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Summary

An investigation has been conducted in the Langley 16-Foot Transonic Tunnel to determine the effects of empennage arrangement on single-engine nozzle/afterbody static pressures. Tests were conducted at Mach numbers from 0.60 to 1.20, nozzle pressure ratios from 1.0 (jet off) to 8.0, and angles of attack from $-3°$ to $9°$ (at jet-off conditions), depending on Mach number. Three empennage arrangements (aft, staggered, and forward) were investigated. Extensive measurements were made of static pressure on the nozzle/afterbody in the vicinity of the tail surfaces.

The results of this study indicate that, for the isolated nozzle/afterbody, high negative pressure coefficients which act on the aft facing slopes of the nozzle/afterbody are evident at Mach numbers above 0.90. At supersonic speeds, shock-induced flow separation is present on the nozzle. The effects of the empennage on the nozzle/afterbody static pressure distributions are not limited to regions close to the tail surface but extend completely around the nozzle/afterbody. At a Mach number of 0.90 and 0.95, the configuration with the aft-located empennage had the lowest pressure coefficients (highest local velocities) on the afterbody. As the empennage is moved closer to the nozzle at supersonic speeds, the shock-induced flow separation causes a reduction in the pressure coefficients over the nozzle. At subsonic speeds (Mach number less than or equal to 0.95), placing the horizontal and vertical tails at the same longitudinal location causes a channeling effect on the flow and results in increased negative pressure coefficients. Thus, the configuration with the staggered empennage represents the configuration with the lowest unfavorable flow effects. At supersonic speeds (Mach number of 1.20), the results show that moving the horizontal and vertical tails away from the nozzle reduces the adverse empennage interference.

Introduction

Past experimental investigations (refs. 1 through 3) on a typical single-engine fighter aft end have shown the vertical and horizontal tails to be the major contributors to the nozzle/afterbody drag problem. During these investigations, the drag penalty was found to be especially acute when the nozzle operated in a closed-down (dry power) mode and when the tail surfaces were in an aft empennage arrangement. Moving the vertical and horizontal tails forward away from the nozzle greatly reduced the transonic drag rise and lowered the overall configuration drag. These results were deduced from force measurements on the aft end of the model and limited pressure measurements on the nozzle. The extent of the interference caused by the tails and its effects could not be determined because of a lack of detailed pressure measurements in the vicinity of the tails. For this reason, the present investigation was undertaken to obtain the detailed pressure distributions over the nozzle, afterbody, and empennage that are necessary to develop an understanding of the flow interactions associated with afterbody/empennage integration. In addition, there is a tremendous need for very detailed, highly accurate pressure data on simple configurations for use in validating new computational methods. (See refs. 4 through 6.) This study provides these data on a very simple axisymmetric nozzle/afterbody configuration with horizontal and vertical tails.

The investigation was conducted in the Langley 16-Foot Transonic Tunnel at Mach numbers from 0.60 to 1.20. Over 300 static pressures were measured on the surface of the model in the vicinity of the tails while nozzle pressure ratio and angle of attack were varied at each Mach number. Three empennage arrangements (aft, staggered, and forward) were investigated with a typical dry power convergent-divergent nozzle installed.

Symbols

The symbols used in the computer-generated tables in the appendix are given in the second column.

b	B	span (root to tip excluding root filler) of baseline tail surface (used for both vertical and horizontal tails), in.
C_p		static-pressure coefficient, $\frac{p_l - p_\infty}{q_\infty}$
C_p^*		pressure coefficient for sonic flow
c	C	airfoil local chord, in.
l	L	model length, in.
M		free-stream Mach number
NPR		nozzle pressure ratio, $p_{t,j}/p_\infty$
p_l		local static pressure, psi
p_t	PTO	free-stream total pressure, psi
$p_{t,j}$		jet total pressure, psi
p_∞	PO	free-stream static pressure, psi
q_∞	QO	free-stream dynamic pressure, psi
R		radius of afterbody or nozzle, in.
x	X	axial distance, in.

y	Y	distance from root (excluding root filler) to row of pressure orifices on horizontal or vertical tails, in.
α	ALPHA	model angle of attack, deg
ϕ	PHI	meridian angle about model axis, positive in counterclockwise direction when facing upstream, deg

Abbreviations:

Fwd	forward
L.E.	leading edge
Sta.	station
Stag	staggered

Apparatus and Methods

Wind Tunnel

The experimental investigation was conducted in the Langley 16-Foot Transonic Tunnel, a single-return atmospheric tunnel with a slotted octagonal test section and continuous air exchange. The Mach number in the test section can be varied from 0.20 to 1.30. A complete description of this facility and its operating characteristics can be found in reference 7.

Support System and Model

A sketch of the sting-strut-supported single-engine model is presented in figure 1. This type of support system places the model centerline on the centerline of the wind tunnel and minimizes support interference on the afterbody and nozzle. Photographs of the model installed in the test section of the Langley 16-Foot Transonic Tunnel are shown in figure 2. A complete description of the model support system can be found in reference 7.

The overall model arrangement, representing a typical single-engine fighter aft end, is composed of four major parts located as shown in the following table:

Part	x, in.	x/l
Forebody	0–40.89	0–0.57
Afterbody	40.89–64.89	0.57–0.91
Nozzle	64.89–71.70	0.91–1.00
Tail surfaces	Variable	Variable

The forebody consists of an ogive nose 24 in. in length with an initial angle of 14° and a constant-radius cylinder thereafter. The afterbody was designed to simulate closure ahead of the nozzle typical of a single-engine fighter configuration. The afterbody had provisions for mounting the vertical and horizontal tails at two different axial locations (forward and aft). The geometric details of the tail surfaces are presented in figure 3. The tail surfaces were tested in three empennage arrangements: aft, staggered, and forward. Figure 4 illustrates the relative position of the tails for the three empennage arrangements. In addition, the model was tested with all tails removed. The external shape of the afterbody and nozzle is presented in figure 5. The nozzle used for this investigation simulated a variable geometry (fixed in dry power mode for this test), convergent-divergent, axisymmetric nozzle typical of those currently in use on modern fighter aircraft. A complete description of this nozzle can be found in reference 1.

Instrumentation

Static pressure was measured on the afterbody and nozzle at the orifice locations shown in figure 5. Additional orifices were located on the left side of the vertical tail and on the horizontal tails as shown in figure 3. Jet total pressure $p_{t,j}$ was measured upstream of the nozzle throat as shown in figure 1. Jet total temperature was maintained at approximately 530°R throughout the entire investigation.

The forces and moments acting on the model were not measured during this investigation but have been extensively measured and documented in previous tests (refs. 1, 2, and 3).

Tests, Corrections, and Accuracy

Data were obtained at Mach numbers 0.60, 0.90, 0.95, and 1.20. At each Mach number, nozzle pressure ratio NPR was varied while angle of attack α was held constant at 0°. The effect of angle of attack was obtained only at a nozzle pressure ratio NPR of 1.00 (jet off). The NPR was varied from 1.0 to 8.0, and the angle of attack was varied from −3° to 9°, depending on Mach number. Reynolds numbers based on the model length for this study are as follows:

M	Reynolds number
0.60	1.80×10^7
0.90	2.24×10^7
0.95	2.30×10^7
1.20	2.40×10^7

To ensure a turbulent boundary layer over the model, a 0.15-in-wide transition strip of No. 100 Carborundum grit was fixed at 0.82 and 0.63 in. from the leading edges of the vertical and horizontal tails, respectively, and at 2.25 in. from the model nose. Model angle of attack was measured by an attitude sensor mounted in the nose of the model.

The accuracy of the pressure coefficients is estimated to be within the following limits:

M	C_p
0.60	±0.0170
0.90	±0.0100
0.95	±0.0096
1.20	±0.0082

The accuracy of α is ±0.02.

Data Reduction

All data for both the model and wind tunnel were recorded simultaneously by computer and stored on magnetic tape. Fifty frames of data taken at a rate of 10 frames per second were averaged for each data point; these average values were used to compute steady-state results. All the data obtained in this study are presented as the variation of pressure coefficient C_p over the afterbody and empennage. These pressure coefficient data are presented in tabulated form in the appendix and in plotted form in the data figures.

Presentation of Results

All the aerodynamic data taken during this study are presented graphically in the figures in the form of pressure coefficient on the nozzle/afterbody and empennage of each configuration. The major results of this investigation are presented in the following figures:

Figure

Effect of model support system on pressure coefficients at two meridian angles for body alone at $M = 0.95$ and NPR = 1.0 (jet off) 6

Effect of nozzle pressure ratio on nozzle/afterbody pressures at $\alpha \approx 0°$ for—

Body alone 7

Body with horizontal and vertical tails in aft location 8

Body with horizontal and vertical tails in forward location 9

Body with horizontal tails in aft location and vertical tail in forward location 10

Effect of angle of attack on nozzle/afterbody pressures at NPR ≈ 1.0 for —

Body alone 11

Body with horizontal and vertical tails in aft location 12

Body with horizontal and vertical tails in forward location 13

Body with horizontal tails in aft location and vertical tail in forward location 14

Effect of empennage arrangement on nozzle/afterbody pressure coefficients at NPR = 1.0 and $\alpha = 0°$ for—

$\phi = 18°$ 15

$\phi = 72°$ 16

Effect of empennage arrangement on pressure coefficients at NPR = 1.0 and $\alpha = 0°$ on—

Horizontal tails 17

Vertical tail 18

Comparison of calculated and experimental pressure coefficients at $\alpha = 0°$ on nozzle/afterbody for—

Body alone 19

Staggered tails configuration 20

Drag coefficient due to various empennage arrangement 21

Results and Discussions

The primary emphasis in this investigation was on determining the effects of nozzle pressure ratio, angle of attack, and empennage arrangement on the pressure distributions over a single-engine nozzle/afterbody configuration. The basic data are presented graphically in figures 7 to 18 and tabulated in the appendix. Comparisons of the experimental data with theoretical calculations are presented in figures 19 and 20.

Strut Interference Effects

The model used in this study was mounted on a strut support system in the Langley 16-Foot Transonic Tunnel. (See fig. 1.) It would be expected from looking at this installation that the strut located on the bottom of the model may adversely affect the pressure coefficients on the model lower surface. However, as indicated by the data of figures 6 and 7, the pressure coefficients on the nozzle/afterbody are not significantly affected by the presence of the strut support system. At an angle of attack of 0° the largest effect noted, as one would expect, is at the stations closest to the strut. (See data for $x/l = 0.7$ in fig. 6(a).) At lifting conditions, $\alpha = 3°$, the strut system again appears to have only small effects on the pressure coefficients. (Compare lower surface pressure coefficients at $\alpha = -3°$ with upper surface pressure coefficients at $\alpha = 3°$ in fig. 6(b).) Based on these results it is believed that the pressure coefficient data obtained on the model

at $\alpha = 0°$ are relatively free of adverse strut interference effects.

Nozzle/Afterbody Configuration

Varying nozzle pressure ratio does not significantly alter the pressure distributions over the isolated nozzle/afterbody (body alone) at the lower test Mach numbers. (See fig. 7.) At supersonic speeds (fig. 7(a)), a local shock wave appears to be present on the nozzle at a fuselage station x/l of about 0.95 and causes flow separation. As the pressure ratio is increased, this shock wave moves forward on the nozzle increasing slightly the area of flow separation. The data of reference 3 (summarized in fig. 21) indicated that the drag coefficient for the isolated nozzle/afterbody is fairly constant up to a Mach number of 0.90. At the higher Mach numbers, the drag increases significantly. At a Mach number of 0.95 (compare figs. 7(b) and (d), for example) the increased drag is probably due to the higher local velocities (area of supersonic flow) in the area around the start of the nozzle ($x/l = 0.91$). These higher negative pressure coefficients acting on the rearward-facing surface area of the nozzle act to increase the drag coefficient. At supersonic speeds, $M = 1.2$, the high drag is caused (compare figs. 7(a) and (d)) by the shock-induced flow separation on the nozzle itself which prevents any pressure recovery over the last 25 percent of the nozzle boattail.

Increasing the angle of attack at subsonic speeds for the isolated nozzle/afterbody (fig. 11) tends to increase the pressure coefficients (reduce local velocities) on the upper surface of the model and decrease the pressure coefficients (increase local velocities) on the lower surface of the model, particularly near the start of the nozzle boattail. At supersonic speeds, the effect of angle of attack is extremely small, which is not surprising since the highest angle of attack at this Mach number was less than 6°.

Nozzle/Afterbody/Empennage Configurations

The effect of nozzle pressure ratio on the pressure distributions over the nozzle/afterbody with the empennage in various arrangements at an angle of attack of approximately 0° is presented in figures 8 through 10. In general, the results show forward movement of a shock wave on the nozzle with increasing NPR at supersonic speeds and some increase in pressure coefficients at the nozzle exit at subsonic speeds. Although there is a small effect of nozzle pressure ratio on these pressure distributions, there is a significant effect of the empennage on the nozzle/afterbody pressure coefficients. The pressure distributions show that the local airflow velocity over the afterbody decreases at the leading edge of the empennage surface and then increases around the empennage surface resulting in slightly lower (more negative) static pressure coefficients at the nozzle exit for $M > 0.90$. (Compare fig. 7 with fig. 8 or 16.) In addition, for the aft tails arrangement the flow expansion around the empennage results in a higher local velocity (lower negative pressure coefficients) at the start of the nozzle boattail than occurs with the tails off. At all Mach numbers of this investigation, the effects of the empennage are not limited to the regions close to the tail surfaces but extend completely around the nozzle/afterbody. The magnitude of these effects is small at the lower Mach numbers (for $M = 0.60$, compare figs. 7(d) and 8(d)) but increase as the Mach number increases (for $M = 0.95$, compare figs. 7(b) and 8(b)).

The drag data of references 1 to 3 and figure 21 indicate that adding the empennage can cause significant interference effects on the nozzle/afterbody, depending on the empennage configuration and test Mach number. At the lower Mach numbers ($M = 0.50$ from ref. 3), the interference drag is extremely small with the aft tails arrangement having the highest level. Comparing the data of figure 7(d) with 8(d) for $M = 0.60$ (empennage is off in fig. 7(d) and on in fig. 8(d)) would tend to confirm this low level of interference drag. The results at $M = 0.60$ presented herein indicate that although the tails caused an acceleration of the flow over the afterbody, the local velocities are still subsonic and no indication of flow separation is present. At a Mach number of 0.95, however (compare figs. 7(b) and 8(b)), the empennage caused a large increase in velocities over the aft portion of the afterbody and forward portion of the nozzle ($x/l = 0.82$ to 0.92) which results in the formation of a shock wave at about $x/l = 0.92$ and flow separation over much of the nozzle (pressures on the nozzle are less positive than on the body alone). (See data for $\phi = 72°$, for example.) These high negative pressure coefficients acting on the rearward-facing projected area of the nozzle/afterbody along with the absence of pressure recovery on the nozzle (flow separation) cause the high level of interference drag shown in references 1 to 3.

The effect of angle of attack on the pressure distributions over the nozzle/afterbody is presented in figure 12 for the configuration with the tails in the aft location, in figure 13 for the configuration with the tails in the forward location, and in figure 14 for the configuration with the tails in the staggered location. (See fig. 4 for model sketches.) Increasing angle of attack significantly affects the pressure coefficients over the afterbody. These effects, as indicated previously, are not limited to the area around the

empennage but extend completely around the afterbody. Increasing angle of attack increases the local velocity on model surfaces located above the upper surface of the horizontal tails ($\phi = 0°$ to $72°$) and lowers the velocities on model surfaces below the horizontal tails ($\phi = 108°$ to $180°$).

At a Mach number of 0.60, increasing angle of attack significantly alters the pressure coefficient distributions over the model afterbody with very little effect on the pressures over the nozzle (particularly at roll angles greater than 18°). (See figs. 12(d), 13(d), and 14(d).) At roll angles which are essentially located behind the vertical tail ($\phi = 0°$ and $18°$) there is a significant effect of angle of attack on the nozzle pressure distribution. The effect of angle of attack on the level of interference drag is believed to be relatively small, since the flow data generally show no evidence of flow separation on the nozzle/afterbody.

At the higher Mach numbers ($M > 0.60$), the angle-of-attack effects are not limited to the model afterbody but extend aft on to the nozzle. (For example, see figs. 12(a) and (b).) Increasing α generally results in lower local pressure coefficients which increase the total drag. Although the effect of α on the nozzle pressure coefficients is large for the aft-mounted empennage arrangement (fig. 12), it is somewhat reduced as the tail surfaces are moved forward away from the nozzle. (See fig. 13.)

Effect of Empennage Arrangement

In references 1 and 3 and figure 21, the aerodynamic force data showed that the staggered tails configuration in general has the lowest interference drag at high subsonic speeds and the aft tails configuration the highest interference drag. At supersonic speeds ($M = 1.20$), the aft tails configuration still has the highest interference drag, but now the forward tails configuration has the lowest interference drag.

At $M = 0.90$, the pressure data show that the configuration with the aft-tail arrangement has the higher local velocities on the afterbody at the start ($x/l = 0.91$) of the nozzle boattail. (Compare figs. 8(c) and 10(c) and see figs. 15(a) and 16(a).) This region of supersonic flow with large negative pressure coefficients acting on the rearward-facing slopes may cause the drag increase identified in reference 3 even though the pressures on the aft part of the nozzle are slightly higher (more positive). The largest negative pressure coefficients on the aft tails configuration are located in the region between the horizontal and vertical tails ($\phi = 0°$ to $90°$); this indicates some channeling effect of the airflow.

At a Mach number of 0.95, the pressure coefficient data indicate (compare figs. 8(b) and 10(b)) essentially the same results as for $M = 0.90$, except that a shock wave at $x/l = 0.92$ causes some flow separation on the nozzle for the aft tails arrangement, and this results in higher interference drag.

At $M = 1.20$, the major area of adverse empennage effects appears to be located on the nozzle. (Compare figs. 8(a) and 9(a) and see figs. 15(b) and 16(b).) As the empennage is moved closer to the nozzle, the shock-induced flow separation causes larger negative pressure coefficients over the nozzle. These reduced pressures acting on the rearward-facing slopes of the nozzle probably result in the increased drag noted in reference 3 for the aft tails configuration.

Empennage Pressure Coefficients

The effect of empennage arrangement on the horizontal tail and vertical tail pressure coefficients at jet-off conditions is summarized in figures 17 and 18, respectively. At the inboard station ($y/b = 0.10$), the pressure coefficients over the horizontal tails in the staggered empennage configuration at subsonic speeds are approximately the same as for the other two empennage arrangements, whereas at the more outboard span station ($y/b = 0.20$), the velocities over the staggered empennage horizontal tails are significantly lower except near the tail leading edge. These data would seem to indicate that at the inboard station, the local flow may be dominated by afterbody/horizontal tail juncture effects. For the outboard station, however, the data would seem to indicate that when the tail surfaces are aligned (located at the same afterbody station) there is some channeling (meeting of the pockets of supersonic flow on each tail surface) of the air flow between the tail surfaces which causes the higher local velocities indicated by the pressure coefficient data. This is evident in the pressure distribution over the vertical tail (fig. 18), which shows a shock wave formed on the aft and forward tails configuration and none on the staggered tails configuration. It is evident that the high empennage interference drag increments at subsonic speeds for the aft and forward tails configurations are due to the high negative pressures in the region of supersonic flow, which are acting on the rearward-facing projected area of the model afterbody and the wave drag. At $M = 1.20$, the pressure coefficient characteristics are nearly the same for all empennage configurations studied, possibly indicating that the interference drag is primarily associated with the effect of the empennage on the flow over the afterbody and nozzle.

Comparison of Calculated and Experimental Results

The experimental data obtained in this investigation are compared with the results calculated

by two theoretical methods in figures 19 and 20. The first theoretical method is a viscous-inviscid interaction method known as RAXJET (refs. 5 and 6), which is used to calculate the pressure distributions over an isolated nozzle/afterbody. This interaction method subdivides the flow about the nozzle/afterbody into several regions. In general these regions include (1) the essentially inviscid external flow, (2) the boundary-layer flow over the nozzle surfaces, (3) the essentially inviscid jet exhaust, and (4) the mixing layer between the jet exhaust and the external stream. The boundary-layer growth effects are accounted for by using an effective surface determined by adding the boundary-layer-displacement thickness to the body geometry. RAXJET attempts to solve the flow field by patching together solutions for the flow in each of these regions. This type of jet flow field modeling has proven to be very accurate for isolated boattail geometries. The second method is a full-potential finite-volume transonic code called FLO-30V (ref. 5), which is used to calculate the pressure distributions over the nozzle/afterbody including the effects of the empennage. In this code an integral boundary-layer calculation is performed in strip fashion. The resulting effective body and tails are used as input to the code. This developmental code utilizes the method of Caughey and Jameson which is based upon the full potential equation and a mesh generation technique which wraps a C-type grid around the body and tails. Further discussion of the methods used in these calculations and of the comparisons of calculations with experimental data can be found in reference 8.

A comparison of the experimental data for the nozzle/afterbody configuration with the calculations by using the RAXJET code is presented in figure 19. The results indicate that the calculations compare reasonably well with the experimental data at subsonic speeds. There is some discrepancy in the comparison at the model station just downstream of the start of the nozzle ($x/l = 0.91$) and at the nozzle exit. This difference is possibly caused either by grid resolution or the inadequacy of the boundary-layer calculation to accurately predict viscous effects. At $M = 1.20$, the nozzle external flow is dominated by shock-induced flow separation, and therefore, the calculations would not be expected to yield good agreement over the nozzle itself because the method does not contain a separation model.

The calculated results from FLO-30V for the staggered empennage arrangement at subsonic speeds are compared with the experimental data in figure 20. The staggered tails arrangement was chosen because the results presented herein and in references 1 and 3 show that the empennage interference effects were less for this configuration than for the other configurations studied, and it was believed that a better agreement could be obtained. The calculated results show reasonably good agreement with the experimental data at the lowest test Mach number ($M = 0.60$). At the higher subsonic test Mach numbers (fig. 20(c) for $M = 0.95$), the discrepancy between the experiment and theory becomes significant. The major reason for the discrepancy could probably be attributed to the approximations made to model the vertical tails and the lack of a model of the wake of the vertical tail. The FLO-30V calculations do account for viscous effects, but the boundary layers on the body and tail were computed separately as two-dimensional elements so that the influence of the empennage is not included in the afterbody boundary-layer calculations. As a result, the FLO-30V calculation shows some influence of the empennage on nozzle/afterbody pressures but fails to predict the severity of the interference effects.

Conclusions

An investigation has been conducted in the Langley 16-Foot Transonic Tunnel to determine the effects of empennage arrangement on single-engine nozzle/afterbody static pressures. Tests were conducted at Mach numbers from 0.60 to 1.20, nozzle pressure ratios from 1.0 (jet off) to 8.0, and angles of attack from $-3°$ to $9°$, depending on Mach number. Three empennage arrangements (aft, staggered, and forward) were investigated. The results of this study indicate the following conclusions:

1. For the isolated nozzle/afterbody, high negative pressure coefficients which act on the rearward-facing slopes of the nozzle/afterbody are evident at Mach numbers above 0.90. At supersonic speeds, shock-induced flow separation is present on the nozzle.

2. The effects of the empennage on nozzle/afterbody pressure coefficients are not limited to the regions close to the tail surfaces but extend completely around the nozzle/afterbody.

3. At a Mach number of 0.90 and 0.95, the configuration with the aft-located horizontal and vertical tails had the lowest (most negative) pressure coefficients (highest local velocities) on the afterbody.

4. As the empennage is moved closer to the nozzle at supersonic speeds, the shock-induced flow separation causes a reduction in the pressure coefficients over the nozzle.

5. At subsonic speeds (Mach number less than or equal to 0.95), placing the horizontal and vertical tails at the same longitudinal location causes a channeling effect on the flow resulting in increased

negative pressure coefficients. The configuration with the staggered tails represents the configuration with the lowest unfavorable flow effects.

6. At supersonic speeds (Mach number equal to 1.20), the results show that moving the horizontal and vertical tails away from the nozzle reduces the unfavorable flow effects.

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Appendix

Tabulated Pressure Distributions

The tabulated pressure distributions are presented in tables A1 through A32 as follows:

Effect of nozzle pressure ratio on pressure distributions for—
- Body alone at—
  - $M = 1.20$ and $\alpha = 0.010°$ A1
  - $M = 0.95$ and $\alpha = 0.010°$ A3
  - $M = 0.90$ and $\alpha = 0.009°$ A5
  - $M = 0.60$ and $\alpha = 0.010°$ A7
- Aft tails configuration at—
  - $M = 1.20$ and $\alpha = 0.025°$ A9
  - $M = 0.95$ and $\alpha = 0.024°$ A11
  - $M = 0.90$ and $\alpha = 0.017°$ A13
  - $M = 0.60$ and $\alpha = 0.030°$ A15
- Forward tails configuration at—
  - $M = 1.20$ and $\alpha = 0.003°$ A17
  - $M = 0.95$ and $\alpha = 0.015°$ A19
  - $M = 0.90$ and $\alpha = 0.016°$ A21
  - $M = 0.60$ and $\alpha = 0.009°$ A23
- Staggered tails configuration at—
  - $M = 1.20$ and $\alpha = 0.015°$ A25
  - $M = 0.95$ and $\alpha = 0.023°$ A27
  - $M = 0.90$ and $\alpha = 0.020°$ A29
  - $M = 0.60$ and $\alpha = 0.029°$ A31

Effect of angle of attack on pressure distributions for—
- Body alone at—
  - $M = 1.20$ and NPR = 1.037 . . . . . A2
  - $M = 0.95$ and NPR = 1.115 . . . . . A4
  - $M = 0.90$ and NPR = 1.111 . . . . . A6
  - $M = 0.60$ and NPR = 1.051 . . . . . A8
- Aft tails configuration at—
  - $M = 1.20$ and NPR = 0.985 . . . . . A10
  - $M = 0.95$ and NPR = 1.067 . . . . . A12
  - $M = 0.90$ and NPR = 1.099 . . . . . A14
  - $M = 0.60$ and NPR = 1.050 . . . . . A16
- Forward tails configuration at—
  - $M = 1.20$ and NPR = 1.052 . . . . . A18
  - $M = 0.95$ and NPR = 1.138 . . . . . A20
  - $M = 0.90$ and NPR = 1.119 . . . . . A22
  - $M = 0.60$ and NPR = 1.056 . . . . . A24
- Staggered tails configuration at—
  - $M = 1.20$ and NPR = 1.006 . . . . . A26
  - $M = 0.95$ and NPR = 1.096 . . . . . A28
  - $M = 0.90$ and NPR = 1.098 . . . . . A30
  - $M = 0.60$ and NPR = 1.049 . . . . . A32

Table A1. Effect of Nozzle Pressure Ratio on Pressure Distributions for Body Alone at $M = 1.20$ and $\alpha = 0.010°$

(a) NPR = 1.060

TEST PARAMETERS

CONFIGURATION	BODY ONLY
POINT NUMBER	3
MACH NUMBER	1.205
ALPHA, DEG	.010
NPR	1.060
PTO, PSI	14.696
PO, PSI	6.023
QO, PSI	6.119

TAIL SURFACE PRESSURE COEFFICIENTS

	HORIZONTAL TAILS				VERTICAL TAIL	
	UPPER SURFACE		LOWER SURFACE			
	Y/B		Y/B		Y/B	
X/C	0.1	0.2	0.1	0.2	0.1	0.2
0.05						
0.10						
0.20						
0.30						
0.40						
0.50						
0.60						
0.70						
0.80						
0.90						

Tails removed

AFTERBODY PRESSURE COEFFICIENTS

	PHI, DEG											
X/L	0	18	36	45	54	72	81	90	108	135	162	180
.584	-.027	-.023	******	-.018	******	******	******	-.023	-.014	-.007	.005	******
.598	-.033	-.027	******	-.025	******	-.028	******	-.028	-.015	-.007	******	******
.612	-.033	-.029	******	-.026	******	-.021	******	-.020	-.011	-.008	******	******
.626	-.031	-.028	******	-.028	******	-.024	******	-.017	-.012	-.005	******	******
.640	******	-.019	******	-.015	******	-.019	******	-.014	-.005	-.002	******	******
.654	******	-.028	******	-.025	******	-.019	******	-.023	-.024	-.020	******	******
.668	******	******	******	-.022	******	-.021	******	-.017	-.015	-.008	******	******
.682	******	-.030	******	-.027	******	-.028	******	-.021	-.018	-.001	.003	******
.696	******	-.030	******	-.027	******	-.026	******	-.019	-.007	.001	-.001	.000
.710	******	-.023	******	******	******	-.024	******	-.010	-.005	.000	-.004	-.006
.724	******	-.020	******	-.021	******	-.020	******	-.009	-.008	-.009	-.013	-.014
.738	******	-.025	******	-.028	******	******	******	-.014	-.026	-.021	-.027	-.026
.752	******	-.012	******	-.009	******	-.012	******	-.010	-.016	-.018	-.018	******
.766	******	-.027	******	-.032	******	-.030	******	-.035	-.043	-.043	-.043	-.046
.779	******	-.019	******	-.019	******	-.023	******	-.018	******	-.029	-.026	-.030
.793	******	-.031	******	-.030	******	-.032	******	******	-.034	-.035	-.038	******
.807	******	-.038	******	-.034	******	-.036	******	******	-.037	-.041	-.037	-.037
.821	******	******	******	-.034	******	-.038	******	******	-.038	-.040	-.039	-.038
.835	******	-.046	******	-.048	******	-.042	******	******	-.040	-.043	-.044	-.051
.849	******	-.057	******	-.057	******	-.050	******	******	-.047	-.054	-.056	-.062
.863	******	-.074	******	-.071	******	-.068	******	******	-.068	-.072	******	-.071
.877	-.086	-.074	******	-.076	******	-.081	******	******	******	******	******	******
.891	-.086	-.094	******	-.096	******	-.100	******	******	-.102	-.097	-.096	-.093
.916	-.115	-.116	-.178	******	-.124	******	-.137	-.143	-.140	-.126	-.116	-.127
.928	-.157	******	-.202	******	-.163	******	-.167	-.169	-.171	-.173	-.174	-.170
.940	-.215	******	-.212	******	-.224	-.229	-.225	-.226	-.229	-.229	-.231	-.230
.952	******	******	-.295	******	-.299	-.300	-.305	-.306	-.308	-.309	-.311	-.306
.962	-.329	-.328	-.326	******	-.331	-.326	-.317	-.314	-.315	-.297	-.327	-.333
.974	-.114	-.086	******	******	-.067	-.058	-.050	-.054	-.050	-.047	-.055	-.055
.986	-.016	-.013	-.016	******	-.014	-.009	-.008	-.011	-.009	-.008	-.010	-.010
.996	.007	.010	******	******	.003	.009	.010	.009	.006	.010	.006	.010

AFTERBODY INTEGRATED PRESSURE DRAG COEFFICIENT .0988

Table A1. Continued

(b) NPR = 2.040

TEST PARAMETERS

CONFIGURATION	BODY ONLY
POINT NUMBER	4
MACH NUMBER	1.201
ALPHA, DEG	.010
NPR	2.040
PTO, PSI	14.697
PO, PSI	6.051
QO, PSI	6.112

TAIL SURFACE PRESSURE COEFFICIENTS

	HORIZONTAL TAILS				VERTICAL TAIL	
	UPPER SURFACE Y/B		LOWER SURFACE Y/B		Y/B	
X/C	0.1	0.2	0.1	0.2	0.1	0.2
0.05						
0.10						
0.20						
0.30						
0.40						
0.50						
0.60						
0.70						
0.80						
0.90						

Tails removed

AFTERBODY PRESSURE COEFFICIENTS

	PHI, DEG											
X/L	0	18	36	45	54	72	81	90	108	135	162	180
.584	-.032	-.030	******	-.018	******	******	******	-.023	-.020	-.012	.005	******
.598	-.037	-.033	******	-.028	******	-.030	******	-.025	-.019	-.008	******	******
.612	-.034	-.034	******	-.028	******	-.025	******	-.020	-.017	-.005	******	******
.626	-.034	-.036	******	-.025	******	-.028	******	-.020	-.018	-.010	******	******
.640	******	-.027	******	-.022	******	-.015	******	-.012	-.012	-.006	******	******
.654	******	-.040	******	-.029	******	-.021	******	-.028	-.027	-.021	******	******
.668	******	******	******	-.025	******	-.022	******	-.021	-.018	-.014	******	******
.682	******	-.032	******	-.034	******	-.030	******	-.023	-.021	-.005	.002	******
.696	******	-.034	******	-.033	******	-.027	******	-.021	-.016	-.006	-.004	.003
.710	******	-.032	******	******	******	-.025	******	-.014	-.008	-.002	-.003	-.005
.724	******	-.023	******	-.025	******	-.017	******	-.010	-.011	-.007	-.012	-.013
.738	******	-.028	******	-.025	******	******	******	-.018	-.028	-.024	-.026	-.024
.752	******	-.016	******	-.014	******	-.014	******	-.013	-.021	-.018	-.019	******
.766	******	-.030	******	-.038	******	-.035	******	-.036	-.044	-.044	-.047	-.048
.779	******	-.022	******	-.024	******	-.027	******	-.022	******	-.030	-.028	-.027
.793	******	-.035	******	-.035	******	-.038	******	******	-.039	-.039	-.039	******
.807	******	-.043	******	-.040	******	-.040	******	******	-.042	-.043	-.040	-.038
.821	******	******	******	-.039	******	-.041	******	******	-.040	-.036	-.038	-.038
.835	******	-.054	******	-.050	******	-.051	******	******	-.047	-.047	-.048	-.051
.849	******	-.062	******	-.053	******	-.052	******	******	-.050	-.059	-.059	-.057
.863	******	-.076	******	-.073	******	-.071	******	******	-.072	-.071	******	-.072
.877	-.094	-.077	******	-.078	******	-.085	******	******	******	******	******	******
.891	-.094	-.100	******	-.097	******	-.103	******	******	-.102	-.096	-.097	-.092
.916	-.121	-.122	-.183	******	-.129	******	-.140	-.147	-.143	-.128	-.116	-.126
.928	-.160	******	-.207	******	-.168	******	-.170	-.173	-.174	-.174	-.174	-.170
.940	-.218	******	-.216	******	-.229	-.234	-.229	-.230	-.232	-.231	-.232	-.229
.952	******	******	-.299	******	-.305	-.305	-.309	-.308	-.310	-.309	-.312	-.305
.962	-.334	-.333	-.331	******	-.334	-.332	-.330	-.326	-.331	-.320	-.335	-.338
.974	-.061	-.063	******	******	-.055	-.055	-.051	-.056	-.049	-.045	-.057	-.060
.986	-.010	-.012	-.009	******	-.009	-.008	-.012	-.010	-.012	-.011	-.017	-.014
.996	.005	.005	******	******	.006	.009	.007	.004	.007	.004	.002	.005

AFTERBODY INTEGRATED PRESSURE DRAG COEFFICIENT .1008

Table A1. Continued

(c) NPR = 4.074

TEST PARAMETERS

CONFIGURATION	BODY ONLY
POINT NUMBER	5
MACH NUMBER	1.200
ALPHA, DEG	.011
NPR	4.074
PTO, PSI	14.695
PO, PSI	6.057
QO, PSI	6.109

TAIL SURFACE PRESSURE COEFFICIENTS

	HORIZONTAL TAILS				VERTICAL TAIL	
	UPPER SURFACE Y/B		LOWER SURFACE Y/B		Y/B	
X/C	0.1	0.2	0.1	0.2	0.1	0.2
0.05						
0.10						
0.20						
0.30						
0.40						
0.50						
0.60						
0.70						
0.80						
0.90						

Tails removed

AFTERBODY PRESSURE COEFFICIENTS

	PHI, DEG											
X/L	0	18	36	45	54	72	81	90	108	135	162	180
.584	-.033	-.031	******	-.017	******	******	******	-.023	-.024	-.014	.004	******
.598	-.039	-.037	******	-.031	******	-.030	******	-.027	-.021	-.007	******	******
.612	-.038	-.035	******	-.027	******	-.025	******	-.020	-.019	-.008	******	******
.626	-.038	-.037	******	-.029	******	-.024	******	-.020	-.018	-.013	******	******
.640	******	-.027	******	-.026	******	-.021	******	-.014	-.014	-.008	******	******
.654	******	-.042	******	-.035	******	-.022	******	-.027	-.028	-.024	******	******
.668	******	******	******	-.028	******	-.024	******	-.024	-.021	-.015	******	******
.682	******	-.031	******	-.033	******	-.031	******	-.026	-.025	-.007	-.001	******
.696	******	-.038	******	-.034	******	-.032	******	-.027	-.020	-.003	-.003	.000
.710	******	-.037	******	******	******	-.024	******	-.019	-.013	-.003	-.001	-.007
.724	******	-.028	******	-.026	******	-.015	******	-.009	-.013	-.011	-.013	-.016
.738	******	-.032	******	-.031	******	******	******	-.019	-.027	-.022	-.024	-.026
.752	******	-.018	******	-.020	******	-.015	******	-.011	-.022	-.021	-.020	******
.766	******	-.035	******	-.039	******	-.035	******	-.040	-.049	-.044	-.047	-.048
.779	******	-.024	******	-.026	******	-.030	******	-.025	******	-.031	-.031	-.031
.793	******	-.034	******	-.037	******	-.042	******	******	-.039	-.039	-.040	******
.807	******	-.042	******	-.039	******	-.043	******	******	-.042	-.042	-.040	-.041
.821	******	******	******	-.040	******	-.044	******	******	-.044	-.044	-.037	-.038
.835	******	-.054	******	-.053	******	-.052	******	******	-.048	-.049	-.050	-.052
.849	******	-.062	******	-.055	******	-.057	******	******	-.053	-.055	-.059	-.062
.863	******	-.080	******	-.074	******	-.071	******	******	-.073	-.076	******	-.072
.877	-.097	-.082	******	-.078	******	-.085	******	******	******	******	******	******
.891	-.096	-.101	******	-.100	******	-.104	******	******	-.103	-.097	-.098	-.092
.916	-.121	-.123	-.185	******	-.130	******	-.144	-.146	-.145	-.127	-.117	-.127
.928	-.161	******	-.208	******	-.171	******	-.173	-.173	-.175	-.175	-.174	-.169
.940	-.220	******	-.218	******	-.230	-.235	-.231	-.231	-.232	-.233	-.232	-.229
.952	******	******	-.303	******	-.303	-.308	-.311	-.311	-.312	-.310	-.313	-.305
.962	-.336	-.335	-.334	******	-.337	-.336	-.336	-.329	-.333	-.332	-.341	-.341
.974	-.079	-.074	******	******	-.067	-.057	-.061	-.057	-.055	-.054	-.060	-.069
.986	-.011	-.012	-.013	******	-.014	-.012	-.014	-.014	-.012	-.016	-.014	-.013
.996	.005	.004	******	******	.005	.004	.005	.005	.003	.006	.004	.009

AFTERBODY INTEGRATED PRESSURE DRAG COEFFICIENT .1029

Table A1. Continued

(d) NPR = 6.026

TEST PARAMETERS

CONFIGURATION	BODY ONLY
POINT NUMBER	6
MACH NUMBER	1.199
ALPHA, DEG	.011
NPR	6.026
PTJ, PSI	14.694
PO, PSI	6.064
QO, PSI	6.107

TAIL SURFACE PRESSURE COEFFICIENTS

	HORIZONTAL TAILS				VERTICAL TAIL	
	UPPER SURFACE Y/B		LOWER SURFACE Y/B		Y/B	
X/C	0.1	0.2	0.1	0.2	0.1	0.2
0.05						
0.10						
0.20						
0.30						
0.40						
0.50						
0.60						
0.70						
0.80						
0.90						

Tails removed

AFTERBODY PRESSURE COEFFICIENTS

	PHI, DEG											
X/L	0	18	36	45	54	72	81	90	108	135	162	180
.584	-.034	-.031	******	-.014	******	******	******	-.024	-.023	-.015	.000	******
.598	-.041	-.036	******	-.031	******	-.033	******	-.026	-.024	-.012	******	******
.612	-.040	-.037	******	-.031	******	-.027	******	-.022	-.021	-.011	******	******
.626	-.039	-.039	******	-.029	******	-.024	******	-.021	-.020	-.013	******	******
.640	******	-.030	******	-.026	******	-.022	******	-.017	-.015	-.008	******	******
.654	******	-.042	******	-.035	******	-.025	******	-.030	-.028	-.025	******	******
.668	******	******	******	-.030	******	-.027	******	-.026	-.022	-.015	******	******
.682	******	-.033	******	-.032	******	-.032	******	-.031	-.027	-.010	-.003	******
.696	******	-.036	******	-.037	******	-.032	******	-.029	-.021	-.010	-.005	-.004
.710	******	-.034	******	******	******	-.026	******	-.019	-.014	-.008	-.008	-.010
.724	******	-.031	******	-.029	******	-.020	******	-.012	-.014	-.012	-.017	-.017
.738	******	-.031	******	-.030	******	******	******	-.021	-.032	-.025	-.027	-.029
.752	******	-.020	******	-.016	******	-.015	******	-.014	-.021	-.021	-.020	******
.766	******	-.036	******	-.039	******	-.037	******	-.039	-.049	-.045	-.047	-.048
.779	******	-.026	******	-.026	******	-.028	******	-.024	******	-.033	-.029	-.030
.793	******	-.035	******	-.037	******	-.038	******	******	-.040	-.040	-.042	******
.807	******	-.044	******	-.039	******	-.042	******	******	-.045	-.043	-.041	-.040
.821	******	******	******	-.041	******	-.043	******	******	-.044	-.044	-.040	-.041
.835	******	-.053	******	-.053	******	-.054	******	******	-.052	-.050	-.051	-.053
.849	******	-.064	******	-.061	******	-.056	******	******	-.058	-.059	-.062	-.064
.863	******	-.081	******	-.077	******	-.073	******	******	-.071	-.074	******	-.076
.877	-.097	-.085	******	-.079	******	-.084	******	******	******	******	******	******
.891	-.096	-.100	******	-.100	******	-.104	******	******	-.103	-.096	-.098	-.094
.916	-.122	-.123	-.186	******	-.130	******	-.144	-.149	-.144	-.128	-.117	-.127
.928	-.163	******	-.209	******	-.172	******	-.172	-.174	-.175	-.175	-.175	-.170
.940	-.220	******	-.218	******	-.230	-.236	-.231	-.232	-.233	-.233	-.232	-.229
.952	******	******	-.302	******	-.307	-.308	-.309	-.309	-.313	-.310	-.312	-.306
.962	-.289	-.271	-.247	******	-.220	-.198	-.188	-.187	-.180	-.187	-.216	-.266
.974	-.026	-.024	******	******	-.020	-.020	-.020	-.021	-.018	-.020	-.025	-.021
.986	.010	.009	.009	******	.009	.009	.007	.008	.007	.006	.004	.008
.996	.015	.014	******	******	.012	.014	.015	.016	.015	.017	.015	.018

AFTERBODY INTEGRATED PRESSURE DRAG COEFFICIENT .0881

Table A1. Concluded

(e) NPR = 7.997

TEST PARAMETERS

CONFIGURATION	BODY ONLY
POINT NUMBER	7
MACH NUMBER	1.200
ALPHA, DEG	.011
NPR	7.997
PTO, PSI	14.694
PO, PSI	6.057
QO, PSI	6.108

TAIL SURFACE PRESSURE COEFFICIENTS

	HORIZONTAL TAILS				VERTICAL TAIL	
	UPPER SURFACE Y/B		LOWER SURFACE Y/B		Y/B	
X/C	0.1	0.2	0.1	0.2	0.1	0.2
0.05						
0.10						
0.20						
0.30						
0.40						
0.50						
0.60						
0.70						
0.80						
0.90						

Tails removed

AFTERBODY PRESSURE COEFFICIENTS

	PHI, DEG											
X/L	0	18	36	45	54	72	81	90	108	135	162	180
.584	-.037	-.030	******	-.025	******	******	******	-.025	-.022	-.016	.000	******
.598	-.043	-.034	******	-.031	******	-.031	******	-.026	-.022	-.014	******	******
.612	-.039	-.034	******	-.031	******	-.024	******	-.022	-.017	-.012	******	******
.626	-.040	-.035	******	-.033	******	-.028	******	-.021	-.021	-.015	******	******
.640	******	-.033	******	-.028	******	-.020	******	-.014	-.015	-.008	******	******
.654	******	-.046	******	-.036	******	-.023	******	-.031	-.028	-.023	******	******
.668	******	******	******	-.030	******	-.028	******	-.026	-.024	-.014	******	******
.682	******	-.037	******	-.032	******	-.032	******	-.029	-.026	-.007	-.006	******
.696	******	-.035	******	-.035	******	-.035	******	-.032	-.025	-.006	-.007	-.004
.710	******	-.038	******	******	******	-.030	******	-.021	-.018	-.003	-.006	-.011
.724	******	-.033	******	-.026	******	-.018	******	-.015	-.012	-.012	-.015	-.017
.738	******	-.030	******	-.031	******	******	******	-.021	-.033	-.027	-.026	-.025
.752	******	-.023	******	-.018	******	-.019	******	-.016	-.025	-.021	-.019	******
.766	******	-.039	******	-.038	******	-.040	******	-.042	-.049	-.047	-.049	-.048
.779	******	-.028	******	-.024	******	-.028	******	-.026	******	-.031	-.030	-.032
.793	******	-.036	******	-.038	******	-.041	******	******	-.038	-.039	-.042	******
.807	******	-.042	******	-.039	******	-.044	******	******	-.043	-.042	-.041	-.040
.821	******	******	******	-.044	******	-.041	******	******	-.041	-.043	-.039	-.040
.835	******	-.054	******	-.052	******	-.056	******	******	-.052	-.051	-.051	-.053
.849	******	-.065	******	-.060	******	-.061	******	******	-.054	-.062	-.063	-.066
.863	******	-.084	******	-.076	******	-.074	******	******	-.071	-.074	******	-.078
.877	-.102	-.084	******	-.079	******	-.084	******	******	******	******	******	******
.891	-.094	-.102	******	-.098	******	-.102	******	******	-.103	-.098	-.097	-.092
.916	-.122	-.122	-.186	******	-.131	******	-.144	-.146	-.142	-.127	-.117	-.125
.928	-.162	******	-.210	******	-.172	******	-.173	-.173	-.174	-.176	-.173	-.169
.940	-.220	******	-.220	******	-.231	-.236	-.231	-.231	-.232	-.231	-.231	-.227
.952	******	******	-.303	******	-.305	-.308	-.309	-.310	-.310	-.311	-.310	-.304
.962	-.128	-.103	-.101	******	-.085	-.069	-.073	-.063	-.066	-.065	-.084	-.110
.974	.006	.008	******	******	.008	.006	.008	.009	.012	.007	.006	.006
.986	.029	.031	.025	******	.028	.027	.027	.027	.026	.022	.025	.027
.996	.028	.025	******	******	.026	.027	.031	.029	.030	.029	.029	.031

AFTERBODY INTEGRATED PRESSURE DRAG COEFFICIENT .0728

Table A2. Effect of Angle of Attack on Pressure Distributions for Body Alone at $M = 1.20$ and NPR = 1.037

(a) $\alpha = -2.991°$

TEST PARAMETERS

CONFIGURATION	BODY ONLY
POINT NUMBER	9
MACH NUMBER	1.200
ALPHA, DEG	-2.991
NPR	1.037
PTO, PSI	14.692
PO, PSI	6.058
QO, PSI	6.107

TAIL SURFACE PRESSURE COEFFICIENTS

X/C	HORIZONTAL TAILS UPPER SURFACE Y/B 0.1	HORIZONTAL TAILS UPPER SURFACE Y/B 0.2	HORIZONTAL TAILS LOWER SURFACE Y/B 0.1	HORIZONTAL TAILS LOWER SURFACE Y/B 0.2	VERTICAL TAIL Y/B 0.1	VERTICAL TAIL Y/B 0.2
0.05						
0.10						
0.20						
0.30						
0.40						
0.50						
0.60						
0.70						
0.80						
0.90						

Tails removed

AFTERBODY PRESSURE COEFFICIENTS

X/L	PHI, DEG 0	18	36	45	54	72	81	90	108	135	162	180
.584	-.037	-.024	******	-.030	******	******	******	-.045	-.040	-.023	.000	******
.598	-.037	-.033	******	-.040	******	-.045	******	-.043	-.038	-.022	******	******
.612	-.036	-.035	******	-.038	******	-.042	******	-.035	-.030	-.020	******	******
.626	-.038	-.039	******	-.043	******	-.040	******	-.037	-.026	-.020	******	******
.640	******	-.027	******	-.037	******	-.038	******	-.027	-.023	-.015	******	******
.654	******	-.044	******	-.043	******	-.038	******	-.043	-.039	-.030	******	******
.668	******	******	******	-.039	******	-.039	******	-.036	-.034	-.022	******	******
.682	******	-.037	******	-.040	******	-.044	******	-.042	-.044	-.023	-.009	******
.696	******	-.042	******	-.044	******	-.049	******	-.045	-.043	-.015	-.006	-.001
.710	******	-.040	******	******	******	-.046	******	-.039	-.030	-.005	-.002	-.002
.724	******	-.035	******	-.041	******	-.039	******	-.027	-.023	-.010	-.007	-.010
.738	******	-.042	******	-.047	******	******	******	-.030	-.033	-.021	-.018	-.017
.752	******	-.030	******	-.031	******	-.026	******	-.020	-.023	-.021	-.019	******
.766	******	-.041	******	-.050	******	-.041	******	-.046	-.048	-.043	-.041	-.043
.779	******	-.034	******	-.031	******	-.036	******	-.027	******	-.030	-.027	-.025
.793	******	-.036	******	-.039	******	-.047	******	******	-.047	-.039	-.035	******
.807	******	-.045	******	-.043	******	-.050	******	******	-.046	-.043	-.033	-.031
.821	******	******	******	-.044	******	-.052	******	******	-.043	-.042	-.034	-.032
.835	******	-.054	******	-.062	******	-.063	******	******	-.052	-.048	-.044	-.043
.849	******	-.062	******	-.066	******	-.068	******	******	-.054	-.060	-.055	-.056
.863	******	-.084	******	-.087	******	-.078	******	******	-.069	-.069	******	-.073
.877	-.134	-.114	******	-.090	******	-.092	******	******	******	******	******	******
.891	-.103	-.111	******	-.098	******	-.102	******	******	-.108	-.098	-.090	-.088
.916	-.126	-.128	-.199	******	-.134	******	-.152	-.154	-.144	-.124	-.111	-.118
.928	-.168	******	-.221	******	-.181	******	-.181	-.178	-.176	-.171	-.167	-.164
.940	-.230	******	-.230	******	-.245	-.249	-.241	-.237	-.232	-.224	-.221	-.219
.952	******	******	-.322	******	-.324	-.321	-.322	-.317	-.310	-.295	-.295	-.293
.962	-.363	-.364	-.362	******	-.367	-.360	-.345	-.320	-.302	-.275	-.305	-.318
.974	-.164	-.111	******	******	-.075	-.066	-.058	-.055	-.056	-.064	-.087	-.111
.986	-.041	-.034	-.033	******	-.028	-.028	-.026	-.027	-.025	-.028	-.029	-.032
.996	-.015	-.013	******	******	-.012	-.012	-.012	-.009	-.014	-.013	-.014	-.010

AFTERBODY INTEGRATED PRESSURE DRAG COEFFICIENT .1087

Table A2. Continued

(b) $\alpha = 0.011°$

TEST PARAMETERS

CONFIGURATION	BODY ONLY
POINT NUMBER	10
MACH NUMBER	1.201
ALPHA, DEG	.011
NPR	1.043
PTO, PSI	14.691
PO, PSI	6.050
QO, PSI	6.109

TAIL SURFACE PRESSURE COEFFICIENTS

	HORIZONTAL TAILS				VERTICAL TAIL	
	UPPER SURFACE Y/B		LOWER SURFACE Y/B		Y/B	
X/C	0.1	0.2	0.1	0.2	0.1	0.2
0.05						
0.10						
0.20						
0.30						
0.40						
0.50						
0.60						
0.70						
0.80						
0.90						

Tails removed

AFTERBODY PRESSURE COEFFICIENTS

	PHI, DEG											
X/L	0	18	36	45	54	72	81	90	108	135	162	180
.584	-.041	-.031	******	-.030	******	******	******	-.031	-.026	-.018	.001	******
.598	-.042	-.037	******	-.036	******	-.034	******	-.030	-.024	-.015	******	******
.612	-.041	-.036	******	-.032	******	-.027	******	-.022	-.018	-.014	******	******
.626	-.041	-.036	******	-.035	******	-.030	******	-.023	-.019	-.016	******	******
.640	******	-.031	******	-.031	******	-.020	******	-.019	-.011	-.013	******	******
.654	******	-.040	******	-.043	******	-.026	******	-.029	-.027	-.022	******	******
.668	******	******	******	-.031	******	-.027	******	-.023	-.024	-.015	******	******
.682	******	-.038	******	-.034	******	-.030	******	-.030	-.029	-.012	-.006	******
.696	******	-.037	******	-.036	******	-.036	******	-.032	-.022	-.013	-.008	-.004
.710	******	-.035	******	******	******	-.032	******	-.023	-.019	-.010	-.011	-.011
.724	******	-.035	******	-.032	******	-.025	******	-.018	-.018	-.013	-.021	-.020
.738	******	-.039	******	-.032	******	******	******	-.027	-.036	-.027	-.031	-.030
.752	******	-.022	******	-.021	******	-.020	******	-.021	-.034	-.023	-.022	******
.766	******	-.037	******	-.042	******	-.041	******	-.044	-.051	-.047	-.050	-.050
.779	******	-.029	******	-.025	******	-.031	******	-.027	******	-.033	-.031	-.034
.793	******	-.035	******	-.035	******	-.041	******	******	-.039	-.040	-.045	******
.807	******	-.042	******	-.038	******	-.046	******	******	-.045	-.043	-.042	-.040
.821	******	******	******	-.044	******	-.045	******	******	-.044	-.043	-.040	-.043
.835	******	-.054	******	-.056	******	-.055	******	******	-.051	-.053	-.052	-.056
.849	******	-.064	******	-.062	******	-.064	******	******	-.058	-.063	-.067	-.066
.863	******	-.082	******	-.082	******	-.073	******	******	-.069	-.076	******	-.078
.877	-.104	-.087	******	-.079	******	-.082	******	******	******	******	******	******
.891	-.095	-.100	******	-.095	******	-.102	******	******	-.101	-.095	-.098	-.095
.916	-.119	-.122	-.184	******	-.129	******	-.141	-.144	-.141	-.124	-.114	-.124
.928	-.162	******	-.208	******	-.173	******	-.171	-.172	-.172	-.171	-.172	-.167
.940	-.220	******	-.218	******	-.231	-.235	-.230	-.229	-.229	-.229	-.229	-.226
.952	******	******	-.301	******	-.305	-.307	-.311	-.310	-.311	-.310	-.310	-.304
.962	-.333	-.336	-.333	******	-.331	-.331	-.333	-.320	-.321	-.327	-.333	-.338
.974	-.127	-.095	******	******	-.071	-.057	-.053	-.057	-.048	-.049	-.065	-.070
.986	-.026	-.020	-.024	******	-.021	-.016	-.016	-.015	-.013	-.014	-.020	-.022
.996	-.003	-.003	******	******	-.003	-.001	.001	.003	.003	-.001	-.001	-.002

AFTERBODY INTEGRATED PRESSURE DRAG COEFFICIENT .1039

Table A2. Continued

(c) $\alpha = 3.011°$

TEST PARAMETERS

CONFIGURATION	BODY ONLY
POINT NUMBER	11
MACH NUMBER	1.200
ALPHA, DEG	3.011
NPR	1.034
PTO, PSI	14.689
PO, PSI	6.055
QO, PSI	6.107

TAIL SURFACE PRESSURE COEFFICIENTS

X/C	HORIZONTAL TAILS UPPER SURFACE Y/B 0.1	HORIZONTAL TAILS UPPER SURFACE Y/B 0.2	HORIZONTAL TAILS LOWER SURFACE Y/B 0.1	HORIZONTAL TAILS LOWER SURFACE Y/B 0.2	VERTICAL TAIL Y/B 0.1	VERTICAL TAIL Y/B 0.2
0.05						
0.10						
0.20						
0.30						
0.40						
0.50						
0.60						
0.70						
0.80						
0.90						

Tails removed

AFTERBODY PRESSURE COEFFICIENTS

X/L	PHI, DEG 0	18	36	45	54	72	81	90	108	135	162	180
.584	-.043	-.034	******	-.036	******	******	******	-.031	-.023	-.012	.004	******
.598	-.041	-.037	******	-.036	******	-.038	******	-.031	-.024	-.015	******	******
.612	-.042	-.036	******	-.038	******	-.032	******	-.027	-.023	-.012	******	******
.626	-.038	-.035	******	-.033	******	-.033	******	-.025	-.026	-.014	******	******
.640	******	-.034	******	-.030	******	-.028	******	-.020	-.018	-.008	******	******
.654	******	-.042	******	-.040	******	-.033	******	-.032	-.031	-.017	******	******
.668	******	******	******	-.030	******	-.030	******	-.029	-.023	-.009	******	******
.682	******	-.034	******	-.034	******	-.037	******	-.033	-.029	-.012	-.005	******
.696	******	-.034	******	-.037	******	-.039	******	-.033	-.024	-.019	-.013	-.009
.710	******	-.034	******	******	******	-.033	******	-.028	-.024	-.015	-.019	-.019
.724	******	-.027	******	-.028	******	-.027	******	-.028	-.030	-.026	-.022	-.023
.738	******	-.032	******	-.034	******	******	******	-.038	-.050	-.038	-.032	-.032
.752	******	-.019	******	-.023	******	-.034	******	-.036	-.038	-.034	-.029	******
.766	******	-.032	******	-.042	******	-.048	******	-.050	-.058	-.057	-.051	-.050
.779	******	-.028	******	-.029	******	-.039	******	-.032	******	-.045	-.036	-.036
.793	******	-.037	******	-.042	******	-.046	******	******	-.050	-.042	-.049	******
.807	******	-.042	******	-.044	******	-.048	******	******	-.052	-.051	-.046	-.046
.821	******	******	******	-.044	******	-.051	******	******	-.052	-.051	-.048	-.047
.835	******	-.053	******	-.058	******	-.057	******	******	-.064	-.065	-.061	-.062
.849	******	-.064	******	-.065	******	-.068	******	******	-.067	-.076	-.069	-.068
.863	******	-.079	******	-.077	******	-.080	******	******	-.087	-.089	******	-.082
.877	-.081	-.075	******	-.079	******	-.085	******	******	******	******	******	******
.891	-.091	-.096	******	-.096	******	-.105	******	******	-.108	-.102	-.097	-.100
.916	-.116	-.119	-.168	******	-.127	******	-.143	-.148	-.150	-.133	-.117	-.133
.928	-.158	******	-.195	******	-.168	******	-.173	-.177	-.180	-.182	-.178	-.171
.940	-.212	******	-.212	******	-.224	-.234	-.231	-.236	-.240	-.243	-.242	-.235
.952	******	******	-.286	******	-.293	-.303	-.310	-.315	-.324	-.328	-.330	-.319
.962	-.307	-.303	-.300	******	-.300	-.316	-.328	-.337	-.360	-.371	-.373	-.368
.974	-.143	-.118	******	******	-.078	-.069	-.066	-.065	-.070	-.078	-.105	-.141
.985	-.034	-.031	-.033	******	-.031	-.026	-.028	-.030	-.030	-.033	-.038	-.039
.996	-.009	-.013	******	******	-.015	-.013	-.014	-.016	-.014	-.015	-.013	-.011

AFTERBODY INTEGRATED PRESSURE DRAG COEFFICIENT .1095

Table A2. Concluded

(d) $\alpha = 5.984°$

TEST PARAMETERS

CONFIGURATION	BODY ONLY
POINT NUMBER	12
MACH NUMBER	1.199
ALPHA, DEG	5.984
NPR	1.017
PTO, PSI	14.691
PO, PSI	6.067
QO, PSI	6.105

TAIL SURFACE PRESSURE COEFFICIENTS

	HORIZONTAL TAILS				VERTICAL TAIL	
	UPPER SURFACE Y/B		LOWER SURFACE Y/B		Y/B	
X/C	0.1	0.2	0.1	0.2	0.1	0.2
0.05						
0.10						
0.20						
0.30						
0.40						
0.50						
0.60						
0.70						
0.80						
0.90						

Tails removed

AFTERBODY PRESSURE COEFFICIENTS

	PHI, DEG											
X/L	0	18	36	45	54	72	81	90	108	135	162	180
.584	-.041	-.033	******	-.039	******	******	******	-.050	-.043	-.021	.015	******
.598	-.041	-.037	******	-.046	******	-.049	******	-.053	-.040	-.016	******	******
.612	-.036	-.037	******	-.042	******	-.045	******	-.047	-.040	-.018	******	******
.626	-.030	-.035	******	-.041	******	-.044	******	-.045	-.042	-.025	******	******
.640	******	-.034	******	-.041	******	-.041	******	-.041	-.034	-.013	******	******
.654	******	-.039	******	-.045	******	-.045	******	-.052	-.043	-.023	******	******
.668	******	******	******	-.039	******	-.043	******	-.047	-.039	-.013	******	******
.682	******	-.033	******	-.042	******	-.049	******	-.053	-.049	-.022	-.003	******
.696	******	-.037	******	-.043	******	-.049	******	-.049	-.046	-.032	-.018	-.017
.710	******	-.035	******	******	******	-.048	******	-.052	-.049	-.039	-.021	-.021
.724	******	-.032	******	-.038	******	-.046	******	-.051	-.055	-.035	-.029	-.024
.738	******	-.033	******	-.035	******	******	******	-.065	-.067	-.048	-.039	-.039
.752	******	-.026	******	-.036	******	-.046	******	-.054	-.061	-.046	-.030	******
.766	******	-.042	******	-.048	******	-.063	******	-.079	-.082	-.067	-.052	-.054
.779	******	-.034	******	-.043	******	-.059	******	-.061	******	-.060	-.038	-.038
.793	******	-.041	******	-.051	******	-.065	******	******	-.073	-.054	-.040	******
.807	******	-.049	******	-.051	******	-.066	******	******	-.070	-.057	-.047	-.047
.821	******	******	******	-.054	******	-.062	******	******	-.073	-.062	-.049	-.054
.835	******	-.058	******	-.062	******	-.071	******	******	-.086	-.077	-.058	-.063
.849	******	-.065	******	-.068	******	-.080	******	******	-.089	-.082	-.064	-.069
.863	******	-.078	******	-.080	******	-.093	******	******	-.095	-.101	******	-.084
.877	-.105	-.082	******	-.080	******	-.092	******	******	******	******	******	******
.891	-.090	-.102	******	-.099	******	-.114	******	******	-.124	-.109	-.115	-.112
.916	-.104	-.118	-.159	******	-.129	******	-.157	-.165	-.170	-.143	-.120	-.139
.928	-.153	******	-.188	******	-.167	******	-.183	-.192	-.201	-.195	-.186	-.176
.940	-.215	******	-.206	******	-.219	-.236	-.242	-.251	-.262	-.261	-.253	-.241
.952	******	******	-.275	******	-.277	-.298	-.316	-.330	-.348	-.351	-.344	-.329
.962	-.335	-.318	-.281	******	-.276	-.286	-.312	-.341	-.390	-.399	-.393	-.383
.974	-.233	-.167	******	******	-.109	-.082	-.088	-.079	-.086	-.126	-.252	-.363
.986	-.032	-.050	-.054	******	-.054	-.051	-.053	-.051	-.055	-.066	-.077	-.073
.996	-.025	-.030	******	******	-.035	-.038	-.040	-.038	-.039	-.043	-.044	-.044

AFTERBODY INTEGRATED PRESSURE DRAG COEFFICIENT .1233

Table A3. Effect of Nozzle Pressure Ratio on Pressure Distributions for Body Alone at $M = 0.95$ and $\alpha = 0.010°$

(a) NPR = 1.112

TEST PARAMETERS

CONFIGURATION	BODY ONLY
POINT NUMBER	13
MACH NUMBER	.951
ALPHA, DEG	.010
NPR	1.112
PTO, PSI	14.691
PO, PSI	8.214
QO, PSI	5.195

TAIL SURFACE PRESSURE COEFFICIENTS

X/C	HORIZONTAL TAILS UPPER SURFACE Y/B 0.1	HORIZONTAL TAILS UPPER SURFACE Y/B 0.2	HORIZONTAL TAILS LOWER SURFACE Y/B 0.1	HORIZONTAL TAILS LOWER SURFACE Y/B 0.2	VERTICAL TAIL Y/B 0.1	VERTICAL TAIL Y/B 0.2
0.05						
0.10						
0.20						
0.30						
0.40						
0.50						
0.60						
0.70						
0.80						
0.90						

Tails removed

AFTERBODY PRESSURE COEFFICIENTS

X/L	PHI, DEG 0	18	36	45	54	72	81	90	108	135	162	180
.584	-.033	-.031	******	-.023	******	******	******	-.016	-.016	-.010	-.004	******
.598	-.049	-.040	******	-.040	******	-.049	******	-.025	-.030	-.018	******	******
.612	-.043	-.041	******	-.032	******	-.041	******	-.023	-.033	-.016	******	******
.626	-.036	-.038	******	-.029	******	-.034	******	-.033	-.032	-.038	******	******
.640	******	-.049	******	-.056	******	-.049	******	-.045	-.028	-.026	******	******
.654	******	-.047	******	-.048	******	-.050	******	-.044	-.040	-.046	******	******
.668	******	******	******	-.047	******	-.045	******	-.042	-.044	-.034	******	******
.682	******	-.060	******	-.052	******	-.050	******	-.046	-.047	-.052	-.038	******
.696	******	-.050	******	-.060	******	-.048	******	-.046	-.042	-.046	-.039	-.031
.710	******	-.043	******	******	******	-.046	******	-.051	-.044	-.040	-.043	-.035
.724	******	-.051	******	-.057	******	-.058	******	-.043	-.049	-.042	-.050	-.046
.738	******	-.058	******	-.056	******	******	******	-.060	-.057	-.044	-.049	-.061
.752	******	-.052	******	-.052	******	-.055	******	-.052	-.054	-.050	-.057	******
.766	******	-.079	******	-.077	******	-.081	******	-.074	-.084	-.070	-.079	-.079
.779	******	-.061	******	-.060	******	-.063	******	-.070	******	-.066	-.062	-.056
.793	******	-.081	******	-.087	******	-.071	******	******	-.083	-.081	-.078	******
.807	******	-.087	******	-.074	******	-.077	******	******	-.081	-.088	-.079	-.075
.821	******	******	******	-.084	******	-.086	******	******	-.093	-.096	-.096	-.098
.835	******	-.104	******	-.102	******	-.115	******	******	-.108	-.112	-.103	-.109
.849	******	-.127	******	-.115	******	-.122	******	******	-.130	-.138	-.121	-.117
.863	******	-.148	******	-.151	******	-.147	******	******	-.140	-.147	******	-.135
.877	-.131	-.129	******	-.144	******	-.146	******	******	******	******	******	******
.891	-.155	-.156	******	-.167	******	-.167	******	******	-.165	-.165	-.155	-.162
.916	-.187	-.184	-.246	******	-.176	******	-.193	-.199	-.195	-.185	-.181	-.184
.928	-.237	******	-.276	******	-.232	******	-.235	-.240	-.232	-.241	-.245	-.233
.940	-.275	******	-.215	******	-.218	-.224	-.243	-.240	-.249	-.228	-.219	-.223
.952	******	******	-.088	******	-.090	-.098	-.099	-.095	-.101	-.106	-.104	-.105
.962	.011	.015	.018	******	.010	.016	.016	.012	.009	.003	-.004	-.003
.974	.103	.104	******	******	.105	.097	.097	.101	.089	.090	.086	.088
.986	.148	.157	.159	******	.160	.150	.147	.145	.139	.146	.144	.143
.996	.176	.173	******	******	.181	.170	.170	.172	.166	.166	.170	.166

AFTERBODY INTEGRATED PRESSURE DRAG COEFFICIENT .0485

Table A3. Continued

(b) NPR = 2.036

TEST PARAMETERS

CONFIGURATION	BODY ONLY
POINT NUMBER	14
MACH NUMBER	.953
ALPHA, DEG	.009
NPR	2.036
PTO, PSI	14.693
PO, PSI	8.197
QO, PSI	5.206

TAIL SURFACE PRESSURE COEFFICIENTS

	HORIZONTAL TAILS				VERTICAL TAIL	
	UPPER SURFACE Y/B		LOWER SURFACE Y/B		Y/B	
X/C	0.1	0.2	0.1	0.2	0.1	0.2
0.05						
0.10						
0.20						
0.30						
0.40						
0.50						
0.60						
0.70						
0.80						
0.90						

Tails removed

AFTERBODY PRESSURE COEFFICIENTS

	PHI, DEG											
X/L	0	18	36	45	54	72	81	90	108	135	162	180
.584	-.035	-.024	******	-.022	******	******	******	-.023	-.016	-.005	.011	******
.598	-.037	-.042	******	-.033	******	-.025	******	-.033	-.025	-.022	******	******
.612	-.054	-.037	******	-.035	******	-.033	******	-.030	-.025	-.029	******	******
.626	-.034	-.029	******	-.042	******	-.032	******	-.026	-.039	-.015	******	******
.640	******	-.053	******	-.032	******	-.033	******	-.041	-.037	-.038	******	******
.654	******	-.054	******	-.058	******	-.037	******	-.050	-.047	-.040	******	******
.668	******	******	******	-.040	******	-.038	******	-.035	-.041	-.027	******	******
.682	******	-.059	******	-.047	******	-.041	******	-.052	-.048	-.039	-.042	******
.696	******	-.049	******	-.046	******	-.055	******	-.044	-.054	-.049	-.049	-.042
.710	******	-.060	******	******	******	-.056	******	-.041	-.051	-.049	-.039	-.037
.724	******	-.061	******	-.066	******	-.053	******	-.042	-.053	-.045	-.047	-.046
.738	******	-.062	******	-.059	******	******	******	-.059	-.057	-.049	-.060	-.046
.752	******	-.057	******	-.061	******	-.060	******	-.049	-.062	-.053	-.047	******
.766	******	-.078	******	-.083	******	-.084	******	-.082	-.078	-.074	-.069	-.090
.779	******	-.060	******	-.052	******	-.062	******	-.053	******	-.062	-.053	-.068
.793	******	-.077	******	-.079	******	-.086	******	******	-.077	-.073	-.083	******
.807	******	-.079	******	-.077	******	-.087	******	******	-.079	-.070	-.083	-.079
.821	******	******	******	-.095	******	-.095	******	******	-.099	-.085	-.092	-.082
.835	******	-.106	******	-.114	******	-.101	******	******	-.105	-.101	-.094	-.113
.849	******	-.131	******	-.114	******	-.128	******	******	-.134	-.115	-.123	-.127
.863	******	-.152	******	-.146	******	-.136	******	******	-.138	-.132	******	-.134
.877	-.141	-.132	******	-.129	******	-.131	******	******	******	******	******	******
.891	-.147	-.165	******	-.155	******	-.155	******	******	-.169	-.141	-.155	-.141
.916	-.174	-.176	-.238	******	-.173	******	-.180	-.177	-.173	-.162	-.165	-.174
.928	-.217	******	-.250	******	-.215	******	-.195	-.210	-.193	-.190	-.208	-.210
.940	-.186	******	-.170	******	-.193	-.161	-.165	-.174	-.160	-.157	-.159	-.171
.952	******	******	-.049	******	-.058	-.061	-.055	-.059	-.059	-.059	-.065	-.063
.962	.050	.047	.047	******	.051	.049	.046	.047	.045	.047	.038	.037
.974	.134	.134	******	******	.131	.133	.133	.127	.133	.131	.123	.123
.986	.187	.182	.181	******	.174	.180	.183	.176	.181	.182	.177	.174
.996	.207	.204	******	******	.205	.200	.201	.199	.204	.195	.195	.201

AFTERBODY INTEGRATED PRESSURE DRAG COEFFICIENT .0295

Table A3. Continued

(c) NPR = 3.036

TEST PARAMETERS

CONFIGURATION	BODY ONLY
POINT NUMBER	15
MACH NUMBER	.952
ALPHA, DEG	.009
NPR	3.036
PTO, PSI	14.691
PO, PSI	8.203
QO, PSI	5.202

TAIL SURFACE PRESSURE COEFFICIENTS

	HORIZONTAL TAILS				VERTICAL TAIL	
	UPPER SURFACE Y/B		LOWER SURFACE Y/B		Y/B	
X/C	0.1	0.2	0.1	0.2	0.1	0.2
0.05						
0.10						
0.20						
0.30						
0.40						
0.50						
0.60						
0.70						
0.80						
0.90						

Tails removed

AFTERBODY PRESSURE COEFFICIENTS

	PHI, DEG											
X/L	0	18	36	45	54	72	81	90	108	135	162	180
.584	-.043	-.018	******	-.019	******	******	******	-.022	-.006	-.009	-.002	******
.598	-.032	-.028	******	-.034	******	-.041	******	-.028	-.025	-.018	******	******
.612	-.040	-.036	******	-.031	******	-.035	******	-.024	-.019	-.024	******	******
.626	-.040	-.025	******	-.034	******	-.032	******	-.034	-.036	-.020	******	******
.640	******	-.049	******	-.037	******	-.041	******	-.050	-.039	-.026	******	******
.654	******	-.054	******	-.046	******	-.035	******	-.053	-.058	-.056	******	******
.668	******	******	******	-.054	******	-.038	******	-.029	-.046	-.028	******	******
.682	******	-.058	******	-.046	******	-.051	******	-.046	-.048	-.042	-.044	******
.696	******	-.049	******	-.051	******	-.054	******	-.047	-.044	-.039	-.041	-.033
.710	******	-.050	******	******	******	-.048	******	-.035	-.055	-.046	-.036	-.025
.724	******	-.062	******	-.063	******	-.050	******	-.050	-.052	-.043	-.040	-.043
.738	******	-.062	******	-.058	******	******	******	-.054	-.065	-.050	-.049	-.060
.752	******	-.056	******	-.053	******	-.061	******	-.049	-.053	-.052	-.045	******
.766	******	-.070	******	-.078	******	-.079	******	-.070	-.084	-.074	-.074	-.074
.779	******	-.065	******	-.051	******	-.063	******	-.057	******	-.058	-.061	-.060
.793	******	-.074	******	-.073	******	-.079	******	******	-.082	-.077	-.082	******
.807	******	-.073	******	-.072	******	-.084	******	******	-.078	-.078	-.075	-.071
.821	******	******	******	-.089	******	-.093	******	******	-.094	-.079	-.086	-.091
.835	******	-.099	******	-.110	******	-.106	******	******	-.107	-.107	-.112	-.100
.849	******	-.124	******	-.122	******	-.117	******	******	-.127	-.125	-.123	-.120
.863	******	-.145	******	-.141	******	-.133	******	******	-.143	-.121	******	-.120
.877	-.125	-.138	******	-.124	******	-.136	******	******	******	******	******	******
.891	-.140	-.170	******	-.152	******	-.164	******	******	-.152	-.159	-.151	-.146
.916	-.173	-.167	-.233	******	-.177	******	-.168	-.180	-.177	-.158	-.163	-.182
.928	-.204	******	-.260	******	-.214	******	-.192	-.204	-.199	-.210	-.202	-.205
.940	-.191	******	-.186	******	-.178	-.163	-.172	-.171	-.171	-.171	-.170	-.159
.952	******	******	-.063	******	-.058	-.059	-.058	-.060	-.054	-.059	-.069	-.067
.962	.044	.049	.046	******	.042	.048	.048	.046	.044	.045	.036	.031
.974	.137	.138	******	******	.129	.133	.132	.130	.125	.123	.124	.124
.986	.187	.191	.174	******	.180	.182	.178	.175	.177	.172	.175	.180
.996	.208	.205	******	******	.203	.196	.201	.198	.201	.197	.194	.200

AFTERBODY INTEGRATED PRESSURE DRAG COEFFICIENT .0297

Table A3. Concluded

(d) NPR = 5.009

TEST PARAMETERS

CONFIGURATION	BODY ONLY
POINT NUMBER	16
MACH NUMBER	.950
ALPHA, DEG	.010
NPR	5.009
PTO, PSI	14.693
PO, PSI	8.224
QO, PSI	5.191

TAIL SURFACE PRESSURE COEFFICIENTS

X/C	HORIZONTAL TAILS UPPER SURFACE Y/B 0.1	HORIZONTAL TAILS UPPER SURFACE Y/B 0.2	HORIZONTAL TAILS LOWER SURFACE Y/B 0.1	HORIZONTAL TAILS LOWER SURFACE Y/B 0.2	VERTICAL TAIL Y/B 0.1	VERTICAL TAIL Y/B 0.2
0.05						
0.10						
0.20						
0.30						
0.40						
0.50						
0.60						
0.70						
0.80						
0.90						

Tails removed

AFTERBODY PRESSURE COEFFICIENTS

X/L	PHI, DEG 0	18	36	45	54	72	81	90	108	135	162	180
.584	-.028	-.027	******	-.017	******	******	******	-.024	-.023	-.005	-.005	******
.598	-.035	-.046	******	-.029	******	-.042	******	-.033	-.027	-.019	******	******
.612	-.045	-.038	******	-.031	******	-.036	******	-.035	-.033	-.037	******	******
.626	-.032	-.040	******	-.047	******	-.035	******	-.033	-.023	-.020	******	******
.640	******	-.039	******	-.036	******	-.038	******	-.048	-.043	-.031	******	******
.654	******	-.061	******	-.052	******	-.042	******	-.045	-.049	-.039	******	******
.668	******	******	******	-.040	******	-.036	******	-.029	-.037	-.034	******	******
.682	******	-.052	******	-.053	******	-.046	******	-.047	-.041	-.041	-.046	******
.696	******	-.041	******	-.049	******	-.057	******	-.045	-.052	-.046	-.045	-.033
.710	******	-.055	******	******	******	-.051	******	-.042	-.043	-.044	-.041	-.043
.724	******	-.050	******	-.056	******	-.054	******	-.051	-.049	-.043	-.039	-.039
.738	******	-.057	******	-.059	******	******	******	-.051	-.066	-.050	-.058	-.058
.752	******	-.055	******	-.062	******	-.053	******	-.050	-.060	-.052	-.049	******
.766	******	-.066	******	-.076	******	-.074	******	-.078	-.078	-.075	-.072	-.085
.779	******	-.059	******	-.066	******	-.057	******	-.055	******	-.057	-.057	-.056
.793	******	-.074	******	-.072	******	-.082	******	******	-.079	-.073	-.081	******
.807	******	-.079	******	-.078	******	-.075	******	******	-.078	-.071	-.081	-.068
.821	******	******	******	-.083	******	-.087	******	******	-.088	-.083	-.087	-.090
.835	******	-.105	******	-.103	******	-.104	******	******	-.104	-.100	-.101	-.106
.849	******	-.120	******	-.119	******	-.121	******	******	-.119	-.116	-.119	-.115
.863	******	-.142	******	-.142	******	-.139	******	******	-.131	-.124	******	-.132
.877	-.126	-.126	******	-.128	******	-.138	******	******	******	******	******	******
.891	-.151	-.159	******	-.148	******	-.160	******	******	-.141	-.139	-.146	-.137
.916	-.164	-.163	-.226	******	-.168	******	-.168	-.173	-.161	-.153	-.159	-.166
.928	-.194	******	-.244	******	-.196	******	-.191	-.182	-.176	-.179	-.180	-.185
.940	-.171	******	-.150	******	-.145	-.138	-.143	-.149	-.145	-.137	-.145	-.143
.952	******	******	-.052	******	-.046	-.045	-.050	-.044	-.045	-.047	-.048	-.051
.962	.062	.062	.063	******	.059	.060	.059	.058	.059	.056	.051	.045
.974	.151	.151	******	******	.144	.148	.143	.145	.146	.143	.140	.136
.986	.198	.199	.190	******	.195	.190	.192	.190	.191	.188	.186	.189
.996	.213	.217	******	******	.214	.210	.203	.209	.212	.209	.207	.209

AFTERBODY INTEGRATED PRESSURE DRAG COEFFICIENT .0209

Table A4. Effect of Angle of Attack on Pressure Distributions for Body Alone at $M = 0.95$ and NPR = 1.115

(a) $\alpha = -2.985°$

TEST PARAMETERS

CONFIGURATION	BODY ONLY
POINT NUMBER	18
MACH NUMBER	.950
ALPHA, DEG	-2.985
NPR	1.115
PTO, PSI	14.690
PO, PSI	8.223
QO, PSI	5.190

TAIL SURFACE PRESSURE COEFFICIENTS

X/C	HORIZONTAL TAILS UPPER SURFACE Y/B 0.1	HORIZONTAL TAILS UPPER SURFACE Y/B 0.2	HORIZONTAL TAILS LOWER SURFACE Y/B 0.1	HORIZONTAL TAILS LOWER SURFACE Y/B 0.2	VERTICAL TAIL Y/B 0.1	VERTICAL TAIL Y/B 0.2
0.05						
0.10						
0.20						
0.30						
0.40						
0.50						
0.60						
0.70						
0.80						
0.90						

Tails removed

AFTERBODY PRESSURE COEFFICIENTS

	PHI, DEG											
X/L	0	18	36	45	54	72	81	90	108	135	162	180
.584	-.027	-.029	******	-.020	******	******	******	-.033	-.024	-.022	-.013	******
.598	-.045	-.033	******	-.045	******	-.055	******	-.048	-.041	-.030	******	******
.612	-.051	-.039	******	-.040	******	-.042	******	-.047	-.047	-.029	******	******
.626	-.037	-.040	******	-.038	******	-.044	******	-.043	-.043	-.039	******	******
.640	******	-.048	******	-.054	******	-.063	******	-.046	-.048	-.054	******	******
.654	******	-.057	******	-.077	******	-.060	******	-.060	-.058	-.047	******	******
.668	******	******	******	-.047	******	-.056	******	-.054	-.045	-.045	******	******
.682	******	-.054	******	-.064	******	-.063	******	-.070	-.059	-.049	-.041	******
.696	******	-.052	******	-.058	******	-.056	******	-.065	-.063	-.049	-.032	-.035
.710	******	-.055	******	******	******	-.050	******	-.049	-.047	-.044	-.037	-.046
.724	******	-.047	******	-.060	******	-.059	******	-.055	-.063	-.048	-.044	-.046
.738	******	-.064	******	-.065	******	******	******	-.063	-.069	-.055	-.052	-.041
.752	******	-.054	******	-.061	******	-.061	******	-.069	-.081	-.056	-.055	******
.766	******	-.089	******	-.090	******	-.088	******	-.084	-.089	-.075	-.073	-.072
.779	******	-.072	******	-.073	******	-.068	******	-.069	******	-.064	-.060	-.056
.793	******	-.090	******	-.089	******	-.093	******	******	-.083	-.074	-.068	******
.807	******	-.076	******	-.084	******	-.082	******	******	-.084	-.080	-.068	-.077
.821	******	******	******	-.087	******	-.102	******	******	-.098	-.085	-.081	-.079
.835	******	-.114	******	-.120	******	-.122	******	******	-.110	-.101	-.099	-.098
.849	******	-.123	******	-.132	******	-.143	******	******	-.135	-.120	-.106	-.111
.863	******	-.159	******	-.162	******	-.162	******	******	-.143	-.128	******	-.131
.877	-.153	-.133	******	-.153	******	-.161	******	******	******	******	******	******
.891	-.178	-.189	******	-.175	******	-.172	******	******	-.156	-.144	-.132	-.142
.916	-.193	-.193	-.269	******	-.194	******	-.204	-.193	-.180	-.164	-.138	-.155
.928	-.262	******	-.308	******	-.250	******	-.243	-.245	-.201	-.172	-.158	-.169
.940	-.345	******	-.324	******	-.325	-.271	-.240	-.247	-.193	-.123	-.132	-.131
.952	******	******	-.214	******	-.149	-.136	-.116	-.096	-.082	-.049	-.053	-.059
.962	-.032	-.023	-.005	******	-.014	.030	.005	.009	.020	.050	.049	.027
.974	.073	.070	******	******	.099	.112	.087	.081	.116	.117	.113	.101
.986	.126	.134	.127	******	.127	.137	.141	.120	.129	.132	.134	.132
.996	.140	.142	******	******	.147	.132	.141	.143	.136	.151	.146	.141

AFTERBODY INTEGRATED PRESSURE DRAG COEFFICIENT .0519

Table A4. Continued

(b) $\alpha = 0.011°$

TEST PARAMETERS

CONFIGURATION	BODY ONLY
POINT NUMBER	19
MACH NUMBER	.951
ALPHA, DEG	.011
NPR	1.133
PTO, PSI	14.689
PO, PSI	8.212
QO, PSI	5.195

TAIL SURFACE PRESSURE COEFFICIENTS

	HORIZONTAL TAILS				VERTICAL TAIL	
	UPPER SURFACE Y/B		LOWER SURFACE Y/B		Y/B	
X/C	0.1	0.2	0.1	0.2	0.1	0.2
0.05						
0.10						
0.20						
0.30						
0.40						
0.50						
0.60						
0.70						
0.80						
0.90						

Tails removed

AFTERBODY PRESSURE COEFFICIENTS

	PHI, DEG											
X/L	0	18	36	45	54	72	81	90	108	135	162	180
.584	-.040	-.026	******	-.024	******	******	******	-.021	-.011	-.016	.001	******
.598	-.046	-.033	******	-.044	******	-.037	******	-.036	-.027	-.026	******	******
.612	-.040	-.041	******	-.039	******	-.031	******	-.039	-.025	-.022	******	******
.626	-.035	-.031	******	-.035	******	-.044	******	-.034	-.024	-.030	******	******
.640	******	-.040	******	-.045	******	-.046	******	-.046	-.041	-.032	******	******
.654	******	-.062	******	-.054	******	-.047	******	-.050	-.066	-.038	******	******
.668	******	******	******	-.040	******	-.042	******	-.038	-.038	-.038	******	******
.682	******	-.054	******	-.056	******	-.056	******	-.043	-.055	-.047	-.042	******
.696	******	-.059	******	-.053	******	-.048	******	-.042	-.047	-.048	-.046	-.045
.710	******	-.050	******	******	******	-.053	******	-.041	-.043	-.047	-.034	-.039
.724	******	-.052	******	-.065	******	-.048	******	-.052	-.054	-.046	-.054	-.049
.738	******	-.063	******	-.062	******	******	******	-.059	-.066	-.044	-.053	-.056
.752	******	-.053	******	-.053	******	-.074	******	-.057	-.062	-.055	-.056	******
.766	******	-.076	******	-.090	******	-.076	******	-.081	-.081	-.071	-.082	-.082
.779	******	-.059	******	-.058	******	-.073	******	-.057	******	-.063	-.064	-.072
.793	******	-.076	******	-.074	******	-.078	******	******	-.083	-.066	-.077	******
.807	******	-.081	******	-.083	******	-.080	******	******	-.086	-.086	-.079	-.081
.821	******	******	******	-.087	******	-.093	******	******	-.102	-.101	-.085	-.090
.835	******	-.111	******	-.109	******	-.102	******	******	-.112	-.094	-.109	-.112
.849	******	-.136	******	-.129	******	-.129	******	******	-.140	-.128	-.118	-.130
.863	******	-.140	******	-.148	******	-.146	******	******	-.132	-.152	******	-.128
.877	-.148	-.148	******	-.139	******	-.151	******	******	******	******	******	******
.891	-.157	-.167	******	-.169	******	-.177	******	******	-.154	-.161	-.167	-.148
.916	-.189	-.188	-.253	******	-.187	******	-.193	-.199	-.191	-.184	-.167	-.191
.928	-.233	******	-.289	******	-.229	******	-.237	-.251	-.228	-.235	-.232	-.231
.940	-.247	******	-.228	******	-.244	-.223	-.245	-.234	-.230	-.225	-.244	-.222
.952	******	******	-.092	******	-.095	-.094	-.100	-.094	-.101	-.098	-.107	-.102
.962	.016	.016	.019	******	.017	.012	.017	.011	.014	.006	-.002	-.005
.974	.105	.106	******	******	.105	.103	.100	.096	.098	.095	.091	.091
.986	.156	.152	.152	******	.153	.150	.148	.150	.149	.147	.138	.145
.996	.175	.180	******	******	.173	.178	.167	.175	.165	.171	.163	.169

AFTERBODY INTEGRATED PRESSURE DRAG COEFFICIENT .0490

Table A4. Continued

(c) $\alpha = 3.014°$

TEST PARAMETERS

CONFIGURATION	BODY ONLY
POINT NUMBER	20
MACH NUMBER	.948
ALPHA, DEG	3.014
NPR	1.120
PTO, PSI	14.689
PO, PSI	8.233
QO, PSI	5.183

TAIL SURFACE PRESSURE COEFFICIENTS

X/C	HORIZONTAL TAILS UPPER SURFACE Y/B 0.1	HORIZONTAL TAILS UPPER SURFACE Y/B 0.2	HORIZONTAL TAILS LOWER SURFACE Y/B 0.1	HORIZONTAL TAILS LOWER SURFACE Y/B 0.2	VERTICAL TAIL Y/B 0.1	VERTICAL TAIL Y/B 0.2
0.05						
0.10						
0.20						
0.30						
0.40						
0.50						
0.60						
0.70						
0.80						
0.90						

Tails removed

AFTERBODY PRESSURE COEFFICIENTS

X/L	PHI, DEG 0	18	36	45	54	72	81	90	108	135	162	180
.584	-.041	-.035	******	-.015	******	******	******	-.020	-.015	-.004	.010	******
.598	-.037	-.041	******	-.038	******	-.041	******	-.029	-.034	-.011	******	******
.612	-.038	-.045	******	-.033	******	-.032	******	-.029	-.032	-.015	******	******
.626	-.032	-.036	******	-.032	******	-.040	******	-.032	-.035	-.024	******	******
.640	******	-.045	******	-.045	******	-.051	******	-.036	-.039	-.027	******	******
.654	******	-.048	******	-.047	******	-.049	******	-.055	-.055	-.052	******	******
.668	******	******	******	-.051	******	-.045	******	-.038	-.033	-.033	******	******
.682	******	-.042	******	-.053	******	-.047	******	-.049	-.057	-.039	-.034	******
.696	******	-.052	******	-.046	******	-.047	******	-.049	-.046	-.044	-.047	-.033
.710	******	-.046	******	******	******	-.060	******	-.048	-.050	-.041	-.032	-.034
.724	******	-.050	******	-.055	******	-.050	******	-.043	-.056	-.051	-.043	-.039
.738	******	-.059	******	-.063	******	******	******	-.063	-.058	-.059	-.050	-.048
.752	******	-.056	******	-.064	******	-.063	******	-.062	-.060	-.059	-.051	******
.766	******	-.072	******	-.085	******	-.072	******	-.079	-.096	-.089	-.088	-.084
.779	******	-.062	******	-.070	******	-.073	******	-.067	******	-.062	-.056	-.064
.793	******	-.075	******	-.079	******	-.082	******	******	-.086	-.085	-.080	******
.807	******	-.075	******	-.078	******	-.085	******	******	-.080	-.081	-.083	-.073
.821	******	******	******	-.090	******	-.098	******	******	-.093	-.089	-.083	-.089
.835	******	-.101	******	-.108	******	-.112	******	******	-.107	-.117	-.104	-.110
.849	******	-.113	******	-.110	******	-.122	******	******	-.126	-.128	-.125	-.133
.863	******	-.123	******	-.130	******	-.140	******	******	-.152	-.141	******	-.136
.877	-.141	-.120	******	-.141	******	-.142	******	******	******	******	******	******
.891	-.151	-.146	******	-.149	******	-.170	******	******	-.171	-.176	-.163	-.173
.916	-.173	-.163	-.204	******	-.164	******	-.184	-.185	-.193	-.188	-.177	-.202
.928	-.168	******	-.204	******	-.199	******	-.212	-.216	-.236	-.259	-.261	-.258
.940	-.135	******	-.135	******	-.146	-.169	-.200	-.232	-.259	-.321	-.320	-.329
.952	******	******	-.043	******	-.047	-.067	-.075	-.071	-.113	-.188	-.192	-.201
.962	.027	.022	.045	******	.047	.056	.043	.039	.010	-.014	-.032	-.043
.974	.103	.101	******	******	.082	.104	.111	.097	.092	.087	.066	.059
.986	.145	.137	.142	******	.146	.145	.142	.131	.143	.131	.127	.127
.996	.162	.155	******	******	.158	.156	.152	.156	.152	.133	.139	.138

AFTERBODY INTEGRATED PRESSURE DRAG COEFFICIENT .0498

Table A4. Concluded

(d) $\alpha = 5.976°$

TEST PARAMETERS

CONFIGURATION	BODY ONLY
POINT NUMBER	21
MACH NUMBER	.949
ALPHA, DEG	5.976
NPR	1.092
PTO, PSI	14.689
PO, PSI	8.224
QO, PSI	5.189

TAIL SURFACE PRESSURE COEFFICIENTS

	HORIZONTAL TAILS				VERTICAL TAIL	
	UPPER SURFACE Y/B		LOWER SURFACE Y/B		Y/B	
X/C	0.1	0.2	0.1	0.2	0.1	0.2
0.05						
0.10						
0.20						
0.30						
0.40						
0.50						
0.60						
0.70						
0.80						
0.90						

Tails removed

AFTERBODY PRESSURE COEFFICIENTS

	PHI, DEG											
X/L	0	18	36	45	54	72	81	90	108	135	162	180
.584	-.037	-.029	******	-.044	******	******	******	-.029	-.021	-.003	.028	******
.598	-.032	-.034	******	-.042	******	-.046	******	-.060	-.030	-.019	******	******
.612	-.037	-.028	******	-.046	******	-.042	******	-.048	-.034	-.036	******	******
.626	-.028	-.030	******	-.055	******	-.046	******	-.056	-.045	-.029	******	******
.640	******	-.044	******	-.051	******	-.067	******	-.057	-.055	-.036	******	******
.654	******	-.052	******	-.056	******	-.069	******	-.077	-.071	-.050	******	******
.668	******	******	******	-.051	******	-.055	******	-.053	-.057	-.034	******	******
.682	******	-.049	******	-.056	******	-.061	******	-.072	-.069	-.044	-.031	******
.696	******	-.048	******	-.049	******	-.066	******	-.068	-.069	-.055	-.033	-.028
.710	******	-.053	******	******	******	-.068	******	-.070	-.063	-.047	-.034	-.026
.724	******	-.050	******	-.060	******	-.073	******	-.073	-.069	-.054	-.039	-.040
.738	******	-.053	******	-.064	******	******	******	-.080	-.088	-.057	-.042	-.046
.752	******	-.060	******	-.068	******	-.080	******	-.085	-.078	-.060	-.050	******
.766	******	-.064	******	-.071	******	-.090	******	-.113	-.115	-.094	-.089	-.074
.779	******	-.066	******	-.072	******	-.083	******	-.080	******	-.069	-.050	-.054
.793	******	-.074	******	-.083	******	-.099	******	******	-.099	-.084	-.079	******
.807	******	-.085	******	-.086	******	-.094	******	******	-.107	-.083	-.072	-.075
.821	******	******	******	-.093	******	-.103	******	******	-.115	-.104	-.090	-.083
.835	******	-.103	******	-.103	******	-.117	******	******	-.139	-.118	-.104	-.101
.849	******	-.117	******	-.117	******	-.130	******	******	-.149	-.133	-.123	-.118
.863	******	-.116	******	-.126	******	-.148	******	******	-.171	-.165	******	-.135
.877	-.105	-.113	******	-.127	******	-.140	******	******	******	******	******	******
.891	-.141	-.137	******	-.134	******	-.155	******	******	-.185	-.188	-.182	-.166
.916	-.124	-.129	-.166	******	-.140	******	-.176	-.193	-.205	-.199	-.177	-.188
.928	-.128	******	-.167	******	-.153	******	-.211	-.231	-.254	-.271	-.273	-.260
.940	-.110	******	-.109	******	-.133	-.158	-.192	-.249	-.311	-.350	-.347	-.344
.952	******	******	-.059	******	-.065	-.074	-.072	-.092	-.171	-.307	-.371	-.306
.962	.032	.006	.007	******	.008	.011	.014	.013	-.008	-.056	-.089	-.089
.974	.093	.080	******	******	.055	.060	.057	.060	.065	.043	.023	.023
.986	.100	.101	.099	******	.085	.083	.087	.082	.091	.088	.081	.083
.996	.093	.096	******	******	.093	.089	.099	.095	.086	.087	.087	.093

AFTERBODY INTEGRATED PRESSURE DRAG COEFFICIENT .0669

Table A5. Effect of Nozzle Pressure Ratio on Pressure Distributions for Body Alone at $M = 0.90$ and $\alpha = 0.009°$

(a) NPR = 1.111

TEST PARAMETERS

CONFIGURATION	BODY ONLY
POINT NUMBER	22
MACH NUMBER	.901
ALPHA, DEG	.009
NPR	1.111
PTO, PSI	14.692
PO, PSI	8.677
QO, PSI	4.931

TAIL SURFACE PRESSURE COEFFICIENTS

X/C	HORIZONTAL TAILS UPPER SURFACE Y/B 0.1	HORIZONTAL TAILS UPPER SURFACE Y/B 0.2	HORIZONTAL TAILS LOWER SURFACE Y/B 0.1	HORIZONTAL TAILS LOWER SURFACE Y/B 0.2	VERTICAL TAIL Y/B 0.1	VERTICAL TAIL Y/B 0.2
0.05						
0.10						
0.20						
0.30						
0.40						
0.50						
0.60						
0.70						
0.80						
0.90						

Tails removed

AFTERBODY PRESSURE COEFFICIENTS

	PHI, DEG											
X/L	0	18	36	45	54	72	81	90	108	135	162	180
.584	-.034	-.030	******	-.021	******	******	******	-.025	-.024	-.016	-.009	******
.598	-.047	-.044	******	-.039	******	-.043	******	-.037	-.031	-.025	******	******
.612	-.043	-.041	******	-.037	******	-.042	******	-.034	-.035	-.030	******	******
.626	-.037	-.042	******	-.043	******	-.037	******	-.031	-.033	-.031	******	******
.640	******	-.048	******	-.047	******	-.044	******	-.045	-.038	-.037	******	******
.654	******	-.053	******	-.055	******	-.043	******	-.044	-.047	-.043	******	******
.668	******	******	******	-.044	******	-.040	******	-.041	-.044	-.033	******	******
.682	******	-.057	******	-.049	******	-.050	******	-.048	-.051	-.046	-.045	******
.696	******	-.052	******	-.051	******	-.051	******	-.048	-.049	-.047	-.041	-.040
.710	******	-.051	******	******	******	-.046	******	-.046	-.050	-.047	-.045	-.044
.724	******	-.055	******	-.058	******	-.056	******	-.049	-.051	-.047	-.048	-.048
.738	******	-.057	******	-.060	******	******	******	-.053	-.063	-.062	-.051	-.058
.752	******	-.051	******	-.060	******	-.056	******	-.056	-.062	-.054	-.052	******
.766	******	-.073	******	-.077	******	-.076	******	-.079	-.078	-.081	-.072	-.073
.779	******	-.063	******	-.064	******	-.065	******	-.061	******	-.063	-.057	-.059
.793	******	-.075	******	-.076	******	-.075	******	******	-.075	-.078	-.075	******
.807	******	-.078	******	-.074	******	-.077	******	******	-.075	-.074	-.072	-.071
.821	******	******	******	-.084	******	-.084	******	******	-.088	-.084	-.085	-.088
.835	******	-.098	******	-.096	******	-.099	******	******	-.097	-.102	-.093	-.093
.849	******	-.108	******	-.110	******	-.112	******	******	-.113	-.108	-.107	-.105
.863	******	-.124	******	-.119	******	-.119	******	******	-.116	-.117	******	-.115
.877	-.120	-.117	******	-.117	******	-.123	******	******	******	******	******	******
.891	-.141	-.143	******	-.145	******	-.140	******	******	-.138	-.126	-.130	-.132
.916	-.166	-.167	-.224	******	-.163	******	-.168	-.170	-.165	-.157	-.151	-.163
.928	-.203	******	-.235	******	-.197	******	-.189	-.197	-.189	-.192	-.195	-.192
.940	-.196	******	-.187	******	-.191	-.186	-.191	-.191	-.190	-.190	-.192	-.189
.952	******	******	-.123	******	-.122	-.120	-.124	-.128	-.119	-.122	-.125	-.120
.962	-.023	-.028	-.021	******	-.024	-.024	-.024	-.025	-.031	-.027	-.031	-.035
.974	.071	.072	******	******	.070	.073	.074	.069	.068	.069	.063	.061
.986	.144	.137	.138	******	.139	.134	.137	.134	.134	.131	.129	.127
.996	.169	.169	******	******	.170	.167	.169	.161	.164	.160	.161	.154

AFTERBODY INTEGRATED PRESSURE DRAG COEFFICIENT .0473

Table A5. Continued

(b) NPR = 2.033

TEST PARAMETERS

CONFIGURATION	BODY ONLY
POINT NUMBER	23
MACH NUMBER	.901
ALPHA, DEG	.010
NPR	2.033
PTO, PSI	14.693
PO, PSI	8.682
QO, PSI	4.929

TAIL SURFACE PRESSURE COEFFICIENTS

X/C	HORIZONTAL TAILS UPPER SURFACE Y/B 0.1	HORIZONTAL TAILS UPPER SURFACE Y/B 0.2	HORIZONTAL TAILS LOWER SURFACE Y/B 0.1	HORIZONTAL TAILS LOWER SURFACE Y/B 0.2	VERTICAL TAIL Y/B 0.1	VERTICAL TAIL Y/B 0.2
0.05						
0.10						
0.20						
0.30						
0.40						
0.50						
0.60						
0.70						
0.80						
0.90						

Tails removed

AFTERBODY PRESSURE COEFFICIENTS

X/L	PHI, DEG 0	18	36	45	54	72	81	90	108	135	162	180
.584	-.034	-.025	******	-.023	******	******	******	-.022	-.019	-.016	-.007	******
.598	-.046	-.037	******	-.036	******	-.037	******	-.037	-.029	-.027	******	******
.612	-.043	-.038	******	-.038	******	-.035	******	-.035	-.032	-.030	******	******
.626	-.034	-.037	******	-.041	******	-.038	******	-.027	-.028	-.029	******	******
.640	******	-.041	******	-.043	******	-.041	******	-.038	-.039	-.030	******	******
.654	******	-.053	******	-.048	******	-.042	******	-.046	-.045	-.038	******	******
.668	******	******	******	-.038	******	-.036	******	-.042	-.042	-.033	******	******
.682	******	-.056	******	-.048	******	-.045	******	-.049	-.046	-.040	-.038	******
.696	******	-.047	******	-.045	******	-.044	******	-.047	-.050	-.045	-.040	-.041
.710	******	-.052	******	******	******	-.046	******	-.042	-.051	-.042	-.041	-.046
.724	******	-.056	******	-.053	******	-.052	******	-.049	-.055	-.048	-.050	-.043
.738	******	-.061	******	-.059	******	******	******	-.052	-.063	-.057	-.051	-.050
.752	******	-.052	******	-.054	******	-.054	******	-.057	-.055	-.054	-.051	******
.766	******	-.072	******	-.073	******	-.074	******	-.077	-.071	-.077	-.067	-.073
.779	******	-.062	******	-.061	******	-.060	******	-.059	******	-.060	-.052	-.060
.793	******	-.073	******	-.069	******	-.075	******	******	-.068	-.073	-.066	******
.807	******	-.070	******	-.071	******	-.077	******	******	-.073	-.074	-.068	-.065
.821	******	******	******	-.085	******	-.086	******	******	-.080	-.080	-.080	-.078
.835	******	-.094	******	-.099	******	-.096	******	******	-.094	-.096	-.086	-.092
.849	******	-.104	******	-.107	******	-.102	******	******	-.103	-.106	-.096	-.104
.863	******	-.122	******	-.116	******	-.110	******	******	-.115	-.112	******	-.113
.877	-.114	-.107	******	-.116	******	-.115	******	******	******	******	******	******
.891	-.131	-.137	******	-.134	******	-.126	******	******	-.130	-.114	-.123	-.119
.916	-.152	-.146	-.206	******	-.149	******	-.143	-.152	-.148	-.139	-.132	-.149
.928	-.179	******	-.206	******	-.174	******	-.163	-.165	-.164	-.161	-.169	-.171
.940	-.176	******	-.160	******	-.166	-.154	-.157	-.165	-.154	-.150	-.156	-.155
.952	******	******	-.084	******	-.089	-.084	-.082	-.086	-.088	-.076	-.089	-.087
.962	.014	.016	.018	******	.014	.015	.020	.016	.011	.014	.010	.005
.974	.112	.113	******	******	.108	.108	.113	.110	.107	.112	.105	.102
.986	.177	.175	.172	******	.172	.168	.174	.169	.167	.172	.166	.170
.996	.206	.206	******	******	.197	.194	.200	.191	.196	.198	.195	.196

AFTERBODY INTEGRATED PRESSURE DRAG COEFFICIENT .0277

Table A5. Continued

(c) NPR = 3.061

TEST PARAMETERS

CONFIGURATION	BODY ONLY
POINT NUMBER	24
MACH NUMBER	.900
ALPHA, DEG	.009
NPR	3.061
PTO, PSI	14.694
PO, PSI	8.687
QO, PSI	4.926

TAIL SURFACE PRESSURE COEFFICIENTS

	HORIZONTAL TAILS				VERTICAL TAIL	
	UPPER SURFACE Y/B		LOWER SURFACE Y/B		Y/B	
X/C	0.1	0.2	0.1	0.2	0.1	0.2
0.05						
0.10						
0.20						
0.30						
0.40						
0.50						
0.60						
0.70						
0.80						
0.90						

Tails removed

AFTERBODY PRESSURE COEFFICIENTS

	PHI, DEG											
X/L	0	18	36	45	54	72	81	90	108	135	162	180
.584	-.041	-.033	******	-.018	******	******	******	-.022	-.021	-.019	-.011	******
.598	-.047	-.040	******	-.040	******	-.044	******	-.030	-.028	-.030	******	******
.612	-.046	-.036	******	-.041	******	-.037	******	-.028	-.029	-.026	******	******
.626	-.038	-.036	******	-.038	******	-.037	******	-.028	-.029	-.025	******	******
.640	******	-.043	******	-.040	******	-.042	******	-.040	-.037	-.038	******	******
.654	******	-.054	******	-.056	******	-.043	******	-.054	-.051	-.043	******	******
.668	******	******	******	-.044	******	-.042	******	-.043	-.038	-.033	******	******
.682	******	-.052	******	-.048	******	-.052	******	-.051	-.047	-.040	-.042	******
.696	******	-.048	******	-.045	******	-.049	******	-.049	-.047	-.041	-.046	-.036
.710	******	-.049	******	******	******	-.052	******	-.048	-.046	-.043	-.041	-.038
.724	******	-.052	******	-.055	******	-.052	******	-.043	-.048	-.050	-.047	-.042
.738	******	-.055	******	-.062	******	******	******	-.055	-.058	-.055	-.050	-.054
.752	******	-.060	******	-.056	******	-.058	******	-.058	-.063	-.055	-.051	******
.766	******	-.075	******	-.070	******	-.070	******	-.072	-.075	-.075	-.071	-.072
.779	******	-.064	******	-.058	******	-.060	******	-.053	******	-.062	-.059	-.053
.793	******	-.074	******	-.070	******	-.071	******	******	-.069	-.070	-.071	******
.807	******	-.077	******	-.071	******	-.072	******	******	-.068	-.072	-.072	-.065
.821	******	******	******	-.078	******	-.079	******	******	-.081	-.081	-.079	-.081
.835	******	-.096	******	-.091	******	-.091	******	******	-.088	-.092	-.093	-.091
.849	******	-.107	******	-.101	******	-.109	******	******	-.104	-.103	-.102	-.098
.863	******	-.116	******	-.117	******	-.112	******	******	-.115	-.113	******	-.105
.877	-.108	-.105	******	-.116	******	-.116	******	******	******	******	******	******
.891	-.126	-.133	******	-.131	******	-.127	******	******	-.131	-.120	-.121	-.121
.916	-.158	-.146	-.210	******	-.146	******	-.152	-.148	-.148	-.138	-.136	-.143
.928	-.179	******	-.214	******	-.170	******	-.166	-.168	-.164	-.168	-.169	-.165
.940	-.171	******	-.153	******	-.157	-.154	-.156	-.164	-.157	-.161	-.156	-.151
.952	******	******	-.084	******	-.083	-.085	-.085	-.088	-.089	-.086	-.087	-.087
.962	.007	.012	.013	******	.015	.014	.012	.018	.009	.014	.007	.008
.974	.107	.114	******	******	.110	.106	.111	.109	.108	.106	.104	.105
.986	.175	.176	.173	******	.175	.170	.172	.167	.169	.164	.165	.169
.996	.201	.203	******	******	.201	.198	.199	.194	.195	.192	.195	.192

AFTERBODY INTEGRATED PRESSURE DRAG COEFFICIENT .0280

Table A5. Concluded

(d) NPR = 4.991

TEST PARAMETERS

CONFIGURATION	BODY ONLY
POINT NUMBER	25
MACH NUMBER	.901
ALPHA, DEG	.009
NPR	4.991
PTO, PSI	14.692
PO, PSI	8.681
QO, PSI	4.929

TAIL SURFACE PRESSURE COEFFICIENTS

	HORIZONTAL TAILS				VERTICAL TAIL	
	UPPER SURFACE Y/B		LOWER SURFACE Y/B		Y/B	
X/C	0.1	0.2	0.1	0.2	0.1	0.2
0.05						
0.10						
0.20						
0.30						
0.40						
0.50						
0.60						
0.70						
0.80						
0.90						

Tails removed

AFTERBODY PRESSURE COEFFICIENTS

	PHI, DEG											
X/L	0	18	36	45	54	72	81	90	108	135	162	180
.584	-.038	-.023	******	-.025	******	******	******	-.029	-.022	-.018	-.007	******
.598	-.040	-.042	******	-.038	******	-.040	******	-.039	-.030	-.026	******	******
.612	-.035	-.039	******	-.036	******	-.032	******	-.031	-.027	-.030	******	******
.626	-.032	-.033	******	-.041	******	-.036	******	-.029	-.028	-.027	******	******
.640	******	-.042	******	-.042	******	-.042	******	-.039	-.040	-.031	******	******
.654	******	-.056	******	-.050	******	-.042	******	-.051	-.051	-.043	******	******
.668	******	******	******	-.044	******	-.043	******	-.035	-.043	-.030	******	******
.682	******	-.056	******	-.046	******	-.052	******	-.039	-.043	-.038	-.042	******
.696	******	-.044	******	-.044	******	-.049	******	-.043	-.052	-.041	-.043	-.043
.710	******	-.054	******	******	******	-.050	******	-.039	-.047	-.039	-.045	-.038
.724	******	-.052	******	-.047	******	-.057	******	-.050	-.050	-.044	-.047	-.044
.738	******	-.056	******	-.056	******	******	******	-.055	-.064	-.051	-.055	-.050
.752	******	-.056	******	-.058	******	-.059	******	-.053	-.056	-.050	-.051	******
.766	******	-.066	******	-.071	******	-.074	******	-.075	-.074	-.071	-.074	-.076
.779	******	-.053	******	-.055	******	-.057	******	-.055	******	-.061	-.058	-.061
.793	******	-.068	******	-.069	******	-.076	******	******	-.067	-.067	-.071	******
.807	******	-.068	******	-.074	******	-.073	******	******	-.068	-.072	-.072	-.066
.821	******	******	******	-.079	******	-.081	******	******	-.077	-.078	-.084	-.077
.835	******	-.097	******	-.094	******	-.092	******	******	-.088	-.089	-.091	-.094
.849	******	-.109	******	-.106	******	-.103	******	******	-.099	-.104	-.100	-.104
.863	******	-.118	******	-.118	******	-.111	******	******	-.109	-.109	******	-.104
.877	-.109	-.103	******	-.111	******	-.113	******	******	******	******	******	******
.891	-.121	-.135	******	-.131	******	-.122	******	******	-.125	-.122	-.118	-.112
.916	-.140	-.141	-.205	******	-.143	******	-.141	-.142	-.142	-.134	-.131	-.143
.928	-.160	******	-.207	******	-.164	******	-.155	-.157	-.155	-.160	-.165	-.157
.940	-.151	******	-.143	******	-.148	-.140	-.142	-.147	-.147	-.140	-.141	-.146
.952	******	******	-.067	******	-.070	-.068	-.065	-.068	-.066	-.069	-.072	-.067
.962	.037	.034	.035	******	.033	.033	.036	.038	.033	.034	.028	.024
.974	.138	.133	******	******	.130	.128	.131	.129	.129	.125	.119	.124
.986	.197	.194	.189	******	.189	.185	.187	.188	.183	.182	.181	.185
.996	.223	.216	******	******	.210	.212	.212	.211	.207	.208	.204	.210

AFTERBODY INTEGRATED PRESSURE DRAG COEFFICIENT .0196

Table A6. Effect of Angle of Attack on Pressure Distributions for Body Alone at $M = 0.90$ and NPR = 1.111

(a) $\alpha = -2.980°$

TEST PARAMETERS

CONFIGURATION	BODY ONLY
POINT NUMBER	27
MACH NUMBER	.901
ALPHA, DEG	-2.980
NPR	1.111
PTO, PSI	14.691
PO, PSI	8.681
QO, PSI	4.928

TAIL SURFACE PRESSURE COEFFICIENTS

X/C	HORIZONTAL TAILS UPPER SURFACE Y/B 0.1	HORIZONTAL TAILS UPPER SURFACE Y/B 0.2	HORIZONTAL TAILS LOWER SURFACE Y/B 0.1	HORIZONTAL TAILS LOWER SURFACE Y/B 0.2	VERTICAL TAIL Y/B 0.1	VERTICAL TAIL Y/B 0.2
0.05						
0.10						
0.20						
0.30						
0.40						
0.50						
0.60						
0.70						
0.80						
0.90						

Tails removed

AFTERBODY PRESSURE COEFFICIENTS

X/L	PHI, DEG 0	18	36	45	54	72	81	90	108	135	162	180
.584	-.037	-.027	******	-.027	******	******	******	-.036	-.035	-.032	-.014	******
.598	-.040	-.042	******	-.051	******	-.052	******	-.042	-.040	-.036	******	******
.612	-.039	-.039	******	-.045	******	-.041	******	-.044	-.039	-.038	******	******
.626	-.028	-.034	******	-.047	******	-.044	******	-.047	-.041	-.039	******	******
.640	******	-.047	******	-.052	******	-.056	******	-.055	-.053	-.038	******	******
.654	******	-.062	******	-.059	******	-.052	******	-.063	-.060	-.050	******	******
.668	******	******	******	-.053	******	-.051	******	-.049	-.047	-.042	******	******
.682	******	-.054	******	-.060	******	-.058	******	-.056	-.056	-.049	-.039	******
.696	******	-.047	******	-.058	******	-.055	******	-.053	-.056	-.050	-.040	-.035
.710	******	-.051	******	******	******	-.057	******	-.056	-.058	-.045	-.041	-.040
.724	******	-.055	******	-.057	******	-.062	******	-.064	-.064	-.052	-.041	-.047
.738	******	-.064	******	-.068	******	******	******	-.069	-.077	-.059	-.048	-.051
.752	******	-.058	******	-.064	******	-.067	******	-.067	-.065	-.057	-.050	******
.766	******	-.077	******	-.084	******	-.082	******	-.088	-.085	-.074	-.064	-.064
.779	******	-.060	******	-.064	******	-.070	******	-.067	******	-.065	-.055	-.052
.793	******	-.073	******	-.083	******	-.083	******	******	-.081	-.068	-.065	******
.807	******	-.080	******	-.083	******	-.085	******	******	-.082	-.072	-.066	-.069
.821	******	******	******	-.090	******	-.097	******	******	-.086	-.083	-.077	-.077
.835	******	-.107	******	-.110	******	-.108	******	******	-.103	-.091	-.084	-.082
.849	******	-.119	******	-.128	******	-.120	******	******	-.109	-.101	-.093	-.093
.863	******	-.133	******	-.142	******	-.133	******	******	-.120	-.111	******	-.101
.877	-.124	-.119	******	-.132	******	-.139	******	******	******	******	******	******
.891	-.153	-.160	******	-.160	******	-.153	******	******	-.137	-.113	-.107	-.110
.916	-.188	-.187	-.266	******	-.182	******	-.174	-.176	-.157	-.135	-.120	-.127
.928	-.246	******	-.301	******	-.235	******	-.210	-.197	-.174	-.149	-.144	-.145
.940	-.284	******	-.256	******	-.254	-.216	-.210	-.194	-.170	-.131	-.125	-.133
.952	******	******	-.181	******	-.174	-.145	-.131	-.109	-.098	-.067	-.070	-.071
.962	-.084	-.075	-.066	******	-.054	-.039	-.022	-.010	.006	.000	.003	.005
.974	.038	.037	******	******	.048	.062	.075	.074	.075	.078	.077	.083
.986	.118	.120	.120	******	.133	.124	.124	.133	.121	.140	.129	.132
.996	.136	.139	******	******	.133	.134	.139	.149	.142	.156	.149	.148

AFTERBODY INTEGRATED PRESSURE DRAG COEFFICIENT .0509

Table A6. Continued

(b) $\alpha = 0.013°$

TEST PARAMETERS

CONFIGURATION	BODY ONLY
POINT NUMBER	28
MACH NUMBER	.900
ALPHA, DEG	.013
NPR	1.122
PTO, PSI	14.691
PO, PSI	8.688
QO, PSI	4.924

TAIL SURFACE PRESSURE COEFFICIENTS

X/C	HORIZONTAL TAILS UPPER SURFACE Y/B 0.1	HORIZONTAL TAILS UPPER SURFACE Y/B 0.2	HORIZONTAL TAILS LOWER SURFACE Y/B 0.1	HORIZONTAL TAILS LOWER SURFACE Y/B 0.2	VERTICAL TAIL Y/B 0.1	VERTICAL TAIL Y/B 0.2
0.05						
0.10						
0.20						
0.30						
0.40						
0.50						
0.60						
0.70						
0.80						
0.90						

