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IDA GROUND-AIR MODEL I (IDAGAM I)

Volume 4: Documentation

Lowell Bruce Anderson
Jerome Bracken
James G. Healy
Mary J. Hutzler
Edward P. Kerlin

October 1974

INSTITUTE FOR DEFENSE ANALYSES,
PROGRAM ANALYSIS DIVISION

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400 Army-Navy Drive, Arlington, Virginia 22202

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The IDA Ground-Air Model I (IDAGAM I) is a deterministic, fully-automated, theater-level model of non-nuclear combat between two opposing forces. The report consists of five volumes, as follows: (1) Comprehensive Description, (2) Definitions of Variables, (3) Detailed Description of Selected Portions, (4) Documentation, and (5) Testing (U) (SECRET).

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FOREWORD

IDAGAM I is a deterministic, fully automated model of non-nuclear combat between two opposing forces. The purpose of this report is to describe and document IDAGAM I. The report consists of five volumes, the contents of which are summarized as follows:

Volume 1 - Comprehensive Description

I. LEVEL OF DETAIL OF IDAGAM I

II. DESCRIPTION OF IDAGAM I

III. LIMITATIONS OF IDAGAM I AND SUGGESTIONS FOR FURTHER RESEARCH

REFERENCES

Volume 2 - Definitions of Variables

I. PROGRAM, OVERLAYS, AND SUBROUTINES

II. DEFINITIONS OF VARIABLES

Volume 3 - Detailed Description of Selected Portions

I. MAXIMUM NUMBER OF RESOURCES AND OTHER QUANTITIES THAT CAN BE PLAYED

II. THE AIR-COMBAT MODEL

III. THE GROUND-COMBAT MODEL

IV. THE THEATER-CONTROL MODEL

V. THEATER CONTROL AT TIME ZERO

VI. GEOGRAPHY

Volume 4 - Documentation

I. STRUCTURE OF IDAGAM I

II. MACHINE CONVERSION

III. PREPARATION OF INPUTS

IV. DESCRIPTION OF OUTPUTS

Appendix A. SAMPLE OUTPUT

Appendix B. RELATIONSHIPS AMONG VARIABLES

Appendix C. VARIABLE SIZES AND LOCATIONS

Volume 5 - Testing

I. DESCRIPTION OF THE TEST PLAN

II. RESULTS OF TESTS

III. CONCLUSIONS

Appendix. SOURCES OF INPUT DATA

Volumes 1, 2, 3, and 4 are Unclassified; Volume 5 is Secret.

Since it would be much too unwieldy to include a copy of the code of the IDAGAM I computer program in this report, no such copy is included here. Copies of this code on appropriate media (tape, cards, etc.) can be obtained directly from the Institute for Defense Analyses.

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INTRODUCTION

The IDAGAM I model is described in Volumes 1 and 3 of this report, and the user is referred to those volumes for comprehensive and detailed descriptions. The purpose of this volume is to assist the user in implementing IDAGAM I on any computer system, in structuring data decks, and in understanding the output format.

IDAGAM I was programmed for use on a CDC 6400 computer with 151K (octal) core capacity. The model, however, was programmed to make it easily adaptive to any system; and the model is already running on an IBM 360.

Due to the complexity of IDAGAM I, it was necessary to structure the model into a main overlay, seven primary overlays, and seven secondary overlays. The main overlay consists of the MAIN program, blank COMMON, and subroutines EIGENV, MPROD, and PR2. The primary overlays are TZERO, AC, GC, TC1, TC2, RF, and RPOMF:

TZERO	contains the subroutines RCD, RFTZ, RPTZ, RPAC, and TCTZ. The first four of these subroutines read inputs at time zero, and TCTZ prepares the model for the first day of combat.
AC	is the air-combat model.
GC	is the ground-combat model.
TC1	is theater control 1.
TC2	is theater control 2.
RF	reads forces at time t.
RPOMF	contains subroutines RP and MF. RP reads parameters at time t, and MF is a user option to move forces as directed by input.

All seven secondary overlays are contained in primary overlay AC and are designated as AC1, AC2, AC3, AC4, AC5, AC6, and AC7. All routines will be discussed in greater detail later.

The model has two input files designated by MZT and MTT, where MZT is the input file for time-zero inputs and MTT is the input file for time-t inputs. The program has set MZT = 4 and MTT = 5; however, these values can be changed very easily, if desired. There is only one output file designated as MOT (= 6); and all values, both of inputs and outputs, are printed on that file.

Chapter I

STRUCTURE OF IDAGAM I COMPUTER PROGRAM

Program MAIN controls the execution of IDAGAM I by calling all primary overlays. During each time period of the war, the air-combat routine (AC) and the ground-combat routine (GC) are executed. These two routines are primary overlays 2 and 3, respectively. The theater-control routines TC1 and TC2 (primary overlays 4 and 5, respectively) are called by MAIN one time period less than the total number of time periods. The first primary overlay, which is program TZERO, is called only once, since, from that routine, subroutines are called that read the time-zero inputs and initialize variables and geography. The last two primary overlays (6 and 7) are called only if the user designates changes in forces or parameters or if the option to move forces by input is elected.

Besides calling the primary overlays, MAIN reads inputs that indicate print options, the number of time periods to be played, and the time periods when changes to forces and parameters should be made. The time periods designated to make changes influence whether primary overlays 6 and 7 are called.

Figure 1 is a flow chart for MAIN.

Subroutine PR2, which is also in the MAIN overlay, is the summary print routine. If IPR2T is inputted with value 1, PR2 is called for those periods designated by the input array IPRB. PR2 is the only summary print routine and, if called, prints out ground and logistic data for both Red and Blue at the very *end* of the designated time period. It is the very last routine to be executed in any time period and reflects all changes due to attrition and increases to forces resulting from

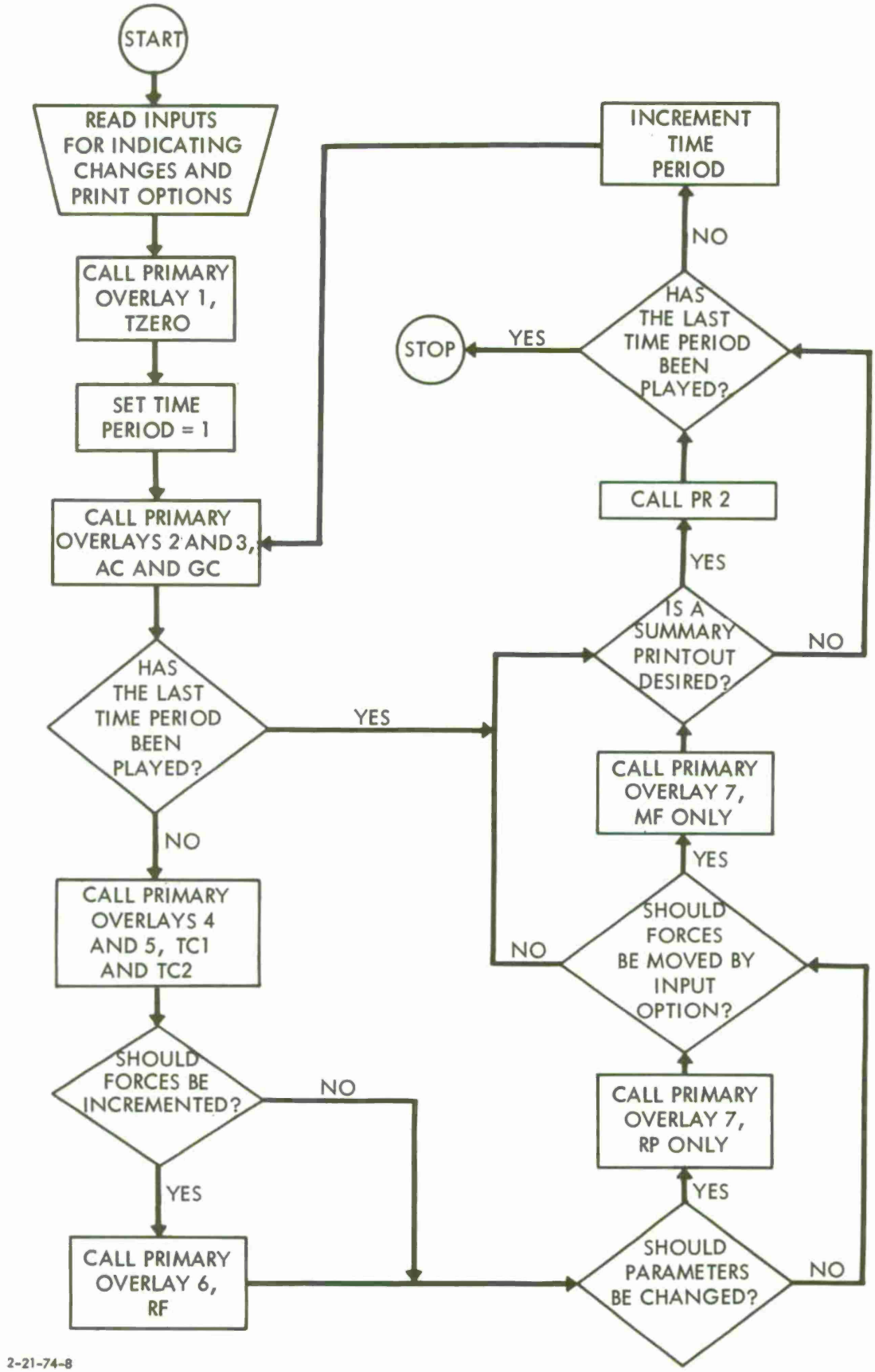

Figure 1. A FLOW CHART FOR MAIN

inputting in routine RF within that time period. Only a maximum of 16 time periods can be requested during any computer run. However, it is easy to increase that number simply by increasing the dimension of IPRB and changing the limit of the DO loop.

Summary air data will be discussed later.

Subroutines EIGENV and MPROD are also in the main overlay and are used in computing the value of Blue and Red weapons in both the TZERO and GC overlays. EIGENV performs the calculation by computing an eigenvector of the Blue-on-Red times the Red-on-Blue effectiveness matrices by a convergence method on the eigenvalue. The user inputs the index of the weapon used as the reference weapon and an epsilon value for convergence. If the component of the eigenvector specified by the inputted index is ever zero or a sufficiently small number, as compared to the input EPSLON, the program stops and prints the following message: "ANTI-POTENTIAL POTENTIAL OF BLUE REFERENCE WEAPON EQUALS 0. RERUN SELECTING A DIFFERENT WEAPON." The eigenvector approach for computing Blue and Red weapon values is an option used only when the method for computing force ratios (variable MCFR) is inputted as 5 or 6. MPROD is called only to multiply an MxN matrix by an NxL matrix, returning an MxL matrix.

Primary overlay TZERO calls input routines RCD (read campaign description), RFTZ (read forces at time zero), RPTZ (read parameters at time zero), RPAC (read parameters for air combat) and TCTZ (theater control at time zero). This overlay is called once in every run.

RCD reads the number of geographical quantities and the number of types of weapons, munitions, and forces to be played. The routine initializes the campaign description, which is then supplemented by the other input routines.

RFTZ reads all Blue and Red forces at time zero. These forces include the number of divisions, people, and weapons in sectors, regions, and the COMMZ; the number of aircraft,

SAMs, and AAA in regions and the COMMZ; the number of aircraft shelters; the number of supplies; and the number of support and replacement people and replacement weapons in the COMMZ.

RPTZ reads Blue and Red parameters at time zero, except for air parameters. These inputs include the description of the geography and the weapon-effectiveness, weapon-allocation, and theater-control parameters.

RPAC reads Blue and Red air parameters at time zero. These parameters include selection of an attrition function, determination of the percent of each type of aircraft sent on the seven primary air missions, and specification of probability-of-detection and probability-of-kill parameters, sortie rates, and the priority for sheltering aircraft.

All the above input routines are read by file MZT, which has a value of 4 in the program. They are all inputted by F format and will be described in the input section (Ch. III). There are no checks for incorrect values; and, depending on the machine or the type of error, either execution will terminate or unreasonable answers will result. Therefore, the input order must be followed in setting up the data deck.

TCTZ (theater control at time zero) is used to calculate all quantities needed in the program that are not changed by later routines, to initialize all variables including cumulative values that are outputted, and to perform simple arithmetic calculations to help the user in preparing inputs. Values of Blue and Red air and ground weapons are calculated in TCTZ and are used in the theater-control and air-combat models. EIGENV and MPROD are called by TCTZ to compute eigenvalues and eigenvectors for this calculation (if MCFR equals 5 or 6). TCTZ is called only once and always produces output, since this routine calculates values that are not changed but that are used throughout each particular run.

The second primary overlay consists of AC, which calls seven secondary overlays (AC1, AC2, AC3, AC4, AC5, AC6, and AC7), and a small subroutine ATTRIT. ATTRIT computes by one of six attrition equations (which are selected by input) the fraction of targets killed. AC and all seven secondary overlays contain three labeled COMMONs (called C1, C2, C3), which consist of air variables that all routines share. AC1 calculates aircraft supply consumption, positions shelters, and computes percentage allocations of each type of aircraft from all airbases to all opposing airbases for each primary mission: CAS, CASE, BD, ABA, ABAE, ABD, and IDR. AC2 allocates numbers of aircraft to missions by the percentages computed in AC1 and determines the number of aircraft originally allocated to CAS and ABA missions that are to be sent on SAM- and AAA-suppression missions. AC3 and AC4 compute air-to-air attrition for Red attacking Blue (and, similarly, AC5 and AC6 compute for Blue attacking Red). AC7, the last air routine, calculates all remaining air interactions. In this routine, aircraft are killed on the way home, all air-to-air attrition is parceled out, air-to-ground attrition by successful ABA aircraft is calculated, IDR is modeled, and priority sheltering is considered. AC7 also contains a section that computes cumulative aircraft quantities (such as sorties flown, aircraft killed, and shelters destroyed); and these values, which are always printed out if a detailed output is requested, may be obtained either by themselves or with a summary printout. Note that the air results printed here occur after the air war and before the ground war. (For a detailed description of outputs, see Chapter IV and Appendix A, below).

Primary overlay GC is the ground-combat routine; and it is called by MAIN, immediately following AC. Over three-quarters of GC consists of a DO loop over sectors where ground attrition (including CAS air-to-ground attrition), supply consumption, weapon-protection groups, and FEBA calculations are computed. Additional FEBA adjustments and cumulative casualties and

weapon losses are computed after the DO loop. GC also computes a killer-target scoreboard that gives numbers of people and weapons (by type) killed by weapons (by type) and aircraft (by type). A summary output will give a cumulative killer-target scoreboard; however, a detailed output must be requested in order to receive a killer-target scoreboard for data occurring on any particular day.

Included in the GC overlay is a small subroutine CVFW, which computes f(x) given the arguments x_1, ..., x_n, the functional values $f(x_1)$, ..., $f(x_n)$, and x. CVFW is called only by GC.

Primary overlays TC1 and TC2 are the theater-control routines. They are not called during the last time period of the war. TC1 adds people, weapons, and supplies to the pools in the COMMZ, adds replacement people and weapons to divisions in regions and sectors, considers delayed effectiveness of replacements, considers the effect of weapon shortages on personnel replacements, and adds repaired weapons to the pools. TC2 calculates geographical quantities due to changes in FEBA movement, computes sector withdrawals and region and sector reinforcements of divisions, and ships supplies to regions and sectors when shortages exist. The user has the option to move forces through inputs by using subroutine MF. (This routine will be discussed later in this chapter.)

Primary overlays 6 and 7 are option routines and are called only if the user designates. Primary overlay 6 is RF (which reads forces at any time t during the battle, where t is the value designated by the variable NTRF). The forces read by RF are the same as those previously read by RFTZ. All values read by RF are added to the values currently contained in the appropriate variables that are being changed. During any particular time period, the user may increment forces for either Red, Blue, or both. The variables IRFB (index to read forces

Blue) and IRFR (index to read forces Red) are the indicators, where the value 1 is inputted if forces for that side are to be read and, otherwise, 0 is inputted. If it is desired to change only a subset of the variables for a particular side and 1 is designated for that side's index, all variables not in that subset must be inputted with the value 0. A zero increment will not change the current value of those forces. After RF has read all force variables, it reads new values for NTRF, IRFB, and IRFR, indicating the (1) next time period to read forces and (2) whose forces will be incremented during that time period. A more detailed description is in the section on input preparation.

Primary overlay 7 is program RPOMF (which is a calling routine for subroutines RP and MF). Subroutine RP (read parameters at time period t) is called, whenever the user indicates, by inputting the time-period value t in the variable NTRP (next time to read parameters) or in the variable NTAP (next time to read air parameters). RP is an input routine that can change one or more of a subset of variables from subroutines RPTZ and RPAC. The selection of this subset was based on variables thought to be most frequently changed. RP uses NAMELIST for inputting and outputting of the parameters to be changed. The NAMELIST group name for the variables from RPTZ is NAME1; and from RPAC, NAME2. If variables not designated are desired to be changed, they need only be inserted in either NAME1 or NAME2, as appropriate. RP, like RF, reads the value for the next time period that parameters should be changed, immediately following all the NAMELIST cards. That value is inputted for NTRP (if RPTZ parameters were changed) or for NTAP (if RPAC parameters were changed).

Subroutine MF allows the user to move forces directly, rather than by the automated logic of TC2. This routine will not only move forces between sectors within a region as TC2 does, but also allow the user to move forces between all

sectors and all regions. MF first reads in an array that indicates how many of six possible moves the user desires. Then for each move, the user must input the number of divisions he wishes to move, the type of division, the location from which he wishes to move them, and the location to which he wishes to move them. If the number that is inputted is greater than the number at a particular location, the program moves only the number of divisions that are present at that location. The six possible moves, identified by the variable ISRZ, include (in order) moves from sector to sector, sector to region, region to sector, region to region, COMMZ to sector, and COMMZ to region. MF first moves Blue forces, and then Red. If the user desires to move forces for only one side, he must input 0 for the number of moves of each of the six possible types. The variable for the number of moves is NBMSR(ISRZ) and NRMSR(ISRZ) for Blue and Red, respectively. MF is the next-to-last routine to be called in a particular time period, if requested, and that time period must be indicated through the variable NTMF (next time to move forces). Similar to RF and RP, MF reads a new value for NTMF immediately preceding the return to MAIN. If no additional calls to MF are desired, a value greater than the number of time periods to be played should be inputted for NTMF.

Chapter II

MACHINE CONVERSION

IDAGAM I has been programmed to facilitate easy adaptation to any computer. However, IDAGAM I does contain certain statements that must be changed when the program is to be run on a machine other than the CDC #6000 series. The first such statement is the program card, which CDC demands as the first card of each program. The other statements all deal with the overlays. There are nine CALL OVERLAY statements in the MAIN program and seven CALL OVERLAY statements in routine AC, all of which have the following format: CALL OVERLAY (5HGACAM,J,K,6HRECALL). GACAM is the variable name of a location that contains the name of the file that contains the overlay. J and K are integers that identify the primary and secondary levels of overlay, respectively. 6HRECALL indicates that the overlay is not reloaded if it is already in memory. The latter statement is useful only for the seventh primary overlay, either when RP is called twice in the same time period (once for ground-parameter changes and once for air-parameter changes) or when RP and MF are both called during the same time period. Considering that more than one call to primary overlay 7 occurs infrequently in one time period, the RECALL statement can increase efficiency only very slightly. All nine of these statements must be adapted to the specific overlay format of the system on which IDAGAM I will be run. There is also an OVERLAY card before each primary and secondary overlay and before the main overlay, totaling 15 cards. An example of an OVERLAY card is OVERLAY(5HGACAM,J,K), which indicates the J^{th} primary level and K^{th} secondary level of overlay. Each overlay is a program; and, hence, there is

a total of 15 program cards, each occurring after an OVERLAY card. There are 46 cards (15 program, 15 OVERLAY, and 16 CALL OVERLAY) that must be deleted or changed.

The only other adjustment that might be necessary is in the use of NAMELIST in subroutine RP. Since this adjustment may change only the structure of the data deck, it will present no change to the program itself.

Chapter III

PREPARATION OF INPUTS

Due to both the quantity of inputs and the fact that RF, RP, and MF can read inputs on any particular day, the preparation of inputs is a tedious job that requires detailed care. There are *no* computer checks in the program that screen the data, and thus erroneous answers or machine rejection might result if data cards are out of order or are keypunched inaccurately.

All data are inputted by a structure of 10 columns to a variable. Integers are always inputted by I10 format and floating point numbers by F10.n, where n ranges between 1 and 4. Since using the decimal point when inputting a floating point number overrides the format, it is convenient to left-adjust the floating point number in a field of 10 and to disregard the indicated number of decimals in the F format.

All inputs are printed out immediately after inputting, and their output follows the same format as their input did. Therefore, although the decimal point will override the format in input, the number will be rounded in output if the number of decimals exceeds the number indicated in the F format.

The first seven data cards are read by MAIN from file MTT and contain information about outputs and when option routines should be called. The first card contains the variables NTPP, NTRF, NTRP, NTMF, NTAP, which give, in order, the number of time periods to be played, the first time period that additional forces should be read in (RF called), the first

time period that ground parameters should be changed (RP called for ground parameter changes), the first time period that forces should be moved by inputs (MF called), and the first time period that air parameters should be changed (RP called for air parameter changes). The second card contains the variables IRFB and IRFR, which indicate whether Blue and/or Red forces should be incremented by RF during time period NTRF. The value 1 indicates that they will be incremented; 0 indicates that they will not. The third card contains the variables IPRIT and IPR2T, which indicate whether a detailed (IPRIT) and/or a summary (IPR2T) print option is desired--by a 1 indicating the affirmative, and 0 the negative. The fourth and fifth cards contain the data for the array IPRA, which indicate during which time periods a detailed printout is desired. The maximum number of time periods to obtain a detailed output is 16. Similarly, the array IPRB, whose data appear on the sixth and seventh cards, indicates for which time periods a summary output is desired. The summary output obtained by IPRB gives only the ground summary, which is outputted by subroutine PR2. In order to get a summary air output, which is always obtained with a detailed output, the time period when the air summary is desired must be multiplied by 1,000 and inputted in array IPRA. If both detailed and summary air outputs are desired, the time periods for the detailed output must come first and then the time periods multiplied by 1,000 for the summary air output. Two cards for each array, IPRA and IPRB, must appear; and if 16 summary or detailed outputs are not desired, any time period greater than NTPP should be inserted in the additional locations in the respective arrays. (An example is indicated in Appendix A.)

After program MAIN reads the first seven cards, all time-zero inputs are read by RCD, RFTZ, RPTZ, and RPAC. RCD reads only six cards, which give the numbers of types of divisions, weapons, aircraft, and air munitions and the numbers of sectors,

regions, postures, and terrains. Care should be taken in checking that they do not exceed the dimensions of variables that are dependent upon them. The program is now dimensioned so that the following values cannot be exceeded:

NJ	(maximum number of sectors)	10
NIB	(maximum number of Blue regions)	4
NIR	(maximum number of Red regions)	4
NKP	(maximum number of postures, except holding)	4
NKT	(maximum number of terrains)	4
NKBD	(maximum number of types of Blue divisions)	6
NKBP	(number of types of Blue people) *must be*	3
NKBW	(maximum number of types of Blue weapons)	10
NKBA	(maximum number of types of Blue aircraft)	8
NKBAM	(maximum number of types of Blue air munitions)	10
NKRD	(maximum number of types of Red divisions)	6
NKRP	(number of types of Red people) *must be*	3
NKRW	(maximum number of types of Red weapons)	10
NKRA	(maximum number of types of Red aircraft)	8
NKRAM	(maximum number of types of Red air munitions)	10
NLEB	(maximum number of days it takes a Blue replacement to gain full effectiveness)	5
NLER	(maximum number of days it takes a Red replacement to gain full effectiveness)	5
NIBRL	(maximum number of intervals where Blue has desired reserve levels)	8
NIRRL	(maximum number of intervals where Red has desired reserve levels)	8
NIFPBS	(maximum number of indexes for FEBA position of Blue shelters)	10
NIFPRS	(maximum number of indexes for FEBA position of Red shelters)	10

Any of these variables can be increased, provided that all COMMON and DIMENSION statements are adjusted accordingly and that the resulting program will still fit in core. (For a list of variables that depend on each of these values, see Appendix B; and for a discussion of DIMENSION statements, see Appendix C.)

RFTZ, RPTZ, and RPAC read all other time-zero inputs. Since all variables are read by either I10 or F10.n format, only eight values can be inputted on a single card. A one-dimensional variable of dimension 10 will be inputted on two cards, the first containing the first eight values of the array, the second containing the last two values of the array in the first 20 columns of the card. A two-dimensional variable A(I,J) is inputted with the I dimension as the rows and the J dimension as the columns. If, for example, A is a 2x10 array, four cards will be needed for inputting and card 1 will contain the values for I = 1 and J = 1-8; card 2 will contain I = 1 and J = 9-10; card 3 will contain I = 2 and J = 1-8; card 4 will contain I = 2 and J = 9-10. A three-dimensional array B(I,J,K) will have I and J representing the rows and K representing the columns. If B is a 2x2x10 array, the first card will contain values of I = 1, J = 1, and K = 1-8; the second card will contain values for I = 1, J =1, and K = 9-10; the third card will contain values for I = 1, J = 2, and K = 1-8; the fourth card will contain values for I = 1, J = 2, and K = 9-10; and the fifth through eighth cards will contain values for the above representation of J and K, but with I having the value 2 throughout. Again, all cards must be in exactly the same order as read by the input routines. (The order of the variables is given in Appendix A.)

Routines RF, RP, and MF read inputs during the time periods the user designates that they should be called. The routines are called at the discretion of the user; and any combination of these routines may be called, or none of them may be called. However, when called they must be in the proper order both according to time period and to calling order in the program. Within a time period, the program first checks variable NTRF to see if forces should be read. If so, the variables IRFB and IRFR are checked to see if Blue forces, Red forces, or both should be read. If both forces are to be

read, Blue-force variables are read first. After reading forces, the program checks variable NTRP to see if ground parameters should be changed; and then it checks NTAP to see if air parameters should be changed. Both parameters are changed by using NAMELIST, where the first parameters are in the NAMELIST group NAME1 and the second parameters are in the NAMELIST group NAME2. Variable NTMF is checked last to see if MF should be called. If, after each variable is checked, the routine is called, the last input in each routine is the variable that indicates the next time that routine should be called; and, in the case of RF, the values for IRFB and IRFR are also included.

All routines except RP have input formats of I10 or F10.n. NAMELIST is used by RP, and the specific structure should be checked on each system. The NAMELIST structure on the CDC requires a dollar sign ($) in Column 2, followed immediately by the NAMELIST group name, the data items (separated by commas), and a dollar sign (indicating completion of the input record). The data items can be any subset of the variables indicated in the NAMELIST group name. The data item is specified and then equated to its value. If the value of only one element of an array is changed, only the variable name with that dimension needs to be included in the NAMELIST input. If the entire array is to be changed, only the first location need be inputted (followed by all values for the array in the order that the machine stores them). For CDC, the storage location is columnwise. If more than one input card is needed, successive cards also start in Column 2.

Consider the variables PBA1(KBA) and PBA2(KBA), both dimensioned to 8. An example of using NAMELIST in changing these air parameters is as follows:

```
Column 2
↓
$NAME2 PBA1(1) = . 2 , . 2 , . 2 , 0 . , 0 . , 0 . , 0 . , 0 . ,
PBA2(2) = . 1 , . 1 , . 1 , 0 . , 0 . , 0 . , 0 . , 0 . $
```

If PBA2 is stored after PBA1, PBA2 can be eliminated from the above statement as follows:

```
Column  2
$NAME2 PBA1(1)=.2,.2,.2,0.,0.,0.,0.,0.,.1,.1,.1,0.,0.,0.,0.,0.$
```

Duplication of values is handled by k * v, where k indicates the number of times the value v appears in succession. This statement then becomes

```
Column 2
$NAME2 PBA1(1) = 3 * .2, 5 * 0., 3 * .1, 5 * 0.$ .
```

Again, note that this description of NAMELIST is specific to the CDC 6000 series and that the structure of this type of statement will vary from system to system.

Chapter IV

DESCRIPTION OF OUTPUTS

Each time a computer run is made, certain outputs are always printed on file MOT. These outputs include all inputs and the outputs from subroutine TCTZ. Each input is outputted immediately after being read--the output appears in the same format as the input--enabling the user to check for incorrect inputting from which inaccurate answers might result.

The first inputs outputted are the seven cards from MAIN describing the time periods and the output options. These inputs are followed immediately by all the time-zero inputs, which include those read by RCD, PFTZ, RPTZ, and RPAC. In output, the variable name or the group of variable names appears and is immediately followed on the next line by the values it contains. On the same line that the variable names appear is a two-, three-, or four-digit number that uniquely represents within an input routine the variables on that line. This number is often convenient in locating a specific variable.

The TCTZ outputs immediately follow the outputting of all numbered time-zero inputs and start at the top of a new page. Since TCTZ initializes geography and calculates variables that are used throughout the program, all TCTZ outputs are printed on output file MOT. The output consists of the variable name in the program followed on the next line by its value. A one-dimensional array is printed on one line going from left to right. Most format statements will allow only 10 values across the page; and thus, if a variable has its last dimension greater than 10, additional values occur on the next line. A two-dimensional array A(I,J) is read with the I dimension

indicating the rows and the J dimension indicating columns. And a three-dimensional array B(I,J,K) will have I and J indicating rows and K indicating columns, with J varying first. For instance, the output for variable BWDS(KBW,KBD,J), where BWDS is a 10x4x7 array, will be a matrix where the first four rows will be values for KBW = 1 and KBD equaling 1-4 (depending on the number of the row). There will be seven columns indicating the seven values of J. The same description applies to the next four rows (5-8), except that KBW = 2. This process continues until KBW = 10, and thus the output matrix for BWDS is 40x7. This method of reading variables is true for all output that is described by a variable name.

The rest of the output is a combination of user output options and values that are inputted at a later time period. A detailed output option returns values for variables as they are calculated or recalculated and thus is outputted by the air-combat, ground-combat, and theater-control routines themselves. The output is numerous, and in many cases a variable is outputted as often as its value is changed. To read a detailed output, it is almost essential to follow along with the program, so that each value represents its proper calculation. For instance, after each attrition calculation, the number of people and weapons are outputted; but depending on its location in the program, that value may be the number left after combat or after nonbattle casualties are subtracted. A detailed output begins first with all air routines, outputs all major calculations, and then, in order, outputs GC, TC1, and TC2 values. The GC outputs are sector by sector for over three-fourths of the routine, and the beginning of each sector starts at the top of a new page headed with the day and sector. Hence, a three-dimensional variable BWDS(KBW,KBD,J) for a value of J = 7 will be outputted seven times, where KBW will indicate rows and KBD will indicate columns. After the sector loop is completed, the rest of the GC outputs are given as

previously described. TC1 and TC2 outputs follow immediately and in similar fashion. However, the withdrawal and reinforcement sections of TC2 also contain output region by region and sector by sector and will follow the format of GC (as just described). Note that the detailed output occurs as the war is played and values reflect the result of specific calculations. The summary option will be described shortly.

Other outputs always printed are the additional force inputs or inputs indicating changes in parameters. These occur in the time period in which the input routines are called. If all options are chosen within a time period, the output will contain first the RF incremental value to forces. This output begins at the top of a page and is identified by the following heading: "THE FOLLOWING DATA ARE INPUTS INDICATING THE INCREMENTAL VALUE OF THE VARIABLES ON DAY N," where N indicates the time period when the forces indicated are inputted. Note that the values outputted here do not reflect the forces already present, but show only the desired increment. RF occurs after all combat and theater-control routines are completed; and, hence, the additional forces are not directly used until the next time period. However, they are immediately added to existing forces and are represented in the summary (which occurs at the very end of a time period) if requested. The final RF inputs are the integers indicating (1) the next time period for RF to be called and (2) whether Blue or Red forces should be changed. All outputs follow the same format as the time-zero input outputs and the number associated with each corresponding variable is identical.

