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JUL 77 S C PERKINS, S S STAHARA, M J HEMSCH F44620-75-C-0047  
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DATA REPORT FOR A TEST PROGRAM TO STUDY  
TRANSONIC FLOW FIELDS ABOUT AIRCRAFT  
WITH APPLICATION TO EXTERNAL STORES

VOLUME I. - SUMMARY REPORT, TUNNEL-EMPTY  
AND MACH-NUMBER SURVEY DATA, FORCE AND  
MOMENT DATA, AND PRESSURE DATA

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20. ABSTRACT (Continue on reverse side if necessary and identify by block number) A test program was conducted to obtain measurements of flow velocities and static pressures in the vicinity of wing-body-store model (representative of a fighter-type aircraft) as well as surface pressures, forces, and moments on the model. Flow velocities and static pressures were also measured near the tunnel walls to provide outer flow field information. This report presents the data obtained during the test program conducted in the 4T and 16T Wind Tunnels at Arnold Engineering Development Center. The Flow-field data were obtained at Mach numbers 0.925, 0.975, and 1.025 and constitute the major part of the data. (cont)																				

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Volume I is a summary report which gives detailed information on the test program and presents uncertainties associated with the various types of data taken in the 4T Wind Tunnel. The volume also presents tunnel-empty and Mach-number surveys, as well as tabulated force and moment and pressure data for the Mach number range 0.80 to 1.15 and angles of attack  $-2^{\circ}$ ,  $-5^{\circ}$ ,  $0^{\circ}$ ,  $2^{\circ}$ , and  $5^{\circ}$ . Volumes II, III, and IV present the tabulated flowfield data for the 4-percent thick wing model at Mach numbers 0.925, 0.975 and 1.025, respectively. Volume V presents the tabulated flow-field data for the 6-percent thick wing model, and Volume VI presents data obtained for the 4-percent thick wing model in the 16T Wind Tunnel.

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## NOMENCLATURE

This section provides a list of symbols which identify various aerodynamic parameters, axis designations, subscripts, and tabulated data nomenclature.

### Symbols

AAL	local upwash angle, deg; $\tan^{-1} [(WL/VM)/(UL/VM)]$
$A_W$	planform area of both wings (does not include body), 0.4444 ft <sup>2</sup>
b	wing span, 16 in.
c	local wing chord
$\bar{c}$	reference length for pitching moment, 5.3444 in.
$C_A$	axial-force coefficient, positive in the positive X direction, axial force/ $q_\infty A_W$
$C_l$	rolling-moment coefficient, positive left wing down as seen by pilot, rolling moment/ $q_\infty A_W b$
$C_m$	pitching-moment coefficient, positive nose up as seen by pilot, pitching moment/ $q_\infty A_W \bar{c}$
$C_N$	normal-force coefficient, positive in the positive Z direction, normal force/ $q_\infty A_W$
$C_n$	yawing-moment coefficient, positive nose left as seen by pilot, yawing moment/ $q_\infty A_W b$
$C_p$	local pressure coefficient, $(p_l - p)/q_\infty$
$C_Y$	side-force coefficient, positive in the positive Y direction, side force/ $q_\infty A_W$
D	probe diameter, in.
M	Mach number
P	free-stream static pressure, psfa
q	dynamic pressure, $\frac{1}{2} \rho V^2$ , psf

## NOMENCLATURE (Continued)

<b>r</b>	radius of the body, in.
<b>Re/ft</b>	free-stream Reynolds number per foot, $\text{ft}^{-1}$
<b>SWL</b>	local sidewash angle, deg; $\tan^{-1}[(VL/VM)/(UL/VM)]$
<b>t</b>	airfoil thickness, see figure 3
<b>UL,VL,WL</b>	local velocity components positive in the positive X, Y, and Z directions, respectively, ft/sec
<b>V</b>	total velocity, ft/sec
<b>VM</b>	free-stream velocity, ft/sec
<b>X,Y,Z</b>	body-fixed Cartesian coordinates with origin coincident with the aircraft model nose at all angles of attack, see figure 6(a)
<b>XT,YT,ZT</b>	tunnel-fixed Cartesian coordinates with origin coincident with the aircraft model nose at zero angle of attack, see figure 6(b)
<b>Y<sub>1</sub>,Z<sub>1</sub></b>	coordinates of wing trailing edge at the wing root, in.; see figure 10
<b>Y<sub>2</sub>,Z<sub>2</sub></b>	coordinates of wing trailing edge at the wing tip, in.; see figure 10
<b><math>\alpha</math></b>	angle of attack of model, angle between body axis and tunnel axis as defined in figure 7
<b><math>\alpha_{\text{probe}}</math></b>	angle of attack of probe, angle between probe axis and tunnel axis
<b><math>\Delta</math></b>	increment along XT, YT, or ZT axis, see Table II
<b><math>\theta</math></b>	azimuthal angle in the Y-Z plane, deg; measured from the positive Y axis as shown in figure 6
<b><math>\rho</math></b>	mass density, slugs/ $\text{ft}^3$

### Subscripts

<b>l</b>	local conditions
<b><math>\infty</math></b>	free-stream conditions

## NOMENCLATURE (Continued)

### Tunnel-Empty Survey Data Tabulations

AATL	upwash angle referenced to tunnel-axis coordinates, calculated from probe measurements, deg; $\tan^{-1}(WT/VT)$
ALFA	aircraft-model angle of attack, positive nose up as seen by the pilot (nose down in tunnel), deg
CPL	local pressure coefficient calculated from probe measurements, $(PL - P)/Q$
DATE	calendar time at which data were recorded
M	wind tunnel free-stream Mach number
ML	local Mach number calculated from probe measurements
P	wind tunnel free-stream static pressure, psfa
PART	sequential indexing number for referencing data; a constant throughout each survey
PL	local static pressure calculated from probe measurements, psfa
POINT	sequential indexing number for referencing data obtained during one part; indexes each time a new set of data inputs is obtained
PT	wind tunnel free-stream total pressure, psfa
PTL	local total pressure measured by probe, psfa
Q	wind tunnel free-stream dynamic pressure, psf
REX10-6	wind tunnel free-stream unit Reynolds number, millions per foot
RUN	identifier for specific user test type
SURVEY	identifier for specific user grid-survey combination
SWTL	sidewash angle referenced to tunnel-axis coordinates, calculated from probe measurements, deg; $\tan^{-1}(VT/UT)$
TEST	alpha-numeric notation for referencing a specific test program in a specific test unit

## NOMENCLATURE (Continued)

TT	wind tunnel free-stream total temperature, °F
UT,VT,WT	velocity components in the tunnel-axis X, Y, and Z directions, respectively, calculated from probe measurements, ft/sec
VM	wind tunnel free-stream velocity, ft/sec
VML	local velocity calculated from probe measurements, ft/sec
WING	wing designation used for a specific part number
XT	location of the probe in the tunnel-axis X direction
YT	location of the probe in the tunnel-axis Y direction
ZT	location of the probe in the tunnel-axis Z direction
Mach-Number Survey Data Tabulations	
AAL	local upwash angle referenced to body-axis coordinates, calculated from probe measurements, deg; $\tan^{-1}(WL/UL)$
ALFA	aircraft-model angle of attack, positive nose up as seen by the pilot (nose down in tunnel), deg
CPL	local-pressure coefficient calculated from probe measurements, $(PL - P)/Q$
DATE	calendar time at which data were recorded
M	wind tunnel free-stream Mach number
ML	local Mach number calculated from probe measurements
PART	sequential indexing number for referencing data; a constant throughout each survey
P	wind tunnel free-stream static pressure, psfa
PL	local static pressure calculated from probe measurements, psfa

## NOMENCLATURE (Continued)

POINT	sequential indexing number for referencing data obtained during one part; indexes each time a new set of data inputs is obtained
PT	wind tunnel free-stream total pressure, psfa
PTL	local total pressure measured by probe, psfa
Q	wind tunnel free-stream dynamic pressure, psf
REX10-6	wind tunnel free-stream unit Reynolds number, millions per foot
RUN	identifier for specific user test type
SURVEY	identifier for specific user grid-survey combination
SWL	local sidewash angle referenced to body-axis coordinates, calculated from probe measurements, deg; $\tan^{-1}(VL/UL)$
TEST	alpha-numeric notation for referencing a specific test program in a specific test unit
TT	wind tunnel free-stream total temperature, °F
UL,VL,WL	velocity components in the body-axis X, Y, and Z directions, respectively, calculated from probe measurements, ft/sec
VM	wind tunnel free-stream velocity, ft/sec
VML	local velocity calculated from probe measurements, ft/sec
WING	wing designation used for a specific part number
X	location of the probe in the body-axis X direction
Y	location of the probe in the body-axis Y direction
Z	location of the probe in the body-axis Z direction

### Force and Moment and Pressure Data Tabulations

ALFA	aircraft-model angle of attack, positive nose up as seen by the pilot (nose down in tunnel), deg
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NOMENCLATURE (Continued)

$A_D$	area of model base, .038785 ft <sup>2</sup>
$A_W$	planform area of both wings (does not include body), 0.4444 ft <sup>2</sup>
b	wing span, 16 in.
$\bar{c}$	reference length for pitching moment, 5.3444 in.
CA	axial-force coefficient measured by balance, in body coordinates; axial force/QA <sub>W</sub>
CAB	base axial-force coefficient in body coordinates, $(P - \bar{P}_b)A_b/QA_W$
CAF	axial-force coefficient corrected for base effects, in body coordinates, CA - CAB
CLL	rolling-moment coefficient in unrolled body coordinates, rolling moment/QA <sub>W</sub> b
CLMF	pitching-moment coefficient in unrolled body coordinates, pitching moment/QA <sub>W</sub> $\bar{c}$
CLN	yawing-moment coefficient in unrolled body coordinates, yawing moment/QA <sub>W</sub> b
CNF	normal-force coefficient in unrolled body coordinates, normal force/QA <sub>W</sub>
CPS N (N = 1,25)	surface-pressure coefficient at orifice N, $(P_S - P)/Q$
CY	side-force coefficient, side force/QA <sub>W</sub>
M	wind tunnel free-stream Mach number
P	wind tunnel free-stream static pressure, psfa
$\bar{P}_b$	average base pressure, psfa
PART	sequential indexing number for referencing data; a constant throughout each sweep
PS	aircraft-model local surface pressure, psfa
PT	wind tunnel free-stream total pressure, psfa

## NOMENCLATURE (Concluded)

Q	wind tunnel free-stream dynamic pressure, psf
REX10-6	wind tunnel free-stream unit Reynolds number, millions per foot
RUN	identifier for specific user test type
SURVEY	identifier for specific user grid-survey combination
TEST	alpha-numeric notation for referencing a specific test program in a specific test unit
TT	wind tunnel free-stream total temperature, °F
VM	wind tunnel free-stream velocity, ft/sec
WING	wing designation used for a specific part number

DATA REPORT FOR A TEST PROGRAM TO STUDY  
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VOLUME I. - SUMMARY REPORT, TUNNEL-EMPTY  
AND MACH-NUMBER SURVEY DATA, FORCE AND  
MOMENT DATA, AND PRESSURE DATA

1. INTRODUCTION

The test program described in this report, authorized under Air Force Contract No. F44620-75-C-0047, was conducted for the purpose of obtaining experimental measurements of flow velocities and static pressures in the vicinity of wing-body models in addition to body surface pressures and forces and moments on the models. Flow velocities and static pressures were also measured near the tunnel walls to provide outer flow field information. The test program was conducted in the 4T and 16T Wind Tunnels at Arnold Engineering Development Center at Mach numbers ranging from 0.80 to 1.15. The flow-field data were obtained at Mach numbers 0.925, 0.975, and 1.025 and constitute the major part of the data.

This report presents the data obtained during the test program. This volume, Volume I, is a summary report which gives detailed information on the test program and presents uncertainties associated with the various types of data taken in the 4T Wind Tunnel. This volume also presents tunnel-empty and Mach-number surveys, as well as tabulated force and moment and pressure data for the Mach number range 0.80 to 1.15 and angles of attack  $-2^{\circ}$ ,  $-5^{\circ}$ ,  $0^{\circ}$ ,  $2^{\circ}$  and  $5^{\circ}$ . Volumes II, III, and IV present the tabulated flow-field data for the 4-percent thick wing model at Mach numbers 0.925, 0.975 and 1.025, respectively. Volume V presents the tabulated flow-field data for the 6-percent thick wing model, and Volume VI presents data obtained for the 4-percent thick wing model in the 16T Wind Tunnel.

A summary of the test data contained in each volume is presented below.

<u>Volume</u>	<u>Wind Tunnel</u>	<u>Wing</u>	<u>Test Data</u>
I	4T	None	Tunnel-empty surveys at $M_\infty = .80, .85, .90, .95, 1.0, 1.025, 1.05, 1.10, 1.15$
		4-percent	Mach-number surveys at $M_\infty = .80, .85, .90, .95, 1.0, 1.025, 1.05, 1.10, 1.15$ and $\alpha = 0^\circ$
		4-percent and 6-percent	Force and Moment and Pressure data at $M_\infty = 0.80, 0.85, 0.90, 0.925, 0.95, 0.975, 1.0, 1.025, 1.05, 1.10, 1.15$
II	4T	4-percent	Flow-field survey data at $M_\infty = 0.925$ and $\alpha = 0^\circ, \pm 2^\circ, \pm 5^\circ$
III	4T	4-percent	Flow-field survey data at $M_\infty = 0.975$ and $\alpha = 0^\circ, \pm 2^\circ, \pm 5^\circ$
IV	4T	4-percent	Flow-field survey data at $M_\infty = 1.025$ and $\alpha = 0^\circ, \pm 2^\circ, \pm 5^\circ$
V	4T	6-percent	Flow-field survey data at $M_\infty = 0.925, .975, 1.025$ , and $\alpha = 0^\circ, \pm 2^\circ, \pm 5^\circ$
VI	16T	None	Tunnel-empty surveys at $M_\infty = .925, .975, 1.025$
		4-percent	Force and Moment and Pressure data at $M_\infty = .80, .85, .90, .925, .95, .975, 1.0, 1.025, 1.05, 1.10, 1.15$ and $\alpha = 0^\circ, \pm 2^\circ, \pm 5^\circ$
		4-percent	Flow-field survey data at $M_\infty = 0.925, 0.975, 1.025$ and $\alpha = 0^\circ, \pm 5^\circ$

References 1 and 2 are reports prepared by AEDC describing data reduction procedures used in the 4T and 16T Wind Tunnel facilities, respectively, to determine force and moment, pressure, and flow-field data. The data uncertainties given in this report were provided by AEDC and meet the data quality requirements that were outlined in reference 3.

## 2. PURPOSE AND SCOPE OF TEST PROGRAM

The purpose of the test program is to obtain experimental data which will aid in the development and evaluation of a theoretical method for predicting flow fields about three-dimensional configurations characteristic of modern fighter/bombers flying in the transonic range. The scope of the test program is to obtain data on a simplified wing-body combination with two different sets of wings at subcritical, supercritical, and supersonic speeds for several values of angle of attack. The effects of wall interference in the 4T Tunnel will also be studied by repeating several of the test conditions in the 16T Propulsion Wind Tunnel. Detailed information regarding these wind tunnels can be found in reference 4. The bulk of the testing was done in the 4T Tunnel and the data obtained from these tests comprise the major part of this data report. This volume, Volume I, summarizes the data, presents the 4T Tunnel-empty and Mach-number surveys, and presents some uncertainties associated with the data. Also, the force and moment and pressure data obtained in the 4T Tunnel are presented in this volume. The 4T Tunnel flow-field survey data are presented in Volumes II through V and all data obtained in the 16T Tunnel are presented in Volume VI.

## 3. TEST HARDWARE

The test installation consisted of a wing-body combination in whose proximity a flow-field survey probe was located. Flow-field survey, pressure distribution, and force and moment data were obtained for two wing-body combinations during the test program.

The flow-field survey data was obtained using the AEDC 0.25-inch diameter conical probe with a  $20^{\circ}$  semi-apex angle. The body is an aluminum fuselage which was bored out and mounted on the 1.5-inch, 500 lb. AEDC 6-1.50-1.12 M-A balance. The force and moment data on the wing-body combinations were obtained using this balance. The entire body contained 25 axially-aligned pressure orifices, 6 on the nose portion and 19 on the fuselage section, from which pressure data on the body surface were obtained.

Figure 1 shows the wing-body combination with the 4-percent wing in the 4T Tunnel with the conical flow-field probe supported on the captive trajectory system (CTS, see ref. 4). Figure 2 is a drawing of the wing-body model which includes the positions of the 25 pressure orifices along the body centerline. Sketches and coordinates of the 4-percent and 6-percent thick airfoils which were used to obtain data are given in figure 3. A detailed sketch of the entire conical flow-field probe and of the probe tip are shown in figure 4. It is also noted that 0.0035-inch, #150 Carborum grit was used on the nose tip and wing leading edges to trip the boundary layer. Figure 5 shows the positions and width of the grit for both the body nose and wings.

#### 4. DEFINITION OF AXES

A conventional set of orthogonal body-fixed axes is used as a frame of reference for the inner flow-field surveys near the body. The origin of the wing-body combination system is at the tip of the nose, as shown in figure 6(a). The pressure orifices are on the same side that probe measurements are taken, which is on the negative Z axis side. As seen by a person positioned on the pressure orifices and looking toward the nose, the X axis is positive aft, the Y axis is positive to the left and the Z axis is positive down.

A conventional set of orthogonal tunnel-fixed axes is used as a frame of reference for the outer flow-field surveys near the

tunnel walls and is shown in figure 6(b). The origin of this reference frame is the nose of the model body when the wing-body is at an angle of attack of  $0^{\circ}$ . It is at this position that the body-fixed axes and tunnel-fixed axes coincide.

The sign convention adopted for the upwash and sidewash angles is shown in figure 7. In the figure, the wing-body is shown in the tunnel at a negative angle of attack to show the flow components with respect to the walls of the tunnel. In the body-axis system, positive angular values of sidewash and upwash correspond to positive values of their respective velocity components. As seen by a person positioned on the pressure orifices and looking forward, positive upwash is a downward flow and positive sidewash is an outward flow along the left wing panel.

## 5. DESCRIPTION OF TESTS

Tests for which experimental data are reported herein are of three general types: (1) flow-field survey tests, (2) pressure-distribution tests and (3) force and moment tests. The tests have been conducted at nominal free-stream Mach numbers of 0.80 to 1.15 and at a nominal Reynolds number per foot of  $3.0 \times 10^6$ . Tests were conducted with a 4-percent thick and a 6-percent thick airfoil to investigate thickness effects on the flow field generated by the wing-body combination.

A note is made here with respect to the positioning of the probe. The X and XT coordinates given in the tabulated data are the axial positions of the probe static pressure orifices in the body-axis and tunnel-axis systems, respectively. The Y and Z coordinates indicate the lateral and vertical positions of the probe longitudinal axis in the body-axis coordinate systems, while YT and ZT indicate the lateral and vertical positions of the probe longitudinal axis in the tunnel-axis coordinate system.

### 5.1 Flow-Field Survey Tests

Flow-field survey tests were conducted with the tunnel empty and with two wing-body configurations at several angles of attack. The conical probe used in the tests was calibrated at nominal Mach numbers of 0.80, 0.85, 0.90, 1.0, 1.025, 1.05, 1.10, and 1.15. Tunnel-empty surveys were made at the same Mach numbers to investigate the uniformity of the free-stream conditions in the region of the wing-body model. Mach-number surveys were also taken in regions of particular interest with the wing-body model in the tunnel. The aforementioned conical probe was used to obtain flow-field velocity components and upwash and sidewash angles, as well as other quantities, at various locations of interest. The velocities and angles were calculated using five pressures measured with the probe. One is a total pressure, located on the tip of the probe, and the other four consist of two orthogonal pairs of static pressures located on the surface of the conical probe. These pressures have also been used to deduce other local-flow quantities, such as Mach number and total pressure. Flow-field surveys were obtained at Mach numbers 0.925, 0.975, and 1.025 for both the 4-percent thick and 6-percent thick wing-body combinations. Data were taken at specified spanwise and chordwise positions for angles of attack of  $0^\circ$ ,  $\pm 2^\circ$ , and  $\pm 5^\circ$ .

The specific flow-field survey tests which were performed and the final data which were obtained are presented in Volumes I through VI of this report. Volumes I through V contain the data obtained in the 4T Tunnel and Volume VI contains data obtained in the 16T Tunnel. Volume I contains Tunnel-empty and Mach-number survey data at Mach numbers 0.80, 0.85, 0.90, 0.95, 1.0, 1.025, 1.05, 1.10 and 1.15. Volumes II, III, and IV contain data for the 4-percent thick wing-body combination at Mach numbers 0.925, 0.975, and 1.025, respectively, and Volume V contains data at the same Mach numbers for the 6-percent thick wing-body combination. Volume VI contains data for the 4-percent thick wing-body combination at the same Mach numbers.

## 5.2 Pressure Distribution Tests

Axial pressure distributions were obtained along the body surface for Mach numbers 0.80, 0.85, 0.90, 0.925, 0.95, 0.975, 1.0, 1.025, 1.05, 1.10 and 1.15 with the 4-percent thick wing-body combination and for Mach numbers 0.925, 0.975, and 1.025 with the 6-percent thick wing-body combination. The pressure distributions were obtained along the bottom of the body ( $\alpha = 0^\circ$ ,  $2^\circ$ , and  $5^\circ$ ) and along the top of the body ( $\alpha = -2^\circ$  and  $-5^\circ$ ).

The specific pressure distribution tests which were performed and the final data which were obtained are presented in this volume, Volume I, for the 4T Tunnel and in Volume VI for the 16T Tunnel.

## 5.3 Force and Moment Tests

Force and moment data were obtained for the 4-percent thick wing-body combination at Mach numbers 0.80, 0.85, 0.90, 0.925, 0.95, 0.975, 1.0, 1.025, 1.05, 1.10 and 1.15 and for the 6-percent thick wing-body combination at Mach numbers 0.925, 0.975, and 1.025. These data were obtained for  $\alpha = 0^\circ$ ,  $+ 2^\circ$ , and  $+ 5^\circ$ .

The specific force and moment tests which were performed and the final data which were obtained are presented in this volume, Volume I, for the 4T Tunnel and in Volume VI for the 16T Tunnel.

## 6. SYMMETRY OF TESTS

This section of the data report contains an assessment of the symmetry of the flow-field survey tests previously described in this report. Specifically, this refers to comparisons of data taken at points whose Z values are identical, but whose Y locations differ in sign only. These comparisons are a good measure of the exactness of positioning the wing-body configuration and probe with respect to one another, the symmetry of the configuration and flow field, and a check of the data reduction procedure.

Figure 8 shows comparisons of pressure ( $C_p$ ), upwash (AAL), and sidewash (SWL) for positions (4, -1), (-4, -1) and (7, -1), (-7, -1) at  $\alpha = 0^\circ$  and  $M_\infty = 0.925$  (4-percent thick wing). Figure 9 shows the same comparisons at  $M_\infty = 1.025$ . These comparisons were carried out for all Mach numbers and angles of attack and for both wings. With the exception of the upwash comparisons at the outboard positions, all comparisons for pressure, upwash and sidewash were very good. Several explanations for the poor upwash comparisons at the outboard positions are offered. First, the regions in which the comparisons are poor are regions in which the measured angle is very small, and the difference in the measurements is usually within the accuracy of the data ( $\pm 0.40^\circ$ , see DATA UNCERTAINTIES section). Second, the wings on either side of the fuselage have slightly different maximum thickness at the tips. Also, the difference between the vertical coordinates of the wing trailing edge at the tip and root is not the same on both sides. These differences, which are given in figure 10, could effect upwash measurements, although it is felt that it would be a very small effect. It is also possible that the flow field of the tunnel is not symmetric in the region of interest, as is shown in reference 5. A small difference in tunnel-empty upwash in the region of interest could easily cause the differences seen in upwash at the outboard wing position.

The overall good agreement shown in the comparisons indicates accurate positioning of the wing-body configuration in the tunnel and of the probe with respect to the wing-body model, and lends confidence to both the test procedures and data reduction schemes used to obtain this data.

## 7. DATA UNCERTAINTIES

Uncertainties in the aerodynamic coefficients, local conditions, flow angles, and probe position for the 4T Wind Tunnel were provided by ARO and are presented below.

## Force and Moment Data

## Uncertainty (+), Absolute

$\underline{C_N}$	$\underline{C_Y}$	$\underline{C_A}$	$\underline{C_m}$	$\underline{C_n}$	$\underline{C_l}$
0.004	0.002	0.004	0.004	0.001	0.003

## Probe Position

## Uncertainty (+), Absolute

$\underline{X, in.}$	$\underline{Y, in.}$	$\underline{Z, in.}$	$\underline{\alpha_{probe}, deg.}$
0.05	0.05	0.05	0.15

## Flow Angles

## Uncertainty (+), Absolute

$\underline{AAL, deg}$	$\underline{SWL, deg}$
0.25	0.25

## Local Conditions

## Uncertainty (+), Absolute

$\underline{C_P}$
0.03

Examining the uncertainties associated with probe angle ( $\alpha_{probe}$ ) and upwash angle (AAL), there exists a maximum possible uncertainty of  $\pm 0.40^\circ$ . This is the uncertainty mentioned in Section 6 that could account for the disagreement of upwash angle at the outboard position.

## 8. TUNNEL-EMPTY SURVEYS

Figure 11 shows the grids used in the tunnel-empty surveys, which were taken at Mach numbers 0.80, 0.85, 0.90, 0.95, 1.0, 1.025, 1.05 and 1.10 and at a nominal free-stream Reynolds number per foot of  $3.0 \times 10^6$  to ascertain the quality of the tunnel-empty flow field.

An example of the type of results derived from the tunnel-empty surveys is the XT traverse at  $YT = 0.0$ ,  $ZT = -14.14$ . The sidewash at this particular location should always be zero, since it lies in the plane of symmetry of the configuration. Examining the sidewash at  $M_\infty = 0.90$  and  $0.95$ , as shown in figure 12, it is seen to be nonzero. It could be argued at first that the "nonzero" sidewash is due to probe error, but closer inspection shows a consistent nonzero sidewash throughout the Mach number range. With the model in the tunnel, the same nonzero sidewash distribution is present throughout the Mach number and angle of attack range, as shown in figure 12. The consistency of these results offers reasonable proof that the tunnel-empty flow field has a slightly positive sidewash angle along  $(YT, ZT) = (0.0, -14.14)$ . The nonzero sidewash is relatively small, however, and will therefore have very little effect on the data taken in this region. In this same manner, the tunnel-empty upwash and sidewash in other parts of the flow field can be examined to determine their effects on the data taken in those regions.

The tunnel-empty surveys at  $M_\infty = 0.80, 0.85, 0.90, 0.95, 1.0, 1.025, 1.05$  and  $1.10$  are summarized in Table II. Columns one and two indicate the page number and part number, respectively, of the tabulated data for each tunnel-empty survey. Column four indicates the free-stream Mach number. Columns five, six and seven indicate the XT, YT, and ZT ranges, respectively, for each traverse. Column nine indicates the increment for the axis along which the traverse is being carried out. All positions are relative to the tunnel origin, which is located at the tip of the wing-body model

when the model is at  $\alpha = 0^\circ$ .

The data are presented in tabular form on pages 1 through 36 at the end of this volume. The heading on each page contains the test number, the part number, the Reynolds number per foot, the angle of attack of the model (not applicable for these tests), the type of wing attached to the model (none for these tests), and the (YT,ZT), (XT,YT), or (XT,ZT) coordinates at which the probe traverse is carried out. Also included are the run and survey numbers and the date on which the data were recorded.

Below the heading information are the data obtained during each test. The first two columns indicate the sequential indexing number for referencing data obtained during one part (POINT) and the location of the probe in the tunnel axis XT, YT, or ZT direction. The wind tunnel free-stream quantities are in columns three through seven, and are Mach number (M), velocity (VM, ft/sec), total pressure (PT, psfa), dynamic pressure (Q, psf), and total temperature (TT, °F). Following these quantities are local quantities as measured by the probe or calculated from probe measurements. These local quantities are Mach number (ML), the ratio of local to free-stream velocity (VML/VM), the ratio of local to free-stream total pressure (PTL/PT), pressure coefficient (CPL), the ratio of local velocity components in the tunnel axis X, Y, and Z directions, respectively, to the free-stream velocity (UT/VM, VT/VM and WT/VM, respectively), and the upwash and sidewash angles referenced to tunnel-axis coordinates (AATL and SWTL, respectively). The positive sense of the upwash and sidewash is shown in figure 7.

#### 9. MACH-NUMBER SURVEYS

The Mach-number surveys were taken at Mach numbers 0.80, 0.85, 0.90, 0.95, 1.0, 1.025, 1.05, 1.10 and 1.15 at a nominal Reynolds number per foot of  $3.0 \times 10^6$ . These tests were taken with the 4-percent thick wing-body configuration at  $\alpha = 0^\circ$  along an X traverse at  $Y = 3.0$ ,  $Z = -2.0$  and  $-1.0$ . The purpose of these

tests was to establish appropriate subcritical and supercritical test conditions for the flow-field surveys.

The data are presented in tabular form on pages 37 through 56 of this volume. The heading on each page contains the test number, the part number, the Reynolds number per foot, the angle of attack of the model, the type of wing attached to the model (4-percent thick wing for the Mach-number surveys), and the Y and Z coordinates at which the X traverse is carried out. Also included are the run and survey numbers and the date on which data were recorded.

Below the heading information are the data obtained during each test. The first two columns indicate the sequential indexing number for referencing data obtained during one part (POINT) and the location of the probe in the body-axis X direction. The wind tunnel free-stream quantities are in columns three through seven and are Mach number (M), velocity (VM, ft/sec), total pressure (PT, psfa), dynamic pressure (Q, psf), and total temperature (TT, °F). Columns eight through sixteen contain local quantities which were either measured by the probe or calculated from probe measurements. These local quantities are Mach number (ML), the ratio of local to free-stream velocity (VML/VM), the ratio of local to free-stream total pressure (PTL/PT), the pressure coefficient (CPL), the ratio of the local velocity components in the body-axis X, Y, and Z directions, respectively, to the free-stream velocity (UL/VM, VL/VM, and WL/VM, respectively), and the upwash and sidewash angles referenced to body-axis coordinates (AAL and SWL, respectively). The positive sense of the upwash and sidewash is shown in figure 7.

#### 10. FORCE AND MOMENT AND PRESSURE TESTS

This section presents the force and moment and pressure data at  $M_{\infty} = 0.80, 0.85, 0.90, 0.925, 0.95, 0.975, 1.0, 1.025, 1.05, 1.10$  and  $1.15$  for the 4-percent thick wing-body and at  $M_{\infty} = 0.925,$

0.975 and 1.025 for the 6-percent thick wing-body. Data for both wings is presented at  $\alpha = 0^\circ, \pm 2^\circ, \pm 5^\circ$ . These tests, performed at a nominal Reynolds number per foot of  $3.0 \times 10^6$ , are outlined in Table IV of this volume. The tabulated data are at the end of this volume beginning on the page numbered 57.

### 10.1 Description of Tests

The aerodynamic coefficients on the wing-body models were obtained during the force and moment tests using the 1.5-inch, 500 lb. AEDC balance #6-1.50-0.50-1.12 M-A. The fuselage was bored out and mounted on this balance. The surface-pressure data were obtained from the 25 pressure orifices on the body surface. The orifices are labeled 1 through 25 with number 1 being closest to the nose tip. The data are arranged such that there are two pages for each Mach number. The first presents the force and moment data for the angle-of-attack range ( $0^\circ, \pm 2^\circ, \pm 5^\circ$ ) and the second presents the pressure data obtained at each angle of attack.

The force and moment and pressure tests are summarized in Table IV. Columns one and two indicate the page and part numbers, respectively, of the tabulated data. Column four indicates the Mach number. Column six indicates the type of data given on each page; F & M indicates force and moment data and P indicates pressure data. Column eight indicates which wing (4-percent thick or 6-percent thick) was attached to the body for each particular run.

### 10.2 Description of Data

The data are presented in tabular form on pages 57 through 84 of this volume. As previously mentioned, each Mach number has two pages of data associated with it. The first page contains force and moment data and the second contains pressure data. The heading on both pages is identical and contains the test number, the part

number, the free-stream Mach number, total pressure, static pressure, Reynolds number per foot, velocity, dynamic pressure, and total temperature. Also included are the type of wing attached to the body (4-percent thick or 6-percent thick), the run number and the survey number.

Below the heading on the first page of each Mach number section are the data obtained during each force and moment test. The results for the force and moment tests include the wing-body model angle of attack, the normal-force coefficient (CNF), the side-force coefficient (CY), the axial-force coefficient corrected for base effects (CAF), the pitching-moment coefficient (CLMF), the yawing-moment coefficient (CLN), the rolling-moment coefficient (CLL), and the base axial-force coefficient (CAB). The positive sense of these forces and moments is shown in figure 13.

Below the heading on the second page of each Mach number section are the data obtained during each pressure test. Column one indicates the orifice at which the pressure coefficient was measured. Columns two through six indicate the pressure coefficient at  $\alpha = -5^\circ, -2^\circ, 0^\circ, 2^\circ$  and  $5^\circ$ , respectively, at each orifice location. The locations of the pressure orifices are shown in figure 2.

## REFERENCES

1. Rittenhouse, L. E. and Kaupp, H.: Procedures and Computer Program for Conducting Force Tests in the PWT 4T Facility. Revised Sept. 5, 1973.
2. Reichenau, D. E.: AFFDL Wing-Body Flowfield Study Test. PWT 16T Facility Project Criteria, Project No. P41T-M9A, Test No. TF-445, Mar. 10, 1977.
3. AEDC 4T Wind Tunnel Test Plan for the Study of Transonic Flow Fields About Aircraft with Application to External Stores. AFOSR Contract No. F44620-75-C-0047, Project No. 9781-01, Nov. 1976.
4. Test Facilities Handbook, Tenth Edition, Arnold Engineering Development Center, Arnold Air Force Station, TN, May 1974.
5. Luchuk, W.: Flow Angle Measurements Using a 2-Inch Span Cruciform-Wing Force Model. Presented at the 45th Semi-Annual Supersonic Tunnel Association, Albuquerque, New Mexico, Apr. 13-14, 1976.

## REFERENCES

1. Kistner, J. B. and Kemp, W. J. Procedures and Computer Program for Conducting Force Tests in the PW 47 Facility. Revised Report, 5, 1973.
2. Ralston, D. E. : 2-Dimensional Wing-Body Flowfield Study Test. PW 47 Facility, Project Criteria, Project No. PW-47-100, Test No. PW-47-100, Mar. 10, 1977.

**TABLE I. - SUMMARY OF TABULATED  
DATA IN VOLUME I**

$$Re/ft = 3.0 \times 10^6$$

Table (1)	Test (2)	Pages (3)
II	Tunnel-empty surveys	1-36
III	Mach-number surveys	37-56
IV	Force and moment and pressure data	57-84

TABLE II.- TUNNEL-EMPTY SURVEYS

1	2	3	4	5	6	7	8	9	10
Page No.	Part No.		Mach No.	XT Range inches	YT Range inches	ZT Range inches		$\Delta$ inches	
1	34		0.80	-6.000	0.000	-14.142		2.000	
				to					
				24.000					
2	34			-6.000	0.000	0.000		2.000	
				to					
				24.000					
3	34			-6.000	14.142	0.000		2.000	
				to					
				24.000					
4	33			14.000	14.000	0.000		2.000	
					to				
					-14.000				
5	33			14.000	0.000	14.000		2.000	
						to			
						-14.000			
6	37		0.85	-6.000	0.000	-14.142		2.000	
				to					
				24.000					
7	37			-6.000	0.000	0.000		2.000	
				to					
				24.000					
8	37			-6.000	14.142	0.000		2.000	
				to					
				24.000					
9	36			14.000	14.000	0.000		2.000	
					to				
					-14.000				
10	36			14.000	0.000	14.000		2.000	
						to			
						-14.000			

TABLE II. - CONTINUED

1	2	3	4	5	6	7	8	9	10
Page No.	Part No.		Mach No.	XT Range inches	YT Range inches	ZT Range inches		Δ inches	
11	39		0.90	-6.000 to 24.000	0.000	-14.142		2.000	
12	39			-6.000 to 24.000	0.000	0.000		2.000	
13	39			-6.000 to 24.000	14.142	0.000		2.000	
14	38			14.000	14.000 to -14.000	0.000		2.000	
15	38			14.000	0.000	14.000 to -14.000		2.000	
16	41		0.95	-6.000 to 24.000	0.000	-14.142		2.000	
17	41			-6.000 to 24.000	0.000	0.000		2.000	
18	41			-6.000 to 24.000	14.142	0.000		2.000	
19	40			14.000	14.000 to -14.000	0.000		2.000	
20	40			14.000	0.000	14.000 to -14.000		2.000	

TABLE II.- CONTINUED

1	2	3	4	5	6	7	8	9	10
Page No.	Part No.		Mach No.	XT Range inches	YT Range inches	ZT Range inches		Δ inches	
21	43		1.00	-6.000 to 24.000	0.000	-14.142		2.000	
22	43			-6.000 to 24.000	14.142	0.000		2.000	
23	43			-6.000 to 24.000	14.142	0.000		2.000	
24	42			14.000	14.000 to -14.000	0.000		2.000	
25	42			14.000	0.000	14.000 to -14.000		2.000	
26	45		1.025	-6.000 to 24.000	0.000	-14.142		2.000	
27	45			-6.000 to 24.000	0.000	0.000		2.000	
28	45			-6.000 to 24.000	14.142	0.000		2.000	
29	44			14.000	14.000 to -14.000	0.000		2.000	
30	44			14.000	0.000	14.000 to -14.000		2.000	

TABLE II. - CONCLUDED

1	2	3	4	5	6	7	8	9	10
Page No.	Part No.		Mach No.	XT Range inches	YT Range inches	ZT Range inches		Δ inches	
31	47		1.05	-6.000 to 24.000	0.000	-14.142		2.000	
32	47			-6.000 to 24.000	0.000	0.000		2.000	
33	47			-6.000 to 24.000	14.142	0.000		2.000	
34	46			14.000 to -14.000	14.000	0.000		2.000	
35	46			14.000	0.000	14.000 to -14.000		2.000	
36	48		1.10	14.000 to -14.000	0.000	14.000		2.000	

TABLE III.- MACH-NUMBER SURVEYS

	1	2	3	4	5	6	7	8	9	10
	Page No.	Part No.		Mach No.	Initial X inches	Final X inches	$\Delta X$ inches		Y inches	Z inches
	37	85		0.80	10.333	19.000	0.333		3.000	-2.000
	38	86		↓						-1.000
	39	93		0.85						-2.000
	40	94		↓						-1.000
	41	96		0.90						-2.000
	42	97		↓						-1.000
	43	99		0.95						-2.000
	44	100		↓						-1.000
	45	102		1.00						-2.000
	46	103		↓						-1.000
	47	105		1.025						-2.000
	48	106		↓						-1.000
	49	108		1.050						-2.000
	50	109		↓						-1.000
	51	111		1.10						-2.000
	52	112		↓						-1.000
	53	114		1.15						-2.000
	54	115		↓						-1.000
								$\alpha$		
	55	928		0.85	11.000	19.000	0.666	5.0	4.000	-1.000
	56	929		↓	↓	↓	↓	-5.0	↓	↓

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TABLE IV.- FORCE AND MOMENT AND PRESSURE TESTS

1	2	3	4	5	6	7	8	9	10
Page No.	Part No.		Mach No.		Type of Data		Wing		
57	73		0.80		F & M		4%		
58	↓		↓		P		↓		
59	74		0.85		F & M				
60	↓		↓		P				
61	75		0.90		F & M				
62	↓		↓		P				
63	938		0.925		F & M				
64	↓		↓		P				
65	76		0.95		F & M				
66	↓		↓		P				
67	939		0.975		F & M				
68	↓		↓		P				
69	77		1.00		F & M				
70	↓		↓		P				
71	78		1.025		F & M				
72	↓		↓		P				
73	79		1.05		F & M				
74	↓		↓		P				
75	80		1.10		F & M				
76	↓		↓		P				
77	81		1.15		F & M				
78	↓		↓		P		↓		
79	945		0.925		F & M		6%		
80	↓		↓		P		↓		
81	946		0.975		F & M				
82	↓		↓		P				
83	947		1.025		F & M				
84	↓		↓		P		↓		

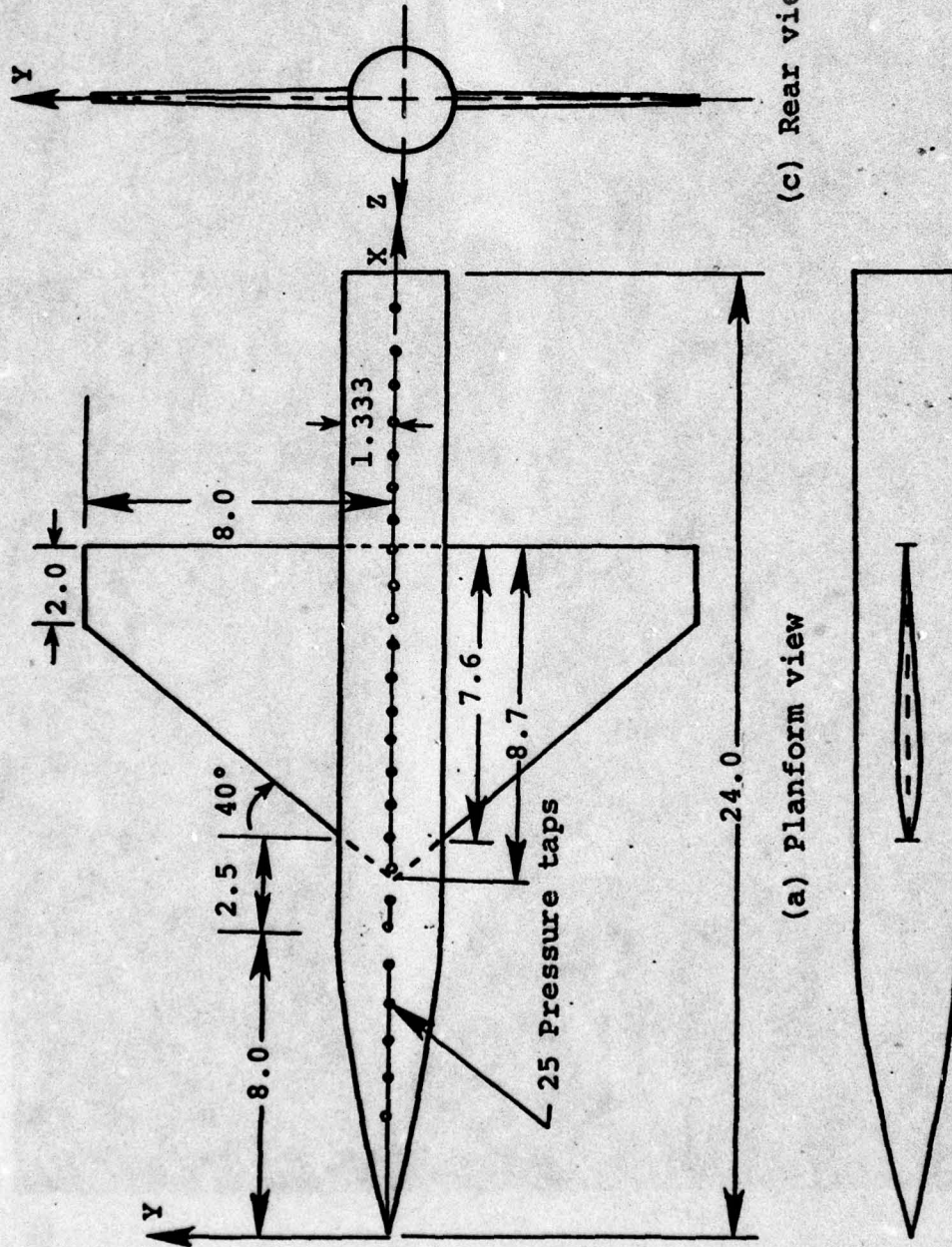


NEAR, INC.

Figure 1.- Conical flow-field survey probe on CTS and wing-body combination with 4-percent thick airfoil.

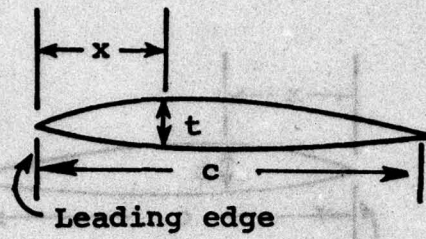
**BODY COORDINATES**

$x, \text{ in.}$	$r, \text{ in.}$
0	0
0.5	0.162
1.0	0.313
1.5	0.453
2.0	0.583
2.5	0.703
3.0	0.813
3.5	0.912
4.0	1.000
4.5	1.078
5.0	1.146
5.5	1.203
6.0	1.250
6.5	1.287
7.0	1.313
7.5	1.328
8.0	1.333
24.0	1.333



ALL DIMENSIONS IN INCHES

Figure 2.-Wing-body combination.