Tails removed

AFTERBODY PRESSURE COEFFICIENTS

X/L	PHI, DEG 0	18	36	45	54	72	81	90	108	135	162	180
.584	-.039	-.032	******	-.024	******	******	******	-.022	-.025	-.023	-.006	******
.598	-.045	-.045	******	-.045	******	-.037	******	-.030	-.031	-.026	******	******
.612	-.043	-.041	******	-.039	******	-.039	******	-.032	-.034	-.027	******	******
.626	-.035	-.041	******	-.039	******	-.038	******	-.039	-.027	-.030	******	******
.640	******	-.041	******	-.045	******	-.043	******	-.045	-.035	-.035	******	******
.654	******	-.050	******	-.054	******	-.044	******	-.050	-.049	-.042	******	******
.668	******	******	******	-.043	******	-.037	******	-.040	-.038	-.038	******	******
.682	******	-.051	******	-.054	******	-.053	******	-.047	-.049	-.039	-.041	******
.696	******	-.049	******	-.044	******	-.049	******	-.045	-.054	-.043	-.043	-.035
.710	******	-.057	******	******	******	-.049	******	-.048	-.050	-.045	-.041	-.043
.724	******	-.055	******	-.055	******	-.053	******	-.052	-.054	-.051	-.050	-.053
.738	******	-.061	******	-.062	******	******	******	-.062	-.066	-.056	-.049	-.056
.752	******	-.057	******	-.062	******	-.059	******	-.058	-.060	-.057	-.052	******
.766	******	-.072	******	-.075	******	-.071	******	-.077	-.075	-.076	-.068	-.070
.779	******	-.062	******	-.064	******	-.062	******	-.058	******	-.059	-.061	-.053
.793	******	-.072	******	-.069	******	-.081	******	******	-.067	-.075	-.073	******
.807	******	-.078	******	-.070	******	-.077	******	******	-.072	-.075	-.071	-.077
.821	******	******	******	-.083	******	-.086	******	******	-.086	-.083	-.080	-.087
.835	******	-.093	******	-.100	******	-.097	******	******	-.094	-.099	-.097	-.090
.849	******	-.113	******	-.111	******	-.110	******	******	-.110	-.109	-.105	-.099
.863	******	-.121	******	-.129	******	-.116	******	******	-.119	-.117	******	-.115
.877	-.118	-.112	******	-.120	******	-.125	******	******	******	******	******	******
.891	-.140	-.151	******	-.144	******	-.130	******	******	-.134	-.124	-.131	-.132
.916	-.166	-.165	-.224	******	-.171	******	-.164	-.167	-.163	-.156	-.149	-.156
.928	-.195	******	-.238	******	-.196	******	-.186	-.195	-.188	-.186	-.190	-.193
.940	-.196	******	-.187	******	-.191	-.185	-.192	-.195	-.193	-.195	-.191	-.193
.952	******	******	-.121	******	-.125	-.123	-.115	-.124	-.118	-.124	-.121	-.128
.962	-.025	-.029	-.022	******	-.031	-.027	-.023	-.023	-.025	-.026	-.031	-.029
.974	.075	.075	******	******	.068	.069	.075	.069	.069	.069	.065	.062
.986	.141	.139	.138	******	.142	.132	.135	.132	.134	.130	.129	.127
.996	.167	.175	******	******	.168	.167	.174	.165	.163	.159	.163	.155

AFTERBODY INTEGRATED PRESSURE DRAG COEFFICIENT .0468

Table A6. Concluded

(c) $\alpha = 6.008°$

TEST PARAMETERS

CONFIGURATION	BODY ONLY
POINT NUMBER	29
MACH NUMBER	.901
ALPHA, DEG	6.008
NPR	1.079
PTO, PSI	14.692
PO, PSI	8.680
QO, PSI	4.930

TAIL SURFACE PRESSURE COEFFICIENTS

X/C	HORIZONTAL TAILS UPPER SURFACE Y/B 0.1	HORIZONTAL TAILS UPPER SURFACE Y/B 0.2	HORIZONTAL TAILS LOWER SURFACE Y/B 0.1	HORIZONTAL TAILS LOWER SURFACE Y/B 0.2	VERTICAL TAIL Y/B 0.1	VERTICAL TAIL Y/B 0.2
0.05						
0.10						
0.20						
0.30						
0.40						
0.50						
0.60						
0.70						
0.80						
0.90						

Tails removed

AFTERBODY PRESSURE COEFFICIENTS

X/L	PHI, DEG 0	18	36	45	54	72	81	90	108	135	162	180
.584	-.042	-.034	******	-.040	******	******	******	-.042	-.039	-.016	.014	******
.598	-.045	-.043	******	-.047	******	-.054	******	-.052	-.045	-.031	******	******
.612	-.037	-.037	******	-.050	******	-.056	******	-.049	-.051	-.027	******	******
.626	-.036	-.040	******	-.046	******	-.056	******	-.051	-.051	-.029	******	******
.640	******	-.046	******	-.049	******	-.064	******	-.060	-.054	-.038	******	******
.654	******	-.045	******	-.058	******	-.059	******	-.079	-.070	-.051	******	******
.668	******	******	******	-.052	******	-.060	******	-.068	-.061	-.037	******	******
.682	******	-.051	******	-.053	******	-.072	******	-.076	-.074	-.053	-.042	******
.696	******	-.049	******	-.055	******	-.069	******	-.077	-.075	-.057	-.042	-.026
.710	******	-.054	******	******	******	-.068	******	-.072	-.071	-.053	-.038	-.029
.724	******	-.054	******	-.061	******	-.076	******	-.077	-.073	-.054	-.041	-.043
.738	******	-.056	******	-.059	******	******	******	-.081	-.089	-.064	-.048	-.047
.752	******	-.060	******	-.066	******	-.073	******	-.085	-.082	-.059	-.044	******
.766	******	-.072	******	-.069	******	-.088	******	-.101	-.105	-.089	-.081	-.074
.779	******	-.061	******	-.067	******	-.080	******	-.079	******	-.067	-.057	-.049
.793	******	-.074	******	-.074	******	-.094	******	******	-.099	-.089	-.080	******
.807	******	-.073	******	-.073	******	-.092	******	******	-.102	-.088	-.074	-.072
.821	******	******	******	-.084	******	-.096	******	******	-.110	-.101	-.085	-.082
.835	******	-.084	******	-.091	******	-.106	******	******	-.126	-.116	-.102	-.096
.849	******	-.093	******	-.101	******	-.121	******	******	-.138	-.129	-.120	-.105
.863	******	-.104	******	-.109	******	-.122	******	******	-.143	-.146	******	-.119
.877	-.089	-.096	******	-.110	******	-.120	******	******	******	******	******	******
.891	-.101	-.118	******	-.113	******	-.137	******	******	-.160	-.152	-.148	-.144
.916	-.118	-.113	-.149	******	-.130	******	-.170	-.184	-.200	-.192	-.181	-.185
.928	-.124	******	-.145	******	-.137	******	-.183	-.215	-.244	-.265	-.271	-.254
.940	-.126	******	-.111	******	-.121	-.143	-.166	-.202	-.260	-.316	-.313	-.307
.952	******	******	-.069	******	-.070	-.076	-.095	-.109	-.170	-.226	-.242	-.238
.962	.036	-.007	-.004	******	-.010	-.004	-.008	-.012	-.050	-.105	-.135	-.126
.974	.083	.068	******	******	.049	.049	.054	.052	.045	.011	-.019	-.015
.986	.106	.104	.091	******	.084	.082	.085	.085	.083	.071	.055	.062
.996	.101	.100	******	******	.093	.090	.090	.088	.079	.077	.081	.088

AFTERBODY INTEGRATED PRESSURE DRAG COEFFICIENT .0641

Table A7. Effect of Nozzle Pressure Ratio on Pressure Distributions for Body Alone at $M = 0.60$ and $\alpha = 0.010°$

(a) NPR = 1.037

TEST PARAMETERS

CONFIGURATION	BODY ONLY
POINT NUMBER	30
MACH NUMBER	.601
ALPHA, DEG	.010
NPR	1.037
PTO, PSI	14.703
PO, PSI	11.520
QO, PSI	2.911

TAIL SURFACE PRESSURE COEFFICIENTS

	HORIZONTAL TAILS				VERTICAL TAIL	
	UPPER SURFACE		LOWER SURFACE			
	Y/B		Y/B		Y/B	
X/C	0.1	0.2	0.1	0.2	0.1	0.2
0.05						
0.10						
0.20						
0.30						
0.40						
0.50						
0.60						
0.70						
0.80						
0.90						

Tails removed

AFTERBODY PRESSURE COEFFICIENTS

	PHI, DEG											
X/L	0	18	36	45	54	72	81	90	108	135	162	180
.584	-.040	-.033	******	-.024	******	******	******	-.033	-.025	-.022	-.014	******
.598	-.044	-.038	******	-.038	******	-.041	******	-.037	-.032	-.027	******	******
.612	-.043	-.038	******	-.035	******	-.035	******	-.035	-.035	-.026	******	******
.626	-.039	-.039	******	-.035	******	-.038	******	-.038	-.038	-.030	******	******
.640	******	-.047	******	-.041	******	-.040	******	-.040	-.044	-.036	******	******
.654	******	-.054	******	-.050	******	-.037	******	-.048	-.049	-.045	******	******
.668	******	******	******	-.044	******	-.045	******	-.039	-.042	-.032	******	******
.682	******	-.051	******	-.043	******	-.046	******	-.047	-.048	-.043	-.039	******
.696	******	-.049	******	-.046	******	-.045	******	-.047	-.045	-.044	-.043	-.039
.710	******	-.046	******	******	******	-.047	******	-.044	-.045	-.039	-.042	-.042
.724	******	-.049	******	-.048	******	-.049	******	-.045	-.050	-.042	-.049	-.049
.738	******	-.054	******	-.051	******	******	******	-.049	-.057	-.051	-.051	-.048
.752	******	-.053	******	-.050	******	-.052	******	-.048	-.055	-.045	-.043	******
.766	******	-.061	******	-.061	******	-.063	******	-.059	-.067	-.066	-.065	-.066
.779	******	-.056	******	-.055	******	-.057	******	-.050	******	-.054	-.050	-.050
.793	******	-.065	******	-.067	******	-.062	******	******	-.062	-.060	-.058	******
.807	******	-.065	******	-.067	******	-.063	******	******	-.063	-.063	-.060	-.063
.821	******	******	******	-.068	******	-.071	******	******	-.066	-.066	-.067	-.067
.835	******	-.083	******	-.080	******	-.076	******	******	-.077	-.076	-.074	-.078
.849	******	-.086	******	-.085	******	-.088	******	******	-.082	-.085	-.079	-.081
.863	******	-.096	******	-.091	******	-.093	******	******	-.086	-.089	******	-.086
.877	-.090	-.089	******	-.090	******	-.091	******	******	******	******	******	******
.891	-.103	-.108	******	-.100	******	-.105	******	******	-.105	-.100	-.104	-.098
.916	-.122	-.120	-.184	******	-.118	******	-.123	-.124	-.120	-.114	-.110	-.120
.928	-.142	******	-.176	******	-.138	******	-.139	-.136	-.137	-.142	-.141	-.137
.940	-.152	******	-.139	******	-.148	-.141	-.141	-.138	-.145	-.147	-.153	-.147
.952	******	******	-.113	******	-.113	-.110	-.113	-.118	-.114	-.114	-.122	-.119
.962	-.046	-.048	-.054	******	-.050	-.048	-.053	-.047	-.056	-.053	-.055	-.058
.974	.028	.031	******	******	.027	.029	.026	.027	.024	.020	.018	.022
.986	.095	.095	.092	******	.091	.093	.092	.088	.083	.081	.074	.076
.996	.134	.124	******	******	.124	.119	.118	.114	.114	.104	.105	.104

AFTERBODY INTEGRATED PRESSURE DRAG COEFFICIENT .0446

Table A7. Continued

(b) NPR = 1.992

TEST PARAMETERS

CONFIGURATION	BODY ONLY
POINT NUMBER	31
MACH NUMBER	.603
ALPHA, DEG	.009
NPR	1.992
PTO, PSI	14.703
PO, PSI	11.503
QO, PSI	2.925

TAIL SURFACE PRESSURE COEFFICIENTS

	HORIZONTAL TAILS				VERTICAL TAIL	
	UPPER SURFACE Y/B		LOWER SURFACE Y/B		Y/B	
X/C	0.1	0.2	0.1	0.2	0.1	0.2
0.05						
0.10						
0.20						
0.30						
0.40						
0.50						
0.60						
0.70						
0.80						
0.90						

Tails removed

AFTERBODY PRESSURE COEFFICIENTS

	PHI, DEG											
X/L	0	18	36	45	54	72	81	90	108	135	162	180
.584	-.037	-.030	******	-.024	******	******	******	-.028	-.019	-.024	-.015	******
.598	-.041	-.033	******	-.041	******	-.041	******	-.035	-.027	-.030	******	******
.612	-.035	-.031	******	-.038	******	-.036	******	-.033	-.030	-.030	******	******
.626	-.034	-.035	******	-.041	******	-.039	******	-.039	-.034	-.029	******	******
.640	******	-.044	******	-.040	******	-.038	******	-.044	-.039	-.027	******	******
.654	******	-.049	******	-.041	******	-.040	******	-.045	-.051	-.038	******	******
.668	******	******	******	-.039	******	-.041	******	-.037	-.035	-.030	******	******
.682	******	-.044	******	-.041	******	-.046	******	-.038	-.047	-.039	-.039	******
.696	******	-.047	******	-.042	******	-.043	******	-.042	-.047	-.044	-.042	-.036
.710	******	-.049	******	******	******	-.047	******	-.042	-.046	-.039	-.042	-.039
.724	******	-.050	******	-.047	******	-.051	******	-.044	-.053	-.041	-.043	-.048
.738	******	-.057	******	-.050	******	******	******	-.049	-.056	-.047	-.045	-.051
.752	******	-.048	******	-.044	******	-.057	******	-.048	-.044	-.044	-.044	******
.766	******	-.058	******	-.055	******	-.055	******	-.064	-.060	-.059	-.060	-.059
.779	******	-.046	******	-.049	******	-.054	******	-.047	******	-.052	-.048	-.046
.793	******	-.059	******	-.060	******	-.063	******	******	-.056	-.058	-.057	******
.807	******	-.061	******	-.061	******	-.064	******	******	-.061	-.062	-.057	-.060
.821	******	******	******	-.067	******	-.072	******	******	-.064	-.062	-.066	-.069
.835	******	-.077	******	-.081	******	-.073	******	******	-.075	-.074	-.071	-.070
.849	******	-.090	******	-.082	******	-.075	******	******	-.079	-.083	-.075	-.076
.863	******	-.085	******	-.090	******	-.083	******	******	-.083	-.084	******	-.082
.877	-.082	-.094	******	-.088	******	-.087	******	******	******	******	******	******
.891	-.095	-.104	******	-.101	******	-.096	******	******	-.099	-.093	-.092	-.096
.916	-.116	-.107	-.167	******	-.111	******	-.105	-.117	-.112	-.105	-.101	-.109
.928	-.122	******	-.174	******	-.128	******	-.121	-.124	-.125	-.129	-.130	-.126
.940	-.132	******	-.117	******	-.133	-.127	-.122	-.127	-.131	-.126	-.129	-.132
.952	******	******	-.092	******	-.094	-.092	-.090	-.091	-.088	-.091	-.094	-.098
.962	-.027	-.014	-.021	******	-.022	-.020	-.016	-.023	-.027	-.021	-.025	-.027
.974	.068	.069	******	******	.060	.062	.066	.061	.062	.059	.056	.055
.986	.137	.137	.137	******	.129	.130	.135	.131	.126	.128	.125	.123
.996	.173	.173	******	******	.169	.168	.171	.166	.165	.164	.163	.156

AFTERBODY INTEGRATED PRESSURE DRAG COEFFICIENT .0280

Table A7. Continued

(c) NPR = 3.028

TEST PARAMETERS

CONFIGURATION	BODY ONLY
POINT NUMBER	32
MACH NUMBER	.600
ALPHA, DEG	.010
NPR	3.028
PTO, PSI	14.703
PO, PSI	11.528
QO, PSI	2.904

TAIL SURFACE PRESSURE COEFFICIENTS

	HORIZONTAL TAILS				VERTICAL TAIL	
	UPPER SURFACE		LOWER SURFACE			
	Y/B		Y/B		Y/B	
X/C	0.1	0.2	0.1	0.2	0.1	0.2
0.05						
0.10						
0.20						
0.30						
0.40						
0.50						
0.60						
0.70						
0.80						
0.90						

Tails removed

AFTERBODY PRESSURE COEFFICIENTS

	PHI, DEG											
X/L	0	18	36	45	54	72	81	90	108	135	162	180
.584	-.039	-.034	******	-.027	******	******	******	-.031	-.028	-.029	-.008	******
.598	-.054	-.041	******	-.044	******	-.033	******	-.038	-.036	-.031	******	******
.612	-.042	-.042	******	-.037	******	-.028	******	-.031	-.031	-.034	******	******
.626	-.040	-.036	******	-.043	******	-.026	******	-.036	-.031	-.032	******	******
.640	******	-.042	******	-.044	******	-.032	******	-.043	-.045	-.035	******	******
.654	******	-.055	******	-.049	******	-.036	******	-.048	-.048	-.042	******	******
.668	******	******	******	-.043	******	-.037	******	-.050	-.039	-.035	******	******
.682	******	-.049	******	-.045	******	-.046	******	-.045	-.054	-.041	-.042	******
.696	******	-.054	******	-.045	******	-.047	******	-.048	-.049	-.039	-.040	-.039
.710	******	-.051	******	******	******	-.044	******	-.047	-.046	-.038	-.038	-.038
.724	******	-.050	******	-.046	******	-.047	******	-.049	-.047	-.040	-.045	-.045
.738	******	-.052	******	-.049	******	******	******	-.054	-.061	-.045	-.048	-.050
.752	******	-.051	******	-.053	******	-.053	******	-.051	-.053	-.043	-.042	******
.766	******	-.072	******	-.066	******	-.060	******	-.066	-.066	-.059	-.057	-.064
.779	******	-.055	******	-.051	******	-.062	******	-.051	******	-.045	-.049	-.051
.793	******	-.066	******	-.059	******	-.066	******	******	-.060	-.051	-.060	******
.807	******	-.066	******	-.068	******	-.063	******	******	-.057	-.049	-.057	-.059
.821	******	******	******	-.067	******	-.068	******	******	-.063	-.056	-.063	-.069
.835	******	-.083	******	-.075	******	-.075	******	******	-.070	-.067	-.072	-.075
.849	******	-.086	******	-.086	******	-.084	******	******	-.078	-.070	-.080	-.081
.863	******	-.091	******	-.096	******	-.088	******	******	-.082	-.078	******	-.081
.877	-.092	-.091	******	-.089	******	-.092	******	******	******	******	******	******
.891	-.095	-.106	******	-.103	******	-.099	******	******	-.091	-.088	-.093	-.096
.916	-.129	-.113	-.175	******	-.114	******	-.113	-.111	-.108	-.103	-.101	-.115
.928	-.129	******	-.169	******	-.129	******	-.126	-.124	-.120	-.123	-.126	-.124
.940	-.137	******	-.123	******	-.128	-.127	-.129	-.124	-.116	-.129	-.129	-.131
.952	******	******	-.097	******	-.097	-.090	-.093	-.088	-.084	-.095	-.102	-.099
.962	-.039	-.024	-.029	******	-.025	-.029	-.023	-.017	-.019	-.021	-.027	-.033
.974	.063	.061	******	******	.059	.060	.061	.063	.067	.063	.059	.058
.986	.132	.136	.132	******	.132	.125	.130	.133	.137	.127	.126	.124
.996	.171	.175	******	******	.165	.165	.166	.166	.170	.162	.162	.159

AFTERBODY INTEGRATED PRESSURE DRAG COEFFICIENT .0287

Table A7. Concluded

(d) NPR = 4.992

TEST PARAMETERS

CONFIGURATION	BODY ONLY
POINT NUMBER	33
MACH NUMBER	.600
ALPHA, DEG	.009
NPR	4.992
PTO, PSI	14.701
PO, PSI	11.522
QO, PSI	2.907

TAIL SURFACE PRESSURE COEFFICIENTS

X/C	HORIZONTAL TAILS UPPER SURFACE Y/B 0.1	HORIZONTAL TAILS UPPER SURFACE Y/B 0.2	HORIZONTAL TAILS LOWER SURFACE Y/B 0.1	HORIZONTAL TAILS LOWER SURFACE Y/B 0.2	VERTICAL TAIL Y/B 0.1	VERTICAL TAIL Y/B 0.2
0.05						
0.10						
0.20						
0.30						
0.40						
0.50						
0.60						
0.70						
0.80						
0.90						

Tails removed

AFTERBODY PRESSURE COEFFICIENTS

X/L	PHI, DEG 0	18	36	45	54	72	81	90	108	135	162	180
.584	-.029	-.034	******	-.023	******	******	******	-.018	-.034	-.022	-.012	******
.598	-.039	-.046	******	-.035	******	-.036	******	-.023	-.041	-.029	******	******
.612	-.040	-.046	******	-.037	******	-.034	******	-.026	-.037	-.026	******	******
.626	-.041	-.040	******	-.035	******	-.037	******	-.031	-.043	-.028	******	******
.640	******	-.053	******	-.039	******	-.040	******	-.039	-.046	-.032	******	******
.654	******	-.056	******	-.045	******	-.032	******	-.039	-.054	-.042	******	******
.668	******	******	******	-.043	******	-.039	******	-.036	-.050	-.040	******	******
.682	******	-.060	******	-.050	******	-.043	******	-.044	-.057	-.047	-.034	******
.696	******	-.056	******	-.052	******	-.039	******	-.049	-.057	-.046	-.035	-.023
.710	******	-.058	******	******	******	-.040	******	-.048	-.054	-.040	-.029	-.032
.724	******	-.058	******	-.048	******	-.038	******	-.045	-.054	-.042	-.034	-.042
.738	******	-.058	******	-.052	******	******	******	-.047	-.057	-.045	-.035	-.045
.752	******	-.043	******	-.058	******	-.059	******	-.049	-.049	-.045	-.038	******
.766	******	-.058	******	-.069	******	-.071	******	-.058	-.066	-.058	-.057	-.051
.779	******	-.053	******	-.056	******	-.064	******	-.046	******	-.047	-.045	-.034
.793	******	-.067	******	-.070	******	-.073	******	******	-.066	-.058	-.052	******
.807	******	-.067	******	-.068	******	-.070	******	******	-.065	-.060	-.051	-.054
.821	******	******	******	-.074	******	-.074	******	******	-.065	-.064	-.054	-.062
.835	******	-.082	******	-.081	******	-.070	******	******	-.077	-.072	-.068	-.060
.849	******	-.090	******	-.082	******	-.078	******	******	-.078	-.080	-.070	-.062
.863	******	-.102	******	-.087	******	-.087	******	******	-.083	-.083	******	-.075
.877	-.095	-.092	******	-.087	******	-.093	******	******	******	******	******	******
.891	-.100	-.112	******	-.095	******	-.102	******	******	-.090	-.087	-.080	-.087
.916	-.112	-.114	-.170	******	-.118	******	-.104	-.115	-.106	-.095	-.089	-.092
.928	-.125	******	-.166	******	-.132	******	-.123	-.120	-.117	-.119	-.115	-.115
.940	-.135	******	-.128	******	-.132	-.118	-.123	-.122	-.123	-.120	-.111	-.118
.952	******	******	-.091	******	-.084	-.079	-.084	-.077	-.075	-.074	-.074	-.080
.962	-.010	-.017	-.012	******	-.018	-.007	-.004	-.010	-.006	-.001	-.002	.002
.974	.085	.080	******	******	.073	.081	.081	.082	.081	.081	.085	.081
.986	.159	.157	.149	******	.152	.157	.151	.153	.152	.153	.158	.154
.996	.198	.192	******	******	.195	.197	.188	.190	.189	.195	.198	.193

AFTERBODY INTEGRATED PRESSURE DRAG COEFFICIENT .0209

Table A8. Effect of Angle of Attack on Pressure Distributions for Body Alone at $M = 0.60$ and NPR = 1.051

(a) $\alpha = -2.980°$

TEST PARAMETERS

CONFIGURATION	BODY ONLY
POINT NUMBER	35
MACH NUMBER	.601
ALPHA, DEG	-2.980
NPR	1.051
PTO, PSI	14.703
PO, PSI	11.518
QO, PSI	2.912

TAIL SURFACE PRESSURE COEFFICIENTS

X/C	HORIZONTAL TAILS UPPER SURFACE Y/B 0.1	HORIZONTAL TAILS UPPER SURFACE Y/B 0.2	HORIZONTAL TAILS LOWER SURFACE Y/B 0.1	HORIZONTAL TAILS LOWER SURFACE Y/B 0.2	VERTICAL TAIL Y/B 0.1	VERTICAL TAIL Y/B 0.2
0.05						
0.10						
0.20						
0.30						
0.40						
0.50						
0.60						
0.70						
0.80						
0.90						

Tails removed

AFTERBODY PRESSURE COEFFICIENTS

X/L	PHI, DEG 0	18	36	45	54	72	81	90	108	135	162	180
.584	-.033	-.031	******	-.024	******	******	******	-.039	-.037	-.031	-.015	******
.598	-.039	-.038	******	-.044	******	-.046	******	-.046	-.041	-.035	******	******
.612	-.041	-.038	******	-.041	******	-.044	******	-.040	-.041	-.031	******	******
.626	-.035	-.036	******	-.040	******	-.046	******	-.044	-.041	-.037	******	******
.640	******	-.043	******	-.048	******	-.049	******	-.051	-.047	-.040	******	******
.654	******	-.049	******	-.054	******	-.049	******	-.056	-.051	-.047	******	******
.668	******	******	******	-.049	******	-.048	******	-.046	-.046	-.040	******	******
.682	******	-.048	******	-.052	******	-.051	******	-.054	-.056	-.044	-.038	******
.696	******	-.049	******	-.051	******	-.054	******	-.056	-.053	-.041	-.037	-.033
.710	******	-.050	******	******	******	-.053	******	-.054	-.059	-.043	-.038	-.033
.724	******	-.056	******	-.054	******	-.059	******	-.055	-.056	-.044	-.042	-.038
.738	******	-.056	******	-.060	******	******	******	-.059	-.065	-.047	-.044	-.044
.752	******	-.052	******	-.059	******	-.058	******	-.059	-.061	-.049	-.045	******
.766	******	-.063	******	-.071	******	-.070	******	-.068	-.073	-.060	-.054	-.055
.779	******	-.060	******	-.059	******	-.065	******	-.061	******	-.051	-.042	-.043
.793	******	-.071	******	-.070	******	-.072	******	******	-.066	-.058	-.054	******
.807	******	-.072	******	-.071	******	-.077	******	******	-.063	-.061	-.052	-.051
.821	******	******	******	-.080	******	-.081	******	******	-.071	-.065	-.059	-.059
.835	******	-.086	******	-.089	******	-.089	******	******	-.075	-.071	-.060	-.064
.849	******	-.093	******	-.097	******	-.096	******	******	-.085	-.079	-.069	-.066
.863	******	-.105	******	-.106	******	-.102	******	******	-.090	-.081	******	-.069
.877	-.105	-.100	******	-.106	******	-.108	******	******	******	******	******	******
.891	-.117	-.125	******	-.118	******	-.115	******	******	-.098	-.084	-.082	-.079
.916	-.148	-.146	-.216	******	-.139	******	-.131	-.126	-.114	-.099	-.087	-.092
.928	-.177	******	-.218	******	-.173	******	-.149	-.143	-.126	-.112	-.108	-.104
.940	-.205	******	-.177	******	-.183	-.161	-.159	-.150	-.133	-.109	-.106	-.105
.952	******	******	-.165	******	-.150	-.136	-.121	-.112	-.092	-.080	-.077	-.077
.962	-.106	-.106	-.093	******	-.077	-.065	-.052	-.040	-.031	-.021	-.022	-.021
.974	-.014	-.008	******	******	-.001	.020	.030	.035	.044	.044	.043	.044
.986	.065	.071	.076	******	.085	.088	.095	.095	.098	.100	.092	.092
.996	.101	.104	******	******	.115	.119	.119	.122	.128	.125	.115	.107

AFTERBODY INTEGRATED PRESSURE DRAG COEFFICIENT .0463

Table A8. Continued

(b) $\alpha = 0.019°$

TEST PARAMETERS

CONFIGURATION	BODY ONLY
POINT NUMBER	36
MACH NUMBER	.599
ALPHA, DEG	.019
NPR	1.052
PTO, PSI	14.703
PO, PSI	11.533
QO, PSI	2.900

TAIL SURFACE PRESSURE COEFFICIENTS

	HORIZONTAL TAILS				VERTICAL TAIL	
	UPPER SURFACE Y/B		LOWER SURFACE Y/B		Y/B	
X/C	0.1	0.2	0.1	0.2	0.1	0.2
0.05						
0.10						
0.20						
0.30						
0.40						
0.50						
0.60						
0.70						
0.80						
0.90						

Tails removed

AFTERBODY PRESSURE COEFFICIENTS

	PHI, DEG											
X/L	0	18	36	45	54	72	81	90	108	135	162	180
.584	-.044	-.033	******	-.027	******	******	******	-.031	-.028	-.026	-.010	******
.598	-.047	-.042	******	-.042	******	-.036	******	-.036	-.034	-.035	******	******
.612	-.042	-.039	******	-.043	******	-.037	******	-.029	-.030	-.034	******	******
.626	-.034	-.035	******	-.043	******	-.037	******	-.029	-.036	-.027	******	******
.640	******	-.046	******	-.039	******	-.041	******	-.034	-.038	-.035	******	******
.654	******	-.047	******	-.049	******	-.041	******	-.052	-.047	-.048	******	******
.668	******	******	******	-.048	******	-.041	******	-.043	-.042	-.040	******	******
.682	******	-.053	******	-.052	******	-.054	******	-.045	-.047	-.040	-.041	******
.696	******	-.047	******	-.045	******	-.046	******	-.043	-.045	-.045	-.042	-.039
.710	******	-.047	******	******	******	-.047	******	-.045	-.047	-.044	-.041	-.036
.724	******	-.050	******	-.052	******	-.049	******	-.049	-.048	-.048	-.046	-.039
.738	******	-.053	******	-.057	******	******	******	-.053	-.061	-.050	-.048	-.042
.752	******	-.057	******	-.053	******	-.053	******	-.055	-.054	-.052	-.048	******
.766	******	-.066	******	-.064	******	-.065	******	-.068	-.072	-.064	-.060	-.064
.779	******	-.055	******	-.051	******	-.055	******	-.047	******	-.049	-.057	-.050
.793	******	-.062	******	-.066	******	-.063	******	******	-.059	-.062	-.059	******
.807	******	-.066	******	-.061	******	-.064	******	******	-.064	-.062	-.059	-.054
.821	******	******	******	-.069	******	-.070	******	******	-.070	-.066	-.066	-.062
.835	******	-.076	******	-.077	******	-.072	******	******	-.079	-.078	-.081	-.076
.849	******	-.086	******	-.088	******	-.086	******	******	-.086	-.084	-.079	-.081
.863	******	-.096	******	-.096	******	-.096	******	******	-.094	-.089	******	-.084
.877	-.093	-.089	******	-.098	******	-.099	******	******	******	******	******	******
.891	-.100	-.108	******	-.110	******	-.101	******	******	-.099	-.095	-.099	-.090
.916	-.128	-.121	-.175	******	-.120	******	-.120	-.126	-.120	-.115	-.111	-.119
.928	-.138	******	-.178	******	-.141	******	-.142	-.141	-.136	-.136	-.141	-.137
.940	-.149	******	-.139	******	-.143	-.142	-.148	-.150	-.147	-.150	-.146	-.140
.952	******	******	-.113	******	-.118	-.107	-.112	-.117	-.113	-.111	-.117	-.110
.962	-.057	-.049	-.049	******	-.051	-.053	-.049	-.050	-.051	-.052	-.058	-.057
.974	.030	.030	******	******	.023	.019	.023	.023	.025	.025	.020	.021
.986	.097	.095	.089	******	.092	.083	.084	.081	.083	.079	.080	.084
.996	.130	.123	******	******	.115	.121	.119	.111	.115	.111	.104	.108

AFTERBODY INTEGRATED PRESSURE DRAG COEFFICIENT .0449

Table A8. Continued

(c) $\alpha = 3.013°$

TEST PARAMETERS

CONFIGURATION	BODY ONLY
POINT NUMBER	37
MACH NUMBER	.600
ALPHA, DEG	3.013
NPR	1.048
PTO, PSI	14.704
PO, PSI	11.525
QO, PSI	2.907

TAIL SURFACE PRESSURE COEFFICIENTS

X/C	HORIZONTAL TAILS UPPER SURFACE Y/B 0.1	HORIZONTAL TAILS UPPER SURFACE Y/B 0.2	HORIZONTAL TAILS LOWER SURFACE Y/B 0.1	HORIZONTAL TAILS LOWER SURFACE Y/B 0.2	VERTICAL TAIL Y/B 0.1	VERTICAL TAIL Y/B 0.2
0.05						
0.10						
0.20						
0.30						
0.40						
0.50						
0.60						
0.70						
0.80						
0.90						

Tails removed

AFTERBODY PRESSURE COEFFICIENTS

X/L	PHI, DEG 0	18	36	45	54	72	81	90	108	135	162	180
.584	-.042	-.033	******	-.027	******	******	******	-.035	-.031	-.020	-.010	******
.598	-.045	-.042	******	-.038	******	-.045	******	-.042	-.040	-.027	******	******
.612	-.042	-.040	******	-.037	******	-.043	******	-.040	-.035	-.032	******	******
.626	-.035	-.035	******	-.043	******	-.042	******	-.041	-.044	-.032	******	******
.640	******	-.047	******	-.045	******	-.043	******	-.048	-.043	-.038	******	******
.654	******	-.046	******	-.051	******	-.046	******	-.056	-.047	-.047	******	******
.668	******	******	******	-.046	******	-.050	******	-.047	-.046	-.037	******	******
.682	******	-.047	******	-.046	******	-.051	******	-.057	-.052	-.044	-.042	******
.696	******	-.044	******	-.046	******	-.052	******	-.051	-.057	-.047	-.038	-.038
.710	******	-.052	******	******	******	-.047	******	-.051	-.055	-.045	-.039	-.044
.724	******	-.051	******	-.051	******	-.052	******	-.051	-.057	-.045	-.046	-.047
.738	******	-.052	******	-.050	******	******	******	-.054	-.063	-.047	-.051	-.051
.752	******	-.052	******	-.055	******	-.050	******	-.053	-.061	-.049	-.050	******
.766	******	-.060	******	-.063	******	-.065	******	-.073	-.074	-.063	-.070	-.068
.779	******	-.052	******	-.050	******	-.058	******	-.058	******	-.058	-.052	-.053
.793	******	-.056	******	-.066	******	-.073	******	******	-.068	-.071	-.067	******
.807	******	-.060	******	-.060	******	-.071	******	******	-.070	-.069	-.060	-.066
.821	******	******	******	-.069	******	-.075	******	******	-.078	-.072	-.071	-.075
.835	******	-.068	******	-.076	******	-.080	******	******	-.085	-.088	-.080	-.083
.849	******	-.070	******	-.079	******	-.088	******	******	-.095	-.094	-.090	-.089
.863	******	-.081	******	-.082	******	-.091	******	******	-.097	-.099	******	-.100
.877	-.079	-.074	******	-.081	******	-.092	******	******	******	******	******	******
.891	-.080	-.095	******	-.097	******	-.101	******	******	-.114	-.115	-.113	-.113
.916	-.102	-.095	-.142	******	-.111	******	-.122	-.129	-.133	-.137	-.128	-.144
.928	-.106	******	-.134	******	-.123	******	-.135	-.146	-.153	-.172	-.172	-.174
.940	-.105	******	-.105	******	-.124	-.128	-.133	-.144	-.164	-.184	-.189	-.188
.952	******	******	-.075	******	-.084	-.098	-.104	-.108	-.128	-.155	-.169	-.166
.962	-.023	-.020	-.018	******	-.029	-.030	-.039	-.046	-.065	-.087	-.101	-.107
.974	.045	.044	******	******	.039	.045	.037	.031	.020	-.004	-.016	-.024
.986	.101	.102	.098	******	.093	.088	.106	.102	.083	.069	.055	.050
.996	.126	.115	******	******	.125	.120	.122	.120	.108	.093	.086	.083

AFTERBODY INTEGRATED PRESSURE DRAG COEFFICIENT .0467

Table A8. Continued

(d) $\alpha = 5.976°$

TEST PARAMETERS

CONFIGURATION	BODY ONLY
POINT NUMBER	38
MACH NUMBER	.601
ALPHA, DEG	5.976
NPR	1.040
PTO, PSI	14.705
PO, PSI	11.522
QO, PSI	2.911

TAIL SURFACE PRESSURE COEFFICIENTS

X/C	HORIZONTAL TAILS UPPER SURFACE Y/B 0.1	HORIZONTAL TAILS UPPER SURFACE Y/B 0.2	HORIZONTAL TAILS LOWER SURFACE Y/B 0.1	HORIZONTAL TAILS LOWER SURFACE Y/B 0.2	VERTICAL TAIL Y/B 0.1	VERTICAL TAIL Y/B 0.2
0.05						
0.10						
0.20						
0.30						
0.40						
0.50						
0.60						
0.70						
0.80						
0.90						

Tails removed

AFTERBODY PRESSURE COEFFICIENTS

X/L	PHI, DEG 0	18	36	45	54	72	81	90	108	135	162	180
.584	-.032	-.037	******	-.034	******	******	******	-.049	-.045	-.028	-.003	******
.598	-.037	-.040	******	-.048	******	-.063	******	-.058	-.056	-.034	******	******
.612	-.040	-.040	******	-.045	******	-.056	******	-.064	-.054	-.030	******	******
.626	-.037	-.038	******	-.043	******	-.053	******	-.058	-.057	-.038	******	******
.640	******	-.042	******	-.051	******	-.058	******	-.066	-.059	-.047	******	******
.654	******	-.042	******	-.058	******	-.061	******	-.070	-.076	-.053	******	******
.668	******	******	******	-.051	******	-.061	******	-.064	-.059	-.042	******	******
.682	******	-.043	******	-.051	******	-.067	******	-.076	-.072	-.057	-.043	******
.696	******	-.043	******	-.054	******	-.070	******	-.078	-.069	-.059	-.040	-.034
.710	******	-.045	******	******	******	-.064	******	-.074	-.072	-.054	-.034	-.043
.724	******	-.049	******	-.054	******	-.060	******	-.069	-.071	-.057	-.041	-.044
.738	******	-.046	******	-.058	******	******	******	-.078	-.079	-.062	-.045	-.044
.752	******	-.044	******	-.056	******	-.073	******	-.075	-.080	-.063	-.048	******
.766	******	-.054	******	-.064	******	-.074	******	-.084	-.093	-.080	-.069	-.063
.779	******	-.052	******	-.056	******	-.071	******	-.078	******	-.069	-.050	-.051
.793	******	-.062	******	-.063	******	-.078	******	******	-.089	-.077	-.070	******
.807	******	-.062	******	-.058	******	-.080	******	******	-.091	-.076	-.064	-.067
.821	******	******	******	-.068	******	-.081	******	******	-.096	-.085	-.069	-.073
.835	******	-.062	******	-.070	******	-.089	******	******	-.107	-.098	-.083	-.082
.849	******	-.075	******	-.074	******	-.097	******	******	-.113	-.103	-.098	-.092
.863	******	-.071	******	-.081	******	-.098	******	******	-.122	-.116	******	-.108
.877	-.070	-.067	******	-.076	******	-.096	******	******	******	******	******	******
.891	-.073	-.083	******	-.080	******	-.108	******	******	-.136	-.129	-.120	-.119
.916	-.084	-.085	-.114	******	-.093	******	-.129	-.144	-.154	-.160	-.148	-.156
.928	-.099	******	-.120	******	-.104	******	-.139	-.154	-.175	-.196	-.195	-.199
.940	-.113	******	-.075	******	-.091	-.116	-.136	-.159	-.186	-.220	-.215	-.215
.952	******	******	-.062	******	-.063	-.080	-.098	-.116	-.151	-.204	-.204	-.200
.962	-.023	-.020	-.012	******	-.014	.017	-.030	-.041	-.085	-.131	-.149	-.145
.974	.048	.038	******	******	.033	.041	.044	.034	.007	-.034	-.054	-.070
.986	.097	.085	.117	******	.099	.078	.078	.076	.073	.039	.034	.016
.996	.100	.095	******	******	.097	.083	.086	.082	.082	.066	.057	.053

AFTERBODY INTEGRATED PRESSURE DRAG COEFFICIENT .0550

Table A8. Concluded

(e) $\alpha = 9.015°$

TEST PARAMETERS

CONFIGURATION	BODY ONLY
POINT NUMBER	39
MACH NUMBER	.600
ALPHA, DEG	9.015
NPR	1.040
PTO, PSI	14.704
PO, PSI	11.526
QO, PSI	2.907

TAIL SURFACE PRESSURE COEFFICIENTS

	HORIZONTAL TAILS				VERTICAL TAIL	
	UPPER SURFACE Y/B		LOWER SURFACE Y/B		Y/B	
X/C	0.1	0.2	0.1	0.2	0.1	0.2
0.05						
0.10						
0.20						
0.30						
0.40						
0.50						
0.60						
0.70						
0.80						
0.90						

Tails removed

AFTERBODY PRESSURE COEFFICIENTS

	PHI, DEG											
X/L	0	18	36	45	54	72	81	90	108	135	162	180
.584	-.029	-.042	******	-.049	******	******	******	-.076	-.073	-.034	.008	******
.598	-.037	-.046	******	-.055	******	-.089	******	-.094	-.084	-.050	******	******
.612	-.029	-.047	******	-.060	******	-.086	******	-.087	-.079	-.044	******	******
.626	-.016	-.045	******	-.056	******	-.084	******	-.096	-.084	-.046	******	******
.640	******	-.046	******	-.057	******	-.086	******	-.098	-.084	-.057	******	******
.654	******	-.051	******	-.065	******	-.077	******	-.107	-.097	-.065	******	******
.668	******	******	******	-.059	******	-.083	******	-.102	-.099	-.055	******	******
.682	******	-.066	******	-.060	******	-.092	******	-.104	-.105	-.067	-.028	******
.696	******	-.063	******	-.058	******	-.085	******	-.095	-.095	-.063	-.031	-.023
.710	******	-.057	******	******	******	-.087	******	-.100	-.096	-.068	-.028	-.023
.724	******	-.061	******	-.062	******	-.087	******	-.105	-.103	-.073	-.033	-.036
.738	******	-.067	******	-.065	******	******	******	-.108	-.111	-.077	-.032	-.038
.752	******	-.059	******	-.057	******	-.085	******	-.112	-.110	-.077	-.037	******
.766	******	-.076	******	-.063	******	-.100	******	-.121	-.123	-.096	-.059	-.051
.779	******	-.061	******	-.056	******	-.090	******	-.104	******	-.084	-.045	-.045
.793	******	-.065	******	-.061	******	-.090	******	******	-.119	-.097	-.060	******
.807	******	-.071	******	-.056	******	-.088	******	******	-.112	-.097	-.059	-.062
.821	******	******	******	-.065	******	-.097	******	******	-.128	-.102	-.070	-.071
.835	******	-.073	******	-.077	******	-.098	******	******	-.129	-.119	-.082	-.074
.849	******	-.084	******	-.078	******	-.106	******	******	-.146	-.127	-.092	-.090
.863	******	-.097	******	-.079	******	-.103	******	******	-.154	-.136	******	-.097
.877	-.070	-.078	******	-.082	******	-.100	******	******	******	******	******	******
.891	-.074	-.097	******	-.083	******	-.104	******	******	-.166	-.146	-.125	-.124
.916	-.100	-.095	-.109	******	-.088	******	-.132	-.147	-.180	-.178	-.154	-.164
.928	-.111	******	-.114	******	-.095	******	-.134	-.163	-.203	-.221	-.213	-.198
.940	-.130	******	-.090	******	-.081	-.097	-.123	-.155	-.213	-.253	-.237	-.232
.952	******	******	-.064	******	-.043	-.060	-.081	-.079	-.176	-.227	-.229	-.220
.962	-.069	-.033	-.003	******	-.014	.013	.003	.015	-.082	-.163	-.175	-.173
.974	.016	.034	******	******	.050	.075	.064	.076	.001	-.052	-.086	-.089
.986	.093	.094	.088	******	.091	.074	.091	.087	.090	.015	-.002	-.009
.996	.093	.088	******	******	.106	.108	.084	.106	.085	.079	.041	.037

AFTERBODY INTEGRATED PRESSURE DRAG COEFFICIENT .0617

Table A9. Effect of Nozzle Pressure Ratio on Pressure Distributions for Aft Tails Configuration at $M = 1.20$ and $\alpha = 0.025°$

(a) NPR = 1.033

TEST PARAMETERS

CONFIGURATION	AFT TAILS
POINT NUMBER	3
MACH NUMBER	1.205
ALPHA, DEG	.025
NPR	1.033
PTO, PSI	14.745
PO, PSI	6.041
QO, PSI	6.140

TAIL SURFACE PRESSURE COEFFICIENTS

	HORIZONTAL TAILS				VERTICAL TAIL	
	UPPER SURFACE Y/B		LOWER SURFACE Y/B		Y/B	
X/C	0.1	0.2	0.1	0.2	0.1	0.2
0.05	******	******	******	******	******	.028
0.10	1.146	.061	-.008	1.146	.208	.019
0.20	1.140	.012	-.021	1.136	******	-.044
0.30	1.137	******	-.058	1.129	-.055	-.061
0.40	1.130	-.094	-.097	******	-.048	-.063
0.50	1.135	-.150	-.143	1.129	-.065	-.074
0.60	1.142	-.180	-.165	1.135	-.106	-.103
0.70	1.151	-.193	-.188	1.144	-.144	-.139
0.80	1.163	******	-.204	1.157	-.186	-.157
0.90	1.176	******	-.200	******	-.194	-.172

AFTERBODY PRESSURE COEFFICIENTS

	PHI, DEG											
X/L	0	18	36	45	54	72	81	90	108	135	162	180
.584	-.032	-.024	******	-.023	******	******	******	-.024	-.014	-.009	.009	******
.598	-.037	-.029	******	-.029	******	-.027	******	-.023	-.017	-.008	******	******
.612	-.034	-.031	******	-.027	******	-.021	******	-.016	-.012	-.002	******	******
.626	-.035	-.030	******	-.020	******	-.019	******	-.014	-.009	-.006	******	******
.640	******	-.019	******	-.016	******	-.016	******	-.012	-.006	-.003	******	******
.654	******	-.032	******	-.027	******	-.020	******	-.024	-.024	-.017	******	******
.668	******	******	******	-.023	******	-.024	******	-.019	-.013	-.008	******	******
.682	******	-.029	******	-.030	******	-.028	******	-.023	-.018	-.003	.003	******
.696	******	-.032	******	-.031	******	-.027	******	-.021	-.013	.000	.001	.001
.710	******	-.027	******	******	******	-.021	******	-.009	-.007	-.001	-.003	-.004
.724	******	.022	******	-.016	******	-.016	******	-.010	-.007	-.009	-.014	-.014
.738	******	.101	******	.016	******	******	******	-.015	-.026	-.024	-.027	-.026
.752	******	.074	******	.055	******	.012	******	-.001	-.013	-.018	-.020	******
.766	******	.036	******	.031	******	.013	******	-.002	-.028	-.042	-.046	-.047
.779	******	.018	******	.042	******	.092	******	.204	.047	-.010	-.023	-.028
.793	******	-.009	******	.050	******	.120	******	******	.067	.013	-.022	******
.807	******	-.006	******	.056	******	.096	******	******	.036	.028	.003	-.003
.821	******	******	******	.047	******	.051	******	******	.001	.022	.019	.014
.835	******	-.018	******	.008	******	.014	******	******	-.027	.007	.014	.013
.849	******	-.049	******	******	******	-.036	******	******	-.055	-.021	-.001	-.003
.863	******	-.083	******	-.075	******	-.088	******	******	-.087	-.051	******	-.022
.877	-.099	-.119	******	-.107	******	-.134	******	******	******	******	******	******
.891	-.147	-.154	******	-.151	******	-.174	******	******	-.151	-.109	-.087	-.079
.915	-.193	-.214	-.271	******	-.223	******	-.251	-.228	-.222	-.170	-.137	-.146
.928	-.224	******	-.309	******	-.273	-.268	-.257	-.240	-.246	-.227	-.208	-.199
.940	-.277	******	-.319	******	-.332	-.321	-.301	-.285	-.296	-.287	-.273	-.267
.952	******	******	-.393	******	-.396	-.372	-.355	-.342	-.362	-.371	-.364	-.356
.962	-.371	-.312	-.275	******	-.276	-.275	-.276	-.239	-.218	-.229	-.310	-.379
.974	-.108	-.108	******	******	-.115	-.109	-.098	-.096	-.091	-.089	-.095	-.093
.986	-.070	-.077	-.079	******	-.079	-.072	-.075	-.072	-.072	-.071	-.072	-.068
.996	-.045	-.041	******	******	-.051	-.049	-.053	-.055	-.054	-.052	-.049	-.049

AFTERBODY INTEGRATED PRESSURE DRAG COEFFICIENT .1195

Table A9. Continued

(b) NPR = 1.998

TEST PARAMETERS

CONFIGURATION	AFT TAILS
POINT NUMBER	4
MACH NUMBER	1.200
ALPHA, DEG	.027
NPR	1.998
PTO, PSI	14.743
PO, PSI	6.081
QO, PSI	6.128

TAIL SURFACE PRESSURE COEFFICIENTS

	HORIZONTAL TAILS				VERTICAL TAIL	
	UPPER SURFACE Y/B		LOWER SURFACE Y/B		Y/B	
X/C	0.1	0.2	0.1	0.2	0.1	0.2
0.05	******	******	******	******	******	.026
0.10	-.021	.053	-.011	.066	.161	.012
0.20	-.043	.008	-.026	.023	******	-.050
0.30	-.068	******	-.062	-.034	-.053	-.066
0.40	-.123	-.100	-.102	******	-.059	-.071
0.50	-.168	-.154	-.149	-.145	-.067	-.079
0.60	-.185	-.184	-.165	-.182	-.104	-.104
0.70	-.193	-.201	-.194	-.211	-.144	-.136
0.80	-.206	******	-.208	-.234	-.180	-.161
0.90	-.192	******	-.207	******	-.191	-.174

AFTERBODY PRESSURE COEFFICIENTS

	PHI, DEG											
X/L	0	18	36	45	54	72	81	90	108	135	162	180
.584	-.038	-.033	******	-.024	******	******	******	-.025	-.017	-.009	.006	******
.598	-.041	-.032	******	-.033	******	-.031	******	-.025	-.021	-.009	******	******
.612	-.040	-.037	******	-.031	******	-.025	******	-.022	-.017	-.008	******	******
.626	-.038	-.038	******	-.029	******	-.026	******	-.020	-.019	-.013	******	******
.640	******	-.029	******	-.027	******	-.019	******	-.015	-.014	-.008	******	******
.654	******	-.040	******	-.034	******	-.025	******	-.030	-.030	-.021	******	******
.668	******	******	******	-.028	******	-.027	******	-.023	-.016	-.014	******	******
.682	******	-.032	******	-.034	******	-.033	******	-.028	-.025	-.009	-.002	******
.696	******	-.038	******	-.039	******	-.032	******	-.022	-.017	-.004	-.002	.000
.710	******	-.035	******	******	******	-.023	******	-.016	-.009	-.005	-.007	-.009
.724	******	.022	******	-.022	******	-.020	******	-.009	-.012	-.011	-.018	-.016
.738	******	.100	******	.011	******	******	******	-.016	-.027	-.024	-.027	-.026
.752	******	.073	******	.051	******	.010	******	-.005	-.020	-.021	-.021	******
.766	******	.030	******	.029	******	.010	******	-.008	-.032	-.042	-.051	-.048
.779	******	.011	******	.034	******	.090	******	.194	.046	-.012	-.027	-.028
.793	******	-.007	******	.039	******	.116	******	******	.063	.011	-.026	******
.807	******	-.014	******	.047	******	.089	******	******	.033	.021	.001	-.007
.821	******	******	******	.040	******	.047	******	******	.000	.018	.016	.013
.835	******	-.030	******	.006	******	.002	******	******	-.030	.003	.009	.011
.849	******	-.050	******	******	******	-.039	******	******	-.054	-.023	-.007	-.004
.863	******	-.086	******	-.078	******	-.093	******	******	-.096	-.053	******	-.024
.877	-.108	-.123	******	-.113	******	-.144	******	******	******	******	******	******
.891	-.154	-.162	******	-.157	******	-.177	******	******	-.154	-.112	-.090	-.080
.916	-.201	-.220	-.281	******	-.231	******	-.255	-.232	-.226	-.172	-.139	-.147
.928	-.229	******	-.312	******	-.281	-.278	-.262	-.245	-.250	-.230	-.210	-.199
.940	-.285	******	-.324	******	-.338	-.327	-.307	-.289	-.300	-.292	-.277	-.272
.952	******	******	-.400	******	-.399	-.377	-.360	-.345	-.365	-.374	-.365	-.358
.962	-.177	-.138	-.142	******	-.134	-.156	-.155	-.206	-.271	-.351	-.363	-.410
.974	-.092	-.106	******	******	-.104	-.110	-.104	-.101	-.098	-.103	-.109	-.115
.986	-.081	-.087	-.087	******	-.092	-.092	-.096	-.081	-.077	-.082	-.081	-.082
.996	-.064	-.064	******	******	-.060	-.061	-.057	-.060	-.051	-.059	-.056	-.058

AFTERBODY INTEGRATED PRESSURE DRAG COEFFICIENT .1204

Table A9. Continued

(c) NPR = 3.995

TEST PARAMETERS

CONFIGURATION	AFT TAILS
POINT NUMBER	5
MACH NUMBER	1.200
ALPHA, DEG	.028
NPR	3.995
PTO, PSI	14.746
PO, PSI	6.081
QO, PSI	6.129

TAIL SURFACE PRESSURE COEFFICIENTS

	HORIZONTAL TAILS				VERTICAL TAIL	
	UPPER SURFACE Y/B		LOWER SURFACE Y/B		Y/B	
X/C	0.1	0.2	0.1	0.2	0.1	0.2
0.05	******	******	******	******	******	.020
0.10	-.017	.055	-.007	.059	.128	.017
0.20	-.044	.008	-.029	.023	******	-.049
0.30	-.073	******	-.066	-.032	-.053	-.065
0.40	-.118	-.098	-.101	******	-.056	-.071
0.50	-.168	-.156	-.145	-.144	-.071	-.077
0.60	-.184	-.187	-.165	-.182	-.106	-.108
0.70	-.190	-.198	-.194	-.210	-.142	-.138
0.80	-.204	******	-.209	-.229	-.182	-.156
0.90	-.194	******	-.207	******	-.191	-.173

AFTERBODY PRESSURE COEFFICIENTS

	PHI, DEG											
X/L	0	18	36	45	54	72	81	90	108	135	162	180
.584	-.035	-.032	******	-.027	******	******	******	-.026	-.019	-.012	.005	******
.598	-.040	-.035	******	-.035	******	-.031	******	-.027	-.021	-.010	******	******
.612	-.040	-.037	******	-.033	******	-.025	******	-.020	-.017	-.009	******	******
.626	-.042	-.039	******	-.032	******	-.027	******	-.018	-.016	-.013	******	******
.640	******	-.027	******	-.029	******	-.018	******	-.015	-.010	-.007	******	******
.654	******	-.039	******	-.033	******	-.022	******	-.029	-.030	-.026	******	******
.668	******	******	******	-.031	******	-.026	******	-.023	-.021	-.011	******	******
.682	******	-.034	******	-.032	******	-.030	******	-.028	-.024	-.010	-.001	******
.696	******	-.038	******	-.039	******	-.032	******	-.030	-.019	-.003	-.007	-.004
.710	******	-.036	******	******	******	-.025	******	-.016	-.014	-.005	-.007	-.008
.724	******	.012	******	-.020	******	-.019	******	-.010	-.013	-.013	-.016	-.014
.738	******	.090	******	.008	******	******	******	-.019	-.027	-.028	-.027	-.026
.752	******	.071	******	.053	******	.008	******	-.006	-.018	-.022	-.020	******
.766	******	.025	******	.031	******	.011	******	-.008	-.035	-.045	-.046	-.050
.779	******	.014	******	.040	******	.093	******	.194	.049	-.011	-.026	-.032
.793	******	-.012	******	.045	******	.122	******	******	.059	.009	-.023	******
.807	******	-.009	******	.054	******	.083	******	******	.035	.020	-.003	-.004
.821	******	******	******	.034	******	.043	******	******	-.003	.021	.015	.013
.835	******	-.023	******	-.001	******	-.001	******	******	-.027	.004	.012	.008
.849	******	-.055	******	******	******	-.038	******	******	-.055	-.024	-.006	-.007
.863	******	-.091	******	-.080	******	-.092	******	******	-.097	-.052	******	-.024
.877	-.106	-.119	******	-.108	******	-.137	******	******	******	******	******	******
.891	-.152	-.155	******	-.154	******	-.176	******	******	-.153	-.110	-.088	-.078
.916	-.198	-.220	-.276	******	-.227	******	-.254	-.232	-.226	-.170	-.138	-.147
.928	-.229	******	-.313	******	-.281	-.278	-.264	-.245	-.250	-.229	-.208	-.198
.940	-.283	******	-.327	******	-.339	-.327	-.305	-.289	-.301	-.291	-.276	-.268
.952	******	******	-.399	******	-.401	-.377	-.360	-.347	-.365	-.373	-.367	-.357
.962	-.249	-.184	-.153	******	-.148	-.146	-.164	-.213	-.331	-.396	-.411	-.410
.974	-.095	-.113	******	******	-.109	-.102	-.107	-.108	-.107	-.118	-.119	-.118
.986	-.076	-.086	-.091	******	-.095	-.095	-.092	-.090	-.078	-.084	-.082	-.074
.996	-.051	-.053	******	******	-.058	-.072	-.071	-.062	-.039	-.062	-.055	-.053

AFTERBODY INTEGRATED PRESSURE DRAG COEFFICIENT .1233

Table A9. Continued

(d) NPR = 5.988

TEST PARAMETERS

CONFIGURATION	AFT TAILS
POINT NUMBER	6
MACH NUMBER	1.200
ALPHA, DEG	.028
NPR	5.988
PTO, PSI	14.747
PO, PSI	6.082
QO, PSI	6.130

TAIL SURFACE PRESSURE COEFFICIENTS

	HORIZONTAL TAILS				VERTICAL TAIL	
	UPPER SURFACE Y/B		LOWER SURFACE Y/B		Y/B	
X/C	0.1	0.2	0.1	0.2	0.1	0.2
0.05	******	******	******	******	******	.024
0.10	-.018	.058	-.011	.067	.102	.021
0.20	-.043	.006	-.033	.019	******	-.047
0.30	-.068	******	-.064	-.031	-.058	-.067
0.40	-.121	-.098	-.102	******	-.054	-.072
0.50	-.167	-.154	-.148	-.143	-.074	-.080
0.60	-.181	-.185	-.168	-.182	-.106	-.113
0.70	-.188	-.197	-.195	-.211	-.141	-.136
0.80	-.205	******	-.208	-.230	-.183	-.157
0.90	-.196	******	-.207	******	-.190	-.172

AFTERBODY PRESSURE COEFFICIENTS

	PHI, DEG											
X/L	0	18	36	45	54	72	81	90	108	135	162	180
584	-.037	-.032	******	-.029	******	******	******	-.026	-.019	-.013	.004	******
598	-.040	-.034	******	-.034	******	-.032	******	-.027	-.023	-.010	******	******
612	-.040	-.038	******	-.032	******	-.026	******	-.022	-.018	-.011	******	******
626	-.042	-.039	******	-.034	******	-.027	******	-.017	-.019	-.013	******	******
640	******	-.029	******	-.029	******	-.019	******	-.014	-.013	-.005	******	******
654	******	-.042	******	-.035	******	-.028	******	-.030	-.028	-.022	******	******
668	******	******	******	-.027	******	-.029	******	-.023	-.022	-.015	******	******
682	******	-.034	******	-.035	******	-.034	******	-.029	-.025	-.016	-.004	******
696	******	-.037	******	-.040	******	-.035	******	-.032	-.019	-.011	-.006	-.003
710	******	-.034	******	******	******	-.027	******	-.018	-.011	-.004	-.010	-.010
724	******	.019	******	-.019	******	-.021	******	-.014	-.014	-.013	-.015	-.015
738	******	.090	******	.009	******	******	******	-.019	-.030	-.027	-.028	-.024
752	******	.079	******	.053	******	.007	******	-.005	-.018	-.021	-.023	******
766	******	.033	******	.027	******	.012	******	-.011	-.029	-.044	-.049	-.048
779	******	.015	******	.038	******	.091	******	.198	.044	-.011	-.026	-.030
793	******	-.008	******	.040	******	.118	******	******	.059	.007	-.027	******
807	******	-.013	******	.050	******	.085	******	******	.030	.022	-.002	-.005
821	******	******	******	.035	******	.042	******	******	-.001	.018	.013	.015
835	******	-.032	******	-.001	******	-.001	******	******	-.035	-.005	.008	.005
849	******	-.052	******	******	******	-.038	******	******	-.054	-.024	-.007	-.009
863	******	-.088	******	-.078	******	-.087	******	******	-.093	-.054	******	-.026
877	-.105	-.123	******	-.109	******	-.138	******	******	******	******	******	******
891	-.152	-.157	******	-.156	******	-.179	******	******	-.155	-.114	-.089	-.082
916	-.198	-.219	-.276	******	-.229	******	-.253	-.232	-.226	-.172	-.138	-.146
928	-.228	******	-.311	******	-.279	-.278	-.261	-.244	-.250	-.231	-.210	-.198
940	-.282	******	-.325	******	-.336	-.324	-.306	-.288	-.301	-.294	-.277	-.269
952	******	******	-.392	******	-.380	-.353	-.351	-.344	-.366	-.374	-.367	-.359
962	-.135	-.133	-.123	******	-.113	-.103	-.109	-.133	-.183	-.235	-.283	-.316
974	-.067	-.083	******	******	-.089	-.080	-.083	-.082	-.081	-.093	-.087	-.082
986	-.059	-.059	-.066	******	-.066	-.074	-.076	-.072	-.060	-.065	-.058	-.051
996	-.040	-.031	******	******	-.037	-.051	-.056	-.043	-.024	-.040	-.037	-.031

AFTERBODY INTEGRATED PRESSURE DRAG COEFFICIENT .1107

Table A9. Concluded

(e) NPR = 7.963

TEST PARAMETERS

CONFIGURATION	AFT TAILS
POINT NUMBER	7
MACH NUMBER	1.201
ALPHA, DEG	.025
NPR	7.963
PTO, PSI	14.746
PO, PSI	6.075
QO, PSI	6.131

TAIL SURFACE PRESSURE COEFFICIENTS

	HORIZONTAL TAILS				VERTICAL TAIL	
	UPPER SURFACE Y/B		LOWER SURFACE Y/B		Y/B	
X/C	0.1	0.2	0.1	0.2	0.1	0.2
0.05	******	******	******	******	******	.019
0.10	-.020	.061	-.011	.074	.081	.024
0.20	-.043	.008	-.035	.026	******	-.050
0.30	-.073	******	-.070	-.028	-.054	-.059
0.40	-.120	-.097	-.100	******	-.058	-.071
0.50	-.168	-.155	-.148	-.141	-.076	-.085
0.60	-.183	-.184	-.173	-.179	-.112	-.114
0.70	-.193	-.199	-.195	-.208	-.136	-.134
0.80	-.201	******	-.208	-.230	-.179	-.154
0.90	-.195	******	-.206	******	-.186	-.168

AFTERBODY PRESSURE COEFFICIENTS

	PHI, DEG											
X/L	0	18	36	45	54	72	81	90	108	135	162	180
.584	-.037	-.033	******	-.029	******	******	******	-.029	-.023	-.015	.003	******
.598	-.043	-.037	******	-.035	******	-.031	******	-.027	-.024	-.015	******	******
.612	-.043	-.037	******	-.034	******	-.030	******	-.020	-.019	-.012	******	******
.626	-.043	-.041	******	-.035	******	-.028	******	-.019	-.019	-.011	******	******
.640	******	-.032	******	-.026	******	-.021	******	-.017	-.015	-.009	******	******
.654	******	-.046	******	-.040	******	-.024	******	-.031	-.029	-.022	******	******
.668	******	******	******	-.031	******	-.027	******	-.024	-.022	-.016	******	******
.682	******	-.034	******	-.036	******	-.032	******	-.034	-.029	-.014	-.005	******
.696	******	-.039	******	-.040	******	-.036	******	-.033	-.024	-.012	-.007	-.003
.710	******	-.036	******	******	******	-.029	******	-.022	-.013	-.005	-.009	-.010
.724	******	.014	******	-.022	******	-.021	******	-.014	-.016	-.014	-.019	-.015
.738	******	.088	******	.005	******	******	******	-.021	-.032	-.023	-.030	-.028
.752	******	.065	******	.047	******	.005	******	-.011	-.024	-.022	-.019	******
.766	******	.029	******	.029	******	.011	******	-.011	-.031	-.041	-.048	-.050
.779	******	.003	******	.039	******	.091	******	.200	.045	-.009	-.026	-.029
.793	******	-.008	******	.047	******	.117	******	******	.059	.006	-.025	******
.807	******	-.016	******	.050	******	.087	******	******	.027	.019	-.002	-.005
.821	******	******	******	.036	******	.045	******	******	-.001	.017	.014	.008
.835	******	-.032	******	.002	******	.008	******	******	-.041	-.009	.009	.004
.849	******	-.056	******	******	******	-.043	******	******	-.052	-.028	-.011	-.006
.863	******	-.092	******	-.078	******	-.087	******	******	-.094	-.055	******	-.028
.877	-.107	-.117	******	-.108	******	-.133	******	******	******	******	******	******
.891	-.149	-.156	******	-.152	******	-.173	******	******	-.156	-.112	-.085	-.080
.916	-.197	-.218	-.275	******	-.229	******	-.255	-.231	-.225	-.168	-.137	-.142
.928	-.227	******	-.311	******	-.276	-.276	-.260	-.244	-.249	-.229	-.207	-.198
.940	-.284	******	-.323	******	-.335	-.312	-.304	-.287	-.300	-.291	-.276	-.266
.952	******	******	-.301	******	-.230	-.214	-.228	-.277	-.360	-.373	-.366	-.357
.962	-.079	-.093	-.097	******	-.088	-.075	-.081	-.083	-.111	-.127	-.139	-.151
.974	-.047	-.061	******	******	-.068	-.065	-.057	-.057	-.062	-.067	-.058	-.051
.986	-.040	-.038	-.041	******	-.046	-.053	-.056	-.054	-.043	-.043	-.038	-.025
.996	-.024	-.015	******	******	-.018	-.028	-.033	-.027	-.012	-.020	-.022	-.017

AFTERBODY INTEGRATED PRESSURE DRAG COEFFICIENT .0963

Table A10. Effect of Angle of Attack on Pressure Distributions for Aft Tails Configuration at $M = 1.20$ and NPR = 0.985

(a) $\alpha = -2.979°$

TEST PARAMETERS

CONFIGURATION	AFT TAILS
POINT NUMBER	9
MACH NUMBER	1.200
ALPHA, DEG	-2.979
NPR	.985
PTO, PSI	14.746
PO, PSI	6.081
QO, PSI	6.129

TAIL SURFACE PRESSURE COEFFICIENTS

	HORIZONTAL TAILS				VERTICAL TAIL	
	UPPER SURFACE Y/B		LOWER SURFACE Y/B		Y/B	
X/C	0.1	0.2	0.1	0.2	0.1	0.2
0.05	******	******	******	******	******	.016
0.10	-.018	.175	-.130	.057	.048	.015
0.20	-.045	.099	-.127	.023	******	-.058
0.30	-.064	******	-.147	-.038	-.071	-.074
0.40	-.118	-.030	-.169	******	-.056	-.079
0.50	-.167	-.091	-.201	-.150	-.073	-.046
0.60	-.183	-.126	-.227	-.186	-.066	-.074
0.70	-.192	-.145	-.258	-.213	-.093	-.091
0.80	-.201	******	-.264	-.235	-.135	-.110
0.90	-.194	******	-.244	******	-.142	-.125

AFTERBODY PRESSURE COEFFICIENTS

	PHI, DEG											
X/L	0	18	36	45	54	72	81	90	108	135	162	180
.584	-.042	-.039	******	-.050	******	******	******	-.042	-.031	-.015	.004	******
.598	-.043	-.042	******	-.047	******	-.048	******	-.045	-.037	-.014	******	******
.612	-.044	-.046	******	-.047	******	-.042	******	-.038	-.033	-.017	******	******
.626	-.048	-.049	******	-.049	******	-.043	******	-.037	-.030	-.015	******	******
.640	******	-.038	******	-.039	******	-.038	******	-.027	-.024	-.014	******	******
.654	******	-.049	******	-.046	******	-.038	******	-.043	-.040	-.030	******	******
.668	******	******	******	-.041	******	-.039	******	-.037	-.034	-.021	******	******
.682	******	-.038	******	-.037	******	-.044	******	-.042	-.042	-.024	-.009	******
.696	******	-.042	******	-.046	******	-.049	******	-.044	-.039	-.019	-.005	.000
.710	******	-.041	******	******	******	-.044	******	-.039	-.029	-.008	-.007	.000
.724	******	-.014	******	-.039	******	-.042	******	-.028	-.021	-.011	-.012	-.009
.738	******	.099	******	-.015	******	******	******	-.029	-.031	-.022	-.019	-.016
.752	******	.068	******	.045	******	-.002	******	-.010	-.020	-.017	-.018	******
.766	******	.024	******	.013	******	.004	******	-.013	-.030	-.034	-.040	-.041
.779	******	.005	******	.023	******	.101	******	.199	.043	-.006	-.020	-.016
.793	******	-.023	******	.040	******	.179	******	******	.008	.002	-.016	******
.807	******	-.026	******	.085	******	.159	******	******	-.047	-.005	-.001	-.002
.821	******	******	******	.081	******	.112	******	******	-.077	-.027	-.006	.002
.835	******	.016	******	.047	******	.065	******	******	-.108	-.046	-.022	-.018
.849	******	-.017	******	******	******	.021	******	******	-.118	-.071	-.050	-.044
.863	******	-.041	******	-.027	******	-.036	******	******	-.146	-.104	******	-.074
.877	-.065	-.081	******	-.061	******	-.081	******	******	******	******	******	******
.891	-.104	-.110	******	-.106	******	-.119	******	******	-.211	-.165	-.136	-.123
.916	-.151	-.172	-.233	******	-.181	******	-.236	-.245	-.267	-.221	-.186	-.191
.928	-.180	******	-.272	******	-.239	-.252	-.249	-.251	-.278	-.276	-.252	-.241
.940	-.237	******	-.286	******	-.306	-.313	-.303	-.288	-.317	-.329	-.317	-.310
.952	******	******	-.370	******	-.381	-.375	-.370	-.343	-.352	-.400	-.401	-.394
.962	-.361	-.367	-.396	******	-.407	-.347	-.264	-.174	-.138	-.149	-.198	-.266
.974	-.319	-.228	******	******	-.167	-.150	-.139	-.120	-.107	-.113	-.125	-.121
.986	-.080	-.088	-.091	******	-.107	-.129	-.123	-.110	-.105	-.106	-.107	-.101
.996	-.056	-.059	******	******	-.082	-.099	-.097	-.097	-.092	-.090	-.079	-.078

AFTERBODY INTEGRATED PRESSURE DRAG COEFFICIENT .1304

Table A10. Continued

(b) $\alpha = 0.021°$

TEST PARAMETERS

CONFIGURATION	AFT TAILS
POINT NUMBER	10
MACH NUMBER	1.200
ALPHA, DEG	.021
NPR	.999
PTO, PSI	14.746
PO, PSI	6.081
QO, PSI	6.129

TAIL SURFACE PRESSURE COEFFICIENTS

	HORIZONTAL TAILS				VERTICAL TAIL	
	UPPER SURFACE Y/B		LOWER SURFACE Y/B		Y/B	
X/C	0.1	0.2	0.1	0.2	0.1	0.2
0.05	******	******	******	******	******	.019
0.10	-.153	.053	-.011	.178	.042	.016
0.20	-.152	.006	-.030	.113	******	-.047
0.30	-.161	******	-.066	.040	-.058	-.065
0.40	-.187	-.099	-.100	******	-.063	-.079
0.50	-.220	-.157	-.145	-.086	-.078	-.084
0.60	-.248	-.188	-.171	-.122	-.114	-.118
0.70	-.257	-.205	-.195	-.158	-.139	-.137
0.80	-.265	******	-.208	-.180	-.182	-.157
0.90	-.245	******	-.205	******	-.191	-.172

AFTERBODY PRESSURE COEFFICIENTS

	PHI, DEG											
X/L	0	18	36	45	54	72	81	90	108	135	162	180
.584	-.040	-.034	******	-.039	******	******	******	-.024	-.023	-.013	-.001	******
.598	-.045	-.041	******	-.038	******	-.037	******	-.035	-.028	-.010	******	******
.612	-.044	-.044	******	-.033	******	-.030	******	-.027	-.025	-.012	******	******
.626	-.045	-.044	******	-.037	******	-.026	******	-.024	-.022	-.014	******	******
.640	******	-.035	******	-.032	******	-.023	******	-.016	-.012	-.009	******	******
.654	******	-.043	******	-.039	******	-.027	******	-.032	-.028	-.024	******	******
.668	******	******	******	-.032	******	-.030	******	-.026	-.023	-.016	******	******
.682	******	-.038	******	-.036	******	-.036	******	-.031	-.030	-.014	-.004	******
.696	******	-.040	******	-.041	******	-.036	******	-.032	-.025	-.011	-.010	-.007
.710	******	-.039	******	******	******	-.035	******	-.022	-.019	-.007	-.011	-.013
.724	******	.007	******	-.027	******	-.025	******	-.018	-.021	-.014	-.022	-.019
.738	******	.086	******	.007	******	******	******	-.023	-.034	-.030	-.029	-.028
.752	******	.071	******	.046	******	.003	******	-.010	-.023	-.021	-.023	******
.766	******	.026	******	.023	******	.009	******	-.012	-.034	-.044	-.050	-.050
.779	******	.007	******	.036	******	.088	******	.190	.044	-.013	-.029	-.034
.793	******	-.012	******	.041	******	.110	******	******	.062	.010	-.026	******
.807	******	-.016	******	.052	******	.082	******	******	.025	.027	-.004	-.009
.821	******	******	******	.031	******	.043	******	******	-.001	.011	.013	.010
.835	******	-.024	******	-.001	******	-.008	******	******	-.041	-.002	.006	.007
.849	******	-.058	******	******	******	-.045	******	******	-.052	-.018	-.010	-.011
.863	******	-.091	******	-.081	******	-.093	******	******	-.086	-.058	******	-.028
.877	-.111	-.126	******	-.115	******	-.137	******	******	******	******	******	******
.891	-.151	-.164	******	-.154	******	-.179	******	******	-.151	-.112	-.087	-.076
.916	-.201	-.220	-.277	******	-.233	******	-.255	-.231	-.224	-.170	-.136	-.143
.928	-.230	******	-.313	******	-.284	-.280	-.263	-.246	-.248	-.230	-.208	-.196
.940	-.286	******	-.326	******	-.339	-.328	-.306	-.288	-.298	-.290	-.275	-.268
.952	******	******	-.403	******	-.404	-.380	-.361	-.346	-.366	-.375	-.365	-.356
.962	-.368	-.302	-.293	******	-.273	-.293	-.316	-.297	-.275	-.265	-.371	-.402
.974	-.112	-.115	******	******	-.127	-.119	-.108	-.104	-.099	-.097	-.104	-.109
.986	-.081	-.084	-.088	******	-.090	-.085	-.081	-.078	-.077	-.078	-.079	-.076
.996	-.061	-.058	******	******	-.061	-.063	-.062	-.062	-.060	-.059	-.057	-.054

AFTERBODY INTEGRATED PRESSURE DRAG COEFFICIENT .1271

Table A10. Continued

(c) $\alpha = 3.018°$

TEST PARAMETERS

CONFIGURATION	AFT TAILS
POINT NUMBER	11
MACH NUMBER	1.199
ALPHA, DEG	3.018
NPR	.975
PTO, PSI	14.745
PO, PSI	6.087
QO, PSI	6.127

TAIL SURFACE PRESSURE COEFFICIENTS

	HORIZONTAL TAILS				VERTICAL TAIL	
	UPPER SURFACE		LOWER SURFACE			
	Y/B		Y/B		Y/B	
X/C	0.1	0.2	0.1	0.2	0.1	0.2
0.05	******	******	******	******	******	.009
0.10	-.018	-.087	.126	.052	.039	.017
0.20	-.042	-.096	.062	.019	******	-.042
0.30	-.064	******	.016	-.039	-.046	-.063
0.40	-.119	-.171	-.037	******	-.071	-.087
0.50	-.167	-.218	-.074	-.151	-.090	-.116
0.60	-.183	-.250	-.104	-.187	-.153	-.156
0.70	-.192	-.259	-.130	-.215	-.184	-.176
0.80	-.202	******	-.148	-.234	-.224	-.203
0.90	-.195	******	-.156	******	-.236	-.218

AFTERBODY PRESSURE COEFFICIENTS

	PHI, DEG											
X/L	0	18	36	45	54	72	81	90	108	135	162	180
.584	-.035	-.040	******	-.038	******	******	******	-.026	-.026	-.018	-.004	******
.598	-.040	-.036	******	-.034	******	-.035	******	-.033	-.027	-.013	******	******
.612	-.035	-.035	******	-.029	******	-.033	******	-.028	-.026	-.017	******	******
.626	-.033	-.034	******	-.034	******	-.033	******	-.030	-.027	-.016	******	******
.640	******	-.031	******	-.028	******	-.026	******	-.020	-.016	-.012	******	******
.654	******	-.038	******	-.039	******	-.030	******	-.035	-.033	-.021	******	******
.668	******	******	******	-.030	******	-.030	******	-.031	-.026	-.012	******	******
.682	******	-.035	******	-.036	******	-.039	******	-.033	-.027	-.013	-.006	******
.696	******	-.035	******	-.038	******	-.035	******	-.032	-.023	-.018	-.013	-.012
.710	******	-.025	******	******	******	-.029	******	-.028	-.025	-.018	-.021	-.022
.724	******	.033	******	-.013	******	-.024	******	-.021	-.027	-.024	-.024	-.025
.738	******	.079	******	.012	******	******	******	-.034	-.042	-.038	-.034	-.033
.752	******	.062	******	.037	******	-.004	******	-.016	-.034	-.032	-.027	******
.766	******	.027	******	.022	******	-.002	******	-.028	-.047	-.053	-.051	-.051
.779	******	.017	******	.033	******	.067	******	.192	.045	-.028	-.036	-.038
.793	******	-.002	******	.026	******	.056	******	******	.117	.008	-.035	******
.807	******	-.015	******	.015	******	.006	******	******	.100	.053	-.014	-.029
.821	******	******	******	-.014	******	-.033	******	******	.074	.058	.022	.010
.835	******	-.063	******	-.050	******	-.072	******	******	.029	.040	.036	.032
.849	******	-.096	******	******	******	-.108	******	******	.009	.033	.045	.038
.863	******	-.136	******	-.126	******	-.151	******	******	-.033	.003	******	.021
.877	-.156	-.165	******	-.159	******	-.194	******	******	******	******	******	******
.891	-.197	-.203	******	-.201	******	-.231	******	******	-.090	-.057	-.036	-.030
.916	-.245	-.263	-.323	******	-.278	******	-.274	-.268	-.177	-.120	-.085	-.096
.928	-.272	******	-.351	******	-.322	-.304	-.279	-.288	-.213	-.181	-.162	-.151
.940	-.324	******	-.364	******	-.370	-.324	-.311	-.313	-.275	-.253	-.232	-.226
.952	******	******	-.204	******	-.180	-.180	-.203	-.309	-.349	-.341	-.333	-.318
.962	-.135	-.127	-.118	******	-.113	-.116	-.118	-.125	-.270	-.389	-.381	-.377
.974	-.111	-.112	******	******	-.108	-.107	-.109	-.117	-.145	-.235	-.395	-.403
.986	-.111	-.110	-.111	******	-.108	-.118	-.120	-.126	-.132	-.127	-.133	-.143
.996	-.098	-.095	******	******	-.108	-.115	-.115	-.119	-.107	-.087	-.077	-.072

AFTERBODY INTEGRATED PRESSURE DRAG COEFFICIENT .1244

Table A10. Concluded

(d) $\alpha = 5.976°$

TEST PARAMETERS

CONFIGURATION	AFT TAILS
POINT NUMBER	12
MACH NUMBER	1.200
ALPHA, DEG	5.976
NPR	.970
PTO, PSI	14.747
PO, PSI	6.078
QO, PSI	6.131

TAIL SURFACE PRESSURE COEFFICIENTS

	HORIZONTAL TAILS				VERTICAL TAIL	
	UPPER SURFACE Y/B		LOWER SURFACE Y/B		Y/B	
X/C	0.1	0.2	0.1	0.2	0.1	0.2
0.05	******	******	******	******	******	.008
0.10	.123	-.224	.265	-.056	.032	.011
0.20	.063	-.189	.169	-.073	******	-.038
0.30	.015	******	.099	-.115	-.045	-.057
0.40	-.044	-.236	.053	******	-.078	-.092
0.50	-.082	-.271	.001	-.205	-.105	-.137
0.60	-.092	-.297	-.040	-.239	-.184	-.188
0.70	-.117	-.307	-.058	-.264	-.225	-.212
0.80	-.132	******	-.086	-.277	-.255	-.235
0.90	-.139	******	-.102	******	-.272	-.250

AFTERBODY PRESSURE COEFFICIENTS

	PHI, DEG											
X/L	0	18	36	45	54	72	81	90	108	135	162	180
.584	-.027	-.030	******	-.038	******	******	******	-.043	-.046	-.022	.002	******
.598	-.031	-.032	******	-.036	******	-.047	******	-.048	-.041	-.022	******	******
.612	-.029	-.031	******	-.037	******	-.046	******	-.048	-.042	-.020	******	******
.626	-.028	-.031	******	-.036	******	-.043	******	-.046	-.042	-.025	******	******
.640	******	-.029	******	-.034	******	-.037	******	-.040	-.036	-.014	******	******
.654	******	-.038	******	-.042	******	-.041	******	-.050	-.043	-.025	******	******
.668	******	******	******	-.036	******	-.040	******	-.045	-.037	-.018	******	******
.682	******	-.034	******	-.043	******	-.046	******	-.050	-.048	-.026	-.006	******
.696	******	-.034	******	-.043	******	-.049	******	-.048	-.042	-.032	-.017	-.015
.710	******	-.021	******	******	******	-.042	******	-.049	-.043	-.034	-.022	-.021
.724	******	.033	******	-.009	******	-.038	******	-.050	-.048	-.039	-.023	-.025
.738	******	.075	******	.009	******	******	******	-.055	-.066	-.048	-.038	-.037
.752	******	.052	******	.023	******	-.012	******	-.040	-.056	-.048	-.028	******
.766	******	.021	******	.015	******	-.008	******	-.052	-.070	-.064	-.052	-.052
.779	******	.011	******	.017	******	.050	******	.196	.007	-.053	-.035	-.035
.793	******	-.010	******	.005	******	.000	******	******	.185	-.015	-.040	******
.807	******	-.027	******	-.021	******	-.064	******	******	.185	.088	-.026	-.041
.821	******	******	******	-.056	******	-.098	******	******	.148	.116	.037	.007
.835	******	-.088	******	-.098	******	-.127	******	******	.104	.105	.087	.069
.849	******	-.125	******	******	******	-.165	******	******	.089	.097	.095	.087
.863	******	-.170	******	-.178	******	-.203	******	******	.051	.075	******	.078
.877	-.202	-.234	******	-.214	******	-.246	******	******	******	******	******	******
.891	-.229	-.235	******	-.249	******	-.282	******	******	-.021	.005	.026	.024
.916	-.285	-.302	-.368	******	-.324	******	-.289	-.352	-.120	-.059	-.029	-.039
.928	-.303	******	-.398	******	-.359	-.323	-.293	-.355	-.163	-.124	-.107	-.095
.940	-.357	******	-.407	******	-.379	-.302	-.285	-.340	-.229	-.203	-.182	-.176
.952	******	******	-.324	******	-.166	-.152	-.155	-.385	-.322	-.299	-.288	-.269
.962	-.231	-.302	-.251	******	-.152	-.152	-.146	-.144	-.350	-.348	-.343	-.332
.974	-.155	-.179	******	******	-.162	-.160	-.153	-.151	-.334	-.354	-.362	-.360
.986	-.142	-.151	-.152	******	-.164	-.172	-.172	-.136	-.179	-.253	-.309	-.298
.996	-.122	-.125	******	******	-.166	-.164	-.164	-.108	-.106	-.111	-.120	-.123

AFTERBODY INTEGRATED PRESSURE DRAG COEFFICIENT .1399

Table A11. Effect of Nozzle Pressure Ratio on Pressure Distributions for Aft Tails Configuration at $M = 0.95$ and $\alpha = 0.024°$

(a) NPR = 1.063

TEST PARAMETERS

CONFIGURATION	AFT TAILS
POINT NUMBER	13
MACH NUMBER	.950
ALPHA, DEG	.024
NPR	1.063
PTO, PSI	14.754
PO, PSI	8.252
QO, PSI	5.216

TAIL SURFACE PRESSURE COEFFICIENTS

	HORIZONTAL TAILS				VERTICAL TAIL	
	UPPER SURFACE Y/B		LOWER SURFACE Y/B		Y/B	
X/C	0.1	0.2	0.1	0.2	0.1	0.2
0.05	******	******	******	******	******	-.053
0.10	-.126	-.069	-.085	-.627	-.064	-.048
0.20	-.219	-.148	-.152	-.619	******	-.099
0.30	-.283	******	-.200	-.630	-.116	-.141
0.40	-.370	-.311	-.264	******	-.183	-.229
0.50	-.420	-.366	-.308	-.720	-.492	-.276
0.60	-.437	-.415	-.366	-.754	-.328	-.336
0.70	-.470	-.437	-.389	-.783	-.374	-.361
0.80	-.494	******	-.399	-.786	-.425	-.397
0.90	-.511	******	-.111	******	-.299	-.236

AFTERBODY PRESSURE COEFFICIENTS

	PHI, DEG											
X/L	0	18	36	45	54	72	81	90	108	135	162	180
.584	-.027	-.022	******	-.004	******	******	******	-.003	-.008	-.009	.010	******
.598	-.034	-.028	******	-.028	******	-.024	******	-.025	-.019	-.012	******	******
.612	-.037	-.026	******	-.022	******	-.019	******	-.022	-.017	-.019	******	******
.626	-.018	-.021	******	-.025	******	-.023	******	-.017	-.021	-.008	******	******
.640	******	-.032	******	-.019	******	-.022	******	-.023	-.026	-.012	******	******
.654	******	-.035	******	-.025	******	-.019	******	-.025	-.032	-.029	******	******
.668	******	******	******	-.019	******	-.011	******	-.015	-.012	-.012	******	******
.682	******	-.007	******	-.010	******	-.015	******	-.023	-.014	-.009	-.013	******
.696	******	.014	******	.011	******	-.002	******	-.006	-.010	-.010	-.012	-.011
.710	******	.046	******	******	******	.006	******	.003	-.006	-.003	-.005	-.009
.724	******	.093	******	.040	******	.013	******	.010	-.005	-.001	-.011	-.010
.738	******	.082	******	.038	******	******	******	.006	-.002	-.006	-.005	-.009
.752	******	.039	******	.032	******	.020	******	.019	.010	.005	-.001	******
.766	******	-.018	******	.007	******	.035	******	.035	.015	-.007	-.017	-.020
.779	******	-.034	******	.020	******	.082	******	.203	.056	.011	-.002	-.008
.793	******	-.054	******	-.008	******	.057	******	******	.020	-.009	-.022	******
.807	******	-.077	******	-.038	******	-.007	******	******	-.046	-.032	-.037	-.041
.821	******	******	******	-.078	******	-.088	******	******	-.086	-.070	-.064	-.067
.835	******	-.194	******	-.152	******	-.142	******	******	-.156	-.114	-.100	-.100
.849	******	-.234	******	******	******	-.218	******	******	-.187	-.155	-.136	-.138
.863	******	-.289	******	-.273	******	-.286	******	******	-.246	-.203	******	-.174
.877	-.305	-.324	******	-.318	******	-.347	******	******	******	******	******	******
.891	-.381	-.387	******	-.379	******	-.407	******	******	-.345	-.290	-.270	-.262
.916	-.430	-.449	-.545	******	-.471	******	-.449	-.437	-.420	-.364	-.334	-.343
.928	-.357	******	-.464	******	-.355	-.360	-.382	-.331	-.402	-.429	-.424	-.416
.940	-.103	******	-.103	******	-.075	-.096	-.118	-.119	-.201	-.242	-.269	-.285
.952	******	******	-.008	******	-.005	-.011	-.011	-.021	-.029	-.030	-.044	-.042
.962	.020	.023	.003	******	.020	.004	.020	.025	.035	.039	.020	.019
.974	.030	.042	******	******	.050	.042	.041	.050	.057	.059	.054	.054
.986	.067	.059	.078	******	.062	.057	.071	.078	.063	.073	.070	.065
.996	.085	.076	******	******	.084	.091	.091	.087	.085	.095	.086	.085

AFTERBODY INTEGRATED PRESSURE DRAG COEFFICIENT .0876

Table A11. Continued

(b) NPR = 2.018

TEST PARAMETERS

CONFIGURATION	AFT TAILS
POINT NUMBER	14
MACH NUMBER	.951
ALPHA, DEG	.024
NPR	2.018
PTO, PSI	14.752
PO, PSI	8.247
QO, PSI	5.217

TAIL SURFACE PRESSURE COEFFICIENTS

	HORIZONTAL TAILS				VERTICAL TAIL	
	UPPER SURFACE Y/B		LOWER SURFACE Y/B		Y/B	
X/C	0.1	0.2	0.1	0.2	0.1	0.2
0.05	******	******	******	******	******	-.050
0.10	-.081	-.062	-.079	.010	-.063	-.047
0.20	-.119	-.140	-.137	-.074	******	-.097
0.30	-.163	******	-.205	-.152	-.120	-.143
0.40	-.228	-.308	-.266	******	-.181	-.224
0.50	-.252	-.361	-.305	-.315	-.464	-.272
0.60	-.271	-.413	-.372	-.368	-.326	-.331
0.70	-.094	-.440	-.387	-.403	-.374	-.359
0.80	.026	******	-.397	-.151	-.425	-.396
0.90	.117	******	-.060	******	-.119	-.189

AFTERBODY PRESSURE COEFFICIENTS

	PHI, DEG											
X/L	0	18	36	45	54	72	81	90	108	135	162	180
.584	-.025	-.018	******	-.008	******	******	******	-.014	-.002	-.007	.009	******
.598	-.031	-.021	******	-.025	******	-.024	******	-.019	-.015	-.014	******	******
.612	-.027	-.022	******	-.024	******	-.018	******	-.016	-.015	-.019	******	******
.626	-.014	-.018	******	-.026	******	-.017	******	-.015	-.012	-.015	******	******
.640	******	-.021	******	-.025	******	-.027	******	-.019	-.023	-.019	******	******
.654	******	-.032	******	-.032	******	-.023	******	-.025	-.032	-.029	******	******
.668	******	******	******	-.019	******	-.019	******	-.011	-.020	-.010	******	******
.682	******	-.016	******	-.010	******	-.014	******	-.014	-.023	-.016	-.015	******
.696	******	.007	******	.005	******	-.005	******	-.001	-.014	-.009	-.012	-.010
.710	******	.043	******	******	******	.006	******	.004	-.002	-.003	-.008	-.006
.724	******	.097	******	.038	******	.011	******	.006	.000	.004	-.011	-.004
.738	******	.090	******	.043	******	******	******	.011	-.005	-.004	-.010	-.001
.752	******	.033	******	.038	******	.021	******	.020	.006	.010	-.003	******
.766	******	-.012	******	.012	******	.029	******	.036	.016	-.005	-.020	-.023
.779	******	-.025	******	.018	******	.079	******	.202	.057	.012	-.002	-.007
.793	******	-.048	******	-.001	******	.052	******	******	.016	-.008	-.023	******
.807	******	-.080	******	-.033	******	-.002	******	******	-.041	-.031	-.039	-.033
.821	******	******	******	-.073	******	-.075	******	******	-.093	-.070	-.067	-.065
.835	******	-.190	******	-.142	******	-.146	******	******	-.150	-.113	-.099	-.102
.849	******	-.232	******	******	******	-.217	******	******	-.193	-.156	-.138	-.138
.863	******	-.291	******	-.276	******	-.294	******	******	-.247	-.204	******	-.172
.877	-.300	-.329	******	-.317	******	-.347	******	******	******	******	******	******
.891	-.377	-.389	******	-.378	******	-.407	******	******	-.344	-.293	-.277	-.261
.916	-.419	-.435	-.540	******	-.470	******	-.465	-.418	-.415	-.367	-.335	-.342
.928	-.259	******	-.363	******	-.361	-.277	-.300	-.263	-.361	-.431	-.428	-.411
.940	-.059	******	-.070	******	-.064	-.061	-.065	-.066	-.117	-.212	-.264	-.247
.952	******	******	-.010	******	.006	-.006	.007	-.008	-.017	-.032	-.044	-.029
.962	.045	.051	.028	******	.017	.031	.014	.033	.037	.027	.024	.023
.974	.070	.090	******	******	.060	.042	.035	.068	.068	.060	.049	.076
.986	.100	.089	.067	******	.072	.065	.070	.102	.095	.089	.075	.114
.996	.108	.111	******	******	.097	.089	.103	.092	.096	.097	.096	.123

AFTERBODY INTEGRATED PRESSURE DRAG COEFFICIENT .0793

Table A11. Continued

(c) NPR = 3.023

TEST PARAMETERS

CONFIGURATION	AFT TAILS
POINT NUMBER	15
MACH NUMBER	.949
ALPHA, DEG	.023
NPR	3.023
PTO, PSI	14.752
PO, PSI	8.259
QO, PSI	5.210

TAIL SURFACE PRESSURE COEFFICIENTS

	HORIZONTAL TAILS				VERTICAL TAIL	
	UPPER SURFACE Y/B		LOWER SURFACE Y/B		Y/B	
X/C	0.1	0.2	0.1	0.2	0.1	0.2
0.05	******	******	******	******	******	-.050
0.10	-.119	-.078	-.089	-.036	-.061	-.054
0.20	-.167	-.141	-.143	-.111	******	-.102
0.30	-.210	******	-.202	-.198	-.114	-.151
0.40	-.291	-.306	-.269	******	-.185	-.227
0.50	-.328	-.366	-.308	-.359	-.443	-.275
0.60	-.365	-.414	-.369	-.409	-.325	-.332
0.70	-.386	-.439	-.383	-.452	-.377	-.363
0.80	-.383	******	-.398	-.456	-.427	-.397
0.90	-.194	******	-.046	******	-.140	-.128

AFTERBODY PRESSURE COEFFICIENTS

	PHI, DEG											
X/L	0	18	36	45	54	72	81	90	108	135	162	180
.584	-.032	-.024	******	-.005	******	******	******	-.014	-.017	-.007	.005	******
.598	-.031	-.036	******	-.024	******	-.027	******	-.021	-.025	-.015	******	******
.612	-.032	-.033	******	-.024	******	-.014	******	-.022	-.014	-.015	******	******
.626	-.031	-.018	******	-.021	******	-.016	******	-.017	-.017	-.015	******	******
.640	******	-.027	******	-.025	******	-.025	******	-.023	-.022	-.017	******	******
.654	******	-.031	******	-.029	******	-.024	******	-.032	-.030	-.021	******	******
.668	******	******	******	-.012	******	-.018	******	-.013	-.011	-.013	******	******
.682	******	-.007	******	-.013	******	-.019	******	-.017	-.017	-.012	-.016	******
.696	******	.013	******	.008	******	-.005	******	-.016	-.013	-.012	-.015	-.011
.710	******	.045	******	******	******	.004	******	.000	-.008	-.007	-.008	-.010
.724	******	.091	******	.034	******	.012	******	.008	-.002	.000	-.005	-.007
.738	******	.092	******	.038	******	******	******	.007	-.003	-.004	-.006	-.011
.752	******	.029	******	.025	******	.022	******	.019	.008	.005	-.005	******
.766	******	-.014	******	.004	******	.033	******	.038	.018	-.007	-.020	-.020
.779	******	-.026	******	.019	******	.083	******	.206	.051	.011	-.007	-.008
.793	******	-.058	******	-.008	******	.056	******	******	.010	-.008	-.023	******
.807	******	-.080	******	-.031	******	-.009	******	******	-.042	-.038	-.037	-.036
.821	******	******	******	-.078	******	-.073	******	******	-.094	-.070	-.065	-.068
.835	******	-.189	******	-.140	******	-.142	******	******	-.154	-.114	-.107	-.101
.849	******	-.230	******	******	******	-.221	******	******	-.195	-.161	-.140	-.138
.863	******	-.295	******	-.277	******	-.291	******	******	-.250	-.204	******	-.177
.877	-.311	-.324	******	-.314	******	-.346	******	******	******	******	******	******
.891	-.378	-.390	******	-.375	******	-.405	******	******	-.345	-.292	-.264	-.262
.916	-.425	-.444	-.537	******	-.473	******	-.462	-.435	-.415	-.370	-.330	-.342
.928	-.293	******	-.372	******	-.316	-.281	-.268	-.292	-.354	-.420	-.408	-.417
.940	-.105	******	-.061	******	-.072	-.061	-.071	-.066	-.125	-.216	-.252	-.285
.952	******	******	.012	******	.013	.001	.018	.003	-.010	-.023	-.037	-.051
.962	.032	.025	.045	******	.028	.030	.026	.020	.035	.038	.030	.024
.974	.051	.049	******	******	.065	.055	.054	.043	.076	.081	.075	.067
.986	.058	.090	.087	******	.079	.078	.081	.094	.097	.083	.110	.098
.996	.083	.106	******	******	.106	.101	.112	.103	.108	.109	.112	.104

AFTERBODY INTEGRATED PRESSURE DRAG COEFFICIENT .0781

Table A11. Concluded

(d) NPR = 5.002

TEST PARAMETERS

CONFIGURATION	AFT TAILS
POINT NUMBER	16
MACH NUMBER	.949
ALPHA, DEG	.024
NPR	5.002
PTO, PSI	14.754
PO, PSI	8.264
QO, PSI	5.209

TAIL SURFACE PRESSURE COEFFICIENTS

	HORIZONTAL TAILS				VERTICAL TAIL	
	UPPER SURFACE Y/B		LOWER SURFACE Y/B		Y/B	
X/C	0.1	0.2	0.1	0.2	0.1	0.2
0.05	******	******	******	******	******	-.042
0.10	-.107	-.066	-.087	-.036	-.061	-.060
0.20	-.175	-.142	-.153	-.114	******	-.100
0.30	-.212	******	-.205	-.199	-.119	-.142
0.40	-.293	-.305	-.271	******	-.184	-.228
0.50	-.330	-.365	-.305	-.356	-.425	-.271
0.60	-.368	-.413	-.377	-.407	-.329	-.332
0.70	-.386	-.436	-.389	-.449	-.378	-.360
0.80	-.379	******	-.402	-.446	-.425	-.394
0.90	-.103	******	-.058	******	-.117	-.090

AFTERBODY PRESSURE COEFFICIENTS

	PHI, DEG											
X/L	0	18	36	45	54	72	81	90	108	135	162	180
.584	-.038	-.019	******	-.004	******	******	******	-.015	-.004	-.008	.004	******
.598	-.034	-.021	******	-.023	******	-.025	******	-.030	-.019	-.017	******	******
.612	-.033	-.026	******	-.026	******	-.020	******	-.021	-.018	-.016	******	******
.626	-.022	-.021	******	-.022	******	-.025	******	-.017	-.012	-.013	******	******
.640	******	-.020	******	-.023	******	-.025	******	-.022	-.019	-.019	******	******
.654	******	-.028	******	-.031	******	-.022	******	-.039	-.031	-.021	******	******
.668	******	******	******	-.011	******	-.014	******	-.016	-.017	-.017	******	******
.682	******	-.013	******	-.016	******	-.014	******	-.020	-.018	-.017	-.017	******
.696	******	.012	******	.003	******	-.006	******	-.009	-.011	-.013	-.014	-.011
.710	******	.046	******	******	******	.004	******	-.001	-.005	-.007	-.011	-.010
.724	******	.093	******	.036	******	.008	******	.005	-.004	-.003	-.014	-.008
.738	******	.084	******	.038	******	******	******	.009	-.006	-.003	-.011	-.011
.752	******	.027	******	.035	******	.022	******	.016	.007	.003	-.003	******
.766	******	-.017	******	.006	******	.029	******	.037	.018	-.005	-.018	-.025
.779	******	-.026	******	.018	******	.080	******	.207	.053	.009	-.001	-.007
.793	******	-.048	******	-.001	******	.052	******	******	.008	-.010	-.025	******
.807	******	-.088	******	-.032	******	-.008	******	******	-.048	-.039	-.040	-.039
.821	******	******	******	-.078	******	-.083	******	******	-.103	-.075	-.071	-.071
.835	******	-.191	******	-.147	******	-.146	******	******	-.159	-.117	-.100	-.103
.849	******	-.233	******	******	******	-.209	******	******	-.202	-.163	-.143	-.138
.863	******	-.293	******	-.270	******	-.291	******	******	-.250	-.208	******	-.185
.877	-.305	-.323	******	-.318	******	-.346	******	******	******	******	******	******
.891	-.378	-.388	******	-.377	******	-.411	******	******	-.347	-.290	-.274	-.267
.916	-.419	-.437	-.535	******	-.465	******	-.456	-.426	-.415	-.364	-.336	-.345
.928	-.268	******	-.361	******	-.337	-.269	-.261	-.258	-.340	-.393	-.426	-.421
.940	-.061	******	-.068	******	-.059	-.054	-.065	-.077	-.123	-.189	-.244	-.242
.952	******	******	.025	******	.012	.016	.009	.021	-.003	-.025	-.030	-.032
.962	.048	.066	.063	******	.057	.042	.045	.052	.043	.051	.026	.041
.974	.077	.083	******	******	.069	.061	.065	.070	.087	.094	.059	.075
.986	.107	.105	.086	******	.090	.087	.084	.097	.095	.103	.092	.109
.996	.117	.134	******	******	.109	.115	.109	.122	.112	.101	.119	.115

AFTERBODY INTEGRATED PRESSURE DRAG COEFFICIENT .0735

Table A12. Effect of Angle of Attack on Pressure Distributions for Aft Tails Configuration at $M = 0.95$ and NPR = 1.067

(a) $\alpha = -2.989°$

TEST PARAMETERS

CONFIGURATION	AFT TAILS
POINT NUMBER	18
MACH NUMBER	.951
ALPHA, DEG	-2.989
NPR	1.067
PTO, PSI	14.755
PO, PSI	8.242
QO, PSI	5.222

TAIL SURFACE PRESSURE COEFFICIENTS

	HORIZONTAL TAILS				VERTICAL TAIL	
	UPPER SURFACE Y/B		LOWER SURFACE Y/B		Y/B	
X/C	0.1	0.2	0.1	0.2	0.1	0.2
0.05	******	******	******	******	******	-.046
0.10	-.120	.069	-.267	-.028	-.061	-.048
0.20	-.166	-.018	-.270	-.105	******	-.076
0.30	-.212	******	-.304	-.189	-.098	-.124
0.40	-.282	-.225	-.355	******	-.154	-.196
0.50	-.320	-.280	-.394	-.350	-.373	-.235
0.60	-.366	-.331	-.444	-.400	-.281	-.290
0.70	-.377	-.367	-.467	-.446	-.366	-.309
0.80	-.369	******	-.442	-.440	-.372	-.350
0.90	-.040	******	-.117	******	-.250	-.282

AFTERBODY PRESSURE COEFFICIENTS

	PHI, DEG											
X/L	0	18	36	45	54	72	81	90	108	135	162	180
.584	-.045	-.034	******	-.023	******	******	******	-.026	-.022	-.005	.009	******
.598	-.041	-.036	******	-.035	******	-.038	******	-.032	-.026	-.011	******	******
.612	-.029	-.029	******	-.025	******	-.027	******	-.028	-.029	-.021	******	******
.626	-.020	-.019	******	-.028	******	-.028	******	-.023	-.023	-.017	******	******
.640	******	-.024	******	-.027	******	-.032	******	-.027	-.021	-.020	******	******
.654	******	-.026	******	-.035	******	-.034	******	-.041	-.040	-.025	******	******
.668	******	******	******	-.017	******	-.025	******	-.024	-.020	-.012	******	******
.682	******	-.010	******	-.014	******	-.020	******	-.022	-.020	-.018	-.015	******
.696	******	.016	******	-.001	******	-.012	******	-.013	-.017	-.014	-.012	-.008
.710	******	.049	******	******	******	-.003	******	-.002	-.010	-.008	-.002	-.005
.724	******	.108	******	.034	******	.006	******	-.003	-.009	-.006	-.010	-.002
.738	******	.091	******	.035	******	******	******	-.004	-.013	-.012	-.012	-.007
.752	******	.031	******	.022	******	.011	******	.011	.002	-.004	-.010	******
.766	******	-.028	******	-.002	******	.025	******	.029	.004	-.020	-.026	-.030
.779	******	-.020	******	.033	******	.113	******	.202	.018	-.018	-.022	-.023
.793	******	-.041	******	.024	******	.133	******	******	-.099	-.052	-.052	******
.807	******	-.051	******	.013	******	.079	******	******	-.151	-.095	-.078	-.069
.821	******	******	******	-.025	******	.005	******	******	-.207	-.140	-.113	-.107
.835	******	-.150	******	-.086	******	-.071	******	******	-.251	-.180	-.154	-.155
.849	******	-.180	******	******	******	-.143	******	******	-.290	-.228	-.199	-.191
.863	******	-.245	******	-.219	******	-.223	******	******	-.340	-.273	******	-.232
.877	-.254	-.273	******	-.255	******	-.278	******	******	******	******	******	******
.891	-.317	-.334	******	-.316	******	-.332	******	******	-.420	-.359	-.329	-.315
.916	-.374	-.400	-.491	******	-.411	******	-.444	-.436	-.448	-.430	-.392	-.398
.928	-.387	******	-.527	******	-.463	-.389	-.357	-.277	-.282	-.409	-.395	-.377
.940	-.195	******	-.226	******	-.249	-.187	-.178	-.132	-.108	-.159	-.173	-.130
.952	******	******	-.042	******	-.056	-.063	-.074	-.072	-.055	-.055	-.053	-.018
.962	.022	.009	.019	******	-.005	-.040	-.019	-.036	-.025	-.022	-.022	-.005
.974	.061	.063	******	******	.039	.009	-.003	-.014	.016	-.003	.003	.013
.986	.083	.082	.074	******	.056	.036	.023	.021	.020	.020	.012	.028
.996	.084	.086	******	******	.064	.063	.051	.037	.045	.035	.028	.052

AFTERBODY INTEGRATED PRESSURE DRAG COEFFICIENT .1022

Table A12. Continued

(b) $\alpha = 0.026°$

TEST PARAMETERS

CONFIGURATION	AFT TAILS
POINT NUMBER	19
MACH NUMBER	.950
ALPHA, DEG	.026
NPR	1.086
PTO, PSI	14.754
PO, PSI	8.258
QO, PSI	5.212

TAIL SURFACE PRESSURE COEFFICIENTS

	HORIZONTAL TAILS				VERTICAL TAIL	
	UPPER SURFACE Y/B		LOWER SURFACE Y/B		Y/B	
X/C	0.1	0.2	0.1	0.2	0.1	0.2
0.05	******	******	******	******	******	-.057
0.10	-.120	-.072	-.090	-.034	-.054	-.054
0.20	-.166	-.140	-.142	-.114	******	-.105
0.30	-.217	******	-.197	-.197	-.117	-.145
0.40	-.291	-.309	-.266	******	-.184	-.228
0.50	-.325	-.368	-.307	-.356	-.362	-.281
0.60	-.369	-.418	-.370	-.408	-.327	-.336
0.70	-.381	-.440	-.386	-.453	-.377	-.362
0.80	-.378	******	-.404	-.453	-.427	-.398
0.90	-.192	******	-.110	******	-.289	-.187

AFTERBODY PRESSURE COEFFICIENTS

	PHI, DEG											
X/L	0	18	36	45	54	72	81	90	108	135	162	180
.584	-.022	-.020	******	-.014	******	******	******	-.024	-.010	-.016	.002	******
.598	-.028	-.024	******	-.031	******	-.024	******	-.022	-.023	-.023	******	******
.612	-.020	-.031	******	-.029	******	-.020	******	-.022	-.016	-.010	******	******
.626	-.017	-.021	******	-.017	******	-.017	******	-.018	-.016	-.015	******	******
.640	******	-.026	******	-.025	******	-.026	******	-.027	-.028	-.017	******	******
.654	******	-.038	******	-.029	******	-.026	******	-.022	-.034	-.025	******	******
.668	******	******	******	-.014	******	-.015	******	-.008	-.021	-.012	******	******
.682	******	-.017	******	-.012	******	-.017	******	-.006	-.026	-.016	-.013	******
.696	******	.005	******	.003	******	-.004	******	-.005	-.013	-.014	-.012	-.012
.710	******	.044	******	******	******	.006	******	.005	-.013	-.006	-.002	-.010
.724	******	.086	******	.035	******	.016	******	.001	-.009	-.006	-.008	-.008
.738	******	.077	******	.035	******	******	******	.002	-.010	-.008	-.008	-.008
.752	******	.036	******	.035	******	.018	******	.015	.008	.001	-.005	******
.766	******	-.013	******	.008	******	.026	******	.037	.018	-.009	-.020	-.021
.779	******	-.015	******	.020	******	.082	******	.213	.051	.007	-.005	-.009
.793	******	-.047	******	-.003	******	.058	******	******	.014	-.007	-.022	******
.807	******	-.077	******	-.038	******	-.020	******	******	-.053	-.036	-.036	-.038
.821	******	******	******	-.088	******	-.083	******	******	-.094	-.074	-.063	-.066
.835	******	-.194	******	-.149	******	-.143	******	******	-.161	-.112	-.101	-.099
.849	******	-.231	******	******	******	-.213	******	******	-.194	-.159	-.138	-.140
.863	******	-.295	******	-.281	******	-.285	******	******	-.251	-.206	******	-.176
.877	-.309	-.324	******	-.323	******	-.341	******	******	******	******	******	******
.891	-.374	-.386	******	-.379	******	-.416	******	******	-.350	-.294	-.266	-.262
.916	-.414	-.449	-.547	******	-.470	******	-.474	-.447	-.418	-.369	-.329	-.347
.928	-.317	******	-.548	******	-.484	-.356	-.359	-.354	-.381	-.428	-.421	-.418
.940	-.101	******	-.142	******	-.139	-.097	-.112	-.129	-.167	-.231	-.251	-.309
.952	******	******	-.053	******	-.048	-.023	-.024	-.012	-.021	-.025	-.036	-.054
.962	.055	.023	-.019	******	-.003	-.009	.012	.024	.033	.034	.011	.020
.974	.071	.027	******	******	.015	.029	.059	.062	.043	.076	.077	.060
.986	.088	.067	.041	******	.046	.076	.089	.080	.084	.073	.093	.081
.996	.102	.077	******	******	.069	.093	.095	.098	.099	.106	.097	.088

AFTERBODY INTEGRATED PRESSURE DRAG COEFFICIENT .0911

Table A12. Continued

(c) $\alpha = 3.026°$

TEST PARAMETERS

CONFIGURATION	AFT TAILS
POINT NUMBER	20
MACH NUMBER	.951
ALPHA, DEG	3.026
NPR	1.061
PTO, PSI	14.757
PO, PSI	8.249
QO, PSI	5.219

TAIL SURFACE PRESSURE COEFFICIENTS

	HORIZONTAL TAILS				VERTICAL TAIL	
	UPPER SURFACE Y/B		LOWER SURFACE Y/B		Y/B	
X/C	0.1	0.2	0.1	0.2	0.1	0.2
0.05	******	******	******	******	******	-.020
0.10	-.323	-.226	.067	.094	-.047	-.047
0.20	-.301	-.259	-.011	-.008	******	-.108
0.30	-.326	******	-.092	-.111	-.135	-.160
0.40	-.391	-.384	-.170	******	-.208	-.251
0.50	-.425	-.446	-.206	-.282	-.358	-.307
0.60	-.440	-.492	-.287	-.343	-.364	-.374
0.70	-.460	-.508	-.305	-.383	-.417	-.405
0.80	-.456	******	-.330	-.399	-.467	-.439
0.90	-.101	******	-.225	******	-.232	-.318

AFTERBODY PRESSURE COEFFICIENTS

	PHI, DEG											
X/L	0	18	36	45	54	72	81	90	108	135	162	180
.584	-.018	-.015	******	-.001	******	******	******	-.034	-.022	-.004	.004	******
.598	-.027	-.024	******	-.019	******	-.014	******	-.011	-.017	-.011	******	******
.612	-.023	-.018	******	-.020	******	-.018	******	-.010	-.019	-.014	******	******
.626	-.023	-.017	******	-.023	******	-.022	******	-.015	-.013	-.012	******	******
.640	******	-.018	******	-.024	******	-.023	******	-.020	-.019	-.017	******	******
.654	******	-.019	******	-.029	******	-.026	******	-.031	-.031	-.023	******	******
.668	******	******	******	-.013	******	-.019	******	-.017	-.015	-.008	******	******
.682	******	-.003	******	-.007	******	-.015	******	-.018	-.020	-.017	-.016	******
.696	******	.018	******	.006	******	-.008	******	-.014	-.014	-.008	-.009	.000
.710	******	.045	******	******	******	.007	******	-.003	-.006	.001	-.005	.003
.724	******	.087	******	.040	******	.012	******	.005	-.001	-.002	-.003	-.005
.738	******	.086	******	.038	******	******	******	.012	-.004	-.002	-.004	-.001
.752	******	.045	******	.038	******	.026	******	.026	.013	.010	.001	******
.766	******	-.001	******	.016	******	.035	******	.042	.029	.004	-.012	-.010
.779	******	-.020	******	.005	******	.053	******	.223	.103	.041	.020	.019
.793	******	-.065	******	-.029	******	-.027	******	******	.110	.037	.005	******
.807	******	-.107	******	-.077	******	-.101	******	******	.062	.025	.006	.002
.821	******	******	******	-.132	******	-.161	******	******	-.002	-.003	-.016	-.018
.835	******	-.222	******	-.196	******	-.224	******	******	-.061	-.047	-.046	-.047
.849	******	-.273	******	******	******	-.283	******	******	-.111	-.090	-.086	-.080
.863	******	-.334	******	-.327	******	-.355	******	******	-.165	-.135	******	-.109
.877	-.352	-.373	******	-.369	******	-.409	******	******	******	******	******	******
.891	-.426	-.436	******	-.439	******	-.469	******	******	-.271	-.228	-.206	-.202
.916	-.430	-.467	-.578	******	-.515	******	-.460	-.440	-.363	-.308	-.267	-.275
.928	-.223	******	-.314	******	-.321	-.259	-.265	-.269	-.370	-.389	-.369	-.351
.940	-.090	******	-.115	******	-.112	-.123	-.136	-.126	-.295	-.411	-.442	-.444
.952	******	******	-.060	******	-.063	-.075	-.081	-.079	-.135	-.179	-.180	-.192
.962	-.037	-.016	-.033	******	-.037	-.039	-.047	-.033	-.063	-.052	-.035	-.035
.974	-.014	-.007	******	******	-.013	-.014	-.018	-.004	-.015	.016	.026	.037
.986	-.005	.015	.008	******	.007	-.014	.003	.010	.019	.047	.062	.057
.996	.019	.027	******	******	.025	.021	.025	.029	.021	.041	.063	.061

AFTERBODY INTEGRATED PRESSURE DRAG COEFFICIENT .1073

Table A12. Concluded

(d) $\alpha = 5.970°$

TEST PARAMETERS

CONFIGURATION	AFT TAILS
POINT NUMBER	21
MACH NUMBER	.948
ALPHA, DEG	5.970
NPR	1.045
PTO, PSI	14.759
PO, PSI	8.273
QO, PSI	5.208

TAIL SURFACE PRESSURE COEFFICIENTS

	HORIZONTAL TAILS				VERTICAL TAIL	
	UPPER SURFACE Y/B		LOWER SURFACE Y/B		Y/B	
X/C	0.1	0.2	0.1	0.2	0.1	0.2
0.05	******	******	******	******	******	-.046
0.10	-.119	-.392	.196	-.042	-.043	-.063
0.20	-.170	-.377	.097	-.115	******	-.120
0.30	-.217	******	.008	-.199	-.149	-.187
0.40	-.294	-.465	-.079	******	-.230	-.278
0.50	-.335	-.522	-.125	-.363	-.370	-.347
0.60	-.372	-.553	-.219	-.412	-.411	-.413
0.70	-.387	-.570	-.209	-.455	-.457	-.452
0.80	-.381	******	-.258	-.461	-.512	-.485
0.90	-.151	******	-.192	******	-.246	-.198