Next occurs the output (from subroutine RP), which indicates changes to ground parameters in NAMELIST group NAME1. It is written by NAMELIST output; and on the CDC 6000 series, it will have the following format:

```
$NAME1
MCSMAB = 1,
MCSMAR = 1,
ISMAB = 0, 0, 0, 0, 0, 0, 0,
ISMAR = 0, 0, 0, 0, 0, 0, 0,
:
$END
```

All variables in NAMELIST group NAME1 will be printed out with each variable beginning on a new line, with floating point numbers represented in E format, and with two- and three-dimensional arrays outputted in the same manner in which they are stored (columnwise).

After the NAMELIST changes will be the variable NTRP, followed on the next line by an integer indicating when ground parameters should again be changed. Subroutine RP will then be called immediately for air-parameter changes in NAMELIST group NAME2; and these parameters are again outputted by NAMELIST in the same format as NAME1. As with the ground changes, the variable NTAP (which indicates the next time period for air-parameter changes) will be outputted, followed on the next line by its value.

The last outputs automatically received are the value inputted by subroutine MF. These values are the number of moves from sectors and regions and the identifying characteristics of those moves. They are outputted in the same format--variable followed by value. Subroutine MF also contributes to the detailed output if the option is requested during the time period in which MF is called. This output indicates the completion of the move and the adjusted values from the move, such as the new number of people in the sector to which forces are moved and the number of people now present in the sector from which the forces were moved. As in the previous option routines,

the variable and the value for the next time to move forces are the final outputs; and they occur automatically.

The last type of output is the summary output for air and ground. These summary routines may be requested in the same time period, or they may be requested separately. When the summary is requested, it appears immediately following the air calculations, since all of it is outputted from AC7. The air summary always appears in the detailed output as the final portion of air output, and it just precedes the GC detailed output.

The majority of the air summary has English headings; however, the values for the rows and columns are not indicated in the printout. For instance, the first air output is headed as follows: "BLUE SORTIES FLOWN BY MISSION AND AIRCRAFT TYPE." The values beneath the heading will always be in the form of an 11xN matrix, where N indicates the number of types of aircraft. The 11 indicates 11 of 12 types of missions (7 primary and 4 secondary), which are always outputted in the air summary. The 11 missions are represented by the rows and are (in order) CAS, CAS AAA-suppression, CAS SAM-suppression, CASE, BD, ABA, ABA AAA-suppression, ABA SAM-suppression, ABAE, ABD, and IDR. The types of aircraft are represented by the columns. The output format allows for nine types of aircraft (the format statement can be changed if additional types of aircraft are desired). The output format allows for nine types of aircraft and then has a column indicating the total number of aircraft on each mission. To the right of the total column and on the line for the eleventh mission is the figure for the total number of aircraft sent on all missions. There are eight of the above type of matrices, and following them are the number of sheltered and nonsheltered aircraft killed on the ground and the new aircraft inventories (by aircraft types). The remainder of the air summary has the same format as the detailed output (i.e., variable name followed by the value). These last values

include (1) all losses due to IDR missions, (2) destruction of shelters, and (3) shelter inventories. This last output represents the number of shelters at the start of the time period and does not reflect any shelters destroyed.

The ground summary, if requested, is the very last output per time period and reflects all events in that time period, including attrition and reinforcement calculations and input changes. The first page identifies the day and indicates basic sector quantities including geographical values, force ratios, and air and ground values. The next few pages give statistics for divisions and replacements for Blue, followed by the same information for Red. The last few pages indicate cumulative ground values (such as casualties and weapon losses in sectors, with sector totals and the cumulative killer-target scoreboard). All values are indicated by their variable names and the matrices are read as described previously. All values are printed in F10.n format, where n ranges from 1 to 4, except for certain cumulative values that normally exceed the 10-column allocation and are outputted in E format.

Appendix A contains a sample output with a discussion of certain outputs.

APPENDIX A

SAMPLE OUTPUT

Appendix A

SAMPLE OUTPUT

The following is a sample output of a two-day war, using option routines RF and RP, and requesting a summary output on days 1 and 2. Along the right edge of the output are numbered references that correspond to the notes below and that explain what appears on the line of output referenced. All numerical values presented here are for demonstration purposes only.

This sample output does not illustrate a detailed output, nor does it give any hints as to how to read one. There is also no example given for using RP to change ground parameters and for the use of MF. To include examples of all options of IDAGAM I here would be cumbersome and nonillustrative. The best way to familiarize oneself with the detailed output and the use of option routines is to read the computer program and experiment.

NOTES

(1) Lines 90-94 indicate the value of variables inputted by MAIN. Line 90 indicates that a two-day war will be played and that RF and RP will be called on day 1 with RP changing air parameters. Line 94 indicates that only Blue forces will be read by RF on day 1. Line 91 indicates a summary output is desired. Line 92 indicates that an air summary is requested on days 1 and 2, and line 93 indicates that a ground summary is also requested on those days.

(2) Lines 110-330 are the variables read by subroutine RCD.

(3) Lines 1010-1255 are Blue force variables read by RFTZ.

(4) Lines 2010-2255 (variable RGSZUZ) are Red force variables read by RFTZ.

(5) Variable ITA (2190) indicates the start of routine RPTZ. Subroutine RPTZ reads all variables through number 8180.

(6) Lines 8200-8373 are air variables read by subroutine RPAC.

(7) Beginning with the variable LONSRR(IR) and continuing through variable KBDDTV(KBD) are the outputs from TCTZ. The first 18 variables describe the geography with respect to the present FEBA, and the variables following them are for weapon and air values that are calculated once for use in the AC, TC1, and TC2 routines. The standard allocation matrices are adjusted here for use in GC.

(8) Starting here and encompassing the next two and one-half pages is the air summary for day 1. The matrices beneath each heading are 11x4 for Blue and 11x3 for Red, indicating 11 missions and 4 or 3 aircraft types (depending on the side). The 11 missions in order are CAS, CAS AAA-suppression, CAS SAM-suppression, CASE, BD, ABA, ABA AAA-suppression, ABA SAM-suppression, ABAE, ABD, and IDR. The "TOTAL" columns indicate the total number of aircraft sent on each mission, with the total number of aircraft sent on all missions indicated to the right of the "TOTAL" column. After eight matrices of this type are the air-to-ground losses and aircraft inventories (by type) with totals. The next line gives cumulative losses to AAA and SAMs by the air war and cumulative casualties in regions due to the interdiction mission. The following two lines indicate cumulative weapon losses in regions due to the IDR mission, and they are followed by the number of cumulative shelters destroyed by air and by being overrun. The number of shelters in regions and COMMZ at the start of the day are printed last.

(9) The next three and one-half pages are the incremental values for Blue forces read by RF on day 1. Only air forces are read here, and they are indicated by variables number 1150, 1160, and 1170. All other variables are inputted with zeros, indicating no additional forces are brought in on day 1.

(10) The variables on line 99 indicate that Blue forces will be read again on day 5.

(11) The following five and one-half pages are the output from subroutine RP for NAMELIST group NAME2. NAMELIST prints out all variables in NAME2, each starting on a new line and reflecting the input changes to variables PBA1(KBA), PBA2(KBA), PBA3(KBA), PBA4(KBA), PBA5(KBA), PBA6(KBA), and PBA7(KBA). All NAMELIST output is in E format.

(12) Line 98 indicates that the next day to read air parameters is day 3.

(13) This is the first page of the ground summary for day 1. It indicates the theater and sector attackers and gives other sector data. Either 0 or -0 may indicate values not calculated.

(14) The following two and one-half pages are Blue force values as exist at the very end of time period 1. This output reflects losses (which are subtracted after the first day's combat) and increases (which are due to inputting forces in RF). Totals calculated for people by sectors and regions are printed just below each, with totals for all sectors, all regions, and the COMMZ printed to the right of the page. There is also a value printed for the "TOTAL EFFECTIVE [1] PEOPLE IN THEATER," which includes all effective people in divisions and pools (both support and replacement) in all sectors and regions and in the COMMZ. Following the people values are the values for weapons in sectors, regions, and the COMMZ; and these values are totaled by weapon type and printed at the right of the page. The final values are for support people, replacement people and weapons, and supplies.

(15) The following two and one-half pages give Red force values at the end of day 1--in the same manner as statement (14) described for Blue.

(16) This page gives comulative values for casualties and weapon losses occuring in ground combat. Casualties are listed for each sector and for all sectors; weapon losses are listed by sector and weapon type and for all sectors by weapon type. Cumulative percent casualties are computed as cumulative casualties divided by the total people in all divisions and sectors during all days of the war until day N, where N designates the time period outputted. Here N = 1. The variables CBNBC and CRNBC indicate cumulative nonbattle casualties in all sectors and all regions.

---

[1]IDAGAM I plays delayed effectiveness of personnel replacements. If it is assumed that each personnel replacement is 50 percent effective on the first day and 100 percent effective on the second day, then IDAGAM I will play two replacements on a particular day to a particular division as if that division received one fully effective replacement on that day and one fully effective replacement on the next day. The total effective people is the total number of fully effective people based on this concept.

Variables CBNBCM and CRNBCM are cumulative nonbattle casualties due to mines and are included in the variables CBNBC and CRNBC. The following line gives cumulative supply losses due to interdiction enroute to sectors.

(17) The remainder of the day-1 output is the cumulative killer-target scoreboard. It first gives the cumulative number of Blue and Red weapons, aircraft, and people in all sectors at the start of ground combat. Variable CRGKBS(KRW,KBW) is the matrix indicating the cumulative Blue type-KBW weapons killed by Red type-KRW weapons in all sectors. Variable CRAKBS(KRA,KBW) is the cumulative number of Blue type-KBW weapons killed by Red type-KRA aircraft; and the subsequent two matrices give the analogous situation for Blue killing Red. The last four vectors indicate people lost by weapons and aircraft.

(18) This is the air summary for day 2.

(19) This is the ground summary for day 2. Notice that RF and RP were not called, and thus no outputting of inputs occurred between the air and ground summaries.

```
90 NTPP,NTRF,NTRP,NTMF,NTAP
       2       1       0       0       1

94 IREB,IHER
       1       0

91 IPR1T,IPR2T
       0       1

92 IPRA(II)
    1000    2000       3       3       3       3       3       3
       3       3       3       3       3       3       3       3

93 IPRB(II)
       1       2       3       3       3       3       3       3
       3       3       3       3       3       3       3       3

110 NJ,NIB,NIH,NKP,NKT
       7       2       3       4       3

210 NKBD,NKBP,NKBW,NKBA,NKBAM
       4       3      10       4       9

220 NKRD,NKRP,NKRW,NKRA,NKRAM
       4       3      10       3       5

310 NLEB,NLER
       4       4

320 NIBRL,NIRRL
       8       8

330 NIFPBS,NIFPRS
      10      10
```

Note (1)

Note (2)

```
1010 NBDS(KBD,J)
     0.00      1.00      1.00      0.00      0.00      0.00      0.00
     0.00      1.00      1.00      0.00      0.00      0.00      0.00
     0.00      0.00      0.00      1.00      0.00      1.00      1.00
     2.00      0.00      0.00      2.00      2.00      2.00      3.00

1020 NBDR(KBD,IB)
     0.00      0.00
     0.00      0.00
     0.00      0.00
     2.00      2.00

1030 NBDZ(KBD)
     0.00      0.00      3.00      1.00

1040 IPBD(KBP,KBD)
    9000.     9000.    10000.    10000.
    8000.     8000.     9000.     9000.
   20000.    20000.    12000.    12000.

1050 TWBD(KBW,KBD)
    4000.     4000.     4000.     4000.
     537.      576.      506.      536.
     351.      243.      326.      298.
      70.       95.       40.       60.
     131.      131.       40.       40.
      12.       12.       12.       12.
      92.      103.       60.       70.
      18.       19.        0.        0.
      40.       40.       40.       40.
      20.       20.       20.       20.

1060 BPDS(KBP,KBD,J)
       0.     9000.     9000.        0.        0.        0.        0.
       0.     9000.     9000.        0.        0.        0.        0.
       0.        0.        0.    10000.        0.    10000.    10000.
   20000.        0.        0.    20000.    20000.    20000.    30000.
       0.     8000.     8000.        0.        0.        0.        0.
       0.     8000.     8000.        0.        0.        0.        0.
       0.        0.        0.     9000.        0.     9000.     9000.
   18000.        0.        0.    18000.    18000.    18000.    27000.
       0.    20000.    20000.        0.        0.        0.        0.
       0.    20000.    20000.        0.        0.        0.        0.
       0.        0.        0.    12000.        0.    12000.    12000.
   24000.        0.        0.    24000.    24000.    24000.    36000.

1070 BPDR(KBP,KBD,IH)
       0.        0.
       0.        0.
       0.        0.
   20000.    20000.
       0.        0.
       0.        0.
       0.        0.
   18000.    18000.
       0.        0.
       0.        0.
       0.        0.
   24000.    24000.

1080 BPDZ(KBP,KBD)
       0.        0.    30000.    10000.
       0.        0.    27000.     9000.
       0.        0.    36000.    12000.
```

Note (3)

1090 BMDS(KB*,KBD,J)

0.	4000.	4000.	0.	0.	0.	0.
0.	4000.	4000.	0.	0.	0.	0.
0.	0.	0.	4000.	0.	4000.	4000.
8000.	0.	0.	8000.	8000.	8000.	12000.
0.	537.	537.	0.	0.	0.	0.
0.	576.	576.	0.	0.	0.	0.
0.	0.	0.	506.	0.	506.	506.
1072.	0.	0.	1072.	1072.	1072.	1608.
0.	351.	351.	0.	0.	0.	0.
0.	243.	243.	0.	0.	0.	0.
0.	0.	0.	326.	0.	326.	326.
596.	0.	0.	596.	596.	596.	894.
0.	70.	70.	0.	0.	0.	0.
0.	95.	95.	0.	0.	0.	0.
0.	0.	0.	40.	0.	40.	40.
120.	0.	0.	120.	120.	120.	180.
0.	131.	131.	0.	0.	0.	0.
0.	131.	131.	0.	0.	0.	0.
0.	0.	0.	40.	0.	40.	40.
80.	0.	0.	80.	80.	80.	120.
0.	12.	12.	0.	0.	0.	0.
0.	12.	12.	0.	0.	0.	0.
0.	0.	0.	12.	0.	12.	12.
24.	0.	0.	24.	24.	24.	36.
0.	92.	92.	0.	0.	0.	0.
0.	103.	103.	0.	0.	0.	0.
0.	0.	0.	60.	0.	60.	60.
140.	0.	0.	140.	140.	140.	210.
0.	18.	18.	0.	0.	0.	0.
0.	18.	18.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.	0.
0.	40.	40.	0.	0.	0.	0.
0.	40.	40.	0.	0.	0.	0.
0.	0.	0.	40.	0.	40.	40.
80.	0.	0.	80.	80.	80.	120.
0.	20.	20.	0.	0.	0.	0.
0.	20.	20.	0.	0.	0.	0.
0.	0.	0.	20.	0.	20.	20.
40.	0.	0.	40.	40.	40.	60.

1100 BWDH(KB*,KBD,14)

0.	0.
0.	0.
0.	0.
8000.	8000.
0.	0.
0.	0.
0.	0.
1072.	1072.
0.	0.
0.	0.
0.	0.
596.	596.
0.	0.
0.	0.
0.	0.
120.	120.
0.	0.
0.	0.
0.	0.
80.	80.
0.	0.
0	0

0.	0.
24.	24.
0.	0.
0.	0.
0.	0.
140.	140.
0.	0.
0.	0.
0.	0.
0.	0.
0.	0.
0.	0.
0.	0.
80.	80.
0.	0.
0.	0.
0.	0.
40.	40.

1110 BRDZ(KB#,KBV)

0.	0.	12000.	4000.
0.	0.	1515.	536.
0.	0.	978.	298.
0.	0.	120.	60.
0.	0.	120.	40.
0.	0.	36.	12.
0.	0.	180.	70.
0.	0.	0.	0.
0.	0.	120.	40.
0.	0.	60.	20.

1115 BSAMFR(IB)

100.00 100.00

1120 BSAMHR(IB)

100.00 100.00

1125 BSAMZ

100.00

1130 TBSAM

100000.00

1135 BAGFR(IB)

100.00 100.00

1140 BAGHR(IB)

100.00 100.00

1145 BAGZ

100.00

1150 BAFR(KHA,IB)

150.	150.
200.	100.
200.	150.
0.	0.

1160 BAHR(KHA,IB)

150.	150.
200.	100.
200.	150.
0.	0.

1170 BAZ(KHA)

0. 0. 0. 100.

```
1170 BSARR(IM,IFRBS)
    50.00     50.00     50.00     50.00     50.00     50.00      0.00      0.00
     0.00      0.00
    50.00     50.00     50.00     50.00     50.00     50.00      0.00      0.00
     0.00      0.00

1175 BSPZ
  200000.

1180 BRPZ
  700000.

1190 BRWZ(KBW)
   47789.    8146.     5534.      764.      783.      144.      915.       58.
     480.      240.

1230 BGSS(J)
  243200.   286400.   286400.   243200.   243200.   354800.   466400.

1240 BGSR(IR)
  100090.   182620.

1245 BGSRUR(IB)
   12510.    40580.

1250 BGSZ
 1200000.

1255 BGSZUZ
  300000.
```

```
2010 NRDS(KRD,J)
     1.00     8.00     6.00     1.00     0.00     6.00     1.00
     3.00     5.00     2.00     3.00     0.00     2.00     0.00
     0.00     0.00     0.00     0.00     3.00     3.00     1.00
     0.00     0.00     0.00     0.00     1.00     2.00     6.00

2020 NRDR(KRD,IR)
     1.00     1.00     8.00
     3.00     3.00     2.00
     0.00     0.00     0.00
     0.00     0.00     0.00

2030 NRDZ(KRD)
     3.00    10.00     0.00     0.00

2040 IPRD(KRP,KRD)
  4500.    6700.    4500.    6700.
  3500.    3800.    3500.    3800.
  6500.    6500.    6500.    6500.

2050 TWRD(KRW,KRD)
  3000.    3000.    3000.    3000.
   403.     213.     350.     175.
   310.     186.     243.     188.
    90.     389.      80.     330.
    67.      69.      61.      54.
    12.      12.      12.      12.
    18.      54.       6.      18.
    18.      18.      12.      12.
    30.      30.      30.      30.
    15.      15.      15.      15.

2060 RPDS(KRP,KRD,J)
  4500.   36000.   27000.   45000.       0.   27000.   45000.
 20100.   33500.   13400.   20100.       0.   13400.       0.
     0.       0.       0.       0.   13500.   13500.    4500.
     0.       0.       0.       0.    6700.   13400.   40200.
  3500.   28000.   21000.    3500.       0.   21000.    3500.
 11400.   19000.    7600.   11400.       0.    7600.       0.
     0.       0.       0.       0.   10500.   10500.    3500.
     0.       0.       0.       0.    3800.    7600.   22800.
  6500.   52000.   39000.    6500.       0.   39000.    6500.
 19500.   32500.   13000.   19500.       0.   13000.       0.
     0.       0.       0.       0.   19500.   19500.    6500.
     0.       0.       0.       0.    6500.   13000.   39000.

2070 RPDR(KRP,KRD,IR)
  4500.    4500.   36000.
 20100.   20100.   13400.
     0.       0.       0.
     0.       0.       0.
  3500.    3500.   28000.
 11400.   11400.    7600.
     0.       0.       0.
     0.       0.       0.
  6500.    6500.   52000.
 19500.   19500.   13000.
     0.       0.       0.
     0.       0.       0.

2080 RPDZ(KRP,KRD)
 13500.   67000.       0.       0.
 10500.   38000.       0.       0.
 19500.   65000.       0.       0.
```

Note (4)

2090 RWDS(KR#,KRD,J)

3000.	24000.	18000.	3000.	0.	18000.	3000.
9000.	15000.	6000.	9000.	0.	6000.	0.
0.	0.	0.	0.	9000.	9000.	3000.
0.	0.	0.	0.	3000.	6000.	18000.
403.	3224.	2418.	403.	0.	2418.	403.
639.	1065.	426.	639.	0.	426.	0.
0.	0.	0.	0.	1050.	1050.	350.
0.	0.	0.	0.	175.	350.	1050.
310.	2480.	1860.	310.	0.	1460.	310.
558.	930.	372.	558.	0.	372.	0.
0.	0.	0.	0.	729.	729.	243.
0.	0.	0.	0.	188.	376.	1128.
90.	720.	540.	90.	0.	540.	90.
1167.	1945.	778.	1167.	0.	778.	0.
0.	0.	0.	0.	240.	240.	80.
0.	0.	0.	0.	330.	660.	1980.
67.	536.	402.	67.	0.	402.	67.
207.	345.	138.	207.	0.	138.	0.
0.	0.	0.	0.	183.	183.	61.
0.	0.	0.	0.	54.	109.	324.
12.	96.	72.	12.	0.	72.	12.
36.	60.	24.	36.	0.	24.	0.
0.	0.	0.	0.	36.	36.	12.
0.	0.	0.	0.	12.	24.	72.
18.	144.	108.	18.	0.	108.	18.
162.	270.	108.	162.	0.	108.	0.
0.	0.	0.	0.	18.	18.	6.
0.	0.	0.	0.	18.	36.	108.
18.	144.	108.	18.	0.	108.	18.
54.	90.	36.	54.	0.	36.	0.
0.	0.	0.	0.	36.	36.	12.
0.	0.	0.	0.	12.	24.	72.
30.	240.	180.	30.	0.	180.	30.
90.	150.	60.	90.	0.	60.	0.
0.	0.	0.	0.	90.	90.	30.
0.	0.	0.	0.	30.	60.	180.
15.	120.	90.	15.	0.	90.	15.
45.	75.	30.	45.	0.	30.	0.
0.	0.	0.	0.	45.	45.	15.
0.	0.	0.	0.	15.	30.	90.

2100 RWDR(KR#,KRD,IR)

3000.	3000.	24000.
9000.	9000.	6000.
0.	0.	0.
0.	0.	0.
403.	403.	3224.
639.	639.	426.
0.	0.	0.
0.	0.	0.
310.	310.	2480.
558.	558.	372.
0.	0.	0.
0.	0.	0.
90.	90.	720.
1167.	1167.	778.
0.	0.	0.
0.	0.	0.
67.	67.	536.
207.	207.	138.
0.	0.	0.
0.	0.	0.
12.	12.	96.
36.	36.	24.

0.	0.	0.
0.	0.	0.
18.	18.	144.
162.	162.	108.
0.	0.	0.
0.	0.	0.
18.	18.	144.
54.	54.	36.
0.	0.	0.
0.	0.	0.
30.	30.	240.
90.	90.	60.
0.	0.	0.
0.	0.	0.
15.	15.	120.
45.	45.	30.
0.	0.	0.
0.	0.	0.

2110 RWDZ(KRW,KRD)

9000.	30000.	0.	0.
1209.	2130.	0.	0.
930.	1860.	0.	0.
270.	3840.	0.	0.
201.	690.	0.	0.
36.	120.	0.	0.
54.	540.	0.	0.
54.	180.	0.	0.
90.	300.	0.	0.
45.	150.	0.	0.

2115 RSAMFR(IR)

67.00	67.00	66.00

2120 RSAMRR(IR)

67.00	97.00	66.00

2125 RSAMZ

100.00

2130 TRSAM

100000.00

2135 RAGFR(IR)

67.00	67.00	66.00

2140 RAGRR(IR)

67.00	67.00	66.00

2145 RAGZ

100.00

2150 RAFR(KRA,IR)

50.	250.	200.
150.	500.	250.
100.	300.	200.

2160 RARR(KRA,IR)

50.	250.	200.
150.	500.	250.
100.	300.	200.

2170 RAZ(KRA)

0.	0.	0.

2172 RSARF(IR,IFPRS)

```
      0.00      25.00      25.00      25.00      25.00      25.00      25.00       0.00
      0.00       0.00
      0.00     100.00     100.00     100.00     100.00     100.00     100.00       0.00
      0.00       0.00
      0.00      50.00      50.00      50.00      50.00      50.00      50.00       0.00
      0.00       0.00

2175 RSPZ
  160000.

2180 HRPZ
  700000.

2190 RRWZ(KRW)
   94000.     9414.      9646.      6545.      8403.       380.      1003.       541.
     950.      475.

2230 RGSS(J)
  520000.    520000.    520000.    520000.    520000.    520000.    520000.

2240 RGSH(IR)
  300000.    525000.    430000.

2245 RGSHUR(IR)
  300000.     75000.    170000.

2250 RGSZ
 2400000.

2255 RGSZUZ
  600000.

2190 ITA
       1

2200 FEBAIZ(J)
      0.00       0.00       0.00       0.00       0.00       0.00       0.00

2210 MCSMAH, MCSMAH
       1          1

2220 ISMAB(J)
       0          0          0          0          0          0          0

2230 ISMAH(J)
       0          0          0          0          0          0          0

2240 LNSBH(IB)
       4          7

2250 LNSHH(IH)
       1          5          7

2260 ISUPAS(J)
       0          0          0          0          0          0          0

2265 IPGB#(KB#)
       1          1          2          2          3          3          2          1
       3          3

2270 IPGR#(KR#)
       1          1          2          2          3          3          2          3
       3          3

2300 MCFR
       6
```


Note
(5)

2305 NIMAX

15

2310 NINTS(J)

15	14	13	13	15	15	15

2320 BNDIS(INTS,J)

-40.0	-35.0	-70.0	-70.0	-90.0	-30.0	-40.0
-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0
10.0	10.0	10.0	10.0	10.0	10.0	10.0
20.0	80.0	30.0	20.0	50.0	50.0	100.0
200.0	90.0	40.0	80.0	60.0	120.0	110.0
220.0	100.0	70.0	200.0	70.0	130.0	160.0
250.0	160.0	130.0	215.0	100.0	180.0	240.0
270.0	180.0	145.0	400.0	150.0	250.0	250.0
320.0	200.0	222.0	410.0	200.0	300.0	330.0
390.0	220.0	350.0	450.0	270.0	310.0	340.0
400.0	400.0	360.0	500.0	380.0	370.0	430.0
650.0	420.0	0.0	0.0	410.0	460.0	475.0
670.0	0.0	0.0	0.0	420.0	470.0	500.0
999999.0	999999.0	999999.0	999999.0	999999.0	999999.0	999999.0

2330 KTERIS(INTS,J)

3	3	1	3	2	2	3
2	2	3	2	1	1	1
2	3	3	2	2	1	1
3	3	3	2	2	1	1
3	2	2	3	2	1	1
2	3	2	2	3	2	3
2	3	2	3	3	2	1
2	2	1	3	2	2	3
3	1	2	3	1	1	1
2	1	3	2	2	1	2
3	1	2	2	1	2	2
2	2	2	1	1	2	3
2	2	2	2	1	1	2
3	2	-0	-0	2	1	2
2	-0	-0	-0	2	1	2

2340 KPBAIS(INTS,J)

1	1	1	1	1	1	1
1	1	1	1	1	1	1
2	2	2	2	2	2	2
2	2	2	2	2	2	2
1	1	1	2	1	1	1
1	1	2	1	1	1	2
2	2	1	4	2	2	1
1	1	4	2	1	1	4
4	4	2	1	4	4	1
1	2	1	2	1	1	1
1	1	1	1	1	2	2
2	1	2	1	2	1	1
1	2	1	1	1	1	1
2	1	-0	-0	2	2	2
1	-0	-0	-0	1	1	1

2350 KPRAIS(INTS,J)

1	1	1	1	1	1	1
1	1	1	1	1	1	1
2	2	2	2	2	2	2
2	2	2	2	2	2	2
1	1	1	2	1	1	1
1	1	2	1	1	1	2
2	2	1	4	2	2	1

```
      1       1       4       2       1       1       4
      4       4       2       1       4       4       1
      1       2       1       2       1       1       1
      1       1       1       1       1       2       2
      2       1       2       1       2       1       1
      1       2       1       1       1       1       1
      2       1      -0      -0       2       2       2
      1      -0      -0      -0       1       1       1

2360 WIDIS(INIS,J)
    120.0   100.0    90.0   120.0    60.0    80.0   120.0
    120.0   100.0    90.0   110.0    60.0    80.0   120.0
    120.0   100.0    90.0   110.0    60.0    80.0   120.0
    120.0   100.0    90.0   110.0    60.0    80.0   120.0
    120.0   100.0    90.0   110.0    60.0    80.0   120.0
    120.0   100.0    90.0   110.0    60.0    80.0    90.0
    120.0   100.0    90.0   110.0    60.0    80.0    90.0
    120.0    90.0    90.0    90.0    60.0    80.0    90.0
    120.0    90.0    90.0    90.0    60.0    80.0    90.0
    120.0    90.0    90.0    90.0    60.0    80.0    90.0
    120.0    90.0    80.0    70.0    60.0    80.0    90.0
    120.0    60.0    70.0    60.0    60.0    80.0    80.0
    120.0    60.0    60.0    60.0    60.0    80.0    70.0
    120.0    60.0     0.0     0.0    60.0    80.0    60.0
    120.0     0.0     0.0     0.0    60.0    80.0    60.0

2370 EFMIS(INIS,J)
      1.0     1.0     1.0     1.0     1.0     1.0     1.0
      1.0     1.0     1.0     1.0     1.0     1.0     1.0
      1.0     1.0     1.0     1.0     1.0     1.0     1.0
      1.0     1.0     1.0     1.0     1.0     1.0     1.0
      1.0     1.0     1.0     1.0     1.0     1.0     1.0
      1.0     1.0     1.0     1.0     1.0     1.0     1.0
      1.0     1.0     1.0     1.0     1.0     1.0     1.0
      1.0     1.0     1.0     1.0     1.0     1.0     1.0
      1.0     1.0     1.0     1.0     1.0     1.0     1.0
      1.0     1.0     1.0     1.0     1.0     1.0     1.0
      1.0     1.0     1.0     1.0     1.0     1.0     1.0
      1.0     1.0     1.0     1.0     1.0     1.0     1.0
      1.0     1.0     1.0     1.0     1.0     1.0     1.0
      1.0     1.0     1.0     1.0     1.0     1.0     1.0
      1.0     1.0     1.0     1.0     1.0     1.0     1.0

2380 MNBDS(J)
     24.     20.     18.     22.     12.     14.     18.

2390 MNRDS(J)
     36.     30.     27.     33.     18.     21.     27.

2410 BDSSUS,RUSSUS
      4.0     4.0

2420 BDSRUS,RUSRUS
     10.0    10.0

2430 BDSRUR,RUSRUR
      1.0     1.0

2440 BDSZUS,RUSZUS
     30.0    30.0

2450 BDSZUR,RUSZUR
     30.0    30.0

2460 BDSZDZ,RUSZDZ
      1.0     1.0
```

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2470 BDSSPZ,RDSSPZ
      1.0       1.0

2480 BDSRPZ,RDSRPZ
      1.0       1.0

2490 BDSRWZ,RDSRWZ
      1.0       1.0

3130 FRBAT(KP)
       .7       1.5        .5        .7

3140 FRRAT(KP)
       .7       1.5        .5        .7

3150 FRBASA(J,KP)
      2.0       3.0        .5       2.0
      2.0       3.0        .5       2.0
      2.0       3.0        .5       2.0
      2.0       3.0        .5       2.0
      2.0       3.0        .5       2.0
      2.0       3.0        .5       2.0
      2.0       3.0        .5       2.0

3155 FRBASD(J,KP)
      2.0       3.0        .5       2.0
      2.0       3.0        .5       2.0
      2.0       3.0        .5       2.0
      2.0       3.0        .5       2.0
      2.0       3.0        .5       2.0
      2.0       3.0        .5       2.0
      2.0       3.0        .5       2.0

3160 FRRASA(J,KP)
      2.0       3.0        .5       2.0
      2.0       3.0        .5       2.0
      2.0       3.0        .5       2.0
      2.0       3.0        .5       2.0
      2.0       3.0        .5       2.0
      2.0       3.0        .5       2.0
      2.0       3.0        .5       2.0

3165 FRRASD(J,KP)
      2.0       3.0        .5       2.0
      2.0       3.0        .5       2.0
      2.0       3.0        .5       2.0
      2.0       3.0        .5       2.0
      2.0       3.0        .5       2.0
      2.0       3.0        .5       2.0
      2.0       3.0        .5       2.0

