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# A STUDY OF A VTOL THRUSTING EJECTOR IN LOW SPEED FLIGHT

BY V. R. STEWART

March 1981

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prepared it.



Prepared under contract NAS2-10494 By  
ROCKWELL INTERNATIONAL CORPORATION

Columbus, Ohio

for



AMES RESEARCH CENTER  
NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

**A STUDY OF A  
VTOL THRUSTING EJECTOR  
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## FOREWORD

This report presents the results of an experimental investigation of V/STOL thrust augmenter wings in flight at slow forward speeds. Two rectangular wing planforms of differing relative chord lengths were tested. The augmenters were positioned in the aft portion of the wing so as to produce increases in circulation lift. Two blown flap configurations were also tested for comparison.

Surface pressures as well as total forces and moments were obtained on the semispan models at two flap deflections and a range of momentum coefficients. The results are compared with predictions made by use of Spence's jet flap theory.

Volume 2 contains tabulation of (1) surveys at the pressure augmenter exit, (2) downwash surveys downstream of the wing, and (3) all force and moment data acquired during the test.

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A STUDY OF A  
VTOL THRUSTING EJECTOR  
IN LOW SPEED FLIGHT

Vearl R. Stewart  
Rockwell International  
North American Aircraft Division

APPENDIX A - PRESSURE EXIT SURVEYS

## SYMBOLS

$R$	-	Wing Aspect Ratio - see Table I	
$A_E$	-	Augmenter Exit Area Perpendicular to Mean Angle	$\text{cm}^2$ (inches <sup>2</sup> )
$A_j$	-	Nozzle Exit Area	$\text{cm}^2$ (inches <sup>2</sup> )
$b_w/2$	-	Wing Semispan	cm (inches)
$\bar{c}_w$	-	Wing Mean Aerodynamic Chord	
$C_f/c$	-	Flap Chord to Wing Chord Ratio	
$C_L$	-	Lift Coefficient, Lift/ $qS_R$	
$C_D$	-	Drag Coefficient, Drag/ $qS_R$	
$C_{D_{\text{Ram}}}$	-	Augmenter Secondary Flow	
$C_M$	-	Pitching Moment Coefficient, Pitching Moment/ $qS_R \bar{c}_w$	
$C_\mu$	-	Momentum Coefficient, $\dot{M}_p V_j / qS_R$	
$D$	-	Throat Width	meters (feet)
$F$	-	3-D Correction Factor, Function of $R$ and $\phi C_\mu$	
$K_1$	-	Induced Drag Correction Factor for Taper	
$K_2$	-	Induced Drag Correction Factor for Part Span Flaps	
$K_b$	-	Lift Correction Factor for Part Span Flaps	
$M$	-	Mach number	
$\dot{M}_p$	-	Primary (nozzle) Mass Flow	kg/sec. (slugs/sec.)
$\dot{M}_s$	-	Secondary (entrained) Mass Flow of Augmenter	kg/sec. (slugs/sec.)
$\dot{M}_T$	-	Total Mass Flow, $\dot{M}_p + \dot{M}_s$	kg/sec. (slugs/sec.)
$P$	-	Pressure	pascals (pounds/in. <sup>2</sup> )
$P_a$	-	Atmospheric Pressure	pascals (pounds/in. <sup>2</sup> )
$P_s$	-	Static Pressure	pascals (pounds/in. <sup>2</sup> )
$P_T$	-	Total Pressure	pascals (pounds/in. <sup>2</sup> )
$P_R$	-	Pressure Ratio, $P_T/P_a$	
$q$	-	Freestream Dynamic Pressure, $\frac{1}{2}\rho V_\infty^2$	newtons/meter <sup>2</sup> (pounds/ft <sup>2</sup> )
$q_h$	-	Dynamic Pressure at Tail Location	newtons/meter <sup>2</sup> (pounds/ft <sup>2</sup> )

r	-	Thrust Recovery Factor	
$S_R$	-	Reference Wing Area	meters <sup>2</sup> (feet <sup>2</sup> )
t	-	Wing Thickness	cm (inches)
t	-	Temperature	K° (R°)
T	-	Thrust	newtons (pounds)
$t_o$	-	Total Temperature	K° (R°)
V	-	Velocity	meters/sec (feet/sec.)
$V_\infty$	-	Freestream Velocity	meters/sec (feet/sec.)
$V_j$	-	Nozzle Jet Velocity	meters/sec (feet/sec.)
X	-	Horizontal Dimension, Positive Aft	meters (feet)
Y	-	Lateral Dimension from Plane of Symmetry, Positive Right	meters (feet)
Z	-	Vertical Dimension from WRP, Positive Up	meters (feet)
$\lambda$	-	Taper Ratio	
$\phi$	-	Thrust Augmentation Ratio	$\frac{\text{Augmented Thrust}}{\text{Isentropic Thrust}}$
$\rho$	-	Air Density	Kg/meter (slugs/ft )
$\alpha$	-	Angle of Attack	degrees
$\theta$	-	Thrust Angle	degrees
$\epsilon$	-	Downwash Angle	degrees
$\delta_F$	-	Mean Flap Angle Measured from WRP	degrees
$\delta_{CB}$	-	Centerbody Angle Measured from WRP	degrees
$\delta_{FWD}$	-	Nose Flap Angle Measured from WRP	degrees
$\delta_{AFT}$	-	Aft Flap Angle Measured from WRP	degrees
$\delta_D$	-	Diffuser Half Angle Measured from Mean Angle	degrees

LIST OF ILLUSTRATIONS

PRESSURE EXIT SURVEYS  $P_T/P_0 = 1.5$

<u>FIGURE</u>	<u>TITLE</u>	<u>RUN</u>	<u>CONFIGURATION</u>	<u>PAGE</u>
A-1 (a-k)	AUGMENTER EXIT TOTAL & STATIC PRESSURE	112	AUG. #1 DIFF. = 16°, $\theta = 30^\circ$ , $\alpha = 0$	5- 15
A-2 (a-d)	" " " "	113	" "	16- 19
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A-4 (a-l)	" " " "	115	" "	27- 38
A-5 (a-g)	" " " "	116	" "	39- 45
A-6 (a-h)	" " " "	117A	AUG. #1, DIFF. = 8°, $\theta = 40^\circ$ , $\alpha = 0$	46- 53
A-7 (a-g)	" " " "	117B	" "	54- 60
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A-10 (a-f)	" " " "	119	AUG. #1, DIFF. = 16°, $\theta = 40^\circ$ , $\alpha = 0$	76- 81
A-11 (a-e)	" " " "	120A	" "	82- 86
A-12 (a-f)	" " " "	120B	" "	87- 92
A-13 (a-f)	" " " "	120C	" "	93- 98
A-14 (a-f)	" " " "	120D	" "	99-104
A-15 (a-d)	" " " "	121A	AUG. #1, DIFF. = 16°, $\theta = 40^\circ$ , $\alpha = 8^\circ$	105-108
A-16 (a-j)	" " " "	121B	" "	109-118

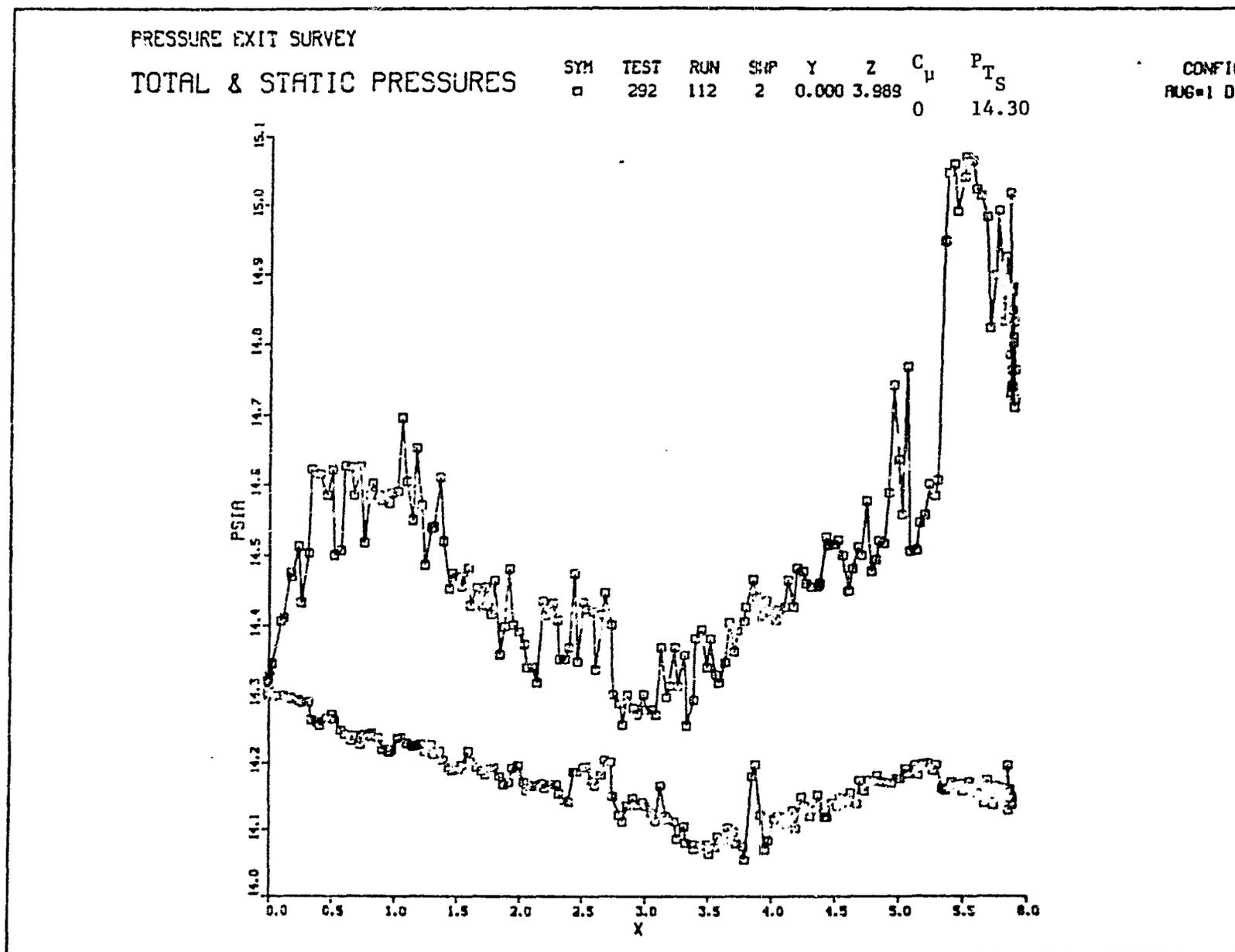


Figure A-1 a. Augmenter Exit Total & Static Pressure, Augmenter #1, Diff =  $16^{\circ}$ ,  $\theta = 30^{\circ}$ ,  $\alpha = 0$

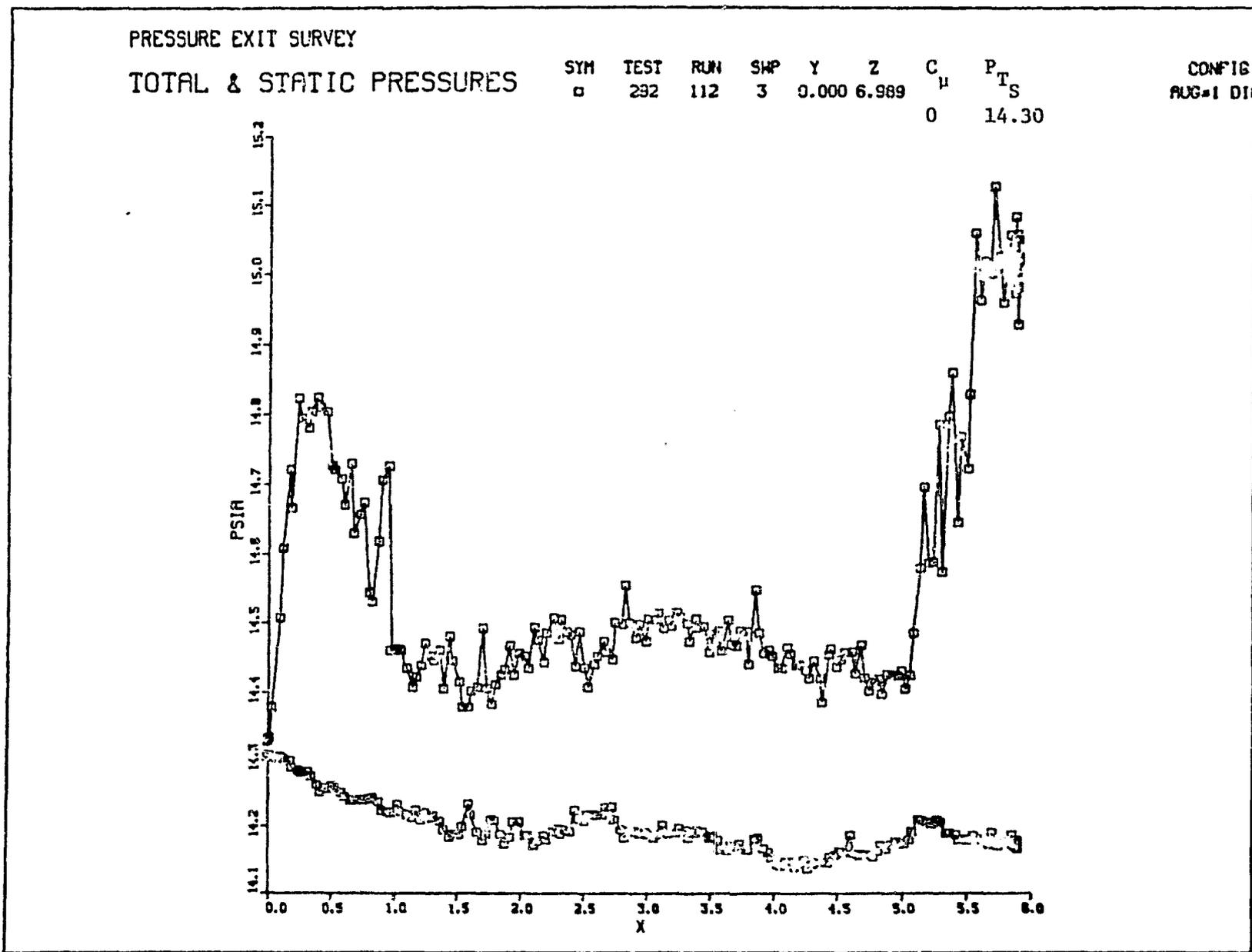


Figure A-1 b. Augmenter Exit Total & Static Pressure, Augmenter #1, Diff = 16°, θ = 30°, α = 0

PRESSURE EXIT SURVEY

TOTAL & STATIC PRESSURES

SYM	TEST	RUN	SWP	Y	Z	C <sub>μ</sub>	P <sub>TS</sub>
□	292	112	4	0.000	13.002	0	14.30

CONFIG  
AUG=1 D:

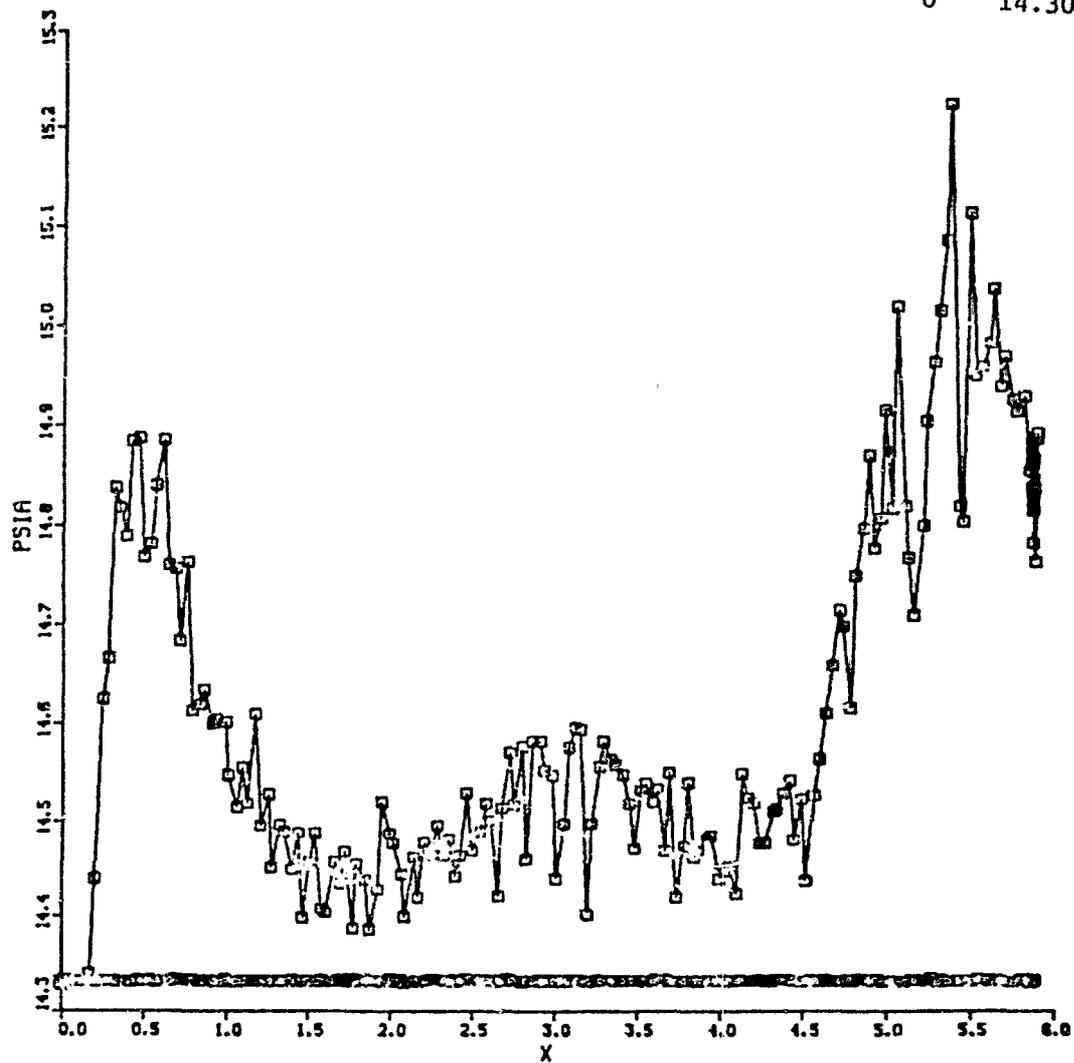


Figure A-1 c. Augmenter Exit Total & Static Pressure, Augmenter #1, Diff = 16°, θ = 30°, α = 0

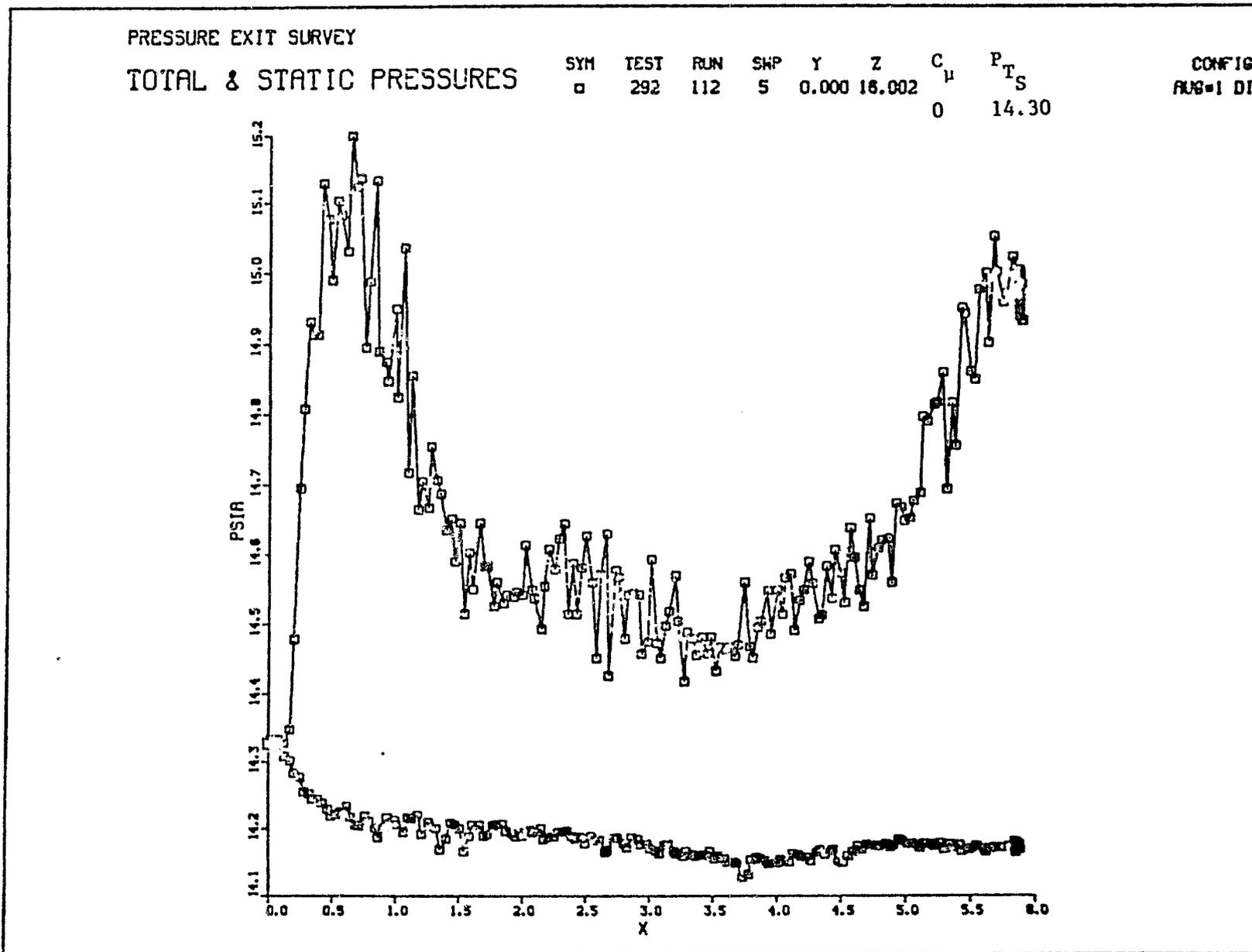


Figure A-1 d. Augmenter Exit Total & Static Pressure, Augmenter #1, Diff = 16°, θ = 30°, α = 0

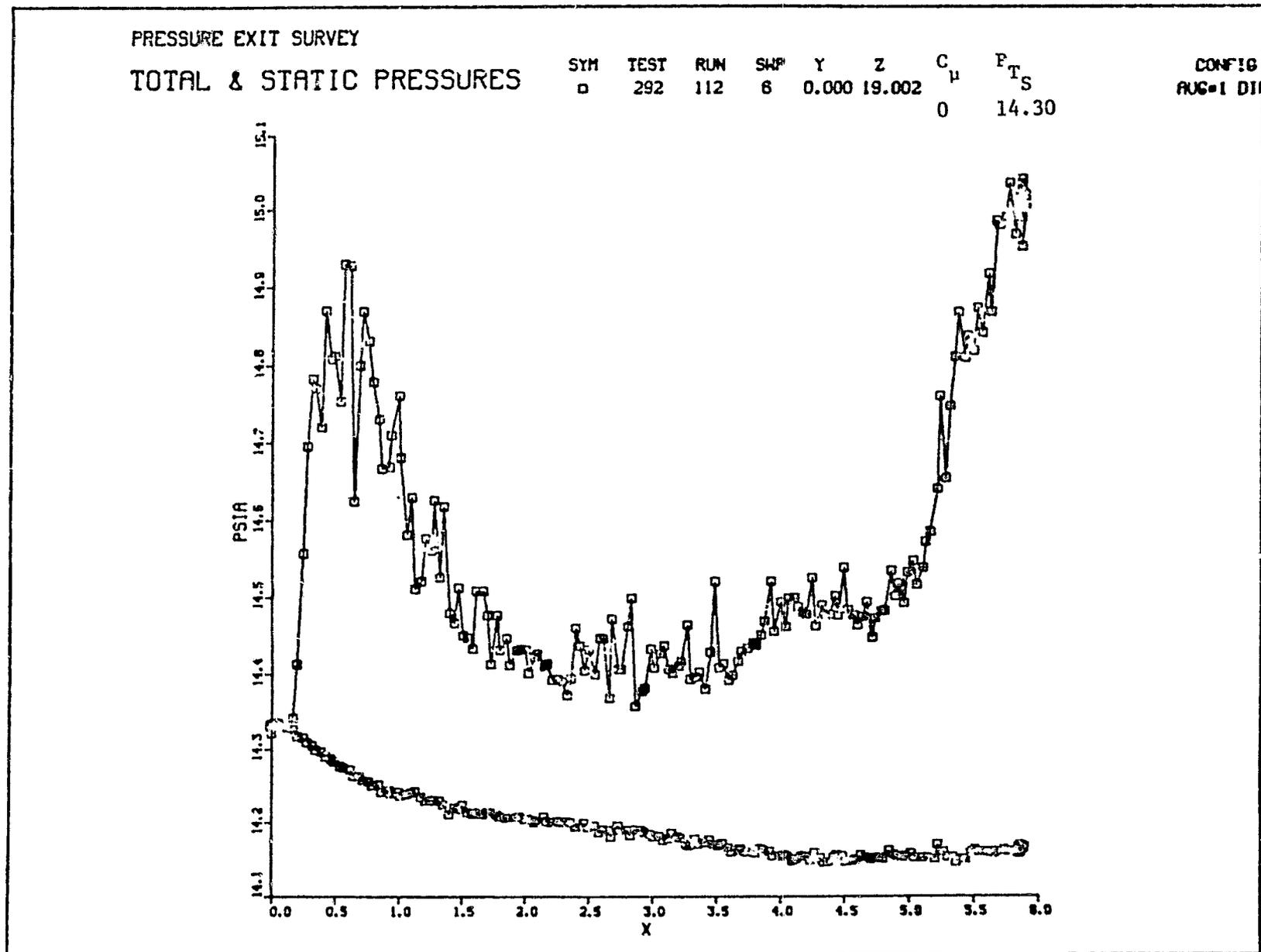


Figure A-1 e. Augmenter Exit Total & Static Pressure, Augmenter #1, Diff - 16°,  $\theta = 30^\circ$ ,  $\alpha = 0$

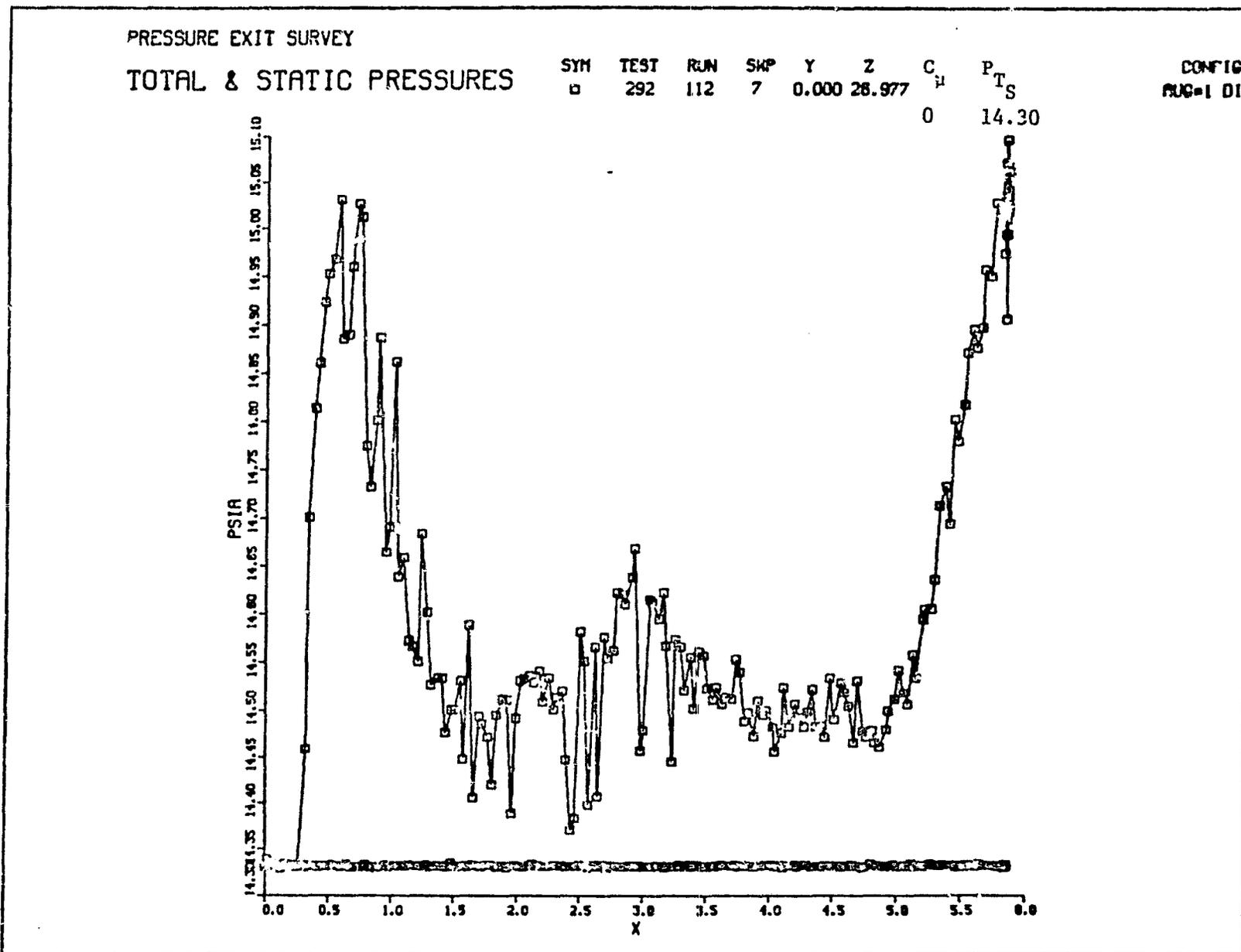


Figure A-1 f. Augmenter Exit Total & Static Pressure, Augmenter #1, Diff = 16°,  $\theta = 30^\circ$ ,  $\alpha = 0$

PRESSURE EXIT SURVEY

TOTAL & STATIC PRESSURES

SYM	TEST	RUN	SWP	Y	Z	C	P <sub>T</sub>	CONFIG
□	292	112	8	0.000	29.977	μ	14.30	AUG-1 DI

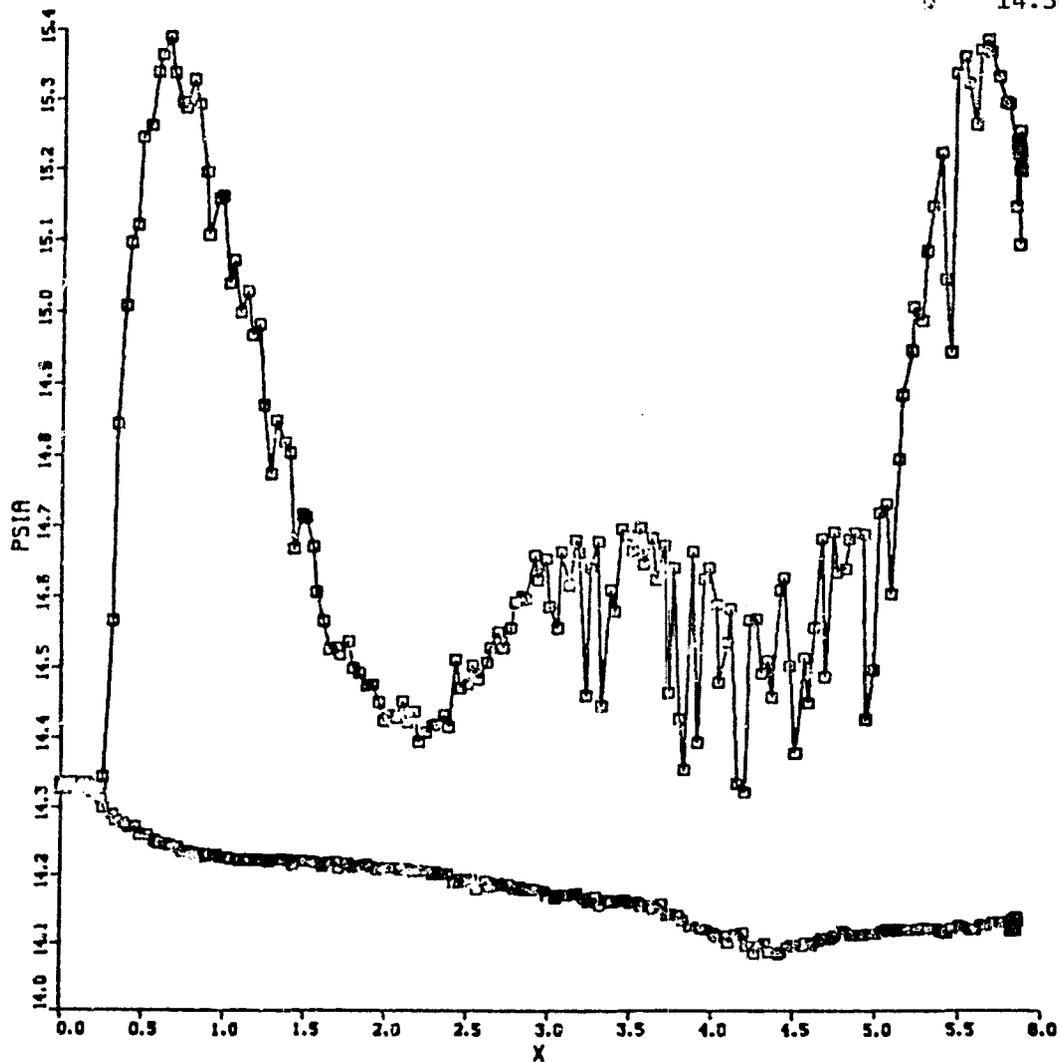


Figure A-1 g. Augmenter Exit Total & Static Pressure, Augmenter #1, Diff = 16°, θ = 30°, α = 0

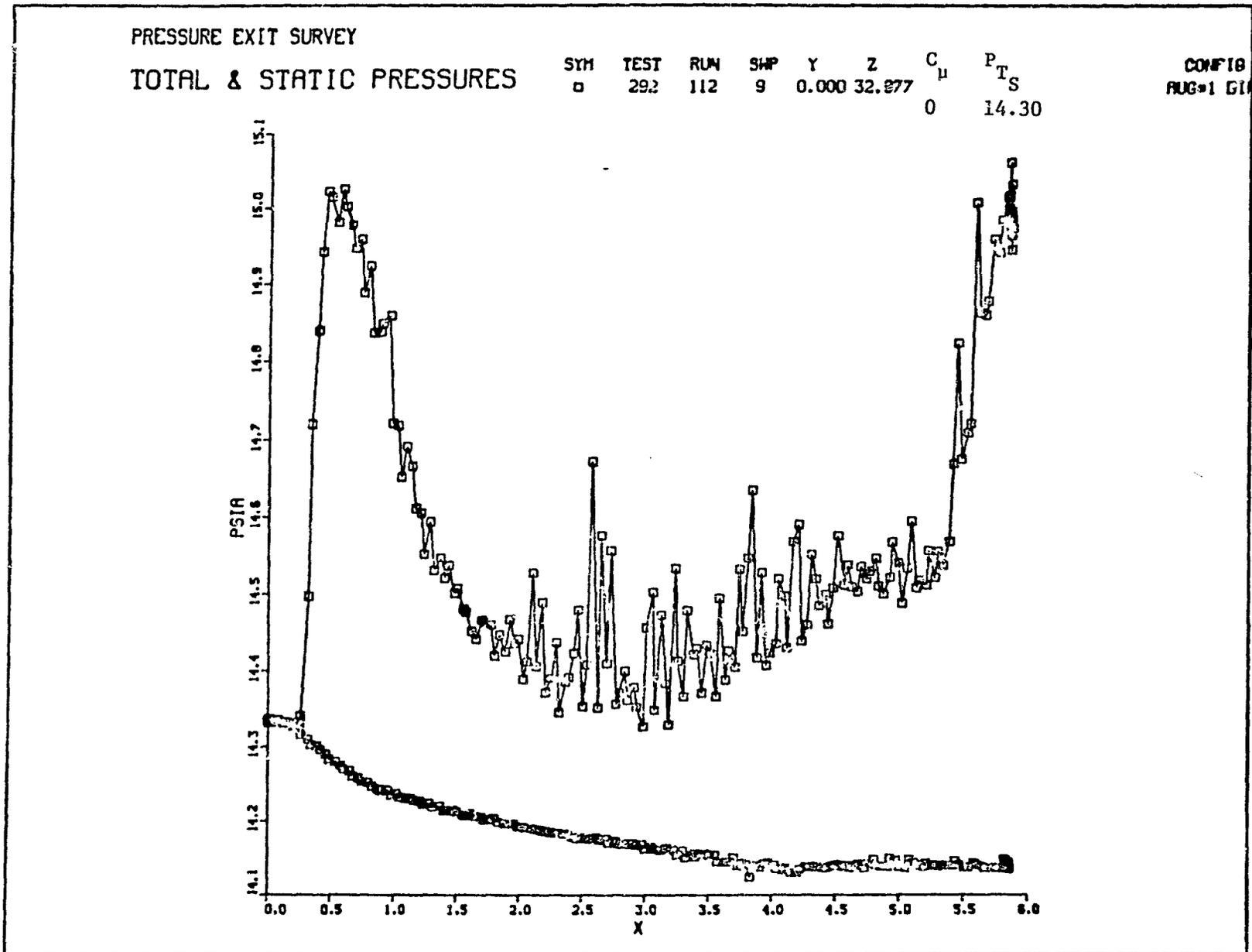


Figure A-1 h. Augmenter Exit Total & Static Pressure, Augmenter #1, Diff =  $16^\circ$ ,  $\theta = 30^\circ$ ,  $\alpha = 0$

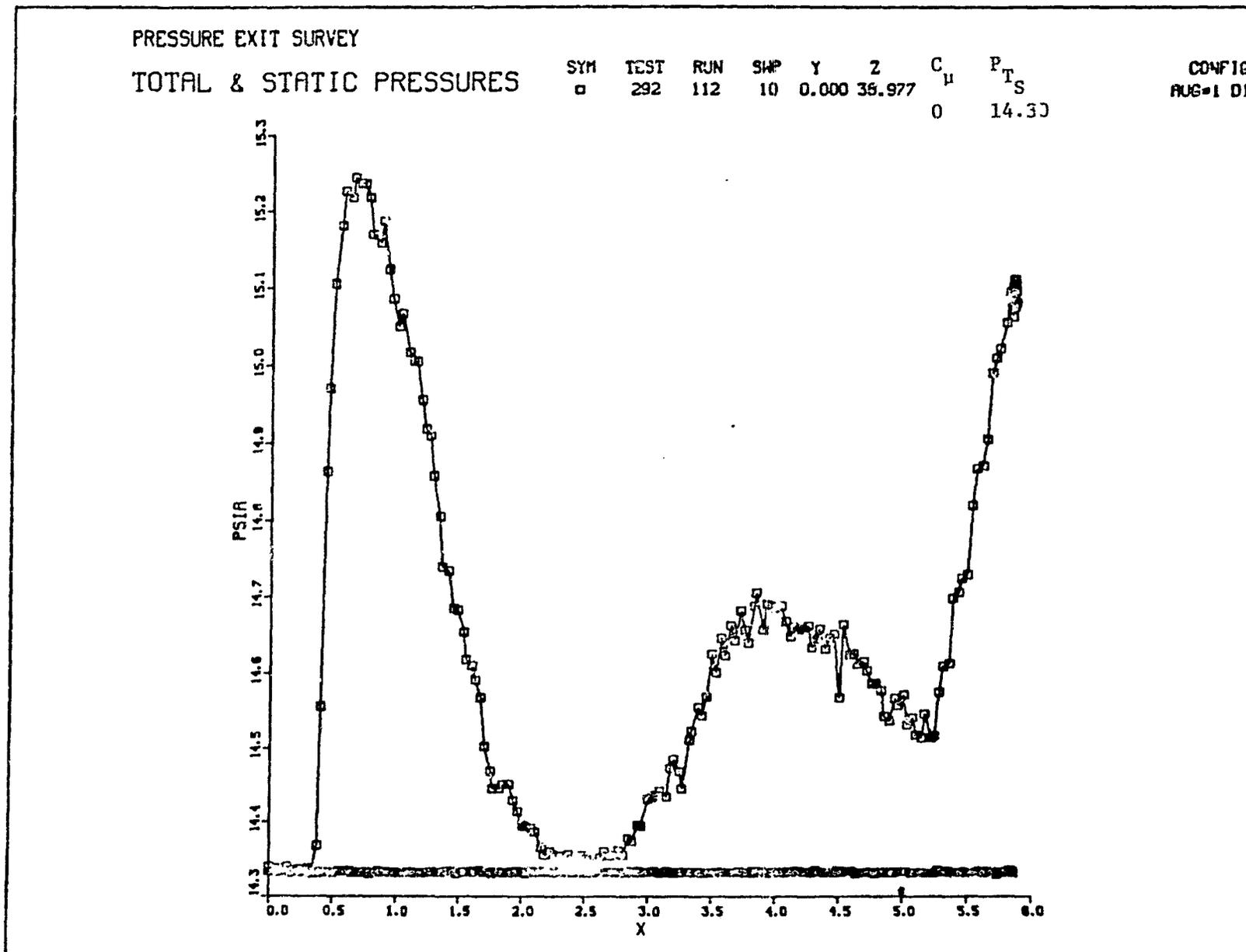


Figure A-1 i. Augmenter Exit Total & Static Pressure, Augmenter #1, Diff =  $16^{\circ}$ ,  $\theta = 30^{\circ}$ ,  $\alpha = 0$

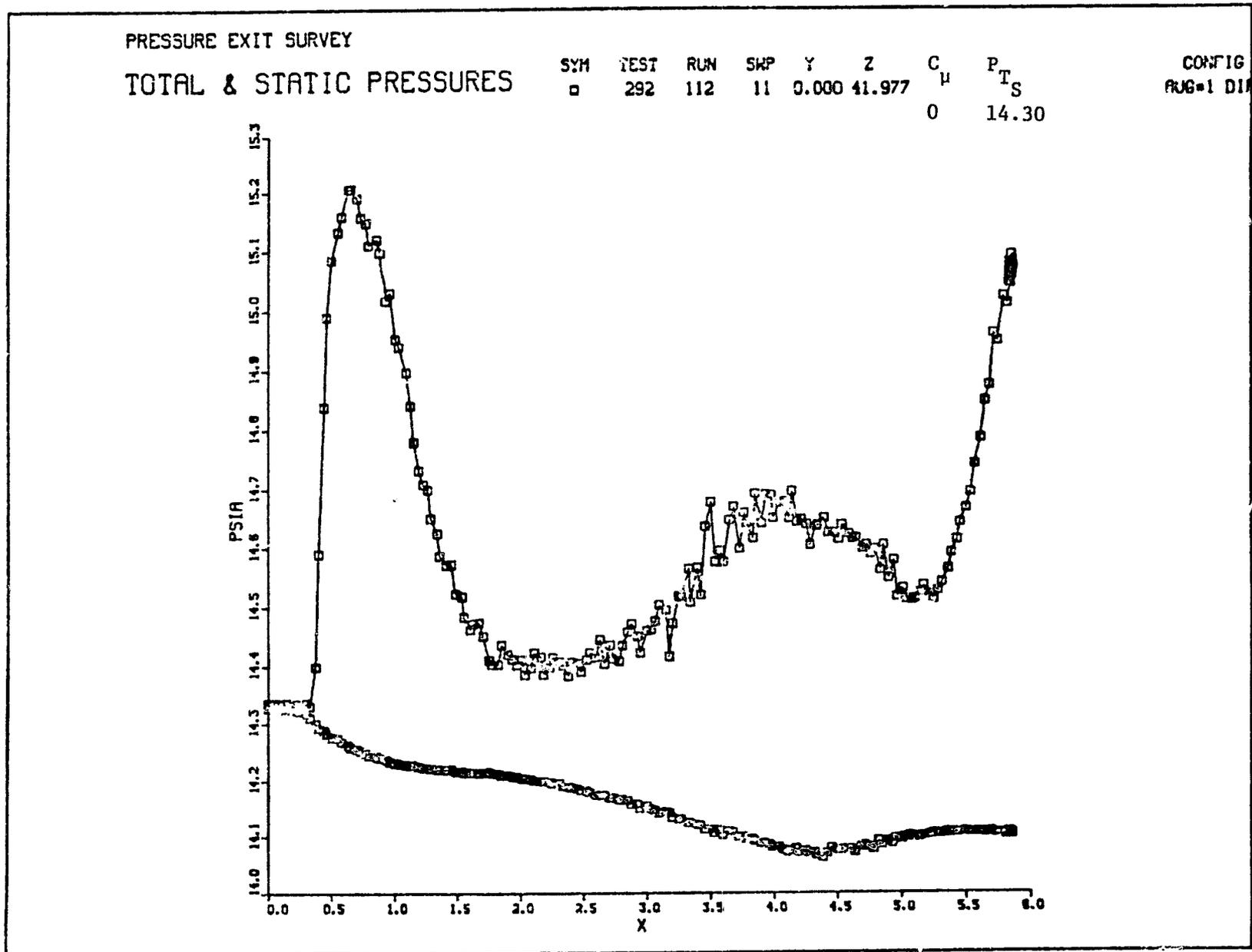


Figure A-1 j. Augmenter Exit Total & Static Pressure, Augmenter #1, Diff =  $16^\circ$ ,  $\theta = 30^\circ$ ,  $\alpha = 0$

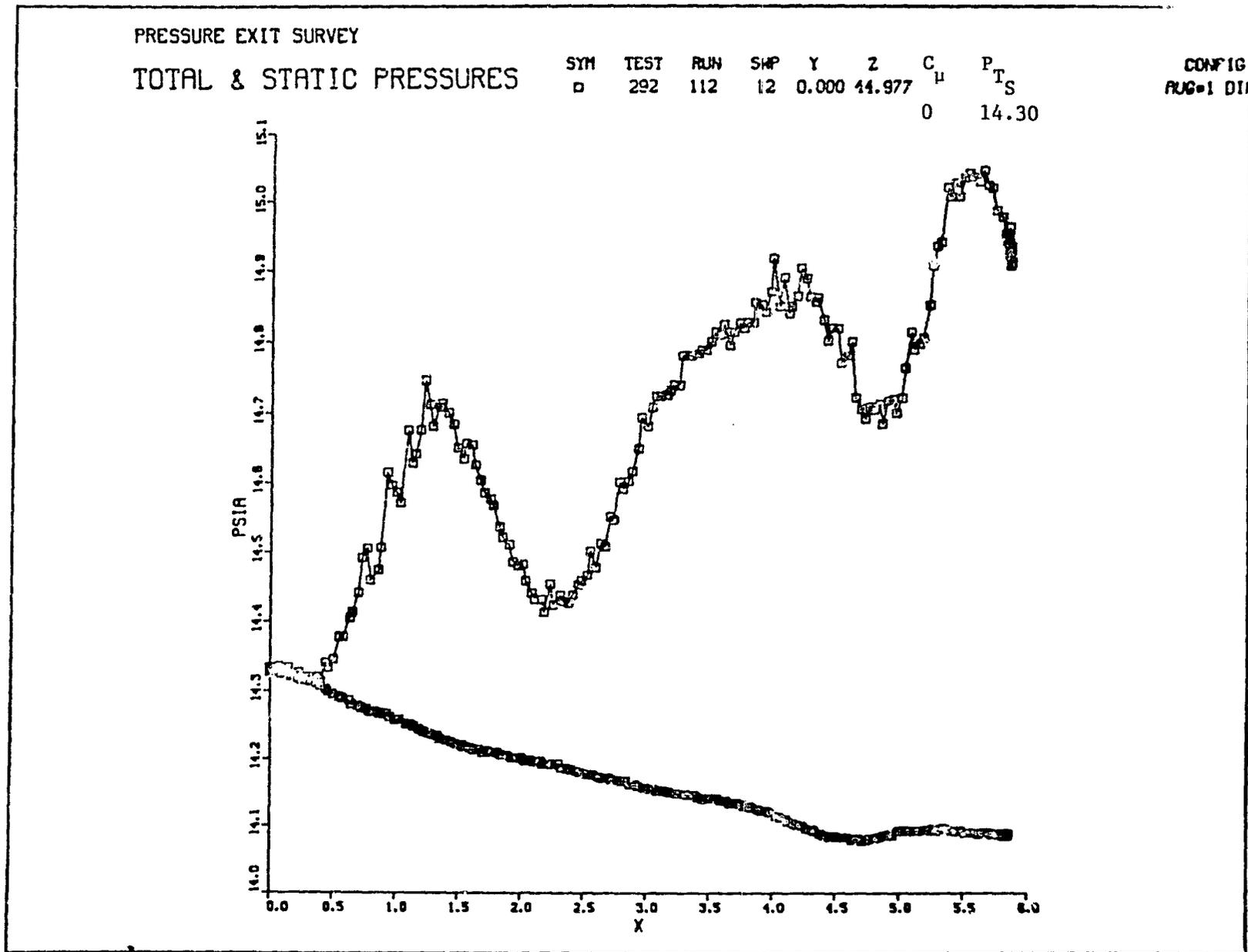


Figure A-1 k. Augmenter Exit Total & Static Pressure, Augmenter #1, Diff =  $16^\circ$ ,  $\theta = 30^\circ$ ,  $\alpha = 0$

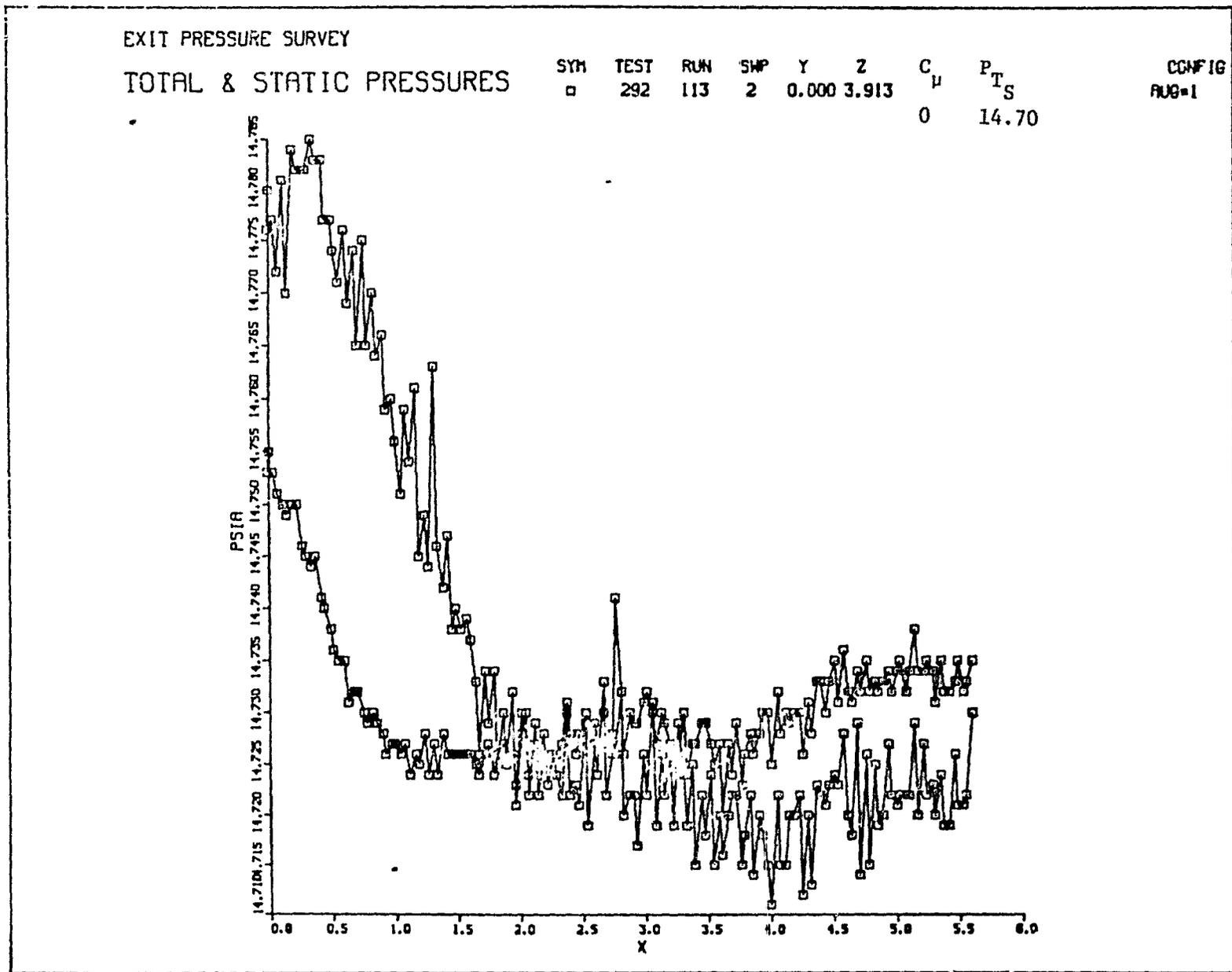


Figure A-2 a. Augmenter Exit Total & Static Pressure, Aug. #1, Diff = 16°, θ = 30°, α = 0

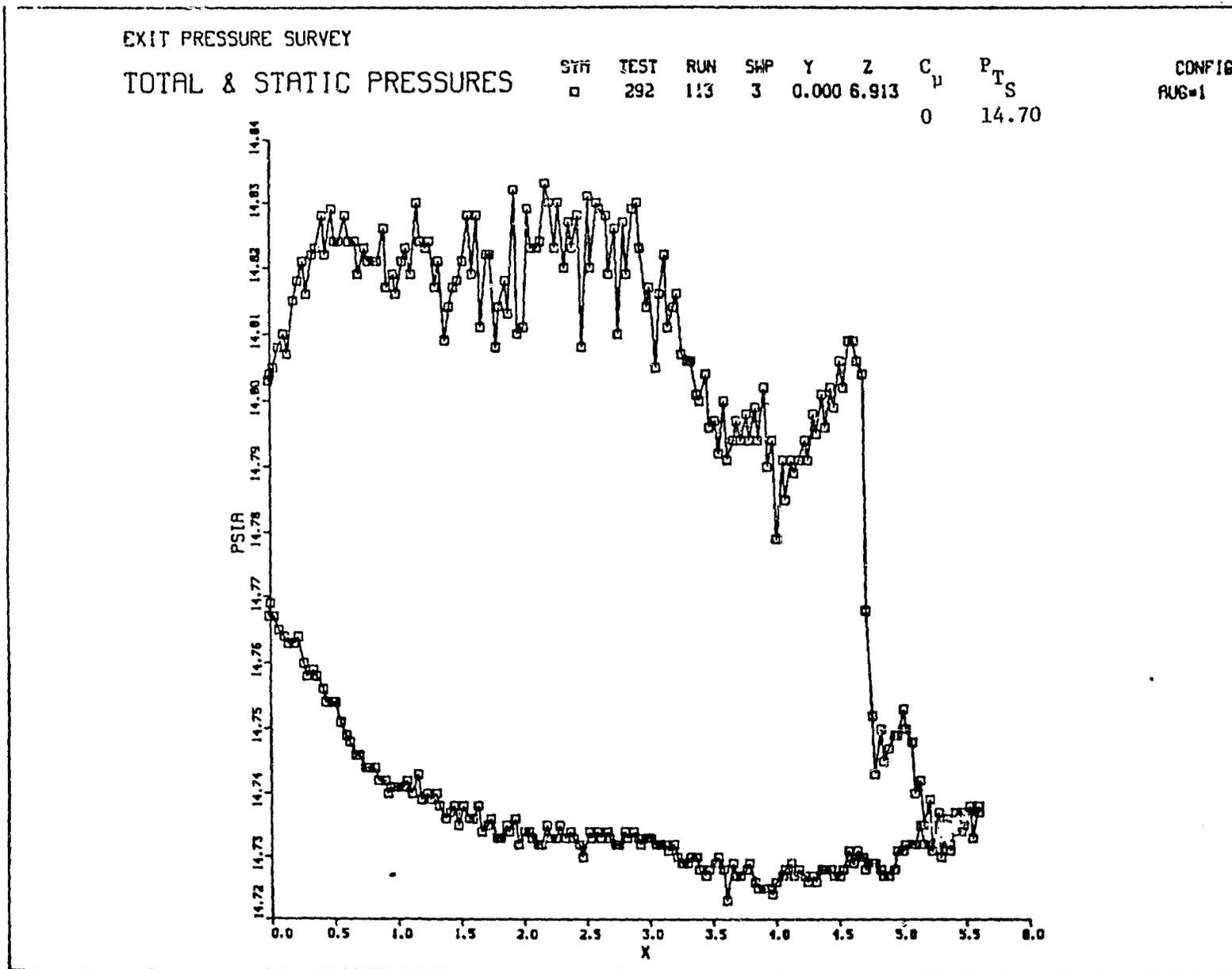


Figure A-2 b. Augmenter Exit Total & Static Pressure, Aug. #1, Diff =  $16^\circ$ ,  $\theta = 30^\circ$ ,  $\alpha = 0$

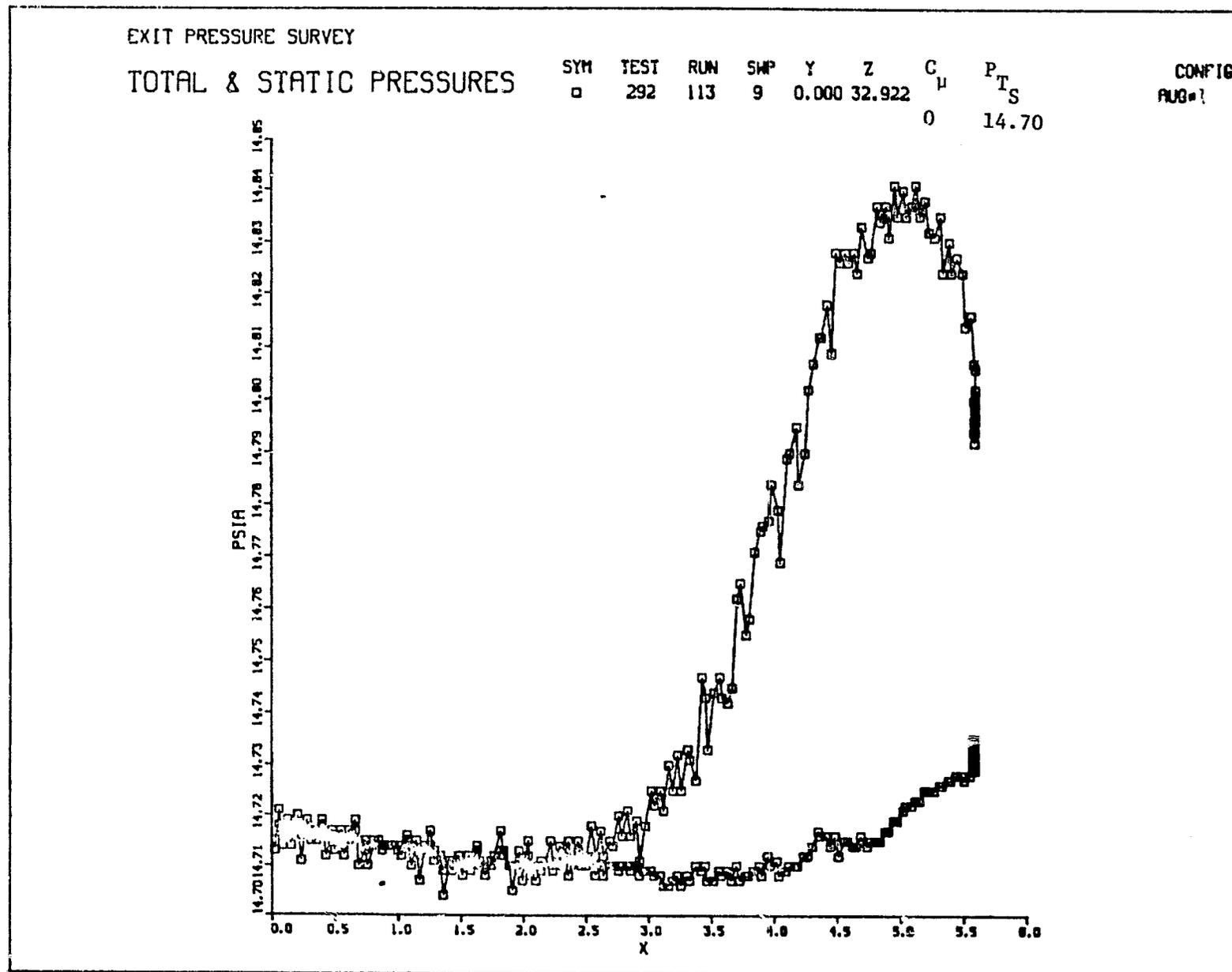


Figure A-2 c. Augmenter Exit Total & Static Pressure, Aug. #1, Diff - 16°,  $\theta = 30^\circ$ ,  $\alpha = 0$

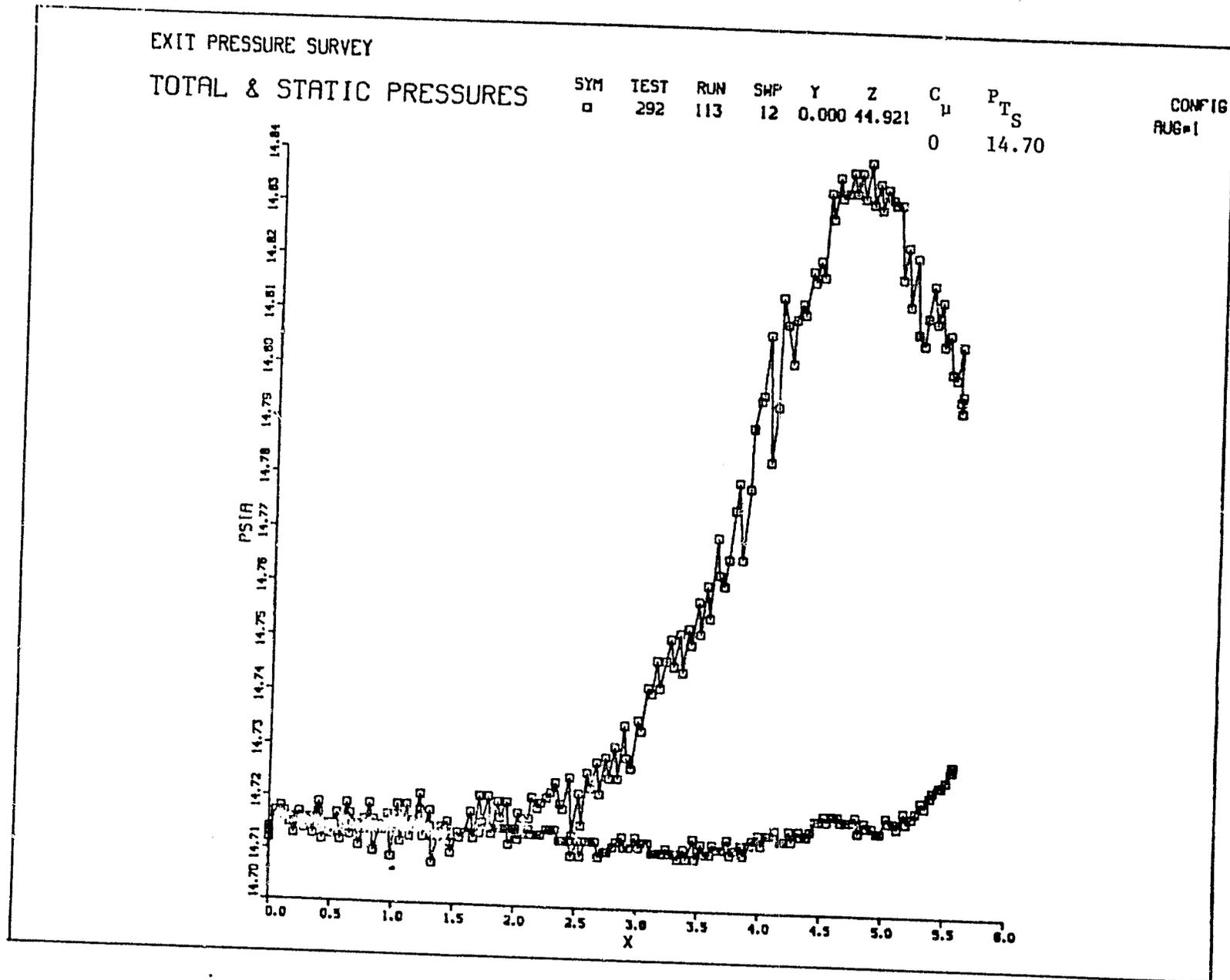


Figure A-2 d. Augmenter Exit Total & Static Pressure, Aug. #1, Diff = 16°,  $\theta = 30^\circ$ ,  $\alpha = 0$

PRESSURE EXIT SURVEY

TOTAL & STATIC PRESSURES

SYM	TEST	RUN	SNP	Y	Z	C <sub>μ</sub>	P <sub>T</sub> <sub>S</sub>
□	292	114	3	0.000	7.018	2	14.80

CONFIS  
1 AUG=1

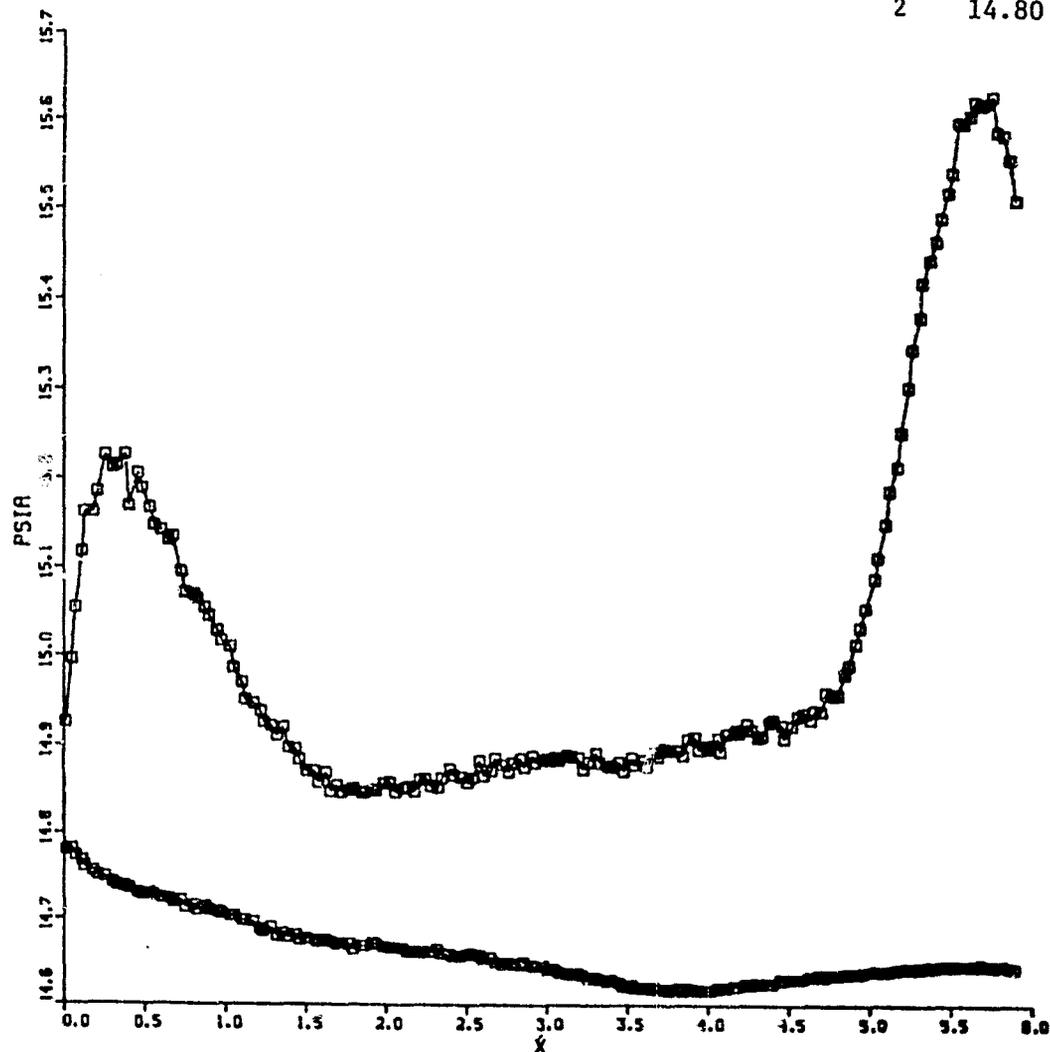


Figure A-3 a. Augmenter Exit Total & Static Pressure, Aug. #1, Diff = 16°, θ = 30°, α = 0°

PRESSURE EXIT SURVEY

TOTAL & STATIC PRESSURES

SYM	TEST	RUN	SHP	Y	Z	C <sub>μ</sub>	P <sub>T</sub> <sub>S</sub>
□	392	114	4	0.000	13.019	2	14.80

CONFIG  
AUG-1

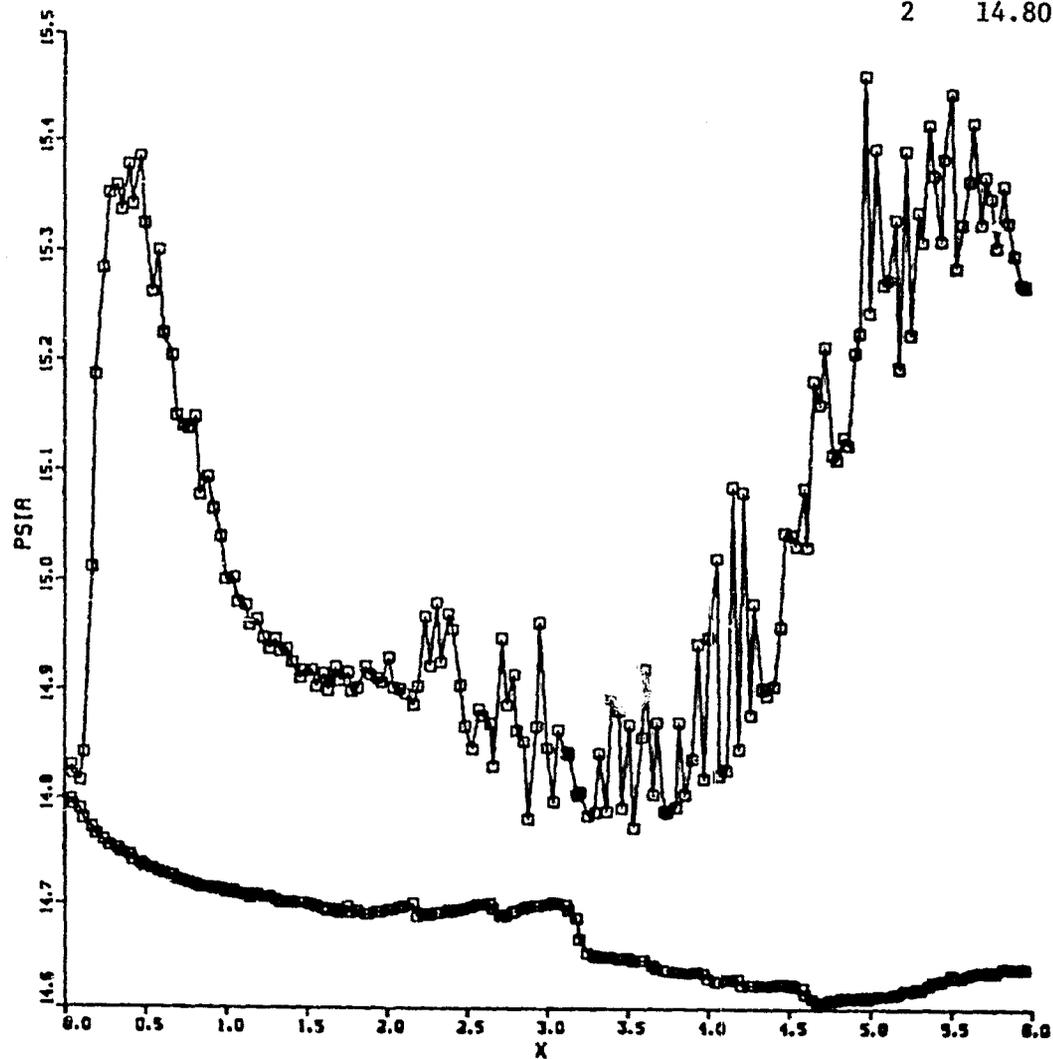


Figure A-3 b. Augmenter Exit Total & Static Pressure, Aug. #1, Diff - 16°, θ = 30°, α = 0

PRESSURE EXIT SURVEY

TOTAL & STATIC PRESSURES

SYM	TEST	RUN	SWP	Y	Z	C	P <sub>T</sub>	P <sub>S</sub>
□	292	114	B	0.000	19.019	μ	2	14.30

CONFIG  
AUG-1

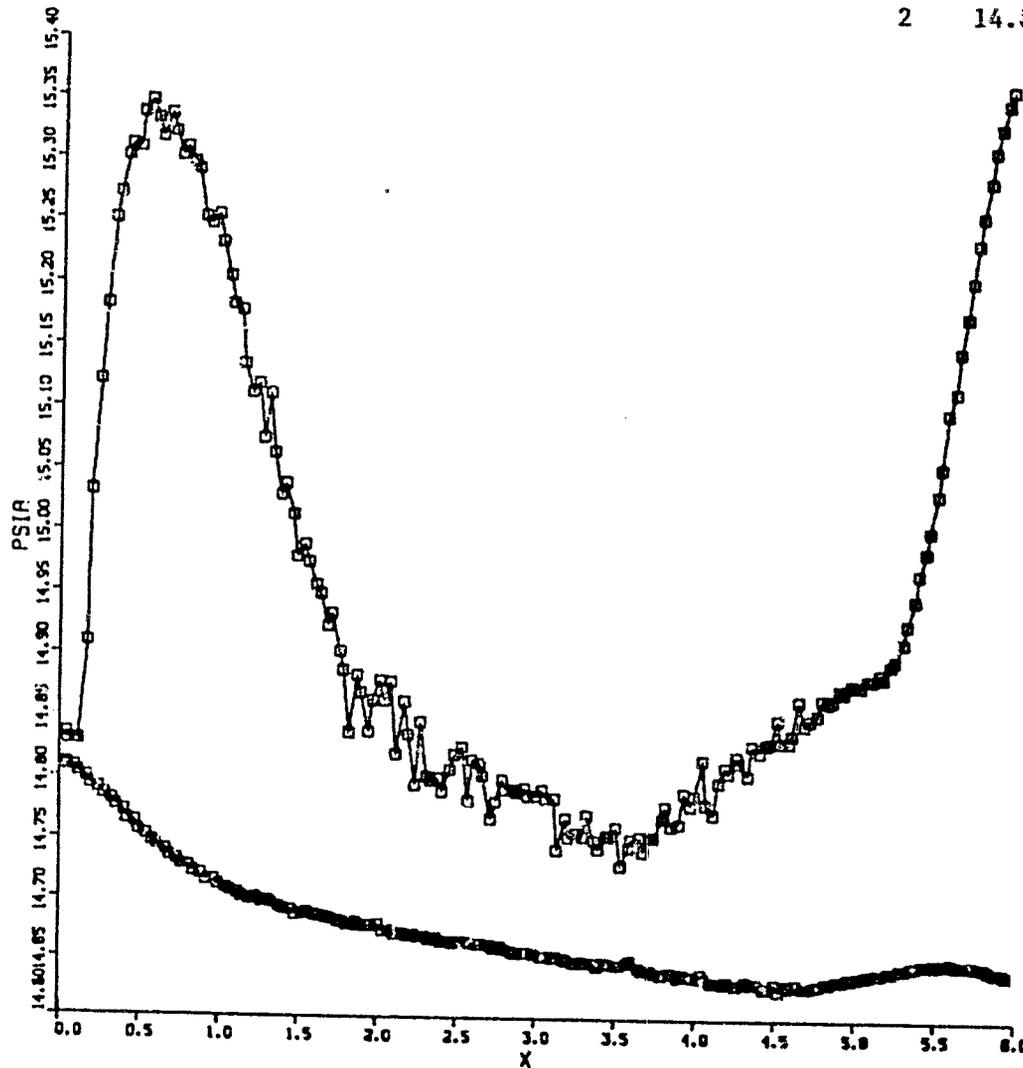


Figure A-3 c. Augmenter Exit Total & Static Pressure, Aug. #1, Diff = 16°, θ = 30°, α = 0

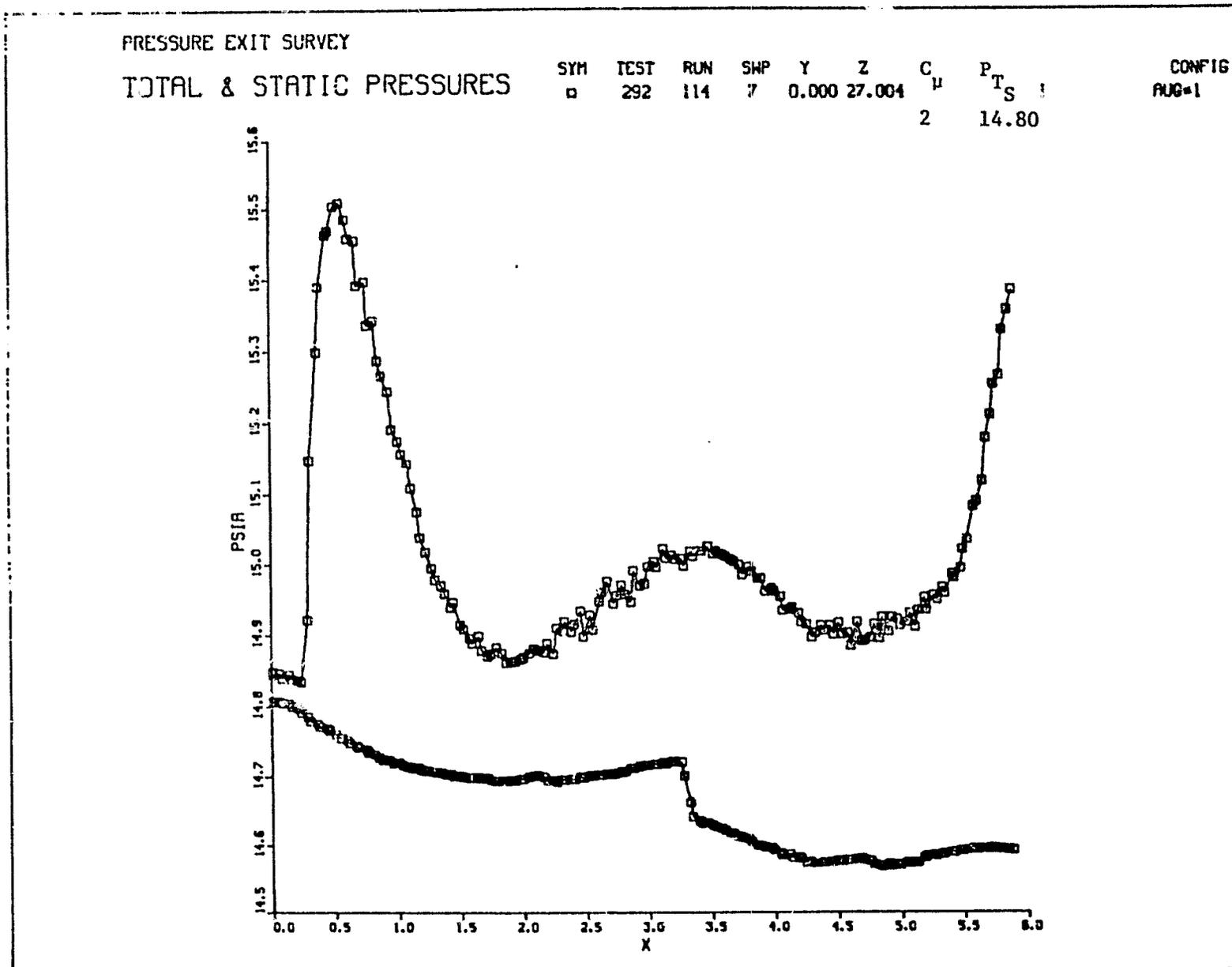


Figure A-3 d. Augmenter Exit Total & Static Pressure, Aug. #1, Diff =  $16^\circ$ ,  $\theta = 30^\circ$ ,  $\alpha = 0$

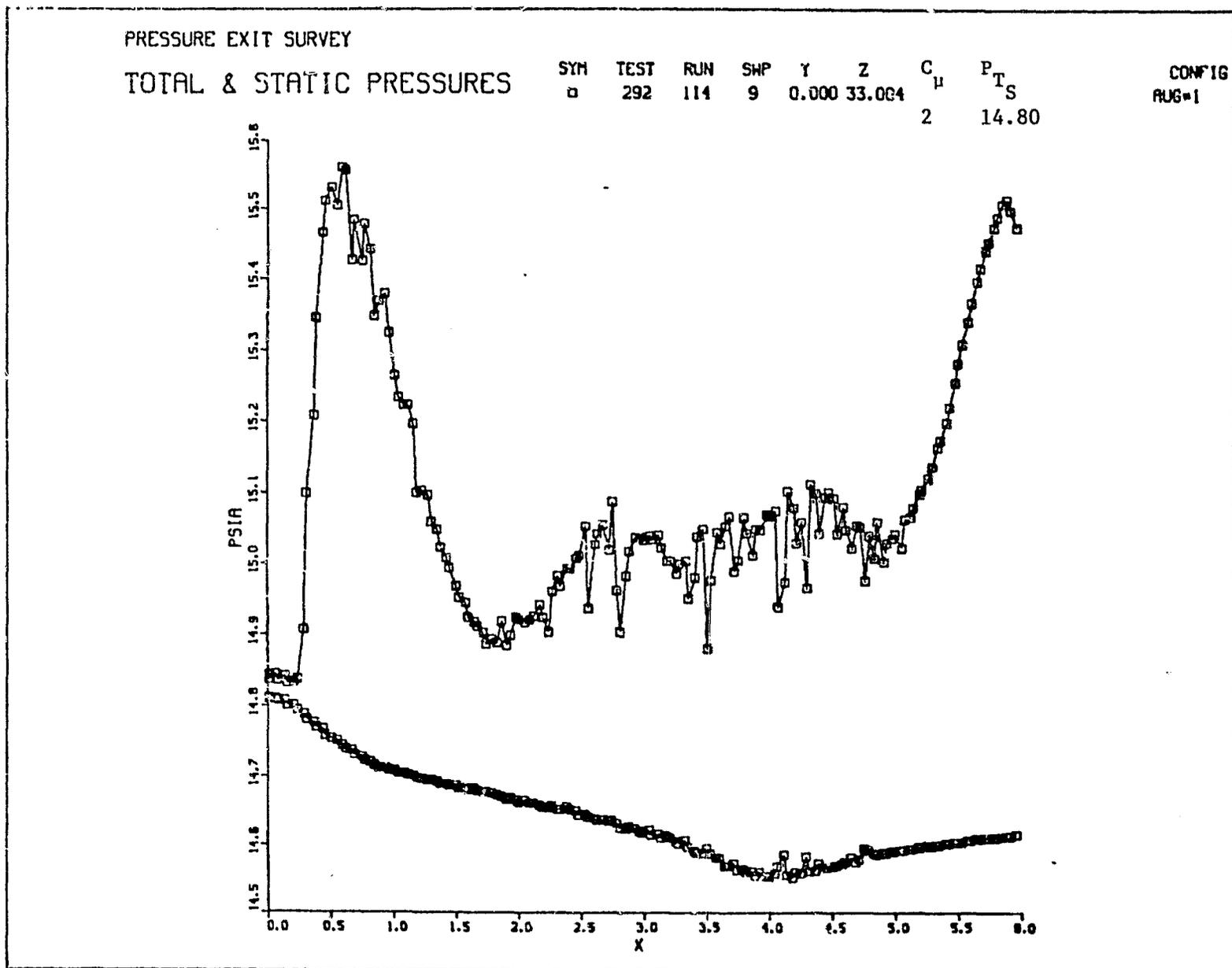


Figure A-3 e. Augmenter Exit Total & Static Pressure, Aug. #1, Diff =  $16^{\circ}$ ,  $\theta = 30^{\circ}$ ,  $\alpha = 0$

PRESSURE EXIT SURVEY

TOTAL & STATIC PRESSURES

SYM	TEST	RUN	SWP	Y	Z	C <sub>μ</sub>	P <sub>T</sub> <sub>S</sub>
□	292	114	10	0.000	39.007	2	14.80

CONFIG  
AUG-1

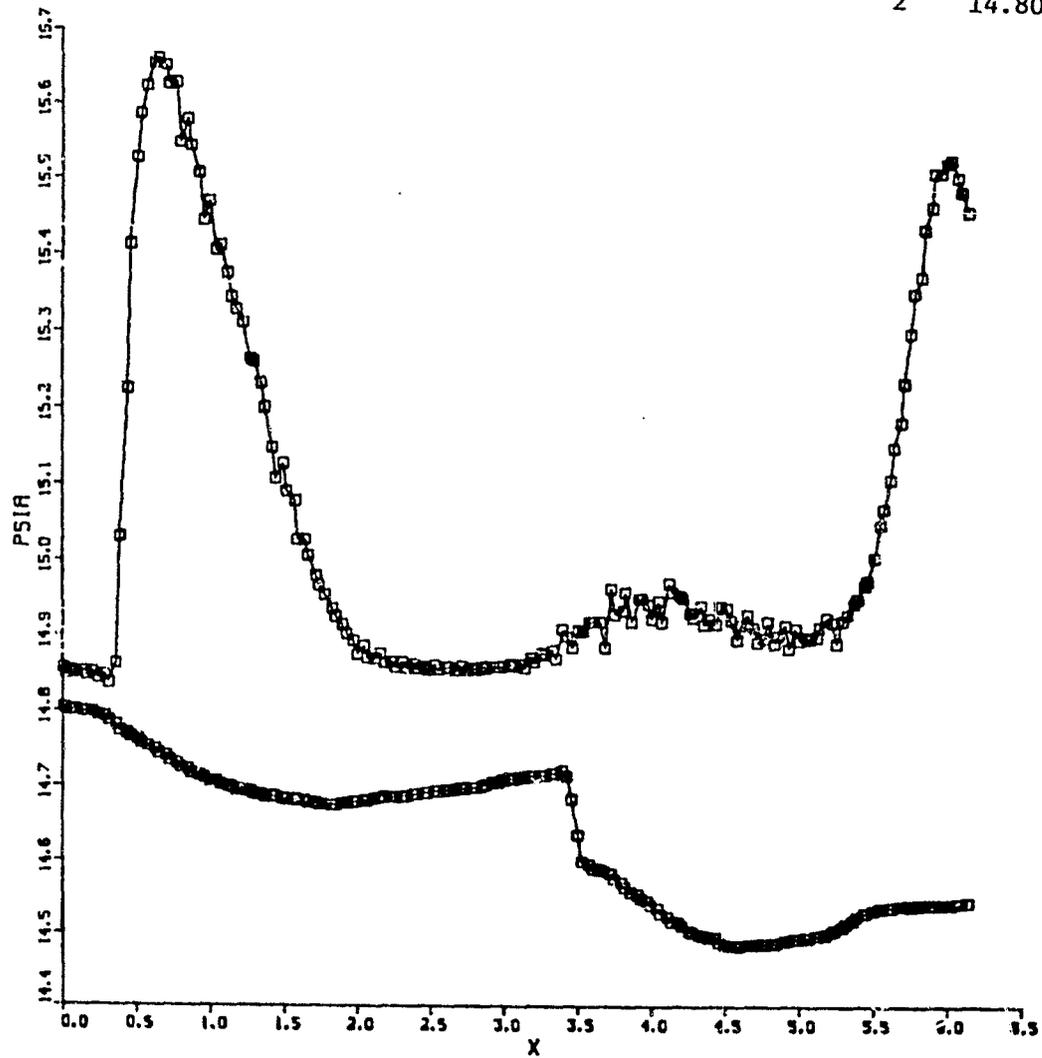


Figure A-3 f. Augmenter Exit Total & Static Pressure, Aug. #1, Diff = 16°, θ = 30°, α = 0

PRESSURE EXIT SURVEY

TOTAL & STATIC PRESSURES

SYM	TEST	RUN	SHP	Y	Z	C <sub>μ</sub>	P <sub>T</sub> <sub>S</sub>
□	292	11-4	12			2	14.80

CONFIG  
AUG 1

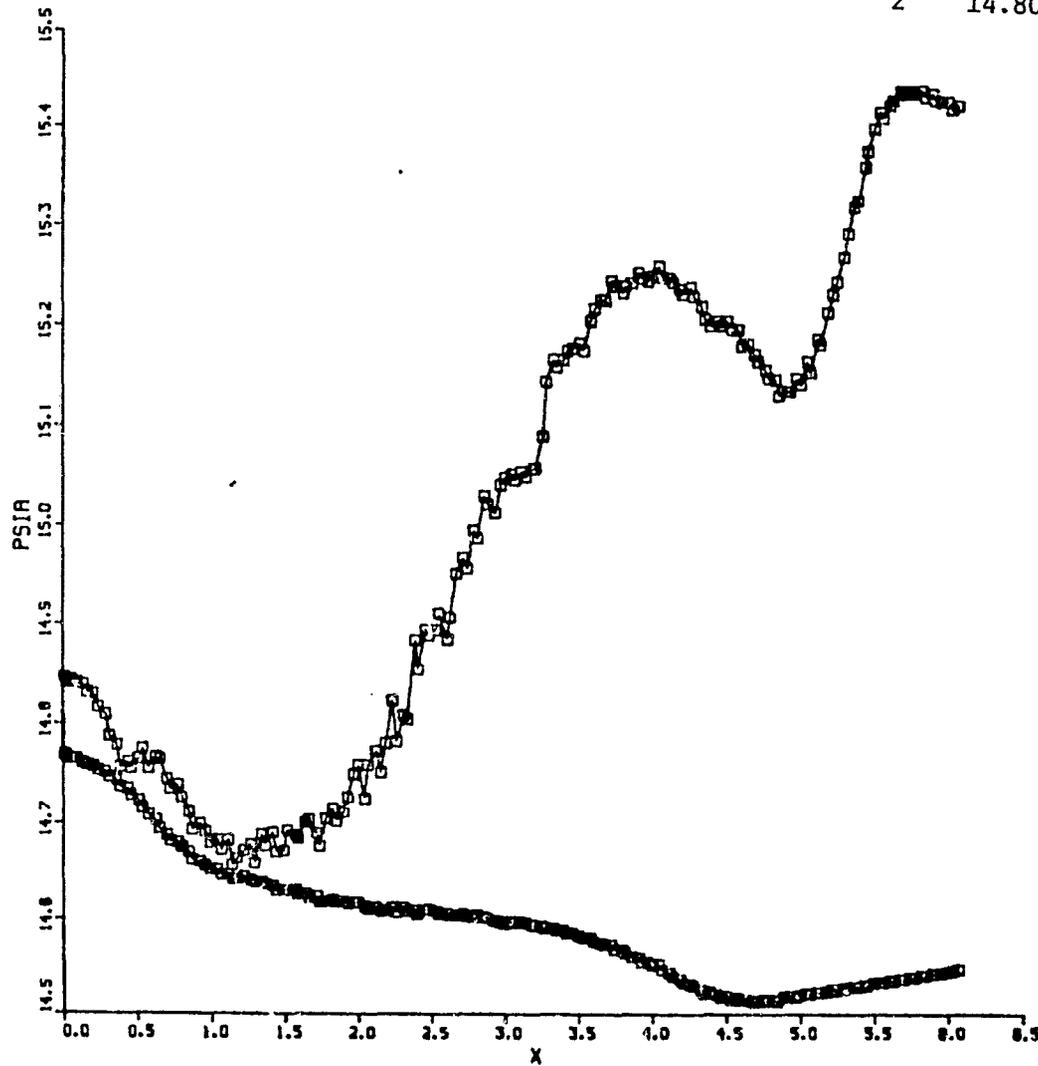


Figure A-3 g. Augmenter Exit Total & Static Pressure, Aug. #1, Diff = 16°, θ = 30°, α = 0

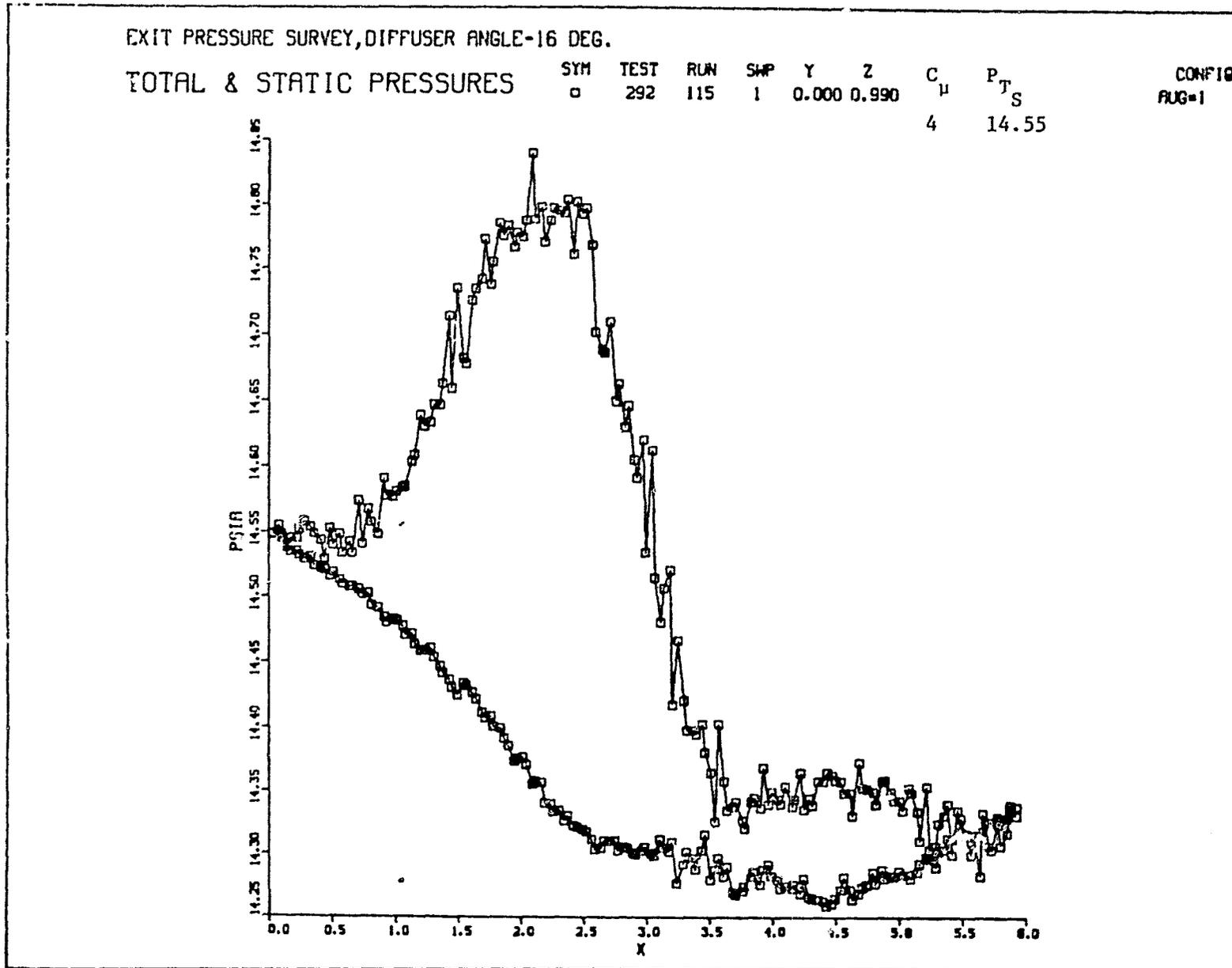


Figure A-4 a. Augmenter Exit Total & Static Pressure, Aug. #1, Diff =  $16^\circ$ ,  $\theta = 30^\circ$ ,  $\alpha = 0$

EXIT PRESSURE SURVEY, DIFFUSER ANGLE-16 DEG.

TOTAL & STATIC PRESSURES

SYM	TEST	RUN	SWP	Y	Z	C <sub>μ</sub>	P <sub>T,S</sub>
□	292	115	2	6.000	3.990	4	14.55

CONFIG  
AUG=1

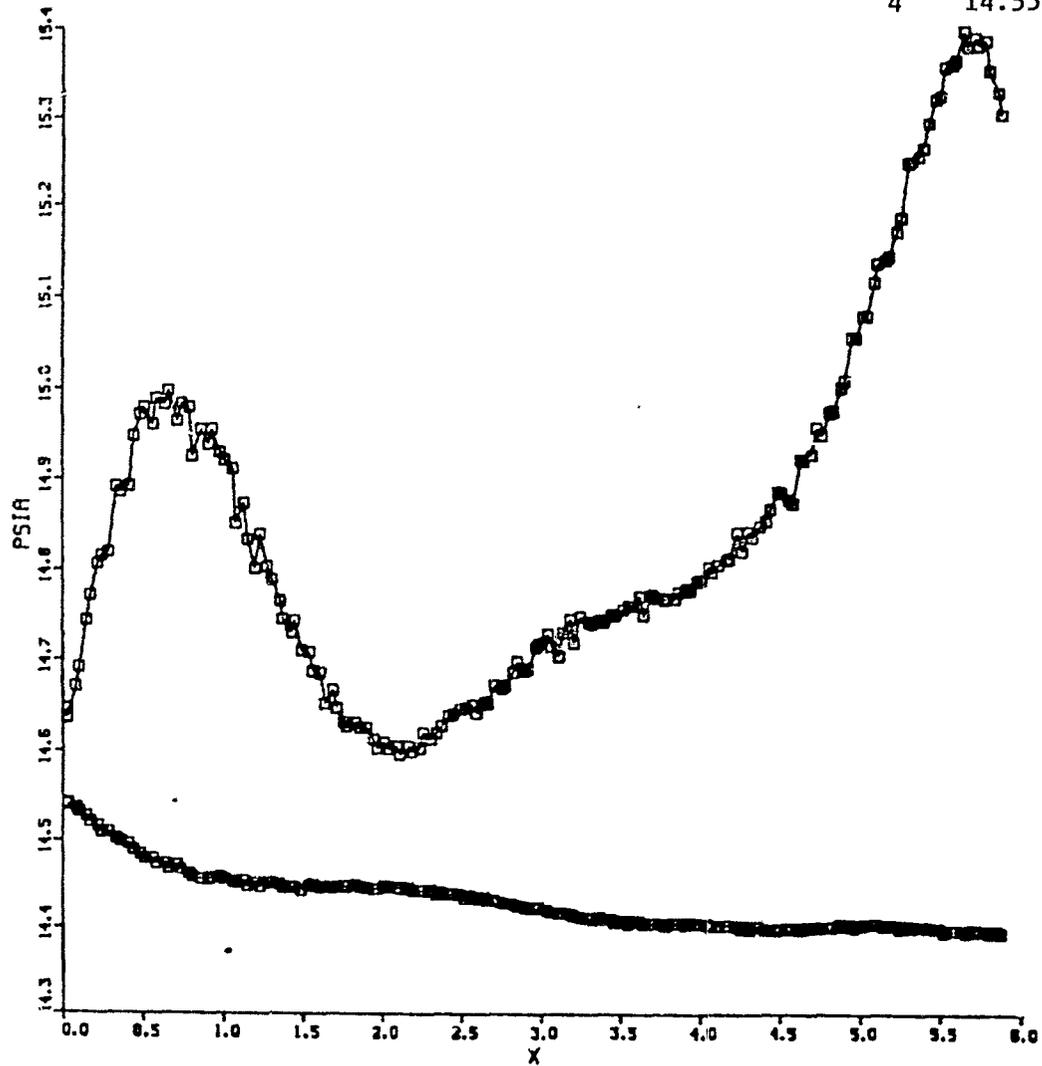


Figure A-4 b. Augmenter Exit Total & Static Pressure, Aug. #1, Diff = 16°,  $\theta = 30^\circ$ ,  $\alpha = 0$

EXIT PRESSURE SURVEY, DIFFUSER ANGLE-16 DEG.

TOTAL & STATIC PRESSURES

SYM	TEST	RUN	SHP	Y	Z	C <sub>μ</sub>	P <sub>TS</sub>
□	292	115	3	0.000	6.990	4	14.55

CONFIG  
AUG#1

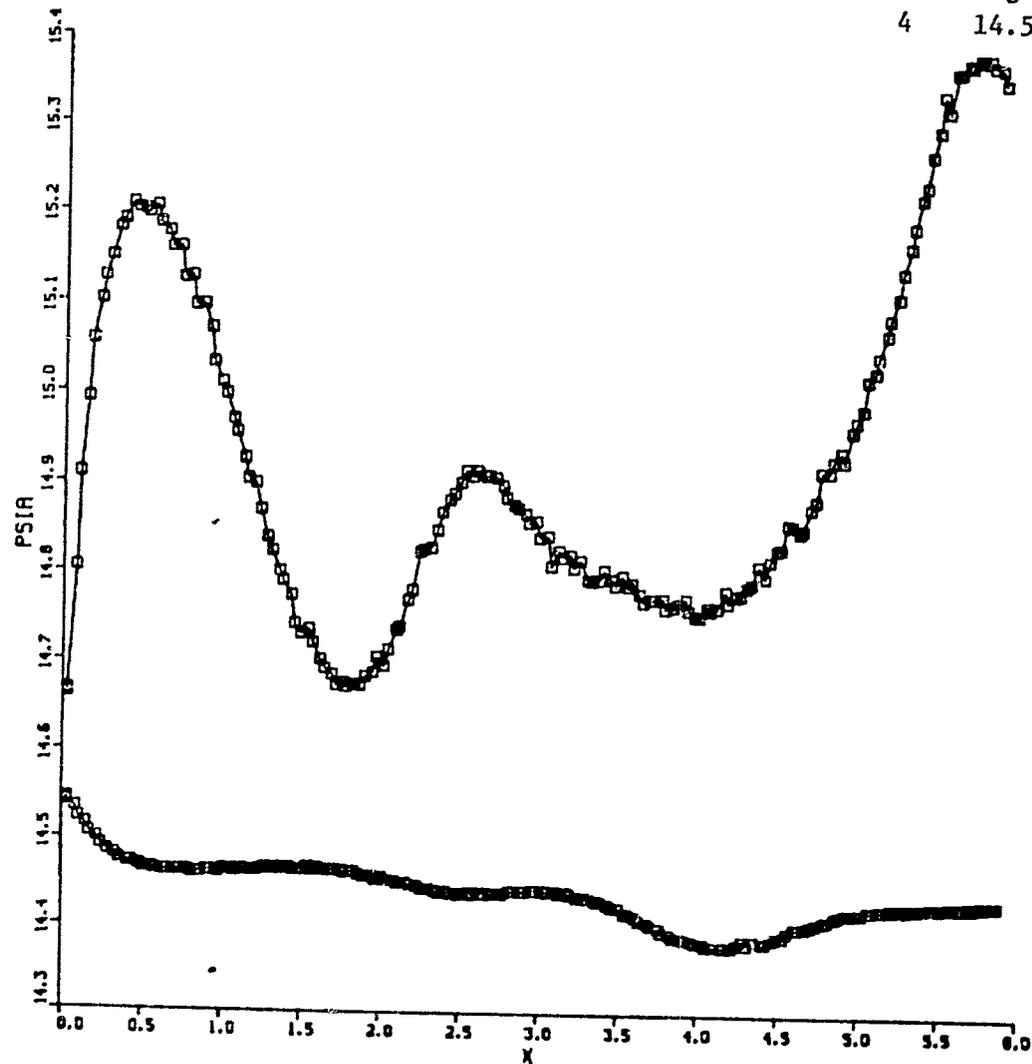


Figure A-4 c. Augmenter Exit Total & Static Pressure, Aug. #1, Diff = 16°, θ = 30°, α = 0

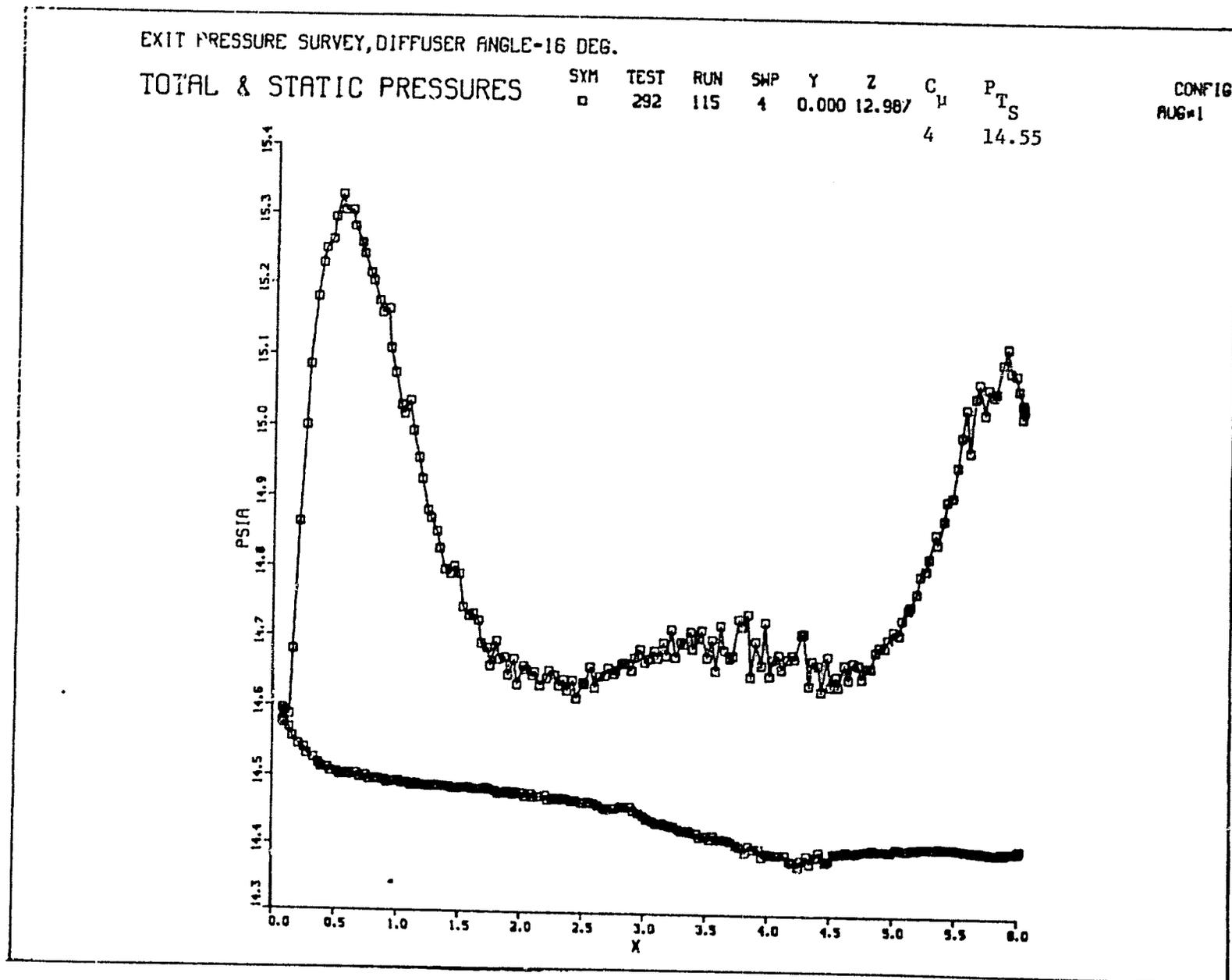


Figure A-4 d. Augmenter Exit Total & Static Pressure, Aug. #1, Diff - 16°,  $\theta = 30^\circ$ ,  $\alpha = 0$

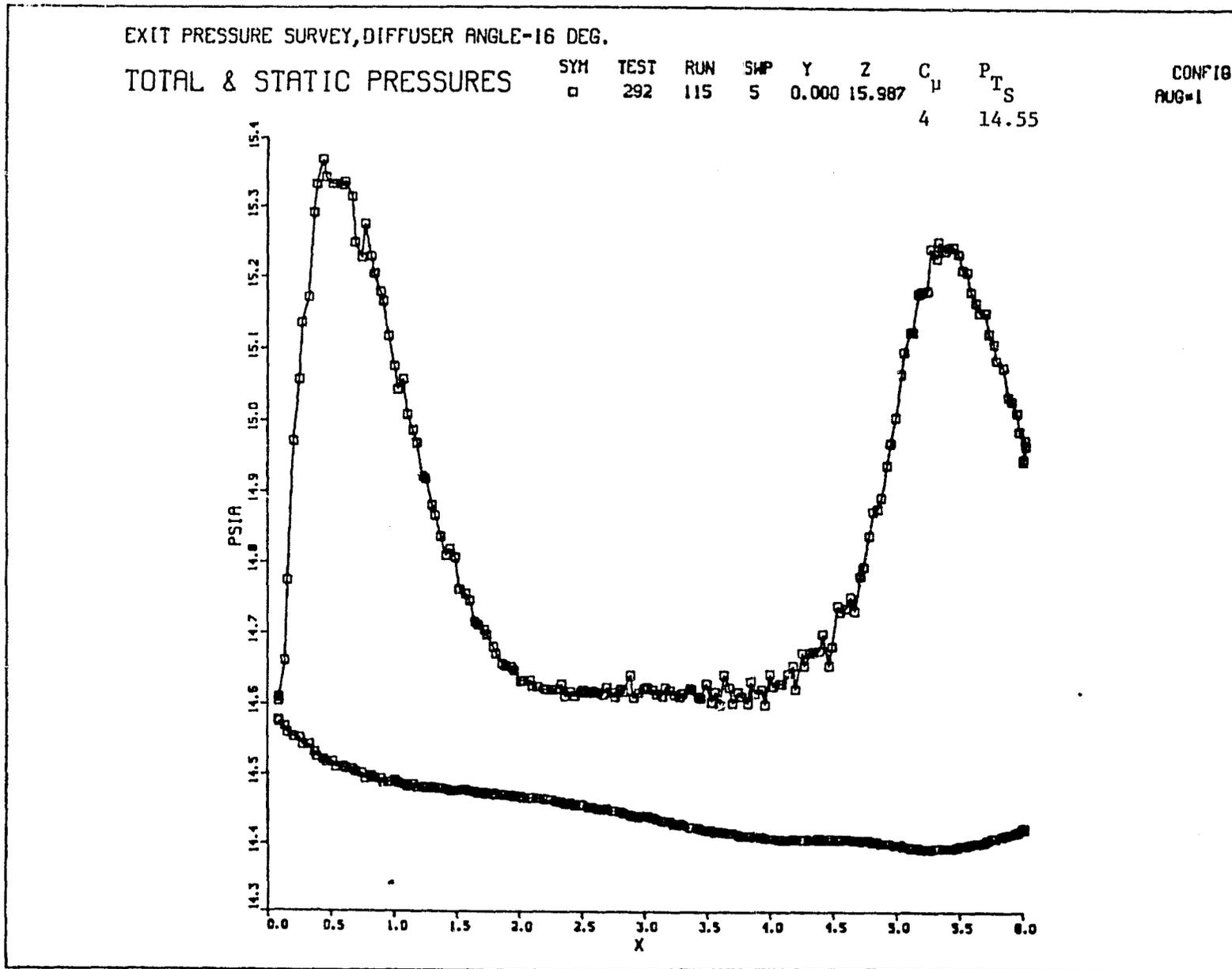


Figure A-4 e. Augmenter Exit Total & Static Pressure, Aug. #1, Diff = 16°,  $\theta = 30^\circ$ ,  $\alpha = 0$

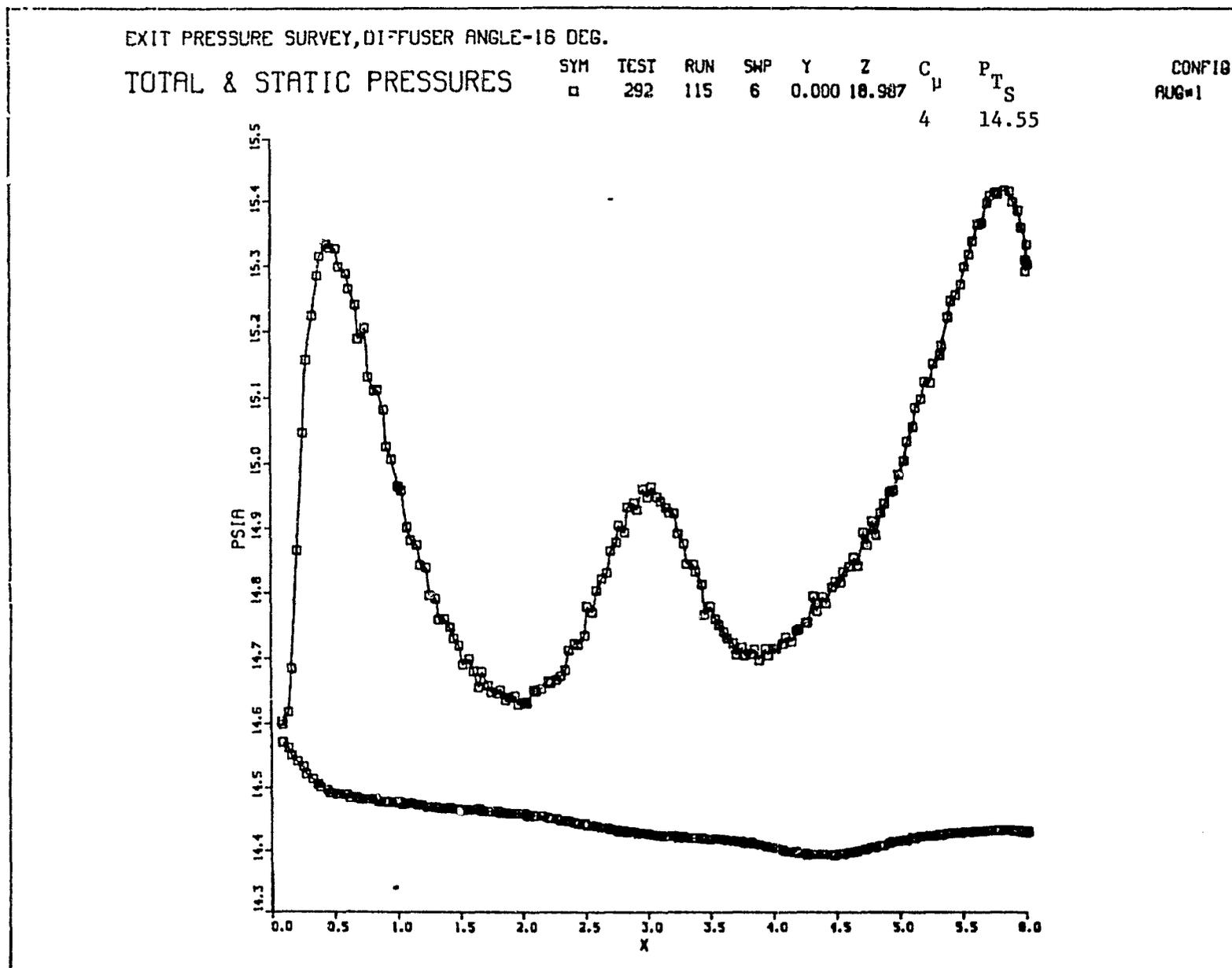


Figure A-4 f. Augmenter Exit Total & Static Pressure, Aut. #1, Diff = 16°,  $\theta = 30^\circ$ ,  $\alpha = 0$

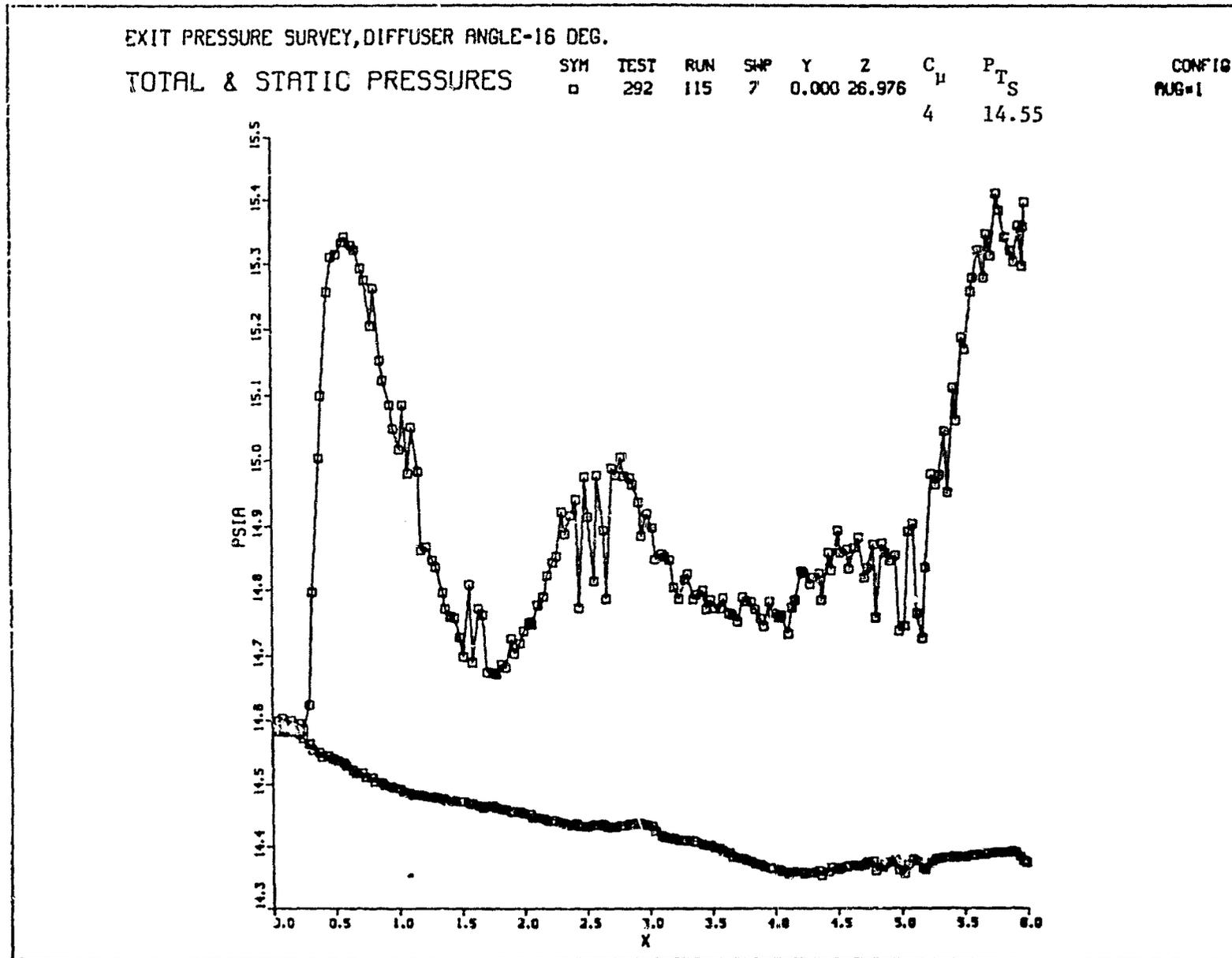


Figure A-4 g. Augmenter Exit Total & Static Pressure, Aug. #1, Diff - 16°,  $\theta = 30^\circ$ ,  $\alpha = 0$

EXIT PRESSURE SURVEY, DIFFUSER ANGLE-16 DEG.

TOTAL & STATIC PRESSURES

SYM	TEST	RUN	SHP	Y	Z	C <sub>μ</sub>	P <sub>TS</sub>
□	292	115	8	0.000	29.976	4	14.55

CONFIG  
#1

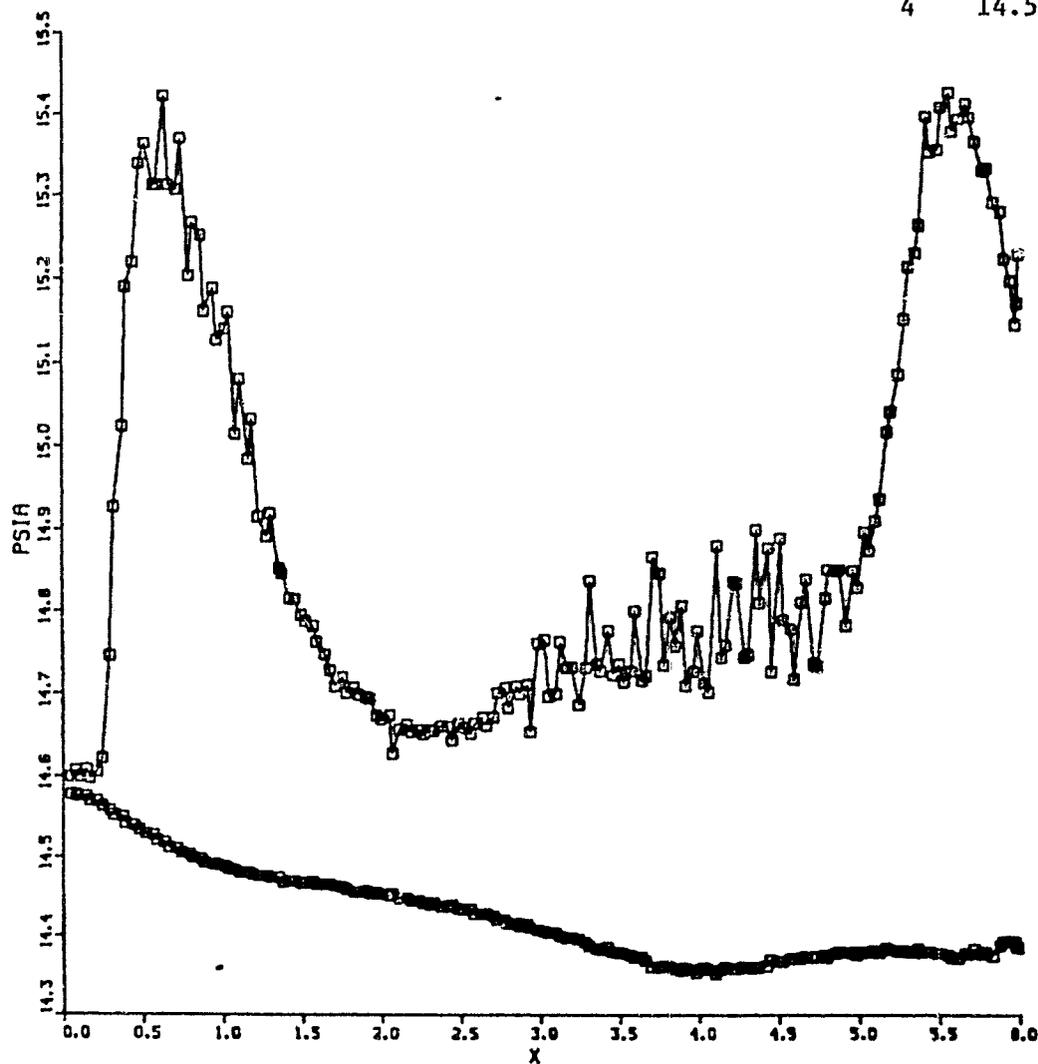


Figure A-4 h. Augmenter Exit Total & Static Pressure, Aug. #1, Diff = 16°, θ = 30°, α = 0

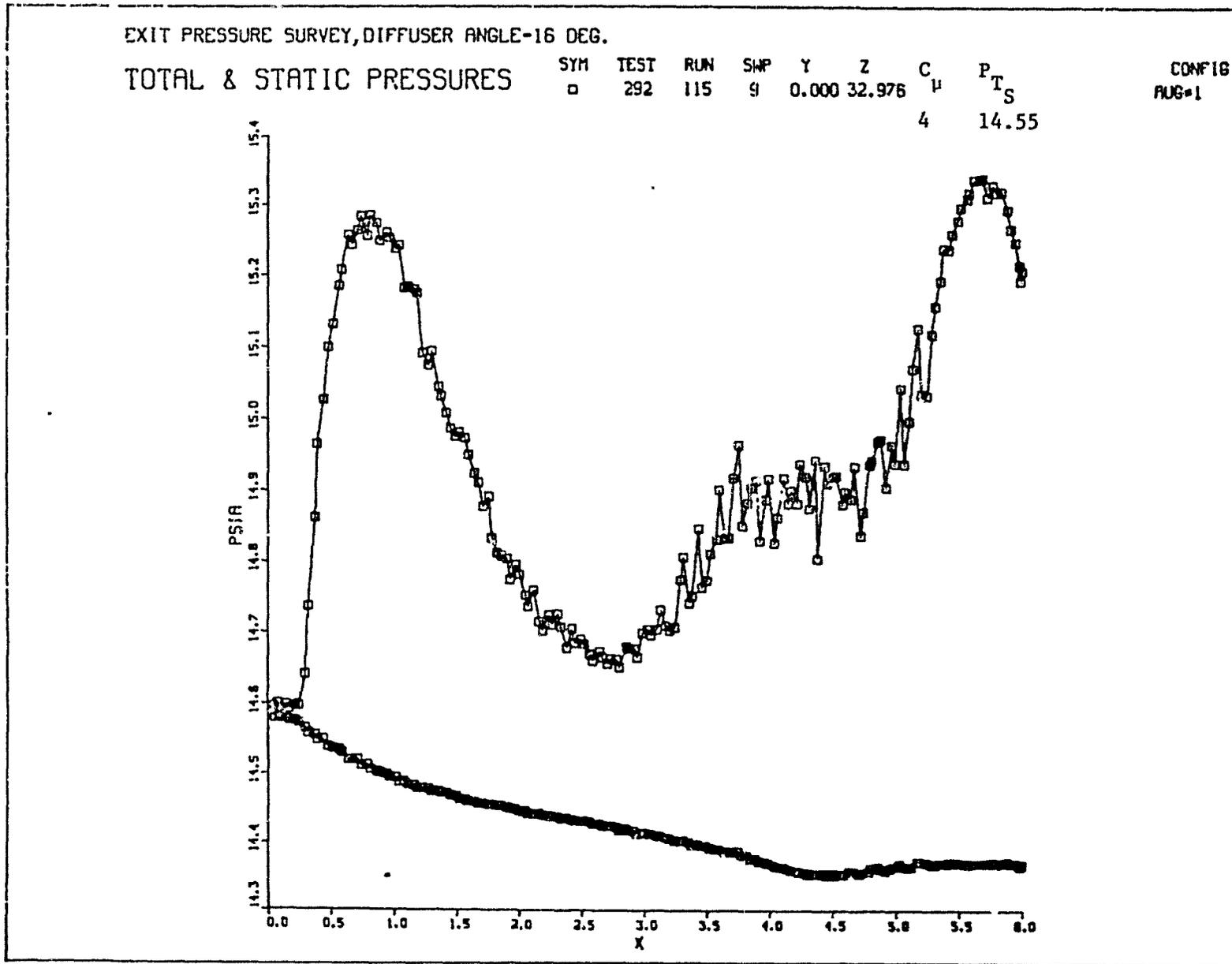


Figure A-4 i. Augmenter Exit Total & Static Pressure, Aug. #1, Diff - 16°,  $\theta = 30^\circ$ ,  $\alpha = 0$

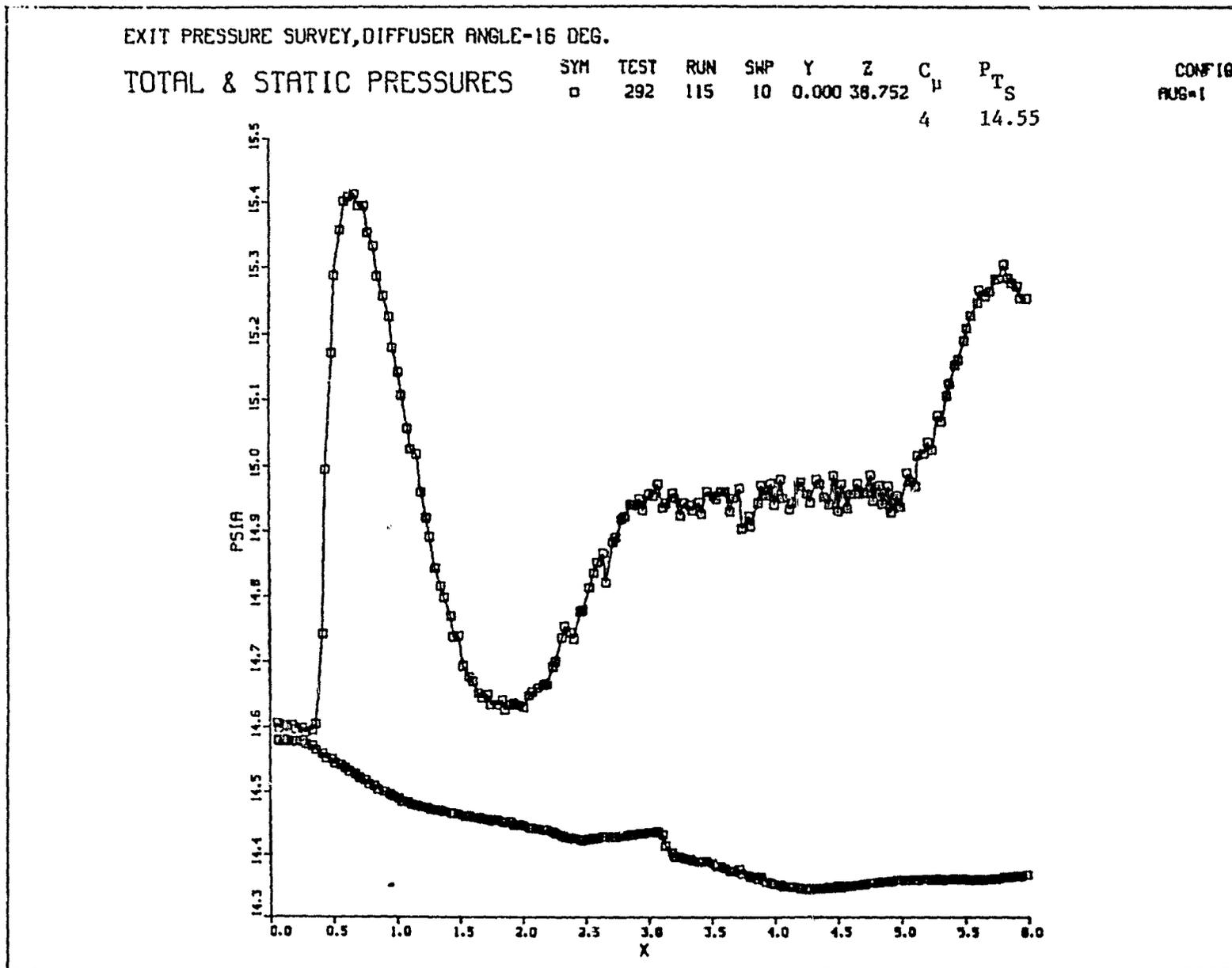


Figure A-4 j. Augmenter Exit Total & Static Pressure, Aug. #1, Diff - 16°,  $\theta = 30^\circ$ ,  $\alpha = 0$

EXIT PRESSURE SURVEY, DIFFUSER ANGLE-16 DEG.