AFTERBODY PRESSURE COEFFICIENTS

	PHI, DEG											
X/L	0	18	36	45	54	72	81	90	108	135	162	180
.584	-.013	-.016	******	-.013	******	******	******	-.044	-.040	-.005	.015	******
.598	-.022	-.018	******	-.026	******	-.020	******	-.027	-.033	-.021	******	******
.612	-.021	-.015	******	-.029	******	-.023	******	-.027	-.032	-.010	******	******
.626	-.010	-.017	******	-.022	******	-.022	******	-.026	-.032	-.013	******	******
.640	******	-.018	******	-.026	******	-.028	******	-.034	-.030	-.022	******	******
.654	******	-.016	******	-.032	******	-.028	******	-.048	-.045	-.032	******	******
.668	******	******	******	-.019	******	-.013	******	-.038	-.021	-.018	******	******
.682	******	.008	******	-.015	******	-.022	******	-.038	-.035	-.030	-.002	******
.696	******	.019	******	-.003	******	-.011	******	-.025	-.026	-.023	.001	.008
.710	******	.042	******	******	******	.002	******	-.016	-.014	-.016	.009	.006
.724	******	.085	******	.025	******	.010	******	-.004	-.012	-.010	.013	.015
.738	******	.079	******	.033	******	******	******	-.002	-.012	-.005	.018	.010
.752	******	.036	******	.030	******	.027	******	.015	.007	.010	.027	******
.766	******	-.009	******	.012	******	.040	******	.047	.029	.011	.014	.020
.779	******	-.032	******	-.011	******	.029	******	.244	.144	.067	.050	.046
.793	******	-.077	******	-.067	******	-.114	******	******	.194	.086	.048	******
.807	******	-.132	******	-.120	******	-.206	******	******	.152	.088	.054	.054
.821	******	******	******	-.191	******	-.248	******	******	.090	.070	.041	.031
.835	******	-.267	******	-.255	******	-.306	******	******	.017	.028	.010	.014
.849	******	-.316	******	******	******	-.358	******	******	-.037	-.019	-.022	-.024
.863	******	-.378	******	-.391	******	-.428	******	******	-.095	-.059	******	-.059
.877	-.410	-.452	******	-.437	******	-.476	******	******	******	******	******	******
.891	-.476	-.483	******	-.494	******	-.535	******	******	-.197	-.144	-.131	-.137
.916	-.499	-.525	-.541	******	-.472	******	-.388	-.506	-.275	-.218	-.193	-.204
.928	-.295	******	-.216	******	-.181	-.202	-.236	-.326	-.283	-.299	-.297	-.294
.940	-.156	******	-.116	******	-.136	-.144	-.172	-.159	-.257	-.363	-.384	-.383
.952	******	******	-.123	******	-.117	-.128	-.131	-.130	-.163	-.249	-.299	-.390
.962	-.145	-.118	-.122	******	-.117	-.146	-.118	-.124	-.113	-.078	-.095	-.109
.974	-.123	-.097	******	******	-.097	-.093	-.088	-.088	-.055	-.008	-.012	-.019
.986	-.079	-.065	-.043	******	-.059	-.040	-.053	-.042	-.004	.019	.040	.026
.996	-.038	-.022	******	******	-.028	-.047	-.046	-.023	.019	.036	.047	.027

AFTERBODY INTEGRATED PRESSURE DRAG COEFFICIENT .1213

Table A13. Effect of Nozzle Pressure Ratio on Pressure Distributions for Aft Tails Configuration at $M = 0.90$ and $\alpha = 0.017°$

(a) NPR = 1.096

TEST PARAMETERS

CONFIGURATION	AFT TAILS
POINT NUMBER	22
MACH NUMBER	.900
ALPHA, DEG	.017
NPR	1.096
PTO, PSI	14.757
PO, PSI	8.721
QO, PSI	4.950

TAIL SURFACE PRESSURE COEFFICIENTS

	HORIZONTAL TAILS				VERTICAL TAIL	
	UPPER SURFACE Y/B		LOWER SURFACE Y/B		Y/B	
X/C	0.1	0.2	0.1	0.2	0.1	0.2
0.05	******	******	******	******	******	-.071
0.10	-.036	-.106	-.127	-.271	-.100	-.090
0.20	-.135	-.200	-.179	-.320	******	-.142
0.30	-.200	******	-.233	-.393	-.164	-.195
0.40	-.288	-.358	-.298	******	-.237	-.276
0.50	-.326	-.407	-.316	-.545	-.452	-.322
0.60	-.397	-.456	-.353	-.592	-.374	-.377
0.70	-.409	-.330	-.233	-.635	-.412	-.379
0.80	-.409	******	-.087	-.496	-.148	-.066
0.90	-.307	******	.012	******	.019	.053

AFTERBODY PRESSURE COEFFICIENTS

	PHI, DEG											
X/L	0	18	36	45	54	72	81	90	108	135	162	180
.584	-.031	-.021	******	-.011	******	******	******	-.013	-.022	-.020	-.006	******
.598	-.037	-.036	******	-.030	******	-.032	******	-.027	-.026	-.025	******	******
.612	-.036	-.031	******	-.030	******	-.026	******	-.024	-.028	-.022	******	******
.626	-.028	-.032	******	-.028	******	-.024	******	-.026	-.026	-.021	******	******
.640	******	-.035	******	-.031	******	-.032	******	-.032	-.027	-.026	******	******
.654	******	-.035	******	-.037	******	-.028	******	-.037	-.033	-.032	******	******
.668	******	******	******	-.021	******	-.024	******	-.024	-.024	-.022	******	******
.682	******	-.019	******	-.021	******	-.028	******	-.031	-.028	-.031	-.028	******
.696	******	.000	******	-.012	******	-.019	******	-.025	-.025	-.027	-.025	-.025
.710	******	.027	******	******	******	-.011	******	-.014	-.025	-.025	-.028	-.024
.724	******	.068	******	.010	******	-.016	******	-.017	-.027	-.023	-.029	-.028
.738	******	.051	******	.012	******	******	******	-.014	-.030	-.023	-.025	-.033
.752	******	.004	******	.000	******	.001	******	-.007	-.015	-.021	-.025	******
.766	******	-.048	******	-.021	******	.005	******	.009	-.007	-.030	-.043	-.042
.779	******	-.056	******	-.021	******	.046	******	.191	.027	-.021	-.032	-.036
.793	******	-.095	******	-.046	******	.003	******	******	-.023	-.043	-.053	******
.807	******	-.124	******	-.078	******	-.046	******	******	-.076	-.063	-.064	-.067
.821	******	******	******	-.121	******	-.130	******	******	-.128	-.106	-.100	-.097
.835	******	-.245	******	-.199	******	-.201	******	******	-.187	-.146	-.130	-.123
.849	******	-.277	******	******	******	-.270	******	******	-.226	-.181	-.166	-.165
.863	******	-.337	******	-.322	******	-.340	******	******	-.276	-.231	******	-.195
.877	-.347	-.368	******	-.369	******	-.395	******	******	******	******	******	******
.891	-.423	-.436	******	-.432	******	-.450	******	******	-.336	-.270	-.246	-.243
.916	-.169	-.176	-.208	******	-.197	******	-.208	-.206	-.191	-.189	-.184	-.203
.928	-.092	******	-.136	******	-.124	-.112	-.116	-.113	-.136	-.168	-.191	-.191
.940	-.048	******	-.073	******	-.078	-.065	-.065	-.059	-.091	-.133	-.156	-.163
.952	******	******	-.014	******	-.011	-.012	-.015	-.005	-.031	-.062	-.083	-.090
.962	.051	.049	.051	******	.064	.037	.043	.043	.036	.019	.003	-.003
.974	.105	.110	******	******	.105	.115	.099	.096	.097	.096	.086	.080
.986	.155	.144	.153	******	.156	.134	.156	.153	.143	.138	.133	.131
.996	.172	.175	******	******	.174	.165	.168	.166	.161	.158	.154	.149

AFTERBODY INTEGRATED PRESSURE DRAG COEFFICIENT .0521

Table A13. Continued

(b) NPR = 2.020

TEST PARAMETERS

CONFIGURATION	AFT TAILS
POINT NUMBER	23
MACH NUMBER	.901
ALPHA, DEG	.016
NPR	2.020
PTO, PSI	14.759
PO, PSI	8.718
QO, PSI	4.953

TAIL SURFACE PRESSURE COEFFICIENTS

	HORIZONTAL TAILS				VERTICAL TAIL	
	UPPER SURFACE Y/B		LOWER SURFACE Y/B		Y/B	
X/C	0.1	0.2	0.1	0.2	0.1	0.2
0.05	******	******	******	******	******	-.082
0.10	.109	-.107	-.117	-.456	-.105	-.079
0.20	-.007	-.190	-.169	-.437	******	-.135
0.30	-.090	******	-.228	-.486	-.159	-.186
0.40	-.185	-.361	-.290	******	-.238	-.285
0.50	-.243	-.402	-.308	-.617	-.440	-.323
0.60	-.269	-.453	-.338	-.658	-.376	-,375
0.70	-.295	-.235	-.207	-.676	-.346	-.342
0.80	-.293	******	-.077	-.393	-.096	-.055
0.90	-.214	******	.026	******	.033	.060

AFTERBODY PRESSURE COEFFICIENTS

	PHI, DEG											
X/L	0	18	36	45	54	72	81	90	108	135	162	180
.584	-.033	-.024	******	.001	******	******	******	-.015	-.017	-.020	-.012	******
.598	-.031	-.030	******	-.030	******	-.036	******	-.026	-.028	-.019	******	******
.612	-.030	-.033	******	-.022	******	-.034	******	-.026	-.024	-.018	******	******
.626	-.023	-.027	******	-.023	******	-.023	******	-.022	-.021	-.020	******	******
.640	******	-.029	******	-.029	******	-.024	******	-.025	-.032	-.025	******	******
.654	******	-.040	******	-.034	******	-.026	******	-.040	-.034	-.032	******	******
.668	******	******	******	-.022	******	-.028	******	-.018	-.025	-.024	******	******
.682	******	-.021	******	-.023	******	-.021	******	-.025	-.027	-.029	-.028	******
.696	******	.001	******	-.010	******	-.020	******	-.019	-.029	-.024	-.025	-.024
.710	******	.023	******	******	******	-.012	******	-.019	-.020	-.023	-.023	-.026
.724	******	.070	******	.015	******	-.010	******	-.013	-.016	-.024	-.024	-.025
.738	******	.064	******	.012	******	******	******	-.016	-.024	-.028	-.026	-.027
.752	******	-.001	******	.008	******	-.003	******	-.001	-.014	-.021	-.023	******
.766	******	-.037	******	-.022	******	.000	******	.011	-.009	-.034	-.046	-.044
.779	******	-.059	******	-.014	******	.050	******	.197	.025	-.023	-.027	-.034
.793	******	-.089	******	-.042	******	.008	******	******	-.016	-.047	-.053	******
.807	******	-.123	******	-.082	******	-.058	******	******	-.074	-.062	-.063	-.063
.821	******	******	******	-.127	******	-.125	******	******	-.125	-.095	-.095	-.090
.835	******	-.248	******	-.192	******	-.192	******	******	-.183	-.149	-.121	-.123
.849	******	-.276	******	******	******	-.255	******	******	-.221	-.178	-.163	-.158
.863	******	-.343	******	-.328	******	-.342	******	******	-.271	-.213	******	-.193
.877	-.347	-.361	******	-.360	******	-.394	******	******	******	******	******	******
.891	-.406	-.428	******	-.417	******	-.448	******	******	-.327	-.262	-.220	-.215
.916	-.133	-.146	-.197	******	-.174	******	-.162	-.176	-.169	-.167	-.163	-.179
.928	-.069	******	-.119	******	-.103	-.094	-.095	-.092	-.115	-.151	-.166	-.169
.940	-.027	******	-.054	******	-.057	-.044	-.047	-.040	-.070	-.104	-.124	-.132
.952	******	******	.008	******	.008	.012	.010	.015	.003	-.030	-.051	-.053
.962	.080	.078	.077	******	.074	.076	.073	.075	.063	.055	.044	.037
.974	.136	.136	******	******	.138	.136	.132	.130	.128	.128	.125	.122
.986	.181	.177	.174	******	.177	.173	.170	.170	.174	.178	.177	.177
.996	.194	.195	******	******	.192	.194	.189	.190	.199	.195	.198	.199

AFTERBODY INTEGRATED PRESSURE DRAG COEFFICIENT .0358

Table A13. Continued

(c) NPR = 3.017

TEST PARAMETERS

CONFIGURATION	AFT TAILS
POINT NUMBER	24
MACH NUMBER	.901
ALPHA, DEG	.018
NPR	3.017
PTO, PSI	14.759
PO, PSI	8.715
QO, PSI	4.954

TAIL SURFACE PRESSURE COEFFICIENTS

	HORIZONTAL TAILS				VERTICAL TAIL	
	UPPER SURFACE Y/B		LOWER SURFACE Y/B		Y/B	
X/C	0.1	0.2	0.1	0.2	0.1	0.2
0.05	******	******	******	******	******	-.080
0.10	-.147	-.121	-.126	-.072	-.129	-.082
0.20	-.191	-.184	-.178	-.156	******	-.132
0.30	-.236	******	-.231	-.237	-.163	-.186
0.40	-.307	-.356	-.295	******	-.240	-.275
0.50	-.332	-.404	-.319	-.391	-.432	-.317
0.60	-.333	-.448	-.346	-.447	-.368	-.383
0.70	-.183	-.221	-.214	-.410	-.298	-.381
0.80	-.051	******	-.076	-.063	-.095	-.063
0.90	.041	******	.027	******	.032	.061

AFTERBODY PRESSURE COEFFICIENTS

	PHI, DEG											
X/L	0	18	36	45	54	72	81	90	108	135	162	180
.584	-.030	-.025	******	.001	******	******	******	-.017	-.021	-.023	-.004	******
.598	-.036	-.034	******	-.031	******	-.028	******	-.024	-.029	-.018	******	******
.612	-.033	-.033	******	-.022	******	-.025	******	-.020	-.024	-.020	******	******
.626	-.028	-.026	******	-.024	******	-.027	******	-.022	-.030	-.025	******	******
.640	******	-.039	******	-.033	******	-.033	******	-.029	-.025	-.025	******	******
.654	******	-.033	******	-.036	******	-.030	******	-.038	-.031	-.040	******	******
.668	******	******	******	-.029	******	-.026	******	-.024	-.018	-.022	******	******
.682	******	-.013	******	-.020	******	-.022	******	-.028	-.026	-.027	-.031	******
.696	******	.002	******	-.009	******	-.023	******	-.025	-.025	-.025	-.028	-.023
.710	******	.028	******	******	******	-.012	******	-.020	-.022	-.023	-.030	-.020
.724	******	.070	******	.013	******	-.015	******	-.012	-.021	-.024	-.028	-.025
.738	******	.062	******	.015	******	******	******	-.016	-.025	-.024	-.028	-.030
.752	******	.002	******	.001	******	.002	******	-.001	-.014	-.021	-.027	******
.766	******	-.040	******	-.025	******	.009	******	.012	-.013	-.031	-.044	-.045
.779	******	-.062	******	-.016	******	.052	******	.197	.027	-.016	-.029	-.032
.793	******	-.093	******	-.047	******	.018	******	******	-.022	-.040	-.056	******
.807	******	-.124	******	-.072	******	-.054	******	******	-.075	-.064	-.064	-.064
.821	******	******	******	-.124	******	-.124	******	******	-.128	-.107	-.098	-.093
.835	******	-.236	******	-.192	******	-.189	******	******	-.184	-.144	-.124	-.125
.849	******	-.274	******	******	******	-.262	******	******	-.225	-.180	-.165	-.157
.863	******	-.333	******	-.322	******	-.348	******	******	-.269	-.231	******	-.185
.877	-.351	-.359	******	-.356	******	-.398	******	******	******	******	******	******
.891	-.401	-.419	******	-.424	******	-.435	******	******	-.319	-.256	-.228	-.221
.916	-.143	-.149	-.180	******	-.169	******	-.169	-.184	-.170	-.174	-.169	-.175
.928	-.075	******	-.117	******	-.104	-.094	-.101	-.090	-.117	-.148	-.171	-.161
.940	-.031	******	-.052	******	-.058	-.045	-.047	-.040	-.070	-.106	-.127	-.129
.952	******	******	.007	******	.005	.008	.013	.014	-.006	-.036	-.049	-.056
.962	.075	.075	.078	******	.076	.072	.072	.071	.065	.051	.038	.037
.974	.131	.132	******	******	.137	.133	.128	.129	.130	.129	.119	.125
.986	.173	.175	.178	******	.173	.168	.169	.172	.170	.175	.172	.175
.996	.190	.189	******	******	.194	.189	.191	.191	.188	.190	.194	.193

AFTERBODY INTEGRATED PRESSURE DRAG COEFFICIENT .0368

Table A13. Concluded

(d) NPR = 5.028

TEST PARAMETERS

CONFIGURATION	AFT TAILS
POINT NUMBER	25
MACH NUMBER	.900
ALPHA, DEG	.017
NPR	5.028
PTO, PSI	14.760
PO, PSI	8.724
QO, PSI	4.950

TAIL SURFACE PRESSURE COEFFICIENTS

	HORIZONTAL TAILS				VERTICAL TAIL	
	UPPER SURFACE Y/B		LOWER SURFACE Y/B		Y/B	
X/C	0.1	0.2	0.1	0.2	0.1	0.2
0.05	******	******	******	******	******	-.064
0.10	-.167	-.111	-.123	-.080	-.153	-.082
0.20	-.196	-.183	-.176	-.160	******	-.138
0.30	-.254	******	-.226	-.248	-.154	-.188
0.40	-.317	-.356	-.301	******	-.237	-.275
0.50	-.335	-.408	-.312	-.404	-.426	-.324
0.60	-.317	-.448	-.335	-.463	-.367	-.385
0.70	-.149	-.237	-.194	-.391	-.261	-.348
0.80	-.044	******	-.069	-.059	-.089	-.053
0.90	.047	******	.033	******	.035	.063

AFTERBODY PRESSURE COEFFICIENTS

	PHI, DEG											
X/L	0	18	36	45	54	72	81	90	108	135	162	180
.584	-.030	-.018	******	.001	******	******	******	-.018	-.018	-.022	-.008	******
.598	-.039	-.031	******	-.030	******	-.031	******	-.026	-.026	-.020	******	******
.612	-.031	-.032	******	-.024	******	-.030	******	-.020	-.024	-.022	******	******
.626	-.024	-.025	******	-.026	******	-.032	******	-.027	-.022	-.022	******	******
.640	******	-.030	******	-.030	******	-.035	******	-.030	-.027	-.022	******	******
.654	******	-.034	******	-.032	******	-.033	******	-.037	-.038	-.033	******	******
.668	******	******	******	-.023	******	-.027	******	-.026	-.020	-.022	******	******
.682	******	-.015	******	-.021	******	-.033	******	-.026	-.027	-.030	-.034	******
.696	******	.001	******	-.011	******	-.025	******	-.020	-.030	-.026	-.030	-.022
.710	******	.024	******	******	******	-.015	******	-.015	-.022	-.023	-.021	-.020
.724	******	.070	******	.014	******	-.006	******	-.009	-.023	-.023	-.024	-.029
.738	******	.058	******	.009	******	******	******	-.015	-.022	-.022	-.030	-.030
.752	******	.005	******	.006	******	-.002	******	-.001	-.012	-.021	-.030	******
.766	******	-.045	******	-.023	******	.008	******	.011	-.009	-.029	-.046	-.047
.779	******	-.052	******	-.016	******	.049	******	.197	.027	-.019	-.038	-.033
.793	******	-.081	******	-.039	******	.011	******	******	-.027	-.044	-.058	******
.807	******	-.116	******	-.069	******	-.048	******	******	-.076	-.071	-.070	-.070
.821	******	******	******	-.121	******	-.119	******	******	-.127	-.111	-.095	-.095
.835	******	-.235	******	-.189	******	-.190	******	******	-.185	-.147	-.135	-.126
.849	******	-.280	******	******	******	-.252	******	******	-.225	-.190	-.168	-.158
.863	******	-.334	******	-.321	******	-.333	******	******	-.273	-.232	******	-.181
.877	-.346	-.362	******	-.358	******	-.392	******	******	******	******	******	******
.891	-.382	-.423	******	-.402	******	-.435	******	******	-.305	-.252	-.208	-.207
.916	-.140	-.138	-.174	******	-.168	******	-.150	-.171	-.161	-.170	-.162	-.162
.928	-.063	******	-.113	******	-.094	-.085	-.086	-.084	-.109	-.140	-.151	-.155
.940	-.020	******	-.044	******	-.052	-.036	-.039	-.030	-.065	-.103	-.111	-.121
.952	******	******	.019	******	.020	.022	.019	.026	.008	-.024	-.042	-.040
.962	.088	.090	.090	******	.087	.088	.086	.086	.080	.064	.052	.054
.974	.147	.149	******	******	.150	.147	.145	.142	.140	.144	.140	.138
.986	.192	.188	.189	******	.186	.185	.184	.181	.177	.179	.187	.185
.996	.212	.212	******	******	.203	.202	.202	.204	.197	.198	.202	.204

AFTERBODY INTEGRATED PRESSURE DRAG COEFFICIENT .0300

Table A14. Effect of Angle of Attack on Pressure Distributions for Aft Tails Configuration at $M = 0.90$ and NPR = 1.099

(a) $\alpha = -2.977°$

TEST PARAMETERS

CONFIGURATION	AFT TAILS
POINT NUMBER	27
MACH NUMBER	.901
ALPHA, DEG	-2.977
NPR	1.099
PTO, PSI	14.762
PO, PSI	8.720
QO, PSI	4.954

TAIL SURFACE PRESSURE COEFFICIENTS

	HORIZONTAL TAILS				VERTICAL TAIL	
	UPPER SURFACE Y/B		LOWER SURFACE Y/B		Y/B	
X/C	0.1	0.2	0.1	0.2	0.1	0.2
0.05	******	******	******	******	******	-.075
0.10	-.152	.033	-.329	-.066	-.092	-.078
0.20	-.200	-.067	-.302	-.149	******	-.124
0.30	-.242	******	-.349	-.242	-.140	-.168
0.40	-.323	-.258	-.400	******	-.200	-.238
0.50	-.321	-.311	-.423	-.402	-.385	-.272
0.60	-.326	-.333	-.483	-.460	-.321	-.325
0.70	-.149	-.134	-.313	-.405	-.195	-.224
0.80	-.041	******	-.081	-.056	-.097	-.057
0.90	.051	******	.017	******	.007	.043

AFTERBODY PRESSURE COEFFICIENTS

	PHI, DEG											
X/L	0	18	36	45	54	72	81	90	108	135	162	180
.584	-.046	-.041	******	-.025	******	******	******	-.025	-.027	-.016	.008	******
.598	-.045	-.038	******	-.043	******	-.036	******	-.038	-.033	-.021	******	******
.612	-.032	-.031	******	-.031	******	-.033	******	-.038	-.030	-.025	******	******
.626	-.030	-.024	******	-.032	******	-.030	******	-.034	-.030	-.025	******	******
.640	******	-.029	******	-.033	******	-.037	******	-.043	-.036	-.035	******	******
.654	******	-.035	******	-.047	******	-.041	******	-.048	-.043	-.039	******	******
.668	******	******	******	-.031	******	-.035	******	-.035	-.040	-.025	******	******
.682	******	-.027	******	-.026	******	-.033	******	-.036	-.035	-.026	-.029	******
.696	******	.005	******	-.008	******	-.028	******	-.039	-.030	-.030	-.029	-.023
.710	******	.036	******	******	******	-.025	******	-.031	-.034	-.023	-.026	-.028
.724	******	.079	******	.013	******	-.021	******	-.026	-.033	-.028	-.031	-.031
.738	******	.064	******	.005	******	******	******	-.030	-.039	-.029	-.033	-.037
.752	******	.005	******	-.005	******	-.014	******	-.016	-.033	-.031	-.038	******
.766	******	-.042	******	-.027	******	-.007	******	.000	-.030	-.045	-.057	-.057
.779	******	-.055	******	-.004	******	.081	******	.172	-.022	-.047	-.055	-.056
.793	******	-.078	******	-.013	******	.108	******	******	-.123	-.093	-.087	******
.807	******	-.098	******	-.025	******	.039	******	******	-.192	-.126	-.118	-.112
.821	******	******	******	-.068	******	-.041	******	******	-.229	-.183	-.150	-.151
.835	******	-.190	******	-.134	******	-.109	******	******	-.287	-.222	-.187	-.184
.849	******	-.226	******	******	******	-.190	******	******	-.311	-.254	-.231	-.226
.863	******	-.288	******	-.267	******	-.267	******	******	-.373	-.310	******	-.269
.877	-.284	-.292	******	-.283	******	-.313	******	******	******	******	******	******
.891	-.286	-.295	******	-.293	******	-.303	******	******	-.421	-.366	-.333	-.328
.916	-.135	-.136	-.195	******	-.147	******	-.172	-.195	-.186	-.208	-.201	-.202
.928	-.089	******	-.159	******	-.129	-.122	-.120	-.104	-.116	-.154	-.169	-.167
.940	-.071	******	-.105	******	-.099	-.087	-.077	-.052	-.048	-.102	-.123	-.125
.952	******	******	-.053	******	-.054	-.039	-.028	-.004	-.005	-.032	-.054	-.052
.962	.018	.017	.017	******	.022	.019	.019	.046	.049	.032	.021	.029
.974	.082	.083	******	******	.089	.079	.077	.099	.091	.086	.087	.096
.986	.125	.131	.122	******	.132	.111	.118	.118	.130	.121	.116	.123
.996	.135	.141	******	******	.130	.121	.128	.136	.125	.128	.133	.124

AFTERBODY INTEGRATED PRESSURE DRAG COEFFICIENT .0562

Table A14. Continued

(b) $\alpha = 0.021°$

TEST PARAMETERS

CONFIGURATION	AFT TAILS
POINT NUMBER	28
MACH NUMBER	.901
ALPHA, DEG	.021
NPR	1.115
PTO, PSI	14.762
PO, PSI	8.722
QO, PSI	4.953

TAIL SURFACE PRESSURE COEFFICIENTS

	HORIZONTAL TAILS				VERTICAL TAIL	
	UPPER SURFACE Y/B		LOWER SURFACE Y/B		Y/B	
X/C	0.1	0.2	0.1	0.2	0.1	0.2
0.05	******	******	******	******	******	-.071
0.10	-.145	-.115	-.117	-.081	-.089	-.089
0.20	-.191	-.187	-.171	-.158	******	-.138
0.30	-.248	******	-.225	-.243	-.161	-.190
0.40	-.309	-.364	-.298	******	-.238	-.279
0.50	-.334	-.408	-.321	-.402	-.379	-.327
0.60	-.358	-.461	-.365	-.458	-.376	-.387
0.70	-.200	-.349	-.246	-.457	-.179	-.395
0.80	-.058	******	-.088	-.070	-.131	-.094
0.90	.037	******	.017	******	.020	.051

AFTERBODY PRESSURE COEFFICIENTS

	PHI, DEG											
X/L	0	18	36	45	54	72	81	90	108	135	162	180
.584	-.028	-.031	******	-.015	******	******	******	-.020	-.021	-.015	-.007	******
.598	-.036	-.035	******	-.026	******	-.032	******	-.027	-.027	-.021	******	******
.612	-.032	-.032	******	-.026	******	-.030	******	-.025	-.027	-.022	******	******
.626	-.029	-.029	******	-.028	******	-.029	******	-.025	-.025	-.028	******	******
.640	******	-.034	******	-.037	******	-.036	******	-.031	-.031	-.028	******	******
.654	******	-.039	******	-.039	******	-.034	******	-.035	-.037	-.033	******	******
.668	******	******	******	-.024	******	-.027	******	-.024	-.027	-.022	******	******
.682	******	-.022	******	-.021	******	-.029	******	-.026	-.033	-.022	-.030	******
.696	******	-.004	******	-.004	******	-.020	******	-.026	-.027	-.021	-.030	-.022
.710	******	.026	******	******	******	-.016	******	-.025	-.020	-.017	-.027	-.025
.724	******	.072	******	.017	******	-.013	******	-.014	-.021	-.021	-.031	-.027
.738	******	.055	******	.012	******	******	******	-.009	-.026	-.022	-.032	-.031
.752	******	.002	******	.000	******	-.005	******	-.003	-.018	-.018	-.031	******
.766	******	-.048	******	-.023	******	.001	******	.009	-.010	-.029	-.046	-.050
.779	******	-.058	******	-.019	******	.045	******	.189	.026	-.018	-.032	-.032
.793	******	-.094	******	-.043	******	.015	******	******	-.016	-.041	-.052	******
.807	******	-.127	******	-.082	******	-.050	******	******	-.058	-.064	-.071	-.067
.821	******	******	******	-.121	******	-.123	******	******	-.112	-.112	-.097	-.095
.835	******	-.248	******	-.192	******	-.197	******	******	-.168	-.144	-.128	-.131
.849	******	-.280	******	******	******	-.269	******	******	-.211	-.185	-.163	-.158
.863	******	-.348	******	-.317	******	-.341	******	******	-.270	-.240	******	-.195
.877	-.352	-.366	******	-.367	******	-.395	******	******	******	******	******	******
.891	-.419	-.424	******	-.434	******	-.425	******	******	-.334	-.277	-.258	-.233
.916	-.165	-.171	-.228	******	-.191	******	-.203	-.199	-.198	-.207	-.197	-.196
.928	-.086	******	-.134	******	-.121	-.110	-.116	-.100	-.140	-.173	-.191	-.187
.940	-.050	******	-.069	******	-.080	-.064	-.065	-.054	-.103	-.132	-.157	-.157
.952	******	******	-.019	******	-.013	-.011	-.009	.003	-.036	-.064	-.089	-.092
.962	.055	.057	.059	******	.047	.050	.053	.063	.028	.011	-.001	-.005
.974	.112	.116	******	******	.112	.108	.105	.121	.092	.090	.079	.083
.986	.154	.154	.159	******	.151	.156	.154	.156	.120	.139	.132	.135
.996	.163	.176	******	******	.175	.167	.180	.176	.147	.152	.149	.146

AFTERBODY INTEGRATED PRESSURE DRAG COEFFICIENT .0519

Table A14. Continued

(c) $\alpha = 6.020°$

TEST PARAMETERS

CONFIGURATION	AFT TAILS
POINT NUMBER	29
MACH NUMBER	.900
ALPHA, DEG	6.020
NPR	1.088
PTO, PSI	14.762
PO, PSI	8.728
QO, PSI	4.948

TAIL SURFACE PRESSURE COEFFICIENTS

	HORIZONTAL TAILS				VERTICAL TAIL	
	UPPER SURFACE Y/B		LOWER SURFACE Y/B		Y/B	
X/C	0.1	0.2	0.1	0.2	0.1	0.2
0.05	******	******	******	******	******	-.063
0.10	-.370	-.464	.197	.057	-.105	-.078
0.20	-.347	-.446	.084	-.061	******	-.156
0.30	-.369	******	-.005	-.153	-.195	-.231
0.40	-.435	-.538	-.084	******	-.296	-.335
0.50	-.456	-.594	-.121	-.324	-.396	-.400
0.60	-.460	-.622	-.166	-.354	-.472	-.470
0.70	-.222	-.461	-.161	-.199	-.237	-.499
0.80	-.048	******	-.104	-.068	-.481	-.291
0.90	.043	******	-.014	******	-.005	.042

AFTERBODY PRESSURE COEFFICIENTS

	PHI, DEG											
X/L	0	18	36	45	54	72	81	90	108	135	162	180
.584	-.020	-.014	******	-.016	******	******	******	-.038	-.035	-.009	.010	******
.598	-.031	-.024	******	-.030	******	-.045	******	-.049	-.048	-.022	******	******
.612	-.024	-.031	******	-.034	******	-.038	******	-.041	-.043	-.017	******	******
.626	-.016	-.026	******	-.029	******	-.036	******	-.045	-.043	-.022	******	******
.640	******	-.031	******	-.035	******	-.043	******	-.051	-.046	-.022	******	******
.654	******	-.029	******	-.034	******	-.039	******	-.059	-.054	-.036	******	******
.668	******	******	******	-.027	******	-.034	******	-.046	-.040	-.022	******	******
.682	******	-.015	******	-.022	******	-.031	******	-.049	-.046	-.028	-.017	******
.696	******	.003	******	-.008	******	-.029	******	-.034	-.038	-.027	-.008	-.012
.710	******	.025	******	******	******	-.020	******	-.032	-.029	-.022	-.005	-.005
.724	******	.057	******	.009	******	-.013	******	-.022	-.029	-.018	-.005	-.010
.738	******	.049	******	.014	******	******	******	-.018	-.026	-.014	-.008	-.007
.752	******	.007	******	.001	******	-.002	******	-.006	-.007	-.001	.009	******
.766	******	-.046	******	-.025	******	.000	******	.023	.012	-.001	-.006	-.010
.779	******	-.073	******	-.052	******	-.018	******	.232	.122	.047	.039	.018
.793	******	-.124	******	-.115	******	-.176	******	******	.179	.061	.023	******
.807	******	-.178	******	-.180	******	-.259	******	******	.139	.065	.038	.019
.821	******	******	******	-.238	******	-.311	******	******	.076	.045	.017	.006
.835	******	-.338	******	-.315	******	-.367	******	******	.007	.007	.005	-.020
.849	******	-.380	******	******	******	-.411	******	******	-.048	-.034	-.038	-.044
.863	******	-.449	******	-.449	******	-.488	******	******	-.093	-.071	******	-.068
.877	-.468	-.502	******	-.499	******	-.540	******	******	******	******	******	******
.891	-.541	-.549	******	-.559	******	-.583	******	******	-.168	-.131	-.119	-.122
.916	-.309	-.299	-.344	******	-.292	******	-.275	-.327	-.198	-.173	-.158	-.175
.928	-.147	******	-.181	******	-.154	-.152	-.161	-.180	-.184	-.208	-.221	-.217
.940	-.074	******	-.097	******	-.088	-.094	-.101	-.108	-.165	-.200	-.234	-.240
.952	******	******	-.040	******	-.040	-.062	-.047	-.061	-.108	-.151	-.184	-.185
.962	-.021	-.021	-.014	******	-.018	-.022	-.012	-.023	-.047	-.059	-.090	-.095
.974	.012	.021	******	******	.020	.016	.025	.012	.015	.025	.015	.007
.986	.048	.052	.065	******	.065	.057	.067	.064	.069	.084	.074	.066
.996	.087	.081	******	******	.098	.093	.095	.088	.080	.084	.084	.082

AFTERBODY INTEGRATED PRESSURE DRAG COEFFICIENT .0843

Table A15. Effect of Nozzle Pressure Ratio on Pressure Distributions for Aft Tails Configuration at $M = 0.60$ and $\alpha = 0.030°$

(a) NPR = 1.035

TEST PARAMETERS

CONFIGURATION	AFT TAILS
POINT NUMBER	30
MACH NUMBER	.602
ALPHA, DEG	.030
NPR	1.035
PTO, PSI	14.774
PO, PSI	11.568
QO, PSI	2.931

TAIL SURFACE PRESSURE COEFFICIENTS

	HORIZONTAL TAILS				VERTICAL TAIL	
	UPPER SURFACE Y/B		LOWER SURFACE Y/B		Y/B	
X/C	0.1	0.2	0.1	0.2	0.1	0.2
0.05	******	******	******	******	******	-.109
0.10	-1.219	-.147	-.111	-1.112	-1.110	-.123
0.20	-1.298	-.163	-.145	-1.249	******	-.158
0.30	-1.365	******	-.180	-1.384	-.166	-.183
0.40	-1.492	-.215	-.194	******	-.193	-.208
0.50	-1.526	-.201	-.181	-1.653	-1.316	-.185
0.60	-1.571	-.166	-.168	-1.750	-.178	-.163
0.70	-1.285	-.117	-.126	-1.667	-1.081	-.123
0.80	-1.061	******	-.073	-1.091	-.085	-.058
0.90	-.906	******	-.011	******	-.007	.015

AFTERBODY PRESSURE COEFFICIENTS

	PHI, DEG											
X/L	0	18	36	45	54	72	81	90	108	135	162	180
.584	-.033	-.028	******	-.015	******	******	******	-.022	-.028	-.022	-.012	******
.598	-.041	-.036	******	-.028	******	-.032	******	-.036	-.037	-.026	******	******
.612	-.038	-.038	******	-.028	******	-.030	******	-.027	-.031	-.026	******	******
.626	-.033	-.030	******	-.030	******	-.032	******	-.031	-.031	-.030	******	******
.640	******	-.035	******	-.033	******	-.039	******	-.030	-.031	-.034	******	******
.654	******	-.033	******	-.041	******	-.036	******	-.040	-.038	-.037	******	******
.668	******	******	******	-.030	******	-.033	******	-.034	-.034	-.031	******	******
.682	******	-.027	******	-.030	******	-.035	******	-.040	-.039	-.038	-.037	******
.696	******	-.014	******	-.025	******	-.035	******	-.038	-.034	-.034	-.034	-.037
.710	******	.004	******	******	******	-.030	******	-.033	-.035	-.040	-.031	-.034
.724	******	.022	******	-.025	******	-.027	******	-.028	-.036	-.034	-.037	-.042
.738	******	.004	******	-.026	******	******	******	-.026	-.038	-.037	-.040	-.038
.752	******	-.031	******	-.031	******	-.023	******	-.019	-.033	-.033	-.044	******
.766	******	-.077	******	-.059	******	-.022	******	-.008	-.027	-.046	-.057	-.056
.779	******	-.100	******	-.052	******	.000	******	.160	-.008	-.037	-.045	-.050
.793	******	-.115	******	-.082	******	-.039	******	******	-.041	-.057	-.060	******
.807	******	-.141	******	-.098	******	-.093	******	******	-.077	-.069	-.064	-.068
.821	******	******	******	-.127	******	-.133	******	******	-.116	-.088	-.075	-.075
.835	******	-.180	******	-.154	******	-.154	******	******	-.144	-.109	-.091	-.089
.849	******	-.192	******	******	******	-.190	******	******	-.163	-.123	-.103	-.105
.863	******	-.185	******	-.174	******	-.204	******	******	-.164	-.135	******	-.107
.877	-.163	-.166	******	-.162	******	-.192	******	******	******	******	******	******
.891	-.162	-.166	******	-.165	******	-.185	******	******	-.161	-.134	-.119	-.115
.916	-.115	-.130	-.181	******	-.138	******	-.139	-.140	-.137	-.135	-.124	-.135
.928	-.098	******	-.160	******	-.137	-.127	-.118	-.112	-.128	-.143	-.145	-.146
.940	-.088	******	-.118	******	-.124	-.107	-.098	-.086	-.116	-.136	-.140	-.150
.952	******	******	-.082	******	-.083	-.071	-.069	-.061	-.081	-.099	-.114	-.110
.962	-.014	-.016	-.014	******	-.017	-.011	-.015	-.010	-.019	-.039	-.048	-.054
.974	.045	.049	******	******	.052	.047	.047	.039	.043	.036	.032	.025
.986	.099	.102	.102	******	.107	.099	.097	.100	.092	.096	.092	.084
.996	.126	.140	******	******	.126	.125	.122	.116	.111	.114	.116	.110

AFTERBODY INTEGRATED PRESSURE DRAG COEFFICIENT .0469

Table A15. Continued

(b) NPR = 2.057

TEST PARAMETERS

CONFIGURATION	AFT TAILS
POINT NUMBER	31
MACH NUMBER	.602
ALPHA, DEG	.029
NPR	2.057
PTO, PSI	14.775
PO, PSI	11.570
QO, PSI	2.930

TAIL SURFACE PRESSURE COEFFICIENTS

	HORIZONTAL TAILS				VERTICAL TAIL	
	UPPER SURFACE Y/B		LOWER SURFACE Y/B		Y/B	
X/C	0.1	0.2	0.1	0.2	0.1	0.2
0.05	******	******	******	******	******	-.107
0.10	-.674	-.129	-.120	-1.673	-1.069	-.103
0.20	-.847	-.172	-.152	-1.622	******	-.143
0.30	-.989	******	-.177	-1.714	-.165	-.183
0.40	-1.132	-.205	-.190	******	-.201	-.203
0.50	-1.197	-.193	-.175	-1.929	-1.099	-.187
0.60	-1.228	-.165	-.160	-1.992	-.177	-.156
0.70	-1.178	-.110	-.117	-1.737	-.874	-.111
0.80	-1.093	******	-.062	-1.244	-.074	-.049
0.90	-.960	******	-.001	******	-.002	.023

AFTERBODY PRESSURE COEFFICIENTS

	PHI, DEG											
X/L	0	18	36	45	54	72	81	90	108	135	162	180
.584	-.032	-.023	******	-.020	******	******	******	-.024	-.020	-.027	-.014	******
.598	-.040	-.029	******	-.034	******	-.033	******	-.035	-.031	-.027	******	******
.612	-.035	-.032	******	-.028	******	-.032	******	-.032	-.030	-.027	******	******
.626	-.027	-.030	******	-.030	******	-.030	******	-.028	-.030	-.027	******	******
.640	******	-.034	******	-.033	******	-.036	******	-.032	-.030	-.030	******	******
.654	******	-.032	******	-.036	******	-.030	******	-.039	-.036	-.035	******	******
.668	******	******	******	-.027	******	-.029	******	-.033	-.033	-.027	******	******
.682	******	-.026	******	-.027	******	-.033	******	-.036	-.036	-.036	-.036	******
.696	******	-.012	******	-.022	******	-.032	******	-.033	-.037	-.034	-.040	-.036
.710	******	.001	******	******	******	-.033	******	-.029	-.033	-.033	-.032	-.039
.724	******	.028	******	-.017	******	-.028	******	-.033	-.038	-.034	-.038	-.037
.738	******	.000	******	-.022	******	******	******	-.030	-.042	-.036	-.041	-.040
.752	******	-.031	******	-.023	******	-.021	******	-.018	-.028	-.035	-.039	******
.766	******	-.080	******	-.051	******	-.023	******	-.009	-.026	-.046	-.052	-.059
.779	******	-.083	******	-.050	******	-.002	******	.151	-.002	-.037	-.046	-.046
.793	******	-.113	******	-.076	******	-.041	******	******	-.042	-.054	-.061	******
.807	******	-.128	******	-.093	******	-.079	******	******	-.074	-.063	-.068	-.063
.821	******	******	******	-.115	******	-.131	******	******	-.108	-.088	-.075	-.077
.835	******	-.174	******	-.153	******	-.158	******	******	-.140	-.105	-.090	-.092
.849	******	-.176	******	******	******	-.179	******	******	-.155	-.115	-.102	-.097
.863	******	-.182	******	-.174	******	-.190	******	******	-.168	-.133	******	-.113
.877	-.150	-.160	******	-.158	******	-.188	******	******	******	******	******	******
.891	-.158	-.163	******	-.159	******	-.174	******	******	-.158	-.126	-.118	-.113
.916	-.105	-.115	-.169	******	-.131	******	-.124	-.132	-.128	-.121	-.120	-.125
.928	-.082	******	-.146	******	-.123	-.120	-.104	-.095	-.116	-.130	-.136	-.140
.940	-.071	******	-.101	******	-.112	-.093	-.081	-.071	-.097	-.119	-.132	-.131
.952	******	******	-.057	******	-.065	-.049	-.047	-.041	-.056	-.079	-.093	-.092
.962	.010	.015	.010	******	.003	.006	.010	.012	.003	-.011	-.028	-.030
.974	.077	.080	******	******	.079	.079	.076	.073	.072	.070	.062	.055
.986	.138	.135	.136	******	.135	.134	.135	.131	.131	.131	.127	.127
.996	.169	.167	******	******	.163	.165	.164	.161	.159	.160	.159	.161

AFTERBODY INTEGRATED PRESSURE DRAG COEFFICIENT .0327

Table A15. Continued

(c) NPR = 3.036

TEST PARAMETERS

CONFIGURATION	AFT TAILS
POINT NUMBER	32
MACH NUMBER	.600
ALPHA, DEG	.015
NPR	3.036
PTO, PSI	14.776
PO, PSI	11.587
QO, PSI	2.917

TAIL SURFACE PRESSURE COEFFICIENTS

	HORIZONTAL TAILS				VERTICAL TAIL	
	UPPER SURFACE Y/B		LOWER SURFACE Y/B		Y/B	
X/C	0.1	0.2	0.1	0.2	0.1	0.2
0.05	******	******	******	******	******	-.097
0.10	.062	-.140	-.115	.066	-1.035	-.098
0.20	.042	-.157	-.150	.036	******	-.150
0.30	.024	******	-.178	.000	-.167	-.178
0.40	.012	-.199	-.199	******	-.192	-.202
0.50	.021	-.194	-.180	.007	-.946	-.185
0.60	.039	-.155	-.157	.024	-.171	-.154
0.70	.079	-.108	-.120	.058	-.738	-.109
0.80	.127	******	-.068	.100	-.076	-.052
0.90	.174	******	-.001	******	-.001	.020

AFTERBODY PRESSURE COEFFICIENTS

	PHI, DEG											
X/L	0	18	36	45	54	72	81	90	108	135	162	180
.584	-.038	-.024	******	-.019	******	******	******	-.019	-.024	-.029	-.016	******
.598	-.039	-.032	******	-.034	******	-.037	******	-.032	-.032	-.032	******	******
.612	-.034	-.033	******	-.034	******	-.031	******	-.029	-.031	-.030	******	******
.626	-.029	-.029	******	-.032	******	-.032	******	-.030	-.034	-.032	******	******
.640	******	-.037	******	-.035	******	-.034	******	-.034	-.030	-.027	******	******
.654	******	-.031	******	-.032	******	-.033	******	-.047	-.038	-.036	******	******
.668	******	******	******	-.027	******	-.032	******	-.033	-.030	-.033	******	******
.682	******	-.022	******	-.033	******	-.037	******	-.035	-.035	-.038	-.038	******
.696	******	-.010	******	-.024	******	-.034	******	-.035	-.041	-.036	-.036	-.032
.710	******	.000	******	******	******	-.029	******	-.030	-.032	-.032	-.032	-.035
.724	******	.024	******	-.016	******	-.027	******	-.032	-.036	-.038	-.036	-.039
.738	******	.007	******	-.024	******	******	******	-.030	-.042	-.037	-.036	-.040
.752	******	-.047	******	-.027	******	-.025	******	-.024	-.025	-.038	-.041	******
.766	******	-.077	******	-.047	******	-.018	******	-.009	-.025	-.046	-.055	-.053
.779	******	-.078	******	-.049	******	.002	******	.155	-.007	-.041	-.047	-.045
.793	******	-.113	******	-.071	******	-.040	******	******	-.040	-.056	-.061	******
.807	******	-.140	******	-.085	******	-.087	******	******	-.082	-.069	-.065	-.065
.821	******	******	******	-.123	******	-.124	******	******	-.109	-.085	-.073	-.074
.835	******	-.168	******	-.147	******	-.160	******	******	-.148	-.107	-.091	-.086
.849	******	-.182	******	******	******	-.178	******	******	-.155	-.122	-.103	-.098
.863	******	-.175	******	-.172	******	-.191	******	******	-.170	-.130	******	-.109
.877	-.154	-.160	******	-.165	******	-.192	******	******	******	******	******	******
.891	-.155	-.167	******	-.162	******	-.178	******	******	-.163	-.128	-.116	-.111
.916	-.106	-.116	-.169	******	-.135	******	-.124	-.134	-.129	-.125	-.118	-.123
.928	-.083	******	-.149	******	-.122	-.119	-.105	-.093	-.116	-.132	-.136	-.137
.940	-.071	******	-.097	******	-.108	-.094	-.087	-.075	-.100	-.124	-.129	-.134
.952	******	******	-.058	******	-.066	-.054	-.050	-.040	-.053	-.081	-.090	-.090
.962	.012	.013	.011	******	.000	.006	.011	.011	.002	-.014	-.024	-.024
.974	.077	.079	******	******	.093	.075	.077	.077	.072	.069	.064	.058
.986	.137	.141	.144	******	.140	.134	.130	.130	.132	.130	.130	.127
.996	.170	.169	******	******	.166	.163	.165	.166	.164	.161	.167	.163

AFTERBODY INTEGRATED PRESSURE DRAG COEFFICIENT .0328

Table A15. Concluded

(d) NPR = 4.989

TEST PARAMETERS

CONFIGURATION	AFT TAILS
POINT NUMBER	33
MACH NUMBER	.601
ALPHA, DEG	.017
NPR	4.989
PTO, PSI	14.776
PO, PSI	11.578
QO, PSI	2.925

TAIL SURFACE PRESSURE COEFFICIENTS

	HORIZONTAL TAILS				VERTICAL TAIL	
	UPPER SURFACE Y/B		LOWER SURFACE Y/B		Y/B	
X/C	0.1	0.2	0.1	0.2	0.1	0.2
0.05	******	******	******	******	******	-.107
0.10	-.129	-.135	-.120	-.144	-.958	-.112
0.20	-.165	-.150	-.161	-.179	******	-.150
0.30	-.202	******	-.174	-.221	-.166	-.180
0.40	-.200	-.206	-.199	******	-.192	-.203
0.50	-.189	-.192	-.181	-.217	-.795	-.180
0.60	-.163	-.155	-.159	-.201	-.169	-.151
0.70	-.113	-.108	-.123	-.154	-.605	-.107
0.80	-.062	******	-.064	-.094	-.073	-.045
0.90	.000	******	.001	******	.001	.021

AFTERBODY PRESSURE COEFFICIENTS

	PHI, DEG											
X/L	0	18	36	45	54	72	81	90	108	135	162	180
.584	-.037	-.025	******	-.012	******	******	******	-.021	-.025	-.027	-.017	******
.598	-.039	-.032	******	-.032	******	-.035	******	-.033	-.031	-.031	******	******
.612	-.033	-.032	******	-.031	******	-.030	******	-.029	-.030	-.032	******	******
.626	-.028	-.028	******	-.033	******	-.031	******	-.029	-.026	-.032	******	******
.640	******	-.028	******	-.034	******	-.034	******	-.034	-.033	-.031	******	******
.654	******	-.033	******	-.036	******	-.030	******	-.045	-.038	-.039	******	******
.668	******	******	******	-.030	******	-.034	******	-.033	-.027	-.032	******	******
.682	******	-.022	******	-.029	******	-.034	******	-.036	-.038	-.038	-.034	******
.696	******	-.011	******	-.023	******	-.028	******	-.034	-.035	-.038	-.034	-.033
.710	******	.007	******	******	******	-.027	******	-.031	-.031	-.031	-.035	-.035
.724	******	.030	******	-.018	******	-.031	******	-.027	-.027	-.036	-.037	-.039
.738	******	.021	******	-.022	******	******	******	-.029	-.036	-.036	-.039	-.042
.752	******	-.040	******	-.029	******	-.023	******	-.021	-.029	-.036	-.039	******
.766	******	-.076	******	-.049	******	-.019	******	-.013	-.030	-.046	-.058	-.055
.779	******	-.083	******	-.050	******	.004	******	.153	-.003	-.042	-.045	-.047
.793	******	-.114	******	-.072	******	-.024	******	******	-.045	-.056	-.058	******
.807	******	-.134	******	-.092	******	-.078	******	******	-.079	-.075	-.064	-.066
.821	******	******	******	-.115	******	-.107	******	******	-.095	-.087	-.079	-.077
.835	******	-.175	******	-.133	******	-.153	******	******	-.145	-.105	-.088	-.088
.849	******	-.176	******	******	******	-.183	******	******	-.143	-.125	-.098	-.100
.863	******	-.174	******	-.166	******	-.186	******	******	-.166	-.130	******	-.106
.877	-.150	-.156	******	-.163	******	-.189	******	******	******	******	******	******
.891	-.151	-.157	******	-.163	******	-.174	******	******	-.161	-.130	-.115	-.112
.916	-.105	-.112	-.168	******	-.124	******	-.124	-.131	-.125	-.120	-.112	-.123
.928	-.077	******	-.141	******	-.115	-.113	-.103	-.091	-.111	-.129	-.134	-.131
.940	-.065	******	-.088	******	-.096	-.087	-.080	-.068	-.091	-.115	-.121	-.126
.952	******	******	-.050	******	-.049	-.043	-.041	-.030	-.046	-.067	-.082	-.084
.962	.023	.027	.023	******	.020	.022	.022	.023	.017	.006	-.006	-.012
.974	.095	.099	******	******	.101	.094	.091	.091	.091	.085	.080	.079
.986	.156	.162	.164	******	.166	.153	.154	.154	.152	.154	.152	.150
.996	.192	.197	******	******	.192	.187	.191	.187	.187	.189	.188	.190

AFTERBODY INTEGRATED PRESSURE DRAG COEFFICIENT .0247

Table A16. Effect of Angle of Attack on Pressure Distributions for Aft Tails Configuration at $M = 0.60$ and NPR = 1.050

(a) $\alpha = -2.981°$

TEST PARAMETERS

CONFIGURATION	AFT TAILS
POINT NUMBER	35
MACH NUMBER	.600
ALPHA, DEG	-2.981
NPR	1.050
PTO, PSI	14.777
PO, PSI	11.589
QO, PSI	2.916

TAIL SURFACE PRESSURE COEFFICIENTS

	HORIZONTAL TAILS				VERTICAL TAIL	
	UPPER SURFACE Y/B		LOWER SURFACE Y/B		Y/B	
X/C	0.1	0.2	0.1	0.2	0.1	0.2
0.05	******	******	******	******	******	-.136
0.10	-.158	.032	-.312	-.152	-.808	-.114
0.20	-.174	-.031	-.281	-.194	******	-.141
0.30	-.194	******	-.278	-.232	-.131	-.161
0.40	-.219	-.127	-.285	******	-.158	-.175
0.50	-.194	-.122	-.250	-.225	-.578	-.157
0.60	-.170	-.104	-.217	-.208	-.148	-.139
0.70	-.123	-.061	-.163	-.155	-.420	-.096
0.80	-.068	******	-.094	-.097	-.067	-.039
0.90	-.005	******	-.024	******	-.003	.022

AFTERBODY PRESSURE COEFFICIENTS

	PHI, DEG											
X/L	0	18	36	45	54	72	81	90	108	135	162	180
.584	-.034	-.027	******	-.017	******	******	******	-.032	-.034	-.033	-.016	******
.598	-.038	-.031	******	-.044	******	-.048	******	-.042	-.035	-.039	******	******
.612	-.032	-.027	******	-.040	******	-.039	******	-.037	-.039	-.039	******	******
.626	-.025	-.022	******	-.038	******	-.042	******	-.039	-.038	-.045	******	******
.640	******	-.029	******	-.046	******	-.047	******	-.041	-.039	-.048	******	******
.654	******	-.028	******	-.049	******	-.039	******	-.051	-.042	-.053	******	******
.668	******	******	******	-.043	******	-.042	******	-.043	-.031	-.043	******	******
.682	******	-.009	******	-.039	******	-.042	******	-.051	-.034	-.047	-.045	******
.696	******	.009	******	-.030	******	-.044	******	-.048	-.037	-.048	-.039	-.037
.710	******	.021	******	******	******	-.041	******	-.042	-.037	-.046	-.038	-.040
.724	******	.049	******	-.026	******	-.035	******	-.043	-.044	-.051	-.042	-.050
.738	******	.023	******	-.031	******	******	******	-.050	-.057	-.060	-.051	-.050
.752	******	-.036	******	-.027	******	-.022	******	-.042	-.060	-.058	-.054	******
.766	******	-.067	******	-.040	******	-.005	******	-.028	-.071	-.082	-.075	-.073
.779	******	-.067	******	-.025	******	.061	******	.113	-.078	-.082	-.070	-.068
.793	******	-.097	******	-.040	******	.067	******	******	-.143	-.103	-.095	******
.807	******	-.105	******	-.048	******	.034	******	******	-.189	-.123	-.101	-.099
.821	******	******	******	-.051	******	-.029	******	******	-.205	-.148	-.113	-.108
.835	******	-.142	******	-.087	******	-.085	******	******	-.231	-.157	-.124	-.123
.849	******	-.132	******	******	******	-.126	******	******	-.228	-.170	-.143	-.129
.863	******	-.130	******	-.137	******	-.146	******	******	-.231	-.178	******	-.138
.877	-.121	-.113	******	-.133	******	-.152	******	******	******	******	******	******
.891	-.133	-.129	******	-.137	******	-.154	******	******	-.202	-.162	-.137	-.135
.916	-.098	-.109	-.174	******	-.108	******	-.134	-.144	-.147	-.144	-.134	-.140
.928	-.086	******	-.150	******	-.114	-.120	-.124	-.112	-.130	-.147	-.144	-.146
.940	-.087	******	-.103	******	-.118	-.112	-.106	-.089	-.113	-.133	-.134	-.145
.952	******	******	-.075	******	-.089	-.089	-.076	-.060	-.062	-.095	-.105	-.103
.962	-.023	-.023	-.025	******	-.014	-.028	-.025	-.006	-.011	-.028	-.042	-.045
.974	.035	.050	******	******	.054	.040	.033	.040	.060	.039	.042	.033
.986	.093	.098	.108	******	.107	.091	.093	.085	.088	.088	.086	.087
.996	.116	.116	******	******	.111	.089	.110	.112	.112	.103	.104	.112

AFTERBODY INTEGRATED PRESSURE DRAG COEFFICIENT .0472

Table A16. Continued

(b) $\alpha = 0.022°$

TEST PARAMETERS

CONFIGURATION	AFT TAILS
POINT NUMBER	36
MACH NUMBER	.598
ALPHA, DEG	.022
NPR	1.056
PTO, PSI	14.778
PO, PSI	11.602
QO, PSI	2.906

TAIL SURFACE PRESSURE COEFFICIENTS

	HORIZONTAL TAILS				VERTICAL TAIL	
	UPPER SURFACE Y/B		LOWER SURFACE Y/B		Y/B	
X/C	0.1	0.2	0.1	0.2	0.1	0.2
0.05	******	******	******	******	******	-.123
0.10	-.158	-.129	-.109	-.146	-.731	-.112
0.20	-.191	-.174	-.157	-.202	******	-.155
0.30	-.216	******	-.178	-.236	-.167	-.186
0.40	-.222	-.218	-.194	******	-.200	-.210
0.50	-.209	-.199	-.182	-.230	-.501	-.187
0.60	-.180	-.167	-.162	-.212	-.172	-.155
0.70	-.131	-.116	-.127	-.165	-.353	-.117
0.80	-.075	******	-.074	-.100	-.082	-.052
0.90	-.011	******	-.011	******	-.013	.020

AFTERBODY PRESSURE COEFFICIENTS

	PHI, DEG											
X/L	0	18	36	45	54	72	81	90	108	135	162	180
.584	-.037	-.029	******	-.018	******	******	******	-.025	-.023	-.028	-.016	******
.598	-.039	-.032	******	-.036	******	-.037	******	-.034	-.032	-.030	******	******
.612	-.036	-.033	******	-.032	******	-.030	******	-.030	-.030	-.026	******	******
.626	-.032	-.031	******	-.029	******	-.029	******	-.031	-.035	-.029	******	******
.640	******	-.039	******	-.033	******	-.037	******	-.035	-.035	-.030	******	******
.654	******	-.037	******	-.036	******	-.031	******	-.043	-.039	-.039	******	******
.668	******	******	******	-.029	******	-.029	******	-.032	-.033	-.030	******	******
.682	******	-.026	******	-.030	******	-.033	******	-.038	-.039	-.039	-.035	******
.696	******	-.014	******	-.025	******	-.030	******	-.037	-.040	-.032	-.032	-.036
.710	******	.000	******	******	******	-.025	******	-.033	-.036	-.036	-.033	-.036
.724	******	.026	******	-.021	******	-.030	******	-.030	-.039	-.036	-.041	-.041
.738	******	-.002	******	-.025	******	******	******	-.032	-.039	-.042	-.043	-.042
.752	******	-.047	******	-.030	******	-.024	******	-.022	-.029	-.036	-.038	******
.766	******	-.075	******	-.053	******	-.024	******	-.007	-.029	-.053	-.054	-.060
.779	******	-.091	******	-.056	******	-.002	******	.155	-.004	-.043	-.045	-.050
.793	******	-.116	******	-.082	******	-.043	******	******	-.043	-.053	-.059	******
.807	******	-.137	******	-.101	******	-.085	******	******	-.068	-.064	-.061	-.067
.821	******	******	******	-.123	******	-.125	******	******	-.110	-.089	-.079	-.079
.835	******	-.182	******	-.150	******	-.160	******	******	-.138	-.104	-.090	-.094
.849	******	-.182	******	******	******	-.188	******	******	-.159	-.117	-.102	-.105
.863	******	-.185	******	-.175	******	-.197	******	******	-.170	-.135	******	-.110
.877	-.153	-.166	******	-.165	******	-.195	******	******	******	******	******	******
.891	-.163	-.170	******	-.163	******	-.183	******	******	-.166	-.133	-.125	-.119
.916	-.113	-.124	-.183	******	-.141	******	-.134	-.138	-.135	-.128	-.120	-.134
.928	-.093	******	-.159	******	-.138	-.126	-.117	-.107	-.125	-.140	-.149	-.147
.940	-.087	******	-.113	******	-.125	-.107	-.100	-.088	-.111	-.138	-.150	-.149
.952	******	******	-.080	******	-.081	-.072	-.066	-.064	-.079	-.100	-.118	-.115
.962	-.012	-.006	-.015	******	-.021	-.021	-.012	-.010	-.025	-.032	-.046	-.054
.974	.049	.057	******	******	.046	.045	.047	.043	.041	.039	.024	.022
.986	.103	.114	.109	******	.105	.104	.096	.093	.094	.089	.081	.080
.996	.134	.129	******	******	.134	.126	.129	.113	.109	.107	.101	.100

AFTERBODY INTEGRATED PRESSURE DRAG COEFFICIENT .0467

Table A16. Continued

(c) $\alpha = 3.017°$

TEST PARAMETERS

CONFIGURATION	AFT TAILS
POINT NUMBER	37
MACH NUMBER	.598
ALPHA, DEG	3.017
NPR	1.048
PTJ, PSI	14.778
PO, PSI	11.602
QO, PSI	2.906

TAIL SURFACE PRESSURE COEFFICIENTS

	HORIZONTAL TAILS				VERTICAL TAIL	
	UPPER SURFACE Y/B		LOWER SURFACE Y/B		Y/B	
X/C	0.1	0.2	0.1	0.2	0.1	0.2
0.05	******	******	******	******	******	-.128
0.10	-.146	-.328	.043	-.159	-.655	-.125
0.20	-.197	-.301	-.035	-.208	******	-.168
0.30	-.211	******	-.082	-.238	-.192	-.206
0.40	-.233	-.298	-.120	******	-.227	-.223
0.50	-.214	-.255	-.120	-.243	-.440	-.208
0.60	-.186	-.208	-.123	-.220	-.203	-.181
0.70	-.143	-.149	-.098	-.176	-.298	-.126
0.80	-.081	******	-.053	-.112	-.092	-.065
0.90	-.021	******	.002	******	-.013	.007

AFTERBODY PRESSURE COEFFICIENTS

	PHI, DEG											
X/L	0	18	36	45	54	72	81	90	108	135	162	180
.584	-.034	-.023	******	-.019	******	******	******	-.028	-.031	-.023	-.007	******
.598	-.039	-.036	******	-.033	******	-.037	******	-.040	-.039	-.027	******	******
.612	-.036	-.035	******	-.037	******	-.037	******	-.039	-.031	-.022	******	******
.626	-.030	-.029	******	-.032	******	-.039	******	-.032	-.033	-.026	******	******
.640	******	-.035	******	-.037	******	-.036	******	-.034	-.040	-.033	******	******
.654	******	-.040	******	-.041	******	-.035	******	-.049	-.045	-.037	******	******
.668	******	******	******	-.034	******	-.038	******	-.039	-.036	-.028	******	******
.682	******	-.028	******	-.033	******	-.039	******	-.043	-.044	-.034	-.036	******
.696	******	-.020	******	-.028	******	-.042	******	-.039	-.039	-.033	-.034	-.030
.710	******	-.003	******	******	******	-.040	******	-.036	-.037	-.031	-.026	-.033
.724	******	.014	******	-.028	******	-.034	******	-.034	-.039	-.030	-.026	-.029
.738	******	-.009	******	-.032	******	******	******	-.031	-.038	-.030	-.027	-.025
.752	******	-.048	******	-.046	******	-.037	******	-.029	-.027	-.023	-.026	******
.766	******	-.085	******	-.073	******	-.044	******	-.010	-.015	-.030	-.042	-.038
.779	******	-.107	******	-.077	******	-.059	******	.153	.042	-.004	-.022	-.028
.793	******	-.138	******	-.119	******	-.132	******	******	.052	-.012	-.035	******
.807	******	-.163	******	-.149	******	-.192	******	******	.025	-.019	-.037	-.036
.821	******	******	******	-.178	******	-.223	******	******	-.020	-.029	-.042	-.040
.835	******	-.217	******	-.205	******	-.239	******	******	-.062	-.053	-.056	-.056
.849	******	-.221	******	******	******	-.256	******	******	-.089	-.075	-.072	-.072
.863	******	-.214	******	-.216	******	-.256	******	******	-.109	-.086	******	-.085
.877	-.183	-.194	******	-.209	******	-.239	******	******	******	******	******	******
.891	-.179	-.187	******	-.190	******	-.219	******	******	-.121	-.106	-.098	-.090
.916	-.129	-.137	-.191	******	-.153	******	-.145	-.142	-.122	-.117	-.117	-.125
.928	-.100	******	-.162	******	-.143	-.130	-.119	-.112	-.120	-.140	-.145	-.148
.940	-.085	******	-.110	******	-.123	-.101	-.093	-.089	-.113	-.143	-.151	-.151
.952	******	******	-.078	******	-.070	-.060	-.057	-.060	-.073	-.113	-.127	-.117
.962	-.013	-.011	-.018	******	-.014	-.008	.000	.002	-.018	-.042	-.067	-.069
.974	.048	.051	******	******	.050	.058	.056	.056	.039	.029	.022	.009
.986	.098	.094	.096	******	.093	.099	.099	.091	.089	.079	.081	.078
.996	.124	.105	******	******	.136	.119	.111	.109	.112	.092	.099	.102

AFTERBODY INTEGRATED PRESSURE DRAG COEFFICIENT .0475

Table A16. Continued

(d) $\alpha = 5.972°$

TEST PARAMETERS

CONFIGURATION	AFT TAILS
POINT NUMBER	38
MACH NUMBER	.601
ALPHA, DEG	5.972
NPR	1.036
PTO, PSI	14.778
PO, PSI	11.576
QO, PSI	2.928

TAIL SURFACE PRESSURE COEFFICIENTS

	HORIZONTAL TAILS				VERTICAL TAIL	
	UPPER SURFACE Y/B		LOWER SURFACE Y/B		Y/B	
X/C	0.1	0.2	0.1	0.2	0.1	0.2
0.05	******	******	******	******	******	-.151
0.10	-.351	-.489	.189	.021	-.578	-.142
0.20	-.319	-.435	.082	-.067	******	-.188
0.30	-.296	******	.015	-.135	-.223	-.229
0.40	-.303	-.365	-.040	******	-.262	-.253
0.50	-.264	-.307	-.061	-.166	-.389	-.229
0.60	-.219	-.239	-.079	-.164	-.229	-.204
0.70	-.161	-.163	-.064	-.131	-.251	-.153
0.80	-.091	******	-.032	-.085	-.113	-.086
0.90	-.025	******	.012	******	-.025	-.002

AFTERBODY PRESSURE COEFFICIENTS

	PHI, DEG.											
X/L	0	18	36	45	54	72	81	90	108	135	162	180
.584	-.029	-.031	******	-.028	******	******	******	-.048	-.043	-.022	-.002	******
.598	-.036	-.033	******	-.047	******	-.059	******	-.055	-.059	-.030	******	******
.612	-.031	-.039	******	-.042	******	-.044	******	-.055	-.050	-.027	******	******
.626	-.031	-.034	******	-.041	******	-.049	******	-.054	-.045	-.032	******	******
.640	******	-.033	******	-.046	******	-.058	******	-.056	-.051	-.040	******	******
.654	******	-.036	******	-.053	******	-.060	******	-.066	-.061	-.043	******	******
.668	******	******	******	-.042	******	-.057	******	-.058	-.053	-.030	******	******
.682	******	-.032	******	-.040	******	-.058	******	-.064	-.058	-.039	-.022	******
.696	******	-.024	******	-.037	******	-.060	******	-.062	-.055	-.042	-.021	-.015
.710	******	-.015	******	******	******	-.052	******	-.061	-.052	-.032	-.014	-.018
.724	******	-.002	******	-.037	******	-.053	******	-.055	-.055	-.032	-.016	-.018
.738	******	-.019	******	-.044	******	******	******	-.059	-.051	-.027	-.013	-.014
.752	******	-.061	******	-.059	******	-.060	******	-.047	-.040	-.019	-.014	******
.766	******	-.106	******	-.103	******	-.080	******	-.035	-.015	-.016	-.022	-.018
.779	******	-.130	******	-.122	******	-.131	******	.144	.079	.016	.007	.001
.793	******	-.178	******	-.163	******	-.274	******	******	.138	.025	.002	******
.807	******	-.208	******	-.207	******	-.312	******	******	.118	.033	.003	-.008
.821	******	******	******	-.242	******	-.331	******	******	.069	.020	-.002	-.013
.835	******	-.260	******	-.268	******	-.334	******	******	.009	.000	-.013	-.021
.849	******	-.268	******	******	******	-.341	******	******	-.025	-.020	-.027	-.034
.863	******	-.259	******	-.276	******	-.316	******	******	-.062	-.045	******	-.048
.877	-.217	-.225	******	-.249	******	-.287	******	******	******	******	******	******
.891	-.209	-.228	******	-.229	******	-.253	******	******	-.093	-.074	-.071	-.069
.916	-.141	-.160	-.212	******	-.181	******	-.162	-.158	-.109	-.108	-.097	-.105
.928	-.112	******	-.186	******	-.158	-.138	-.122	-.116	-.116	-.132	-.137	-.135
.940	-.098	******	-.128	******	-.133	-.103	-.089	-.089	-.119	-.142	-.154	-.152
.952	******	******	-.090	******	-.080	-.059	-.050	-.062	-.098	-.119	-.137	-.128
.962	-.035	-.042	-.032	******	-.025	-.012	-.012	-.018	-.047	-.065	-.077	-.076
.974	.025	.008	******	******	.029	.037	.037	.024	.021	.008	.003	-.004
.986	.074	.060	.069	******	.060	.068	.070	.061	.063	.060	.056	.052
.996	.069	.065	******	******	.069	.072	.074	.065	.063	.068	.067	.068

AFTERBODY INTEGRATED PRESSURE DRAG COEFFICIENT .0587

Table A16. Concluded

(e) $\alpha = 9.013°$

TEST PARAMETERS

CONFIGURATION	AFT TAILS
POINT NUMBER	39
MACH NUMBER	.597
ALPHA, DEG	9.013
NPR	1.046
PTO, PSI	14.778
PO, PSI	11.612
QO, PSI	2.899

TAIL SURFACE PRESSURE COEFFICIENTS

	HORIZONTAL TAILS				VERTICAL TAIL	
	UPPER SURFACE Y/B		LOWER SURFACE Y/B		Y/B	
X/C	0.1	0.2	0.1	0.2	0.1	0.2
0.05	******	******	******	******	******	-.133
0.10	-.175	-1.711	.320	-.177	-.540	-.137
0.20	-.196	-.376	.195	-.211	******	-.205
0.30	-.212	******	.101	-.244	-.255	-.250
0.40	-.239	-.376	.031	******	-.305	-.277
0.50	-.218	-.334	.002	-.255	-.376	-.262
0.60	-.194	-.272	-.033	-.225	-.258	-.229
0.70	-.145	-.201	-.035	-.183	-.237	-.170
0.80	-.091	******	-.016	-.118	-.132	-.094
0.90	-.030	******	.022	******	-.044	-.011

AFTERBODY PRESSURE COEFFICIENTS

	PHI, DEG.											
X/L	0	18	36	45	54	72	81	90	108	135	162	180
.584	-.024	-.032	******	-.042	******	******	******	-.086	-.077	-.030	.014	******
.598	-.032	-.047	******	-.052	******	-.072	******	-.091	-.084	-.039	******	******
.612	-.023	-.048	******	-.052	******	-.076	******	-.086	-.075	-.036	******	******
.626	-.019	-.040	******	-.052	******	-.081	******	-.087	-.081	-.039	******	******
.640	******	-.052	******	-.055	******	-.081	******	-.095	-.083	-.042	******	******
.654	******	-.054	******	-.055	******	-.077	******	-.109	-.093	-.050	******	******
.668	******	******	******	-.052	******	-.081	******	-.093	-.084	-.040	******	******
.682	******	-.054	******	-.050	******	-.081	******	-.099	-.096	-.044	-.006	******
.696	******	-.058	******	-.044	******	-.082	******	-.100	-.078	-.047	-.004	.007
.710	******	-.034	******	******	******	-.082	******	-.091	-.080	-.036	.002	.004
.724	******	-.021	******	-.047	******	-.081	******	-.092	-.081	-.035	.001	.011
.738	******	-.050	******	-.058	******	******	******	-.093	-.078	-.029	.004	.010
.752	******	-.103	******	-.081	******	-.093	******	-.083	-.054	-.014	.020	******
.766	******	-.149	******	-.123	******	-.129	******	-.069	-.024	-.008	.009	.006
.779	******	-.172	******	-.161	******	-.266	******	.084	.104	.039	.041	.037
.793	******	-.227	******	-.235	******	-.420	******	******	.225	.061	.038	******
.807	******	-.264	******	-.281	******	-.465	******	******	.207	.078	.045	.039
.821	******	******	******	-.320	******	-.442	******	******	.150	.074	.038	.029
.835	******	-.320	******	-.341	******	-.419	******	******	.073	.055	.030	.012
.849	******	-.315	******	******	******	-.395	******	******	.019	.028	.014	.009
.863	******	-.310	******	-.330	******	-.364	******	******	-.025	.003	******	-.012
.877	-.248	-.277	******	-.297	******	-.331	******	******	******	******	******	******
.891	-.240	-.261	******	-.275	******	-.285	******	******	-.067	-.040	-.044	-.041
.916	-.170	-.196	-.292	******	-.205	******	-.179	-.187	-.105	-.081	-.078	-.083
.928	-.143	******	-.256	******	-.191	-.161	-.140	-.138	-.119	-.120	-.127	-.119
.940	-.141	******	-.179	******	-.162	-.115	-.097	-.101	-.132	-.134	-.151	-.136
.952	******	******	-.146	******	-.105	-.062	-.050	-.069	-.111	-.116	-.143	-.128
.962	-.084	-.098	-.066	******	-.032	-.010	-.007	-.016	-.052	-.058	-.084	-.077
.974	-.012	-.023	******	******	.035	.042	.041	.033	.015	.014	.001	-.009
.986	.060	.049	.075	******	.081	.087	.086	.072	.070	.073	.059	.058
.996	.088	.061	******	******	.101	.097	.101	.085	.082	.089	.081	.079

AFTERBODY INTEGRATED PRESSURE DRAG COEFFICIENT .0651

Table A17. Effect of Nozzle Pressure Ratio on Pressure Distributions for Forward Tails Configuration at $M = 1.20$ and $\alpha = 0.003°$

(a) NPR = 1.056

TEST PARAMETERS

CONFIGURATION	FWD TAILS
POINT NUMBER	3
MACH NUMBER	1.203
ALPHA, DEG	.003
NPR	1.056
PTO, PSI	14.683
PO, PSI	6.028
QO, PSI	6.111

TAIL SURFACE PRESSURE COEFFICIENTS

	HORIZONTAL TAILS				VERTICAL TAIL	
	UPPER SURFACE Y/B		LOWER SURFACE Y/B		Y/B	
X/C	0.1	0.2	0.1	0.2	0.1	0.2
0.05	.034	******	.021	******	.026	.033
0.10	.045	.104	-.001	.068	******	******
0.20	.012	.056	-.014	.020	-.024	-.038
0.30	******	.008	******	-.025	-.048	-.051
0.40	-.073	-.044	-.101	-.080	-.043	-.052
0.50	-.114	-.098	-.145	-.137	-.041	-.067
0.60	-.123	-.135	-.160	-.158	-.094	-.099
0.70	-.122	-.156	-.133	-.163	-.115	******
0.80	-.125	-.168	-.136	-.171	-.138	-.126
0.90	-.093	******	-.111	******	-.137	-.119

AFTERBODY PRESSURE COEFFICIENTS

	PHI, DEG											
X/L	0	18	36	45	54	72	81	90	108	135	162	180
.584	-.031	-.027	******	******	******	******	******	-.024	-.018	-.009	.008	******
.598	-.039	-.030	******	-.029	******	-.027	******	-.026	-.017	-.009	******	******
.612	-.036	-.032	******	-.029	******	-.025	******	-.024	-.013	-.008	******	******
.626	-.017	-.023	******	-.029	******	-.023	******	-.023	-.012	-.008	******	******
.640	******	.074	******	-.004	******	-.019	******	-.016	-.010	-.001	******	******
.654	******	.073	******	.025	******	-.008	******	-.021	-.022	-.018	******	******
.668	******	******	******	.048	******	.010	******	-.004	-.011	-.011	******	******
.682	******	.023	******	.036	******	.046	******	.074	.021	.000	-.001	******
.696	******	.003	******	.047	******	.120	******	******	.094	.033	.005	.002
.710	******	-.001	******	******	******	.111	******	******	.085	.058	.019	.010
.724	******	.002	******	.058	******	.076	******	******	.051	.055	.033	.024
.738	******	-.004	******	.033	******	******	******	******	.014	.033	.035	.033
.752	******	-.005	******	.016	******	.011	******	******	-.006	.029	.042	******
.766	******	-.050	******	-.027	******	-.036	******	******	-.046	-.009	.008	.009
.779	******	-.061	******	-.046	******	-.071	******	******	-.076	-.006	.011	.012
.793	******	-.089	******	-.084	******	-.100	******	******	-.078	-.039	-.016	******
.807	******	-.115	******	-.110	******	-.133	******	******	-.099	-.061	-.030	-.032
.821	******	******	******	-.135	******	-.147	******	******	-.106	-.076	-.052	-.050
.835	******	-.156	******	-.161	******	-.170	******	******	-.118	-.095	-.078	-.077
.849	******	-.166	******	-.176	******	-.178	******	******	-.117	-.117	-.101	-.100
.863	******	-.159	******	-.192	******	-.167	******	******	-.104	-.128	******	-.129
.877	-.128	-.140	******	-.166	******	-.122	******	******	******	******	******	******
.891	-.136	-.142	******	-.136	******	-.128	******	******	-.119	-.134	-.159	-.155
.916	-.136	-.130	-.175	******	-.125	******	-.147	-.154	-.160	-.157	-.157	******
.928	-.159	******	-.196	******	-.163	******	-.173	-.178	-.189	-.200	-.192	-.203
.940	-.204	******	-.205	******	-.221	******	-.229	-.233	-.242	-.252	-.260	-.257
.952	******	******	-.285	******	-.293	-.303	-.312	-.313	-.321	-.328	-.332	******
.962	-.311	-.309	-.318	******	-.322	-.318	-.321	-.307	-.248	-.189	-.217	-.275
.974	-.137	-.114	******	******	-.084	-.073	-.065	-.057	-.050	-.044	-.050	-.054
.986	-.018	-.019	-.020	******	-.022	-.031	-.031	-.028	-.025	-.021	-.023	-.025
.996	.005	.005	******	******	-.001	-.006	-.012	-.009	-.010	-.007	-.008	-.008

AFTERBODY INTEGRATED PRESSURE DRAG COEFFICIENT .1092

Table A17. Continued

(b) NPR = 1.990

TEST PARAMETERS

CONFIGURATION	FWD TAILS
POINT NUMBER	4
MACH NUMBER	1.201
ALPHA, DEG	.005
NPR	1.990
PTO, PSI	14.680
PO, PSI	6.046
QO, PSI	6.104

TAIL SURFACE PRESSURE COEFFICIENTS

	HORIZONTAL TAILS				VERTICAL TAIL	
	UPPER SURFACE Y/B		LOWER SURFACE Y/B		Y/B	
X/C	0.1	0.2	0.1	0.2	0.1	0.2
0.05	.022	******	.021	******	.028	.020
0.10	.044	.102	.001	.063	******	******
0.20	.012	.047	-.027	.015	-.022	-.044
0.30	******	.006	******	-.031	-.043	-.056
0.40	-.071	-.046	-.106	-.086	-.047	-.054
0.50	-.116	-.102	-.146	-.138	-.040	-.069
0.60	-.127	-.137	-.166	-.165	-.088	-.100
0.70	-.124	-.159	-.137	-.170	-.113	******
0.80	-.118	-.169	-.140	-.176	-.137	-.131
0.90	-.100	******	-.123	******	-.134	-.122

AFTERBODY PRESSURE COEFFICIENTS

	PHI, DEG											
X/L	0	18	36	45	54	72	81	90	108	135	162	180
.584	-.035	-.029	******	******	******	******	******	-.024	-.021	-.011	.007	******
.598	-.039	-.034	******	-.030	******	-.028	******	-.026	-.023	-.008	******	******
.612	-.036	-.036	******	-.029	******	-.023	******	-.019	-.016	-.011	******	******
.626	-.019	-.026	******	-.032	******	-.025	******	-.019	-.018	-.009	******	******
.640	******	.066	******	-.005	******	-.015	******	-.012	-.012	-.004	******	******
.654	******	.070	******	.021	******	-.010	******	-.024	-.026	-.019	******	******
.668	******	******	******	.046	******	.008	******	-.006	-.015	-.006	******	******
.682	******	.017	******	.037	******	.042	******	.077	.021	-.001	.000	******
.696	******	.001	******	.043	******	.127	******	******	.095	.028	.006	.003
.710	******	.002	******	******	******	.115	******	******	.080	.057	.023	.011
.724	******	.007	******	.058	******	.075	******	******	.045	.051	.032	.024
.738	******	-.003	******	.030	******	******	******	******	.015	.032	.038	.037
.752	******	-.007	******	.018	******	.006	******	******	-.008	.023	.041	******
.766	******	-.049	******	-.030	******	-.045	******	******	-.049	-.011	.003	.012
.779	******	-.066	******	-.048	******	-.077	******	******	-.067	-.012	.011	.013
.793	******	-.094	******	-.082	******	-.103	******	******	-.085	-.039	-.018	******
.807	******	-.119	******	-.112	******	-.128	******	******	-.103	-.063	-.033	-.030
.821	******	******	******	-.129	******	-.146	******	******	-.106	-.075	-.050	-.048
.835	******	-.157	******	-.161	******	-.169	******	******	-.123	-.096	-.080	-.074
.849	******	-.169	******	-.183	******	-.182	******	******	-.119	-.119	-.102	-.101
.863	******	-.162	******	-.200	******	-.167	******	******	-.106	-.130	******	-.124
.877	-.132	-.148	******	-.170	******	-.127	******	******	******	******	******	******
.891	-.142	-.146	******	-.136	******	-.128	******	******	-.124	-.136	-.157	-.153
.916	-.137	-.134	-.178	******	-.129	******	-.150	-.156	-.162	-.158	-.159	******
.928	-.158	******	-.197	******	-.165	******	-.174	-.180	-.190	-.201	-.196	-.204
.940	-.207	******	-.210	******	-.224	******	-.231	-.235	-.246	-.253	-.260	-.257
.952	******	******	-.288	******	-.297	-.306	-.313	-.315	-.321	-.328	-.333	******
.962	-.303	-.302	-.303	******	-.283	-.271	-.292	-.296	-.242	-.176	-.176	-.225
.974	-.062	-.067	******	******	-.047	-.043	-.046	-.050	-.050	-.045	-.041	-.045
.986	.000	-.006	-.009	******	-.013	-.013	-.004	-.017	-.021	-.021	-.019	-.018
.996	.019	.014	******	******	.005	.004	.004	-.003	.001	-.002	-.001	.001

AFTERBODY INTEGRATED PRESSURE DRAG COEFFICIENT .1055

Table A17. Continued

(c) NPR = 3.949

TEST PARAMETERS

CONFIGURATION	FWD TAILS
POINT NUMBER	5
MACH NUMBER	1.199
ALPHA, DEG	.004
NPR	3.949
PTO, PSI	14.682
PO, PSI	6.064
QO, PSI	6.100

TAIL SURFACE PRESSURE COEFFICIENTS

	HORIZONTAL TAILS				VERTICAL TAIL	
	UPPER SURFACE Y/B		LOWER SURFACE Y/B		Y/B	
X/C	0.1	0.2	0.1	0.2	0.1	0.2
0.05	.024	******	.016	******	.028	.034
0.10	.040	.097	-.005	.056	******	******
0.20	.005	.048	-.027	.018	-.024	-.038
0.30	******	-.003	******	-.031	-.041	-.057
0.40	-.075	-.049	-.109	-.083	-.049	-.052
0.50	-.117	-.104	-.156	-.140	-.043	-.069
0.60	-.127	-.138	-.173	-.162	-.091	-.103
0.70	-.129	-.158	-.146	-.170	-.114	******
0.80	-.126	-.174	-.143	-.176	-.134	-.131
0.90	-.102	******	-.128	******	-.137	-.122

AFTERBODY PRESSURE COEFFICIENTS

	PHI, DEG.											
X/L	0	18	36	45	54	72	81	90	108	135	162	180
.584	-.033	-.031	******	******	******	******	******	-.025	-.026	-.016	.004	******
.598	-.042	-.038	******	-.033	******	-.031	******	-.025	-.025	-.013	******	******
.612	-.039	-.038	******	-.033	******	-.027	******	-.021	-.018	-.014	******	******
.626	-.019	-.030	******	-.035	******	-.028	******	-.019	-.019	-.013	******	******
.640	******	.064	******	-.010	******	-.020	******	-.012	-.012	-.007	******	******
.654	******	.075	******	.015	******	-.013	******	-.023	-.025	-.023	******	******
.668	******	******	******	.035	******	.007	******	-.008	-.012	-.014	******	******
.682	******	.020	******	.030	******	.044	******	.073	.022	.002	-.005	******
.696	******	-.003	******	.040	******	.121	******	******	.086	.031	.003	.003
.710	******	-.013	******	******	******	.117	******	******	.080	.058	.016	.008
.724	******	.001	******	.056	******	.068	******	******	.044	.050	.029	.027
.738	******	-.010	******	.034	******	******	******	******	.009	.030	.034	.037
.752	******	-.005	******	.010	******	.005	******	******	-.008	.024	.038	******
.766	******	-.049	******	-.041	******	-.041	******	******	-.051	-.012	.004	.008
.779	******	-.064	******	-.048	******	-.071	******	******	-.077	-.012	.012	.014
.793	******	-.093	******	-.091	******	-.106	******	******	-.086	-.043	-.018	******
.807	******	-.119	******	-.112	******	-.135	******	******	-.097	-.064	-.037	-.029
.821	******	******	******	-.137	******	-.151	******	******	-.108	-.079	-.051	-.048
.835	******	-.157	******	-.166	******	-.175	******	******	-.116	-.099	-.080	-.078
.849	******	-.172	******	-.186	******	-.190	******	******	-.120	-.122	-.105	-.100
.863	******	-.162	******	-.202	******	-.173	******	******	-.112	-.133	******	-.125
.877	-.139	-.142	******	-.173	******	-.125	******	******	******	******	******	******
.891	-.142	-.145	******	-.138	******	-.128	******	******	-.122	-.139	-.159	-.153
.916	-.138	-.135	-.179	******	-.130	******	-.154	-.158	-.164	-.160	-.159	******
.928	-.162	******	-.198	******	-.170	******	-.177	-.181	-.192	-.204	-.198	-.204
.940	-.208	******	-.210	******	-.228	******	-.233	-.237	-.246	-.255	-.264	-.256
.952	******	******	-.292	******	-.299	-.308	-.314	-.316	-.325	-.331	-.334	******
.962	-.311	-.308	-.311	******	-.307	-.306	-.323	-.318	-.296	-.250	-.256	-.307
.974	-.069	-.069	******	******	-.062	-.062	-.056	-.058	-.060	-.057	-.055	-.057
.986	.000	-.005	-.005	******	-.018	-.017	-.010	-.015	-.024	-.025	-.026	-.019
.996	.017	.013	******	******	.000	.003	.002	-.004	-.005	-.009	-.004	.000

AFTERBODY INTEGRATED PRESSURE DRAG COEFFICIENT .1114

Table A17. Concluded

(d) NPR = 6.008

TEST PARAMETERS

CONFIGURATION	FWD TAILS
POINT NUMBER	6
MACH NUMBER	1.201
ALPHA, DEG	.005
NPR	6.008
PTO, PSI	14.683
PO, PSI	6.049
QO, PSI	6.105

TAIL SURFACE PRESSURE COEFFICIENTS

	HORIZONTAL TAILS				VERTICAL TAIL	
	UPPER SURFACE Y/B		LOWER SURFACE Y/B		Y/B	
X/C	0.1	0.2	0.1	0.2	0.1	0.2
0.05	.027	******	.019	******	.028	.019
0.10	.028	.101	.006	.066	******	******
0.20	.004	.046	-.029	.021	-.019	-.042
0.30	******	-.003	******	-.022	-.043	-.061
0.40	-.077	-.049	-.107	-.082	-.046	-.052
0.50	-.114	-.100	-.154	-.137	-.045	-.065
0.60	-.127	-.136	-.168	-.165	-.088	-.104
0.70	-.126	-.159	-.143	-.172	-.113	******
0.80	-.125	-.169	-.140	-.177	-.138	-.130
0.90	-.102	******	-.129	******	-.132	-.123

AFTERBODY PRESSURE COEFFICIENTS

	PHI, DEG											
X/L	0	18	36	45	54	72	81	90	108	135	162	180
.584	-.036	-.031	******	******	******	******	******	-.028	-.023	-.016	.005	******
.598	-.042	-.035	******	-.033	******	-.028	******	-.027	-.023	-.011	******	******
.612	-.042	-.037	******	-.029	******	-.027	******	-.023	-.017	-.013	******	******
.626	-.020	-.025	******	-.032	******	-.028	******	-.022	-.020	-.013	******	******
.640	******	.066	******	-.011	******	-.018	******	-.014	-.016	-.005	******	******
.654	******	.064	******	.018	******	-.011	******	-.025	-.025	-.021	******	******
.668	******	******	******	.043	******	.006	******	-.007	-.015	-.012	******	******
.682	******	.072	******	.032	******	.044	******	.066	.016	-.005	-.002	******
.696	******	-.007	******	.037	******	.120	******	******	.085	.026	.001	.001
.710	******	-.009	******	******	******	.113	******	******	.079	.057	.020	.007
.724	******	-.006	******	.059	******	.076	******	******	.044	.050	.030	.021
.738	******	-.010	******	.029	******	******	******	******	.003	.027	.032	.032
.752	******	-.015	******	.019	******	.009	******	******	-.011	.023	.038	******
.766	******	-.050	******	-.033	******	-.042	******	******	-.050	-.016	.002	.007
.779	******	-.061	******	-.047	******	-.076	******	******	-.072	-.011	.008	.011
.793	******	-.091	******	-.083	******	-.108	******	******	-.088	-.045	-.017	******
.807	******	-.117	******	-.115	******	-.133	******	******	-.104	-.058	-.033	-.032
.821	******	******	******	-.134	******	-.151	******	******	-.109	-.078	-.048	-.050
.835	******	-.166	******	-.166	******	-.173	******	******	-.123	-.103	-.083	-.077
.849	******	-.168	******	-.182	******	-.184	******	******	-.120	-.119	-.105	-.103
.863	******	-.165	******	-.200	******	-.172	******	******	-.109	-.137	******	-.130
.877	-.133	-.149	******	-.170	******	-.127	******	******	******	******	******	******
.891	-.140	-.148	******	-.137	******	-.127	******	******	-.121	-.137	-.157	-.156
.916	-.138	-.132	-.177	******	-.129	******	-.149	-.154	-.161	-.158	-.156	******
.928	-.161	******	-.198	******	-.167	******	-.174	-.179	-.190	-.201	-.197	-.203
.940	-.208	******	-.210	******	-.225	******	-.233	-.235	-.245	-.253	-.258	-.255
.952	******	******	-.290	******	-.298	-.308	-.313	-.316	-.322	-.329	-.332	******
.962	-.230	-.214	-.197	******	-.173	-.160	-.144	-.164	-.141	-.107	-.110	-.132
.974	-.018	-.020	******	******	-.022	-.022	-.024	-.021	-.022	-.024	-.023	-.025
.986	.017	.020	.011	******	.006	.006	.008	.003	-.002	-.002	-.001	-.003
.996	.028	.029	******	******	.012	.012	.012	.010	.009	.009	.011	.010

AFTERBODY INTEGRATED PRESSURE DRAG COEFFICIENT .0943

Table A18. Effect of Angle of Attack on Pressure Distributions for Forward Tails Configuration at $M = 1.20$ and NPR = 1.052

(a) $\alpha = -2.985°$

TEST PARAMETERS

CONFIGURATION	FWD TAILS
POINT NUMBER	9
MACH NUMBER	1.200
ALPHA, DEG	-2.985
NPR	1.052
PTO, PSI	14.680
PO, PSI	6.053
QO, PSI	6.102

TAIL SURFACE PRESSURE COEFFICIENTS

	HORIZONTAL TAILS				VERTICAL TAIL	
	UPPER SURFACE Y/B		LOWER SURFACE Y/B		Y/B	
X/C	0.1	0.2	0.1	0.2	0.1	0.2
0.05	-.095	******	.031	******	.021	.026
0.10	-.113	.091	.003	.179	******	******
0.20	-.093	.045	-.028	.115	-.031	-.050
0.30	******	-.008	******	.061	-.069	-.070
0.40	-.139	-.054	-.108	-.013	-.060	-.078
0.50	-.174	-.110	-.154	-.072	-.011	-.029
0.60	-.185	-.143	-.171	-.098	-.042	-.061
0.70	-.192	-.156	-.139	-.115	-.066	******
0.80	-.185	-.174	-.141	-.110	-.092	-.090
0.90	-.164	******	-.124	******	-.085	-.077

AFTERBODY PRESSURE COEFFICIENTS

	PHI, DEG											
X/L	0	18	36	45	54	72	81	90	108	135	162	180
.584	-.036	-.035	******	******	******	******	******	-.044	-.037	-.021	.003	******
.598	-.045	-.041	******	-.042	******	-.047	******	-.045	-.036	-.017	******	******
.612	-.041	-.043	******	-.041	******	-.041	******	-.039	-.034	-.014	******	******
.626	-.040	-.046	******	-.042	******	-.041	******	-.038	-.030	-.016	******	******
.640	******	.063	******	-.024	******	-.028	******	-.028	-.025	-.016	******	******
.654	******	.072	******	.006	******	-.021	******	-.035	-.037	-.027	******	******
.668	******	******	******	.031	******	-.001	******	-.018	-.026	-.016	******	******
.682	******	.007	******	.018	******	.028	******	.065	.010	-.014	-.005	******
.696	******	-.010	******	.018	******	.158	******	******	.038	.019	.009	.009
.710	******	-.025	******	******	******	.181	******	******	-.007	.029	.021	.017
.724	******	-.011	******	.087	******	.143	******	******	-.035	.011	.019	.018
.738	******	.004	******	.069	******	******	******	******	-.065	-.013	.007	.013
.752	******	.025	******	.063	******	.066	******	******	-.078	-.030	.001	******
.766	******	-.013	******	.007	******	.012	******	******	-.108	-.061	-.041	-.036
.779	******	-.012	******	.001	******	-.023	******	******	-.133	-.071	-.043	-.034
.793	******	-.047	******	-.032	******	-.053	******	******	-.144	-.092	-.065	******
.807	******	-.075	******	-.060	******	-.077	******	******	-.159	-.110	-.081	-.070
.821	******	******	******	-.085	******	-.095	******	******	-.169	-.125	-.098	-.092
.835	******	-.107	******	-.115	******	-.119	******	******	-.178	-.149	-.124	-.119
.849	******	-.118	******	-.134	******	-.131	******	******	-.181	-.168	-.149	-.145
.863	******	-.112	******	-.150	******	-.120	******	******	-.162	-.190	******	-.178
.877	-.083	-.095	******	-.119	******	-.105	******	******	******	******	******	******
.891	-.089	-.092	******	-.090	******	-.109	******	******	-.135	-.174	-.206	-.209
.916	-.101	-.098	-.158	******	-.108	******	-.145	-.151	-.161	-.176	-.188	******
.928	-.134	******	-.186	******	-.152	******	-.164	-.173	-.189	-.211	-.212	-.226
.940	-.197	******	-.202	******	-.217	******	-.229	-.230	-.241	-.257	-.266	-.266
.952	******	******	-.292	******	-.297	-.306	-.316	-.313	-.311	-.319	-.328	******
.962	-.320	-.320	-.327	******	-.336	-.345	-.341	-.283	-.171	-.116	-.126	-.170
.974	-.307	-.240	******	******	-.121	-.090	-.074	-.069	-.051	-.041	-.045	-.050
.986	-.039	-.041	-.039	******	-.038	-.046	-.050	-.042	-.035	-.028	-.026	-.027
.996	-.011	-.011	******	******	-.015	-.024	-.031	-.025	-.017	-.013	-.014	-.011

AFTERBODY INTEGRATED PRESSURE DRAG COEFFICIENT .1124

Table A18. Continued

(b) $\alpha = 0.014°$

TEST PARAMETERS

CONFIGURATION	FWD TAILS
POINT NUMBER	10
MACH NUMBER	1.198
ALPHA, DEG	.014
NPR	1.056
PTO, PSI	14.637
PO, PSI	6.054
QO, PSI	6.079

TAIL SURFACE PRESSURE COEFFICIENTS

	HORIZONTAL TAILS				VERTICAL TAIL	
	UPPER SURFACE Y/B		LOWER SURFACE Y/B		Y/B	
X/C	0.1	0.2	0.1	0.2	0.1	0.2
0.05	.033	******	-.320	******	.028	.013
0.10	.034	.224	-.142	.065	******	******
0.20	.007	.143	-.128	.015	-.025	-.045
0.30	******	.085	******	-.029	-.051	-.060
0.40	-.080	.018	-.177	-.086	-.060	-.067
0.50	-.118	-.043	-.210	-.140	-.048	-.069
0.60	-.133	-.080	-.231	-.166	-.095	-.105
0.70	-.133	-.099	-.210	-.178	-.115	******
0.80	-.127	-.111	-.203	-.180	-.142	-.136
0.90	-.103	******	-.184	******	-.142	-.128

AFTERBODY PRESSURE COEFFICIENTS

	PHI, DEG											
X/L	0	18	36	45	54	72	81	90	108	135	162	180
.584	-.039	-.035	******	******	******	******	******	-.028	-.026	-.015	.001	******
.598	-.048	-.040	******	-.035	******	-.037	******	-.029	-.025	-.015	******	******
.612	-.043	-.038	******	-.033	******	-.031	******	-.026	-.025	-.019	******	******
.626	-.023	-.032	******	-.037	******	-.031	******	-.027	-.025	-.019	******	******
.640	******	.058	******	-.018	******	-.024	******	-.019	-.019	-.012	******	******
.654	******	.063	******	.009	******	-.018	******	-.029	-.027	-.025	******	******
.668	******	******	******	.031	******	.006	******	-.008	-.016	-.017	******	******
.682	******	.010	******	.026	******	.039	******	.066	.013	-.007	-.005	******
.696	******	.000	******	.036	******	.120	******	******	.078	.021	-.005	-.001
.710	******	-.015	******	******	******	.104	******	******	.075	.052	.010	.004
.724	******	-.015	******	.046	******	.070	******	******	.045	.047	.021	.016
.738	******	-.012	******	.022	******	******	******	******	.005	.025	.029	.027
.752	******	-.022	******	.008	******	-.001	******	******	-.015	.020	.033	******
.766	******	-.058	******	-.033	******	-.051	******	******	-.059	-.019	.004	.005
.779	******	-.066	******	-.054	******	-.085	******	******	-.081	-.020	.009	.012
.793	******	-.089	******	-.087	******	-.111	******	******	-.086	-.043	-.022	******
.807	******	-.121	******	-.115	******	-.146	******	******	-.107	-.064	-.036	-.030
.821	******	******	******	-.143	******	-.154	******	******	-.113	-.078	-.054	-.049
.835	******	-.166	******	-.168	******	-.175	******	******	-.128	-.102	-.080	-.080
.849	******	-.171	******	-.188	******	-.185	******	******	-.128	-.122	-.110	-.101
.863	******	-.170	******	-.204	******	-.178	******	******	-.107	-.142	******	-.130
.877	-.137	-.157	******	-.177	******	-.130	******	******	******	******	******	******
.891	-.150	-.151	******	-.141	******	-.130	******	******	-.123	-.136	-.157	-.157
.916	-.141	-.135	-.179	******	-.128	******	-.152	-.158	-.163	-.160	-.158	******
.928	-.165	******	-.201	******	-.168	******	-.177	-.182	-.191	-.203	-.214	-.206
.940	-.212	******	-.214	******	-.226	******	-.234	-.237	-.246	-.255	-.261	-.258
.952	******	******	-.292	******	-.300	-.310	-.315	-.319	-.325	-.333	-.335	******
.962	-.318	-.314	-.325	******	-.332	-.332	-.338	-.319	-.285	-.243	-.269	-.307
.974	-.148	-.128	******	******	-.099	-.082	-.077	-.070	-.062	-.054	-.057	-.057
.986	-.030	-.030	-.030	******	-.030	-.038	-.039	-.033	-.032	-.029	-.034	-.030
.996	-.003	-.006	******	******	-.009	-.015	-.017	-.016	-.015	-.013	-.012	-.012

AFTERBODY INTEGRATED PRESSURE DRAG COEFFICIENT .1169

Table A18. Continued

(c) $\alpha = 3.016°$

TEST PARAMETERS

CONFIGURATION	FWD TAILS
POINT NUMBER	11
MACH NUMBER	1.202
ALPHA, DEG	3.016
NPR	1.048
PTO, PSI	14.684
PO, PSI	6.037
QO, PSI	6.109

TAIL SURFACE PRESSURE COEFFICIENTS

	HORIZONTAL TAILS				VERTICAL TAIL	
	UPPER SURFACE Y/B		LOWER SURFACE Y/B		Y/B	
X/C	0.1	0.2	0.1	0.2	0.1	0.2
0.05	.203	******	.032	******	.022	.015
0.10	.165	.097	.007	-.094	******	******
0.20	.092	.054	-.022	-.091	-.015	-.039
0.30	******	.000	******	-.115	-.039	-.052
0.40	-.012	-.049	-.105	-.155	-.067	-.074
0.50	-.045	-.102	-.146	-.202	-.081	-.099
0.60	-.063	-.137	-.162	-.230	-.131	-.142
0.70	-.061	-.159	-.139	-.228	-.160	******
0.80	-.059	-.168	-.135	-.236	-.186	-.179
0.90	-.042	******	-.120	******	-.190	-.177

AFTERBODY PRESSURE COEFFICIENTS

	PHI, DEG											
X/L	0	18	36	45	54	72	81	90	108	135	162	180
.584	-.035	-.032	******	******	******	******	******	-.035	-.027	-.018	.000	******
.598	-.040	-.035	******	-.036	******	-.039	******	-.033	-.029	-.017	******	******
.612	-.035	-.036	******	-.034	******	-.032	******	-.030	-.026	-.018	******	******
.626	.003	-.011	******	-.030	******	-.032	******	-.029	-.032	-.017	******	******
.640	******	.053	******	-.004	******	-.028	******	-.023	-.023	-.010	******	******
.654	******	.053	******	.014	******	-.018	******	-.031	-.031	-.022	******	******
.668	******	******	******	.031	******	.004	******	-.011	-.019	-.010	******	******
.682	******	.018	******	.033	******	.041	******	.064	.005	-.012	-.004	******
.696	******	.008	******	.035	******	.076	******	******	.132	.006	-.013	-.009
.710	******	-.005	******	******	******	.035	******	******	.149	.064	-.009	-.015
.724	******	-.019	******	.009	******	-.010	******	******	.120	.084	.024	.007
.738	******	-.032	******	-.021	******	******	******	******	.074	.075	.048	.043
.752	******	-.050	******	-.042	******	-.063	******	******	.052	.071	.077	******
.766	******	-.090	******	-.089	******	-.116	******	******	.005	.039	.050	.052
.779	******	-.110	******	-.106	******	-.142	******	******	-.018	.043	.064	.062
.793	******	-.135	******	-.143	******	-.167	******	******	-.025	.014	.037	******
.807	******	-.164	******	-.169	******	-.198	******	******	-.033	-.004	.019	.022
.821	******	******	******	-.192	******	-.212	******	******	-.045	-.020	-.002	.001
.835	******	-.214	******	-.221	******	-.231	******	******	-.059	-.048	-.028	-.028
.849	******	-.217	******	-.235	******	-.238	******	******	-.064	-.061	-.046	-.046
.863	******	-.221	******	-.255	******	-.217	******	******	-.053	-.078	******	-.069
.877	-.196	-.209	******	-.226	******	-.144	******	******	******	******	******	******
.891	-.202	-.201	******	-.171	******	-.138	******	******	-.112	-.093	-.099	-.097
.916	-.171	-.164	-.191	******	-.149	******	-.158	-.166	-.157	-.136	-.115	******
.928	-.185	******	-.210	******	-.182	******	-.182	-.184	-.188	-.187	-.196	-.169
.940	-.222	******	-.221	******	-.232	******	-.234	-.241	-.244	-.246	-.242	-.238
.952	******	******	-.285	******	-.289	-.301	-.313	-.321	-.325	-.330	-.333	******
.962	-.289	-.279	-.275	******	-.273	-.309	-.338	-.333	-.345	-.367	-.375	-.374
.974	-.106	-.099	******	******	-.092	-.092	-.074	-.074	-.073	-.079	-.103	-.123
.986	-.032	-.034	-.037	******	-.040	-.041	-.041	-.043	-.044	-.045	-.047	-.039
.996	-.009	-.013	******	******	-.018	-.025	-.029	-.028	-.027	-.023	-.023	-.017

AFTERBODY INTEGRATED PRESSURE DRAG COEFFICIENT .1192

Table A18. Concluded

(d) $\alpha = 6.017°$

TEST PARAMETERS

CONFIGURATION	FWD TAILS
POINT NUMBER	12
MACH NUMBER	1.197
ALPHA, DEG.	6.017
NPR	1.028
PTO, PSI	14.682
PO, PSI	6.074
QO, PSI	6.098

TAIL SURFACE PRESSURE COEFFICIENTS

	HORIZONTAL TAILS				VERTICAL TAIL	
	UPPER SURFACE Y/B		LOWER SURFACE Y/B		Y/B	
X/C	0.1	0.2	0.1	0.2	0.1	0.2
0.05	.348	******	.198	******	.042	.028
0.10	.269	-.038	.136	-.299	******	******
0.20	.195	-.051	.061	-.188	-.008	-.027
0.30	******	-.090	******	-.199	-.023	-.035
0.40	.064	-.126	-.039	-.223	-.068	-.076
0.50	.024	-.176	-.084	-.263	-.110	-.126
0.60	.025	-.206	-.082	-.283	-.170	-.175
0.70	.019	-.226	-.081	-.282	-.203	******
0.80	.009	-.232	-.078	-.287	-.232	-.220
0.90	.037	******	-.050	******	-.231	-.218

AFTERBODY PRESSURE COEFFICIENTS

	PHI, DEG											
X/L	0	18	36	45	54	72	81	90	108	135	162	180
.584	-.031	-.034	******	******	******	******	******	-.051	-.048	-.027	.005	******
.598	-.036	-.035	******	-.044	******	-.052	******	-.052	-.047	-.021	******	******
.612	-.034	-.034	******	-.039	******	-.047	******	-.048	-.048	-.025	******	******
.626	.007	-.009	******	-.032	******	-.046	******	-.052	-.043	-.029	******	******
.640	******	.062	******	-.008	******	-.033	******	-.042	-.038	-.016	******	******
.654	******	.054	******	.010	******	-.022	******	-.047	-.048	-.029	******	******
.668	******	******	******	.020	******	-.003	******	-.033	-.038	-.014	******	******
.682	******	.017	******	.023	******	.031	******	.046	-.027	-.022	-.006	******
.696	******	.006	******	.025	******	.038	******	******	.172	-.026	-.024	-.015
.710	******	-.005	******	******	******	-.047	******	******	.211	.065	-.019	-.023
.724	******	-.024	******	-.028	******	-.092	******	******	.190	.132	.019	-.010
.738	******	-.056	******	-.071	******	******	******	******	.130	.130	.073	.059
.752	******	-.077	******	-.098	******	-.132	******	******	.113	.136	.133	******
.766	******	-.131	******	-.142	******	-.173	******	******	.065	.107	.103	.100
.779	******	-.152	******	-.165	******	-.192	******	******	.052	.106	.126	.118
.793	******	-.184	******	-.197	******	-.218	******	******	.049	.080	.095	******
.807	******	-.209	******	-.222	******	-.247	******	******	.038	.058	.072	.071
.821	******	******	******	-.246	******	-.264	******	******	.025	.044	.063	.057
.835	******	-.253	******	-.277	******	-.281	******	******	.002	.021	.036	.031
.849	******	-.265	******	-.295	******	-.290	******	******	.011	.007	.016	.015
.863	******	-.275	******	-.312	******	-.244	******	******	.018	-.011	******	-.014
.877	-.246	-.287	******	-.263	******	-.167	******	******	******	******	******	******
.891	-.246	-.247	******	-.202	******	-.159	******	******	-.105	-.053	-.041	-.044
.916	-.206	-.191	-.234	******	-.173	******	-.171	-.182	-.163	-.129	-.080	******
.928	-.202	******	-.242	******	-.200	******	-.194	-.196	-.198	-.184	-.171	-.147
.940	-.232	******	-.237	******	-.242	******	-.252	-.259	-.255	-.251	-.236	-.228
.952	******	******	-.291	******	-.285	-.302	-.327	-.338	-.337	-.338	-.335	******
.962	-.325	-.316	-.242	******	-.258	-.310	-.343	-.357	-.377	-.384	-.385	-.380
.974	-.148	-.126	******	******	-.127	-.128	-.111	-.105	-.115	-.161	-.334	-.383
.986	-.051	-.069	-.091	******	-.090	-.065	-.063	-.070	-.071	-.073	-.071	-.072
.996	-.033	-.033	******	******	-.056	-.048	-.049	-.054	-.050	-.051	-.041	-.039

AFTERBODY INTEGRATED PRESSURE DRAG COEFFICIENT .1312

Table A19. Effect of Nozzle Pressure Ratio on Pressure Distributions for Forward Tails Configuration at $M = 0.95$ and $\alpha = 0.015°$

(a) NPR = 1.132

TEST PARAMETERS

CONFIGURATION	FWD TAILS
POINT NUMBER	13
MACH NUMBER	.951
ALPHA, DEG	.015
NPR	1.132
PTO, PSI	14.685
PO, PSI	8.209
QO, PSI	5.194

TAIL SURFACE PRESSURE COEFFICIENTS

	HORIZONTAL TAILS				VERTICAL TAIL	
	UPPER SURFACE Y/B		LOWER SURFACE Y/B		Y/B	
X/C	0.1	0.2	0.1	0.2	0.1	0.2
0.05	-.062	******	-.024	******	-.013	-.035
0.10	-.066	-.606	-.110	-.070	******	******
0.20	-.110	-.588	-.216	-.131	-.055	-.090
0.30	******	-.609	******	-.190	-.104	-.136
0.40	-.228	-.636	-.372	-.290	-.186	-.205
0.50	-.262	-.679	-.419	-.341	-.215	-.245
0.60	-.301	-.711	-.409	-.374	-.286	-.305
0.70	-.294	-.732	-.402	-.387	-.327	******
0.80	-.298	-.742	-.417	-.391	-.348	-.348
0.90	-.251	******	-.388	******	-.350	-.329

AFTERBODY PRESSURE COEFFICIENTS

	PHI, DEG											
X/L	0	18	36	45	54	72	81	90	108	135	162	180
.584	.002	.006	******	******	******	******	******	.003	.010	.012	.023	******
.598	.009	.016	******	.010	******	.007	******	-.002	.005	.004	******	******
.612	.045	.041	******	.024	******	.016	******	.008	.004	.006	******	******
.626	.117	.080	******	.042	******	.025	******	.015	.013	.007	******	******
.640	******	.114	******	.046	******	.028	******	.019	.009	.006	******	******
.654	******	.052	******	.036	******	.030	******	.017	.010	.006	******	******
.668	******	******	******	.036	******	.045	******	.047	.040	.025	******	******
.682	******	-.007	******	.026	******	.071	******	.117	.064	.026	.009	******
.696	******	-.025	******	.022	******	.081	******	******	.056	.024	.008	.003
.710	******	-.053	******	******	******	.020	******	******	.005	.008	-.002	-.005
.724	******	-.088	******	-.049	******	-.032	******	******	-.049	-.022	-.022	-.028
.738	******	-.135	******	-.098	******	******	******	******	-.098	-.053	-.053	-.047
.752	******	-.165	******	-.131	******	-.149	******	******	-.128	-.082	-.070	******
.766	******	-.231	******	-.207	******	-.222	******	******	-.189	-.141	-.125	-.126
.779	******	-.248	******	-.235	******	-.256	******	******	-.215	-.152	-.124	-.128
.793	******	-.291	******	-.282	******	-.306	******	******	-.245	-.197	-.173	******
.807	******	-.327	******	-.321	******	-.343	******	******	-.259	-.222	-.194	-.194
.821	******	******	******	-.345	******	-.366	******	******	-.279	-.240	-.225	-.220
.835	******	-.380	******	-.387	******	-.394	******	******	-.292	-.278	-.255	-.258
.849	******	-.377	******	-.402	******	-.396	******	******	-.287	-.296	-.286	-.289
.863	******	-.251	******	-.269	******	-.261	******	******	-.212	-.255	******	-.311
.877	-.074	-.102	******	-.091	******	-.099	******	******	******	******	******	******
.891	-.074	-.075	******	-.069	******	-.053	******	******	-.075	-.101	-.114	-.105
.916	-.069	-.071	-.117	******	-.080	******	-.090	-.080	-.091	-.092	-.091	******
.928	-.095	******	-.135	******	-.107	******	-.108	-.112	-.112	-.120	-.126	-.130
.940	-.114	******	-.107	******	-.111	******	-.112	-.115	-.119	-.121	-.131	-.127
.952	******	******	-.060	******	-.057	-.060	-.065	-.061	-.063	-.053	-.064	******
.962	.019	.023	.026	******	.026	.022	.020	.024	.021	.027	.018	.021
.974	.110	.105	******	******	.101	.102	.106	.094	.107	.107	.099	.099
.986	.159	.156	.156	******	.163	.148	.152	.155	.155	.150	.153	.153
.996	.186	.182	******	******	.177	.178	.180	.176	.167	.178	.170	.180

AFTERBODY INTEGRATED PRESSURE DRAG COEFFICIENT .0429

Table A19. Continued

(b) NPR = 2.013

TEST PARAMETERS

CONFIGURATION	FWD TAILS
POINT NUMBER	14
MACH NUMBER	.952
ALPHA, DEG	.015
NPR	2.013
PTO, PSI	14.682
PO, PSI	8.200
QO, PSI	5.197

TAIL SURFACE PRESSURE COEFFICIENTS

	HORIZONTAL TAILS				VERTICAL TAIL	
	UPPER SURFACE Y/B		LOWER SURFACE Y/B		Y/B	
X/C	0.1	0.2	0.1	0.2	0.1	0.2
0.05	-.050	******	.591	******	-.007	-.031
0.10	-.066	.603	.592	-.070	******	******
0.20	-.107	.580	.572	-.128	-.055	-.081
0.30	******	.559	******	-.189	-.107	-.132
0.40	-.227	.543	.555	-.285	-.187	-.204
0.50	-.260	.552	.559	-.336	-.216	-.250
0.60	-.300	.567	.575	-.370	-.288	-.306
0.70	-.297	.587	.597	-.384	-.324	******
0.80	-.300	.613	.623	-.393	-.351	-.345
0.90	-.261	******	.649	******	-.343	-.333

AFTERBODY PRESSURE COEFFICIENTS

	PHI, DEG											
X/L	0	18	36	45	54	72	81	90	108	135	162	180
.584	.004	.006	******	******	******	******	******	.009	.009	.015	.016	******
.598	.010	.015	******	.013	******	.000	******	-.001	.002	.004	******	******
.612	.041	.039	******	.024	******	.012	******	.011	.006	.011	******	******
.626	.119	.082	******	.045	******	.023	******	.017	.012	.008	******	******
.640	******	.109	******	.045	******	.025	******	.021	.017	.010	******	******
.654	******	.064	******	.039	******	.030	******	.020	.014	.010	******	******
.668	******	******	******	.038	******	.045	******	.048	.041	.026	******	******
.682	******	-.007	******	.026	******	.077	******	.115	.062	.026	.011	******
.696	******	-.025	******	.018	******	.087	******	******	.060	.024	.007	.007
.710	******	-.051	******	******	******	.025	******	******	.003	.013	-.003	-.003
.724	******	-.090	******	-.050	******	-.033	******	******	-.039	-.020	-.024	-.024
.738	******	-.139	******	-.095	******	******	******	******	-.094	-.056	-.047	-.042
.752	******	-.163	******	-.126	******	-.140	******	******	-.123	-.080	-.071	******
.766	******	-.228	******	-.207	******	-.223	******	******	-.191	-.144	-.122	-.121
.779	******	-.247	******	-.232	******	-.249	******	******	-.219	-.160	-.129	-.125
.793	******	-.287	******	-.283	******	-.311	******	******	-.246	-.197	-.174	******
.807	******	-.324	******	-.316	******	-.341	******	******	-.260	-.221	-.196	-.190
.821	******	******	******	-.344	******	-.368	******	******	-.272	-.249	-.226	-.214
.835	******	-.372	******	-.388	******	-.398	******	******	-.295	-.279	-.258	-.252
.849	******	-.370	******	-.396	******	-.390	******	******	-.275	-.297	-.288	-.284
.863	******	-.253	******	-.202	******	-.207	******	******	-.177	-.295	******	-.305
.877	-.077	-.108	******	-.105	******	-.102	******	******	******	******	******	******
.891	-.062	-.062	******	-.047	******	-.060	******	******	-.090	-.088	-.094	-.095
.916	-.055	-.058	-.098	******	-.062	******	-.067	-.067	-.075	-.071	-.078	******
.928	-.079	******	-.111	******	-.087	******	-.085	-.082	-.088	-.101	-.116	-.108
.940	-.075	******	-.071	******	-.079	******	-.080	-.082	-.082	-.086	-.091	-.096
.952	******	******	-.024	******	-.020	-.020	-.023	-.023	-.024	-.020	-.026	******
.962	.058	.063	.063	******	.068	.065	.063	.063	.066	.071	.068	.061
.974	.140	.141	******	******	.141	.141	.140	.143	.143	.147	.146	.144
.986	.198	.189	.191	******	.193	.189	.189	.196	.191	.193	.193	.197
.996	.214	.212	******	******	.217	.210	.213	.213	.208	.210	.212	.215

AFTERBODY INTEGRATED PRESSURE DRAG COEFFICIENT .0237

Table A19. Continued

(c) NPR = 2.993

TEST PARAMETERS

CONFIGURATION	FWD TAILS
POINT NUMBER	15
MACH NUMBER	.952
ALPHA, DEG	.015
NPR	2.993
PTO, PSI	14.686
PO, PSI	8.195
QO, PSI	5.202