$x/c, \%$	$t/2c, \%$
0	0
2.5	0.325
5.0	0.548
7.5	0.736
10.0	0.900
15.0	1.175
20.0	1.399
25.0	1.576
30.0	1.726
35.0	1.837
40.0	1.921
45.0	1.974
50.0	1.998
55.0	1.989
60.0	1.955
65.0	1.885
70.0	1.777
75.0	1.620
80.0	1.406
85.0	1.085
90.0	0.738
95.0	0.369
100.0	0

$$t_{\max} = 2(7.6) (0.01998) = 0.304" \text{ @ root}$$

$$t_{\max} = 2(2) (0.01998) = 0.080" \text{ @ tip}$$

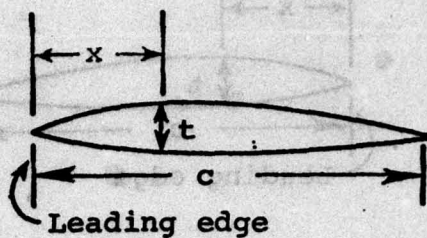
Leading-edge radius: 0.1 percent c

Trailing-edge radius: 0.01 percent c

(a) 4-percent thick airfoil

Figure 3.-Coordinates of airfoil sections.

$x/c, \%$	$t/2c, \%$
0	0
0.5	0.464
0.75	0.563
1.25	0.718
2.5	0.981
5.0	1.313
7.5	1.591
10.0	1.824
15.0	2.194
20.0	2.474
25.0	2.687
30.0	2.842
35.0	2.945
40.0	2.996
45.0	2.992
50.0	2.925
55.0	2.793
60.0	2.602
65.0	2.364
70.0	2.087
75.0	1.775
80.0	1.437
85.0	1.083
90.0	0.727
95.0	0.370
100.0	0.013



$$t_{\max} = 2(7.6) (2.996) \\ = 0.455" \quad \text{@ root}$$

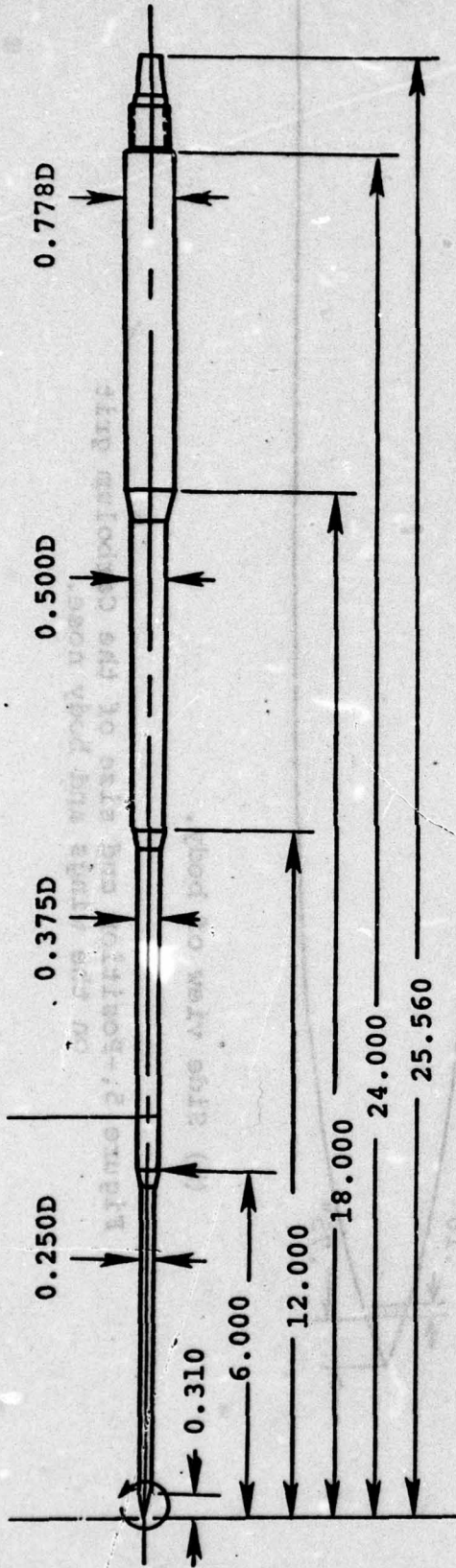
$$t_{\max} = 2(2) (2.996) \\ = 0.120" \quad \text{@ tip}$$

Leading-edge radius: 0.229 percent  $c$

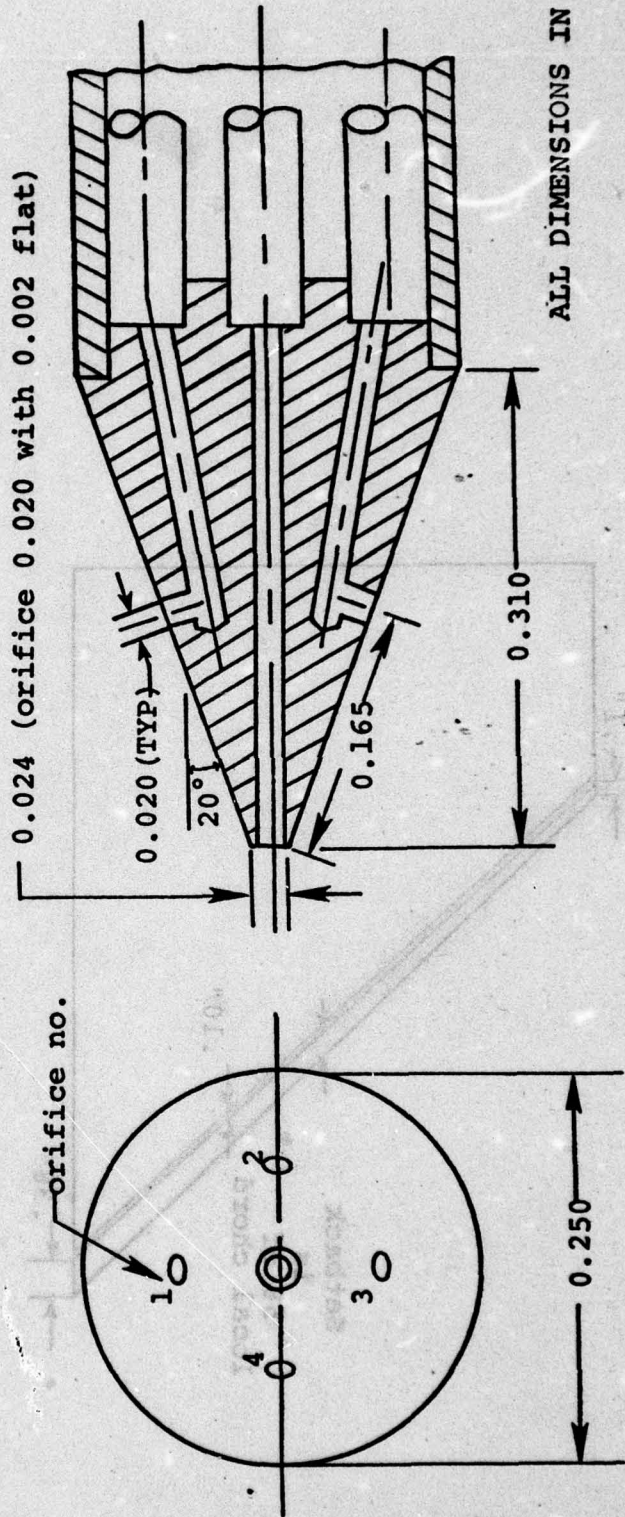
Trailing-edge radius: 0.014 percent  $c$

(b) 6-percent thick airfoil (NACA 65A006)

Figure 3.-Concluded.

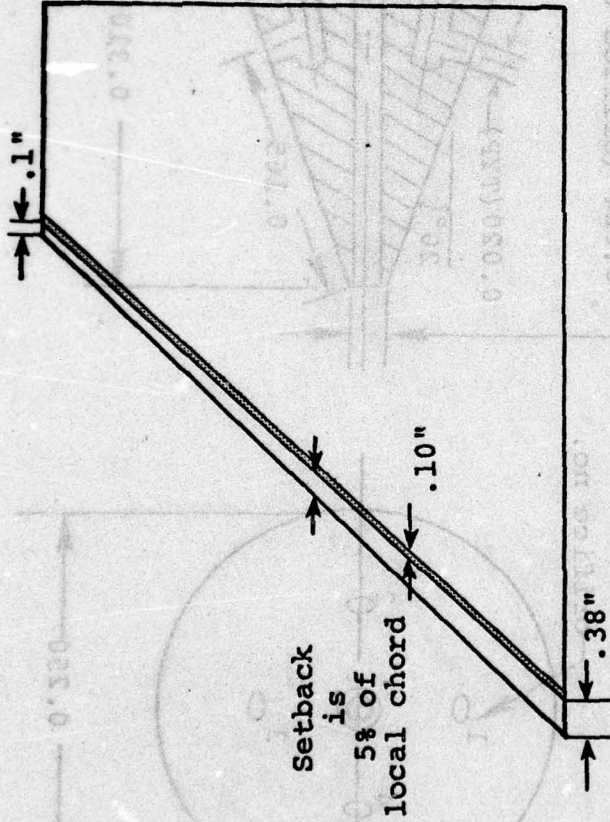


(a) Overall view of the probe.



(b) Details of the 40° probe tip.

Figure 4.-Details and Dimensions of the 40° apex angle probe.

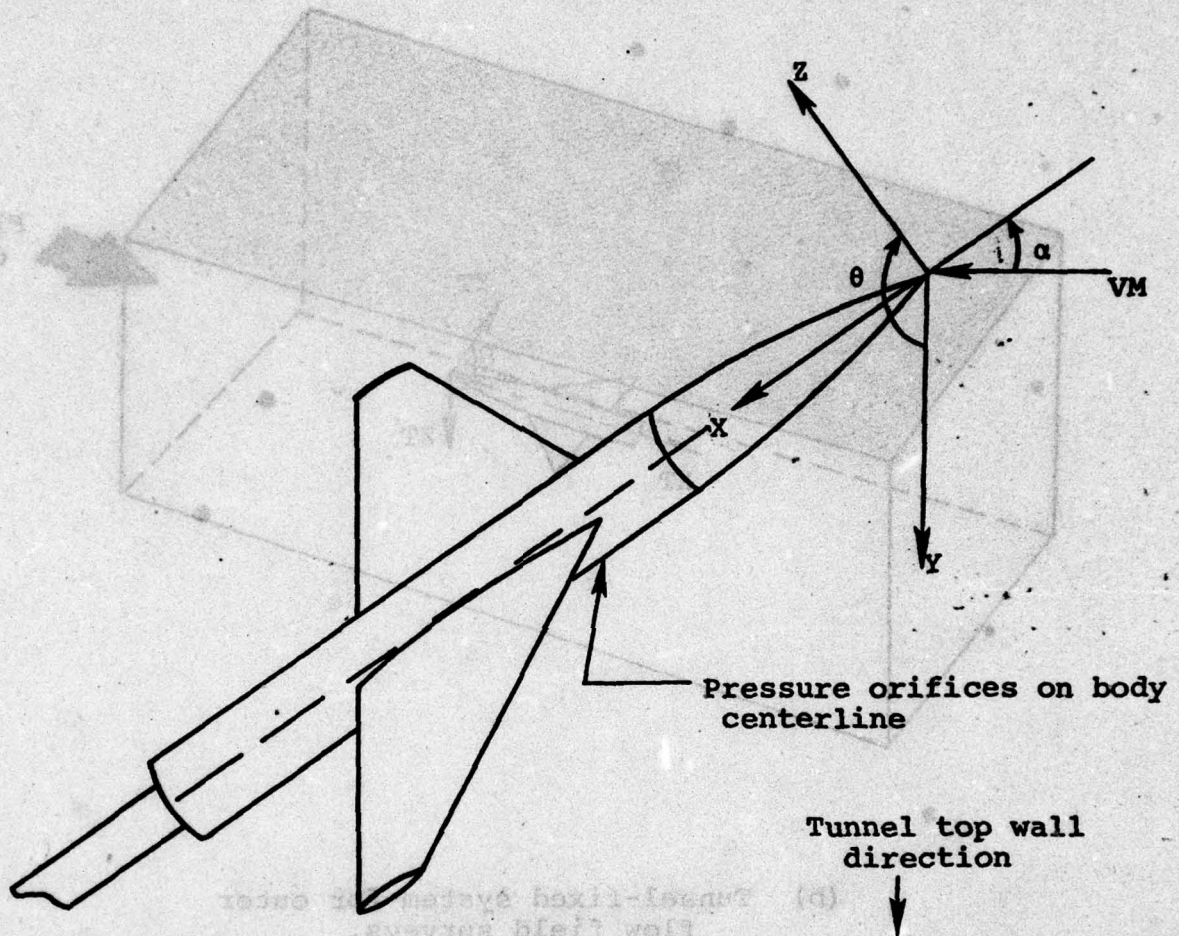


(a) Planform view of wing.



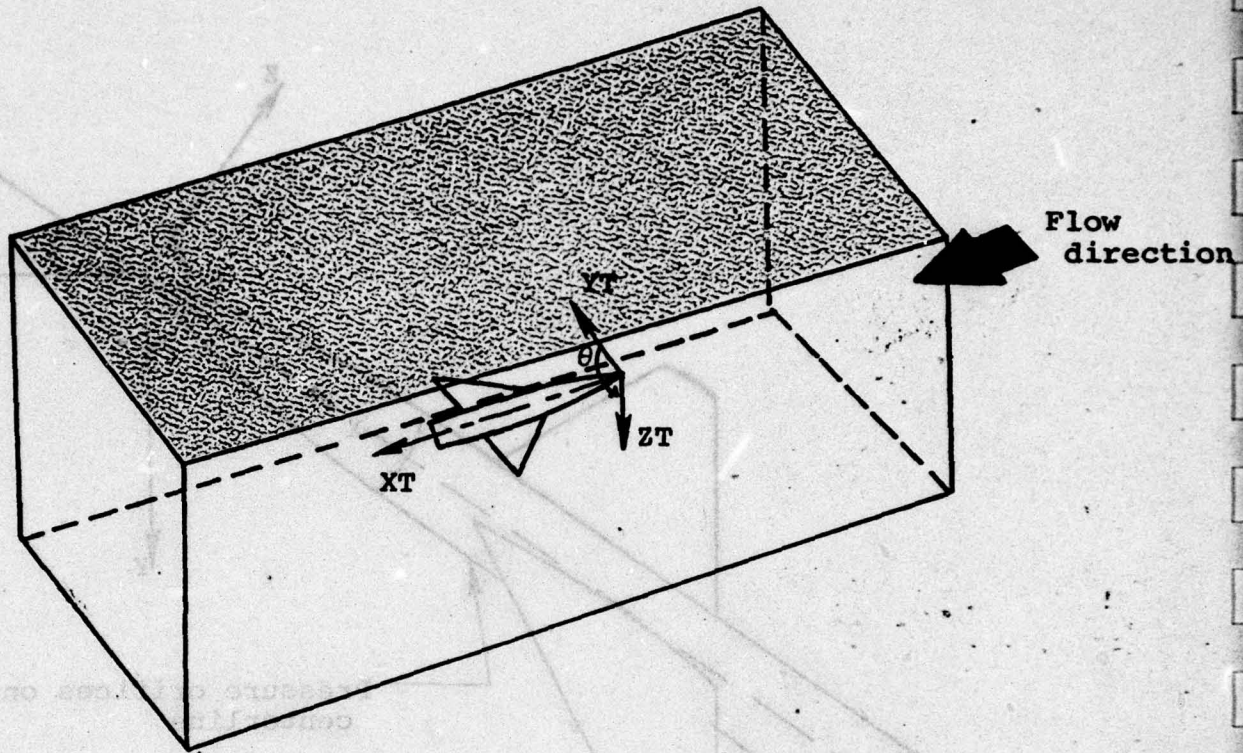
(b) Side view of body.

Figure 5.-Position and size of the Carbolium grit on the wings and body nose.



(a) Body-fixed system for inner flow field surveys.

Figure 6.-Coordinate systems.



(b) Tunnel-fixed system for outer flow field surveys.

Figure 6.- Concluded.

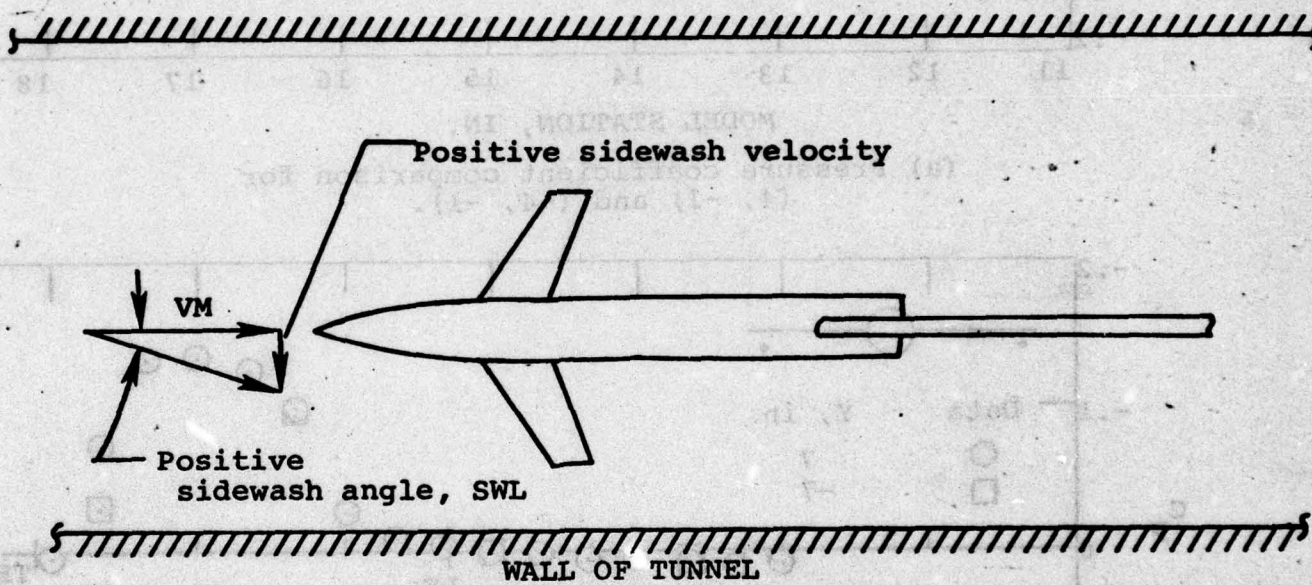
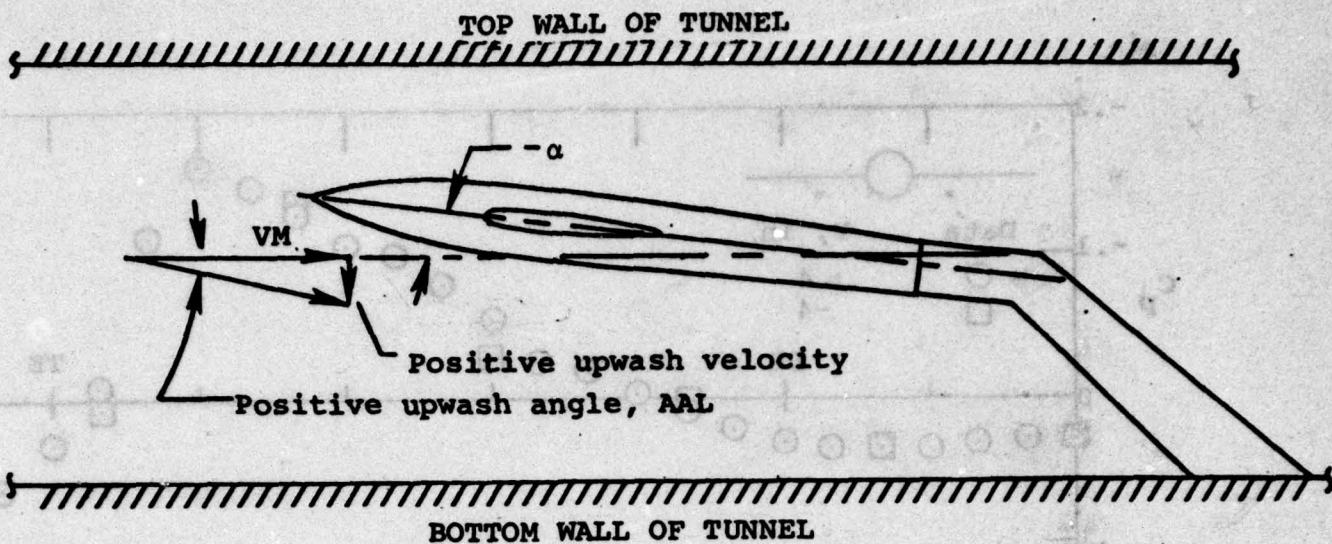
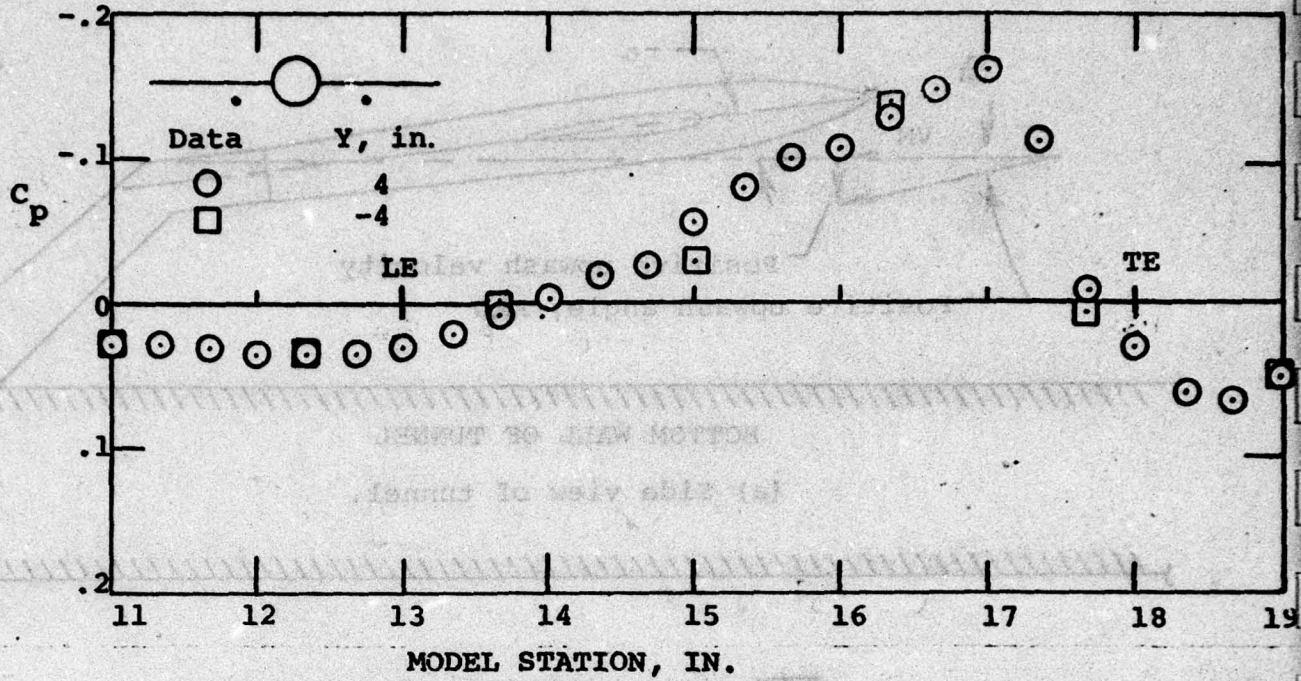
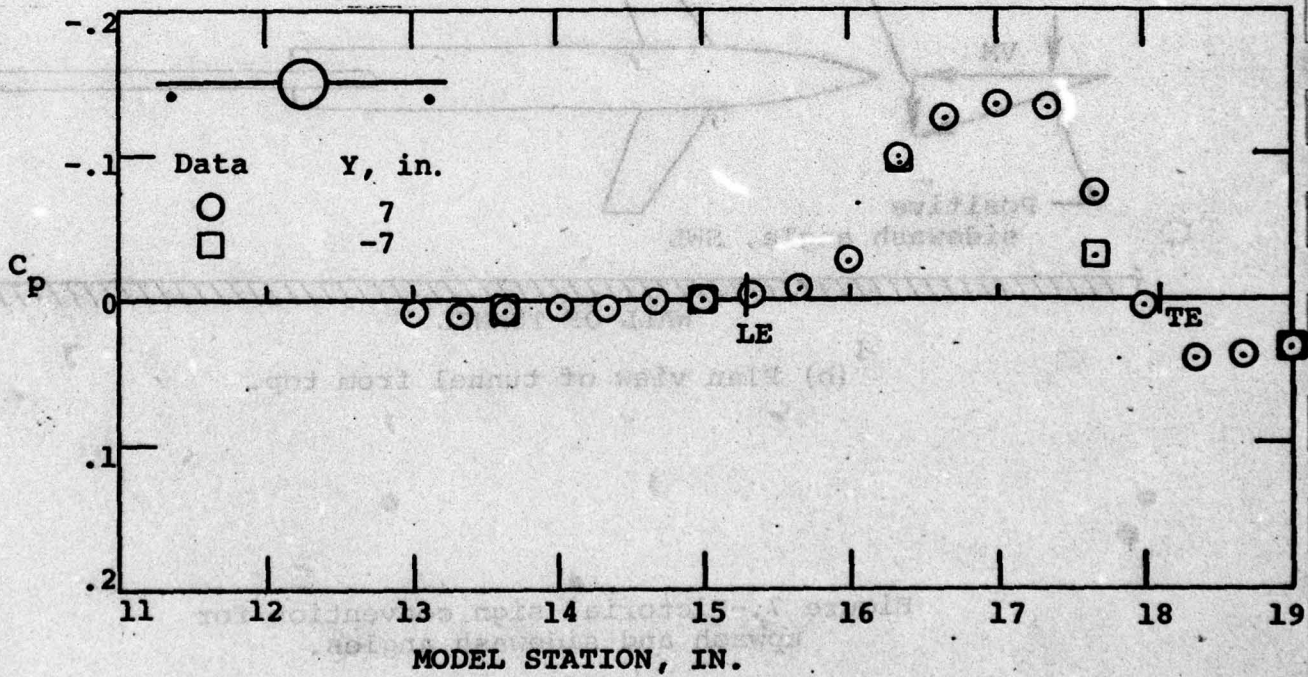


Figure 7.-Pictorial sign convention for upwash and sidewash angles.

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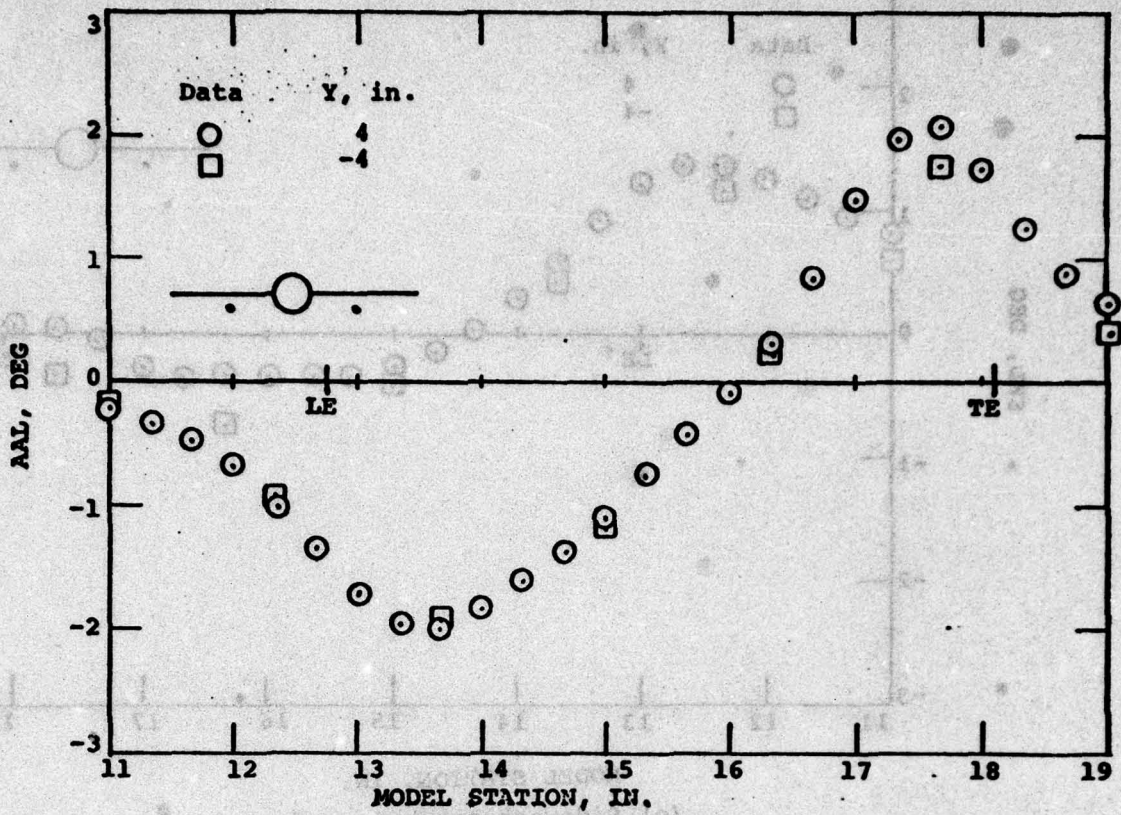


(a) Pressure coefficient comparison for (4, -1) and (-4, -1).

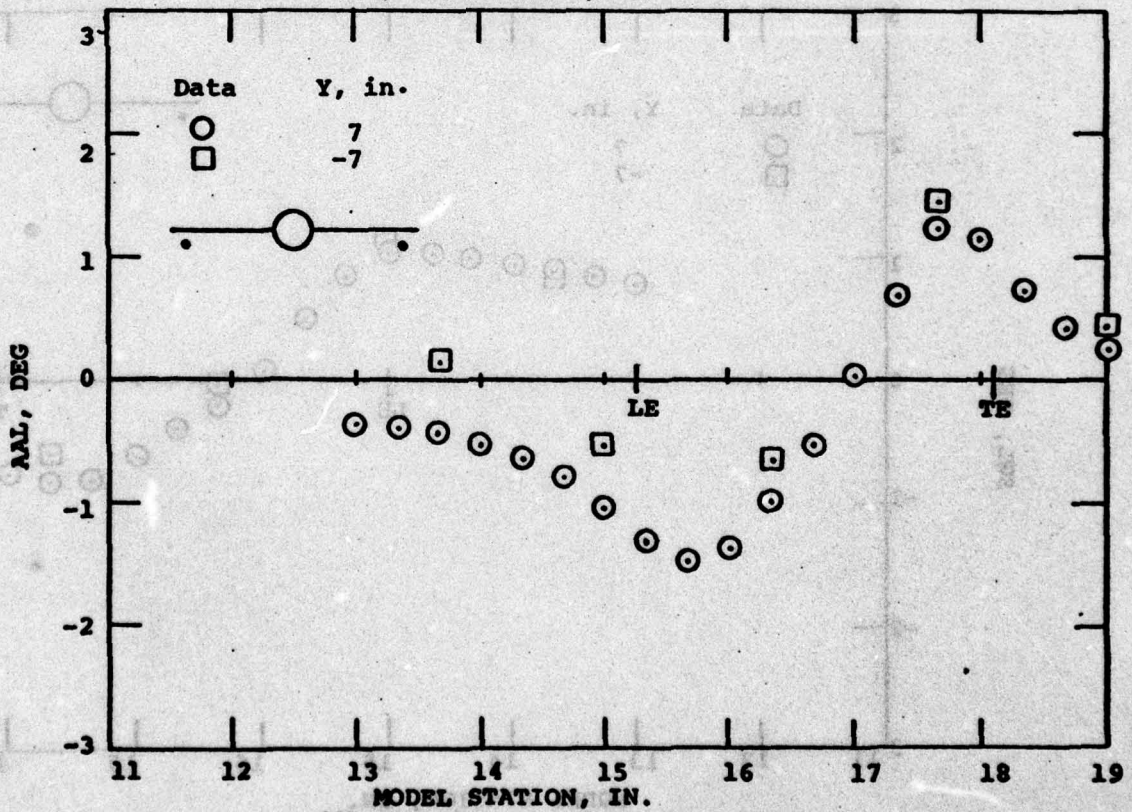


(b) Pressure coefficient comparison for (7, -1) and (-7, -1).

Figure 8.-Symmetry comparisons for 4-percent thick wing-body combination at  $Z = -1.0$  in.,  $\alpha = 0^\circ$ ,  $M_\infty = 0.925$ .

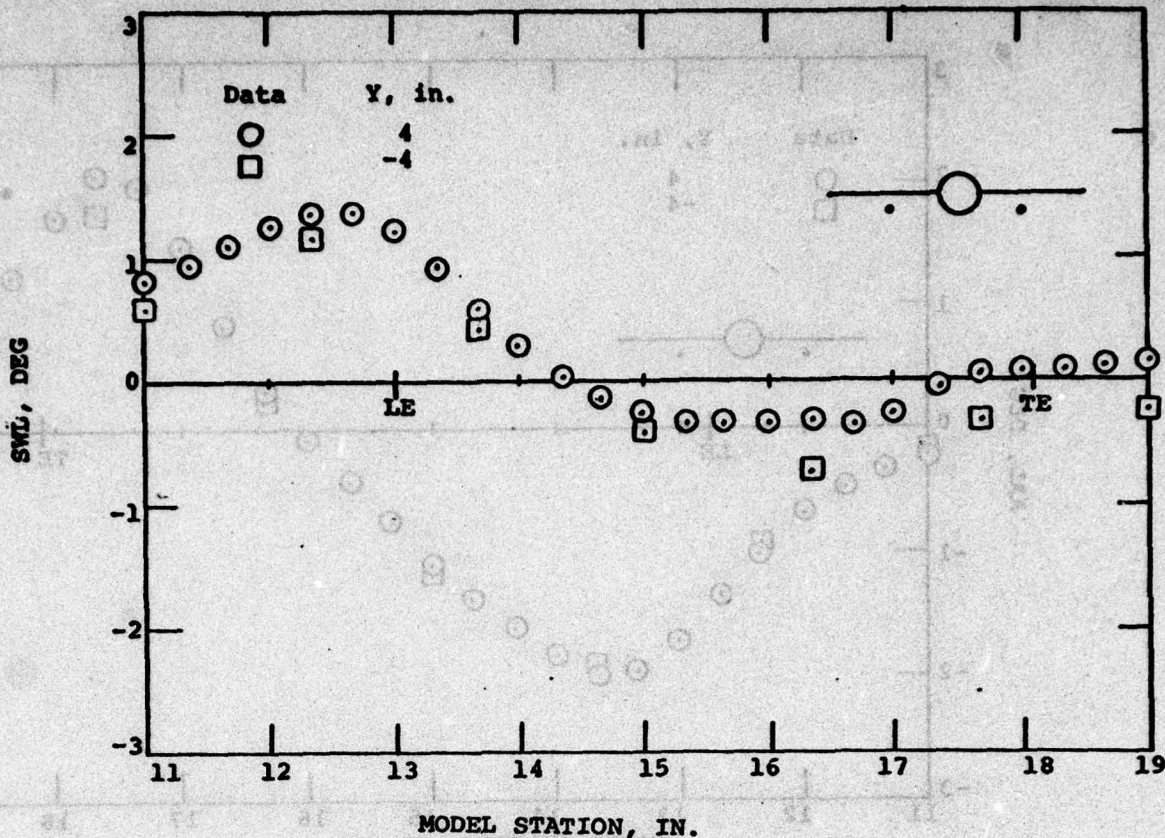


(c) Upwash comparison for (4, -1) and (-4, -1).

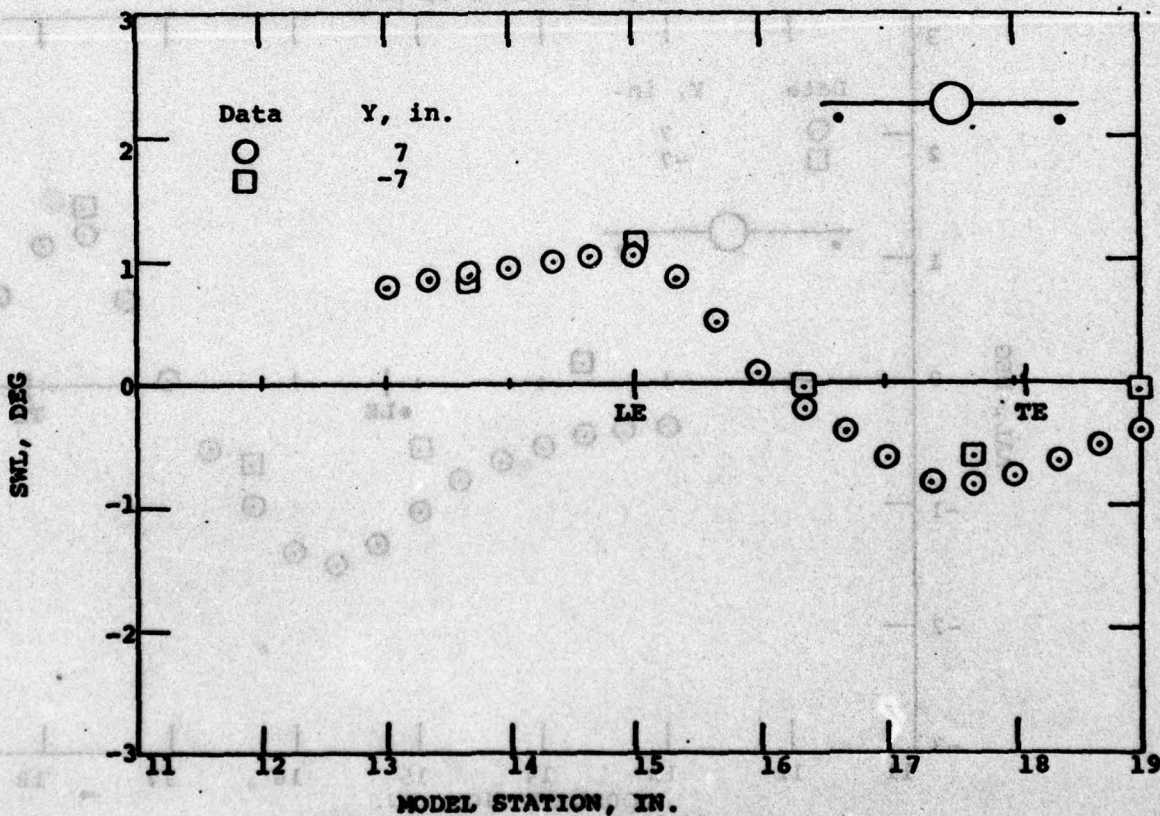


(d) Upwash comparison for (7, -1) and (-7, -1).

Figure 8.-Continued.

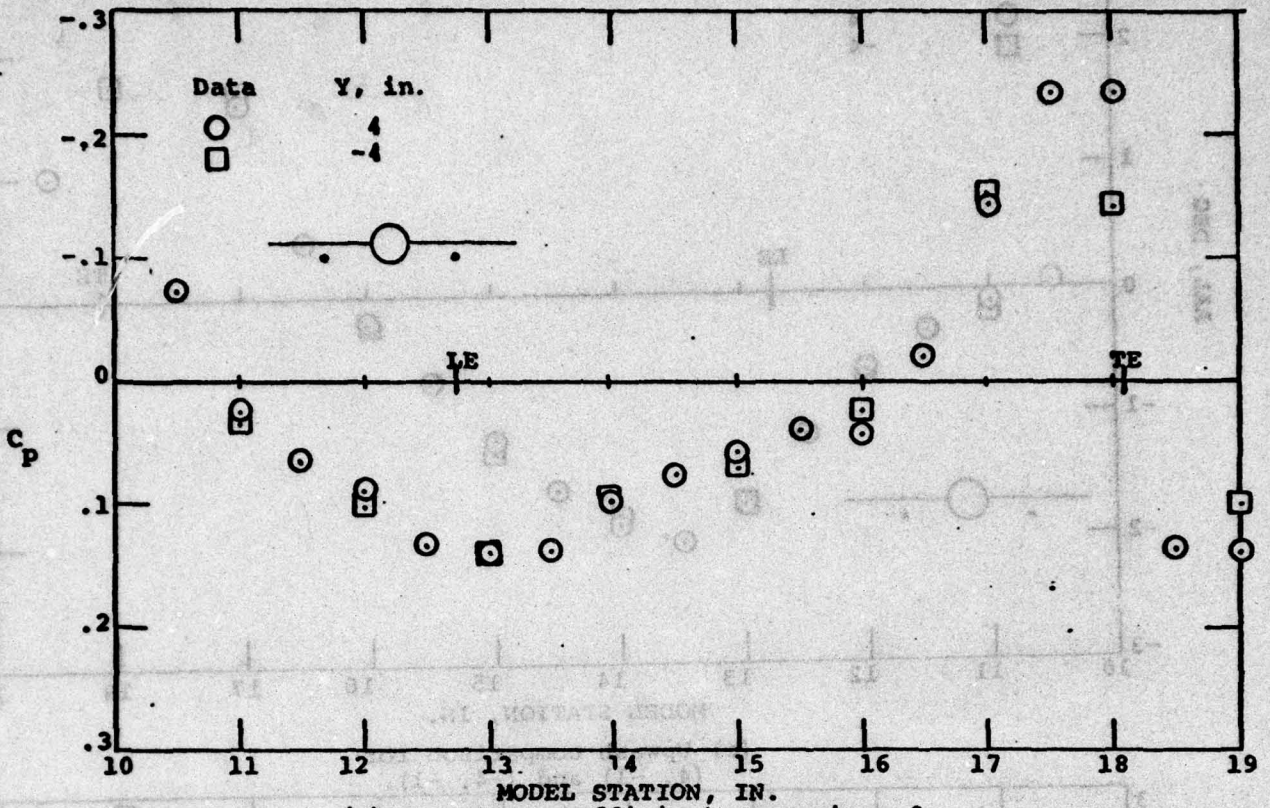


(e) Sidewash comparison for (4, -1) and (-4, -1).

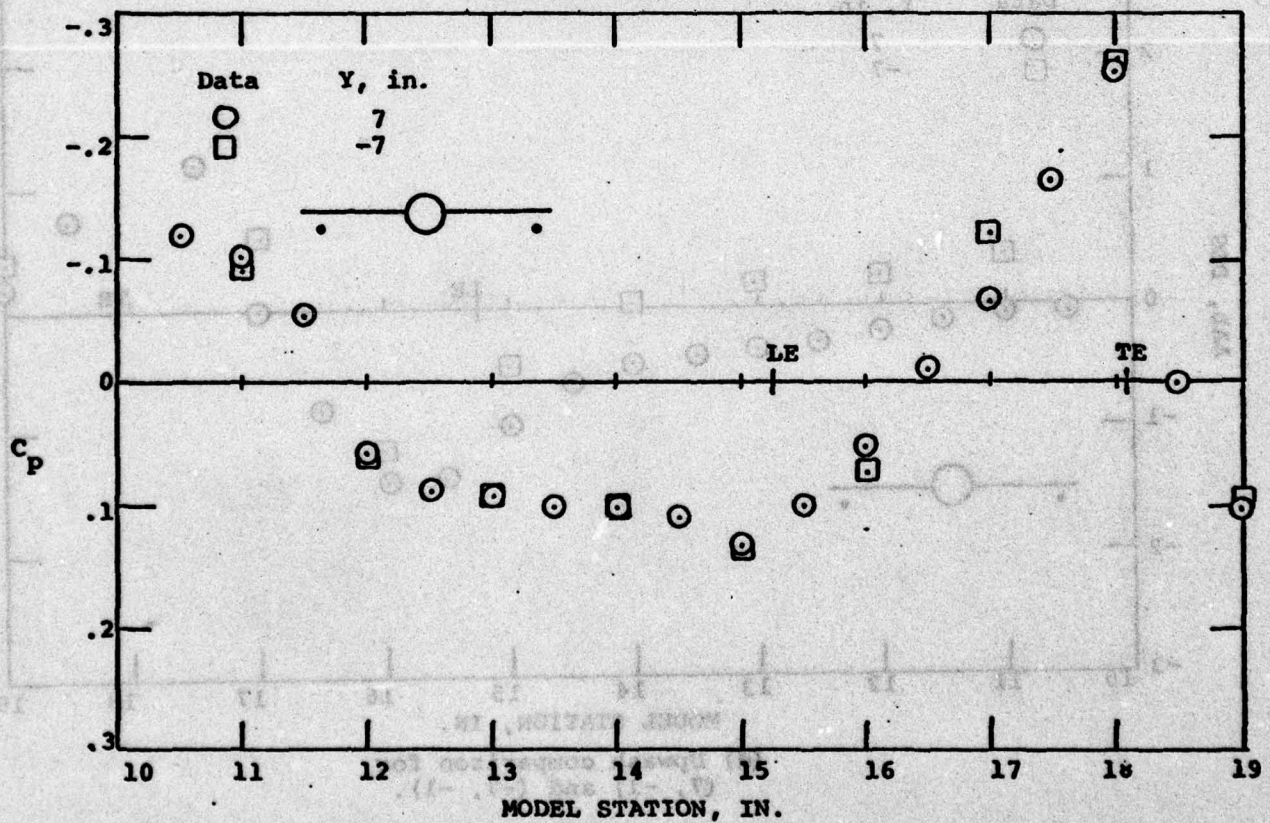


(f) Sidewash comparison for (7, -1) and (-7, -1).