TOTAL & STATIC PRESSURES

SYM	TEST	RUN	SHP	Y	Z	C <sub>μ</sub>	P <sub>TS</sub>
□	292	115	11	0.000	41.752	4	14.55

CONFIG  
AUG=1

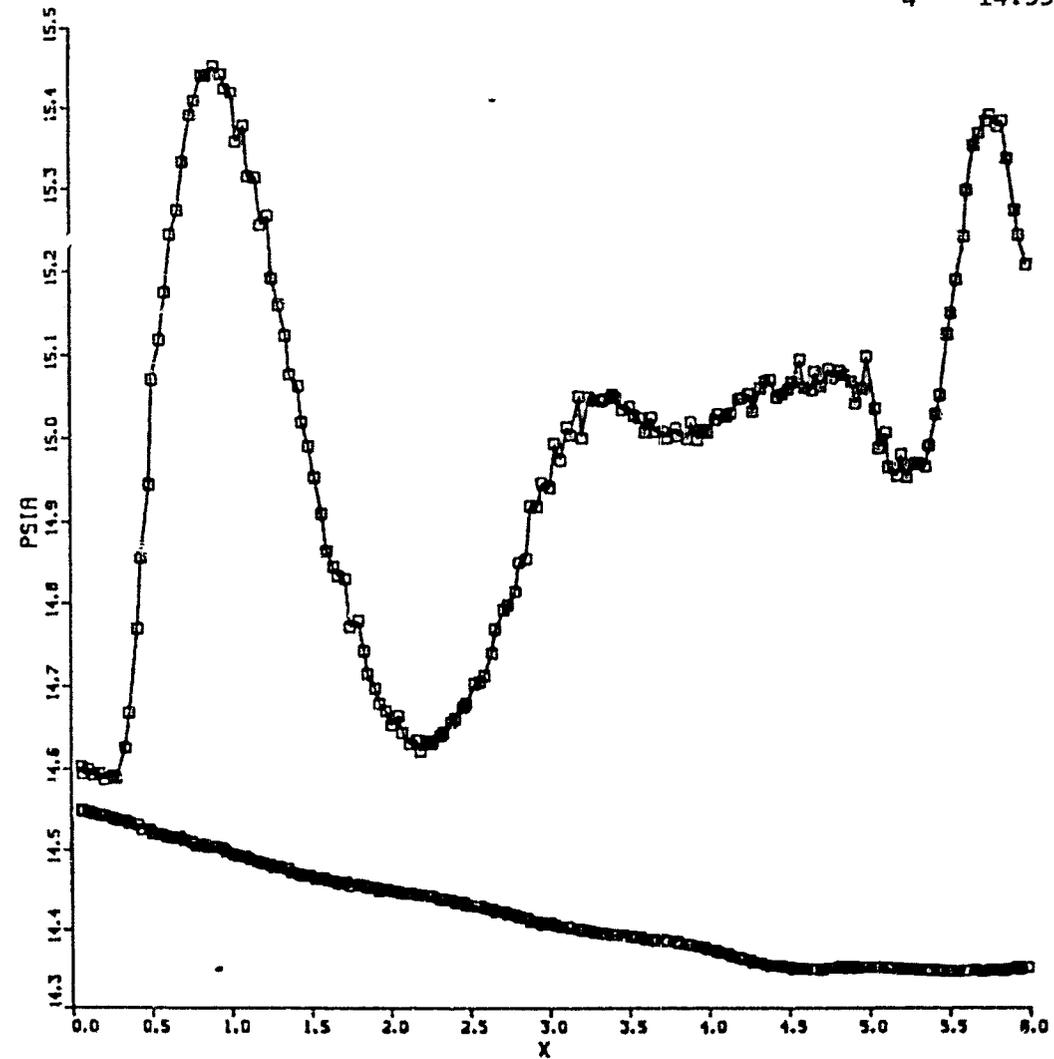


Figure A-4 k. Augmenter Exit Total & Static Pressure, Aug. #1, Diff = 16°, θ = 30°, α = 0

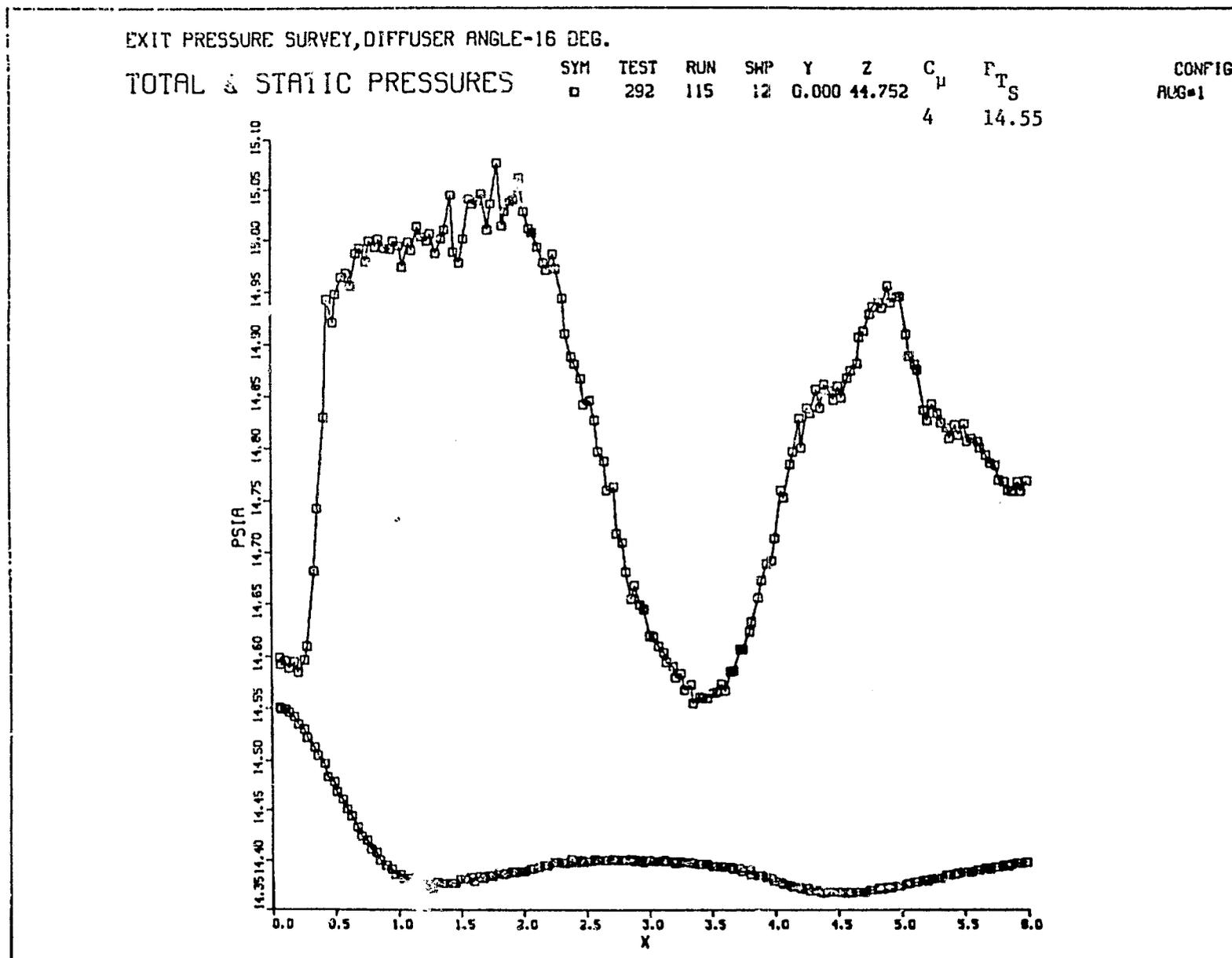


Figure A-4 1. Augmenter Exit Total & Static Pressure, Aug. #1, Diff = 16°,  $\theta = 30^\circ$ ,  $\alpha = 0$

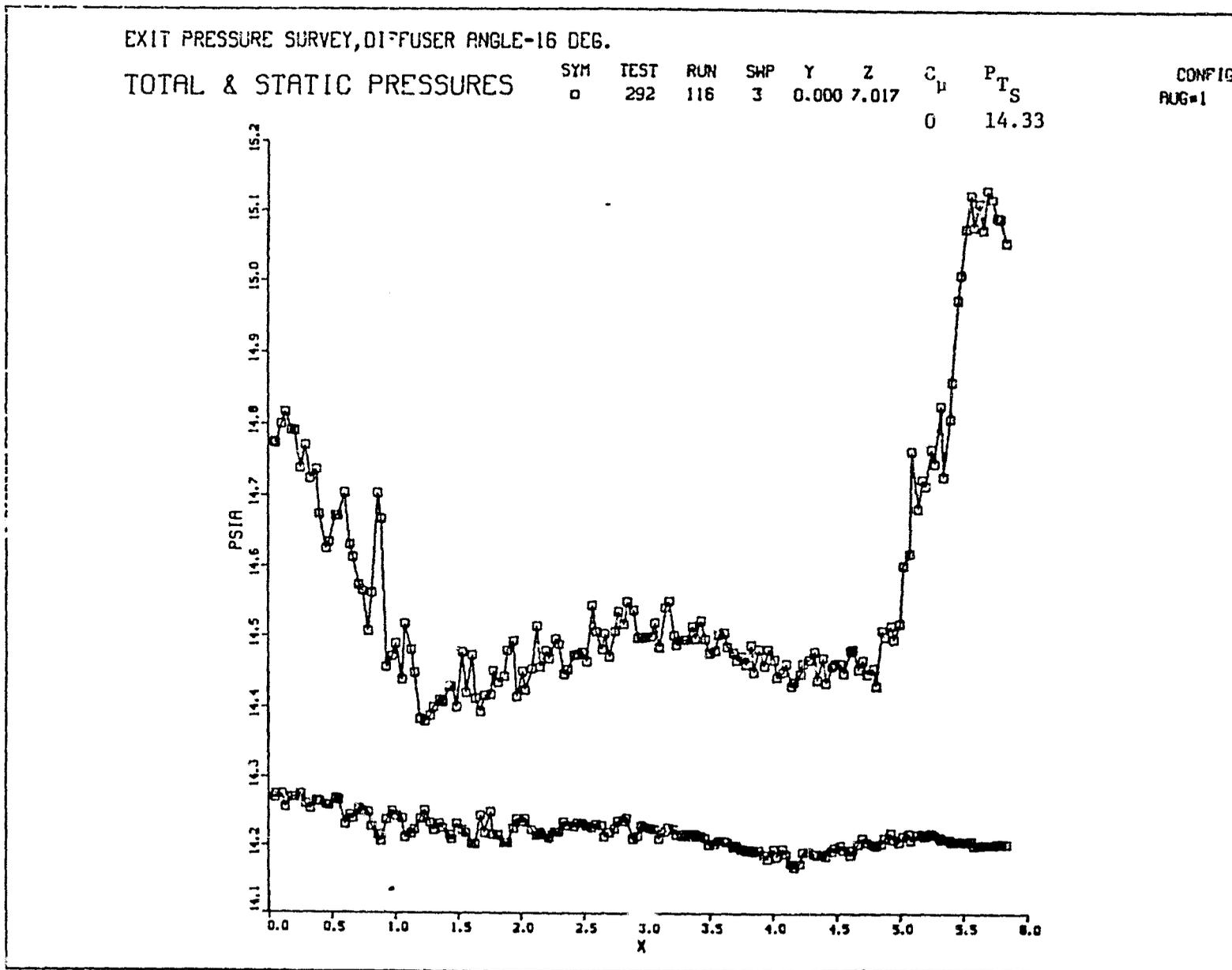


Figure A-5 a. Augmenter Exit Total & Static Pressure, Aug. #1, Diff = 16°,  $\theta = 30^\circ$ ,  $\alpha = 0$

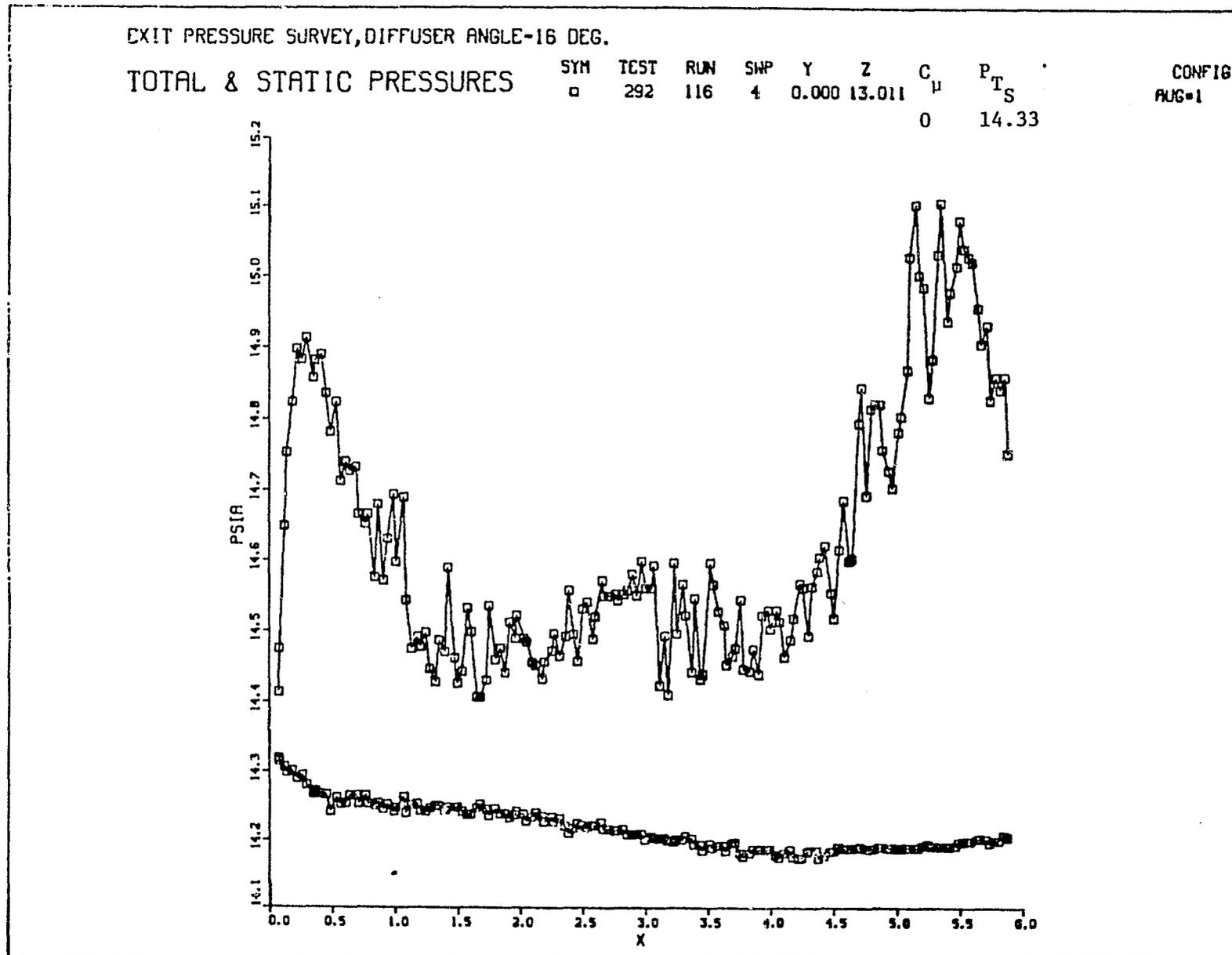


Figure A-5 b. Augmenter Exit Total & Static Pressure, Aug. #1, Diff = 16°,  $\theta = 30^\circ$ ,  $\alpha = 0$

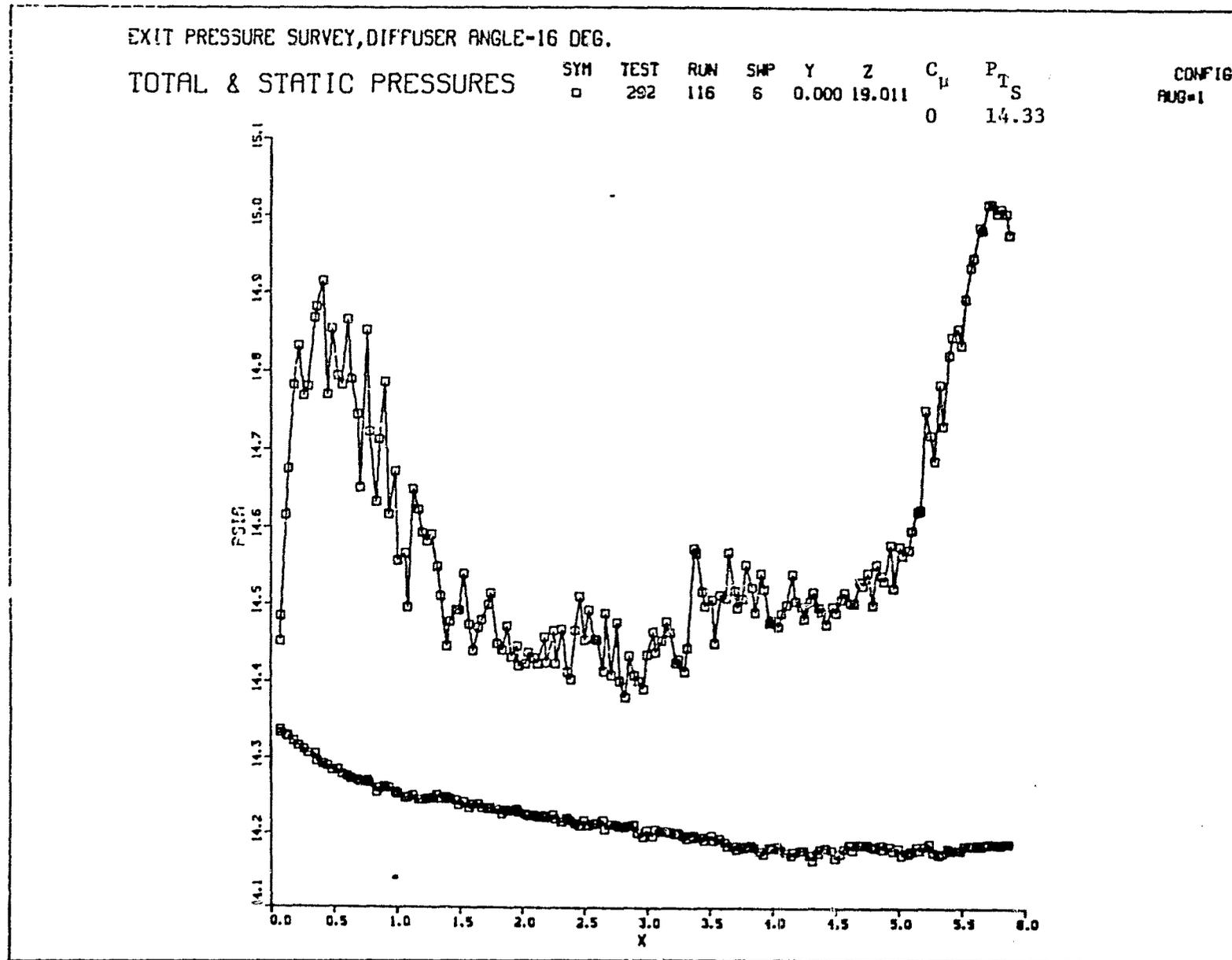


Figure A-5 c. Augmenter Exit Total & Static Pressure, Aug. #1, Diff =  $16^\circ$ ,  $\theta = 30^\circ$ ,  $\alpha = 0$

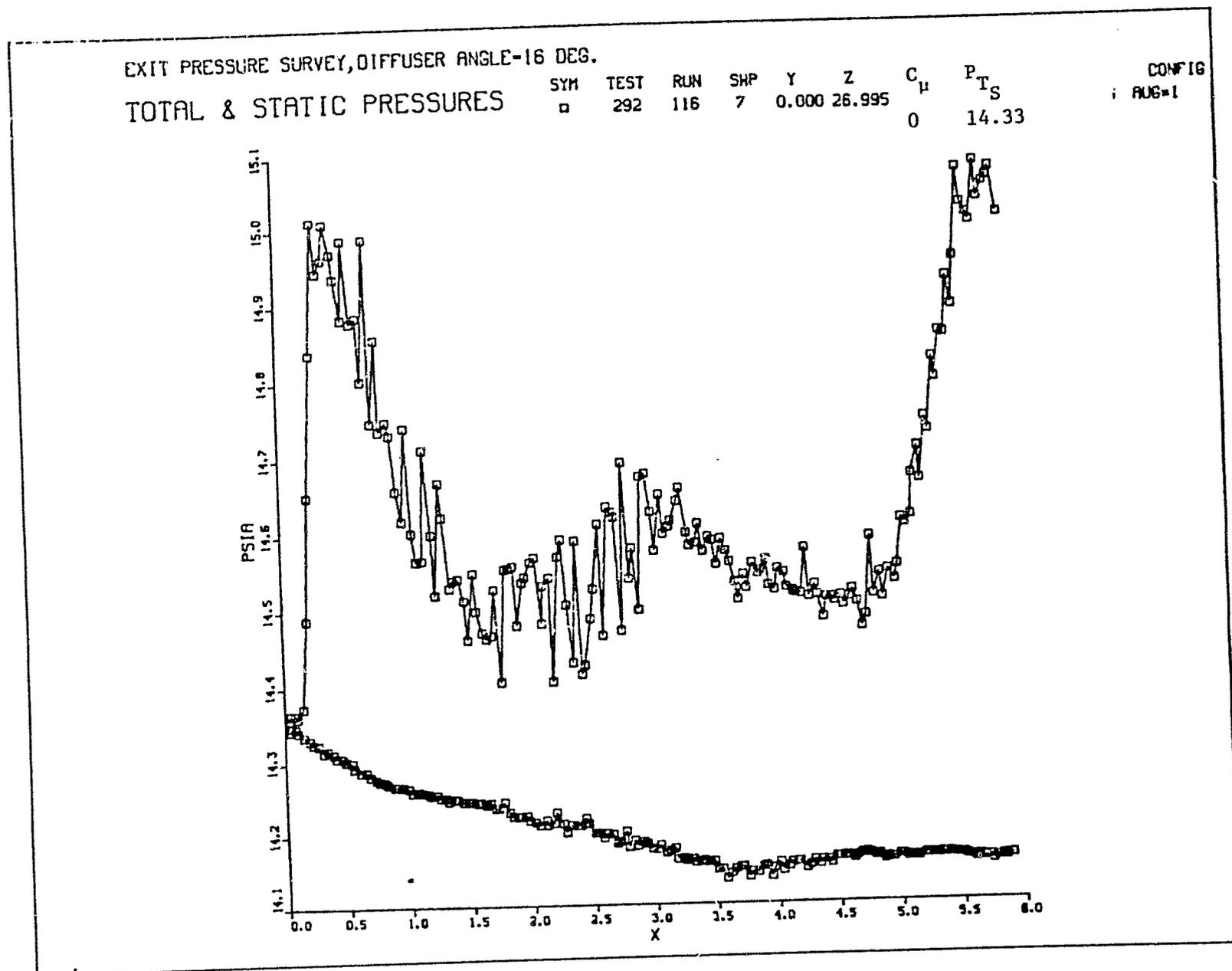


Figure A-5 d. Augmenter Exit Total & Static Pressure, Aug. #1, Diff =  $16^{\circ}$ ,  $\theta = 30^{\circ}$ ,  $\alpha = 0$

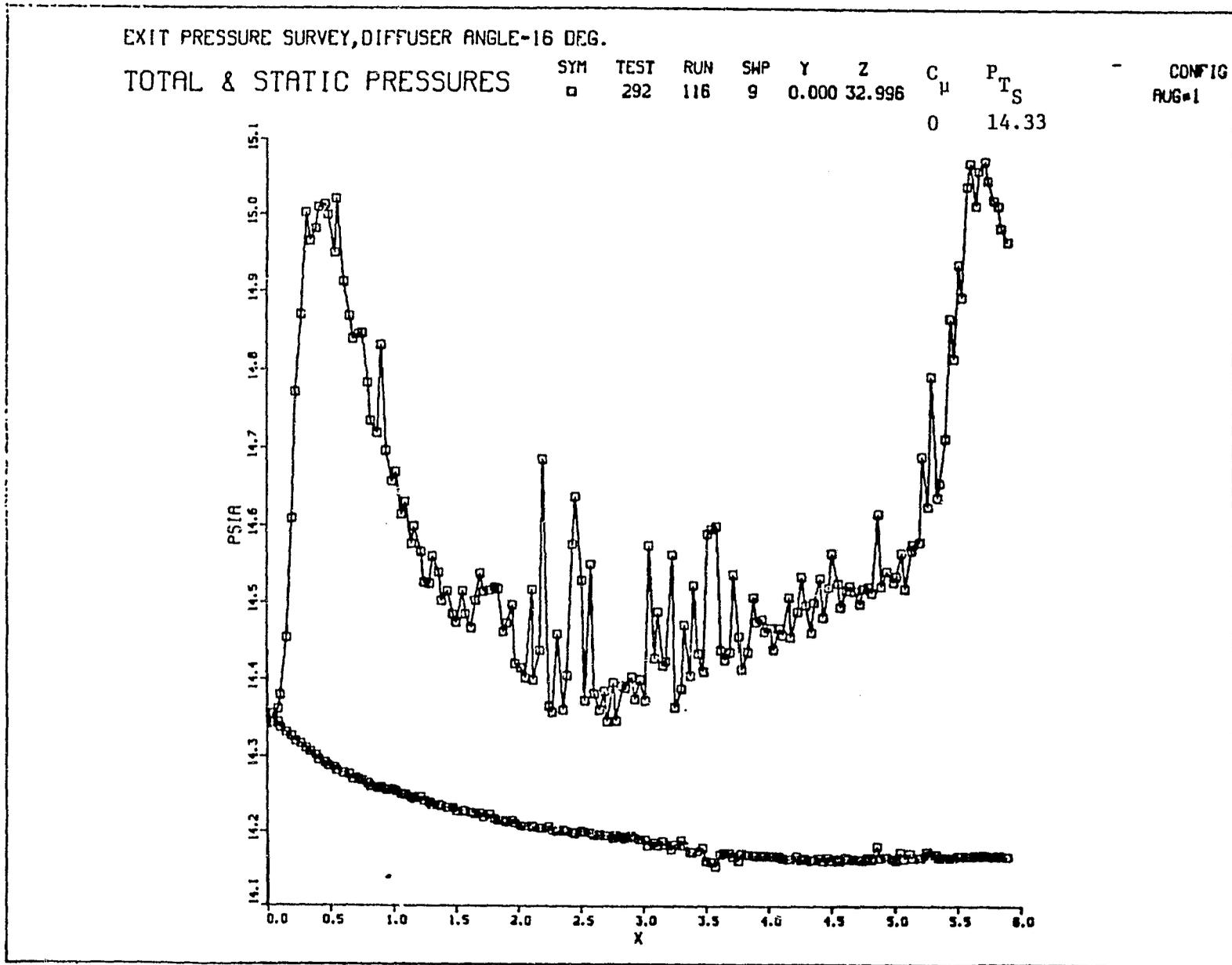


Figure A-5 e. Augmenter Exit Total & Static Pressure, Aug. #1, Diff = 16°,  $\theta = 30^\circ$ ,  $\alpha = 0$

EXIT PRESSURE SURVEY, DIFFUSER ANGLE-16 DEG.

TOTAL & STATIC PRESSURES

SYM	TEST	RUN	SWP	Y	Z	$C_{\mu}$	$P_{TS}$
□	292	116	10	0.000	38.986	0	14.33

CONFIG  
AUG=1

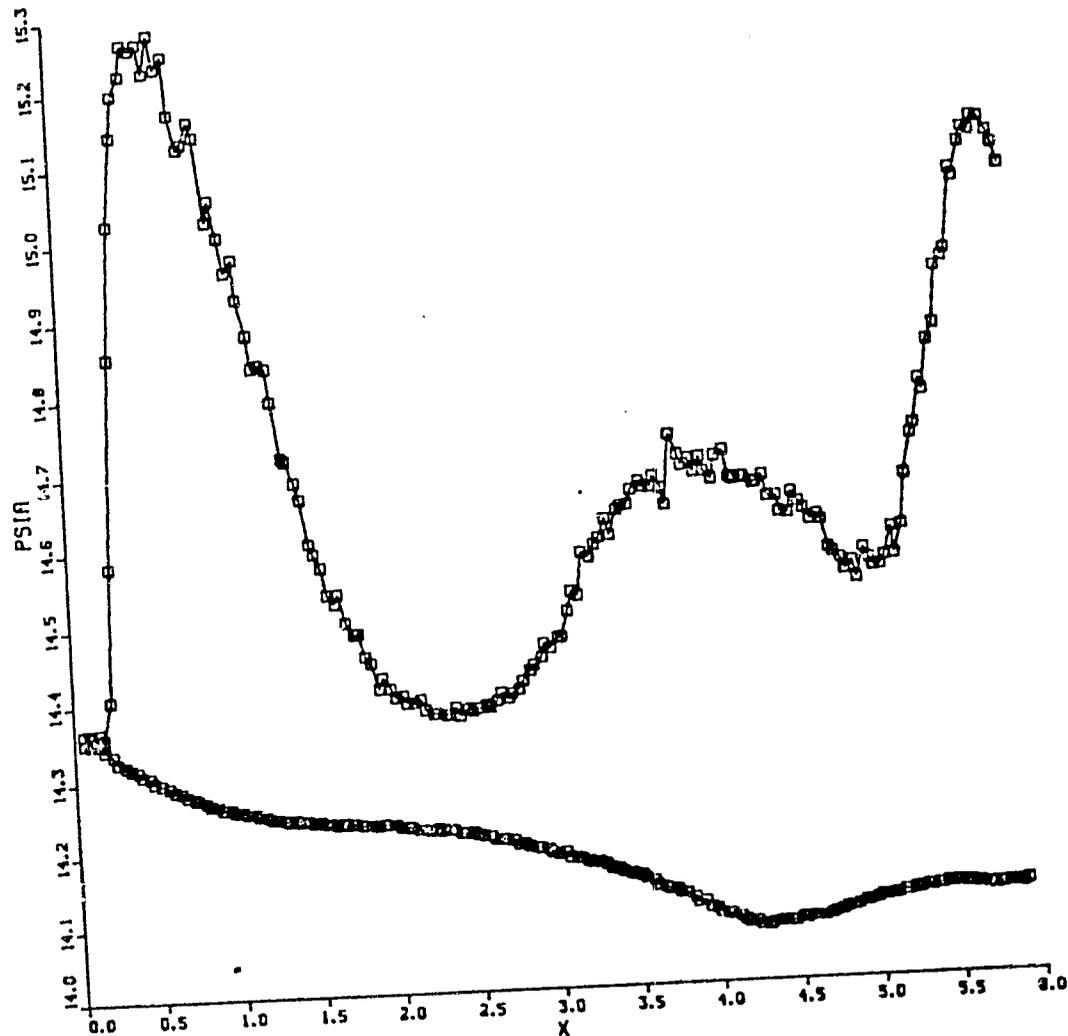


Figure A-5 f. Augmenter Exit Total & Static Pressure, Aug. #1, Diff = 16°,  $\theta = 30^\circ$ ,  $\alpha = 0$

EXIT PRESSURE SURVEY, DIFFUSER ANGLE-16 DEG.

TOTAL & STATIC PRESSURES

SYM	TEST	RUN	SWP	Y	Z	C <sub>u</sub>	P <sub>T</sub>	P <sub>S</sub>
□	292	116	12	0.000	44.986	0	14.33	

CONF 16  
AUG-1

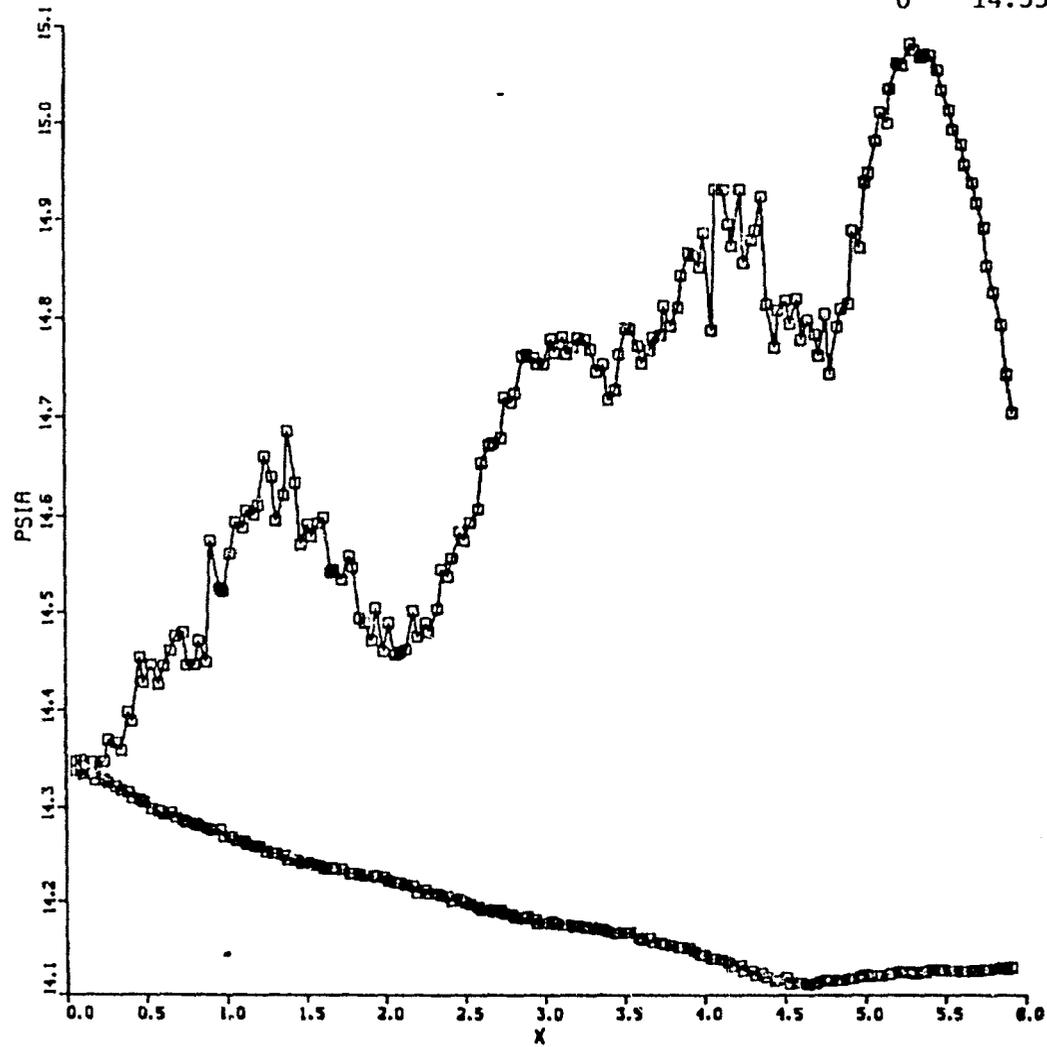


Figure A-5 g. Augmenter Exit Total & Static Pressure, Aug. #1, Diff = 16°,  $\theta = 30^\circ$ ,  $\alpha = 0$

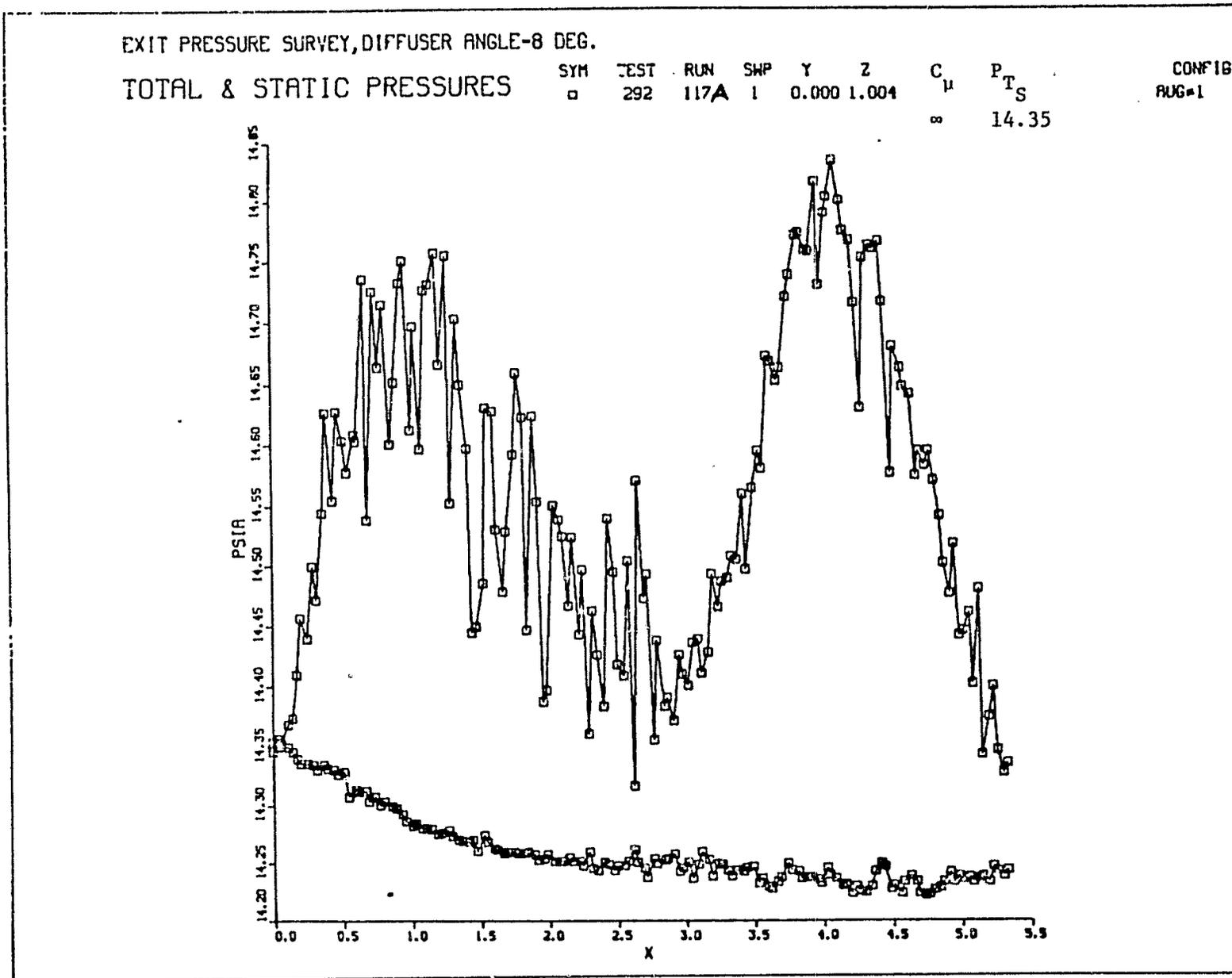


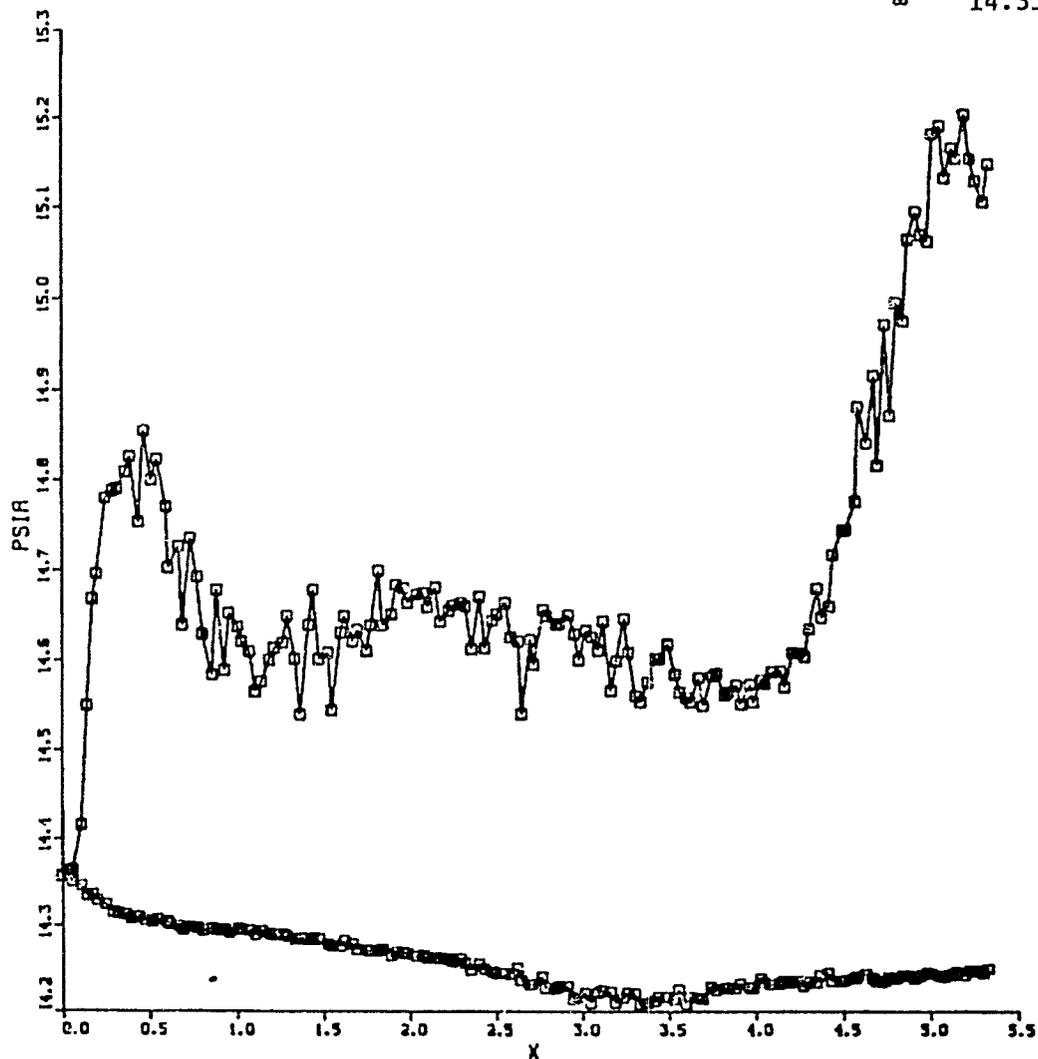
Figure A-6 a. Augmenter Exit Total & Static Pressure, Aug. #1, Diff =  $8^{\circ}$ ,  $\theta = 40^{\circ}$ ,  $\alpha = 0$

EXIT PRESSURE SURVY, DIFFUSER ANGLE-8 DEG.

TOTAL & STATIC PRESSURES

SYM	TEST	RUN	SWP	Y	Z	C <sub>μ</sub>	P <sub>T</sub> <sub>S</sub>
□	292	117A	3	0.000	7.004	∞	14.35

CONFID  
AUG=1



47

Figure A-6 b. Augmenter Exit Total & Static Pressure, Aug. #1, Diff = 8°, θ = 40°, α = 0

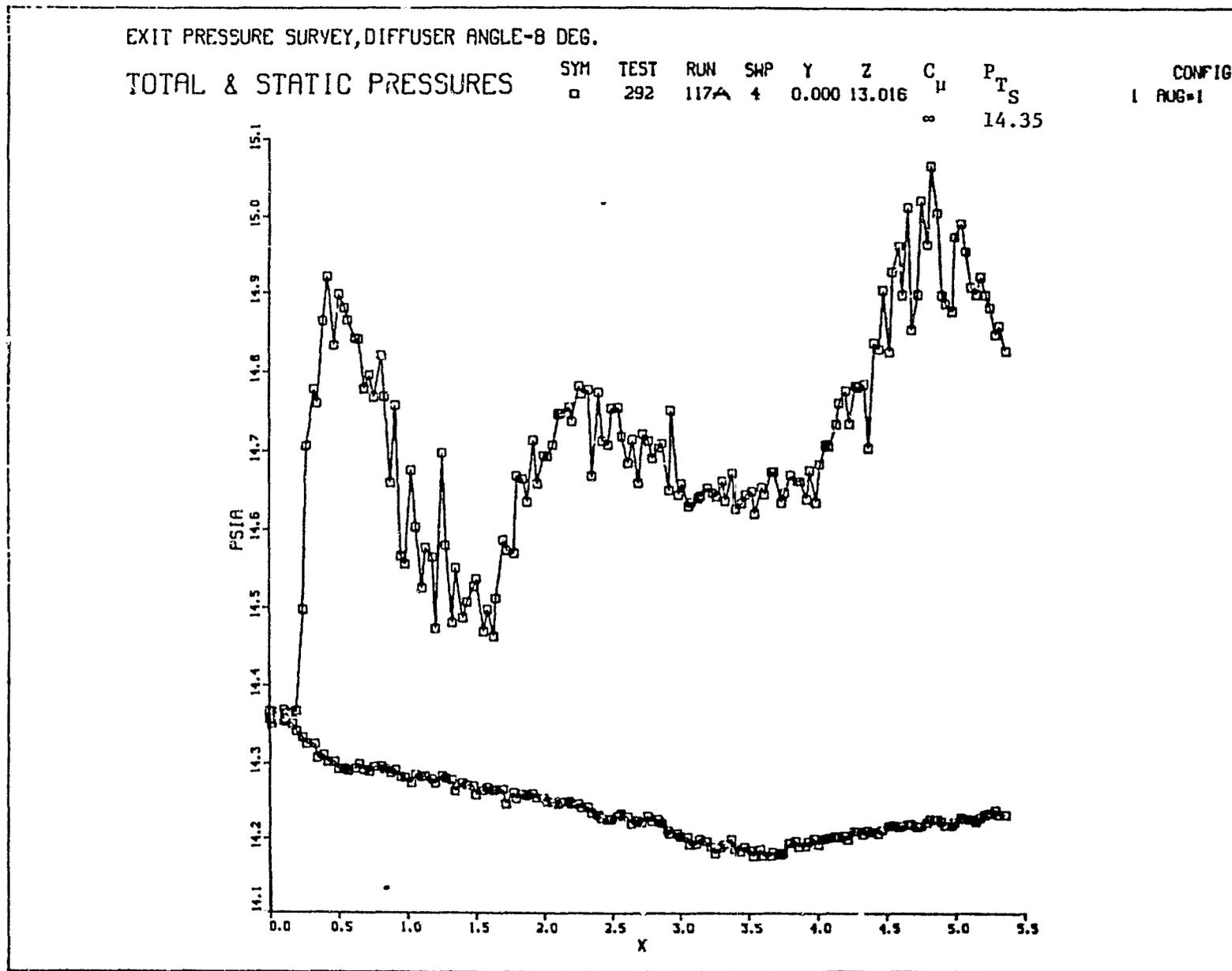


Figure A-6 c. Augmenter Exit Total & Static Pressure, Aug. #1, Diff = 8°,  $\theta = 40^\circ$ ,  $\alpha = 0$

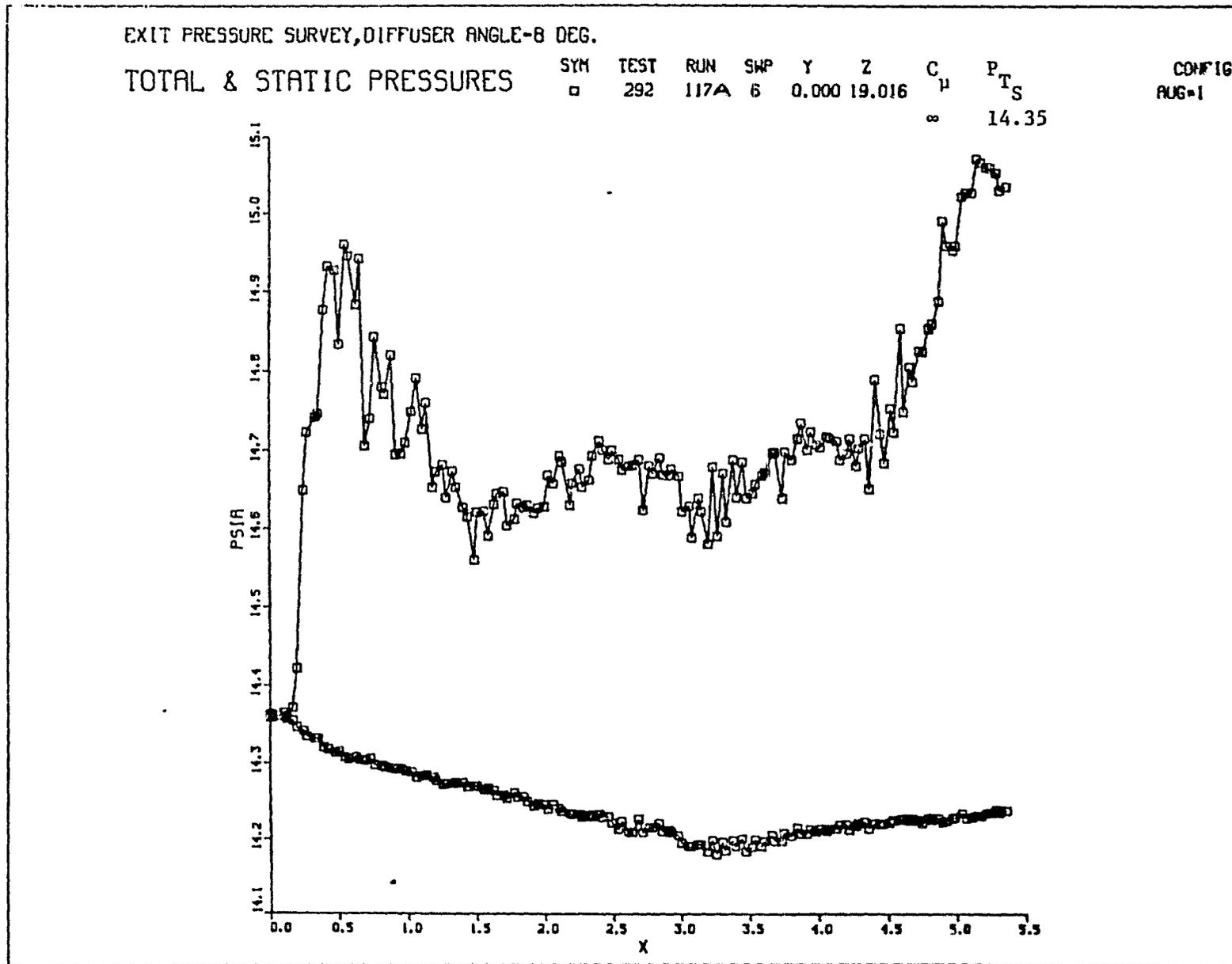


Figure A-6 d. Augmenter Exit Total & Static Pressure, Aug. #1, Diff =  $8^\circ$ ,  $\theta = 40^\circ$ ,  $\alpha = 0$

EXIT PRESSURE SURVEY, DIFFUSER ANGLE-8 DEG.

TOTAL & STATIC PRESSURES

SYM	TEST	RUN	SNP	Y	Z	C	P <sub>T</sub>	P <sub>S</sub>
□	292	117A	7	0.000	27.028	μ		
						∞	14.35	

CONFIG  
AUG#1

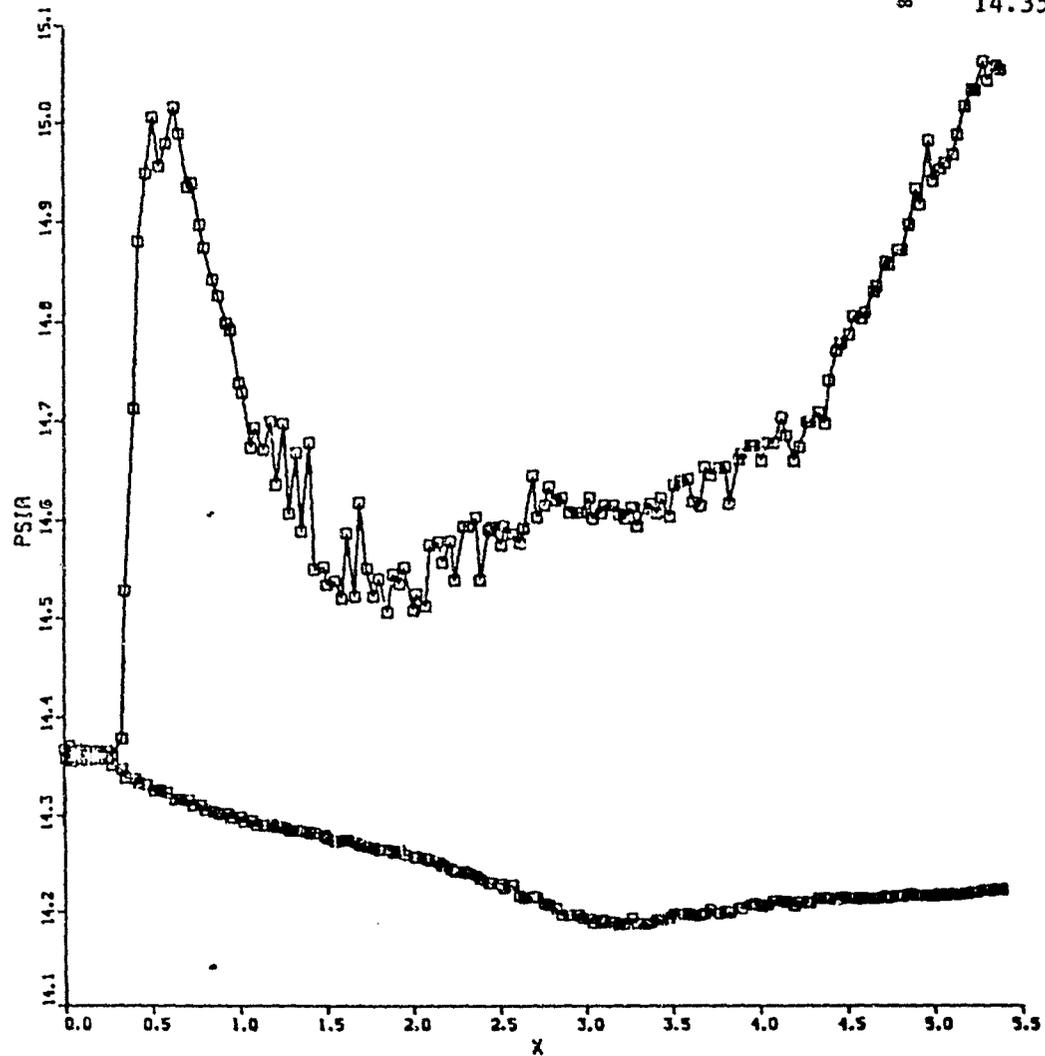
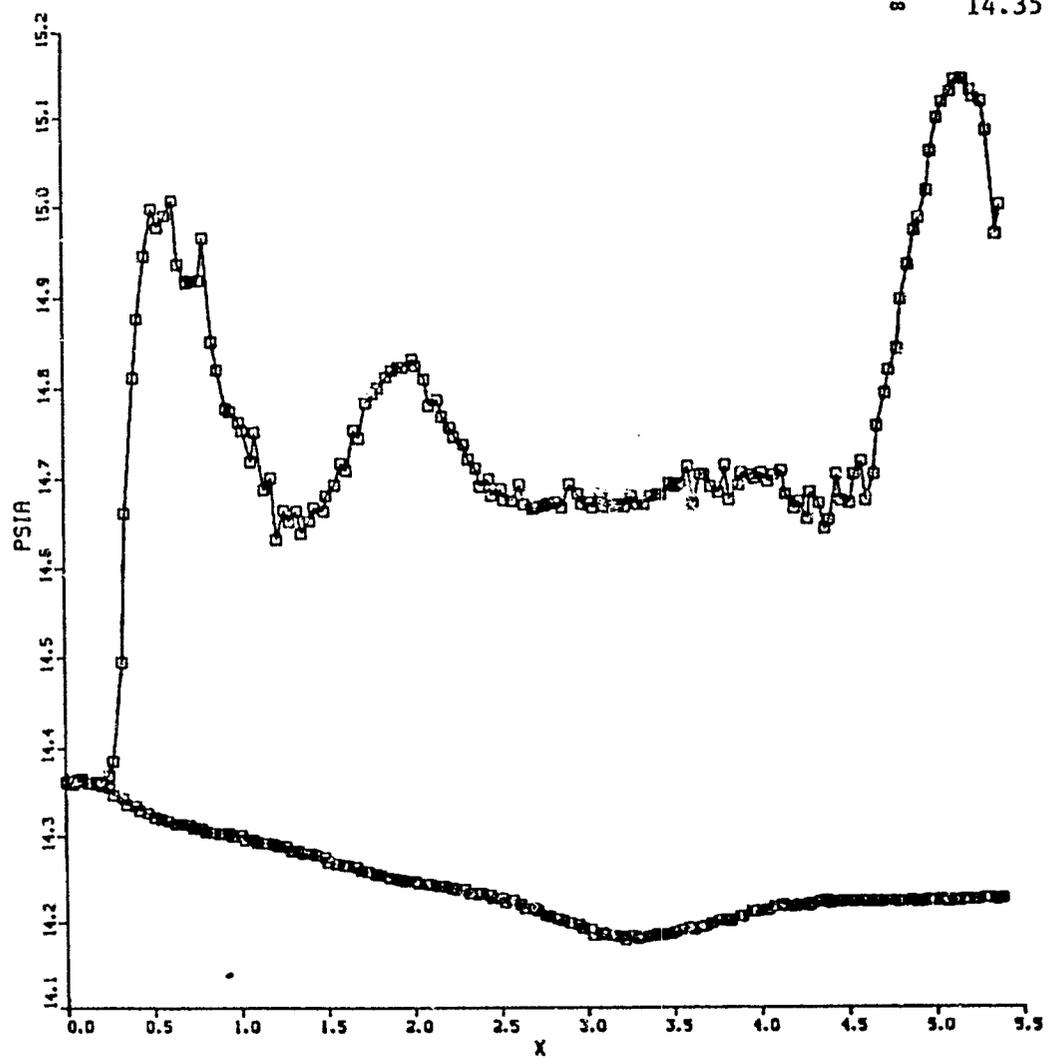


Figure A-6 e. Augmenter Exit Total & Static Pressure, Aug. #1, Diff = 8°, θ = 40°, α = 0

EXIT PRESSURE SURVEY, DIFFUSER ANGLE=8 DEG.

TOTAL & STATIC PRESSURES

SYM	TEST	RUN	SHP	Y	Z	C	P	CONFIG
□	292	117A	9	0.000	33.028	μ	T <sub>S</sub>	AUG=1
							∞	14.35



SI

Figure A-6 f. Augmenter Exit Total & Static Pressure, Aug. #1, Diff = 8°, θ = 40°, α = 0

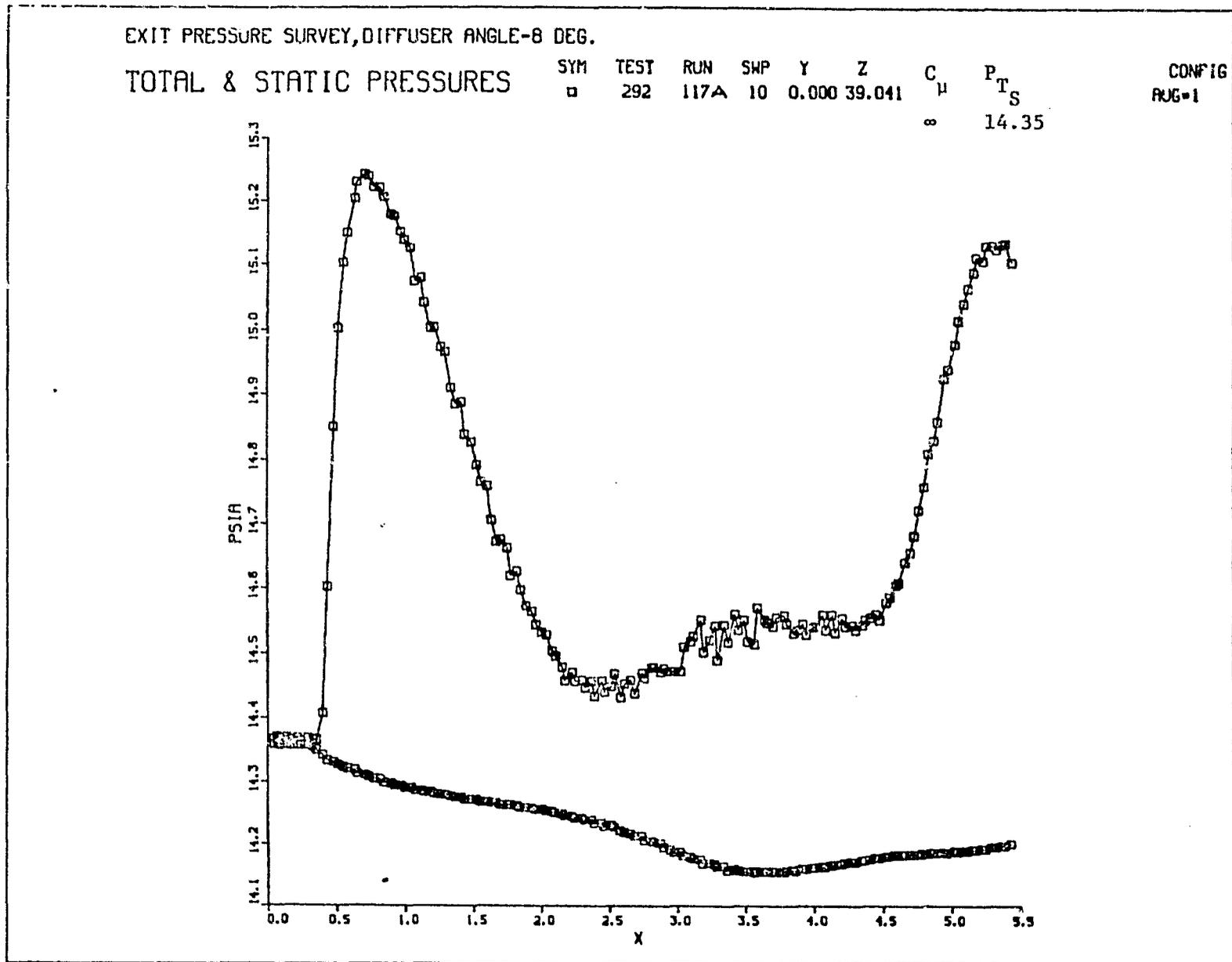


Figure A-6 g. Augmenter Exit Total & Static Pressure, Aug. #1, Diff =  $8^{\circ}$ ,  $\theta = 40^{\circ}$ ,  $\alpha = 0$

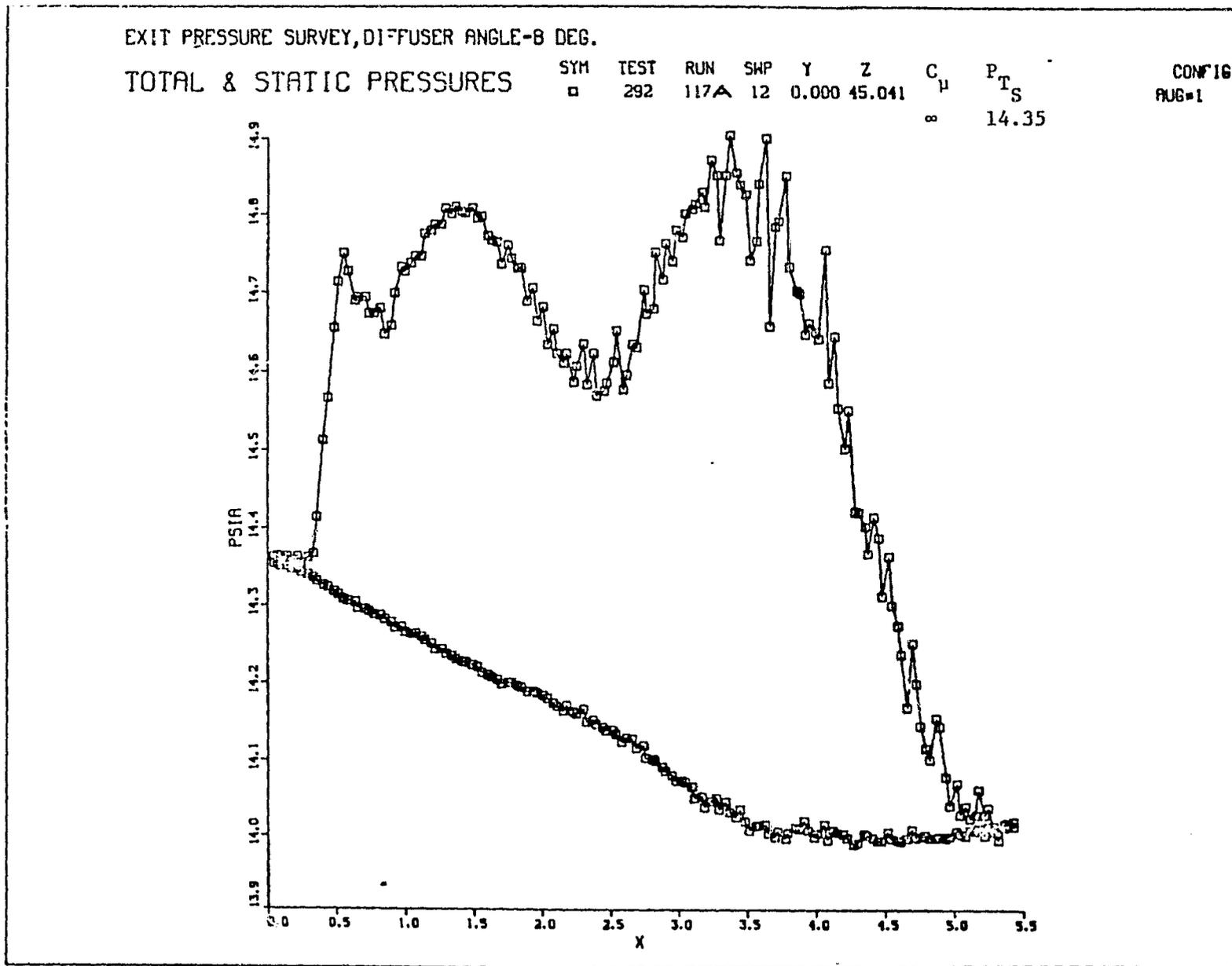


Figure A-6 h. Augmenter Exit Total & Static Pressure, Aug. #1, Diff = 8°,  $\theta = 40^\circ$ ,  $\alpha = 0$

EXIT PRESSURE SURVEY, DIFFUSER ANGLE-8 DEG.

TOTAL & STATIC PRESSURES

SYM	TEST	RUN	SHP	Y	Z	C <sub>μ</sub>	P <sub>T</sub> <sub>S</sub>	CONFIG
□	292	117 B	1	0.000	0.905	0	14.77	AUG-1

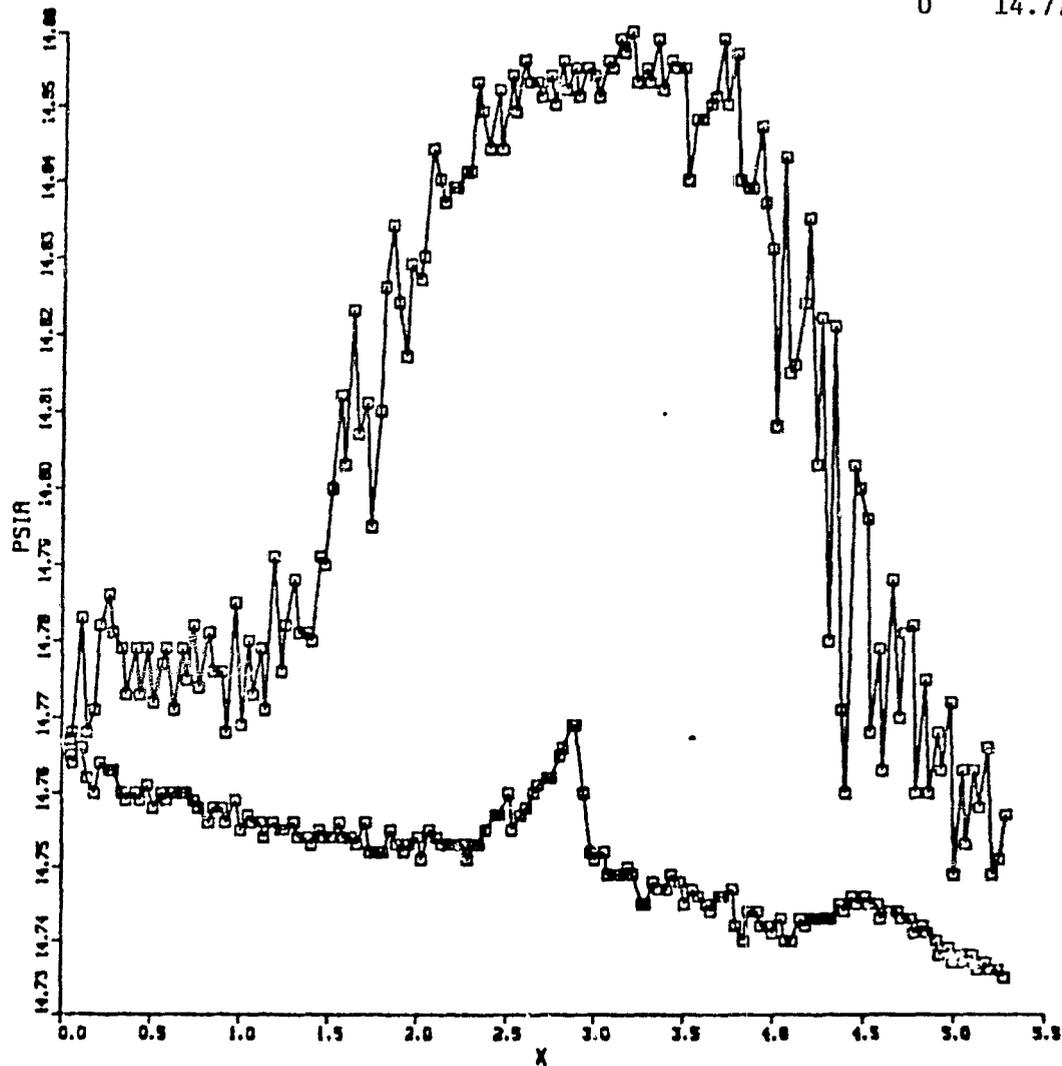


Figure A-7 a. Augmenter Exit Total & Static Pressure, Aug. #1, Diff = 8°, θ = 40°, α = 0

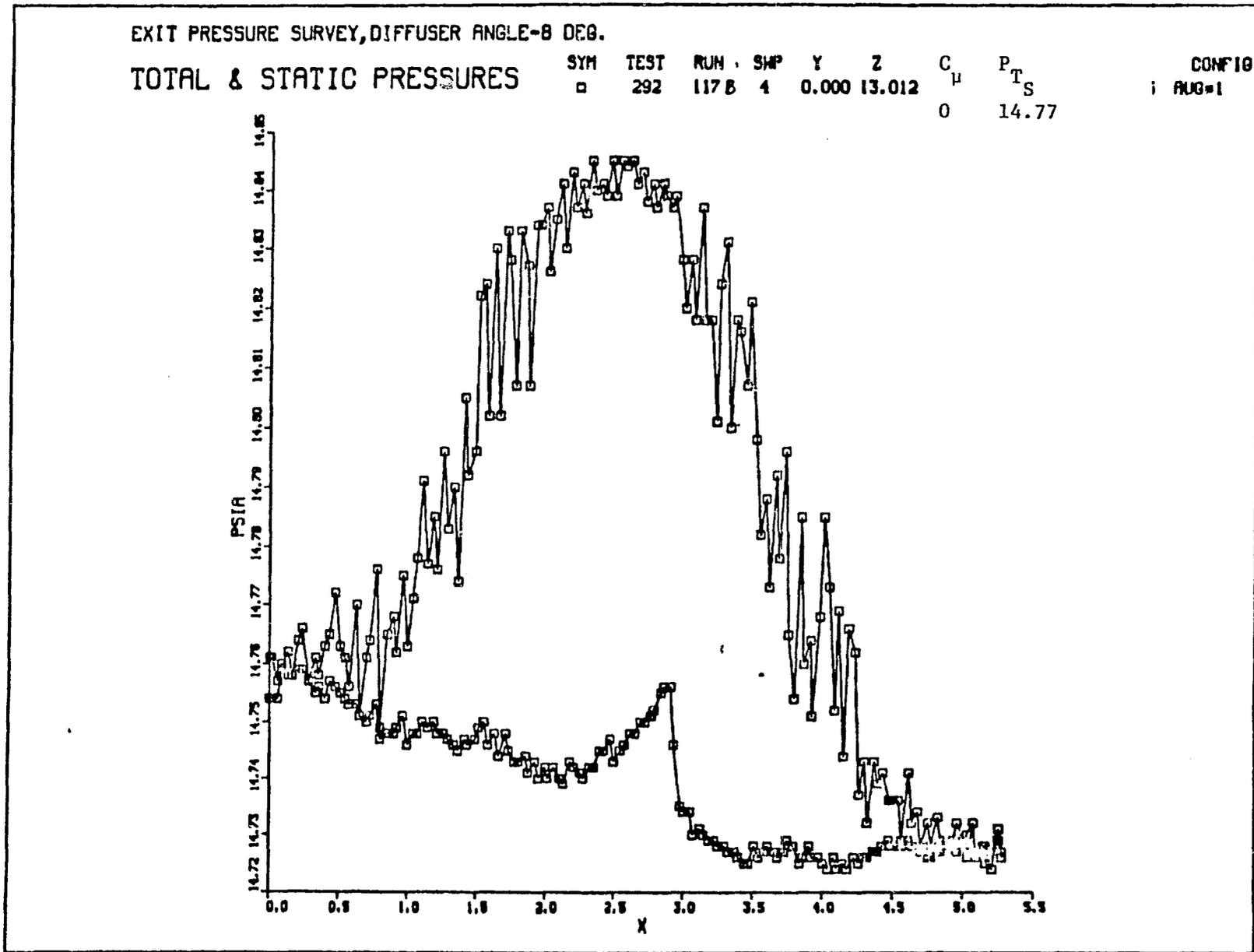


Figure A-7 b. Augmenter Exit Total & Static Pressure, Aug. #1, Diff = 8°,  $\theta = 40^\circ$ ,  $\alpha = 0$

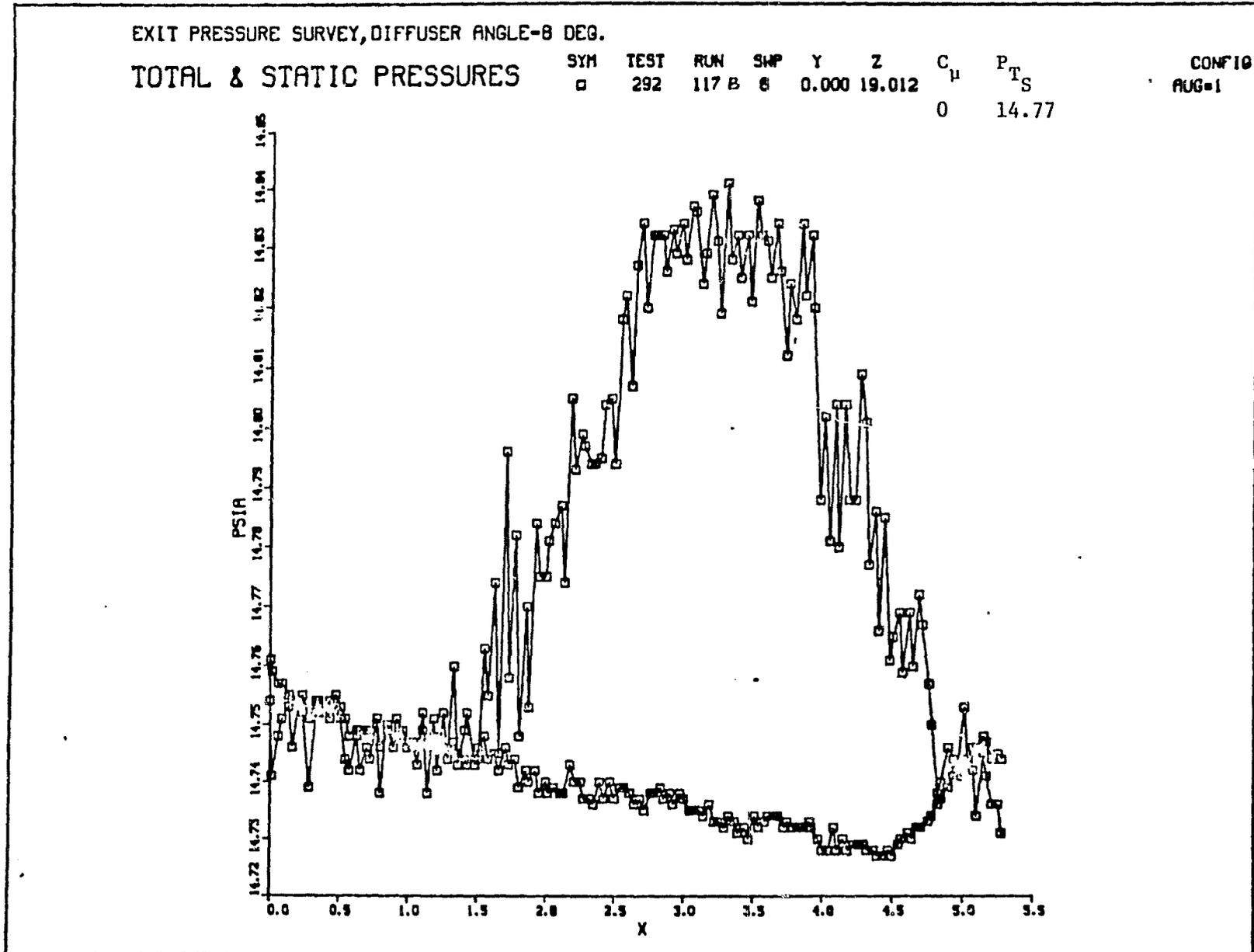


Figure A-7 c. Augmenter Exit Total & Static Pressure, Aug. #1, Diff = 8°,  $\theta = 40^\circ$ ,  $\alpha = 0$

EXIT PRESSURE SURVEY, DIFFUSER ANGLE-8 DEG.

TOTAL & STATIC PRESSURES

SYM	TEST	RUN	SWP	Y	Z	C <sub>μ</sub>	P <sub>T</sub> <sub>S</sub>	CONFIG
□	292	117B	7	0.000	27.023	0	14.77	AUG-1

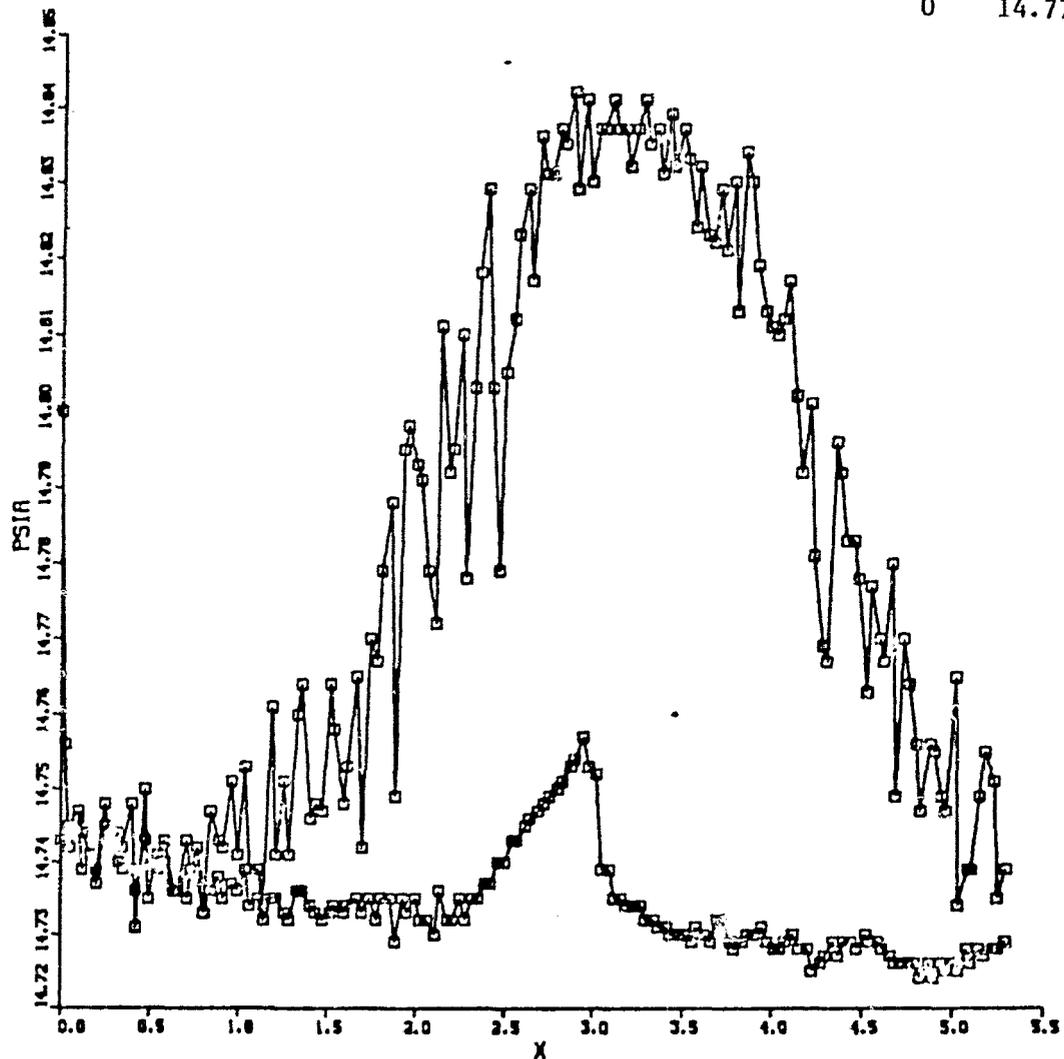


Figure A-7 d. Augmenter Exit Total & Static Pressure, Aug. #1, Diff = 8°, θ = 40°, α = 0

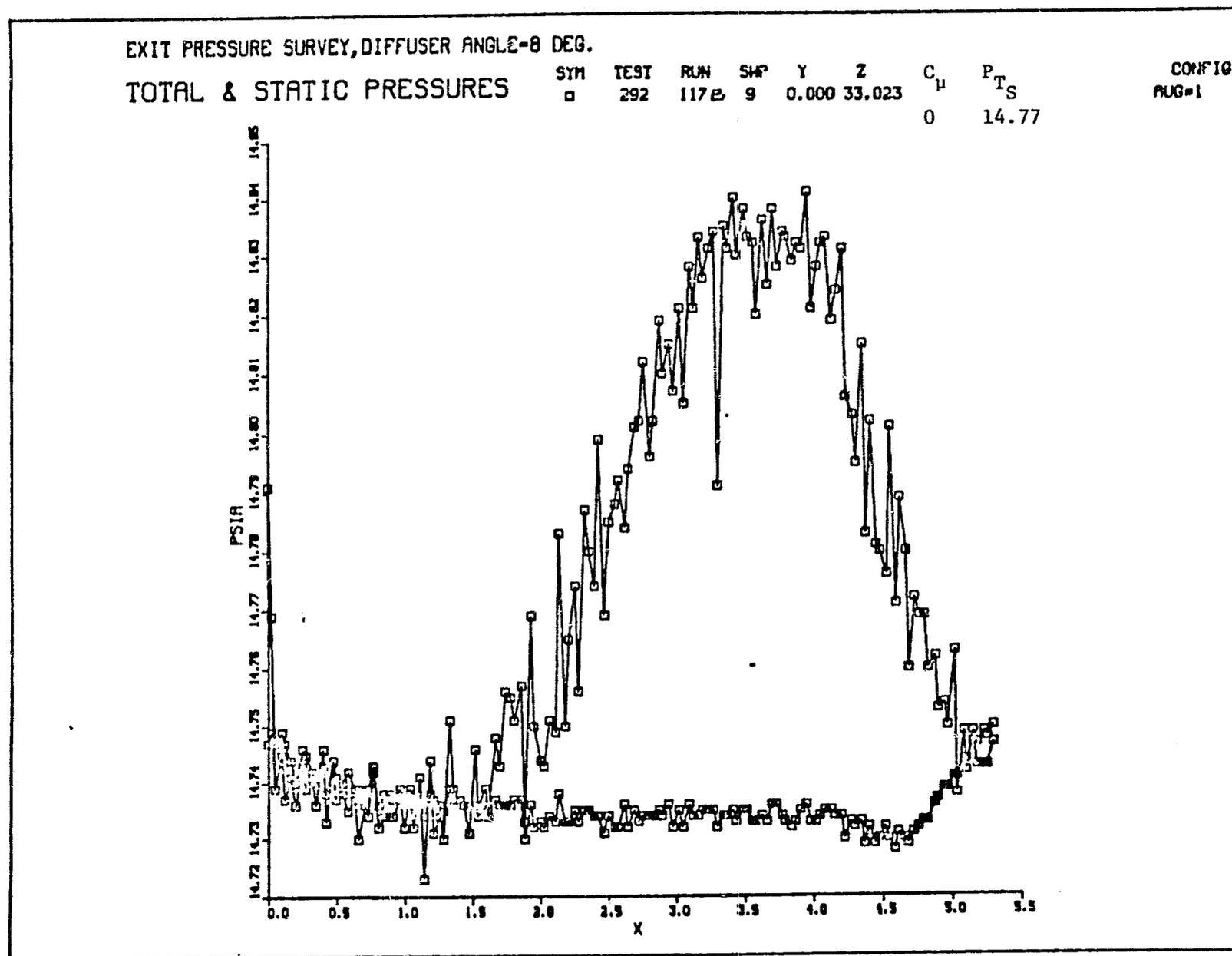


Figure A-7 e. Augmenter Exit Total & Static Pressure, Aug. #1, Diff = 8°,  $\theta = 40^\circ$ ,  $\alpha = 0$

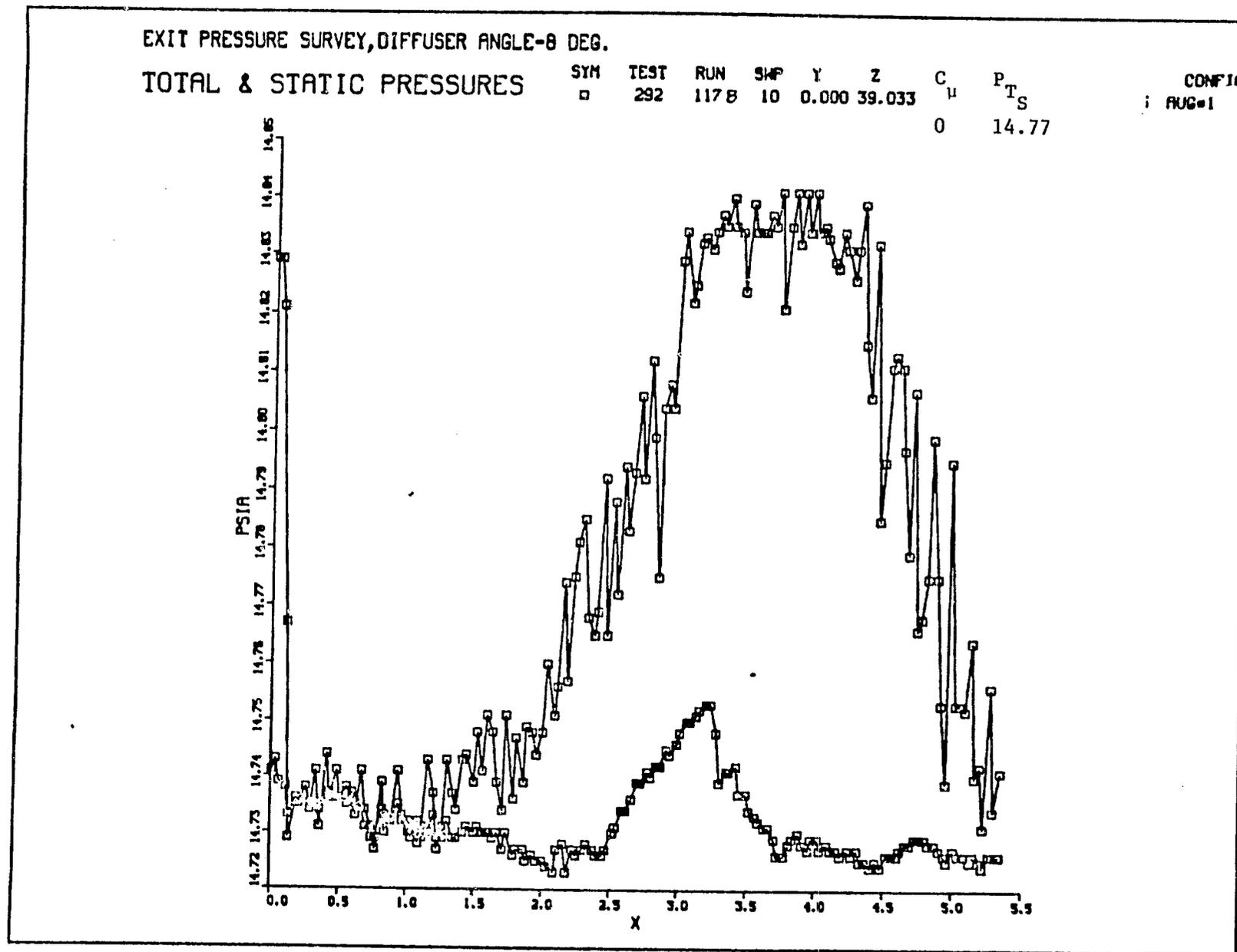


Figure A-7 f. Augmenter Exit Total & Static Pressure, Aug. #1, Diff = 8°,  $\theta = 40^\circ$ ,  $\alpha = 0$

EXIT PRESSURE SURVEY, DIFFUSER ANGLE-8 DEG.

TOTAL & STATIC PRESSURES

SYM	TEST	RUN	SWP	Y	Z	C	P
□	292	117 B	12	0.000	45.033	$\mu$	$T_S$
						0	14.77

CONFIG  
AUG-1

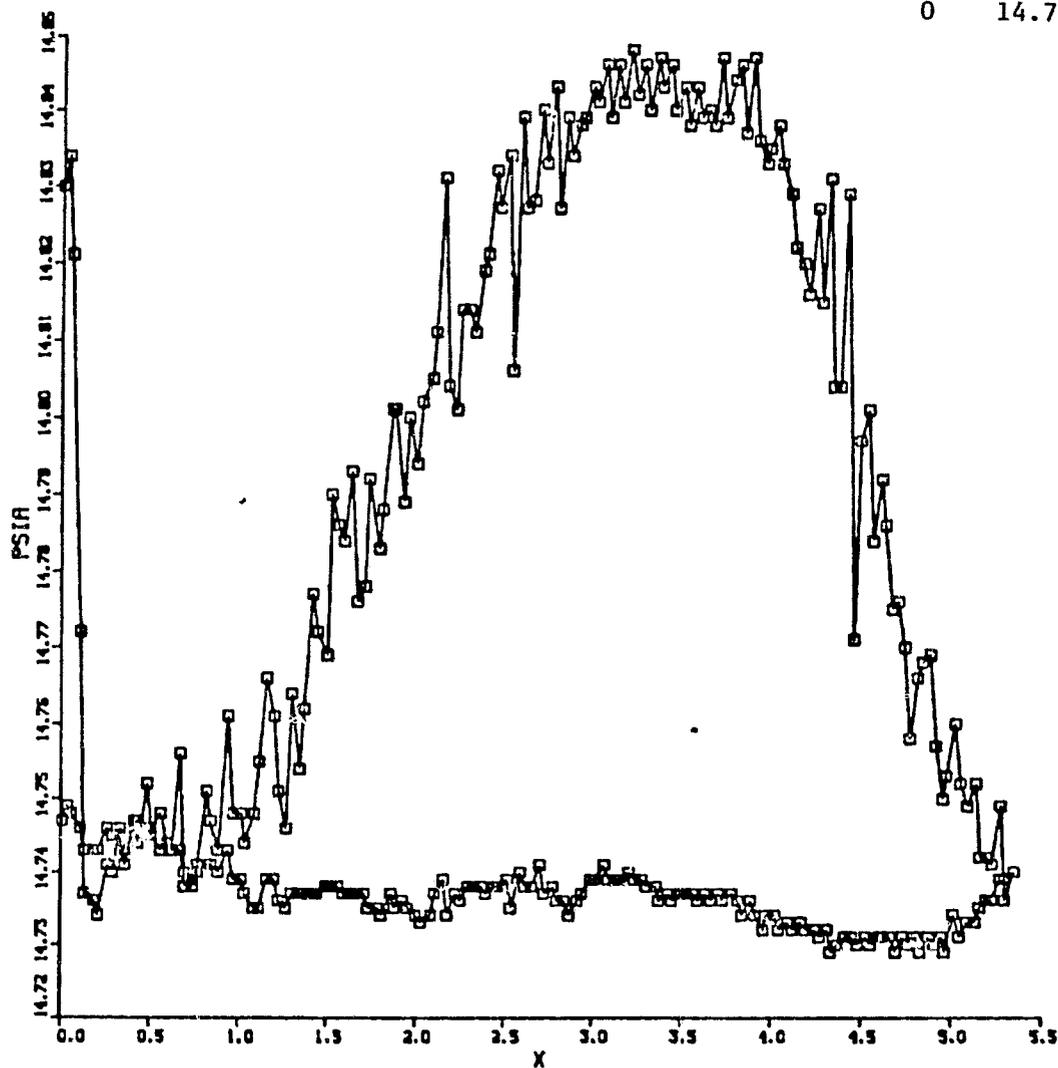


Figure A-7 g. Augmenter Exit Total & Static Pressure, Aug. #1, Diff = 8°,  $\theta = 40^\circ$ ,  $\alpha = 0$

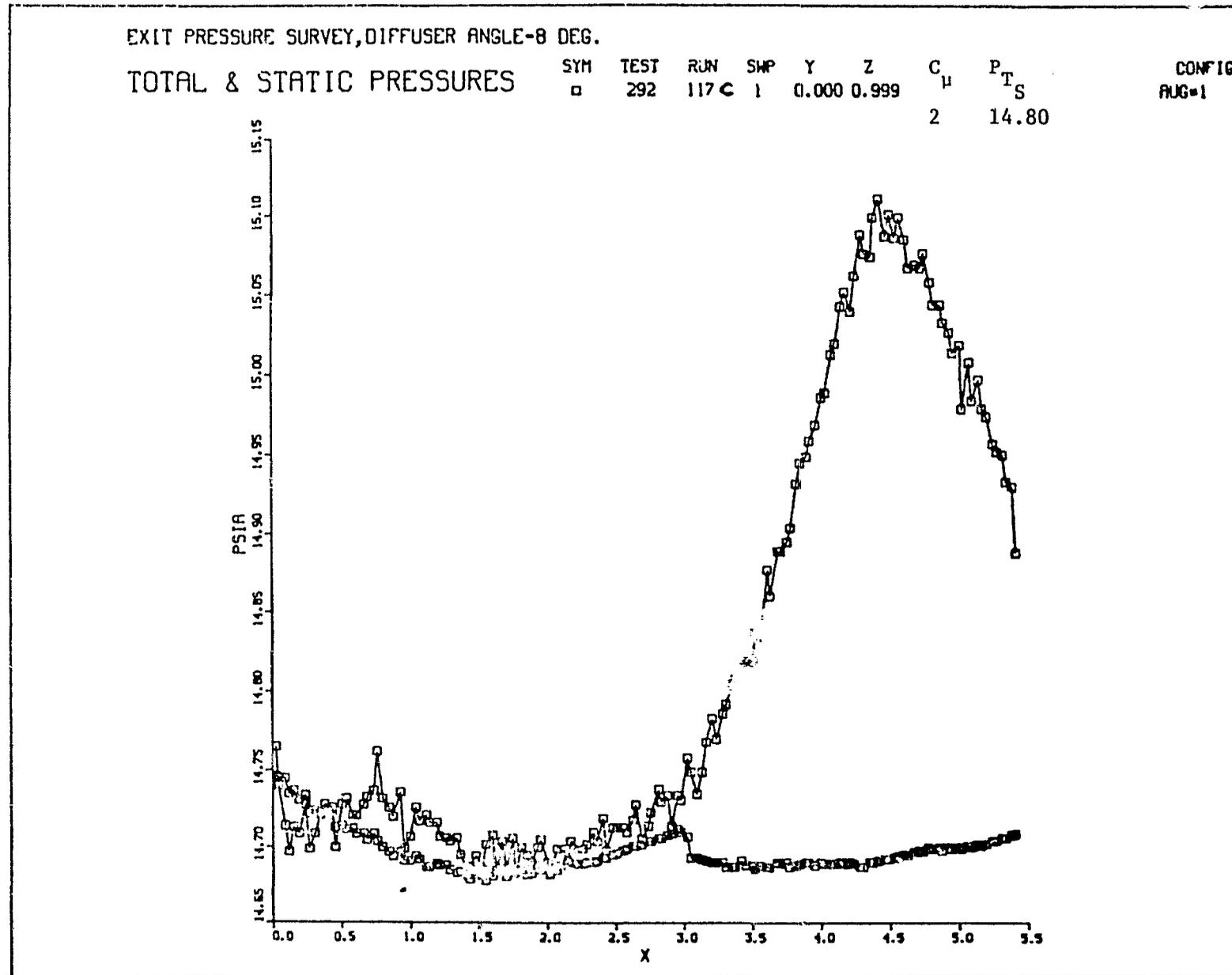


Figure A-8 a. Augmenter Exit Total & Static Pressure, Aug. #1, Diff = 9°,  $\theta = 40^\circ$ ,  $\alpha = 0$

EXIT PRESSURE SURVEY, DIFFUSER ANGLE-8 DEG.

TOTAL & STATIC PRESSURES

SYM	TEST	RUN	SWP	Y	Z	C <sub>H</sub>	P <sub>T<sub>S</sub></sub>
□	292	117C	3	0.000	6.999	2	14.80

CONFIG  
AUG-1

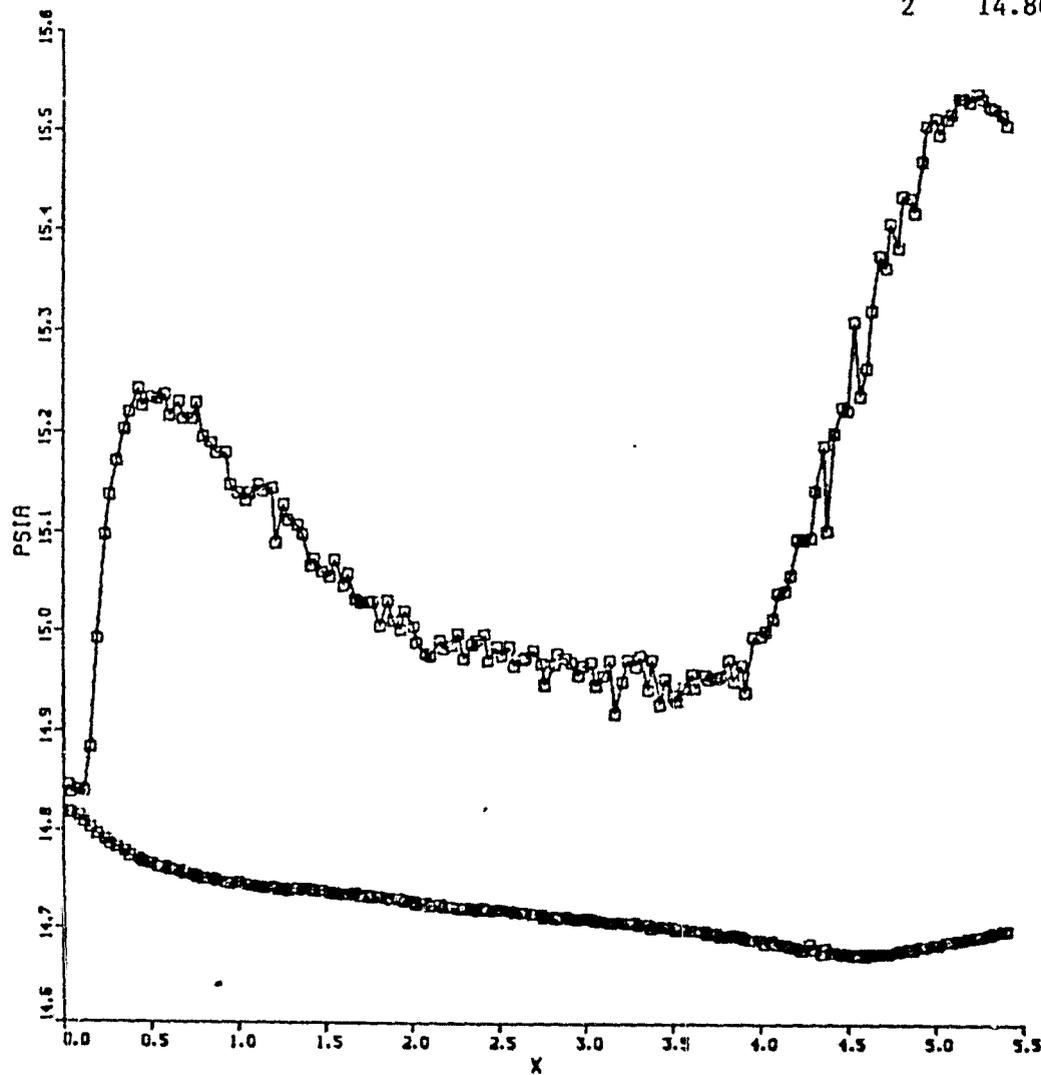


Figure A-8 b. Augmenter Exit Total & Static Pressure, Aug. #1, Diff = 8°, θ = 40°, α = 0

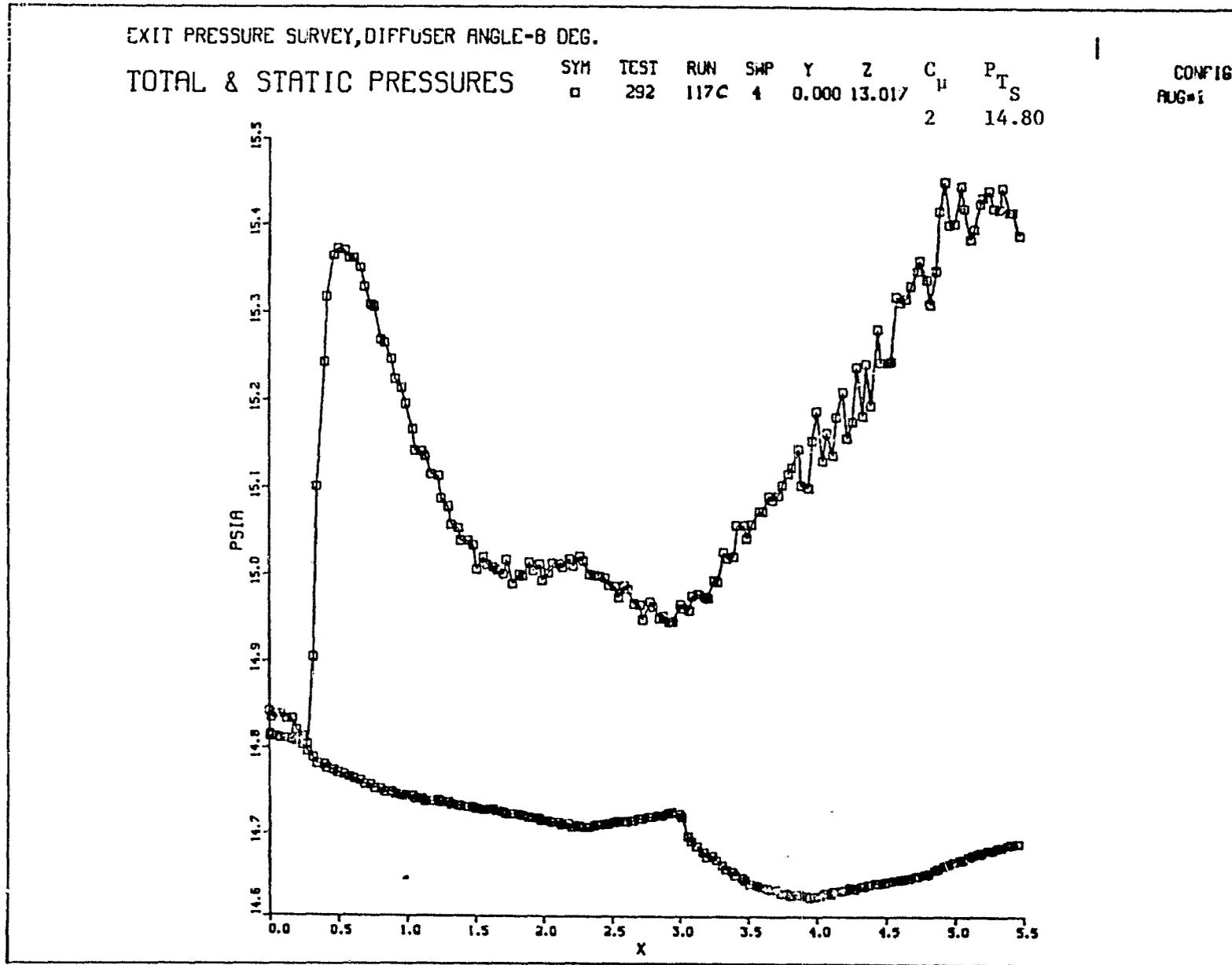


Figure A-8 c. Augmenter Exit Total & Static Pressure, Aug. #1, Diff = 8°,  $\theta = 40^\circ$ ,  $\alpha = 0$

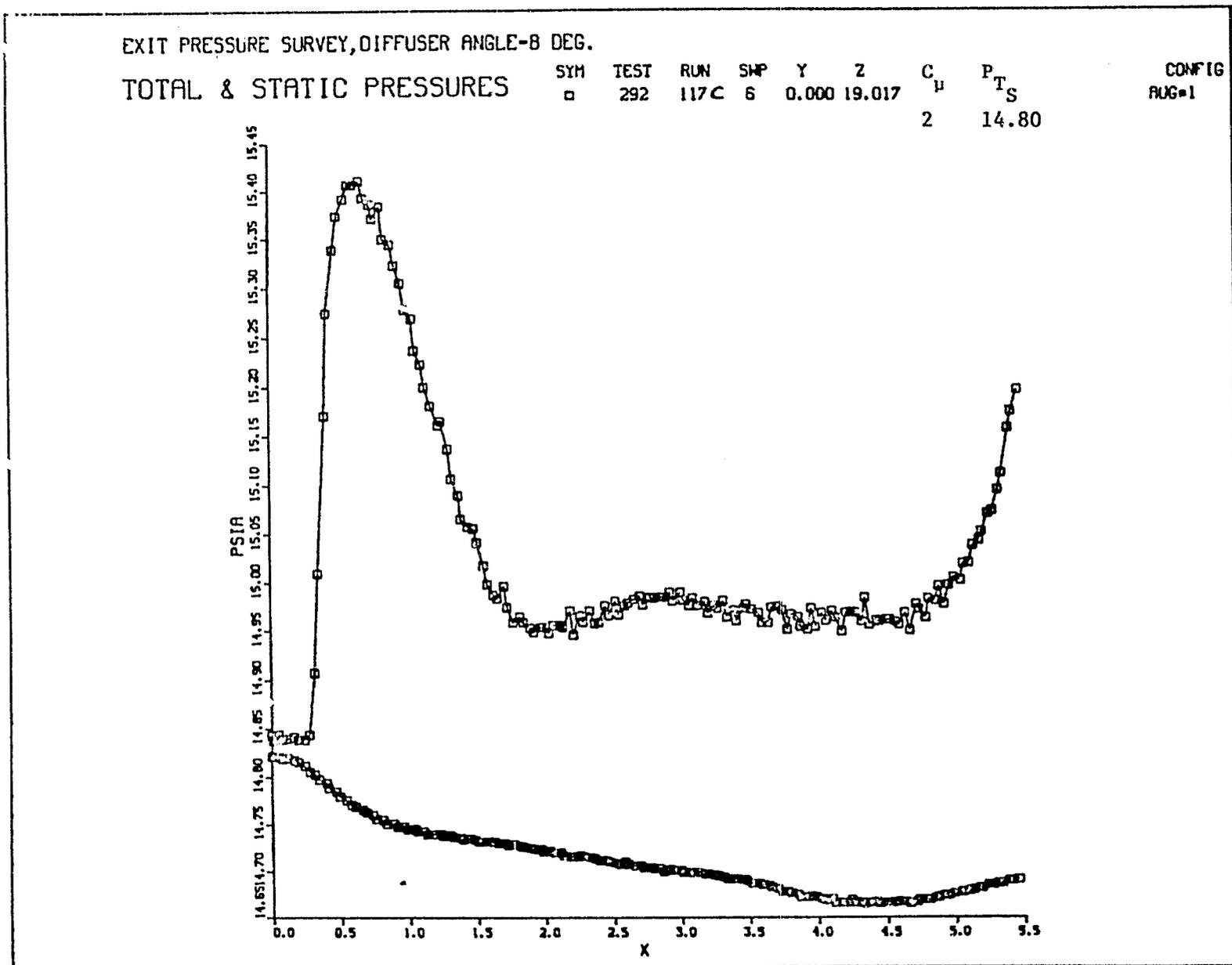
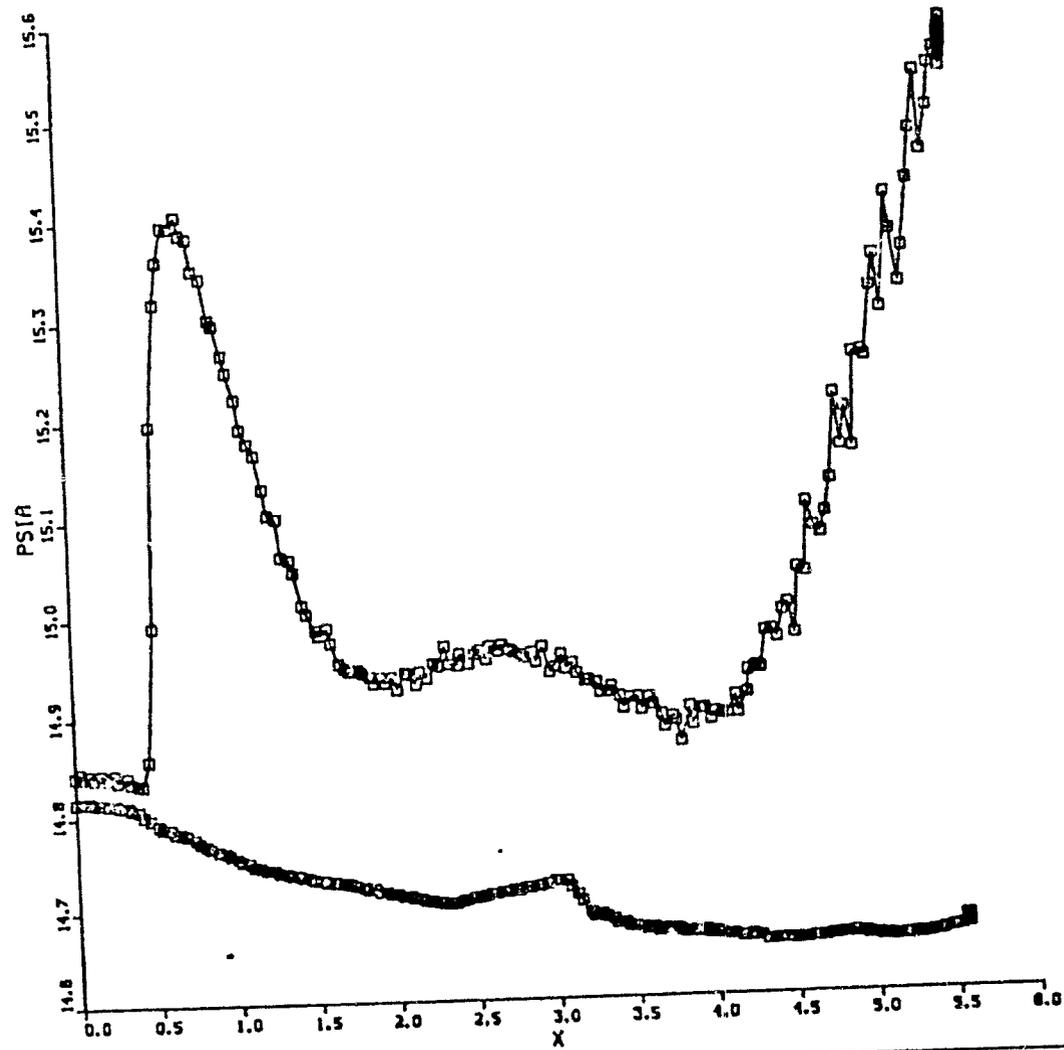


Figure A-8 d. Augmenter Exit Total & Static Pressure, Aug. #1, Diff = 8°,  $\theta = 40^\circ$ ,  $\alpha = 0$

EXIT PRESSURE SURVEY, DIFFUSER ANGLE-8 DEG.

TOTAL &amp; STATIC PRESSURES

SYM	TEST	RUN	SHP	Y	Z	C <sub>P</sub>	P <sub>T</sub> <sub>S</sub>
□	292	117C	7	0.000	27.029	2	14.80

 CONFID  
 AUG#1

 Figure A-8 e. Augmenter Exit Total & Static Pressure, Aug. #1, Diff = 8°,  $\theta = 40^\circ$ ,  $\alpha = 0$

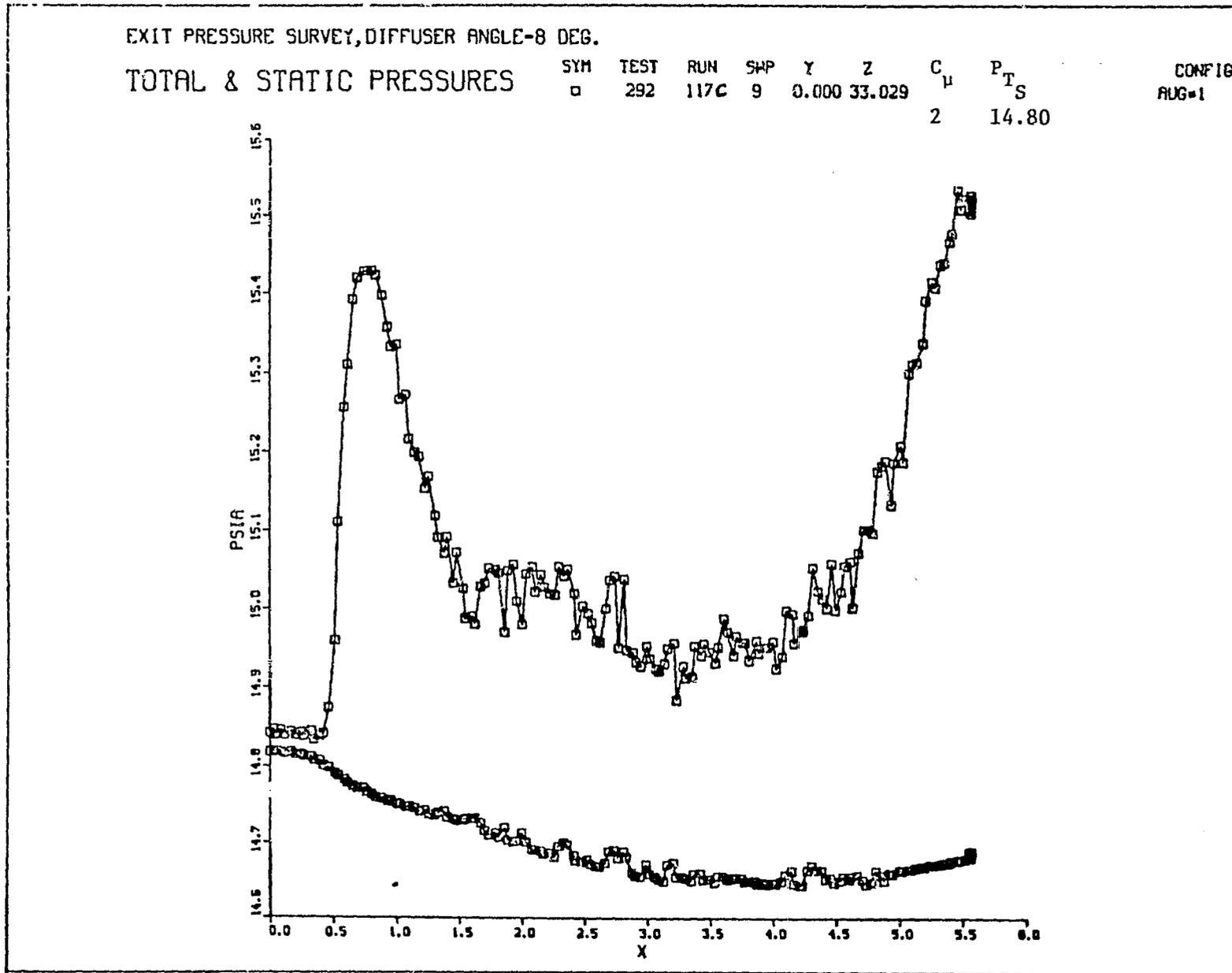


Figure A-8 f. Augmenter Exit Total & Static Pressure, Aug. #1, Diff =  $8^{\circ}$ ,  $\theta = 40^{\circ}$ ,  $\alpha = 0$

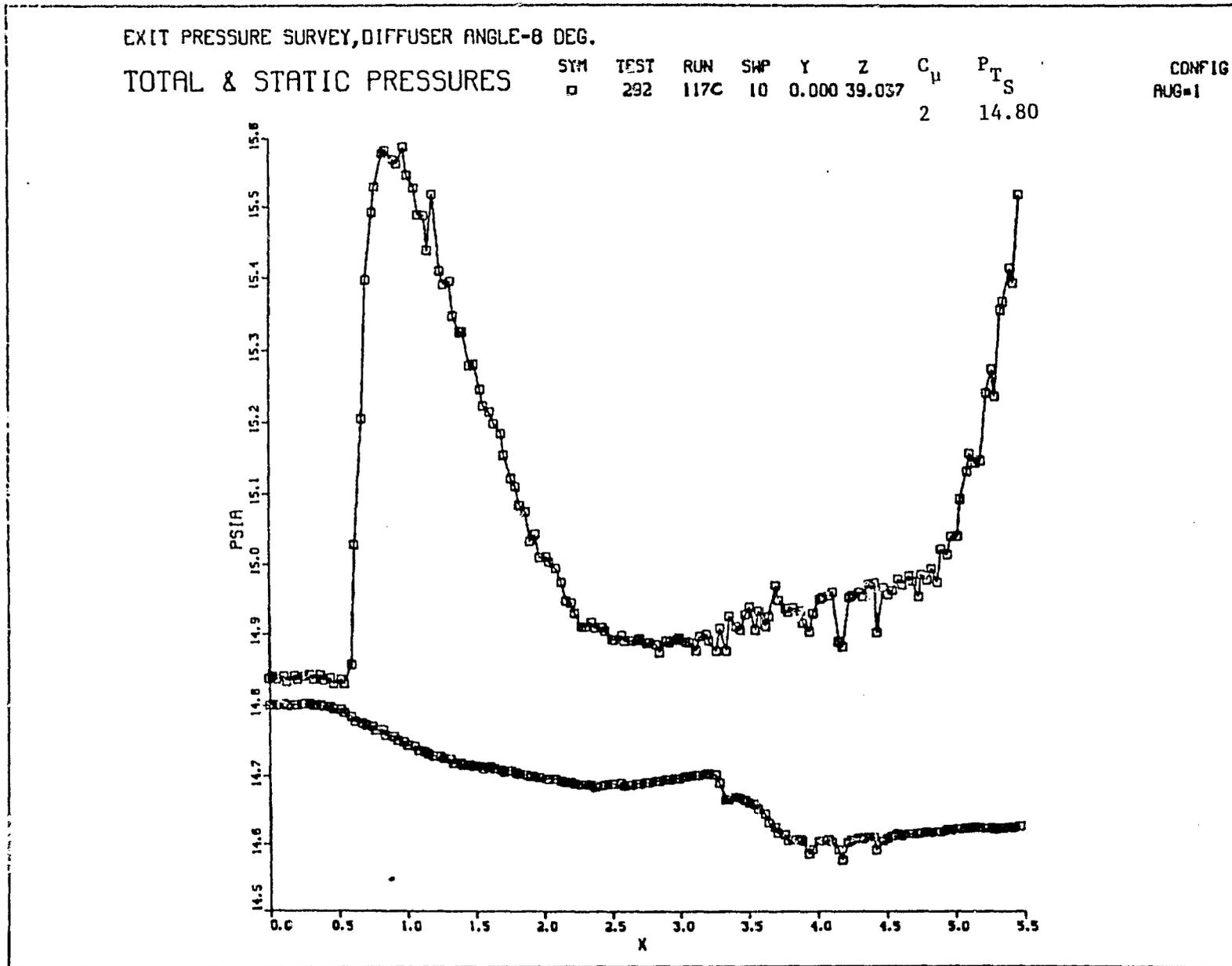


Figure A-8 g. Augmenter Exit Total & Static Pressure, Aug. #1, Diff =  $8^{\circ}$ ,  $\theta = 40^{\circ}$ ,  $\alpha = 0$

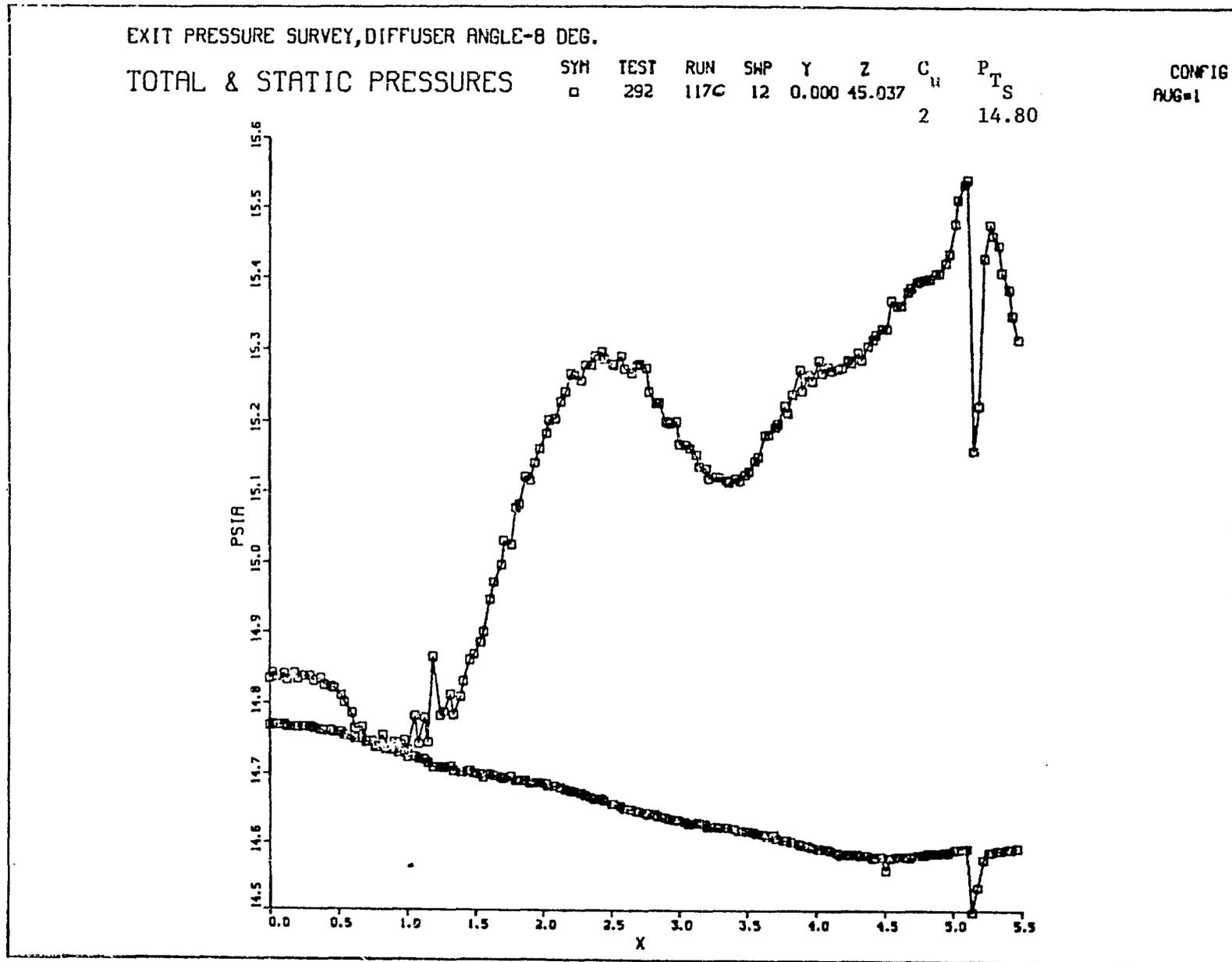


Figure A-8 h. Augmenter Exit Total & Static Pressure, Aug. #1, Diff = 8°,  $\theta = 40^\circ$ ,  $\alpha = 0$

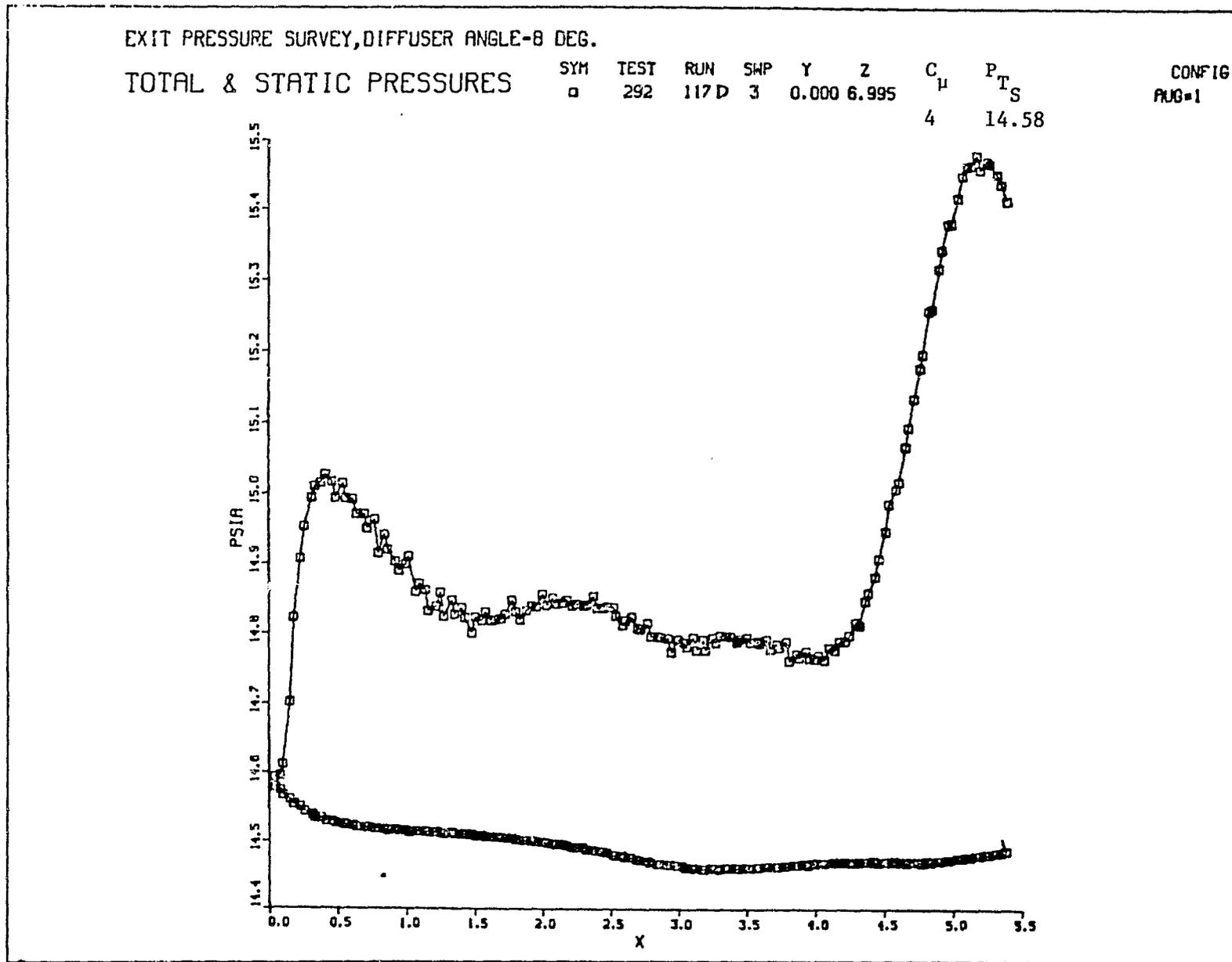


Figure A-9 a. Augmenter Exit Total & Static Pressure, Aug. #1, Diff = 8°,  $\theta = 40^\circ$ ,  $\alpha = 0$

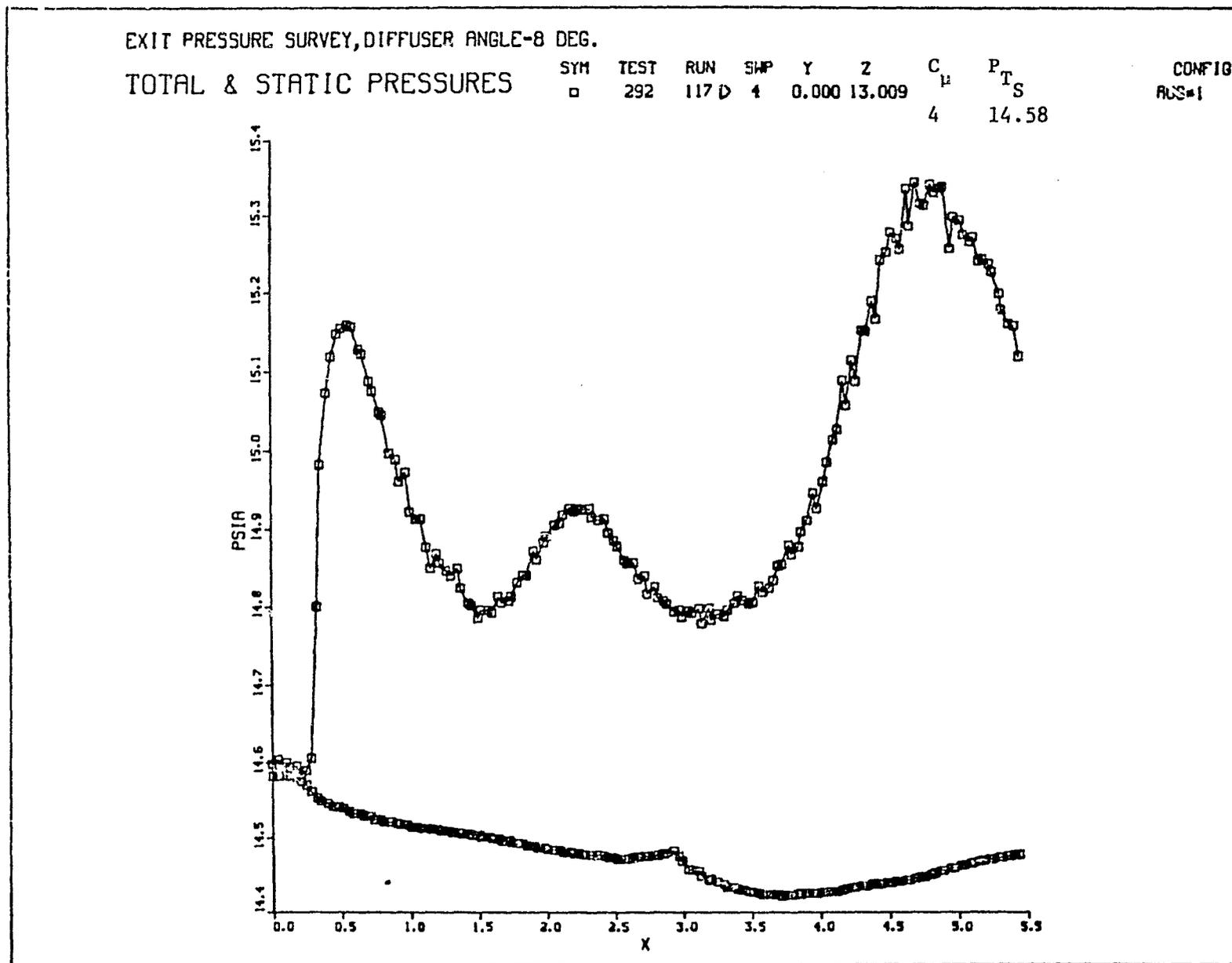


Figure A-9 b. Augmenter Exit Total & Static Pressure, Aug. #1, Diff = 8°, θ = 40°, α = 0

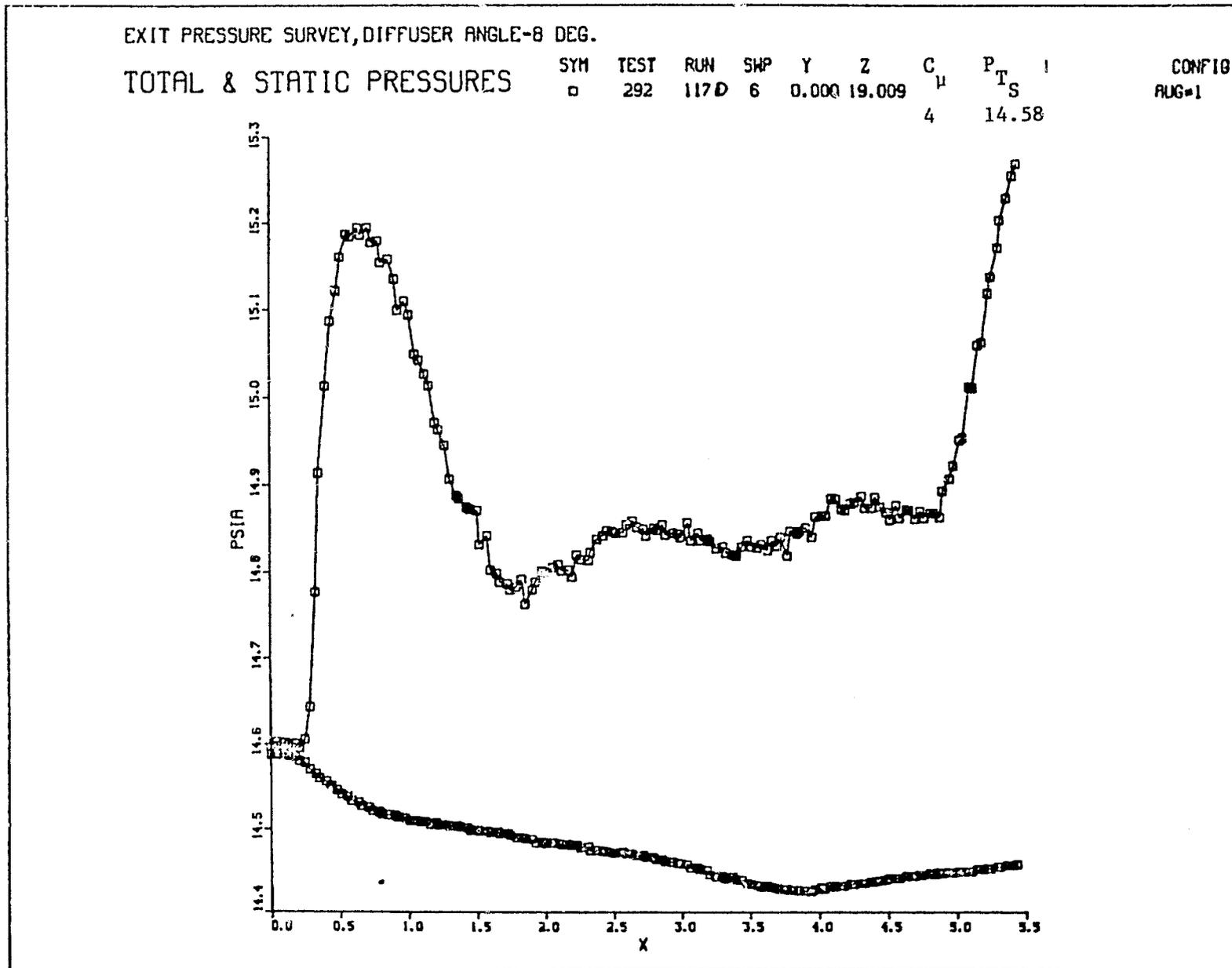


Figure A-9 c. Augmenter Exit Total & Static Pressure, Aug. #1, Diff =  $8^{\circ}$ ,  $\theta = 40^{\circ}$ ,  $\alpha = 0$

EXIT PRESSURE SURVEY, DIFFUSER ANGLE-8 DEG.

TOTAL & STATIC PRESSURES

SYM	TEST	RUN	SWP	Y	Z	C	P <sub>T</sub>
□	292	117D	7	0.000	27.026	μ	14.58
						4	

CONFIG  
AUG#1

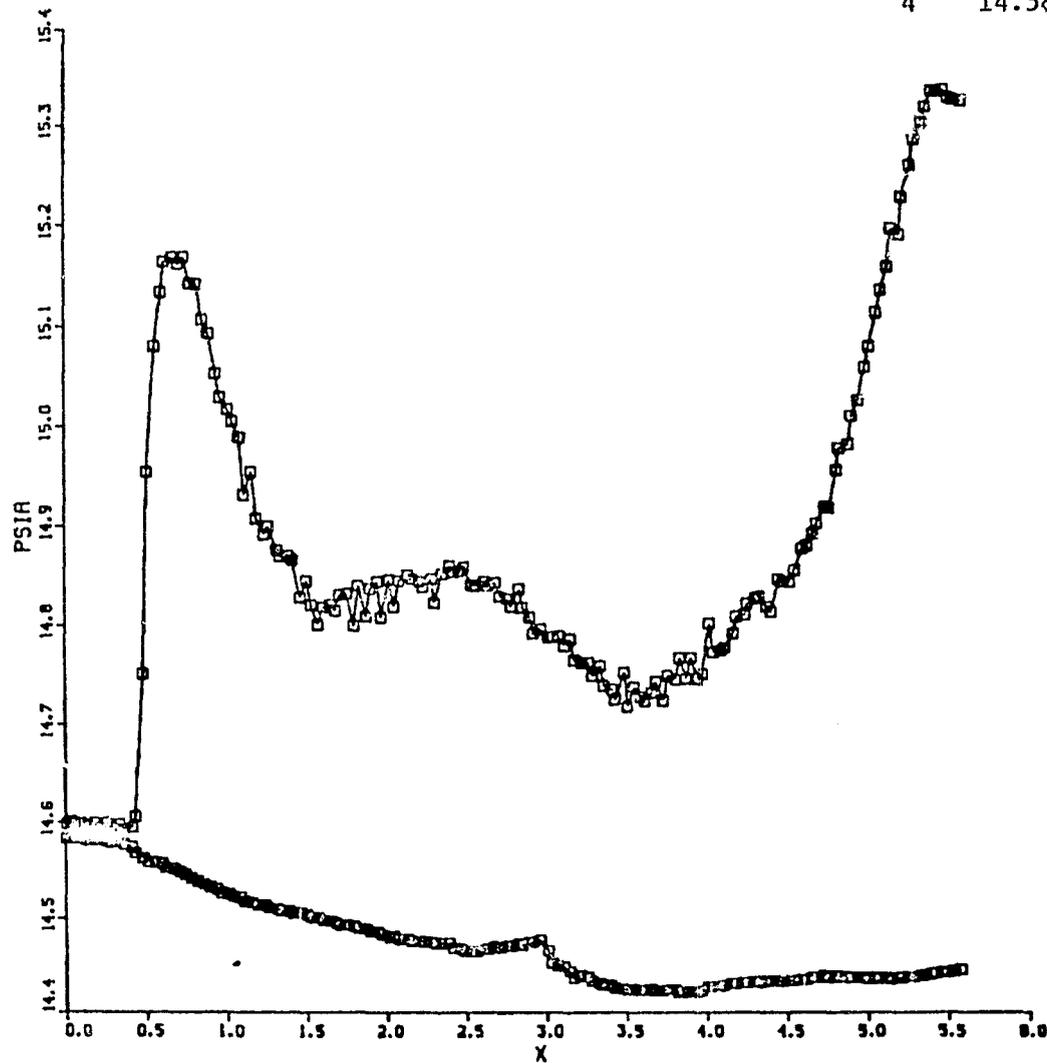


Figure A-9 d. Augmenter Exit Total & Static Pressure, Aug. #1, Diff = 8°, θ = 40°, α = 0

EXIT PRESSURE SURVEY, DIFFUSER ANGLE-8 DEG.

TOTAL & STATIC PRESSURES

SYM	TEST	RUN	SHP	Y	Z	C <sub>μ</sub>	P <sub>T,S</sub>
□	292	117 D	9	0.000	33.026	4	14.58

CONFIG  
AUG-1

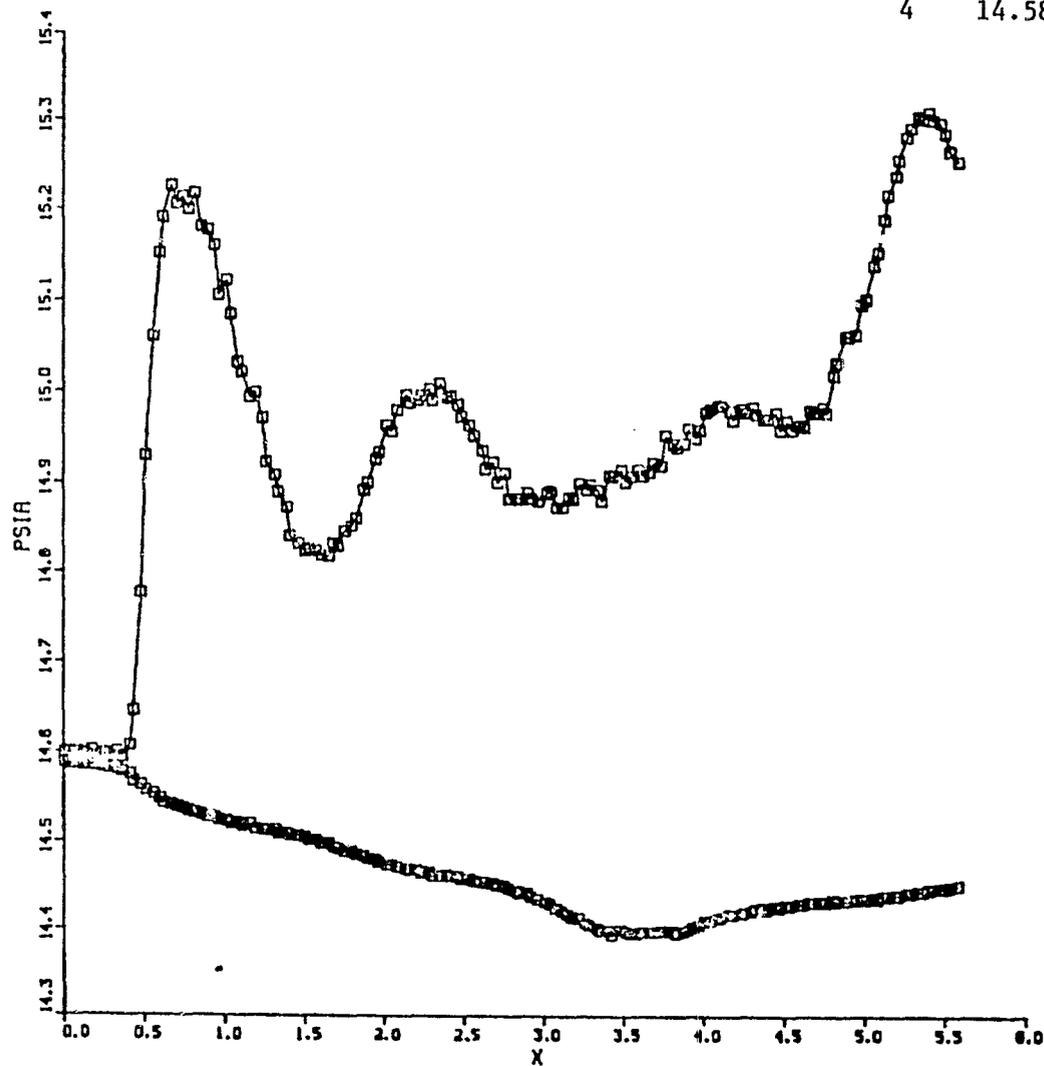


Figure A-9 e. Augmenter Exit Total & Static Pressure, Aug. #1, Diff = 8°, θ = 40°, α = 0

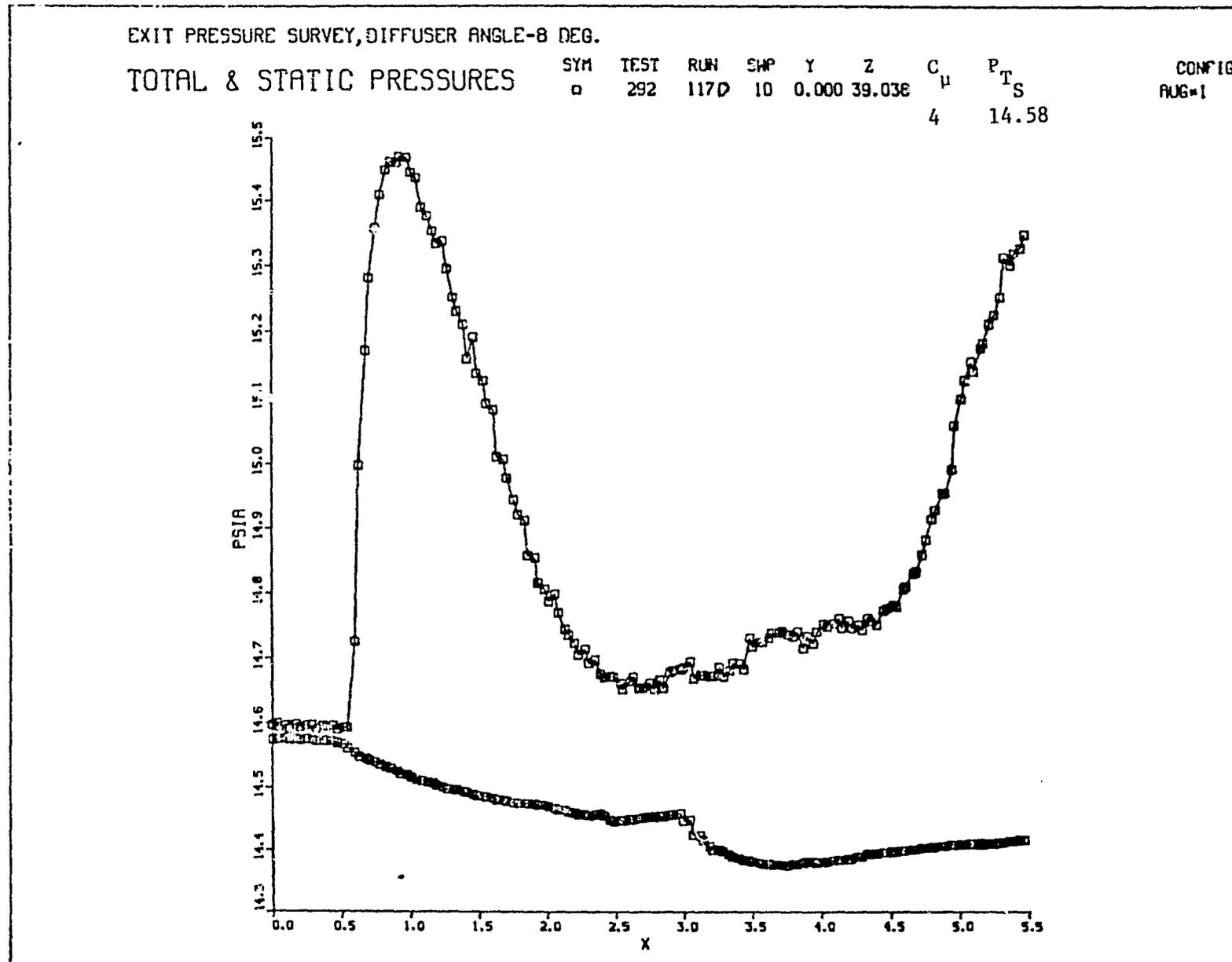


Figure A-9 f. Augmenter Exit Total & Static Pressure, Aug. #1, Diff = 8°,  $\theta = 40^\circ$ ,  $\alpha = 0$

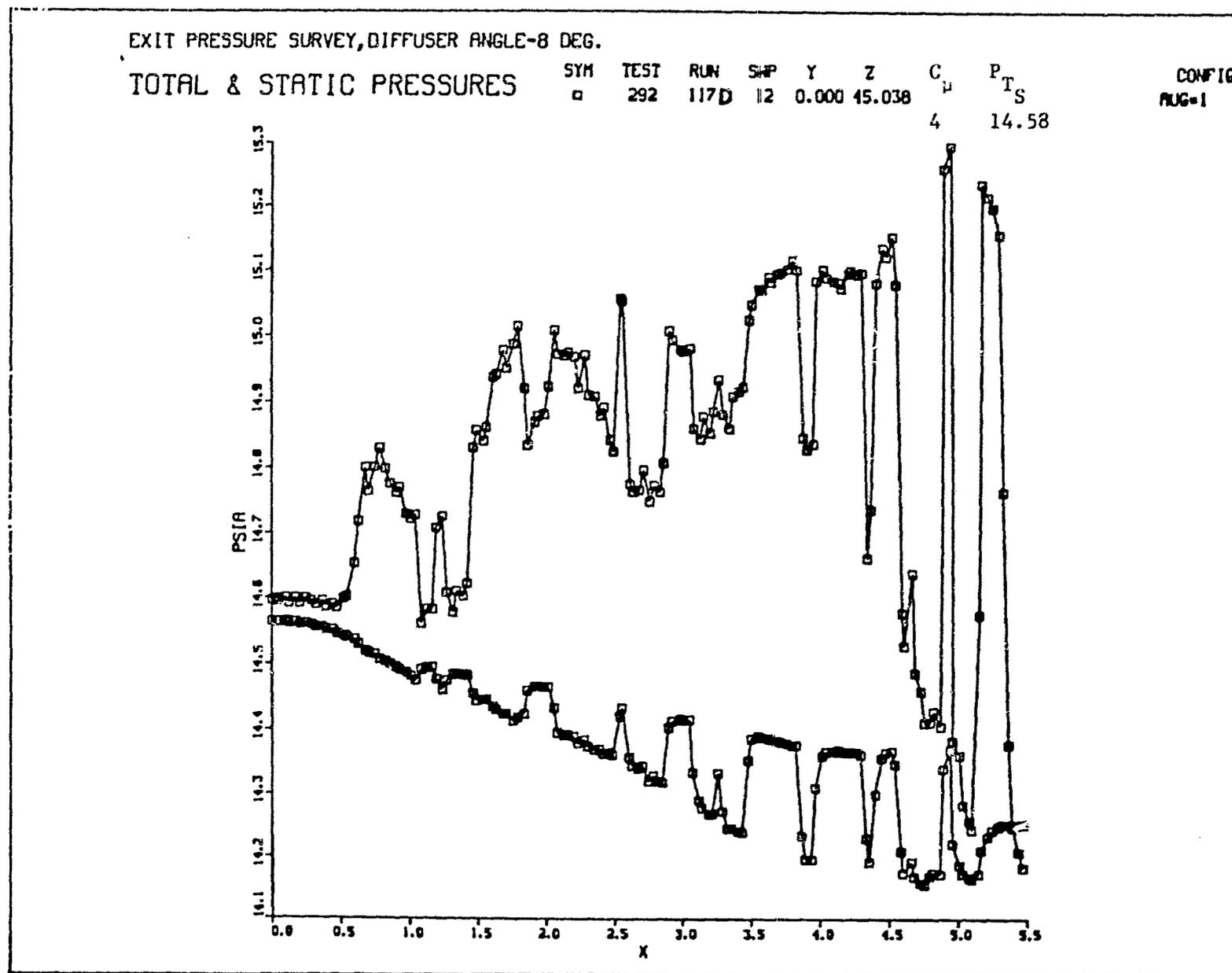


Figure A-9 g. Augmenter Exit Total & Static Pressure, Aug. #1, Diff =  $8^{\circ}$ ,  $\theta = 40^{\circ}$ ,  $\alpha = 0$

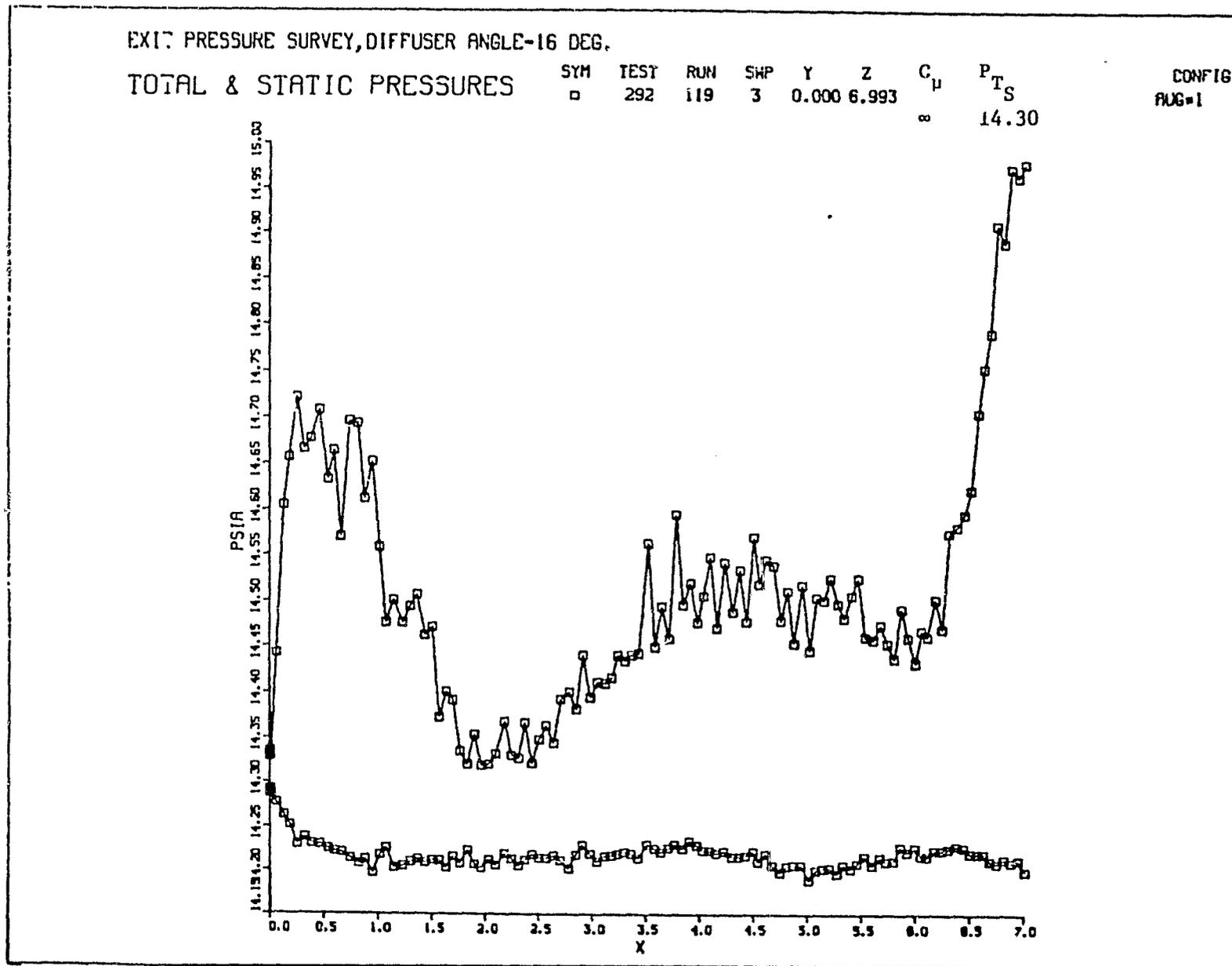


Figure A-10 a. Augmenter Exit Total & Static Pressure, Aug. #1, Diff = 16°,  $\theta = 40^\circ$ ,  $\alpha = 0$

EXIT PRESSURE SURVEY, DIFFUSER ANGLE-16 DEG.

