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**SUPERSONIC DYNAMIC STABILITY DERIVATIVES
OF A MODIFIED 089B SHUTTLE ORBITER**

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and
E. E. Davenport**

October 1974

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PLOT SCHEDULE:

- (A) CNQ, CNA, CLMQ, CLMA VS ALPHA
- (B) CYNR, CYNBC, CBLR, CBLBC VS ALPHA
- (C) CBLP, CBLBS, CYNP, CYNBS VS ALPHA

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SUPERSONIC DYNAMIC STABILITY
DERIVATIVES OF A MODIFIED O89B SHUTTLE ORBITER
(LA14)

by

Delma C. Freeman, Jr., Richmond P. Boyden and E. E. Davenport

SUMMARY

An experimental test program has been conducted to measure the supersonic dynamic stability derivatives of a modified O89B shuttle orbiter configuration. The tests were conducted in the Langley Unitary Plan Wind Tunnel utilizing forced oscillation equipment. Rotary derivatives were measured about all three axes with both the in-phase and out-of-phase derivatives reported herein. The tests were conducted at Mach numbers of 1.6, 1.9, 2.36, 2.86, 3.96 and 4.63 for angles of attack up to 30° . The data were measured at the model resonant frequency with pitch and yaw amplitudes of 1° and roll amplitudes of 2.5° .

INTRODUCTION

One of the current major national goals is the development of the Space Shuttle. As part of this effort a program has been initiated at the Langley Research Center to experimentally measure the dynamic damping derivatives of the shuttle orbiter for all flight phases from entry to landing. These experimentally measured values will be utilized in computations to assess the importance of dynamic damping derivatives on overall vehicle dynamics. Subsonic-transonic results are presented in reference 1 and hypersonic results in reference 2.

As part of this study supersonic forced oscillation tests of a 0.0165-scale model of a modified 089B shuttle orbiter have been made in the Langley Unitary Plan Wind Tunnel (UPWT). These tests were made for several configurations over a Mach number range from 1.6 to 4.63 measuring the pitch, roll, and yaw damping. The normal force due to pitch rate, cross-derivative yawing moment due to roll rate, and rolling moment due to yaw rate were also measured. Data plots and tables were prepared by Chrysler Corporation under NASA contract. For this investigation, designated UPWT 1046/1049 (LA14), the tunnel occupancy time was 170 hours.

SYMBOLS

<u>SYMBOL</u>	<u>PLOT SYMBOL</u>	<u>DEFINITION</u>
b	BREF	reference span, meters
C_{ℓ}	CBL	rolling-moment coefficient, $\frac{\text{rolling moment}}{q_{\infty} S b}$
$C_{\ell p}$	-	$\frac{\partial C_{\ell}}{\partial \left(\frac{pb}{2V}\right)}$, per radian
$C_{\ell \dot{p}}$	-	$\frac{\partial C_{\ell}}{\partial \left(\frac{pb^2}{4V^2}\right)}$, per radian
$C_{\ell p} + C_{\ell \dot{\beta}} \sin \alpha$	CBLP	damping-in-roll parameter, per radian
$C_{\ell r}$	-	$\frac{\partial C_{\ell}}{\partial \left(\frac{rb}{2V}\right)}$, per radian
$C_{\ell \dot{r}}$	-	$\frac{\partial C_{\ell}}{\partial \left(\frac{rb^2}{4V^2}\right)}$, per radian
$C_{\ell r} - C_{\ell \dot{\alpha}} \cos \alpha$	CBLR	rolling moment due to yaw rate parameter, per radian

SYMBOLS (Continued)

<u>SYMBOL</u>	<u>PLOT SYMBOL</u>	<u>DEFINITION</u>
$C_{l\beta}$	-	$\frac{\partial C_l}{\partial \beta}$, per radian
$C_{l\dot{\beta}}$	-	$\frac{\partial C_l}{\partial \left(\frac{\dot{\beta} b}{2V}\right)}$, per radian
$C_{l\beta} \sin \alpha - k^2 C_{l\dot{\rho}}$	CBLBS	rolling moment due to roll displacement parameter, per radian
$C_{l\beta} \cos \alpha + k^2 C_{l\dot{r}}$	CBLBC	effective dihedral parameter, per radian
C_m	CLM	pitching-moment coefficient, $\frac{\text{pitching moment}}{q_\infty S \bar{c}}$
C_{mq}	-	$\frac{\partial C_m}{\partial \left(\frac{qc}{2V}\right)}$, per radian
$C_{m\dot{q}}$	-	$\frac{\partial C_m}{\partial \left(\frac{\dot{q} \bar{c}^2}{4V^2}\right)}$, per radian
$C_{mq} + C_{m\dot{\alpha}}$	CLMQ	damping-in-pitch parameter, per radian
$C_{m\alpha}$	-	$\frac{\partial C_m}{\partial \alpha}$, per radian
$C_{m\dot{\alpha}}$	-	$\frac{\partial C_m}{\partial \left(\frac{\dot{\alpha} \bar{c}}{2V}\right)}$, per radian
$C_{m\alpha} - k^2 C_{m\dot{q}}$	CLMA	oscillatory longitudinal stability parameter, per radian
C_N	CN	normal force coefficient, $\frac{\text{normal force}}{q_\infty S}$

SYMBOLS (Continued)

<u>SYMBOL</u>	<u>PLOT SYMBOL</u>	<u>DEFINITION</u>
C_{Nq}	-	$\frac{\partial C_N}{\partial \left(\frac{q\dot{c}}{2V}\right)}$, per radian
$C_{N\dot{q}}$	-	$\frac{\partial C_N}{\partial \left(\frac{\dot{q}\bar{c}^2}{4V^2}\right)}$, per radian
$C_{Nq} + C_{N\dot{\alpha}}$	CNQ	normal force due to pitch rate parameter, per radian
$C_{N\alpha}$	-	$\frac{\partial C_N}{\partial \alpha}$, per radian
$C_{N\dot{\alpha}}$	-	$\frac{\partial C_N}{\partial \left(\frac{\dot{\alpha}\bar{c}}{2V}\right)}$, per radian
$C_{N\alpha} - k^2 C_{N\dot{q}}$	CNA	normal force due to pitch displacement parameter, per radian
C_n	CYN	yawing-moment coefficient, $\frac{\text{yawing moment}}{q_\infty S b}$
C_{np}	-	$\frac{\partial C_n}{\partial \left(\frac{pb}{2V}\right)}$, per radian
$C_{n\dot{p}}$	-	$\frac{\partial C_n}{\partial \left(\frac{\dot{p}b^2}{4V^2}\right)}$, per radian
$C_{np} + C_{n\dot{\beta}} \sin \alpha$	CYNP	yawing moment due to roll rate parameter, per radian
C_{nr}	-	$\frac{\partial C_n}{\partial \left(\frac{rb}{2V}\right)}$, per radian

SYMBOLS (Continued)

<u>SYMBOL</u>	<u>PLOT SYMBOL</u>	<u>DEFINITION</u>
C_{n_r}	-	$\frac{\partial C_n}{\partial \left(\frac{rb^2}{4V^2}\right)}$, per radian
$C_{n_r} - C_{n_\beta} \cos \alpha$	CYNR	damping-in-yaw parameter, per radian
C_{n_β}	-	$\frac{\partial C_n}{\partial \beta}$, per radian
C_{n_β}	-	$\frac{\partial C_n}{\partial \left(\frac{\beta b}{2V}\right)}$, per radian
$C_{n_\beta} \cos \alpha + k^2 C_{n_r}$	CYNBC	oscillatory directional-stability parameter, per radian
$C_{n_\beta} \sin \alpha - k^2 C_{n_p}$	CYNBS	yawing moment due to roll displacement parameter, per radian
\bar{c}	LREF	reference chord, meters
c.g.	CG-LOC	reference center of gravity location position
f	-	frequency of oscillation, Hertz
k	-	reduced frequency parameter, $\frac{\omega \bar{c}}{2V}$ in pitch; $\frac{\omega b}{2V}$ in roll and yaw, radians
M	MACH	free-stream Mach number
P	-	angular velocity of model about X axis, radians/second
q	-	angular velocity of model about Y axis, radians/second
q_∞	Q(KPA)	free-stream dynamic pressure, k Pa, (psf)
R	RN/L	Reynolds number, millions/meter, millions/foot, millions based on body length

SYMBOLS (Concluded)

<u>SYMBOL</u>	<u>PLOT SYMBOL</u>	<u>DEFINITION</u>
r	-	angular velocity of model about Z axis, radians/second
S	SREF	reference area, meters ²
V	-	free-stream velocity, meters/second
α	ALPHA	angle of attack, radians or degrees
β	BETA	angle of sideslip, radians or degrees
ω	-	angular velocity, $2\pi f$, radians/second
δ_a	AILRON	total aileron control surface deflection angle, degrees
δ_{bf}	BDFLAP	body flap surface deflection angle, positive trailing edge down, degrees
δ_e	ELEVTR	elevator surface deflection angle, positive trailing edge down, degrees
δ_r	RUDDER	rudder surface deflection angle, positive deflection trailing edge to the left, degrees
δ_{rf}	RUDFLR	rudder flare deflection angle, included angle between split rudder used to decrease speed, degrees

Note: A dot over a quantity indicates a first derivative with respect to time.

CONFIGURATION INVESTIGATED

A 0.0165 scale model of a blend of Rockwell International shuttle configurations was tested. The model consisted of a 089B orbiter configuration with a 139B configuration nose forward of fuselage station 500. A sketch and photograph of the model are shown in figures 2 and 3, respectively. Data were measured at two moment reference point locations, 65 percent and 67 percent of the body length, (position 1.0 and 2.0, respectively). Variations of body flap and orbital maneuvering system (OMS) installation were also investigated. The data tabulation sheets are presented in Table II and the model component dimensional data are presented in Table III.

TEST CONDITIONS

Tunnel conditions during the tests are summarized in table 1. The Langley forced oscillation apparatus (see reference 3) was used with the model oscillating at resonant frequency. Amplitudes of 1° were used during the pitch and yaw tests and 2.5° for the roll tests. Both the in-phase and the out-of-phase derivatives are presented for the primary derivatives as well as the cross-derivatives of yawing moment due to rolling velocity and rolling moment due to yaw velocity. All data presented are average values of three data samples at each angle of attack.

TABLE I. TEST CONDITIONS

MACH NUMBER	REYNOLDS NUMBER X 10 ⁶ (BASED ON MODEL LENGTH)	DYNAMIC PRESSURE	
		k Pa	PSF
1.60	3.55	23.03	480
1.90	3.55	22.89	478
2.36	4.43	26.86	560
2.86	4.43	23.70	495
3.96	4.43	17.62	368
4.63	4.43	13.93	291

TEST FACILITY DESCRIPTION

The Langley Research Center Unitary Plan Wind Tunnel (see reference 4) is an air-medium, continuous-flow facility consisting of two test sections. Asymmetrical, sliding-block type throats control Mach number, and models can be supported from stings mounted to the side-wall strut systems. Each test section is 1.219 meters by 1.219 meters (4 feet by 4 feet). Section Number 1 operates at Mach numbers of 1.47 to 2.86 and Section Number 2 operates at Mach numbers of 2.29 to 4.63. Reynolds numbers and tunnel pressures are variation with limitations prescribed by tunnel capabilities and model load designs. Normal operating total temperature is 65°C (150°F).

DATA REDUCTION

Forces and moments were reduced about the body axes system to coefficient form utilizing the following model reference values:

b	= BREF = reference wing span	= 0.39256 meter	(15.455 in.)
\bar{c}	= LREF = reference MAC	= 0.1990 meter	(7.834 in.)
S	= SREF = reference wing area	= 0.0680 m ²	(0.7323 ft ²)

Moment coefficients are referenced to two theoretical center of gravity locations, which are: 1) 65% and 2) 67% of the body length. These dimensions are:

x_{cg1}	longitudinal length, nose to forward moment reference center	0.3513 meter	(13.830 in.)
x_{cg2}	longitudinal length, nose to aft moment reference center	0.3621 meter	(14.256 in.)
z_{cg}	vertical distance, water plane 0 to moment reference center	0.0106 meter	(0.419 in.)

PRESENTATION OF RESULTS

The forced oscillation test results are presented in figures 4 through 12. The effect of c.g. position on the pitch damping and the normal force due to pitch rate are presented in figure 4. These results show that the model exhibited positive damping at all test conditions except at Mach numbers of 3.96 and 4.63 where there were significant nonlinearities and some undamping at angles of attack between 8 and 18 degrees for both c.g. positions. The effect of c.g. position on the yaw damping is presented in figure 5. These results show that the model had positive damping for the entire α and Mach range tested for both c.g. positions. The rolling moment due to yaw rate is also presented in this figure. The effect of OMS installation on the roll damping and the yawing moment due to roll rate are presented in figure 8. These data show that the model generally exhibited positive damping for the α and Mach range tested.

The vertical tail contribution to the yaw and roll damping can be seen in figures 9 and 10 and the effect of configuration variables such as elevon and body flap deflection and body flap removal, are presented in figures 11 and 12 respectively.

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1. Boyden, R. P. and Freeman, Delma C.: Subsonic and Transonic Dynamic Stability Derivatives of a Modified O89B Shuttle Orbiter, TMX-72631.
2. Uselton, Bob L.: Hypersonic Dynamic Stability Derivatives of a Modified O89B Shuttle Orbiter, DMS-DR-2132.
3. Bielat, Ralph P. and Wiley, Harleth G.: Dynamic Longitudinal and Directional Stability Derivatives for a 45° Sweptback-Wing Airplane Model at Transonic Speeds, TM X-39, August 1959.
4. Schaefer, William T. Jr.: Characteristics of Major Active Wind Tunnels At the Langley Research Center, TMX-1130, July 1965.

TABLE II.

TEST : LA14, UPWT 1046/1049		DATA SET / RUN NUMBER COLLATION SUMMARY										DATE : 31 SEPTEMBER 73								
DATA SET IDENTIFIER	CONFIGURATION	SCHD.		PARAMETERS/VALUES				NO. OF RUNS	MACH NUMBERS (OR ALTERNATE INDEPENDENT VARIABLE)											
		α	β	δe	δr_f	δb_f	C.G.		1.6	1.9	2.36	2.86	3.96	4.63						
RPGP01	BMV	A	0	0	40	-	1	4	-	-	910	911	912	913						
P03	BWVM	A	0	0	40	-	1	6	603	604	906	907	908	909						
P05	BWVMF	A	0	0	40	0	1	6	601	602	901	902	903	904						
P06	BWVMF	A	0	0	40	0	2	6	606	607	918	919	920	921						
P07	BWVMF	A	0	5	40	13	2	5	-	608	914	915	916	917						
RPGY01	BWV	A	0	0	40	-	1	5	-	613	934	935	936	937						
Y02	BW M	A	0	0	-	-	1	5	-	612	932	933	930	931						
Y03	BWVM	A	0	0	40	-	1	5	-	611	926	927	928	929						
Y04	BWVM	A	0	0	40	-	2	5	-	610	922	923	924	925						
RPGR01	BWV	A	0	0	40	-	1	5	619	620	618	-	946	947						
R02	BW M	A	0	0	-	-	1	6	616	617	942	943	944	945						
R03	BWVM	A	0	0	40	-	1	6	614	615	940	941	938	939						
"P" DATA	CLMQ	CLMA	CNQ	CNA	Q (KPA)	BETA					MACH		ALPHA	6						
"Y" DATA	CYNR	CYNBC	CBLR	CBLBC	Q (KPA)	BETA					MACH		ALPHA	6						
"R" DATA	CBLP	CBLBS	CYNP	CYNBS	Q (KPA)	BETA					MACH		ALPHA	6						

TYPE OF DATA α OR β SCHEDULES

$\alpha(A) = -2^\circ$ $\Delta\alpha = 2^\circ \rightarrow 24^\circ$ COEFFICIENT SCHEDULES

C.G. 1 = FORWARD = 65% Body Length 2 = AFT = 67% Body Length

TABLE III. - COMPONENT DIMENSIONAL DATA

COMPONENT- BODY - B

GENERAL DESCRIPTION- 089B-139B(MODIFIED NOSE), NOSE SECTION FROM FULL-SCALE STATION 238.0 TO STATION 500 FROM NAR DRAWING VL70-000139B, REMAINING BODY AFT OF STATION 500 FROM NAR VL70-000093.

MODEL SCALE- 0.0165

DRAWING NUMBER- VL70-000093, VL70-000139B.

TEST IDENTIFICATION- LA14

	FULL SCALE METRIC		FULL SCALE ENGLISH		MODEL SCALE METRIC		MODEL SCALE ENGLISH	
LENGTH	3277.4	CM.	1290.3	IN.	54.077	CM.	21.290	IN.
MAX. WIDTH	673.1	CM.	265.0	IN.	11.106	CM.	4.372	IN.
MAX. DEPTH	629.9	CM.	248.0	IN.	10.394	CM.	4.092	IN.
FINENESS RATIO	4.869		4.869		4.869		4.869	
MAX CROSS-SECTIONAL AREA	42.4011	SO.M.	456.4000	SO.FT.	115.4370	SO.CM.	17.8927	SO.IN.

FOOTNOTE-GENERAL-MODEL SCALE VALUES ARE DERIVED FROM FULL SCALE VALUES UNLESS NOTED OTHERWISE.

COMPONENT- ELEVON

GENERAL DESCRIPTION- CONFIGURATION PER LINES VL70-000093, DATA FOR (1) OF (2) SIDES.

MODEL SCALE- 0.0165

DRAWING NUMBER- VL70-000093

TEST IDENTIFICATION- LA14

	FULL SCALE METRIC		FULL SCALE ENGLISH		MODEL SCALE METRIC		MODEL SCALE ENGLISH	
AREA	19.0932	SO.M.	205.5170	SO.FT.	51.9813	SO.CM.	8.0571	SO.IN.
EQUIVALENT SPAN	897.5	CM.	353.34	IN.	14.81	CM.	5.83	IN.
INBOARD EQUIVALENT CHORD	291.5	CM.	114.78	IN.	4.81	CM.	1.89	IN.
OUTBOARD EQUIVALENT CHORD	139.7	CM.	55.00	IN.	2.31	CM.	.91	IN.
RATIO MOVABLE SURFACE CHORD/ TOTAL SURFACE CHORD								
AT INBOARD EQUIVALENT CHORD	.208		.208		.208		.208	
AT OUTBOARD EQUIVALENT CHORD	.400		.400		.400		.400	
SWEEP-BACK ANGLES								
LEADING EDGE	.00	DEG.	.00	DEG.	.00	DEG.	.00	DEG.
TAILING EDGE	-10.02	DEG.	-10.02	DEG.	-10.02	DEG.	-10.02	DEG.
HINGELINE	.00	DEG.	.00	DEG.	.00	DEG.	.00	DEG.
AREA MOMENT NORMAL TO HINGELINE	43.8367	CU.M.	1548.0700	CU.FT.	196.9200	CU.CM.	12.0167	CU.IN.

FOOTNOTE- GENERAL-MODEL SCALE VALUES ARE DERIVED FROM FULL SCALE VALUES UNLESS NOTED OTHERWISE.



TABLE III. - COMPONENT DIMENSIONAL DATA

COMPONENT- WING - W

GENERAL DESCRIPTION- ORBITER CONFIGURATION PER LINES VL70-000093, (DIHEDRAL IS DEFINED AT THE LOWER SURFACE OF THE WING AT THE 75.33 PERCENT ELEMENT LINE PROJECTED INTO A PLANE PERPENDICULAR TO THE FUSELAGE REFERENCE LINE).

MODEL SCALE- 0.0165

DRAWING NUMBER- VL70-000093

TEST IDENTIFICATION- LA14

	FULL SCALE METRIC		FULL SCALE ENGLISH		MODEL SCALE METRIC		MODEL SCALE ENGLISH	
TOTAL DATA								
PLANFORM AREA	249.9102	SQ.M.	2690.0000	SQ.FT.	680.3804	SQ.CM.	105.4588	SQ.IN.
EQUIVALENT SPAN	2379.172	CM.	936.680	IN.	39.256	CM.	15.455	IN.
ASPECT RATIO	2.265		2.265		2.265		2.265	
RATE OF TAPER	1.177		1.177		1.177		1.177	
TAPER RATIO	.200		.200		.200		.200	
DIHEDRAL ANGLE	3.500	DEG.	3.500	DEG.	3.500	DEG.	3.500	DEG.
INCIDENCE ANGLE	3.000	DEG.	3.000	DEG.	3.000	DEG.	3.000	DEG.
AERODYNAMIC TWIST	3.000	DEG.	3.000	DEG.	3.000	DEG.	3.000	DEG.
SWEEP-BACK ANGLES								
LEADING EDGE	45.000	DEG.	45.000	DEG.	45.000	DEG.	45.000	DEG.
TRAILING EDGE	-10.240	DEG.	-10.240	DEG.	-10.240	DEG.	-10.240	DEG.
0.25 ELEMENT LINE	35.209	DEG.	35.209	DEG.	35.209	DEG.	35.209	DEG.
CHORDS								
ROOT (WING STATION 0.0)	1750.67	CM.	689.24	IN.	28.89	CM.	11.37	IN.
TIP (EQUIVALENT)	350.14	CM.	137.85	IN.	5.78	CM.	2.27	IN.
MAC	1206.02	CM.	474.81	IN.	19.90	CM.	7.83	IN.
FUS. STA. OF 0.25 MAC	2887.71	CM.	1136.89	IN.	47.65	CM.	18.76	IN.
W.P. OF 0.25 MAC	759.97	CM.	299.20	IN.	12.54	CM.	4.94	IN.
B.L. OF 0.25 MAC	462.61	CM.	182.13	IN.	7.63	CM.	3.01	IN.
EXPOSED DATA								
AREA	162.7937	SQ.M.	1752.2900	SQ.FT.	443.2059	SQ.CM.	68.6968	SQ.IN.
EQUIVALENT SPAN	1830.53	CM.	720.68	IN.	30.20	CM.	11.89	IN.
ASPECT RATIO	2.058		2.058		2.058		2.058	
TAPER RATIO	.2451		.2451		.2451		.2451	
CHORDS								
ROOT	1428.50	CM.	562.40	IN.	23.57	CM.	9.28	IN.
TIP	350.14	CM.	137.85	IN.	5.78	CM.	2.27	IN.
MAC	998.30	CM.	393.03	IN.	16.47	CM.	6.48	IN.
FUS. STA. OF 0.25 MAC	3010.69	CM.	1185.31	IN.	49.68	CM.	19.56	IN.
W.P. OF 0.25 MAC	762.51	CM.	300.20	IN.	12.58	CM.	4.95	IN.
B.L. OF 0.25 MAC	365.15	CM.	143.76	IN.	6.02	CM.	2.37	IN.

FOOTNOTE- GENERAL- MODEL SCALE VALUES ARE DERIVED FROM FULL SCALE VALUES UNLESS NOTED OTHERWISE.

TABLE III. - COMPONENT DIMENSIONAL DATA

COMPONENT- VERTICAL TAIL - V
 GENERAL DESCRIPTION- CENTERLINE VERTICAL TAIL DOUBLE WEDGE AIRFOIL
 WITH ROUNDED LEADING EDGE.
 MODEL SCALE- 0.0165
 DRAWING NUMBER- VL70-00095
 TEST IDENTIFICATION- LA14

	FULL SCALE METRIC		FULL SCALE ENGLISH		MODEL SCALE METRIC		MODEL SCALE ENGLISH	
THEORETICAL AREA	38.3923	SQ.M.	413.2500	SQ.FT.	104.5231	SQ.CM.	16.2011	SQ.IN.
EQUIVALENT SPAN	801.93	CM.	315.72	IN.	13.23	CM.	5.21	IN.
INBOARD EQUIVALENT CHORD	681.99	CM.	268.50	IN.	11.25	CM.	4.43	IN.
OUTBOARD EQUIVALENT CHORD	275.51	CM.	108.47	IN.	4.55	CM.	1.79	IN.
SWEEP-BACK ANGLES								
LEADING EDGE	45.00	DEG.	45.00	DEG.	45.00	DEG.	45.00	DEG.
TAILING EDGE	26.25	DEG.	26.249	DEG.	26.25	DEG.	26.25	DEG.

FOOTNOTE-GENERAL-MODEL SCALE VALUES ARE DERIVED FROM FULL SCALE VALUES
 UNLESS NOTED OTHERWISE.

COMPONENT- RUDDER
 GENERAL DESCRIPTION- CONFIGURATION PER LINES VL70-00095.
 MODEL SCALE- 0.0165
 DRAWING NUMBER- VL70-00095
 TEST IDENTIFICATION- LA14

	FULL SCALE METRIC		FULL SCALE ENGLISH		MODEL SCALE METRIC		MODEL SCALE ENGLISH	
AREA	9.883	SQ.M.	106.380	SQ.FT.	.0027	SQ.M.	.0290	SQ.FT.
EQUIVALENT SPAN	510.54	CM.	201.00	IN.	8.42	CM.	3.32	IN.
INBOARD EQUIVALENT CHORD	232.63	CM.	91.585	IN.	3.84	CM.	1.51	IN.
OUTBOARD EQUIVALENT CHORD	129.12	CM.	50.833	IN.	2.13	CM.	.84	IN.
RATIO MOVABLE SURFACE CHORD/ TOTAL SURFACE CHORD								
AT INBOARD EQUIVALENT CHORD	.400		.400		.400		.400	
AT OUTBOARD EQUIVALENT CHORD	.400		.400		.400		.400	
SWEEP-BACK ANGLES								
LEADING EDGE	34.83	DEG.	34.83	DEG.	34.83	DEG.	34.83	DEG.
TRAILING EDGE	26.25	DEG.	26.25	DEG.	26.25	DEG.	26.25	DEG.
HINGELINE	34.83	DEG.	34.83	DEG.	34.83	DEG.	34.83	DEG.
AREA MOMENT								
NORMAL TO HINGELINE	14.8983	CU.M.	526.1250	CU.FT.	66.9250	CU.CM.	4.0840	CU.IN.

FOOTNOTE-GENERAL-MODEL SCALE VALUES ARE DERIVED FROM FULL SCALE VALUES
 UNLESS NOTED OTHERWISE.



TABLE III. - COMPONENT DIMENSIONAL DATA

COMPONENT- OMS PODS- M
 GENERAL DESCRIPTION- 2A LIGHTWEIGHT CONFIGURATION PER MC120074
 MODEL SCALE- 0.0165
 DRAWING NUMBER- VL70-000094
 TEST IDENTIFICATION- LA14

	FULL SCALE METRIC		FULL SCALE ENGLISH		MODEL SCALE METRIC		MODEL SCALE ENGLISH	
LENGTH	878.842	CM.	346.000	IN.	14.501	CM.	5.709	IN.
MAX WIDTH (AT XO=1450)	274.321	CM.	108.000	IN.	4.526	CM.	1.782	IN.
MAX DEPTH (AT XO=1500)	289.053	CM.	113.800	IN.	4.769	CM.	1.878	IN.
OMS POD CENTERLINE								
Z AXIS ORBITER	1178.308	CM.	463.900	IN.	19.442	CM.	7.654	IN.
Y AXIS ORBITER	203.200	CM.	80.000	IN.	3.353	CM.	1.320	IN.

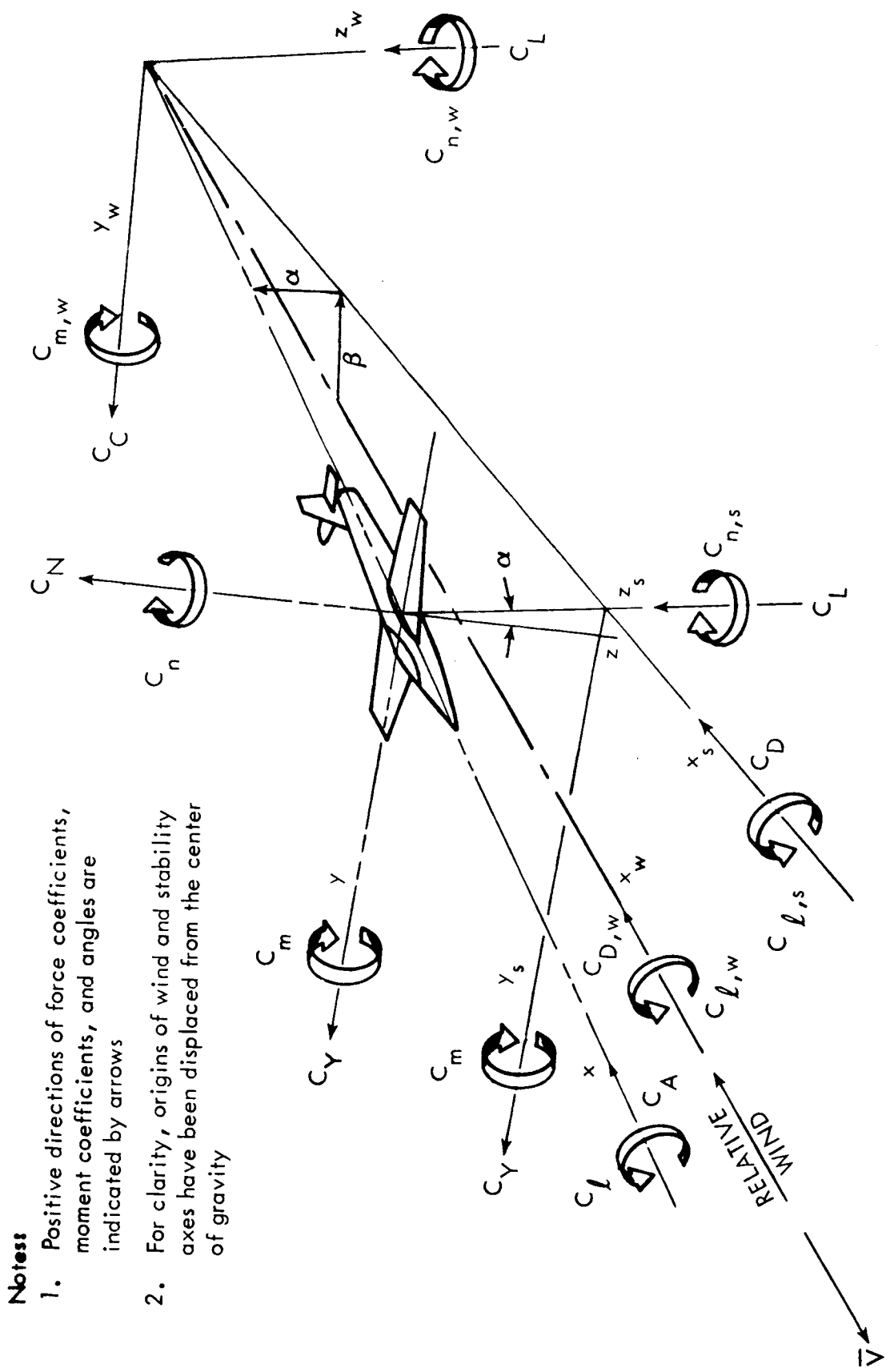
FOOTNOTE- GENERAL- MODEL SCALE VALUES ARE DERIVED FROM FULL SCALE VALUES
 UNLESS NOTED OTHERWISE.

COMPONENT- BODY FLAP- F
 GENERAL DESCRIPTION- BODY FLAP 2A CONFIGURATION PER LINES VL70-000094.
 MODEL SCALE- 0.0165
 DRAWING NUMBER- VL70-000094 A
 TEST IDENTIFICATION- LA14

	FULL SCALE METRIC		FULL SCALE ENGLISH		MODEL SCALE METRIC		MODEL SCALE ENGLISH	
LENGTH	215.138	CM.	84.700	IN.	3.550	CM.	1.398	IN.
MAXIMUM WIDTH	673.101	CM.	265.000	IN.	11.106	CM.	4.372	IN.
MAXIMUM DEPTH	53.340	CM.	21.000	IN.	.880	CM.	.346	IN.
AREA PLANFORM	13.2517	SO.M.	142.6400	SO.FT.	36.0779	SO.CM.	5.5921	SO.IN.
AREA BASE	3.5903	SO.M.	38.6460	SO.FT.	9.7747	SO.CM.	1.5151	SO.IN.

FOOTNOTE- GENERAL- MODEL SCALE VALUES ARE DERIVED FROM FULL SCALE VALUES
 UNLESS NOTED OTHERWISE.





Notes

1. Positive directions of force coefficients, moment coefficients, and angles are indicated by arrows
2. For clarity, origins of wind and stability axes have been displaced from the center of gravity

FIGURE 1. AXIS SYSTEMS

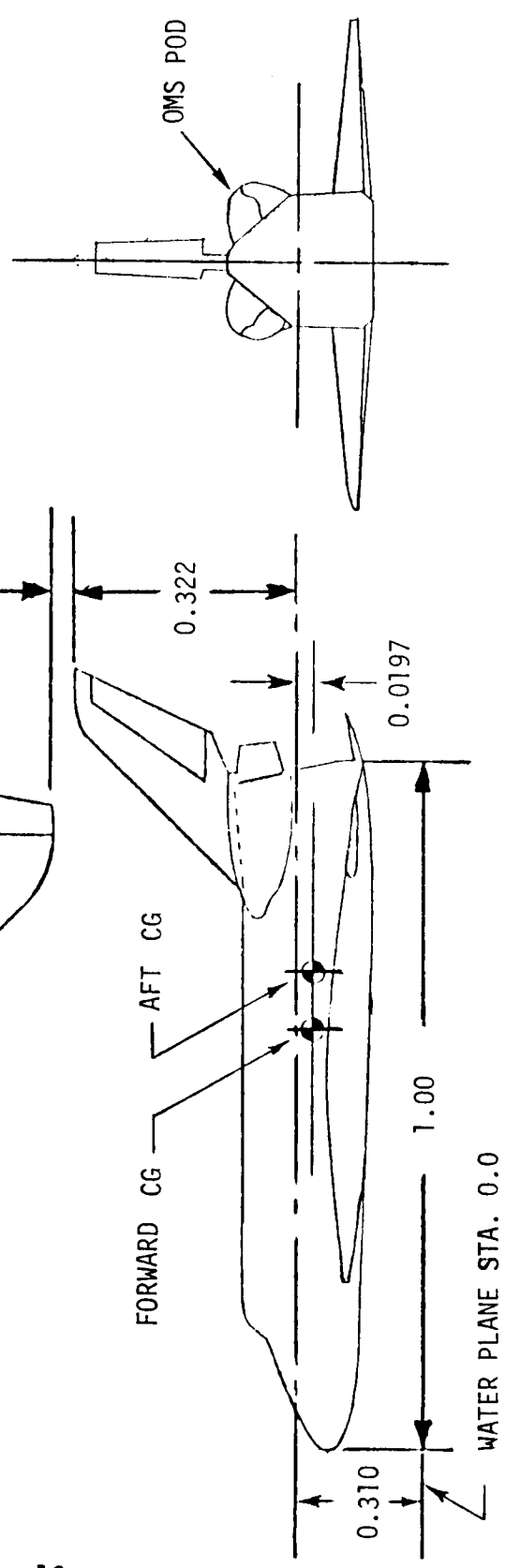
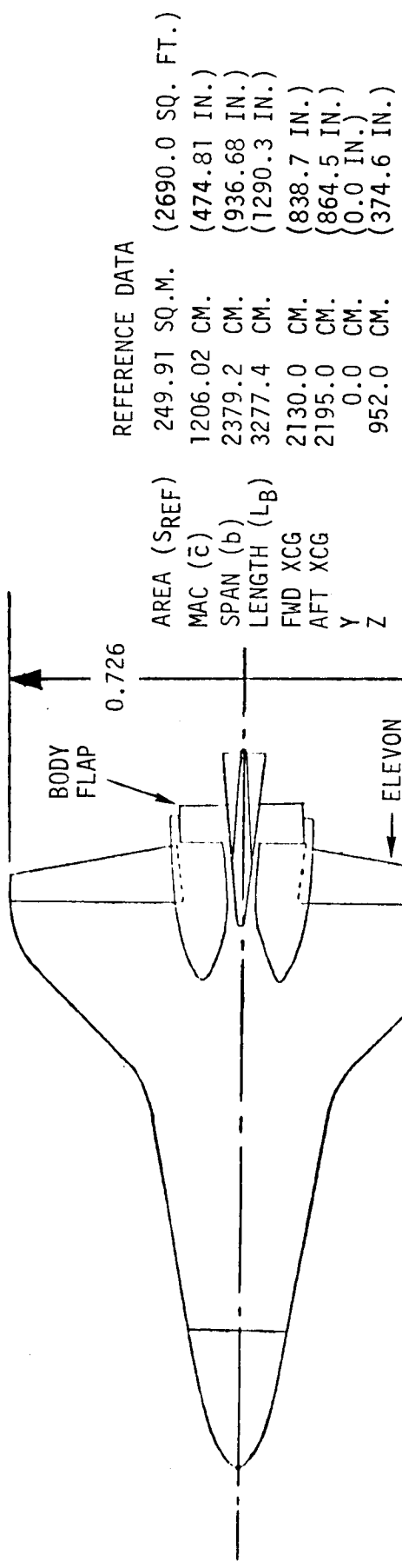


FIGURE 2. 0899B ORBITER WITH DIMENSIONS NORMALIZED WITH RESPECT TO BODY LENGTH OF 3277.4 CM. (1290.3 IN.)

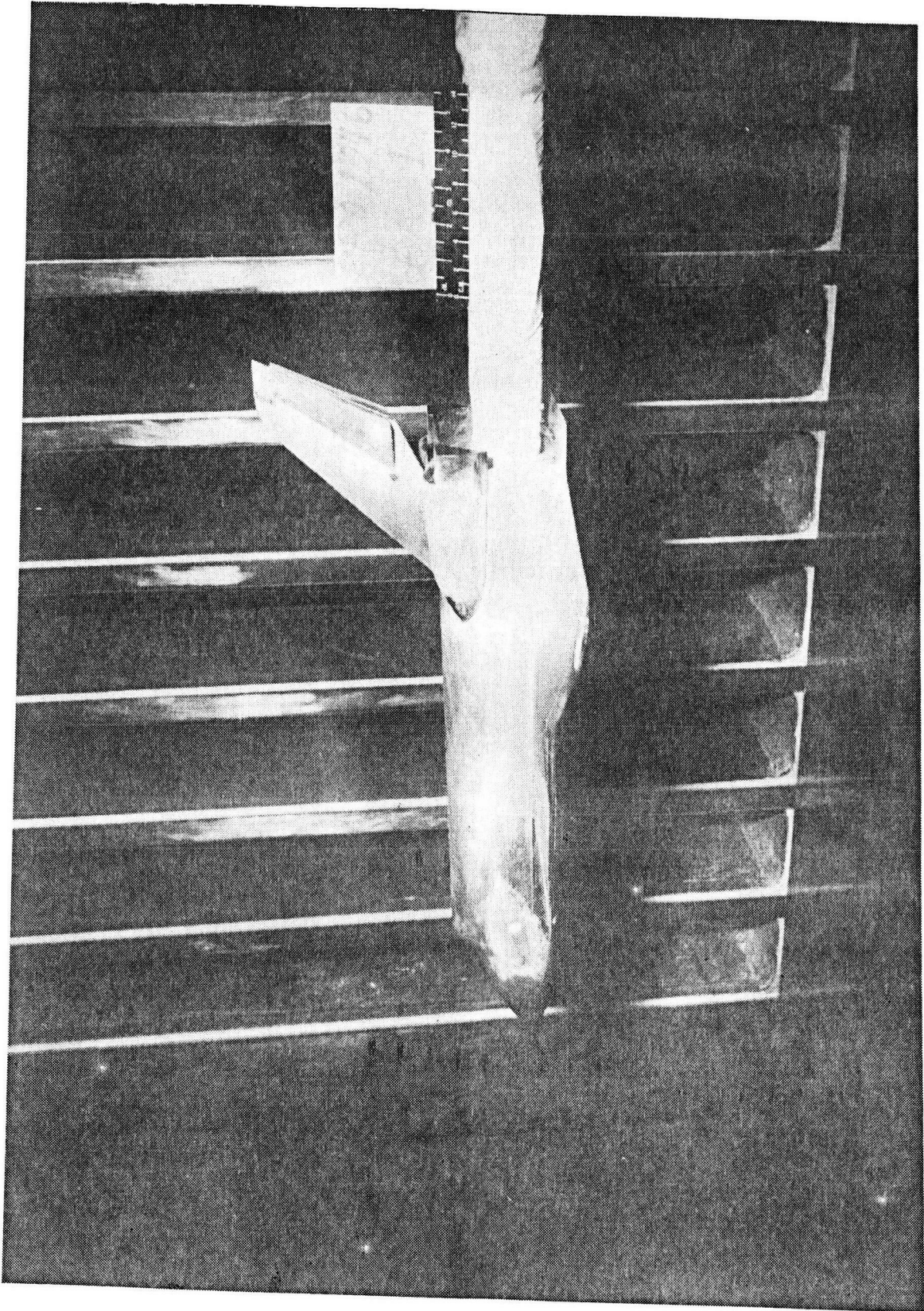


FIGURE 3. PHOTOGRAPH OF MODEL INSTALLED IN NASA UNITARY PLAN WIND TUNNEL

DATA FIGURES

DATA SET SYMBOL (RPG05) (RPG06) CONFIGURATION DESCRIPTION LA-14, ROCKWELL CRB 0698 V/MOD, NOSE (BVMVF) LA-14, ROCKWELL CRB 0698 V/MOD, NOSE (BVMVF)

CG-LOC 1.000 2.000 ELEVTR .000 .000 BOFLAP .000 .000 RUOFLR 40.000 40.000

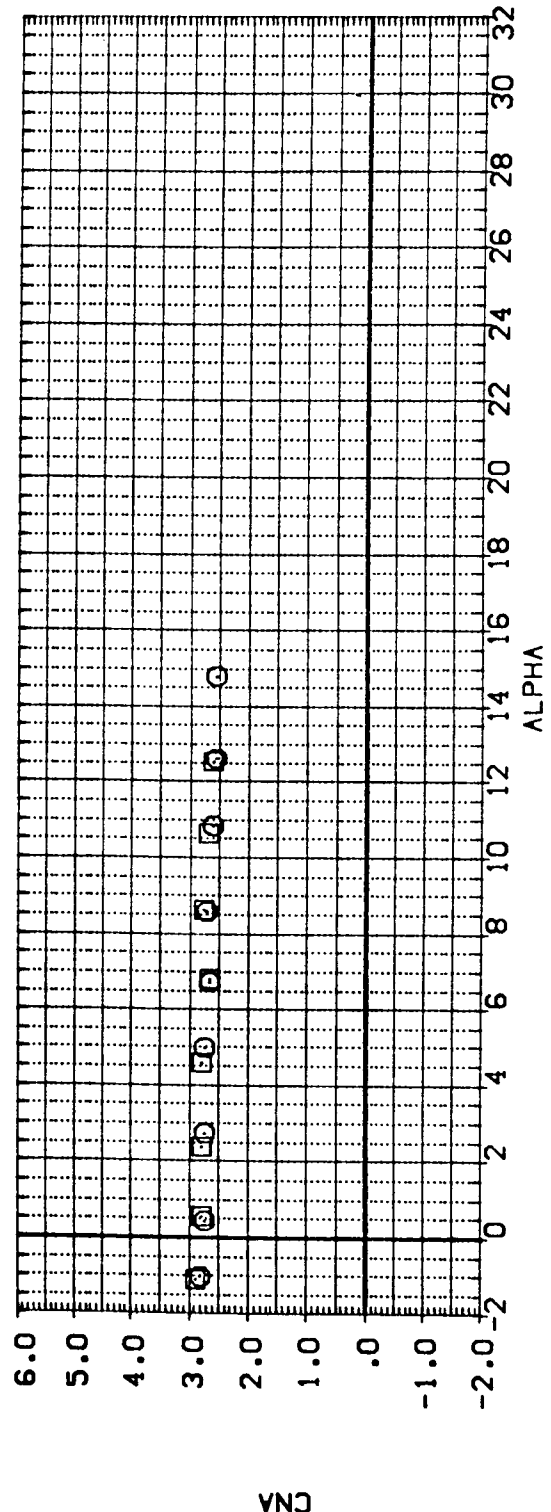
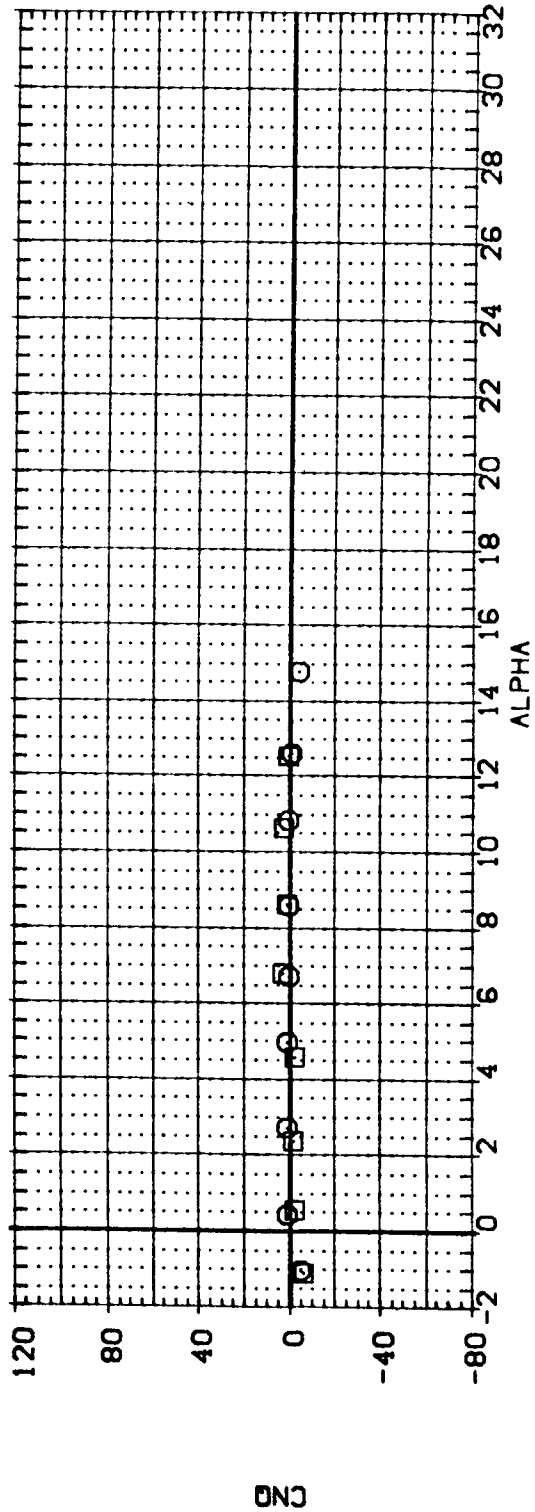


FIGURE 4. EFFECT OF C. G. LOCATION ON DYNAMIC STABILITY PARAMETERS IN PITCH
 CAJ MACH = 1.60

DATA SET SYMBOL (RPGP05) (RPGP06)

CONFIGURATION DESCRIPTION
 LA-14: ROCKWELL CR8 0898 V/MOD. NOSE (BVMVF)
 LA-14: ROCKWELL CR8 0898 V/MOD. NOSE (BVMVF)

CG-LOC 1.000 2.000
 ELEVTR .000 .000
 BDFLAP .000 .000
 RUDFLR 40.000 40.000

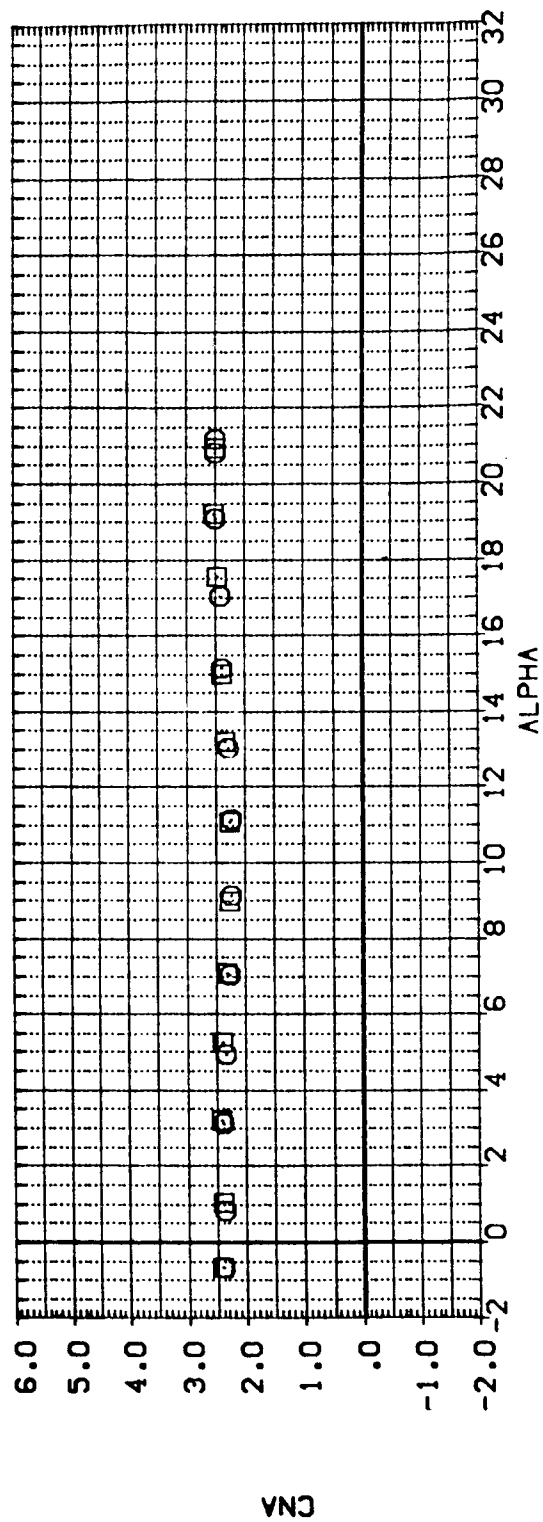
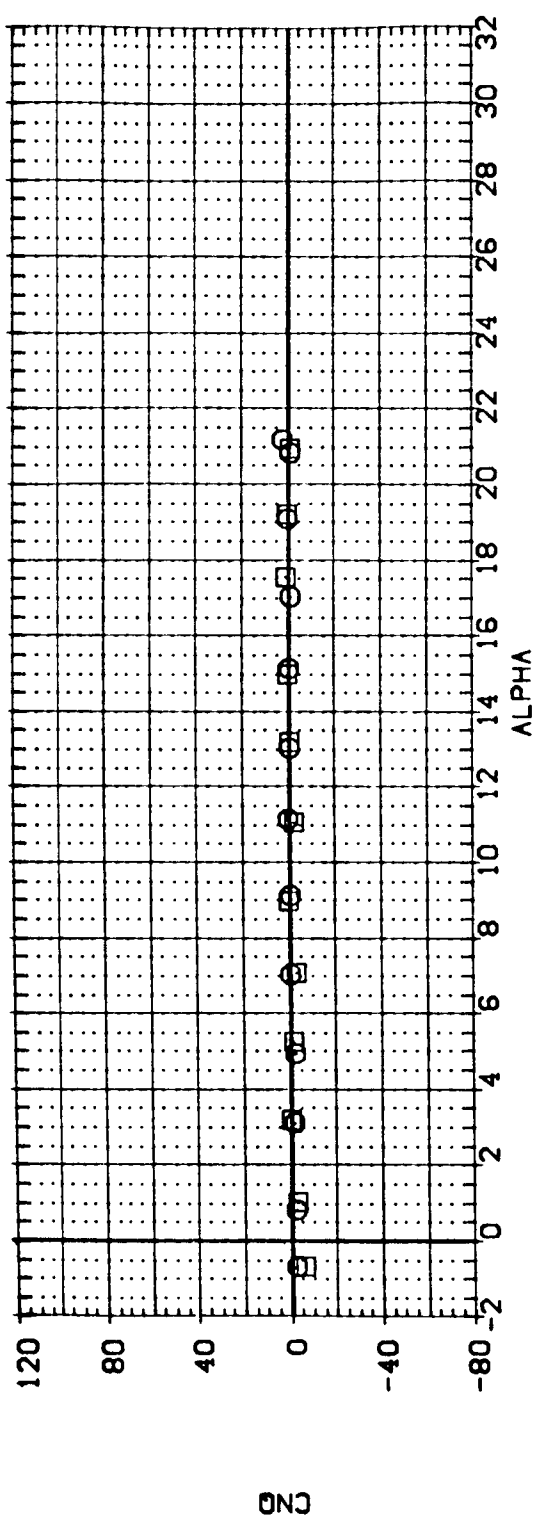


FIGURE 4. EFFECT OF C. G. LOCATION ON DYNAMIC STABILITY PARAMETERS IN PITCH

(B)MACH = 1.90

DATA SET SYMBOL: \emptyset CONFIGURATION DESCRIPTION:
 (RPGPOS) LA-14, ROCKWELL 098 0898 V/HOD, NOSE (BVVWF)
 (RPGPOS) LA-14, ROCKWELL 098 0898 V/HOD, NOSE (BVVWF)

CG-LOC 1.000 ELEVTR .000 BDFLAP .000 RUDFLR 40.000
 2.000 .000 .000 40.000

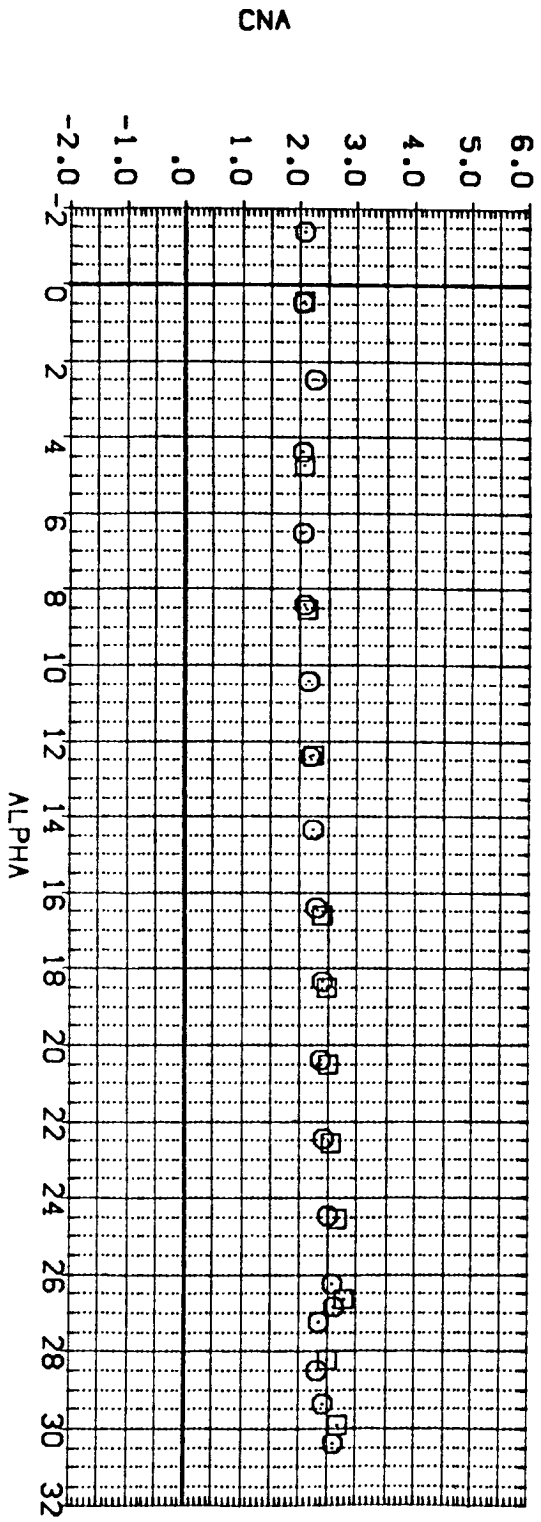
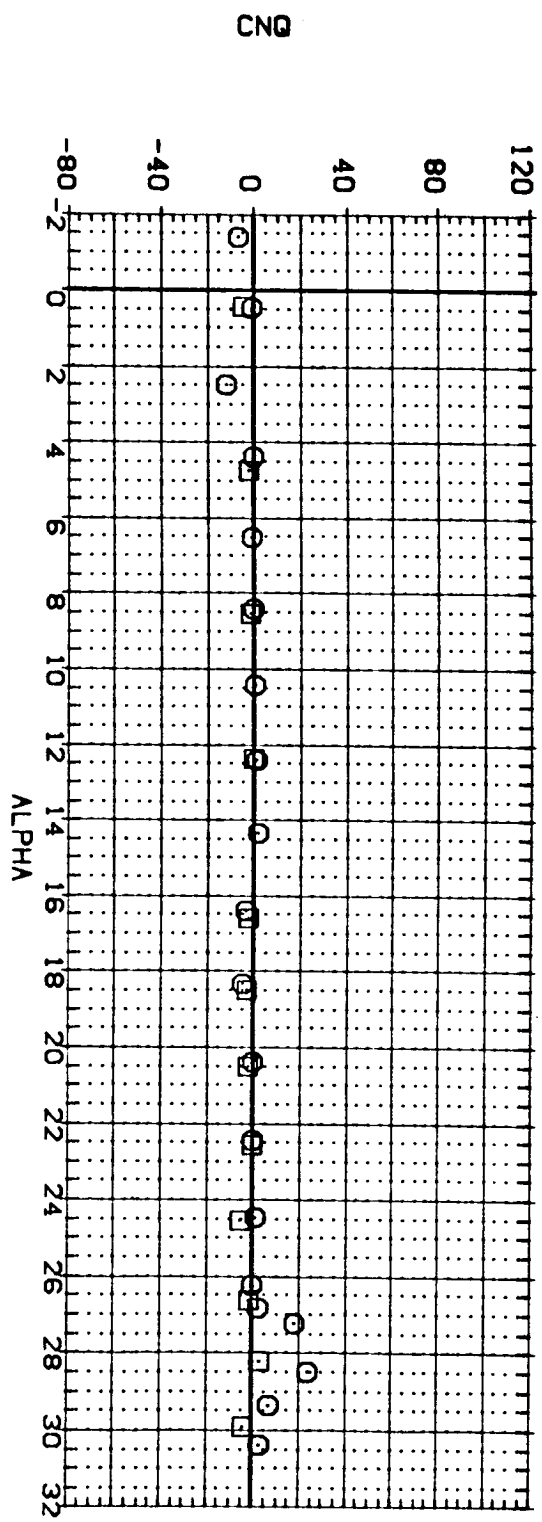


FIGURE 4. EFFECT OF C. G. LOCATION ON DYNAMIC STABILITY PARAMETERS IN PITCH
 (COMACH = 2.36)

DATA SET SYMBOL: CONFIGURATION DESCRIPTION: LA-14, ROCKWELL 089 0898 V/HOOD, NOSE (BVMVF) (RPGP05) LA-14, ROCKWELL 089 0898 V/HOOD, NOSE (BVMVF)

CG-LDC: 1.000 ELEVTR: .000 80FLAP: .000 RUDFLR: 40.000
 2.000 .000 .000 40.000

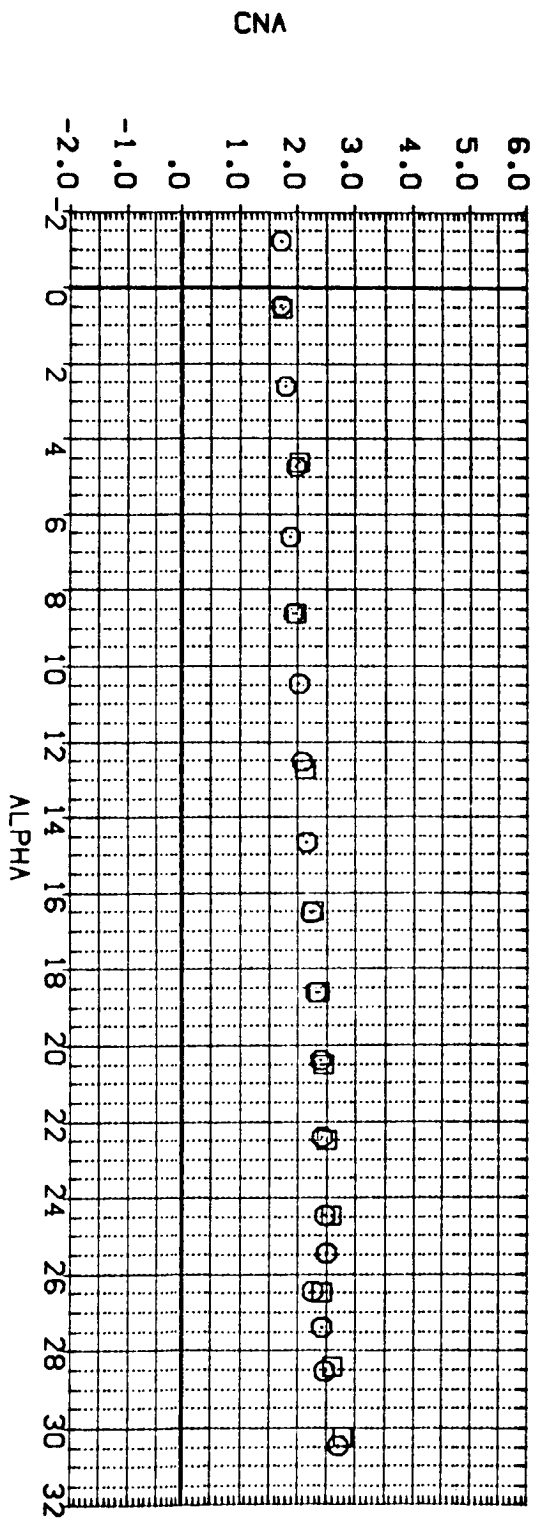
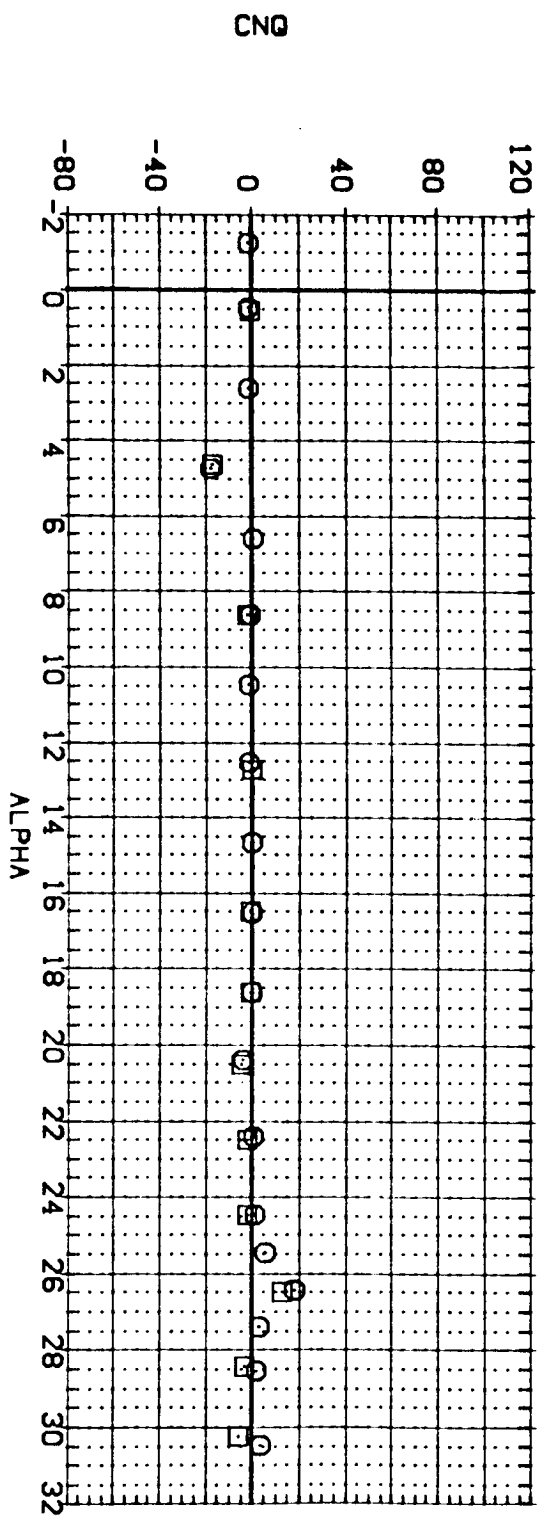


FIGURE 4. EFFECT OF C. G. LOCATION ON DYNAMIC STABILITY PARAMETERS IN PITCH
 (D)MACH = 2.86

DATA SET SYMBOL LA-14; ROCKWELL ORB 0898 V/MOD; NOSE (BVMF)
 (RPG05) LA-14; ROCKWELL ORB 0898 V/MOD; NOSE (BVMF)

CG-LOC 1.000 ELEVTR .000 BOFLAP .000 RUDFLR 40.000
 2.000 .000 .000

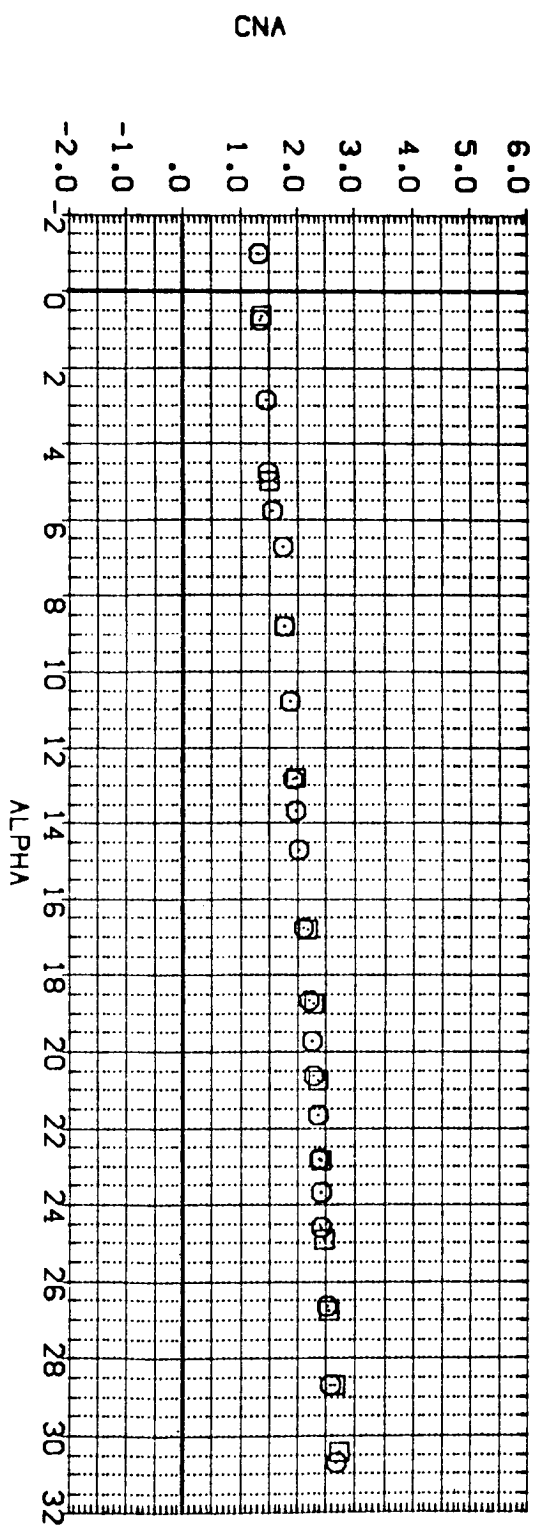
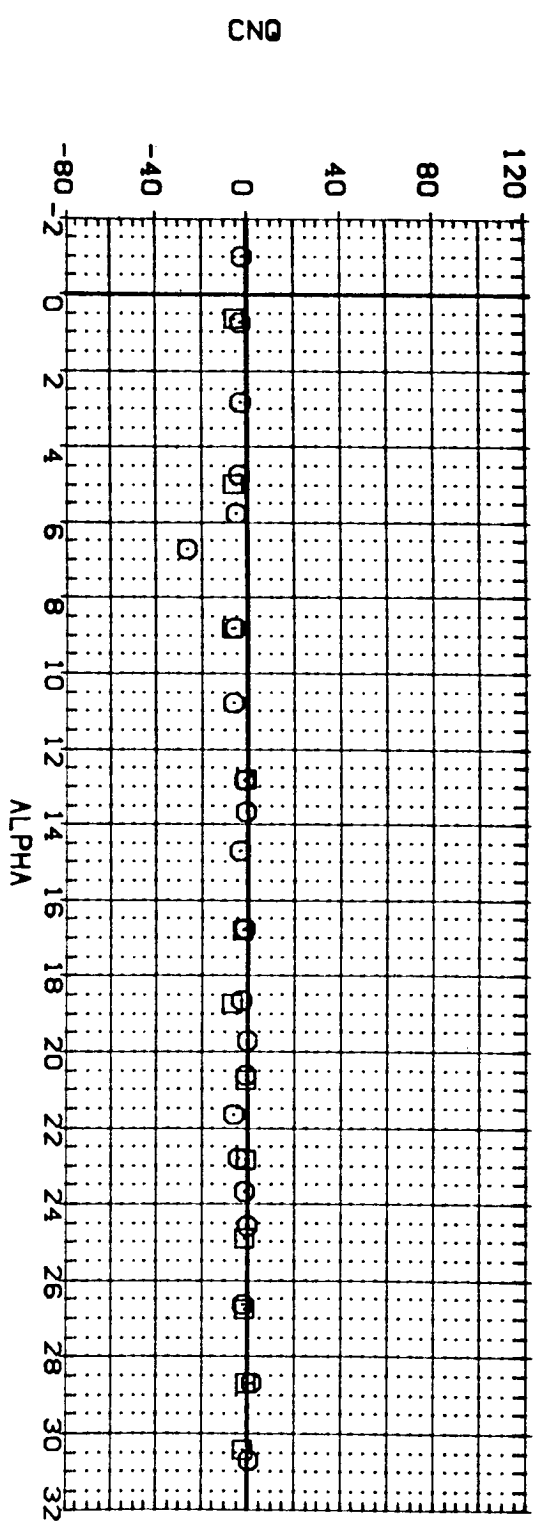


FIGURE 4. EFFECT OF C. G. LOCATION ON DYNAMIC STABILITY PARAMETERS IN PITCH
 (CE)MACH = 3.96

DATA SET SYMBOL: CONFIGURATION DESCRIPTION: LA-14, ROCKWELL 088 0898 V/MOD. NOSE (BVMVF) CG-LOC 1.072 ELEVTR .000 BOFLAP .000 RUDFLR 40.000
 (RPG05) LA-14, ROCKWELL 088 0898 V/MOD. NOSE (BVMVF) 2.000 .000 .000 40.000
 (RPG06) LA-14, ROCKWELL 088 0898 V/MOD. NOSE (BVMVF)

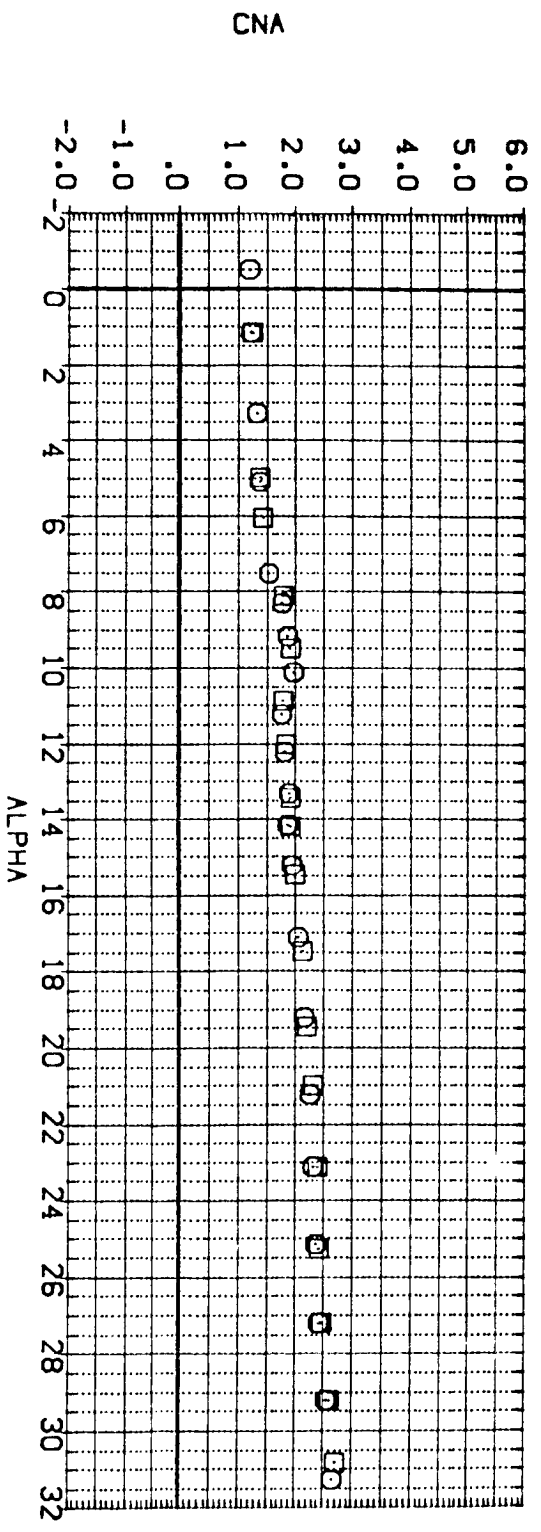
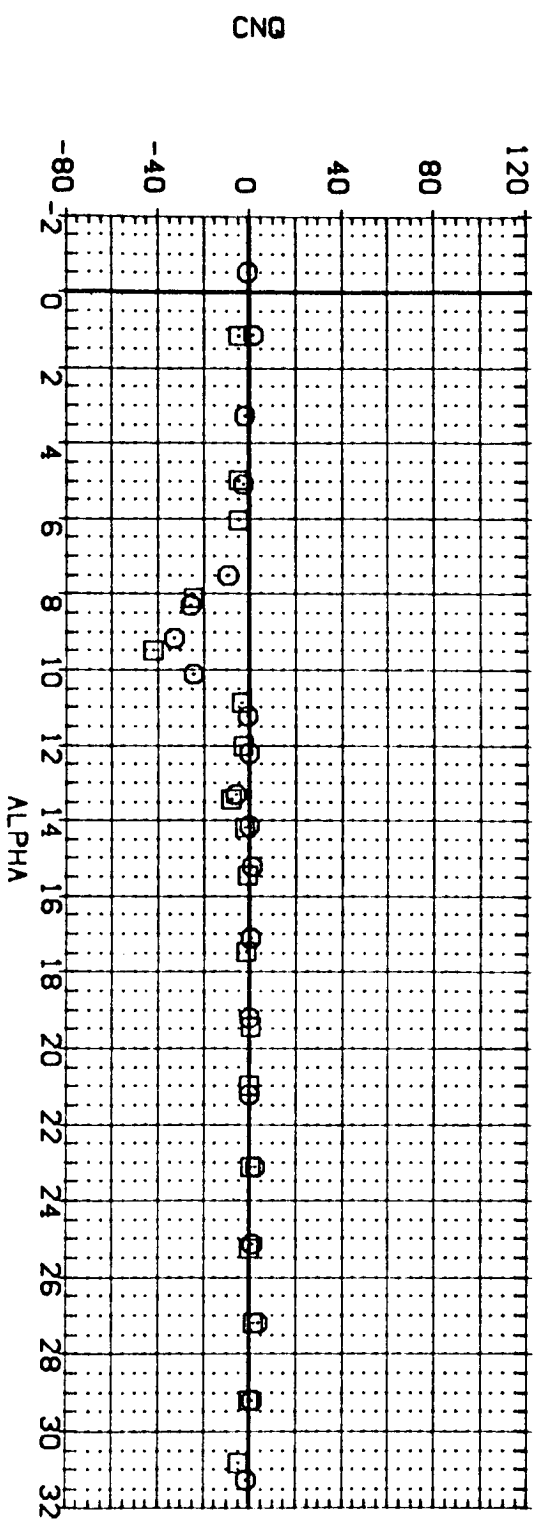