3170 SABMAR(KDAM,KRW)
      .769      .073      .060      .057      .017      .003      .006      .004
      .008      .004
      .769      .073      .060      .057      .017      .003      .006      .004
      .008      .004
      .769      .073      .060      .057      .017      .003      .006      .004
      .008      .004
      .769      .073      .060      .057      .017      .003      .006      .004
      .008      .004
      .886     0.000     0.000      .066      .020      .004      .007      .004
      .009      .004
      .886     0.000     0.000      .066      .020      .004      .007      .004
      .009      .004
     0.000      .562      .444     0.000     0.000     0.000     0.000     0.000
```

0.000	0.000						
0.000	.552	.448	0.000	0.000	0.000	0.000	0.000
0.000	0.000						
0.000	.552	.448	0.000	0.000	0.000	0.000	0.000
0.000	0.000						

3175 SABMOR(KBAM,KRW)

.769	.073	.060	.057	.017	.003	.006	.004
.008	.004						
.769	.073	.060	.057	.017	.003	.006	.004
.008	.004						
.769	.073	.060	.057	.017	.003	.006	.004
.008	.004						
.769	.073	.060	.057	.017	.003	.006	.004
.008	.004						
.886	0.000	0.000	.066	.020	.004	.007	.004
.009	.004						
.886	0.000	0.000	.066	.020	.004	.007	.004
.009	.004						
0.000	.552	.448	0.000	0.000	0.000	0.000	0.000
0.000	0.000						
0.000	.552	.448	0.000	0.000	0.000	0.000	0.000
0.000	0.000						
0.000	.552	.448	0.000	0.000	0.000	0.000	0.000
0.000	0.000						

3180 SABWAR(KBW,KRW)

.933	0.000	0.000	.045	0.000	0.000	.022	0.000
0.000	0.000						
.813	0.000	0.000	.125	0.000	0.000	.062	0.000
0.000	0.000						
.378	.152	.219	.125	0.000	0.000	.115	0.000
0.000	0.000						
0.000	.165	.537	.029	0.000	0.000	.269	0.000
0.000	0.000						
.370	0.000	0.000	.020	.250	.070	.010	.110
.090	.080						
.370	0.000	0.000	.020	.250	.070	.010	.110
.090	.080						
.927	0.000	0.000	.049	0.000	0.000	.024	0.000
0.000	0.000						
.801	.002	.023	.013	0.000	0.000	.160	0.000
0.000	0.000						
.813	0.000	0.000	.125	0.000	0.000	.062	0.000
0.000	0.000						
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000						

3185 SABWOR(KBW,KRW)

.933	0.000	0.000	.045	0.000	0.000	.022	0.000
0.000	0.000						
.813	0.000	0.000	.125	0.000	0.000	.062	0.000
0.000	0.000						
.378	.152	.219	.125	0.000	0.000	.115	0.000
0.000	0.000						
0.000	.165	.537	.029	0.000	0.000	.269	0.000
0.000	0.000						
.370	0.000	0.000	.020	.250	.070	.010	.110
.090	.080						
.370	0.000	0.000	.020	.250	.070	.010	.110
.090	.080						
.927	0.000	0.000	.049	0.000	0.000	.024	0.000
0.000	0.000						
.801	.002	.023	.013	0.000	0.000	.160	0.000
0.000	0.000						
.813	0.000	0.000	.125	0.000	0.000	.062	0.000

0.000	0.000						
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000						
3190 SARMAB(KHAM*KBW)							
.778	.105	.059	.010	.016	.002	.016	.002
.008	.004						
.778	.105	.059	.010	.016	.002	.016	.002
.008	.004						
.778	.105	.059	.010	.016	.002	.016	.002
.008	.004						
.930	0.000	0.000	.012	.020	.003	.019	.002
.009	.005						
0.000	.639	.361	0.000	0.000	0.000	0.000	0.000
0.000	0.000						
3195 SARMUH(KHAM*KBW)							
.778	.105	.059	.010	.016	.002	.016	.002
.008	.004						
.778	.105	.059	.010	.016	.002	.016	.002
.008	.004						
.778	.105	.059	.010	.016	.002	.016	.002
.008	.004						
.930	0.000	0.000	.012	.020	.003	.019	.002
.009	.005						
0.000	.639	.361	0.000	0.000	0.000	0.000	0.000
0.000	0.000						
3200 SARWAB(KHW*KBW)							
.800	0.000	0.000	.088	0.000	0.000	.044	.067
0.000	0.000						
.781	0.000	0.000	.074	0.000	0.000	.037	.108
0.000	0.000						
.513	.163	.102	.108	0.000	0.000	.054	0.000
0.000	0.000						
0.000	.093	.401	.270	0.000	0.000	.135	0.000
0.000	0.000						
.600	0.000	0.000	.020	.230	.030	.010	0.000
.060	.050						
.600	0.000	0.000	.020	.230	.030	.010	0.000
.060	.050						
.942	0.000	0.000	.038	0.000	0.000	.019	0.000
0.000	0.000						
.600	0.000	0.000	.020	.230	.030	.010	0.000
.060	.050						
.781	0.000	0.000	.074	0.000	0.000	.037	.108
0.000	0.000						
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000						
3205 SARWDH(KHW*KBW)							
.800	0.000	0.000	.088	0.000	0.000	.044	.067
0.000	0.000						
.781	0.000	0.000	.074	0.000	0.000	.037	.108
0.000	0.000						
.513	.163	.102	.108	0.000	0.000	.054	0.000
0.000	0.000						
0.000	.093	.401	.270	0.000	0.000	.135	0.000
0.000	0.000						
.600	0.000	0.000	.020	.230	.030	.010	0.000
.060	.050						
.600	0.000	0.000	.020	.230	.030	.010	0.000
.060	.050						
.942	0.000	0.000	.038	0.000	0.000	.019	0.000
0.000	0.000						
.600	0.000	0.000	.020	.230	.030	.010	0.000

.060	.050						
.781	0.000	0.000	.074	0.000	0.000	.037	.108
0.000	0.000						
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000						

3210 VBAMAR(KBAM,KRW)

.100	.070	.070	.030	.003	.003	.005	.002
.001	.001						
.400	0.000	0.000	.010	.010	.010	.020	.010
.005	.005						
.020	.025	.025	.005	0.000	0.000	.001	0.000
0.000	0.000						
.025	.010	.010	.005	0.000	0.000	.002	0.000
0.000	0.000						
.700	0.000	0.000	.200	.015	.015	.040	.015
.010	.010						
.700	0.000	0.000	.200	.015	.015	.040	.015
.010	.010						
.250	.150	.150	.050	.050	.050	.010	.005
.005	.005						
.250	.150	.150	.050	.050	.050	.010	.005
.005	.005						
.020	.025	.025	.005	0.000	0.000	.010	0.000
0.000	0.000						

3215 VBAMUR(KBAM*KRW)

.100	.070	.070	.030	.003	.003	.005	.002
.001	.001						
.400	0.000	0.000	.010	.010	.010	.020	.010
.005	.005						
.020	.025	.025	.005	0.000	0.000	.001	0.000
0.000	0.000						
.025	.010	.010	.005	0.000	0.000	.002	0.000
0.000	0.000						
.700	0.000	0.000	.200	.015	.015	.040	.015
.010	.010						
.700	0.000	0.000	.200	.015	.015	.040	.015
.010	.010						
.250	.150	.150	.050	.050	.050	.010	.005
.005	.005						
.250	.150	.150	.050	.050	.050	.010	.005
.005	.005						
.020	.025	.025	.005	0.000	0.000	.010	0.000
0.000	0.000						

3220 VBWAHP(2*KBW*KRW)

.003	0.000	0.000	.001	0.000	0.000	.001	0.000
0.000	0.000						
.075	0.000	0.000	.020	.001	.001	.040	.001
.001	.001						
.040	.350	.300	.010	.001	.001	.020	.001
.001	.001						
.030	.300	.250	.005	.001	.001	.010	.001
.001	.001						
.700	0.000	0.000	.200	.015	.015	.400	.015
.010	.020						
.800	0.000	0.000	.200	.015	.015	.400	.015
.010	.020						
.400	0.000	0.000	.100	.010	.010	.200	.005
.005	.010						
.050	.300	.300	.015	.001	.001	.030	.001
.001	.002						
.070	0.000	0.000	.015	.001	.001	.040	.005
.005	.001						
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

```
0.000     0.000
 .003     0.000     0.000     .001     0.000     0.000     .001     0.000
0.000     0.000
 .075     0.000     0.000     .020     .001      .001      .040     .001
 .001     .001
 .040     .350      .300      .010     .001      .001      .020     .001
 .001     .001
 .030     .300      .250      .005     .001      .001      .010     .001
 .001     .001
 .700     0.000     0.000     .200     .015      .015      .400     .015
 .010     .020
 .800     0.000     0.000     .200     .015      .015      .400     .015
 .010     .020
 .400     0.000     0.000     .100     .010      .010      .200     .005
 .005     .010
 .050     .300      .300      .015     .001      .001      .030     .001
 .001     .002
 .070     0.000     0.000     .015     .001      .001      .040     .005
 .005     .001
0.000     0.000     0.000     0.000    0.000     0.000     0.000    0.000
0.000     0.000
```

3225 VBWDRP(2*KBW*KRW)

```
 .003     0.000     0.000     .001     0.000     0.000     .001     0.000
0.000     0.000
 .075     0.000     0.000     .020     .001      .001      .040     .001
 .001     .001
 .040     .350      .300      .010     .001      .001      .020     .001
 .001     .001
 .030     .300      .250      .005     .001      .001      .010     .001
 .001     .001
 .700     0.000     0.000     .200     .015      .015      .400     .015
 .010     .020
 .800     0.000     0.000     .200     .015      .015      .400     .015
 .010     .020
 .400     0.000     0.000     .100     .010      .010      .200     .005
 .005     .010
 .050     .300      .300      .015     .001      .001      .030     .001
 .001     .002
 .070     0.000     0.000     .015     .001      .001      .040     .005
 .005     .001
0.000     0.000     0.000     0.000    0.000     0.000     0.000    0.000
0.000     0.000
 .003     0.000     0.000     .001     0.000     0.000     .001     0.000
0.000     0.000
 .075     0.000     0.000     .020     .001      .001      .040     .001
 .001     .001
 .040     .350      .300      .010     .001      .001      .020     .001
 .001     .001
 .030     .300      .250      .005     .001      .001      .010     .001
 .001     .001
 .700     0.000     0.000     .200     .015      .015      .400     .015
 .010     .020
 .800     0.000     0.000     .200     .015      .015      .400     .015
 .010     .020
 .400     0.000     0.000     .100     .010      .010      .200     .005
 .005     .010
 .050     .300      .300      .015     .001      .001      .030     .001
 .001     .002
 .070     0.000     0.000     .015     .001      .001      .040     .005
 .005     .001
0.000     0.000     0.000     0.000    0.000     0.000     0.000    0.000
0.000     0.000
```

3230 VRAMAB(KRAM*KRW)

```
 .070     .030      .030      .020     .001      .001      .002     .003
```

.001	.001						
.020	.030	.020	.005	0.000	0.000	.001	.010
0.000	0.000						
.040	.020	.020	.010	.001	.001	.002	.002
.001	.001						
.400	0.000	0.000	.100	.010	.010	.020	.020
.005	.005						
.150	.100	.100	.020	.002	.002	.005	.050
.002	.002						

3235 VRAMDA(KRAM,KRW)

.070	.030	.030	.020	.001	.001	.002	.003
.001	.001						
.020	.030	.020	.005	0.000	0.000	.001	.010
0.000	0.000						
.040	.020	.020	.010	.001	.001	.002	.002
.001	.001						
.400	0.000	0.000	.100	.010	.010	.020	.020
.005	.005						
.150	.100	.100	.020	.002	.002	.005	.050
.002	.002						

3240 VRWABP(2,KRW,KRW)

.003	0.000	0.000	.002	0.000	0.000	.002	.002
0.000	0.000						
.050	0.000	0.000	.020	.001	.001	.020	.020
.002	.002						
.040	.350	.300	.010	.001	.001	.020	.020
.002	.002						
.020	.150	.150	.005	0.000	0.000	.010	.010
.001	.001						
.700	0.000	0.000	.200	.010	.010	.350	.350
.025	.025						
.700	0.000	0.000	.250	.020	.020	.450	.400
.030	.030						
.700	0.000	0.000	.200	.010	.010	.300	.300
.020	.020						
.700	0.000	0.000	.200	.010	.010	.400	.400
.020	.020						
.060	0.000	0.000	.020	.001	.001	.030	.030
.002	.002						
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000						
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
.003	0.000	0.000	.002	0.000	0.000	.002	.002
0.000	0.000						
.050	0.000	0.000	.020	.001	.001	.020	.020
.002	.002						
.040	.350	.300	.010	.001	.001	.020	.020
.002	.002						
.020	.150	.150	.005	0.000	0.000	.010	.010
.001	.001						
.700	0.000	0.000	.200	.010	.010	.350	.350
.025	.025						
.700	0.000	0.000	.250	.020	.020	.450	.400
.030	.030						
.700	0.000	0.000	.200	.010	.010	.300	.300
.020	.020						
.700	0.000	0.000	.200	.010	.010	.400	.400
.020	.020						
.060	0.000	0.000	.020	.001	.001	.030	.030
.002	.002						
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000						

3245 VRWDAP(2,KRW,KRW)

.003	0.000	0.000	.002	0.000	0.000	.002	.002

0.000	0.000						
.050	0.000	0.000	.020	.001	.001	.020	.020
.002	.002						
.040	.350	.300	.010	.001	.001	.020	.020
.002	.002						
.020	.150	.150	.005	0.000	0.000	.010	.010
.001	.001						
.700	0.000	0.000	.200	.010	.010	.350	.350
.025	.025						
.700	0.000	0.000	.250	.020	.020	.450	.400
.030	.030						
.700	0.000	0.000	.200	.010	.010	.300	.300
.020	.020						
.700	0.000	0.000	.200	.010	.010	.400	.400
.020	.020						
.060	0.000	0.000	.020	.001	.001	.030	.030
.002	.002						
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000						
.003	0.000	0.000	.002	0.000	0.000	.002	.002
0.000	0.000						
.050	0.000	0.000	.020	.001	.001	.020	.020
.002	.002						
.040	.350	.300	.010	.001	.001	.020	.020
.002	.002						
.020	.150	.150	.005	0.000	0.000	.010	.010
.001	.001						
.700	0.000	0.000	.200	.010	.010	.350	.350
.025	.025						
.700	0.000	0.000	.250	.020	.020	.450	.400
.030	.030						
.700	0.000	0.000	.200	.010	.010	.300	.300
.020	.020						
.700	0.000	0.000	.200	.010	.010	.400	.400
.020	.020						
.060	0.000	0.000	.020	.001	.001	.030	.030
.002	.002						
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000						

3246 RAMKAR(KdAM,KRm)

4.00	0.00	0.00	.03	.01	.01	.03	.02
.01	.02						
2.00	.02	.01	.07	.02	.01	.10	.05
.02	.05						
1.00	.01	.01	.09	.05	.03	.09	.08
.05	.05						
.50	.01	.01	.10	.05	.02	.10	.05
.05	.04						
5.00	.05	0.00	.70	.40	.30	1.00	.40
.70	.50						
4.00	.01	0.00	.50	.20	.20	.30	.20
.50	.50						
.50	.05	.05	.08	.20	.20	.10	.20
.20	.30						
2.00	.30	.20	.50	.40	.40	.30	.50
.40	.30						
1.00	.50	.50	.60	.20	.20	.20	.20
.20	.30						

3247 RAMKAB(KRAM,KBm)

4.00	0.00	0.00	.03	.01	.01	.03	.02
.01	.02						
1.00	.01	.01	.09	.05	.03	.09	.08
.05	.05						
2.00	.02	.01	.07	.02	.01	.10	.05

[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
.02	.05						
5.00	.05	0.00	.70	.40	.30	1.00	.40
.70	.50						
2.00	.30	.20	.50	.40	.40	.30	.50
.40	.30						
3250 BAMNLA(KBA,KBAM)							
2.00	.50	1.00	0.00	0.00	0.00	0.00	0.00
0.00							
2.00	.33	6.00	1.33	1.33	0.00	1.33	0.00
0.00							
1.00	1.00	2.00	.67	0.00	.67	0.00	.33
0.00							
0.00	0.00	4.00	1.33	0.00	1.33	2.67	0.00
0.00							
3251 BAMNLD(KBA,KBAM)							
2.00	.50	1.00	0.00	0.00	0.00	0.00	0.00
0.00							
2.00	.33	6.00	1.33	1.33	0.00	1.33	0.00
0.00							
1.00	1.00	2.00	.67	0.00	.67	0.00	.33
0.00							
0.00	0.00	4.00	1.33	0.00	1.33	2.67	0.00
0.00							
3255 RAMNLA(KRA,KRAM)							
0.00	0.00	0.00	0.00	0.00			
2.00	1.00	.25	.50	.50			
2.00	1.00	.50	0.00	0.00			
3256 RAMNLD(KRA,KRAM)							
0.00	0.00	0.00	0.00	0.00			
2.00	1.00	.25	.50	.50			
2.00	1.00	.50	0.00	0.00			
3260 BWGPG(KKBW,KBW)							
0.00	0.00	4.00	1.00	32.00	32.00	4.00	0.00
32.00	32.00						
0.00	0.00	1.00	.25	4.00	4.00	1.00	0.00
4.00	4.00						
0.00	0.00	2.00	1.00	6.00	6.00	1.00	0.00
6.00	6.00						
0.00	0.00	2.00	1.00	6.00	6.00	1.00	0.00
6.00	6.00						
0.00	0.00	2.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00						
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00						
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00						
0.00	0.00	0.00	0.00	32.00	32.00	0.00	0.00
32.00	32.00						
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00						
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00						
3261 RWGPG(KKRW,KRW)							
0.00	0.00	4.00	1.00	32.00	32.00	4.00	32.00
32.00	32.00						
0.00	0.00	1.00	.25	4.00	4.00	1.00	4.00
4.00	4.00						
0.00	0.00	2.00	1.00	6.00	6.00	1.00	6.00
6.00	6.00						
0.00	0.00	2.00	0.00	0.00	0.00	0.00	0.00

```
      0.00      0.00
      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
      0.00      0.00
      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
      0.00      0.00
      0.00      0.00      0.00      0.00     32.00     32.00      0.00     32.00
     32.00     32.00
      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
      0.00      0.00
      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
      0.00      0.00
      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
      0.00      0.00
3265 BALBD(KBD)
       .40       .40       .40       .40
3266 BALRD(KRD)
       .50       .50       .50       .50
3270 PNBD(KBD)
      1.00      1.00      1.00      1.00
3280 PNRD(KRD)
      1.00      1.00      1.00      1.00
3290 BCWI(KBW)
        1.        1.        1.        1.        0.        0.        1.        0.
        0.        0.
3300 RCWI(KRW)
        1.        1.        1.        1.        0.        0.        1.        0.
        0.        0.
3301 LVBWA(KBW)
      .005      .200      .500      .350      .700      .800      .400      .450
      .070     0.000
3302 LVBWD(KBW)
      .005      .200      .500      .350      .700      .800      .400      .450
      .070     0.000
3303 LVBAA(KBA)
     1.200     1.200     1.200     1.200
3304 LVBAD(KBA)
     1.200     1.200     1.200     1.200
3305 LVRWA(KRW)
      .003      .100      .500      .200      .700      .800      .700      .010
      .010     0.000
3306 LVRWD(KRW)
      .003      .100      .500      .200      .700      .800      .700      .010
      .010     0.000
3307 LVRAA(KRA)
      .500      .500      .500
3308 LVRAD(KRA)
      .500      .500      .500
3310 PBCSSD(KBD)
      .08       .08       .08       .08
3320 PRCSSD(KRD)
```

```
      .08        .08        .08        .08

3325 MCBM,MCHM
         1          1

3330 BMFDPT(KBD,KP,KT)
     1.00       1.00       1.00
     1.00       1.00       1.00
     1.00       1.00       1.00
     1.00       1.00       1.00
     1.00       1.00       1.00
     1.00       1.00       1.00
     1.00       1.00       1.00
     1.00       1.00       1.00
     1.00       1.00       1.00
     1.00       1.00       1.00
     1.00       1.00       1.00
     1.00       1.00       1.00
     1.00       1.00       1.00
     1.00       1.00       1.00
     1.00       1.00       1.00
     1.00       1.00       1.00

3340 RMFDPT(KRD,KP,KT)
     1.00       1.00       1.00
     1.00       1.00       1.00
     1.00       1.00       1.00
     1.00       1.00       1.00
     1.00       1.00       1.00
     1.00       1.00       1.00
     1.00       1.00       1.00
     1.00       1.00       1.00
     1.00       1.00       1.00
     1.00       1.00       1.00
     1.00       1.00       1.00
     1.00       1.00       1.00
     1.00       1.00       1.00
     1.00       1.00       1.00
     1.00       1.00       1.00
     1.00       1.00       1.00

3346 BMFAS(J)
     10.0       10.0       10.0       10.0       10.0       10.0       10.0

3348 RMFAS(J)
     10.0       10.0       10.0       10.0       10.0       10.0       10.0

3350 PBWSF(KB#)
    .7776      .1048      .0591      .0103      .0165      .0023      .0158      .0019
    .0078      .0039

3355 PRWSF(KR#)
    .7688      .0736      .0595      .0569      .0172      .0031      .0062      .0038
    .0077      .0038

3360 BPWLAM(KBW,KRAM)
     1.00       1.00       1.00       1.00       1.00
    20.00      20.00      20.00      20.00      20.00
     5.00       5.00       5.00       5.00       5.00
     4.00       4.00       4.00       4.00       4.00
    50.00      50.00      50.00      50.00      50.00
    50.00      50.00      50.00      50.00      50.00
     2.00       2.00       2.00       2.00       2.00
     2.00       2.00       2.00       2.00       2.00
    50.00      50.00      50.00      50.00      50.00
    50.00      50.00      50.00      50.00      50.00
```

3370 HPWLDM(KQW,KRAM)

1.00	1.00	1.00	1.00	1.00
20.00	20.00	20.00	20.00	20.00
5.00	5.00	5.00	5.00	5.00
4.00	4.00	4.00	4.00	4.00
50.00	50.00	50.00	50.00	50.00
50.00	50.00	50.00	50.00	50.00
2.00	2.00	2.00	2.00	2.00
2.00	2.00	2.00	2.00	2.00
50.00	50.00	50.00	50.00	50.00
50.00	50.00	50.00	50.00	50.00

3380 HPWLAW(KHW,KRW)

1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
1.00	1.00						
20.00	20.00	20.00	20.00	20.00	20.00	20.00	20.00
20.00	20.00						
5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00
5.00	5.00						
4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
4.00	4.00						
50.00	50.00	50.00	50.00	50.00	50.00	50.00	50.00
50.00	50.00						
50.00	50.00	50.00	50.00	50.00	50.00	50.00	50.00
50.00	50.00						
2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
2.00	2.00						
2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
2.00	2.00						
50.00	50.00	50.00	50.00	50.00	50.00	50.00	50.00
50.00	50.00						
50.00	50.00	50.00	50.00	50.00	50.00	50.00	50.00
50.00	50.00						

3390 HPWLDW(KJW,KRW)

1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
1.00	1.00						
20.00	20.00	20.00	20.00	20.00	20.00	20.00	20.00
20.00	20.00						
5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00
5.00	5.00						
4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
4.00	4.00						
50.00	50.00	50.00	50.00	50.00	50.00	50.00	50.00
50.00	50.00						
50.00	50.00	50.00	50.00	50.00	50.00	50.00	50.00
50.00	50.00						
2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
2.00	2.00						
2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
2.00	2.00						
50.00	50.00	50.00	50.00	50.00	50.00	50.00	50.00
50.00	50.00						
50.00	50.00	50.00	50.00	50.00	50.00	50.00	50.00
50.00	50.00						

3410 HPWLAM(KHW,KRAM)

1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
1.00							
20.00	20.00	20.00	20.00	20.00	20.00	20.00	20.00
20.00							
5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00
5.00							
4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
4.00							

50.00	50.00	50.00	50.00	50.00	50.00	50.00	50.00
50.00							
50.00	50.00	50.00	50.00	50.00	50.00	50.00	50.00
50.00							
2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
2.00							
50.00	50.00	50.00	50.00	50.00	50.00	50.00	50.00
50.00							
50.00	50.00	50.00	50.00	50.00	50.00	50.00	50.00
50.00							
50.00	50.00	50.00	50.00	50.00	50.00	50.00	50.00
50.00							

3420 RPWLDM(KHW,KBAW)

1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
1.00							
20.00	20.00	20.00	20.00	20.00	20.00	20.00	20.00
20.00							
5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00
5.00							
4.00	4.00	4.00	4.07	4.00	4.00	4.00	4.00
4.00							
50.00	50.00	50.00	50.00	50.00	50.00	50.00	50.00
50.00							
50.00	50.00	50.00	50.00	50.00	50.00	50.00	50.00
50.00							
2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
2.00							
50.00	50.00	50.00	50.00	50.00	50.00	50.00	50.00
50.00							
50.00	50.00	50.00	50.00	50.00	50.00	50.00	50.00
50.00							
50.00	50.00	50.00	50.00	50.00	50.00	50.00	50.00
50.00							

3430 RPWLAW(KHW,KHW)

1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
1.00	1.00						
20.00	20.00	20.00	20.00	20.00	20.00	20.00	20.00
20.00	20.00						
5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00
5.00	5.00						
4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
4.00	4.00						
50.00	50.00	50.00	50.00	50.00	50.00	50.00	50.00
50.00	50.00						
50.00	50.00	50.00	50.00	50.00	50.00	50.00	50.00
50.00	50.00						
2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
2.00	2.00						
50.00	50.00	50.00	50.00	50.00	50.00	50.00	50.00
50.00	50.00						
50.00	50.00	50.00	50.00	50.00	50.00	50.00	50.00
50.00	50.00						
50.00	50.00	50.00	50.00	50.00	50.00	50.00	50.00
50.00	50.00						

3440 RPWLDW(KHW,KHW)

1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
1.00	1.00						
20.00	20.00	20.00	20.00	20.00	20.00	20.00	20.00
20.00	20.00						
5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00
5.00	5.00						
4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
4.00	4.00						

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50.00     50.00     50.00     50.00     50.00     50.00     50.00     50.00
50.00     50.00
50.00     50.00     50.00     50.00     50.00     50.00     50.00     50.00
50.00     50.00
 2.00      2.00      2.00      2.00      2.00      2.00      2.00      2.00
 2.00      2.00
50.00     50.00     50.00     50.00     50.00     50.00     50.00     50.00
50.00     50.00
50.00     50.00     50.00     50.00     50.00     50.00     50.00     50.00
50.00     50.00
50.00     50.00     50.00     50.00     50.00     50.00     50.00     50.00
50.00     50.00

3450 BCRPR(KBP)
 .01       .01       .01

3460 RCRPH(KHP)
 .01       .01       .01

3470 BCRWR(KBW)
 0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
 0.00      0.00

3480 RCRWH(KHW)
 0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
 0.00      0.00

3530 BCRSPZ
 .01

3540 RCRSPZ
 .01

3550 BCRRPZ
 .01

3560 RCRRPZ
 .01

3570 BCRRWZ(KBW)
 0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
 0.00      0.00

3580 RCRRWZ(KHW)
 0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
 0.00      0.00

3600 BCRPH(KBP)
 .04       .04       .04

3610 BCRPP(KBP,KP)
 .04       .04       .04       .04
 .04       .04       .04       .04
 .04       .04       .04       .04

3620 BCRWH(KBW)
 0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
 0.00      0.00

3630 BCRWP(KBW,KP)
 0.00      0.00      0.00      0.00
 0.00      0.00      0.00      0.00
 0.00      0.00      0.00      0.00
 0.00      0.00      0.00      0.00
 0.00      0.00      0.00      0.00
 0.00      0.00      0.00      0.00
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      0.00        0.00        0.00        0.00
      0.00        0.00        0.00        0.00
      0.00        0.00        0.00        0.00
      0.00        0.00        0.00        0.00

3640 RCRPM(KRP)
       .04         .04         .04

3650 RCRPP(KRP,KP)
       .04         .04         .04         .04
       .04         .04         .04         .04
       .04         .04         .04         .04

3660 RCRWM(KRW)
      0.00        0.00        0.00        0.00        0.00        0.00        0.00        0.00
      0.00        0.00

3670 RCRWP(KRW,KP)
      0.00        0.00        0.00        0.00
      0.00        0.00        0.00        0.00
      0.00        0.00        0.00        0.00
      0.00        0.00        0.00        0.00
      0.00        0.00        0.00        0.00
      0.00        0.00        0.00        0.00
      0.00        0.00        0.00        0.00
      0.00        0.00        0.00        0.00
      0.00        0.00        0.00        0.00
      0.00        0.00        0.00        0.00

3675 SMRSOA(KSO)
       .80         .80         .80         .80

3680 SMRSOO(KSO)
       .73         .73         .73         .73

3685 SMRSOA(KRO)
       .80         .80         .80         .80

3690 SMRSOO(KRO)
       .73         .73         .73         .73

3695 PSBWOA(KSO)
       .76         .76         .76         .76

3700 PSBWOO(KSO)
       .65         .65         .65         .65

3705 PSRWOA(KRO)
       .76         .76         .76         .76

3710 PSRWOO(KRO)
       .65         .65         .65         .65

3711 FRRWAN
      1.00

3712 FRBWAN
      1.00

3713 FRRWON
      1.00

3714 FRBWON
      1.00

3715 HEWFSP(.,KP)
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      3.00      3.00      3.00      3.00
      3.00      3.00      3.00      3.00
      3.00      3.00      3.00      3.00
      3.00      3.00      3.00      3.00
      3.00      3.00      3.00      3.00
      3.00      3.00      3.00      3.00
      3.00      3.00      3.00      3.00
3717 RFWFSP(J,KP)
      3.00      3.00      3.00      3.00
      3.00      3.00      3.00      3.00
      3.00      3.00      3.00      3.00
      3.00      3.00      3.00      3.00
      3.00      3.00      3.00      3.00
      3.00      3.00      3.00      3.00
      3.00      3.00      3.00      3.00
3720 FBACSI(KBA)
       .10       .10       .10       .10
3721 FRACSI(KRA)
       .10       .10       .10
3725 BSLRAC(KRA)
       .04       .04       .04
3726 RSLBAC(KBA)
       .10       .10       .10       .10
3730 BSLRWV(KRW)
       .10       .10       .10       .10       .10       .10       .10       .10
       .10       .10
3740 RSLBWV(KBW)
       .10       .10       .10       .10       .10       .10       .10       .10
       .10       .10
3750 BSRASI(KRA)
       .36       .36       .36
3751 RSBASI(KBA)
       .96       .96       .96       .96
3752 BSRASR(KRA)
       .36       .36       .36
3753 RSBASR(KBA)
       .96       .96       .96       .96
3755 PSUBIS(J)
       .01       .01       .01       .01       .01       .01       .01
3756 PSUBIS(J)
       .01       .01       .01       .01       .01       .01       .01
3760 FFRHS(J)
      1.00      1.00      1.00      1.00      1.00      1.00      1.00
3770 FFRHS(J)
      1.00      1.00      1.00      1.00      1.00      1.00      1.00
3780 FFRHDS(J)
      1.00      1.00      1.00      1.00      1.00      1.00      1.00
3790 FFRHDS(J)
      1.00      1.00      1.00      1.00      1.00      1.00      1.00
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.... .... .... .... .... .... .... ....
3800 BRLZAI(IBRL)
     0.00     0.00     0.00     0.00     0.00     0.00     0.00     0.00
3810 BRLZDI(IBRL)
     0.00     0.00     0.00     0.00     0.00     0.00     0.00     0.00
3820 RRLZAI(IRRL)
     0.00     0.00     0.00     0.00     0.00     0.00     0.00     0.00
3830 RRLZDI(IRRL)
     0.00     0.00     0.00     0.00     0.00     0.00     0.00     0.00
3840 FIBRLZ(IBRL,J)
   -10.00   -10.00   -10.00   -10.00   -10.00   -10.00   -10.00
    10.00    10.00    10.00    20.00    10.00    10.00    10.00
   201.00    91.00    30.00   201.00    64.00   117.00    97.00
   211.00   101.00    40.00   215.00    74.00   127.00   107.00
   389.00   182.00   131.00   398.00   268.00   297.00   317.00
   403.00   196.00   145.00   408.00   282.00   311.00   327.00
   453.00   410.00   355.00     0.00   406.00   459.00   467.00
   663.00   420.00   365.00     0.00   416.00   469.00   477.00
3850 FIRRLZ(IRRL,J)
   -10.00   -10.00   -10.00   -10.00   -10.00   -10.00   -10.00
    10.00    10.00    10.00    20.00    10.00    10.00    10.00
   201.00    91.00    30.00   201.00    64.00   117.00    97.00
   211.00   101.00    40.00   215.00    74.00   127.00   107.00
   389.00   182.00   131.00   398.00   268.00   297.00   317.00
   403.00   196.00   145.00   408.00   282.00   311.00   327.00
   453.00   410.00   355.00     0.00   406.00   459.00   467.00
   663.00   420.00   365.00     0.00   416.00   469.00   477.00
3860 MABPPZ,MARRPZ
     0.       0.
3870 MABRWZ(KBW)
     0.       0.       0.       0.       0.       0.       0.       0.
     0.       0.
3880 MARRWZ(KRW)
     0.       0.       0.       0.       0.       0.       0.       0.
     0.       0.
3900 RLBAP(KP)
     0.00     0.00     0.00     0.00
3910 RLBDP(KP)
     0.00     0.00     0.00     0.00
3920 RLRAP(KP)
     0.00     0.00     0.00     0.00
3930 RLRDP(KP)
     0.00     0.00     0.00     0.00
3940 RLBAFF,RLRAFF
     0.00     0.00
3950 RLBDFM,RLRDFM
     0.00     0.00
4000 UABRPZ,UARRPZ
     0.00     0.00
4010 UIBRPZ,UIRRPZ
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      0.00        0.00
4020 DABRWZ(KBW)
      0.00        0.00        0.00        0.00        0.00        0.00        0.00        0.00
      0.00        0.00
4030 DIBRWZ(KBW)
      0.00        0.00        0.00        0.00        0.00        0.00        0.00        0.00
      0.00        0.00
4040 DARRWZ(KRW)
      0.00        0.00        0.00        0.00        0.00        0.00        0.00        0.00
      0.00        0.00
4050 DIRRWZ(KRW)
      0.00        0.00        0.00        0.00        0.00        0.00        0.00        0.00
      0.00        0.00
4060 DABGSZ,DARGSZ
  20000.00        0.00
4070 DIBGSZ,DIRGSZ
      0.00        0.00
4080 DABSAM,DARSAM
      0.00        0.00
4090 DIBSAM,DIRSAM
      0.00        0.00
5000 IBGFCR,IRGFCR
         0           0
5010 BRPF,RRPF
       .03         .03
5020 ERRDU(LEB)
       .50         .80         .92        1.00
5030 ERRDU(LER)
       .50         .80         .92        1.00
5040 PBWRRR(KBW)
      0.00        0.00        0.00        0.00        0.00        0.00        0.00        0.00
      0.00        0.00
5050 PRWRRR(KRW)
      0.00        0.00        0.00        0.00        0.00        0.00        0.00        0.00
      0.00        0.00
5060 PBWLRR(KBW)
      0.00        0.00        0.00        0.00        0.00        0.00        0.00        0.00
      0.00        0.00
5070 PRWLRR(KRW)
      0.00        0.00        0.00        0.00        0.00        0.00        0.00        0.00
      0.00        0.00
5080 PBWLRA(KBW,KP)
      0.00        0.00        0.00        0.00
      0.00        0.00        0.00        0.00
      0.00        0.00        0.00        0.00
      0.00        0.00        0.00        0.00
      0.00        0.00        0.00        0.00
      0.00        0.00        0.00        0.00
      0.00        0.00        0.00        0.00
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      0.00        0.00        0.00        0.00
      0.00        0.00        0.00        0.00
      0.00        0.00        0.00        0.00

5090 PBWLRD(KBW,KP)
      0.00        0.00        0.00        0.00
      0.00        0.00        0.00        0.00
      0.00        0.00        0.00        0.00
      0.00        0.00        0.00        0.00
      0.00        0.00        0.00        0.00
      0.00        0.00        0.00        0.00
      0.00        0.00        0.00        0.00
      0.00        0.00        0.00        0.00
      0.00        0.00        0.00        0.00
      0.00        0.00        0.00        0.00

6000 PRWLRD(KRW,KP)
      0.00        0.00        0.00        0.00
      0.00        0.00        0.00        0.00
      0.00        0.00        0.00        0.00
      0.00        0.00        0.00        0.00
      0.00        0.00        0.00        0.00
      0.00        0.00        0.00        0.00
      0.00        0.00        0.00        0.00
      0.00        0.00        0.00        0.00
      0.00        0.00        0.00        0.00
      0.00        0.00        0.00        0.00

6010 PRWLRD(KRW,KP)
      0.00        0.00        0.00        0.00
      0.00        0.00        0.00        0.00
      0.00        0.00        0.00        0.00
      0.00        0.00        0.00        0.00
      0.00        0.00        0.00        0.00
      0.00        0.00        0.00        0.00
      0.00        0.00        0.00        0.00
      0.00        0.00        0.00        0.00
      0.00        0.00        0.00        0.00
      0.00        0.00        0.00        0.00

6030 FRBAP(KP)
      6.00        6.00        6.00        6.00

6040 FRBDP(KP)
      1.00        1.00        1.00        1.00

6050 FRRAP(KP)
      6.00        6.00        6.00        6.00

6060 FRRDP(KP)
      1.00        1.00        1.00        1.00

6070 MBRFBA,MBRFRD
      1.00        1.00

6080 MRBFRA,MRBFBD
      1.00        1.00

6090 BRRAD(KBD)
      .20         .20         .20         .20

6091 RRRAD(KRD)
      .20         .20         .20         .20

7000 BRRDD(KBD)
      .20         .20         .20         .20
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```
7001 RRRUO(KRU)
      .20       .20       .20       .20
7010 BPCRPS(KRP)
      .04       .04       .04
7020 RPCRPS(KRP)
      .04       .04       .04
7030 BPCRWS(KRW)
     0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
     0.00      0.00
7040 RPCRWS(KRW)
     0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
     0.00      0.00
7050 BPCRPR(KRP)
      .04       .04       .04
7060 RPCRPR(KRP)
      .04       .04       .04
7070 BPCRWR(KRW)
     0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
     0.00      0.00
7080 RPCRWR(KRW)
     0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
     0.00      0.00
7090 BPCRSP,RPCRSP
      .04       .04
7100 BPCRRP,RPCRRP
      .04       .04
7110 BPCRRW(KRW)
     0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
     0.00      0.00
7120 RPCRRW(KRW)
     0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
     0.00      0.00
7130 PBNCAP(KP)
     .0010     .0010     .0010     .0020
7135 PBNCUP(KP)
     .0010     .0010     .0010     .0020
7140 PBNCR,PBNCZ
     .0010     .0010
7145 PRNCAP(KP)
     .0010     .0010     .0010     .0020
7150 PRNCUP(KP)
     .0010     .0010     .0010     .0020
7155 PRNCR,PRNCZ
     .0010     .0010
7200 IWUCE
        3
```

```
7205 MNIE
      10

7210 EFCE
    .0100

8000 NBAEF
       8

8005 BAEFX(IBAEF)
     .76      .77      .80      .83      .87      .92      .94      .98

8010 BAEFY(KBU,IBAEF)
    0.00      .16      .45      .61      .77      .92      .96     1.00
    0.00      .16      .45      .61      .77      .92      .96     1.00
    0.00      .16      .45      .61      .77      .92      .96     1.00
    0.00      .16      .45      .61      .77      .92      .96     1.00

8015 NBDEF
       8

8020 BDEFX(IBDEF)
     .65      .67      .70      .73      .76      .82      .92      .98

8025 BDEFY(KBU,IBDEF)
    0.00      .14      .30      .44      .56      .74      .94     1.00
    0.00      .14      .30      .44      .56      .74      .94     1.00
    0.00      .14      .30      .44      .56      .74      .94     1.00
    0.00      .14      .30      .44      .56      .74      .94     1.00

8030 NRAEF
       8

8035 RAEFX(IRAEF)
     .76      .77      .80      .83      .87      .92      .94      .98

8040 RAEFY(KRU,IRAEF)
    0.00      .16      .45      .61      .77      .92      .96     1.00
    0.00      .16      .45      .61      .77      .92      .96     1.00
    0.00      .16      .45      .61      .77      .92      .96     1.00
    0.00      .16      .45      .61      .77      .92      .96     1.00

8045 NRDEF
       8

8050 RDEFX(IRDEF)
     .65      .67      .70      .73      .76      .82      .92      .98

8055 RDEFY(KRU,IRDEF)
    0.00      .14      .30      .44      .56      .74      .94     1.00
    0.00      .14      .30      .44      .56      .74      .94     1.00
    0.00      .14      .30      .44      .56      .74      .94     1.00
    0.00      .14      .30      .44      .56      .74      .94     1.00

8060 NPCBAF
       8

8065 PCBAFX(IPCBAF)
    0.00      .50     1.00     2.00     3.00     4.00     6.00    20.00

8070 PCBAFY(KP,IPCBAF)
  1.0000    .0120    .0100    .0060    .0050    .0040    .0030    .0030
  1.0000    .0230    .0180    .0130    .0090    .0080    .0070    .0070
  1.0000    .0060    .0050    .0030    .0025    .0020    .0015    .0015
  1.0000    .0120    .0100    .0060    .0050    .0040    .0030    .0030
```