TOTAL & STATIC PRESSURES

SYM	TEST	RUN	SHP	Y	Z	$C_{\mu}$	$P_{TS}$
□	292	119	4	0.000	12.960	$\infty$	14.30

CONFIG  
AUG#1

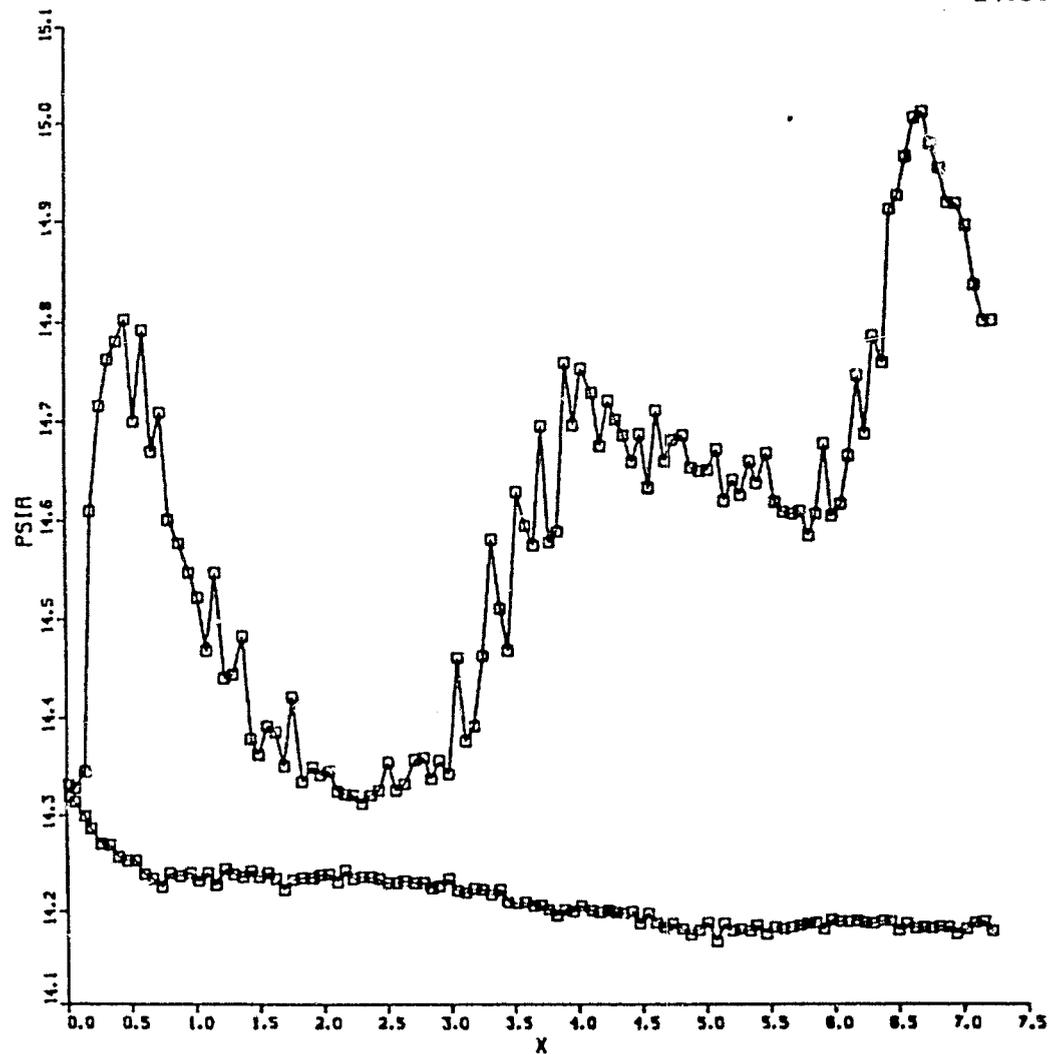


Figure A-10 b. Augmenter Exit Total & Static Pressure, Aug. #1, Diff = 16°,  $\theta = 40^\circ$ ,  $\alpha = 0$

EXIT PRESSURE SURVEY, DIFFUSER ANGLE-16 DEG.

TOTAL & STATIC PRESSURES

SYM	TEST	RUN	SWP	Y	Z	C <sub>μ</sub>	P <sub>T</sub> S
□	292	119	6	0.000	18.980	∞	14.30

CCNF16  
AUG-1

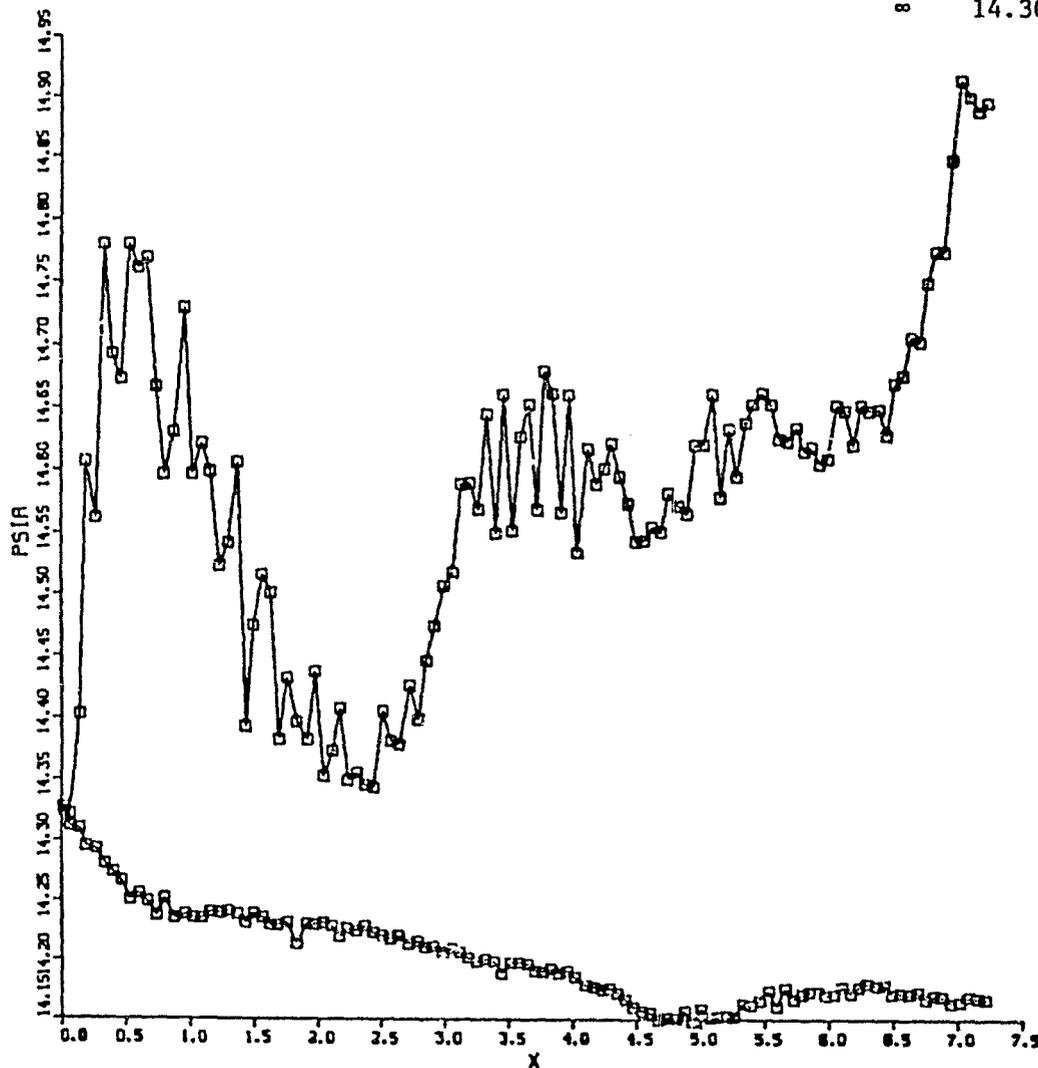


Figure A-10 c. Augmenter Exit Total & Static Pressure, Aug. #1, Diff = 16°, θ = 40°, α = 0

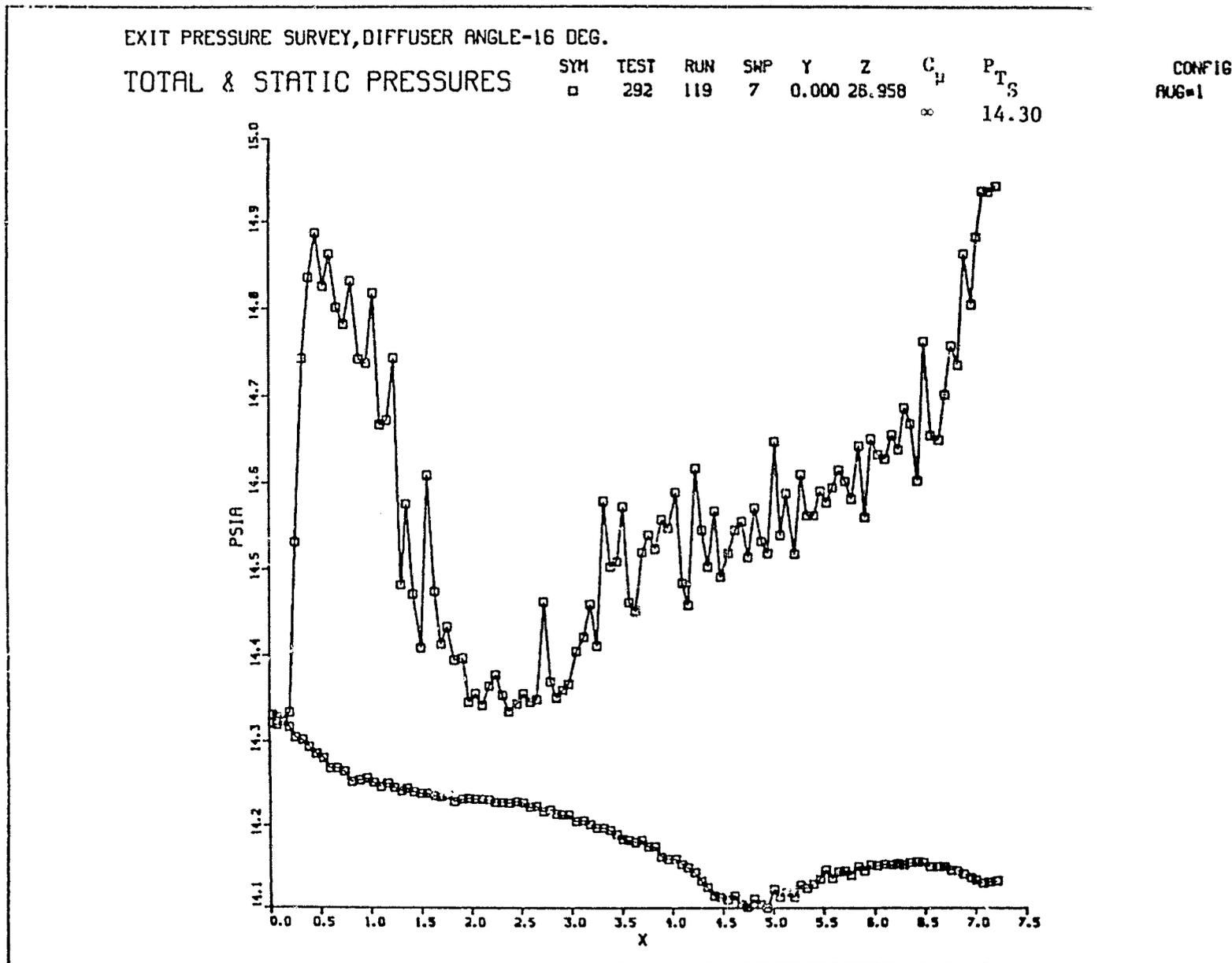


Figure A-10 d. Augmenter Exit Total & Static Pressure, Aug. #1, Diff = 16°,  $\theta = 40^\circ$ ,  $\alpha = 0$

EXIT PRESSURE SURVEY, DIFFUSER ANGLE-16 DEG.

TOTAL &amp; STATIC PRESSURES

SYM	TEST	RUN	SHP	Y	Z	C <sub>μ</sub>	P <sub>T</sub> <sub>S</sub>
□	292	119	9	0.000	32.958	∞	14.30

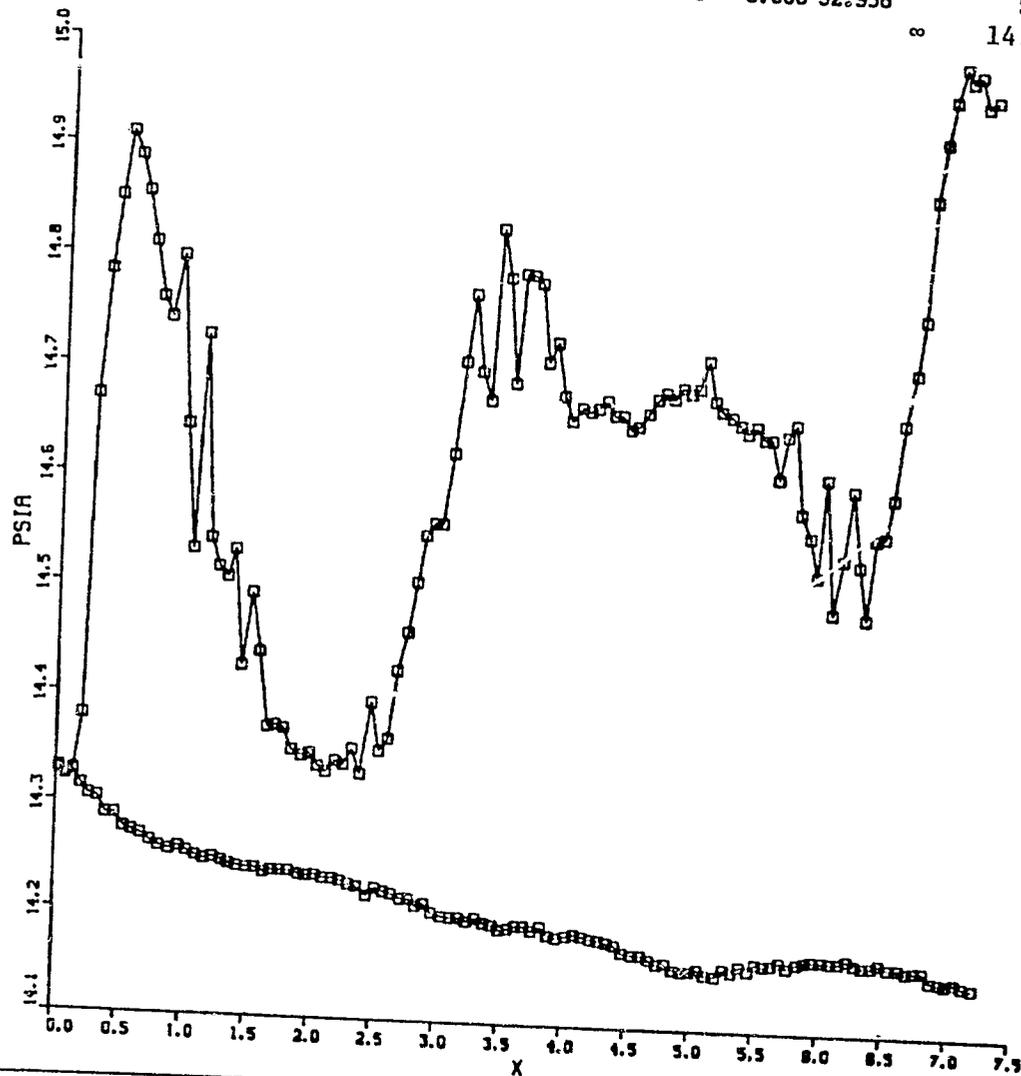
CONFIG  
AUG-1

Figure A-10 e. Augmenter Exit Total &amp; Static Pressure, Aug. #1, Diff = 16°, θ = 40°, α = 0

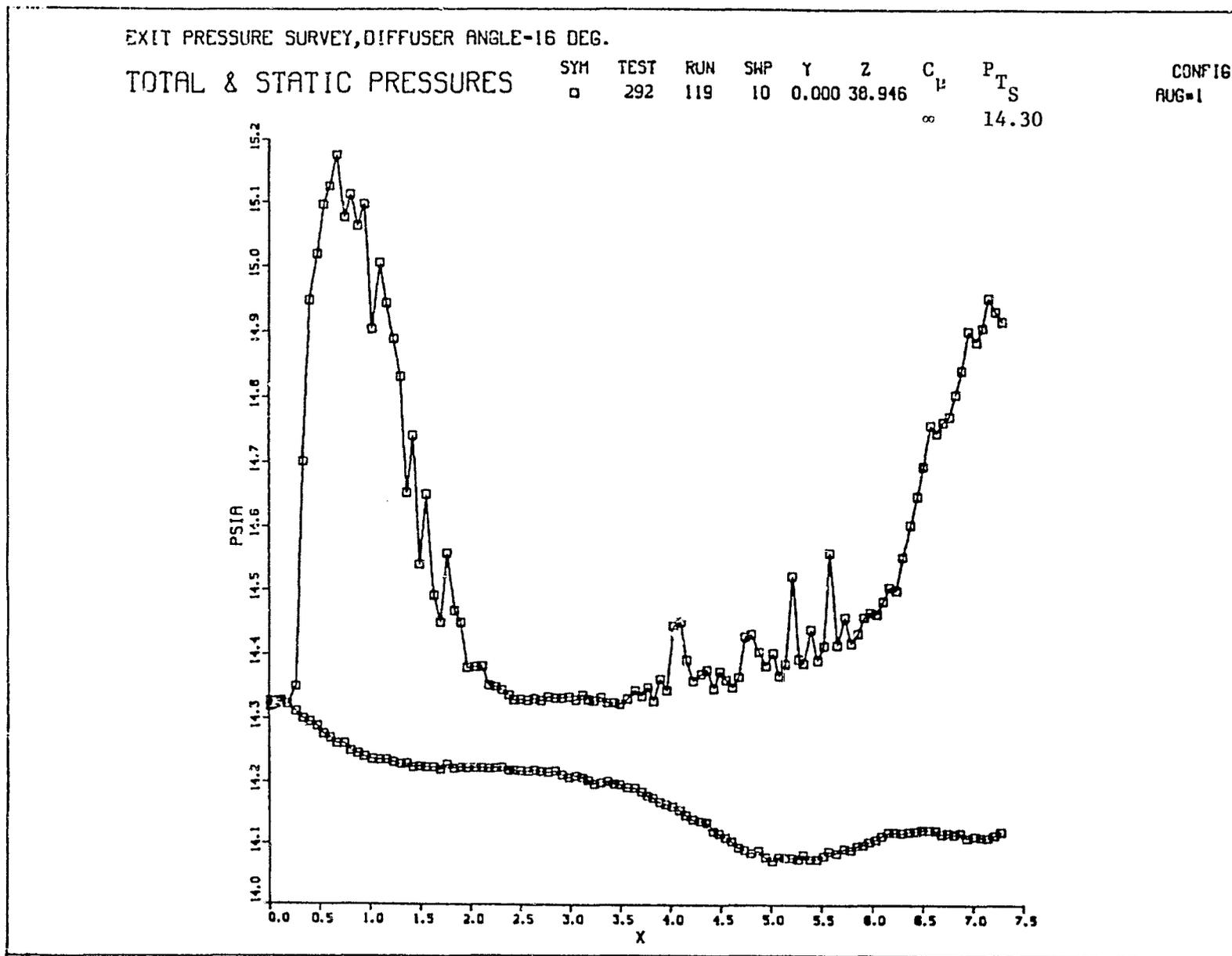


Figure A-10 f. Augmenter Exit Total & Static Pressure, Aug. #1, Diff = 16°,  $\theta = 40^\circ$ ,  $\alpha = 0$

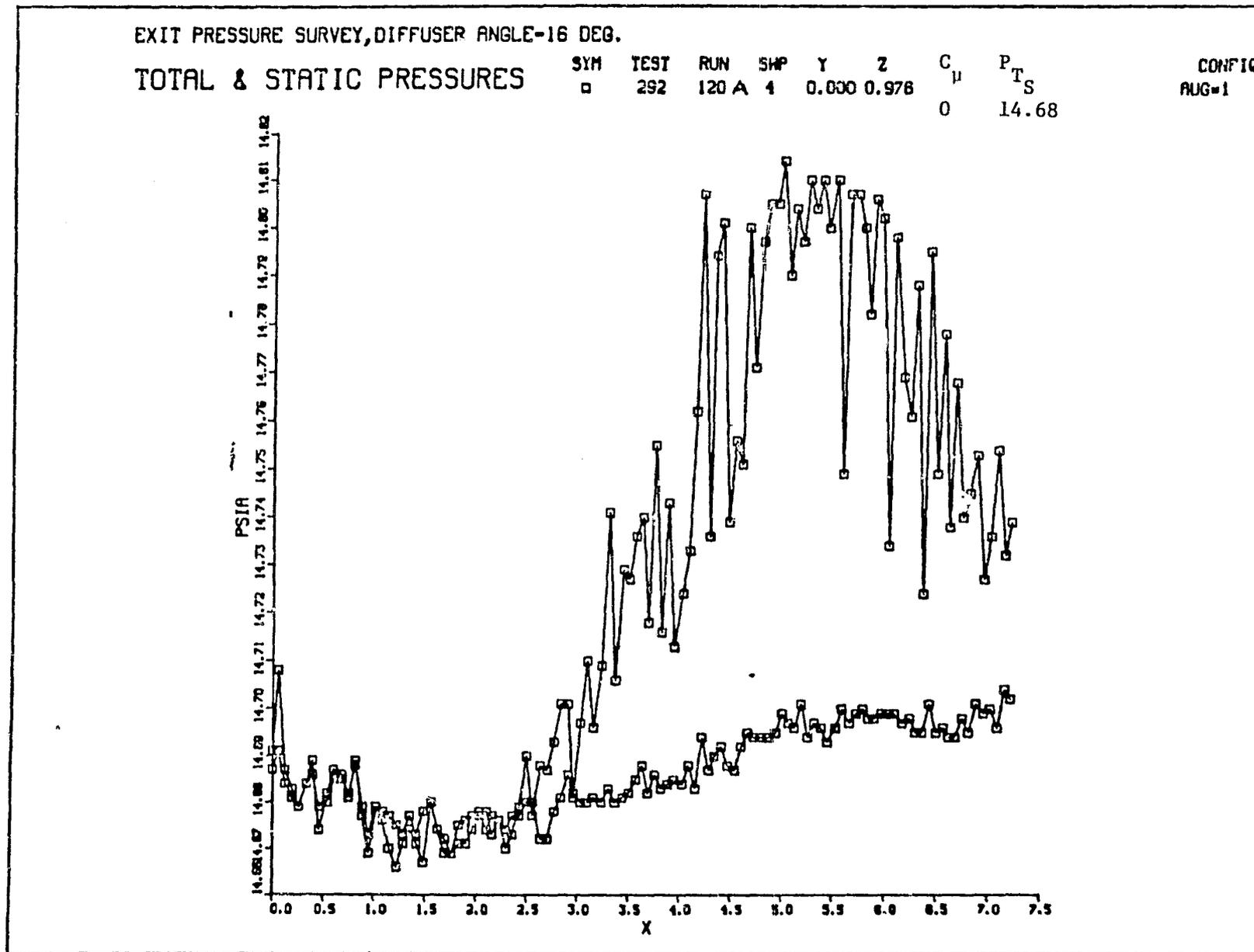


Figure A-11 a. Augmenter Exit Total & Static Pressure, Aug. #1, Diff = 16°,  $\theta = 40^\circ$ ,  $\alpha = 0$

EXIT PRESSURE SURVEY, DIFFUSER ANGLE-16 DEG.

TOTAL & STATIC PRESSURES

SYM	TEST	RUN	SHP	Y	Z	C <sub>μ</sub>	P <sub>T</sub> <sub>S</sub>
□	292	120 A	7	0.000	12.980	0	14.68

CONFIG  
AUG-1

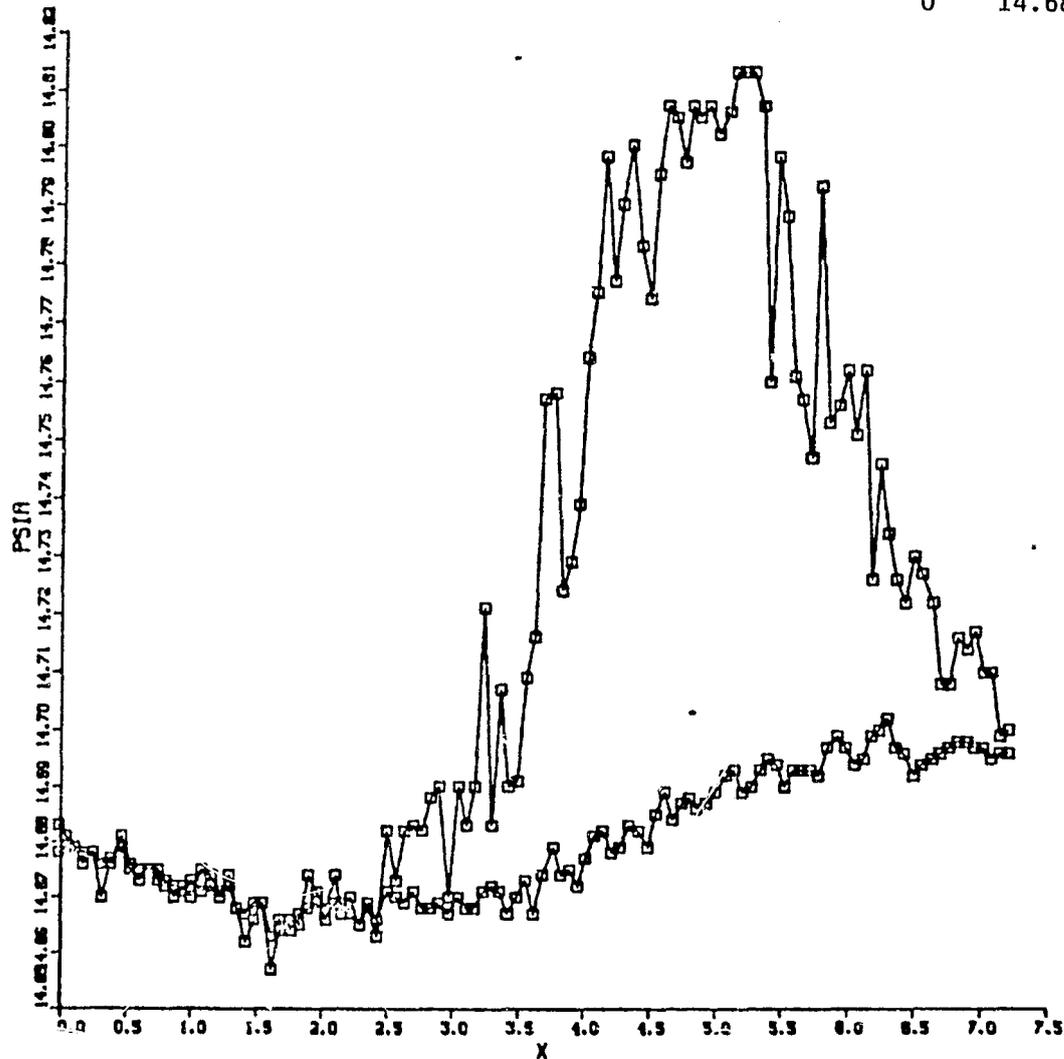


Figure A-11 b. Augmenter Exit Total & Static Pressure, Aug. #1, Diff = 16°, θ = 40°, α = 0

EXIT PRESSURE SURVEY, DIFFUSER ANGLE-16 DEG.

TOTAL & STATIC PRESSURES

SYM	TEST	RUN	SWP	Y	Z	C <sub>μ</sub>	P <sub>T</sub> <sub>S</sub>
□	292	120 A	10	0.000	28.864	0	14.68

CONFID  
AUG-1

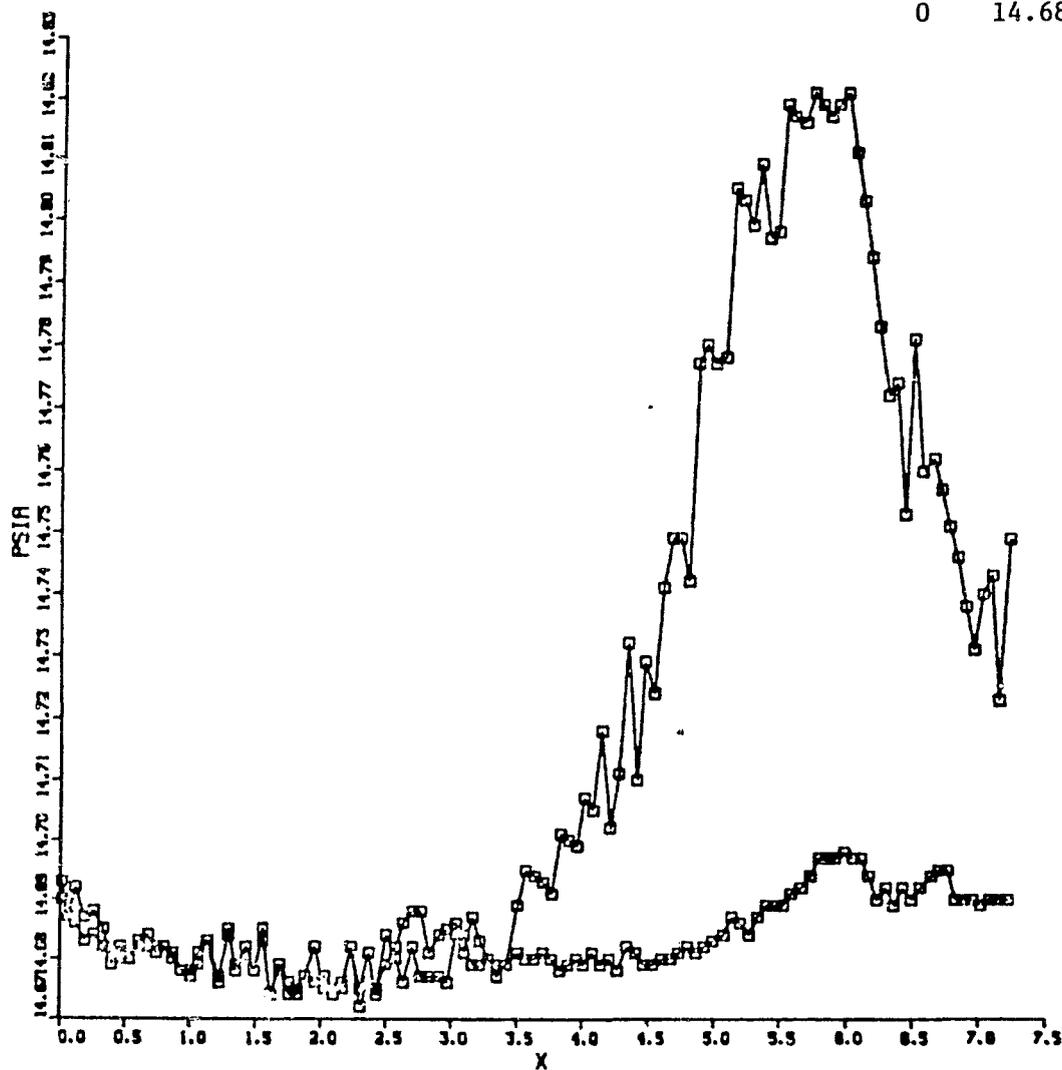


Figure A-11 c. Augmenter Exit Total & Static Pressure, Aug. #1, Diff = 16°, θ = 40°, α = 0

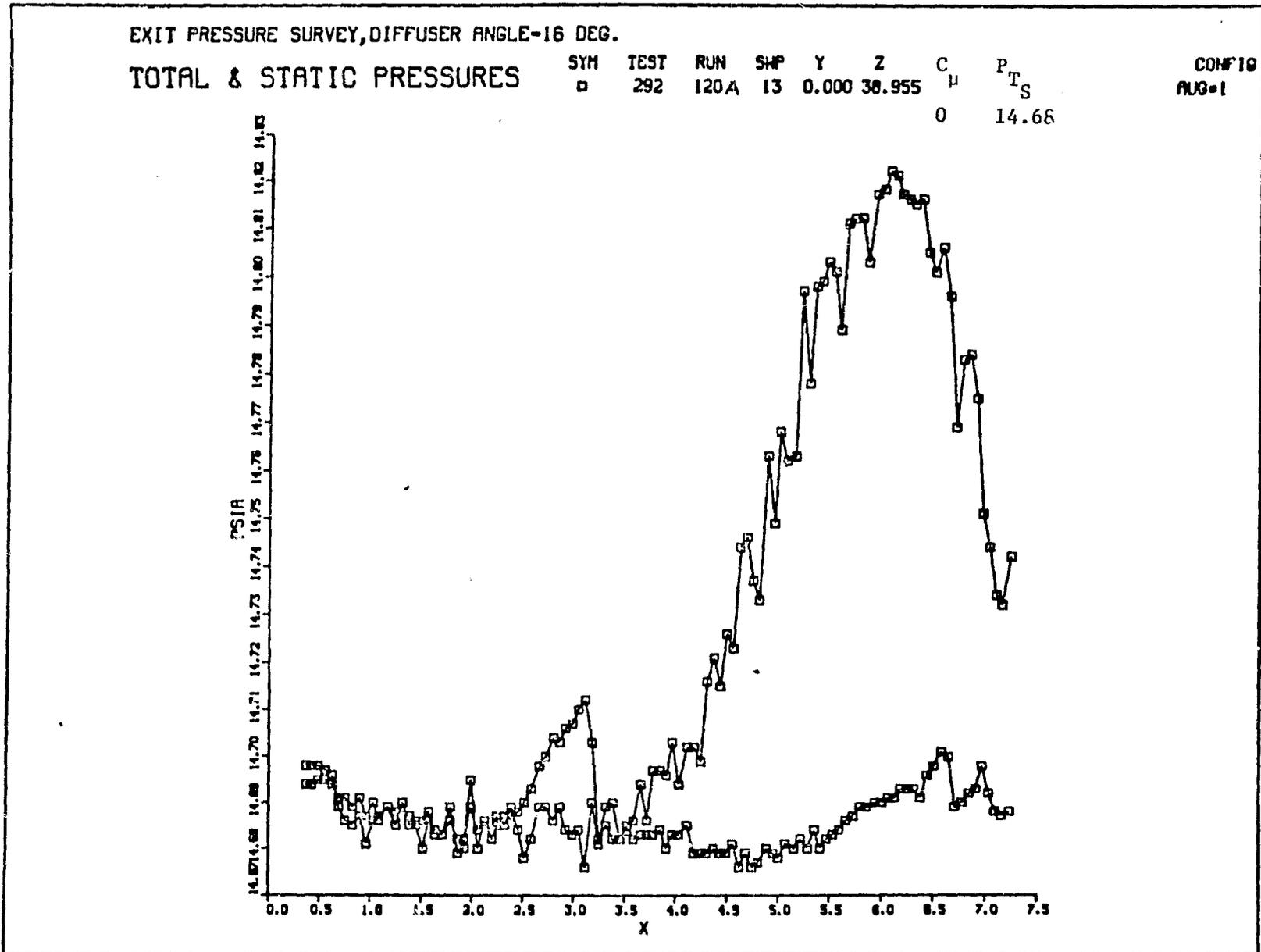


Figure A-11 d. Augmenter Exit Total & Static Pressure, Aug. #1, Diff = 16°,  $\theta = 40^\circ$ ,  $\alpha = 0$

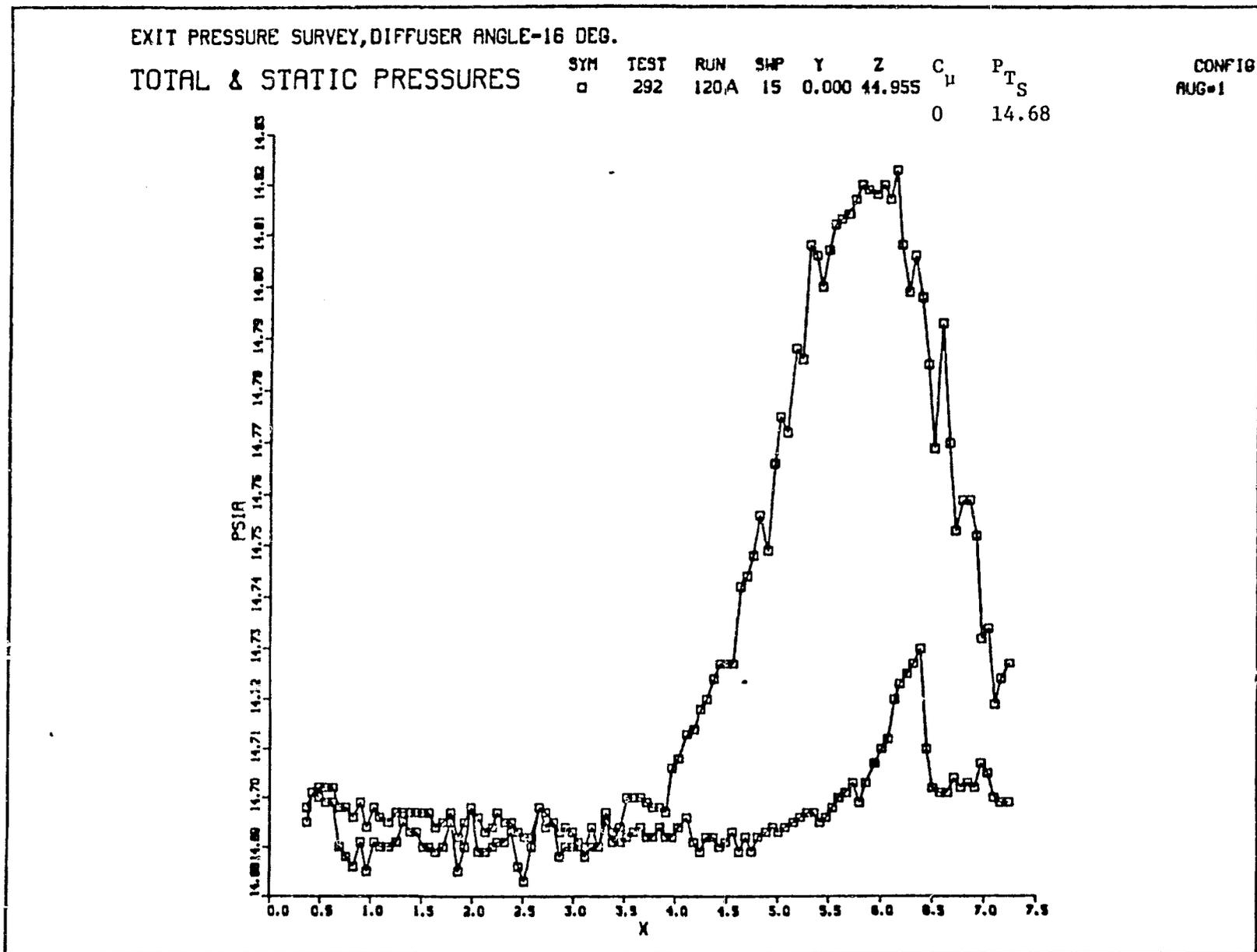


Figure A-11 e. Augmenter Exit Total & Static Pressure, Aug. #1, Diff = 16°,  $\theta = 40^\circ$ ,  $\alpha = 0$

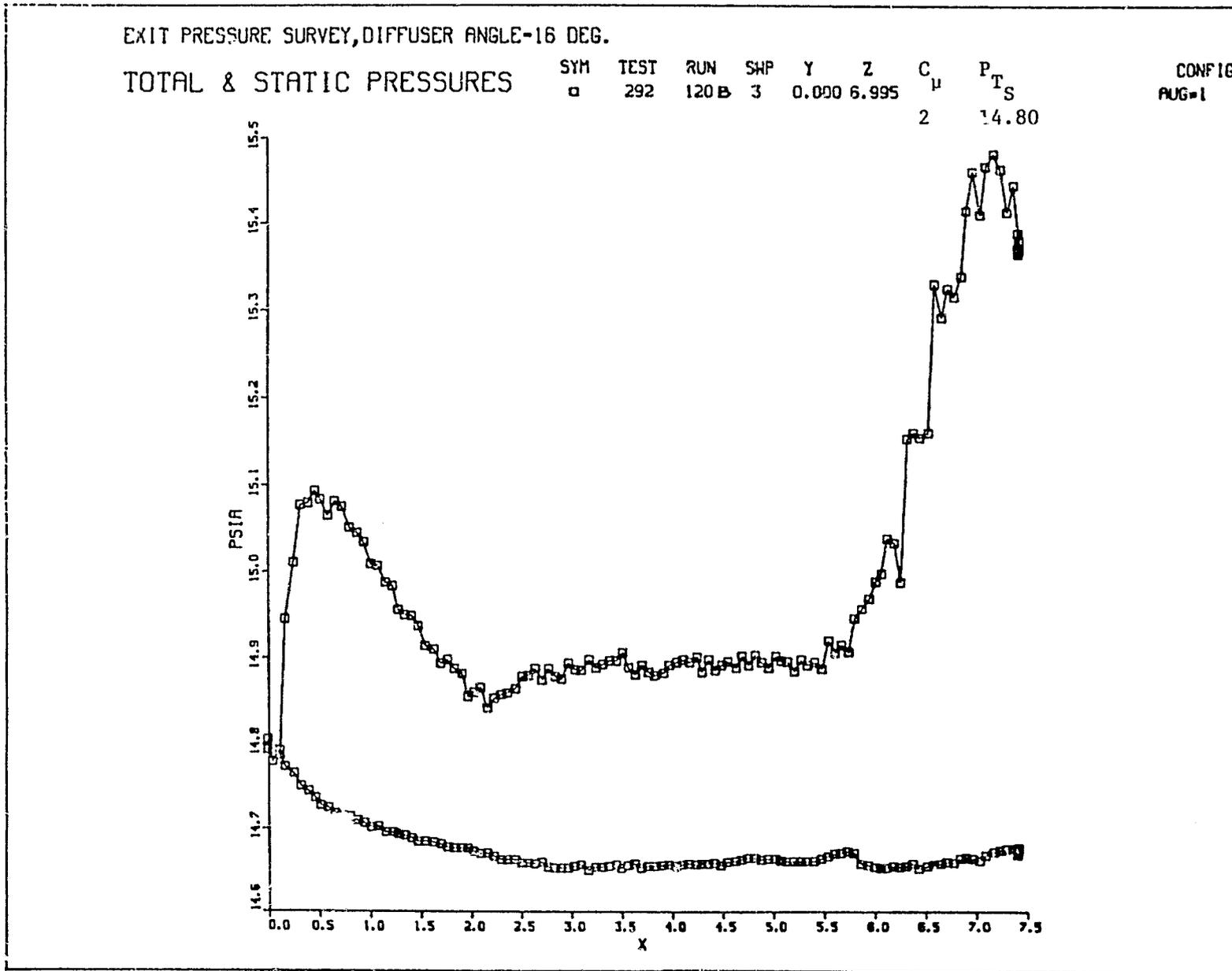


Figure A-12 a. Augmenter Exit Total & Static Pressure, Aug. #1, Diff = 16°, θ = 40°, α = 0

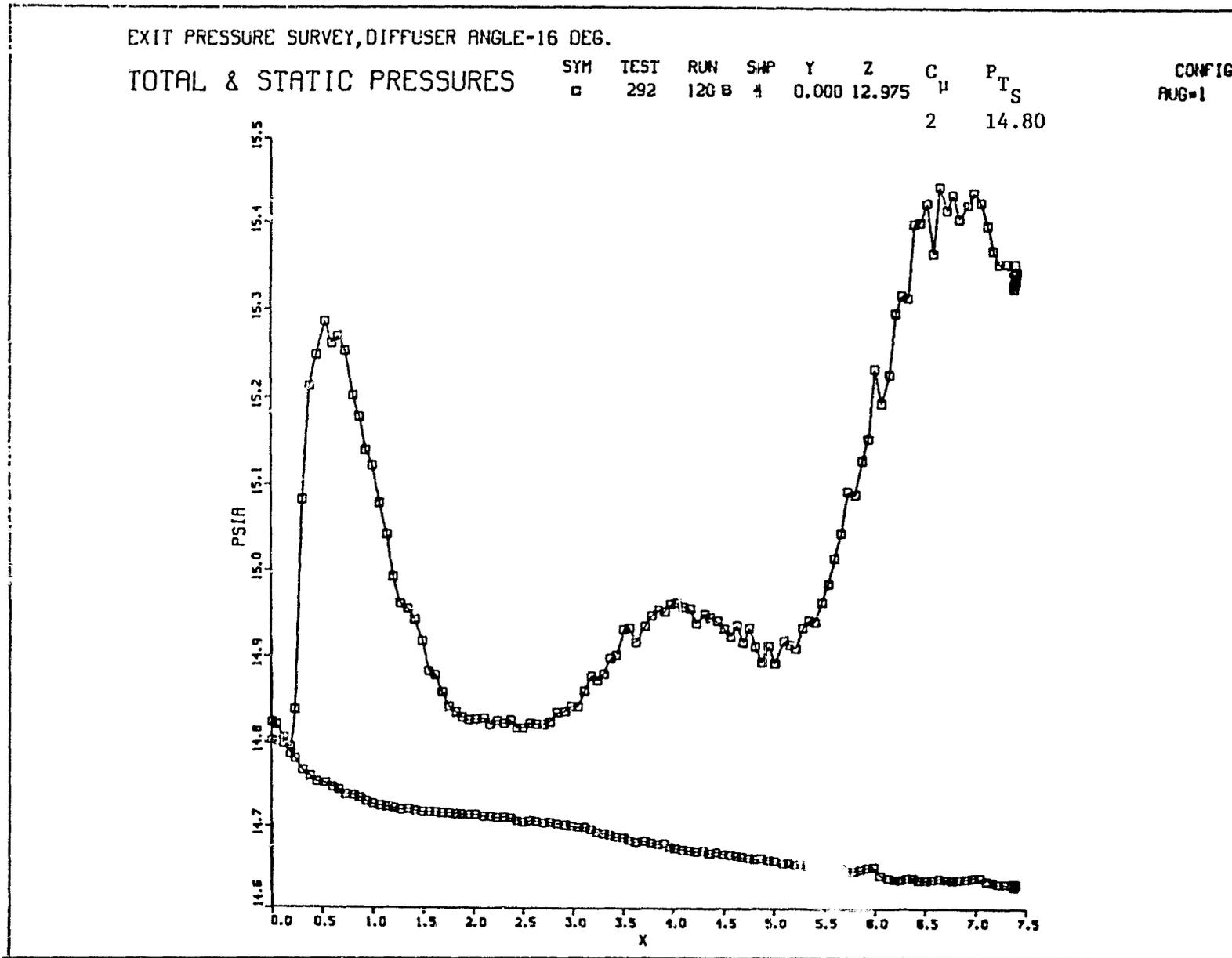


Figure A-12 b. Augmenter Exit Total & Static Pressure, Aug. #1, Diff =  $16^\circ$ ,  $\theta = 40^\circ$ ,  $\alpha = 0$

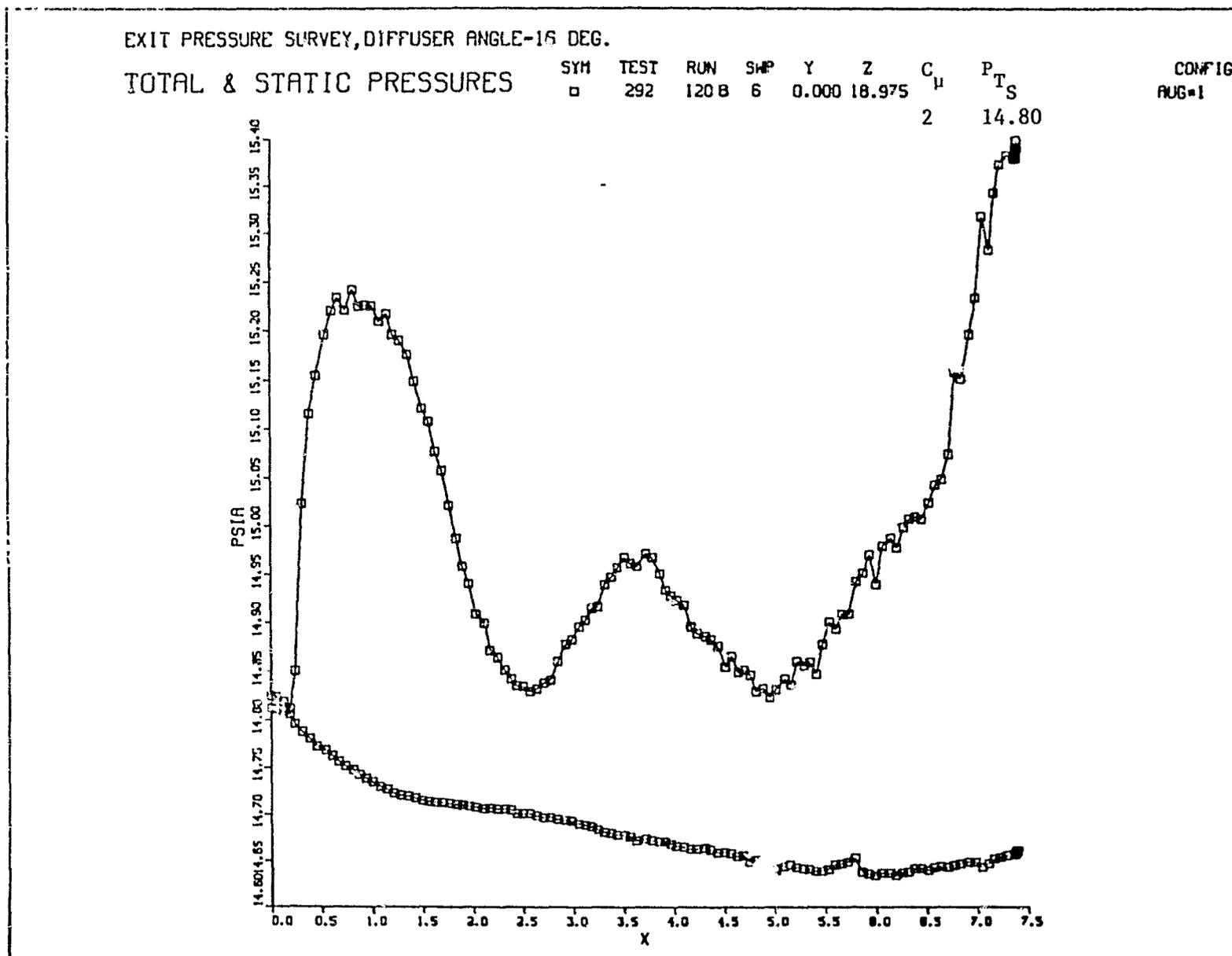


Figure A-12 c. Augmenter Exit Total & Static Pressure, Aug. #1, Diff = 16°,  $\theta = 40^\circ$ ,  $\alpha = 0$

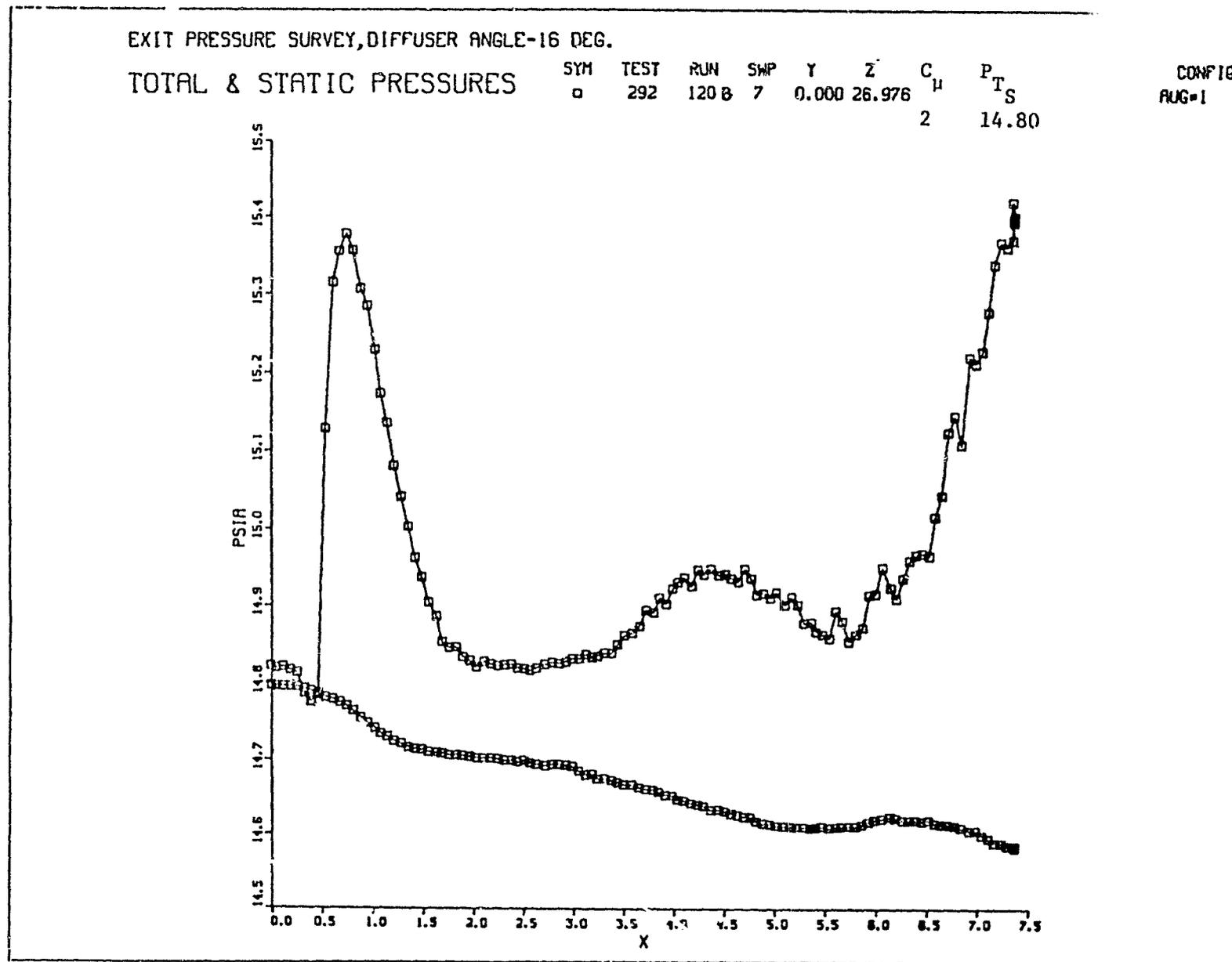


Figure A-12 d. Augmenter Exit Total & Static Pressure, Aug. #1, Diff = 16°,  $\theta = 40^\circ$ ,  $\alpha = 0$

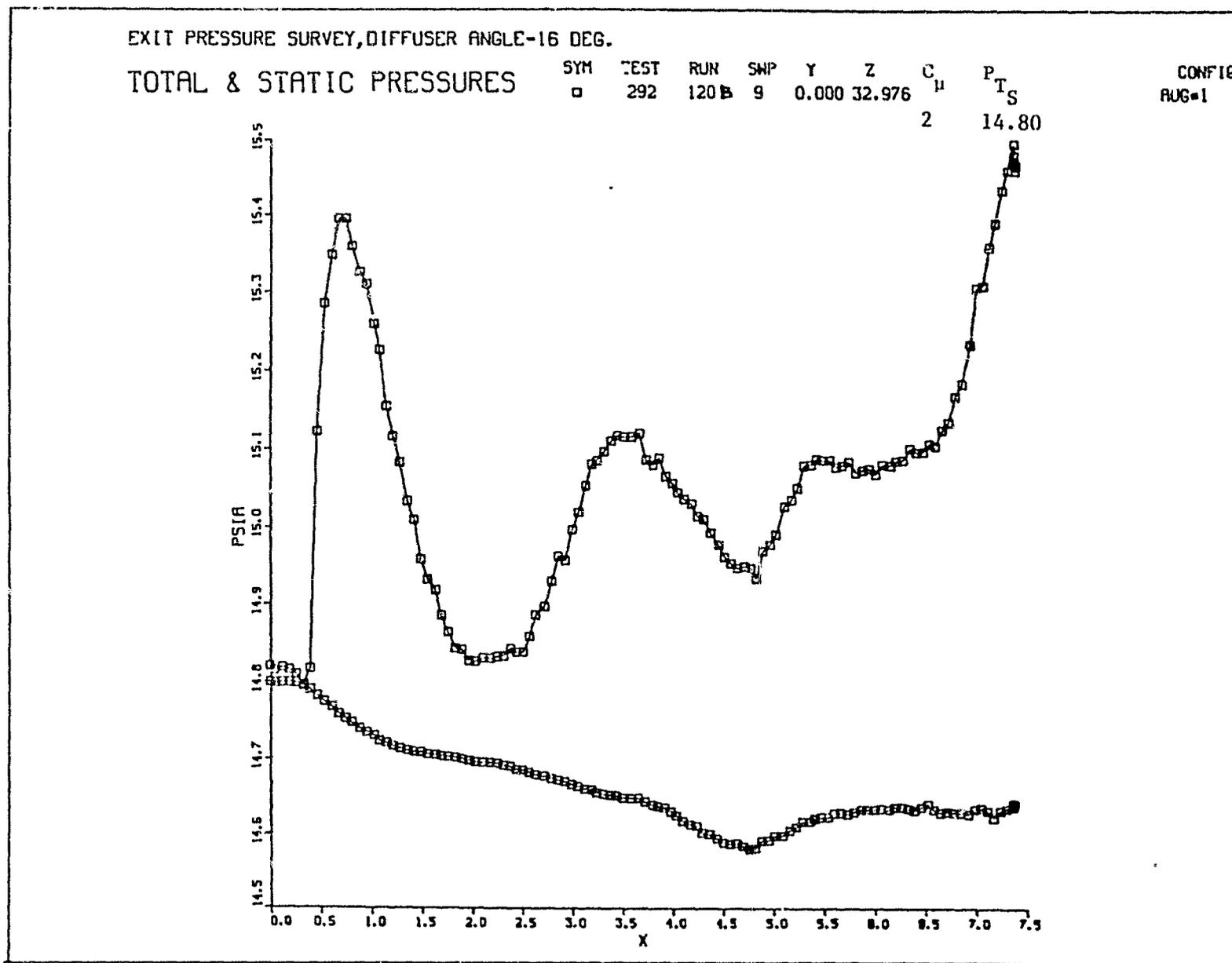


Figure A-12 e. Augmenter Exit Total & Static Pressure, Aug. #1, Diff = 16°,  $\theta = 40^\circ$ ,  $\alpha = 0$

EXIT PRESSURE SURVEY, DIFFUSER ANGLE-16 DEG.

TOTAL & STATIC PRESSURES

SYM	TEST	RUN	SHP	Y	Z	C <sub>μ</sub>	P <sub>T</sub>	P <sub>S</sub>
□	292	120 B	10	0.000	38.960	2	14.80	

CONFIG  
AUG#1

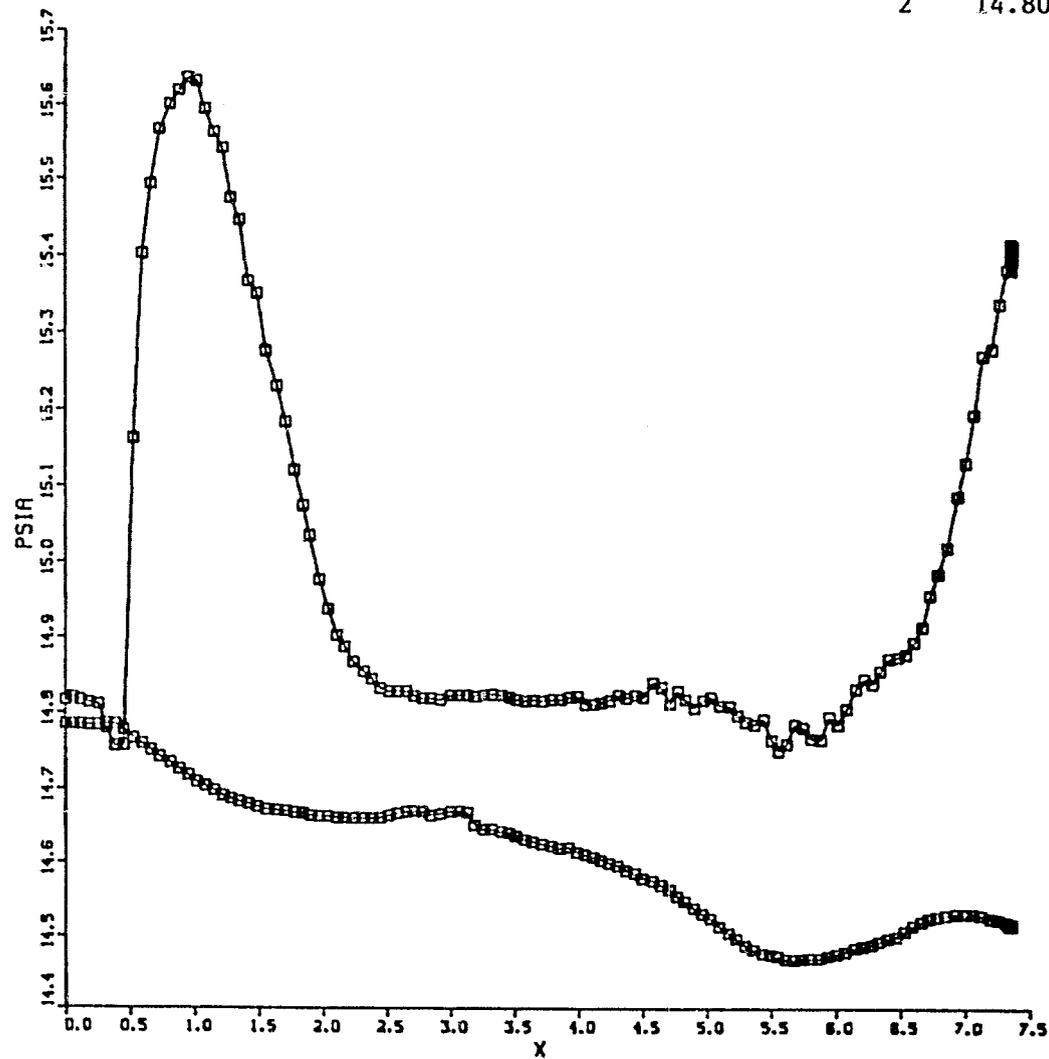


Figure A-12 f. Augmenter Exit Total & Static Pressure, Aug. #1, Diff = 16°, θ = 40°, α = 0

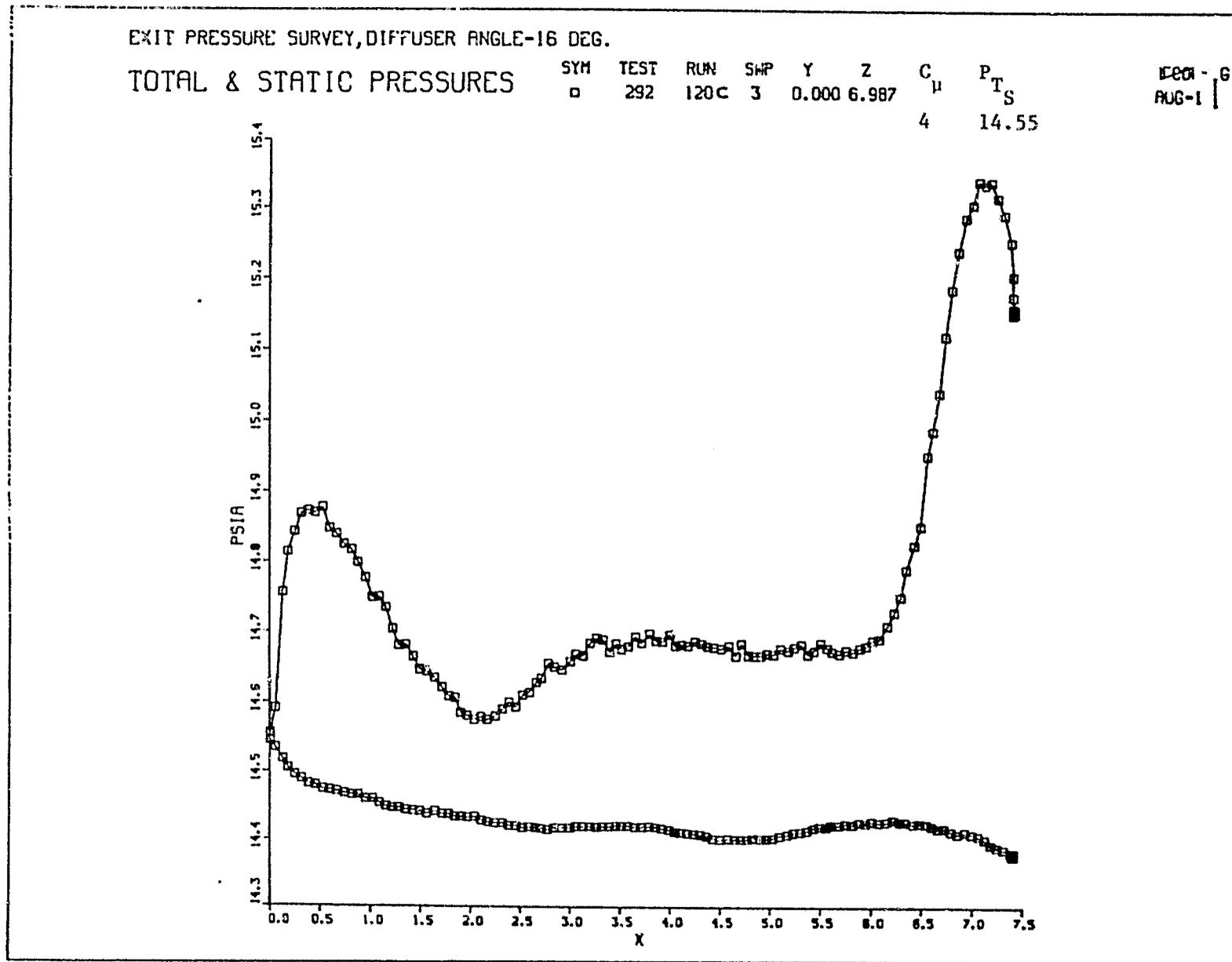


Figure A-13 a. Augmenter Exit Total & Static Pressure, Aug. #1, Diff =  $16^{\circ}$ ,  $\theta = 40^{\circ}$ ,  $\alpha = 0$

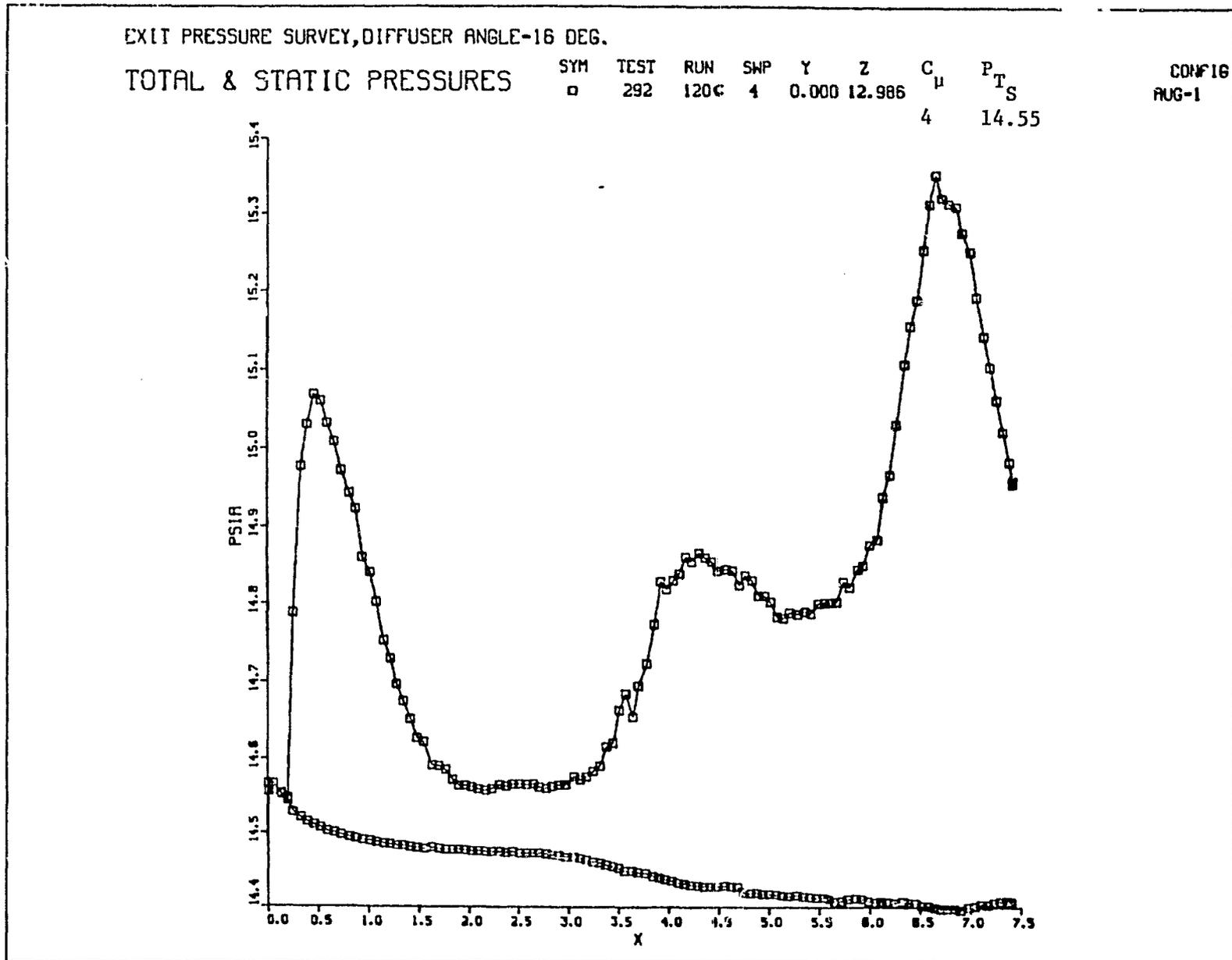


Figure A-13 b. Augmenter Exit Total & Static Pressure, Aug. #1, Diff = 16°,  $\theta = 40^\circ$ ,  $\alpha = 0$

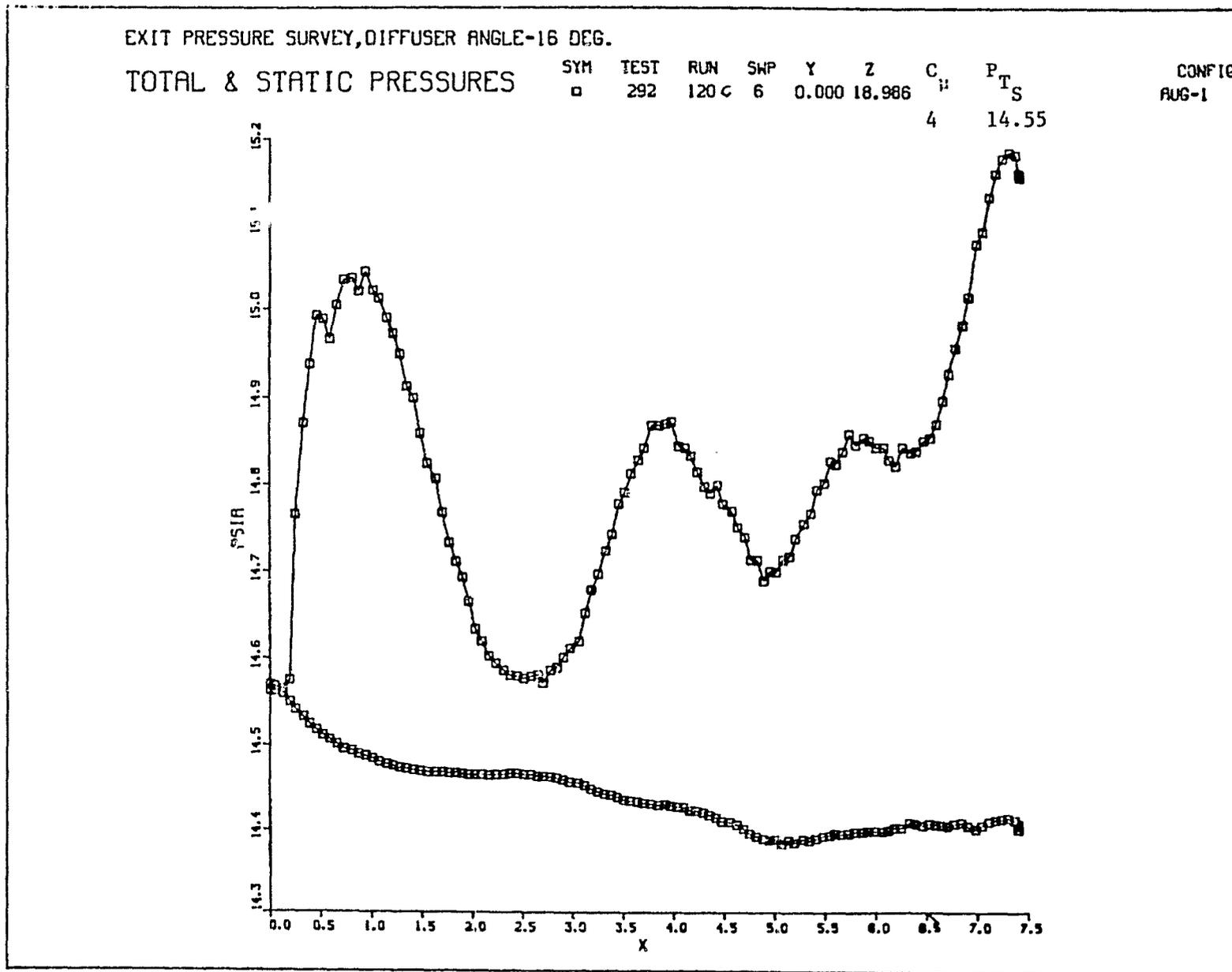


Figure A-13 c. Augmenter Exit Total & Static Pressure, Aug. #1, Diff = 16°,  $\theta = 40^\circ$ ,  $\alpha = 0$

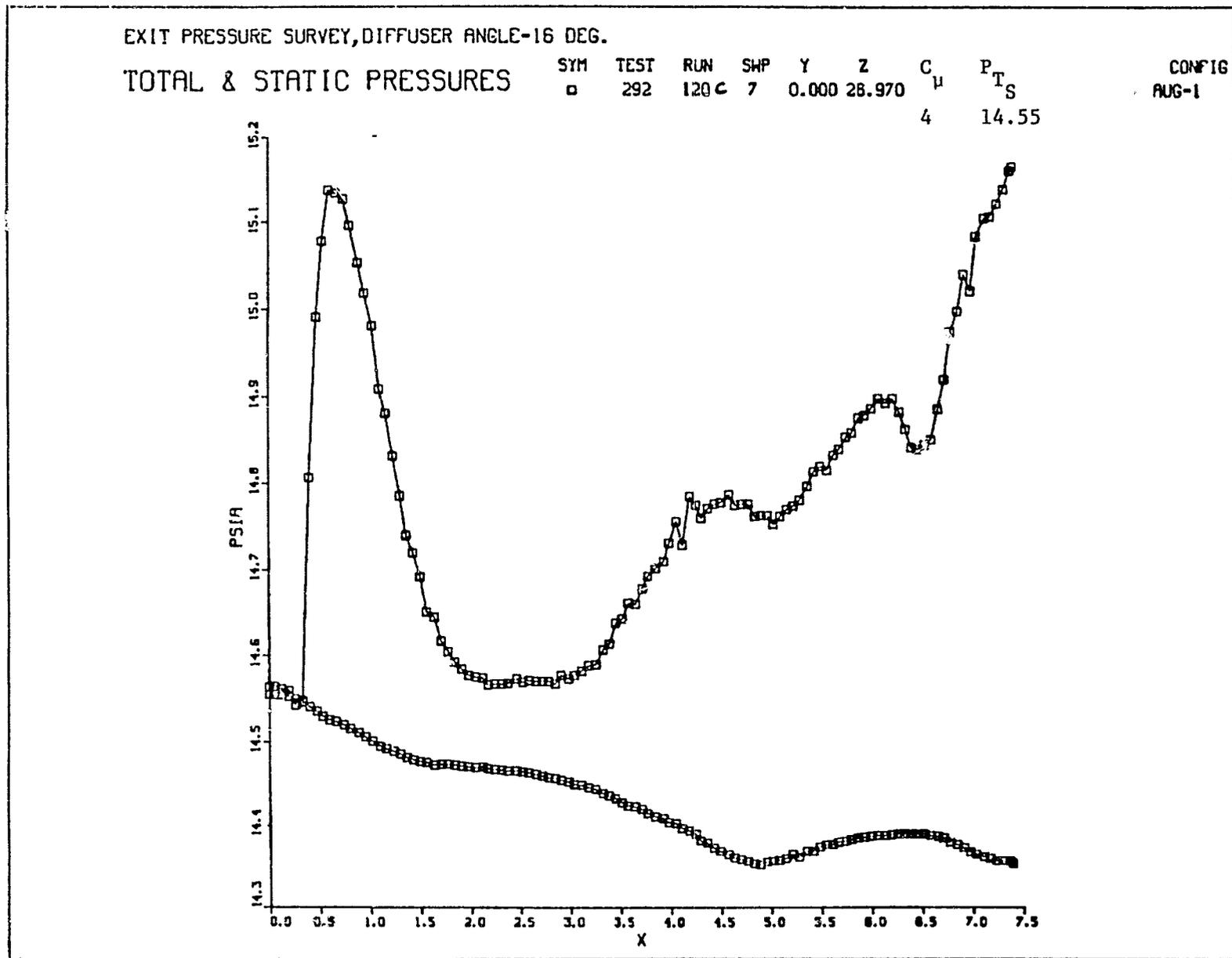


Figure A-13 d. Augmenter Exit Total & Static Pressure, Aug. #1, Diff $\angle$  = 16 $^{\circ}$ ,  $\theta$  = 40 $^{\circ}$ ,  $\alpha$  = 0

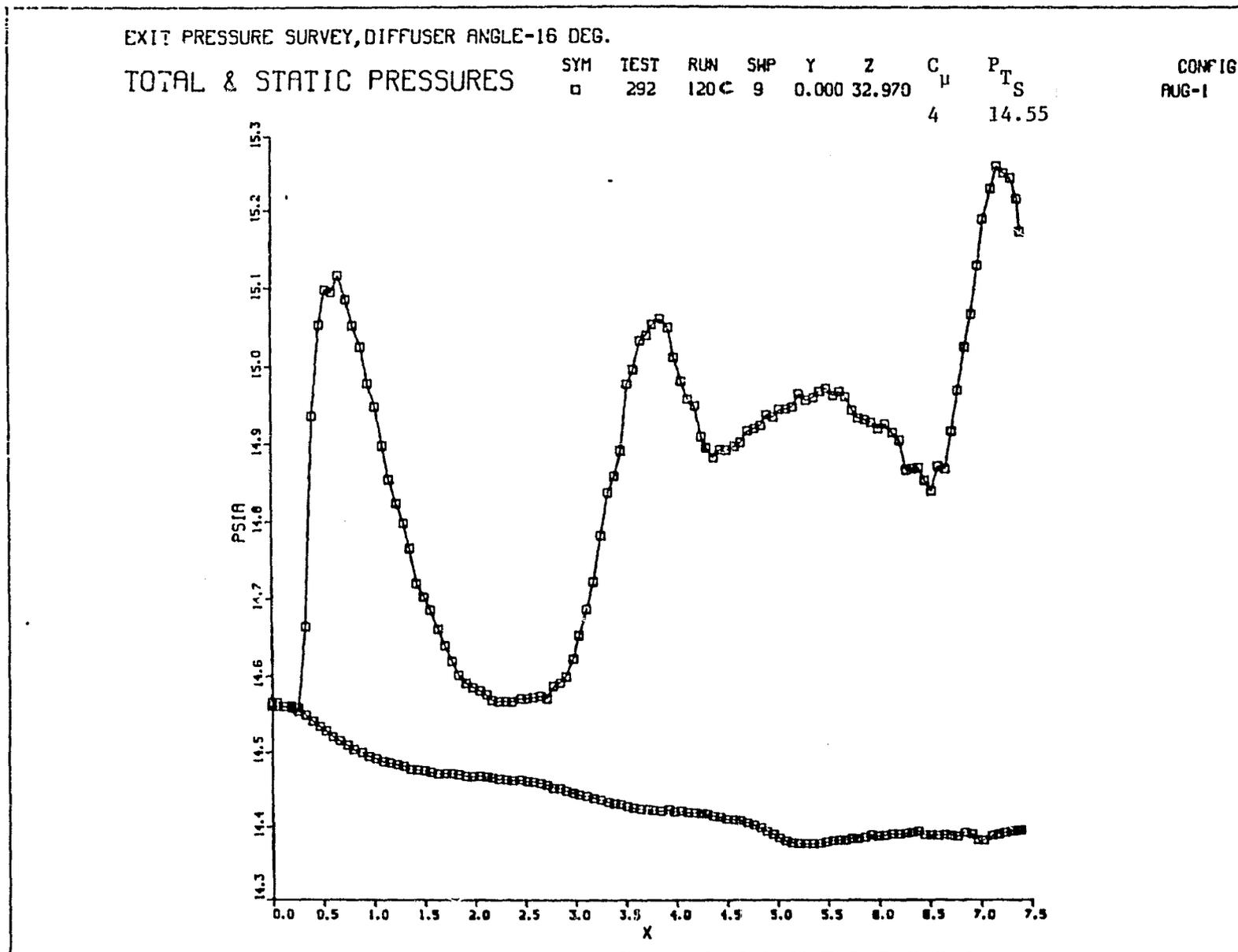


Figure A-13 e. Augmenter Exit Total & Static Pressure, Aug. #1, Diff = 16°,  $\theta = 40^\circ$ ,  $\alpha = 0$

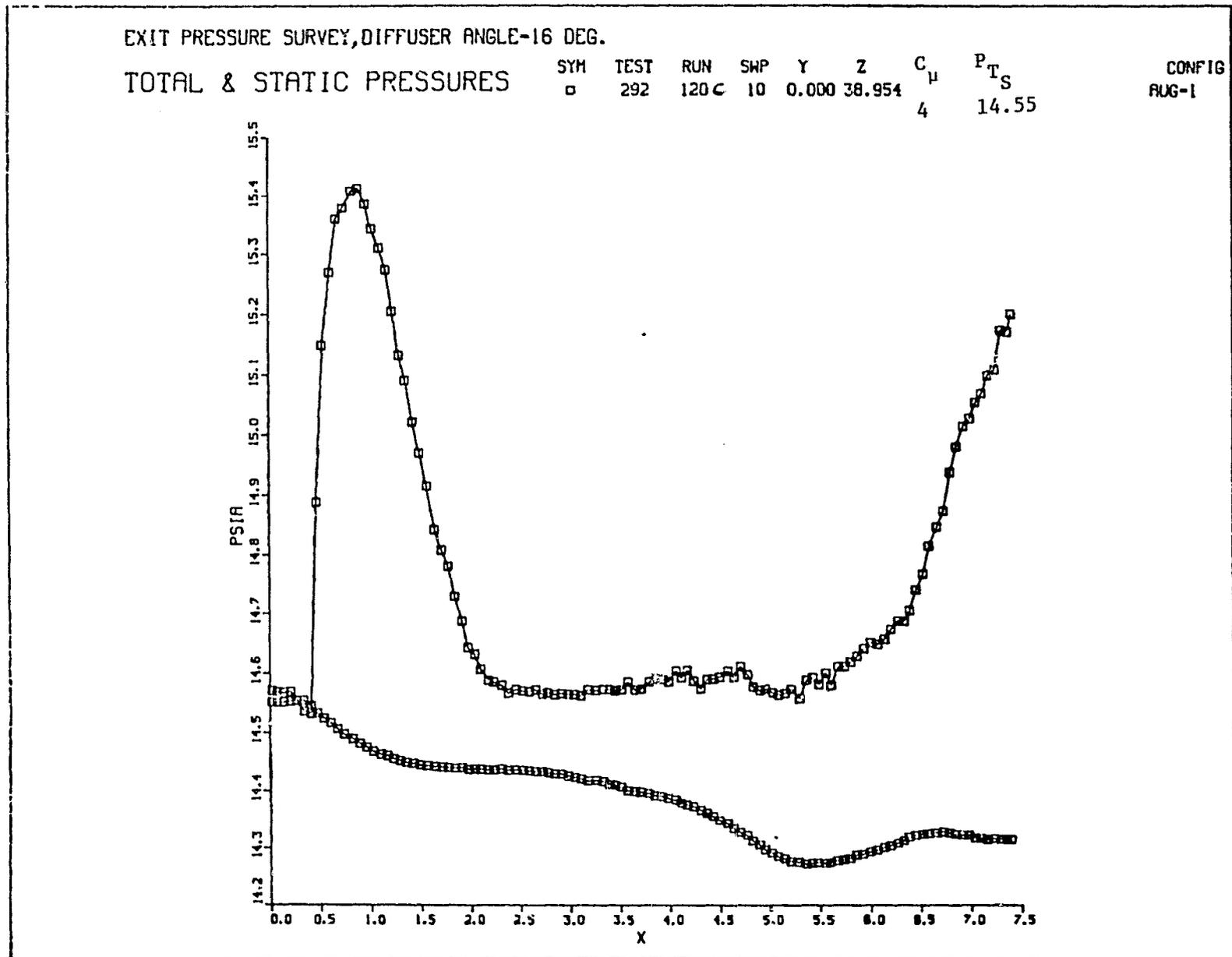


Figure A-13 f. Augmenter Exit Total & Static Pressure, Aug. #1, Diff =  $16^{\circ}$ ,  $\theta = 40^{\circ}$ ,  $\alpha = 0$

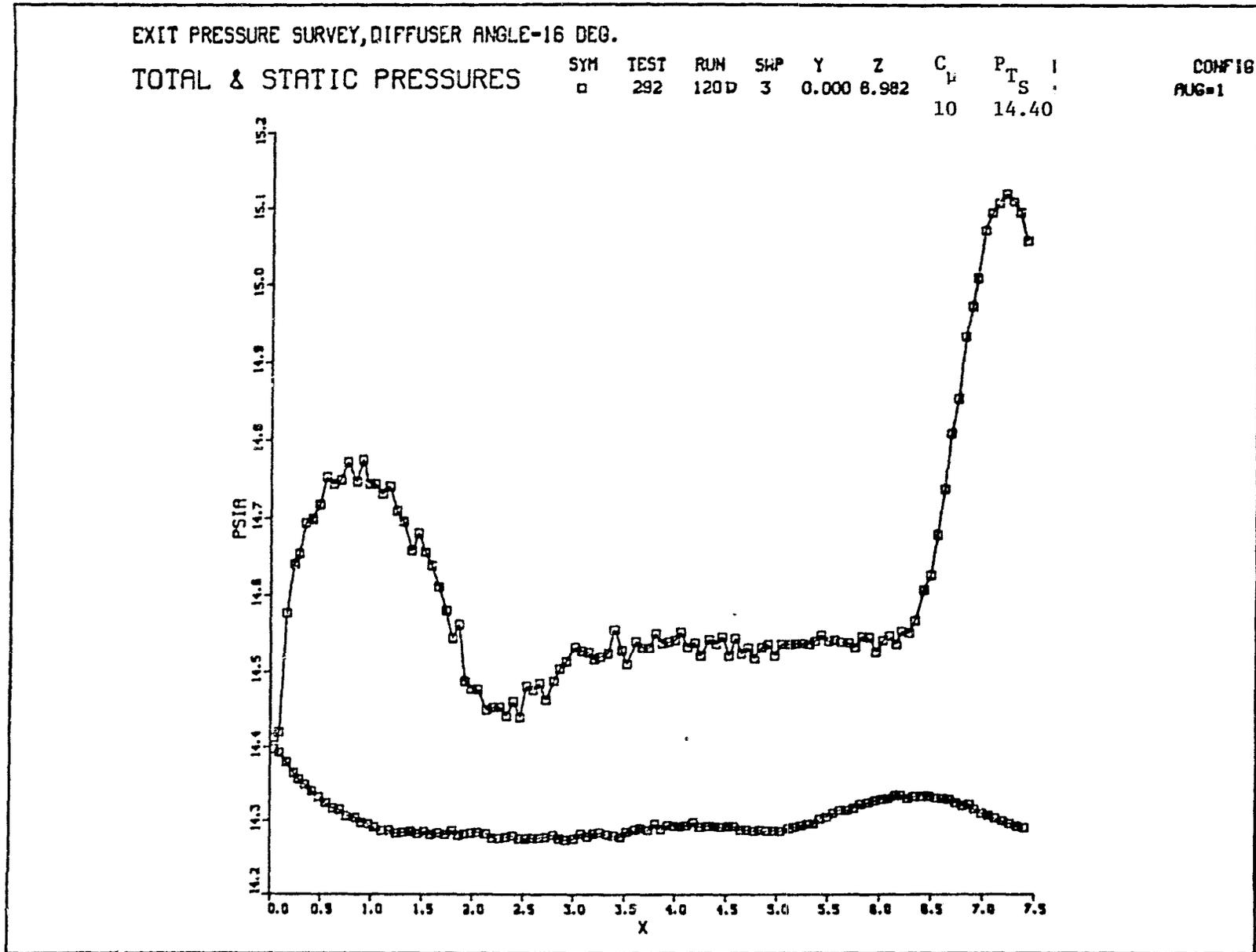


Figure A-14 a. Augmenter Exit Total & Static Pressure, Aug. #1, Diff = 16°,  $\theta = 40^\circ$ ,  $\alpha = 0$

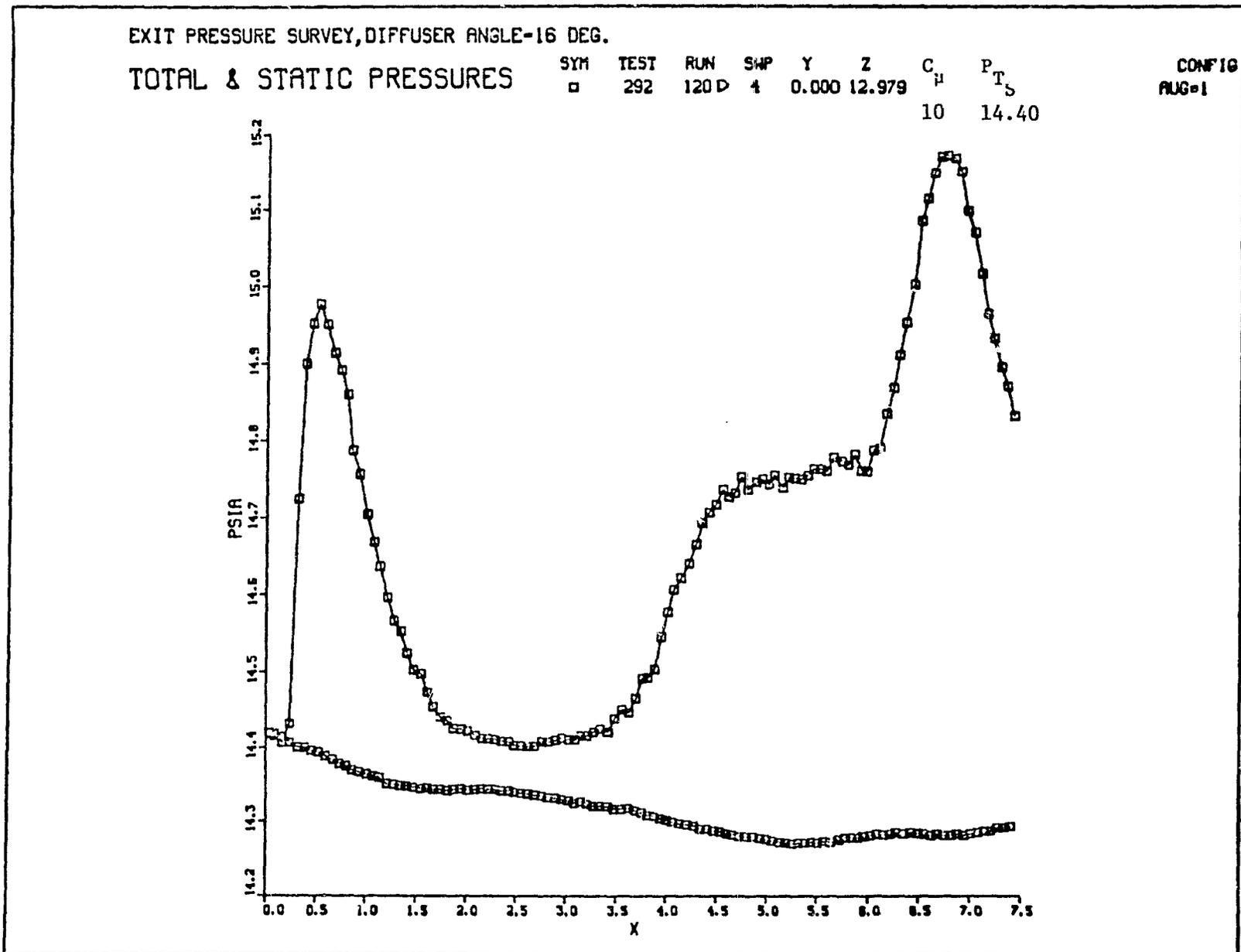


Figure A-14 b. Augmenter Exit Total & Static Pressure, Aug. #1, Diff = 16°,  $\theta = 40^\circ$ ,  $\alpha = 0$

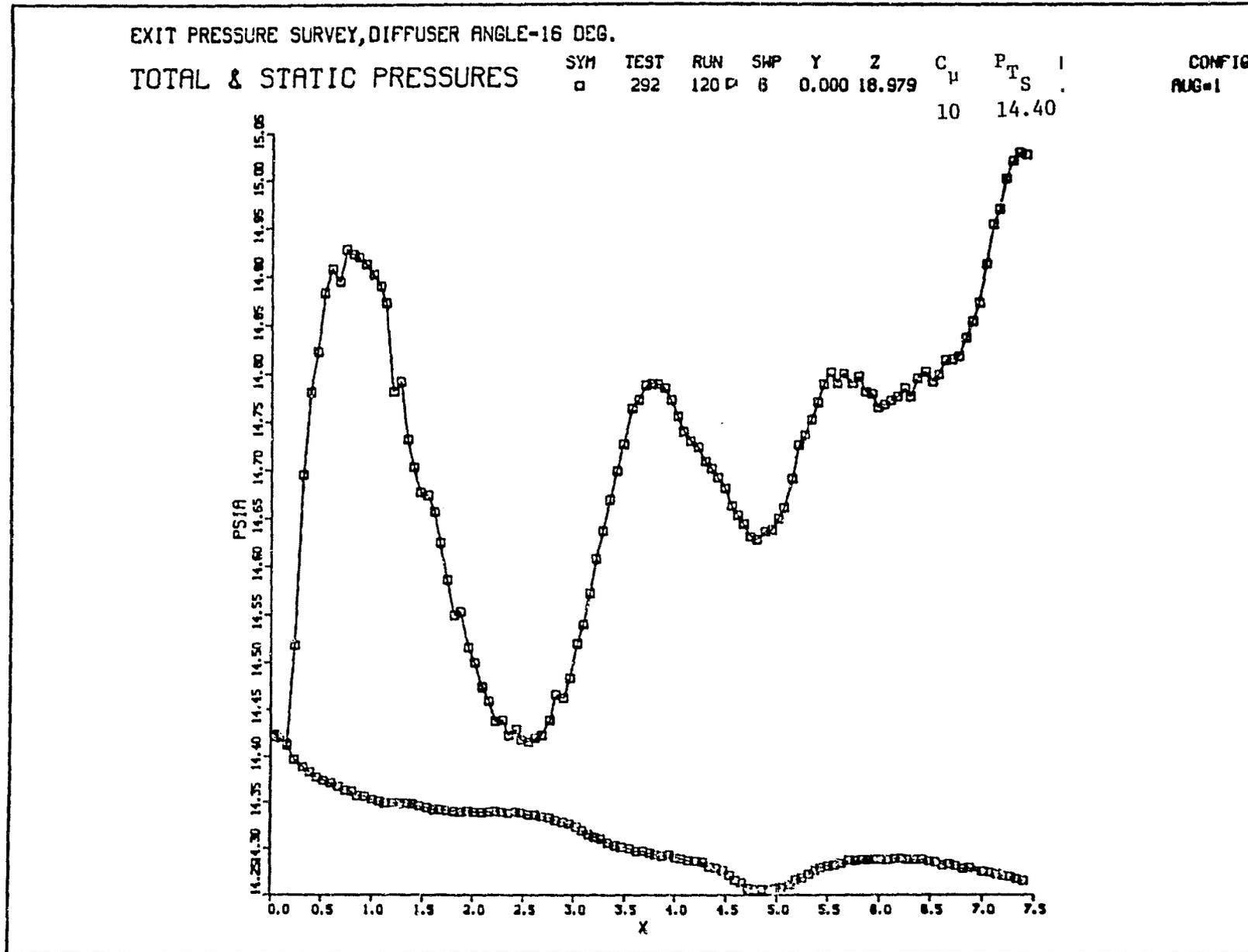


Figure A-14 c. Augmenter Exit Total & Static Pressure, Aug. #1, Diff = 16°,  $\theta = 40^\circ$ ,  $\alpha = 0$

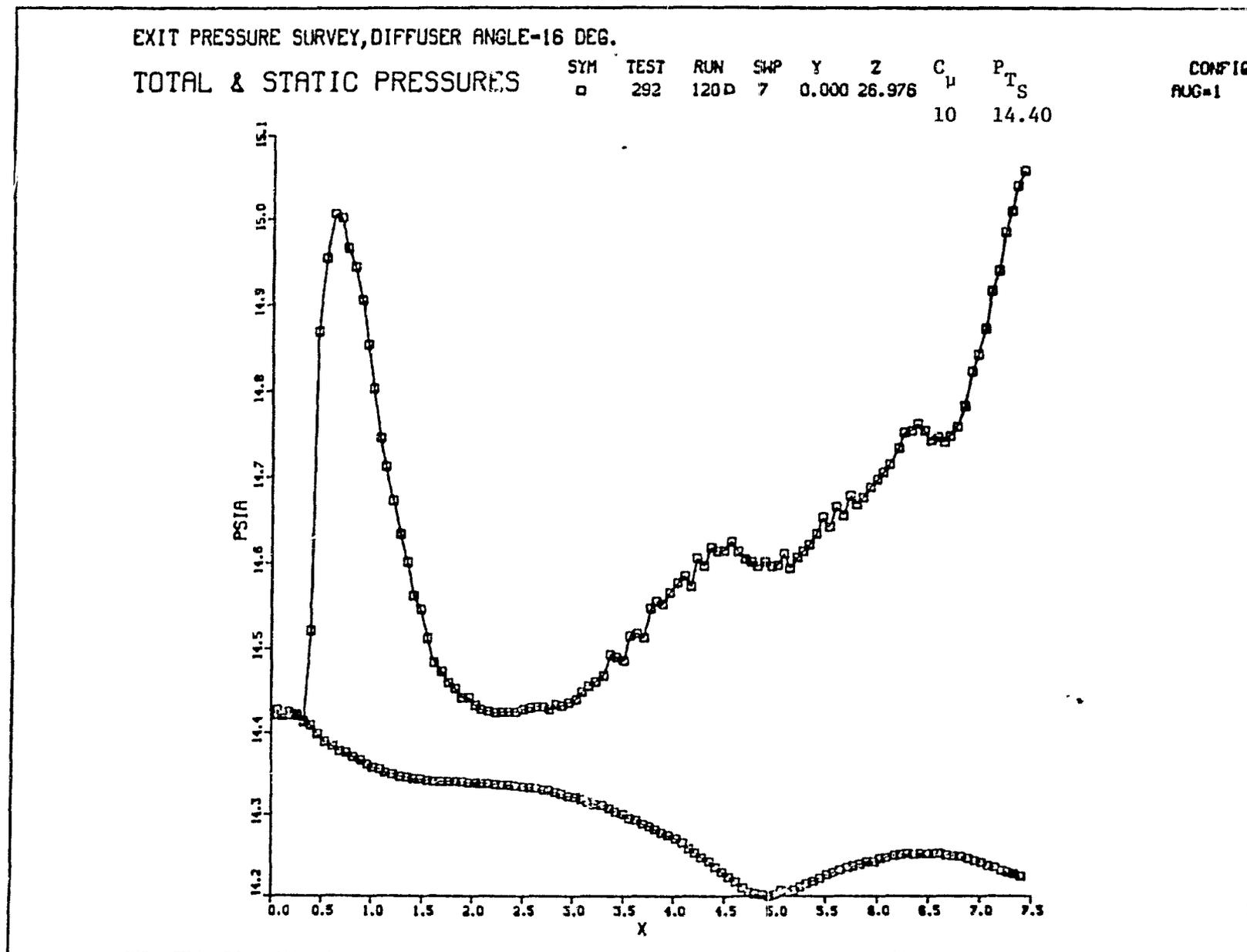


Figure A-14 d. Augmenter Exit Total & Static Pressure, Aug. #1, Diff = 16°,  $\theta = 40^\circ$ ,  $\alpha = 0$

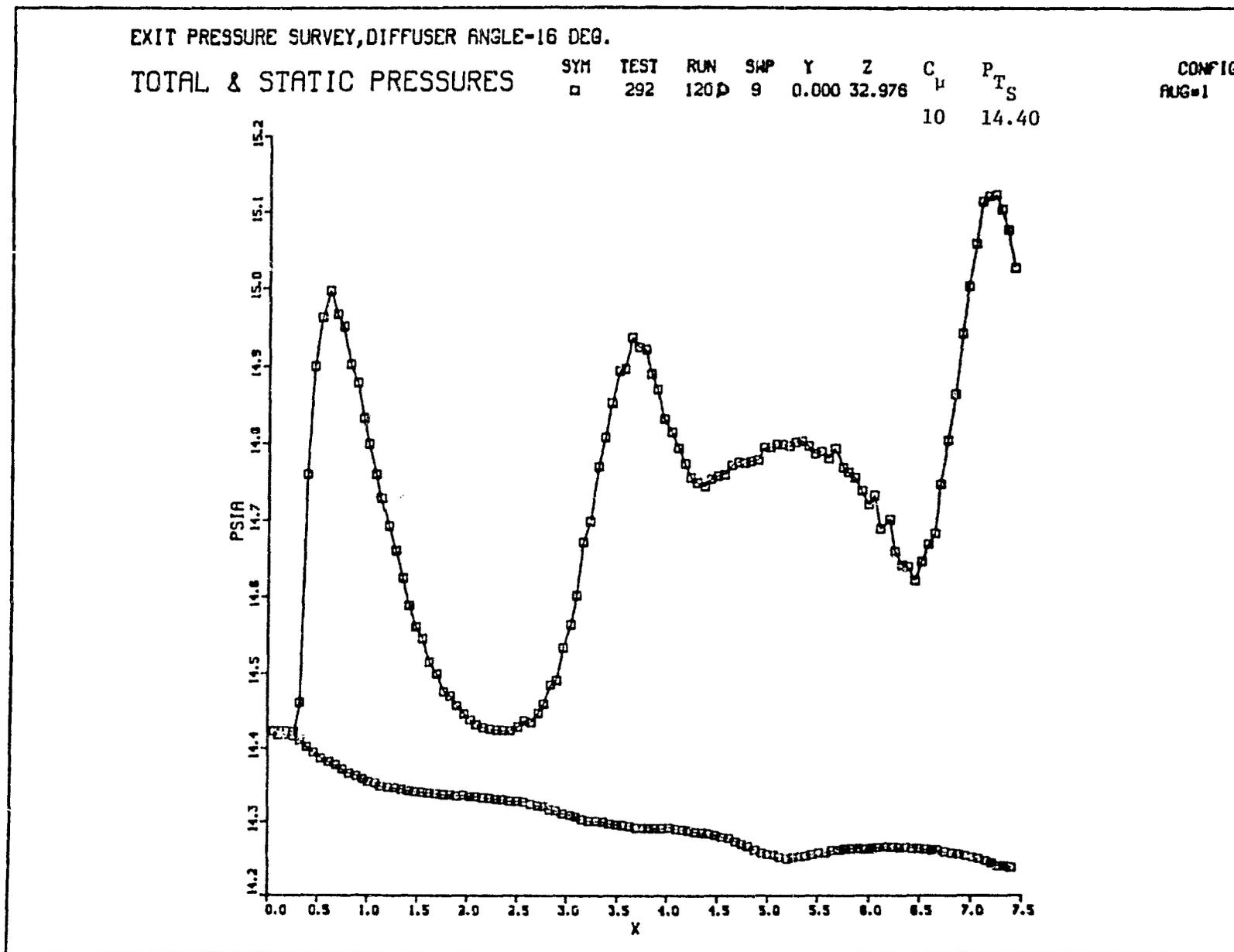


Figure A-14 e. Augmenter Exit Total & Static Pressure, Aug. #1, Diff = 16°,  $\theta = 40^\circ$ ,  $\alpha = 0$

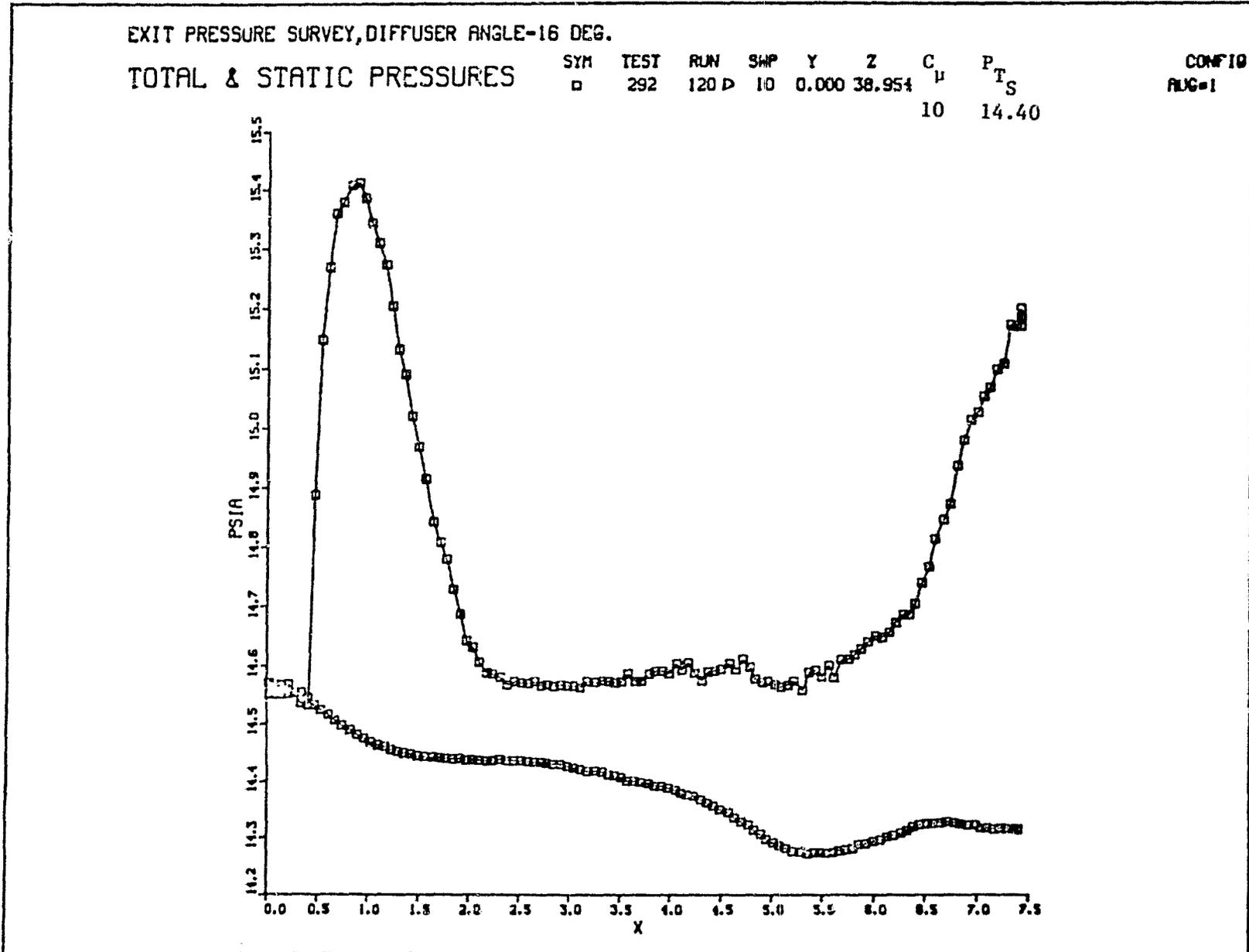


Figure A-14 f. Augmenter Exit Total & Static Pressure, Aug. #1, Diff = 16°,  $\theta = 40^\circ$ ,  $\alpha = 0$

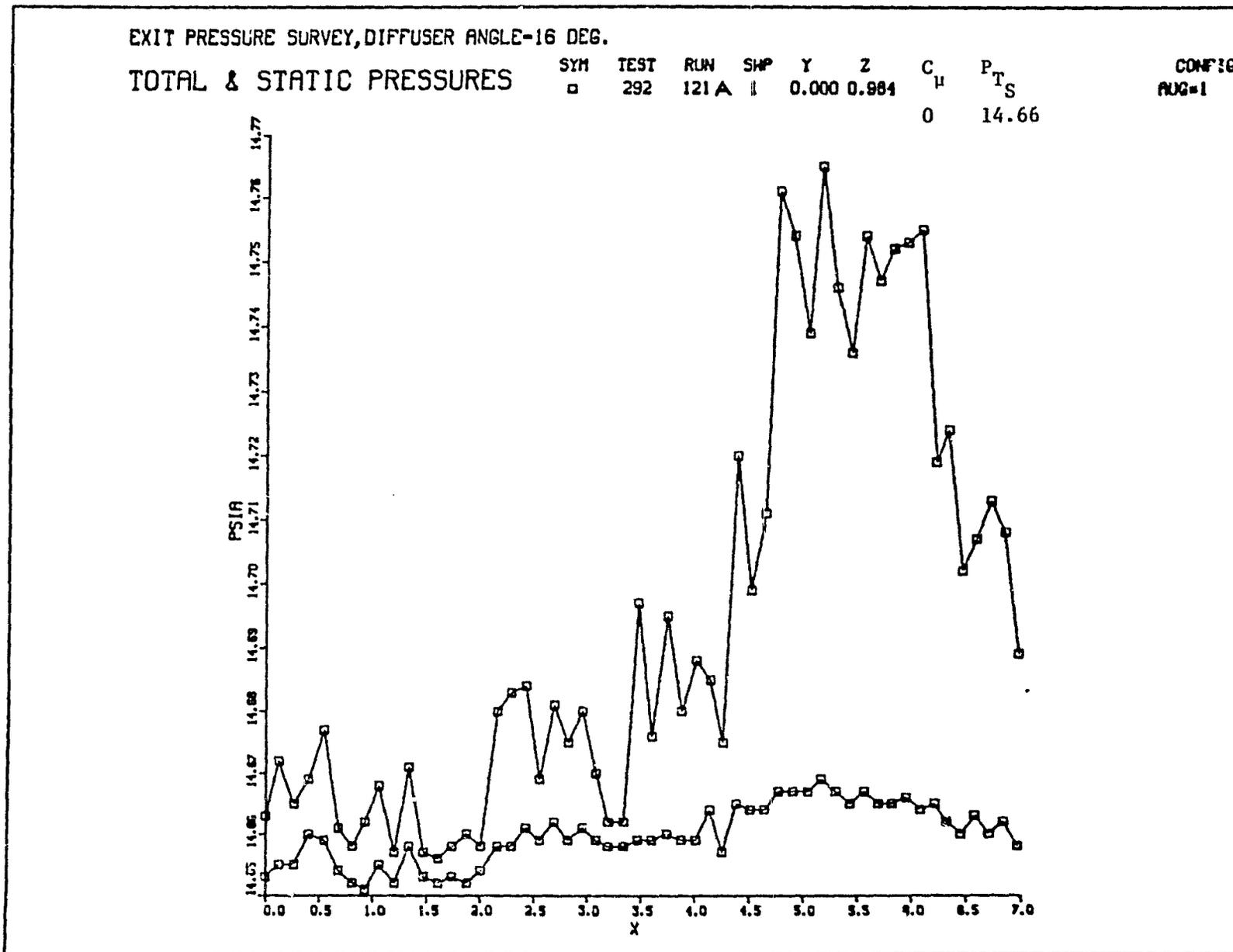


Figure A-15 a. Augmenter Exit Total & Static Pressure, Aug. #1, Diff = 16°,  $\theta = 40^\circ$ ,  $\alpha = 8^\circ$

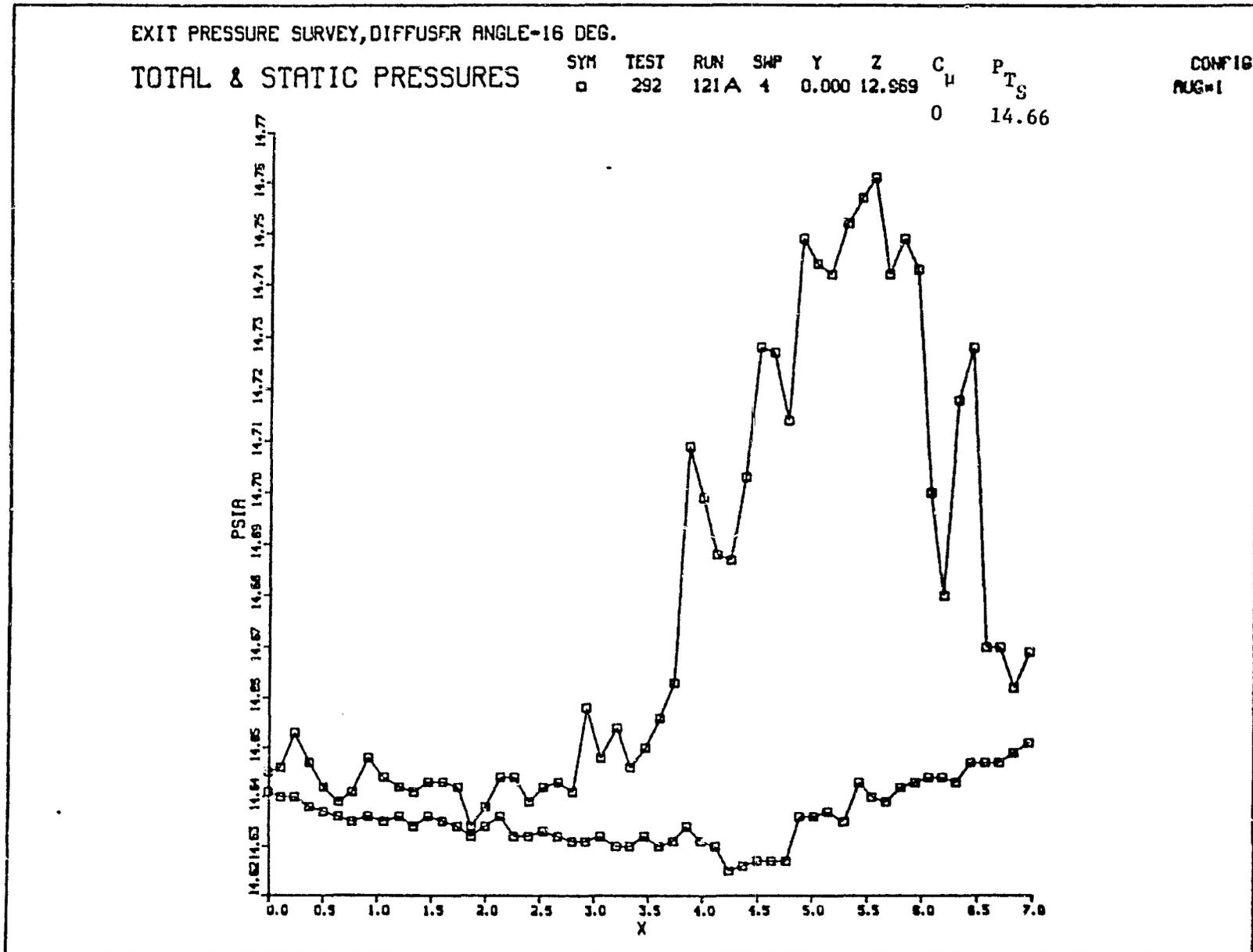


Figure A-15 b. Augmenter Exit Total & Static Pressure, Aug. #1, Diff = 16°,  $\theta = 40^\circ$ ,  $\alpha = 8^\circ$

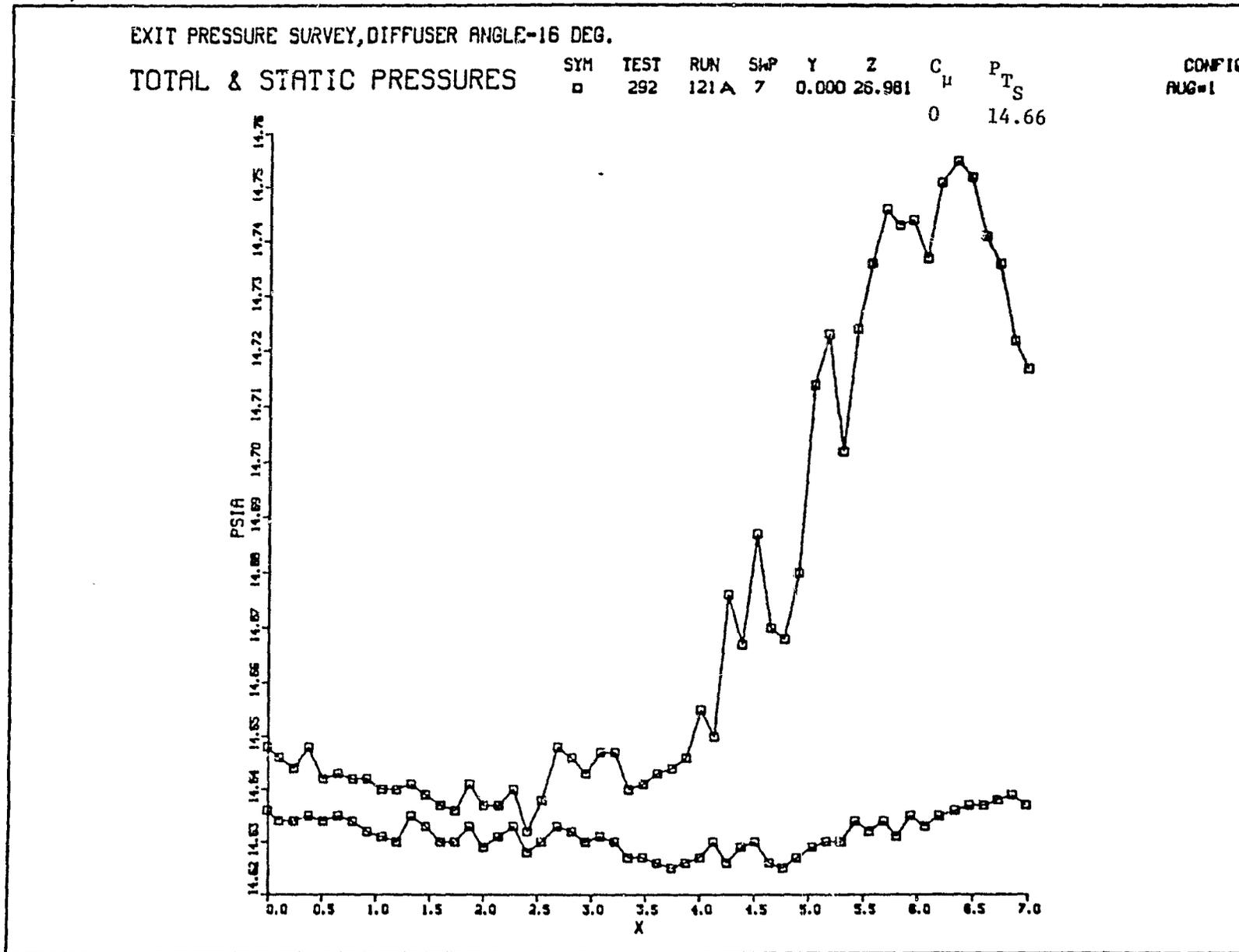


Figure A-15 c. Augmenter Exit Total & Static Pressure, Aug. #1, Diff = 16°,  $\theta = 40^\circ$ ,  $\alpha = 8^\circ$

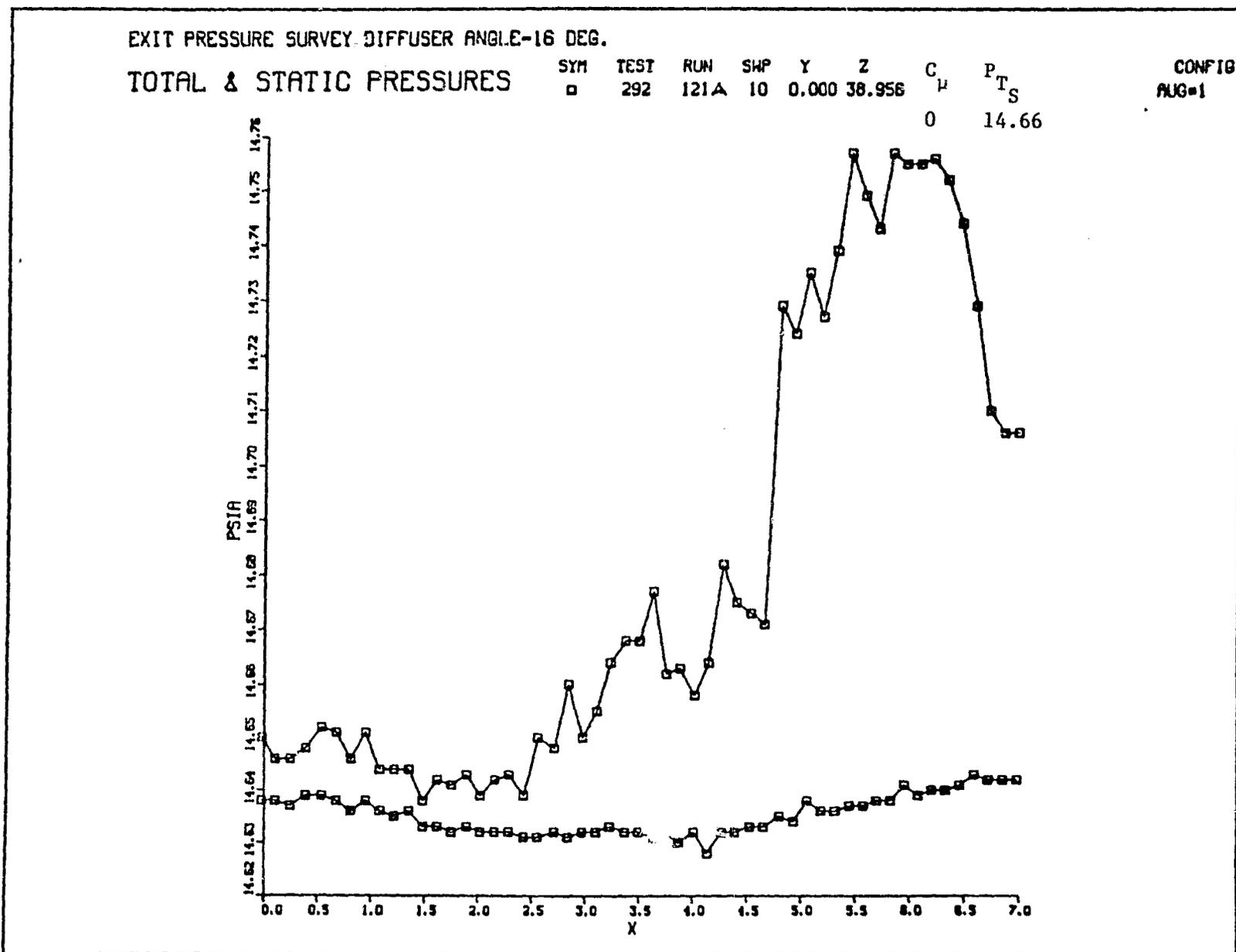


Figure A-15 d. Augmenter Exit Total & Static Pressure, Aug. #1, Diff = 16°,  $\theta = 40^\circ$ ,  $\alpha = 8^\circ$

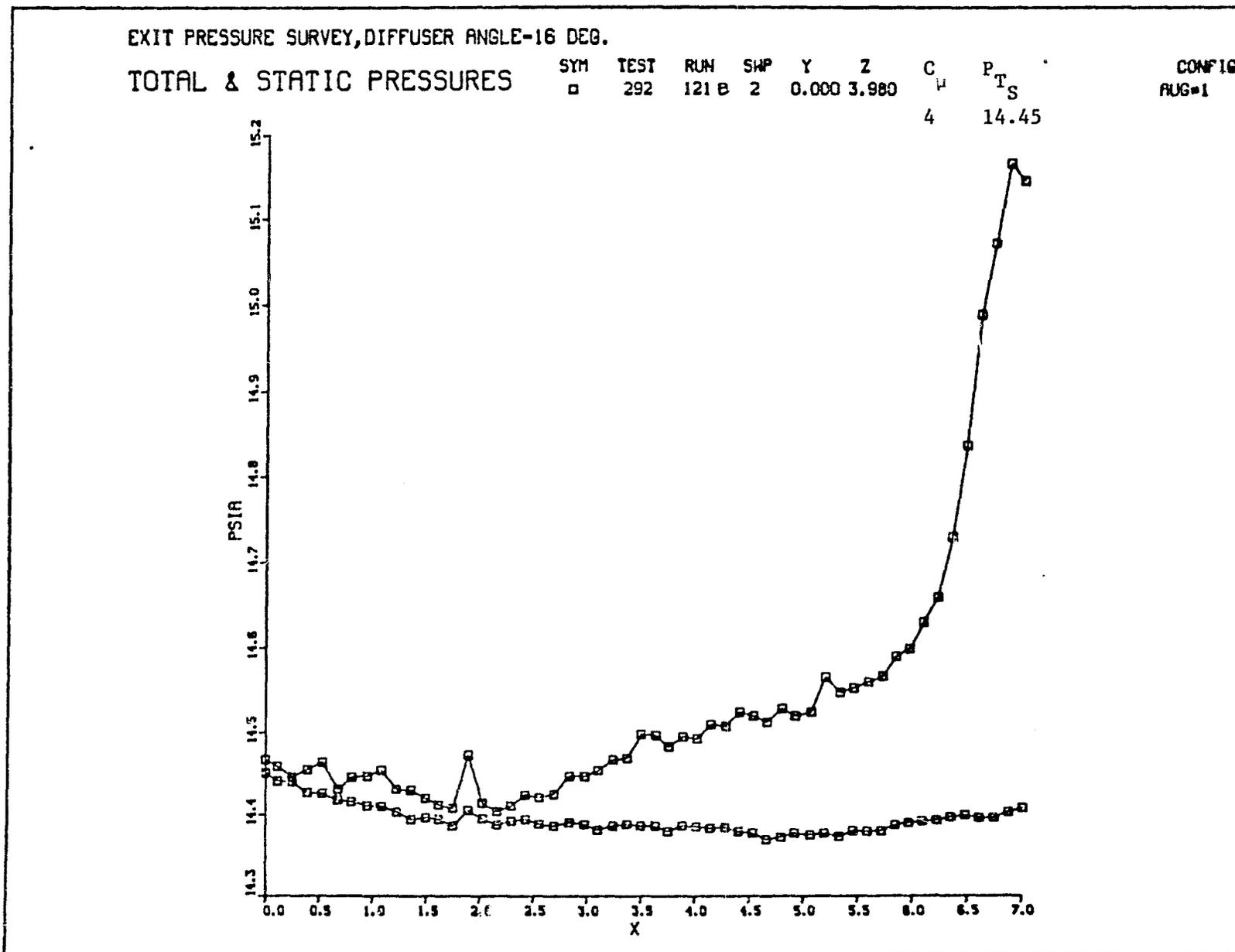


Figure A-16 a. Augmenter Exit Total & Static Pressure, Aug. #1, Diff = 16°,  $\theta = 40^\circ$ ,  $\alpha = 8^\circ$

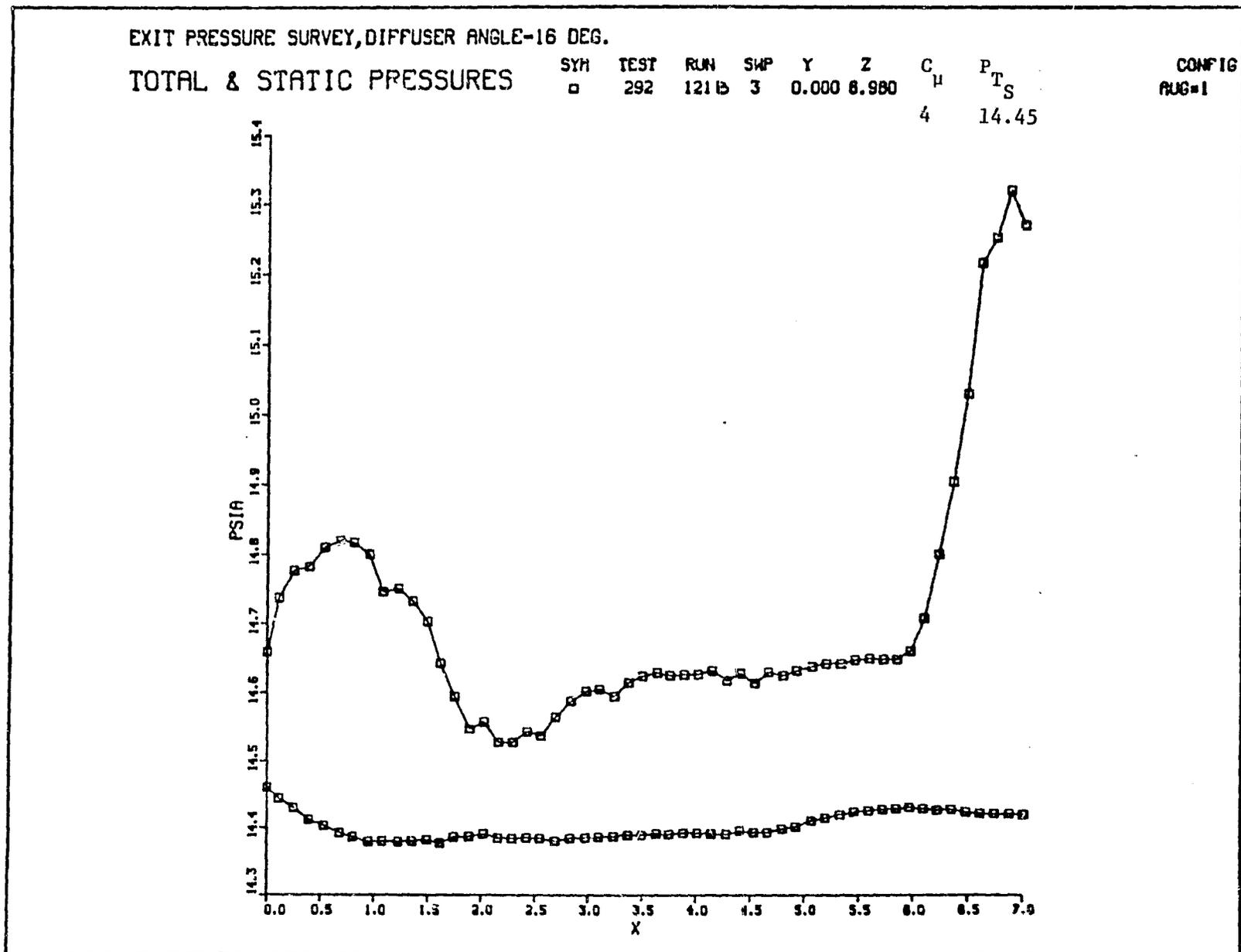


Figure A-16 b. Augmenter Exit Total & Static Pressure, Aug. #1, Diff = 16°,  $\theta = 40^\circ$ ,  $\alpha = 8^\circ$

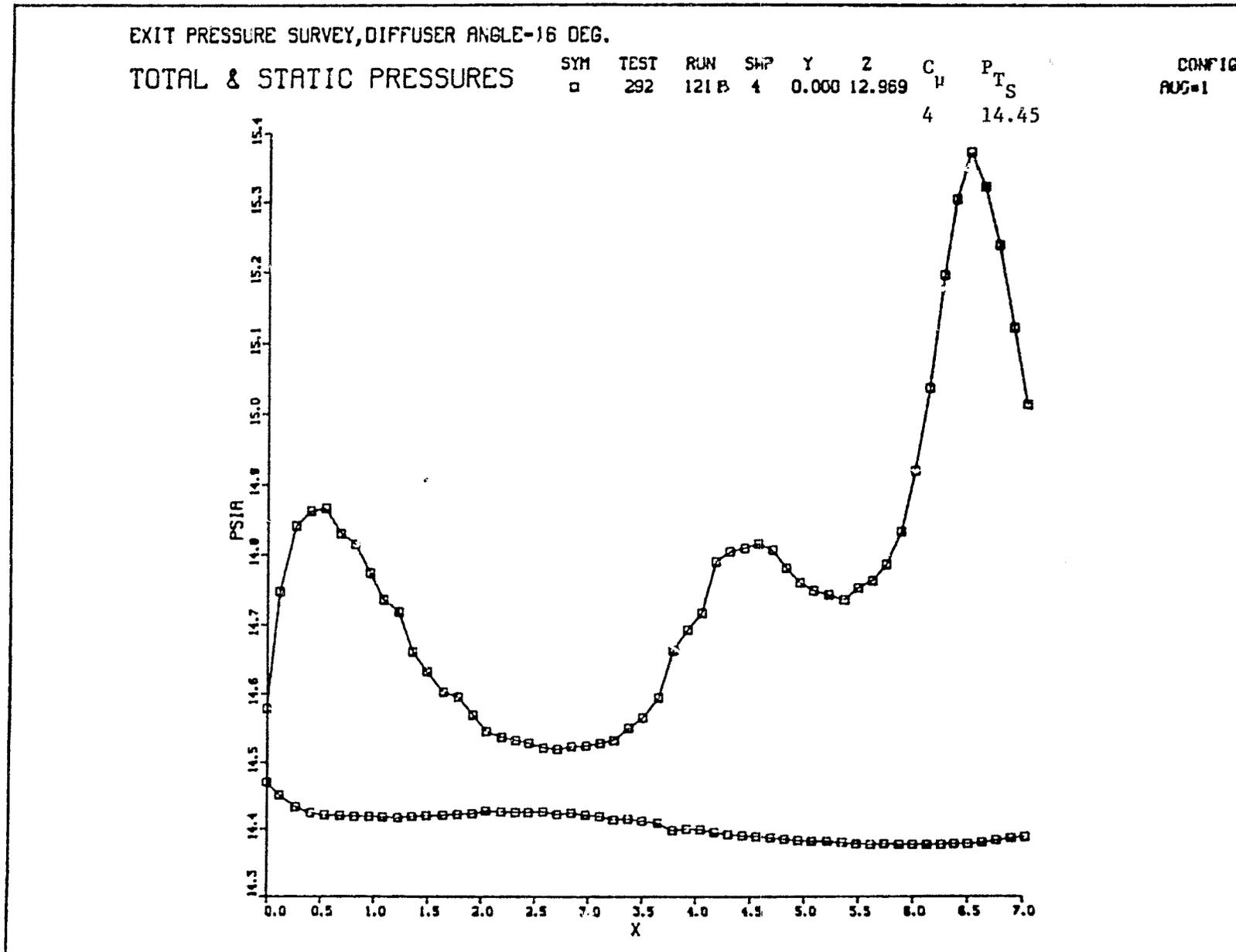


Figure A-16 c. Augmenter Exit Total & Static Pressure, Aug. #1, Diff = 16°, θ = 40°, α = 8°