Figure 8.-Concluded.

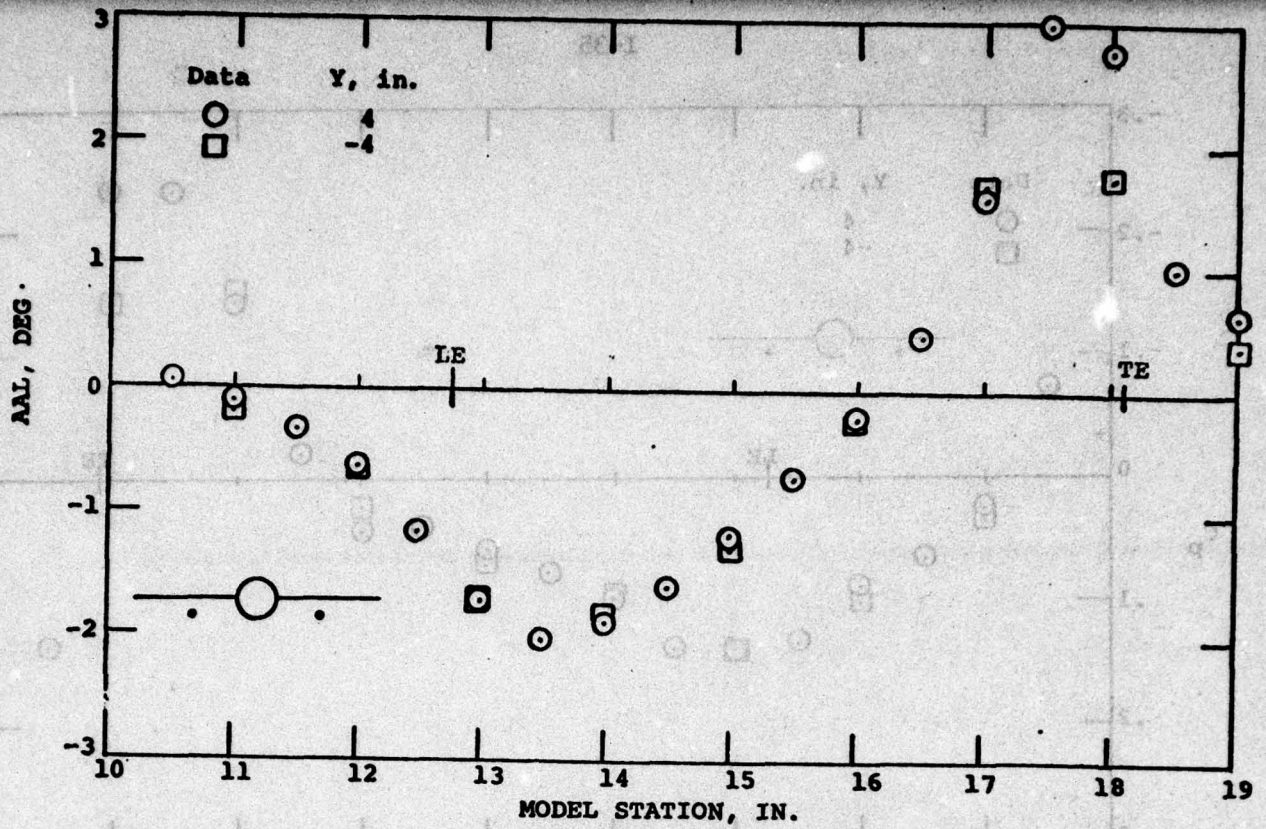


(a) Pressure coefficient comparison for (4, -1) and (-4, -1).

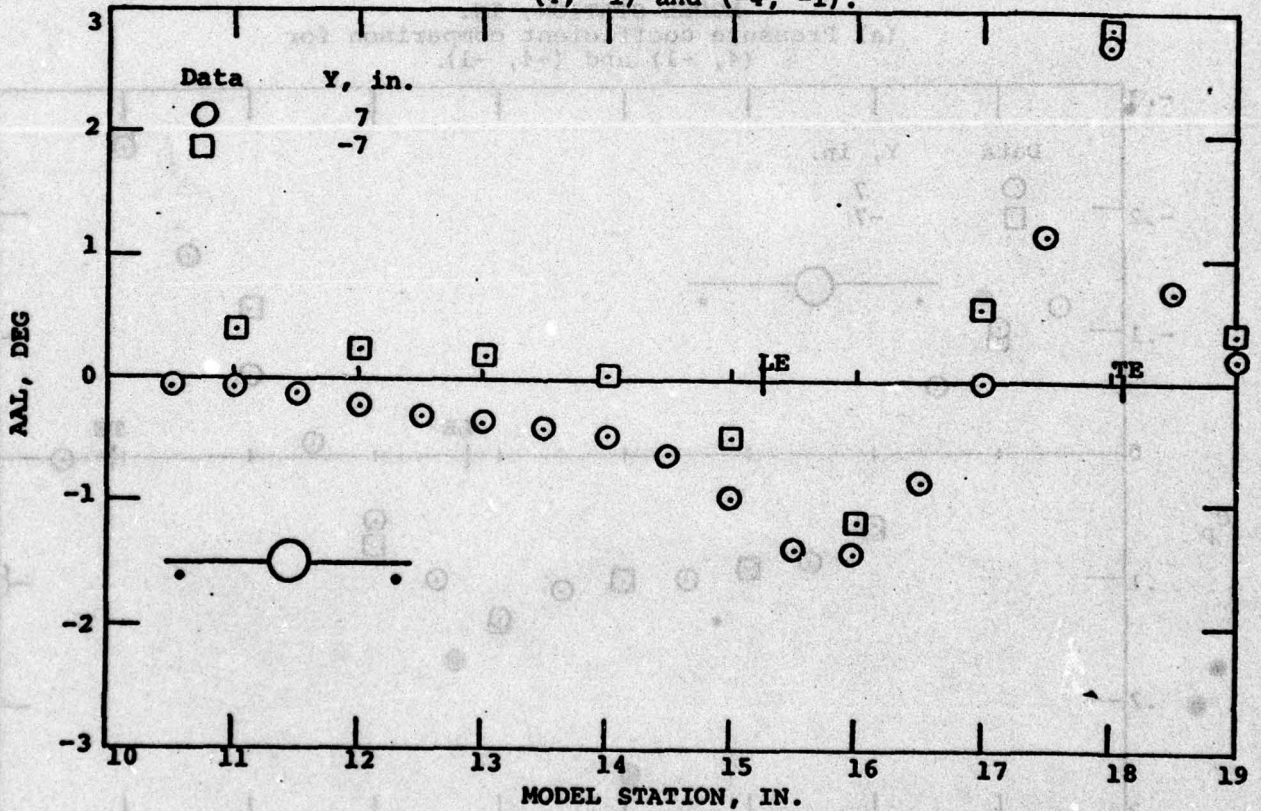


(b) Pressure coefficient comparison for (7, -1) and (-7, -1).

Figure 9.-Symmetry comparisons for 4-percent thick wing-body combination at  $Z = -1.0$  in.,  $\alpha = 0^\circ$ ,  $M_\infty = 1.025$ .

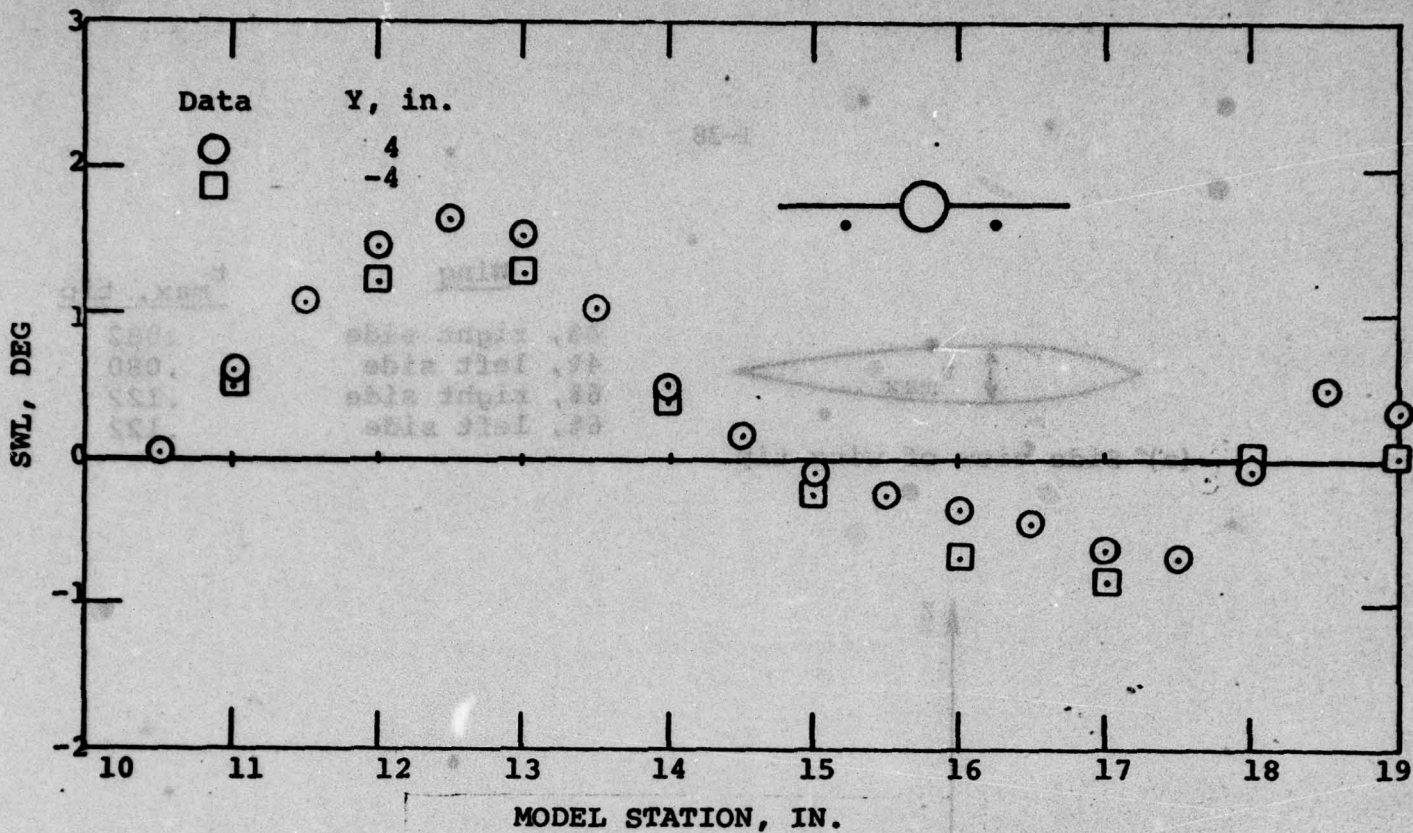


(c) Upwash comparison for (4, -1) and (-4, -1).

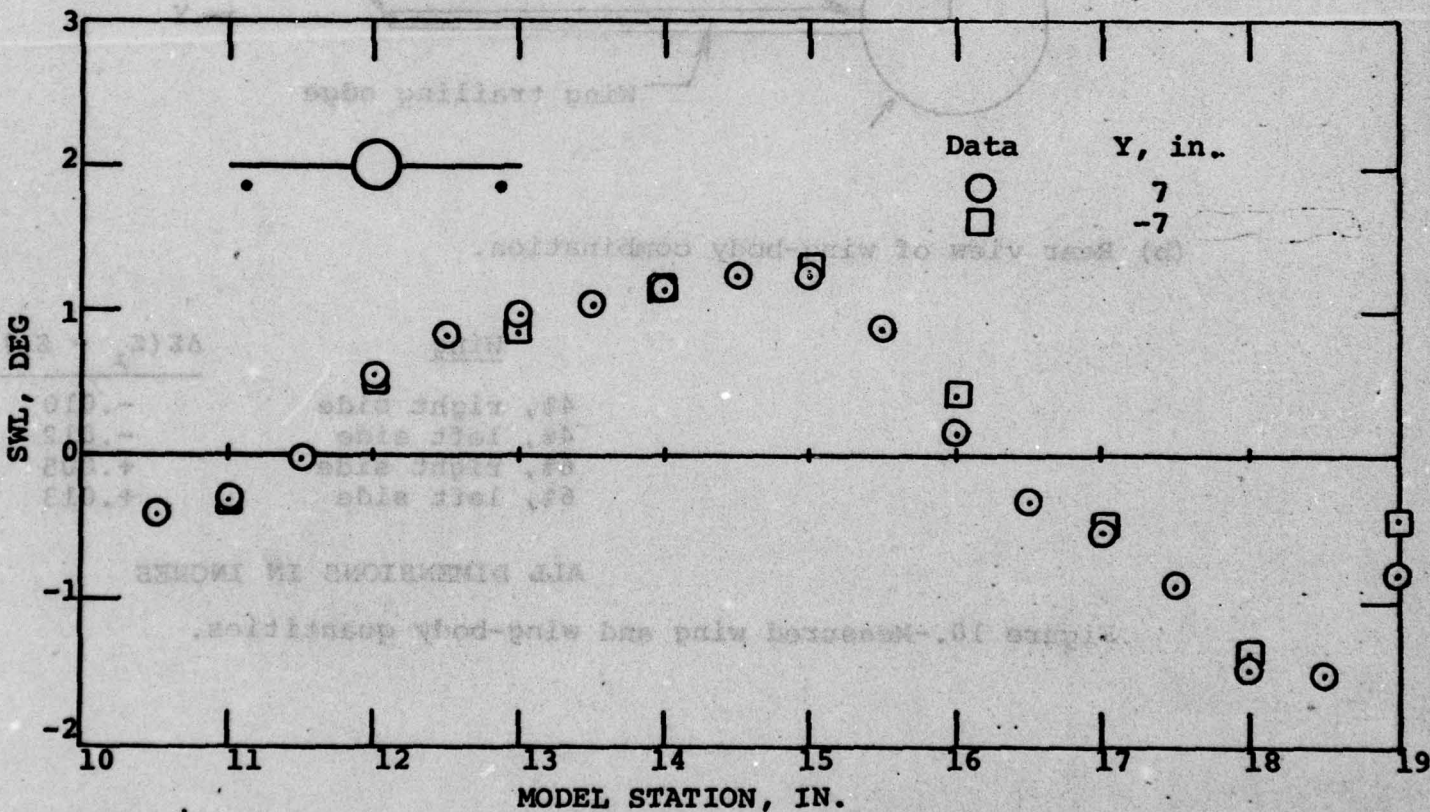


(d) Upwash comparison for (7, -1) and (-7, -1).

Figure 9.- Continued.

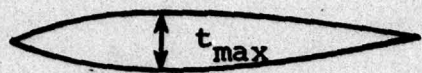


(e) Sidewash comparison for (4, -1) and (-4, -1).



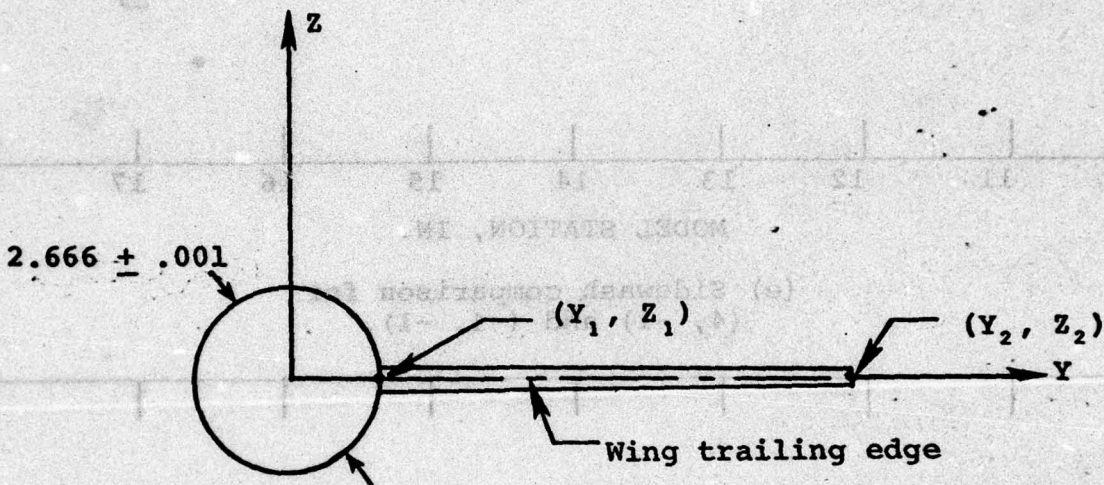
(f) Sidewash comparison for (7, -1) and (-7, -1).

Figure 9.-Concluded.



(a) Side view of wing tip.

Wing	$t_{max, tip}$
4%, right side	.082
4%, left side	.080
6%, right side	.122
6%, left side	.122

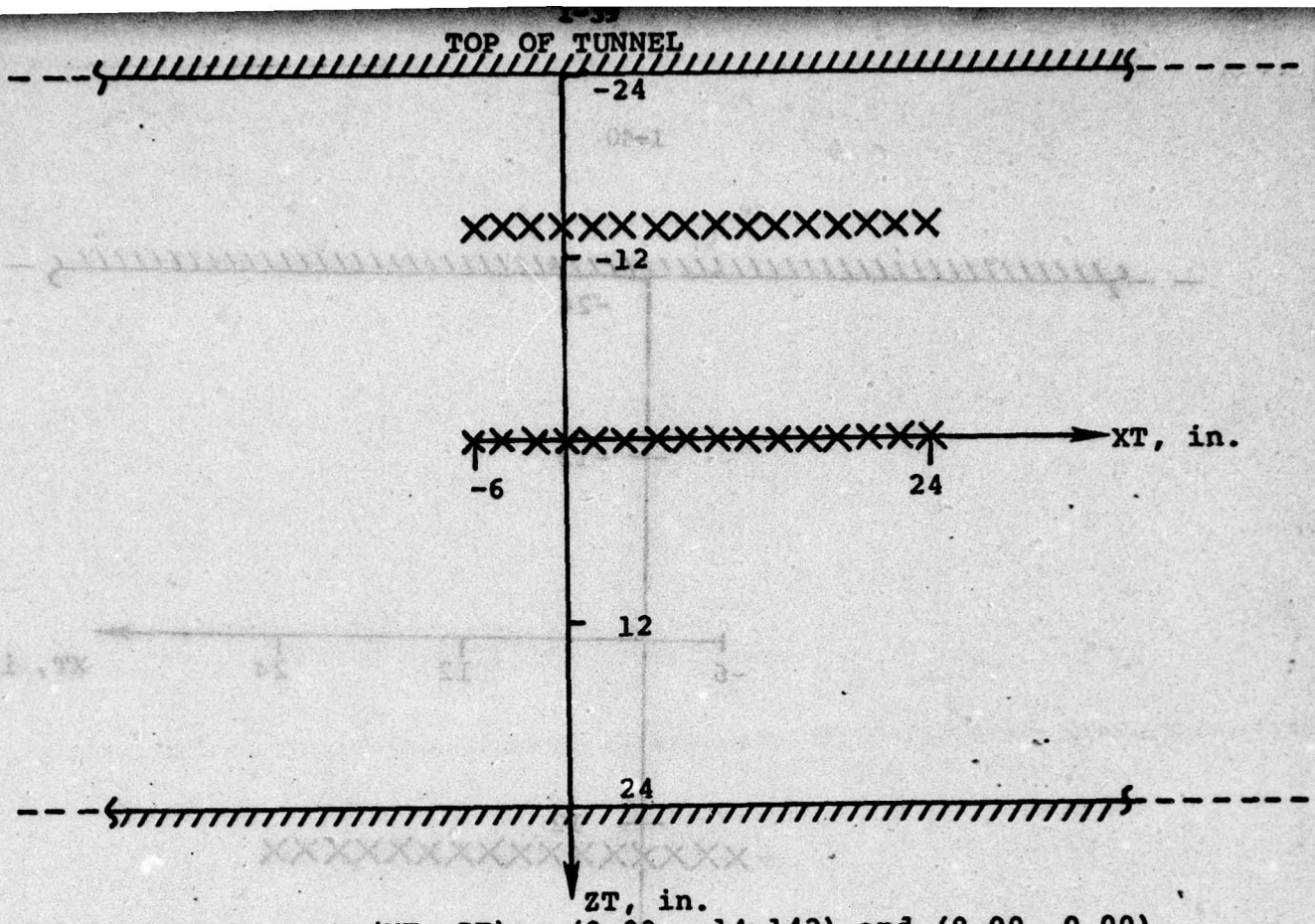


(b) Rear view of wing-body combination.

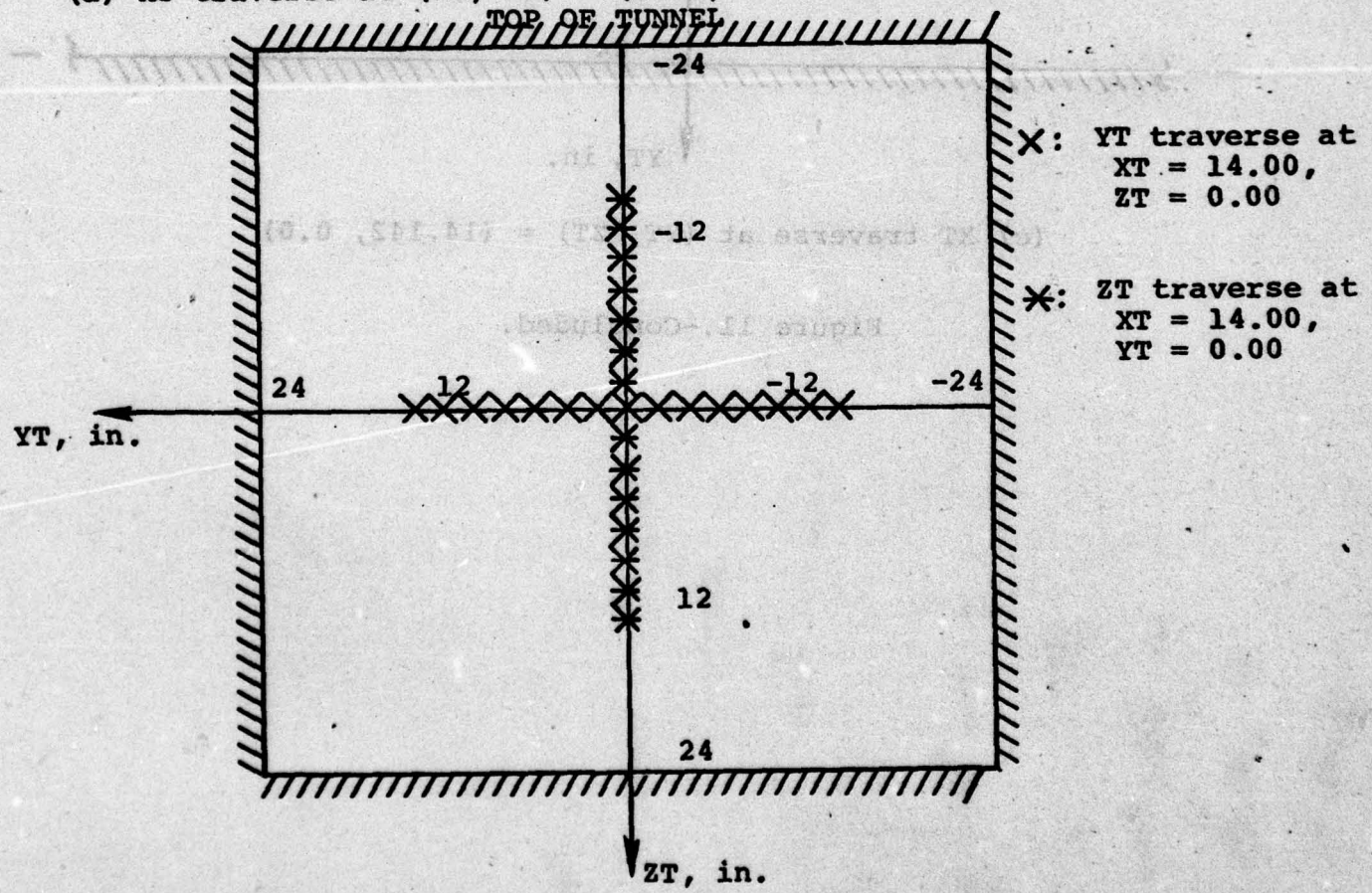
Wing	$\Delta Z (Z_2 - Z_1)$
4%, right side	-.010
4%, left side	-.012
6%, right side	+.005
6%, left side	+.013

ALL DIMENSIONS IN INCHES

Figure 10.-Measured wing and wing-body quantities.



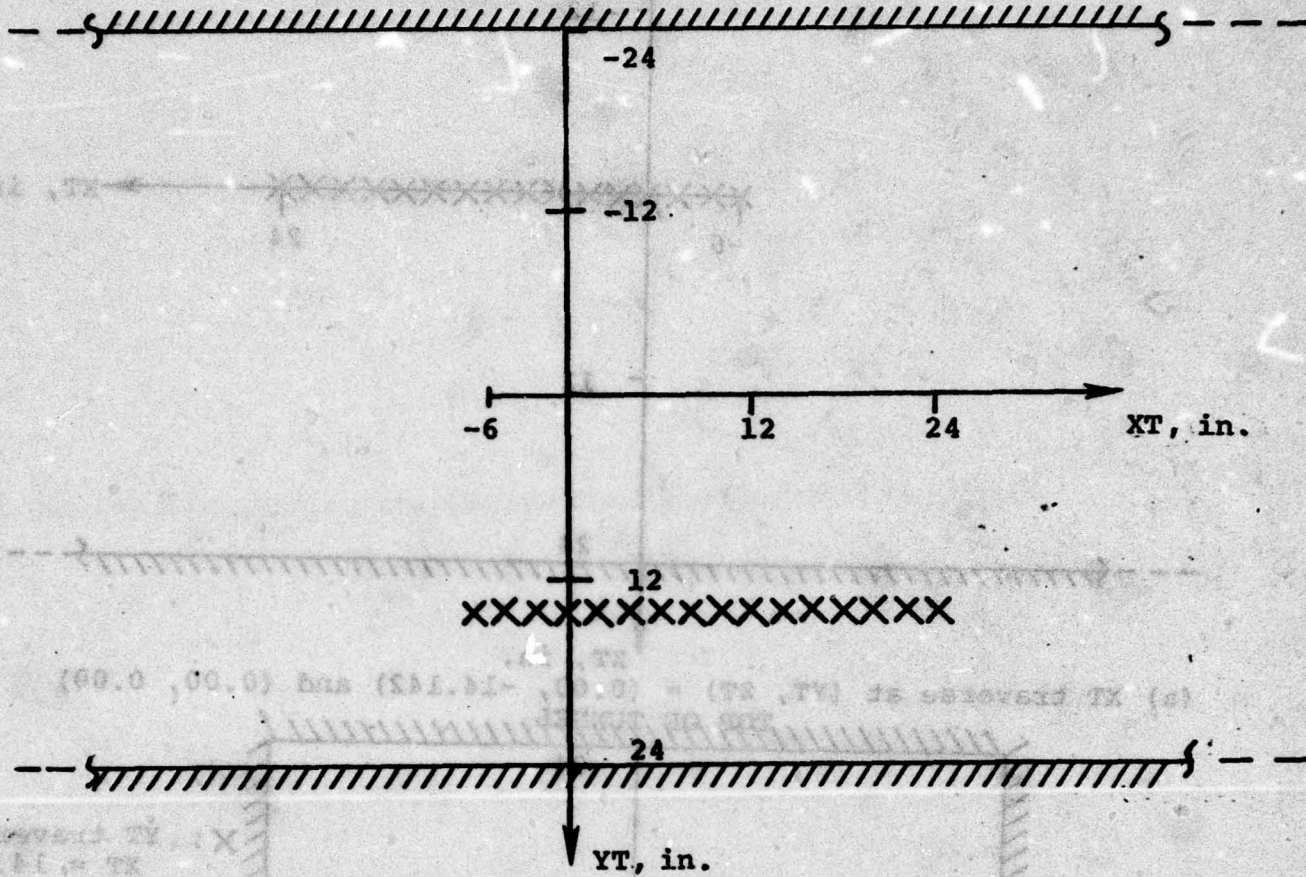
(a) XT traverse at  $(YT, ZT) = (0.00, -14.142)$  and  $(0.00, 0.00)$



(b) YT and ZT traverses

Figure 11.- Tunnel-Empty Survey grids.

I-40



(c) XT traverse at  $(YT, ZT) = (14.142, 0.0)$

Figure 11.-Concluded.

DATA

- Tunnel Empty at  $M_\infty = 0.95$
- Tunnel Empty at  $M_\infty = 0.90$
- 4-percent thick wing-body combination at  $M_\infty = 0.925$

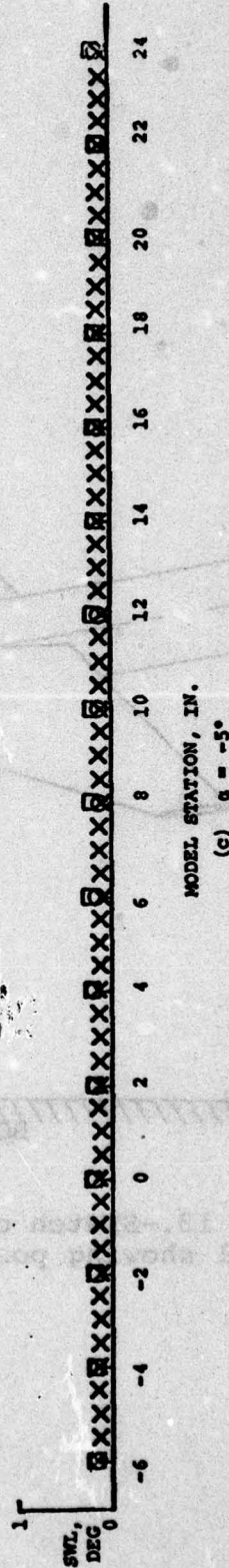
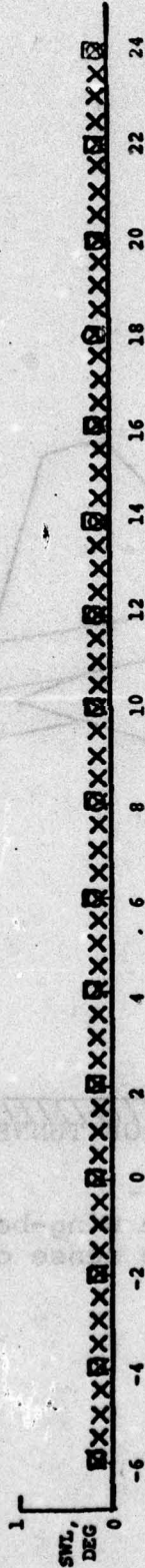


Figure 12.-Local Sidewash SWL at  $Y_T = 0.0$  in.,  $Z_T = -14.14$  in.

41

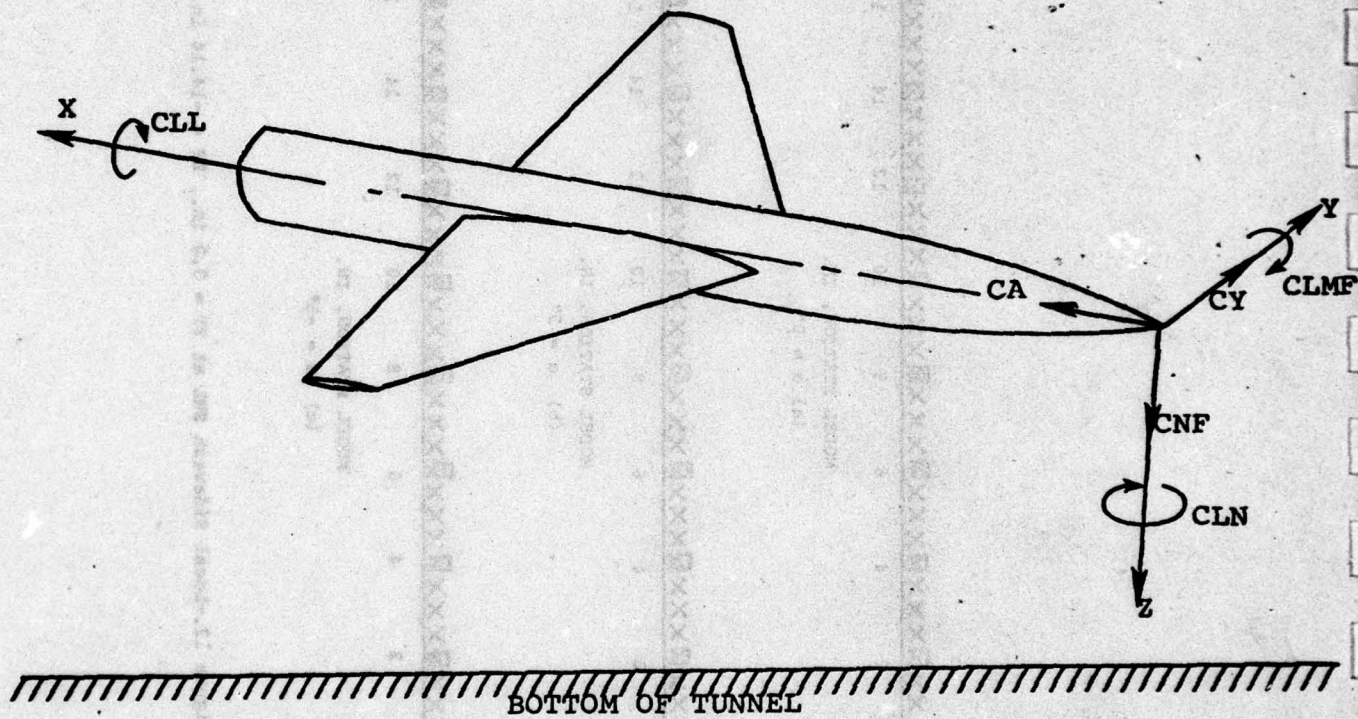


Figure 13.-Sketch of the wing-body configuration in the tunnel showing positive sense of forces and moments.

TEST PART MEXIC-6 ALPHA WING YP 2P PWR SUPPLY DATE  
 1C-484 36 3.007 0.000 0.00 -14.14 1-701 2-2-77  
 AERC PROPULSION WIND TUNNEL  
 TRANSONIC 4T

POINT	XT	Y	VM	PT	0	TT	ML	VMI/VH	PTL/PT	CPL	UT/VH	VT/VH	WT/VH	AATL	OUTL
5	-6.000	0.807	661.76	1944.9	453.7	82.1	0.806	1.004	1.000	-0.008	1.004	0.003	0.007	0.41	0.18
6	-4.000	0.804	665.97	1941.1	453.3	82.7	0.811	1.006	1.001	-0.010	1.006	0.003	0.007	0.42	0.18
7	-2.000	0.798	658.20	1944.0	453.0	82.6	0.806	1.008	1.001	-0.017	1.009	0.003	0.008	0.43	0.16
8	0.000	0.788	638.48	1946.0	453.2	82.9	0.807	1.009	1.001	-0.015	1.009	0.003	0.007	0.40	0.16
9	2.000	0.801	661.37	1947.5	453.5	83.4	0.806	1.006	1.001	-0.011	1.006	0.003	0.006	0.34	0.17
10	4.000	0.800	645.73	1948.1	453.3	83.2	0.809	1.008	1.001	-0.018	1.009	0.003	0.005	0.28	0.16
11	6.000	0.802	661.88	1947.7	453.2	82.9	0.808	1.007	1.001	-0.012	1.007	0.003	0.005	0.28	0.18
12	8.000	0.800	645.18	1946.2	453.9	83.4	0.812	1.007	1.001	-0.013	1.007	0.003	0.004	0.22	0.18
13	10.000	0.803	648.30	1945.3	456.9	83.4	0.811	1.008	1.001	-0.014	1.008	0.003	0.003	0.28	0.16
14	12.000	0.803	663.04	1947.2	455.7	83.2	0.808	1.006	1.001	-0.009	1.006	0.003	0.003	0.17	0.16
15	14.000	0.804	663.87	1948.6	457.8	82.7	0.807	1.004	1.001	-0.007	1.004	0.003	0.003	0.17	0.18
16	16.000	0.799	658.98	1947.9	454.3	83.3	0.803	1.005	1.001	-0.008	1.004	0.002	0.003	0.19	0.18
17	18.000	0.804	663.71	1946.0	456.8	83.3	0.807	1.004	1.000	-0.007	1.004	0.002	0.004	0.22	0.18
18	20.000	0.803	663.97	1947.6	457.2	83.8	0.805	1.002	1.001	-0.002	1.002	0.001	0.004	0.23	0.08
19	22.000	0.799	660.07	1950.9	459.4	83.6	0.797	0.997	1.001	0.008	0.997	0.001	0.005	0.28	0.08
20	24.000	0.800	659.64	1947.1	454.5	83.1	0.803	1.004	1.001	-0.005	1.004	0.002	0.005	0.29	0.09

TEST POINT	PCX10-6	ALPS	WING	YT	WING	WT	WING SURVEY	DATE	AESC PROPELLSION WIND TUNNEL	TRANSOMIC AT		
IC-484	34	3.001	0.00	0.00	0.00	1.702	2-2-77					
POINT	M	W	WING	YT	WING	WT	WING SURVEY	DATE	AESC PROPELLSION WIND TUNNEL	TRANSOMIC AT		
	WT	WING	YT	WING	WT	WING SURVEY	DATE	AESC PROPELLSION WIND TUNNEL	TRANSOMIC AT			
22	8.000	0.799	1547.9	454.0	82.7	0.809	1.011	1.011	0.004	0.008	0.43	0.20
23	8.000	0.798	1545.2	453.5	82.9	0.804	1.005	1.005	0.003	0.007	0.37	0.18
24	8.000	0.798	1546.1	453.9	83.3	0.804	1.005	1.005	0.003	0.007	0.39	0.18
25	8.000	0.799	1548.2	454.6	83.2	0.803	1.004	1.004	0.003	0.006	0.35	0.17
26	8.000	0.799	1548.4	454.1	83.5	0.804	1.005	1.005	0.003	0.006	0.35	0.17
27	8.000	0.800	1547.7	453.9	82.9	0.802	1.002	1.002	0.003	0.006	0.32	0.17
28	8.000	0.802	1544.6	453.2	82.3	0.808	1.007	1.007	0.003	0.005	0.31	0.15
29	8.000	0.800	1543.9	453.0	83.0	0.805	1.005	1.005	0.002	0.006	0.33	0.15
30	10.000	0.798	1550.1	454.6	84.4	0.802	1.003	1.003	0.002	0.005	0.30	0.14
31	12.000	0.802	1550.4	454.9	83.4	0.807	1.005	1.005	0.002	0.006	0.32	0.12
32	14.000	0.801	1547.6	453.3	82.7	0.807	1.007	1.007	0.002	0.006	0.32	0.13
33	16.000	0.800	1545.1	453.4	83.2	0.809	1.002	1.002	0.002	0.005	0.29	0.09
34	18.000	0.800	1545.1	453.8	83.4	0.810	1.002	1.002	0.002	0.005	0.30	0.11
35	20.000	0.800	1548.4	453.5	84.2	0.814	1.005	1.005	0.002	0.005	0.30	0.11
36	22.000	0.813	1548.2	453.7	83.3	0.817	1.003	1.003	0.002	0.005	0.31	0.09
37	24.000	0.803	1548.6	453.9	83.4	0.803	1.003	1.003	0.002	0.005	0.32	0.10

TEST PART RPX10-4 ALPHA MING YP ST SRV SUPPLY DATE AEC PROPULSION WIND TUNNEL  
 34 2.985 0000 14.14 0.00 1-703 2-2-77 TRANSONIC 48

POINT	XT	M	W	VW	PT	0	TT	WL	VWL/VW	PFL/PT	CPL	UT/VW	VT/VW	WT/VW	AAZL	AAZL
39	-6.000	0.799	859.07	1551.7	445.0	84.5	0.830	1.035	0.998	-0.075	1.035	0.006	0.008	0.008	0.46	0.20
40	-6.000	0.799	860.51	1552.0	445.6	84.4	0.802	1.003	1.001	-0.005	1.003	0.002	0.003	0.003	0.15	0.14
41	-2.000	0.801	862.74	1552.1	447.1	84.6	0.804	1.003	1.001	-0.004	1.003	0.002	0.002	0.002	0.12	0.14
42	0.000	0.798	860.07	1544.2	445.9	84.5	0.802	1.004	1.000	-0.008	1.004	0.002	0.002	0.002	0.12	0.12
43	7.000	0.801	862.50	1552.9	447.1	84.5	0.803	1.003	1.000	-0.004	1.003	0.002	0.002	0.002	0.11	0.11
44	4.000	0.801	862.18	1551.3	446.7	84.3	0.805	1.005	1.001	-0.007	1.005	0.002	0.002	0.002	0.11	0.12
45	6.000	0.799	858.84	1552.4	445.3	84.2	0.802	1.004	1.001	-0.006	1.004	0.002	0.001	0.001	0.08	0.10
46	6.000	0.802	863.09	1550.5	447.1	84.3	0.803	1.001	1.001	-0.005	1.001	0.002	0.001	0.001	0.06	0.09
47	10.000	0.804	863.88	1549.7	447.9	83.5	0.807	1.004	1.001	-0.005	1.004	0.001	0.001	0.001	0.06	0.06
48	12.000	0.804	864.78	1546.9	447.3	84.2	0.808	1.005	1.001	-0.007	1.005	0.001	0.002	0.002	0.09	0.06
49	14.000	0.803	864.09	1550.0	447.5	84.6	0.809	1.007	1.000	-0.013	1.007	0.001	0.001	0.001	0.08	0.08
50	16.000	0.804	864.62	1546.3	446.5	84.1	0.810	1.004	1.001	-0.006	1.004	0.001	0.001	0.001	0.04	0.08
51	18.000	0.803	864.31	1550.1	447.6	84.7	0.804	1.001	1.000	-0.002	1.001	0.001	0.001	0.001	0.06	0.04
52	20.000	0.799	860.51	1551.5	445.0	83.8	0.804	1.006	1.001	-0.011	1.006	0.001	0.001	0.001	0.05	0.07
53	22.000	0.803	864.64	1549.4	447.8	83.8	0.806	1.002	1.001	-0.002	1.002	0.001	0.001	0.001	0.06	0.06
54	24.000	0.801	861.30	1547.5	445.5	83.2	0.804	1.003	1.001	-0.004	1.003	0.001	0.001	0.001	0.05	0.05