FIGURE 4. EFFECT OF C. G. LOCATION ON DYNAMIC STABILITY PARAMETERS IN PITCH
 (CF)MACH = 4.63

DATA SET SYMBOL CONFIGURATION DESCRIPTION CG-LOC ELEVTR BOFLAP RUDFLR
 (RPG05) (RPG06) LA-14; ROCKWELL CRB 0898 V/100; NOSE (BW/MF) 1.000 .000 .000 40.000
 LA-14; ROCKWELL CRB 0898 V/100; NOSE (BW/MF) 2.000 .000 .000 40.000

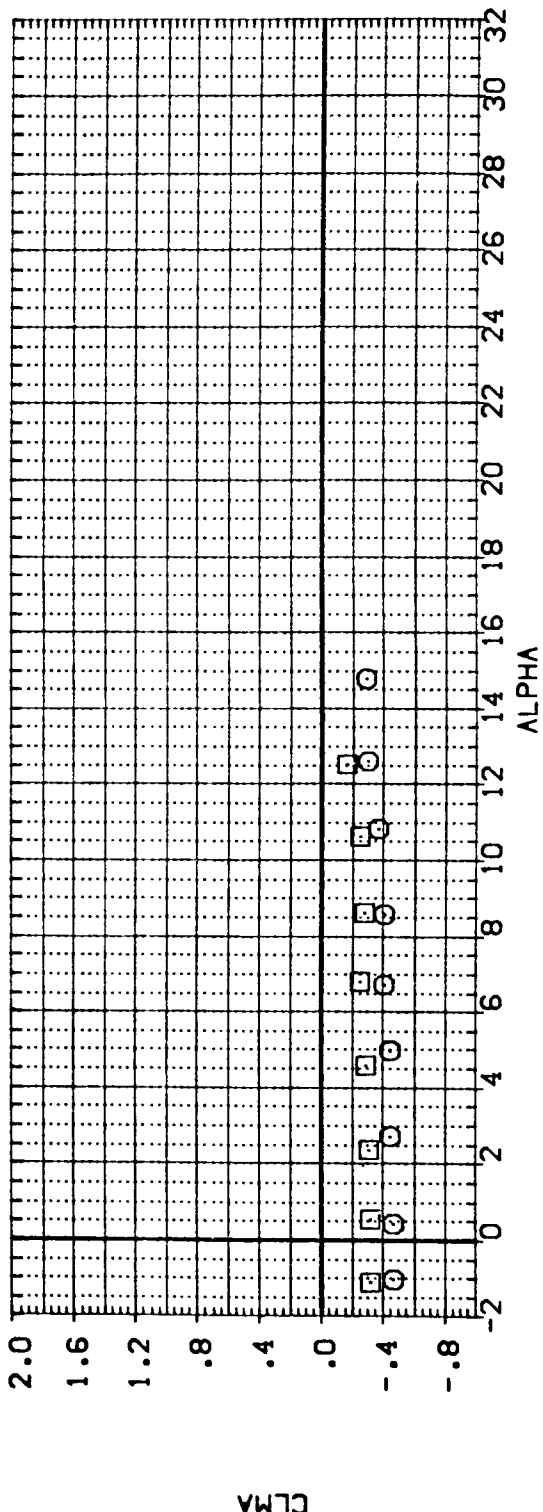
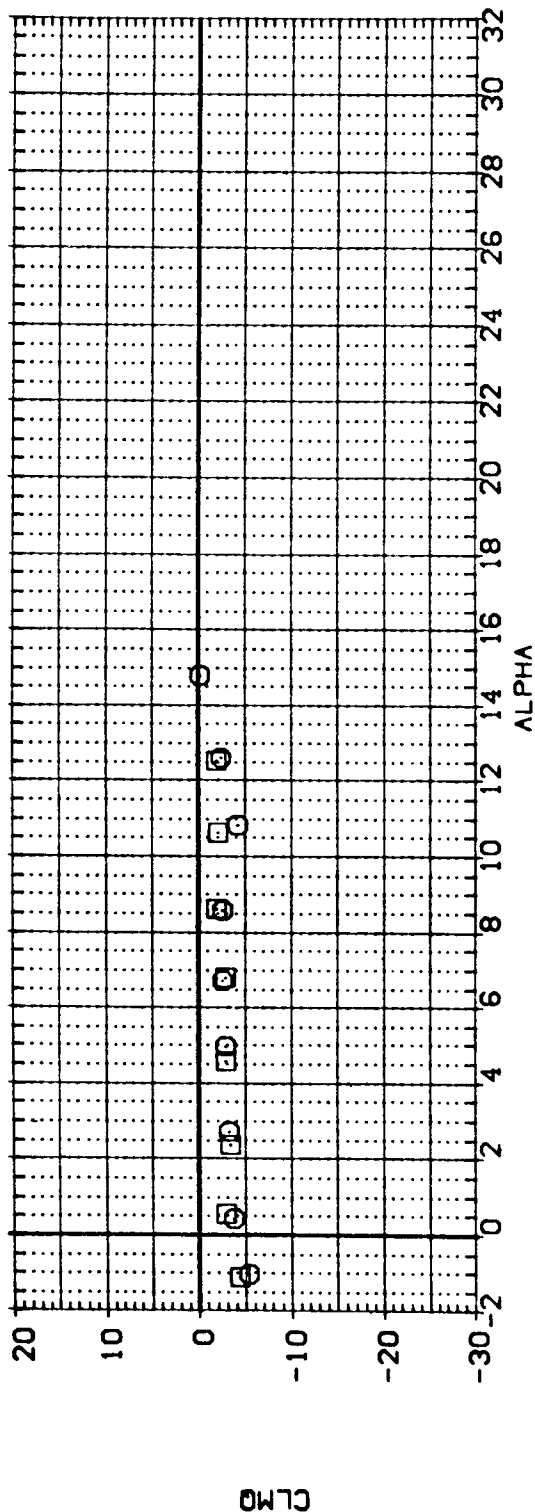


FIGURE 4. EFFECT OF C. G. LOCATION ON DYNAMIC STABILITY PARAMETERS IN PITCH

(A)MACH = 1.60

DATA SET SYMBOL CONFIGURATION DESCRIPTION CG-LOC ELEVTR BOFLAP RUOFLR
 (RPGF05) (RPGF05) LA-14; ROCKWELL ORB 0698 V/MOD; NOSE (BVMVF) 1.000 .000 .000 40.000
 (RPGF06) (RPGF06) LA-14; ROCKWELL ORB 0698 V/MOD; NOSE (BVMVF) 2.000 .000 .000 40.000

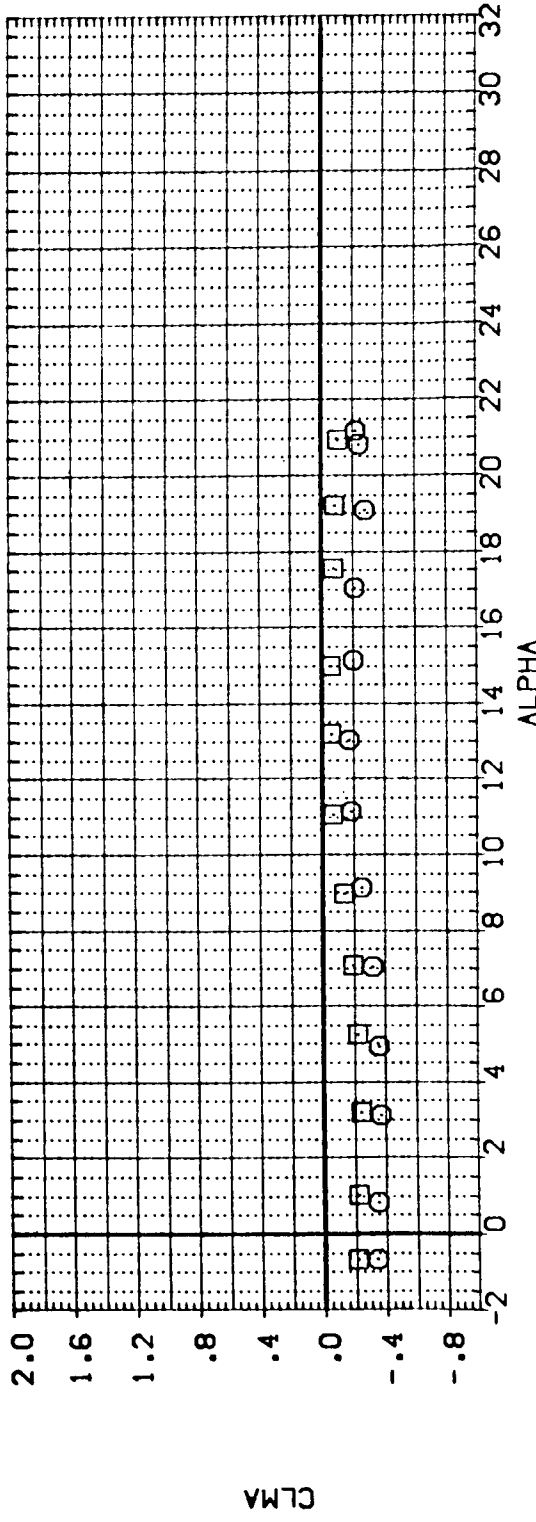
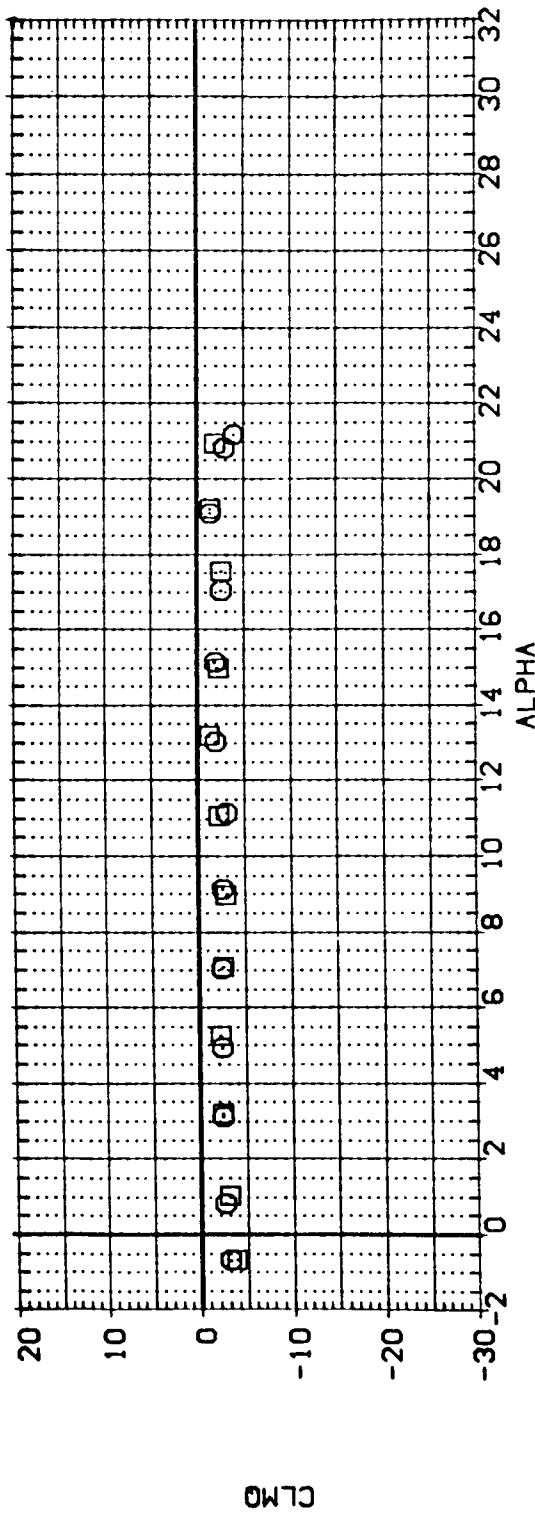


FIGURE 4. EFFECT OF C. G. LOCATION ON DYNAMIC STABILITY PARAMETERS IN PITCH

(B)MACH = 1.90

DATA SET SYMBOL CONFIGURATION DESCRIPTION

(RFGP05) □ LA-14; ROCKWELL CRB 0898 V/100. NOSE (8VWVF)

(RFGP06) □ LA-14; ROCKWELL CRB 0898 V/100. NOSE (8VWVF)

CG-LOC ELEVTR BOFLAP RUDFLR
 1.000 .000 .000 40.000
 2.000 .000 .000 40.000

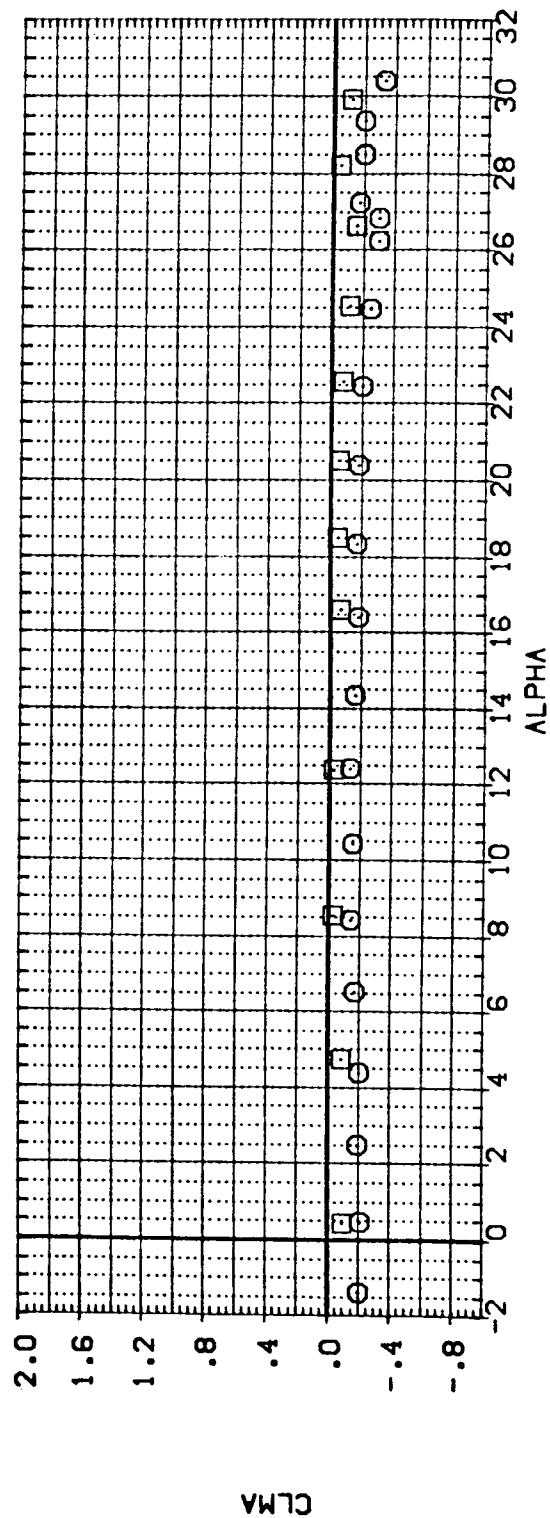
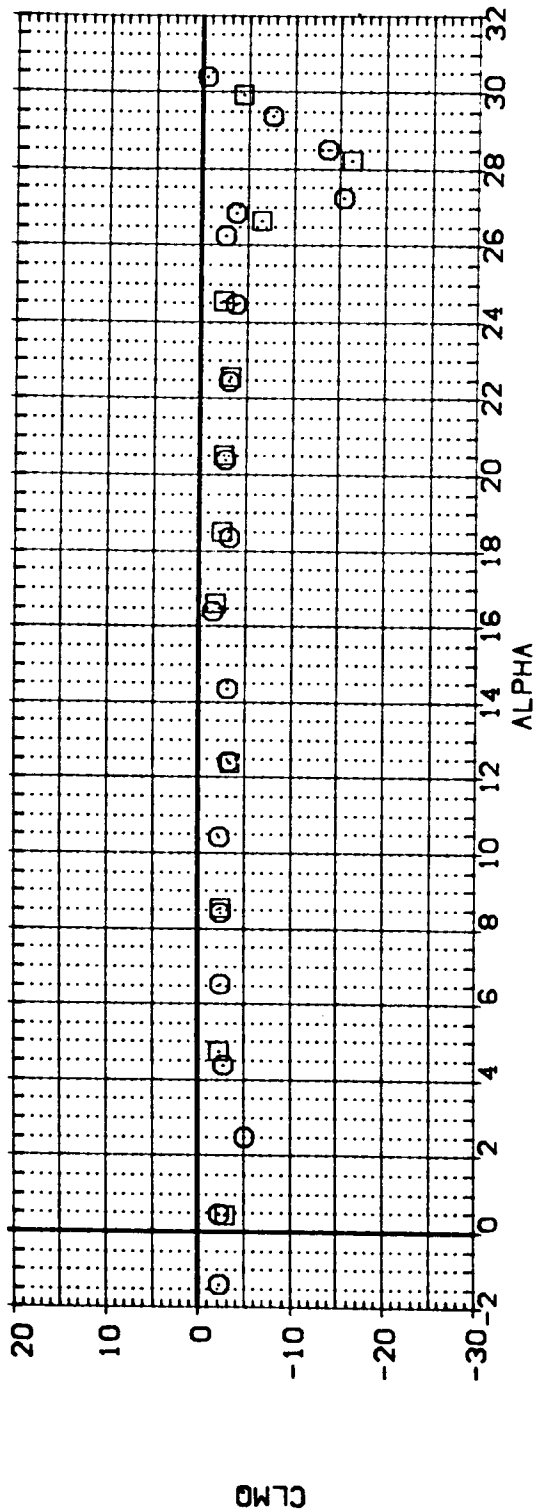


FIGURE 4. EFFECT OF C. G. LOCATION ON DYNAMIC STABILITY PARAMETERS IN PITCH

(C)MACH = 2.36

DATA SET SYMBOL CONFIGURATION DESCRIPTION CG-L0C ELEVTR BOFLAP RUJDFLR
 (RPGPOS) (RPGPOS) LA-14; ROCKWELL QRB 0698 V/MOD. NOSE (BVVNF) 1.000 .000 .000 40.000
 (RPGPOS) (RPGPOS) LA-14; ROCKWELL QRB 0698 V/MOD. NOSE (BVVNF) 2.000 .000 .000 40.000

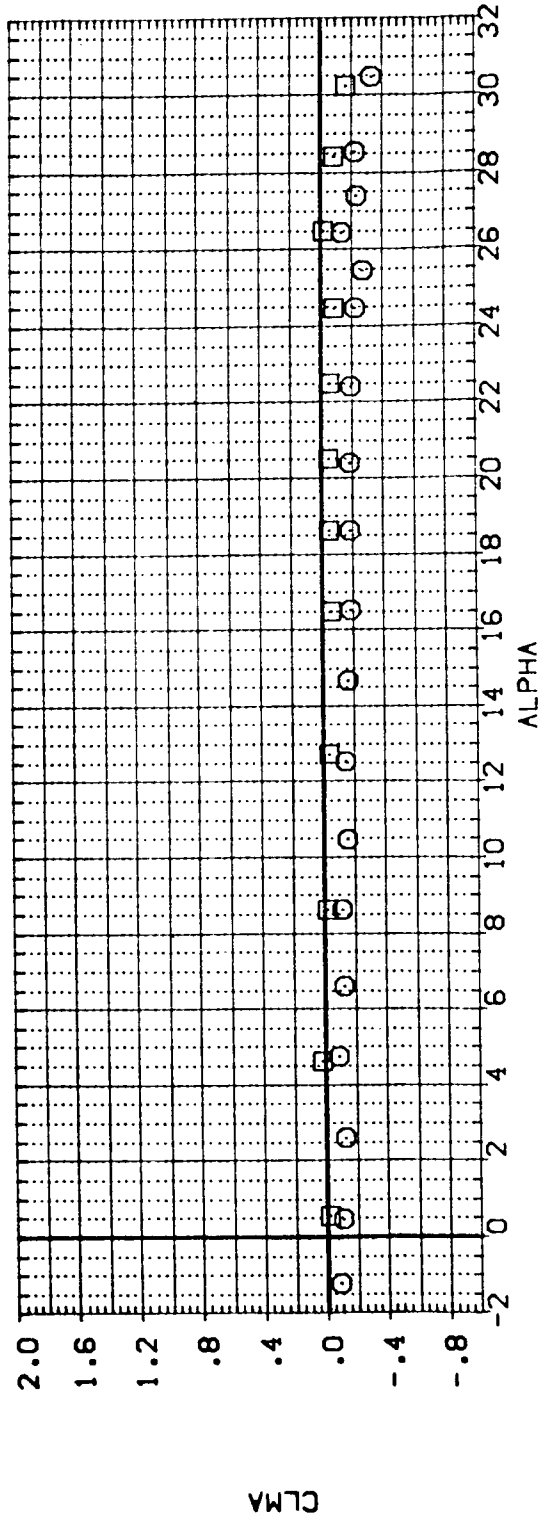
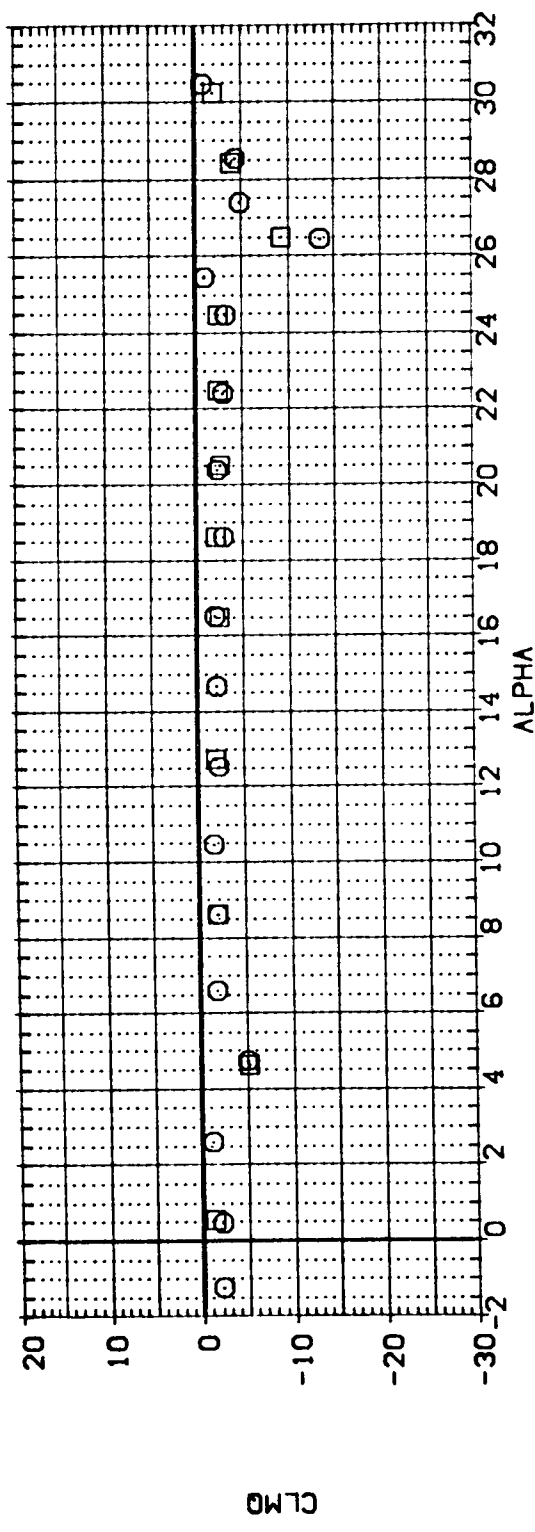


FIGURE 4. EFFECT OF C. G. LOCATION ON DYNAMIC STABILITY PARAMETERS IN PITCH

(O)MACH = 2.86

DATA SET SYMBOL: (RPG05) (RPG06) □

CONFIGURATION DESCRIPTION:
 LA-14: ROCKWELL ORB 0898 V/MOD; NOSE (BVMVF)
 LA-14: ROCKWELL ORB 0898 V/MOD; NOSE (BVMVF)

CG-LOC: 1.000 2.000

ELEVTR: .000 .000

BOFLAP: .000 .000

RJDFLR: 40.000 40.000

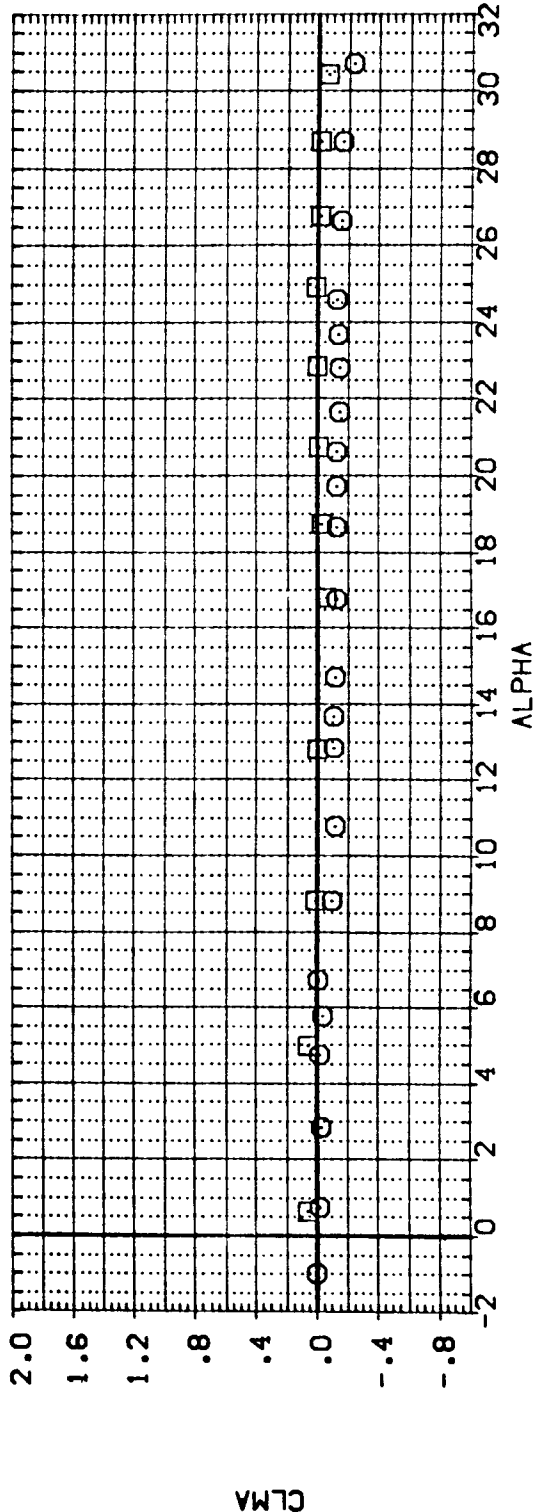
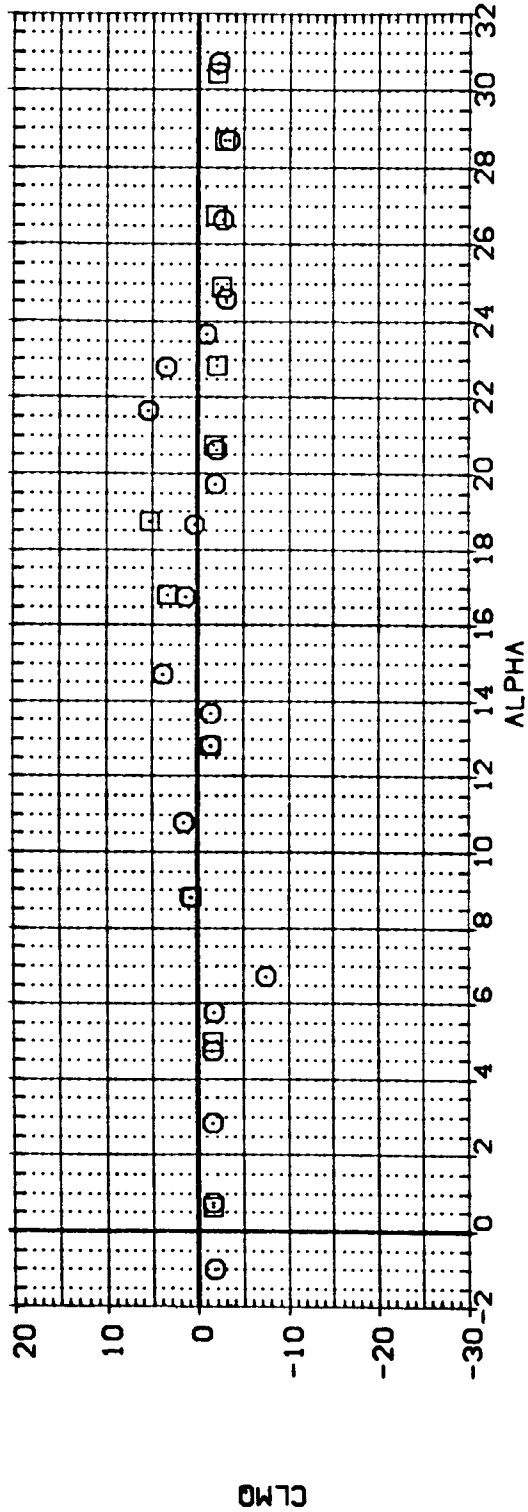


FIGURE 4. EFFECT OF C. G. LOCATION ON DYNAMIC STABILITY PARAMETERS IN PITCH

(E)MACH = 3.96

DATA SET SYMBOL CONFIGURATION DESCRIPTION CG-LOC ELEVTR BOFLAP RUOFLR
 (RPGP05) LA-14; ROCKWELL ORB 0698 V/MOD; NOSE (BVMVF) 1.000 .000 .000 40.000
 (RPGP06) LA-14; ROCKWELL ORB 0698 V/MOD; NOSE (BVMVF) 2.000 .000 .000 40.000

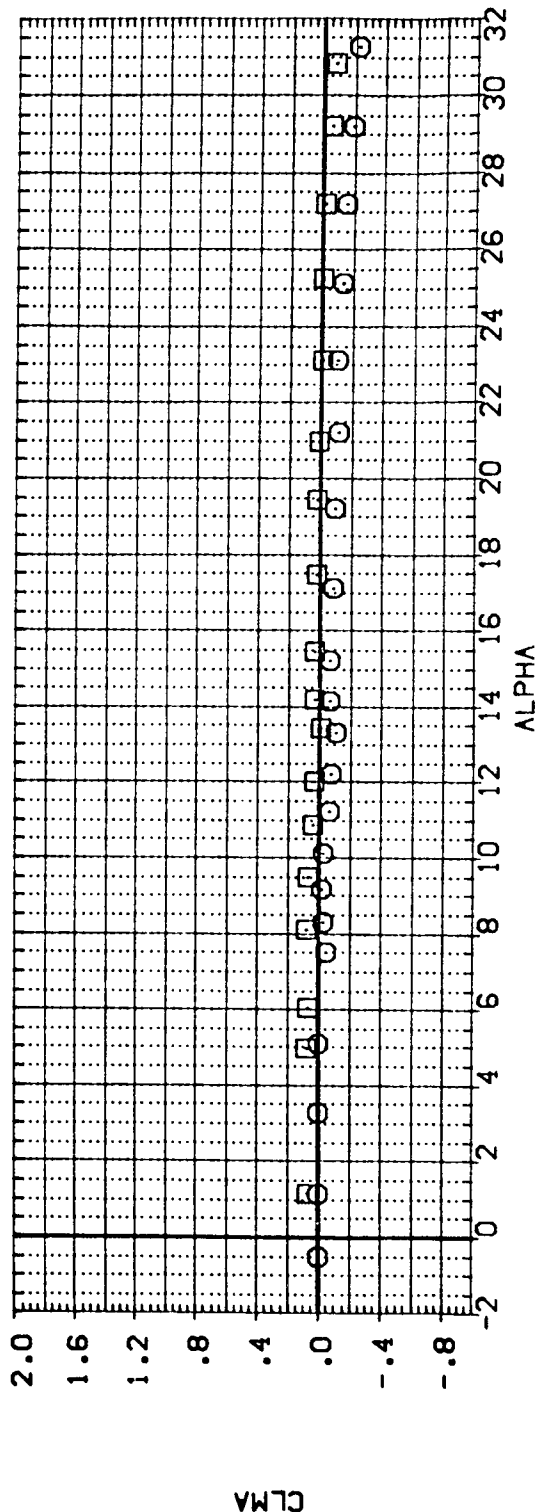
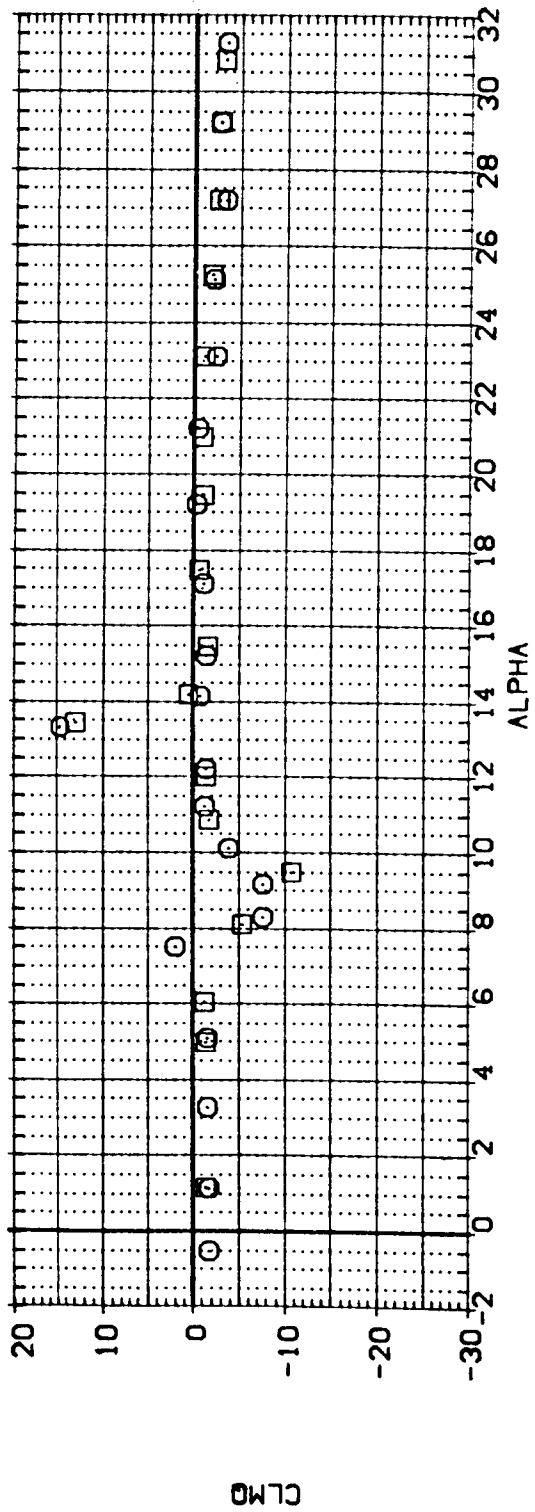


FIGURE 4. EFFECT OF C. G. LOCATION ON DYNAMIC STABILITY PARAMETERS IN PITCH
 (F)MACH = 4.63 PAGE 12

DATA SET SYMBOL CONFIGURATION DESCRIPTION CG-LOC ELEVTR RUOFLR
 (RPGY03) LA-14; ROCKWELL DRB 0898 V/MOD. NOSE (BVMH) 1.000 .000 40.000
 (RPGY04) LA-14; ROCKWELL DRB 0898 V/MOD. NOSE (BVMH) 2.000 .000 40.000

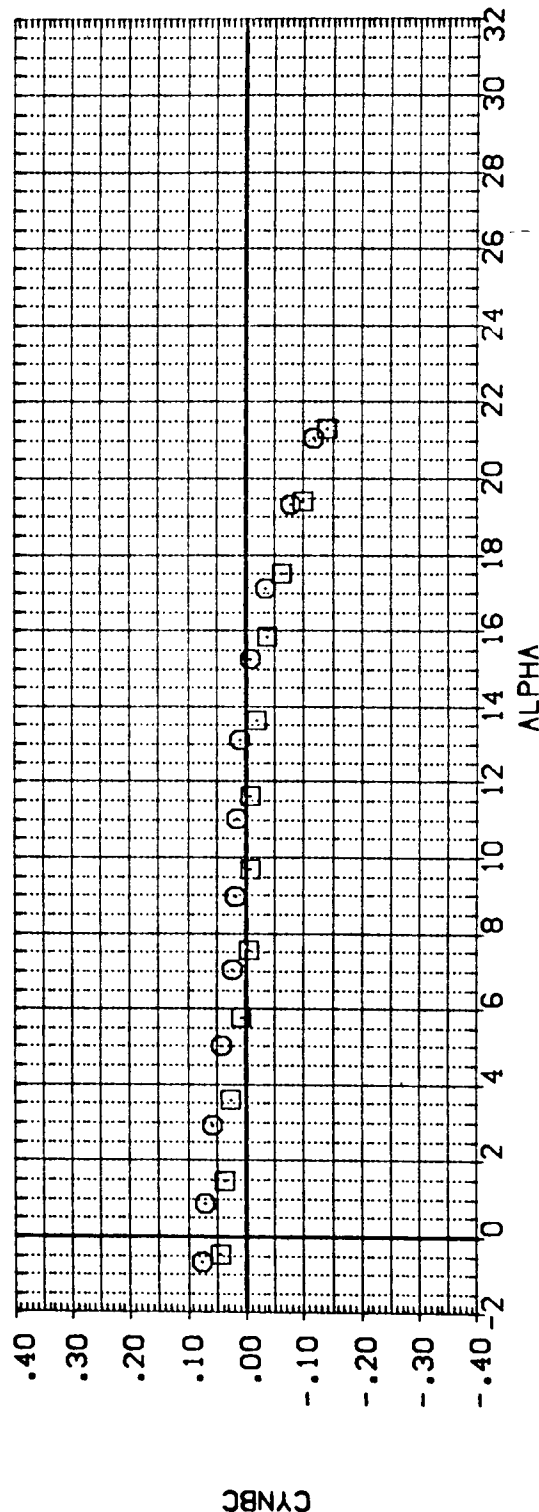
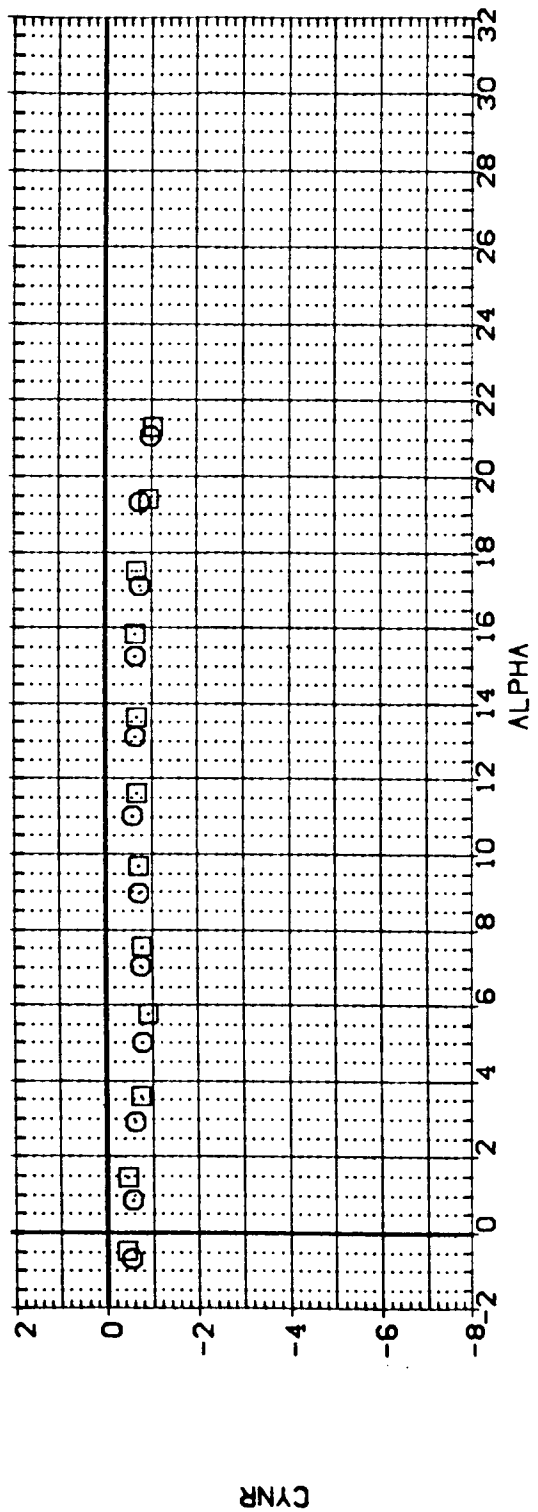


FIGURE 5. EFFECT OF C. G. LOCATION ON DYNAMIC STABILITY PARAMETERS IN YAW

(A)MACH = 1.90

DATA SET SYMBOL: [Symbol] CG-LOC ELEVTR RUOFLR
 [RPGV03] LA-14: ROCKWELL DRB 0898 V/MOD. NOSE (BVM) 1.000 .000 40.000
 [RPGV04] LA-14: ROCKWELL DRB 0898 V/MOD. NOSE (BVM) 2.000 .000 40.000

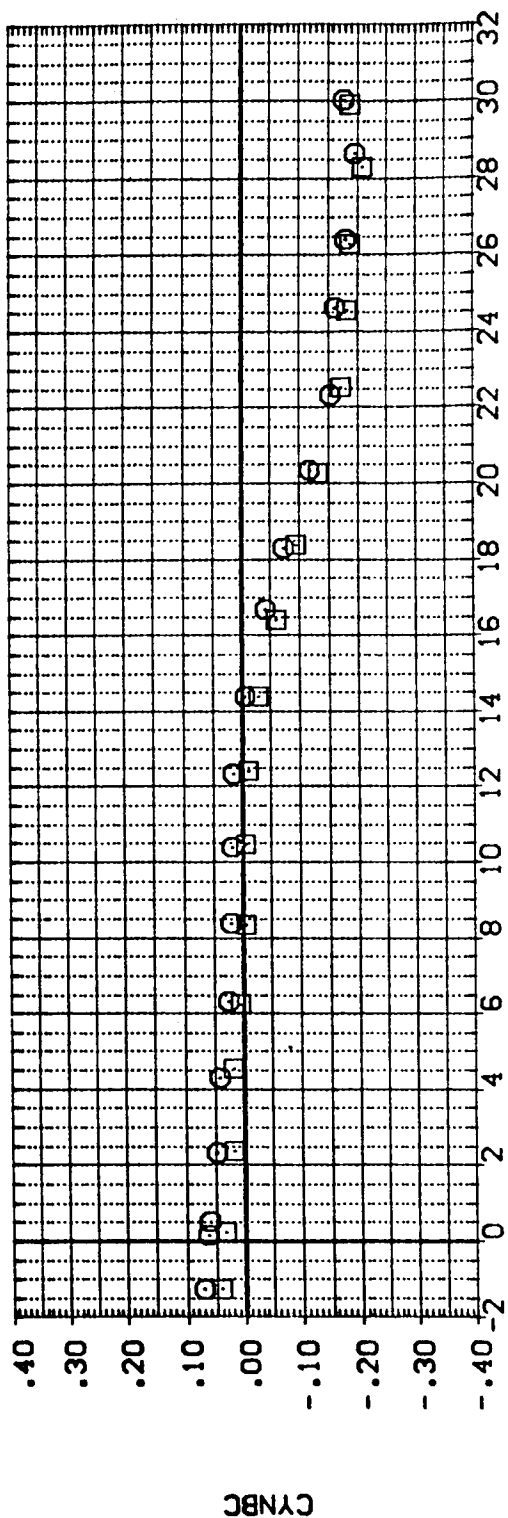
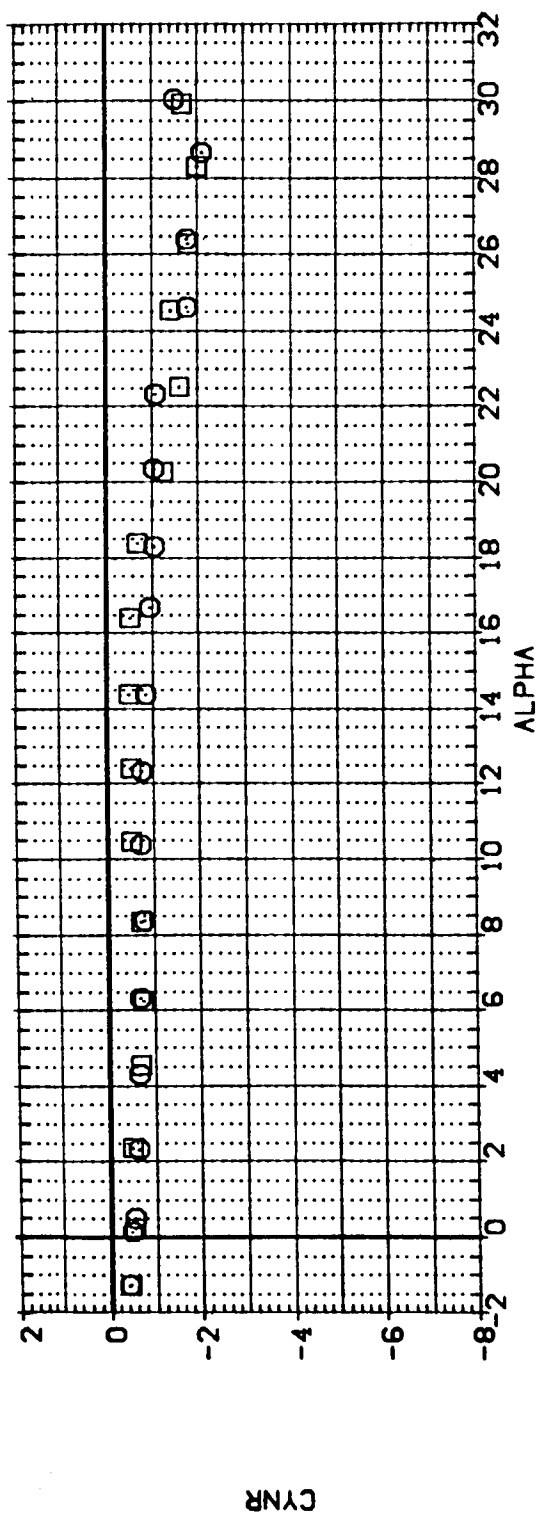


FIGURE 5. EFFECT OF C. G. LOCATION ON DYNAMIC STABILITY PARAMETERS IN YAW

(B)MACH = 2.36

CG-LOC ELEVTR RUOFLR
 1.000 .000 40.000
 2.000 .000 40.000

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (RPGY03) LA-14: ROCKWELL GRB 0898 V/MOD. NOSE (BVM)
 (RPGY04) LA-14: ROCKWELL GRB 0898 V/MOD. NOSE (BVM)

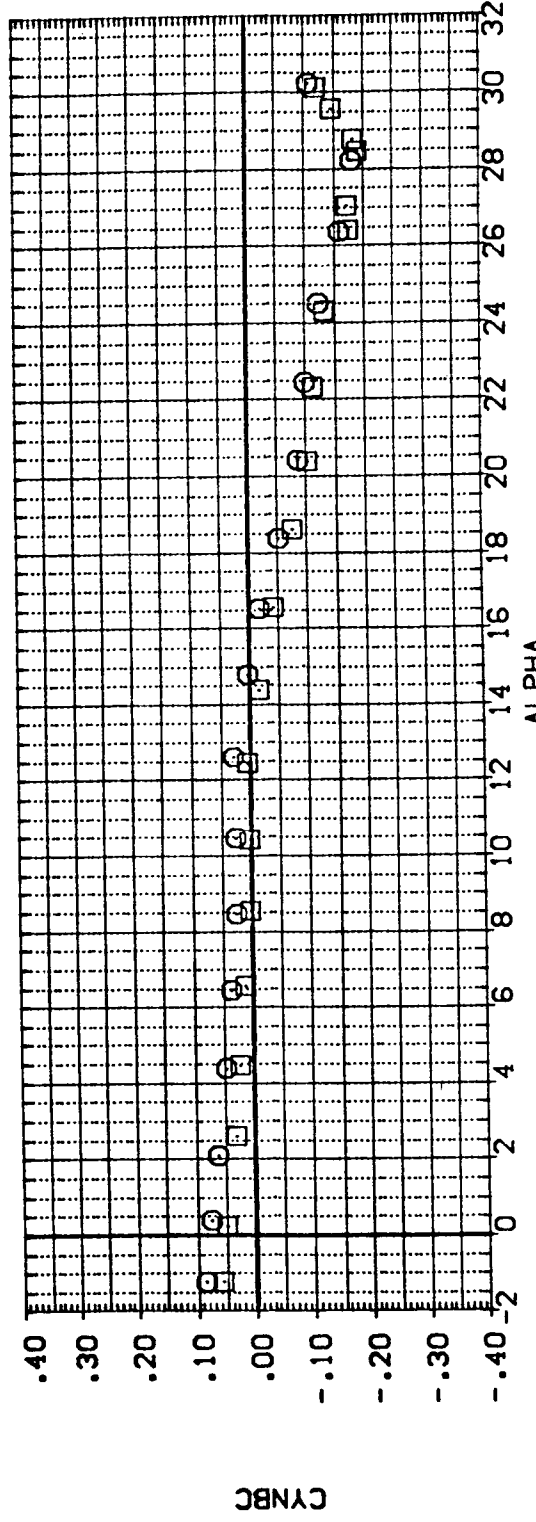
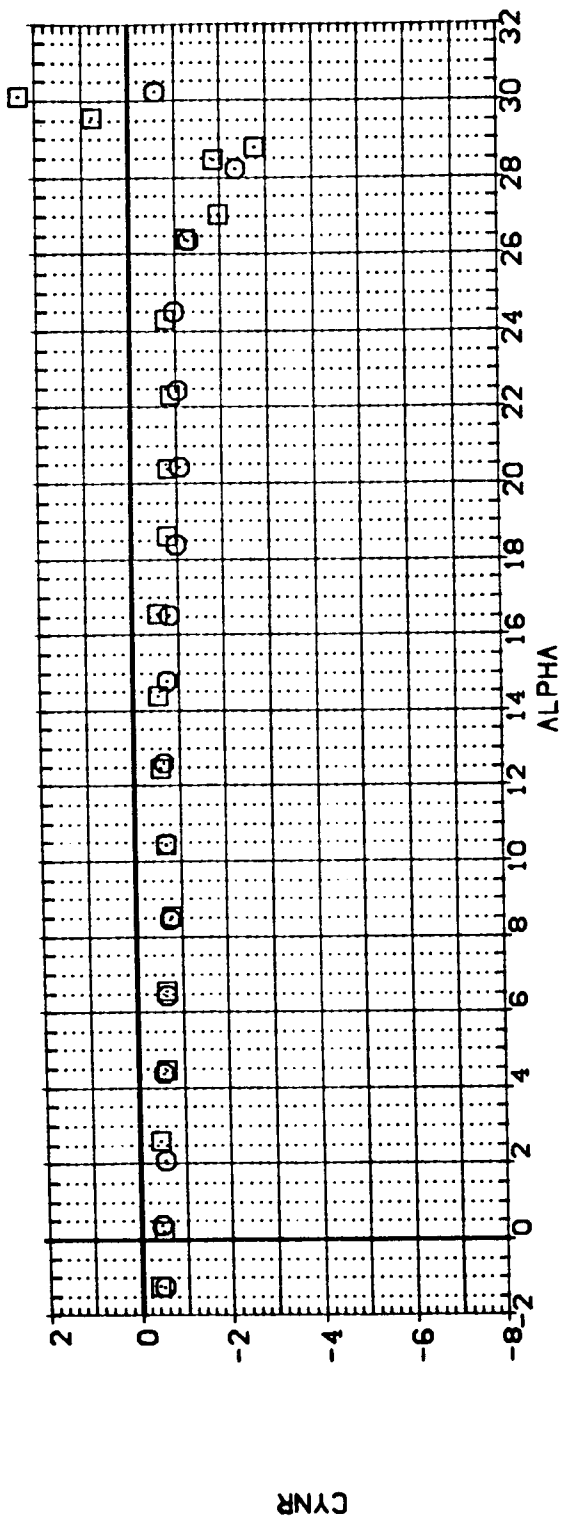


FIGURE 5. EFFECT OF C. G. LOCATION ON DYNAMIC STABILITY PARAMETERS IN YAW

(CJMACH = 2.86

CG-LOC ELEVTR RUOFLR
 1.000 .000 40.000
 2.000 .000 40.000

CG-LOC ELEVTR RUOFLR
 1.000 .000 40.000
 2.000 .000 40.000

LA-14: ROCKWELL CRB 0898 V/HOD. NOSE (BVMH)
 LA-14: ROCKWELL CRB 0898 V/HOD. NOSE (BVMH)

LA-14: ROCKWELL CRB 0898 V/HOD. NOSE (BVMH)
 LA-14: ROCKWELL CRB 0898 V/HOD. NOSE (BVMH)

LA-14: ROCKWELL CRB 0898 V/HOD. NOSE (BVMH)
 LA-14: ROCKWELL CRB 0898 V/HOD. NOSE (BVMH)

LA-14: ROCKWELL CRB 0898 V/HOD. NOSE (BVMH)
 LA-14: ROCKWELL CRB 0898 V/HOD. NOSE (BVMH)

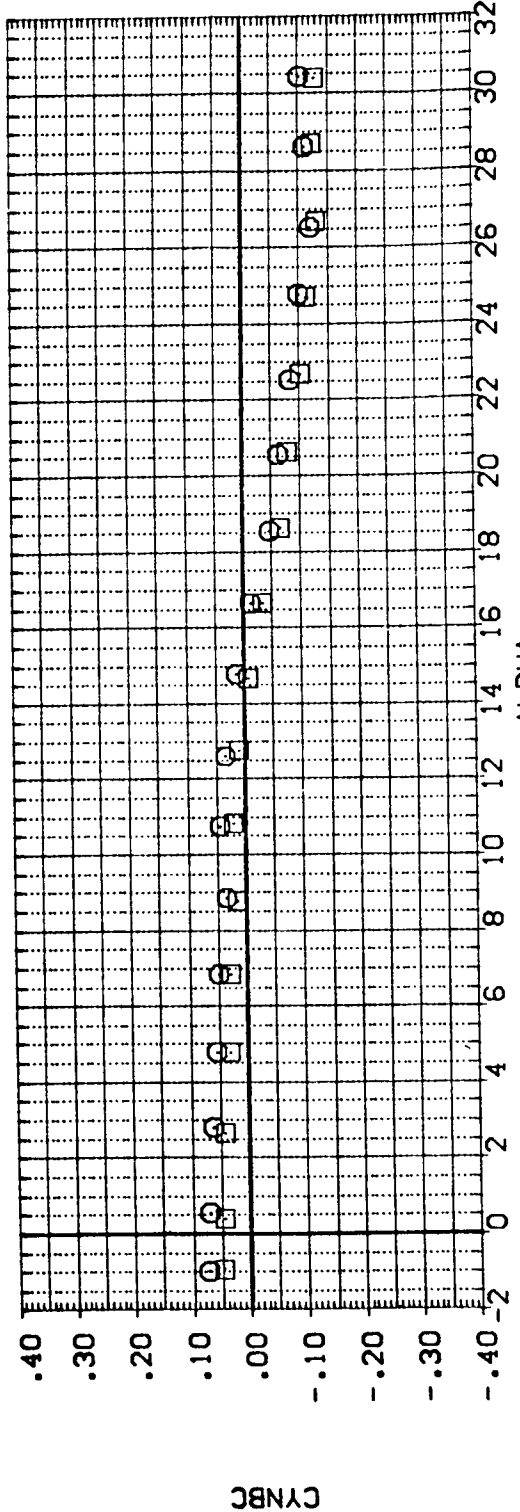
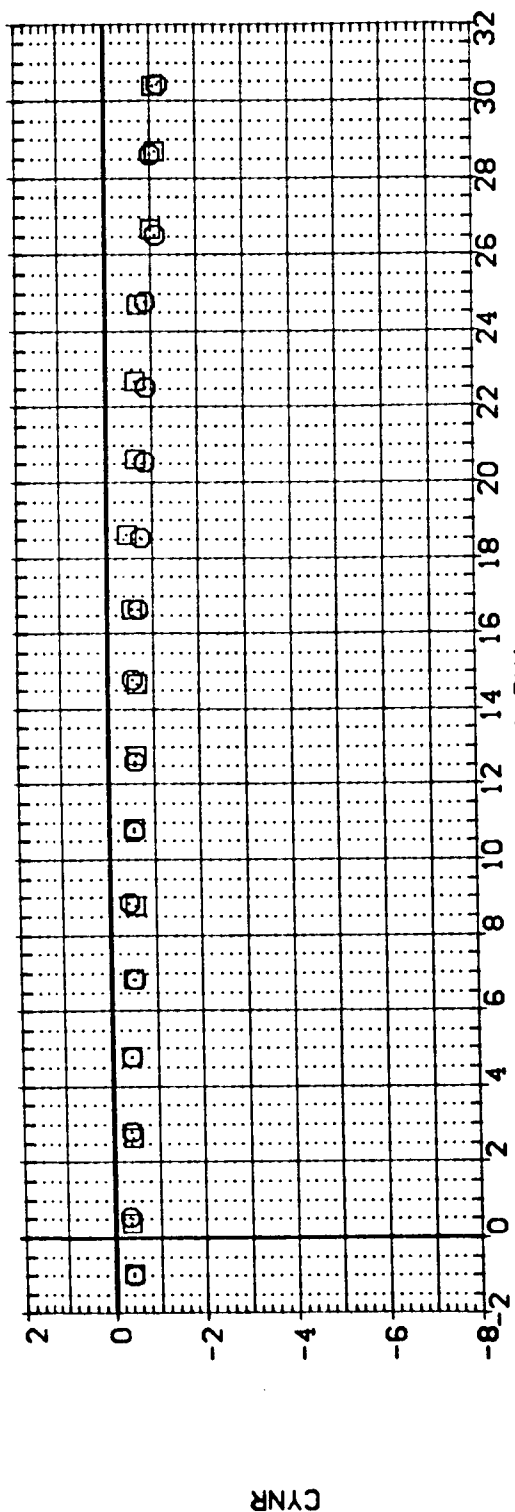


FIGURE 5. EFFECT OF C. G. LOCATION ON DYNAMIC STABILITY PARAMETERS IN YAW

(D)MACH = 3.96

CG-LOC ELEVTR RUDELIR
 1.000 .000 40.000
 2.000 .000 40.000

CONFIGURATION DESCRIPTION
 LA-14; ROCKWELL DRB 0698 V/MOD. NOSE (BVM)
 LA-14; ROCKWELL DRB 0698 V/MOD. NOSE (BVM)

DATA SET SYMBOL
 (RPGY03)
 (RPGY04)

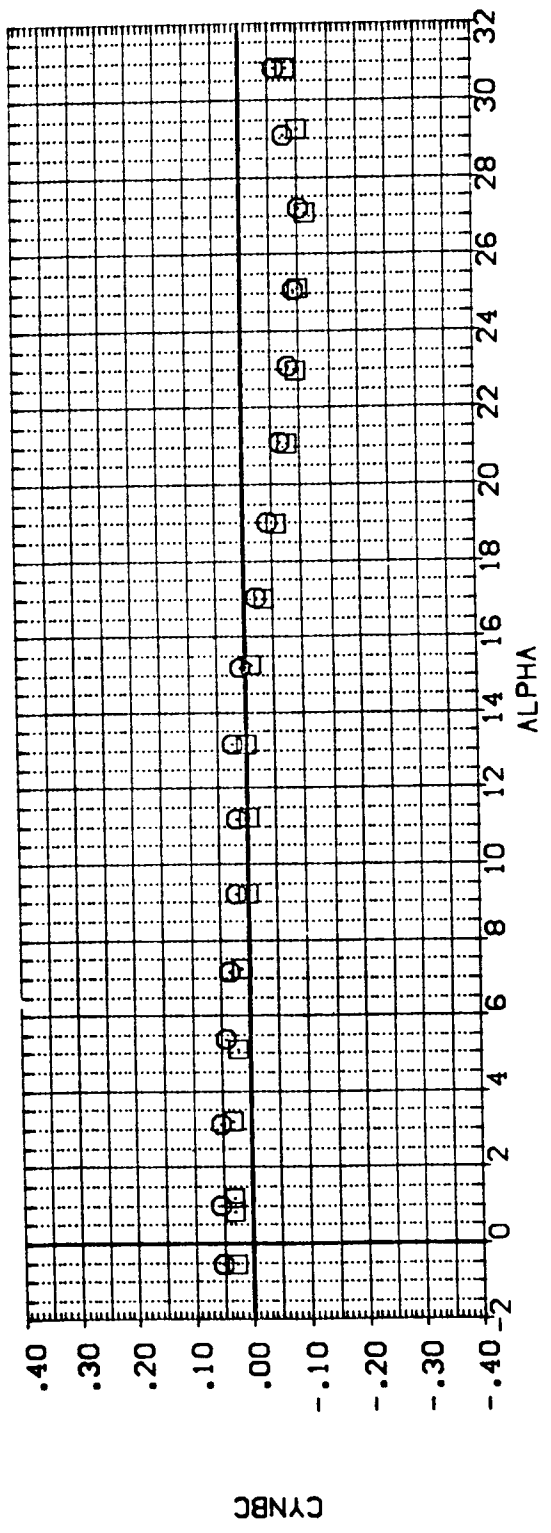
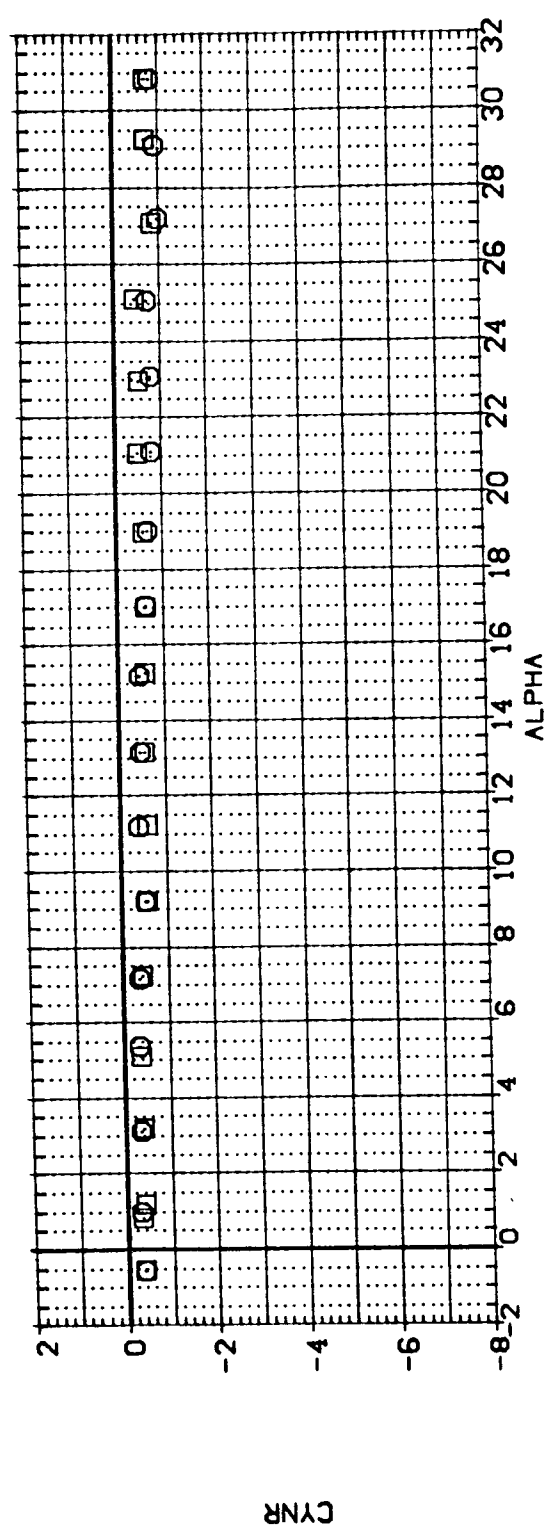


FIGURE 5. EFFECT OF C. G. LOCATION ON DYNAMIC STABILITY PARAMETERS IN YAW

(E)MACH = 4.63

DATA SET SYMBOL (RPGY03) (RPGY04)
 CONFIGURATION DESCRIPTION LA-14, ROCKWELL CR8 0898 V/M00, NOSE (BWHM) LA-14, ROCKWELL CR8 0898 V/M00, NOSE (BWHM)
 CG-LOC 1.000 2.000 ELEVTR .000 .000 RUOFLR 40.000 40.000

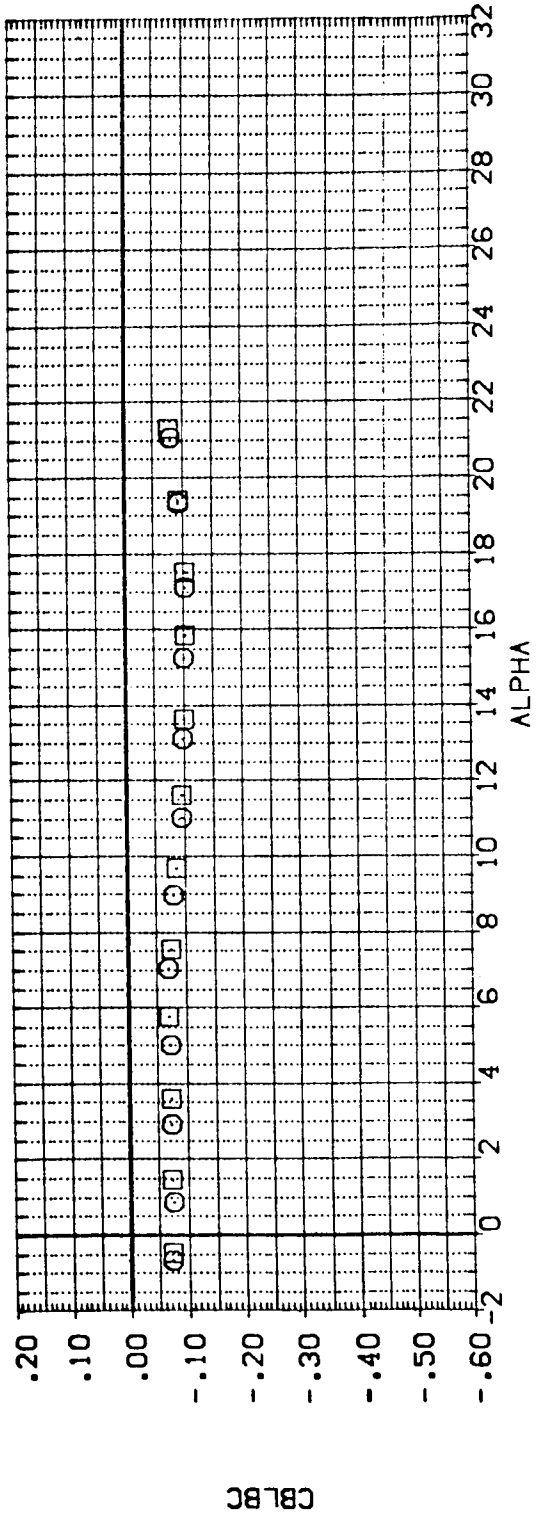
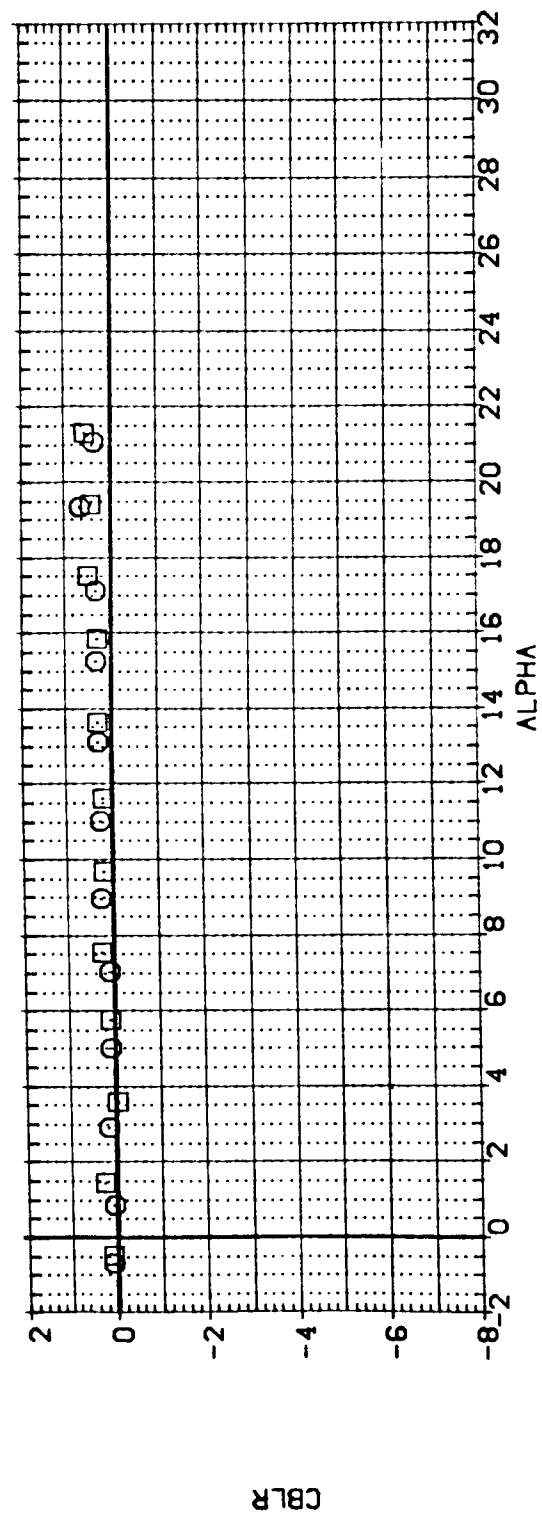


FIGURE 5. EFFECT OF C. G. LOCATION ON DYNAMIC STABILITY PARAMETERS IN YAW

(A)MACH = 1.90

DATA SET SYMBOL: []
 CONFIGURATION DESCRIPTION:
 LA-14: ROCKWELL CRB 0898 V/100. NOSE (BVMH)
 LA-14: ROCKWELL CRB 0898 V/100. NOSE (BVMH)
 CG-LOC: 1.000
 ELEVTR: .000
 RUOFLR: 40.000
 2.000
 .000
 10.000

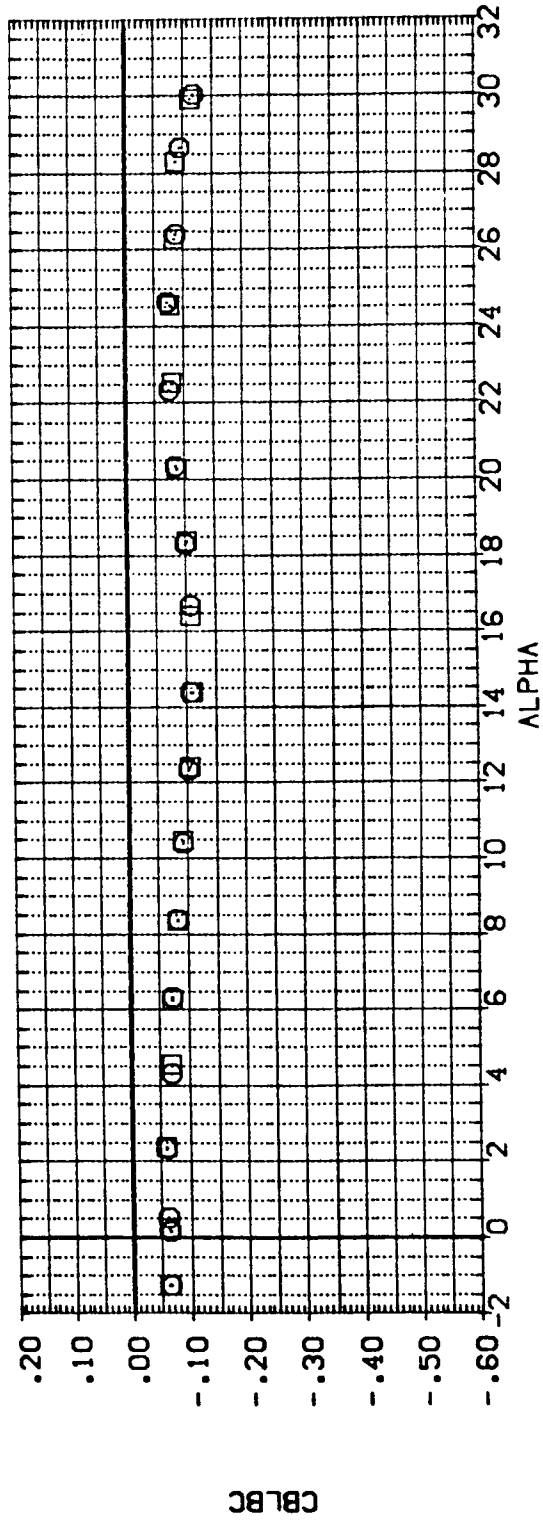
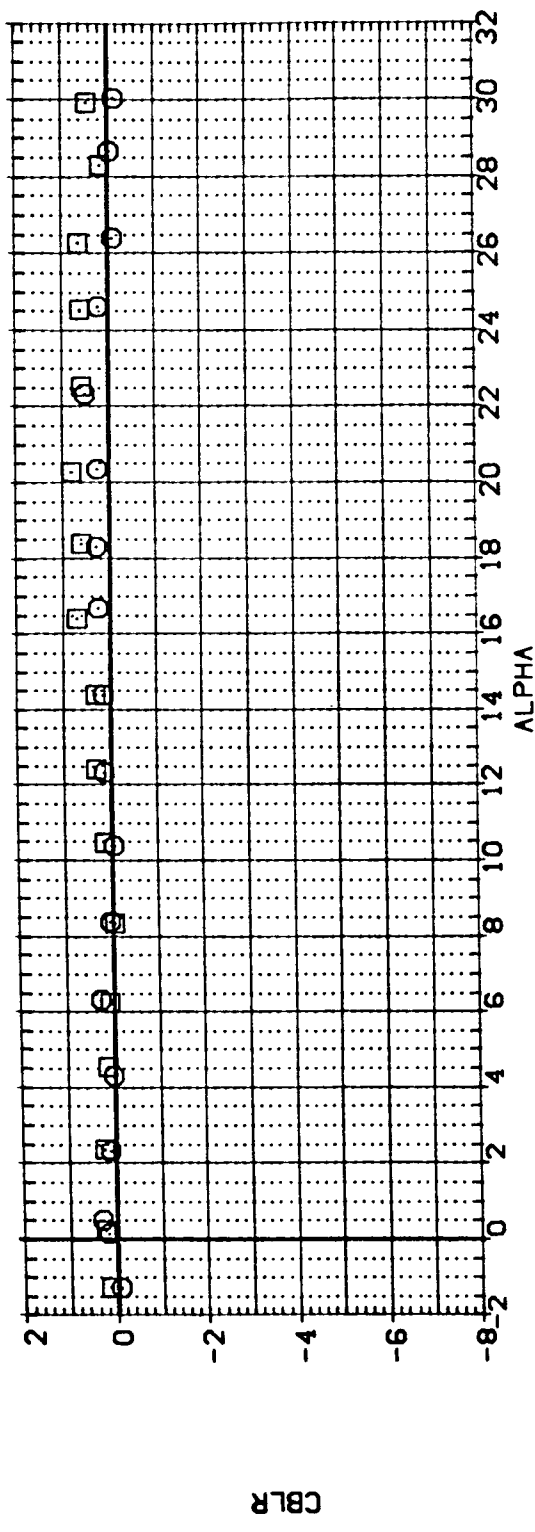


FIGURE 5. EFFECT OF C. G. LOCATION ON DYNAMIC STABILITY PARAMETERS IN YAW
 (B)MACH = 2.36

CO-LOC ELEVTR RUOFLR
 1.000 .000 40.000
 2.000 .000 40.000

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (RPGY03) LA-14; ROCKWELL ORB 0898 V/MOD. NOSE (BVMH)
 (RPGY04) LA-14; ROCKWELL ORB 0898 V/MOD. NOSE (BVMH)