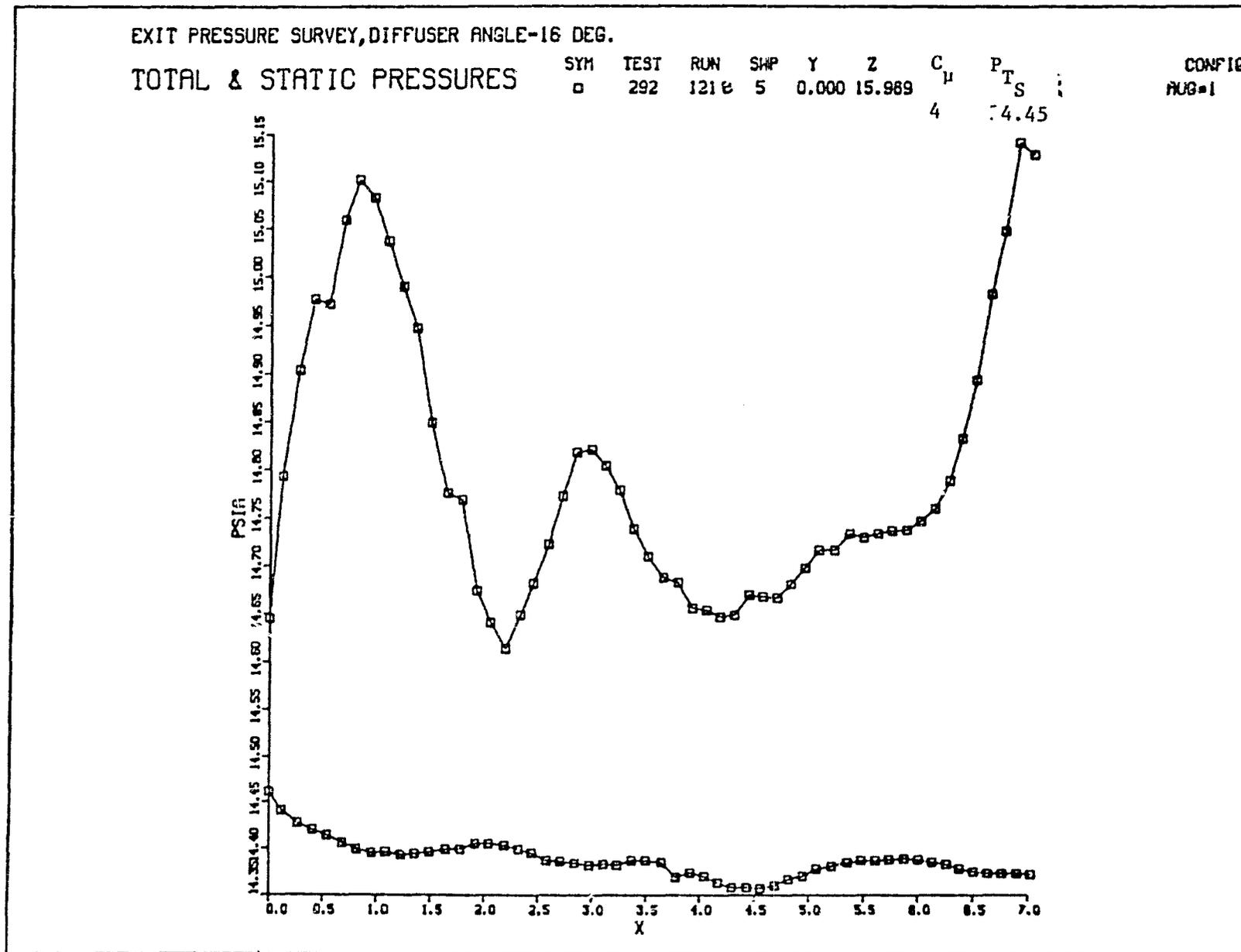


Figure A-16 d. Augmenter Exit Total & Static Pressure, Aug. #1, Diff =  $16^{\circ}$ ,  $\theta = 40^{\circ}$ ,  $\alpha = 8^{\circ}$

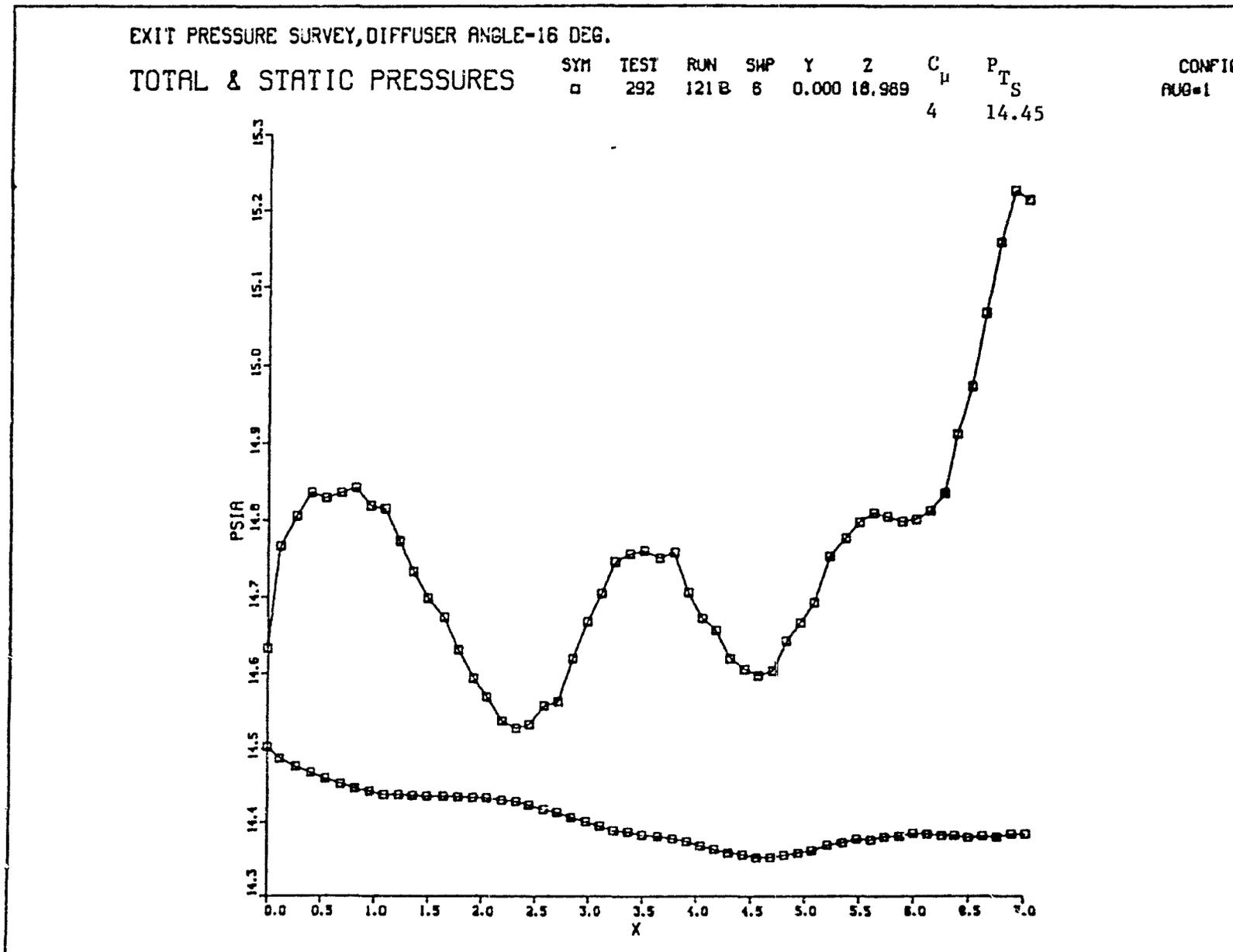


Figure A-16 e. Augmenter Exit Total & Static Pressure, Aug. #1, Diff =  $16^\circ$ ,  $\theta = 40^\circ$ ,  $\alpha = 8^\circ$

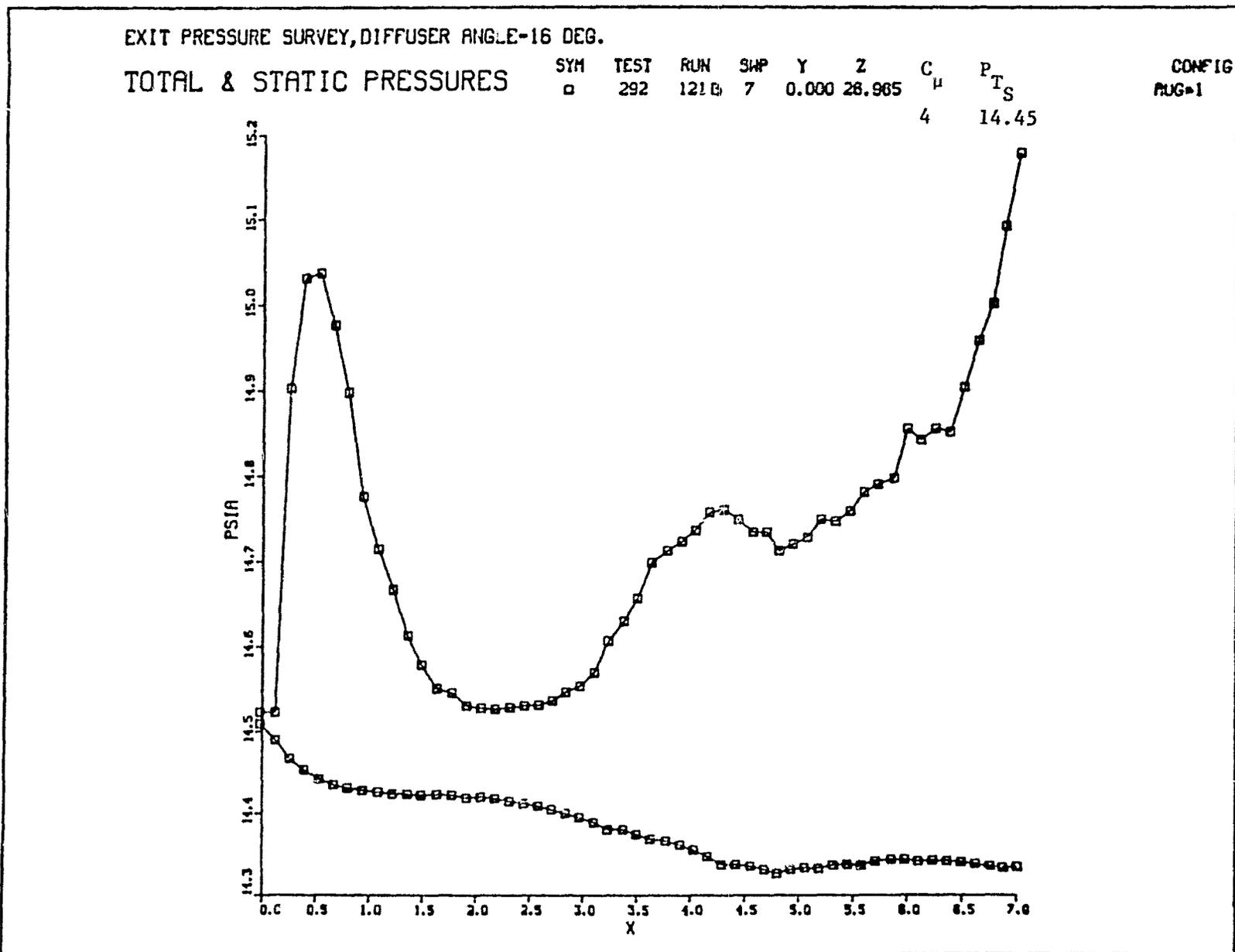


Figure A-16 f Augmentor Exit Total &amp; Static Pressures

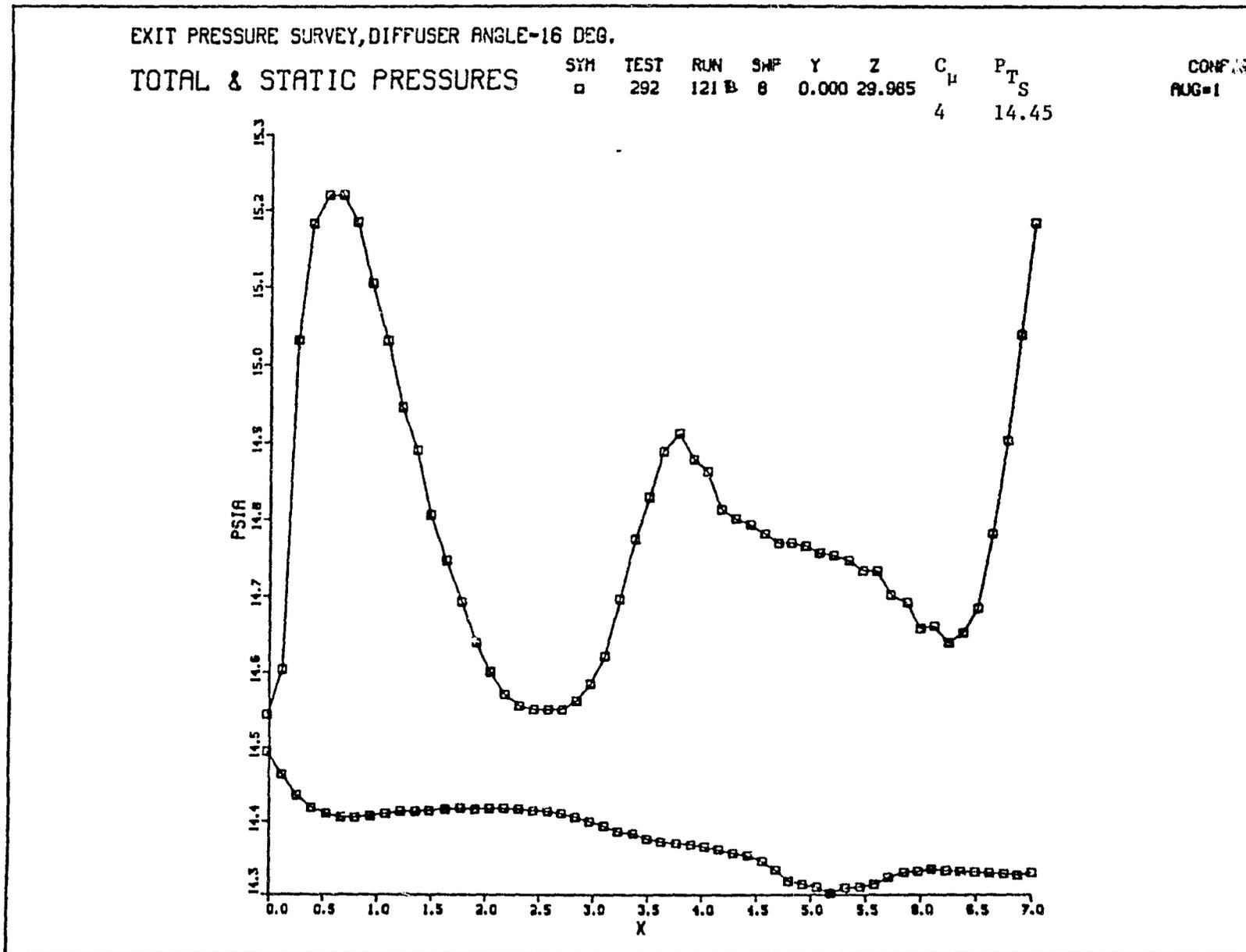


Figure A-16 g. Augmenter Exit Total & Static Pressure, Aug. #1, Diff =  $16^{\circ}$ ,  $\theta = 40^{\circ}$ ,  $\alpha = 8^{\circ}$

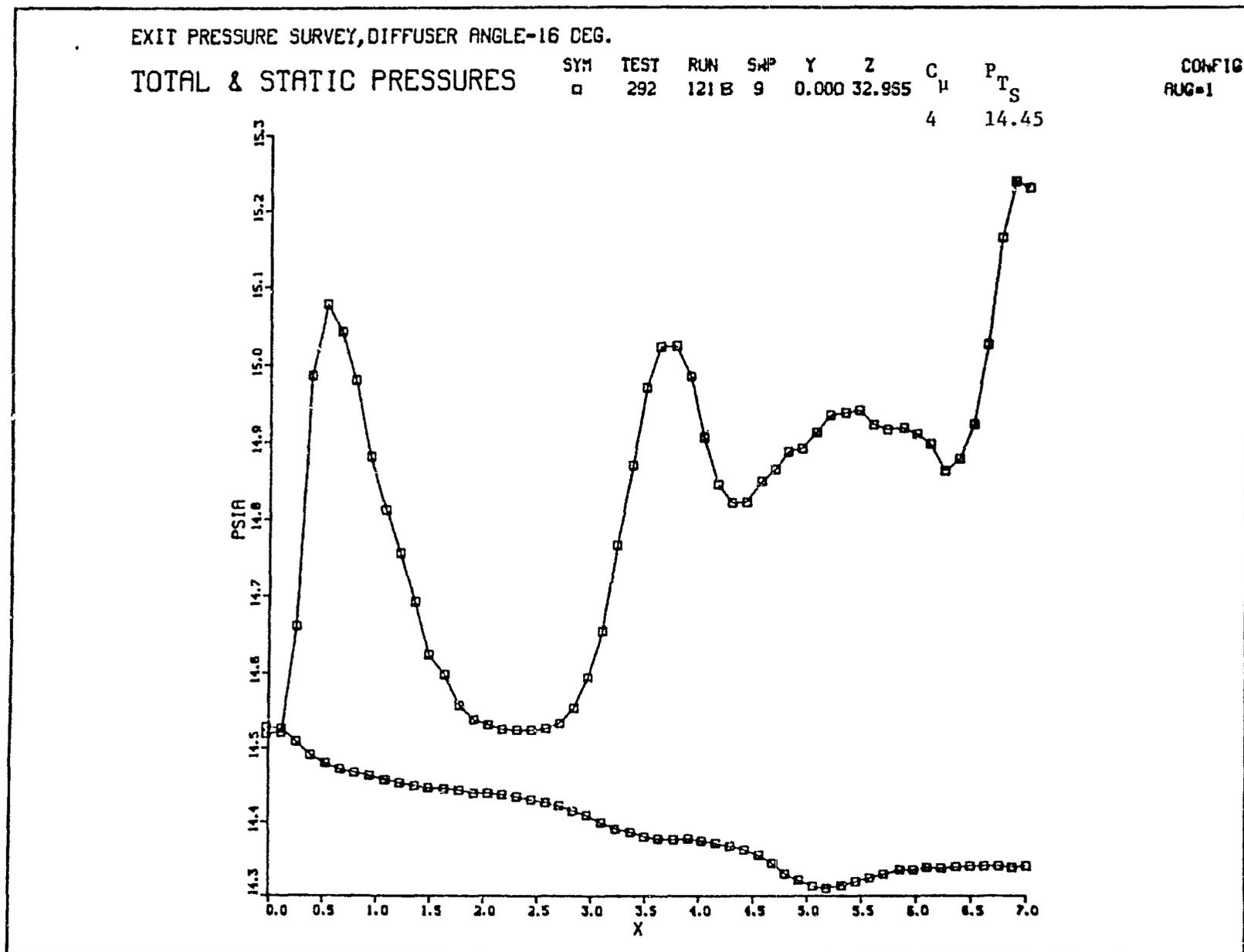


Figure A-16 h. Augmenter Exit Total & Static Pressure, Aug. #1, Diff = 16°,  $\theta = 40^\circ$ ,  $\alpha = 8^\circ$

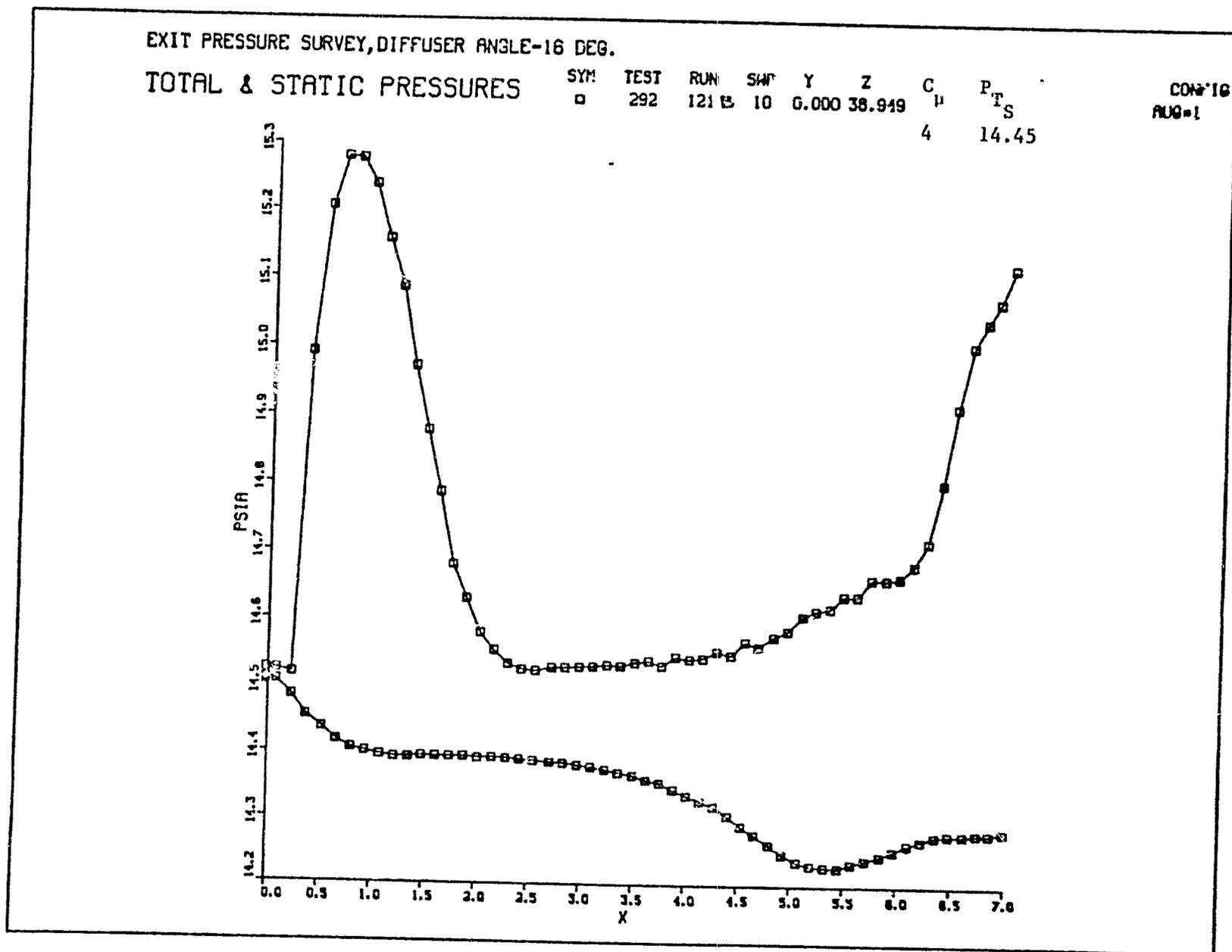


Figure A-16 i. Augmenter Exit Total & Static Pressure, Aug. #1, Diff =  $16^\circ$ ,  $\theta = 40^\circ$ ,  $\alpha = 8^\circ$

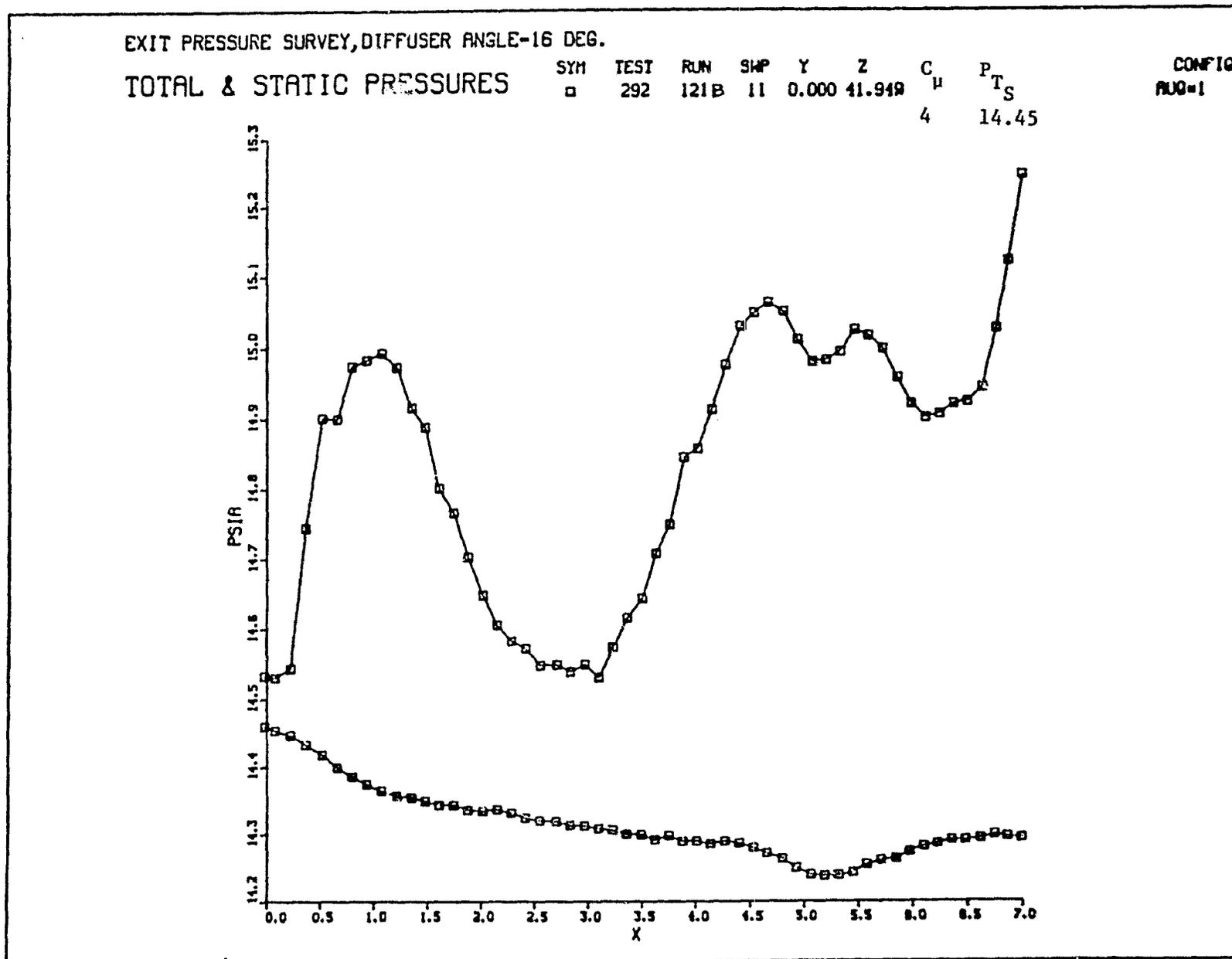


Figure A-16 j. Augmenter Exit Total & Static Pressure, Aug. #1, Diff = 16°,  $\theta = 40^\circ$ ,  $\alpha = 8^\circ$

A STUDY OF A  
VTOL THRUSTING EJECTOR  
IN LOW SPEED FLIGHT

Yearl R. Stewart  
Rockwell International  
North American Aircraft Division

APPENDIX B - DOWNWASH SURVEY CONFIGURATION

## LIST OF ILLUSTRATIONS

### DOWNWASH SURVEY CONFIGURATION

<u>FIGURE</u>	<u>TITLE</u>	<u>RUN</u>	<u>PAGE</u>
B-1 (a-d)	AUG. #1, DIFF. = $16^\circ$ , $\theta = 40^\circ$ , $\alpha = 8^\circ$ , STA. 103	122	121-124
B-2 (a-h)	AUG. #1, DIFF. = $16^\circ$ , $\theta = 40^\circ$ , $\alpha = 0^\circ$ , STA. 103	123	125-132
B-3 (a-d)	AUG. #1, DIFF. = $16^\circ$ , $\theta = 40^\circ$ , $\alpha = 0^\circ$ , STA. 96	125	133-136
B-4 (a-d)	AUG. #1, DIFF. = $16^\circ$ , $\theta = 40^\circ$ , $\alpha = 0^\circ$ , STA. 89	126	137-140
B-5 (a-d)	AUG. #1, DIFF. = $8^\circ$ , $\theta = 40^\circ$ , $\alpha = 0^\circ$ , STA. 89	127	141-144
B-6 (a-d)	AUG. #1, DIFF. = $8^\circ$ , $\theta = 40^\circ$ , $\alpha = 0^\circ$ , STA. 103	128	145-148
B-7 (a-d)	JET FLAP, $\theta = 40^\circ$ , STA. 89	129	149-152
B-8 (a-d)	JET FLAP, $\theta = 40^\circ$ , STA. 96	130	153-156
B-9 (a-g)	JET FLAP, $\theta = 40^\circ$ , STA. 103	131	157-163

CONF: AUG #1 DIFF. = 16°, FWD - 66°,  $\alpha = 8^\circ$   
 STA. 103

SYM	C	$\mu$	q
○	2	8.6	
□	4	4.3	

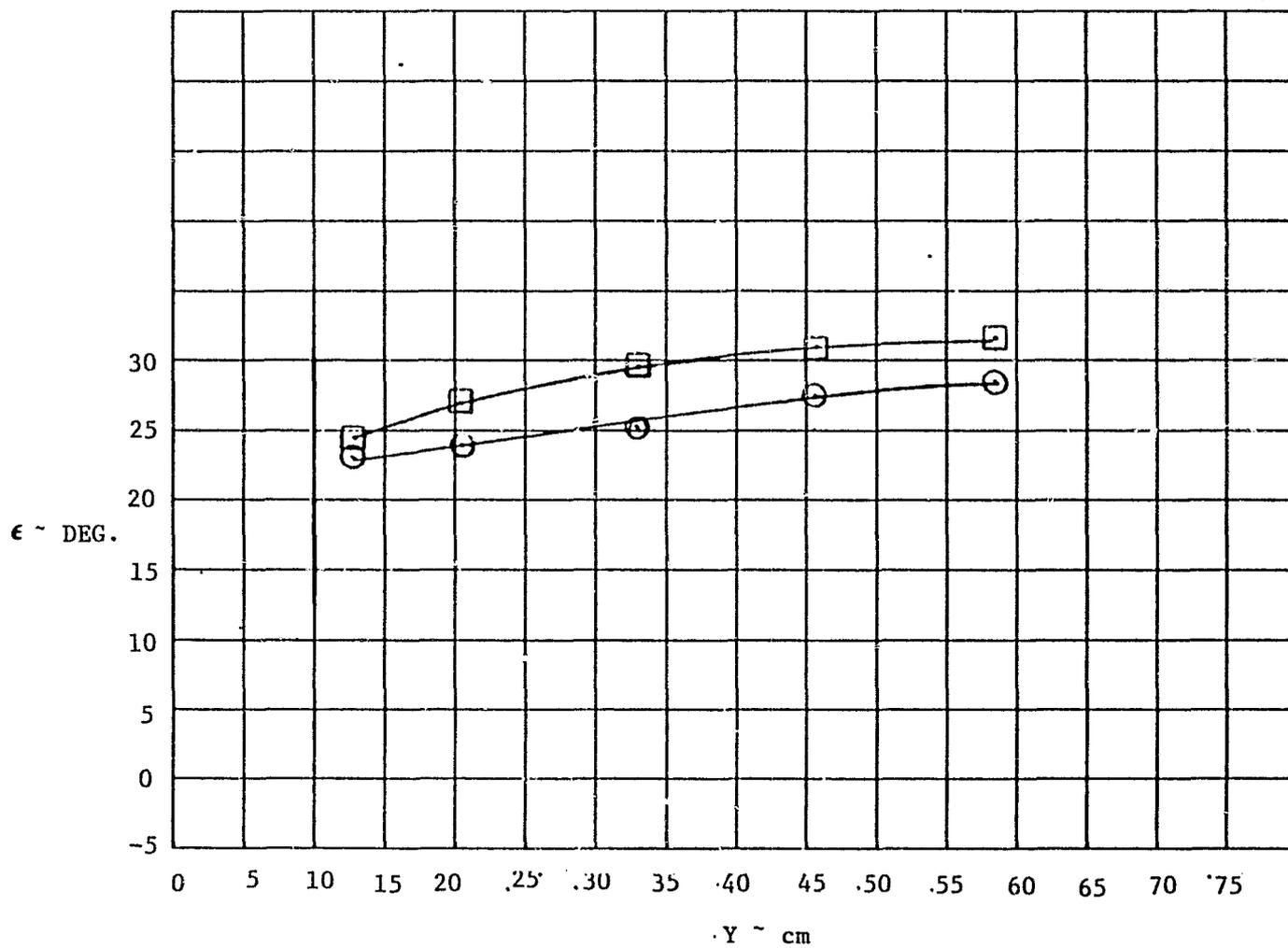


Figure B-1 a. Aug. #1, Diff - 16°,  $\theta = 40^\circ$ ,  $\alpha = 8^\circ$ , Sta. 103

CONF: AUG #1 DIFF. = 16°, FWD. = 66°,  $\alpha$  = 8°  
 STA 103

SYM	C <sub>μ</sub>	q
○	2	8.6
□	4	4.3

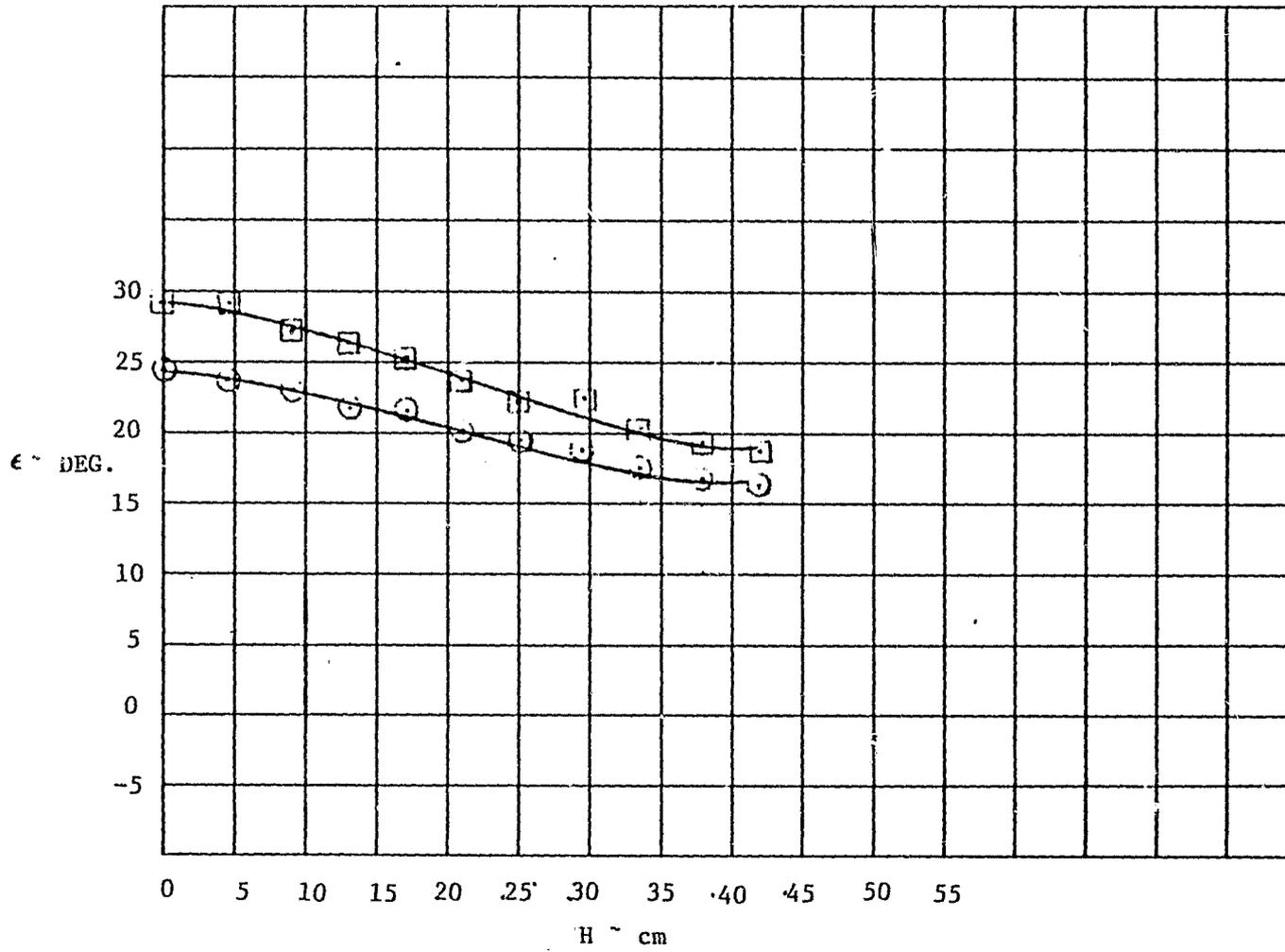


Figure B-1 b. Aug. #1, Diff - 16°,  $\theta$  40°,  $\alpha$  = 8°. Sta. 103

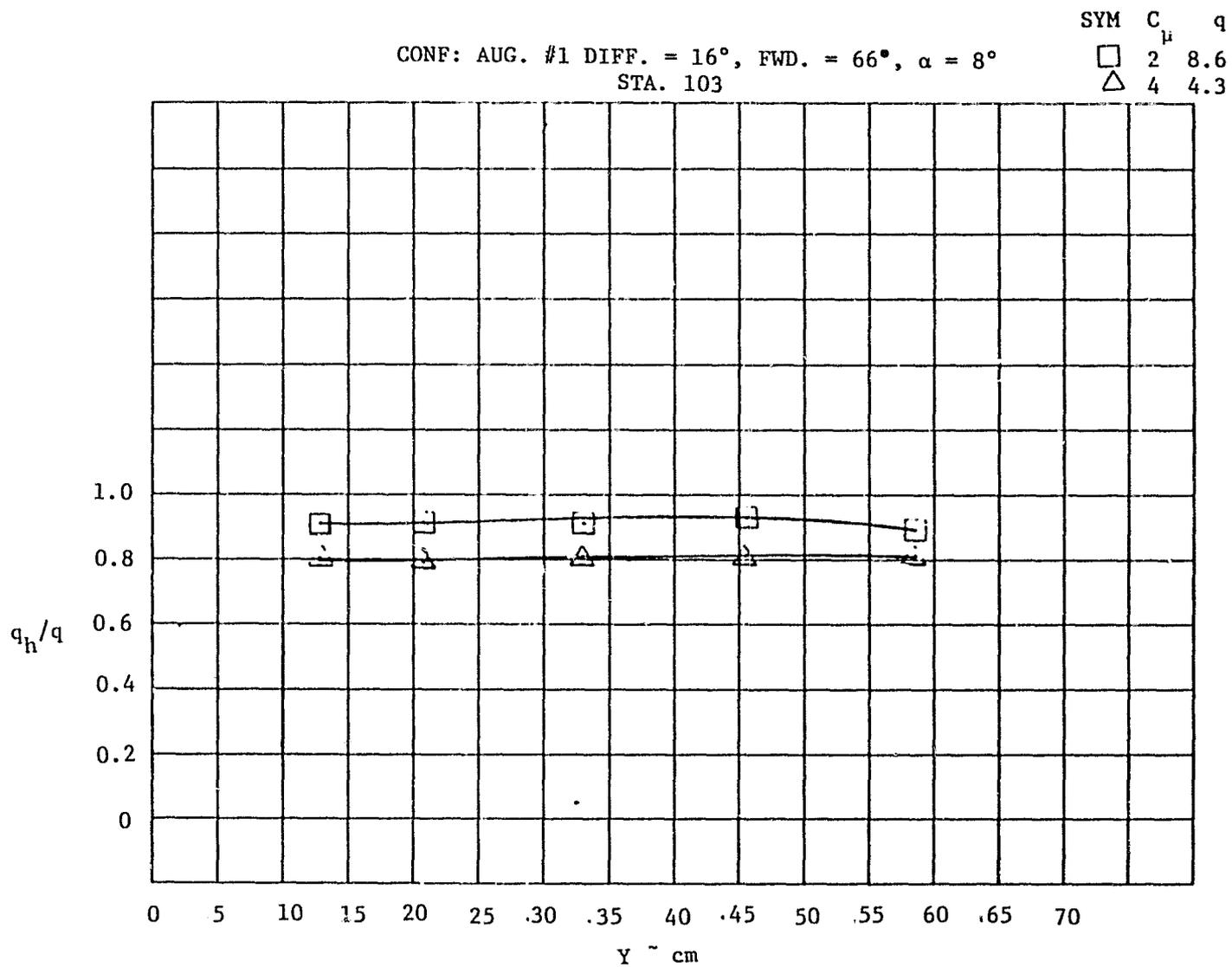


Figure B-1 c. Aug. #1, Diff = 16°,  $\theta = 40^\circ$ ,  
 $\alpha = 8^\circ$ , Sta. 103

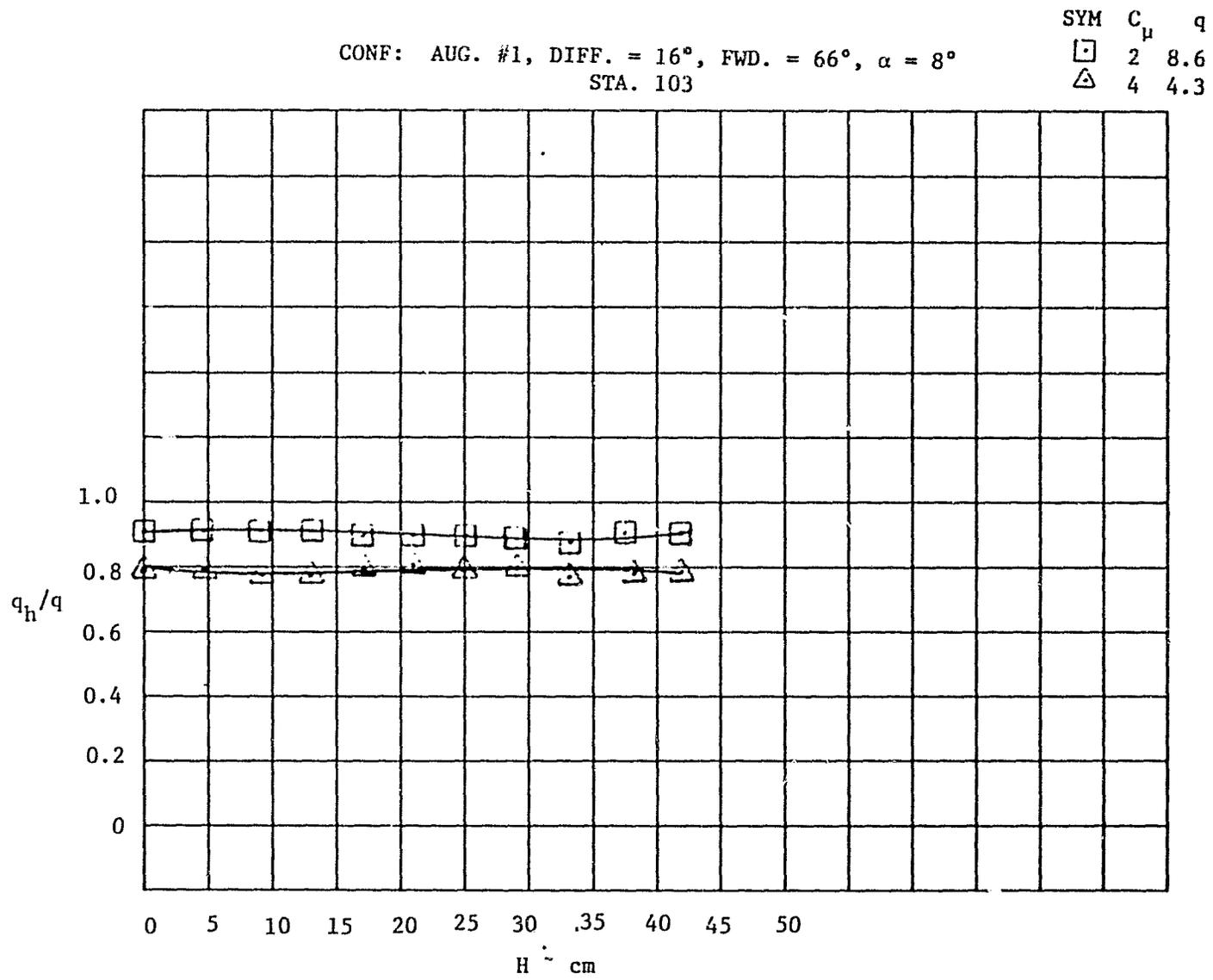


Figure B-1 d. Aug. #1, Diff - 16°,  $\theta = 40^\circ$ ,  
 $\alpha = 8^\circ$ , Sta. 103

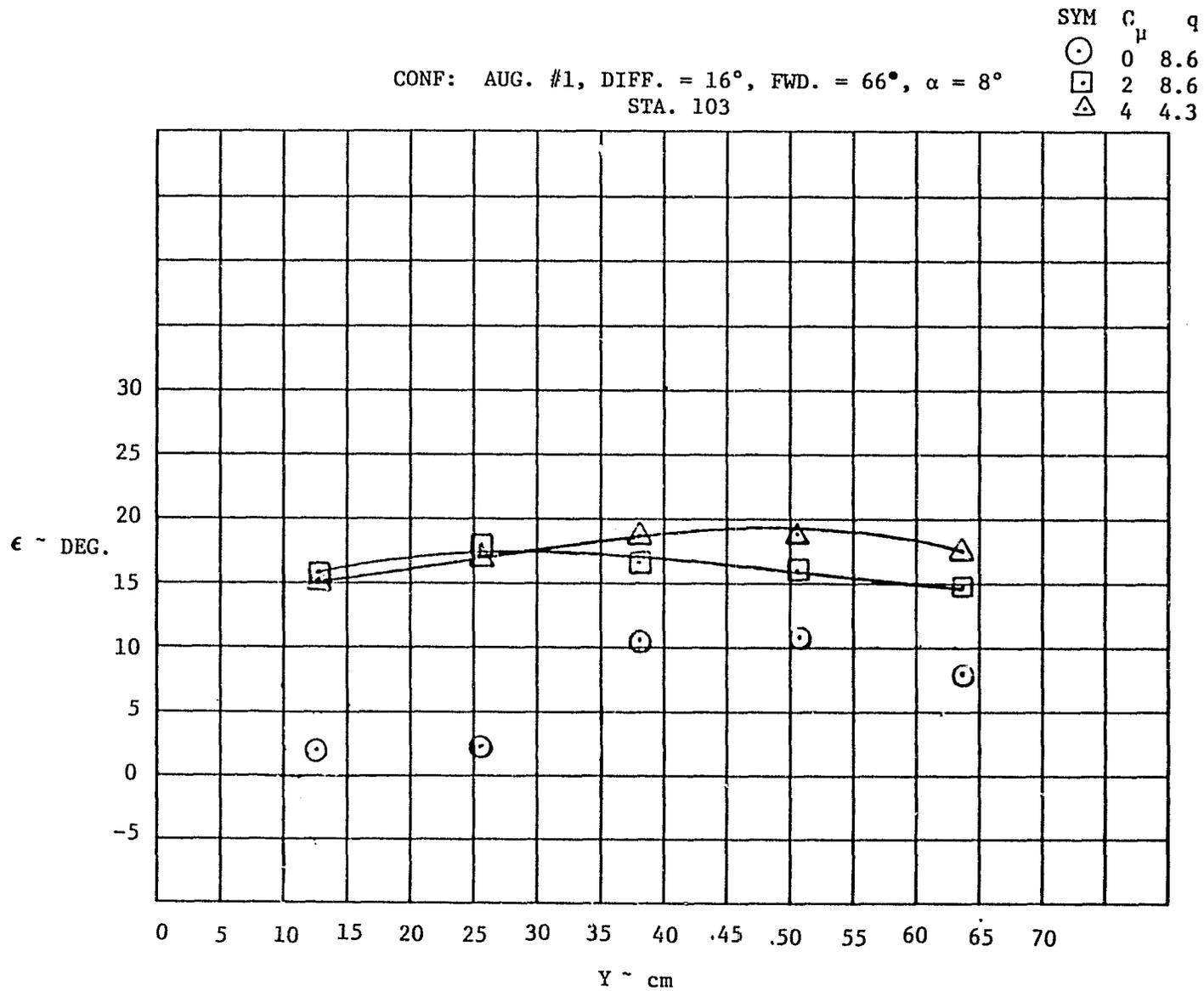


Figure B-2 a. Aug. #1, Diff =  $16^\circ$ ,  $\theta = 40^\circ$ ,  $\alpha = 0^\circ$ , Sta. 103

CONF: AUG. #1, DIFF. = 16°, FWD, = 66°,  $\alpha = 0^\circ$   
 STA. 103

SYM	C <sub>μ</sub>	q
○	0	8.6
□	2	8.6
△	4	4.3

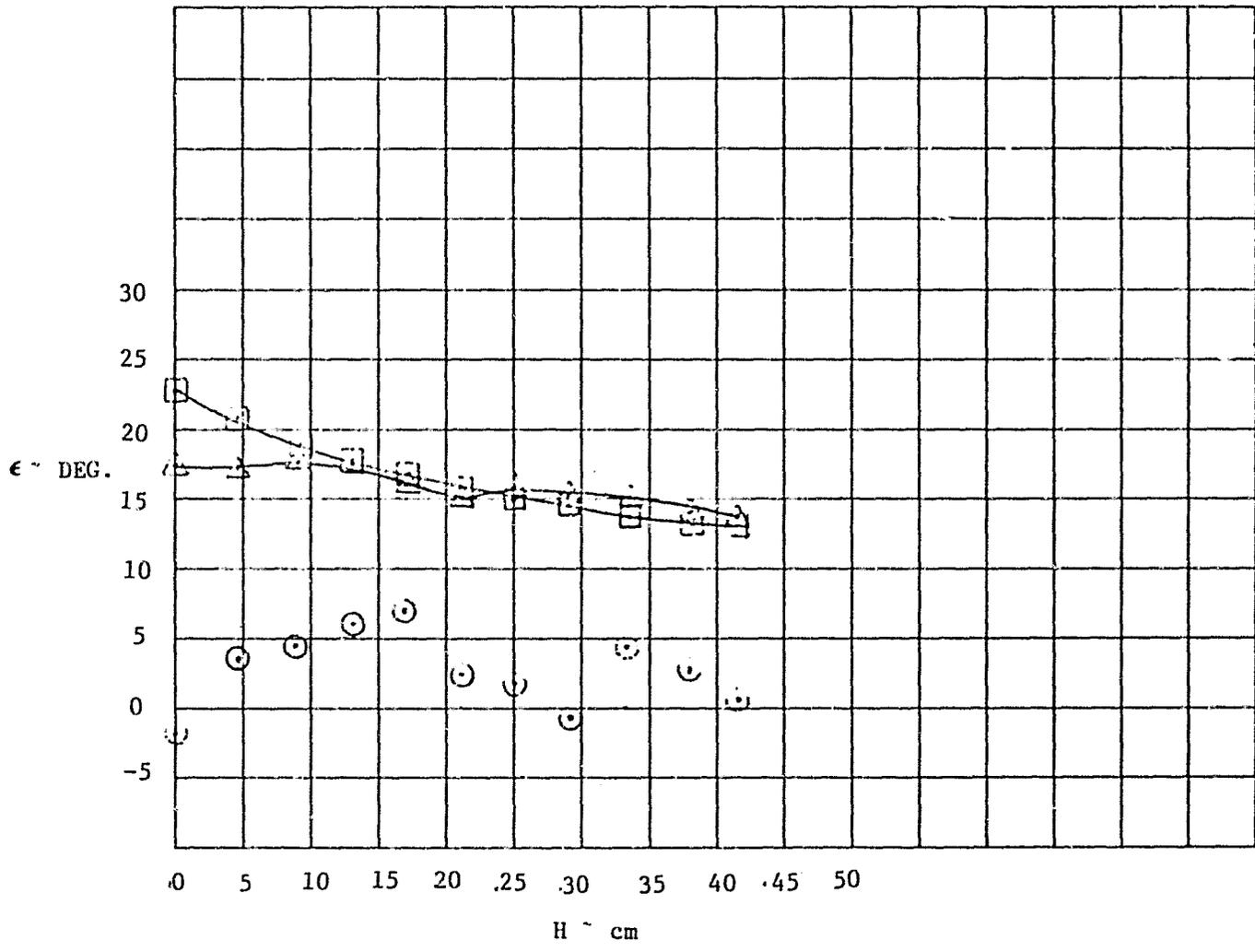


Figure B-2 b. Aug. #1, Diff = 16°,  $\theta = 40^\circ$ ,  $\alpha = 0^\circ$ , Sta. 103

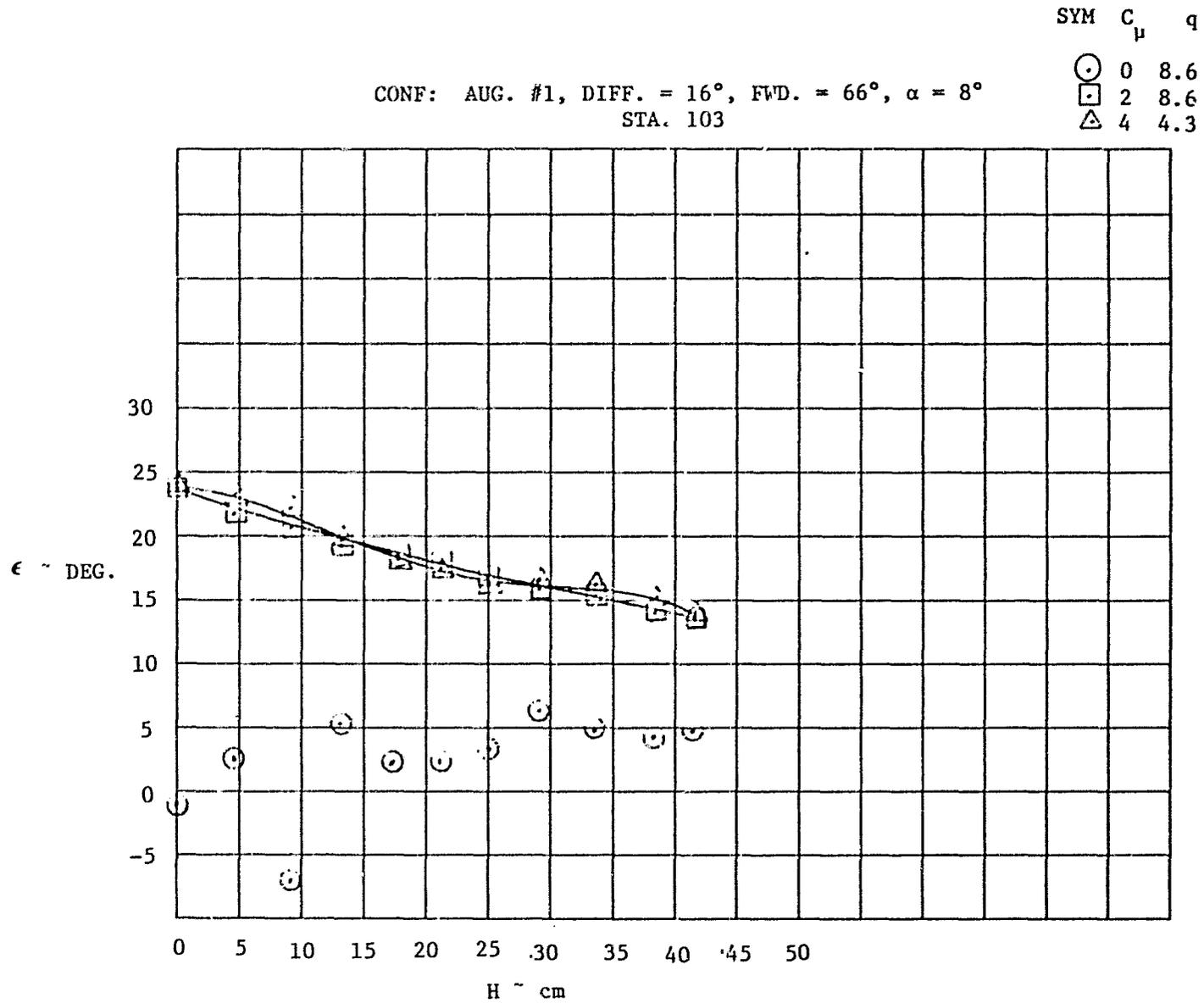


Figure B-2 c. Aug. #1, Diff =  $16^\circ$ ,  $\theta = 40^\circ$ ,  $\alpha = 0^\circ$ , Sta. 103

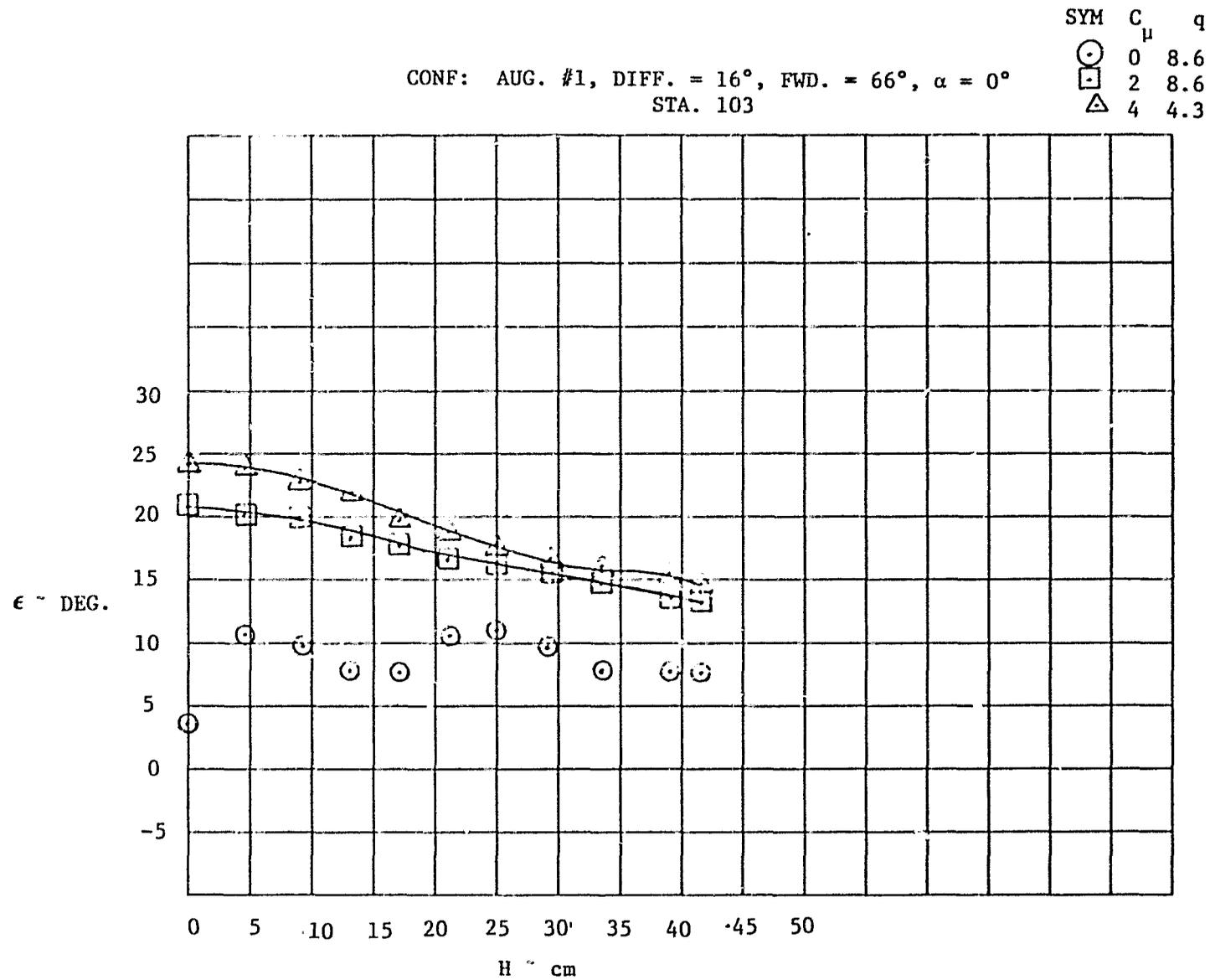


Figure B-2 d. Aug. #1, Diff = 16°,  $\theta = 40^\circ$ ,  $\alpha = 0^\circ$ , Sta. 103

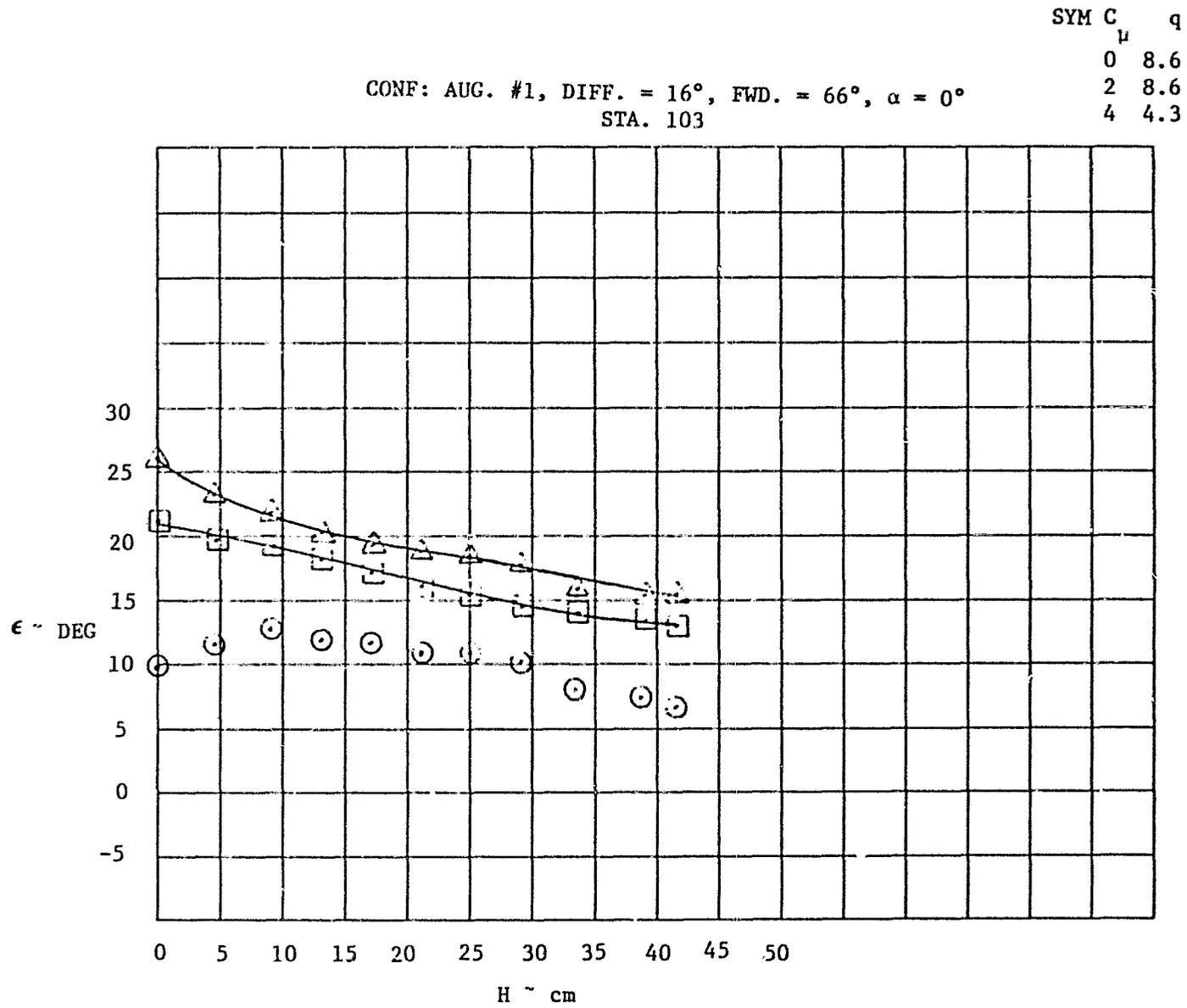


Figure B-2 e. Aug. #1, Diff = 16°,  $\theta = 40^\circ$ ,  $\alpha = 0^\circ$ , Sta. 103

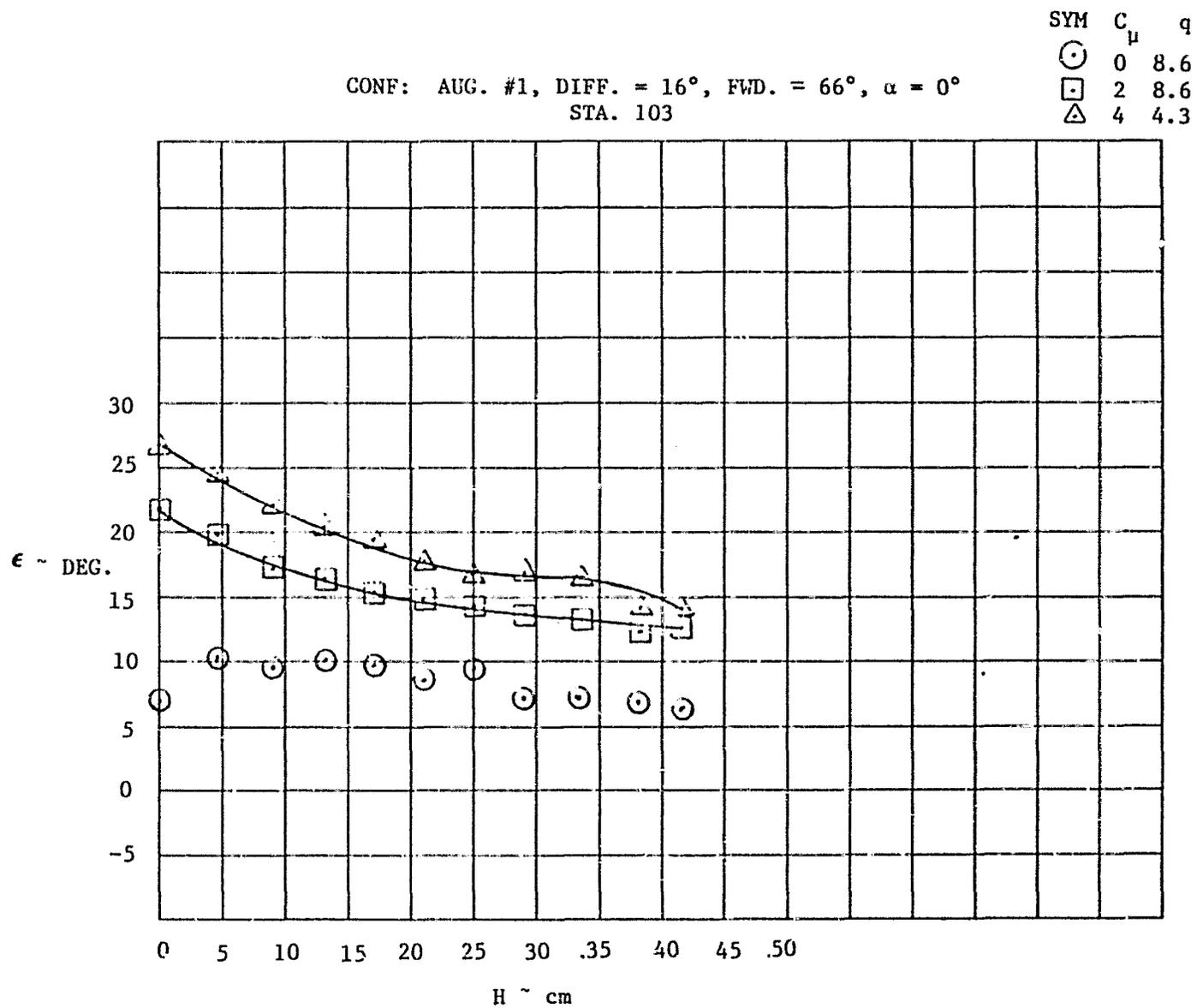


Figure B-2 f. Aug. #1, Diff =  $16^\circ$ ,  $\theta = 40^\circ$ ,  $\alpha = 0^\circ$ , Sta. 103

CONF: AUG. #1, DIFF. = 16°, FWD = 66°,  $\alpha = 0^\circ$   
 STA. 103

SYM	$C_\mu$	q
○	0	8.6
□	2	8.6
△	4	4.3

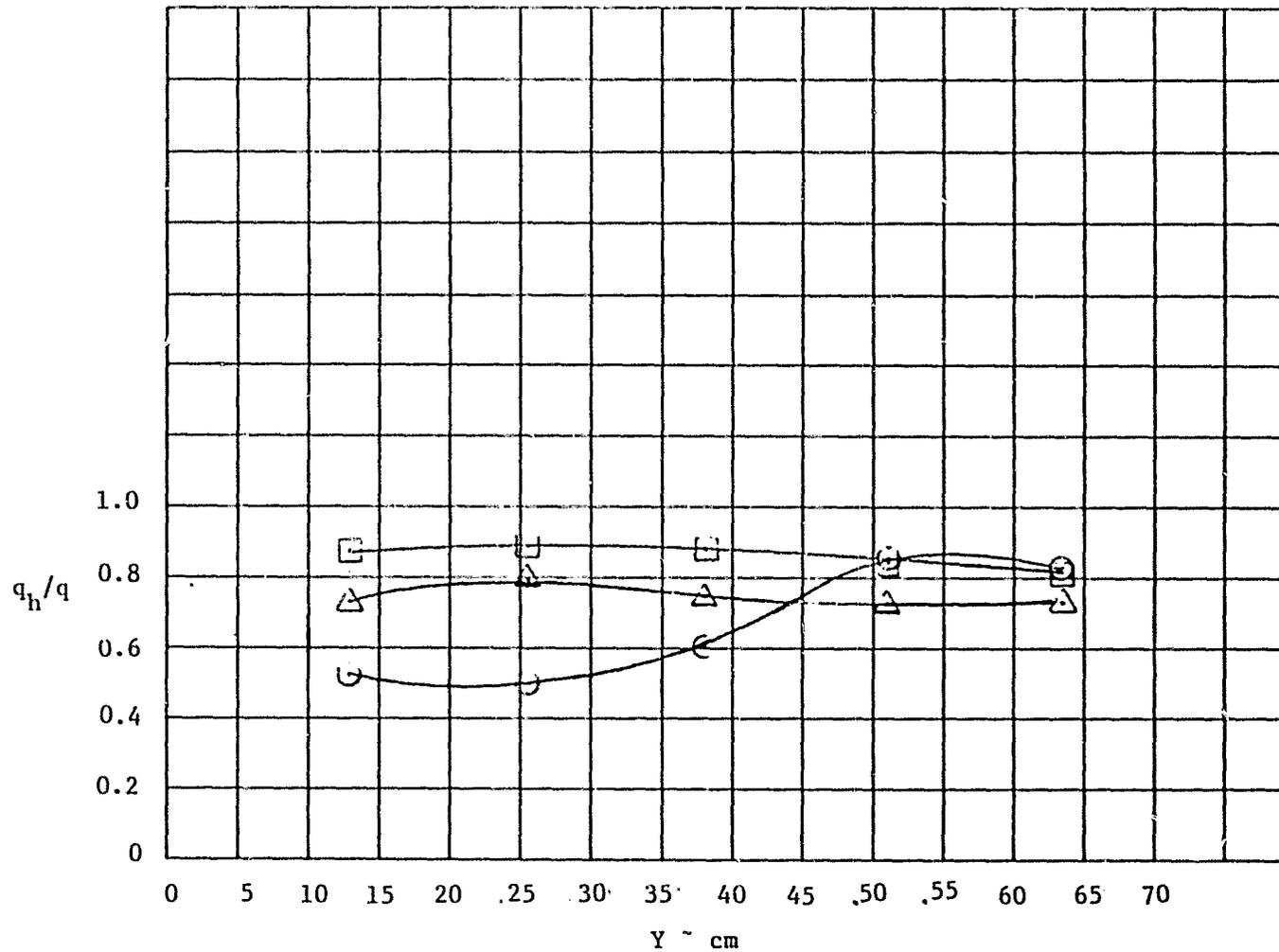


Figure B-2 g. Aug. #1, Diff = 16°,  $\theta = 40^\circ$ ,  $\alpha = 0^\circ$ , Sta. 103

CONF: AUG. #1, DIFF. = 16°, FWD. = 66°,  $\alpha = 0^\circ$   
 STA. 103

SYM	C <sub>μ</sub>	q
⊙	0	8.6
□	2	8.6
△	4	4.3

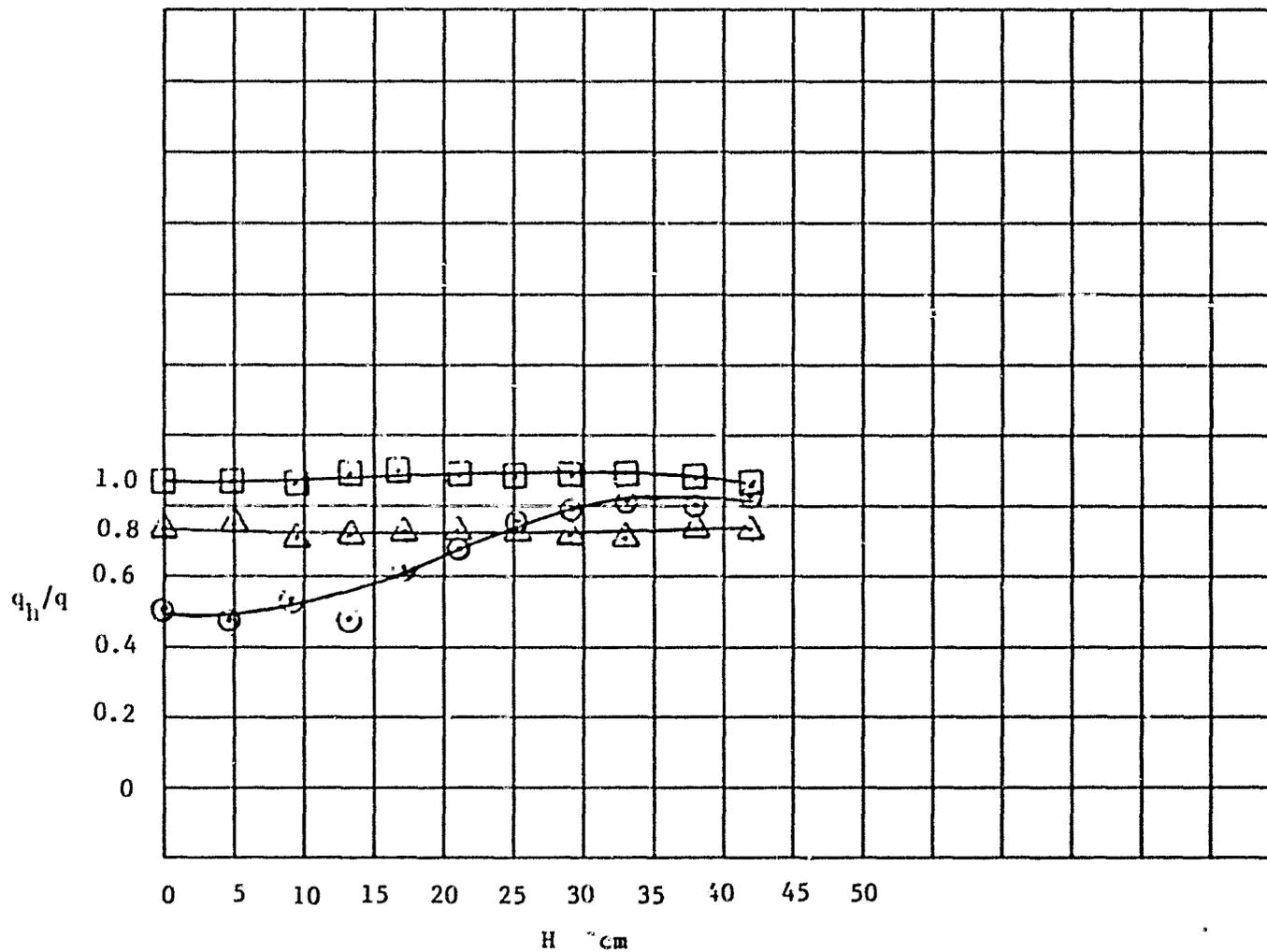


Figure B-2 h. Aug. #1, Diff. = 16°,  $\theta = 40^\circ$ ,  $\alpha = 0^\circ$ , Sta. 103

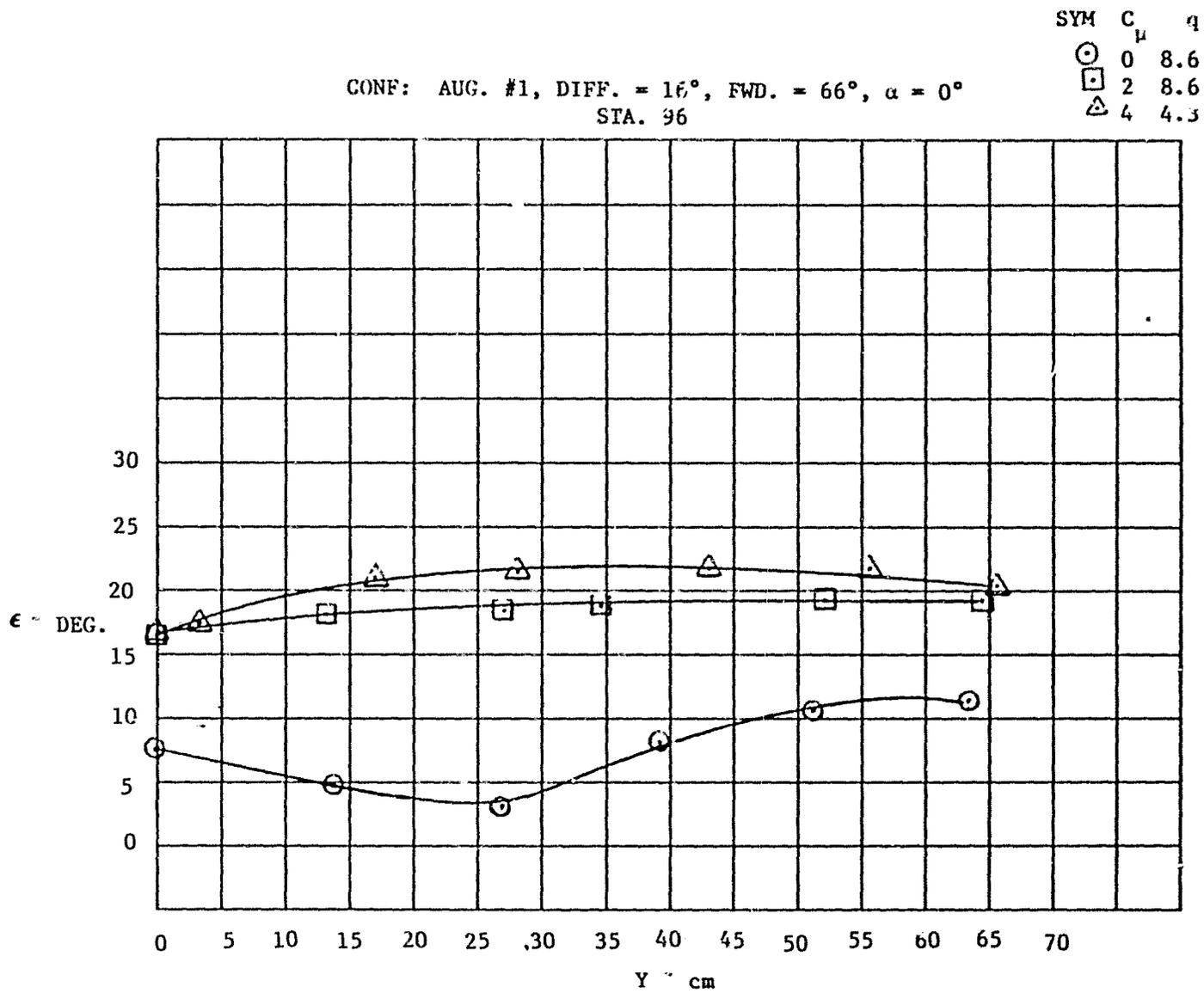


Figure B-3 a. Aug. #1, Diff =  $16^\circ$ ,  $\theta = 40^\circ$ ,  $\alpha = 0^\circ$ , Sta. 96

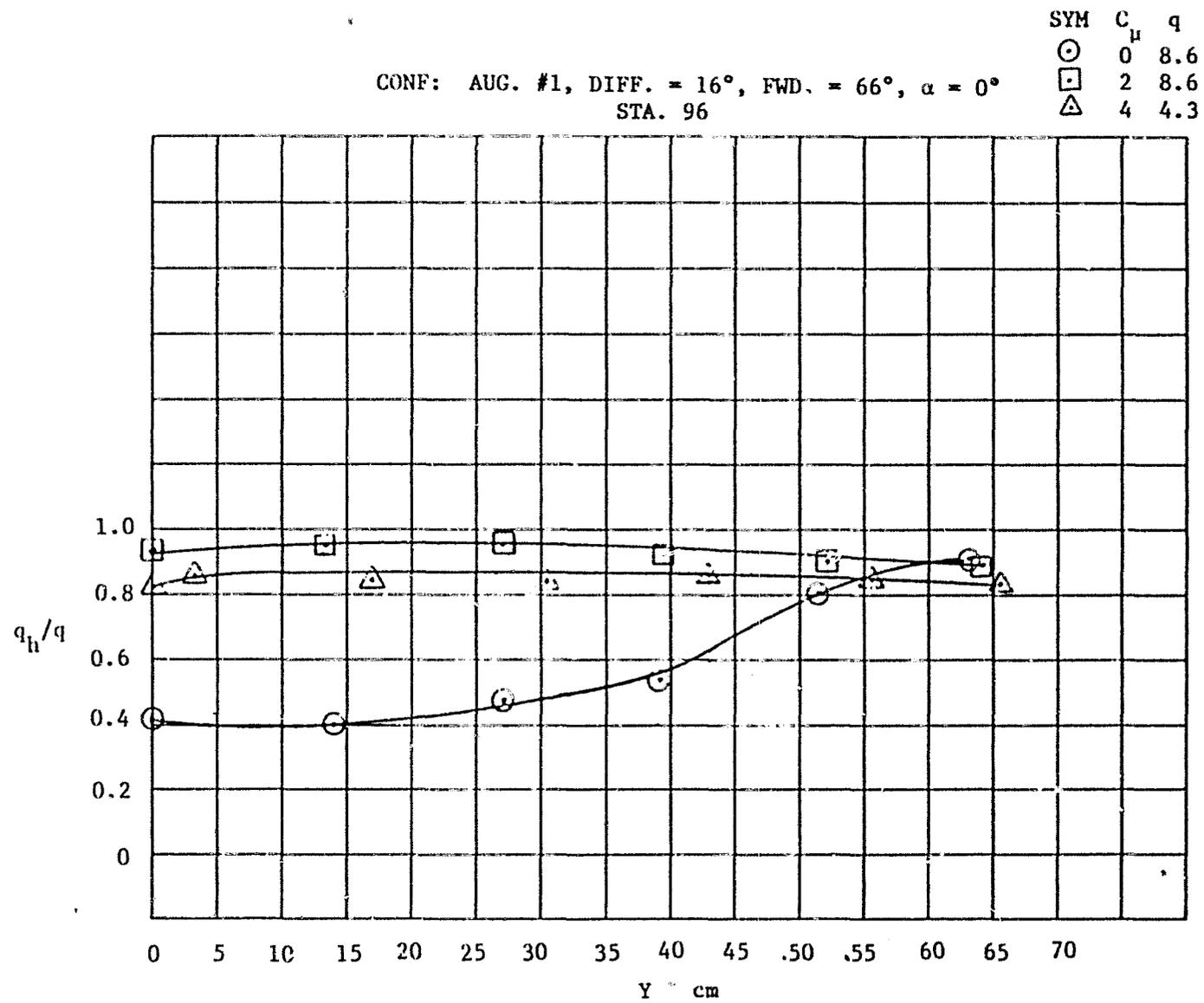


Figure B-3 b. Aug. #1, Diff = 16°,  $\theta = 40^\circ$ ,  $\alpha = 0^\circ$ , Sta. 96

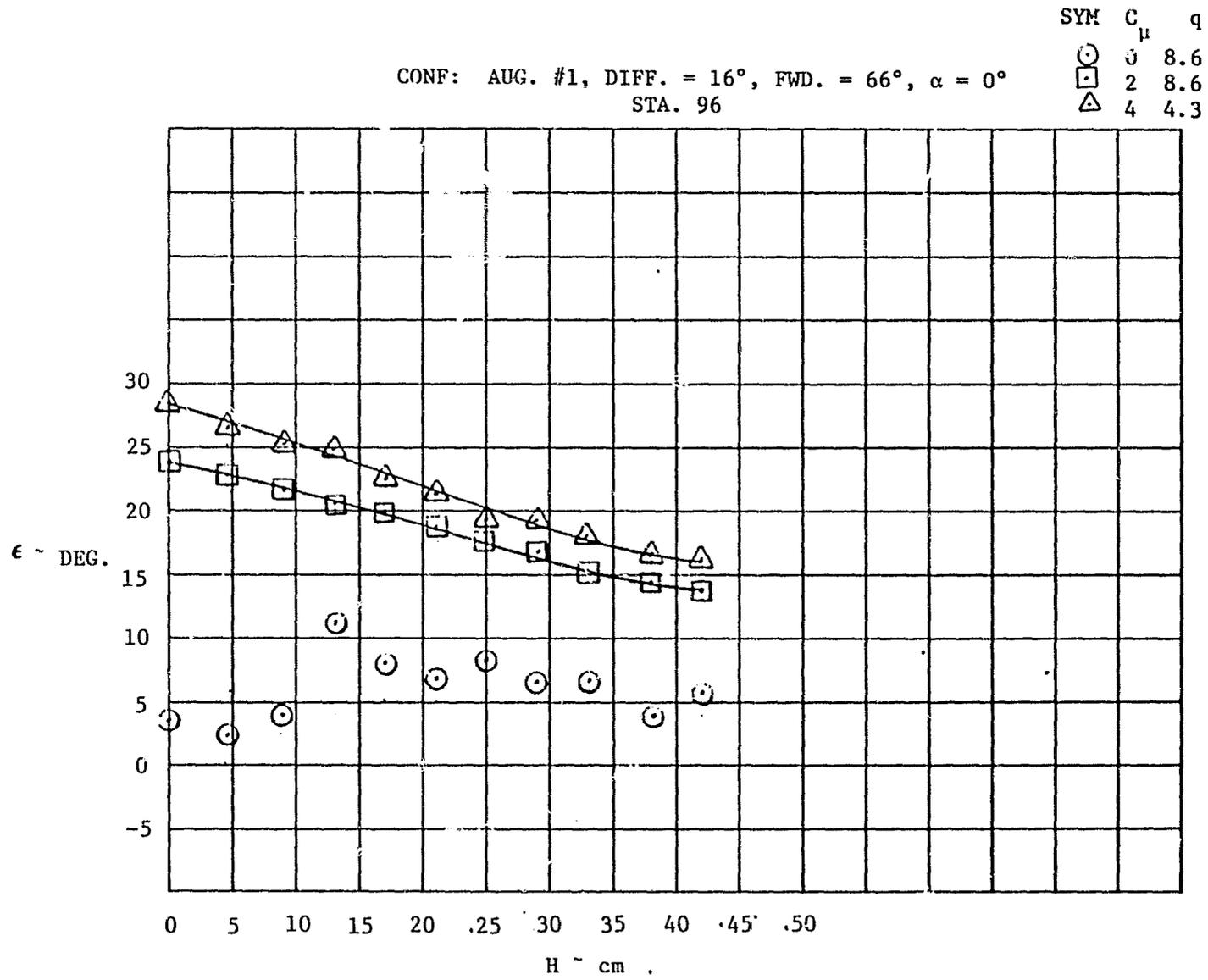


Figure B-3 c. Aug. #1, Diff = 16°,  $\theta = 40^\circ$ ,  $\alpha = 0^\circ$ , Sta. 96

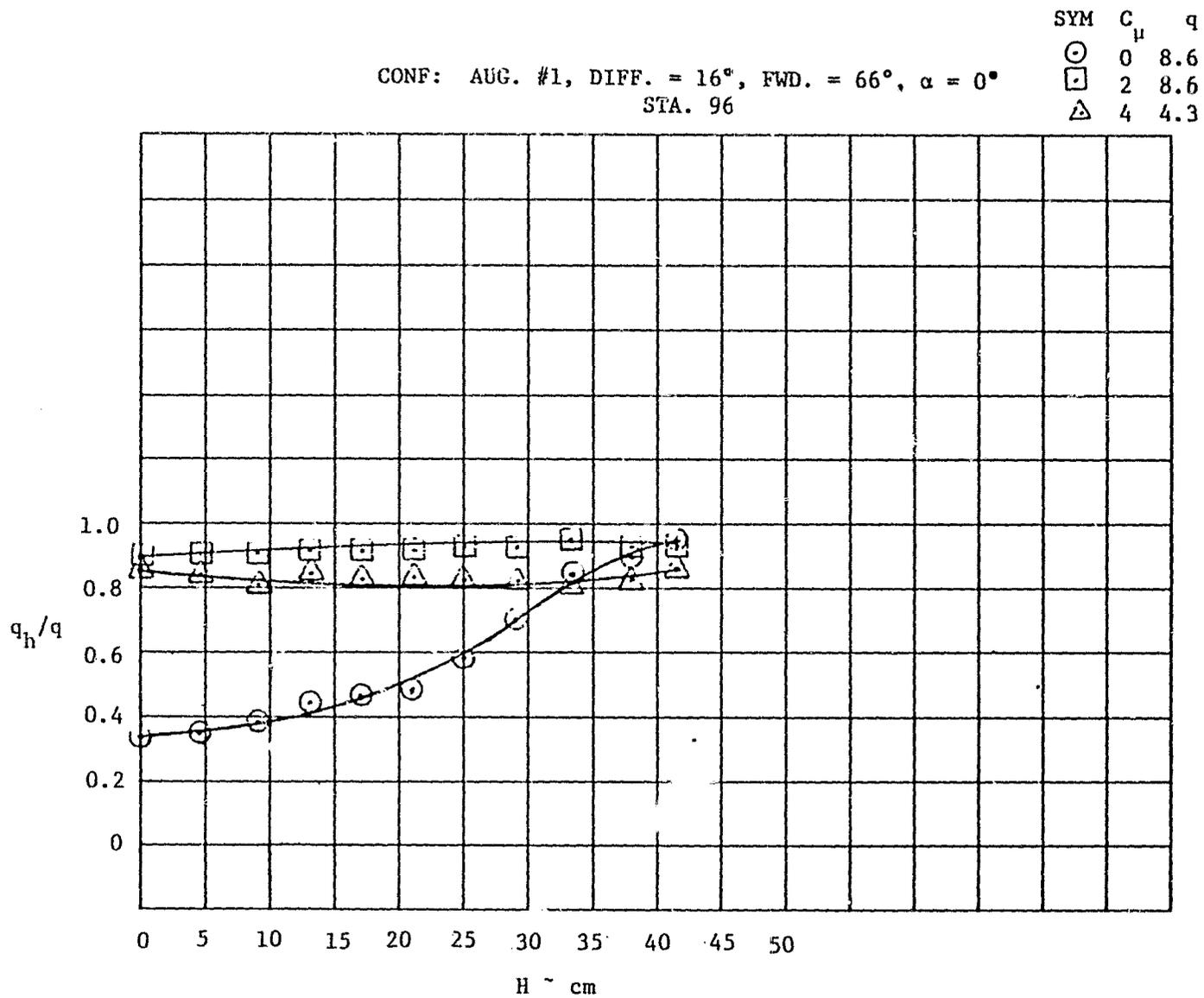


Figure B-3 d. Aug. #1, Diff = 16°,  $\theta = 40^\circ$ ,  $\alpha = 0^\circ$ , Sta. 96

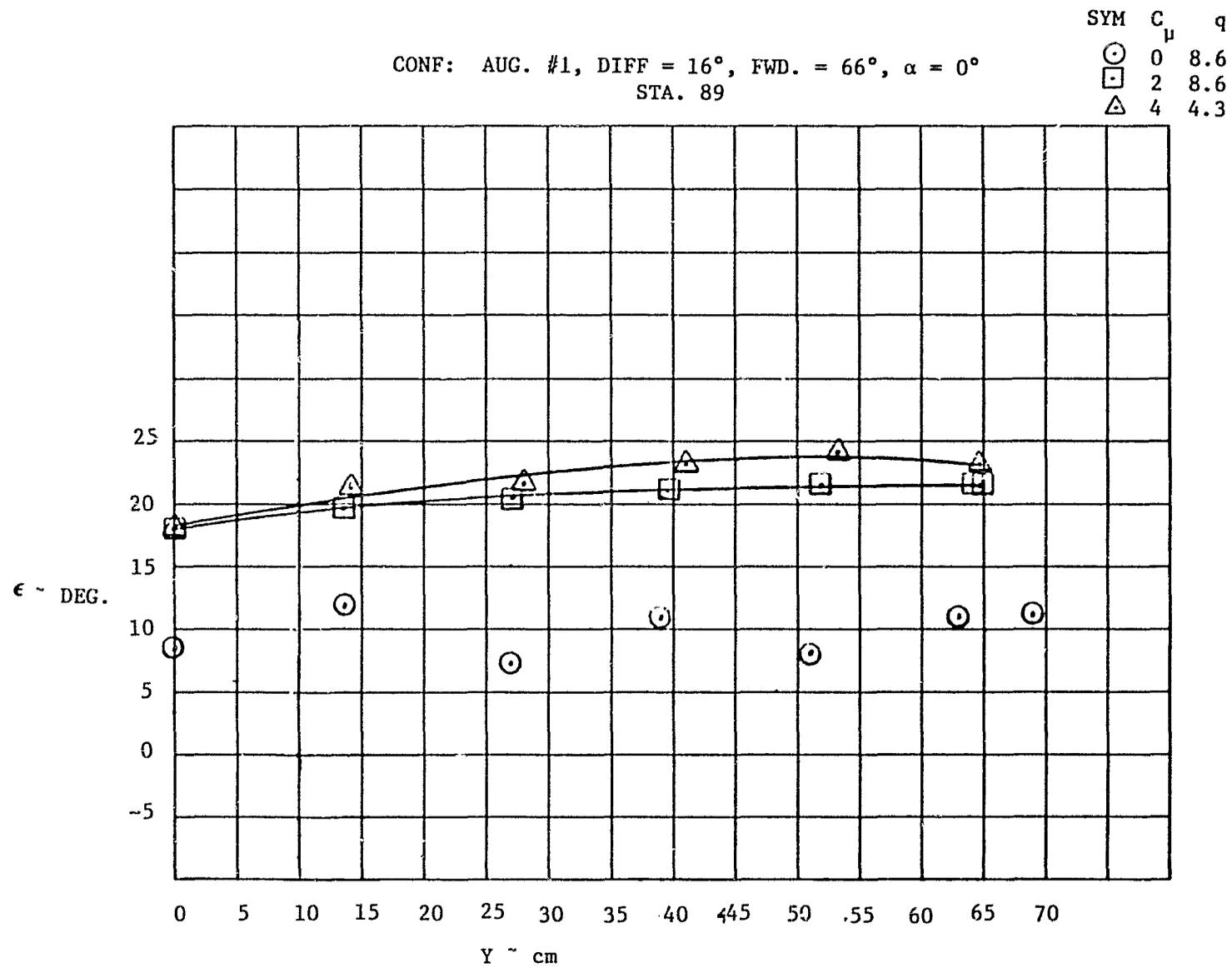


Figure B-4 a, Aug. #1, Diff = 16°,  $\theta = 40^\circ$ ,  $\alpha = 0^\circ$ , Sta. 89

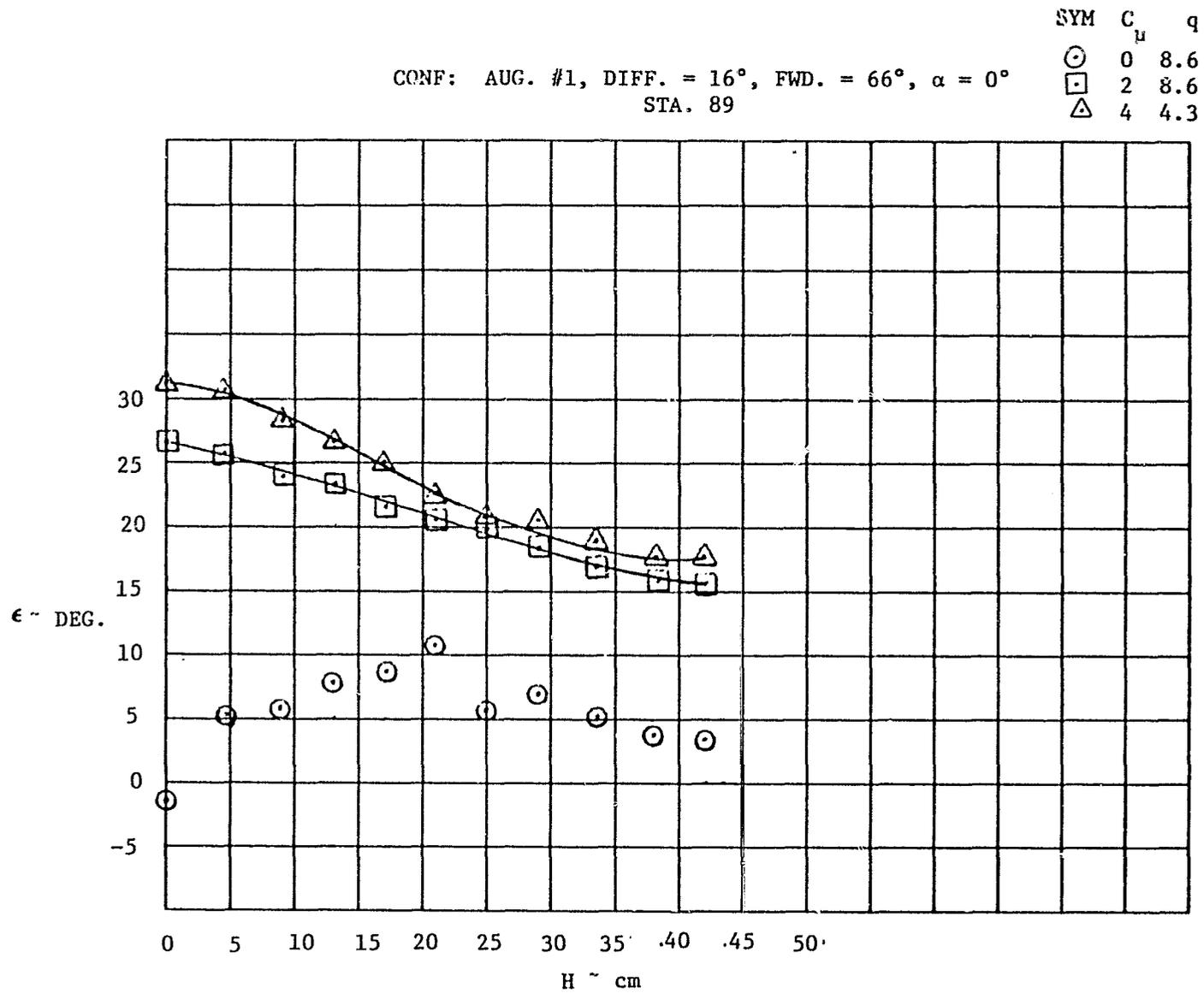


Figure B-4 b. Aug. #1, Diff = 16°,  $\theta = 40^\circ$ ,  $\alpha = 0^\circ$ , Sta. 89

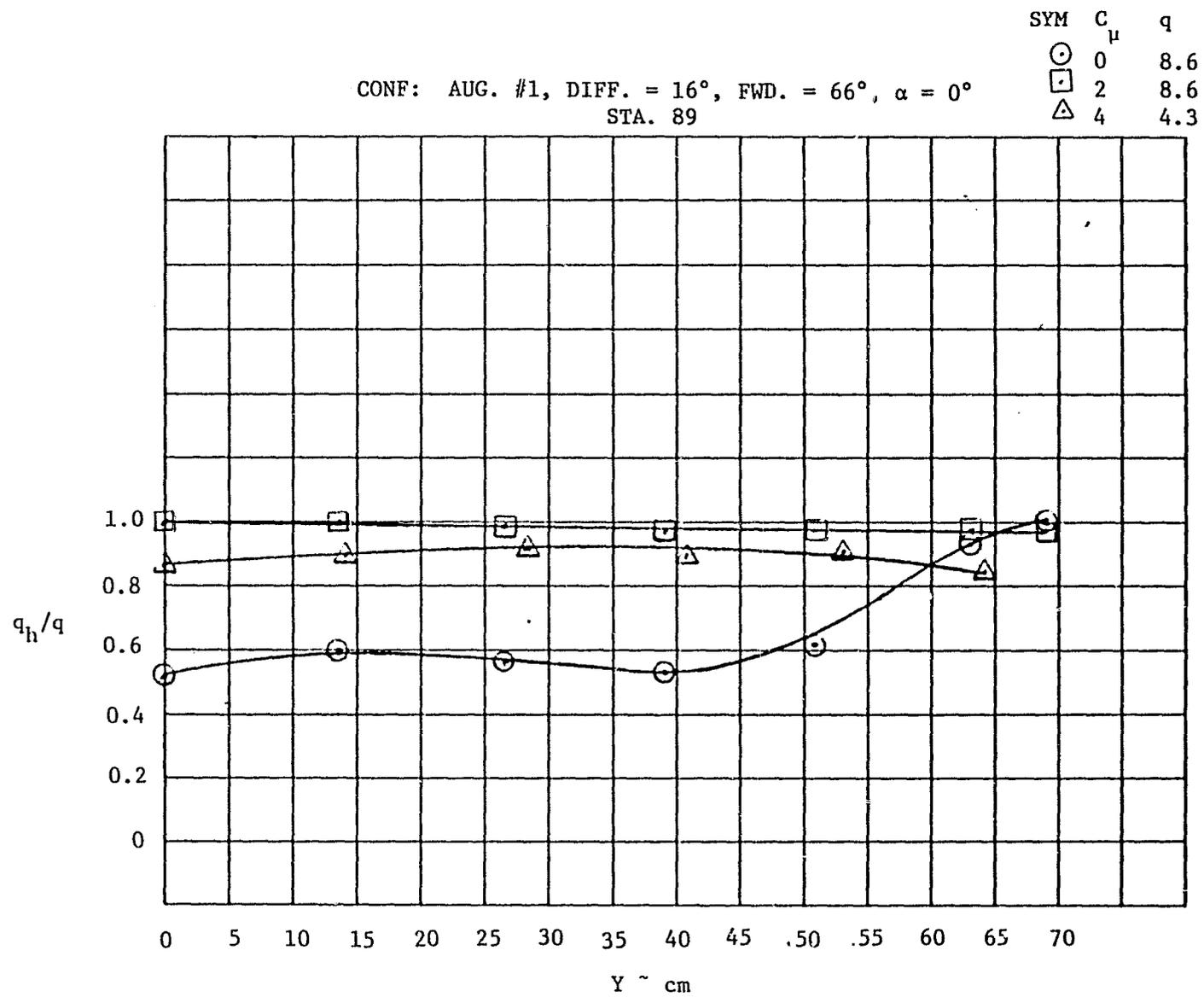


Figure B-4 c. Aug. #1, Diff = 16°,  $\theta = 40^\circ$ ,  $\alpha = 0^\circ$ , Sta. 89

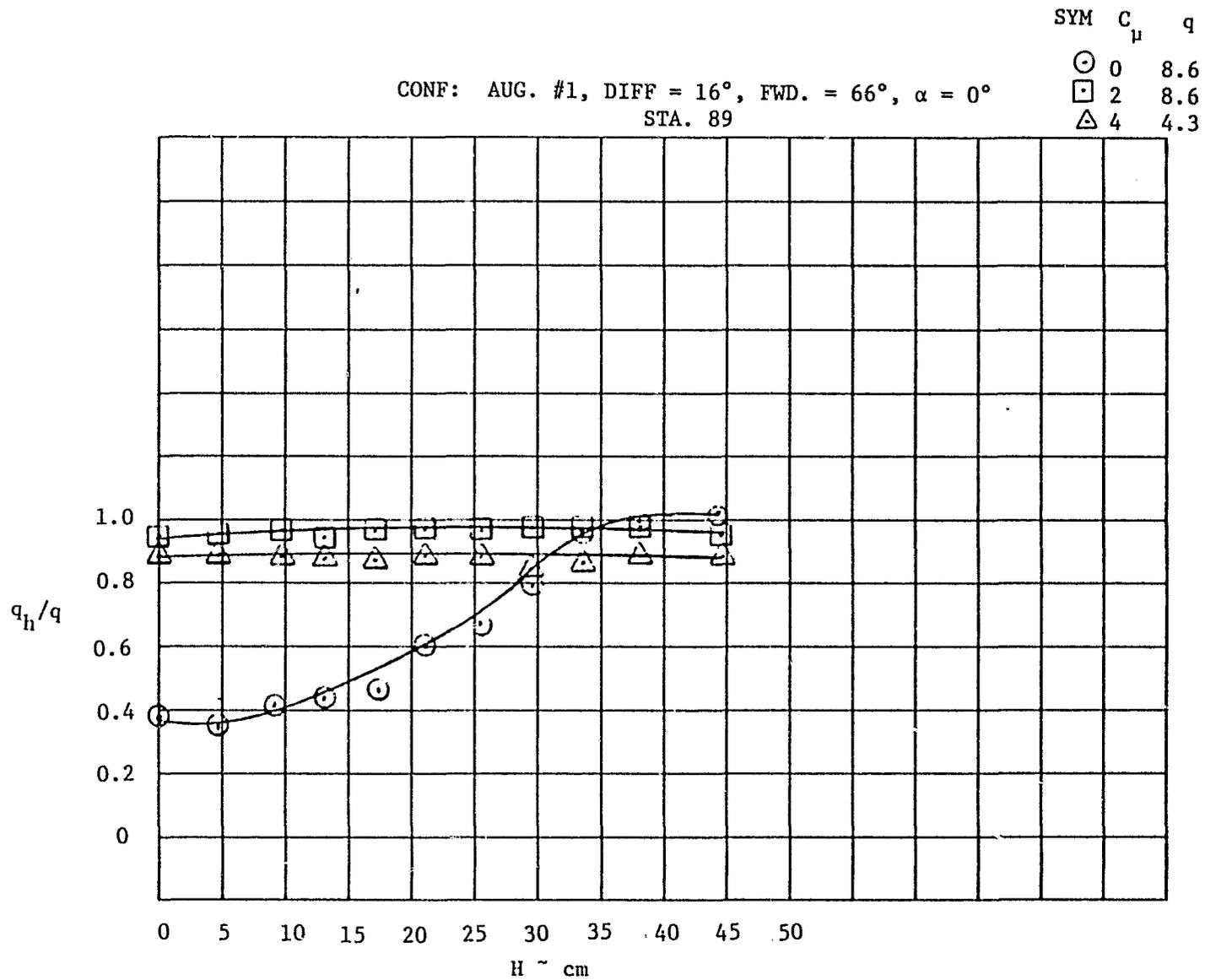


Figure B-4 d. Aug. #1, Diff = 16°,  $\theta = 40^\circ$ ,  $\alpha = 0^\circ$ , Sta. 89

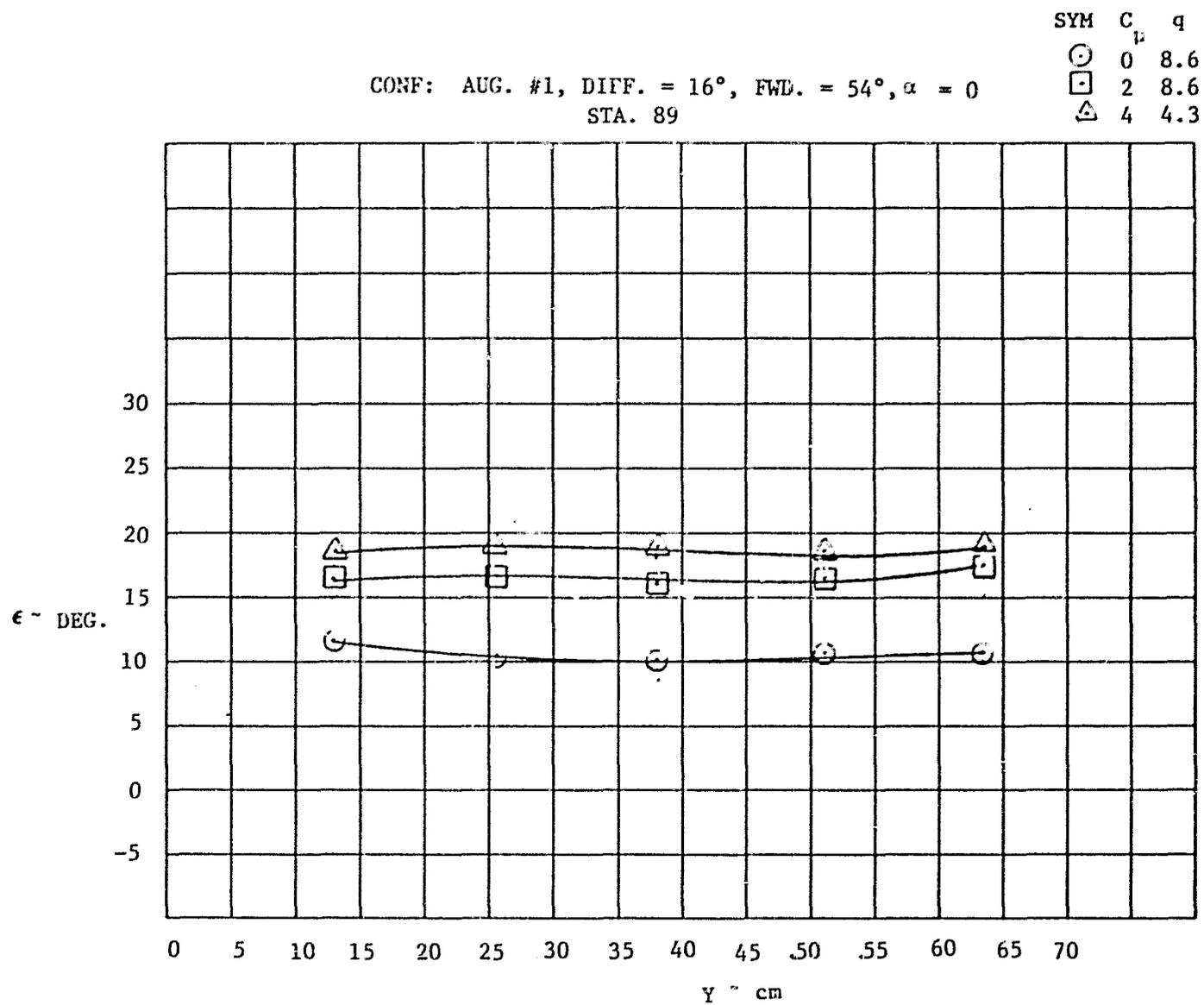


Figure B-5 a. Aug. #1, Diff =  $8^\circ$ ,  $\theta = 40^\circ$ ,  $\alpha = 0^\circ$ , Sta. 89

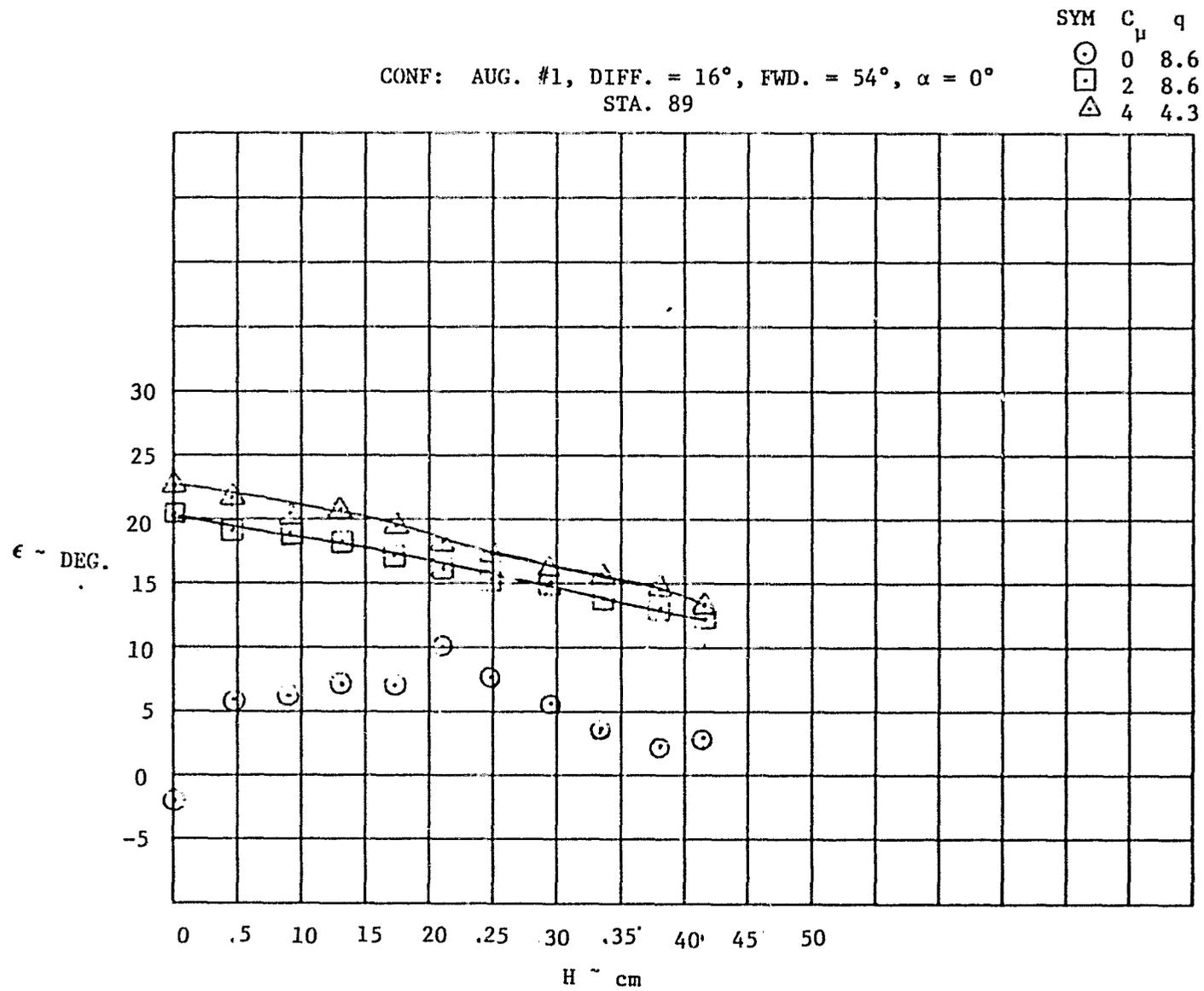
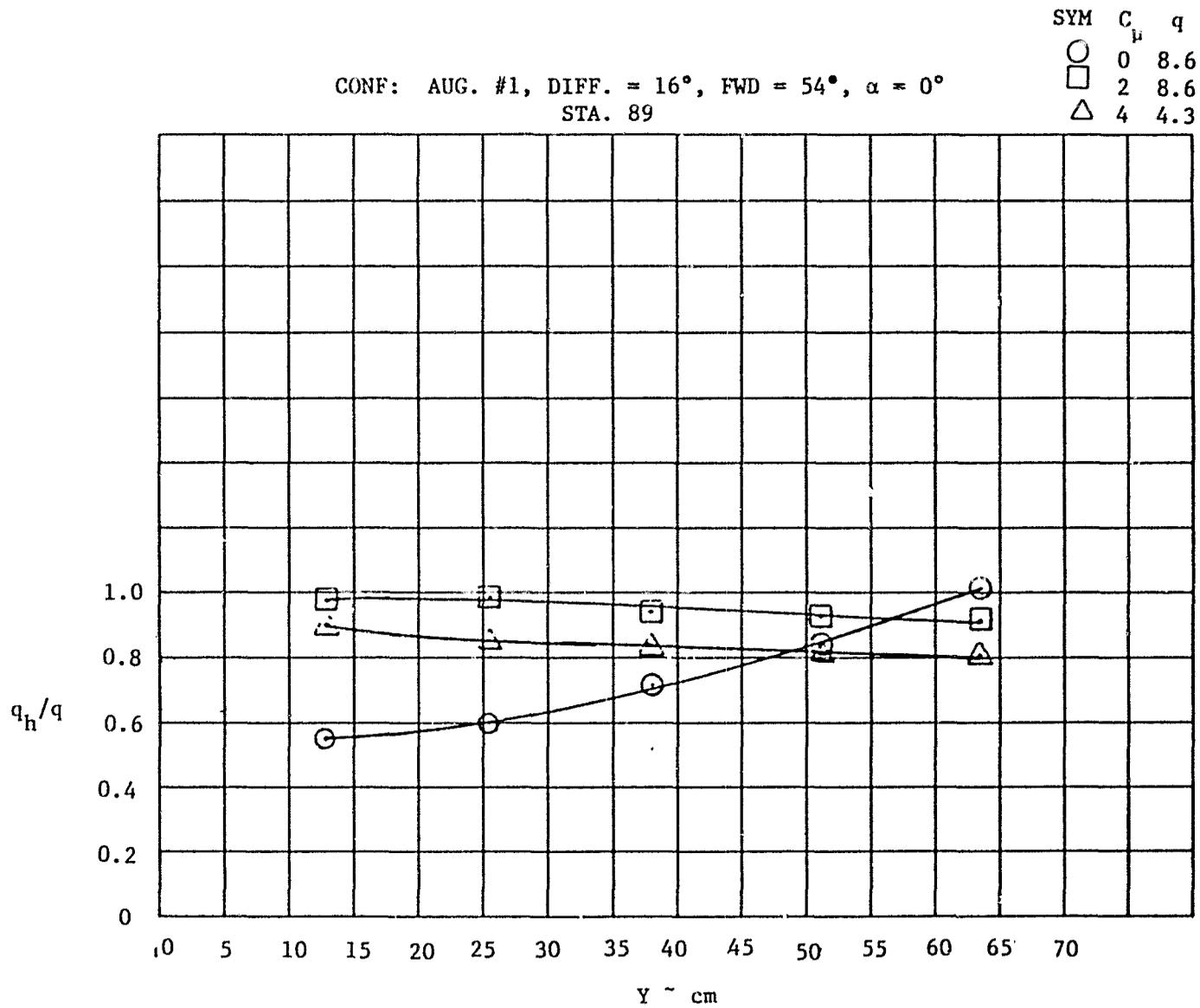


Figure B-5 b. Aug. #1, Diff = 8°,  $\theta = 40^\circ$ ,  $\alpha = 0^\circ$ , Sta. 89

Figure B-5 c. Aug. #1, Diff = 8°,  $\theta = 40^\circ$ ,  $\alpha = 0^\circ$ , Sta. 89

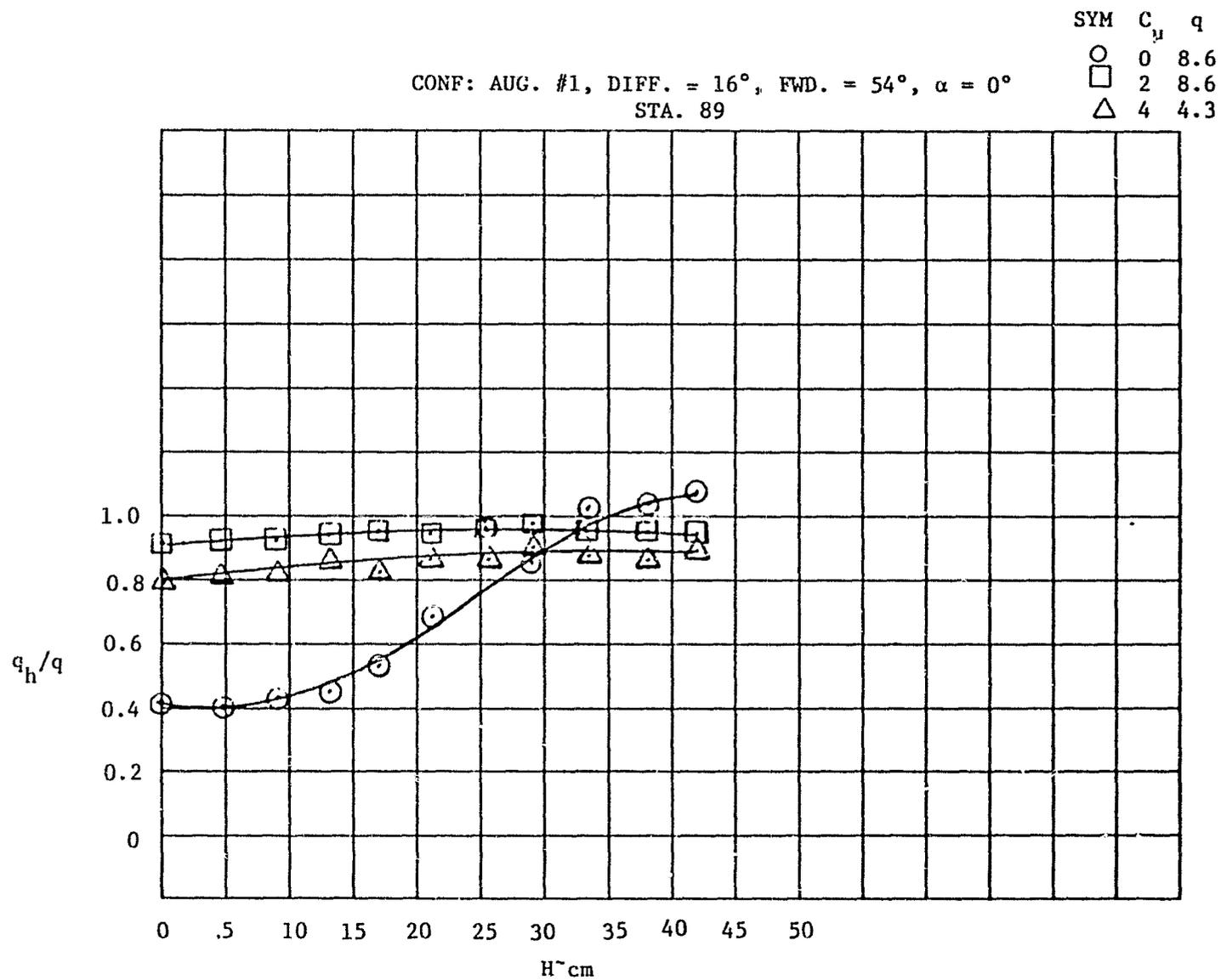


Figure B-5 d. Aug. #1, Diff = 8°,  $\theta = 40^\circ$ ,  $\alpha = 0^\circ$ , Sta. 89

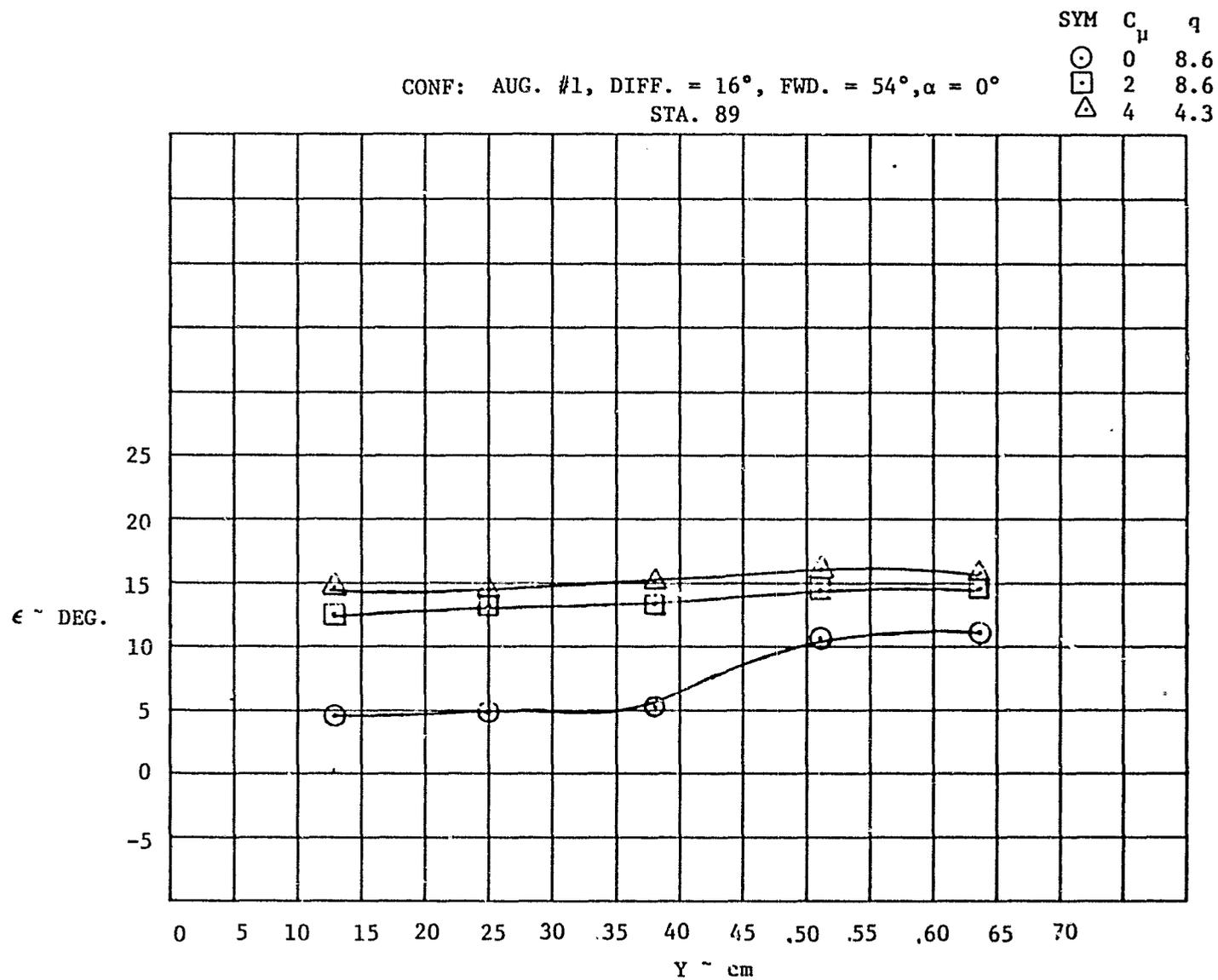


Figure B-6 a. Aug. #1, Diff =  $8^\circ$ ,  $\theta = 40^\circ$ ,  $\alpha = 0^\circ$ , Sta. 103

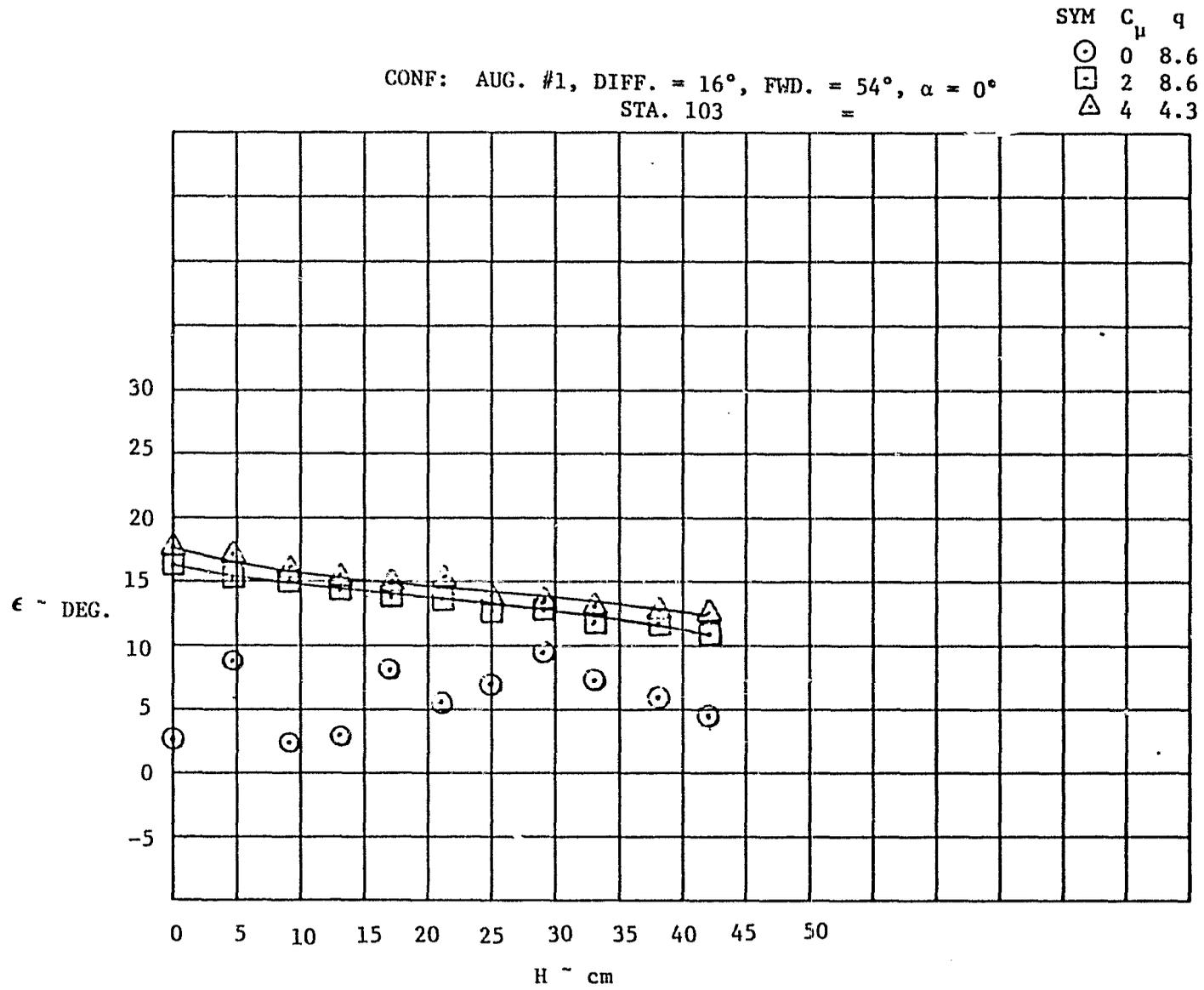


Figure B-6 b. Aug. #1, Diff = 8°,  $\theta = 40^\circ$ ,  $\alpha = 0^\circ$ , Sta. 103

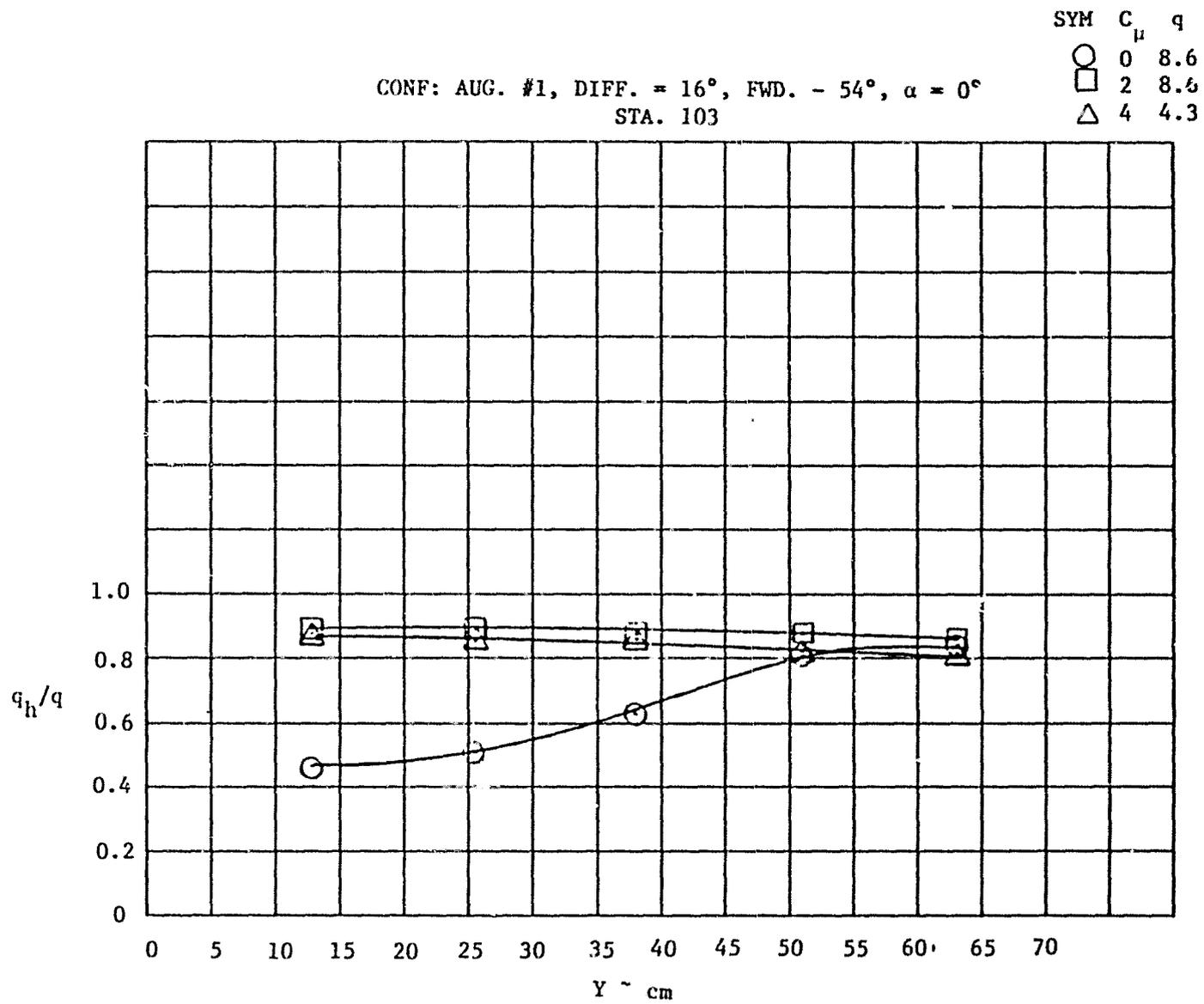


Figure B-6 c. Aug. #1, Diff = 8°,  $\theta = 40^\circ$ ,  $\alpha = 0^\circ$ , Sta. 103

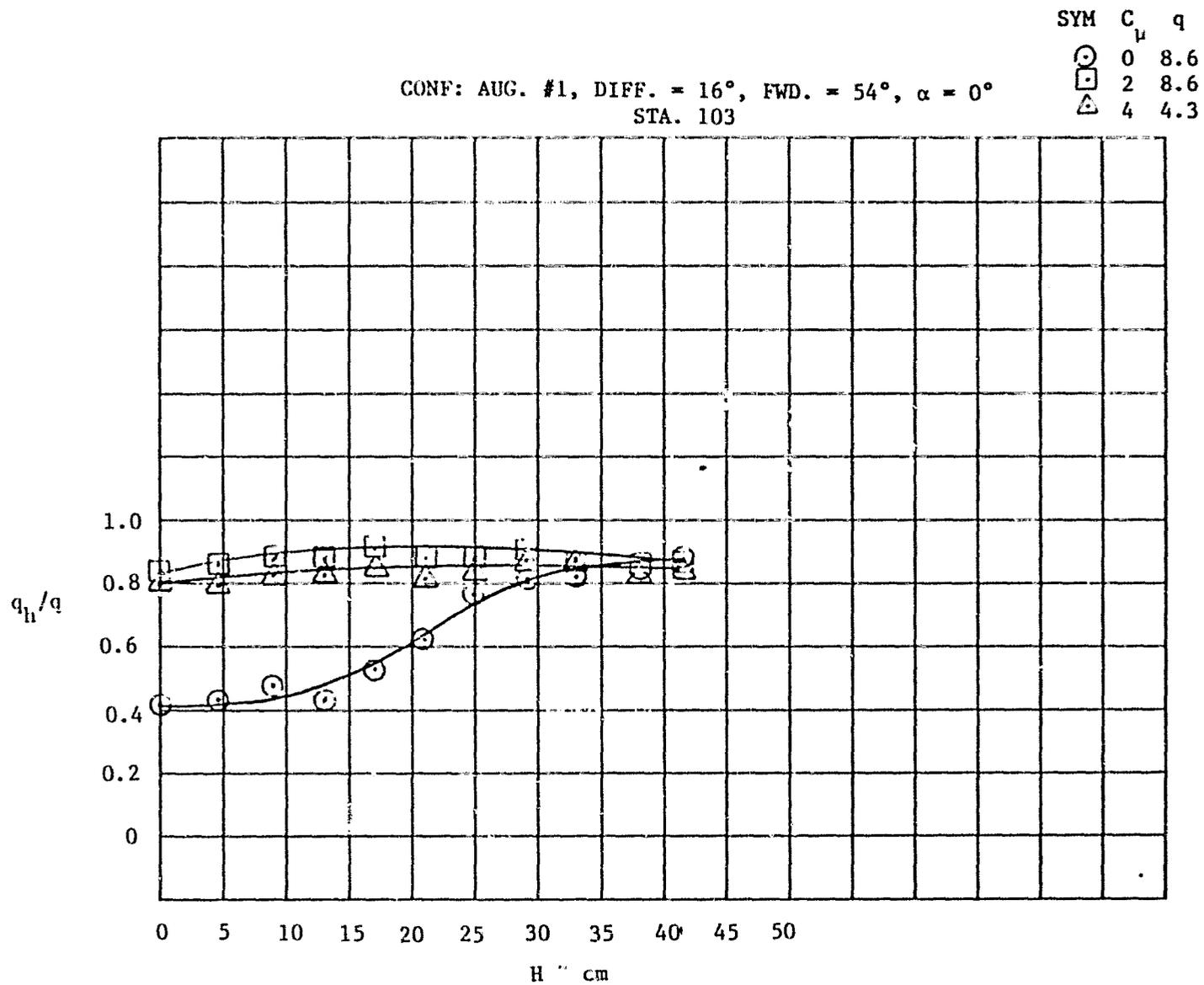


Figure B-6 d. Aug. #1, Diff = 8°,  $\theta = 40^\circ$ ,  $\alpha = 0^\circ$ , Sta. 103