TEST PART REX10-6  
 TC-484 33 2.995

ALFA WING XT  
 0000 K0NP 14.00 0.00

DATE  
 20-2-77

AEDC PROPULSION WIND TUNNEL  
 TRANSONIC 4F

POINT	WT	W	VM	PT	0	ST	VL	VM/VN	PT/PT	CPL	UT/VN	VT/VN	WT/VN	AATL	SUTL
23	14.000	0.706	853.26	1536.7	448.6	79.7	0.804	1.010	1.000	-0.019	1.010	0.001	0.005	0.30	0.08
24	12.000	0.704	852.91	1532.9	449.3	79.9	0.804	1.007	1.002	-0.010	1.007	-0.002	-0.005	-0.26	-0.09
25	10.000	0.803	848.32	1432.3	452.9	80.1	0.805	1.003	1.001	-0.003	1.003	-0.001	-0.001	-0.07	-0.08
26	8.000	0.797	854.82	1537.3	449.9	79.7	0.802	1.006	1.001	-0.009	1.006	-0.001	-0.002	-0.12	-0.04
27	6.000	0.799	854.16	1434.1	440.0	79.5	0.803	1.004	1.001	-0.005	1.004	0.002	-0.004	-0.21	0.14
28	4.000	0.807	851.74	1533.2	450.8	81.0	0.803	1.003	1.001	-0.004	1.003	0.002	-0.001	-0.06	0.10
29	2.000	0.794	856.43	1536.4	440.7	79.9	0.803	1.004	1.001	-0.007	1.004	0.003	0.002	0.11	0.17
30	0.000	0.800	858.09	1536.9	451.4	81.5	0.801	1.001	1.001	-0.000	1.001	0.000	0.005	0.29	0.12
31	-2.000	0.801	848.82	1438.2	452.8	80.7	0.805	1.005	1.000	-0.009	1.005	-0.000	0.001	0.08	-0.08
32	-4.000	0.782	857.87	1539.8	451.8	81.4	0.803	1.004	1.001	-0.006	1.004	0.000	0.000	0.00	-0.02
33	-6.000	0.782	857.40	1540.3	451.9	80.9	0.804	1.005	1.001	-0.008	1.005	-0.001	0.005	0.31	-0.04
34	-8.000	0.782	857.45	1537.7	451.4	80.5	0.802	1.003	1.001	-0.003	1.003	0.000	0.003	0.20	0.01
35	-10.000	0.801	858.40	1536.1	451.8	80.2	0.804	1.004	1.001	-0.005	1.004	0.001	0.004	0.24	0.06
36	-12.000	0.800	858.24	1537.0	451.7	80.6	0.804	1.005	1.001	-0.008	1.005	0.002	0.002	0.14	0.13
37	-14.000	0.800	858.45	1538.5	452.1	81.0	0.804	1.004	1.000	-0.008	1.004	0.000	0.002	0.14	0.01

TEST 887 8870-A ALPHA 818 1P 0.00 0.00 0.00  
 TC-884 33 2.996

DATE 2-9-77

WIND SURVEY 1-

AEDC PROPLUSTON WIND TUNNEL  
 TRANSONIC 4T

POINT	Z	M	W	VM	PT	Q	YT	ML	VML/W	PTL/PT	CPL	UT/W	VT/W	WT/W	WTL	STL
7	14.000	0.799	0.799	859.97	1527.6	448.2	77.9	0.801	1.003	1.001	-0.003	1.003	0.001	0.005	0.28	0.08
8	12.000	0.799	0.799	859.16	1530.9	449.0	79.1	0.803	1.004	1.001	-0.007	1.004	0.003	0.003	0.18	0.18
9	10.000	0.798	0.798	858.02	1531.1	448.6	78.4	0.800	1.002	1.001	-0.001	1.002	0.006	-0.002	-0.11	0.23
10	10.000	0.798	0.798	858.35	1530.2	448.7	78.7	0.803	1.004	1.001	-0.008	1.004	0.006	-0.002	-0.11	0.23
11	4.000	0.798	0.798	857.01	1531.6	448.8	78.6	0.801	1.003	1.001	-0.005	1.003	0.006	-0.005	-0.17	0.20
12	4.000	0.801	0.801	857.54	1530.6	450.4	78.7	0.802	1.002	1.001	0.000	1.001	0.003	-0.003	-0.16	0.20
13	3.000	0.801	0.801	857.14	1531.7	449.4	78.8	0.802	1.004	1.001	-0.002	1.004	0.002	0.001	0.05	0.14
14	0.000	0.798	0.798	856.38	1531.8	449.5	78.3	0.803	1.004	1.001	-0.005	1.004	0.002	0.005	0.29	0.09
15	-2.000	0.802	0.802	857.81	1529.9	451.3	79.4	0.807	1.005	1.001	-0.008	1.003	0.003	0.006	0.23	0.20
16	-4.000	0.803	0.803	858.88	1528.7	451.0	79.4	0.805	1.004	1.001	-0.003	1.003	0.002	0.005	0.26	0.13
17	-6.000	0.801	0.801	857.84	1529.5	450.5	79.4	0.805	1.004	1.001	-0.005	1.004	-0.001	0.004	0.21	-0.04
18	-8.000	0.801	0.801	857.97	1530.2	450.6	78.7	0.805	1.004	1.001	-0.006	1.004	-0.002	0.004	0.21	-0.04
19	-10.000	0.798	0.798	857.27	1530.2	448.0	78.1	0.802	1.004	1.002	-0.004	1.004	-0.001	0.004	0.20	-0.04
20	-12.000	0.798	0.798	856.24	1528.9	448.7	79.3	0.802	1.004	1.001	-0.004	1.004	0.003	0.004	0.23	0.18
21	-14.000	0.798	0.798	855.67	1533.8	449.5	79.7	0.801	1.003	1.001	-0.005	1.003	0.003	0.004	0.21	0.14

TEST PARS REGION ALPHA WIND TT RUN SURVEY DATE AEDC PROPUSTION WIND SUMMER  
 TC-084 37 3,001 0.00 0.00 -14.14 1-701 2-2-77 TRANSONIC 42

POINT	X	Y	M	W	BT	TT	PL	VHL/VH	PTL/PT	CPL	UT/VH	VT/VH	WT/VH	AATL	SWTL
5	-6.000	0.844	917.31	1516.5	0	88.6	0.861	1.005	1.001	-0.009	1.005	0.003	0.007	0.42	0.19
6	-4.000	0.851	913.09	1523.0	481.4	88.4	0.860	1.009	1.001	-0.016	1.009	0.003	0.006	0.43	0.19
7	-2.000	0.844	908.27	1524.5	478.4	88.4	0.855	1.009	1.001	-0.017	1.009	0.004	0.007	0.43	0.20
8	0.000	0.848	909.49	1522.7	478.6	88.6	0.857	1.009	1.001	-0.017	1.009	0.003	0.007	0.40	0.19
9	2.000	0.842	914.32	1522.5	475.1	88.6	0.853	1.012	1.002	-0.020	1.012	0.003	0.006	0.36	0.18
10	4.000	0.840	912.25	1523.8	474.0	88.5	0.851	1.011	1.001	-0.020	1.011	0.003	0.005	0.31	0.18
11	6.000	0.837	910.33	1523.4	472.4	88.6	0.848	1.011	1.001	-0.019	1.011	0.003	0.005	0.29	0.18
12	8.000	0.838	908.24	1523.6	472.0	88.1	0.847	1.009	1.001	-0.016	1.009	0.003	0.004	0.24	0.16
13	10.000	0.841	907.50	1519.5	473.2	87.9	0.847	1.006	1.001	-0.016	1.006	0.003	0.003	0.20	0.18
14	12.000	0.844	907.42	1520.8	476.9	88.0	0.851	1.006	1.001	-0.009	1.006	0.003	0.004	0.22	0.14
15	14.000	0.850	916.46	1519.6	484.5	88.0	0.861	1.002	1.001	-0.002	1.002	0.003	0.003	0.20	0.13
16	16.000	0.883	947.20	1518.0	499.3	88.0	0.883	0.999	1.000	0.002	0.999	0.003	0.004	0.21	0.13
17	18.000	0.906	964.16	1517.0	513.4	87.3	0.884	0.996	1.001	0.010	0.996	0.002	0.004	0.24	0.13
18	20.000	0.928	982.07	1515.6	523.9	87.7	0.921	0.993	1.002	0.016	0.993	0.002	0.005	0.26	0.14
19	22.000	0.927	976.02	1523.4	522.1	88.0	0.919	0.999	1.001	0.004	0.999	0.003	0.005	0.28	0.15
20	24.000	0.932	994.15	1526.3	529.5	88.0	0.936	1.005	1.001	-0.005	1.005	0.003	0.006	0.32	0.16

TEST PART RPX10-6 ALPA WING PT 22 P/W SUPPLY 1-702 DATE 2-2-77 AEDC PROPULSION WIND TUNNEL  
 IC-484 37 2.992 0.000 0.00 0.00

POINT	ST	M	W	WU	PT	Q	TT	ML	YML/W	P/L/P/T	CPL	UT/W	VT/W	WT/W	AATL	SPTL
22	-4.000	0.848	909.70	1519.2	477.6	84.1	0.860	1.012	1.001	-0.024	1.012	0.003	0.007	0.43	0.19	
23	-4.000	0.849	910.55	1520.9	479.6	87.5	0.855	1.005	1.001	-0.009	1.005	0.003	0.007	0.39	0.19	
24	-2.000	0.851	912.51	1519.8	480.1	87.8	0.847	1.006	1.001	-0.010	1.006	0.004	0.007	0.39	0.21	
25	0.000	0.850	911.11	1521.1	479.7	87.6	0.856	1.007	1.001	-0.011	1.007	0.004	0.006	0.36	0.20	
26	2.000	0.848	909.44	1519.3	477.8	87.4	0.856	1.006	1.002	-0.011	1.006	0.003	0.006	0.33	0.19	
27	4.000	0.845	907.55	1521.0	477.1	88.4	0.853	1.008	1.001	-0.015	1.008	0.003	0.006	0.33	0.19	
28	6.000	0.843	904.54	1524.0	475.4	88.1	0.850	1.006	1.001	-0.013	1.006	0.003	0.006	0.34	0.18	
29	8.000	0.842	904.35	1522.5	475.4	88.0	0.849	1.007	1.002	-0.010	1.006	0.003	0.006	0.33	0.18	
30	10.000	0.847	908.64	1520.2	477.5	89.0	0.852	1.005	1.001	-0.008	1.005	0.003	0.006	0.31	0.18	
31	12.000	0.854	914.60	1519.5	481.4	88.0	0.858	1.004	1.001	-0.006	1.004	0.003	0.006	0.31	0.16	
32	14.000	0.863	924.03	1520.2	487.7	88.1	0.867	1.004	1.001	-0.003	1.004	0.003	0.006	0.33	0.17	
33	16.000	0.874	934.29	1517.3	494.6	87.4	0.879	1.003	1.002	-0.002	1.003	0.003	0.006	0.30	0.15	
34	18.000	0.891	948.73	1514.6	502.4	88.0	0.893	1.002	1.002	-0.002	1.002	0.003	0.006	0.30	0.17	
35	20.000	0.898	948.31	1517.5	501.4	88.0	0.893	1.007	1.000	-0.015	1.007	0.003	0.006	0.30	0.17	
36	22.000	0.844	904.24	1527.2	477.7	88.6	0.848	1.004	1.001	-0.008	1.004	0.003	0.006	0.36	0.18	
37	24.000	0.854	915.74	1520.0	482.0	88.3	0.858	1.004	1.002	-0.003	1.004	0.003	0.006	0.34	0.16	

TEST PART RFX10-6 ALPHA 0.000 14.14 0.00 1-703

DATE 20-2-79

MIN SURVEY

ACDC PROPLUSTON WIND TUNNEL

TRANSONIC 4F

IC-084 37 3.013

POINT	XY	M	VU	BT	G	TY	WL	VHL/VH	PTI/PT	CPL	UT/VH	VT/VH	WT/VH	AATL	SWTL
36	-4.000	0.898	619.43	1524.2	483.9	88.7	0.855	0.997	0.999	0.009	0.997	0.004	0.007	0.40	0.21
37	-4.000	0.894	617.38	1523.0	483.8	88.8	0.851	1.006	1.001	-0.009	1.006	0.003	0.003	0.18	0.18
41	-7.000	0.893	619.28	1524.2	482.7	89.1	0.850	1.006	1.001	-0.011	1.006	0.003	0.003	0.15	0.16
42	0.000	0.849	611.14	1524.3	479.9	89.0	0.856	1.007	1.002	-0.012	1.007	0.003	0.003	0.14	0.14
43	2.000	0.841	605.34	1525.0	474.6	89.2	0.850	1.007	1.002	-0.011	1.007	0.002	0.003	0.15	0.11
44	6.000	0.840	602.23	1522.4	474.0	89.0	0.846	1.006	1.001	-0.010	1.006	0.002	0.002	0.13	0.12
45	6.000	0.838	601.56	1521.2	472.8	89.3	0.845	1.006	1.001	-0.010	1.006	0.002	0.002	0.14	0.12
46	8.000	0.840	602.46	1522.2	473.8	89.3	0.846	1.006	1.001	-0.009	1.006	0.002	0.002	0.12	0.10
47	10.000	0.844	606.28	1522.1	476.4	89.3	0.850	1.006	1.001	-0.009	1.005	0.002	0.002	0.16	0.11
48	12.000	0.850	611.73	1521.4	479.4	89.0	0.855	1.004	1.001	-0.007	1.004	0.002	0.002	0.12	0.13
49	14.000	0.859	620.00	1517.3	484.1	89.1	0.863	1.004	1.002	-0.003	1.004	0.002	0.002	0.12	0.11
50	16.000	0.870	630.20	1517.7	481.0	89.1	0.876	1.006	1.001	-0.010	1.006	0.002	0.001	0.08	0.12
51	18.000	0.868	610.64	1526.9	480.9	89.0	0.858	0.998	1.001	0.005	0.998	0.002	0.002	0.16	0.09
52	20.000	0.854	616.84	1520.0	483.0	87.9	0.858	1.003	1.002	-0.002	1.003	0.002	0.001	0.09	0.10
53	22.000	0.848	609.50	1521.3	478.7	87.7	0.855	1.007	1.002	-0.016	1.007	0.002	0.002	0.10	0.12
54	24.000	0.846	607.70	1518.0	476.4	87.6	0.855	1.009	1.002	-0.015	1.009	0.002	0.002	0.16	0.09

TEST PLAN REX10-6 ALPH WING XT 27 RUN SURVEY DATE 2-3-77 AEDC PROPULSION WIND TUNNEL  
 IC-486 36 2.089 0.000 14.000 0.000 1-1

POINT	VT	V	VM	VP	PT	Q	FP	ML	VML/VM	PTL/PT	CPL	UT/VM	VT/VM	WT/VM	AATL	SMTL
22	16.000	0.849	904.13	1917.7	479.4	87.3	0.854	1.009	1.001	1.001	-0.017	1.009	0.002	0.006	0.32	0.09
24	12.000	0.851	917.30	1918.7	479.6	87.4	0.856	1.009	1.000	1.000	-0.011	1.005	-0.000	-0.002	-0.09	-0.01
25	12.000	0.851	910.67	1918.1	479.1	86.7	0.856	1.006	1.001	1.001	-0.010	1.006	-0.000	-0.000	-0.02	-0.02
26	6.000	0.853	913.24	1916.7	480.0	87.1	0.858	1.005	1.001	1.001	-0.008	1.005	-0.000	-0.001	-0.06	-0.01
27	6.000	0.848	909.43	1918.6	478.2	86.8	0.853	1.004	1.002	1.002	-0.006	1.004	0.003	-0.003	-0.14	0.17
29	6.000	0.851	911.79	1918.0	479.3	87.3	0.854	1.003	1.001	1.001	-0.004	1.003	0.002	-0.000	-0.02	0.12
30	2.000	0.848	910.12	1920.0	478.8	87.3	0.857	1.008	1.001	1.001	-0.015	1.008	0.003	0.003	0.16	0.18
31	2.000	0.851	917.27	1922.3	480.5	88.1	0.856	1.005	1.000	1.000	-0.009	1.005	0.003	0.006	0.34	0.16
32	-2.000	0.848	909.73	1921.1	478.5	88.0	0.854	1.006	1.001	1.001	-0.009	1.006	0.001	0.001	0.07	0.04
33	-4.000	0.851	912.01	1920.9	480.0	88.0	0.855	1.005	1.001	1.001	-0.008	1.005	0.001	0.001	0.03	0.07
34	-6.000	0.848	908.10	1922.6	478.8	87.3	0.854	1.010	1.002	1.002	-0.016	1.010	0.000	0.006	0.32	0.03
35	-8.000	0.850	910.51	1918.9	478.7	87.3	0.856	1.002	1.001	1.001	-0.012	1.007	0.001	0.005	0.26	0.06
36	-10.000	0.851	911.46	1916.8	478.8	87.2	0.856	1.005	1.001	1.001	-0.008	1.005	0.002	0.004	0.25	0.12
37	-12.000	0.849	910.17	1919.2	478.4	87.6	0.856	1.008	1.001	1.001	-0.014	1.008	0.003	0.003	0.16	0.18
37	-12.000	0.849	910.45	1919.4	479.5	87.6	0.855	1.007	1.001	1.001	-0.011	1.007	0.001	0.003	0.16	0.06

TPST PART PERIOD-6  
 20-484 36 2.988

ALPHA WTC XT  
 0.000 14.00 0.00

DATE  
 20 2-77

DATE  
 20 2-77

DATE  
 20 2-77

DATE  
 20 2-77

DATE  
 20 2-77

DATE  
 20 2-77

POINT	ZY	V	W	WTC	XT	YT	VL	VUL/VH	PIL/PT	CPL	UT/VH	VT/VH	WT/VH	AATL	SNPL
6	14.000	0.848	909.67	1518.6	478.1	87.2	0.854	1.005	1.001	-0.007	1.005	0.002	0.005	0.31	0.09
7	12.000	0.841	911.54	1516.9	478.0	87.0	0.855	1.004	1.001	-0.007	1.004	0.004	0.003	0.19	0.21
8	10.000	0.850	910.51	1519.8	479.0	86.8	0.855	1.005	1.001	-0.010	1.005	0.006	-0.001	-0.09	0.37
9	8.000	0.847	907.84	1517.3	476.7	86.9	0.854	1.007	1.002	-0.011	1.007	0.007	-0.001	-0.08	0.38
10	6.000	0.850	910.54	1516.5	478.3	86.8	0.854	1.004	1.001	-0.005	1.004	0.006	-0.003	-0.19	0.34
11	4.000	0.848	909.67	1518.7	477.4	86.6	0.855	1.008	1.000	-0.015	1.008	0.006	-0.003	-0.15	0.35
12	2.000	0.851	911.12	1516.0	478.4	86.9	0.853	1.003	1.001	-0.003	1.003	0.003	0.002	0.09	0.17
13	0.000	0.853	913.26	1516.2	479.8	86.9	0.857	1.004	1.001	-0.007	1.004	0.003	0.005	0.30	0.15
14	-2.000	0.851	911.70	1517.6	478.0	87.0	0.857	1.007	1.001	-0.011	1.007	0.004	0.006	0.34	0.22
15	-4.000	0.851	911.64	1518.8	478.4	86.7	0.855	1.006	1.001	-0.010	1.006	0.003	0.005	0.31	0.17
16	-6.000	0.850	910.02	1518.6	478.6	86.7	0.855	1.005	1.001	-0.008	1.005	0.001	0.005	0.28	0.04
17	-8.000	0.850	910.95	1517.0	478.8	86.9	0.855	1.004	1.001	-0.007	1.005	0.001	0.005	0.27	-0.05
18	-10.000	0.850	910.73	1516.6	478.5	86.7	0.855	1.006	1.001	-0.011	1.006	0.001	0.005	0.27	0.08
19	-12.000	0.851	910.85	1517.6	478.9	86.7	0.855	1.004	1.001	-0.008	1.004	0.003	0.005	0.27	0.17
20	-14.000	0.848	909.57	1517.5	477.3	86.8	0.852	1.005	1.001	-0.008	1.005	0.003	0.005	0.26	0.14

TEST PPT MEX10-9 ALPHA WFG VT ST RUC SURVEY DATE BEOC PROPULSION WIND TUNNEL  
 TC-484 3d 2.906 0000 0.00 -14.14 1-701 20-2-77 TRANSONIC AT

POINT	X	Y	M	VM	PT	WFG	VT	ST	RUC	SURVEY	DATE	BEOC	PROPULSION	WIND	TUNNEL			
5	-6.000	0.000	0.000	943.43	1400.5	301.8	0	40.5	0.905	1.000	1.000	0.000	CPL	DT/VM	VT/VM	WT/VM	AATL	SMPL
6	-6.000	0.000	0.000	940.30	1405.5	300.6	0	40.4	0.905	1.000	1.000	-0.011	-0.011	1.000	0.003	0.007	0.39	0.17
7	-7.000	0.000	0.000	944.19	1405.5	407.7	0	90.6	0.899	1.000	1.000	-0.008	-0.008	1.005	0.003	0.006	0.36	0.17
8	7.000	0.000	0.000	947.44	1405.6	493.6	0	90.4	0.893	1.000	1.000	-0.012	-0.012	1.006	0.003	0.006	0.33	0.19
9	7.000	0.000	0.000	941.72	1492.0	495.1	0	90.4	0.888	1.000	1.000	-0.011	-0.011	1.007	0.003	0.005	0.31	0.19
10	6.000	0.000	0.000	946.10	1492.3	498.5	0	90.0	0.890	1.000	1.000	-0.004	-0.004	1.003	0.003	0.005	0.27	0.19
11	6.000	0.000	0.000	952.88	1492.9	486.4	0	89.9	0.898	1.000	1.000	-0.003	-0.003	1.005	0.003	0.004	0.23	0.19
12	9.000	0.000	0.000	963.25	1451.0	502.4	0	90.0	0.897	1.000	1.000	-0.003	-0.003	1.003	0.003	0.003	0.19	0.19
13	12.000	0.000	0.000	947.25	1485.0	493.6	0	89.8	0.892	1.000	1.000	-0.009	-0.009	1.005	0.003	0.003	0.16	0.17
14	12.000	0.000	0.000	956.84	1483.7	491.0	0	89.1	0.874	1.000	1.000	-0.012	-0.012	1.007	0.003	0.004	0.21	0.18
15	14.000	0.000	0.000	943.49	1486.0	480.6	0	89.7	0.891	1.000	1.000	0.008	0.008	0.998	0.002	0.002	0.14	0.14
16	16.000	0.000	0.000	944.78	1486.1	495.0	0	89.8	0.890	1.000	1.000	0.005	0.005	0.998	0.003	0.004	0.21	0.14
17	18.000	0.000	0.000	929.54	1467.5	497.0	0	90.7	0.872	1.000	1.000	-0.009	-0.009	1.006	0.002	0.004	0.25	0.12
18	20.000	0.000	0.000	914.44	1494.0	493.8	0	89.9	0.852	1.000	1.000	0.005	0.005	0.999	0.002	0.005	0.27	0.13
19	22.000	0.000	0.000	915.80	1493.9	495.8	0	90.1	0.870	1.000	1.000	0.009	0.009	0.996	0.002	0.005	0.28	0.10
20	24.000	0.000	0.000	943.81	1496.4	491.6	0	89.3	0.870	1.000	1.000	0.026	0.026	0.998	0.003	0.004	0.26	0.18



TEST PARS PRX10-6 ALPHA WING YF 27 PUN SURVEY AEDC PROPULSION WIND TUNNEL  
 TC-484 39 2-969 0000 WQVE 14-14 0.00 1-703

DATE 2-2-77

TRANSONIC 42

POINT	XT	M	VM	PT	O	FT	ML/VH	BTL/PT	CPL	UT/VH	V7/VH	WT/VH	AATL	SMZL
39	-4.000	0.842	977.44	1515.2	445.5	93.3	0.875	0.994	-0.036	1.012	0.004	0.008	0.18	0.20
40	-4.000	0.803	864.34	1507.6	507.2	92.2	0.904	1.002	0.001	1.001	0.002	0.003	0.18	0.12
41	-2.000	0.827	848.00	1406.3	503.4	92.2	0.881	1.001	-0.004	1.003	0.002	0.002	0.13	0.13
42	0.000	0.801	933.00	1502.2	498.5	91.9	0.894	1.002	-0.004	1.003	0.002	0.002	0.13	0.11
43	2.000	0.891	864.64	1499.1	498.9	91.1	0.895	1.002	0.000	1.002	0.002	0.002	0.10	0.11
44	4.000	0.804	945.02	1497.3	499.0	90.2	0.897	1.001	-0.002	1.002	0.002	0.002	0.11	0.12
45	6.000	0.804	871.76	1492.9	499.3	89.6	0.900	1.001	-0.002	1.002	0.002	0.002	0.13	0.10
46	8.000	0.800	888.57	1491.4	499.4	90.0	0.901	1.002	-0.002	1.002	0.002	0.002	0.10	0.09
47	10.000	0.902	950.88	1493.6	502.0	89.2	0.904	1.001	-0.001	1.001	0.002	0.002	0.10	0.10
48	12.000	0.907	866.12	1487.0	502.7	89.8	0.907	1.002	0.003	1.000	0.002	0.002	0.11	0.10
49	14.000	0.915	973.10	1492.5	506.7	90.0	0.914	1.000	0.002	0.999	0.002	0.002	0.11	0.08
50	14.000	0.922	878.94	1482.6	512.4	89.7	0.917	1.001	0.011	0.995	0.001	0.002	0.13	0.08
51	18.000	0.925	881.41	1480.1	513.5	89.1	0.923	1.000	0.004	0.998	0.002	0.002	0.12	0.10
52	20.000	0.929	885.91	1480.3	515.7	89.8	0.924	1.002	0.013	0.995	0.002	0.002	0.13	0.11
53	22.000	0.924	952.92	1493.5	515.3	89.3	0.923	1.001	0.008	0.997	0.002	0.002	0.14	0.12
54	24.000	0.901	952.77	1488.1	499.3	87.3	0.903	1.002	-0.001	1.002	0.002	0.002	0.10	0.10

TEST POINT	PART NO	ALPHA	WING	XT	YT	WIND	DATE	RUN SURVEY	AEDC PROPULSION WIND TUNNEL	TPANSONEC 4T			
21	14.000	0.897	1492.6	497.3	90.0	0.901	2-2-77	1-1	UT/YM	VT/YM	WT/YM	AATL	SMTL
22	12.000	0.897	1489.6	497.9	90.0	0.901			1.003	0.002	0.005	0.28	0.09
23	10.000	0.897	1482.6	498.2	90.0	0.900			1.003	0.001	-0.001	-0.06	0.08
24	8.000	0.896	1492.7	498.9	90.3	0.901			1.002	-0.000	-0.000	-0.01	-0.01
25	6.000	0.896	1493.0	500.2	89.6	0.901			1.002	0.000	-0.001	-0.08	0.02
26	4.000	0.897	1490.9	498.9	89.1	0.901			1.002	0.004	-0.002	-0.14	0.21
27	2.000	0.897	1488.0	499.1	89.9	0.902			1.001	0.003	-0.001	-0.04	0.14
28	0.000	0.897	1491.3	498.7	89.4	0.904			1.003	0.004	0.002	0.13	0.22
29	-2.000	0.898	1489.1	498.9	89.0	0.902			1.002	0.003	0.005	0.30	0.18
30	-4.000	0.898	1488.9	499.1	89.3	0.902			1.003	0.001	0.001	0.07	0.08
31	-6.000	0.898	1489.8	498.1	89.6	0.902			1.002	0.001	0.001	0.03	0.08
32	-8.000	0.897	1488.8	498.1	89.5	0.901			1.003	0.001	0.005	0.28	0.04
33	-10.000	0.897	1488.5	497.5	89.1	0.900			1.003	0.002	0.004	0.25	0.11
34	-12.000	0.897	1489.1	497.6	89.1	0.900			1.003	0.002	0.002	0.26	0.13
35	-14.000	0.897	1489.5	497.8	89.3	0.901			1.003	0.003	0.003	0.17	0.15
36									1.003	0.001	0.003	0.17	0.07

TEST POINT	PART 36	PART 36	MPC 14.00	VT 0.00	RUN SURVEY 1-1	DATE 2-2-77	AEDC PROPELLSION WIND TUNNEL TRANSONIC 42								
							VT/VN	UT/VN	VT/VN	WT/VN	AA/TL	SM/TL			
1	14.000	0.898	947.34	1492.2	497.4	88.9	0.902	1.003	1.001	-0.005	1.003	0.002	0.005	0.27	0.13
6	12.000	0.897	945.95	1489.8	497.4	88.7	0.900	1.002	1.002	-0.001	1.002	0.004	0.002	0.27	0.23
7	10.000	0.897	945.94	1485.8	496.7	88.6	0.900	1.002	1.002	-0.001	1.002	0.007	0.001	-0.09	0.38
8	8.000	0.900	944.94	1484.3	496.7	88.8	0.902	1.002	1.000	-0.004	1.002	0.007	-0.001	-0.09	0.38
9	6.000	0.900	944.14	1484.5	501.2	89.8	0.903	1.003	1.001	-0.005	1.003	0.006	-0.004	-0.21	0.34
10	4.000	0.898	947.40	1486.1	500.6	89.4	0.901	1.003	1.002	-0.003	1.003	0.006	-0.002	-0.14	0.36
11	2.000	0.897	944.56	1488.7	497.2	89.0	0.900	1.002	1.002	-0.001	1.002	0.003	0.001	0.06	0.19
12	0.000	0.897	944.27	1488.2	497.1	89.5	0.900	1.003	1.001	-0.003	1.003	0.003	0.001	0.28	0.18
13	-2.000	0.897	947.19	1492.0	497.1	89.0	0.901	1.003	1.001	-0.004	1.003	0.004	0.005	0.31	0.22
14	-4.000	0.898	944.37	1485.2	497.5	89.6	0.900	1.003	1.001	-0.004	1.003	0.003	0.004	0.26	0.17
15	-6.000	0.898	944.19	1493.2	497.9	89.9	0.898	1.003	1.002	-0.002	1.003	0.001	0.004	0.25	0.08
16	-8.000	0.895	945.16	1488.9	497.5	90.0	0.897	1.002	1.001	-0.001	1.002	-0.000	0.004	0.25	-0.02
17	-10.000	0.895	944.36	1493.2	498.0	90.0	0.899	1.003	1.001	-0.005	1.003	0.001	0.004	0.23	0.05
18	-12.000	0.895	944.74	1495.0	498.2	90.0	0.897	1.002	1.001	-0.004	1.002	0.003	0.004	0.23	0.19
19	-14.000	0.894	944.01	1493.8	497.5	89.6	0.896	1.002	1.001	-0.001	1.002	0.003	0.004	0.23	0.18

TEST PART	REFID-6	A/PA	M/RC	VT	ZT	NUM SURVEY	DATE	AEDC PROPULSION WIND TUNNEL							
IC-484	41	2.971	0.000	0.00	-14.14	1-701	3-2-77	TRANSONIC CT							
POINT	XT	P	VW	PT	O	YT	W/L	VML/VH	P/L/P/T	CPL	UT/VH	VT/VH	WT/VH	A/T/L	B/T/L
5	-6.000	0.625	978.51	1450.0	488.5	86.0	0.924	1.000	1.000	0.001	1.000	0.003	0.007	0.40	0.16
6	-4.000	0.605	980.63	1454.0	480.3	85.8	0.911	1.005	1.001	-0.008	1.005	0.003	0.007	0.41	0.17
7	-2.000	0.605	981.56	1448.9	483.1	85.9	0.911	1.005	1.002	-0.007	1.005	0.003	0.007	0.38	0.17
8	0.000	0.634	986.44	1447.8	503.5	85.7	0.926	0.993	1.001	0.016	0.993	0.003	0.007	0.39	0.16
9	2.000	0.643	984.68	1452.6	504.9	85.7	0.934	0.992	1.001	0.017	0.992	0.003	0.006	0.36	0.17
10	4.000	0.644	986.64	1451.8	510.2	86.1	0.936	0.992	1.002	0.019	0.992	0.003	0.006	0.33	0.19
11	5.000	0.647	987.99	1451.8	510.9	86.1	0.937	0.992	1.001	0.018	0.992	0.003	0.005	0.29	0.19
12	6.000	0.647	988.23	1451.3	511.9	85.9	0.937	0.992	1.002	0.019	0.992	0.003	0.005	0.27	0.19
13	10.000	0.641	1002.28	1448.6	512.0	85.8	0.937	0.987	1.002	0.039	0.987	0.002	0.005	0.29	0.13
14	12.000	0.642	1008.73	1450.8	516.9	85.7	0.941	0.984	1.000	0.031	0.984	0.002	0.005	0.29	0.12
15	14.000	0.644	1013.69	1448.6	519.1	85.7	0.943	0.981	1.001	0.040	0.981	0.002	0.005	0.30	0.12
16	16.000	0.644	1018.93	1448.2	519.8	85.8	0.944	0.981	1.001	0.039	0.981	0.002	0.005	0.31	0.13
17	18.000	0.660	1010.67	1452.3	518.3	86.5	0.944	0.985	1.001	0.031	0.985	0.003	0.006	0.32	0.18
18	20.000	0.664	1015.28	1452.3	521.0	86.2	0.942	0.980	1.001	0.043	0.980	0.002	0.006	0.33	0.11
19	22.000	0.648	998.85	1451.0	511.8	85.5	0.935	0.988	1.001	0.035	0.988	0.002	0.005	0.31	0.12
20	24.000	0.648	998.65	1447.4	510.9	84.8	0.936	0.989	1.002	0.036	0.989	0.002	0.006	0.33	0.11

TEST PART MPX10-4 ALPHA KING YT ZT ROW SURVEY DATE AEDC PROPULSION WIND TUNNEL  
 SC-484 41 3.001 0.000 0.00 0.00 1-702 2-2-77 4T

POINT	XT	M	Y4	PT	Y7	Z7	ROW	WT	WT/VW	PTL/WT	CPL	UT/VW	V7/VW	WT/VW	AATL	SMTL
22	6.000	0.844	607.52	1450.7	511.6	0	95.4	0.934	0.988	1.002	0.026	0.988	0.003	0.007	0.40	0.19
23	6.000	0.881	1001.59	1444.7	512.0	0	95.2	0.938	0.988	1.001	0.026	0.988	0.003	0.007	0.38	0.17
24	6.000	0.948	999.20	1447.9	510.9	0	95.4	0.937	0.990	1.001	0.022	0.990	0.003	0.007	0.38	0.17
25	6.000	0.945	985.48	1449.3	508.5	0	95.2	0.936	0.992	1.001	0.018	0.992	0.003	0.006	0.37	0.17
26	6.000	0.948	986.44	1447.0	509.0	0	95.6	0.935	0.991	1.002	0.020	0.991	0.003	0.006	0.35	0.18
27	6.000	0.947	997.34	1449.8	510.7	0	95.1	0.937	0.991	1.001	0.019	0.991	0.003	0.006	0.35	0.16
28	6.000	0.948	999.50	1449.1	511.6	0	95.2	0.937	0.990	1.001	0.023	0.990	0.003	0.006	0.33	0.15
29	6.000	0.948	1000.32	1446.0	511.0	0	95.2	0.937	0.989	1.002	0.025	0.989	0.003	0.006	0.32	0.15
30	10.000	0.944	1006.64	1449.7	515.4	0	96.0	0.941	0.986	1.000	0.027	0.986	0.003	0.006	0.34	0.15
31	12.000	0.953	1003.51	1453.2	515.2	0	95.4	0.940	0.986	1.001	0.026	0.986	0.003	0.006	0.34	0.18
32	14.000	0.954	1005.31	1447.6	514.2	0	95.4	0.940	0.987	1.002	0.030	0.987	0.003	0.006	0.34	0.15
33	16.000	0.957	1016.38	1446.3	514.6	0	95.0	0.940	0.985	1.001	0.032	0.985	0.002	0.006	0.32	0.12
34	18.000	0.951	1011.14	1449.9	519.0	0	96.0	0.943	0.984	1.001	0.033	0.984	0.002	0.006	0.35	0.13
35	20.000	0.957	1007.20	1454.3	519.4	0	95.9	0.942	0.986	1.001	0.028	0.986	0.003	0.006	0.37	0.15
36	22.000	0.958	1008.04	1447.1	515.5	0	95.5	0.941	0.985	1.003	0.036	0.985	0.002	0.006	0.35	0.12
37	24.000	0.964	1017.72	1445.6	517.6	0	95.4	0.942	0.981	1.001	0.039	0.981	0.002	0.006	0.34	0.14

TEST PART NEX1000  
 SC-484 41 2.007

ALVA WIND ST SUN SURVEY  
 14.14 0.00 1-703

DATE  
 2-3-77

AEDC PROPELLSION WIND TUNNEL  
 TRANSONIC 4T

POINT	ST	W	VM	PT	0	TT	WL	VML/WV	PTL/PT	CPL	UT/VW	VT/VW	WT/VW	AATL	AMTL
38	-4.000	0.935	986.34	1446.4	510.0	85.4	0.907	0.966	1.004	0.075	0.965	0.003	0.007	0.39	0.30
39	-4.000	0.944	992.69	1448.1	509.2	85.1	0.934	0.990	1.001	0.021	0.990	0.002	0.003	0.19	0.13
40	-2.000	0.947	987.64	1447.6	509.9	85.4	0.935	0.990	1.001	0.022	0.990	0.002	0.003	0.16	0.11
41	0.000	0.945	996.12	1450.3	510.1	85.2	0.934	0.990	1.001	0.021	0.990	0.002	0.003	0.17	0.11
42	0.000	0.945	996.06	1446.9	508.7	85.6	0.934	0.991	1.001	0.021	0.991	0.002	0.003	0.15	0.11
43	2.000	0.949	1000.54	1449.8	511.7	86.0	0.937	0.989	1.001	0.023	0.989	0.002	0.003	0.15	0.11
44	4.000	0.940	1001.41	1452.0	513.3	86.3	0.938	0.990	1.002	0.024	0.990	0.002	0.003	0.16	0.11
45	6.000	0.940	1001.07	1448.3	512.0	85.8	0.937	0.988	1.002	0.027	0.988	0.002	0.002	0.14	0.10
46	8.000	0.954	1004.62	1446.9	513.5	85.6	0.939	0.987	1.001	0.028	0.987	0.001	0.002	0.13	0.09
47	10.000	0.953	1002.97	1448.7	513.3	85.5	0.939	0.988	1.001	0.026	0.988	0.002	0.002	0.13	0.10
48	12.000	0.954	1003.95	1448.4	514.1	85.4	0.941	0.988	1.002	0.026	0.988	0.002	0.002	0.14	0.11
49	14.000	0.959	1008.93	1448.3	516.5	85.4	0.943	0.984	1.001	0.033	0.984	0.002	0.003	0.16	0.11
50	16.000	0.941	1010.34	1448.3	517.5	85.7	0.943	0.985	1.001	0.033	0.985	0.002	0.002	0.13	0.09
51	18.000	0.956	1005.98	1450.8	515.6	85.5	0.938	0.984	1.001	0.034	0.984	0.002	0.002	0.14	0.10
52	20.000	0.965	1014.41	1446.9	518.9	85.6	0.944	0.981	1.002	0.041	0.981	0.002	0.002	0.14	0.10
53	22.000	0.969	1017.84	1447.6	521.1	85.4	0.961	0.992	1.001	0.037	0.992	0.002	0.002	0.14	0.10
54	24.000	0.969	1017.84	1447.6	521.1	85.4	0.961	0.992	1.001	0.037	0.992	0.002	0.002	0.14	0.10

TEST PART PEZIC-6 ALPHA WING XT ZF RUN SURVEY DATE AEDC POPULATION WIND TUNNEL  
 TC-484 40 2.001 0.000 14.00 0.00 1.0

POINT	YF	M	WV	PT	Q	TX	ML	VMZ/V4	PTL/PT	CPL	UT/V4	VT/V4	WT/V4	AATL	SWTL
23	14.000	0.549	1002.16	1455.5	513.7	86.5	0.939	0.991	1.003	0.072	0.991	0.002	0.005	0.30	0.11
25	12.000	0.649	1001.75	1455.6	514.3	87.6	0.937	0.990	1.004	0.078	0.990	0.001	-0.001	-0.06	0.09
26	10.000	0.950	1002.79	1451.9	513.4	87.3	0.938	0.989	1.002	0.074	0.989	0.000	0.000	0.02	0.08
27	8.000	0.654	1005.91	1458.4	517.4	88.4	0.940	0.988	1.001	0.076	0.988	0.001	-0.001	-0.08	0.04
28	6.000	0.655	1005.01	1455.8	517.1	88.4	0.940	0.988	1.002	0.076	0.988	0.001	-0.001	-0.08	0.18
29	4.000	0.655	1007.40	1456.4	517.3	87.9	0.939	0.986	1.001	0.079	0.986	0.003	0.001	0.02	0.15
30	2.000	0.654	1006.44	1454.1	516.3	87.7	0.939	0.987	1.002	0.079	0.987	0.003	0.003	0.16	0.20
31	0.000	0.952	1004.41	1453.8	514.5	87.6	0.938	0.987	1.001	0.077	0.987	0.003	0.006	0.32	0.17
32	-2.000	0.953	1005.28	1452.4	514.6	87.9	0.938	0.987	1.001	0.077	0.987	0.001	0.002	0.13	0.07
33	-4.000	0.954	1006.81	1453.0	516.2	87.6	0.940	0.987	1.001	0.076	0.987	0.001	0.001	0.08	0.07
34	-6.000	0.950	1003.80	1456.2	514.9	87.5	0.938	0.989	1.002	0.075	0.989	0.001	0.006	0.33	0.06
35	-8.000	0.649	1003.48	1451.3	512.5	87.2	0.936	0.988	1.002	0.076	0.988	0.002	0.005	0.27	0.09
36	-10.000	0.649	1002.14	1452.5	514.3	87.2	0.938	0.988	1.001	0.072	0.988	0.002	0.005	0.31	0.13
37	-12.000	0.649	1000.79	1450.1	513.2	87.0	0.936	0.989	1.001	0.074	0.989	0.003	0.005	0.21	0.17
38	-14.000	0.648	1000.08	1453.1	512.2	86.4	0.937	0.990	1.001	0.072	0.990	0.001	0.004	0.21	0.08

TEST PART RPX10-A ALPS WING XT VT RWV SURVEY AEDC POPULATION WIND TUNNEL  
 TC-084 40 2,001 0.000 14.00 0.00 1-1

DATE 3-2-77

TRANSONIC 47

POINT	XT	Y	VU	PT	Q	TS	ML	WVL/VW	PFL/PT	CPL	UT/VW	VT/VW	WT/VW	ARTL	DMTL
7	14.000	0.048	1001.17	1457.8	512.8	87.8	0.936	0.989	1.002	0.024	0.989	0.002	0.005	0.29	0.11
8	12.000	0.050	1003.13	1457.2	515.0	88.2	0.936	0.989	1.001	0.023	0.989	0.004	0.003	0.19	0.22
9	10.000	0.051	1004.06	1450.7	516.5	88.6	0.936	0.989	1.001	0.024	0.989	0.006	-0.001	-0.07	0.36
10	8.000	0.040	1002.08	1458.4	515.1	88.6	0.937	0.989	1.002	0.026	0.989	0.007	-0.001	-0.03	0.38
11	6.000	0.049	1002.20	1458.2	514.8	88.3	0.937	0.989	1.002	0.024	0.990	0.006	-0.001	-0.16	0.35
12	4.000	0.048	1001.88	1456.5	513.9	87.4	0.937	0.989	1.002	0.024	0.990	0.006	-0.002	-0.12	0.38
13	2.000	0.049	1001.72	1456.6	514.1	87.9	0.937	0.989	1.001	0.023	0.989	0.003	0.002	0.16	0.39
14	0.000	0.040	1001.04	1458.7	514.8	88.1	0.937	0.989	1.001	0.023	0.989	0.003	0.005	0.30	0.20
15	-2.000	0.048	1001.72	1458.6	514.5	88.5	0.936	0.989	1.001	0.023	0.989	0.003	0.006	0.32	0.19
16	-4.000	0.048	1002.13	1461.3	515.7	88.5	0.937	0.989	1.001	0.023	0.989	0.003	0.006	0.30	0.08
17	-6.000	0.047	1000.61	1459.2	513.8	88.5	0.935	0.989	1.002	0.025	0.989	0.001	0.005	0.30	0.08
18	-8.000	0.047	1001.22	1458.6	514.2	88.5	0.936	0.989	1.001	0.023	0.989	-0.000	0.005	0.29	-0.02
19	-10.000	0.046	1000.76	1460.3	514.7	88.4	0.935	0.989	1.001	0.023	0.989	0.001	0.005	0.29	0.03
20	-12.000	0.046	999.76	1458.6	513.7	88.0	0.934	0.989	1.001	0.024	0.989	0.003	0.005	0.29	0.15
21	-14.000	0.046	998.07	1455.5	512.3	87.7	0.933	0.989	1.002	0.026	0.989	0.003	0.005	0.30	0.16