TAIL SURFACE PRESSURE COEFFICIENTS

	HORIZONTAL TAILS				VERTICAL TAIL	
	UPPER SURFACE Y/B		LOWER SURFACE Y/B		Y/B	
X/C	0.1	0.2	0.1	0.2	0.1	0.2
0.05	-.055	******	.585	******	-.014	-.032
0.10	-.065	.602	.583	-.071	******	******
0.20	-.109	.574	.573	-.129	-.052	-.089
0.30	******	.556	******	-.189	-.099	-.136
0.40	-.228	.543	.553	-.286	-.183	-.206
0.50	-.255	.551	.559	-.339	-.213	-.245
0.60	-.294	.570	.575	-.370	-.286	-.302
0.70	-.292	.591	.597	-.385	-.319	******
0.80	-.295	.614	.622	-.385	-.346	-.350
0.90	-.255	******	.647	******	-.340	-.325

AFTERBODY PRESSURE COEFFICIENTS

	PHI, DEG											
X/L	0	18	36	45	54	72	81	90	108	135	162	180
.584	.004	.010	******	******	******	******	******	.008	.003	.012	.021	******
.598	.015	.010	******	.012	******	.005	******	.001	.005	.008	******	******
.612	.046	.041	******	.028	******	.016	******	.011	.007	.005	******	******
.626	.117	.082	******	.042	******	.024	******	.018	.011	.010	******	******
.640	******	.106	******	.048	******	.026	******	.022	.012	.014	******	******
.654	******	.069	******	.045	******	.027	******	.020	.014	.009	******	******
.668	******	******	******	.035	******	.046	******	.052	.040	.029	******	******
.682	******	-.003	******	.030	******	.073	******	.119	.061	.029	.011	******
.696	******	-.031	******	.024	******	.082	******	******	.056	.024	.010	.009
.710	******	-.053	******	******	******	.043	******	******	.005	.010	.001	-.001
.724	******	-.089	******.	-.046	******	-.033	******	******	-.045	-.023	-.022	-.023
.738	******	-.135	******	-.098	******	******	******	******	-.100	-.057	-.047	-.041
.752	******	-.160	******	-.139	******	-.144	******	******	-.119	-.083	-.069	******
.766	******	-.228	******	-.202	******	-.223	******	******	-.190	-.145	-.126	-.121
.779	******	-.244	******	-.233	******	-.256	******	******	-.215	-.151	-.127	-.121
.793	******	-.288	******	-.283	******	-.307	******	******	-.241	-.194	-.171	******
.807	******	-.326	******	-.312	******	-.336	******	******	-.260	-.226	-.195	-.190
.821	******	******	******	-.341	******	-.365	******	******	-.273	-.249	-.221	-.214
.835	******	-.370	******	-.385	******	-.396	******	******	-.295	-.275	-.255	-.252
.849	******	-.373	******	-.395	******	-.377	******	******	-.280	-.302	-.284	-.281
.863	******	-.251	******	-.330	******	-.243	******	******	-.225	-.289	******	-.308
.877	-.098	-.080	******	-.112	******	-.070	******	******	******	******	******	******
.891	-.058	-.042	******	-.067	******	-.051	******	******	-.076	-.093	-.098	-.075
.916	-.054	-.060	-.106	******	-.056	******	-.063	-.070	-.075	-.080	-.073	******
.928	-.077	******	-.112	******	-.085	******	-.088	-.089	-.088	-.099	-.115	-.103
.940	-.079	******	-.072	******	-.082	******	-.079	-.084	-.084	-.084	-.093	-.093
.952	******	******	-.018	******	-.021	-.024	-.023	-.020	-.020	-.020	-.023	******
.962	.056	.062	.061	******	.064	.060	.060	.061	.062	.067	.066	.063
.974	.140	.138	******	******	.139	.137	.138	.138	.141	.144	.146	.145
.986	.190	.188	.192	******	.191	.185	.194	.188	.187	.190	.192	.195
.996	.214	.209	******	******	.213	.211	.214	.209	.208	.209	.214	.219

AFTERBODY INTEGRATED PRESSURE DRAG COEFFICIENT .0250

Table A19. Concluded

(d) NPR = 5.014

TEST PARAMETERS

CONFIGURATION	FWD TAILS
POINT NUMBER	16
MACH NUMBER	.953
ALPHA, DEG	.015
NPR	5.014
PTO, PSI	14.685
PO, PSI	8.189
QO, PSI	5.205

TAIL SURFACE PRESSURE COEFFICIENTS

	HORIZONTAL TAILS				VERTICAL TAIL	
	UPPER SURFACE Y/B		LOWER SURFACE Y/B		Y/B	
X/C	0.1	0.2	0.1	0.2	0.1	0.2
0.05	-.059	******	.587	******	-.007	-.019
0.10	-.067	.605	.582	-.063	******	******
0.20	-.113	.577	.571	-.122	-.050	-.083
0.30	******	.563	******	-.187	-.103	-.128
0.40	-.227	.545	.554	-.283	-.182	-.205
0.50	-.263	.555	.560	-.342	-.213	-.239
0.60	-.299	.570	.577	-.367	-.287	-.297
0.70	-.302	.589	.598	-.385	-.317	******
0.80	-.305	.615	.624	-.381	-.345	-.345
0.90	-.270	******	.650	******	-.345	-.321

AFTERBODY PRESSURE COEFFICIENTS

	PHI, DEG.											
X/L	0	18	36	45	54	72	81	90	108	135	162	180
.584	.006	.012	******	******	******	******	******	.006	.008	.011	.023	******
.598	.013	.014	******	.010	******	.008	******	.001	.002	.008	******	******
.612	.043	.040	******	.029	******	.015	******	.010	.008	.008	******	******
.626	.117	.085	******	.043	******	.030	******	.017	.011	.010	******	******
.640	******	.111	******	.050	******	.029	******	.019	.013	.010	******	******
.654	******	.058	******	.038	******	.030	******	.021	.013	.002	******	******
.668	******	******	******	.033	******	.045	******	.050	.043	.021	******	******
.682	******	.004	******	.024	******	.074	******	.116	.063	.024	.013	******
.696	******	-.025	******	.018	******	.094	******	******	.054	.023	.008	.009
.710	******	-.054	******	******	******	.031	******	******	.001	.008	.002	-.004
.724	******	-.090	******	-.043	******	-.031	******	******	-.048	-.019	-.019	-.024
.738	******	-.133	******	-.093	******	******	******	******	-.095	-.058	-.047	-.042
.752	******	-.157	******	-.134	******	-.138	******	******	-.124	-.078	-.072	******
.766	******	-.224	******	-.206	******	-.207	******	******	-.197	-.144	-.124	-.120
.779	******	-.243	******	-.226	******	-.250	******	******	-.222	-.148	-.127	-.122
.793	******	-.285	******	-.281	******	-.306	******	******	-.244	-.198	-.172	******
.807	******	-.315	******	-.315	******	-.341	******	******	-.264	-.218	-.196	-.190
.821	******	******	******	-.344	******	-.363	******	******	-.279	-.243	-.220	-.215
.835	******	-.373	******	-.382	******	-.389	******	******	-.298	-.279	-.256	-.253
.849	******	-.372	******	-.394	******	-.397	******	******	-.281	-.283	-.283	-.281
.863	******	-.199	******	-.258	******	-.296	******	******	-.167	-.274	******	-.307
.877	-.076	-.082	******	-.067	******	-.133	******	******	******	******	******	******
.891	-.047	-.058	******	-.044	******	-.088	******	******	-.065	-.102	-.095	-.131
.916	-.051	-.054	-.098	******	-.058	******	-.063	-.067	-.068	-.066	-.069	******
.928	-.071	******	-.101	******	-.081	******	-.083	-.075	-.079	-.092	-.104	-.092
.940	-.071	******	-.067	******	-.070	******	-.071	-.070	-.070	-.073	-.080	-.079
.952	******	******	-.005	******	-.005	-.009	-.010	-.009	-.007	-.003	-.006	******
.962	.072	.077	.078	******	.081	.076	.077	.075	.078	.085	.081	.079
.974	.154	.153	******	******	.153	.158	.150	.155	.156	.158	.159	.160
.986	.205	.203	.207	******	.203	.203	.197	.205	.207	.199	.206	.205
.996	.224	.225	******	******	.226	.218	.215	.223	.214	.218	.222	.221

AFTERBODY INTEGRATED PRESSURE DRAG COEFFICIENT .0177

Table A20. Effect of Angle of Attack on Pressure Distributions for Forward Tails Configuration at $M = 0.95$ and NPR = 1.138

(a) $\alpha = -2.987°$

TEST PARAMETERS

CONFIGURATION	FWD TAILS
POINT NUMBER	18
MACH NUMBER	.951
ALPHA, DEG	-2.987
NPR	1.138
PTO, PSI	14.687
PO, PSI	8.211
QO, PSI	5.194

TAIL SURFACE PRESSURE COEFFICIENTS

	HORIZONTAL TAILS				VERTICAL TAIL	
	UPPER SURFACE Y/B		LOWER SURFACE Y/B		Y/B	
X/C	0.1	0.2	0.1	0.2	0.1	0.2
0.05	-.281	******	.586	******	-.016	-.030
0.10	-.245	.592	.575	.081	******	******
0.20	-.241	.574	.571	-.017	-.049	-.078
0.30	******	.552	******	-.102	-.083	-.113
0.40	-.321	.538	.548	-.209	-.149	-.173
0.50	-.352	.550	.556	-.257	-.179	-.209
0.60	-.382	.563	.571	-.305	-.237	-.256
0.70	-.388	.582	.592	-.315	-.277	******
0.80	-.380	.611	.619	-.321	-.295	-.292
0.90	-.329	******	.643	******	-.265	-.216

AFTERBODY PRESSURE COEFFICIENTS

	PHI, DEG											
X/L	0	18	36	45	54	72	81	90	108	135	162	180
.584	-.010	.006	******	******	******	******	******	-.007	.001	.010	.022	******
.598	.001	.011	******	.004	******	-.007	******	-.011	-.010	.005	******	******
.612	.040	.038	******	.026	******	.010	******	.003	-.004	.000	******	******
.626	.127	.088	******	.038	******	.017	******	.008	.000	.001	******	******
.640	******	.118	******	.048	******	.016	******	.006	-.002	-.002	******	******
.654	******	.056	******	.030	******	.024	******	.001	-.002	-.004	******	******
.668	******	******	******	.023	******	.033	******	.032	.029	.008	******	******
.682	******	.000	******	.024	******	.083	******	.112	.035	.002	-.006	******
.696	******	-.016	******	.037	******	.150	******	******	-.028	-.018	-.022	-.018
.710	******	-.029	******	******	******	.112	******	******	-.107	-.056	-.041	-.036
.724	******	-.061	******	.008	******	.055	******	******	-.158	-.101	-.073	-.068
.738	******	-.094	******	-.031	******	******	******	******	-.191	-.133	-.104	-.096
.752	******	-.115	******	-.072	******	-.070	******	******	-.223	-.163	-.123	******
.766	******	-.189	******	-.148	******	-.152	******	******	-.278	-.214	-.183	-.178
.779	******	-.196	******	-.173	******	-.192	******	******	-.302	-.228	-.189	-.185
.793	******	-.239	******	-.228	******	-.241	******	******	-.312	-.261	-.234	******
.807	******	-.271	******	-.257	******	-.278	******	******	-.341	-.292	-.256	-.250
.821	******	******	******	-.285	******	-.300	******	******	-.360	-.315	-.287	-.277
.835	******	-.312	******	-.320	******	-.337	******	******	-.369	-.343	-.318	-.315
.849	******	-.266	******	-.310	******	-.320	******	******	-.348	-.365	-.350	-.346
.863	******	-.061	******	-.148	******	-.187	******	******	-.163	-.307	******	-.361
.877	-.028	-.041	******	-.044	******	-.087	******	******	******	******	******	******
.891	-.051	-.061	******	-.066	******	-.061	******	******	-.068	-.070	-.165	-.117
.916	-.109	-.098	-.163	******	-.091	******	-.094	-.088	-.078	-.064	-.070	******
.928	-.148	******	-.186	******	-.131	******	-.122	-.115	-.089	-.084	-.086	-.083
.940	-.168	******	-.151	******	-.145	******	-.130	-.117	-.067	-.071	-.065	-.073
.952	******	******	-.091	******	-.080	-.071	-.066	-.063	-.015	-.018	-.021	******
.962	-.017	-.007	-.002	******	.009	.008	.034	.018	.040	.057	.047	.048
.974	.076	.084	******	******	.099	.104	.094	.095	.128	.109	.122	.121
.986	.143	.139	.138	******	.145	.131	.135	.131	.155	.151	.149	.152
.996	.160	.152	******	******	.155	.147	.150	.146	.162	.149	.151	.161

AFTERBODY INTEGRATED PRESSURE DRAG COEFFICIENT .0439

Table A20. Continued

(b) $\alpha = 0.002°$

TEST PARAMETERS

CONFIGURATION	FWD TAILS
POINT NUMBER	19
MACH NUMBER	.950
ALPHA, DEG	.002
NPR	1.155
PTO, PSI	14.687
PO, PSI	8.214
QO, PSI	5.192

TAIL SURFACE PRESSURE COEFFICIENTS

	HORIZONTAL TAILS				VERTICAL TAIL	
	UPPER SURFACE Y/B		LOWER SURFACE Y/B		Y/B	
X/C	0.1	0.2	0.1	0.2	0.1	0.2
0.05	-.068	******	.432	******	-.003	-.031
0.10	-.068	.686	.456	-.069	******	******
0.20	-.109	.646	.489	-.132	-.056	-.089
0.30	******	.606	******	-.188	-.107	-.135
0.40	-.221	.585	.502	-.289	-.187	-.213
0.50	-.261	.588	.519	-.343	-.216	-.246
0.60	-.299	.592	.545	-.375	-.288	-.304
0.70	-.294	.606	.574	-.389	-.322	******
0.80	-.306	.625	.603	-.391	-.351	-.347
0.90	-.257	******	.637	******	-.345	-.329

AFTERBODY PRESSURE COEFFICIENTS

	PHI, DEG											
X/L	0	18	36	45	54	72	81	90	108	135	162	180
.584	-.003	.006	******	******	******	******	******	.005	.002	.010	.019	******
.598	.009	.008	******	.008	******	.000	******	.004	.001	.009	******	******
.612	.040	.037	******	.028	******	.012	******	.013	.007	.010	******	******
.626	.111	.081	******	.043	******	.023	******	.019	.009	.011	******	******
.640	******	.112	******	.049	******	.025	******	.016	.014	.011	******	******
.654	******	.063	******	.038	******	.028	******	.016	.011	.007	******	******
.668	******	******	******	.034	******	.044	******	.045	.042	.023	******	******
.682	******	-.004	******	.025	******	.071	******	.113	.059	.027	.008	******
.696	******	-.032	******	.022	******	.085	******	******	.057	.022	.007	.01
.710	******	-.054	******	******	******	.026	******	******	.006	.003	-.001	-.00
.724	******	-.091	******	-.046	******	-.037	******	******	-.051	-.020	-.024	-.02
.738	******	-.133	******	-.103	******	******	******	******	-.093	-.059	-.047	-.04
.752	******	-.166	******	-.134	******	-.142	******	******	-.124	-.081	-.073	******
.766	******	-.233	******	-.211	******	-.225	******	******	-.191	-.146	-.125	-.12
.779	******	-.254	******	-.234	******	-.257	******	******	-.222	-.154	-.126	-.12
.793	******	-.293	******	-.281	******	-.312	******	******	-.241	-.199	-.175	******
.807	******	-.326	******	-.317	******	-.348	******	******	-.263	-.231	-.196	-.18
.821	******	******	******	-.349	******	-.364	******	******	-.285	-.245	-.223	-.21
.835	******	-.374	******	-.383	******	-.390	******	******	-.297	-.280	-.256	-.25
.849	******	-.365	******	-.401	******	-.374	******	******	-.292	-.306	-.286	-.28
.863	******	-.187	******	-.285	******	-.231	******	******	-.242	-.292	******	-.30
.877	-.056	-.094	******	-.059	******	-.105	******	******	******	******	******	******
.891	-.038	-.056	******	-.055	******	-.071	******	******	-.144	-.105	-.151	-.16
.916	-.072	-.073	-.118	******	-.074	******	-.077	-.088	-.094	-.092	-.091	******
.928	-.102	******	-.143	******	-.111	******	-.113	-.106	-.113	-.121	-.118	-.12
.940	-.114	******	-.105	******	-.120	******	-.112	-.116	-.115	-.121	-.124	-.13
.952	******	******	-.057	******	-.057	-.061	-.066	-.060	-.057	-.060	-.060	******
.962	.019	.017	.023	******	.024	.019	.022	.022	.024	.021	.024	.01
.974	.105	.103	******	******	.098	.103	.097	.101	.102	.101	.102	.10
.986	.157	.162	.159	******	.153	.159	.154	.149	.154	.150	.150	.15
.996	.182	.179	******	******	.183	.179	.181	.177	.174	.170	.178	.16

AFTERBODY INTEGRATED PRESSURE DRAG COEFFICIENT .0440

Table A20. Continued

(c) $\alpha = 3.010°$

TEST PARAMETERS

CONFIGURATION	FWD TAILS
POINT NUMBER	20
MACH NUMBER	.949
ALPHA, DEG	3.010
NPR	1.129
PTO, PSI	14.694
PO, PSI	8.225
QO, PSI	5.184

TAIL SURFACE PRESSURE COEFFICIENTS

	HORIZONTAL TAILS				VERTICAL TAIL	
	UPPER SURFACE Y/B		LOWER SURFACE Y/B		Y/B	
X/C	0.1	0.2	0.1	0.2	0.1	0.2
0.05	.145	******	.578	******	-.006	-.035
0.10	.092	.597	.575	-.241	******	******
0.20	.014	.569	.570	-.259	-.050	-.094
0.30	******	.552	******	-.295	-.119	-.158
0.40	-.132	.537	.545	-.370	-.210	-.242
0.50	-.164	.548	.553	-.426	-.255	-.284
0.60	-.214	.563	.571	-.448	-.333	-.346
0.70	-.216	.581	.591	-.456	-.377	******
0.80	-.217	.609	.617	-.465	-.407	-.402
0.90	-.162	******	.643	******	-.412	-.388

AFTERBODY PRESSURE COEFFICIENTS

	PHI, DEG											
X/L	0	18	36	45	54	72	81	90	108	135	162	180
.584	.006	.013	******	******	******	******	******	.004	.005	.015	.030	******
.598	.012	.018	******	.013	******	.007	******	.000	-.001	.007	******	******
.612	.043	.039	******	.025	******	.013	******	.007	.003	.010	******	******
.626	.103	.073	******	.039	******	.028	******	.017	.010	.012	******	******
.640	******	.097	******	.045	******	.025	******	.019	.011	.011	******	******
.654	******	.064	******	.035	******	.034	******	.019	.014	.011	******	******
.668	******	******	******	.036	******	.046	******	.050	.047	.033	******	******
.682	******	-.009	******	.016	******	.061	******	.120	.089	.044	.038	******
.696	******	-.034	******	-.009	******	.028	******	******	.137	.058	.038	.038
.710	******	-.070	******	******	******	-.056	******	******	.104	.068	.044	.032
.724	******	-.121	******	-.106	******	-.119	******	******	.052	.044	.030	.019
.738	******	-.174	******	-.150	******	******	******	******	.004	.015	.006	.003
.752	******	-.214	******	-.201	******	-.227	******	******	-.045	-.014	-.013	******
.766	******	-.275	******	-.270	******	-.301	******	******	-.107	-.071	-.069	-.064
.779	******	-.307	******	-.298	******	-.328	******	******	-.135	-.073	-.059	-.060
.793	******	-.347	******	-.349	******	-.374	******	******	-.166	-.127	-.103	******
.807	******	-.381	******	-.382	******	-.410	******	******	-.185	-.148	-.127	-.128
.821	******	******	******	-.409	******	-.435	******	******	-.191	-.172	-.147	-.154
.835	******	-.437	******	-.449	******	-.467	******	******	-.218	-.203	-.181	-.185
.849	******	-.443	******	-.474	******	-.468	******	******	-.184	-.185	-.194	-.209
.863	******	-.338	******	-.379	******	-.353	******	******	-.132	-.202	******	-.232
.877	-.141	-.143	******	-.166	******	-.183	******	******	******	******	******	******
.891	-.083	-.064	******	-.068	******	-.111	******	******	-.101	-.171	-.125	-.189
.916	-.052	-.053	-.086	******	-.062	******	-.076	-.092	-.104	-.119	-.117	******
.928	-.062	******	-.094	******	-.070	******	-.099	-.090	-.126	-.155	-.170	-.172
.940	-.065	******	-.053	******	-.062	******	-.094	-.112	-.130	-.153	-.175	-.176
.952	******	******	-.032	******	-.035	-.037	-.044	-.058	-.064	-.083	-.099	******
.962	.040	.033	.028	******	.034	.027	.071	.020	.009	.009	-.002	-.004
.974	.109	.110	******	******	.129	.082	.079	.120	.082	.090	.090	.087
.986	.147	.134	.152	******	.143	.119	.112	.120	.126	.131	.135	.131
.996	.147	.136	******	******	.127	.131	.127	.128	.133	.135	.135	.140

AFTERBODY INTEGRATED PRESSURE DRAG COEFFICIENT .0471

Table A20. Concluded

(d) $\alpha = 6.008°$

TEST PARAMETERS

CONFIGURATION	FWD TAILS
POINT NUMBER	21
MACH NUMBER	.948
ALPHA, DEG	6.008
NPR	1.087
PTO, PSI	14.686
PO, PSI	8.230
QO, PSI	5.183

TAIL SURFACE PRESSURE COEFFICIENTS

	HORIZONTAL TAILS				VERTICAL TAIL	
	UPPER SURFACE Y/B		LOWER SURFACE Y/B		Y/B	
X/C	0.1	0.2	0.1	0.2	0.1	0.2
0.05	.323	******	.728	******	.010	-.011
0.10	.236	.494	.678	-.414	******	******
0.20	.134	.506	.642	-.387	-.053	-.101
0.30	******	.498	******	-.400	-.141	-.171
0.40	-.025	.495	.596	-.452	-.247	-.269
0.50	-.064	.518	.596	-.510	-.302	-.326
0.60	-.101	.534	.604	-.516	-.391	-.393
0.70	-.112	.560	.615	-.526	-.429	******
0.80	-.087	.596	.635	-.535	-.463	-.454
0.90	-.053	******	.654	******	-.461	-.443

AFTERBODY PRESSURE COEFFICIENTS

	PHI, DEG											
X/L	0	18	36	45	54	72	81	90	108	135	162	180
.584	.014	.015	******	******	******	******	******	-.013	-.007	.018	.047	******
.598	.022	.020	******	.014	******	.001	******	-.014	-.007	.012	******	******
.612	.045	.045	******	.026	******	.012	******	-.002	-.005	.016	******	******
.626	.104	.073	******	.039	******	.024	******	.007	.006	.020	******	******
.640	******	.097	******	.045	******	.023	******	.012	.006	.027	******	******
.654	******	.058	******	.047	******	.033	******	.015	.010	.026	******	******
.668	******	******	******	.037	******	.049	******	.055	.053	.059	******	******
.682	******	-.006	******	.014	******	.053	******	.140	.114	.075	.061	******
.696	******	-.044	******	-.027	******	-.047	******	******	.216	.106	.075	.07
.710	******	-.096	******	******	******	-.162	******	******	.207	.123	.083	.07
.724	******	-.157	******	-.154	******	-.218	******	******	.156	.114	.077	.06
.738	******	-.214	******	-.216	******	******	******	******	.099	.096	.062	.05
.752	******	-.254	******	-.265	******	-.307	******	******	.052	.064	.049	******
.766	******	-.326	******	-.331	******	-.367	******	******	-.013	.013	.002	-.00
.779	******	-.357	******	-.367	******	-.399	******	******	-.046	-.001	.005	-.00
.793	******	-.401	******	-.415	******	-.443	******	******	-.074	-.042	-.040	******
.807	******	-.439	******	-.447	******	-.478	******	******	-.089	-.067	-.055	-.05
.821	******	******	******	-.479	******	-.497	******	******	-.107	-.098	-.083	-.07
.835	******	-.496	******	-.515	******	-.526	******	******	-.110	-.104	-.104	-.10
.849	******	-.509	******	-.538	******	-.509	******	******	-.097	-.113	-.116	-.12
.863	******	-.493	******	-.440	******	-.337	******	******	-.124	-.134	******	-.13
.877	-.232	-.231	******	-.197	******	-.170	******	******	******	******	******	******
.891	-.112	-.113	******	-.127	******	-.110	******	******	-.204	-.241	-.226	-.21
.916	-.055	-.047	-.069	******	-.046	******	-.041	-.062	-.132	-.224	-.234	******
.928	-.070	******	-.045	******	-.020	******	-.021	-.043	-.115	-.215	-.281	-.29
.940	-.071	******	-.002	******	.009	******	.020	-.009	-.076	-.136	-.208	-.20
.952	******	******	.032	******	.029	.031	.040	.026	-.036	-.058	-.100	******
.962	.002	.039	.035	******	.040	.047	.051	.044	.021	.008	-.005	-.02
.974	.046	.060	******	******	.037	.050	.050	.058	.038	.059	.070	.05
.986	.075	.069	.054	******	.069	.070	.084	.083	.068	.076	.093	.10
.996	.072	.076	******	******	.078	.061	.072	.080	.050	.068	.082	.09

AFTERBODY INTEGRATED PRESSURE DRAG COEFFICIENT .0562

Table A21. Effect of Nozzle Pressure Ratio on Pressure Distributions for Forward Tails Configuration at $M = 0.90$ and $\alpha = 0.016°$

(a) NPR = 1.114

TEST PARAMETERS

CONFIGURATION	FWD TAILS
POINT NUMBER	22
MACH NUMBER	.900
ALPHA, DEG	.016
NPR	1.114
PTO, PSI	14.684
PO, PSI	8.686
QO, PSI	4.921

TAIL SURFACE PRESSURE COEFFICIENTS

	HORIZONTAL TAILS				VERTICAL TAIL	
	UPPER SURFACE		LOWER SURFACE			
	Y/B		Y/B		Y/B	
X/C	0.1	0.2	0.1	0.2	0.1	0.2
0.05	-.097	******	.770	******	-.041	-.071
0.10	-.102	.292	.710	-.119	******	******
0.20	-.141	.345	.656	-.183	-.093	-.128
0.30	******	.374	******	-.247	-.152	-.189
0.40	-.258	.381	.585	-.351	-.230	-.256
0.50	-.250	.414	.576	-.388	-.271	-.301
0.60	-.263	.441	.574	-.406	-.332	-.349
0.70	-.171	.480	.581	-.253	-.349	******
0.80	-.088	.518	.595	-.064	-.125	-.085
0.90	-.014	******	.610	******	-.004	.020

AFTERBODY PRESSURE COEFFICIENTS

	PHI, DEG											
X/L	0	18	36	45	54	72	81	90	108	135	162	180
.584	-.010	-.007	******	******	******	******	******	-.012	-.014	-.005	.003	******
.598	-.005	-.007	******	-.005	******	-.012	******	-.012	-.017	-.012	******	******
.612	.028	.016	******	.006	******	.000	******	-.006	-.007	-.009	******	******
.626	.089	.060	******	.018	******	-.001	******	-.001	-.005	-.007	******	******
.640	******	.081	******	.023	******	-.001	******	-.007	-.011	-.012	******	******
.654	******	.025	******	.008	******	.006	******	-.007	-.011	-.010	******	******
.668	******	******	******	.015	******	.012	******	.019	.011	.002	******	******
.682	******	-.044	******	-.006	******	.036	******	.089	.029	-.002	-.018	******
.696	******	-.067	******	-.015	******	.044	******	******	.025	-.005	-.023	-.019
.710	******	-.103	******	******	******	-.019	******	******	-.027	-.027	-.034	-.034
.724	******	-.141	******	-.095	******	-.079	******	******	-.080	-.050	-.047	-.052
.738	******	-.178	******	-.139	******	******	******	******	-.127	-.083	-.081	-.080
.752	******	-.212	******	-.194	******	-.187	******	******	-.153	-.106	-.093	******
.766	******	-.287	******	-.261	******	-.279	******	******	-.204	-.157	-.150	-.142
.779	******	-.293	******	-.278	******	-.302	******	******	-.213	-.158	-.130	-.122
.793	******	-.331	******	-.317	******	-.365	******	******	-.223	-.175	-.154	******
.807	******	-.303	******	-.311	******	-.334	******	******	-.190	-.180	-.144	-.135
.821	******	******	******	-.166	******	-.178	******	******	-.154	-.140	-.130	-.134
.835	******	-.080	******	-.085	******	-.087	******	******	-.097	-.107	-.113	-.119
.849	******	-.041	******	-.053	******	-.045	******	******	-.067	-.098	-.099	-.100
.863	******	-.029	******	-.043	******	-.027	******	******	-.043	-.081	******	-.097
.877	-.022	-.029	******	-.044	******	-.038	******	******	******	******	******	******
.891	-.058	-.069	******	-.071	******	-.067	******	******	-.078	-.090	-.096	-.101
.916	-.115	-.115	-.174	******	-.115	******	-.121	-.119	-.125	-.123	-.123	******
.928	-.145	******	-.191	******	-.152	******	-.147	-.152	-.152	-.160	-.173	-.167
.940	-.167	******	-.151	******	-.160	******	-.154	-.157	-.161	-.167	-.164	-.166
.952	******	******	-.105	******	-.106	-.104	-.102	-.106	-.104	-.100	-.107	******
.962	-.031	-.023	-.020	******	-.021	-.019	-.021	-.018	-.018	-.013	-.017	-.017
.974	.066	.067	******	******	.068	.067	.072	.068	.072	.079	.078	.071
.986	.131	.132	.133	******	.134	.135	.138	.136	.134	.130	.135	.135
.996	.160	.161	******	******	.164	.168	.169	.165	.161	.168	.163	.163

AFTERBODY INTEGRATED PRESSURE DRAG COEFFICIENT .0415

Table A21. Continued

(b) NPR = 2.001

TEST PARAMETERS

CONFIGURATION	FWD TAILS
POINT NUMBER	23
MACH NUMBER	.899
ALPHA, DEG	.016
NPR	2.001
PTO, PSI	14.684
PO, PSI	8.688
QO, PSI	4.919

TAIL SURFACE PRESSURE COEFFICIENTS

	HORIZONTAL TAILS				VERTICAL TAIL	
	UPPER SURFACE Y/B		LOWER SURFACE Y/B		Y/B	
X/C	0.1	0.2	0.1	0.2	0.1	0.2
0.05	-.080	******	.854	******	-.036	-.073
0.10	-.092	.281	.789	-.112	******	******
0.20	-.127	.278	.713	-.182	-.088	-.131
0.30	******	.327	******	-.244	-.153	-.184
0.40	-.246	.350	.628	-.339	-.236	-.248
0.50	-.243	.394	.607	-.385	-.272	-.298
0.60	-.249	.433	.598	-.399	-.339	-.341
0.70	-.181	.469	.600	-.213	-.354	******
0.80	-.087	.504	.602	-.059	-.105	-.071
0.90	-.012	******	.609	******	.001	.028

AFTERBODY PRESSURE COEFFICIENTS

	PHI, DEG											
X/L	0	18	36	45	54	72	81	90	108	135	162	180
.584	-.014	-.001	******	******	******	******	******	-.011	-.010	-.003	.007	******
.598	-.013	-.002	******	-.003	******	-.009	******	-.019	-.015	-.009	******	******
.612	.018	.020	******	.009	******	.004	******	-.008	-.014	-.001	******	******
.626	.091	.053	******	.025	******	.009	******	-.003	-.008	-.006	******	******
.640	******	.072	******	.024	******	.007	******	-.004	-.007	-.012	******	******
.654	******	.024	******	.007	******	.008	******	-.012	-.006	-.014	******	******
.668	******	******	******	.007	******	.018	******	.013	.012	-.001	******	******
.682	******	-.045	******	-.011	******	.041	******	.079	.031	-.003	-.014	******
.696	******	-.071	******	-.022	******	.052	******	******	.025	-.009	-.021	-.027
.710	******	-.093	******	******	******	-.008	******	******	-.028	-.022	-.034	-.035
.724	******	-.137	******	-.087	******	-.079	******	******	-.073	-.056	-.057	-.054
.738	******	-.173	******	-.145	******	******	******	******	-.121	-.082	-.081	-.075
.752	******	-.216	******	-.188	******	-.192	******	******	-.155	-.111	-.091	******
.766	******	-.294	******	-.258	******	-.278	******	******	-.212	-.155	-.133	-.143
.779	******	-.312	******	-.286	******	-.302	******	******	-.215	-.155	-.128	-.135
.793	******	-.327	******	-.324	******	-.343	******	******	-.219	-.166	-.147	******
.807	******	-.247	******	-.243	******	-.302	******	******	-.185	-.149	-.139	-.136
.821	******	******	******	-.148	******	-.164	******	******	-.143	-.130	-.129	-.126
.835	******	-.065	******	-.079	******	-.080	******	******	-.095	-.102	-.108	-.120
.849	******	-.032	******	-.046	******	-.041	******	******	-.057	-.082	-.091	-.104
.863	******	-.025	******	-.039	******	-.026	******	******	-.043	-.071	******	-.091
.877	-.018	-.023	******	-.034	******	-.036	******	******	******	******	******	******
.891	-.055	-.060	******	-.059	******	-.060	******	******	-.069	-.079	-.096	-.092
.916	-.107	-.101	-.154	******	-.099	******	-.106	-.103	-.107	-.104	-.105	******
.928	-.131	******	-.160	******	-.127	******	-.128	-.125	-.127	-.134	-.145	-.146
.940	-.131	******	-.123	******	-.128	******	-.128	-.129	-.122	-.129	-.137	-.136
.952	******	******	-.066	******	-.066	-.068	-.069	-.071	-.060	-.059	-.073	******
.962	.002	.016	.023	******	.022	.022	.018	.023	.025	.031	.029	.018
.974	.099	.106	******	******	.112	.112	.109	.112	.116	.120	.117	.113
.986	.171	.167	.171	******	.176	.174	.171	.171	.177	.177	.172	.178
.996	.199	.201	******	******	.203	.204	.201	.198	.202	.205	.198	.204

AFTERBODY INTEGRATED PRESSURE DRAG COEFFICIENT .0210

Table A21. Continued

(c) NPR = 3.006

TEST PARAMETERS

CONFIGURATION	FWD TAILS
POINT NUMBER	24
MACH NUMBER	.900
ALPHA, DEG	.016
NPR	3.006
PTO, PSI	14.685
PO, PSI	8.679
QO, PSI	4.925

TAIL SURFACE PRESSURE COEFFICIENTS

	HORIZONTAL TAILS				VERTICAL TAIL	
	UPPER SURFACE Y/B		LOWER SURFACE Y/B		Y/B	
X/C	0.1	0.2	0.1	0.2	0.1	0.2
0.05	-.091	******	-.191	******	-.039	-.062
0.10	-.104	-.090	-.219	-.122	******	******
0.20	-.137	-.170	-.242	-.180	-.089	-.136
0.30	******	-.243	******	-.237	-.147	-.184
0.40	-.254	-.344	-.364	-.341	-.232	-.256
0.50	-.252	-.389	-.411	-.387	-.267	-.305
0.60	-.260	-.459	-.416	-.402	-.331	-.343
0.70	-.179	-.481	-.417	-.255	-.353	******
0.80	-.092	-.490	-.392	-.055	-.111	-.078
0.90	-.014	******	-.327	******	.003	.025

AFTERBODY PRESSURE COEFFICIENTS

	PHI, DEG											
X/L	0	18	36	45	54	72	81	90	108	135	162	180
.584	-.003	-.001	******	******	******	******	******	-.010	-.008	-.004	.002	******
.598	-.001	.000	******	-.005	******	-.015	******	-.014	-.011	-.008	******	******
.612	.027	.023	******	.010	******	-.003	******	-.007	-.005	-.008	******	******
.626	.097	.063	******	.021	******	.002	******	-.004	.000	-.009	******	******
.640	******	.085	******	.021	******	.004	******	.004	-.002	-.012	******	******
.654	******	.031	******	.008	******	.004	******	.000	-.006	-.012	******	******
.668	******	******	******	.008	******	.015	******	.024	.016	-.003	******	******
.682	******	-.044	******	-.011	******	.042	******	.087	.037	-.006	-.017	******
.696	******	-.062	******	-.021	******	.042	******	******	.025	-.011	-.020	-.021
.710	******	-.095	******	******	******	-.012	******	******	-.030	-.028	-.027	-.031
.724	******	-.141	******	-.097	******	-.072	******	******	-.081	-.058	-.053	-.055
.738	******	-.182	******	-.149	******	******	******	******	-.126	-.086	-.079	-.061
.752	******	-.203	******	-.183	******	-.192	******	******	-.157	-.115	-.095	******
.766	******	-.281	******	-.260	******	-.272	******	******	-.208	-.160	-.137	-.138
.779	******	-.285	******	-.275	******	-.306	******	******	-.224	-.160	-.130	-.125
.793	******	-.315	******	-.308	******	-.346	******	******	-.230	-.174	-.150	******
.807	******	-.267	******	-.280	******	-.341	******	******	-.202	-.166	-.137	-.139
.821	******	******	******	-.172	******	-.215	******	******	-.154	-.131	-.122	-.110
.835	******	-.067	******	-.092	******	-.092	******	******	-.101	-.108	-.108	-.115
.849	******	-.034	******	-.050	******	-.041	******	******	-.063	-.089	-.095	-.098
.863	******	-.019	******	-.037	******	-.023	******	******	-.047	-.072	******	-.090
.877	-.013	-.020	******	-.035	******	-.037	******	******	******	******	******	******
.891	-.046	-.055	******	-.061	******	-.064	******	******	-.071	-.080	-.094	-.081
.916	-.096	-.097	-.149	******	-.095	******	-.106	-.108	-.109	-.109	-.107	******
.928	-.125	******	-.163	******	-.131	******	-.127	-.133	-.130	-.138	-.153	-.147
.940	-.126	******	-.120	******	-.136	******	-.131	-.137	-.131	-.133	-.137	-.141
.952	******	******	-.068	******	-.073	-.070	-.075	-.074	-.066	-.066	-.073	******
.962	.012	.015	.025	******	.026	.020	.019	.018	.020	.027	.024	.021
.974	.107	.109	******	******	.109	.110	.109	.105	.111	.116	.116	.111
.986	.176	.175	.174	******	.169	.170	.167	.164	.168	.173	.172	.173
.996	.202	.206	******	******	.197	.199	.196	.196	.199	.199	.196	.206

AFTERBODY INTEGRATED PRESSURE DRAG COEFFICIENT .0229

Table A21. Concluded

(d) NPR = 4.977

TEST PARAMETERS

CONFIGURATION	FWD TAILS
POINT NUMBER	25
MACH NUMBER	.899
ALPHA, DEG	.016
NPR	4.977
PTO, PSI	14.684
PO, PSI	8.689
QO, PSI	4.919

TAIL SURFACE PRESSURE COEFFICIENTS

	HORIZONTAL TAILS				VERTICAL TAIL	
	UPPER SURFACE Y/B		LOWER SURFACE Y/B		Y/B	
X/C	0.1	0.2	0.1	0.2	0.1	0.2
0.05	-.090	******	-.202	******	-.034	-.066
0.10	-.101	-.091	-.207	-.132	******	******
0.20	-.133	-.171	-.241	-.178	-.086	-.128
0.30	******	-.241	******	-.244	-.149	-.184
0.40	-.255	-.344	-.369	-.341	-.231	-.258
0.50	-.259	-.394	-.415	-.381	-.274	-.300
0.60	-.253	-.456	-.419	-.393	-.331	-.341
0.70	-.174	-.482	-.420	-.250	-.341	******
0.80	-.085	-.492	-.421	-.059	-.110	-.065
0.90	-.016	******	-.350	******	.000	.028

AFTERBODY PRESSURE COEFFICIENTS

	PHI, DEG											
X/L	0	18	36	45	54	72	81	90	108	135	162	180
.584	-.010	.001	******	******	******	******	******	-.012	-.013	-.004	.002	******
.598	-.002	-.005	******	-.003	******	-.014	******	-.018	-.014	-.008	******	******
.612	.025	.021	******	.011	******	-.007	******	-.007	-.009	-.009	******	******
.626	.094	.060	******	.020	******	.005	******	-.004	-.008	-.012	******	******
.640	******	.083	******	.017	******	.005	******	-.003	-.007	-.008	******	******
.654	******	.029	******	.012	******	.008	******	-.008	-.008	-.016	******	******
.668	******	******	******	.006	******	.021	******	.020	.017	.001	******	******
.682	******	-.037	******	-.001	******	.045	******	.086	.033	-.009	-.017	******
.696	******	-.065	******	-.021	******	.046	******	******	.019	-.011	-.021	-.02
.710	******	-.093	******	******	******	-.011	******	******	-.030	-.020	-.033	-.03
.724	******	-.142	******	-.091	******	-.079	******	******	-.081	-.047	-.058	-.05
.738	******	-.174	******	-.137	******	******	******	******	-.119	-.092	-.078	-.07
.752	******	-.209	******	-.179	******	-.185	******	******	-.147	-.100	-.091	******
.766	******	-.282	******	-.261	******	-.272	******	******	-.211	-.163	-.130	-.13
.779	******	-.293	******	-.274	******	-.300	******	******	-.214	-.160	-.125	-.13
.793	******	-.316	******	-.326	******	-.338	******	******	-.236	-.192	-.150	******
.807	******	-.260	******	-.260	******	-.321	******	******	-.190	-.155	-.134	-.13
.821	******	******	******	-.167	******	-.161	******	******	-.135	-.127	-.125	-.11
.835	******	-.066	******	-.079	******	-.086	******	******	-.098	-.115	-.103	-.11
.849	******	-.032	******	-.046	******	-.036	******	******	-.055	-.083	-.094	-.10
.863	******	-.018	******	-.036	******	-.024	******	******	-.036	-.070	******	-.08
.877	-.014	-.021	******	-.033	******	-.033	******	******	******	******	******	******
.891	-.050	-.059	******	-.061	******	-.063	******	******	-.069	-.076	-.095	-.08
.916	-.095	-.093	-.147	******	-.095	******	-.097	-.101	-.103	-.101	-.099	******
.928	-.118	******	-.156	******	-.124	******	-.122	-.116	-.120	-.128	-.145	-.13
.940	-.118	******	-.106	******	-.118	******	-.119	-.112	-.115	-.115	-.128	-.12
.952	******	******	-.054	******	-.054	-.057	-.059	-.055	-.050	-.050	-.057	******
.962	.027	.033	.042	******	.039	.040	.039	.037	.038	.046	.044	.03
.974	.127	.127	******	******	.128	.132	.128	.131	.127	.136	.133	.13
.986	.192	.190	.193	******	.191	.187	.190	.191	.189	.192	.186	.19
.996	.221	.216	******	******	.214	.212	.210	.212	.213	.212	.211	.21

AFTERBODY INTEGRATED PRESSURE DRAG COEFFICIENT .0141

Table A22. Effect of Angle of Attack on Pressure Distributions for Forward Tails Configuration at $M = 0.90$ and NPR = 1.119

(a) $\alpha = -2.994°$

TEST PARAMETERS

CONFIGURATION	FWD TAILS
POINT NUMBER	27
MACH NUMBER	.893
ALPHA, DEG	-2.994
NPR	1.119
PTO, PSI	14.578
PO, PSI	8.686
QO, PSI	4.847

TAIL SURFACE PRESSURE COEFFICIENTS

	HORIZONTAL TAILS				VERTICAL TAIL	
	UPPER SURFACE Y/B		LOWER SURFACE Y/B		Y/B	
X/C	0.1	0.2	0.1	0.2	0.1	0.2
0.05	-.357	******	-.212	******	-.037	-.062
0.10	-.290	-.096	-.215	.038	******	******
0.20	-.283	-.175	-.243	-.058	-.084	-.111
0.30	******	-.247	******	-.137	-.133	-.159
0.40	-.367	-.351	-.376	-.237	-.195	-.217
0.50	-.392	-.402	-.421	-.273	-.226	-.262
0.60	-.399	-.466	-.428	-.264	-.249	-.257
0.70	-.281	-.488	-.429	-.130	-.180	******
0.80	-.119	-.500	-.425	-.048	-.069	-.048
0.90	-.030	******	-.380	******	.014	.034

AFTERBODY PRESSURE COEFFICIENTS

	PHI, DEG.											
X/L	0	18	36	45	54	72	81	90	108	135	162	180
.584	-.012	-.003	******	******	******	******	******	-.019	-.016	-.015	.002	******
.598	-.001	.001	******	-.015	******	-.022	******	-.022	-.022	-.015	******	******
.612	.034	.025	******	.007	******	-.011	******	-.012	-.023	-.019	******	******
.626	.112	.065	******	.016	******	-.006	******	-.013	-.018	-.021	******	******
.640	******	.099	******	.018	******	-.007	******	-.016	-.021	-.024	******	******
.654	******	.026	******	-.004	******	-.005	******	-.023	-.024	-.029	******	******
.668	******	******	******	.001	******	.011	******	.007	-.008	-.022	******	******
.682	******	-.044	******	-.009	******	.050	******	.087	.001	-.038	-.042	******
.696	******	-.051	******	-.004	******	.111	******	******	-.065	-.059	-.058	-.051
.710	******	-.072	******	******	******	.076	******	******	-.160	-.094	-.080	-.070
.724	******	-.102	******	-.041	******	.010	******	******	-.210	-.131	-.114	-.104
.738	******	-.125	******	-.076	******	******	******	******	-.241	-.160	-.143	-.132
.752	******	-.156	******	-.119	******	-.120	******	******	-.262	-.190	-.160	******
.766	******	-.234	******	-.190	******	-.193	******	******	-.324	-.238	-.215	-.208
.779	******	-.195	******	-.198	******	-.208	******	******	-.332	-.250	-.211	-.201
.793	******	-.191	******	-.194	******	-.239	******	******	-.345	-.277	-.239	******
.807	******	-.143	******	-.150	******	-.168	******	******	-.308	-.260	-.226	-.200
.821	******	******	******	-.096	******	-.106	******	******	-.217	-.198	-.183	-.171
.835	******	-.048	******	-.060	******	-.065	******	******	-.124	-.145	-.142	-.141
.849	******	-.026	******	-.040	******	-.034	******	******	-.082	-.103	-.113	-.111
.863	******	-.020	******	-.039	******	-.027	******	******	-.049	-.086	******	-.095
.877	-.013	-.022	******	-.035	******	-.043	******	******	******	******	******	******
.891	-.064	-.075	******	-.073	******	-.073	******	******	-.079	-.086	-.102	-.095
.916	-.126	-.125	-.197	******	-.122	******	-.125	-.121	-.122	-.115	-.117	******
.928	-.166	******	-.216	******	-.162	******	-.156	-.155	-.146	-.143	-.152	-.143
.940	-.187	******	-.180	******	-.176	******	-.169	-.156	-.151	-.141	-.144	-.140
.952	******	******	-.128	******	-.119	-.119	-.110	-.108	-.087	-.082	-.083	******
.962	-.049	-.037	-.029	******	-.031	-.027	-.025	-.015	-.006	.001	-.007	-.005
.974	.059	.060	******	******	.070	.071	.068	.065	.071	.081	.075	.080
.986	.128	.124	.124	******	.130	.123	.131	.134	.128	.134	.128	.137
.996	.147	.148	******	******	.146	.139	.148	.141	.148	.155	.154	.159

AFTERBODY INTEGRATED PRESSURE DRAG COEFFICIENT .0451

Table A22. Continued

(b) $\alpha = 0.013°$

TEST PARAMETERS

CONFIGURATION	FWD TAILS
POINT NUMBER	28
MACH NUMBER	.903
ALPHA, DEG	.013
NPR	1.131
PTO, PSI	14.684
PO, PSI	8.649
QO, PSI	4.942

TAIL SURFACE PRESSURE COEFFICIENTS

	HORIZONTAL TAILS				VERTICAL TAIL	
	UPPER SURFACE Y/B		LOWER SURFACE Y/B		Y/B	
X/C	0.1	0.2	0.1	0.2	0.1	0.2
0.05	-.082	******	-.213	******	-.043	-.075
0.10	-.093	-.084	-.201	-.120	******	******
0.20	-.138	-.171	-.238	-.185	-.092	-.127
0.30	******	-.239	******	-.248	-.145	-.180
0.40	-.260	-.340	-.359	-.346	-.230	-.255
0.50	-.265	-.387	-.402	-.378	-.273	-.300
0.60	-.272	-.454	-.414	-.417	-.332	-.347
0.70	-.199	-.467	-.415	-.323	-.357	******
0.80	-.090	-.482	-.404	-.057	-.137	-.090
0.90	-.017	******	-.339	******	-.003	.024

AFTERBODY PRESSURE COEFFICIENTS

	PHI, DEG											
X/L	0	18	36	45	54	72	81	90	108	135	162	180
.584	-.008	-.007	******	******	******	******	******	-.013	-.011	-.004	.005	******
.598	.000	-.003	******	-.004	******	-.013	******	-.011	-.019	-.004	******	******
.612	.027	.016	******	.013	******	-.005	******	-.007	-.013	-.011	******	******
.626	.093	.058	******	.019	******	.007	******	.002	-.009	-.010	******	******
.640	******	.085	******	.024	******	.003	******	-.002	-.008	-.010	******	******
.654	******	.024	******	.012	******	.005	******	-.002	-.008	-.019	******	******
.668	******	******	******	.007	******	.015	******	.024	.018	.000	******	******
.682	******	-.039	******	-.008	******	.037	******	.089	.039	-.005	-.020	******
.696	******	-.060	******	-.022	******	.045	******	******	.031	-.008	-.022	-.020
.710	******	-.090	******	******	******	-.013	******	******	-.027	-.022	-.032	-.034
.724	******	-.135	******	-.093	******	-.080	******	******	-.073	-.051	-.054	-.046
.738	******	-.179	******	-.139	******	******	******	******	-.121	-.086	-.082	-.070
.752	******	-.204	******	-.184	******	-.187	******	******	-.150	-.108	-.095	******
.766	******	-.280	******	-.264	******	-.273	******	******	-.222	-.161	-.139	-.147
.779	******	-.294	******	-.280	******	-.303	******	******	-.220	-.165	-.137	-.130
.793	******	-.336	******	-.331	******	-.352	******	******	-.235	-.192	-.166	******
.807	******	-.321	******	-.340	******	-.347	******	******	-.208	-.162	-.149	-.133
.821	******	******	******	-.198	******	-.238	******	******	-.154	-.143	-.133	-.125
.835	******	-.082	******	-.097	******	-.096	******	******	-.104	-.118	-.118	-.127
.849	******	-.037	******	-.051	******	-.046	******	******	-.060	-.084	-.103	-.099
.863	******	-.023	******	-.040	******	-.032	******	******	-.044	-.079	******	-.094
.877	-.021	-.024	******	-.037	******	-.038	******	******	******	******	******	******
.891	-.060	-.059	******	-.069	******	-.068	******	******	-.075	-.088	-.098	-.095
.916	-.110	-.113	-.171	******	-.106	******	-.121	-.122	-.125	-.125	-.125	******
.928	-.144	******	-.186	******	-.149	******	-.156	-.149	-.152	-.159	-.157	-.168
.940	-.159	******	-.148	******	-.161	******	-.157	-.158	-.157	-.169	-.164	-.166
.952	******	******	-.099	******	-.106	-.110	-.109	-.109	-.102	-.104	-.114	******
.962	-.025	-.020	-.018	******	-.010	-.020	-.025	-.018	-.018	-.016	-.020	-.018
.974	.071	.066	******	******	.073	.070	.064	.069	.067	.075	.070	.068
.986	.140	.128	.135	******	.134	.127	.133	.136	.127	.126	.131	.129
.996	.163	.158	******	******	.168	.156	.159	.158	.162	.160	.148	.152

AFTERBODY INTEGRATED PRESSURE DRAG COEFFICIENT .0423

C - 2

Table A22. Concluded

(c) $\alpha = 6.015°$

TEST PARAMETERS

CONFIGURATION	FWD TAILS
POINT NUMBER	29
MACH NUMBER	.901
ALPHA, DEG	6.015
NPR	1.086
PTO, PSI	14.684
PO, PSI	8.677
QO, PSI	4.926

TAIL SURFACE PRESSURE COEFFICIENTS

	HORIZONTAL TAILS				VERTICAL TAIL	
	UPPER SURFACE Y/B		LOWER SURFACE Y/B		Y/B	
X/C	0.1	0.2	0.1	0.2	0.1	0.2
0.05	.313	******	-.361	******	-.026	-.066
0.10	.229	.047	-.415	-.499	******	******
0.20	.117	-.058	-.406	-.447	-.095	-.150
0.30	******	-.150	******	-.469	-.191	-.224
0.40	-.030	-.262	-.469	-.521	-.306	-.322
0.50	-.062	-.310	-.511	-.568	-.357	-.379
0.60	-.085	-.379	-.507	-.577	-.442	-.447
0.70	-.078	-.404	-.505	-.591	-.485	******
0.80	-.042	-.419	-.499	-.524	-.507	-.504
0.90	-.001	******	-.459	******	-.075	-.081

AFTERBODY PRESSURE COEFFICIENTS

	PHI, DEG											
X/L	0	18	36	45	54	72	81	90	108	135	162	180
.584	.000	.002	******	******	******	******	******	-.025	-.020	.006	.031	******
.598	.008	.006	******	.000	******	-.019	******	-.029	-.030	-.001	******	******
.612	.030	.019	******	.007	******	-.013	******	-.018	-.019	.001	******	******
.626	.084	.052	******	.015	******	-.003	******	-.011	-.012	.002	******	******
.640	******	.071	******	.019	******	.000	******	-.008	-.010	.005	******	******
.654	******	.028	******	.013	******	.003	******	-.011	-.007	.002	******	******
.668	******	******	******	.001	******	.013	******	.030	.028	.032	******	******
.682	******	-.049	******	-.029	******	.011	******	.113	.088	.047	.040	******
.696	******	-.089	******	-.080	******	-.103	******	******	.189	.075	.053	.050
.710	******	-.146	******	******	******	-.214	******	******	.185	.092	.061	.053
.724	******	-.204	******	-.210	******	-.287	******	******	.138	.089	.056	.051
.738	******	-.269	******	-.275	******	******	******	******	.082	.072	.046	.040
.752	******	-.312	******	-.322	******	-.355	******	******	.029	.046	.029	******
.766	******	-.390	******	-.393	******	-.438	******	******	-.033	.002	-.014	-.007
.779	******	-.415	******	-.418	******	-.458	******	******	-.050	-.006	.005	-.005
.793	******	-.454	******	-.474	******	-.503	******	******	-.066	-.041	-.032	******
.807	******	-.489	******	-.505	******	-.535	******	******	-.071	-.051	-.035	-.033
.821	******	******	******	-.512	******	-.543	******	******	-.075	-.054	-.051	-.048
.835	******	-.352	******	-.375	******	-.331	******	******	-.062	-.068	-.057	-.063
.849	******	-.135	******	-.176	******	-.148	******	******	-.052	-.068	-.070	-.072
.863	******	-.065	******	-.085	******	-.089	******	******	-.048	-.066	******	-.077
.877	-.026	-.033	******	-.061	******	-.058	******	******	******	******	******	******
.891	-.042	-.057	******	-.064	******	-.057	******	******	-.067	-.091	-.093	-.089
.916	-.074	-.078	-.141	******	-.069	******	-.072	-.080	-.098	-.115	-.116	******
.928	-.107	******	-.128	******	-.075	******	-.074	-.090	-.116	-.158	-.179	-.180
.940	-.127	******	-.084	******	-.053	******	-.046	-.069	-.116	-.150	-.188	-.192
.952	******	******	-.032	******	.008	.021	.023	-.003	-.056	-.089	-.135	******
.962	-.042	-.012	.043	******	.057	.064	.061	.057	.025	-.005	-.029	-.051
.974	.033	.061	******	******	.070	.074	.069	.068	.064	.067	.060	.046
.986	.090	.104	.086	******	.079	.084	.090	.093	.085	.106	.107	.107
.996	.084	.106	******	******	.109	.088	.086	.103	.077	.086	.098	.103

AFTERBODY INTEGRATED PRESSURE DRAG COEFFICIENT .0370

Table A23. Effect of Nozzle Pressure Ratio on Pressure Distributions for Forward Tails Configuration at $M = 0.60$ and $\alpha = 0.009°$

(a) NPR = 1.041

TEST PARAMETERS

CONFIGURATION	FWD TAILS
POINT NUMBER	30
MACH NUMBER	.602
ALPHA, DEG	.009
NPR	1.041
PTO, PSI	14.694
PO, PSI	11.503
QO, PSI	2.916

TAIL SURFACE PRESSURE COEFFICIENTS

	HORIZONTAL TAILS				VERTICAL TAIL	
	UPPER SURFACE Y/B		LOWER SURFACE Y/B		Y/B	
X/C	0.1	0.2	0.1	0.2	0.1	0.2
0.05	-.082	******	-1.301	******	-.077	-.096
0.10	-.095	-1.122	-1.312	-.131	******	******
0.20	-.121	-1.274	-1.370	-.169	-.118	-.138
0.30	******	-1.379	******	-.191	-.156	-.171
0.40	-.166	-1.552	-1.586	-.208	-.194	-.185
0.50	-.159	-1.637	-1.657	-.190	-.177	-.171
0.60	-.140	-1.741	-1.678	-.162	-.148	-.151
0.70	-.111	-1.782	-1.667	-.111	-.123	******
0.80	-.070	-1.797	-1.669	-.071	-.075	-.064
0.90	-.030	******	-1.600	******	-.025	-.009

AFTERBODY PRESSURE COEFFICIENTS

	PHI, DEG											
X/L	0	18	36	45	54	72	81	90	108	135	162	180
.584	-.015	-.012	******	******	******	******	******	-.020	-.014	-.018	-.006	******
.598	-.016	-.006	******	-.018	******	-.022	******	-.022	-.026	-.022	******	******
.612	.008	.003	******	-.012	******	-.016	******	-.018	-.026	-.021	******	******
.626	.056	.020	******	-.011	******	-.021	******	-.020	-.022	-.025	******	******
.640	******	.034	******	-.016	******	-.022	******	-.025	-.024	-.025	******	******
.654	******	-.015	******	-.026	******	-.021	******	-.021	-.025	-.030	******	******
.668	******	******	******	-.029	******	-.012	******	-.003	-.006	-.023	******	******
.682	******	-.073	******	-.044	******	.003	******	.051	.005	-.033	-.033	******
.696	******	-.092	******	-.054	******	-.010	******	******	-.005	-.031	-.040	-.033
.710	******	-.118	******	******	******	-.056	******	******	-.049	-.047	-.039	-.039
.724	******	-.138	******	-.089	******	-.094	******	******	-.075	-.052	-.055	-.049
.738	******	-.149	******	-.120	******	******	******	******	-.105	-.071	-.059	-.062
.752	******	-.144	******	-.125	******	-.140	******	******	-.114	-.075	-.066	******
.766	******	-.156	******	-.140	******	-.168	******	******	-.138	-.099	-.086	-.079
.779	******	-.138	******	-.134	******	-.145	******	******	-.132	-.084	-.068	-.065
.793	******	-.129	******	-.125	******	-.151	******	******	-.130	-.091	-.078	******
.807	******	-.108	******	-.110	******	-.129	******	******	-.106	-.089	-.078	-.073
.821	******	******	******	-.098	******	-.104	******	******	-.099	-.086	-.077	-.082
.835	******	-.074	******	-.085	******	-.085	******	******	-.078	-.081	-.079	-.082
.849	******	-.061	******	-.079	******	-.066	******	******	-.069	-.083	-.081	-.080
.863	******	-.055	******	-.071	******	-.058	******	******	-.061	-.083	******	-.084
.877	-.047	-.047	******	-.066	******	-.064	******	******	******	******	******	******
.891	-.073	-.080	******	-.079	******	-.079	******	******	-.077	-.088	-.094	-.094
.916	-.103	-.097	-.156	******	-.103	******	-.103	-.103	-.105	-.109	-.107	******
.928	-.122	******	-.156	******	-.129	******	-.122	-.121	-.122	-.133	-.134	-.133
.940	-.134	******	-.122	******	-.132	******	-.133	-.133	-.132	-.135	-.136	-.139
.952	******	******	-.098	******	-.107	-.106	-.104	-.102	-.104	-.103	-.111	******
.962	-.049	-.035	-.037	******	-.043	-.042	-.043	-.042	-.043	-.048	-.052	-.048
.974	.027	.030	******	******	.027	.032	.029	.029	.032	.027	.029	.024
.986	.091	.098	.093	******	.093	.090	.088	.085	.088	.089	.088	.087
.996	.114	.117	******	******	.120	.115	.116	.119	.121	.115	.115	.109

AFTERBODY INTEGRATED PRESSURE DRAG COEFFICIENT .0418

Table A23. Continued

(b) NPR = 2.112

TEST PARAMETERS

CONFIGURATION	FWD TAILS
POINT NUMBER	31
MACH NUMBER	.601
ALPHA, DEG	.008
NPR	2.112
PTO, PSI	14.694
PO, PSI	11.512
QO, PSI	2.910

TAIL SURFACE PRESSURE COEFFICIENTS

	HORIZONTAL TAILS				VERTICAL TAIL	
	UPPER SURFACE Y/B		LOWER SURFACE Y/B		Y/B	
X/C	0.1	0.2	0.1	0.2	0.1	0.2
0.05	-.090	******	-.870	******	-.089	-.095
0.10	-.100	-1.381	-1.008	-.144	******	******
0.20	-.118	-1.464	-1.140	-.169	-.115	-.143
0.30	******	-1.566	******	-.183	-.158	-.169
0.40	-.172	-1.695	-1.401	-.203	-.190	-.188
0.50	-.147	-1.787	-1.454	-.183	-.172	-.168
0.60	-.137	-1.861	-1.517	-.159	-.149	-.143
0.70	-.108	-1.907	-1.507	-.110	-.120	******
0.80	-.064	-1.921	-1.488	-.063	-.071	-.054
0.90	-.023	******	-1.359	******	-.015	-.002

AFTERBODY PRESSURE COEFFICIENTS

	PHI, DEG											
X/L	0	18	36	45	54	72	81	90	108	135	162	180
.584	-.020	-.008	******	******	******	******	******	-.018	-.021	-.014	-.005	******
.598	-.008	-.012	******	-.016	******	-.022	******	-.018	-.027	-.020	******	******
.612	.008	.000	******	-.011	******	-.017	******	-.017	-.027	-.024	******	******
.626	.057	.020	******	-.012	******	-.015	******	-.017	-.021	-.020	******	******
.640	******	.027	******	-.010	******	-.021	******	-.017	-.020	-.020	******	******
.654	******	-.010	******	-.020	******	-.015	******	-.024	-.022	-.033	******	******
.668	******	******	******	-.031	******	-.009	******	.004	-.008	-.017	******	******
.682	******	-.073	******	-.034	******	-.002	******	.053	.004	-.027	-.033	******
.696	******	-.086	******	-.052	******	-.012	******	******	-.006	-.036	-.041	-.028
.710	******	-.109	******	******	******	-.048	******	******	-.038	-.041	-.041	-.037
.724	******	-.131	******	-.093	******	-.102	******	******	-.071	-.050	-.047	-.049
.738	******	-.146	******	-.118	******	******	******	******	-.103	-.067	-.057	-.052
.752	******	-.149	******	-.128	******	-.136	******	******	-.116	-.074	-.059	******
.766	******	-.150	******	-.147	******	-.164	******	******	-.141	-.096	-.080	-.079
.779	******	-.140	******	-.130	******	-.146	******	******	-.127	-.081	-.072	-.059
.793	******	-.129	******	-.123	******	-.142	******	******	-.123	-.092	-.077	******
.807	******	-.105	******	-.106	******	-.124	******	******	-.110	-.085	-.079	-.073
.821	******	******	******	-.093	******	-.103	******	******	-.094	-.084	-.079	-.072
.835	******	-.069	******	-.082	******	-.078	******	******	-.079	-.081	-.082	-.079
.849	******	-.054	******	-.073	******	-.057	******	******	-.064	-.076	-.079	-.074
.863	******	-.053	******	-.065	******	-.057	******	******	-.055	-.079	******	-.079
.877	-.045	-.046	******	-.061	******	-.055	******	******	******	******	******	******
.891	-.069	-.072	******	-.076	******	-.071	******	******	-.071	-.079	-.085	-.082
.916	-.090	-.092	-.144	******	-.091	******	-.092	-.094	-.096	-.093	-.099	******
.928	-.108	******	-.142	******	-.112	******	-.112	-.111	-.110	-.118	-.124	-.120
.940	-.116	******	-.107	******	-.118	******	-.109	-.113	-.114	-.122	-.120	-.125
.952	******	******	-.079	******	-.084	-.080	-.082	-.080	-.084	-.084	-.091	******
.962	-.018	-.018	-.011	******	-.013	-.013	-.014	-.015	-.013	-.012	-.024	-.019
.974	.060	.062	******	******	.064	.063	.060	.061	.065	.065	.059	.061
.986	.128	.124	.129	******	.130	.125	.130	.127	.130	.128	.132	.130
.996	.164	.164	******	******	.160	.163	.162	.160	.161	.164	.166	.171

AFTERBODY INTEGRATED PRESSURE DRAG COEFFICIENT .0263

Table A23. Continued

(c) NPR = 3.137

TEST PARAMETERS

CONFIGURATION	FWD TAILS
POINT NUMBER	32
MACH NUMBER	.600
ALPHA, DEG	.009
NPR	3.137
PTO, PSI	14.691
PO, PSI	11.517
QO, PSI	2.903

TAIL SURFACE PRESSURE COEFFICIENTS

	HORIZONTAL TAILS				VERTICAL TAIL	
	UPPER SURFACE Y/B		LOWER SURFACE Y/B		Y/B	
X/C	0.1	0.2	0.1	0.2	0.1	0.2
0.05	-.086	******	-.563	******	-.082	-.091
0.10	-.095	-1.688	-.740	-.125	******	******
0.20	-.140	-1.642	-.926	-.175	-.114	-.140
0.30	******	-1.734	******	-.189	-.154	-.166
0.40	-.169	-1.824	-1.218	-.213	-.186	-.192
0.50	-.158	-1.931	-1.303	-.189	-.172	-.171
0.60	-.143	-1.980	-1.334	-.160	-.155	-.145
0.70	-.106	-2.037	-1.330	-.116	-.125	******
0.80	-.065	-2.032	-1.271	-.067	-.074	-.060
0.90	-.021	******	-1.180	******	-.018	-.002

AFTERBODY PRESSURE COEFFICIENTS

	PHI, DEG											
X/L	0	18	36	45	54	72	81	90	108	135	162	180
.584	-.017	-.011	******	******	******	******	******	-.016	-.024	-.023	-.013	******
.598	-.012	-.014	******	-.021	******	-.028	******	-.026	-.023	-.022	******	******
.612	.011	.006	******	-.011	******	-.021	******	-.021	-.024	-.020	******	******
.626	.062	.025	******	-.008	******	-.018	******	-.019	-.022	-.026	******	******
.640	******	.036	******	-.016	******	-.023	******	-.019	-.021	-.031	******	******
.654	******	-.008	******	-.026	******	-.019	******	-.023	-.023	-.029	******	******
.668	******	******	******	-.026	******	-.013	******	.000	-.007	-.023	******	******
.682	******	-.068	******	-.042	******	.006	******	.055	-.001	-.023	-.033	******
.696	******	-.100	******	-.051	******	-.005	******	******	-.008	-.032	-.040	-.035
.710	******	-.114	******	******	******	-.046	******	******	-.046	-.037	-.037	-.042
.724	******	-.134	******	-.083	******	-.093	******	******	-.072	-.053	-.049	-.050
.738	******	-.154	******	-.117	******	******	******	******	-.105	-.068	-.054	-.057
.752	******	-.143	******	-.127	******	-.144	******	******	-.121	-.075	-.068	******
.766	******	-.154	******	-.138	******	-.162	******	******	-.134	-.096	-.084	-.075
.779	******	-.134	******	-.130	******	-.156	******	******	-.131	-.087	-.066	-.065
.793	******	-.121	******	-.120	******	-.146	******	******	-.117	-.094	-.077	******
.807	******	-.107	******	-.107	******	-.125	******	******	-.107	-.084	-.076	-.073
.821	******	******	******	-.094	******	-.108	******	******	-.088	-.084	-.073	-.077
.835	******	-.070	******	-.087	******	-.080	******	******	-.079	-.084	-.075	-.076
.849	******	-.059	******	-.069	******	-.067	******	******	-.059	-.077	-.078	-.082
.863	******	-.051	******	-.072	******	-.053	******	******	-.057	-.079	******	-.083
.877	-.038	-.053	******	-.061	******	-.060	******	******	******	******	******	******
.891	-.066	-.075	******	-.074	******	-.067	******	******	-.077	-.084	-.089	-.086
.916	-.090	-.089	-.146	******	-.093	******	-.099	-.094	-.097	-.102	-.095	******
.928	-.103	******	-.142	******	-.114	******	-.110	-.105	-.110	-.120	-.148	-.123
.940	-.113	******	-.105	******	-.119	******	-.116	-.115	-.114	-.117	-.125	-.128
.952	******	******	-.079	******	-.080	-.081	-.077	-.083	-.081	-.082	-.088	******
.962	-.018	-.015	-.011	******	-.015	-.019	-.021	-.015	-.019	-.021	-.021	-.026
.974	.067	.069	******	******	.064	.066	.064	.066	.064	.063	.067	.059
.986	.135	.131	.134	******	.129	.130	.128	.129	.130	.135	.131	.130
.996	.168	.169	******	******	.168	.163	.168	.164	.163	.168	.169	.169

AFTERBODY INTEGRATED PRESSURE DRAG COEFFICIENT .0262

Table A23. Concluded

(d) NPR = 5.091

TEST PARAMETERS

CONFIGURATION	FWD TAILS
POINT NUMBER	33
MACH NUMBER	.600
ALPHA, DEG	.009
NPR	5.091
PTO, PSI	14.691
PO, PSI	11.516
QO, PSI	2.904

TAIL SURFACE PRESSURE COEFFICIENTS

	HORIZONTAL TAILS				VERTICAL TAIL	
	UPPER SURFACE Y/B		LOWER SURFACE Y/B		Y/B	
X/C	0.1	0.2	0.1	0.2	0.1	0.2
0.05	-.077	******	-1.209	******	-.094	-.094
0.10	-.100	-1.058	-1.214	-.136	******	******
0.20	-.123	-1.176	-1.255	-.158	-.112	-.145
0.30	******	-1.307	******	-.186	-.148	-.159
0.40	-.167	-1.476	-1.458	-.208	-.184	-.184
0.50	-.154	-1.543	-1.467	-.181	-.171	-.173
0.60	-.145	-1.637	-1.429	-.151	-.146	-.148
0.70	-.104	-1.495	-1.266	-.114	-.116	******
0.80	-.062	-1.107	-1.078	-.063	-.072	-.053
0.90	-.021	******	-.941	******	-.020	.001

AFTERBODY PRESSURE COEFFICIENTS

	PHI, DEG											
X/L	0	18	36	45	54	72	81	90	108	135	162	180
.584	-.015	-.013	******	******	******	******	******	-.020	-.022	-.018	-.011	******
.598	-.008	-.012	******	-.019	******	-.025	******	-.022	-.025	-.023	******	******
.612	.011	.004	******	-.011	******	-.021	******	-.017	-.020	-.023	******	******
.626	.059	.028	******	-.012	******	-.021	******	-.022	-.026	-.024	******	******
.640	******	.028	******	-.015	******	-.017	******	-.024	-.024	-.028	******	******
.654	******	-.016	******	-.024	******	-.015	******	-.021	-.025	-.028	******	******
.668	******	******	******	-.022	******	-.009	******	.004	-.009	-.019	******	******
.682	******	-.073	******	-.042	******	.005	******	.056	.007	-.024	-.032	******
.696	******	-.087	******	-.048	******	-.005	******	******	-.010	-.032	-.032	-.034
.710	******	-.110	******	******	******	-.055	******	******	-.046	-.041	-.040	-.040
.724	******	-.134	******	-.098	******	-.093	******	******	-.069	-.052	-.046	-.056
.738	******	-.144	******	-.119	******	******	******	******	-.104	-.075	-.060	-.059
.752	******	-.141	******	-.124	******	-.139	******	******	-.120	-.074	-.063	******
.766	******	-.147	******	-.138	******	-.162	******	******	-.137	-.099	-.080	-.080
.779	******	-.128	******	-.120	******	-.150	******	******	-.126	-.088	-.068	-.064
.793	******	-.123	******	-.122	******	-.138	******	******	-.119	-.093	-.074	******
.807	******	-.106	******	-.107	******	-.122	******	******	-.106	-.089	-.069	-.078
.821	******	******	******	-.092	******	-.099	******	******	-.094	-.083	-.074	-.079
.835	******	-.071	******	-.078	******	-.078	******	******	-.076	-.083	-.076	-.080
.849	******	-.056	******	-.064	******	-.061	******	******	-.064	-.082	-.076	-.077
.863	******	-.051	******	-.066	******	-.049	******	******	-.054	-.075	******	-.079
.877	-.040	-.045	******	-.060	******	-.053	******	******	******	******	******	******
.891	-.058	-.069	******	-.073	******	-.066	******	******	-.071	-.077	-.082	-.087
.916	-.085	-.086	-.145	******	-.087	******	-.093	-.093	-.093	-.093	-.090	******
.928	-.099	******	-.137	******	-.108	******	-.103	-.108	-.107	-.111	-.137	-.114
.940	-.110	******	-.099	******	-.107	******	-.105	-.107	-.111	-.108	-.111	-.121
.952	******	******	-.065	******	-.067	-.070	-.067	-.073	-.067	-.068	-.079	******
.962	-.001	.000	.000	******	.002	.000	-.004	-.003	.000	-.002	-.004	-.004
.974	.084	.084	******	******	.083	.084	.084	.079	.082	.085	.084	.082
.986	.158	.158	.157	******	.156	.151	.155	.153	.150	.155	.158	.152
.996	.193	.194	******	******	.195	.189	.193	.191	.190	.194	.192	.194

AFTERBODY INTEGRATED PRESSURE DRAG COEFFICIENT .0177

Table A24. Effect of Angle of Attack on Pressure Distributions for Forward Tails Configuration at $M = 0.60$ and NPR = 1.056

(a) $\alpha = -2.992°$

TEST PARAMETERS

CONFIGURATION	FWD TAILS
POINT NUMBER	35
MACH NUMBER	.601
ALPHA, DEG	-2.992
NPR	1.056
PTO, PSI	14.691
PO, PSI	11.511
QO, PSI	2.908

TAIL SURFACE PRESSURE COEFFICIENTS

	HORIZONTAL TAILS				VERTICAL TAIL	
	UPPER SURFACE Y/B		LOWER SURFACE Y/B		Y/B	
X/C	0.1	0.2	0.1	0.2	0.1	0.2
0.05	-.325	******	-1.162	******	-.076	-.081
0.10	-.282	-1.047	-1.192	.049	******	******
0.20	-.257	-1.177	-1.261	-.046	-.101	-.122
0.30	******	-1.294	******	-.085	-.130	-.148
0.40	-.258	-1.468	-1.451	-.122	-.151	-.166
0.50	-.210	-1.535	-1.466	-.117	-.140	-.148
0.60	-.188	-1.623	-1.428	-.102	-.120	-.116
0.70	-.144	-1.382	-1.237	-.080	-.102	******
0.80	-.095	-1.079	-1.060	-.039	-.050	-.037
0.90	-.039	******	-.932	******	-.003	.011

AFTERBODY PRESSURE COEFFICIENTS

	PHI, DEG											
X/L	0	18	36	45	54	72	81	90	108	135	162	180
.584	-.009	-.006	******	******	******	******	******	-.026	-.030	-.024	-.019	******
.598	-.006	-.005	******	-.015	******	-.036	******	-.043	-.038	-.028	******	******
.612	.015	.010	******	-.003	******	-.033	******	-.033	-.033	-.036	******	******
.626	.077	.038	******	-.008	******	-.025	******	-.030	-.042	-.034	******	******
.640	******	.026	******	-.010	******	-.028	******	-.031	-.038	-.038	******	******
.654	******	.001	******	-.014	******	-.020	******	-.035	-.044	-.048	******	******
.668	******	******	******	-.016	******	-.009	******	-.013	-.032	-.048	******	******
.682	******	-.054	******	-.023	******	.024	******	.039	-.053	-.059	-.053	******
.696	******	-.072	******	-.028	******	.070	******	******	-.106	-.079	-.068	-.069
.710	******	-.082	******	******	******	.031	******	******	-.154	-.095	-.075	-.075
.724	******	-.100	******	-.048	******	-.005	******	******	-.185	-.117	-.098	-.085
.738	******	-.110	******	-.055	******	******	******	******	-.203	-.129	-.095	-.090
.752	******	-.101	******	-.076	******	-.054	******	******	-.197	-.133	-.102	******
.766	******	-.117	******	-.091	******	-.091	******	******	-.204	-.148	-.120	-.109
.779	******	-.104	******	-.083	******	-.095	******	******	-.186	-.132	-.103	-.105
.793	******	-.091	******	-.090	******	-.095	******	******	-.166	-.136	-.103	******
.807	******	-.077	******	-.069	******	-.084	******	******	-.146	-.119	-.103	-.098
.821	******	******	******	-.063	******	-.075	******	******	-.124	-.110	-.101	-.095
.835	******	-.048	******	-.064	******	-.061	******	******	-.102	-.109	-.098	-.096
.849	******	-.040	******	-.058	******	-.042	******	******	-.083	-.095	-.090	-.100
.863	******	-.039	******	-.053	******	-.049	******	******	-.069	-.091	******	-.096
.877	-.035	-.046	******	-.053	******	-.058	******	******	******	******	******	******
.891	-.064	-.075	******	-.076	******	-.075	******	******	-.084	-.091	-.098	-.091
.916	-.105	-.102	-.167	******	-.101	******	-.099	-.103	-.103	-.103	-.103	******
.928	-.132	******	-.170	******	-.126	******	-.126	-.124	-.118	-.122	-.136	-.126
.940	-.147	******	-.129	******	-.141	******	-.134	-.130	-.123	-.123	-.125	-.125
.952	******	******	-.118	******	-.115	-.106	-.103	-.107	-.094	-.087	-.098	******
.962	-.063	-.056	-.051	******	-.048	-.044	-.042	-.040	-.040	-.034	-.042	-.045
.974	.016	.025	******	******	.029	.032	.028	.026	.034	.036	.030	.026
.986	.086	.086	.091	******	.086	.088	.092	.089	.087	.088	.083	.086
.996	.113	.110	******	******	.110	.113	.117	.110	.113	.122	.102	.114

AFTERBODY INTEGRATED PRESSURE DRAG COEFFICIENT .0431

Table A24. Continued

(b) $\alpha = 0.008°$

TEST PARAMETERS

CONFIGURATION	FWD TAILS
POINT NUMBER	36
MACH NUMBER	.600
ALPHA, DEG	.008
NPR	1.058
PTO, PSI	14.691
PO, PSI	11.519
QO, PSI	2.901

TAIL SURFACE PRESSURE COEFFICIENTS

	HORIZONTAL TAILS				VERTICAL TAIL	
	UPPER SURFACE Y/B		LOWER SURFACE Y/B		Y/B	
X/C	0.1	0.2	0.1	0.2	0.1	0.2
0.05	-.115	******	-1.187	******	-.082	-.095
0.10	-.092	-1.037	-1.218	-.143	******	******
0.20	-.124	-1.168	-1.265	-.164	-.119	-.140
0.30	******	-1.293	******	-.181	-.152	-.175
0.40	-.162	-1.461	-1.463	-.209	-.188	-.189
0.50	-.149	-1.529	-1.462	-.193	-.178	-.165
0.60	-.142	-1.627	-1.403	-.161	-.155	-.149
0.70	-.110	-1.480	-1.235	-.116	-.122	******
0.80	-.065	-1.085	-1.060	-.068	-.079	-.055
0.90	-.029	******	-.930	******	-.027	-.001

AFTERBODY PRESSURE COEFFICIENTS

	PHI, DEG											
X/L	0	18	36	45	54	72	81	90	108	135	162	180
.584	-.017	-.013	******	******	******	******	******	-.022	-.020	-.016	-.008	******
.598	-.014	-.011	******	-.019	******	-.026	******	-.027	-.025	-.025	******	******
.612	.006	.002	******	-.015	******	-.016	******	-.021	-.023	-.019	******	******
.626	.059	.022	******	-.008	******	-.018	******	-.023	-.021	-.020	******	******
.640	******	.027	******	-.014	******	-.018	******	-.026	-.023	-.024	******	******
.654	******	-.011	******	-.026	******	-.014	******	-.021	-.028	-.031	******	******
.668	******	******	******	-.031	******	-.008	******	.001	-.010	-.021	******	******
.682	******	-.078	******	-.046	******	.004	******	.051	-.005	-.029	-.033	******
.696	******	-.093	******	-.058	******	.007	******	******	.002	-.034	-.035	-.039
.710	******	-.107	******	******	******	-.060	******	******	-.039	-.032	-.042	-.045
.724	******	-.133	******	-.105	******	-.092	******	******	-.084	-.060	-.054	-.053
.738	******	-.137	******	-.115	******	******	******	******	-.102	-.064	-.060	-.061
.752	******	-.146	******	-.128	******	-.148	******	******	-.115	-.083	-.063	******
.766	******	-.160	******	-.144	******	-.172	******	******	-.139	-.093	-.078	-.082
.779	******	-.140	******	-.127	******	-.149	******	******	-.127	-.088	-.068	-.069
.793	******	-.124	******	-.122	******	-.143	******	******	-.127	-.094	-.078	******
.807	******	-.107	******	-.107	******	-.127	******	******	-.109	-.086	-.072	-.076
.821	******	******	******	-.095	******	-.098	******	******	-.089	-.083	-.079	-.082
.835	******	-.072	******	-.078	******	-.079	******	******	-.081	-.082	-.077	-.082
.849	******	-.064	******	-.074	******	-.064	******	******	-.062	-.079	-.079	-.084
.863	******	-.058	******	-.068	******	-.057	******	******	-.062	-.079	******	-.087
.877	-.046	-.053	******	-.068	******	-.062	******	******	******	******	******	******
.891	-.069	-.075	******	-.075	******	-.079	******	******	-.077	-.082	-.096	-.096
.916	-.099	-.096	-.156	******	-.098	******	-.103	-.106	-.103	-.103	-.103	******
.928	-.118	******	-.157	******	-.124	******	-.122	-.120	-.120	-.127	-.138	-.134
.940	-.129	******	-.122	******	-.133	******	-.130	-.132	-.127	-.133	-.142	-.143
.952	******	******	-.103	******	-.104	-.096	-.105	-.102	-.102	-.100	-.114	******
.962	-.043	-.038	-.039	******	-.039	-.039	-.043	-.046	-.042	-.043	-.049	-.056
.974	.032	.032	******	******	.031	.029	.029	.029	.031	.031	.026	.023
.986	.096	.094	.091	******	.094	.094	.091	.084	.086	.088	.082	.081
.996	.120	.125	******	******	.119	.122	.117	.115	.115	.113	.106	.102

AFTERBODY INTEGRATED PRESSURE DRAG COEFFICIENT .0411

Table A24. Continued

(c) $\alpha = 3.020°$

TEST PARAMETERS

CONFIGURATION	FWD TAILS
POINT NUMBER	37
MACH NUMBER	.600
ALPHA, DEG	3.020
NPR	1.053
PTO, PSI	14.691
PO, PSI	11.517
QO, PSI	2.903

TAIL SURFACE PRESSURE COEFFICIENTS

	HORIZONTAL TAILS				VERTICAL TAIL	
	UPPER SURFACE Y/B		LOWER SURFACE Y/B		Y/B	
X/C	0.1	0.2	0.1	0.2	0.1	0.2
0.05	.126	******	-1.218	******	-.093	-.107
0.10	.076	-1.061	-1.183	-.344	******	******
0.20	-.005	-1.182	-1.252	-.300	-.142	-.166
0.30	******	-1.298	******	-.294	-.186	-.197
0.40	-.083	-1.478	-1.430	-.288	-.226	-.213
0.50	-.093	-1.542	-1.445	-.261	-.209	-.200
0.60	-.083	-1.633	-1.370	-.210	-.180	-.175
0.70	-.068	-1.437	-1.229	-.154	-.149	******
0.80	-.038	-1.104	-1.068	-.096	-.094	-.078
0.90	-.007	******	-.938	******	-.039	-.017

AFTERBODY PRESSURE COEFFICIENTS

	PHI, DEG											
X/L	0	18	36	45	54	72	81	90	108	135	162	180
.594	-.020	-.017	******	******	******	******	******	-.026	-.027	-.015	.001	*****
.598	-.016	-.019	******	-.025	******	-.030	******	-.029	-.028	-.017	******	*****
.612	.003	-.004	******	-.018	******	-.028	******	-.025	-.024	-.015	******	*****
.626	.044	.015	******	-.018	******	-.028	******	-.026	-.028	-.016	******	*****
.640	******	.011	******	-.020	******	-.029	******	-.030	-.024	-.011	******	*****
.654	******	-.023	******	-.028	******	-.030	******	-.029	-.029	-.015	******	*****
.668	******	******	******	-.043	******	-.028	******	-.005	.000	-.002	******	*****
.682	******	-.097	******	-.067	******	-.042	******	.047	.031	-.002	-.011	*****
.696	******	-.117	******	-.094	******	-.096	******	******	.070	.010	-.011	-.00
.710	******	-.151	******	******	******	-.171	******	******	.053	.012	-.009	-.01
.724	******	-.171	******	-.154	******	-.206	******	******	.022	.000	-.015	-.01
.738	******	-.183	******	-.179	******	******	******	******	-.012	-.013	-.021	-.02
.752	******	-.186	******	-.189	******	-.235	******	******	-.030	-.025	-.023	*****
.766	******	-.190	******	-.194	******	-.237	******	******	-.069	-.050	-.042	-.04
.779	******	-.173	******	-.175	******	-.215	******	******	-.074	-.044	-.033	-.03
.793	******	-.159	******	-.172	******	-.202	******	******	-.078	-.057	-.048	*****
.807	******	-.138	******	-.142	******	-.167	******	******	-.066	-.055	-.048	-.05
.821	******	******	******	-.124	******	-.131	******	******	-.061	-.057	-.058	-.05
.835	******	-.091	******	-.103	******	-.102	******	******	-.053	-.064	-.060	-.06
.849	******	-.081	******	-.090	******	-.078	******	******	-.047	-.066	-.066	-.06
.863	******	-.066	******	-.082	******	-.063	******	******	-.052	-.069	******	-.07
.877	-.052	-.063	******	-.072	******	-.065	******	******	******	******	******	*****
.891	-.071	-.083	******	-.083	******	-.078	******	******	-.075	-.079	-.091	-.08
.916	-.093	-.095	-.147	******	-.100	******	-.097	-.101	-.105	-.108	-.107	*****
.928	-.108	******	-.145	******	-.119	******	-.116	-.116	-.124	-.136	-.144	-.14
.940	-.116	******	-.110	******	-.117	******	-.124	-.129	-.134	-.146	-.158	-.15
.952	******	******	-.089	******	-.086	-.092	-.094	-.103	-.109	-.116	-.135	*****
.962	-.034	-.035	-.033	******	-.031	-.034	-.033	-.035	-.046	-.052	-.067	-.06
.974	.036	.033	******	******	.028	.036	.038	.035	.025	.024	.015	.00
.986	.094	.087	.083	******	.091	.093	.086	.081	.087	.082	.076	.07
.996	.114	.104	******	******	.124	.104	.108	.107	.099	.101	.096	.09

AFTERBODY INTEGRATED PRESSURE DRAG COEFFICIENT .0412

Table A24. Continued

(d) $\alpha = 6.017°$

TEST PARAMETERS

CONFIGURATION	FWD TAILS
POINT NUMBER	38
MACH NUMBER	.601
ALPHA, DEG	6.017
NPR	1.039
PTO, PSI	14.691
PO, PSI	11.506
QO, PSI	2.912

TAIL SURFACE PRESSURE COEFFICIENTS

	HORIZONTAL TAILS				VERTICAL TAIL	
	UPPER SURFACE Y/B		LOWER SURFACE Y/B		Y/B	
X/C	0.1	0.2	0.1	0.2	0.1	0.2
0.05	.313	******	-1.610	******	-.095	-.128
0.10	.216	-.801	-1.549	-.451	******	******
0.20	.116	-.971	-1.521	-.415	-.151	-.174
0.30	******	-1.131	******	-.390	-.215	-.231
0.40	.006	-1.292	-1.630	-.370	-.255	-.255
0.50	-.025	-1.337	-1.687	-.312	-.251	-.236
0.60	-.039	-1.352	-1.615	-.251	-.215	-.200
0.70	-.031	-1.202	-1.384	-.185	-.178	******
0.80	-.013	-1.059	-1.093	-.114	-.121	-.100
0.90	.009	******	-.959	******	-.050	-.029

AFTERBODY PRESSURE COEFFICIENTS

	PHI, DEG											
X/L	0	18	36	45	54	72	81	90	108	135	162	180
.584	-.023	-.025	******	******	******	******	******	-.048	-.039	-.016	.009	******
.598	-.021	-.023	******	-.037	******	-.055	******	-.049	-.054	-.018	******	******
.612	-.008	-.021	******	-.030	******	-.051	******	-.047	-.042	-.013	******	******
.626	.034	.002	******	-.028	******	-.047	******	-.051	-.044	-.014	******	******
.640	******	-.001	******	-.036	******	-.055	******	-.050	-.040	-.016	******	******
.654	******	-.038	******	-.054	******	-.059	******	-.054	-.038	-.014	******	******
.668	******	******	******	-.073	******	-.061	******	-.029	-.005	.005	******	******
.682	******	-.111	******	-.114	******	-.105	******	.022	.047	.019	.017	******
.696	******	-.153	******	-.151	******	-.225	******	******	.144	.036	.023	.019
.710	******	-.191	******	******	******	-.302	******	******	.159	.057	.039	.028
.724	******	-.217	******	-.236	******	-.335	******	******	.114	.053	.026	.020
.738	******	-.237	******	-.237	******	******	******	******	.061	.041	.020	.016
.752	******	-.233	******	-.250	******	-.312	******	******	.028	.032	.015	******
.766	******	-.240	******	-.263	******	-.304	******	******	-.009	.000	-.006	-.010
.779	******	-.215	******	-.229	******	-.271	******	******	-.025	.002	.010	-.002
.793	******	-.203	******	-.222	******	-.245	******	******	-.031	-.014	-.013	******
.807	******	-.174	******	-.185	******	-.202	******	******	-.033	-.020	-.017	-.019
.821	******	******	******	-.157	******	-.165	******	******	-.032	-.030	-.020	-.030
.835	******	-.116	******	-.135	******	-.127	******	******	-.037	-.041	-.034	-.044
.849	******	-.095	******	-.113	******	-.099	******	******	-.036	-.048	-.049	-.053
.863	******	-.079	******	-.101	******	-.079	******	******	-.041	-.060	******	-.059
.877	-.062	-.068	******	-.085	******	-.076	******	******	******	******	******	******
.891	-.076	-.094	******	-.088	******	-.081	******	******	-.079	-.075	-.083	-.081
.916	-.099	-.103	-.162	******	-.100	******	-.099	-.105	-.107	-.112	-.107	******
.928	-.117	******	-.153	******	-.111	******	-.113	-.116	-.128	-.140	-.162	-.144
.940	-.131	******	-.115	******	-.114	******	-.117	-.125	-.138	-.151	-.166	-.164
.952	******	******	-.100	******	-.085	-.081	-.086	-.104	-.116	-.129	-.150	******
.962	-.055	-.057	-.049	******	-.037	-.035	-.034	-.046	-.059	-.070	-.086	-.083
.974	.017	-.003	******	******	.019	.023	.019	.014	.012	.010	.000	-.007
.986	.077	.062	.063	******	.055	.059	.054	.062	.065	.065	.060	.054
.996	.078	.060	******	******	.065	.066	.065	.062	.068	.073	.070	.069

AFTERBODY INTEGRATED PRESSURE DRAG COEFFICIENT .0489

Table A24. Concluded

(e) $\alpha = 9.009°$

TEST PARAMETERS

CONFIGURATION	FWD TAILS
POINT NUMBER	39
MACH NUMBER	.601
ALPHA, DEG	9.009
NPR	1.051
PTO, PSI	14.689
PO, PSI	11.507
QO, PSI	2.909

TAIL SURFACE PRESSURE COEFFICIENTS

	HORIZONTAL TAILS				VERTICAL TAIL	
	UPPER SURFACE Y/B		LOWER SURFACE Y/B		Y/B	
X/C	0.1	0.2	0.1	0.2	0.1	0.2
0.05	.447	******	-1.135	******	-.098	-.139
0.10	.343	-1.042	-1.203	-1.848	******	******
0.20	.221	-1.173	-1.248	-.291	-.178	-.204
0.30	******	-1.299	******	-.329	-.244	-.252
0.40	.071	-1.462	-1.429	-.358	-.298	-.279
0.50	.040	-1.539	-1.430	-.330	-.281	-.256
0.60	.005	-1.615	-1.397	-.287	-.251	-.225
0.70	.000	-1.400	-1.204	-.228	-.205	******
0.80	.005	-1.080	-1.059	-.161	-.139	-.117
0.90	.018	******	-.928	******	-.071	-.046

AFTERBODY PRESSURE COEFFICIENTS

	PHI, DEG											
X/L	0	18	36	45	54	72	81	90	108	135	162	180
.584	-.021	-.037	******	******	******	******	******	-.081	-.066	-.016	.030	*****
.598	-.019	-.040	******	-.046	******	-.081	******	-.088	-.078	-.024	******	*****
.612	-.004	-.039	******	-.045	******	-.075	******	-.083	-.072	-.019	******	*****
.626	.043	-.022	******	-.048	******	-.074	******	-.083	-.071	-.015	******	*****
.640	******	-.027	******	-.054	******	-.087	******	-.088	-.070	-.016	******	*****
.654	******	-.074	******	-.078	******	-.091	******	-.094	-.064	-.015	******	*****
.668	******	******	******	-.104	******	-.104	******	-.065	-.025	.015	******	*****
.682	******	-.163	******	-.147	******	-.186	******	-.011	.051	.037	.045	*****
.696	******	-.199	******	-.205	******	-.378	******	******	.201	.065	.059	.05
.710	******	-.243	******	******	******	-.460	******	******	.250	.096	.076	.05
.724	******	-.273	******	-.302	******	-.449	******	******	.195	.100	.068	.05
.738	******	-.292	******	-.317	******	******	******	******	.137	.089	.067	.05
.752	******	-.288	******	-.307	******	-.383	******	******	.091	.083	.059	*****
.766	******	-.289	******	-.318	******	-.361	******	******	.031	.046	.030	.03
.779	******	-.251	******	-.280	******	-.310	******	******	.005	.045	.041	.03
.793	******	-.235	******	-.263	******	-.285	******	******	-.002	.020	.017	*****
.807	******	-.204	******	-.229	******	-.248	******	******	-.013	.015	.014	.00
.821	******	******	******	-.202	******	-.205	******	******	-.019	-.011	.002	-.00
.835	******	-.144	******	-.174	******	-.161	******	******	-.031	-.024	-.022	-.02
.849	******	-.129	******	-.144	******	-.132	******	******	-.035	-.033	-.037	-.03
.863	******	-.117	******	-.127	******	-.101	******	******	-.051	-.058	******	-.05
.877	-.076	-.093	******	-.114	******	-.084	******	******	******	******	******	*****
.891	-.093	-.126	******	-.116	******	-.083	******	******	-.085	-.078	-.078	-.07
.916	-.108	-.127	-.241	******	-.113	******	-.096	-.097	-.107	-.109	-.104	*****
.928	-.133	******	-.227	******	-.125	******	-.106	-.106	-.125	-.144	-.164	-.14
.940	-.153	******	-.154	******	-.130	******	-.105	-.116	-.136	-.155	-.170	-.16
.952	******	******	-.132	******	-.089	-.072	-.078	-.100	-.108	-.129	-.156	*****
.962	-.094	-.099	-.064	******	-.035	-.022	-.034	-.036	-.048	-.060	-.092	-.09
.974	-.021	-.028	******	******	.039	.022	.024	.034	.034	.013	.000	-.01
.986	.056	.052	.085	******	.070	.085	.069	.086	.080	.082	.071	.05
.996	.085	.079	******	******	.141	.124	.107	.092	.100	.096	.095	.09

AFTERBODY INTEGRATED PRESSURE DRAG COEFFICIENT .0508

Table A25. Effect of Nozzle Pressure Ratio on Pressure Distributions for Staggered Tails Configuration at $M = 1.20$ and $\alpha = 0.015°$

(a) NPR = 1.043

TEST PARAMETERS

CONFIGURATION	STAG TAILS
POINT NUMBER	3
MACH NUMBER	1.205
ALPHA, DEG	.015
NPR	1.043
PTO, PSI	14.786
PO, PSI	6.056
QO, PSI	6.158

TAIL SURFACE PRESSURE COEFFICIENTS

	HORIZONTAL TAILS				VERTICAL TAIL	
	UPPER SURFACE Y/B		LOWER SURFACE Y/B		Y/B	
X/C	0.1	0.2	0.1	0.2	0.1	0.2
0.05	-.015	******	******	******	.033	.041
0.10	-.031	-.019	-.005	.001	.001	.004
0.20	-.059	-.071	-.028	-.051	-.030	-.042
0.30	-.082	******	-.063	-.085	-.055	-.067
0.40	-.129	-.167	-.103	******	-.095	-.108
0.50	-.178	-.214	-.148	-.205	-.115	-.138
0.60	-.192	-.238	-.165	-.227	-.144	-.153
0.70	-.202	-.221	-.195	-.228	-.148	-.152
0.80	-.212	******	-.206	-.209	-.114	-.139
0.90	-.202	******	-.199	******	-.054	-.055

AFTERBODY PRESSURE COEFFICIENTS

	PHI, DEG											
X/L	0	18	36	45	54	72	81	90	108	135	162	180
.584	-.024	-.022	******	-.014	******	******	******	-.026	-.013	-.012	.003	******
.598	-.030	-.027	******	-.028	******	-.027	******	-.026	-.014	-.008	******	******
.612	-.028	-.027	******	-.027	******	-.026	******	-.017	-.010	-.007	******	******
.626	-.008	-.019	******	-.023	******	-.020	******	-.016	-.008	-.005	******	******
.640	******	.081	******	.002	******	-.010	******	-.011	-.005	-.003	******	******
.654	******	.083	******	.027	******	-.007	******	-.016	-.020	-.018	******	******
.668	******	******	******	.041	******	.007	******	-.002	-.009	-.005	******	******
.682	******	.012	******	.024	******	.012	******	.008	.001	.000	-.001	******
.696	******	-.006	******	.011	******	.007	******	.015	.011	.007	.002	.002
.710	******	-.022	******	******	******	.012	******	.019	.019	.013	.003	.000
.724	******	-.042	******	-.008	******	.007	******	.020	.018	.006	-.003	-.004
.738	******	-.056	******	-.029	******	******	******	-.001	-.002	-.004	-.012	-.014
.752	******	-.068	******	-.029	******	-.008	******	.001	-.002	-.002	-.003	******
.766	******	-.093	******	-.063	******	-.037	******	-.029	-.030	-.025	-.028	-.029
.779	******	-.100	******	-.056	******	.024	******	.174	.030	-.006	-.009	-.012
.793	******	-.114	******	-.048	******	.045	******	******	.060	.005	-.015	******
.807	******	-.107	******	-.039	******	.001	******	******	.023	.020	.002	.002
.821	******	******	******	-.051	******	-.034	******	******	-.002	.019	.014	.009
.835	******	-.080	******	-.072	******	-.071	******	******	-.033	-.004	.009	.002
.849	******	-.077	******	******	******	-.117	******	******	-.053	-.029	-.011	-.011
.863	******	-.067	******	-.122	******	-.154	******	******	-.094	-.056	******	-.031
.877	-.021	-.043	******	-.121	******	-.194	******	******	******	******	******	******
.891	-.059	-.079	******	-.131	******	-.212	******	******	-.160	-.118	-.096	-.086
.916	-.121	-.132	-.193	******	-.183	******	-.231	-.219	-.222	-.171	-.141	-.151
.928	-.175	******	-.241	******	-.222	-.227	-.224	-.217	-.241	-.231	-.211	-.201
.940	-.247	******	-.260	******	-.276	-.274	-.260	-.253	-.284	-.286	-.276	-.271
.952	******	******	-.345	******	-.344	-.323	-.308	-.302	-.336	-.365	-.364	-.355
.962	-.390	-.390	-.387	******	-.361	-.271	-.248	-.199	-.143	-.132	-.170	-.203
.974	-.125	-.130	******	******	-.108	-.098	-.089	-.077	-.073	-.072	-.079	-.079
.986	-.063	-.072	-.068	******	-.058	-.057	-.054	-.056	-.054	-.056	-.057	-.053
.996	-.030	-.035	******	******	-.030	-.031	-.031	-.036	-.038	-.040	-.037	-.036

AFTERBODY INTEGRATED PRESSURE DRAG COEFFICIENT .1114

Table A25. Continued

(b) NPR = 2.013

TEST PARAMETERS

CONFIGURATION	STAG TAILS
POINT NUMBER	4
MACH NUMBER	1.200
ALPHA, DEG	.017
NPR	2.013
PTO, PSI	14.786
PO, PSI	6.094
QO, PSI	6.147

TAIL SURFACE PRESSURE COEFFICIENTS

	HORIZONTAL TAILS				VERTICAL TAIL	
	UPPER SURFACE Y/B		LOWER SURFACE Y/B		Y/B	
X/C	0.1	0.2	0.1	0.2	0.1	0.2
0.05	-.022	******	******	******	.021	.036
0.10	-.038	-.029	-.009	-.009	.003	.004
0.20	-.058	-.066	-.029	-.058	-.036	-.046
0.30	-.088	******	-.065	-.098	-.064	-.072
0.40	-.133	-.171	-.106	******	-.097	-.113
0.50	-.182	-.217	-.150	-.211	-.112	-.140
0.60	-.191	-.244	-.169	-.236	-.145	-.153
0.70	-.206	-.231	-.196	-.234	-.147	-.156
0.80	-.216	******	-.212	-.215	-.117	-.137
0.90	-.211	******	-.205	******	-.058	-.057

AFTERBODY PRESSURE COEFFICIENTS

	PHI, DEG											
X/L	0	18	36	45	54	72	81	90	108	135	162	180
.584	-.028	-.025	******	-.020	******	******	******	-.024	-.016	-.015	.001	******
.598	-.035	-.029	******	-.031	******	-.030	******	-.025	-.019	-.011	******	******
.612	-.036	-.032	******	-.031	******	-.024	******	-.021	-.015	-.010	******	******
.626	-.017	-.024	******	-.024	******	-.023	******	-.017	-.016	-.009	******	******
.640	******	.073	******	.000	******	-.014	******	-.015	-.012	-.005	******	******
.654	******	.069	******	.027	******	-.009	******	-.023	-.025	-.020	******	******
.668	******	******	******	.039	******	.008	******	-.007	-.010	-.010	******	******
.682	******	.015	******	.020	******	.009	******	.000	-.007	-.003	.001	******
.696	******	-.010	******	.010	******	.010	******	.006	.004	.001	.004	.003
.710	******	-.027	******	******	******	.010	******	.015	.012	.010	.000	-.002
.724	******	-.046	******	-.010	******	.002	******	.014	.011	.004	-.001	-.005
.738	******	-.066	******	-.034	******	******	******	-.001	-.007	-.008	-.012	-.013
.752	******	-.073	******	-.029	******	-.008	******	-.004	-.004	-.005	-.003	******
.766	******	-.096	******	-.066	******	-.036	******	-.031	-.031	-.028	-.026	-.027
.779	******	-.108	******	-.062	******	.019	******	.169	.027	-.006	-.011	-.011
.793	******	-.119	******	-.054	******	.042	******	******	.049	.004	-.016	******
.807	******	-.113	******	-.047	******	.000	******	******	.024	.019	.003	.000
.821	******	******	******	-.055	******	-.047	******	******	-.008	.015	.012	.010
.835	******	-.090	******	-.084	******	-.084	******	******	-.035	-.005	.004	.005
.849	******	-.077	******	******	******	-.122	******	******	-.064	-.029	-.011	-.009
.863	******	-.065	******	-.128	******	-.166	******	******	-.099	-.059	******	-.034
.877	-.029	-.053	******	-.133	******	-.202	******	******	******	******	******	******
.891	-.061	-.082	******	-.137	******	-.210	******	******	-.161	-.118	-.094	-.087
.916	-.126	-.138	-.199	******	-.189	******	-.236	-.226	-.226	-.174	-.143	-.150
.928	-.181	******	-.244	******	-.228	-.238	-.230	-.222	-.245	-.231	-.212	-.202
.940	-.253	******	-.264	******	-.283	-.280	-.267	-.258	-.287	-.291	-.276	-.271
.952	******	******	-.354	******	-.352	-.328	-.314	-.305	-.339	-.368	-.365	-.357
.962	-.340	-.256	-.291	******	-.255	-.227	-.214	-.222	-.173	-.154	-.173	-.229
.974	-.095	-.088	******	******	-.087	-.078	-.071	-.075	-.080	-.084	-.081	-.080
.986	-.053	-.056	-.060	******	-.055	-.042	-.041	-.047	-.057	-.068	-.056	-.052
.996	-.032	-.031	******	******	-.029	-.012	-.012	-.017	-.030	-.046	-.034	-.036

AFTERBODY INTEGRATED PRESSURE DRAG COEFFICIENT .1098

Table A25. Continued

(c) NPR = 3.993

TEST PARAMETERS

CONFIGURATION	STAG TAILS
POINT NUMBER	5
MACH NUMBER	1.200
ALPHA, DEG	.015
NPR	3.993
PTO, PSI	14.786
PO, PSI	6.097
QO, PSI	6.146

TAIL SURFACE PRESSURE COEFFICIENTS

	HORIZONTAL TAILS				VERTICAL TAIL	
	UPPER SURFACE Y/B		LOWER SURFACE Y/B		Y/B	
X/C	0.1	0.2	0.1	0.2	0.1	0.2
0.05	-.028	******	******	******	.024	.028
0.10	-.043	-.023	-.010	-.006	.007	.003
0.20	-.063	-.076	-.028	-.057	-.035	-.046
0.30	-.088	******	-.065	-.101	-.064	-.072
0.40	-.135	-.170	-.107	******	-.093	-.112
0.50	-.181	-.216	-.151	-.211	-.117	-.139
0.60	-.202	-.242	-.169	-.232	-.143	-.153
0.70	-.204	-.230	-.199	-.235	-.145	-.155
0.80	-.218	******	-.213	-.213	-.117	-.141
0.90	-.209	******	-.205	******	-.056	-.056

AFTERBODY PRESSURE COEFFICIENTS

	PHI, DEG.											
X/L	0	18	36	45	54	72	81	90	108	135	162	180
.584	-.031	-.025	******	-.021	******	******	******	-.027	-.018	-.014	.000	******
.598	-.035	-.030	******	-.029	******	-.030	******	-.023	-.020	-.010	******	******
.612	-.037	-.032	******	-.030	******	-.024	******	-.020	-.016	-.013	******	******
.626	-.019	-.025	******	-.030	******	-.023	******	-.021	-.019	-.011	******	******
.640	******	.071	******	-.005	******	-.014	******	-.015	-.011	-.008	******	******
.654	******	.072	******	.023	******	-.008	******	-.026	-.026	-.022	******	******
.668	******	******	******	.037	******	.010	******	-.009	-.016	-.011	******	******
.682	******	.013	******	.022	******	.012	******	-.004	-.010	-.007	.000	******
.696	******	-.015	******	.002	******	.010	******	.005	.006	.002	.001	.000
.710	******	-.026	******	******	******	.009	******	.015	.016	.009	.000	-.003
.724	******	-.040	******	-.015	******	.006	******	.012	.008	.004	-.004	-.007
.738	******	-.067	******	-.031	******	******	******	.005	-.009	-.007	-.012	-.013
.752	******	-.069	******	-.031	******	-.009	******	-.002	-.004	-.004	-.003	******
.766	******	-.097	******	-.066	******	-.039	******	-.031	-.033	-.030	-.026	-.030
.779	******	-.107	******	-.061	******	.019	******	.170	.027	-.007	-.011	-.012
.793	******	-.118	******	-.054	******	.045	******	******	.051	.004	-.015	******
.807	******	-.111	******	-.048	******	-.004	******	******	.021	.019	.002	-.003
.821	******	******	******	-.057	******	-.046	******	******	-.007	.016	.011	.010
.835	******	-.089	******	-.087	******	-.080	******	******	-.039	-.004	.004	.001
.849	******	-.079	******	******	******	-.117	******	******	-.059	-.030	-.011	-.014
.863	******	-.068	******	-.124	******	-.162	******	******	-.100	-.059	******	-.033
.877	-.026	-.051	******	-.127	******	-.195	******	******	******	******	******	******
.891	-.065	-.083	******	-.135	******	-.214	******	******	-.154	-.117	-.097	-.086
.916	-.125	-.137	-.199	******	-.187	******	-.234	-.223	-.226	-.173	-.143	-.152
.928	-.182	******	-.242	******	-.230	-.237	-.229	-.223	-.245	-.232	-.213	-.203
.940	-.252	******	-.264	******	-.283	-.280	-.266	-.258	-.288	-.291	-.279	-.269
.952	******	******	-.354	******	-.350	-.331	-.313	-.306	-.339	-.368	-.365	-.356
.962	-.384	-.336	-.309	******	-.297	-.258	-.254	-.252	-.241	-.208	-.222	-.305
.974	-.097	-.090	******	******	-.091	-.083	-.082	-.082	-.088	-.091	-.089	-.090
.986	-.052	-.058	-.063	******	-.062	-.045	-.044	-.048	-.061	-.075	-.061	-.059
.996	-.029	-.033	******	******	-.028	-.012	-.010	-.013	-.029	-.051	-.035	-.037

AFTERBODY INTEGRATED PRESSURE DRAG COEFFICIENT .1145

Table A25. Continued

(d) NPR = 6.019

TEST PARAMETERS

CONFIGURATION	STAG TAILS
POINT NUMBER	6
MACH NUMBER	1.199
ALPHA, DEG	.010
NPR	6.019
PTO, PSI	14.786
PO, PSI	6.106
QO, PSI	6.144

TAIL SURFACE PRESSURE COEFFICIENTS

	HORIZONTAL TAILS				VERTICAL TAIL	
	UPPER SURFACE Y/B		LOWER SURFACE Y/B		Y/B	
X/C	0.1	0.2	0.1	0.2	0.1	0.2
0.05	-.029	******	******	******	.023	.035
0.10	-.041	-.023	-.019	-.016	.003	.000
0.20	-.063	-.073	-.033	-.061	-.027	-.047
0.30	-.088	******	-.069	-.104	-.063	-.075
0.40	-.136	-.173	-.106	******	-.095	-.114
0.50	-.183	-.218	-.155	-.214	-.114	-.141
0.60	-.202	-.242	-.176	-.235	-.144	-.158
0.70	-.207	-.231	-.199	-.236	-.147	-.157
0.80	-.220	******	-.214	-.214	-.116	-.139
0.90	-.210	******	-.206	******	-.056	-.058

AFTERBODY PRESSURE COEFFICIENTS

	PHI, DEG											
X/L	0	18	36	45	54	72	81	90	108	135	162	180
.584	-.029	-.029	******	-.023	******	******	******	-.026	-.021	-.015	-.003	******
.598	-.037	-.032	******	-.030	******	-.033	******	-.027	-.022	-.012	******	******
.612	-.035	-.034	******	-.031	******	-.026	******	-.021	-.017	-.012	******	******
.626	-.020	-.027	******	-.030	******	-.025	******	-.020	-.016	-.012	******	******
.640	******	.074	******	-.007	******	-.018	******	-.013	-.015	-.009	******	******
.654	******	.069	******	.020	******	-.012	******	-.026	-.029	-.025	******	******
.668	******	******	******	.042	******	.004	******	-.010	-.015	-.015	******	******
.682	******	.013	******	.021	******	.006	******	-.002	-.010	-.006	-.003	******
.696	******	-.011	******	.005	******	.005	******	.007	.002	.004	.003	-.002
.710	******	-.030	******	******	******	.013	******	.013	.012	.007	.001	-.003
.724	******	-.046	******	-.018	******	.004	******	.012	.010	.000	-.005	-.005
.738	******	-.065	******	-.036	******	******	******	.001	-.010	-.007	-.011	-.011
.752	******	-.070	******	-.038	******	-.012	******	-.003	-.006	-.005	-.003	******
.766	******	-.098	******	-.067	******	-.038	******	-.029	-.031	-.029	-.031	-.029
.779	******	-.105	******	-.058	******	.022	******	.173	.027	-.008	-.012	-.013
.793	******	-.112	******	-.052	******	.040	******	******	.051	.005	-.015	******
.807	******	-.112	******	-.046	******	.000	******	******	.023	.016	.004	-.001
.821	******	******	******	-.057	******	-.046	******	******	-.011	.011	.012	.010
.835	******	-.092	******	-.087	******	-.078	******	******	-.036	-.007	.000	.000
.849	******	-.084	******	******	******	-.120	******	******	-.063	-.032	-.017	-.016
.863	******	-.070	******	-.130	******	-.159	******	******	-.103	-.062	******	-.031
.877	-.030	-.049	******	-.128	******	-.197	******	******	******	******	******	******
.891	-.063	-.083	******	-.133	******	-.215	******	******	-.164	-.120	-.095	-.087
.916	-.124	-.137	-.201	******	-.190	******	-.236	-.227	-.228	-.177	-.145	-.154
.928	-.180	******	-.246	******	-.230	-.238	-.230	-.225	-.247	-.233	-.213	-.202
.940	-.253	******	-.264	******	-.283	-.281	-.267	-.259	-.289	-.293	-.279	-.273
.952	******	******	-.354	******	-.351	-.331	-.313	-.306	-.341	-.371	-.368	-.359
.962	-.192	-.161	-.146	******	-.139	-.139	-.152	-.148	-.122	-.113	-.115	-.143
.974	-.057	-.061	******	******	-.067	-.055	-.052	-.058	-.065	-.071	-.061	-.067
.986	-.026	-.032	-.042	******	-.043	-.031	-.028	-.032	-.047	-.058	-.037	-.042
.996	-.010	-.016	******	******	-.018	-.001	.011	.005	-.013	-.041	-.017	-.021

AFTERBODY INTEGRATED PRESSURE DRAG COEFFICIENT .1003

Table A25. Concluded

(e) NPR = 8.069

TEST PARAMETERS

CONFIGURATION	STAG TAILS
POINT NUMBER	7
MACH NUMBER	1.203
ALPHA, DEG	.010
NPR	8.069
PTO, PSI	14.782
PO, PSI	6.074
QO, PSI	6.151

TAIL SURFACE PRESSURE COEFFICIENTS

	HORIZONTAL TAILS				VERTICAL TAIL	
	UPPER SURFACE Y/B		LOWER SURFACE Y/B		Y/B	
X/C	0.1	0.2	0.1	0.2	0.1	0.2
0.05	-.027	******	******	******	.020	.025
0.10	-.041	-.016	-.014	-.009	.003	.002
0.20	-.059	-.066	-.036	-.053	-.032	-.048
0.30	-.088	******	-.066	-.104	-.064	-.071
0.40	-.130	-.169	-.102	******	-.098	-.109
0.50	-.179	-.217	-.153	-.212	-.113	-.134
0.60	-.198	-.241	-.175	-.234	-.141	-.151
0.70	-.203	-.229	-.197	-.234	-.147	-.154
0.80	-.213	******	-.210	-.212	-.114	-.140
0.90	-.206	******	-.203	******	-.056	-.063

AFTERBODY PRESSURE COEFFICIENTS

	PHI, DEG											
X/L	0	18	36	45	54	72	81	90	108	135	162	180
.584	-.030	-.025	******	-.019	******	******	******	-.026	-.019	-.014	-.002	******
.598	-.036	-.031	******	-.028	******	-.031	******	-.025	-.022	-.013	******	******
.612	-.035	-.034	******	-.029	******	-.024	******	-.021	-.018	-.012	******	******
.626	-.020	-.028	******	-.030	******	-.022	******	-.016	-.018	-.013	******	******
.640	******	.067	******	-.011	******	-.015	******	-.012	-.012	-.007	******	******
.654	******	.063	******	.020	******	-.010	******	-.024	-.025	-.023	******	******
.668	******	******	******	.040	******	.005	******	-.010	-.015	-.014	******	******
.682	******	.015	******	.021	******	.009	******	-.001	-.012	-.008	-.002	******
.696	******	-.011	******	.005	******	.008	******	.002	.001	-.003	-.003	-.002
.710	******	-.027	******	******	******	.006	******	.016	.010	.011	-.001	-.002
.724	******	-.048	******	-.015	******	.005	******	.015	.013	.006	-.008	.000
.738	******	-.062	******	-.032	******	******	******	.000	-.006	-.005	-.013	-.007
.752	******	-.073	******	-.036	******	-.014	******	-.002	-.005	.000	-.001	******
.766	******	-.097	******	-.067	******	-.034	******	-.030	-.032	-.026	-.027	-.029
.779	******	-.099	******	-.057	******	.022	******	.172	.030	-.005	-.011	-.010
.793	******	-.111	******	-.050	******	.046	******	******	.052	.008	-.015	******
.807	******	-.110	******	-.042	******	.006	******	******	.020	.020	.000	.003
.821	******	******	******	-.053	******	-.034	******	******	-.005	.015	.011	.013
.835	******	-.090	******	-.077	******	-.080	******	******	-.044	-.008	.000	.000
.849	******	-.088	******	******	******	-.119	******	******	-.055	-.029	-.016	-.017
.863	******	-.070	******	-.126	******	-.161	******	******	-.099	-.057	******	-.037
.877	-.026	-.049	******	-.123	******	-.189	******	******	******	******	******	******
.891	-.057	-.078	******	-.133	******	-.211	******	******	-.163	-.113	-.096	-.085
.916	-.120	-.133	-.196	******	-.184	******	-.233	-.222	-.225	-.171	-.142	-.150
.928	-.177	******	-.244	******	-.227	-.235	-.228	-.220	-.243	-.228	-.211	-.203
.940	-.246	******	-.262	******	-.277	-.277	-.264	-.255	-.285	-.290	-.277	-.269
.952	******	******	-.348	******	-.341	-.316	-.287	-.275	-.307	-.336	-.357	-.354
.962	-.082	-.075	-.073	******	-.074	-.075	-.077	-.076	-.067	-.067	-.070	-.082
.974	-.026	-.026	******	******	-.036	-.030	-.028	-.030	-.041	-.046	-.036	-.037
.986	.000	-.005	-.014	******	-.019	-.014	-.008	-.009	-.019	-.034	-.018	-.012
.996	.012	.004	******	******	.003	.013	.015	.023	.005	-.017	.004	.002