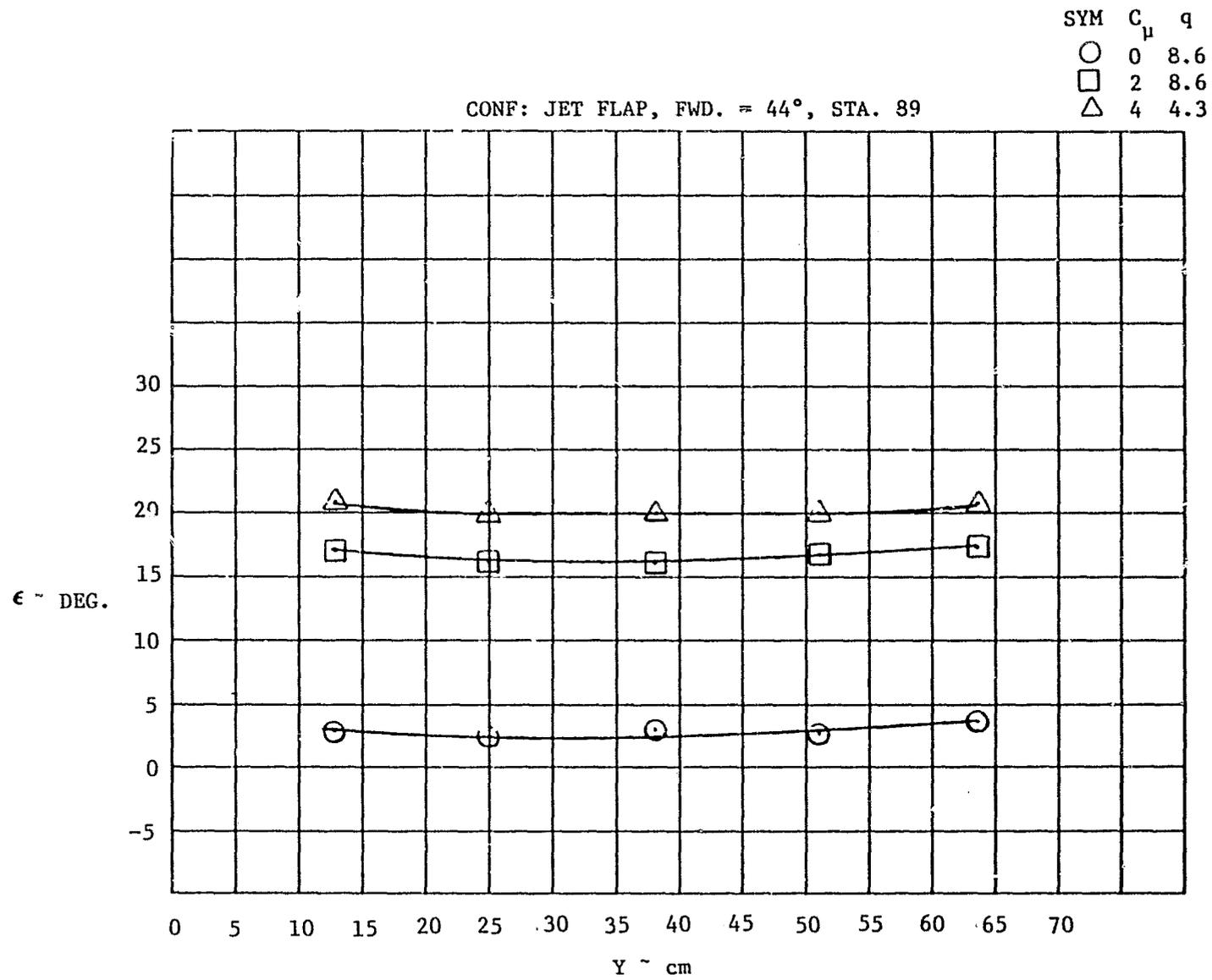
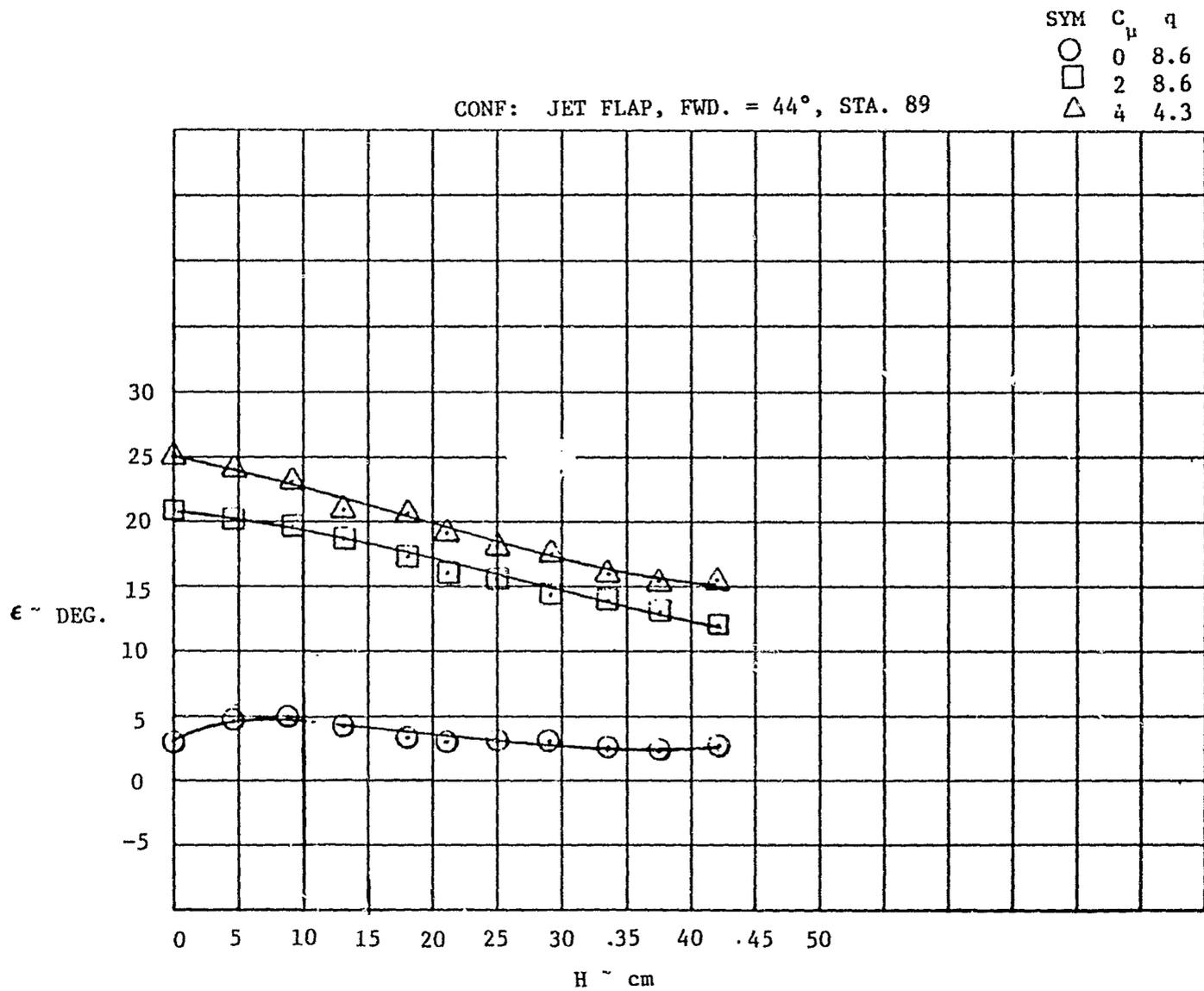
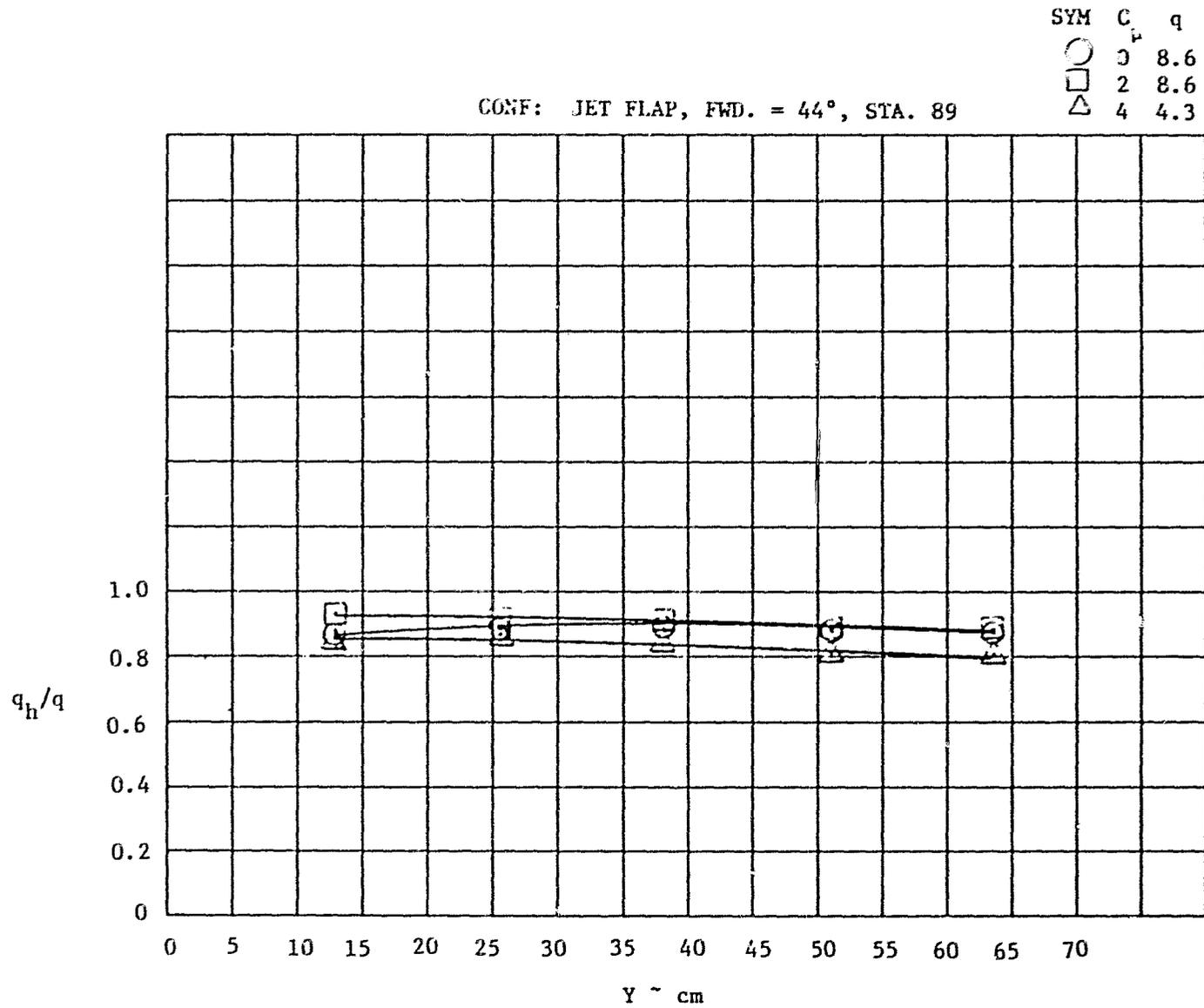
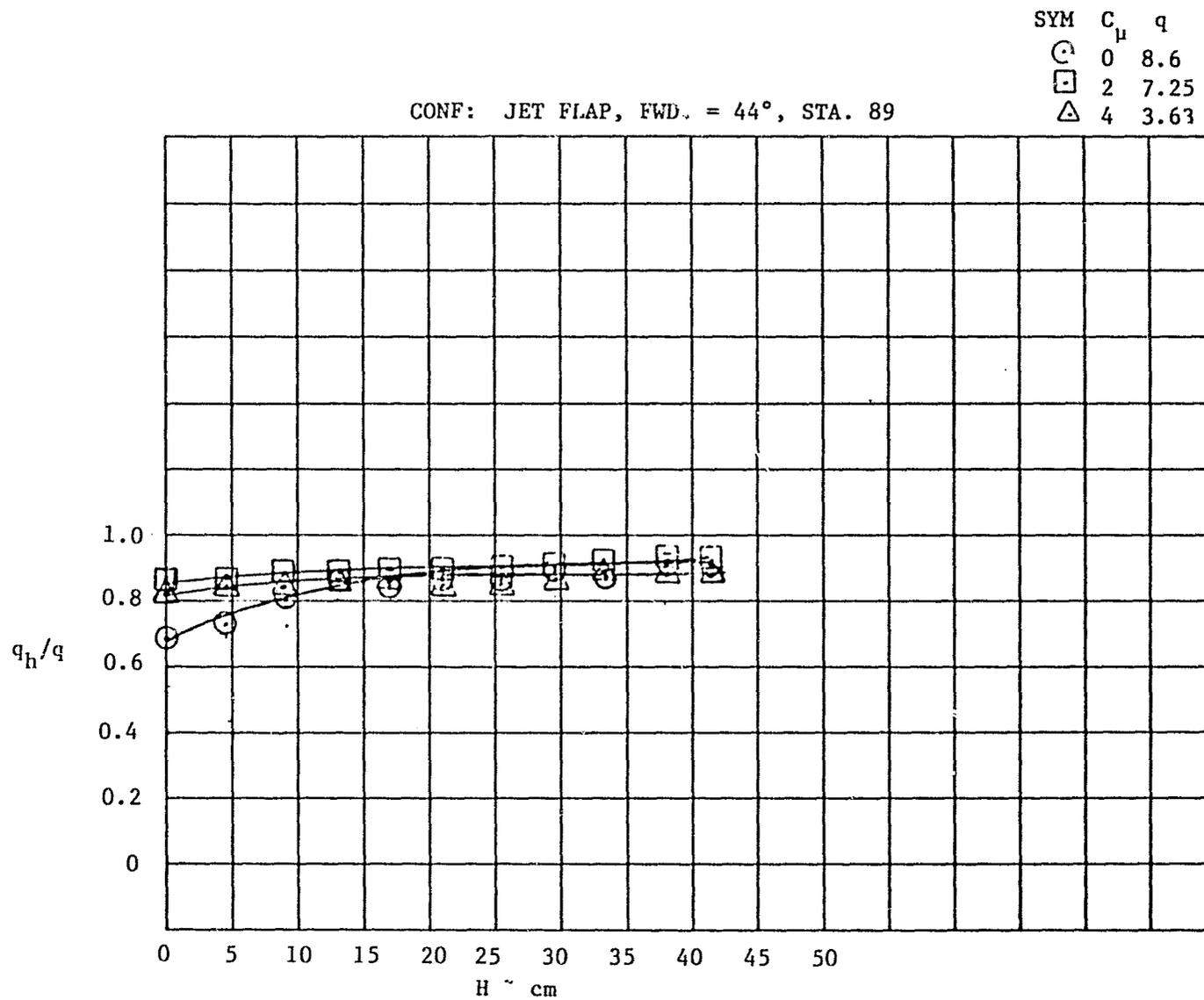


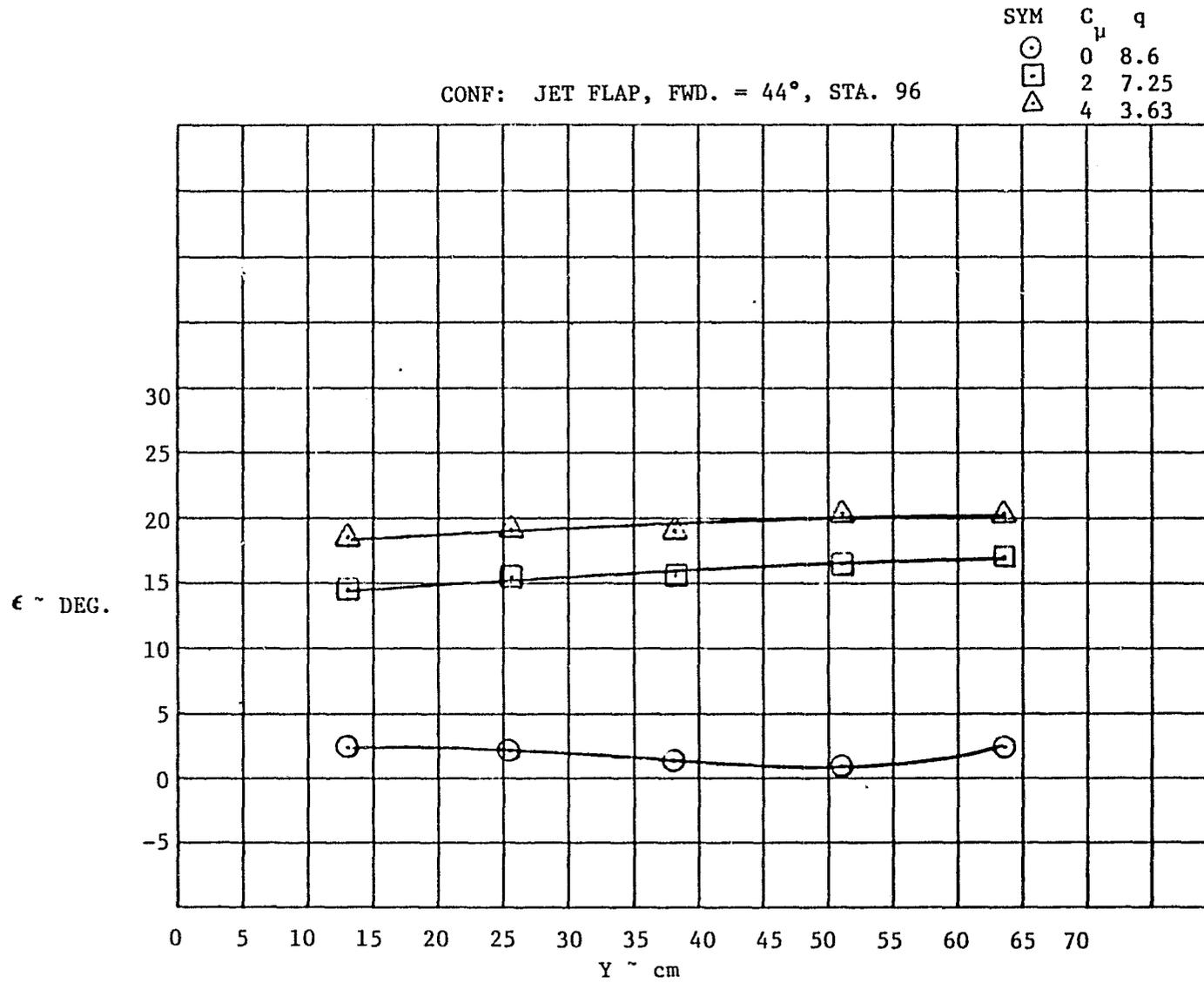
Figure B-7 a. Jet Flap,  $\theta = 40^\circ$ , Sta. 89

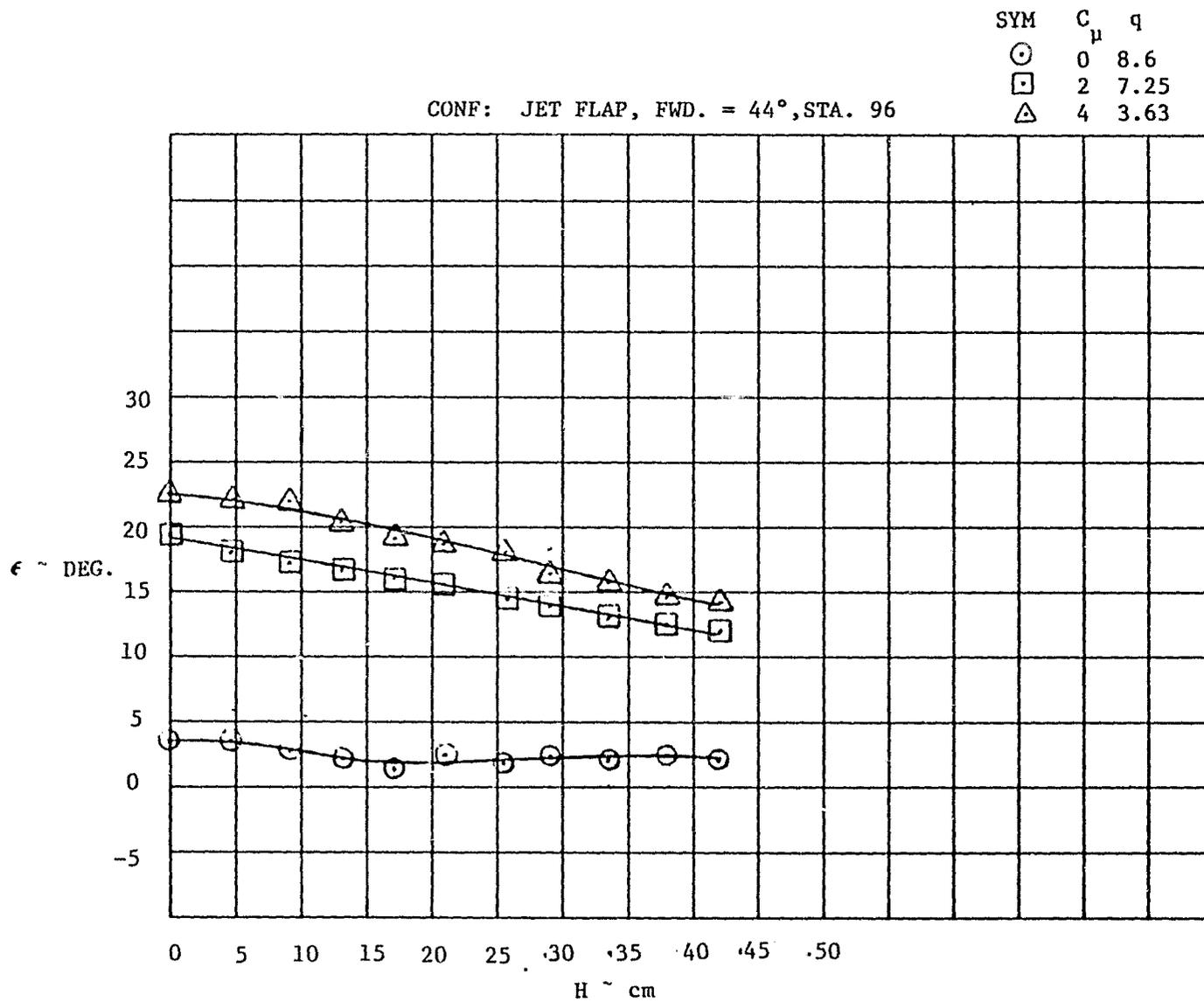
150

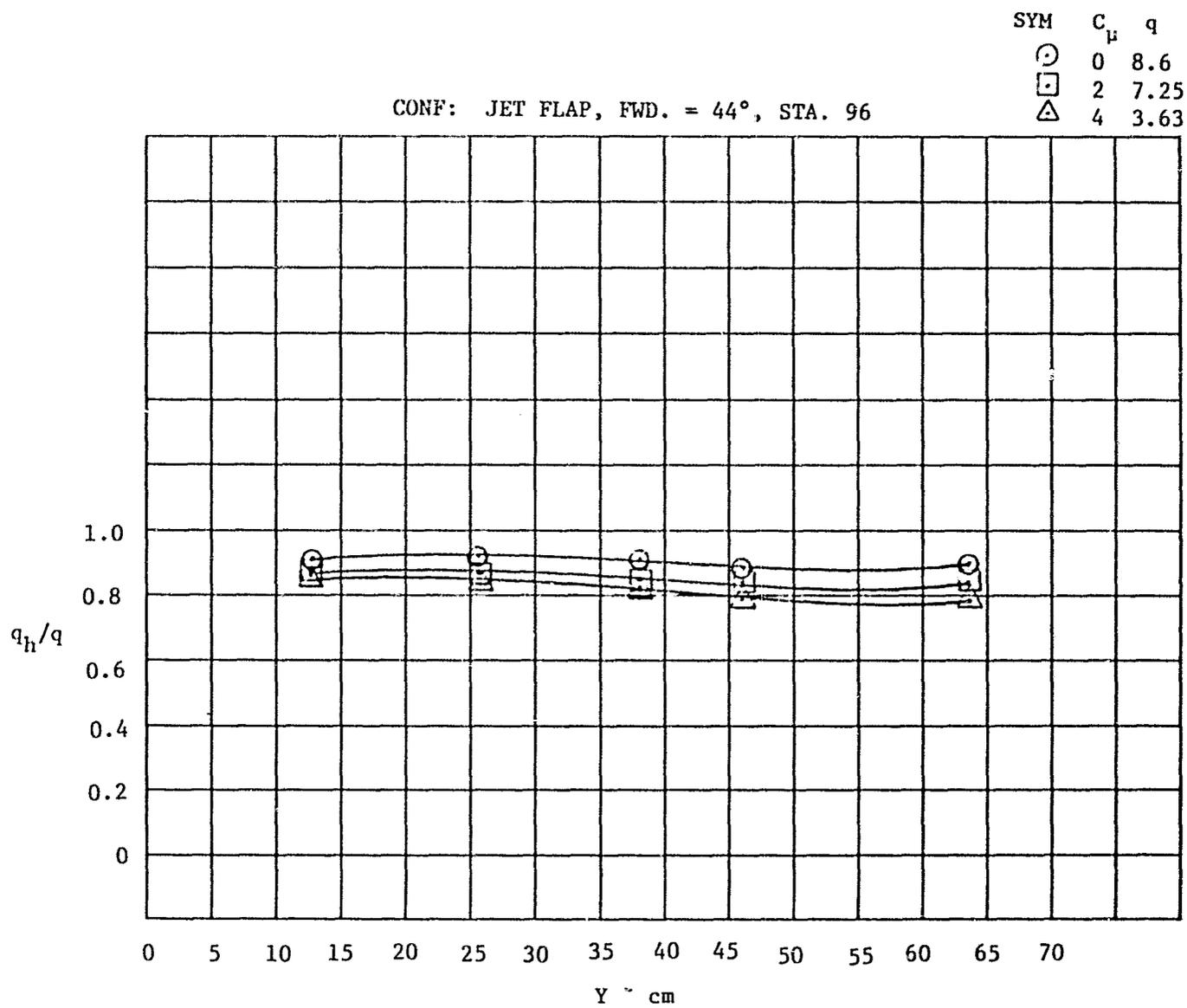
Figure B-7 b. Jet Flap,  $\theta = 40^\circ$ , Sta. 89

Figure B-7 c. Jet Flap,  $\theta = 40^\circ$ , Sta. 89

Figure B-7 d. Jet Flap,  $\theta = 40^\circ$ , Sta. 89

Figure B-3 a. Jet Flap,  $\theta = 40^\circ$ , Sta. 96

Figure B-8 b. Jet Flap,  $\theta = 40^\circ$ , Sta. 96

Figure B-8 c. Jet Flap,  $\theta = 40^\circ$ , Sta. 96

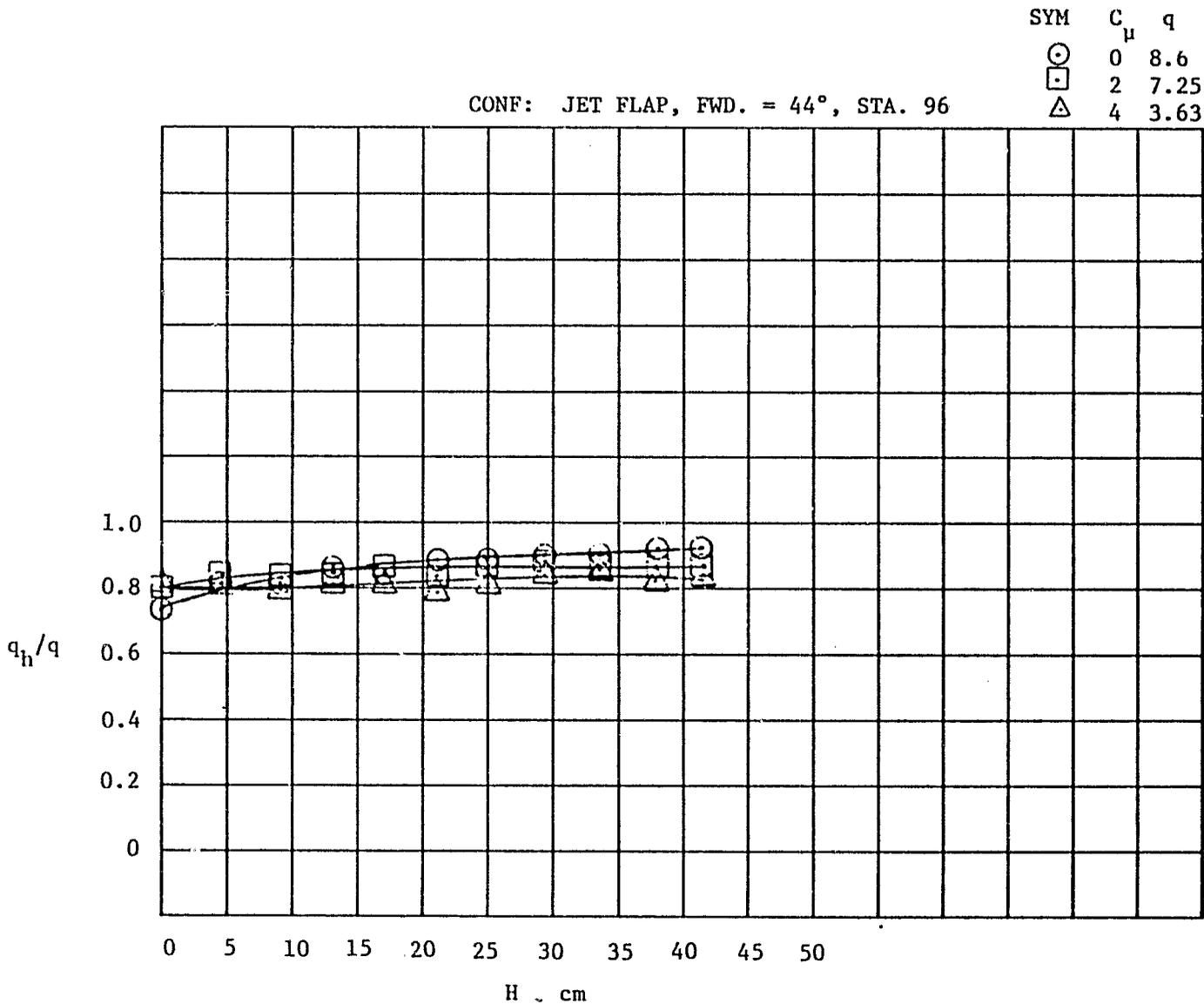
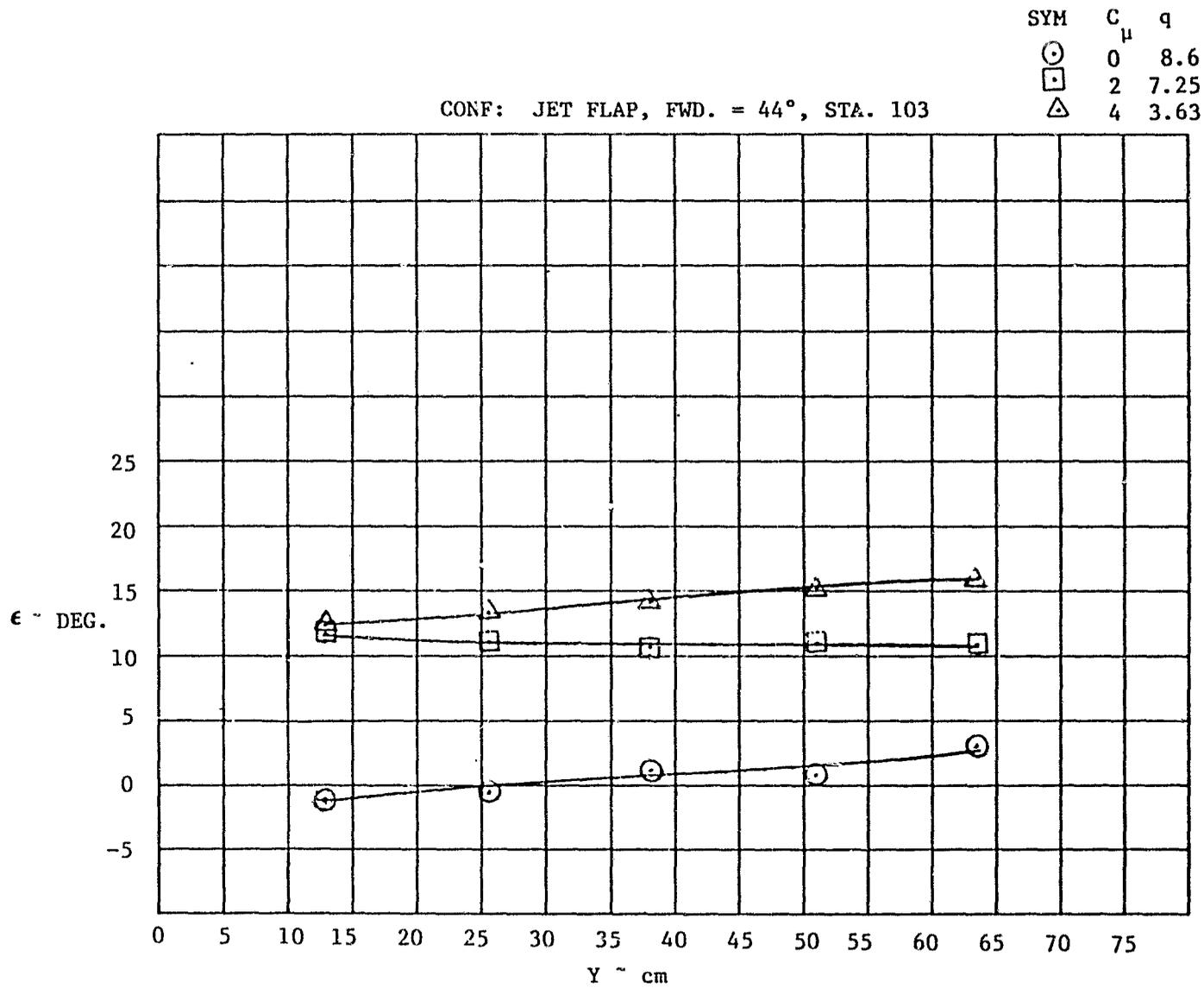
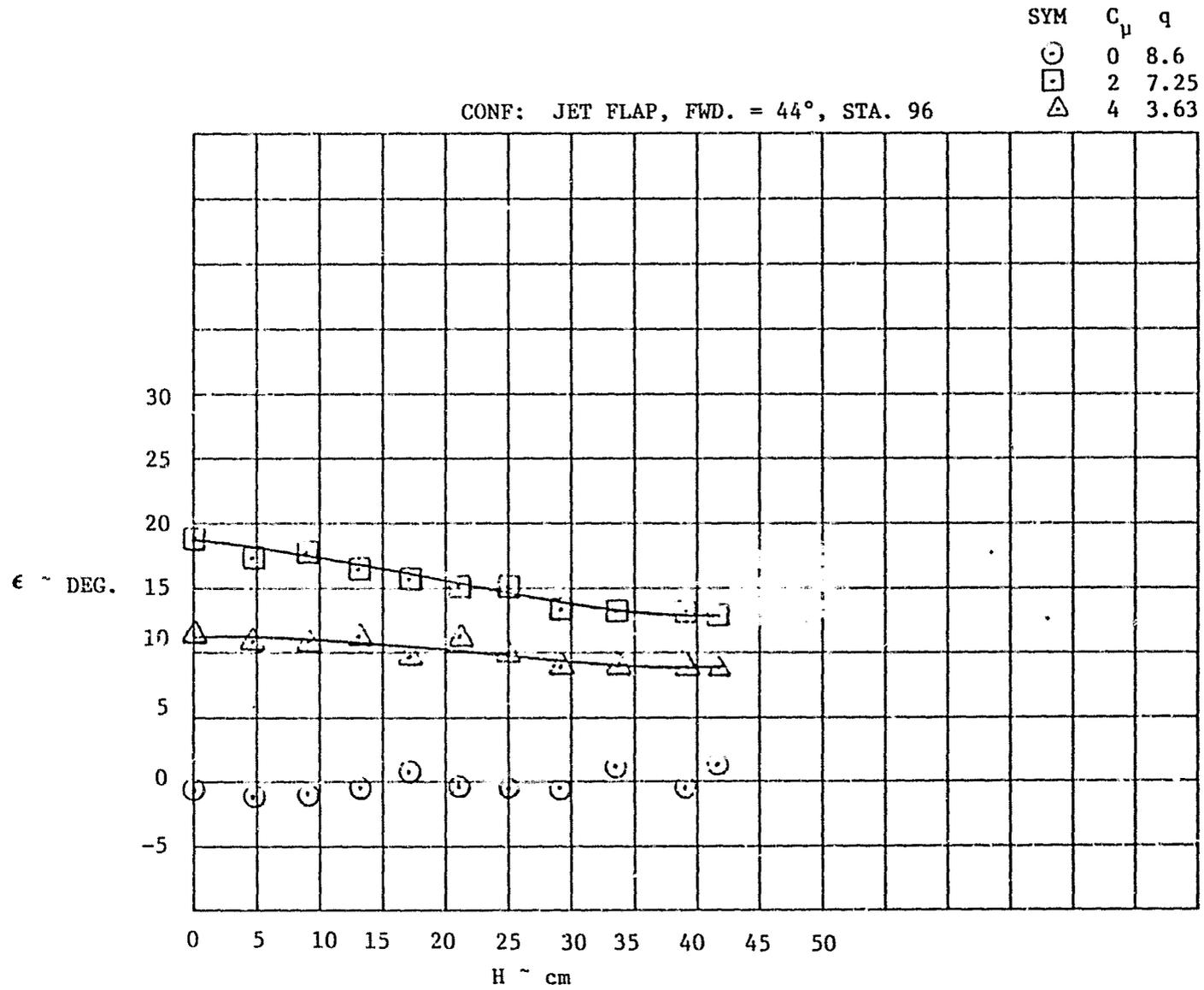
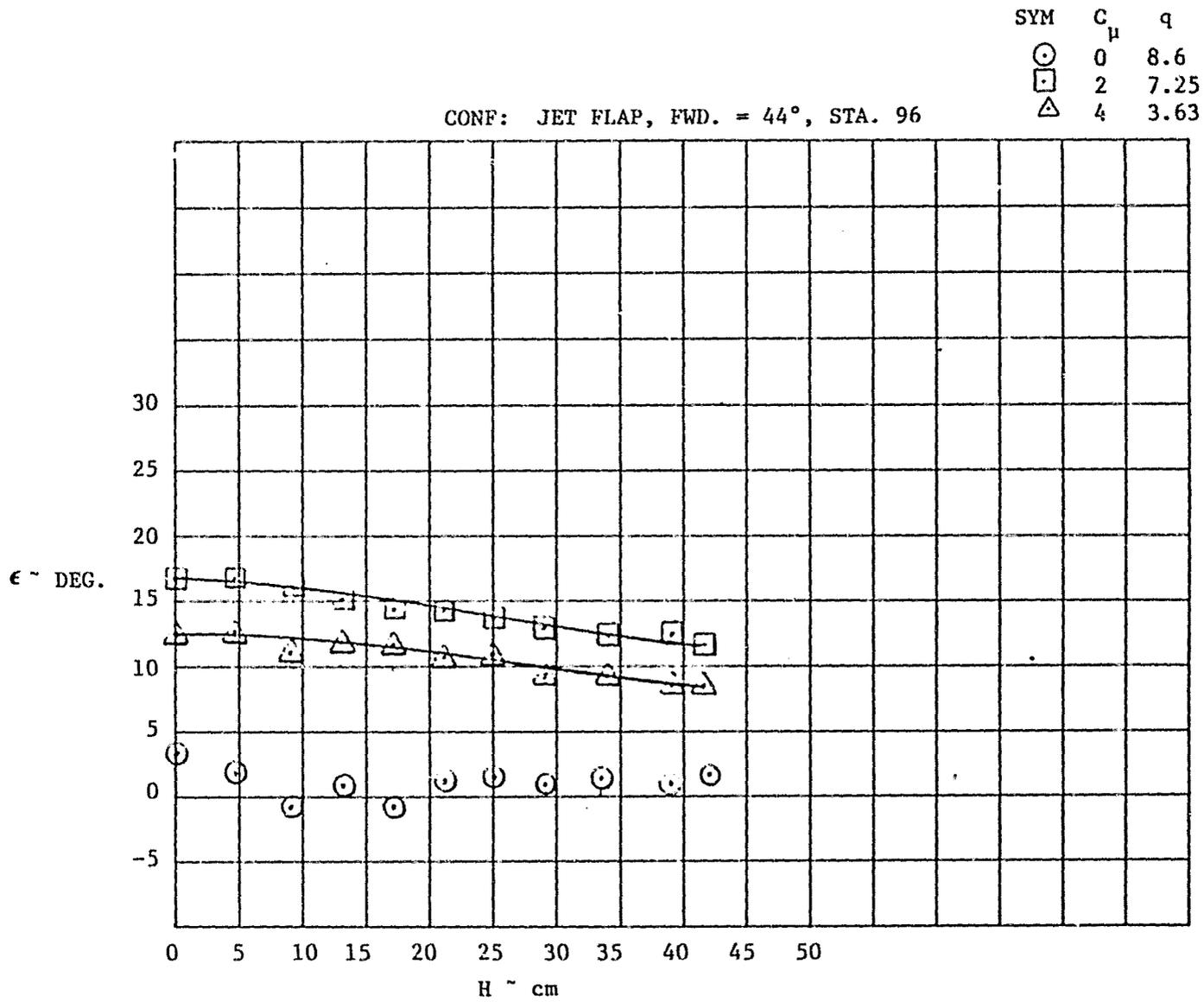
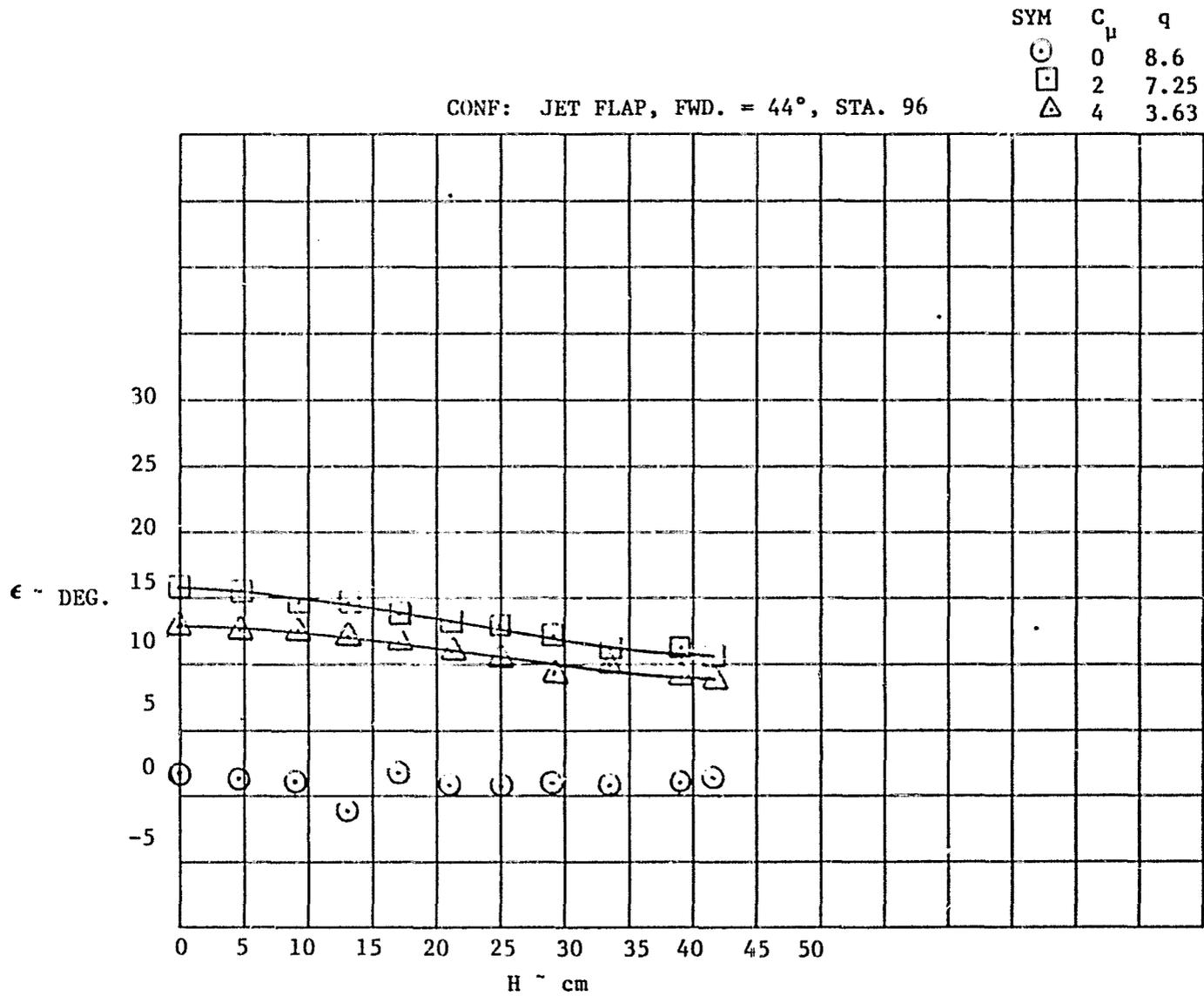


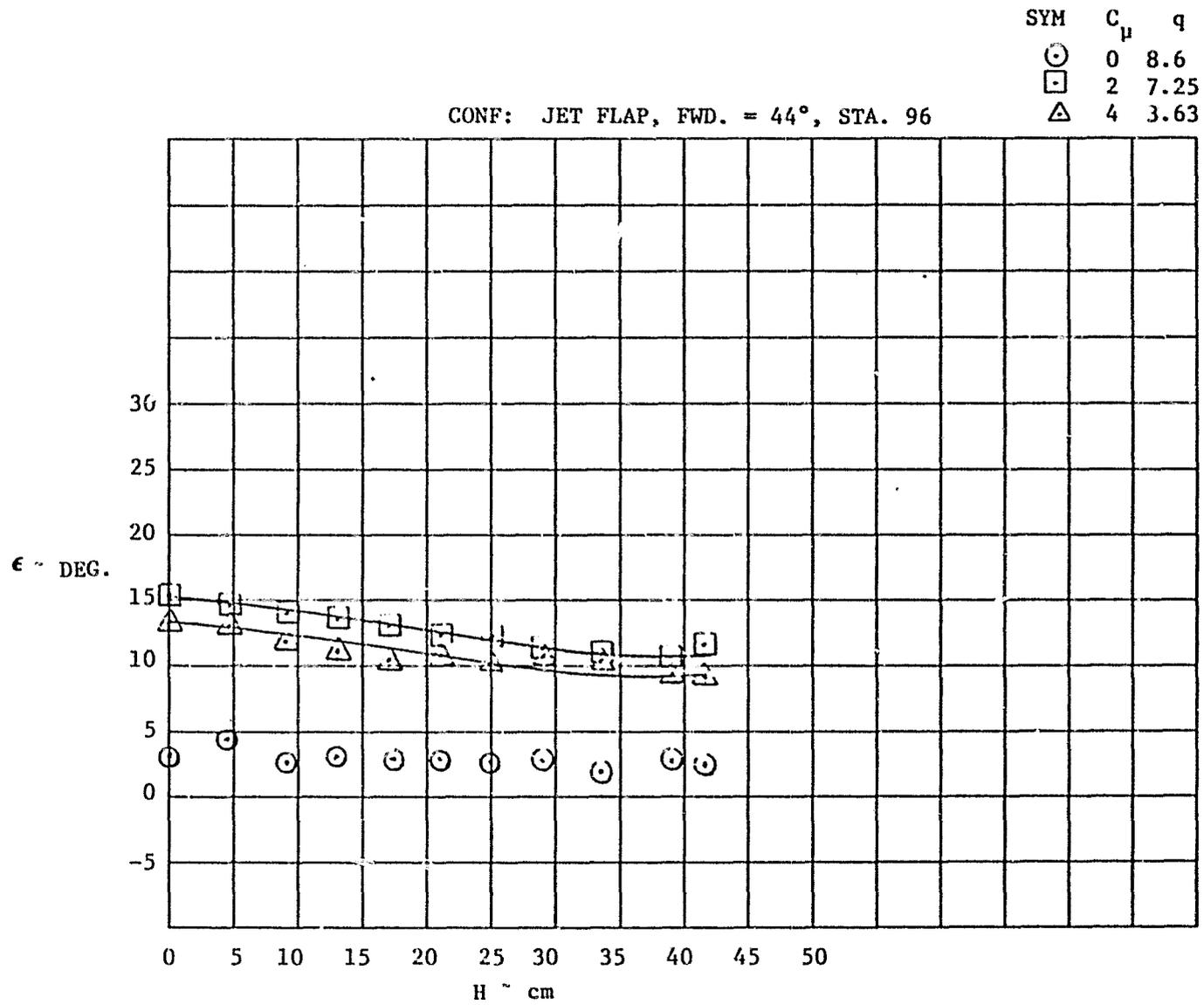
Figure B-8 d. Jet Flap,  $\theta = 40^\circ$ , Sta. 96

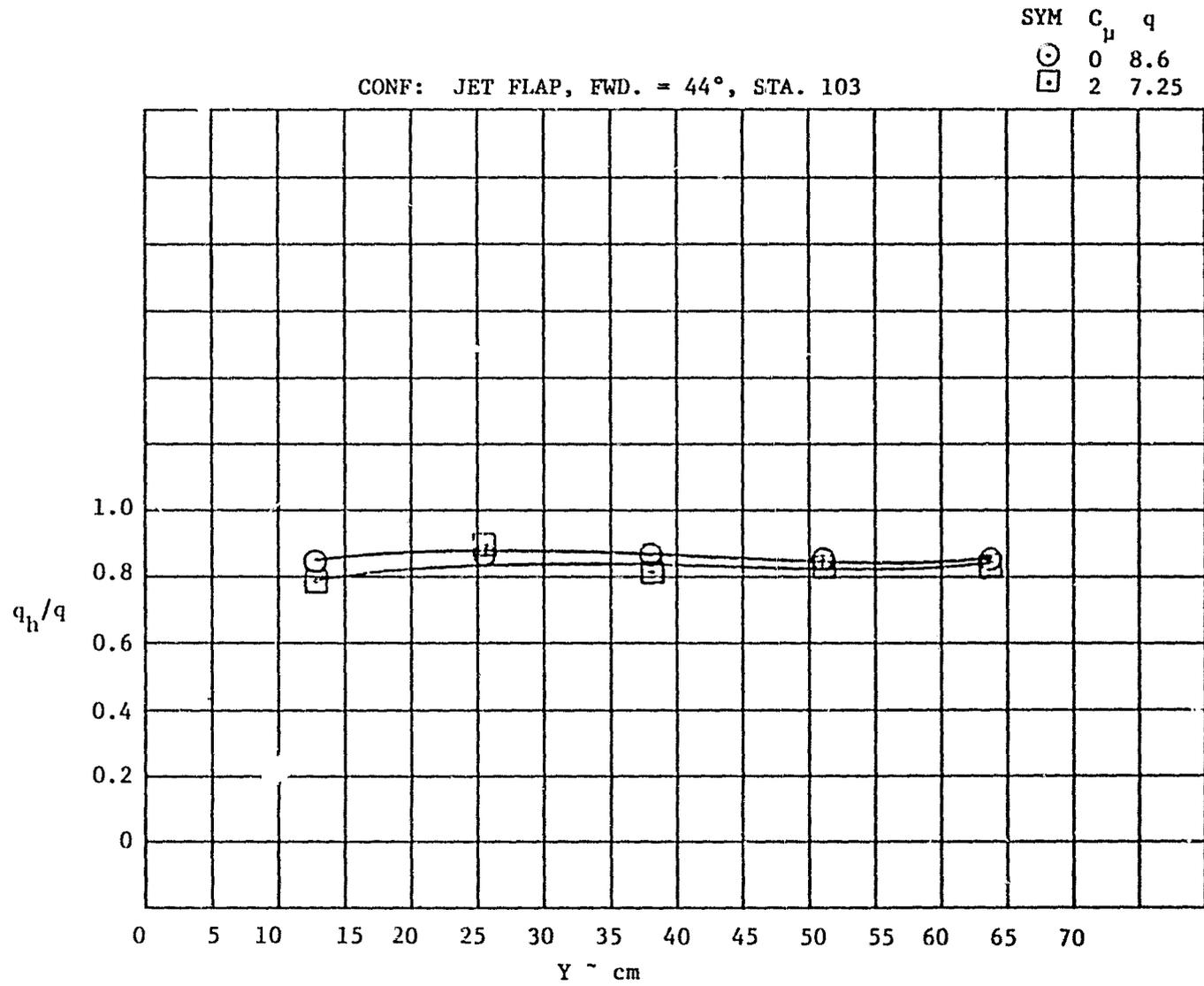
Figure B-9 a. Jet Flap,  $\theta = 40^\circ$ , Sta. 103

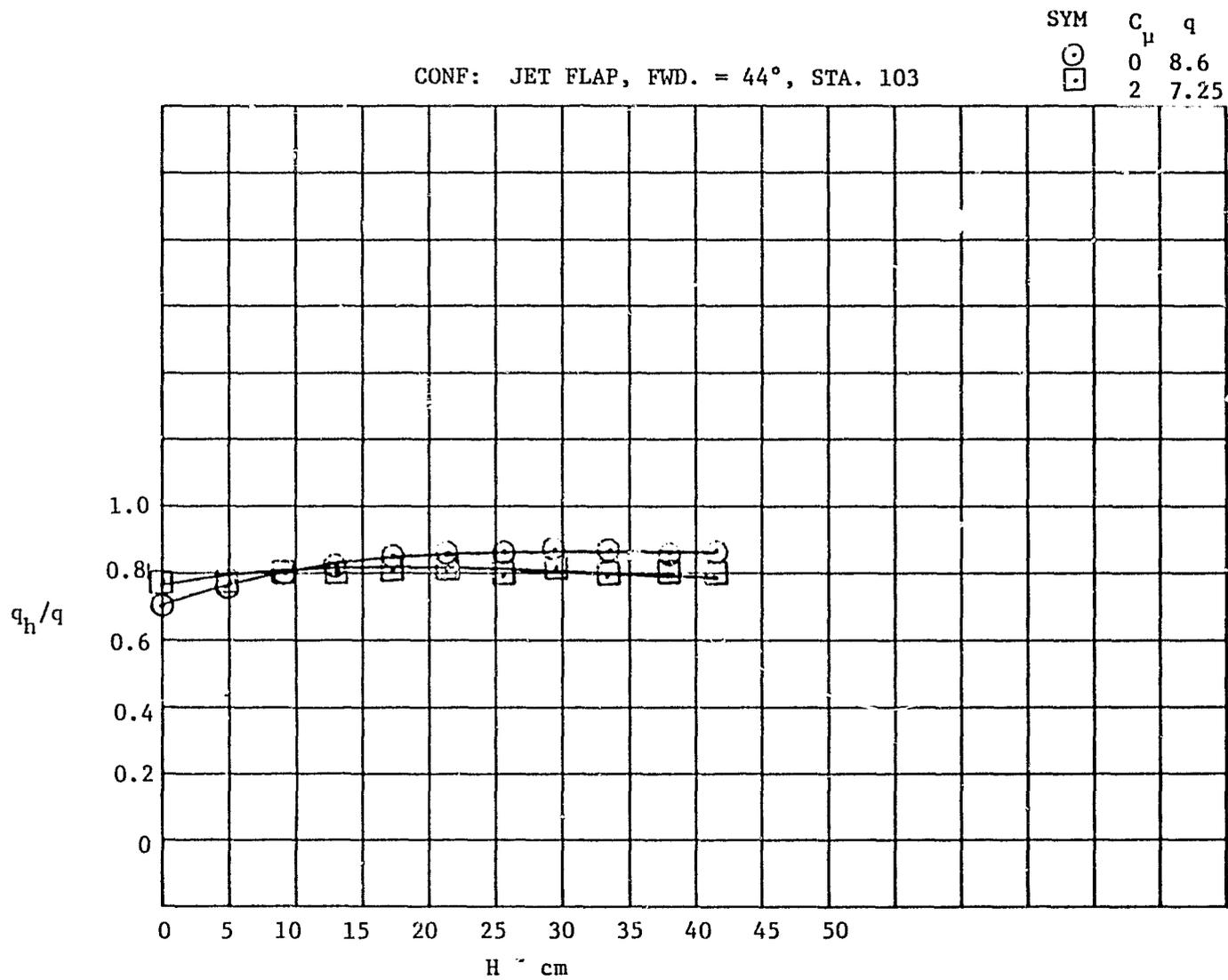
Figure B-9 b. Jet Flap,  $\theta = 40^\circ$ , Sta. 103

Figure B-9 c. Jet Flap,  $\theta = 40^\circ$ , Sta. 103

Figure B-9 d. Jet Flap,  $\theta = 40^\circ$ , Sta. 103

Figure B-9 e. Jet Flap,  $\theta = 40^\circ$ , Sta. 103

Figure B-9 f. Jet Flap,  $\theta = 40^\circ$ , Sta. 103

Figure B-9 g. Jet Flap,  $\theta = 40^\circ$ , Sta. 103

A STUDY OF A  
VTOL THRUSTING EJECTOR  
IN LOW SPEED FLIGHT

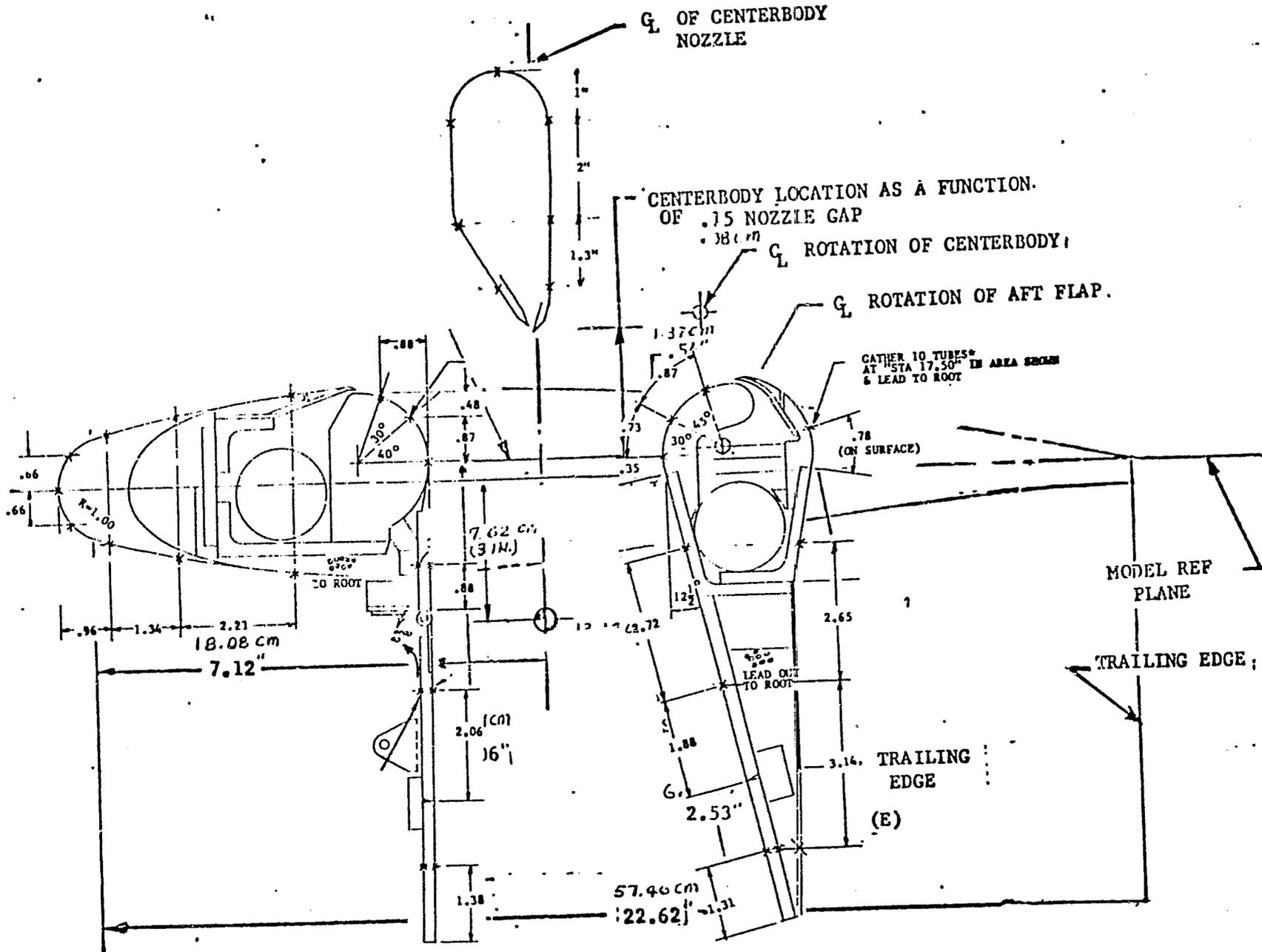
Vearl R. Stewart  
Rockwell International  
North American Aircraft Division

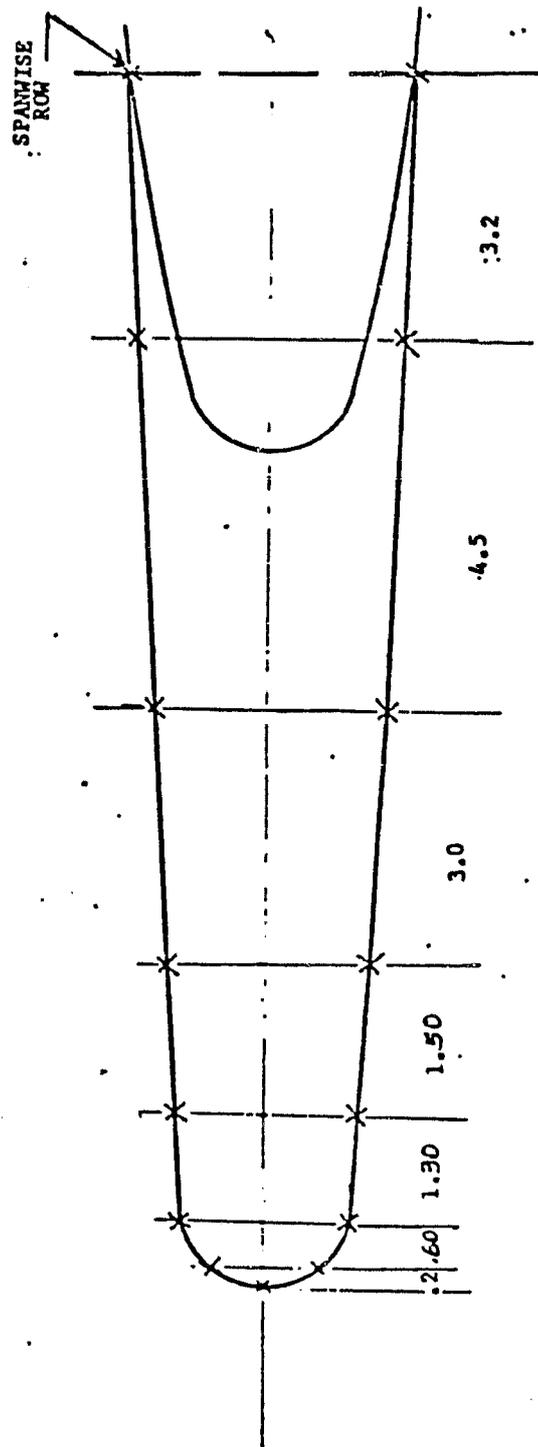
APPENDIX C - TABULATED DATA

## APPENDIX C

### TABULATED DATA

Appendix C presents tabulated test results of the summarized force data and selected tabulated pressure data. A run schedule is presented to identify the data. The pressures are tabulated in pounds per square inch referenced to atmosphere. The test section is not vented to atmosphere and therefore the test section static pressure is greater than the atmosphere reference. Figure C-1 presents the incremental test section pressure over reference. Figure C-2 and C-3 present the location of the pressure instrumentation.





Extended Nose Surface Pressure Installation

PRINTOUT IDENTIFICATION

$P_T N_O$	Data Point	
ALPHA N	Angle of Attack	degrees
$Q_H$	Dynamic pressure	lbs/ft <sup>2</sup>
CL H	Lift coefficient	
CD H	Drag coefficient	
CM H	Pitching Moment Coefficient	
YM	Model Yawing Moment	
RL	Model Rolling Moment	
PTPHCH	} ( Nozzle pressure ratio Used in calculations	
PTPCBH		
PTPACH		
PHI	Augmentation ratio used in calculations	
THETA	$\text{Tan}^{-1} \frac{\text{normal force}}{\text{axial force}}$	
THRUST	$\sqrt{N^2 + A^2}$	
WFT	Total nozzle weight flow	
THTH	Total nozzle thrust	
CDR	Used in calculations	
CDHR	Used in calculations	

RUN SCHEDULE

RUN	CONFIGURATION	NOMINAL THRUST ANGLE	DIFFUSER ANGLE	NOMINAL $C_H$	PAGE
17	AUGMENTER 1	4 <sup>0</sup>	16 <sup>0</sup>	0	171
18	"	"	"	1	176
19	"	"	"	2	181
20	"	"	"	4	186
23	"	"	8 <sup>0</sup>	0	191
24	"	"	"	1	196
25	"	"	"	2	201
26	"	"	"	4	206
28	"	"	0	0	211
29	"	"	"	1	216
30	"	"	"	2	221
31	"	"	"	4	226
33	AUGMENTER 2	"	"	0	231
34	"	"	"	1	236
35	"	"	"	2	241
36	"	"	"	4	246
38	"	"	8 <sup>0</sup>	0	251
39	"	"	"	1	256
40	"	"	"	2	261
41	"	"	"	4	267
43	"	"	16 <sup>0</sup>	0	273
44	"	"	"	1	278
45	"	"	"	2	283
46	"	"	"	4	288
50	JET FLAP 2	40	-	0	293
51	"	"	-	1	298
52	"	"	-	2	303
53	"	"	-	4	308
55	JET FLAP 1	40	-	0	313
56	"	"	-	1	318
57	"	"	-	2	323
58	"	"	-	4	328
60	"	30	-	0	334
61	"	"	-	1	339
62	"	"	-	2	344
63	"	"	-	4	349
71	AUGMENTER 1	30 <sup>0</sup>	16 <sup>0</sup>	0	354
72	"	"	"	1	359
73	"	"	"	1	364
74	"	"	"	0	369
75	"	"	"	1	374
76	"	"	"	2	380
77	"	"	"	4	385
78	AUGMENTER 2	"	"	0	390
79	"	"	"	1	395
80	"	"	"	2	400
81	"	"	"	4	406
84	"	"	8 <sup>0</sup>	0	411
85	"	"	"	1	416
86	"	"	"	2	421
87	"	"	"	4	425
88	"	"	"	4	430

<u>RUN</u>	<u>CONFIGURATION</u>	<u>NOMINAL THRUST ANGLE</u>	<u>DIFFUSER ANGLE</u>	<u>NOMINAL C<sub>u</sub></u>	<u>PAGE</u>
89	AUGMENTER 1	30°	16°	0	435
90	"	"	"	0	440
91	"	"	"	1	445
92	"	"	"	2	450
93	"	"	"	4	455
95	"	"	0°	0	460
96	"	"	"	1	465
97	"	"	"	2	470
98	"	"	"	4	476
99	AUGMENTER 2	"	"	0	485
100	"	"	"	1	490
101	"	"	"	2	495
102	"	"	"	1	500
103	"	"	"	2	506
104	"	"	"	4	511
106	AUGMENTER 1	"	"	1	516
107	"	"	"	2	521
108	"	"	"	4	526
110	"	"	16°	-	531
133	CLEAN WING CONF. 1	-	-	-	532
134	" " CONF. 2	-	-	-	537

NOTE: Data for each run consists of summary page and pressure data for four selected angles of attack. Pressures are in pounds per square inch referenced to atmospheric pressure. Therefore:

$$C_P = \frac{(p + P_a - P_{TS})144}{q}$$

NACAL 292 RUN 17 DATE 06 OCT 80 TIME 12.14 RECOMP. NO. 2 DISK 1 PAGE 22

JOB NO. 11 LDGR ACCT 31302 CONTRACT 1631 SUB ACCT 10001 ACQ DATE 30 JUN 80 22.46

MOD 11 ALPHA WIND ON RUN, C/B=70 DEG, FWD=66 DEG, AFT=34 DEG, MEAN=50 DEG, CMU=0  $P_{T_S}$   $P_A$   
 15.00 14.257

SUMMARY PAGE

PT NO	ALPHA H PHI	O H THETA	CLH THRUST	CDH DELAL	CMH WFT	YM THTH	RL CMUTH	PTPFCH CDR	PTPCBH CDHR	PTPACI
1	-3.5816 1.4000	15.1970 40.2832	0.5008 112.5983	0.5888 0.2232	0.1074 0.2255	-1211.4859 0.7038	1985.3749 0.0049	0.9849 0.0231	0.9945 0.5556	0.994
2	-7.5211 1.4000	15.1517 34.6456	0.3907 98.0472	0.5654 0.1701	0.0186 0.2092	-1280.7994 0.6454	1606.5046 0.0045	0.9850 0.0308	0.9950 0.5346	0.994
3	-11.0467 1.4000	15.0674 28.0964	0.2850 85.8531	0.5339 0.1196	-0.0681 0.0547	-1221.6023 0.1888	1172.4611 0.0013	0.9844 0.0080	0.9947 0.5258	0.993
4	0.2234 1.4000	14.9690 44.2638	0.5784 116.7867	0.5934 0.2607	0.1640 0.0910	-1088.5342 0.3871	2317.7770 0.0027	0.9850 0.0135	0.9949 0.5799	0.994
5	0.6965 1.4000	14.8043 42.6530	0.5622 113.5263	0.5893 0.2529	0.1907 0.2449	-1010.3020 0.9076	2282.2273 0.0065	0.9854 0.0365	0.9952 0.5528	0.994
6	4.1258 1.4000	14.8684 46.8324	0.6375 122.3615	0.5980 0.2893	0.2366 0.2867	-952.0118 0.9775	2634.7898 0.0069	0.9858 0.0426	0.9945 0.5553	0.993
7	8.0507 1.4000	14.9233 49.3642	0.7190 133.1108	0.6170 0.3288	0.3228 0.3334	-871.5255 1.0899	2951.3882 0.0077	0.9886 0.0495	0.9953 0.5674	0.994
8	11.8247 1.4000	14.8202 52.2561	0.8388 148.0753	0.6493 0.3872	0.3945 0.1969	-822.4338 0.6014	3130.8513 0.0043	0.9911 0.0293	0.9955 0.6199	0.994
9	15.7423 1.4000	14.6754 54.2517	0.9235 157.2061	0.6647 0.4286	0.4416 0.0000	-666.5827 0.0045	3128.4680 0.0000	0.9942 0.0000	0.9961 0.6647	0.995
10	19.5621 1.4000	14.7987 52.1471	0.8606 151.8508	0.6688 0.3980	0.4395 0.1653	-607.1560 0.4963	2785.5846 0.0035	0.9944 0.0246	0.9952 0.6441	0.994

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VACAL 292 RUN 17 DATE 06 OCT 80 TIME 12.12 RECOMP. NO. 2 DISK 1 PAGE 8  
JOB NO. 11 LDGR ACCT 31302 CONTRACT 1631 SUB ACCT 10001 ACO DATE 30 JUN 80 22.36  
MOD 11 ALPHA WIND ON RUN, C/B=70 DEG, FWD=66 DEG, AFT=34 DEG, MEAN=50 DEG, CMU=0

DATA POINT 4

0.5380  
0.8476 0.7035  
0.6270 0.6804  
0.7204 0.7066 0.6581 0.6832  
0.6661 0.6030  
0.6736  
0.8384 0.6299 0.6629 0.6702  
0.8401 0.6567  
0.8213 0.6567  
0.8189 0.8248 0.5724 0.6773  
0.8329 0.6462 0.6345  
0.8276 0.6329 0.6844  
0.7994 0.6434 0.6731  
0.6885 0.6821  
0.6099 0.7466 0.7141 0.7154 0.7035 0.7066 0.7472 0.7116 0.7416 0.7422

81

NACAL 292      RUN 17      DATE 06 OCT 80      TIME 12.13      RECOMP. NO. 2      DISK 1      PAGE 14  
 JOB NO. 11      LDGR. ACCT 31302      CONTRACT 1631      SUB ACCT 10001      ACC DATE 30 JUN 80 22.41  
 MOD 11 ALPHA WIND ON RUN, C/B=70 DEG, FWD=66 DEG, AFT=34 DEG, MEAN=50 DEG, CMU=0

DATA POINT 7

0.6753

0.8449      0.6913

0.6527      0.6841

0.6719      0.6784

0.6604      0.6885  
 0.5524      0.6267  
 0.4675  
 0.7285      0.6542  
 0.8356  
 0.8398      0.6592  
 0.8313      0.8281  
 0.6867      0.6742  
 0.6405  
 0.6161      0.6749

0.8324      0.6498      0.6439      0.6803

0.8318      0.6492      0.6752

0.8096      0.6411      0.6821

0.6891

0.6398      0.7472      0.6629      0.6792      0.6879      0.6804      0.7404      0.6979      0.7441      0.7391

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NACAL 292    RUN 17    DATE 06 OCT 80    TIME 12.13    RECOMP. NO. 2    DISK 1    PAGE 16  
 JOB NO. 11    LDGR ACCT 31302    CONTRACT 1631    SUB ACCT 10001    ACO DATE 30 JUN 80 22.42  
 MOD 11 ALPHA WIND ON RUN, C/B=70 DEG, FWD=66 DEG, AFT=34 DEG, MEAN=50 DEG, CMU=0

DATA POINT 8

0.6722  
 0.8418    0.6880  
 0.6468    0.6693  
 0.5912    0.6679    0.6592    0.6710  
 0.5025    0.6467  
 0.4650    0.6492  
 0.6698    0.6492    0.6842    0.6666  
 0.8123    0.6492    0.7279  
 0.8417    0.8364    0.6427    0.6086    0.6759  
 0.8344    0.8299  
 0.8336    0.6609    0.6569    0.6758  
 0.8171    0.6660    0.6855  
 0.6604    0.7391    0.6292    0.6467    0.6617    0.6642    0.7360    0.6779    0.7366    0.6798  
 0.6934    0.7335

174

NACAL 292    RUN 17    DATE 06 OCT 80    TIME 12.14    RECOMP. NO. 2    DISK 1    PAGE 20  
 JOB NO. 11    LDGR.ACCT 31302    CONTRACT 1631    SUB ACCT 10001    ACO DATE 30 JUN 80 22.45  
 MOD 11 ALPHA WIND ON RUN, C/B=70 DEG, FWD=66 DEG, AFT=34 DEG, MEAN=50 DEG, CMU=0

DATA POINT 10

0.6611

0.6518    0.6806

0.6363    0.6750

0.6533    0.6673

0.6729    0.6659

0.6511    0.6392  
 0.6461    0.6505  
 0.6011  
 0.6767    0.6604  
 0.7846  
 0.8423    0.6792  
 0.8387    0.8346

0.6786

0.6711    0.6697

0.8372    0.6730

0.6625

0.6820

0.8384    0.6741

0.6671

0.6798

0.8226    0.6769

0.6662

0.6823    0.7454    0.6530    0.6530    0.6542    0.6498    0.7416    0.6467    0.7416    0.7397

175

NACAL 292 RUN 18 DATE 06 OCT 80 TIME 12.24 RECOMP. NO. 2 DISK 1 PAGE 22

JOB NO. 11 LDGR ACCT 31302 CONTRACT 1631 SUB ACCT 10001 ACQ DATE 30 JUN 80 23.19

MOD 12 ALPHA WIND ON RUN, C/B=70 DEG, FWD=66 DEG, AFT=34 DEG, MEAN=50 DEG, CMU=1  $P_{TS}$   $P_A$   
 15.05 14.282

SUMMARY PAGE

PT NO	ALPHA H PHI	O H THETA	CLH THRUST	CDH DELAL	CMH WFT	YM THTH	RL CMUTH	PTPFCH CDR	PTPRH CDHR	PTPACH
1	1.6495 1.4000	14.8488 80.3227	3.6538 518.1396	0.6230 1.6856	0.5596 5.3353	-861.0695 124.0404	15017.4960 0.8873	1.3619 0.7925	1.3657 -0.1694	1.3619
2	-2.3143 1.4000	14.8535 82.6682	3.4020 479.6397	0.4377 1.5579	0.6000 5.3262	-1122.0273 124.0477	14154.4035 0.8871	1.3628 0.7913	1.3655 -0.3536	1.3664
3	-6.2618 1.4000	14.8374 85.4252	3.1509 441.5310	0.2521 1.4289	0.5340 5.3329	-1166.8897 124.2033	13050.9448 0.8892	1.3630 0.7932	1.3657 -0.5411	1.3650
176 4	-9.8509 1.4000	14.9045 88.6827	2.7920 391.8543	0.0642 1.2560	0.4546 5.3327	-904.1245 124.3780	11906.7558 0.8864	1.3629 0.7918	1.3663 -0.7276	1.3675
5	1.7011 1.4000	14.8786 79.9953	3.5958 511.4317	0.6343 1.6659	0.6044 5.3255	-955.6823 124.1359	15050.1909 0.8862	1.3627 0.7918	1.3651 -0.1575	1.3646
6	5.6416 1.4000	14.7301 78.1571	3.7931 537.4285	0.7953 1.7733	0.6162 5.3277	-776.4260 124.3129	15729.7598 0.8964	1.3630 0.7969	1.3653 -0.0015	1.3639
7	9.5222 1.4000	14.6176 76.6857	3.8757 548.0776	0.9172 1.8269	0.6482 5.3238	-562.1364 124.4930	16091.3562 0.9046	1.3605 0.8004	1.3673 0.1167	1.3656
8	13.3342 1.4000	14.6904 74.8671	4.0073 574.1096	1.0837 1.9098	0.6540 5.3286	-184.2758 124.8635	16375.6909 0.9028	1.3638 0.7996	1.3674 0.2840	1.3672
9	17.1033 1.4000	14.7236 74.8200	3.8760 556.6452	1.0509 1.8473	0.6911 5.3020	642.9016 124.2223	15847.2677 0.8962	1.3649 0.7951	1.3677 0.2557	1.3633
10	20.9471 1.4000	14.6422 73.4191	3.8989 560.7637	1.1609 1.8748	0.6798 5.2698	1075.8422 123.3881	15383.4507 0.8951	1.3615 0.7931	1.3635 0.3677	1.3691

0

NACAL 292    RUN 18    DATE 06 OCT 80    TIME 12.22    RECOMP. NO. 2    DISK 1    PAGE 10  
 JOB NO. 11    LDGR ACCT 31302    CONTRACT 1631    SUB ACCT 10001    ACQ DATE 30 JUN 80 23.10  
 MOD 12    ALPHA WIND ON RUN,C/B=70 DEG,FWD=66 DEG,AFT=34 DEG,MEAN=50 DEG,CMU=1

DATA POINT 5

-0.3297

0.7987    0.1782

-0.0960    0.2376

0.2859    0.2594

0.4014    0.3310    -0.3737    0.2899  
 0.1539    -1.4301

-0.1770  
 0.3983    -1.4424    -0.1164

0.7593  
 0.8777    0.1290    -0.0612    0.6116

0.8801    0.8772

0.8792    0.3735    0.5801

0.6762

0.8767    0.5093    0.6824

0.8732    0.7062    0.7429    0.7663

0.9425    0.7692    0.3989    0.4014    0.3241    0.3378    0.7704    0.3497    0.7767    0.7704

177



NACAL 292      RUN 18      DATE 06 OCT 80      TIME 12.23      RECOMP. NO. 2      DISK 1      PAGE 16  
 JOB NO. 11      LDGR ACCT 31302      CONTRACT 1631      SUB ACCT 10001      ACQ DATE 30 JUN 80 23.15  
 MOD 12      ALPHA WIND ON RUN,C/B=70 DEG,FWD=66 DEG,AFT=34 DEG,MEAN=50 DEG,CMU=1

DATA POINT 8

-0.0998

0.8417      0.5538

-0.0181      0.2275

0.3403      0.5035

0.3166      0.3029

-0.0900

-1.4105

-0.2144

-0.0405

-0.7555

-0.1047

-1.3419

-0.8958

0.4825

0.8356

0.2805

-0.1654

0.7032

0.8777

0.8829

0.8852

0.4032

0.5497

0.5662

0.8817

0.5384

0.6923

0.6963

0.8838

0.7025

0.7157

0.8415

0.7754

0.3054

0.3615

0.2755

0.2830

0.7735

0.2929

0.7735

0.7723

179

MACAL 292    RUN 18    DATE 06 OCT 80    TIME 12.24    RECOMP. NO. 2    DISK 1    PAGE 20  
 JOB NO. 11    LDGR ACCT 31302    CONTRACT 1631    SUB ACCT 10001    ACQ DATE 30 JUN 80 23.18  
 MOD 12    ALPHA WIND ON RUN,C/B=70 DEG,FWD=66 DEG,AFT=34 DEG,MEAN=50 DEG,CMU=1

DATA POINT 10

180

						0.1517				
						0.8557	0.6484			
						0.1059	0.6094			
						0.4642	0.5887			
		0.0498	0.4120							
		0.0224		-0.8088				-0.2395	0.2949	
		-0.7402								
		-0.3388		-0.8517				-0.6642		
		0.3465								
		0.7936		0.4999				-0.1188	0.6329	
		0.8750	0.8874							
				0.8868	0.5028			0.6031		
									0.6575	
				0.8837	0.5989			0.7590		
										0.6816
				0.8858	0.8003			0.7504		
	0.7935	0.7760	0.1271	0.2867	0.2780	0.2954	0.7816	0.3004	0.7767	0.7673

NACAL 292      RUN 19      DATE 06 OCT 80      TIME 12.35      RECOMP. NO. 1      DISK 1      PAGE 22

JOB NO. 11      LDGR ACCT 31302      CONTRACT 1631      SUB ACCT 10001      ACQ DATE 1 JUL 80 0.22

MOD 13      ALPHA WIND ON RUN,C/B=70 DEG,FWD=66 DEG,AFT=34 DEG,MEAN=50 DEG,CMU=2

P<sub>T</sub>      P<sub>A</sub>  
 14.64      14.252

SUMMARY PAGE

PT NO	ALPHA H PHI	Q H THETA	CLH THRUST	CDH DELAL	CMH WFT	YM THTH	RL CMUTH	PTPFCH CDR	PTPCBH CDIR	PTPACH
1	2.2940 1.4000	14.6824 -89.8709	5.2097 720.0895	-0.0117 2.2313	0.9811 8.2846	2154.5103 266.0166	21184.8582 1.9245	1.8928 1.2397	1.8969 -1.2514	1.9088
2	-1.4957 1.4000	14.6898 -86.5052	4.7318 655.5842	-0.2889 2.0111	0.8884 8.2762	2081.4183 266.9002	19773.6653 1.9299	1.8980 1.2429	1.9029 -1.5319	1.9010
3	-5.6308 1.4000	14.8635 -82.6436	4.2010 592.7125	-0.5423 1.7758	0.7798 8.2732	2024.4064 267.1040	18165.3109 1.9089	1.8966 1.2362	1.9046 -1.7786	1.8988
4	-9.2407 1.4000	14.9095 -78.7008	3.7796 540.9905	-0.7551 1.5896	0.6902 8.2596	2138.0147 266.9777	16820.5629 1.9021	1.8984 1.2332	1.9051 -1.9954	1.9018
5	2.5556 1.4000	14.6691 -89.6593	5.1847 715.9998	-0.0308 2.2191	0.9885 8.2627	2137.4507 267.3633	21234.7401 1.9360	1.9011 1.2447	1.9054 -1.2755	1.9009
6	6.6844 1.4000	14.5352 87.1289	5.6251 770.6812	0.2821 2.4325	1.0720 8.2562	2120.0452 267.0676	22704.5432 1.9517	1.8963 1.2501	1.9034 -0.9680	1.9001
7	10.7406 1.4000	14.1947 84.4983	6.0645 814.1493	0.5841 2.6467	1.1440 8.2589	2349.6161 267.5804	23864.5550 2.0024	1.9026 1.2665	1.9034 -0.6823	1.9007
8	14.6555 1.4000	14.3094 81.5328	6.3675 867.2166	0.9479 2.8251	1.2102 8.2434	2614.8676 267.4554	25238.9881 1.9854	1.9022 1.2604	1.9023 -0.3125	1.9025
9	18.5760 1.4000	14.3103 78.8842	6.4681 888.0360	1.2708 2.9266	1.1866 8.2353	2974.9793 267.2741	25627.2834 1.9839	1.8956 1.2597	1.9036 0.0110	1.9039
10	22.5098 1.4000	14.4258 76.0332	6.5824 921.1637	1.6371 3.0474	1.1916 8.2166	3209.5093 266.8275	26315.7322 1.9647	1.8937 1.2526	1.9034 0.3844	1.9036

181

0

NACAL 292 RUN 19 DATE 06 OCT 80 TIME 12.31 RECOMP. NO. 1 DISK 1 PAGE 2

JOB NO. 11 LDGR ACCT 31302 CONTRACT 1631 SUB ACCT 10001 ACQ DATE 30 JUN 80 23.59

MOD 13 ALPHA WIND ON RUN,C/B=70 DEG,FWD=66 DEG,AFT=34 DEG,MEAN=50 DEG,CMU=2

DATA POINT 1

-1.1121

0.7744 -0.2310

-0.7378 -0.3555

-0.0784 -0.2276

0.2038 0.0573

-0.1360 -3.1416

-1.9071 0.8474

-0.6794  
0.0772 -3.3181

-3.1012

0.6441  
0.8606 0.1202

-2.0511

0.7759

0.8868 0.8849

0.8855 0.0636

0.3225

0.7537

0.8844 0.1882

0.6546

0.7815

0.8804 0.5730

0.7316

0.6544 0.7759 0.1801 0.2050 0.0560 0.0673 0.7902 0.0847 0.7834 0.7902

182

8

NACAL 292    RUN 19    DATE 06 OCT 80    TIME 12.33    RECOMP. NO. 1    DISK 1    PAGE 14  
 JOB NO. 11    LDGR ACCT 31302    CONTRACT 1631    SUB ACCT 10001    ACQ DATE 1 JUL 80 0.17  
 MOD 13    ALPHA WIND ON RUN, C/B=70 DEG, FWD=66 DEG, AFT=34 DEG, MEAN=50 DEG, CMU=2

DATA POINT 7

153

-1.2186

0.7923    -0.2861

-0.6487    -0.3840

-0.0374    -0.2919

0.0492    -0.0171

-0.4478    -3.1202

-1.4519

-0.5244    -3.1478

0.3373

0.7895    0.2293

0.8596    0.8696

0.8742    0.1279

0.8742    0.2488

0.8741    0.5876

0.1545    0.7472    0.0548    0.0997    -0.0245    -0.0257    0.7609    -0.0122    0.7497    0.7591

-1.7282    0.8359

-2.6552

-1.7570    0.7472

0.3327

0.7287

0.6446

0.7118    0.7572

VACAL 292 RUN 19 DATE 06 OCT 80 TIME 12.34 RECOMP. NO. 1 DISK 1 PAGE 16  
 JOB NO. 11 LDGR ACCT 31302 CONTRACT 1631 SUB ACCT 10001 ACO DATE 1 JUL 80 0.18  
 MOD 13 ALPHA WIND ON RUN,C/B=70 DEG,FWD=66 DEG,AFT=34 DEG,MEAN=50 DEG,CMU=2

DATA POINT 8

184

-1.1864

0.8158 -0.1340

-0.5708 -0.2363

-0.0012 -0.0416 0.0057 -0.3215

-0.5734 -3.0975 -1.5781 0.8616

-1.8593 -3.1061 -2.2128

-0.8846 0.2792 -1.5009 0.7729

0.1577 0.7512 0.8585 0.8818

0.8843 0.1526 0.4004 0.7443

0.8826 0.2672 0.6503

0.8860 0.6097 0.7282 0.7715

-0.0490 0.7647 -0.0343 0.0760 -0.0416 -0.0588 0.7784 -0.0202 0.7622 0.7641

NACAL 292 RUN 19 DATE 06 OCT 80 TIME 12.34 RECOMP. NO. 1 DISK 1 PAGE 20  
 JOB NO. 11 LDGR ACCT 31302 CONTRACT 1631 SUB ACCT 10001 ACQ DATE 1 JUL 80 0.21  
 MOD 13 ALPHA WIND ON RUN, C/B=70 DEG, FWD=66 DEG, AFT=34 DEG, MEAN=50 DEG, CMU=2

DATA POINT 10

-0.5142

			0.8092	0.0630					
			-0.4187	-0.1433					
			0.1132	0.1917					
	-0.5697	-0.0722							
	-0.5538		-1.7950			-1.1726	0.0663		
	-0.9116								
	-1.2902		-2.1326			-1.8220			
	-0.1142								
	0.6664		0.4761			-1.1738	0.8042		
	0.8347	0.8843							
		0.8914	0.2318			0.5166			
								0.7681	
		0.8883	0.3865			0.7446			
								0.7931	
		0.8909	0.7205				0.7863		
-0.3136	0.7659	-0.2346	-0.2658	-0.1421	-0.0808	0.7778	-0.08	0.7697	0.7765

NACAL 292 RUN 20 DATE 13 OCT 80 TIME 00.12 RFCOMP. NO. 1 DISK 1 PAGE 22

JOB NO. 11 LDGR ACCT 31302 CONTRACT 1631 SUB ACCT 10001 ACO DATE 1 JUL 80 18.46

MOD 14 ALPHA WIND ON RUN, C/B=70 DEG, FWD=66 DEG, AFT=34 DEG, MEAN=50 DEG, CMU=4

P<sub>T</sub> P<sub>A</sub>  
14.26 14.267

SUMMARY PAGE

PT NO	ALPHA H PHI	Q H THETA	CLH THRUST	CDH DELAL	CMH WFT	YM THTH	RL CMUTH	PTPCN CDR	PTPCN CDHR	PTPACH
1	2.7858 1.4000	7.3233 -78.3583	7.4540 524.6897	-1.5357 2.7966	1.3480 8.2347	4791.3858 271.7478	15453.9852 3.9417	1.9495 1.7812	1.9501 -3.3169	1.9529
2	-1.3988 1.4000	7.5942 -74.0559	6.5552 487.4011	-1.8727 2.4637	1.1684 8.2396	4733.2952 272.4742	14512.1161 3.8112	1.9517 1.7519	1.9520 -3.6247	1.9550
3	-5.4823 1.4000	7.7136 -69.2191	5.8449 453.6702	-2.2063 2.1919	1.0270 8.2161	4614.5423 271.6713	13667.8877 3.7411	1.9471 1.7349	1.9514 -3.9413	1.9439
4	-9.2539 1.4000	7.8332 -64.2278	5.1402 420.9190	-2.4817 1.9287	0.8745 8.2149	4670.6289 272.1694	12791.5216 3.6908	1.9512 1.7229	1.9542 -4.2047	1.9518
5	2.8684 1.4000	7.3572 -78.2280	7.3873 522.4607	-1.5260 2.7766	1.3250 8.1976	4732.4793 271.9474	15453.6948 3.9264	1.9506 1.7771	1.9491 -3.3031	1.9534
6	6.9840 1.4000	7.2873 -82.4697	8.0363 556.1146	-1.0623 3.0475	1.4428 8.1902	4735.6092 272.0289	16403.7991 3.9652	1.9491 1.7861	1.9494 -2.8484	1.9557
7	11.0069 1.4000	7.3567 -86.3935	8.5273 591.7411	-0.5374 3.2821	1.5428 8.1840	4722.9930 271.7205	17285.4369 3.9263	1.9499 1.7768	1.9493 -2.3142	1.9548
8	15.0933 1.4000	7.1948 89.7332	9.2279 625.0445	0.0429 3.5956	1.6732 8.1895	4745.7362 272.2789	18137.7676 4.0199	1.9520 1.7989	1.9492 -1.7560	1.9515
9	19.3163 1.4000	7.0373 86.0113	9.8550 654.4800	0.6871 3.9034	1.7675 8.1781	4774.6722 272.1640	18854.2755 4.1081	1.9525 1.8178	1.9482 -1.1306	1.9528
10	23.1476 1.4000	7.3760 82.8911	9.7906 685.1128	1.2210 3.9953	1.7000 8.1779	4885.2519 272.2292	19569.7794 3.9204	1.9487 1.7756	1.9500 -0.5546	1.9512

181

0

NACAL 292 RUN 20 DATE 13 OCT 80 TIME 00.08 RECOMP. NO. 1 DISK 1 PAGE 2  
 JOB NO. 11 LDGR ACCT 31302 CONTRACT 1631 SUB ACCT 10001 ACO DATE 1 JUL 80 18.15  
 MOD 14 ALPHA WIND ON RUN,C/B=70 DEG,FWD=66 DEG,AFT=34 DEG,MEAN=50 DEG,CMU=4

DATA POINT 1

187

-0.8440

0.2380 -0.3408

-1.3240 -0.3906

-0.0386 -0.2268 -0.5466 -0.1699

-0.2686 -3.5690 -2.1843 0.4298

-0.6408 -3.8137 -4.0118

-0.1208 0.2582

0.4185 -0.3992 -2.8589 0.3895

0.4443 0.4462

0.4448 -0.4289 -0.2420

0.4439 -0.3059 0.2010

0.4422 0.1364 0.3123 0.3887

-0.0049 0.3817 -0.1140 -0.1017 -0.2268 -0.2060 0.3905 -0.1778 0.3605 0.3899

NACAL 292 RUN 20 DATE 13 OCT 80 TIME 00.10 RECOMP. NO. 1 DISK 1 PAGE 14  
JOB NO. 11 LDGR ACCT 31302 CONTRACT 1631 SUB ACCT 10001 ACO DATE 1 JUL 80 18.41  
MOD 14 ALPHA WIND ON RUN, C/B=70 DEG, FWD=66 DEG, AFT=34 DEG, MEAN=50 DEG, CMU=4

DATA POINT 7

188

-0.9160  
0.2877 -0.3784  
-1.2027 -0.4276  
-0.5065 -0.2212  
-0.1422 -0.2796  
-0.4820 -3.4905  
-1.1277  
-0.5249 -3.6340  
0.0465  
0.3769 -0.2882  
0.4255 0.4440 -2.7031 0.3840  
0.4426 -0.3639 -0.1863  
0.4431 -0.2466 0.2293 0.3740  
0.4437 0.1573 0.3184 0.3845  
-0.0355 0.3805 -0.1827 -0.1533 -0.2820 -0.2722 0.3830 -0.2219 0.3811 0.3924

NACAL 292 RUN 20 DATE 13 OCT 80 TIME 00.11 RECOMP. NO. 1 DISK 1 PAGE 16  
JOB NO. 11 LDGR ACCT 31302 CONTRACT 1631 SUB ACCT 10001 ACO DATE 1 JUL 80 18.41  
MOD 14 ALPHA WIND ON RUN, C/B=70 DEG, FWD=66 DEG, AFT=34 DEG, MEAN=50 DEG, CMU=4

DATA POINT 8

189

-0.9571  
0.3052 -0.3942  
-1.1607 -0.4623  
-0.4729 -0.2368  
-0.2005 -0.2943 -2.1825 0.4293  
-0.5850 -3.4648  
-1.3908  
-0.7542 -3.5948 -3.7236  
-0.0766 -0.2624 -2.6001 0.3854  
0.3437  
0.4273 0.4403  
0.4477 -0.3523 -0.1670 0.3714  
0.4445 -0.2311 0.2306  
0.4445 0.1664 0.3259 0.3861  
-0.1079 0.3855 -0.2483 -0.1974 -0.3103 -0.2980 0.3855 -0.2575 0.3849 0.3861

NACAL 292      RUN 20      DATE 13 OCT 80      TIME 00.11      RECOMP. NO. 1      DISK 1      PAGE 20  
 JOB NO. 11      LDGR ACCT 31302      CONTRACT 1631      SUB ACCT 10001      ACQ DATE 1 JUL 80 18.44  
 MOD 14      ALPHA WIND ON RUN,C/B=70 DEG,FWD=66 DEG,AFT=34 DEG,MEAN=50 DEG,CMU=4

DATA POINT 10

190

-1.0766

0.3446    -0.4410

-1.0216    -0.4829

-0.4065    -0.2212

-0.5966    -0.2477

-0.6414      -3.1177

-1.6625

-1.1896      -3.2550

-0.3174

0.2840      -0.2048

0.4106    0.4476

-2.1077      0.4262

-3.5519

-2.4082      0.3848

0.4513    -0.3102

-0.0933

0.3738

0.4522    -0.1616

0.2596

0.4537    0.2139

0.3344      0.3896

-0.2207    0.3880    -0.3470    -0.2747    -0.3593    -0.3348    0.3905    -0.2863    0.3805    0.3948

IACAL 292 RUN 23 DATE 13 OCT 80 TIME 00.48 RECOMP. NO. 1 DISK 1 PAGE 22

JOB NO. 11 LDGR ACCT 31302 CONTRACT 1631 SUB ACCT 10001 ACQ DATE 2 JUL 80 17.20

MOD 17 ALPHA WIND ON RUN, C/B=70 DEG, FWD=54 DEG, AFT=38 DEG, MFAN=46 DEG, CMU=0

P<sub>T</sub> P<sub>A</sub>  
15.04 14.282

SUMMARY PAGE

PT NO	ALPHA H PHI	Q H THETA	CLH THRUST	CDH DELAL	CMH WFT	YM TH1H	RL CMUTH	PTPFCH CDR	PTPCBH CDHR	PTPACH
1	0.3752 1.3000	15.2643 51.9860	0.7234 131.9561	0.5655 0.3308	0.1610 0.3074	-1095.9163 1.1840	3185.3872 0.0082	0.9811 0.0371	0.9947 0.5283	(.9948
2	-3.6474 1.3000	15.3061 50.1942	0.6154 115.4335	0.5126 0.2788	0.1102 0.1258	-1170.6985 0.4131	2924.1072 0.0028	0.9767 0.0152	0.9939 0.4976	0.9936
3	-7.5683 1.2000	15.1523 44.4260	0.4619 94.1299	0.4712 0.2055	0.0290 0.1693	-1176.6023 0.6989	2408.9916 0.0048	0.9761 0.0205	0.9940 0.4506	0.9936
4	-10.9971 1.3000	15.3804 37.9122	0.3541 83.4529	0.4547 0.1542	-0.0551 0.3371	-1166.3021 1.2777	1960.3717 0.0095	0.9768 0.0406	0.9947 0.4140	0.9943
5	0.3403 1.3000	15.0337 52.1424	0.7209 129.2303	0.5603 0.3296	0.1784 0.3559	-1077.7032 1.3550	3209.3656 0.0095	0.9801 0.0434	0.9948 0.5169	0.9937
6	4.2196 1.3000	15.0379 51.1815	0.7404 134.5300	0.5956 0.3391	0.1987 0.1562	-927.7331 0.5392	3235.3292 0.0036	0.9867 0.0190	0.9943 0.5766	0.9946
7	8.1644 1.2000	15.0345 53.2979	0.8286 146.2891	0.6177 0.3820	0.2806 0.1771	-869.5014 0.6230	3510.2898 0.0044	0.9893 0.0216	0.9952 0.5960	0.9950
8	11.9316 1.2000	15.0515 55.5037	0.9198 158.1501	0.6321 0.4263	0.3610 0.1175	-783.9875 0.3049	3572.5767 0.0021	0.9926 0.0143	0.9950 0.6177	0.9970
9	15.7711 1.2000	14.9365 56.8677	0.9863 165.6218	0.6437 0.4587	0.4239 0.2693	-694.4996 0.7626	3459.9837 0.0054	0.9942 0.0330	0.9950 0.6107	0.9968
10	19.5958 1.3000	14.9866 57.8377	1.0013 166.8766	0.6296 0.4657	0.4383 0.2861	-440.3884 0.8912	3203.8124 0.0063	0.9934 0.0350	0.9946 0.5946	0.9948

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NACAL 292 RUN 23 DATE 13 OCT 80 TIME 00.44 RECOMP. NO. 1 DISK 1 PAGE 2

JOB NO. 11 LDGR ACCT 31302 CONTRACT 1631 SUB ACCT 10001 ACQ DATE 2 JUL 80 17.03

MOD 17 ALPHA WIND ON RUN,C/B=70 DEG,FWD=54 DEG,AFT=38 DEG,MEAN=46 DEG,CMU=0

DATA POINT 1

0.5635

0.8641 0.6872

0.6041 0.6862

0.6540 0.6863

0.7267 0.7045

0.6755

0.5454

0.6922

0.6633

0.6971

0.8588

0.5565

0.6940

0.8562

0.8284

0.8489

0.6589

0.6984

0.8210 0.8316

0.8414 0.6233

0.6845

0.6886

0.8510 0.6696

0.6948

0.8131 0.7093

0.7095

0.6982

0.7496 0.7625 0.7255 0.7193 0.7058 0.7144 0.7570 0.7058 0.7644 0.7650

192

NACAL 292    RUN 23    DATE 13 OCT 80    TIME 00.46    RECOMP. NO. 1    DISK 1    PAGE 14  
 JOB NO. 11    LDGR, ACCT 31302    CONTRACT 1631    SUB ACCT 10001    ACQ DATE 2 JUL 80 17.16  
 MOD 17 ALPHA WIND ON RUN, C/B=70 DEG, FWD=54 DEG, AFT=38 DEG, MEAN=46 DEG, CMU=0

DATA POINT 7

193

					0.6661				
					0.8581	0.6903			
					0.6825	0.6851			
					0.6826	0.6767			
	0.6910	0.7064					0.6780	0.6914	
	0.6015		0.6626						
	0.5293								
	0.7687		0.6823			0.8329			
	0.8621								
	0.8519		0.8545			0.6811		0.6925	
	0.8380	0.8361							
			0.8408	0.6916		0.7013			
								0.6835	
			0.8499	0.6855			0.7180		
									0.6846
			0.8140	0.6939				0.7235	
0.7354	0.7533	0.7021	0.7107	0.7082	0.7119	0.7502	0.7058	0.7607	0.7644

NACAL 292      RUN 23      DATE 13 OCT 80      TIME 00.47      RECOMP. NO. 1      DISK 1      PAGE 16  
 JOB NO. 11      LDGR ACCT 31302      CONTRACT 1631      SUB ACCT 10001      ACO DATE 2 JUL 80 17.16  
 MOD 17 ALPHA WIND ON RUN,C/B=70 DEG,FWD=54 DEG,AFT=38 DEG,MEAN=46 DEG,CMU=0

DATA POINT 8

0.6787  
 0.8618    0.6931  
 0.6950    0.6828  
 0.6404    0.6848    0.6976    0.6783  
 0.5238    0.6928    0.6934    0.6869  
 0.4380  
 0.7113    0.6996    0.8070  
 0.8502  
 0.8594    0.8588    0.7008    0.6943  
 0.8460    0.8386  
 0.8449    0.6724    0.6974  
 0.6888  
 0.8559    0.6875    0.7243  
 0.8162    0.6976    0.6854  
 0.7248  
 0.7304    0.7564    0.6527    0.6749    0.7045    0.6996    0.7508    0.6984    0.7619    0.7631

194

NACAL 292    RUN 23    DATE 13 OCT 80    TIME 00.48    RFCOMP. NO. 1    DISK 1    PAGE 20  
 JOB NO. 11    LDGR. ACCT 31302    CONTRACT 1631    SUB ACCT 10001    ACQ DATE 2 JUL 80 17.19  
 MOD 17 ALPHA WIND ON RUN, C/B=70 DEG, FWD=54 DEG, AFT=38 DEG, MEAN=46 DEG, CMU=0

DATA POINT 10

195

					0.6426				
					0.8173		0.6828		
					0.6182		0.6933		
					0.6701		0.6857		
		0.6145	0.6663						
		0.5293		0.6737			0.6922		0.6818
		0.5589							
		0.6274		0.6749			0.6811		
		0.8150							
		0.8556		0.8582			0.6916		0.6877
		0.8510	0.8369						
				0.8388	0.6744		0.6875		
									0.6889
				0.8527	0.6801			0.7011	
									0.6862
				0.8159	0.6875			0.6973	
		0.7237	0.7514	0.6576	0.6595	0.6484	0.6459	0.7490	0.6564
								0.7551	0.7502

NACAL 292 RUN 24 DATE 13 OCT 80 TIME 03.08 RECOMP. NO. 1 DISK 1 PAGE 22

JOB NO. 11 LDGR ACCT 31302 CONTRACT 1631 SUB ACCT 10001 ACQ DATE 2 JUL 80 17.51

MOD 18 ALPHA WIND ON RUN,C/B=70 DEG,FWD=54 DEG,AFT=38 DEG,MEAN=46 DEG,CMU=1

P<sub>TS</sub> P<sub>A</sub>  
15.05 14.282

SUMMARY PAGE

PT NO	ALPHA H PHI	O H THETA	CLH THRUST	CDH DELAL	CMH WFT	YM THTH	RL CMUTH	PTPFCH CDR	PTPCRH CDHR	PTPACH
1	1.3512 1.3000	15.1585 81.0633	2.8626 413.5273	0.4501 1.3222	0.2795 5.2392	-243.0128 122.9605	12368.9232 0.8616	1.3703 0.6408	1.3704 -0.1907	1.3665
2	-2.5402 1.3000	15.0636 83.2050	2.9425 420.2293	0.3506 1.3478	0.2641 5.2406	-813.8884 123.2497	12348.3818 0.8691	1.3719 0.6439	1.3711 -0.2933	1.3658
3	-6.4908 1.3000	14.9079 85.6369	2.8498 401.1150	0.2174 1.2946	0.2521 5.2362	-950.5953 123.0441	11827.7440 0.8767	1.3676 0.6470	1.3708 -0.4296	1.3658
4	-10.0893 1.3000	14.9709 88.6862	2.5171 354.6535	0.0577 1.1359	0.2106 5.2478	-769.3965 123.6806	10492.6279 0.8775	1.3698 0.6474	1.3723 -0.5897	1.3710
5	1.3583 1.3000	14.9477 81.1436	2.8389 404.3082	0.4423 1.3109	0.2762 5.1829	-415.1151 121.3794	12190.0393 0.8625	1.3730 0.6401	1.3588 -0.1977	1.3677
6	5.1432 1.3000	14.8941 80.3575	2.8445 404.5612	0.4832 1.3174	0.3365 5.1622	185.2748 120.8645	12236.2558 0.8620	1.3689 0.6389	1.3603 -0.1556	1.3686
7	9.0241 1.3000	14.9695 80.0083	2.5297 419.2233	0.5161 1.3587	0.4165 5.2131	719.4406 122.9266	12388.8582 0.8722	1.3694 0.6437	1.3719 -0.1276	1.3692
8	12.9415 1.3000	15.0206 78.0686	3.1072 449.0827	0.6565 1.4533	0.4530 5.1967	1065.5592 122.6184	12678.0354 0.8671	1.3698 0.6406	1.3727 0.0159	1.3707
9	16.8311 1.3000	14.9769 76.9867	3.2102 464.5498	0.7419 1.5055	0.4784 5.1773	1666.2950 121.8023	12485.8365 0.8638	1.3727 0.6394	1.2631 0.1024	1.3720
10	20.6459 1.3000	15.1913 75.9851	3.2581 480.2517	0.8132 1.5398	0.5359 5.1835	2139.5250 122.0993	12195.1062 0.8537	1.3647 0.6356	1.3728 0.1775	1.3674

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NACAL 292    RUN 24    DATE 13 OCT 80    TIME 03.04    RECOMP. NO. 1    DISK 1    PAGE 2  
 JGR NO. 11    LDGR ACCT 31302    CONTRACT 1631    SUB ACCT 10001    ACO DATE 2 JUL 80 17.27  
 MOD 18    ALPHA WIND ON RUN,C/B=70 DEG,FWD=54 DEG,AFT=38 DEG,MEAN=46 DEG,CMU=1

DATA POINT 1

197

					0.1901				
					0.8552	0.4162			
					0.4090	0.5119			
					0.5465	0.5976			
	0.5894	0.5433					-0.0477	0.1392	
	0.4461		-0.7901						
	0.2916						-0.1696		
	0.7103		-0.4514						
	0.8685						-0.0784	0.6126	
	0.8797		0.8723						
	0.8662	0.8683							
			0.8706	0.5720			0.5673		0.6219
			0.8660	0.5602			0.7200		
									0.7076
			0.8515	0.6759				0.7314	
0.7022	0.7639	0.5869	0.5757	0.5483	0.5533	0.7764	0.5265	0.7677	0.7758

8

NACAL 292    RUN 24    DATE 13 OCT 80    TIME 03.07    RECOMP. NO. 1    DISK 1    PAGE 14  
 JOB NO. 11    LDGR ACCT 31302    CONTRACT 1631    SUB ACCT 10001    ACQ DATE 2 JUL 80 17.45  
 MOD 18 ALPHA WIND ON RUN,C/B=70 DEG,FWD=54 DEG,AFT=38 DEG,MEAN=46 DEG,CMU=1

DATA POINT 7

0.4877

0.8575    0.4942

0.4405    0.5531

0.5517    0.5785

0.5496    0.5284

0.3414    -0.7240

-0.0833    0.2473

0.0137

0.4735    -0.3748

-0.4820

0.7922

0.8722    0.8792

-0.2339    0.6145

0.8755    0.8731

0.8708    0.5913

0.5557

0.6199

0.8666    0.5497

0.7143

0.8603    0.6779

0.7208    0.6731

0.6518    0.7664    0.5770    0.5583    0.5172    0.5284    0.7826    0.5159    0.7683    0.7658

198



NACAL 292     RUN 24     DATE 13 OCT 80     TIME 03.08     RECOMP. NO. 1     DISK 1     PAGE 20  
 JOB NO. 11     LDGR ACCT 31302     CONTRACT 1631     SUB ACCT 10001     ACO DATE 2 JUL 80 17.49  
 MOD 18 ALPHA WIND ON RUN,C/B=70 DEG,FWD=54 DEG,AFT=38 DEG,MEAN=46 DEG,CMU=1

DATA POINT 10

0.6871

0.8803     0.6577

0.4602     0.6528

0.6050     0.6410

0.4374     0.4162  
 0.2293     -0.6278  
 -0.4961  
 -0.0465     -0.1702  
 0.5493  
 0.8414     0.9072  
 0.8891     0.8942  
 0.0398     0.3539  
 -0.2511  
 -0.0128     0.6214

0.8903     0.6582

0.6720

0.6731

0.8914     0.6466

0.7871

0.8849     0.7808

0.7625     0.7033

0.6125     0.7739     0.3103     0.3751     0.4816     0.4953     0.7901     0.5010     0.7783     0.7795

200

CAL 292 RUN 25 DATE 13 OCT 80 TIME 03.18 RECOMP. NO. 1 DISK 1 PAGE 22

B NO. 11 LDGR ACCT 31302 CONTRACT 1631 SUB ACCT 10001 ACQ DATE 2 JUL 80 19.07

MOD 19 ALPHA WIND ON RUN, C/R=70 DEG, FWD=54 DEG, AFT=38 DEG, MEAN=46 DEG, CMU=2

P<sub>T</sub> P<sub>A</sub>  
15.075 14.282

SUMMARY PAGE

NO	ALPHA H PHI	O H THETA	CLH THRUST	CDH DELAL	CMH WFT	YM THTH	RL CMUTH	PTPFCH CDR	PTPCBH CDHR	PTPACH
1	2.1408 1.2000	15.1338 89.6803	4.8364 689.0580	0.0269 2.0934	0.7052 8.1238	2252.2248 265.1767	20027.9448 1.8612	1.8916 0.9929	1.8941 -0.9659	1.8967
2	-1.9555 1.2000	15.2687 -86.6288	4.3159 621.4518	-0.2542 1.8535	0.5775 8.1220	2235.3046 265.3431	18464.2007 1.8459	1.8923 0.9890	1.8932 -1.2433	1.8997
3	-5.9806 1.2000	15.2007 -82.5461	3.9921 576.1523	-0.5223 1.6961	0.4607 8.1042	2300.7273 264.8273	17165.0983 1.8506	1.8924 0.9900	1.8921 -1.5123	1.8985
4	-9.6614 1.2000	15.2102 -77.7932	3.5408 518.7406	-0.7659 1.4945	0.3583 8.0949	2539.2933 265.0313	15533.5137 1.8509	1.8953 0.9893	1.8974 -1.7557	1.9002
5	2.1834 1.2000	15.1013 89.6786	4.8356 687.4699	0.0271 2.0931	0.6610 8.0915	2234.4886 264.8940	19872.2007 1.8632	1.8967 0.9929	1.8938 -0.9658	1.8955
6	6.2448 1.2000	14.9758 86.2022	5.3180 751.2172	0.3437 2.3260	0.7496 8.1044	2142.2942 265.3805	21591.5550 1.8823	1.8985 0.9994	1.8912 -0.6557	1.8928
7	10.1306 1.2000	15.0500 83.4108	5.4302 774.4734	0.6272 2.4155	0.7259 8.0804	2248.8267 264.8202	22330.8109 1.8691	1.8939 0.9942	1.8942 -0.3669	1.8984
8	13.9830 1.2000	15.0403 81.6715	5.4658 782.1583	0.8001 2.4593	0.7043 8.0767	2754.9079 264.7461	22392.2834 1.8698	1.8925 0.9946	1.8931 -0.1944	1.8977
9	17.8707 1.2000	14.8446 79.9531	5.6145 796.8474	0.9947 2.5522	0.7347 8.0858	3475.5339 265.2924	22482.9605 1.8983	1.8972 1.0025	1.8942 -0.0078	1.8993
10	21.7983 1.2000	14.8679 78.2651	5.7085 816.0670	1.1858 2.6253	0.7609 8.0634	4163.6742 264.6112	22616.1771 1.8905	1.8958 0.9992	1.8939 0.1865	1.8996

201

0

NACAL 292      RUN 25      DATE 13 OCT 80      TIME 03.14      RECOMP. NO. 1      DISK 1      PAGE 2  
 JOB NO. 11      LDGR ACCT 31302      CONTRACT 1631      SUB ACCT 10001      ACQ DATE 2 JUL 80 18.46  
 MOD 19 ALPHA WIND ON RUN, C/B=70 DEG, FWD=54 DEG, AFT=38 DEG, MEAN=46 DEG, CMU=2

DATA POINT 1

202

-0.7609

0.8912    -0.1402

0.2440    -0.1664

0.4340    0.3781            0.4026    -0.2325

0.1691            -1.9476                            -1.0288    0.8946

-0.1950

0.4048            -1.3461                            -1.2140

0.7971

0.9055            0.9023                            -0.8656            0.7846

0.9046    0.9034

0.9008    0.5095                            0.4917

0.7609

0.8980    0.4043                            0.7091

0.8888    0.6260                            0.7691    0.7946

0.4769    0.7848    0.4023    0.4421    0.3706    0.3955    0.7904    0.4036    0.7835    0.7866

8

NACAL 292    RUN 25    DATE 13 OCT 80    TIME 03.17    RECOMP. NO. 1    DISK 1    PAGE 14  
 JOB NO. 11    LDGR ACCT 31302    CONTRACT 1631    SUB ACCT 10001    ACQ DATE 2 JUL 80 19.02  
 MOD 19 ALPHA WIND ON RUN,C/B=70 DEG,FWD=54 DEG,AFT=38 DEG,MEAN=46 DEG,CMU=2

DATA POINT 7

203

					0.0846				
					0.8831	0.2230			
					0.1926	0.2184			
					0.3806	0.3286			
	0.3196	0.3184							
	-0.0189		-2.0093						
	-0.7800								
	-0.0226		-1.3956				-1.0765		-0.4373
	0.5858						-1.5943		
	0.8735			0.9060					
	0.8998	0.9017					-1.0728		0.6384
			0.8963	0.4729				0.4853	
									0.8174
			0.8978	0.4158				0.7428	
			0.8945	0.6286					0.8105
								0.7728	
0.4390	0.7748	0.3426	0.3843	0.3016	0.3121	0.7773	0.3283	0.7810	0.7817

NACAL 292      RUN 25      DATE 13 OCT 80      TIME 03.17      RECOMP. NO. 1      DISK 1      PAGE 16  
 JOB NO. 11      LDGR. ACCT 31302      CONTRACT 1631      SUB ACCT 10001      ACQ DATE 2 JUL 80 19.03  
 MOD 19 ALPHA WIND ON RUN, C/B=70 DEG, FWD=54 DEG, AFT=38 DEG, MEAN=46 DEG, CMU=2

DATA POINT 8

0.3270

0.8855    0.0483

0.2089    0.4230

0.3710    0.2210

0.2792    0.3053  
 -0.1234  
 -0.9475  
 -0.1797  
 0.4869  
 0.8458

-1.9885  
 -1.3778

-0.8919    -0.1682  
 -1.4964

0.8943    0.9009    0.9110

-1.1211    0.6197

0.8983    0.4624

0.3821

0.7865

0.9000    0.4020

0.7180

0.8938    0.6206

0.7411    0.8038

0.4670    0.7786    0.2978    0.3781    0.2985    0.3034    0.7761    0.3146    0.7804    0.7810

204

NACAL 292      RUN 25      DATE 13 OCT 80      TIME 03.18      RECOMP. NO. 1      DISK 1      PAGE 20  
 JOB NO. 11      LDGR ACCT 31302      CONTRACT 1631      SUB ACCT 10001      ACQ DATE 2 JUL 80 19.06  
 MOD 19 ALPHA WIND ON RUN,C/B=70 DEG,FWD=54 DEG,AFT=38 DEG,MEAN=46 DEG,CMU=2

DATA POINT 10

0.1455

0.8695    0.4569

0.1833    0.5721

0.4004    0.4667

-0.0489    0.2493

-0.0733    -1.2770

-0.5672

-0.5844    -0.9487

0.2272

0.7805    0.9110

0.8766    0.8980

-0.8753    -0.0195

-1.7605

-0.8179    0.6107

205

0.9028    0.4827

0.4174

0.6375

0.9068    0.3855

0.7431

0.9017    0.6488

0.7638    0.7189

0.1138    0.7748    0.1455    0.0796    0.1442    0.2375    0.7786    0.2761    0.7810    0.7804

IACAL 292 RUN 26 DATE 13 OCT 80 TIME 03.29 RECOMP. NO. 1 DISK 1 PAGE 22

IOB NO. 11 LDGR ACCT 31302 CONTRACT 1631 SUB ACCT 10001 ACO DATE 2 JUL 80 19.44

MOD 20 ALPHA WIND ON RUN, C/B=70 DEG, FWD=54 DEG, AFT=38 DEG, MEAN=46 DEG, CMU=4

P<sub>T</sub> P<sub>A</sub>  
15.075 14.282

SUMMARY PAGE

PT NO	ALPHA H PHI	Ø H THETA	CLH THRUST	CDH DELAL	CMH WFT	YM THTH	RL CMUTH	PTPFCH CDR	PTPCBH CDHR	PTPACH
1	2.8222 1.2000	7.4724 -79.4077	7.3407 525.3384	-1.3727 2.7824	1.0241 8.1453	4770.2726 271.4731	15188.3562 3.8591	1.9506 1.4356	1.9451 -2.8083	1.9560
2	-1.3484 1.2000	7.7299 -74.5629	6.4569 487.4555	-1.7830 2.4419	0.8721 8.1401	4854.7549 271.2135	14272.5826 3.7270	1.9463 1.4107	1.9442 -3.1937	1.9545
3	-5.4344 1.2000	7.8247 -69.5076	5.7984 455.9817	-2.1670 2.1804	0.7156 8.1470	4926.2667 271.6244	13373.0846 3.6874	1.9498 1.4036	1.9464 -3.5707	1.9547
4	-9.1095 1.2000	7.7776 -64.5620	5.3028 429.9496	-2.5222 1.9800	0.5819 8.1601	5029.3336 272.1645	12490.7420 3.7171	1.9489 1.4106	1.9453 -3.9329	1.9561
5	2.8921 1.2000	7.3831 -79.1695	7.3901 522.9657	-1.4138 2.7927	1.0372 8.1381	4830.2273 271.5789	15118.7420 3.9073	1.9510 1.4444	1.9444 -2.8582	1.9574
6	7.0083 1.2000	7.3218 -83.5450	8.0034 555.1814	-0.9055 3.0608	1.1639 8.1345	4723.3749 271.4656	15986.8936 3.9384	1.9505 1.4497	1.9445 -2.3552	1.9586
7	11.1643 1.2000	7.1978 -87.6801	8.6416 586.0472	-0.3500 3.3487	1.2580 8.1335	4646.8513 271.4909	16716.0708 4.0066	1.9473 1.4631	1.9452 -1.8132	1.9498
8	15.1564 1.2000	7.2172 88.7357	9.0545 623.8741	0.1998 3.5721	1.3145 8.1274	4631.3336 271.3778	17553.7519 3.9395	1.9494 1.4502	1.9451 -1.2504	1.9509
9	19.3475 1.2000	7.0314 85.4645	9.8110 651.4730	0.7782 3.9089	1.4219 8.1166	4782.6938 271.1671	18149.3582 4.0965	1.9491 1.4780	1.9449 -0.6997	1.9495
10	23.2381 1.2000	7.0949 82.2903	10.1197 682.0848	1.3699 4.1227	1.4392 8.1172	4805.5846 271.0650	18779.2912 4.0583	1.9483 1.4715	1.9430 -0.1015	1.9476

206

NACAL 292 RUN 26 DATE 13 OCT 80 TIME 03.25 RECOMP. NO. 1 DISK 1 PAGE 2  
JOB NO. 11 LDGR ACCT 31302 CONTRACT 1631 SUB ACCT 10001 ACQ DATE 2 JUL 80 19.16

MOD 20 ALPHA WIND ON RUN,C/B=70 DEG,FWD=54 DEG,AFT=38 DEG,MEAN=46 DEG,CMU=4

DATA POINT 1

207

-0.7775  
0.4103 -0.3186  
-0.2113 -0.3745  
-0.0367 -0.1783  
0.0796 0.0167  
-0.0788 -2.2977  
-0.3827  
0.0255 -1.7957  
0.3185  
0.4355 0.4378  
0.4435 0.4407  
-1.4796 0.4038  
-2.6608  
-1.9522 0.3740  
0.4407 0.0565  
-0.0392  
0.3608  
0.4383 -0.0722  
0.2788  
0.4352 0.1654  
0.3416 0.3794  
0.0485 0.3943 0.0547 0.0715 0.0192 0.0404 0.3999 0.0460 0.3906 0.3856

8

NACAL 292    RUN 26    DATE 13 OCT 80    TIME 03.28    RECOMP. NO. 1    DISK 1    PAGE 14  
 JOB NO. 11    LDGR ACCT 31302    CONTRACT 1631    SUB ACCT 10001    ACQ DATE 2 JUL 80 19.37  
 MDD 20 ALPHA WIND ON RUN,C/B=70 DEG,FWD=54 DEG,AFT=38 DEG,MEAN=46 DEG,CMU=4

DATA POINT 7

208

-0.9235

0.4201    -0.3939

-0.1719    -0.4167

-0.0166    -0.4625

-0.0048    -0.0317

-0.2855    -2.2854

-0.8407

-0.3356    -1.7413

0.1346

0.3947    0.4254

0.4306    0.4390

0.4386    0.0817

0.4360    -0.0290

0.4356    0.1834

0.0136    0.3831    -0.0189    0.0074    -0.0232    -0.0097    0.3887    -0.0171    0.3837    0.3831

-1.5114    0.3972

-2.3551

-1.7315    0.3678

0.0166

0.3572

0.2836

0.3454    0.3732

NACAL 292    RUN 26    DATE 13 OCT 80    TIME 03.28    RECOMP. NO. 1    DISK 1    PAGE 16  
 JOB NO. 11    LDGR ACCT 31302    CONTRACT 1631    SUB ACCT 10001    ACQ DATE 2 JUL 80 19.40  
 MOD 20 ALPHA WIND ON RUN,C/B=70 DEG,FWD=54 DEG,AFT=38 DEG,MEAN=46 DEG,CMU=4

DATA POINT 8

209

-0.9303

0.4287    -0.4316

-0.1534    -0.4719

-0.0146    -0.4667

-0.0525    -0.0501    -1.5395    0.4143

-0.3900    -2.2781

-1.0938    -1.7199    -2.2310

-0.5857    0.4378    -1.6563    0.3697

0.0245

0.3669

0.4283    0.4406

0.4412    0.1016    0.0287    0.3600

0.4403    -0.0114    0.2960

0.4413    0.1926    0.3486    0.3755

-0.0528    0.3881    -0.0648    -0.0152    -0.0415    -0.0348    0.3931    -0.0311    0.3862    0.3831

NACAL 292 RUN 26 DATE 13 OCT 80 TIME 03.29 RECOMP. NO. 1 DISK 1 PAGE 20

JOB NO. 11 LDGR ACCT 31302 CONTRACT 1631 SUB ACCT 10001 ACQ DATE 2 JUL 80 19.43

MOD 20 ALPHA WIND ON RUN,C/B=70 DEG,FWD=54 DEG,AFT=38 DEG,MEAN=46 DEG,CMU=4

DATA POINT .10

-0.8703

0.4306 -0.4018

-0.1500 -0.4602

-0.0016 -0.4875

-0.4255 -0.1137

-0.3601

-1.7162

-1.4600 0.4361

-0.8737

-0.8743

-1.3683

-2.0641

-0.1954

0.3031

0.4428

-1.5077

0.3795

0.4074 0.4367

0.4449 0.1048

0.0702

0.3635

0.4467 0.0424

0.3108

0.4475 0.2313

0.3646

0.3778

-0.2922 0.3962 -0.2225 -0.2885 -0.1718 -0.0966 0.3899 -0.0727 0.3962 0.3906

210

ACAL 292 RUN 28 DATE 13 OCT 80 TIME 04.25 RECOMP. NO. 1 DISK 1 PAGE 22  
 OB NO. 11 LDGR ACCT 31302 CONTRACT 1631 SUB ACCT 10001 ACQ DATE 2 JUL 80 23.51

MOD 22 ALPHA WIND ON RUN, C/B=70 DEG, FWD=42 DEG, AFT=42 DEG, MEAN=42 DEG, CMU=0

P<sub>T</sub> P<sub>A</sub>  
 15.035 14.277

SUMMARY PAGE

T NO	ALPHA H PHI	Ø H THETA	CLH THRUST	CDH DELAL	CMH WFT	YM THTH	RL CMUTH	PTPFCH CDR	PTPCBII CDHR	PTPACH
1	0.3551 0.9500	15.2668 47.4427	0.6248 121.9242	0.5137 0.2832	0.0797 0.3213	-874.2738 1.1955	2488.8011 0.0083	0.9873 0.0276	0.9927 0.5460	0.9960
2	-3.5967 0.9500	15.4554 42.1914	0.4589 99.4257	0.5062 0.2037	0.0107 0.5177	-972.7009 1.6518	2124.2066 0.0113	0.9884 0.0443	0.9949 0.4619	0.9967
3	-7.5256 0.9500	15.2696 31.2648	0.2830 78.4027	0.4662 0.1200	-0.0722 0.3165	-943.9491 1.0668	1585.7812 0.0074	0.9879 0.0272	0.9945 0.4389	0.9958
4 211	-11.1606 0.9500	15.4515 16.0542	0.1247 65.6203	0.4335 0.0451	-0.1626 0.3100	-877.6080 1.0274	803.2033 0.0070	0.9885 0.0265	0.9948 0.4069	0.9967
5	0.2783 0.9500	15.1177 47.1720	0.5987 116.1859	0.5549 0.2706	0.0773 0.0797	-908.8902 0.2841	2466.0108 0.0019	0.9885 0.0069	0.9943 0.5480	0.9964
6	4.1379 0.9500	15.1370 49.1273	0.6965 131.2726	0.6028 0.3179	0.1490 0.4925	-867.6081 1.5724	2880.6983 0.0110	0.9903 0.0426	0.9938 0.5601	0.9976
7	7.9386 0.9500	14.9578 49.7730	0.7138 131.6555	0.6038 0.3263	0.2419 0.4722	-751.1910 1.4734	3047.6594 0.0104	0.9928 0.0411	0.9937 0.5626	0.9968
8	11.7541 0.9500	15.0705 52.4691	0.7837 140.2113	0.6020 0.3601	0.3111 0.4783	-688.0002 1.0428	3126.3001 0.0073	0.9971 0.0415	0.9949 0.5604	1.0001
9	15.7201 0.9500	14.9551 55.6513	0.9049 154.3108	0.6184 0.4189	0.3353 0.2317	-510.6718 0.7021	3283.0452 0.0049	0.9945 0.0202	0.9939 0.5982	0.9957
10	19.5340 0.9500	14.9016 55.9888	1.0010 169.4090	0.6754 0.4664	0.3225 0.2912	-380.4995 0.8742	3231.3498 0.0062	0.9947 0.0254	0.9950 0.6500	0.9944

NACAL 292 RUN 28 DATE 13 OCT 80 TIME 04.21 RECOMP. NO. 1 DISK 1 PAGE 2

JOB NO. 11 LDGR ACCT 31302 CONTRACT 1631 SUB ACCT 10001 ACQ DATE 2 JUL 80 23.29

MOD 22 ALPHA WIND ON RUN,C/B=70 DEG,FWD=42 DEG,AFT=42 DEG,MEAN=42 DEG,CMU=0

DATA POINT 1

212

0.5433  
0.8659 0.6859  
0.7033 0.6855  
0.7579 0.7504 0.7051 0.6837  
0.6939 0.6510 0.7293 0.6922  
0.7473  
0.8910 0.3108 0.8704  
0.8258  
0.8006 0.8263 0.7859 0.6906  
0.8014 0.8113  
0.8188 0.7360 0.7730 0.7011  
0.6213 0.7530 0.7798  
0.8264 0.7744 0.7476 0.6954  
0.7560 0.7498 0.7448 0.7529 0.7374 0.7405 0.7610 0.7480 0.7554 0.7629

NACAL 292 RUN 28 DATE 13 OCT 80 TIME 04.23 RECOMP. NO. 1 DISK 1 PAGE 14

JOB NO. 11 LDGR ACCT 31302 CONTRACT 1631 SUB ACCT 10001 ACQ DATE 2 JUL 80 23.47

MOD 22 ALPHA WIND ON RUN, C/B=70 DEG, FWD=42 DEG, AFT=42 DEG, MEAN=42 DEG, CMU=0

DATA POINT 7

0.6342

0.8620 0.6752

0.7480 0.6763

0.7280 0.6738

0.7262 0.7405 0.7361 0.6798

0.6429 0.7094

0.5993 0.6889 0.8704

0.8107 0.6889

0.8595 0.8294 0.7710 0.6812

0.8339 0.8230 0.8210

0.8268 0.7415 0.7588 0.6877

0.8261 0.7462 0.7713

0.8183 0.7546 0.6996 0.7533

0.7336 0.7498 0.7380 0.7355 0.7293 0.7417 0.7697 0.7380 0.7604 0.7654

213

NACAL 292      RUN 28      DATE 13 OCT 80      TIME 04.24      RECOMP. NO. 1      DISK 1      PAGE 16  
 JOB NO. 11      LDGR ACCT 31302      CONTRACT 1631      SUB ACCT 10001      ACO DATE 2 JUL 80 23.48  
 MOD 22 ALPHA WIND ON RUN, C/B=70 DEG, FWD=42 DEG, AFT=42 DEG, MEAN=42 DEG, CMU=0

DATA POINT 8

0.6484

0.8469    0.6786

0.6883    0.6761

0.7053    0.6732

0.6597    0.6858

0.6864    0.7150

0.6099

0.7877    0.7113

0.8628

0.8455    0.8394

0.8321    0.8276

0.7504    0.6848

0.7629

0.7411    0.6879

0.8288    0.7278

0.7588

0.6908

0.8338    0.7418

0.7624

0.8193    0.7491

0.7500

0.6974

0.6963    0.7498    0.6870    0.6808    0.7075    0.7032    0.7623    0.7007    0.7554    0.7654

214



CAL 292 RUN 29 DATE 13 OCT 80 TIME 04.37 RECOMP. NO. 1 DISK 1 PAGE 22

DB NO. 11 LDGR ACCT 31302 CONTRACT 1631 SUB ACCT 10001 ACQ DATE 3 JUL 80 0.26

MOD 23 ALPHA WIND ON RUN, C/B=70 DEG, FWD=42 DEG, AFT=42 DEG, MEAN=42 DEG, CMU=1

P<sub>TS</sub> P<sub>A</sub>  
15.05 14.277

SUMMARY PAGE

NO	ALPHA H PHI	O H THETA	CLH THRUST	CDH DEFLAL	CMH WFT	YM TH1H	RL CM1TH	PTPFCH CDR	PTPCRH CDHR	PTPACH
1	0.4910 0.9500	14.8338 80.2697	1.7360 245.9023	0.2945 0.8004	0.0229 5.1946	671.8479 119.2518	7248.8789 0.8539	1.3656 0.4545	1.3671 -0.1569	1.3691
2	-3.1560 0.9500	14.9963 82.4579	1.5310 218.0320	0.2027 0.7024	-0.0576 5.1996	567.9258 119.3622	6753.9369 0.8454	1.3660 0.4526	1.3672 -0.2489	1.3690
3	-7.0980 0.9500	15.1130 84.2163	1.3161 188.2054	0.1333 0.6019	-0.1333 5.2039	342.5539 119.6136	6280.8100 0.8407	1.3680 0.4514	1.3667 -0.3181	1.3705
4	-10.6315 0.9500	15.1546 86.6272	1.1602 165.8188	0.0683 0.5293	-0.2219 5.2219	263.7001 120.2310	5714.3139 0.8427	1.3698 0.4524	1.3676 -0.3840	1.3702
5	0.7690 0.9500	14.9343 81.2070	1.6813 239.1905	0.2600 0.7736	0.0201 5.2154	738.3946 120.1344	7165.2470 0.8544	1.3687 0.4555	1.3674 -0.1954	1.3739
6	4.7244 0.9500	14.9734 79.3341	1.8611 266.9571	0.3505 0.8607	0.0836 5.2243	1011.9736 120.6612	7645.3897 0.8559	1.3729 0.4561	1.3689 -0.1056	1.3732
7	8.6356 0.9500	14.6981 77.6142	1.9928 282.3124	0.4376 0.9265	0.1566 5.2199	1198.7138 120.5149	7717.1043 0.8709	1.3717 0.4602	1.3690 -0.0226	1.3722
8	12.4663 0.9500	14.9436 76.4418	2.1365 309.1879	0.5152 0.9981	0.2411 5.1524	1343.8501 118.2267	7870.8326 0.8403	1.3623 0.4509	1.3646 0.0642	1.3681
9	16.3784 0.9500	14.8876 75.2102	2.3196 336.2495	0.6124 1.0903	0.3073 5.1544	1599.3053 118.0002	8138.7440 0.8419	1.3580 0.4522	1.3623 0.1602	1.3633
0	20.2285 0.9500	14.7842 74.1226	2.5246 365.3170	0.7180 1.1944	0.3811 5.1597	1847.8029 118.5948	8601.6397 0.8521	1.3621 0.4545	1.3661 0.2635	1.3637

216

SACAL 292 RUN 29 DATE 13 OCT 80 TIME 04.34 RECOMP. NO. 1 DISK 1 PAGE 2

JOB NO. 11 LDGR ACCT 31302 CONTRACT 1631 SUB ACCT 10001 ACQ DATE 3 JUL 80 0.05

MOD 23 ALPHA WIND ON RUN,C/B=70 DEG,FWD=42 DEG,AFT=42 DEG,MEAN=42 DEG,CMU=1

DATA POINT 1

217

						0.6631				
						0.8826	0.6709			
						0.7646	0.6595			
						0.7815	0.6568			
	0.7264	0.7246						0.3132	0.5803	
	0.6717		-0.0036							
	0.6848									
	0.8582		-0.0415					0.2286		
	0.8746									
	0.8454		0.8451					0.4399	0.6795	
	0.8374	0.8397								
			0.8461	0.8311				0.7800		
									0.6660	
			0.8505	0.8336				0.8154		
			0.8518	0.7943					0.6737	
								0.7672		
0.7314	0.7674	0.7445	0.7476	0.7215	0.7140	0.7637	0.7159	0.7650	0.7718	



NACAL 292 RUN 29 DATE 13 OCT 80 TIME 04.36 RECOMP. NO. 1 DISK 1 PAGE 16  
JOB NO. 11 LDGR ACCT 31302 CONTRACT 1631 SUB ACCT 10001 ACQ DATE 3 JUL 80 0.21  
MOD 23 ALPHA WIND ON RUN,C/B=70 DEG,FWD=42 DEG,AFT=42 DEG,MEAN=42 DEG,CMU=1

DATA POINT 8

0.6913  
0.8806 0.6568  
0.7515 0.6646  
0.7800 0.6406  
0.6220 0.5456  
0.4685 0.0074 0.3069 0.5428  
0.3573  
0.6954 0.0174 0.2411  
0.8430  
0.8795 0.8600 0.4375 0.6578  
0.8707 0.8635  
0.8584 0.8367 0.7874 0.6832  
0.8684 0.8451 0.8285  
0.8598 0.8086 0.7721 0.6905  
0.6376 0.7612 0.5785 0.6164 0.6494 0.6512 0.7619 0.6587 0.7575 0.7606

219

NACAL 292 RUN 29 DATE 13 OCT 80 TIME 04.37 RECOMP. NO. 1 DISK 1 PAGE 20  
JOB NO. 11 LDGR ACCT 31302 CONTRACT 1631 SUB ACCT 10001 ACQ DATE 3 JUL 80 0.24

MOD 23 ALPHA WIND ON RUN,C/B=70 DEG,FWD=42 DEG,AFT=42 DEG,MEAN=42 DEG,CMU=1

DATA POINT 10

220

						0.6521				
						0.8824	0.6803			
						0.6583	0.7097			
						0.7472	0.6766			
	0.4884	0.4934						0.3231	0.6215	
	0.3355		0.0870							
	0.4269									
	0.2939		0.0627					0.2684		
	0.7051									
	0.8762		0.8750					0.4312	0.6472	
	0.8946	0.8864								
			0.8818	0.7952				0.8280		
									0.6772	
			0.8863	0.8514				0.8458		
										0.6948
			0.8793	0.8271				0.7978		
0.5356	0.7656	0.5058	0.4250	0.5468	0.5493	0.7718	0.5120	0.7637	0.7706	

ICAL 392 RUN 30 DATE 13 OCT 80 TIME 04.48 RECOMP. NO. 1 DISK 1 PAGE 22

IB NO. 11 LDGR ACCT 31302 CONTRACT 1631 SUB ACCT 10001 ACQ DATE 3 JUL 80 18.29

MOD 24 ALPHA WIND ON RUN, C/R=70 DEG, FWD=42 DEG, AFT=42 DEG, MEAN=42 DEG, CMU=2

P<sub>T</sub> P<sub>A</sub>  
15.07 14.282

SUMMARY PAGE

NO	ALPHA H PHI	Ø H THETA	CLH THRUST	CDH DELAL	CMH WFT	YM THTH	RL CMJTH	PTPFCH CDR	PTPCBH CDHR	PTPACH
1	1.4616 0.9500	15.0264 -89.4979	3.1373 443.8232	-0.0274 1.3958	-0.0020 8.0418	2607.5398 260.5273	13029.2854 1.8417	1.8892 0.7050	1.8879 -0.7325	1.8960
2	-2.5494 0.9500	15.0588 -86.7591	2.9345 416.6564	-0.1641 1.2979	-0.0626 8.0533	2206.9640 260.8871	12665.3247 1.8402	1.8933 0.7060	1.8853 -0.8701	1.8926
3	-6.3956 0.9500	15.0594 -83.9625	2.8276 403.1078	-0.2990 1.2420	-0.1278 8.0535	1848.6798 261.2904	12516.5177 1.8430	1.8936 0.7065	1.8883 -1.0056	1.8955
4	-9.7643 0.9500	14.8864 -81.6733	2.8965 410.2535	-0.4239 1.2612	-0.1255 8.0647	1531.3206 261.7741	12394.1121 1.8679	1.8903 0.7118	1.8892 -1.1357	1.8985
5	1.4171 0.9500	14.8713 -88.9766	3.1180 436.5880	-0.0556 1.3850	-0.0052 8.0499	2584.5949 261.2220	12983.5314 1.8658	1.8916 0.7110	1.8880 -0.7667	1.8954
6	5.3137 0.9500	15.0083 88.1283	3.3317 470.9870	0.1088 1.4917	0.0397 8.0529	2920.4473 261.4092	13504.5885 1.8501	1.8905 0.7081	1.8881 -0.5992	1.8960
7	9.1986 0.9500	15.1201 86.5236	3.4684 494.6131	0.2100 1.5606	0.1107 8.0573	2422.3380 261.3932	13556.9074 1.8363	1.8888 0.7060	1.8853 -0.4959	1.8942
8	13.1105 0.9500	15.2216 83.6798	3.5961 521.8716	0.3982 1.6366	0.1684 8.0381	3700.2524 260.7807	13510.3267 1.8079	1.8880 0.6997	1.8849 -0.3014	1.8926
9	17.0476 0.9500	15.0948 81.0282	3.8601 555.2152	0.6087 1.7762	0.2605 8.0371	4002.5615 260.8268	13789.7913 1.8355	1.8869 0.7049	1.8863 -0.0962	1.8928
10	21.0868 0.9500	15.1744 78.6516	4.0732 593.4811	0.8175 1.8969	0.3506 8.0410	4284.8671 261.0482	14288.6417 1.8274	1.8892 0.7038	1.8851 0.1136	1.8999

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NACAL 292      RUN 30      DATE 13 OCT 80      TIME 04.44      RECOMP. NO. 1      DISK 1      PAGE 2  
 JOB NO. 11      LDGR ACCT 31302      CONTRACT 1631      SUB ACCT 10001      ACQ DATE 3 JUL 80 18.10  
 MOD 24 ALPHA WIND ON RUN,C/B=70 DEG,FWD=42 DEG,AFT=42 DEG,MEAN=42 DEG,CMU=2