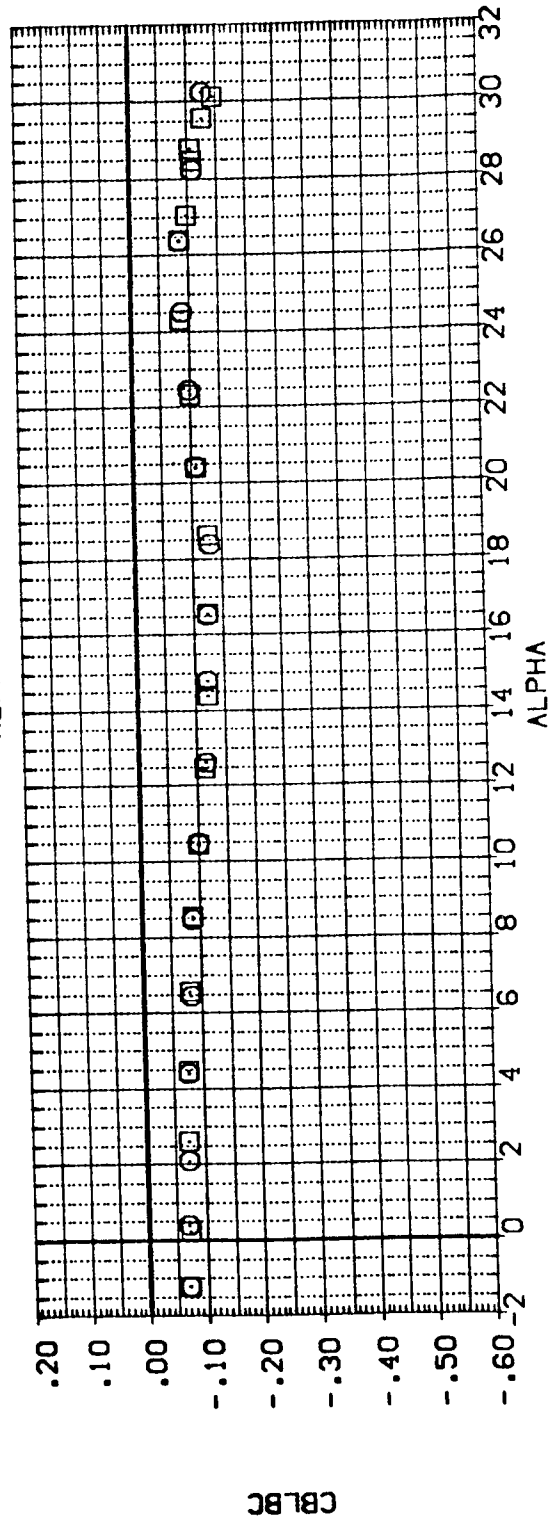
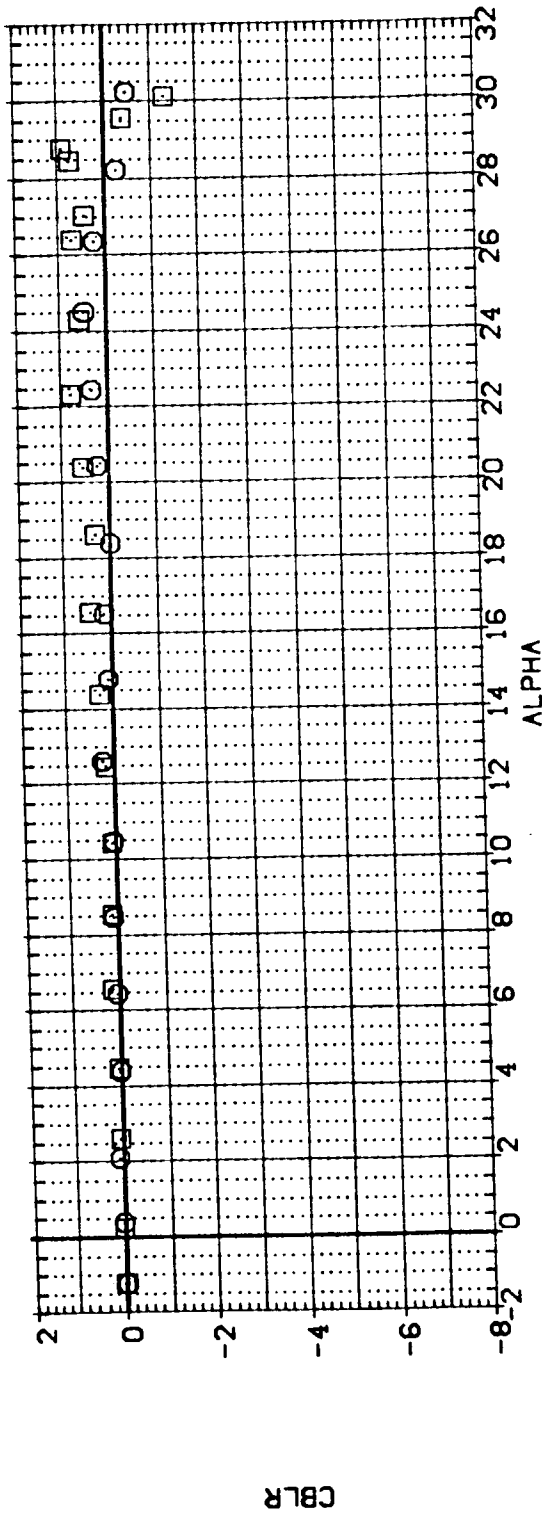


FIGURE 5. EFFECT OF C. G. LOCATION ON DYNAMIC STABILITY PARAMETERS IN YAW

(C)MACH = 2.86

DATA SET SYMBOL CONFIGURATION DESCRIPTION CG-LOC ELEVTR RUOFLR
 (RPGY03) LA-14: ROCKWELL CRB 0898 V/100, NOSE (BVM) 1.000 .000 40.000
 (RPGY04) LA-14: ROCKWELL CRB 0898 V/100, NOSE (BVM) 2.000 .000 40.000

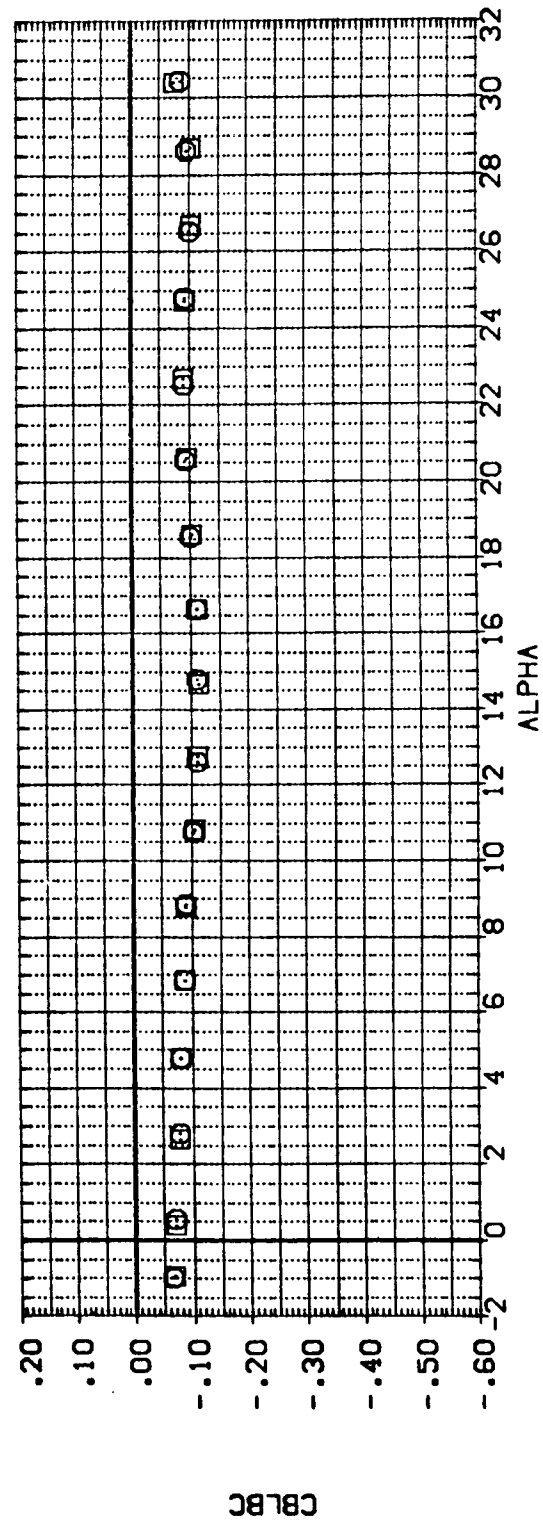
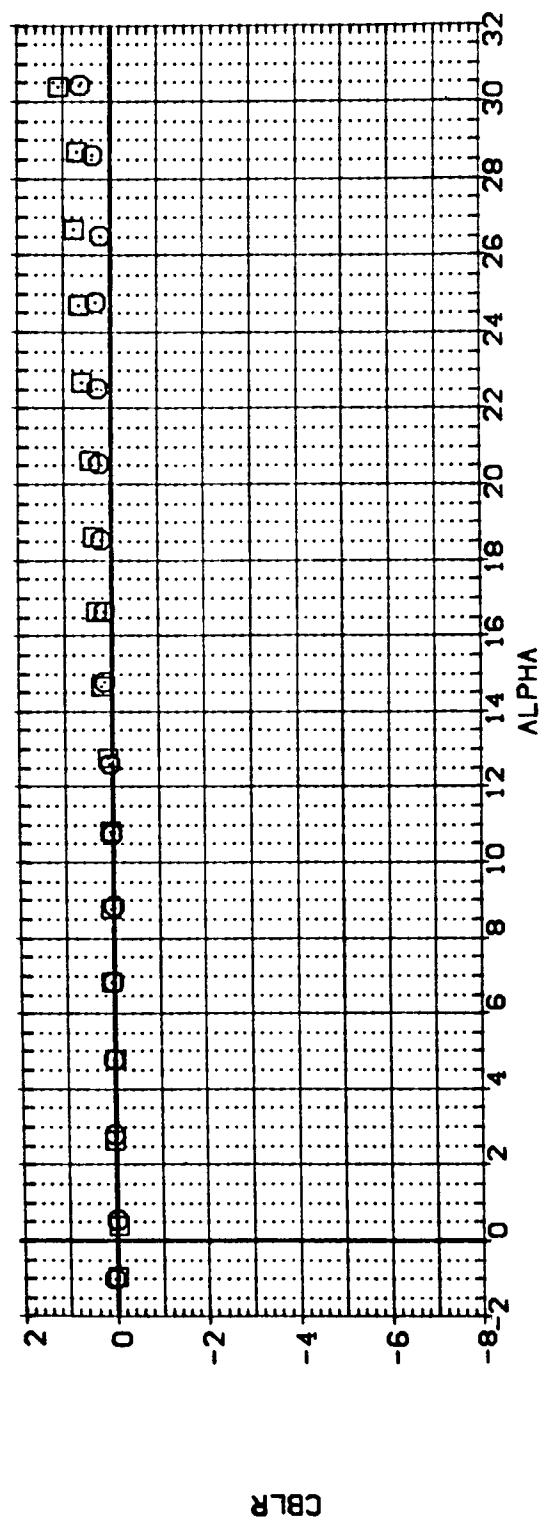


FIGURE 5. EFFECT OF C. G. LOCATION ON DYNAMIC STABILITY PARAMETERS IN YAW

(O)MACH = 3.96

DATA SET SYMBOL (RP-GY03) (RP-GY04)

CONFIGURATION DESCRIPTION
 LA-14; ROCKWELL CR8 D898 V/100. NOSE (BVMH)
 LA-14; ROCKWELL CR8 D898 V/100. NOSE (BVMH)

CG-LOC 1.000 2.000
 ELEVTR .000 .000
 RUOFLR 40.000 40.000

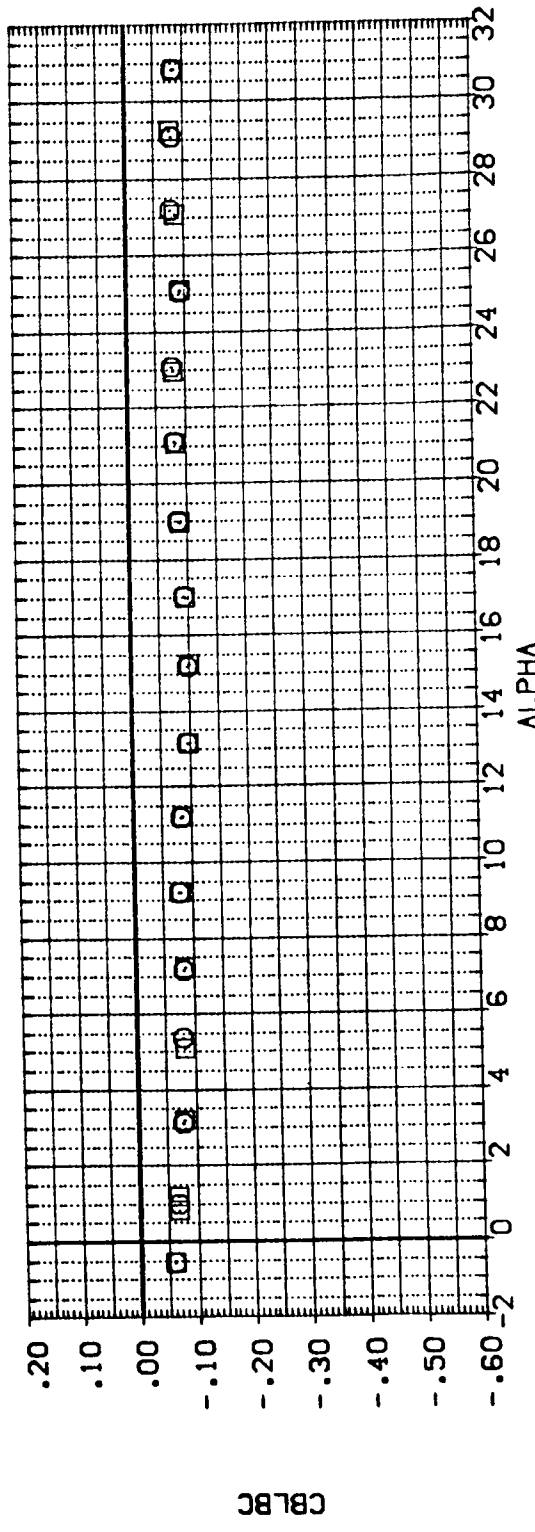
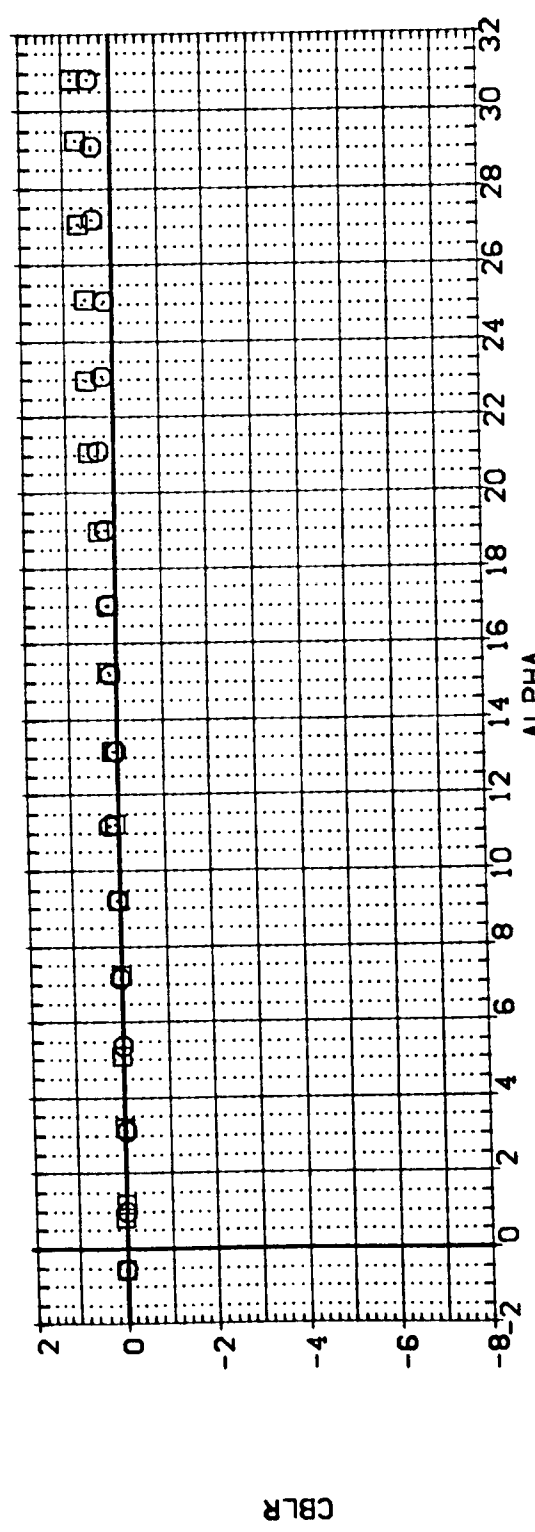


FIGURE 5. EFFECT OF C. G. LOCATION ON DYNAMIC STABILITY PARAMETERS IN YAW

(E)MACH = 4.63

DATA SET SYMBOL (RFGP01) (RFGP03) CONFIGURATION DESCRIPTION LA-14, ROCKWELL ORB 0898 V/MOD, NOSE (BVMH)

CG-LOC 1.000
ELEVTR .000
RUOFLR 40.000

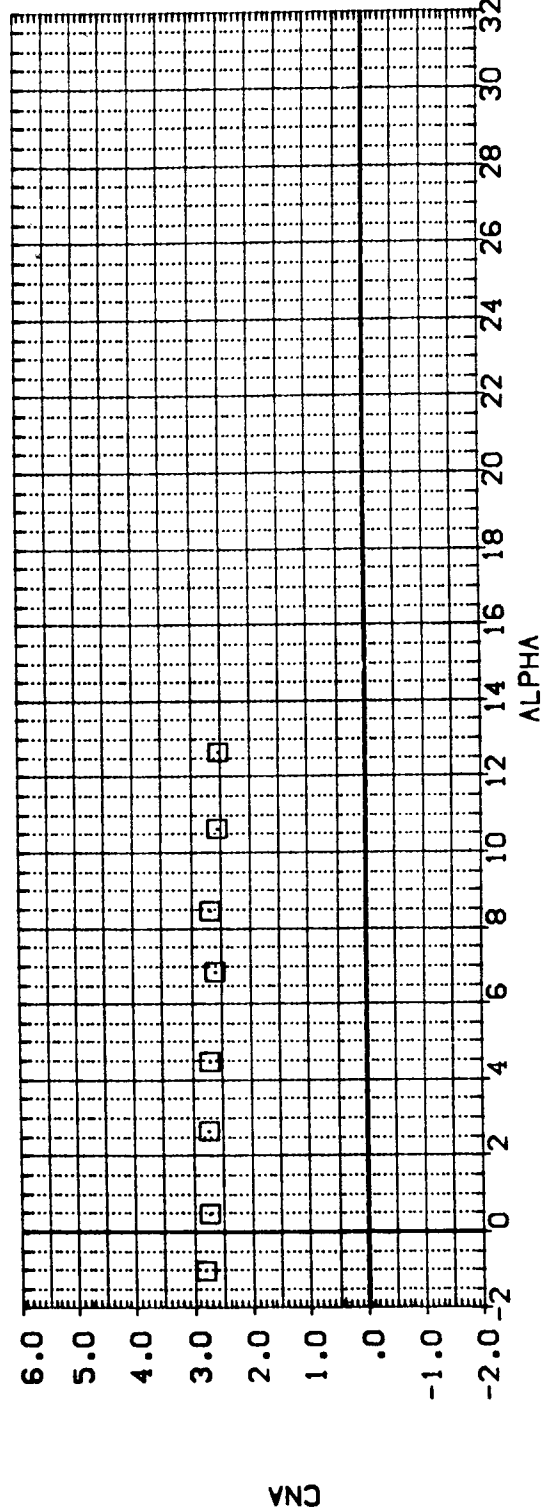
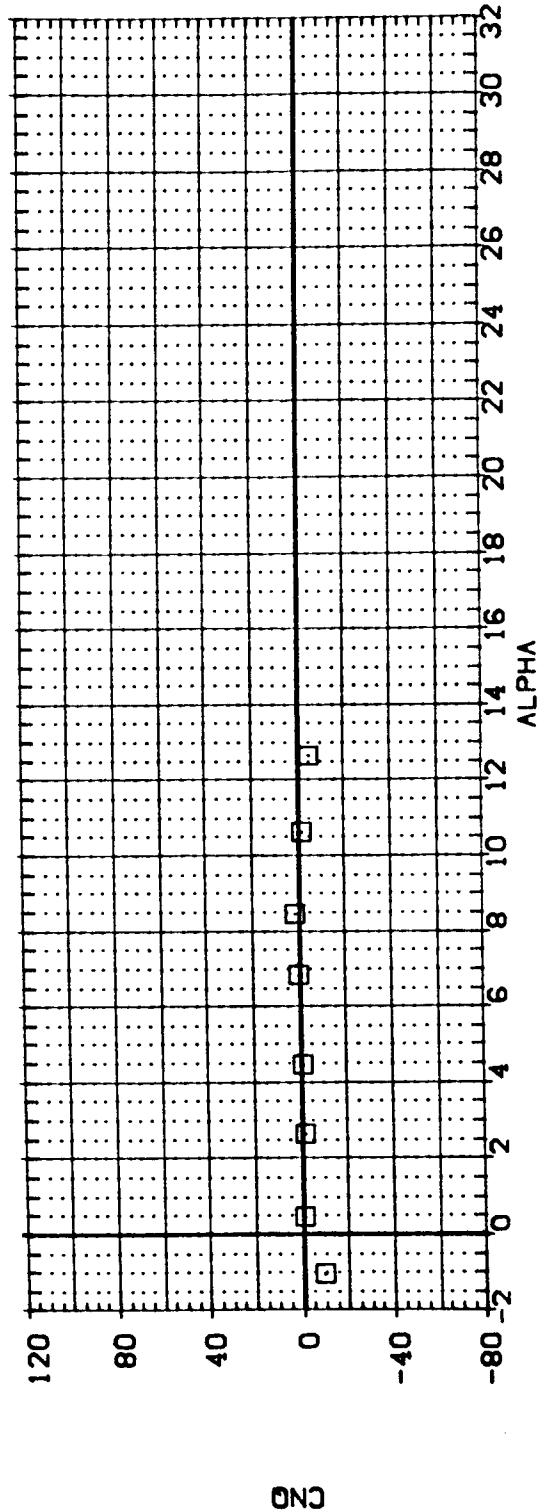


FIGURE 6. EFFECT OF OMS PODS ON DYNAMIC STABILITY PARAMETERS IN PITCH

(A)MACH = 1.60

DATA SET SYMBOL: (RPGP01) (RPGP03)
 CONFIGURATION DESCRIPTION: LA-14, ROCKWELL CRB 0898 V/MOD, NOSE (BVMV)
 DATA NOT AVAILABLE
 CG-LOC: 1.000
 ELEVTR: .000
 RUOFLLR: 40.000
 1.000
 .000
 40.000

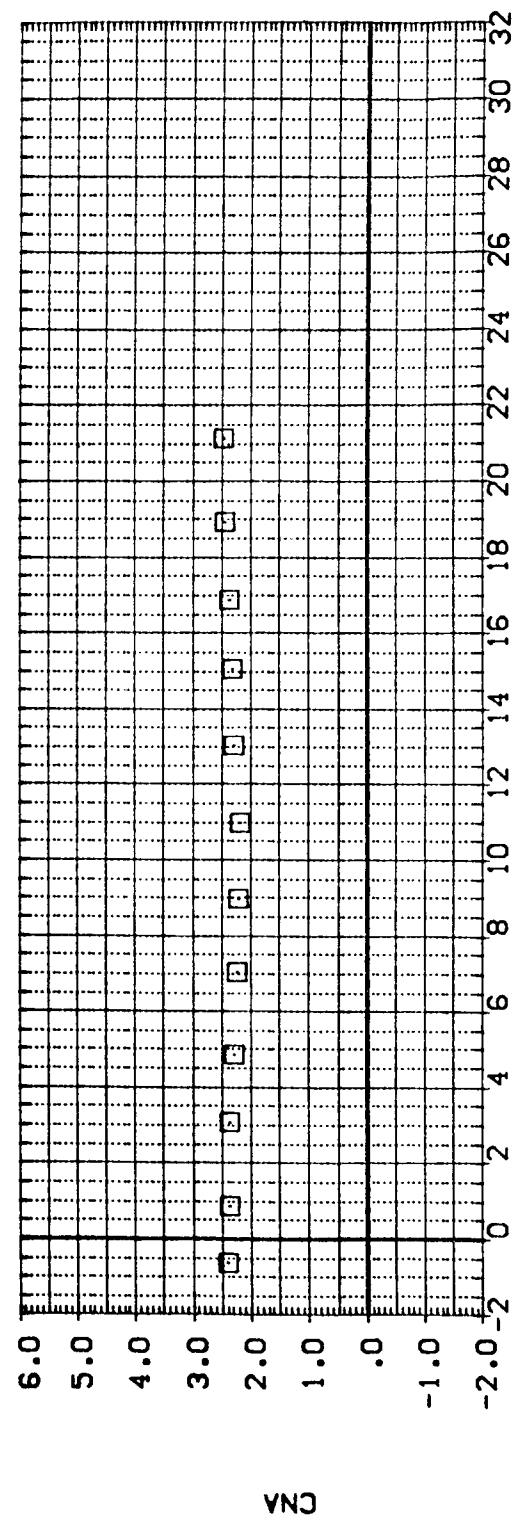
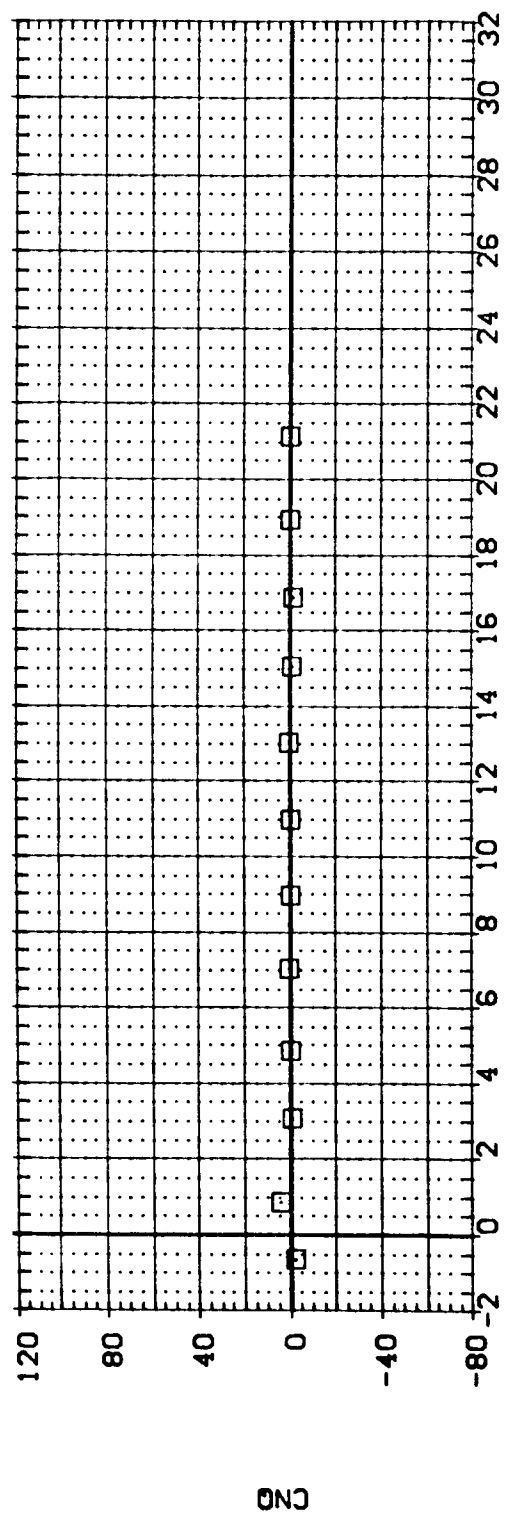


FIGURE 6. EFFECT OF OMS PODS ON DYNAMIC STABILITY PARAMETERS IN PITCH

(B)MACH = 1.90

DATA SET SYMBOL (RPGP01) (RPGP03)
 CONFIGURATION DESCRIPTION LA-14: ROCKWELL ORB 0898 V/MOD: NOSE (BNV) LA-14: ROCKWELL ORB 0898 V/MOD: NOSE (BNVM)
 CG-LOC 1.000 1.000
 ELEVTR .000 .000
 RUOFLR 40.000 40.000

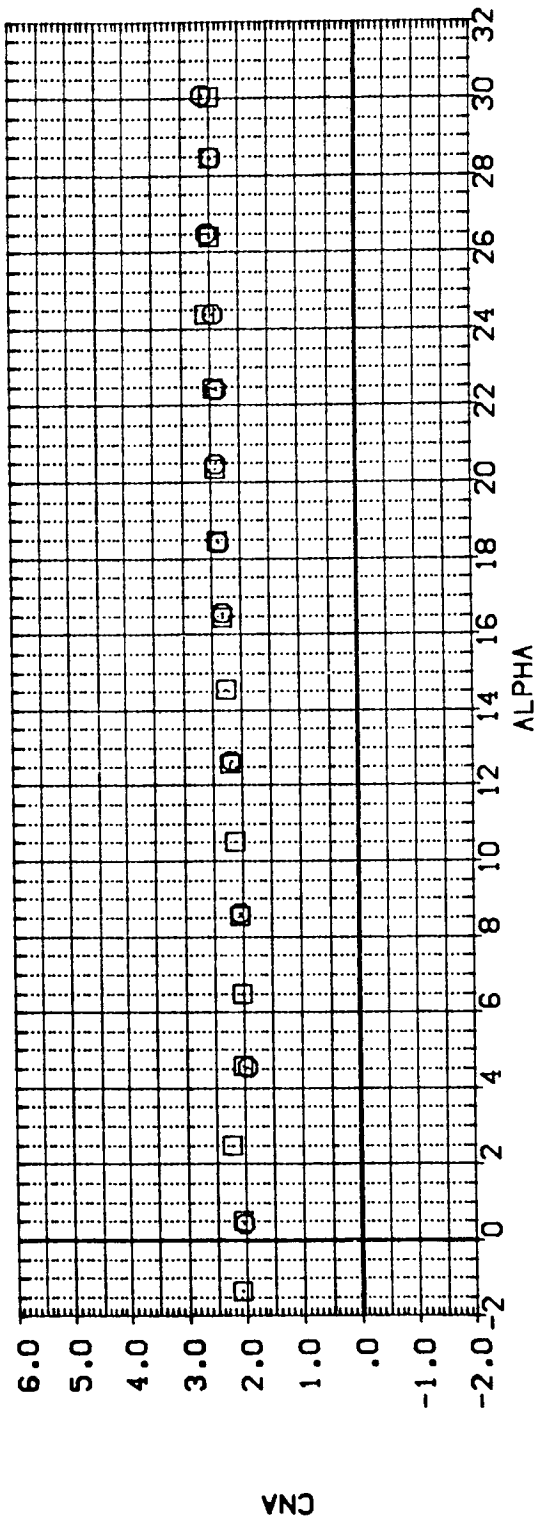
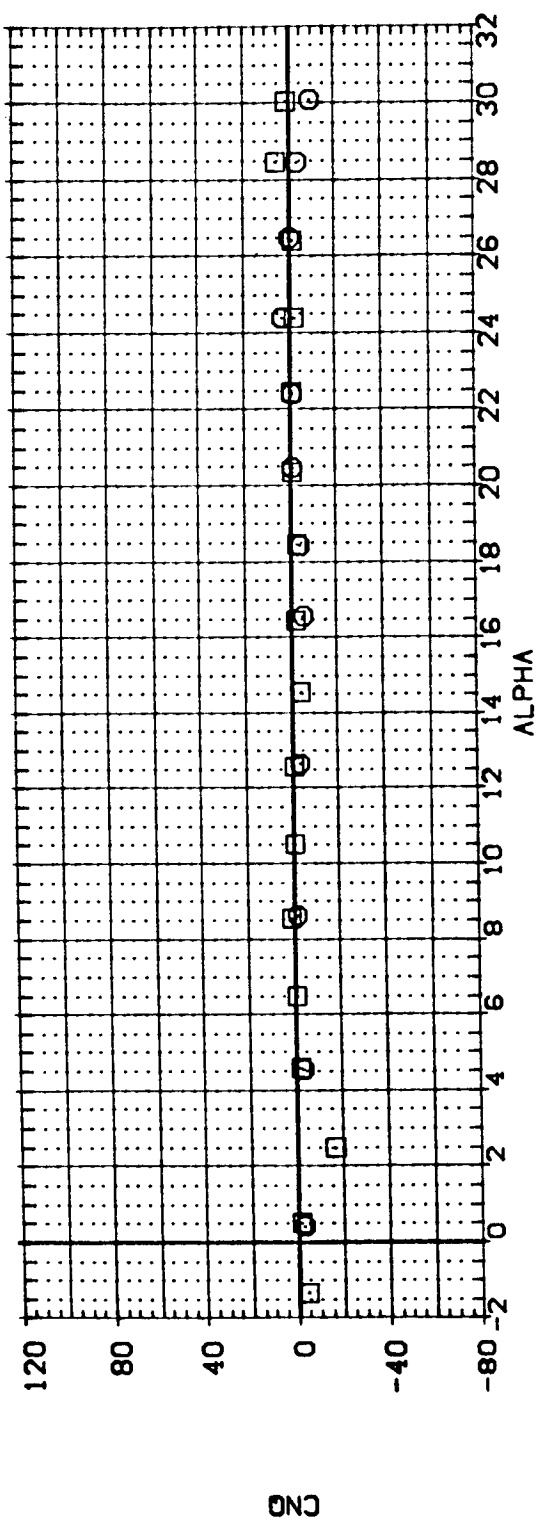


FIGURE 6. EFFECT OF OMS PODS ON DYNAMIC STABILITY PARAMETERS IN PITCH

CG-LOC ELEVTR RUOFLR
 1.000 .000 40.000
 1.000 .000 40.000

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (RPG01) LA-14; ROCKWELL DRB 0958 V/MOD. NOSE (BVM }
 (RPG03) LA-14; ROCKWELL DRB 0958 V/MOD. NOSE (BVM }

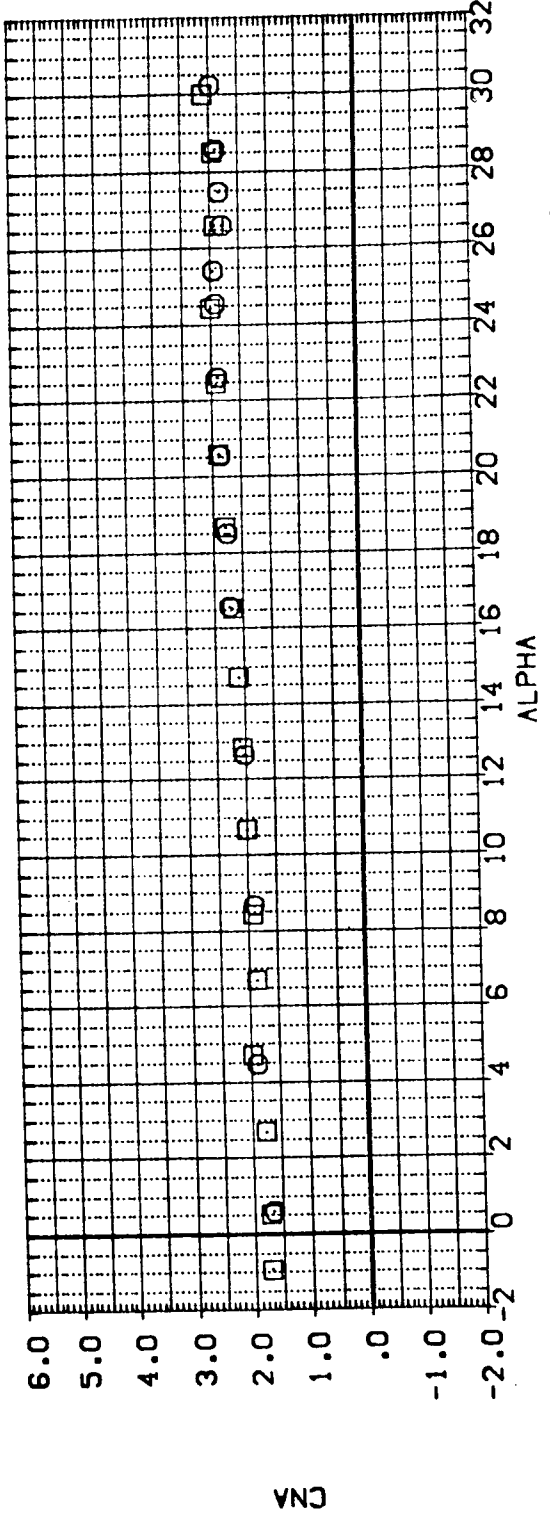
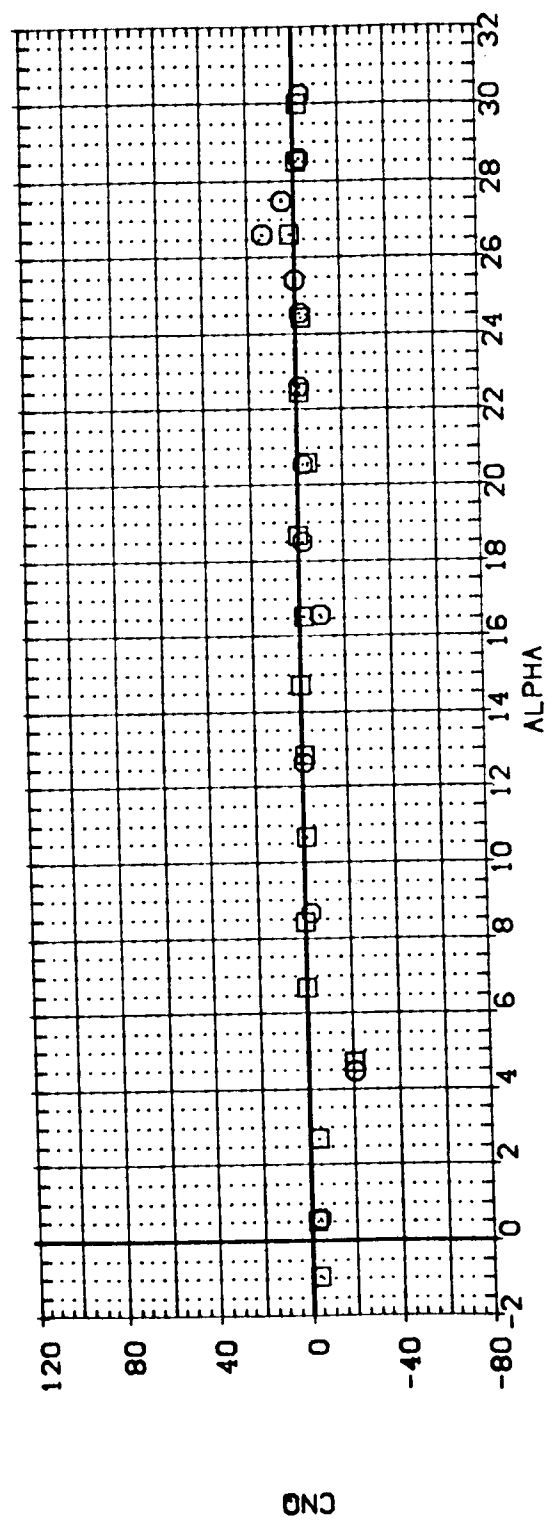


FIGURE 6. EFFECT OF OMS PODS ON DYNAMIC STABILITY PARAMETERS IN PITCH

(O)MACH = 2.86

DATA SET SYMBOL CONFIGURATION DESCRIPTION CG-LOC ELEVTR RUOFLR
 { RFGPO1 } LA-14, ROCKWELL CRB 0698 V/MOD, NOSE (BVV) 1.000 .000 40.000
 { RFGPO3 } LA-14, ROCKWELL CRB 0698 V/MOD, NOSE (BVVM) 1.000 .000 40.000

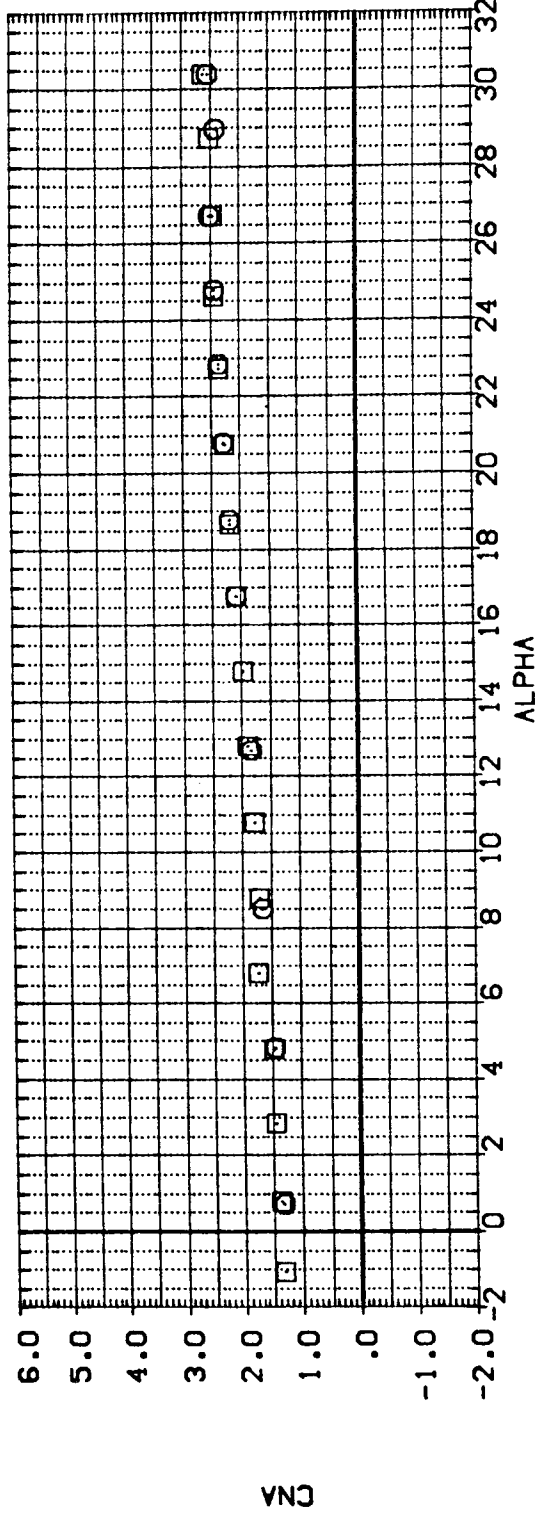
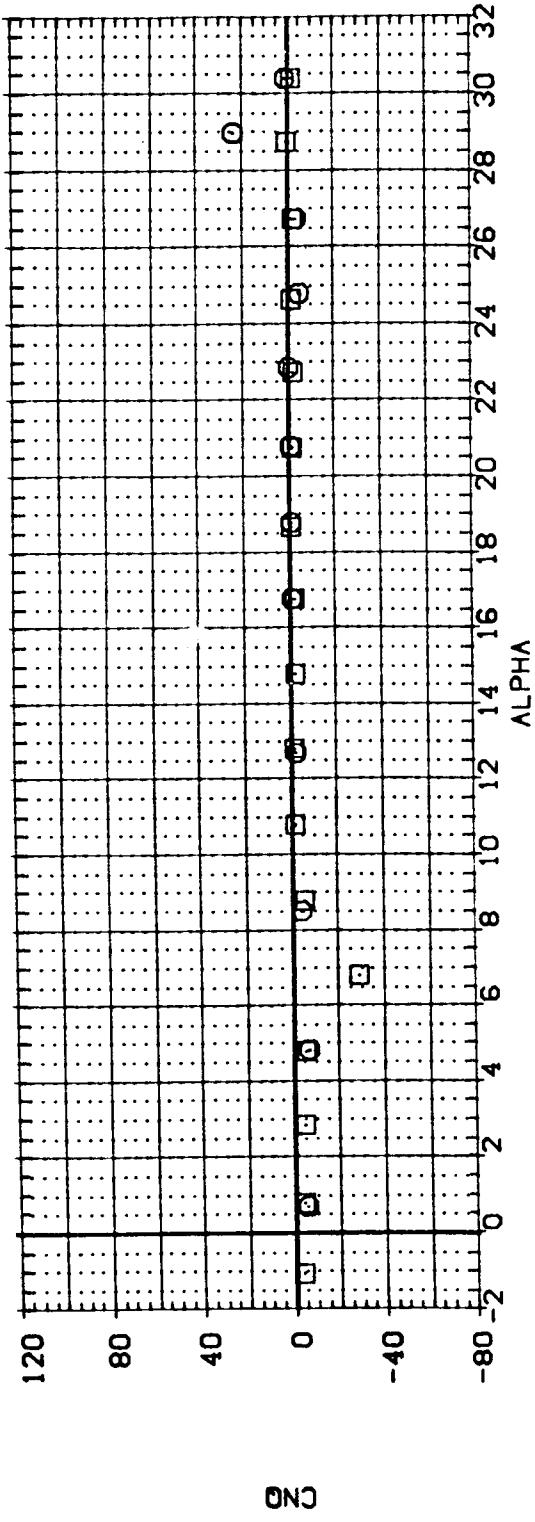


FIGURE 6. EFFECT OF OMS PODS ON DYNAMIC STABILITY PARAMETERS IN PITCH

(E)MACH = 3.96

CG-LOC ELEVTR RUDELIR
 1.000 .000 40.000
 1.000 .000 40.000

CONFIGURATION DESCRIPTION
 LA-14: ROCKWELL ORB 0888 V/MOD. NOSE (BWW)
 LA-14: ROCKWELL ORB 0888 V/MOD. NOSE (BWWH)

DATA SET SYMBOL
 (RPGP01) □
 (RPGP03) □

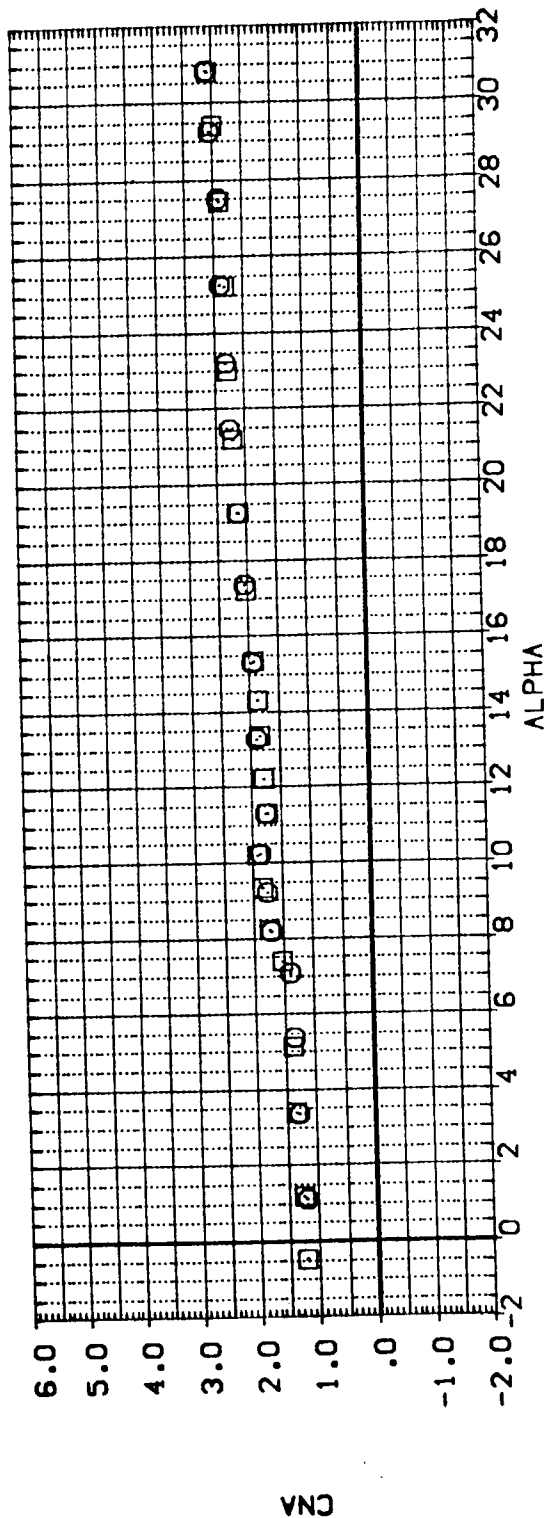
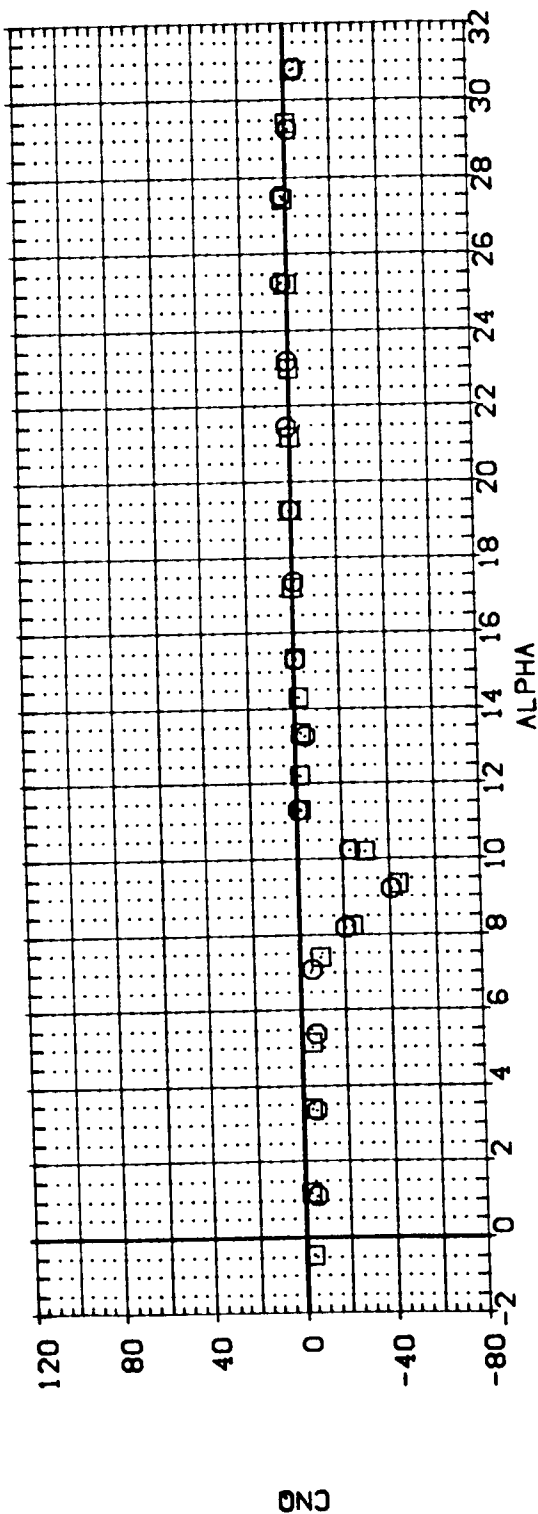


FIGURE 6. EFFECT OF OMS PODS ON DYNAMIC STABILITY PARAMETERS IN PITCH

(CF)MACH = 4.63

DATA SET SYMBOL: [] CONFIGURATION DESCRIPTION: CG-LDC ELEVTR RUJDFLR
 [RPGP01] DATA NOT AVAILABLE 1.000 .000 40.000
 [RPGP03] LA-14, ROCKWELL ORB 0898 V/MOD. NOSE (BVMV) 1.000 .000 40.000

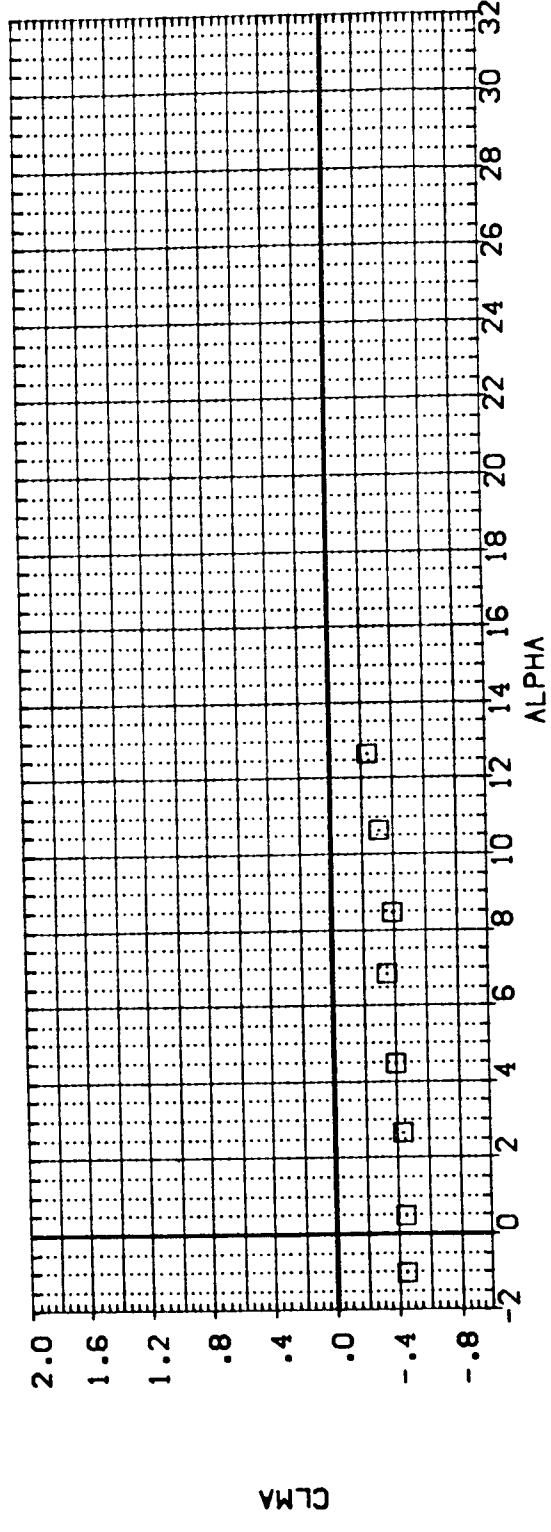
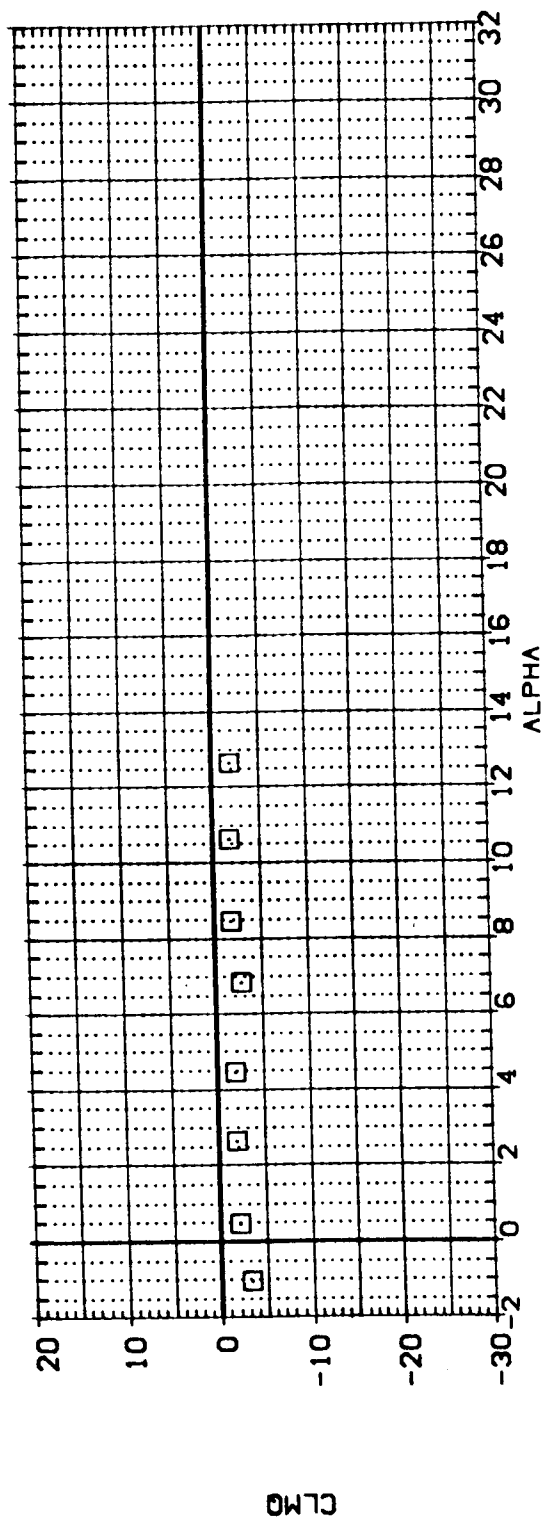
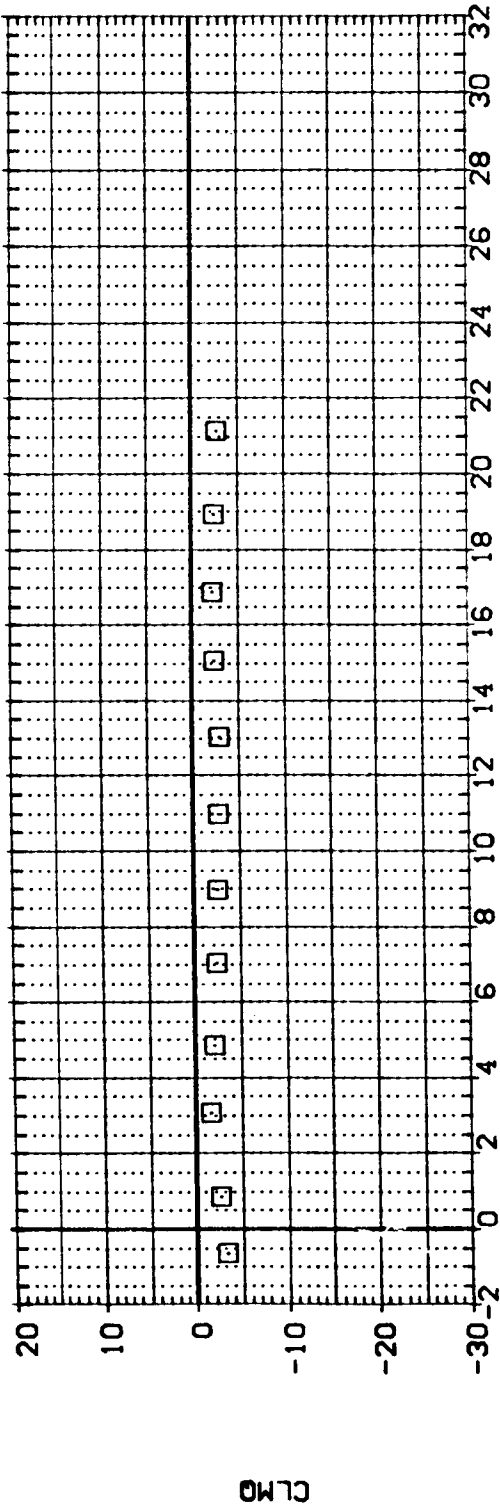


FIGURE 6. EFFECT OF OMS PODS ON DYNAMIC STABILITY PARAMETERS IN PITCH

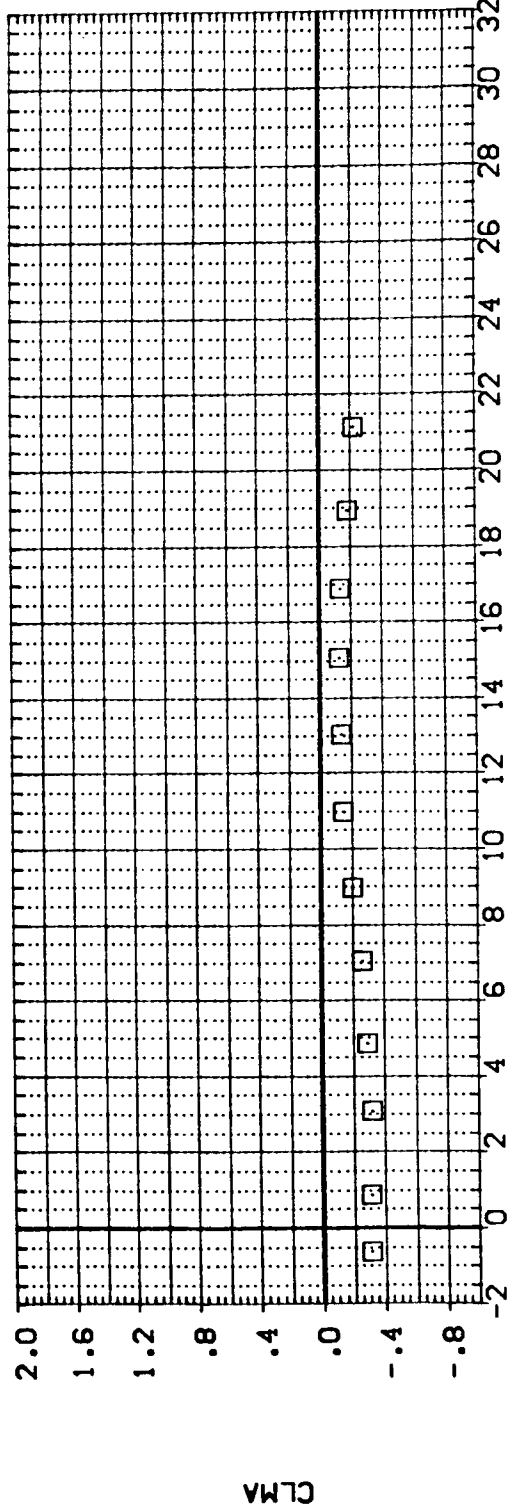
CAJ MACH = 1.60

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (RPGP01) DATA NOT AVAILABLE
 (RPGP03) LA-14, ROCKWELL D58 D698 V/MOD, NOSE (BVM)

CG-LOC 1.000
 ELEVTR .000
 RUOFLR 40.000



ALPHA



ALPHA

FIGURE 6. EFFECT OF OMS PODS ON DYNAMIC STABILITY PARAMETERS IN PITCH

(B)MACH = 1.90

DATA SET SYMBOL. CONFIGURATION DESCRIPTION CG-LOC ELEVTR RUOFLR
 { RFGPO1 } LA-14; ROCKWELL ORB 0898 V/MOD; NOSE (BVM) 1.000 .000 40.000
 { RFGPO3 } LA-14; ROCKWELL ORB 0898 V/MOD; NOSE (BVM) 1.000 .000 40.000

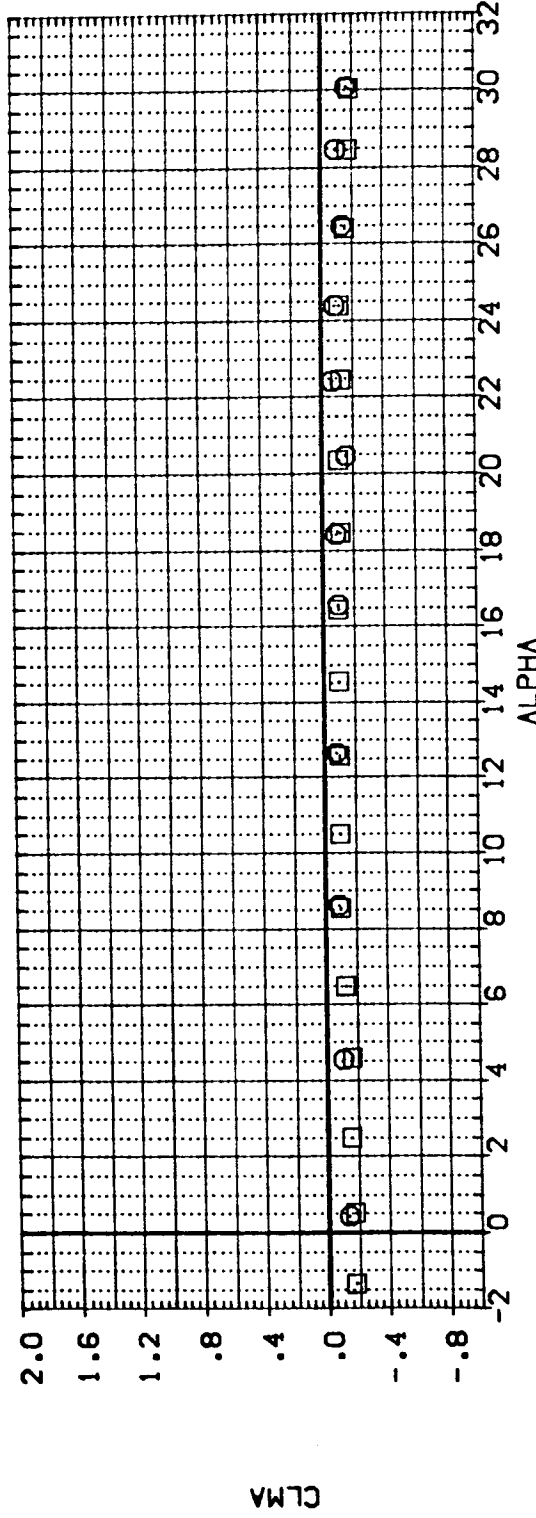
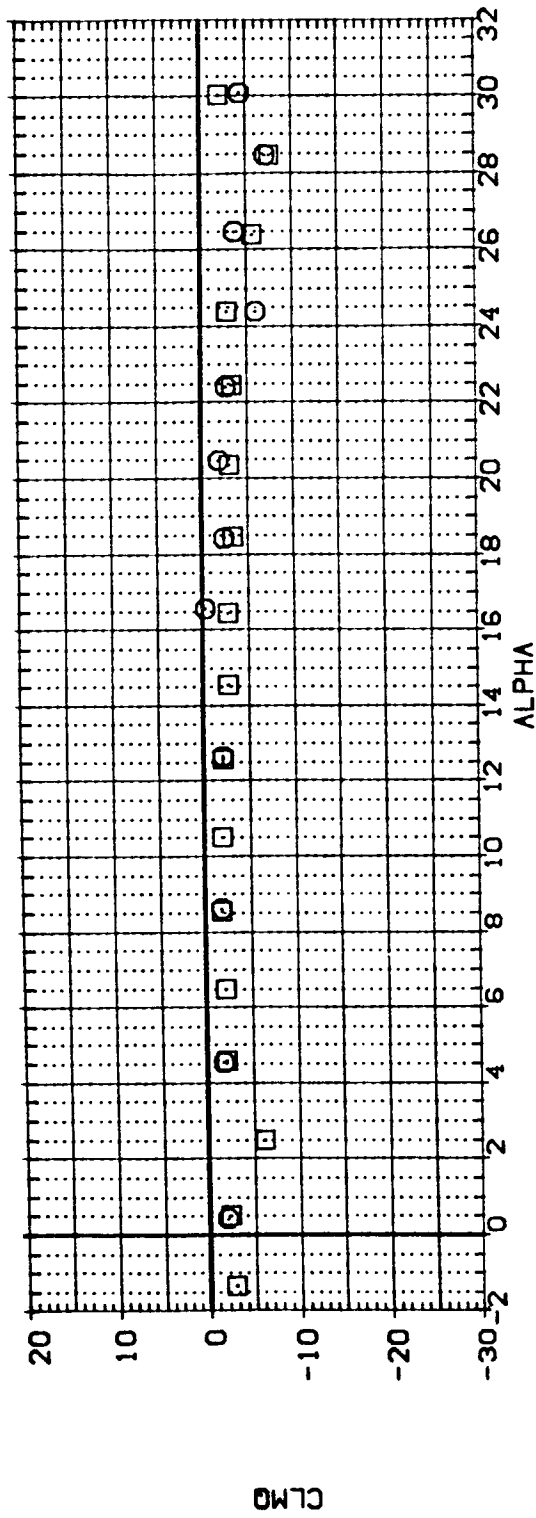


FIGURE 6. EFFECT OF OMS PODS ON DYNAMIC STABILITY PARAMETERS IN PITCH

(C)MACH = 2.36

DATA SET SYMBOL. CONFIGURATION DESCRIPTION CG-LOC ELEVTR RUDEFUR
 [RFGP01] LA-14; ROCKWELL ORB 0898 V/100; NOSE (BVM) .000 40.000
 [RFGP03] LA-14; ROCKWELL ORB 0898 V/100; NOSE (BVM) 1.000 .000
 1.000 40.000

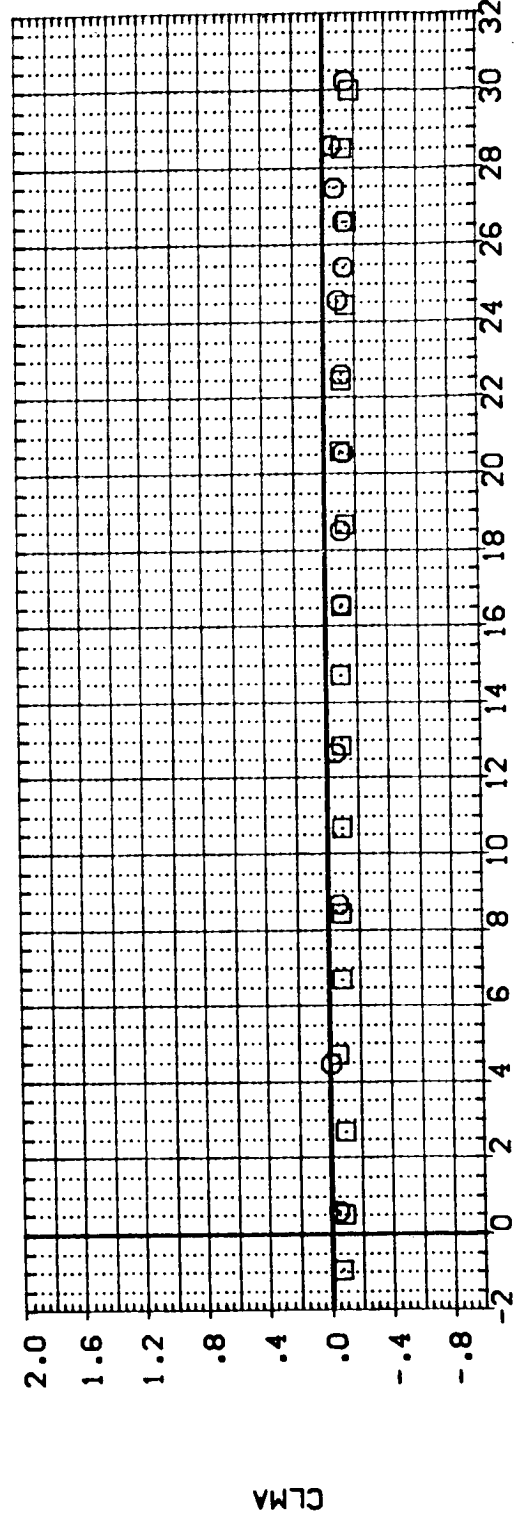
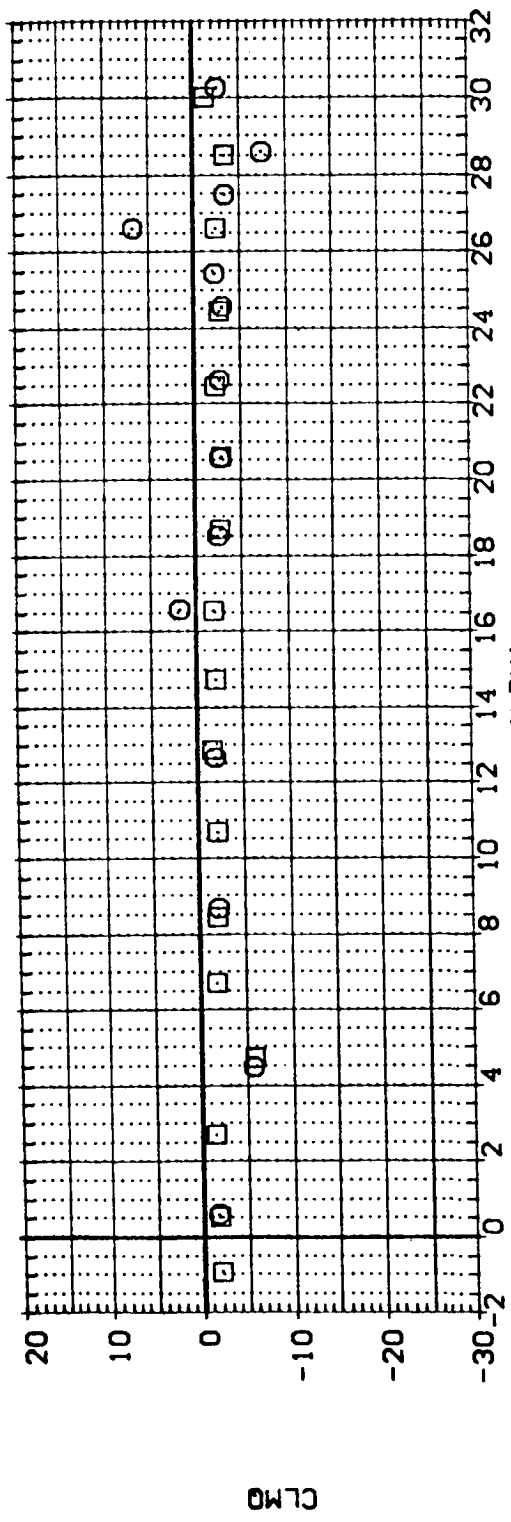


FIGURE 6. EFFECT OF OMS PODS ON DYNAMIC STABILITY PARAMETERS IN PITCH

(O)MACH = 2.86

DATA SET SYMBOL CONFIGURATION DESCRIPTION CG-LOC ELEVTR RUOFLR
 (RPGP01) LA-14; ROCKWELL DRB 0698 V/MOD; NOSE (BVM) 1.000 .000 40.000
 (RPGP03) LA-14; ROCKWELL DRB 0698 V/MOD; NOSE (BVMH) 1.000 .000 40.000

