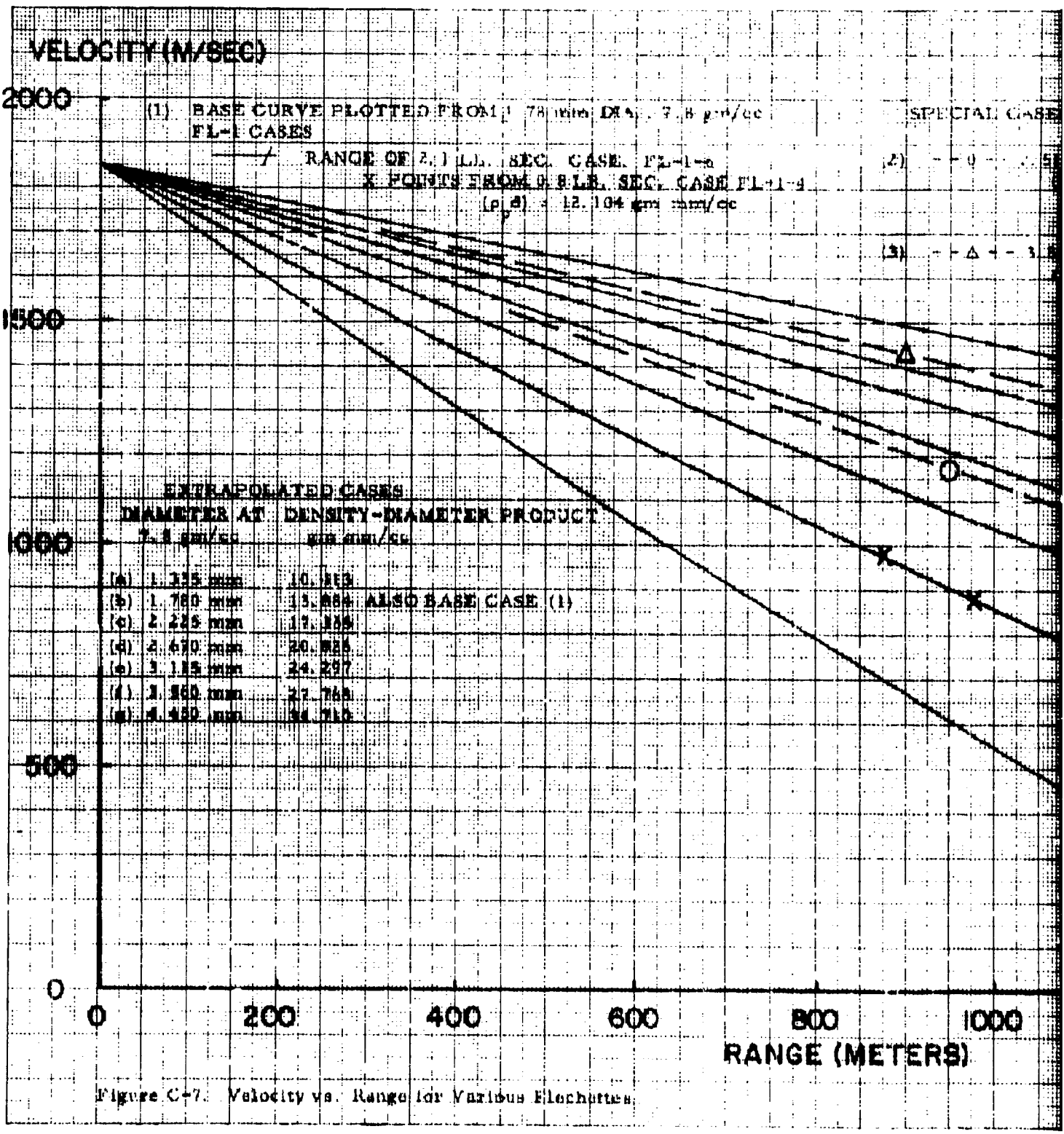
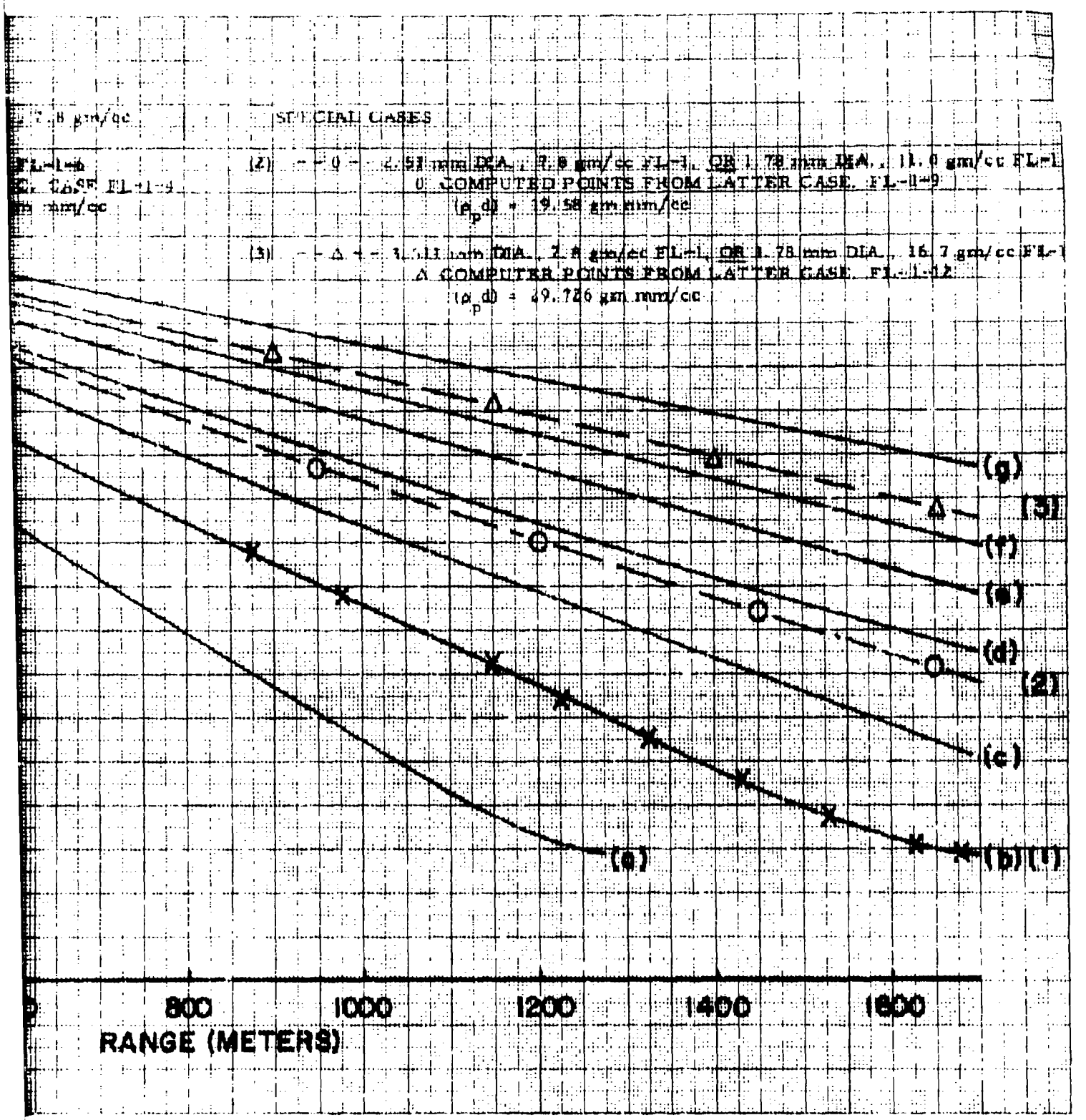