DATA POINT 1

222

0.5381  
 0.8902    0.6533  
 0.7171    0.6164  
 0.6754    0.6773    0.7325    0.5502  
 0.6031    -0.7853    -0.0754    0.3482  
 0.4958  
 0.8157    -0.0226    -0.4683  
 0.8907  
 0.8855    0.8750    -0.1079    0.5919  
 0.8611    0.8572  
 0.8633    0.8704    0.7313  
 0.6123  
 0.8688    0.9610    0.8315  
 0.8643    0.7547    0.7734    0.6354  
 0.6835    0.7939    0.6910    0.6910    0.6885    0.6473    0.7796    0.6567    0.7958    0.7839





NACAL 292      RUN 30      DATE 13 OCT 80      TIME 04.48      RECOMP. NO. 1      DISK 1      PAGE 20  
 JOB NO. 11      LDGR ACCT 31302      CONTRACT 1631      SUB ACCT 10001      ACQ DATE 3 JUL 80 18.27  
 MOD 24 ALPHA WIND ON RUN,C/B=70 DEG,FWD=42 DEG,AFT=42 DEG,MEAN=42 DEG,CMU=2

DATA POINT 10

225

						0.6325					
						0.8972	0.7251				
						0.6477	0.5889				
						0.6510	0.6058				
		0.3704	0.4153								
		0.4683	-0.5585					-0.1023	0.2625		
		-0.2243									
		-0.0472	-0.0729					-0.4205			
		0.5517									
		0.8824	0.9218					-0.1189	0.5950		
		0.9188	0.9214								
			0.9171	0.8788				0.7991			
									0.6507		
			0.9198	1.0089				0.9024			
			0.9124	0.8374					0.7261		
								0.8381			
		0.4241	0.8145	0.3941	0.4047	0.4390	0.2968	0.8101	0.3804	0.8157	0.8126

ACAL 392 RUN 31 DATE 13 OCT 80 TIME 04.59 RECOMP. NO. 1 DISK 1 PAGE 22

OB NO. 11 LDGR ACCT 31302 CONTRACT 1631 SUB ACCT 10001 ACO DATE 3 JUL 80 18.56

MOD 25 ALPHA WIND ON RUN, C/B=70 DEG, FWD=42 DEG, AFT=42 DEG, MEAN=42 DEG, CMU=4

P<sub>T</sub> P<sub>A</sub>  
14.67 14.282

SUMMARY PAGE

PT NO	ALPHA H PHI	Q H THETA	CLH THRUST	CDH DELAL	CMH WFT	YM THTH	RL CMUTH	PTPFCH CDR	PTPCBH CDHR	PTPACH
1	2.6295 0.9500	7.4590 -83.6806	6.4250 453.9258	-0.7115 2.5658	0.3173 8.1105	3122.6791 268.0240	12826.6613 3.8169	1.9443 1.0226	1.9383 -1.7341	1.9454
2	-1.5700 0.9500	7.6708 -79.2426	5.6712 416.8624	-1.0774 2.2587	0.2051 8.1060	3171.3331 267.9539	11884.5806 3.7106	1.9437 1.0080	1.9393 -2.0854	1.9440
3	-5.6401 0.9500	7.6802 -74.5432	5.0992 382.5161	-1.4099 2.0175	0.0942 8.1070	3195.6427 268.1730	11003.8543 3.7090	1.9422 1.0076	1.9399 -2.4176	1.9456
4	-9.3539 0.9500	7.8405 -69.6443	4.4662 351.6156	-1.6570 1.7657	-0.0197 8.1160	3303.6751 268.5385	10094.7578 3.6381	1.9428 0.9984	1.9410 -2.6554	1.9440
5	2.5568 0.9500	7.6359 -83.6853	6.3111 456.4480	-0.6984 2.5323	0.3032 8.1077	3117.2716 268.2589	12874.9684 3.7317	1.9424 1.0107	1.9391 -1.7091	1.9458
6	6.3882 0.9500	7.5598 -86.9211	6.1026 434.9421	-0.3282 2.5126	0.0802 8.0990	3447.6663 268.0824	12471.6968 3.7668	1.9440 1.0148	1.9408 -1.3430	1.9472
7	10.2471 0.9500	7.5485 -89.4208	6.2341 443.0358	-0.0630 2.6000	0.1934 8.0968	3631.6810 268.0221	12639.6515 3.7716	1.9445 1.0154	1.9388 -1.0784	1.9484
8	14.1199 0.9500	7.5574 87.8766	6.3512 452.1772	0.2354 2.6905	0.2211 8.1132	3743.3666 268.7986	12736.7814 3.7781	1.9457 1.0169	1.9404 -0.7815	1.9497
9	18.2082 0.9500	7.5003 84.8120	6.7117 475.8564	0.6093 2.8843	0.3139 8.1073	2916.6008 268.4950	13180.3267 3.8025	1.9443 1.0202	1.9370 -0.4108	1.9495
10	22.2957 0.9500	7.3032 81.6815	7.2834 506.0856	1.0649 3.1716	0.4181 8.0914	3997.4704 267.8523	13797.4665 3.8958	1.9415 1.0320	1.9370 0.0329	1.9497

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NACAL 392      RUN 31      DATE 13 OCT 80      TIME 04.57      RECOMP. NO. 1      DISK 1      PAGE 14  
 JOB NO. 11      LDGR ACCT 31302      CONTRACT 1631      SUB ACCT 10001      ACQ DATE 3 JUL 80 18.53  
 MOD 25 ALPHA WIND ON RUN, C/B=70 DEG, FWD=42 DEG, AFT=42 DEG, MEAN=42 DEG, CMU=4

DATA POINT 7

228

					0.2006				
					0.4493	0.2549			
					0.2887	0.1147			
					0.3169	0.0530			
	0.1882	0.2262					-0.4804	-0.1242	
	0.0741								
	-0.1752								
	0.1371						-1.0036		
	0.3615								
	0.4433						-0.5759		0.2677
	0.4484	0.4477							
					0.4473	0.4616		0.3623	
									0.2566
					0.4461	0.5968		0.4342	
									0.3118
					0.4420	0.3504		0.3922	
0.2293	0.3964	0.1683	0.2244	0.2462	0.2119	0.3933	0.2368	0.3964	0.3958

NACAL 392      RUN 31      DATE 13 OCT 80      TIME 04.58      RECOMP. NO. 1      DISK 1      PAGE 16  
 JOB NO. 11      LDGR ACCT 31302      CONTRACT 1631      SUB ACCT 10001      ACO DATE 3 JUL 80 18.53  
 MOD 25 ALPHA WIND ON RUN,C/B=70 DEG,FWD=42 DEG,AFT=42 DEG,MEAN=42 DEG,CMU=4

DATA POINT 8

229

					0.2762					
					0.4488	0.3325				
					0.2653	0.1579				
	0.1770	0.1589			0.3140	0.2554				
	0.0236		-1.2206					-0.4865	-0.0318	
	-0.3125									
	0.0629		-0.2683					-0.9534		
	0.2839									
	0.4328			0.4513				-0.5772		0.2290
	0.4501	0.4539								
			0.4493	0.4496				0.3233		
										0.2995
			0.4474	0.5824				0.4343		
										0.3274
			0.4427	0.3651					0.3996	
	0.1845	0.3852	0.1034	0.2119	0.1976	0.1951	0.3958	0.2194	0.3902	0.3958

NACAL 392 RUN 31 DATE 13 OCT 80 TIME 04.58 RECOMP. NO. 1 DISK 1 PAGE 20

JOB NO. 11 LDGR ACCT 31302 CONTRACT 1631 SUB ACCT 10001 ACO DATE 3 JUL 80 18.55

MOD 25 ALPHA WIND ON RUN,C/R=70 DEG,FWD=42 DEG,AFT=42 DEG,MEAN=42 DEG,CMU=4

DATA POINT 10

230

					0.2827					
					0.4365	0.3449				
					0.0303	0.2845				
					0.2492	0.2466				
	0.0280	0.0105								
	-0.0839		-1.1807					-0.5104	-0.1487	
	-0.5600									
	-0.2683		-0.3247					-0.9215		
	0.1274									
	0.3941		0.4531					-0.5870	0.2685	
	0.4427	0.4508								
			0.4511	0.3953				0.3550		
									0.2904	
			0.4527	0.6111				0.4385		
										0.3274
			0.4494	0.3955				0.4018		
0.1228	0.3821	-0.0398	-0.0502	0.0006	-0.0453	0.3908	0.1016	0.3902	0.3908	

CAL 292 RUN 33 DATE 13 OCT 80 TIME 05.24 RECOMP. NO. 1 DISK 1 PAGE 22

IR NO. 11 LDGR ACCT 31302 CONTRACT 1631 SUB ACCT 10001 ACQ DATE 8 JUL 80 17.53

MOD 27 ALPHA WIND ON RUN, C/B=70 DEG, FWD=42 DEG, AFT=42 DEG, MEAN=42 DEG, CMU=0  
AUG 2

P<sub>T</sub> P<sub>A</sub>  
14.74 14.22

SUMMARY PAGE

NO	ALPHA H PHI	Q H THETA	CLH THRUST	CDH DELAL	CMH WFT	YM TRTH	RL CMITH	PTPFCH CDR	PTPCBH CDHR	PTPACH
1	0.3169 0.9500	10.6423 52.7317	0.4700 85.3378	0.3576 0.3092	0.0847 0.0536	-622.6936 0.0661	1948.5209 0.0004	0.9936 0.0038	0.5961 0.3537	0.9990
2	-3.5888 0.9500	10.5612 42.2532	0.3205 68.3500	0.3528 0.2056	-0.6052 0.2720	-683.6423 0.6651	1427.1065 0.0046	0.9937 0.0197	0.5967 0.3330	0.9985
3 231	-7.6022 0.9500	10.8432 20.5187	0.1212 50.9350	0.3240 0.0683	-0.1035 0.2421	-691.8168 0.6034	711.4694 0.0040	0.9932 0.0173	0.5964 0.3066	0.9982
4	-11.1962 0.9500	10.9376 -21.1452	-0.1249 51.4336	0.3230 -0.0975	-0.1934 0.3183	-597.9714 0.7819	-443.0201 0.0052	0.9924 0.0227	0.5966 0.3003	0.9985
5	0.3521 0.9500	10.5883 52.4364	0.4679 84.8583	0.3598 0.3078	0.0840 0.1512	-656.9040 0.3496	1929.0787 0.0024	0.9941 0.0109	0.5967 0.3488	0.9983
6	4.2313 0.9500	10.5070 57.1757	0.6059 103.5363	0.3934 0.4066	0.1774 0.2211	-596.6219 0.5294	2507.2091 0.0037	0.9949 0.0161	0.9960 0.3773	0.9985
7	8.1475 0.9500	10.3704 61.8770	0.7546 120.4743	0.4033 0.5074	0.2779 0.2339	-489.1841 0.5668	2936.6914 0.0040	0.9958 0.0171	0.5959 0.3861	0.9982
8	12.0613 0.9500	10.3215 67.2496	0.9697 147.3516	0.4066 0.6561	0.3657 0.2409	-439.1884 0.4848	3645.1505 0.0034	0.9976 0.0177	0.5966 0.3889	0.9990
9	15.9826 0.9500	10.3495 65.1680	1.0620 164.4251	0.4914 0.7252	0.3683 0.3672	-345.4360 0.8938	3986.5811 0.0063	0.9961 0.0270	0.5962 0.4644	0.9976
10	19.8968 0.9500	10.3694 62.4234	1.1150 177.0835	0.5823 0.7689	0.3942 0.2205	-213.5150 0.4245	4124.7509 0.0030	0.9976 0.0162	0.5980 0.5661	0.9982









ACAL 292 RUN 34 DATE 13 OCT 80 TIME 05.35 RECOMP. NO. 1 DISK 1 PAGE 22

OB NO. 11 LDGR ACCT 31302 CONTRACT 1631 SUB ACCT 10001 ACO DATE 8 JUL 80 18.32

MOD 28 ALPHA WIND ON RUN, C/R=70 DEG, FWD=42 DEG, AFT=42 DEG, MEAN=42 DEG, CMU=1  
AUG 2

P<sub>TS</sub> P<sub>A</sub>  
14.76 14.23

SUMMARY PAGE

T NO	ALPHA H PHI	O H THETA	CLH THRUST	CDH DELAL	CMH WFT	YM THTH	RL CMUTH	PTPFCH CDR	PTPCBH CDHR	PTPACH
1	1.2169 0.9500	10.4993 86.2680	1.8213 260.1313	0.1156 1.1940	0.1440 5.3062	851.0205 126.5570	7775.4537 0.8878	1.3953 0.3885	1.3972 -0.2728	1.3983
2	-2.8288 0.9500	10.4040 88.4661	1.6314 230.5216	0.0436 1.0656	0.0385 5.3020	647.3182 126.5902	7092.5836 0.8962	1.3970 0.3902	1.3967 -0.3465	1.3988
3	-6.7453 0.9500	10.3577 -88.0595	1.3866 195.1054	-0.0469 0.9018	-0.0539 5.3353	632.8495 128.4235	6540.4251 0.9133	1.4033 0.3944	1.4027 -0.4414	1.4040
4	-10.5062 0.9500	10.5224 -84.4814	1.1774 168.9838	-0.1137 0.7642	-0.1550 5.3070	615.9382 126.9076	5727.3572 0.8883	1.3964 0.3889	1.3972 -0.5027	1.3978
5	1.1548 0.9500	10.5375 86.0673	1.7922 256.9939	0.1232 1.1764	0.1308 5.2923	810.0994 126.6263	7792.5285 0.8851	1.3981 0.3877	1.3955 -0.2645	1.4003
6	5.1811 0.9500	10.5246 83.5329	2.0512 294.9589	0.2325 1.3550	0.2417 5.2948	830.9082 126.5589	8638.2736 0.8857	1.3967 0.3881	1.3950 -0.1556	1.3984
7	9.0519 0.9500	10.5378 82.2213	2.2859 330.5703	0.3087 1.5175	0.3487 5.2759	1005.5992 125.8865	9174.1397 0.8799	1.3942 0.3865	1.3944 -0.0777	1.3956
8	13.0558 0.9500	10.5296 80.2478	2.5322 367.1889	0.4306 1.6908	0.4342 5.2754	1203.9879 126.0626	9635.6889 0.8818	1.3953 0.3868	1.3949 0.0437	1.3949
9	17.2106 0.9500	10.5291 77.8572	2.5228 427.3641	0.6288 1.9737	0.5366 5.2922	1395.5575 126.2796	10658.1948 0.8834	1.3941 0.3878	1.3940 0.2409	1.3954
10	21.8336 0.9500	10.4953 75.1508	3.2033 472.1943	0.8492 2.1984	0.6198 5.2999	1724.6053 126.9530	11370.2657 0.8909	1.3971 0.3892	1.4004 0.4600	1.3938

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0

NACAL 292    RUN 34    DATE 13 OCT 80    TIME 05.31    RECOMP. NO. 1    DISK 1    PAGE 2  
 JOB NO. 11    LDGR, ACCT 31302    CONTRACT 1631    SUB ACCT 10001    ACQ DATE 8 JUL 80 18.00  
 MOD 28    ALPHA WIND ON RUN, C/B=70 DEG, FWD=42 DEG, AFT=42 DEG, MEAN=42 DEG, CMU=1  
 AUG 2

DATA POINT 1

0.3883

0.5976    0.4821

0.4851    0.4223

0.5029    0.3911

0.4814    0.5020    0.5344    0.5076    0.5029    0.3911    0.0430    0.2877

0.4190    -0.2562

0.3099    -0.0833    -0.1103

0.4147    -0.0833    -0.1103

0.5525

0.5999    0.5830    0.1471    0.4206

0.5499

0.5536

0.5656    0.5672    0.5644    0.5116

0.5749    0.5673    0.4079

0.5789    0.5950    0.5542

0.5809    0.5293    0.4462

0.5213    0.5232    0.5213    0.5045    0.5176    0.5063    0.5288    0.5063    0.4677    0.4976

0.5201

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ACAL 292 RUN 35 DATE 13 OCT 80 TIME 05.45 RECOMP. NO. 1 DISK 1 PAGE 22

OB NO. 11 LDGR ACCT 31302 CONTRACT 1631 SUB ACCT 10001 ACO DATE 8 JUL 80 19.02

MOD 29 ALPHA WIND ON RUN, C/B=70 DEG, FWD=42 DEG, AFT=42 DEG, MEAN=42 DEG, CMU=2  
AUG 2

P<sub>T</sub> P<sub>A</sub>  
14.77 14.233

SUMMARY PAGE

T NO	ALPHA H PHI	Q H THETA	CLH THRUST	CDH DELAL	CMH WFT	YM THTH	RL CMUTH	PTPFCH CDR	PTPCBH CDHR	PTPACH
1	2.2420 0.9500	10.5057 -89.1556	3.8077 543.1443	-0.0561 2.3297	0.3917 7.9880	1979.7984 261.1887	15542.1239 1.8312	1.9196 0.5854	1.9230 -0.6415	1.9224
2	-1.7194 0.9500	10.5917 -85.0558	3.4986 504.9568	-0.3026 2.1140	0.3064 7.9680	2150.2558 260.3505	14513.1574 1.8105	1.9156 0.5816	1.9198 -0.8842	1.9204
3	-5.8819 0.9500	10.5297 -80.1405	3.0726 446.2421	-0.5340 1.8420	0.1782 8.1306	2301.9384 266.1481	12949.8385 1.8600	1.9193 0.5955	1.9217 -1.1296	1.9217
4	-9.5504 0.9500	10.5167 -75.0882	2.6688 394.3293	-0.7107 1.5938	0.0531 8.1252	2527.3503 266.1455	11514.3444 1.8640	1.9199 0.5961	1.9231 -1.3068	1.9220
5	2.4214 0.9500	10.2508 -88.6933	3.9562 550.7209	-0.0902 2.4015	0.4385 8.1203	2113.1299 265.9639	15661.0295 1.9111	1.9186 0.6036	1.9221 -0.6938	1.9250
6	6.4027 0.9500	10.1710 87.5873	4.2212 583.3897	0.1778 2.6021	0.5227 7.9239	2013.4955 259.5264	16574.2204 1.8795	1.9190 0.5913	1.9197 -0.4135	1.9232
7	10.5519 0.9500	10.0825 84.1888	4.6401 638.4263	0.4722 2.8940	0.6754 7.9188	1919.4274 259.6614	18004.0314 1.8969	1.9206 0.5938	1.9224 -0.1216	1.9252
8	14.5052 0.9500	10.1068 81.1811	4.9352 685.2691	0.7656 3.1262	0.7097 7.9378	1855.6296 260.2950	19152.4881 1.8970	1.9191 0.5946	1.9215 0.1710	1.9240
9	18.6949 0.9500	9.9108 78.2759	5.3220 731.3416	1.1044 3.4219	0.9222 7.9580	1881.5649 261.1286	20239.1810 1.9407	1.9195 0.6022	1.9223 0.5022	1.9267
10	22.8049 0.9500	9.7798 75.4341	5.6472 774.6929	1.4674 3.7007	1.0391 7.9729	1960.4463 261.5338	21272.9605 1.9698	1.9180 0.6075	1.9210 0.8598	1.9245

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JACAL 292      RUN 36      DATE 13 OCT 80      TIME 05.56      RECOMP. NO. 1      DISK 1      PAGE 24

JOB NO. 11      LDGR ACCT 31302      CONTRACT 1631      SUB ACCT 10001      ACQ DATE 8 JUL 80 19.33

MOD 30 ALPHA WIND ON RUN, C/B=70 DEG, FWD=42 DEG, AFT=42 DEG, MEAN=42 DEG, CMU=4  
AUG 2

P<sub>T</sub>      P<sub>A</sub>  
14.50      14.233

SUMMARY PAGE

PT NO	ALPHA H PHI	Ø H THETA	CLH THRUST	CPH DELAL	CMH WFT	YM THTH	RL CMUTH	PTPFCH CDR	PTPCBH CDHR	PTPACH
1	2.9185 0.9500	5.3008 -78.6657	5.4860 402.6462	-1.0996 2.9370	0.5123 8.1316	3610.3070 270.1991	11455.0058 3.7546	1.9565 0.8471	1.9602 -1.9468	1.9596
2	-1.2264 0.9500	5.2711 -73.2330	4.5854 372.8022	-1.5020 2.6358	0.3666 8.1323	3766.0339 270.5161	10602.5196 3.7802	1.9600 0.8502	1.9592 -2.3522	1.9621
3	-5.4099 0.9500	5.4010 -67.9918	4.3818 346.5495	-1.7710 2.3145	0.2130 8.1352	3804.9547 270.5223	9899.6293 3.6893	1.9585 0.8402	1.9559 -2.6113	1.9631
4	-9.2088 0.9500	5.4008 -62.1302	3.8471 319.0921	-2.0343 2.0274	0.0747 8.1104	3918.2450 269.7260	9073.9133 3.6786	1.9575 0.8379	1.9572 -2.8723	1.9605
5	2.9386 0.9500	5.1370 -78.2670	5.6352 401.3928	-1.1703 2.9895	0.5217 8.1753	2631.6412 271.9614	11377.7834 3.8995	1.9582 0.8663	1.9559 -2.0367	1.9573
6	7.2112 0.9500	4.9799 -82.8892	6.3219 430.7228	-0.7886 3.3682	0.6851 8.1192	3580.7081 270.0821	12136.2637 3.9948	1.9565 0.8740	1.9569 -1.6626	1.9582
7	11.1680 0.9500	5.1058 -86.7542	6.5662 455.8801	-0.3723 3.5653	0.8059 8.1368	3542.7918 270.7456	12823.6554 3.9059	1.9575 0.8651	1.9572 -1.2374	1.9571
8	15.3141 0.9500	5.0117 89.0499	7.1130 484.0388	0.1179 3.9230	0.9559 8.1178	3475.0551 270.1835	13528.2519 3.9709	1.9567 0.8712	1.9561 -0.7532	1.9587
9	19.5230 0.9500	4.9049 85.4522	7.5853 506.9675	0.6036 4.2522	1.0841 8.0884	3512.1269 269.2074	14109.8484 4.0427	1.9561 0.8777	1.9546 -0.2740	1.9595
10	23.6550 0.9500	4.8572 81.8769	8.0088 533.4714	1.1431 4.5811	1.2112 8.0784	3485.0290 268.5835	14749.3720 4.0730	1.9545 0.8809	1.9510 0.2622	1.9579

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NACAL 292 RUN 36 DATE 13 OCT 80 TIME 05.53 RECOMP. NO. 1 DISK 1 PAGE 2  
 JGB NO. 11 LDGR ACCT 31302 CONTRACT 1631 SUB ACCT 10001 ACO DATE 8 JUL 80 19.10

MOD 30 ALPHA WIND ON RUN, C/B=70 DEG, FWD=42 DEG, AFT=42 DEG, MEAN=42 DEG, CMU=4  
 AUG 2

DATA POINT 1

-0.3713

					0.3134	0.0675			
					0.1660	-0.1598			
		0.1856	0.2136	0.2616	0.1937	0.1905	-0.1571		
	0.1220				-1.2821				-0.7720
	-0.0306								0.2702
	0.0330				-0.0949				-0.9741
0.1644									
0.2831					0.3114				-0.7151
0.3128									0.2572
0.3075									
0.3089	0.3032	0.2993							0.2236
			0.3040	0.3371					
									0.2504
					0.3053	0.4498			0.3052
									0.2606
									0.2753
				0.3052	0.2398				
0.2130	0.2217	0.2211	0.2092	0.2136	0.2123	0.2690	0.2198	0.1905	0.2067

247



NACAL 292 RUN 36 DATE 13 OCT 80 TIME 05.56 RFCOMP. NO. 1 DISK 1 PAGE 16

JOB NO. 11 LDGR ACCT 31302 CONTRACT 1631 SUB ACCT 10001 ACO DATE 8 JUL 80 19.27

MOD 30 ALPHA WIND ON RUN, C/B=70 DEG, FWD=42 DEG, AFT=42 DEG, MEAN=42 DEG, CMU=4  
AUG 2

DATA POINT 8

-0.3825

0.2904 0.0311

0.1050 -0.1908

0.0367 0.0940 0.2223 0.1825 0.1652 -0.1613

0.0348 -1.1449 -0.7616 0.2550

-0.2540 -0.3183 -1.0984

-0.2638 -0.0771 0.3201 -0.6937 0.2486

0.1148 0.2547

0.3086 0.3101 0.3090 0.3063 0.2348 0.2461

249 0.3095 0.3205 0.2899

0.3080 0.4481 0.2595

0.3109 0.2512 0.2773

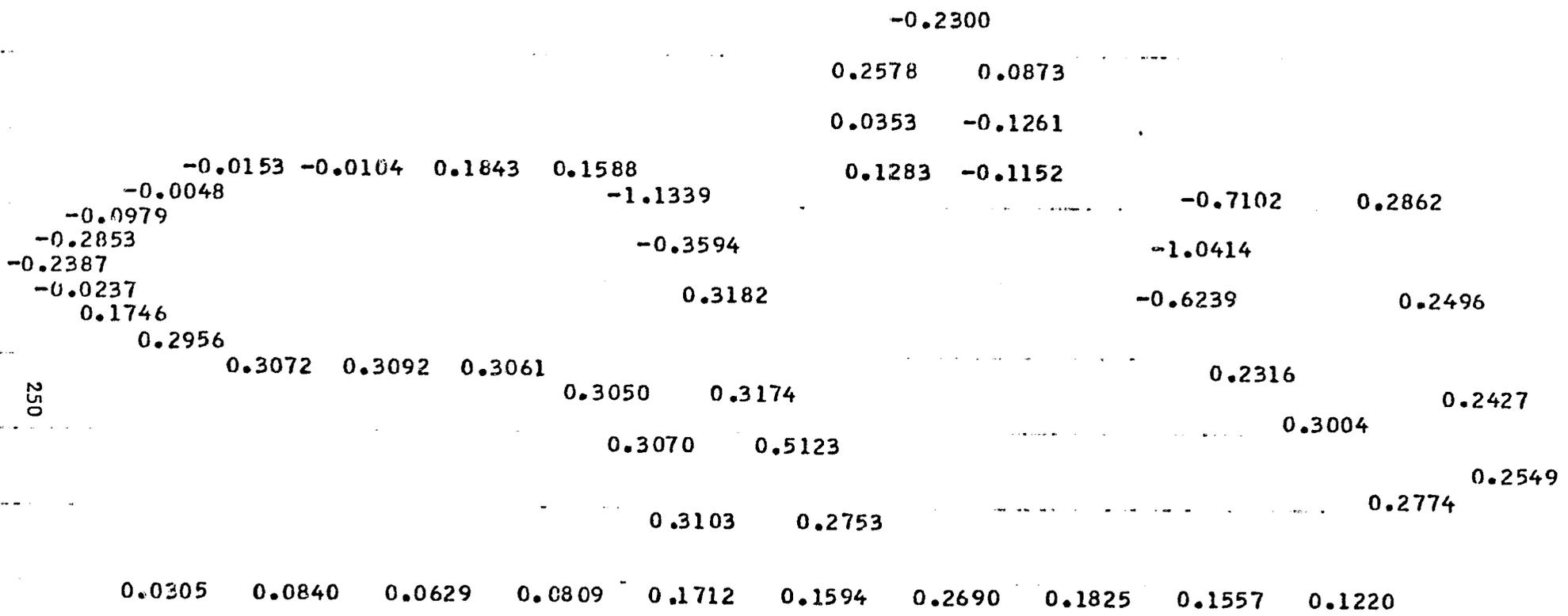
0.1208 0.1376 0.1376 0.1793 0.1843 0.1893 0.2753 0.1949 0.1669 0.1613

NACAL 292 RUN 36 DATE 13 OCT 80 TIME 05.57 RECOMP. NO. 1 DISK 1 PAGE 20

JOB NO. 11 LDGR ACCT 31302 CONTRACT 1631 SUB ACCT 10001 ACQ DATE 8 JUL 80 19.30

MOD 30 ALPHA WIND ON RUN,C/B=70 DEG,FWD=42 DEG,AFT=42 DEG,MEAN=42 DEG,CMU=4  
AUG 2

DATA POINT 10



MACAL 292 RUN 38 DATE 14 OCT 80 TIME 03.20 RECOMP. NO. 1 DISK 1 PAGE 27

JOB NO. 11 LDGR ACCT 31302 CONTRACT 1631 SUB ACCT 10001 ACQ DATE 8 JUL 80 23.25

MOD 32 ALPHA WIND ON RUN,C/B=70 DEG,FWD=54 DEG,AFT=38 DEG,MEAN=46 DEG,CMU=0  
AUG 2

P<sub>T</sub> P<sub>A</sub>  
14.77 14.257

SUMMARY PAGE

PT NO	ALPHA H PHI	Q H THETA	CLH THRUST	CDH DELTA	CMH WFT	YM THTH	RL CMUTH	PTPFGH CDR	PTPCBH CDHR	PTPACH
1	0.2879 1.3000	10.2584 58.2186	0.6231 102.0995	0.3861 0.4157	0.1541 0.0467	-667.3797 0.2155	2526.4571 0.0015	0.9878 0.0048	0.9962 0.3813	0.9965
2	-3.5580 1.3000	10.5990 53.5015	0.4770 85.3891	0.3529 0.3140	0.0628 0.1544	-686.1646 0.4816	2037.3668 0.0033	0.9857 0.0156	0.9961 0.2373	0.9963
3	-7.5945 1.3000	10.7293 41.1890	0.2791 61.7442	0.3189 0.1775	-0.0330 0.3192	-707.1464 0.9820	1344.1887 0.0067	0.9851 0.0321	0.9958 0.2860	0.9956
4 251	-11.2637 1.3000	10.8143 6.1877	0.0341 46.5284	0.3150 0.0085	-0.1415 0.3524	-627.8337 1.0467	258.9330 0.0071	0.9869 0.0353	0.9968 0.2797	0.9972
5	0.3419 1.3000	10.5360 58.3644	0.6389 107.3400	0.3936 0.4268	0.1586 0.1020	-694.4745 0.3372	2643.0054 0.0023	0.9875 0.0103	0.9959 0.3832	0.9971
6	4.3134 1.3000	10.5039 60.9308	0.7506 122.4640	0.4172 0.5050	0.2319 0.1026	-613.2448 0.3184	3095.4123 0.0022	0.9910 0.0104	0.9963 0.4068	0.9968
7	8.1779 1.3000	10.4224 63.5200	0.8808 139.2390	0.4367 0.5963	0.3211 0.2897	-472.9229 0.7880	3463.3612 0.0055	0.9918 0.0296	0.9961 0.4091	0.9969
8	12.0757 1.3000	10.4313 66.8921	1.0191 156.9220	0.4348 0.6919	0.4104 0.2517	-419.7207 0.5172	3979.3080 0.0036	0.9967 0.0257	0.9973 0.4091	0.9987
9	15.9813 1.3000	10.4237 66.2864	1.0954 169.3227	0.4811 0.7477	0.4477 0.1026	-303.6694 0.2541	4160.5354 0.0017	0.9958 0.0104	0.9968 0.4767	0.9970
10	19.8103 1.3000	10.4375 63.4783	1.1375 180.1467	0.5676 0.7836	0.4528 0.3183	-270.9985 0.8334	4378.9950 0.0058	0.9955 0.0324	0.9961 0.5351	0.9963

NACAL 292 RUN 38 DATE 14 OCT 80 TIME 03.16 RECOMP. NO. 1 DISK 1 PAGE 2  
JOB NO. 11 LDGR ACCT 31302 CONTRACT 1631 SUB ACCT 10001 ACQ DATE 8 JUL 80 23.07  
MOD 32 ALPHA WIND ON RUN, C/R=70 DEG, FWD=54 DEG, AFT=38 DEG, MEAN=46 DEG, CMU=0  
AUG 2

DATA POINT 1

0.3662  
0.5791 0.4948  
0.4052 0.4800  
0.4438 0.4531  
0.4793 0.4986 0.5211 0.4862  
0.4469 0.3889  
0.3740 0.0860  
0.4619 0.4625 0.4511  
0.5435 0.5808 0.4650  
0.5007 0.5635 0.4481 0.4642  
0.5261  
0.5423 0.5431 0.5489 0.4639  
252 0.5602 0.4460 0.4642  
0.5591 0.4539 0.4809  
0.5474 0.4718 0.4611  
0.4803  
0.5005 0.5067 0.5111 0.4974 0.4980 0.4961 0.5055 0.5005 0.4930 0.5024

NACAL 292 RUN 38 DATE 14 OCT 80 TIME 03.18 RECOMP. NO. 1 DISK 1 PAGE 14

JOB NO. 11 LDGR ACCT 31302 CONTRACT 1631 SUB ACCT 10001 ACQ DATE 8 JUL 80 23.21

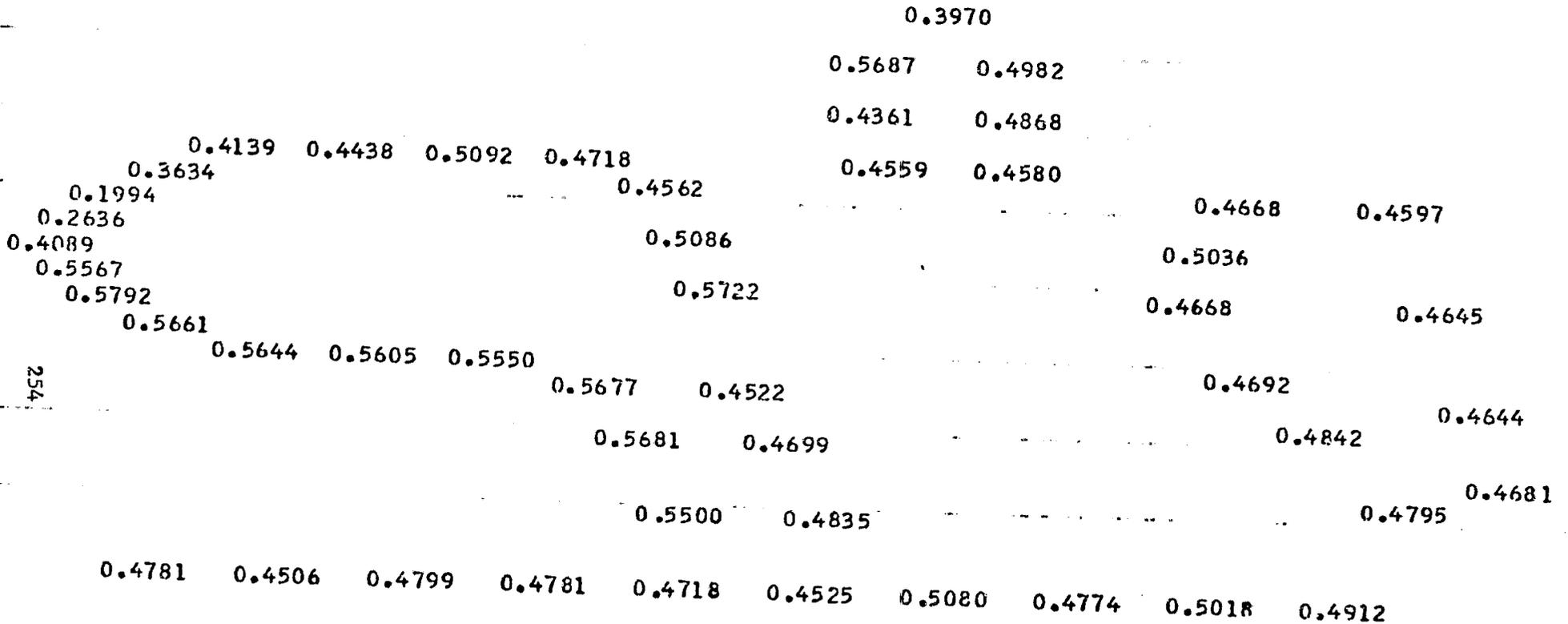
MOD 32 ALPHA WIND ON RUN, C/B=70 DEG, FWD=54 DEG, AFT=38 DEG, MEAN=46 DEG, CMU=0  
AUG 2

DATA POINT 7

						0.4016				
						0.5853	0.4964			
						0.4492	0.4828			
						0.4597	0.4579			
		0.4438	0.4824	0.5298	0.4937			0.4581	0.4648	
		0.3958			0.4288					
		0.2194						0.5379		
		0.3017			0.4706					
		0.4619								
		0.5796			0.5722			0.4687	0.4655	
		0.5737								
		0.5630								
		0.5627	0.5574	0.5587				0.4757		
253					0.5667	0.4634			0.4611	
					0.5669	0.4664		0.4903		
										0.4675
									0.4947	
					0.5503	0.4713				
	0.4955	0.4862	0.5055	0.5036	0.4968	0.5086	0.5105	0.5074	0.5217	0.5124

NACAL 292      RUN 38      DATE 14 OCT 80      TIME 03.19      RECOMP. NO. 1      DISK 1      PAGE 16  
 JOB NO. 11      LDGR ACCT 31302      CONTRACT 1631      SUB ACCT 10001      ACQ DATE 8 JUL 80 23.23  
 MOD 32 ALPHA WIND ON RUN,C/B=70 DEG,FWD=54 DEG,AFT=38 DEG,MEAN=46 DEG,CMU=0  
 AUG 2

DATA POINT 8



NACAL 292    RUN 38    DATE 14 OCT 80    TIME 03.19    RECOMP. NO. 1    DISK 1    PAGE 20  
JOB NO. 11    LDGR ACCT 31302    CONTRACT 1631    SUB ACCT 10001    ACQ DATE 8 JUL 80 23.24  
MOD 32    ALPHA WIND ON RUN, C/B=70 DEG, FWD=54 DEG, AFT=38 DEG, MEAN=46 DEG, CMU=0  
AUG 2

DATA POINT 10

								0.4424				
							0.4415		0.4981			
							0.4103		0.4874			
							0.4373		0.4583			
		0.4338	0.4338	0.5061	0.4413					0.4675	0.4560	
		0.3983				0.4538						
		0.2321										
		0.2038				0.5921				0.4550		
		0.3590										
		0.5275				0.5759				0.4644	0.4695	
		0.5860										
		0.5806										
		0.5800	0.5690	0.5621						0.4602		
					0.5700	0.4480					0.4686	
										0.4639		
					0.5689	0.4650						
						0.5522	0.4602					0.4741
											0.4690	
		0.4606	0.4637	0.4631	0.4519	0.4481	0.4600	0.5117	0.4693	0.4787	0.4662	

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NACAL 292 RUN 39 DATE 14 OCT 80 TIME 03.29 RECOMP. NO. 1 DISK 1 PAGE 22

JOB NO. 11 LOGR ACCT 31302 CONTRACT 1631 SUB ACCT 10001 ACO DATE 8 JUL 80 23.51

MOD 33 ALPHA WIND ON RUN, C/B=70 DEG, FWD=54 DEG, AFT=38 DEG, MEAN=46 DEG, CMU=1  
AUG 2

P<sub>T</sub> P<sub>A</sub>  
14.79 14.257

SUMMARY PAGE

PT NO	ALPHA H PHI	O H THETA	CLH THRUST	CDH DELAL	CMH WFT	YM THTH	RL CMUTH	PTPFCH CDR	PTPCBH CDHR	PTPACH
1	2.0854 1.3000	10.5306 84.3689	3.2234 463.0759	0.3178 2.0839	0.5644 5.3852	-74.8450 129.1438	13163.3050 0.9033	1.3955 0.5470	1.3975 -0.2292	1.4001
2	-2.0684 1.3000	10.6552 87.2783	2.1487 412.5509	0.1354 1.8278	0.4381 5.3953	-0.7658 129.5909	11924.3759 0.8958	1.3990 0.5453	1.3973 -0.4099	1.3993
3	-6.0895 1.3000	10.4829 -89.2365	2.5335 360.6005	-0.0337 1.6119	0.3267 5.3877	76.5827 129.3033	10521.9704 0.9085	1.3972 0.5494	1.3962 -0.5831	1.3988
4	-9.7445 1.3000	10.4014 -85.2593	2.1912 310.4887	-0.1817 1.3859	0.2094 5.3885	268.6296 129.5253	9267.7184 0.9172	1.3966 0.5520	1.3993 -0.7337	1.3981
5	2.0771 1.3000	10.5671 84.5458	3.2107 462.7060	0.3065 2.0741	0.5682 5.3887	-121.0814 129.4809	13154.7243 0.9025	1.3978 0.5478	1.3976 -0.2413	1.3985
6	6.1609 1.3000	10.4398 81.5655	3.5541 509.2365	0.5270 2.3224	0.6881 5.3992	-248.6675 129.9526	14436.5590 0.9168	1.3983 0.5524	1.3976 -0.0254	1.3998
7	10.1931 1.3000	10.2094 78.8649	3.8347 541.7039	0.7547 2.5406	0.7976 5.3910	-392.8021 129.6870	15307.7637 0.9356	1.3971 0.5580	1.3980 0.1967	1.3993
8	14.1174 1.3000	10.1317 76.4719	4.0678 575.4990	0.9787 2.7351	0.8882 5.3816	-379.9400 129.7058	16263.5236 0.9429	1.3994 0.5592	1.3952 0.4194	1.4005
9	18.2002 1.3000	10.1800 74.3612	4.2814 614.4664	1.1985 2.9213	0.9697 5.3984	-256.0193 130.2061	17218.5983 0.9421	1.3984 0.5603	1.3978 0.6381	1.4016
10	22.2310 1.3000	9.7988 72.3628	4.6177 644.5909	1.4681 3.1932	1.0658 5.3864	-169.6873 129.8065	17928.9487 0.9757	1.3967 0.5702	1.3961 0.8979	1.4016

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NACAL 292    RUN 39    DATE 14 OCT 80    TIME 03.25    RECOMP. NO. 1    DISK 1    PAGE 2  
 JOB NO. 11    LDGR ACCT 31302    CONTRACT 1631    SUB ACCT 10001    ACQ DATE 8 JUL 80 23.31  
 MOD 33    ALPHA WJND ON RUN, C/B=70 DEG, FWD=54 DEG, AFT=38 DEG, MEAN=46 DEG, CMU=1  
 AUG 2

DATA POINT 1

-0.3471

							0.5957	0.2616	
							0.2202	0.1855	
							0.3223	-0.0602	
		0.3808	0.4083	0.5055	0.3808				
		0.2936				-0.7579			
	0.0187								
	0.1365					-0.0367			
	0.3827								-0.3780
	0.5659								
	0.6082					0.6127			
	0.5962								-0.1317
		0.5945	0.5903	0.5903					
						0.5997	0.3357		0.4049
						0.6000	0.3429		0.5040
									0.5169
						0.5976	0.4585		0.5324
									0.5395
	0.4407	0.4226	0.4481	0.4357	0.4195	0.4276	0.5385	0.4207	0.3540
									0.3902

257



NACAL 292 RUN 39 DATE 14 OCT 80 TIME 03.28 RECOMP. NO. 1 DISK 1 PAGE 16  
JOB NO. 11 LDGR ACCT 31302 CONTRACT 1631 SUB ACCT 10001 ACQ DATE 8 JUL 80 23.46  
MOD 33 ALPHA WIND ON RUN, C/B=70 DEG, FWD=54 DEG, AFT=38 DEG, MEAN=46 DEG, CMU=1  
AUG 2

DATA POINT 8

259

0.1813 0.2655 0.4425 0.3796 -0.0484  
0.1907 -0.6305 0.5409 0.3549  
-0.2487 -0.0563 0.1315 0.2886  
-0.1911 -0.3750 0.3101 0.1082  
0.0037 0.6077 -0.3125 0.0189  
0.3311 -0.0827 0.3829  
0.5390  
0.6078 0.4210  
0.6085 0.6056 0.5996 0.5262 0.5268  
0.5985 0.3498  
0.6011 0.3722 0.5376  
0.5952 0.4833 0.5424  
0.3821 0.3316 0.3035 0.3378 0.3727 0.3952 0.5311 0.3896 0.3478 0.3328



VACAL 292 RUN 40 DATE 14 OCT 80 TIME 04.04 RECOMP. NO. 1 DISK 1 PAGE 26

JOB NO. 11 LDGR. ACCT 31302 CONTRACT 1631 SUB ACCT 10001 ACO DATE 9 JUL 80 0.50

MOD 34 ALPHA WIND ON RUN, C/B=70 DEG, FWD=54 DEG, AFT=38 DEG, MEAN=46 DEG, CMU=2  
AUG 2

P<sub>T</sub> P<sub>A</sub>  
14.79 14.257

SUMMARY PAGE

PT NO	ALPHA H PHI	Q H THETA	CLH THRUST	CDH DELTA	CMH WFT	YM THTH	RL CMUTH	PTPFCH CDR	PTPCFH CDPR	PTPACH
1	2.7057 1.3000	10.1473 -85.9061	4.5689 631.0259	-0.3270 2.6644	0.8003 8.1988	3210.0477 268.3853	18396.5235 1.9482	1.9240 0.8493	1.9225 -1.1763	1.9255
2	-1.4201 1.3000	10.3164 -81.7375	4.6824 577.7614	-0.5928 2.3658	0.6503 8.1923	3341.0373 268.7467	17075.6023 1.9188	1.9191 0.8432	1.9254 -1.4360	1.9289
3	-5.6044 1.3000	10.5164 -76.2665	3.5795 526.0926	-0.8748 2.0584	0.4950 8.2334	3551.5600 272.5044	15636.4113 1.9086	1.9354 0.8425	1.9253 -1.7173	1.9427
4	-5.5930 1.3000	10.3455 -76.3199	3.5924 519.2950	-0.8744 2.0652	0.5022 8.1276	3468.4650 267.6350	15474.7066 1.9055	1.9318 0.8393	1.9185 -1.7137	1.9119
5	-5.5508 1.3000	10.3191 -76.4031	3.6175 521.4120	-0.8749 2.0781	0.5001 8.1652	3463.5856 269.5422	15522.4684 1.9240	1.9237 0.8448	1.9235 -1.7198	1.9309
6	-9.2029 1.3000	10.6044 -71.1199	3.0990 471.5334	-1.0599 1.7806	0.3639 8.1411	3708.4675 268.7440	14171.4684 1.8667	1.9218 0.8310	1.9238 -1.8909	1.9278
7	2.6822 1.3000	10.1935 -85.5560	4.5009 624.7630	-0.3498 2.6256	0.7885 8.1378	3171.7317 268.6970	18264.2873 1.9416	1.9232 0.8477	1.9244 -1.1975	1.9249
8	6.7409 1.3000	10.2222 -89.6086	4.8982 679.7770	-0.0334 2.8940	0.9233 8.1246	2961.5196 268.0064	19719.2361 1.9311	1.9069 0.8453	1.9240 -0.8788	1.9238
9	10.8628 1.3000	9.9249 86.8666	5.3726 725.7336	0.2941 3.2059	1.0752 8.1388	2922.7042 269.0246	20878.3464 1.9946	1.9260 0.8594	1.9217 -0.5653	1.9274
10	14.9555 1.3000	9.7601 83.5362	5.8264 776.9673	0.6601 3.5206	1.2204 8.1290	2925.2853 268.8702	22139.9566 2.0291	1.9264 0.8661	1.9236 -0.2060	1.9296

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ACAL 292 RUN 40 DATE 14 OCT 80 TIME 04.05 RECOMP. NO. 1 DISK 1 PAGE 27

OB NO. 11 LDGR.ACCT 31302 CONTRACT 1631 SUB ACCT 10001 ACQ DATE 9 JUL 80 0.50

MOD 34 ALPHA WIND ON RUN,C/B=70 DEG,FWD=54 DEG,AFT=38 DEG,MEAN=46 DEG,CMU=2  
AUG 2

SUMMARY PAGE

T NO	ALPHA H PHI	O H THETA	CLH THRUST	CDH DELAL	CMH WFT	YM THTH	RL CMUTH	PTPFCH CDR	PTPCBH CDHR	PTPACH
11	19.1084 1.3000	9.6590 80.0609	6.2466 831.6165	1.0946 3.8450	1.3531 8.1330	2848.6879 269.0040	23536.9330 2.0514	1.9229 0.8713	1.9236 0.2222	1.9273
12	23.2899 1.3000	9.6673 76.7416	6.5416 882.0599	1.5413 4.1261	1.4505 8.1393	2804.9237 269.3415	24741.7440 2.0522	1.9207 0.8720	1.9265 0.6693	1.9234

ACAL 292 RUN 40 DATE 14 OCT 80 TIME 04.00 RECOMP. NO. 1 DISK 1 PAGE 2

OB NO. 11 LDGR ACCT 31302 CONTRACT 1631 SUB ACCT 10001 ACO DATE 9 JUL 80 0.19

MOD 34 ALPHA WIND ON RUN, C/B=70 DEG, FWD=54 DEG, AFT=38 DEG, MEAN=46 DEG, CMU=2  
AUG 2

ATA POINT 1

-0.8050

0.5764 0.0950

-0.0007 0.0106

0.1684 -0.3210

-1.2758 0.5248

-2.1295

-1.5418 0.5125

0.1756

0.5012

0.4245

0.5244

0.4970

0.5954 0.3190

0.3572 0.3266 0.3703 0.3590 0.3516 0.3534 0.5330 0.3291 0.3073 0.3098

0.3191 0.3628 0.4513 0.2805

0.2125 -1.9107

-0.1348

-0.0067 -0.0576

0.2630

0.5224 0.6072

0.6055

0.6019

0.6030 0.5962 0.5945

0.5985 0.2019

0.6015 0.1307

263



NACAL 292      RUN 40      DATE 14 OCT 80      TIME 04.03      RECOMP. NO. 1      DISK 1      PAGE 20  
 JOB NO. 11      LDGR ACCT 31302      CONTRACT 1631      SUB ACCT 10001      ACQ DATE 9 JUL 80      0.45

MOD 34 ALPHA WIND ON RUN, C/B=70 DEG, FWD=54 DEG, AFT=38 DEG, MEAN=46 DEG, CMU=2  
 AUG 2

DATA POINT 10

								-0.8492		
							0.5381	0.0800		
							-0.0933	-0.0224		
							0.1571	-0.3362		
	0.0336	0.1278	0.3590	0.3087						
	0.0617			-1.4548				-1.2256	0.4915	
	-0.1822									
	-0.3946			-0.3689				-2.0572		
	-0.2108									
	0.1999			0.6022				-1.4584	0.5015	
	0.4783									
	0.5995									
	0.6047	0.6038	0.6002					0.2268		
				0.5982	0.2075				0.4950	
								0.4505		
				0.6007	0.1781				0.5190	
									0.5089	
				0.5974	0.3615					
	0.2468	0.2256	0.2082	0.2605	0.3279	0.3291	0.5361	0.2992	0.2842	0.2019

265

NACAL 292      RUN 40      DATE 14 OCT 80      TIME 04.04      RECOMP. NO. 1      DISK 1      PAGE 24  
 JOB NO. 11      LDGR ACCT 31302      CONTRACT 1631      SUB ACCT 10001      ACQ DATE 9 JUL 80 0.47  
 MOD 34 ALPHA WIND ON RUN, C/B=70 DEG, FWD=54 DEG, AFT=38 DEG, MEAN=46 DEG, CMU=2  
 AUG 2

DATA POINT 12

-0.5285

0.4190      0.1776

-0.2037      0.0404

0.1548      -0.2306

-0.0263 -0.0557 0.2668 0.2743

-0.0288

-1.3530

-1.1643      0.5400

-0.0857

-0.3909

-1.9420

-0.5515

0.6171

-1.3114

0.5101

-0.4853

-0.0609

0.3360

0.5840

0.6093 0.6152 0.6109

0.6158      0.2523

0.2713

0.5000

266

0.6152      0.2467

0.4819

0.5281

0.6137      0.3926

0.5322

0.0698 0.0935 0.0810 0.1147 0.3067 0.3017 0.5405 0.2693 0.2668 0.1471

ACAL 292 RUN 41 DATE 14 OCT 80 TIME 04.14 RECOMP. NO. 1 DISK 1 PAGE 24

OB NO. 11 LDGR ACCT 31302 CONTRACT 1631 SUB ACCT 10001 ACQ DATE 9 JUL 80 17.36

MOD 35 ALPHA WIND ON RUN, C/R=70 DEG, FWD=54 DEG, AFT=38 DEG, MEAN=46 DEG, CMU=4  
AUG 2

P<sub>T</sub> P<sub>A</sub>  
14.5 14.233

SUMMARY PAGE

PT NO	ALPHA H PHI	Q H THETA	CLH THRUST	CDH DELTA	CMH WFT	YM THTH	RL CMUTH	PTPFCH CDR	PTPCBH CDHR	PTPACH
1	3.3184 1.3000	5.2448 -75.4515	6.6304 487.7539	-1.7207 3.3046	0.9901 8.2648	5339.8493 273.1824	13998.8680 3.8366	1.9539 1.1962	1.9665 -2.9169	1.9627
2	-0.9031 1.3000	5.3190 -70.2613	5.5570 457.0118	-2.1374 2.9515	0.8182 8.2685	5456.6653 273.9523	13151.9724 3.7937	1.9632 1.1904	1.9643 -3.3279	1.9617
3	-5.0478 1.3000	5.3142 -64.7604	5.3562 427.2185	-2.5249 2.6369	0.6557 8.2420	5519.8464 273.5236	12272.7263 3.7912	1.9605 1.1891	1.9618 -3.7141	1.9643
4	-8.8359 1.3000	5.5711 -59.5319	4.5987 403.5439	-2.7054 2.2851	0.4945 8.2426	5606.0905 274.0140	11553.7795 3.6229	1.9585 1.1629	1.9644 -3.8683	1.9624
5	3.4104 1.3000	5.1047 -75.4143	6.8147 487.9996	-1.7732 3.3690	1.0202 8.2352	5335.9250 274.3801	14034.9291 3.9592	1.9578 1.2162	1.9627 -2.9895	1.9631
6	7.4970 1.3000	5.1614 -80.0345	7.2770 517.7263	-1.2786 3.6538	1.1626 8.2272	5263.5403 274.3099	14844.3858 3.9147	1.9581 1.2092	1.9619 -2.4878	1.9652
7	11.6783 1.3000	5.0872 -84.3304	7.8664 545.5623	-0.7809 3.9949	1.3282 8.2027	5233.4055 274.0006	15602.1791 3.9673	1.9568 1.2158	1.9648 -1.9968	1.9633
8	15.7329 1.3000	5.0481 -88.1074	8.3253 570.8752	-0.2751 4.2936	1.4678 8.2032	5245.0816 274.2490	16267.9763 4.0016	1.9592 1.2217	1.9643 -1.4369	1.9636
9	20.1147 1.3000	4.5630 88.4765	9.2175 577.4135	0.2478 4.7924	1.6661 8.1467	5382.2893 271.9784	16374.0885 4.3904	1.9558 1.2773	1.9583 -1.0295	1.9567
10	24.1922 1.3000	4.8106 84.3060	9.4937 623.1019	0.9465 5.0573	1.7750 8.1797	5394.5177 273.8353	17543.4172 4.1929	1.9620 1.2491	1.9653 -0.3025	1.9639

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CAL 292    RUN 41    DATE 14 OCT 80    TIME 04.14    RECOMP. NO. 1    DISK 1    PAGE 25  
 JB NO. 11    LDGR ACCT 31302    CONTRACT 1631    SUB ACCT 10001    ACO DATE 9 JUL 80 17.36  
 MOD 35    ALPHA WIND ON RUN, C/B=70 DEG, FWD=54 DEG, AFT=38 DEG, MEAN=46 DEG, CMU=4  
 AUG 2

SUMMARY PAGE

Γ NO	ALPHA H PHI	Θ H THETA	CLH THRUST	CDH DELAL	CMH WFT	YM . THTH	RL CMUTH	PTPFCH CDR	PTPCBH CDHR	PTPACH
11	0.3016 1.2000	0.0665 71.2844	0.4382 0.4177	0.1484 0.2878	0.4629 0.0858	-15.2148 0.0802	75.3837 0.0889	1.0002 0.1124	1.0010 0.0360	0.9996





NACAL 292 RUN 41 DATE 14 OCT 80 TIME 04.13 RECOMP. NO. 1 DISK 1 PAGE 16

JOB NO. 11 LDGR ACCT 31302 CONTRACT 1631 SUB ACCT 10001 ACO DATE 9 JUL 80 17.30

MOD 35 ALPHA WIND ON RUN, C/B=70 DEG, FWD=54 DEG, AFT=38 DEG, MEAN=46 DEG, CMU=4  
AUG 2

DATA POINT 8

-0.5983

0.2206 -0.0224

-0.3671 -0.1114

-0.1439 -0.1511

-1.3719 0.2771

-2.7605

-2.1109 0.2608

-0.1760

0.1596 0.2505

0.3112 -0.1842

0.2278 0.2616

0.3109 0.0398

0.1326 0.0597 0.0741 0.0946 0.0790 0.0660 0.2634 0.0504 0.0641 0.0093

-0.0104 0.0174 0.1743 0.0572

0.0000 -1.8599

-0.1389 -1.4558

-0.3367 -2.7605

-0.2197

0.0431 0.3064

0.2199

0.3074

0.3114 0.3146 0.3092

0.3111 -0.1091

0.3112 -0.1842

0.3109 0.0398

0.2278 0.2616

0.1596 0.2505

-0.1760

-2.1109 0.2608

-2.7605

-1.3719 0.2771

-0.1439 -0.1511

-0.3671 -0.1114

0.2206 -0.0224

-0.5983

271.



NACAL 292 RUN 43 DATE 14 OCT 80 TIME 04.32 RECOMP. NO. 1 DISK 1 PAGE 22  
 JOB NO. 11 LDGR ACCT 31302 CONTRACT 1631 SUB ACCT 10001 ACO DATE 10 JUL 80 0.43

MOD 37 ALPHA WIND ON RUN, C/B=70 DEG, FWD=66 DEG, AFT=34 DEG, MEAN=50 DEG, CMU=0  
 AUG 2

P<sub>T</sub> P<sub>A</sub>  
 14.76 14.247

SUMMARY PAGE

PT NO	ALPHA H PHI	Q H THETA	CLH THRUST	CDH DELAL	CMH WFT	YM TH1H	RL CMUTH	PTPFCH CDR	PTPCBH CDHP	PTPACH
1	0.4071 1.4000	10.7067 49.9259	0.4586 87.1183	0.3857 0.3014	0.1656 0.2029	-807.0567 0.5447	2022.8095 0.0037	0.9909 0.0249	0.9973 0.3408	0.9970
2	-3.5593 1.4000	10.4632 39.2159	0.3112 69.7788	0.3800 0.1987	0.3685 0.1590	-909.6471 0.4161	1422.7347 0.0029	0.9900 0.0197	0.9964 0.3402	0.9965
3	-7.5584 1.4000	10.4029 17.4608	0.1073 50.5112	0.3411 0.0580	-0.0448 0.1820	-793.4837 0.5062	729.7185 0.0035	0.9909 0.0227	0.9972 0.3184	0.9967
4	-11.1677 1.4000	10.5538 -28.2644	-0.1780 53.8584	0.3310 -0.1330	-0.1610 0.2323	-656.5820 0.5117	-554.4681 0.0035	0.9929 0.0287	0.9984 0.3023	0.9979
5	0.3571 1.4000	10.4844 50.2910	0.4682 86.5163	0.3875 0.3080	0.1635 0.2925	-765.9921 0.8063	1989.2288 0.0056	0.9909 0.0363	0.9969 0.3511	0.9967
6	4.3089 1.4000	10.5275 56.4884	0.6034 103.4396	0.3995 0.4022	0.2595 0.0764	-686.1857 0.2561	2555.6102 0.0017	0.9908 0.0094	0.9965 0.3901	0.9961
7	8.2650 1.4000	10.3346 61.2349	0.7577 121.1725	0.4142 0.5099	0.3486 0.2026	-553.8008 0.5773	3059.3051 0.0041	0.9917 0.0253	0.9965 0.3888	0.9961
8	12.2243 1.4000	10.1879 65.2323	1.0088 153.6751	0.4654 0.6866	0.4426 0.2001	-612.6668 0.4809	3835.7923 0.0034	0.9957 0.0252	0.9974 0.4402	0.9957
9	16.1120 1.4000	10.1886 62.8944	1.0434 162.1368	0.5340 0.7152	0.4483 0.1572	-579.4464 0.2805	4022.3208 0.0027	0.9963 0.0198	0.9970 0.5142	0.9967
10	19.9387 1.4000	10.2439 60.5686	1.0401 166.0906	0.5868 0.7165	0.4490 0.0943	-285.5372 0.2335	3996.3400 0.0016	0.9963 0.0118	0.9968 0.5749	0.9970

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NACAL 292    RUN 43    DATE 14 OCT 80    TIME 04.28    RECOMP. NO. 1    DISK 1    PAGE 2

JOB NO. 11    LDGR ACCT 31302    CONTRACT 1631    SUB ACCT 10001    ACQ DATE 10 JUL 80 0.27

MOD 37    ALPHA WIND ON RUN, C/B=70 DEG, FWD=66 DEG, AFT=34 DEG, MEAN=50 DEG, CRU=0  
AUG 2

DATA POINT 1

0.3763  
0.5946    0.5036  
0.4513    0.4943  
0.4680    0.4736  
0.4989    0.5051    0.5089    0.5126    0.4297    0.4590    0.4686  
0.4640  
0.3929  
0.4777    0.4340    0.4340  
0.5794  
0.5879    0.4565    0.4103    0.4747  
0.5106  
0.5349  
0.5537    0.5584    0.5686    0.4487  
0.5762    0.4592    0.4778  
0.5757    0.4501    0.4671  
0.5601    0.4447    0.4768  
0.4838  
0.5120    0.5176    0.5176    0.5170    0.5201    0.5195    0.5189    0.5238    0.5132    0.5182

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NACAL 292 RUN 43 DATE 14 OCT 80 TIME 04.31 RECOMP. NO. 1 DISK 1 PAGE 16

JOB NO. 11 LDGR ACCT 31302 CONTRACT 1631 SUB ACCT 10001 ACQ DATE 10 JUL 80 0.40

MOD 37 ALPHA WIND ON RUN, C/R=70 DEG, FWD=66 DEG, AFT=34 DEG, MEAN=50 DEG, CMU=0  
AUG 2

DATA POINT 8

						0.3990				
						0.5655	0.4923			
						0.4219	0.4858			
						0.4395	0.4737			
		0.4166	0.4135	0.4814	0.4789			0.4527	0.4623	
	0.3667				0.4515					
	0.1409									
	0.2164				0.4378			0.4577		
	0.3916									
	0.5462				0.4465			0.4234	0.4672	
	0.5757									
	0.5633									
	0.5618	0.5570	0.5587					0.4618		
				0.5540	0.4431				0.4691	
				0.5540	0.4361			0.4666		
276										0.4694
									0.4683	
				0.5516	0.4388					
	0.4552	0.4490	0.4527	0.4746	0.4796	0.4640	0.5039	0.4796	0.4721	0.4902

NACAL 292 RUN 43 DATE 14 OCT 80 TIME 04.32 RECBMP. NO. 1 DISK 1 PAGE 20

JOB NO. 11 LDGR ACCT 31302 CONTRACT 1631 SUB ACCT 10001 ACO DATE 10 JUL 80 0.42

MOD 37 ALPHA WIND ON RUN, C/B=70 DEG, FWD=66 DEG, AFT=34 DEG, MEAN=50 DEG, CMU=0  
AUG 2

DATA POINT 10

							0.4411					
							0.4327	0.4855				
							0.4259	0.4722				
							0.4324	0.4535				
			0.3779	0.4216	0.4690	0.4559						
			0.3792				0.4453		0.4496	0.4474		
			0.2108									
			0.2070				0.4415		0.4540			
			0.3392									
			0.5065				0.4453		0.4590	0.4476		
			0.5145									
			0.5703									
			0.5657	0.5609	0.5570				0.4487			
						0.5499	0.4597			0.4598		
						0.5480	0.4615			0.4484		
										0.4628		
										0.4474		
						0.5463	0.4515					
			0.4484	0.4403	0.4440	0.4440	0.4397	0.4390	0.4914	0.4478	0.4384	0.4552

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ACAL 292 RUN 44 DATE 14 OCT 80 TIME 04.41 RECOMP. NO. 1 DISK 1 PAGE 22

DB NO. 11 LDGR ACCT 31302 CONTRACT 1631 SUB ACCT 10001 ACQ DATE 10 JUL 80 17.36

MOD 38 ALPHA WIND ON RUN, C/B=70 DEG, FWD=66 DEG, AFT=34 DEG, MEAN=50 DEG, CMU=1  
AUG 2

P<sub>TS</sub> P<sub>A</sub>  
14.73 14.208

SUMMARY PAGE

T NO	ALPHA H PHI	Q H THETA	CLH THRUST	CDH DELAL	CMH WFT	YM TH1H	RL CM1TH	PTPFCH CDR	PTPCRH CDHR	PTPACH
1	2.2294 1.4000	10.2673 85.2764	3.4732 485.7896	0.2869 2.2202	0.8092 5.4094	-130.7689 130.5521	14258.9802 0.9365	1.3965 0.6894	1.4027 -0.4024	1.3971
2	-1.8290 1.4000	10.3635 88.2153	3.1080 437.4971	0.0968 1.9718	0.6900 5.3956	-49.5191 130.2080	13023.0393 0.9254	1.3981 0.6855	1.3987 -0.5886	1.3966
3	-5.5586 1.4000	10.4174 -87.9661	2.7288 386.1783	-0.0969 1.7170	0.5531 5.3952	54.0708 130.4667	11694.8188 0.9225	1.3993 0.6839	1.3995 -0.7808	1.4000
4	-9.6013 1.4000	10.4032 -84.2078	2.3890 339.0831	-0.2381 1.4962	0.4358 5.3774	241.5429 129.9361	10422.3562 0.9199	1.3936 0.6826	1.4002 -0.9207	1.3987
5	2.2827 1.4000	10.2752 85.2737	3.4463 482.2224	0.2788 2.2032	0.8053 5.3863	-133.7957 130.2600	14170.1613 0.9337	1.3961 0.6882	1.4009 -0.4094	1.3974
6	6.3609 1.4000	9.8875 82.4379	3.5039 528.6318	0.5182 2.5161	0.9591 5.3939	-253.8419 130.4916	15404.9369 0.9721	1.3961 0.7030	1.4011 -0.1847	1.3967
7	10.3609 1.4000	10.0887 79.9752	4.0973 569.8949	0.7243 2.6775	1.0472 5.3889	-288.5414 130.2764	16437.6535 0.9518	1.3969 0.6953	1.4005 0.0289	1.3964
8	14.2939 1.4000	10.1032 77.2709	4.3147 606.7353	0.9746 2.8682	1.1227 5.3727	-355.8877 130.1353	17279.1849 0.9487	1.3970 0.6931	1.4003 0.2815	1.3984
9	18.3730 1.4000	9.9195 74.7413	4.5785 639.1112	1.2489 3.0964	1.1809 5.3665	-321.2295 130.0806	18099.8975 0.9659	1.3983 0.6988	1.4001 0.5501	1.3990
10	22.3532 1.4000	9.8024 72.6471	4.7857 667.2495	1.4954 3.2899	1.2241 5.3638	-171.7987 130.1927	18716.0944 0.9783	1.3996 0.7027	1.4019 0.7927	1.3991

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NACAL 292 RUN 44 DATE 14 OCT 80 TIME 04.37 RECOMP. NO. 1 DISK 1 PAGE 2

JOB NO. 11 LDGR ACCT 31302 CONTRACT 1631 SUB ACCT 10001 ACQ DATE 10 JUL 80 17.11

MOD 38 ALPHA WIND ON RUN, C/B=70 DEG, FWD=66 DEG, AFT=34 DEG, MEAN=50 DEG, CMU=1  
AUG 2

DATA POINT 1

279  
-0.5295  
0.5188 0.1233  
-0.2075 0.0263  
0.3296 0.3646 0.4495 0.2397 0.0629 -0.1036  
0.2253 -1.4312 -0.9414 0.5458  
-0.1166  
0.0006 -1.5171 -1.4054  
0.2703  
0.4996 0.2747 -0.8586 0.5091  
0.5875  
0.5845  
0.5869 0.5822 0.5801 0.2678  
0.5869 0.1437 0.4961  
0.5901 0.2431 0.4461  
0.5818 0.4095 0.5115  
0.4899  
0.4033 0.3515 0.3009 0.3346 0.3165 0.3146 0.5194 0.2965 0.2753 0.2709



NACAL 292    RUN 44    DATE 14 OCT 80    TIME 04.40    RECOMP. NO. 1    DISK 1    PAGE 16  
 JOB NO. 11    LDGR ACCT 31302    CONTRACT 1631    SUB ACCT 10001    ACO DATE 10 JUL 80 17.31  
 MOD 38 ALPHA WIND ON RUN, C/B=70 DEG, FWD=66 DEG, AFT=34 DEG, MEAN=50 DEG, CMU=1  
 AUG 2

DATA POINT 8

-0.5104

0.4979    0.0887

-0.1428    0.0291

0.1502    -0.1123

-0.7401    0.5341

0.1086    0.1610    0.3602    0.2753

0.1098

-0.8346

-0.2602

-0.9518

-0.9911

-0.3228

0.4807

-0.4731

0.5012

-0.1522

0.2326

0.4759

0.5785

0.3791

0.5887    0.5861    0.5813

0.5867    0.2395

0.4765

0.4945

0.5876    0.3274

0.5003

0.5174

0.5850    0.4658

0.3583    0.2871    0.2547    0.3159    0.3046    0.3028    0.5269    0.2715    0.2722    0.1972

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NACAL 292 RUN 44 DATE 14 OCT 80 TIME 04.41 RECOMP. NO. 1 DISK 1 PAGE 20

JOB NO. 11 LDGR ACCT 31302 CONTRACT 1631 SUB ACCT 10001 ACO DATE 10 JUL 80 17.35

MOD 38 ALPHA WIND ON RUN, C/B=70 DEG, FWD=66 DEG, AFT=34 DEG, MEAN=50 DEG, CMU=1  
AUG 2

DATA POINT 10

-0.2543  
 0.2939 0.2513  
 -0.0757 0.1383  
 0.0899 0.0880 0.2959 0.1748 0.2175 0.0446  
 0.0899 -0.4639 -0.4382 0.5671  
 0.0000  
 -0.3479 -0.3854 -0.6167  
 -0.3044  
 0.0571 0.5606 -0.1902 0.5104  
 0.3686  
 0.5622  
 0.5839 0.5858 0.5830 0.4615  
 282 0.5842 0.3433 0.5006  
 0.5847 0.4302 0.5155  
 0.5849 0.5247 0.5234  
 0.5290  
 0.2060 0.1954 0.2085 0.1298 0.2072 0.3084 0.529 0.2547 0.2584 0.1485

NACAL 292 RUN 45 DATE 15 OCT 80 TIME 00.51 RECOMP. NO. 1 DISK 1 PAGE 22

JOB NO. 11 LDGR ACCT 31302 CONTRACT 1631 SUB ACCT 10001 ACQ DATE 10 JUL 80 18.08

MOD 39 ALPHA WIND ON RUN, C/B=70 DEG, FWD=66 DEG, AFT=34 DEG, MEAN=50 DEG, CMU=2  
AUG 2

P<sub>TS</sub> P<sub>A</sub>  
14.74 14.213

SUMMARY PAGE

PT NO	ALPHA H PHI	Θ H THETA	CLH THRUST	CDH DELAL	CMH WFT	YM THTH	RL CMUTH	PTPFCH CDR	PTPCBH CDHR	PTPACH
1	2.8416 1.4000	10.1042 -85.1537	4.8359 665.7586	-0.4100 2.7774	1.0698 8.1647	3482.1594 269.8659	19696.7243 1.9673	1.9240 1.0517	1.9289 -1.4617	1.9248
2	-1.2017 1.4000	10.1376 -80.7874	4.3565 607.4185	-0.7065 2.4816	0.9178 8.1558	3713.7499 269.6864	18242.0550 1.9595	1.9253 1.0494	1.9276 -1.7559	1.9263
3	-5.5160 1.4000	10.2042 -76.0232	3.7897 546.3062	-0.9425 2.1553	0.7533 8.1414	3580.1973 269.2958	16557.9251 1.9250	1.9256 1.0391	1.9270 -1.9817	1.9268
4	-9.2023 1.4000	10.4014 -71.5334	3.3259 495.1595	-1.1106 1.8919	0.6052 8.1428	3572.0063 269.0696	15177.3858 1.9054	1.9178 1.0346	1.9244 -2.1453	1.9274
5	2.7830 1.4000	10.0822 -84.8166	4.8187 662.2835	-0.4371 2.7631	1.0736 8.1419	3513.2672 269.4026	19612.3542 1.9682	1.9217 1.0514	1.9271 -1.4885	1.9268
6	6.9534 1.4000	9.8377 -88.4830	5.3548 715.4311	-0.1418 3.0863	1.2291 8.1539	3573.2529 270.0939	20981.7283 2.0223	1.9218 1.0662	1.9292 -1.2080	1.9282
7	11.0241 1.4000	9.7443 87.9907	5.7638 762.9643	0.2022 3.3633	1.3734 8.1545	3561.4055 70.0244	22111.4330 2.0411	1.9219 1.0719	1.9282 -0.8697	1.9272
8	15.1024 1.4000	9.6811 84.2092	6.1049 806.4937	0.6191 3.6341	1.5028 8.1337	3151.6761 269.5264	23045.0039 2.0507	1.9222 1.0731	1.9291 -0.4539	1.9274
9	19.1645 1.4000	9.6753 81.1094	6.4392 856.0920	1.0072 3.9009	1.6048 8.1383	3280.7639 269.6226	24419.4133 2.0526	1.9212 1.0743	1.9267 -0.0671	1.9269
10	23.3217 1.4000	9.2512 78.2320	6.9282 888.8296	1.4433 4.2538	1.7365 8.1363	3510.7327 269.7679	25124.3700 2.1479	1.9220 1.0988	1.9302 0.3444	1.9275

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b

NACAL 292 RUN 45 DATE 15 OCT 80 TIME 00.50 RECOMP. NO. 1 DISK 1 PAGE 14

JOB NO. 11 LDGR ACCT 31302 CONTRACT 1631 SUB ACCT 10001 ACQ DATE 10 JUL 80 18.03

MOD 39 ALPHA WIND ON RUN, C/B=70 DEG, FWD=66 DEG, AFT=34 DEG, MEAN=50 DEG, CMU=2  
AUG 2

DATA POINT 7

										-0.8718			
										0.3913	-0.0595		
										-0.9916	-0.1860		
										-0.3870	-0.1438		
			0.0505	0.1061	0.3321	0.0730				-2.9191	-2.1948	0.5709	
			0.0892										
			-0.1761							-3.3997		-3.8864	
			-0.3848										
			-0.1417										
			0.2623							0.1941		-2.6932	0.5206
			0.4978										
			0.5963										
				0.5983	0.5960	0.5900						-0.0871	
						0.5988	-0.2965						0.5047
												0.3475	
						0.5975	-0.1312						
													0.5210
													0.4520
						0.5944	0.2811						
			0.3346	0.1860	0.0724	0.1642	0.1948	0.1523	0.5307	0.1130	0.1567	0.0499	

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NACAL 292 RUN 45 DATE 15 OCT 80 TIME 00.50 RECOMP. NO. 1 DISK 1 PAGE 16  
JOB NO. 11 LDGR ACCT 31302 CONTRACT 1631 SUB ACCT 10001 ACQ DATE 10 JUL 80 18.04  
MOD 39 ALPHA WIND ON RUN, C/R=70 DEG, FWD=66 DEG, AFT=34 DEG, MEAN=50 DEG, CHU=2  
AUG 2

DATA POINT 8

-0.8241

0.3764    -0.0471

-0.9482    -0.1432

-0.0331    0.0449    0.3109    0.1048    -0.3538    -0.1934

-0.0104    -2.7436    -2.0727    0.5687

-0.3320  
-0.5554    -3.0210    -3.7403

-0.3068    0.3228    -2.6085    0.5229

0.1233  
0.4378  
0.5890

0.6045    0.6012    0.5951    0.5989    -0.2240    -0.0422    0.5069

0.5980    -0.0742    0.3574

0.5971    0.3138    0.4627    0.5227

0.3521    0.1848    0.0262    0.2110    0.1685    0.1542    0.5344    0.1148    0.1692    0.0487

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ACAL 292 RUN 46 DATE 15 OCT 80 TIME 01.01 RECOMP. NO. 1 DISK 1 PAGE 24  
 DB NO. 11 LDGR ACCT 31302 CONTRACT 1631 SUB ACCT 10001  
 MOD 49 ALPHA WIND ON RUN, C/B=70 DEG, FWD=66 DEG, AFT=34 DEG, MEAN=50 DEG, CMU=4  
 AUG 2 ACO DATE 10 JUL 80 18.49

P<sub>T</sub>S 14.47 P<sub>A</sub> 14.213

SUMMARY PAGE

NO	ALPHA H PHI	O H THETA	CIH THRUST	CDH DELAL	CMH WFT	YM THTH	RL CMUTH	PTPFCH CDR	PTPCRH CDHR	PTPACH
1	3.4498 1.4000	4.8285 -73.7988	7.2481 494.7813	-2.1059 3.4775	1.3637 0.8202	5754.9153 28.1519	14494.8858 0.4294	1.9538 0.1545	1.9642 -2.2604	1.9634
2	3.4003 1.4000	4.8953 -73.9360	7.1136 491.9813	-2.0484 3.4357	1.3371 8.1568	5632.3612 273.7987	14395.5590 4.1197	1.9573 1.5265	1.9644 -3.5749	1.9599
3	-0.7249 1.4000	4.9802 -69.6034	6.4662 466.4381	-2.4043 3.1158	1.1727 8.1615	5529.4399 274.1038	13743.3484 4.0541	1.9595 1.5144	1.9647 -3.9187	1.9638
4	-4.9770 1.4000	5.0701 -64.2294	5.6322 430.1362	-2.7070 2.7263	0.9399 8.1372	5436.8277 273.1214	12755.7952 3.9678	1.9560 1.4962	1.9613 -4.2033	1.9638
5	-8.7280 1.4000	5.1348 -58.9013	5.0168 408.4265	-3.0261 2.4246	0.7882 8.1610	5674.0915 274.3724	12057.3720 3.9358	1.9594 1.4912	1.9674 -4.5173	1.9672
6	3.4381 1.4000	4.9671 -74.2073	6.9707 488.5026	-1.9715 3.3938	1.2967 8.1583	5641.5088 274.1091	14363.2716 4.0648	1.9570 1.5157	1.9649 -3.4873	1.9664
7	7.5538 1.4000	4.9229 -78.6152	7.6100 518.8172	-1.5323 3.7305	1.4710 8.1624	5619.3444 274.3754	15072.5019 4.1053	1.9568 1.5237	1.9663 -3.0560	1.9668
8	11.7330 1.4000	4.7997 -82.8288	8.2221 539.9873	-1.0344 4.0711	1.6386 8.1443	5545.2224 273.6309	15635.4251 4.1993	1.9539 1.5399	1.9659 -2.5744	1.9623
9	15.8529 1.4000	4.6822 -86.8858	8.9089 567.1515	-0.4847 4.4549	1.8325 8.1518	5604.9556 274.1982	16281.6909 4.3135	1.9618 1.5607	1.9632 -2.0454	1.9687
10	19.9981 1.4000	4.7000 88.8623	9.2192 588.3702	0.1830 4.7401	1.9599 8.1601	5458.0738 274.4174	16855.4684 4.3007	1.9602 1.5595	1.9655 -1.3764	1.9624

NACAL 292

RUN 46

DATE 15 OCT 80

TIME 00.57

RECOMP. NO. 1

DISK 1

PAGE 2

JOB NO. 11

LDGR ACCT 31302

CONTRACT 1631

SUB ACCT 10001

ACQ DATE 10 JUL 80 18.14

MOD 40 ALPHA WIND ON RUN, C/B=70 DEG, FWD=66 DEG, AFT=34 DEG, MEAN=50 DEG, CMU=4  
AUG 2

DATA POINT 1

-0.4265

-0.0053 -0.0845

-1.4822 -0.1578

-0.7775 -0.1887

0.0998 0.1192 0.1398 -0.1706

0.0112

-3.5731

-2.4948 0.2914

-0.2154

-4.2150

-4.4016

-0.1442

-0.1460

-3.2245

0.2683

0.0262

0.2053

0.2817

0.2920

0.2910 0.2900 0.2846

0.2888 -0.6455

-0.4497

0.2546

289

0.2905 -0.4739

0.0368

0.2577

0.2873 -0.0306

0.1660

0.0811 -0.0239 -0.0816 -0.0257 -0.0368 -0.0503 0.2541 -0.0711 -0.0675 -0.0957

NACAL 292 RUN 46 DATE 15 OCT 80 TIME 01.00 RECOMP. NO. 1 DISK 1 PAGE 16

JOB NO. 11 LDGR ACCT 31302 CONTRACT 1631 SUB ACCT 10001 ACQ DATE 10 JUL 80 18.42

MOD 40 ALPHA WIND ON RUN, C/B=70 DEG, FWD=66 DEG, AFT=34 DEG, MEAN=50 DEG, CMU=4  
AUG 2

DATA POINT 8

-0.4914

0.0177 -0.0946

-1.3773 -0.1728

-0.7328 -0.1928

-0.0490 0.0330 0.0998 -0.1558

-0.0368

-3.4135

-2.2842 0.2806

-0.2356

-4.0481

-4.1917

-0.3682

-0.1779

0.0781

-0.5584

-3.1066

0.2552

0.2288

0.2885

0.2928 0.2930 0.2877

-0.4112

0.2541

290

0.2902 -0.5851

0.0551

0.2942 -0.4285

0.2554

0.2880 -0.0068

0.1734

0.1023 0.0056 -0.1037 -0.0233 -0.0355 -0.0398 0.2640 -0.0810 -0.0908 -0.1331

NACAL 292 RUN 46 DATE 15 OCT 80 TIME 01.00 RECOMP. NO. 1 DISK 1 PAGE 18

JOB NO. 11 LDGR ACCT 31302 CONTRACT 1631 SUB ACCT 10001 ACQ DATE 10 JUL 80 18.44

MOD 40 ALPHA WIND ON RUN,C/B=70 DEG,FWD=66 DEG,AFT=34 DEG,MEAN=50 DEG,CMU=4  
AUG 2

DATA POINT 9

-0.4955

-0.0022 -0.0907

-1.4232 -0.1783

-0.0773 -0.0263 0.0998 -0.1792 -0.7222 -0.1950

-0.0785 -3.3460 -2.3493 0.2759

-0.3289 -3.9708 -4.2899

-0.3970 -3.9708 -4.2899

-0.2553 -0.5339 -3.1054 0.2578

0.0160 -0.5339 -3.1054 0.2578

0.1906 0.2873

0.2925 0.2923 0.2900 0.2902 -0.6086 -0.4125 0.2541

291 0.2928 -0.4321 9.0524

0.2934 -0.0111 0.2571

0.1749

0.1073 -0.0024 -0.1172 -0.0012 -0.0601 -0.0564 0.2640 -0.0883 -0.0748 -0.1368



ACAL 292 RUN 50 DATE 15 OCT 80 TIME 01.41 RECOMP. NO. 1 DISK 1 PAGE 22

DB NO. 11 LDGR ACCT 31302 CONTRACT 1631 SUB ACCT 10001 ACC DATE 10 JUL 80 23.58

MOD 44 ALPHA WIND ON RUN, FWD=40 DEG (C/B & AFT OFF), CMU=0, JET FLAP 2

P<sub>T</sub> P<sub>A</sub>  
14.70 14.233

SUMMARY PAGE

T NO	ALPHA H PHI	Q H THETA	CLH THRUST	CDH DELAL	CMH WFT	YM THTH	RL CMUTH	PTPFCH CDR	PTPCBH CDHR	PTPACH
1	0.4200 1.4000	9.8212 72.6592	0.7976 84.8164	0.2490 0.4010	0.2974 0.0467	-254.9473 0.1234	2287.9635 0.0012	0.9960 0.0000	0.9988 0.2440	0.9999
2	-3.5643 1.4000	9.8881 66.2144	0.5211 58.1993	0.2297 0.2552	0.0888 0.0741	-352.6271 0.2068	1569.0076 0.0020	0.9956 0.0000	0.9979 0.2256	0.9986
3	-7.5458 1.4000	9.8521 51.6564	0.2730 35.4503	0.2160 0.1322	-0.1239 0.0661	-336.6533 0.1903	828.5632 0.0018	0.9953 0.0000	0.9980 0.2159	0.9987
4	-11.4832 1.4000	10.0414 -18.6183	-0.0687 22.3542	0.2041 -0.0416	-0.3378 0.0661	-201.2934 0.1747	-174.2392 0.0016	0.9960 0.0000	0.9986 0.2041	0.9993
5	293 0.4189 1.4000	9.7433 72.4046	0.7611 80.4021	0.2413 0.3822	0.2825 0.0813	-240.7848 0.2206	2212.1850 0.0021	0.9958 0.0000	0.9986 0.2413	0.9998
6	4.4264 1.4000	9.6544 74.5332	1.0451 108.1963	0.2892 0.5284	0.4741 0.0000	-145.3616 0.0000	2937.6102 0.0000	0.9963 0.0000	0.9990 0.2852	0.9991
7	8.3515 1.4000	9.7158 76.4637	1.2561 129.7260	0.3024 0.6366	0.6181 0.0000	-105.2949 0.0000	3376.0004 0.0000	0.9967 0.0000	0.9992 0.3024	0.9991
8	12.0966 1.4000	9.8077 74.5432	1.3671 143.7655	0.3780 0.6964	0.7038 0.0570	-0.1611 0.1448	3724.0142 0.0014	0.9963 0.0000	0.9987 0.3780	0.9985
9	16.0342 1.4000	9.8259 66.7283	1.3573 150.0282	0.5835 0.7008	0.6799 0.0661	-140.3695 0.1692	3903.1077 0.0016	0.9963 0.0000	0.9988 0.5834	0.9990
10	19.9310 1.4000	9.5389 64.7597	1.4636 159.5057	0.6899 0.7624	0.7593 0.0329	69.9068 0.0802	4000.6190 0.0008	0.9966 0.0000	0.9993 0.6899	0.9992

0

NACAL 292 RUN 50 DATE 15 OCT 80 TIME 01.37 RECOMP. NO. 1 DISK 1 PAGE 2

JOB NO. 11 LDGR ACCT 31302 CONTRACT 1631 SUB ACCT 10001 ACQ DATE 10 JUL 80 23.41

MOD 44 ALPHA WIND ON RUN, FWD=40 DEG (C/B & AFT OFF), CMU=0, JET FLAP 2

DATA POINT 1

0.4733

0.4713 0.4719

0.4697 0.4724

0.4716 0.4714

0.4316 0.4460 0.4790 0.4485

0.3929

0.4291

0.4821

0.4734

0.3200

0.4304

0.4740

0.4148

0.5227

0.5083

0.4734

0.4713

0.5364

0.4512

0.4776

0.4944 0.4955 0.4949

0.4724

0.5062

0.4228

0.4714

294

0.5099

0.4224

0.4744

0.4703

0.4943

0.4193

0.4727

0.4522 0.4497 0.4578 0.4572 0.4616 0.4566 0.4666 0.4541 0.4578 0.4591

NACAL 292      RUN 50      DATE 15 OCT 80      TIME 01.39      RECOMP. NO. 1      DISK 1      PAGE 14  
 JOB NO. 11      LDGR ACCT 31302      CONTRACT 1631      SUB ACCT 10001      ACO DATE 10 JUL 80 23.53

MOD 44 ALPHA WIND ON RUN, FWD=40 DEG (C/B & AFT OFF), CMU=0, JET FLAP 2

DATA POINT 7

												0.4687	
													0.4670      0.4679
													0.4665      0.4668
													0.4677      0.4677
		0.3892	0.4179	0.4653	0.4428								0.4677      0.4677
		0.3206											0.4734      0.4682
		0.1397											
		0.2333											0.4347      0.4715
		0.4148											
		0.5285											0.5121      0.4703      0.4670
		0.5265											
		0.5100											
			0.5136	0.5049	0.4981								0.4691      0.4677
295						0.5088	0.4299						
													0.4677      0.4674
						0.5112	0.4265						0.4683      0.4674
						0.4980	0.4242						0.4683      0.4674
	0.4316	0.4322	0.4404	0.4447	0.4466	0.4491	0.4703	0.4428	0.4641	0.4441			

NACAL 292 RUN 50 DATE 15 OCT 80 TIME 01.40 RECOMP. NO. 1 DISK 1 PAGE 16  
 JOB NO. 11 LDGR ACCT 31302 CONTRACT 1631 SUB ACCT 10001 ACO DATE 10 JUL 80 23.54  
 MOD 44 ALPHA WIND ON RUN, FWD=40 DEG (C/B & AFT OFF), CMU=0, JET FLAP 2

DATA POINT 8

0.4714  
 0.4708 0.4736  
 0.4719 0.4711  
 0.4702 0.4714  
 0.3873 0.4073 0.4503 0.4472 0.4441 0.4772 0.4716  
 0.3256 0.4341 0.4715  
 0.1097 0.4341 0.4715  
 0.2950 0.4341 0.4715  
 0.4011 0.4341 0.4715  
 0.5136 0.5202 0.4740 0.4710  
 0.5450 0.5202 0.4740 0.4710  
 0.5241 0.4733 0.4725  
 0.5265 0.5166 0.5089 0.5142 0.4316 0.4744  
 296 0.5241 0.4279 0.4714  
 0.5068 0.4316 0.4705  
 0.4191 0.4198 0.4322 0.4460 0.4441 0.4416 0.4740 0.4453 0.4510 0.4453

NACAL 292 RUN 50 DATE 15 OCT 80 TIME 01.40 RECOMP. NO. 1 DISK 1 PAGE 20  
 JOB NO. 11 LDGR ACCT 31302 CONTRACT 1631 SUB ACCT 10001 ACO DATE 10 JUL 80 23.56  
 MOD 44 ALPHA WIND ON RUN, FWD=40 DEG (C/B & AFT OFF), CHU=0, JET FLAP 2

DATA POINT 10

0.4623

0.4628 0.4617

0.4636 0.4643

0.4634 0.4646

0.3992 0.4166 0.4478 0.4329

0.4684 0.4629

0.3711

0.4191

0.2177

0.4117

0.4715

0.1927

0.5059

0.4703

0.4619

0.3356

0.4895

0.5370

0.5279

0.4620

0.5233 0.5171 0.5062

0.5136 0.4231

0.4649

297

0.4634

0.5213 0.4180

0.4629

0.4639

0.4975 0.4234

0.4248 0.4322 0.4154 0.4191 0.4210 0.4241 0.4703 0.4154 0.4304 0.4110

CAL 292 RUN 51 DATE 15 OCT 80 TIME 01.54 RECOMP. NO. 1 DISK 1 PAGE 22

IB NO. 11 LDGR ACCT 31302 CONTRACT 1631 SUB ACCT 10001 ACO DATE 11 JUL 80 0.17

MOD 45 ALPHA WIND ON RUN, FWD=44 DEG (C/B & AFT OFF), CMU=1, JET FLAP 2

P<sub>TS</sub> P<sub>A</sub>  
14.71 14.233

SUMMARY PAGE

NO	ALPHA H PHI	OH THETA	CLH THRUST	CDH DFLAL	CMH WFT	YM THTH	RL CMUTH	PTPFCH CDR	PTPCBH CDHR	PTP:CH
1	1.7501 1.4000	9.6791 -88.8952	3.5564 355.7991	-0.0685 1.7088	0.9504 2.6098	1232.8494 96.7912	10207.6613 0.9676	2.4079 0.0008	0.9992 -0.0694	0.9992
2	-2.3862 1.4000	9.7250 -85.7442	3.0634 308.7261	-0.2279 1.4687	0.7045 2.6102	1125.2920 96.8002	8989.0708 0.9632	2.4079 0.0008	0.9997 -0.2288	0.9990
3	-6.4538 1.4000	9.7736 -81.5878	2.5353 258.1551	-0.3749 1.2145	0.4547 2.6128	1117.0233 96.9446	7775.1801 0.9598	2.4106 0.0009	0.9992 -0.3758	0.9996
4	-10.4962 1.4000	9.8444 -76.4605	2.0311 212.5406	-0.4891 0.9746	0.2136 2.6147	1234.4456 97.0157	6495.6988 0.9536	2.4108 0.0009	0.9994 -0.4890	0.9994
5	1.6950 1.4000	9.6926 -88.5377	3.5211 352.8129	-0.0898 1.6904	0.9466 2.6161	1222.4441 97.0265	10202.2539 0.9687	2.4089 0.0009	0.9993 -0.0908	0.9995
6	5.7636 1.4000	9.8195 88.2198	3.5627 402.2969	0.1162 1.9141	1.1732 2.6162	1207.0019 96.9738	11520.9212 0.9556	2.4058 0.0009	0.9989 0.1152	0.9990
7	9.7711 1.4000	9.6572 85.9860	4.4477 444.9729	0.3121 2.1562	1.4090 2.6153	1300.8676 96.9463	12668.5432 0.9714	2.4055 0.0009	0.9990 0.3111	0.9987
8	12.8043 1.4000	9.4522 83.2543	4.8691 478.9351	0.5759 2.3827	1.6175 2.6159	1392.7541 96.9908	13523.1200 0.9929	2.4068 0.0010	0.9990 0.5749	1.0002
9	17.7678 1.4000	9.5480 80.2348	5.0277 503.2265	0.8562 2.5043	1.6995 2.6162	1403.5888 97.0416	14171.5806 0.9835	2.4076 0.0010	0.9993 0.8552	0.9994
0	20.7685 1.4000	9.6607 76.0541	3.1379 322.7931	0.7792 1.6279	0.9215 2.6155	1448.4756 97.1307	8458.2086 0.9729	2.4120 0.0010	0.9991 0.7781	0.9990

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ACAL 292      RUN 51      DATE 15 OCT 80      TIME 01.52      RECOMP. NO. 1      DISK 1      PAGE 14  
 JOB NO. 11      LDGR ACCT 31302      CONTRACT 1631      SUB ACCT 10001      ACQ DATE 11 JUL 80 0.13  
 MOD 45 ALPHA WIND ON RUN, FWD=44 DEG (C/B & AFT OFF), CMU=1, JET FLAP 2

ATA POINT 7

											0.4778								
										0.4761	0.4772								
										0.4769	0.4758								
										0.4772	0.4735								
										0.4792	0.4761								
										0.4661									
										0.4824	0.4752								
										0.4768	0.4771								
										0.4734									
											0.4757								
										0.4735									
										0.5335	0.4133								
										0.2933	0.2795	0.1535	0.2689	0.2646	0.2639	0.4817	0.2702	0.2471	0.2302

0.2508 0.2970 0.3669 0.1709  
 0.1185 -2.1759  
 -0.3208 -0.6784  
 -0.2214  
 0.0661 0.5516  
 0.3825  
 0.5283  
 0.5471  
 0.5445 0.5389 0.5317  
 0.5295 0.3709  
 0.5318 0.3482  
 300

CAL 292 RUN 51 DATE 15 OCT 80 TIME 01.53 RECOMP. NO. 1 DISK 1 PAGE 16  
 B NO. 11 LDGR ACCT 31302 CONTRACT 1631 SUB ACCT 10001 ACQ DATE 11 JUL 80 0.14  
 MOD 45 ALPHA WIND ON RUN, FWD=44 DEG (C/R & AFT OFF), CMU=1, JET FLAP 2

TA POINT B

0.4692  
 0.4684 0.4667  
 0.4689 0.4681  
 0.4695 0.4683  
 0.1273 0.1497 0.3444 0.2190 -2.2667 0.4749 0.4675  
 0.1585 -0.1171 -0.2361 -0.5766 0.4699  
 0.0447 0.3053 0.4862 0.5192 0.4761 0.4693  
 0.5394 0.5411 0.5360 0.5284 0.5249 0.3698 0.4695 0.4690  
 301 0.5292 0.3541 0.4684  
 0.5261 0.4152 0.4676 0.4675  
 0.3394 0.2496 0.1535 0.2327 0.2720 0.2539 0.4749 0.2421 0.2321 0.1928

JACAL 292 RUN 51 DATE 15 OCT 80 TIME 01:29 RECOMP. NO. 1 DISK 1 PAGE 20  
 JOB NO. 11 LDGR ACCT 31302 CONTRACT 1631 SUB ACCT 10001 ACO DATE 11 JUL 80 0.16  
 MOD 45 ALPHA WIND ON RUN, FWD=44 DEG (C/B & AFT OFF), CMU=1, JET FLAP 2

DATA POINT 10

								0.4815			
						0.4828			0.4822		
						0.4784			0.4823		
		0.4093	0.3931	0.4493	0.3806			0.4801	0.4809		
	0.4318					-1.7882			0.4892	0.4801	
	0.3900										
	0.2646					-0.2073			0.4842		
0.3401											
0.4726								0.4842		0.4801	
0.5460						0.5011					
	0.5519										
		0.5480	0.5392	0.5283					0.4798		
					0.5264	0.4058				0.4805	
302											
					0.5283	0.3826			0.4792		
										0.4803	
										0.4794	
					0.5255	0.4052					
	0.4019	0.3881	0.3931	0.3925	0.3950	0.3850	0.4842	0.3145	0.3232	0.3226	

VACAL 292 RUN 52 DATE 15 OCT 80 TIME 02.12 RECOMP. NO. 1 DISK 1 PAGE 22

JOB NO. 11 LDGR. ACCT 31302 CONTRACT 1631 SUB ACCT 10001 ACO DATE 11 JUL 80 0.37

MOD 46 ALPHA WIND ON RUN, FWD=44 DEG (C/B & AFT OFF), CMU=2, JET FLAP 2

P<sub>T</sub> P<sub>A</sub>  
14.47 14.233

SUMMARY PAGE

PT NO	ALPHA H PHI	Ø H THETA	CLH THRUST	CDH DELAL	CMH WFT	YM TH1H	RL CM1H	PTPFCH CDR	PTPCDH CDHR	PTPACH
1	2.0352 1.4000	4.9612 -82.8770	4.4974 232.3748	-0.5620 2.0475	1.0684 2.6165	1531.7283 97.8881	6779.6594 1.9092	2.4496 0.0009	0.9995 -0.5720	1.0000
2	-2.0272 1.4000	4.9309 -78.9685	4.0078 208.0730	-0.7813 1.8178	0.8317 2.6229	1520.4416 98.1912	6137.4734 1.9269	2.4514 0.0009	0.9995 -0.7823	1.0001
3	-6.1339 1.4000	4.9704 -74.4011	3.4714 185.1269	-0.9691 1.5732	0.5781 2.6228	1483.4616 98.2291	5470.8080 1.9123	2.4534 0.0009	0.9990 -0.9761	0.9994
4	303 -10.1940 1.4000	4.9789 -68.1077	2.8395 157.4607	-1.1410 1.2905	0.3081 2.6253	1547.8063 98.3954	4715.3395 1.9123	2.4560 0.0009	0.9995 -1.1420	1.0002
5	2.0897 1.4000	4.8086 -82.7746	4.6395 232.3947	-0.5881 2.1020	1.1017 2.6250	1555.8644 98.4074	6759.6082 1.9803	2.4563 0.0009	0.9999 -0.5891	1.0004
6	6.0996 1.4000	4.8002 -86.4350	5.1664 256.7845	-0.3218 2.3532	1.3482 2.6235	1554.8388 98.3418	7439.0649 1.9824	2.4554 0.0009	0.9993 -0.3228	1.0001
7	10.2515 1.4000	4.8515 -89.8172	5.6196 281.7461	-0.0179 2.5826	1.5677 2.6254	1614.6097 98.4042	8128.0757 1.9627	2.4539 0.0009	1.0003 -0.0188	1.0006
8	14.3461 1.4000	4.6873 86.7671	6.2980 305.5590	0.3557 2.9140	1.8570 2.6237	1644.6158 98.2969	8710.2401 2.0292	2.4517 0.0009	0.9995 0.3548	0.9992
9	18.2755 1.4000	4.6154 83.6850	6.7049 321.7501	0.7420 3.1464	2.0508 2.6266	1688.6295 98.4924	9159.8011 2.0650	2.4545 0.0009	0.9998 0.7410	1.0005
10	22.3173 1.4000	4.6887 80.6882	6.9238 339.9600	1.1352 3.3158	2.1400 2.6238	1739.7037 98.3612	9642.2893 2.0300	2.4530 0.0009	0.9991 1.1343	0.9992

NACAL 292 RUN 52 DATE 15 OCT 80 TIME 02.08 RECOMP. NO. 1 DISK 1 PAGE 2  
JOB NO. 11 LDGR ACCT 31302 CONTRACT 1631 SUB ACCT 10001 ACQ DATE 11 JUL 80 0.21  
MOD 46 ALPHA WIND ON RUN, FWD=44 DEG (C/B & AFT OFF), CMU=2, JET FLAP 2

DATA POINT 1

0.2426  
0.2426 0.2425  
0.2459 0.2434  
0.1372 0.1553 0.1884 0.0798 0.2431 0.2445  
0.0991 -2.2174 0.2345 0.2434  
-0.0263  
0.0311 -0.7119 0.2302  
0.1597  
0.2622 0.2470 0.2358 0.2419  
0.2812  
0.2718  
0.2713 0.2682 0.2682 0.2448 0.2419  
304 0.2647 0.2100 0.2448  
0.2662 0.1577 0.2431  
0.2693 0.1965 0.2442  
0.1048 0.1097 0.0848 0.1110 0.1172 0.1297 0.2395 0.1129 0.0998 0.0973

NACAL 292    RUN 52    DATE 15 OCT 80    TIME 02.11    RECOMP. NO. 1    DISK 1    PAGE 14  
 JOB NO. 11    LDGR ACCT 31302    CONTRACT 1631    SUB ACCT 10001    ACO DATE 11 JUL 80 0.34  
 MOD 46 ALPHA WIND ON RUN, FWD=44 DEG (C/B & AFT OFF), CMU=2, JET FLAP 2

DATA POINT 7

								0.2386		
								0.2403	0.2386	
								0.2413	0.2403	
			0.0898	0.1241	0.1640	0.0598		0.2396	0.2409	
			0.0249			-2.2272				
		-0.2042								0.2345
		-0.1643								0.2388
		-0.0208				-0.7463				0.2395
		0.1711								
		0.2581				0.2464				0.2320
		0.2743								
			0.2750	0.2713	0.2681					
						0.2685	0.1962			0.2389
	305									
						0.2656	0.1474			0.2423
						0.2675	0.1925			0.2422
										0.2397
	0.1004	0.0973	0.0449	0.0892	0.0973	0.1035	0.2333	0.0904	0.0823	0.0630

NACAL 292 RUN 52 DATE 15 OCT 80 TIME 02.11 RECOMP. NO. 1 DISK 1 PAGE 16  
JOB NO. 11 LDGR ACCT 31302 CONTRACT 1631 SUB ACCT 10001 ACO DATE 11 JUL 80 0.34

MOD 46 ALPHA WIND ON RUIN, FWD=44 DEG (C/B & AFT OFF), CMU=2, JET FLAP 2

DATA POINT 8

										0.2386		
										0.2400	0.2382	
										0.2403	0.2396	
										0.2394	0.2402	
		0.0249	0.0804	0.1553	0.0798						0.2314	0.2386
		-0.0030				-2.2322						
		-0.1422										
		-0.1937				-0.6825					0.2264	
		0.0784										
		0.1238									0.2314	0.2394
		0.2365				0.2383						
		0.2747										
		0.2752	0.2721	0.2701							0.2371	
						0.2656	0.1978					0.2394
306											0.2411	
						0.2672	0.1549					
												0.2393
												0.2416
						0.2693	0.1942					
		0.1341	0.0898	0.0249	0.0742	0.1035	0.0935	0.2320	0.0804	0.0779	0.0492	

NACAL 292    RUN 52    DATE 15 OCT 80    TIME 02.12    RECOMP. NO. 1    DISK 1    PAGE 20  
 JOB NO. 11    LDGR ACCT 31302    CONTRACT 1631    SUB ACCT 10001    ACQ DATE 11 JUL 80 0.36  
 MOD 46 ALPHA WIND ON RUN, FWD=44 DEG (C/B & AFT OFF), CMU=2, JET FLAP 2

DATA POINT 10

						0.2382				
						0.2386	0.2385			
						0.2403	0.2386			
						0.2391	0.2396			
	-0.0177	-0.0067	0.1297	0.0848				0.2295	0.2399	
	-0.0183			-2.3070						
	-0.1441							0.2289		
	-0.2747			-0.6481						
	-0.2054									
	0.0061			0.2445				0.2308	0.2397	
	0.1780									
	0.2704									
	0.2773	0.2773	0.2749					0.2402		
				0.2689	0.2012				0.2402	
								0.2409		
				0.2672	0.1686					
									0.2391	
									0.2400	
				0.2727	0.2026					
307	0.0798	0.0723	0.0442	0.0268	0.0786	0.0761	0.2320	0.0598	0.0567	0.0174

ICAL 292 RUN 53 DATE 15 OCT 80 TIME 02.25 RECOMP. NO. 1 DISK 1 PAGE 22

TR NO. 11 LAC ACCT 31302 CONTRACT 1631 SUB ACCT 10001 ACQ DATE 11 JUL 80 17.40

MOD 47 ALPHA WIND ON RUN, FWD=44 DEG (C/B & AFT OFF), CMU=4, JET FLAP 2

P<sub>TS</sub> P<sub>A</sub>  
14.35 14.228

SUMMARY PAGE

TR NO	ALPHA H PHI	OH THETA	CLH THRUST	CDH DELAL	CMH WFT	YM THTH	RL CMUTH	PTPFCH CDR	PTPCBH CDHR	PTPACH
1	2.6083 1.4000	2.4518 -75.6407	6.3623 166.4008	-1.6287 2.6126	1.2915 2.6290	1773.9406 98.5348	4822.2805 3.8889	2.4753 0.0000	0.9995 -1.6288	0.9993
2	-1.4960 1.4000	2.5355 -71.2369	5.5571 153.6885	-1.8769 2.2916	0.9903 2.6424	1746.2979 97.9303	4473.4143 3.7375	2.4666 0.0001	1.0005 -1.8771	1.0003
3	-5.5545 1.4000	2.5120 -65.9788	4.9471 140.6030	-2.2048 2.0316	0.7212 2.6849	1728.1641 98.2217	4106.0432 3.7875	2.4715 0.0003	1.0000 -2.2051	1.0000
4	-9.7364 1.4000	2.5824 -59.0698	4.0535 126.1119	-2.4289 1.6776	0.4157 2.6797	1775.8873 98.4048	3672.6761 3.6873	2.4716 0.0002	0.9992 -2.4291	0.9992
5	2.6777 1.4000	2.4036 -75.4656	6.4556 165.6524	-1.6736 2.6394	1.2884 2.6803	1773.2241 98.4813	4780.6919 3.9648	2.4731 0.0001	0.9990 -1.6738	0.9989
6	6.8670 1.4000	2.4184 -80.6109	7.1561 181.2779	-1.1832 2.9556	1.5789 2.6757	1765.7431 98.3372	5204.0501 3.9346	2.4710 0.0001	0.9999 -1.1834	1.0001
7	10.9552 1.4000	2.2477 -84.1344	7.8954 192.5658	-0.8111 3.2673	1.8633 2.6777	1799.2514 98.2882	5510.1594 4.0511	2.4672 0.0001	0.9990 -0.8112	0.9989
8	14.9267 1.4000	2.2475 -87.7283	8.3682 203.1688	-0.3319 3.5102	2.0819 2.6841	1853.7824 98.1587	5845.0993 4.0462	2.4675 0.0001	0.9997 -0.3320	0.9993
9	19.1534 1.4000	2.2445 87.9831	8.9581 217.1754	0.3154 3.8294	2.3196 2.6651	1887.8580 98.2098	6202.3818 4.0535	2.4689 0.0001	0.9993 0.3153	0.9994
10	23.2747 1.4000	2.2553 85.0562	9.5839 224.2028	0.8290 4.1373	2.5222 2.6670	1953.3590 98.2586	6355.7745 4.2159	2.4683 0.0001	0.9993 0.8289	0.9985

308

IACAL 292 RUN 53 DATE 15 OCT 80 TIME 02.21 RECOMP. NO. 1 DISK 1 PAGE 2  
OB NO. 11 LDGR ACCT 31302 CONTRACT 1631 SUB ACCT 10001 ACQ DATE 11 JUL 80 17.23  
MOD 47 ALPHA WIND ON RUN, FWD=44 DEG (C/B & AFT OFF), CMU=4, JET FLAP 2

DATA POINT 1

0.1213  
0.1213 0.1215  
0.1200 0.1210  
0.0612 0.0724 0.0949 0.0349 0.1195 0.1203  
0.0293 -2.2089 0.1174 0.1210  
-0.0429 0.1161  
0.0106 -0.7526 0.1024 0.1212  
0.0605 0.1161 0.1024 0.1212  
0.1209 0.1382  
0.1366  
0.1377 0.1345 0.1315 0.1218  
309 0.1294 0.1223 0.1213  
0.1306 0.0592 0.1204  
0.1318 0.0874 0.1189  
0.1195  
0.0374 0.0449 0.0368 0.0318 0.0443 0.0399 0.1068 0.0405 0.0399 0.0362

ACAL 292 RUN 53 DATE 15 OCT 80 TIME 02.23 RECOMP. NO. 1 DISK 1 PAGE 14  
 1B NO. 11 LDGR ACCT 31302 CONTRACT 1631 SUB ACCT 10001 ACQ DATE 11 JUL 80 17.34  
 MOD 47 ALPHA WIND ON RUN, FWD=44 DEG (C/B & AFT OFF), CMU=4, JET FLAP 2

ATA POINT 7

						0.1206			
						0.1195	0.1218		
						0.1197	0.1207		
						0.1190	0.1197		
0.0380	0.0474	0.0836	0.0224					0.1136	0.1200
-0.0049			-2.2593						
-0.1227								0.1167	
-0.1135			-0.7619						
.0270									
0.0738			0.1249					0.1074	0.1204
0.1247									
0.1377									
0.1383	0.1379	0.1331						0.1224	
			0.1297	0.1136					0.1195
			0.1298	0.0542				0.1198	
									0.1193
			0.1332	0.0886				0.1184	
0.0349	0.0399	0.0399	0.0393	0.0343	0.0299	0.1105	0.0224	0.0274	0.0131

ACAL 292 RUN 53 DATE 15 OCT 80 TIME 02.24 RECOMP. NO. 1 DISK 1 PAGE 16  
DB NO. 11 LDGR ACCT 31302 CONTRACT 1631 SUB ACCT 10001 ACG DATE 11 JUL 80 17.35  
MOD 47 ALPHA WIND ON RUN, FWD=44 DEG (C/B & AFT OFF), CMU=4, JET FLAP 2

ATA POINT 8

0.1189

---

0.1189     0.1215

---

0.1200     0.1227

---

0.0199 0.0349 0.0749 0.0306     0.1186     0.1197

-0.0233     -2.2384     0.1186     0.1213

-0.1731

-0.1651     -0.7821     0.1136

0.0859

0.0384     0.1199     0.1049     0.1220

0.1192

---

0.1289

---

0.1283 0.1281 0.1235     0.1309     0.1129     0.1226

---

0.1329     0.0556     0.1203     0.1206

---

0.1358     0.0789     0.1181     0.1206

---

0.0418 0.0405 0.0193 0.0143 0.0293 0.0262 0.1142 0.0231 0.0199 -0.0036

111

ACAL 292      RUN 53      DATE 15 OCT 80      TIME 02.25      RECOMP. NO. 1      DISK 1      PAGE 20  
 OB NO. 11      LDGR ACCT 31302      CONTRACT 1631      SUB ACCT 10001      ACO DATE 11 JUL 80 17.39  
 MOD 47 ALPHA WIND ON RUN, FWD=44 DEG (C/B & AFT OFF), CMU=4, JET FLAP 2

ATA POINT 10

0.1172  
 0.1176      0.1197  
 0.1187      0.1200  
 0.1184      0.1172  
 -0.0601 -0.0110 0.0618 0.0224      -2.2740      0.1011      0.1156  
 -0.0638  
 -0.1804  
 -0.2130      -0.7625      0.1092  
 0.1719  
 -0.0317      0.1161      0.1074      0.1169  
 0.0718  
 0.1277  
 0.1352 0.1352 0.1325      0.1193  
 0.1295      0.1153      0.1176  
 312      0.1323      0.0564      0.1178  
 0.1346      0.0819      0.1166  
 0.1163  
 0.0324 0.0199 -0.0128 0.0106 0.0224 0.0118 0.1068 0.0074 0.0031 -0.0184

IACAL 292 RUN 55 DATE 16 OCT 80 TIME 03.17 RFCOMP. NO. 1 DISK 1 PAGE 22

JOB NO. 11 LDGR ACCT 31302 CONTRACT 1631 SUB ACCT 10001 ACQ DATE 11 JUL 80 20.17

MOD 49 JET FLAP 1 ALPHA WIND ON RUN, CMU=0, FWD=44 DEG, C/B & AFT OFF

P<sub>T</sub> P<sub>A</sub>  
14.92 14.218

SUMMARY PAGE

PT NO	ALPHA H PHI	Q H THETA	CLH THRUST	CDH DELAL	CMH WFT	YM TH1H	RL CMUTH	PTPFCH COR	PTPCBH COR	PTPACH
1	0.3243 1.4000	14.1218 64.8135	0.8706 83.1538	0.4094 0.2601	0.3781 0.1285	-480.4547 0.2248	2523.3986 0.0025	0.9951 0.0000	0.9990 0.4603	0.9993
2	-3.6142 1.4000	14.2405 59.0694	0.6448 66.0723	0.3863 0.1906	0.1354 0.1173	-607.2428 0.2132	2040.6655 0.0024	0.9947 0.0000	0.9993 0.3163	0.9994
3	-7.5595 1.4000	14.1098 48.7014	0.3928 45.5353	0.3450 0.1134	-0.1944 0.0953	-558.6862 0.1612	1311.0624 0.0018	0.9949 0.0000	0.9993 0.3150	0.9995
4	-11.4495 1.4000	14.3342 27.2310	0.1760 33.9243	0.3406 0.0468	-0.4770 0.1158	-462.6709 0.1564	629.7760 0.0017	0.9953 0.0000	0.9996 0.3405	0.9997
5	0.3018 1.4000	14.1987 65.2220	0.5316 89.8526	0.4280 0.2789	0.3577 0.1141	-489.4413 0.1735	2553.7229 0.0019	0.9948 0.0000	0.9999 0.4270	0.9995
6	4.1849 1.4000	14.0898 68.3723	1.1617 108.6786	0.4606 0.3499	0.5151 0.1931	-361.6974 0.2644	3048.9694 0.0041	0.9958 0.0001	1.0004 0.4604	0.9996
7	8.0757 1.4000	14.0597 69.0881	1.2482 115.3490	0.4570 0.3766	0.7155 0.0731	-282.5141 0.1836	3282.9355 0.0021	0.9958 0.0000	1.0002 0.4570	1.0002
8	11.7531 1.4000	14.0379 64.9178	1.1826 113.1382	0.5535 0.3567	0.8027 0.1513	-152.5701 0.2744	2924.2258 0.0031	0.9956 0.0001	0.9997 0.5534	0.9999
9	15.6767 1.4000	14.0274 61.2095	1.3166 129.9419	0.7205 0.3994	0.8578 0.0580	-208.4574 0.0371	2891.4586 0.0004	0.9956 0.0000	0.9996 0.7204	0.9999
10	19.4798 1.4000	14.0472 58.7643	1.4247 144.4676	0.8640 0.4347	0.9756 0.1926	-318.1437 0.3448	2812.5467 0.0039	0.9968 0.0001	1.0007 0.8639	1.0006

NACAL 292 RUN 55 DATE 16 OCT 80 TIME 03.13 RECOMP. NO. 1 DISK 1 PAGE 2  
JOB NO. 11 LDGR ACCT 31302 CONTRACT 1631 SUB ACCT 10001 ACQ DATE 11 JUL 80 19.59

MOD 49 JET FLAP 1 ALPHA WIND ON RUN, CMU=0, FWD=44 DEG, C/B & AFT OFF

DATA POINT 1

0.7020

0.7024 0.7031

0.7035 0.7027

0.7044 0.6987

0.6270 0.6314

0.5764

0.6345

0.6982

0.6944

0.6283

0.7988

0.6301

0.7032

0.7768

0.7356

0.7501

0.7120

0.6972

0.7353 0.7382

0.7427

0.6233

0.6975

0.6997

0.7418

0.6120

-0.0009

0.7331

0.6184

-0.0016

0.6994

0.6295

0.6245

0.6308

0.6308

0.6320

0.6233

0.7070

0.6289

0.6345

0.6170

314



NACAL 292    RUN 55    DATE 16 OCT 80    TIME 03.16    RECOMP. NO. 1    DISK 1    PAGE 16  
 JOB NO. 11    LDGR ACCT 31302    CONTRACT 1631    SUB ACCT 10001    ACO DATE 11 JUL 80 20.15  
 MOD 49 JET FLAP 1 ALPHA WIND ON RUN, CMU=0, FWD=44 DEG, C/R & AFT OFF

DATA POINT 8

316

					0.6998					
					0.7014		0.7017			
					0.7021		0.7026			
					0.7009		0.7011			
	0.6458	0.6489								
	0.6320		0.6426				0.7120		0.6994	
	0.5945									
	0.7438		0.6408				0.7070			
	0.8004									
	0.7879		0.7763				0.7095		0.6997	
	0.7745	0.7642								
			0.7651	0.6438			0.7015			
									0.7023	
			0.7708	0.6420				-0.0009		
									0.7021	
			0.7466	0.6372				-0.0016		
	0.6495	0.6489	0.6495	0.6557	0.6445	0.6470	0.7095	0.6251	0.6270	0.6158

NACAL 292 RUN 55 DATE 16 OCT 80 TIME 03.17 RECOMP. NO. 1 DISK 1 PAGE 2  
JOB NO. 11 LDGR ACCT 31302 CONTRACT 1631 SUB ACCT 10001 ACQ DATE 11 JUL 80 20.17  
MOD 49 JET FLAP 1 ALPHA WIND ON RUN, CMU=0, FWD=44 DEG, C/B & AFT OFF

DATA POINT 10

317

					0.6997					
					0.7009		0.6972			
					0.7023		0.7007			
					0.7001		0.6987			
	0.5596	0.6607					0.7120		0.6947	
	0.5521		0.6345							
	0.4396						0.7145			
	0.6639		0.6295							
	0.7861						0.7095		0.6981	
	0.8040		0.7782							
	0.7921	0.7785								
			0.7762	0.6352			0.6987			0.7004
			0.7825	0.6372					-0.0009	
										0.6992
			0.7484	0.6359					-0.0016	
0.6589	0.6570	0.6445	0.6345	0.6095	0.5970	0.7095	0.6395	0.6420	0.6295	

VACAL 292 RUN 56 DATE 16 OCT 80 TIME 03.29 RECOMP. NO. 1 DISK 1 PAGE 22

JOB NO. 11 LDGR ACCT 31302 CONTRACT 1631 SUB ACCT 10001 ACQ DATE 11 JUL 80 20.47

MOD 50 JET FLAP 1 ALPHA WIND ON RUN, CMU=1, FWD=44 DEG, C/B & AFT OFF

P<sub>T</sub> P<sub>A</sub>  
14.92 14.218

SUMMARY PAGE

PT NO	ALPHA H PHI	O H THETA	CLH THRUST	CDH DELAL	CMH WFT	YM THTH	RL CMUTH	PTPFCH CDR	PTPCRH CDR	PTPACH
1	1.3455 1.4000	14.0382 89.9450	4.4885 388.9049	0.0043 1.3226	1.1290 2.3972	1092.3058 83.9110	11125.0649 0.9684	2.1855 0.0017	0.9997 0.0020	1.0000
2	-2.6819 1.4000	14.1229 -87.7903	3.9119 341.2499	-0.1509 1.1510	0.8452 2.4093	789.0476 83.7879	9983.5255 0.9612	2.1826 0.0018	1.0006 -0.1527	1.0005
3	-6.7023 1.4000	14.0149 -84.7146	3.3156 288.0292	-0.3067 0.9744	0.5613 2.3700	711.2117 83.9242	8610.1909 0.9702	2.1829 0.0018	0.9995 -0.3085	0.9992
4 318	-10.6448 1.4000	13.8742 -81.4036	2.7790 240.6812	-0.4201 0.8172	0.2769 2.4362	725.0019 84.0784	7336.7096 0.9818	2.1883 0.0019	0.9999 -0.4220	1.0001
5	1.3115 1.4000	13.9035 -89.6953	4.4988 386.0666	-0.0239 1.3238	1.1489 2.4293	1071.5474 83.9804	11130.7027 0.9786	2.1838 0.0019	1.0000 -0.0259	1.0005
6	5.3456 1.4000	14.0072 88.0568	5.0912 440.4081	0.1727 1.5026	1.4442 2.3673	1242.7502 83.8476	12388.0058 0.9698	2.1821 0.0019	0.9994 0.1707	0.9995
7	9.3277 1.4000	14.2062 86.1506	5.5268 489.1171	0.3718 1.6385	1.7111 2.3971	1453.6801 84.0026	13730.2066 0.9513	2.1850 0.0020	1.0003 0.3698	1.0000
8	12.1577 1.4000	14.2307 84.1296	5.7419 506.9817	0.5903 1.7157	1.9212 2.4118	1816.7172 84.0422	14383.1377 0.9568	2.1855 0.0020	1.0006 0.5852	0.9997
9	16.5590 1.4000	14.0517 77.2929	4.0788 362.4871	0.9122 1.2586	1.3529 2.4176	1777.4522 83.9768	10488.4035 0.9682	2.1852 0.0021	0.9995 0.9101	0.9996
10	20.1691 1.4000	14.1982 76.1770	3.5141 317.1336	0.8646 1.0854	1.2606 2.3848	2131.6879 83.7901	8879.2952 0.9561	2.1855 0.0021	0.9999 0.8624	0.9998

NACAL 292 RUN 56 DATE 16 OCT 80 TIME 03.25 RECOMP. NO. 1 DISK 1 PAGE 2  
JOB NO. 11 LDGR ACCT 31302 CONTRACT 1631 SUB ACCT 10001 ACQ DATE 11 JUL 80 20.27

MOD 50 JET FLAP 1 ALPHA WIND ON RUN, CMU=1, FWD=44 DEG, C/B & AFT OFF

DATA POINT 1

0.6878  
0.6858 0.6912  
0.6873 0.6882  
0.6887 0.6873  
0.2708 0.1609  
0.1291 -2.8762  
0.1223  
0.5453 -0.6661  
0.7562  
0.7906 0.7650  
0.7801 0.7721  
0.7742 0.5263  
0.7767 0.5436  
0.7702 0.6186  
0.3868 0.2196 0.2365 0.2452 0.2365 0.2190 0.6889 0.2458 0.2389 0.2271  
0.7051 0.6882  
0.6988  
0.6889 0.6904  
0.6886  
0.6889  
-0.0009  
-0.0016 0.6893

319

NACAL 292 RUN 56 DATE 16 OCT 80 TIME 03.27 RECOMP. NO. 1 DISK 1 PAGE 14

JOB NO. 11 LDGR ACCT 31302 CONTRACT 1631 SUB ACCT 10001 ACQ DATE 11 JUL 80 20.41

MOD 50 JET FLAP 1 ALPHA WIND ON RUN, CMU=1, FWD=44 DEG, C/B & AFT OFF

DATA POINT 7

						0.7023				
						0.7055	0.7037			
						0.7058	0.7047			
						0.7046	0.7049			
	0.0586	0.0461						0.7176	0.7038	
	-0.1355		-3.0056							
	-0.4103									
	0.1971		-0.7127					0.7151		
	0.6080									
	0.8018		0.7925					0.7163	0.7040	
320	0.8128	0.8069								
			0.8020	0.5198			0.7057			
									0.7043	
			0.8047	0.5493				-0.0009		
			0.7969	0.6331					-0.0016	0.7035
	0.1447	0.1098	0.0811	0.1098	0.1191	0.1092	0.7151	0.1460	0.1566	0.1079

NACAL 292 RUN 56 DATE 16 OCT 80 TIME 03.28 RECOMP. NO. 1 DISK 1 PAGE 16

JOB NO. 11 LDGR ACCT 31302 CONTRACT 1631 SUB ACCT 10001 ACQ DATE 11 JUL 80 20.43

MOD 50 JET FLAP 1 ALPHA WIND ON RUN,CMU=1,FWD=44 DEG,C/B & AFT OFF

DATA POINT 8

0.7070

0.7063 0.7077

0.7063 0.7061

0.7060 0.7064

-0.1975 0.0274  
-0.2214 -2.8412

0.7300 0.7075

-0.6612  
0.0574 -0.6624

0.7226

0.5215  
0.7889 0.7937

0.7144 0.7077

0.8078 0.8077

0.8063 0.5252

0.7081

0.7063

0.8078 0.5559

-0.0009

0.7055

0.8058 0.6396

-0.0016

0.1485 -0.0196 -0.0380 0.0199 0.0742 0.0561 0.7126 0.0879 0.1141 0.0723

321

NACAL 292 RUN 56 DATE 16 OCT 80 TIME 03.29 RECOMP. NO. 1 DISK 1 PAGE 20

JOB NO. 11 LDGR ACCT 31302 CONTRACT 1631 SUB ACCT 10001 ACO DATE 11 JUL 80 20.46

MOD 50 JET FLAP 1 ALPHA WIND ON RUN,CMU=1,FWD=44 DEG,C/B & AFT OFF

DATA POINT 10

0.7001

0.7035 0.7020

0.7010 0.7010

0.7003 0.7026

0.4430 0.6102

0.3750 -0.9513

0.2246

0.5878 0.0761

0.7221

0.8148 0.7588

0.8083 0.8041

0.7251 0.7044

0.7213

0.7088 0.7054

0.7989 0.6343

0.7024

0.7021

0.8038 0.5955

-0.0009

0.7818 0.6026

0.7064  
-0.0016

0.7350 0.6539 0.6464 0.6389 0.5160 0.5085 0.7226 0.2745 0.2514 0.1940

322

ACAL 292 RUN 57 DATE 16 OCT 80 TIME 03.43 RECOMP. NO. 1 DISK 1 PAGE 22  
 PB NO. 11 LDGR ACCT 31302 CONTRACT 1631 SUB ACCT 10001  
 MOD 51 JET FLAP 1 ALPHA WIND ON RUN, CMU=2, FWD=44 DEG, C/B & AFT OFF  
 ACO DATE 11 JUL 80 21.56

P<sub>TS</sub> P<sub>A</sub>  
 14.58 14.228

SUMMARY PAGE

PT NO	ALPHA H PHI	Q H THETA	CLH THRUST	CDH DELAL	CMH WFT	YM THTH	RL CMUTH	PTPFCH CDR	PTPCRH CDHR	PTPACH
1	1.6023 1.4000	7.2055 -85.3555	5.6958 257.6686	-0.4627 1.6239	1.3054 2.4019	1457.9613 84.8862	7373.3451 1.8826	2.2348 0.0013	0.9997 -0.4640	1.6003
2	-2.4040 1.4000	7.1275 -82.4275	5.1644 229.1876	-0.6865 1.4676	1.0266 2.4172	1290.6269 85.1691	6626.4783 1.9360	2.2367 0.0013	1.0001 -0.6879	1.6005
3	-6.4436 1.4000	7.1727 -78.9238	4.4342 200.0250	-0.8672 1.2611	0.6967 2.4250	1204.0652 85.2405	5869.0905 1.9254	2.2409 0.0014	0.9994 -0.8686	0.9994
4	-10.3738 1.4000	7.0726 -74.7082	3.8033 172.1183	-1.0398 1.0823	0.3948 2.4275	1208.0895 85.1681	5091.7135 1.9510	2.2397 0.0014	0.9995 -1.0413	0.9990
5	1.6855 1.4000	7.2133 -85.4417	5.7360 256.1830	-0.4573 1.6350	1.2929 2.4185	1426.2817 85.1985	7330.2627 1.9136	2.2369 0.0014	0.9991 -0.4587	0.9991
6	5.7156 1.4000	7.2264 -88.5361	6.4712 288.7212	-0.1653 1.8511	1.6191 2.3978	1518.8243 85.3101	8162.2608 1.9127	2.2400 0.0013	0.9998 -0.1667	0.9997
7	9.7044 1.4000	7.0909 89.0630	7.0956 310.5834	0.1160 2.0380	1.9080 2.4219	1624.8309 85.34.1	8776.2440 1.9500	2.2398 0.0014	0.9990 0.1166	0.9989
8	13.6095 1.4000	7.1075 86.8915	7.5773 332.8909	0.4115 2.1903	2.1778 2.4211	1840.4397 85.1906	9371.4920 1.9419	2.2367 0.0014	0.9989 0.4100	0.9993
9	16.7287 1.4000	7.0854 82.6524	4.9547 218.4749	0.6389 1.4970	1.2272 2.3731	1853.5455 84.9560	6341.2539 1.9426	2.2233 0.0014	0.9994 0.6374	0.9991
10	20.5760 1.4000	7.0550 79.6613	4.7579 210.5979	0.8679 1.4568	1.2407 2.3752	1808.5445 85.0461	5826.7677 1.9531	2.2376 0.0014	0.9990 0.8665	0.9988

323







ACAL 292 RUN 57 DATE 16 OCT 80 TIME 03.43 RECOMP. NO. 1 DISK 1 PAGE 20  
 OB NO. 11 LDGR ACCT 31302 CONTRACT 1631 SUB ACCT 10001 ACO DATE 11 JUL 80 21.55  
 MOD 51 JET FLAP 1 ALPHA WIND ON RUN, CMU=2, FWD=44 DEG, C/B & AFT OFF

ATA POINT 10

327

0.3595  
 0.3610 0.3581  
 0.3567 0.3582  
 0.3581 0.3587  
 0.2121 0.2664  
 0.1828 -1.1876  
 0.2926  
 0.2496 -0.2472  
 0.3827  
 0.4074 0.3569  
 0.4049 0.4040 0.3394 0.3625  
 0.4062 0.3197 0.3579  
 0.4057 0.3011 -0.0009  
 0.3596  
 0.4074 0.2958 -0.0016 0.3593  
 0.3987 0.3170 0.2958 0.2933 0.2433 0.2121 0.3432 0.1622 0.1260 0.0474

IACAL 292      RUN 58      DATE 16 OCT 80      TIME 04.02      RFCOMP. NO. 1      DISK 1      PAGE 24  
 JOB NO. 11      LDGR ACCT 31302      CONTRACT 1631      SUB ACCT 10001      ACO DATE 11 JUL 80 22.22

MOD 52 JET FLAP 1 ALPHA WIND ON RUN, CMU=4, FWD=44 DEG, C/B & AFT OFF

P<sub>T</sub>S      P<sub>A</sub>  
 14.40      14.228

SUMMARY PAGE

T NO	ALPHA H PMI	Ø H THETA	CLH THRUST	CDH DELAL	CMH WFT	YM THTH	RL CMUTH	PTPFCH CDR	PTPCBH CDHR	PTPACH
1	1.9649 1.4000	3.5885 -78.0836	7.4686 169.0615	-1.5761 1.9941	1.5313 2.4385	1578.8565 85.7952	5059.2303 3.8736	2.2624 0.0013	0.9994 -1.5774	1.0002
2	-2.0024 1.4000	3.6923 -74.8161	6.6212 156.3508	-1.7969 1.7724	1.1995 2.4297	1501.4219 85.9251	4670.8690 3.7704	2.2658 0.0012	0.9996 -1.7982	1.0004
3	-6.0809 1.4000	3.6182 -70.8775	5.9149 139.8055	-2.0508 1.5828	0.9038 2.3842	1465.6889 85.8471	4251.5127 3.8441	2.2658 0.0012	1.0001 -2.0520	1.0011
4	328 -10.1224 1.4000	3.6584 -65.5159	4.8707 120.8461	-2.2180 1.3132	0.5862 2.4400	1494.8971 85.7977	3840.4566 3.7997	2.2635 0.0012	0.9993 -2.2192	1.0002
5	2.1279 1.4000	3.5891 -78.2082	7.5268 170.3290	-1.5713 2.0085	1.5075 2.4351	1588.2984 85.7864	5035.7332 3.8726	2.2631 0.0011	0.9993 -1.5724	1.0000
6	6.1649 1.4000	3.5508 -82.6236	8.4441 186.6065	-1.0931 2.2664	1.8543 2.4081	1620.2340 85.9122	5486.1308 3.9200	2.2655 0.0011	0.9999 -1.0943	1.0009
7	10.0580 1.4000	3.5782 -85.3482	9.0579 200.7082	-0.7370 2.4430	2.1566 2.4378	1705.8996 85.8603	5878.7450 3.8876	2.2633 0.0011	0.9997 -0.7381	1.0000
8	14.0966 1.4000	3.4757 -88.3156	9.9063 212.6039	-0.2913 2.6840	2.4682 2.4460	1827.4719 85.9182	6169.5560 4.0051	2.2642 0.0010	0.9985 -0.2924	0.9992
9	18.1184 1.4000	3.5079 88.7376	10.3462 224.0612	0.2279 2.8409	2.7224 2.4392	1914.0135 85.8990	6540.0482 3.9674	2.2645 0.0010	0.9989 0.2269	0.9998
10	22.2727 1.4000	3.3824 85.8830	11.2878 236.2623	0.8124 3.1211	2.9677 2.4213	2041.5305 85.9461	6788.2342 4.1168	2.2674 0.0010	0.9995 0.8114	0.9999

WACAL 292      RUN 58      DATE 16 OCT 80      TIME 04.02      RECOMP. NO. 1      DISK 1      PAGE 25  
 JOB NO. 11      LDGR. ACCT 31302      CONTRACT 1631      SUB ACCT 10001      ACQ DATE 11 JUL 80 22.22  
 MOD 52 JET FLAP 1 ALPHA WIND ON RUN, CMU=4, FWD=44 DEG, C/B & AFT OFF

SUMMARY PAGE

PT NO	ALPHA H PHI	Q H THETA	CLH THRUST	CDH DELAL	CMH WFT	YM THTH	RL CMUTH	PTPFCH CDR	PTPCBH CDHR	PTPACH
11	22.1988 1.4000	3.4672 85.9563	11.0020 236.0274	0.7777 3.0533	2.9428 2.4469	2056.8804 85.9256	6791.6318 4.0152	2.2632 0.0010	0.9991 0.7767	0.9997

ACAL 292 RUN 58 DATE 16 OCT 80 TIME 03.58 RECOMP. NO. 1 DISK 1 PAGE 2  
DB NO. 11 LDGR ACCT 31302 CONTRACT 1631 SUB ACCT 10001 ACQ DATE 11 JUL 80 22.08

MOD 52 JET FLAP 1 ALPHA WIND ON RUN, CMU=4, FWD=44 DEG, C/B & AFT OFF

DATA POINT 1

0.1811

0.1821 0.1839

0.1831 0.1819

0.1821 0.1811

-0.0012 -0.0392

-0.0472

-2.2885

0.1673 0.1784

-0.0785

0.0661

-0.7483

0.1648

0.1782

0.2091

0.1698

0.1648

0.1824

0.2115 0.2074

0.2044 0.1515

0.1784

0.1839

0.2035 0.1137

-0.0009

0.2038 0.1202

-0.0016

0.1822

0.0874 -0.0049 -0.0110 -0.0049 -0.0098 -0.0153 0.1642 0.0043 -0.0055 -0.0135

330

ACAL 292 RUN 58 DATE 16 OCT 80 TIME 04.00 RECOMP. NO. 1 DISK 1 PAGE 14  
OB NO. 11 LDGR ACCT 31302 CONTRACT 1631 SUB ACCT 10001 ACQ DATE 11 JUL 80 22.18  
MOD 52 JET FLAP 1 ALPHA WIND ON RUN, CMU=4, FWD=44 DEG, C/B & AFT OFF

DATA POINT 7

0.1807  
0.1833 0.1844  
0.1850 0.1839  
0.1855 0.1831  
-0.0798 -0.0699 0.1748 0.1819  
-0.1344 -2.3597  
-0.2639  
-0.0429 -0.7661 0.1673  
0.1121  
0.2061 0.1686 0.1736 0.1831  
0.2115 0.2111  
0.2103 0.1405 0.1847 0.1858  
0.2114 0.1101 -0.0009  
0.2097 0.1236 -0.0016 0.1851  
0.0449 -0.0251 -0.0687 -0.0564 -0.0442 -0.0546 0.1648 -0.0331 -0.0362 -0.0663

331

EACAL 292      RUN 58      DATE 16 OCT 80      TIME 04.01      RECOMP. NO. 1      DISK 1      PAGE 16  
 JOB NO. 11      LDGR ACCT 31302      CONTRACT 1631      SUB ACCT 10001      ACQ DATE 11 JUL 80 22.19  
 MOD 52 JET FLAP 1 ALPHA WIND ON RUN, CMU=4, FWD=44 DEG, C/S & AFT OFF

JATA POINT 8

0.1827

0.1856      0.1844

0.1850      0.1831

0.1818      0.1830

-0.1602      -0.0822

-0.1872      -2.2836

-0.3572

-0.1043

0.0725

0.1987

0.2051      0.2047

-0.7489

0.1598

0.2047      0.1359

0.2055      0.1004

0.2081      0.1381

0.1636      0.1819

0.1573

0.1648

0.1842

0.1825

0.1862

-0.0009

-0.0016      0.1845

0.0299      -0.1172      -0.1276      -0.1129      -0.0773      -0.0791      0.1648      -0.0460      -0.0491      -0.0828

332

IACAL 292 RUN 58 DATE 16 OCT 80 TIME 04.01 RECOMP. NO. 1 DISK 1 PAGE 20  
 IOB NO. 11 LDGR ACCT 31302 CONTRACT 1631 SUB ACCT 10001 ACQ DATE 11 JUL 80 22.21  
 MOD 52 JET FLAP 1 ALPHA WIND ON RUN, CMU=4, FWD=44 DEG, C/B & AFT OFF

DATA POINT 10

0.1797

0.1814 0.1833

0.1827 0.1824

0.1827 0.1814

-0.2639 -0.1620

-0.2584

-1.7655

0.1698

0.1808

-0.2578

-0.1012

-0.6384

0.1636

0.0223

0.1685

0.1548

0.1673

0.1824

0.2018 0.2106

0.2083

0.1463

0.1833

0.1845

333

0.2098

0.1246

-0.0009

0.2086

0.1475

-0.0016

0.1830

0.0037

-0.2167

-0.2369

-0.2160

-0.1718

-0.1479

0.1617

-0.0761

-0.0841

-0.1240

IACAL 292 RUN 60 DATE 16 OCT 80 TIME 04.22 RFCOMP. NO. 1 DISK 1 PAGE 22

JOB NO. 11 LDGR ACCT 31302 CONTRACT 1631 SUB ACCT 10001 ACQ DATE 11 JUL 80 23.39

MOD 54 JET FLAP 1 ALPHA WIND ON RUN, CMU=0, FWD=34 DEG, C/B & AFT OFF

P<sub>T</sub> P<sub>A</sub>  
 14.92 14.218

SUMMARY PAGE

PT NO	ALPHA H PHI	O H THETA	CLH TRUST	CDH DELAL	CMH WFT	YM THTH	RL CMUTH	PTPFCH CDR	PTPCBH CDHR	PTPACH
1	0.3253 1.4000	14.3523 66.1263	0.7279 70.5167	0.3221 0.2166	0.2039 0.0867	-244.7654 0.2039	1913.0391 0.0023	0.9958 0.0000	0.9994 0.3221	1.0000
2	-3.5867 1.4000	14.4054 58.4587	0.4689 48.9227	0.2878 0.1375	-0.0516 0.1721	-338.6229 0.3152	1336.4215 0.0035	0.9963 0.0000	0.9995 0.2877	1.0000
3	-7.4616 1.4000	14.1400 60.3702	0.5056 50.7713	0.2876 0.1488	-0.2493 0.1042	-374.2606 0.2811	1366.3587 0.0032	0.9912 0.0000	0.9996 0.2875	0.9999
4	-11.2487 1.4000	14.4042 8.2385	0.0386 24.0012	0.2671 0.0061	-0.5419 0.1269	-186.4691 0.2412	91.8635 0.0027	0.9955 0.0000	0.9990 0.2671	0.9995
5	0.3164 1.4000	14.4024 66.0043	0.7290 70.9409	0.3245 0.2170	0.1937 0.0594	-274.2264 0.1392	1937.8169 0.0015	0.9957 0.0000	0.9993 0.3245	0.9994
6	4.2385 1.4000	14.1954 69.5517	0.9396 87.8620	0.3503 0.2815	0.4168 0.0431	-128.4072 0.0964	2411.7996 0.0011	0.9959 0.0000	0.9996 0.3503	0.9994
7	8.0698 1.4000	14.0748 71.2419	1.1229 103.0232	0.3813 0.3378	0.6330 0.1569	-112.6025 0.2274	2852.2504 0.0026	0.9965 0.0001	1.0001 0.3812	1.0000
8	11.8590 1.4000	14.0749 67.5540	1.1441 107.5376	0.4726 0.3445	0.7647 0.1144	-27.2401 0.1878	2799.7765 0.0021	0.9962 0.0000	0.9996 0.4725	0.9998
9	15.7929 1.4000	14.1102 62.3822	1.2400 121.8789	0.6487 0.3750	0.8250 0.0448	-169.2938 0.0145	2591.8420 0.0001	0.9965 0.0000	0.9999 0.6487	1.0000
10	19.5449 1.4000	14.1442 59.9882	1.2967 130.7367	0.7490 0.3934	0.9140 0.0114	-140.5336 0.0132	2525.7499 0.0001	0.9956 0.0000	0.9992 0.7490	0.9992