AFTERBODY INTEGRATED PRESSURE DRAG COEFFICIENT .0875

Table A26. Effect of Angle of Attack on Pressure Distributions for Staggered Tails Configuration at $M = 1.20$ and NPR = 1.006

(a) $\alpha = -2.777°$

TEST PARAMETERS

CONFIGURATION	STAG TAILS
POINT NUMBER	9
MACH NUMBER	1.200
ALPHA, DEG	-2.777
NPR	1.006
PTO, PSI	14.783
PO, PSI	6.094
QO, PSI	6.145

TAIL SURFACE PRESSURE COEFFICIENTS

	HORIZONTAL TAILS				VERTICAL TAIL	
	UPPER SURFACE Y/B		LOWER SURFACE Y/B		Y/B	
X/C	0.1	0.2	0.1	0.2	0.1	0.2
0.05	-.214	******	******	******	.019	.006
0.10	-.163	.095	-.131	.104	.000	-.006
0.20	-.163	.022	-.129	.034	-.036	-.056
0.30	-.177	******	-.147	-.036	-.073	-.084
0.40	-.196	-.101	-.168	******	-.102	-.119
0.50	-.232	-.157	-.207	-.158	-.126	-.150
0.60	-.257	-.176	-.226	-.175	-.149	-.167
0.70	-.268	-.158	-.258	-.165	-.153	-.171
0.80	-.278	******	-.261	-.136	-.137	-.156
0.90	-.254	******	-.239	******	-.029	-.057

AFTERBODY PRESSURE COEFFICIENTS

	PHI, DEG											
X/L	0	18	36	45	54	72	81	90	108	135	162	180
.584	-.036	-.029	******	-.032	******	******	******	-.041	-.030	-.018	.001	******
.598	-.042	-.033	******	-.042	******	-.048	******	-.039	-.033	-.016	******	******
.612	-.036	-.038	******	-.043	******	-.041	******	-.033	-.027	-.016	******	******
.626	-.038	-.040	******	-.042	******	-.042	******	-.037	-.031	-.017	******	******
.640	******	.063	******	-.029	******	-.033	******	-.027	-.023	-.014	******	******
.654	******	.065	******	.013	******	-.025	******	-.042	-.039	-.029	******	******
.668	******	******	******	.033	******	-.005	******	-.024	-.029	-.020	******	******
.682	******	.006	******	.012	******	-.006	******	-.010	-.022	-.014	-.002	******
.696	******	-.019	******	-.011	******	-.009	******	-.013	-.014	-.005	.004	.010
.710	******	-.040	******	******	******	-.013	******	-.006	-.006	.009	.012	.012
.724	******	-.052	******	-.029	******	-.014	******	-.007	-.003	.009	.009	.003
.738	******	-.040	******	-.049	******	******	******	-.018	-.016	-.004	.002	.001
.752	******	-.086	******	-.046	******	-.030	******	-.015	-.010	-.002	.001	******
.766	******	-.105	******	-.078	******	-.051	******	-.037	-.036	-.026	-.025	-.020
.779	******	-.107	******	-.068	******	.018	******	.168	.015	-.008	-.006	-.002
.793	******	-.123	******	-.055	******	.099	******	******	-.004	-.008	-.009	******
.807	******	-.120	******	-.016	******	.076	******	******	-.056	-.013	-.004	-.004
.821	******	******	******	-.006	******	.026	******	******	-.078	-.029	-.009	-.006
.835	******	-.060	******	-.037	******	-.020	******	******	-.110	-.054	-.030	-.025
.849	******	-.038	******	******	******	-.063	******	******	-.119	-.079	-.052	-.053
.863	******	-.018	******	-.075	******	-.106	******	******	-.148	-.111	******	-.080
.877	.035	.015	******	-.067	******	-.141	******	******	******	******	******	******
.891	-.002	-.023	******	-.071	******	-.147	******	******	-.220	-.170	-.143	-.133
.916	-.073	-.082	-.149	******	-.131	******	-.206	-.236	-.266	-.223	-.190	-.194
.928	-.131	******	-.196	******	-.179	-.202	-.209	-.237	-.269	-.278	-.256	-.243
.940	-.204	******	-.223	******	-.244	-.258	-.257	-.265	-.298	-.328	-.319	-.311
.952	******	******	-.315	******	-.321	-.324	-.324	-.307	-.258	-.314	-.398	-.393
.962	-.357	-.357	-.359	******	-.356	-.300	-.237	-.148	-.108	-.111	-.136	-.147
.974	-.379	-.373	******	******	-.202	-.133	-.113	-.100	-.087	-.092	-.100	-.100
.986	-.124	-.118	-.109	******	-.100	-.097	-.096	-.095	-.088	-.091	-.091	-.090
.996	-.052	-.056	******	******	-.066	-.078	-.081	-.084	-.080	-.073	-.070	-.066

AFTERBODY INTEGRATED PRESSURE DRAG COEFFICIENT .1205

Table A26. Continued

(b) $\alpha = 0.022°$

TEST PARAMETERS

CONFIGURATION	STAG TAILS
POINT NUMBER	10
MACH NUMBER	1.199
ALPHA, DEG	.022
NPR	1.025
PTO, PSI	14.782
PO, PSI	6.101
QO, PSI	6.143

TAIL SURFACE PRESSURE COEFFICIENTS

	HORIZONTAL TAILS				VERTICAL TAIL	
	UPPER SURFACE Y/B		LOWER SURFACE Y/B		Y/B	
X/C	0.1	0.2	0.1	0.2	0.1	0.2
0.05	-.023	******	******	******	.013	.013
0.10	-.042	-.027	-.013	-.017	.003	-.008
0.20	-.063	-.086	-.031	-.069	-.036	-.052
0.30	-.088	******	-.067	-.114	-.069	-.081
0.40	-.132	-.180	-.101	******	-.103	-.114
0.50	-.180	-.221	-.155	-.217	-.120	-.140
0.60	-.198	-.248	-.175	-.238	-.145	-.160
0.70	-.206	-.234	-.199	-.240	-.150	-.157
0.80	-.218	******	-.210	-.217	-.123	-.145
0.90	-.206	******	-.206	******	-.063	-.066

AFTERBODY PRESSURE COEFFICIENTS

	PHI, DEG											
X/L	0	18	36	45	54	72	81	90	108	135	162	180
.584	-.033	-.030	******	-.024	******	******	******	-.030	-.020	-.020	-.003	******
.598	-.039	-.034	******	-.031	******	-.031	******	-.029	-.024	-.020	******	******
.612	-.037	-.038	******	-.034	******	-.026	******	-.023	-.021	-.017	******	******
.626	-.022	-.029	******	-.034	******	-.023	******	-.023	-.023	-.013	******	******
.640	******	.063	******	-.010	******	-.020	******	-.015	-.014	-.009	******	******
.654	******	.062	******	.013	******	-.013	******	-.027	-.030	-.025	******	******
.668	******	******	******	.034	******	.003	******	-.014	-.018	-.016	******	******
.682	******	.015	******	.019	******	.007	******	-.003	-.013	-.006	-.004	******
.696	******	-.014	******	.006	******	.003	******	-.002	-.001	-.001	-.007	-.004
.710	******	-.028	******	******	******	.003	******	.008	.009	.004	-.002	-.008
.724	******	-.051	******	-.020	******	.005	******	.011	.007	.000	-.011	-.008
.738	******	-.067	******	-.036	******	******	******	-.005	-.012	-.009	-.016	-.013
.752	******	-.072	******	-.035	******	-.015	******	-.009	-.010	-.005	-.002	******
.766	******	-.103	******	-.069	******	-.038	******	-.035	-.032	-.029	-.031	-.032
.779	******	-.101	******	-.057	******	.019	******	.172	.027	-.007	-.010	-.012
.793	******	-.117	******	-.053	******	.043	******	******	.051	.006	-.016	******
.807	******	-.113	******	-.048	******	-.007	******	******	.026	.018	-.001	-.004
.821	******	******	******	-.062	******	-.044	******	******	-.001	.013	.011	.007
.835	******	-.094	******	-.087	******	-.085	******	******	-.037	-.006	.003	-.003
.849	******	-.087	******	******	******	-.127	******	******	-.052	-.027	-.015	-.015
.863	******	-.070	******	-.132	******	-.166	******	******	-.099	-.061	******	-.036
.877	-.030	-.053	******	-.131	******	-.199	******	******	******	******	******	******
.891	-.068	-.083	******	-.139	******	-.213	******	******	-.156	-.115	-.095	-.084
.916	-.129	-.140	-.205	******	-.189	******	-.240	-.227	-.227	-.174	-.142	-.149
.928	-.183	******	-.245	******	-.234	-.242	-.233	-.226	-.246	-.231	-.213	-.202
.940	-.251	******	-.266	******	-.287	-.283	-.268	-.260	-.290	-.292	-.278	-.272
.952	******	******	-.356	******	-.352	-.333	-.315	-.309	-.342	-.370	-.370	-.357
.962	-.397	-.396	-.396	******	-.368	-.283	-.256	-.216	-.159	-.149	-.190	-.281
.974	-.138	-.133	******	******	-.115	-.104	-.089	-.081	-.077	-.074	-.080	-.086
.986	-.071	-.079	-.074	******	-.069	-.065	-.062	-.061	-.061	-.061	-.065	-.058
.996	-.038	-.048	******	******	-.040	-.039	-.039	-.043	-.041	-.043	-.045	-.039

AFTERBODY INTEGRATED PRESSURE DRAG COEFFICIENT .1172

Table A26. Continued

(c) $\alpha = 3.021°$

TEST PARAMETERS

CONFIGURATION	STAG TAILS
POINT NUMBER	11
MACH NUMBER	1.200
ALPHA, DEG	3.021
NPR	1.004
PTO, PSI	14.784
PO, PSI	6.097
QO, PSI	6.145

TAIL SURFACE PRESSURE COEFFICIENTS

	HORIZONTAL TAILS				VERTICAL TAIL	
	UPPER SURFACE Y/B		LOWER SURFACE Y/B		Y/B	
X/C	0.1	0.2	0.1	0.2	0.1	0.2
0.05	.146	******	******	******	.014	-.003
0.10	.104	-.158	.122	-.123	.007	.000
0.20	.047	-.179	.071	-.155	-.028	-.045
0.30	-.002	******	.016	-.193	-.059	-.066
0.40	-.060	-.247	-.038	******	-.094	-.104
0.50	-.100	-.285	-.078	-.276	-.107	-.128
0.60	-.110	-.309	-.104	-.297	-.135	-.150
0.70	-.135	-.304	-.128	-.300	-.136	-.145
0.80	-.148	******	-.151	-.280	-.116	-.135
0.90	-.152	******	-.155	******	-.092	-.083

AFTERBODY PRESSURE COEFFICIENTS

	PHI, DEG											
X/L	0	18	36	45	54	72	81	90	108	135	162	180
.584	-.033	-.030	******	-.023	******	******	******	-.030	-.015	-.034	-.013	******
.598	-.037	-.032	******	-.030	******	-.030	******	-.025	-.031	-.022	******	******
.612	-.032	-.033	******	-.029	******	-.028	******	-.026	-.027	-.014	******	******
.626	.011	-.008	******	-.026	******	-.030	******	-.026	-.019	-.015	******	******
.640	******	.069	******	-.005	******	-.020	******	-.018	-.016	-.007	******	******
.654	******	.057	******	.017	******	-.015	******	-.029	-.029	-.021	******	******
.668	******	******	******	.036	******	-.001	******	-.014	-.021	-.009	******	******
.682	******	.008	******	.018	******	.001	******	-.005	-.019	-.007	-.005	******
.696	******	-.010	******	.005	******	.004	******	.003	-.005	-.009	-.014	-.008
.710	******	-.025	******	******	******	.006	******	.007	-.002	-.005	-.016	-.018
.724	******	-.046	******	-.012	******	.001	******	.006	.000	-.008	-.016	-.016
.738	******	-.056	******	-.029	******	******	******	-.012	-.021	-.019	-.025	-.021
.752	******	-.062	******	-.035	******	-.018	******	-.009	-.012	-.012	-.013	******
.766	******	-.092	******	-.067	******	-.042	******	-.034	-.037	-.033	-.036	-.036
.779	******	-.094	******	-.058	******	.005	******	.175	.033	-.016	-.016	-.016
.793	******	-.104	******	-.058	******	-.017	******	******	.114	.012	-.022	******
.807	******	-.110	******	-.074	******	-.074	******	******	.101	.051	-.006	-.014
.821	******	******	******	-.101	******	-.117	******	******	.072	.060	.026	.017
.835	******	-.121	******	-.134	******	-.156	******	******	.033	.045	.036	.032
.849	******	-.126	******	******	******	-.189	******	******	.011	.030	.034	.036
.863	******	-.129	******	-.185	******	-.223	******	******	-.034	.004	******	.021
.877	-.087	-.111	******	-.183	******	-.255	******	******	******	******	******	******
.891	-.122	-.140	******	-.195	******	-.266	******	******	-.097	-.060	-.039	-.029
.916	-.177	-.192	-.253	******	-.249	******	-.264	-.272	-.177	-.119	-.086	-.097
.928	-.229	******	-.293	******	-.284	-.275	-.253	-.268	-.212	-.181	-.162	-.150
.940	-.293	******	-.313	******	-.323	-.294	-.275	-.281	-.268	-.251	-.233	-.223
.952	******	******	-.373	******	-.309	-.246	-.251	-.317	-.335	-.340	-.330	-.316
.962	-.141	-.133	-.122	******	-.117	-.107	-.108	-.131	-.289	-.384	-.384	-.377
.974	-.099	-.092	******	******	-.087	-.086	-.085	-.096	-.129	-.216	-.390	-.401
.986	-.086	-.084	-.083	******	-.084	-.082	-.084	-.091	-.100	-.103	-.101	-.096
.996	-.072	-.066	******	******	-.071	-.072	-.072	-.082	-.082	-.070	-.055	-.051

AFTERBODY INTEGRATED PRESSURE DRAG COEFFICIENT .1225

Table A26. Concluded

(d) $\alpha = 5.987°$

TEST PARAMETERS

CONFIGURATION	STAG TAILS
POINT NUMBER	12
MACH NUMBER	1.199
ALPHA, DEG	5.987
NPR	.985
PTO, PSI	14.785
PO, PSI	6.104
QO, PSI	6.144

TAIL SURFACE PRESSURE COEFFICIENTS

	HORIZONTAL TAILS				VERTICAL TAIL	
	UPPER SURFACE Y/B		LOWER SURFACE Y/B		Y/B	
X/C	0.1	0.2	0.1	0.2	0.1	0.2
0.05	.291	******	******	******	.026	.009
0.10	.230	-.319	.253	-.238	.011	.014
0.20	.141	-.275	.162	-.248	-.023	-.042
0.30	.094	******	.108	-.264	-.045	-.056
0.40	.023	-.310	.047	******	-.079	-.093
0.50	-.018	-.338	-.004	-.331	-.098	-.119
0.60	-.032	-.358	-.045	-.348	-.134	-.146
0.70	-.061	-.350	-.063	-.348	-.133	-.138
0.80	-.077	******	-.093	-.325	-.125	-.132
0.90	-.093	******	-.104	******	-.116	-.095

AFTERBODY PRESSURE COEFFICIENTS

	PHI, DEG											
X/L	0	18	36	45	54	72	81	90	108	135	162	180
.584	-.027	-.026	******	-.030	******	******	******	-.046	-.032	-.051	-.020	******
.598	-.031	-.029	******	-.036	******	-.043	******	-.047	-.048	-.023	******	******
.612	-.029	-.029	******	-.035	******	-.041	******	-.047	-.037	-.020	******	******
.626	.015	.001	******	-.027	******	-.037	******	-.047	-.039	-.022	******	******
.640	******	.061	******	-.002	******	-.027	******	-.032	-.034	-.014	******	******
.654	******	.055	******	.013	******	-.023	******	-.042	-.042	-.023	******	******
.668	******	******	******	.019	******	-.005	******	-.029	-.038	-.014	******	******
.682	******	.011	******	.011	******	-.003	******	-.021	-.034	-.021	-.006	******
.696	******	.001	******	-.002	******	-.001	******	-.017	-.025	-.027	-.019	-.015
.710	******	-.016	******	******	******	.001	******	-.011	-.022	-.026	-.021	-.023
.724	******	-.035	******	-.012	******	-.007	******	-.013	-.023	-.025	-.021	-.025
.738	******	-.050	******	-.033	******	******	******	-.029	-.037	-.032	-.030	-.031
.752	******	-.057	******	-.042	******	-.027	******	-.026	-.030	-.028	-.018	******
.766	******	-.092	******	-.067	******	-.052	******	-.056	-.052	-.046	-.039	-.037
.779	******	-.095	******	-.060	******	-.004	******	.185	.018	-.031	-.015	-.019
.793	******	-.105	******	-.079	******	-.065	******	******	.177	.002	-.023	******
.807	******	-.117	******	-.107	******	-.148	******	******	.181	.085	-.014	-.026
.821	******	******	******	-.140	******	-.185	******	******	.150	.111	.044	.021
.835	******	-.154	******	-.177	******	-.218	******	******	.103	.111	.091	.077
.849	******	-.165	******	******	******	-.248	******	******	.084	.097	.093	.087
.863	******	-.178	******	-.229	******	-.274	******	******	.045	.067	******	.070
.877	-.141	-.182	******	-.235	******	-.303	******	******	******	******	******	******
.891	-.152	-.194	******	-.251	******	-.315	******	******	-.026	-.001	.016	.022
.916	-.225	-.238	-.321	******	-.300	******	-.281	-.369	-.123	-.063	-.033	-.042
.928	-.267	******	-.350	******	-.326	-.299	-.270	-.335	-.166	-.130	-.111	-.100
.940	-.337	******	-.364	******	-.354	-.293	-.277	-.317	-.228	-.205	-.186	-.176
.952	******	******	-.418	******	-.224	-.178	-.198	-.309	-.312	-.300	-.289	-.271
.962	-.174	-.176	-.170	******	-.163	-.151	-.149	-.169	-.305	-.349	-.346	-.336
.974	-.125	-.123	******	******	-.157	-.149	-.142	-.135	-.203	-.305	-.365	-.365
.986	-.119	-.114	-.119	******	-.130	-.136	-.129	-.132	-.124	-.154	-.222	-.265
.996	-.098	-.101	******	******	-.108	-.113	-.119	-.115	-.101	-.089	-.088	-.088

AFTERBODY INTEGRATED PRESSURE DRAG COEFFICIENT .1320

Table A27. Effect of Nozzle Pressure Ratio on Pressure Distributions for Staggered Tails Configuration at $M = 0.95$ and $\alpha = 0.023°$

(a) NPR = 1.098

TEST PARAMETERS

CONFIGURATION	STAG TAILS
POINT NUMBER	13
MACH NUMBER	.948
ALPHA, DEG	.023
NPR	1.098
PTO, PSI	14.789
PO, PSI	8.288
QO, PSI	5.219

TAIL SURFACE PRESSURE COEFFICIENTS

	HORIZONTAL TAILS				VERTICAL TAIL	
	UPPER SURFACE Y/B		LOWER SURFACE Y/B		Y/B	
X/C	0.1	0.2	0.1	0.2	0.1	0.2
0.05	-.095	******	******	******	-.049	-.088
0.10	-.123	-.180	-.082	-.155	-.082	-.096
0.20	-.161	-.234	-.136	-.212	-.117	-.141
0.30	-.221	******	-.191	-.273	-.167	-.187
0.40	-.294	-.306	-.265	******	-.225	-.250
0.50	-.330	-.260	-.288	-.253	-.227	-.251
0.60	-.364	-.278	-.365	-.272	-.232	-.244
0.70	-.372	-.296	-.359	-.293	-.193	-.197
0.80	-.279	******	-.308	-.300	-.161	-.146
0.90	.033	******	.016	******	-.041	-.011

AFTERBODY PRESSURE COEFFICIENTS

	PHI, DEG											
X/L	0	18	36	45	54	72	81	90	108	135	162	180
.584	-.004	-.007	******	.002	******	******	******	-.003	-.003	-.007	.010	******
.598	.009	.000	******	-.010	******	-.008	******	-.015	-.017	-.006	******	******
.612	.029	.017	******	.009	******	-.005	******	-.007	-.007	-.013	******	******
.626	.096	.067	******	.019	******	.002	******	-.002	-.005	-.012	******	******
.640	******	.091	******	.024	******	-.003	******	-.008	-.019	-.025	******	******
.654	******	.024	******	-.001	******	-.004	******	-.024	-.029	-.030	******	******
.668	******	******	******	-.016	******	-.015	******	-.011	-.016	-.022	******	******
.682	******	-.056	******	-.042	******	-.033	******	-.032	-.039	-.032	-.036	******
.696	******	-.094	******	-.059	******	-.057	******	-.043	-.046	-.041	-.042	-.035
.710	******	-.116	******	******	******	-.073	******	-.056	-.056	-.035	-.039	-.037
.724	******	-.153	******	-.103	******	-.083	******	-.066	-.064	-.038	-.052	-.043
.738	******	-.177	******	-.121	******	******	******	-.084	-.076	-.056	-.051	-.045
.752	******	-.183	******	-.131	******	-.093	******	-.070	-.071	-.038	-.040	******
.766	******	-.195	******	-.159	******	-.072	******	-.054	-.048	-.055	-.053	-.060
.779	******	-.166	******	-.103	******	-.016	******	.157	.019	-.018	-.030	-.038
.793	******	-.162	******	-.117	******	-.064	******	******	.008	-.028	-.049	******
.807	******	-.173	******	-.138	******	-.129	******	******	-.045	-.043	-.058	-.053
.821	******	******	******	-.173	******	-.182	******	******	-.085	-.075	-.076	-.076
.835	******	-.155	******	-.193	******	-.219	******	******	-.150	-.115	-.101	-.108
.849	******	-.107	******	******	******	-.243	******	******	-.182	-.154	-.146	-.143
.863	******	-.105	******	-.183	******	-.240	******	******	-.232	-.199	******	-.178
.877	-.100	-.110	******	-.181	******	-.215	******	******	******	******	******	******
.891	-.164	-.189	******	-.206	******	-.254	******	******	-.330	-.275	-.269	-.255
.916	-.242	-.253	-.321	******	-.287	******	-.309	-.307	-.334	-.329	-.319	-.326
.928	-.275	******	-.344	******	-.301	-.241	-.229	-.183	-.218	-.265	-.336	-.356
.940	-.211	******	-.157	******	-.168	-.096	-.078	-.057	-.066	-.109	-.144	-.161
.952	******	******	-.050	******	-.031	-.008	-.001	.028	.023	.018	-.012	-.017
.962	.022	.020	.033	******	.045	.052	.060	.085	.086	.079	.066	.061
.974	.089	.086	******	******	.096	.100	.114	.124	.114	.126	.114	.116
.986	.131	.132	.138	******	.125	.119	.136	.140	.137	.139	.133	.136
.996	.132	.142	******	******	.133	.140	.152	.150	.146	.140	.155	.148

AFTERBODY INTEGRATED PRESSURE DRAG COEFFICIENT .0527

Table A27. Continued

(b) NPR = 1.960

TEST PARAMETERS

CONFIGURATION	STAG TAILS
POINT NUMBER	14
MACH NUMBER	.950
ALPHA, DEG	.021
NPR	1.960
PTO, PSI	14.784
PO, PSI	8.274
QO, PSI	5.223

TAIL SURFACE PRESSURE COEFFICIENTS

	HORIZONTAL TAILS				VERTICAL TAIL	
	UPPER SURFACE Y/B		LOWER SURFACE Y/B		Y/B	
X/C	0.1	0.2	0.1	0.2	0.1	0.2
0.05	-.094	******	******	******	-.047	-.072
0.10	-.118	-.185	-.061	-.155	-.072	-.095
0.20	-.166	-.237	-.129	-.208	-.115	-.135
0.30	-.205	******	-.192	-.275	-.164	-.183
0.40	-.296	-.289	-.260	******	-.221	-.247
0.50	-.327	-.265	-.283	-.253	-.230	-.254
0.60	-.362	-.274	-.355	-.265	-.226	-.256
0.70	-.379	-.290	-.364	-.285	-.187	-.198
0.80	-.284	******	-.252	-.214	-.161	-.141
0.90	.035	******	.042	******	-.049	-.012

AFTERBODY PRESSURE COEFFICIENTS

	PHI, DEG											
X/L	0	18	36	45	54	72	81	90	108	135	162	180
.584	.001	-.005	******	-.001	******	******	******	-.005	.004	-.002	.010	******
.598	.006	.010	******	-.006	******	-.009	******	-.011	-.009	-.010	******	******
.612	.024	.026	******	.006	******	.001	******	-.003	-.009	-.010	******	******
.626	.090	.067	******	.021	******	.000	******	.001	-.007	-.009	******	******
.640	******	.092	******	.025	******	-.005	******	-.003	-.015	-.016	******	******
.654	******	.030	******	.005	******	-.005	******	-.022	-.021	-.034	******	******
.668	******	******	******	-.020	******	-.013	******	-.014	-.018	-.023	******	******
.682	******	-.056	******	-.044	******	-.040	******	-.039	-.037	-.026	-.032	******
.696	******	-.089	******	-.058	******	-.051	******	-.053	-.040	-.037	-.034	-.029
.710	******	-.107	******	******	******	-.063	******	-.048	-.049	-.039	-.042	-.034
.724	******	-.147	******.	-.105	******	-.084	******	-.069	-.058	-.048	-.042	-.038
.738	******	-.172	******	-.126	******	******	******	-.074	-.080	-.052	-.051	-.042
.752	******	-.179	******	-.119	******	-.085	******	-.076	-.061	-.048	-.039	******
.766	******	-.196	******	-.143	******	-.074	******	-.048	-.054	-.050	-.051	-.059
.779	******	-.177	******	-.104	******	-.013	******	.156	.025	-.015	-.034	-.033
.793	******	-.172	******	-.113	******	-.054	******	******	.013	-.028	-.045	******
.807	******	-.156	******	-.131	******	-.124	******	******	-.042	-.048	-.050	-.048
.821	******	******	******	-.166	******	-.176	******	******	-.094	-.082	-.079	-.070
.835	******	-.140	******	-.180	******	-.229	******	******	-.150	-.114	-.108	-.109
.849	******	-.096	******	******	******	-.239	******	******	-.190	-.162	-.142	-.138
.863	******	-.109	******	-.177	******	-.274	******	******	-.244	-.207	******	-.174
.877	-.093	-.113	******	-.173	******	-.254	******	******	******	******	******	******
.891	-.159	-.175	******	-.203	******	-.249	******	******	-.325	-.274	-.258	-.248
.916	-.211	-.233	-.290	******	-.272	******	-.283	-.300	-.316	-.308	-.306	-.314
.928	-.237	******	-.282	******	-.219	-.193	-.184	-.156	-.182	-.228	-.302	-.277
.940	-.179	******	-.118	******	-.106	-.066	-.063	-.042	-.050	-.076	-.109	-.109
.952	******	******	-.017	******	-.004	.012	.021	.046	.036	.022	.007	.000
.962	.062	.064	.072	******	.075	.080	.083	.095	.097	.090	.081	.080
.974	.132	.137	******	******	.137	.125	.125	.132	.120	.139	.132	.137
.986	.163	.171	.175	******	.172	.160	.155	.147	.139	.149	.158	.167
.996	.191	.191	******	******	.183	.185	.180	.170	.166	.161	.168	.180

AFTERBODY INTEGRATED PRESSURE DRAG COEFFICIENT .0377

Table A27. Continued

(c) NPR = 3.020

TEST PARAMETERS

CONFIGURATION	STAG TAILS
POINT NUMBER	15
MACH NUMBER	.951
ALPHA, DEG	.021
NPR	3.020
PTO, PSI	14.786
PO, PSI	8.264
QO, PSI	5.230

TAIL SURFACE PRESSURE COEFFICIENTS

	HORIZONTAL TAILS				VERTICAL TAIL	
	UPPER SURFACE Y/B		LOWER SURFACE Y/B		Y/B	
X/C	0.1	0.2	0.1	0.2	0.1	0.2
0.05	-.090	******	******	******	-.055	-.063
0.10	-.109	-.182	-.065	-.155	-.065	-.096
0.20	-.156	-.239	-.126	-.207	-.104	-.141
0.30	-.211	******	-.185	-.270	-.162	-.192
0.40	-.281	-.287	-.257	******	-.221	-.248
0.50	-.320	-.258	-.280	-.258	-.230	-.253
0.60	-.357	-.271	-.352	-.264	-.225	-.236
0.70	-.360	-.293	-.357	-.283	-.192	-.198
0.80	-.211	******	-.290	-.224	-.169	-.150
0.90	.062	******	.028	******	-.057	-.018

AFTERBODY PRESSURE COEFFICIENTS

	PHI, DEG											
X/L	0	18	36	45	54	72	81	90	108	135	162	180
.584	-.008	-.005	******	.003	******	******	******	-.001	-.003	.002	.008	******
.598	.004	.004	******	.000	******	-.012	******	-.008	-.012	-.011	******	******
.612	.032	.024	******	.007	******	.002	******	-.003	-.012	-.010	******	******
.626	.104	.065	******	.024	******	.008	******	.000	-.008	-.002	******	******
.640	******	.088	******	.033	******	-.001	******	-.010	-.016	-.019	******	******
.654	******	.031	******	.001	******	-.003	******	-.023	-.022	-.026	******	******
.668	******	******	******	-.008	******	-.014	******	-.018	-.015	-.026	******	******
.682	******	-.053	******	-.049	******	-.030	******	-.031	-.040	-.034	-.029	******
.696	******	-.091	******	-.060	******	-.047	******	-.037	-.042	-.039	-.033	-.027
.710	******	-.111	******	******	******	-.062	******	-.048	-.053	-.042	-.031	-.032
.724	******	-.152	******	-.107	******	-.075	******	-.062	-.061	-.050	-.048	-.044
.738	******	-.176	******	-.132	******	******	******	-.073	-.072	-.058	-.049	-.052
.752	******	-.180	******	-.134	******	-.084	******	-.070	-.066	-.050	-.041	******
.766	******	-.209	******	-.152	******	-.073	******	-.049	-.044	-.056	-.055	-.057
.779	******	-.165	******	-.107	******	-.017	******	.163	.017	-.023	-.027	-.034
.793	******	-.154	******	-.115	******	-.055	******	******	.009	-.025	-.045	******
.807	******	-.156	******	-.134	******	-.126	******	******	-.038	-.039	-.051	-.051
.821	******	******	******	-.170	******	-.160	******	******	-.095	-.075	-.071	-.079
.835	******	-.151	******	-.167	******	-.211	******	******	-.146	-.111	-.098	-.104
.849	******	-.104	******	******	******	-.248	******	******	-.192	-.149	-.142	-.141
.863	******	-.102	******	-.166	******	-.246	******	******	-.243	-.199	******	-.173
.877	-.097	-.122	******	-.171	******	-.235	******	******	******	******	******	******
.891	-.168	-.178	******	-.211	******	-.261	******	******	-.333	-.275	-.266	-.259
.916	-.241	-.237	-.306	******	-.271	******	-.279	-.301	-.316	-.322	-.301	-.320
.928	-.237	******	-.280	******	-.247	-.202	-.182	-.179	-.181	-.256	-.291	-.302
.940	-.158	******	-.123	******	-.109	-.072	-.071	-.047	-.050	-.080	-.115	-.120
.952	******	******	-.022	******	-.006	.006	.012	.035	.042	.025	.000	.000
.962	.051	.058	.065	******	.066	.074	.080	.091	.087	.083	.083	.077
.974	.136	.129	******	******	.132	.129	.129	.124	.132	.132	.134	.133
.986	.175	.169	.172	******	.170	.163	.154	.151	.152	.158	.150	.163
.996	.188	.189	******	******	.188	.179	.172	.166	.167	.161	.165	.163

AFTERBODY INTEGRATED PRESSURE DRAG COEFFICIENT .0393

Table A27. Concluded

(d) NPR = 5.036

TEST PARAMETERS

CONFIGURATION	STAG TAILS
POINT NUMBER	16
MACH NUMBER	.948
ALPHA, DEG	.021
NPR	5.036
PTO, PSI	14.726
PO, PSI	8.259
QO, PSI	5.193

TAIL SURFACE PRESSURE COEFFICIENTS

	HORIZONTAL TAILS				VERTICAL TAIL	
	UPPER SURFACE Y/B		LOWER SURFACE Y/B		Y/B	
X/C	0.1	0.2	0.1	0.2	0.1	0.2
0.05	-.097	******	******	******	-.042	-.071
0.10	-.116	-.182	-.068	-.155	-.077	-.096
0.20	-.163	-.228	-.133	-.201	-.108	-.144
0.30	-.209	******	-.188	-.261	-.164	-.184
0.40	-.289	-.299	-.260	******	-.219	-.245
0.50	-.323	-.256	-.285	-.262	-.229	-.250
0.60	-.371	-.269	-.357	-.263	-.234	-.242
0.70	-.373	-.288	-.366	-.287	-.194	-.193
0.80	-.208	******	-.269	-.262	-.162	-.164
0.90	.057	******	.045	******	-.055	-.004

AFTERBODY PRESSURE COEFFICIENTS

	PHI, DEG											
X/L	0	18	36	45	54	72	81	90	108	135	162	180
.584	-.003	-.016	******	.002	******	******	******	-.001	.000	.002	.010	******
.598	.005	.005	******	-.002	******	-.012	******	-.018	-.011	-.009	******	******
.612	.030	.027	******	.009	******	.000	******	-.010	-.006	-.012	******	******
.626	.097	.071	******	.022	******	.010	******	-.008	-.006	-.005	******	******
.640	******	.095	******	.030	******	.002	******	-.010	-.013	-.013	******	******
.654	******	.032	******	.011	******	-.008	******	-.017	-.029	-.025	******	******
.668	******	******	******	-.005	******	-.012	******	-.019	-.014	-.020	******	******
.682	******	-.053	******	-.040	******	-.034	******	-.036	-.036	-.029	-.031	******
.696	******	-.087	******	-.055	******	-.052	******	-.045	-.038	-.038	-.034	-.036
.710	******	-.108	******	******	******	-.064	******	-.053	-.051	-.039	-.031	-.038
.724	******	-.145	******	-.108	******	-.076	******	-.063	-.055	-.055	-.042	-.048
.738	******	-.168	******	-.141	******	******	******	-.076	-.072	-.055	-.051	-.050
.752	******	-.176	******	-.132	******	-.093	******	-.072	-.061	-.055	-.044	******
.766	******	-.213	******	-.149	******	-.072	******	-.049	-.045	-.055	-.057	-.061
.779	******	-.174	******	-.102	******	-.010	******	.163	.021	-.021	-.033	-.040
.793	******	-.167	******	-.116	******	-.051	******	******	.009	-.025	-.046	******
.807	******	-.164	******	-.134	******	-.127	******	******	-.046	-.043	-.051	-.057
.821	******	******	******	-.167	******	-.167	******	******	-.089	-.074	-.072	-.077
.835	******	-.157	******	-.173	******	-.228	******	******	-.153	-.111	-.107	-.111
.849	******	-.106	******	******	******	-.235	******	******	-.187	-.154	-.142	-.147
.863	******	-.097	******	-.176	******	-.235	******	******	-.245	-.199	******	-.180
.877	-.097	-.109	******	-.171	******	-.219	******	******	******	******	******	******
.891	-.153	-.171	******	-.210	******	-.248	******	******	-.338	-.283	-.264	-.257
.916	-.235	-.232	-.307	******	-.251	******	-.286	-.292	-.305	-.300	-.299	-.325
.928	-.242	******	-.251	******	-.199	-.178	-.167	-.161	-.161	-.238	-.270	-.280
.940	-.136	******	-.113	******	-.080	-.056	-.042	-.032	-.037	-.090	-.096	-.106
.952	******	******	-.005	******	.010	.026	.032	.048	.055	.040	.014	.013
.962	.069	.073	.079	******	.084	.088	.091	.094	.098	.103	.096	.088
.974	.148	.143	******	******	.151	.144	.141	.134	.138	.142	.143	.142
.986	.184	.191	.184	******	.188	.177	.173	.153	.156	.152	.163	.165
.996	.200	.194	******	******	.201	.196	.190	.182	.181	.176	.171	.179

AFTERBODY INTEGRATED PRESSURE DRAG COEFFICIENT .0323

Table A28. Effect of Angle of Attack on Pressure Distributions for Staggered Tails Configuration at $M = 0.95$ and NPR = 1.096

(a) $\alpha = -2.977°$

TEST PARAMETERS

CONFIGURATION	STAG TAILS
POINT NUMBER	18
MACH NUMBER	.949
ALPHA, DEG	-2.977
NPR	1.096
PTO, PSI	14.789
PO, PSI	8.279
QO, PSI	5.224

TAIL SURFACE PRESSURE COEFFICIENTS

	HORIZONTAL TAILS				VERTICAL TAIL	
	UPPER SURFACE Y/B		LOWER SURFACE Y/B		Y/B	
X/C	0.1	0.2	0.1	0.2	0.1	0.2
0.05	-.316	******	******	******	-.046	-.078
0.10	-.295	.019	-.227	.017	-.084	-.107
0.20	-.283	-.049	-.226	-.062	-.125	-.150
0.30	-.310	******	-.284	-.106	-.172	-.203
0.40	-.374	-.163	-.334	******	-.233	-.261
0.50	-.419	-.183	-.369	-.175	-.247	-.271
0.60	-.434	-.223	-.426	-.219	-.247	-.251
0.70	-.459	-.242	-.432	-.243	-.125	-.116
0.80	-.381	******	-.296	-.251	-.041	-.018
0.90	-.030	******	-.039	******	.027	.053

AFTERBODY PRESSURE COEFFICIENTS

	PHI, DEG											
X/L	0	18	36	45	54	72	81	90	108	135	162	18(
.584	-.033	-.020	******	-.011	******	******	******	-.014	-.011	.001	.014	****
.598	.022	.006	******	-.009	******	-.020	******	-.021	-.026	-.014	******	****
.612	.044	.026	******	.003	******	-.010	******	-.016	-.015	-.017	******	****
.626	.108	.081	******	.020	******	-.002	******	-.020	-.022	-.018	******	****
.640	******	.103	******	.017	******	-.012	******	-.028	-.027	-.022	******	****
.654	******	.028	******	-.006	******	-.024	******	-.035	-.044	-.032	******	****
.668	******	******	******	-.020	******	-.036	******	-.031	-.037	-.031	******	****
.682	******	-.076	******	-.066	******	-.052	******	-.047	-.053	-.045	-.034	****
.696	******	-.095	******	-.079	******	-.072	******	-.064	-.064	-.048	-.038	-.0
.710	******	-.130	******	******	******	-.083	******	-.071	-.068	-.052	-.045	-.0
.724	******	-.158	******	-.119	******	-.102	******	-.078	-.081	-.056	-.048	-.0
.738	******	-.190	******	-.149	******	******	******	-.095	-.085	-.061	-.048	-.0
.752	******	-.186	******	-.149	******	-.115	******	-.094	-.075	-.056	-.049	****
.766	******	-.218	******	-.187	******	-.100	******	-.062	-.055	-.060	-.064	-.0
.779	******	-.168	******	-.088	******	.021	******	.155	-.012	-.039	-.049	-.0
.793	******	-.125	******	-.059	******	.029	******	******	-.081	-.071	-.069	****
.807	******	-.081	******	-.045	******	-.012	******	******	-.148	-.098	-.087	-.0
.821	******	******	******	-.050	******	-.042	******	******	-.181	-.131	-.119	-.1
.835	******	-.028	******	-.047	******	-.071	******	******	-.241	-.182	-.151	-.1
.849	******	-.020	******	******	******	-.100	******	******	-.264	-.216	-.191	-.1
.863	******	-.034	******	-.088	******	-.128	******	******	-.313	-.255	******	-.2
.877	-.034	-.059	******	-.100	******	-.161	******	******	******	******	******	****
.891	-.115	-.136	******	-.157	******	-.201	******	******	-.398	-.343	-.310	-.3
.916	-.202	-.214	-.292	******	-.240	******	-.268	-.263	-.306	-.352	-.353	-.3
.928	-.275	******	-.357	******	-.297	-.221	-.172	-.123	-.147	-.201	-.273	-.3
.940	-.321	******	-.301	******	-.236	-.111	-.082	-.046	-.038	-.103	-.096	-.1
.952	******	******	-.084	******	-.101	-.032	-.045	.015	-.001	.021	-.019	-.0
.962	-.026	-.020	-.012	******	.009	.004	.024	.029	.034	.043	.034	.0
.974	.060	.047	******	******	.057	.036	.040	.036	.036	.044	.052	.0
.986	.101	.103	.092	******	.091	.062	.071	.058	.063	.072	.067	.0
.996	.110	.105	******	******	.089	.077	.085	.079	.096	.069	.072	.0

AFTERBODY INTEGRATED PRESSURE DRAG COEFFICIENT .0675

Table A28. Continued

(b) $\alpha = 0.022°$

TEST PARAMETERS

CONFIGURATION	STAG TAILS
POINT NUMBER	19
MACH NUMBER	.952
ALPHA, DEG	.022
NPR	1.119
PTO, PSI	14.789
PO, PSI	8.257
QO, PSI	5.236

TAIL SURFACE PRESSURE COEFFICIENTS

	HORIZONTAL TAILS				VERTICAL TAIL	
	UPPER SURFACE Y/B		LOWER SURFACE Y/B		Y/B	
X/C	0.1	0.2	0.1	0.2	0.1	0.2
0.05	-.089	******	******	******	-.047	-.074
0.10	-.109	-.185	-.071	-.148	-.070	-.092
0.20	-.157	-.233	-.121	-.207	-.112	-.141
0.30	-.210	******	-.185	-.270	-.167	-.189
0.40	-.287	-.296	-.251	******	-.225	-.253
0.50	-.322	-.285	-.285	-.260	-.232	-.254
0.60	-.367	-.271	-.357	-.265	-.238	-.243
0.70	-.369	-.291	-.355	-.290	-.194	-.200
0.80	-.309	******	-.306	-.296	-.173	-.166
0.90	.020	******	.010	******	-.068	-.034

AFTERBODY PRESSURE COEFFICIENTS

	PHI, DEG											
X/L	0	18	36	45	54	72	81	90	108	135	162	180
.584	-.019	-.006	******	.004	******	******	******	-.003	-.006	.000	.010	******
.598	-.002	-.001	******	-.003	******	-.010	******	-.016	-.009	-.002	******	******
.612	.022	.025	******	.015	******	-.001	******	-.003	-.009	-.006	******	******
.626	.096	.065	******	.026	******	.006	******	.001	-.007	-.008	******	******
.640	******	.090	******	.027	******	-.001	******	-.008	-.009	-.015	******	******
.654	******	.038	******	.010	******	-.006	******	-.020	-.028	-.025	******	******
.668	******	******	******	-.011	******	-.017	******	-.022	-.021	-.018	******	******
.682	******	-.061	******	-.040	******	-.036	******	-.038	-.033	-.032	-.028	******
.696	******	-.084	******	-.058	******	-.046	******	-.046	-.047	-.035	-.035	-.035
.710	******	-.117	******	******	******	-.062	******	-.059	-.048	-.038	-.038	-.034
.724	******	-.144	******	-.103	******	-.082	******	-.063	-.061	-.049	-.046	-.039
.738	******	-.177	******	-.133	******	******	******	-.072	-.073	-.054	-.049	-.048
.752	******	-.176	******	-.131	******	-.092	******	-.067	-.061	-.050	-.043	******
.766	******	-.218	******	-.152	******	-.079	******	-.046	-.045	-.053	-.056	-.057
.779	******	-.176	******	-.109	******	-.009	******	.157	.025	-.019	-.033	-.039
.793	******	-.165	******	-.118	******	-.063	******	******	.004	-.027	-.043	******
.807	******	-.174	******	-.133	******	-.124	******	******	-.041	-.046	-.053	-.048
.821	******	******	******	-.167	******	-.185	******	******	-.087	-.074	-.075	-.074
.835	******	-.154	******	-.203	******	-.229	******	******	-.148	-.114	-.105	-.103
.849	******	-.129	******	******	******	-.257	******	******	-.186	-.158	-.141	-.144
.863	******	-.113	******	-.171	******	-.257	******	******	-.242	-.199	******	-.177
.877	-.101	-.115	******	-.159	******	-.242	******	******	******	******	******	******
.891	-.173	-.187	******	-.212	******	-.256	******	******	-.333	-.277	-.265	-.255
.916	-.249	-.251	-.318	******	-.275	******	-.315	-.323	-.342	-.336	-.321	-.335
.928	-.306	******	-.331	******	-.298	-.255	-.229	-.213	-.233	-.307	-.370	-.373
.940	-.246	******	-.184	******	-.150	-.104	-.088	-.067	-.074	-.098	-.146	-.182
.952	******	******	-.057	******	-.023	-.009	.010	.027	.035	.021	-.004	-.015
.962	.009	.023	.041	******	.045	.060	.059	.080	.075	.086	.066	.064
.974	.081	.093	******	******	.101	.107	.114	.112	.107	.120	.110	.110
.986	.122	.128	.129	******	.128	.128	.133	.131	.133	.128	.130	.132
.996	.130	.136	******	******	.142	.134	.143	.140	.142	.137	.148	.152

AFTERBODY INTEGRATED PRESSURE DRAG COEFFICIENT .0547

Table A28. Continued

(c) $\alpha = 3.018°$

TEST PARAMETERS

CONFIGURATION	STAG TAILS
POINT NUMBER	20
MACH NUMBER	.951
ALPHA, DEG	3.018
NPR	1.103
PTO, PSI	14.788
PO, PSI	8.263
QO, PSI	5.232

TAIL SURFACE PRESSURE COEFFICIENTS

	HORIZONTAL TAILS				VERTICAL TAIL	
	UPPER SURFACE Y/B		LOWER SURFACE Y/B		Y/B	
X/C	0.1	0.2	0.1	0.2	0.1	0.2
0.05	.105	******	******	******	-.034	-.066
0.10	.043	-.349	.073	-.291	-.060	-.087
0.20	-.048	-.362	-.010	-.317	-.096	-.125
0.30	-.114	******	-.083	-.374	-.149	-.169
0.40	-.200	-.450	-.166	******	-.199	-.219
0.50	-.221	-.490	-.197	-.470	-.206	-.227
0.60	-.289	-.473	-.279	-.457	-.196	-.203
0.70	-.296	-.393	-.288	-.400	-.205	-.211
0.80	-.233	******	-.279	-.209	-.224	-.224
0.90	.039	******	-.016	******	-.212	-.168

AFTERBODY PRESSURE COEFFICIENTS

	PHI, DEG											
X/L	0	18	36	45	54	72	81	90	108	135	162	180
.584	-.003	.007	******	.008	******	******	******	-.005	.002	.001	.012	*****
.598	.004	.011	******	-.001	******	-.014	******	-.019	-.009	-.002	******	*****
.612	.027	.027	******	.013	******	-.007	******	-.008	-.009	-.001	******	*****
.626	.091	.060	******	.028	******	.008	******	-.009	-.004	-.006	******	*****
.640	******	.080	******	.024	******	.000	******	-.011	-.009	-.012	******	*****
.654	******	.040	******	.010	******	-.003	******	-.017	-.021	-.017	******	*****
.668	******	******	******	.002	******	-.006	******	-.014	-.012	-.010	******	*****
.682	******	-.049	******	-.026	******	-.028	******	-.033	-.024	-.025	-.024	*****
.696	******	-.070	******	-.045	******	-.042	******	-.035	-.031	-.032	-.028	-.02
.710	******	-.092	******	******	******	-.056	******	-.044	-.043	-.028	-.031	-.02
.724	******	-.133	******	-.088	******	-.074	******	-.052	-.054	-.041	-.033	-.04
.738	******	-.154	******	-.109	******	******	******	-.065	-.060	-.045	-.038	-.03
.752	******	-.155	******	-.107	******	-.070	******	-.051	-.047	-.036	-.025	*****
.766	******	-.177	******	-.122	******	-.058	******	-.023	-.022	-.038	-.041	-.04
.779	******	-.158	******	-.107	******	-.027	******	.184	.073	.013	-.001	-.01
.793	******	-.170	******	-.144	******	-.128	******	******	.104	.024	-.010	*****
.807	******	-.195	******	-.186	******	-.216	******	******	.056	.022	-.009	-.01
.821	******	******	******	-.231	******	-.271	******	******	.009	-.014	-.028	-.03
.835	******	-.249	******	-.280	******	-.321	******	******	-.062	-.042	-.046	-.05
.849	******	-.245	******	******	******	-.364	******	******	-.102	-.085	-.086	-.0
.863	******	-.224	******	-.326	******	-.410	******	******	-.163	-.137	******	-.1
.877	-.192	-.211	******	-.299	******	-.413	******	******	******	******	******	*****
.891	-.262	-.277	******	-.317	******	-.420	******	******	-.264	-.218	-.203	-.2
.916	-.324	-.320	-.388	******	-.344	******	-.268	-.278	-.313	-.277	-.262	-.2
.928	-.255	******	-.282	******	-.246	-.173	-.141	-.181	-.250	-.310	-.355	-.3
.940	-.112	******	-.102	******	-.092	-.047	-.072	-.072	-.117	-.178	-.287	-.3
.952	******	******	-.003	******	.026	.037	-.001	.024	-.022	-.040	-.072	-.0
.962	.046	.043	.044	******	.051	.063	.066	.048	.032	.032	.014	.0
.974	.082	.079	******	******	.073	.089	.075	.064	.060	.093	.080	.0
.986	.099	.095	.101	******	.089	.099	.091	.090	.099	.114	.112	.1
.996	.106	.108	******	******	.110	.109	.101	.101	.106	.116	.113	.1

AFTERBODY INTEGRATED PRESSURE DRAG COEFFICIENT .0644

Table A28. Concluded

(d) $\alpha = 5.990°$

TEST PARAMETERS

CONFIGURATION	STAG TAILS
POINT NUMBER	21
MACH NUMBER	.951
ALPHA, DEG	5.990
NPR	1.079
PTO, PSI	14.784
PO, PSI	8.260
QO, PSI	5.232

TAIL SURFACE PRESSURE COEFFICIENTS

	HORIZONTAL TAILS				VERTICAL TAIL	
	UPPER SURFACE Y/B		LOWER SURFACE Y/B		Y/B	
X/C	0.1	0.2	0.1	0.2	0.1	0.2
0.05	.261	******	******	******	-.016	-.042
0.10	.179	-.523	.222	-.460	-.045	-.058
0.20	.069	-.480	.104	-.437	-.078	-.104
0.30	-.011	******	.021	-.464	-.122	-.147
0.40	-.089	-.534	-.069	******	-.163	-.190
0.50	-.157	-.570	-.111	-.548	-.167	-.185
0.60	-.198	-.579	-.198	-.555	-.168	-.192
0.70	-.188	-.529	-.184	-.487	-.210	-.219
0.80	-.182	******	-.183	-.182	-.253	-.249
0.90	-.019	******	-.056	******	-.280	-.251

AFTERBODY PRESSURE COEFFICIENTS

	PHI, DEG											
X/L	0	18	36	45	54	72	81	90	108	135	162	180
.584	.010	.015	******	.000	******	******	******	-.019	-.010	.001	.030	******
.598	.019	.015	******	-.001	******	-.014	******	-.027	-.023	-.006	******	******
.612	.033	.027	******	.007	******	-.003	******	-.019	-.019	-.003	******	******
.626	.090	.060	******	.019	******	-.005	******	-.012	-.017	-.003	******	******
.640	******	.078	******	.022	******	-.004	******	-.023	-.022	-.013	******	******
.654	******	.034	******	.008	******	-.005	******	-.023	-.029	-.021	******	******
.668	******	******	******	-.002	******	-.008	******	-.014	-.017	-.009	******	******
.682	******	-.029	******	-.025	******	-.025	******	-.037	-.037	-.020	-.010	******
.696	******	-.059	******	-.038	******	-.037	******	-.039	-.040	-.017	-.015	-.004
.710	******	-.082	******	******	******	-.051	******	-.042	-.037	-.020	-.006	-.006
.724	******	-.102	******	-.074	******	-.056	******	-.056	-.050	-.027	-.019	-.010
.738	******	-.124	******	-.084	******	******	******	-.053	-.061	-.032	-.015	-.020
.752	******	-.119	******	-.088	******	-.053	******	-.043	-.037	-.014	.001	******
.766	******	-.138	******	-.097	******	-.035	******	-.007	-.004	-.014	-.013	-.011
.779	******	-.140	******	-.110	******	-.045	******	.224	.128	.052	.037	.028
.793	******	-.177	******	-.168	******	-.226	******	******	.205	.080	.036	******
.807	******	-.218	******	-.225	******	-.323	******	******	.171	.090	.041	.038
.821	******	******	******	-.290	******	-.365	******	******	.110	.069	.036	.019
.835	******	-.302	******	-.343	******	-.406	******	******	.033	.033	.013	.002
.849	******	-.324	******	******	******	-.451	******	******	-.020	-.012	-.022	-.025
.863	******	-.320	******	-.405	******	-.488	******	******	-.079	-.057	******	-.057
.877	-.274	-.312	******	-.404	******	-.503	******	******	******	******	******	******
.891	-.344	-.380	******	-.425	******	-.516	******	******	-.193	-.140	-.139	-.143
.916	-.346	-.353	-.390	******	-.270	******	-.266	-.263	-.242	-.204	-.195	-.199
.928	-.254	******	-.182	******	-.114	-.123	-.128	-.133	-.233	-.275	-.294	-.281
.940	-.128	******	-.090	******	-.084	-.086	-.091	-.087	-.195	-.303	-.370	-.362
.952	******	******	-.081	******	-.085	-.078	-.076	-.079	-.120	-.147	-.223	-.199
.962	-.039	-.049	-.060	******	-.086	-.070	-.076	-.049	-.071	-.050	-.065	-.073
.974	-.032	-.030	******	******	-.058	-.052	-.052	-.036	-.035	.012	.016	.016
.986	-.009	-.005	-.002	******	-.026	.001	-.006	.004	.019	.051	.049	.061
.996	.040	.037	******	******	.019	.045	.045	.028	.041	.061	.054	.061

AFTERBODY INTEGRATED PRESSURE DRAG COEFFICIENT .0957

Table A29. Effect of Nozzle Pressure Ratio on Pressure Distributions for Staggered Tails Configuration at $M = 0.90$ and $\alpha = 0.020°$

(a) NPR = 1.113

TEST PARAMETERS

CONFIGURATION	STAG TAILS
POINT NUMBER	22
MACH NUMBER	.901
ALPHA, DEG	.020
NPR	1.113
PTO, PSI	14.786
PO, PSI	8.732
QO, PSI	4.963

TAIL SURFACE PRESSURE COEFFICIENTS

	HORIZONTAL TAILS				VERTICAL TAIL	
	UPPER SURFACE Y/B		LOWER SURFACE Y/B		Y/B	
X/C	0.1	0.2	0.1	0.2	0.1	0.2
0.05	-.109	******	******	******	-.079	-.086
0.10	-.134	-.161	-.082	-.153	-.089	-.100
0.20	-.181	-.196	-.145	-.179	-.122	-.154
0.30	-.220	******	-.202	-.226	-.173	-.203
0.40	-.299	-.275	-.270	******	-.221	-.243
0.50	-.326	-.278	-.296	-.263	-.223	-.236
0.60	-.326	-.265	-.333	-.279	-.196	-.199
0.70	-.172	-.162	-.215	-.196	-.151	-.149
0.80	-.064	******	-.091	-.102	-.107	-.083
0.90	.023	******	.004	******	-.045	-.022

AFTERBODY PRESSURE COEFFICIENTS

	PHI, DEG											
X/L	0	18	36	45	54	72	81	90	108	135	162	180
.584	-.023	-.004	******	-.005	******	******	******	-.017	-.011	-.015	-.003	******
.598	-.012	-.006	******	-.017	******	-.023	******	-.030	-.021	-.014	******	******
.612	.016	.011	******	.001	******	-.017	******	-.014	-.019	-.020	******	******
.626	.080	.051	******	.006	******	-.012	******	-.012	-.020	-.024	******	******
.640	******	.067	******	.001	******	-.019	******	-.020	-.023	-.031	******	******
.654	******	.003	******	-.023	******	-.023	******	-.039	-.037	-.039	******	******
.668	******	******	******	-.031	******	-.036	******	-.036	-.033	-.032	******	******
.682	******	-.081	******	-.058	******	-.052	******	-.048	-.049	-.037	-.039	******
.696	******	-.106	******	-.070	******	-.058	******	-.055	-.056	-.040	-.040	-.046
.710	******	-.136	******	******	******	-.067	******	-.066	-.056	-.037	-.036	-.039
.724	******	-.152	******	-.099	******	-.075	******	-.068	-.063	-.049	-.046	-.042
.738	******	-.174	******	-.123	******	******	******	-.074	-.072	-.055	-.053	-.046
.752	******	-.172	******	-.118	******	-.075	******	-.055	-.060	-.045	-.045	******
.766	******	-.185	******	-.126	******	-.063	******	-.039	-.043	-.055	-.064	-.065
.779	******	-.145	******	-.094	******	-.016	******	.150	.010	-.029	-.044	-.051
.793	******	-.146	******	-.105	******	-.061	******	******	-.002	-.045	-.056	******
.807	******	-.129	******	-.112	******	-.107	******	******	-.046	-.061	-.067	-.063
.821	******	******	******	-.122	******	-.153	******	******	-.099	-.096	-.085	-.088
.835	******	-.106	******	-.141	******	-.181	******	******	-.152	-.133	-.120	-.122
.849	******	-.095	******	******	******	-.205	******	******	-.195	-.169	-.150	-.157
.863	******	-.111	******	-.173	******	-.237	******	******	-.255	-.214	******	-.179
.877	-.104	-.121	******	-.168	******	-.231	******	******	******	******	******	******
.891	-.155	-.174	******	-.208	******	-.247	******	******	-.308	-.253	-.218	-.207
.916	-.170	-.167	-.215	******	-.175	******	-.175	-.178	-.181	-.184	-.178	-.197
.928	-.173	******	-.198	******	-.161	-.141	-.133	-.115	-.140	-.174	-.182	-.185
.940	-.162	******	-.138	******	-.133	-.103	-.092	-.078	-.102	-.140	-.158	-.159
.952	******	******	-.083	******	-.071	-.046	-.039	-.027	-.036	-.069	-.086	-.086
.962	-.014	-.003	.006	******	.012	.019	.023	.030	.027	.026	.003	-.009
.974	.077	.079	******	******	.090	.095	.086	.098	.096	.098	.090	.089
.986	.139	.141	.144	******	.143	.140	.142	.145	.146	.143	.145	.145
.996	.157	.163	******	******	.163	.163	.164	.169	.170	.169	.168	.169

AFTERBODY INTEGRATED PRESSURE DRAG COEFFICIENT .0450

Table A29. Continued

(b) NPR = 2.027

TEST PARAMETERS

CONFIGURATION	STAG TAILS
POINT NUMBER	23
MACH NUMBER	.900
ALPHA, DEG	.021
NPR	2.027
PTO, PSI	14.782
PO, PSI	8.741
QO, PSI	4.955

TAIL SURFACE PRESSURE COEFFICIENTS

	HORIZONTAL TAILS				VERTICAL TAIL	
	UPPER SURFACE Y/B		LOWER SURFACE Y/B		Y/B	
X/C	0.1	0.2	0.1	0.2	0.1	0.2
0.05	-.112	******	******	******	-.069	-.096
0.10	-.129	-.172	-.079	-.149	-.085	-.107
0.20	-.179	-.203	-.148	-.188	-.124	-.162
0.30	-.227	******	-.195	-.223	-.175	-.204
0.40	-.289	-.269	-.264	******	-.216	-.235
0.50	-.318	-.275	-.290	-.245	-.209	-.227
0.60	-.286	-.245	-.306	-.252	-.177	-.198
0.70	-.151	-.146	-.182	-.172	-.144	-.140
0.80	-.051	******	-.076	-.083	-.093	-.076
0.90	.034	******	.016	******	-.040	-.016

AFTERBODY PRESSURE COEFFICIENTS

	PHI, DEG											
X/L	0	18	36	45	54	72	81	90	108	135	162	180
.584	-.016	-.010	******	.000	******	******	******	-.009	-.015	-.012	-.001	******
.598	-.012	-.009	******	-.013	******	-.020	******	-.016	-.022	-.014	******	******
.612	.017	.010	******	.002	******	-.012	******	-.008	-.019	-.016	******	******
.626	.083	.051	******	.010	******	-.009	******	-.009	-.018	-.017	******	******
.640	******	.072	******	.005	******	-.014	******	-.018	-.026	-.026	******	******
.654	******	.011	******	-.013	******	-.021	******	-.034	-.038	-.038	******	******
.668	******	******	******	-.027	******	-.035	******	-.030	-.030	-.028	******	******
.682	******	-.077	******	-.054	******	-.048	******	-.045	-.045	-.043	-.041	******
.696	******	-.103	******	-.080	******	-.062	******	-.052	-.051	-.045	-.039	-.030
.710	******	-.127	******	******	******	-.068	******	-.062	-.053	-.041	-.042	-.032
.724	******	-.150	******	-.106	******	-.085	******	-.066	-.061	-.053	-.042	-.039
.738	******	-.174	******	-.130	******	******	******	-.068	-.070	-.056	-.046	-.041
.752	******	-.165	******	-.120	******	-.079	******	-.055	-.055	-.050	-.042	******
.766	******	-.177	******	-.125	******	-.060	******	-.032	-.042	-.056	-.062	-.059
.779	******	-.143	******	-.096	******	-.012	******	.155	.016	-.028	-.039	-.036
.793	******	-.136	******	-.095	******	-.059	******	******	-.006	-.038	-.057	******
.807	******	-.133	******	-.114	******	-.099	******	******	-.060	-.054	-.063	-.059
.821	******	******	******	-.115	******	-.149	******	******	-.100	-.087	-.087	-.084
.835	******	-.107	******	-.136	******	-.171	******	******	-.165	-.125	-.116	-.118
.849	******	-.099	******	******	******	-.205	******	******	-.194	-.160	-.149	-.138
.863	******	-.103	******	-.160	******	-.226	******	******	-.254	-.197	******	-.163
.877	-.103	-.113	******	-.166	******	-.224	******	******	******	******	******	******
.891	-.147	-.160	******	-.180	******	-.243	******	******	-.274	-.232	-.202	-.189
.916	-.145	-.149	-.198	******	-.156	******	-.154	-.162	-.158	-.162	-.158	-.161
.928	-.147	******	-.182	******	-.139	-.120	-.111	-.100	-.118	-.153	-.165	-.157
.940	-.135	******	-.113	******	-.107	-.078	-.066	-.060	-.080	-.112	-.129	-.132
.952	******	******	-.050	******	-.040	-.019	-.014	-.008	-.009	-.043	-.058	-.057
.962	.030	.033	.041	******	.046	.052	.053	.060	.057	.051	.034	.036
.974	.123	.120	******	******	.126	.126	.123	.124	.124	.123	.121	.126
.986	.179	.173	.178	******	.177	.178	.176	.168	.171	.173	.174	.179
.996	.196	.203	******	******	.198	.198	.194	.191	.194	.191	.195	.199

AFTERBODY INTEGRATED PRESSURE DRAG COEFFICIENT .0280

Table A29. Continued

(c) NPR = 2.997

TEST PARAMETERS

CONFIGURATION	STAG TAILS
POINT NUMBER	24
MACH NUMBER	.900
ALPHA, DEG	.021
NPR	2.997
PTO, PSI	14.780
PO, PSI	8.736
QO, PSI	4.957

TAIL SURFACE PRESSURE COEFFICIENTS

	HORIZONTAL TAILS				VERTICAL TAIL	
	UPPER SURFACE Y/B		LOWER SURFACE Y/B		Y/B	
X/C	0.1	0.2	0.1	0.2	0.1	0.2
0.05	-.112	******	******	******	-.088	-.087
0.10	-.139	-.166	-.094	-.142	-.092	-.117
0.20	-.181	-.192	-.149	-.189	-.123	-.148
0.30	-.222	******	-.207	-.220	-.175	-.200
0.40	-.300	-.263	-.265	******	-.220	-.236
0.50	-.314	-.267	-.277	-.252	-.218	-.228
0.60	-.300	-.245	-.299	-.264	-.188	-.189
0.70	-.158	-.145	-.192	-.183	-.147	-.144
0.80	-.050	******	-.076	-.091	-.103	-.081
0.90	.035	******	.018	******	-.048	-.014

AFTERBODY PRESSURE COEFFICIENTS

	PHI, DEG											
X/L	0	18	36	45	54	72	81	90	108	135	162	180
.584	-.015	-.008	******	-.001	******	******	******	-.013	-.010	-.017	-.002	******
.598	-.010	-.004	******	-.017	******	-.020	******	-.026	-.021	-.014	******	******
.612	.017	.012	******	.002	******	-.012	******	-.013	-.021	-.010	******	******
.626	.084	.049	******	.016	******	-.005	******	-.016	-.018	-.019	******	******
.640	******	.072	******	.006	******	-.016	******	-.023	-.025	-.024	******	******
.654	******	.001	******	-.013	******	-.020	******	-.032	-.033	-.036	******	******
.668	******	******	******	-.030	******	-.030	******	-.030	-.033	-.028	******	******
.682	******	-.077	******	-.055	******	-.051	******	-.046	-.049	-.042	-.042	******
.696	******	-.108	******	-.076	******	-.065	******	-.049	-.050	-.048	-.037	-.0
.710	******	-.126	******	******	******	-.064	******	-.060	-.058	-.044	-.040	-.0
.724	******	-.158	******	-.109	******	-.081	******	-.065	-.063	-.041	-.049	-.0
.738	******	-.172	******	-.114	******	******	******	-.076	-.069	-.052	-.049	-.0
.752	******	-.161	******	-.114	******	-.071	******	-.053	-.052	-.037	-.041	******
.766	******	-.176	******	-.124	******	-.062	******	-.027	-.041	-.052	-.057	-.0
.779	******	-.142	******	-.095	******	-.015	******	.159	.018	-.026	-.042	-.0
.793	******	-.136	******	-.101	******	-.058	******	******	-.014	-.040	-.060	******
.807	******	-.127	******	-.104	******	-.117	******	******	-.069	-.055	-.058	-.0
.821	******	******	******	-.129	******	-.157	******	******	-.103	-.091	-.087	-.0
.835	******	-.099	******	-.142	******	-.173	******	******	-.174	-.125	-.118	-.1
.849	******	-.089	******	******	******	-.197	******	******	-.200	-.160	-.153	-.1
.863	******	-.106	******	-.170	******	-.220	******	******	-.241	-.205	******	-.1
.877	-.099	-.117	******	-.158	******	-.228	******	******	******	******	******	******
.891	-.146	-.160	******	-.176	******	-.229	******	******	-.281	-.224	-.209	-.2
.916	-.147	-.148	-.201	******	-.156	******	-.151	-.172	-.159	-.161	-.158	-.1
.928	-.152	******	-.178	******	-.143	-.121	-.111	-.103	-.118	-.150	-.166	-.1
.940	-.132	******	-.115	******	-.111	-.078	-.066	-.054	-.076	-.115	-.136	-.2
.952	******	******	-.053	******	-.040	-.019	-.013	-.005	-.014	-.043	-.063	-.(
.962	.027	.034	.039	******	.046	.050	.054	.056	.057	.048	.033	.(
.974	.118	.119	******	******	.122	.123	.121	.120	.124	.125	.121	.2
.986	.179	.173	.176	******	.173	.178	.174	.174	.170	.169	.169	.2
.996	.197	.200	******	******	.199	.200	.192	.195	.190	.190	.195	.2

AFTERBODY INTEGRATED PRESSURE DRAG COEFFICIENT .0289

Table A29. Concluded

(d) NPR = 5.033

TEST PARAMETERS

CONFIGURATION	STAG TAILS
POINT NUMBER	25
MACH NUMBER	.900
ALPHA, DEG	.021
NPR	5.033
PTO, PSI	14.775
PO, PSI	8.733
QO, PSI	4.955

TAIL SURFACE PRESSURE COEFFICIENTS

	HORIZONTAL TAILS				VERTICAL TAIL	
	UPPER SURFACE Y/B		LOWER SURFACE Y/B		Y/B	
X/C	0.1	0.2	0.1	0.2	0.1	0.2
0.05	-.113	******	******	******	-.067	-.096
0.10	-.132	-.158	-.087	-.144	-.090	-.108
0.20	-.192	-.189	-.150	-.175	-.127	-.151
0.30	-.228	******	-.199	-.220	-.176	-.198
0.40	-.303	-.262	-.265	******	-.217	-.239
0.50	-.309	-.266	-.292	-.249	-.215	-.229
0.60	-.298	-.242	-.300	-.252	-.182	-.187
0.70	-.147	-.139	-.179	-.162	-.158	-.142
0.80	-.051	******	-.071	-.079	-.100	-.080
0.90	.039	******	.027	******	-.042	-.006

AFTERBODY PRESSURE COEFFICIENTS

	PHI, DEG											
X/L	0	18	36	45	54	72	81	90	108	135	162	180
.584	-.017	.000	******	.003	******	******	******	-.014	-.013	-.009	-.006	******
.598	-.013	-.007	******	-.009	******	-.026	******	-.015	-.018	-.013	******	******
.612	.015	.016	******	.004	******	-.010	******	-.016	-.022	-.017	******	******
.626	.086	.049	******	.009	******	-.006	******	-.017	-.022	-.024	******	******
.640	******	.072	******	.002	******	-.014	******	-.021	-.019	-.025	******	******
.654	******	.022	******	-.011	******	-.020	******	-.035	-.032	-.034	******	******
.668	******	******	******	-.023	******	-.032	******	-.037	-.034	-.028	******	******
.682	******	-.079	******	-.054	******	-.047	******	-.047	-.049	-.039	-.039	******
.696	******	-.104	******	-.071	******	-.060	******	-.049	-.049	-.044	-.041	-.031
.710	******	-.124	******	******	******	-.072	******	-.053	-.058	-.042	-.042	-.038
.724	******	-.157	******	-.108	******	-.083	******	-.061	-.066	-.046	-.045	-.047
.738	******	-.179	******	-.117	******	******	******	-.067	-.064	-.048	-.049	-.046
.752	******	-.164	******	-.118	******	-.068	******	-.053	-.052	-.041	-.044	******
.766	******	-.187	******	-.121	******	-.062	******	-.032	-.038	-.048	-.059	-.061
.779	******	-.150	******	-.092	******	-.013	******	.153	.019	-.033	-.039	-.037
.793	******	-.136	******	-.105	******	-.051	******	******	-.004	-.039	-.055	******
.807	******	-.120	******	-.100	******	-.104	******	******	-.054	-.060	-.063	-.069
.821	******	******	******	-.119	******	-.153	******	******	-.099	-.090	-.090	-.087
.835	******	-.097	******	-.140	******	-.177	******	******	-.161	-.125	-.117	-.122
.849	******	-.089	******	******	******	-.202	******	******	-.195	-.169	-.146	-.138
.863	******	-.100	******	-.154	******	-.215	******	******	-.244	-.203	******	-.172
.877	-.095	-.112	******	-.158	******	-.222	******	******	******	******	******	******
.891	-.138	-.147	******	-.180	******	-.223	******	******	-.287	-.226	-.197	-.191
.916	-.149	-.143	-.190	******	-.144	******	-.147	-.156	-.151	-.158	-.152	-.156
.928	-.144	******	-.164	******	-.132	-.111	-.102	-.093	-.108	-.138	-.156	-.156
.940	-.122	******	-.104	******	-.100	-.068	-.057	-.042	-.061	-.099	-.121	-.127
.952	******	******	-.037	******	-.022	-.008	.004	.011	.002	-.027	-.046	-.047
.962	.043	.052	.058	******	.066	.072	.068	.073	.071	.064	.051	.051
.974	.134	.139	******	******	.141	.143	.139	.138	.140	.141	.136	.136
.986	.193	.189	.191	******	.186	.190	.188	.186	.180	.185	.187	.182
.996	.214	.213	******	******	.216	.208	.211	.206	.200	.201	.201	.207

AFTERBODY INTEGRATED PRESSURE DRAG COEFFICIENT .0208

Table A30. Effect of Angle of Attack on Pressure Distributions for Staggered Tails Configuration at $M = 0.90$ and NPR = 1.098

(a) $\alpha = -2.981°$

TEST PARAMETERS

CONFIGURATION	STAG TAILS
POINT NUMBER	27
MACH NUMBER	.900
ALPHA, DEG	-2.981
NPR	1.098
PTO, PSI	14.776
PO, PSI	8.738
QO, PSI	4.953

TAIL SURFACE PRESSURE COEFFICIENTS

	HORIZONTAL TAILS				VERTICAL TAIL	
	UPPER SURFACE Y/B		LOWER SURFACE Y/B		Y/B	
X/C	0.1	0.2	0.1	0.2	0.1	0.2
0.05	-.342	******	******	******	-.084	-.106
0.10	-.335	.016	-.267	.035	-.098	-.130
0.20	-.340	-.041	-.276	-.048	-.134	-.165
0.30	-.360	******	-.315	-.107	-.180	-.205
0.40	-.415	-.164	-.384	******	-.229	-.249
0.50	-.436	-.188	-.400	-.164	-.203	-.210
0.60	-.463	-.178	-.441	-.201	-.149	-.148
0.70	-.241	-.124	-.279	-.155	-.097	-.088
0.80	-.054	******	-.083	-.091	-.037	-.033
0.90	.033	******	.012	******	.006	.031

AFTERBODY PRESSURE COEFFICIENTS

	PHI, DEG											
X/L	0	18	36	45	54	72	81	90	108	135	162	180
.584	-.024	-.015	******	-.012	******	******	******	-.018	-.021	-.015	.003	******
.598	-.015	-.006	******	-.022	******	-.030	******	-.037	-.034	-.021	******	******
.612	.020	.013	******	-.007	******	-.018	******	-.028	-.032	-.029	******	******
.626	.093	.059	******	-.002	******	-.013	******	-.029	-.031	-.027	******	******
.640	******	.078	******	-.002	******	-.026	******	-.031	-.042	-.033	******	******
.654	******	.007	******	-.027	******	-.036	******	-.047	-.050	-.039	******	******
.668	******	******	******	-.041	******	-.048	******	-.049	-.052	-.038	******	******
.682	******	-.094	******	-.073	******	-.072	******	-.055	-.060	-.050	-.035	******
.696	******	-.113	******	-.088	******	-.071	******	-.070	-.062	-.050	-.040	-.041
.710	******	-.136	******	******	******	-.084	******	-.080	-.065	-.049	-.038	-.040
.724	******	-.158	******	-.125	******	-.090	******	-.078	-.069	-.049	-.050	-.047
.738	******	-.168	******	-.129	******	******	******	-.084	-.079	-.058	-.046	-.048
.752	******	-.159	******	-.122	******	-.082	******	-.064	-.062	-.047	-.051	******
.766	******	-.166	******	-.123	******	-.059	******	-.044	-.048	-.064	-.068	-.064
.779	******	-.106	******	-.053	******	.038	******	.151	-.025	-.056	-.065	-.065
.793	******	-.084	******	-.043	******	.056	******	******	-.116	-.082	-.082	******
.807	******	-.069	******	-.029	******	.016	******	******	-.159	-.112	-.105	-.105
.821	******	******	******	-.030	******	-.023	******	******	-.207	-.161	-.133	-.130
.835	******	-.040	******	-.045	******	-.062	******	******	-.259	-.196	-.180	-.167
.849	******	-.041	******	******	******	-.113	******	******	-.294	-.234	-.208	-.216
.863	******	-.049	******	-.096	******	-.136	******	******	-.340	-.286	******	-.243
.877	-.054	-.064	******	-.106	******	-.162	******	******	******	******	******	******
.891	-.101	-.114	******	-.150	******	-.173	******	******	-.391	-.334	-.307	-.276
.916	-.147	-.151	-.218	******	-.148	******	-.166	-.185	-.180	-.200	-.191	-.209
.928	-.173	******	-.215	******	-.152	-.136	-.120	-.113	-.116	-.150	-.165	-.169
.940	-.184	******	-.154	******	-.142	-.103	-.083	-.058	-.059	-.109	-.130	-.131
.952	******	******	-.101	******	-.080	-.055	-.026	-.017	.011	-.019	-.054	-.065
.962	-.037	-.024	-.018	******	.000	.026	.016	.044	.065	.025	.014	.015
.974	.062	.063	******	******	.079	.083	.097	.085	.109	.104	.099	.090
.986	.122	.119	.123	******	.122	.106	.122	.125	.125	.113	.123	.120
.996	.132	.136	******	******	.131	.117	.126	.126	.134	.138	.140	.135

AFTERBODY INTEGRATED PRESSURE DRAG COEFFICIENT .0468

Table A30. Continued

(b) $\alpha = 0.021°$

TEST PARAMETERS

CONFIGURATION	STAG TAILS
POINT NUMBER	28
MACH NUMBER	.900
ALPHA, DEG	.021
NPR	1.119
PTO, PSI	14.773
PO, PSI	8.730
QO, PSI	4.955

TAIL SURFACE PRESSURE COEFFICIENTS

	HORIZONTAL TAILS				VERTICAL TAIL	
	UPPER SURFACE Y/B		LOWER SURFACE Y/B		Y/B	
X/C	0.1	0.2	0.1	0.2	0.1	0.2
0.05	-.104	******	******	******	-.081	-.107
0.10	-.125	-.183	-.079	-.150	-.091	-.110
0.20	-.182	-.200	-.143	-.185	-.126	-.163
0.30	-.227	******	-.202	-.234	-.174	-.203
0.40	-.288	-.277	-.269	******	-.212	-.243
0.50	-.318	-.291	-.293	-.265	-.210	-.234
0.60	-.323	-.271	-.320	-.286	-.183	-.205
0.70	-.175	-.156	-.208	-.201	-.155	-.150
0.80	-.064	******	-.093	-.100	-.105	-.085
0.90	.023	******	.004	******	-.046	-.017

AFTERBODY PRESSURE COEFFICIENTS

	PHI, DEG											
X/L	0	18	36	45	54	72	81	90	108	135	162	180
.584	-.027	-.010	******	.004	******	******	******	-.008	-.019	-.011	.000	******
.598	-.015	-.014	******	-.012	******	-.019	******	-.018	-.030	-.016	******	******
.612	.008	.003	******	.001	******	-.011	******	-.017	-.020	-.017	******	******
.626	.078	.052	******	.009	******	-.013	******	-.016	-.023	-.020	******	******
.640	******	.067	******	.005	******	-.018	******	-.022	-.027	-.025	******	******
.654	******	.005	******	-.015	******	-.024	******	-.042	-.039	-.034	******	******
.668	******	******	******	-.028	******	-.033	******	-.036	-.038	-.030	******	******
.682	******	-.077	******	-.059	******	-.048	******	-.054	-.041	-.035	-.035	******
.696	******	-.098	******	-.066	******	-.056	******	-.055	-.050	-.045	-.040	-.033
.710	******	-.127	******	******	******	-.070	******	-.064	-.055	-.042	-.041	-.042
.724	******	-.157	******	-.106	******	-.082	******	-.065	-.055	-.048	-.045	-.045
.738	******	-.165	******	-.126	******	******	******	-.069	-.069	-.049	-.044	-.050
.752	******	-.176	******	-.126	******	-.078	******	-.056	-.053	-.045	-.048	******
.766	******	-.189	******	-.140	******	-.067	******	-.035	-.039	-.050	-.064	-.057
.779	******	-.157	******	-.094	******	-.007	******	.153	.016	-.028	-.038	-.039
.793	******	-.148	******	-.113	******	-.059	******	******	-.002	-.045	-.052	******
.807	******	-.141	******	-.110	******	-.119	******	******	-.061	-.056	-.062	-.067
.821	******	******	******	-.132	******	-.149	******	******	-.101	-.088	-.086	-.091
.835	******	-.106	******	-.137	******	-.174	******	******	-.165	-.134	-.112	-.115
.849	******	-.106	******	******	******	-.205	******	******	-.199	-.165	-.146	-.145
.863	******	-.116	******	-.165	******	-.229	******	******	-.253	-.202	******	-.176
.877	-.120	-.112	******	-.170	******	-.242	******	******	******	******	******	******
.891	-.155	-.164	******	-.197	******	-.242	******	******	-.291	-.252	-.214	-.216
.916	-.174	-.177	-.226	******	-.170	******	-.170	-.180	-.179	-.183	-.174	-.182
.928	-.182	******	-.204	******	-.159	-.139	-.129	-.120	-.140	-.171	-.187	-.184
.940	-.167	******	-.146	******	-.132	-.102	-.091	-.075	-.105	-.140	-.151	-.161
.952	******	******	-.078	******	-.067	-.049	-.038	-.035	-.044	-.067	-.089	-.093
.962	-.013	-.002	.001	******	.017	.021	.023	.032	.027	.017	-.003	-.003
.974	.073	.074	******	******	.091	.092	.088	.089	.095	.096	.084	.087
.986	.141	.139	.141	******	.144	.141	.141	.149	.137	.142	.153	.143
.996	.165	.176	******	******	.167	.163	.161	.157	.158	.172	.167	.163

AFTERBODY INTEGRATED PRESSURE DRAG COEFFICIENT .0453

Table A30. Concluded

(c) $\alpha = 6.030°$

TEST PARAMETERS

CONFIGURATION	STAG TAILS
POINT NUMBER	29
MACH NUMBER	.900
ALPHA, DEG	6.030
NPR	1.075
PTO, PSI	14.774
PO, PSI	8.736
QO, PSI	4.952

TAIL SURFACE PRESSURE COEFFICIENTS

	HORIZONTAL TAILS				VERTICAL TAIL	
	UPPER SURFACE Y/B		LOWER SURFACE Y/B		Y/B	
X/C	0.1	0.2	0.1	0.2	0.1	0.2
0.05	.255	******	******	******	-.052	-.067
0.10	.170	-.651	.203	-.559	-.064	-.076
0.20	.064	-.542	.094	-.506	-.094	-.127
0.30	-.018	******	.013	-.529	-.129	-.166
0.40	-.086	-.592	-.065	******	-.174	-.203
0.50	-.129	-.599	-.106	-.569	-.185	-.220
0.60	-.131	-.386	-.129	-.401	-.208	-.242
0.70	-.107	-.153	-.125	-.191	-.259	-.274
0.80	-.052	******	-.079	-.078	-.296	-.294
0.90	.014	******	.000	******	-.240	-.175

AFTERBODY PRESSURE COEFFICIENTS

	PHI, DEG											
X/L	0	18	36	45	54	72	81	90	108	135	162	180
.584	.002	.010	******	-.009	******	******	******	-.027	-.021	-.015	.010	******
.598	.002	.007	******	-.016	******	-.035	******	-.031	-.034	-.017	******	******
.612	.025	.017	******	-.005	******	-.025	******	-.026	-.029	-.015	******	******
.626	.080	.048	******	.003	******	-.023	******	-.023	-.036	-.015	******	******
.640	******	.056	******	.004	******	-.030	******	-.033	-.039	-.021	******	******
.654	******	.015	******	-.004	******	-.028	******	-.042	-.051	-.035	******	******
.668	******	******	******	-.018	******	-.031	******	-.035	-.039	-.022	******	******
.682	******	-.052	******	-.038	******	-.048	******	-.047	-.059	-.035	-.019	******
.696	******	-.080	******	-.057	******	-.051	******	-.051	-.055	-.041	-.017	-.007
.710	******	-.098	******	******	******	-.058	******	-.050	-.061	-.030	-.011	-.010
.724	******	-.126	******	-.086	******	-.066	******	-.070	-.063	-.039	-.017	-.009
.738	******	-.139	******	-.106	******	******	******	-.069	-.071	-.037	-.014	-.014
.752	******	-.140	******	-.102	******	-.074	******	-.054	-.039	-.025	-.010	******
.766	******	-.171	******	-.125	******	-.066	******	-.023	-.016	-.022	-.022	-.013
.779	******	-.176	******	-.145	******	-.093	******	.202	.112	.035	.017	.022
.793	******	-.220	******	-.220	******	-.278	******	******	.182	.053	.023	******
.807	******	-.263	******	-.289	******	-.390	******	******	.144	.060	.031	.029
.821	******	******	******	-.348	******	-.441	******	******	.092	.044	.025	.015
.835	******	-.351	******	-.402	******	-.461	******	******	.011	.012	-.008	-.005
.849	******	-.331	******	******	******	-.502	******	******	-.030	-.030	-.025	-.026
.863	******	-.289	******	-.381	******	-.503	******	******	-.087	-.067	******	-.052
.877	-.242	-.287	******	-.357	******	-.458	******	******	******	******	******	******
.891	-.260	-.311	******	-.332	******	-.362	******	******	-.145	-.114	-.100	-.095
.916	-.175	-.187	-.233	******	-.199	******	-.175	-.185	-.157	-.148	-.132	-.139
.928	-.159	******	-.198	******	-.161	-.131	-.116	-.115	-.151	-.180	-.186	-.179
.940	-.137	******	-.133	******	-.120	-.082	-.074	-.075	-.135	-.179	-.192	-.186
.952	******	******	-.084	******	-.057	-.032	-.026	-.035	-.092	-.115	-.149	-.138
.962	-.023	-.031	-.021	******	-.002	.007	.008	.005	-.027	-.036	-.053	-.051
.974	.048	.029	******	******	.024	.033	.037	.038	.029	.043	.043	.043
.986	.085	.070	.065	******	.049	.054	.057	.060	.064	.086	.098	.100
.996	.080	.063	******	******	.069	.079	.084	.082	.059	.093	.095	.097

AFTERBODY INTEGRATED PRESSURE DRAG COEFFICIENT .0683

Table A31. Effect of Nozzle Pressure Ratio on Pressure Distributions for Staggered Tails Configuration at $M = 0.60$ and $\alpha = 0.029°$

(a) NPR = 1.043

TEST PARAMETERS

CONFIGURATION	STAG TAILS
POINT NUMBER	30
MACH NUMBER	.602
ALPHA, DEG	.029
NPR	1.043
PTO, PSI	14.784
PO, PSI	11.573
QO, PSI	2.936

TAIL SURFACE PRESSURE COEFFICIENTS

	HORIZONTAL TAILS				VERTICAL TAIL	
	UPPER SURFACE Y/B		LOWER SURFACE Y/B		Y/B	
X/C	0.1	0.2	0.1	0.2	0.1	0.2
0.05	-.129	******	******	******	-.109	-.094
0.10	-.140	-.132	-.100	-.126	-.117	-.117
0.20	-.165	-.168	-.137	-.167	-.130	-.143
0.30	-.189	******	-.165	-.200	-.150	-.162
0.40	-.207	-.195	-.196	******	-.167	-.176
0.50	-.189	-.182	-.179	-.185	-.158	-.160
0.60	-.162	-.150	-.169	-.176	-.132	-.132
0.70	-.116	-.099	-.126	-.134	-.117	-.105
0.80	-.059	******	-.072	-.086	-.077	-.061
0.90	.002	******	-.010	******	-.034	-.011

AFTERBODY PRESSURE COEFFICIENTS

	PHI, DEG											
X/L	0	18	36	45	54	72	81	90	108	135	162	180
.584	-.017	-.013	******	-.003	******	******	******	-.024	-.026	-.023	-.013	******
.598	-.013	-.013	******	-.019	******	-.029	******	-.031	-.031	-.026	******	******
.612	.003	.000	******	-.016	******	-.029	******	-.029	-.032	-.030	******	******
.626	.050	.020	******	-.020	******	-.026	******	-.029	-.029	-.035	******	******
.640	******	.026	******	-.030	******	-.035	******	-.035	-.038	-.035	******	******
.654	******	-.031	******	-.038	******	-.037	******	-.044	-.046	-.041	******	******
.668	******	******	******	-.041	******	-.039	******	-.035	-.038	-.035	******	******
.682	******	-.082	******	-.060	******	-.052	******	-.050	-.042	-.041	-.043	******
.696	******	-.092	******	-.066	******	-.059	******	-.053	-.047	-.038	-.042	-.037
.710	******	-.114	******	******	******	-.059	******	-.052	-.047	-.035	-.039	-.038
.724	******	-.125	******	-.077	******	-.058	******	-.045	-.044	-.038	-.045	-.042
.738	******	-.125	******	-.082	******	******	******	-.045	-.049	-.043	-.045	-.044
.752	******	-.122	******	-.081	******	-.051	******	-.034	-.041	-.037	-.045	******
.766	******	-.122	******	-.088	******	-.045	******	-.023	-.032	-.050	-.055	-.059
.779	******	-.108	******	-.075	******	-.014	******	.140	-.003	-.037	-.046	-.049
.793	******	-.113	******	-.081	******	-.061	******	******	-.027	-.054	-.062	******
.807	******	-.100	******	-.091	******	-.090	******	******	-.058	-.068	-.066	-.064
.821	******	******	******	-.095	******	-.124	******	******	-.094	-.082	-.076	-.077
.835	******	-.088	******	-.109	******	-.157	******	******	-.131	-.103	-.090	-.088
.849	******	-.083	******	******	******	-.158	******	******	-.146	-.120	-.103	-.100
.863	******	-.087	******	-.120	******	-.163	******	******	-.164	-.130	******	-.108
.877	-.068	-.077	******	-.116	******	-.161	******	******	******	******	******	******
.891	-.095	-.108	******	-.127	******	-.158	******	******	-.157	-.128	-.125	-.116
.916	-.112	-.119	-.171	******	-.129	******	-.131	-.133	-.132	-.131	-.126	-.130
.928	-.133	******	-.171	******	-.135	-.123	-.114	-.099	-.123	-.138	-.145	-.146
.940	-.142	******	-.130	******	-.128	-.110	-.097	-.084	-.109	-.134	-.146	-.146
.952	******	******	-.098	******	-.092	-.080	-.067	-.061	-.077	-.101	-.115	-.112
.962	-.042	-.044	-.040	******	-.030	-.022	-.023	-.015	-.020	-.039	-.051	-.050
.974	.027	.033	******	******	.039	.046	.040	.043	.040	.040	.030	.025
.986	.093	.098	.096	******	.099	.092	.095	.093	.096	.091	.085	.086
.996	.121	.123	******	******	.123	.115	.116	.114	.110	.111	.110	.111

AFTERBODY INTEGRATED PRESSURE DRAG COEFFICIENT .0445

Table A31. Continued

(b) NPR = 2.040

TEST PARAMETERS

CONFIGURATION	STAG TAILS
POINT NUMBER	31
MACH NUMBER	.600
ALPHA, DEG	.028
NPR	2.040
PTO, PSI	14.784
PO, PSI	11.587
QO, PSI	2.923

TAIL SURFACE PRESSURE COEFFICIENTS

	HORIZONTAL TAILS				VERTICAL TAIL	
	UPPER SURFACE Y/B		LOWER SURFACE Y/B		Y/B	
X/C	0.1	0.2	0.1	0.2	0.1	0.2
0.05	-.130	******	******	******	-.106	-.103
0.10	-.140	-.128	-.102	-.120	-.093	-.105
0.20	-.172	-.162	-.149	-.158	-.120	-.143
0.30	-.176	******	-.153	-.192	-.153	-.160
0.40	-.193	-.188	-.182	******	-.163	-.176
0.50	-.187	-.173	-.167	-.183	-.153	-.164
0.60	-.153	-.143	-.162	-.163	-.134	-.132
0.70	-.107	-.098	-.118	-.125	-.109	-.103
0.80	-.054	******	-.065	-.070	-.074	-.059
0.90	.004	******	.001	******	-.031	-.010

AFTERBODY PRESSURE COEFFICIENTS

	PHI, DEG											
X/L	0	18	36	45	54	72	81	90	108	135	162	180
.584	-.019	-.009	******	-.002	******	******	******	-.024	-.021	-.021	-.015	******
.598	-.013	-.009	******	-.019	******	-.030	******	-.032	-.030	-.022	******	******
.612	.006	.002	******	-.011	******	-.029	******	-.029	-.031	-.026	******	******
.626	.056	.023	******	-.016	******	-.027	******	-.028	-.032	-.027	******	******
.640	******	.015	******	-.019	******	-.034	******	-.036	-.035	-.034	******	******
.654	******	-.026	******	-.036	******	-.037	******	-.044	-.044	-.039	******	******
.668	******	******	******	-.040	******	-.042	******	-.037	-.035	-.035	******	******
.682	******	-.083	******	-.062	******	-.050	******	-.047	-.045	-.041	-.035	******
.696	******	-.100	******	-.069	******	-.050	******	-.047	-.042	-.038	-.042	-.037
.710	******	-.105	******	******	******	-.057	******	-.046	-.044	-.041	-.033	-.040
.724	******	-.121	******	-.080	******	-.056	******	-.045	-.047	-.042	-.038	-.041
.738	******	-.128	******	-.087	******	******	******	-.045	-.048	-.037	-.045	-.045
.752	******	-.118	******	-.076	******	-.049	******	-.030	-.039	-.041	-.044	******
.766	******	-.123	******	-.084	******	-.040	******	-.018	-.032	-.045	-.057	-.061
.779	******	-.110	******	-.076	******	-.019	******	.148	-.008	-.038	-.048	-.048
.793	******	-.104	******	-.087	******	-.055	******	******	-.031	-.050	-.052	******
.807	******	-.094	******	-.087	******	-.092	******	******	-.065	-.063	-.068	-.062
.821	******	******	******	-.094	******	-.118	******	******	-.108	-.083	-.070	-.077
.835	******	-.082	******	-.105	******	-.140	******	******	-.135	-.098	-.090	-.091
.849	******	-.076	******	******	******	-.153	******	******	-.156	-.116	-.093	-.098
.863	******	-.078	******	-.113	******	-.157	******	******	-.164	-.128	******	-.108
.877	-.062	-.078	******	-.111	******	-.157	******	******	******	******	******	******
.891	-.091	-.100	******	-.121	******	-.152	******	******	-.155	-.127	-.113	-.113
.916	-.107	-.107	-.158	******	-.117	******	-.120	-.123	-.123	-.124	-.118	-.123
.928	-.118	******	-.158	******	-.122	-.111	-.101	-.093	-.111	-.129	-.132	-.134
.940	-.125	******	-.111	******	-.114	-.093	-.085	-.073	-.096	-.121	-.126	-.132
.952	******	******	-.081	******	-.072	-.053	-.048	-.037	-.057	-.076	-.092	-.092
.962	-.021	-.012	-.010	******	-.003	.004	.004	.014	.004	-.012	-.024	-.025
.974	.064	.065	******	******	.074	.081	.074	.071	.072	.071	.066	.061
.986	.132	.131	.134	******	.135	.133	.131	.129	.131	.131	.131	.129
.996	.165	.166	******	******	.168	.167	.164	.166	.162	.168	.160	.162

AFTERBODY INTEGRATED PRESSURE DRAG COEFFICIENT .0297

Table A31. Continued

(c) NPR = 2.961

TEST PARAMETERS

CONFIGURATION	STAG TAILS
POINT NUMBER	32
MACH NUMBER	.600
ALPHA, DEG	.028
NPR	2.961
PTO, PSI	14.785
PO, PSI	11.592
QO, PSI	2.920

TAIL SURFACE PRESSURE COEFFICIENTS

	HORIZONTAL TAILS				VERTICAL TAIL	
	UPPER SURFACE Y/B		LOWER SURFACE Y/B		Y/B	
X/C	0.1	0.2	0.1	0.2	0.1	0.2
0.05	-.137	******	******	******	-.086	-.101
0.10	-.147	-.131	-.091	-.132	-.104	-.112
0.20	-.173	-.144	-.134	-.163	-.116	-.141
0.30	-.190	******	-.166	-.196	-.146	-.164
0.40	-.206	-.190	-.185	******	-.156	-.175
0.50	-.196	-.173	-.176	-.183	-.148	-.155
0.60	-.165	-.145	-.160	-.165	-.128	-.135
0.70	-.119	-.100	-.116	-.128	-.114	-.099
0.80	-.060	******	-.063	-.076	-.075	-.059
0.90	.001	******	.000	******	-.029	-.005

AFTERBODY PRESSURE COEFFICIENTS

	PHI, DEG											
X/L	0	18	36	45	54	72	81	90	108	135	162	180
.584	-.018	-.010	******	.000	******	******	******	-.018	-.020	-.022	-.016	******
.598	-.009	-.008	******	-.019	******	-.032	******	-.029	-.029	-.030	******	******
.612	.011	.002	******	-.018	******	-.024	******	-.032	-.026	-.029	******	******
.626	.060	.027	******	-.016	******	-.028	******	-.030	-.029	-.032	******	******
.640	******	.022	******	-.025	******	-.032	******	-.032	-.037	-.032	******	******
.654	******	-.021	******	-.034	******	-.035	******	-.044	-.043	-.038	******	******
.668	******	******	******	-.040	******	-.041	******	-.032	-.036	-.034	******	******
.682	******	-.078	******	-.058	******	-.045	******	-.041	-.049	-.041	-.035	******
.695	******	-.104	******	-.067	******	-.049	******	-.042	-.047	-.041	-.038	-.033
.710	******	-.114	******	******	******	-.053	******	-.049	-.044	-.039	-.035	-.042
.724	******	-.119	******	-.081	******	-.053	******	-.043	-.041	-.040	-.035	-.041
.738	******	-.124	******	-.083	******	******	******	-.045	-.045	-.038	-.038	-.041
.752	******	-.122	******	-.077	******	-.049	******	-.037	-.037	-.041	-.042	******
.766	******	-.119	******	-.085	******	-.041	******	-.021	-.031	-.047	-.059	-.053
.779	******	-.104	******	-.067	******	-.026	******	.143	-.005	-.042	-.041	-.045
.793	******	-.101	******	-.082	******	-.059	******	******	-.030	-.047	-.056	******
.807	******	-.098	******	-.084	******	-.085	******	******	-.072	-.063	-.062	-.065
.821	******	******	******	-.089	******	-.117	******	******	-.105	-.079	-.075	-.074
.835	******	-.081	******	-.103	******	-.133	******	******	-.141	-.094	-.081	-.081
.849	******	-.078	******	******	******	-.149	******	******	-.154	-.114	-.095	-.094
.863	******	-.081	******	-.115	******	-.155	******	******	-.164	-.124	******	-.111
.877	-.063	-.082	******	-.115	******	-.156	******	******	******	******	******	******
.891	-.083	-.104	******	-.124	******	-.152	******	******	-.160	-.129	-.110	-.110
.916	-.102	-.106	-.163	******	-.120	******	-.118	-.126	-.124	-.120	-.115	-.120
.928	-.114	******	-.154	******	-.123	-.112	-.101	-.093	-.112	-.130	-.132	-.139
.940	-.122	******	-.115	******	-.112	-.094	-.083	-.072	-.095	-.115	-.122	-.132
.952	******	******	-.085	******	-.070	-.059	-.049	-.041	-.055	-.074	-.087	-.091
.962	-.017	-.012	-.012	******	-.007	.007	.006	.009	.006	-.010	-.023	-.022
.974	.067	.067	******	******	.072	.073	.074	.072	.075	.070	.067	.057
.986	.134	.137	.133	******	.139	.132	.132	.130	.132	.138	.135	.129
.996	.164	.170	******	******	.169	.163	.165	.165	.165	.166	.168	.165

AFTERBODY INTEGRATED PRESSURE DRAG COEFFICIENT .0292

Table A31. Concluded

(d) NPR = 4.975

TEST PARAMETERS

CONFIGURATION	STAG TAILS
POINT NUMBER	33
MACH NUMBER	.601
ALPHA, DEG	.028
NPR	4.975
PTO, PSI	14.785
PO, PSI	11.587
QO, PSI	2.925

TAIL SURFACE PRESSURE COEFFICIENTS

	HORIZONTAL TAILS				VERTICAL TAIL	
	UPPER SURFACE Y/B		LOWER SURFACE Y/B		Y/B	
X/C	0.1	0.2	0.1	0.2	0.1	0.2
0.05	-.135	******	******	******	-.098	-.108
0.10	-.126	-.135	-.103	-.137	-.103	-.110
0.20	-.166	-.157	-.135	-.158	-.121	-.147
0.30	-.182	******	-.168	-.180	-.148	-.166
0.40	-.205	-.185	-.190	******	-.168	-.173
0.50	-.191	-.170	-.167	-.169	-.153	-.155
0.60	-.158	-.140	-.156	-.156	-.135	-.133
0.70	-.115	-.093	-.115	-.117	-.109	-.095
0.80	-.057	******	-.056	-.063	-.069	-.059
0.90	.005	******	.007	******	-.030	-.006

AFTERBODY PRESSURE COEFFICIENTS

	PHI, DEG											
X/L	0	18	36	45	54	72	81	90	108	135	162	180
.584	-.013	-.004	******	.000	******	******	******	-.023	-.023	-.018	-.016	******
.598	-.013	-.010	******	-.015	******	-.030	******	-.033	-.028	-.028	******	******
.612	.009	.003	******	-.013	******	-.025	******	-.026	-.028	-.025	******	******
.626	.057	.023	******	-.012	******	-.026	******	-.028	-.027	-.028	******	******
.640	******	.028	******	-.022	******	-.031	******	-.033	-.037	-.031	******	******
.654	******	-.025	******	-.035	******	-.037	******	-.040	-.043	-.041	******	******
.668	******	******	******	-.045	******	-.040	******	-.039	-.036	-.031	******	******
.682	******	-.079	******	-.055	******	-.049	******	-.044	-.046	-.039	-.042	******
.696	******	-.098	******	-.065	******	-.055	******	-.049	-.048	-.037	-.041	-.037
.710	******	-.113	******	******	******	-.055	******	-.044	-.044	-.043	-.037	-.037
.724	******	-.120	******	-.083	******	-.057	******	-.044	-.046	-.044	-.047	-.041
.738	******	-.126	******	-.089	******	******	******	-.040	-.047	-.044	-.044	-.043
.752	******	-.116	******	-.078	******	-.047	******	-.034	-.035	-.043	-.044	******
.766	******	-.124	******	-.083	******	-.039	******	-.016	-.033	-.051	-.058	-.060
.779	******	-.106	******	-.073	******	-.015	******	.147	-.002	-.038	-.046	-.047
.793	******	-.102	******	-.080	******	-.058	******	******	-.029	-.050	-.063	******
.807	******	-.087	******	-.084	******	-.078	******	******	-.071	-.064	-.065	-.064
.821	******	******	******	-.086	******	-.123	******	******	-.111	-.082	-.075	-.075
.835	******	-.080	******	-.108	******	-.139	******	******	-.140	-.098	-.088	-.090
.849	******	-.077	******	******	******	-.145	******	******	-.158	-.115	-.103	-.096
.863	******	-.078	******	-.108	******	-.158	******	******	-.165	-.126	******	-.105
.877	-.062	-.075	******	-.111	******	-.153	******	******	******	******	******	******
.891	-.086	-.101	******	-.115	******	-.149	******	******	-.156	-.127	-.121	-.108
.916	-.101	-.104	-.155	******	-.115	******	-.113	-.117	-.120	-.119	-.114	-.120
.928	-.111	******	-.149	******	-.115	-.106	-.097	-.090	-.107	-.125	-.130	-.129
.940	-.122	******	-.106	******	-.107	-.086	-.073	-.070	-.090	-.112	-.128	-.124
.952	******	******	-.070	******	-.060	-.045	-.036	-.034	-.042	-.072	-.085	-.080
.962	-.005	.000	.003	******	.009	.025	.022	.027	.017	.003	-.010	-.011
.974	.085	.086	******	******	.092	.092	.090	.087	.093	.089	.082	.079
.986	.157	.156	.157	******	.156	.158	.156	.149	.153	.154	.146	.151
.996	.199	.196	******	******	.194	.192	.192	.187	.187	.184	.187	.191

AFTERBODY INTEGRATED PRESSURE DRAG COEFFICIENT .0223

Table A32. Effect of Angle of Attack on Pressure Distributions for Staggered Tails Configuration at $M = 0.60$ and NPR = 1.049

(a) $\alpha = -2.980°$

TEST PARAMETERS

CONFIGURATION	STAG TAILS
POINT NUMBER	35
MACH NUMBER	.598
ALPHA, DEG	-2.980
NPR	1.049
PTO, PSI	14.786
PO, PSI	11.613
QO, PSI	2.904

TAIL SURFACE PRESSURE COEFFICIENTS

	HORIZONTAL TAILS				VERTICAL TAIL	
	UPPER SURFACE Y/B		LOWER SURFACE Y/B		Y/B	
X/C	0.1	0.2	0.1	0.2	0.1	0.2
0.05	-.392	******	******	******	-.112	-.110
0.10	-.359	.049	-.297	.011	-.112	-.117
0.20	-.322	-.032	-.261	-.045	-.117	-.129
0.30	-.299	******	-.263	-.105	-.143	-.161
0.40	-.307	-.109	-.265	******	-.158	-.162
0.50	-.265	-.111	-.228	-.139	-.138	-.142
0.60	-.220	-.100	-.201	-.146	-.107	-.110
0.70	-.162	-.071	-.149	-.116	-.076	-.074
0.80	-.096	******	-.085	-.080	-.041	-.037
0.90	-.026	******	-.019	******	.003	.014

AFTERBODY PRESSURE COEFFICIENTS

	PHI, DEG											
X/L	0	18	36	45	54	72	81	90	108	135	162	180
.584	-.021	-.005	******	-.009	******	******	******	-.033	-.035	-.027	-.014	******
.598	-.015	-.010	******	-.027	******	-.042	******	-.045	-.044	-.033	******	******
.612	.010	.003	******	-.020	******	-.038	******	-.038	-.038	-.034	******	******
.626	.063	.029	******	-.021	******	-.038	******	-.040	-.040	-.032	******	******
.640	******	.030	******	-.023	******	-.047	******	-.046	-.049	-.038	******	******
.654	******	-.036	******	-.047	******	-.048	******	-.060	-.053	-.045	******	******
.668	******	******	******	-.049	******	-.054	******	-.054	-.050	-.041	******	******
.682	******	-.090	******	-.068	******	-.062	******	-.058	-.061	-.052	-.042	******
.696	******	-.099	******	-.074	******	-.063	******	-.061	-.058	-.050	-.042	-.042
.710	******	-.106	******	******	******	-.064	******	-.057	-.062	-.053	-.043	-.043
.724	******	-.121	******	-.083	******	-.063	******	-.054	-.053	-.050	-.054	-.049
.738	******	-.108	******	-.074	******	******	******	-.056	-.062	-.057	-.054	-.053
.752	******	-.107	******	-.070	******	-.045	******	-.045	-.056	-.055	-.058	******
.766	******	-.106	******	-.070	******	-.030	******	-.028	-.060	-.075	-.074	-.074
.779	******	-.076	******	-.034	******	.032	******	.133	-.066	-.078	-.071	-.073
.793	******	-.073	******	-.033	******	.045	******	******	-.154	-.102	-.086	******
.807	******	-.052	******	-.030	******	.010	******	******	-.170	-.120	-.097	-.093
.821	******	******	******	-.037	******	-.024	******	******	-.196	-.137	-.110	-.107
.835	******	-.043	******	-.045	******	-.056	******	******	-.219	-.156	-.124	-.119
.849	******	-.041	******	******	******	-.085	******	******	-.221	-.166	-.130	-.131
.863	******	-.046	******	-.075	******	-.103	******	******	-.220	-.169	******	-.134
.877	-.035	-.053	******	-.077	******	-.110	******	******	******	******	******	******
.891	-.065	-.083	******	-.095	******	-.114	******	******	-.193	-.158	-.146	-.133
.916	-.104	-.105	-.162	******	-.112	******	-.114	-.140	-.142	-.145	-.130	-.137
.928	-.128	******	-.164	******	-.127	-.114	-.109	-.107	-.123	-.144	-.144	-.143
.940	-.144	******	-.127	******	-.125	-.106	-.096	-.080	-.102	-.129	-.141	-.141
.952	******	******	-.112	******	-.092	-.078	-.067	-.055	-.057	-.086	-.104	-.100
.962	-.063	-.058	-.047	******	-.041	-.031	-.019	-.009	.003	-.032	-.038	-.043
.974	.018	.020	******	******	.029	.037	.038	.048	.067	.050	.033	.033
.986	.087	.091	.091	******	.099	.091	.099	.100	.103	.112	.091	.089
.996	.110	.113	******	******	.115	.106	.116	.112	.133	.131	.113	.112

AFTERBODY INTEGRATED PRESSURE DRAG COEFFICIENT .0435

Table A32. Continued

(b) $\alpha = 0.02°$

TEST PARAMETERS

CONFIGURATION	STAG TAILS
POINT NUMBER	36
MACH NUMBER	.598
ALPHA, DEG	.020
NPR	1.055
PTO, PSI	14.785
PO, PSI	11.610
QO, PSI	2.906

TAIL SURFACE PRESSURE COEFFICIENTS

	HORIZONTAL TAILS				VERTICAL TAIL	
	UPPER SURFACE Y/B		LOWER SURFACE Y/B		Y/B	
X/C	0.1	0.2	0.1	0.2	0.1	0.2
0.05	-.132	******	******	******	-.102	-.109
0.10	-.143	-.127	-.091	-.134	-.109	-.111
0.20	-.179	-.160	-.142	-.173	-.126	-.139
0.30	-.203	******	-.167	-.195	-.150	-.163
0.40	-.216	-.192	-.185	******	-.165	-.172
0.50	-.198	-.175	-.174	-.194	-.151	-.158
0.60	-.166	-.148	-.165	-.173	-.136	-.137
0.70	-.122	-.099	-.129	-.134	-.111	-.100
0.80	-.063	******	-.072	-.090	-.077	-.058
0.90	-.006	******	-.010	******	-.034	-.014

AFTERBODY PRESSURE COEFFICIENTS

	PHI, DEG											
X/L	0	18	36	45	54	72	81	90	108	135	162	180
.584	-.021	-.011	******	-.002	******	******	******	-.022	-.021	-.022	-.011	****
.598	-.016	-.011	******	-.023	******	-.029	******	-.032	-.029	-.029	******	****
.612	.004	.001	******	-.019	******	-.029	******	-.025	-.031	-.027	******	****
.626	.055	.021	******	-.016	******	-.027	******	-.030	-.035	-.027	******	****
.640	******	.012	******	-.022	******	-.036	******	-.032	-.038	-.035	******	****
.654	******	-.026	******	-.037	******	-.035	******	-.044	-.045	-.044	******	****
.668	******	******	******	-.047	******	-.043	******	-.039	-.041	-.035	******	****
.682	******	-.089	******	-.063	******	-.049	******	-.049	-.041	-.041	-.038	****
.696	******	-.094	******	-.070	******	-.053	******	-.048	-.047	-.044	-.042	-.0
.710	******	-.111	******	******	******	-.059	******	-.048	-.046	-.041	-.039	-.0
.724	******	-.126	******	-.084	******	-.059	******	-.045	-.042	-.038	-.043	-.0
.738	******	-.122	******	-.083	******	******	******	-.047	-.047	-.040	-.044	-.0
.752	******	-.121	******	-.078	******	-.051	******	-.037	-.040	-.036	-.042	****
.766	******	-.125	******	-.085	******	-.045	******	-.019	-.036	-.047	-.060	-.0
.779	******	-.108	******	-.075	******	-.016	******	.148	-.007	-.036	-.045	-.0
.793	******	-.107	******	-.089	******	-.057	******	******	-.025	-.054	-.059	****
.807	******	-.095	******	-.089	******	-.095	******	******	-.073	-.064	-.067	-.0
.821	******	******	******	-.097	******	-.115	******	******	-.104	-.088	-.078	-.0
.835	******	-.087	******	-.103	******	-.141	******	******	-.144	-.104	-.087	-.0
.849	******	-.080	******	******	******	-.161	******	******	-.153	-.117	-.100	-.1
.863	******	-.085	******	-.120	******	-.169	******	******	-.159	-.134	******	-.1
.877	-.065	-.078	******	-.117	******	-.159	******	******	******	******	******	****
.891	-.093	-.107	******	-.126	******	-.158	******	******	-.159	-.134	-.122	-.1
.916	-.114	-.114	-.171	******	-.126	******	-.130	-.136	-.131	-.128	-.125	-.1
.928	-.130	******	-.164	******	-.132	-.122	-.117	-.103	-.123	-.143	-.147	-.1
.940	-.138	******	-.128	******	-.125	-.108	-.096	-.084	-.113	-.134	-.147	-.1
.952	******	******	-.095	******	-.091	-.074	-.066	-.061	-.076	-.098	-.113	-.1
.962	-.044	-.039	-.040	******	-.031	-.023	-.022	-.019	-.020	-.037	-.053	-.0
.974	.034	.037	******	******	.040	.041	.038	.039	.037	.033	.027	.0
.986	.102	.098	.095	******	.101	.097	.090	.092	.088	.090	.080	.0
.996	.131	.133	******	******	.122	.115	.116	.112	.115	.105	.105	.1

AFTERBODY INTEGRATED PRESSURE DRAG COEFFICIENT .0446

Table A32. Continued

(c) $\alpha = 3.030°$

TEST PARAMETERS

CONFIGURATION	STAG TAILS
POINT NUMBER	37
MACH NUMBER	.599
ALPHA, DEG	3.030
NPR	1.048
PTO, PSI	14.786
PO, PSI	11.605
QO, PSI	2.911

TAIL SURFACE PRESSURE COEFFICIENTS

	HORIZONTAL TAILS				VERTICAL TAIL	
	UPPER SURFACE Y/B		LOWER SURFACE Y/B		Y/B	
X/C	0.1	0.2	0.1	0.2	0.1	0.2
0.05	.088	******	******	******	-.081	-.094
0.10	.023	-.333	.060	-.330	-.095	-.113
0.20	-.055	-.292	-.017	-.291	-.114	-.142
0.30	-.100	******	-.069	-.298	-.150	-.168
0.40	-.141	-.275	-.110	******	-.169	-.180
0.50	-.147	-.237	-.119	-.247	-.164	-.168
0.60	-.126	-.192	-.115	-.221	-.154	-.163
0.70	-.096	-.132	-.089	-.171	-.144	-.130
0.80	-.048	******	-.048	-.110	-.112	-.091
0.90	.005	******	.002	******	-.066	-.037

AFTERBODY PRESSURE COEFFICIENTS

	PHI, DEG											
X/L	0	18	36	45	54	72	81	90	108	135	162	180
.584	-.019	-.010	******	-.007	******	******	******	-.025	-.027	-.024	-.009	******
.598	-.015	-.014	******	-.023	******	-.033	******	-.032	-.030	-.027	******	******
.612	.006	.001	******	-.018	******	-.027	******	-.033	-.031	-.025	******	******
.626	.048	.020	******	-.017	******	-.035	******	-.035	-.031	-.028	******	******
.640	******	.024	******	-.023	******	-.037	******	-.039	-.038	-.029	******	******
.654	******	-.020	******	-.033	******	-.041	******	-.052	-.047	-.037	******	******
.668	******	******	******	-.042	******	-.043	******	-.042	-.040	-.031	******	******
.682	******	-.076	******	-.056	******	-.050	******	-.050	-.050	-.040	-.031	******
.696	******	-.097	******	-.069	******	-.053	******	-.053	-.048	-.037	-.031	-.028
.710	******	-.111	******	******	******	-.059	******	-.051	-.048	-.040	-.031	-.033
.724	******	-.125	******	-.089	******	-.068	******	-.056	-.047	-.038	-.035	-.033
.738	******	-.133	******	-.099	******	******	******	-.056	-.054	-.037	-.031	-.032
.752	******	-.139	******	-.098	******	-.068	******	-.044	-.034	-.030	-.029	******
.766	******	-.144	******	-.113	******	-.071	******	-.029	-.020	-.035	-.043	-.041
.779	******	-.129	******	-.114	******	-.085	******	.148	.044	-.008	-.018	-.026
.793	******	-.140	******	-.131	******	-.176	******	******	.060	-.009	-.030	******
.807	******	-.131	******	-.148	******	-.203	******	******	.037	-.017	-.030	-.035
.821	******	******	******	-.157	******	-.216	******	******	-.021	-.026	-.042	-.045
.835	******	-.126	******	-.162	******	-.219	******	******	-.053	-.049	-.049	-.055
.849	******	-.119	******	******	******	-.229	******	******	-.091	-.072	-.064	-.067
.863	******	-.116	******	-.166	******	-.219	******	******	-.105	-.084	******	-.081
.877	-.094	-.111	******	-.153	******	-.209	******	******	******	******	******	******
.891	-.112	-.129	******	-.154	******	-.194	******	******	-.123	-.105	-.098	-.094
.916	-.124	-.126	-.173	******	-.141	******	-.133	-.132	-.117	-.115	-.109	-.117
.928	-.128	******	-.165	******	-.140	-.126	-.108	-.108	-.116	-.136	-.147	-.143
.940	-.132	******	-.120	******	-.126	-.103	-.088	-.087	-.113	-.133	-.154	-.151
.952	******	******	-.090	******	-.084	-.068	-.060	-.055	-.079	-.102	-.127	-.123
.962	-.039	-.037	-.026	******	-.009	-.004	-.006	-.007	-.027	-.045	-.061	-.061
.974	.037	.037	******	******	.042	.048	.064	.042	.038	.028	.018	.013
.986	.098	.097	.110	******	.091	.115	.113	.096	.089	.089	.077	.076
.996	.121	.110	******	******	.129	.118	.099	.130	.103	.106	.098	.099

AFTERBODY INTEGRATED PRESSURE DRAG COEFFICIENT .0442

Table A32. Continued

(d) $\alpha = 6.004°$

TEST PARAMETERS

CONFIGURATION	STAG TAILS
POINT NUMBER	38
MACH NUMBER	.599
ALPHA, DEG	6.004
NPR	1.033
PTO, PSI	14.786
PO, PSI	11.601
QO, PSI	2.914

TAIL SURFACE PRESSURE COEFFICIENTS

	HORIZONTAL TAILS				VERTICAL TAIL	
	UPPER SURFACE Y/B		LOWER SURFACE Y/B		Y/B	
X/C	0.1	0.2	0.1	0.2	0.1	0.2
0.05	.263	******	******	******	-.077	-.100
0.10	.176	-.432	.201	-.551	-.090	-.103
0.20	.062	-.415	.094	-.433	-.107	-.134
0.30	-.002	******	.030	-.393	-.147	-.163
0.40	-.055	-.337	-.033	******	-.171	-.190
0.50	-.079	-.277	-.045	-.300	-.179	-.186
0.60	-.069	-.218	-.064	-.249	-.182	-.178
0.70	-.055	-.149	-.053	-.179	-.186	-.157
0.80	-.026	******	-.020	-.107	-.140	-.119
0.90	.016	******	.027	******	-.097	-.061

AFTERBODY PRESSURE COEFFICIENTS

	PHI, DEG											
X/L	0	18	36	45	54	72	81	90	108	135	162	180
.584	-.030	-.032	******	-.014	******	******	******	-.042	-.055	-.023	-.001	******
.598	-.035	-.025	******	-.027	******	-.047	******	-.052	-.053	-.030	******	******
.612	-.019	-.006	******	-.026	******	-.042	******	-.054	-.050	-.026	******	******
.626	.025	.012	******	-.023	******	-.042	******	-.046	-.047	-.028	******	******
.640	******	.017	******	-.027	******	-.044	******	-.057	-.051	-.034	******	******
.654	******	-.023	******	-.035	******	-.051	******	-.083	-.061	-.043	******	******
.668	******	******	******	-.047	******	-.051	******	-.083	-.055	-.037	******	******
.682	******	-.073	******	-.066	******	-.066	******	-.097	-.062	-.042	-.024	******
.696	******	-.093	******	-.075	******	-.074	******	-.097	-.061	-.038	-.021	-.01
.710	******	-.110	******	******	******	-.078	******	-.091	-.061	-.034	-.017	-.01
.724	******	-.130	******	-.099	******	-.087	******	-.073	-.068	-.033	-.015	-.01
.738	******	-.149	******	-.111	******	******	******	-.074	-.063	-.029	-.014	-.01
.752	******	-.171	******	-.137	******	-.095	******	-.071	-.043	-.019	-.008	******
.766	******	-.196	******	-.152	******	-.117	******	-.054	-.022	-.016	-.019	-.01
.779	******	-.199	******	-.163	******	-.171	******	.126	.076	.015	.011	-.00
.793	******	-.212	******	-.193	******	-.312	******	******	.147	.032	.001	******
.807	******	-.203	******	-.210	******	-.348	******	******	.140	.037	.008	.00
.821	******	******	******	-.226	******	-.344	******	******	.081	.032	-.001	-.01
.835	******	-.169	******	-.235	******	-.317	******	******	.027	.011	-.008	-.02
.849	******	-.164	******	******	******	-.293	******	******	-.019	-.015	-.026	-.03
.863	******	-.162	******	-.209	******	-.274	******	******	-.051	-.032	******	-.03
.877	-.126	-.145	******	-.200	******	-.249	******	******	******	******	******	******
.891	-.140	-.162	******	-.188	******	-.215	******	******	-.086	-.066	-.064	-.06
.916	-.165	-.153	-.191	******	-.158	******	-.123	-.120	-.094	-.090	-.091	-.10
.928	-.172	******	-.178	******	-.149	-.110	-.093	-.083	-.097	-.115	-.133	-.12
.940	-.178	******	-.136	******	-.134	-.062	-.052	-.050	-.093	-.122	-.143	-.14
.952	******	******	-.104	******	-.084	-.002	-.001	-.009	-.064	-.098	-.128	-.12
.962	-.088	-.077	-.047	******	-.025	-.008	.059	.046	-.011	-.035	-.069	-.07
.974	-.006	-.001	******	******	.027	.033	.084	.070	.048	.035	.012	-.00
.986	.052	.057	.061	******	.055	.072	.079	.089	.081	.079	.070	.06
.996	.053	.061	******	******	.062	.091	.101	.101	.062	.078	.074	.06

AFTERBODY INTEGRATED PRESSURE DRAG COEFFICIENT .0486

Table A32. Concluded

(e) $\alpha = 9.031°$

TEST PARAMETERS

CONFIGURATION	STAG TAILS
POINT NUMBER	39
MACH NUMBER	.600
ALPHA, DEG	9.031
NPR	1.047
PTO, PSI	14.786
PO, PSI	11.589
QO, PSI	2.923

TAIL SURFACE PRESSURE COEFFICIENTS

	HORIZONTAL TAILS				VERTICAL TAIL	
	UPPER SURFACE Y/B		LOWER SURFACE Y/B		Y/B	
X/C	0.1	0.2	0.1	0.2	0.1	0.2
0.05	.392	******	******	******	-.072	-.089
0.10	.300	-1.727	.334	-.405	-.080	-.095
0.20	.172	-.515	.199	-.494	-.099	-.127
0.30	.091	******	.107	-.463	-.140	-.169
0.40	.026	-.325	.034	******	-.179	-.200
0.50	-.012	-.300	.003	-.334	-.200	-.202
0.60	-.027	-.267	-.027	-.284	-.208	-.204
0.70	-.020	-.186	-.030	-.207	-.217	-.184
0.80	.001	******	-.011	-.130	-.185	-.144
0.90	.027	******	.027	******	-.137	-.089

AFTERBODY PRESSURE COEFFICIENTS

	PHI, DEG											
X/L	0	18	36	45	54	72	81	90	108	135	162	180
.584	-.019	-.021	******	-.034	******	******	******	-.081	-.079	-.031	.011	******
.598	-.017	-.032	******	-.037	******	-.071	******	-.087	-.088	-.040	******	******
.612	-.004	-.027	******	-.037	******	-.068	******	-.084	-.081	-.043	******	******
.626	.048	-.002	******	-.037	******	-.066	******	-.084	-.080	-.043	******	******
.640	******	-.001	******	-.038	******	-.068	******	-.090	-.085	-.047	******	******
.654	******	-.038	******	-.049	******	-.063	******	-.109	-.096	-.050	******	******
.668	******	******	******	-.056	******	-.074	******	-.102	-.096	-.041	******	******
.682	******	-.098	******	-.066	******	-.083	******	-.119	-.099	-.049	-.008	******
.696	******	-.111	******	-.078	******	-.089	******	-.121	-.090	-.049	-.004	.002
.710	******	-.130	******	******	******	-.097	******	-.117	-.087	-.047	.004	.005
.724	******	-.145	******	-.114	******	-.107	******	-.110	-.090	-.038	-.001	.001
.738	******	-.167	******	-.125	******	******	******	-.109	-.093	-.035	.002	.005
.752	******	-.188	******	-.150	******	-.133	******	-.106	-.071	-.015	.023	******
.766	******	-.223	******	-.188	******	-.182	******	-.094	-.035	-.009	.012	.008
.779	******	-.231	******	-.219	******	-.307	******	.067	.105	.037	.042	.033
.793	******	-.259	******	-.266	******	-.508	******	******	.237	.064	.038	******
.807	******	-.261	******	-.293	******	-.488	******	******	.211	.086	.049	.033
.821	******	******	******	-.295	******	-.443	******	******	.151	.084	.046	.027
.835	******	-.235	******	-.295	******	-.396	******	******	.075	.061	.034	.017
.849	******	-.225	******	******	******	-.367	******	******	.013	.038	.016	.007
.863	******	-.236	******	-.265	******	-.327	******	******	-.020	.012	******	-.005
.877	-.167	-.203	******	-.241	******	-.290	******	******	******	******	******	******
.891	-.178	-.226	******	-.232	******	-.259	******	******	-.066	-.034	-.042	-.042
.916	-.186	-.205	-.271	******	-.195	******	-.167	-.156	-.100	-.074	-.074	-.085
.928	-.203	******	-.257	******	-.178	-.152	-.130	-.129	-.114	-.114	-.124	-.117
.940	-.223	******	-.194	******	-.153	-.111	-.088	-.088	-.125	-.132	-.147	-.141
.952	******	******	-.151	******	-.109	-.058	-.048	-.058	-.106	-.111	-.141	-.127
.962	-.133	-.125	-.069	******	-.043	-.005	-.008	-.014	-.053	-.050	-.077	-.076
.974	-.045	-.041	******	******	.027	.044	.044	.027	.023	.025	.006	-.002
.986	.037	.053	.068	******	.092	.084	.114	.087	.078	.077	.067	.059
.996	.081	.082	******	******	.118	.124	.123	.094	.093	.094	.087	.084

AFTERBODY INTEGRATED PRESSURE DRAG COEFFICIENT .0612

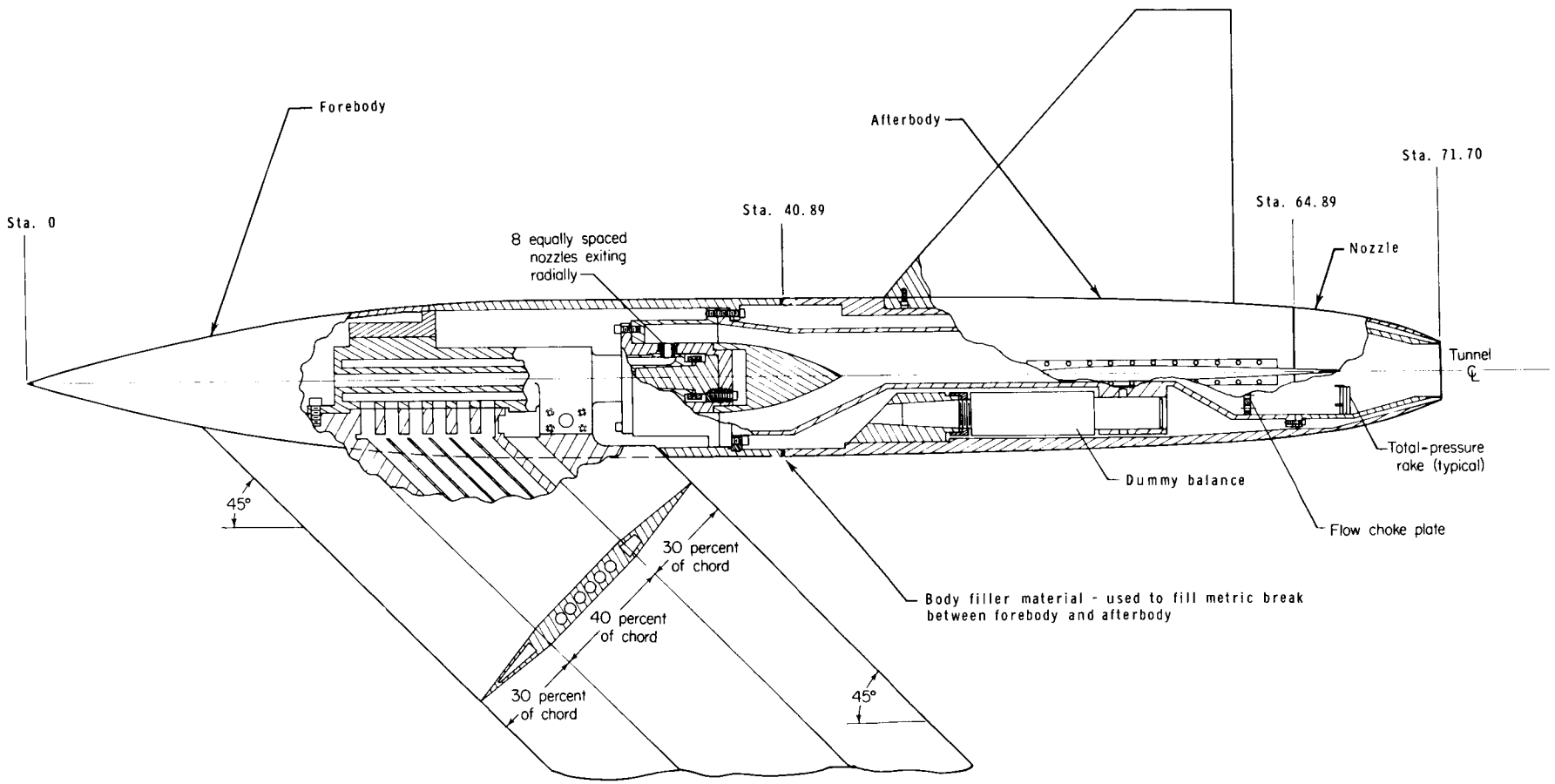
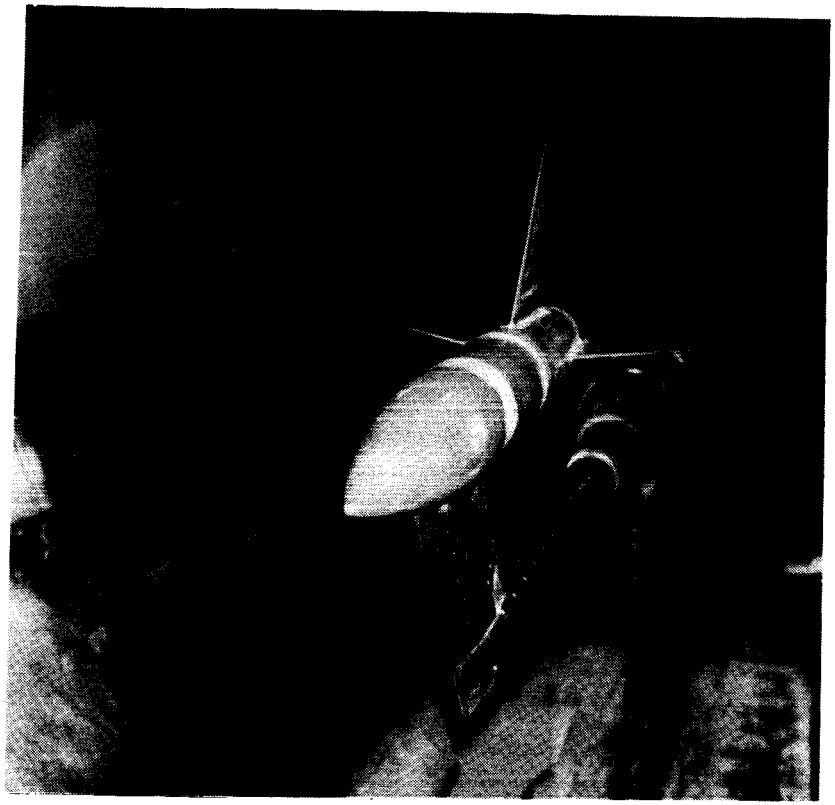
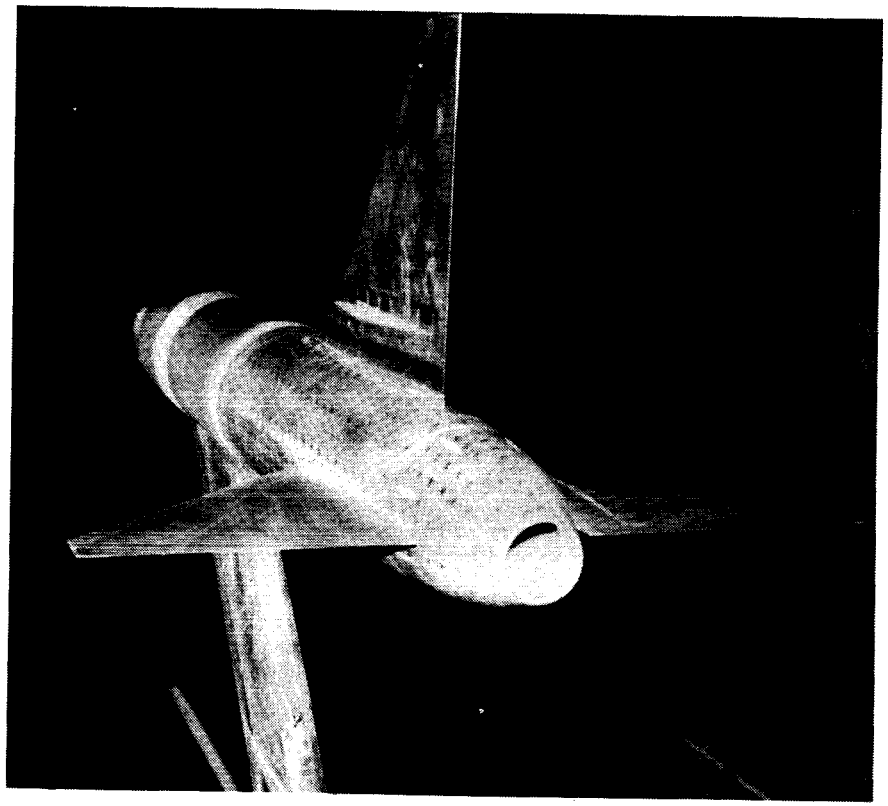


Figure 1. Sketch of air-powered, single-engine model with tails installed in staggered empennage arrangement. Linear dimensions are in inches.