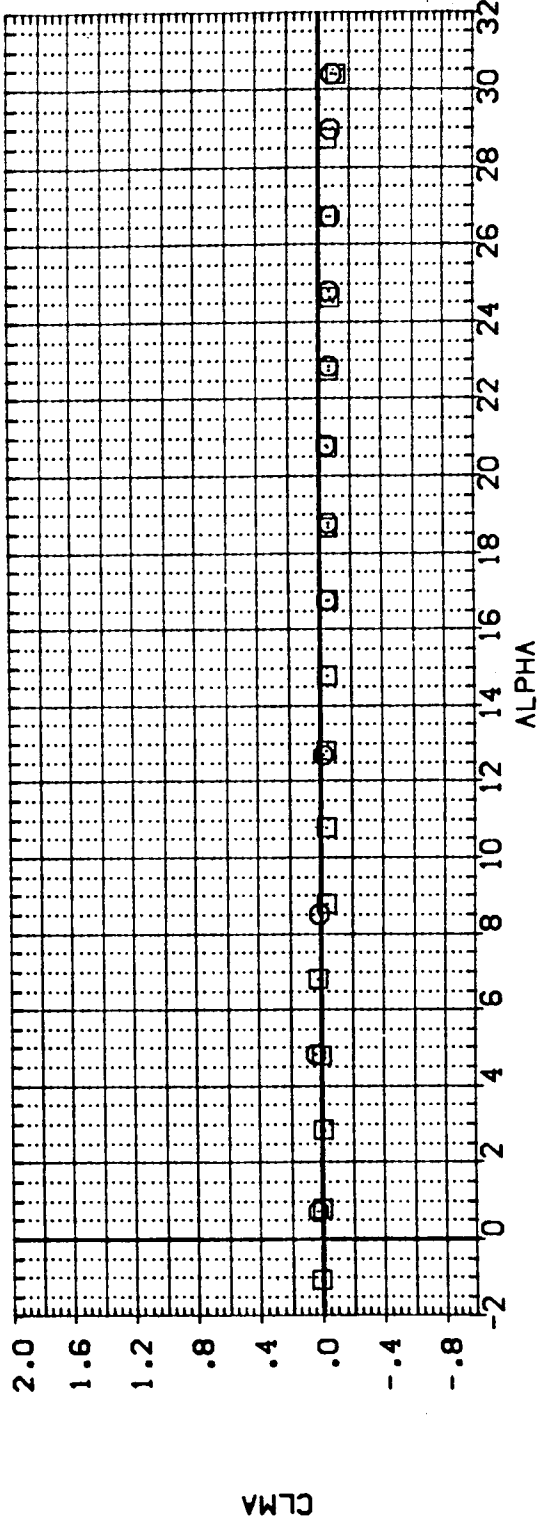
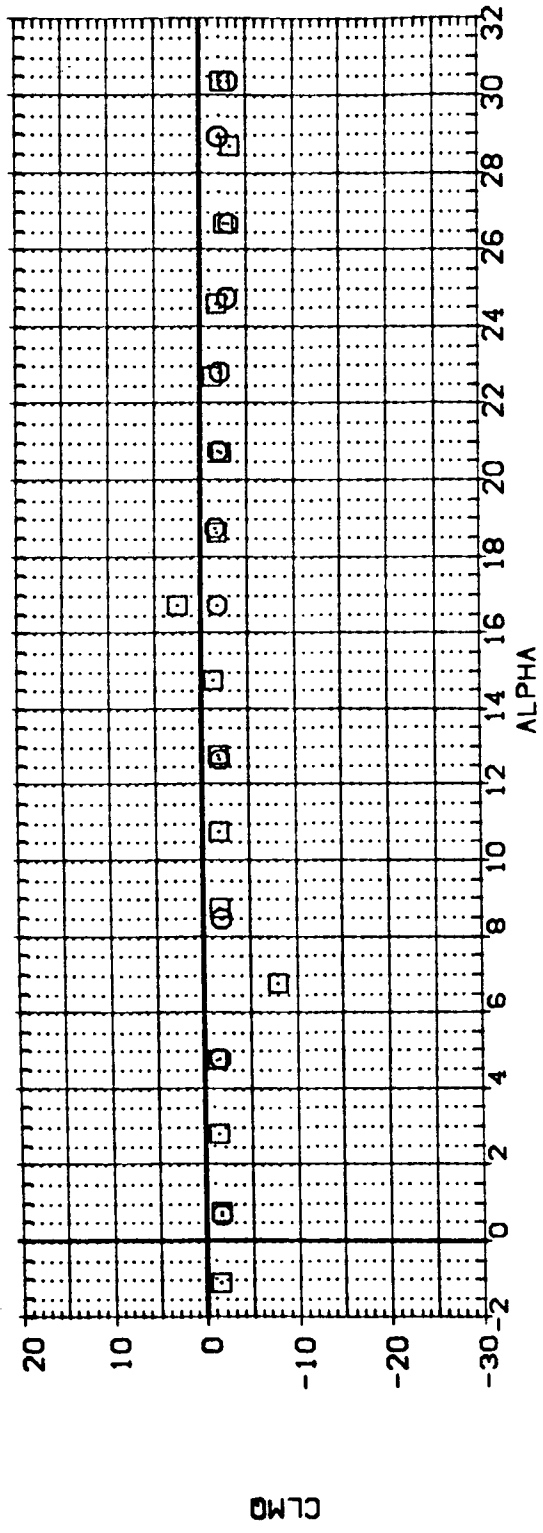


FIGURE 6. EFFECT OF OMS PODS ON DYNAMIC STABILITY PARAMETERS IN PITCH

(E)MACH = 3.96

DATA SET SYMBOL CONFIGURATION DESCRIPTION CG-LOC ELEVTR RUDFLR
 (RPGP01) LA-14, ROCKWELL ORB 0898 V/MDD, NOSE (BVM) 1.000 .000 40.000
 (RPGP03) LA-14, ROCKWELL ORB 0898 V/MDD, NOSE (BVM) 1.000 .000 40.000

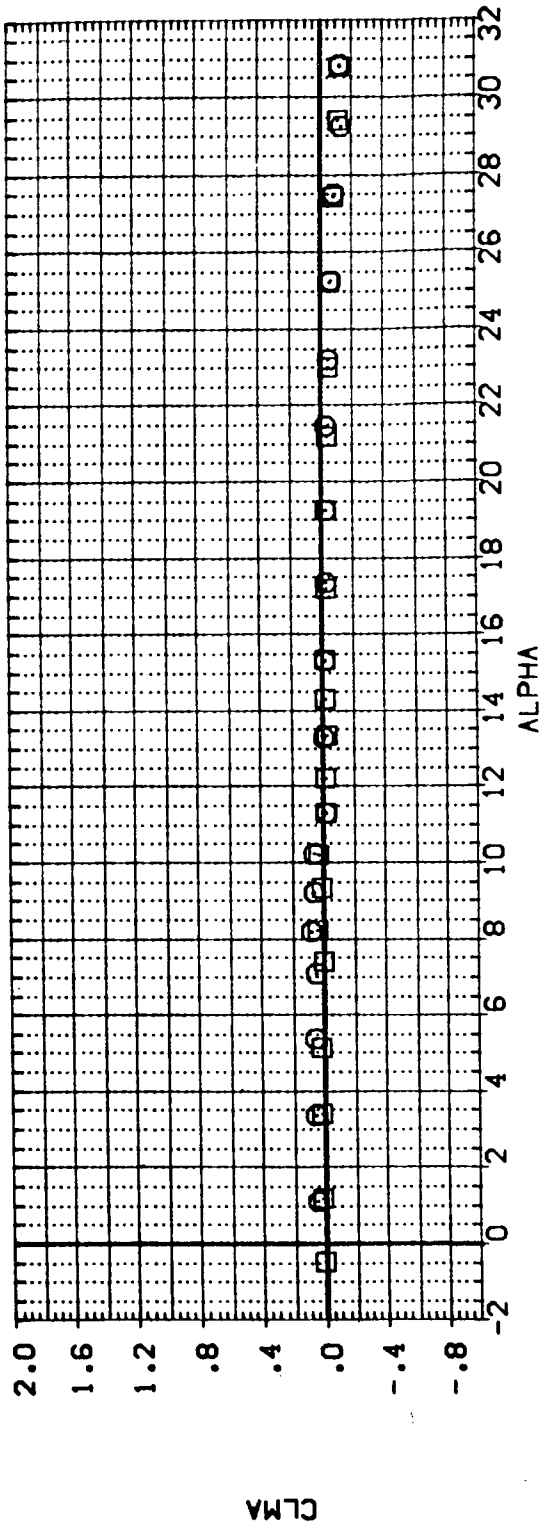
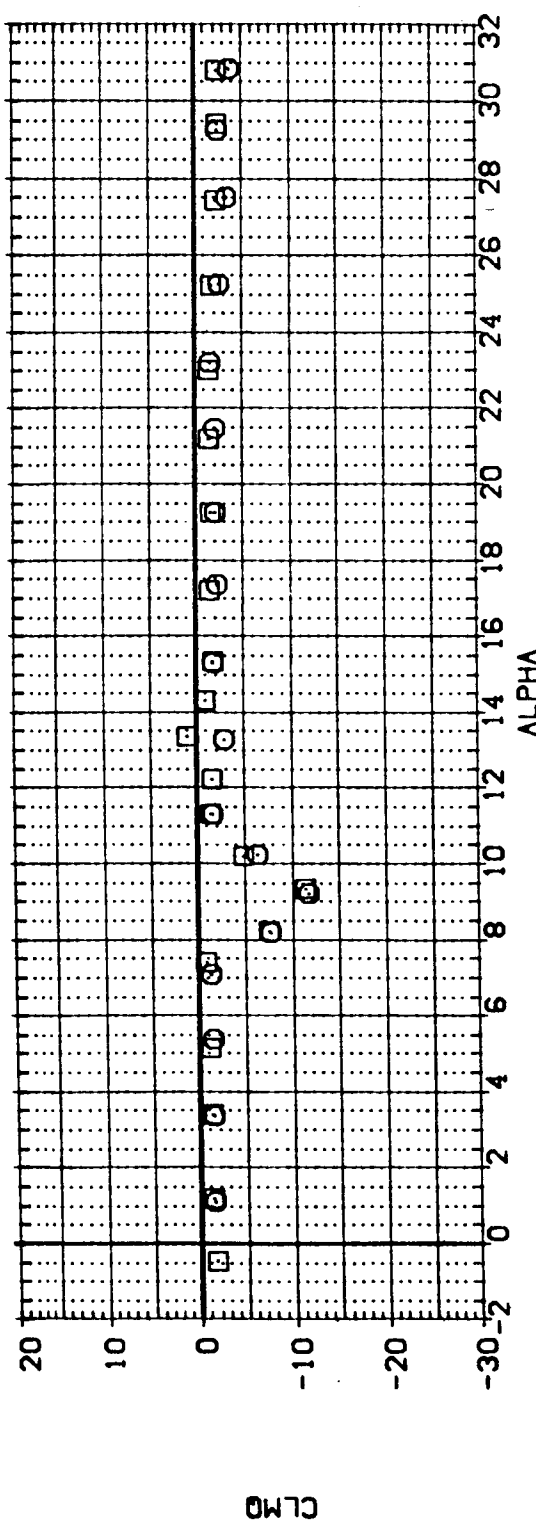


FIGURE 6. EFFECT OF OMS PODS ON DYNAMIC STABILITY PARAMETERS IN PITCH

(CF)MACH = 4.63

DATA SET SYMBOL CONFIGURATION DESCRIPTION CG-LOC ELEVTR RUDFLR
 (RPGY01) LA-14, ROCKWELL CRB 0698 V/MOD, NOSE (BVM) 1.000 .000 40.000
 (RPGY03) LA-14, ROCKWELL CRB 0698 V/MOD, NOSE (BVM) 1.000 .000 40.000

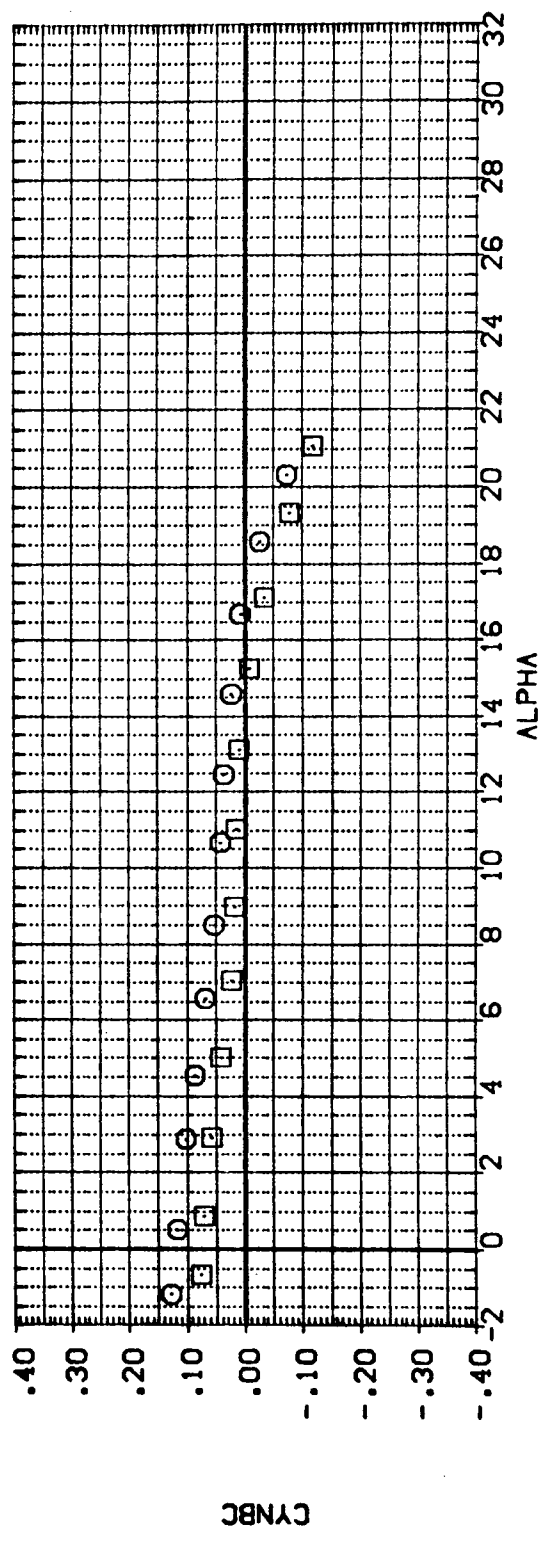
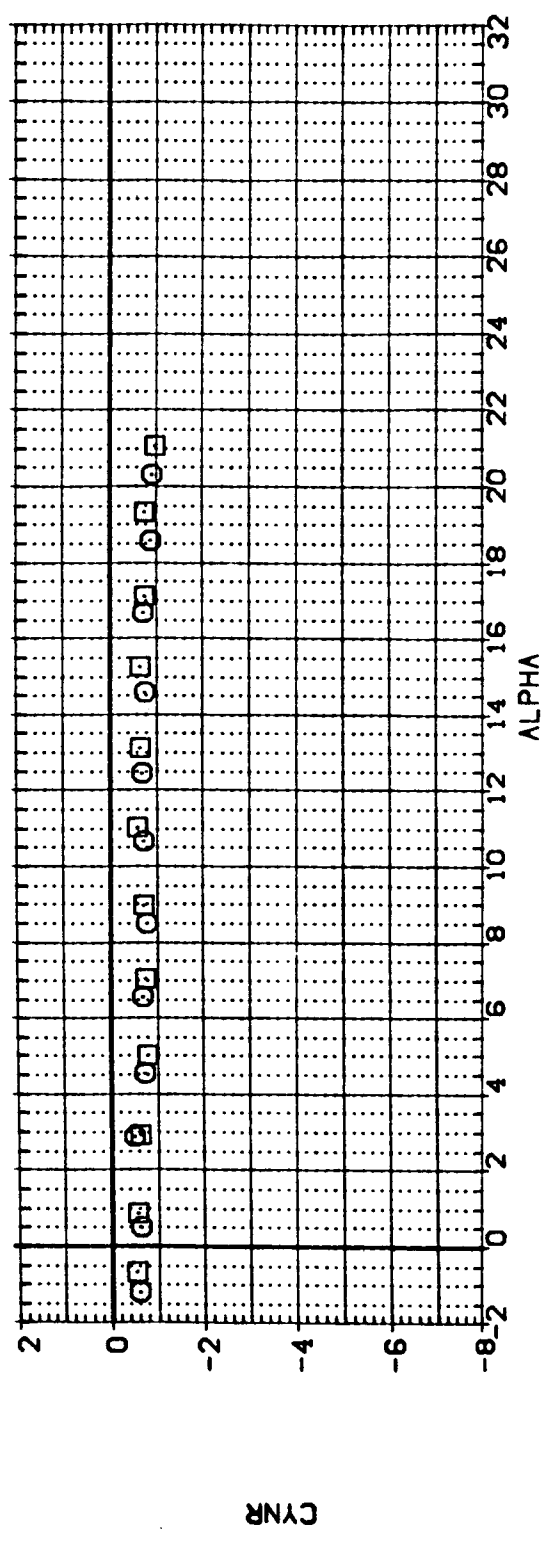


FIGURE 7. EFFECT OF OMS PODS ON DYNAMIC STABILITY PARAMETERS IN YAW

(A)MACH = 1.90

DATA SET SYMBOL CONFIGURATION DESCRIPTION CG-LOC ELEVTR RUOFLR
 (RPGY01) LA-14, ROCKWELL OPR8 0898 V/MOD, NOSE (BVM) 1.000 .000 40.000
 (RPGY03) LA-14, ROCKWELL OPR8 0898 V/MOD, NOSE (BVM) 1.000 .000 40.000

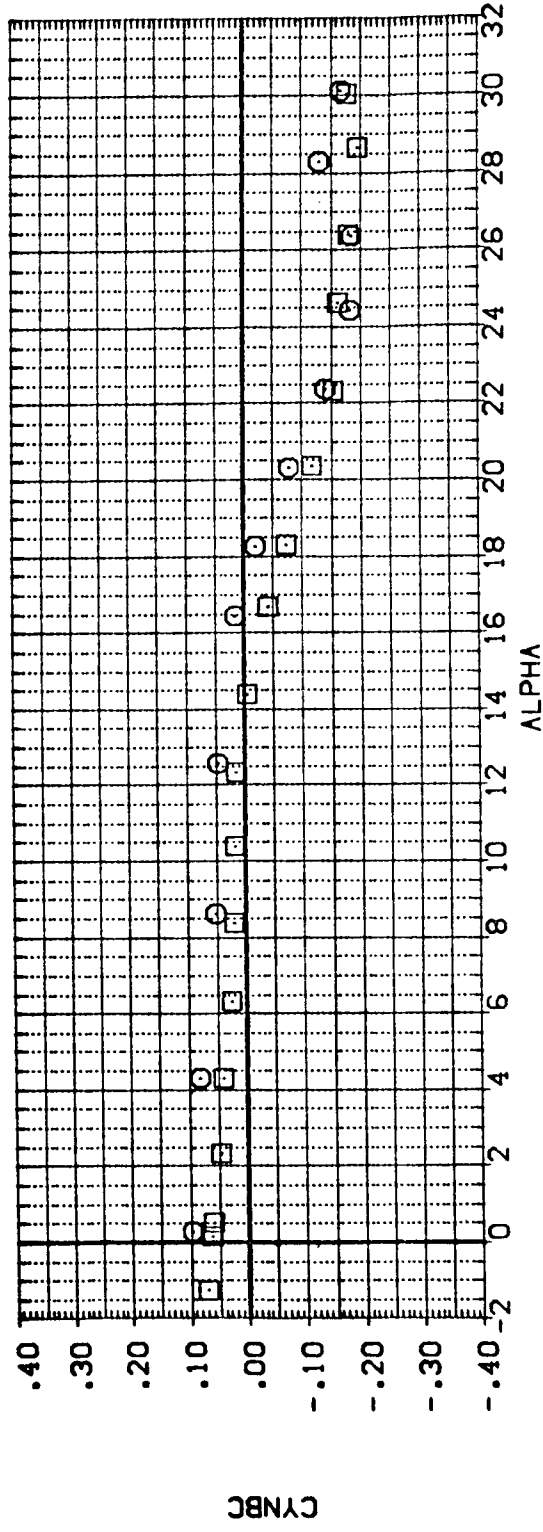
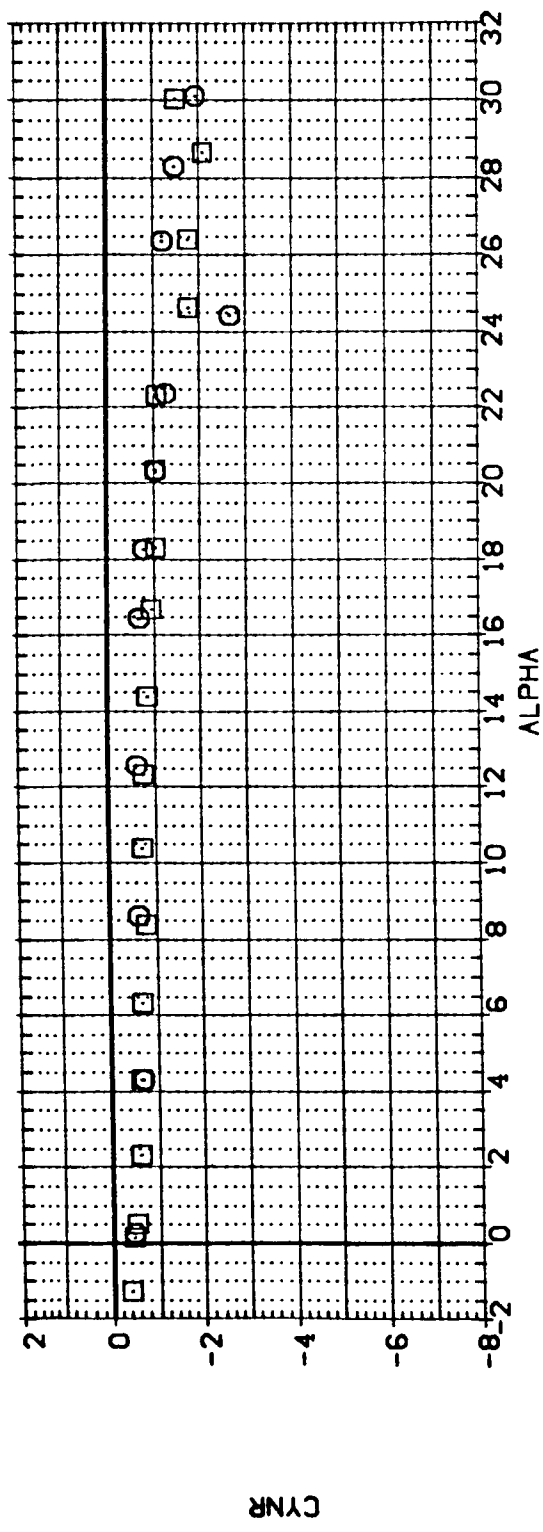


FIGURE 7. EFFECT OF OMS PODS ON DYNAMIC STABILITY PARAMETERS IN YAW

(B)MACH = 2.36

DATA SET SYMBOL CONFIGURATION DESCRIPTION CG-LOC ELEVTR RUDELR
 (RPGY01) LA-14: ROCKWELL DRB D698 V/MOD. NOSE (BMV) 1.000 .000 40.000
 (RPGY03) LA-14: ROCKWELL DRB D698 V/MOD. NOSE (BVM) 1.000 .000 40.000

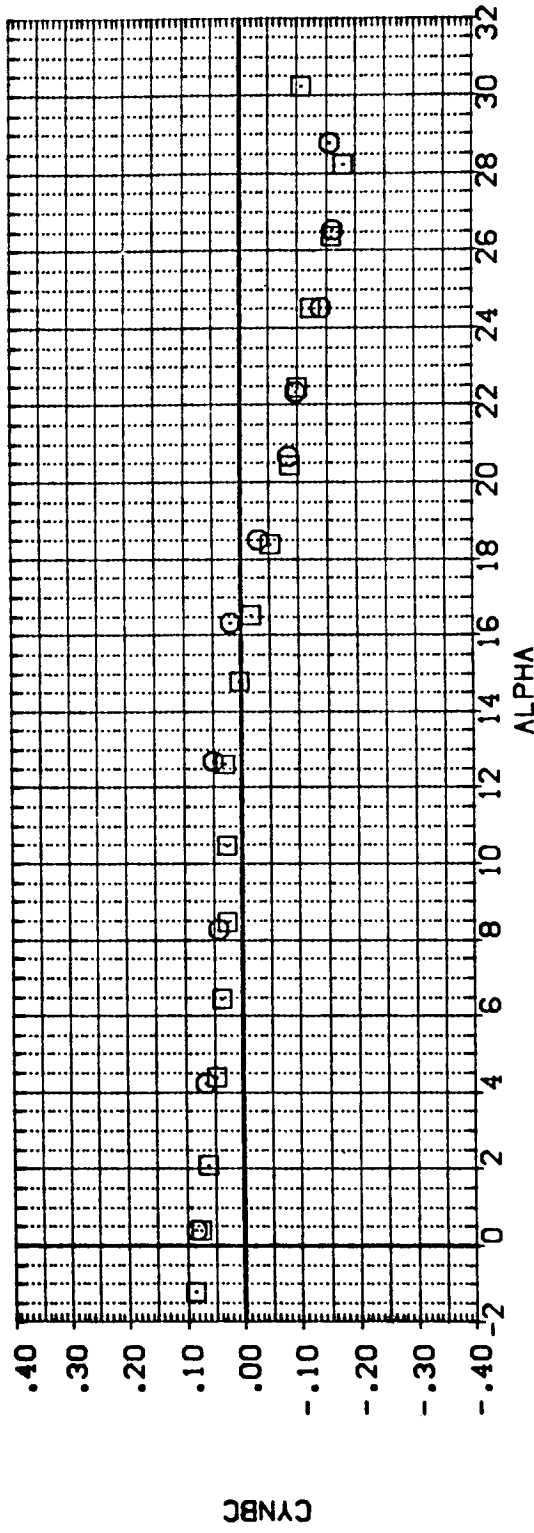
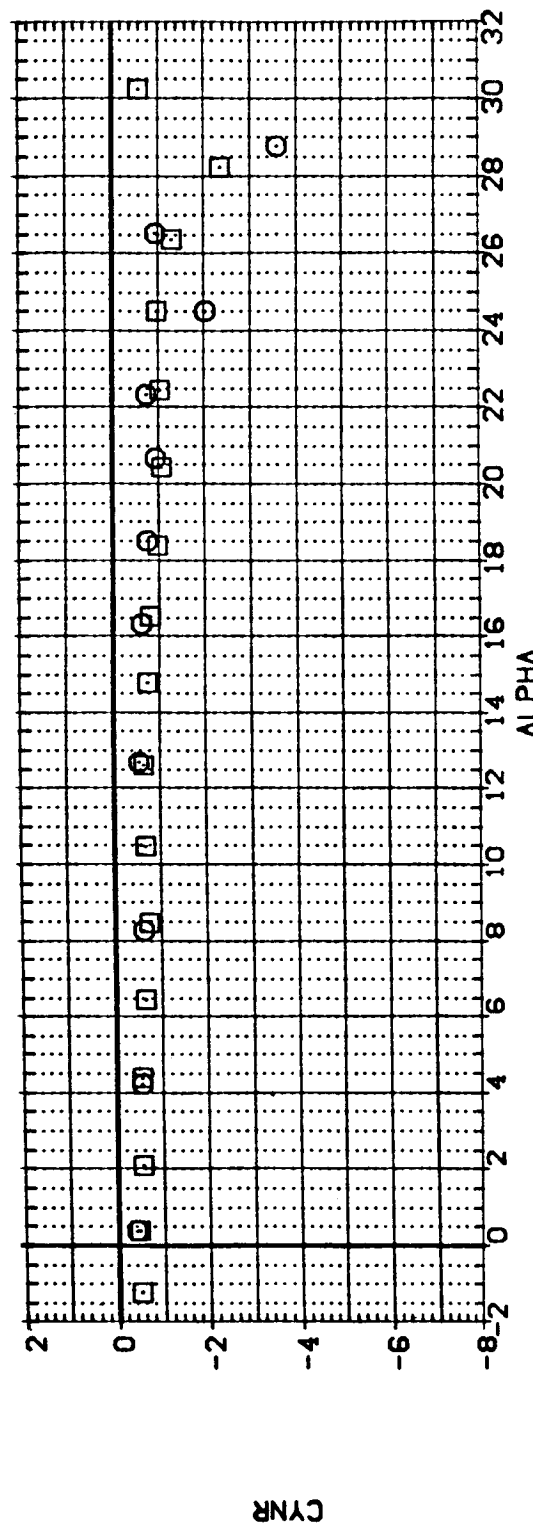


FIGURE 7. EFFECT OF OMS PODS ON DYNAMIC STABILITY PARAMETERS IN YAW

(CJ)MACH = 2.86

DATA SET SYMBOL CONFIGURATION DESCRIPTION CG-LDC ELEVTR RUOFLR
 (RPGY01) LA-14; ROCKWELL ORB 0898 1/100; NOSE (BMV }
 (RPGY03) LA-14; ROCKWELL ORB 0898 1/100; NOSE (BVM }

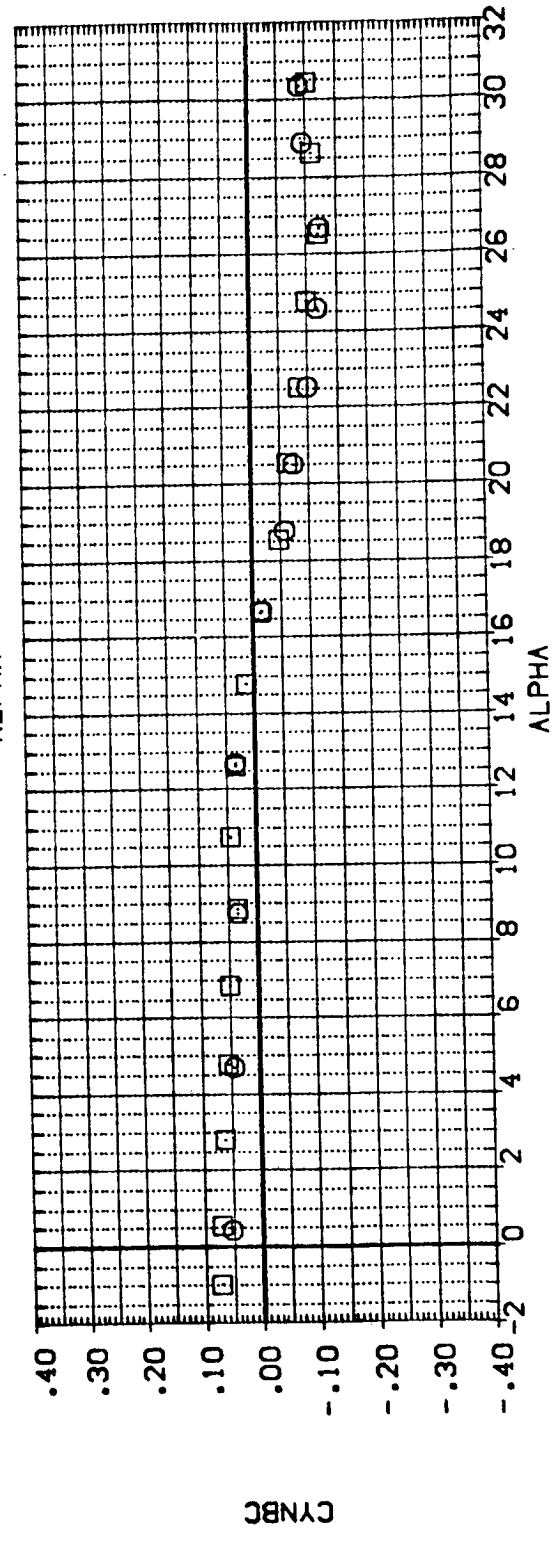
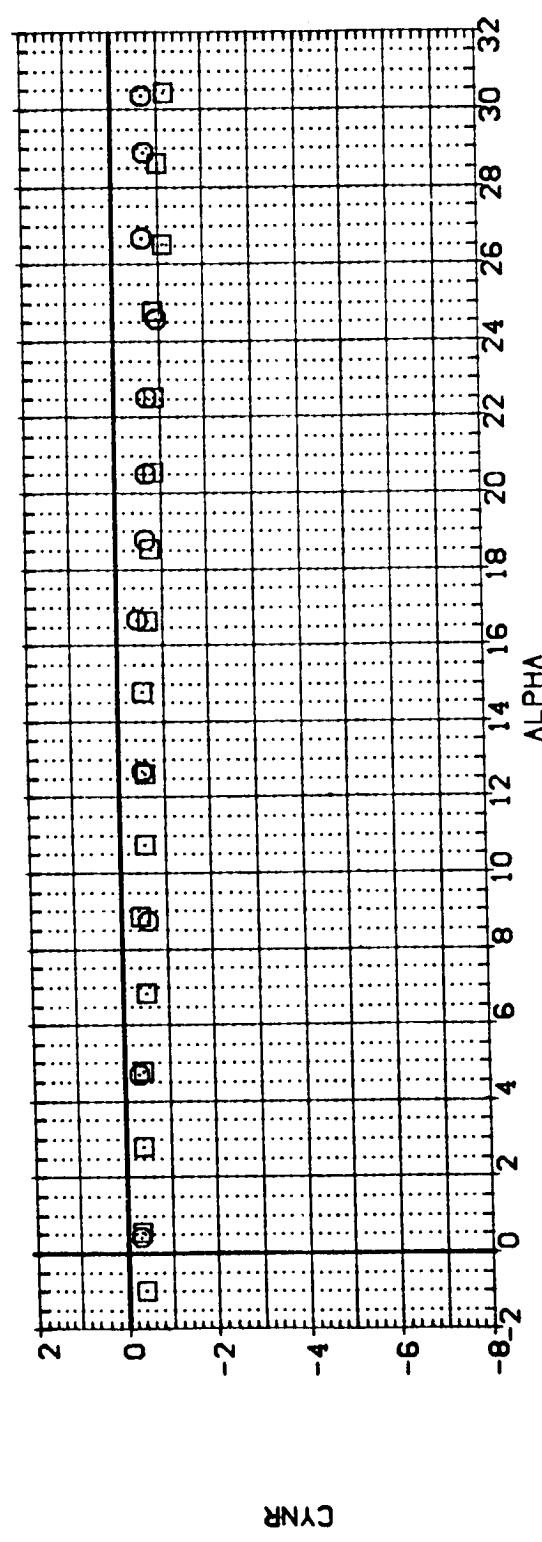


FIGURE 7. EFFECT OF OMS POOS ON DYNAMIC STABILITY PARAMETERS IN YAW

(COM)MACH = 3.96

DATA SET SYMBOL: (RFGY01) (RFGY03)
 CONFIGURATION DESCRIPTION: LA-14; ROCKWELL ORB 0888 V/MOD. NOSE (BMV }
 LA-14; ROCKWELL ORB 0888 V/MOD. NOSE (BVM }
 CG-LOC: 1.000 1.000
 ELEVTR: .000 .000
 RUJFLR: 40.000 40.000

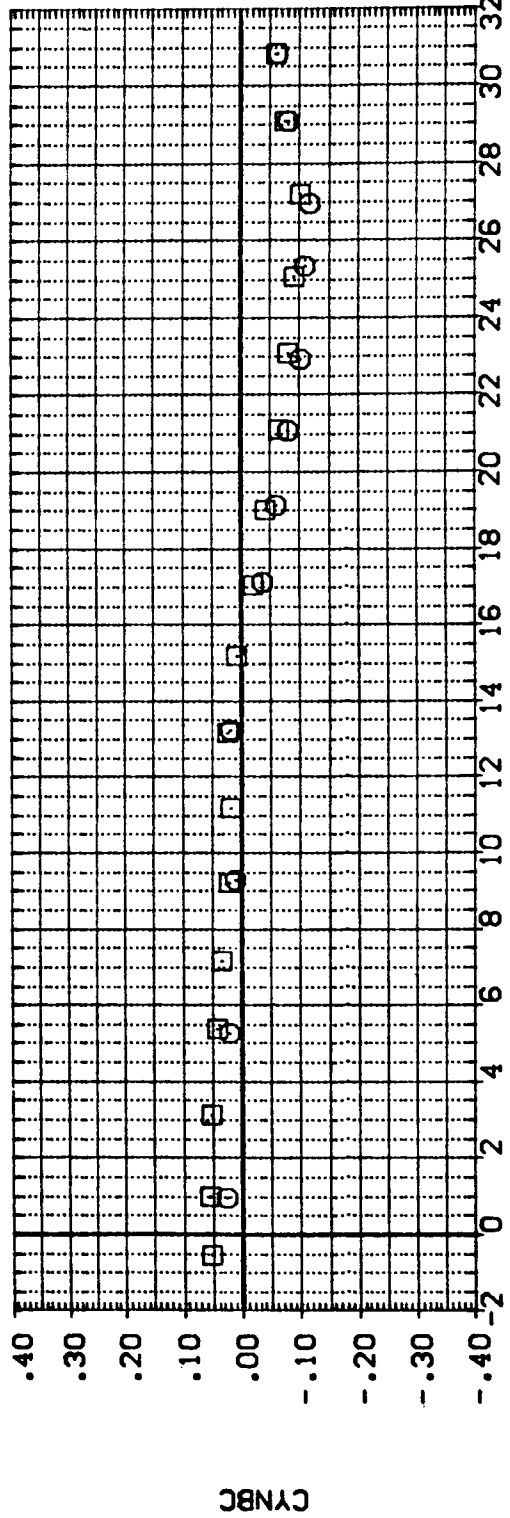
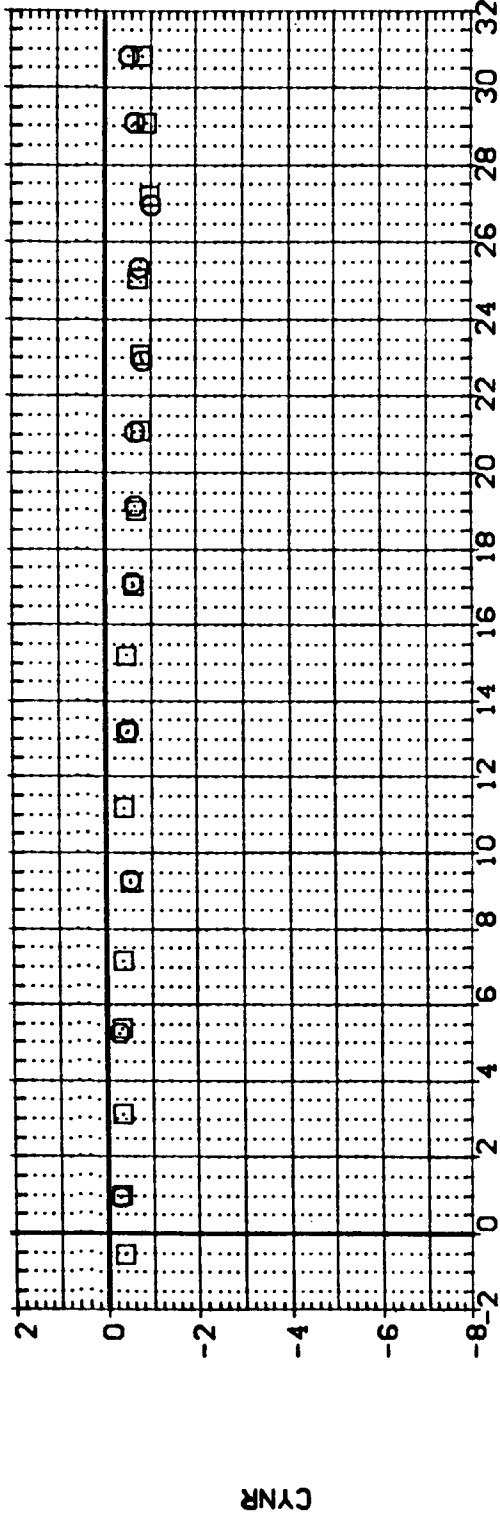


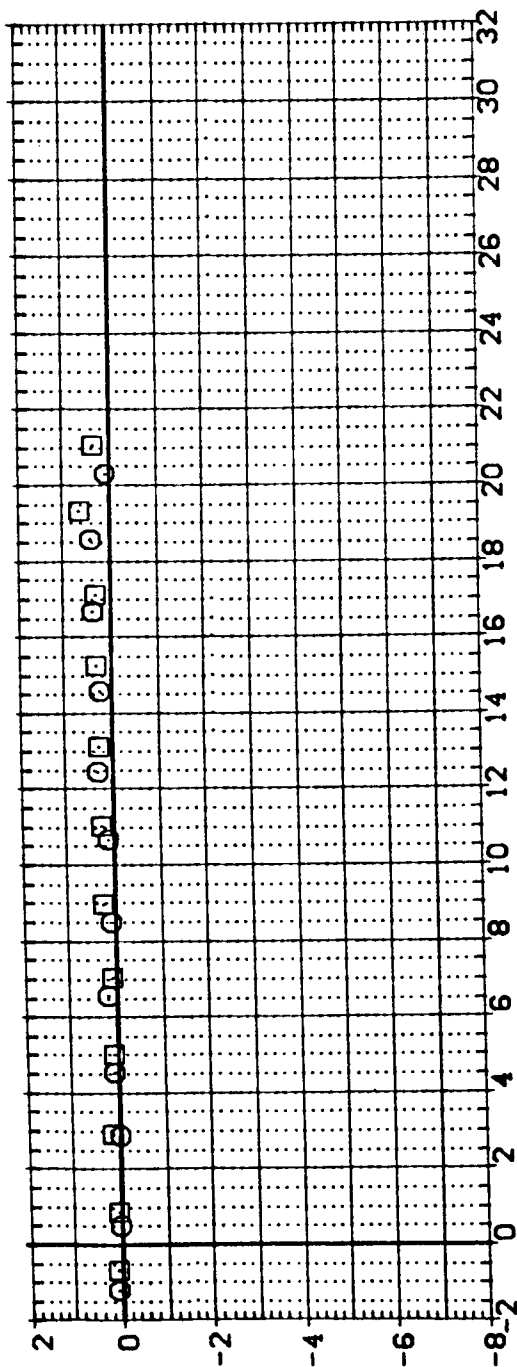
FIGURE 7. EFFECT OF OMS PODS ON DYNAMIC STABILITY PARAMETERS IN YAW

(E)MACH = 4.63

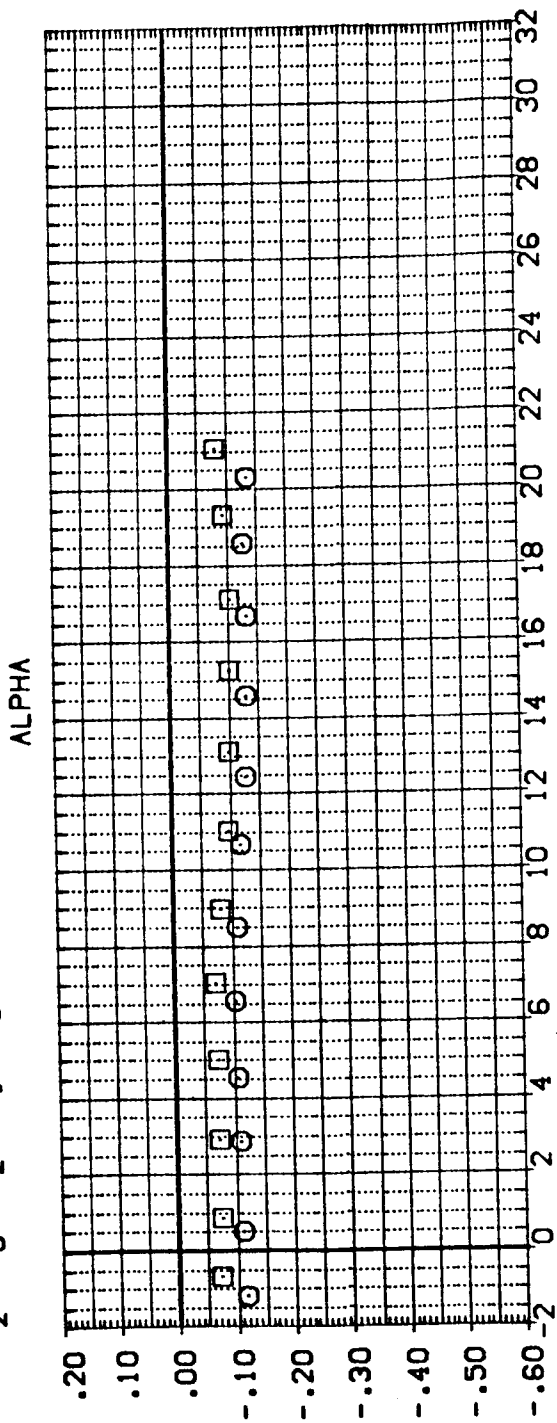
CG-LOC ELEVTR RUOFLR
 1.000 .000 40.000
 1.000 .000 40.000

CONFIGURATION DESCRIPTION
 LA-14: ROCKWELL ORB 0898 V/MOD. NOSE (BVM)
 LA-14: ROCKWELL ORB 0898 V/MOD. NOSE (BVM)

DATA SET SYMBOL (RFGY01) (RFGY03) □



CBLR



CBLBC

FIGURE 7. EFFECT OF OMS PODS ON DYNAMIC STABILITY PARAMETERS IN YAW

(A)MACH = 1.90

DATA SET SYMBOL CONFIGURATION DESCRIPTION CG-LOC ELEVTR RUDEF LR
 (RFGY01) LA-14: ROCKWELL ORB 0888 V/MOD. NOSE (BVM) 1.000 .000 40.000
 (RFGY03) LA-14: ROCKWELL ORB 0888 V/MOD. NOSE (BVM) 1.000 .000 40.000

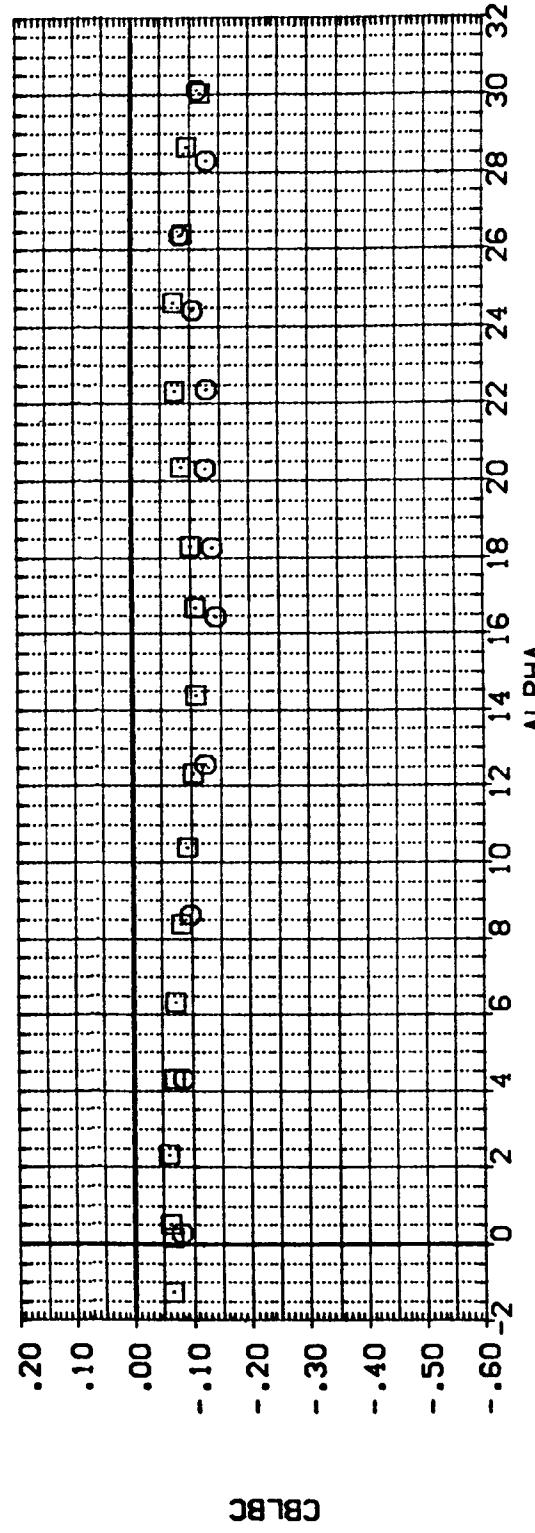
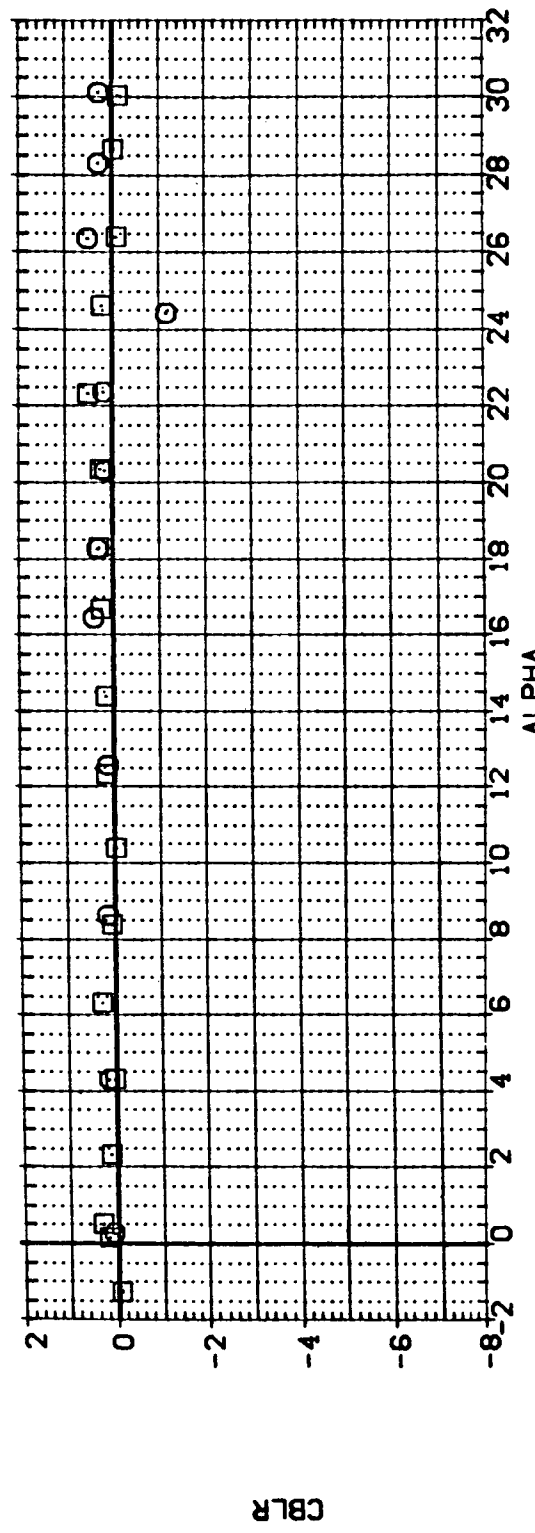


FIGURE 7. EFFECT OF OMS PODS ON DYNAMIC STABILITY PARAMETERS IN YAW

(B)MACH = 2.36

DATA SET SYMBOL CONFIGURATION DESCRIPTION CG-LOC ELEVTR RUOFLR

(RPGY01) LA-14, ROCKWELL CR8 DBSB V/100, NOSE (BVM) 1.000 .000 40.000

(RPGY03) LA-14, ROCKWELL CR8 DBSB V/100, NOSE (BVMH) 1.000 .000 40.000

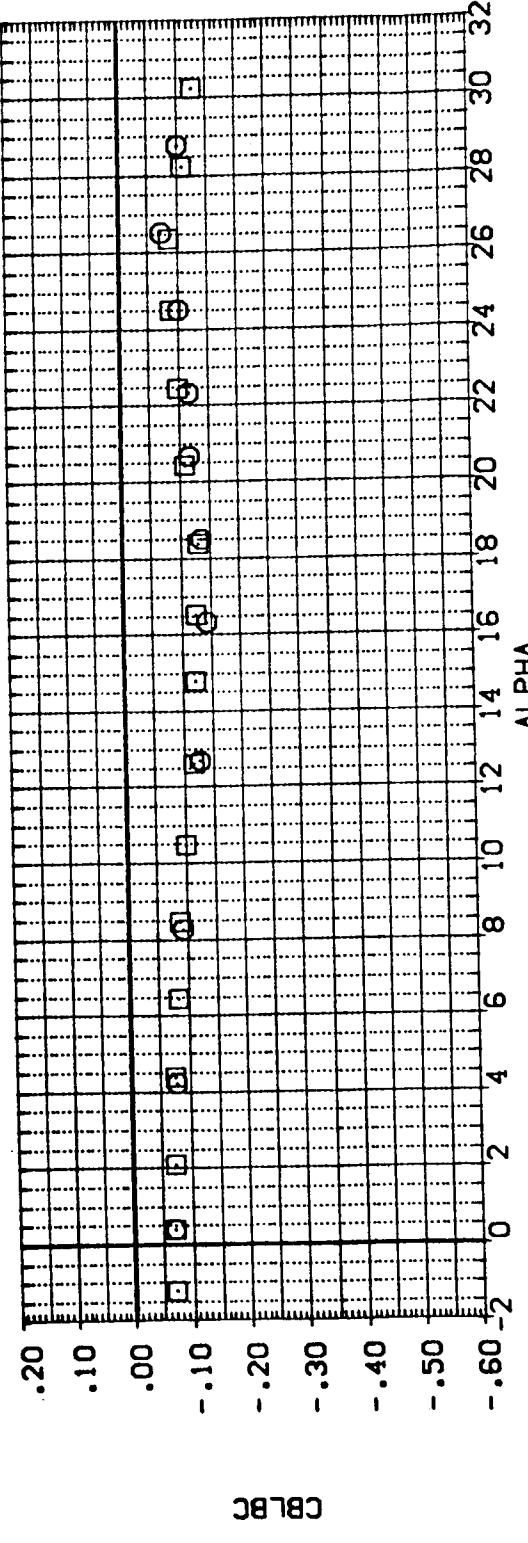
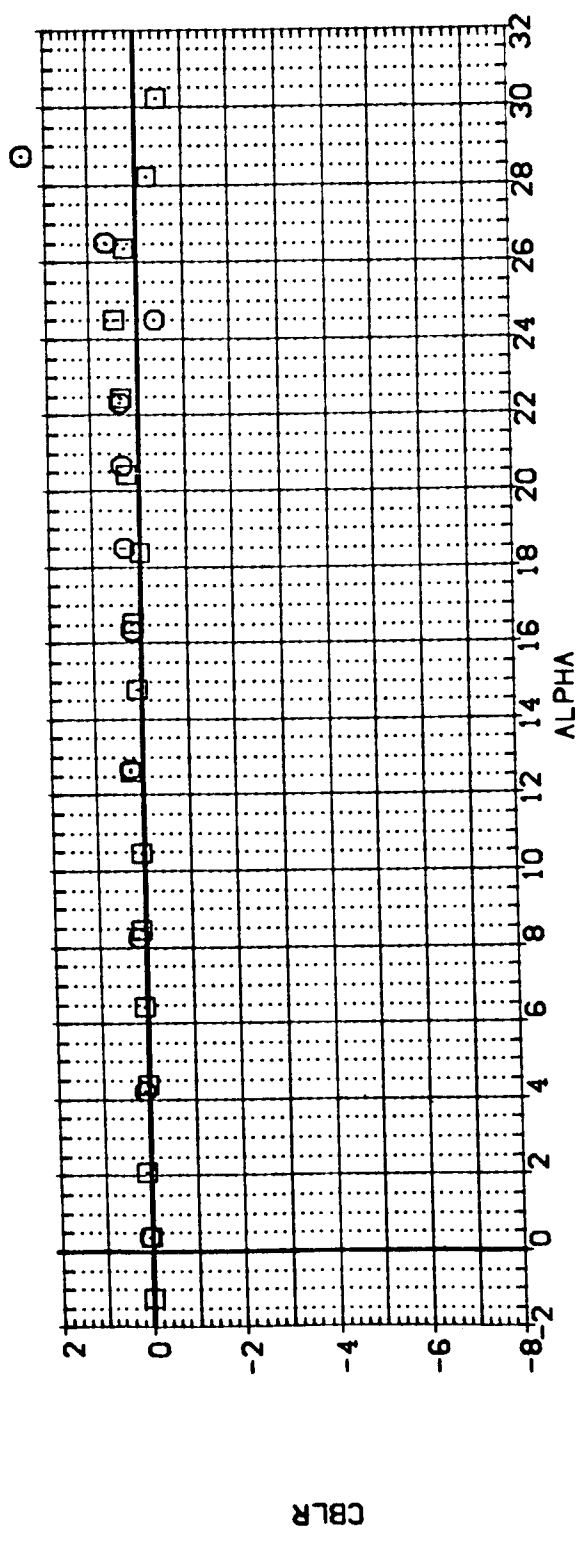


FIGURE 7. EFFECT OF OMS PODS ON DYNAMIC STABILITY PARAMETERS IN YAW

(C)MACH = 2.86

DATA SET SYMBOL: (RPGY01) (RPGY03)
 CONFIGURATION DESCRIPTION: LA-14: ROCKWELL ORB 0898 V/100. NOSE (BNV)
 LA-14: ROCKWELL ORB 0898 V/100. NOSE (BNVM)
 CG-LOC: 1.000
 ELEVTR: .000
 RUOFLR: 40.000

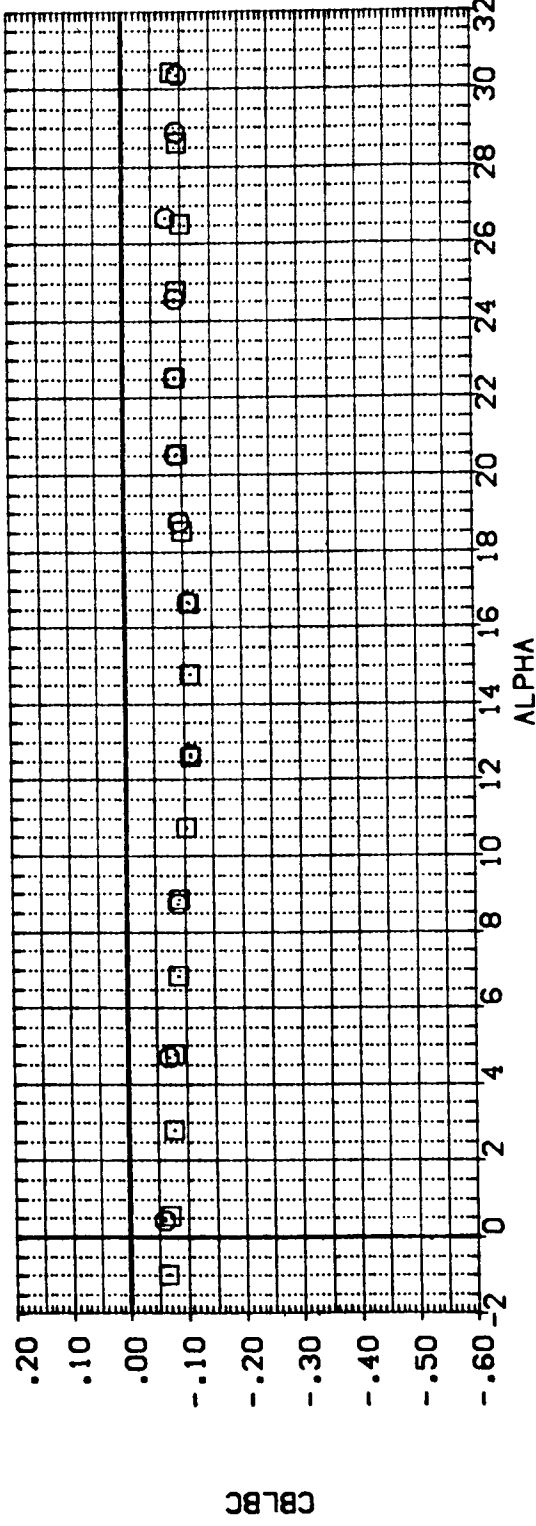
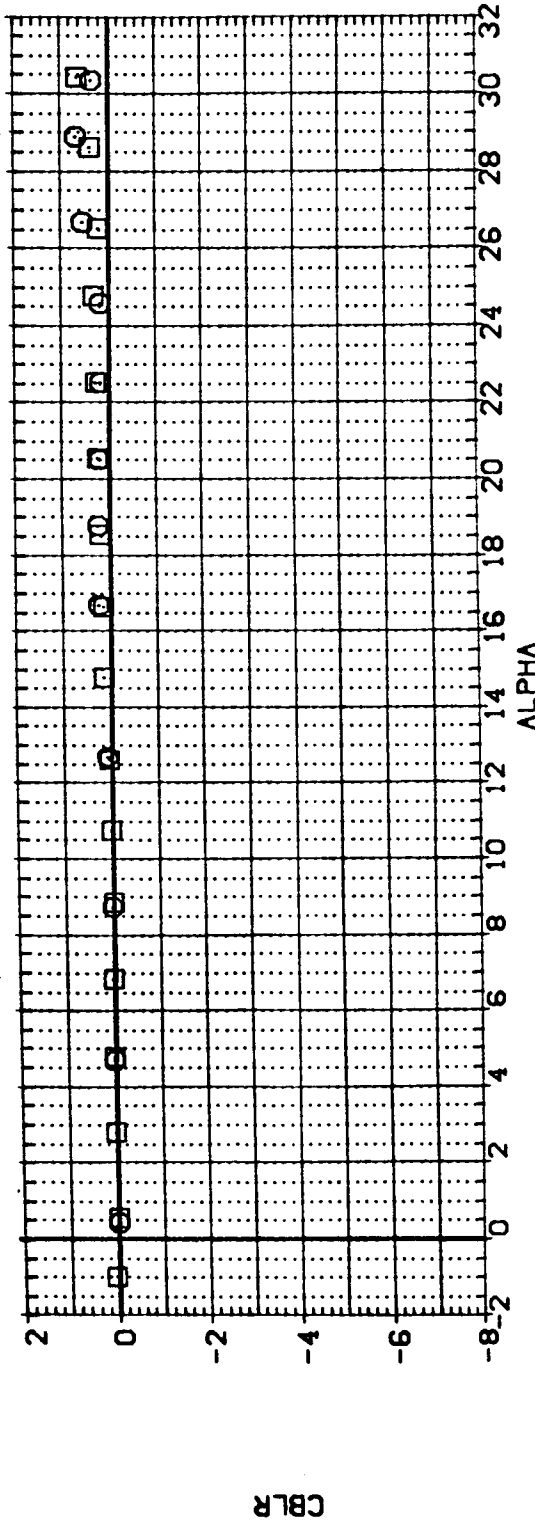


FIGURE 7. EFFECT OF OMS PODS ON DYNAMIC STABILITY PARAMETERS IN YAW

()MACH = 3.96

CG-LOC ELEVTR RUDFLR
 1.000 .000 40.000
 1.000 .000 40.000

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (RPGV01) LA-14; ROCKWELL CRB 0888 V/MOD; NOSE (BNV)
 (RPGV03) LA-14; ROCKWELL CRB 0888 V/MOD; NOSE (BNVM)

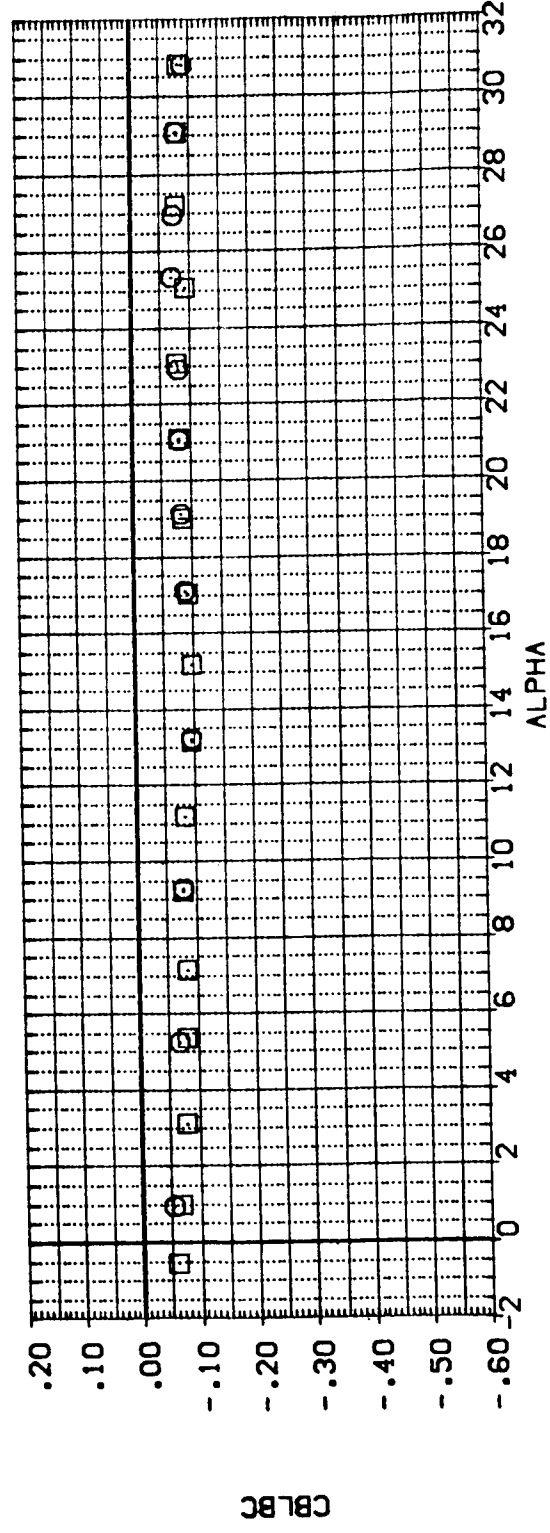
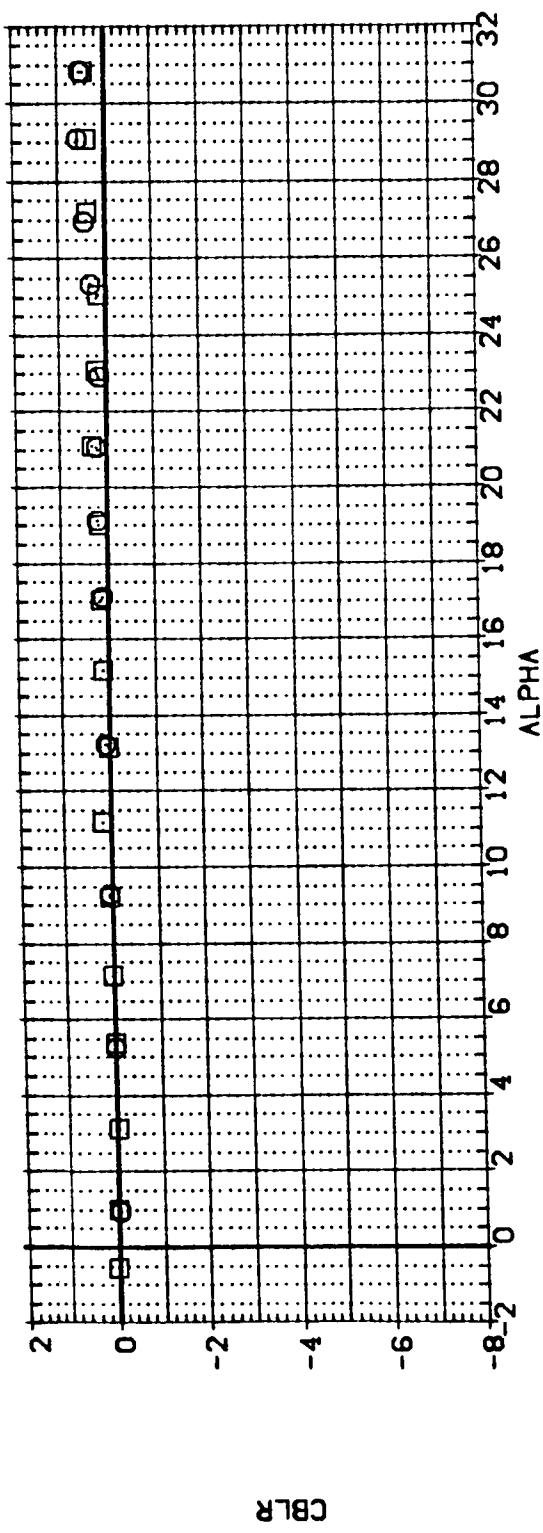


FIGURE 7. EFFECT OF OMS PODS ON DYNAMIC STABILITY PARAMETERS IN YAW

(E)MACH = 4.63

DATA SET SYMBOL CONFIGURATION DESCRIPTION CG-LOC ELEVTR RUDELR
 (RPGR01) LA-14, ROCKWELL ORB 0698 V/MOD, NOSE (BNV) 1.000 .000 40.000
 (RPGR03) LA-14, ROCKWELL ORB 0698 V/MOD, NOSE (BNVM) 1.000 .000 40.000

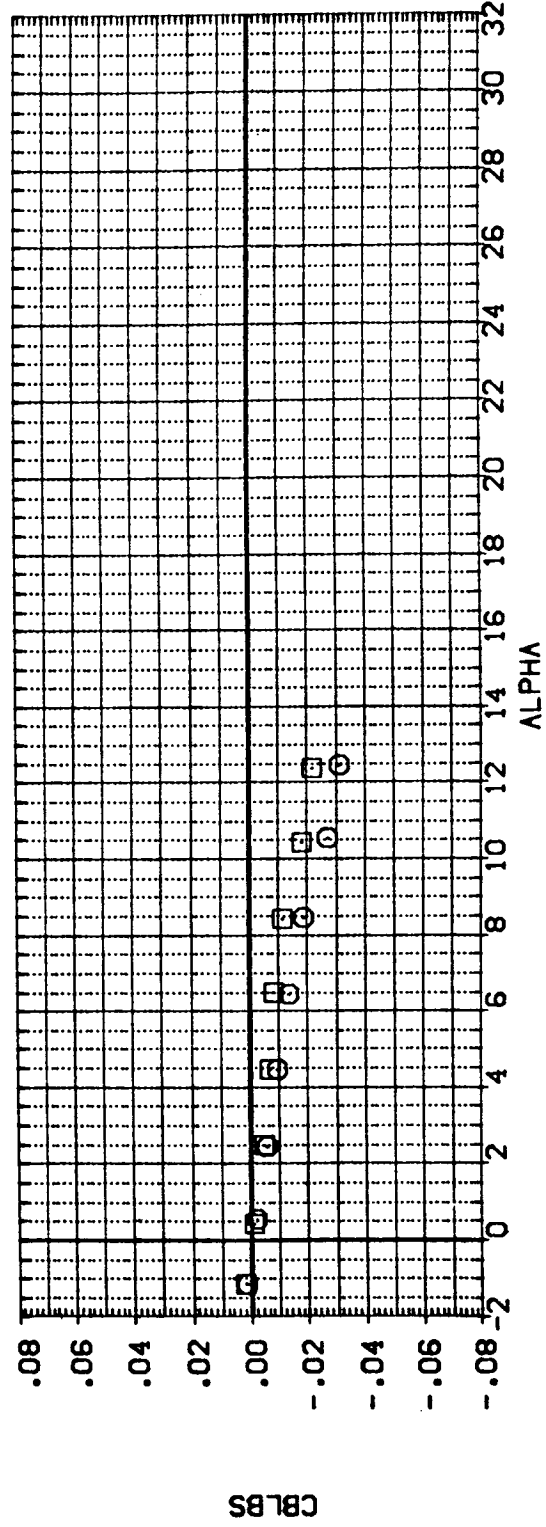
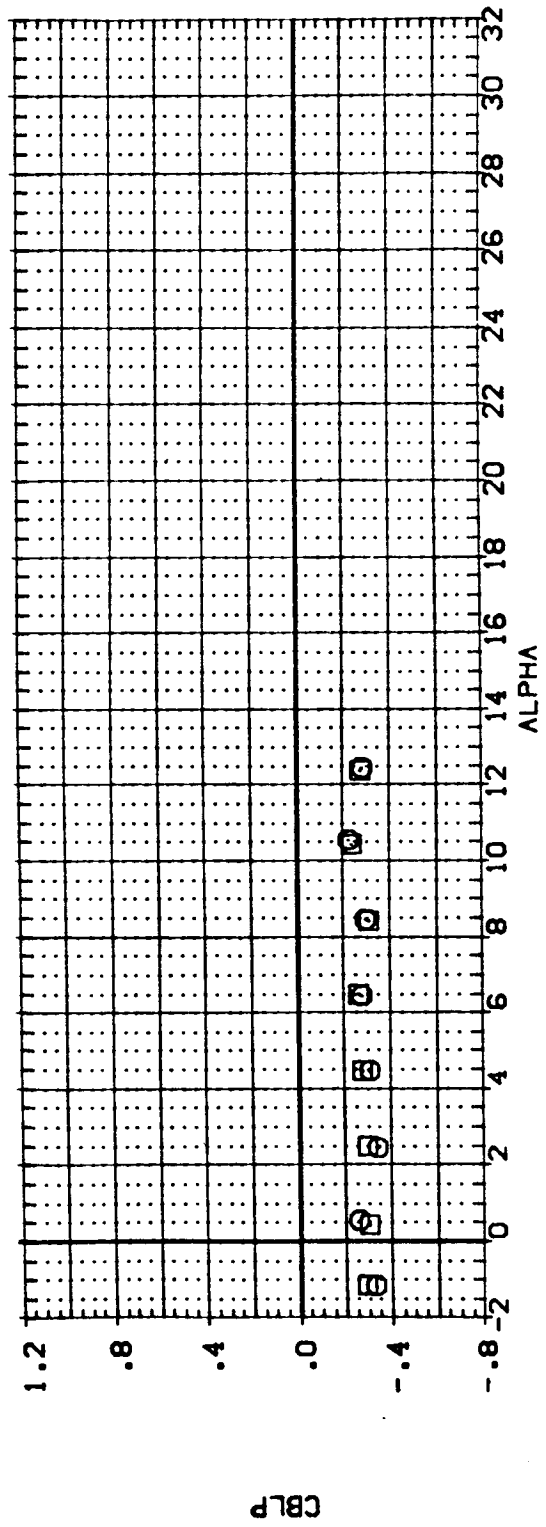


FIGURE 8. EFFECT OF OMS PODS ON DYNAMIC STABILITY PARAMETERS IN ROLL

CAJMACH = 1.60

DATA SET SYMBOL CONFIGURATION DESCRIPTION CG-LOC ELEVTR RUOFLR
 (RPG001) LA-14; ROCKWELL DRB 0898 V/MOD; NOSE (BVM } 1.000 .000 40.000
 (RPG003) LA-14; ROCKWELL DRB 0898 V/MOD; NOSE (BVM } 1.000 .000 40.000

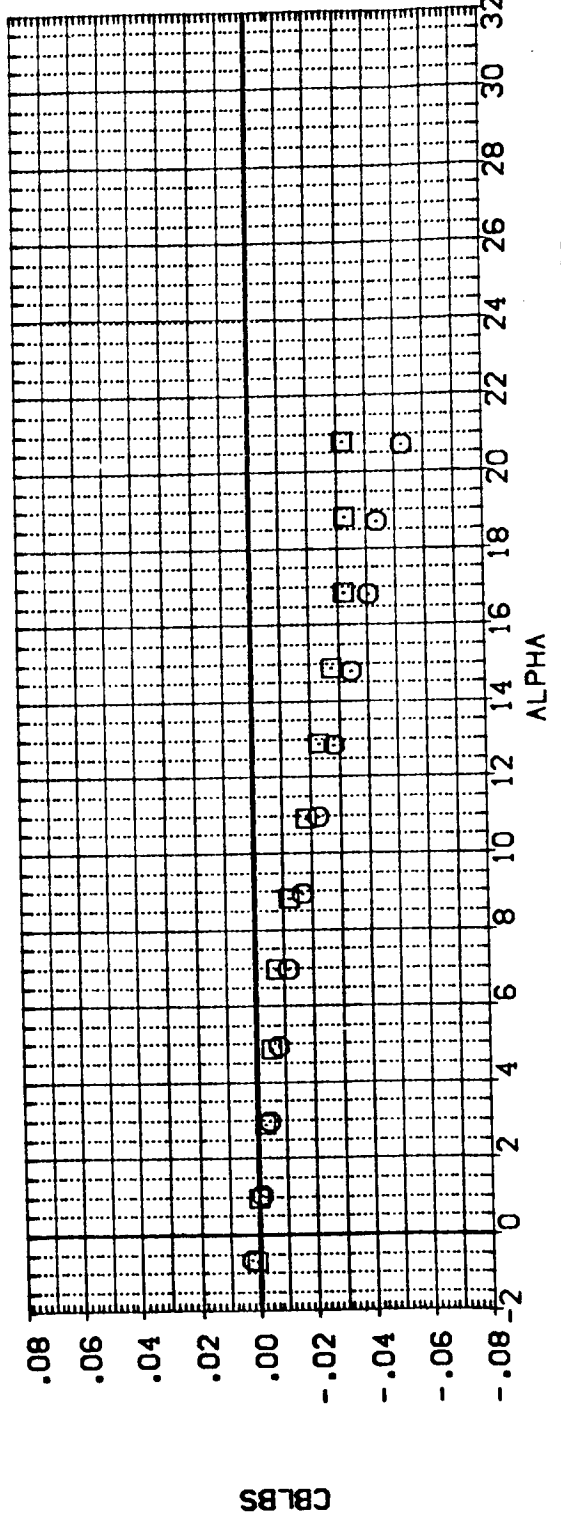
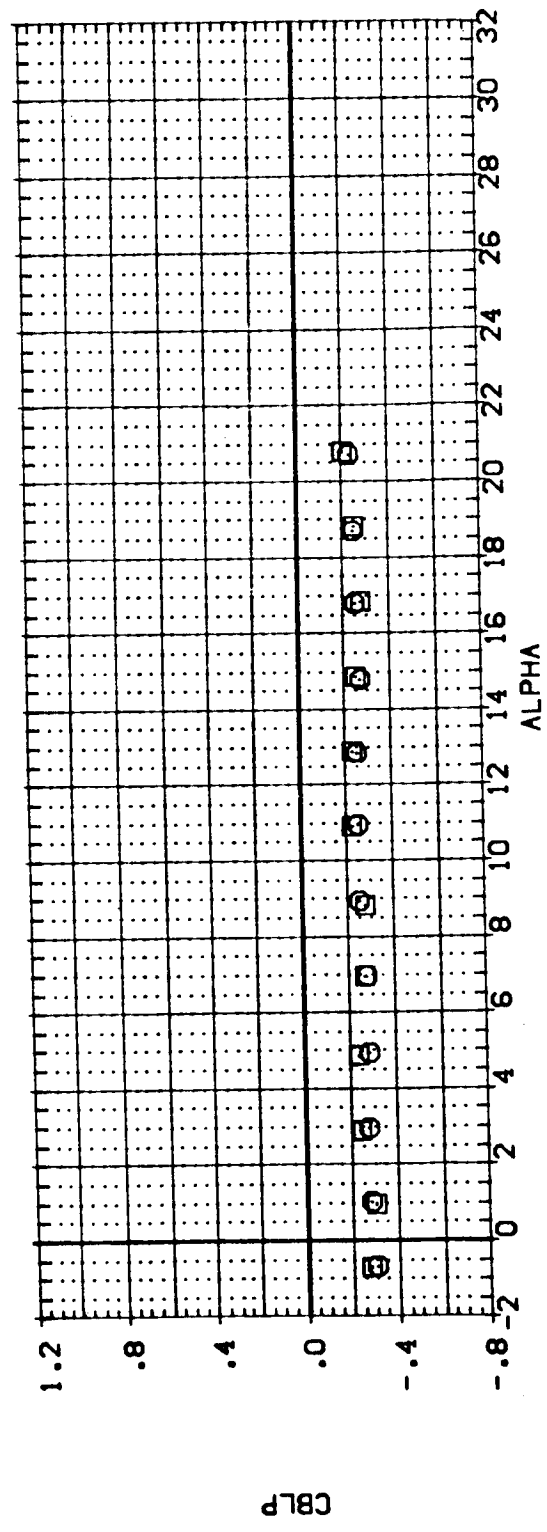