VACAL 292 RUN 60 DATE 16 OCT 80 TIME 04.20 RECOMP. NO. 1 DISK 1 PAGE 10  
JOB NO. 11 LDGR ACCT 31302 CONTRACT 1631 SUB ACCT 10001 ACQ DATE 11 JUL 80 23.33

MOD 54 JET FLAP 1 ALPHA WIND ON RUN, CMU=0, FWD=34 DEG, C/B & AFT OFF

DATA POINT 5

0.7056

0.7073 0.7032

0.7043 0.7008

0.7051 0.7045

0.6432 0.6345

0.6026 0.6457

0.6488

0.8087

0.7533

0.7235

0.7195 0.7212

0.6657

0.6944

0.7264 0.6367

0.7256 0.6328

0.7392 0.6279

0.6788 0.7039

0.6894

0.6932 0.7045

0.7057

0.7048

-0.0009

-0.0016 0.7042

0.6394 0.6357 0.6376 0.6288 0.6270 0.6282 0.6907 0.6326 0.6532 0.6394

335

MACAL 292 RUN 60 DATE 16 OCT 80 TIME 04.21 RECOMP. NO. 1 DISK 1 PAGE 14  
JOB NO. 11 LDGR ACCT 31302 CONTRACT 1631 SUB ACCT 10001 ACO DATE 11 JUL 80 23.35  
MOD 54 JET FLAP 1 ALPHA WIND ON RUN, CMU=0, FWD=34 DEG, C/B & AFT OFF

DATA POINT 7

0.6994  
0.7012 0.7002  
0.7006 0.7005  
0.5645 0.6082 0.6974 0.7019  
0.5058 0.6345 0.6763 0.6975  
0.5633  
0.7219 0.6644 0.6819  
0.7991  
0.7734 0.7019 0.6794 0.7002  
0.7499 0.7383  
0.7361 0.6251 0.6975  
0.6998  
0.7320 0.6325 -0.0009  
0.7394 0.6353 -0.0016 0.6997  
0.6376 0.6282 0.6207 0.6138 0.6126 0.6170 0.6744 0.5995 0.6326 0.6145

336

IACAL 292 RUN 60 DATE 16 OCT 80 TIME 04.21 RECOMP. NO. 1 DISK 1 PAGE 16  
 'DB NO. 11 LDGR ACCT 31302 CONTRACT 1631 SUB ACCT 10001 ACO DATE 11 JUL 80 23.36  
 MOD 54 JET FLAP 1 ALPHA WIND ON RUN,CMU=0,FWD=34 DEG,C/B & AFT OFF

IATA POINT 8

0.7031

0.7029 0.7019

0.7025 0.6981

0.6995 0.7012

0.6788 0.7029

0.6295 0.6270  
 0.6232 0.6320  
 0.5845  
 0.7431 0.6782

0.6838

0.8066  
 0.7652 0.7319  
 0.7519 0.7482

0.6800 0.7029

0.7491 0.6390

0.7026

0.7028

337

0.7479 0.6375

-0.0009

0.7483 0.6393

0.7006  
-0.0016

0.6345 0.6351 0.6351 0.6295 0.6126 0.6195 0.6707 0.6188 0.6263 0.6288

NACAL 292    RUN 60    DATE 16 OCT 80    TIME 04.22    RECOMP. NO. 1    DISK 1    PAGE 20  
 JOB NO. 11    LDGR. ACCT 31302    CONTRACT 1631    SUB ACCT 10001    ACO DATE 11 JUL 80 23.39

MOD 54 JET FLAP 1 ALPHA WIND ON RUN, CMU=0, FWD=34 DEG, C/B & AFT OFF

DATA POINT 10

328

						0.6994			
						0.7015	0.7006		
						0.7012	0.6986		
						0.7003	0.6991		
	0.5845	0.6357							
	0.5595		0.6295						
	0.4946							0.6888	0.7023
	0.6894		0.6819					0.6869	
	0.7893								
	0.7930		0.7444					0.6832	0.7032
	0.7669	0.7531							
			0.7505	0.6316				0.7023	
									0.7023
			0.7516	0.6331				-0.0009	
									0.7011
			0.7517	0.6432				-0.0016	
0.6544	0.6451	0.6451	0.6438	0.6107	0.6132	0.6944	0.6338	0.6501	0.6370

MACAL 292 RUN 61 DATE 16 OCT 80 TIME 04.54 RECOMP. NO. 1 DISK 1 PAGE 22

JOB NO. 11 LDGR ACCT 31302 CONTRACT 1631 SUB ACCT 10001 ACQ DATE 12 JUL 80 0.01

MOD 55 JET FLAP 1 ALPHA WIND ON RUN, CMU=1, FWD=34 DEG, C/B & AFT OFF

P<sub>T</sub> P<sub>A</sub>  
14.92 14.218

SUMMARY PAGE

PT NO	ALPHA H PHI	O H THETA	CLH THRUST	CDH DELAL	CMH WFT	YM THTH	RL CMUTH	PTPFCH CDR	PTPCDH CDHR	PTPACH
1	0.9520 1.4000	13.9136 -85.0737	3.3371 287.6417	-0.2876 0.9813	0.7220 2.4428	1690.2005 83.7095	8362.7283 0.9747	2.1862 0.0017	1.0001 -0.2864	1.0007
2	-3.0611 1.4000	14.0809 -82.0102	2.7032 237.2359	-0.3754 0.7966	0.4284 2.4279	1461.7551 83.9492	7228.5078 0.9659	2.1906 0.0018	1.0007 -0.3813	1.0006
3	-7.0788 1.4000	14.0461 -77.8118	2.1926 194.4730	-0.4736 0.6474	0.1476 2.4065	1386.9574 83.6801	6048.7401 0.9652	2.1868 0.0019	1.0008 -0.4755	1.0008
4	-11.0362 1.4000	13.9279 -72.1262	1.6582 149.7716	-0.5347 0.4923	-0.1559 2.4068	1448.6715 83.6532	4699.5659 0.9731	2.1858 0.0019	1.0001 -0.5367	0.9999
5	0.9649 1.4000	14.1247 -84.8153	3.2430 283.8815	-0.2942 0.9541	0.7126 2.4255	1695.3407 83.8832	8356.7873 0.9622	2.1878 0.0020	0.9999 -0.2862	0.9999
6	4.8854 1.4000	13.9955 -87.6305	3.8050 328.9613	-0.1574 1.1203	1.0157 2.4383	1896.1564 83.7079	9556.2795 0.9690	2.1843 0.0021	1.0006 -0.1595	1.0004
7	8.9312 1.4000	14.0543 -89.7425	4.3161 374.4039	-0.0193 1.2725	1.3038 2.3730	2094.9862 83.6491	10640.5885 0.9643	2.1836 0.0021	1.0002 -0.0215	0.9998
8	12.7865 1.4000	14.1020 88.0703	4.8945 426.2563	0.1649 1.4469	1.5772 2.3719	2395.6712 83.6508	11892.6515 0.9610	2.1849 0.0021	0.9995 0.1627	0.9992
9	16.7858 1.4000	14.1496 85.4898	5.1027 447.0179	0.4025 1.5220	1.7905 2.4429	2726.0639 83.8032	12463.4645 0.9595	2.1835 0.0022	1.0007 0.4002	1.0004
10	20.1783 1.4000	14.1956 78.9340	3.5329 315.4015	0.6909 1.0820	1.2510 2.3919	2408.5349 83.6788	8902.5117 0.9550	2.1856 0.0022	1.0003 0.6887	0.9999

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ACAL 292    RUN 61    DATE 16 OCT 80    TIME 04.53    RECOMP. NO. 1    DISK 1    PAGE 14  
 PB NO. 11    LDGR ACCT 31302    CONTRACT 1631    SUB ACCT 10001    ACO DATE 11 JUL 80 23.56  
 MOD 55 JET FLAP 1 ALPHA WIND ON RUN, CMU=1, FWD=34 DEG, C/B & AFT OFF

ATA POINT 7

ORIGINAL PAGE  
 OF FOUR (CONTINUED)

0.6882

0.6885    0.6895

0.6878    0.6866

0.6886    0.6872

0.2284    0.1904

0.0181    -2.3810

-0.1141

0.3920

0.6914

0.7881

0.7875    0.7740

-2.0920

0.7603

0.7617    0.5466

0.7643    0.5369

0.7622    0.6242

0.6967    0.6897

0.6998

0.7060

0.6915

0.5894

0.6911

-0.0009

-0.0016

0.6906

0.2909    0.2334    0.2284    0.2528    0.2397    0.2409    0.7017    0.2671    0.2640    0.2447

341



^CAL 292    RUN 61    DATE 16 OCT 80    TIME 04.54    RECOMP. NO. 1    DISK 1    PAGE 20  
 CB NO. 11    LDGR ACCT 31302    CONTRACT 1631    SUB ACCT 10001    ACO DATE 11 JUL 80 23.59  
 MOD 55 JET FLAP 1 ALPHA WIND ON RUN,CMU=1,FWD=34 DEG,C/B & AFT OFF

ITA POINT 10

0.7060  
 0.7077    0.7053  
 0.7013    0.7034  
 0.7048    0.7022  
 0.3989    0.6105  
 0.4513    -0.9573  
 0.3308  
 0.5618    -1.4979  
 0.7500  
 0.8030    0.7872  
 0.7959    0.7896  
 0.7179    0.7034  
 0.7198  
 0.7185    0.7039  
 0.7844    0.6329  
 0.7016  
 0.7907    0.5871  
 -0.0009  
 0.7740    0.5693  
 -0.0016    0.7036  
 0.7572    0.6492    0.6380    0.6361    0.4750    0.3883    0.7141    0.3158    0.2740    0.2796

343

ACAL 292 RUN 62 DATE 16 OCT 80 TIME 05.47 RECOMP. NO. 1 DISK 1 PAGE 22

OB NO. 11 LDGR ACCT 31302 CONTRACT 1631 SUB ACCT 10001 ACO DATE 12 JUL 80 0.24

MOD 56 JET FLAP 1 ALPHA WIND ON RUN,CMU=2,FWD=34 DEG,C/B & AFT OFF

P<sub>T</sub> P<sub>A</sub>  
14.58 14.228

SUMMARY PAGE

T NO	ALPHA H PHI	Q H THETA	CLH THRUST	CDH DELAL	CMH WFT	YM THTH	RL CMUTH	PTPFCH CDR	PTPCBH CDHR	PTPACH
1	1.2481 1.4000	7.1628 -78.1509	4.1501 187.4687	-0.8707 1.1823	0.7587 2.3896	1815.9904 84.7500	5364.6318 1.9170	2.2343 0.0021	0.9992 -0.9779	0.9997
2	-2.8635 1.4000	7.1151 -73.5880	3.4914 159.8403	-1.0033 0.2976	0.4519 2.3786	1663.1759 84.7975	4689.2293 1.9309	2.2352 0.0021	0.9986 -1.0305	0.9991
3	-6.8782 1.4000	7.0689 -67.9158	2.8561 134.4800	-1.1588 0.8193	0.1537 2.3800	1605.8142 84.8831	4005.3247 1.9455	2.2368 0.0021	0.9990 -1.1609	0.9996
4	-10.8451 1.4000	7.1195 -61.1493	2.2257 111.6605	-1.2261 0.6442	-0.1490 2.3941	1643.0132 84.8641	3275.9916 1.9312	2.2366 0.0021	0.9995 -1.2282	0.9999
5	1.1927 1.4000	7.1045 -78.0519	4.1562 186.2867	-0.8795 1.1851	0.7380 2.3807	1809.4950 84.8634	5361.2903 1.9353	2.2371 0.0020	0.9994 -0.8816	0.9995
6	5.2008 1.4000	7.1767 -82.1577	4.8419 216.4995	-0.6669 1.3819	1.0547 2.4054	1925.3774 84.9708	6101.7558 1.9183	2.2365 0.0020	0.9993 -0.6689	0.9996
7	9.2471 1.4000	7.1601 -85.3563	5.5110 244.3507	-0.4476 1.5755	1.3607 2.4109	2033.1951 84.8882	6835.2785 1.9208	2.2323 0.0020	0.9993 -0.4466	0.9992
8	13.1794 1.4000	7.2377 -88.2801	5.9899 267.6985	-0.1798 1.7226	1.6112 2.3805	2191.3882 84.9037	7427.1742 1.9006	2.2334 0.0019	0.9996 -0.1818	0.9994
9	17.1379 1.4000	7.2394 89.0595	6.3945 285.7596	0.1049 1.8529	1.8604 2.4065	2446.4635 85.2066	7920.3631 1.9069	2.2379 0.0019	0.9994 0.1030	0.9996
10	20.4758 1.4000	7.3267 83.2097	4.5087 205.3295	0.5368 1.3612	1.1246 2.4024	2097.4621 84.7979	5589.0688 1.8751	2.2342 0.0019	0.9996 0.5349	1.0001

344

0

VACAL 292 RUN 62 DATE 16 OCT 80 TIME 05.44 RECOMP. NO. 1 DISK 1 PAGE 2  
JOB NO. 11 LDGR ACCT 31302 CONTRACT 1631 SUB ACCT 10001 ACQ DATE 12 JUL 80 0.07  
MOD 56 JET FLAP 1 ALPHA WIND ON RUN, CMU=2, FWD=34 DEG, C/B & AFT OFF

DATA POINT 1

345

0.3250																			
0.3223					0.3252														
0.3209					0.3266														
0.1497			0.0998		0.3152			0.3249											
0.0948		-2.0742								0.3389		0.3256							
0.1123																			
0.3076		-2.5822								0.3395									
0.3714																			
0.3737		0.3376			0.3395							0.3255							
0.3710		0.3714																	
0.3686				0.2849		0.3270						0.3247							
0.3699					0.2392		-0.0009												
0.3625				0.2863		-0.0016						0.3270							
0.2140		0.1472		0.1466		0.1441		0.1447		0.1410		0.3407		0.1360		0.1123		0.1298	

8

VACAL 292      RUN 62      DATE 16 OCT 80      TIME 05.46      RECOMP. NO. 1      DISK 1      PAGE 14  
 IOB NO. 11      LDGR ACCT 31302      CONTRACT 1631      SUB ACCT 10001      ACQ DATE 12 JUL 80 0.18  
 MOD 56 JET FLAP 1 ALPHA WIND ON RUN,CMU=2,FWD=34 DEG,C/B & AFT OFF

DATA POINT 7

						0.3375			
						0.3363		0.3387	
						0.3387		0.3381	
						0.3394		0.3375	
		0.0667	0.0312					0.3438	0.3387
		-0.0595		-2.2245					
		-0.1613							
		0.1366		-2.4485				0.3432	
		0.3247							
		0.3939		0.3607				0.3482	0.3367
		0.3947	0.3915						
				0.3794	0.2799			0.3398	
									0.3391
				0.3841	0.2330			-0.0009	
									0.3389
				0.3805	0.2900			-0.0016	
	0.1516	0.0624	0.0549	0.0630	0.0649	0.0611	0.3482	0.0805	0.0580
									0.0699

346

ACAL 292      RUN 62      DATE 16 OCT 80      TIME 05.46      RECOMP. NO. 1      DISK 1      PAGE 16  
 DB NO. 11      LDGR ACCT 31302      CONTRACT 1631      SUB ACCT 10001      ACQ DATE 12 JUL 80      0.19  
 MOD 56 JET FLAP 1 ALPHA WIND ON RUN, CMU=2, FWD=34 DEG, C/B & AFT OFF

ATA POINT 8

0.3404

0.3398    0.3400

0.3398    0.3404

-0.0588    0.0087

0.3409    0.3398

-0.1012    -2.1595

0.3463    0.3397

-0.3018

0.0337    -2.3761

0.3438

0.2654

0.3871    0.3663

0.3395

0.3398

0.3972    0.3952

347

0.3868    0.2695

0.3404

0.3386

0.3873    0.2299

-0.0009

0.3859    0.2863

-0.0016

0.3397

0.1304    0.0212    -0.0147    0.0143    0.0355    0.0280    0.3470    0.0586    0.0374    0.0474

NACAL 292 RUN 62 DATE 16 OCT 80 TIME 05.47 RECOMP. NO. 1 DISK 1 PAGE 20  
 JOB NO. 11 LDGR ACCT 31302 CONTRACT 1631 SUB ACCT 10001 ACQ DATE 12 JUL 80 0.22  
 MOD 56 JET FLAP 1 ALPHA WIND ON RUN, CMU=2, FWD=34 DEG, C/B & AFT OFF

DATA POINT 10

					0.3452					
					0.3466	0.3457				
					0.3478	0.3495				
					0.3491	0.3475				
	0.2146	0.2409					0.3513	0.3471		
	0.3064	-1.1583								
	0.1747									
	0.3045	-1.9736					0.3545			
	0.3656									
	0.4100	0.3738					0.3570	0.3438		
	0.4098	0.4026								
			0.3935	0.3130			0.3443			
								0.3435		
			0.3947	0.2720				-0.0009		
			0.3888	0.2774					0.3477	
								-0.0016		
	0.4250	0.3020	0.2596	0.2802	0.2396	0.2184	0.3563	0.0948	0.0586	0.0773

348

IACAL 292 RUN 63 DATE 16 OCT 80 TIME 06.00 RECOMP. NO. 1 DISK 1 PAGE 22

INR NO. 11 LDGR ACCT 31302 CONTRACT 1631 SUB ACCT 10001 ACQ DATE 12 JUL 80 0.44

MOD 57 JET FLAP 1 ALPHA WIND ON RUN, CMU=4, FWD=34 DEG, C/B & AFT OFF

P<sub>TS</sub> P<sub>A</sub>  
14.40 14.228

SUMMARY PAGE

PT NO	ALPHA H PHI	OH THETA	CLH THRUST	CDH DELAL	CMH WFT	YM THTH	RL CMUTH	PTPFCH CDR	PTPCBH CDHR	PTPACH
1	1.5569 1.4000	3.6156 -69.9045	5.6613 134.5257	-2.0712 1.5186	0.8294 2.4418	1853.2312 85.5593	3739.6151 3.8340	2.2640 0.0019	0.9997 -2.0732	0.9997
2	-2.4719 1.4000	3.6822 -65.2806	4.8722 121.8018	-2.2326 1.3129	0.5095 2.4299	1767.0489 85.5785	3380.1028 3.7655	2.2633 0.0019	0.9994 -2.2346	1.0001
3	-6.6033 1.4000	3.5230 -57.9324	4.1057 105.3496	-2.5722 1.1068	0.1573 2.4248	1746.5686 85.6902	2899.4163 3.9408	2.2643 0.0019	0.9999 -2.5742	0.9996
4	349 -10.5541 1.4000	3.7002 -51.3204	3.1652 92.7159	-2.5371 0.8760	-0.1750 2.4203	1757.2428 85.5495	2484.6200 3.7459	2.2625 0.0018	0.9996 -2.5390	0.9999
5	1.6059 1.4000	3.5591 -70.0170	5.7386 134.1368	-2.0867 1.5371	0.7968 2.4289	1879.2802 85.5022	3696.3060 3.8922	2.2601 0.0018	0.9992 -2.0866	0.9998
6	5.6178 1.4000	3.5755 -75.2389	6.5777 150.1151	-1.7331 1.7658	1.1265 2.4025	1919.8936 85.6983	4128.4832 3.8833	2.2635 0.0018	0.9993 -1.7349	1.0003
7	9.7059 1.4000	3.5795 -79.2286	7.3920 166.2376	-1.4049 1.9882	1.4284 2.4408	1990.1626 85.5444	4554.9261 3.8719	2.2610 0.0018	0.9994 -1.4067	0.9993
8	13.6278 1.4000	3.5817 -82.5564	8.0189 178.7767	-1.0476 2.1683	1.7126 2.4206	2094.9995 85.5442	4919.9458 3.8696	2.2609 0.0017	1.0002 -1.0494	1.0006
9	17.7079 1.4000	3.5243 -86.2999	8.7875 191.5496	-0.5682 2.3949	2.0449 2.4186	2225.1082 85.5480	5243.0245 3.9328	2.2611 0.0017	1.0000 -0.5699	0.9999
10	21.7206 1.4000	3.5718 -89.2201	9.1849 202.5052	-0.1250 2.5327	2.1932 2.4226	2348.8134 85.5637	5496.6545 3.8812	2.2612 0.0016	0.9995 -0.1266	1.0000

IACAL 292 RUN 63 DATE 16 OCT 80 TIME 05.56 RECOMP. NO. 1 DISK 1 PAGE 2  
 OB NO. 11 LDGR ACCT 31302 CONTRACT 1631 SUB ACCT 10001 ACQ DATE 12 JUL 80 0.32  
 MOD 57 JET FLAP 1 ALPHA WIND ON RUN, CMU=4, FWD=34 DEG, C/B & AFT OFF

ATA POINT 1

0.1779

0.1786 0.1770

0.1783 0.1766

0.1784 0.1736

0.0386 0.0187 0.1697 0.1735  
 0.0099 -1.9734  
 0.0187

0.1329 -2.7544 0.1660  
 0.1981

0.2051 0.1616 0.1666 0.1746  
 0.2023 0.1972

0.1886 0.1659 0.1739

0.1750

0.1920 0.1023 -0.0009

0.1946 0.1420 -0.0016 0.1726

0.1485 0.0567 0.0349 0.0411 0.0418 0.0336 0.1578 0.0461 0.0324 0.0349

350

8  
JACAL 292 RUN 63 DATE 16 OCT 80 TIME 05.59 RECOMP. NO. 1 DISK 1 PAGE 14  
JOB NO. 11 LDGR ACCT 31302 CONTRACT 1631 SUB ACCT 10001 ACQ DATE 12 JUL 80 0.41  
MOD 57 JET FLAP 1 ALPHA WIND ON RUN, CMU=4, FWD=34 DEG, C/B & AFT OFF

DATA POINT 7

0.1753

0.1763 0.1759

0.1772 0.1773

0.1784 0.1778

-0.0134 -0.0116  
-0.0662 -2.0483

-0.1417  
0.0249 -2.7231

0.1538  
0.2021 0.1591

0.2058 0.2021

0.1672 0.1758

0.1597

0.1703 0.1770

0.1920 0.1612

0.1761

0.1776

0.1932 0.0963

-0.0009

0.1974 0.1292

-0.0016

0.1752

0.1216 0.0000 -0.0159 -0.0098 0.0000 0.0093 0.1597 0.0106 -0.0067 -0.0036

351

IACAL 292    RUN 63    DATE 16 OCT 80    TIME 05.59    RECOMP. NO. 1    DISK 1    PAGE 16  
 DB NO. 11    LDGR ACCT 31302    CONTRACT 1631    SUB ACCT 10001    ACO DATE 12 JUL 80 0.41  
 MOD 57 JET FLAP 1 ALPHA WIND ON RUN, CMU=4, FWD=34 DEG, C/B & AFT OFF

ATA POINT 8

352

0.1763  
 0.1772    0.1776  
 0.1778    0.1789  
 0.1790    0.1775  
 -0.0809 -0.0269  
 -0.0981    -1.9974  
 -0.2306  
 -0.0165    -2.6820  
 0.1174  
 0.1981    0.1597  
 0.2092    0.2065  
 0.2006    0.1568  
 0.1988    0.0938  
 0.2017    0.1366  
 0.0936    -0.0245    -0.0637    -0.0392    -0.0171    -0.0104    0.1585    -0.0092    -0.0196    -0.0171  
 0.1672    0.1772  
 0.1703  
 0.1709    0.1783  
 0.1781  
 0.1772  
 -0.0009  
 -0.0016    0.1756

CAL 292    RUN 63    DATE 16 OCT 80    TIME 06.00    RECOMP. NO. 1    DISK 1    PAGE 20  
 IB NO. 11    LDGR ACCT 31302    CONTRACT 1631    SUB ACCT 10001    ACQ DATE 12 JUL 80 0.43  
 MOD 57 JET FLAP 1 ALPHA WIND ON RUN, CMU=4, FWD=34 DEG, C/B & AFT OFF

DATA POINT 10

353

				0.1798					
				0.1790	0.1792				
				0.1816	0.1804				
				0.1821	0.1793				
	-0.1693	-0.1239				0.1672		0.1786	
	-0.1760		-1.6465						
	-0.2208								
	-0.0460		-2.4041			0.1653			
	0.0724								
	0.1923		0.1759			0.1753		0.1800	
	0.2054	0.2075							
			0.2035	0.1684		0.1800			
								0.1812	
			0.2034	0.1123			-0.0009		
									0.1796
			0.2060	0.1356				-0.0016	
0.1010	-0.1527	-0.1631	-0.1288	-0.1018	-0.0895	0.1622	-0.0294	-0.0447	-0.0453

ACAL 292 RUN 71 DATE 17 OCT 80 TIME 02.00 RECOMP. NO. 1 DISK 1 PAGE 22

OR NO. 11 LDGR ACCT 31302 CONTRACT 1631 SUB ACCT 10001 ACQ DATE 18 AUG 80 19.56

MOD 64 ALPHA WIND ON RUN, C/B=60 DEG, FWD=54 DEG, AFT=22 DEG, MEAN=38 DEG,  
CMU=0

P<sub>T</sub> P<sub>A</sub>  
15.035 14.272

SUMMARY PAGE

T NO	ALPHA H PHI	O H THETA	CLH THRUST	CDH DELAL	CMH WFT	YM THTH	RL CMUTH	PTPFCH CDR	PTPCBH CDHR	PTPACH
1	0.3143 1.3000	15.4070 46.1893	0.5426 109.0726	0.5205 0.2438	0.1606 0.5480	-900.1842 1.4576	2071.8922 0.0100	0.9873 0.0697	0.9970 0.4507	1.0009
2	-3.6074 1.3000	15.4522 42.2943	0.4573 98.8728	0.5027 0.2030	0.0750 0.5436	-1078.8100 1.4846	1699.5787 0.0102	0.9865 0.0691	0.9970 0.4336	1.0017
3	-7.5850 1.3000	15.7072 35.5944	0.3260 82.8328	0.4555 0.1407	-0.0312 0.1702	-1054.9884 0.4862	1251.0831 0.0032	0.9843 0.0214	0.9956 0.4340	0.9997
4	-11.5282 1.3000	15.6690 22.7444	0.1753 68.4210	0.4277 0.0713	-0.1181 0.0769	-1040.2005 0.2615	781.2872 0.0017	0.9850 0.0097	0.9958 0.4180	0.9997
5	0.2737 1.3000	15.4704 46.1803	0.5120 103.3582	0.4913 0.2253	0.1540 0.2258	-913.4673 0.6158	2065.6323 0.0042	0.9862 0.0287	0.9961 0.4626	0.9996
6	4.1750 1.2000	15.5009 51.9097	0.6801 126.1150	0.5331 0.3059	0.2388 0.5059	-879.8652 1.3210	2469.4576 0.0090	0.9877 0.0642	0.9970 0.4688	1.0007
7	8.0852 1.3000	15.4877 55.5693	0.8056 142.4151	0.5522 0.3703	0.3032 0.0955	-671.1403 0.2227	2769.0098 0.0015	0.9878 0.0121	0.9955 0.5401	0.9993
8	12.0045 1.3000	15.1683 59.0132	0.9932 165.4494	0.5965 0.4612	0.3887 0.0768	-640.9218 0.1915	3093.1245 0.0013	0.9900 0.0098	0.9961 0.5866	0.9993
9	15.8327 1.3000	15.1777 58.3348	1.0356 173.8568	0.6387 0.4825	0.4337 0.2584	-496.5548 0.4863	3147.3641 0.0034	0.9936 0.0332	0.9963 0.6055	1.0000
10	19.7292 1.3000	15.2569 54.3919	1.0388 183.5209	0.7439 0.4863	0.4516 0.5276	-290.9317 1.1791	3308.2121 0.0082	0.9950 0.0676	0.9970 0.6763	1.0009

354

0

NACAL 292    RUN 71    DATE 17 OCT 80    TIME 01.57    RECOMP. NO. 1    DISK 1    PAGE 2  
 JOB NO. 11    LDGR ACCT 31302    CONTRACT 1631    SUB ACCT 10001    ACQ DATE 18 AUG 80 19.43  
 MOD 64    ALPHA WIND ON RUN, C/B=60 DEG, FWD=54 DEG, AFT=22 DEG, MEAN=38 DEG,  
           CMU=0

DATA POINT 1

-0.1777

-0.0036    -0.0468

-0.2024    -0.0187

-0.0871    -0.0569

10.1650 -0.6029

-5.0052    -0.1196

-0.0805    -0.0623

-4.9997

-4.9033    -0.0915

-0.0860

0.0863

0.0559    0.0471

-0.1617

-0.0568

2.5932 -1.1927

-1.1892    -0.1032

-0.0779

-0.0579

-1.1935    -0.1167

-0.0660

-1.2087    -0.1062

-0.0557  
-0.0568

-0.0140    -0.0274    -0.0036    -0.0067    -0.6108    -0.0170    0.0043    -0.0366    -0.0335    0.0049

355

JACAL 292      RUN 71      DATE 17 OCT 80      TIME 01.59      RECOMP. NO. 1      DISK 1      PAGE 14

OR NO. 11      LDGR ACCT 31302      CONTRACT 1631      SUB ACCT 10001      ACQ DATE 18 AUG 80 19.53

MOD 64      ALPHA WIND ON RUN, C/B=60 DEG, FWD=54 DEG, AFT=22 DEG, MEAN=38 DEG,  
            CMU=0

DATA POINT 7

					-0.1859					
					-0.0058	-0.0523				
					-0.1873	-0.0150				
					-0.0901	-0.0597				
	10.0911	-0.3039					-0.0561	-0.0603		
	-5.1358		-0.1110							
	-5.1370									
	-4.9563		-0.0915				-0.0683			
	0.1139									
	0.0969		0.0558				-0.1891	-0.0600		
356	2.6211	-1.1853								
			-1.1826	-0.1013			-0.0816			
								-0.0573		
			-1.1728	-0.1005			-0.0542			
								-0.0546		
			-1.2064	-0.1004				-0.0565		
	-0.0598	-0.0707	-0.0414	-0.0030	-0.3130	-0.0390	-0.0006	-0.0433	-0.0384	0.0000

NACAL 292 RUN 71 DATE 17 OCT 80 TIME 01.59 RECOMP. NO. 1 DISK 1 PAGE 16  
JOB NO. 11 LDGR ACCT 31302 CONTRACT 1631 SUB ACCT 10001 ACQ DATE 18 AUG 80 19.54  
MOD 64 ALPHA WIND ON RUN, C/B=60 DEG, FWD=54 DEG, AFT=22 DEG, MEAN=38 DEG,  
CMU=0

DATA POINT 8

-0.1893

-0.0040 -0.0491

-0.1910 -0.0175

-0.0871 -0.0528

10.0321 -0.3191

-5.1583

-0.0921

-5.2163

-0.0573 -0.0565

-4.9856

-0.0805

0.1009

-0.0750

0.1091

0.0633

-0.1885

-0.0582

2.6310 -1.1809

-1.1806 -0.0984

-0.0862

-0.0620

-1.1712 -0.0918

-0.0646

-1.2103 -0.0890

-0.0573  
-0.0462

-0.1159 -0.1098 -0.0811 -0.0067 -0.2874 -0.0573 -0.0134 -0.0573 -0.0475 -0.0097

357

VACAL 292 RUN 71 DATE 17 OCT 80 TIME 02.00 RECOMP. NO. 1 DISK 1 PAGE 20  
 JOB NO. 11 LDGR ACCT 31302 CONTRACT 1631 SUB ACCT 10001 ACQ DATE 18 AUG 80 19.55  
 MOD 64 ALPHA WIND ON RUN, C/B=60 DEG, FWD=54 DEG, AFT=22 DEG, MEAN=38 DEG,  
 CMU=0

DATA POINT 10

-0.1290

-0.0046 -0.0620

-0.1067 -0.0212

-0.0711 -0.0630

10.0445 -0.3246  
-5.1162 -0.0805

-5.1614  
-5.0241 -0.0695  
0.0911

0.1146 0.0595  
2.6375 -1.1725

-0.0732 -0.0660

-0.0537

-0.0469 -0.0659

-1.1713 -0.0677

-0.0605

-0.0579

-1.1667 -0.0631

-0.0687

-1.2026 -0.0634

-0.0648 -0.0545

-0.0701 -0.0598 -0.0646 -0.0103 -0.2300 -0.0793 0.0093 -0.1452 -0.1257 0.0099

358

IACAL 292 RUN 72 DATE 17 OCT 80 TIME 01.17 RECOMP. NO. 1 DISK 1 PAGE 22

OB NO. 11 LDGR ACCT 31302 CONTRACT 1631 SUB ACCT 10001 ACQ DATE 18 AUG 80 20.19

MOD 65 ALPHA WIND ON RUN, C/B=60 DEG, FWD=54 DEG, AFT=22 DEG, MEAN=38 DEG,  
CMU=1

P<sub>T</sub> P<sub>A</sub>  
15.035 14.272

SUMMARY PAGE

T NO	ALPHA H PHI	O H THETA	CLH THRUST	CDH DELAL	CMH WFT	YM THTH	RL CMUTH	PTPFCH CDR	PTPCBH CDHR	PTPACH
1	1.3244 1.3000	15.0906 88.3653	2.9853 424.2786	0.0851 1.3413	0.4849 5.2667	1076.0944 121.0220	10984.5314 0.8518	1.3587 0.6780	1.3639 -0.5928	1.3597
2	-2.6878 1.3000	15.0383 -88.5878	2.6220 371.3221	-0.0646 1.1723	0.4063 5.2680	1064.1857 120.4734	9653.6574 0.8509	1.3597 0.6796	1.3547 -0.7443	1.3573
3	-6.8142 1.3000	14.8952 -83.7432	2.1673 305.7357	-0.2376 0.9645	0.3173 5.3058	1256.8209 122.2079	8285.1338 0.8715	1.3622 0.6883	1.3642 -0.9259	1.3608
4 359	-10.8463 1.3000	14.9064 -77.9116	1.7051 244.7034	-0.3651 0.7587	0.2179 5.2878	1451.8909 121.7589	6.21.2253 0.8676	1.3608 0.6856	1.3634 -1.0508	1.3638
5	1.3266 1.3000	14.8431 89.2730	2.9694 414.9506	0.0324 1.3297	0.5035 5.2954	1182.2495 121.8928	10886.2696 0.8723	1.3650 0.6885	1.3628 -0.6560	1.3587
6	5.2844 1.3000	14.8182 85.8423	3.2698 457.3401	0.2376 1.4787	0.5529 5.2331	1092.5529 120.8983	11934.6377 0.8666	1.3646 0.6810	1.3633 -0.4434	1.3688
7	9.2201 1.3000	15.0108 82.8834	3.4301 488.4785	0.4282 1.5689	0.5797 5.2307	1197.2591 120.6730	12554.1102 0.8539	1.3643 0.6764	1.3645 -0.2481	1.3606
8	13.1249 1.3000	14.9041 80.7086	3.6404 517.5676	0.5955 1.6802	0.6394 5.2261	1272.0477 120.6447	13114.8523 0.8598	1.3651 0.6782	1.3644 -0.0827	1.3613
9	16.9840 1.3000	15.0701 78.8131	3.6346 525.6305	0.7188 1.6939	0.6543 5.1630	1528.8095 118.7703	13287.9113 0.8371	1.3613 0.6664	1.3599 0.0523	1.3615
10	20.9149 1.3000	14.9078 76.3506	3.7416 540.3793	0.9086 1.7671	0.6970 5.1588	1959.6801 118.7468	13279.9232 0.8461	1.3589 0.6695	1.3639 0.2390	1.3581

0

ACAL 292 RUN 72 DATE 17 OCT 80 TIME 01.13 RECOMP. NO. 1 DISK 1 PAGE 2  
OB NO. 11 LDGR ACCT 31302 CONTRACT 1631 SUB ACCT 10001 ACQ DATE 18 AUG 80 20.05  
MOD 65 ALPHA WIND ON RUN, C/B=60 DEG, FWD=54 DEG, AFT=22 DEG, MEAN=38 DEG,  
CMU=1

ATA POINT 1

360

-0.8933  
-----  
0.0012 -0.6180  
-----  
-0.9403 -0.3183  
-----  
-0.3264 -0.7392 -0.8216 -0.6022  
-----  
-0.4786 -2.2939 -0.7112 -0.0371  
-----  
-0.4652  
-----  
-0.1016 -2.2495 -1.2788  
-----  
0.0870  
-----  
0.1164 -0.0115 -0.9104 -0.0115  
-----  
0.1073 0.0982  
-----  
0.0971 -0.4767 -0.2011 0.0038  
-----  
0.1093 -0.3157 -0.0602  
-----  
0.0881 -0.1339 -0.0084 0.0109  
-----  
-0.0925 -0.3069 -0.3379 -0.0225 -0.6540 -0.3635 -0.0127 -0.3489 -0.3544 -0.0207

8

VACAL 292    RUN 72    DATE 17 OCT 80    TIME 01.16    RECOMP. NO. 1    DISK 1    PAGE 14  
JOB NO. 11    LDGR ACCT 31302    CONTRACT 1631    SUB ACCT 10001    ACQ DATE 18 AUG 80 20.15  
MOD 65    ALPHA WIND ON RUN, C/B=60 DEG, FWD=54 DEG, AFT=22 DEG, MEAN=38 DEG,  
CMU=1

DATA POINT 7

-0.4622

0.0007    -0.4058

-0.7829    -0.1288

-0.4810    -0.7246

-0.8060    -0.4416

-0.5943

-2.0954

-0.8781    -0.3599

-0.8525

-2.0503

-1.0760

-0.3294

0.0032

0.1170

0.0247

-0.8275

-0.1259

0.1231    0.1150

361

0.1112    -0.4565

-0.1857

-0.0585

0.1203    -0.3141

-0.0385

0.1059    -0.1124

-0.0132

-0.0534

-0.2350    -0.4853    -0.4116    -0.0152    -0.5273    -0.4098    -0.0085    -0.3854    -0.3732    -0.0048



ACAL 292 RUN 72 DATE 17 OCT 80 TIME 01.17 RECOMP. NO. 1 DISK 1 PAGE 20  
 DB NO. 11 LDGR ACCT 31302 CONTRACT 1631 SUB ACCT 10001 ACQ DATE 18 AUG 80 20.18  
 MOD 65 ALPHA WIND ON RUN, C/B=60 DEG, FWD=54 DEG, AFT=22 DEG, MEAN=38 DEG,  
 CMU=1

ATA POINT 10

-0.4610

0.0049 -0.1374

-0.5271 -0.0709

-0.6323 -0.1671

-0.7088 -0.9329

-0.7124 -1.0583

-0.7599

-0.6789 -0.5354

-0.4189

-1.2660

-0.9901

-0.1398

0.0955

0.1133

-0.7746

-0.1204

0.1283 0.1283

0.1294 -0.2851

-0.1064

-0.0774

0.1325 -0.1431

-0.0010

0.1212 -0.0173

-0.0075 -0.0377

-0.3544 -0.6564 -0.6528 -0.0079 -0.4963 -0.4774 -0.0048 -0.3958 -0.3848 -0.0066

363

ACAL 292 RUN 73 DATE 17 OCT 80 TIME 01.31 RFCOMP. NO. 1 DISK 1 PAGE 22

OB NO. 11 LDGR ACCT 31302 CONTRACT 1631 SUB ACCT 10001 ACQ DATE 18 AUG 80 21.55

MOD 65 ALPHA WIND ON RUN, C/B=60 DEG, FWD=54 DEG, AFT=22 DEG, MEAN=38 DEG,  
CMU=1

P<sub>T</sub> P<sub>A</sub>  
15.035 14.272

SUMMARY PAGE

T NO	ALPHA H PHI	Q H THETA	CLH THRUST	CDH DELAL	CMH WFT	YM THTH	RL CMUTH	PTPFCH CDR	PTPCRH CDNR	PTPACH
1	1.4343 1.2000	15.2494 -87.1395	3.1997 459.9272	-0.1559 1.4098	0.5229 6.0483	2300.5792 129.3965	11678.0905 0.9710	1.3643 0.7726	1.3641 -0.9325	1.3679
2	-2.7470 1.3000	15.4828 -82.7317	2.6906 395.3454	-0.3431 1.1811	0.4171 6.0015	2299.9822 138.5547	10172.8956 0.9505	1.3634 0.7623	1.3658 -1.1055	1.3666
3	-6.8144 1.3000	15.2312 -78.4056	2.2325 328.1317	-0.4580 0.9803	0.3246 5.9626	2272.8139 137.6285	8876.0039 0.9535	1.3623 0.7617	1.3659 -1.2198	1.3666
4	-10.8525 1.3000	15.3262 -71.6896	1.7426 264.8353	-0.5766 0.7671	0.2118 5.8916	2468.9621 125.9062	7316.8543 0.9419	1.3625 0.7535	1.3645 -1.2302	1.3633
5	1.2541 1.3000	15.2448 -87.5138	3.1462 454.9176	-0.1366 1.3895	0.5266 5.9228	2137.2362 136.8710	11671.5432 0.9474	1.3658 0.7578	1.3642 -0.8944	1.3616
6	5.4044 1.3000	14.9807 89.2888	3.6326 512.3375	0.0387 1.6106	0.6124 5.9078	2125.7322 136.7005	12904.4527 0.9693	1.3637 0.7660	1.3634 -0.7272	1.3655
7	9.3217 1.3000	15.1183 85.2473	3.8542 549.9955	0.2798 1.7311	0.6175 5.8912	2161.2750 136.6246	13652.1613 0.9599	1.3629 0.7614	1.3651 -0.4815	1.3659
8	13.2325 1.3000	14.9695 83.0047	4.0975 581.7784	0.5027 1.8619	0.6378 5.8911	2080.5959 137.0557	14280.2302 0.9725	1.3639 0.7660	1.3651 -0.2632	1.3695
9	17.1608 1.3000	14.9445 80.7830	4.1252 587.9665	0.6694 1.8970	0.6535 5.8828	2338.5875 136.6019	14549.5787 0.9709	1.3655 0.7658	1.3643 -0.0964	1.3637
10	21.0604 1.3000	15.1109 78.6074	4.1974 609.1107	0.8457 1.9539	0.6739 5.9158	2671.9286 137.9187	14625.0728 0.9695	1.3681 0.7667	1.3660 0.0790	1.3664

JACAL 292    RUN 73    DATE 17 OCT 80    TIME 01.27    RECOMP. NO. 1    DISK 1    PAGE 2  
 JOB NO. 11    LDGR ACCT 31302    CONTRACT 1631    SUB ACCT 10001    ACO DATE 18 AUG 80 21.24  
 MOD 65    ALPHA WIND ON RUN, C/B=60 DEG, FWD=54 DEG, AFT=22 DEG, MEAN=38 DEG,  
 CMU=1

DATA POINT 1

365

-0.9936

---

-0.0013    -0.6109

---

-1.1146    -0.3764

---

-0.3210    -0.7938    -0.8381    -0.6341

---

-0.4752    -2.3479    -1.4901    0.0912

---

-0.5330    -2.2157    -2.2273

---

-0.1224    -0.0932    -1.4719    0.0120

---

0.1231    0.1129    0.1090    -0.0042

---

0.1121    -0.4986    -0.2077    -0.0061

---

0.1161    -0.3365    -0.0666

---

0.0888    -0.1582    -0.0165    0.0129

---

-0.1498    -0.3704    -0.3411    0.0055    -0.7091    -0.3752    -0.0067    -0.3813    -0.3667    0.0185

8

NACAL 292 RUN 73 DATE 17 OCT 80 TIME 01.29 RECOMP. NO. 1 DISK 1 PAGE 14  
 JOB NO. 11 LDGR ACCT 31302 CONTRACT 1631 SUB ACCT 10001 ACO DATE 18 AUG 80 21.50  
 MOD 65 ALPHA WIND ON RUN, C/B=60 DEG, FWD=54 DEG, AFT=22 DEG, MEAN=38 DEG,  
 CMU=1

DATA POINT 7

366

-0.6055

---

-0.0012    -0.4273

---

-1.0606    -0.3378

---

-0.9048    -0.6097

---

-0.5824    -0.5897

-0.6372    -2.1944

---

-0.4936

-0.3905    -2.0981

---

-0.0354

0.1104    0.0068

---

0.1240    0.1160

-1.7801

---

-1.0734    -0.0361

---

0.1192    -0.5153

-1.0807    -0.6132

---

-0.1945

-0.0560

---

0.1206    -0.3119

-1.0734    -0.0361

---

-0.0408

---

0.0973    -0.1077

-0.0009    0.0386

---

-0.3046    -0.5166    -0.4764    0.0161    -0.4812    -0.4447    0.0012    -0.4106    -0.4112    0.0148

IACAL 292 RUN 73 DATE 17 OCT 80 TIME 01.30 RECOMP. NO. 1 DISK 1 PAGE 16  
 JOB NO. 11 LDGR ACCT 31302 CONTRACT 1631 SUB ACCT 10001 ACO DATE 18 AUG 80 21.51  
 MOD 65 ALPHA WIND ON RUN, C/B=60 DEG, FWD=54 DEG, AFT=22 DEG, MEAN=38 DEG,  
 CMU=1

DATA POINT 8

367

				-0.5052					
				0.0007	-0.3987				
				-0.8733	-0.1897				
				-0.8143	-0.2622				
	-0.7188	-0.6482				-1.1490		-0.2725	
	-0.6817		-1.9739						
	-1.1203								
	-0.4752		-1.9312			-1.8581			
	-0.0926								
	0.1013		0.0402			-1.1989		-0.1757	
	0.1206	0.1211							
			0.1217	-0.4791		-0.1754			
								-0.0828	
			0.1206	-0.2695			-0.0245		
			0.1016	-0.0768				-0.0195	0.0119
-0.4057	-0.6159	-0.6141	0.0099	-0.4648	-0.4581	-0.0030	-0.4337	-0.4106	0.0247

VACAL 292 RUN 73 DATE 17 OCT 80 TIME 01.31 RECOMP. NO. 1 DISK 1 PAGE 20  
 JOB NO. 11 LDGR ACCT 31302 CONTRACT 1631 SUB ACCT 10001 ACO DATE 18 AUG 80 21.54  
 MOD 65 ALPHA WIND ON RUN, C/B=60 DEG, FWD=54 DEG, AFT=22 DEG, MEAN=38 DEG,  
 CMU=1

DATA POINT 10

-0.6372

-0.0003    -0.3744

-0.6287    -0.1292

-0.7627   -0.7651                -0.6756   -0.2178

-0.7006                -1.3317                                -1.0484    -0.5977

-0.7134

-0.5647                -1.1130                                -1.4597

-0.2074

0.0710                                0.0873                                -1.0113                -0.1249

0.1140    0.1239

0.1240   -0.3345                                -0.1164

0.1192   -0.1908                                0.0006

0.1101   -0.0218                                -0.0122                -0.0430

-0.5324   -0.7304   -0.7213    0.0161   -0.4343   -0.5068    0.0179   -0.4703   -0.4191    0.0266

368 ORIGINAL PAGE IS OF POOR QUALITY

ACAL 292 RUN 74 DATE 17 OCT 80 TIME 01.51 RECOMP. NO. 1 DISK 1 PAGE 22

IB NO. 11 LDGR ACCT 31302 CONTRACT 1631 SUB ACCT 10001 ACC DATE 18 AUG 80 23.22

MOD 66 ALPHA WIND ON RUN, C/B=60 DEG, FWD=54 DEG, AFT=22 DEG, MEAN=38 DEG,  
CMU=0

P<sub>T</sub>S P<sub>A</sub>  
15.035 14.272

SUMMARY PAGE

NO	ALPHA H PHI	Θ H THETA	CLH THRUST	CDH DELAL	CMH WFT	YM THTH	RL CMJTH	PTPFCH CDR	PTPCBH CDHR	PTPACH
1	0.2341 1.3000	15.1790 46.7149	0.5253 103.1266	0.4948 0.2357	0.1394 0.4378	-922.8168 2.4457	1905.2810 0.0171	0.9836 0.0559	0.9937 0.4389	0.9505
2	-3.8883 1.3000	15.5390 41.4230	0.4018 90.3960	0.4633 0.1802	0.0625 0.3199	-1005.7543 1.5202	1567.3698 0.0103	0.9844 0.0403	0.9946 0.4229	0.9539
3	-7.8851 1.3000	15.4483 33.2730	0.2910 77.1553	0.4435 0.1243	-0.0365 0.3515	-1028.9286 1.7567	1113.5979 0.0120	0.9835 0.0445	0.9940 0.3990	0.9546
4	369 -11.7520 1.3000	15.2051 21.7070	0.1707 66.5232	0.4289 0.0672	-0.1410 0.2465	-944.7726 1.0770	572.7437 0.0074	0.9842 0.0313	0.9951 0.3975	0.9581
5	0.0115 1.3000	15.0303 45.1952	0.5044 100.5986	0.5010 0.2256	0.1539 0.5898	-953.2188 2.9031	1905.0152 0.0205	0.9854 0.0757	0.9951 0.4252	0.9601
6	3.9064 1.3000	14.9527 49.5041	0.6225 115.2345	0.5316 0.2822	0.2238 0.1579	-780.2872 0.6355	2285.2455 0.0045	0.9864 0.0203	0.9951 0.5112	0.9633
7	7.8236 1.3000	14.9333 53.6173	0.7316 128.9868	0.5442 0.3380	0.3041 0.2036	-703.0141 0.9195	2617.7869 0.0065	0.9867 0.0262	0.9944 0.5179	0.9635
8	11.7072 1.3000	14.9344 56.9638	0.8813 149.1428	0.5783 0.4108	0.3757 0.5121	-692.3591 2.3306	2965.7829 0.0165	0.9898 0.0660	0.9955 0.5122	0.9663
9	15.4977 1.3000	14.7383 57.8755	0.9792 160.4291	0.6148 0.4548	0.4195 0.2605	-490.8166 1.2182	3243.7785 0.0087	0.9914 0.0337	0.9938 0.5810	0.9667
10	19.3334 1.3000	15.0454 55.6937	0.9441 161.8982	0.6442 0.4383	0.4212 0.1662	-363.1292 0.7478	3122.3139 0.0052	0.9932 0.0213	0.9936 0.6228	0.9687

0

NACAL 292    RUN 74    DATE 17 OCT 80    TIME 01.48    RECOMP. NO. 1    DISK 1    PAGE 2  
JOB NO. 11    LDGR ACCT 31302    CONTRACT 1631    SUB ACCT 10001    ACO DATE 18 AUG 80 23.07  
MOD 66    ALPHA WIND ON RUN, C/B=60 DEG, FWD=54 DEG, AFT=22 DEG, MEAN=38 DEG,  
          CMU=0

DATA POINT 1

0.5855

0.7581    0.7089

0.5633    0.7435

0.6638    0.6988

0.7631    0.0878

0.7191    0.6467

0.7792

0.8850

0.8378

0.8106

0.8159    0.8327

0.5746

0.8231

0.8343    0.6506

0.7055    0.6863

0.6548

0.5632    0.7041

0.6849

0.8350    0.6417

0.6812

0.7049

0.8180    0.6457

0.6937

0.7091

0.7754    0.7470    0.7600    0.7767    0.0136    0.7266    0.7606    0.7457    0.7352    0.7563



12

NACAL 292    RUN 74    DATE 17 OCT 80    TIME 01.50    RECOMP. NO. 1    DISK 1    PAGE 16  
 JOB NO. 11    LDGR ACCT 31302    CONTRACT 1631    SUB ACCT 10001    ACO DATE 18 AUG 80 23.20  
 MOD 66    ALPHA WIND ON RUN, C/B=60 DEG, FWD=54 DEG, AFT=22 DEG, MEAN=38 DEG,  
 CMU=0

DATA POINT 8

0.5684

0.7446    0.6857

0.5560    0.7302

0.6573    0.6826

0.6189    0.5495

0.5792

0.6288

0.7179    0.6811

0.5041

0.7571

0.6529

0.6659

0.5744

0.8490

0.8144

0.5508

0.6877

0.8384    0.8298

0.8293    0.6471

0.6560

0.6900

0.8422    0.6440

0.6658

0.8001    0.6412

0.6823    0.6873

0.6263    0.6306    0.6461    0.7594    0.2661    0.6770    0.7327    0.6968    0.7030    0.7352

372

NACAL 292 RUN 74 DATE 17 OCT 80 TIME 01.51 RECOMP. NO. 1 DISK 1 PAGE 20

JOB NO. 11 LDGR ACCT 31302 CONTRACT 1631 SUB ACCT 10001 ACO DATE 18 AUG 80 23.22

MOD 66 ALPHA WIND ON RUN, C/B=60 DEG, FWD=54 DEG, AFT=22 DEG, MEAN=38 DEG, CMU=0

DATA POINT 10

0.6622

0.7440 0.6800

0.6604 0.7293

0.6723 0.6823

0.6863 0.5508

0.6634 0.6399

0.6832

0.7624

0.8391

0.8519

0.8442 0.8428

0.6579

0.8305

0.6900 0.6687

0.6845

0.6863

0.6781

0.8374 0.6845

0.6794

0.6808

0.8497 0.6843

0.6743

0.8157 0.6832

0.6727 0.6891

0.6913 0.6752 0.6554 0.7655 0.3131 0.6560 0.7451 0.6257 0.6201 0.7389

373

ICAL 292 RUN 75 DATE 17 OCT 80 TIME 02.11 RECOMP. NO. 1 DISK 1 PAGE 24

IB NO. 11 LDGR ACCT 31302 CONTRACT 1631 SUB ACCT 10001 ACQ DATE 18 AUG 80 23.49

MOD 67 ALPHA WIND ON RUN, C/B=60 DEG, FWD=54 DEG, AFT=22 DEG, MEAN=38 DEG,  
CMU=1

P<sub>T</sub> P<sub>A</sub>  
15.035 14.272

SUMMARY PAGE

NO	ALPHA H PHI	Q H THETA	CLH THRUST	CUH DELAL	CMH WFT	YM THTH	RL CMUTH	PTPFCH CDR	PTPCBH CDHR	PTPACH
1	1.2308 1.3000	15.0142 88.1798	2.9131 411.9555	0.0925 1.3109	0.4812 5.2832	937.5246 120.7824	10645.2598 0.8545	1.3701 0.6769	1.3632 -0.5843	1.3570
2	-2.7646 1.3000	15.0304 -88.6149	2.5295 358.0313	-0.0611 1.1326	0.4015 5.2870	921.4967 120.7063	9337.7991 0.8530	1.3679 0.6773	1.3635 -0.7385	1.3540
3	-6.8225 1.3000	15.2669 -84.9240	2.1120 304.7451	-0.1876 0.9433	0.3171 5.3250	918.4596 121.7675	8183.5757 0.8472	1.3663 0.6769	1.3646 -0.8645	1.3575
4	-10.8314 1.3000	15.0889 -80.1853	1.7458 251.6763	-0.3020 0.7787	0.2127 5.2852	1072.5971 120.6325	6863.0403 0.8492	1.3626 0.6759	1.3626 -0.9779	1.3590
5	-10.8422 1.3000	15.1115 -80.1644	1.7316 250.0145	-0.3002 0.7726	0.2113 5.3074	1082.3363 121.0697	6766.8612 0.8510	1.3649 0.6787	1.3638 -0.9789	1.3504
6	1.2461 1.3000	14.9431 88.5843	2.8994 408.0086	0.0716 1.3031	0.4960 5.3295	962.9676 122.0610	10622.3897 0.8676	1.3680 0.6857	1.3640 -0.6141	1.3598
7	5.2693 1.3000	14.8632 85.4039	3.2081 450.3375	0.2579 1.4542	0.5477 5.3136	1065.1646 121.6078	11599.3503 0.8691	1.3697 0.6857	1.3633 -0.4278	1.3558
8	9.2767 1.3000	14.9931 82.6369	3.4426 489.4531	0.4448 1.5763	0.5880 5.2958	977.7011 120.9946	12552.7716 0.8572	1.3648 0.6803	1.3626 -0.2355	1.3563
9	13.1261 1.3000	15.0042 80.6658	3.5804 512.5228	0.5885 1.6534	0.6333 5.3000	1221.0935 121.2163	13049.9527 0.8581	1.3661 0.6806	1.3621 -0.0921	1.3578
10	17.0203 1.3000	14.9825 78.7396	3.7003 532.1557	0.7367 1.7249	0.6690 5.2958	1500.7682 121.4325	13451.1850 0.8609	1.3688 0.6806	1.3638 0.0560	1.3603

374

ACAL 292    RUN 75    DATE 17 OCT 80    TIME 02.11    RECOMP. NO. 1    DISK 1    PAGE 25  
 DB NO. 11    LDGR ACCT 31302    CONTRACT 1631    SUB ACCT 10001    ACQ DATE 18 AUG 80 23.49  
 MOD 67    ALPHA WIND ON RUN, C/B=60 DEG, FWD=54 DEG, AFT=22 DEG, MEAN=38 DEG,  
           CMU=1

SUMMARY PAGE

T NO	ALPHA H PHI	O H THETA	CLH THRUST	CDH DELAL	CMH WFT	YM THTH	RL CMUTH	PTPFCH CDR	PTPCBH CDHR	PTPACH
11	20.7956 1.3000	15.2217 77.0936	3.5863 527.2288	0.8217 1.6866	0.6770 5.2487	1909.7293 119.8825	13174.5570 0.8365	1.3643 0.6693	1.3623 0.1524	1.3551

8

NACAL 292    RUN 75    DATE 17 OCT 80    TIME 02.07    RECOMP. NO. 1    DISK 1    PAGE 2  
JOB NO. 11    LDGR ACCT 31302    CONTRACT 1631    SUB ACCT 10001    ACQ DATE 18 AUG 80 23.31  
MOD 67    ALPHA WIND ON RUN, C/B=60 DEG, FWD=54 DEG, AFT=22 DEG, MEAN=38 DEG,  
          CMU=1

DATA POINT 1

376

-0.1637

0.7642    0.0094

-0.2532    0.5042

-0.0675    0.2003

0.4473 -0.0573

0.2866    -1.5008

0.2884

0.6712    -1.4002

0.8472

0.8730    0.7984

0.8651    0.8627

0.8624    0.3217

0.8677    0.4420

0.8511    0.6249

0.6129    0.4212    0.4287    0.7730    0.0068    0.3896    0.7674    0.4231    0.3989    0.7494

-0.1030    0.4040

-0.5397

-0.0774    0.7608

0.5747

0.6988

0.7507    0.7713

0.7532

NACAL 292 RUN 75 DATE 17 OCT 80 TIME 02.10 RECOMP. NO. 1 DISK 1 PAGE 16  
 JOB NO. 11 LDGR. ACCT 31302 CONTRACT 1631 SUB ACCT 10001 ACO DATE 18 AUG 80 23.45  
 MOD 67 ALPHA WIND ON RUN, C/B=60 DEG, FWD=54 DEG, AFT=22 DEG, MEAN=38 DEG,  
 CMU=1

DATA POINT 8

377

0.0872  
 0.7732 0.4198  
 -0.0620 0.5867  
 -0.0626 0.3440  
 0.2388 -0.0030 -0.0798 0.1862  
 0.1749 -1.4130  
 -0.1366  
 0.4057 -1.3966 -0.2469  
 0.7560  
 0.8785 0.7947 -0.0457 0.5774  
 0.8866 0.8776  
 0.8748 0.2951 0.5848 0.6881  
 0.8813 0.4731 0.7196  
 0.8623 0.6615 0.7386 0.7544  
 0.4069 0.2661 0.3437 0.7699 0.1687 0.3424 0.7674 0.3883 0.3759 0.7581

NACAL 292 RUN 75 DATE 17 OCT 80 TIME 02.10 RECOMP. NO. 1 DISK 1 PAGE 18

JOB NO. 11 LDGR ACCT 31302 CONTRACT 1631 SUB ACCT 10001 ACO DATE 18 AUG 80 23.46

MOD 67 ALPHA WIND ON RUN, C/B=60 DEG, FWD=54 DEG, AFT=22 DEG, MEAN=38 DEG,  
CMU=1

DATA POINT 9

0.2350

0.7766 0.3103

-0.1181 0.5430

0.0181 0.4452

0.1147 -0.0664

0.1172 -1.0770

-0.2841

-0.0963 0.3735

0.3164 -1.1599

-0.3647

0.7122

0.8748 0.8177

-0.1116 0.5936

0.8861 0.8843

0.8852 0.3634

0.6079

0.6909

0.8861 0.5112

0.7335

0.8748 0.6771

0.7368 0.7083

0.2965 0.1830 0.2097 0.7755 0.1774 0.3232 0.7780 0.3586 0.3660 0.7631

578

ORIGINAL PAGE IS  
OF POOR QUALITY

NACAL 292 RUN 75 DATE 17 OCT 80 TIME 02.11 RFCOMP. NO. 1 DISK 1 PAGE 22  
 JOB NO. 11 LDGR ACCT 31302 CONTRACT 1631 SUB ACCT 10001 ACC DATE 18 AUG 80 23.48  
 MOD 67 ALPHA WIND ON RUN, C/B=60 DEG, FWD=54 DEG, AFT=22 DEG, MEAN=38 DEG,  
 CMU=1

DATA POINT 11

379

0.4285  
 0.7864 0.6254  
 -0.0106 0.7247  
 0.2345 0.4830  
 0.0477 -0.1854  
 0.0595 -0.5202  
 0.0837  
 0.2518 -0.6452  
 0.6066  
 0.8534 0.8741  
 0.8943 0.8953  
 0.8965 0.4296  
 0.6438  
 0.8948 0.5870  
 0.7641  
 0.8911 0.7321  
 0.6603  
 0.7236  
 0.7543  
 0.2754 0.0899 0.1005 0.7941 0.2022 0.2742 0.7873 0.3604 0.3449 0.7730

CAL 292 RUN 76 DATE 17 OCT 80 TIME 02.23 RECOMP. NO. 1 DISK 1 PAGE 27

3 NO. 11 LDGR ACCT 31302 CONTRACT 1631 SUB ACCT 10001 ACQ DATE 19 AUG 80 0.21

DD 68 ALPHA WIND ON RUN, C/B=60 DEG, FWD=54 DEG, AFT=22 DEG, MEAN=38 DEG,  
CMU=2

P<sub>T</sub> P<sub>A</sub>  
15.06 14.272

SUMMARY PAGE

NO	ALPHA H PHI	O H THETA	CLH THRUST	CDH DELTA	CMH WFT	YM THTH	RL CMUTH	PTPFCH CDR	PTPCRH CDHR	PTPACH
1	1.5906 1.3000	15.2818 -79.011°	3.6429 537.3702	-0.7073 1.5401	0.7613 8.2032	4645.2129 263.1899	13928.5078 1.8175	1.8990 1.0391	1.8894 -1.7464	1.8937
2	-2.4851 1.3000	15.2077 -73.6047	3.1505 473.2608	-0.9269 1.3268	0.6328 8.1953	4695.0600 263.1326	12392.9881 1.8258	1.8926 1.0418	1.8923 -1.6688	1.8945
3	-6.6336 1.3000	15.0708 -67.8590	2.6967 413.0612	-1.0972 1.1351	0.5068 8.1738	4633.9084 262.3182	10912.8503 1.8489	1.8895 1.0476	1.8911 -2.1449	1.8928
4	380 -10.6667 1.3000	15.4113 -61.7015	2.1924 361.2580	-1.1804 0.9293	0.3628 8.1638	4692.2818 261.8754	9455.7736 1.8050	1.8857 1.0350	1.8885 -2.2155	1.8905
5	1.5426 1.3000	15.0724 -78.7109	3.6625 529.5432	-0.7311 1.5457	0.7690 8.1960	4677.6476 263.4680	13781.6968 1.8568	1.8923 1.0516	1.8883 -1.7627	1.8938
6	5.5996 1.3000	15.1137 -83.4146	4.1688 597.0847	-0.4812 1.7698	0.8842 8.1911	4653.2982 263.4559	15339.1121 1.8516	1.8926 1.0501	1.8904 -1.5313	1.8903
7	9.6180 1.3000	15.1729 -86.7442	4.5543 651.5819	-0.2590 1.9462	0.9754 8.1593	4706.5137 262.6601	16566.0668 1.8388	1.8937 1.0449	1.8886 -1.3039	1.8928
8	13.6206 1.3000	15.0340 89.7660	4.9802 704.8597	0.0203 2.1481	0.9995 8.1526	4936.2818 262.6999	17786.5117 1.8561	1.8986 1.0495	1.8880 -1.0291	1.8919
9	17.6344 1.3000	15.0568 86.4962	5.2980 752.3736	0.3243 2.3153	1.0488 8.1373	5176.5580 261.6581	18890.5078 1.8459	1.8943 1.0448	1.8862 -0.7204	1.8924
10	21.6721 1.3000	14.8779 83.5567	5.6244 792.7673	0.6351 2.4911	1.0656 8.1256	5524.1062 261.4091	19741.8739 1.8663	1.8968 1.0497	1.8878 -0.4146	1.8918

0

NACAL 292 RUN 76 DATE 17 OCT 80 TIME 02.19 RECOMP. NO. 1 DISK 1 PAGE 2  
 JOB NO. 11 LDGR ACCT 31302 CONTRACT 1631 SUB ACCT 10001 ACQ DATE 18 AUG 80 23.55  
 MOD 68 ALPHA WIND ON RUN, C/B=60 DEG, FWD=54 DEG, AFT=22 DEG, MEAN=38 DFG,  
 CMU=2

DATA POINT 1

381

						-0.3857				
					0.7941		0.0632			
					-0.6955		0.3468			
					-0.8092		0.0970			
	0.3115	-0.0475								
	0.1415		-3.2300							
	0.0372									-1.3715
	0.5505		-3.5839							0.8538
	0.8506									-2.7321
	0.9090			0.7634						
	0.9000	0.8969								-1.7224
										0.8000
					0.8977	-0.1137				0.3144
										0.7814
					0.8975	0.1531				0.6444
										0.7968
										0.7342
0.4326	0.2439	0.3004	0.7864	0.0335	0.2296	0.7963	0.2464	0.2520	0.7920	



NACAL 292 RUN 76 DATE 17 OCT 80 TIME 02.22 RFCOMP. NO. 1 DISK 1 PAGE 16  
 JOB NO. 11 LDGR ACCT 31302 CONTRACT 1631 SUB ACCT 10001 ACQ DATE 19 AUG 80 0.08  
 MOD 68 ALPHA WIND ON RUIN, C/B=60 DEG, FWD=54 DEG, AFT=22 DEG, MEAN=38 DEG,  
 CMU=2

DATA POINT R

-0.4230

0.7879 0.0410

-0.5312 0.2310

-0.6671 -0.0006

-0.2458 -0.1055

-0.2111 -2.6223

-0.7620 -2.9341

0.0172 0.8093

0.5602 0.8983 0.9037

0.8537

-1.0055 0.8853

-1.9902

-1.1848 0.7943

0.8977 -0.0135

0.4279

0.9015 0.2684

0.7737

0.8949 0.5308

0.6844

0.7971

0.7596

0.1483 -0.1025 -0.0927 0.7889 0.1402 0.0813 0.8037 0.1334 0.1228 0.7951

383

NACAL 292 RUN 76 DATE 17 OCT 80 TIME 02.22 RECOMP. NO. 1 DISK 1 PAGE 20  
JOB NO. 11 LDGR ACCT 31302 CONTRACT 1631 SUB ACCT 10001 ACC DATE 19 AUG 80 0.20  
MOD 68 ALPHA WIND ON RUN, C/B=60 DEG, FWD=54 DEG, AFT=22 DEG, MEAN=38 DEG,  
CMU=2

DATA POINT 10

384

						-0.2238				
						0.7886	0.0528			
						-0.2598	0.2612			
						-0.5224	-0.0041			
		-0.5021	-0.3648					-0.7138	0.7450	
		-0.5234		-2.0720						
		-0.4618								
		-0.2428		-2.1855				-1.5534		
		0.3312								
		0.7892			0.7709			-0.8419	0.8189	
		0.8814	0.9012							
				0.8943	0.0954			0.4914		
									0.7864	
				0.9026	0.3932			0.7152		
										0.8017
				0.8970	0.6071				0.7774	
0.0825	-0.4100	-0.3550	0.7839	0.0924	-0.0164	0.7944	0.0813	0.0782	0.7944	

NACAL 292      RUN 77      DATE 17 OCT 80      TIME 02.33      RECOMP. NO. 1      DISK 1      PAGE 22  
 JOB NO. 11      LDGR ACCT 31302      CONTRACT 1631      SUB ACCT 10001      ACQ DATE 19 AUG 80 17.02

MOD 69    ALPHA WIND ON RUN, C/R=60 DEG, FWD=54 DEG, AFT=22 DEG, MEAN=38 DEG,  
 CMU=4

P<sub>T</sub>    P<sub>A</sub>  
 14.67   14.272

SUMMARY PAGE

PT NO	ALPHA H PHI	Q H THETA	CLH THRUST	CDH DELAL	CMH WFT	YM THTH	RL LMUTH	PTPFCH CDR	PTPCBH CDHR	PTPACH
1	2.0401 1.2000	7.6512 -65.6438	5.0913 403.1075	-2.3079 1.9298	0.9801 8.1328	6131.5186 268.9822	9761.4133 3.7343	1.9475 1.4921	1.9468 -3.8001	1.9419
2	-2.2122 1.2000	7.8643 -60.0210	4.3499 371.7966	-2.5093 1.6552	0.8344 8.1202	6024.0659 268.7747	8999.7893 3.6303	1.9488 1.4701	1.9466 -3.9794	1.9434
3	-6.4114 1.2000	7.9602 -53.2061	3.6241 339.1429	-2.7105 1.3882	0.6810 8.1340	5967.9251 269.6064	8121.0009 3.5977	1.9511 1.4644	1.9490 -4.1750	1.9447
4 385	-10.4875 1.2000	7.8694 -46.2618	3.0323 310.9225	-2.9016 1.1702	0.5107 8.1335	6018.3297 269.5858	7247.1555 3.6389	1.9472 1.4733	1.9472 -4.3750	1.9473
5	1.9072 1.2000	7.7519 -66.1007	5.0960 406.7717	-2.2581 1.9335	0.9789 8.1437	6081.0846 270.2166	9924.3129 3.7027	1.9431 1.4870	1.9504 -3.7452	1.9509
6	6.0332 1.2000	7.6785 -71.5618	5.8193 443.4198	-1.9401 2.2111	1.1293 8.1233	6125.3208 269.4125	10793.5019 3.7270	1.9475 1.4907	1.9427 -3.4309	1.9510
7	10.1576 1.2000	7.7748 -76.0270	6.3349 477.8081	-1.5762 2.4260	1.2432 8.1324	6217.7873 269.5441	11609.8661 3.6826	1.9482 1.4834	1.9396 -3.0597	1.9445
8	14.1537 1.2000	7.5934 -79.7923	6.9364 503.8281	-1.2490 2.6676	1.3462 8.1075	6299.0403 268.8075	12210.6456 3.7603	1.9496 1.4974	1.9396 -2.7464	1.9423
9	18.2530 1.2000	7.4278 -83.7718	7.6175 535.8276	-0.8313 2.9494	1.4586 8.1163	6481.2203 269.3546	12937.2519 3.8520	1.9409 1.5164	1.9408 -2.3477	1.9430
10	22.3861 1.2000	7.4375 -87.5587	8.0664 565.2999	-0.3439 3.1700	1.5253 8.1070	6624.1240 269.2349	13663.8149 3.8453	1.9523 1.5140	1.9422 -1.8579	1.9427

NACAL 292 RUN 77 DATE 17 OCT 80 TIME 02.29 RECOMP. NO. 1

DISK 1 PAGE 2

JOB NO. 11 LDGR ACCT 31302 CONTRACT 1631 SUB ACCT 10001

ACQ DATE 19 AUG 80 16.45

MOD 69 ALPHA WIND ON RUN, C/R=60 DEG, FWD=54 DEG, AFT=22 DEG, MEAN=38 DEG,  
CMU=4

DATA POINT 1

-0.1812

0.3851 -0.0948

-1.1810 0.1302

-1.4031 -0.0403

-1.7985 0.4324

0.0215 -0.0157  
-0.6027 -3.6061

-0.1655  
0.1801 -4.1306

-3.4866

0.3829  
0.4378 0.3072

-2.3782 0.3984

0.4432 0.4409

0.4401 -0.6185

-0.1600

0.3855

0.4368 -0.3320

0.2315

0.4293 0.0000

0.3163 0.3017

0.0826 -0.0351 -0.0200 0.3880 0.0141 -0.0885 0.3812 -0.0594 -0.0600 0.3849

386



MACAL 292 RUN 77 DATE 17 OCT 80 TIME 02.32 RECOMP. NO. 1 DISK 1 PAGE 16  
 JOB NO. 11 LDGR ACCT 31302 CONTRACT 1631 SUB ACCT 10001 ACQ DATE 19 AUG 80 17.00  
 MOD 69 ALPHA WIND ON RUN, C/B=60 DEG, FWD=54 DEG, AFT=22 DEG, MFAN=38 DEG,  
 CMU=4

DATA POINT 8

388

-0.3888  
 0.3920 -0.1480  
 -1.0332 0.0770  
 -1.2282 -0.1907  
 -0.3182 -0.1243  
 -0.3523 -3.3368 -1.7136 0.4398  
 -0.7482  
 -0.1746 -3.7668 -3.1313  
 0.1909  
 0.4081 0.2973 -2.0871 0.3990  
 0.4492 0.4527  
 0.4515 -0.5100 -0.0865 0.3896  
 0.4455 -0.2168 0.2567  
 0.4477 0.0605 0.3954 0.3312  
 0.0505 -0.2710 -0.1461 0.3960 0.0166 -0.1728 0.3923 -0.1418 -0.1515 0.4009

NACAL 292 RUN 77 DATE 17 OCT 80 TIME 02.33 RECOMP. NO. 1 DISK 1 PAGE 20  
 JOB NO. 11 LDGR ACCT 31302 CONTRACT 1631 SUB ACCT 10001 ACO DATE 19 AUG 80 17.01  
 MOD 69 ALPHA WIND ON RUN, C/B=60 DEG, FWD=54 DEG, AFT=22 DEG, MEAN=38 DEG,  
 CMU=4

DATA POINT 10

389

-0.4308  
 0.3954 -0.1627  
 -0.9879 0.0777  
 -0.6045 -0.3165 -1.1474 -0.1420  
 -0.5827 -2.8038 -1.5729 0.4342  
 -0.5893  
 -0.2534 -3.4739 -2.8912  
 0.0565  
 0.3662 0.2578 -1.9470 0.3951  
 0.4341 0.4470  
 0.4520 -0.4586 -0.0331  
 0.4503 -0.1374 0.3160  
 0.4495 0.0996 0.2692  
 -0.0291 -0.5196 -0.4475 0.3904 0.0326 -0.2486 0.3904 -0.2019 -0.2037 0.3899  
 0.3384 0.3929

ACAL 292    RUN 78    DATE 17 OCT 80    TIME 02.43    RFCOMP. NO. 1    DISK 1    PAGE 20  
 DB NO. 11    LDGR ACCT 31302    CONTRACT 1631    SUB ACCT 10001    ACQ DATE 19 AUG 80 19.27

MOD 70    ALPHA WIND ON RUN, C/B=60 DEG, FWD=54 DEG, AFT=22 DEG, MEAN=38 DEG,  
 CMU=0, AUGMENTOR 2

P<sub>T</sub>S    P<sub>A</sub>  
 14.82    14.296

SUMMARY PAGE

T NO	ALPHA H PHI	O H THETA	CLH THRUST	CDH DELAL	CMH WFT	YM .THTH	RL CMUTH	PTPFCH CDR	PTPCBH CDHR	PTPACH
1	0.1985 1.3000	10.7065 53.1546	0.4057 73.7019	0.3040 0.2650	0.1279 0.3716	-615.3188 1.4988	1616.2148 0.0103	0.9889 0.0395	0.9950 0.2644	0.9819
2	-3.7474 1.3000	11.0168 38.8034	0.2373 56.6591	0.2952 0.1493	0.0258 0.0427	-651.9319 0.2174	1062.9803 0.0014	0.9905 0.0044	0.9961 0.2907	0.9864
3	-7.7727 1.3000	10.8644 11.9243	0.0614 43.8317	0.2907 0.0283	-0.0854 0.0426	-652.2145 0.1853	359.8865 0.0012	0.9904 0.0045	0.9968 0.2862	0.9902
4 390	-11.8783 1.3000	10.7746 -43.4759	-0.2625 60.0719	0.2980 -0.2005	-0.2141 0.1076	-477.1844 0.4219	-1061.8587 0.0028	0.9905 0.0114	0.9972 0.2865	0.9929
5	0.2102 1.3000	10.7600 53.6422	0.4249 77.0896	0.3128 0.2761	0.1277 0.5181	-666.4390 1.6190	1658.0519 0.0110	0.9904 0.0550	0.9964 0.2578	0.9936
6	4.1286 1.3000	10.6671 60.7377	0.5886 97.7211	0.3298 0.3909	0.2260 0.4259	-465.8761 1.4233	2191.0989 0.0098	0.9895 0.0454	0.9950 0.2843	0.9941
7	8.1405 1.3000	10.6548 66.3263	0.7730 122.0913	0.3389 0.5179	0.3269 0.4964	-374.2364 1.6496	2690.4128 0.0114	0.9898 0.0530	0.9949 0.2858	0.9946
8	16.0386 1.3000	10.4233 67.1675	1.1310 173.6625	0.4762 0.7720	0.4543 0.0745	-319.0736 0.1665	4130.8759 0.0011	0.9950 0.0080	0.9961 0.4681	0.9983
9	19.9166 1.3000	10.4786 61.7966	1.0959 176.9161	0.5877 0.7560	0.4427 0.3784	-180.7605 1.1011	4175.7637 0.0077	0.9942 0.0407	0.9945 0.5469	0.9974

NACAL 292 RUN 78 DATE 17 OCT 80 TIME 02.39 RECOMP. NO. 1 DISK 1 PAGE 2  
JOB NO. 11 LDGR ACCT 31302 CONTRACT 1631 SUB ACCT 10001 ACQ DATE 19 AUG 80 18.57

MOD 70 ALPHA WIND ON RUN, C/B=60 DEG, FWD=54 DEG, AFT=22 DFG, MEAN=38 DEG,  
CMU=0, AUGMENTOR 2

DATA POINT 1

0.4066  
0.5176 0.4827  
0.3730 0.5105  
0.4581 0.4824  
0.4785 0.5063 0.5341 0.0018 0.4853 0.4782  
0.4538 0.4377  
0.4235 0.4575  
0.5168 0.4575  
0.5737 0.5440  
0.5787 0.3703 0.4825  
0.4881 0.5284  
0.5393 0.5513 0.5585 0.4687  
0.5744 0.4519 0.4831 0.4850  
0.5773 0.4500  
0.5532 0.4442 0.4838  
0.5249 0.5156 0.5218 0.5082 0.0370 0.5286 0.5199 0.5218 0.5168 0.5162

391

NACAL 292    RUN 78    DATE 17 OCT 80    TIME 02.42    RECOMP. NO. 1    DISK 1    PAGE 14  
 JOB NO. 11    LDGR ACCT 31302    CONTRACT 1631    SUB ACCT 10001    ACO DATE 19 AUG 80 19.23

MOD 70    ALPHA WIND ON RUN, C/B=60 DEG, FWD=54 DEG, AFT=22 DEG, MFAN=38 DEG,  
 CFU=0, AUGMENTOR 2

DATA POINT 7

								0.4002		
								0.5172	0.4876	
								0.3872	0.5141	
								0.4564	0.4799	
		0.4470	0.4785	0.5230	0.2027				0.4927	0.4709
		0.4031				0.4402				
		0.2405								
		0.3462				0.4556			0.4364	
		0.5069								
		0.6013				0.5620			0.3653	0.4792
		0.5809								
		0.5634								
		0.5660	0.5674	0.5674					0.4513	
392					0.5761	0.4545				0.4356
					0.5801	0.4530			0.4664	
										0.4830
					0.5696	0.4372			0.4751	
	0.5100	0.4779	0.5057	0.5292	0.1768	0.5150	0.5199	0.5261	0.5082	0.5131

NACAL 292 RUN 78 DATE 17 OCT 80 TIME 02.42 RECOMP. NO. 1 DISK 1 PAGE 18  
JOB NO. 11 LGGR ACCT 31302 CONTRACT 1631 SUB ACCT 10001 ACQ DATE 19 AUG 80 19.26

MOD 70 ALPHA WIND ON RUN, C/R=60 DEG, FWD=54 DEG, AFT=22 DEG, MEAN=38 DEG,  
CMU=0, AUGMENTOR 2

DATA POINT 9

									0.4499					
									0.5088		0.4553			
									0.4363		0.4978			
									0.4452		0.4678			
			0.4334	0.4500	0.5199	0.1928					0.4593		0.4505	
			0.3044				0.4507							
			0.2126											
			0.2213				0.4463				0.4587			
			0.3040											
			0.5227				0.5508				0.4606		0.4656	
			0.5902											
			0.5826											
			0.5778	0.5702	0.5628						0.4618			
						0.5758	0.4585						0.4621	
											0.4571			
						0.5762	0.4641							
													0.4732	
							0.5643	0.4715					0.4640	
			0.4618	0.4581	0.4599	0.5088	0.1990	0.4661	0.5075	0.4686	0.4704	0.5094		

393

0

NACAL 292 RUN 78 DATE 17 OCT 80 TIME 02.41 RECOMP. NO. 1 DISK 1 PAGE 10

JOB NO. 11 PDGR ACCT 31302 CONTRACT 1631 SUB ACCT 10001 ACQ DATE 19 AUG 80 19.22

MOD 70 ALPHA WIND ON RUN, C/B=60 DEG, FWD=54 DEG, AFT=22 DEG, MEAN=38 DEG,  
CFU=0, AUGMENTOR 2

DATA POINT 5

0.4041

0.5247 0.4868

0.3882 0.5165

0.4571 0.4803

0.5032 0.5181 0.5292 0.1694

0.4624

0.4562

0.4800

0.4794

0.4055

0.5329

0.4519

0.4463

0.5060

0.5827

0.5545

0.4074

0.4845

0.4893

0.5277

0.5455 0.5554 0.5578

0.4718

0.4808

394

0.5730

0.4494

0.4751

0.5773

0.4514

0.4833

0.5554

0.4431

0.4817

0.5422 0.5385 0.5267 0.5329 0.1397 0.5193 0.5113 0.5354 0.5292 0.5119

JACAL 292 RUN 79 DATE 17 OCT 80 TIME 02.55 RECOMP, NO. 1 DISK 1 PAGE 27

DB NO. 11 LDGR ACCT 31302 CONTRACT 1631 SUB ACCT 10001 ACO DATE 19 AUG 80 19.48

MOD 71 ALPHA WIND ON RUN, C/B=60 DEG, FWD=54 DEG, AFT=22 DEG, MEAN=38 DEG,  
CMU=1, AUGMENTOR 2

P<sub>T</sub> P<sub>A</sub>  
14.83 14.296

SUMMARY PAGE

T NO	ALPHA H PHI	O H THETA	CLH THRUST	CDH DELAL	CMH WFT	YM THTH	RL CMUTH	PTPFCH CDR	PTPCRH CDHR	PTPACH
1	1.5583 1.3000	10.7392 -84.9774	2.5221 369.1337	-0.2216 1.5768	0.5803 5.4651	2023.3964 120.6225	9747.2932 0.8959	1.3987 0.5811	1.3924 -0.8028	1.3980
2	-2.5319 1.3000	10.5044 -80.1854	2.1639 313.1769	-0.3743 1.3462	0.4552 5.4603	2028.6060 120.5831	8401.3779 0.9156	1.3965 0.5874	1.3947 -0.5618	1.3875
3	-6.6924 1.3000	10.7274 -74.1818	1.7093 258.7424	-0.4842 1.0655	0.3151 5.4563	2099.2957 120.9791	7117.4429 0.8993	1.4012 0.5811	1.3980 -1.0653	1.3903
4	-10.7404 1.3000	10.6730 -67.0274	1.3636 214.6034	-0.5780 0.8525	0.1845 5.4908	2300.2057 131.9102	5853.0501 0.9103	1.3996 0.5865	1.3982 -1.1545	1.3921
5 395	1.6398 1.3000	10.4936 -84.8824	2.5608 366.2834	-0.2293 1.5984	0.5866 5.4831	2020.7979 131.5962	9650.5098 0.9237	1.3995 0.5909	1.3963 -0.8202	1.3906
6	5.6822 1.3000	10.2730 -88.4092	2.9529 416.0086	-0.0820 1.8494	0.7270 5.4589	1965.5191 120.9975	10871.7204 0.9302	1.3986 0.5919	1.3960 -0.6739	1.3903
7	9.7710 1.3000	10.5556 88.1226	3.2895 471.6601	0.1078 2.0778	0.8338 5.4638	1947.6353 131.1068	12189.2952 0.9148	1.3992 0.5874	1.3960 -0.4795	1.3980
8	13.8613 1.3000	10.4798 84.5819	3.6539 522.1938	0.3465 2.3353	0.9477 5.4763	1938.5610 121.5955	13375.5531 0.9249	1.3993 0.5911	1.3971 -0.2446	1.3893
9	17.9118 1.3000	10.3160 81.8544	3.9828 563.4803	0.5700 2.5729	1.0379 5.4455	2038.9267 130.8020	14322.8976 0.9339	1.3992 0.5926	1.3962 -0.0226	1.3886
10	22.0469 1.3000	10.4358 78.9069	4.2137 608.3545	0.8261 2.7695	1.0919 5.4679	2131.7465 131.5766	15371.1791 0.9287	1.3987 0.5920	1.3966 0.2341	1.3889



NACAL 292 RUN 79 DATE 17 OCT 80 TIME 02.53 RECOMP. NO. 1 DISK 1 PAGE 14  
 JOB NO. 11 LDGR ACCT 31302 CONTRACT 1631 SUB ACCT 10001 ACO DATE 19 AUG 80 19.44

MCD 71 ALPHA WIND ON RUN, C/B=60 DEG, FWD=54 DEG, AFT=22 DFG, MEAN=38 DEG,  
 CMU=1, AUGMENTOR 2

DATA POINT 7

						-0.1322			
						0.5363	0.0709		
						-0.2508	0.2851		
						-0.2140	0.0820		
	0.2736	0.3609	0.4309	0.0879					
	0.1907				-1.5550				
	-0.2513								-0.6451
	-0.1278				-1.5234				0.5565
	0.1770								-1.2246
	0.4613								
	0.6047				0.5814				-0.6658
	0.6152								0.5344
397	0.6106	0.6072	0.6024						
				0.6056	0.1077				0.3183
									0.5263
				0.6072	0.2323				0.4708
				0.6028	0.3870				0.5417
									0.5085
0.4526	0.3219	0.3182	0.5454	0.1213	0.3194	0.5479	0.3232	0.2872	0.5330

NACAL 292 RUN 79 DATE 17 OCT 80 TIME 02.54 RECOMP. NO. 1 DISK 1 PAGE 16  
JOB NO. 11 LDGR ACCT 31302 CONTRACT 1631 SUB ACCT 10001 ACQ DATE 19 AUG 80 19.45  
MOD 71 ALPHA WIND ON RUN, C/B=60 DEG, FWD=54 DEG, AFT=22 DEG, MEAN=38 DEG,  
CMU=1, AUGMENTOR 2

DATA POINT 8

0.1869 0.2309 0.4037 0.0792 -0.1107  
0.2117 -1.1053 0.5369 0.0792  
-0.0152 -1.2739 -0.3116 0.2960  
-0.1570 -0.0485 0.0997  
0.0390 -0.5630 0.5442  
0.3882 0.5473 -1.1302  
0.5702 0.6323 0.5358  
0.6143  
0.6149 0.6090 0.6022 0.3553  
0.6089 0.1480 0.5262  
0.6083 0.2621 0.4870  
398 0.6000 0.4209 0.5403  
0.4569 0.3145 0.3064 0.5355 0.1349 0.3182 0.5386 0.3182 0.2928 0.5380 0.5209

VACAL 292    RUN 79    DATE 17 OCT 80    TIME 02.55    RECOMP. NO. 1    DISK 1    PAGE 20  
 JOB NO. 11    LDGR ACCT 31302    CONTRACT 1631    SUB ACCT 10001    ACO DATE 19 AUG 80 19.47  
 MOD 71    ALPHA WIND ON RUN, C/R=60 DEG, FWD=54 DEG, AFT=22 DEG, MEAN=38 DEG,  
 CMU=1, AUGMENTOR 2

DATA POINT 10

-0.0107

				0.5356	0.1331						
				-0.1837	0.3396						
	0.0860	0.0761	0.2897	0.0458	-0.0429	0.1158					
	0.0730			-0.9927					-0.3864	0.5406	
	-0.0772										
	-0.3591			-1.0681					-0.8588		
	-0.2318										
	0.1594			0.4910					-0.4686	0.5329	
	0.4511										
	0.5993										
	0.6100	0.6131	0.6053						0.3864		
				0.6096	0.2124						0.5259
									0.5020		
				0.6100	0.3316						
											0.5395
										0.5270	
				0.6044	0.4480						
399	0.3046	0.2179	0.1962	0.5442	0.1523	0.2985	0.5386	0.3033	0.2860	0.5287	

ACAL 292 RUN 80 DATE 17 OCT 80 TIME 03.47 RECOMP. NO. 1 DISK 1 PAGE 26

DB NO. 11 LDGR ACCT 31302 CONTRACT 1631 SUB ACCT 10001 ACO DATE 19 AUG 80 21.48

MOD 72 ALPHA WIND ON RUN, C/B=60 DEG, FWD=54 DEG, AFT=22 DEG, MEAN=38 DEG,  
CMU=2, AUGMENTOR 2

P<sub>T</sub> P<sub>A</sub>  
14.85 14.296

SUMMARY PAGE

NO	ALPHA H PHI	Θ H THETA	CLH THRUST	CDH DELAL	CMH WFT	YM THTH	RL CMUTH	PTPFCH CDR	PTFCRH CDHR	PTPACH
1	2.0652 1.3000	10.6612 -72.6386	2.2416 488.9929	-0.9516 1.8705	0.7218 8.2188	5574.7726 269.4066	12593.3838 1.8613	1.9264 0.8765	1.9272 -1.8282	1.9266
2	-2.2683 1.3000	10.4812 -67.0731	2.7695 427.8923	-1.1714 1.5925	0.5773 8.2247	5517.2234 269.9243	11059.2460 1.8969	1.9270 0.8860	1.9246 -2.0535	1.9284
3	-6.4806 1.3000	10.8953 -60.1593	2.2193 378.4571	-1.2731 1.2875	0.4174 8.2281	5585.1368 270.6113	9790.5314 1.8295	1.9343 0.8705	1.9257 -2.1437	1.9274
4	-10.5123 1.3000	10.5390 -51.2113	1.8006 330.5217	-1.4471 1.0486	0.2794 8.2039	5801.7480 270.2882	8255.8484 1.8890	1.9288 0.8841	1.9279 -2.3313	1.9298
5	400 1.8132 1.3000	10.6522 -72.8249	3.1727 480.2098	-0.9800 1.8302	0.7055 8.1935	5589.5669 269.9835	12298.0747 1.8669	1.9263 0.8792	1.9261 -1.8592	1.9207
6	6.0139 1.3000	10.4754 -78.1896	3.6929 536.5524	-0.7721 2.1339	0.8546 8.1742	5568.6860 269.7430	13805.2046 1.8967	1.9250 0.8854	1.9233 -1.6576	1.9292
7	1.9800 1.3000	10.8560 -73.2627	3.1517 485.0512	-0.9477 1.8236	0.7127 8.1870	5577.8198 269.8523	12504.2716 1.8309	1.9303 0.8693	1.9250 -1.8171	1.9260
8	5.9716 1.3000	10.5645 -78.0555	3.6655 537.3613	-0.7754 2.1192	0.8712 8.1685	5563.1919 269.5117	13789.9350 1.8791	1.9279 0.8806	1.9225 -1.6560	1.9284
9	10.0970 1.3000	10.4598 -82.5374	4.1491 594.2186	-0.5434 2.4091	1.0113 8.1618	5611.9212 269.4445	15164.1495 1.8974	1.9302 0.8846	1.9237 -1.4281	1.9229
10	14.2530 1.3000	10.4046 -86.7449	4.5813 648.1696	-0.2605 2.6851	1.1361 8.1721	5675.0432 270.0824	16409.4015 1.9120	1.9293 0.8890	1.9225 -1.1496	1.9265

ACAL 292 RUN 80 DATE 17 OCT 80 TIME 03.47 RECOMP. NO. 1 DISK 1 PAGE 27

JB NO. 11 LDGR ACCT 31302 CONTRACT 1631 SUB ACCT 10001 ACQ DATE 19 AUG 80 21.48

MOD 72 ALPHA WIND ON RUN, C/B=60 DEG, FWD=54 DEG, AFT=22 DEG, MEAN=38 DEG,  
CMU=2, AUGMENTOR 2

SUMMARY PAGE

Γ NO	ALPHA H PHI	Θ H THETA	CLH THRUST	CDH DELAL	CMH WFT	YM THTH	RL CMUTH	PTPFCH CDR	PTPCRH CDHR	PTPACH
11	18.2840 1.3000	10.1817 89.5180	5.0508 698.1878	0.0424 2.9867	1.2552 8.1608	5783.8208 270.0981	17583.6023 1.9540	1.9289 0.8983	1.9252 -0.8558	1.9278
12	22.5481 1.2000	10.0649 86.0126	5.4790 750.4836	0.3819 3.2800	1.3653 8.1622	5966.5157 270.4025	18775.9133 1.9785	1.9287 0.9047	1.9235 -0.5228	1.9294



MACAL 292 RUN 80 DATE 17 OCT 80 TIME 03.45 RECOMP. NO. 1 DISK 1 PAGE 1P

JOB NO. 11 LDGR ACCT 31302 CONTRACT 1631 SUB ACCT 10001 ACQ DATE 19 AUG 80 21.44

MOD 72 ALPHA WIND ON RUN, C/R=60 DEG, FWD=54 DEG, AFT=22 DEG, MEAN=38 DEG,  
CMU=2, AUGMENTOR 2

DATA POINT 9

403

								-0.1905			
								0.5453	-0.0668		
								-1.0444	0.1916		
								-1.2345	0.0897		
		0.2450	0.3013	0.3514	0.1850						
		0.1175				-3.4191				-1.6161	0.5827
	-0.3631										
	-0.2396					-4.0304				-3.3364	
	0.0674										
	0.4263					0.3719				-2.2536	0.5539
	0.6006										
	0.6237										
		0.6193	0.6149	0.6063						-0.0095	
					0.6136	-0.4511					0.5399
										0.3922	
					0.6115	-0.1655					
											0.5447
										0.4825	
						0.6049	0.1599				
	0.3997	0.2202	0.2004	0.5501	0.1058	0.2178	0.5445	0.2537	0.2252	0.5439	

1

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NACAL 292      RUN 80      DATE 17 OCT 80      TIME 03.46      RECOMP. NO. 1      DISK 1      PAGE 20  
JOB NO. 11      LDGR ACCT 31302      CONTRACT 1631      SUB ACCT 10001      ACQ DATE 19 AUG 80 21.45  
MOD 72    ALPHA WIND ON RUN, C/R=60 DEG, FWD=54 DEG, AFT=22 DEG, MEAN=38 DEG,  
          CFU=2, AUGMENTOR 2

DATA POINT 10

-0.1403  
0.5388    -0.0956  
-1.0028    0.1863  
-1.1885    0.0908  
0.0717    0.1905    0.3539    0.1522    -1.5377    0.5720  
-3.1216  
0.1261    -0.0833  
-3.7798    -3.2317  
-0.2785  
-0.0492  
0.2499    -2.1843    0.5460  
0.3083  
0.5478  
0.6200  
-0.0003  
0.6200    0.6094    0.6028    0.6070    -0.4219    0.5251  
0.3913  
0.6070    -0.1551    0.5337  
0.4864  
0.5998    0.1897  
0.3904    0.1967    0.1670    0.5315    0.1225    0.2128    0.5247    0.2184    0.2301    0.5451

404



JACAL 292 RUN 81 DATE 17 OCT 80 TIME 03.58 RECOMP. NO. 1 DISK 1 PAGE 22

JOB NO. 11 LDGR ACCT 31302 CONTRACT 1631 SUB ACCT 10001 ACQ DATE 19 AUG 80 22.37

MOD 73 ALPHA WIND ON RUN, C/B=60 DEG, FWD=54 DEG, AFT=22 DEG, MEAN=38 DEG,  
CMU=4, AUGMENTOR 2

P<sub>T</sub> P<sub>A</sub>  
14.56 14.287

SUMMARY PAGE

PT NO	ALPHA H PHI	Q H THETA	CLH THRUST	CDH DELAL	CMH WFT	YM THTH	RL CMUTH	PTPFCH CDR	PTPCBH CDHR	PTPACH
1	2.2840 1.3000	5.4281 -60.5172	4.4685 378.2858	-2.5264 2.2502	0.8610 8.2123	6735.7745 273.5022	8934.8503 3.7114	1.9649 1.2412	1.9627 -3.7677	1.9633
2	-1.9785 1.2000	5.6092 -55.1083	3.8148 354.1694	-2.6604 1.9400	0.7019 8.1973	6675.9251 272.9200	8287.4684 3.5839	1.9655 1.2195	1.9575 -3.8800	1.9586
3	-6.1764 1.3000	5.6915 -48.0989	3.1545 327.4903	-2.8305 1.6207	0.5476 8.1897	6636.0501 272.8762	7478.1505 3.5315	1.9670 1.2102	1.9572 -4.0407	1.9588
4	-10.3219 1.3000	5.6222 -39.9093	2.5697 305.7149	-3.0723 1.3320	0.3713 8.1965	6825.7785 273.5345	6655.1082 3.5837	1.9620 1.2201	1.9605 -4.2924	1.9634
5	2.2535 1.3000	5.5139 -61.5934	4.4601 379.5794	-2.4122 2.2612	0.8517 8.1874	6620.8759 273.4445	9004.1161 3.6528	1.9649 1.2315	1.9622 -3.6437	1.9560
6	5.3935 1.3000	5.3942 -66.8591	5.1115 407.0875	-2.1845 2.5820	1.0240 8.1983	6664.9251 274.0781	9717.3995 3.7425	1.9648 1.2473	1.9617 -3.4318	1.9622
7	10.5507 1.3000	5.2337 -72.1954	5.7335 436.0597	-1.8413 2.9076	1.1738 8.1848	6698.3503 273.7420	10446.6830 3.7803	1.9623 1.2533	1.9612 -3.0946	1.9604
8	14.7038 1.3000	5.3108 -76.4950	6.2412 462.7898	-1.4989 3.1863	1.3026 8.1714	6796.9891 273.4055	11071.6102 3.7920	1.9622 1.2549	1.9592 -2.7538	1.9600
9	18.8970 1.3000	5.1373 -81.2124	6.9737 492.1541	-1.0780 3.5755	1.4819 8.1689	6854.2283 273.7939	11815.9606 3.9256	1.9645 1.2765	1.9614 -2.3545	1.9628
10	23.1129 1.3000	5.0976 -85.1826	7.4351 516.3758	-0.6266 3.8633	1.5933 8.1672	7009.9743 273.9582	12330.6043 3.9586	1.9629 1.2821	1.9613 -1.9087	1.9641

904

MACAL 292      RUN 81      DATE 17 OCT 80      TIME 03.55      RECOMP. NO. 1      DISK 1      PAGE 10  
JOB NO. 11      LDGR ACCT 31302      CONTRACT 1631      SUB ACCT 10001      ACQ DATE 19 AUG 80 22.32  
MOD 73      ALPHA WIND ON RUN, C/B=60 DEG, FWD=54 DEG, AFT=22 DEG, MEAN=38 DEG,  
CMU=4, AUGMENTOR 2

DATA POINT 5

0.0530  
0.2771 -0.1265  
0.2747 0.1020  
-1.5052 -0.0689  
0.1743 0.1842 0.2089 -0.0984  
-3.5838      -1.8922      0.3187  
0.1335  
-0.0151  
0.0271      -4.3051      -3.6944  
0.1780  
0.2952      -0.0145      -2.5606      0.2909  
0.3155  
0.3099  
0.3070 0.3010 0.3006  
0.3104 -0.7491      -0.3023      0.2784  
0.3056 -0.4633      0.1095  
0.2982 -0.1287      0.2106      0.2064  
0.1335 0.0605 0.0395 0.2596 0.0061 0.0173 0.2794 0.0185 0.0111 0.2769

07



NACAL 292 RUN 81 DATE 17 OCT 80 TIME 03.57 RECOMP. NO. 1 DISK 1 PAGE 16  
 JOB NO. 11 LDGR ACCT 31302 CONTRACT 1631 SUB ACCT 10001 ACD DATE 19 AUG 80 22.34

MOD 73 ALPHA WIND ON RUN, C/B=60 DEG, FWD=54 DEG, AFT=22 DEG, MFAN=38 DEG,  
 CMU=4, AUGMENTOR 2

DATA POINT 8

						-0.0434			
						0.2725	-0.1494		
						0.2725	0.0658		
						-1.5194	-0.0837		
	0.1174	0.1242	0.1780	-0.1197					
	0.0302				-3.6142				
	-0.3111							-1.8788	0.3112
	-0.3177				-4.3142			-3.6033	
-0.1324									
0.1251					-0.0182			-2.5399	0.2827
0.2624									
0.3140									
	0.3099	0.3078	0.3020					-0.2842	
				0.3071	-0.7483				0.2730
								0.1147	
				0.3028	-0.4502				
									0.2778
									0.2035
				0.3056	-0.1219				
0.1631	0.0185	-0.0078	0.2664	-0.0243	-0.0218	0.2732	-0.0024	-0.0255	0.2738

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ORIGINAL PAGE IS  
 OF POOR QUALITY



CAL 292 RUN 84 DATE 24 OCT 80 TIME 05.29 RECOMP. NO. 2 DISK 1 PAGE 22

IB NO. 11 LDGR ACCT 31302 CONTRACT 1631 SUB ACCT 10001 ACO DATE 20 AUG 80 17.53

MOD 75 ALPHA WIND ON RUN, AUGMENTOR 2, C/B=60 DEG, FWD=46 DEG, AFT=30 DEG,  
MEAN=38 DEG, CMU=0

P<sub>T</sub> P<sub>A</sub>  
14.75 14.238

SUMMARY PAGE

NO	ALPHA H PHI	O H THETA	CLH THRUST	CDH DELAL	CMH WFT	YM THTH	RL CMUTH	PTPFCH CDR	PTPCRH CDHR	PTPACH
1	0.2638 1.1600	10.3504 59.8176	0.5293 86.0530	0.3078 0.3499	0.0994 0.4233	-497.1126 0.8235	2011.1577 0.0058	0.9922 0.0357	0.9979 0.2721	1.0002
2	-3.6499 1.1600	10.7362 50.6909	0.3363 63.357	0.2753 0.2176	-0.0005 0.1427	-566.9399 0.4093	1449.2694 0.0028	0.9886 0.0118	0.9964 0.2635	0.9973
3	-7.6678 1.1600	11.0477 30.5394	0.1523 44.9553	0.2581 0.0919	-0.0991 0.5162	-551.1802 1.0851	787.0804 0.0072	0.9902 0.0422	0.9986 0.2159	0.9991
4	-11.7691 1.1600	10.6622 -27.7023	-0.1418 44.1838	0.2702 -0.1062	-0.2130 0.1428	-465.6229 0.4171	-611.2509 0.0028	0.9889 0.0119	0.9970 0.2583	0.9978
5	0.2339 1.1600	10.6277 61.1874	0.5265 86.7030	0.2856 0.3479	0.0946 0.1494	-517.0743 0.3228	1990.0396 0.0022	0.9902 0.0124	0.9968 0.2771	0.9982
6	4.2004 1.1600	10.6699 64.7381	0.7065 113.1712	0.3334 0.4721	0.1954 0.5127	-441.2551 0.9961	2624.5816 0.0068	0.9929 0.0427	0.9981 0.2906	0.9997
7	8.2471 1.1600	10.6037 67.9939	0.8739 135.6902	0.3531 0.5876	0.2974 0.1559	-328.2793 0.3731	3021.2962 0.0025	0.9931 0.0130	0.9966 0.3401	0.9992
8	12.2771 1.1600	10.6934 70.2531	1.0367 159.9212	0.3721 0.7001	0.3758 0.5113	-298.1592 0.8720	3499.7485 0.0060	0.9965 0.0425	0.9986 0.3296	1.0009
9	16.2323 1.1600	10.2364 69.7884	1.1693 174.8549	0.4304 0.7949	0.4473 0.2326	-208.0866 0.4820	4121.9704 0.0034	0.9961 0.0197	0.9977 0.4107	0.9989
10	20.0835 1.1600	10.5339 63.5731	1.1278 180.1178	0.5605 0.7763	0.4252 0.5042	-125.9578 0.9505	4282.2322 0.0066	0.9973 0.0423	0.9980 0.5182	0.9985

NACAL 292 RUN 84 DATE 24 OCT 80 TIME 05:25 RECOMP. NO. 2 DISK 1 PAGE 2  
 JOB NO. 11 LDGR ACCT 31302 CONTRACT 1631 SUB ACCT 10001  
 MOD 75 ALPHA WIND ON RUN, AUGMENTOR 2, C/B=60 DEG, FWD=46 DEG, AFT=30 DEG,  
 MEAN=38 DEG, CMU=0  
 ACQ DATE 20 AUG 80 17:41

DATA POINT 1

0.3855  
 0.5093 0.4688  
 0.5070 0.4859  
 0.4361 0.4720  
 0.4763 0.5025 0.5237 0.5087  
 0.4632  
 0.4164 0.4844  
 0.4875 0.4607  
 0.5710  
 0.5631 0.5268  
 0.4678  
 0.5096  
 0.5261 0.5288 0.5314  
 0.5516 0.4268  
 0.5513 0.4486  
 0.4576 0.4663  
 0.5249  
 0.4464 0.4657  
 0.4799  
 0.4578 0.4663  
 0.4375 0.4862 0.4731  
 0.4950  
 0.5000 0.5274 0.5162 0.4962 0.5174 0.5243 0.5062 0.5043 0.5093 0.5193

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NACAL 292 RUN 84 DATE 24 OCT 80 TIME 05.28 RECOMP. NO. 2 DISK 1 PAGE 14  
JOB NO. 11 LDGR ACCT 31302 CONTRACT 1631 SUB ACCT 10001 ACQ DATE 20 AUG 80 17.50  
MOD 75 ALPHA WIND ON RUN, AUGMENTOR 2, C/B=60 DEG, FWD=46 DEG, AFT=30 DEG,  
MFAN=38 DEG, CMU=0

DATA POINT 7

0.3949

					0.5181	0.4746			
					0.5181	0.4941			
					0.4607	0.4688			
	0.4171	0.4538	0.4937	0.5287	0.5162		0.4763	0.4714	
	0.2705				0.5075				
	0.3329				0.4381		0.5611		
	0.4775				0.5467		0.4520	0.4805	
	0.5937								
	0.5687								
	0.5602						0.4873		
413	0.5604	0.5533	0.5483		0.5650	0.4638		0.4704	
					0.5693	0.4657		0.5048	
					0.5599	0.4913		0.5085	0.4802
0.4944	0.4944	0.5187	0.5062	0.5181	0.5305	0.5149	0.5137	0.5156	0.5137

MACAL 292 RUN 84 DATE 24 OCT 80 TIME 05.28 RFCOMP. NO. 2 DISK 1 PAGE 16  
JOB NO. 11 LGGR ACCT 31302 CONTRACT 1631 SUB ACCT 10001 ACQ DATE 20 AUG 80 17.50

MOD 75 ALPHA WIND ON RUN, AUGMENTOR 2, C/B=60 DEG, FWD=46 DEG, AFT=30 DEG,  
MEAN=38 DEG, CMU=0

DATA POINT 8

0.3719  
0.5163 0.4657  
0.5139 0.4867  
0.4459 0.4681  
0.4326 0.4351 0.5287 0.5087 0.5000 0.4813 0.4900  
0.4158 0.3036 0.4919 0.5099  
0.3142 0.4470 0.5486 0.4613 0.4805  
0.4470 0.5769 0.5725  
0.5866  
0.5676 0.5576 0.5485 0.4851  
414 0.5687 0.4597 0.4756  
0.5746 0.4737 0.4934  
0.5533 0.4860 0.4688  
0.5059  
0.4688 0.4738 0.4813 0.5075 0.4975 0.5218 0.5137 0.5075 0.5131 0.5274



CAL 292 RUN 85 DATE 24 OCT 80 TIME 05.43 RECOMP. NO. 2 DISK 1 PAGE 22

IB NO. 11 LDGR ACCT 31302 CONTRACT 1631 SUB ACCT 10001 ACQ DATE 20 AUG 80 18.20

MOD 76 ALPHA WIND ON RUN, AUGMENTOR 2, C/B=60 DEG, FWD=46 DEG, AFT=30 DEG,  
MEAN=30 DEG, CMU=1

P<sub>T</sub> P<sub>A</sub>  
14.77 14.238

SUMMARY PAGE

NO	ALPHA H PHI	Q H THETA	CLH THRUST	CDH DELTA	CMH WFT	YM THTH	RL CMUTH	PTPFCH CDR	PTPCBH CDHR	PTPACH
1	1.7380 1.1600	10.3566 -89.3838	2.7403 385.2242	-0.0294 1.7349	0.4103 5.3904	1187.1355 129.7762	9948.4881 0.9220	1.3997 0.4563	1.3966 -0.4857	1.4058
2	-2.4057 1.1600	10.4447 -85.3485	2.3473 333.9493	-0.1909 1.4780	0.2867 5.4138	1230.4461 130.4770	8773.0078 0.9201	1.4017 0.4566	1.3994 -0.6476	1.4010
3	-5.5629 1.1600	10.4924 -82.2954	2.0560 295.5384	-0.2781 1.2931	0.1919 5.4132	1289.6560 130.4959	7930.7805 0.9161	1.4023 0.4555	1.3990 -0.7337	1.4019
4	-10.7030 1.1600	10.6778 -74.6263	1.5366 231.0251	-0.4225 0.9667	0.0313 5.3994	1467.2337 130.2990	6245.6742 0.8988	1.4051 0.4507	1.4000 -0.8732	1.3995
5	1.6434 1.1600	10.3857 -89.2334	2.7047 381.3976	-0.0361 1.7129	0.4072 5.3675	1119.4758 129.2372	9985.9113 0.9165	1.4009 0.4543	1.3971 -0.4905	1.3999
6	5.7538 1.1600	10.2898 87.6216	3.0328 428.1652	0.1259 1.9339	0.5226 5.3757	1089.1309 129.2546	11098.2125 0.9163	1.3981 0.4550	1.3951 -0.3290	1.3997
7	9.8693 1.1600	10.3453 84.6989	3.3534 473.0107	0.3111 2.1574	0.6259 5.3942	1097.3001 129.9725	12163.8582 0.9254	1.4008 0.4577	1.3967 -0.1466	1.4004
8	13.8728 1.1600	10.4577 81.6939	3.6646 525.8051	0.5350 2.3871	0.7377 5.4012	1149.9099 130.1864	13408.2302 0.9169	1.4005 0.4560	1.3960 0.0789	1.4018
9	17.9196 1.1600	10.1753 79.2353	3.9844 560.9691	0.7584 2.6278	0.8409 5.3716	1220.8316 129.2418	14170.3976 0.9355	1.3983 0.4598	1.3941 0.2985	1.4004
10	22.0993 1.1600	10.0195 76.9892	4.2603 594.7912	0.9844 2.8419	0.9138 5.3696	1562.1660 129.4421	14853.7814 0.9516	1.3998 0.4634	1.3947 0.5209	1.4038

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NACAL 292 RUN 85 DATE 24 OCT 80 TIME 05.39 RECOMP. NO. 2 DISK 1 PAGE 2  
JOB NO. 11 LDGR ACCT 31302 CONTRACT 1631 SUB ACCT 10001 ACQ DATE 20 AUG 80 18.06

MOD 76 ALPHA WIND ON RUN, AUGMENTOR 2, C/B=60 DEG, FWD=46 DEG, AFT=30 DEG,  
MEAN=38 DEG, CMU=1

DATA POINT 1

0.0047  
0.5275 0.1029  
0.5285 0.2395  
0.4234 0.4384 0.5114 0.3904 0.2412 0.0682  
0.3542 -0.9110 -0.1649 0.4409  
0.1524 -0.3420 -0.0343  
0.2656 0.5999 -0.0085 0.4885  
0.4609 0.5729  
0.5980 0.5767 0.5749 0.5680 0.3990 0.5156  
0.5900 0.5701 0.3121 0.5114  
417 0.5788 0.3518 0.5253  
0.5814 0.4295 0.5310  
0.4615 0.3947 0.4178 0.5232 0.4141 0.4110 0.5201 0.4503 0.4290 0.5114

MACAL 292 RUN 85 DATE 24 OCT 80 TIME 05.41 RECOMP. NO. 2 DISK 1 PAGE 14  
JOB NO. 11 LDGR ACCT 31302 CONTRACT 1631 SUB ACCT 10001 ACQ DATE 20 AUG 80 18.16

MOD 76 ALPHA WIND ON RUN, AUGMENTOR 2, C/B=60 DEG, FWD=46 DEG, AFT=30 DEG,  
MEAN=38 DEG, CMU=1

DATA POINT 7

0.1438  
0.5282 0.2501  
0.5295 0.3136  
0.2806 0.2099  
0.3636 0.4053 0.4727 0.3642 -0.8773 0.2806 0.2099  
0.2713 -0.1170 -0.1514 0.3105  
-0.0772 -0.3004 -0.0919  
0.1939 0.6074 -0.1201 0.4946  
0.4632 0.5957  
0.6036  
0.6002 0.5911 0.5792 0.4082  
0.5834 0.3330 0.4082  
0.5865 0.3535 0.5136 0.4245  
0.5918 0.4362 0.5210  
0.5290  
0.4484 0.3835 0.4004 0.5226 0.3916 0.4097 0.5369 0.4203 0.4116 0.5263

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NAVAL 292    RUN 85    DATE 24 OCT 80    TIME 05.42    RECOMP. NO. 2    DISK 1    PAGE 20  
 JOB NO. 11    LDGR ACCT 31302    CONTRACT 1631    SUB ACCT 10001    ACO DATE 20 AUG 80 18.19  
 MOD 76 ALPHA WIND ON RUN, AUGMENTOR 2, C/B=60 DEG, FWD=46 DEG, AFT=30 DEG,  
 MEAN=38 DEG, CMU=1

DATA POINT 10

						0.1386					
						0.5211	0.2711				
						0.5242	0.3193				
						0.2392	0.2027				
		0.2426	0.1808	0.3480	0.3405			-0.1121	0.2885		
		0.1690									
		-0.0012									
		-0.3102									
		-0.1551						-0.0465			
		0.1914									
		0.4692				0.5987		-0.0257	0.4600		
		0.5903									
		0.5940	0.5955	0.5814							
						0.5888	0.3447				
420								0.4544	0.4191		
								0.5273			
						0.5877	0.3963				
									0.5056		
									0.5298		
						0.5945	0.4743				
		0.2519	0.2251	0.2257	0.5270	0.3480	0.3579	0.5320	0.3816	0.3629	0.5114

CAL 292 RUN 86 DATE 24 OCT 80 TIME 05.59 RECOMP. NO. 2 DISK 1 PAGE 22

OB NO. 11 LDGR ACCT 31302 CONTRACT 1631 SUB ACCT 10001 ACQ DATE 20 AUG 80 18.51

MOD 77 ALPHA WIND ON RUN, AUGMENTOR 2, C/B=60 DEG, FWD=46 DEG, AFT=30 DEG,  
MEAN=38 DEG, CMU=2

P<sub>TS</sub> P<sub>A</sub>  
14.77 14.238

SUMMARY PAGE

T NO	ALPHA H PHI	Q H THETA	CLH THRUST	CDH DELAL	CMH WFT	YM THTH	RL CMUTH	PTPFGH CDR	PTPCBH CDHR	PTPACH
1	2.2337 1.1600	10.5907 -79.2382	3.6653 536.4446	-0.6966 2.1324	0.5217 8.1287	4764.4822 266.9090	13770.3267 1.8563	1.9277 0.6814	1.9195 -1.3730	1.9329
2	-2.0267 1.1600	10.6141 -74.0632	3.2193 482.4410	-0.9152 1.8634	0.3849 8.1257	4855.9694 267.0163	12479.0590 1.8530	1.9291 0.6809	1.9215 -1.6002	1.9256
3	-6.2339 1.1600	10.5868 -67.1520	2.7115 422.8984	-1.1424 1.5649	0.2408 8.1353	5027.1869 267.6951	11042.6987 1.8625	1.9304 0.6831	1.9222 -1.8256	1.9305
4	-10.2394 1.1600	10.4630 -58.8601	2.2349 370.9059	-1.3503 1.2892	0.0909 8.1282	5342.4340 267.7101	9462.0610 1.8846	1.9323 0.6870	1.9228 -2.0373	1.9320
5	421 2.1402 1.1600	10.4285 -78.8827	3.6959 533.2714	-0.7262 2.1432	0.5266 8.1241	4777.5196 267.6232	13734.8169 1.8902	1.9317 0.6878	1.9220 -1.4141	1.9321
6	6.2454 1.1600	10.3703 -83.3076	4.1407 586.9742	-0.4858 2.4161	0.6592 8.1009	4679.5787 267.1110	15013.5728 1.8972	1.9317 0.6884	1.9225 -1.1742	1.9328
7	14.5962 1.1600	9.8983 88.6725	5.1421 691.1900	0.1151 3.0501	0.9447 8.1035	4635.9299 267.4419	17512.2834 1.9901	1.9303 0.7053	1.9228 -0.5161	1.9226
8	14.5661 1.1600	9.8133 88.5980	5.1905 691.7189	0.1270 3.0753	0.9539 8.1232	4635.9743 268.7320	17500.4408 2.0171	1.9361 0.7108	1.9249 -0.5838	1.9367
9	18.6694 1.1600	9.8226 85.0654	5.5305 740.2544	0.4774 3.3309	1.0562 8.0956	4686.1171 267.9508	18670.5590 2.0093	1.9322 0.7087	1.9253 -0.2312	1.9320
10	22.8679 1.1600	9.8154 81.6720	5.8660 790.0105	0.8566 3.5987	1.1512 8.0967	4870.2716 268.3785	19869.5629 2.0140	1.9332 0.7097	1.9282 0.1489	1.9283







NACAL 292 RUN 87 DATE 24 OCT 80 TIME 07.42 RECOMP. NO. 2 DISK 1 PAGE 22

JOB NO. 11 LDGR ACCT 31302 CONTRACT 1631 SUB ACCT 10001 ACQ DATE 20 AUG 80 19.26

MOD 78 ALPHA WIND ON RUN, AUGMENTOR 2, C/B=60 DEG, FWD=46 DEG, AFT=30 DEG,  
MEAN=38 DEG, CMU=4

P<sub>TS</sub> P<sub>A</sub>  
14.77 14.233

SUMMARY PAGE

PT NO	ALPHA H PHI	Ø H THETA	CLH THRUST	CDH DELAL	CMH WFT	YM THTH	RL CNUTH	PTPFCH CDR	PTPCRH CDHR	PTPACH
1	3.2293 1.1600	10.6514 -79.8102	3.6961 543.0426	-0.6643 2.1540	0.5304 8.1259	4736.4123 267.6223	13977.4507 1.8507	1.9331 0.6801	1.9247 -1.3444	1.9259
2	-2.1694 1.1600	10.7672 -73.9902	3.1841 484.2311	-0.9136 1.8456	0.3774 8.1456	4883.4458 268.4525	12542.2952 1.8364	1.9318 0.6779	1.9259 -1.5916	1.9351
3	-6.3270 1.1600	10.7347 -67.5800	2.7005 425.7450	-1.1141 1.5622	0.2354 8.1185	5021.3641 267.5014	11111.0944 1.8355	1.9338 0.6770	1.9252 -1.7912	1.9299
4 425	-10.4495 1.1600	10.4414 -59.2575	2.2631 373.2645	-1.3460 1.3047	0.0962 8.1286	5322.5245 268.0786	9543.4192 1.8911	1.9279 0.6882	1.9268 -2.0342	1.9340
5	1.9733 1.1600	10.4250 -78.8462	3.6975 533.3874	-0.7290 2.1436	0.5217 8.1286	4802.9606 268.1366	13756.1023 1.8945	1.9332 0.6887	1.9244 -1.4177	1.9304
6	6.0853 1.1600	10.4465 -83.5503	4.1371 590.4841	-0.4676 2.4179	0.6563 8.1191	4665.7558 267.8622	15134.8838 1.8887	1.9307 0.6874	1.9231 -1.1551	1.9313
7	10.4078 1.1600	10.1694 -87.9179	4.6867 647.4901	-0.1703 2.7578	0.8055 8.1387	4600.4635 268.9457	16488.4093 1.9480	1.9320 0.6989	1.9259 -0.8693	1.9337
8	14.3875 1.1600	9.9546 88.8446	5.0904 688.0909	0.1026 3.0210	0.9302 8.1290	4666.1919 268.9696	17505.0393 1.9902	1.9379 0.7062	1.9252 -0.6035	1.9343
9	18.5281 1.1600	9.7599 85.2324	5.5341 735.8196	0.4615 3.3280	1.0530 8.1057	4704.8612 268.2671	18641.2794 2.0246	1.9332 0.7115	1.9251 -0.2560	1.9341
10	22.8582 1.1600	9.6164 81.7678	5.9617 786.4233	0.8625 3.6434	1.1674 8.1238	4899.1279 269.4096	19786.2834 2.0636	1.9379 0.7192	1.9296 0.1432	1.9294

MICAL 292    RUN 87    DATE 24 OCT 80    TIME 07.40    RECOMP. NO. 2    DISK 1    PAGE 10  
JOB NO. 11    LDGR ACCT 31302    CONTRACT 1631    SUB ACCT 10001    ACQ DATE 20 AUG 80 19.20

MOD 78    ALPHA WIND ON RUN, AUGMENTOR 2, C/B=60 DEG, FWD=46 DEG, AFT=30 DEG,  
MEAN=38 DEG, CMU=4

DATA POINT 5

426

								-0.2352					
								0.5341	0.0102				
								0.5348	0.1350				
								0.1401	0.0255				
		0.4018	0.4273	0.4640	0.3234					-0.5919	0.4370		
		0.3253						-1.9532					
		0.0827											
		0.1717						-0.7057		-1.5190			
		0.4093											
		0.5850						0.5785		-1.1325	0.5060		
		0.6116											
		0.5964											
		0.5924	0.5851	0.5801						0.2086			
								0.5773	0.2525		0.5074		
											0.4774		
								0.5881	0.2424				
													0.5369
											0.5212		
								0.5890	0.2954				
		0.4161	0.3546	0.3595	0.5250	0.3720	0.3981	0.5443	0.3850	0.3726	0.5437		

8

NACAL 292 RUN 87 DATE 24 OCT 80 TIME 07.40 RECOMP. NO. 2 DISK 1 PAGE 14  
JOB NO. 11 LDGR ACCT 31302 CONTRACT 1631 SUB ACCT 10001 ACQ DATE 20 AUG 80 19.22  
MOD 78 ALPHA WIND ON RUN, AUGMENTOR 2, C/B=60 DEG, FWD=46 DEG, AFT=30 DEG,  
MEAN=38 DEG, CMU=4

DATA POINT 7

-0.3610

0.5323 -0.0292

0.5278 0.1050

0.1250 -0.0497

0.3322 0.3776 0.4217 0.2836

0.2021 -1.9470

-0.2421 -0.6041 0.4469

-0.2189 -0.7264 -1.3869

0.0485 -0.7264

0.4065 0.5723 -1.0163 0.5011

0.5796 0.6088

0.6025 0.5936 0.5799

427 0.5867 0.2409 0.2857 0.5050

0.5878 0.2452 0.4831

0.5905 0.3138 0.5278

0.5235

0.4304 0.3259 0.2874 0.5200 0.3471 0.3657 0.5287 0.3589 0.3502 0.5275



NACAL 292    RUN 87    DATE 24 OCT 80    TIME 07.42    RECOMP. NO. 2    DISK 1    PAGE 20

JOB NO. 11    LDGR ACCT 31302    CONTRACT 1631    SUB ACCT 10001    ACQ DATE 20 AUG 80 19.25

MOD 78 ALPHA WIND ON RUN, AUGMENTOR 2, C/B=60 DEG, FWD=46 DEG, AFT=30 DEG,  
MEAN=38 DEG, CMU=4

DATA POINT 10

								-0.1252	
								0.5171	0.0691
								0.5128	0.1390
								0.0927	-0.0544
		0.1325	0.0895	0.2998	0.2955				
	0.0814				-1.7501				
-0.1045									-0.5185
-0.4831									0.4268
-0.3846					-0.6824				-1.1857
0.0746									
0.3868					0.5686				-0.9123
0.5787									0.4827
	0.5871	0.5839	0.5749						
				0.5808	0.2275			0.2793	
									0.4814
				0.5785	0.3061			0.4785	
									0.5090
				0.5813	0.3232				0.5238
0.1455	0.1505	0.1244	0.5045	0.3172	0.3216	0.5287	0.2905	0.3042	0.5250

429

NACAL 292 RUN 88 DATE 20 OCT 80 TIME 02.44 RFCOMP. NO. 1 DISK 1 PAGE 22

JOB NO. 11 LDGR ACCT 31302 CONTRACT 1631 SUB ACCT 10001 ACQ DATE 20 AUG 80 20.58

MOD 78 ALPHA WIND ON RUN, AUGMENTOR 2, C/B=60 DEG, FWD=46 DEG, AFT=30 DEG,  
MEAN=38 DEG, CMU=4

P<sub>TS</sub> P<sub>A</sub>  
14.50 14.228

SUMMARY PAGE

PT NO	ALPHA H PHI	Q H THETA	CLH THRUST	CDH DELAL	CMH WFT	YM THH	RL CMUTH	PTPFCH CDR	PTPCBH CDHR	PTPACH
1	-5.7517 1.1600	6.3033 -58.0532	4.0683 410.2856	-2.5369 -5.6436	0.4860 8.1428	6395.9212 269.3439	10106.1043 3.1475	1.9614 0.8882	1.9556 -3.4252	1.9639
2	-9.3952 1.1600	6.5317 -53.4907	3.5056 386.7630	-2.5949 -5.2843	0.3523 8.1955	6416.3179 271.3017	9445.3936 3.0595	1.9664 0.8776	1.9596 -3.4725	1.9662
3	-12.9781 1.1600	6.5297 -47.8744	3.0061 359.3060	-2.7186 -4.9742	0.2258 8.1716	6420.9173 269.9869	8657.3208 3.0455	1.9633 0.8747	1.9542 -3.5934	1.9622
4 430	-16.6287 1.1600	6.5806 -40.7109	2.4340 333.3929	-2.8287 -4.7550	0.0900 8.1739	6568.6407 270.3850	7768.7923 3.0265	1.9683 0.8716	1.9567 -3.7003	1.9645
5	-5.9400 1.1600	6.6902 -58.9421	3.9226 415.9081	-2.3623 -5.7268	0.4733 8.1625	6331.1427 269.7623	10242.3247 2.9700	1.9603 0.8638	1.9529 -3.2262	1.9613
6	-2.6156 1.1600	6.6750 -63.5882	4.4440 449.6589	-2.2072 -6.2346	0.5930 8.1934	6289.7224 271.5458	11116.0413 2.9965	1.9639 0.8685	1.9618 -3.0757	1.9667
7	0.7641 1.1600	6.9448 -67.3454	4.5837 478.5170	-1.9548 -6.7468	0.6778 8.1807	6296.2322 271.2402	11879.4665 2.8768	1.9626 0.8506	1.9600 -2.8055	1.9673
8	3.9307 1.1600	6.9468 -70.9257	5.0940 508.3334	-1.7614 -7.3341	0.7768 8.1725	6294.8051 271.2164	12619.7125 2.8757	1.9664 0.8502	1.9593 -2.6116	1.9662
9	7.1471 1.1600	7.0329 -74.2095	5.3827 533.8350	-1.5120 -7.9898	0.8505 8.1757	6294.9163 271.8513	13266.4350 2.8472	1.9672 0.8465	1.9602 -2.3586	1.9673
10	10.4910 1.1600	6.6663 -76.6833	5.8701 545.9427	-1.3894 -8.5163	0.9290 8.1439	6405.9940 270.9915	13446.7322 2.9943	1.9665 0.8670	1.9592 -2.2564	1.9680



8

NACAL 292    RUN 88    DATE 20 OCT 80    TIME 02.43    RECOMP. NO. 1    DISK 1    PAGE 14  
JOB NO. 11    LDGR ACCT 31302    CONTRACT 1631    SUB ACCT 10001    ACQ DATE 20 AUG 80 20.54

MOD 78    ALPHA WIND ON RUN, AUGMENTOR 2, C/B=60 DEG, FWD=46 DEG, AFT=30 DEG,  
MEAN=38 DEG, CMU=4

DATA POINT 7

-0.1809

0.2731    -0.0946

0.2765    0.0290

-0.1509    -0.0830

0.1033    0.1493    0.2097    0.0690

0.0460    -2.2897

-0.7740    0.2271

-0.2257

-1.1607

-1.8999

-0.1835

0.0000

0.1918

0.3112

-1.6270    0.2567

0.3005

0.3138

0.3154    0.3132    0.3078

-0.0209

0.2579

432

0.2988    -0.0314

0.2012

0.2972    -0.0407

0.2459    0.2665

0.3083    0.0063

0.2147    0.1070    0.1213    0.2875    0.1170    0.1108    0.2807    0.1238    0.0840    0.2763





ACAL 292 RUN 89 DATE 20 OCT 80 TIME 02.55 RECOMP. NO. 1 DISK 1 PAGE 22

DB NO. 11 LDGR ACCT 31302 CONTRACT 1631 SUB ACCT 10001 ACQ DATE 20 AUG 80 21.43

MOD 79 ALPHA WIND ON RUN, AUGMENTOR 1, C/B=60 DEG, FWD=46 DEG, AFT=30 DEG,  
MEAN=38 DEG, CMU=0

P<sub>T</sub> P<sub>A</sub>  
14.74 14.228

SUMMARY PAGE

T NO	ALPHA H PHI	Q H THETA	CLH THRUST	CDH DELAL	CMH WFT	YM THTH	RL CMUTH	PTPFCH CDR	PTPCBH CDHR	PTPACH
1	0.2730 1.1600	10.4423 53.6705	0.6224 75.8535	0.4577 0.2823	0.0936 0.2858	-523.1899 0.9087	1693.1498 0.0092	0.9873 0.0346	0.9948 0.4231	0.9956
2	-3.7030 1.1600	10.5824 50.3943	0.5071 65.5810	0.4196 0.2276	0.0062 0.2858	-576.5242 0.9395	1458.7308 0.0094	0.9856 0.0343	0.9946 0.3852	0.9949
3	-7.6957 1.1600	10.5606 44.2659	0.3554 50.6234	0.3646 0.1562	-0.0909 0.2139	-535.8907 0.6149	1051.8174 0.0061	0.9841 0.0257	0.9953 0.3388	0.9951
4	-11.5669 1.1600	10.7235 29.4162	0.1956 40.2175	0.3470 0.0810	-0.1875 0.2362	-513.4036 0.8700	613.9515 0.0086	0.9858 0.0282	0.9971 0.3187	0.9967
5	0.2352 1.1600	10.2860 53.7511	0.6145 74.5108	0.4506 0.2785	0.0818 0.3368	-520.4365 1.0617	1668.7113 0.0108	0.9869 0.0409	0.9947 0.4096	0.9956
6	4.1890 1.1600	10.4146 55.6714	0.7707 91.5086	0.5263 0.3534	0.1586 0.2089	-465.2584 0.5854	1991.1461 0.0059	0.9905 0.0253	0.9960 0.5009	0.9985
7	8.0672 1.1600	10.3925 57.2859	0.8462 98.4053	0.5435 0.3897	0.2213 0.1940	-373.5353 0.5238	2045.7822 0.0053	0.9917 0.0235	0.9954 0.5200	0.9984
8	11.9017 1.1600	10.2508 59.0091	0.9391 105.7250	0.5641 0.4346	0.3121 0.3271	-317.0928 0.9437	2140.5556 0.0097	0.9927 0.0400	0.9948 0.5240	0.9975
9	15.7944 1.1600	10.2460 59.8536	1.0185 113.6148	0.5915 0.4733	0.3788 0.4570	-229.6999 0.9900	2337.8607 0.0102	0.9963 0.0559	0.9965 0.5356	0.9997
10	19.7634 1.1600	10.2030 59.0583	1.0174 113.9383	0.6099 0.4731	0.4037 0.2317	-107.5665 0.5458	2167.5132 0.0056	0.9960 0.0284	0.9968 0.5814	0.9968

435

NACAL 292    RUN 89    DATE 20 OCT 80    TIME 02.51    RECOMP. NO. 1    DISK 1    PAGE 2  
 JOB NO. 11    LDGR ACCT 31302    CONTRACT 1631    SUB ACCT 10001    ACC DATE 20 AUG 80 21.30  
 MOD 79 ALPHA WIND ON RUN, AUGMENTOR 1, C/B=60 DEG, FWD=46 DEG, AFT=30 DEG,  
 MFAN=38 DEG, CMU=0

DATA POINT 1

436

					0.3883				
					0.5056		0.4721		
					0.5101		0.4948		
					0.4389		0.4670		
		0.4998	0.4905				0.4506		0.4644
		0.4699		0.4307					
		0.5067							
		0.5863		0.4531			0.5017		
		0.5511							
		0.5368		0.5428			0.4556		0.4645
		0.5388	0.5508						
				0.5528	0.4215		0.4799		
									0.4629
				0.5531	0.4458		0.4836		
									0.4764
				0.5519	0.4839			0.4818	
0.3834	0.4880	0.4973	0.5098	0.4979	0.4892	0.5135	0.4836	0.4724	0.5011

NACAL 292 RUN 89 DATE 20 OCT 80 TIME 02.53 RECOMP. NO. 1 DISK 1 PAGE 14

JOB NO. 11 LDGR ACCT 31302 CONTRACT 1631 SUB ACCT 10001 ACQ DATE 20 AUG 80 21.40

MOD 79 ALPHA WIND ON RUN, AUGMENTOR 1, C/B=60 DEG, FWD=46 DEG, AFT=30 DEG,  
MEAN=38 DFG, CMU=0

DATA POINT 7

0.3841

0.5073 0.4619

0.5044 0.4884

0.4587 0.4570

0.4799 0.4730  
0.4301 0.4612  
0.4208  
0.5565 0.4867  
0.5877  
0.5623 0.5390  
0.5522 0.5546

0.4811 0.4728

0.5390

0.4425 0.4685

0.5582 0.4587

0.4793

0.4629

0.5586 0.4538

0.4971

0.5453 0.4736

0.4753  
0.4907

0.4170 0.4718 0.4954 0.4917 0.4818 0.4923 0.5172 0.4774 0.4755 0.5098

437

NACAL 292      RUN 89      DATE 20 OCT 80      TIME 02.54      RECOMP. NO. 1      DISK 1      PAGE 16  
 JOB NO. 11      LDGR ACCT 31302      CONTRACT 1631      SUB ACCT 10001      ACO DATE 20 AUG 80 21.41

MOD 79 ALPHA WIND UN RUN, AUGMENTOR 1, C/B=60 DEG, FWD=46 DEG, AFT=30 DEG,  
 MFAN=38 DEG, CMU=0

DATA POINT 8

438

						0.3844			
						0.5019	0.4636		
						0.5050	0.4853		
						0.4558	0.4575		
		0.4575	0.4681					0.4818	0.4673
		0.3915		0.4618					
		0.3610							
		0.5135		0.4749				0.5378	
		0.5845							
		0.5703		0.5403				0.4494	0.4629
		0.5619	0.5579						
				0.5576	0.4555			0.4796	
									0.4670
				0.5611	0.4598			0.4928	
									0.4753
				0.5442	0.4778			0.4911	
0.4481	0.4232	0.4699	0.5048	0.4656	0.4755	0.4998	0.4600	0.4656	0.4874

NACAL 292 RUN 89 DATE 20 OCT 80 TIME 02.54 RECOMP. NO. 1 DISK 1 PAGE 20  
 JOB NO. 11 LDGR ACCT 31302 CONTRACT 1631 SUB ACCT 10001 ACQ DATE 20 AUG 80 21.42  
 MOD 79 ALPHA WIND ON RUN, AUGMENTOR 1, C/B=60 DEG, FWD=46 DEG, AFT=30 DEG,  
 MFAN=36 DEG, CMU=0

DATA POINT 10

439

					0.4383				
					0.5045	0.4619			
					0.5031	0.4881			
					0.4575	0.4644			
	0.4388	0.4376					0.4581	0.4593	
	0.4432		0.4481						
	0.4102								
	0.4830		0.4500				0.4699		
	0.5689								
	0.5782		0.5428						
	0.5683	0.5625					0.4581	0.4639	
			0.5600	0.4624					
							0.4667		
									0.4602
			0.5672	0.4639					
							0.4738		
			0.5408	0.4662					0.4715
								0.4788	
0.4531	0.4556	0.4239	0.4836	0.4450	0.4525	0.4880	0.4376	0.4351	0.4824

CAL 292 RUN 90 DATE 20 OCT 80 TIME 03.05 RECOMP. NO. 1 DISK 1 PAGE 22

IB NO. 11 LDGR ACCT 31302 CONTRACT 1631 SUB ACCT 10001 ACO DATE 20 AUG 80 22.03

MOD 79 ALPHA WIND ON RUN, AUGMENTOR 1, C/B=60 DEG, FWD=46 DEG, AFT=30 DEG,  
MEAN=38 DEG, CMU=0

P<sub>T</sub> P<sub>A</sub>  
15.00 14.228

SUMMARY PAGE

Γ NO	ALPHA H PHI	Θ H THETA	CLH THRUST	CDH DELAL	CMH WFT	YM TH1H	RL CMUTH	PTPFCH CDR	PTPCBH CDHR	PTPACH
1	0.2873 1.1600	15.1495 54.5116	0.6524 114.2827	0.4651 0.2966	0.0832 0.2189	-746.0516 0.7520	2540.8449 0.0052	0.9849 0.0218	0.9948 0.4433	0.9963
2	-3.6813 1.1600	15.2122 50.7367	0.5085 94.0717	0.4157 0.2283	0.0146 0.4584	-811.1154 1.8485	2179.1909 0.0129	0.9802 0.0456	0.9935 0.3700	0.9933
3	-7.6123 1.1600	15.3600 43.7350	0.3518 73.5891	0.3677 0.1545	-0.0756 0.2662	-836.3863 1.0849	1661.7987 0.0075	0.9797 0.0264	0.9955 0.3413	0.9948
4	-11.5437 1.1600	15.4078 30.9629	0.2036 57.4175	0.3394 0.0850	-0.1861 0.1515	-791.6702 0.5388	1010.8779 0.0037	0.9797 0.0150	0.9956 0.3244	0.9948
5	0.3271 1.1600	15.3392 54.1663	0.6456 115.0015	0.4662 0.2933	0.0944 0.1204	-825.1970 0.4428	2605.6279 0.0030	0.9849 0.0119	0.9954 0.4542	0.9957
6	4.1649 1.1600	14.9914 55.9962	0.7637 130.0201	0.5152 0.3499	0.1796 0.4531	-711.9624 1.6742	2895.5004 0.0118	0.9848 0.0455	0.9934 0.4697	0.9953
7	8.1266 1.1600	14.9533 57.3128	0.8547 142.9675	0.5484 0.3939	0.2576 0.4993	-570.0980 1.6515	3039.9266 0.0117	0.9883 0.0502	0.9937 0.4982	0.9978
8	11.9446 1.1600	15.0558 59.8727	0.9284 152.1460	0.5387 0.4291	0.3128 0.4484	-478.7330 1.3348	3177.4704 0.0094	0.9919 0.0449	0.9943 0.4938	0.9982
9	15.8230 1.1600	14.9196 60.3520	1.0144 163.9525	0.5774 0.4711	0.3776 0.1391	-363.2191 0.4205	3425.3705 0.0029	0.9947 0.0140	0.9949 0.5634	0.9994
10	19.6646 1.1600	14.9968 58.9182	0.9582 157.9622	0.5776 0.4440	0.4062 0.4625	-56.7635 1.4940	3108.3661 0.0105	0.9934 0.0464	0.9944 0.5311	0.9941