L-85-2292

Looking downstream



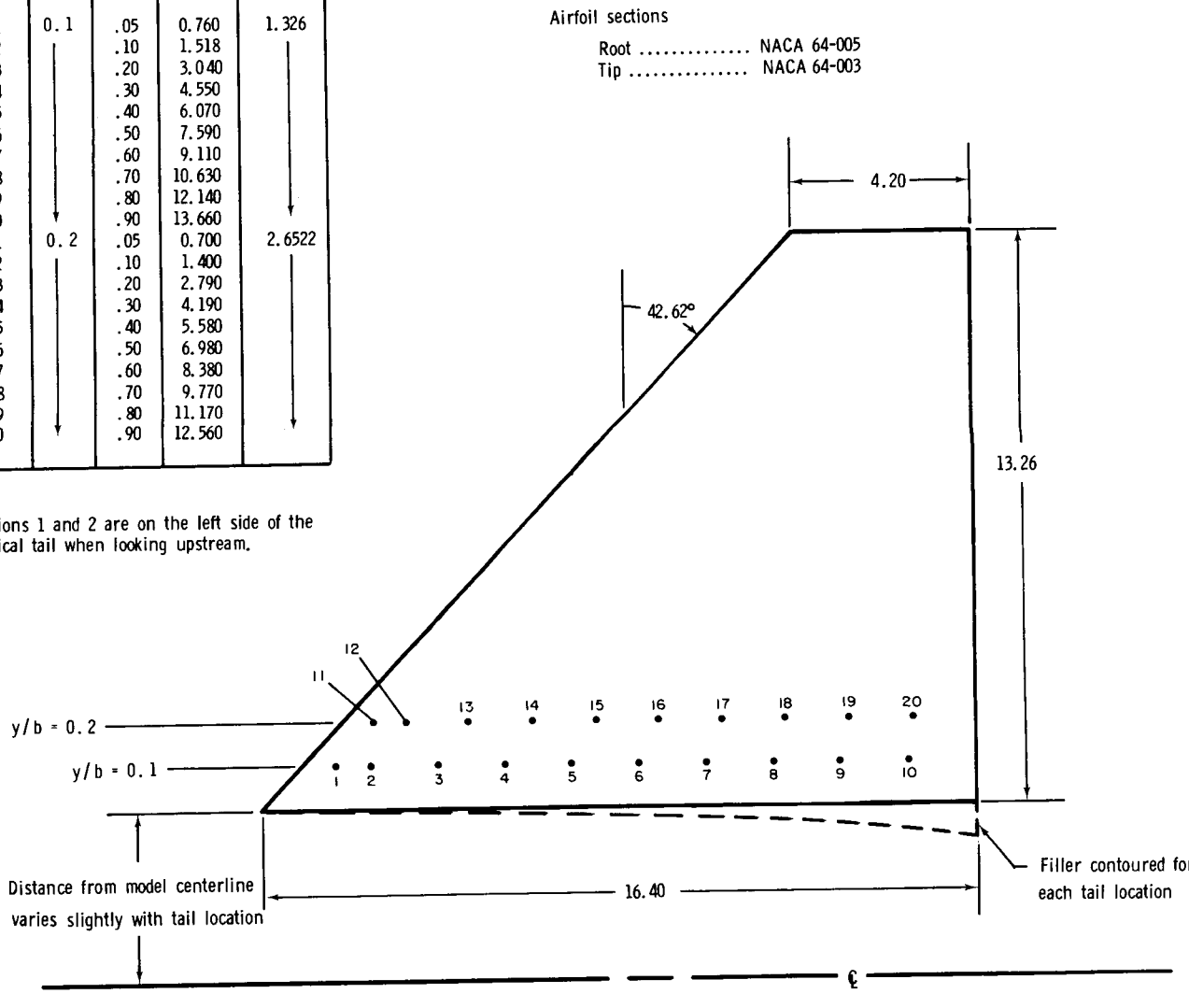
L-85-2295

Looking upstream

Figure 2. Model installed in test section of Langley 16-Foot Transonic Tunnel. Tail surfaces are shown in staggered arrangement.

Orifice	y/b	x/c	x, in.	y, in.
1	0.1	.05	0.760	1.326
2		.10	1.518	
3		.20	3.040	
4		.30	4.550	
5		.40	6.070	
6		.50	7.590	
7		.60	9.110	
8		.70	10.630	
9		.80	12.140	
10		.90	13.660	
11	0.2	.05	0.700	2.6522
12		.10	1.400	
13		.20	2.790	
14		.30	4.190	
15		.40	5.580	
16		.50	6.980	
17		.60	8.380	
18		.70	9.770	
19		.80	11.170	
20		.90	12.560	

Stations 1 and 2 are on the left side of the vertical tail when looking upstream.



(a) Vertical tail.

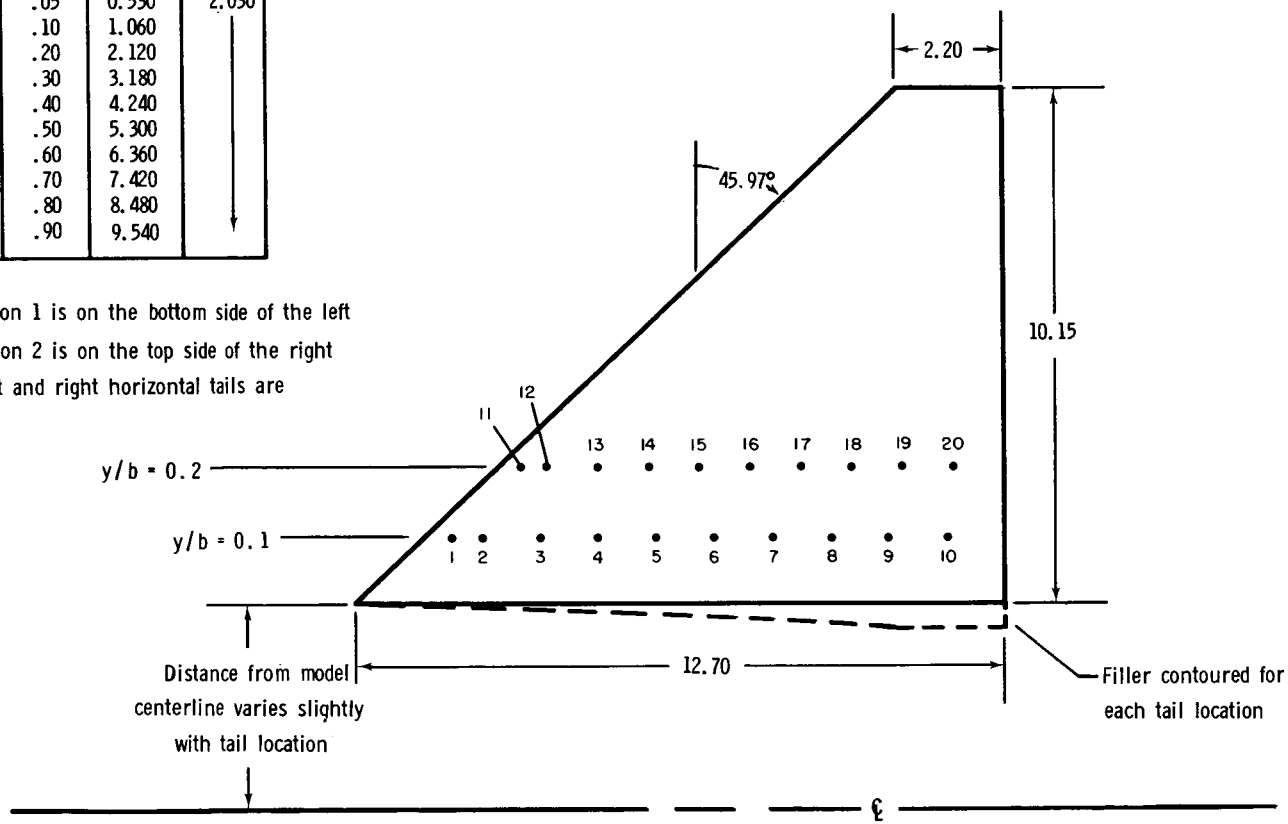
Figure 3. Geometric details of horizontal and vertical tails including static pressure orifice locations. Line dimensions are in inches.

Orifice	y/b	x/c	x, in.	y, in.
1	0.1	.05	0.583	1.015
2		.10	1.165	
3		.20	2.330	
4		.30	3.495	
5		.40	4.660	
6		.50	5.825	
7		.60	6.990	
8		.70	8.155	
9		.80	9.320	
10		.90	10.485	
11	0.2	.05	0.530	2.030
12		.10	1.060	
13		.20	2.120	
14		.30	3.180	
15		.40	4.240	
16		.50	5.300	
17		.60	6.360	
18		.70	7.420	
19		.80	8.480	
20		.90	9.540	

Looking upstream, station 1 is on the bottom side of the left horizontal tail and station 2 is on the top side of the right horizontal tail. The left and right horizontal tails are interchangeable.

Airfoil sections

Root..... NACA 64-005
Tip..... NACA 64-003



(b) Horizontal tails.

Figure 3. Concluded.

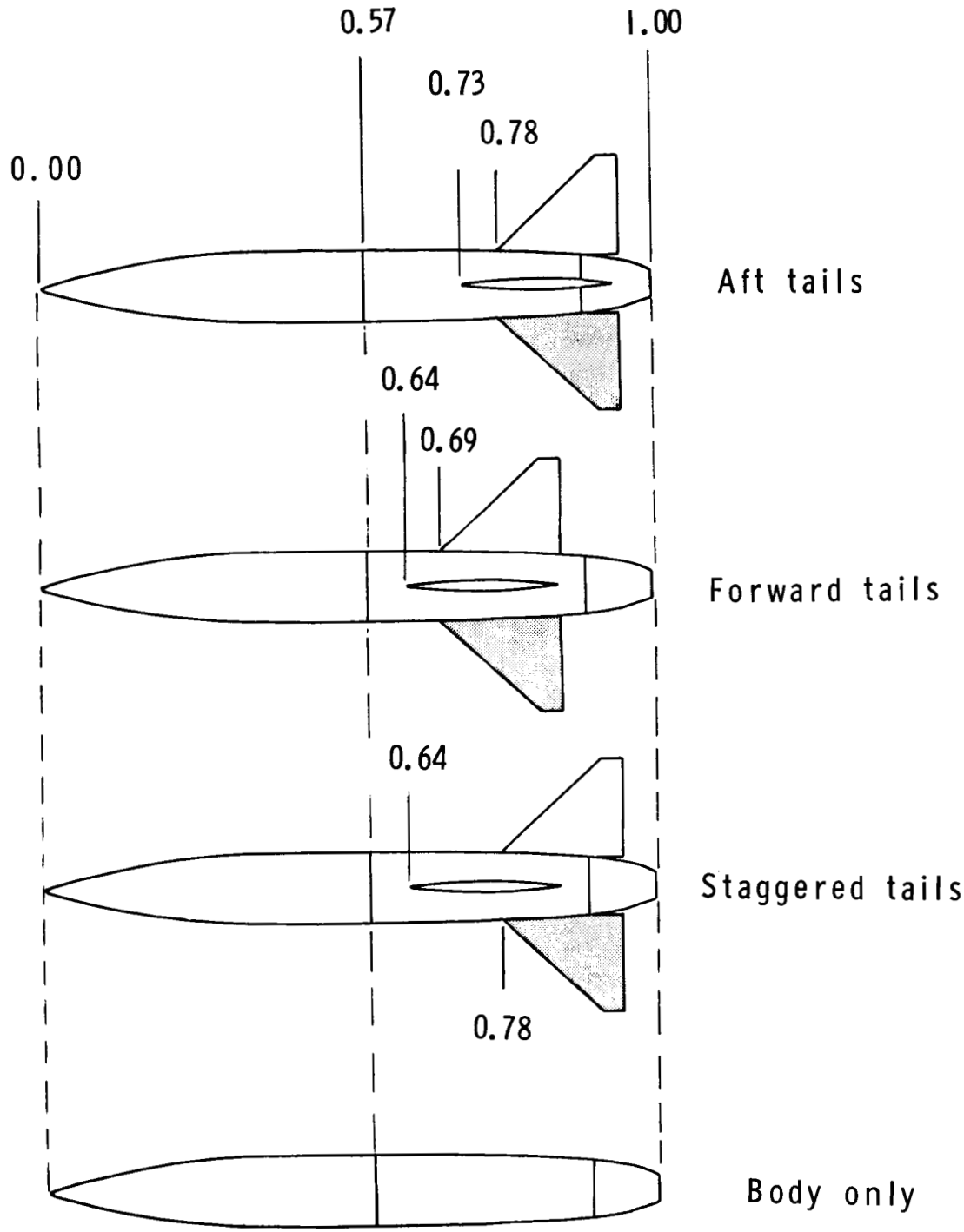
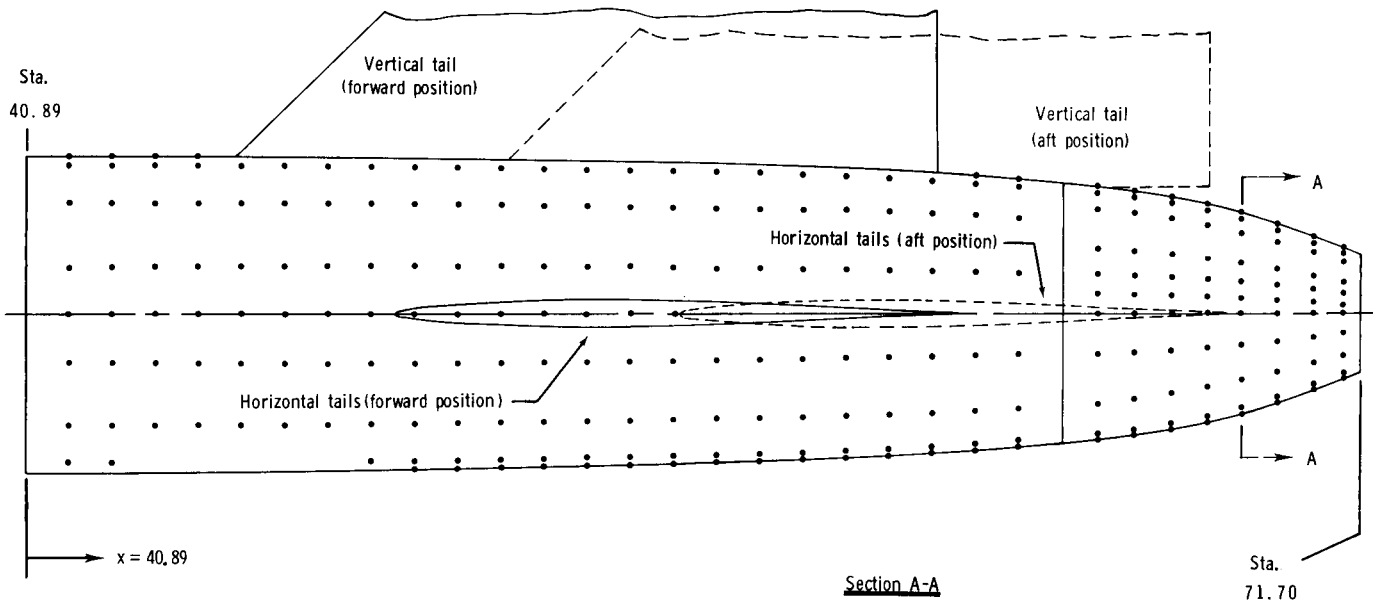
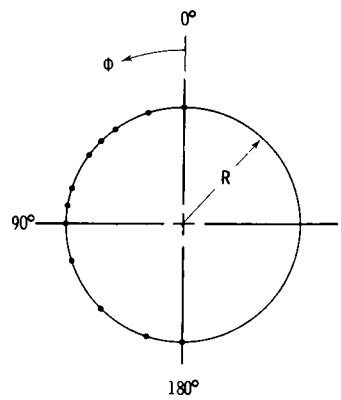


Figure 4. Planform view of model configurations tested. Dimensions are in fractions of body length.



Section A-A



Pressure taps are on the left side of the afterbody and nozzle when looking upstream.

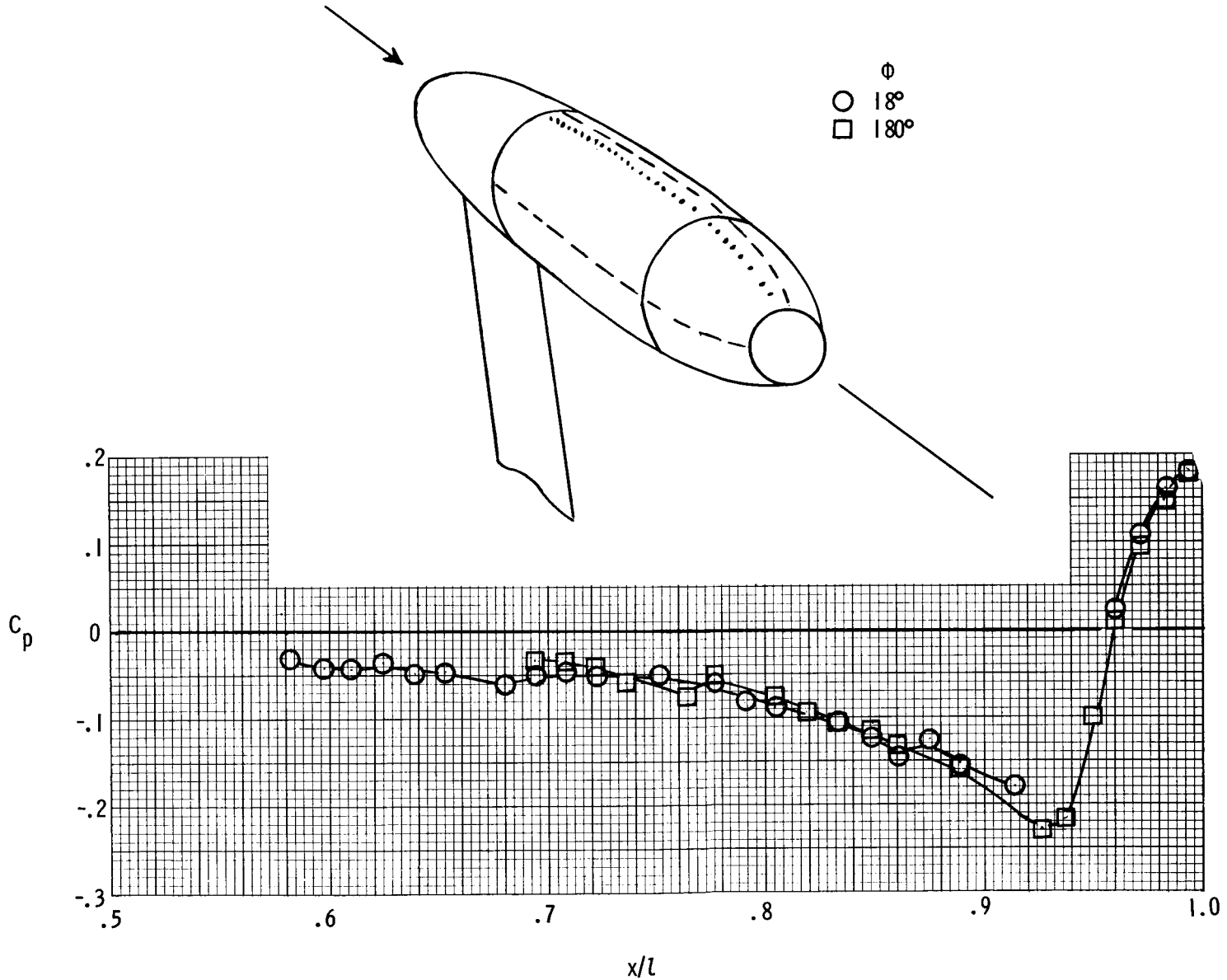
Nozzle/afterbody external geometry

x, in.	R, in.
40.888	3.670
42.888	3.664
44.888	3.654
46.888	3.636
48.888	3.612
50.888	3.580
52.888	3.539
54.888	3.488
56.888	3.425
58.888	3.348
60.888	3.248
61.388	3.217
61.888	3.184
62.388	3.147
62.888	3.108
63.488	3.056
64.888	3.000
65.700	2.919
67.181	2.726
67.700	2.635
68.700	2.400
69.700	2.098
70.700	1.750
71.700	1.374

Pressure orifice locations (see tables A2 through A8)

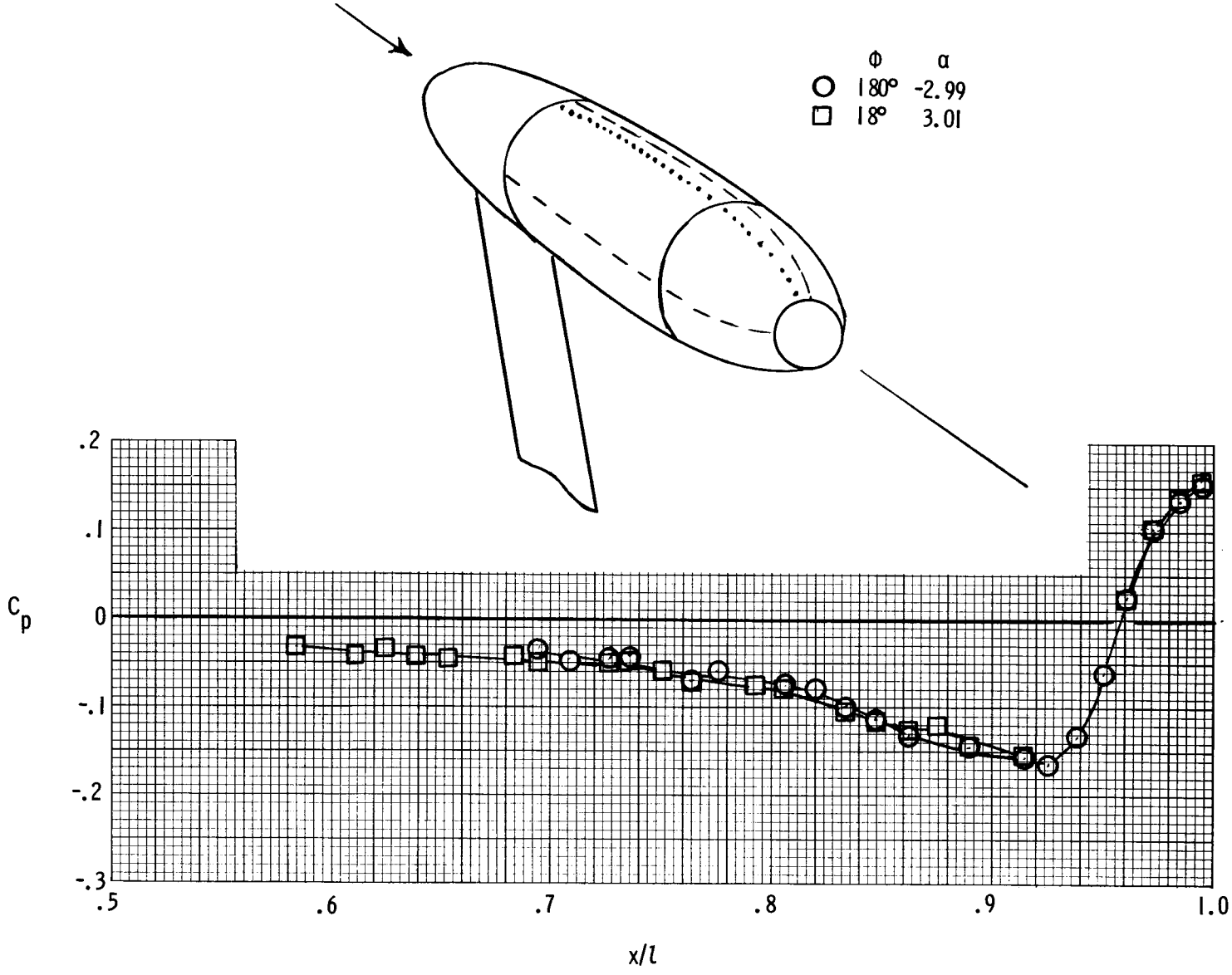
x, in.	x/l	Φ, deg											
		0	18	36	45	54	72	81	90	108	135	162	180
41.888	.524	x	x		x		x		x	x	x	x	
42.488	.598	x	x		x		x		x	x	x	x	
43.888	.612	x	x		x		x		x	x	x		
44.488	.626	x	x		x		x		x	x	x		
45.088	.640		x		x		x		x	x	x		
46.588	.654		x		x		x		x	x	x		
47.988	.668		x		x		x		x	x	x		
48.888	.682		x		x		x		x	x	x	x	
49.988	.696		x		x		x		x	x	x	x	x
50.888	.710		x		x		x		x	x	x	x	x
51.888	.724		x		x		x		x	x	x	x	x
52.888	.738		x		x		x		x	x	x	x	x
53.888	.752		x		x		x		x	x	x	x	x
54.888	.766		x		x		x		x	x	x	x	x
55.888	.780		x		x		x		x	x	x	x	x
56.888	.794		x		x		x			x	x	x	x
57.888	.806		x		x		x			x	x	x	x
58.888	.822		x		x		x			x	x	x	x
59.888	.836		x		x		x			x	x	x	x
60.488	.850		x		x		x			x	x	x	x
61.888	.864		x		x		x			x	x	x	x
62.888	.878	x	x		x		x			x	x	x	x
63.888	.892	x	x		x		x			x	x	x	x
65.700	.916	x	x	x		x	x	x	x	x	x	x	x
66.550	.928	x	x	x		x	x	x	x	x	x	x	x
67.400	.940	x	x	x		x	x	x	x	x	x	x	x
68.250	.952	x	x	x		x	x	x	x	x	x	x	x
69.000	.962	x	x	x		x	x	x	x	x	x	x	x
69.950	.974	x	x	x		x	x	x	x	x	x	x	x
70.700	.986	x	x	x		x	x	x	x	x	x	x	x
71.400	.996	x	x	x		x	x	x	x	x	x	x	x

Figure 5. Afterbody and nozzle pressure instrumentation and external geometry details. Linear dimensions are in inches.



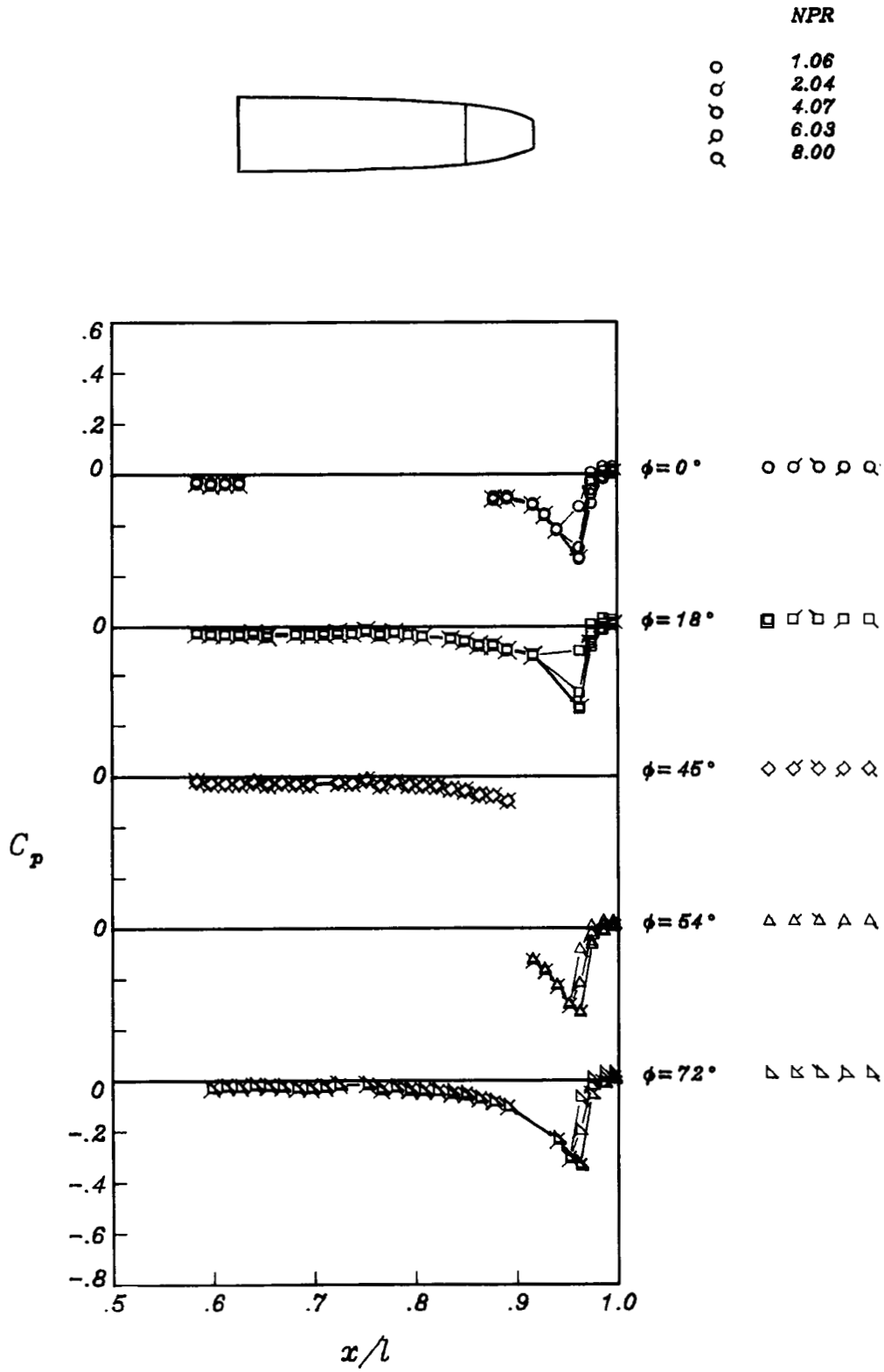
(a) $\alpha = 0.0°$.

Figure 6. Effect of model support system on pressure coefficients at two meridian angles for body alone at $M = 0.95$ and NPR = 1.0.



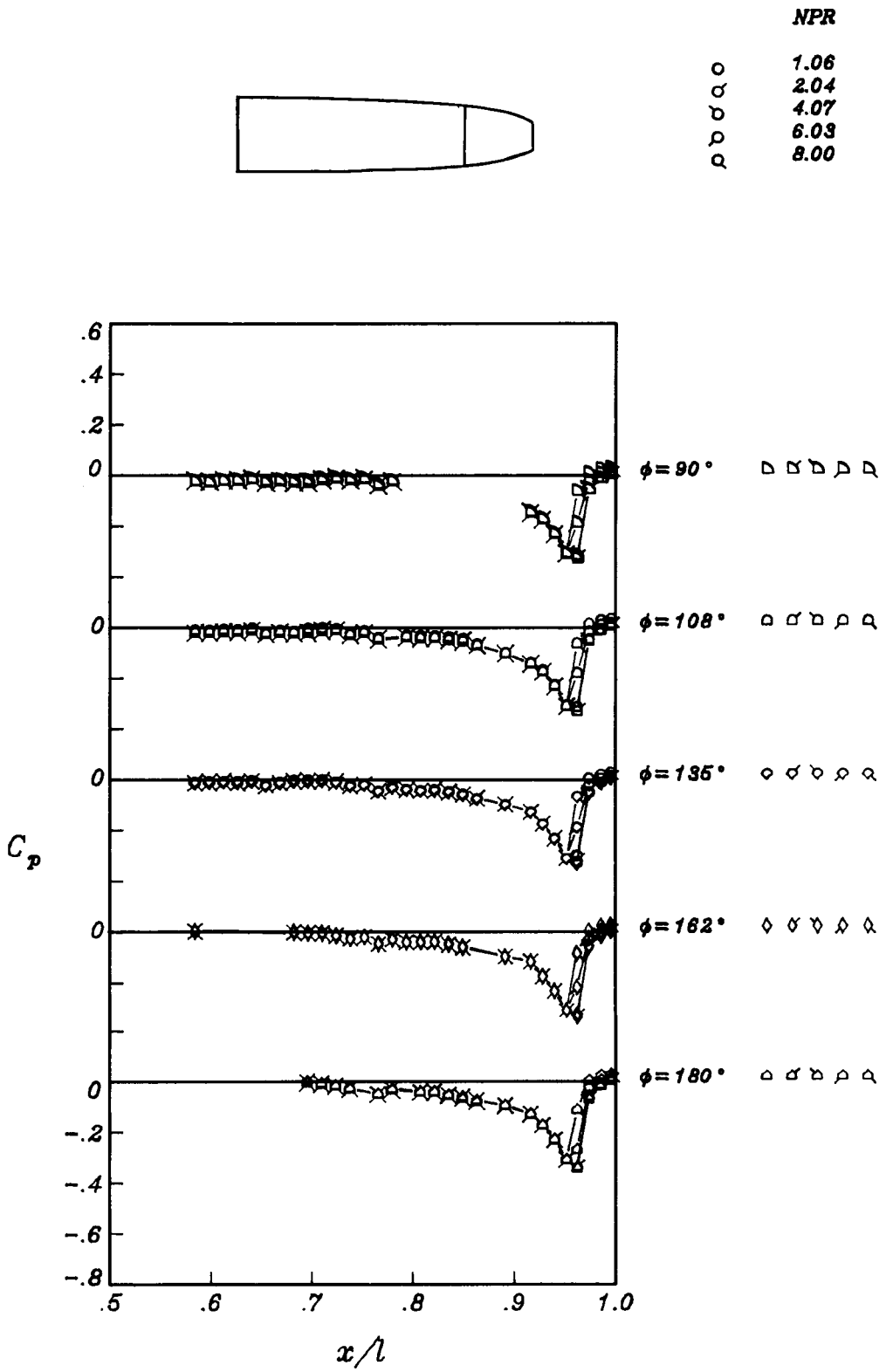
(b) $\alpha = \pm 3.0°$.

Figure 6. Concluded.



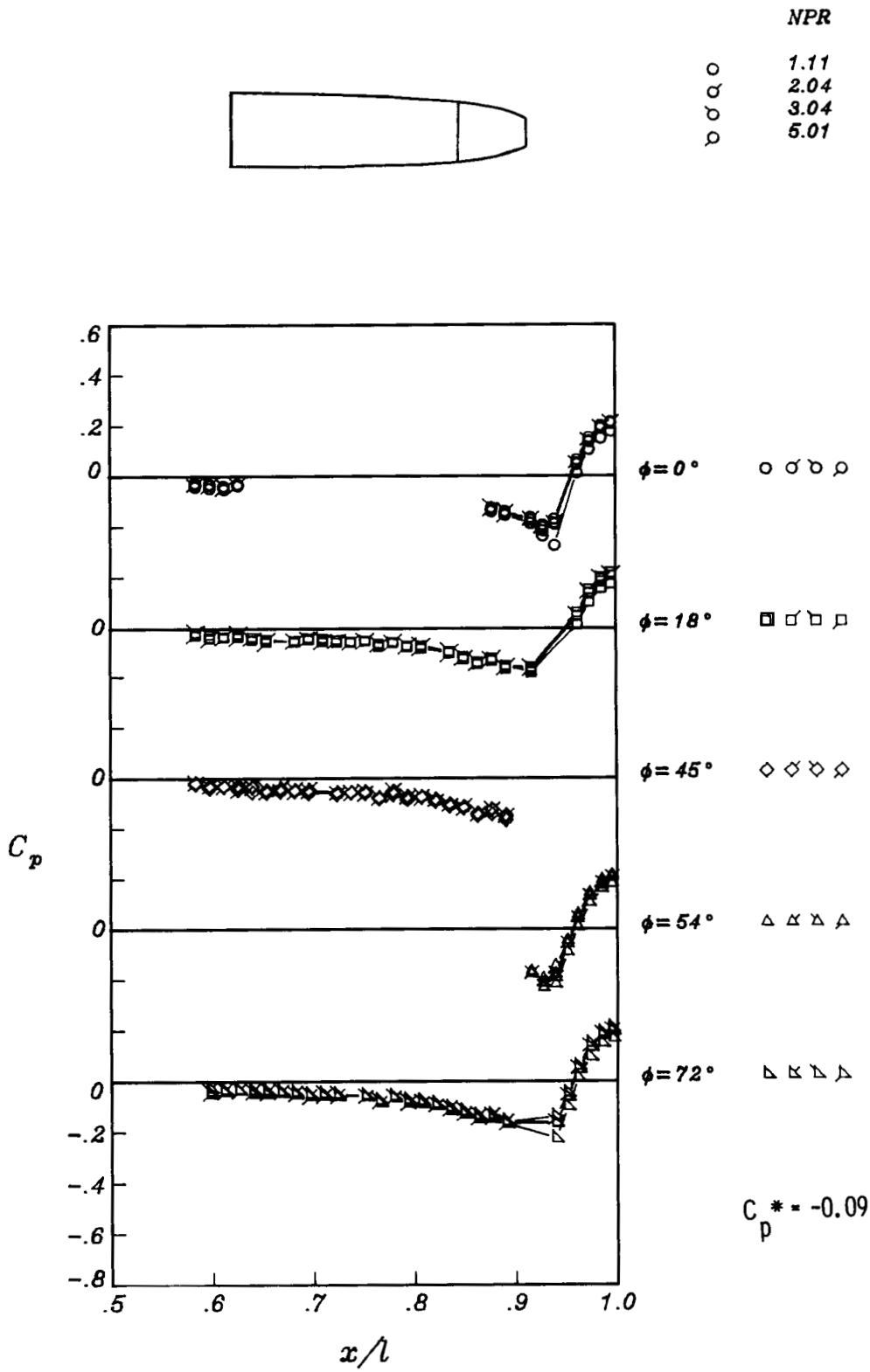
(a) $M = 1.20$; $\alpha = 0.01°$.

Figure 7. Effect of nozzle pressure ratio on nozzle/afterbody pressures for body alone.



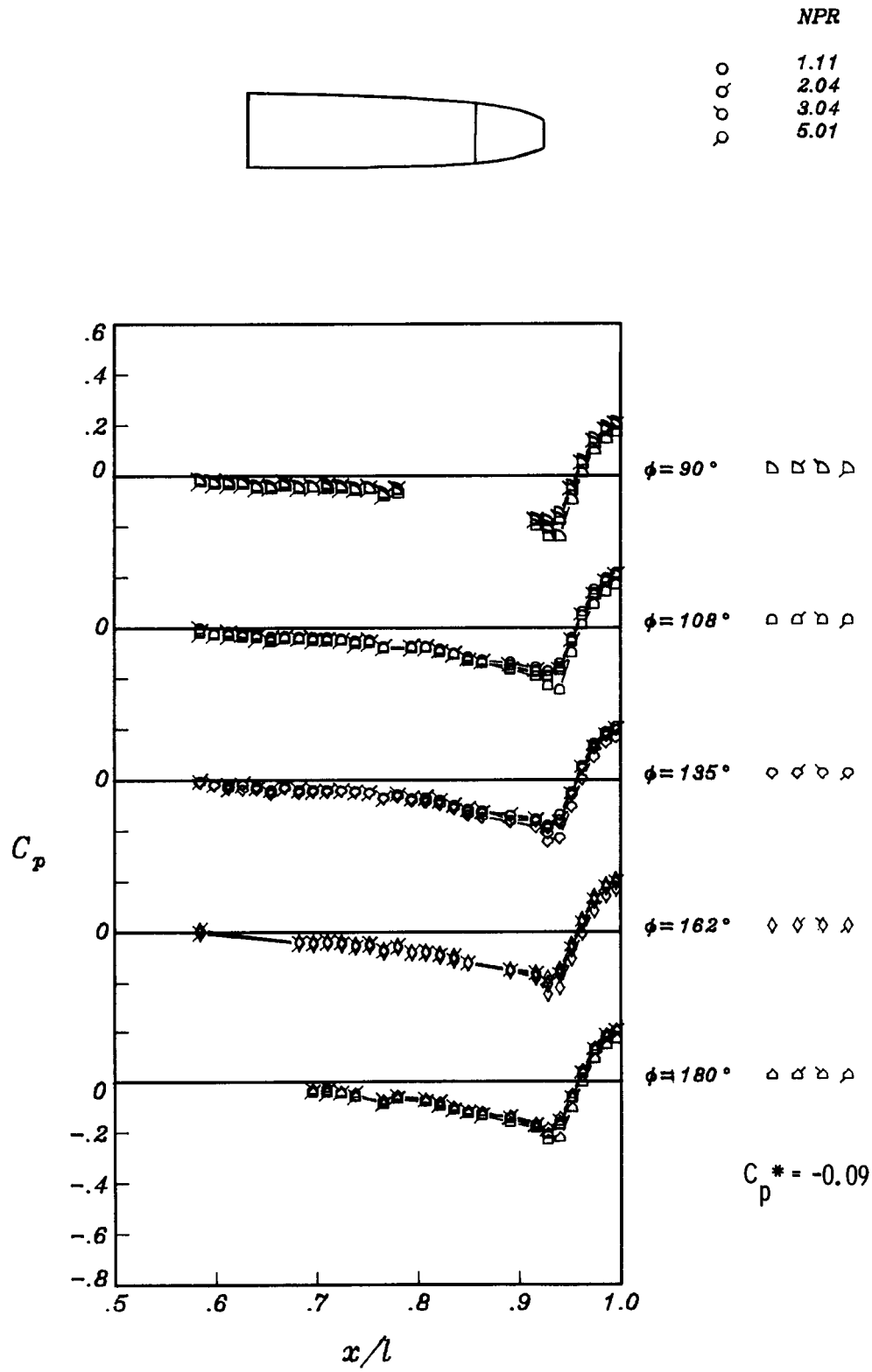
(a) Concluded.

Figure 7. Continued.



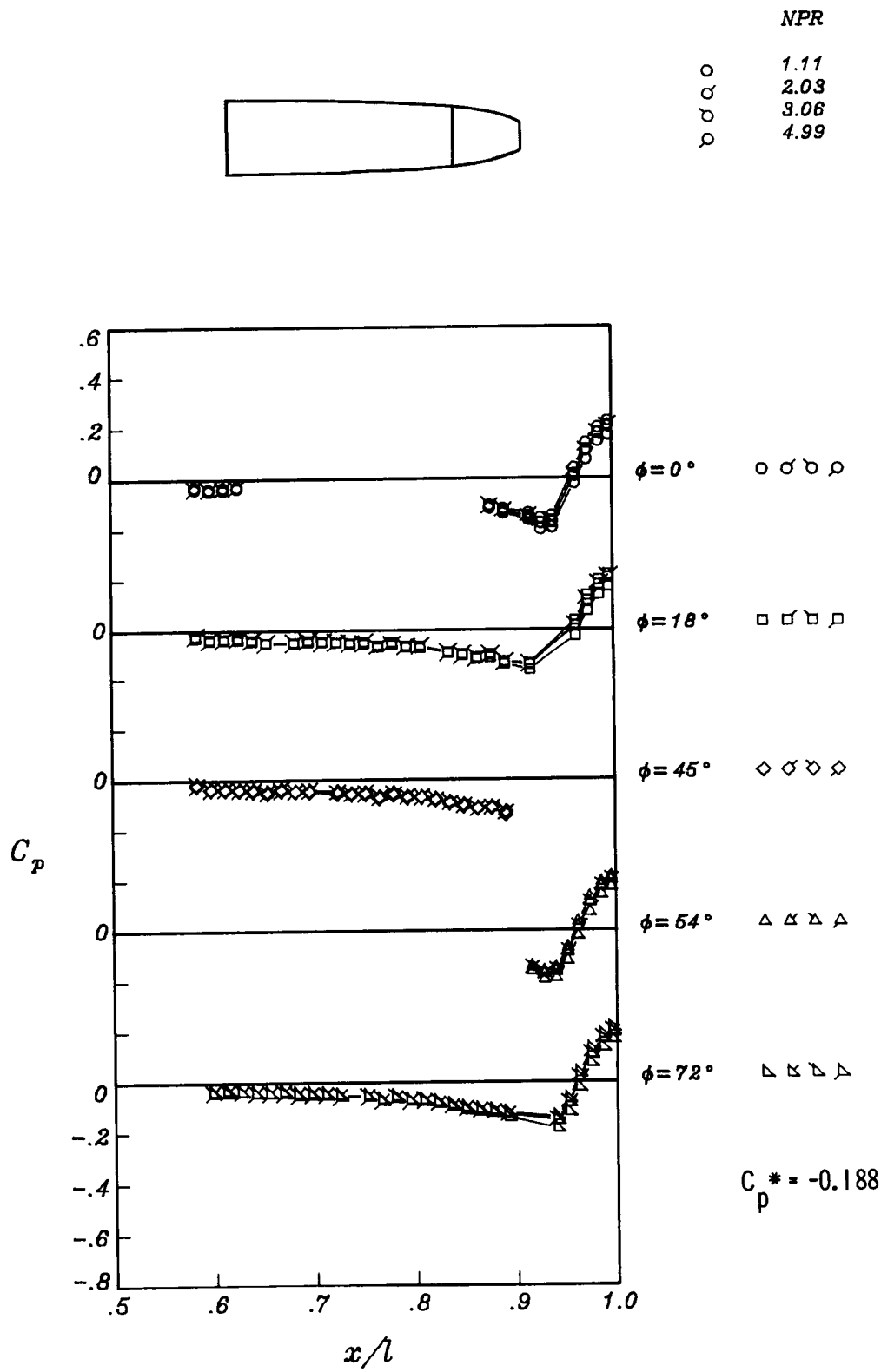
(b) $M = 0.95$; $\alpha = 0.01°$.

Figure 7. Continued.



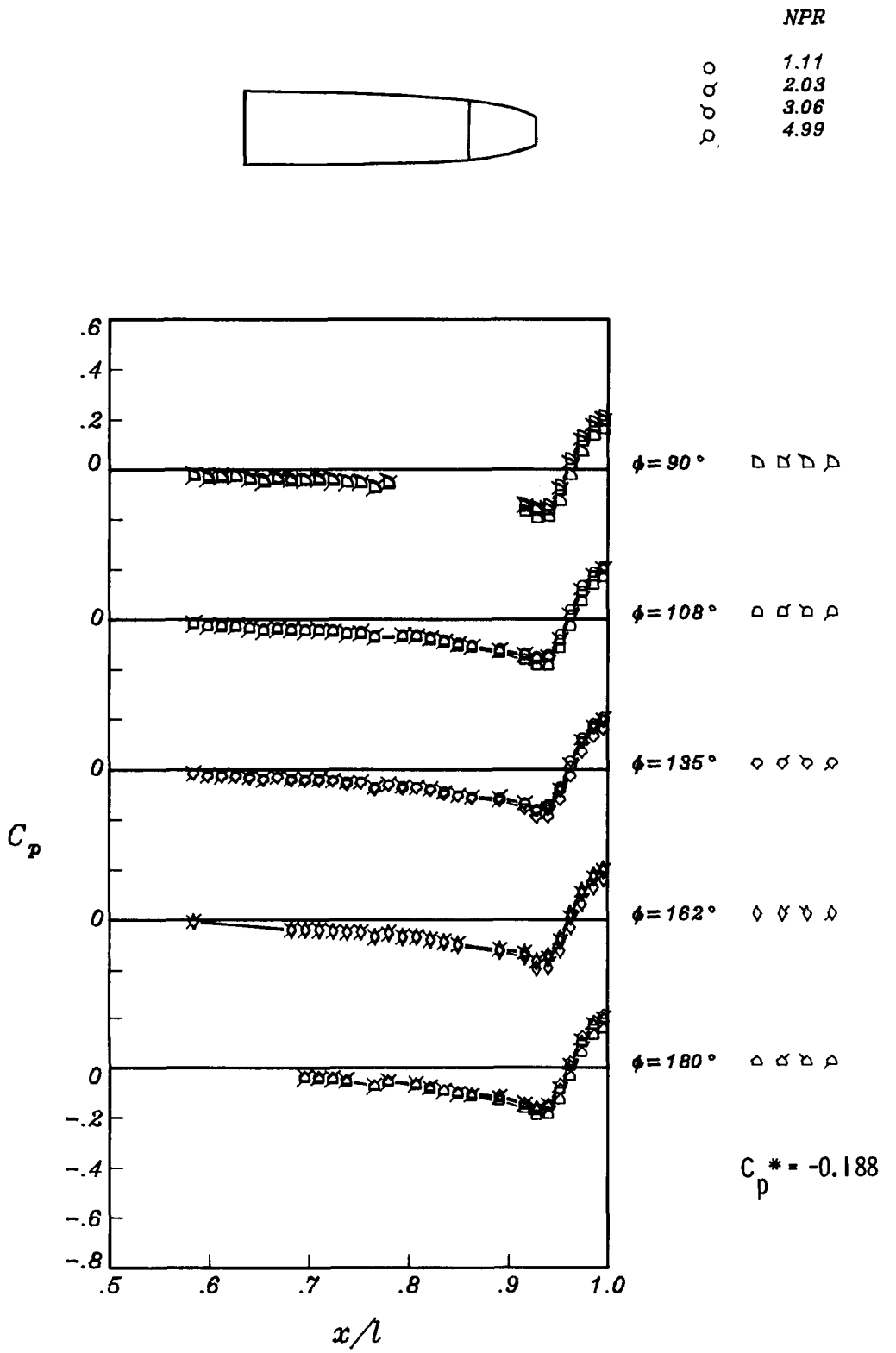
(b) Concluded.

Figure 7. Continued.



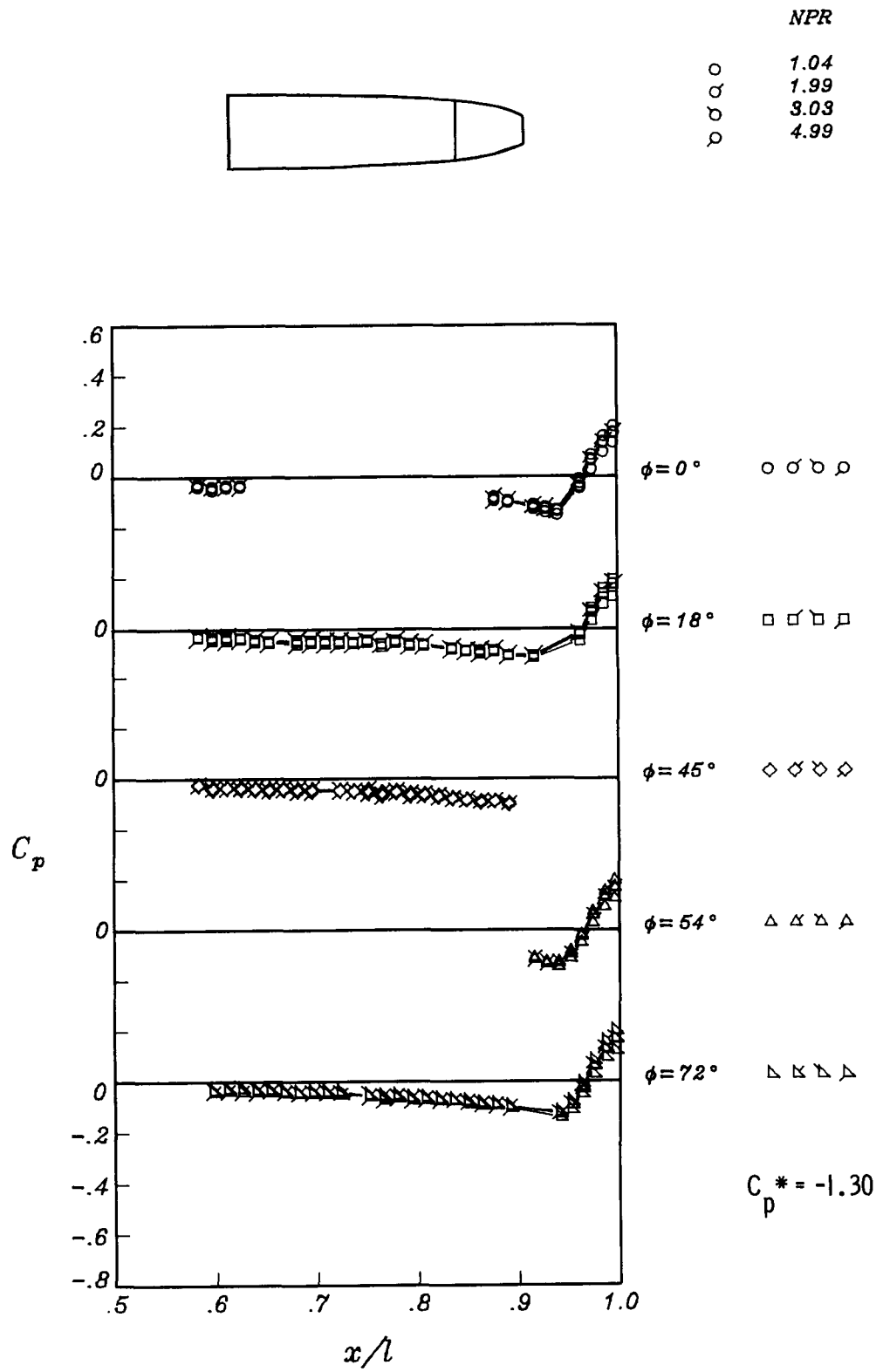
(c) $M = 0.90$; $\alpha = 0.01°$.

Figure 7. Continued.



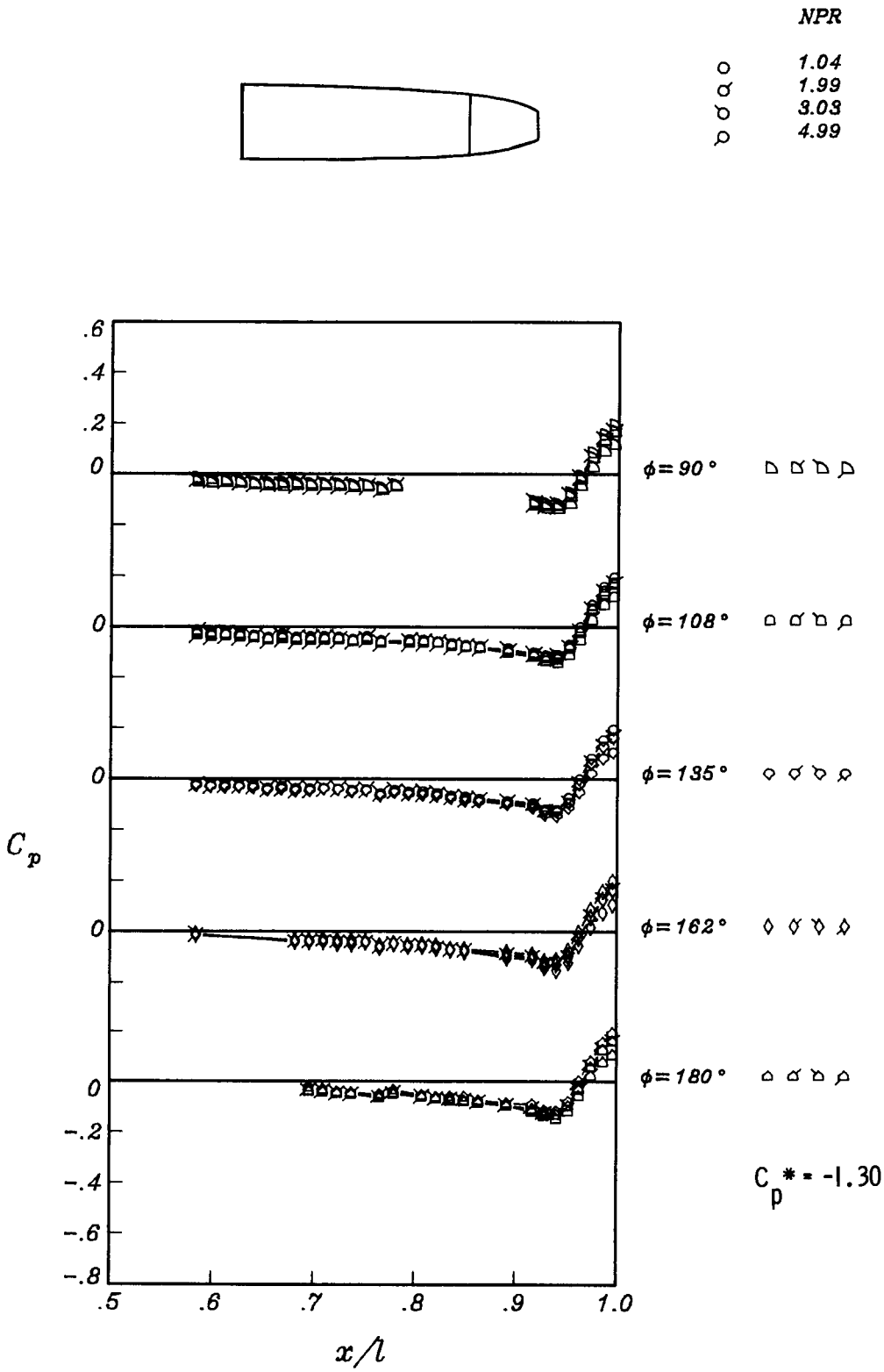
(c) Concluded.

Figure 7. Continued.



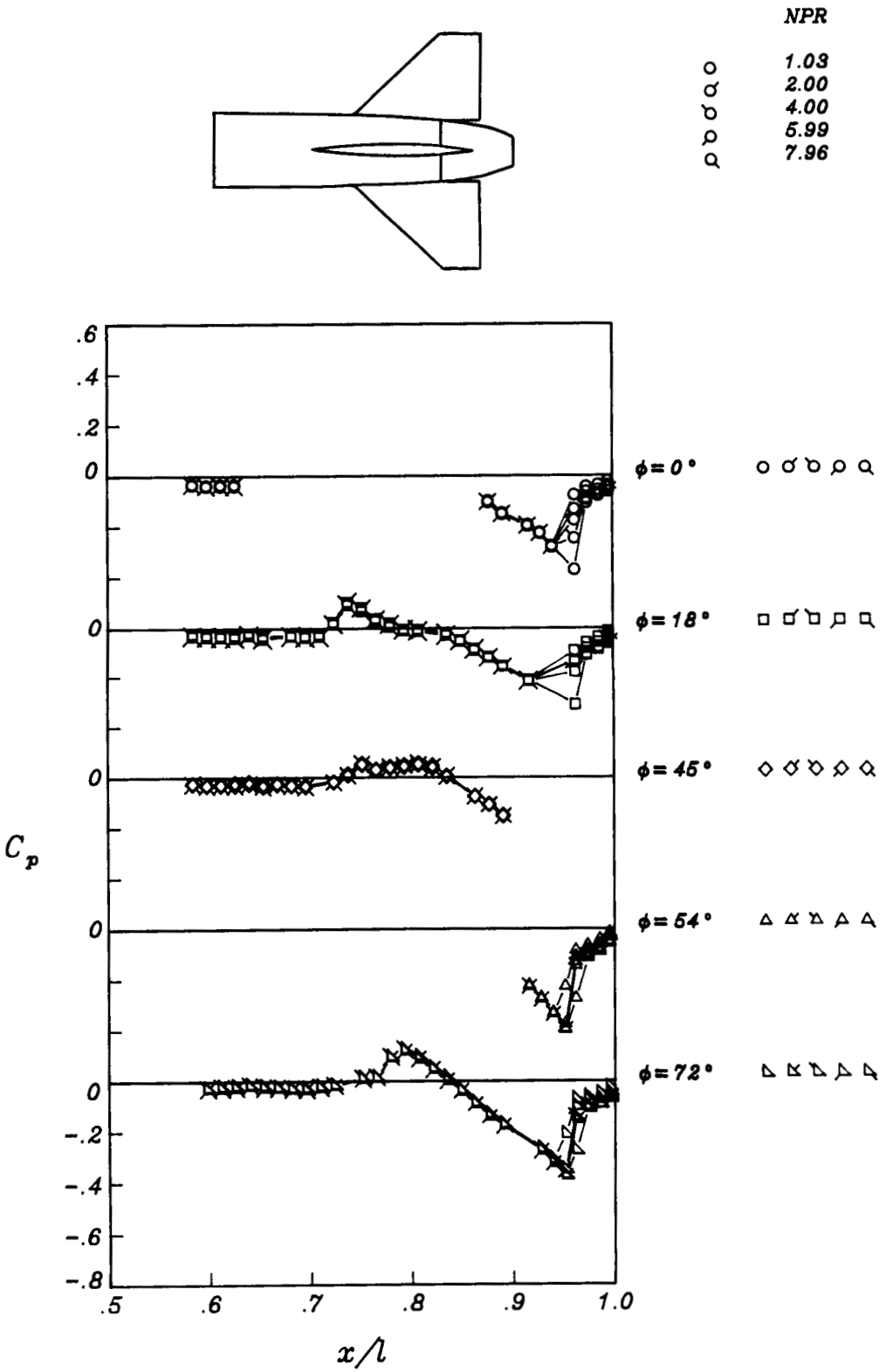
(d) $M = 0.60$; $\alpha = 0.01°$.

Figure 7. Continued.



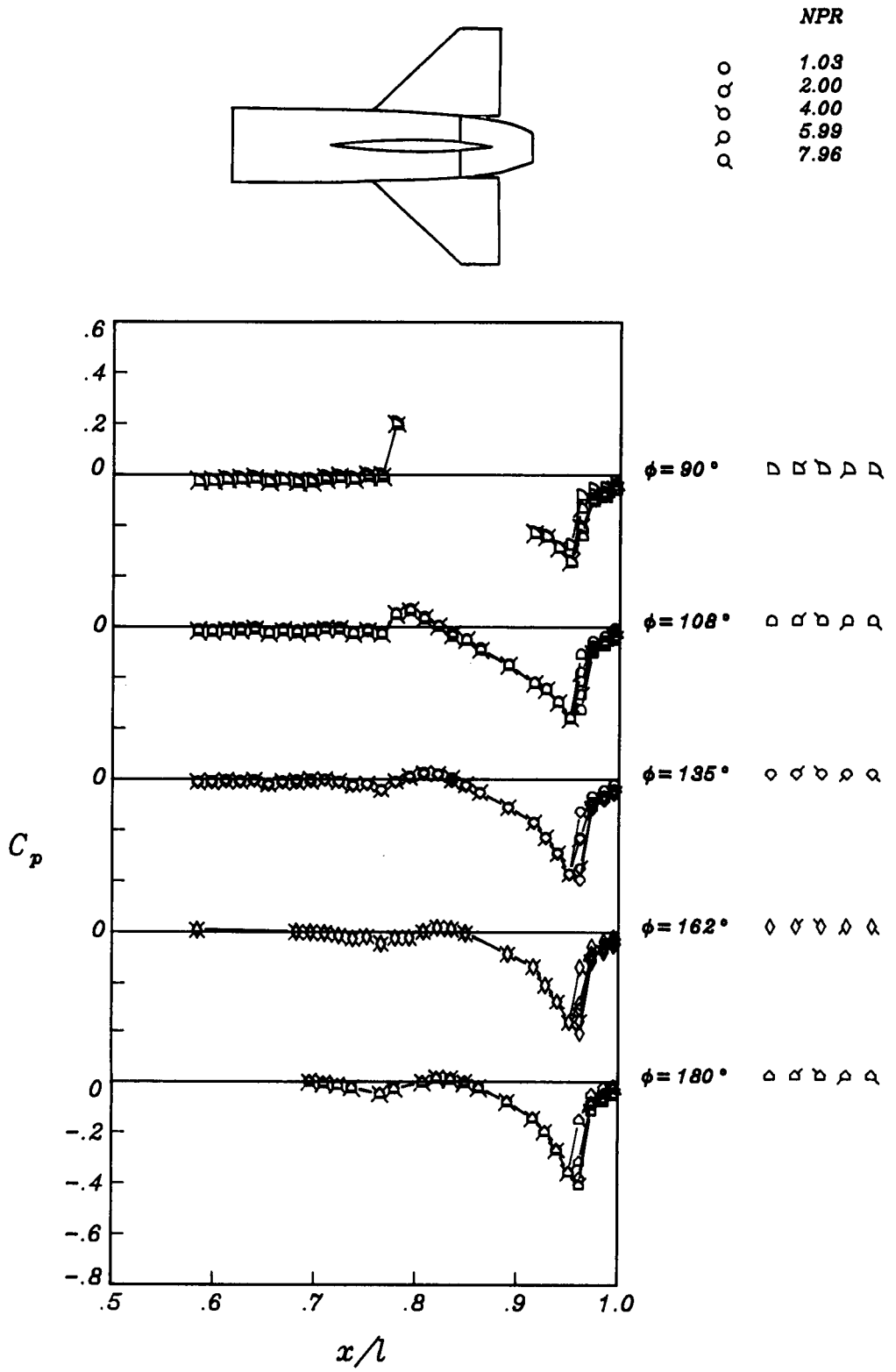
(d) Concluded.

Figure 7. Concluded.



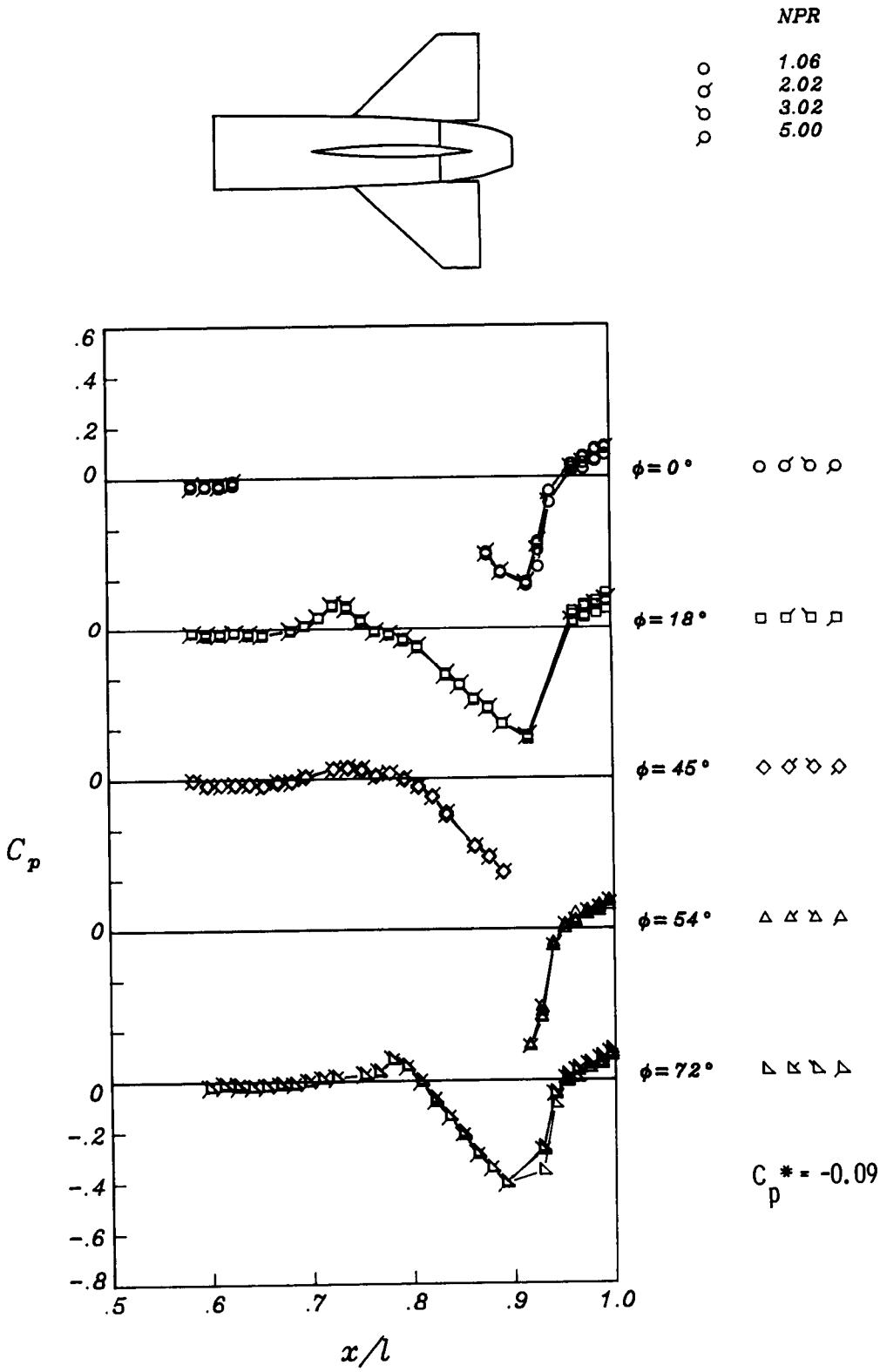
(a) $M = 1.20$; $\alpha = 0.03°$.

Figure 8. Effect of nozzle pressure ratio on nozzle/afterbody pressures for body with horizontal and vertic tails in aft location.



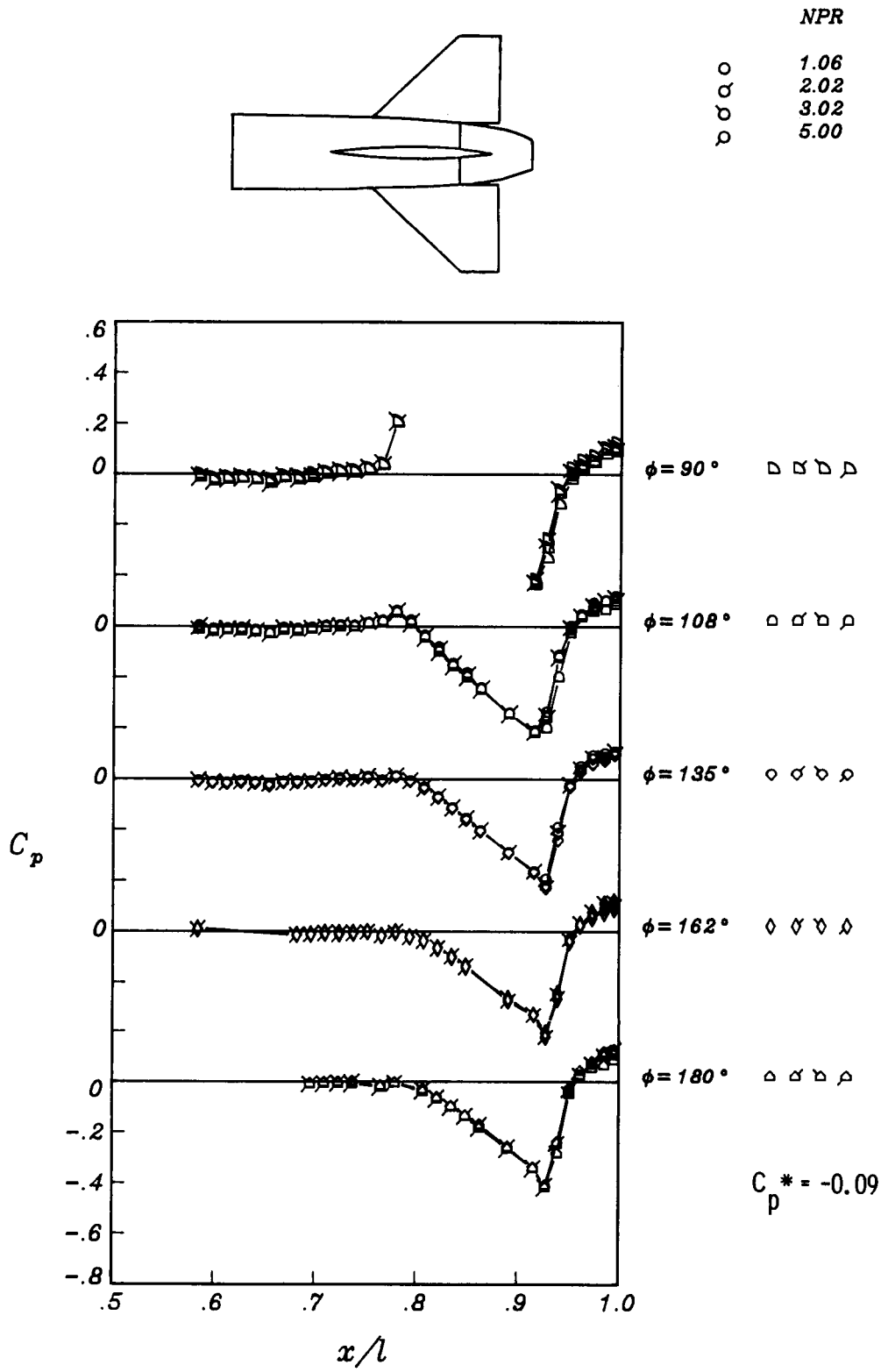
(a) Concluded.

Figure 8. Continued.



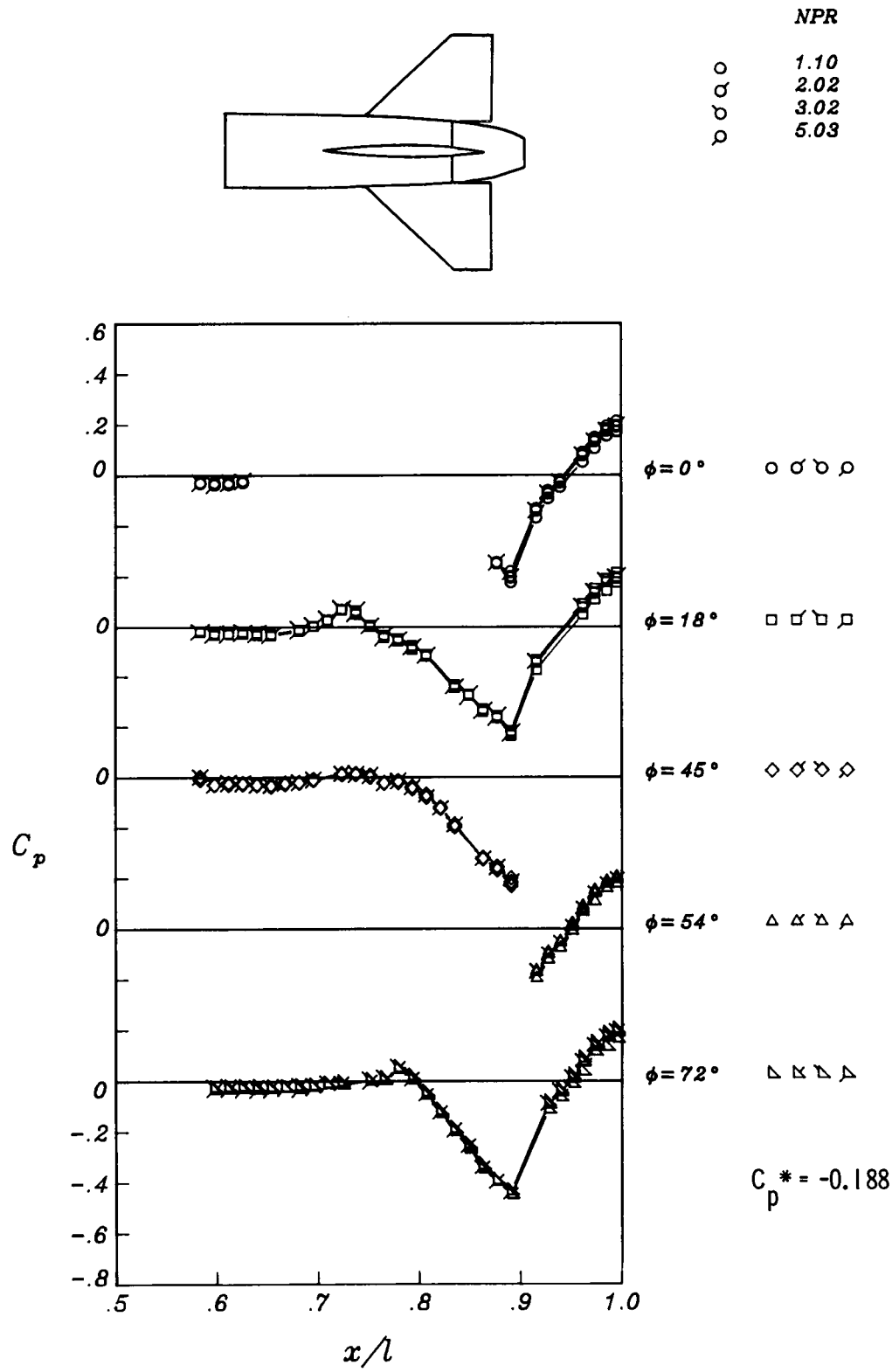
(b) $M = 0.95$; $\alpha = 0.02°$.

Figure 8. Continued.



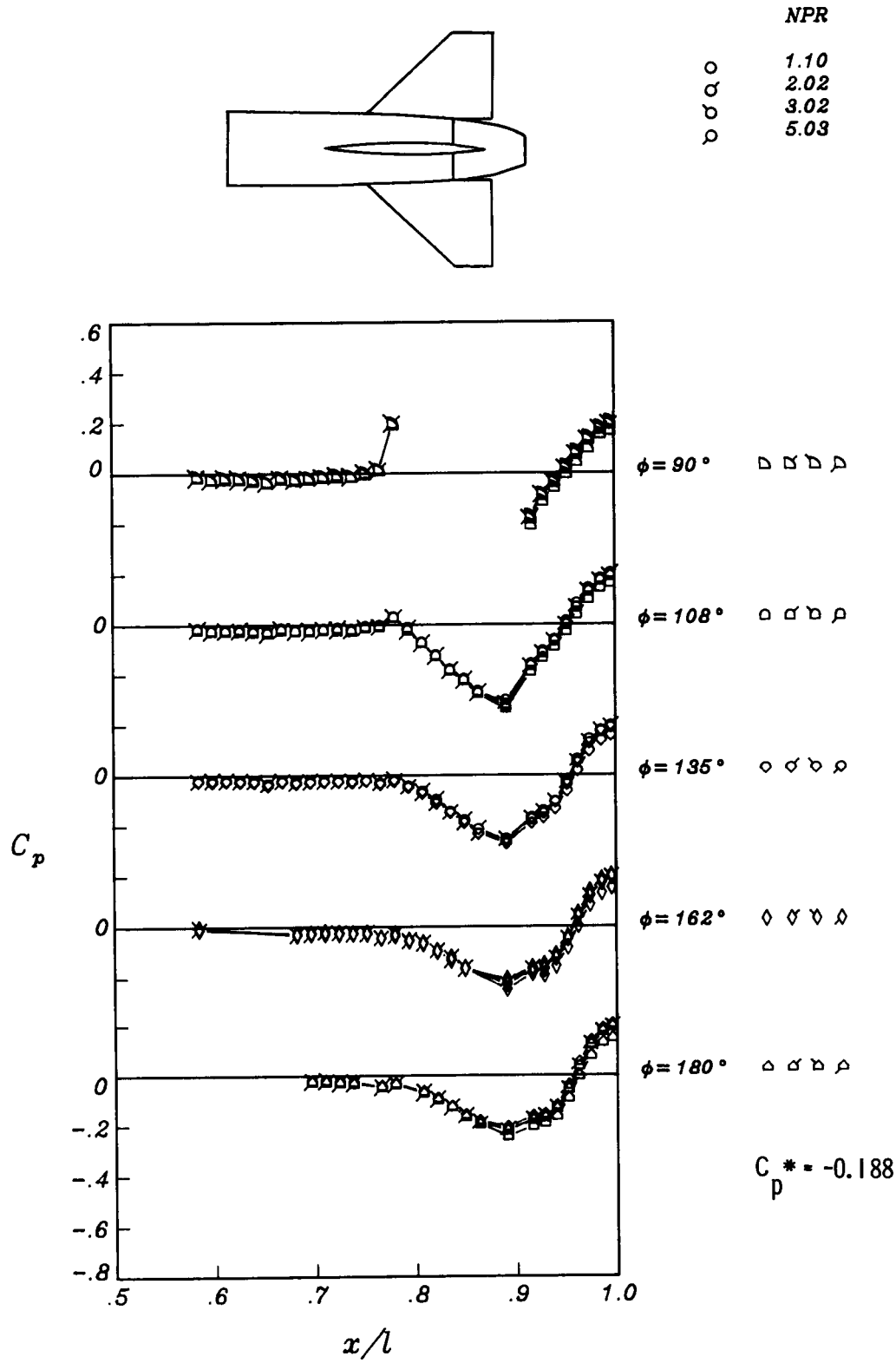
(b) Concluded.

Figure 8. Continued.



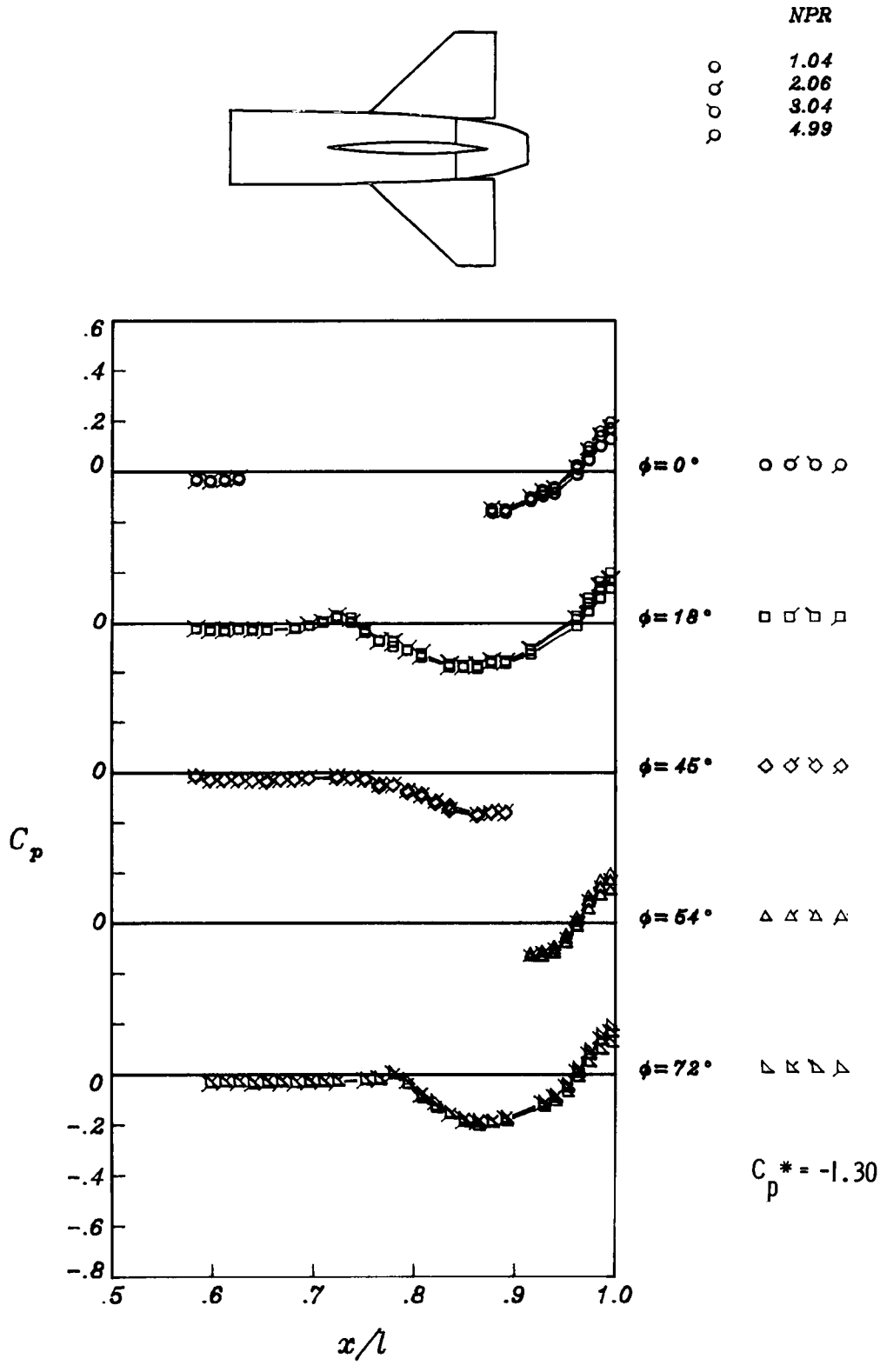
(c) $M = 0.90$; $\alpha = 0.02°$.

Figure 8. Continued.



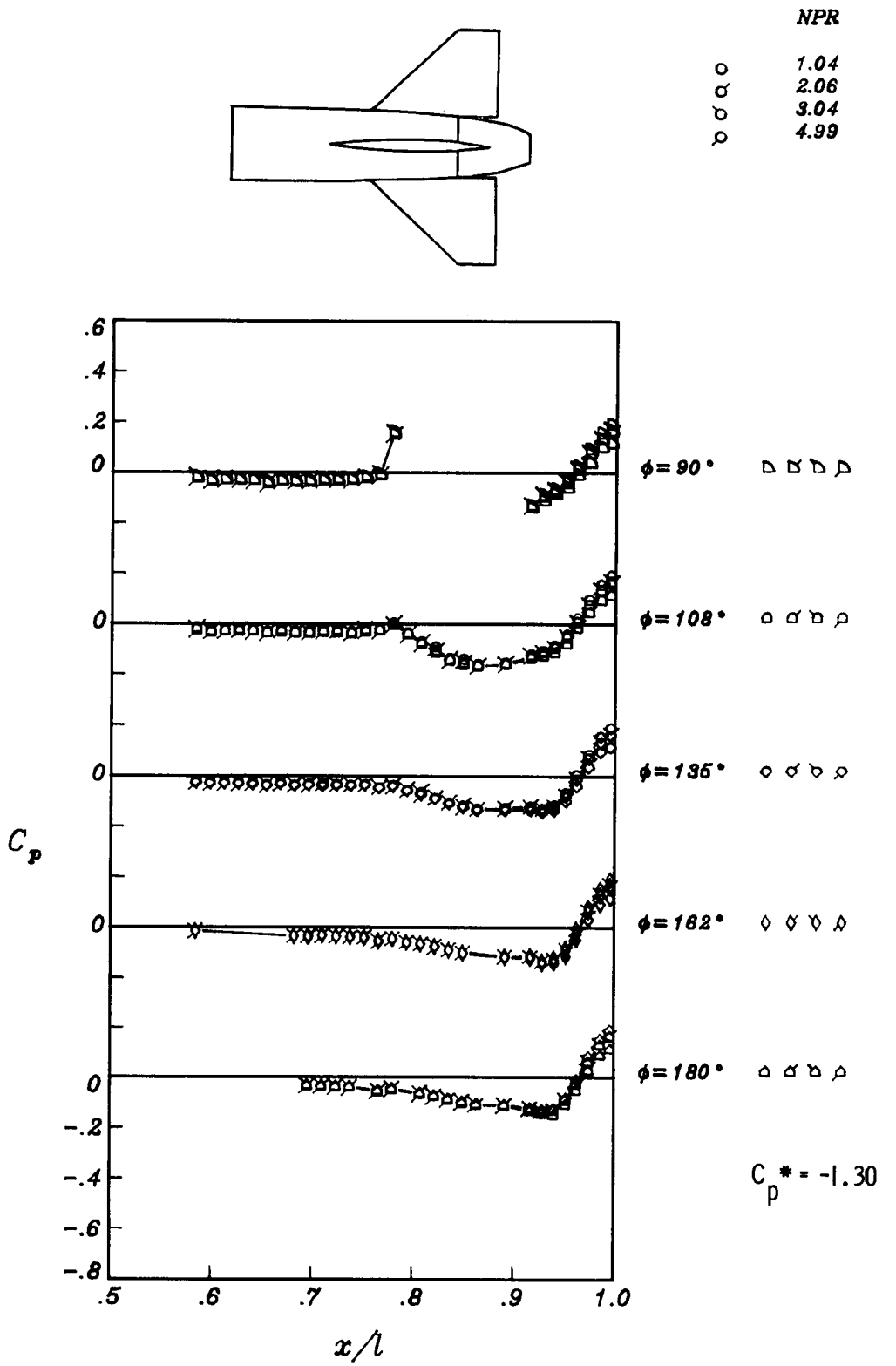
(c) Concluded.

Figure 8. Continued.



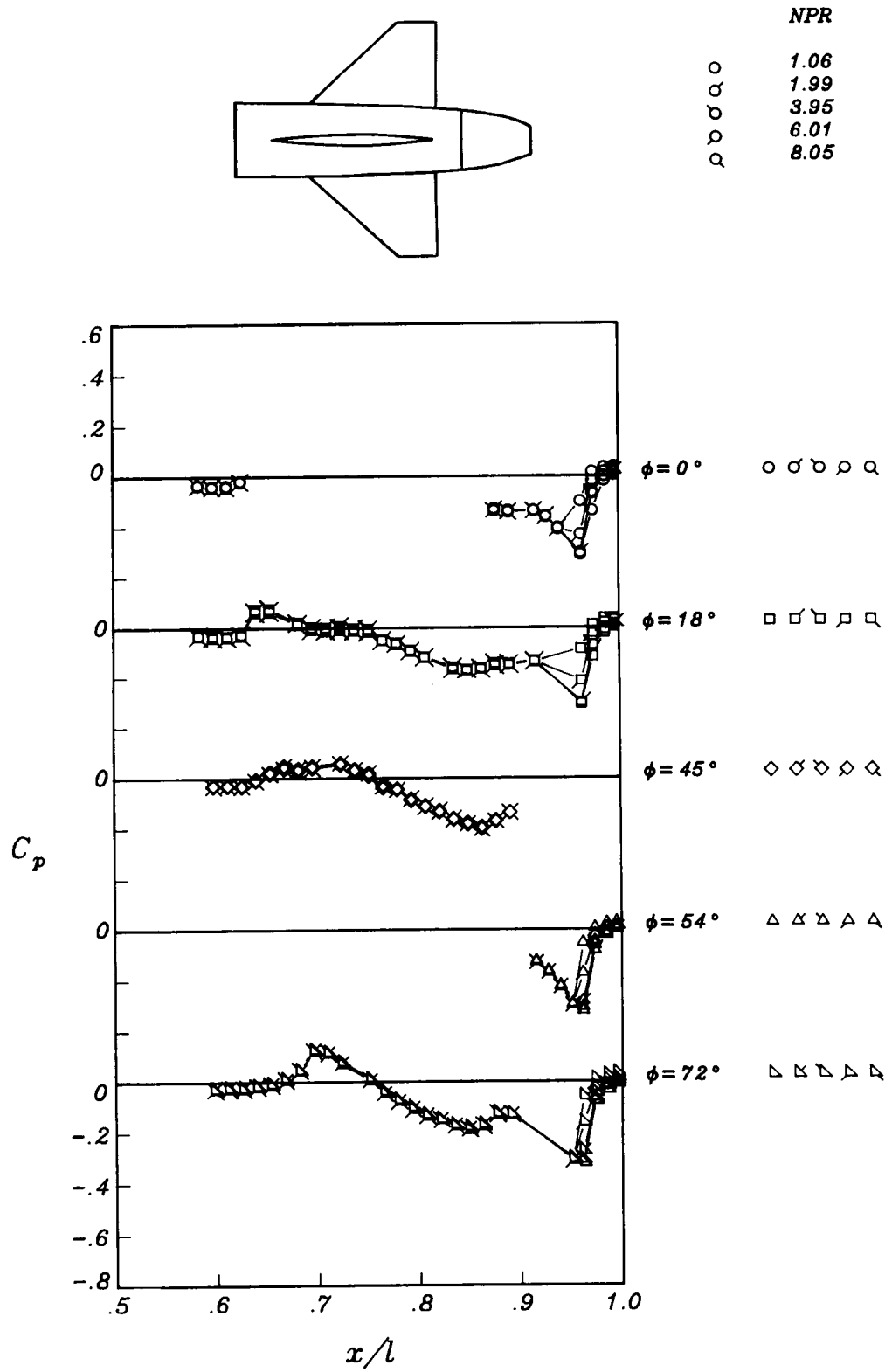
(d) $M = 0.60$; $\alpha = 0.03°$.

Figure 8. Continued.



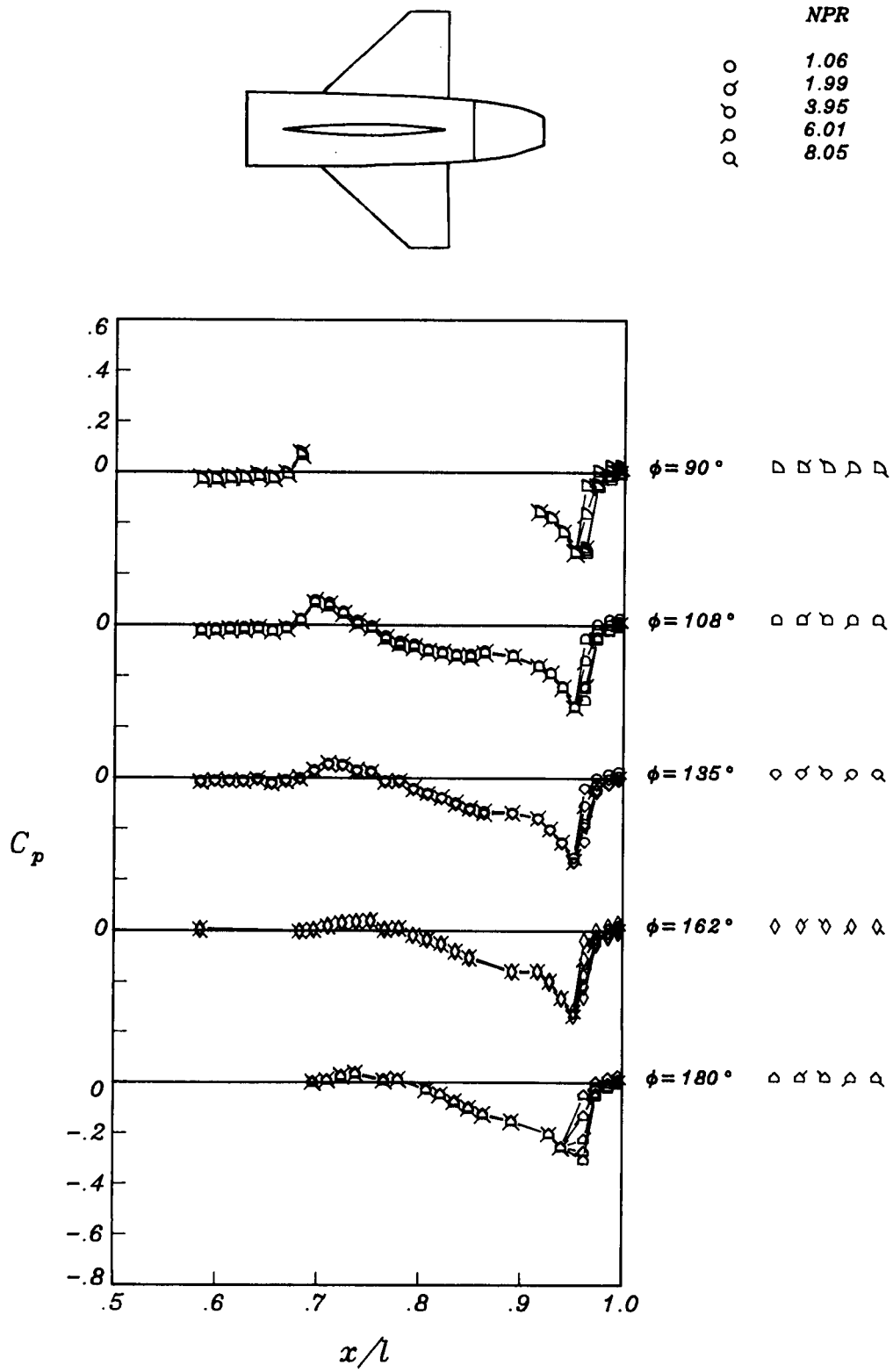
(d) Concluded.

Figure 8. Concluded.



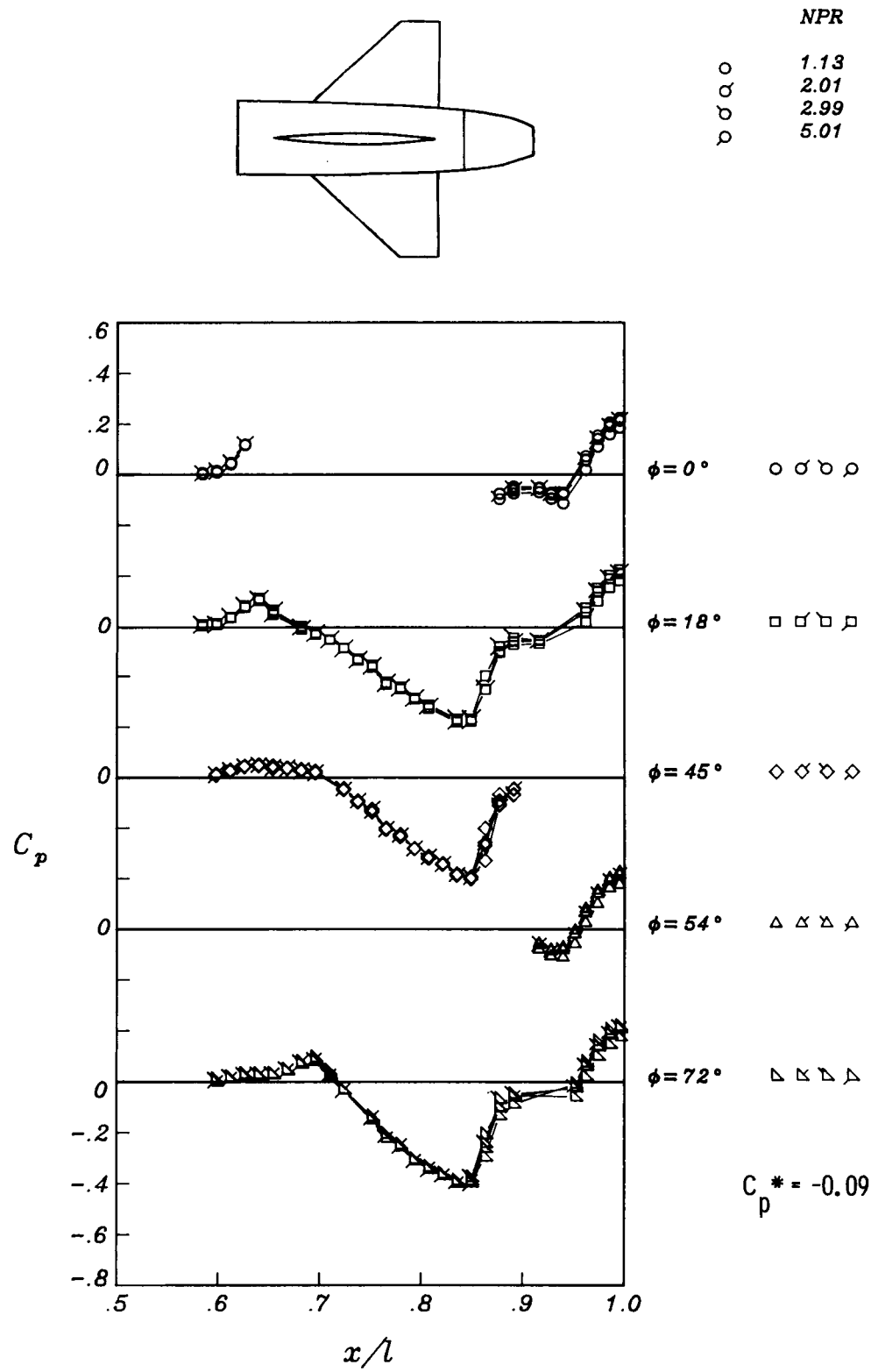
(a) $M = 1.20$; $\alpha = 0.0°$.

Figure 9. Effect of nozzle pressure ratio on nozzle/afterbody pressures for body with horizontal and vertical tails in forward location.



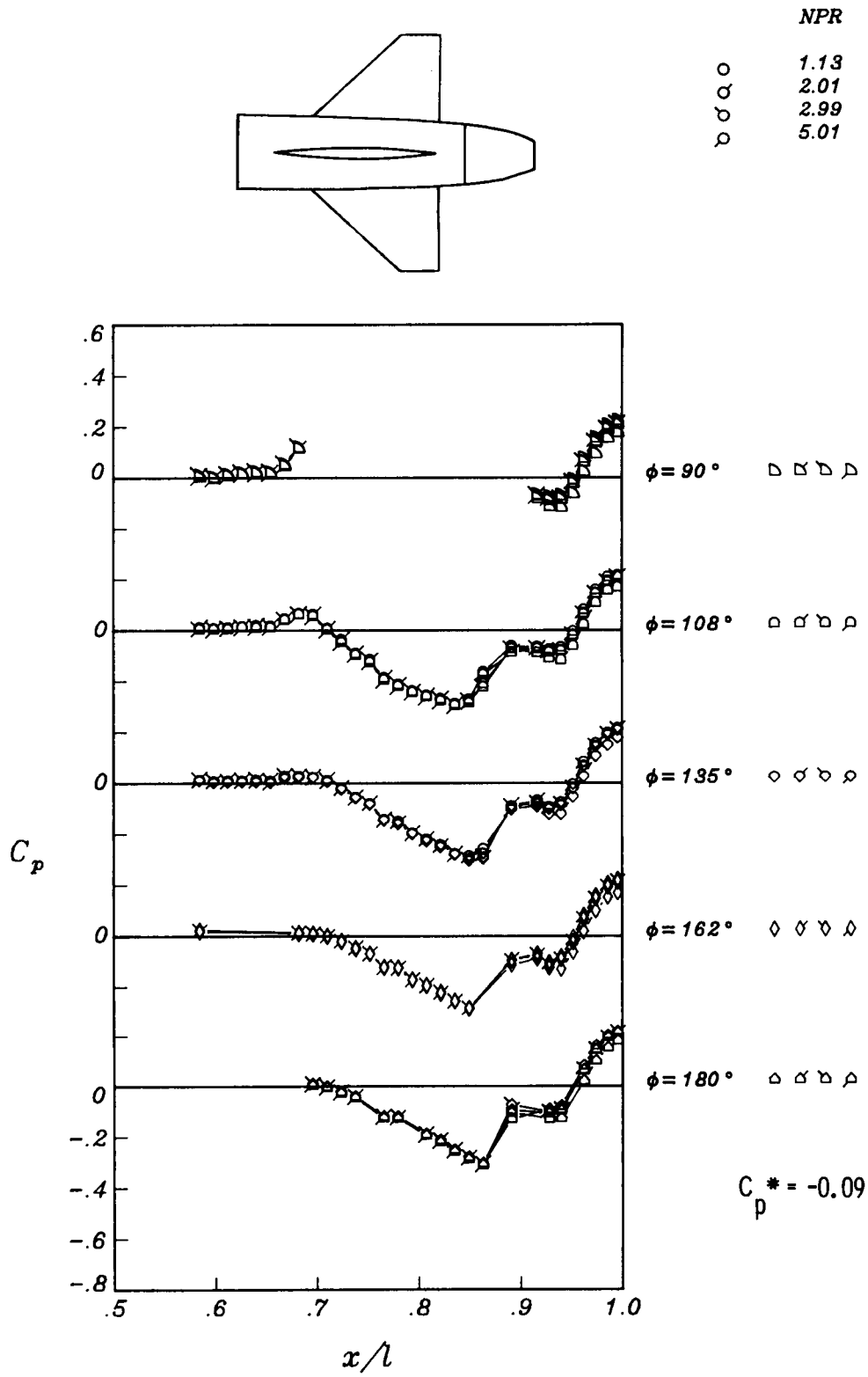
(a) Concluded.