POINT	Kt	M	W	WVE	WT	ZT	SUN SURVEY	DATE	AEC PROPULATOR WIND TUNNEL				
									WT/VN	VT/VN	AATL	SUTL	
12	-6.000	0.000	1042.81	1478.5	0	0	1-201	2-2-77	0.985	0.003	0.007	0.39	0.17
13	-4.000	0.000	1043.34	1474.0	476.8	14.9	0.980	0.985	0.003	0.007	0.40	0.17	
14	-2.000	0.000	1042.54	1477.5	525.8	49.5	0.984	0.988	0.003	0.007	0.41	0.18	
15	0.000	0.000	1039.45	1476.1	526.9	49.1	0.979	0.987	0.003	0.007	0.40	0.18	
16	2.000	0.000	1041.63	1473.2	524.7	45.4	0.983	0.989	0.003	0.006	0.38	0.18	
17	4.000	0.000	1042.14	1477.9	526.9	45.3	0.984	0.990	0.003	0.006	0.35	0.19	
18	6.000	0.000	1042.42	1479.8	526.1	46.2	0.983	0.988	0.003	0.006	0.33	0.16	
19	8.000	0.000	1044.78	1479.6	528.2	46.4	0.987	0.996	0.003	0.006	0.32	0.17	
20	10.000	0.000	1045.22	1431.3	529.4	45.6	0.984	0.996	0.003	0.006	0.33	0.18	
21	12.000	0.000	1047.80	1423.0	475.1	45.4	0.988	0.983	0.003	0.006	0.32	0.18	
22	14.000	0.000	1048.41	1426.8	529.3	45.3	0.986	0.985	0.003	0.006	0.31	0.18	
23	16.000	0.000	1051.35	1426.8	531.1	45.1	0.982	0.978	0.003	0.006	0.33	0.16	
24	18.000	0.000	1051.90	1424.3	530.2	45.5	0.983	0.979	0.002	0.006	0.35	0.14	
25	20.000	0.000	1053.14	1427.2	532.1	45.1	0.986	0.980	0.003	0.006	0.35	0.15	
26	22.000	0.000	1048.73	1425.4	529.7	45.2	0.984	0.982	0.003	0.006	0.37	0.15	
27	24.000	0.000	1047.21	1424.2	527.9	45.4	0.982	0.983	0.002	0.006	0.38	0.14	

TEST PART PEX10-6  
TC-484 43 2.509

ALFA MING YV  
0.000 0.00 0.00

NON SURVEY  
1-7-72

DATE  
2-2-77

AEC PROPULSION WIND TUNNEL  
TRANSONIC CT

POINT	IT	W	VU	PT	C	ST	PL	VPL/VN	PPL/PT	CPL	UT/VN	VT/VN	WT/VN	MT/VN	AATL	SMTL
28	-6.000	1.000	1045.01	1429.3	526.0	16.0	0.978	0.983	1.002	0.037	0.983	0.003	0.007	0.30	0.10	
30	-4.000	0.998	1043.89	1430.3	524.1	46.3	0.983	0.989	1.001	0.037	0.989	0.003	0.007	0.30	0.10	
31	-2.000	0.998	1043.46	1430.4	526.0	16.1	0.981	0.986	1.001	0.030	0.986	0.003	0.006	0.37	0.17	
32	0.000	0.997	1043.03	1429.1	526.9	16.1	0.982	0.987	1.001	0.027	0.987	0.003	0.007	0.30	0.10	
33	2.000	0.998	1043.47	1429.1	527.6	16.0	0.983	0.988	1.002	0.027	0.988	0.003	0.006	0.37	0.17	
34	4.000	0.998	1043.41	1429.5	527.0	15.8	0.981	0.986	1.002	0.031	0.986	0.003	0.006	0.30	0.10	
35	6.000	0.998	1042.65	1429.5	525.1	15.4	0.980	0.985	1.002	0.032	0.985	0.003	0.006	0.38	0.17	
36	8.000	0.999	1043.36	1429.4	526.1	15.3	0.982	0.986	1.002	0.033	0.986	0.003	0.006	0.34	0.16	
37	10.000	1.000	1044.82	1429.1	527.0	15.5	0.982	0.985	1.002	0.033	0.985	0.003	0.006	0.34	0.16	
38	12.000	1.004	1049.58	1429.7	530.0	16.0	0.983	0.983	1.001	0.035	0.983	0.003	0.006	0.35	0.17	
39	14.000	1.004	1049.72	1429.9	530.0	16.2	0.983	0.983	1.001	0.037	0.983	0.003	0.006	0.36	0.17	
40	16.000	1.007	1051.84	1429.7	531.7	16.6	0.981	0.979	1.001	0.044	0.979	0.003	0.006	0.35	0.16	
41	18.000	1.008	1049.65	1428.7	530.5	16.1	0.982	0.981	1.002	0.041	0.981	0.003	0.006	0.30	0.17	
42	20.000	1.005	1049.72	1428.4	529.7	16.1	0.982	0.981	1.002	0.041	0.981	0.003	0.007	0.30	0.17	
43	22.000	1.004	1049.16	1429.3	530.4	16.4	0.982	0.984	1.001	0.035	0.984	0.003	0.006	0.37	0.16	
44	24.000	1.001	1046.00	1429.8	529.4	16.3	0.982	0.984	1.002	0.035	0.984	0.003	0.006	0.37	0.16	

TEST PART DESIGN AIFA WING YF 27 ROW SURVEY DATE 2-2-77 AEDC PROPULSION WIND TUNNEL  
 TC-464 43 3.000 0.000 10.14 0.00 1-703

POINT	X	Y	Z	M	V	W	PT	Q	TT	WL	WVL/W	PTL/PT	CPL	UT/VM	VT/VM	WT/VM	AATL	SBTL
46	-4.000	0.000	1063.80	1426.4	527.9	0.977	0.982	0.982	0.982	0.982	0.982	0.982	0.982	0.982	0.982	0.982	0.982	0.982
47	-4.000	0.000	1049.71	1431.5	526.0	0.982	0.986	0.986	0.986	0.986	0.986	0.986	0.986	0.986	0.986	0.986	0.986	0.986
48	-2.000	0.000	1049.87	1428.2	526.0	0.981	0.986	0.986	0.986	0.986	0.986	0.986	0.986	0.986	0.986	0.986	0.986	0.986
49	0.000	0.000	1048.16	1428.4	527.6	0.981	0.985	0.985	0.985	0.985	0.985	0.985	0.985	0.985	0.985	0.985	0.985	0.985
50	2.000	0.000	1049.60	1428.2	528.3	0.983	0.988	0.988	0.988	0.988	0.988	0.988	0.988	0.988	0.988	0.988	0.988	0.988
51	4.000	0.000	1049.94	1428.1	527.1	0.983	0.988	0.988	0.988	0.988	0.988	0.988	0.988	0.988	0.988	0.988	0.988	0.988
52	4.000	0.000	1043.45	1428.0	527.1	0.980	0.985	0.985	0.985	0.985	0.985	0.985	0.985	0.985	0.985	0.985	0.985	0.985
53	6.000	1.000	1045.53	1428.4	528.1	0.983	0.986	0.986	0.986	0.986	0.986	0.986	0.986	0.986	0.986	0.986	0.986	0.986
54	10.000	1.000	1045.45	1428.0	528.5	0.982	0.985	0.985	0.985	0.985	0.985	0.985	0.985	0.985	0.985	0.985	0.985	0.985
55	12.000	1.000	1047.30	1428.5	529.4	0.981	0.982	0.982	0.982	0.982	0.982	0.982	0.982	0.982	0.982	0.982	0.982	0.982
56	14.000	1.000	1047.56	1427.9	529.3	0.982	0.982	0.982	0.982	0.982	0.982	0.982	0.982	0.982	0.982	0.982	0.982	0.982
57	14.000	1.000	1050.55	1427.7	532.2	0.983	0.983	0.983	0.983	0.983	0.983	0.983	0.983	0.983	0.983	0.983	0.983	0.983
58	14.000	1.000	1052.43	1428.0	530.9	0.985	0.985	0.985	0.985	0.985	0.985	0.985	0.985	0.985	0.985	0.985	0.985	0.985
59	20.000	1.000	1052.43	1428.1	530.9	0.984	0.980	0.980	0.980	0.980	0.980	0.980	0.980	0.980	0.980	0.980	0.980	0.980
60	22.000	1.011	1054.80	1428.7	533.3	0.986	0.980	0.980	0.980	0.980	0.980	0.980	0.980	0.980	0.980	0.980	0.980	0.980
61	24.000	1.010	1054.26	1429.6	533.2	0.985	0.979	0.979	0.979	0.979	0.979	0.979	0.979	0.979	0.979	0.979	0.979	0.979

POINT	TEST	PART	PRX10-6	ALFA	WING	KT	HT	WING	HT	ST	WT	WT/V4	PTL/WT	CPL	UT/V4	VT/V4	WT/V4	AATL	SMTL
21	14.000	0.997	1063.34	1437.5	528.7	0.00	0.003	0.987	0.997	0.021	0.987	0.002	0.006	0.006	0.987	0.006	0.006	0.006	0.006
22	12.000	0.997	1062.67	1424.7	525.7	89.9	0.990	0.986	1.004	0.034	0.986	0.001	-0.001	0.986	0.001	-0.001	-0.001	-0.001	0.006
23	14.000	0.997	1063.34	1425.0	526.8	85.3	0.981	0.985	1.002	0.033	0.985	0.000	0.000	0.985	0.000	0.000	0.000	0.000	0.006
24	14.000	0.997	1063.34	1425.0	527.8	85.4	0.983	0.986	1.001	0.029	0.986	0.001	0.000	0.986	0.001	0.000	0.001	0.001	0.006
25	14.000	0.997	1063.34	1425.0	526.0	85.2	0.980	0.985	1.002	0.033	0.985	0.003	-0.001	0.985	0.003	-0.001	-0.001	-0.001	0.006
26	14.000	0.997	1063.34	1425.0	527.5	85.3	0.984	0.986	1.001	0.030	0.986	0.003	0.001	0.986	0.003	0.001	0.001	0.001	0.006
27	14.000	0.997	1063.34	1425.0	527.5	85.3	0.981	0.985	1.001	0.032	0.985	0.006	0.001	0.985	0.006	0.001	0.001	0.001	0.006
28	14.000	0.997	1063.34	1425.0	527.5	85.3	0.981	0.985	1.001	0.032	0.985	0.006	0.001	0.985	0.006	0.001	0.001	0.001	0.006
29	14.000	0.997	1063.34	1425.0	527.5	85.3	0.983	0.986	1.002	0.030	0.986	0.003	0.001	0.986	0.003	0.001	0.001	0.001	0.006
30	14.000	0.997	1063.34	1425.0	526.9	85.4	0.981	0.985	1.002	0.032	0.985	0.003	0.001	0.985	0.003	0.001	0.001	0.001	0.006
31	14.000	0.997	1063.34	1425.0	527.1	85.2	0.982	0.986	1.000	0.030	0.986	0.001	0.001	0.986	0.001	0.001	0.001	0.001	0.006
32	14.000	0.997	1063.34	1425.0	527.3	85.3	0.983	0.986	1.001	0.029	0.986	0.001	0.001	0.986	0.001	0.001	0.001	0.001	0.006
33	14.000	0.997	1063.34	1425.0	527.3	85.3	0.983	0.986	1.001	0.029	0.986	0.001	0.001	0.986	0.001	0.001	0.001	0.001	0.006
34	14.000	0.997	1063.34	1425.0	526.5	85.3	0.982	0.986	1.002	0.030	0.986	0.002	0.001	0.986	0.002	0.001	0.001	0.001	0.006
35	14.000	0.997	1063.34	1425.0	526.9	85.4	0.982	0.987	1.000	0.027	0.987	0.003	0.001	0.987	0.003	0.001	0.001	0.001	0.006
36	14.000	0.997	1063.34	1425.0	526.7	85.4	0.982	0.987	1.002	0.029	0.987	0.001	0.001	0.987	0.001	0.001	0.001	0.001	0.006

TEST PART REX10-A  
 3C-484 42 1.004

ALPHA WING XT  
 0.000 14.00 0.00

NUM SURVEY  
 1-1

DATE  
 3-2-77

AEDC PROPLUSTON WIND TUNNEL  
 TRANSONIC 4T

POINT	ZT	V	VN	PT	O	YT	WT	VVL/VN	PTL/PT	CPL	UT/VN	VT/VN	WT/VN	AATL	SBTL
5	14.000	1.004	1045.64	1428.3	328.6	95.5	0.985	0.987	1.001	0.020	0.987	0.002	0.005	0.21	0.13
6	12.000	1.004	1044.53	1427.8	327.0	95.4	0.982	0.985	1.001	0.031	0.985	0.004	0.004	0.21	0.23
7	10.000	1.000	1044.04	1425.4	326.6	95.8	0.983	0.987	1.002	0.029	0.987	0.006	0.000	0.01	0.33
8	8.000	1.000	1045.60	1428.0	328.1	96.2	0.984	0.987	1.002	0.020	0.987	0.006	0.000	0.00	0.37
9	6.000	1.000	1045.75	1430.8	329.2	96.3	0.983	0.986	1.001	0.031	0.986	0.006	-0.002	-0.12	0.24
10	4.000	0.999	1044.44	1428.8	327.9	96.1	0.983	0.986	1.001	0.029	0.986	0.006	-0.001	-0.06	0.39
11	2.000	0.998	1043.13	1428.0	327.1	95.7	0.983	0.986	1.002	0.027	0.988	0.003	0.003	0.18	0.19
12	0.000	0.998	1043.53	1426.5	326.0	95.4	0.981	0.985	1.001	0.031	0.985	0.003	0.005	0.23	0.17
13	-2.000	0.998	1043.14	1426.0	326.5	95.4	0.982	0.986	1.001	0.029	0.986	0.004	0.006	0.24	0.23
14	-4.000	0.998	1043.82	1427.8	327.5	95.4	0.983	0.986	1.001	0.029	0.986	0.003	0.006	0.24	0.17
15	-6.000	0.997	1042.24	1426.7	326.3	95.4	0.980	0.986	1.001	0.031	0.986	0.001	0.004	0.22	0.06
16	-8.000	0.998	1043.85	1426.0	326.6	95.5	0.982	0.986	1.002	0.020	0.986	0.000	0.005	0.28	0.02
17	-10.000	0.998	1043.61	1424.7	326.9	95.6	0.982	0.986	1.002	0.030	0.986	0.001	0.005	0.22	0.08
18	-12.000	0.999	1043.94	1426.6	327.0	95.4	0.979	0.984	1.001	0.024	0.984	0.003	0.006	0.24	0.19
19	-14.000	0.998	1042.73	1426.0	326.3	95.4	0.982	0.987	1.001	0.029	0.987	0.003	0.006	0.24	0.17

TEST PART PEX10-6 STVS WING YF ZF RWY SURVEY DATE AEDC PROPLUSTON WIND TUNNEL  
 JC-484 45 3.006 0000 KCWE 0.00 -14.14 1-701 2-3-77 TRANSDUC 02

POINT	X	Y	Z	W	Vx	Vy	Vz	PL	VHL/VH	PTL/PT	CPL	UT/VH	VT/VH	WT/VH	ARTL	SMTL
5	-0.000	1.024	1062.07	1448.2	543.9	95.3	1.014	0.976	1.002	0.050	0.976	0.002	0.007	0.42	0.09	
6	-4.000	1.024	1076.78	1449.0	546.9	95.5	0.997	0.977	1.000	0.046	0.977	0.002	0.007	0.42	0.09	
7	-2.000	1.020	1073.03	1450.4	547.1	95.4	0.991	0.976	1.001	0.049	0.976	0.002	0.006	0.38	0.10	
8	0.000	1.021	1073.14	1450.9	545.9	95.5	0.992	0.976	1.002	0.052	0.976	0.002	0.006	0.34	0.10	
9	2.000	1.016	1071.05	1451.6	545.2	95.3	0.983	0.978	1.000	0.043	0.978	0.002	0.006	0.35	0.10	
10	4.000	1.014	1067.27	1451.4	544.0	95.4	0.984	0.983	1.000	0.034	0.983	0.002	0.006	0.38	0.10	
11	6.000	1.018	1066.77	1451.2	544.5	95.6	0.961	0.978	1.001	0.045	0.978	0.001	0.006	0.36	0.10	
12	8.000	1.024	1075.97	1451.7	547.5	95.5	0.999	0.979	1.001	0.043	0.979	0.001	0.006	0.31	0.09	
13	10.000	1.032	1082.06	1451.3	550.5	95.2	1.002	0.976	1.001	0.049	0.976	0.001	0.006	0.34	0.09	
14	12.000	1.041	1088.32	1449.2	553.7	95.4	1.012	0.977	1.002	0.049	0.977	0.001	0.006	0.33	0.09	
15	14.000	1.037	1086.72	1452.2	552.9	95.4	1.011	0.979	1.000	0.042	0.979	0.002	0.006	0.37	0.09	
16	16.000	1.043	1091.91	1453.4	555.9	95.3	1.007	0.971	1.000	0.058	0.971	0.001	0.006	0.37	0.09	
17	18.000	1.051	1098.64	1451.4	559.0	95.6	1.026	0.979	1.001	0.044	0.979	0.001	0.006	0.36	0.09	
18	20.000	1.040	1089.93	1449.4	552.9	95.7	1.001	0.969	1.000	0.062	0.969	0.002	0.006	0.31	0.08	
19	22.000	1.033	1082.98	1455.1	552.1	95.7	1.004	0.977	1.001	0.047	0.977	0.001	0.006	0.31	0.08	
20	24.000	1.027	1077.48	1453.7	549.1	95.5	0.993	0.973	1.000	0.059	0.973	0.001	0.006	0.33	0.07	

TEST PART REX10-4 ALFA KING VP ZT AIR SURVEY DATE AEDC POPULATION WIND TURNED  
 TC-404 45 3.003 0.000 0.00 1-702 2-2-77 2-2-77 TRANSDUC 45

POINT	XT	Y	VU	PT	O	TT	ML	VNL/VH	PTL/PT	CPL	UT/VH	VT/VH	WT/VH	ARTL	SMPL
22	-6.000	1.024	1076.00	1453.4	947.8	95.4	0.997	0.979	0.999	0.051	0.979	0.002	0.007	0.31	0.10
23	-4.000	1.020	1071.00	1452.1	945.6	95.6	0.998	0.974	1.002	0.053	0.974	0.003	0.007	0.38	0.20
24	-2.000	1.026	1075.00	1452.7	947.9	95.7	0.998	0.970	1.001	0.050	0.970	0.002	0.006	0.36	0.10
25	0.000	1.022	1073.78	1451.4	946.3	95.6	0.990	0.974	1.000	0.053	0.974	0.002	0.005	0.33	0.06
26	2.000	1.021	1072.77	1456.7	947.8	95.7	0.994	0.978	1.001	0.045	0.978	0.002	0.006	0.33	0.12
27	4.000	1.021	1077.56	1451.3	948.3	95.3	0.996	0.975	1.001	0.052	0.975	0.002	0.005	0.32	0.13
28	6.000	1.031	1081.72	1447.1	948.5	95.1	1.007	0.981	1.002	0.041	0.981	0.002	0.005	0.30	0.18
29	8.000	1.028	1078.95	1450.0	948.4	95.4	1.006	0.982	1.001	0.037	0.982	0.002	0.005	0.33	0.13
30	10.000	1.028	1078.64	1452.7	948.2	95.6	1.007	0.983	1.001	0.035	0.983	0.002	0.005	0.30	0.09
31	12.000	1.032	1082.14	1451.3	948.5	95.2	1.001	0.975	1.001	0.053	0.975	0.002	0.006	0.28	0.11
32	14.000	1.033	1083.41	1450.9	950.8	95.6	1.000	0.973	1.001	0.055	0.973	0.002	0.005	0.31	0.12
33	16.000	1.031	1081.38	1451.3	950.1	95.4	0.995	0.971	1.001	0.060	0.971	0.002	0.005	0.32	0.11
34	18.000	1.033	1083.04	1450.9	948.9	95.2	0.997	0.971	1.002	0.061	0.971	0.002	0.005	0.32	0.12
35	20.000	1.044	1082.07	1448.2	954.0	95.1	1.007	0.971	1.002	0.061	0.971	0.002	0.006	0.34	0.11
36	22.000	1.049	1086.30	1449.8	956.3	95.7	1.014	0.973	1.002	0.057	0.973	0.001	0.006	0.34	0.07
37	24.000	1.054	1075.57	1455.5	948.5	96.1	0.996	0.978	1.001	0.046	0.978	0.001	0.005	0.36	0.08

TEST 6894 BRX10-6 ALPHA WING YR ZT RUN SURVEY DATE AEDC PROPLUSION WIND TUNNEL  
 RC-004 49 3.002 0.000 WQVF 14.14 0.00 1-703 20 2-77 AEDC TRANSONIC 47

POINT	XT	Y	VU	PI	O	TT	WL	VVL/VH	PTL/PT	CPL	UT/VH	VT/VH	WT/VH	AATL	SWTL
30	06.000	1.022	1073.33	1453.8	547.1	95.4	1.006	0.986	0.989	0.028	0.986	0.002	0.006	0.35	0.11
31	06.000	1.024	1075.23	1450.8	547.1	95.3	0.987	0.970	1.002	0.053	0.970	0.001	0.002	0.14	0.08
40	09.000	1.025	1075.79	1449.8	546.8	95.3	0.989	0.971	1.001	0.060	0.971	0.001	0.003	0.16	0.07
41	09.000	1.024	1075.03	1451.6	547.4	95.7	0.985	0.976	1.002	0.051	0.976	0.001	0.003	0.16	0.08
42	09.000	1.024	1075.26	1452.0	547.4	95.4	0.984	0.975	1.002	0.052	0.975	0.001	0.002	0.14	0.08
43	09.000	1.024	1076.70	1453.3	548.6	95.3	0.987	0.976	1.001	0.049	0.976	0.001	0.002	0.11	0.08
44	09.000	1.029	1079.32	1450.0	548.6	95.8	0.990	0.975	1.002	0.054	0.975	0.001	0.002	0.13	0.06
45	09.000	1.034	1082.00	1452.2	549.2	95.5	1.006	0.975	1.001	0.052	0.975	0.001	0.002	0.14	0.06
46	09.000	1.044	1082.78	1453.2	556.1	95.6	1.016	0.978	1.000	0.045	0.978	0.001	0.002	0.13	0.06
47	10.000	1.047	1095.03	1451.8	546.7	95.2	1.020	0.978	1.002	0.045	0.978	0.000	0.002	0.11	0.02
48	10.000	1.045	1093.76	1447.2	544.2	96.0	1.023	0.983	1.002	0.036	0.983	0.001	0.002	0.12	0.04
50	10.000	1.021	1073.44	1454.2	549.9	96.2	0.988	0.981	1.000	0.038	0.981	0.001	0.002	0.13	0.06
51	10.000	1.017	1049.88	1468.7	547.0	95.9	0.986	0.974	1.000	0.052	0.974	0.002	0.003	0.16	0.14
52	20.000	1.054	1101.44	1482.5	549.7	95.8	1.022	0.975	1.003	0.054	0.975	0.000	0.002	0.12	0.02
53	20.000	1.050	1098.84	1450.0	537.3	96.2	1.014	0.971	1.000	0.058	0.971	0.001	0.002	0.14	0.07
54	20.000	1.019	1071.89	1457.5	547.4	96.3	0.991	0.977	1.001	0.048	0.977	0.002	0.003	0.17	0.13

TEST PAPT RFX10-6 AFDC PROPELLSION WIND TUNNEL  
 IC-484 44 2,993 0.000 MING XT 37 P/W SURVEY 2- 2-77  
 0.000 WDCZ 14.00 0.00 1. 1

POINT	YT	W	VW	PT	0	TP	YL	VM/VW	FTL/PT	CPL	UT/VW	VT/VW	WT/VW	AATL	SMTL
22	14.000	1.023	1071.09	1446.0	544.9	94.4	0.994	0.976	1.004	0.054	0.976	0.001	0.004	0.24	0.05
24	12.000	1.025	1075.52	1452.1	547.8	94.4	1.001	0.980	0.999	0.039	0.980	-0.001	-0.000	-0.03	-0.04
25	10.000	1.023	1074.12	1448.2	545.5	95.1	0.989	0.972	1.002	0.059	0.972	-0.001	0.001	0.05	-0.04
26	8.000	1.021	1078.51	1446.9	548.3	95.1	0.993	0.971	1.001	0.059	0.971	-0.000	-0.001	-0.06	-0.02
27	6.000	1.020	1079.72	1451.4	549.6	94.8	0.993	0.972	1.002	0.059	0.972	0.002	-0.001	-0.07	0.10
28	4.000	1.025	1075.38	1446.9	546.8	95.1	0.990	0.972	1.002	0.050	0.972	0.001	0.001	0.08	0.08
29	2.000	1.025	1075.48	1450.1	547.1	95.0	0.991	0.972	1.001	0.057	0.972	0.002	0.003	0.16	0.14
30	0.000	1.021	1075.98	1450.9	547.4	95.3	0.989	0.971	1.001	0.061	0.971	0.002	0.005	0.31	0.12
31	-2.000	1.024	1074.38	1451.2	547.0	94.6	0.989	0.971	1.002	0.060	0.971	0.000	0.002	0.10	0.02
32	-4.000	1.022	1073.18	1445.6	544.2	94.6	0.985	0.970	1.002	0.064	0.970	0.000	0.001	0.09	0.02
33	-6.000	1.022	1073.07	1449.8	545.5	95.3	0.989	0.973	1.003	0.058	0.973	-0.000	0.006	0.32	-0.09
34	-8.000	1.024	1075.72	1451.9	548.0	95.4	0.989	0.969	1.001	0.063	0.969	0.001	0.005	0.28	0.05
35	-10.000	1.025	1075.64	1443.0	544.7	95.2	0.987	0.969	1.003	0.066	0.969	0.001	0.005	0.29	0.05
36	-12.000	1.025	1076.57	1453.1	549.6	95.0	0.987	0.975	1.000	0.050	0.975	0.002	0.004	0.21	0.13
37	-14.000	1.024	1074.65	1446.5	546.0	95.2	0.990	0.972	1.002	0.059	0.972	0.000	0.004	0.21	0.02

TEST PATT MFX10-A  
TC-484 44 3.006

DATE  
2-2-77

ROW SURVEY  
1-1

ALPHA MING XT  
0.000 14.00 0.00

AEDC PROPELLSION WIND TUNNEL  
TRANSDUCIC 43

POINT	IT	M	VV	PT	Q	TT	%L	VM/L/VW	PIL/PT	CPD	UT/VW	VT/VW	WT/VW	MT/VW	ABTL	SWTL
6	14.000	1.074	1074.20	1448.5	546.0	93.7	0.985	0.975	1.000	0.050	0.975	0.001	0.004	0.26	0.07	
7	12.000	1.076	1076.04	1449.5	548.3	94.2	0.986	0.974	0.999	0.051	0.974	0.003	0.002	0.11	0.17	
8	10.000	1.077	1076.54	1448.7	547.6	93.7	0.985	0.974	1.001	0.054	0.974	0.005	-0.001	-0.07	0.20	
9	8.000	1.074	1074.70	1443.5	445.1	93.9	0.990	0.970	1.001	0.061	0.970	0.005	-0.001	-0.05	0.29	
10	6.000	1.074	1074.20	1444.5	544.9	94.2	0.992	0.972	1.001	0.057	0.972	0.004	-0.002	-0.16	0.26	
11	4.000	1.074	1074.44	1449.4	547.2	93.9	0.991	0.971	1.002	0.050	0.971	0.005	-0.002	-0.09	0.27	
12	2.000	1.073	1073.04	1447.0	545.1	94.0	0.988	0.970	1.001	0.052	0.970	0.002	0.002	0.12	0.16	
13	0.000	1.071	1071.18	1445.1	543.6	93.7	0.987	0.972	1.002	0.059	0.972	0.002	0.005	0.31	0.10	
14	-2.000	1.074	1074.20	1449.6	546.5	94.2	0.990	0.969	1.000	0.052	0.969	0.002	0.005	0.31	0.13	
15	-4.000	1.074	1074.15	1448.1	546.7	94.6	0.988	0.969	1.001	0.053	0.969	0.002	0.005	0.32	0.13	
16	-6.000	1.074	1074.65	1448.0	546.4	94.5	0.988	0.970	1.001	0.051	0.970	-0.001	0.005	0.31	-0.06	
17	-8.000	1.074	1074.46	1447.6	544.7	94.5	0.988	0.972	1.001	0.059	0.972	-0.001	0.005	0.31	-0.06	
18	-10.000	1.072	1071.97	1447.6	544.7	94.2	0.989	0.974	1.002	0.055	0.974	-0.001	0.005	0.30	-0.06	
19	-12.000	1.071	1071.09	1448.0	544.5	94.1	0.988	0.974	1.001	0.055	0.974	-0.002	0.005	0.30	-0.06	
20	-14.000	1.072	1072.74	1446.9	544.1	94.0	0.986	0.970	1.002	0.063	0.970	0.001	0.005	0.33	0.09	

TEST POINT PERIOD ALPHA WIND YR ST SWM ANVET DATE AEDC PROPLUSTON WIND TUNNEL  
 TC-484 47 2.998 0.00 0.00 1-702 2-3-77 TRANSONIC 4F

POINT	KT	M	W4	W5	Q	ST	W1	W1/AVM	PTL/PT	CPL	UT/VM	VT/VM	WT/VM	AATL	SWTL
22	-6.000	1.049	1066.90	1449.0	554.7	95.8	1.035	0.990	0.999	0.018	0.990	0.001	0.007	0.40	0.07
23	-4.000	1.045	1064.08	1443.8	553.0	95.8	1.070	0.990	1.001	0.042	0.980	0.002	0.005	0.31	0.13
24	-2.000	1.051	1068.03	1447.7	556.5	96.1	1.018	0.974	1.000	0.052	0.974	0.002	0.006	0.35	0.08
25	0.000	1.047	1066.48	1445.5	554.5	96.3	1.018	0.977	1.002	0.049	0.977	0.001	0.006	0.37	0.07
26	2.000	1.050	1067.87	1443.7	554.8	95.5	1.013	0.970	1.001	0.061	0.970	0.001	0.006	0.36	0.08
27	4.000	1.052	1069.70	1445.3	556.1	95.8	1.022	0.976	1.001	0.069	0.976	0.001	0.006	0.34	0.08
28	6.000	1.054	1072.34	1448.5	558.9	95.9	1.026	0.974	0.999	0.044	0.974	0.002	0.005	0.32	0.11
29	8.000	1.057	1074.32	1449.7	559.0	95.7	1.034	0.982	1.001	0.038	0.982	0.002	0.005	0.32	0.10
30	10.000	1.055	1077.74	1449.3	554.6	96.0	1.027	0.978	1.001	0.045	0.978	0.002	0.005	0.31	0.10
31	12.000	1.057	1103.73	1449.7	559.2	95.0	1.034	0.993	1.001	0.035	0.993	0.002	0.005	0.29	0.12
32	14.000	1.047	1088.84	1447.0	556.8	95.6	1.031	0.981	1.001	0.034	0.983	0.002	0.005	0.30	0.11
33	16.000	1.053	1109.84	1448.0	560.7	95.9	1.042	0.984	1.000	0.033	0.984	0.002	0.006	0.32	0.11
34	18.000	1.057	1104.65	1444.6	547.8	96.3	1.021	0.971	1.000	0.057	0.971	0.002	0.006	0.38	0.12
35	20.000	1.068	1114.12	1448.1	563.3	96.3	1.043	0.981	1.001	0.040	0.981	0.002	0.007	0.38	0.11
36	22.000	1.060	1106.47	1444.5	549.7	96.0	1.033	0.979	1.001	0.044	0.979	0.002	0.006	0.36	0.11
37	24.000	1.058	1105.34	1446.0	550.7	96.3	1.021	0.971	1.000	0.059	0.971	0.002	0.006	0.37	0.08

TEST PART REFID-0 SLPA WING TT ST DMV SUPVET DATE AEDC PROPULSION WIND TUNNEL TRANSONIC 47

30-2-97

1-293

0.00

NOV 14, 1954

1107.02

1107.02

1107.02

1107.02

POINT	WT	W	VM	WT	Q	ST	W	VM/VN	PTL/PT	CPL	UT/VN	WT/VN	AATL	SMTL
39	2.000	1.066	1097.13	1449.3	563.9	95.9	1.035	0.991	0.998	0.015	0.991	0.003	0.24	0.15
40	2.000	1.049	1097.13	1449.5	565.0	95.9	1.019	0.977	1.001	0.048	0.977	0.001	0.14	0.03
41	2.000	1.049	1097.30	1446.8	554.6	95.4	1.017	0.975	1.001	0.052	0.975	0.001	0.14	0.04
42	2.000	1.049	1097.44	1443.0	556.7	95.7	1.016	0.973	1.001	0.055	0.973	0.001	0.18	0.03
43	2.000	1.053	1099.08	1446.1	556.2	95.6	1.022	0.976	1.000	0.047	0.976	0.001	0.18	0.07
44	2.000	1.050	1098.62	1446.6	555.3	96.0	1.021	0.977	1.002	0.048	0.977	0.002	0.14	0.10
45	2.000	1.055	1101.06	1448.4	556.4	95.9	1.023	0.977	1.001	0.048	0.977	0.001	0.15	0.08
46	2.000	1.054	1101.90	1446.4	557.5	96.0	1.028	0.978	1.001	0.045	0.978	0.001	0.15	0.06
47	2.000	1.053	1100.19	1446.1	556.7	95.5	1.027	0.980	1.000	0.045	0.980	0.001	0.14	0.07
48	2.000	1.057	1100.31	1443.3	557.1	95.9	1.036	0.984	1.001	0.034	0.984	0.001	0.12	0.06
49	2.000	1.058	1104.43	1446.8	557.2	95.6	1.030	0.978	1.000	0.044	0.978	0.001	0.11	0.07
50	2.000	1.058	1104.53	1442.6	557.3	95.7	1.036	0.983	1.003	0.037	0.983	0.002	0.12	0.08
51	2.000	1.056	1103.01	1444.9	557.4	95.8	1.033	0.982	1.002	0.038	0.982	0.003	0.13	0.02
52	2.000	1.053	1101.08	1446.4	556.2	95.1	1.022	0.975	1.002	0.052	0.975	0.001	0.13	0.05
53	2.000	1.058	1105.27	1447.1	559.1	96.1	1.029	0.977	1.001	0.048	0.977	0.001	0.14	0.05
54	2.000	1.055	1107.02	1445.8	557.5	96.4	1.022	0.974	1.001	0.053	0.974	0.001	0.13	0.08

TEST PART DEX10-6 ALPI WING YF 2P RHM SURVEY DATE AEDC PROPLUSTON WIND TUNNEL  
 3C-484 47 2.000 0.00 -14.16 1.701 2-3-77 TRANSONIC 4F

POINT	XT	Y	VM	WT	PT	Q	TT	WL	VWL/VH	PTL/PT	CPL	DT/VH	VT/VH	WT/VH	ARTL	SUTL
5	-4.000	1.057	1089.46	1438.0	553.4	95.6	1.023	0.977	1.001	0.047	0.977	0.001	0.007	0.40	0.07	
6	-4.000	1.057	1089.99	1448.9	553.8	96.1	1.027	0.981	1.001	0.038	0.981	0.002	0.007	0.41	0.11	
7	-7.000	1.044	1088.72	1448.7	550.6	96.5	1.015	0.975	1.001	0.051	0.975	0.002	0.007	0.40	0.08	
8	0.000	1.046	1089.81	1448.6	550.5	95.9	1.008	0.974	1.001	0.055	0.974	0.001	0.007	0.39	0.06	
9	2.000	1.044	1093.43	1444.1	553.4	96.0	1.017	0.978	1.000	0.044	0.978	0.002	0.006	0.35	0.09	
10	4.000	1.051	1088.43	1448.1	552.1	96.0	1.027	0.981	1.000	0.038	0.981	0.002	0.005	0.32	0.09	
11	6.000	1.058	1088.74	1444.9	552.2	96.2	1.021	0.978	1.002	0.047	0.978	0.002	0.005	0.30	0.09	
12	8.000	1.058	1102.81	1445.0	549.2	96.2	1.032	0.982	1.000	0.037	0.982	0.001	0.005	0.29	0.07	
13	10.000	1.044	1103.01	1444.2	547.8	96.1	1.036	0.985	1.001	0.032	0.985	0.002	0.005	0.32	0.10	
14	12.000	1.051	1088.93	1447.1	550.3	96.1	1.017	0.974	1.000	0.052	0.974	0.001	0.006	0.34	0.07	
15	14.000	1.074	1108.14	1447.7	540.7	96.0	1.037	0.981	1.001	0.040	0.981	0.002	0.006	0.34	0.08	
16	16.000	1.074	1118.37	1444.7	543.9	96.1	1.042	0.976	1.000	0.049	0.976	0.001	0.006	0.36	0.08	
17	18.000	1.049	1112.44	1444.7	542.7	96.0	1.043	0.982	1.000	0.016	0.982	0.002	0.006	0.37	0.09	
18	20.000	1.056	1103.72	1448.7	547.4	96.3	1.024	0.975	1.002	0.053	0.975	0.001	0.006	0.37	0.07	
19	22.000	1.058	1104.99	1447.9	549.1	96.3	1.032	0.980	1.001	0.042	0.980	0.001	0.007	0.40	0.07	
20	24.000	1.054	1101.48	1446.3	552.1	96.1	1.024	0.977	1.001	0.048	0.977	0.001	0.006	0.38	0.08	



TEST IC-684	PART 46	REXID-A 2.997	ALFA 0.000	WING SPAN 14.00	XT 0	YT 0	ZZ 0	TT 95.0	MM SURVEY 3-1	ML 1.020	VM/VW 0.977	PTL/DT 1.002	CPL 0.048	UT/VW 0.977	DATE 20-2-77	AEDC PROPULSION WIND TUNNEL TRANSONIC 02			
																VT/VW	WT/VW	ABTL	SBTL
6	14.000	1.046	1097.44	1446.2	554.6	95.0	1.020	0.977	0.048	0.977	0.001	0.004	0.23	0.03					
7	12.000	1.052	1099.47	1446.8	554.9	95.0	1.022	0.977	0.047	0.977	0.003	0.002	0.12	0.18					
8	10.000	1.053	1101.20	1449.0	558.1	96.0	1.028	0.980	0.039	0.980	0.004	-0.001	-0.05	0.28					
9	9.000	1.052	1098.93	1448.4	557.4	96.0	1.024	0.980	0.041	0.980	0.005	-0.001	-0.04	0.27					
10	8.000	1.050	1097.84	1445.0	545.1	95.0	1.023	0.979	0.040	0.979	0.004	-0.003	-0.18	0.28					
11	7.000	1.048	1096.65	1444.4	544.3	94.0	1.027	0.983	0.036	0.983	0.005	-0.002	-0.10	0.27					
12	6.000	1.047	1095.72	1445.1	544.7	95.0	1.024	0.982	0.039	0.982	0.002	0.002	0.09	0.14					
13	5.000	1.044	1094.34	1444.3	543.3	95.0	1.024	0.983	0.037	0.983	0.002	0.005	0.27	0.11					
14	4.000	1.044	1092.70	1443.2	542.0	96.0	1.019	0.980	0.041	0.980	0.003	0.006	0.23	0.19					
15	3.000	1.045	1107.54	1446.0	557.4	96.3	1.031	0.981	0.039	0.981	0.002	0.005	0.29	0.10					
16	2.000	1.050	1097.86	1445.7	555.3	96.0	1.025	0.980	0.042	0.980	-0.000	0.005	0.34	-0.01					
17	1.000	1.048	1094.48	1444.4	543.3	95.0	1.020	0.978	0.046	0.978	-0.001	0.006	0.36	-0.08					
18	-1.000	1.044	1094.37	1444.2	543.9	96.2	1.018	0.978	0.047	0.978	0.000	0.006	0.34	0.01					
19	-2.000	1.044	1094.93	1446.3	554.7	96.0	1.015	0.976	0.051	0.975	0.002	0.006	0.35	0.11					
20	-3.000	1.044	1094.38	1445.8	553.8	96.0	1.012	0.973	0.053	0.973	0.002	0.005	0.36	0.13					

POINT	ST	M	W	WING	KT	TY	RPM SURVEY		DATE	AEDC POPULATION WIND TUNNEL								
							WING	TY		VT/VH	UT/VH	VT/VH	UT/VH	MT/VH	ANSL	SWTL		
IC-084	48	3.001	0.000	14.00	0.00	0.00	1-	1-	2-	3-77								
5	14.000	1.100	1140.84	1434.7	549.3	96.0	1.094	0.995	0.995	0.001	0.003	0.003	0.003	0.27	0.08			
6	12.000	1.101	1141.24	1435.6	549.3	95.8	1.094	0.995	0.995	0.003	0.003	0.003	0.003	0.16	0.18			
7	10.000	1.098	1139.64	1432.1	547.8	95.9	1.090	0.993	0.993	0.005	0.005	0.005	0.005	0.01	0.27			
8	8.000	1.098	1140.14	1432.9	548.2	96.3	1.092	0.995	0.995	0.005	0.005	0.005	0.005	-0.01	0.22			
9	6.000	1.098	1139.37	1434.2	548.4	96.1	1.092	0.995	0.995	0.005	0.005	0.005	0.005	-0.14	0.28			
10	4.000	1.098	1139.49	1433.4	547.6	96.0	1.091	0.995	0.995	0.005	0.005	0.005	0.005	-0.001	0.29			
11	2.000	1.097	1139.51	1434.7	548.2	96.3	1.093	0.997	0.997	0.007	0.007	0.007	0.007	0.16	0.18			
12	0.000	1.099	1139.01	1436.0	549.3	95.2	1.093	0.996	0.996	0.008	0.008	0.008	0.008	0.34	0.09			
13	-2.000	1.097	1139.08	1435.3	548.5	95.7	1.094	0.997	0.997	1.000	0.005	0.005	0.005	0.34	0.12			
14	-4.000	1.097	1139.08	1433.4	547.7	95.9	1.099	0.994	0.994	1.000	0.011	0.011	0.011	0.33	0.12			
15	-6.000	1.102	1141.84	1434.0	549.7	96.0	1.093	0.994	0.994	0.999	0.011	0.011	0.011	0.38	0.08			
16	-8.000	1.100	1140.87	1434.5	548.2	95.8	1.092	0.994	0.994	1.000	0.013	0.013	0.013	0.33	0.08			
17	-10.000	1.098	1140.08	1432.2	548.1	95.8	1.095	0.996	0.996	1.000	0.007	0.007	0.007	0.39	0.09			
18	-12.000	1.098	1139.37	1433.3	548.1	96.1	1.095	0.998	0.998	1.000	0.005	0.005	0.005	0.39	0.05			
19	-14.000	1.098	1139.71	1437.1	549.8	96.0	1.097	0.999	0.999	0.999	0.001	0.001	0.001	0.42	0.07			