8075 NPCBDF
8

8080 PCBDFX(IPCBDF)
0.00 .50 1.00 2.00 3.00 4.00 6.00 20.00

8085 PCBDFY(KP,IPCBDF)
0.0000 .0040 .0050 .0070 .0090 .0120 .0180 .0300
0.0000 .0100 .0120 .0180 .0220 .0270 .0350 .0500
0.0000 .0080 .0100 .0140 .0180 .0240 .0360 .0600
0.0000 .0040 .0050 .0070 .0090 .0120 .0180 .0300

8086 NPCBMF
2

8087 PCBMFX(IPCBMF)
0.00 10.00

8088 PCBMFY(IPCBMF)
.0050 .0050

8090 NPCRAF
8

8095 PCRAFX(IPCRAF)
0.00 .50 1.00 2.00 3.00 4.00 6.00 20.00

8100 PCRAFY(KP,IPCRAF)
1.0000 .0120 .0100 .0080 .0050 .0040 .0030 .0030
1.0000 .0230 .0180 .0130 .0090 .0080 .0070 .0070
1.0000 .0060 .0050 .0030 .0025 .0020 .0015 .0015
1.0000 .0120 .0100 .0060 .0050 .0040 .0030 .0030

8105 NPCRDF
8

8110 PCRDFX(IPCRDF)
0.00 .50 1.00 2.00 3.00 4.00 6.00 20.00

8115 PCRDFY(KP,IPCRDF)
0.0000 .0040 .0050 .0070 .0090 .0120 .0180 .0300
0.0000 .0100 .0120 .0180 .0220 .0270 .0350 .0500
0.0000 .0080 .0100 .0140 .0180 .0240 .0360 .0600
0.0000 .0040 .0050 .0070 .0090 .0120 .0180 .0300

8116 NPCRMF
2

8117 PCRMFX(IPCRMF)
0.00 10.00

8118 PCRMFY(IPCRMF)
.0050 .0050

8120 NBFMF
8

8125 BFMFX(IBFMF)
0.00 1.00 1.50 2.00 3.00 4.00 5.00 20.00

8130 BFMFY(KP,KT,IBFMF)
0.00 8.37 13.35 17.70 25.74 25.74 27.35 40.00
0.00 3.86 5.95 8.05 15.29 15.29 16.89 30.00
0.00 1.12 2.25 3.37 5.63 5.63 6.43 20.00
0.00 0.00 .29 2.69 4.34 5.14 6.27 20.00

```
     0.00      0.00       .18      1.12      2.73      3.70      4.34     15.00
     0.00      0.00       .09       .64      1.64      2.17      2.57     10.00
     0.00     16.74     26.70     35.40     51.48     51.48     54.70     80.00
     0.00      7.72     11.90     16.10     30.58     30.58     33.78     60.00
     0.00      2.24      4.50      6.74     11.26     11.26     12.86     40.00
     0.00      4.18      6.67      8.85     12.87     12.87     13.67     20.00
     0.00      1.93      2.97      4.02      7.64      7.64      8.44     15.00
     0.00       .56      1.12      1.68      2.81      2.81      3.21     10.00

8135 NRFMF
        8

8140 RFMFX(IRFMF)
     0.00      1.00      1.50      2.00      3.00      4.00      5.00     20.00

8145 RFMFY(KP,KT,IRFMF)
     0.00      8.37     13.35     17.70     25.74     25.74     27.35     40.00
     0.00      3.86      5.95      8.05     15.29     15.29     16.89     30.00
     0.00      1.12      2.25      3.37      5.63      5.63      6.43     20.00
     0.00      0.00       .29      2.09      4.34      5.14      6.27     20.00
     0.00      0.00       .18      1.12      2.73      3.70      4.34     15.00
     0.00      0.00       .09       .64      1.64      2.17      2.57     10.00
     0.00     16.74     26.70     35.40     51.48     51.48     54.70     80.00
     0.00      7.72     11.90     16.10     30.58     30.58     33.78     60.00
     0.00      2.24      4.50      6.74     11.26     11.26     12.86     40.00
     0.00      4.18      6.67      8.85     12.87     12.87     13.67     20.00
     0.00      1.93      2.97      4.02      7.64      7.64      8.44     15.00
     0.00       .56      1.12      1.68      2.81      2.81      3.21     10.00

8150 NSEFBF
        2

8155 SEFBFX(ISEFBF)
     0.00      3.00

8160 SEFBFY(ISEFBF)
     0.00      1.00

8165 NSEFRF
        2

8170 SEFRFX(ISEFRF)
     0.00      3.00

8175 SEFRFY(ISEFRF)
     0.00      1.00

8180 EPSLON
    .0000

8200 IDEAF,IDAAF
        1         1

8201 ISMAAF,IASMAF
        1         1

8202 IGNAAF,IAGNAF
        1         1

8203 IASAF,IANSAF
        1         1

8205 IRBAF(KBA)
        1         5         5         5

8206 IRHAB(KHA)
```

```
                1              4              4              5
8207 IRBAZ(KBA)
                1              3              3              5
8210 IRRAF(KRA)
                1              4              4
8211 IRRAR(KRA)
                1              4              4
8212 IRRAZ(KRA)
                1              3              3
8214 IBAFCR,IRAFCR
                0              0
8215 PBA1(KBA)
            0.000          .400           .400          0.000
8216 PBA2(KBA)
            0.000          .148           .148          0.000
8217 PBA3(KBA)
             .500         0.000          0.000         0.000
8218 PBA4(KBA)
            0.000          .306           .306          1.000
8219 PBA5(KBA)
            0.000          .102           .102          0.000
8220 PBA6(KBA)
             .500         0.000          0.000         0.000
8227 PBA7(KBA)
            0.000          .044           .044          0.000
8221 PRA1(KRA)
            0.000          .338           .338
8222 PRA2(KRA)
            0.000          .125           .125
8223 PRA3(KRA)
             .500         0.000          0.000
8224 PRA4(KRA)
            0.000          .375           .375
8225 PRA5(KRA)
            0.000          .125           .125
8226 PRA6(KRA)
             .500         0.000          0.000
8228 PRA7(KRA)
            0.000          .038           .038
8230 PBACS(KBA)
            0.000          .100           .100          .100
8231 PRACS(KRA)
            0.000          .100           .100
8232 PBAAS(KBA)
```

```
      0.000       .100        .100        .100

8233 PRAAS(KRA)
      0.000       .100        .100

8229 FBAISR(KRA)
       .100       .100        .100        .100

8234 FRAISR(KRA)
       .100       .100        .100

8235 BDED(L)
       .0002      .0004

8236 BDDEC(L)
       .0001      .0002

8237 BDDEF(L)
       .0002      .0003

8239 BDDER(L)
       .0003      .0004

8240 BDDEZ(L)
      0.0000      .0005

8330 BDDAC(L)
       .0001      .0002

8331 BDDAF(L)
       .0002      .0003

8332 BDDAR(L)
       .0003      .0004

8333 BDDAZ(L)
      0.0000      .0005

8238 BDAD(L)
       .0002      .0004

8334 BDSC(L)
       .0002      .0004

8335 BDSF(L)
       .0004      .0006

8336 BDSR(L)
       .0006      .0008

8337 BDSZ(L)
      0.0000      .0010

8338 BDGC(L)
       .0001      .0002

8339 BDGF(L)
       .0002      .0003

8340 BDGR(L)
       .0003      .0004

8341 BDGZ(L)
      0.0000      .0005

8241 BDSS,BDGG
```

```
     .0004      .0004
8242 BDAS*BDAN
     .0004      .0004
8243 RDED(L)
     .0002      .0004
8244 RDDEC(L)
     .0001      .0002
8245 RDDEF(L)
     .0002      .0003
8247 RDDEH(L)
     .0003      .0004
8248 RDDEZ(L)
    0.0000      .0005
8342 RDDAC(L)
     .0001      .0002
8343 RDDAF(L)
     .0002      .0003
8344 RDDAH(L)
     .0003      .0004
8345 RDDAZ(L)
    0.0000      .0005
8246 RDAD(L)
     .0002      .0004
8346 RDSC(L)
     .0002      .0004
8347 RDSF(L)
     .0004      .0006
8348 RDSH(L)
     .0006      .0008
8349 RDSZ(L)
    0.0000      .0010
8350 RDGC(L)
     .0001      .0002
8351 RDGF(L)
     .0002      .0003
8352 RDGH(L)
     .0003      .0004
8353 RDGZ(L)
    0.0000      .0005
8249 RDSS,RDGG
     .0004      .0004
8250 RDAS,RDAN
     .0004      .0004
8255 RKFD(KRA*KRA)
```

```
      0.000      0.000      0.000
       .040       .040       .040
       .076       .076       .076
       .010       .010       .010

8256 BKDE(KBA,KRA)
       .075       .075       .075
       .075       .075       .075
       .075       .075       .075
       .075       .075       .075

8257 BKDA(KBA,KRA)
       .125       .125       .125
       .125       .125       .125
       .125       .125       .125
       .125       .125       .125

8258 BKAD(KBA,KRA)
      0.000      0.000      0.000
       .023       .023       .023
       .076       .076       .076
       .016       .016       .016

8259 BKS(KRA)
       .200       .200       .200

8260 BKG(KRA)
       .100       .100       .100

8261 BKSS(KBA)
       .200       .200       .200       .200

8262 BKGG(KBA)
       .100       .100       .100       .100

8263 BKAS(KBA)
      0.000       .025       .030       .064

8264 BKAN(KBA)
      0.000       .100       .127       .272

8265 BKED(KRA,KBA)
       .058       .058       .058       .058
       .058       .058       .058       .058
       .058       .058       .058       .058

8266 BKDE(KRA,KBA)
       .050       .050       .050       .050
       .050       .050       .050       .050
       .050       .050       .050       .050

8267 BKDA(KRA,KBA)
       .045       .045       .045       .045
       .045       .045       .045       .045
       .045       .045       .045       .045

8268 BKAD(KRA,KBA)
       .040       .040       .040       .040
       .031       .031       .031       .031
       .058       .058       .058       .058

8269 BKS(KBA)
       .200       .200       .200       .200

8270 BKG(KBA)
       .100       .100       .100       .100
```

```
8271 RKSS(KRA)
     0.000      .200      .200
8272 RKGG(KRA)
     0.000      .100      .100
8273 RKAS(KRA)
     0.000      .062      .023
8274 RKAN(KRA)
     0.000      .263      .096
8275 BSFRAK(KRA)
     0.00       5.00      5.00
8276 RSFBAK(KRA)
     0.00       .50       .50       .50
8277 FRASAG,FRASAG
      .50        .50
8278 PBAAGM(KRA)
     2.00       2.00      2.00      2.00
8279 PRAAGM(KRA)
     2.00       2.00      2.00
8280 BMCASS,RMCASS
    20.00      20.00
8281 BMABAS,RMABAS
    20.00      20.00
8282 BMSPSC,RMSPSC
     2.00       2.00
8283 BMSPSA,RMSPSA
     2.00       2.00
8284 WFCBSN,WFCRSN
      .10        .10
8285 PDBANG(KRA)
      .15        .15       .15       .15
8286 PDRANG(KRA)
      .15        .15       .15
8288 ABRFRA,AMBFRA
     1.00       1.00
8289 ABRFRD,AMBFRD
     1.00       1.00
8290 FBARBR(IB,IR)
      .25        .75      0.00
     0.00        .33       .67
8291 FRABBR(IR,IB)
     1.00       0.00
      .75        .25
     0.00       1.00
8294 BAFRCA,RAFBCA
```

```
8295 BSCA(KBA)
     4.00      4.00      4.00      4.00
8296 RSCA(KRA)
     4.00      4.00      4.00
8298 BAARNS,RAABNS
     5.000     5.000
8299 PARSUB,PARSUB
     .100      .100
8300 FPBS(IFPBS)
   133.00    166.00    199.00    233.00    266.00    299.00    333.00    366.00
   399.00    433.00
8301 FPRS(IFPRS)
   -67.00   -101.00   -134.00   -167.00   -201.00   -234.00   -267.00   -301.00
  -334.00   -367.00
8305 DSB,DFRH,DRRR,DZR
   100.00    100.00    100.00    100.00
8306 DSR,DFRH,DRRR,DZR
   100.00    100.00    100.00    100.00
8310 SRB1(KBA)
     1.000     1.500     2.000     1.500
8311 SRB2(KBA)
     1.000     1.000     1.500     1.000
8312 SRB3(KBA)
     2.000     1.000     1.000     1.000
8313 SRB4(KBA)
     1.000     1.000     1.500     1.500
8314 SRB5(KBA)
     1.000     1.000     1.500     1.000
8315 SRB6(KBA)
     2.000     1.000     1.000     1.000
8322 SRB7(KBA)
     1.000     1.000     1.500     1.000
8316 SRR1(KRA)
     1.000     2.500     3.000
8317 SRR2(KRA)
     1.000     2.000     2.500
8318 SRR3(KRA)
     3.500     1.000     1.000
8319 SRR4(KRA)
     1.000     1.500     2.500
8320 SRR5(KRA)
     1.000     2.000     2.500
8321 SRR6(KRA)
     3.500     1.000     1.000
```

```
8323 SHR7(KRA)
     1.000      2.000      2.500

8325 KHAS(KBA)
        4          1          3          2

8326 KHAS(KRA)
        3          1          2

8370 FFBAKH(KBA)
     .100       .100       .100       .100

8371 FFBEKH,FFBDKH
     .050       0.000

8372 FFRAKH(KRA)
     .100       .100       .100

8373 FFREKH,FFRDKH
     .050       0.000
```

LONSRR(IR)

1 2 6

LONSBR(IB)

1 5

FEBA(J)

0.00 0.00 0.00 0.00 0.00 0.00 0.00

ISHA(J)

1 1 0 0 0 1 0

KTER(J)

3 3 3 2 2 1 1

KTERNR(J)

3 2 2 3 2 1 1

KTERNB(J)

2 3 3 2 2 1 1

KPRA(J)

2 2 2 2 2 2 2

KPRAN(J)

1 1 1 2 1 1 1

KPBA(J)

2 2 2 2 2 2 2

KPBAN(J)

1 1 1 1 1 1 1

WIDS(J)

120.00 100.00 90.00 110.00 60.00 80.00 120.00

WIDSNR(J)

120.00 100.00 90.00 110.00 60.00 80.00 120.00

WIDSNB(J)

120.00 100.00 90.00 110.00 60.00 80.00 120.00

EDGEM(J)

1.00 1.00 1.00 1.00 1.00 1.00 1.00

FEIR(J)

10.00 10.00 10.00 10.00 10.00 10.00 10.00

FEIB(J)

0.00 0.00 0.00 0.00 0.00 0.00 0.00

EDGEL(J)

0.00 1.00 1.00 1.00 1.00 1.00 1.00

PBAKRP(2*KB#*KR#)

.003	0.000	0.000	.000	0.000	0.000	.000	0.000	0.000	0.000
.061	0.000	0.000	.002	0.000	0.000	.002	0.000	0.000	0.000
.015	.053	.066	.001	0.000	0.000	.002	0.000	0.000	0.000
0.000	.050	.134	.000	0.000	0.000	.003	0.000	0.000	0.000
.259	0.000	0.000	.004	.004	.001	.004	.002	.001	.002
.296	0.000	0.000	.004	.004	.001	.004	.002	.001	.002
.371	0.000	0.000	.005	0.000	0.000	.005	0.000	0.000	0.000
.040	.001	.007	.000	0.000	0.000	.005	0.000	0.000	0.000
.057	0.000	0.000	.002	0.000	0.000	.002	0.000	0.000	0.000

0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
.003	0.000	0.000	.000	0.000	0.000	.000	0.000	0.000	0.000
.061	0.000	0.000	.002	0.000	0.000	.002	0.000	0.000	0.000
.015	.053	.066	.001	0.000	0.000	.002	0.000	0.000	0.000
0.000	.050	.134	.000	0.000	0.000	.003	0.000	0.000	0.000
.259	0.000	0.000	.004	.004	.001	.004	.002	.001	.002
.296	0.000	0.000	.004	.004	.001	.004	.002	.001	.007
.371	0.000	0.000	.005	0.000	0.000	.005	0.000	0.000	0.000
.040	.001	.007	.000	0.000	0.000	.005	0.000	0.000	0.000
.057	0.000	0.000	.002	0.000	0.000	.002	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

PBDKRP(2,KBW,KRW)

.003	0.000	0.000	.000	0.000	0.000	.000	0.000	0.000	0.000
.061	0.000	0.000	.002	0.000	0.000	.002	0.000	0.000	0.000
.015	.053	.066	.001	0.000	0.000	.002	0.000	0.000	0.000
0.000	.050	.134	.000	0.000	0.000	.003	0.000	0.000	0.000
.259	0.000	0.000	.004	.004	.001	.004	.002	.001	.002
.296	0.000	0.000	.004	.004	.001	.004	.002	.001	.002
.371	0.000	0.000	.005	0.000	0.000	.005	0.000	0.000	0.000
.040	.001	.007	.000	0.000	0.000	.005	0.000	0.000	0.000
.057	0.000	0.000	.002	0.000	0.000	.002	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
.003	0.000	0.000	.000	0.000	0.000	.000	0.000	0.000	0.000
.061	0.000	0.000	.002	0.000	0.000	.002	0.000	0.000	0.000
.015	.053	.066	.001	0.000	0.000	.002	0.000	0.000	0.000
0.000	.050	.134	.000	0.000	0.000	.003	0.000	0.000	0.000
.259	0.000	0.000	.004	.004	.001	.004	.002	.001	.002
.296	0.000	0.000	.004	.004	.001	.004	.002	.001	.002
.371	0.000	0.000	.005	0.000	0.000	.005	0.000	0.000	0.000
.040	.001	.007	.000	0.000	0.000	.005	0.000	0.000	0.000
.057	0.000	0.000	.002	0.000	0.000	.002	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

PRAKBP(2,KRW,KBW)

.002	0.000	0.000	.000	0.000	0.000	.000	.000	0.000	0.000
.039	0.000	0.000	.001	0.000	0.000	.001	.002	0.000	0.000
.021	.057	.049	.001	0.000	0.000	.001	0.000	0.000	0.000
0.000	.014	.060	.001	0.000	0.000	.001	0.000	0.000	0.000
.420	0.000	0.000	.004	.002	.000	.003	0.000	.002	.001
.420	0.000	0.000	.005	.005	.001	.004	0.000	.002	.002
.659	0.000	0.000	.008	0.000	0.000	.006	0.000	0.000	0.000
.420	0.000	0.000	.004	.002	.000	.004	0.000	.001	.001
.047	0.000	0.000	.001	0.000	0.000	.001	.003	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
.002	0.000	0.000	.000	0.000	0.000	.000	.000	0.000	0.000
.039	0.000	0.000	.001	0.000	0.000	.001	.002	0.000	0.000
.021	.057	.049	.001	0.000	0.000	.001	0.000	0.000	0.000
0.000	.014	.060	.001	0.000	0.000	.001	0.000	0.000	0.000
.420	0.000	0.000	.004	.002	.000	.003	0.000	.002	.001
.420	0.000	0.000	.005	.005	.001	.004	0.000	.002	.002
.659	0.000	0.000	.008	0.000	0.000	.006	0.000	0.000	0.000
.420	0.000	0.000	.004	.002	.000	.004	0.000	.001	.001
.047	0.000	0.000	.001	0.000	0.000	.001	.003	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

PRDKBP(2,KRW,KBW)

.002	0.000	0.000	.000	0.000	0.000	.000	.000	0.000	0.000
.039	0.000	0.000	.001	0.000	0.000	.001	.002	0.000	0.000
.021	.057	.049	.001	0.000	0.000	.001	0.000	0.000	0.000
0.000	.014	.060	.001	0.000	0.000	.001	0.000	0.000	0.000
.420	0.000	0.000	.004	.002	.000	.003	0.000	.002	.001
.420	0.000	0.000	.005	.005	.001	.004	0.000	.002	.002
.659	0.000	0.000	.008	0.000	0.000	.006	0.000	0.000	0.000
.420	0.000	0.000	.004	.002	.000	.004	0.000	.001	.001
.047	0.000	0.000	.001	0.000	0.000	.001	.003	0.000	0.000

0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
.002	0.000	0.000	.000	0.000	0.000	.000	.000	0.000	0.000
.039	0.000	0.000	.001	0.000	0.000	.001	.002	0.000	0.000
.021	.057	.049	.001	0.000	0.000	.001	0.000	0.000	0.000
0.000	.014	.060	.001	0.000	0.000	.001	0.000	0.000	0.000
.420	0.000	0.000	.004	.002	.000	.003	0.000	.002	.001
.420	0.000	0.000	.005	.005	.001	.004	0.000	.002	.002
.659	0.000	0.000	.008	0.000	0.000	.006	0.000	0.000	0.000
.420	0.000	0.000	.004	.002	.000	.004	0.000	.001	.001
.047	0.000	0.000	.001	0.000	0.000	.001	.003	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

VBWASP(KBW,KP)

.001	.001
.058	.058
1.000	1.000
1.942	1.942
.125	.125
.128	.128
.137	.137
.127	.127
.047	.047

VBWDSP(KBW,KP)

.001	.001
.058	.058
1.000	1.000
1.942	1.942
.125	.125
.128	.128
.137	.137
.127	.127
.047	.047

VRWASP(KRW,KP)

.006	.006
.053	.053
.872	.872
1.027	1.027
.147	.147
.186	.186
.262	.262
.147	.147
.056	.056

VRWDSP(KRW,KP)

.006	.006
.053	.053
.872	.872
1.027	1.027
.147	.147
.186	.186
.262	.262
.147	.147
.056	.056

VBAASF(KBA)

.247	2.126	.729	3.218

VBADSF(KBA)

.246	2.125	.729	3.218

VRAASF(KRA)

0.000	.452	.114

VRADSF(KRA)

0.000	.452	.114							

SABWAR(KBW,KRW)

1.214	0.000	0.000	.784	0.000	0.000	3.597	0.000	0.000	0.000
1.058	0.000	0.000	2.190	0.000	0.000	10.048	0.000	0.000	0.000
.492	2.082	3.681	2.197	0.000	0.000	18.548	0.000	0.000	0.000
0.000	2.260	9.025	.510	0.000	0.000	43.387	0.000	0.000	0.000
.481	0.000	0.000	.351	14.535	22.581	1.613	28.947	11.688	21.053
.481	0.000	0.000	.351	14.535	22.581	1.613	28.947	11.688	21.053
1.206	0.000	0.000	.856	0.000	0.000	3.919	0.000	0.000	0.000
1.042	.033	.395	.223	0.000	0.000	25.855	0.000	0.000	0.000
1.057	0.000	0.000	2.197	0.000	0.000	10.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

SABWDR(KBW,KRW)