NACAL 292 RUN 90 DATE 20 OCT 80 TIME 03.02 RECOMP. NO. 1 DISK 1 PAGE 2

JOB NO. 11 LDGR ACCT 31302 CONTRACT 1631 SUB ACCT 10001 ACQ DATE 20 AUG 80 21.51

MOD 79 ALPHA WIND ON RUN, AUGMENTOR 1, C/B=60 DEG, FWD=46 DEG, AFT=30 DEG,  
MFAN=38 DEG, CMU=0

DATA POINT 1

441

					0.5681				
					0.7458		0.6902		
					0.7443		0.7216		
					0.6397		0.6833		
		0.7262	0.7231				0.6825		0.6819
		0.6931		0.6725					
		0.7486							
		0.8609		0.6769			0.7436		
		0.7986							
		0.7897		0.8035			0.6625		0.6873
		0.7899	0.7959						
				0.8085	0.6154		0.7053		
									0.6885
				0.8133	0.6599			0.7121	
									0.6931
				0.8008	0.7139			0.7093	
0.5764	0.7274	0.7318	0.7468	0.7305	0.7131	0.7511	0.7125	0.7100	0.7393

NACAL 292 RUN 90 DATE 20 OCT 80 TIME 03.04 RECOMP. NO. 1 DISK 1 PAGE 14  
JOB NO. 11 LDGR ACCT 31302 CONTRACT 1631 SUB ACCT 10001 ACQ DATE 20 AUG 80 22.00

MOD 79 ALPHA WIND ON RUN, AUGMENTOR 1, C/B=60 DEG, FWD=46 DEG, AFT=30 DEG,  
MEAN=38 DEG, CMU=0

DATA POINT 7

442

0.5516  
0.7530 0.6998  
0.7555 0.7299  
0.6699 0.6790  
0.6994 0.7405  
0.6226 0.7187  
0.6357  
0.8266 0.7112  
0.8656  
0.8408 0.8248  
0.8274 0.8177  
0.6488 0.6944  
0.8230 0.6760  
0.6987  
0.6958  
0.8324 0.6825  
0.7381  
0.8100 0.6982  
0.7386  
0.7002  
0.6600 0.7000 0.7143 0.7567 0.7355 0.7281 0.7611 0.7305 0.7218 0.7461

NACAL 292 RUN 90 DATE 20 OCT 80 TIME 03.04 RECOMP. NO. 1 DISK 1 PAGE 16

JOB NO. 11 LDGR ACCT 31302 CONTRACT 1631 SUB ACCT 10001 ACQ DATE 20 AUG 80 22.01

MOD 79 ALPHA WIND ON RUN, AUGMENTOR 1, C/B=60 DEG, FWD=46 DEG, AFT=30 DEG,  
MEAN=38 DEG, CMU=0

DATA POINT 8

443

					0.5376				
					0.7495		0.6988		
					0.7492		0.7238		
					0.6859		0.6779		
	0.6831	0.7218					0.7324	0.6938	
	0.5883		0.6925						
	0.5683								
	0.7798		0.7106				0.8210		
	0.8602								
	0.8479		0.8347				0.6700	0.6941	
	0.8342	0.8256							
			0.8227	0.6779			0.7130		
								0.6955	
			0.8345	0.6921			0.7363		
									0.6973
			0.8099	0.7161				0.7269	
0.6825	0.6363	0.6875	0.7592	0.7006	0.7081	0.7636	0.6800	0.7068	0.7549

MACAL 292      RUN 90      DATE 20 OCT 80      TIME 03.05      RECOMP. NO. 1      DISK 1      PAGE 20  
 JOB NO. 11      LDGR ACCT 31302      CONTRACT 1631      SUB ACCT 10001      ACQ DATE 20 AUG 80 22.03

MOD 79 ALPHA WIND ON RUN, AUGMENTOR 1, C/B=60 DEG, FWD=46 DEG, AFT=30 DEG,  
 MEAN=38 DEG, CMU=0

DATA POINT 10

444

					0.6636				
					0.7421	0.6817			
					0.7417	0.7207			
					0.6720	0.6814			
	0.6563	0.6813					0.6937	0.6804	
	0.6557		0.6588						
	0.6494								
	0.7686		0.6669				0.6813		
	0.8144								
	0.8451		0.8329				0.6962	0.6851	
	0.8435	0.8287							
			0.8273	0.6868			0.6910		
									0.6847
			0.8439	0.6885			0.6947		
									0.6905
			0.7994	0.6890				0.6941	
0.6981	0.6688	0.6444	0.7567	0.6582	0.6563	0.7561	0.6488	0.6438	0.7412

CAL 292 RUN 91 DATE 20 OCT 80 TIME 03.37 RECOMP. NO. 1 DISK 1 PAGE 22

B NO. 11 LDGR ACCT 31302 CONTRACT 1631 SUB ACCT 10001 ACQ DATE 20 AUG 80 22.23

OD 80 ALPHA WIND ON RUN, AUGMENTOR 1, C/B=60 DEG, FWD=46 DEG, AFT=30 DEG,  
MEAN=38 DEG, CMU=1

P<sub>T</sub> P<sub>A</sub>  
15.00 14.228

SUMMARY PAGE

NO	ALPHA H PHI	Q H THETA	CLH THRUST	CDH DELAL	CMH WFT	YM JHTH	RL CMUTH	PTPFCH CDR	PTPCBH CDHR	PTPACH
1	1.0501 1.1600	15.0866 87.6231	2.4272 345.0260	0.1007 1.0996	0.1305 5.3733	985.9708 126.1391	9467.6928 0.8881	1.3785 0.5382	1.3762 -0.4375	1.3854
2	-2.8406 1.1600	15.1480 89.5769	2.2753 324.4752	0.0168 1.0269	0.0732 5.2996	749.8925 122.8374	9095.6200 0.8613	1.3680 0.5295	1.3671 -0.5127	1.3703
3	-6.8485 1.1600	14.9896 -86.5622	2.1660 306.2065	-0.1301 0.9700	0.0396 5.3485	653.5060 124.9521	8580.4665 0.8854	1.3779 0.5374	1.3725 -0.6675	1.3785
4	-10.8249 1.1600	15.1352 -82.2256	1.8632 267.9400	-0.2543 0.8318	-0.0306 5.3539	761.0891 125.0498	7426.6407 0.8776	1.3771 0.5354	1.3722 -0.7897	1.3795
5	1.1235 1.1600	14.8441 88.3234	2.3958 334.9414	0.0701 1.0835	0.1446 5.3429	1033.8914 124.9580	9322.4507 0.8941	1.3799 0.5396	1.3747 -0.4695	1.3767
6	5.0186 1.1600	14.8634 86.1784	2.5240 353.9640	0.1686 1.1473	0.2080 5.3628	1303.2618 125.5798	9605.2086 0.8974	1.3802 0.5415	1.3758 -0.3729	1.3780
7	8.9474 1.1600	14.7361 84.2161	2.6971 376.0864	0.2732 1.2324	0.3042 5.3616	1497.2615 125.5451	9698.5984 0.9049	1.3781 0.5438	1.3757 -0.2706	1.3797
8	12.8264 1.1600	15.0369 82.9276	2.8102 400.8692	0.3486 1.2892	0.3407 5.3371	1983.9889 124.9705	9814.8877 0.8828	1.3804 0.5359	1.3747 -0.1872	1.3789
9	16.7569 1.1600	15.1091 80.8833	2.9475 424.6102	0.4729 1.3622	0.4108 5.3639	2298.7878 125.8183	10076.8503 0.8845	1.3808 0.5374	1.3757 -0.0644	1.3813
10	20.7500 1.1600	15.1687 78.1044	3.0785 449.2644	0.6485 1.4395	0.4696 5.3295	2549.9202 125.0685	10005.5649 0.8758	1.3781 0.5329	1.3781 0.1155	1.3809

445

NACAL 292    RUN 91    DATE 20 OCT 80    TIME 03.33    RECOMP. NO. 1    DISK 1    PAGE 2  
 JOB NO. 11    LDGR ACCT 31302    CONTRACT 1631    SUB ACCT 10001    ACQ DATE 20 AUG 80 22.09

MOD 80 ALPHA WIND ON RUN, AUGMENTOR 1, C/B=60 DEG, FWD=46 DEG, AFT=30 DEG,  
 MEAN=38 DEG, CMU=1

DATA POINT 1

947

				0.2777						
				0.7608		0.5169				
				0.7578		0.6482				
				0.5129		0.5680				
	0.6132	0.5789					0.1232		0.4963	
	0.5254		-0.7263							
	0.5384									
	0.7918		-0.1168				0.0908			
	0.8524									
	0.8364		0.8640				0.0199		0.6006	
	0.8329	0.8323								
			0.8349	0.5739			0.6132			
									0.6459	
			0.8358	0.5780			0.7321			
			0.9338	0.6441					0.6532	
								0.7143		
0.8765	0.5789	0.6076	0.7607	0.5901	0.5833	0.7595	0.5914	0.5883	0.7532	

NACAL 292 RUN 91 DATE 20 OCT 80 TIME 03.35 RECOMP. NO. 1 DISK 1 PAGE 14  
JOB NO. 11 LDGR ACCT 31302 CONTRACT 1631 SUB ACCT 10001 ACQ DATE 20 AUG 80 22.20

MOD 80 ALPHA WIND ON RUN, AUGMENTOR 1, C/B=60 DEG, FWD=46 DEG, AFT=30 DEG,  
MFAN=38 DEG, CMU=1

DATA POINT 7

0.4734

0.7482 0.6287

0.7481 0.6995

0.5315 0.6309

0.5204 0.5223

0.3878 -0.6419

0.2876

0.6268 -0.0434

0.8271

0.8609 0.8640

0.8506 0.8393

0.1288 0.4657

-0.1884

-0.0795 0.6134

0.8386 0.5834

0.6207

0.6353

0.8430 0.5797

0.7323

0.8334 0.6356

0.7083 0.6552

0.4930 0.4781 0.5577 0.7470 0.5497 0.5497 0.7532 0.5565 0.5602 0.7545

447

MACAL 292      RUN 91      DATE 20 OCT 80      TIME 03.36      RECOMP. NO. 1      DISK 1      PAGE 16  
 JOB NO. 11      LDGR ACCT 31302      CONTRACT 1631      SUB ACCT 10001      ACQ DATE 20 AUG 80 22.21

MDD 80 ALPHA WIND ON RUN, AUGMENTOR 1, C/B=60 DEG, FWD=46 DEG, AFT=30 DEG,  
 MFAN=38 DEG, CMU=1

DATA POINT 8

448

						0.4882			
						0.7556	0.6376		
						0.7588	0.7020		
						0.5544	0.6492		
	0.3654	0.5210							
	0.3872		-0.4718					0.1425	0.5725
	0.1606								
	0.5403		0.0124					-0.1487	
	0.7911								
	0.8658		0.8678					-0.0465	0.6221
	0.8653	0.8535							
			0.8490	0.6015				0.6370	
									0.6548
			0.8538	0.6029				0.7439	
									0.6764
			0.8486	0.6584				0.7313	
0.3915	0.3822	0.4413	0.7570	0.4930	0.5167	0.7595	0.5696	0.5553	0.7482

NACAL 292 RUN 91 DATE 20 OCT 80 TIME 03.36 RECOMP. NO. 1 DISK 1 PAGE 20  
 JOB NO. 11 LDGR ACCT 31302 CONTRACT 1631 SUB ACCT 10001  
 MOD 80 ALPHA WIND ON RUN, AUGMENTOR 1, C/B=60 DEG, FWD=46 DEG, AFT=30 DEG,  
 MEAN=38 DEG, CMU=1  
 ACQ DATE 20 AUG 80 22.22

DATA POINT 10

0.6006

0.7673 0.6164

0.7673 0.7143

0.5642 0.6452

0.2197 0.3150

0.2116 -0.2661

0.1948

0.4077

0.6873

0.8632

0.8702 0.8639

0.2066

0.8715

0.8609 0.6399

0.8633 0.6719

0.8633 0.7224

0.1954 0.4720

-0.0330

0.0423 0.6616

0.6834

0.6489

0.7836

0.7011

0.7618

0.3199 0.2178 0.2340 0.7644 0.3318 0.4905 0.7694 0.5621 0.5602 0.7607

449

CAL 292 RUN 92 DATE 20 OCT 80 TIME 03.47 RECOMP. NO. 1 DISK 1 PAGE 22

IB NO. 11 LDGR ACCT 31302 CONTRACT 1631 SUB ACCT 10001 ACO DATE 20 AUG 80 23.00

OD 81 ALPHA WIND ON RUN, AUGMENTOR 1, C/B=60 DEG, FWD=46 DEG, AFT=30 DEG,  
MEAN=38 DEG, CMU=2

P<sub>TS</sub> P<sub>A</sub>  
15.00 14.228

SUMMARY PAGE

NO	ALPHA H PHI	O H THETA	CLH THRUST	CDH DELAL	CMH WFT	YM THTH	RL CMUTH	PTPFCH CDR	PTPCBH CDHR	PTPACH
1	1.8003 1.1600	15.1530 -85.0835	4.0537 580.4016	-0.3486 1.7390	0.3576 8.1650	3441.8917 263.2335	15038.5944 1.8453	1.8989 0.8148	1.8873 -1.1635	1.8944
2	-2.6287 1.1600	15.6561 -79.4406	3.4412 515.9268	-0.6414 1.4656	0.2605 8.1553	3717.2273 263.0155	13722.6928 1.7845	1.8968 0.8012	1.8872 -1.4427	1.8959
3	-6.6856 1.1600	15.0334 -73.5091	3.0338 447.7794	-0.8981 1.2824	0.1647 8.1677	3927.2706 264.3229	12137.2381 1.8676	1.9064 0.8201	1.8944 -1.7183	1.9017
4	-10.7615 1.1600	15.2570 -66.8804	2.4762 386.7168	-1.0571 1.0490	0.0517 8.1427	4102.9153 263.1173	10476.6259 1.8319	1.8987 0.8121	1.8944 -1.8693	1.8839
5	1.5005 1.1600	15.1683 -83.8238	3.9852 572.3982	-0.4312 1.7029	0.3748 8.1362	3561.7130 263.0475	14982.1023 1.8421	1.8966 0.8140	1.8888 -1.2453	1.8958
6	5.4161 1.1600	15.2823 -87.3285	4.2640 614.1242	-0.1989 1.8395	0.4181 8.1431	3772.5408 263.6259	16093.7598 1.8324	1.8991 0.8121	1.8905 -1.0110	1.8973
7	9.5125 1.1600	15.1558 89.1064	4.5913 655.1632	0.0716 2.0034	0.4762 8.1400	3920.8769 263.5238	17014.4172 1.8469	1.8976 0.8155	1.8878 -0.7438	1.8955
8	13.4958 1.1600	15.1310 86.9552	4.8104 686.1797	0.2558 2.1157	0.5201 8.1272	4326.1623 263.5001	17583.2164 1.8498	1.8989 0.8156	1.8886 -0.5597	1.8959
9	17.4532 1.1600	14.9185 83.9464	5.1024 720.6275	0.5411 2.2741	0.5976 8.1088	4563.1141 262.9492	18347.3306 1.8722	1.8942 0.8203	1.8857 -0.2791	1.8958
0	21.4070 1.1600	14.9440 81.9012	5.1467 731.3558	0.7323 2.3231	0.5681 8.0885	5010.6446 262.6125	18257.3582 1.8666	1.8955 0.8183	1.8864 -0.0859	1.8960

NACAL 292 RUN 92 DATE 20 OCT 80 TIME 03.45 RECOMP. NO. 1 DISK 1 PAGE 10  
JOB NO. 11 LDGR ACCT 31302 CONTRACT 1631 SUB ACCT 10001 ACQ DATE 20 AUG 80 22.55

MOD 81 ALPHA WIND ON RUN, AUGMENTOR 1, C/B=60 DEG, FWD=46 DEG, AFT=30 DEG,  
MEAN=38 DEG, CMU=2

DATA POINT 5

-0.2114

0.7855 0.0479

0.7809 0.3682

0.2864 0.1093

0.4630 0.3989

0.3248 -2.0248

0.2601

0.6577 -0.7426

0.8800

0.8854 0.8563

0.8783 0.8786

-0.3554 0.5640

-0.4447

-0.4490 0.7059

0.8738 0.4188

0.5397

0.7626

0.8794 0.4319

0.7433

0.8686 0.5694

0.7818  
0.7870

0.4518 0.4032 0.4468 0.7772 0.4654 0.4748 0.7785 0.4735 0.4891 0.7934

451

8

NACAL 292    RUN 92    DATE 20 OCT 80    TIME 03.45    RECOMP. NO. 1    DISK 1    PAGE 14  
JOB NO. 11    LDGR ACCT 31302    CONTRACT 1631    SUB ACCT 10001    ACQ DATE 20 AUG 80 22.57

MOD 81 ALPHA WIND ON RUN, AUGMENTOR 1, C/B=60 DEG, FWD=46 DEG, AFT=30 DEG,  
MEAN=38 DEG, CMU=2

DATA POINT 7

0.0797

0.7915    0.5411

0.7921    0.5109

0.3425    0.3754

0.1854    0.3783  
0.1792    -1.7862

-0.1296  
0.3802    -0.6704

0.7648  
0.8943    0.8662

0.8940    0.8875

0.8872    0.4700

0.8907    0.4425

0.8874    0.5708

-0.2422    0.2764

-0.9488

-0.6839    0.6221

0.5471

0.6324

0.7566

0.7717    0.7039

0.2277    0.2638    0.2850    0.7847    0.3665    0.3802    0.7816    0.4406    -0.4306    0.7903

452

MACAL 292 RUN 92 DATE 20 OCT 80 TIME 03.46 RECOMP. NO. 1 DISK 1 PAGE 16  
JOB NO. 11 LDGR ACCT 31302 CONTRACT 1631 SUB ACCT 10001 ACQ DATE 20 AUG 80 22.58

MOD 81 ALPHA WIND ON RUN, AUGMENTOR 1, C/B=60 DEG, FWD=46 DEG, AFT=30 DEG,  
MEAN=38 DEG, CMU=2

DATA POINT 8

453

					0.3165						
					0.7946		0.3909				
					0.7923		0.5115				
					0.3551		0.5729				
	0.1163	0.3074									
	0.1362			-1.4706					-0.2911	0.3153	
	-0.2349										
	0.3148			-0.5591					-0.8062		
	0.6740										
	0.8972			0.8762					-0.7035	0.5884	
	0.8995	0.8961									
				0.9009	0.4695				0.5549		
										0.6566	
				0.9043	0.4685				0.7568		
				0.8969	0.5995					0.7505	
									0.7615		
0.2227	0.1593	0.1518	0.7766	0.3099	0.3547	0.7816	0.4182	0.4256	0.7866		



VACAL 292 RUN 93 DATE 20 OCT 80 TIME 03.59 RECOMP. NO. 1 DISK 1 PAGE 22

JOB NO. 11 LDGR. ACCT 31302 CONTRACT 1631 SUB ACCT 10001 ACQ DATE 20 AUG 80 23.21

MOD 82 ALPHA WIND ON RUN, AUGMENTOR 1, C/B=60 DEG, FWD=46 DEG, AFT=30 DEG, .  
MEAN=38 DEG, CMU=4

P<sub>T</sub> P<sub>A</sub>  
14.62 14.228

SUMMARY PAGE

PT NO	ALPHA H PHI	O H THETA	CLH THRUST	CDH DELAL	CMH WFT	YM THTH	RL CMUTH	PTPFCH CDR	PTPCBH CDHR	PTPACH
1	2.1768 1.1600	7.7011 -71.9840	5.6900 433.7855	-1.8505 2.1768	0.5052 8.1612	5581.4497 270.5237	10970.2795 3.7314	1.9510 1.1639	1.9449 -3.0145	1.9510
2	-1.9492 1.1600	7.8131 -66.5166	5.0002 400.5968	-2.1724 1.9082	0.3741 8.1347	5623.0590 269.8369	10135.5924 3.6686	1.9549 1.1528	1.9423 -3.3252	1.9457
3	-6.1648 1.1600	7.9986 -60.0725	4.2378 368.2002	-2.4395 1.6211	0.2336 8.1527	5690.3287 270.7669	9282.3228 3.5958	1.9513 1.1423	1.9457 -3.5819	1.9474
4	-10.2347 1.1600	7.7514 -51.4492	3.5875 334.7432	-2.8588 1.3670	0.0868 8.1352	5986.5236 270.2837	8174.1348 3.7039	1.9513 1.1592	1.9448 -4.0180	1.9457
5	2.2428 1.1600	7.5601 -71.8760	5.7548 430.5609	-1.8836 2.1953	0.5086 8.1123	5573.7795 269.7420	10854.5924 3.7900	1.9504 1.1708	1.9458 -3.0544	1.9441
6	6.3523 1.1600	7.3711 -76.9724	6.4965 462.7197	-1.5031 2.4890	0.6369 8.0754	5467.2096 268.0724	11636.2066 3.8631	1.9395 1.1810	1.9365 -2.6842	1.9453
7	10.4533 1.1600	7.3825 -81.6020	7.0797 497.3735	-1.0451 2.7430	0.7500 8.0891	5445.5511 268.8955	12461.2145 3.8690	1.9463 1.1825	1.9389 -2.2277	1.9442
8	14.5717 1.1600	7.2938 -85.4412	7.5865 529.7445	-0.6049 2.9741	0.8361 8.0732	5510.7145 268.7996	13185.5531 3.8617	1.9502 1.1796	1.9424 -1.7845	1.9468
9	18.7059 1.1600	7.1824 -89.3810	8.2794 559.8497	-0.0894 3.2807	0.9318 8.0627	5605.5373 268.5435	13869.5413 3.9716	1.9490 1.1955	1.9419 -1.2850	1.9492
10	22.8016 1.1600	7.0920 87.3766	8.7641 585.7465	0.4015 3.5212	0.9660 8.0754	5797.9497 269.3114	14403.1495 4.0337	1.9486 1.2057	1.9449 -0.8042	1.9502

NACAL 292 RUN 93 DATE 20 OCT 80 TIME 03.55 RFCOMP. NO. 1 DISK 1 PAGE 2  
JOB NO. 11 LDGR ACCT 31302 CONTRACT 1631 SUB ACCT 10001 ACQ DATE 20 AUG 80 23.07

MOD 82 ALPHA WIND ON RUN, AUGMENTOR 1, C/B=60 DEG, FWD=46 DEG, AFT=30 DEG,  
MEAN=38 DEG, CMU=4

DATA POINT 1

456

-0.2530  
0.3890 -0.0222  
0.3835 0.1141  
-0.0175 -0.0713  
0.1330 0.1044  
0.0335 -2.1536  
0.0012  
0.2393 -0.9533  
0.4098  
0.4427 0.4202  
0.4421 0.4373  
0.4321 0.1006  
0.4350 0.1078  
0.4306 0.1411  
0.1616 0.1268 0.1206 0.3836 0.1467 0.1392 0.3811 0.1305 0.1417 0.3935  
-0.7236 0.3555  
-1.5535  
-1.2944 0.3729  
0.1181  
0.3669  
0.3266  
0.3816  
0.3706



NACAL 292 RUN 93 DATE 20 OCT 80 TIME 03.58 RECOMP. NO. 1 DISK 1 PAGE 16

JOB NO. 11 LDGR ACCT 31302 CONTRACT 1631 SUB ACCT 10001 ACQ DATE 20 AUG 80 23.18

MOD 82 ALPHA WIND ON RUN, AUGMENTOR 1, C/B=60 DEG, FWD=46 DEG, AFT=30 DEG,  
MEAN=38 DEG, CMU=4

DATA POINT 8

-0.3240

0.3789 -0.0460

0.3753 0.0765

-0.0138 -0.1296

-0.1772 -0.0165

-0.1961 -1.8860

-0.4895

-0.6869 0.4092

-0.0482 -0.8794

-1.2907

0.2345

0.4095 0.4202

-1.1410 0.3629

0.4362 0.4385

0.4298 0.0923

0.1198

0.3572

0.4313 0.1145

0.3319

0.4310 0.1678

0.3744  
0.3750

-0.0171 -0.1515 -0.1497 0.3717 -0.0085 0.0410 0.3848 0.0584 0.0646 0.3860

458



ACAL 292    RUN 95    DATE 20 OCT 80    TIME 04.24    RECOMP. NO. 1    DISK 1    PAGE 22

DB NO. 11    LDGR ACCT 31302    CONTRACT 1631    SUB ACCT 10001    ACO DATE 21 AUG 80 18.01

MOD 84 ALPHA WIND ON RUN, AUGMENTOR 1, C/B=60 DEG, FWD=32 DEG, AFT=32 DEG,  
MEAN=32 DEG, CMU=0

P<sub>T</sub><sub>S</sub>    P<sub>A</sub>  
14.97    14.208

SUMMARY PAGE

T NO	ALPHA H PHI	Q H THETA	CLH THRUST	CDH DELAL	CMH WFT	YM THTH	RL CMUTH	PTPFCH CDR	PTPCRH CDHR	PTPACH
1	0.1747 0.8800	15.0515 48.7646	0.5102 96.1507	0.4472 0.2288	0.0410 0.2696	-661.6932 0.7650	1846.7758 0.0053	0.9886 0.0190	0.9955 0.4282	1.0012
2	-3.6840 0.8800	15.2854 38.9484	0.3288 75.7792	0.4068 0.1429	-0.0526 0.4121	-722.2404 1.0683	1378.0002 0.0073	0.9900 0.0288	0.9978 0.3780	1.0023
3	-7.7388 0.8800	15.6516 22.1877	0.1503 58.6617	0.3686 0.0591	-0.1524 0.3573	-642.4921 1.0126	662.8491 0.0068	0.9881 0.0248	0.9957 0.3438	1.0002
4	-11.6870 0.8800	15.4016 -9.0077	-0.0565 52.3645	0.3567 -0.0373	-0.2382 0.4155	-540.6646 0.9456	-86.1666 0.0065	0.9908 0.0290	0.9983 0.3276	1.0015
5	0.2332 0.8800	15.3551 48.9274	0.5031 96.4705	0.4384 0.2255	0.0377 0.3203	-637.2578 0.9117	1906.6131 0.0063	0.9886 0.0224	0.9960 0.4160	1.0011
6	4.1212 0.8800	15.0622 53.5367	0.6548 115.4619	0.4839 0.2977	0.1270 0.1705	-567.0818 0.5070	2366.2775 0.0035	0.9897 0.0120	0.9956 0.4718	1.0017
7	8.1205 0.8800	15.1255 55.8602	0.7782 133.8943	0.5277 0.3570	0.2120 0.4076	-534.0062 1.0195	2698.1746 0.0071	0.9941 0.0288	0.9974 0.4988	1.0035
8	11.9400 0.8800	15.1224 60.0318	0.9142 150.2450	0.5271 0.4222	0.2645 0.1286	-399.2718 0.3059	3058.1417 0.0021	0.9964 0.0090	0.9955 0.5180	1.0021
9	15.8357 0.8800	15.1066 59.5443	1.0019 165.2983	0.5891 0.4652	0.3091 0.4191	-218.7871 0.8335	3355.5698 0.0058	0.9975 0.0296	0.9971 0.5594	0.9988
10	19.8300 0.8800	15.0417 57.6938	1.1028 184.7695	0.6973 0.5164	0.3119 0.4365	-154.2798 0.9442	3592.7012 0.0066	0.9963 0.0309	0.9978 0.6663	0.9972

460

NACAL 292    RUN 95    DATE 20 OCT 80    TIME 04.20    RFCOMP. NO. 1    DISK 1    PAGE 2  
 JOB NO. 11    LDGR ACCT 31302    CONTRACT 1631    SUB ACCT 10001    ACQ DATE 21 AUG 80 17.36  
 MOD 84 ALPHA WIND ON RUN, AUGMENTOR 1, C/B=60 DEG, FWD=32 DEG, AFT=32 DEG,  
 MEAN=32 DEG, CMU=0

DATA POINT 1

0.5603

0.7554    0.6970

0.7571    0.7183

0.6825    0.6958

0.7516    0.7628

0.7293    0.6647

0.7883

0.8722    0.7131

0.7886

0.7718    0.7852

0.7758    0.7820

0.8007    0.6995

0.8423

0.7380    0.7018

0.7942    0.7078

0.7704

0.7915    0.7560

0.6987

0.7769

0.8173    0.7718

0.7035

0.7461

0.7597    0.7579    0.7628    0.7628    0.7554    0.7504    0.7529    0.7523    0.7479    0.7554

461

NACAL 292 RUN 95 DATE 20 OCT 80 TIME 04.22 RECOMP. NO. 1 DISK 1 PAGE 14  
JOB NO. 11 LDGR ACCT 31302 CONTRACT 1631 SUB ACCT 10001 ACQ DATE 21 AUG 80 17.58  
MOD 84 ALPHA WIND ON RUN, AUGMENTOR 1, C/B=60 DEG, FWD=32 DEG, AFT=32 DEG,  
MFAN=32 DEG, CMU=0

DATA POINT 7

0.5352  
0.7600 0.6965  
0.7563 0.7169  
0.7047 0.6890  
0.7094 0.7461  
0.6609 0.7144  
0.6609  
0.8305 0.7579  
0.8703  
0.8348 0.8051  
0.8190 0.8081  
0.8156 0.7322  
0.8110 0.7472  
0.8224 0.7705  
0.6995 0.7318 0.7541 0.7541 0.7392 0.7504 0.7529 0.7392 0.7579 0.7709  
0.8163 0.7050  
0.8498  
0.7330 0.6993  
0.7679  
0.7812  
0.7036  
0.7086  
0.7588

462

NACAL 292    RUN 95    DATE 20 OCT 80    TIME 04.23    RECOMP. NO. 1    DISK 1    PAGE 16  
 JOB NO. 11    LDGR ACCT 31302    CONTRACT 1631    SUB ACCT 10001    ACO DATE 21 AUG 80 17.59  
 MOD 84 ALPHA WIND ON RUN, AUGMENTOR 1, C/B=60 DEG, FWD=32 DEG, AFT=32 DEG,  
 MEAN=32 DEG, CMU=0

DATA POINT 8

463

					0.5128				
					0.7514	0.6785			
					0.7520	0.7135			
	0.6827	0.6976			0.7047	0.6757			
	0.6305		0.7019				0.8138	0.6947	
	0.5994						0.7877		
	0.7939		0.7330						
	0.8657								
	0.8444		0.8051				0.7019	0.6961	
	0.8274	0.8124							
			0.8136	0.7251			0.7599		
									0.6976
			0.8200	0.7402			0.7698		
									0.7004
			0.8223	0.7537				0.7500	
0.6939	0.6827	0.6827	0.7554	0.7181	0.7082	0.7442	0.7051	0.7293	0.7529

NACAL 292 RUN 95 DATE 20 OCT 80 TIME 04.23 RECOMP. NO. 1 DISK 1 PAGE 20

JOB NO. 11 LDGR ACCT 31302 CONTRACT 1631 SUB ACCT 10001 ACQ DATE 21 AUG 80 18.01

MOD 84 ALPHA WIND ON RUN, AUGMENTOR 1, C/B=60 DEG, FWD=32 DEG, AFT=32 DEG,  
MEAN=32 DEG, CMU=0

DATA POINT 10

0.6723

0.7480 0.6871

0.7455 0.7180

0.7016 0.6865

0.6597 0.6709

0.6765 0.6883

0.5994

0.7554 0.7280

0.8560

0.8560 0.8026

0.8360 0.8167

0.6709 0.6950

0.6721

0.6373 0.6899

0.8153 0.6947

0.6587

0.6859

0.8175 0.7015

0.8518

0.8068 0.6686

0.6900  
0.7912

0.6864 0.6982 0.6597 0.7429 0.6734 0.6783 0.7411 0.6647 0.6995 0.7641

464

ACAL 292 RUN 96 DATE 20 OCT 80 TIME 04.34 RECOMP. NO. 1 DISK 1 PAGE 22

7B NO. 11 LDGR ACCT 31302 CONTRACT 1631 SUB ACCT 10001 ACQ DATE 21 AUG 80 18.23

400 85 ALPHA WIND ON RUN, AUGMENTOR 1, C/B=60 DEG, FWD=32 DEG, AFT=32 DEG,  
MEAN=32 DEG, CMU=1

P<sub>T</sub> P<sub>A</sub>  
14.97 14.208

SUMMARY PAGE

Γ NO	ALPHA H	Θ H	CLH	CDH	CMH	YM	RL	PTPFCH	PTPCBH	PTPACH
	PHI	THETA	THRUST	DELAL	WFT	THTH	CMUTH	CDR	CDHR	
1	0.5972	14.9964	1.3895	0.0459	-0.0495	1170.9173	5228.4596	1.3805	1.3733	1.3793
	0.9500	88.1048	196.2724	0.6328	5.2746	122.0212	0.8643	0.3887	-0.3428	
2	-3.3919	15.2622	1.1557	-0.0175	-0.1432	1085.8144	4719.2568	1.3762	1.3726	1.3751
	0.9500	-89.1305	166.0784	0.5256	5.2665	121.5273	0.8458	0.3849	-0.4024	
3	-7.3371	15.2866	0.9565	-0.0923	-0.2320	1059.5501	4079.6648	1.3777	1.3756	1.3785
	0.9500	-84.4841	138.2932	0.4347	5.2544	122.6194	0.8520	0.3868	-0.4792	
4	-11.2779	15.1010	0.7988	-0.1460	-0.3288	1044.3850	3477.3169	1.3754	1.3754	1.3751
	0.9500	-79.6357	115.4464	0.3636	5.2872	122.2804	0.8601	0.3890	-0.5351	
5	0.6233	15.0616	1.4220	0.0642	-0.0460	1155.8179	5276.1210	1.3776	1.3750	1.3751
	0.9500	87.4149	201.8415	0.6481	5.2894	122.4653	0.8637	0.3899	-0.3257	
6	4.5837	14.8378	1.6083	0.1292	0.0411	1406.9116	5658.5639	1.3779	1.3750	1.3751
	0.9500	85.4039	225.3869	0.7348	5.2691	122.0222	0.8735	0.3917	-0.2624	
7	8.5545	14.5687	1.8654	0.2346	0.1405	1521.3169	6155.6919	1.3769	1.3743	1.3753
	0.9500	82.8451	258.4063	0.8582	5.2637	121.8656	0.8885	0.3951	-0.1604	
8	12.4769	14.8183	2.1104	0.3253	0.2114	1665.7074	6675.9409	1.3793	1.3746	1.3789
	0.9500	81.2355	297.8892	0.9732	5.2675	122.2842	0.8765	0.3923	-0.0669	
9	16.4699	14.6041	2.3401	0.4299	0.2973	1991.0396	7078.0619	1.3812	1.3748	1.3841
	0.9500	79.5902	327.1178	1.0852	5.3007	123.4714	0.8980	0.3981	0.0317	
10	20.4074	14.7724	2.4805	0.5435	0.3688	2307.2416	7364.8228	1.3788	1.3730	1.3799
	0.9500	77.6406	353.1526	1.1585	5.2687	122.4457	0.8804	0.3936	0.1498	

405

0

NACAL 292      RUN 96      DATE 20 OCT 80      TIME 04.30      RECOMP. NO. 1      DISK 1      PAGE 2  
JOB NO. 11      LDGR ACCT 31302      CONTRACT 1631      SUB ACCT 10001      ACO DATE 21 AUG 80 18.08

MOD 85 ALPHA WIND ON RUN, AUGMENTOR 1, C/B=60 DEG, FWD=32 DEG, AFT=32 DEG,  
MEAN=32 DEG, CMU=1

DATA POINT 1

0.5310

0.7743      0.7031

0.7764      0.7229

0.7607      0.6678

0.7380      0.7492

0.7026      -0.0684

0.7573

0.8865      -0.0348

0.8447

0.8133      0.8548

0.8138      0.8132

0.8210      0.7979

0.6257      0.8707

0.8368      0.7767

0.3541      0.6756

0.5131

0.4578      0.6818

0.7561

0.6735

0.8138

0.6982  
0.7630

0.7716      0.7530      0.7523      0.7853      0.7610      0.7393      0.7666      0.7542      0.7405      0.7623

MACAL 292    RUN 96    DATE 20 OCT 80    TIME 04.33    RECOMP. NO. 1    DISK 1    PAGE 14  
 JOB NO. 11    LDGR ACCT 31302    CONTRACT 1631    SUB ACCT 10001    ACO DATE 21 AUG 80 18.19

MOD 85 ALPHA WIND ON RUN, AUGMENTOR 1, C/B=60 DEG, FWD=32 DEG, AFT=32 DEG,  
 MEAN=32 DEG, CMU=1

DATA POINT 7

0.4992

0.7593    0.6786

0.7584    0.7148

0.7405    0.6596

0.6337    0.6946  
 0.5734    -0.0488  
 0.5672  
 0.7865    0.0540  
 0.8657  
 0.8511    0.8474  
 0.8351    0.8212

0.3497    0.6586

0.4908

0.4262    0.6725

0.8183    0.7760

0.7483

0.6710

0.8292    0.8652

0.7985

0.8322    0.7693

0.6716  
 0.7536

0.6324    0.6188    0.6616    0.7536    0.7001    0.6765    0.7480    0.7051    0.6958    0.7387

467

NACAL 292 RUN 96 DATE 20 OCT 80 TIME 04.33 RECOMP. NO. 1 DISK 1 PAGE 16  
 JOB NO. 11 LDGR ACCT 31302 CONTRACT 1631 SUB ACCT 10001 ACQ DATE 21 AUG 80 18.20

MOD 85 ALPHA WIND ON RUN, AUGMENTOR 1, C/B=60 DEG, FWD=32 DEG, AFT=32 DEG,  
 MEAN=32 DEG, CMU=1

DATA POINT 8

468

					0.5401				
					0.7540		0.6843		
					0.7574		0.7087		
					0.7369		0.6491		
	0.5691	0.6150							
	0.5647		0.0782						
	0.4951						0.3379		0.6523
	0.7082		0.1112				0.4970		
	0.8510								
	0.8579		0.8412				0.4373		0.6684
	0.8494	0.8323							
			0.8297	0.7767			0.7531		
									0.6662
			0.8373	0.8619			0.8047		
			0.8410	0.7743					0.6752
									0.7565
0.5430	0.5094	0.5858	0.7617	0.6107	0.6417	0.7517	0.6604	0.6685	0.7443

NACAL 292    RUN 96    DATE 20 OCT 80    TIME 04.34    RECOMP. NO. 1    DISK 1    PAGE 20  
 JOB NO. 11    LGGR ACCT 31302    CONTRACT 1631    SUB ACCT 10001    ACQ DATE 21 AUG 80 18.22  
 MOD 85 ALPHA WIND ON RUN, AUGMENTOR 1, C/B=60 DEG, FWD=32 DEG, AFT=32 DEG,  
 MEAN=32 DEG, CMU=1

DATA POINT 10

0.5984

0.7545    0.6307

0.7596    0.7116

0.6668    0.6861

0.4075    0.4429  
 0.3510    -0.0287  
 0.3075  
 0.2541  
 0.3373  
 0.8593    0.8586  
 0.8663    0.8513

0.3280    0.5949

0.4572

0.4721    0.6690

0.8433    0.7428

0.7636

0.8548    0.8601

0.6681

0.8465    0.7811

0.8113

0.7695    0.6869

0.4783    0.3907    0.4181    0.7617    0.4628    0.5697    0.7554    0.6144    0.6219    0.7498

469

ACAL 292 RUN 97 DATE 20 OCT 80 TIME 04.45 RECOMP. NO. 1 DISK 1 PAGE 24

JB NO. 11 LDGR ACCT 31302 CONTRACT 1631 SUB ACCT 10001 ACQ DATE 21 AUG 80 18.44

MOD 86 ALPHA WIND ON RUN, AUGMENTOR 1, C/B=60 DEG, FWD=32 DEG, AFT=32 DEG,  
MEAN=32 DEG, CMU=2 Q=15.4

P<sub>TS</sub> P<sub>A</sub>  
15.00 14.208

SUMMARY PAGE

T NO	ALPHA H PHI	Q H THETA	CLH THRUST	CDH DELAL	CMH WFT	YM THTH	RL CMUTH	PTPFCH CDR	PTPCBH CDHR	PTPACH
1	0.9618 0.9500	15.1659 -79.6844	2.3941 347.4375	-0.4357 1.0500	-0.1002 8.0709	3701.0255 260.2640	9228.0669 1.8229	1.9000 0.5953	1.8944 -1.0310	1.8998
2	-2.9889 0.9500	14.9978 -75.4060	2.1779 317.7528	-0.5670 0.9516	-0.1577 8.0685	3435.2267 260.6668	8875.7460 1.8462	1.9049 0.5995	1.8943 -1.1665	1.8954
3	-6.9407 0.9500	14.9641 -72.3757	2.1112 312.0609	-0.6707 0.9186	-0.2314 8.0848	3226.8216 261.6494	8504.8995 1.8573	1.9019 0.6020	1.8948 -1.2727	1.9009
4 470	-10.8425 0.9500	15.1303 -66.7976	1.8727 290.1628	-0.8025 0.8135	-0.2849 8.0552	3367.8272 260.3029	7675.0354 1.8310	1.9036 0.5969	1.8939 -1.3995	1.8992
5	0.9995 0.9500	15.0354 -79.4643	2.4008 345.6480	-0.4465 1.0521	-0.0901 8.0606	3679.2539 261.2603	9167.6937 1.8459	1.9035 0.5996	1.8957 -1.0462	1.8983
6	0.9827 0.9500	15.1076 -79.6900	2.4111 348.5437	-0.4386 1.0569	-0.0991 8.0540	3702.0644 261.3473	9260.1121 1.8375	1.9017 0.5981	1.8992 -1.0367	1.8946
7	4.9446 0.9500	14.9819 -83.6392	2.6705 378.9877	-0.2776 1.1759	-0.0206 8.0135	3865.0270 259.8900	9664.8877 1.8426	1.9028 0.5980	1.8946 -0.8957	1.8906
8	8.9897 0.9500	14.7630 -87.0678	2.9740 413.8728	-0.1523 1.3156	0.0512 8.0453	4100.7224 261.2770	10044.0865 1.8799	1.8993 0.6053	1.8934 -0.7576	1.8995
9	12.9021 0.9500	14.8856 89.9139	3.2544 456.0584	0.0048 1.4485	0.1271 8.0293	4376.4163 261.1632	10655.7420 1.8636	1.8997 0.6019	1.8959 -0.5970	1.9018
10	16.9746 0.9500	15.1166 86.6288	3.5264 502.7119	0.2077 1.5849	0.2321 8.0288	4555.3631 261.0610	11356.3661 1.8344	1.8978 0.5972	1.8945 -0.3895	1.8992

0

NACAL 292    RUN 97    DATE 20 OCT 80    TIME 04.40    RECOMP. NO. 1    DISK 1    PAGE 2  
JOB NO. 11    LDGR ACCT 31302    CONTRACT 1631    SUB ACCT 10001    ACQ DATE 21 AUG 80 18.28  
MOD 86 ALPHA WIND ON RUN, AUGMENTOR 1, C/B=60 DEG, FWD=32 DEG, AFT=32 DEG,  
MEAN=32 DEG, CMU=2 Q=15.4

DATA POINT 1

471

				0.4555					
				0.7810	0.6658				
				0.7832	0.6760				
				0.7019	0.6201				
	0.7140	0.6823				0.0149	0.5691		
	0.6606	-0.8656							
	0.6781					0.0720			
	0.8781	-0.8204							
	0.8781					-0.0836	0.6303		
	0.8406	0.8172							
	0.8329	0.8340							
		0.8340	0.7761			0.6924		0.5477	
		0.8378	1.0142			0.3079			
									0.5561
			0.8428	0.6899			0.7751		
0.7351	0.6978	0.7225	0.7904	0.6916	0.6792	0.7830	0.7009	0.6860	0.7880

NACAL 292 RUN 97 DATE 20 OCT 80 TIME 04.43 RECOMP. NO. 1 DISK 1 PAGE 16

JOB NO. 11 LDGR ACCT 31302 CONTRACT 1631 SUB ACCT 10001 ACQ DATE 21 AUG 80 18.41

MOD 86 ALPHA WIND ON RUN, AUGMENTOR 1, C/B=60 DEG, FWD=32 DEG, AFT=32 DEG,  
MEAN=32 DEG, CMU=2 Q=15.4

DATA POINT 8

472

					0.4845				
					0.7643		0.6420		
					0.7653		0.6976		
					0.6936		0.6487		
	0.5997	0.6363							
	0.4915		-0.8460				0.0385		0.5895
	0.4499								
	0.7053		-0.7122				-0.0146		
	0.8655								
	0.8678		0.8159				-0.1826		0.6329
	0.8558	0.8442							
			0.8381	0.7619			0.6865		
									0.6410
			0.8443	1.0315			0.8049		
									0.6419
			0.8381	0.6786				0.7622	
0.5456	0.5568	0.6345	0.7594	0.6307	0.6351	0.7519	0.6444	0.6574	0.7780

NACAL 292 RUN 97 DATE 20 OCT 80 TIME 04.44 RFCOMP. NO. 1 DISK 1 PAGE 18

JOB NO. 11 LDGR ACCT 31302 CONTRACT 1631 SUB ACCT 10001 ACQ DATE 21 AUG 80 18.41

MOD 86 ALPHA WIND ON RUN, AUGMENTOR 1, C/B=60 DEG, FWD=32 DEG, AFT=32 DEG,  
MEAN=32 DEG, CMU=2 Q=15.4

DATA POINT 9

0.4909

0.7699 0.6590

0.7688 0.6945

0.7016 0.6624

0.4865 0.5692

0.4952 -0.5992

0.3101

0.6208

0.8293

0.8781

0.8718 0.8579

0.8519 0.7684

0.0428 0.5375

-0.0158

-0.1252 0.6516

0.6955

0.6549

0.8539 1.0140

0.8171

0.8519 0.7044

0.6776  
0.7708

0.4362 0.4375 0.4654 0.7681 0.5462 0.6040 0.7643 0.6301 0.6413 0.7780

473

20

NACAL 292 RUN 97 DATE 20 OCT 80 TIME 04.44 RECOMP. NO. 1 DISK 1 PAGE 22  
JOB NO. 11 LDGR ACCT 31302 CONTRACT 1631 SUB ACCT 10001 ACO DATE 21 AUG 80 18.43  
MOD 86 ALPHA WIND ON RUN, AUGMENTOR 1, C/B=60 DEG, FWD=32 DEG, AFT=32 DEG,  
MEAN=32 DEG, CMU=2 Q=15.4

DATA POINT 11

474

0.5068  
0.7875 0.6800  
0.7929 0.7535  
0.6295 0.6748  
0.2815 0.3766  
0.2802 -0.5638  
0.2349  
0.4667 -0.3475  
0.7364  
0.8822 0.8905  
0.9015 0.8959  
0.8820 0.7347  
0.8910 1.0673  
0.8862 0.7511  
0.7177  
0.8524  
0.6342  
0.6596  
0.7183  
0.8187  
0.3567 0.2274 0.1994 0.7979 0.4058 0.5518 0.7880 0.6090 0.6090 0.7929

CAL 292 RUN 97 DATE 20 OCT 80 TIME 04.45 RECOMP. NO. 1 DISK 1 PAGE 25  
 IB NO. 11 LDGR ACCT 31302 CONTRACT 1631 SUB ACCT 10001 ACO DATE 21 AUG 80 18.44

ND 86 ALPHA WIND ON RUN, AUGMENTOR 1, C/B=60 DEG, FWD=32 DEG, AFT=32 DEG,  
 MEAN=32 DEG, CMU=2 Q=15.4

SUMMARY PAGE

NO	ALPHA H PHI	Q H THETA	CLH THRUST	CDH DELAL	CMH WFT	YM THTH	RL CMUTH	PTPFCH CDR	PTPCBH CDHR	PTPACH
11	20.9727 0.9500	14.9510 83.3869	3.8311 542.8394	0.4441 1.7421	0.2867 8.0123	4908.9419 260.7370	11658.1574 1.8524	1.9023 0.5997	1.8921 -0.1556	1.8970

NACAL 292 RUN 98 DATE 20 OCT 80 TIME 04.53 RFCOMP. NO. 1 DISK 1 PAGE 2

JOB NO. 11 LDGR ACCT 31302 CONTRACT 1631 SUB ACCT 10001 ACQ DATE 21 AUG 80 18.49

MJD 87 ALPHA WIND ON RUN, AUGMENTOR 1, C/B=60 DEG, FWD=32 DEG, AFT=32 DEG,  
MEAN=32 DEG, CMU=4 Q=7.7

DATA POINT 1

476

					0.0911				
					0.3977	0.2242			
					0.3960	0.2389			
					0.2724	0.1678			
	0.2690	0.2473							
	0.2120		-1.2976				-0.3888	0.1877	
	0.2176								
	0.3757		-1.2604				-0.4333		
	0.4459								
	0.4525			0.3819			-0.5192	0.3225	
	0.4405	0.4319							
			0.4322	0.3331			0.2917		
								0.3288	
			0.4343	0.6606			0.4268		
			0.4352	0.3324				0.3616	
								0.4029	
0.2721	0.2790	0.2703	0.3788	0.2864	0.2777	0.386	0.2951	0.2976	0.3850

NACAL 292 RUN 98 DATE 20 OCT 80 TIME 04.55 RECOMP. NO. 1 DISK 1 PAGE 12

JOB NO. 11 LDGR ACCT 31302 CONTRACT 1631 SUB ACCT 10001 ACQ DATE 21 AUG 80 19.03

MOD 87 ALPHA WIND ON RUN, AUGMENTOR 1, C/B=60 DEG, FWD=32 DEG, AFT=32 DEG,  
MFAN=32 DFG, CMU=4 Q=7.7

DATA POINT 6

0.1001

0.3940 0.2845

0.3958 0.3096

0.2979 0.2279

0.1748 0.2579

0.1674 -1.1903

0.0827

0.2827 -1.1324

0.4177

0.4500 0.3912

0.4499 0.4413

-0.3413 0.1934

-0.4510

-0.5960 0.2589

0.4339 0.3635

0.2894

0.2851

0.4419 0.7057

0.4237

0.4356 0.3122

0.3290  
0.3923

0.1878 0.1636 0.2046 0.3869 0.2411 0.2405 0.3831 0.2833 0.2666 0.3769

477

NACAL 292    RUN 98    DATE 20 OCT 80    TIME 04.55    RECOMP. NO. 1    DISK 1    PAGE 14  
 JOB NO. 11    LDGR ACCT 31302    CONTRACT 1631    SUB ACCT 10001    ACC DATE 21 AUG 80 19.04  
 MOD 87 ALPHA WIND ON RUN, AUGMENTOR 1, C/B=60 DEG, FWD=32 DEG, AFT=32 DEG,  
 MFAN=32 DEG, CMU=4 Q=7.7

DATA POINT 7

478

					0.1484				
					0.3938	0.3043			
					0.3960	0.3427			
					0.2997	0.2858			
	0.1345	0.2151					-0.2998	0.1430	
	0.1252		-1.0318						
	-0.0091						-0.5046		
	0.2232		-1.0624						
	0.3789								
	0.4471		0.3968				-0.5540	0.2846	
	0.4525	0.4445							
			0.4374	0.3701			0.2897		
								0.2928	
			0.4400	0.7070			0.4235		
									0.3154
			0.4374	0.3060				0.4012	
0.1481	0.1165	0.1178	0.3856	0.1940	0.2256	0.3931	0.2511	0.2492	0.3825



ACAL 292 RUN 98 DATE 20 OCT 80 TIME 04.56 RECOMP. NO. 1 DISK 1 PAGE 20

DB NO. 11 LDGR ACCT 31302 CONTRACT 1631 SUB ACCT 10001 ACQ DATE 21 AUG 80 19.06

MOD 87 ALPHA WIND ON RUN, AUGMENTOR 1, C/B=60 DEG, FWD=32 DEG, AFT=32 DEG,  
MEAN=32 DEG, CMU=4 Q=7.7

P<sub>T</sub> P<sub>A</sub>  
14.60 14.208

SUMMARY PAGE

T NO	ALPHA H PHI	Q H THETA	CLH THRUST	CDH DELTA	CMH WFT	YM THTH	RL CMUTH	PTPFCH CDR	PTPCBH CDHR	PTPACH
1	1.8106 0.9500	7.8204 -73.7280	4.5334 349.1374	-1.3232 1.8214	-0.0576 8.0501	4251.6072 267.1248	8482.2854 3.6236	1.9539 0.8414	1.9457 -2.1647	1.9489
2	-2.1643 0.9500	7.7444 -69.2579	4.2367 330.2941	-1.6044 1.6868	-0.0639 8.0222	4204.2503 266.2933	7975.7745 3.6525	1.9472 0.8439	1.9463 -2.4484	1.9440
3	-6.5205 0.9500	7.7809 -61.4351	3.4790 290.1578	-1.8940 1.3858	-0.1913 8.0265	4294.2165 266.8785	6920.5137 3.6434	1.9518 0.8431	1.9443 -2.7372	1.9524
4	-10.4544 0.9500	7.8297 -54.8237	2.8999 261.8477	-2.0439 1.1624	-0.2957 8.0062	4390.6259 266.2037	6082.7962 3.6069	1.9530 0.8379	1.9459 -2.8818	1.9440
5	5.8242 0.9500	7.6661 -78.2203	4.9138 362.2583	-1.0247 1.9922	-0.0206 7.9890	4330.0088 265.5482	8724.4350 3.6795	1.9406 0.8456	1.9449 -1.8704	1.9464
6	9.7695 0.9500	7.7177 -81.1822	5.0678 372.6106	-0.7861 2.0764	0.0221 7.9830	4518.4330 265.6683	8926.5944 3.6565	1.9462 0.8424	1.9460 -1.6286	1.9478
7	13.7562 0.9500	7.5823 -84.7837	5.4561 391.0813	-0.4981 2.2557	0.1057 7.9799	4641.0639 265.8040	9271.0531 3.7237	1.9466 0.8497	1.9492 -1.3478	1.9487
8	17.8325 0.9500	7.6280 -89.1250	5.8440 419.7132	-0.0892 2.4554	0.1095 7.9559	4715.7598 264.6870	9523.7263 3.6859	1.9416 0.8448	1.9441 -0.9340	1.9451
9	22.0552 0.9500	7.3849 86.4514	6.5170 453.9491	0.4041 2.7786	0.2185 7.9822	4719.2805 266.0413	9988.3995 3.8267	1.9469 0.8618	1.9470 -0.4577	1.9471

480

NACAL 292 RUN 98 DATE 20 OCT 80 TIME 04.53 RFCOMP. NO. 1 DISK 1 PAGE 2  
JOB NO. 11 LDGR ACCT 31302 CONTRACT 1631 SUB ACCT 10001 ACQ DATE 21 AUG 80 18.49

MOD 87 ALPHA WIND ON RUN, AUGMENTOR 1, C/B=60 DEG, FWD=32 DEG, AFT=32 DEG,  
MEAN=32 DEG, CMU=4 Q=7.7

DATA POINT 1

0.0911

0.3977 0.2742

0.3960 0.2389

0.2724 0.1678

0.2690 0.2473

0.2120 -1.2976

0.2176

0.3757 -1.2604

0.4469

0.4525 0.3819

0.4405 0.4319

-0.3888 0.1877

-0.4333

-0.5192 0.3225

0.4322 0.3331

0.2917

0.3288

0.4343 0.6606

0.4268

0.4352 0.3324

0.4020 0.3616

0.2721 0.2790 0.2703 0.3788 0.2864 0.2777 0.3869 0.2951 0.2976 0.3850

481

NACAL 292 RUN 98 DATE 20 OCT 80 TIME 04.55 RECOMP. NO. 1 DISK 1 PAGE 12  
 JOB NO. 11 LDGR ACCT 31302 CONTRACT 1631 SUB ACCT 10001 ACQ DATE 21 AUG 80 19.03

MOD 87 ALPHA WIND ON RUN, AUGMENTOR 1, C/B=60 DEG, FWD=32 DEG, AFT=32 DEG,  
 MFAN=32 DFG, CMU=4 Q=7.7

DATA POINT 6

0.1001

0.3940 0.2845

0.3958 0.3096

0.2979 0.2279

0.1748 0.2579

0.1674 -1.1903

0.0827

0.2827 -1.1324

0.4177

0.4500 0.3912

0.4499

0.4413

-0.3413 0.1934

-0.4510

-0.5960 0.2589

0.4339 0.3635

0.2894

0.2851

0.4419 0.7057

0.4237

0.4356 0.3122

0.3290  
0.3923

0.1878 0.1636 0.2046 0.3869 0.2411 0.2405 0.3831 0.2833 0.2666 0.3749

482

C-6

MACAL 292 RUN 98 DATE 20 OCT 80 TIME 04.55 RECOMP. NO. 1 DISK 1 PAGE 14  
JOB NO. 11 LDGR ACCT 31302 CONTRACT 1631 SUB ACCT 10001 ACQ DATE 21 AUG 80 19.04

MOD 87 ALPHA WIND ON RUN, AUGMENTOR 1, C/B=60 DEG, FWD=32 DEG, AFT=32 DEG,  
MFAN=32 DFG, CMU=4 Q=7.7

DATA POINT 7

483

					0.1484				
					0.3938		0.3043		
					0.3960		0.3427		
					0.2997		0.2858		
	0.1345	0.2151							
	0.1252		-1.0318				-0.2998		0.1430
	-0.0091								
	0.2212		-1.0824				-0.5046		
	0.3789								
	0.4471		0.3968				-0.5540		0.2846
	0.4525	0.4445							
			0.4374	0.3701			0.2897		
									0.2928
			0.4400	0.7070			0.4235		
			0.4374	0.3060					0.3154
								0.4012	
0.1481	0.1165	0.1178	0.3856	0.1940	0.2256	0.3931	0.2511	0.2492	0.3825



ICAL 292 RUN 99 DATE 20 OCT 80 TIME 05.07 RECOMP. NO. 1 DISK 1 PAGE 22

IB NO. 11 LDGR ACCT 31302 CONTRACT 1631 SUB ACCT 10001 ACO DATE 21 AUG 80 21.45

MOD 88 ALPHA WIND ON RUN, AUGMENTOR 2, C/B=60 DEG, FWD=32 DEG, AFT=32 DEG,  
MEAN=32 DEG, CMU=0

P<sub>T</sub> P<sub>A</sub>  
14.74 14.218

SUMMARY PAGE

NO	ALPHA H PHI	Ø H THETA	CLH THRUST	CDH DELAL	CMH WFT	YM TH1H	RL CMUTH	PTPFCH CDR	PTPCBH CDHR	PTPACH
1	0.2384 0.9500	10.6041 51.7179	0.3646 66.8814	0.2878 0.2369	0.0321 0.5893	-419.4241 1.4445	1377.1774 0.0100	0.9932 0.0360	0.9964 0.2517	1.0006
2	-3.8267 0.9500	10.5933 33.4025	0.1740 45.4769	0.2639 0.1066	-0.0713 0.5967	-441.8695 1.4533	689.8222 0.0101	0.9934 0.0365	0.9968 0.2274	1.0012
3	-7.8793 0.9500	10.6798 -4.6761	-0.0214 38.1611	0.2623 -0.0263	-0.1819 0.1511	-390.2229 0.3875	-77.3490 0.0026	0.9930 0.0092	0.9967 0.2531	1.0008
4	-11.9403 0.9500	10.7965 -48.7079	-0.3428 66.8919	0.3011 -0.2405	-0.2588 0.4659	-332.2508 1.3260	-1297.2947 0.0090	0.9909 0.0282	0.9952 0.2728	0.9988
5	0.1471 0.9500	10.7537 50.7128	0.3510 66.2110	0.2871 0.2275	0.0269 0.5249	-363.5874 1.5247	1322.0278 0.0104	0.9913 0.0319	0.9946 0.2552	0.9989
6	4.1483 0.9500	10.5499 59.7140	0.5556 92.1650	0.3245 0.3682	0.1307 0.1578	-300.8472 0.4224	1999.8590 0.0029	0.9944 0.0097	0.9967 0.3148	1.0012
7	8.1639 0.9500	10.5143 64.8721	0.7234 114.0610	0.3393 0.4839	0.2330 0.2505	-251.4812 0.5596	2471.8307 0.0039	0.9961 0.0154	0.9970 0.3238	1.0014
8	12.1086 0.9500	10.4207 67.9840	0.9339 142.5170	0.3776 0.6300	0.3264 0.2915	-144.5756 0.6582	3057.3110 0.0046	0.9965 0.0180	0.9966 0.3596	1.0014
9	16.0899 0.9500	10.2637 67.8567	1.1466 172.4977	0.4666 0.7820	0.3727 0.1389	-87.8057 0.3777	3970.8681 0.0027	0.9964 0.0086	0.9954 0.4579	0.9976
10	19.9988 0.9500	10.3357 62.7171	1.1475 181.1751	0.5918 0.7926	0.3413 0.5342	-16.3219 1.6032	4088.2627 0.0114	0.9947 0.0331	0.9944 0.3586	0.9960

485

NACAL 292     RUN 99     DATE 20 OCT 80     TIME 05.03     RECOMP. NO. 1     DISK 1     PAGE 2

JOB NO. 11     LDGR ACCT 31302     CONTRACT 1631     SUB ACCT 10001     ACQ DATE 21 AUG 80 21.28

MOD 88     ALPHA WIND ON RUN, AUGMENTOR 2, C/B=60 DEG, FWD=32 DEG, AFT=32 DEG,  
 MEAN=32 DEG, CMU=0

DATA POINT 1

0.3939

0.5164     0.4771

0.5148     0.4894

0.4717     0.4737

0.5217     0.5130     0.5049     0.5198     0.5328     0.4726

0.5074     0.4777

0.4913     0.4969     0.5526

0.5117     0.4981     0.4760

0.5260

0.5392     0.5328

0.4560

0.5022     0.5288     0.4806

0.5219     0.5313     0.5244     0.5452     0.4942

0.5304

0.5501     0.5145     0.4814

0.5556     0.5231     0.5119

0.5341     0.5310     0.5254     0.5099     0.5155     0.5142     0.5105     0.5272     0.5179     0.4981

986

MACAL 292      RUN 99      DATE 20 OCT 80      TIME 05.06      RECOMP. NO. 1      DISK 1      PAGE 14  
 JOB NO. 11      LDGR ACCT 31302      CONTRACT 1631      SUB ACCT 10001      ACQ DATE 21 AUG 80 21.41  
 MOD 88    ALPHA WIND ON RUN, AUGMENTOR 2, C/B=60 DEG, FWD=32 DEG, AFT=32 DEG,  
 MEAN=32 DEG, CMU=0

DATA POINT 7

							0.3905			
							0.5087	0.4623		
							0.5059	0.4765		
		0.4932	0.4944	0.5025	0.5031		0.4686	0.4587		
	0.4919				0.4876			0.5334	0.4688	
	0.4894									
	0.4919				0.5105			0.5514		
	0.5031									
	0.5541				0.5303			0.4932	0.4745	
	0.5376									
	0.5401									
		0.5421	0.5375	0.5219				0.5156		
					0.5459	0.4963			0.4708	
								0.5239		
					0.5493	0.5048				
									0.4743	
									0.5076	
					0.5536	0.5167				
	0.4907	0.5000	0.5297	0.5062	0.5093	0.5136	0.5037	0.5117	0.5136	0.5031

NACAL 292 RUN 99 DATE 20 OCT 80 TIME 05.06 RECOMP. NO. 1 DISK 1 PAGE 16  
JOB NO. 11 LDGR ACCT 31302 CONTRACT 1631 SUB ACCT 10001 ACO DATE 21 AUG 80 21.42

MOD 88 ALPHA WIND ON RUN, AUGMENTOR 2, C/B=60 DEG, FWD=32 DEG, AFT=32 DEG,  
MEAN=32 DEG, CMU=0

DATA POINT 8

0.3894  
0.5087 0.4601  
0.5073 0.4789  
0.4732 0.4640  
0.4969 0.4981 0.5099 0.5012 0.4894 0.5359 0.4768  
0.4901 0.4640 0.4808 0.4932 0.5477  
0.4663 0.5416 0.5359 0.4944 0.4745  
0.5635 0.5544  
0.5518 0.5419 0.5241 0.5478 0.4942 0.5153 0.4775  
0.5532 0.5033 0.5248 0.4758  
0.5504 0.5160 0.5114  
0.4721 0.4554 0.4919 0.5037 0.5080 0.5117 0.5025 0.5142 0.5105 0.5043

488

NACAL 292 RUN 99 DATE 20 OCT 80 TIME 05.07 RECOMP. NO. 1 DISK 1 PAGE 20  
 JOB NO. 11 LDGR ACCT 31302 CONTRACT 1631 SUB ACCT 10001 ACQ DATE 21 AUG 80 21.44  
 MOD 88 ALPHA WIND ON RUN, AUGMENTOR 2, C/B=60 DEG, FWD=32 DEG, AFT=32 DEG,  
 MEAN=32 DEG, CMU=0

DATA POINT 10

								0.4395		
								0.5067	0.4689	
								0.5102	0.4860	
								0.4606	0.4523	
		0.5031	0.4901	0.4913	0.4678				0.4640	0.4644
		0.4857			0.4628					
		0.4597								
		0.4746			0.4932				0.4709	
		0.4733								
		0.5282			0.5564				0.4448	0.4701
		0.5740								
		0.5630								
		0.5620	0.5493	0.5242					0.4458	
489					0.5484	0.4671				0.4689
					0.5555	0.4704			0.5714	
										0.4720
					0.5481	0.4458				0.5328
	0.4721	0.4467	0.4560	0.5111	0.4671	0.4609	0.5037	0.4671	0.4795	0.4944

ACAL 292 RUN 100 DATE 20 OCT 80 TIME 05.16 RECOMP. NO. 1 DISK 1 PAGE 22

DB NO. 11 LDGR ACCT 31302 CONTRACT 1631 SUB ACCT 10001 ACQ DATE 21 AUG 80 22.09

MOD 89 ALPHA WIND ON RUN, AUGMENTOR 2, C/B=60 DEG, FWD=32 DEG, AFT=32 DEG,  
MEAN=32 DEG, CMU=1

P<sub>T</sub> P<sub>A</sub>  
14.75 14.218

SUMMARY PAGE

T NO	ALPHA H PHI	Q H THETA	CLH THRUST	CDH DELAL	CMH WFT	YM THTH	RL CMUTH	PTPFCH CDR	PTPCBH CDHR	PTPACH
1	0.9094 0.9500	10.5292 -86.2494	1.4583 209.1168	-0.0956 0.9434	0.0369 5.3785	1507.1464 127.5851	5447.4488 0.8916	1.3993 0.3297	1.3997 -0.4254	1.4035
2	-3.1636 0.9500	10.2204 -81.4947	1.2182 172.7454	-0.1821 0.7861	-0.0531 5.3727	1418.6449 127.3280	4738.3297 0.9078	1.4001 0.3328	1.3983 -0.5150	1.4003
3	-7.1259 0.9500	10.2636 -77.1181	1.0369 148.2129	-0.2371 0.6693	-0.1571 5.3820	1342.7869 127.4570	4111.9222 0.9147	1.3998 0.3345	1.3971 -0.5716	1.4002
4 490	-11.1534 0.9500	10.4766 -70.7179	0.8037 121.1186	-0.2812 0.5211	-0.2641 5.3766	1420.3225 127.4212	3341.8976 0.8958	1.3999 0.3308	1.3977 -0.6120	1.4006
5	0.9671 0.9500	10.4829 -86.7002	1.4774 210.6180	-0.0851 0.9563	0.0461 5.4004	1513.7283 128.2367	5481.2814 0.9010	1.4007 0.3323	1.3990 -0.4175	1.4023
6	4.9176 0.9500	10.7031 89.6627	1.7127 248.8816	0.0100 1.1136	0.1480 5.4072	1574.5278 128.3853	6283.7765 0.8835	1.4004 0.3294	1.3982 -0.3194	1.4017
7	9.0140 0.9500	10.5261 86.9550	2.0469 292.9344	0.1088 1.3354	0.2802 5.3712	1592.1427 127.2626	7163.6535 0.8905	1.3997 0.3301	1.3973 -0.2212	1.3971
8	12.9596 0.9500	10.4991 84.2267	2.3757 340.3569	0.2402 1.5599	0.3704 5.3819	1742.2162 127.6998	7914.2204 0.8959	1.4018 0.3312	1.3974 -0.0910	1.3974
9	17.1457 0.9500	10.5637 81.6511	2.6721 387.3289	0.3921 1.7700	0.4722 5.3950	1979.9896 128.0402	8540.3011 0.8928	1.4007 0.3311	1.3973 0.0610	1.3975
10	21.2078 0.9500	10.8109 78.6598	2.9211 436.9633	0.5752 1.9605	0.5396 5.3963	2253.3902 127.9177	9455.9350 0.8715	1.3972 0.3275	1.3963 0.2477	1.3961

NACAL 292 RUN 100 DATE 20 OCT 80 TIME 05.14 RECOMP. NO. 1 DISK 1 PAGE 2  
JOB NO. 11 LDGR ACCT 31302 CONTRACT 1631 SUB ACCT 10001 ACQ DATE 21 AUG 80 21.53  
MOD 89 ALPHA WIND ON RUN, AUGMENTOR 2, C/B=60 DEG, FWD=32 DEG, AFT=32 DEG,  
MFAN=32 DEG, CMU=1

DATA POINT 1

0.3206  
0.5204 0.4550  
0.5253 0.4734  
0.4925 0.4262  
0.5229 0.4993 0.5123 0.5136  
0.5154 -0.3048 0.0899 0.3937  
0.5080  
0.5266 -0.4036 0.1997  
0.5421  
0.5663 0.5719 0.1724 0.4338  
0.5161  
0.5307  
0.5435 0.5477 0.5360 0.4993  
167 0.5576 0.5344 0.4545  
0.5640 0.6328 0.5522  
0.5637 0.5161 0.4589  
0.5190  
0.5210 0.5086 0.5092 0.5328 0.5254 0.5117 0.5316 0.5278 0.5030 0.5086

NACAL 292 RUN 100 DATE 20 OCT 80 TIME 05.16 RECOMP. NO. 1 DISK 1 PAGE 14  
 JOB NO. 11 LDGR ACCT 31302 CONTRACT 1631 SUB ACCT 10001 ACQ DATE 21 AUG 80 22.05

MOD 89 ALPHA WIND ON RUN, AUGMENTOR 2, C/B=60 DEG, FWD=32 DEG, AFT=32 DEG,  
 MFAN=32 DEG, CMU=1

DATA POINT 7

0.3483

0.5309 0.4570

0.5327 0.4796

0.5204 0.5123 0.5192 0.5024 0.5002 0.4496

0.5012 -0.2841 0.0986 0.3613

0.4677 -0.3432 0.1563

0.5154 -0.5830 0.1563 0.4419

0.5179 0.5830 0.1563 0.4419

0.5634 0.5918 0.5773

0.5918 0.5805 0.5694 0.5480 0.5058

0.5773 0.5734 0.5428 0.5577 0.4619

0.5804 0.6459 0.5862 0.5395 0.4668

0.4950 0.4739 0.4832 0.5285 0.5043 0.4956 0.5322 0.5142 0.5012 0.5154

492

MACAL 292      RUN 100      DATE 20 OCT 80      TIME 05.17      RECOMP. NO. 1      DISK 1      PAGE 16  
 JOB NO. 11      LDGR ACCT 31302      CONTRACT 1631      SUB ACCT 10001      ACO DATE 21 AUG 80 22.06

MOD 89 ALPHA WIND ON RUN, AUGMENTOR 2, C/B=60 DEG, FWD=32 DEG, AFT=32 DEG,  
 MEAN=32 DEG, CMU=1

DATA POINT 8

						0.3578				
						0.5346	0.4618			
						0.5364	0.5096			
						0.4979	0.4757			
	0.5173	0.5074	0.5396	0.4912				0.1048	0.3960	
	0.5148			-0.2853						
	0.4726									
	0.4801			-0.3182				0.2481		
0.4795										
0.5412				0.5818				0.1612	0.4586	
0.6053										
0.6015										
	0.5950	0.5831	0.5603					0.5085		
463				0.5868	0.5400					0.4600
				0.5876	0.6380			0.5670		
										0.4923
				0.5922	0.5537			0.5512		
	0.4367	0.3870	0.4404	0.5347	0.4968	0.5055	0.5489	0.5012	0.4906	0.5322

NACAL 292      RUN 100      DATE 20 OCT 80      TIME 05.18      RFCOMP. NO. 1      DISK 1      PAGE 20

JOB NO. 11      LDGR ACCT 31302      CONTRACT 1631      SUB ACCT 10001      ACO DATE 21 AUG 80 22.08

MOD 89 ALPHA WIND ON RUN, AUGMENTOR 2, C/B=60 DEG, FWD=32 DEG, AFT=32 DEG,  
MEAN=32 DEG, CMU=1

DATA POINT 10

0.2787

0.5488    0.3181

0.5472    0.4450

0.4136    0.3901

0.1284    0.4099

0.2481

0.2623    0.4456

0.5566

0.4520

0.5935

0.4700

0.5602

0.6117    0.5700

0.6121    0.6137

0.6103    0.4814

0.6146    0.6040    0.5770

0.6217

0.5778

0.4731

0.4292

0.4788

0.4962

0.5223

0.5098    0.4801    0.5297    0.4478

-0.1902

-0.1762

0.5930

0.3883    0.3870    0.3380    0.5433    0.4249    0.4894    0.5607    0.5036    0.5036    0.5446

767

NACAL 292      RUN 101      DATE 24 OCT 80      TIME 08.02      RECOMP. NO. 1      DISK 1      PAGE 22

JOB NO. 11      LDGR ACCT 31302      CONTRACT 1631      SUB ACCT 10001      ACO DATE 21 AUG 80 22.34

MOD 90 ALPHA WIND ON RUN, AUGMENTOR 2, C/B=60 DEG, FWD=32 DEG, AFT=32 DEG,  
MEAN=32 DEG, CMU=2

P<sub>T</sub>      P<sub>A</sub>  
14.75      14.218

SUMMARY PAGE

PT NO	ALPHA H PHI	O H THETA	CLH THRUST	CDH DELAL	CMH WFT	YM THTH	RL CMUTH	PTPFCH CDR	PTPCBH CDHR	PTPACH
1	1.6341 0.9500	10.6613 -79.6124	2.7747 408.3066	-0.5086 1.6805	0.1603 8.1229	3735.9635 264.6447	10418.5649 1.8284	1.9300 0.4971	1.9271 -1.0057	1.9305
2	-2.3701 0.9500	10.7021 -75.0521	2.4969 375.4960	-0.6666 1.5032	0.0787 8.1103	3672.1732 264.5458	9549.6397 1.8207	1.9279 0.4960	1.9270 -1.1626	1.9290
3	-6.4879 0.9500	10.4045 -68.1258	2.1237 323.2589	-0.8526 1.2728	-0.0313 8.1096	3772.5551 265.2410	8168.8119 1.8777	1.9357 0.5040	1.9248 -1.3567	1.9322
4 495	-10.6283 0.9500	10.6395 -60.0111	1.6460 274.5067	-0.9499 0.9944	-0.1490 8.0841	3967.8021 264.3438	6840.2558 1.8301	1.9350 0.4971	1.9222 -1.4471	1.9290
5	1.7636 0.9500	10.3465 -79.5705	2.3537 407.5790	-0.5252 1.7222	0.1819 8.0732	3694.9279 264.1997	10362.7519 1.8808	1.9293 0.5038	1.9228 -1.0291	1.9307
6	5.7565 0.9500	10.2759 -83.9957	3.1758 445.4966	-0.3340 1.9316	0.2613 8.0700	3676.7563 264.3665	11241.7775 1.8950	1.9271 0.5057	1.9249 -0.8397	1.9296
7	9.9338 0.9500	10.2999 -88.0343	3.5721 499.7911	-0.1226 2.1887	0.3870 8.1168	3672.7652 266.5115	12329.0334 1.9059	1.9306 0.5083	1.9295 -0.6309	1.9337
8	14.0112 0.9500	10.2014 88.2153	3.9988 554.0974	0.1245 2.4719	0.5239 8.0996	3793.2016 266.5428	13452.7795 1.9245	1.9345 0.5104	1.9296 -0.3858	1.9329
9	18.0973 0.9500	10.0600 85.1322	4.3446 595.5155	0.3700 2.7145	0.6273 8.0638	3924.1343 265.5415	14349.3070 1.9442	1.9362 0.5120	1.9280 -0.1420	1.9354
10	22.3417 0.9500	9.7979 81.7141	4.6143 647.1516	0.7011 3.0465	0.7304 8.0622	4092.2696 265.7644	15325.4861 1.9979	1.9327 0.5193	1.9275 0.1817	1.9357

NACAL 292      RUN 101      DATE 24 OCT 80      TIME 07.58      RECOMP. NO. 1      DISK 1      PAGE 2  
 JOB NO. 11      LDGR ACCT 31302      CONTRACT 1631      SUB ACCT 10001      ACQ DATE 21 AUG 80 22.14  
 MOD 90 ALPHA WIND ON RUN, AUGMENTOR 2, C/B=60 DEG, FWL=32 DEG, AFT=32 DEG,  
 MFAN=32 DEG, CMU=2

DATA POINT 1

0.2230  
 0.5486      0.3139  
 0.5514      0.3808  
 0.4247      0.3311  
 0.5475      0.5320      0.5308      0.4824      -0.2048      0.3237  
 0.5320      -1.1801  
 0.5097      -1.4423      -0.2481  
 0.5407  
 0.5457      0.5010      -0.2121      0.4341  
 0.5959  
 0.5827  
 0.5806      0.4703  
 0.5887      0.5860      0.5682      0.4611  
 0.5944      0.5022      0.5827  
 0.6008      0.7611      0.4868  
 0.5927      0.5568      0.5580  
 0.5048      0.4942      0.4849      0.5395      0.5066      0.4899      0.5420      0.5054      0.5004      0.5320

967

NACAL 292 RUN 101 DATE 24 OCT 80 TIME 08.01 RECOMP. NO. 1 DISK 1 PAGE 14

JOB NO. 11 LDGR ACCT 31302 CONTRACT 1631 SUB ACCT 10001 ACQ DATE 21 AUG 80 22.25

MOD 90 ALPHA WIND ON RUN, AUGMENTOR 2, C/B=60 DEG, FWD=32 DEG, AFT=32 DEG,  
MEAN=32 DEG, CMU=2

DATA POINT 7

0.2893

0.5377 0.3973

0.5369 0.4132

0.4062 0.4061

0.5277 0.5165 0.5110 0.4514

0.4986

-0.9967

-0.1969

0.2475

0.4613

0.4892

-0.8729

-0.2414

0.4589

0.5335

0.4973

-0.3194

0.4135

0.5993

0.5959

0.5991 0.5870 0.5585

0.4414

0.5891

0.4919

0.4144

497

0.5676

0.5925

0.7299

0.4828

0.5532

0.5856

0.4931

0.4527

0.4489

0.4080

0.5227

0.4700

0.4626

0.5234

0.4843

0.4837

0.5227

NACAL 292      RUN 101      DATE 24 OCT 80      TIME 08.01      RECOMP. NO. 1      DISK 1      PAGE 16  
 JOB NO. 11      LDGR ACCT 31302      CONTRACT 1631      SUB ACCT 10001      ACO DATE 21 AUG 80 22.29

MOD 90 ALPHA WIND ON RUN, AUGMENTOR 2, C/B=60 DEG, FWD=32 DEG, AFT=32 DEG,  
 MEAN=32 DEG, CMU=2

DATA POINT 8

0.1166  
 0.5320      0.2520  
 0.5329      0.3626  
 0.5060      0.4812      0.4930      0.4446      0.3816      0.2033  
 0.4961      -0.8863  
 0.5017      -0.2450      0.2580  
 0.4613      -0.8357  
 0.4006      -0.2304  
 0.4836      0.4948      -0.2609      0.4307  
 0.5783  
 0.5967  
 0.5991      0.5870      0.5534      0.5868      0.4502      0.4443  
 867      0.5864      0.6712      0.5719      0.4346  
 0.5857      0.5293      0.4589  
 0.5541  
 0.4030      0.3813      0.2995      0.5172      0.4533      0.4458      0.5184      0.4682      0.4657      0.5184

NACAL 292 RUN 101 DATE 24 OCT 80 TIME 08.02 RFCOMP. NO. 1 DISK 1 PAGE 20  
JOB NO. 11 LDGR ACCT 31302 CONTRACT 1631 SUB ACCT 10001 ACQ DATE 21 AUG 80 22.32  
MOD 90 ALPHA WIND ON RUN, AUGMENTOR 2, C/B=60 DEG, FWD=32 DEG, AFT=32 DEG,  
MEAN=32 DEG, CMU=2

DATA POINT 10

0.1360  
0.5221 0.3241  
0.5203 0.3254  
0.3076 0.2434  
0.4861 0.4427 0.4582 0.3981 -0.1975 0.3049  
0.4688 -0.9656  
0.4527 -0.9095 -0.2365  
0.4316  
0.3230 0.5041 -0.2121 0.3914  
0.3639  
0.4890  
0.5800  
0.5927 0.5800 0.5438 0.4585  
499 0.5785 0.4135 0.4346  
0.5843 0.5743 0.5765  
0.5890 0.5124 0.4392  
0.5451  
0.2406 0.2524 0.1662 0.5184 0.4155 0.3993 0.5091 0.4285 0.4415 0.5128

NACAL 292 RUN 102 DATE 24 OCT 80 TIME 08.11 RECOMP. NO. 1 DISK 1 PAGE 26

JOB NO. 11 LDGR ACCT 31302 CONTRACT 1631 SUB ACCT 10001 ACQ DATE 22 AUG 80 0.03

MOD 89 ALPHA WIND ON RUN, AUGMENTOR 2, C/B=60 DEG, FWD=32 DEG, AFT=32 DEG,  
MEAN=32 DEG, CMU=1

P<sub>T</sub> P<sub>A</sub>  
14.75 14.218

SUMMARY PAGE

PT NO	ALPHA H PHI	Q H THETA	CLH THRUST	CDH DELAL	CMH WFT	YM THTH	RL CMUTH	PTPFCR CDR	PTPCRH CDHR	PTPACH
1	0.8898 0.9500	10.4220 -86.0061	1.4524 206.0087	-0.1014 0.9392	0.0370 5.3608	1536.0329 127.4286	5463.8651 0.9006	1.4013 0.3311	1.3982 -0.4325	1.3971
2	-3.0685 0.9500	10.2559 -81.8290	1.2382 174.1734	-0.1777 0.7990	-0.0535 5.4016	1411.8971 128.7748	4878.6387 0.9248	1.4047 0.3364	1.4000 -0.5142	1.4010
3	0.9384 0.9500	10.5016 -86.4765	1.4421 206.0023	-0.0888 0.9338	0.0431 5.3183	1496.3097 126.2689	5456.0078 0.8856	1.4013 0.3267	1.3989 -0.4155	1.3998
4	-3.0963 0.9500	10.5660 -82.5055	1.2046 174.2914	-0.1584 0.7789	-0.0483 5.3401	1380.1670 127.0161	4866.5895 0.8854	1.4041 0.3271	1.4000 -0.4856	1.4011
5	-7.1119 0.9500	10.4524 -77.0204	1.0100 147.0774	-0.2326 0.6525	-0.1508 5.3239	1360.1520 126.5511	4187.0088 0.8918	1.4028 0.3281	1.3988 -0.5607	1.4019
6	-11.1306 0.9500	10.5000 -71.2689	0.8090 121.7775	-0.2743 0.5246	-0.2628 5.3124	1414.0019 126.2491	3399.2445 0.8856	1.3981 0.3267	1.4001 -0.6016	1.4022
7	0.9537 0.9500	10.3157 -86.8327	1.4704 206.2459	-0.0813 0.9522	0.0462 5.3324	1497.1540 126.9009	5435.2775 0.9061	1.3993 0.3311	1.4004 -0.4125	1.4034
8	4.9655 0.9500	10.3090 89.6187	1.7425 243.8899	0.0115 1.1326	0.1589 5.3045	1608.0314 126.3359	6216.2588 0.9026	1.4013 0.3295	1.4008 -0.3179	1.4033
9	9.1059 0.9500	10.1745 86.8978	2.0883 288.8847	0.1131 1.3618	0.2766 5.3217	1618.5017 126.7201	7028.5738 0.9174	1.4007 0.3330	1.3998 -0.2198	1.4023
10	13.0011 0.9500	10.2272 84.1789	2.3548 328.6481	0.2400 1.5469	0.3622 5.3349	1782.0895 127.2033	7549.5403 0.9161	1.4022 0.3329	1.4000 -0.0929	1.4035

NACAL 292      RUN 102      DATE 24 OCT 80      TIME 08.11      RECOMP. NO. 1      DISK 1      PAGE 27  
 JOB NO. 11      LDGR ACCT 31302      CONTRACT 1631      SUB ACCT 10001      ACQ DATE 22 AUG 80 0.03  
 MOD 89 ALPHA WIND ON RUN, AUGMENTOR 2, C/B=60 DEG, FWD=32 DEG, AFT=32 DEG,  
 MEAN=32 DEG, CMU=1

SUMMARY PAGE

PT NO	ALPHA H PHI	Q H THETA	CLH THRUST	CDH DELAL	CMH WFT	YM THTH	RL CMUTH	PTPFCH CDR	PTPCBH CDHR	PTPACH
11	17.0971 0.9500	10.5388 82.0692	2.5871 373.7252	0.3604 1.7116	0.4562 5.3116	2027.9896 126.3533	8302.0787 0.8831	1.3981 0.3265	1.3985 0.0338	1.4012
12	21.2978 0.9500	10.3121 78.7690	3.0145 430.2728	0.5985 2.0226	0.5540 5.3054	2243.9168 126.1560	9344.1102 0.9011	1.3975 0.3298	1.3972 0.2637	1.4014

NACAL 292 RUN 102 DATE 24 OCT 80 TIME 08.06 RECOMP. NO. 1 DISK 1 PAGE 2

JOB NO. 11 LDGR ACCT 31302 CONTRACT 1631 SUB ACCT 10001 ACQ DATE 21 AUG 80 23.19

MOD 89 ALPHA WIND ON RUN, AUGMENTOR 2, C/B=60 DEG, FWD=32 DEG, AFT=32 DEG,  
MEAN=32 DEG, CMU=1

DATA POINT 1

0.3223

0.5201 0.4396

0.5181 0.4654

0.4875 0.4248

0.4835 0.4885 0.5090 0.5009

0.4841 -0.2309

0.6882 0.4067

0.4866

0.5108 -0.0843

0.2361

0.5127

0.5202 0.5494

0.1665 0.4334

0.5168

0.5179

0.5262 0.5330 0.5406

0.4953

502

0.5557 0.5270

0.4292

0.5588 0.6311

0.5397

0.5578 0.5131

0.5167 0.4455

0.5052 0.5177 0.5096 0.5133 0.5096 0.5059 0.5108 0.5090 0.5034 0.5121

8

NACAL 292      RUN 102      DATE 24 OCT 80      TIME 08.09      RECOMP. NO. 1      DISK 1      PAGE 18  
 JOB NO. 11      LDGR ACCT 31302      CONTRACT 1631      SUB ACCT 10001      ACQ DATE 21 AUG 80 23.59

MOD 89    ALPHA WIND ON RUN, AUGMENTOR 2, C/B=60 DEG, FWD=32 DEG, AFT=32 DEG,  
 MEAN=32 DEG, CMU=1

DATA POINT 9

						0.3625									
						0.5131	0.4496								
						0.5088	0.4668								
						0.4824	0.4492								
								0.0658	0.3725						
								0.1678							
								0.1280	0.4269						
								0.4864	0.4343						
								0.5414							
									0.4628						
									0.5210						
						0.5678	0.5218								
						0.4586	0.4599	0.4816	0.4922	0.4754	0.4909	0.5059	0.4766	0.4673	0.5059

203

NACAL 292

RIIN 102

DATE 24 OCT 80

TIME 08.10

RECOMP. NO. 1

DISK 1

PAGE 20

JOB NO. 11

LDGR ACCT 31302

CONTRACT 1631

SUB ACCT 10001

ACQ DATE 22 AUG 80 0.00

MOD 89 ALPHA WIND ON RUN, AUGMENTOR 2, C/B=60 DEG, FWD=32 DEG, AFT=32 DEG,  
MEAN=32 DEG, CMU=1

DATA POINT 10

0.3639

0.5241 0.4510

0.5202 0.4563

0.4855 0.4238

0.4319 0.4642 0.4996 0.4686

0.4493

0.4375

0.4897

0.4884

0.5238

0.5316

0.5366

0.5449 0.5574 0.5655

0.5760 0.5187

0.5789 0.6061

0.5805 0.5164

0.4474 0.4362 0.4356 0.5102 0.4878 0.5059 0.5189 0.4934 0.4996 0.5295

0.0789 0.3698

0.1914

0.1354 0.4447

0.4921

0.5562 0.4241

0.5411 0.4688

504

NACAL 292      RUN 102      DATE 24 OCT 80      TIME 08.10      RECOMP. NO. 1      DISK 1      PAGE 24  
 JOB NO. 11      LDGR ACCT 31302      CONTRACT 1631      SUB ACCT 10001      ACQ DATE 22 AUG 80 0.12  
 MOD 89 ALPHA WIND ON RUN, AUGMENTOR 2, C/B=60 DEG, FWD=32 DEG, AFT=32 DEG,  
 MEAN=32 DEG, CMU=1

DATA POINT 12

						0.2398				
						0.5284	0.3413			
						0.5310	0.3925			
						0.4195	0.4037			
	0.4101	0.3380	0.4518	0.4294				0.1236	0.4136	
	0.4642				-0.1258					
	0.4611									
	0.4928				-0.0207			0.2217		
	0.4835									
	0.5238				0.5792			0.2442	0.4048	
	0.5409									
	0.5494									
	0.5621	0.5863	0.5668					0.5250		
				0.5913	0.4675				0.4649	
								0.5791		
505				0.5995	0.5959					
									0.4668	
									0.5497	
				0.5964	0.5446					
	0.3555	0.3598	0.3200	0.5307	0.4468	0.4798	0.5307	0.4934	0.4822	0.5295

IACAL 292 RUN 103 DATE 24 OCT 80 TIME 08.18 RECOMP. NO. 1 DISK 1 PAGE 22

IOB NO. 11 LDGR. ACCT 31302 CONTRACT 1631 SUB ACCT 10001 ACO DATE 22 AUG 80 0.19

MOD 90 ALPHA WIND ON RUN, AUGMENTOR 2, C/B=60 DEG, FWD=32 DEG, AFT=32 DEG,  
MEAN=32 DFG, CMU=2

P<sub>TS</sub> P<sub>A</sub>  
14.77 14.233

SUMMARY PAGE

PT NO	ALPHA H PHI	Q H THETA	CLH THRUST	CDH DELAL	CMH WFT	YM THTH	RL CMUTH	PTPFCH CDR	PTPCRH CDHR	PTPACH
1	1.7804 0.9500	10.2910 -79.7025	2.8401 403.2930	-0.5160 1.7160	0.1671 8.0338	3692.0915 261.4292	10229.8149 1.8712	1.9322 0.4999	1.9203 -1.0159	1.9341
2	-2.4004 0.9500	10.4739 -74.4994	2.4789 365.7975	-0.6875 1.4906	0.0696 8.0017	3712.3326 260.5273	9318.5078 1.8322	1.9290 0.4938	1.9247 -1.1813	1.9332
3	-6.5918 0.9500	10.6252 -67.9248	2.0334 316.5180	-0.8246 1.2243	-0.0332 8.0141	3759.9192 261.1125	8084.5167 1.8101	1.9313 0.4914	1.9225 -1.3160	1.9336
4	-10.5521 0.9500	10.3630 -59.8142	1.6674 271.3893	-0.9699 1.0052	-0.1475 8.0257	3970.3218 262.4462	6795.5718 1.8654	1.9350 0.4992	1.9289 -1.4421	1.9380
5	1.7096 0.9500	10.3636 -79.5470	2.8302 404.9272	-0.5221 1.7056	0.1821 8.0035	3672.3779 261.0574	10272.6279 1.8554	1.9304 0.4972	1.9268 -1.0194	1.9266
6	5.8256 0.9500	10.3569 -84.4068	3.2159 454.3442	-0.3149 1.9570	0.2939 8.0071	3598.1771 261.6607	11399.8188 1.8609	1.9312 0.4979	1.9266 -0.8128	1.9353
7	9.9472 0.9500	10.3206 -88.0955	3.5420 496.5661	-0.1177 2.1732	0.3892 7.9845	3651.1796 260.6267	12235.0688 1.8601	1.9262 0.4975	1.9240 -0.6153	1.9303
8	13.9969 0.9500	10.2992 87.9958	3.9596 553.9826	0.1385 2.4541	0.5244 8.0230	3688.3390 262.6748	13493.0216 1.8786	1.9346 0.5008	1.9340 -0.3622	1.9259
9	18.0562 0.9500	10.1853 84.6330	4.3533 604.6096	0.4089 2.7292	0.6188 8.0323	3867.8307 262.3406	14434.5314 1.9044	1.9359 0.5043	1.9317 -0.0954	1.9378
10	22.3242 0.9500	9.8786 81.5372	4.7965 650.3556	0.7136 3.0411	0.7343 7.9940	4072.8144 261.8726	15359.1121 1.9526	1.9385 0.5100	1.9296 0.2036	1.9263

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NACAL 292 RUN 103 DATE 24 OCT 80 TIME 08.16 RECOMP. NO. 1 DISK 1 PAGE 10

JOB NO. 11 LDGR ACCT 31302 CONTRACT 1631 SUB ACCT 10001 ACQ DATE 22 AUG 80 0.14

MOD 90 ALPHA WIND ON RUN, AUGMENTOR 2, C/B=60 DEG, FWD=32 DEG, AFT=32 DEG,  
MEAN=32 DEG, CMU=2

DATA POINT 5

0.1516  
0.5282 0.3397  
0.5298 0.3252  
0.4133 0.3306  
0.4669 0.4614 0.5086 0.4632 0.4133 0.3306  
0.4837 -1.0348 -0.2298 0.2582  
0.4694 -0.8545 -0.2359  
0.5223 -0.8545 -0.2359  
0.5372 0.4681 -0.2004 0.4380  
0.5340 0.4681 -0.2004 0.4380  
0.5403 0.4681 -0.2004 0.4380  
0.5389 0.4465 0.4635  
0.5459 0.5607 0.5661 0.4465 0.4635  
0.5729 0.4927 0.5640 0.4635  
0.5762 0.7456 0.5471 0.4636  
0.5797 0.5321 0.5471 0.4636  
0.4626 0.4576 0.4825 0.5279 0.4769 0.4750 0.5279 0.4800 0.4663 0.5285

507

NACAL 292 RUN 103 DATE 24 OCT 80 TIME 08.17 RFCOMP. NO. 1 DISK 1 PAGE 14

JOB NO. 11 LDGR ACCT 31302 CONTRACT 1631 SUB ACCT 10001 ACQ DATE 22 AUG 80 0.16

MOD 90 ALPHA WIND ON RUN, AUGMENTOR 2, C/B=60 DEG, FWD=32 DEG, AFT=32 DEG,  
MEAN=32 DEG, CMU=2

DATA POINT 7

0.2157  
0.5371 0.3830  
0.5369 0.3350  
0.4545 0.4470 0.4750 0.4576 0.4201 0.3483  
0.4526 -1.0018 -0.2273 0.2327  
0.4340 -0.8093 -0.2591  
0.5074  
0.5130 0.4512 -0.3423 0.4136  
0.5364  
0.5487  
0.5456  
0.5636 0.5820 0.5772 0.4559  
0.5868 0.4754 0.5714 0.4354  
508 0.5929 0.7159 0.4879  
0.5893 0.5188 0.5523  
0.4502 0.4402 0.4178 0.5285 0.4794 0.4676 0.5260 0.4837 0.4663 0.5273

NACAL 292      RUN 103      DATE 24 OCT 80      TIME 08.17      REGCOMP. NO. 1      DISK 1      PAGE 16  
 JOB NO. 11      LDGR ACCT 31302      CONTRACT 1631      SUB ACCT 10001      ACO DATE 22 AUG 80 0.17

MOD 90 ALPHA WIND ON RUN, AUGMENTOR 2, C/B=60 DEG, FWD=32 DEG, AFT=32 DEG,  
 MEAN=32 DEG, CMU=2

DATA POINT 8

0.1534

0.5321    0.2632

0.5323    0.3258

0.3929    0.3352

0.3973    0.4004    0.4346    0.4271

0.4327

-0.9749

-0.2243

0.3296

0.4744

-0.8661

-0.3141

0.4980

0.4900

0.5273

0.4844

-0.3239

0.4034

0.5432

0.5431

0.5618    0.5816    0.5806

0.4480

0.5930

0.4711

0.4063

0.5769

0.5935

0.6759

0.4556

0.5548

0.5878

0.5109

0.4141

0.3886

0.2636

0.5186

0.4570

0.4558

0.5242

0.4688

0.4564

0.5179

509

NACAL 292      RUN 103      DATE 24 OCT 80      TIME 08.18      RECOMP. NO. 1      DISK 1      PAGE 20  
 JOB NO. 11      LDGR ACCT 31302      CONTRACT 1631      SUB ACCT 10001      ACQ DATE 22 AUG 80 0.18  
 MOD 90 ALPHA WIND ON RUN, AUGMENTOR 2, C/B=60 DEG, FWD=32 DEG, AFT=32 DEG,  
 MEAN=32 DEG, CMU=2

DATA POINT 10

						0.1293				
						0.5245	0.2884			
						0.5258	0.3018			
						0.3080	0.2234			
	0.3214	0.2052	0.3693	0.4079				-0.2145	0.3273	
	0.4017				-0.9333					
	0.4216									
	0.4626				-0.9113			-0.2139		
0.4682										
0.5052					0.5043			-0.1858	0.3743	
0.5221										
0.5363										
	0.5516	0.5789	0.5840					0.4562		
				0.5865	0.4052				0.4055	
								0.5751		
				0.5864	0.6065					
									0.4471	
									0.5474	
				0.5916	0.5256					
	0.2313	0.2512	0.1927	0.5235	0.4141	0.4116	0.5254	0.4415	0.4216	0.5248

510

NACAL 292 RUN 104 DATE 24 OCT 80 TIME 08.28 RECOMP. NO. 1 DISK 1 PAGE 22

JOB NO. 11 LDGR ACCT 31302 CONTRACT 1631 SUB ACCT 10001 ACQ DATE 22 AUG 80 17.10

MOD 91 ALPHA WIND ON RUN, AUGMENTOR 2, C/B=60 DEG, FWD=32 DEG, AFT=32 DEG,  
MEAN=32 DEG, CMU=4

P<sub>T</sub> P<sub>A</sub>  
14.57 14.292

SUMMARY PAGE

PT NO	ALPHA H PHI	Q H THETA	CLH THRUST	CDH DELAL	CMH WFT	YM THTH	RL CMUTH	PTPFCH CDR	PTPCBH CDHR	PTPACH
1	2.1791 0.9500	5.5781 -70.2215	4.0824 328.5431	-1.4680 2.2178	0.2282 8.0481	4465.2539 265.6686	7825.2795 3.5081	1.9620 0.6853	1.9594 -2.1533	1.9557
2	-1.9748 0.9500	5.6144 -64.3774	3.5462 299.7827	-1.7008 1.9245	0.0947 8.0473	4484.3256 266.0129	7107.0118 3.4899	1.9685 0.6831	1.9597 -2.3839	1.9601
3	-6.2054 0.9500	5.6565 -56.6898	2.9475 270.8515	-1.9369 1.6026	-0.0422 8.0348	4580.1958 265.5756	6312.8247 3.4583	1.9631 0.6798	1.9597 -2.6168	1.9573
4	-10.3596 0.9500	5.5574 -48.4680	2.4072 242.6237	-2.1321 1.3168	-0.1926 7.9809	4662.3415 263.4322	5447.0118 3.4915	1.9635 0.6815	1.9510 -2.8136	1.9555
5	2.1439 0.9500	5.5424 -69.7755	4.0634 325.8415	-1.4970 2.2042	0.2272 7.9765	4480.8690 263.4549	7803.8887 3.5013	1.9619 0.6822	1.9544 -2.1792	1.9533
6	6.2029 0.9500	5.4132 -75.5092	4.6885 355.8848	-1.2117 2.5489	0.3603 7.9851	4385.7263 264.0431	8544.4428 3.5928	1.9657 0.6914	1.9546 -1.9031	1.9548
7	10.5313 0.9500	5.2284 -80.3769	5.2815 387.5183	-0.8954 2.8852	0.5011 7.9817	4357.0403 264.1280	9312.3995 3.6512	1.9597 0.6968	1.9560 -1.5923	1.9596
8	14.6502 0.9500	5.2789 -84.5484	5.7531 414.1812	-0.5490 3.1733	0.6354 7.9737	4377.2116 264.0451	9977.8306 3.6843	1.9621 0.6995	1.9566 -1.2486	1.9584
9	18.8405 0.9500	5.2515 -89.0143	6.2311 444.3164	-0.1072 3.4914	0.7600 7.9642	4391.8907 263.9520	10700.7598 3.7022	1.9611 0.7008	1.9571 -0.8080	1.9608
10	23.0529 0.9500	5.0411 87.6231	6.8342 468.1279	0.2836 3.8531	0.8900 7.9668	4543.3690 264.0206	11233.0846 3.8577	1.9595 0.7160	1.9538 -0.4324	1.9598

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NACAL 292

RUN 104

DATE 24 OCT 80

TIME 08.26

RECOMP. NO. 1

DISK 1

PAGE 10

JOB NO. 11

LDGR ACCT 31302

CONTRACT 1631

SUB ACCT 10001

ACC DATE 22 AUG 80 17.05

MOD 91 ALPHA WIND ON RUN, AUGMENTOR 2, C/B=60 DEG, FWD=32 DEG, AFT=32 DEG,  
MEAN=32 DEG, CMU=4

DATA POINT 5

512

-0.1270

0.2789 -0.1515

0.2823 0.0518

0.1522 -0.1923

0.2342 0.2243 0.2664 0.2243 -0.6609 0.2004

0.2565 -1.4376

0.2435 -1.5400

0.2534 0.2026 -0.5366

0.2695 0.2026 -0.3837 0.2576

0.2788 0.2026

0.2863 0.2863

0.2891 0.2970 0.3018 0.1797 0.2576

0.3042 0.2130 0.2672

0.3030 0.4913 0.2954

0.3053 0.2399 0.2786

0.2948

0.2261 0.2175 0.2243 0.2646 0.2119 0.2268 0.2751 0.2336 0.2187 0.2726

NACAL 292 RUN 104 DATE 24 OCT 80 TIME 08.27 RECOMP. NO. 1 DISK 1 PAGE 14  
JOB NO. 11 LDGR ACCT 31302 CONTRACT 1631 SUB ACCT 10001 ACO DATE 22 AUG 80 17.07  
MOD 91 ALPHA WIND ON RUN, AUGMENTOR 2, C/B=60 DEG, FWD=32 DFG, AFT=32 DEG,  
MFAN=32 DEG, CMU=4

DATA POINT 7

-0.1272

0.2775 -0.0268

0.2769 0.0163

0.1490 -0.0016

0.1970 0.2014 0.2633 0.1803

0.2330

-1.4273

-0.5214

0.2016

0.2175

0.2441

-1.5296

-0.4465

0.2447

0.2754

0.1914

-0.4227

0.2433

0.2850

0.2907

0.2942 0.3025 0.3064

0.1737

0.2590

513

0.3096

0.2081

0.3035

0.3083

0.4815

0.2743

0.2974

0.3061

0.2866

0.2007

0.1871

0.1871

0.2640

0.2001

0.2224

0.2856

0.2057

0.2001

0.2838

MACAL 292 RUN 104 DATE 24 OCT 80 TIME 08.27 RECOMP. NO. 1 DISK 1 PAGE 16

JOB NO. 11 LDGR ACCT 31302 CONTRACT 1631 SUB ACCT 10001 ACQ DATE 22 AUG 80 17.08

MOD 91 ALPHA WIND ON RUN, AUGMENTOR 2, C/B=60 DEG, FWD=32 DEG, AFT=32 DEG,  
MEAN=32 DEG, CMU=4

DATA POINT 8

						-0.1690				
						0.2777	-0.1129			
						0.2786	0.0148			
						0.1337	-0.1200			
		0.1883	0.1828	0.2392	0.1877					
	0.2206				-1.4242			-0.4178	0.1843	
	0.2001									
	0.2286				-1.5125			-0.5098		
0.2447										
0.2700					0.2119			-0.3850	0.2391	
0.2820										
0.2885										
	0.2956	0.3061	0.3089					0.1814		
				0.3095	0.2090				0.2613	
								0.2967		
S14				0.3079	0.5092					0.2687
										0.3012
				0.3103	0.2510					
	0.1865	0.1555	0.1400	0.2739	0.1834	0.2007	0.2850	0.2032	0.1939	0.2782

MACAL 292    RUN 104    DATE 24 OCT 80    TIME 08.28    RECOMP. NO. 1    DISK 1    PAGE 20  
 JOB NO. 11    LDGR ACCT 31302    CONTRACT 1631    SUB ACCT 10001    .    ACQ DATE 22 AUG 80 17.09  
 MOD 91    ALPHA WIND ON RUN, AUGMENTOR 2, C/B=60 DEG, FWD=32 DEG, AFT=32 DEG,  
 MEAN=32 DEG, CMU=4

DATA POINT 10

						0.0575				
						0.2723	0.1371			
						0.2734	0.1271			
						0.1169	0.0407			
		0.1233	0.0694	0.1896	0.1722			-0.5312	0.1842	
	0.1983				-1.3700					
	0.2007									
	0.2200				-1.5156			-0.4392		
	0.2243									
	0.2570				0.2113			-0.4276	0.2350	
	0.2671									
	0.2833									
	0.2899	0.3032	0.3086					0.1993		
				0.3073	0.1916				0.2403	
								0.2982		
				0.3044	0.4427					
									0.2623	
									0.2907	
				0.3078	0.2979					
515	0.0793	0.0743	0.0458	0.2689	0.1797	0.1760	0.2801	0.1834	0.1753	0.2763

NACAL 292      RUN 106      DATE 24 OCT 80      TIME 08.40      RFCOMP. NO. 1      DISK 1      PAGE 22

JOB NO. 11      LDGR ACCT 31302      CONTRACT 1631      SUB ACCT 10001      ACQ DATE 22 AUG 80 18.13

MOD 85 ALPHA WIND ON RUN, AUGMENTOR 1, C/B=60 DEG, FWD=32 DEG, AFT=32 DEG,  
MEAN=32 DEG, CMU=1

P<sub>TS</sub>      P<sub>A</sub>  
15.10      14.292

SUMMARY PAGE

PT NO	ALPHA H PHI	Q H THETA	CLH THRUST	CDH DELAL	CHH WFT	YM THTH	RL CMUTH	PTPFCH CDR	PTPCRH CDHR	PTPACH
1	0.5921 0.9500	15.1291 87.4942	1.3705 195.3921	0.0559 0.6246	-0.0468 5.2128	1258.0202 121.8456	5189.6289 0.8555	1.3760 0.3838	1.3739 -0.3230	1.3782
2	-3.2072 0.9500	15.0533 -89.0312	1.1598 164.3910	-0.0156 0.5274	-0.1401 5.1939	1102.0853 121.4690	4673.8631 0.8571	1.3793 0.3836	1.3736 -0.4032	1.3774
3	-7.2492 0.9500	15.0787 -84.6319	0.9425 134.3884	-0.0885 0.4285	-0.2353 5.2045	1062.2128 121.9225	4046.4192 0.8589	1.3827 0.3842	1.3745 -0.4728	1.3780
4	-11.2433 0.9500	15.0214 -79.0725	0.7835 112.8444	-0.1512 0.3567	-0.3349 5.1944	979.0166 121.5793	3444.7170 0.8597	1.3807 0.3843	1.3738 -0.5355	1.3767
5	0.6608 0.9500	14.8635 87.3264	1.4263 199.8015	0.0666 0.6501	-0.0543 5.1973	1198.8754 121.7638	5259.6633 0.8702	1.3808 0.3867	1.3754 -0.3201	1.3796
6	4.5736 0.9500	14.8588 84.7808	1.6304 229.0154	0.1489 0.7456	0.0374 5.1936	1416.7652 121.7951	5774.6929 0.8707	1.3810 0.3866	1.3767 -0.2376	1.3764
7	8.6084 0.9500	15.1513 82.1906	1.8249 262.7356	0.2502 0.8388	0.1569 5.2037	1425.0210 121.8835	6302.3789 0.8545	1.3756 0.3837	1.3779 -0.1334	1.3762
8	12.5080 0.9500	15.0055 81.3219	2.0616 294.6122	0.3146 0.9503	0.2312 5.2022	1768.6700 121.9084	6689.0570 0.8629	1.3771 0.3857	1.3773 -0.0710	1.3757
9	16.4672 0.9500	14.9696 79.6234	2.3001 329.5287	0.4211 1.0663	0.2906 5.1718	1965.8009 121.0512	7222.9399 0.8589	1.3758 0.3841	1.3768 0.0370	1.3742
10	20.5003 0.9500	14.7808 77.5265	2.4943 355.4688	0.5517 1.1654	0.3732 5.1816	2228.2278 121.3586	7501.6584 0.8721	1.3771 0.3875	1.3763 0.1642	1.3750

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MACAL 292      RUN 106      DATE 24 OCT 80      TIME 08.36      RECOMP. NO. 1      DISK 1      PAGE 2  
 JOB NO. 11      LDGR ACCT 31302      CONTRACT 1631      SUB ACCT 10001      ACO DATE 22 AUG 80 17.59  
 MOD 85    ALPHA WIND ON RUN, AUGMENTOR 1, C/B=60 DEG, FWD=32 DEG, AFT=32 DEG,  
           MEAN=32 DEG, CMU=1

DATA POINT 1

0.5125

0.7709    0.6910

0.7748    0.7070

0.7555    0.6842

0.7512    0.7543

0.7203      -0.0784

0.3669      0.6713

0.7605  
0.8793      -0.0656

0.5544

0.8445  
0.8126      0.8218

0.4629      0.6810

0.8144    0.8156

0.8238    0.7902

0.7536

0.6799

0.8224    0.8761

0.8058

0.8331    0.7760

0.6662  
0.7701

0.7741    0.7537    0.7543    0.7655    0.7562    0.7562    0.7630    0.7500    0.7401    0.7692

517

NACAL 292      RUN 106      DATE 24 OCT 80      TIME 08.39      RECOMP. NO. 1      DISK 1      PAGE 14  
JOB NO. 11      LDGR ACCT 31302      CONTRACT 1631      SUB ACCT 10001      ACQ DATE 22 AUG 80 18.10

MOD 85 ALPHA WIND ON RUN, AUGMENTOR 1, C/B=60 DEG, FWD=32 DEG, AFT=32 DEG,  
MEAN=32 DEG, CMU=1

DATA POINT 7

518

0.5409  
0.7769    0.6825  
0.7720    0.7115  
0.6776    0.7222    0.7539    0.6736  
0.6015    -0.0529    0.3657    0.6656  
0.5823  
0.7977    -0.0036    0.5625  
0.8817  
0.8670    0.8317    0.4579    0.6859  
0.8522    0.8368  
0.8391    0.7874    0.7595  
0.6731  
0.8443    0.8778    0.8139  
0.8442    0.7832    0.7695    0.6862  
0.6330    0.6559    0.6850    0.7636    0.7209    0.7191    0.7655    0.7215    0.7277    0.7605

MACAL 292      RUN 106      DATE 24 OCT 80      TIME 08.39      RECOMP. NO. 1      DISK 1      PAGE 16  
 JOB NO. 11      LDGR ACCT 31302      CONTRACT 1631      SUB ACCT 10001      ACQ DATE 22 AUG 80 18.11  
 MOD 85    ALPHA WIND ON RUN, AUGMENTOR 1, C/B=60 DEG, FWD=32 DEG, AFT=32 DEG,  
 MEAN=32 DEG, CMU=1

DATA POINT 8

519

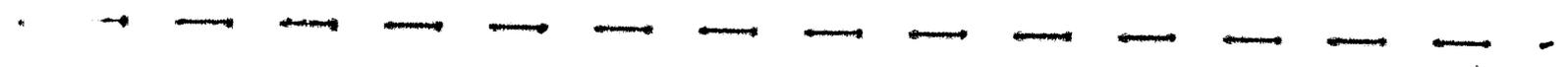
					0.5229				
					0.7577	0.6726			
					0.7646	0.7074			
					0.7502	0.6717			
	0.5848	0.6262					0.3713	0.6790	
	0.6015		0.0773						
	0.4870								
	0.7043		0.1571				0.5384		
	0.8628								
	0.8752		0.8255				0.4517	0.6841	
	0.8578	0.8488							
			0.8451	0.7794			0.7644		
								0.6719	
			0.8479	0.8667			0.8150		
									0.6768
			0.8409	0.7890				0.7774	
0.5742	0.5458	0.5872	0.7562	0.6330	0.6689	0.7568	0.6894	0.7054	0.7673

NACAL 292 RUN 106 DATE 24 OCT 80 TIME 08.40 RECOMP. NO. 1 DISK 1 PAGE 20  
JOB NO. 11 LDGR ACCT 31302 CONTRACT 1631 SUB ACCT 10001  
MOD 85 ALPHA WIND ON RUN, AUGMENTOR 1, C/B=60 DEG, FWD=32 DEG, AFT=32 DEG, ACD DATE 22 AUG 80 18.12  
MEAN=32 DEG, CMU=1

DATA POINT 10

520

					0.4894				
					0.7529	0.6784			
					0.7518	0.7084			
					0.6622	0.6699			
	0.4078	0.4455					0.3273	0.6342	
	0.4418		0.0080						
	0.2508								
	0.5674		0.3416				0.5136		
	0.7687								
	0.8602		0.8416				0.4678		0.6796
	0.8658	0.8530							
			0.8497	0.7342			0.7724		
									0.6754
			0.8587	0.8695			0.8153		
			0.8459	0.7967					0.6788
								0.7780	
0.4845	0.4109	0.4226	0.7525	0.4678	0.5817	0.7593	0.6083	0.6114	0.7574



NACAL 292 RUN 107 DATE 24 OCT 80 TIME 08.47 RECOMP. NO. 1 DISK 1 PAGE 22

JOB NO. 11 LDGR. ACCT 31302 CONTRACT 1631 SUB ACCT 10001 ACQ DATE 22 AUG 80 18.31

MOD 86 ALPHA WIND ON RUN, AUGMENTOR 1, C/B=60 DEG, FWD=32 DEG, AFT=32 DEG,  
MEAN=32 DEG, CMU=2 Q=15.4

P<sub>T</sub> P<sub>A</sub>  
15.10 14.292

SUMMARY PAGE

PT NO	ALPHA H PHI	Q H THETA	CLH THRUST	CDH DELAL	CMH WFT	YM TH1H	RL CMUTH	PTPFCH CDR	PTPCRH CDHR	PTPACH
1	0.8426 0.9500	15.0507 -79.1958	2.3588 340.2468	-0.4501 1.0342	-0.0964 7.9359	3721.3794 257.2472	9081.4586 1.8155	1.9006 0.5876	1.8945 -1.0378	1.8982
2	-2.8091 0.9500	15.0529 -76.4551	2.2082 321.8863	-0.5319 0.9662	-0.1720 7.9403	3359.7440 257.4491	8890.8405 1.8167	1.9017 0.5881	1.8940 -1.1291	1.8950
3	-6.8535 0.9500	15.2415 -72.2443	2.0261 305.2605	-0.6487 0.8840	-0.2309 7.9079	3184.3991 256.1878	8428.8188 1.7854	1.8944 0.5826	1.8946 -1.2314	1.8948
4	-10.7293 0.9500	14.8566 -67.2382	1.8880 286.1619	-0.7883 0.8206	-0.3043 7.8962	3254.8272 255.9165	7654.3385 1.8298	1.8955 0.5895	1.8916 -1.3778	1.8896
5	1.1474 0.9500	15.1252 -80.1085	2.4121 348.6433	-0.4206 1.0565	-0.0803 7.9167	3583.7219 256.9281	9247.6613 1.8044	1.8970 0.5867	1.8927 -1.0068	1.8917
6	5.0950 0.9500	14.8621 -83.6201	2.6813 377.4869	-0.2993 1.1803	-0.0179 7.9119	3900.2032 257.0025	9553.8247 1.8368	1.8988 0.5913	1.8954 -0.8907	1.8890
7	8.8702 0.9500	14.7833 -86.7109	2.9659 414.0135	-0.1706 1.3123	0.0698 7.8792	4081.3597 255.8284	10022.7873 1.8382	1.8983 0.5908	1.8914 -0.7615	1.8880
8	13.0782 0.9500	14.6050 89.8948	3.3360 458.6775	0.0061 1.4830	0.1373 7.8590	4319.2253 256.6567	10609.5688 1.8666	1.8960 0.5961	1.8911 -0.5900	1.8900
9	17.0092 0.9500	14.8888 87.2677	3.4781 488.0118	0.1599 1.5551	0.2159 7.8565	4695.6929 256.8578	10709.0019 1.8325	1.8974 0.5905	1.8938 -0.4305	1.8887
10	21.0629 0.9500	14.8657 83.8425	3.7709 530.7882	0.4068 1.7119	0.2833 7.8909	4876.0245 256.5121	11170.8818 1.8329	1.8987 0.5907	1.8864 -0.1839	1.8892

521

NACAL 292 RUN 107 DATE 24 OCT 80 TIME 08.44 RECOMP. NO. 1 DISK 1 PAGE 2  
JOB NO. 11 LDGR ACCT 31302 CONTRACT 1631 SUB ACCT 10001 ACQ DATE 22 AUG 80 18.18

MOD 86 ALPHA WIND ON RUN, AUGMENTOR 1, C/B=60 DEG, FWD=32 DEG, AFT=32 DEG,  
MEAN=32 DEG, CMU=2 Q=15.4

DATA POINT 1

522

0.4580  
0.7726 0.6477  
0.7723 0.6767  
0.6926 0.6468  
0.6952 0.6797  
0.6224 -0.9067  
0.6679  
0.8691 -0.9134  
0.8693  
0.8340 0.7447  
0.8268 0.8252  
0.8254 0.7634  
0.8329 1.0126  
0.8340 0.6852  
0.7131 0.6945 0.7020 0.7682 0.6896 0.6791 0.7713 0.6828 0.6884 0.7719  
0.0321 0.5475  
0.0340  
-0.0864 0.6343  
0.6816  
0.6457  
0.7965  
0.6502  
0.7646

8

NACAL 292    RUN 107    DATE 24 OCT 80    TIME 08.46    RECOMP. NO. 1    DISK 1    PAGE 14

JOB NO. 11    LGGR ACCT 31302    CONTRACT 1631    SUB ACCT 10001    ACO DATE 22 AUG 80 18.28

MOD 86 ALPHA WIND ON RUN, AUGMENTOR 1, C/B=60 DEG, FWD=32 DEG, AFT=32 DEG,  
MEAN=32 DEG, CMU=2 Q=15.4

DATA POINT 7

0.4680

0.7643    0.6497

0.7675    0.6872

0.6853    0.6371

0.5961    0.6370

0.4816    -0.8689

0.4308

0.7205    -0.8057

0.8539

0.8673    0.7428

0.8550    0.8403

0.0544    0.5396

0.0037

-0.1314    0.6440

0.8362    0.7544

0.6804

0.6261

0.8416    1.0212

0.8044

0.8368    0.6997

0.6546  
0.7743

0.5361    0.5311    0.5819    0.7633    0.6456    0.6265    0.7552    0.6531    0.6525    0.7546

NACAL 292 RUN 107 DATE 24 OCT 80 TIME 08.46 RECOMP. NO. 1 DISK 1 PAGE 16

JOB NO. 11 LDGR ACCT 31302 CONTRACT 1631 SUB ACCT 10001 ACQ DATE 22 AUG 80 18.29

MOD 86 ALPHA WIND ON RUN, AUGMENTOR 1, C/B=60 DEG, FWD=32 DEG, AFT=32 DEG,  
MEAN=32 DEG, CMU=2 Q=15.4

DATA POINT 8

524

					0.4620				
					0.7655	0.6657			
					0.7686	0.7006			
					0.6981	0.6520			
	0.4791	0.5614					0.0742	0.5226	
	0.4853								
	0.2287								
	0.6172						0.0204		
	0.8226								
	0.8770								
	0.8729	0.8548					-0.1515	0.6398	
					0.6494	0.7614			
							0.6964		
									0.6637
					0.8525	1.0294			
							0.8104		
					0.8534	0.7129			0.6701
								0.7813	
0.4643	0.4321	0.4519	0.7558	0.5410	0.5905	0.7571	0.6370	0.6475	0.7552

MACAL 292 RUN 107 DATE 24 OCT 80 TIME 08.47 RECOMP. NO. 1 DISK 1 PAGE 20

JOB NO. 11 LDGR ACCT 31302 CONTRACT 1631 SUB ACCT 10001 ACO DATE 22 AUG 80 18.30

MOD 86 ALPHA WIND ON RUN, AUGMENTOR 1, C/B=60 DEG, FWD=32 DEG, AFT=32 DEG,  
MEAN=32 DEG, CMU=2 Q=15.4

DATA POINT 10

0.6051

0.7827 0.6912

0.7837 0.7222

0.6054 0.6784

0.2395 0.3825

0.2476 -0.5464

0.2649  
0.4407 -0.4174

0.7146  
0.8784 0.8041

0.8954 0.8858

0.1547 0.3396

0.0588

-0.0462 0.6318

0.8775 0.7237

0.7032

0.6469

0.8818 1.0646

0.8476

0.8727 0.7348

0.7200  
0.8174

0.3398 0.2705 0.2234 0.7695 0.3999 0.5633 0.7763 0.5676 0.6141 0.7707

525

NACAL 292      RUN 108      DATE 24 OCT 80      TIME 08.56      RECOMP. NO. 1      DISK 1      PAGE 22

JOB NO. 11      LDGR ACCT 31302      CONTRACT 1631      SUB ACCT 10001      ACQ DATE 22 AUG 80 18.54

MOD 87 ALPHA WIND ON RUN, AUGMENTOR 1, C/B=60 DEG, FWD=32 DEG, AFT=32 DEG,  
MEAN=32 DEG, CMU=4

P<sub>T</sub>      P<sub>A</sub>  
S      A  
14.70      14.296

SUMMARY PAGE

PT NO	ALPHA H PHI	Θ H THETA	CLH THRUST	CDH DELAL	CMH WFT	YM THTH	RL CMUTH	PTPFCH CDR	PTPCBH CDHR	PTPACH
1	1.6895 0.9500	7.6624 -73.2143	4.5081 339.6670	-1.3598 1.8086	-0.0874 7.9192	4231.8566 260.8420	8291.8976 3.6160	1.9431 0.8325	1.9318 -2.1923	1.9350
2	-2.3363 0.9500	7.7401 -68.5960	4.1297 323.2100	-1.6187 1.6463	-0.0889 7.9193	4158.4842 261.0983	7825.7480 3.5832	1.9413 0.8283	1.9350 -2.4471	1.9394
3	-6.4842 0.9500	7.6756 -61.4159	3.5054 288.7882	-1.9121 1.3959	-0.1985 7.9302	4257.4852 261.8644	6906.9803 3.6239	1.9445 0.8334	1.9375 -2.7455	1.9450
4	-10.5245 0.9500	7.7645 -54.1659	2.6786 259.5413	-2.0787 1.1527	-0.2937 7.9321	4385.0728 262.0402	6008.3621 3.5849	1.9466 0.8288	1.9392 -2.9076	1.9414
5	1.7106 0.9500	7.7967 -73.7936	4.5425 347.2101	-1.3202 1.8250	-0.0449 7.9222	4176.2017 261.9257	8420.1259 3.5685	1.9463 0.8261	1.9400 -2.1463	1.9449
6	5.7295 0.9500	7.7205 -77.3927	4.7288 352.6465	-1.0576 1.9205	-0.0489 7.9356	4340.7480 262.5074	8570.2677 3.6071	1.9491 0.8314	1.9394 -1.8891	1.9377
7	9.6905 0.9500	7.8182 -80.7723	4.9509 369.1712	-0.8043 2.0310	0.0005 7.9392	4508.4269 262.7261	8805.2106 3.5696	1.9480 0.8273	1.9408 -1.6317	1.9350
8	13.6798 0.9500	7.7596 -84.7752	5.3745 394.2481	-0.4914 2.2266	0.0855 7.9068	4547.8129 261.5182	9283.1613 3.5800	1.9475 0.8272	1.9359 -1.3187	1.9368
9	17.7884 0.9500	7.5737 -89.2255	5.9294 422.8032	-0.0801 2.4878	0.1061 7.9049	4616.5137 261.5481	9529.0905 3.6683	1.9459 0.8374	1.9360 -0.9175	1.9365
10	22.0191 0.9500	7.4758 86.4865	6.5075 458.8501	0.3955 2.7744	0.2051 7.9101	4682.8169 261.8877	9964.9015 3.7211	1.9439 0.8437	1.9384 -0.4442	1.9340

MACAL 292 RUN 108 DATE 24 OCT 80 TIME 08.52 RECOMP. NO. 1 DISK 1 PAGE 2

JOB NO. 11 LDGR ACCT 31302 CONTRACT 1631 SUB ACCT 10001 ACQ DATE 22 AUG 80 18.40

MOD 87 ALPHA WIND ON RUN, AUGMENTOR 1, C/B=60 DEG, FWD=32 DEG, AFT=32 DEG,  
MEAN=32 DEG, CMU=4

DATA POINT 1

527

-0.0332  
0.3854 0.2131  
0.3892 0.2522  
0.2790 0.2722 0.2587 0.1914  
0.1942 -1.3453 -0.3266 0.2849  
0.2066  
0.3761 -1.2505 -0.4391  
0.4356  
0.4349 0.3396 -0.4190 0.3077  
0.4345 0.4282  
0.4222 0.3262 0.2881  
0.3418  
0.4271 0.6036 0.4103  
0.4245 0.3661 0.3404  
0.3651  
0.2846 0.2518 0.2549 0.3953 0.2759 0.2672 0.3898 0.2858 0.2765 0.3904

NACAL 292      RUN 108      DATE 24 OCT 80      TIME 08.54      RECOMP. NO. 1      DISK 1      PAGE 14  
 JOB NO. 11      LDGR ACCT 31302      CONTRACT 1631      SUB ACCT 10001      ACO DATE 22 AUG 80 18.51  
 MOD 87 ALPHA WIND ON RUN, AUGMENTOR 1, C/B=60 DEG, FWD=32 DEG, AFT=32 DEG,  
 MEAN=32 DEG, CMU=4

DATA POINT 7

528

					0.1858				
					0.3920	0.2612			
					0.3940	0.5085			
					0.2968	0.2844			
		0.1973	0.2549						
		0.1825	-1.1647				-0.2816	0.1818	
		0.0742							
		0.2926	-1.1118				-0.3989		
		0.4214							
		0.4507	0.3625				-0.4981	0.2749	
		0.4495	0.4472						
			0.4404	0.3589			0.2994		
								0.2880	
			0.4379	0.6905			0.4108		
			0.4384	0.3140					0.3079
								0.3942	
0.1720	0.1645	0.2413	0.4040	0.2462	0.2592	0.4028	0.2771	0.2679	0.4077

12

NACAL 292 RUN 108 DATE 24 OCT 80 TIME 08.55 RECOMP. NO. 1 DISK 1 PAGE 16  
JOB NO. 11 LDGR ACCT 31302 CONTRACT 1631 SUB ACCT 10001 ACQ DATE 22 AUG 80 18.52

MOD 87 ALPHA WIND ON RUN, AUGMENTOR 1, C/B=60 DEG, FWD=32 DEG, AFT=32 DEG,  
MEAN=32 DEG, CMU=4

DATA POINT 8

0.2105

0.3536 0.3402

0.3976 0.3347

0.3045 0.2790

0.1553 0.2060

0.1416 -1.0449

-0.0121

0.2153 -1.0668

0.2841

0.4500 0.3619

0.4558 0.4527

-0.2816 0.1741

-0.4233

-0.5589 0.2866

0.4435 0.3707

0.2999

0.2892

0.4439 0.6887

0.4174

0.4438 0.3214

0.3265

0.3952

0.1373 0.1187 0.1324 0.4034 0.1967 0.2320 0.4040 0.2573 0.2493 0.4040

529

NACAL 292 RUN 108 DATE 24 OCT 80 TIME 08.55 RECOMP. NO. 1 DISK 1 PAGE 20  
JOB NO. 11 LDGR ACCT 31302 CONTRACT 1631 SUB ACCT 10001 ACO DATE 22 AUG 80 18.53

MOD 87 ALPHA WIND ON RUN, AUGMENTOR 1, C/B=60 DEG, FWD=32 DEG, AFT=32 DEG,  
MEAN=32 DEG, CMU=4

DATA POINT 10

530

0.0417  
0.3945 0.1178  
0.3949 0.3109  
0.1946 0.0715  
-0.0638 0.0643  
-0.1167 -1.0789  
-0.0888  
0.0470 -1.0686  
0.2612  
0.4168 0.3743  
0.4493 0.4535  
0.4512 0.2955  
0.4495 0.6722  
0.4464 0.3516  
-0.2974 0.1190  
-0.4135  
-0.3691 0.2669  
0.2932  
0.2491  
0.4253  
0.4077 0.3304  
-0.0291 -0.0523 -0.0608 0.3941 0.1713 0.1973 0.3953 0.1769 0.2190 0.3966

RACAL 292 RUN 110 DATE 24 OCT 80 TIME 09.09 RECOMP. NO. 1 DISK 1 PAGE 22  
 JOB NO. 11 LDGR ACCT 31302 CONTRACT 1631 SUB ACCT 10001 ACO DATE 22 AUG 80 23.16

MOD 93 CMU VARIATION, ALPHA=3 DEG, C/B=60 DEG, FWD=54 DEG, AFT=22 DEG,  
 MEAN=38 DEG

P<sub>T</sub> P<sub>A</sub>  
 14.70 14.316

SUMMARY PAGE

PT NO	ALPHA H PHI	Q H THETA	CLH THRUST	CDH DELAL	CMH WFT	YM THTH	RL CMUTH	PTPFCH CDR	PTPCBH CDNR	PTPACH
1	0.9600 1.2000	14.9262 77.0042	2.0085 289.6568	0.4635 0.9354	0.2379 3.5845	-664.1141 56.0771	7763.4379 0.3990	1.1546 0.4565	1.1486 0.0040	1.1538
2	1.2617 1.3000	15.0039 86.8560	3.0082 425.5501	0.1652 1.3587	0.4622 5.3667	651.8358 124.2597	11443.4015 0.8797	1.3767 0.6865	1.3710 -0.5212	1.3753
3	1.1391 1.3000	15.1742 81.7737	2.4955 360.2010	0.3607 1.1499	0.3107 4.4005	-224.2922 85.3750	9704.8385 0.5976	1.2490 0.5602	1.2438 -0.1994	1.2444
4	1.4142 1.3000	7.6369 -86.2227	3.4819 250.8486	-0.2237 1.5209	0.6299 4.5409	1088.9512 92.8399	6883.7755 1.2913	1.2811 0.8256	1.2736 -1.0494	1.2774
5	1.5103 1.3000	7.6563 -80.2250	4.0056 293.1714	-0.6835 1.6865	0.7619 5.4366	2215.4478 131.0329	7918.1968 1.8179	1.4146 0.9876	1.4087 -1.6711	1.4097
6	1.5696 1.3000	7.7002 -76.8189	4.3579 324.4525	-1.0206 1.7860	0.8292 6.1006	3073.0418 161.5385	8658.9960 2.2284	1.5264 1.1052	1.5154 -2.1258	1.5258
7	1.6304 1.3000	7.6783 -73.0467	4.7188 356.5923	-1.4384 1.8777	0.8977 6.8414	4046.9230 198.2500	9353.5216 2.7426	1.6674 1.2428	1.6594 -2.6812	1.6567
8	1.7486 1.3000	7.6071 -70.9632	5.1737 391.9477	-1.7851 2.0052	0.9629 7.5016	4915.4635 232.8253	10171.1456 3.2511	1.7995 1.3703	1.7995 -3.1554	1.7971
9	1.7672 1.3000	7.8506 -69.1947	5.4025 427.1349	-2.0528 2.0579	0.9925 8.1588	5709.3877 268.4712	10945.8995 3.6325	1.9475 1.4690	1.9387 -3.5218	1.9488
10	1.8089 1.3000	7.7462 -67.6837	5.6587 446.0640	-2.3226 2.1181	1.0211 8.6146	6300.0934 293.0304	11356.4881 4.0183	2.0399 1.5630	2.0394 -3.8857	2.0453

NACAL 292 R/WIN 133 DATE 24 OCT 80 TIME 10.16 RECOMP. NO. 1 DISK 2 PAGE 22

JOB NO. 11 LDGR ACCT 22000 CONTRACT 163 SUB ACCT 3010 ACQ DATE 5 SEP 80 22.25

MOD 113 CHORD WING, WIND ON, ALPHA SWEEP, 22.62 INCHES

P<sub>T</sub>S 14.40 P<sub>A</sub> 14.345

SUMMARY PAGE

PT NO	ALPHA H PHI	Q H THETA	CLH THRUST	CDH DELAL	CMH WFT	YM THTH	RL CMUTH	PTPFCH CDR	PTPCBH CDHR	PTPACH
1	0.0732 0.0000	8.4870 51.5160	0.1016 10.3776	0.0808 0.0441	-0.0169 0.1553	104.8593 0.2401	104.2456 0.0030	0.9989 0.0000	0.9985 0.0807	0.9985
2	-3.9586 0.0000	8.5266 -70.2873	-0.2472 21.0856	0.0886 -0.1156	-0.1237 0.1354	124.7164 0.2125	-559.4810 0.0026	0.9985 0.0000	0.9985 0.0885	0.9986
3	-7.9799 0.0000	8.6227 -76.8513	-0.5570 46.4354	0.1301 -0.2583	-0.2056 0.0235	197.7427 0.0497	-1174.8838 0.0006	0.9975 0.0000	0.9977 0.1301	0.9974
4	-11.8786 0.0000	8.7863 -74.5191	-0.7513 64.4842	0.2080 -0.3456	-0.2666 0.0670	289.2939 0.0959	-1637.6360 0.0011	0.9990 0.0000	0.9988 0.2080	0.9984
5	0.0449 0.0000	8.5654 53.9580	0.0854 8.5262	0.0622 0.0372	-0.0192 0.0538	137.7840 0.1156	90.4050 0.0014	0.9972 0.0000	0.9974 0.0621	0.9972
6	4.1315 0.0000	8.6520 78.2578	0.4315 35.9022	0.0897 0.1957	0.0952 0.0721	156.9785 0.1309	788.9863 0.0016	0.9984 0.0000	0.9983 0.0856	0.9974
7	8.0218 0.0000	8.4148 81.6445	0.7228 57.8771	0.1061 0.3255	0.2112 0.0582	232.0763 0.1320	1271.5098 0.0016	0.9971 0.0000	0.9970 0.1061	0.9970
8	12.0346 0.0000	8.4077 80.7552	0.9727 78.0040	0.1583 0.4449	0.3138 0.1478	299.6602 0.2015	1770.7482 0.0025	0.9994 0.0000	0.9987 0.1582	0.9987
9	15.8631 0.0000	8.4487 74.4003	1.0215 84.3617	0.2852 0.4653	0.2993 0.1218	359.2384 0.1742	1867.2431 0.0021	0.9988 0.0000	0.9988 0.2851	0.9988
10	19.7608 0.0000	8.2477 70.4107	1.1318 93.2809	0.4027 0.5233	0.3203 0.0478	333.0880 0.0996	1959.7652 0.0012	0.9976 0.0000	0.9977 0.4027	0.9971



MACAL 292 RUN 133 DATE 24 OCT 80 TIME 10.15 RECOMP. NO. 1 DISK 2 PAGE 14  
JOB NO. 11 LDGR ACCT 22000 CONTRACT 163 SUB ACCT 3010 ACQ DATE 5 SEP 80 22.22  
POD 113 CHORD WING, WIND ON, ALPHA SWEEP, 22.62 INCHES

DATA POINT 7

534,

0.0000  
0.0000 0.0000  
0.0000 0.0000  
0.0000 0.0000  
0.0509 0.0000  
0.0000 0.0000  
0.0000 0.0000  
0.0000 0.0000  
0.0000 0.0000  
0.0000 0.0000  
0.0222 0.0000  
0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000





NACAL 292 RUN 134 DATE 24 OCT 80 TIME 10.23 RECOMP. NO. 1 DISK 2 PAGE 27

JOB NO. 11 LDGR ACCT 22000 CONTRACT 163 SUB ACCT 3010 ACO DATE 5 SEP 80 22.56

MOD 114 CHORD WING, WIND ON, ALPHA SWEEP, CHORD=32.62

P<sub>T</sub> P<sub>A</sub>  
14.40 14.345

SUMMARY PAGE

PT NO	ALPHA H PHI	O H THETA	CLH THRUST	CDH DELAL	CMH WFT	YM THTH	RL CMUTH	PTPFCH CDR	PTPCBH CDHR	PTPACH
1	0.0787 0.0000	8.6756 54.2848	0.0713 10.3466	0.0512 0.0449	-0.0072 0.1362	124.7376 0.2006	112.2913 0.0017	0.9993 0.0000	0.9985 0.0512	0.9996
2	-4.0026 0.0000	8.8195 -76.2525	-0.2416 29.7702	0.0586 -0.1619	-0.1261 0.0976	128.7624 0.2234	-754.2148 0.0018	0.9976 0.0000	0.9985 0.0516	0.9971
3	-8.0993 0.0000	8.5789 -79.4130	-0.5193 61.5408	0.0970 -0.3467	-0.2385 0.1533	212.5628 0.2905	-1576.6313 0.0024	0.9987 0.0000	0.9974 0.0970	0.9981
4	-11.9956 0.0000	8.7456 -74.2787	-0.6580 81.1687	0.1852 -0.4425	-0.3024 0.1372	216.8415 0.2426	-2119.2027 0.0020	0.9999 0.0000	0.9978 0.1851	0.9979
5	0.0683 0.0000	8.6786 49.5531	0.0603 9.3398	0.0514 0.0376	-0.0099 0.1428	131.3210 0.2286	82.3541 0.0019	0.9987 0.0000	0.9985 0.0513	0.9984
6	4.0816 0.0000	8.6910 79.7072	0.3355 40.2427	0.0609 0.2201	0.1107 0.1379	186.5762 0.2253	909.9111 0.0019	0.9992 0.0000	0.9980 0.0609	0.9983
7	8.1013 0.0000	8.5193 82.2237	0.6037 70.4781	0.0824 0.3981	0.2227 0.0646	254.4470 0.1583	1630.9862 0.0013	0.9973 0.0000	0.9964 0.0824	0.9964
8	12.1386 0.0000	8.4016 81.8514	0.8740 100.7126	0.1251 0.5785	0.3332 0.1359	311.2167 0.2125	2386.5447 0.0018	0.9992 0.0000	0.9983 0.1251	0.9983
9	16.0151 0.0000	8.5458 73.4468	0.9103 110.1887	0.2705 0.6088	0.3097 0.1568	258.2037 0.2384	2584.6053 0.0020	0.9993 0.0000	0.9985 0.2705	0.9982
10	19.9590 0.0000	8.6530 70.1400	0.9955 124.3492	0.3596 0.6712	0.3259 0.0606	336.7338 0.1480	2844.8518 0.0012	0.9972 0.0000	0.9962 0.3595	0.9967

537

0

FACAL 292    RUN 134    DATE 24 OCT 80    TIME 10.19    RECOMP. NO. 1    DISK 2    PAGE 2  
 JOB NO. 11    LDGR ACCT 22000    CONTRACT 163    SUB ACCT 3010    ACQ DATE 5 SEP 80 22.45  
 MOD 114    CHORD WING, WIND ON, ALPHA SWEEP, CHORD=32.62

DATA POINT 1

						0.0000					
						0.0000	0.0000				
						0.0000	0.0000				
						0.0000	0.0000				
						0.0000	0.0000				
						0.0000	0.0000				
						0.0000	0.0000		0.0000	0.0000	
						0.0000	0.0000		0.0000	0.0000	
						0.0000	0.0000		0.0000	0.0000	
						0.0000	0.0000		0.0000	0.0000	
						0.0000	0.0000		0.0000	0.0000	
						0.0000	0.0000		0.0000	0.0000	
						0.0155	0.0000		0.0000	0.0000	
						0.0000	0.0000		0.0000	0.0000	
						0.0000	0.0000		0.0000	0.0000	

538