FIGURE 8. EFFECT OF OMS PODS ON DYNAMIC STABILITY PARAMETERS IN ROLL

(B)MACH = 1.90

DATA SET SYMBOL: [Symbol] CONFIGURATION DESCRIPTION: CG-LOC ELEVTR RUOFLR
 [RPGR01] LA-14; ROCKWELL CRB 0898 V/100; NOSE (BVM) 1.000 .000 40.000
 [RPGR03] LA-14; ROCKWELL CRB 0898 V/100; NOSE (BVM) 1.000 .000 40.000

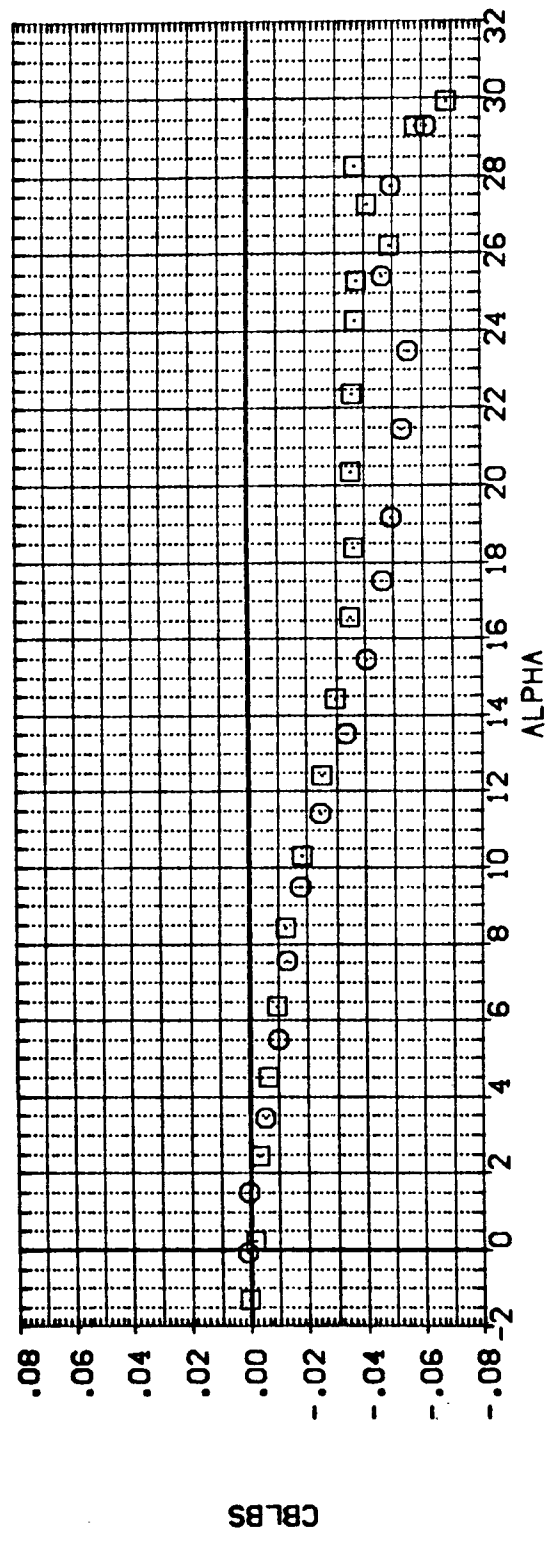
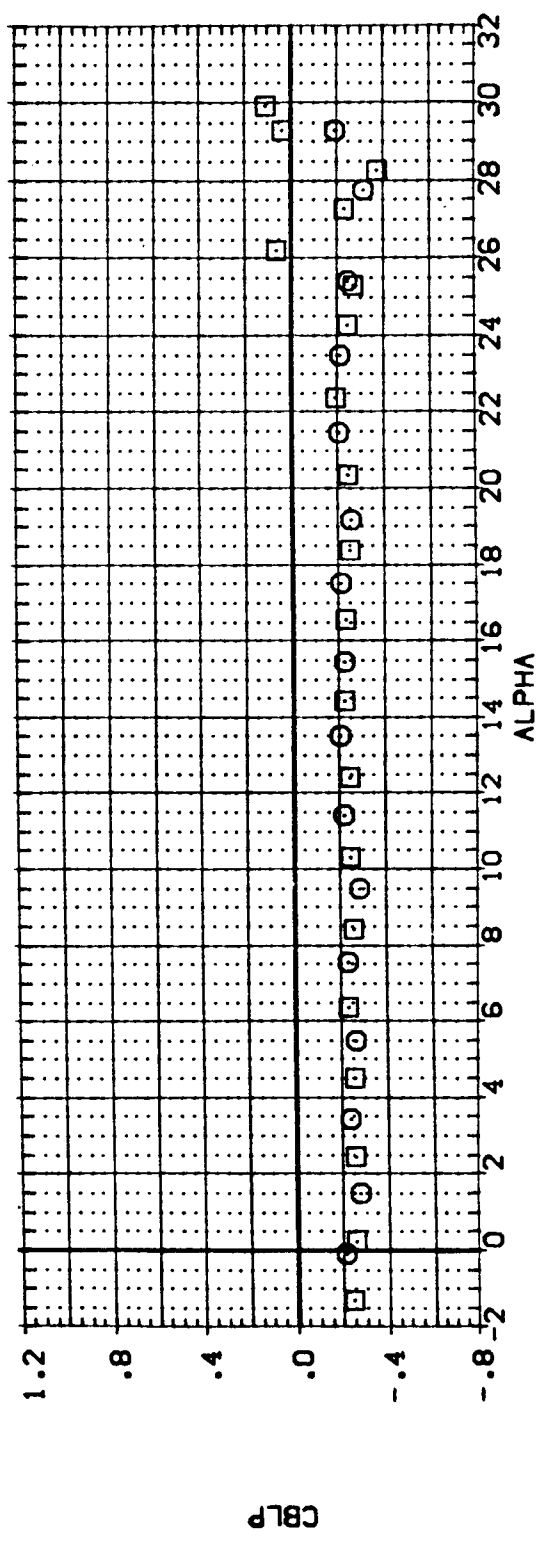


FIGURE 8. EFFECT OF OMS PODS ON DYNAMIC STABILITY PARAMETERS IN ROLL

(C)MACH = 2.36

DATA SET SYMBOL: CONFIGURATION DESCRIPTION: CG-LOC ELEVTR RUDEFLR
 (RPGRO1) DATA NOT AVAILABLE .000 .000 40.000
 (RPGRO3) LA-14, ROCKWELL ORB 0898 V/MOD, NOSE (BVVM) 1.000 .000 40.000

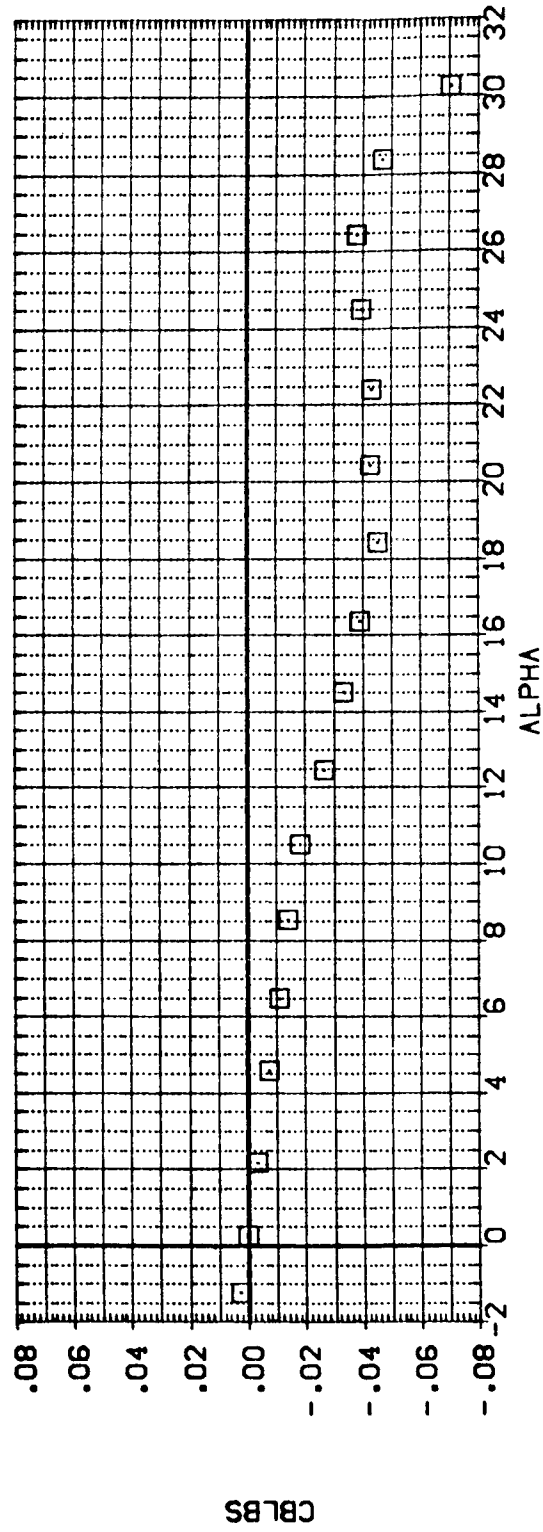
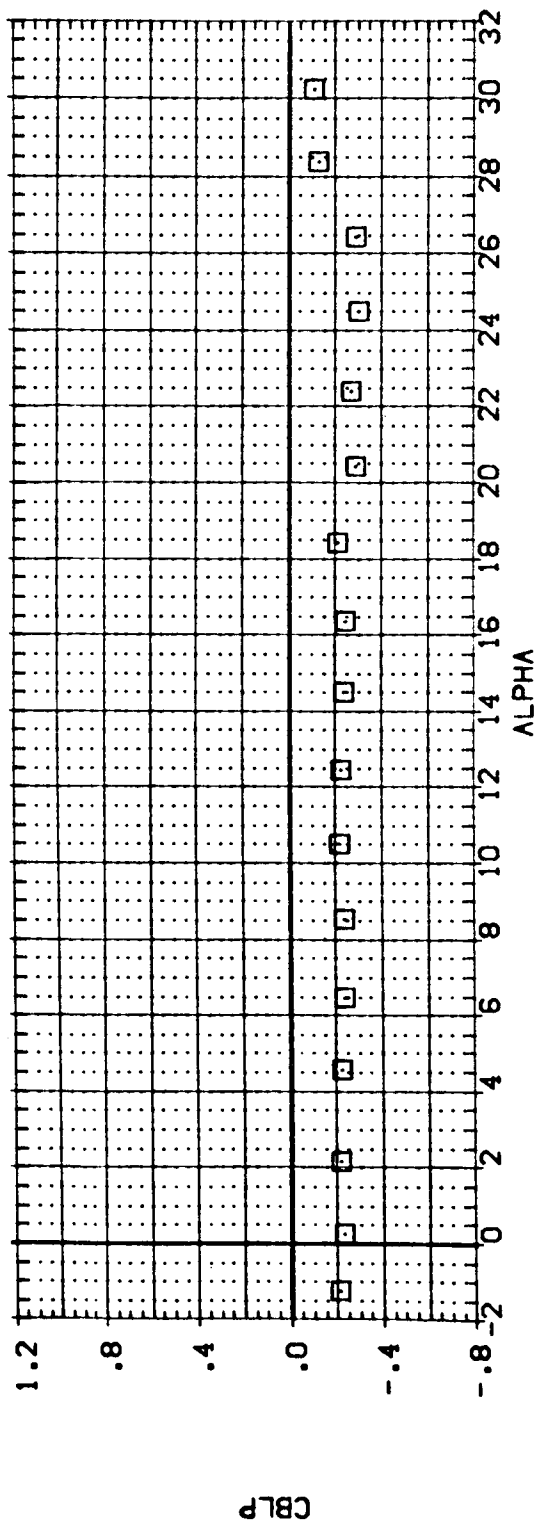


FIGURE 8. EFFECT OF OMS PODS ON DYNAMIC STABILITY PARAMETERS IN ROLL

(D)MACH = 2.86

DATA SET SYMBOL CONFIGURATION DESCRIPTION CG-LOC ELEVTR RUDELIR
 (RPGRO1) LA-14. ROCKWELL DR8 D658 V/MOD. NOSE (BVM) 1.000 .000 40.000
 (RPGRO3) LA-14. ROCKWELL DR8 D658 V/MOD. NOSE (BVM) 1.000 .000 40.000

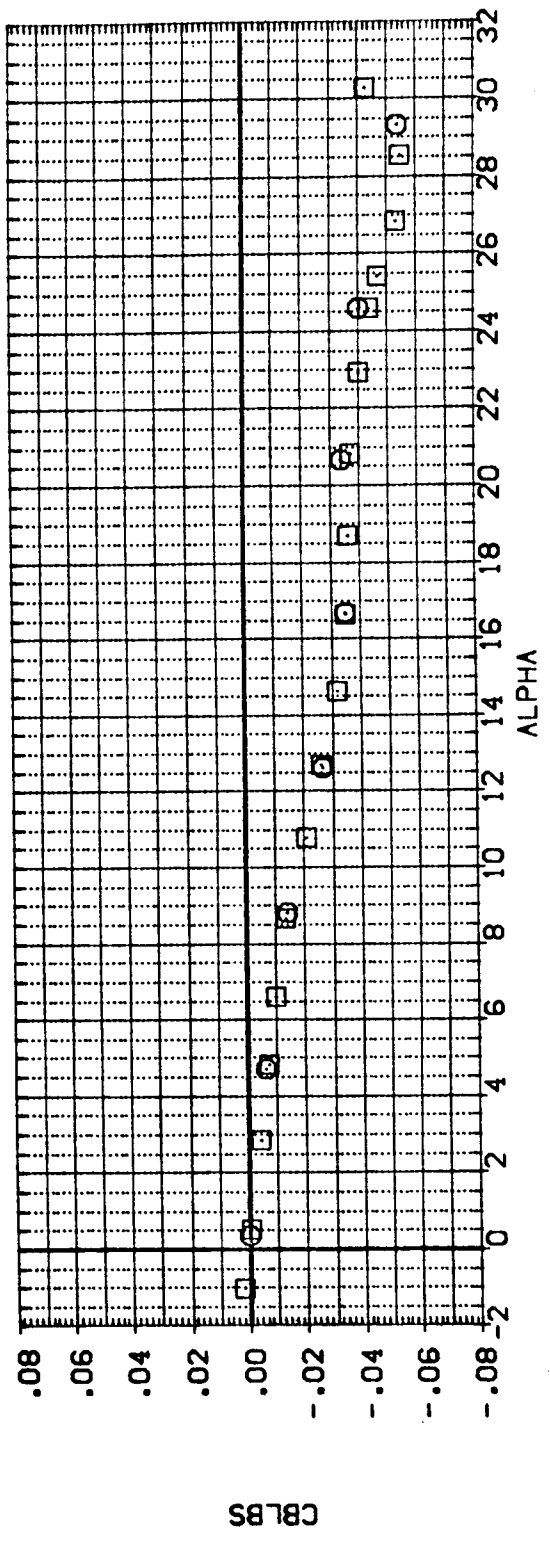
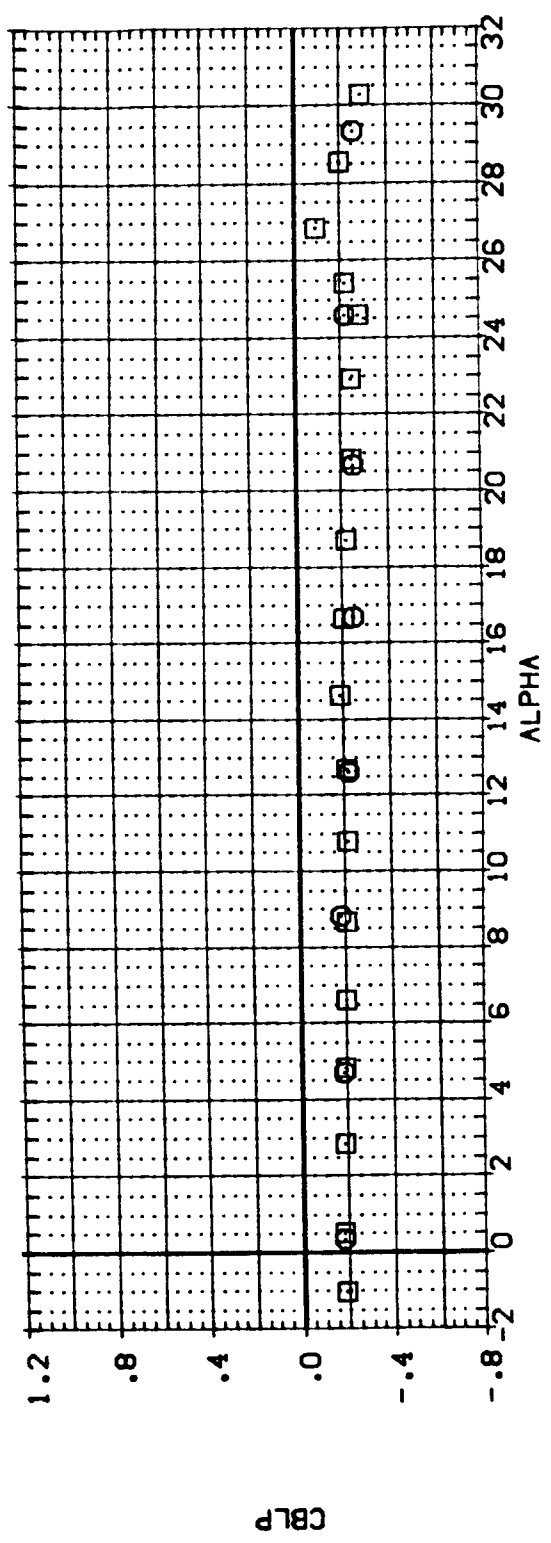


FIGURE 8. EFFECT OF OMS PODS ON DYNAMIC STABILITY PARAMETERS IN ROLL

(E)MACH = 3.96

DATA SET SYMBOL CONFIGURATION DESCRIPTION CG-LOC ELEVTR RUDEFLR
 (RPG901) LA-14; ROCKWELL ORB 0888 V/MOD. NOSE (BVM) 1.000 .000 40.000
 (RPG903) LA-14; ROCKWELL ORB 0888 V/MOD. NOSE (BVMH) 1.000 .000 40.000

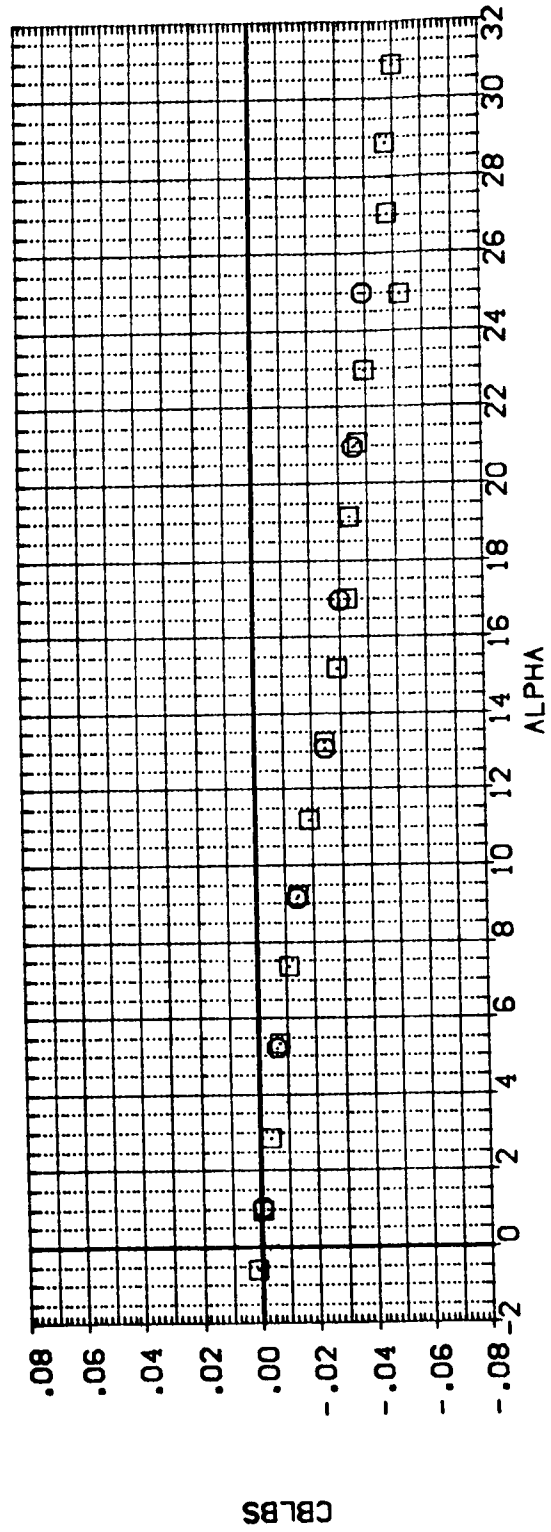
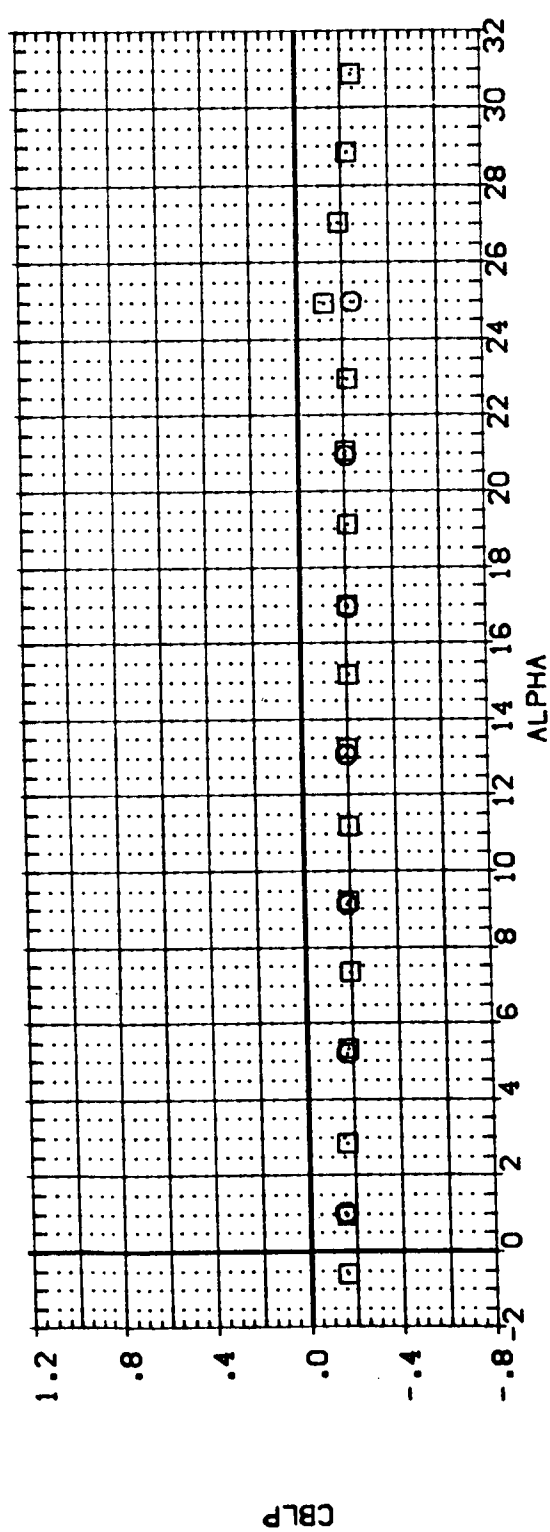


FIGURE 8. EFFECT OF OMS PODS ON DYNAMIC STABILITY PARAMETERS IN ROLL

(CF)MACH = 4.63

DATA SET SYMBOL CONFIGURATION DESCRIPTION OS-LOC ELEVTR RUJDFLR
 (RPGR01) LA-14; ROCKWELL ORB 0698 V/MOD. NOSE (BVM) 1.000 .000 40.000
 (RPGR03) LA-14; ROCKWELL ORB 0698 V/MOD. NOSE (BVM) 1.000 .000 40.000

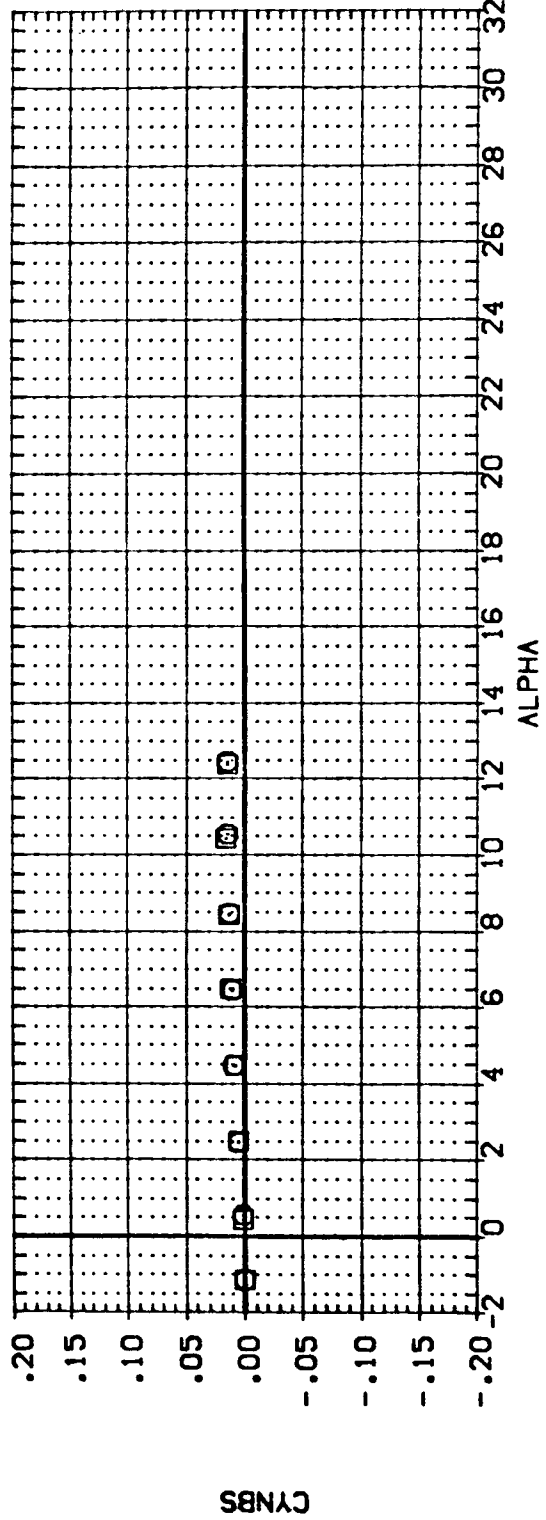
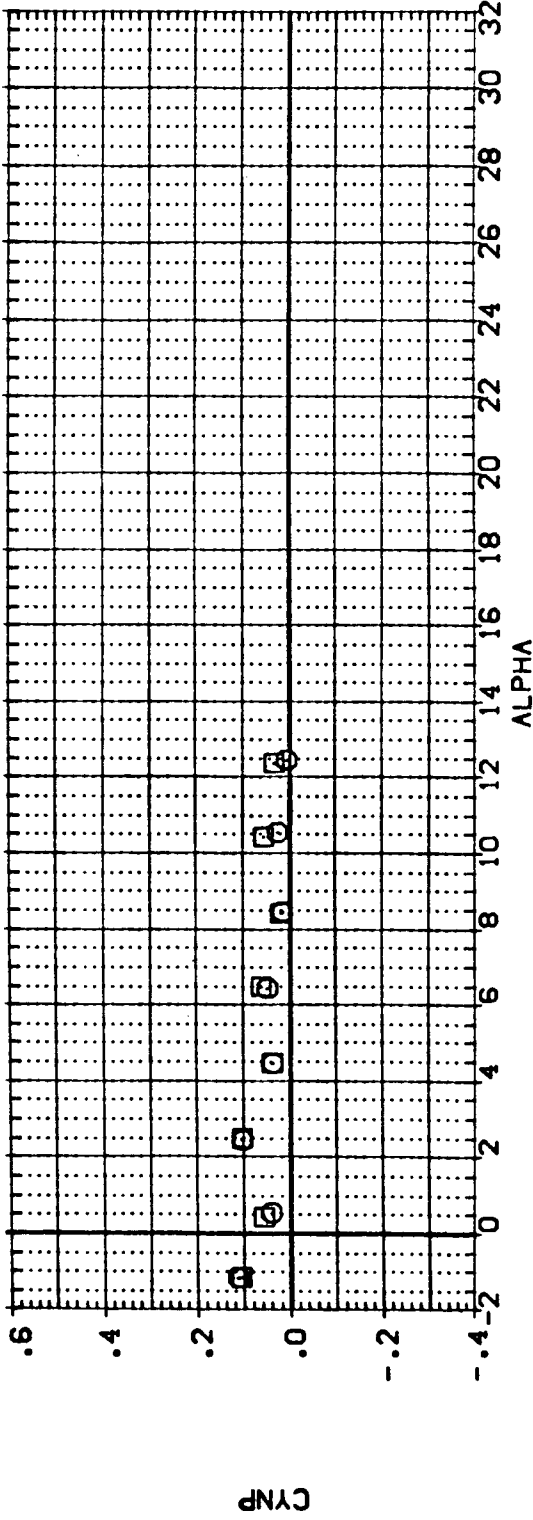


FIGURE 8. EFFECT OF OMS PODS ON DYNAMIC STABILITY PARAMETERS IN ROLL

(A)MACH = 1.60

DATA SET SYMBOL: (RPGRO1) (RPGRO3) CONFIGURATION DESCRIPTION: LA-14; ROCKWELL ORB 0898 V/MOD; NOSE (BNV) LA-14; ROCKWELL ORB 0898 V/MOD; NOSE (BNVM) CG-LOC: 1.000 1.000 ELEVTR: .000 .000 RUDEFLR: 40.000 40.000

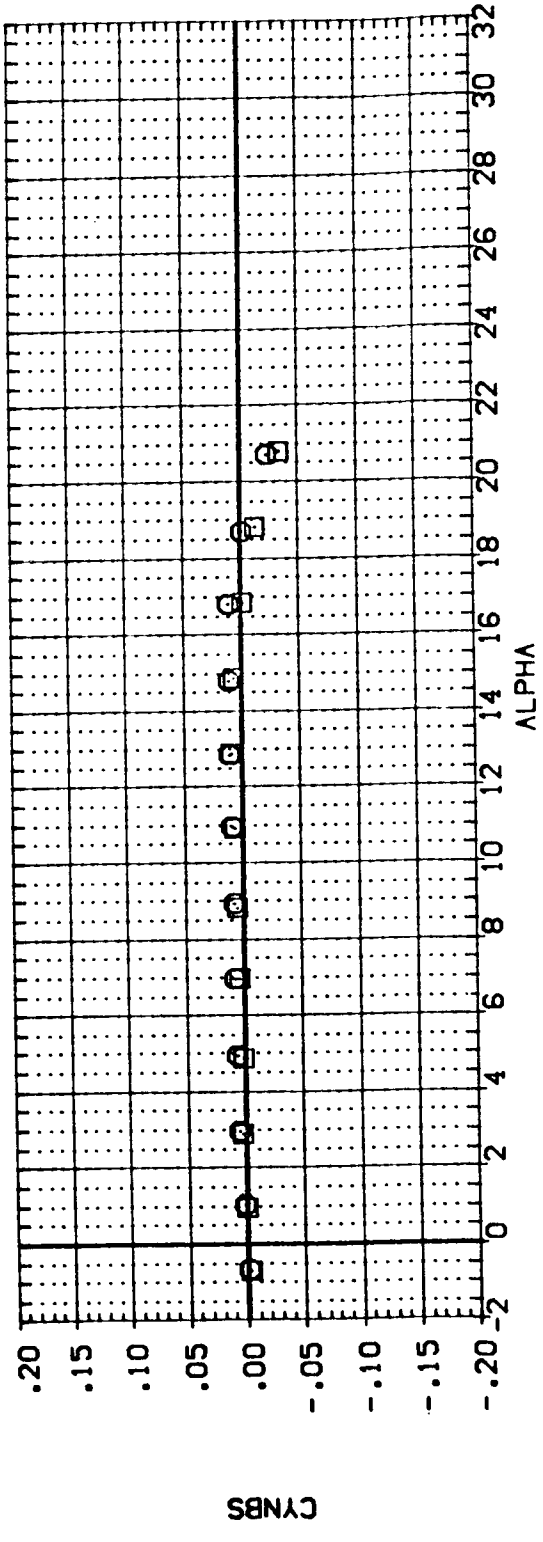
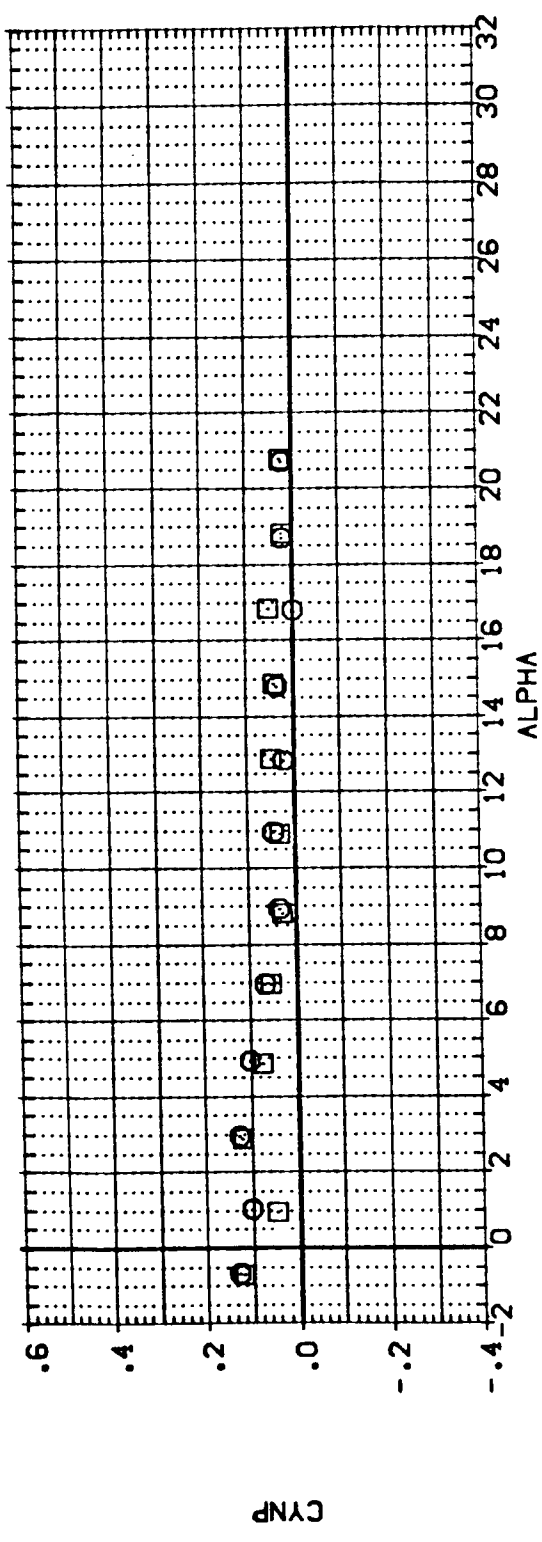


FIGURE 8. EFFECT OF OMS PODS ON DYNAMIC STABILITY PARAMETERS IN ROLL

(B)MACH = 1.90

DATA SET SYMBOL CONFIGURATION DESCRIPTION CG-LOC ELEVTR RUDELR
 (RPGRO1) LA-14: ROCKWELL ORB 0698 V/MOD: NOSE (BMV) 1.000 .000 40.000
 (RPGRO2) LA-14: ROCKWELL ORB 0698 V/MOD: NOSE (BMVM) 1.000 .000 40.000

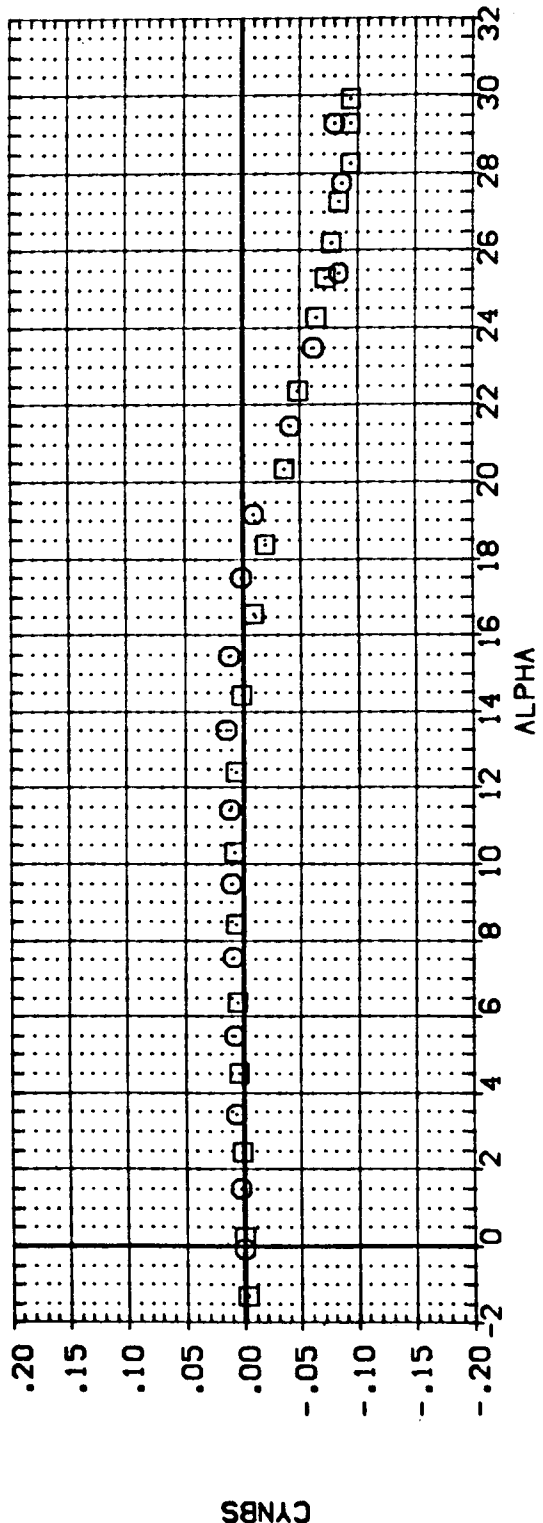
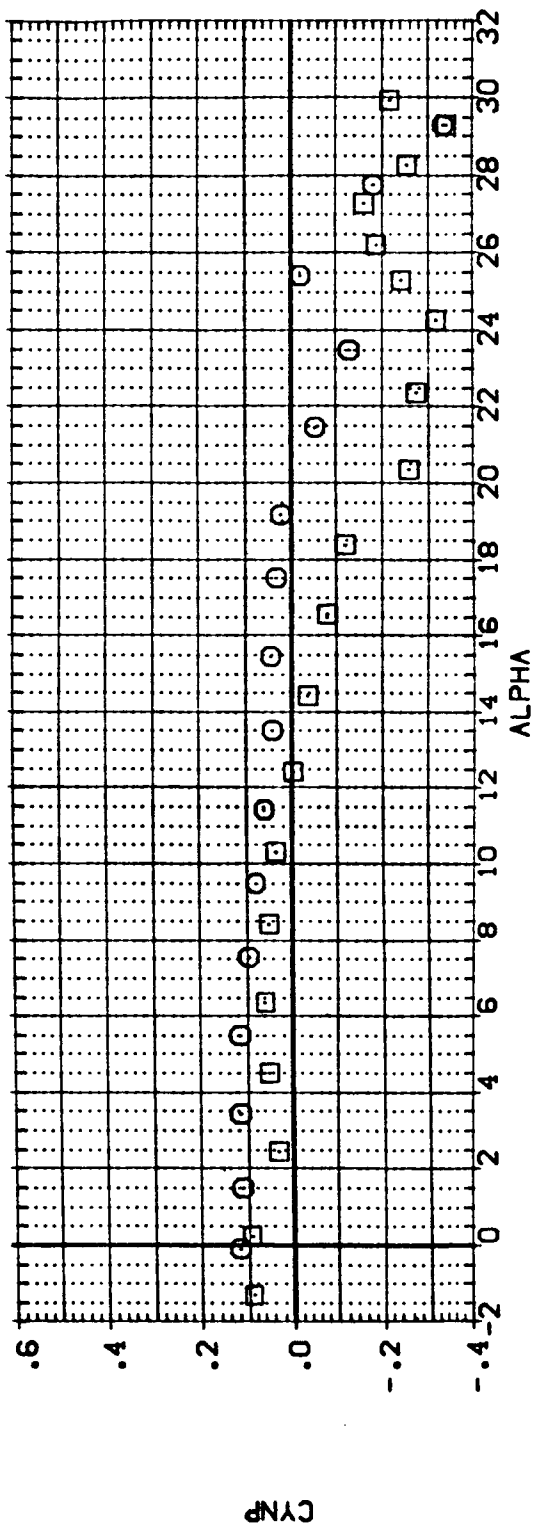


FIGURE 8. EFFECT OF OMS POOS ON DYNAMIC STABILITY PARAMETERS IN ROLL

DATA SET SYMBOL: [] CONFIGURATION DESCRIPTION: LA-14, ROCKWELL CRB 0898 V/HOOD, NOSE (BVMH)
 [RPGR01] DATA NOT AVAILABLE
 [RPGR03]

CG-LOC: 1.000
 ELEVTR: .000
 RUOFLR: 40.000

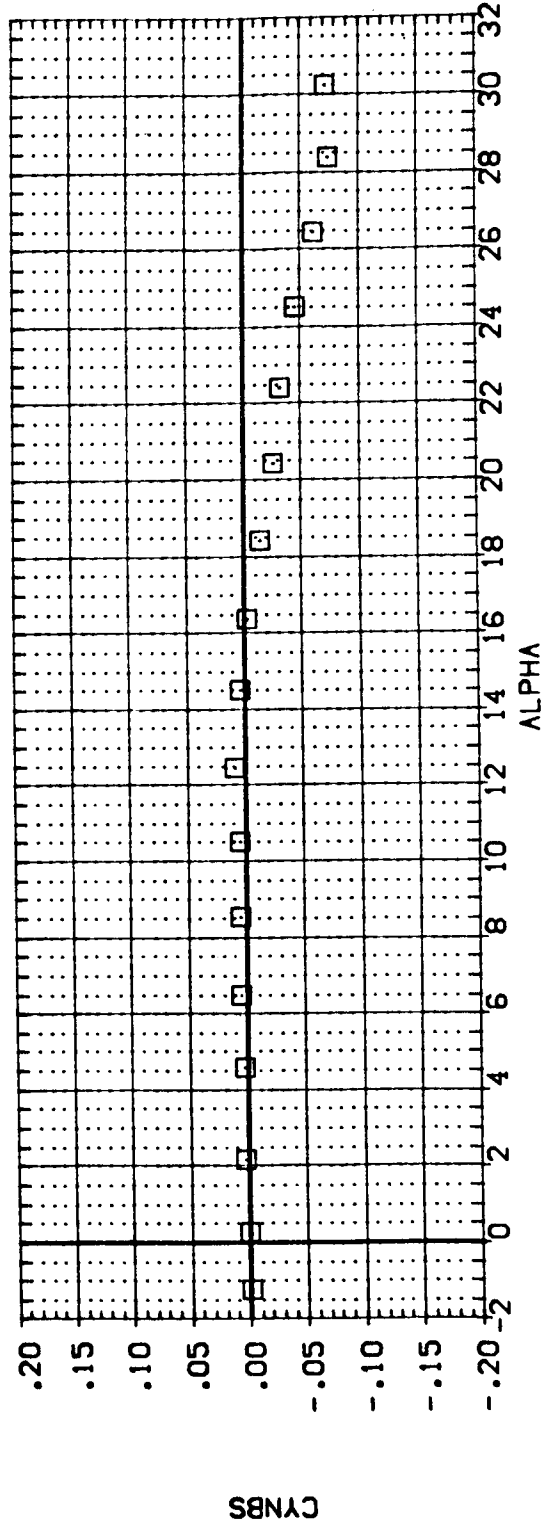
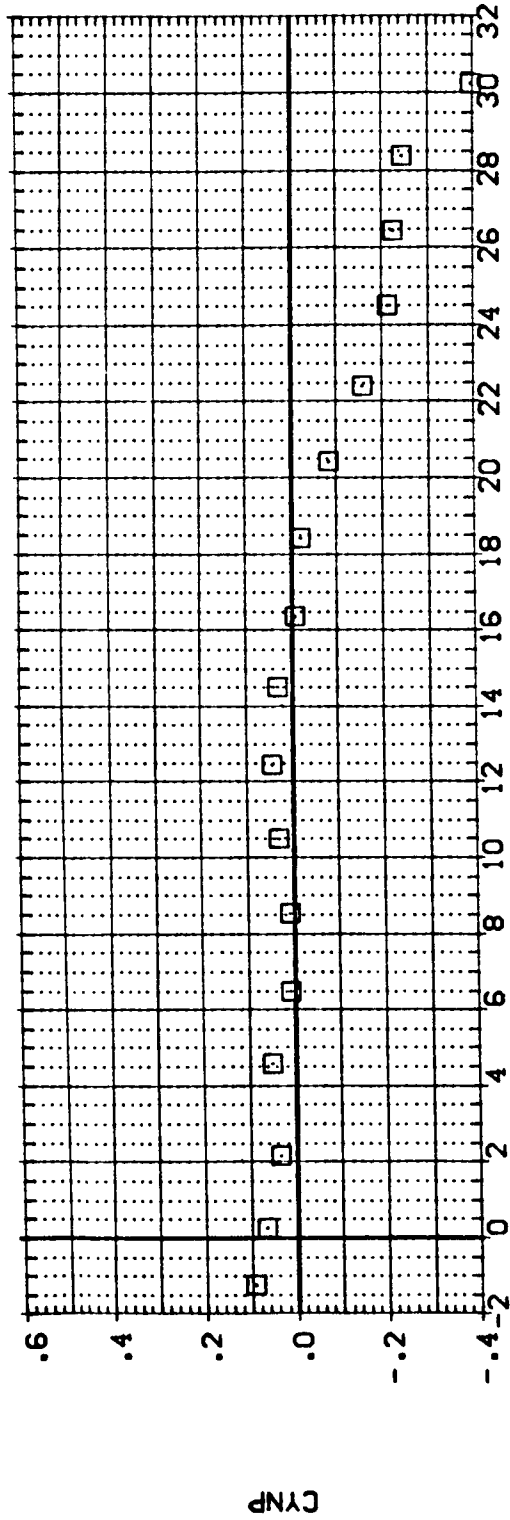


FIGURE 8. EFFECT OF OMS PODS ON DYNAMIC STABILITY PARAMETERS IN ROLL

(O)MACH = 2.86

DATA SET SYMBOL: [] CONFIGURATION DESCRIPTION: CG-LOC ELEVTR RUOFLR
 [RFGRO1] LA-14, ROCKWELL CR8 0898 V/MOD, NOSE (BNV) 1.000 .000 40.000
 [RFGRO3] LA-14, ROCKWELL CR8 0898 V/MOD, NOSE (BNVH) 1.000 .000 40.000

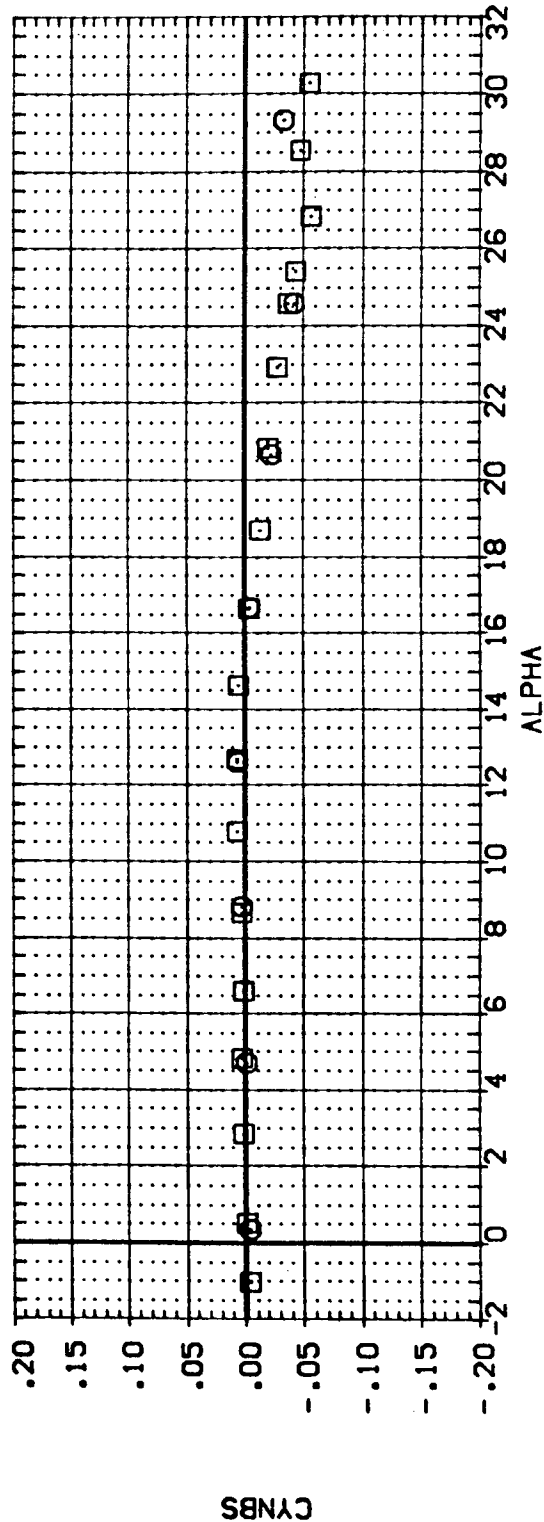
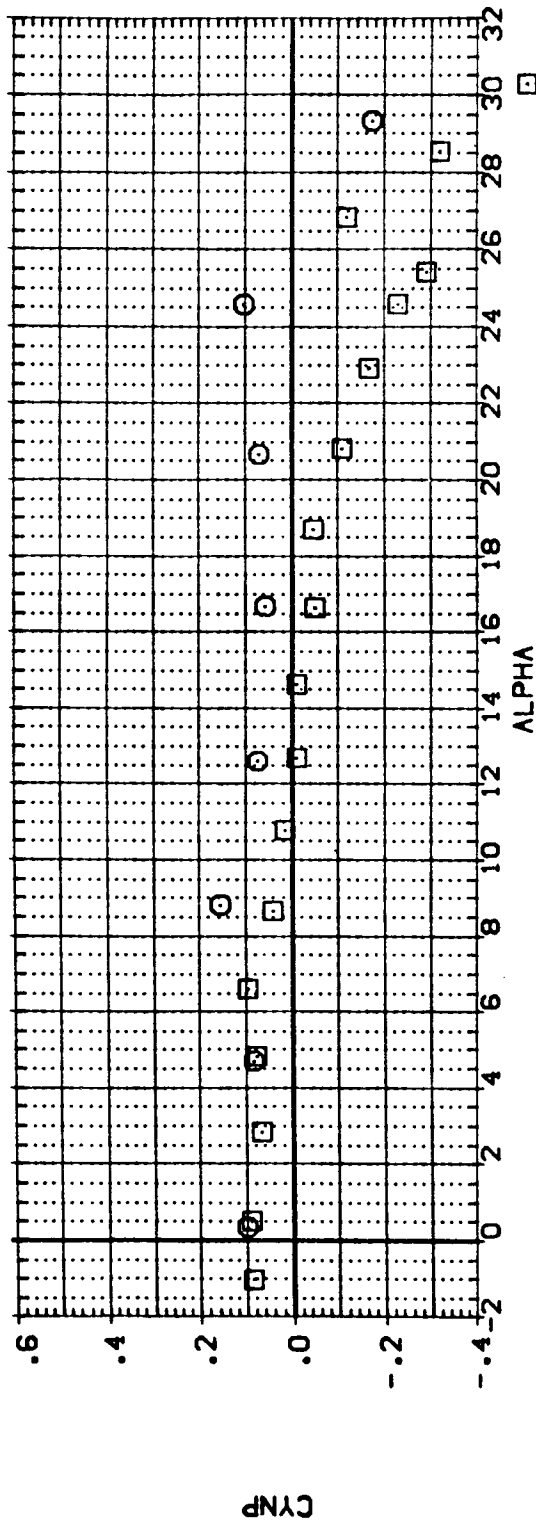


FIGURE 8. EFFECT OF OMS PODS ON DYNAMIC STABILITY PARAMETERS IN ROLL

DATA SET SYMBOL CONFIGURATION DESCRIPTION CG-LOC ELEVTR RUOFLR

(RPGR01) LA-14; ROCKWELL ORB 0898 V/MOD; NOSE (BVM) } 1.000 .000 40.000

(RPGR03) LA-14; ROCKWELL ORB 0898 V/MOD; NOSE (BVM) } 1.000 .000 40.000

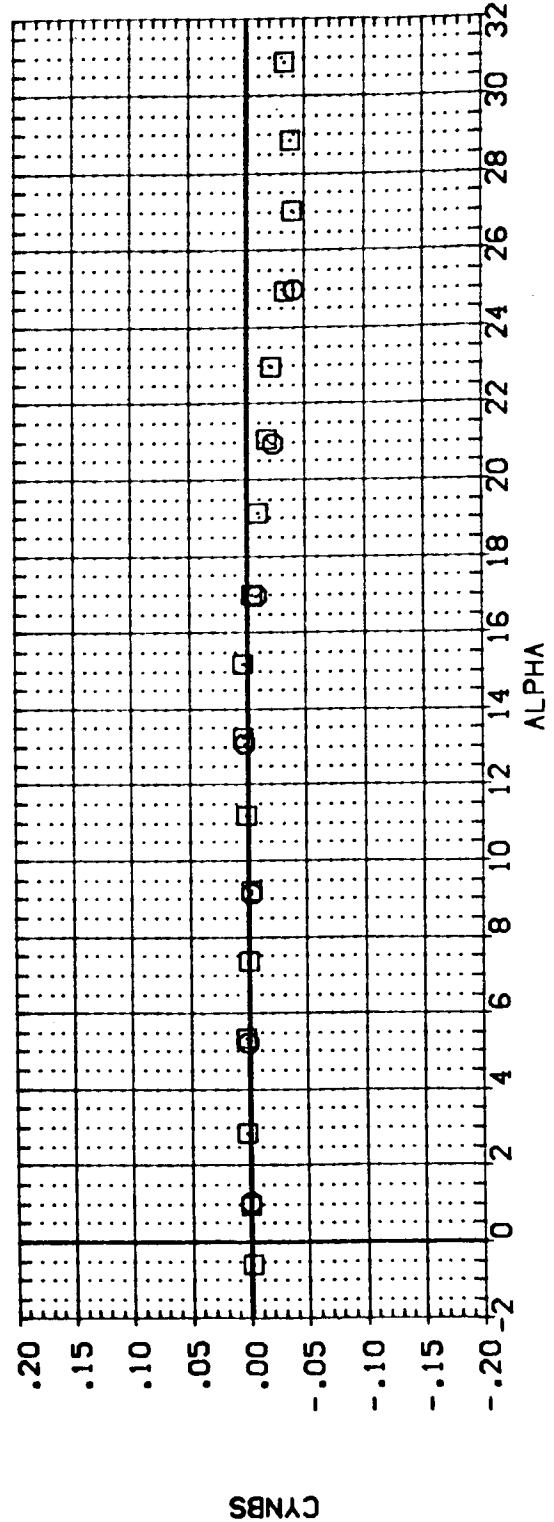
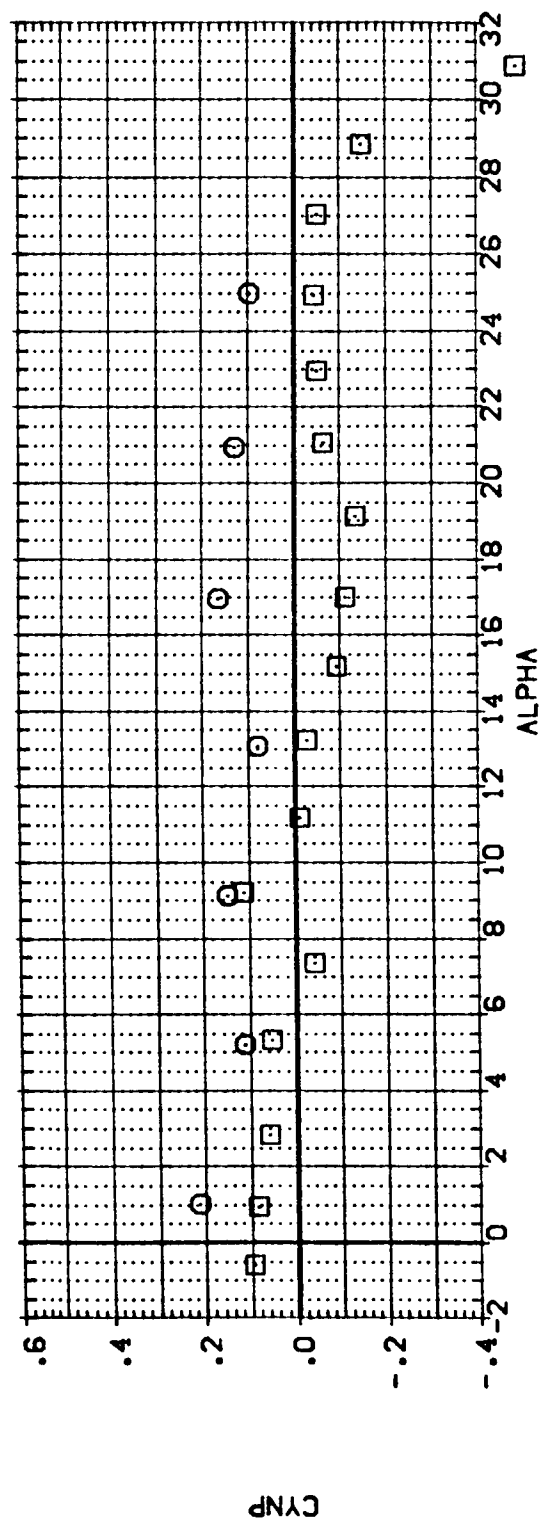


FIGURE 8. EFFECT OF OMS POOS ON DYNAMIC STABILITY PARAMETERS IN ROLL

(F)MACH = 4.63

DATA SET SYMBOL: [Symbol] CONFIGURATION DESCRIPTION: CG-LOC ELEVTR RUOFLR
 (RPGY02) LA-14; ROCKWELL ORB D898 V/MOD; NOSE (BV M) 1.000 .000
 (RPGY03) LA-14; ROCKWELL ORB D898 V/MOD; NOSE (BVM) 1.000 .000 40.000

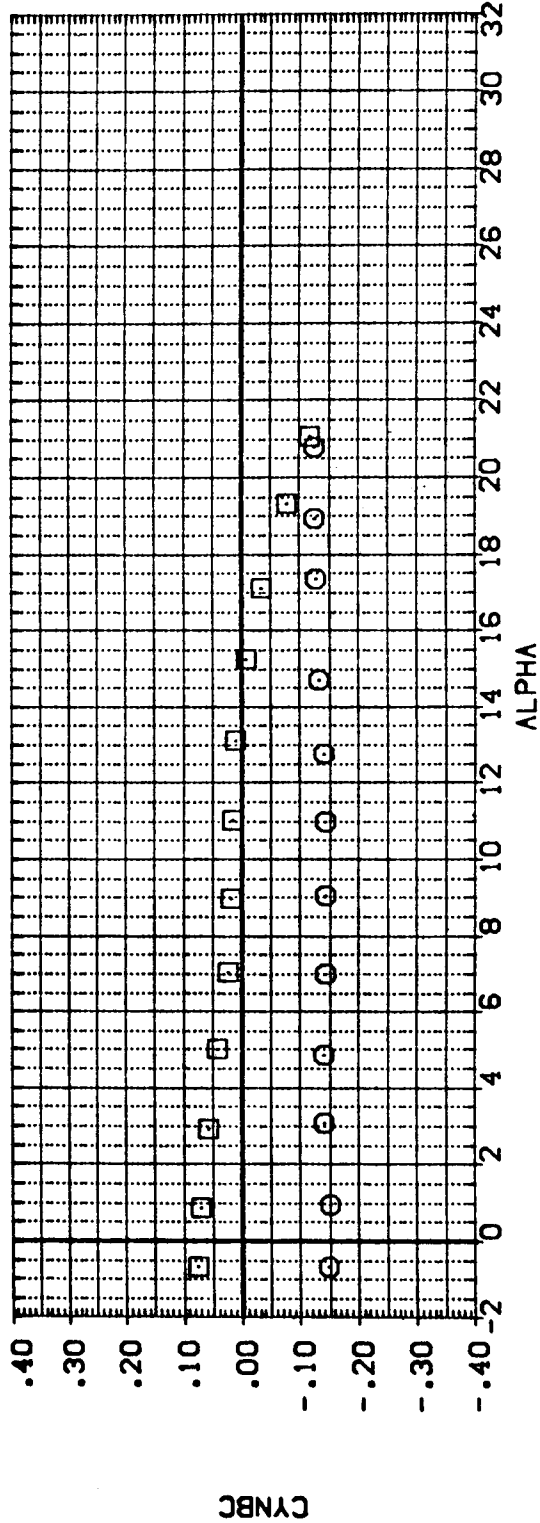
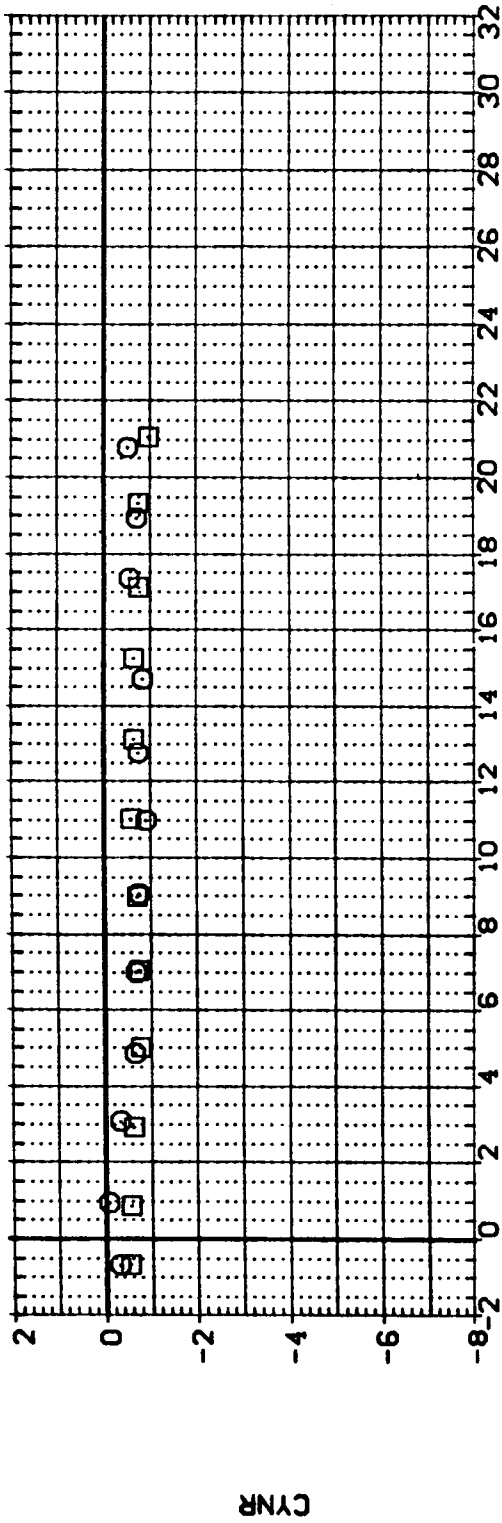


FIGURE 9. EFFECT OF VERTICAL TAIL ON DYNAMIC STABILITY PARAMETERS IN YAW

(A)MACH = 1.90

DATA SET SYMBOL: []
 (RPGV02)
 (RPGV03)

CONFIGURATION DESCRIPTION

LA-14; ROCKWELL ORB 0899 V/MOD; NOSE (BV M)
 LA-14; ROCKWELL ORB 0899 V/MOD; NOSE (BVVM)

CG-LOC: 1.000
 ELEVTR: .000
 RUDFLR: 40.000

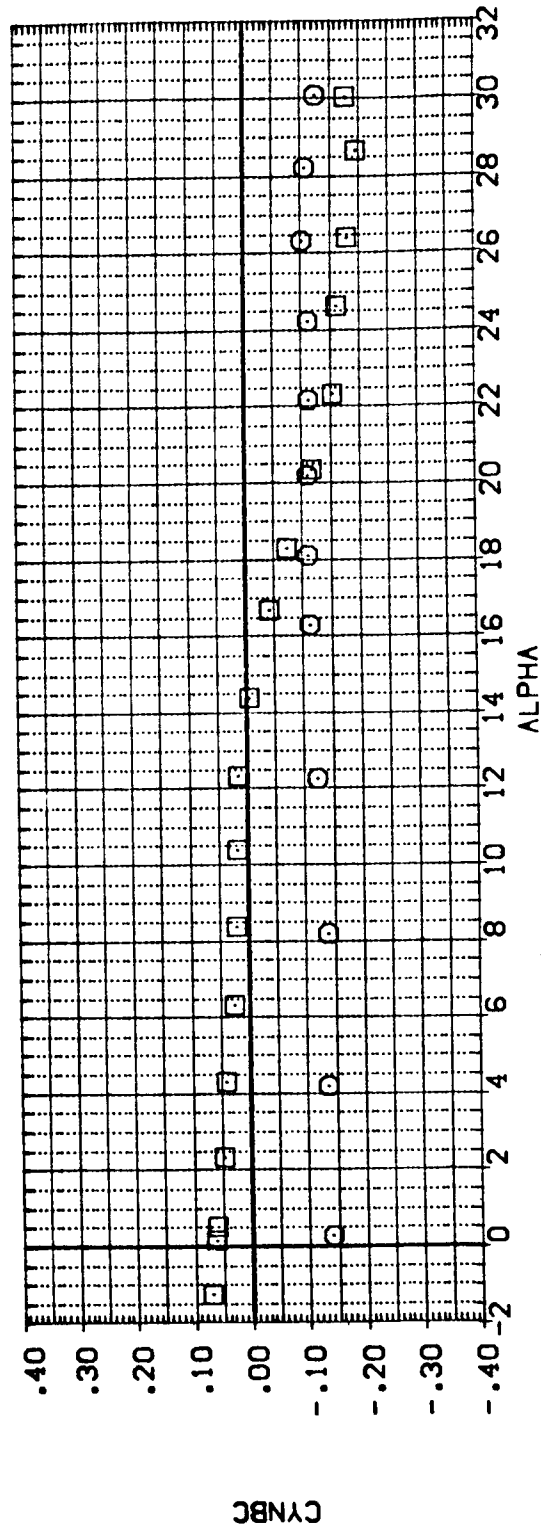
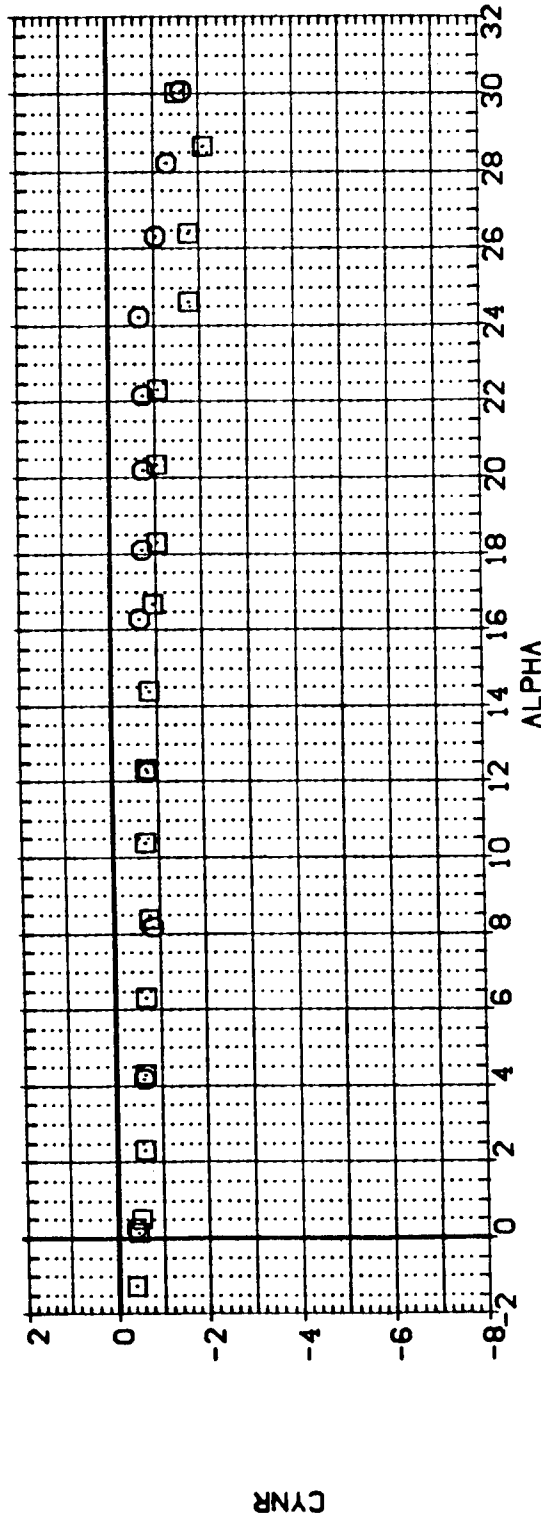


FIGURE 9. EFFECT OF VERTICAL TAIL ON DYNAMIC STABILITY PARAMETERS IN YAW

(B)MACH = 2.36

CG-LOC ELEVTR RUOFLR
 1.000 .000
 1.000 .000
 1.000 40.000

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (RPGY02) LA-14; ROCKWELL ORB 0898 V/HOO; NOSE (BV M)
 (RPGY03) LA-14; ROCKWELL ORB 0898 V/HOO; NOSE (BVH)

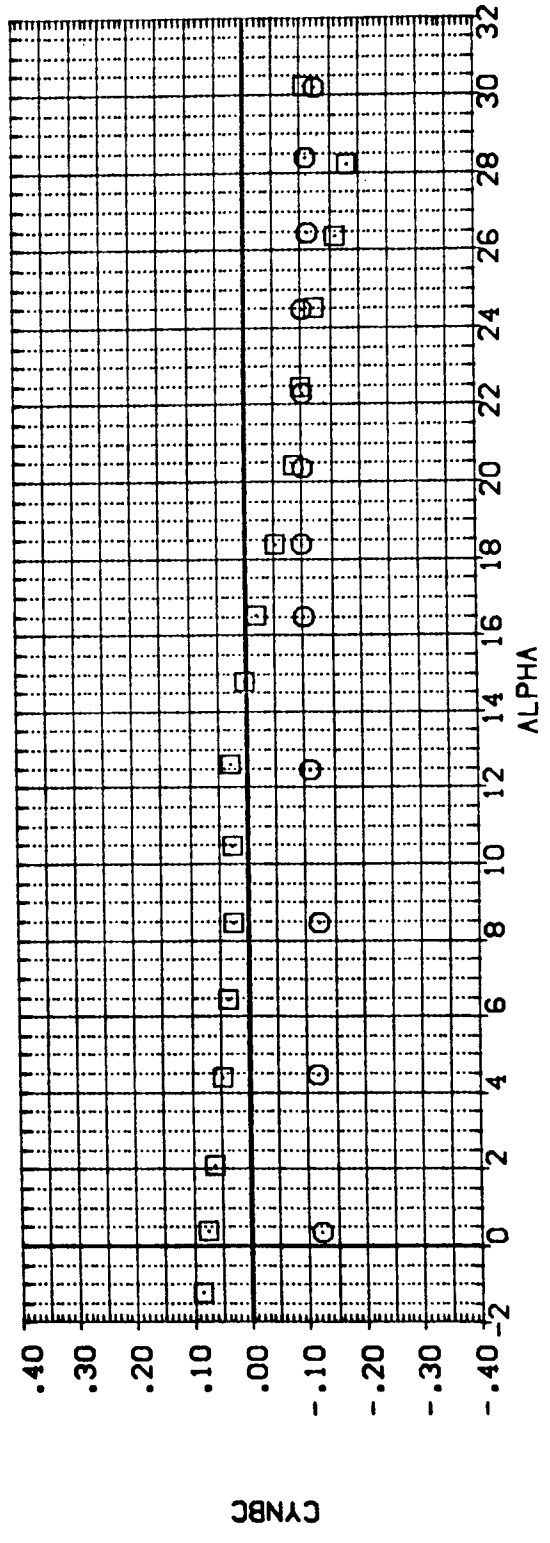
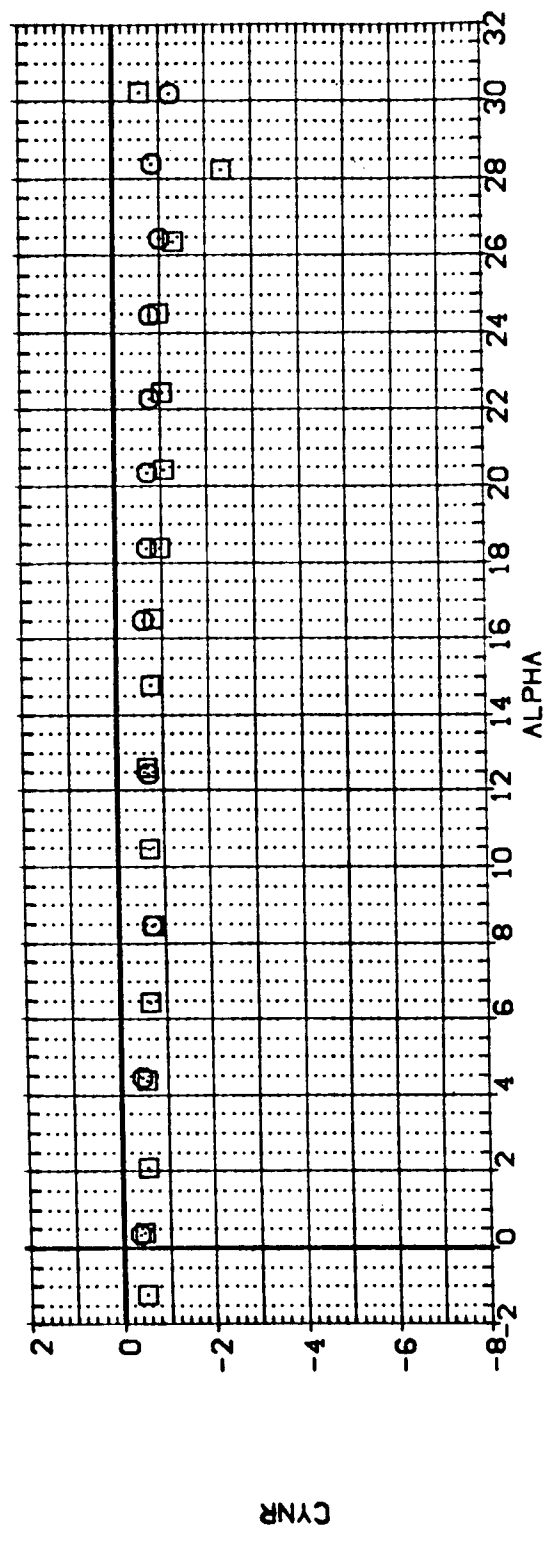