Figure C-7. Velocity vs. Range for Various Flechettes

A



7.8 gm/cc
SPECIAL CASES
FL-1-6
CASE FL-1-4
mm/cc
(2) - - 0 - - 2.51 mm DIA., 7.8 gm/cc FL-1, OR 1.78 mm DIA., 11.0 gm/cc FL-1
0 COMPUTED POINTS FROM LATTER CASE, FL-1-9
($\rho_p d$) = 19.58 gm mm/cc
(3) - - Δ - - 3.511 mm DIA., 7.8 gm/cc FL-1, OR 1.78 mm DIA., 16.7 gm/cc FL-1
Δ COMPUTER POINTS FROM LATTER CASE, FL-1-12
($\rho_p d$) = 29.726 gm mm/cc
(g)
(3)
(f)
(e)
(d)
(2)
(c)
(a)
(b)(1)
800
1000
1200
1400
1600
RANGE (METERS)

B

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13. ABSTRACT

The report is a compendium of the ballistic properties of projectile shapes of possible interest in small arms applications. The shapes cover a range of L/D ranging from conventional bullets (~3.5) to that of flechettes (~20) and include such shapes as cones, cone cylinders, and cone flares. The ballistic properties are mapped over a range of calibers and projectile densities. A drag-reducing tracer is included as one of the prime design considerations as a means of reducing base drag. Tabulations include velocity, energy, angle of fall, time of flight, and height as a function of range, with constraints on recoil momentum. Aerodynamic coefficients are also included.

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