POINT	Y	P	W	ALFA	WING	Y	Z	RUN		DATE	AEDC POPULSTON WIND TUNNEL						SWL
								2	3		2-2-77	VL/VH	VT/VH	WL/VH	ADL	SWL	
TC-444	85	2.995	-0.15	48	3.00	-2.00	3	1	2-2-77	VL/VH	VT/VH	WL/VH	ADL	SWL			
9	10.333	0.768	84.19	1527.7	447.4	0	77.9	0.799	1.001	1.002	1.001	0.007	-0.39	0.36			
10	10.466	0.803	88.56	1524.1	450.2	0	78.0	0.802	0.999	1.002	1.001	0.009	-0.31	0.39			
12	11.000	0.792	88.01	1528.5	447.7	0	78.0	0.801	1.004	1.001	1.001	-0.011	-0.52	0.38			
13	11.333	0.802	88.17	1530.0	451.1	0	77.9	0.803	1.001	1.001	1.001	-0.013	-0.74	0.36			
14	11.666	0.800	85.79	1529.3	449.2	0	77.9	0.802	1.003	1.002	1.001	-0.015	-0.97	0.38			
15	12.000	0.803	85.01	1528.6	451.3	0	77.9	0.805	1.002	1.001	1.001	-0.017	-0.97	0.38			
16	12.333	0.801	86.65	1528.5	448.6	0	77.8	0.807	1.007	1.001	1.001	-0.012	-1.04	0.32			
17	12.666	0.801	86.70	1527.7	449.4	0	77.9	0.811	1.011	1.001	1.001	-0.020	-1.09	0.37			
18	13.000	0.801	87.38	1529.4	450.4	0	78.0	0.815	1.013	1.000	1.000	-0.028	-1.05	0.48			
19	13.333	0.801	87.44	1528.3	450.0	0	78.1	0.817	1.018	1.001	1.001	-0.033	-1.01	0.29			
20	13.666	0.800	86.54	1528.1	449.6	0	78.1	0.822	1.024	1.001	1.001	-0.046	-0.90	0.34			
21	14.000	0.800	86.17	1528.5	449.3	0	77.8	0.824	1.027	1.002	1.001	-0.054	-0.78	0.31			
22	14.333	0.800	88.98	1527.8	448.0	0	77.9	0.828	1.031	1.002	1.002	-0.059	-0.93	0.18			
23	14.666	0.801	86.60	1527.7	449.4	0	77.9	0.832	1.034	1.001	1.001	-0.067	-0.48	0.12			
24	15.000	0.801	86.85	1527.5	449.4	0	78.0	0.832	1.035	1.001	1.001	-0.069	-0.23	0.09			
25	15.333	0.801	87.50	1528.7	450.2	0	78.1	0.836	1.038	1.001	1.001	-0.075	-0.44	0.09			
26	15.666	0.802	87.80	1531.6	451.2	0	78.1	0.836	1.038	1.001	1.001	-0.075	-0.44	0.09			
27	16.000	0.798	84.51	1531.0	448.7	0	78.2	0.834	1.039	1.002	1.001	-0.076	0.47	0.08			
28	16.333	0.763	84.33	1529.7	448.2	0	78.2	0.830	1.036	1.002	1.001	-0.069	0.70	0.12			
29	16.666	0.802	88.19	1528.3	450.0	0	78.1	0.833	1.036	1.001	1.001	-0.066	0.08	0.12			
30	17.000	0.800	86.81	1527.3	448.6	0	78.2	0.837	1.036	1.001	1.001	-0.066	0.08	0.12			
31	17.333	0.799	84.08	1529.2	448.4	0	78.3	0.818	1.021	1.001	1.001	-0.040	1.09	0.18			
32	17.666	0.800	84.25	1530.4	449.7	0	78.2	0.812	1.014	1.001	1.001	-0.025	1.16	0.17			
33	18.000	0.800	86.36	1528.5	449.1	0	78.4	0.815	1.016	1.001	1.001	-0.028	1.10	0.20			
34	18.333	0.764	85.11	1529.6	448.5	0	78.5	0.802	1.004	1.001	1.001	-0.008	0.97	0.21			
35	18.666	0.802	84.74	1530.6	451.4	0	78.5	0.798	0.996	1.001	1.001	-0.008	0.86	0.23			
36	19.000	0.795	85.71	1531.8	446.3	0	78.2	0.798	1.003	1.001	1.001	-0.008	0.67	0.23			



TEST PART REX10-6 ALPHA WING Y Z RUN SURVEY DATE AEDC PROPULSION WIND TUNNEL  
 TC-484 93 2.997 0.00 48 3.00 -2.00 3-1 2-3-77 TRANSONIC 42

POINT	X	M	VU	PT	Q	TT	ML	VHL/VH	FTL/FT	CPL	UL/VH	VL/VH	ML/VH	AAL	SML
6	10.333	0.850	909.86	1514.3	477.4	86.3	0.851	1.002	1.001	-0.001	1.001	0.013	-0.009	-0.51	0.75
7	10.666	0.850	910.25	1514.9	478.0	86.1	0.850	1.000	1.001	0.002	1.000	0.014	-0.011	-0.62	0.79
8	11.000	0.851	911.00	1515.9	478.6	86.5	0.850	0.999	1.001	0.004	0.999	0.015	-0.013	-0.74	0.84
9	11.333	0.851	911.38	1516.2	479.0	86.4	0.849	0.998	1.001	0.006	0.998	0.015	-0.016	-0.91	0.84
10	11.666	0.852	911.73	1516.8	479.3	86.5	0.853	0.999	1.001	0.003	0.999	0.015	-0.018	-1.04	0.85
11	12.000	0.852	912.15	1515.6	479.2	86.6	0.853	1.001	1.001	-0.000	1.001	0.014	-0.020	-1.17	0.82
12	12.333	0.852	912.52	1516.4	479.6	86.7	0.858	1.005	1.001	-0.008	1.005	0.013	-0.022	-1.26	0.75
13	12.666	0.853	913.48	1516.4	480.3	86.7	0.861	1.008	1.001	-0.015	1.008	0.012	-0.023	-1.31	0.67
14	13.000	0.854	913.99	1516.6	480.7	86.7	0.867	1.013	1.001	-0.024	1.013	0.010	-0.023	-1.28	0.58
15	13.333	0.855	914.76	1516.6	481.2	86.7	0.871	1.017	1.001	-0.032	1.017	0.009	-0.022	-1.22	0.51
16	13.666	0.851	911.40	1516.7	479.1	86.4	0.876	1.025	1.002	-0.048	1.025	0.008	-0.020	-0.98	0.44
18	14.000	0.845	905.91	1515.3	479.0	86.5	0.872	1.027	1.002	-0.051	1.027	0.007	-0.018	-0.94	0.37
19	14.333	0.848	907.94	1515.4	478.5	86.2	0.877	1.029	1.001	-0.057	1.029	0.006	-0.015	-0.84	0.34
20	14.666	0.848	908.73	1514.7	478.7	86.5	0.882	1.034	1.001	-0.066	1.034	0.006	-0.012	-0.68	0.32
21	15.000	0.850	909.96	1515.4	477.9	86.2	0.886	1.037	1.001	-0.077	1.037	0.006	-0.009	-0.50	0.31
22	15.333	0.851	911.43	1516.3	479.0	86.5	0.890	1.039	1.001	-0.077	1.039	0.006	-0.005	-0.27	0.32
23	15.666	0.854	913.51	1517.2	480.7	86.5	0.893	1.040	1.001	-0.080	1.040	0.006	-0.001	-0.05	0.34
24	16.000	0.854	913.26	1515.6	480.1	86.2	0.894	1.041	1.001	-0.081	1.041	0.007	0.003	0.19	0.39
25	16.333	0.855	914.54	1515.2	480.8	86.3	0.894	1.040	1.001	-0.078	1.040	0.008	0.008	0.45	0.42
32	16.666	0.854	914.55	1516.1	480.9	86.7	0.891	1.037	1.002	-0.072	1.037	0.008	0.013	0.72	0.46
45	17.000	0.853	912.16	1508.8	477.4	86.0	0.886	1.034	1.002	-0.065	1.034	0.009	0.017	0.92	0.52
46	17.333	0.848	908.59	1522.2	479.0	86.3	0.872	1.024	1.001	-0.047	1.024	0.010	0.017	0.97	0.57
47	17.666	0.849	908.99	1522.0	479.4	86.0	0.863	1.014	1.001	-0.027	1.014	0.010	0.017	0.94	0.56
48	18.000	0.850	909.35	1515.6	477.7	85.9	0.854	1.005	1.002	-0.005	1.005	0.010	0.014	0.82	0.57
49	18.333	0.853	912.87	1514.0	478.4	86.2	0.851	0.998	1.001	0.006	0.998	0.010	0.011	0.65	0.55
53	18.666	0.849	909.42	1517.4	478.0	86.4	0.844	0.995	1.000	0.011	0.995	0.010	0.008	0.48	0.56
54	19.000	0.851	910.95	1517.9	479.2	86.5	0.846	0.995	1.001	0.011	0.995	0.010	0.006	0.35	0.55

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TEST PART WEX10-6 ALPHA WING Y Z RUN SURVEY DATE MEDC PROPULSION WIND TUNNEL  
 IC-484 94 2.986 0.08 49 3.00 -1.00 3-2 2-3-77 TRANSONIC 4T

POINT	X	M	VM	PT	Q	IT	ML	VML/VN	PTI/PT	CPL	UL/VN	VL/VN	WL/VN	AAL	SML
6	10.333	0.850	909.98	1510.3	476.0	86.7	0.845	0.995	1.001	0.012	0.995	0.016	-0.007	-0.38	0.92
7	10.666	0.850	910.65	1514.4	477.8	86.6	0.844	0.994	1.000	0.013	0.994	0.016	-0.009	-0.30	1.05
8	11.000	0.850	910.56	1515.8	478.3	86.4	0.839	0.988	1.001	0.025	0.986	0.021	-0.013	-0.77	1.23
9	11.333	0.851	910.67	1515.0	478.2	86.3	0.837	0.986	1.002	0.031	0.986	0.024	-0.018	-1.07	1.38
10	11.666	0.850	910.31	1513.3	477.4	86.3	0.837	0.986	1.002	0.031	0.986	0.024	-0.026	-1.52	1.40
11	12.000	0.852	912.53	1515.6	479.4	86.6	0.841	0.989	1.001	0.024	0.986	0.022	-0.032	-1.87	1.29
12	12.333	0.853	912.70	1515.4	479.5	86.6	0.849	0.997	1.001	0.009	0.996	0.016	-0.037	-2.13	1.02
13	12.666	0.854	913.57	1516.5	480.5	86.5	0.857	1.004	1.001	-0.006	1.003	0.013	-0.038	-2.17	0.77
14	13.000	0.854	914.39	1516.9	481.1	86.5	0.867	1.013	1.000	-0.024	1.012	0.010	-0.037	-2.08	0.54
15	13.333	0.854	913.89	1515.3	480.2	86.6	0.875	1.021	1.001	-0.041	1.021	0.006	-0.030	-1.89	0.35
16	13.666	0.852	911.81	1516.3	479.2	86.5	0.883	1.032	1.001	-0.063	1.031	0.004	-0.030	-1.67	0.23
17	14.000	0.848	908.41	1515.0	476.5	86.6	0.882	1.035	1.002	-0.067	1.035	0.003	-0.026	-1.44	0.18
18	14.333	0.849	909.55	1515.6	477.4	86.6	0.888	1.039	1.001	-0.077	1.039	0.003	-0.022	-1.19	0.16
19	14.666	0.850	910.61	1515.9	478.3	86.5	0.893	1.043	1.001	-0.084	1.043	0.002	-0.017	-0.93	0.13
20	15.000	0.851	911.36	1514.3	478.2	86.6	0.899	1.048	1.002	-0.094	1.048	0.002	-0.011	-0.62	0.16
21	15.333	0.853	912.76	1515.2	479.4	86.7	0.902	1.050	1.001	-0.098	1.050	0.003	-0.006	-0.35	0.17
23	15.666	0.851	911.30	1516.2	479.0	86.3	0.904	1.054	1.002	-0.105	1.054	0.004	0.000	0.01	0.24
24	16.000	0.852	912.12	1515.9	479.2	86.7	0.904	1.053	1.001	-0.104	1.053	0.005	0.005	0.30	0.26
25	16.333	0.854	913.70	1515.0	480.0	86.7	0.906	1.053	1.001	-0.106	1.053	0.006	0.013	0.70	0.31
45	16.666	0.854	913.55	1521.1	481.9	86.5	0.906	1.053	1.001	-0.104	1.052	0.007	0.022	1.21	0.40
46	17.000	0.853	913.24	1515.2	479.7	86.7	0.897	1.044	1.001	-0.086	1.044	0.009	0.028	1.56	0.49
48	17.333	0.848	908.05	1515.2	476.3	86.6	0.878	1.031	1.001	-0.060	1.030	0.011	0.032	1.79	0.61
49	17.666	0.849	907.94	1514.2	476.0	86.5	0.855	1.008	1.001	-0.013	1.003	0.011	0.030	1.69	0.64
50	18.000	0.849	908.94	1515.6	477.1	86.5	0.842	0.993	1.001	0.016	0.993	0.011	0.024	1.36	0.63
51	18.333	0.851	911.07	1516.0	478.7	86.4	0.835	0.983	1.001	0.036	0.983	0.011	0.017	0.97	0.63
52	18.666	0.853	913.36	1516.0	480.2	86.5	0.835	0.981	1.001	0.041	0.981	0.010	0.011	0.62	0.59
59	19.000	0.849	909.13	1520.0	478.5	86.7	0.831	0.982	1.001	0.038	0.982	0.010	0.006	0.36	0.57

TEST PART REX10-6 ALPHA WING Y Z RUN SURVEY  
 IC-484 96 2.992 0.08 11 3.00 -2.00 1-1

DATE 2-3-77  
 AEDC PROPUSSION WIND TUNNEL  
 TRANSONIC 4T

POINT	X	M	VM	PT	Q	IT	ML	YML/VM	PTL/PT	CPL	UL/VM	VL/VM	ML/VM	AAL	SWL
5	14.333	0.903	957.08	1485.6	497.7	87.9	0.895	0.996	1.000	0.009	0.996	0.009	-0.005	-0.27	0.49
6	10.666	0.900	957.86	1486.9	498.7	87.6	0.895	0.994	1.001	0.013	0.994	0.010	-0.007	-0.38	0.56
7	11.000	0.900	957.44	1483.2	497.1	87.8	0.892	0.992	1.002	0.018	0.992	0.010	-0.009	-0.50	0.60
8	11.333	0.901	958.46	1483.6	498.0	87.7	0.892	0.992	1.001	0.018	0.992	0.011	-0.012	-0.67	0.65
9	11.666	0.902	959.93	1487.2	499.9	88.0	0.894	0.992	1.001	0.017	0.992	0.012	-0.014	-0.83	0.68
10	12.000	0.902	959.74	1486.2	499.5	88.0	0.895	0.994	1.001	0.015	0.993	0.011	-0.017	-0.98	0.61
11	12.333	0.903	960.34	1485.9	499.7	88.0	0.899	0.996	1.001	0.009	0.996	0.010	-0.019	-1.09	0.56
12	12.666	0.903	960.60	1485.0	499.6	87.9	0.903	1.000	1.001	0.002	0.999	0.008	-0.020	-1.15	0.48
14	13.000	0.904	961.57	1486.5	500.7	87.9	0.909	1.005	1.001	-0.008	1.004	0.007	-0.020	-1.16	0.37
17	13.333	0.904	961.47	1486.0	500.5	87.9	0.913	1.009	1.001	-0.016	1.008	0.005	-0.020	-1.12	0.27
18	13.666	0.905	962.07	1486.2	500.9	87.9	0.917	1.012	1.001	-0.022	1.012	0.004	-0.019	-1.07	0.20
19	14.000	0.903	960.95	1486.3	500.2	88.0	0.922	1.018	1.001	-0.034	1.018	0.003	-0.017	-0.94	0.15
20	14.333	0.902	960.01	1487.0	499.9	88.0	0.925	1.021	1.001	-0.041	1.021	0.001	-0.014	-0.78	0.08
21	14.666	0.904	961.36	1487.5	500.9	88.0	0.928	1.023	1.001	-0.045	1.023	0.001	-0.011	-0.63	0.05
22	15.000	0.905	962.33	1485.5	500.8	88.1	0.932	1.026	1.001	-0.050	1.025	0.001	-0.008	-0.47	0.03
24	15.333	0.902	959.39	1486.6	499.4	88.0	0.934	1.031	1.001	-0.061	1.031	0.001	-0.004	-0.21	0.05
25	15.666	0.902	959.48	1487.1	499.6	88.0	0.936	1.032	1.001	-0.063	1.032	0.001	-0.000	-0.01	0.04
26	16.000	0.904	961.13	1485.1	499.9	88.1	0.938	1.032	1.001	-0.063	1.032	0.001	-0.000	-0.01	0.00
28	16.333	0.903	960.17	1485.1	499.4	88.0	0.941	1.036	1.001	-0.070	1.036	0.002	0.010	0.57	0.13
29	16.666	0.901	958.80	1485.9	498.8	87.9	0.938	1.035	1.001	-0.067	1.035	0.004	0.016	0.89	0.20
30	17.000	0.903	960.34	1485.4	499.6	88.0	0.935	1.030	1.002	-0.058	1.030	0.005	0.021	1.18	0.25
33	17.333	0.903	960.09	1486.3	499.6	88.0	0.935	1.026	1.001	-0.043	1.022	0.006	0.024	1.33	0.33
34	17.666	0.903	960.40	1485.5	499.6	88.0	0.913	1.010	1.001	-0.017	1.009	0.006	0.022	1.27	0.36
36	18.000	0.902	959.59	1485.1	499.0	88.0	0.903	1.001	1.001	0.001	1.000	0.007	0.020	1.12	0.38
37	18.333	0.903	960.51	1486.2	499.9	88.0	0.896	0.993	1.001	0.016	0.993	0.006	0.016	0.93	0.35
38	18.666	0.903	961.01	1485.9	500.1	88.1	0.892	0.990	1.001	0.023	0.989	0.006	0.012	0.72	0.34
39	19.000	0.904	961.12	1486.6	500.4	88.1	0.891	0.988	1.001	0.026	0.988	0.006	0.010	0.56	0.32

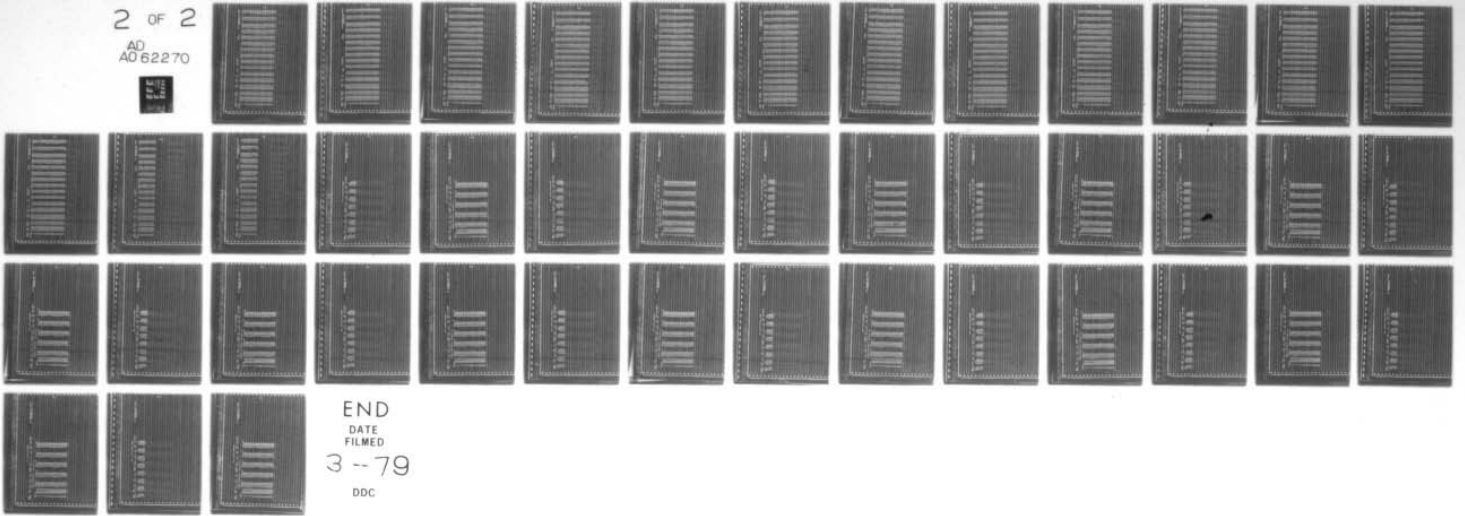
AD-A062 270

NIELSEN ENGINEERING AND RESEARCH INC MOUNTAIN VIEW CALIF F/G 1/3  
DATA REPORT FOR A TEST PROGRAM TO STUDY TRANSONIC FLOW FIELDS A--ETC(U)  
JUL 77 S C PERKINS, S S STAHARA, M J HEMSCH F44620-75-C-0047  
NEAR-TR-138-VOL-1 AFOSR-TR-78-1485 NL

UNCLASSIFIED

2 OF 2

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DATE  
FILMED  
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TEST PART AX10-A ALPHA WING Y Z RUN SURVEY DATE AEDC PROPULSION WIND TUNNEL  
 7C-484 97 2.996 0.08 48 3.00 -1.00 3-2 3-77

POINT	X	Y	Z	PT	Q	TT	ML	VML/VN	PTL/PT	CPL	UL/VN	VL/VN	WL/VN	AWL	SWL
5	10.333	0.907	955.74	1486.7	497.0	88.3	0.888	0.991	1.001	0.021	0.990	0.011	-0.003	-0.15	0.63
6	10.666	0.901	954.57	1486.2	498.7	88.0	0.889	0.988	1.001	0.025	0.988	0.014	-0.004	-0.26	0.78
7	11.000	0.902	959.49	1485.6	499.1	88.0	0.884	0.983	1.001	0.035	0.983	0.016	-0.008	-0.49	0.96
8	11.333	0.903	960.60	1486.7	500.1	88.1	0.882	0.980	1.001	0.041	0.980	0.028	-0.014	-0.84	1.18
9	11.666	0.903	961.11	1486.6	500.3	88.2	0.882	0.979	1.001	0.043	0.979	0.022	-0.022	-1.27	1.26
10	12.000	0.904	961.05	1487.3	500.6	88.0	0.884	0.981	1.001	0.039	0.981	0.020	-0.029	-1.69	1.15
11	12.333	0.902	959.98	1487.3	498.9	88.2	0.889	0.977	1.002	0.028	0.987	0.015	-0.034	-1.33	0.89
12	12.666	0.904	961.38	1486.7	500.6	88.0	0.898	0.994	1.001	0.012	0.994	0.011	-0.036	-2.06	0.64
15	13.000	0.901	958.58	1487.4	499.1	88.1	0.906	1.005	1.001	-0.008	1.004	0.006	-0.036	-2.03	0.33
16	13.333	0.899	957.05	1483.4	496.9	88.0	0.910	1.011	1.002	-0.017	1.010	0.002	-0.033	-1.88	0.12
17	13.666	0.902	959.92	1486.7	499.7	88.1	0.918	1.015	1.001	-0.030	1.015	0.000	-0.038	-1.68	0.00
18	14.000	0.902	955.63	1486.2	499.3	88.1	0.924	1.021	1.002	-0.039	1.020	-0.001	-0.026	-1.45	-0.07
19	14.333	0.903	961.06	1486.2	500.1	88.3	0.929	1.024	1.001	-0.047	1.024	-0.002	-0.021	-1.19	-0.12
20	14.666	0.901	958.58	1486.9	498.9	88.1	0.931	1.028	1.001	-0.056	1.028	-0.003	-0.017	-0.95	-0.17
21	15.000	0.901	959.29	1485.3	498.8	88.2	0.935	1.032	1.001	-0.062	1.032	-0.003	-0.012	-0.66	-0.15
22	15.333	0.903	960.64	1486.3	499.9	88.3	0.938	1.033	1.001	-0.068	1.033	-0.002	-0.007	-0.39	-0.14
23	15.666	0.905	962.13	1486.7	501.0	88.2	0.942	1.035	1.001	-0.069	1.035	-0.002	-0.001	-0.08	-0.10
25	16.000	0.900	957.82	1485.4	498.0	88.0	0.943	1.040	1.001	-0.080	1.040	-0.001	0.006	0.30	-0.05
26	16.333	0.900	958.11	1485.6	498.1	88.2	0.960	1.057	1.001	-0.111	1.057	-0.001	0.013	0.58	-0.01
27	16.666	0.903	960.32	1487.1	500.0	88.3	0.976	1.068	1.001	-0.136	1.068	0.002	0.023	1.24	0.09
28	17.000	0.904	962.06	1487.1	501.0	88.4	0.967	1.059	1.001	-0.116	1.059	0.004	0.032	1.74	0.23
30	17.333	0.902	959.78	1487.5	499.8	88.3	0.931	1.027	1.001	-0.053	1.027	0.007	0.037	2.09	0.40
31	17.666	0.902	960.27	1485.5	499.4	88.3	0.910	1.008	1.001	-0.013	1.007	0.008	0.036	2.03	0.47
33	18.000	0.904	961.58	1486.5	500.6	88.3	0.889	0.986	1.001	0.029	0.986	0.008	0.028	1.66	0.48
34	18.333	0.903	960.80	1487.6	500.4	88.4	0.877	0.975	1.001	0.050	0.975	0.007	0.021	1.23	0.40
35	18.666	0.904	961.89	1487.8	501.2	88.3	0.876	0.973	1.001	0.056	0.973	0.006	0.014	0.83	0.37
38	19.000	0.903	961.17	1485.9	500.0	88.4	0.880	0.978	1.001	0.046	0.978	0.006	0.010	0.56	0.34

TEST PART REX10-6 ALPHA WING Y 2 RUN SUBVEY  
 TC-494 99 2.994 0.06 46 3.00 -2.00 3-1

DATE 2-3-77

AEDC PROPULSION WIND TUNNEL  
 TRANSONIC 42

POINT	X	M	N	VK	PT	Q	TT	ML	VML/VW4	PTL/PT	CPL	UL/VW	VL/VW	ML/VW	AAL	SWL
7	10.333	0.949	1007.25	1457.4	514.4	88.6	0.927	0.980	1.001	0.040	0.990	0.010	-0.003	-0.19	0.56	
8	10.666	0.949	1002.61	1459.1	515.2	88.6	0.926	0.979	1.001	0.043	0.979	0.010	-0.007	-0.29	0.59	
9	11.000	0.949	1002.65	1459.0	515.1	88.6	0.923	0.977	1.001	0.048	0.977	0.011	-0.008	-0.45	0.66	
10	11.333	0.949	1003.10	1458.4	515.2	88.6	0.921	0.975	1.001	0.052	0.975	0.012	-0.011	-0.66	0.72	
11	11.666	0.950	1003.70	1459.1	515.9	88.4	0.924	0.975	1.001	0.052	0.975	0.013	-0.014	-0.81	0.76	
12	12.000	0.950	1003.59	1458.9	515.8	88.3	0.924	0.976	1.001	0.049	0.976	0.013	-0.017	-1.01	0.74	
13	12.333	0.951	1004.45	1457.8	515.9	88.3	0.926	0.977	1.001	0.046	0.977	0.012	-0.019	-1.13	0.69	
14	12.666	0.952	1005.14	1458.0	516.2	88.5	0.930	0.991	1.001	0.040	0.980	0.010	-0.021	-1.22	0.60	
15	13.000	0.953	1005.99	1459.2	517.1	88.6	0.933	0.993	1.001	0.036	0.983	0.009	-0.022	-1.27	0.58	
16	13.333	0.953	1006.63	1459.3	517.5	88.6	0.937	0.995	1.001	0.032	0.985	0.007	-0.021	-1.23	0.56	
17	13.666	0.954	1007.48	1458.0	517.5	88.6	0.940	0.997	1.002	0.029	0.987	0.005	-0.020	-1.18	0.51	
20	14.000	0.954	1006.97	1459.2	517.7	88.5	0.944	0.991	1.001	0.020	0.991	0.004	-0.018	-1.07	0.24	
22	14.333	0.952	1005.34	1458.9	516.7	88.5	0.964	1.010	1.001	-0.019	1.010	0.003	-0.016	-0.92	0.19	
23	14.666	0.952	1004.94	1458.5	516.4	88.3	0.969	1.015	1.001	-0.028	1.015	0.003	-0.014	-0.79	0.14	
24	15.000	0.953	1006.25	1457.7	516.8	88.4	0.975	1.019	1.001	-0.037	1.019	0.002	-0.011	-0.62	0.13	
25	15.333	0.955	1007.56	1458.5	517.8	88.5	0.986	1.028	1.001	-0.054	1.028	0.002	-0.008	-0.42	0.09	
26	15.666	0.952	1005.14	1460.5	517.1	88.6	0.991	1.035	1.001	-0.068	1.035	0.002	-0.004	-0.21	0.09	
27	16.000	0.951	1004.83	1458.5	516.2	88.5	0.995	1.038	1.002	-0.075	1.038	0.002	-0.001	-0.05	0.18	
28	16.333	0.953	1006.61	1458.2	517.1	88.6	1.007	1.047	1.001	-0.091	1.047	0.002	0.007	0.38	0.12	
29	16.666	0.955	1007.64	1459.0	517.9	88.6	1.018	1.055	1.001	-0.109	1.055	0.003	0.014	0.77	0.18	
30	17.000	0.953	1006.20	1459.4	517.3	88.6	1.044	1.079	1.000	-0.158	1.079	0.004	0.025	1.32	0.19	
31	17.333	0.952	1005.59	1457.6	516.3	88.6	1.020	1.060	1.002	-0.137	1.059	0.009	0.030	1.51	0.48	
32	17.666	0.954	1007.18	1458.0	517.3	88.6	0.964	1.008	1.001	-0.016	1.008	0.011	0.029	1.63	0.23	
33	18.000	0.954	1006.73	1460.2	517.9	88.6	0.930	0.979	1.000	0.042	0.979	0.010	0.024	1.47	0.29	
34	18.333	0.952	1005.38	1458.6	516.6	88.4	0.922	0.973	1.001	0.056	0.973	0.009	0.020	1.16	0.28	
35	18.666	0.954	1007.30	1459.0	517.6	88.3	0.918	0.968	1.000	0.065	0.967	0.009	0.016	0.93	0.28	
37	19.000	0.953	1006.43	1458.2	517.1	88.3	0.919	0.969	1.000	0.062	0.969	0.007	0.012	0.70	0.40	

TEST PART RFXIO-6 ALPHA WING Y 2 RUN SURVEY DATE 2-3-77 AEDC PROPULSION WIND TUNNEL  
 IC-484 100 3.003 0.08 40 3.00 -1.00 3-2

POINT	X	M	VM	PT	G	TT	ML	VM/VM	PTL/PT	CP/L	UL/VM	VL/VM	WL/VM	AAL	S/L
5	10.333	0.948	1001.19	1461.6	515.3	88.4	0.924	0.978	1.000	0.043	0.978	0.011	-0.001	-0.07	0.66
6	10.666	0.947	1001.04	1460.3	514.8	88.4	0.919	0.974	1.001	0.053	0.974	0.014	-0.003	-0.19	0.84
7	11.000	0.947	1000.78	1455.4	515.0	88.2	0.913	0.969	1.002	0.055	0.969	0.018	-0.007	-0.44	1.07
8	11.333	0.949	1002.02	1456.4	515.1	88.2	0.911	0.966	1.001	0.070	0.965	0.022	-0.013	-0.78	1.29
9	11.666	0.950	1002.98	1459.9	515.8	88.3	0.910	0.964	1.001	0.073	0.964	0.024	-0.021	-1.27	1.61
10	12.000	0.950	1003.05	1457.2	515.9	88.3	0.911	0.965	1.001	0.072	0.964	0.022	-0.029	-1.74	1.33
11	12.333	0.951	1003.86	1457.8	515.5	88.4	0.916	0.969	1.001	0.084	0.968	0.019	-0.034	-2.01	1.11
12	12.666	0.952	1004.81	1460.4	517.0	88.4	0.923	0.974	1.001	0.054	0.973	0.013	-0.037	-2.18	0.78
13	13.000	0.952	1005.09	1458.8	516.5	88.5	0.928	0.979	1.001	0.045	0.978	0.008	-0.037	-2.17	0.48
14	13.333	0.952	1005.66	1457.7	516.4	88.5	0.934	0.983	1.001	0.035	0.983	0.005	-0.035	-2.06	0.27
15	13.666	0.954	1006.89	1459.6	517.7	88.6	0.939	0.987	1.001	0.027	0.987	0.002	-0.032	-1.86	0.12
17	14.000	0.953	1005.84	1459.1	517.0	88.5	0.943	0.991	1.001	0.019	0.991	0.001	-0.027	-1.57	0.05
18	14.333	0.954	1006.94	1460.0	518.1	88.2	0.944	1.009	1.000	-0.018	1.008	0.000	-0.024	-1.34	0.00
20	14.666	0.952	1005.27	1457.7	516.3	88.4	0.974	1.019	1.001	-0.036	1.019	-0.001	-0.019	-1.05	-0.05
21	15.000	0.951	1004.46	1458.0	515.9	88.4	0.981	1.026	1.001	-0.050	1.026	0.001	-0.014	-0.80	-0.06
22	15.333	0.952	1005.53	1460.3	517.3	88.4	0.983	1.033	1.001	-0.064	1.033	-0.001	-0.009	-0.51	-0.03
23	15.666	0.952	1005.50	1457.4	516.3	88.3	0.995	1.037	1.002	-0.071	1.037	-0.001	-0.004	-0.24	-0.04
24	16.000	0.954	1007.07	1456.0	516.6	88.5	1.005	1.045	1.001	-0.081	1.045	-0.001	-0.001	0.07	-0.04
27	16.333	0.951	1004.79	1461.1	517.1	88.6	1.021	1.061	1.001	-0.120	1.061	-0.000	0.011	0.57	-0.01
28	16.666	0.957	1004.82	1457.4	516.0	88.3	1.030	1.068	1.001	-0.135	1.068	0.001	0.019	1.03	0.05
29	17.000	0.955	1007.70	1456.9	518.1	88.3	1.047	1.080	1.000	-0.160	1.079	0.005	0.031	1.63	0.27
30	17.333	0.953	1006.35	1459.5	517.4	88.6	1.016	1.055	1.000	-0.110	1.054	0.013	0.037	2.04	0.73
31	17.666	0.953	1006.54	1459.3	517.5	88.5	0.936	0.987	1.000	0.027	0.986	0.014	0.037	2.16	0.81
37	18.000	0.951	1004.46	1457.1	515.6	88.3	0.916	0.968	1.000	0.064	0.967	0.012	0.031	1.33	0.74
38	18.333	0.953	1005.66	1456.8	516.2	88.3	0.905	0.957	1.000	0.085	0.957	0.010	0.024	1.23	0.50
39	18.666	0.954	1007.33	1459.8	517.7	88.6	0.903	0.954	0.999	0.090	0.954	0.009	0.018	1.05	0.32
41	19.000	0.952	1005.56	1459.3	516.9	88.6	0.907	0.959	1.000	0.082	0.959	0.009	0.013	0.75	0.45

TEST PART REX10-6 ALPHA WING Y Z RUN SUPPLY DATE AEDC PROPELLSION WIND TUNNEL  
 IC-484 102 3.020 0.00 48 3.00 -2.00 3-1 2-3-77 IRANSONIC AT

POINT	X	M	VH	PT	O	TT	ML	VML/VH	FTL/PT	CPL	UL/VH	VL/VH	ML/VH	AAL	JWL
5	10.333	0.999	1046.82	1451.8	536.3	88.7	0.944	0.954	1.000	0.092	0.954	0.009	-0.005	-0.28	0.51
6	10.666	0.996	1044.69	1440.3	531.0	88.6	0.931	0.944	1.001	0.112	0.944	0.009	-0.006	-0.39	0.53
9	11.000	0.990	1046.75	1441.4	532.5	88.5	0.930	0.941	1.000	0.118	0.941	0.010	-0.009	-0.52	0.61
10	11.333	0.998	1046.31	1441.5	532.3	88.7	0.928	0.940	1.001	0.121	0.940	0.011	-0.011	-0.69	0.68
11	11.666	0.998	1046.10	1438.3	531.0	88.6	0.928	0.940	1.001	0.122	0.940	0.011	-0.015	-0.89	0.69
12	12.000	1.000	1047.61	1439.3	537.1	88.6	0.929	0.940	1.000	0.120	0.940	0.011	-0.017	-1.04	0.68
13	12.333	1.000	1048.06	1442.4	533.4	88.8	0.932	0.942	1.000	0.116	0.942	0.011	-0.020	-1.19	0.64
14	12.666	1.000	1048.23	1443.3	533.9	89.0	0.935	0.945	1.001	0.111	0.944	0.009	-0.021	-1.27	0.57
15	13.000	0.998	1046.22	1440.6	531.8	88.9	0.937	0.948	1.001	0.106	0.948	0.007	-0.022	-1.31	0.49
16	13.333	0.999	1046.78	1432.5	529.2	88.7	0.939	0.949	1.001	0.103	0.949	0.006	-0.023	-1.36	0.37
17	13.666	1.002	1050.02	1441.1	533.9	88.9	0.960	0.965	1.000	0.071	0.965	0.004	-0.021	-1.25	0.26
18	14.000	1.000	1047.46	1440.7	532.6	88.7	0.964	0.970	1.001	0.062	0.970	0.004	-0.020	-1.18	0.21
19	14.333	0.999	1046.66	1436.0	530.5	88.6	0.971	0.977	1.002	0.049	0.977	0.003	-0.018	-1.04	0.16
20	14.666	1.001	1048.39	1439.1	532.5	88.6	0.983	0.985	1.000	0.030	0.985	0.002	-0.015	-0.89	0.11
21	15.000	1.001	1048.59	1439.1	532.6	88.5	0.987	0.988	1.000	0.024	0.988	0.002	-0.013	-0.73	0.09
22	15.333	1.001	1048.99	1436.5	531.8	88.6	0.996	0.995	1.001	0.011	0.995	0.001	-0.009	-0.53	0.08
23	15.666	1.001	1048.72	1435.8	531.4	88.6	1.002	1.001	1.001	-0.001	1.001	0.001	-0.006	-0.33	0.07
24	16.000	1.002	1049.70	1438.6	533.0	88.6	1.006	1.005	1.000	-0.010	1.005	0.002	-0.001	-0.06	0.12
25	16.333	1.002	1049.83	1439.6	533.4	88.6	1.024	1.018	1.001	-0.034	1.018	0.002	-0.004	-0.29	0.13
26	16.666	1.002	1049.30	1434.1	531.1	88.6	1.059	1.057	1.001	-0.092	1.047	0.001	0.013	0.72	0.03
27	17.000	1.002	1050.03	1436.8	533.4	88.7	1.084	1.084	1.000	-0.133	1.066	0.001	0.020	1.06	0.02
28	17.333	1.003	1050.34	1438.9	533.3	88.8	1.111	1.087	1.000	-0.174	1.087	0.001	0.029	1.51	0.02
29	17.666	1.002	1049.48	1436.7	532.1	88.8	1.136	1.110	1.000	-0.219	1.109	0.001	0.039	2.02	0.07
30	18.000	1.003	1050.70	1437.7	533.1	88.6	1.157	1.123	1.000	-0.246	1.122	0.004	0.047	2.41	0.19
31	18.333	1.003	1050.90	1436.6	532.7	88.6	1.131	1.102	0.997	-0.207	1.101	0.011	0.038	1.96	0.19
32	18.666	1.004	1051.46	1441.6	534.8	89.1	1.006	1.002	0.999	-0.007	1.002	0.013	0.014	0.79	0.09
33	19.000	1.002	1049.75	1436.1	532.0	88.8	0.971	0.974	0.999	0.049	0.974	0.011	0.007	0.48	0.02

TEST PART REX10-6 ALPHA WING Y Z RUN SURVEY DATE AEDC PROPULSION WIND TUNNEL  
 TC-484 103 3.003 0.08 48 3.00 -1.00 3-2 3-77 TRANSONIC 4T

POINT	X	M	V <sub>M</sub>	PT	Q	TT	ML	YML/YN	PFL/PT	CPL	UL/YN	VL/YN	WL/YN	AAL	SPL
1	10.333	0.996	1046.70	1440.9	531.2	88.8	0.936	0.940	1.000	0.103	0.949	0.011	-0.004	-0.22	0.65
7	10.666	0.998	1046.52	1439.7	531.6	88.9	0.930	0.942	1.000	0.115	0.945	0.013	-0.005	-0.27	0.79
8	11.000	0.998	1046.51	1438.6	533.1	88.8	0.924	0.937	1.000	0.126	0.937	0.016	-0.008	-0.49	1.00
9	11.333	0.996	1046.91	1431.5	531.5	88.9	0.917	0.932	1.001	0.137	0.932	0.020	-0.013	-0.80	1.23
10	11.666	0.996	1046.70	1431.8	527.7	89.1	0.913	0.929	1.002	0.144	0.929	0.022	-0.021	-1.28	1.34
11	12.000	1.001	1049.99	1433.1	534.1	89.0	0.919	0.930	1.000	0.139	0.930	0.021	-0.030	-1.84	1.31
12	12.333	0.998	1046.97	1442.6	533.0	88.8	0.920	0.933	1.001	0.135	0.932	0.017	-0.035	-2.14	1.85
13	12.666	0.948	1046.07	1435.3	529.9	88.7	0.925	0.936	1.002	0.126	0.937	0.012	-0.037	-2.27	0.74
14	13.000	1.000	1047.84	1438.0	531.7	88.9	0.932	0.943	0.999	0.113	0.942	0.008	-0.037	-2.20	0.47
15	13.333	1.002	1049.84	1444.7	535.1	88.9	0.939	0.947	1.001	0.109	0.946	0.004	-0.035	-2.14	0.34
16	13.666	0.997	1045.69	1432.7	528.7	88.7	0.943	0.952	1.002	0.099	0.951	0.001	-0.032	-1.92	0.84
17	14.000	0.995	1047.53	1432.4	529.7	89.0	0.945	0.971	1.001	0.089	0.971	0.000	-0.028	-1.67	0.80
19	14.333	1.001	1049.16	1443.1	534.9	89.1	0.975	0.979	1.001	0.045	0.978	-0.001	-0.024	-1.39	-0.03
20	14.666	1.000	1049.49	1436.9	531.5	89.1	0.979	0.982	1.001	0.037	0.982	-0.001	-0.020	-1.16	-0.06
21	15.000	1.002	1049.99	1438.2	533.1	89.0	0.994	0.994	1.000	0.013	0.994	-0.002	-0.016	-0.92	-0.09
22	15.333	1.003	1051.18	1442.4	534.9	89.0	1.003	1.000	1.001	0.002	0.999	-0.001	-0.011	-0.62	-0.08
23	15.666	1.001	1048.84	1438.5	532.3	89.0	1.006	1.005	1.002	-0.002	1.005	-0.001	-0.006	-0.34	-0.05
24	16.000	1.001	1048.78	1436.9	531.6	89.1	1.014	1.011	1.001	-0.022	1.011	-0.000	-0.001	-0.05	-0.02
25	16.333	1.003	1050.72	1440.2	534.0	88.8	1.032	1.024	1.000	-0.048	1.024	0.000	-0.006	0.34	0.02
26	16.666	1.003	1050.36	1440.5	533.8	89.0	1.055	1.043	1.000	-0.087	1.043	0.000	0.016	0.85	0.82
27	17.000	1.003	1050.52	1438.7	533.2	89.0	1.102	1.080	0.999	-0.161	1.080	0.000	0.028	1.50	0.81
28	17.333	1.002	1049.71	1439.4	533.1	89.0	1.148	1.117	0.999	-0.234	1.116	0.001	0.044	2.25	0.88
29	17.666	1.002	1049.98	1440.3	533.5	89.1	1.155	1.122	0.997	-0.246	1.121	0.006	0.049	2.51	0.82
30	18.000	1.001	1049.34	1437.4	532.0	89.2	1.102	1.082	0.997	-0.167	1.081	0.015	0.036	1.93	0.80
31	18.333	1.003	1050.59	1439.2	533.5	88.8	0.998	0.996	0.997	0.003	0.995	0.017	0.021	1.20	0.99
32	18.666	1.003	1050.59	1439.4	533.6	88.5	0.987	0.986	0.999	0.025	0.986	0.014	0.012	0.70	0.84
33	19.000	1.004	1052.05	1437.5	533.5	89.2	0.994	0.991	1.000	0.017	0.991	0.011	0.008	0.47	0.63