FIGURE 9. EFFECT OF VERTICAL TAIL ON DYNAMIC STABILITY PARAMETERS IN YAW

(C)MACH = 2.86

DATA SET SYMBOL (RPGY02) (RPGY03) CONFIGURATION DESCRIPTION LA-14: ROCKWELL DRB 0638 V/MOD: NOSE (BM M) LA-14: ROCKWELL DRB 0638 V/MOD: NOSE (BVVM) CG-LOC 1.000 1.000 ELEVTR 0.000 0.000 RUOFLR 40.000 40.000

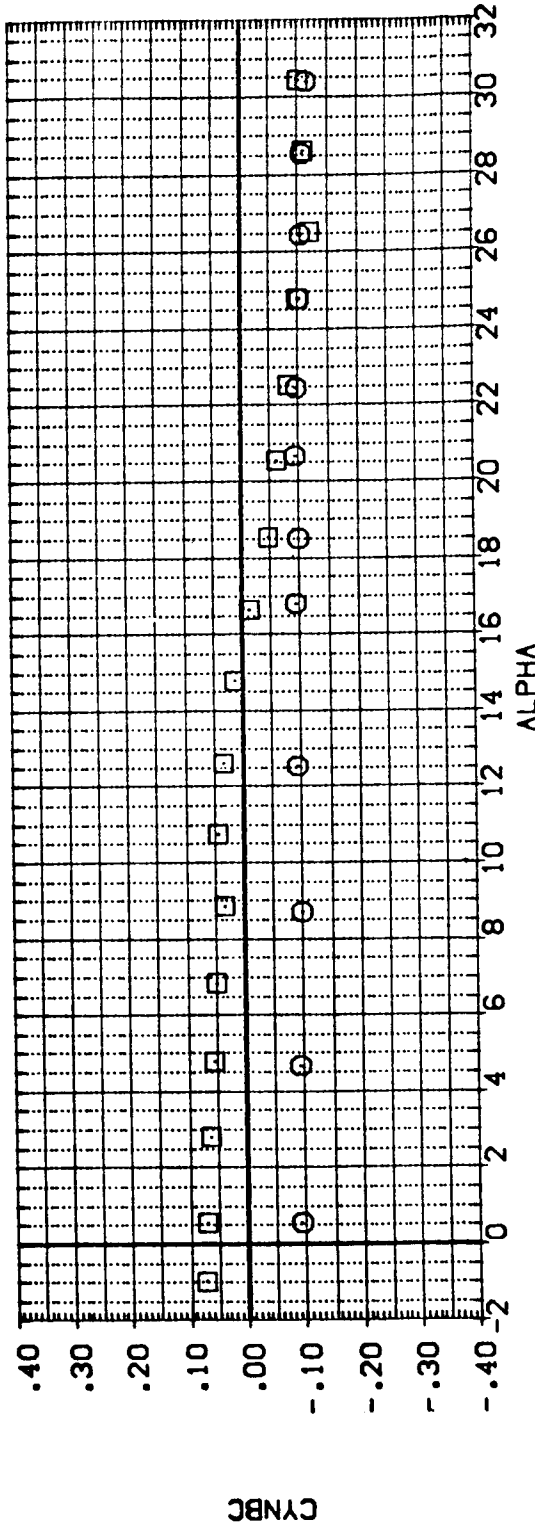
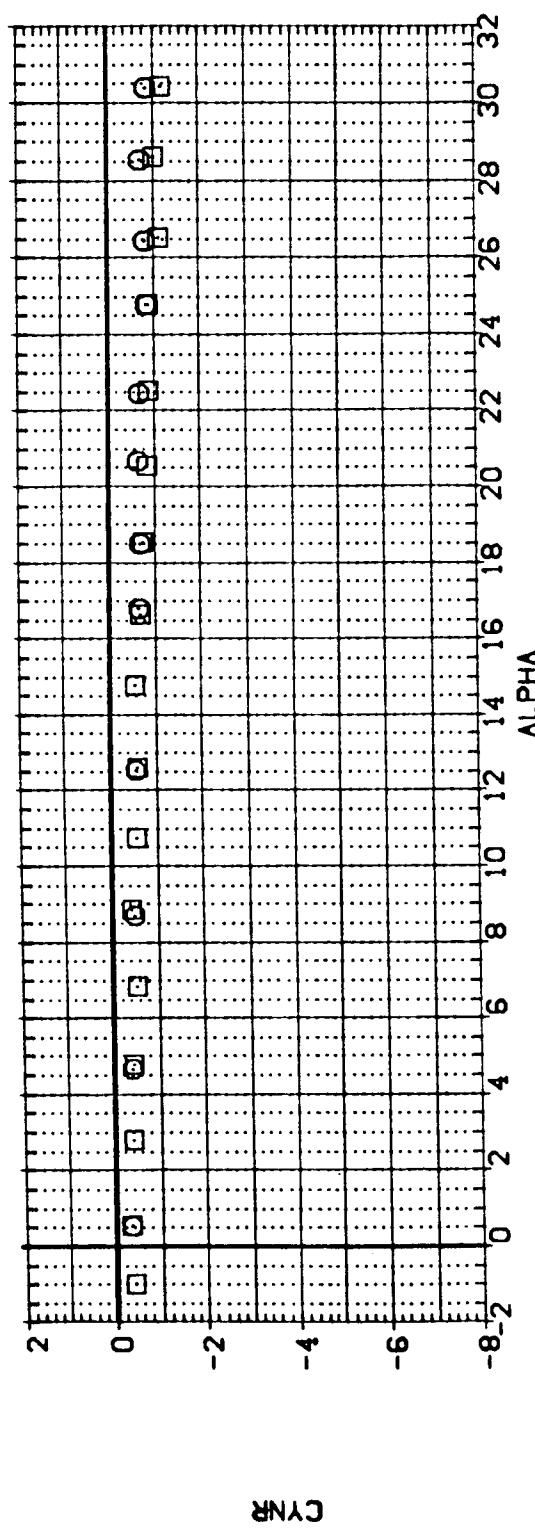


FIGURE 9. EFFECT OF VERTICAL TAIL ON DYNAMIC STABILITY PARAMETERS IN YAW

(D)MACH = 3.96

DATA SET SYMBOL CONFIGURATION DESCRIPTION CG-LOC ELEVTR RUDEFLR
 (RPGV02) LA-14; ROCKWELL ORB 0698 V/MOD; NOSE (BY M) 1.000 .000
 (RPGV03) LA-14; ROCKWELL ORB 0698 V/MOD; NOSE (BY M) 1.000 .000

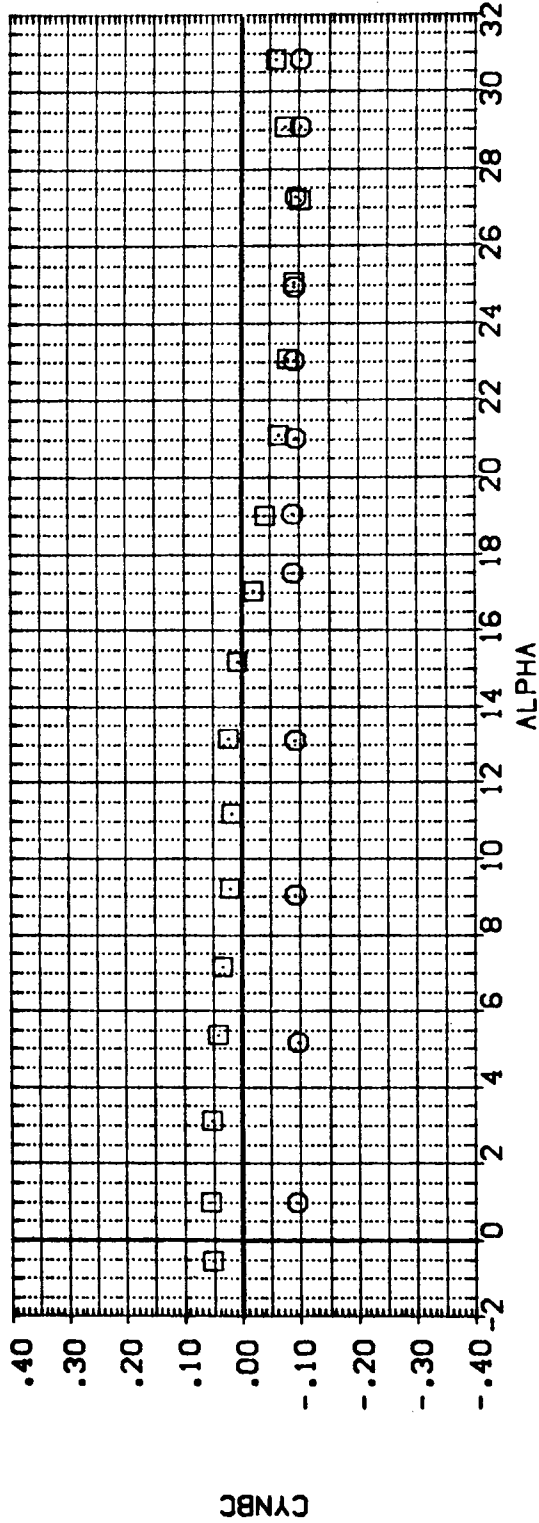
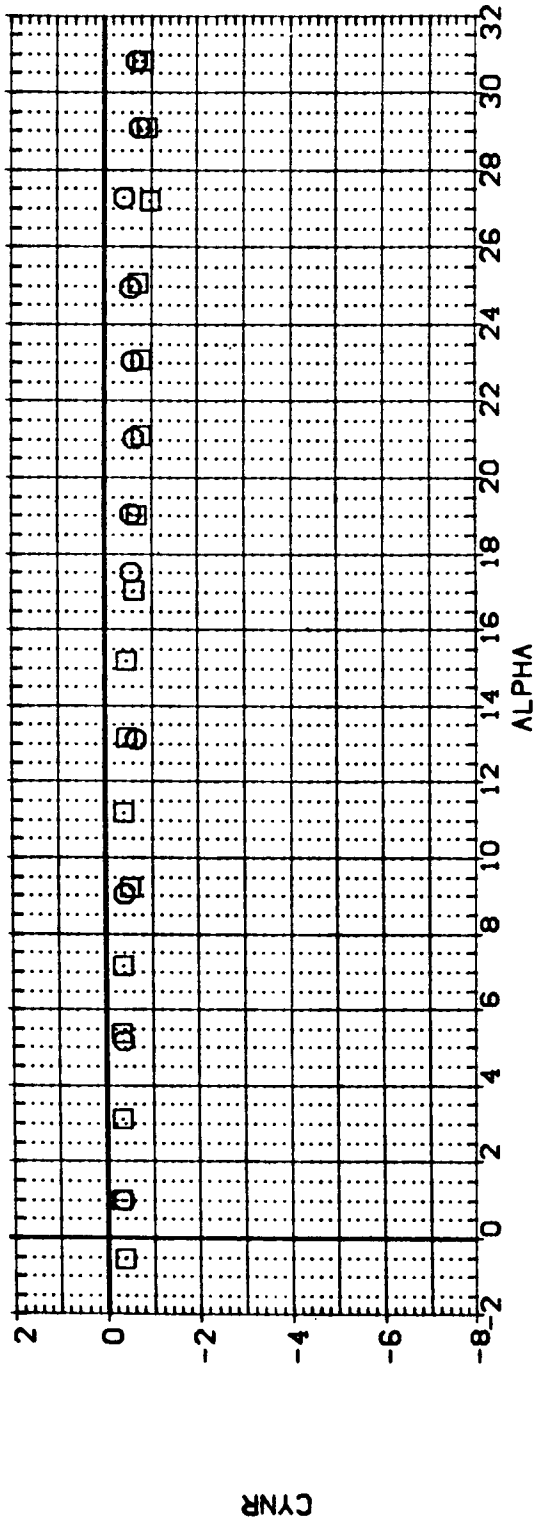


FIGURE 9. EFFECT OF VERTICAL TAIL ON DYNAMIC STABILITY PARAMETERS IN YAW

(E)MACH = 4.63

DATA SET SYMBOL CONFIGURATION DESCRIPTION CG-LOC ELEVTR RUOFLR
 {RPGV02} LA-14; ROCKWELL GRB 0898 V/100; NOSE (BVM) 1.000 .000
 {RPGV03} LA-14; ROCKWELL GRB 0898 V/100; NOSE (BVM) 1.000 .000

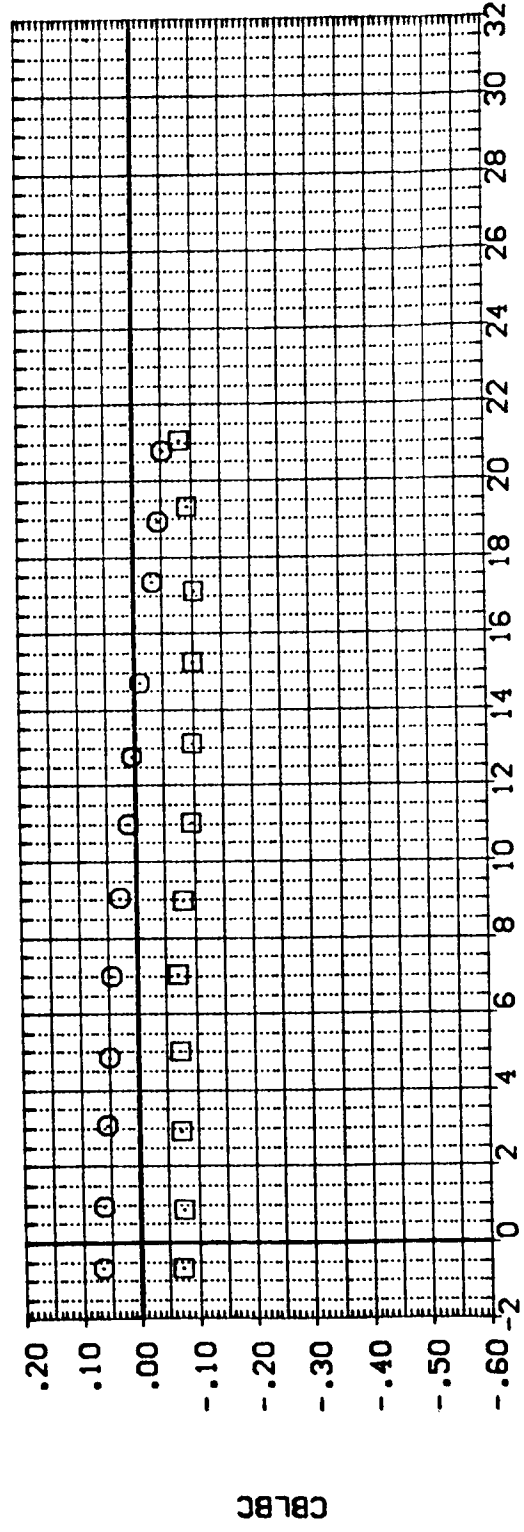
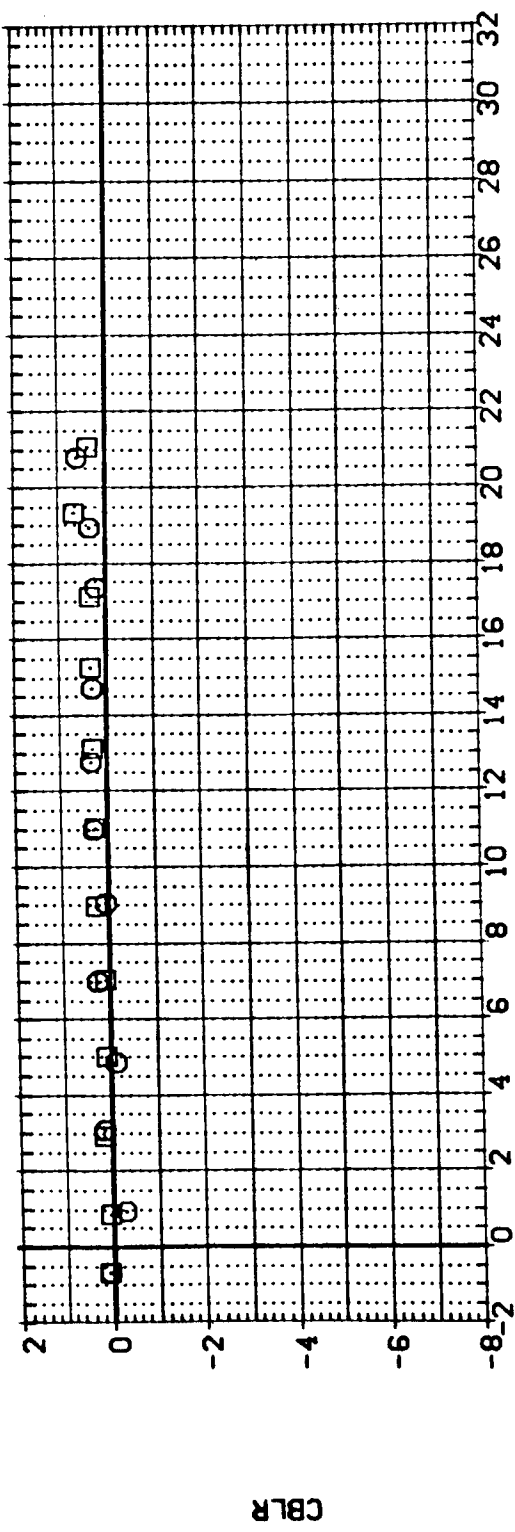


FIGURE 9. EFFECT OF VERTICAL TAIL ON DYNAMIC STABILITY PARAMETERS IN YAW

CAJ MACH = 1.90

DATA SET SYMBOL: (RPGY02) (RPGY03)
 CONFIGURATION DESCRIPTION: LA-14; ROCKWELL ORB 0698 V/MOD; NOSE (BV M)
 LA-14; ROCKWELL ORB 0698 V/MOD; NOSE (BV M)
 CG-LOC: 1.000 1.000
 ELEVTR: .000 .000
 RUOFLR: 40.000 40.000

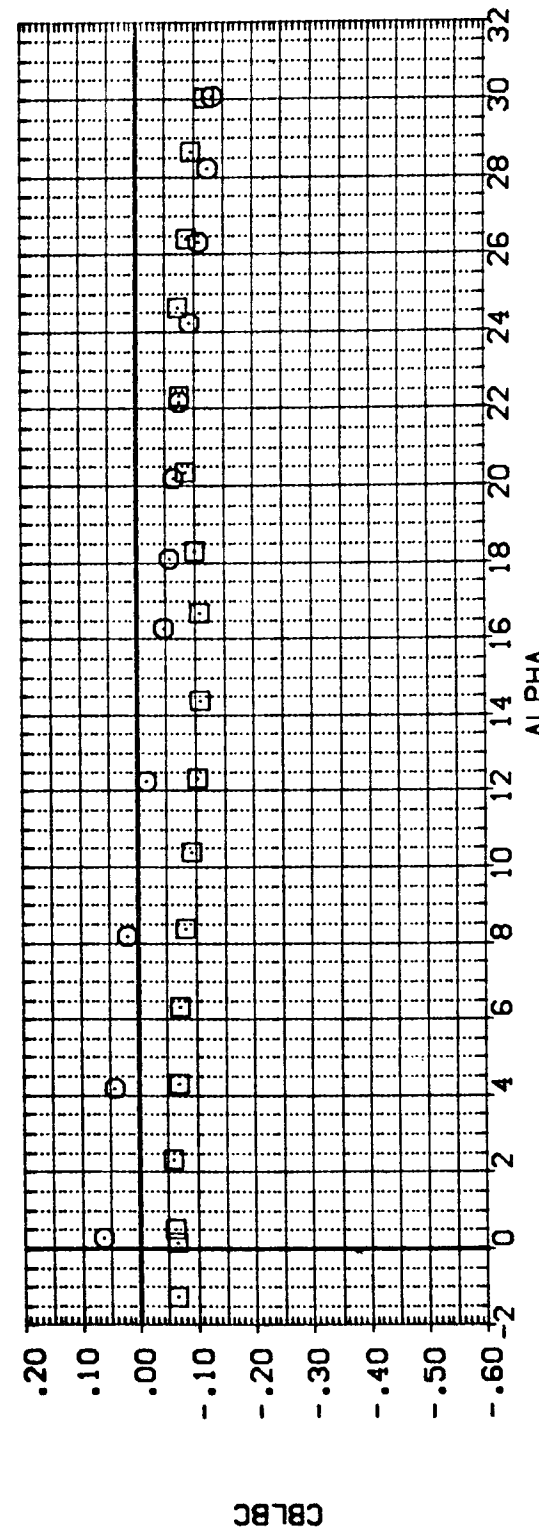
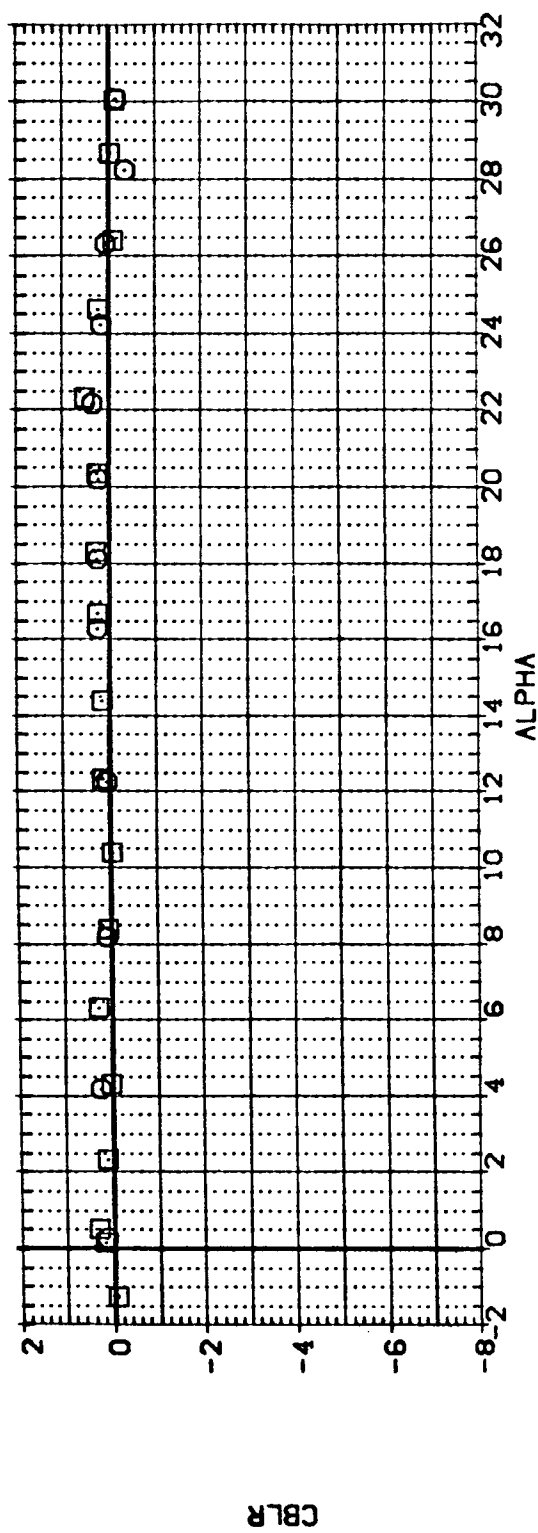


FIGURE 9. EFFECT OF VERTICAL TAIL ON DYNAMIC STABILITY PARAMETERS IN YAW

(B)MACH = 2.36

DATA SET SYMBOL CONFIGURATION DESCRIPTION CG-LOC ELEVTR RUDFLR
 (RPGY02) LA-14; ROCKWELL CR8 0898 V/100; NOSE (BV M) 1.000 .000
 (RPGY03) LA-14; ROCKWELL CR8 0898 V/100; NOSE (BVVM) 1.000 .000 40.000

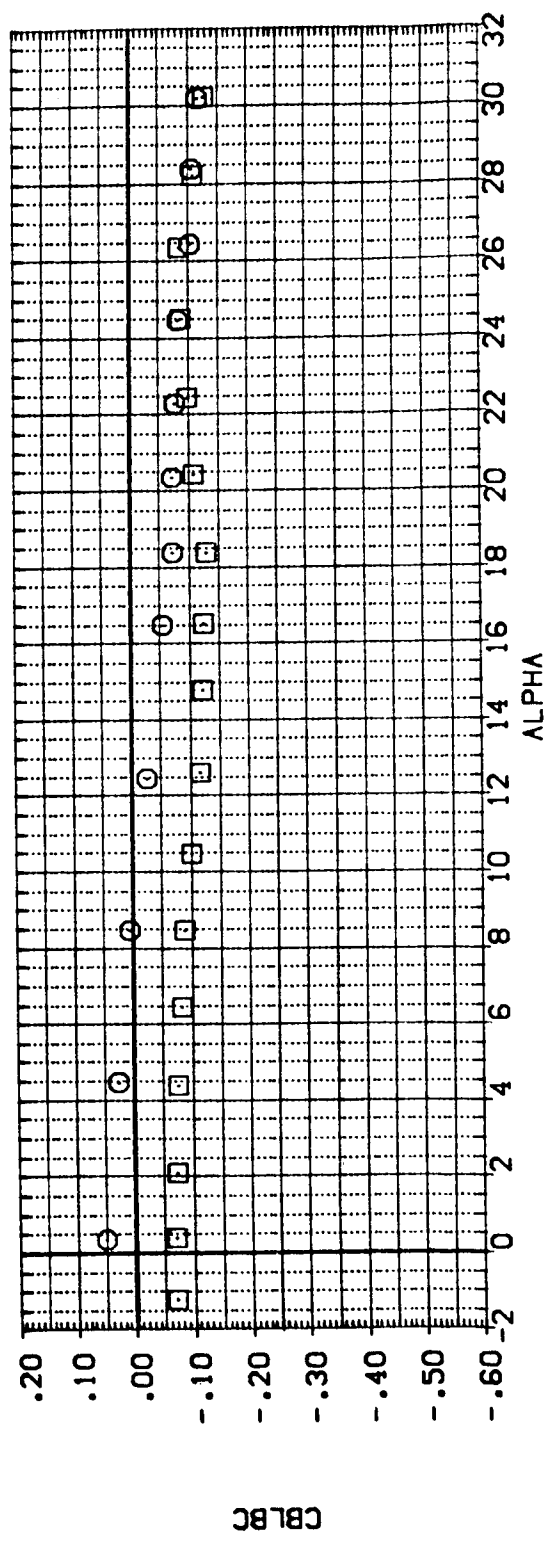
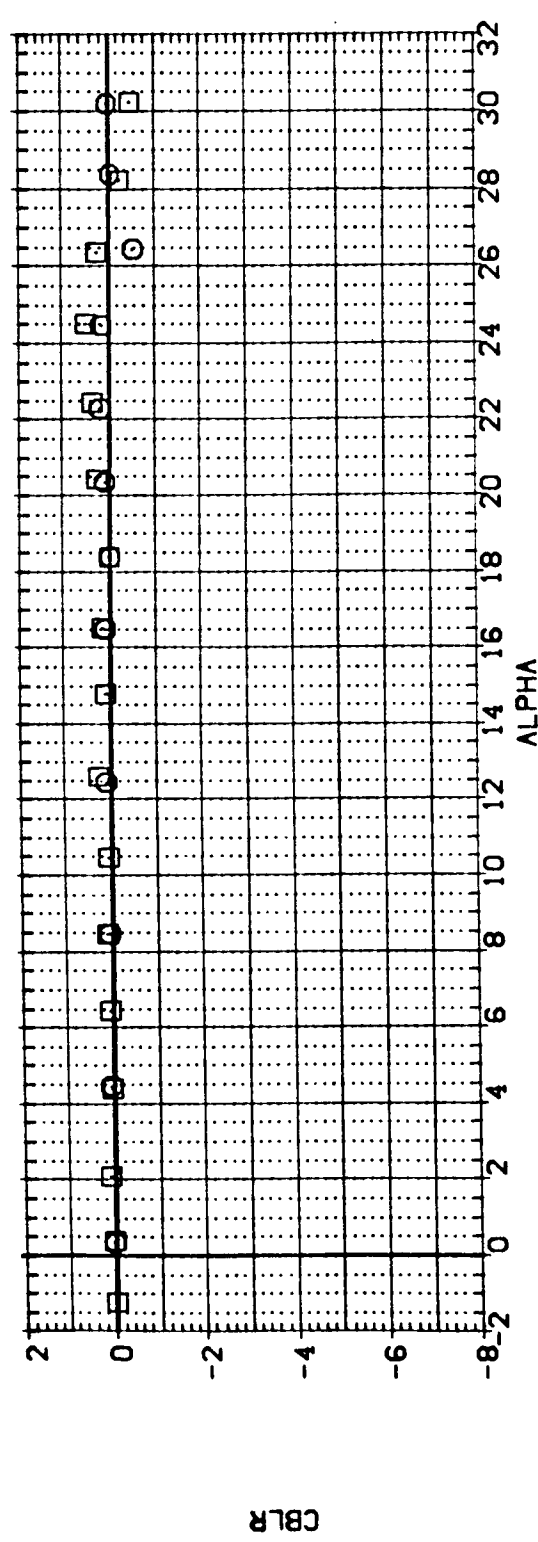


FIGURE 9. EFFECT OF VERTICAL TAIL ON DYNAMIC STABILITY PARAMETERS IN YAW

(C)MACH = 2.86

DATA SET SYMBOL CONFIGURATION DESCRIPTION CG-LOC ELEVTR RUOFLR
 (RPGY02) LA-14: ROCKWELL DRB 0698 V/MOD. NOSE (BV M) 1.000 .000
 (RPGY03) LA-14: ROCKWELL DRB 0698 V/MOD. NOSE (BVVM) 1.000 .000

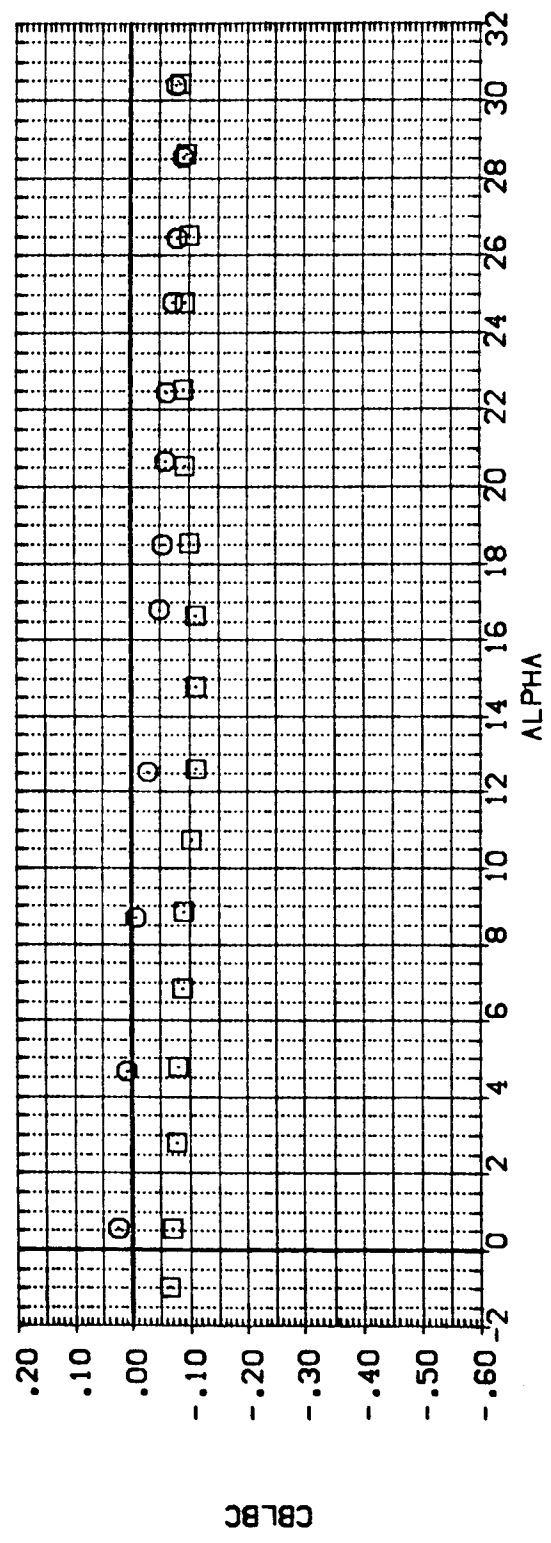
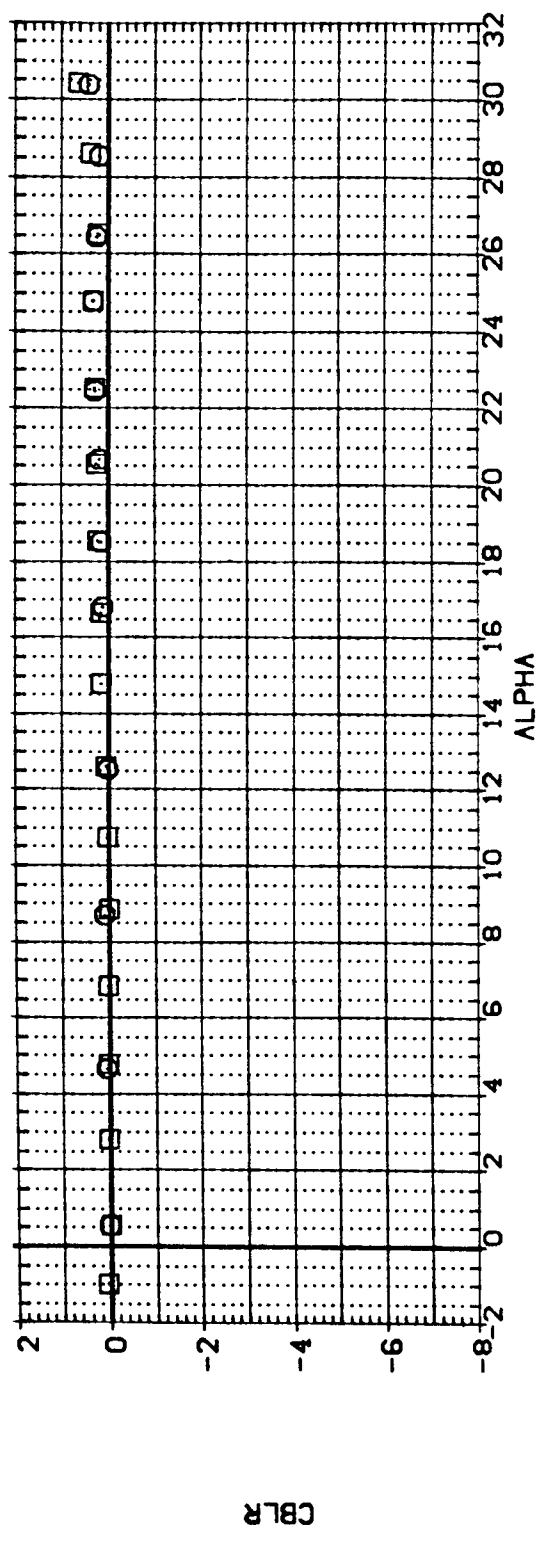


FIGURE 9. EFFECT OF VERTICAL TAIL ON DYNAMIC STABILITY PARAMETERS IN YAW

(D)MACH = 3.96

DATA SET SYMBOL CONFIGURATION DESCRIPTION CG-LOC ELEVTR RUOFLR
 (RPGY02) LA-14; ROCKWELL ORB 0698 V/MOD. NOSE (BV M) 1.000 .000
 (RPGY03) LA-14; ROCKWELL ORB 0658 V/MOD. NOSE (BVVH) 1.000 .000 40.000

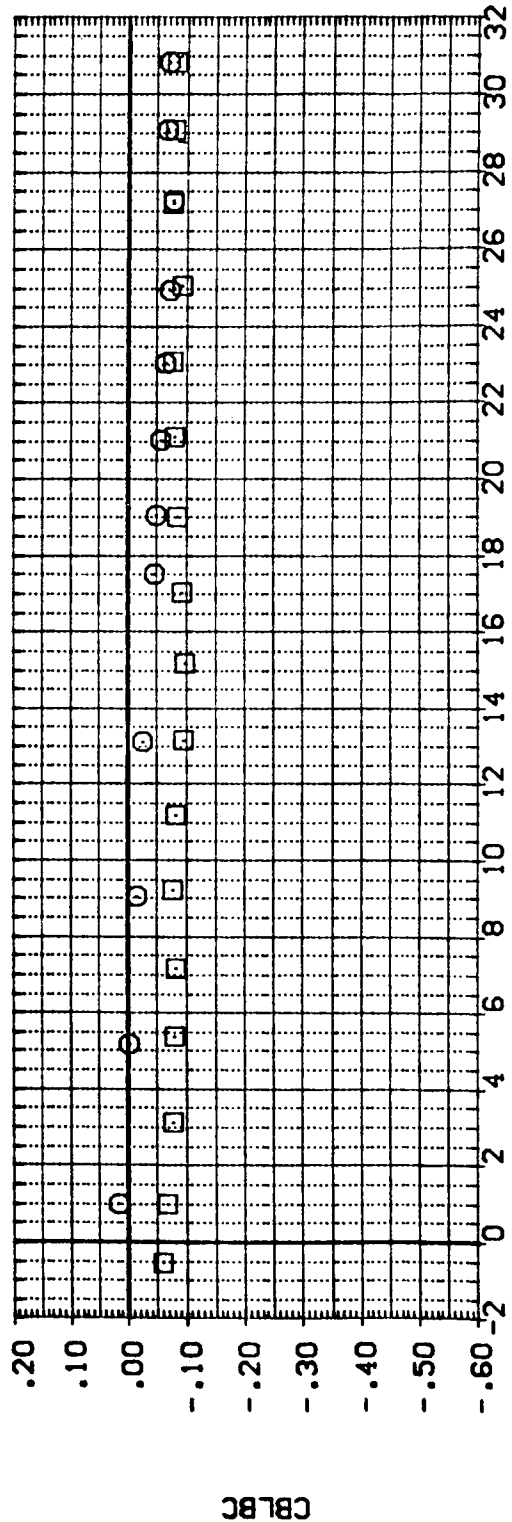
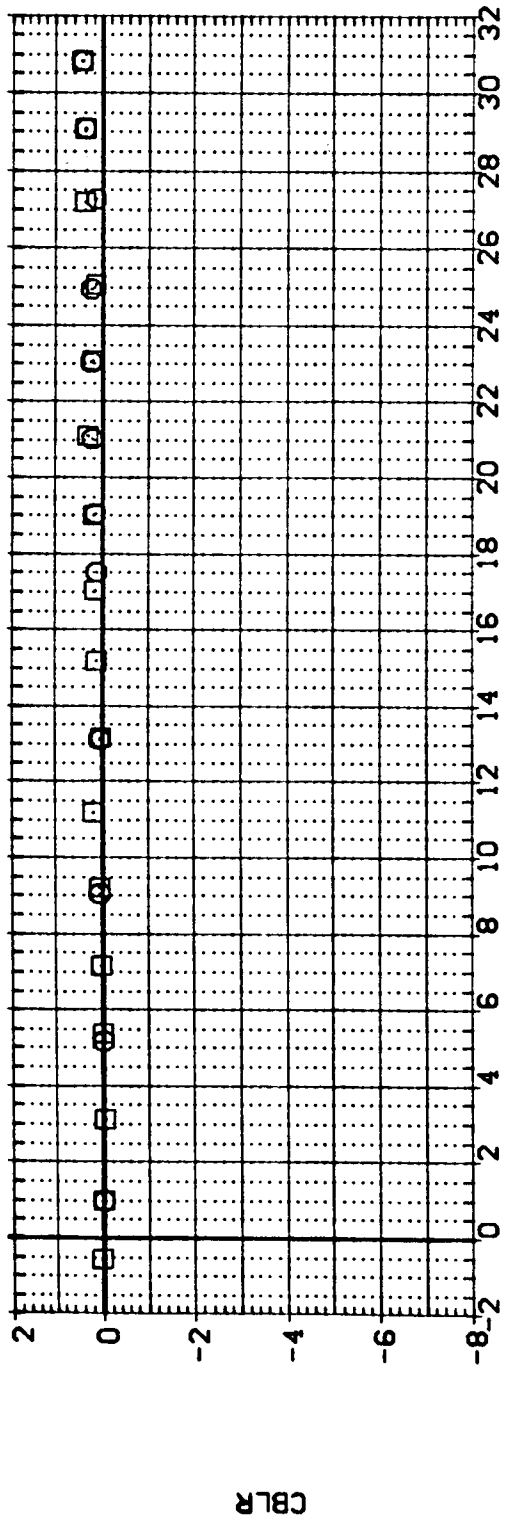


FIGURE 9. EFFECT OF VERTICAL TAIL ON DYNAMIC STABILITY PARAMETERS IN YAW

(E)MACH = 4.63

DATA SET SYMBOL CONFIGURATION DESCRIPTION CG-LOC ELEVTR RUOFLR
 (RPGRO2) LA-14: ROCKWELL CRB 0698 V/MOD. NOSE (BV M) 1.000 .000
 (RPGRO3) LA-14: ROCKWELL CRB 0698 V/MOD. NOSE (BVVM) 1.000 .000

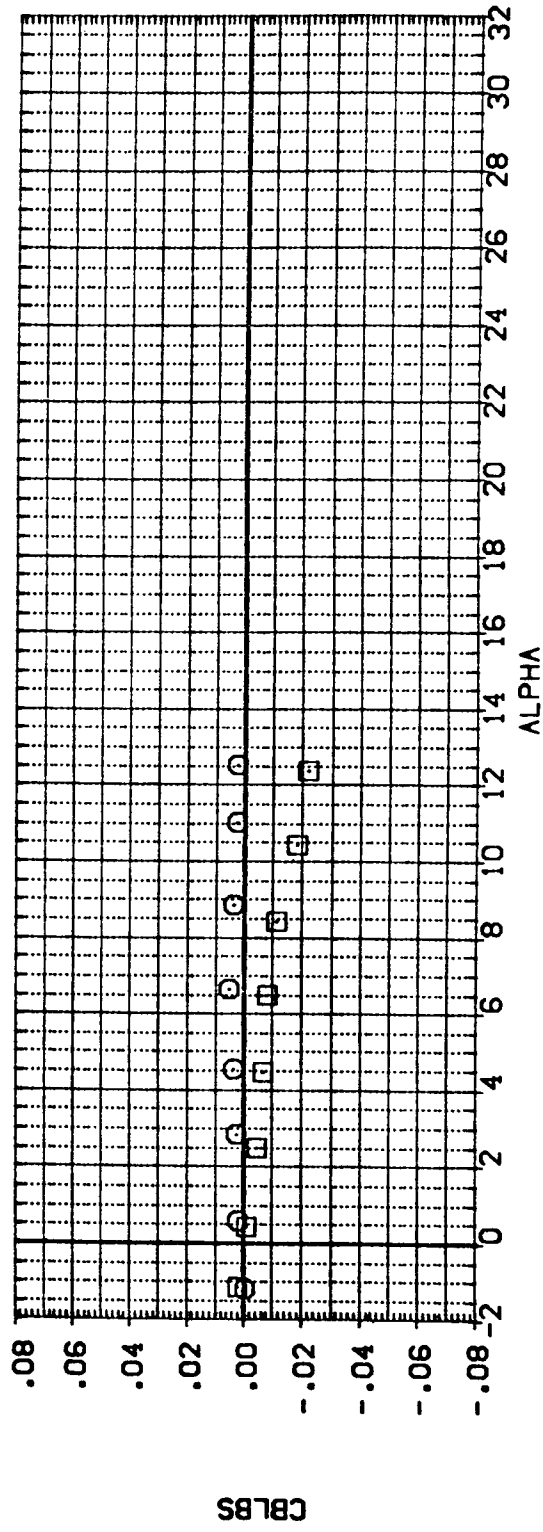
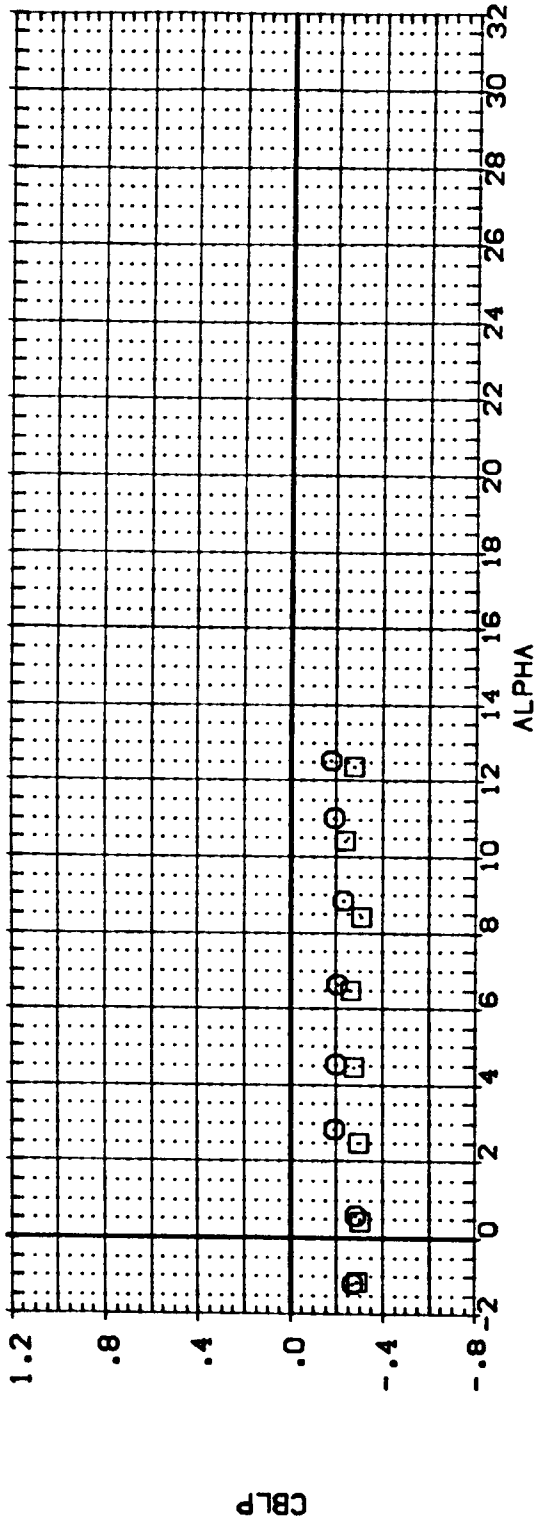


FIGURE 10. EFFECT OF VERTICAL TAIL ON DYNAMIC STABILITY PARAMETERS IN ROLL

CAJ MACH = 1.60

DATA SET SYMBOL. CONFIGURATION DESCRIPTION
 (RPG002) LA-14; ROCKWELL CRB 0938 V/MOD. NOSE (BVM H)
 (RPG003) LA-14; ROCKWELL CRB 0938 V/MOD. NOSE (BVM H)

CG-LOC 1.000
 ELEVTR .000
 RUDELR 40.000

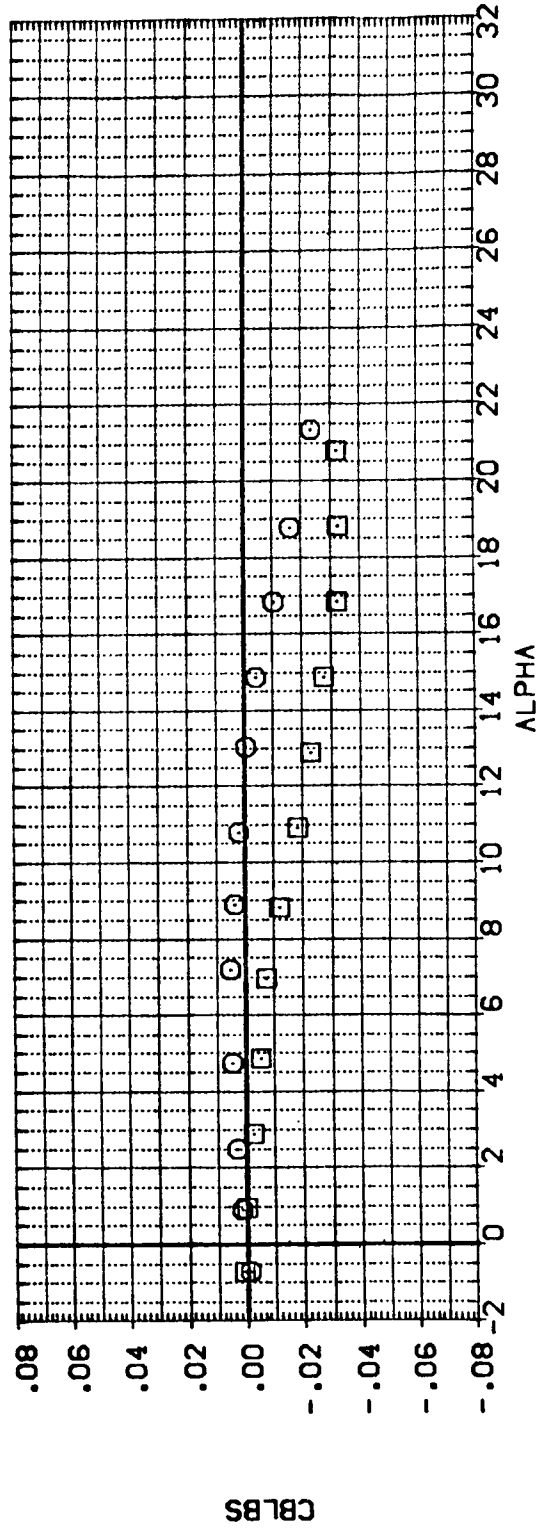
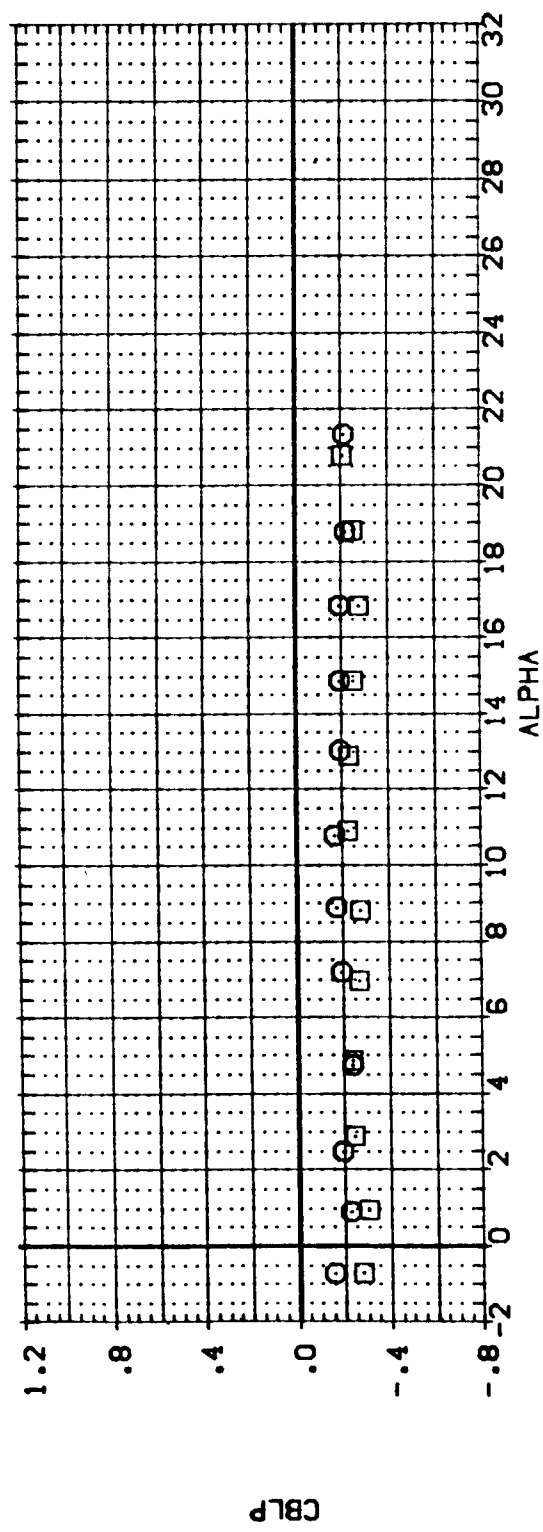


FIGURE 10. EFFECT OF VERTICAL TAIL ON DYNAMIC STABILITY PARAMETERS IN ROLL

(B)MACH = 1.90

DATA SET SYMBOL CONFIGURATION DESCRIPTION CG-LOC ELEVTR RUDFLR
 (RPGR02) LA-14; ROCKWELL CRB 0898 V/MOD. NOSE (BV M) 1.000 .000
 (RPGR03) LA-14; ROCKWELL CRB 0898 V/MOD. NOSE (BVMH) 1.000 .000

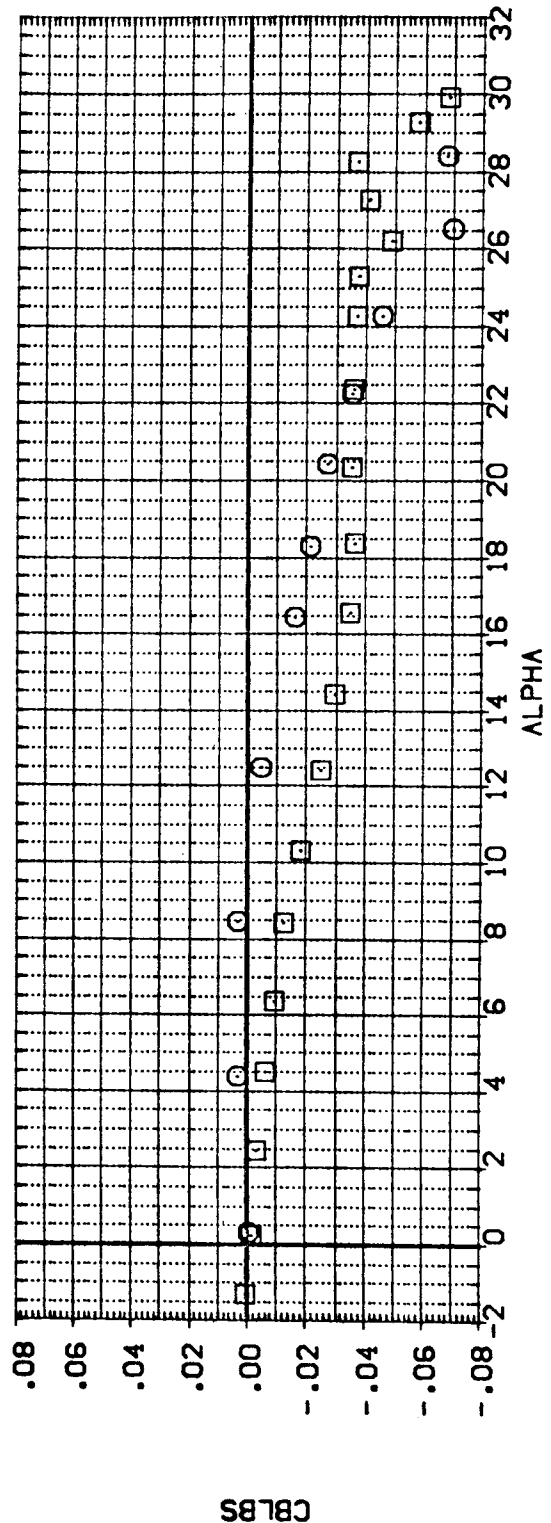
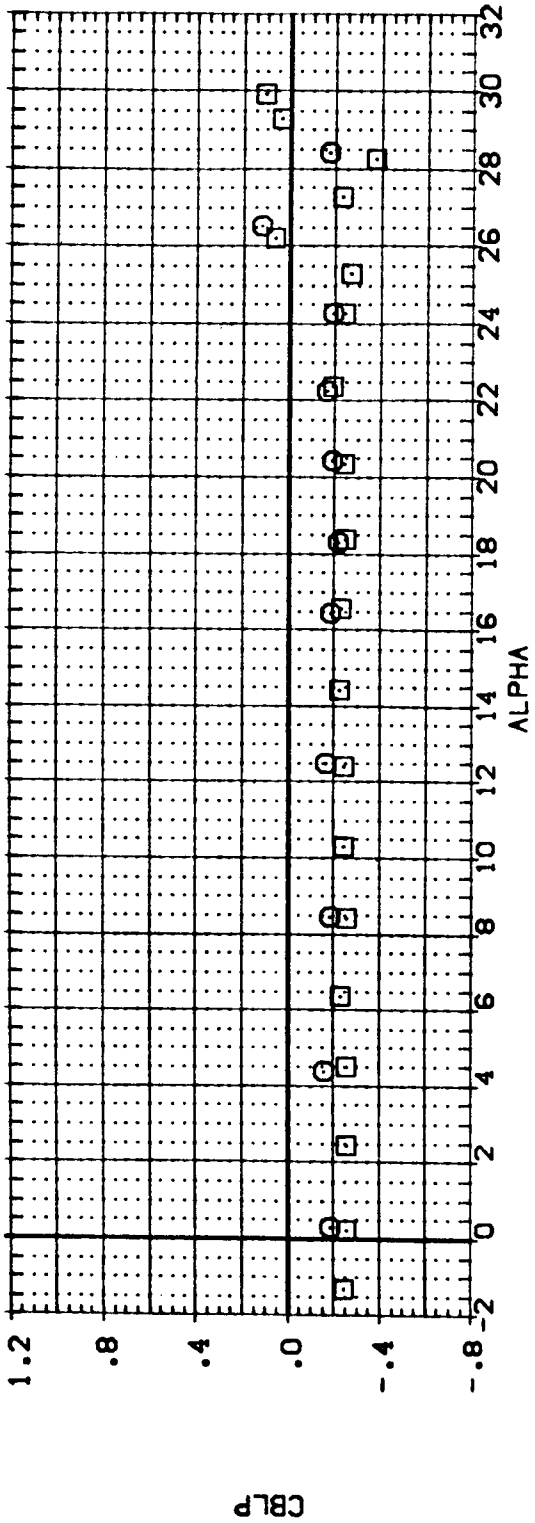


FIGURE 10. EFFECT OF VERTICAL TAIL ON DYNAMIC STABILITY PARAMETERS IN ROLL

(C)MACH = 2.36

CG-LOC ELEVTR RUOFLR
 1.000 .000
 1.000 .000 40.000

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (RFGRO2) () LA-14; ROCKWELL CR8 CR88 V/MOD; NOSE (BV M)
 (RFGRO3) () LA-14; ROCKWELL CR8 CR88 V/MOD; NOSE (BVAH)

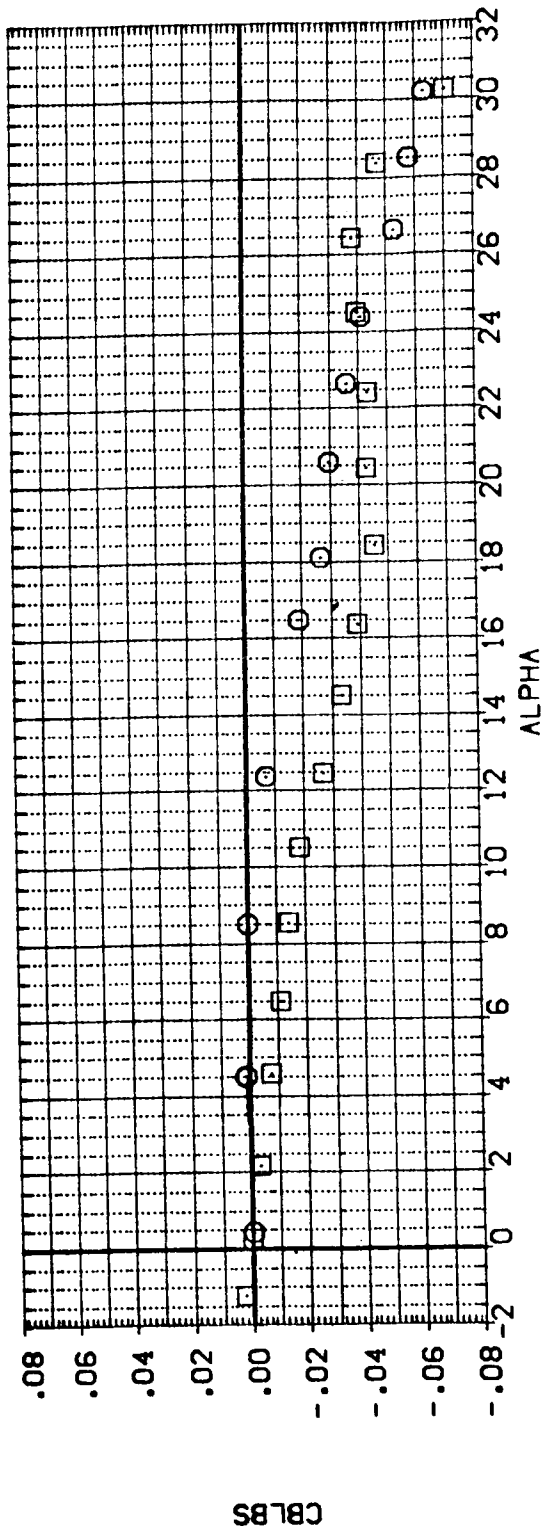
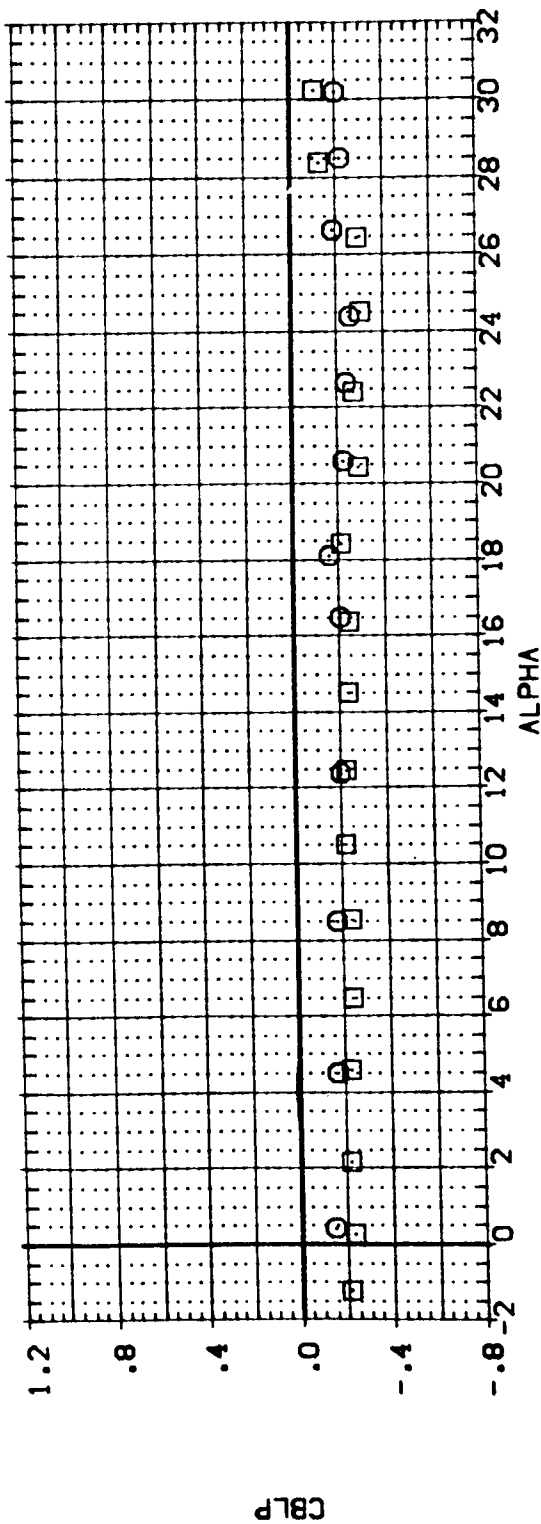


FIGURE 10. EFFECT OF VERTICAL TAIL ON DYNAMIC STABILITY PARAMETERS IN ROLL

()MACH = 2.86

DATA SET SYMBOL CONFIGURATION DESCRIPTION CG-LOC ELEVTR RUOFLR
 (RPGRO2) LA-14, ROCKWELL ORB 0898 V/MOD, NOSE (BV M) 1.000 .000 .000
 (RPGRO3) LA-14, ROCKWELL ORB 0898 V/MOD, NOSE (BVM) 1.000 .000 40.000

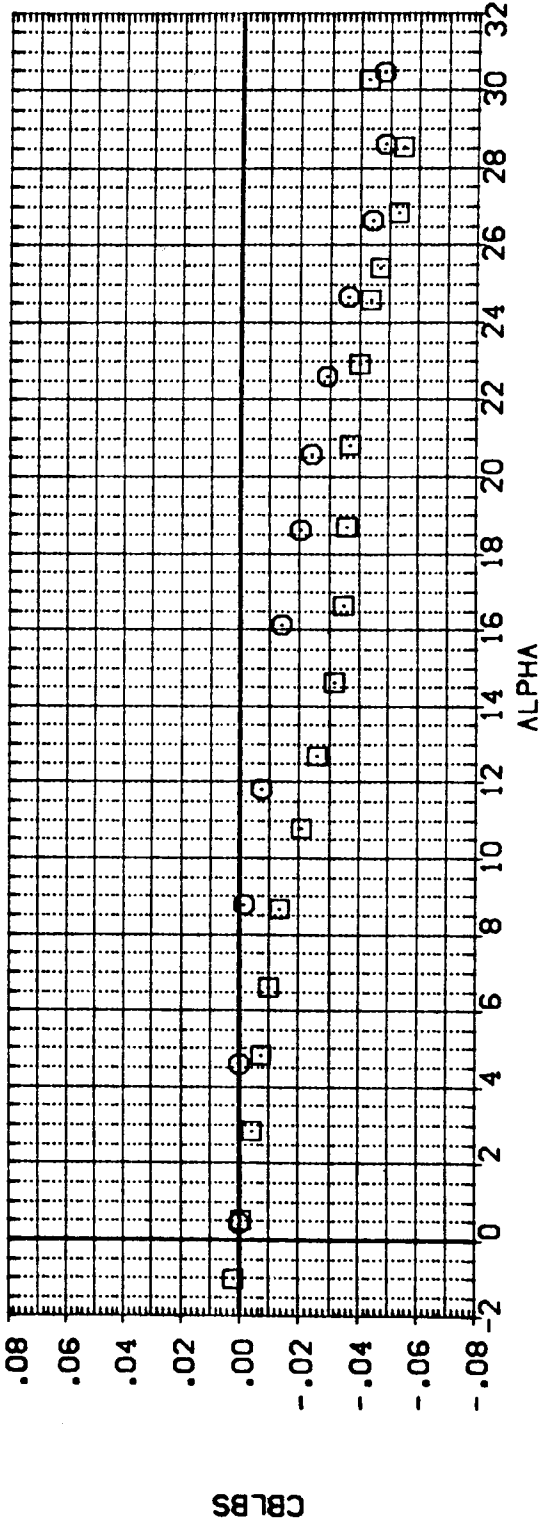
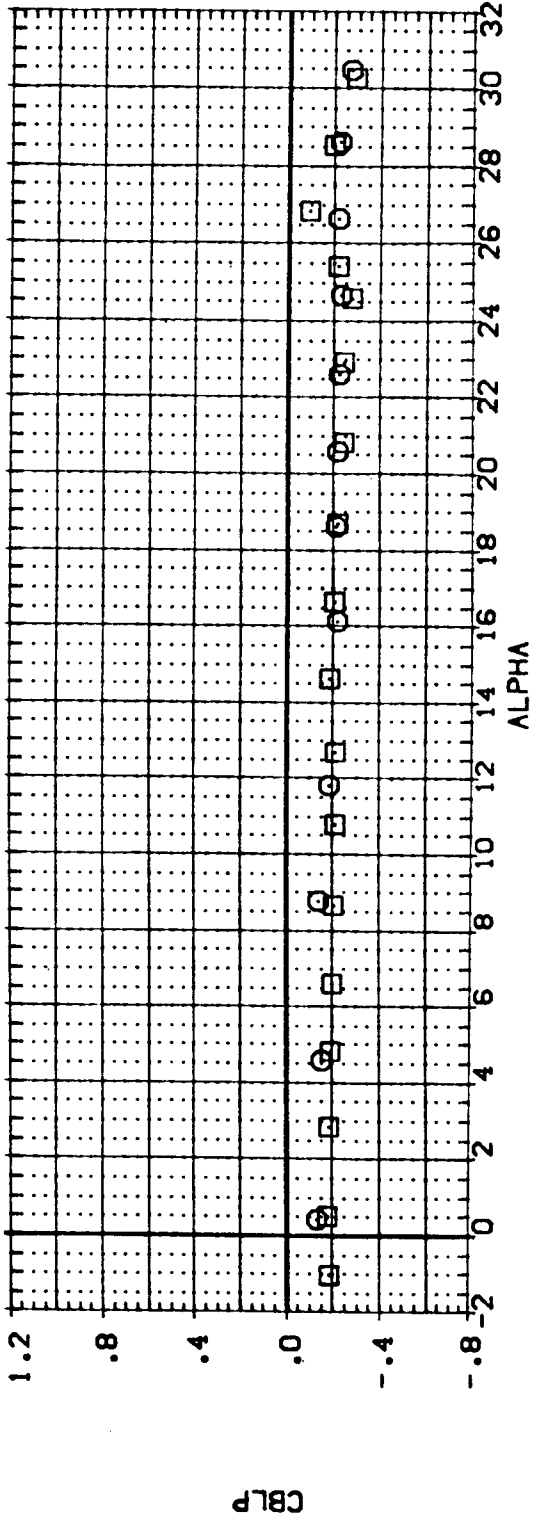


FIGURE 10. EFFECT OF VERTICAL TAIL ON DYNAMIC STABILITY PARAMETERS IN ROLL

(E)MACH = 3.96

DATA SET SYMBOL CONFIGURATION DESCRIPTION CG-LOC ELEVTR RUOFLR
 (RPG02) LA-14; ROCKWELL ORB 0898 V/100; NOSE (BVM) 1.000 .000
 (RPG03) LA-14; ROCKWELL ORB 0898 V/100; NOSE (BVM) 1.000 .000

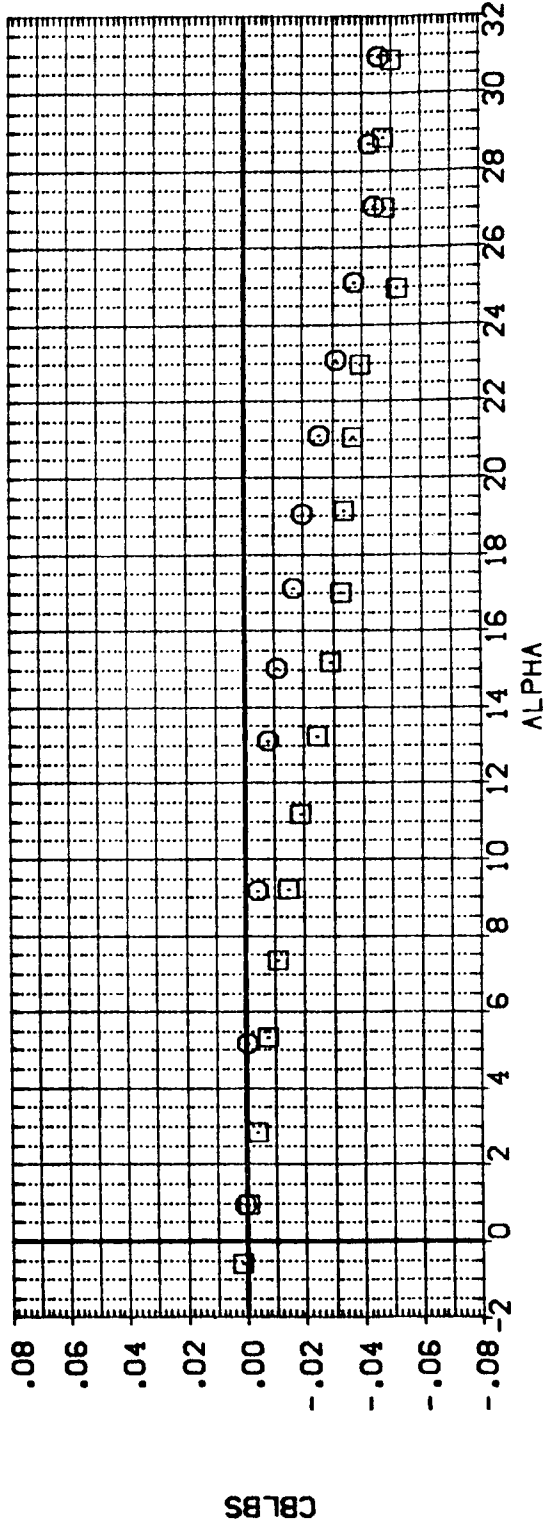
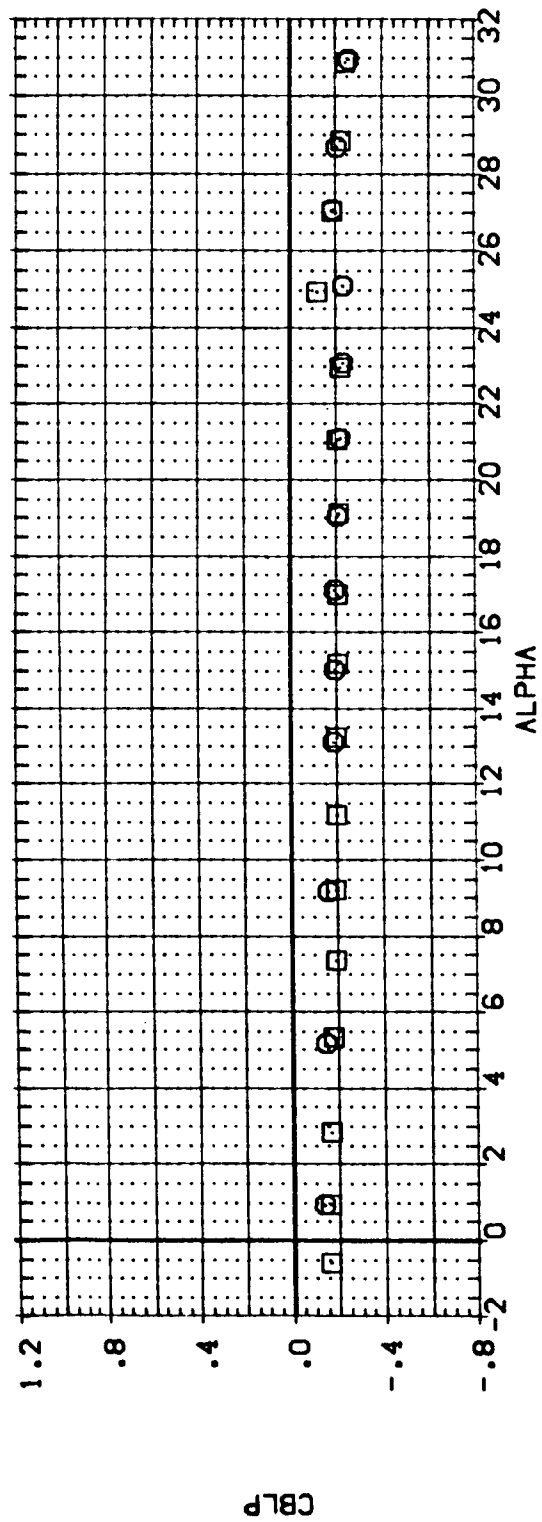