1.214	0.000	0.000	.784	0.000	0.000	3.597	0.000	0.000	0.000
1.058	0.000	0.000	2.190	0.000	0.000	10.048	0.000	0.000	0.000
.492	2.082	3.681	2.197	0.000	0.000	18.548	0.000	0.000	0.000
0.000	2.260	9.025	.510	0.000	0.000	43.387	0.000	0.000	0.000
.481	0.000	0.000	.351	14.535	22.581	1.613	28.947	11.688	21.053
.481	0.000	0.000	.351	14.535	22.581	1.613	28.947	11.688	21.053
1.206	0.000	0.000	.856	0.000	0.000	3.919	0.000	0.000	0.000
1.042	.033	.395	.223	0.000	0.000	25.855	0.000	0.000	0.000
1.057	0.000	0.000	2.197	0.000	0.000	10.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

SARWAB(KRW,KBW)

1.029	0.000	0.000	8.544	0.000	0.000	2.785	35.263	0.000	0.000
1.004	0.000	0.000	7.184	0.000	0.000	2.342	56.842	0.000	0.000
.660	1.555	2.741	10.485	0.000	0.000	3.418	0.000	0.000	0.000
0.000	.887	6.785	26.214	0.000	0.000	8.544	0.000	0.000	0.000
.772	0.000	0.000	1.942	13.939	13.043	.633	0.000	7.692	12.821
.772	0.000	0.000	1.942	13.939	13.043	.633	0.000	7.692	12.821
1.211	0.000	0.000	3.689	0.000	0.000	1.203	0.000	0.000	0.000
.772	0.000	0.000	1.942	13.939	13.043	.633	0.000	7.692	12.821
1.004	0.000	0.000	7.184	0.000	0.000	2.342	56.842	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

SARWDB(KRW,KBW)

1.029	0.000	0.000	8.544	0.000	0.000	2.785	35.263	0.000	0.000
1.004	0.000	0.000	7.184	0.000	0.000	2.342	56.842	0.000	0.000
.660	1.555	2.741	10.485	0.000	0.000	3.418	0.000	0.000	0.000
0.000	.887	6.785	26.214	0.000	0.000	8.544	0.000	0.000	0.000
.772	0.000	0.000	1.942	13.939	13.043	.633	0.000	7.692	12.821
.772	0.000	0.000	1.942	13.939	13.043	.633	0.000	7.692	12.821
1.211	0.000	0.000	3.689	0.000	0.000	1.203	0.000	0.000	0.000
.772	0.000	0.000	1.942	13.939	13.043	.633	0.000	7.692	12.821
1.004	0.000	0.000	7.184	0.000	0.000	2.342	56.842	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

SABMAR(KBAM,KRW)

1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
1.153	0.000	0.000	1.153	1.151	1.161	1.145	1.158	1.156	1.158
1.153	0.000	0.000	1.153	1.151	1.161	1.145	1.158	1.156	1.158
0.000	7.555	7.538	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	7.555	7.538	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	7.555	7.538	0.000	0.000	0.000	0.000	0.000	0.000	0.000

SABMDR(KBAM,KRW)

1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000

1.153	0.000	0.000	1.153	1.151	1.161	1.145	1.158	1.156	1.158
1.153	0.000	0.000	1.153	1.151	1.161	1.145	1.158	1.156	1.158
0.000	7.555	7.538	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	7.555	7.538	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	7.555	7.538	0.000	0.000	0.000	0.000	0.000	0.000	0.000

SARMAB(KRAM,KBW)

1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
1.196	0.000	0.000	1.194	1.194	1.217	1.196	1.211	1.192	1.205
0.000	6.097	6.108	0.000	0.000	0.000	0.000	0.000	0.000	0.000

SARMDB(KRAM,KBW)

1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
1.196	0.000	0.000	1.194	1.194	1.217	1.196	1.211	1.192	1.205
0.000	6.097	6.108	0.000	0.000	0.000	0.000	0.000	0.000	0.000

TRAWVD(KRD)

423.24	621.75	346.83	548.39

TRDWVD(KRD)

423.28	621.80	346.86	548.44

KRDATV(KRD)

3	1	4	2

KRDDTV(KRD)

3	1	4	2

TBAWVD(KBD)

556.92	501.21	453.86	467.79

TBDWVD(KBD)

556.91	501.20	453.85	467.78

KBDATV(KBD)

1	2	4	3

KBDDTV(KBD)

1	2	4	3

DAY
1

BLUE SORTIES FLOWN BY MISSION AND AIRCRAFT TYPE				TOTAL	
0.00	329.10	512.07	0.00	841.17	
0.00	20.36	31.58	0.00	51.94	
0.00	10.18	15.79	0.00	25.97	
0.00	88.68	155.19	0.00	243.87	
300.00	0.00	0.00	0.00	300.00	
0.00	168.33	294.65	138.73	601.71	
0.00	6.36	11.02	4.55	21.93	
0.00	9.03	15.84	6.72	31.59	
0.00	61.20	107.10	0.00	168.30	
900.00	0.00	0.00	0.00	900.00	
0.00	26.64	46.62	0.00	73.26	3259.74
BLUE AIRCRAFT KILLED BY MISSION AND AIRCRAFT TYPE				TOTAL	
0.00	4.49	5.28	0.00	9.78	
0.00	.47	.61	0.00	1.08	
0.00	.11	.12	0.00	.23	
0.00	.33	.39	0.00	.72	
6.93	0.00	0.00	0.00	6.93	
0.00	9.54	11.21	5.00	25.76	
0.00	.48	.54	.31	1.33	
0.00	.63	.72	.42	1.77	
0.00	2.56	2.99	0.00	5.55	
7.39	0.00	0.00	0.00	7.39	
0.00	1.32	1.58	0.00	2.90	63.44
CUMULATIVE BLUE SORTIES FLOWN BY MISSION AND AIRCRAFT TYPE				TOTAL	
0.00	329.10	512.07	0.00	841.17	
0.00	20.36	31.58	0.00	51.94	
0.00	10.18	15.79	0.00	25.97	
0.00	88.68	155.19	0.00	243.87	
300.00	0.00	0.00	0.00	300.00	
0.00	168.33	294.65	138.73	601.71	
0.00	6.36	11.02	4.55	21.93	
0.00	9.03	15.84	6.72	31.59	
0.00	61.20	107.10	0.00	168.30	
900.00	0.00	0.00	0.00	900.00	
0.00	26.64	46.62	0.00	73.26	3259.74
CUMULATIVE BLUE AIRCRAFT KILLED BY MISSION AND AIRCRAFT TYPE				TOTAL	
0.00	4.49	5.28	0.00	9.78	
0.00	.47	.61	0.00	1.08	
0.00	.11	.12	0.00	.23	
0.00	.33	.39	0.00	.72	
6.93	0.00	0.00	0.00	6.93	
0.00	9.54	11.21	5.00	25.76	
0.00	.48	.54	.31	1.33	
0.00	.63	.72	.42	1.77	
0.00	2.56	2.99	0.00	5.55	
7.39	0.00	0.00	0.00	7.39	
0.00	1.32	1.58	0.00	2.90	63.44
RED SORTIES FLOWN BY MISSION AND AIRCRAFT TYPE				TOTAL	
0.00	1370.17	1096.21		2466.37	
0.00	99.05	79.20		178.25	
0.00	49.53	39.60		89.12	
0.00	459.00	375.00		825.00	
875.00	0.00	0.00		875.00	
0.00	915.00	1016.75		1931.75	
0.00	44.69	49.62		94.30	
0.00	52.81	58.64		111.45	

Note
(8)

0.00	450.00	375.00		825.00	
3500.00	0.00	0.00		3500.00	
0.00	135.00	112.50		247.50	11143.75

RED AIRCRAFT KILLED BY MISSION AND AIRCRAFT TYPE

				TOTAL	
0.00	4.29	2.92		7.20	
0.00	.34	.23		.57	
0.00	.13	.09		.22	
0.00	.48	.32		.80	
3.60	0.00	0.00		3.60	
0.00	26.71	17.85		44.56	
0.00	1.42	.95		2.37	
0.00	1.49	.99		2.48	
0.00	4.74	3.16		7.91	
4.25	0.00	0.00		4.25	
0.00	2.15	1.44		3.59	77.55

CUMULATIVE RED SORTIES FLOWN BY MISSION AND AIRCRAFT TYPE

				TOTAL	
0.00	1370.17	1096.21		2466.37	
0.00	99.05	79.20		178.25	
0.00	49.53	39.60		89.12	
0.00	450.00	375.00		825.00	
875.00	0.00	0.00		875.00	
0.00	915.00	1016.75		1931.75	
0.00	44.69	49.62		94.30	
0.00	52.81	58.64		111.45	
0.00	450.00	375.00		825.00	
3500.00	0.00	0.00		3500.00	
0.00	135.00	112.50		247.50	11143.75

CUMULATIVE RED AIRCRAFT KILLED BY MISSION AND AIRCRAFT TYPE

				TOTAL	
0.00	4.29	2.92		7.20	
0.00	.34	.23		.57	
0.00	.13	.09		.22	
0.00	.48	.32		.80	
3.60	0.00	0.00		3.60	
0.00	26.71	17.85		44.56	
0.00	1.42	.95		2.37	
0.00	1.49	.99		2.48	
0.00	4.74	3.16		7.91	
4.25	0.00	0.00		4.25	
0.00	2.15	1.44		3.59	77.55

BLUE AIRCRAFT SHELTERED AND NON-SHELTERED KILLED

0.00	60.78

CUMULATIVE BLUE AIRCRAFT SHELTERED AND NON-SHELTERED KILLED

0.00	60.78

RED AIRCRAFT SHELTERED AND NON-SHELTERED KILLED

0.00	30.27

CUMULATIVE RED AIRCRAFT SHELTERED AND NON-SHELTERED KILLED

0.00	30.27

BLUE AIRCRAFT INVENTORY BY AIRCRAFT TYPE

				TOTAL
585.68	548.54	647.29	94.26	1875.78

RED AIRCRAFT INVENTORY BY AIRCRAFT TYPE

				TOTAL
982.74	1737.72	1171.72		3892.18

CHGL	CRSHL	CHGL	CRSHL	CACRI	CRCRI
.99	1.34	.66	.58	2259.35	914.04

CBWLIN(KHW)									
1035.42	11.76	4.30	1.43	35	.08	1.53	0.00	.52	.23

CRWLIR(KRW)									
742.27	3.30	2.06	4.70	.61	.08	.75	.20	.42	.19
CBSAD	CBSAD								
0.00	0.00								
BSAFR(IB)									
150.00	150.00								
BSARR(IB)									
150.00	150.00								
BSAZ									
0.00									
RSAFR(IB)									
75.00	300.00	150.00							
RSARR(IB)									
75.00	300.00	150.00							
RSAZ									
0.00									

THE FOLLOWING DATA ARE INPUTS INDICATING THE INCREMENTAL VALUE OF THE VARIABLES ON DAY 1

Note (9)

```
1010 NBDS(KBD,J)
      0.00      0.00      0.00      0.00      0.00      0.00      0.00
      0.00      0.00      0.00      0.00      0.00      0.00      0.00
      0.00      0.00      0.00      0.00      0.00      0.00      0.00
      0.00      0.00      0.00      0.00      0.00      0.00      0.00

1020 NBDR(KBD,IB)
      0.00      0.00
      0.00      0.00
      0.00      0.00
      0.00      0.00

1030 NBDZ(KBD)
      0.00      0.00      0.00      0.00

1040 TPBD(KBP,KBD)
        0.        0.        0.        0.
        0.        0.        0.        0.
        0.        0.        0.        0.

1050 TWBD(KBW,KBD)
        0.        0.        0.        0.
        0.        0.        0.        0.
        0.        0.        0.        0.
        0.        0.        0.        0.
        0.        0.        0.        0.
        0.        0.        0.        0.
        0.        0.        0.        0.
        0.        0.        0.        0.
        0.        0.        0.        0.
        0.        0.        0.        0.

1060 BPDS(KBP,KBD,J)
        0.        0.        0.        0.        0.        0.        0.
        0.        0.        0.        0.        0.        0.        0.
        0.        0.        0.        0.        0.        0.        0.
        0.        0.        0.        0.        0.        0.        0.
        0.        0.        0.        0.        0.        0.        0.
        0.        0.        0.        0.        0.        0.        0.
        0.        0.        0.        0.        0.        0.        0.
        0.        0.        0.        0.        0.        0.        0.
        0.        0.        0.        0.        0.        0.        0.
        0.        0.        0.        0.        0.        0.        0.
        0.        0.        0.        0.        0.        0.        0.
        0.        0.        0.        0.        0.        0.        0.

1070 BPDR(KBP,KBD,IB)
        0.        0.
        0.        0.
        0.        0.
        0.        0.
        0.        0.
        0.        0.
        0.        0.
        0.        0.
        0.        0.
        0.        0.
        0.        0.
        0.        0.

1080 BPDZ(KBP,KBD)
        0.        0.        0.        0.
```

```
      0.        0.        0.        0.
      0.        0.        0.        0.

 1090 BWDS(KBW*KBU*J)
      0.        0.        0.        0.        0.        0.        0.
      0.        0.        0.        0.        0.        0.        0.
      0.        0.        0.        0.        0.        0.        0.
      0.        0.        0.        0.        0.        0.        0.
      0.        0.        0.        0.        0.        0.        0.
      0.        0.        0.        0.        0.        0.        0.
      0.        0.        0.        0.        0.        0.        0.
      0.        0.        0.        0.        0.        0.        0.
      0.        0.        0.        0.        0.        0.        0.
      0.        0.        0.        0.        0.        0.        0.
      0.        0.        0.        0.        0.        0.        0.
      0.        0.        0.        0.        0.        0.        0.
      0.        0.        0.        0.        0.        0.        0.
      0.        0.        0.        0.        0.        0.        0.
      0.        0.        0.        0.        0.        0.        0.
      0.        0.        0.        0.        0.        0.        0.
      0.        0.        0.        0.        0.        0.        0.
      0.        0.        0.        0.        0.        0.        0.
      0.        0.        0.        0.        0.        0.        0.
      0.        0.        0.        0.        0.        0.        0.
      0.        0.        0.        0.        0.        0.        0.
      0.        0.        0.        0.        0.        0.        0.
      0.        0.        0.        0.        0.        0.        0.
      0.        0.        0.        0.        0.        0.        0.
      0.        0.        0.        0.        0.        0.        0.
      0.        0.        0.        0.        0.        0.        0.
      0.        0.        0.        0.        0.        0.        0.
      0.        0.        0.        0.        0.        0.        0.
      0.        0.        0.        0.        0.        0.        0.
      0.        0.        0.        0.        0.        0.        0.
      0.        0.        0.        0.        0.        0.        0.
      0.        0.        0.        0.        0.        0.        0.
      0.        0.        0.        0.        0.        0.        0.
      0.        0.        0.        0.        0.        0.        0.
      0.        0.        0.        0.        0.        0.        0.
      0.        0.        0.        0.        0.        0.        0.
      0.        0.        0.        0.        0.        0.        0.
      0.        0.        0.        0.        0.        0.        0.
      0.        0.        0.        0.        0.        0.        0.
      0.        0.        0.        0.        0.        0.        0.

 1100 BWDH(KB**KBU*IH)
      0.        0.
      0.        0.
      0.        0.
      0.        0.
      0.        0.
      0.        0.
      0.        0.
      0.        0.
      0.        0.
      0.        0.
      0.        0.
      0.        0.
      0.        0.
      0.        0.
      0.        0.
      0.        0.
      0.        0.
      0.        0.
      0.        0.
      0         0
```

```
      0.        0.
      0.        0.
      0.        0.
      0.        0.
      0.        0.
      0.        0.
      0.        0.
      0.        0.
      0.        0.
      0.        0.
      0.        0.
      0.        0.
      0.        0.
      0.        0.
      0.        0.
      0.        0.
      0.        0.
      0.        0.
      0.        0.
      0.        0.

1110 BWDZ(KBW,KBD)
      0.        0.        0.        0.
      0.        0.        0.        0.
      0.        0.        0.        0.
      0.        0.        0.        0.
      0.        0.        0.        0.
      0.        0.        0.        0.
      0.        0.        0.        0.
      0.        0.        0.        0.
      0.        0.        0.        0.
      0.        0.        0.        0.

1115 BSAMFR(IB)
     0.00      0.00

1120 BSAMRR(IB)
     0.00      0.00

1125 BSAMZ
     0.00

1130 TBSAM
     0.00

1135 BAGFR(IB)
     0.00      0.00

1140 BAGRR(IB)
     0.00      0.00

1145 BAGZ
     0.00

1150 BAFR(KBA,IB)
      0.        0.
     50.       50.
     50.       50.
      0.        0.

1160 BARR(KBA,IB)
      0.        0.
     50.       50.
     50.       50.
      0.        0.
```

```
1170 BAZ(KBA)
       0.        0.        0.      400.

1172 BSARF(IB,IFPBS)
      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
      0.00      0.00
      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
      0.00      0.00

1175 BSPZ
       0.

1180 BRPZ
       0.

1190 BRWZ(KB#)
       0.        0.        0.        0.        0.        0.        0.        0.
       0.        0.

1230 BGSS(J)
       0.        0.        0.        0.        0.        0.        0.

1240 BGSR(IB)
       0.        0.

1245 BGSRUR(IB)
       0.        0.

1250 BGSZ
       0.

1255 BGSZUZ
       0.

99     NTRF      IRFB      IRFR
       5         1         0
```

Note (10)

```
$NAME2
IDEAF  =  1,
IDAAF  =  1,
ISMAAF =  1,
IASMAF =  1,
IGNAAF =  1,
IAGNAF =  1,
IASAF  =  1,
IANSAF =  1,
IRBAF  =  1,  5,  5,  5,  0,  0,  0,  0,
IRBAR  =  1,  4,  4,  5,  0,  0,  0,  0,
IRBAZ  =  1,  3,  3,  5,  0,  0,  0,  0,
IRRAF  =  1,  4,  4,  0,  0,  0,  0,  0,
IRRAR  =  1,  4,  4,  0,  0,  0,  0,  0,
IRRAZ  =  1,  3,  3,  0,  0,  0,  0,  0,
IBAFCR =  0,
IRAFCR =  0,
PBA1   =  0.0,  0.3996E+00,  0.3996E+00,  0.0,  0.0,  0.0,  0.0,  0.0,
PBA2   =  0.0,  0.1478E+00,  0.1478E+00,  0.0,  0.0,  0.0,  0.0,  0.0,
PBA3   =  0.5E+00,  0.0,  0.0,  0.0,  0.0,  0.0,  0.0,  0.0,
PBA4   =  0.0,  0.3062E+00,  0.3062E+00,  0.1E+01,  0.0,  0.0,  0.0,  0.0,
PBA5   =  0.0,  0.102E+00,  0.102E+00,  0.0,  0.0,  0.0,  0.0,  0.0,
PBA6   =  0.5E+00,  0.0,  0.0,  0.0,  0.0,  0.0,  0.0,  0.0,
PRA1   =  0.0,  0.3375E+00,  0.3375E+00,  0.0,  0.0,  0.0,  0.0,  0.0,
PRA2   =  0.0,  0.125E+00,  0.125E+00,  0.0,  0.0,  0.0,  0.0,  0.0,
PRA3   =  0.5E+00,  0.0,  0.0,  0.0,  0.0,  0.0,  0.0,  0.0,
PRA4   =  0.0,  0.375E+00,  0.375E+00,  0.0,  0.0,  0.0,  0.0,  0.0,
PRA5   =  0.0,  0.125E+00,  0.125E+00,  0.0,  0.0,  0.0,  0.0,  0.0,
PRA6   =  0.1E+01,  0.0,  0.0,  0.0,  0.0,  0.0,  0.0,  0.0,
PBACS  =  0.0,  0.1E+00,  0.1E+00,  0.1E+00,  0.0,  0.0,  0.0,  0.0,
PRACS  =  0.0,  0.1E+00,  0.1E+00,  0.0,  0.0,  0.0,  0.0,  0.0,
PBAAS  =  0.0,  0.1E+00,  0.1E+00,  0.1E+00,  0.0,  0.0,  0.0,  0.0,
```

Note (11)

```
PRAAS  =  0.0,  0.1E+00,  0.1E+00,  0.0,  0.0,  0.0,  0.0,  0.0,
BDED   =  0.2E-03,  0.4E-03,
BDDEC  =  0.1E-03,  0.2E-03,
BDDEF  =  0.2E-03,  0.3E-03,
BDDER  =  0.3E-03,  0.4E-03,
BDDEZ  =  0.0,  0.5E-03,
BDDAC  =  0.1E-03,  0.2E-03,
BDDAF  =  0.2E-03,  0.3E-03,
BDDAR  =  0.3E-03,  0.4E-03,
BDDAZ  =  0.0,  0.5E-03,
BDAD   =  0.2E-03,  0.4E-03,
BDSC   =  0.2E-03,  0.4E-03,
BDSF   =  0.4E-03,  0.6E-03,
BDSR   =  0.6E-03,  0.8E-03,
BDSZ   =  0.0,  0.1E-02,
BDGC   =  0.1E-03,  0.2E-03,
BDGF   =  0.2E-03,  0.3E-03,
BDGR   =  0.3E-03,  0.4E-03,
BDGZ   =  0.0,  0.5E-03,
BDSS   =  0.4E-03,
BDGG   =  0.4E-03,
BDAS   =  0.4E-03,
BDAN   =  0.4E-03,
RDED   =  0.2E-03,  0.4E-03,
RDDEC  =  0.1E-03,  0.2E-03,
RDDEF  =  0.2E-03,  0.3E-03,
RDDER  =  0.3E-03,  0.4E-03,
RDDEZ  =  0.0,  0.5E-03,
RDDAC  =  0.1E-03,  0.2E-03,
RDDAF  =  0.2E-03,  0.3E-03,
RDDAR  =  0.3E-03,  0.4E-03,
RDDAZ  =  0.0,  0.5E-03,
RDAD   =  0.2E-03,  0.4E-03,
```

```
RDSC   =  0.2E-03,  0.4E-03,

RDSF   =  0.4E-03,  0.6E-03,

RDSR   =  0.6E-03,  0.8E-03,

RDSZ   =  0.0,  0.1E-02,

RDGC   =  0.1E-03,  0.2E-03,

RDGF   =  0.2E-03,  0.3E-03,

RDGR   =  0.3E-03,  0.4E-03,

RDGZ   =  0.0,  0.5E-03,

RDSS   =  0.4E-03,

RDGG   =  0.4E-03,

RDAS   =  0.4E-03,

RDAN   =  0.4E-03,

BKED   =  0.0,  0.4E-01,  0.76E-01,  0.1E-01,  0.0,  0.0,  0.0,  0.0,  0.0,     0.4E-01,  0.76E-01,  0.1E-01,
  0.0,  0.0,  0.0,  0.0,  0.0,  0.0,  0.4E-01,  0.76E-01,  0.1E-01,  0.0,  0.0,  0.0,  0.0,  0.0  ,  0.0,  0.0,  0.0,  0.0,  0.0,
  0.0,  0.0,  0.0,  0.0,  0.0,  0.0,  0.0,  0.0,  0.0,  0.0,  0.0,  0.0,  0.0  ,  0.0,  0.0,  0.0,  0.0,  0.0,
  0.0,  0.0,  0.0,  0.0,  0.0,  0.0,  0.0,  0.0,  0.0,  0.0,  0.0,  0.0,  0.0  ,  0.0,  0.0,  0.0,  0.0,  0.0,

BKDE   =  0.75E-01,  0.75E-01,  0.75E-01,  0.75E-01,  0.0,  0.0,  0.0,  0.0,     0.75E-01,  0.75E-01,  0.75E-01,
  0.75E-01,  0.0,  0.0,  0.0,  0.0,  0.75E-01,  0.75E-01,  0.75E-01,  0.75E-01  ,  0.0,  0.0,  0.0,  0.0,  0.0,
  0.0,  0.0,  0.0,  0.0,  0.0,  0.0,  0.0,  0.0,  0.0,  0.0,  0.0,  0.0,  0.0  ,  0.0,  0.0,  0.0,  0.0,  0.0,
  0.0,  0.0,  0.0,  0.0,  0.0,  0.0,  0.0,  0.0,  0.0,  0.0,  0.0,  0.0,  0.0  ,  0.0,  0.0,  0.0,  0.0,  0.0,
  0.0,  0.0,  0.0,

BKDA   =  0.125E+00,  0.125E+00,  0.125E+00,  0.125E+00,  0.0,  0.0,  0.0,     0.0,  0.125E+00,  0.125E+00,
  0.125E+00,  0.125E+00,  0.0,  0.0,  0.0,  0.0,  0.125E+00,  0.125E+00  ,  0.125E+00,  0.125E+00,  0.0,
  0.0,  0.0,  0.0,  0.0,  0.0,  0.0,  0.0,  0.0,  0.0,  0.0,  0.0,  0.0,  0.0  ,  0.0,  0.0,  0.0,  0.0,  0.0,
  0.0,  0.0,  0.0,  0.0,  0.0,  0.0,  0.0,  0.0,  0.0,  0.0,  0.0,  0.0,  0.0  ,  0.0,  0.0,  0.0,  0.0,  0.0,
  0.0,  0.0,  0.0,  0.0,  0.0,  0.0,  0.0,

BKAD   =  0.0,  0.23E-01,  0.76E-01,  0.16E-01,  0.0,  0.0,  0.0,  0.0,  0.0,     0.23E-01,  0.76E-01,  0.16E-01,
  0.0,  0.0,  0.0,  0.0,  0.0,  0.23E-01,  0.76E-01,  0.16E-01,  0.0,  0.0  ,  0.0,  0.0,  0.0,  0.0,  0.0,
  0.0,  0.0,  0.0,  0.0,  0.0,  0.0,  0.0,  0.0,  0.0,  0.0,  0.0,  0.0,  0.0  ,  0.0,  0.0,  0.0,  0.0,  0.0,
  0.0,  0.0,  0.0,  0.0,  0.0,  0.0,  0.0,  0.0,  0.0,  0.0,  0.0,  0.0,  0.0  ,  0.0,  0.0,  0.0,  0.0,  0.0,
  0.0,

BKS    =  0.2E+00,  0.2E+00,  0.2E+00,  0.0,  0.0,  0.0,  0.0,  0.0,

BKG    =  0.1E+00,  0.1E+00,  0.1E+00,  0.0,  0.0,  0.0,  0.0,  0.0,

BKSS   =  0.6E+00,  0.2E+00,  0.2E+00,  0.2E+00,  0.0,  0.0,  0.0,  0.0,

BKGG   =  0.1E+00,  0.1E+00,  0.1E+00,  0.1E+00,  0.0,  0.0,  0.0,  0.0,

BKAS   =  0.0,  0.25E-01,  0.3E-01,  0.64E-01,  0.0,  0.0,  0.0,  0.0,

BKAN   =  0.0,  0.1E+00,  0.127E+00,  0.272E+00,  0.0,  0.0,  0.0,  0.0,

RKED   =  0.58E-01,  0.58E-01,  0.58E-01,  0.0,  0.0,  0.0,  0.0,  0.0,     0.58E-01,  0.58E-01,  0.58E-01,
  0.0,  0.0,  0.0,  0.0,  0.0,  0.58E-01,  0.58E-01,  0.58E-01,  0.0,  0.0  ,  0.0,  0.0,  0.0,  0.58E-01,
  0.58E-01,  0.58E-01,  0.0,  0.0,  0.0,  0.0,  0.0,  0.0,  0.0,  0.0,  0.0  ,  0.0,  0.0,  0.0,  0.0,  0.0,
  0.0,  0.0,  0.0,  0.0,  0.0,  0.0,  0.0,  0.0,  0.0,  0.0,  0.0,  0.0,  0.0  ,  0.0,  0.0,  0.0,  0.0,  0.0,
  0.0,  0.0,  0.0,  0.0,  0.0,

RKDE   =  0.5E-01,  0.5E-01,  0.5E-01,  0.0,  0.0,  0.0,  0.0,  0.0,  0.5E-01,  0.5E-01,  0.5E-01,  0.0,  0.0,
```

```
  0.0,  0.0,  0.0,  0.5E-01,  0.5E-01,  0.5E-01,  0.0,  0.0,  0.0,  0.0,  0.0  ,  0.5E-0,  0.5E-01,  0.5E-01,
  0.0,  0.0,  0.0,  0.0,  0.0,  0.0,  0.0,  0.0,  0.0,  0.0,  0.0,  0.0,  0.0  ,  0.0,  0.0,  0.0,  0.0,  0.0,
  0.0,  0.0,  0.0,  0.0,  0.0,  0.0,  0.0,  0.0,  0.0,  0.0,  0.0,  0.0,  0.0  ,  0.0,  0.0,  0.0,  0.0,  0.0,
  0.0,

RKDA   = 0.45E-01,  0.45E-01,  0.45E-01,  0.0,  0.0,  0.0,  0.0,  0.0,          0.45E-01,  0.45E-01,  0.45E-01,
  0.0,  0.0,  0.0,  0.0,  0.0,  0.45E-01,  0.45E-01,  0.45E-01,  0.0,  0.0  ,  0.0,  0.0,  0.0,  0.45E-01,
  0.45E-01,  0.45E-01,  0.0,  0.0,  0.0,  0.0,  0.0,  0.0,  0.0,  0.0,  0.0  ,  0.0,  0.0,  0.0,  0.0,  0.0,
  0.0,  0.0,  0.0,  0.0,  0.0,  0.0,  0.0,  0.0,  0.0,  0.0,  0.0,  0.0  ,  0.0,  0.0,  0.0,  0.0,  0.0,
  0.0,  0.0,  0.0,  0.0,  0.0,

RKAD   = 0.4E-01,  0.31E-01,  0.58E-01,  0.0,  0.0,  0.0,  0.0,  0.0,          0.4E-01,  0.31E-01,  0.58E-01,
  0.0,  0.0,  0.0,  0.0,  0.0,  0.4E-01,  0.31E-01,  0.58E-01,  0.0,  0.0,  0.0,  0.0,  0.0,  0.4E-01,  0.31E-01,
  0.58E-01,  0.0,  0.0,  0.0,  0.0,  0.0,  0.0,  0.0,  0.0,  0.0,  0.0,  0.0  ,  0.0,  0.0,  0.0,  0.0,  0.0,
  0.0,  0.0,  0.0,  0.0,  0.0,  0.0,  0.0,  0.0,  0.0,  0.0,  0.0,  0.0  ,  0.0,  0.0,  0.0,  0.0,  0.0,
  0.0,  0.0,  0.0,

RKS    = 0.2E+00,  0.2E+00,  0.2E+00,  0.2E+00,  0.0,  0.0,  0.0,  0.0,

RKG    = 0.1E+00,  0.1E+00,  0.1E+00,  0.1E+00,  0.0,  0.0,  0.0,  0.0,

RKSS   = 0.0,  0.2E+00,  0.2E+00,  0.0,  0.0,  0.0,  0.0,  0.0,

RKGG   = 0.0,  0.1E+00,  0.1E+00,  0.0,  0.0,  0.0,  0.0,  0.0,

RKAS   = 0.0,  0.62E-01,  0.23E-01,  0.0,  0.0,  0.0,  0.0,  0.0,

RKAN   = 0.0,  0.263E+00,  0.96E-01,  0.0,  0.0,  0.0,  0.0,  0.0,

BSFRAK = 0.0,  0.5E+01,  0.5E+01,  0.0,  0.0,  0.0,  0.0,  0.0,

RSFRAK = 0.0,  0.5E+00,  0.5E+00,  0.5E+00,  0.0,  0.0,  0.0,  0.0,

FRASAG = 0.5E+00,

FRASAG = 0.5E+00,

RMCASS = 0.2E+02,

RMCASS = 0.2E+02,

RMABAS = 0.2E+02,

RMABAS = 0.2E+02,

RMSPSC = 0.2E+01,

RMSPSC = 0.2E+01,

RMSPSA = 0.2E+01,

RMSPSA = 0.2E+01,

WFCRSN = 0.1E+00,

WFCRSN = 0.1E+00,

PDRANG = 0.15E+00,  0.15E+00,  0.15E+00,  0.15E+00,  0.0,  0.0,  0.0,  0.0,

PDRANG = 0.15E+00,  0.15E+00,  0.15E+00,  0.0,  0.0,  0.0,  0.0,  0.0,

ABRFRD = 0.1E+01,

ARBFRD = 0.1E+01,

FRARRN = 0.25E+00,  0.0,  0.0,  0.0,  0.75E+00,  0.33E+00,  0.0,  0.0,  0.0,  0.67E+00,  0.0,  0.0,  0.0,
```

```
  0.0,  0.0,  0.0,
FRARBR = 0.1E+01, 0.75E+00, 0.0, 0.0, 0.0, 0.25E+00, 0.1E+01, 0.0,  0.0, 0.0, 0.0, 0.0, 0.0, 0.0,
  0.0,  0.0,  0.0,
BAFRCA = 0.1E+00,
RAFRCA = 0.1E+00,
BSCA   = 0.4E+01, 0.4E+01, 0.4E+01, 0.4E+01, 0.0, 0.0, 0.0, 0.0,
RSCA   = 0.4E+01, 0.4E+01, 0.4E+01, 0.0, 0.0, 0.0, 0.0, 0.0,
BAARNS = 0.5E+01,
RAARNS = 0.5E+01,
FPBS   = 0.133E+03, 0.166E+03, 0.199E+03, 0.233E+03, 0.266E+03,  0.299E+03, 0.333E+03, 0.366E+03,
  0.399E+03, 0.433E+03,
FPRS   = -0.67E+02, -0.101E+03, -0.134E+03, -0.167E+03, -0.201E+03,  -0.234E+03, -0.267E+03, -0.301E+03,
 -0.334E+03, -0.367E+03,
DSB    = 0.1E+03,
DFRB   = 0.1E+03,
DRRB   = 0.1E+03,
DZB    = 0.1E+03,
DSR    = 0.1E+03,
DFRR   = 0.1E+03,
DRRR   = 0.1E+03,
DZR    = 0.1E+03,
SRB1   = 0.0, 0.2E+01, 0.25E+01, 0.2E+01, 0.0, 0.0, 0.0, 0.0,
SRB2   = 0.0, 0.15E+01, 0.2E+01, 0.0, 0.0, 0.0, 0.0, 0.0,
SRB3   = 0.25E+01, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0,
SRB4   = 0.0, 0.15E+01, 0.2E+01, 0.2E+01, 0.0, 0.0, 0.0, 0.0,
SRB5   = 0.0, 0.15E+01, 0.2E+01, 0.0, 0.0, 0.0, 0.0, 0.0,
SRB6   = 0.25E+01, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0,
SRR1   = 0.0, 0.3E+01, 0.35E+01, 0.0, 0.0, 0.0, 0.0, 0.0,
SRR2   = 0.0, 0.25E+01, 0.3E+01, 0.0, 0.0, 0.0, 0.0, 0.0,
SRR3   = 0.4E+01, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0,
SRR4   = 0.0, 0.2E+01, 0.3E+01, 0.0, 0.0, 0.0, 0.0, 0.0,
SRR5   = 0.0, 0.25E+01, 0.3E+01, 0.0, 0.0, 0.0, 0.0, 0.0,
SRR6   = 0.4E+01, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0,
KBCS   = 4, 1, 3, 2, 0, 0, 0, 0,
KRAC   = 3, 1, 2, 0, 0, 0, 0, 0,
```

```
FFBAKH = 0.1E+00, 0.1E+00, 0.1E+00, 0.1E+00, 0.0, 0.0, 0.0, 0.0,
FFBEKH = 0.5E-01,
FFBOKH = 0.0,
FFRAKH = 0.1E+00, 0.1E+00, 0.1E+00, 0.0, 0.0, 0.0, 0.0, 0.0,
FFREKH = 0.5E-01,
FFROKH = 0.0,
PBAAGM = 0.2E+01, 0.2E+01, 0.2E+01, 0.2E+01, 0.0, 0.0, 0.0, 0.0,
PRAAGM = 0.2E+01, 0.2E+01, 0.2E+01, 0.0, 0.0, 0.0, 0.0, 0.0,
ARBFRA = 0.1E+01,
ARRFBA = 0.1E+01,
PABSDR = 0.1E+00,
PARSDB = 0.1E+00,
PBA7 = 0.0, 0.444E-01, 0.444E-01, 0.0, 0.0, 0.0, 0.0, 0.0,
PRA7 = 0.0, 0.375E-01, 0.375E-01, 0.0, 0.0, 0.0, 0.0, 0.0,
SRB7 = 0.0, 0.15E+01, 0.2E+01, 0.0, 0.0, 0.0, 0.0, 0.0,
SRR7 = 0.0, 0.25E+01, 0.3E+01, 0.0, 0.0, 0.0, 0.0, 0.0,
$END
98 NTAP
      3
```