TEST PART REX10-6 ALPHA WING Y 2  
 IC-484 105 3.003 0.08 48 3.00 -2.00 2  
 RUN SURVEY 30.1

DATE 20 3-77

AEOC PROPULSION WIND TUNNEL  
 TRANSONIC 42

POINT	X	M	YH	PT	0	IT	ML	VHL/VH	PTL/PT	CPL	UL/VH	VL/VH	ML/VH	AAL	SWL
5	10.333	1.029	1075.21	1436.7	543.7	91.0	1.092	1.049	1.000	-0.099	1.049	-0.001	0.002	0.12	-0.05
6	10.666	1.030	1075.93	1437.5	544.3	91.0	1.073	1.034	0.999	-0.070	1.034	0.003	-0.001	-0.08	0.16
7	11.000	1.026	1072.73	1437.6	542.8	91.0	1.005	0.983	1.000	0.034	0.983	0.008	-0.008	-0.45	0.47
8	11.333	1.025	1071.96	1435.9	541.8	90.9	0.987	0.969	1.002	0.054	0.969	0.011	-0.012	-0.70	0.64
9	11.666	1.027	1073.66	1436.7	543.0	90.7	0.984	0.965	1.001	0.072	0.964	0.012	-0.017	-0.98	0.71
10	12.000	1.028	1074.22	1435.1	542.6	90.8	0.982	0.962	1.001	0.077	0.962	0.012	-0.019	-1.16	0.72
11	12.333	1.030	1075.71	1436.1	543.6	91.0	0.980	0.960	1.001	0.082	0.959	0.011	-0.022	-1.29	0.65
12	12.666	1.024	1071.01	1437.7	542.0	90.9	0.978	0.962	1.001	0.078	0.962	0.010	-0.023	-1.36	0.57
13	13.000	1.024	1070.79	1436.7	541.5	91.0	0.975	0.960	1.002	0.083	0.960	0.009	-0.023	-1.39	0.47
14	13.333	1.028	1074.19	1439.1	544.1	91.0	0.980	0.962	1.000	0.076	0.961	0.006	-0.023	-1.36	0.36
15	13.666	1.028	1074.14	1436.1	542.9	91.0	0.985	0.965	1.002	0.073	0.965	0.004	-0.022	-1.28	0.26
16	14.000	1.028	1074.06	1435.6	542.7	91.0	0.989	0.969	1.001	0.064	0.969	0.003	-0.019	-1.15	0.16
17	14.333	1.024	1070.56	1437.2	541.6	91.0	0.984	0.968	1.002	0.067	0.968	0.001	-0.016	-0.97	0.07
18	14.666	1.026	1073.21	1436.8	542.6	91.2	0.991	0.971	1.002	0.060	0.971	0.000	-0.014	-0.83	0.01
19	15.000	1.026	1075.68	1437.0	543.9	91.2	0.998	0.975	1.001	0.051	0.975	-0.000	-0.011	-0.63	-0.02
21	15.333	1.023	1070.17	1435.3	540.6	91.3	0.999	0.981	1.002	0.041	0.981	-0.001	-0.007	-0.43	-0.03
22	15.666	1.025	1071.88	1439.4	542.9	91.3	1.004	0.984	1.001	0.034	0.984	-0.001	-0.004	-0.21	-0.05
23	16.000	1.027	1073.61	1437.0	542.8	91.3	1.009	0.983	1.001	0.035	0.983	-0.000	0.001	0.04	-0.01
24	16.333	1.025	1071.93	1436.8	542.0	91.3	1.030	1.004	1.001	-0.006	1.004	-0.000	0.008	0.45	-0.09
25	16.666	1.025	1071.78	1441.7	543.7	91.3	1.057	1.026	1.000	-0.053	1.026	-0.002	0.015	0.86	-0.09
26	17.000	1.025	1072.62	1436.8	542.2	91.4	1.080	1.043	1.000	-0.086	1.043	-0.002	0.022	1.22	-0.13
27	17.333	1.029	1075.39	1437.6	543.9	91.4	1.106	1.063	1.000	-0.124	1.062	-0.002	0.031	1.68	-0.12
28	17.666	1.021	1069.19	1438.0	541.0	91.6	1.133	1.088	1.000	-0.175	1.087	-0.002	0.041	2.17	-0.09
29	18.000	1.027	1074.75	1439.8	544.2	91.4	1.151	1.096	0.998	-0.193	1.095	0.001	0.049	2.54	0.03
30	18.333	1.026	1075.81	1438.8	543.6	91.3	1.086	1.045	0.999	-0.092	1.045	-0.010	0.031	1.68	0.04
34	18.666	1.022	1069.95	1431.6	542.8	91.4	0.982	0.967	0.997	0.061	0.967	0.010	0.014	0.93	0.39
35	19.000	1.027	1076.20	1437.4	543.1	91.7	0.973	0.956	0.999	0.086	0.956	0.007	0.008	0.47	0.31

TEST PART REX10-6 ALPHA MING Y Z RUN SURVEY DATE AEDC PROPULSION WIND TUNNEL  
 3C-484 106 2.996 0.08 43 3.00 -1.09 3- 2 2- 3-77 TRANSONIC 4E

POINT	X	M	VM	PT	C	FT	ML	VML/VH	PTL/PT	CPL	UL/VH	VL/VH	NL/VH	AAL	SNL
2	10.333	1.027	1074.42	1435.9	542.7	91.6	1.081	1.042	1.000	-0.005	1.042	0.003	0.002	0.09	0.15
3	10.666	1.025	1072.82	1437.4	542.5	91.6	1.074	0.999	1.000	0.002	0.999	0.005	-0.003	-0.15	0.52
4	11.000	1.027	1073.86	1437.7	543.1	91.5	0.991	0.971	1.001	0.059	0.971	0.015	-0.008	-0.45	0.89
5	11.333	1.028	1075.16	1438.7	544.1	91.6	0.975	0.957	1.001	0.087	0.957	0.020	-0.014	-0.85	1.19
6	11.666	1.022	1070.12	1437.9	543.4	91.5	0.963	0.951	1.001	0.100	0.950	0.024	-0.021	-1.29	1.44
7	12.000	1.025	1072.38	1437.5	542.4	91.4	0.941	0.931	1.000	0.139	0.930	0.023	-0.030	-1.86	1.44
8	12.333	1.027	1074.10	1439.9	543.1	91.4	0.944	0.931	1.001	0.139	0.931	0.019	-0.036	-2.20	1.16
9	12.666	1.028	1074.66	1435.0	542.6	91.3	0.961	0.945	1.001	0.112	0.944	0.013	-0.038	-2.31	0.79
10	13.000	1.029	1075.63	1440.0	544.8	91.6	0.972	0.954	1.000	0.093	0.953	0.008	-0.038	-2.29	0.46
11	13.333	1.027	1073.61	1437.2	542.9	91.3	0.975	0.958	1.000	0.066	0.957	0.004	-0.035	-2.12	0.21
12	13.666	1.022	1069.82	1440.0	541.3	91.5	0.970	0.957	1.000	0.085	0.957	-0.000	-0.031	-1.85	-0.02
13	14.000	1.026	1071.09	1438.7	543.1	91.6	0.991	0.974	1.001	0.075	0.964	-0.001	-0.027	-1.60	-0.07
14	14.333	1.028	1075.06	1438.5	543.0	91.6	0.996	0.974	1.001	0.059	0.971	-0.002	-0.023	-1.34	-0.09
15	14.666	1.029	1075.51	1435.7	542.2	91.4	1.004	0.980	1.001	0.054	0.973	-0.003	-0.019	-1.10	-0.15
16	15.000	1.023	1071.04	1439.3	542.3	91.6	1.009	0.988	1.002	0.028	0.988	-0.003	-0.014	-0.82	-0.17
17	15.333	1.022	1069.66	1439.3	541.7	91.5	1.009	0.989	1.000	0.022	0.989	-0.003	-0.009	-0.50	-0.17
18	15.666	1.024	1071.85	1438.2	542.3	91.7	1.017	0.994	1.001	0.013	0.994	-0.003	-0.004	-0.23	-0.19
19	16.000	1.027	1074.32	1438.6	543.5	91.9	1.031	1.003	1.001	-0.003	1.003	-0.002	0.002	0.10	-0.19
20	16.333	1.022	1070.14	1436.8	540.8	91.9	1.052	1.024	1.000	-0.047	1.024	-0.002	0.016	0.39	-0.12
21	16.666	1.025	1072.40	1438.3	542.7	91.5	1.092	1.053	1.001	-0.105	1.052	-0.002	0.029	1.60	-0.31
22	17.000	1.029	1075.38	1437.2	543.7	91.5	1.135	1.083	0.999	-0.167	1.082	-0.001	0.043	2.27	-0.04
23	17.333	1.024	1071.39	1440.0	542.7	91.7	1.136	1.088	0.997	-0.179	1.087	0.006	0.046	2.42	0.36
24	18.000	1.025	1072.59	1438.3	542.7	91.7	1.076	1.041	0.997	-2.086	1.040	0.013	0.035	1.94	0.71
25	18.333	1.030	1076.91	1441.6	545.8	92.0	0.986	0.964	0.996	0.064	0.964	0.014	0.022	1.30	0.86
26	18.666	1.021	1069.30	1439.0	541.2	92.0	0.978	0.965	1.000	0.070	0.965	0.010	0.013	0.78	0.62
27	19.000	1.023	1070.89	1439.6	542.2	91.9	0.993	0.976	1.000	0.049	0.976	0.008	0.010	0.59	0.69

TEST PART MFX10-6 ALPHA WING Y Z RUN SURVEY  
 JC-484 108 3.002 0.00 48 3.00 -2.00 3-

DATE 2-3-77

AEDC PROPUSSION WIND TUNNEL  
 TRANSONIC 43

POINT	X	Y	Z	PT	W	U	V	W	TT	ML	VML/VN	FTL/PT	CPL	UL/VN	VL/VN	WL/VN	AAL	SWL
6	10.333	1.049	1093.25	1433.5	550.3	92.0	1.110	1.047	0.999	-0.096	1.047	1.000	-0.096	1.047	0.001	0.002	0.09	0.07
7	10.666	1.052	1095.81	1431.3	550.8	91.7	1.068	1.013	1.000	-0.025	1.013	1.000	-0.025	1.013	0.006	-0.002	-0.12	0.26
8	11.000	1.050	1094.33	1431.3	550.1	91.8	1.046	0.997	1.000	0.007	0.997	1.000	0.007	0.997	0.010	-0.008	-0.43	0.56
9	11.333	1.052	1095.62	1433.1	551.3	91.8	1.015	0.971	1.000	0.058	0.971	1.000	0.058	0.971	0.013	-0.014	-0.03	0.77
10	11.666	1.053	1096.45	1431.6	551.1	91.8	1.015	0.970	1.000	0.050	0.970	1.000	0.050	0.970	0.014	-0.019	-1.13	0.83
11	12.000	1.054	1097.64	1432.8	552.2	91.8	1.015	0.969	1.000	0.042	0.969	1.000	0.042	0.969	0.014	-0.022	-1.33	0.85
13	12.333	1.046	1090.73	1432.6	548.9	91.9	1.010	0.971	1.001	0.059	0.971	1.001	0.059	0.971	0.013	-0.026	-1.53	0.76
14	12.666	1.049	1093.25	1432.9	550.2	91.9	1.008	0.968	1.000	0.064	0.968	1.000	0.064	0.967	0.011	-0.028	-1.63	0.64
15	13.000	1.051	1095.42	1431.9	550.7	91.9	1.015	0.971	1.001	0.060	0.971	1.001	0.060	0.971	0.009	-0.022	-1.63	0.54
16	13.333	1.053	1097.05	1432.8	551.8	91.9	1.023	0.976	1.001	0.049	0.976	1.001	0.049	0.976	0.006	-0.027	-1.50	0.37
17	13.666	1.054	1097.54	1429.8	550.9	91.9	1.035	0.986	1.001	0.031	0.986	1.001	0.031	0.985	0.005	-0.025	-1.47	0.31
20	14.000	1.051	1094.83	1432.1	550.6	91.9	1.051	1.000	1.001	0.001	1.000	1.001	0.001	1.000	0.004	-0.021	-1.22	0.25
21	14.333	1.050	1096.68	1431.8	550.3	92.0	1.056	1.004	1.000	-0.007	1.004	1.000	-0.007	1.004	0.004	-0.019	-1.06	0.21
22	14.666	1.053	1096.51	1431.9	551.3	91.8	1.072	1.015	1.000	-0.029	1.015	1.000	-0.029	1.014	0.003	-0.015	-0.83	0.16
24	15.000	1.052	1098.06	1431.8	551.0	91.9	1.089	1.028	1.000	-0.056	1.028	1.000	-0.056	1.028	0.001	-0.009	-0.50	0.08
25	15.333	1.049	1093.15	1432.7	550.0	92.0	1.109	1.036	1.000	-0.073	1.036	1.000	-0.073	1.036	0.000	-0.006	-0.35	0.03
26	15.666	1.050	1094.59	1433.8	551.1	92.0	1.109	1.045	1.000	-0.090	1.045	1.000	-0.090	1.045	0.000	-0.003	-0.16	0.00
27	16.000	1.053	1096.36	1433.4	551.7	91.9	1.119	1.051	1.000	-0.102	1.051	1.000	-0.102	1.051	0.001	0.000	0.02	0.08
28	16.333	1.054	1095.84	1431.6	551.7	91.9	1.131	1.058	1.000	-0.116	1.058	1.000	-0.116	1.058	0.002	0.004	0.20	0.08
30	16.666	1.052	1095.57	1432.0	550.8	92.0	1.139	1.066	0.999	-0.133	1.066	0.999	-0.133	1.066	0.000	0.011	0.50	0.03
31	17.000	1.050	1094.39	1433.2	550.7	92.0	1.131	1.062	0.999	-0.123	1.061	0.999	-0.123	1.061	-0.005	0.021	1.14	-0.30
32	17.333	1.052	1095.56	1431.2	550.5	92.0	1.152	1.076	0.999	-0.152	1.076	0.999	-0.152	1.076	-0.005	0.029	1.56	-0.27
34	17.666	1.046	1090.87	1432.1	548.6	92.1	1.156	1.084	1.000	-0.167	1.084	1.000	-0.167	1.083	0.001	0.060	2.04	0.03
35	18.000	1.049	1093.55	1433.3	550.3	92.1	1.180	1.099	0.998	-0.198	1.099	0.998	-0.198	1.097	-0.001	0.051	2.64	-0.06
36	18.333	1.051	1095.67	1432.4	550.9	92.2	1.191	1.105	0.996	-0.213	1.105	0.996	-0.213	1.104	0.001	0.055	2.85	0.08
38	18.666	1.053	1097.05	1431.4	551.2	92.1	1.144	1.069	0.994	-0.144	1.069	0.994	-0.144	1.069	0.009	0.026	1.39	0.50
40	19.000	1.048	1092.50	1431.8	549.3	92.0	1.001	0.963	0.997	0.069	0.963	0.997	0.069	0.963	0.013	0.008	0.47	0.75

TEST PART PER10-6 ALPHA MING Y Z RUN SURVEY DATE AEDC PROPELLSION WIND TUNNEL  
 TC-484 109 2.994 0.08 48 3.00 -1.00 3-2 2-3-77 TRANSONIC AT

POINT	X	M	V4	PT	Q	TT	ML	VML/VM	PTL/PT	CPL	UL/VM	VL/VM	WL/VM	AAL	SWL
2	10.333	1.046	1090.81	1430.0	548.0	91.8	1.039	1.041	0.999	-0.082	1.041	0.004	0.001	0.07	0.20
3	10.666	1.051	1095.22	1432.7	550.9	92.0	1.038	1.006	0.999	-0.012	1.005	0.011	-0.002	-0.10	0.64
4	11.000	1.052	1096.21	1432.5	551.3	92.0	1.013	0.969	1.000	0.063	0.969	0.018	-0.007	-0.44	1.08
5	11.333	1.053	1096.75	1430.6	550.8	92.0	1.000	0.958	1.001	0.095	0.958	0.024	-0.014	-0.81	1.42
7	11.666	1.052	1096.21	1432.5	551.3	92.0	0.994	0.954	1.001	0.094	0.953	0.027	-0.024	-1.44	1.64
8	12.000	1.053	1096.21	1431.7	551.1	91.8	0.992	0.952	1.001	0.097	0.952	0.026	-0.032	-1.95	1.58
9	12.333	1.054	1097.64	1432.0	551.7	92.0	0.996	0.954	1.001	0.093	0.953	0.022	-0.038	-2.30	1.31
11	12.666	1.051	1095.27	1433.2	551.1	92.0	1.003	0.962	1.000	0.077	0.961	0.015	-0.042	-2.51	0.88
12	13.000	1.051	1095.22	1432.5	550.8	92.0	1.006	0.964	1.001	0.073	0.963	0.009	-0.042	-2.50	0.56
13	13.333	1.053	1097.05	1431.8	551.4	91.9	1.012	0.967	1.001	0.067	0.966	0.005	-0.040	-2.36	0.28
14	13.666	1.055	1098.38	1432.1	552.2	91.9	1.016	0.969	1.000	0.062	0.969	0.003	-0.037	-2.18	0.18
16	14.000	1.046	1090.53	1432.6	548.8	91.9	1.021	0.980	1.000	0.040	0.980	0.001	-0.031	-1.84	0.07
20	14.333	1.051	1094.83	1433.1	550.9	92.0	1.027	0.981	1.000	0.038	0.981	0.001	-0.027	-1.56	0.07
21	14.666	1.054	1097.45	1432.3	552.3	92.0	1.037	0.987	0.999	0.025	0.987	0.001	-0.023	-1.33	0.07
22	15.000	1.054	1097.40	1432.3	551.7	92.1	1.049	0.996	1.000	0.007	0.996	0.000	-0.019	-1.07	0.01
24	15.333	1.049	1093.25	1432.5	550.0	91.8	1.061	1.010	1.000	-0.019	1.009	0.000	-0.014	-0.80	0.01
25	15.666	1.049	1093.79	1432.0	550.0	92.0	1.069	1.015	0.999	-0.031	1.015	-0.001	-0.010	-0.54	-0.07
26	16.000	1.051	1095.22	1432.5	550.9	92.0	1.100	1.037	0.999	-0.075	1.037	-0.001	-0.005	-0.27	-0.08
27	16.333	1.054	1097.79	1432.7	552.1	92.0	1.132	1.059	0.999	-0.119	1.059	-0.002	0.004	-0.22	-0.18
28	16.666	1.054	1097.59	1432.3	551.8	92.0	1.173	1.090	0.998	-0.181	1.090	-0.003	0.021	1.13	-0.13
30	17.000	1.051	1095.22	1432.1	550.7	92.0	1.199	1.111	0.997	-0.223	1.110	-0.003	0.039	2.04	-0.16
31	17.333	1.050	1094.14	1433.7	550.8	92.1	1.195	1.109	0.996	-0.220	1.108	-0.007	0.054	2.78	-0.25
32	17.666	1.052	1095.77	1433.4	551.4	92.0	1.214	1.121	0.994	-0.245	1.119	-0.005	0.067	3.44	-0.26
33	18.000	1.054	1097.64	1431.6	551.5	92.2	1.202	1.111	0.991	-0.228	1.109	0.002	0.058	3.00	0.18
35	18.333	1.047	1091.62	1433.4	549.6	92.0	1.031	0.987	0.995	0.019	0.987	0.017	0.021	1.25	0.07
36	18.666	1.047	1091.82	1433.2	549.6	92.0	1.018	0.977	0.999	0.044	0.977	0.016	0.014	0.94	0.04
37	19.000	1.050	1094.58	1433.2	550.8	92.0	1.029	0.993	0.999	0.033	0.993	0.013	0.010	0.60	0.74

TEST PART REX10-6 ALPHA WING Y 2 PUN SURVEY AEDC PROPULSION WIND TUNNEL  
 TC-484 111 3.000 0.08 40 3.00 -2.00 3-1

POINT	X	M	VA	PT	Q	TT	ML	VNL/VM	PTL/PT	CPL	UL/VM	VL/VM	WL/VM	ARL	SWL
11	10.333	1.099	1135.68	1420.3	563.2	91.9	1.161	1.044	0.997	-0.092	1.044	0.000	0.003	0.16	0.02
12	10.666	1.099	1135.89	1422.2	564.0	92.0	1.152	1.038	0.997	-0.079	1.038	0.002	0.003	0.18	0.16
13	11.000	1.099	1135.88	1420.5	563.3	92.0	1.127	1.020	0.998	-0.042	1.020	0.006	-0.001	-0.07	0.33
14	11.333	1.101	1137.26	1421.1	564.1	92.0	1.064	0.973	0.998	0.052	0.973	0.012	-0.012	-0.72	0.72
15	11.666	1.103	1138.54	1421.7	564.8	92.0	1.026	0.943	0.978	0.113	0.942	0.014	-0.014	-1.14	0.83
16	12.000	1.105	1140.21	1422.5	565.8	92.0	1.034	0.948	0.979	0.104	0.947	0.014	-0.023	-1.41	0.82
17	12.333	1.104	1139.89	1421.4	565.2	92.0	1.030	0.945	1.001	0.112	0.944	0.012	-0.025	-1.54	0.75
18	12.666	1.105	1140.27	1419.6	564.7	92.0	1.027	0.942	1.000	0.117	0.942	0.011	-0.026	-1.61	0.66
21	13.000	1.099	1135.29	1418.7	562.7	92.0	1.026	0.946	1.001	0.110	0.945	0.009	-0.026	-1.60	0.54
22	13.333	1.099	1135.71	1421.0	563.4	92.0	1.029	0.948	1.001	0.109	0.947	0.007	-0.025	-1.60	0.40
23	13.666	1.100	1136.27	1420.5	563.5	92.0	1.040	0.955	1.001	0.091	0.955	0.005	-0.025	-1.49	0.29
24	14.000	1.101	1136.98	1419.9	563.5	92.0	1.056	0.967	1.001	0.077	0.967	0.004	-0.022	-1.30	0.22
25	14.333	1.103	1138.71	1420.6	564.4	92.0	1.073	0.978	1.001	0.045	0.978	0.002	-0.019	-1.09	0.11
28	14.666	1.098	1134.74	1419.8	562.6	92.0	1.083	0.989	1.001	0.023	0.989	0.001	-0.014	-0.81	0.04
29	15.000	1.098	1135.30	1421.4	563.3	92.2	1.089	0.993	1.000	0.013	0.993	0.001	-0.010	-0.60	0.04
30	15.333	1.100	1136.26	1421.1	563.6	92.2	1.105	1.004	1.000	-0.007	1.004	0.000	-0.007	-0.40	0.01
31	15.666	1.102	1138.25	1422.8	565.1	92.0	1.117	1.011	0.998	-0.023	1.011	0.000	-0.003	-0.16	0.01
33	16.000	1.104	1139.78	1422.7	565.6	92.2	1.133	1.021	0.999	-0.042	1.021	0.001	0.000	0.01	0.06
34	16.333	1.098	1134.56	1421.1	563.0	92.1	1.131	1.024	1.000	-0.048	1.024	0.003	0.006	0.32	0.18
35	16.666	1.099	1135.73	1420.0	563.0	92.1	1.144	1.033	1.000	-0.066	1.033	0.005	0.010	0.54	0.26
36	17.000	1.101	1137.74	1421.5	564.4	92.1	1.163	1.045	0.998	-0.091	1.044	0.004	0.016	0.88	0.33
37	17.333	1.103	1139.31	1421.7	565.1	92.0	1.183	1.057	0.998	-0.115	1.056	0.004	0.024	1.29	0.22
39	17.666	1.101	1137.85	1420.7	564.1	92.2	1.198	1.069	0.998	-0.141	1.068	0.006	0.032	1.73	0.30
40	18.000	1.100	1136.88	1421.6	564.0	92.2	1.215	1.082	0.995	-0.166	1.081	0.008	0.040	2.14	0.40
41	18.333	1.102	1138.22	1420.0	563.9	92.3	1.223	1.086	0.992	-0.177	1.085	0.010	0.047	2.48	0.53
42	18.666	1.104	1140.07	1421.4	565.2	92.3	1.228	1.087	0.991	-0.181	1.086	0.014	0.051	2.68	0.73
43	19.000	1.100	1136.81	1422.1	564.2	92.3	1.187	1.062	0.990	-0.134	1.062	0.017	0.013	0.68	0.89

TEST PART REX10-6 ALPHA WING Y 2 RUN SURVEY DATE 2-3-77 AEDC PROPELLSION WIND TUNNEL  
 TC-484 112 2.997 0.08 48 3.00 -1.00 3-2

POINT	X	M	VM	PT	0	TI	ML	VL/VH	PTL/PT	CPI	UL/VH	VL/VH	WL/VH	ML/VH	A2L	SWL
3	10.333	1.103	1138.99	1418.7	563.8	92.0	1.163	1.043	0.998	-0.058	1.043	0.001	0.003	0.14	0.08	
7	10.666	1.101	1137.76	1422.0	564.6	92.2	1.146	1.032	0.997	-0.067	1.032	0.006	0.000	0.00	0.36	
8	11.000	1.098	1135.14	1421.9	563.5	92.1	1.055	0.968	0.998	0.051	0.968	0.019	-0.008	-0.98	1.14	
9	11.333	1.098	1135.15	1421.3	563.3	92.1	1.013	0.936	0.999	0.128	0.935	0.076	-0.016	-0.98	1.57	
10	11.666	1.099	1135.76	1420.0	563.0	92.1	1.013	0.935	1.001	0.131	0.935	0.028	-0.024	-1.46	1.72	
11	12.000	1.102	1138.19	1423.5	565.4	92.1	1.014	0.934	1.000	0.132	0.933	0.027	-0.033	-2.02	1.64	
12	12.333	1.101	1137.49	1421.6	564.4	92.0	1.010	0.932	1.002	0.130	0.930	0.022	-0.039	-2.40	1.35	
13	12.666	1.103	1138.76	1420.7	564.5	92.0	1.008	0.929	1.001	0.143	0.928	0.015	-0.041	-2.54	0.95	
14	13.000	1.104	1139.83	1419.6	564.5	92.1	1.010	0.930	1.001	0.143	0.929	0.010	-0.041	-2.54	0.64	
15	13.333	1.098	1134.77	1421.1	563.0	92.2	1.013	0.936	1.000	0.128	0.935	0.006	-0.039	-2.38	0.35	
16	13.666	1.098	1135.11	1421.4	563.3	92.1	1.017	0.939	1.001	0.123	0.939	0.002	-0.035	-2.15	0.13	
17	14.000	1.099	1136.02	1420.6	563.4	92.1	1.021	0.941	1.000	0.118	0.941	0.000	-0.032	-1.93	0.02	
18	14.333	1.102	1137.84	1421.5	564.5	92.0	1.034	0.950	1.000	0.100	0.949	0.000	-0.028	-1.88	0.01	
19	14.666	1.102	1136.16	1420.9	564.3	92.0	1.048	0.960	1.000	0.081	0.954	-0.001	-0.024	-1.44	-0.03	
20	15.000	1.104	1139.68	1421.0	565.0	91.9	1.062	0.969	1.000	0.062	0.979	-0.001	-0.020	-1.10	-0.06	
22	15.333	1.102	1138.10	1420.4	564.1	92.0	1.081	0.984	0.999	0.030	0.984	-0.002	-0.015	-0.97	-0.02	
23	15.666	1.099	1135.92	1420.6	563.4	92.0	1.082	0.987	0.999	0.025	0.987	0.001	-0.010	-0.60	0.04	
24	16.000	1.101	1137.56	1420.7	564.0	92.0	1.112	1.008	0.998	-0.017	1.008	0.001	-0.005	-0.29	0.05	
25	16.333	1.103	1139.19	1421.0	564.7	92.2	1.151	1.034	0.997	-0.071	1.034	-0.001	0.005	0.29	-0.05	
28	16.666	1.097	1133.97	1419.0	562.0	92.0	1.169	1.052	0.998	-0.105	1.052	0.001	0.022	1.20	0.06	
29	17.000	1.099	1135.55	1421.5	563.5	92.1	1.200	1.072	0.997	-0.146	1.072	0.002	0.030	2.09	0.10	
30	17.333	1.100	1136.85	1419.6	563.2	92.2	1.216	1.082	0.994	-0.168	1.080	0.006	0.027	2.75	0.31	
31	17.666	1.103	1139.15	1422.6	565.3	92.3	1.232	1.091	0.992	-0.187	1.089	0.006	0.064	3.35	0.39	
32	18.000	1.103	1139.48	1421.2	564.9	92.2	1.229	1.088	0.993	-0.185	1.087	0.012	0.051	3.24	0.65	
33	18.333	1.100	1136.29	1421.4	563.7	92.2	1.174	1.054	0.999	-0.118	1.053	0.018	0.019	0.84	0.97	
34	18.666	1.101	1137.08	1421.4	564.1	92.1	1.054	0.966	0.990	0.056	0.965	0.019	0.000	0.03	1.13	
35	19.000	1.102	1138.01	1420.4	564.0	92.3	1.090	0.991	1.000	0.017	0.991	0.018	-0.002	-0.12	1.07	

15  
2  
7

TEST PAPT HEMIO-6 ALPHA MING Y Z RUN SURVEY DATE AEDC PROPUJSTON WIND TUNNEL  
 IC-484 114 2-997 0.08 49 3.00 -2.00 3-1

POINT	X	M	VP	PI	O	TI	ML	VM/VH	PTL/PT	CPL	UL/VH	VL/VH	WL/VH	AAL	SML
6	10.333	1.146	1174.69	1412.5	574.2	92.1	1.199	1.036	0.994	-0.078	1.036	-0.000	0.004	0.21	-0.02
7	10.666	1.148	1175.93	1414.2	575.3	92.1	1.199	1.035	0.994	-0.075	1.035	0.001	0.003	0.17	0.03
8	11.000	1.149	1176.52	1413.5	575.2	92.1	1.194	1.031	0.994	-0.067	1.031	0.002	0.002	0.12	0.10
9	11.333	1.151	1178.13	1413.5	575.7	92.1	1.186	1.024	0.994	-0.054	1.024	0.004	-0.001	-0.07	0.23
10	11.666	1.151	1177.89	1413.2	575.6	92.0	1.127	0.984	0.996	0.027	0.984	0.015	-0.018	-1.05	0.85
11	12.000	1.151	1178.62	1413.7	576.0	92.1	1.116	0.977	0.999	0.045	0.976	0.014	-0.022	-1.31	0.84
12	12.333	1.152	1179.00	1413.9	576.2	92.0	1.120	0.978	0.999	0.044	0.977	0.012	-0.024	-1.42	0.69
13	12.666	1.153	1179.81	1413.7	576.4	92.0	1.124	0.980	0.999	0.039	0.979	0.009	-0.025	-1.46	0.50
14	13.000	1.154	1180.68	1414.3	577.0	91.9	1.131	0.984	0.999	0.030	0.984	0.007	-0.025	-1.45	0.39
20	13.333	1.154	1180.43	1414.0	576.7	92.0	1.138	0.989	0.999	0.020	0.989	0.005	-0.024	-1.39	0.30
21	13.666	1.154	1180.33	1414.5	577.0	91.7	1.142	0.992	0.998	0.015	0.991	0.003	-0.023	-1.35	0.16
22	14.000	1.154	1181.01	1412.6	576.3	92.0	1.146	0.994	0.998	0.009	0.994	0.001	-0.021	-1.19	0.07
24	14.333	1.152	1179.54	1413.8	576.3	92.1	1.133	1.001	0.999	-0.003	1.000	0.001	-0.018	-1.03	0.05
25	14.666	1.153	1180.04	1415.6	577.2	92.1	1.151	0.999	0.998	0.000	0.999	0.000	-0.016	-0.93	0.02
26	15.000	1.153	1179.58	1413.0	576.0	92.0	1.158	1.003	0.999	-0.008	1.003	-0.001	-0.013	-0.73	-0.05
27	15.333	1.155	1181.42	1412.6	576.4	92.1	1.164	1.008	0.997	-0.019	1.008	-0.001	-0.009	-0.49	-0.07
29	15.666	1.151	1178.27	1415.2	576.4	92.2	1.174	1.016	0.996	-0.035	1.016	-0.000	-0.004	-0.23	-0.01
30	16.000	1.151	1178.27	1413.4	575.7	92.3	1.177	1.018	0.997	-0.039	1.018	-0.001	-0.002	-0.13	-0.04
31	16.333	1.152	1178.77	1413.2	575.9	92.0	1.165	1.022	0.996	-0.049	1.022	-0.001	0.001	0.07	-0.05
32	16.666	1.154	1180.47	1414.1	576.8	92.0	1.197	1.029	0.995	-0.063	1.029	-0.000	0.006	0.36	-0.02
33	17.000	1.155	1181.25	1414.7	577.2	92.1	1.204	1.033	0.994	-0.072	1.033	0.000	0.011	0.63	0.00
34	17.333	1.153	1179.71	1414.4	576.6	92.2	1.213	1.040	0.994	-0.086	1.040	0.000	0.018	1.01	0.01
35	17.666	1.150	1177.65	1412.7	575.2	92.2	1.221	1.048	0.993	-0.102	1.048	0.001	0.027	1.50	0.07
36	18.000	1.152	1178.77	1414.1	576.2	92.0	1.234	1.055	0.991	-0.118	1.054	-0.001	0.038	2.06	-0.05
37	18.333	1.153	1179.80	1414.4	576.7	92.0	1.247	1.063	0.988	-0.135	1.062	0.002	0.048	2.60	0.08
38	18.666	1.153	1179.88	1412.1	575.8	92.0	1.255	1.068	0.987	-0.146	1.066	0.006	0.054	2.91	0.32
41	19.000	1.150	1177.05	1414.1	575.7	91.9	1.254	1.070	0.985	-0.152	1.068	0.011	0.056	3.00	0.59

TEST PART REX10-6 ALPHA WING Y Z RUN SURVEY DATE AEDC PROPULSION WIND TUNNEL  
 JC-484 115 3.002 0.08 48 3.00 -1.00 1c 2 2-3-77 TRANSONIC 41

POINT	X	M	VM	PT	Q	TT	KL	VML/VN	PTL/PT	CPL	UL/VN	YL/VN	ML/VN	AAL	SWL
8	10.333	1.151	1179.33	1414.2	576.1	92.0	1.201	1.034	0.993	-0.074	1.034	-0.000	0.003	0.18	-0.01
9	10.666	1.153	1179.56	1413.4	576.2	92.0	1.199	1.032	0.994	-0.069	1.032	0.001	0.003	0.16	0.05
10	11.000	1.155	1181.22	1413.7	576.8	92.1	1.175	1.014	0.993	-0.035	1.014	0.011	-0.004	-0.23	0.60
11	11.333	1.152	1179.14	1413.6	576.1	92.0	1.092	0.958	0.995	0.079	0.958	0.026	-0.019	-1.12	1.57
12	11.666	1.151	1178.75	1413.1	575.8	92.1	1.084	0.953	1.000	0.095	0.952	0.028	-0.029	-1.73	1.68
13	12.000	1.153	1180.24	1413.8	576.6	92.0	1.090	0.956	1.000	0.099	0.955	0.024	-0.037	-2.23	1.41
14	12.333	1.154	1180.28	1414.8	577.0	92.0	1.093	0.958	0.999	0.084	0.957	0.016	-0.042	-2.50	0.96
16	12.666	1.154	1180.72	1412.2	576.1	91.9	1.102	0.964	0.999	0.071	0.963	0.007	-0.043	-2.57	0.45
17	13.000	1.152	1179.34	1414.5	576.6	92.0	1.109	0.970	0.999	0.060	0.969	0.003	-0.042	-2.47	0.20
18	13.333	1.152	1179.46	1413.4	576.2	92.0	1.117	0.976	0.998	0.047	0.975	0.001	-0.039	-2.28	0.03
19	13.666	1.154	1180.21	1413.1	576.4	91.8	1.129	0.983	0.997	0.031	0.982	-0.002	-0.034	-2.00	-0.09
21	14.000	1.154	1181.03	1414.0	576.9	92.0	1.140	0.990	0.997	0.017	0.990	-0.003	-0.029	-1.71	-0.15
22	14.333	1.151	1178.35	1413.4	575.8	92.0	1.132	0.987	0.997	0.023	0.987	-0.002	-0.027	-1.54	-0.10
23	14.666	1.152	1179.00	1414.4	576.4	92.0	1.145	0.995	0.997	0.006	0.995	-0.002	-0.022	-1.28	-0.14
24	15.000	1.152	1179.36	1413.4	576.1	92.0	1.160	1.005	0.996	-0.014	1.005	-0.004	-0.016	-0.30	-0.20
25	15.333	1.154	1180.32	1413.3	576.4	92.0	1.176	1.016	0.996	-0.035	1.016	-0.004	-0.009	-0.51	-0.25
27	15.666	1.149	1176.91	1412.6	575.0	92.0	1.179	1.020	0.996	-0.044	1.020	-0.003	-0.004	-0.24	-0.13
28	16.000	1.150	1177.63	1413.8	575.7	92.0	1.187	1.025	0.995	-0.055	1.025	-0.002	-0.003	0.19	-0.13
29	16.333	1.151	1178.21	1413.3	575.7	92.0	1.205	1.037	0.995	-0.076	1.037	-0.003	0.014	0.77	-0.17
30	16.666	1.152	1179.23	1412.9	575.9	92.0	1.217	1.043	0.994	-0.092	1.043	-0.004	0.022	1.20	-0.23
31	17.000	1.154	1180.53	1414.0	576.8	92.0	1.230	1.051	0.991	-0.110	1.051	-0.004	0.034	1.84	-0.22
33	17.333	1.149	1179.10	1413.5	575.4	92.1	1.246	1.065	0.990	-0.138	1.064	-0.002	0.049	2.65	-0.13
34	17.666	1.152	1179.40	1412.8	575.9	92.1	1.259	1.071	0.986	-0.153	1.069	-0.000	0.061	3.26	-0.01
35	18.000	1.153	1180.34	1412.9	576.2	92.1	1.266	1.075	0.982	-0.163	1.073	0.003	0.065	3.46	0.15
36	18.333	1.153	1180.31	1414.4	576.8	92.1	1.260	1.071	0.982	-0.157	1.070	0.012	0.058	3.11	0.03
38	18.666	1.151	1178.20	1413.5	575.8	92.1	1.094	0.960	0.982	0.059	0.960	0.017	-0.010	-0.60	1.03
39	19.000	1.151	1178.48	1413.2	575.7	92.2	1.121	0.980	0.998	0.039	0.979	0.017	-0.006	-0.35	0.99

TEST PART REFID-4 ALPHA KING Y Z PUN SURVEY DATE AEBC PROPULSION WIND TUNNEL  
 TC-464 928 3.000 5.01 45 6.00 -1.00 4-901 2-7-77 TRANSONIC 42

POINT	Z	K	VP	PT	G	IT	PL	VNL/VH	DIL/PT	CP2	UL/VH	VL/VH	WL/VH	ABL	EWL
20	11.000	0.651	906.34	1484.3	471.9	40.7	0.826	0.974	1.000	0.033	0.968	0.032	0.103	6.19	1.90
21	11.526	0.652	907.15	1495.0	472.6	40.7	0.804	0.954	1.000	0.030	0.948	0.048	0.103	6.23	2.90
22	12.333	0.653	907.63	1495.3	473.3	40.6	0.787	0.932	1.000	0.136	0.925	0.070	0.088	5.46	4.31
25	13.000	0.654	908.04	1497.1	473.9	40.7	0.772	0.916	1.000	0.166	0.911	0.081	0.053	3.31	5.10
26	13.666	0.650	908.90	1494.7	476.7	40.7	0.778	0.925	1.001	0.151	0.922	0.089	0.023	1.45	4.31
27	14.333	0.652	907.67	1494.7	472.5	40.7	0.802	0.949	1.001	0.103	0.947	0.055	0.014	0.82	2.37
28	15.000	0.654	906.91	1493.3	473.3	40.8	0.829	0.974	1.001	0.054	0.973	0.044	0.014	1.19	2.18
29	15.468	0.651	906.24	1486.4	472.3	40.9	0.848	0.987	1.001	0.009	0.996	0.038	0.021	1.74	1.94
30	16.333	0.654	908.99	1493.7	473.4	40.5	0.867	1.013	1.001	-0.024	1.012	0.035	0.031	1.94	1.98
34	17.000	0.653	907.70	1490.4	471.6	40.3	0.875	1.072	1.002	-0.041	1.021	0.035	0.047	2.65	2.37
41	17.666	0.653	907.79	1489.8	471.4	40.6	0.855	1.003	1.002	-0.001	1.000	0.040	0.053	3.04	2.46
45	18.333	0.646	903.83	1490.8	469.2	40.5	0.832	0.983	1.001	0.035	0.981	0.042	0.042	2.44	2.46
70	19.000	0.651	906.34	1481.0	470.9	40.8	0.839	0.987	1.002	0.029	0.986	0.044	0.035	2.03	2.56

TEST PART PERIOD-6 ALPHA WIND Y Z RUN SURVEY DATE AEDC PROPELLSION WIND TUNNEL  
 TC-084 026 3,000 -5.00 48 4.90 -1.00 4-901 2-7-77 TRANSONIC 47

POINT	X	Y	Z	Vx	Vy	Vz	PT	Q	TT	ML	VNI/V4	PTL/PT	CPL	UL/VM	VL/VM	WL/VM	ABL	SUL
8	11.000	0.450	0.450	905.21	1496.8	471.7	1496.8	471.7	41.0	0.889	1.040	1.000	-0.081	1.038	0.005	-0.072	-3.98	0.27
9	11.666	0.452	0.452	906.79	1495.2	472.5	1495.2	472.5	40.7	0.866	1.015	1.001	-0.029	1.004	-0.002	-0.148	-8.39	-0.31
10	12.333	0.453	0.453	907.79	1491.4	472.0	1491.4	472.0	40.4	0.892	1.040	1.000	-0.080	1.025	-0.027	-0.175	-9.68	-1.31
11	13.000	0.455	0.455	910.14	1491.1	473.9	1491.1	473.9	40.6	0.905	1.134	0.998	-0.284	1.123	-0.092	-0.167	-8.49	-4.78
13	13.666	0.448	0.448	908.57	1490.7	472.5	1490.7	472.5	41.1	1.052	1.227	1.000	-0.463	1.217	-0.127	-0.092	-4.31	-5.97
14	14.333	0.450	0.450	908.99	1490.6	472.3	1490.6	472.3	40.7	1.046	1.212	1.002	-0.427	1.207	-0.101	-0.027	-1.29	-4.98
15	15.000	0.453	0.453	909.25	1492.6	472.3	1492.6	472.3	41.2	1.018	1.153	1.001	-0.328	1.161	-0.067	-0.007	-0.35	-3.31
16	15.666	0.452	0.452	907.44	1491.1	472.4	1491.1	472.4	41.0	0.939	1.127	1.001	-0.255	1.126	-0.050	0.001	0.05	-2.34
19	16.333	0.452	0.452	907.50	1487.5	473.6	1487.5	473.6	40.8	0.937	1.095	1.001	-0.170	1.084	-0.044	0.010	0.52	-2.23
20	17.000	0.452	0.452	907.60	1495.8	473.0	1495.8	473.0	41.0	0.923	1.072	1.001	-0.142	1.071	-0.042	0.024	1.27	-2.26
21	17.666	0.454	0.454	908.94	1495.9	474.1	1495.9	474.1	40.7	0.886	1.033	1.001	-0.065	1.032	-0.037	0.028	1.58	-2.07
22	18.333	0.452	0.452	907.49	1494.8	472.7	1494.8	472.7	40.9	0.842	0.990	1.000	0.021	0.989	-0.033	0.012	0.71	-1.90
23	19.000	0.454	0.454	906.54	1496.3	474.4	1496.3	474.4	41.1	0.851	0.966	1.000	0.029	0.966	-0.031	-0.000	-0.01	-1.02

PAGE 1 AIRBURY FORCE, MOMENT

ARDC PROPELLER WIND TUNNEL  
SPANSONIC AT

WING RUN SURVEY  
J 1

TT 78.8 48

VP 0 449.2

PT 1430.4 1005.2

W 2.997

ALPHA	CXF	CY	CAR	CLXF	CLM	CLL	CAB
-5.01	-0.4835	-0.0014	0.0107	-0.0353	-0.0002	0.0030	0.0101
-1.99	-0.1723	-0.0010	0.0162	-0.0137	-0.0002	0.0029	0.0101
-0.01	-0.0012	-0.0004	0.0178	0.0018	-0.0002	0.0027	0.0099
2.02	0.1765	-0.0006	0.0148	0.0177	-0.0002	0.0030	0.0099
5.02	0.4740	-0.0007	0.0080	0.0398	-0.0003	0.0020	0.0100

PAGE 3 SUMMARY PRESSURES

AEDC PROPULSION WIND TUNNEL  
TRANSONIC 4E

WING NUM SURVEY 2 1  
70.0 43

TEST ID: 73-0-790 1930.0 1005.2 2.997 355.9 442.3

PRESSURE COEFFICIENTS CP80788-P.3/0

COEFFICIENT	ALPHA=1.00	ALPHA=0.01	ALPHA=2.02	ALPHA=5.02
1 CP8 1a	0.1101	0.0316	0.0053	-0.0349
2 CP8 2a	0.0707	-0.0394	-0.0029	-0.0944
3 CP8 3a	-0.0322	-0.0701	-0.1076	-0.1324
4 CP8 4a	-0.0780	-0.1195	-0.1379	-0.1529
5 CP8 5a	-0.0899	-0.1194	-0.1257	-0.1320
6 CP8 6a	-0.0315	-0.0613	-0.0051	-0.0701
7 CP8 7a	-0.0148	-0.0640	-0.0077	-0.0708
8 CP8 8a	0.0291	-0.0175	-0.0208	-0.0473
9 CP8 9a	0.0505	-0.0066	-0.0299	-0.0600
10 CP8 10a	0.0942	0.0414	-0.0082	-0.1019
11 CP8 11a	0.0972	0.0302	-0.0117	-0.1519
12 CP8 12a	0.0977	0.0217	-0.0229	-0.1509
13 CP8 13a	0.0693	0.0720	-0.0414	-0.1706
14 CP8 14a	0.0424	-0.0215	-0.0416	-0.1612
15 CP8 15a	0.0346	-0.0222	-0.0371	-0.1545
16 CP8 16a	0.0244	-0.0249	-0.0540	-0.1295
17 CP8 17a	0.0141	-0.0251	-0.0467	-0.1001
18 CP8 18a	0.0157	-0.0130	-0.0429	-0.0641
19 CP8 19a	0.0250	-0.0048	-0.0137	-0.0263
20 CP8 20a	0.0253	0.0111	0.0053	-0.0070
21 CP8 21a	0.0217	0.0100	0.0033	-0.0008
22 CP8 22a	0.0139	0.0057	0.0004	-0.0017
23 CP8 23a	0.0126	0.0049	0.0013	-0.0004
24 CP8 24a	0.0048	-0.0023	-0.0010	-0.0070
25 CP8 25a	-0.0095	-0.0040	-0.0014	-0.0040