FIGURE 10. EFFECT OF VERTICAL TAIL ON DYNAMIC STABILITY PARAMETERS IN ROLL

(F)MACH = 4.63

DATA SET SYMBOL CONFIGURATION DESCRIPTION CG-LDC ELEVTR RUDELFR
 (RPGR02) □ LA-14: ROCKWELL DRB 0898 V/MOD. NOSE (BV M) 1.000 .000
 (RPGR03) ○ LA-14: ROCKWELL DRB 0898 V/MOD. NOSE (BV M) 1.000 40.000

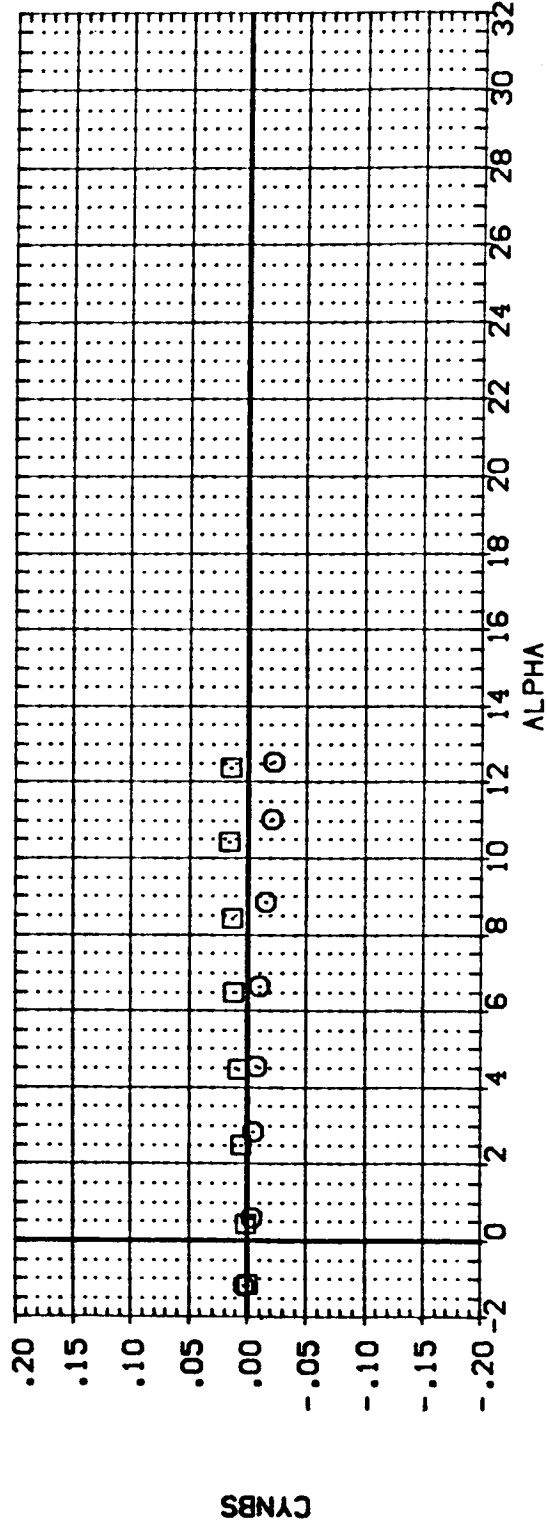
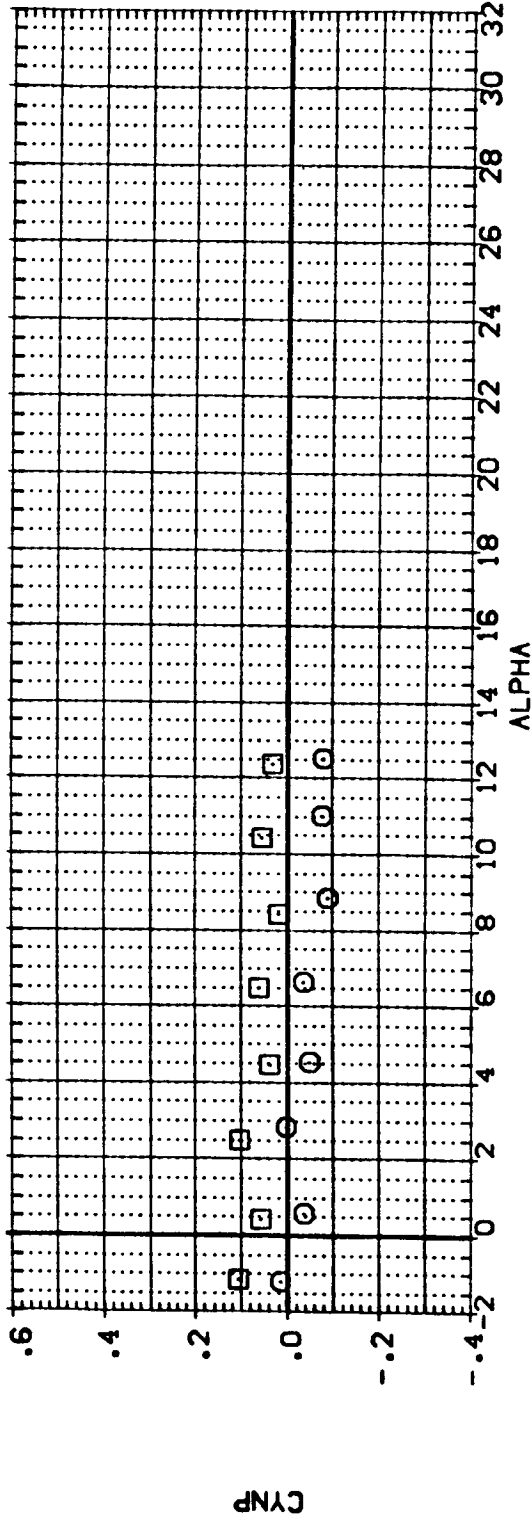


FIGURE 10. EFFECT OF VERTICAL TAIL ON DYNAMIC STABILITY PARAMETERS IN ROLL

CAJ MACH = 1.60

DATA SET SYMBOL: (RPG02) (RPG03) CG-LOC ELEVTR RUOFLR
 CONFIGURATION DESCRIPTION: LA-14; ROCKWELL ORB 0898 V/100. NOSE (BV M) 1.000 .000
 LA-14; ROCKWELL ORB 0898 V/100. NOSE (BVVM) 1.000 .000 40.000

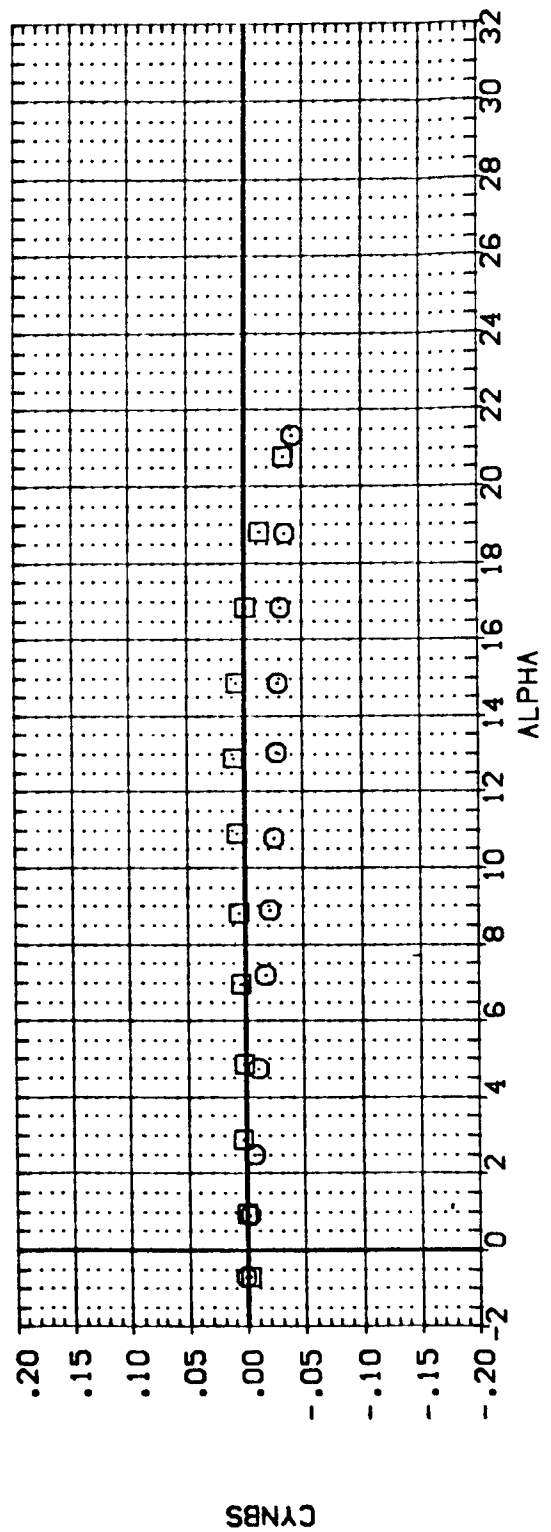
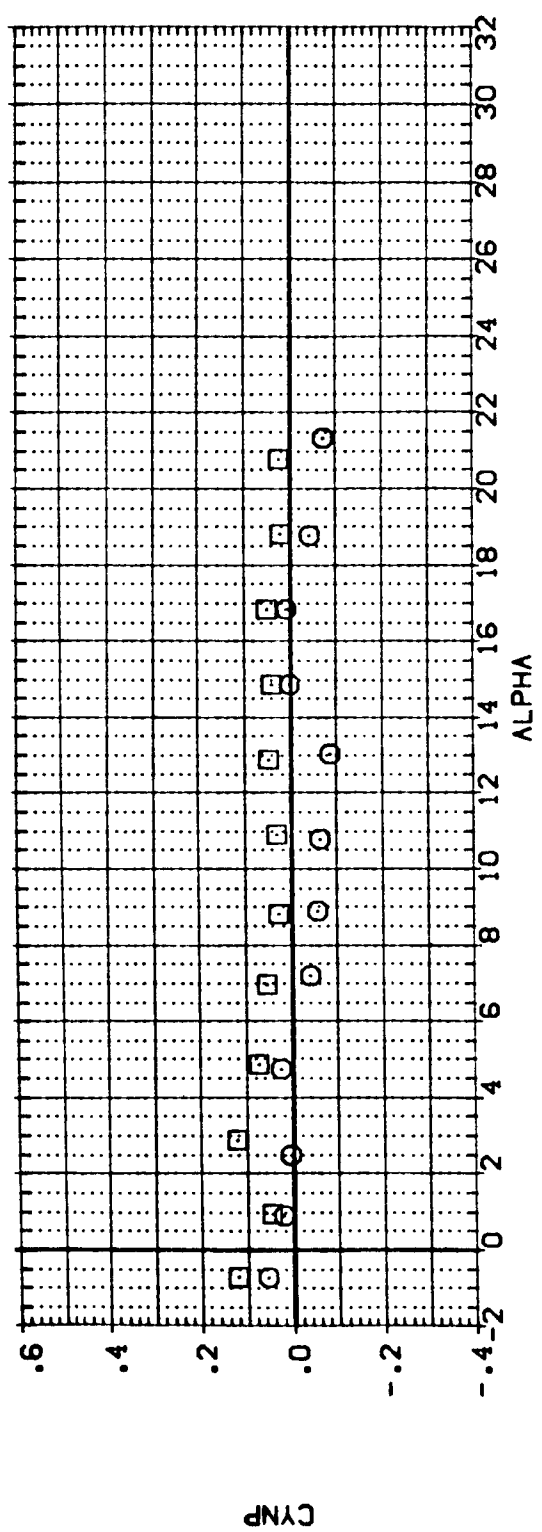


FIGURE 10. EFFECT OF VERTICAL TAIL ON DYNAMIC STABILITY PARAMETERS IN ROLL
 (B)MACH = 1.90

DATA SET SYMBOL CONFIGURATION DESCRIPTION CG-LOC ELEVTR RUDEFLR
 { RFGRO2 } LA-14, ROCKWELL CR8 0898 V/MOD, NOSE (BV M) 1.000 .000 .000
 { RFGRO3 } LA-14, ROCKWELL CR8 0898 V/MOD, NOSE (BVVH) 1.000 .000 40.000

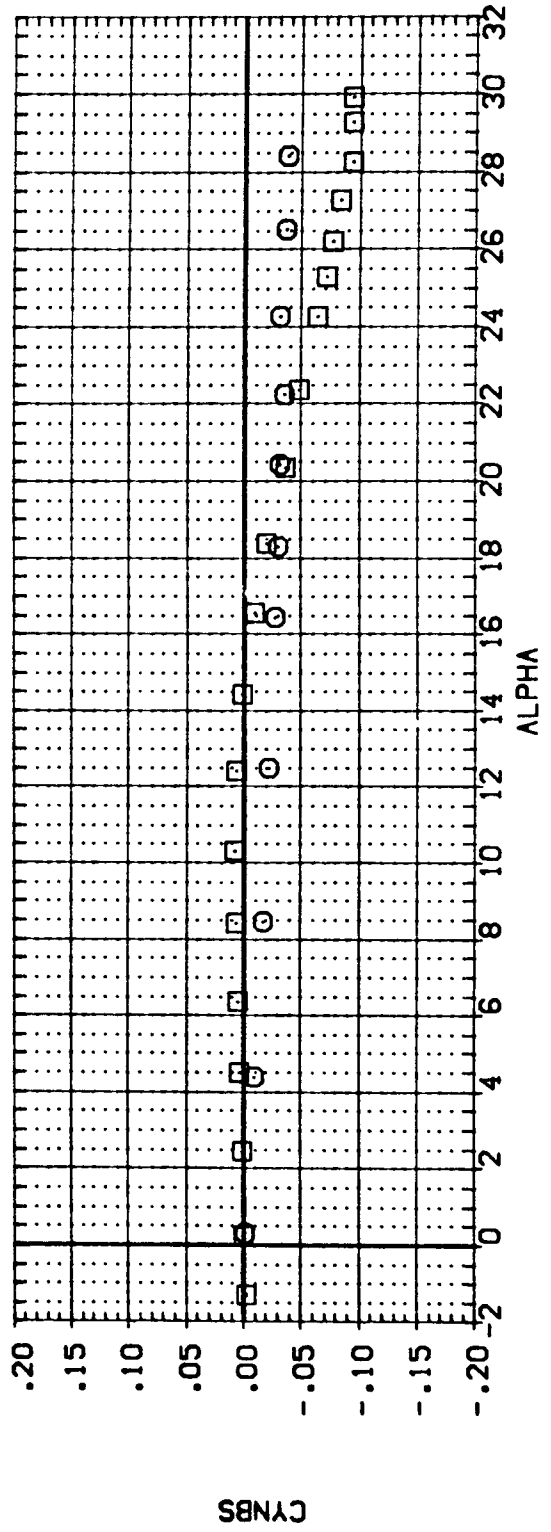
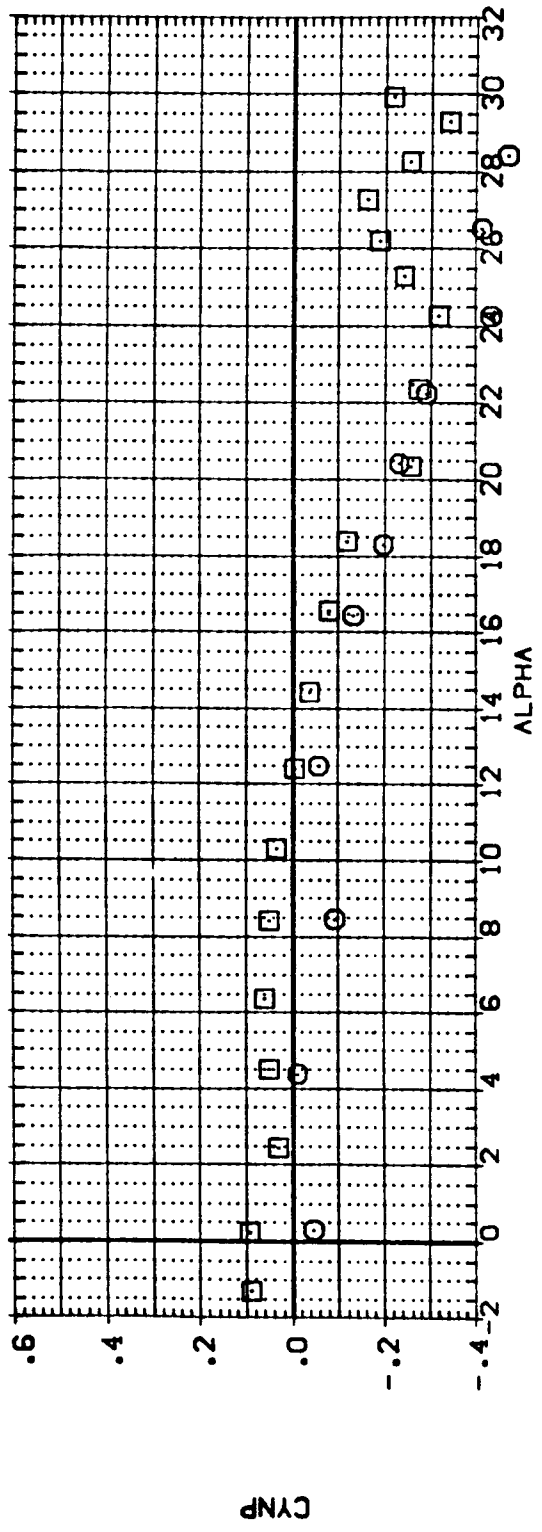


FIGURE 10. EFFECT OF VERTICAL TAIL ON DYNAMIC STABILITY PARAMETERS IN ROLL

(CJMACH = 2.36

DATA SET SYMBOL: (RPGR02) (RPGR03)
 CONFIGURATION DESCRIPTION: LA-14; ROCKWELL CRB 0688 1/100; NOSE (BW M) NOSE (BWVM)
 CG-LOC: 1.000 1.000
 ELEVTR: .000 .000
 RUDELR: 40.000

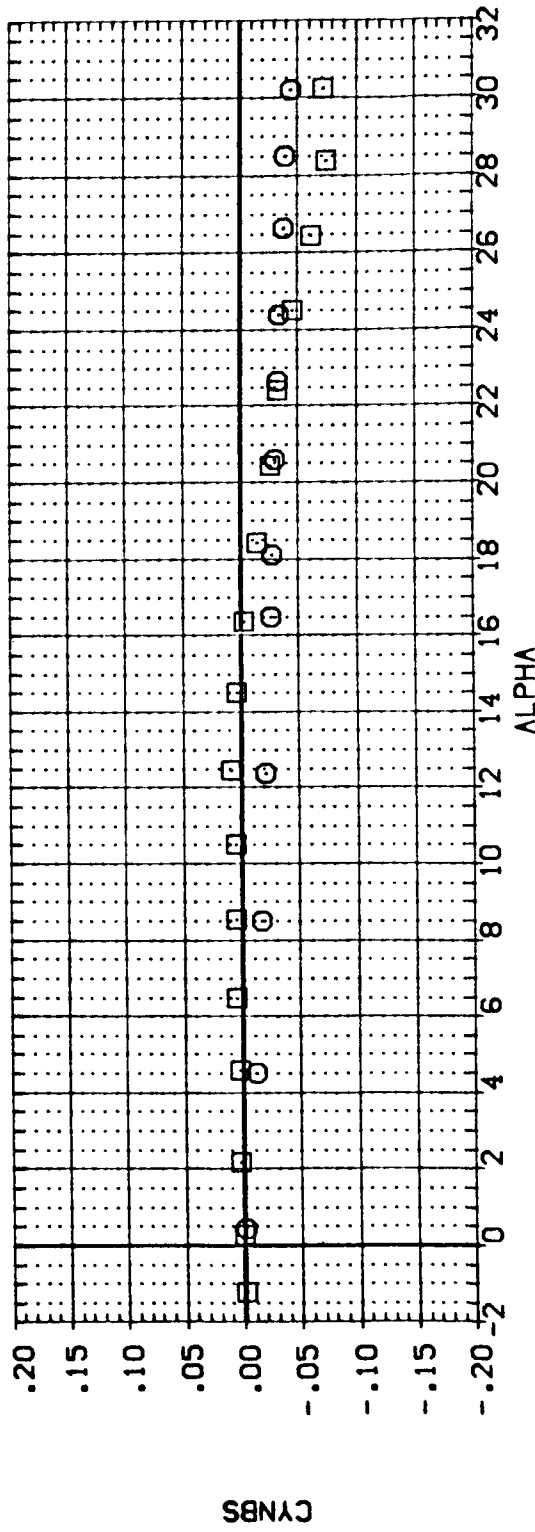
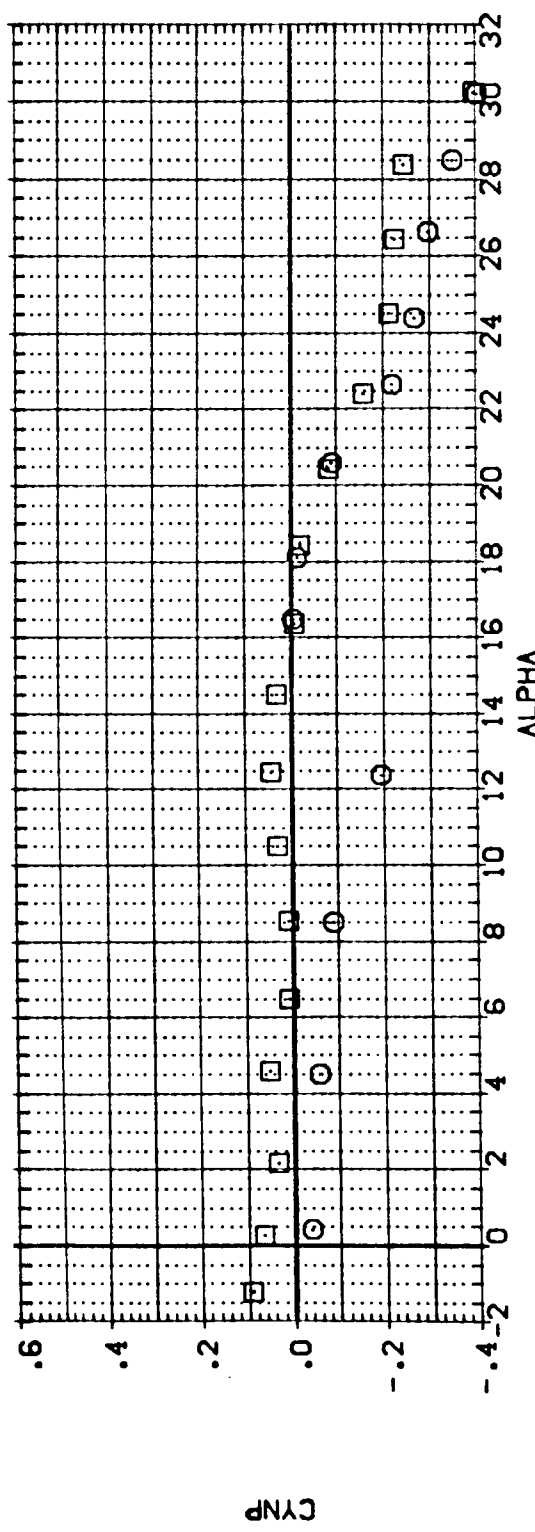


FIGURE 10. EFFECT OF VERTICAL TAIL ON DYNAMIC STABILITY PARAMETERS IN ROLL

(D)MACH = 2.86

DATA SET SYMBOL: (RPG02) (RPG03) □

CONFIGURATION DESCRIPTION:
 LA-14; ROCKWELL ORB 0898 V/MOD; NOSE (BV M)
 LA-14; ROCKWELL ORB 0898 V/MOD; NOSE (BVVM)

CG-LOC: 1.000 1.000
 ELEVTR: .000 .000
 RUOFLR: 40.000

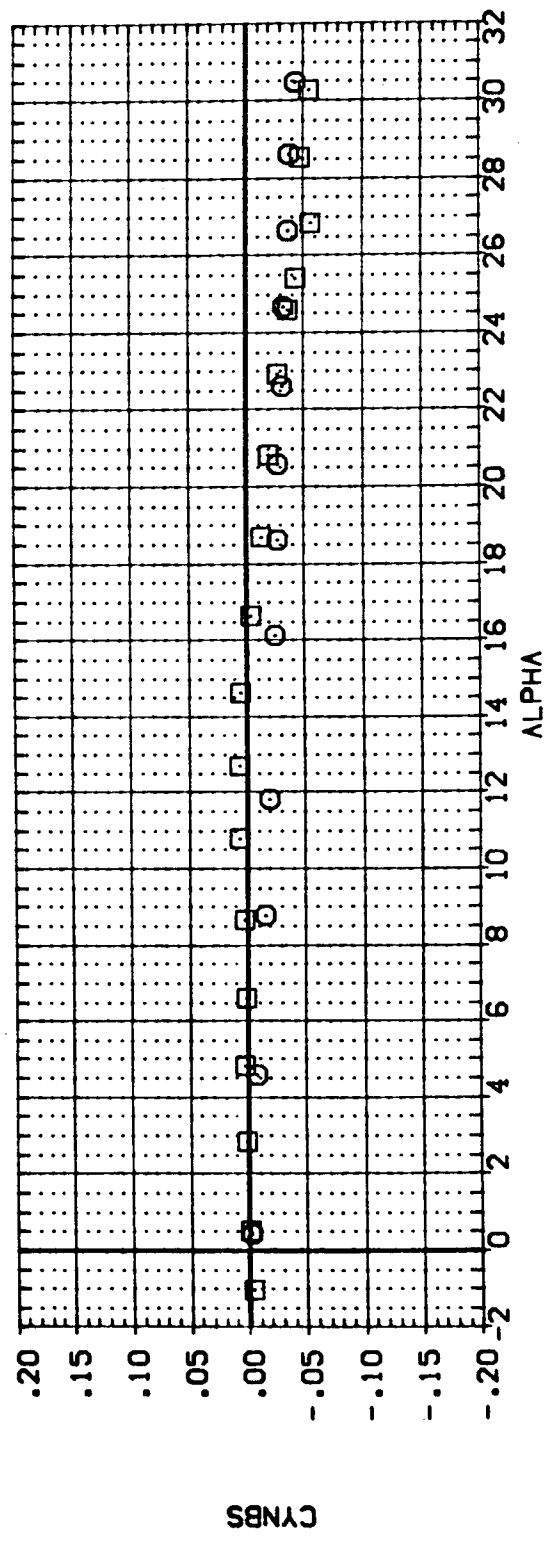
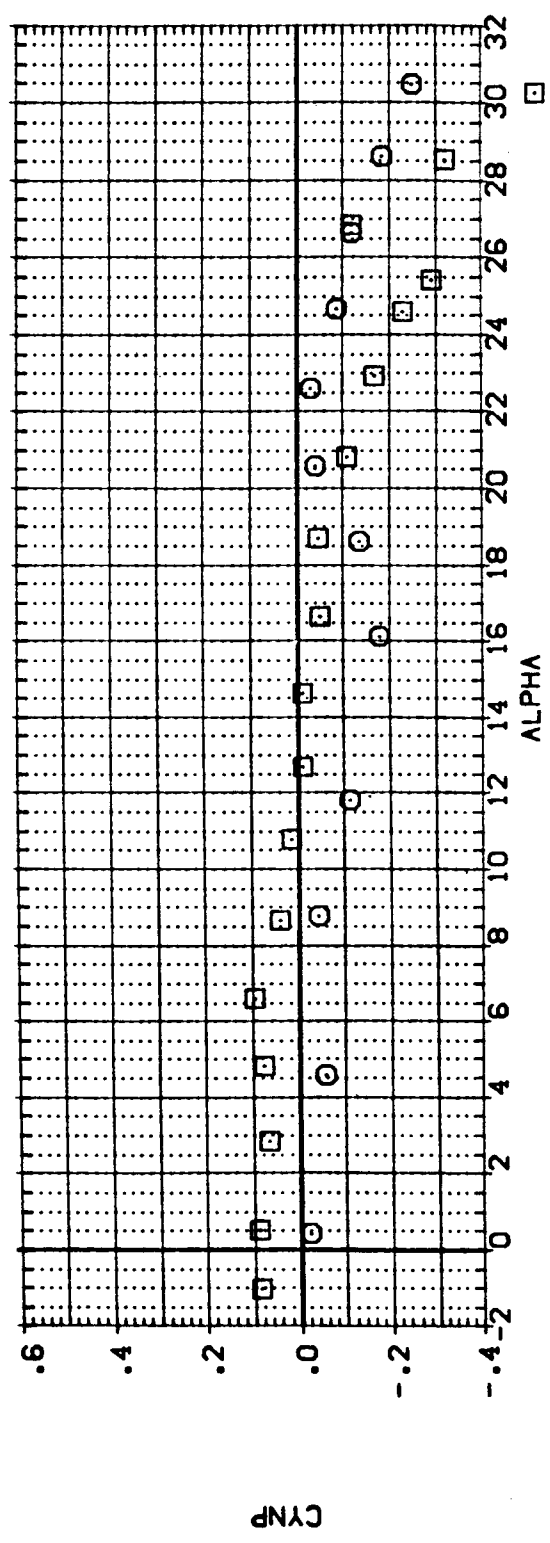


FIGURE 10. EFFECT OF VERTICAL TAIL ON DYNAMIC STABILITY PARAMETERS IN ROLL

(E)MACH = 3.96

CG-LOC 1.000
 ELEVTR .000
 RUOFLR 40.000

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (RPGRO2) LA-14, ROCKWELL ORB 0698 V/MOD, NOSE (BV M)
 (RPGRO3) LA-14, ROCKWELL ORB 0698 V/MOD, NOSE (BV M)

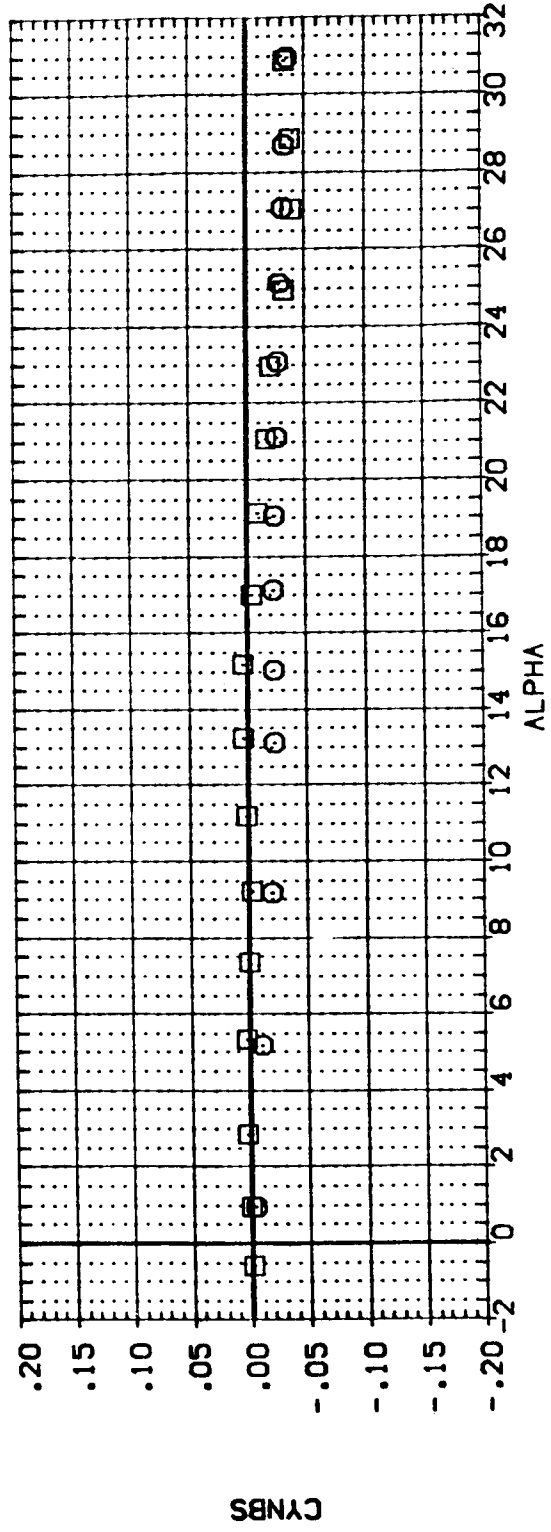
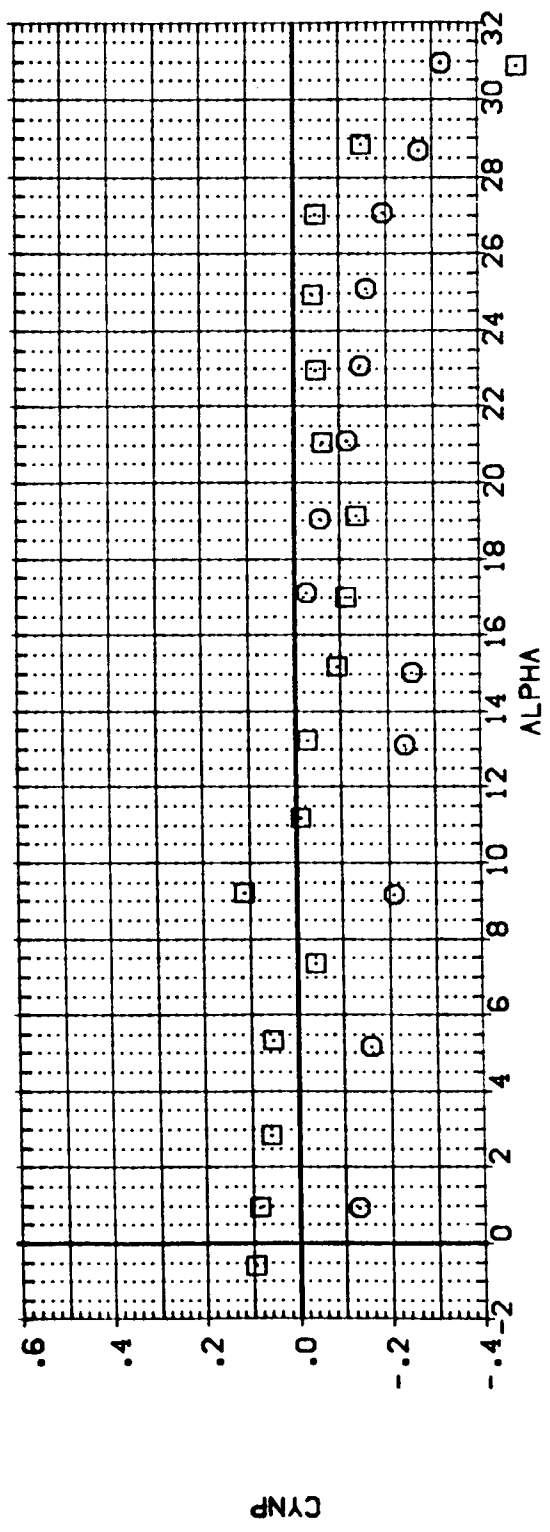


FIGURE 10. EFFECT OF VERTICAL TAIL ON DYNAMIC STABILITY PARAMETERS IN ROLL

(F)MACH = 4.63

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 { RFGP05 } LA-14, ROCKWELL DRB 0898 W/MOD. NOSE (BIVVNF)
 { RFGP07 } DATA NOT AVAILABLE

CG-LOC ELEVTR BOFLAP RUOFLR
 2.000 .000 .000 40.000
 2.000 5.000 13.000 40.000

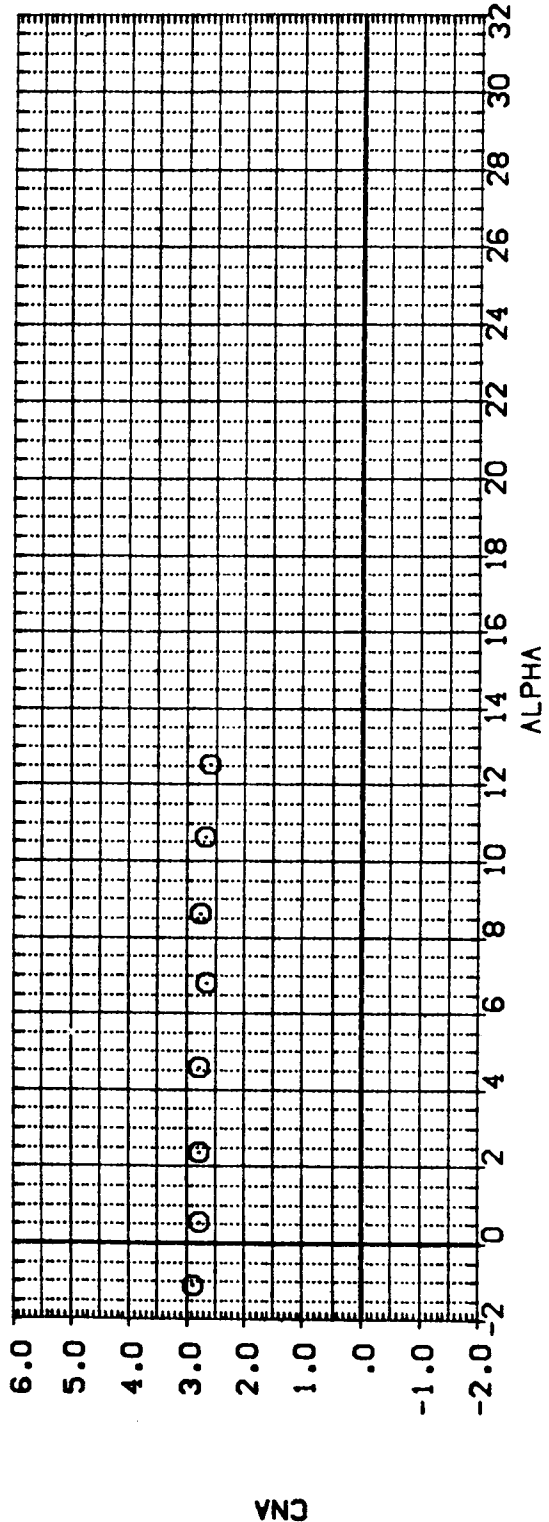
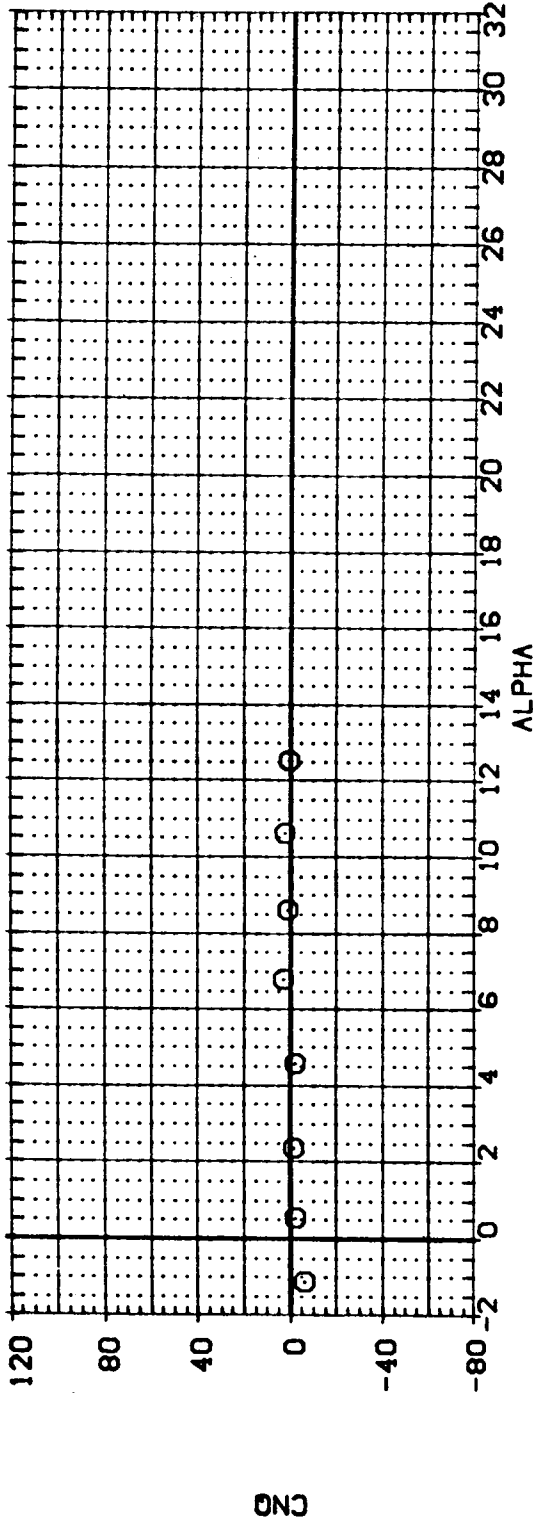


FIGURE 11. EFFECT OF ELEVONS AND BODY FLAP ON DYN. STAB. PARAMETERS IN PITCH

CA/MACH = 1.60

DATA SET SYMBOL: (RPGP06) (RPGP07) CONFIGURATION DESCRIPTION: LA-14, ROCKWELL 0R8 0668 V/MOD, NOSE (BVMVF) CG-LOC: 2.000 2.000 ELEVTR: .000 5.000 BDFLAP: .000 13.000 RUOFLR: 40.000 40.000

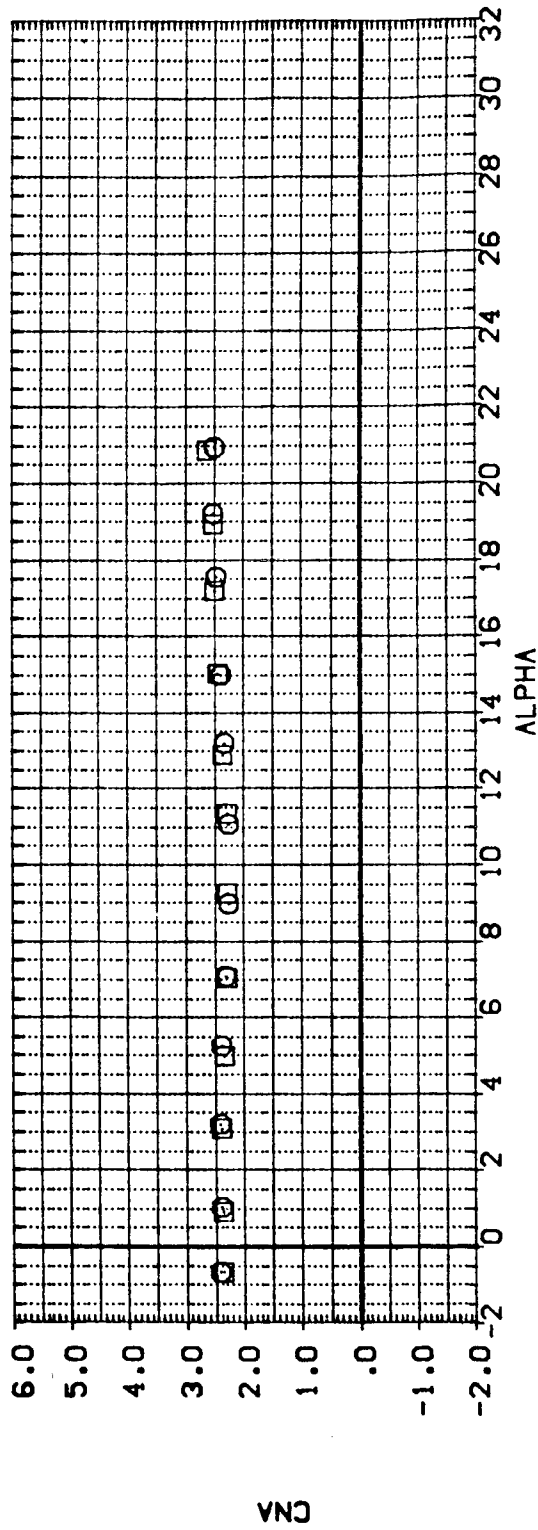
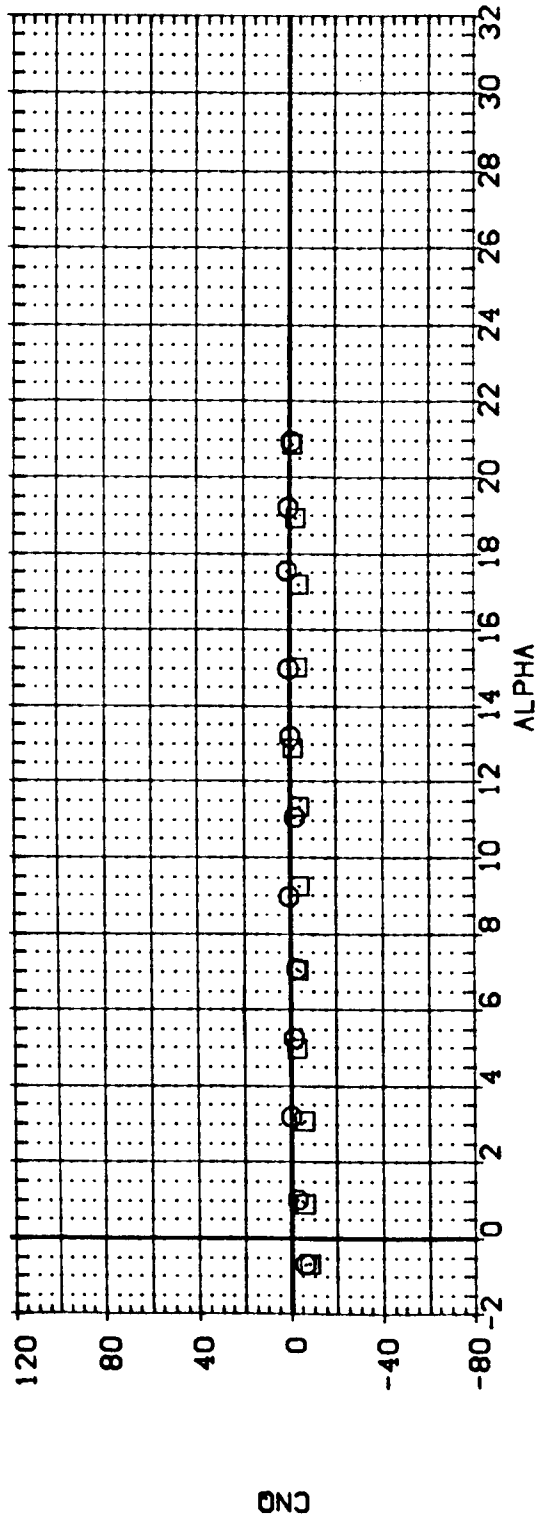


FIGURE 11. EFFECT OF ELEVONS AND BODY FLAP ON DYN. STAB. PARAMETERS IN PITCH

(B)MACH = 1.90

DATA SET SYMBOL CONFIGURATION DESCRIPTION CG-LOC ELEVTR BOFLAP RUOFLR
 (RPG05) LA-14, ROCKWELL DRB 0698 V/MOD, NOSE (BVMVF) 2.000 .000 .000 40.000
 (RPG07) LA-14, ROCKWELL DRB 0698 V/MOD, NOSE (BVMVF) 2.000 5.000 13.000 40.000

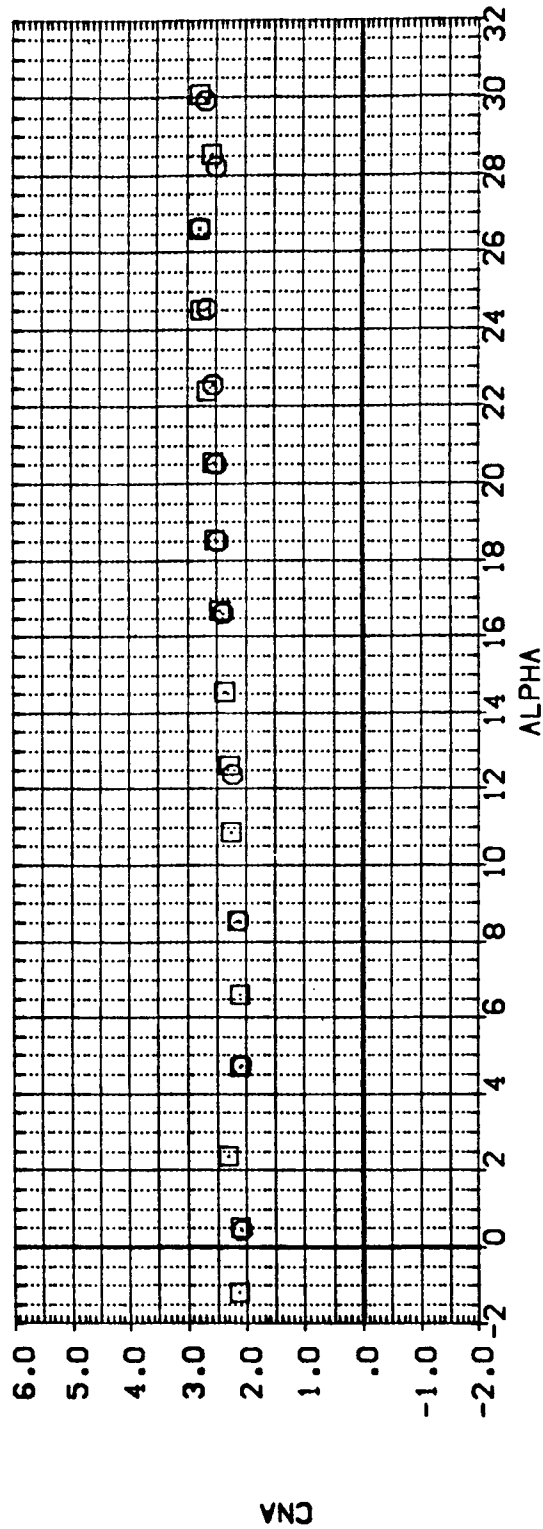
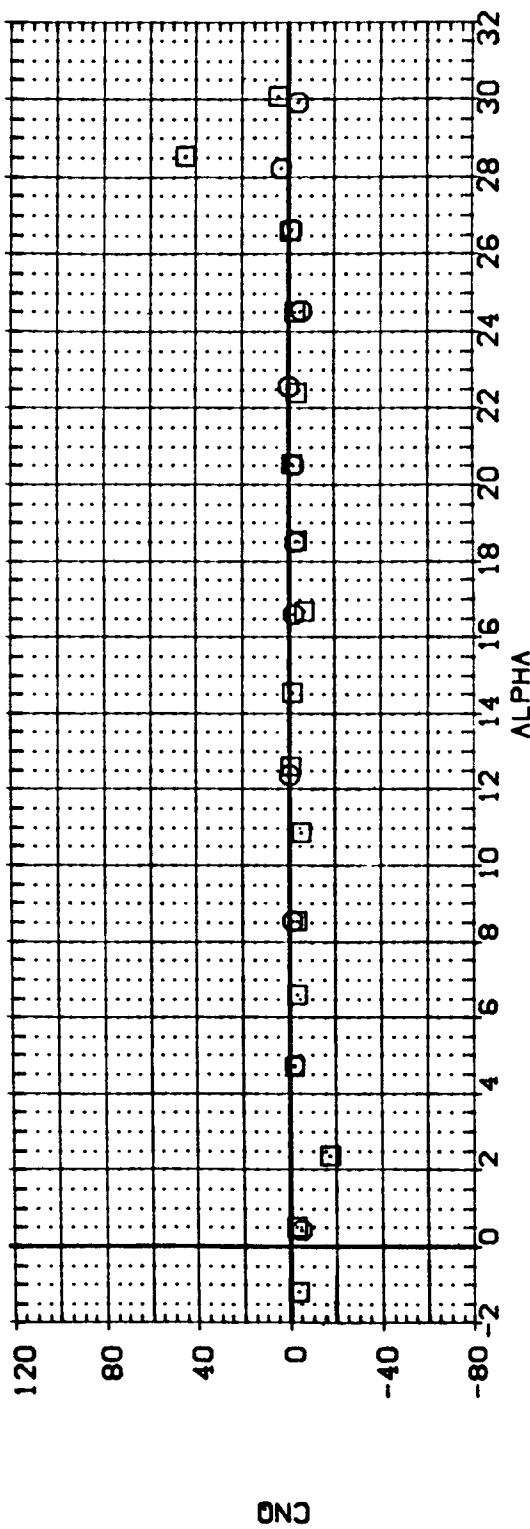


FIGURE 11. EFFECT OF ELEVONS AND BODY FLAP ON DYN. STAB. PARAMETERS IN PITCH

(C)MACH = 2.36

DATA SET SYMBOL: [] CONFIGURATION DESCRIPTION: LA-14; ROCKWELL CRB 0858 V/100. NOSE (BVMF) 2.000 CG-LOC 2.000 ELEVTR 5.000 BOFLAP .000 RUOFLR 40.000
 [] LA-14; ROCKWELL CRB 0858 V/100. NOSE (BVMF) 2.000 CG-LOC 2.000 ELEVTR 5.000 BOFLAP .000 RUOFLR 40.000

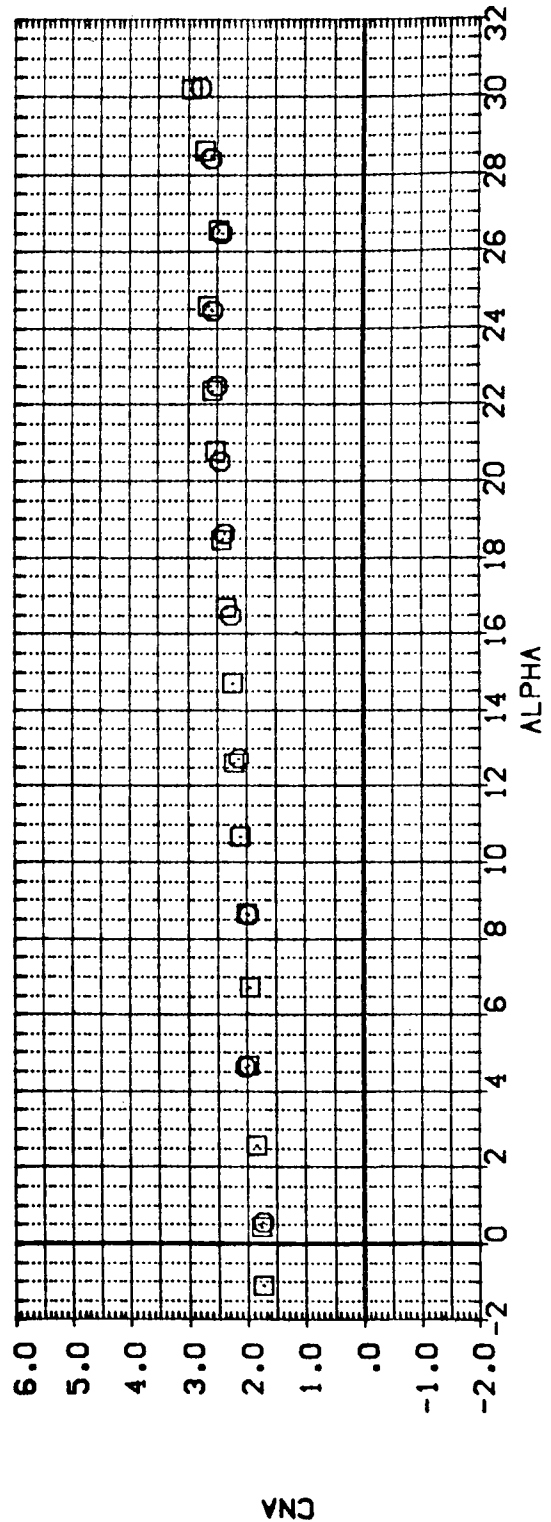
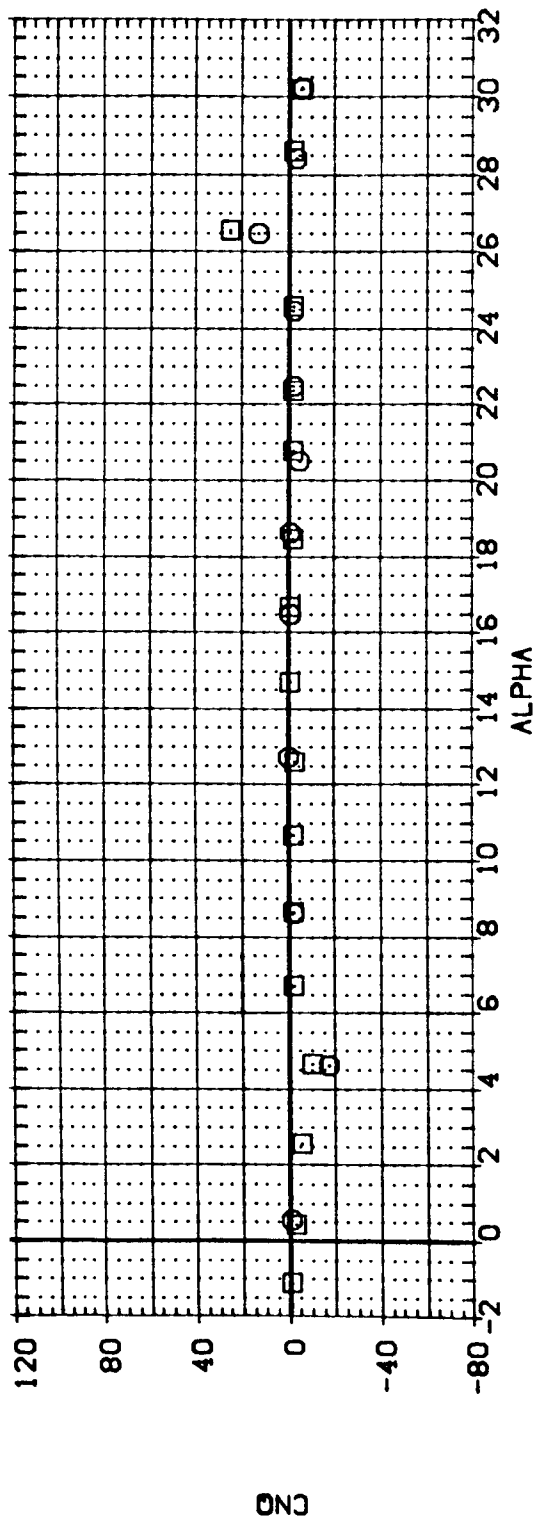


FIGURE 11. EFFECT OF ELEVONS AND BODY FLAP ON DYN. STAB. PARAMETERS IN PITCH

(O)MACH = 2.86

DATA SET SYMBOL CONFIGURATION DESCRIPTION CG-LOC ELEVTR BDFLAP RUJFLR
 (RPG06) LA-14; ROCKWELL CRB 0698 V/MOD; NOSE (BVMVF) 2.000 .000 .000 40.000
 (RPG07) LA-14; ROCKWELL CRB 0698 V/MOD; NOSE (BVMVF) 2.000 5.000 13.000 40.000

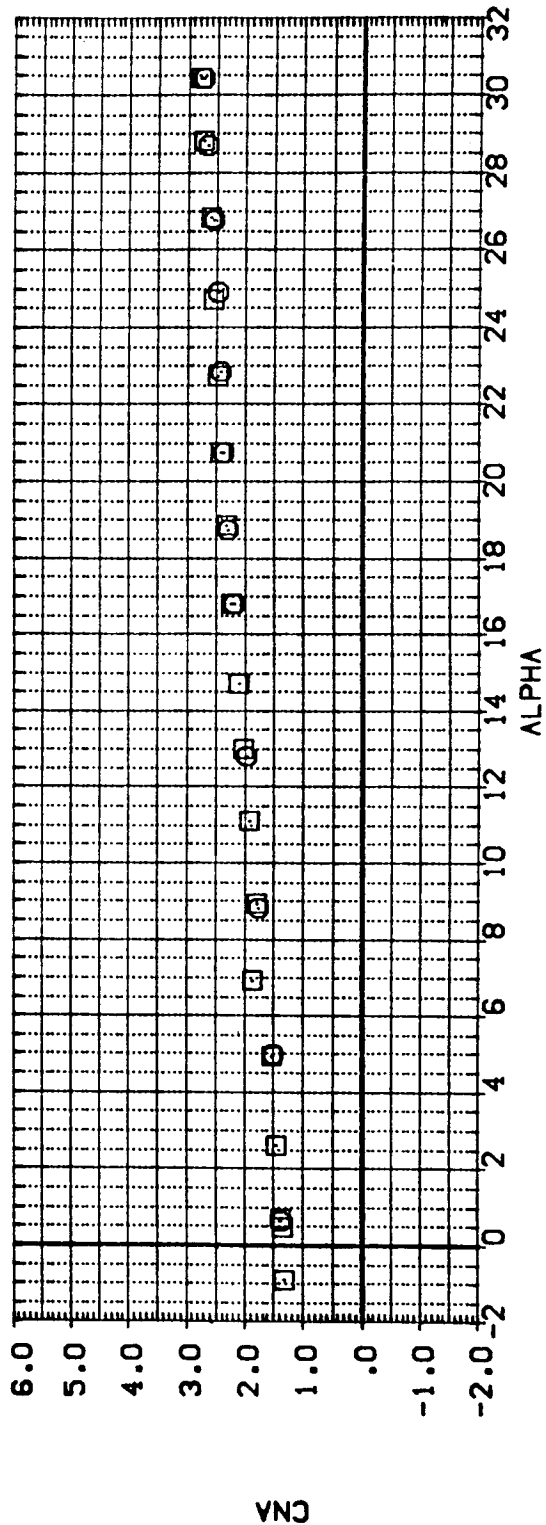
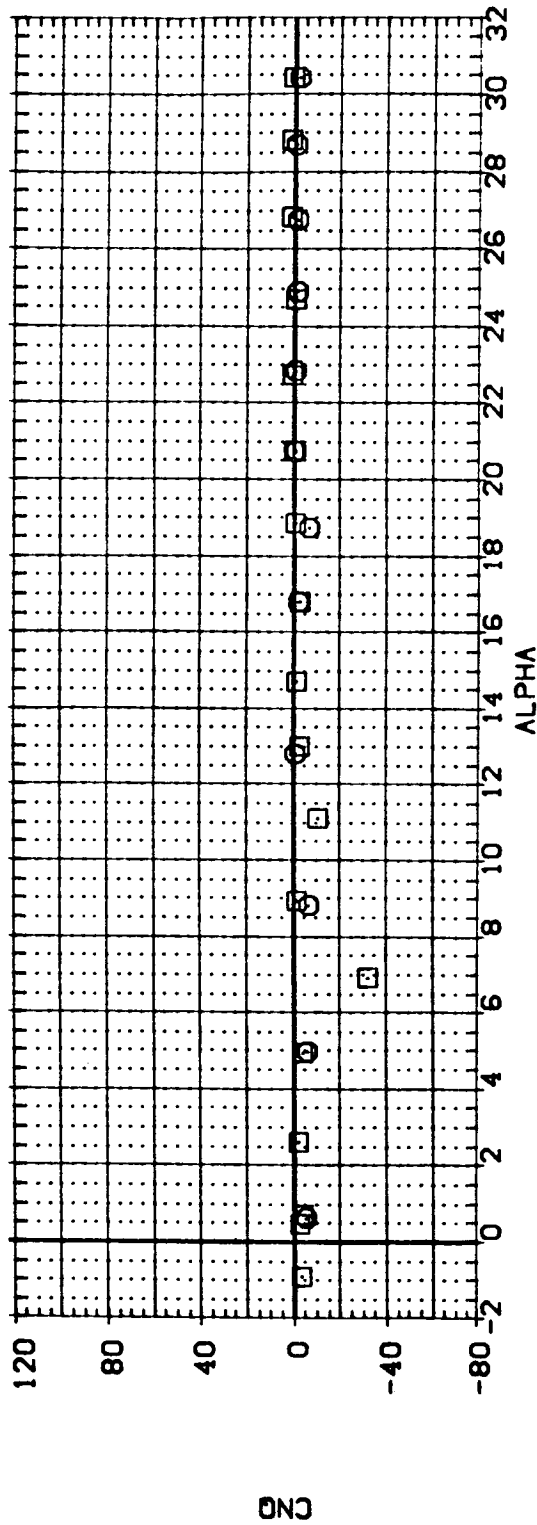


FIGURE 11. EFFECT OF ELEVONS AND BODY FLAP ON DYN. STAB. PARAMETERS IN PITCH

(E)MACH = 3.96

DATA SET SYMBOL (RFGP07) CONFIGURATION DESCRIPTION (RFGP07) LA-14: ROCKWELL CR8 0898 V/MOD. NOSE (BVMVF) LA-14: ROCKWELL CR8 0898 V/MOD. NOSE (BVMVF)

CG-LOC 2.000
ELEVTR 5.000
BDFLAP 13.000
RUDFLR 40.000

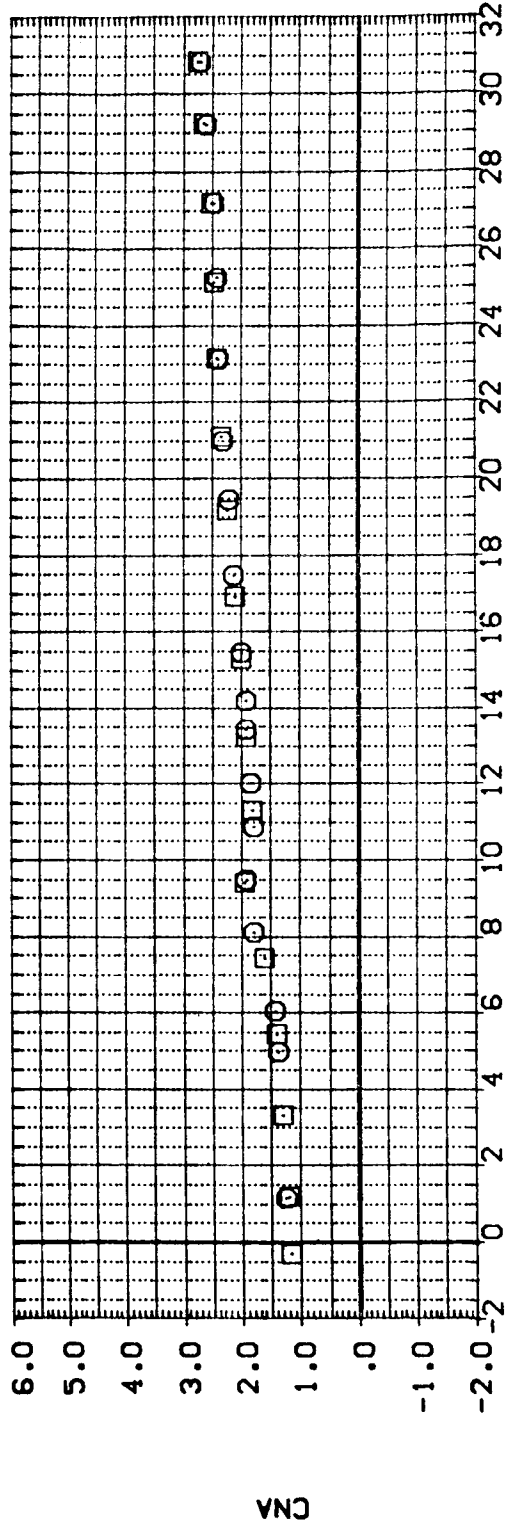
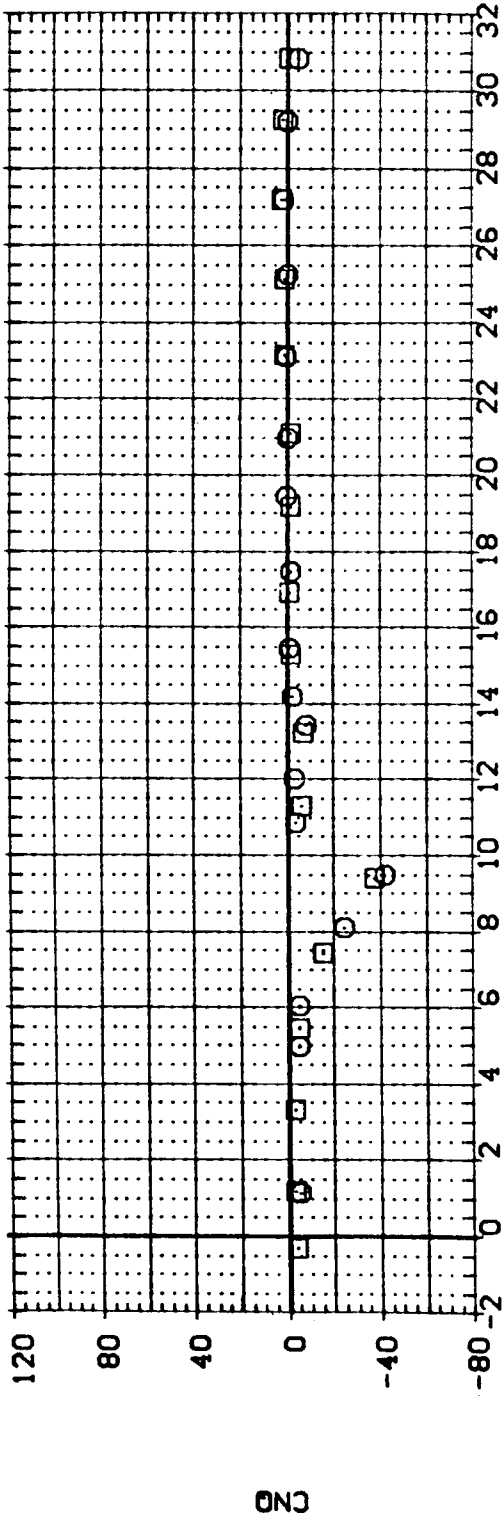


FIGURE 11. EFFECT OF ELEVONS AND BODY FLAP ON DYN. STAB. PARAMETERS IN PITCH

(F)MACH = 4.63

DATA SET SYMBO: CONFIGURATION DESCRIPTION
 (RPG905) LA-14, ROCKWELL ORB 089B V/MOD, NOSE (BWHVF)
 (RPG907) DATA NOT AVAILABLE

CG-LOC 2.000
 2.000
 ELEVTR .000
 5.000
 BDFLAP .000
 13.000
 RUDFLR 40.000
 40.000

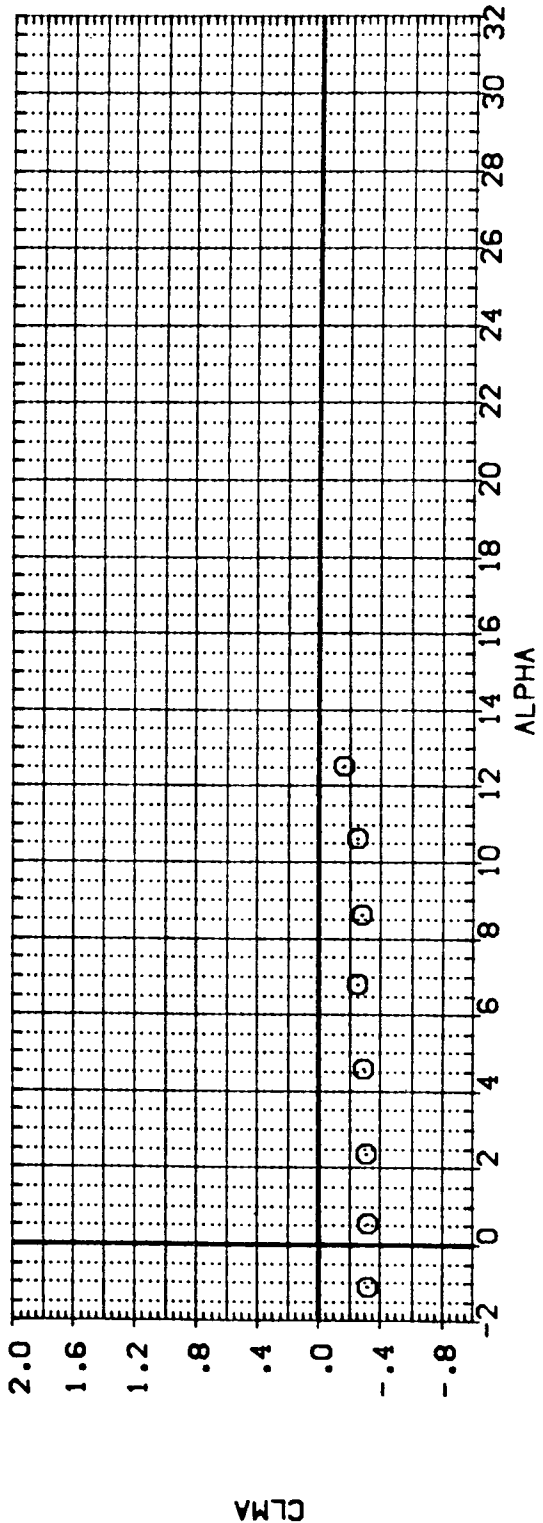
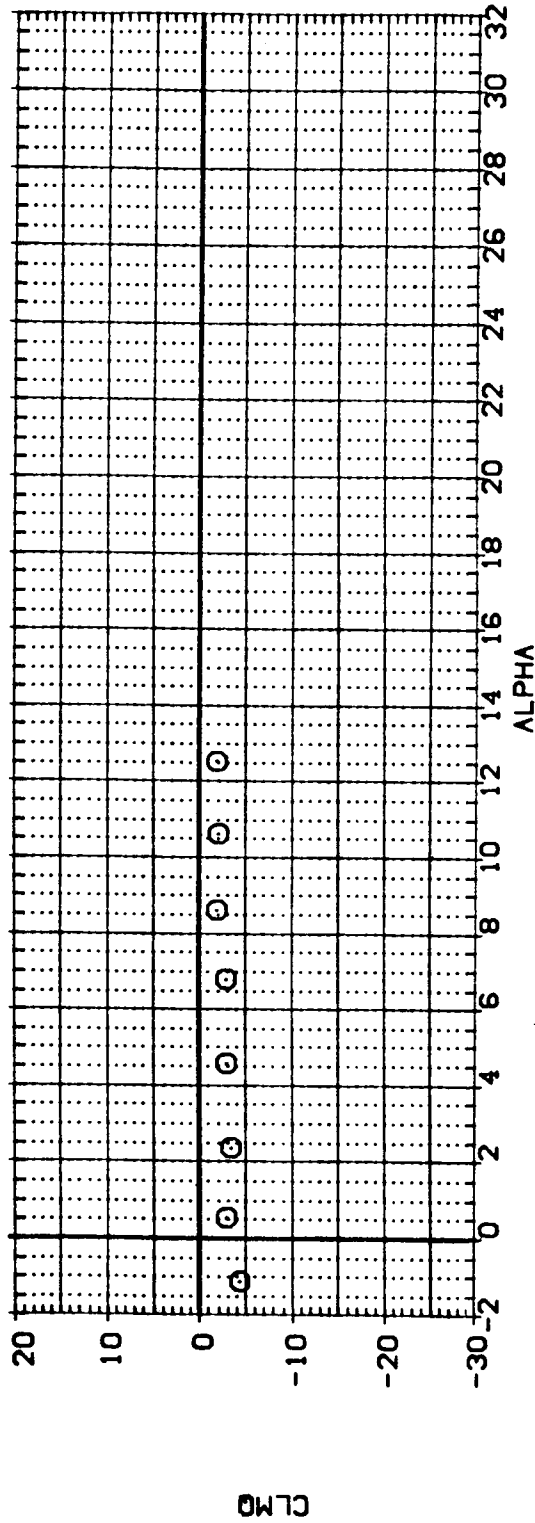