Note (12)

DAY							
	1						
ITA							
	1						
ISAS(J)							
	1	1	1	0	0	1	0
ISMA(J)							
	1	1	0	0	0	1	0
KTER(J)							
	3	3	3	2	2	1	1
KPBA(J)							
	2	2	2	2	2	2	2
KPRA(J)							
	2	2	2	2	2	2	2
WIDS(J)							
	120.00	100.00	90.00	110.00	60.00	80.00	120.00
CFEBA(J)							
	1.17	2.57	1.69	0.00	0.00	5.13	0.00
FEBA(J)							
	1.17	2.57	1.69	0.00	0.00	5.13	0.00
VBGS(J)							
	982.62	1035.54	1007.38	1457.47	921.32	1348.17	1948.18
VRGS(J)							
	2614.95	6296.03	3533.70	2668.17	1586.73	5926.47	4460.14
VBAS(J)							
	101.90	296.40	136.96	68.49	27.65	185.02	117.77
VRAS(J)							
	125.82	364.63	0.00	0.00	0.00	179.77	0.00
FRBBS(J)							
	2.53	5.00	3.09	1.75	1.67	3.98	2.16
FRBRS(J)							
	-0.00	-0.00	-0.00	.57	.60	-0.00	.46

Note
(13)

Note (14)

1010 NBDS(KBD,J)

0.00	1.00	1.00	0.00	0.00	0.00	0.00
0.00	1.00	1.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	1.00	0.00	4.00	1.00
2.00	2.00	0.00	2.00	2.00	5.00	3.00

1020 NBDR(KBD,IB)

0.00	0.00
0.00	0.00
0.00	0.00
0.00	0.00

1030 NBDZ(KBD)

0.00	0.00	0.00	0.00

1060 BPDS(KBP,KBD,J)

0.00	8764.78	8836.91	0.00	0.00	0.00	0.00
0.00	8769.05	8839.79	0.00	0.00	0.00	0.00
0.00	0.00	0.00	9967.83	0.00	39807.42	9967.84
19757.07	19782.81	0.00	19934.87	19935.31	49490.90	29902.22
0.00	7983.39	7986.25	0.00	0.00	0.00	0.00
0.00	7983.39	7986.25	0.00	0.00	0.00	0.00
0.00	0.00	0.00	8994.44	0.00	35962.52	8994.49
17982.82	17804.53	0.00	17988.88	17988.71	44819.88	26983.48
0.00	19968.84	19975.36	0.00	0.00	0.00	0.00
0.00	19969.21	19975.61	0.00	0.00	0.00	0.00
0.00	0.00	0.00	11991.55	0.00	47943.78	11991.55
23967.03	23739.37	0.00	23983.02	23983.04	59746.71	35974.54

TOTAL

61706.92	134765.39	73600.19	92860.59	61907.06	277771.21	123814.12	826425.47

1070 BPDR(KBP,KBD,IB)

0.00	0.00
0.00	0.00
0.00	0.00
0.00	0.00
0.00	0.00
0.00	0.00
0.00	0.00
0.00	0.00
0.00	0.00
0.00	0.00
0.00	0.00
0.00	0.00

TOTAL

0.00	0.00

1080 BPDZ(KBP,KBD)

0.00	0.00	0.00	0.00	
0.00	0.00	0.00	0.00	
0.00	0.00	0.00	0.00	0.00

TOTAL EFFECTIVE PEOPLE IN THEATER 1718624.42

1090 BWDS(KBW,KBD,J)

0.00	4000.00	4000.00	0.00	0.00	0.00	0.00	
0.00	4000.00	4000.00	0.00	0.00	0.00	0.00	
0.00	0.00	0.00	4000.00	0.00	16000.00	4000.00	
8000.00	8000.00	0.00	8000.00	8000.00	20000.00	12000.00	104000.00
0.00	537.00	537.00	0.00	0.00	0.00	0.00	
0.00	576.00	576.00	0.00	0.00	0.00	0.00	
0.00	0.00	0.00	506.00	0.00	2024.00	506.00	
1072.00	1072.00	0.00	1072.00	1072.00	2680.00	1608.00	13838.00
0.00	351.00	351.00	0.00	0.00	0.00	0.00	

[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	
0.00	243.00	243.00	0.00	0.00	0.00	0.00	
0.00	0.00	0.00	326.00	0.00	1304.00	326.00	
596.00	596.00	0.00	596.00	596.00	1490.00	894.00	7912.00
0.00	70.00	70.00	0.00	0.00	0.00	0.00	
0.00	95.00	95.00	0.00	0.00	0.00	0.00	
0.00	0.00	0.00	40.00	0.00	160.00	40.00	
120.00	120.00	0.00	120.00	120.00	300.00	180.00	1530.00
0.00	131.00	131.00	0.00	0.00	0.00	0.00	
0.00	131.00	131.00	0.00	0.00	0.00	0.00	
0.00	0.00	0.00	40.00	0.00	160.00	40.00	
80.00	80.00	0.00	80.00	80.00	200.00	120.00	1404.00
0.00	12.00	12.00	0.00	0.00	0.00	0.00	
0.00	12.00	12.00	0.00	0.00	0.00	0.00	
0.00	0.00	0.00	12.00	0.00	48.00	12.00	
24.00	24.00	0.00	24.00	24.00	60.00	36.00	312.00
0.00	92.00	92.00	0.00	0.00	0.00	0.00	
0.00	103.00	103.00	0.00	0.00	0.00	0.00	
0.00	0.00	0.00	60.00	0.00	240.00	60.00	
140.00	140.00	0.00	140.00	140.00	350.00	210.00	1870.00
0.00	18.00	18.00	0.00	0.00	0.00	0.00	
0.00	18.00	18.00	0.00	0.00	0.00	0.00	
0.00	0.00	0.00	0.00	0.00	0.00	0.00	
0.00	0.00	0.00	0.00	0.00	0.00	0.00	72.00
0.00	40.00	40.00	0.00	0.00	0.00	0.00	
0.00	40.00	40.00	0.00	0.00	0.00	0.00	
0.00	0.00	0.00	40.00	0.00	160.00	40.00	
80.00	80.00	0.00	80.00	80.00	200.00	120.00	1040.00
0.00	20.00	20.00	0.00	0.00	0.00	0.00	
0.00	20.00	20.00	0.00	0.00	0.00	0.00	
0.00	0.00	0.00	20.00	0.00	80.00	20.00	
40.00	40.00	0.00	40.00	40.00	100.00	60.00	520.00

1100 BWDR(KBW,KBD,IB)

0.00	0.00	
0.00	0.00	
0.00	0.00	
0.00	0.00	0.00
0.00	0.00	
0.00	0.00	
0.00	0.00	
0.00	0.00	0.00
0.00	0.00	
0.00	0.00	
0.00	0.00	
0.00	0.00	0.00
0.00	0.00	
0.00	0.00	
0.00	0.00	
0.00	0.00	0.00
0.00	0.00	
0.00	0.00	
0.00	0.00	
0.00	0.00	0.00
0.00	0.00	
0.00	0.00	
0.00	0.00	
0.00	0.00	0.00
0.00	0.00	
0.00	0.00	
0.00	0.00	
0.00	0.00	0.00
0.00	0.00	
0.00	0.00	
0.00	0.00	
0.00	0.00	0.00

```
     0.00      0.00
     0.00      0.00
     0.00      0.00                                                                                    0.00
     0.00      0.00
     0.00      0.00
     0.00      0.00
     0.00      0.00                                                                                    0.00

1110 BWDZ(KBW,KBD)
     0.00      0.00      0.00      0.00                                                                0.00
     0.00      0.00      0.00      0.00                                                                0.00
     0.00      0.00      0.00      0.00                                                                0.00
     0.00      0.00      0.00      0.00                                                                0.00
     0.00      0.00      0.00      0.00                                                                0.00
     0.00      0.00      0.00      0.00                                                                0.00
     0.00      0.00      0.00      0.00                                                                0.00
     0.00      0.00      0.00      0.00                                                                0.00
     0.00      0.00      0.00      0.00                                                                0.00
     0.00      0.00      0.00      0.00                                                                0.00

1175 BSPZ
 199800.00

1180 BRPZ
 692398.95

1190 BRWZ(KBW)
   45256.08   8019.82   5371.32    745.37    781.22    143.71    903.58     52.35    477.95    238.52

1230 BGSS(J)
 240443.78 282763.63 283086.63 239213.18 240561.33 350460.75 460993.99

1240 BGSR(IB)
 146000.00 222585.97

1250 BGSZ
1432060.02
```

Note (15)

2010 NRDS(KRU,J)

2.00	8.00	6.00	1.00	0.00	12.00	1.00
6.00	5.00	2.00	3.00	0.00	2.00	0.00
0.00	0.00	0.00	0.00	3.00	3.00	1.00
0.00	0.00	0.00	0.00	1.00	2.00	6.00

2020 NRDR(KRU,IR)

0.00	1.00	5.00
0.00	3.00	12.00
0.00	0.00	0.00
0.00	0.00	0.00

2030 NRDZ(KRU)

0.00	0.00	0.00	0.00

2060 RPDS(KRP,KRU,J)

8934.22	35748.62	26797.13	4472.87	0.00	53754.79	4469.79	
40049.69	33385.62	13351.39	20042.63	0.00	13351.25	0.00	
0.00	0.00	0.00	0.00	13437.72	13408.24	4473.63	
0.00	0.00	0.00	0.00	6684.72	13355.92	40086.81	
6991.00	27972.72	20977.17	3497.50	0.00	41956.23	3497.49	
22771.05	18982.10	7592.04	11392.01	0.00	7594.42	0.00	
0.00	0.00	0.00	0.00	10493.19	10492.40	3497.57	
0.00	0.00	0.00	0.00	3797.61	7594.71	22784.70	
12981.28	51952.55	38962.96	6494.52	0.00	77911.02	6494.25	
38949.13	32474.53	12989.49	19485.94	0.00	12989.69	0.00	
0.00	0.00	0.00	0.00	19485.29	19482.66	6494.59	
0.00	0.00	0.00	0.00	6495.67	12990.12	38972.07	
TOTAL							
130676.36	200516.15	120670.18	65385.46	60394.20	284881.46	130770.91	993294.72

2070 RPDR(KRP,KRU,IR)

0.00	4481.23	22470.00	
0.00	20016.18	80313.46	
0.00	0.00	0.00	
0.00	0.00	0.00	
0.00	3485.40	17476.66	
0.00	11352.46	45550.92	
0.00	0.00	0.00	
0.00	0.00	0.00	
0.00	6472.89	32456.66	
0.00	19418.68	77916.04	
0.00	0.00	0.00	
0.00	0.00	0.00	
TOTAL			
0.00	65226.85	276183.73	341410.59

2080 RPDZ(KRP,KRU)

0.00	0.00	0.00	0.00	
0.00	0.00	0.00	0.00	
0.00	0.00	0.00	0.00	0.00

TOTAL EFFECTIVE PEOPLE IN THEATER 2188682.92

2090 RWDS(KRW,KRU,J)

6000.00	24000.00	18000.00	3000.00	0.00	36000.00	3000.00	
18000.00	15000.00	6000.00	9000.00	0.00	6000.00	0.00	
0.00	0.00	0.00	0.00	9000.00	9000.00	3000.00	
0.00	0.00	0.00	0.00	3000.00	6000.00	18000.00	192000.00
806.00	4224.00	2418.00	403.00	0.00	4836.00	403.00	
1278.00	1065.00	426.00	639.00	0.00	426.00	0.00	
0.00	0.00	0.00	0.00	1050.00	1050.00	350.00	
0.00	0.00	0.00	0.00	175.00	350.00	1050.00	19949.00
420.00	2480.00	1860.00	310.00	0.00	3720.00	310.00	

[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	
1116.00	930.00	372.00	558.00	0.00	372.00	0.00	
0.00	0.00	0.00	0.00	729.00	729.00	243.00	
0.00	0.00	0.00	0.00	188.00	376.00	1128.00	16041.00
180.00	720.00	540.00	90.00	0.00	1080.00	90.00	
2334.00	1945.00	778.00	1167.00	0.00	778.00	0.00	
0.00	0.00	0.00	0.00	240.00	240.00	80.00	
0.00	0.00	0.00	0.00	330.00	660.00	1980.00	13232.00
134.00	536.00	402.00	67.00	0.00	804.00	67.00	
414.00	345.00	138.00	207.00	0.00	138.00	0.00	
0.00	0.00	0.00	0.00	183.00	183.00	61.00	
0.00	0.00	0.00	0.00	54.00	108.00	324.00	4165.00
24.00	96.00	72.00	12.00	0.00	144.00	12.00	
72.00	60.00	24.00	36.00	0.00	24.00	0.00	
0.00	0.00	0.00	0.00	36.00	36.00	12.00	
0.00	0.00	0.00	0.00	12.00	24.00	72.00	768.00
36.00	144.00	108.00	18.00	0.00	216.00	18.00	
324.00	270.00	108.00	162.00	0.00	108.00	0.00	
0.00	0.00	0.00	0.00	18.00	18.00	6.00	
0.00	0.00	0.00	0.00	18.00	36.00	108.00	1716.00
36.00	144.00	108.00	18.00	0.00	216.00	18.00	
108.00	90.00	36.00	54.00	0.00	36.00	0.00	
0.00	0.00	0.00	0.00	36.00	36.00	12.00	
0.00	0.00	0.00	0.00	12.00	24.00	72.00	1056.00
60.00	240.00	180.00	30.00	0.00	360.00	30.00	
180.00	150.00	60.00	90.00	0.00	60.00	0.00	
0.00	0.00	0.00	0.00	90.00	90.00	30.00	
0.00	0.00	0.00	0.00	30.00	60.00	180.00	1920.00
30.00	120.00	90.00	15.00	0.00	180.00	15.00	
90.00	75.00	30.00	45.00	0.00	30.00	0.00	
0.00	0.00	0.00	0.00	45.00	45.00	15.00	
0.00	0.00	0.00	0.00	15.00	30.00	90.00	960.00
2100 HWDR(KR#,KRD,IR)							
0.00	2000.00	15000.00					
0.00	9000.00	36000.00					
0.00	0.00	0.00					
0.00	0.00	0.00					63000.00
0.00	403.00	2015.00					
0.00	639.00	2556.00					
0.00	0.00	0.00					
0.00	0.00	0.00					5613.00
0.00	310.00	1550.00					
0.00	558.00	2232.00					
0.00	0.00	0.00					
0.00	0.00	0.00					4650.00
0.00	90.00	450.00					
0.00	1167.00	4668.00					
0.00	0.00	0.00					
0.00	0.00	0.00					6375.00
0.00	67.00	335.00					
0.00	207.00	828.00					
0.00	0.00	0.00					
0.00	0.00	0.00					1437.00
0.00	12.00	60.00					
0.00	36.00	144.00					
0.00	0.00	0.00					
0.00	0.00	0.00					252.00
0.00	18.00	90.00					
0.00	162.00	648.00					
0.00	0.00	0.00					
0.00	0.00	0.00					918.00
0.00	18.00	90.00					
0.00	54.00	216.00					
0.00	0.00	0.00					
0.00	0.00	0.00					378.00
0.00	30.00	150.00					

```
  [illegible]   [illegible]   [illegible]
  0.00     90.00    360.00
  0.00      0.00      0.00
  0.00      0.00      0.00                                                    630.00
  0.00     15.00     75.00
  0.00     45.00    180.00
  0.00      0.00      0.00
  0.00      0.00      0.00                                                    315.00
2110 RWDZ(KRW,KRD)
  0.00      0.00      0.00      0.00                                            0.00
  0.00      0.00      0.00      0.00                                            0.00
  0.00      0.00      0.00      0.00                                            0.00
  0.00      0.00      0.00      0.00                                            0.00
  0.00      0.00      0.00      0.00                                            0.00
  0.00      0.00      0.00      0.00                                            0.00
  0.00      0.00      0.00      0.00                                            0.00
  0.00      0.00      0.00      0.00                                            0.00
  0.00      0.00      0.00      0.00                                            0.00
  0.00      0.00      0.00      0.00                                            0.00
2175 RSPZ
 159840.00
2180 RRPZ
 694137.62
2190 RRWZ(KRW)
  92692.93   9323.10   9525.67   6527.76   8401.20    379.60    989.13    540.22    948.68    473.89
2230 RGSS(J)
 517275.72 511833.22 515047.44 517230.20 517485.14 511907.59 514556.47
2240 RGSH(IR)
 599345.41 596726.33 587440.69
2250 RGSZ
2936585.90
```

CBCS(J)
524.69 1049.70 726.36 186.00 124.00 1083.16 248.00

CBPCS(J)
.0085 .0144 .0099 .0020 .0020 .0118 .0020

CRCS(J)
371.89 767.47 539.18 163.75 151.25 827.35 327.50

CRPCS(J)
.0057 .0038 .0045 .0025 .0025 .0041 .0025

CRC CBPC CRC CRPC
3041.91 .01 3128.39 .00

CBWLS(KBW,J)
90.68 159.66 97.30 29.55 17.78 170.09 32.04
14.38 30.96 21.71 4.93 3.69 31.75 6.98
23.49 37.90 26.49 9.39 4.91 43.61 12.50
2.17 5.19 3.89 .75 .56 4.06 .97
.10 .56 .42 .04 .03 .22 .05
.03 .05 .04 .01 .01 .06 .01
1.21 2.85 2.16 .46 .30 2.34 .58
0.00 3.10 2.55 0.00 0.00 0.00 0.00
.12 .20 .16 .05 .03 .27 .06
.10 .17 .13 .04 .03 .22 .05

CBWL(KBW)
597.10 114.42 156.29 17.60 1.42 .21 9.89 5.65 .89 .74

CRWLS(KRW,J)
66.25 101.01 98.06 26.65 21.09 135.96 55.77
10.23 20.51 14.77 4.57 4.64 23.96 8.93
14.34 26.10 19.85 6.49 6.20 30.81 14.48
2.31 3.07 1.60 .98 .36 2.46 1.74
.12 .39 .29 .05 .04 .20 .09
.03 .10 .09 .01 .01 .05 .03
2.87 1.14 2.12 1.36 .23 2.35 1.02
.06 .20 .15 .03 .01 .09 .04
.03 .09 .07 .01 .01 .05 .03
.05 .16 .12 .02 .02 .08 .05

CRWL(KRW)
504.79 87.63 118.27 12.53 1.18 .33 13.12 .58 .29 .49

RBPCS(J)
.6690 .2664 .4515 1.2506 1.2506 .3466 1.2506

CRBPCS(J)
.6690 .2664 .4315 1.2506 1.2506 .3466 1.2506

RBPC CMBPC
.73 .55

CBNBC CRNBC CBNBCM CRNBCM
1723.80 2193.46 0.00 0.00

CBSLI CMSLI
0.00 0.00

CBWS(KBW)
.7200E+05 .9646E+04 .5444E+04 .1110E+04 .1084E+04 .2160E+03 .1340E+04 .7200E+02 .7194E+03 .3597E+03

CRAS(KBW)

Note (16)

Note (17)

0.00	290.13	451.35	0.00						

CRWS(KRW)

.1620E+00	.1949E+05	.1331E+05	.1143E+05	.3489E+04	.6480E+03	.1428E+04	.8760E+03	.1619E+04	.8097E+03

CRAS(KRA)

0.00	1223.50	978.71

CBPS	CWPS
.5820E+06	.8430E+06

CRGKBS(KRW,KBW)

44.66	0.00	0.00	4.11	0.00	0.00	1.61	1.86	0.00	0.00
76.75	0.00	0.00	3.67	0.00	0.00	1.44	3.34	0.00	0.00
31.23	87.23	73.25	2.11	0.00	0.00	1.65	0.00	0.00	0.00
0.00	18.87	80.61	2.26	0.00	0.00	1.77	0.00	0.00	0.00
174.83	0.00	0.00	2.08	.86	.13	1.43	0.00	.62	.52
32.07	0.00	0.00	.47	.31	.05	.34	0.00	.14	.11
113.79	0.00	0.00	1.70	0.00	0.00	.99	0.00	0.00	0.00
44.41	0.00	0.00	.53	.22	.03	.42	0.00	.13	.11
8.87	0.00	0.00	.35	0.00	0.00	.20	.44	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

CRAKBS(KRA,KBW)

0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
52.05	6.93	3.74	.24	.02	.00	.05	.01	.01	.00
18.45	1.34	.69	.09	.01	.00	.01	.00	.00	.00

CBGKRS(KBW,KRW)

41.01	0.00	0.00	.65	0.00	0.00	.38	0.00	0.00	0.00
119.83	0.00	0.00	4.81	0.00	0.00	5.60	0.00	0.00	0.00
16.40	60.84	74.74	1.34	0.00	0.00	2.82	0.00	0.00	0.00
0.00	11.60	31.25	.03	0.00	0.00	.67	0.00	0.00	0.00
65.54	0.00	0.00	.94	.93	.26	1.20	.48	.23	.41
13.00	0.00	0.00	.17	.16	.05	.20	.08	.04	.07
105.37	0.00	0.00	1.35	0.00	0.00	1.61	0.00	0.00	0.00
.83	.02	.17	.00	0.00	0.00	.12	0.00	0.00	0.00
8.30	0.00	0.00	.27	0.00	0.00	.41	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

CBAKRS(KRA,KRW)

0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
93.89	10.63	8.50	1.67	.04	.01	.05	.01	.01	.01
100.63	4.52	3.61	1.29	.05	.01	.05	.01	.01	.01
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

CRGKBP(KRW)

68.03	100.99	2153.84	793.11	292.42	65.07	122.55	71.75	11.55	0.00

CRAKBP(KRA)

0.00	212.05	50.54

CBGKRP(KRW)

44.36	150.27	1617.85	389.77	187.35	33.85	113.99	2.30	10.20	0.00

CBAKRP(KRA)

0.00	359.72	218.73	0.00

DAY 2

DAY
2

Note
(18)

BLUE SORTIES FLOWN BY MISSION AND AIRCRAFT TYPE				TOTAL	
0.00	544.20	770.01	0.00	1314.21	
0.00	36.02	50.96	0.00	86.98	
0.00	18.01	25.48	0.00	43.49	
0.00	165.95	250.46	0.00	416.41	
362.07	0.00	0.00	0.00	362.07	
0.00	311.27	469.80	897.02	1678.09	
0.00	13.27	19.83	36.92	70.02	
0.00	19.26	29.25	54.59	103.10	
0.00	114.53	172.85	0.00	287.37	
1102.14	0.00	0.00	0.00	1102.14	
0.00	49.85	75.24	0.00	125.09	5588.97

BLUE AIRCRAFT KILLED BY MISSION AND AIRCRAFT TYPE				TOTAL	
0.00	6.11	7.08	0.00	13.19	
0.00	.43	.50	0.00	.92	
0.00	.15	.18	0.00	.33	
0.00	.41	.47	0.00	.88	
7.98	0.00	0.00	0.00	7.98	
0.00	12.12	13.91	25.68	51.71	
0.00	.54	.61	1.09	2.25	
0.00	.74	.86	1.58	3.18	
0.00	3.48	3.97	0.00	7.45	
8.23	0.00	0.00	0.00	8.23	
0.00	2.00	2.34	0.00	4.34	100.46

CUMULATIVE BLUE SORTIES FLOWN BY MISSION AND AIRCRAFT TYPE				TOTAL	
0.00	873.30	1282.08	0.00	2155.38	
0.00	56.38	82.54	0.00	138.92	
0.00	28.19	41.27	0.00	69.46	
0.00	254.63	405.65	0.00	660.28	
662.07	0.00	0.00	0.00	662.07	
0.00	479.60	764.45	1035.75	2279.80	
0.00	19.63	30.86	41.47	91.96	
0.00	28.30	45.09	61.30	134.69	
0.00	175.73	279.95	0.00	455.67	
2002.14	0.00	0.00	0.00	2002.14	
0.00	76.49	121.86	0.00	198.35	8848.71

CUMULATIVE BLUE AIRCRAFT KILLED BY MISSION AND AIRCRAFT TYPE				TOTAL	
0.00	10.61	12.37	0.00	22.97	
0.00	.90	1.10	0.00	2.00	
0.00	.26	.30	0.00	.56	
0.00	.74	.85	0.00	1.60	
14.91	0.00	0.00	0.00	14.91	
0.00	21.66	25.12	30.68	77.47	
0.00	1.02	1.16	1.41	3.58	
0.00	1.37	1.57	2.00	4.95	
0.00	6.04	6.96	0.00	13.00	
15.62	0.00	0.00	0.00	15.62	
0.00	3.32	3.92	0.00	7.25	163.90

RED SORTIES FLOWN BY MISSION AND AIRCRAFT TYPE				TOTAL	
0.00	1762.76	1386.77		3149.53	
0.00	128.11	100.74		228.85	
0.00	64.06	50.37		114.43	
0.00	543.04	439.39		982.43	
977.97	0.00	0.00		977.97	
0.00	1176.99	1190.42		2367.32	
0.00	63.23	63.92		127.15	
0.00	62.15	62.84		124.99	

0.00	543.04	439.39							982.43	
3930.97	0.00	0.00							3930.97	
0.00	0.00	0.00							0.00	12988.09
RED AIRCRAFT KILLED BY MISSION AND AIRCRAFT TYPE									TOTAL	
0.00	7.95	5.61							13.55	
0.00	.66	.46							1.12	
0.00	.24	.17							.42	
0.00	.55	.37							.93	
5.40	0.00	0.00							5.40	
0.00	26.48	17.95							44.43	
0.00	1.51	1.02							2.53	
0.00	1.39	.94							2.34	
0.00	5.21	3.53							8.74	
7.78	0.00	0.00							7.78	
0.00	0.00	0.00							0.00	87.24
CUMULATIVE RED SORTIES FLOWN BY MISSION AND AIRCRAFT TYPE									TOTAL	
0.00	3132.93	2482.97							5615.91	
0.00	227.17	179.94							407.10	
0.00	113.58	89.97							203.55	
0.00	993.04	814.39							1807.43	
1852.97	0.00	0.00							1852.97	
0.00	2091.91	2207.17							4299.07	
0.00	107.92	113.54							221.46	
0.00	115.96	122.48							238.44	
0.00	993.04	814.39							1807.43	
7430.97	0.00	0.00							7430.97	
0.00	135.00	112.50							247.50	24131.84
CUMULATIVE RED AIRCRAFT KILLED BY MISSION AND AIRCRAFT TYPE									TOTAL	
0.00	12.23	8.52							20.76	
0.00	1.00	.69							1.69	
0.00	.38	.26							.64	
0.00	1.04	.70							1.73	
8.99	0.00	0.00							8.99	
0.00	53.19	35.80							88.99	
0.00	2.93	1.97							4.90	
0.00	2.88	1.94							4.82	
0.00	9.95	6.70							16.65	
12.03	0.00	0.00							12.03	
0.00	2.15	1.44							3.59	164.79
BLUE AIRCRAFT SHELTERED AND NON-SHELTERED KILLED										
0.00	90.70									
CUMULATIVE BLUE AIRCRAFT SHELTERED AND NON-SHELTERED KILLED										
0.00	151.48									
RED AIRCRAFT SHELTERED AND NON-SHELTERED KILLED										
0.00	99.75									
CUMULATIVE RED AIRCRAFT SHELTERED AND NON-SHELTERED KILLED										
0.00	130.02									
BLUE AIRCRAFT INVENTORY BY AIRCRAFT TYPE									TOTAL	
569.47	675.35	773.89	465.91						2484.62	
RED AIRCRAFT INVENTORY BY AIRCRAFT TYPE									TOTAL	
938.19	1626.32	1140.68							3705.19	
CBGL	CBSML	CRGL	CRSML	CBCRI	CRCRI					
3.25	3.20	1.95	2.19	2259.35	2491.92					
CBWLIR(KBW)										
1035.82	11.76	4.30	1.03	.35	.08	1.53	0.00	.52	.23	