PAGE 3 AIRMIDY FORCE, MOMENT

AEDC PROPULSION WIND TUNNEL  
TRANSONIC 45

WING ROW SURVEY  
TT 92.3 49 3 1

VM 906.5 473.4 0

IC-484 74 0.880 1501.6 936.5 3.003 0.0100

ALPA	CHP	CT	CAP	CLW	CLL	CAB
-5.01	-0.4792	-0.0021	0.0100	-0.0334	0.0029	0.0101
-1.96	-0.1793	-0.0014	0.0150	-0.0135	0.0029	0.0102
-0.01	-0.0034	-0.0014	0.0170	0.0019	-0.0027	0.0100
2.02	0.1804	-0.0013	0.0153	0.0174	0.0030	0.0097
5.02	0.4843	-0.0008	0.0083	0.0379	0.0029	0.0101

TEST PART W PT P RE-10-6 VM 0 TT WING ROW SURVEY  
TC-404 74 0.050 1501.6 036.5 3.001 906.5 473.4 92.2 49 3 1

PRESSURE COEFFICIENTS CP80(P8-D-3)/Q

CP121CF	ALFA=5.01	ALFA=1.99	ALFA=0.01	ALFA=2.02	ALFA=5.02
1	0.1193	0.0667	0.0405	0.0114	-0.0295
2	0.0339	-0.0130	-0.0367	-0.0598	-0.0928
3	-0.0322	-0.0742	-0.0108	-0.1101	-0.1343
4	-0.0833	-0.1191	-0.1314	-0.1429	-0.1871
5	-0.0806	-0.1170	-0.1249	-0.1299	-0.1343
6	-0.0315	-0.0552	-0.0595	-0.0619	-0.0638
7	-0.0330	-0.0578	-0.0618	-0.0604	-0.0604
8	0.0346	-0.0704	-0.0316	-0.0202	-0.0328
9	0.0495	0.0217	0.0017	-0.0193	-0.0339
10	0.1123	0.0498	0.0179	-0.0193	-0.0903
11	0.1068	0.0373	-0.0038	-0.0532	-0.1312
12	0.1037	0.0274	-0.0175	-0.0705	-0.1789
13	0.0792	0.0051	-0.0302	-0.0916	-0.1931
14	0.0667	-0.0013	-0.0431	-0.0909	-0.1728
15	0.0380	-0.0245	-0.0610	-0.1014	-0.1326
16	0.0293	-0.0102	-0.0593	-0.0918	-0.1084
17	0.0137	-0.0312	-0.0528	-0.0739	-0.0846
18	0.0147	-0.0171	-0.0314	-0.0423	-0.0204
19	0.0287	0.0047	-0.0023	-0.0065	-0.0004
20	0.0317	0.0182	0.0128	0.0103	0.0017
21	0.0285	0.0166	0.0138	0.0117	0.0038
22	0.0166	0.0101	0.0091	0.0097	0.0056
23	0.0173	0.0078	0.0069	0.0087	0.0051
24	0.0090	0.0092	-0.0013	0.0066	-0.0099
25	-0.0313	-0.0384	-0.0306	-0.0366	-0.0408

PAGE 1 SUMMARY FORCE, MOMENT

AEDC PROPMISION WIND TUNNEL  
TRANSONIC 4E

TEST PART # PT P PROLOG VM 0 TT WIG ROW SURVEY  
TC-404 75 0.899 1473.0 072.1 2.999 954.3 493.8 94.7 40 1 1

ALPA	CPX	CV	CAP	CLM	CLV	CLU	CAN
-8.00	-0.5014	-0.0021	0.0111	-0.0294	-0.0002	0.0034	0.0009
-2.00	-0.1008	-0.0013	0.0160	-0.0126	-0.0003	0.0030	0.0105
0.00	-0.0020	-0.0012	0.0102	0.0016	-0.0002	0.0020	0.0101
2.00	0.1003	-0.0010	0.0152	0.0100	-0.0002	0.0030	0.0102
5.00	0.5000	-0.0019	0.0087	0.0320	-0.0003	0.0029	0.0104

PAGE 2 SUMMARY PRESSURES

PRESSURE COEFFICIENTS - COEFF(CP-S-P) / Q

ORIFICE	ALFA=5.00	ALFA=2.00	ALFA=0.01	ALFA=2.02	ALFA=0.01
1 CP8 1a	0.1795	0.0718	0.0490	0.0133	-0.0258
2 CP8 2a	0.0304	-0.0142	-0.0342	-0.0630	-0.0948
3 CP8 3a	-0.0373	-0.0826	-0.0987	-0.1227	-0.1452
4 CP8 4a	-0.0923	-0.1361	-0.1455	-0.1661	-0.1736
5 CP8 5a	-0.0986	-0.1357	-0.1391	-0.1486	-0.1464
6 CP8 6a	-0.0315	-0.0606	-0.0603	-0.0697	-0.0684
7 CP8 7a	-0.0295	-0.0586	-0.0582	-0.0591	-0.0487
8 CP8 8a	0.0336	0.0732	-0.0317	-0.0146	-0.0147
9 CP8 9a	0.0277	0.0292	0.0127	-0.0102	-0.0314
10 CP8 10a	0.1795	0.0401	0.0302	-0.0115	-0.0719
11 CP8 11a	0.1277	0.0472	0.0084	-0.0500	-0.1442
12 CP8 12a	0.1194	0.0353	-0.0108	-0.0740	-0.1836
13 CP8 13a	0.7016	0.0090	-0.0364	-0.1029	-0.2203
14 CP8 14a	0.0705	-0.0007	-0.0455	-0.1102	-0.2306
15 CP8 15a	0.0445	-0.0297	-0.0702	-0.1290	-0.2519
16 CP8 16a	0.2242	-0.0416	-0.0750	-0.1325	-0.1989
17 CP8 17a	0.0064	-0.0455	-0.0686	-0.0975	-0.1238
18 CP8 18a	0.0120	-0.0765	-0.0374	-0.0914	-0.0626
19 CP8 19a	0.0310	0.0068	0.0032	-0.0043	-0.0101
20 CP8 20a	0.0400	0.0270	0.0218	0.0180	0.0147
21 CP8 21a	0.0380	0.0226	0.0240	0.0204	0.0198
22 CP8 22a	0.0295	0.0153	0.0170	0.0153	0.0140
23 CP8 23a	0.0254	0.0115	0.0137	0.0107	0.0113
24 CP8 24a	0.0195	0.0026	0.0044	0.0010	0.0012
25 CP8 25a	-0.0242	-0.0368	-0.0334	-0.0362	-0.0378

PAGE 1 SUMMARY FORCE, MOMENT

AEBC PROPELLION STD TUNNEL  
TRANSONIC ST

WING NON SUPREY

79.5 46 3 1

RP10-6 VM 970.6 499.9 0

BT 032.0

WT 1443.3

WT 0.927

PART W 930

ALFA	CMF	CY	CAP	CMPF	CLM	CLL	CAB
-4.98	-0.5242	-0.0004	0.0122	-0.0210	-0.0008	0.0043	0.0104
-1.90	-0.1966	-0.0012	0.0174	-0.0124	-0.0002	0.0033	0.0094
0.00	-0.0056	-0.0007	0.0187	0.0002	-0.0001	0.0029	0.0104
2.01	0.1921	-0.0008	0.0165	0.0127	-0.0001	0.0031	0.0099
5.01	0.5400	-0.0007	0.0090	0.0164	-0.0000	0.0061	0.0100

PAGE 2 SUMMARY PRESSURES

TEST PART M DT P M210-6 VM Q TT M546 GUN SUVET AEDC PROPELLSION WIND TUNNEL  
 TC-084 030 0.022 1403.3 032.0 3.000 970.6 493.9 79.6 49 3 1 TRANSONIC 4T

PRESSURE COEFFICIENTS CP80(CP8-P 3/0)

ORIFICE	ALFA=4.09	ALFA=1.09	ALFA=0.00	ALFA=2.01	ALFA=3.01
1 CP8 1a	0.1372	0.0990	0.0495	0.0266	0.0150
2 CP8 2a	0.0338	-0.0030	-0.0399	-0.0585	-0.0924
3 CP8 3a	-0.0417	-0.0738	-0.1075	-0.1218	-0.1473
4 CP8 4a	-0.1084	-0.1354	-0.1661	-0.1724	-0.1871
5 CP8 5a	-0.1193	-0.1356	-0.1585	-0.1540	-0.1495
6 CP8 6a	-0.0406	-0.0511	-0.0654	-0.0593	-0.0502
7 CP8 7a	-0.0302	-0.0475	-0.0576	-0.0487	-0.0314
8 CP8 8a	0.0440	0.0186	-0.0026	-0.0016	-0.0032
9 CP8 9a	0.0840	0.0457	0.0150	0.0036	-0.0102
10 CP8 10a	0.1334	0.0742	0.0335	0.0032	-0.0482
11 CP8 11a	0.1347	0.0643	0.0088	-0.0374	-0.1250
12 CP8 12a	0.1047	0.0375	-0.0329	-0.0735	-0.1789
13 CP8 13a	0.0840	0.0248	-0.0387	-0.0645	-0.2067
14 CP8 14a	0.0787	-0.0120	-0.0520	-0.1093	-0.2219
15 CP8 15a	0.0414	-0.0201	-0.0021	-0.1304	-0.2831
16 CP8 16a	0.0142	-0.0379	-0.0667	-0.1498	-0.2729
17 CP8 17a	-0.0046	-0.0461	-0.0643	-0.1262	-0.2857
18 CP8 18a	-0.0034	-0.0239	-0.0502	-0.0529	-0.0990
19 CP8 19a	0.0232	0.0184	0.0028	0.0060	0.0114
20 CP8 20a	0.0376	0.0366	0.0248	0.0248	0.0408
21 CP8 21a	0.0304	0.0396	0.0289	0.0337	0.0442
22 CP8 22a	0.0163	0.0320	0.0204	0.0262	0.0340
23 CP8 23a	0.0743	0.0750	0.0134	0.0184	0.0246
24 CP8 24a	0.0134	0.0152	0.0032	0.0076	0.0189
25 CP8 25a	-0.0292	-0.0247	-0.0389	-0.0310	-0.0310

PAGE 1 SUMMARY FORCE, MOMENT

AEDC PROPELLSION WING TUNNEL  
TRANSONIC 45

TEST PT P PP10-6 VM TT WING NOV SURVEY  
IC-484 76 0.650 1429.3 799.9 2.968 999.3 599.0 84.2 46 3 1

ALFA	CNF	CT	CAF	CLMF	CLW	CLL	CAR
-5.01	-0.5483	-0.0077	0.0194	0.0014	-0.0002	0.0049	0.0102
-1.08	-0.2088	-0.0013	0.0194	-0.0023	-0.0003	0.0030	0.0101
0.01	-0.0024	-0.0010	0.0194	0.0032	-0.0002	0.0028	0.0107
2.07	0.1996	-0.0011	0.0190	0.0087	-0.0002	0.0039	0.0103
5.02	0.5436	-0.0005	0.0142	0.0093	-0.0004	0.0020	0.0100

PAGE 2 SUMMARY PRESSURES

AEDC PROPELLSION WIND TUNNEL  
TRANSONIC 43

WING HOW SURVEY  
45 1 1

ALPHA 2.02  
505.0 04.2

ALPHA 0.01  
999.3 505.0

ALPHA 1.08  
799.0 2.000

ALPHA 5.01  
1420.3 799.0

PRESSURE COEFFICIENTS CPSP(CPS-P.70)

CPSP(CP)	ALPHA=5.01	ALPHA=1.08	ALPHA=0.01	ALPHA 2.02	ALPHA 5.02
1	0.1432	0.0923	0.0586	0.0296	-0.0083
2	0.0462	-0.0005	-0.0316	-0.0550	-0.0853
3	-0.0383	-0.0008	-0.1094	-0.1284	-0.1518
4	-0.1136	-0.1460	-0.1696	-0.1828	-0.1981
5	-0.1441	-0.1860	-0.2095	-0.2177	-0.2018
6	-0.0265	-0.0421	-0.0453	-0.0425	-0.0337
7	-0.0141	-0.0404	-0.0410	-0.0372	-0.0193
8	0.0573	0.0274	0.0107	0.0087	0.0214
9	0.1016	0.0533	0.0306	0.0183	0.0128
10	0.1517	0.0870	0.0494	0.0171	-0.0245
11	0.1478	0.0733	0.0244	-0.0237	-0.1023
12	0.1383	0.0586	0.0042	-0.0511	-0.1461
13	0.1080	0.0293	-0.0275	-0.0838	-0.1886
14	0.0916	0.0138	-0.0427	-0.1019	-0.2020
15	0.0560	-0.0225	-0.0777	-0.1370	-0.2337
16	0.0241	-0.0400	-0.1020	-0.1601	-0.2550
17	-0.0173	-0.0608	-0.1375	-0.1876	-0.2822
18	-0.0261	-0.0598	-0.1350	-0.1738	-0.2037
19	0.0145	0.0111	-0.0028	0.0007	-0.0748
20	0.0415	0.0400	0.0313	0.0441	0.0509
21	0.0502	0.0456	0.0318	0.0476	0.0668
22	0.0464	0.0374	0.0317	0.0386	0.0590
23	0.0403	0.0297	0.0242	0.0277	0.0329
24	0.0298	0.0177	0.0113	0.0138	0.0247
25	-0.0144	-0.0233	-0.0394	-0.0272	-0.0198

PAGE 1 SUMMARY FORCE, MOMENT

TEST	PART	U	PT	D	RF10-6	VN	0	TT	WING	RUN	AEBC
TC-484	930	0.976	1425.6	774.0	3.005	1020.5	516.5	91.6	48	1	PROPULSION WIND TUNNEL
											TRANSONIC 0.7
ALFA	CXF		CY	CAP	CLMF	CLL	CAB				
-5.01	-0.5559	-0.0017	0.0234	0.0139	-0.0001	0.0032	0.0098				
-1.99	-0.2210	-0.0015	0.0312	0.0049	-0.0002	0.0028	0.0106				
0.01	-0.0072	-0.0010	0.0279	0.0007	-0.0001	0.0024	0.0106				
2.02	0.2022	-0.0007	0.0266	0.0013	-0.0001	0.0029	0.0108				
5.02	0.5524	-0.0007	0.0268	-0.0116	-0.0002	0.0035	0.0108				

TEST PART M PT P RE-10-6 VM 0 TT VING RUN SURVEY AEC PROPELLSION WIND TUNNEL  
 TC-484 439 0.976 1425.6 774.0 3.005 1020.9 516.5 01.6 49 3 1

PAGE 2 SUMMARY PRESSURES

PRESSURE COEFFICIENTS CP8(CP8-P)/Q

ORIFICE	ALPHA=5.01	ALPHA=1.00	ALPHA 0.01	ALPHA 2.02	ALPHA 5.02
1 CP8 1a	0.1543	0.1064	0.0783	0.0468	0.0074
2 CP8 2a	0.0597	0.0094	-0.0169	-0.0435	-0.0770
3 CP8 3a	-0.0311	-0.0684	-0.0857	-0.1174	-0.1306
4 CP8 4a	-0.1176	-0.1460	-0.1659	-0.1846	-0.2021
5 CP8 5a	-0.1655	-0.1923	-0.2042	-0.2196	-0.2286
6 CP8 6a	-0.2305	-0.2474	-0.2482	-0.2478	-0.2097
7 CP8 7a	0.0190	-0.0160	-0.0226	-0.0237	0.0308
8 CP8 8a	0.0931	0.0616	0.0541	0.0515	0.0569
9 CP8 9a	0.1265	0.0919	0.0648	0.0540	0.0429
10 CP8 10a	0.1737	0.1121	0.0797	0.0486	0.0062
11 CP8 11a	0.1685	0.0950	0.0498	0.0045	-0.0727
12 CP8 12a	0.1424	0.0659	0.0166	-0.0367	-0.1290
13 CP8 13a	0.1249	0.0487	-0.0037	-0.0630	-0.1602
14 CP8 14a	0.1091	0.0324	-0.0210	-0.0783	-0.1792
15 CP8 15a	0.0674	-0.0085	-0.0551	-0.1133	-0.2109
16 CP8 16a	0.0367	-0.0323	-0.0785	-0.1401	-0.2322
17 CP8 17a	0.0090	-0.0710	-0.1156	-0.1700	-0.2590
18 CP8 18a	-0.0609	-0.1186	-0.1585	-0.2050	-0.2896
19 CP8 19a	-0.1007	-0.1306	-0.1604	-0.2210	-0.2151
20 CP8 20a	-0.0195	0.0236	0.0241	-0.0048	-0.0849
21 CP8 21a	0.0340	0.0579	0.0621	0.0620	0.0578
22 CP8 22a	0.0477	0.0552	0.0586	0.0645	0.0777
23 CP8 33a	0.0512	0.0462	0.0465	0.0515	0.0686
24 CP8 24a	0.0423	0.0310	0.0292	0.0313	0.0466
25 CP8 25a	-0.0601	-0.0121	-0.0144	-0.0142	-0.0031

PAGE 1 SUMMARY FORCE, MOMENT

APDC PROPULSION WIND TUNNEL  
TRANSONIC 4T

TEST TC-084 PART W 1.002 PT 1074.0 P 751.6 RE-10-6 VM 1046.1 S20.2 0 TT 05.0 40 WING ROW SURVEY 3 1

ALPHA	CNF	CY	CAP	CLVP	CLV	CLL	CAB
-5.01	-0.5538	-0.0021	0.0263	0.0238	-0.0003	0.0028	0.0003
-1.94	-0.2187	-0.0016	0.0314	0.0076	-0.0003	0.0025	0.0108
0.01	-0.0088	-0.0014	0.0325	0.0033	-0.0003	0.0023	0.0108
2.02	0.2918	-0.0011	0.0306	-0.0013	-0.0003	0.0024	0.0106
5.00	0.5460	-0.0010	0.0267	-0.0158	-0.0003	0.0034	0.0086

PAGE 2 SUMMARY PRESSURES

AEDC PROPELLSION WIND TUNNEL  
TRANSONIC 47

TEST PART W PT P PR610-6 VM O TT WING RUN SURVEY 3 1  
TC-484 77 1,002 1476.0 791.6 3.003 1046.1 578.2 85.0 49 3 1

PRESSURE COEFFICIENTS C<sub>DP</sub>(P)P 2/8

ORIFICE	ALFA=5.01	ALFA=1.99	ALFA=0.01	ALFA=2.03	ALFA=5.00
1	0.1742	0.1253	0.0952	0.0653	0.0259
2	0.0744	0.0297	0.0044	-0.0206	-0.0509
3	-0.0151	-0.0488	-0.0715	-0.0921	-0.1199
4	-0.0978	-0.1274	-0.1444	-0.1619	-0.1838
5	-0.1482	-0.1772	-0.1897	-0.2037	-0.2151
6	-0.2188	-0.2365	-0.2405	-0.2442	-0.2399
7	-0.2146	-0.2228	-0.2193	-0.2146	-0.2191
8	-0.0075	-0.1402	-0.1301	-0.1096	-0.0613
9	0.1897	0.0760	0.0541	0.0486	0.0676
10	0.2155	0.1461	0.1098	0.0911	0.0518
11	0.2992	0.1362	0.0927	0.0496	-0.0171
12	0.1864	0.1212	0.0735	0.0233	-0.0613
13	0.1645	0.0956	0.0401	-0.0143	-0.1041
14	0.1450	0.0708	0.0205	-0.0336	-0.1754
15	0.1025	0.0319	-0.0176	-0.0715	-0.1613
16	0.0885	0.0031	-0.0420	-0.0980	-0.1859
17	0.0745	-0.0368	-0.0800	-0.1319	-0.2163
18	-0.0242	-0.0792	-0.1212	-0.1682	-0.2464
19	-0.0706	-0.1239	-0.1617	-0.2073	-0.2797
20	-0.1016	-0.1411	-0.1613	-0.2087	-0.2096
21	-0.0660	-0.0330	-0.0132	-0.0221	-0.1241
22	-0.0407	0.0240	0.0382	0.0432	0.0186
23	0.0125	0.0493	0.0566	0.0417	0.0366
24	0.0430	0.0519	0.0535	0.0563	0.0599
25	0.0300	0.0165	0.0189	0.0175	0.0287

PAGE 1 SUPPLY FORCE, MOMENT

AEDC PROPUSSION WIND TUNNEL  
TRANSONIC 4T

TEST PART M PT P RP10-6 VM Q TT WING RUN SURVEY  
TC-484 79 1.025 1394.0 215.2 2.995 1060.7 525.3 79.4 40 3 1

ALPHA	CLM	CLY	CAP	CLMP	CLW	CLL	CAB
-3.02	-0.5614	-0.0023	0.0278	0.0201	-0.0003	0.0028	0.0078
-1.99	-0.2722	-0.0012	0.0306	0.0054	-0.0004	0.0026	0.0104
0.01	-0.0105	-0.0011	0.0320	0.0037	-0.0004	0.0023	0.0120
2.02	0.2067	-0.0013	0.0306	0.0030	-0.0004	0.0026	0.0103
5.02	0.5499	-0.0009	0.0244	-0.0121	-0.0005	0.0032	0.0096

PAGE 2 SUMMARY PRESSURES

TEST PART N PT P PFO10-6 VM 0 TT WING PIV SURVEY AEDC PROPULSION WIND TUNNEL  
 TC-604 76 1.025 1395.0 715.2 2.995 1060.7 525.3 79.4 40 3 .1

PRESSURE COEFFICIENTS CP80(PB-P) / Q

ORIFICE	ALFA=5.02	ALFA=1.98	ALFA=0.01	ALFA=2.02	ALFA=9.02
1 CP8 1B	0.2023	0.1494	0.1224	0.0963	0.0494
2 CP8 2B	0.1012	0.0428	0.0305	0.0004	-0.0336
3 CP8 3B	0.0155	-0.0760	-0.0460	-0.0732	-0.0998
4 CP8 4B	-0.0677	-0.1069	-0.1231	-0.1455	-0.1640
5 CP8 5B	-0.1254	-0.1583	-0.1710	-0.1874	-0.2001
6 CP8 6B	-0.1978	-0.2709	-0.2276	-0.2322	-0.2314
7 CP8 7B	-0.1974	-0.2116	-0.2137	-0.2035	-0.1988
8 CP8 8B	-0.1321	-0.1444	-0.1469	-0.1356	-0.1190
9 CP8 9B	-0.0527	-0.1128	-0.1109	-0.1031	-0.0478
10 CP810B	0.1934	0.0535	-0.0099	-0.0274	0.0010
11 CP811B	0.2184	0.0081	0.0200	-0.0196	-0.0475
12 CP812B	0.2132	0.1065	0.0317	-0.0194	-0.0794
13 CP813B	0.1809	0.0917	0.0222	-0.0251	-0.1076
14 CP814B	0.1738	0.0859	0.0226	-0.0221	-0.1139
15 CP815B	0.1352	0.0569	-0.0016	-0.0443	-0.1359
16 CP816B	0.1048	0.0349	-0.0132	-0.0611	-0.1478
17 CP817B	0.0623	-0.0000	-0.0373	-0.0434	-0.1073
18 CP818B	0.0146	-0.0391	-0.0314	-0.1179	-0.1931
19 CP819B	-0.0304	-0.0801	-0.1073	-0.1524	-0.2233
20 CP820B	-0.0595	-0.0885	-0.0890	-0.1377	-0.2421
21 CP821B	-0.0257	-0.0008	0.0230	-0.0063	-0.0008
22 CP822B	-0.0141	0.0239	0.0434	0.0285	-0.0023
23 CP823B	-0.0045	0.0213	0.0364	0.0234	0.0105
24 CP824B	-0.0086	0.0116	0.0205	0.0089	0.0002
25 CP825B	-0.0207	-0.0192	-0.0102	-0.0210	-0.0371

PAGE 1 SUMMARY FORCE, MOMENT

AESC PROVISIONS WIND TUNNEL TRANSDUCER AT

TEST PART 4 1,049 1388.0 491.7 2,998 1099.0 533.0 70.1 40 1 1

ALFA	CHP	CT	CAP	CLMP	CLW	CLL	CAS
-5.01	-0.5742	-0.0024	0.0304	0.0373	-0.0004	0.0025	0.0184
-1.98	-0.2211	-0.0015	0.0343	0.0155	-0.0004	0.0026	0.0146
0.01	-0.2042	-0.0017	0.0345	0.0037	-0.0004	0.0025	0.0142
2.01	0.2171	-0.0012	0.0327	-0.0083	-0.0004	0.0027	0.0148
5.00	0.1694	-0.0009	0.0276	-0.0276	-0.0005	0.0024	0.0166

PAGE 2 SUMMARY PRESSURES

TEST PART 4 PT 37010-6 VM 0 TT WING RUN SURVEY ADCS PROPELLION WIND TUNNEL  
 TC-084 70 1.000 1000.0 001.7 2.000 1000.0 933.0 79.1 00 3 J TRANSONIC AT

PRESSURE COEFFICIENTS CPM(PS-P. 1/8)

DEVICE	ALPHA=5.01	ALPHA=1.00	ALPHA 0.01	ALPHA 2.01	ALPHA 5.00
1	0.2271	0.1793	0.1479	0.1185	0.0802
2	0.1205	0.0160	0.0601	0.0393	0.0000
3	0.0481	0.0170	-0.0112	-0.0225	-0.0364
4	-0.0307	-0.0332	-0.0817	-0.0908	-0.1155
5	-0.0830	-0.1028	-0.1212	-0.1314	-0.1475
6	-0.1530	-0.1834	-0.1714	-0.1732	-0.1801
7	-0.1921	-0.1919	-0.1971	-0.1932	-0.1936
8	-0.0944	-0.0904	-0.0993	-0.0956	-0.0990
9	-0.0802	-0.0705	-0.0668	-0.0614	-0.0700
10	0.0768	-0.0093	-0.0361	-0.0413	-0.0428
11	0.1908	0.0540	-0.0050	-0.0208	-0.0709
12	0.1668	0.0352	-0.0063	-0.0378	-0.1137
13	0.1376	0.0320	-0.0254	-0.0797	-0.1490
14	0.1483	0.0324	-0.0303	-0.0808	-0.1891
15	0.1226	0.0042	-0.0365	-0.1028	-0.1884
16	0.1042	-0.0160	-0.0770	-0.1299	-0.2032
17	0.0712	-0.0413	-0.0997	-0.1924	-0.2208
18	0.0310	-0.0707	-0.1257	-0.1771	-0.2207
19	-0.0086	-0.0501	-0.1135	-0.1604	-0.2019
20	-0.0475	-0.0817	-0.1087	-0.1593	-0.2312
21	-0.0326	-0.0426	-0.0376	-0.0473	-0.1131
22	-0.0170	-0.0108	0.0160	0.0278	0.0102
23	0.0179	0.0605	0.0999	0.0902	0.0800
24	0.0301	0.0619	0.1004	0.0900	0.0703
25	0.0180	0.0540	0.0805	0.0692	0.0297

PAGE 1 SUMMARY FORCE, MOMENT

TEST	PART	U	DT	P	WFO10-6	VM	G	TT	UING	RUP	WIND	TUNNEL
TC-404	60	1.181	1379.3	644.0	3.003	1123.0	547.1	79.1	46	3	42	TRANSONIC 42
SLP1	CH7	0.5418	0.0027	0.0324	0.0306	0.0024	0.0002	0.0024	0.0024	0.0161		
		-0.2157	-0.0018	0.0352	0.0169	-0.0023	0.0023	0.0027	0.0027	0.0156		
		0.0054	-0.0034	0.0388	0.0044	-0.0003	0.0003	0.0026	0.0026	0.0188		
		0.2054	-0.0013	0.0346	-0.0004	-0.0004	0.0004	0.0026	0.0026	0.0152		
		0.5310	-0.0010	0.0297	-0.0209	-0.0003	0.0003	0.0026	0.0026	0.0170		

PAGE 3 SUMMARY PRESSURES

TEST PART # 1,101 1370.3 64.0 3.003 1123.0 507.1 79.1 40 2 3  
AFCO PROPELLION WIND TUNNEL  
TRANSONIC AT

PRESSURE COEFFICIENTS C<sub>PS</sub>(C<sub>PS</sub>)P 1/6

ORIFICE	ALPHA=4.00	ALPHA=1.00	ALPHA 0.01	ALPHA 2.02	ALPHA 5.01
1 C <sub>PS</sub> 1a	0.2486	0.1940	0.1661	0.1385	0.1008
2 C <sub>PS</sub> 2a	0.1477	0.1030	0.0768	0.0519	0.0187
3 C <sub>PS</sub> 3a	0.0742	0.0372	0.0143	-0.0071	-0.0363
4 C <sub>PS</sub> 4a	-0.0040	-0.0401	-0.0500	-0.0765	-0.0953
5 C <sub>PS</sub> 5a	-0.0622	-0.0830	-0.0998	-0.1146	-0.1259
6 C <sub>PS</sub> 6a	-0.1376	-0.1476	-0.1570	-0.1619	-0.1656
7 C <sub>PS</sub> 7a	-0.1320	-0.1400	-0.1433	-0.1476	-0.1509
8 C <sub>PS</sub> 8a	-0.0814	-0.0804	-0.0813	-0.0861	-0.0883
9 C <sub>PS</sub> 9a	-0.0735	-0.0772	-0.0747	-0.0662	-0.0517
10 C <sub>PS</sub> 10a	-0.0184	-0.0280	-0.0333	-0.0150	-0.0126
11 C <sub>PS</sub> 11a	0.1922	0.0848	0.0355	-0.0024	-0.0248
12 C <sub>PS</sub> 12a	0.2108	0.1070	0.0470	-0.0005	-0.0597
13 C <sub>PS</sub> 13a	0.1940	0.0944	0.0322	-0.0240	-0.0911
14 C <sub>PS</sub> 14a	0.1901	0.0873	0.0378	-0.0312	-0.0993
15 C <sub>PS</sub> 15a	0.1416	0.0703	0.0073	-0.0400	-0.1167
16 C <sub>PS</sub> 16a	0.1406	0.0404	-0.0006	-0.0378	-0.1169
17 C <sub>PS</sub> 17a	0.1053	0.0429	-0.0073	-0.0521	-0.1409
18 C <sub>PS</sub> 18a	0.0647	0.0036	-0.0353	-0.0972	-0.1025
19 C <sub>PS</sub> 19a	0.0217	-0.0432	-0.0333	-0.1394	-0.1946
20 C <sub>PS</sub> 20a	-0.0240	-0.0894	-0.1321	-0.1881	-0.2411
21 C <sub>PS</sub> 21a	-0.0422	-0.0803	-0.1278	-0.1680	-0.2177
22 C <sub>PS</sub> 22a	-0.0415	-0.0543	-0.0670	-0.0775	-0.0864
23 C <sub>PS</sub> 23a	-0.0503	-0.0435	-0.0333	-0.0066	-0.0031
24 C <sub>PS</sub> 24a	-0.0380	-0.0054	0.0008	0.0170	0.0233
25 C <sub>PS</sub> 25a	-0.0306	-0.0152	-0.0008	-0.0073	-0.0077



TEST PART W P RFA10-6 VM 0 TT WING SURVEY AECG PROPELLION WIND TUNNEL  
 TC-404 81 1.199 1371.7 601.9 3.001 1165.5 599.0 79.5 00 3 1

PAGE 2 SUMMARY PRESSURES

PRESSURE COEFFICIENTS CP8008-P 1/8

ORIPCE	ALPHA=5.00	ALPHA=2.00	ALPHA 0.01	ALPHA 2.02	ALPHA 5.02
1	CP8 10	0.2470	0.1693	0.1449	0.1261
2	CP8 20	0.1506	0.0813	0.0515	0.0190
3	CP8 30	0.0606	0.0201	-0.0015	-0.0208
4	CP8 40	0.0042	-0.0263	-0.0604	-0.0772
5	CP8 50	-0.0408	-0.0725	-0.0896	-0.1102
6	CP8 60	-0.1179	-0.1719	-0.1334	-0.1442
7	CP8 70	-0.1088	-0.1172	-0.1260	-0.1317
8	CP8 80	-0.0602	-0.0722	-0.0805	-0.0791
9	CP8 90	-0.0628	-0.0626	-0.0606	-0.0514
10	CP8 100	-0.0317	-0.0296	-0.0233	-0.0220
11	CP8 110	0.1044	0.0414	0.0104	-0.0300
12	CP8 120	0.1939	0.0833	0.0330	-0.0682
13	CP8 130	0.1013	0.0806	0.0215	-0.0935
14	CP8 140	0.1797	0.0885	0.0273	-0.0980
15	CP8 150	0.1613	0.0620	0.0016	-0.1187
16	CP8 160	0.1459	0.0622	0.0038	-0.1259
17	CP8 170	0.1166	0.0376	-0.0203	-0.1361
18	CP8 180	0.0071	0.0150	-0.0385	-0.1540
19	CP8 190	0.0493	-0.0196	-0.0635	-0.1763
20	CP8 200	0.0184	-0.0580	-0.1038	-0.2092
21	CP8 210	-0.0106	-0.0494	-0.0895	-0.1797
22	CP8 220	-0.0058	-0.0237	-0.0371	-0.0730
23	CP8 230	-0.0140	-0.0060	-0.0102	0.0131
24	CP8 240	-0.0138	-0.0015	0.0226	0.0423
25	CP8 250	0.0271	0.0390	0.0346	0.0142

PAGE 1 SUMMARY FORCE, MOMENT

ARDC PROPULSION WIND TUNNEL  
TRANSONIC 47

TEST IC-484 PART W 0.925 PT 1442.8 P 230.2 PFD10-6 VM 0 TT WING SWN SUPVET 6  
945 0.925 1442.8 230.2 2.993 073.6 496.8 00.7 65 6

ALFA	CMF	CT	CAP	CLUP	CLW	CLL	CAR
-5.01	-0.5558	-0.0047	0.0140	-0.0036	-0.0003	-0.0001	0.0098
-1.08	-0.2110	-0.0009	0.0192	-0.0033	-0.0002	0.0003	0.0008
0.02	-0.0047	-0.0006	0.0200	-0.0011	-0.0002	0.0002	0.0101
2.01	0.7046	-0.0007	0.0191	0.0036	-0.0001	0.0007	0.0096
5.01	0.5511	-0.0000	0.0110	0.0021	0.0001	0.0010	0.0100

PAGE 2 SUMMARY PRESSURES

TEST PART M PT RE-10-6 VM ALDC PROPULSION WIND TUNNEL  
 75-484 945 0.925 1442.5 830.2 2.993 973.6 495.8 80.7 68 6 1 TRANSONIC CR

PRESSURE COEFFICIENTS CP8(CP8-P 1/8)

ORIFICE	ALFA=5.01	ALFA=1.98	ALFA=0.02	ALFA=2.01	ALFA=5.01
1 CP8 1a	0.1394	0.0874	0.0547	0.0279	-0.0139
2 CP8 2a	0.0424	-0.0050	-0.0343	-0.0550	-0.0904
3 CP8 3a	-0.0321	-0.0756	-0.1015	-0.1173	-0.1441
4 CP8 4a	-0.0649	-0.1358	-0.1565	-0.1665	-0.1794
5 CP8 5a	-0.1035	-0.1330	-0.1465	-0.1449	-0.1393
6 CP8 6a	-0.0238	-0.0443	-0.0531	-0.0477	-0.0390
7 CP8 7a	-0.0085	-0.0313	-0.0391	0.0305	-0.0163
8 CP8 8a	0.0478	0.0361	0.0215	0.0234	0.0234
9 CP8 9a	0.1054	0.0646	0.0415	0.0298	0.0120
10 CP8 10a	0.1497	0.0878	0.0501	0.0197	-0.0269
11 CP8 11a	0.1336	0.0560	0.0089	-0.0363	-0.1145
12 CP8 12a	0.0951	0.0132	-0.0403	-0.0925	-0.1862
13 CP8 13a	0.0752	-0.0142	-0.0703	-0.1271	-0.2273
14 CP8 14a	0.0491	-0.0391	-0.0971	-0.1593	-0.2571
15 CP8 15a	0.0648	-0.0802	-0.1433	-0.2007	-0.3002
16 CP8 16a	-0.0083	-0.0872	-0.1569	-0.2313	-0.3299
17 CP8 17a	-0.0067	-0.0592	-0.0815	-0.1759	-0.3600
18 CP8 18a	0.0140	-0.0132	-0.0249	-0.0275	-0.1385
19 CP8 19a	0.0448	0.0309	0.0237	0.0300	0.0230
20 CP8 20a	0.0567	0.0467	0.0407	0.0484	0.0562
21 CP8 21a	0.0561	0.0483	0.0431	0.0500	0.0600
22 CP8 22a	0.0493	0.0377	0.0325	0.0400	0.0478
23 CP8 23a	0.0408	0.0283	0.0231	0.0281	0.0330
24 CP8 24a	0.0283	0.0168	0.0111	0.0157	0.0179
25 CP8 25a	-0.0174	-0.0257	-0.0313	-0.0293	-0.0275

TEST TC-694 PART 4 946 0.973 1.332.2 780.2 P 2910-6 VM 0 2.967 1020.4 317.5 TT 0 0.000 0.000 0.000  
 WING SURVEY 60 6 1  
 AEDC PROPULSION WIND TUNNEL SPANSONIC 47

ALFA	CFP	CY	CLP	CLM	CLN	CLL	CLM	CLN	CLL	CLM	CLN	CLL	CLM	CLN	CLL
-5.01	-0.5530	-0.0014	0.0394	0.0191	-0.0002	0.0006	0.0003	0.0003	0.0006	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007
-1.90	-0.7090	-0.0009	0.0346	0.0013	-0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001
0.02	-0.0057	-0.0012	0.0346	-0.0008	-0.0001	0.0006	0.0006	0.0006	0.0006	0.0006	0.0006	0.0006	0.0006	0.0006	0.0006
2.01	0.2021	-0.0010	0.0326	-0.0025	-0.0001	0.0004	0.0004	0.0004	0.0004	0.0004	0.0004	0.0004	0.0004	0.0004	0.0004
5.01	0.5531	-0.0012	0.0376	-0.0261	0.0000	0.0006	0.0006	0.0006	0.0006	0.0006	0.0006	0.0006	0.0006	0.0006	0.0006

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PAGE 2 SUMMARY PRESSURES

TEST PART P RP10-6 YH 0 TT WING RUN SURVEY  
 AEDC PROPELLION WIND TUNNEL  
 TRANSONIC 47

TC-484 946 0.973 1432.2 750.2 3.997 1020.4 817.5 84.3 6 6 1

PRESSURE COEFFICIENTS CPB(CPB-P 2/0

ORIFICE	ALPHA=0.01	ALPHA=1.99	ALFA 0.02	ALFA 2.01	ALFA 5.01
1 CPB 1a	0.1573	0.1086	0.0795	0.0484	0.0095
2 CPB 2a	0.0533	0.0100	-0.0160	-0.0436	-0.0742
3 CPB 3a	-0.0306	-0.0671	-0.0955	-0.1166	-0.1354
4 CPB 4a	-0.1125	-0.1446	-0.1645	-0.1832	-0.2017
5 CPB 5a	-0.1647	-0.1919	-0.2037	-0.2147	-0.2274
6 CPB 6a	-0.2076	-0.2411	-0.2234	-0.1767	-0.0663
7 CPB 7a	0.0402	0.0249	0.0230	0.0293	0.0317
8 CPB 8a	0.1034	0.0854	0.0728	0.0704	0.0820
9 CPB 9a	0.1451	0.1103	0.0900	0.0768	0.0720
10 CPB10a	0.1870	0.1317	0.0977	0.0652	0.0315
11 CPB11a	0.1693	0.0989	0.0519	0.0074	-0.0544
12 CPB12a	0.1242	0.0571	0.0037	-0.0698	-0.1238
13 CPB13a	0.0993	0.0212	-0.0297	-0.0899	-0.1693
14 CPB14a	0.0690	-0.0079	-0.0507	-0.1174	-0.2021
15 CPB15a	0.0170	-0.0584	-0.1075	-0.1644	-0.2482
16 CPB16a	-0.0167	-0.0462	-0.1442	-0.1994	-0.2769
17 CPB17a	-0.0547	-0.1344	-0.1874	-0.2361	-0.3130
18 CPB18a	-0.0835	-0.1624	-0.2137	-0.2676	-0.3227
19 CPB19a	-0.0823	-0.1417	-0.1639	-0.2378	-0.3596
20 CPB20a	0.0433	0.0237	0.0351	0.0162	-0.1300
21 CPB21a	0.0433	0.0634	0.0734	0.0756	0.0501
22 CPB22a	0.0533	0.0661	0.0718	0.0791	0.0879
23 CPB23a	0.0574	0.0604	0.0600	0.0460	0.0316
24 CPB24a	0.0500	0.0491	0.0419	0.0454	0.0322
25 CPB25a	0.0042	-0.0012	-0.0056	-0.0034	-0.0100

PAGE 1 SUMMARY FORCE. MOMENT

AEDC PROPELLSION WIND TUNNEL  
TRANSONIC 47

TEST IC-484 PART M 947 1.074 1421.7 730.1 P 2.990 1065.0 536.0 77 72 71 70 69 68 67 66 65 64 63 62 61 60 59 58 57 56 55 54 53 52 51 50 49 48 47 46 45 44 43 42 41 40 39 38 37 36 35 34 33 32 31 30 29 28 27 26 25 24 23 22 21 20 19 18 17 16 15 14 13 12 11 10 9 8 7 6 5 4 3 2 1

ALPHA	CFP	CT	CAP	CLXP	CLM	CLL	CAB
-5.01	-0.3569	-0.0012	0.0345	0.0394	-0.0002	0.0005	0.0079
-1.90	-0.2166	-0.0010	0.0301	0.0072	-0.0002	0.0004	0.0085
0.00	-0.0077	-0.0007	0.0307	-0.0002	-0.0001	0.0007	0.0080
2.02	0.2082	-0.0007	0.0379	-0.0070	-0.0002	0.0006	0.0079
5.01	0.5459	-0.0009	0.0314	-0.0390	-0.0001	0.0006	0.0085

PAGE 7 SUMMARY PRESSURES

TEST PART 4 PT 9 PROTO-6 VM Q TT WING PIV SURVEY ATDC PROPULSION WIND TUNNEL  
 TC-484 947 1.024 1421.7 390.1 3.990 1064.9 336.0 89.0 SA 5 1 TRANSONIC AT

PRESSURE COEFFICIENTS CPSP(PSP) 3/8

COEFFICIENT	ALPHA=5.01	ALPHA=1.99	ALPHA=0.00	ALPHA=2.03	ALPHA=8.01
1	0.2021	0.1560	0.1277	0.0959	0.0937
2	0.0974	0.0554	0.0359	0.0037	0.0358
3	0.0144	-0.0232	-0.0485	-0.0688	-0.0904
4	-0.0714	-0.1044	-0.1283	-0.1407	-0.1683
5	-0.1208	-0.1555	-0.1717	-0.1824	-0.2001
6	-0.2030	-0.2217	-0.2204	-0.2282	-0.2314
7	-0.2030	-0.2115	-0.2103	-0.2191	-0.2257
8	-0.1412	-0.1461	-0.1402	-0.1261	-0.0911
9	0.0937	-0.0553	-0.0339	-0.0127	0.0019
10	0.2711	0.2348	0.0944	0.0713	0.0321
11	0.2181	0.1792	0.0793	0.0412	-0.0143
12	0.1846	0.0993	0.0486	0.0063	-0.0598
13	0.1607	0.0787	0.0243	-0.0248	-0.1033
14	0.1338	0.0534	0.0038	-0.0468	-0.1379
15	0.0845	0.0101	-0.0356	-0.0825	-0.1647
16	0.0493	-0.0226	-0.0680	-0.1129	-0.1818
17	0.0142	-0.0372	-0.1031	-0.1464	-0.2258
18	-0.0147	-0.0534	-0.1324	-0.1788	-0.2538
19	-0.0323	-0.0682	-0.1442	-0.1931	-0.2703
20	-0.0458	-0.0812	-0.1212	-0.1713	-0.2744
21	-0.0278	-0.0005	-0.0056	-0.0252	-0.1037
22	-0.0199	0.0191	0.0196	0.0300	-0.0099
23	-0.0177	0.0180	0.0162	0.0198	0.0073
24	-0.0183	0.0082	0.0077	0.0121	0.0025
25	-0.0302	-0.0234	-0.0192	-0.0119	-0.0228