Figure 9. Continued.



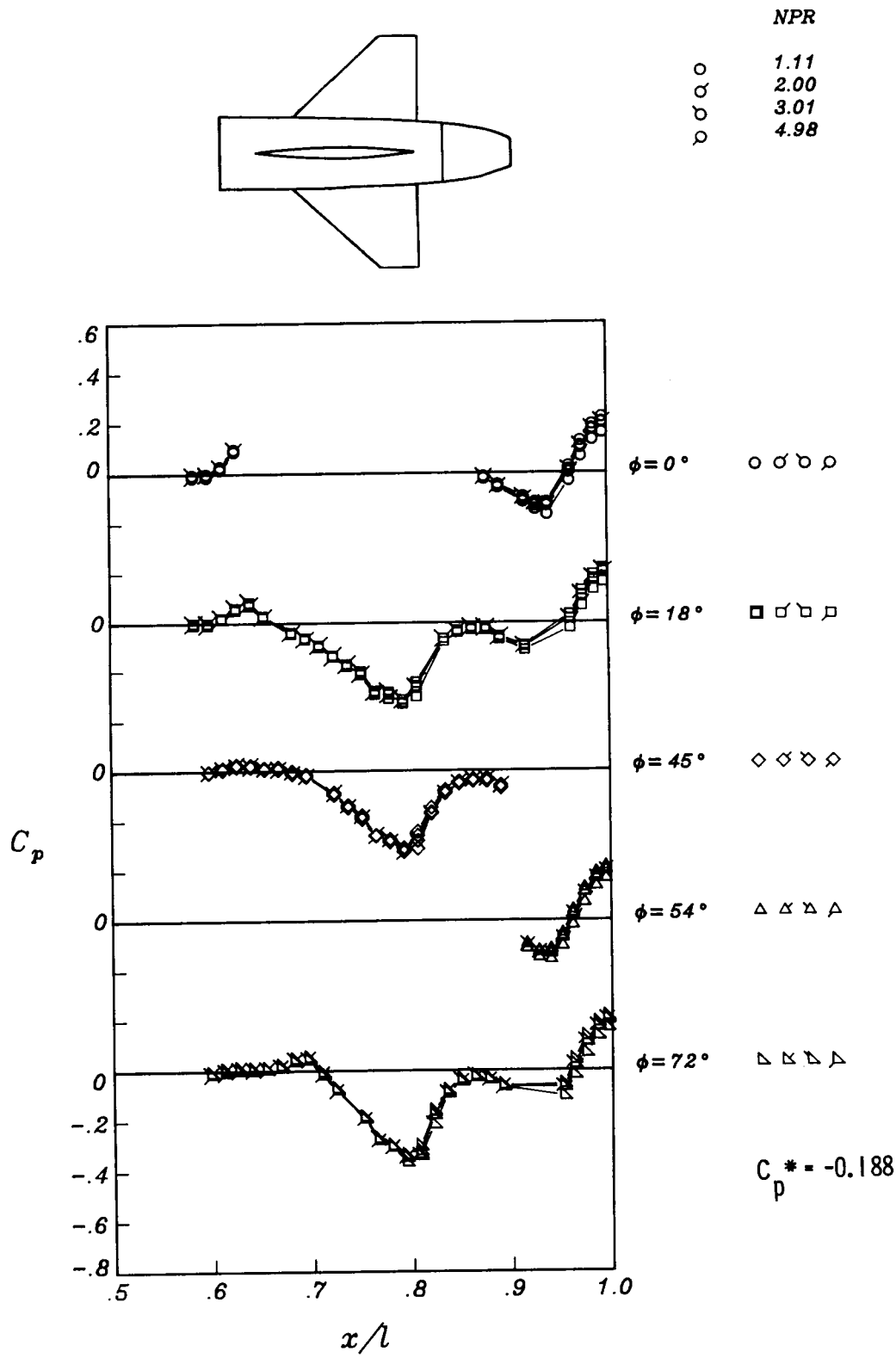
(b) $M = 0.95$; $\alpha = 0.02°$.

Figure 9. Continued.



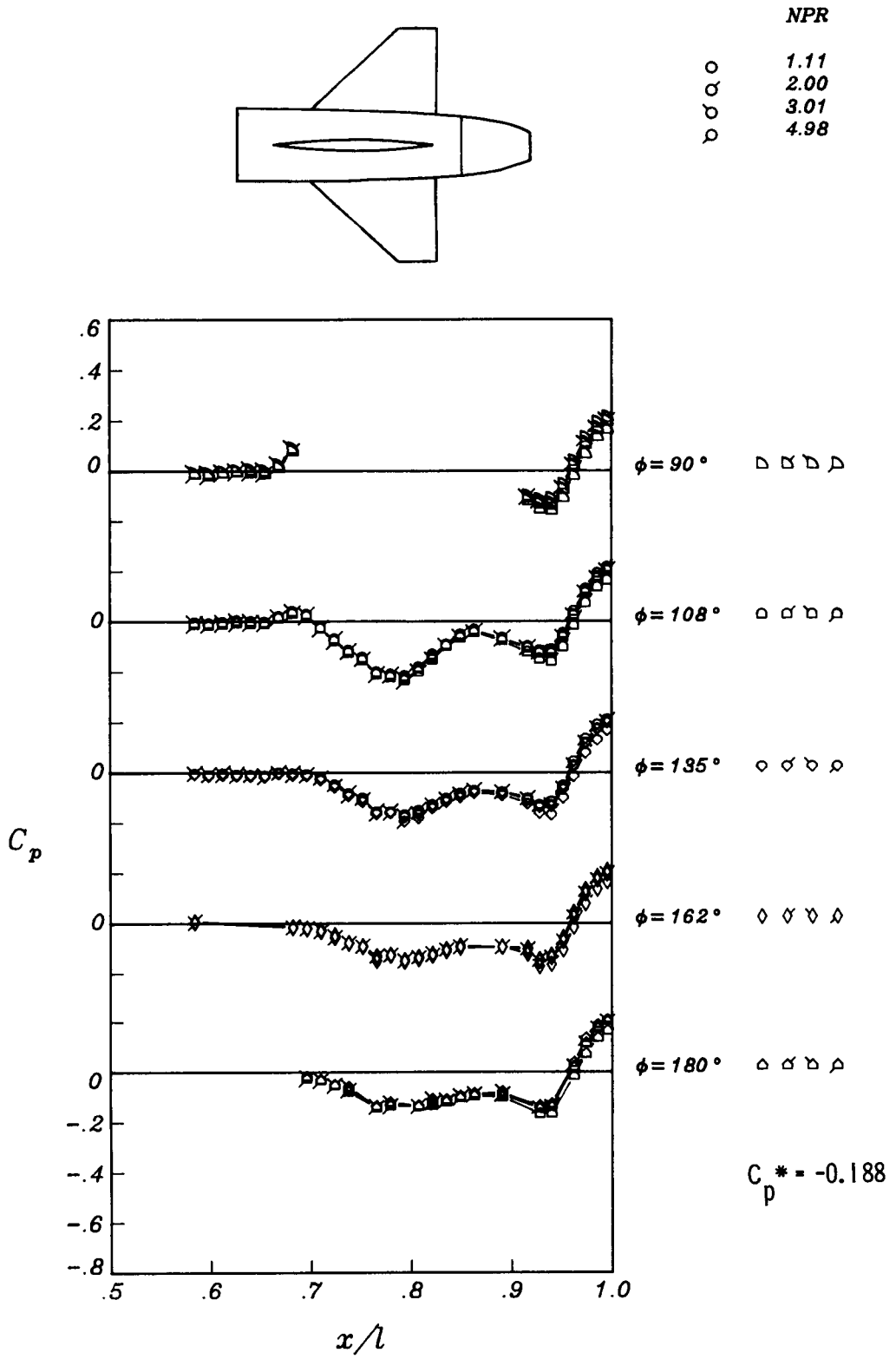
(b) Concluded.

Figure 9. Continued.



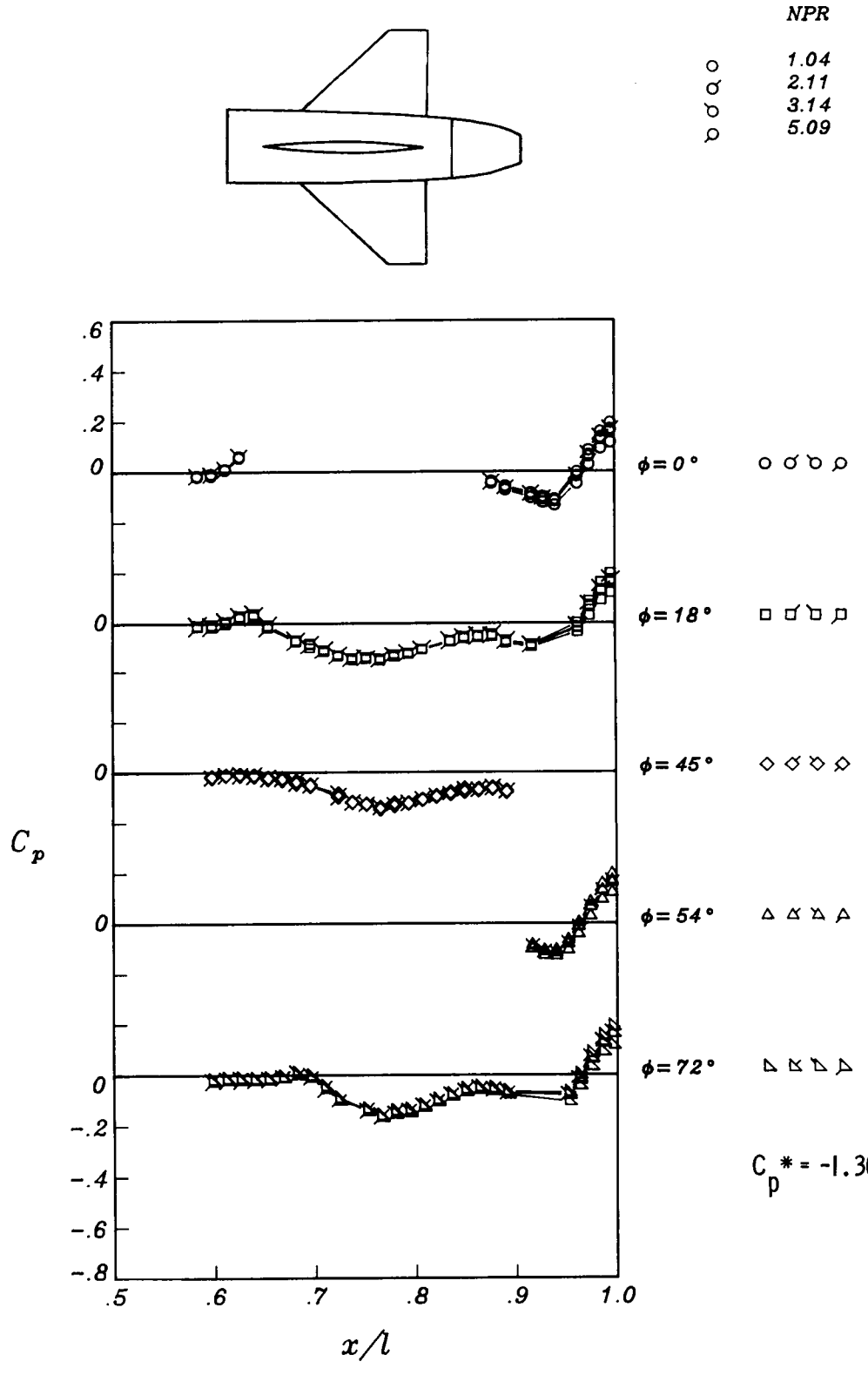
(c) $M = 0.90$; $\alpha = 0.02°$.

Figure 9. Continued.



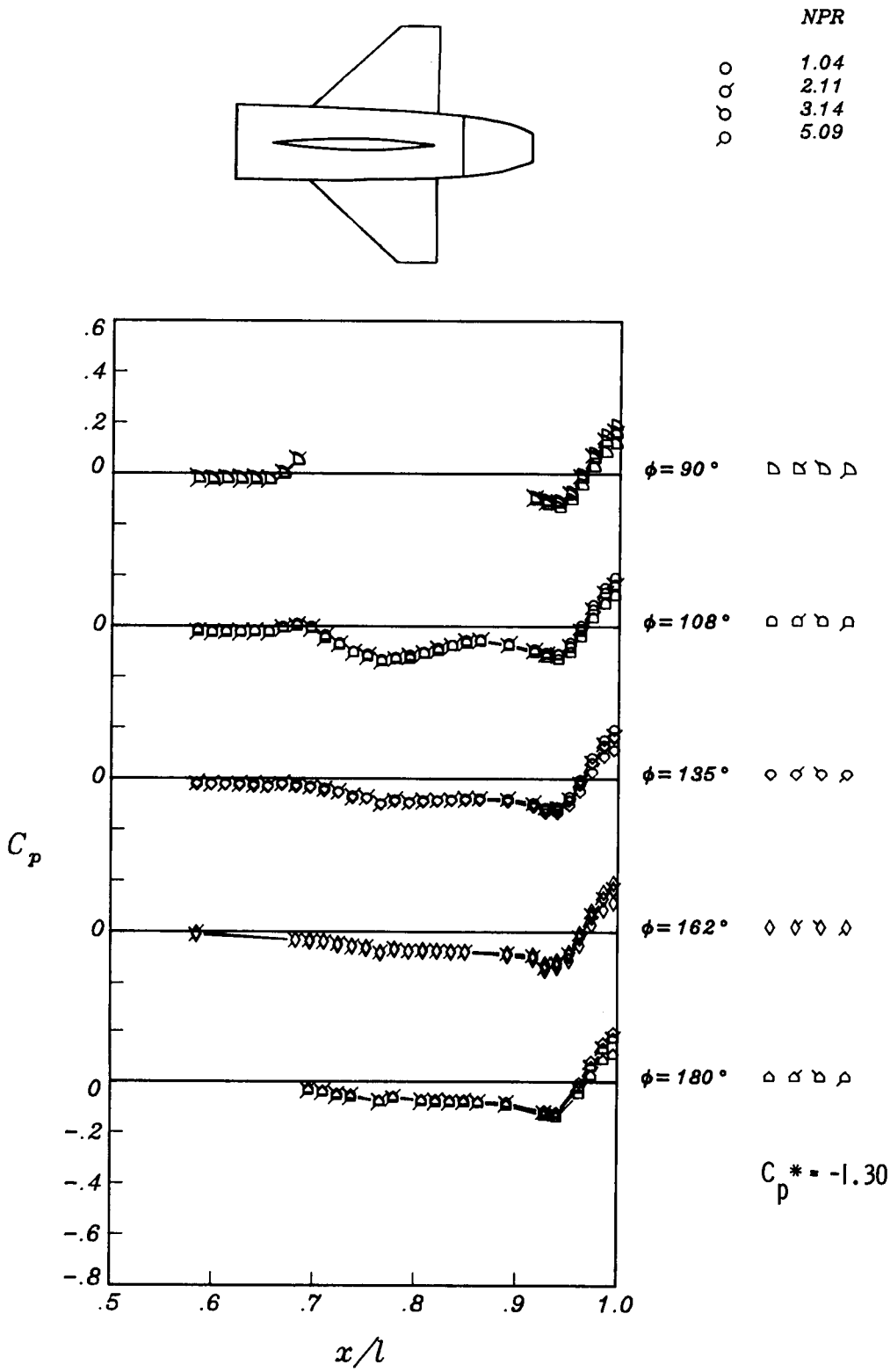
(c) Concluded.

Figure 9. Continued.



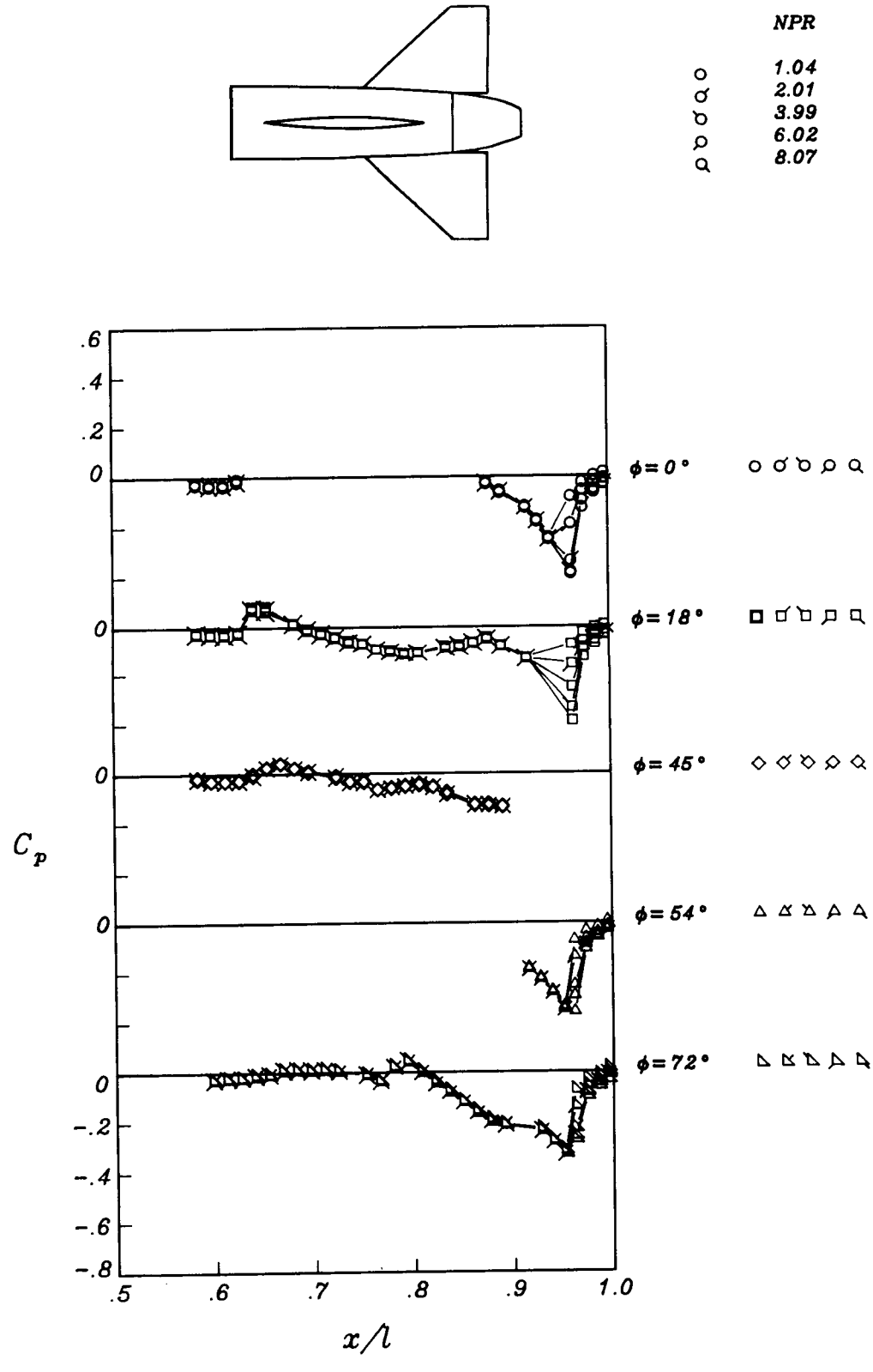
(d) $M = 0.60$; $\alpha = 0.01°$.

Figure 9. Concluded.



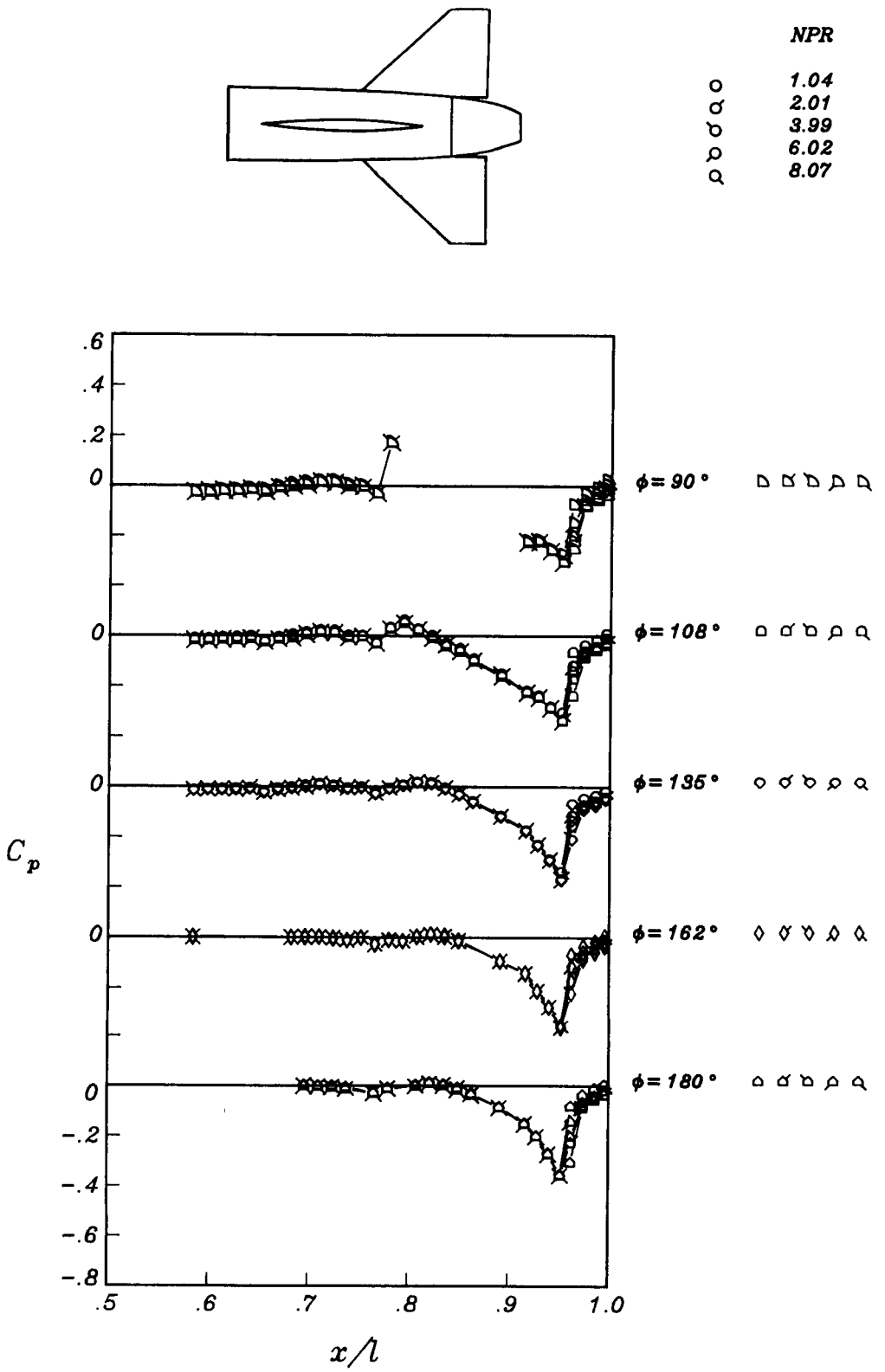
(d) Concluded.

Figure 9. Concluded.



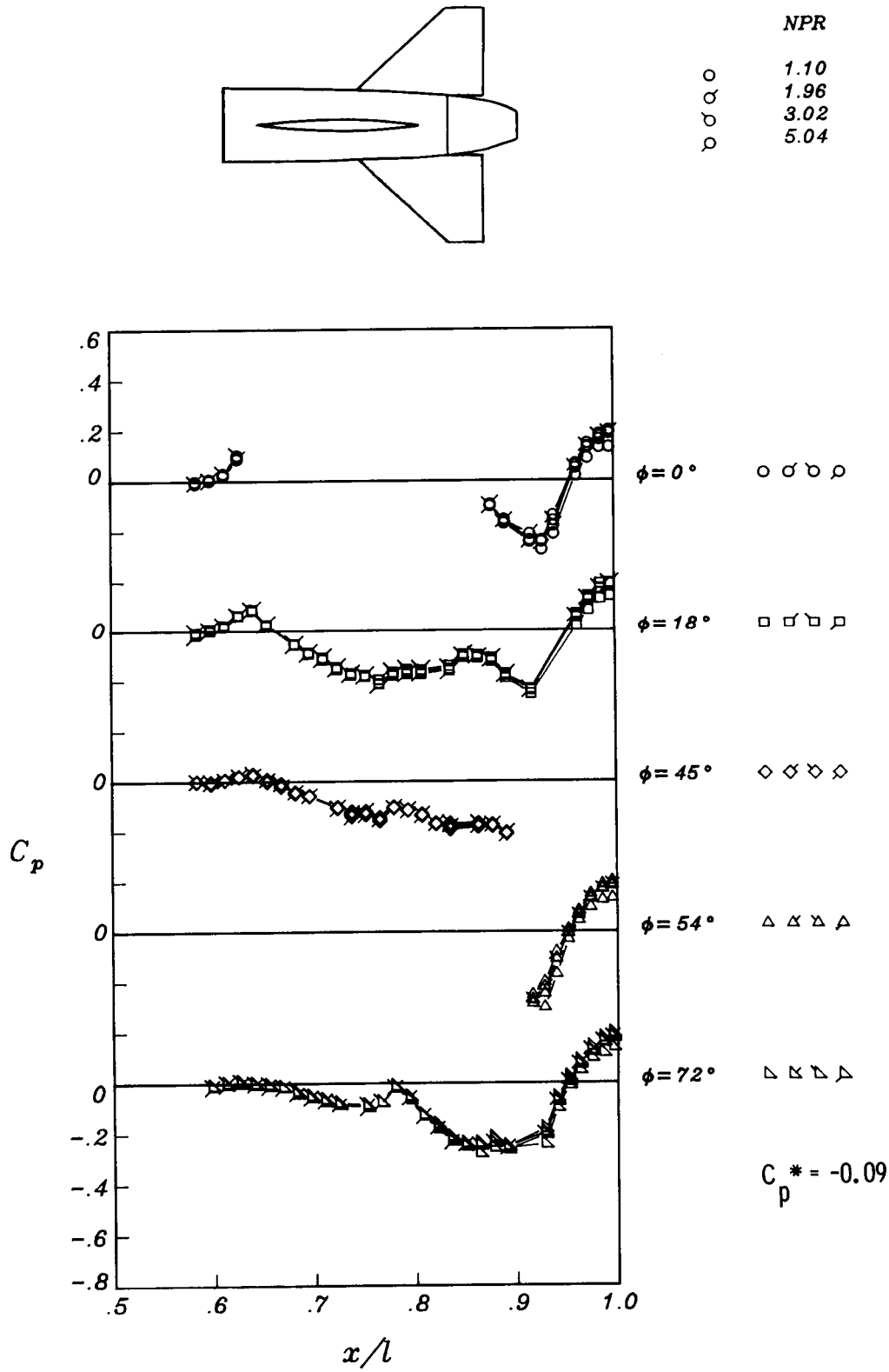
(a) $M = 1.20$; $\alpha = 0.02°$.

Figure 10. Effect of nozzle pressure ratio on nozzle/afterbody pressures for body with horizontal tails in location and vertical tail in forward location.



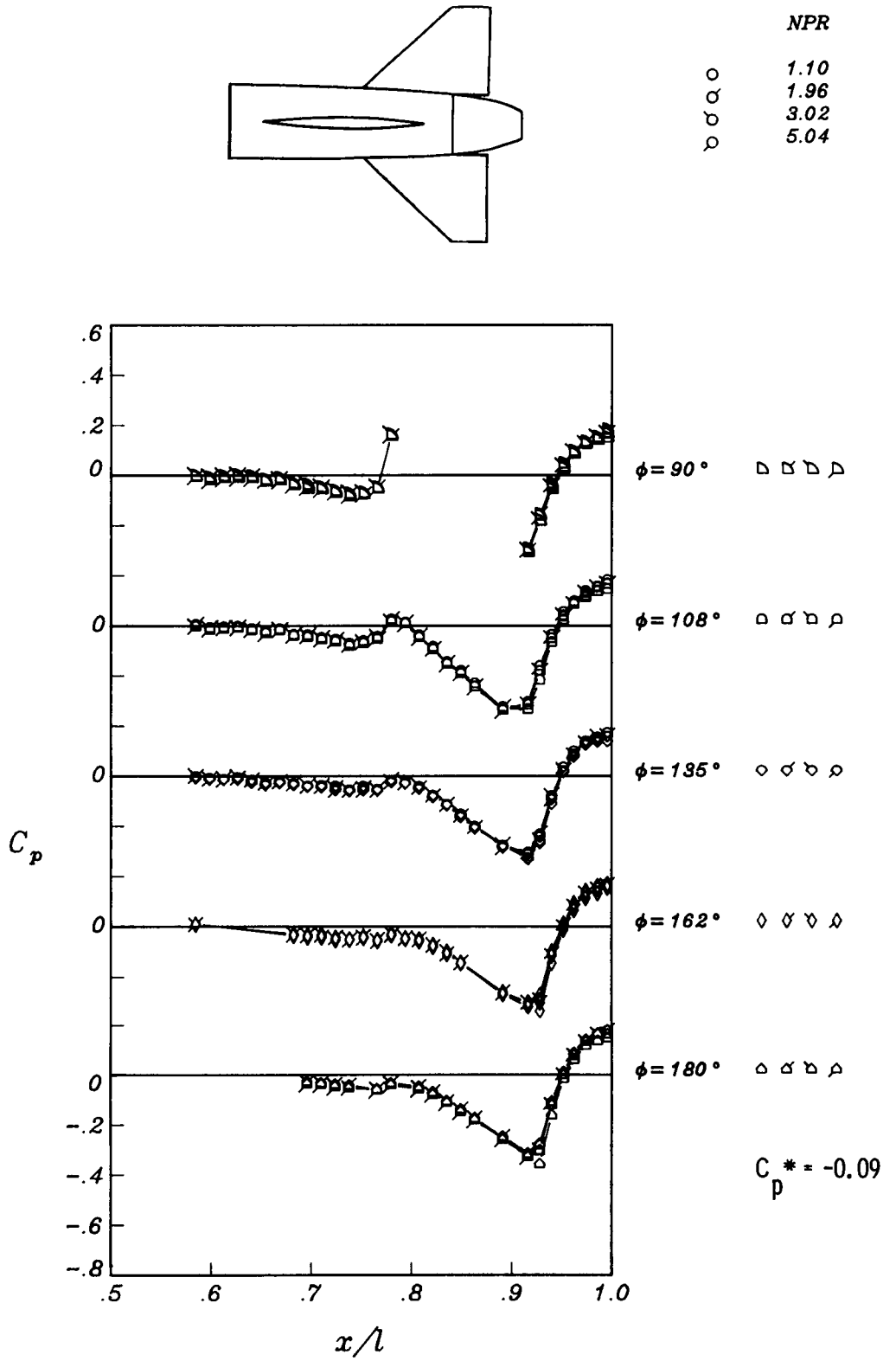
(a) Concluded.

Figure 10. Continued.



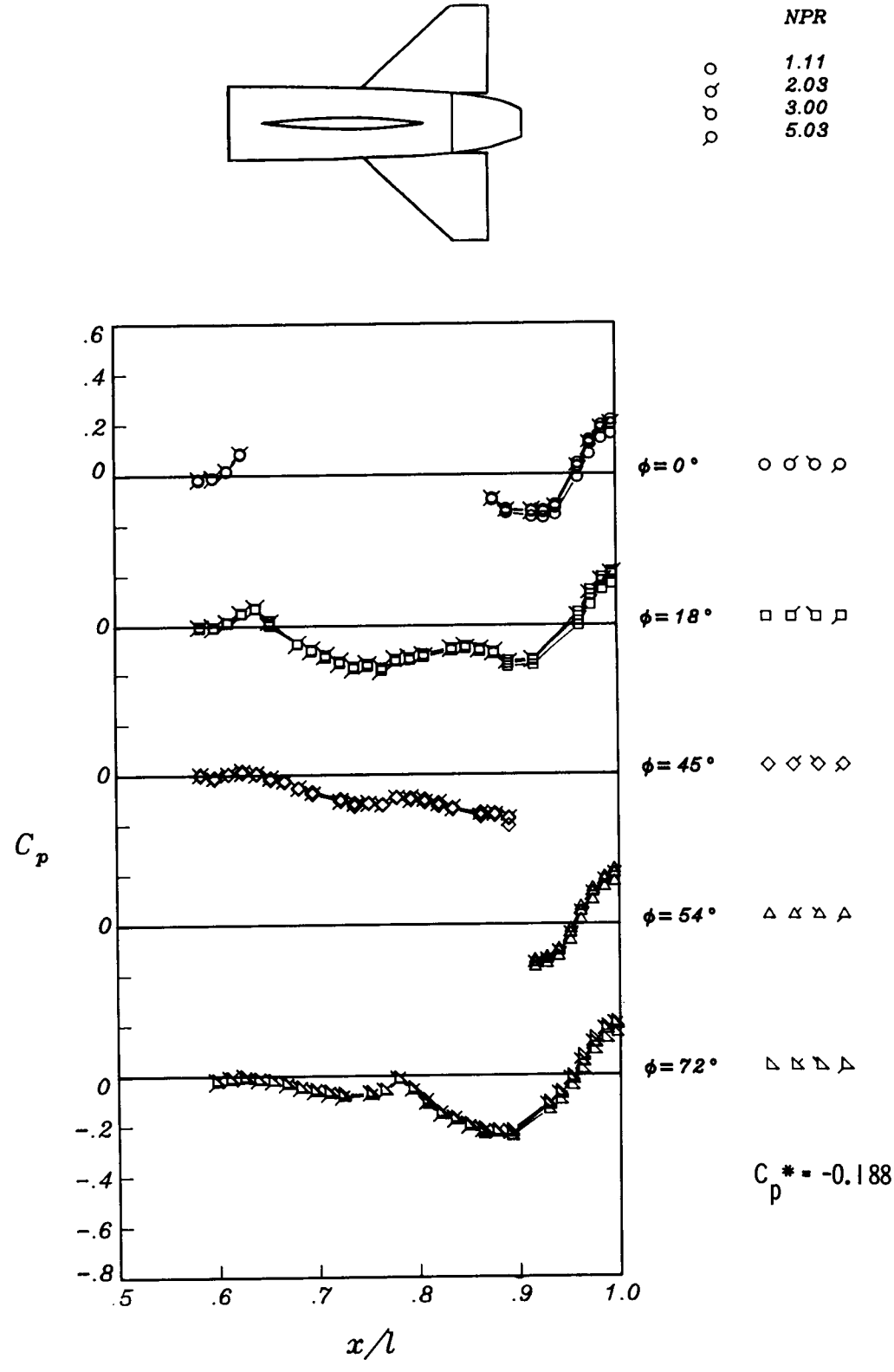
(b) $M = 0.95$; $\alpha = 0.02°$.

Figure 10. Continued.



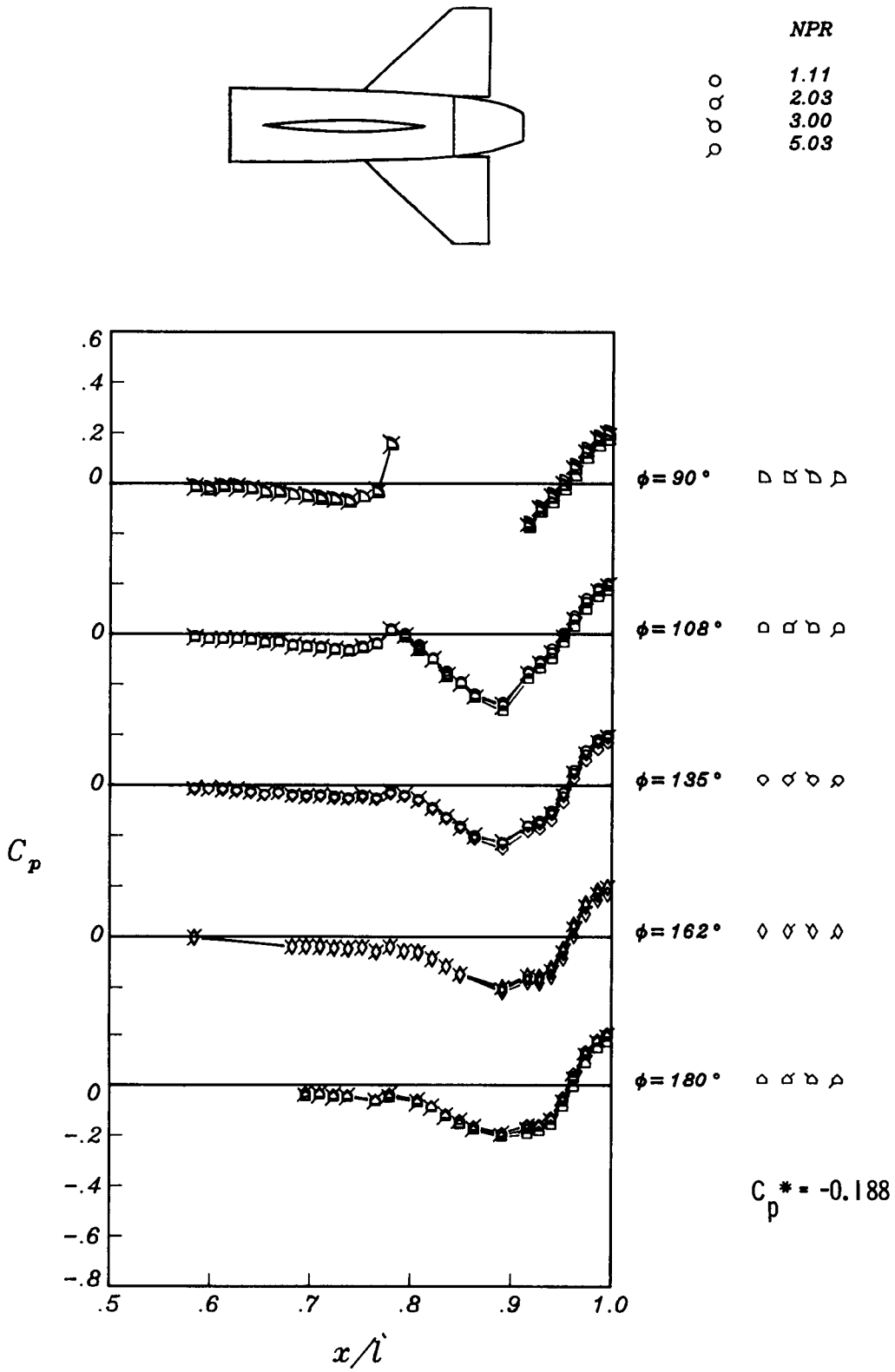
(b) Concluded.

Figure 10. Continued.



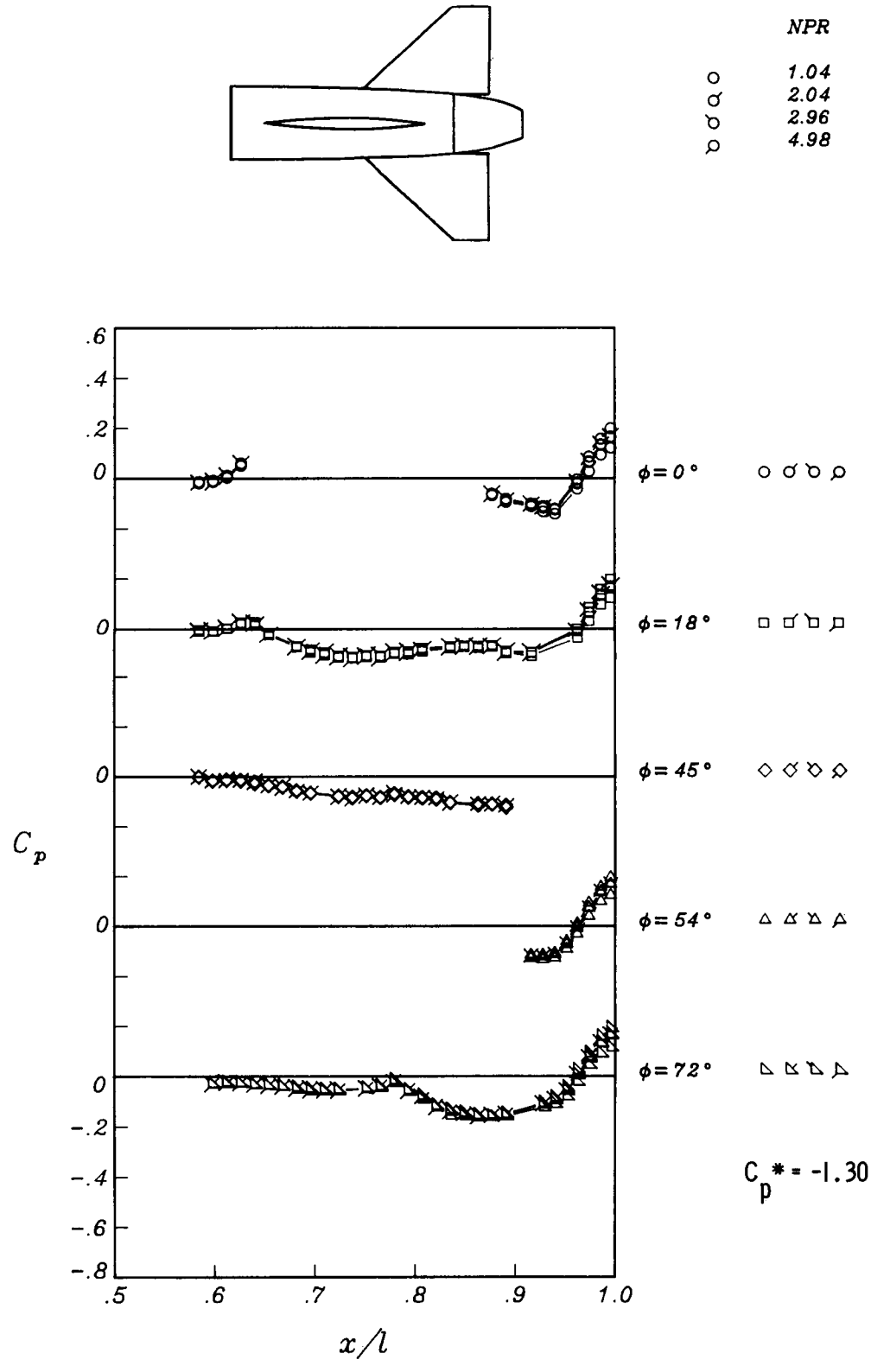
(c) $M = 0.90$; $\alpha = 0.02°$.

Figure 10. Continued.



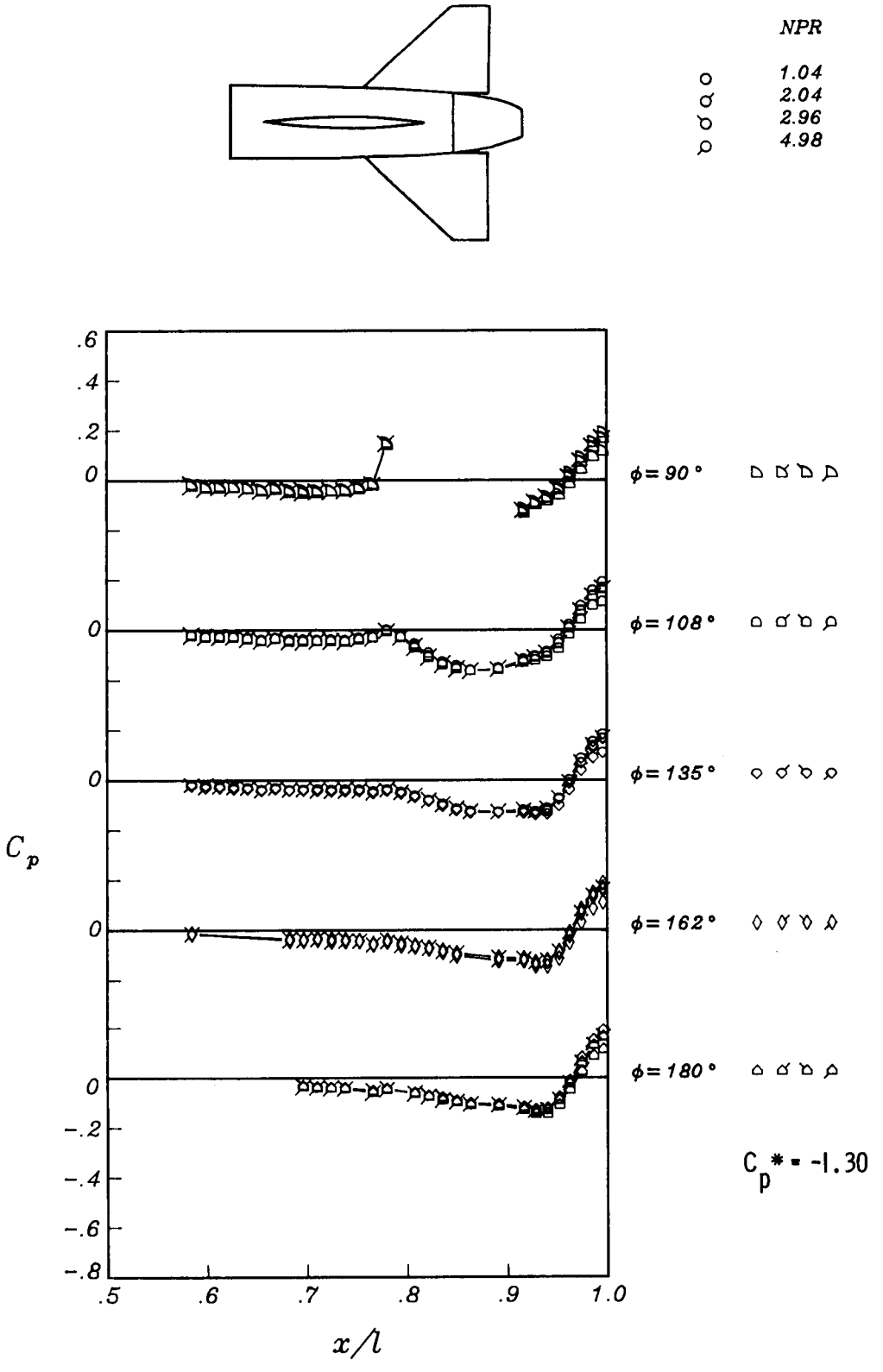
(c) Concluded.

Figure 10. Continued.



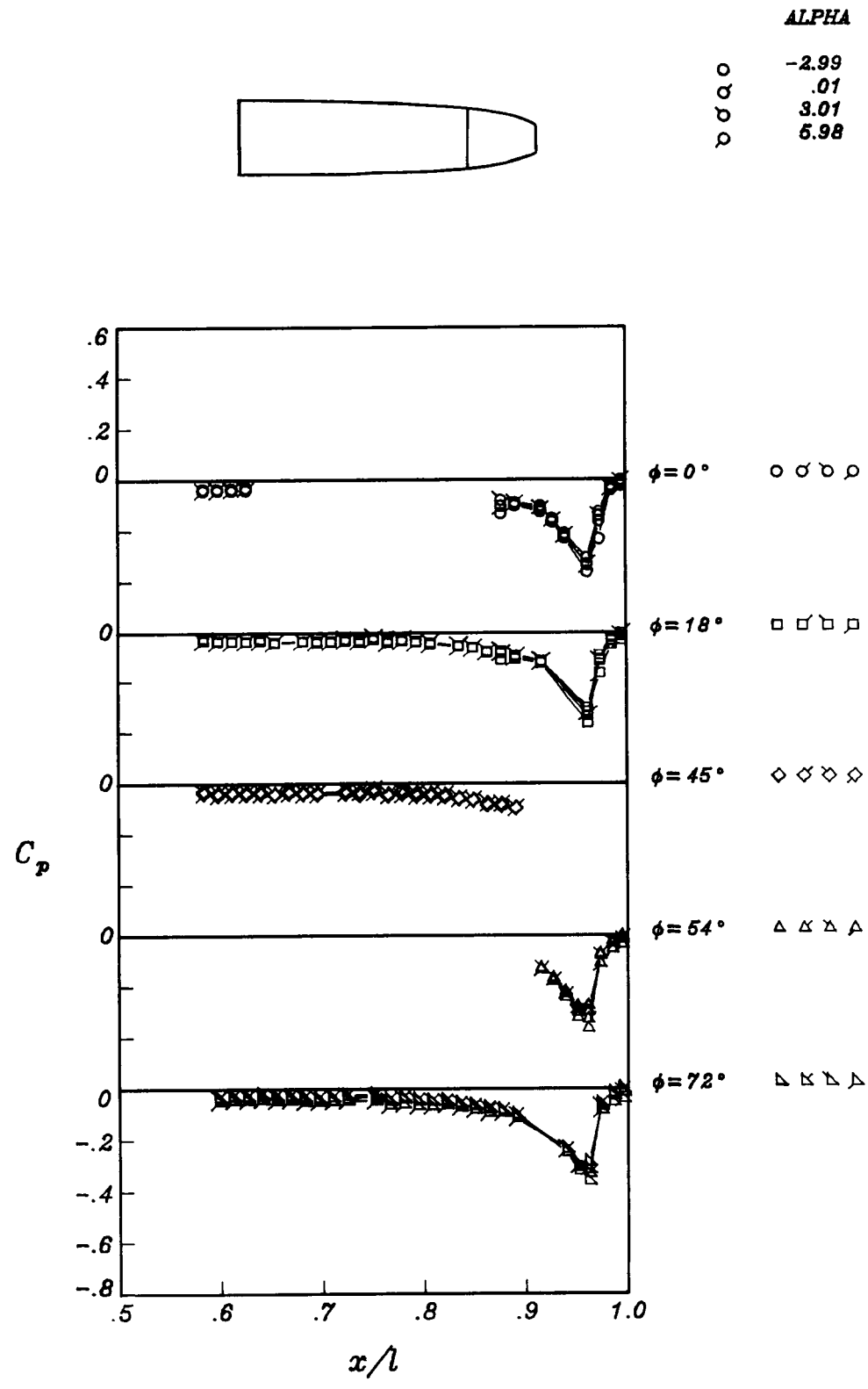
(d) $M = 0.60$; $\alpha = 0.03°$.

Figure 10. Continued.



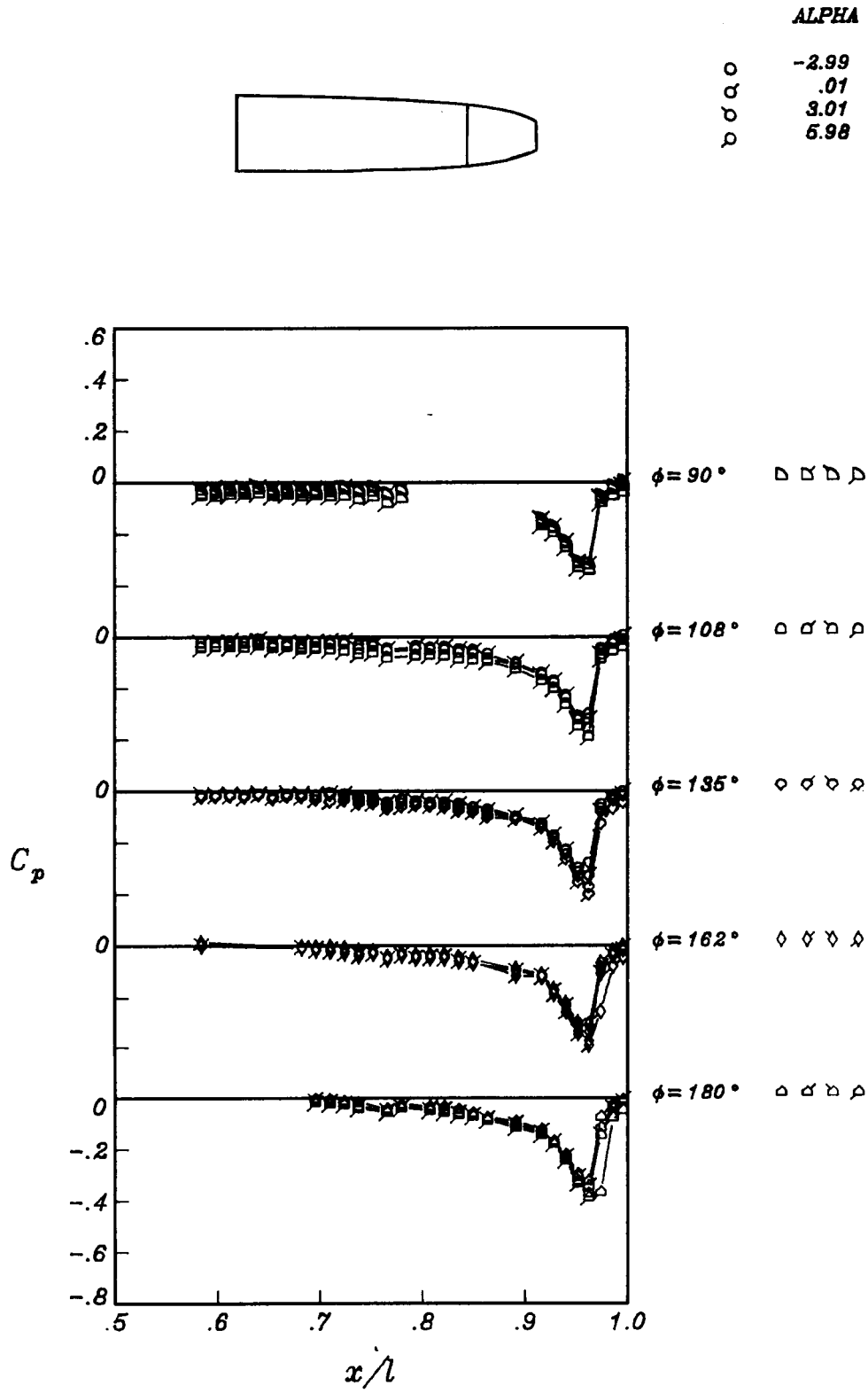
(d) Concluded.

Figure 10. Concluded.



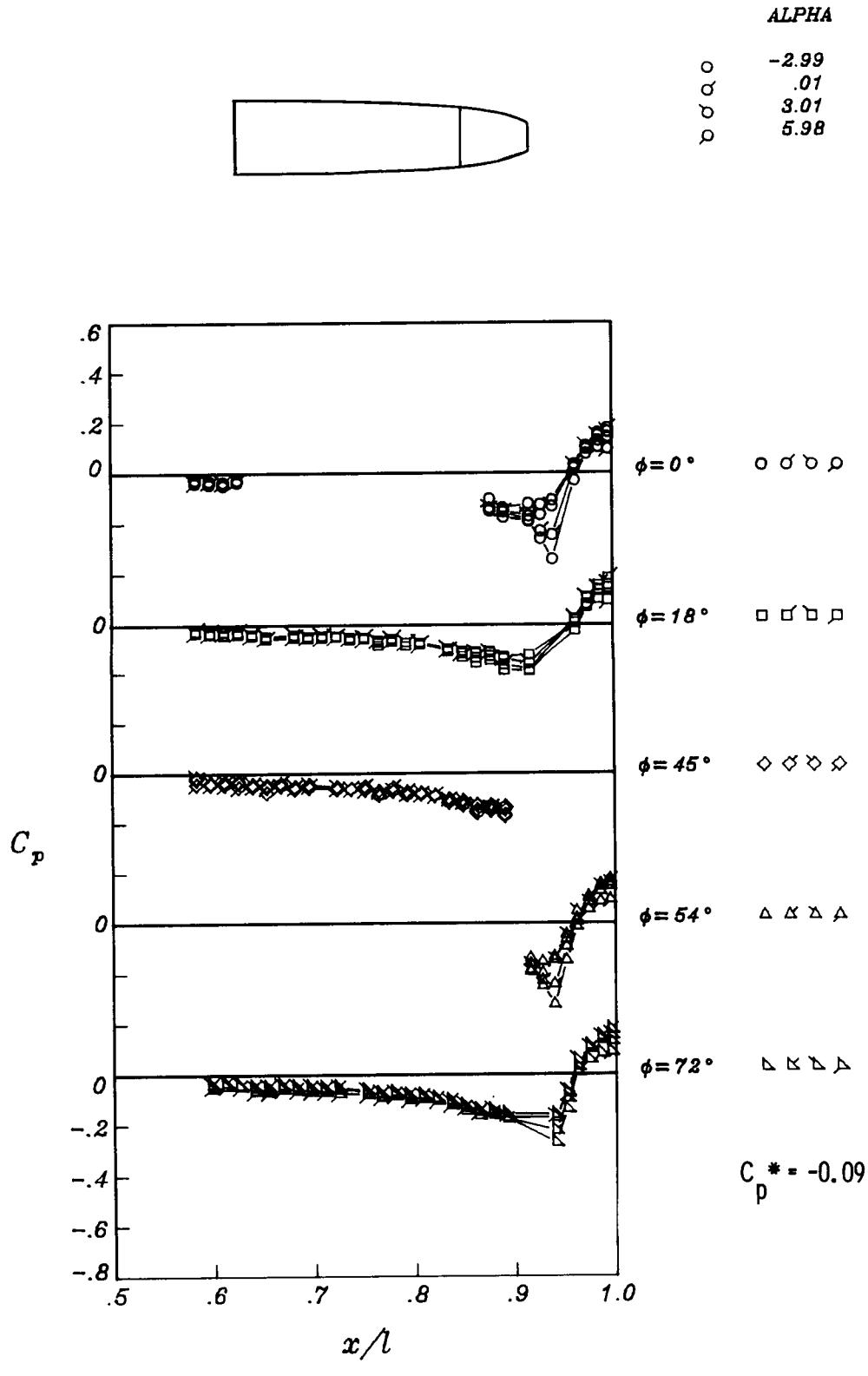
(a) $M = 1.20$; NPR = 1.037.

Figure 11. Effect of angle of attack on nozzle/afterbody pressures for body alone.



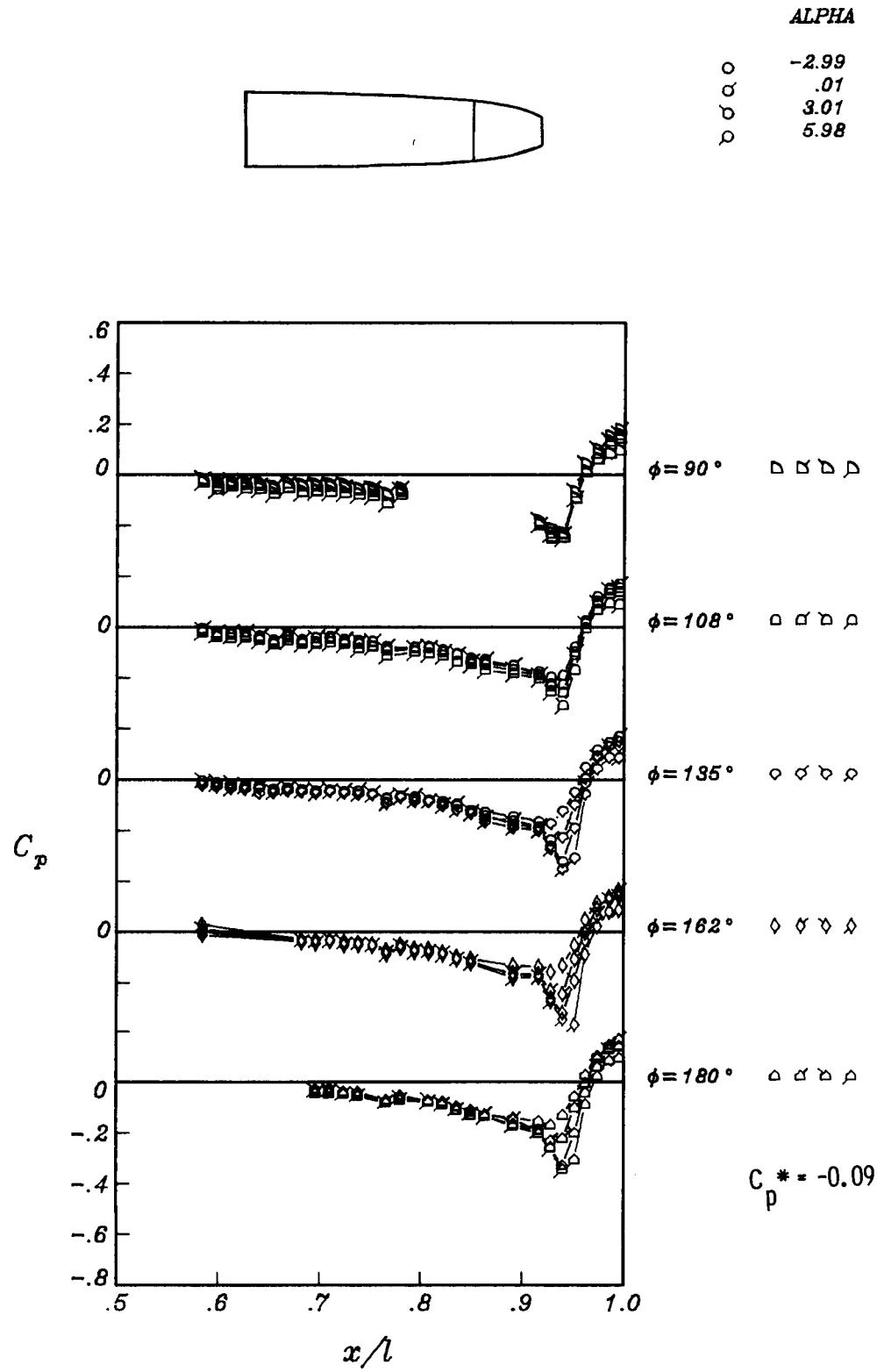
(a) Concluded.

Figure 11. Continued.



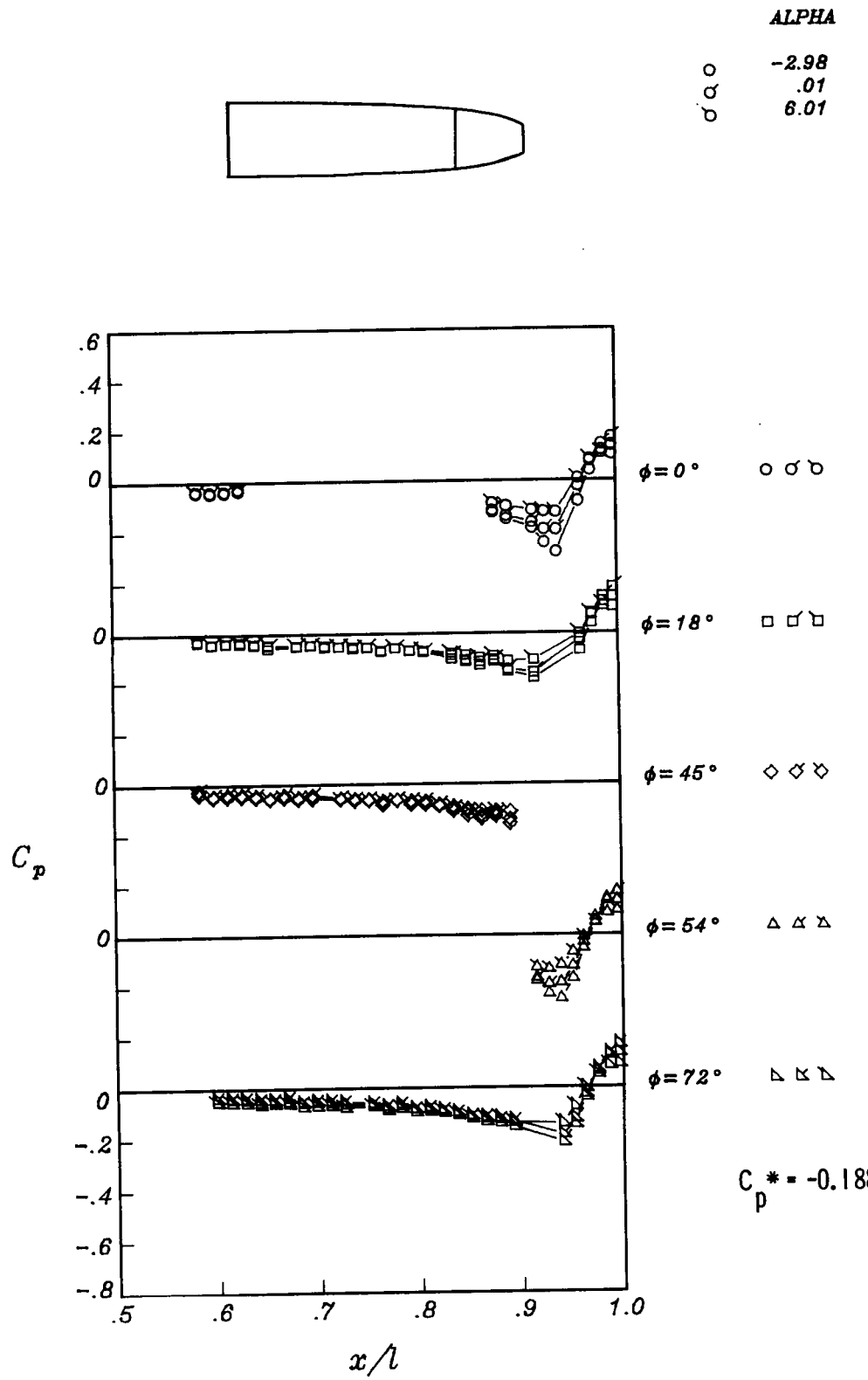
(b) $M = 0.95$; NPR = 1.115.

Figure 11. Continued.



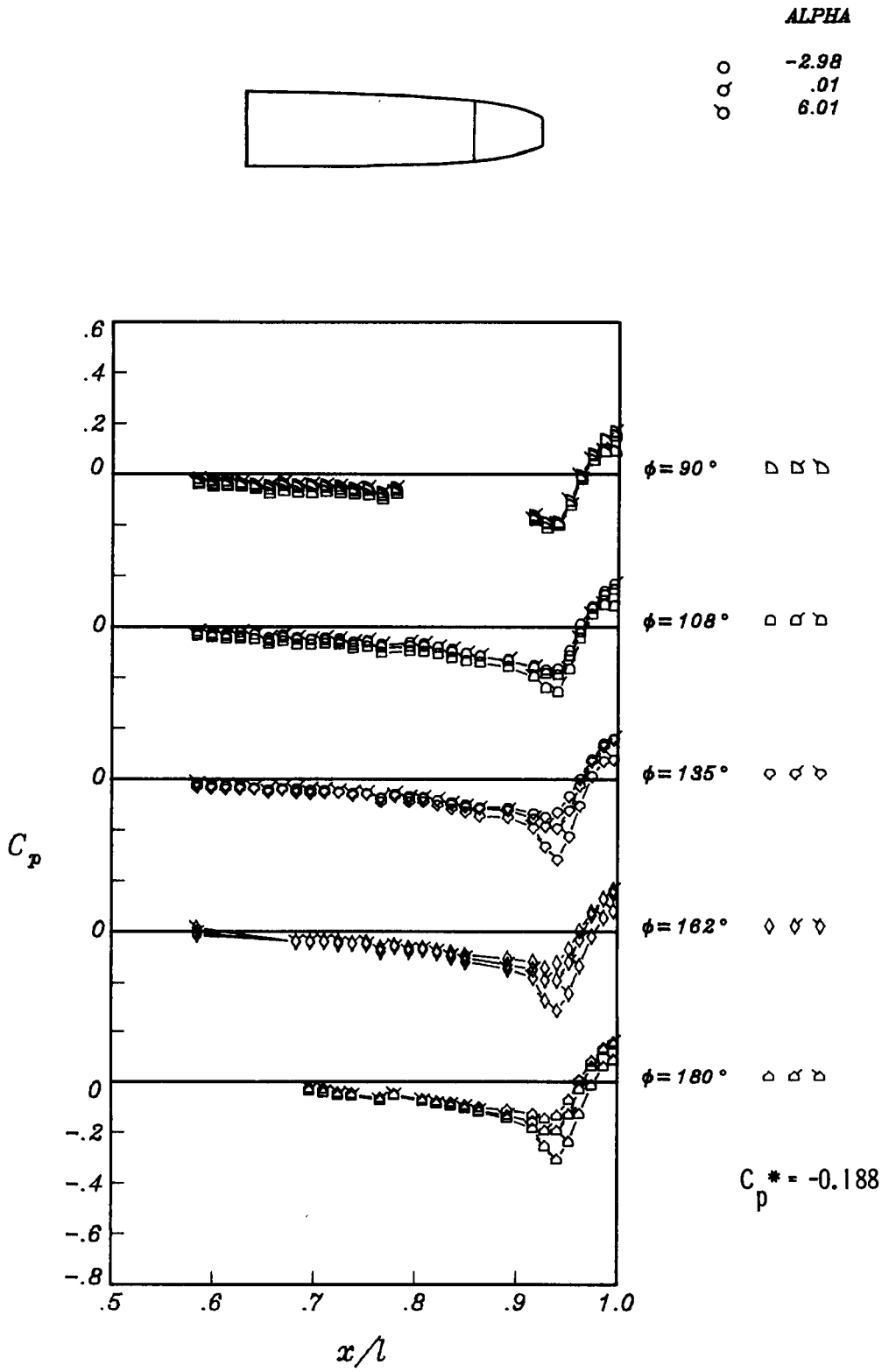
(b) Concluded.

Figure 11. Continued.



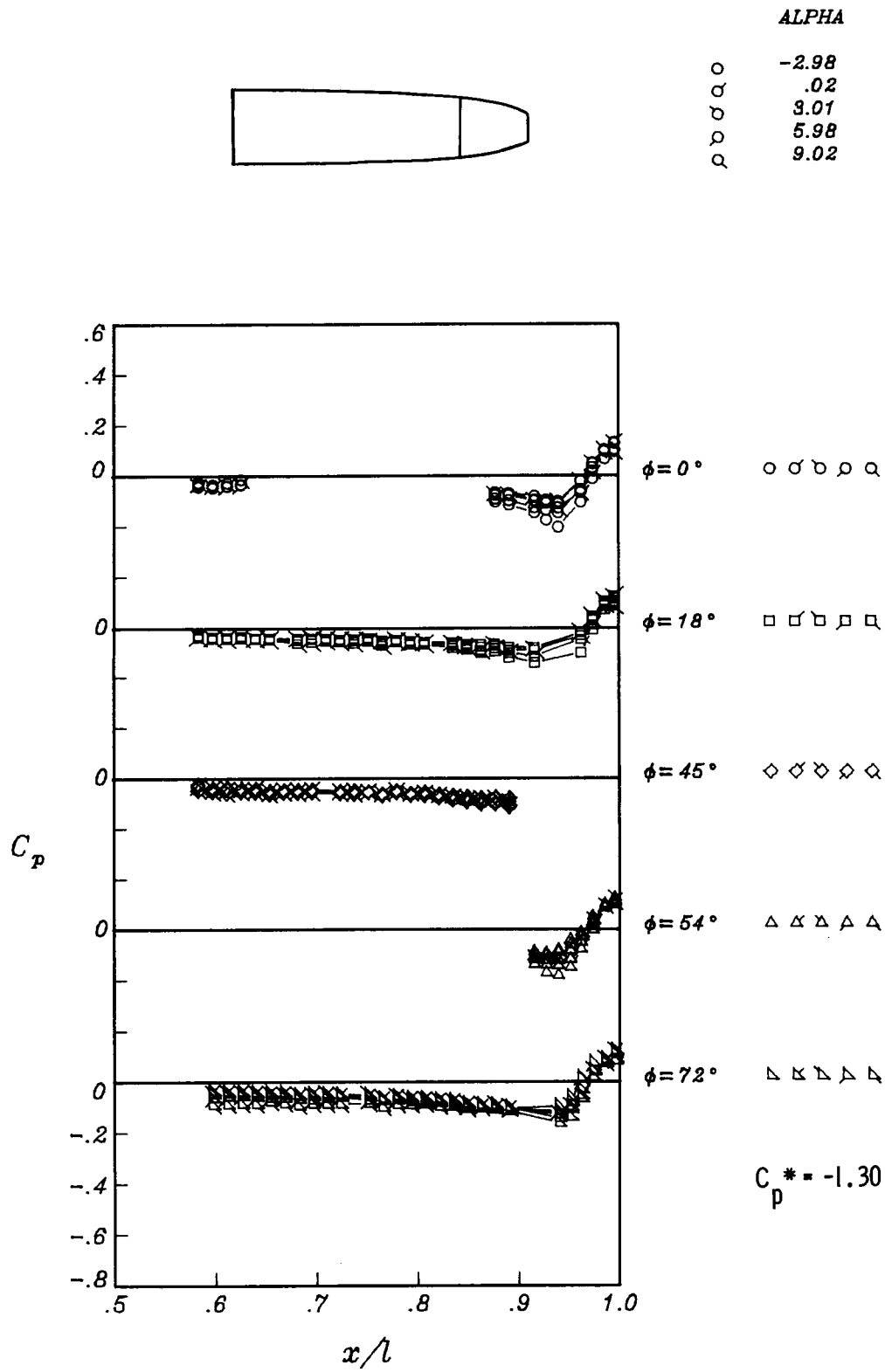
(c) $M = 0.90$; NPR = 1.111.

Figure 11. Continued.



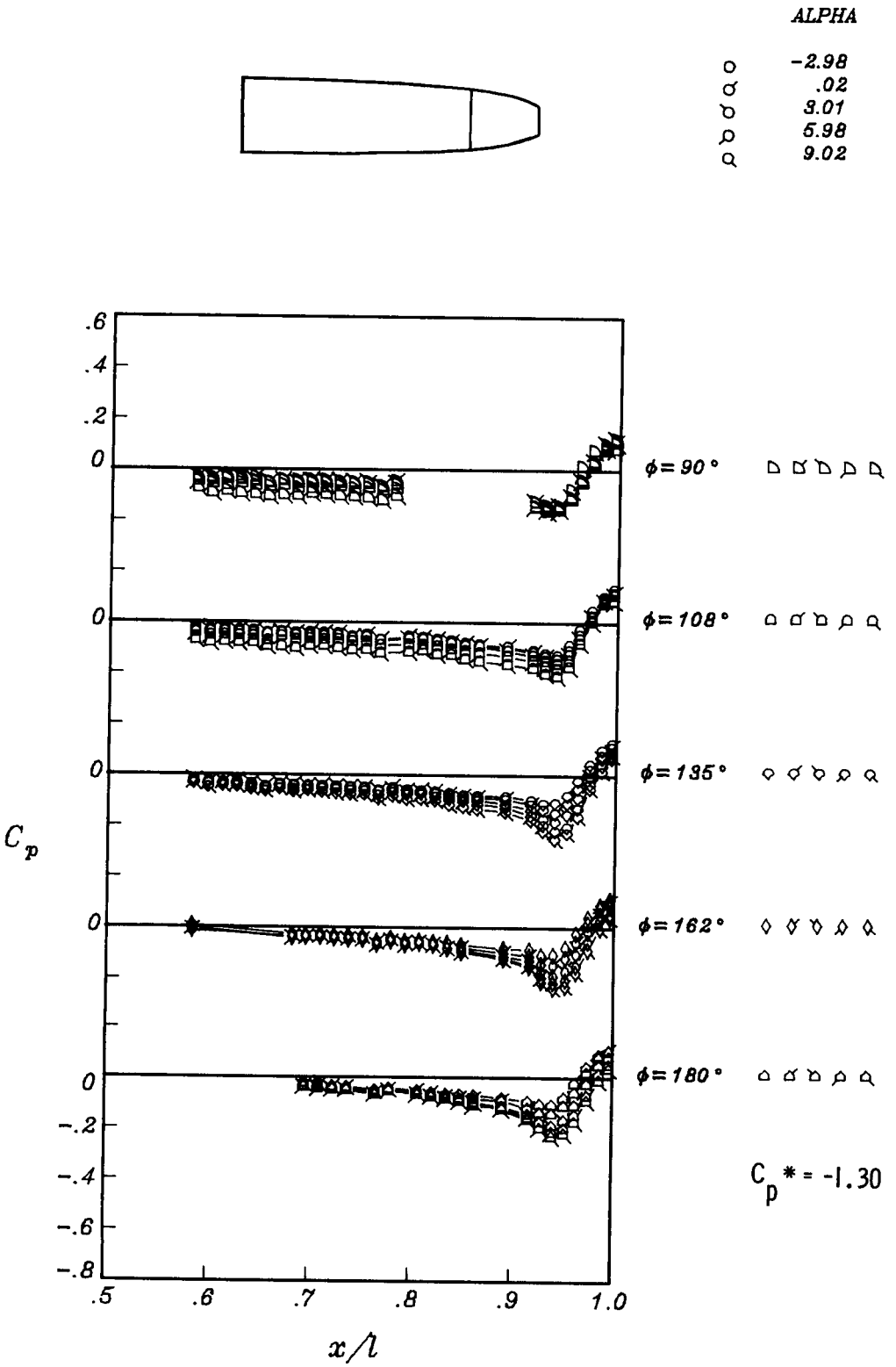
(c) Concluded.

Figure 11. Continued.



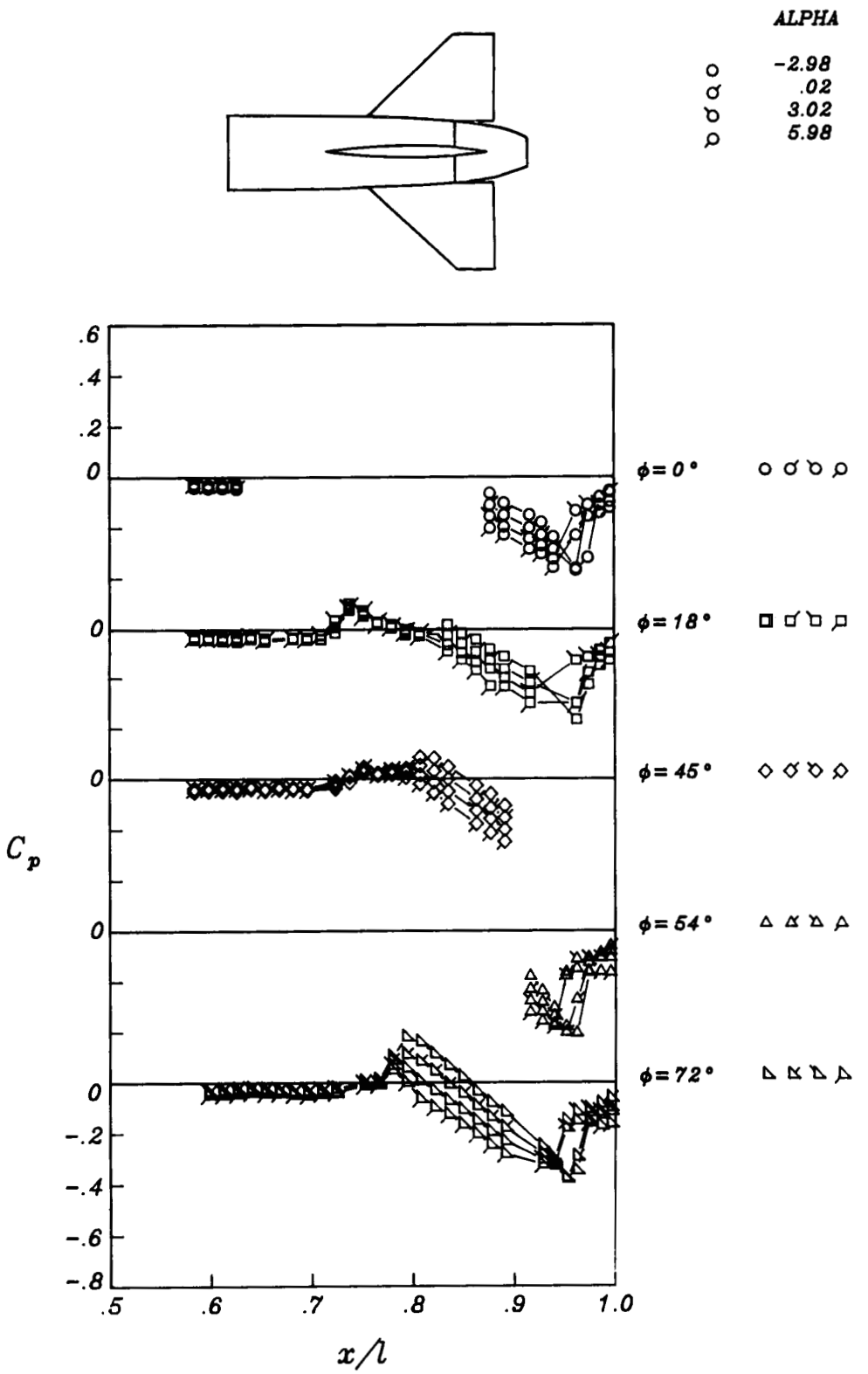
(d) $M = 0.60$; NPR = 1.051.

Figure 11. Continued.



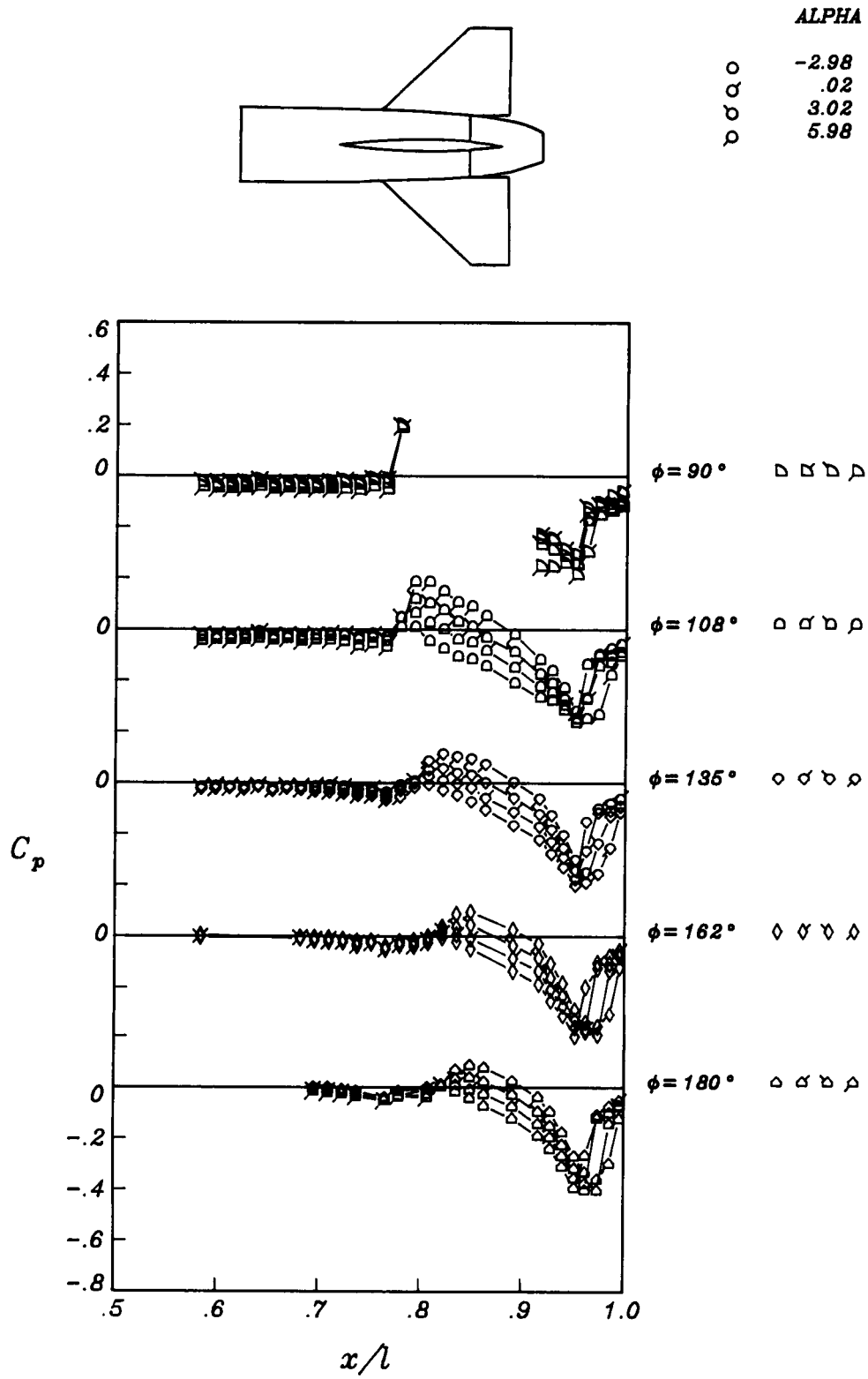
(d) Concluded.

Figure 11. Concluded.



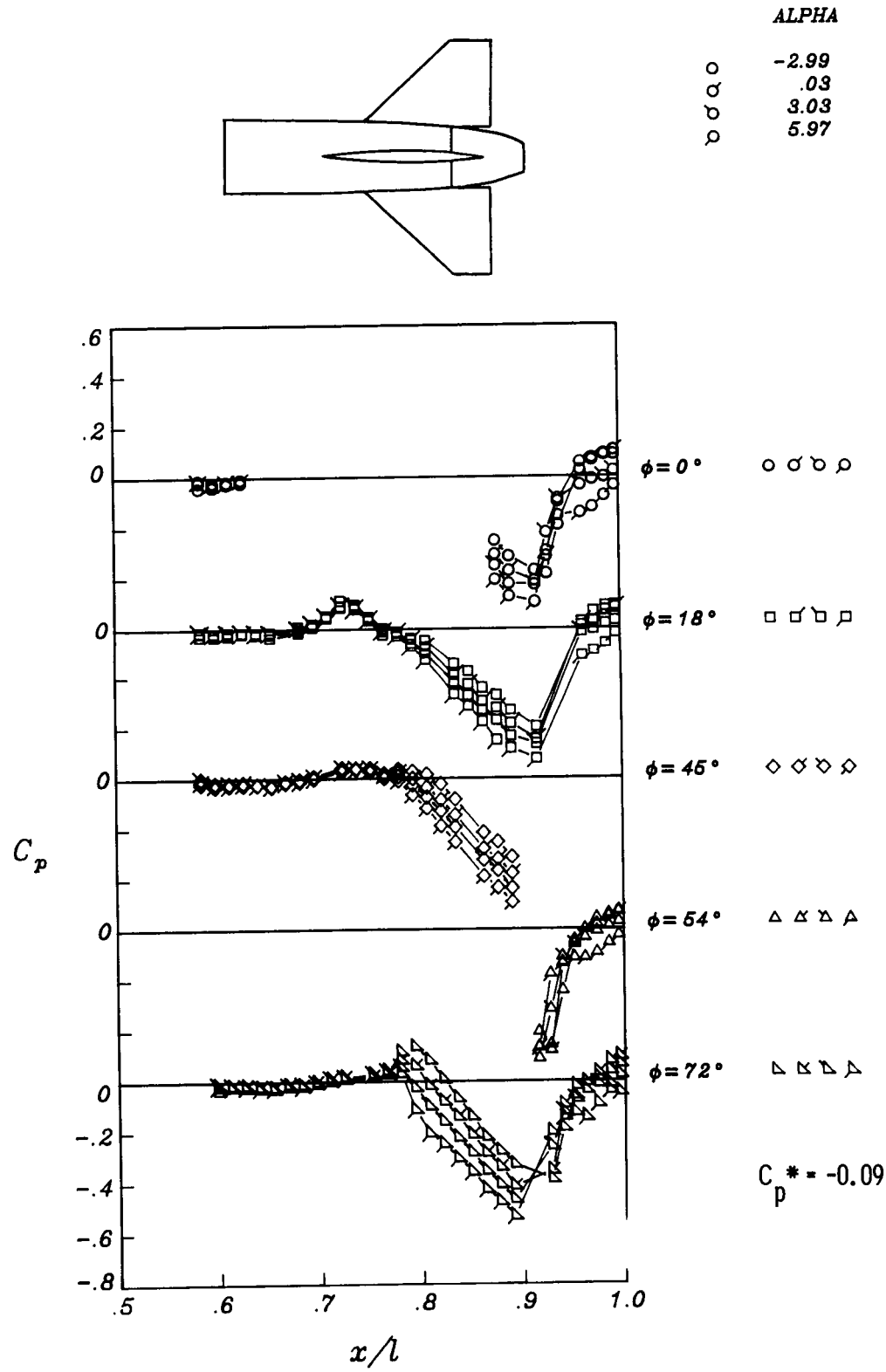
(a) $M = 1.20$; NPR = 0.985.

Figure 12. Effect of angle of attack on nozzle/afterbody pressures for body with horizontal and vertical ta in aft location.



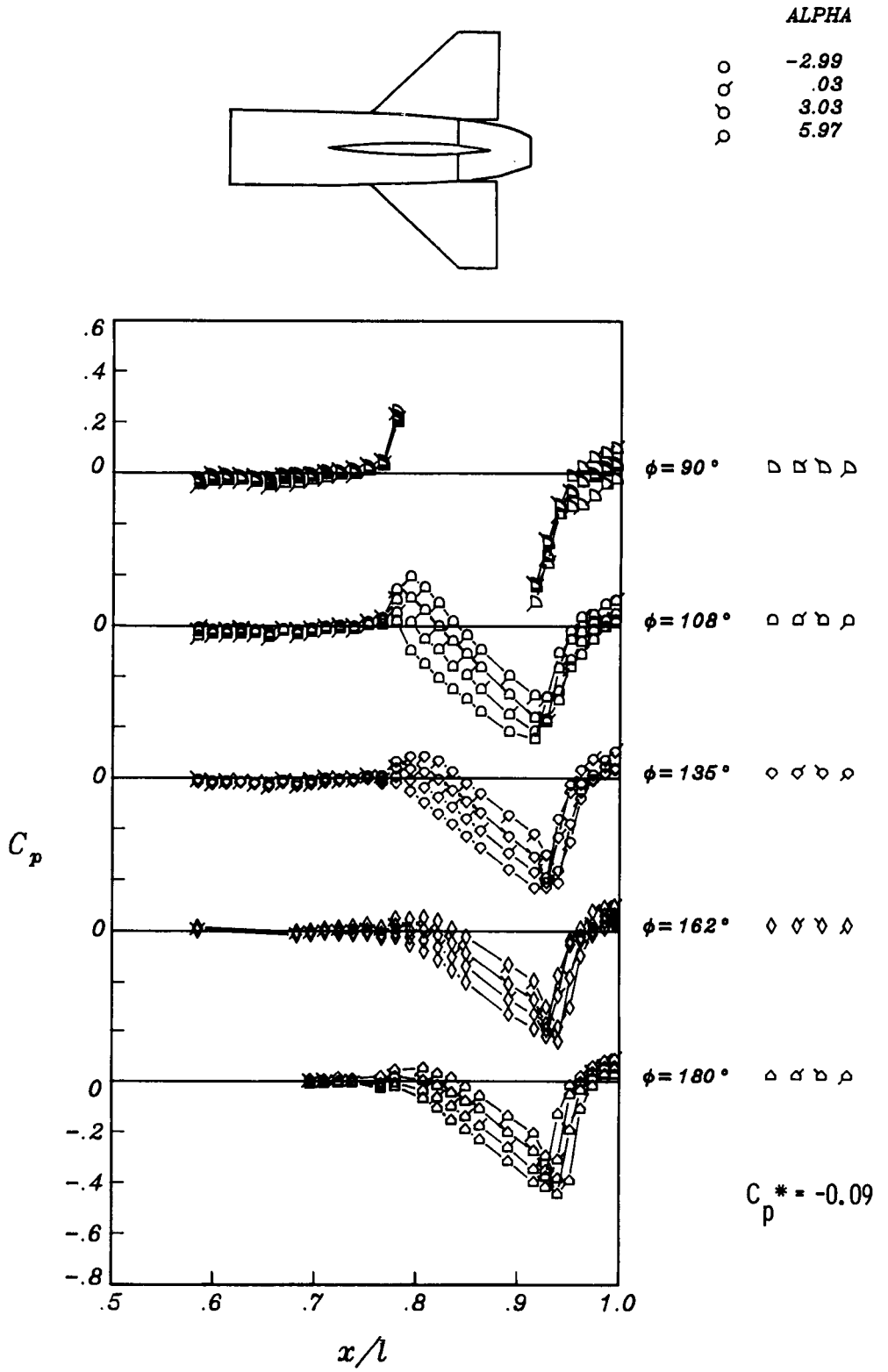
(a) Concluded.

Figure 12. Continued.



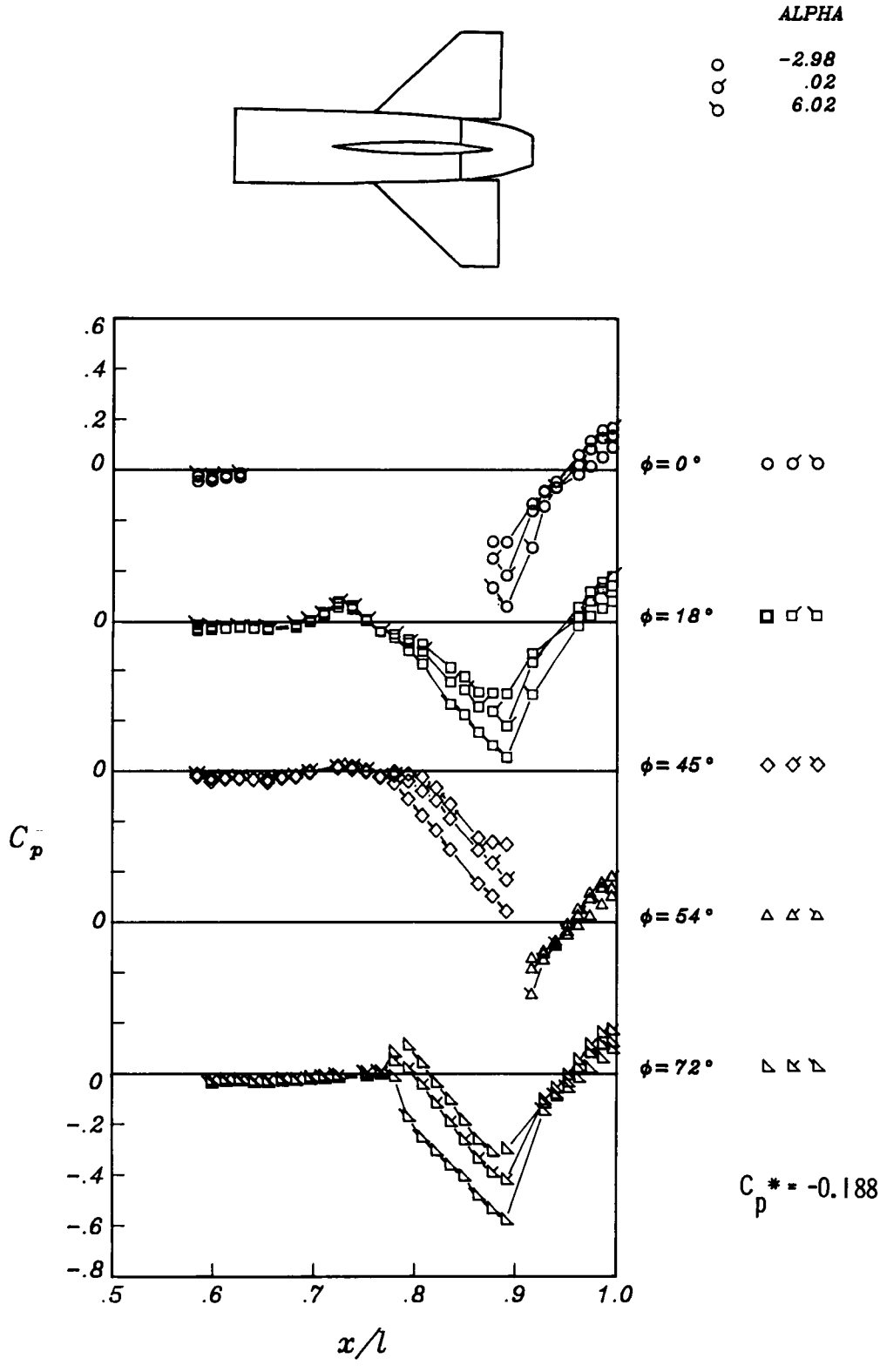
(b) $M = 0.95$; NPR = 1.067.

Figure 12. Continued.



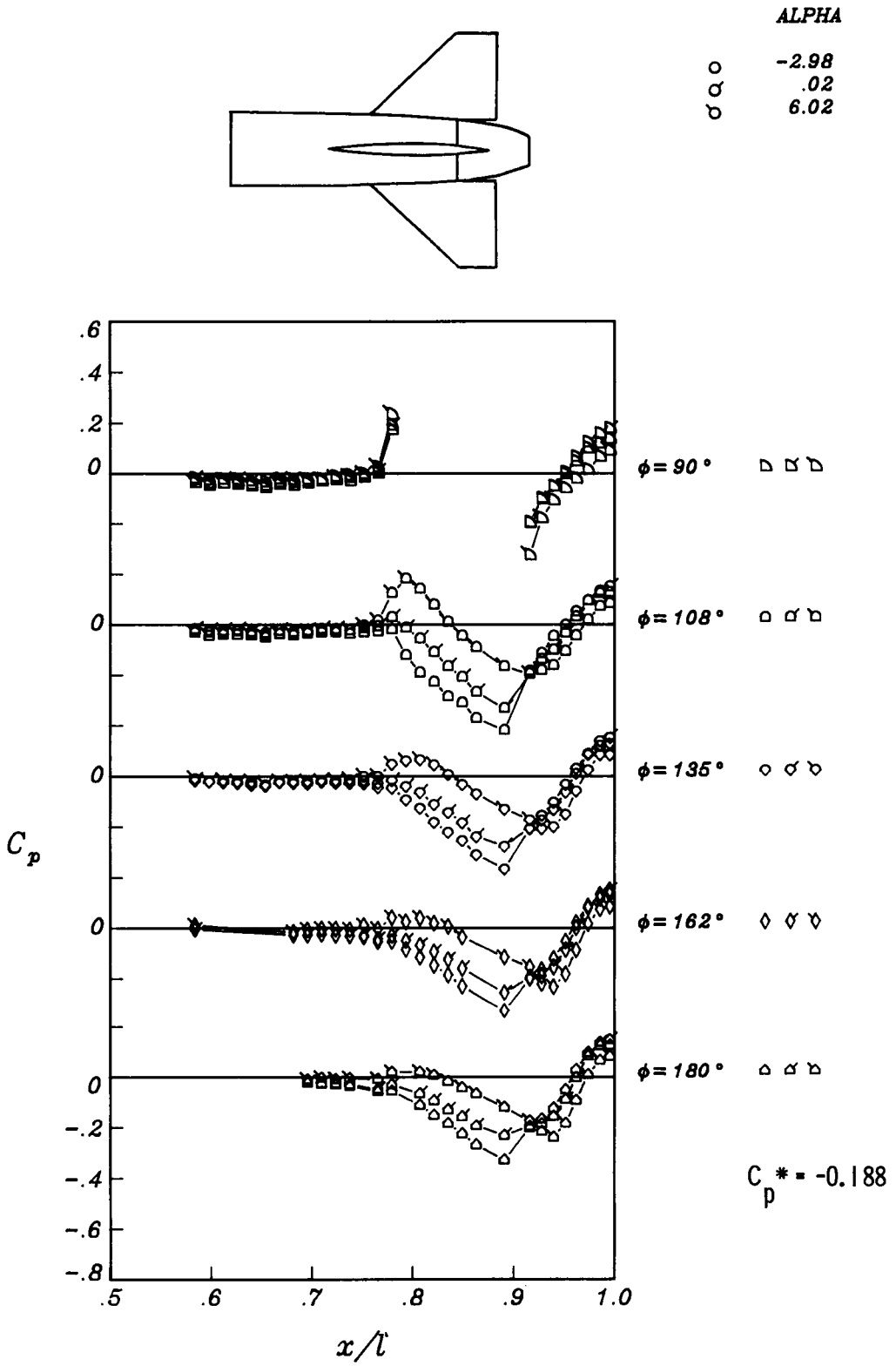
(b) Concluded.

Figure 12. Continued.



(c) $M = 0.90$; NPR = 1.099.

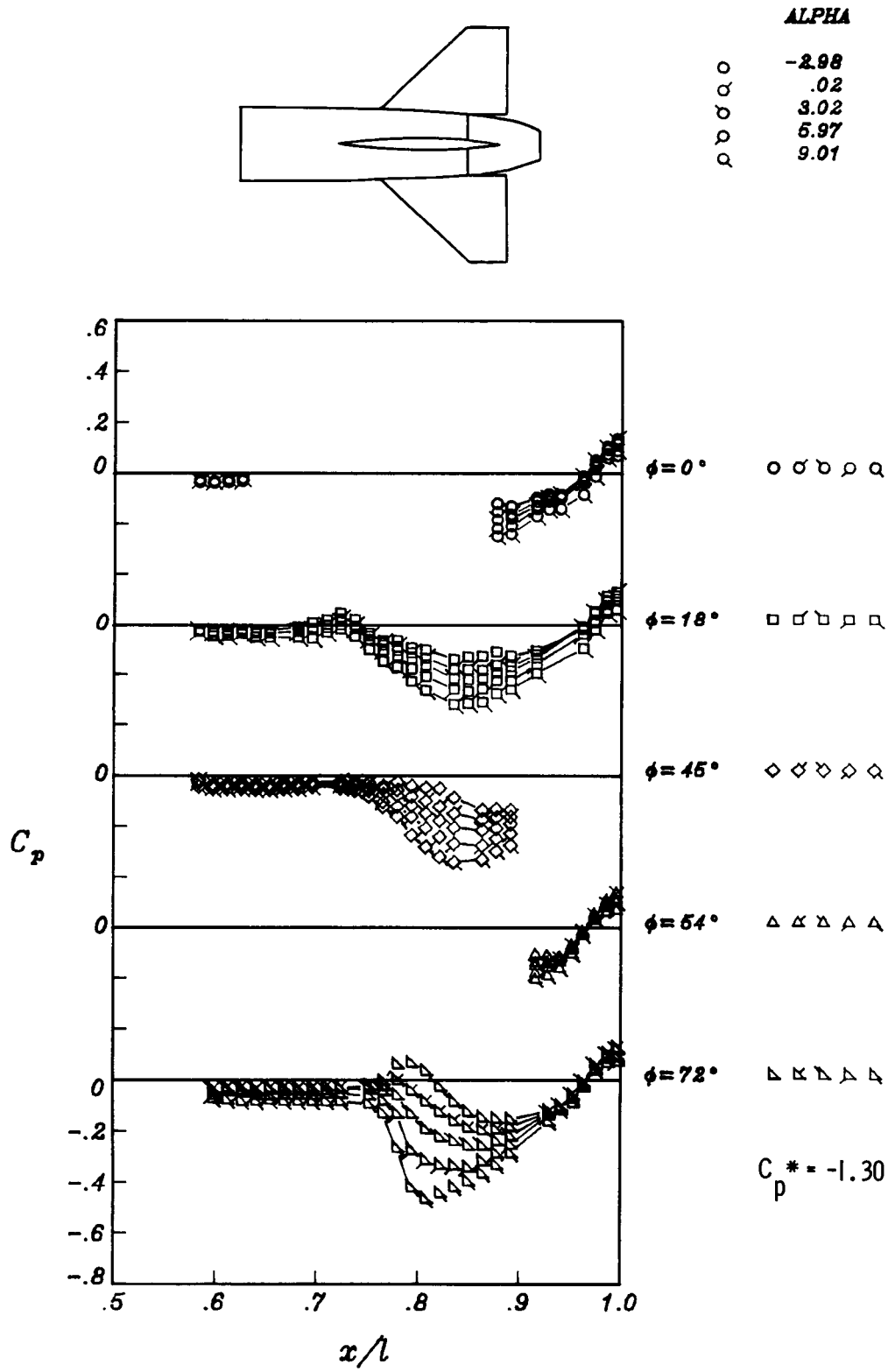
Figure 12. Continued.



(c) Concluded.

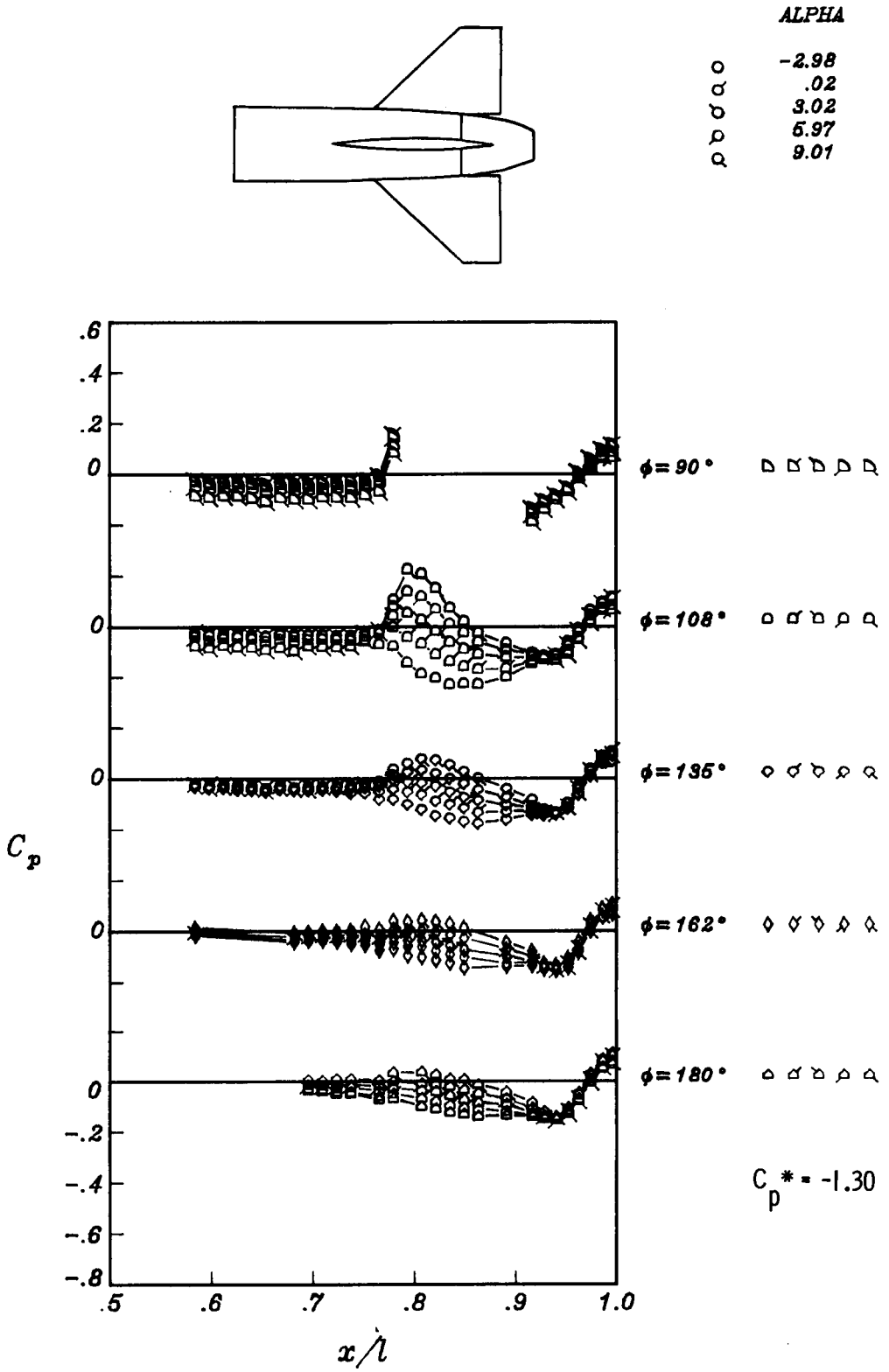
Figure 12. Continued.

C-3



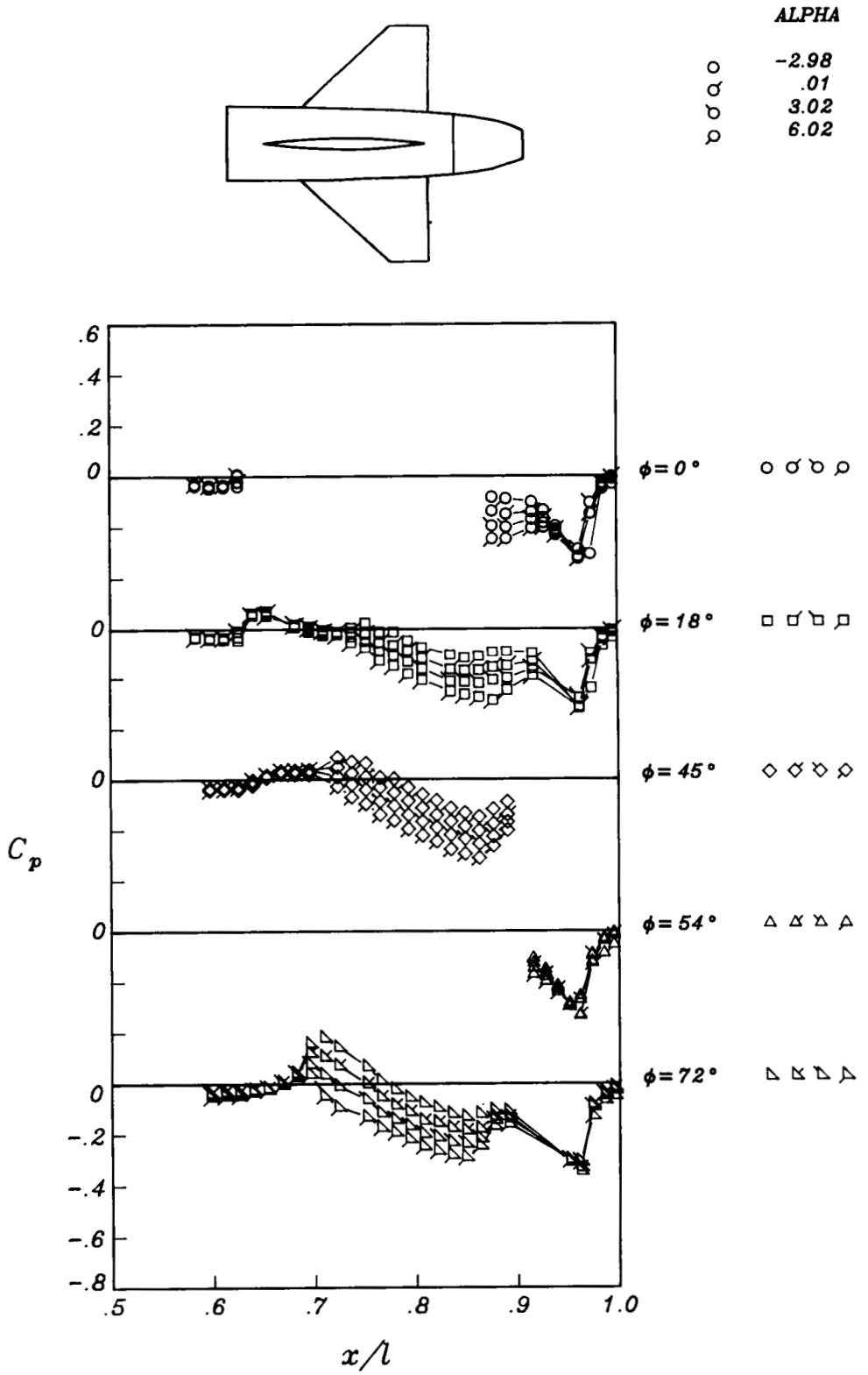
(d) $M = 0.60$; NPR = 1.050.

Figure 12. Continued.



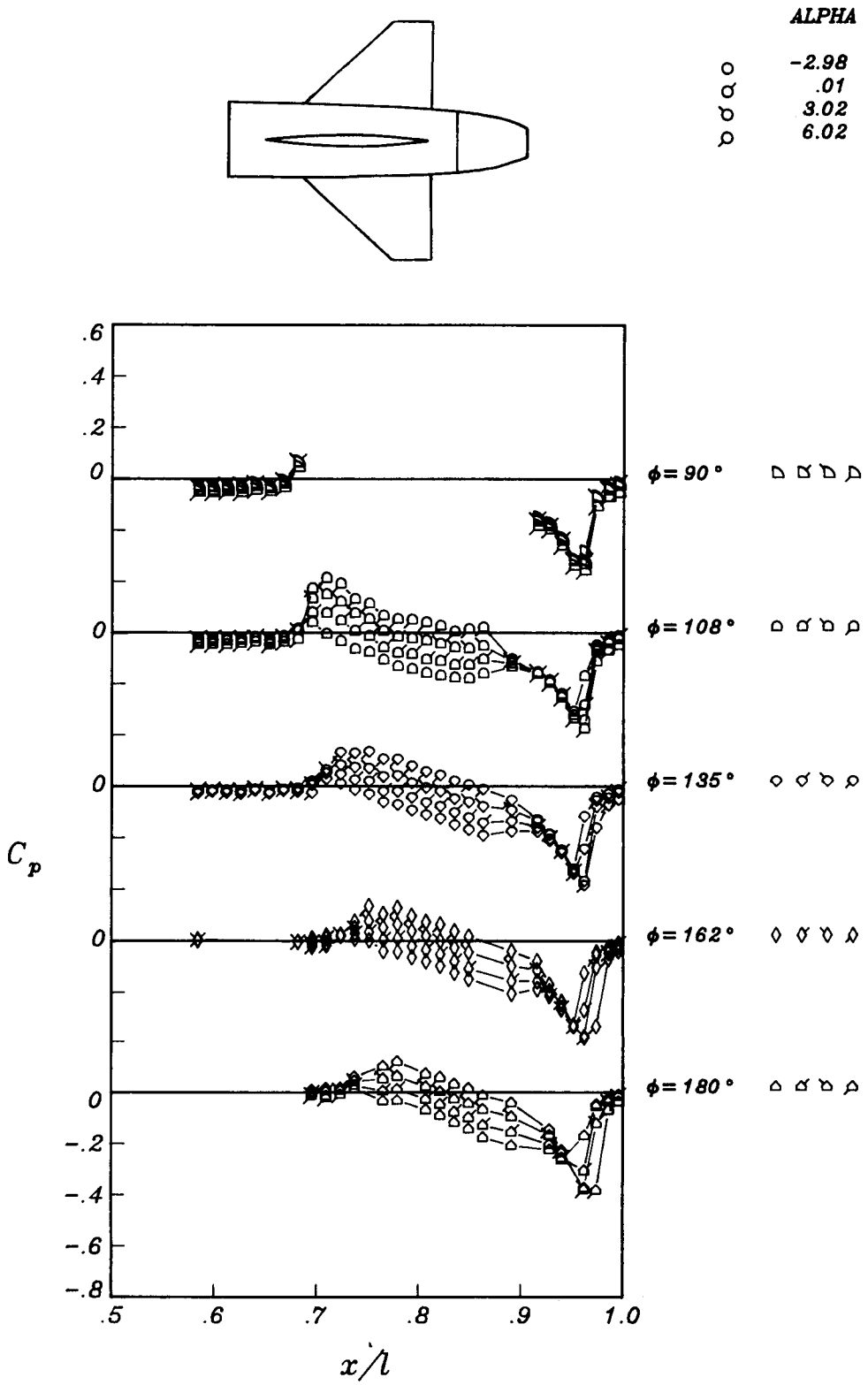
(d) Concluded.

Figure 12. Concluded.



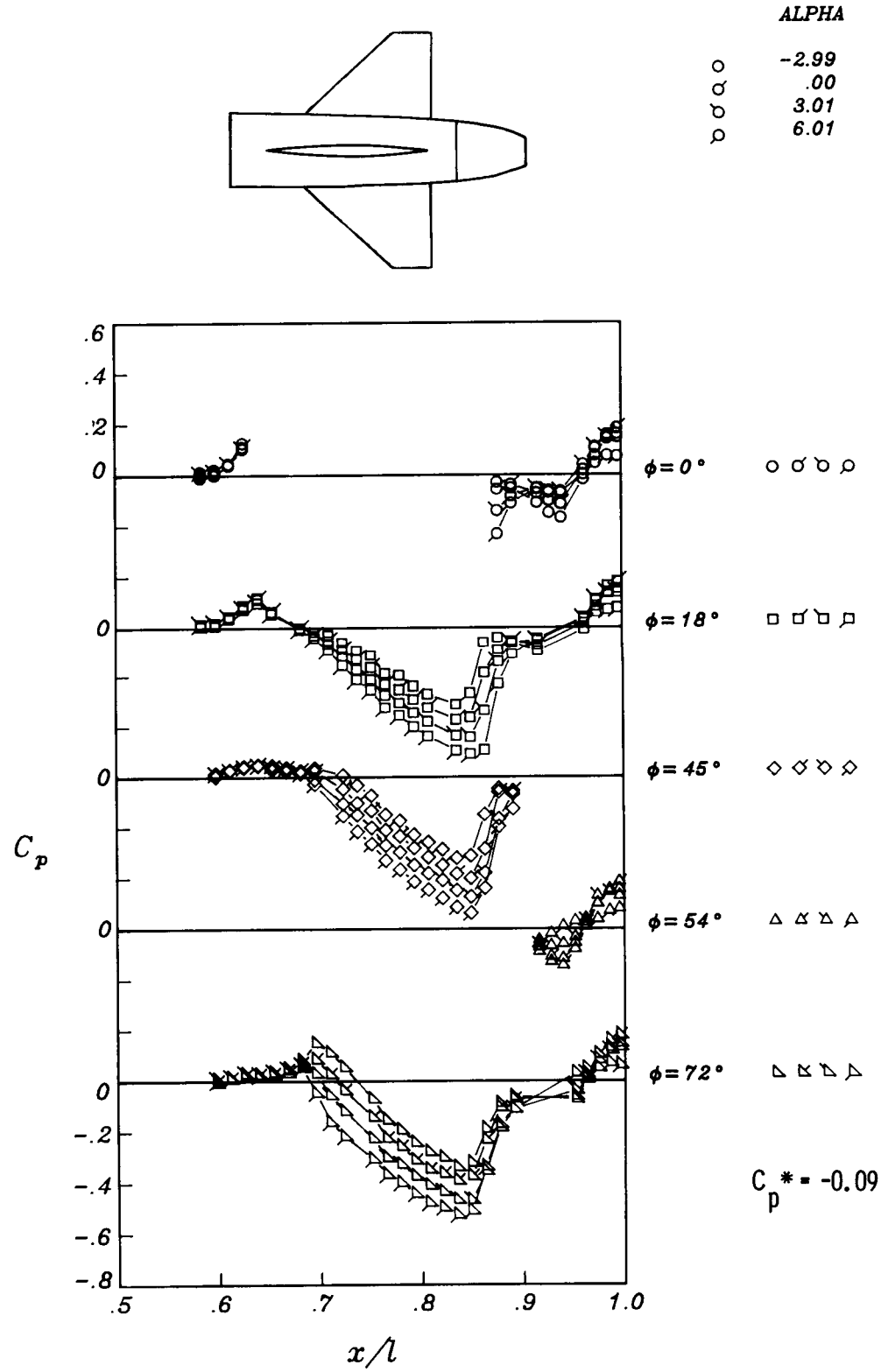
(a) $M = 1.20$; NPR = 1.052.