CRWLIR(KHW)									
2021.97	8.72	5.56	14.31	1.69	.21	2.26	.55	1.15	.52

CBSAD	CRSAD
0.00	0.00

BSAFR(IB)
150.00

BSARR(IB)
150.00

BSAZ
0.00

RSAFR(IR)		
75.00	300.00	150.00

RSARR(IR)		
75.00	300.00	150.00

RSAZ
0.00

DAY
2

ITA
1

ISAS(J)						
1	1	0	0	0	1	0
ISMA(J)						
1	1	0	0	0	1	0
KTER(J)						
3	3	3	2	2	1	1
KPBA(J)						
2	2	2	2	2	2	2
KPRA(J)						
2	2	2	2	2	2	2
WIDS(J)						
120.00	100.00	90.00	110.00	60.00	80.00	120.00
CFERA(J)						
2.18	1.65	0.00	0.00	0.00	2.03	0.00
FERA(J)						
3.35	4.22	1.69	0.00	0.00	7.15	0.00
VBGS(J)						
982.62	1948.64	1007.38	1457.47	921.32	3956.56	1948.18
VRGS(J)						
5229.91	8423.86	3533.86	2668.17	1586.73	8206.09	4460.14
VBAS(J)						
357.96	329.05	183.25	90.95	49.13	294.66	213.20
VRAS(J)						
192.53	458.30	0.00	0.00	0.00	220.39	0.00
FRRBS(J)						
4.02	3.02	2.97	1.72	1.64	1.98	2.06
FRBRS(J)						
-0.00	-0.00	.34	.58	.61	-0.00	.48

Note
(19)

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1010 NBDS(KBD,J)
      0.00      1.00      1.00      0.00      0.00      0.00      0.00
      0.00      1.00      1.00      0.00      0.00      0.00      0.00
      0.00      0.00      0.00      1.00      0.00      4.00      1.00
      2.00      2.00      0.00      2.00      2.00      5.00      3.00

1020 NBDR(KBD,IB)
      0.00      0.00
      0.00      0.00
      0.00      0.00
      0.00      0.00

1030 NBDZ(KBD)
      0.00      0.00      0.00      0.00

1060 BPDS(KBP,KBD,J)
      0.00   8456.63   8763.80      0.00      0.00      0.00      0.00
      0.00   8466.24   8767.84      0.00      0.00      0.00      0.00
      0.00      0.00      0.00   9903.62      0.00  38968.29   9903.63
  19016.05  19187.13      0.00  19804.84  19806.16  48418.34  29707.00
      0.00   7958.35   7974.32      0.00      0.00      0.00      0.00
      0.00   7958.35   7974.32      0.00      0.00      0.00      0.00
      0.00      0.00      0.00   8983.33      0.00  35896.02   8983.49
  17938.58  17768.44      0.00  17966.66  17966.14  44736.88  26950.48
      0.00  19921.36  19949.45      0.00      0.00      0.00      0.00
      0.00  19922.19  19949.81      0.00      0.00      0.00      0.00
      0.00      0.00      0.00  11974.65      0.00  47823.67  11974.67
  23878.07  24663.96      0.00  23949.10  23949.17  59594.68  35923.67
TOTAL
  60832.69 133302.68  73379.53  92582.20  61721.46 275437.88 123442.93                                    820699.38

1070 BPDR(KBP,KBD,IB)
      0.00      0.00
      0.00      0.00
      0.00      0.00
      0.00      0.00
      0.00      0.00
      0.00      0.00
      0.00      0.00
      0.00      0.00
      0.00      0.00
      0.00      0.00
      0.00      0.00
      0.00      0.00
TOTAL
      0.00      0.00                                                                                    0.00

1080 BPDZ(KBP,KBD)
      0.00      0.00      0.00      0.00
      0.00      0.00      0.00      0.00
      0.00      0.00      0.00      0.00                                                                0.00

 TOTAL EFFECTIVE PEOPLE IN THEATER        1712898.33

1090 BWDS(KBW,KBD,J)
      0.00   2945.90   3990.14      0.00      0.00      0.00      0.00
      0.00   3945.90   3990.14      0.00      0.00      0.00      0.00
      0.00      0.00      0.00   3990.17      0.00  15857.01   3992.00
   7862.87   7891.80      0.00   7980.33   7982.25  19821.26  11976.00                                 103225.77
      0.00    527.38    534.88      0.00      0.00      0.00      0.00
      0.00    565.69    573.72      0.00      0.00      0.00      0.00
      0.00      0.00      0.00    504.42      0.00   1997.73    504.33
   1049.85   1052.80      0.00   1064.65   1068.31   2645.21   1602.70                                  13695.68
      0.00    338.44    342.82      0.00      0.00      0.00      0.00
```

0.00	233.36	240.80	0.00	0.00	0.00	0.00	
0.00	0.00	0.00	322.68	0.00	1266.52	322.66	
558.64	571.61	0.00	589.94	591.10	1447.17	884.85	7713.50
0.00	68.56	59.07	0.00	0.00	0.00	0.00	
0.00	93.04	94.55	0.00	0.00	0.00	0.00	
0.00	0.00	0.00	39.81	0.00	157.42	39.82	
116.52	117.53	0.00	119.44	119.44	295.16	179.21	1510.17
0.00	130.81	130.76	0.00	0.00	0.00	0.00	
0.00	130.91	130.96	0.00	0.00	0.00	0.00	
0.00	0.00	0.00	39.99	0.00	159.81	39.99	
79.84	79.88	0.00	79.97	79.97	199.76	119.96	1402.71
0.00	11.98	12.00	0.00	0.00	0.00	0.00	
0.00	11.98	12.00	0.00	0.00	0.00	0.00	
0.00	0.00	0.00	12.00	0.00	47.95	12.00	
23.95	23.97	0.00	23.99	23.99	59.93	35.99	311.73
0.00	91.13	91.79	0.00	0.00	0.00	0.00	
0.00	102.02	102.77	0.00	0.00	0.00	0.00	
0.00	0.00	0.00	59.86	0.00	238.23	59.87	
138.05	138.67	0.00	139.68	139.70	347.41	209.55	1858.74
0.00	16.97	17.74	0.00	0.00	0.00	0.00	
0.00	15.97	17.74	0.00	0.00	0.00	0.00	
0.00	0.00	0.00	0.00	0.00	0.00	0.00	
0.00	0.00	0.00	0.00	0.00	0.00	0.00	69.42
0.00	39.74	39.98	0.00	0.00	0.00	0.00	
0.00	39.74	39.98	0.00	0.00	0.00	0.00	
0.00	0.00	0.00	39.98	0.00	159.37	39.98	
79.68	79.49	0.00	79.97	79.97	199.21	119.95	1037.06
0.00	19.85	19.99	0.00	0.00	0.00	0.00	
0.00	19.85	19.90	0.00	0.00	0.00	0.00	
0.00	0.00	0.00	19.99	0.00	79.60	19.99	
39.78	39.70	0.00	39.97	39.97	99.50	59.96	518.13

1100 BWDR(KHW,KBU,IB)

0.00	0.00	
0.00	0.00	
0.00	0.00	
0.00	0.00	0.00
0.00	0.00	
0.00	0.00	
0.00	0.00	
0.00	0.00	0.00
0.00	0.00	
0.00	0.00	
0.00	0.00	
0.00	0.00	0.00
0.00	0.00	
0.00	0.00	
0.00	0.00	
0.00	0.00	0.00
0.00	0.00	
0.00	0.00	
0.00	0.00	
0.00	0.00	0.00
0.00	0.00	
0.00	0.00	
0.00	0.00	
0.00	0.00	0.00
0.00	0.00	
0.00	0.00	
0.00	0.00	
0.00	0.00	0.00
0.00	0.00	
0.00	0.00	
0.00	0.00	
0.00	0.00	0.00

0.00 0.00
0.00 0.00
0.00 0.00 0.00
0.00 0.00
0.00 0.00
0.00 0.00 0.00

1110 BWDZ(KB+*KBD)
0.00 0.00 0.00 0.00 0.00
0.00 0.00 0.00 0.00 0.00
0.00 0.00 0.00 0.00 0.00
0.00 0.00 0.00 0.00 0.00
0.00 0.00 0.00 0.00 0.00
0.00 0.00 0.00 0.00 0.00
0.00 0.00 0.00 0.00 0.00
0.00 0.00 0.00 0.00 0.00
0.00 0.00 0.00 0.00 0.00
0.00 0.00 0.00 0.00 0.00

1175 BSPZ
190800.00

1180 BRPZ
692398.95

1190 BRWZ(KBW)
45256.08 8019.82 5371.32 745.37 781.22 143.71 903.58 52.35 477.95 238.52

1230 BGSS(J)
237421.91 279621.85 279773.24 235226.37 237922.65 338451.57 455587.97

1240 BGSW(IB)
146000.00 222585.97

1250 BGSZ
1421356.90

2010 NRDS(KRU,J)

2.00	4.00	6.00	1.00	0.00	12.00	1.00
6.00	5.00	2.00	3.00	0.00	2.00	0.00
0.00	0.00	0.00	0.00	3.00	3.00	1.00
0.00	0.00	0.00	0.00	1.00	2.00	6.00

2020 NRDR(KRU,IR)

0.00	1.00	5.00
0.00	3.00	12.00
0.00	0.00	0.00
0.00	0.00	0.00

2030 NRDZ(KRU)

0.00	0.00	0.00	0.00

2060 RPDS(KRP,KRU,J)

8765.83	35110.22	26557.90	4418.74	0.00	52504.73	4409.69
39698.50	33104.92	13290.85	19928.00	0.00	13210.38	0.00
0.00	0.00	0.00	0.00	13313.44	13135.82	4421.07
0.00	0.00	0.00	0.00	6654.14	13229.60	39860.21
6980.11	27910.85	20943.00	3492.51	0.00	41880.57	3492.53
22736.43	18965.47	7580.00	11376.10	0.00	7581.14	0.00
0.00	0.00	0.00	0.00	10479.65	10474.38	3492.76
0.00	0.00	0.00	0.00	3792.84	7582.34	22754.66
12954.09	51845.77	38904.38	6483.58	0.00	77726.15	6482.79
38882.09	32419.01	12972.01	19457.83	0.00	12965.12	0.00
0.00	0.00	0.00	0.00	19455.90	19439.99	6483.80
0.00	0.00	0.00	0.00	6487.01	12966.89	38916.23

TOTAL

130017.05	199342.24	120248.14	65156.77	60182.97	282697.11	130313.54	987957.82

2070 RPDR(KRP,KRU,IR)

0.00	4411.95	22423.67
0.00	19700.72	80147.86
0.00	0.00	0.00
0.00	0.00	0.00
0.00	3431.52	17440.63
0.00	11176.95	45457.00
0.00	0.00	0.00
0.00	0.00	0.00
0.00	6372.82	32389.74
0.00	19118.46	77755.39
0.00	0.00	0.00
0.00	0.00	0.00

TOTAL

0.00	64218.42	275614.28

339832.71

2080 RPDZ(KRP,KRU)

0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00

0.00

TOTAL EFFECTIVE PEOPLE IN THEATER 2181768.14

2090 RWDS(KRW,KRU,J)

5971.37	23889.89	17957.14	2993.21	0.00	35825.06	2992.57
17914.10	14931.18	5985.71	8979.63	0.00	5970.84	0.00
0.00	0.00	0.00	0.00	8983.42	8956.27	2992.57
0.00	0.00	0.00	0.00	2994.47	5970.84	17955.41
800.45	3203.58	2410.98	401.24	0.00	4793.87	401.02
1269.21	1058.26	424.76	636.21	0.00	422.29	0.00
0.00	0.00	0.00	0.00	1046.05	1040.85	348.28
0.00	0.00	0.00	0.00	174.34	346.95	1044.94
413.54	2453.97	1850.96	307.71	0.00	3665.87	407.62

191263.69

19823.16

1104.37	920.24	370.19	553.87	0.00	366.59	0.00	
0.00	0.00	0.00	0.00	724.17	718.39	240.98	
0.00	0.00	0.00	0.00	186.75	370.53	1118.60	15874.15
179.75	719.00	539.63	89.93	0.00	1078.21	89.93	
2330.75	1942.30	777.46	1166.08	0.00	776.71	0.00	
0.00	0.00	0.00	0.00	239.84	239.60	79.93	
0.00	0.00	0.00	0.00	329.79	658.91	1978.36	13216.19
133.96	535.75	401.88	66.99	0.00	803.70	66.99	
413.89	344.84	137.96	206.96	0.00	137.95	0.00	
0.00	0.00	0.00	0.00	182.97	182.93	60.99	
0.00	0.00	0.00	0.00	53.99	107.96	323.94	4163.64
23.99	95.93	71.97	12.00	0.00	143.92	12.00	
71.97	59.96	23.99	35.99	0.00	23.99	0.00	
0.00	0.00	0.00	0.00	35.99	35.98	12.00	
0.00	0.00	0.00	0.00	12.00	23.99	71.98	767.63
35.69	142.46	107.44	17.87	0.00	212.85	17.87	
321.21	267.12	107.44	160.81	0.00	106.43	0.00	
0.00	0.00	0.00	0.00	17.89	17.74	5.96	
0.00	0.00	0.00	0.00	17.89	35.48	107.22	1699.35
35.98	143.87	107.94	17.99	0.00	215.85	17.99	
107.95	89.92	35.99	53.98	0.00	35.97	0.00	
0.00	0.00	0.00	0.00	35.99	35.97	12.00	
0.00	0.00	0.00	0.00	12.00	23.98	71.97	1055.34
59.96	239.77	179.89	29.99	0.00	359.64	29.98	
179.87	149.85	59.96	89.98	0.00	59.94	0.00	
0.00	0.00	0.00	0.00	89.98	89.91	29.98	
0.00	0.00	0.00	0.00	29.99	59.94	179.91	1918.55
29.97	119.81	89.91	14.99	0.00	179.72	14.99	
89.90	74.88	29.97	44.98	0.00	29.95	0.00	
0.00	0.00	0.00	0.00	14.99	44.93	14.99	
0.00	0.00	0.00	0.00	14.99	29.95	89.93	958.86

2100 AWOR(KRW,KRO,IR)

0.00	2795.39	14864.34	
0.00	8386.16	35674.42	
0.00	0.00	0.00	
0.00	0.00	0.00	61720.30
0.00	401.69	2014.10	
0.00	636.93	2554.86	
0.00	0.00	0.00	
0.00	0.00	0.00	5607.58
0.00	309.21	1549.67	
0.00	556.58	2231.24	
0.00	0.00	0.00	
0.00	0.00	0.00	4646.50
0.00	89.55	449.71	
0.00	1161.18	4664.95	
0.00	0.00	0.00	
0.00	0.00	0.00	6365.40
0.00	66.83	334.89	
0.00	206.48	827.73	
0.00	0.00	0.00	
0.00	0.00	0.00	1435.93
0.00	11.98	59.99	
0.00	35.93	143.97	
0.00	0.00	0.00	
0.00	0.00	0.00	251.86
0.00	17.93	89.94	
0.00	161.11	647.55	
0.00	0.00	0.00	
0.00	0.00	0.00	916.49
0.00	17.94	89.96	
0.00	53.83	215.91	
0.00	0.00	0.00	
0.00	0.00	0.00	377.65
0.00	29.84	149.93	

```
      0.00     89.65    359.82
      0.00      0.00      0.00
      0.00      0.00      0.00                                                                     629.27
      0.00     14.91     74.85
      0.00     44.73    179.65
      0.00      0.03      0.00
      0.00      0.00      0.00                                                                     314.14

2110 HWDZ(KHW,KRU)
      0.00      0.00      0.00      0.00                                                             0.00
      0.00      0.00      0.00      0.00                                                             0.00
      0.00      0.00      0.00      0.00                                                             0.00
      0.00      0.00      0.00      0.00                                                             0.00
      0.00      0.00      0.00      0.00                                                             0.00
      0.00      0.00      0.00      0.00                                                             0.00
      0.00      0.00      0.00      0.00                                                             0.00
      0.00      0.00      0.00      0.00                                                             0.00
      0.00      0.00      0.00      0.00                                                             0.00
      0.00      0.00      0.00      0.00                                                             0.00