Figure 13. Effect of angle of attack on nozzle/afterbody pressures for body with horizontal and vertical tails in forward location.



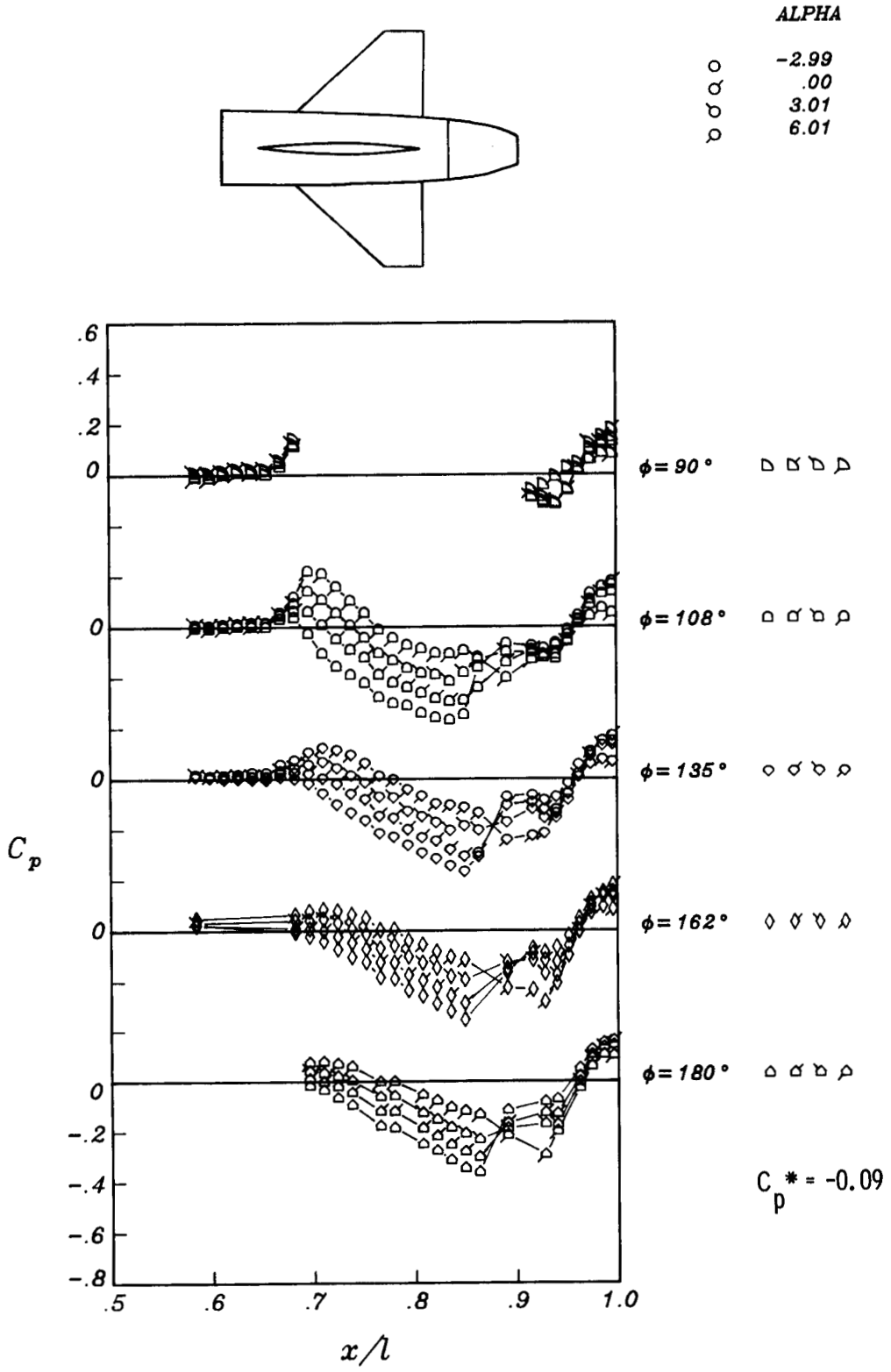
(a) Concluded.

Figure 13. Continued.



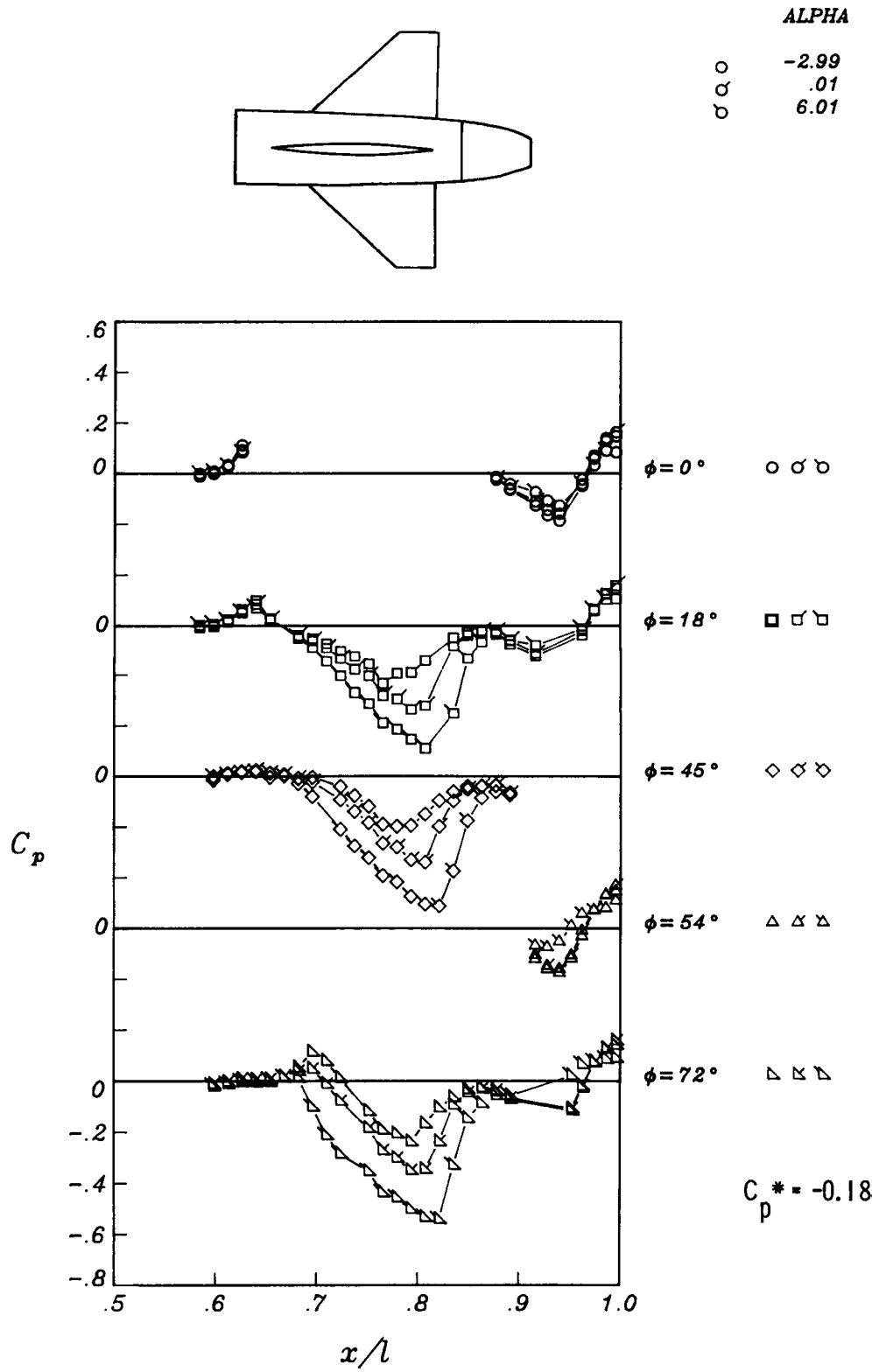
(b) $M = 0.95$; NPR = 1.138.

Figure 13. Continued.



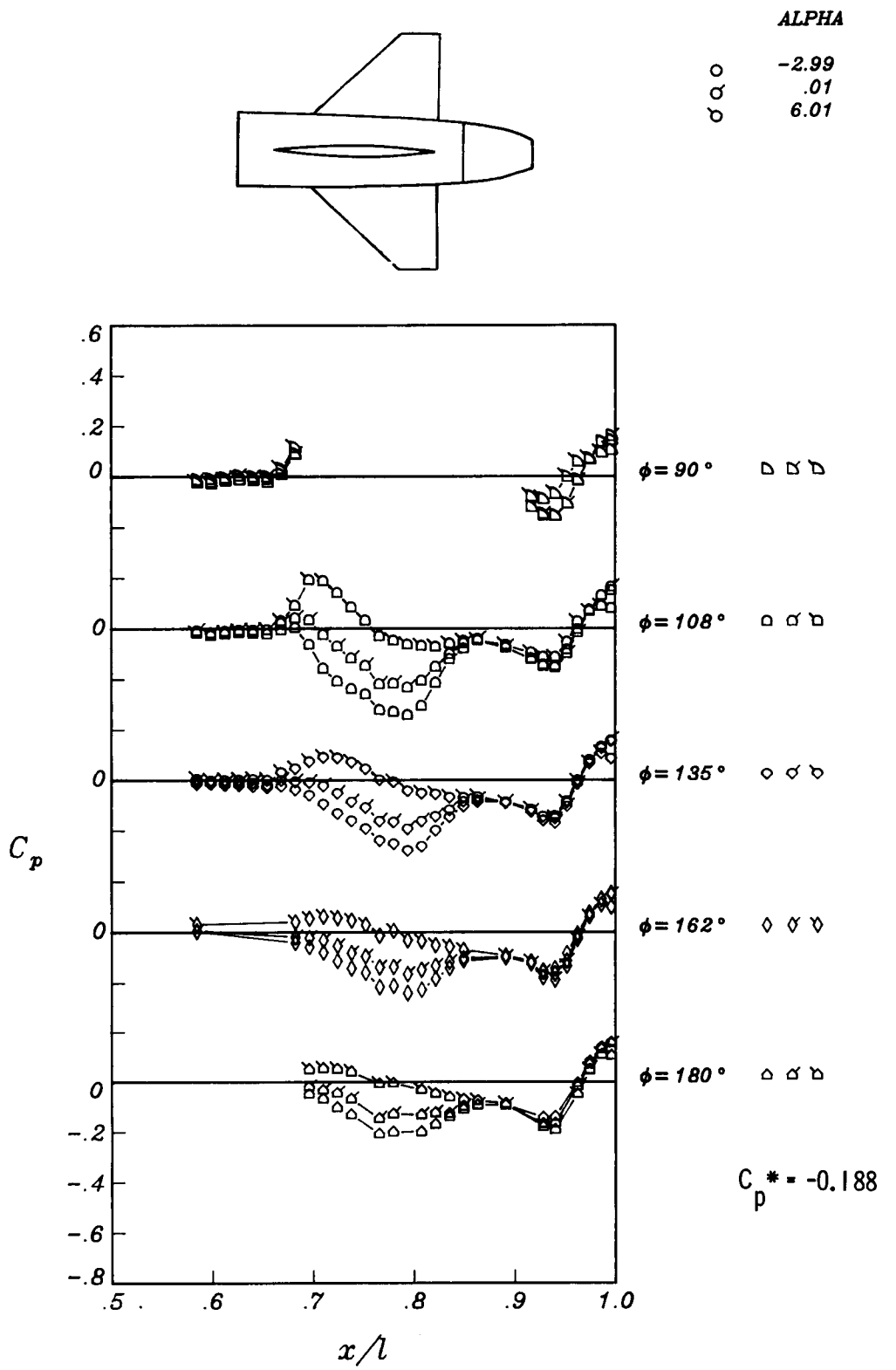
(b) Concluded.

Figure 13. Continued.



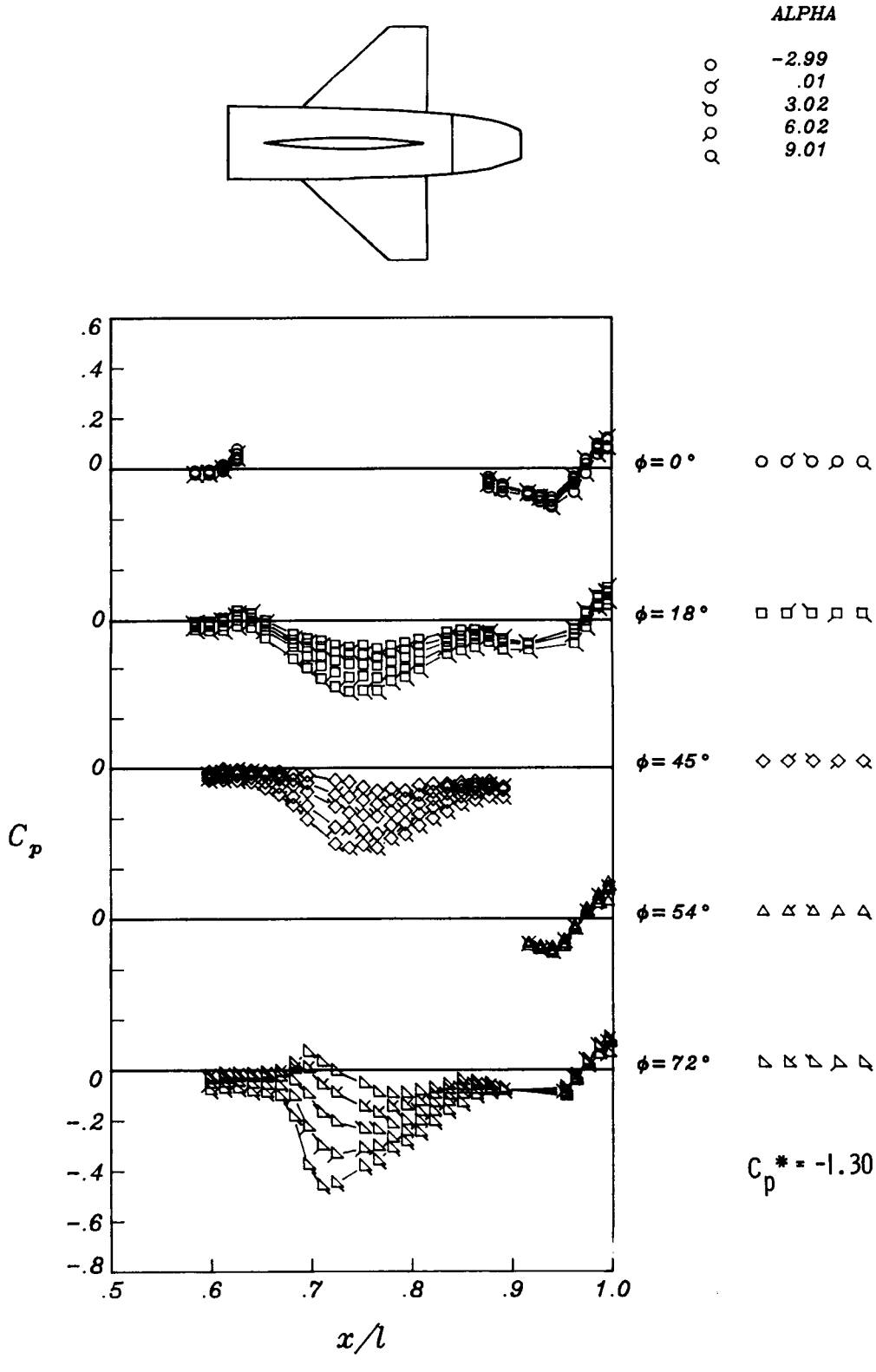
(c) $M = 0.90$; NPR = 1.119.

Figure 13. Continued.



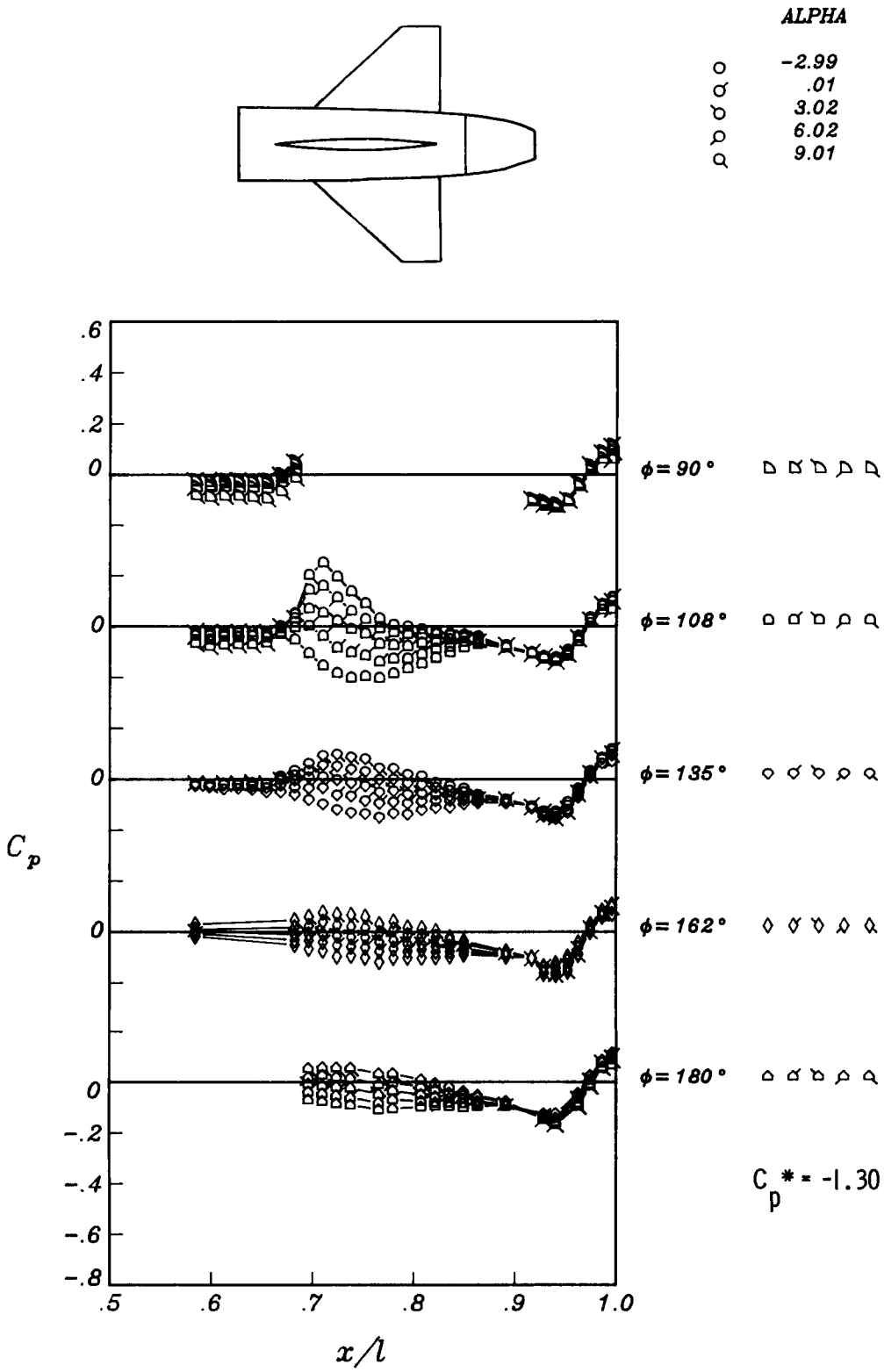
(c) Concluded.

Figure 13. Continued.



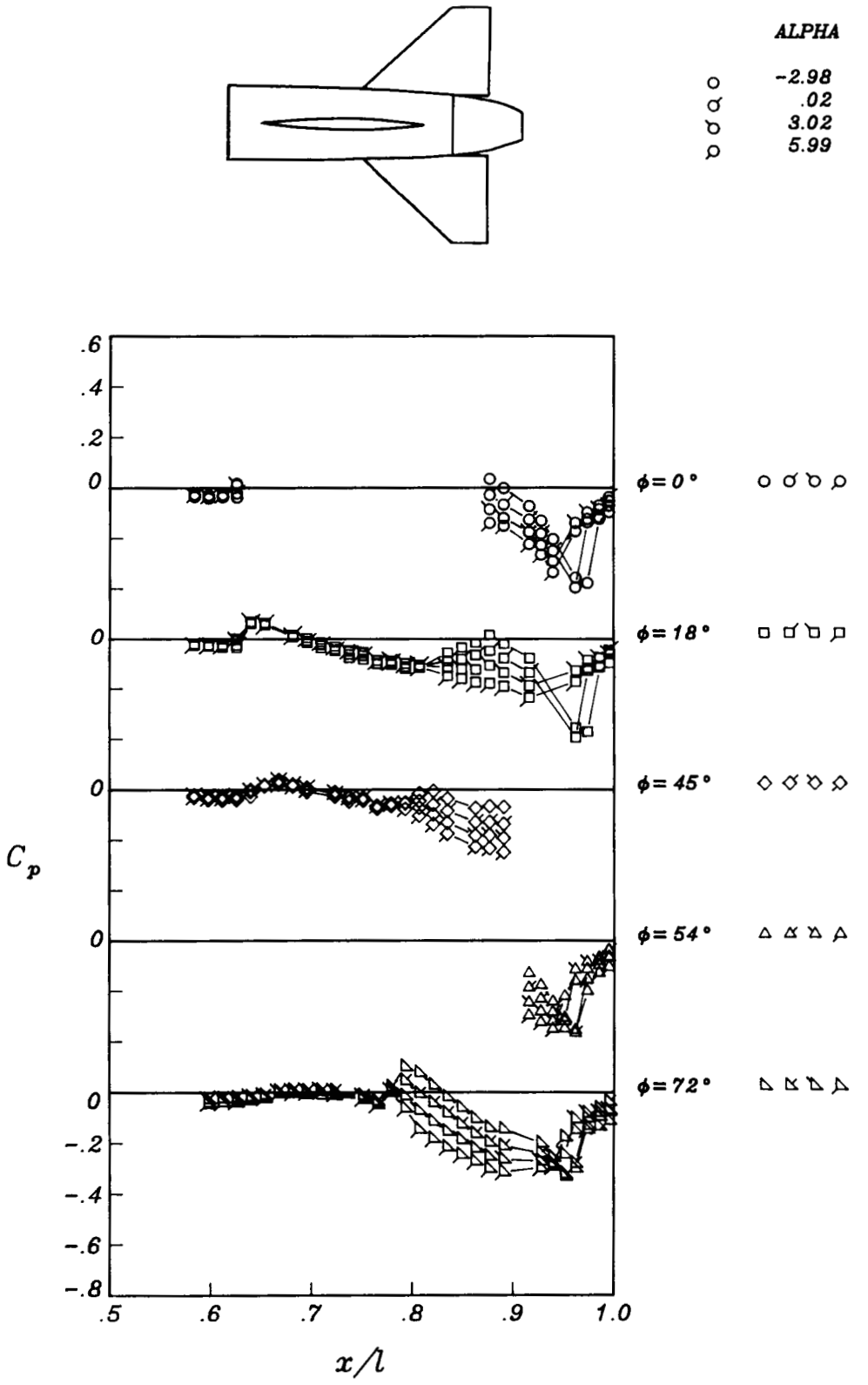
(d) $M = 0.60$; NPR = 1.056.

Figure 13. Continued.



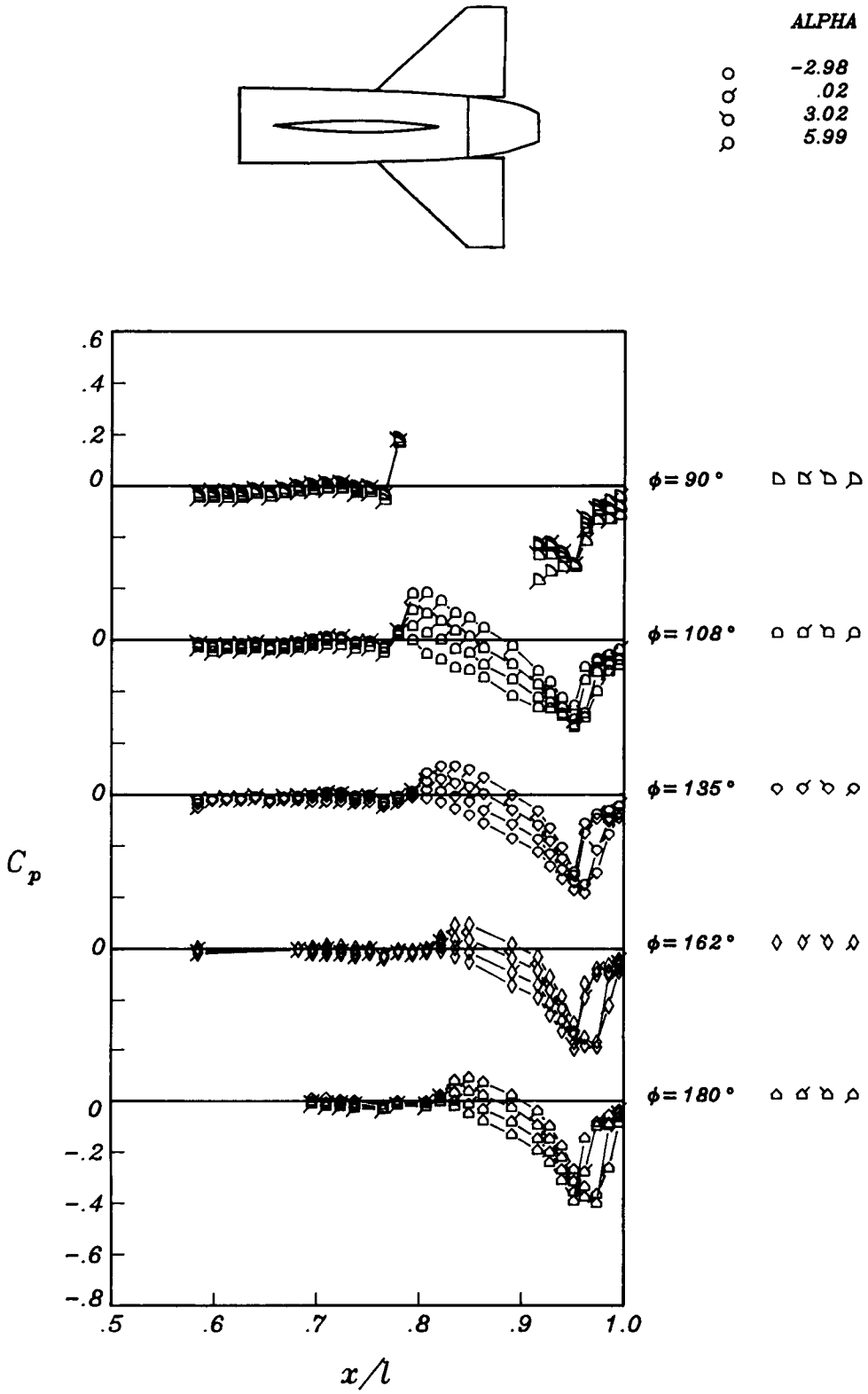
(d) Concluded.

Figure 13. Concluded.



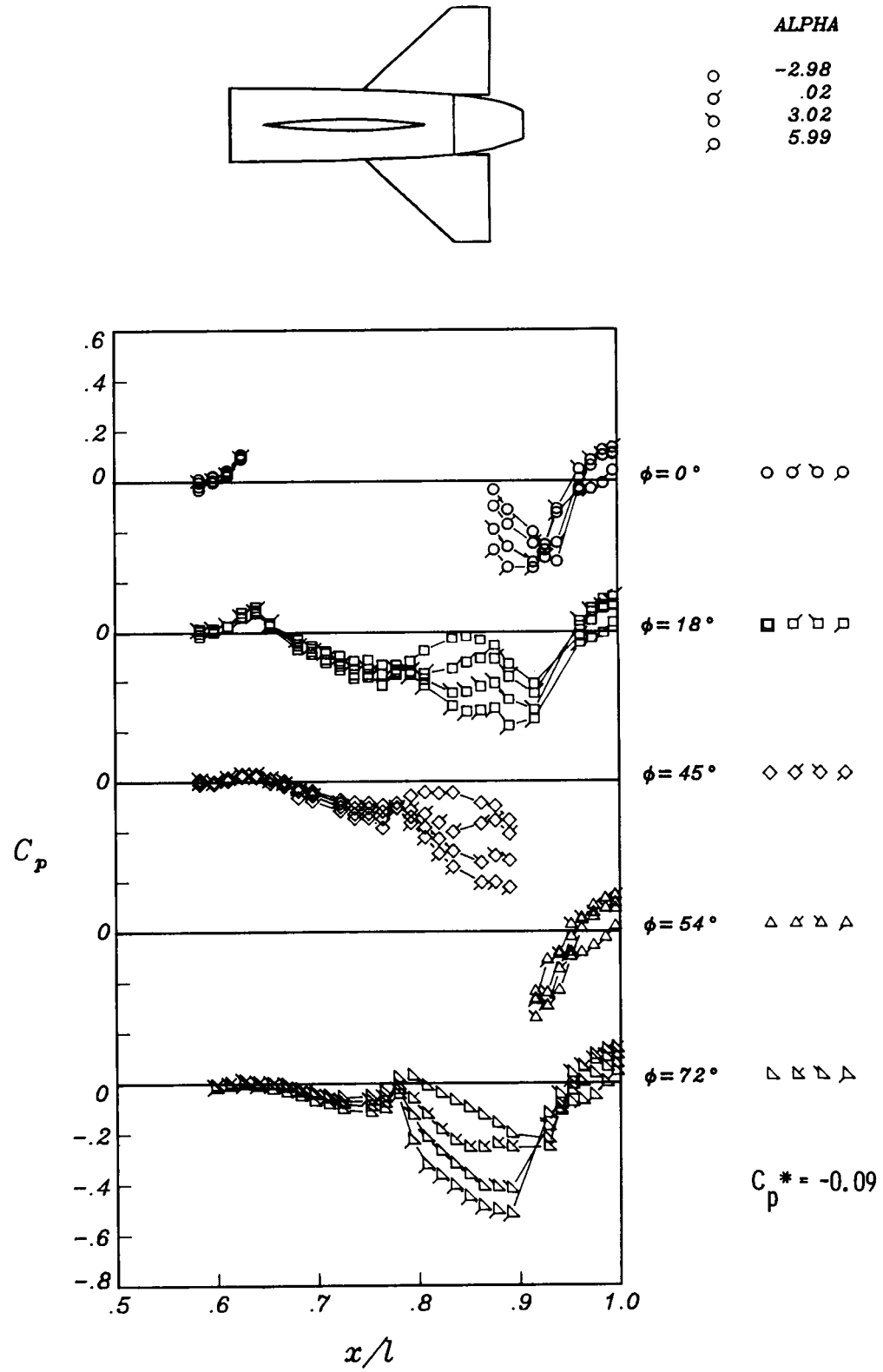
(a) $M = 1.20$; NPR = 1.006.

Figure 14. Effect of angle of attack on nozzle/afterbody pressures for body with horizontal tails in aft locatic and vertical tail in forward location.



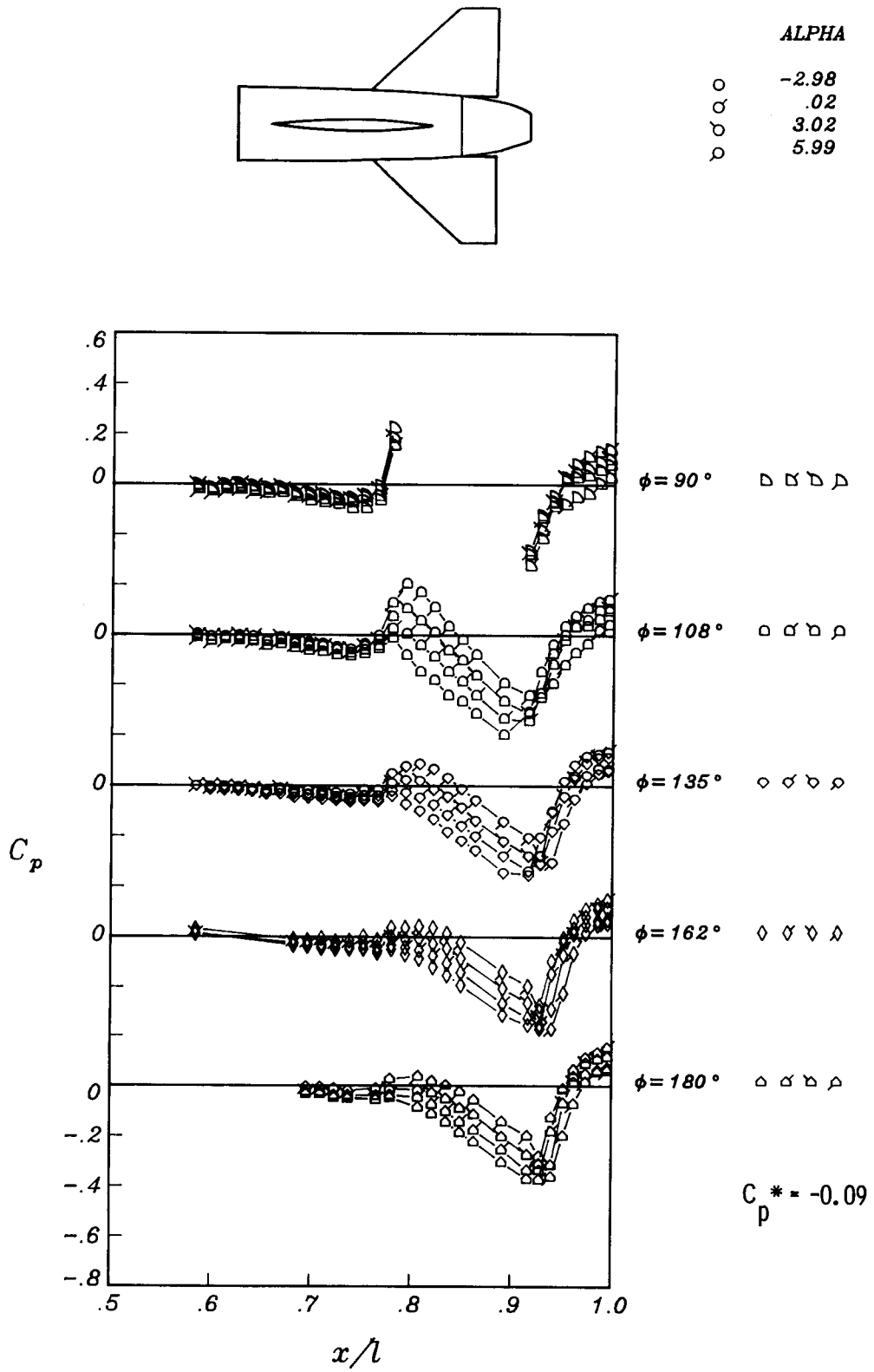
(a) Concluded.

Figure 14. Continued.



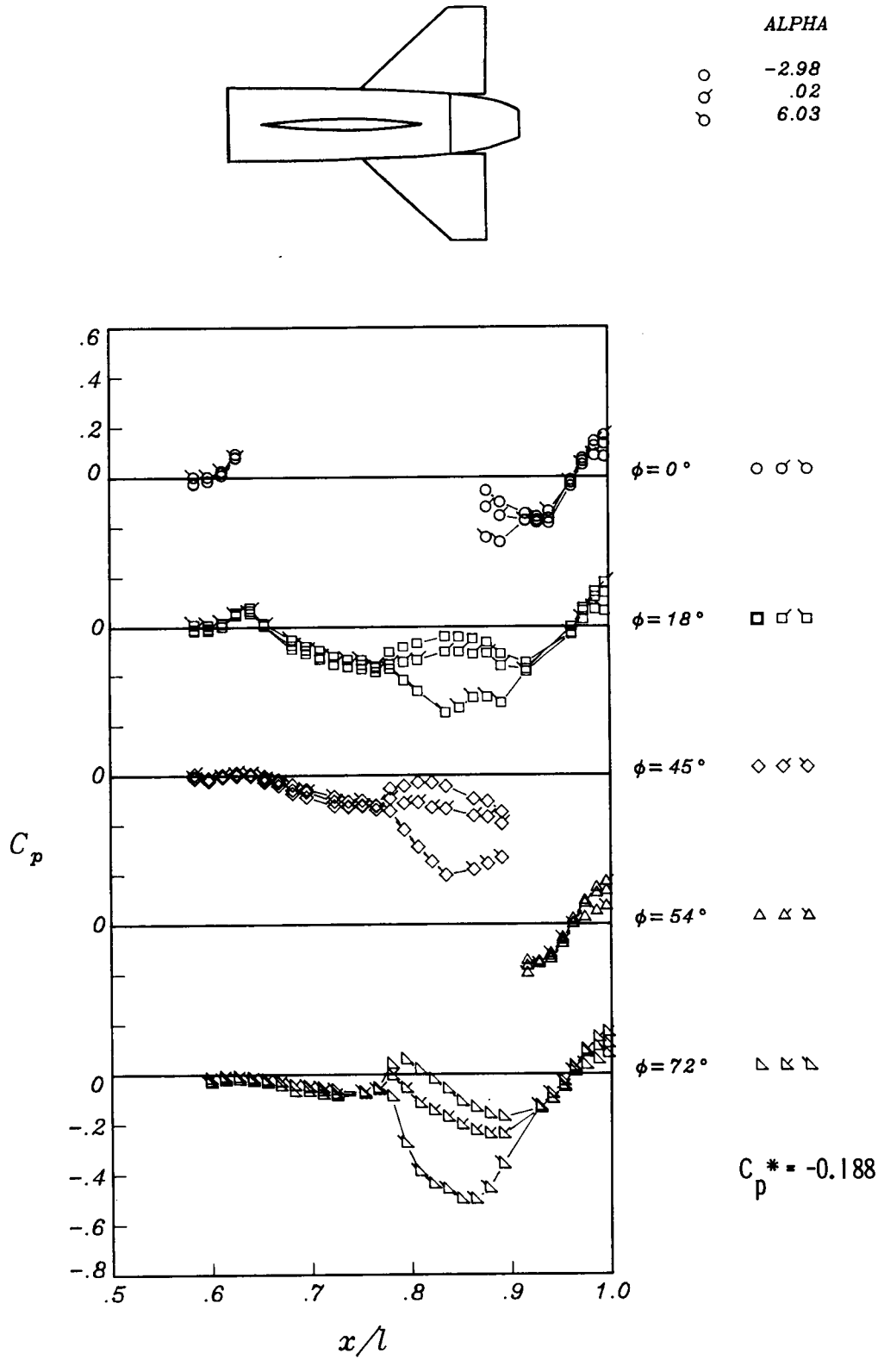
(b) $M = 0.95$; NPR = 1.096.

Figure 14. Continued.



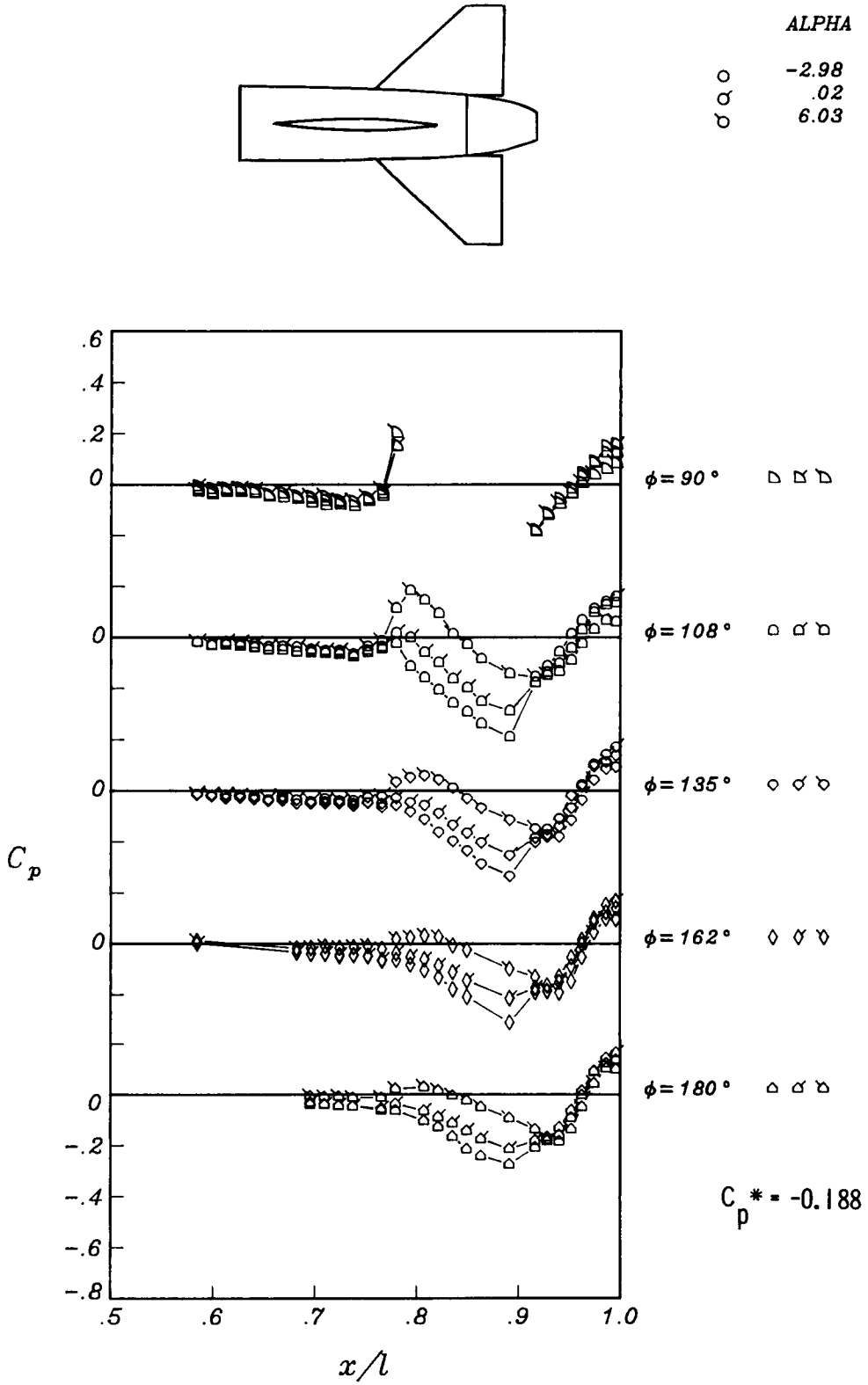
(b) Concluded.

Figure 14. Continued.



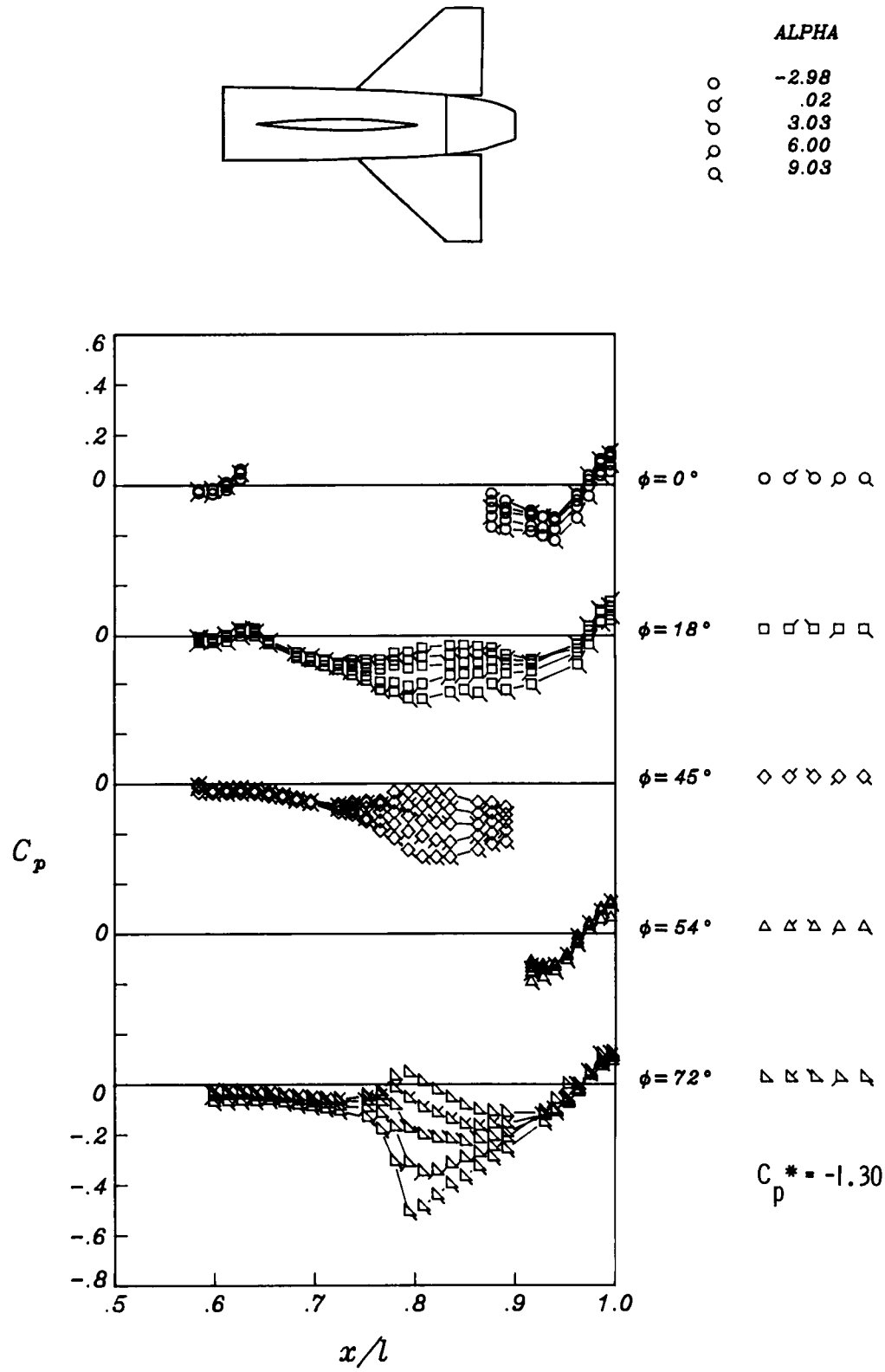
(c) $M = 0.90$; NPR = 1.098.

Figure 14. Continued.



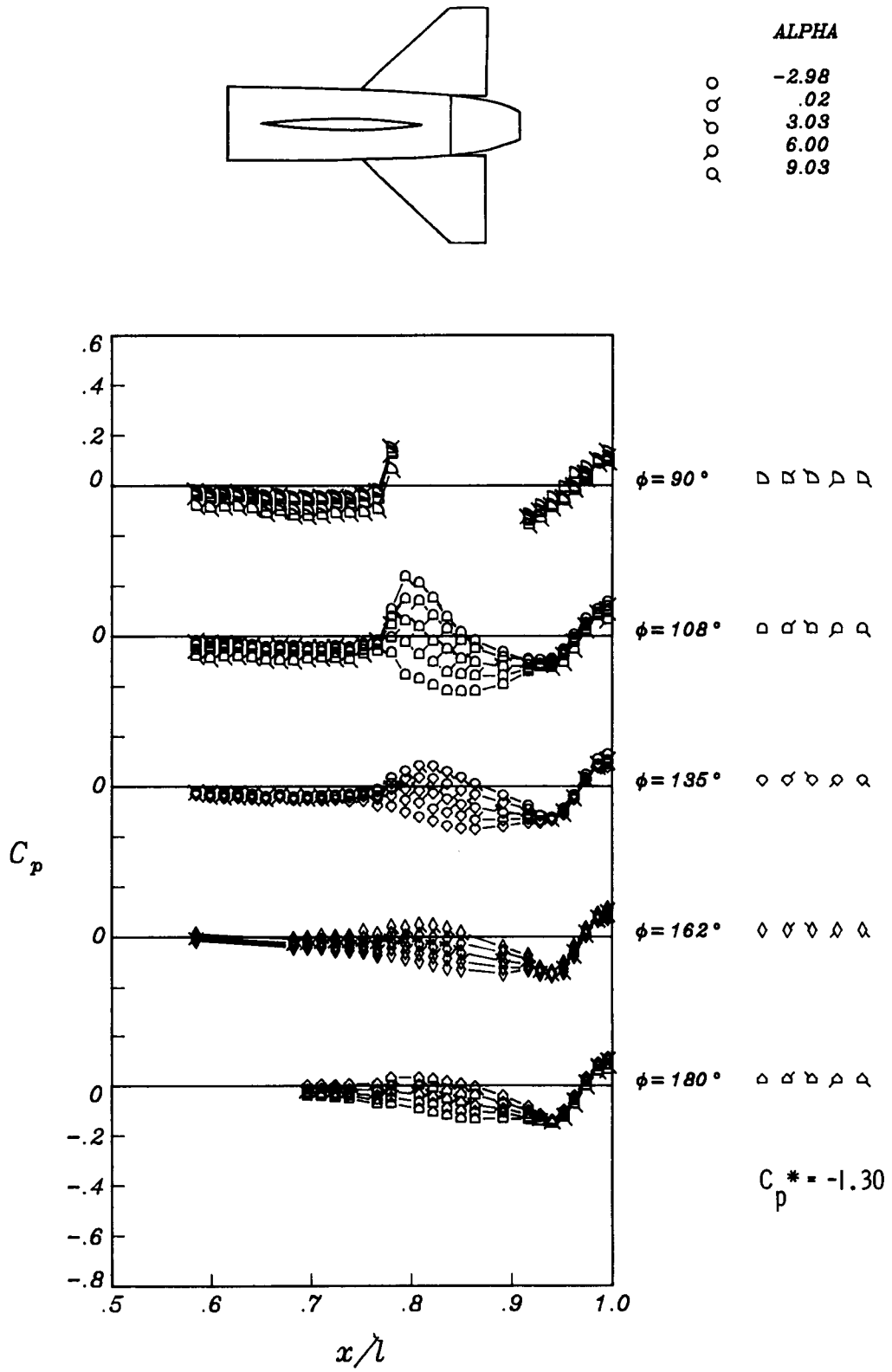
(c) Concluded.

Figure 14. Continued.



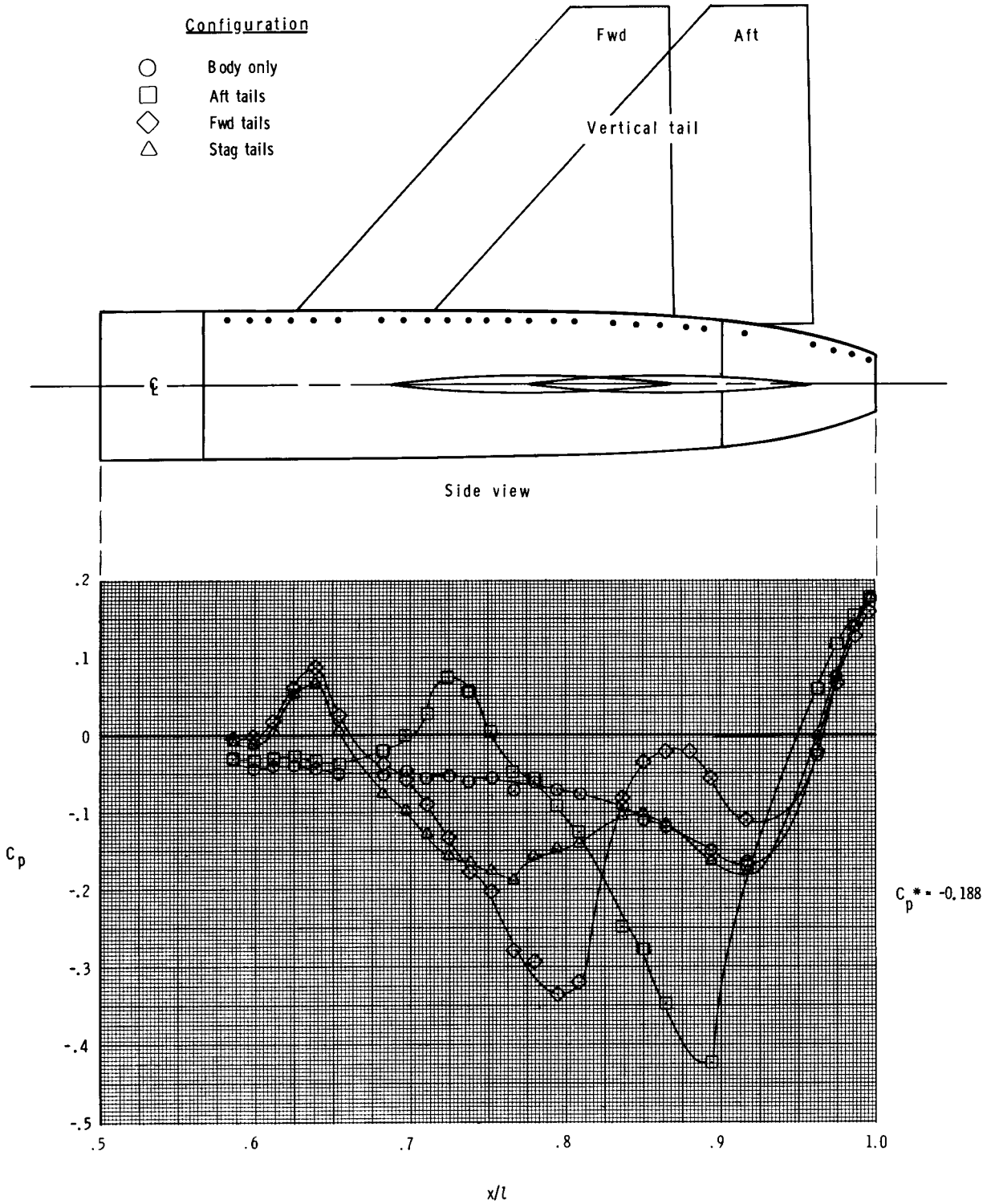
(d) $M = 0.60$; NPR = 1.049.

Figure 14. Continued.



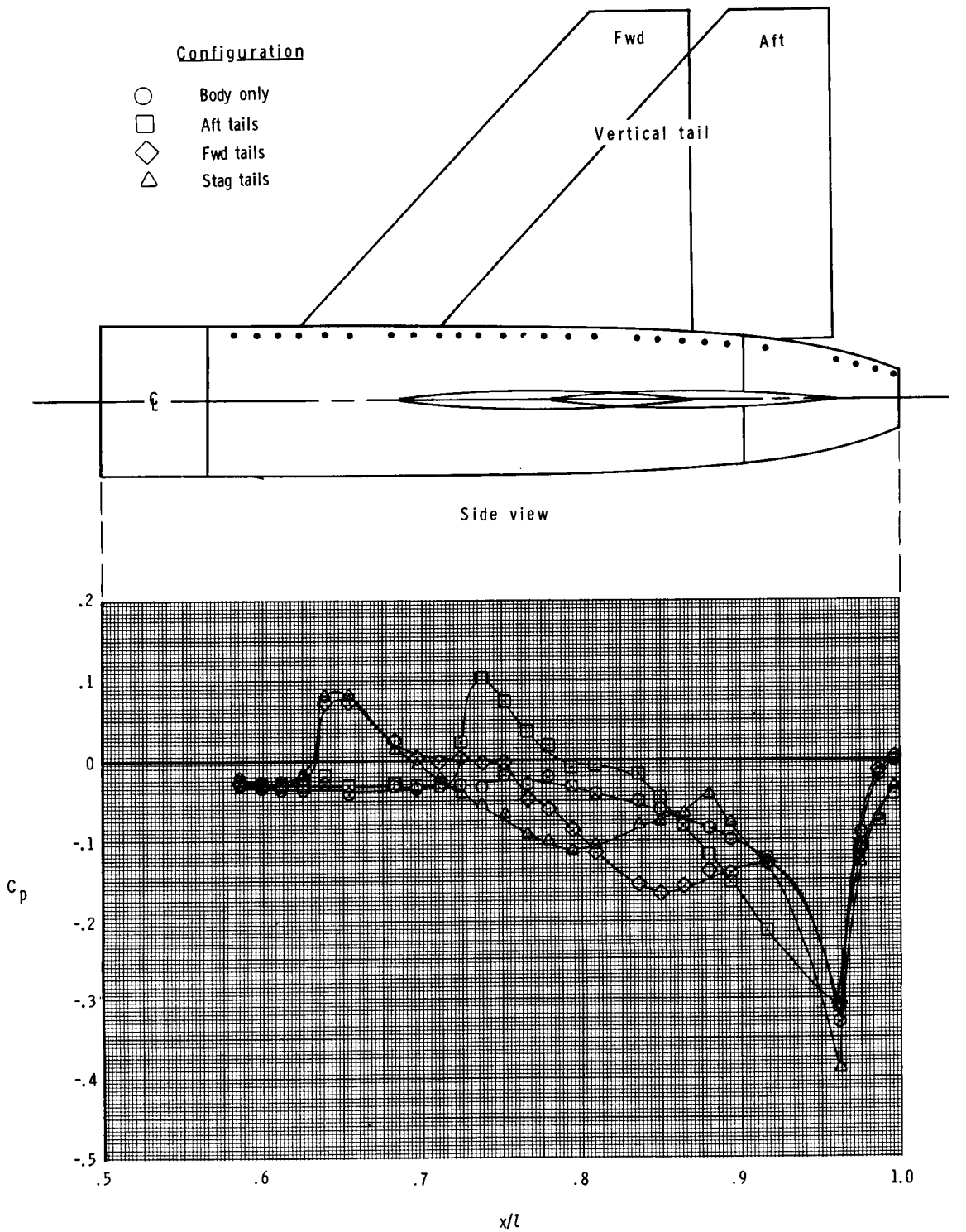
(d) Concluded.

Figure 14. Concluded.



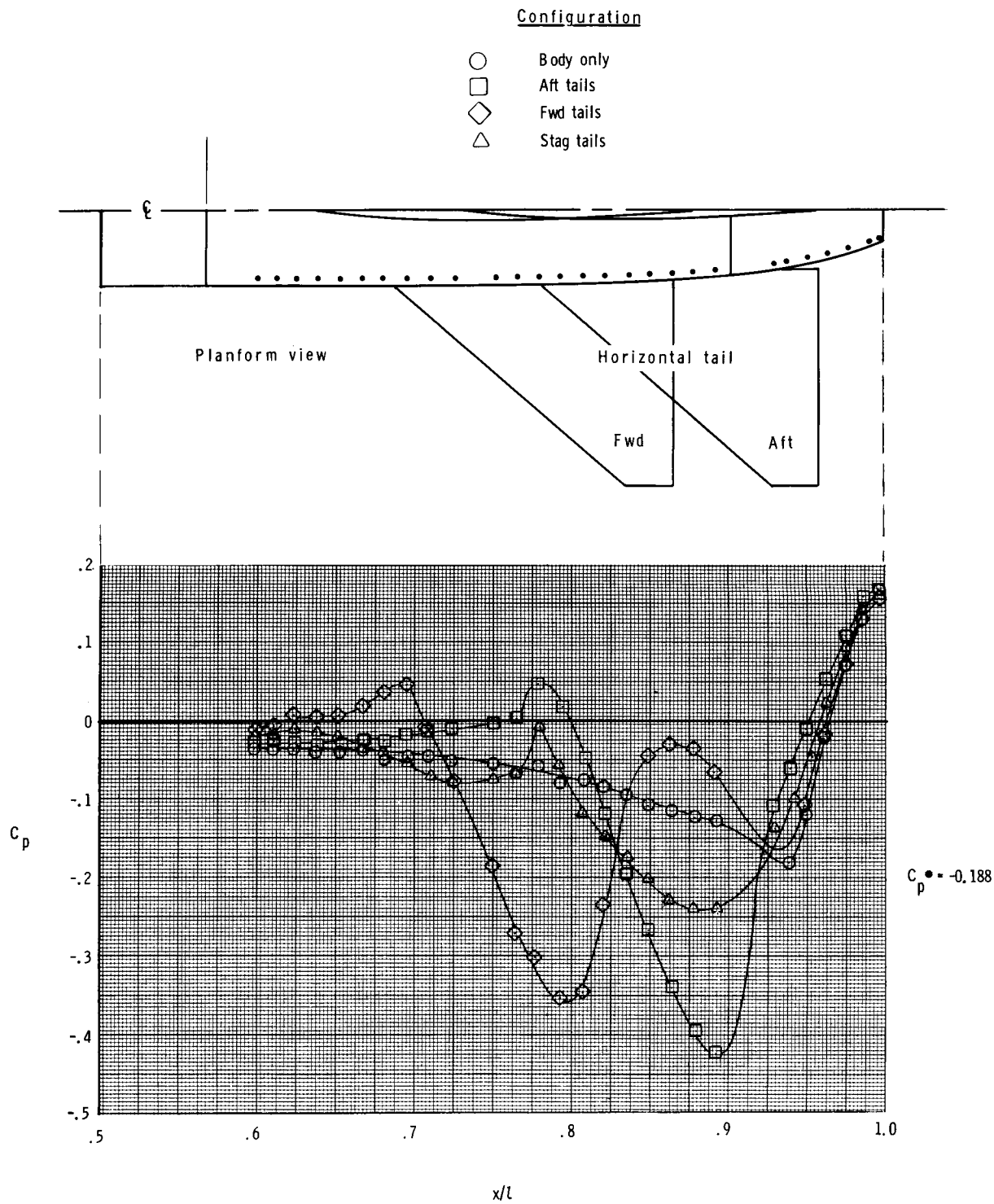
(a) $M = 0.90$.

Figure 15. Effect of empennage arrangement on nozzle/afterbody pressure coefficients at NPR = 1.0 and $\alpha = 0°$ for $\phi = 18°$.



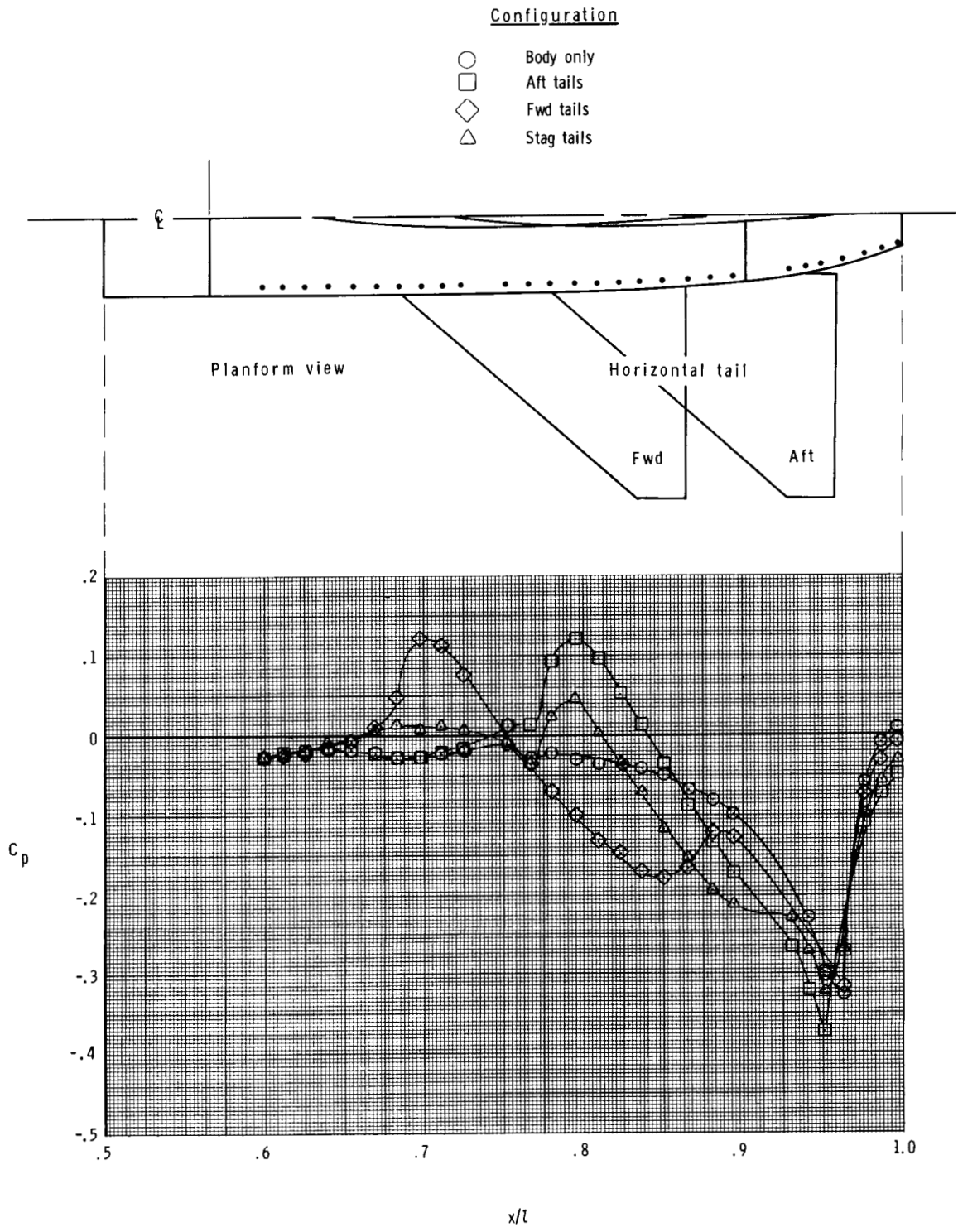
(b) $M = 1.20$.

Figure 15. Concluded.



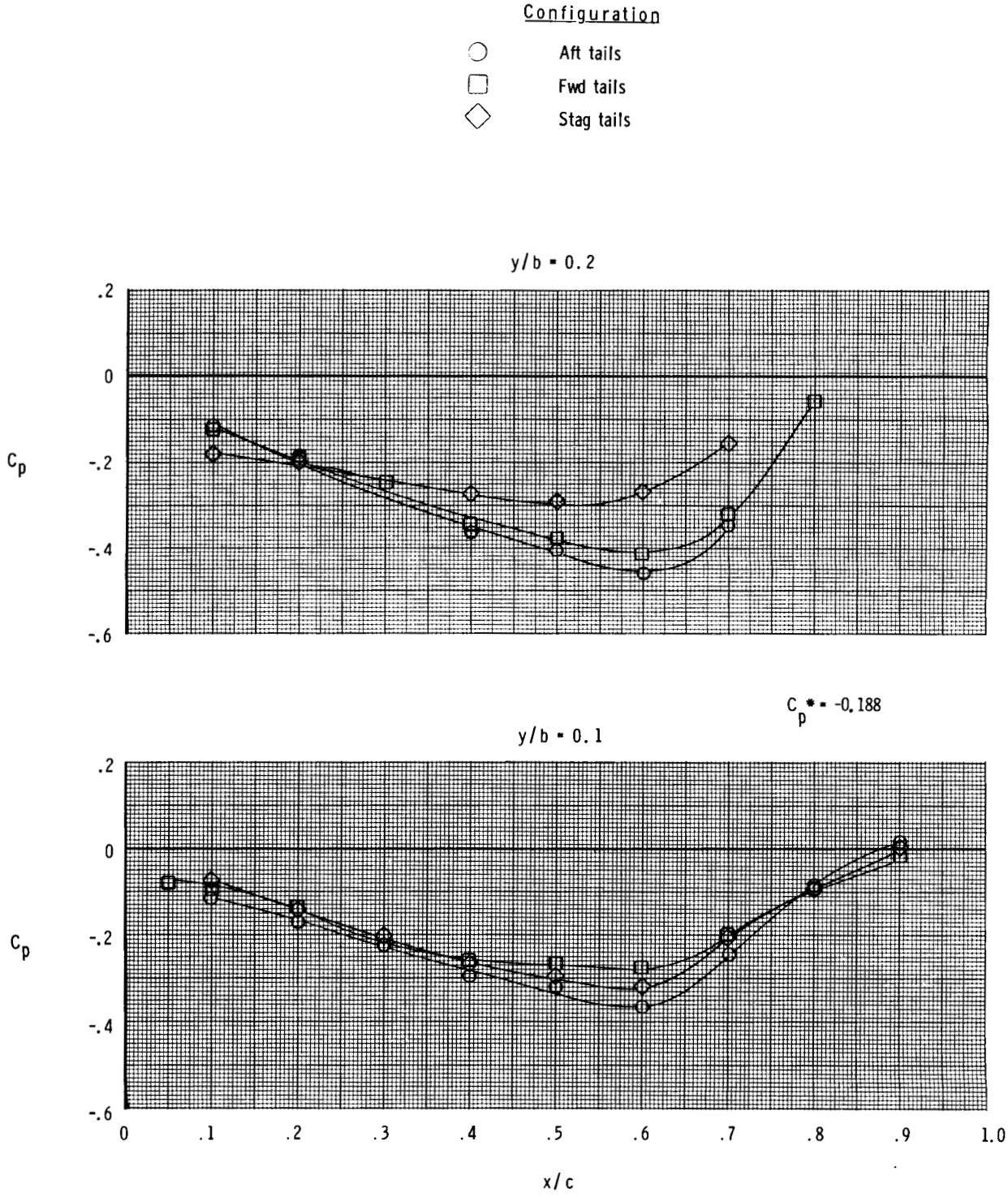
(a) $M = 0.90$.

Figure 16. Effect of empennage arrangement on afterbody/nozzle pressure coefficients at NPR = 1.0 and $\alpha = 0°$ for $\phi = 72°$.



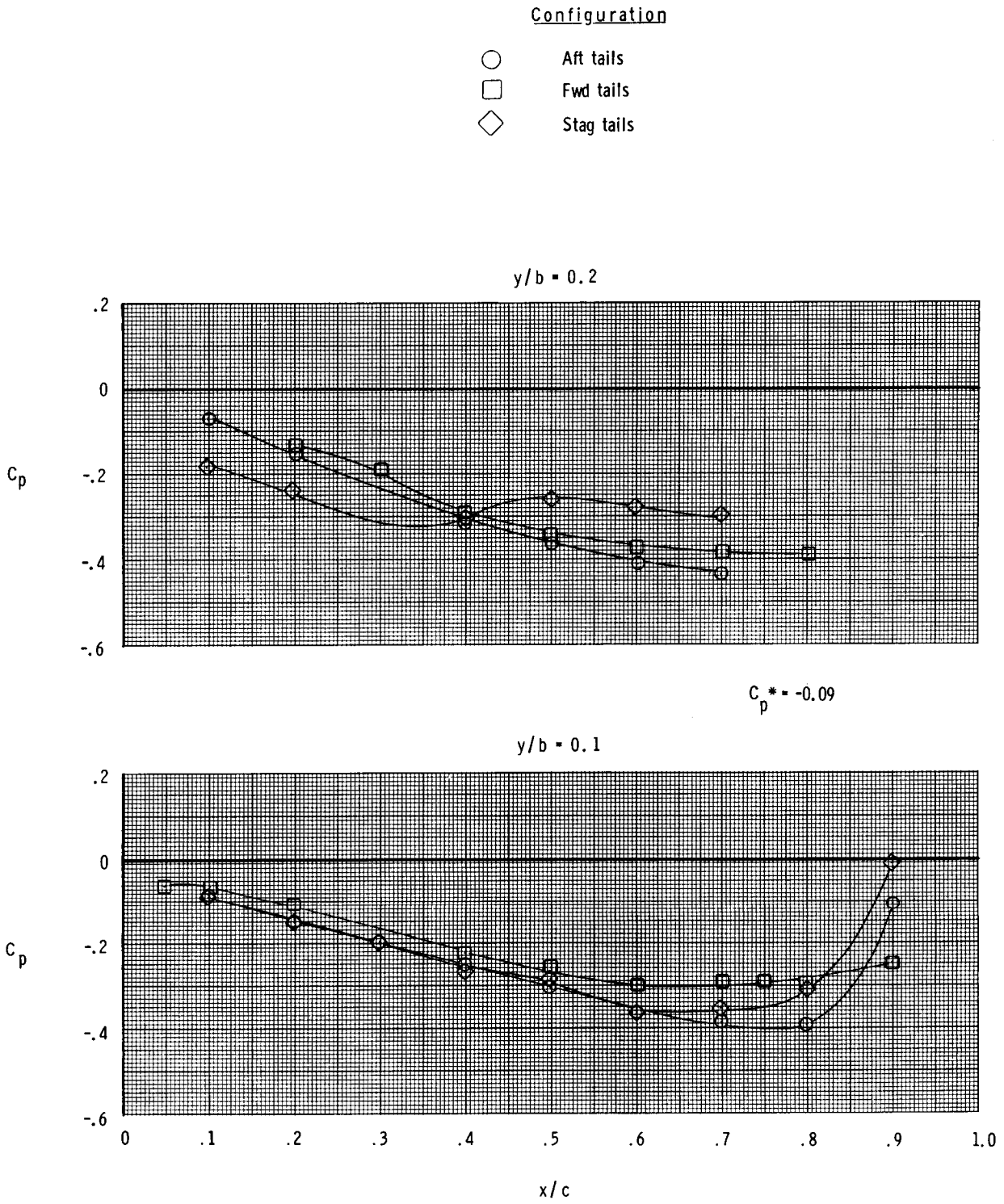
(b) $M = 1.20$.

Figure 16. Concluded.



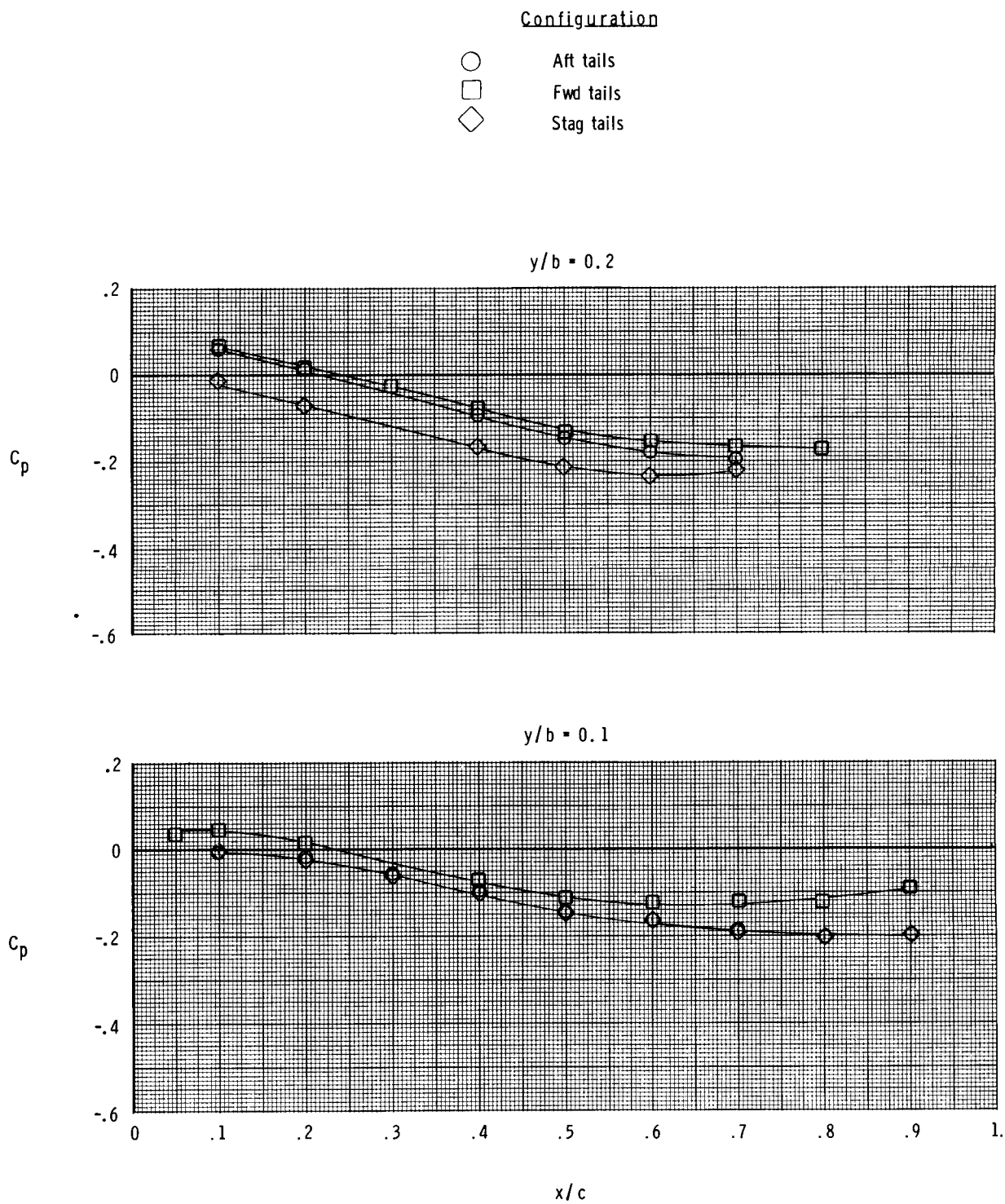
(a) $M = 0.90$.

Figure 17. Effect of empennage arrangement on horizontal tail pressure coefficients at NPR = 1.0 and $\alpha =$



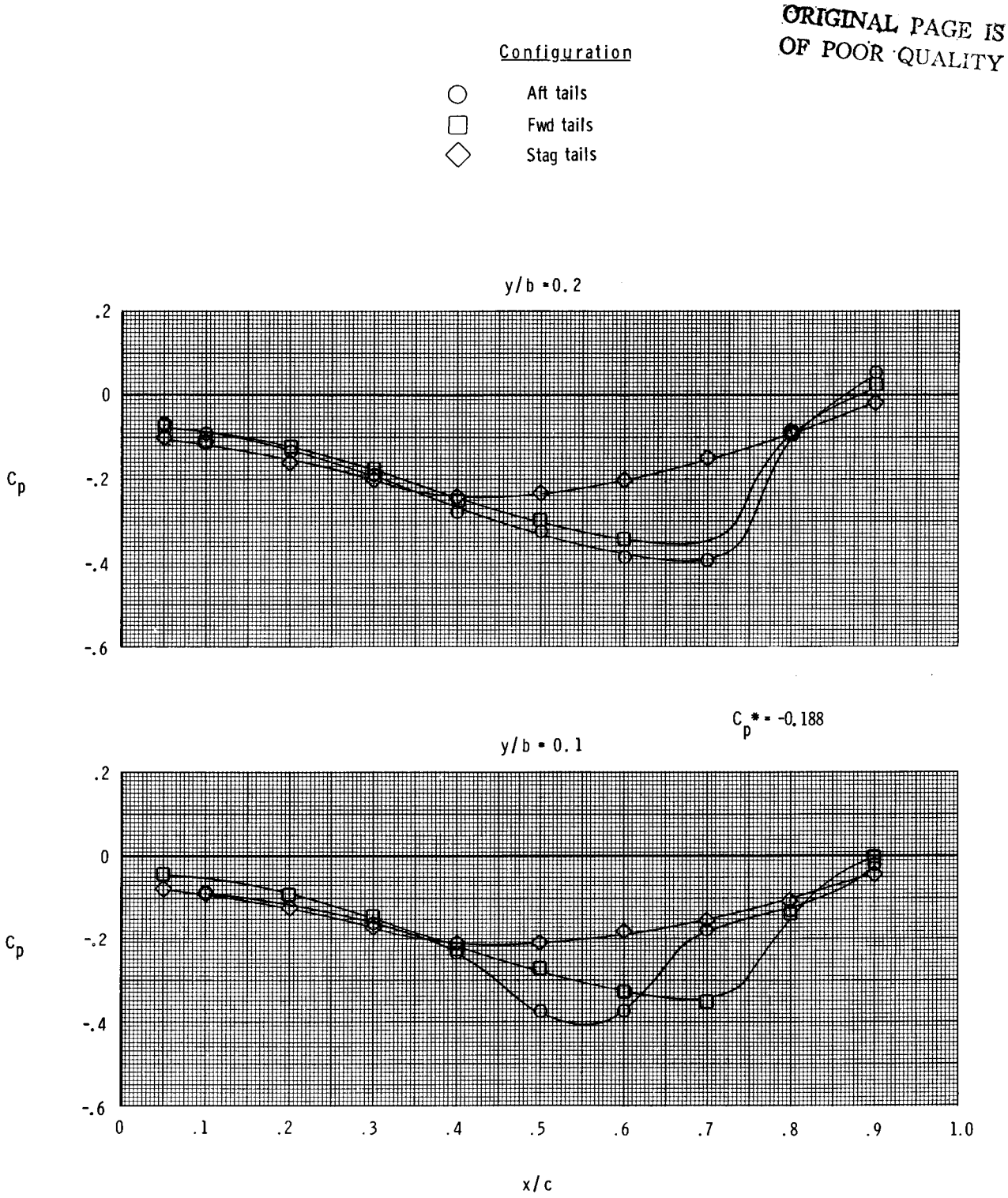
(b) $M = 0.95$.

Figure 17. Continued.



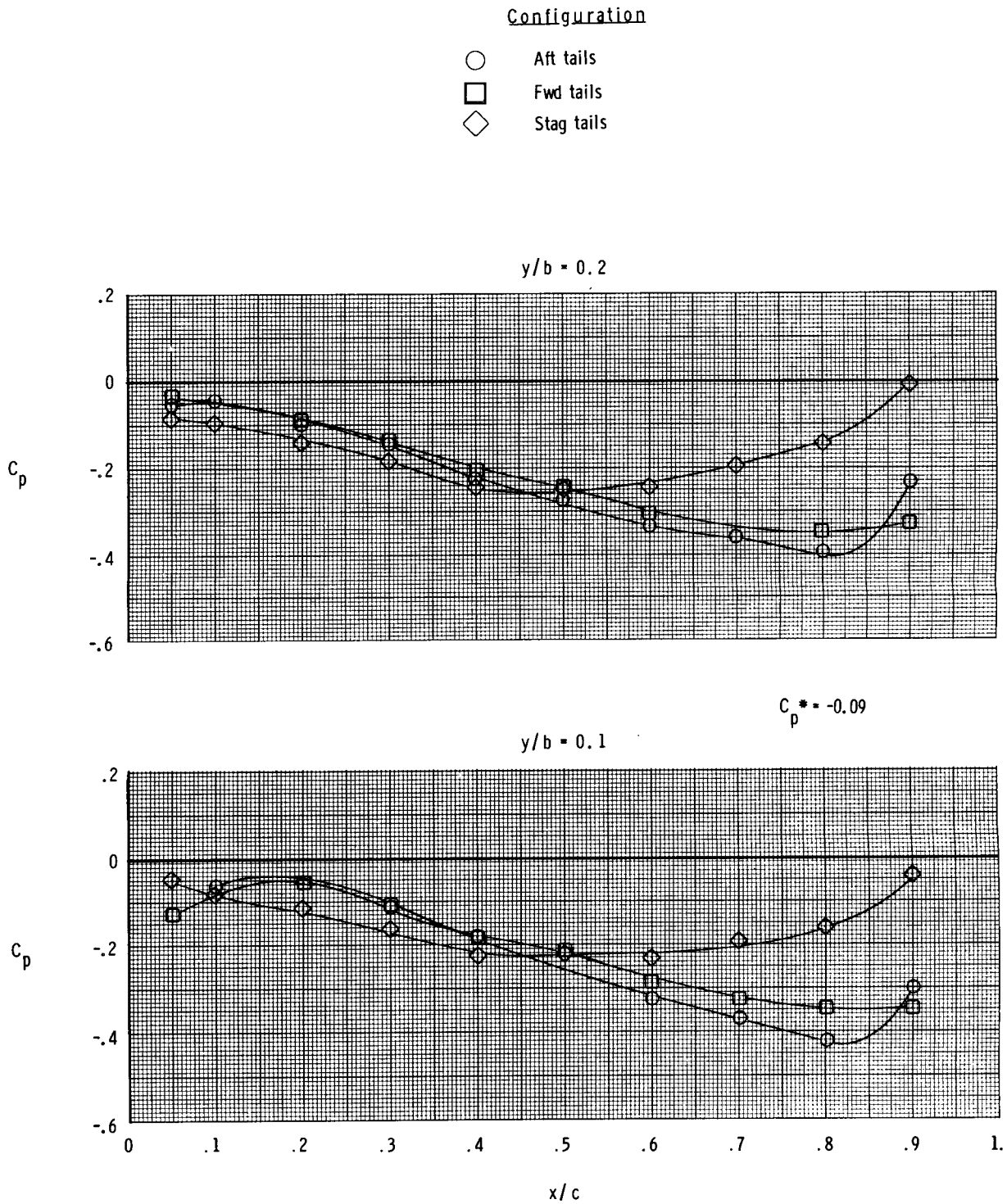
(c) $M = 1.20$.

Figure 17. Concluded.



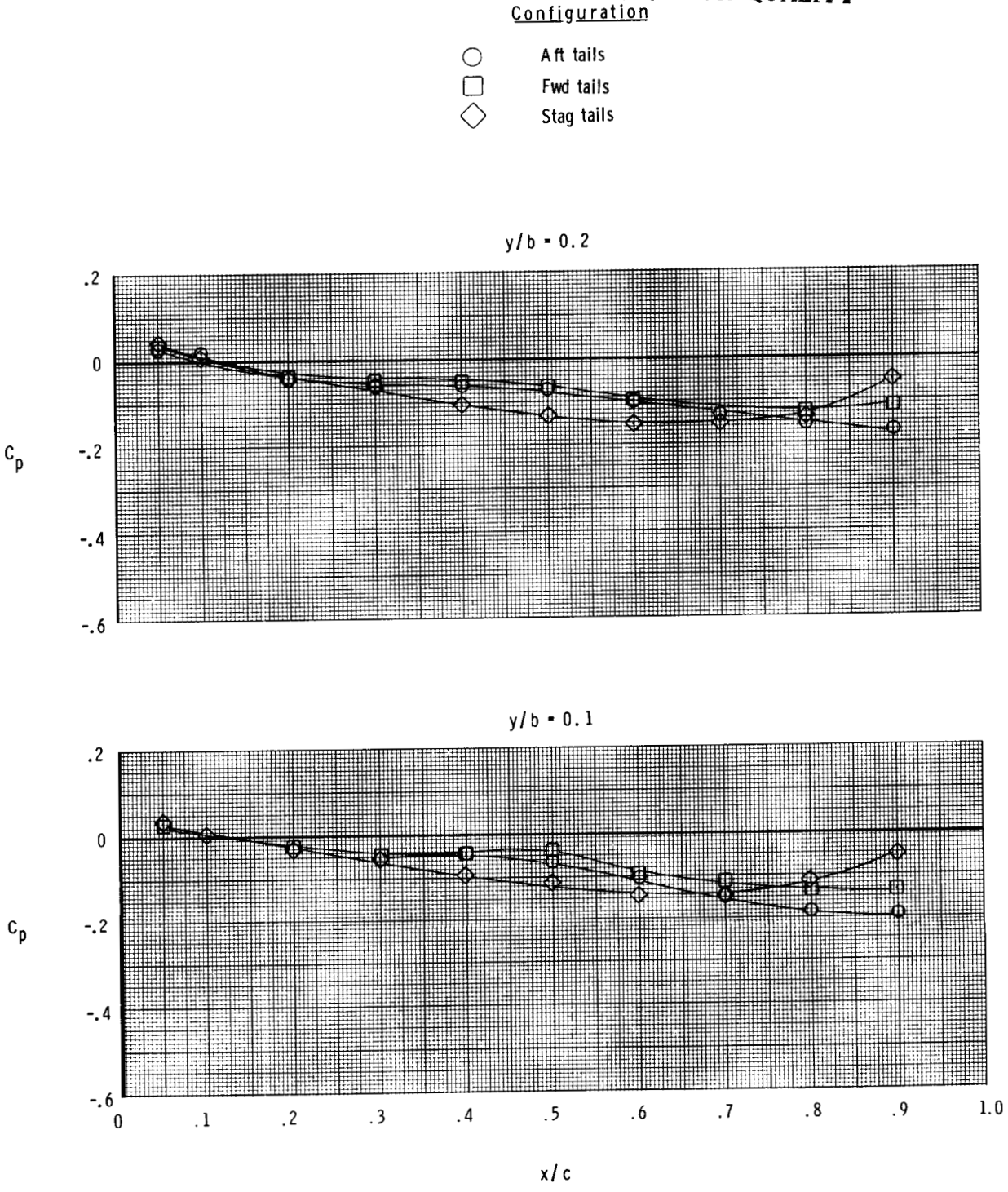
(a) $M = 0.90$.

Figure 18. Effect of empennage arrangement on vertical tail pressure coefficients at NPR = 1.0 and $\alpha = 0°$.



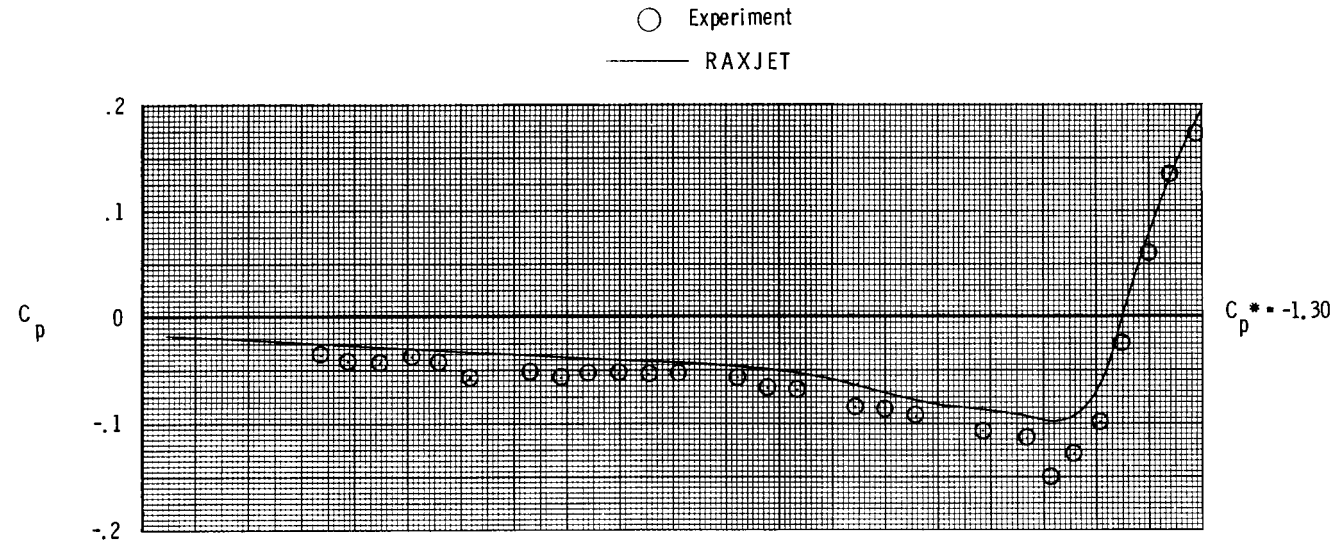
(b) $M = 0.95$.

Figure 18. Continued.

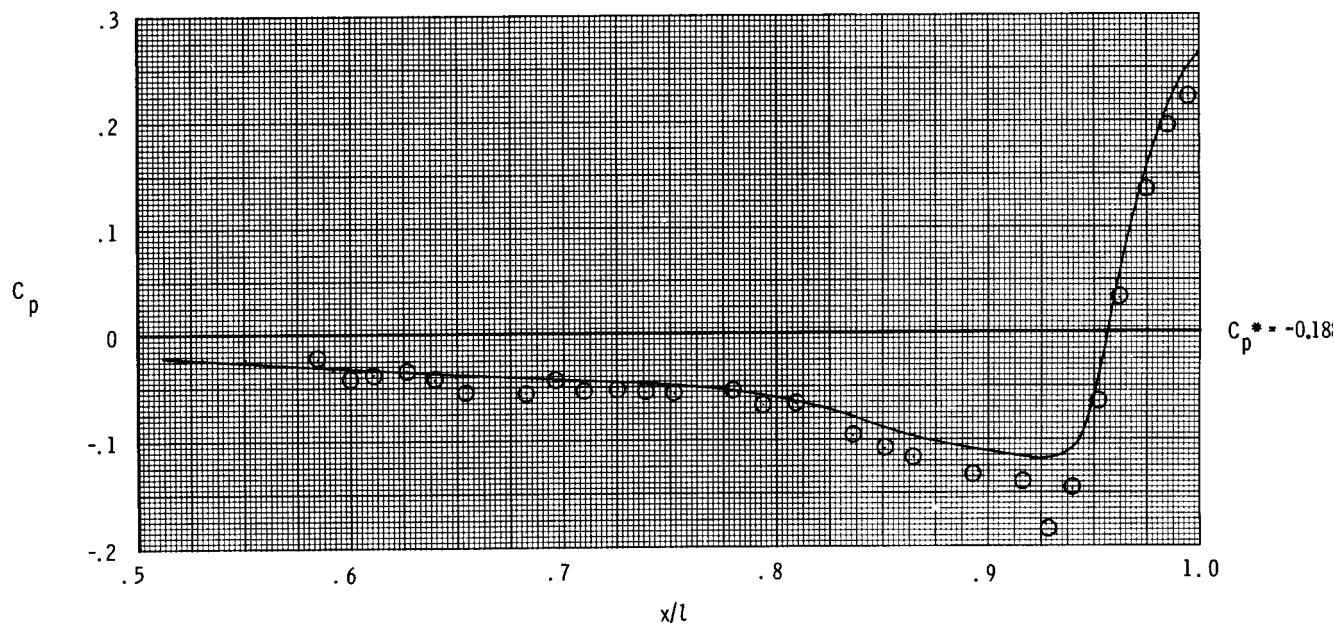


(c) $M = 1.20$.

Figure 18. Concluded.

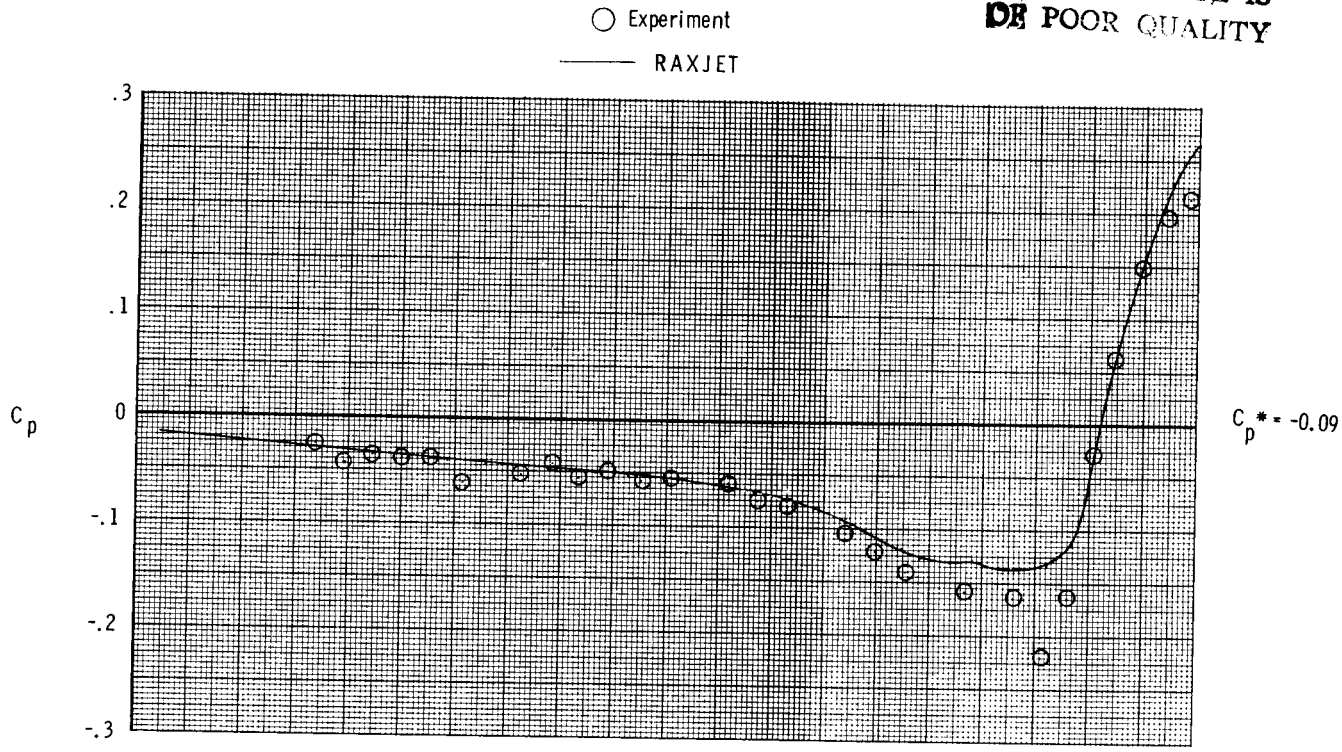


(a) $M = 0.60$; NPR = 3.0.

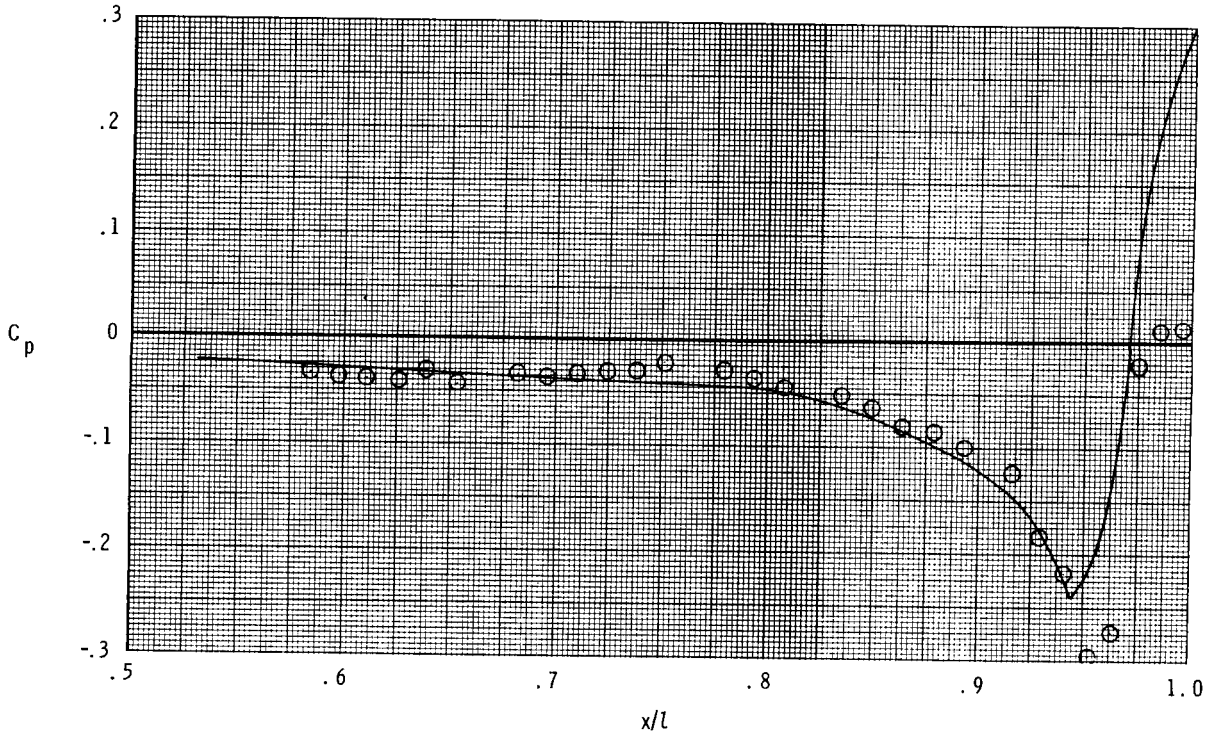


(b) $M = 0.90$; NPR = 5.0.

Figure 19. Comparison of calculated and experimental pressure coefficients at $\alpha = 0°$ on nozzle/afterbody f
body alone.

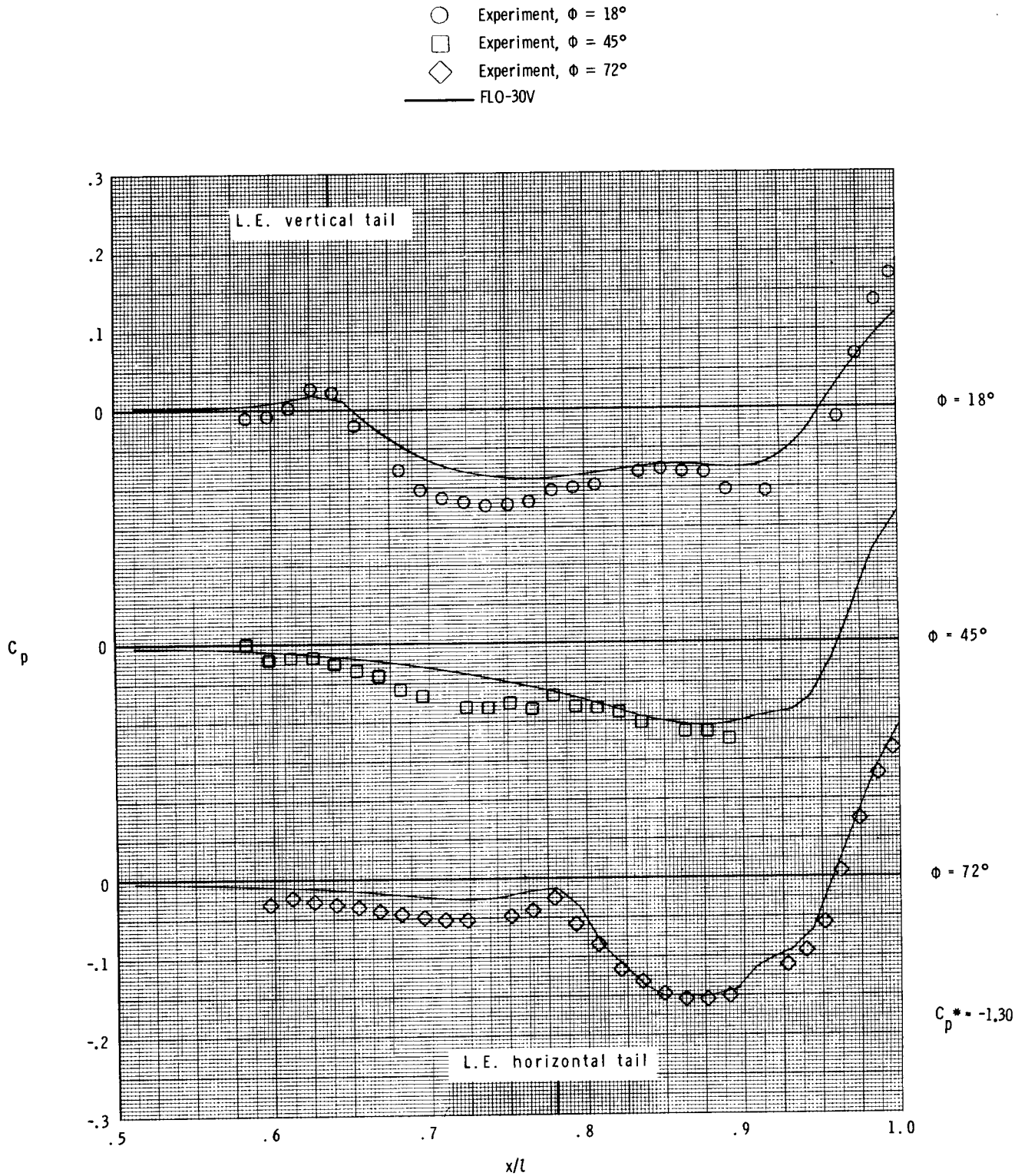


(c) $M = 0.95$; NPR = 5.0.



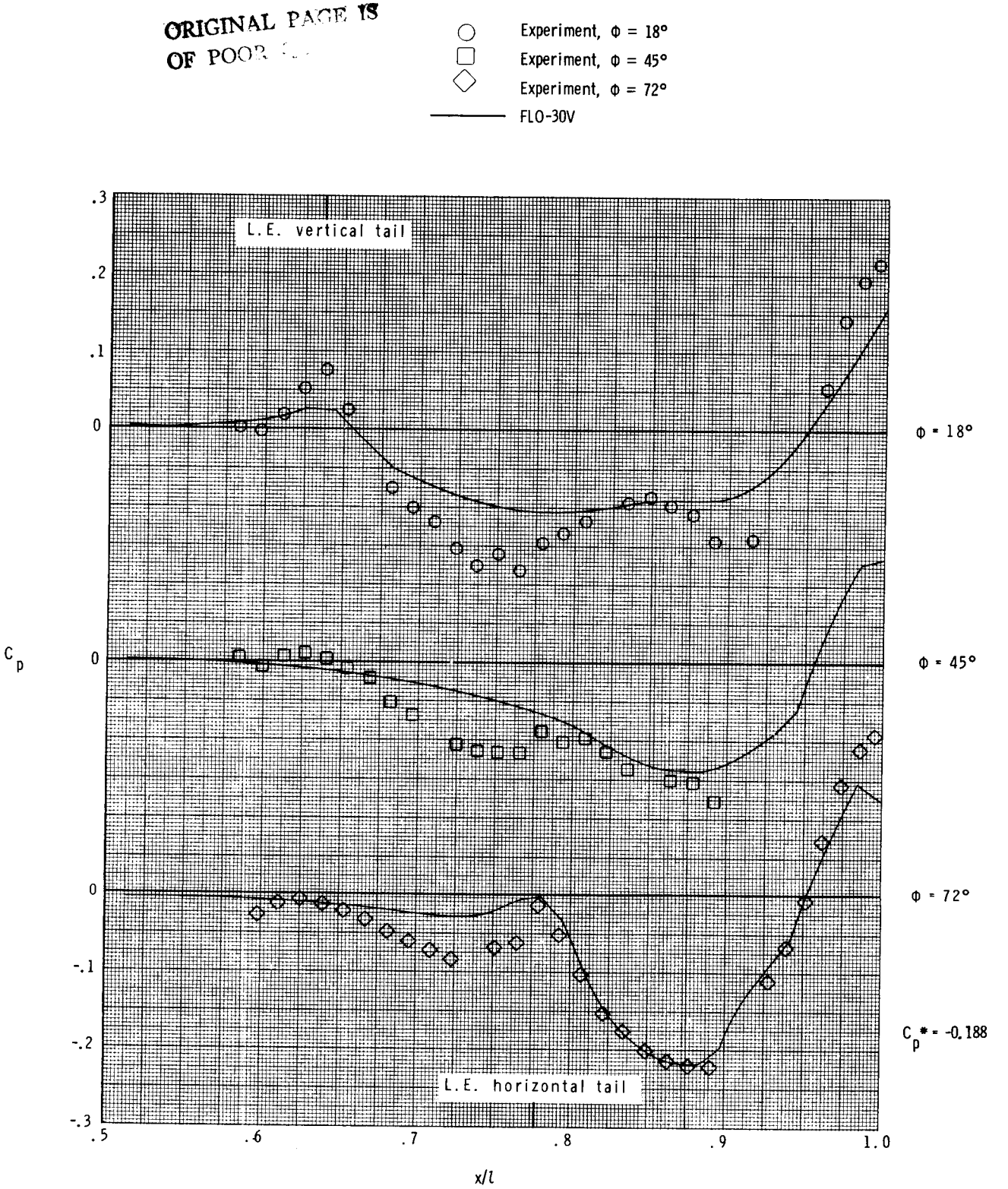
(d) $M = 1.20$; NPR = 6.0.

Figure 19. Concluded.



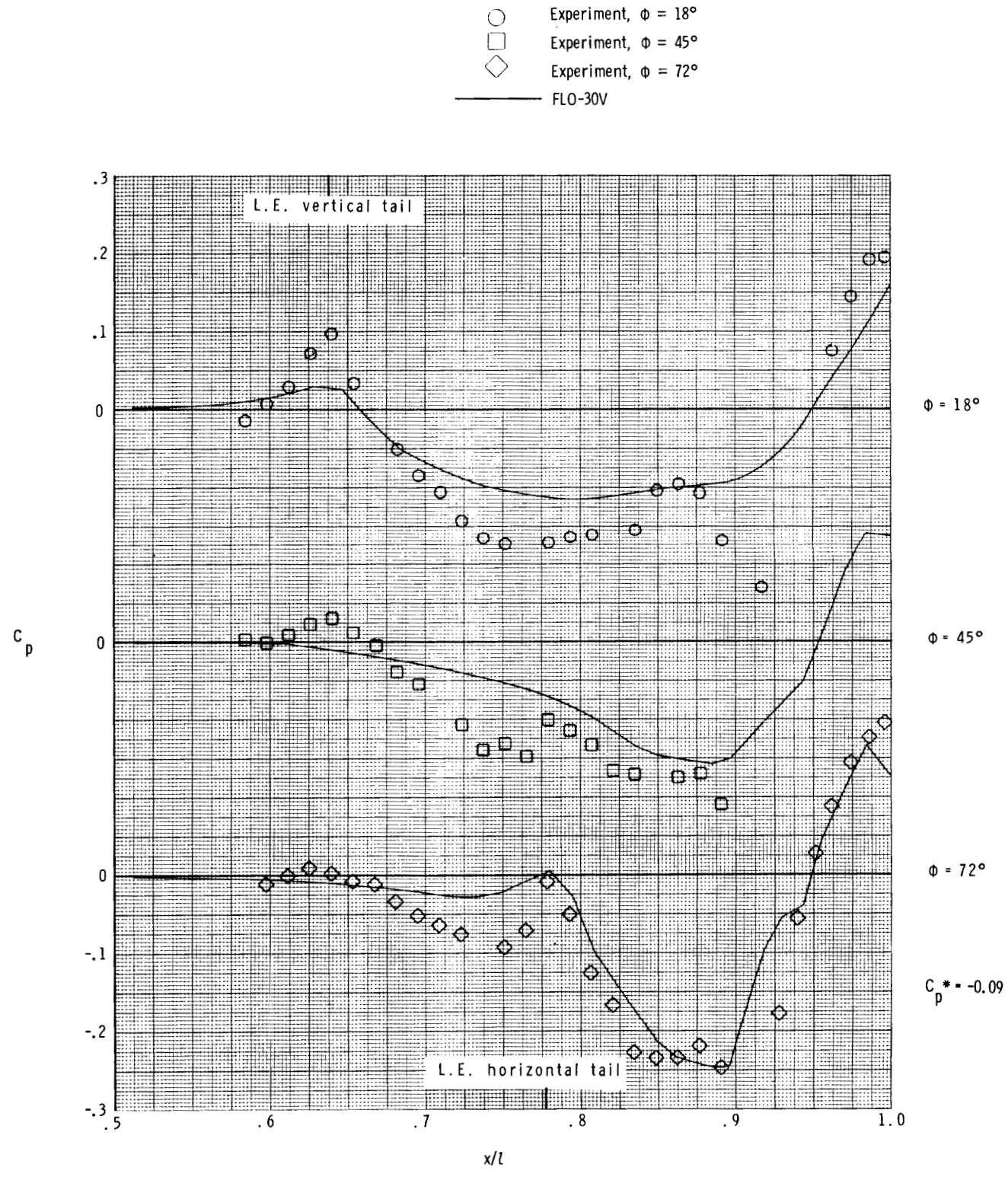
(a) $M = 0.60$; NPR = 3.0.

Figure 20. Comparison of calculated and experimental pressure coefficients at $\alpha = 0°$ on nozzle/afterbody for staggered tail configuration at three meridian angles located between vertical and horizontal tails.



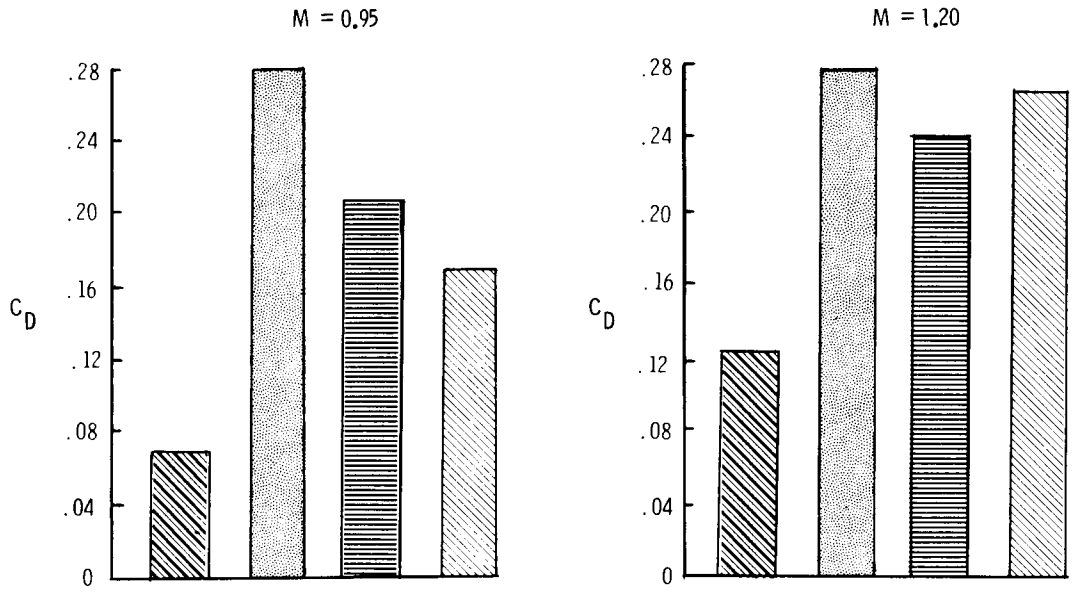
(b) $M = 0.90$; NPR = 5.0.

Figure 20. Continued.

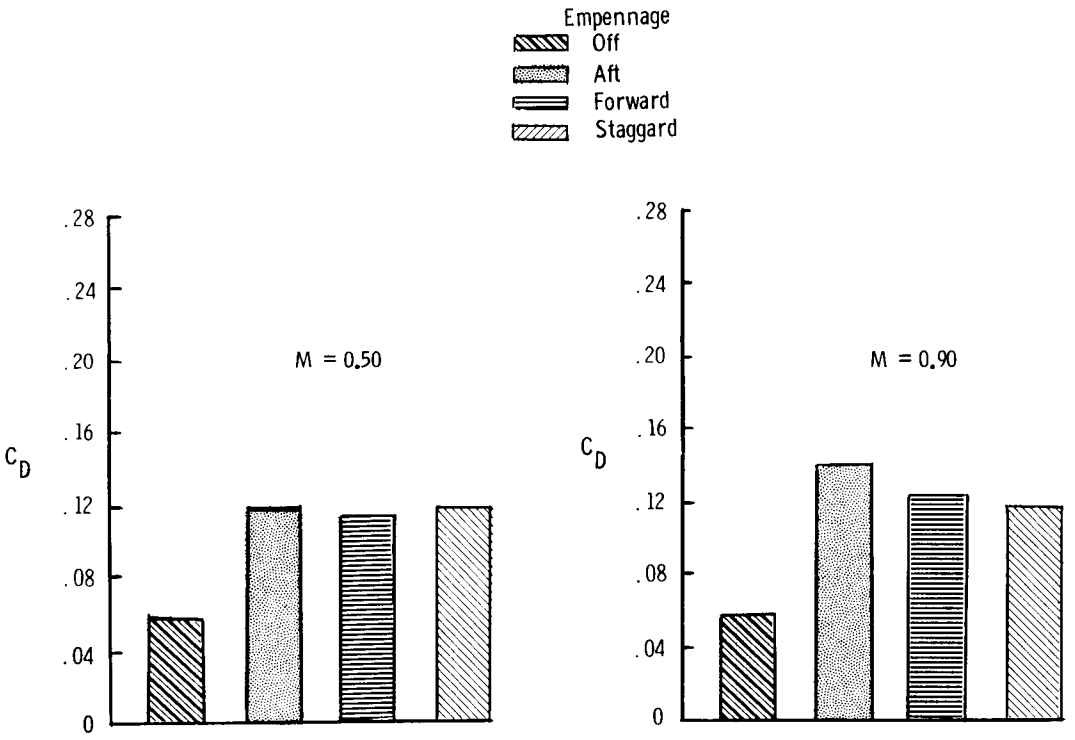


(c) $M = 0.95$; NPR = 5.0.

Figure 20. Concluded.



(a) $M = 0.95$ and 1.20.



(b) $M = 0.50$ and 0.90.

Figure 21. Drag coefficient due to various empennage arrangements. (Data from figs. 21 and 22 of ref. 3.)

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15. Supplementary Notes

16. Abstract

An investigation has been conducted in the Langley 16-Foot Transonic Tunnel to determine the effects of empennage arrangement on single-engine nozzle/afterbody static pressures. Tests were conducted at Mach numbers from 0.60 to 1.20, nozzle pressure ratios from 1.0 (jet off) to 8.0, and angles of attack from $-3°$ to $9°$ (at jet-off conditions), depending on Mach number. Three empennage arrangements (aft, staggered, and forward) were investigated. Extensive measurements were made of static pressure on the nozzle/afterbody in the vicinity of the tail surfaces.

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