2175 HSPZ
 159840.00

2180 HRPZ
 694137.62

2190 HRWZ(KRW)
  92692.93   1323.10   9525.67   6527.76   8401.20    374.60    989.13    540.22    944.68    473.89

2230 HGSS(J)
 511916.61 503572.93 510091.10 514459.10 514968.39 500064.16 509106.59

2240 HGSH(IR)
 599345.41 596726.33 587440.69

2250 HGSZ
2921017.18
```

CBCS(J)
1338.02 2376.97 873.56 371.72 247.81 3140.77 495.63

CBPCS(J)
.0109 .0115 .0060 .0020 .0020 .0086 .0020

CRCS(J)
901.05 1741.84 840.45 327.21 302.24 2708.73 654.43

CRPCS(J)
.0046 .0044 .0035 .0025 .0025 .0056 .0025

CBC	CBPC	CRC	CRPC
8846.48	.01	7476.35	.00

CBWLS(KBW,J)

227.81	376.07	117.02	59.05	35.53	491.82	64.04
36.53	70.09	26.11	9.86	7.38	92.81	13.96
60.85	86.58	31.86	18.77	9.81	123.92	24.99
5.65	11.06	4.68	1.50	1.12	11.48	1.94
.27	1.05	.51	.08	.06	.65	.10
.07	.11	.04	.02	.02	.18	.03
3.16	6.03	2.60	.92	.60	6.70	1.15
0.00	5.16	3.07	0.00	0.00	0.00	0.00
.32	.48	.19	.10	.07	.79	.12
.27	.39	.14	.08	.06	.65	.10

CBWL(KBW)

1371.33	256.74	356.78	37.43	2.72	.48	21.15	8.23	2.06	1.71

CRWLS(KRW,J)

180.79	339.94	155.21	53.81	43.19	412.94	115.21
24.57	47.67	23.03	9.12	9.25	82.00	17.80
32.43	61.90	30.70	12.91	12.27	106.43	28.48
5.81	6.77	2.51	1.97	.73	7.03	3.52
.27	.83	.45	.11	.07	.64	.18
.07	.21	.12	.03	.02	.18	.06
5.99	7.56	3.25	2.68	.45	7.85	1.98
.13	.41	.23	.06	.03	.31	.08
.06	.19	.11	.03	.02	.16	.05
.10	.32	.19	.04	.03	.28	.09

CRWL(KRW)

1301.10	213.44	285.11	28.34	2.54	.70	29.77	1.24	.62	1.05

RBPCS(J)
.3044 .4902 1.2506 1.2506 1.2506 .9003 1.2506

CRBPCS(J)
.4229 .3780 .5864 1.2506 1.2506 .6596 1.2506

RBPC	CRBPC
.88	.65

CBNHC	CRNHC	CBNBCM	CRNBCM
2545.32	3182.40	0.00	0.00

CBSLI	CRSLI
0.00	0.00

CBWS(KBW)
.1762E+06 .2348E+05 .1336E+05 .2640E+04 .2488E+04 .5280E+03 .3210E+04 .1440E+03 .1758E+04 .8788E+03

CRWS(KRW)

0.00	766.90	1128.43	0.00						
CRWS(KRW)									
.3540E+06	.3644E+05	.2935E+05	.2467E+05	.7654E+04	.1416E+04	.3144E+04	.1932E+04	.3538E+04	.1769E+04
CRAS(KRA)									
0.00	2766.54	2209.14							
CBPS	CRPS								
.1408E+07	.1836E+07								
CRGKBS(KRW,KBW)									
101.44	0.00	0.00	8.72	0.00	0.00	3.44	2.71	0.00	0.00
178.24	0.00	0.00	7.92	0.00	0.00	3.13	4.86	0.00	0.00
70.40	194.77	166.15	4.40	0.00	0.00	3.47	0.00	0.00	0.00
0.00	41.68	179.72	4.76	0.00	0.00	3.74	0.00	0.00	0.00
401.92	0.00	0.00	4.48	1.64	.29	3.10	0.00	1.43	1.19
73.58	0.00	0.00	1.02	.59	.11	.73	0.00	.31	.26
249.70	0.00	0.00	3.49	0.00	0.00	2.05	0.00	0.00	0.00
102.42	0.00	0.00	1.15	.42	.07	.91	0.00	.29	.24
20.32	0.00	0.00	.75	0.00	0.00	.44	.64	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CRAKBS(KRA,KBW)									
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
128.23	16.92	9.22	.55	.05	.01	.11	.01	.02	.01
45.07	3.37	1.70	.20	.01	.00	.03	.01	.01	.00
CBGKRS(KBW,KRW)									
98.63	0.00	0.00	1.47	0.00	0.00	.87	0.00	0.00	0.00
288.03	0.00	0.00	10.87	0.00	0.00	12.97	0.00	0.00	0.00
39.54	151.81	184.98	3.03	0.00	0.00	6.56	0.00	0.00	0.00
0.00	26.87	71.96	.07	0.00	0.00	1.48	0.00	0.00	0.00
136.96	0.00	0.00	1.92	1.95	.55	2.43	1.00	.47	.86
31.14	0.00	0.00	.39	.38	.11	.47	.19	.09	.17
242.64	0.00	0.00	2.96	0.00	0.00	3.59	0.00	0.00	0.00
1.39	.03	.28	.01	0.00	0.00	.21	0.00	0.00	0.00
20.07	0.00	0.00	.61	0.00	0.00	.96	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CBAKRS(KBA,KRW)									
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
219.06	24.73	19.86	4.06	.10	.02	.12	.02	.03	.01
223.64	10.00	8.03	2.95	.11	.02	.12	.03	.03	.01
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CRGKBP(KRW)									
148.62	225.89	4821.07	1758.76	653.51	142.89	267.74	160.45	25.48	0.00
CRAKBP(KRA)									
0.00	519.14	122.93							
CBGKRP(KRW)									
106.24	357.44	4025.90	900.45	390.87	81.10	261.64	3.84	24.44	0.00
CBAKRP(KBA)									
0.00	838.56	485.87	7.00						

APPENDIX B

RELATIONSHIPS AMONG VARIABLES

[The following is an alphabetical list of parameter indices designated by their maximum values. Each index is followed by the page number of this appendix on which a list of input variables dependent on that index appears.

NBAEF	B-2	NIRRL	B-3	NKRAM	B-5	NPCBHF	B-8
NBDEF	B-2	NJ	B-9	NKRD	B-5	NPCRAF	B-7
NBFMF	B-2	NKBA	B-3	NKRP	B-6	NPCRDF	B-8
NIB	B-2	NKBAM	B-5	NKRW	B-6	NPCRHF	B-8
NIBRL	B-3	NKBD	B-5	NKT	B-9	NRAEF	B-2
NIFPBS	B-3	NKBP	B-6	NLEB	B-7	NRDEF	B-2
NIFPRS	B-3	NKBW	B-6	NLER	B-7	NRFMF	B-2
NINTS	B-9	NKP	B-9	NPCBAF	B-7	NSEFBF	B-8
NIR	B-2	NKRA	B-3	NPCBDF	B-8	NSEFRF	B-8.]

Appendix B

RELATIONSHIPS AMONG VARIABLES

When preparing inputs and making changes to input data, one should take care to see that all related variables are checked and changed if necessary. This appendix is devoted entirely to providing a simple means of helping the user to prepare and make changes to inputs correctly. There exists no convenient ordering system for inputting data; and often one variable that may influence another, being found in an entirely different input routine, may go unnoticed--resulting in inaccurate answers.

This appendix does not, by any means, consider all possible combinations of changes; nor does it indicate all variables that should be looked at when a change is made. Rather, it only considers all index parameters and lists variables dependent upon them. If an index value is changed, all variables below that index will also need to be changed. If a variable within a list is changed, all surrounding variables should be checked to see whether their values influence the changed variables.

Following this list of variables, there is a section on relationships of variables, indicating when changes to a variable may affect other variables, where these variables are not necessarily dimensioned to the same argument. Some of the examples in that section include a subset of the variables from one of the following lists--demonstrating the importance of the index parameter when working with inputs. However, it also emphasizes that merely looking at the following lists will be insufficient for proper input preparation.

This appendix can be useful as a guide to changing variables, but the only accurate method in making proper changes is to know the meaning of the variables and how they are used in the program.

NBAEF	NRAEF
BAEFX(IBAEF)	RAEFX(IRAEF)
BAEFY(KBD,IBAEF)	RAEFY(KRD,IRAEF)
NBDEF	**NRDEF**
BDEFX(IBDEF)	RDEFX(IRDEF)
BDEFY(KBD,IBDEF)	RDEFY(KRD,IRDEF)
NBFMF	**NRFMF**
BFMFX(IBFMF)	RFMFX(IRFMF)
BFMFY(KP,KT,IBFMF)	RFMFY(KP,KT,IRFMF)
NIB	**NIR**
NBDR(KBD,IB)	NRDR(KRD,IR)
BPDR(KBP,KBD,IB)	RPDR(KRP,KRD,IR)
BWDR(KBW,KBD,IB)	RWDR(KRW,KRD,IR)
BSAMFR(IB)	RSAMFR(IR)
BSAMRR(IB)	RSAMRR(IR)
BAGFR(IB)	RAGFR(IR)
BAGRR(IB)	RAGRR(IR)
BAFR(KBA,IB)	RAFR(IRA,IR)
BARR(KBA,IB)	RARR(KRA,IR)
BSARF(IB,IFPBS)	RSARF(IR,IFPRS)
BGSR(IB)	RGSR(IR)
BGSRUR(IB)	RGSRUR(IR)
LNSBR(IB)	LNSRR(IR)
FBARRR(IB,IR)	FBARRR(IB,IR)
FRARBR(IR,IB)	FRARBR(IR,IB)

NIBRL	NIRRL
BRLZAI(IBRL)	RRLZAI(IRRL)
BRLZDI(IBRL)	RRLZDI(IRRL)
FIBRLZ(IBRL,J)	FIRRLZ(IRRL,J)
NIFPBS	NIFPRS
BSARF(IB,IFPBS)	RSARF(IR,IFPRS)
FPBS(IFPBS)	FPRS(IFPRS)
NKBA	NKRA
BAFR(KBA,IB)	RAFR(KRA,IR)
BARR(KBA,IB)	RARR(KRA,IR)
BAZ(KBA)	RAZ(KRA)
BAMNLA(KBA,KBAM)	RAMNLA(KRA,KRAM)
BAMNLD(KBA,KBAM)	RAMNLD(KRA,KRAM)
LVBAA(KBA)	LVRAA(KRA)
LVBAD(KBA)	LVRAD(KRA)
FBACSI(KBA)	FRACSI(KRA)
RSLBAC(KBA)	BSLRAC(KRA)
RSBASI(KBA)	BSRASI(KRA)
RSBASR(KBA)	BSRASR(KRA)
IRBAF(KBA)	IRRAF(KRA)
IRBAR(KBA)	IRRAR(KRA)
IRBAZ(KBA)	IRRAZ(KRA)
PBA1(KBA)	PRA1(KRA)
PBA2(KBA)	PRA2(KRA)
PBA3(KBA)	PRA3(KRA)
PBA4(KBA)	PRA4(KRA)
PBA5(KBA)	PRA5(KRA)
PBA6(KBA)	PRA6(KRA)
PBA7(KBA)	PRA7(KRA)
PBACS(KBA)	PRACS(KRA)

(columns continued on next page)

NKBA (cont'd)

PBAAS(KBA)
FBAISR(KBA)
BKED(KBA,KRA)
BKDE(KBA,KRA)
BKDA(KBA,KRA)
BKAD(KBA,KRA)
BKSS(KBA)
BKGG(KBA)
BKAS(KBA)
BKAN(KBA)
RKED(KRA,KBA)
RKDE(KRA,KBA)
RKDA(KRA,KBA)
RKAD(KRA,KBA)
RKS(KBA)
RKG(KBA)
RSFBAK(KBA)
PBAAGM(KBA)
PDBANG(KBA)
BSCA(KBA)
SRB1(KBA)
SRB2(KBA)
SRB3(KBA)
SRB4(KBA)
SRB5(KBA)
SRB6(KBA)
SRB7(KBA)
KBAS(KBA)
FFBAKH(KBA)

NKRA (cont'd)

PRAAS(KRA)
FRAISR(KRA)
BKED(KBA,KRA)
BKDE(KBA,KRA)
BKDA(KBA,KRA)
BKAD(KBA,KRA)
BKS(KRA)
BKG(KRA)
RKED(KRA,KBA)
RKDE(KRA,KBA)
RRDA(KRA,KBA)
RKAD(KRA,KBA)
RKSS(KRA)
RKGG(KRA)
RKAS(KRA)
RKAN(KRA)
BSFRAK(KRA)
PRAAGM(KRA)
PDRANG(KRA)
RSCA(KRA)
SRR1(KRA)
SRR2(KRA)
SRR3(KRA)
SRR4(KRA)
SRR5(KRA)
SRR6(KRA)
SRR7(KRA)
KRAS(KRA)
FFRAKH(KRA)

NKBAM	NKRAM
SABMAR(KBAM,KRW)	SARMAB(KRAM,KBW)
SABMDR(KBAM,KRW)	SARMDB(KRAM,KBW)
VBAMAR(KBAM,KRW)	VRAMAB(KRAM,KBW)
VBAMDR(KBAM,KRW)	VRAMDB(KRAM,KBW)
BAMKAR(KBAM,KRW)	RAMKAB(KRAM,KBW)
BAMNLA(KBA,KBAM)	RAMNLA(KRA,KRAM)
BAMNLD(KBA,KBAM)	RAMNLD(KRA,KRAM)
RPWLAM(KRW,KBAM)	BPWLAM(KBW,KRAM)
RPWLDM(KRW,KBAM)	BPWLDM(KBW,KRAM)

NKBD	NKRD
NBDS(KBD,J)	NRDS(KRD,J)
NBDR(KBD,IB)	NRDR(KRD,IR)
NBDZ(KBD)	NRDZ(KRD)
TPBD(KBP,KBD)	TPRD(KRP,KRD)
TWBD(KBW,KBD)	TWRD(KRW,KRD)
BPDS(KBP,KBD,J)	RPDS(KRP,KRD,J)
BPDR(KBP,KBD,IB)	RPDR(KRP,KRD,IR)
BPDZ(KBP,KBD)	RPDZ(KRP,KRD)
BWDS(KBW,KBD,J)	RWDS(KRW,KRD,J)
BWDR(KBW,KBD,IB)	RWDR(KRW,KRD,IR)
BWDZ(KBW,KBD)	RWDZ(KRW,KRD)
BALBD(KBD)	BALRD(KRD)
PNBD(KBD)	PNRD(KRD)
PBCSSD(KBD)	PRCSSD(KRD)
BMFDPT(KBD,KP,KT)	RMFDPT(KRD,KP,KT)
BMRSDA(KBD)	RMRSDA(KRD)
BMRSDD(KBD)	RMRSDD(KRD)
PSBWDA(KBD)	PSRWDA(KRD)
PSBWDD(KBD)	PSRWDD(KRD)
BRRAD(KBD)	RRRAD(KRD)
BRRDD(KBD)	RRRDD(KRD)
BAEFY(KBD,IBAEF)	RAEFY(KRD,IRAEF)
BDEFY(KBD,IBDEF)	RDEFY(KRD,IRDEF)

NKBP		NKRP	
TPBD(KBP,KBD)		TPRD(KRP,KRD)	
BPDS(KBP,KBD,J)		RPDS(KRP,KRD,J)	
BPDR(KBP,KBD,IB)		RPDR(KRP,KRD,IR)	
BPDZ(KBP,KBD)		RPDZ(KRP,KRD)	
BCRPR(KBP)		RCRPR(KRP)	
BCRPH(KRB)		RCRPH(KRP)	
BCRPP(KBP,KP)		RCRPP(KRP,KP)	
BPCRPS(KBP)		RPCRPS(KRP)	
BPCRPR(KBP)		RPCRPR(KRP)	
NKBW		**NKRW**	
TWBD(KBW,KBD)		TWRD(KRW,KRD)	
BWDS(KBW,KBD,J)		RWDS(KRW,KRD,J)	
BWDR(KBW,KBD,IB)		RWDR(KRW,KRD,IR)	
BWDZ(KBW,KBD)		RWDZ(KRW,KRD)	
BRWZ(KBW)		RRWZ(KRW)	
IPGBW(KBW)		IPGRW(KRW)	
SABWAR(KBW,KRW)		SABMAR(KBAM,KRW)	
SABWDR(KBW,KRW)		SABMDR(KBAM,KRW)	
SARMAB(KRAM,KBW)		SABWAR(KBW,KRW)	
SARMDB(KRAM,KBW)		SABWDR(KBW,KRW)	
SARWAB(KRW,KBW)		SARWAB(KRW,KBW)	
SARWDB(KRW,KBW)		SARWDB(KRW,KBW)	
VBWARP(KP,KBW,KRW)	KP = 1,2	VBAMAR(KBAM,KRW)	
VBWDRP(KP,KBW,KRW)	KP = 1,2	VBAMDR(KBAM,KRW)	
VRAMAB(KRAM,KBW)		VBWARP(KP,KBW,KRW)	KP = 1,2
VRAMDB(KRAM,KBW)		VBWDRP(KP,KBW,KRW)	KP = 1,2
VRWABP(KP,KRW,KBW)	KP = 1,2	VRWABP(KP,KRW,KBW)	KP = 1,2
VRWDBP(KP,KRW,KBW)	KP = 1,2	VRWDBP(KP,KRW,KBW)	KP = 1,2
RAMKAB(KRAM,KBW)		BAMKAR(KBAM,KRW)	
BWGPG(KKBW,KBW)		RWGPG(KKRW,KRW)	
BCWI(KBW)		RCWI(KRW)	

(columns continued on next page)

NKBW (cont'd)

LVBWA(KBW)
LVBWD(KBW)
PBWSF(KBW)
BPWLAM(KBW,KRAM)
BPWLDM(KBW,KRAM)
BPWLAW(KBW,KRW)
PBWLDW(KBW,KRW)
RPWLAW(KRW,KBW)
RPWLDW(KRW,KBW)
BCRWR(KBW)
BCRRWZ(KBW)
BCRWH(KBW)
BCRWP(KBW,KP)
RSLBWV(KBW)
MABRWZ(KBW)
DABRWZ(KBW)
DIBRWZ(KRW)
PBWRRR(KBW)
PBWLRH(KBW)
PBWLRA(KBW,KP)
PBWLRD(KBW,KP)
BPCRWS(KBW)
BPCRWR(KBW)
BPCRRW(KBW)

NLEB

EBRDD(LEB)

NPCBAF

PCBAFX(IPCBAF)
PCBAFY(KP,IPCBAF)

NKRW (cont'd)

LVRWA(KRW)
LVRWD(KRW)
PRWSF(KRW)
BPWLAW(KBW,KRW)
BPWLDW(KBW,KRW)
RPWLAM(KRW,KBAM)
RPWLDM(KRW,KBAM)
RPWLAW(KRW,KBW)
RPWLDW(KRW,KBW)
RCRWR(KRW)
RCRRWZ(KRW)
RCRWH(KRW)
RCRWP(KRW,KP)
BSLRWV(KRW)
MARRWZ(KRW)
DARRWZ(KRW)
DIRRWZ(KRW)
PRWRRR(KRW)
PRWLRH(KRW)
PRWLRA(KRW,KP)
PRWLRD(KRW,KP)
RPCRWS(KRW)
RPCRWR(KRW)
RPCRRW(KRW)

NLER

ERRDD(LER)

NPCRAF

PCRAFX(IPCRAF)
PCRAFY(KP,IPCRAF)

NPCBDF

PCBDFX(IPCBDF)
PCBDFY(KP,IPCBDF)

NPCRDF

PCRDFX(IPCRDF)
PCRDFY(KP,IPCRDF)

NPCBHF

PCBHFX(IPCBHF)
PCBHFY(IPCBHF)

NPCRHF

PCRHFX(IPCRHF)
PCRHFY(IPCRHF)

NSEFBF

SEFBFX(ISEFBF)
SEFBFY(ISEFBF)

NSEFRF

SEFRFX(ISEFRF)
SEFRFY(ISEFRF)

NINTS (NIMAX)

BNDIS(INTS,J)
KTERIS(INTS,J)
KPBAIS(INTS,J)
KPRAIS(INTS,J)
WIDIS(INTS,J)
EFHIS(INTS,J)

NJ

NBDS(KBD,J)
BPDS(KBP,KBD,J)
BWDS(KBW,KBD,J)
BGSS(J)
NRDS(KRD,J)
RPDS(KRP,KRD,J)
RWDS(KRW,KRD,J)
RGSS(J)
FEBATZ(J)
ISMAB(J)
ISMAR(J)
ISUPAS(J)
NINTS(J)
BNDIS(INTS,J)
KTERIS(INTS,J)
KPBAIS(INTS,J)
KPRAIS(INTS,J)
WIDIS(INTS,J)
EFHIS(INTS,J)
MNBDS(J)
MNRDS(J)
FRBASA(J,KP)
FRBASD(J,KP)
FRRASA(J,KP)

NJ (cont'd)

FRRASD(J,KP)
BMFAS(J)
RMFAS(J)
BFWFSP(J,KP)
RFWFSP(J,KP)
PSURIS(J)
PSUBIS(J)
FFRBS(J)
FFRRS(J)
FFRBDS(J)
FFRRDS(J)
FIBRLZ(IBRL,J)
FIRRLZ(IRRL,J)

NKP

KPBAIS(INTS,J)
KPRAIS(INTS,J)
FRBAT(KP)
FRRAT(KP)
FRBASA(J,KP)
FRBASD(J,KP)
FRRASA(J,KP)
FRRASD(J,KP)
BMFDPT(KBD,KP,KT)
RMFDPT(KRD,KP,KT)
BCRPP(KBP,KP)
BCRWP(KBW,KP)
RCRPP(KRP,KP)
RCRWP(KRW,KP)
BFWFSP(J,KP)
RFWFSP(J,KP)
RLBAP(KP)

NKP (cont'd)

RLBDP(KP)
RLRAP(KP)
RLRDP(KP)
PBWLRA(KBW,KP)
PBWLRD(KBW,KP)
PRWLRA(KRW,KP)
PRWLRD(KRW,KP)
FRBAP(KP)
FRBDP(KP)
FRRAP(KP)
FRRDP(KP)
PBNCAP(KP)
PBNCDP(KP)
PRNCAP(KP)
PRNCDP(KP)
PCBAFY(KP,IPCBAF)
PCBDFY(KP,IPCBDF)
PCRAFY(KP,IPCRAF)
PCRDFY(KP,IPCRDF)
BFMFY(KP,KT,IBFMF)
RFMFY(KP,KT,IRFMF)

NKT

BMFDPT(KBD,KP,KT)
RMFDPT(KRD,KP,KT)
BFMFY(KP,KT,IBFMF)
RFMFY(KP,KT,IRFMF)

The following are examples of variables that are related to each other. Within each group, any or all of the variables may need to be changed if any one of them is changed. An explanation of each group follows this list of variables:

(1) NTRF, IRFB, IRFR.
(2) IPR1T, IPRA(II).
(3) IPR2T, IPRB(II).
(4) MCSMAB, ISMAB(J).
(5) MCSMAR, ISMAR(J).
(6) IPGBW(KBW), BWGPG(KKBW,KBW).
(7) IPGRW(KRW), RWGPG(KKRW,KRW).
(8) BSARF(IB,IFPBS), FPBS(IFPBS), DSB, DFRB, DRRB, DZB.
(9) RSAFR(IR,IFPRS), FPRS(IFPRS), DSR, DFRR, DRRR, DZR.
(10) MCFR, IWUCE, MNIE, EFCE.
(11) MCFR, LVBWA(KBW), LVBWD(KBW), LVBAA(KBA), LVBAD(KBA), LVRWA(KRW), LVRWD(KRW), LVRAA(KRA), LVRAD(KRA).

An example of the relationship of variables within a group is demonstrated by Group (1). If NTRF is inputted with a time period for reading forces, IRFB and IRFR must indicate whether Blue or Red forces should be read. Similarly, IPRA and IPRB must indicate days when a detailed or ground summary output is desired by the appropriate flags in IPR1T and IPR2T. When the method for computing the sector of main attack for Blue or Red (MCSMAB or MCSMAR) is inputted as 3, arrays ISMAB and ISMAR must indicate which sectors are sectors of main attacks. Groups (10) and (11) also represent options where, if the method for computing force ratios (MCFR) is equal to 5 or 6, the variables in Group (10) may need to be changed; or, similarly, if MCFR is equal to 3 or 4, Group (11) is affected.

Another way variables are related is given by Groups (6), (7), (8), and (9). The variables in Groups (6) and (7) deal with weapon protection groups. The first variable indicates what protection group the weapon is in. The second variable indicates the number of weapons of a particular type needed

to protect weapons of a particular type according to the protection group indicated by the first variable. The variables in Groups (8) and (9) deal with how the model allocates aircraft shelters to notional airbases by looking at the FEBA position.

These groups are only a few examples of how different variables interact in the model. Again, only a knowledge of the model will ensure proper understanding of the inputs.

APPENDIX C

VARIABLE SIZES AND LOCATIONS

Appendix C

VARIABLE SIZES AND LOCATIONS

1. Maximum Dimensions

The following list indicates the values for the maximum number of types of quantities (such as sectors, regions, weapons, divisions, and aircraft) that can be inputted without changing COMMON and DIMENSION statements. If a larger number is desired for any index, all variables dependent on that index must be changed in all COMMON and DIMENSION statements. (Appendix B indicates the variables that need to be changed.)

Index of Variables	Variable Indicating Maximum Value of Index	Maximum Dimension Size
IB	NIB	4
IBAEF	NBAEF	8
IBDEF	NBDEF	8
IBFMF	NBFMF	8
IBRL	NIBRL	8
IFPBS	NIFPBS	10
IFPRS	NIFPRS	10
II	--	16
INTS	NIMAX	15
IPCBAF	NPCBAF	8
IPCBDF	NPCBDF	8
IPCBHF	NPCBHF	8
IPCRAF	NPCRAF	8
IPCRDF	NPCRDF	8

(columns concluded on next page)

IPCRHF	NPCRHF	8
IR	NIR	4
IRAEF	NRAEF	8
IRDEF	NRDEF	8
IRFMF	NRFMF	8
IRRL	NIRRL	8
ISEFBF	NSEFBF	8
ISEFRF	NSEFRF	8
J	NJ	10
KBA	NKBA	8
KBAM	NKBAM	10
KBD	NKBD	6
KBP	NKBP	*must be* 3
KBW	NKBW	10
KKBW	NKBW	10
KKRW	NKRW	10
KP	NKP	4
KRA	NKRA	8
KRAM	NKRAM	10
KRD	NKRD	6
KRP	NKRP	*must be* 3
KRW	NKRW	10
KT	NKT	4
LEB	NLEB	5
LER	NLER	5

2. Blank COMMON, Labeled COMMON, DIMENSION Statements

a. Blank COMMON

Whenever an array is enlarged beyond the size of its present dimension, blank COMMON, labeled COMMON, and all DIMENSION statements must reflect this increase. In Subsections 2b and 2c (below) is the list of variables in labeled COMMON and in DIMENSION statements written with variable indices to aid the user in changing array sizes. Blank COMMON is divided into two sections, entitled input variables and working variables. The former group of variables are listed in Appendix B in input order within each list. Since Appendix B does not deal with the working variables in blank COMMON, the following is a list of those variables with their parameter indices.

Working Variables - Blank COMMON

EBRDR(LEB,KBD,IB), EBRDS(LEB,KBD,J), EDGEH(J), EDGEL(J), ERRDR(LER,KRD,IR), ERRDS(LER,KRD,J), FEBA(J), FEIB(J), FEIR(J), ISCFFR(J), ISA, ISMA(J), KBDATV(KBD), KBDDTV(KBD), KPBA(J), KPBAN(J), KPRA(J), KPRAN(J), KRDATV(KRD), KRDDTV(KRD), KTER(J), KTERNB(J), KTERNR(J), LONSBR(IB), LONSRR(IR), MOT, MZT, PCBS(J), PCRS(J), TBSC, TBTPDS(KBD,J), TRSC, TRTPDS(KRD,J), TWBD(KBW,KBD), TWRD(KRW,KRD), WIDS(J), WIDSNB(J), WIDSNR(J), IPR1, MTT, IT, ITT, ITAY, YBAEDS(KBD,J), YBDEDS(KBD,J), YBPPDS(KBD,J), YRAEDS(KRD,J), YRDEDS(KRD,J), YRPPDS(KRD,J), BRWR(KBW), RRWR(KRW), CBCS(J), CRCS(J), CBWLS(KBW,J), CRWLS(KRW,J), TBPDS(J), TRPDS(J), CBPCS(J), CRPCS(J), CBWL(KBW), CRWL(KRW), CRBPCS(J), RBPCS(J), CABRPZ, CARRPZ, CABRWZ(KBW), CARRWZ(KRW), CBC, CBPC, CRC, CRPC, RBPC, CRBPC, ISAS(J), VBAS(J), VBGS(J), VRAS(J), VRGS(J), FRRBS(J), FRBRS(J), BAS(KBA,J), RAS(KRA,J), BAISR(KBA,IR), RAISR(KRA,IB), VBAASF(KBA), VBADSF(KBA), VRAASF(KRA), VRADSF(KRA), VBWASP(KBW,KP), VBWDSP(KBW,KP), VRWASP(KRW,KP), VRWDSP(KRW,KP),

TBWDR(KBW,KBD,IB), TBWDS(KBW,KBD,J), TRWDR(KRW,KRD,IR), TRWDS(KRW,KRD,J), ISCFF2(J), CFEBA(J), SUMM (largest value of KBA,KRA,KBAM,KRAM,KBW,KRW,IB, or IR), CBSLI, CRSLI, CBSFM(M,KBA),* CRSFM(M,KRA),* CBAKM(M,KBA),* CRAKM(M,KRA),* CBASK, CBANK, CRASK, CRANK, CBGL, CBSML, CRGL, CRSML, CBNBC, CRNBC, CBCRI, CRCRI, CBWLIR(KBW), CRWLIR(KRW), CBNBCM, CRNBCM, CBSAD, CRSAD, CBWS(KBW), CRWS(KRW), CBAS(KBA), CRAS(KRA), CBPS, CRPS, CBGKRS(KBW,KRW), CRGKBS(KRW,KBW), CBAKRS(KRA,KRW), CRAKBS(KBA,KRW), CBGKRP(KBW), CRGKBP(KRW), CBAKRP(KBA), CRAKBP(KRA)

b. Labeled COMMON

Routines AC1, AC2, AC3, AC4, AC5, AC6, and AC7 (together with their calling routine AC) contain labeled COMMON identified by C1, C2, and C3. What follows is a list of variables with their parameter indices for each COMMON block. Again, these variables must be redimensioned when enlarging any value of the list in Section 1 of this appendix (above). In some cases, a variable will be indexed to "A" or "B"; and when this occurs, the value of the largest parameter should be selected for dimensioning the array.

Working Variables Labeled COMMON C1

PBAF1(KBA,IB,J), PBAR1(KBA,IB,J), PBAZ1(KBA,J), PBAF2(KBA,IB,IR), PBAR2(KBA,IB,IR), PBAZ2(KBA,IR), PBAF3(KBA,IB), PBAR3(KBA,IB), PBAZ3(KBA,IB), PBAF4F(KBA,IB,IR), PBAF4R(KBA,IB,IR), PBAF4Z(KBA,IB), PBAR4F(KBA,IB,IR), PBAR4R(KBA,IB,IR), PBAR4Z(KBA,IB), PBAZ4F(KBA,IR), PBAZ4R(KBA,IR), PBAZ4Z(KBA), PBAF5F(KBA,IB,IR), PBAF5R(KBA,IB,IR), PBAF5Z(KBA,IB), PBAR5F(KBA,IB,IR), PBAR5R(KBA,IB,IR), PBAR5Z(KBA,IB), PBAZ5F(KBA,IR), PBAZ5R(KBA,IR), PBAZ5Z(KBA), PBAF6(KBA,IB),

*M must be 11 (on the four working variables thus marked).

PBAR6(KBA,IB), PBAZ6(KBA), PBAF7F(KBA,IB,IR), PBAR7F(KBA,IB,IR), PBAZ7F(KBA,IR), PRAF1(KRA,IR,J), PRAR1(KRA,IR,J), PRAZ1(KRA,J), PRAF2(KRA,IR,IB), PRAR2(KRA,IR,IB), PRAZ2(KRA,IB), PRAF3(KRA,IR), PRAR3(KRA,IR), PRAZ3(KRA,IR), PRAF4F(KRA,IR,IB), PRAF4R(KRA,IR,IB), PRAF4Z(KRA,IR), PRAR4F(KRA,IR,IB), PRAR4R(KRA,IR,IB), PRAR4Z(KRA,IR), PRAZ4F(KRA,IB), PRAZ4R(KRA,IB), PRAZ4Z(KRA), PRAF5F(KRA,IR,IB), PRAF5Z(KRA,IR), PRAR5F(KRA,IR,IB), PRAF5F(KRA,IR,IB), PRAF5R(KRA,IR,IB), PRAF5Z(KRA,IR), PRAR5F(KRA,IR,IB), PRAR5R(KRA,IR,IB), PRAR5Z(KRA,IR), PRAZ5F(KRA,IB), PRAZ6(KRA), PRAF7F(KRA,IR,IB), PRAR7F(KRA,IR,IB), PRAZ7F(KRA,IB)

Working Variables Labeled COMMON C2

BACS(KBA,J), BACG(KBA,J), BACA(KBA,J), BACE(KBA,IR), BACD(KBA,IB), BAFS(KBA,IR), BAFG(KBA,IR), BAFA(KBA,IR), BAFE(KBA,IR), BAFD(KBA,IB), BARS(KBA,IR), BARG(KBA,IR), BARA(KBA,IR), BARE(KBA,IR), BARD(KBA,IB), BAZS(KBA), BAZG(KBA), BAZA(KBA), BAZE(KBA), BAZD(KBA), BACSK(KBA,J), BACGK(KBA,J), BACAK(KBA,J), BACEK(KBA,IR), BACDK(KBA,IB), BAFSK(KBA,IR), BAFGK(KBA,IR), BAFAK(KBA,IR), BAFEK(KBA,IR), BAFDK(KBA,IB), BARSK(KBA,IR), BARGK(KBA,IR), BARAK(KBA,IR), BAREK(KBA,IR), BARDK(KBA,IB), BAZSK(KBA), BAZGK(KBA), BAZAK(KBA), BAZEK(KBA), BAZDK(KBA), BAIDR(KBA,IR), BAIDRK(KBA,IR), RACS(KRA,J), RACG(KRA,J), RACA(KRA,J), RACE(KRA,IB), RACD(KRA,IR), RAFS(KRA,IB), RAFG(KRA,IB), RAFA(KRA,IB), RAFE(KRA,IB), RAFD(KRA,IR), RARS(KRA,IB), RARG(KRA,IB), RARA(KRA,IB), RARE(KRA,IB), RARD(KRA,IR), RAZS(KRA), RAZG(KRA), RAZA(KRA), RAZE(KRA), RAZD(KRA), RACSK(KRA,J), RACGK(KRA,J), RACAK(KRA,J), RACEK(KRA,IB), RACDK(KRA,IR), RAFSK(KRA,IB), RAFGK(KRA,IB), RAFAK(KRA,IB), RAFEK(KRA,IB), RAFDK(KRA,IR), RARSK(KRA,IB), RARGK(KRA,IB), RARAK(KRA,IB), RAREK(KRA,IB), RARDK(KRA,IR), RAZSK(KRA), RAZGK(KRA), RAZAK(KRA), RAZEK(KRA), RAZDK(KRA), RAIDR(KRA,IB), RAIDRK(KRA,IB)

Working Variables Labeled COMMON C3

BSAFR(IB), BSARR(IB), RSAFR(IR), RSARR(IR), BAFRN(IB), BFARS(IB), BARRN(IB), BARRS(IB), RAFRN(IR), RAFRS(IR), RARRN(IR), RARRS(IR), PAR1T(KRA or KBA,IR or IB), PAR2T(KRA or KBA,IR or IB), PAF1T(KRA or KBA,IR or IB), PAF2T(KRA or KBA,IR or IB), VNS(J), PCASS(J), WBAFR(IB), WBARR(IB), WRAFR(IR), WRARR(IR), SUPM(KBA or KRA), TK1(KBA or KRA), BSS(J), BSFR(IB), BGS(J), RSS(J), RSFR(IR), RGS(J), SHTS(KBA or KRA), STOR(KRA), RAWVS(J), RDWVS(J), BAWVS(J), BDWVS(J), BAFRNK(IB), BAFRSK(IB), BARRNK(IB), BARRSK(IB), RAFRNK(IR), RAFRSK(IR), RARRNK(IR), RARRSK(IR), BSSK(J), BSFRK(IB), BGSK(J), RSSK(J), RSFRK(IR), RGSK(J), STOB(KBA), BSRRK(IB), RSRRK(IR), BAGFRK(IB), BAGRRK(IB), RAGFRK(IR), RAGRRK(IR), BASHT(KBA), RASHT(KRA), PRBSRS, PRRSRS, BAGZK, RAGZK, BSAMZK, RSAMZK, BSAZ, RSAZ, ASAM, NKBW1, NKRW1

c. DIMENSION Statements

The following is a list of routines in IDAGAM I, along with the variables that appear in the dimension statements of that routine. The variables are written in a form that indicates the parameters upon which the variables are dependent and that thus facilitates making changes to the DIMENSION statements. In some cases, a variable will be indexed to parameter "A" or "B"; and when this occurs, the value of the largest parameter should be selected for dimensioning the array. The index "max dim" is indicated for the variables in routine RF below, and the value for dimensioning should be the largest number of all indices. (For a list of indices, see Section 1 of this Appendix.) The value now in the dimension statement for RF is 20.

EIGENV

R(KBW,KRW), W(KBW)

TCTZ

TBAWVD(KBD), TBDWVD(KBD), TRAWVD(KRD), TRDWVD(KRD), PBAKRP(2,KBW,KRW), PBDKRP(2,KBW,KRW), PRAKBP(2,KRW,KBW), PRDKBP(2,KRW,KBD), PBAAKR(KBA,KRW), PBADKR(KBA,KRW), PRAAKB(KRA,KBW), PRADKB(KRA,KBW), BSUM(product of KBW and KRW), RSUM(product of KBW and KRW)

ATTRIT

S(KBA or KRA), PK(KBA or KRA)

AC7

BAFAT(KBA,IR), BARAT(KBA,IR), BAZAT(KBA), RAFAT(KRA,IB), RARAT(KRA,IB), RAZAT(KRA), BAIDRT(KBA,IR), RAIDRT(KRA,IB), WDR(max of KBW,KRW), RWLR(KRW,IR), BWLR(KBW,IB), RCR(IR), BCR(IB), BSAFRD(IB), BSARRD(IB), RSAFRD(IR), RSARRD(IR)

GC

ABPLDS(KBP,KBD), ARPLDS(KRP,KRD), BCS(J), BPWLA(KBW), BPWLD(KBW), BPWLDS(KBW,KBD), BWLDS(KBW,KBD), BWS(KBW), EBPLDS(KBP,KBD), ERPLDS(KRP,KRD), PBWLSA(KBW), PBWLSD(KBW), PRWLSA(KRW), PRWLSD(KRW), RCS(J), RPWLA(KRW), RPWLD(KRW), RPWLDS(KRW,KRD), RWLDS(KRW,KRD), RWS(KRW), BWLS(KBW), RWLS(KRW), BPLDS(KBP,KBD), RPLDS(KRP,KRD), PBAAKR(KBA,KRW), PBADKR(KBA,KRW), PBAKRP(2,KBW,KRW), PBDKRP(2,KBW,KRW), PRAAKB(KRA,KBW), PRADKB(KRA,KBW), PRAKBP(2,KRW,KBW), PRDKBP(2,KRW,KBW), AABMAR(KBAM,KRW), AABMDR(KBAM,KRW), AABWAR(KBW,KRW), AABWDR(KBW,KRW), AARMAB(KRAM,KBW), AARMDB(KRAM,KBW), AARWAB(KRW,KBW), AARWDB(KRW,KBW), PBWDS(KBW), PRWDS(KRW), UBWDS(KBW,KBD), URWDS(KRW,KRD), VIBAA(KBA), VIBAD(KBA), VIBWAP(KBW,2), VIBWDP(KBW,2) VIRAA(KRA), VIRAD(KRA), VIRWAP(KRW,2), VIRWDP(KRW,2), BAEFYS(IBAEF), BDEFYS(IBDEF), BFMFYS(IBFMF), PCBAYS(IPCBAF), PCBDYS(IPCBDF), PCRAYS(IPCRAF), PCRDYS(IPCRDF), RAEFYS(IRAEF),

RDEFYS(IRDEF), RFMFYS(IRFMF), BAKRS(KBA,KRW), BGKRS(KBW,KRW), RAKBS(KRA,KBW), RGKBS(KRW,KBW), BAKRP(KBA), BGKRP(KBW), RAKBP(KRA), RGKBP(KRW), BSUM(product of KBW and KRW), RSUM(product of KRW and KBW)

TC1

BRDR(KBD,IB), BRDS(KBD,J), BRPDR(KBP,KBD,IB), BRPDS(KBP,KBD,J), BRWDR(KBW,KBD,IB), BRWDS(KBW,KBD,J), BRWN(KBW), BRWRZT(KBW), BTPRDR(KBD,IB), BTPRDS(KBD,J), BWADR(KBW,KBD,IB), BWADS(KBW,KBD,J), BWANDR(KBW,KBD,IB), BWANDS(KBW,KBD,J), BWNDR(KBW,KBD,IB), BWNDS(KBW,KBD,J), BWNT(KBW), BWRRDR(KBW,KBD,IB), BWRRDS(KBW,KBD,J), DEBRDD(LEB), DERRDD(LER), RRDR(KRD,IR), RRDS(KRD,J), RRPDR(KRP,KRD,IR), RRPDS(KRP,KRD,J), RRWDR(KRW,KRD,IR), RRWDS(KRW,KRD,J), RRWN(KRW), RRWRZT(KRW), RTPRDR(KRD,IR), RTPRDS(KRD,J), RWADR(KRW,KRD,IR), RWADS(KRW,KRD,J), RWANDR(KRW,KRD,IR), RWANDS(KRW,KRD,J), RWNDR(KRW,KRD,IR), RWNDS(KRW,KRD,J), RWNT(KRW), RWRRDR(KRW,KRD,IR), RWRRDS(KRW,KRD,J), TBRWDR(KBW,KBD,IB), TBRWDS(KBW,KBD,J), TBTPDR(KBD,IB), TRRWDR(KRW,KRD,IR), TRRWDS(KRW,KRD,J), TRTPDR(KRD,IR), VIBWMN(KBW), VIBWMX(KBW), VIRWMN(KRW), VIRWMX(KRW)

TC2

BAWVS(J), BDWVS(J), NBDSZR(KBD), NDSRS(KBD or KRD), NNBDZ(KBD), NNDR(KBD or KRD), NNRDZ(KRD), NRDSZR(KRD), RAWVS(J), RDWVS(J), WV1DR(KBD or KRD), WV1DS(KBD or KRD), BGSSR(IB), BGSSS(J), RGSSR(IR), RGSSS(J), RNR(IR or IB), PSDS(KBD or KRD), NDSSR(KBD or KRD), NNDS(KBD or KRD), ISMF(J), KPBAY(J), KPRAY(J), PSDR(KBD or KRD), TBTPDR(KBD,IB), TRTPDR(KRD,IR)

RF

A1(max dim), A2(max dim, max dim), A3(max dim, max dim, max dim)

3. RP NAMELIST Groups

The following is the list of variables presently in each NAMELIST groups in RP. Unless the NAMELIST group is changed within the program, the following variables are the only parameters that can be changed during any desired time period. The list below contains the variables in the same order as the program and thus indicates the order of storage.

NAME1

MCSMAB, MCSMAR, ISMAB(J), ISMAR(J), FRBAT(KP), FRRAT(KP), FRGASA(J,KP), FRBASD(J,KP), FRRASA(J,KP), FRRASD(J,KP), PBCSSD(KBD), PRCSSD(KRD), BMFAS(J), RMFAS(J), FFRBS(J), FFRRS(J), BRLZAI(IBRL), BRLZDI(IBRL), RRLZAI(IRRL), RRLZDI(IRRL), FIBRLZ(IBRL,J), FIRRLZ(IRRL,J), RLBAP(KP), RLBDP(KP), RLRAP(KP), RLRDP(KP), RLBAFF, RLRAFF, RLBDFM, RLRDFM, IBGFCR, IRGFCR, FRBAFF, FRRAFF, FRBAP(KP), FRBDP(KP), FRRAP(KP), FRRDP(KP), MBRFBA, MBRFRD, MRBERA, MRBFRD, BRRAD(KBD), RRRAD(KRD), BRRDD(KBD), RRRDD(KRD)

NAME2

IDEAF, IDAAF, ISMAAF, IASMAF, IGNAAF, IAGNAF, IASAF, IANSAF, IRBAF(KBA), IRBAR(KBA), IRBAZ(KBA), IRRAF(KRA), IRRAR(KRA), IRRAZ(KRA), IBAFCR, IRAFCR, PBA1(KBA), PBA2(KBA), PBA3(KBA), PBA4(KBA), PBA5(KBA), PBA6(KBA), PRA1(KRA), RRA2(KRA), PRA3(KRA), PRA4(KRA), PRA5(KRA), PRA6(KRA), PBACS(KBA), PRACS(KRA), PBAAS(KBA), PRASS(KRA), BDED(L), BDDEC(L), BDDEF(L), BDDER(L), BDDEZ(L), BDDAC(L), BDDAF(L), BDDAR(L), BDDAZ(L), BDAD(L), BDSC(L), BDSF(L), BDSR(L), BDSZ(L), BDGC(L), BDGF(L), BDGR(L), BDCZ(L), BDSS, BDGG, BDAS, BDAN, RDED(L), RDDEC(L), RDDEF(L), RDDER(L), RDDEZ(L), RDDAC(L), RDDAF(L), RDDAR(L), RDDAZ(L), RDAD(L), RDSC(L), RDSF(L), RDSR(L), RDSZ(L), RDGC(L), RDGF(L), RDGR(L), RDGZ(L), RDSS, RDGG, RDAS, RDAN, BKED(KBA,KRA), BKDE(KBA,KRA), BKDA(KBA,KRA),

BKAD(KBA,KRA), BKS(KRA), BKG(KRA), BKSS(KBA), BKGG(KBA),
BKAS(KBA), BKAN(KBA), RKED(KRA,KBA), RKDE(KRA,KBA),
RKDA(KRA,KBA), RKAD(KRA,KBA), RKS(KBA), RKG(KBA), RKSS(KRA),
RKGG(KRA), RKAS(KRA), RKAN(KRA), BSFRAK(KRA), RSFBAK(KBA),
FBASAG, FRASAG, BMCASS, RMCASS, BMABAS, RMABAS, BMSPSC,
RMSPCS, BMSPSA, RMSPSA, WFCBSN, WFCRSN, PDBANG(KBA),
PDRANG(KRA), ABRFRD, ARBFBD, FBARRR(IB,IR), FRARBR(IR,IB),
BAFRCA, RAFBCA, BSCA(KBA), RSCA(KRA), BAARNS, RAABNS,
FPBS(IFPBS), FPRS(IRPRS), DSB, DFRB, DRRB, DZB, DSR, DFRR,
DRRR, DSR, SRB1(KBA), SRB2(KBA), SRB3(KBA), SRB4(KBA),
SRB5(KBA), SRB6(KBA), SRR1(KRA), SRR2(KRA), SRR3(KRA),
SRR4(KRA), SRR5(KRA), SRR6(KRA), KBAS(KBA), KRAS(KRA),
FFBAKH(KBA), FFBEKH, FFBDKH, FFRAKH(KRA), FFREKH, FFRDKH,
PBAAGM(KBA), PRAAGM(KRA), ARBFRA, ABRFBA, PABSDR, PARSDB,
PBA7(KBA), PRA7(KRA), SRB7(KBA), SRR7(KRA)