FIGURE 11. EFFECT OF ELEVONS AND BODY FLAP ON DYN. STAB. PARAMETERS IN PITCH

(A)MACH = 1.60

DATA SET SYMBOL: (RPGP06) (RPGP07) CONFIGURATION DESCRIPTION: LA-14; ROCKWELL GR8 0898 V/100; NOSE (BV/MF) LA-14; ROCKWELL GR8 0898 V/100; NOSE (BV/MF)

CG-LOC: 2.000 ELEVTR: .000 BDFLAP: .000 RUOFLR: 40.000
 2.000 5.000 13.000 40.000

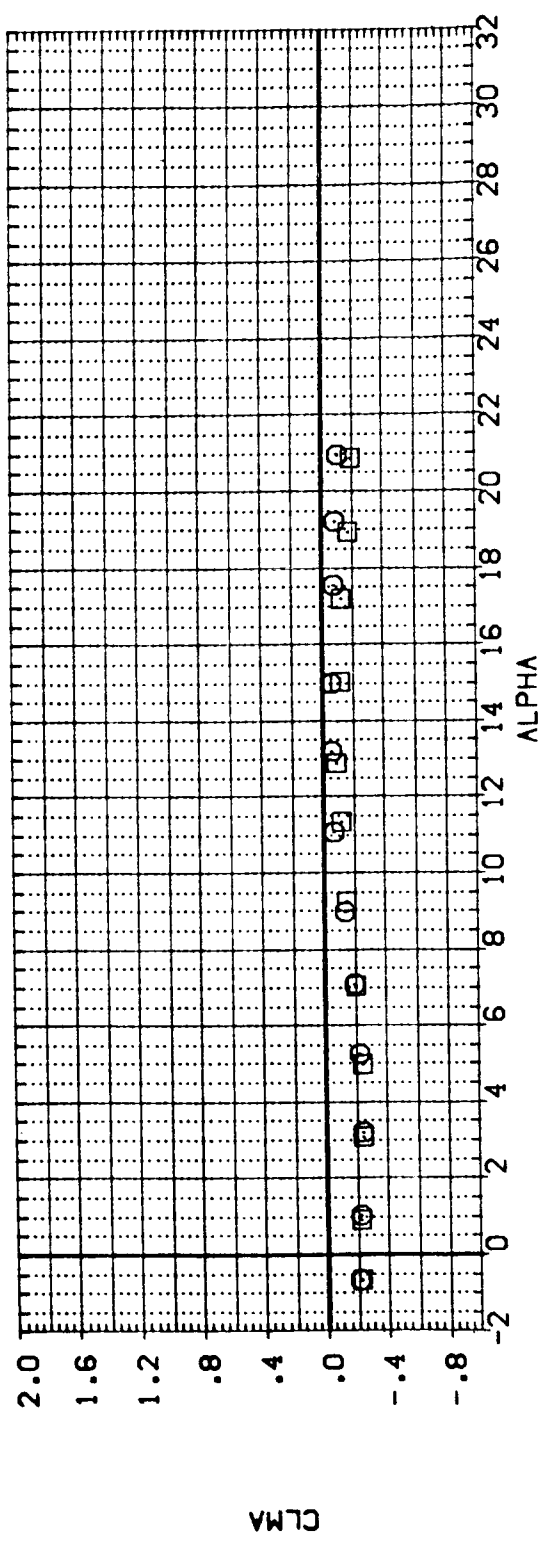
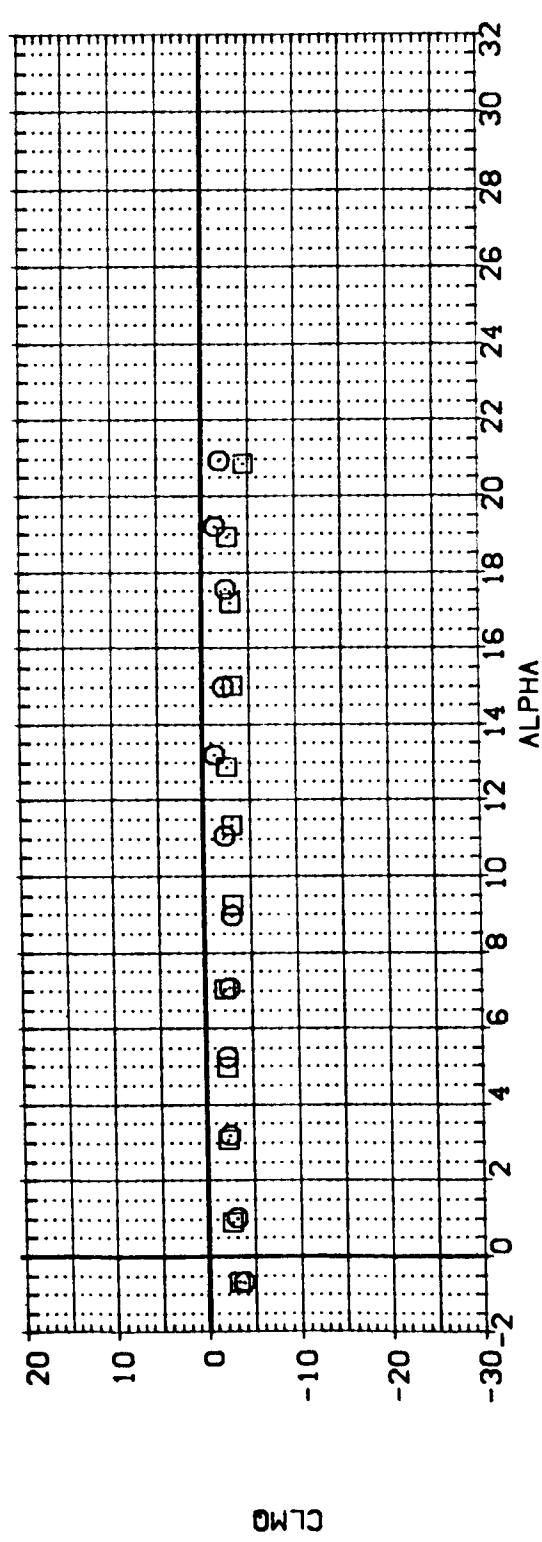


FIGURE 11. EFFECT OF ELEVONS AND BODY FLAP ON DYN. STAB. PARAMETERS IN PITCH

(B)MACH = 1.90

DATA SET SYMBOL. CONFIGURATION DESCRIPTION CG-LOC ELEVTR BOFLAP RUOFLR
 (RPGP06) LA-14; ROCKWELL CRB 0898 V/MO; NOSE (BVMF) 2.000 .000 .000 40.000
 (RPGP07) LA-14; ROCKWELL CRB 0898 V/MO; NOSE (BVMF) 2.000 5.000 13.000 40.000

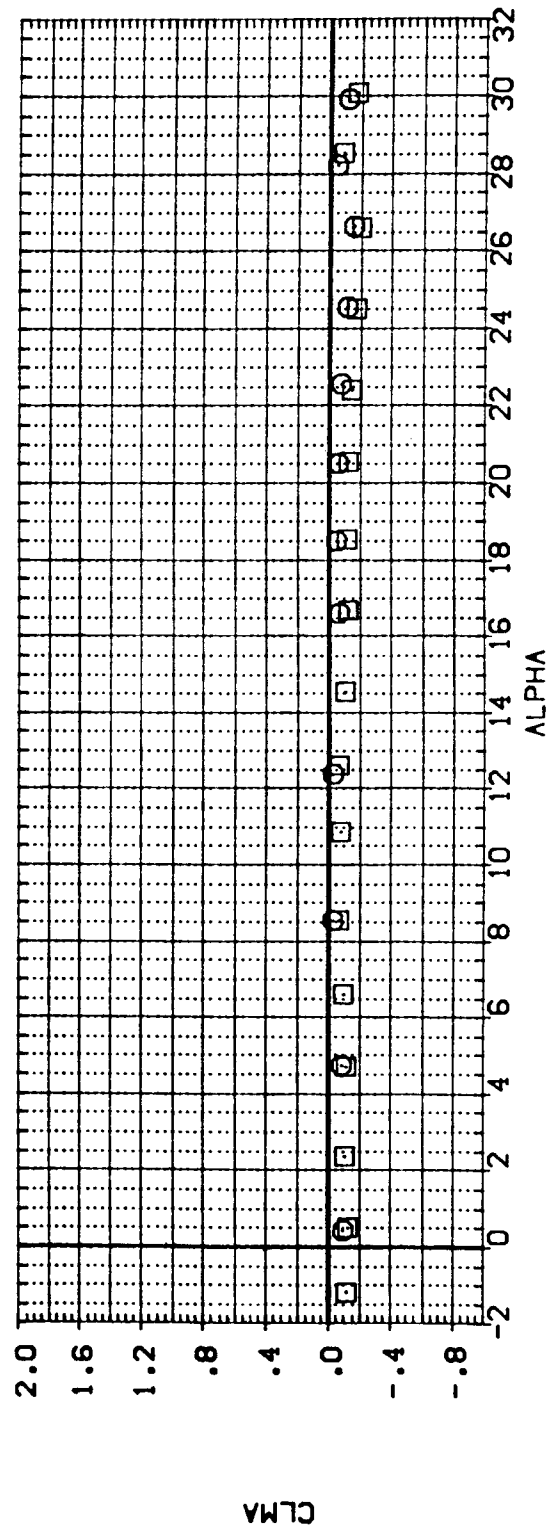
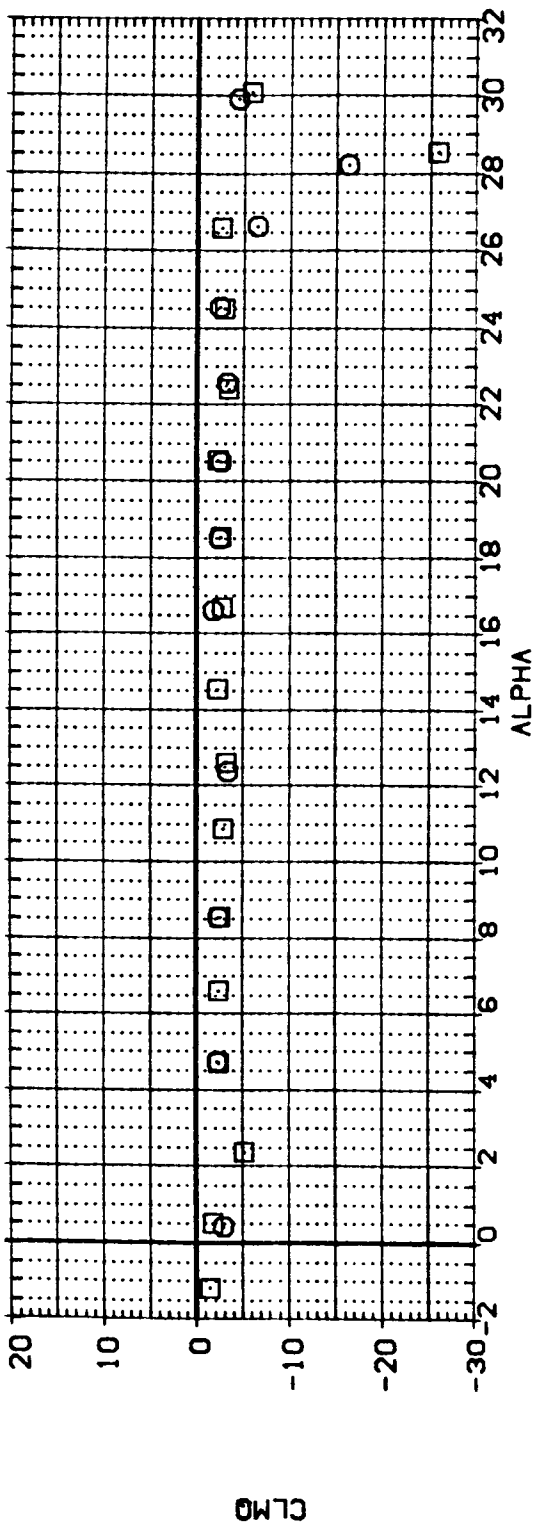


FIGURE 11. EFFECT OF ELEVONS AND BODY FLAP ON DYN. STAB. PARAMETERS IN PITCH
 (C)MACH = 2.36

DATA SET SYMBOL. CONFIGURATION DESCRIPTION
 (RPG06) LA-14; ROCKWELL ORB 0698 V/MOD. NOSE (BVMVF)
 (RPG07) LA-14; ROCKWELL ORB 0698 V/MOD. NOSE (BVMVF)

CG-LOC ELEVTR BOFLAP RLOFLR
 2.000 5.000 .000 40.000
 2.000 5.000 13.000 40.000

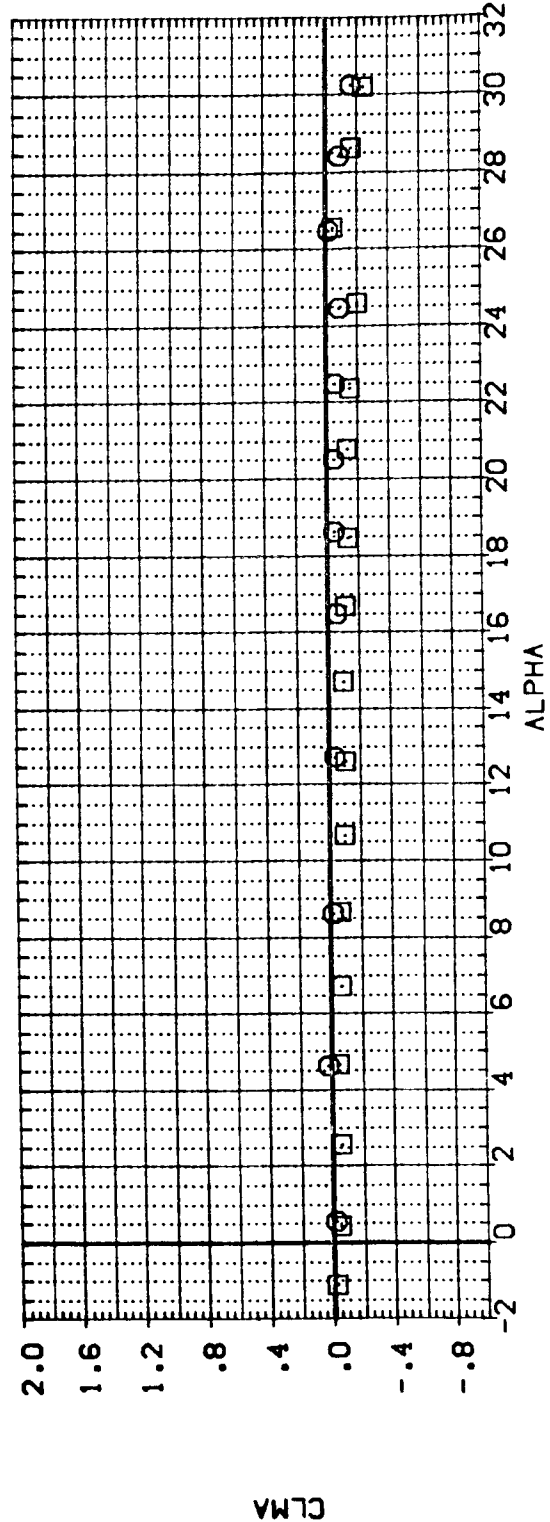
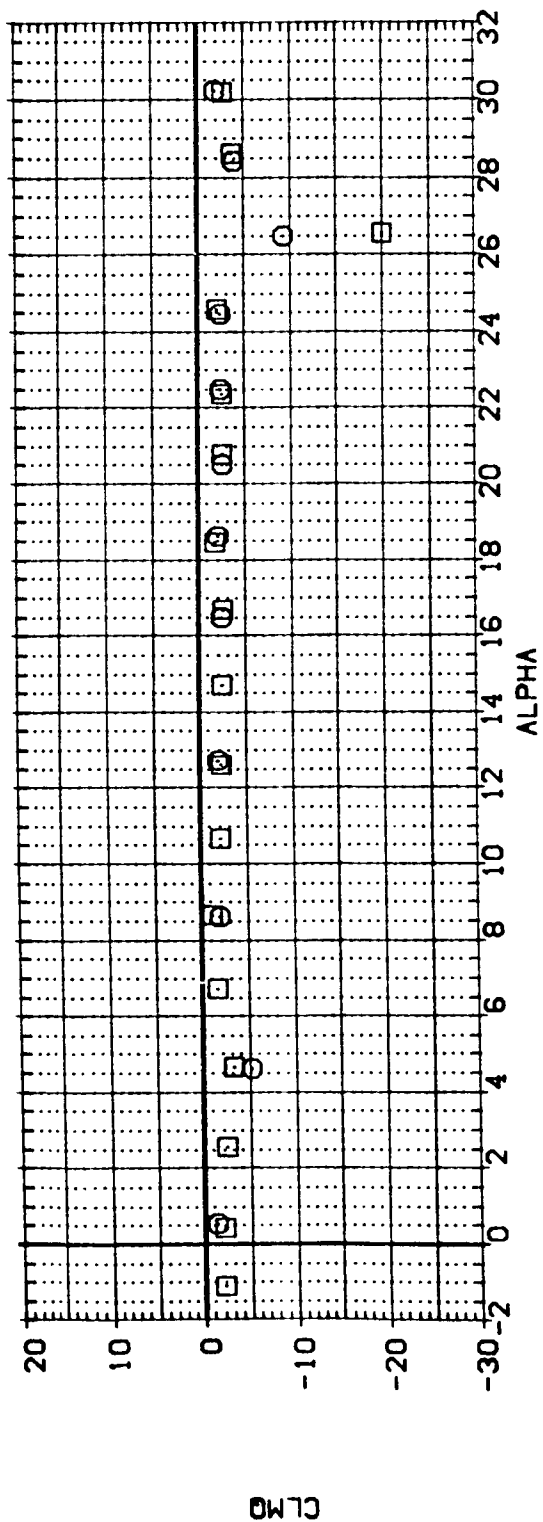


FIGURE 11. EFFECT OF ELEVONS AND BODY FLAP ON DYN. STAB. PARAMETERS IN PITCH

(D)MACH = 2.86

DATA SET SYMBOL: (RPG06) (RPG07)
 CONFIGURATION DESCRIPTION: LA-14; ROCKWELL CRB 0898 V/MOD. NOSE (BVVHF) NOSE (BVVHF)
 CG-LOC: 2.000 2.000
 ELEVTR: .000 5.000
 BOFLAP: .000 13.000
 RUOFLR: 40.000 40.000

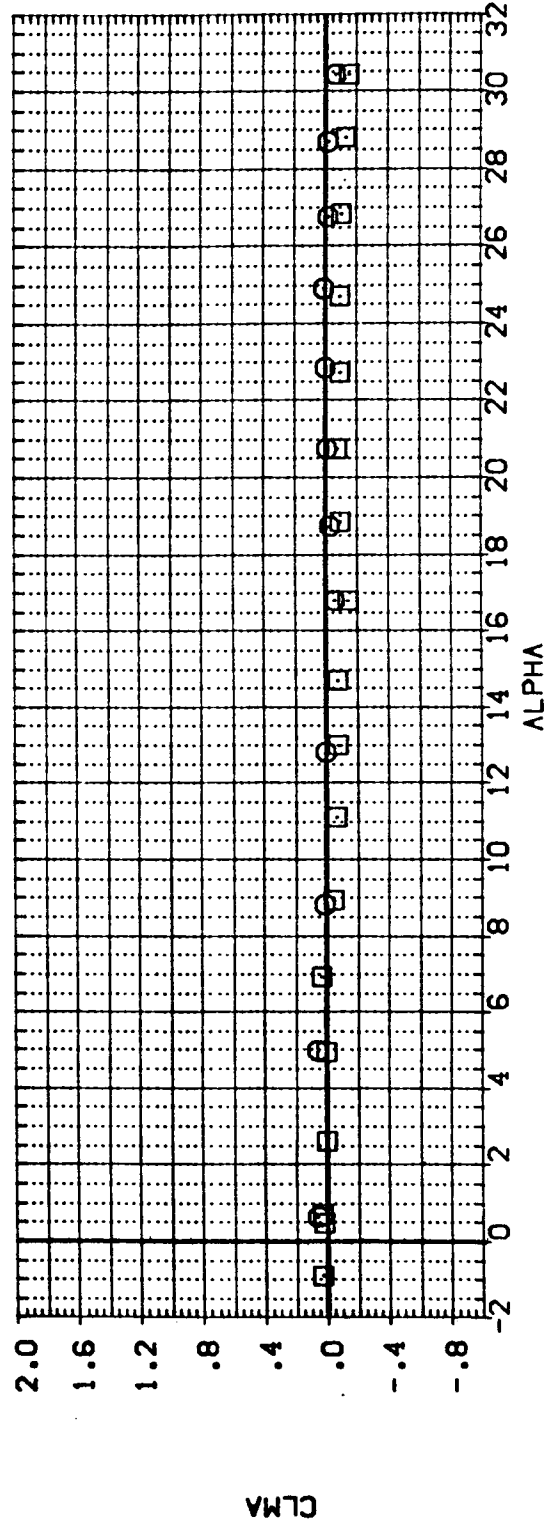
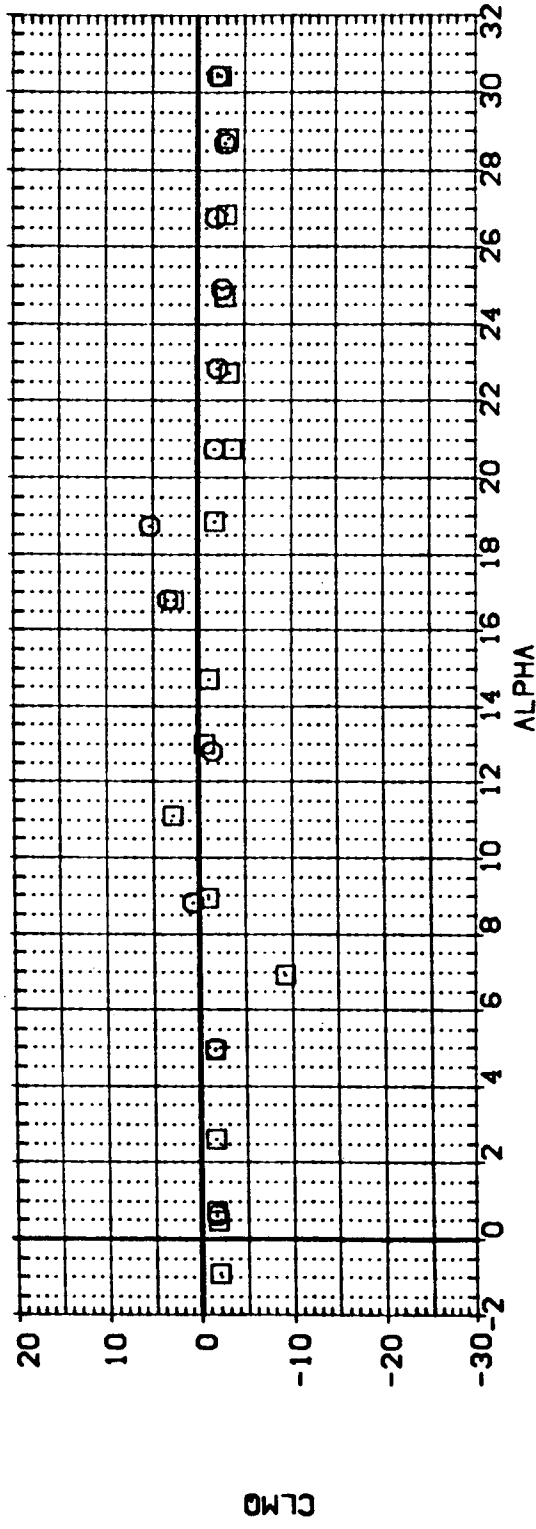


FIGURE 11. EFFECT OF ELEVONS AND BODY FLAP ON DYN. STAB. PARAMETERS IN PITCH

(E)MACH = 3.96

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (RPGP06) LA-14; ROCKWELL CRB 0898 V/MOD; NOSE (BNVNF)
 (RPGP07) LA-14; ROCKWELL CRB 0898 V/MOD; NOSE (BNVNF)

CG-LOC ELEVTR BOFLAP RUOFLR
 2.000 .000 .000 40.000
 2.000 5.000 13.000 40.000

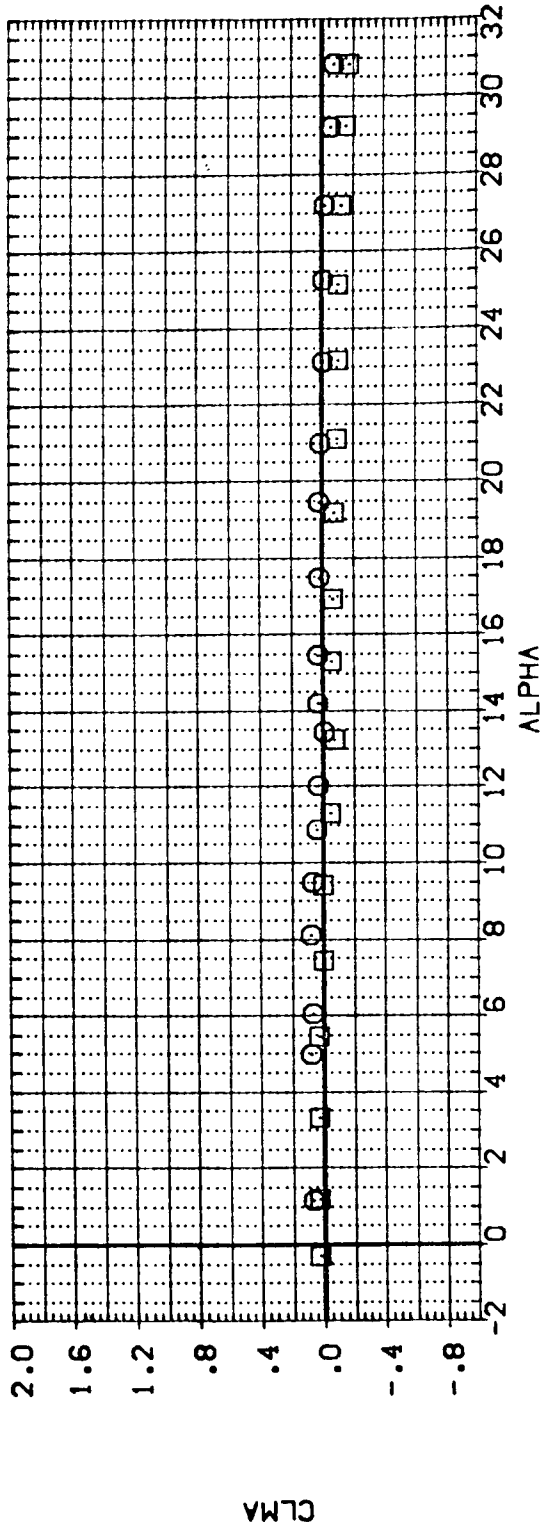
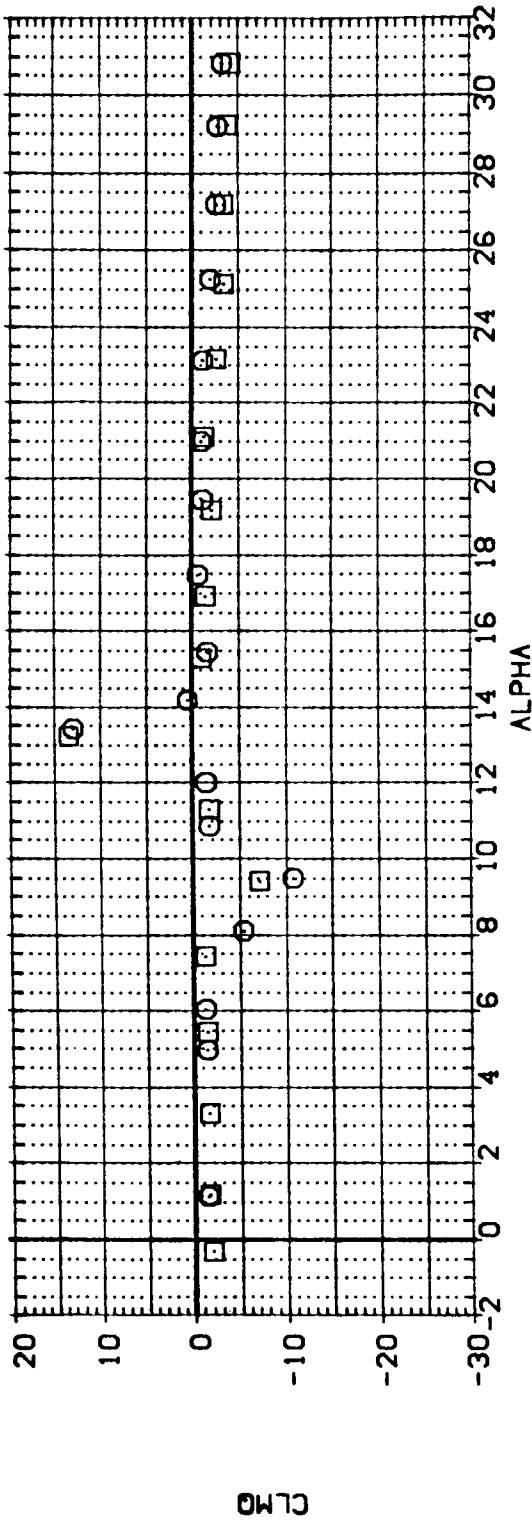


FIGURE 11. EFFECT OF ELEVONS AND BODY FLAP ON DYN. STAB. PARAMETERS IN PITCH

(F)MACH = 4.63

DATA SET SYMBOL: **B** CONFIGURATION DESCRIPTION: CG-LOC ELEVTR BDFLAP RUDELIR
 (RPG03) LA-14; ROCKWELL CR8 0898 V/MOD. NOSE (BVVH) 1.000 .000 40.000
 (RPG05) LA-14; ROCKWELL CR8 0898 V/MOD. NOSE (BVVHF) 1.000 .000 40.000

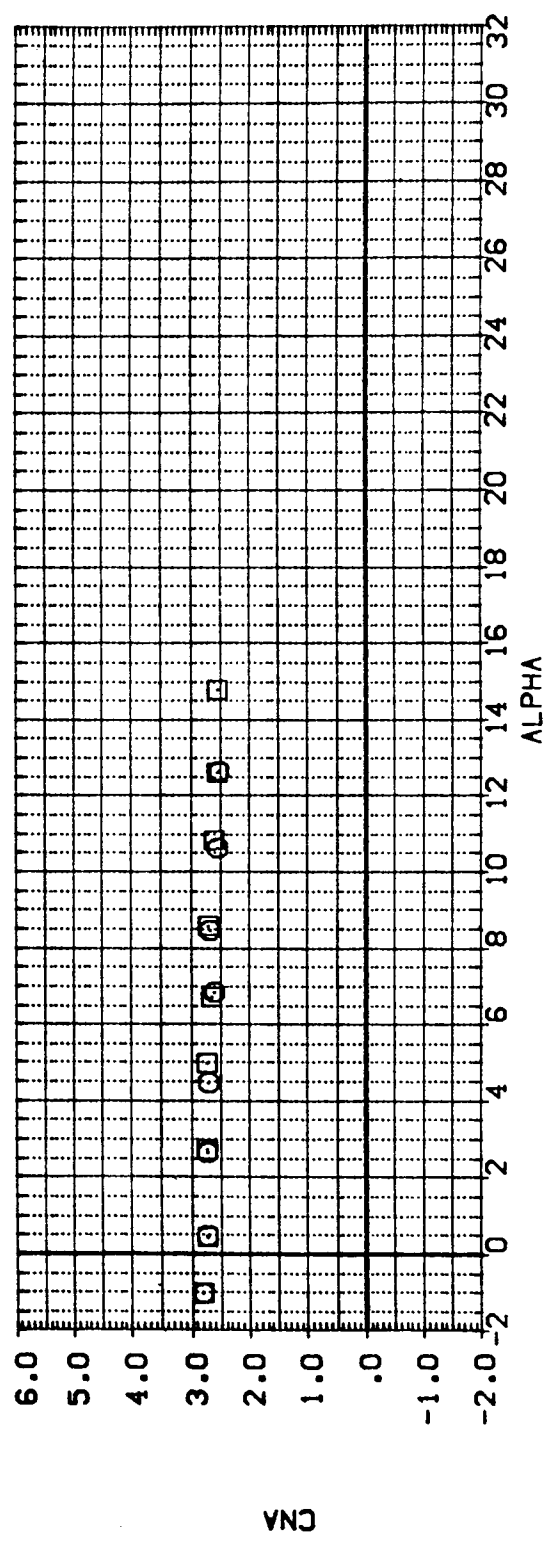
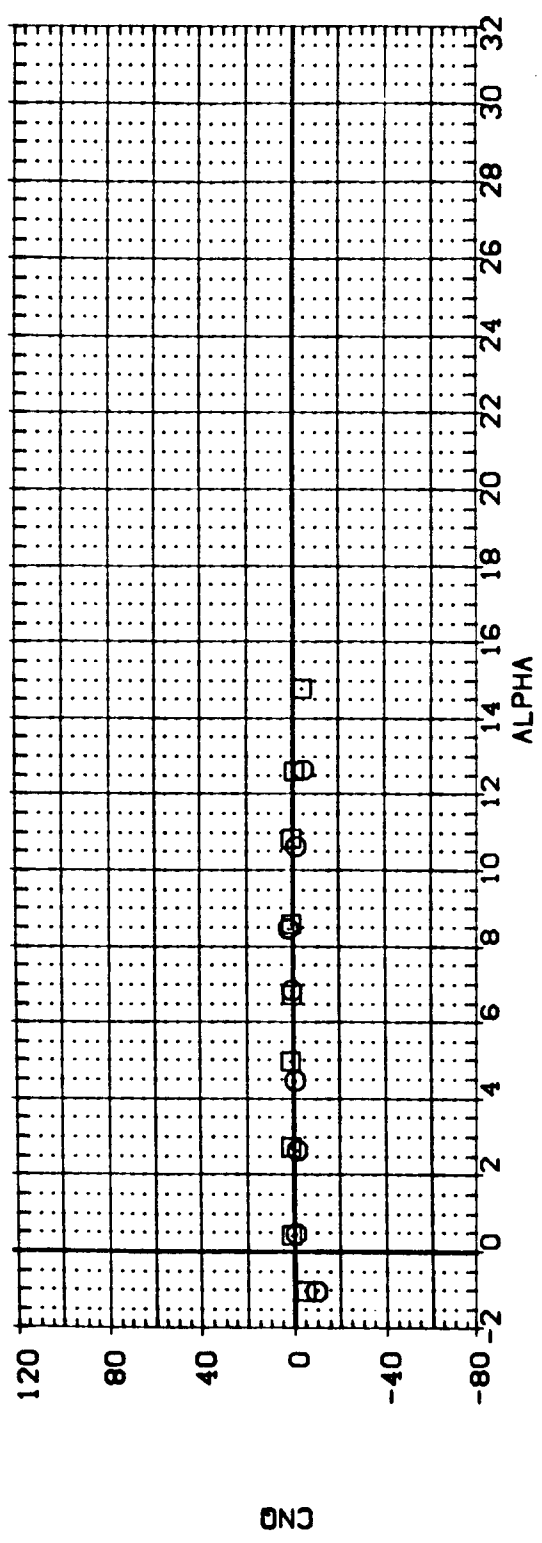


FIGURE 12. EFFECT OF BODY FLAP ON DYNAMIC STABILITY PARAMETERS IN PITCH

CAJ MACH = 1.60

DATA SET SYMBOL CONFIGURATION DESCRIPTION CG-LOC ELEVTR BOFLAP RUDELR
 (RFGP03) LA-14; ROCKWELL CRB 0898 V/MOD. NOSE (BVVM) 1.000 .000 .000 40.000
 (RFGP05) LA-14; ROCKWELL CRB 0898 V/MOD. NOSE (BVVNF) 1.000 .000 .000 40.000

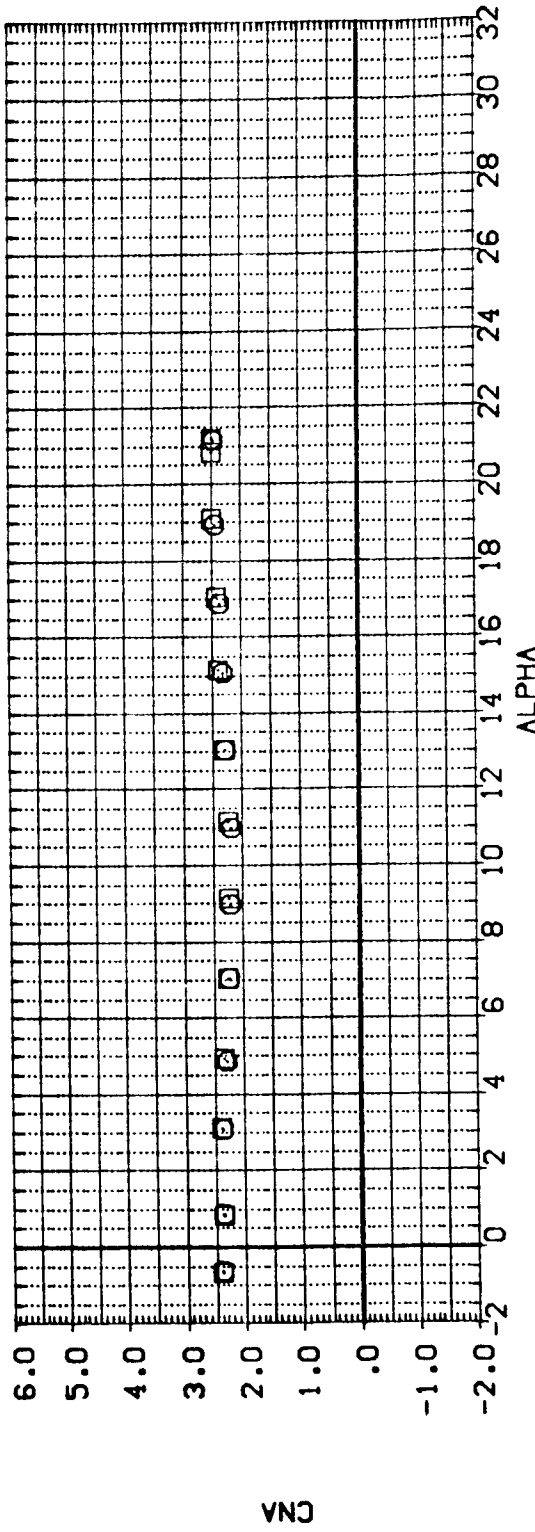
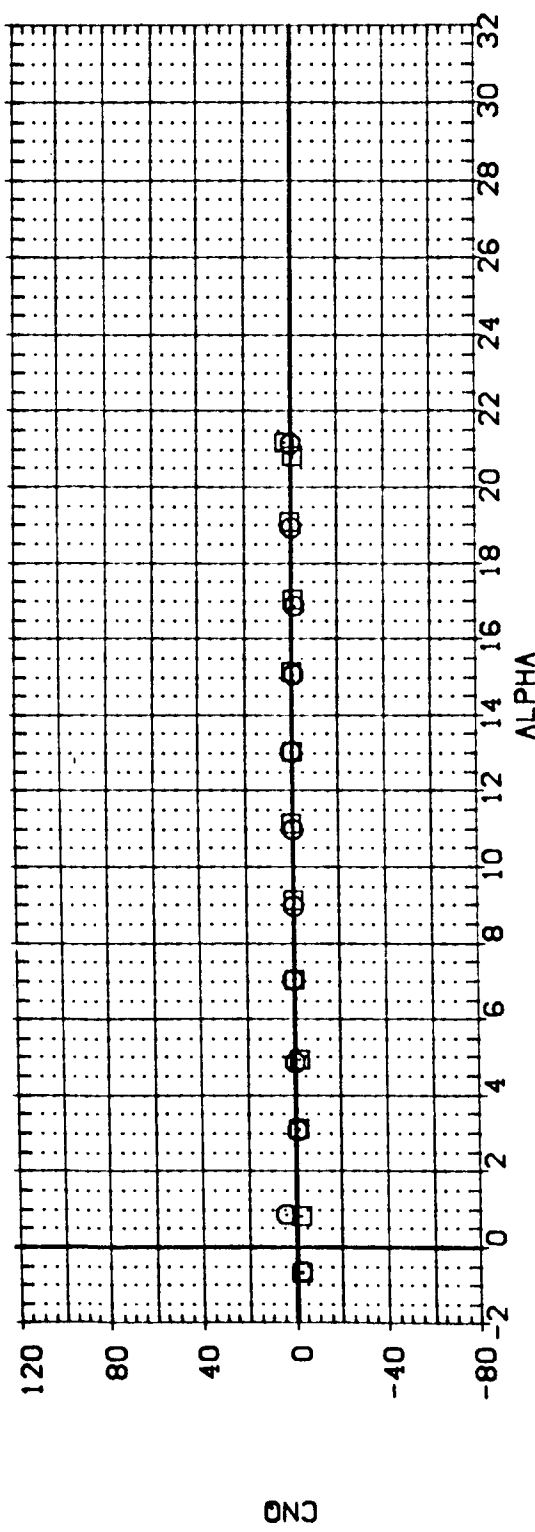


FIGURE 12. EFFECT OF BODY FLAP ON DYNAMIC STABILITY PARAMETERS IN PITCH

(B)MACH = 1.90

DATA SET SYMBOL. CONFIGURATION DESCRIPTION CG-LOC ELEVTR BDFLAP RUOFLR
 {RPGP03} LA-14; ROCKWELL CRB 0698 V/MOD. NOSE (BVVM) 1.000 .000 .000 40.000
 {RPGP05} LA-14; ROCKWELL CRB 0698 V/MOD. NOSE (BVVMF) 1.000 .000 .000 40.000

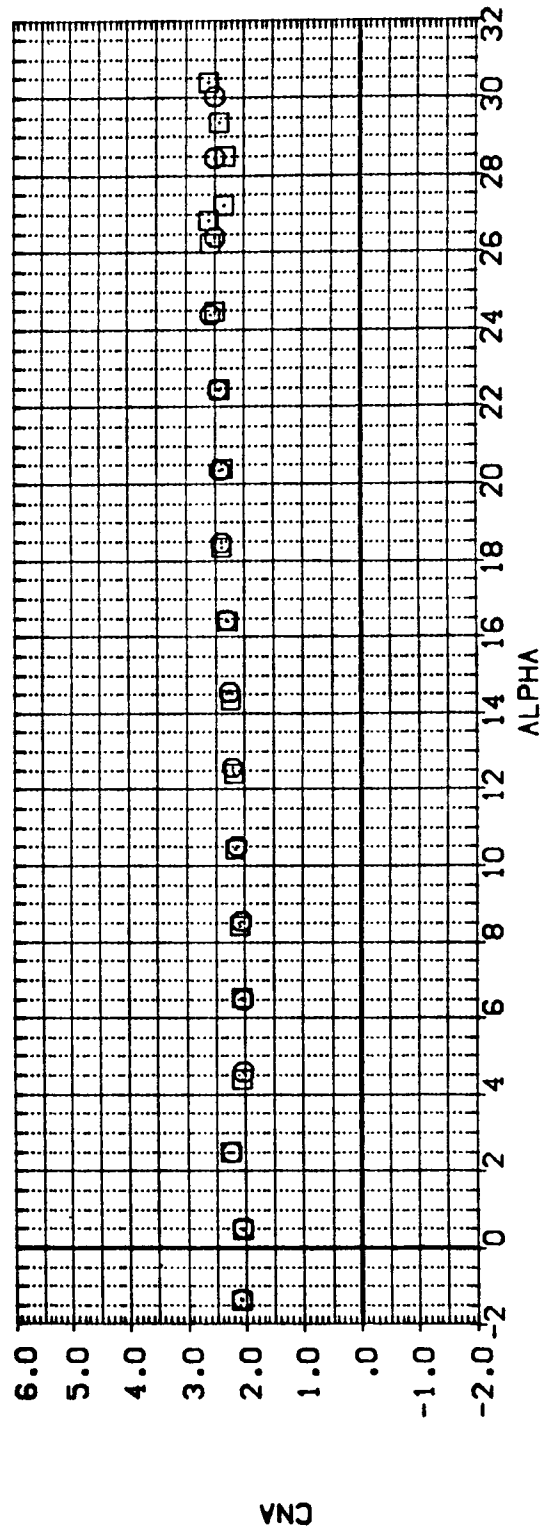
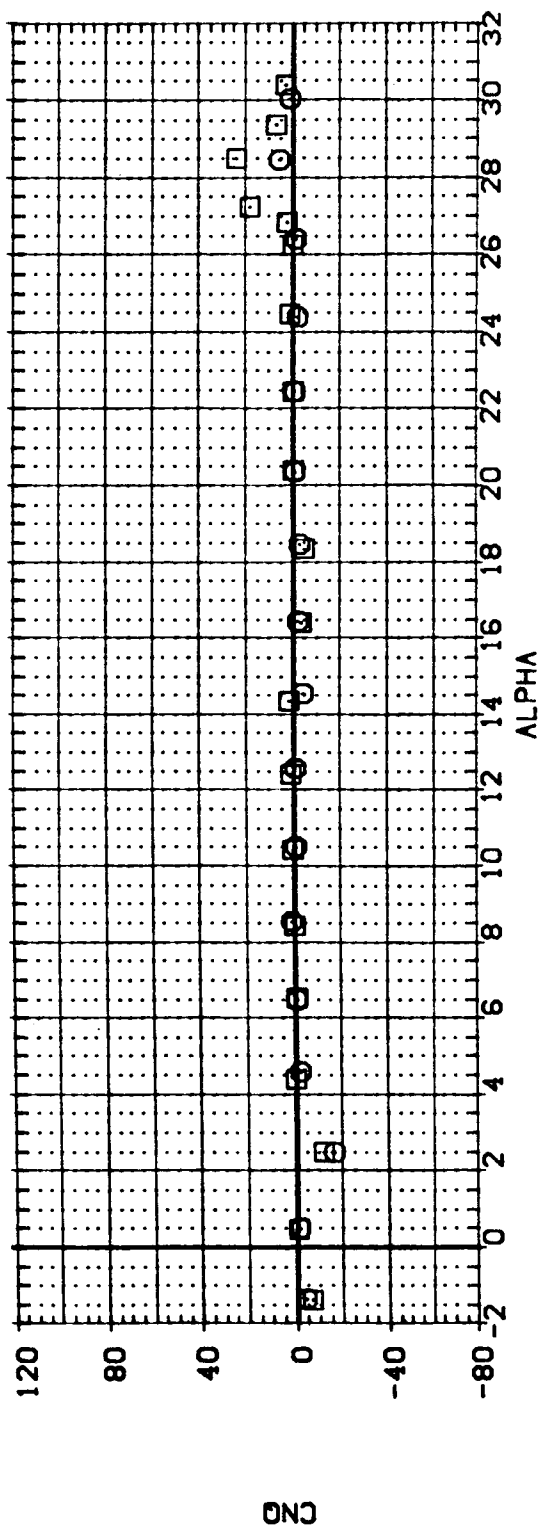


FIGURE 12. EFFECT OF BODY FLAP ON DYNAMIC STABILITY PARAMETERS IN PITCH

DATA SET SYMBOL: (RFGP03) (RFGP05) CONFIGURATION DESCRIPTION: LA-14; ROCKWELL CRB 0658 V/MOD. NOSE (BV/M) LA-14; ROCKWELL CRB 0658 V/MOD. NOSE (BV/MF)

CG-LOC 1.000 1.000

ELEVTR .000 .000

BDFLAP .000 .000

RUDFLR 40.000 40.000

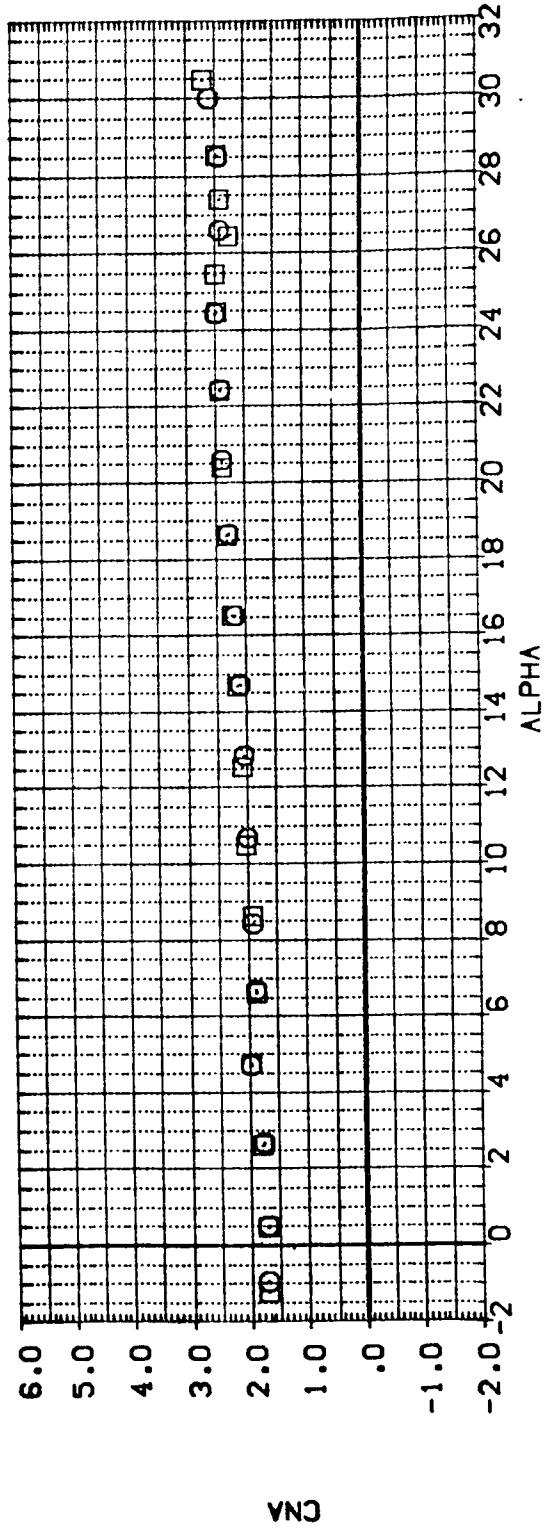
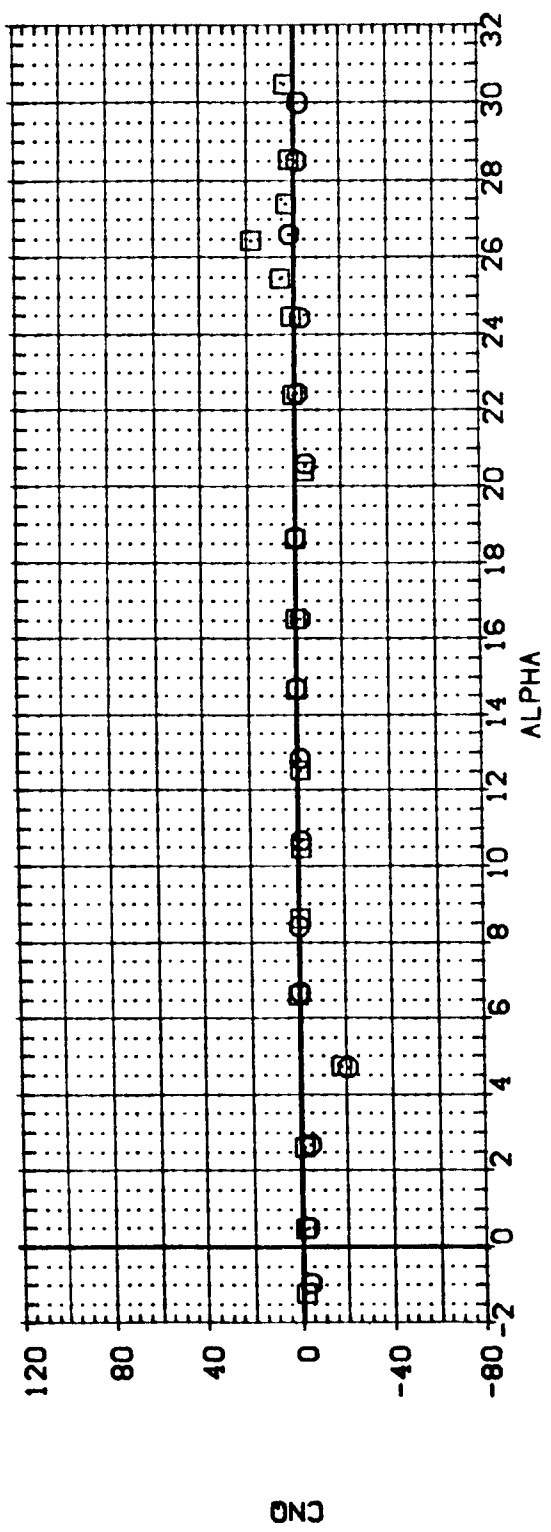


FIGURE 12. EFFECT OF BODY FLAP ON DYNAMIC STABILITY PARAMETERS IN PITCH

(C)MACH = 2.86

DATA SET SYMBOL CONFIGURATION DESCRIPTION CG-LOC ELEVTR BOFLAP RUOFLR
 (RFGP03) LA-14; ROCKWELL DRB 0698 1/2MOD. NOSE (BVMV1)
 (RFGP05) LA-14; ROCKWELL DRB 0698 1/2MOD. NOSE (BVMV1)

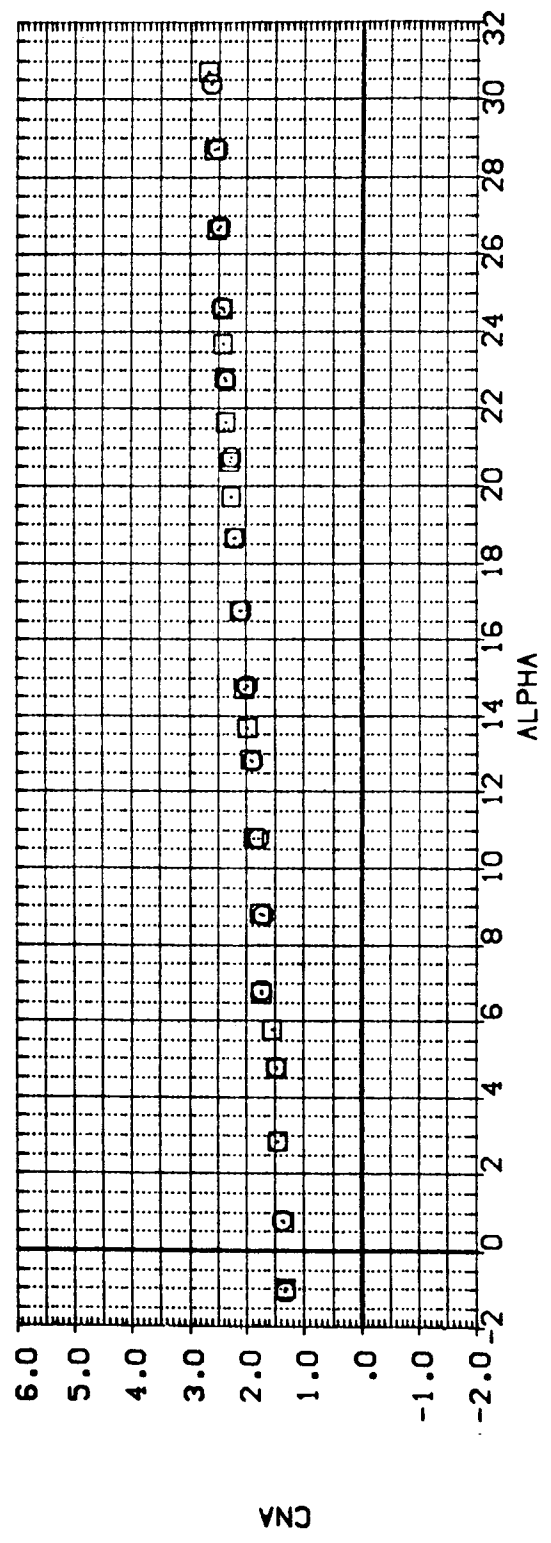
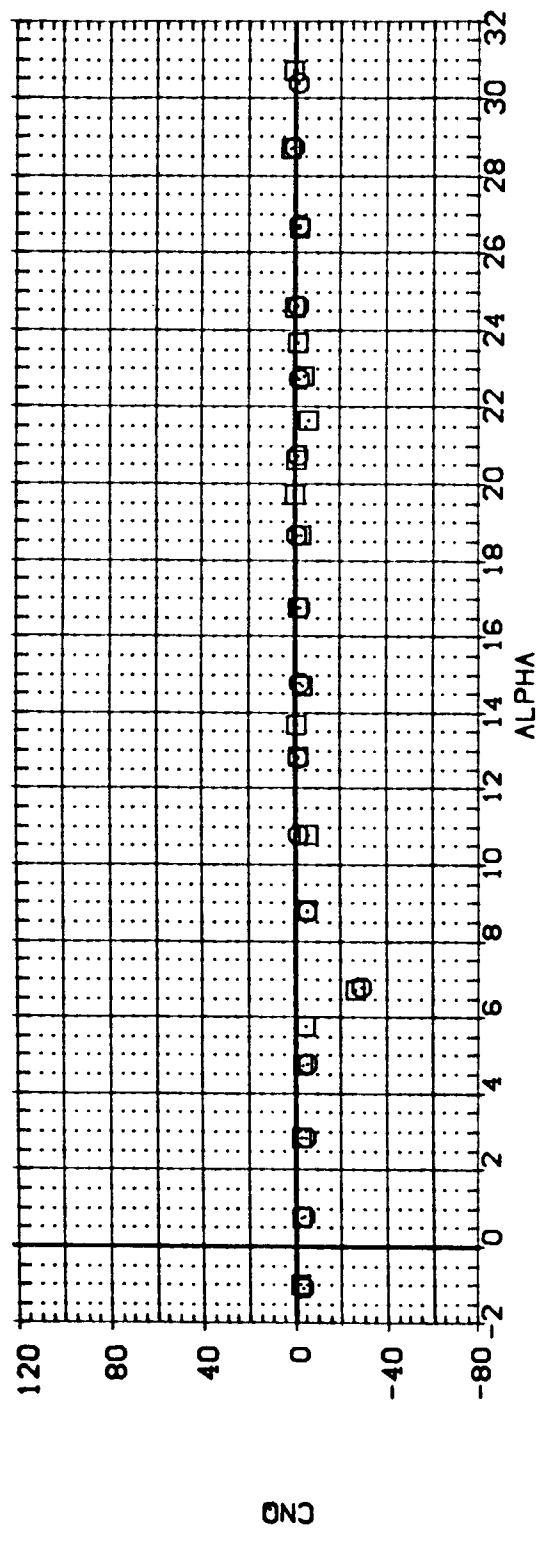


FIGURE 12. EFFECT OF BODY FLAP ON DYNAMIC STABILITY PARAMETERS IN PITCH

(E)MACH = 3.96

DATA SET SYMBOL CONFIGURATION DESCRIPTION CG-LOC ELEVTR BDFLAP RUOFLR
 (RPG703) (RPG703) LA-14; ROCKWELL DRB 0898 V/MOD; NOSE (BVVM) 1.000 .000 40.000
 (RPG705) (RPG705) LA-14; ROCKWELL DRB 0898 V/MOD; NOSE (BVVM) 1.000 .000 40.000

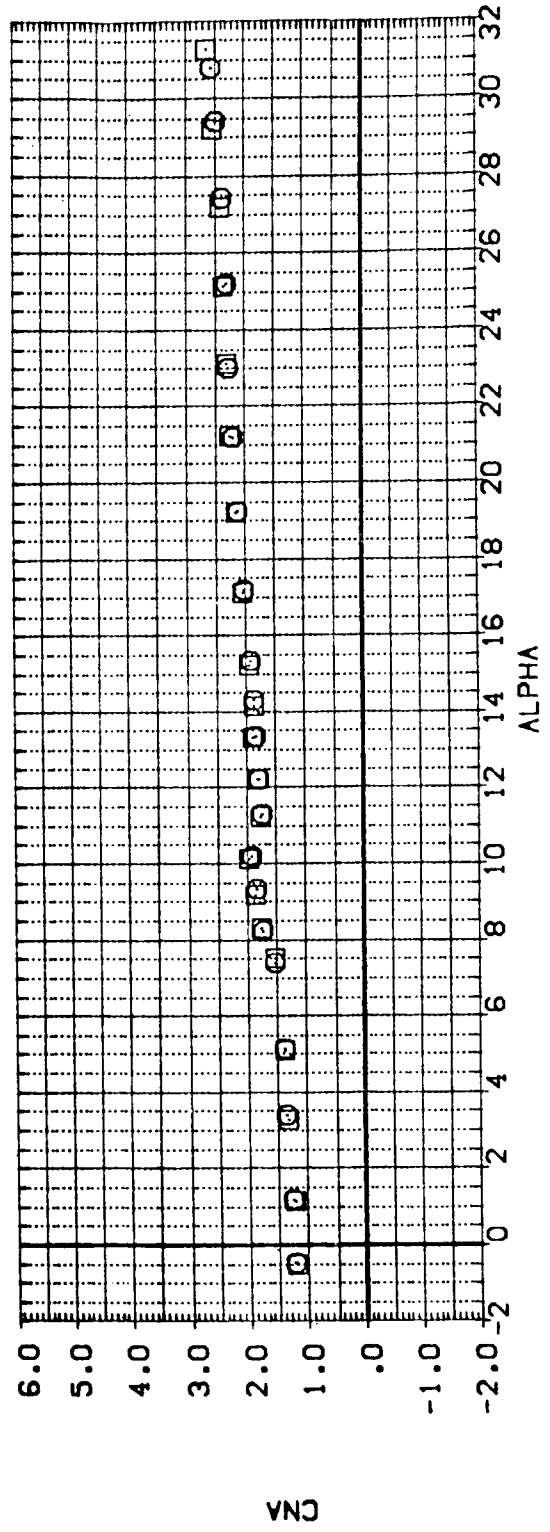
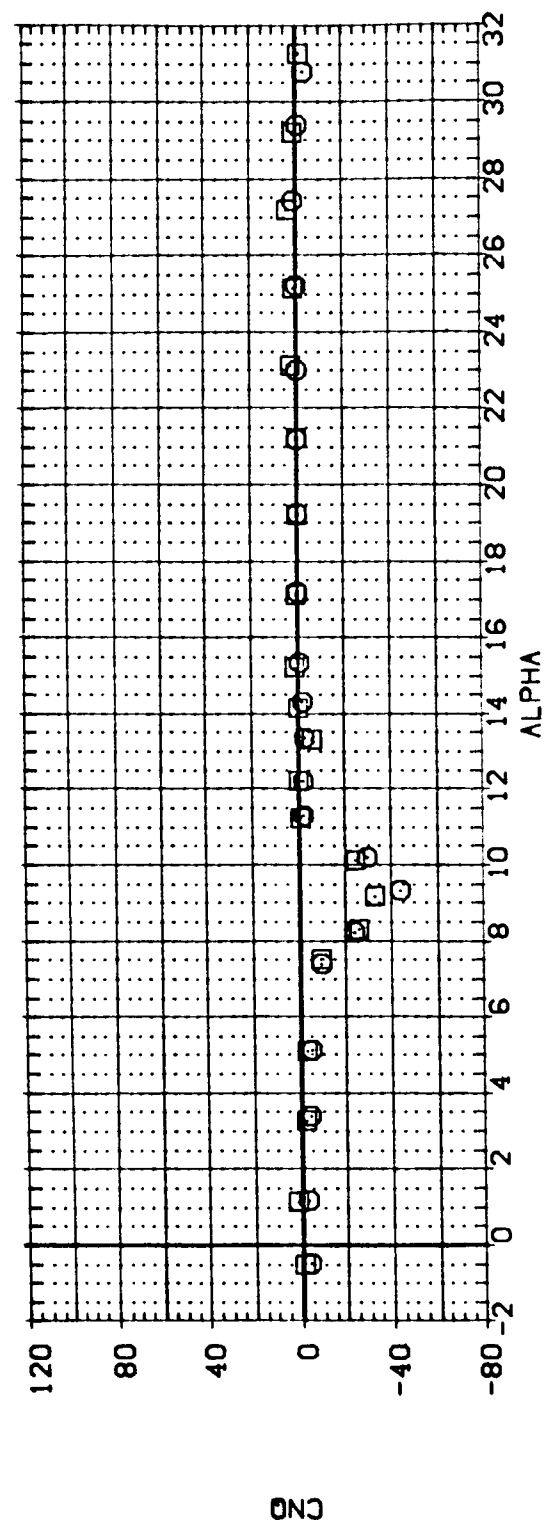


FIGURE 12. EFFECT OF BODY FLAP ON DYNAMIC STABILITY PARAMETERS IN PITCH

(F)MACH = 4.63

DATA SET SYMBOL CONFIGURATION DESCRIPTION CG-LOC ELEVTR BDFLAP RUOFLR
 (RPGF03) LA-14; ROCKWELL CR8 0898 V/MOD. NOSE (BVVM) 1.000 .000 .000 40.000
 (RPGF05) LA-14; ROCKWELL CR8 0898 V/MOD. NOSE (BVVF) 1.000 .000 .000 40.000

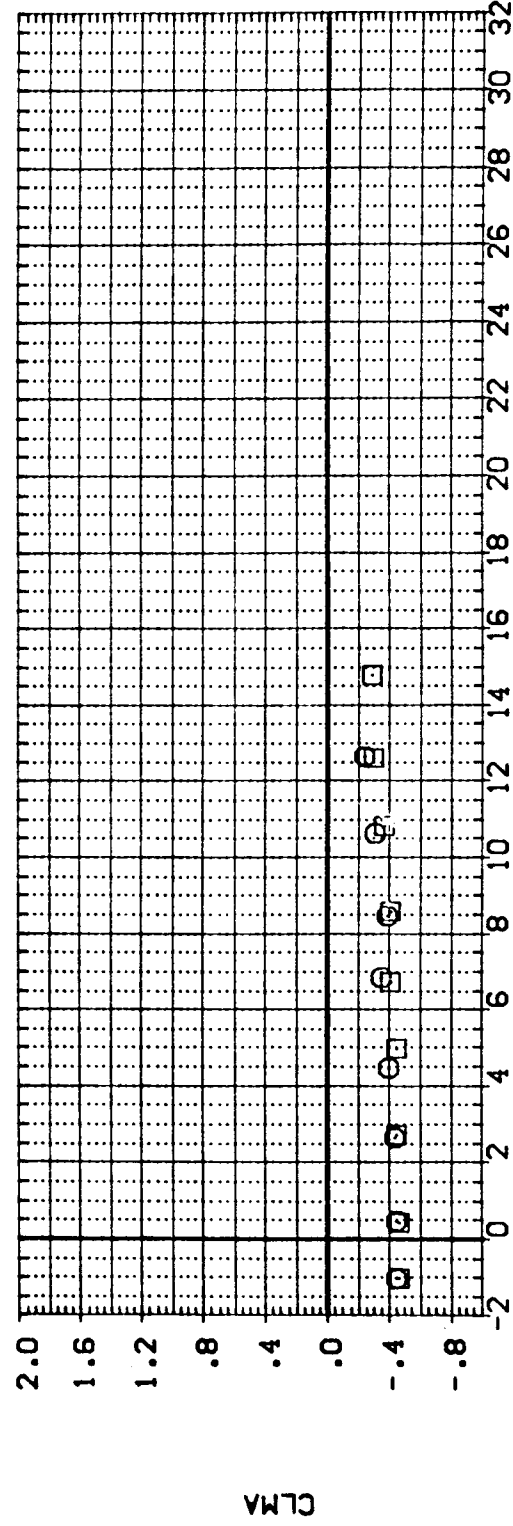
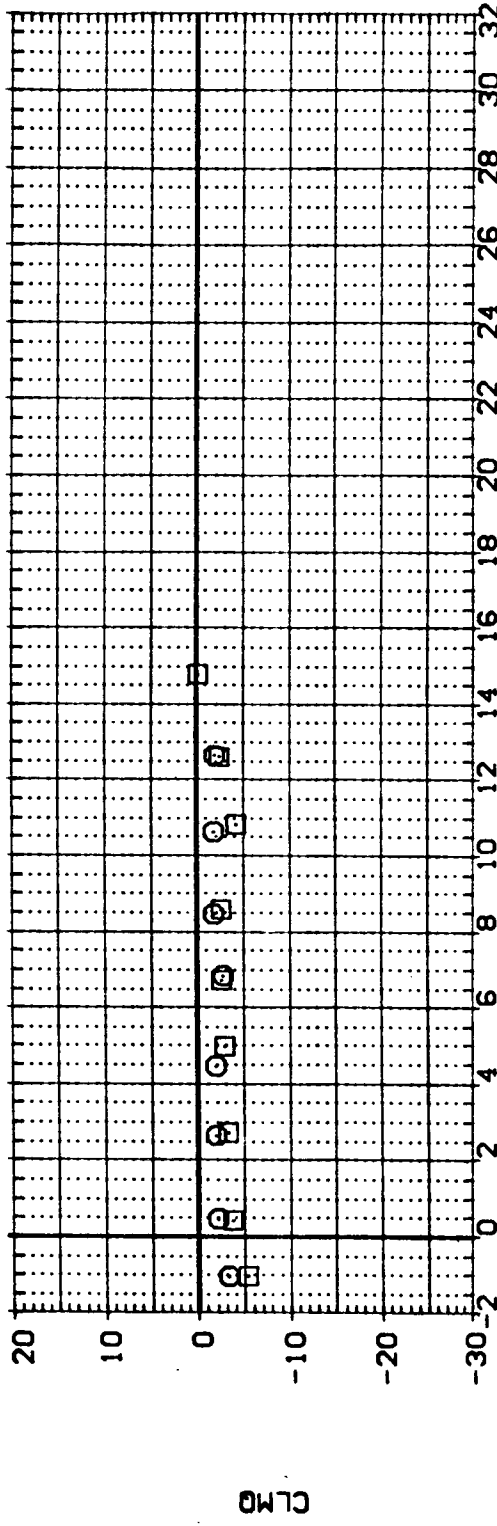


FIGURE 12. EFFECT OF BODY FLAP ON DYNAMIC STABILITY PARAMETERS IN PITCH

(A)MACH = 1.60

DATA SET SYMBOL CONFIGURATION DESCRIPTION CG-LOC ELEVTR BDFLAP RUDELR
 (RPGP03) LA-14; ROCKWELL CR8 0698 V/MOD. NOSE (BVM) 1.000 .000 .000 40.000
 (RPGP05) LA-14; ROCKWELL CR8 0698 V/MOD. NOSE (BVM) 1.000 .000 .000 40.000

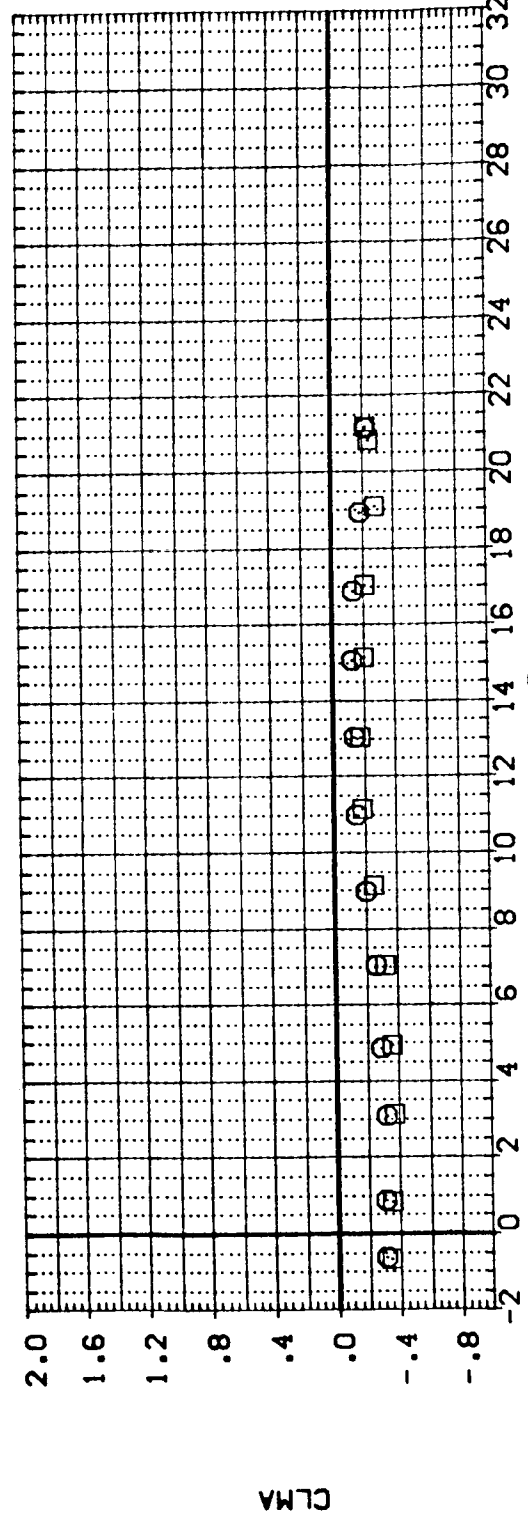
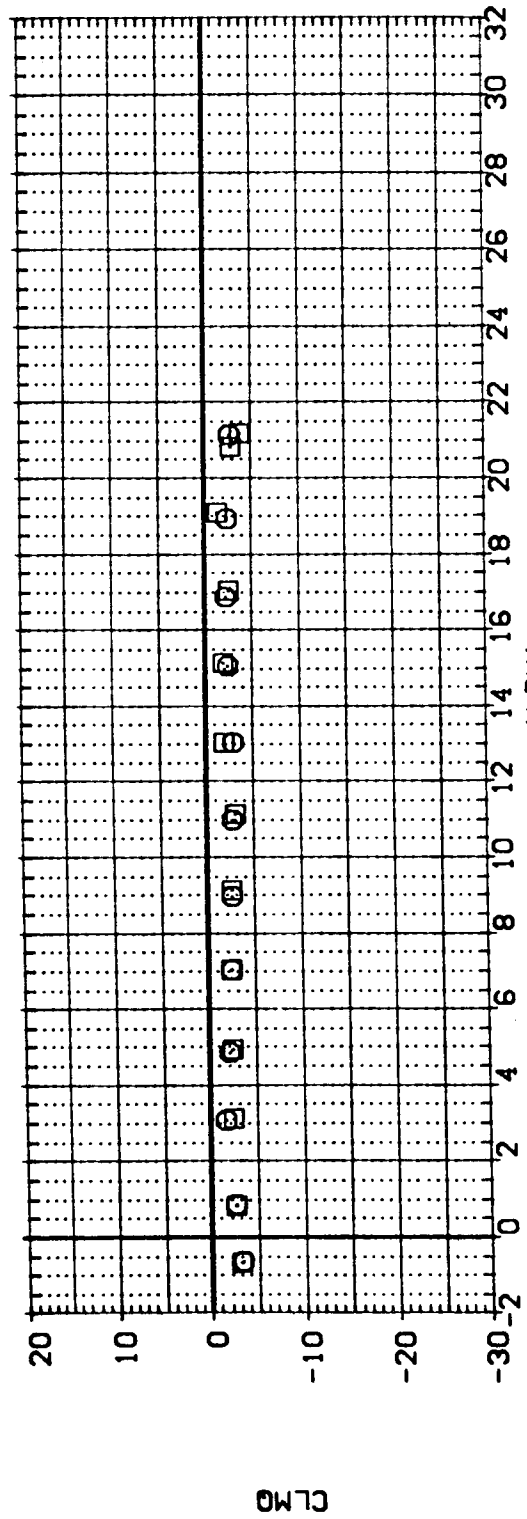


FIGURE 12. EFFECT OF BODY FLAP ON DYNAMIC STABILITY PARAMETERS IN PITCH

(B)MACH = 1.90

DATA SET SYMBOL CONFIGURATION DESCRIPTION CG-LOC ELEVTR BOFLAP RUOFLR
 (RPGP03) LA-14; ROCKWELL ORB 0888 V/MOD; NOSE (BVMF) 1.000 .000 40.000
 (RPGP05) LA-14; ROCKWELL ORB 0888 V/MOD; NOSE (BVMF) 1.000 .000 40.000

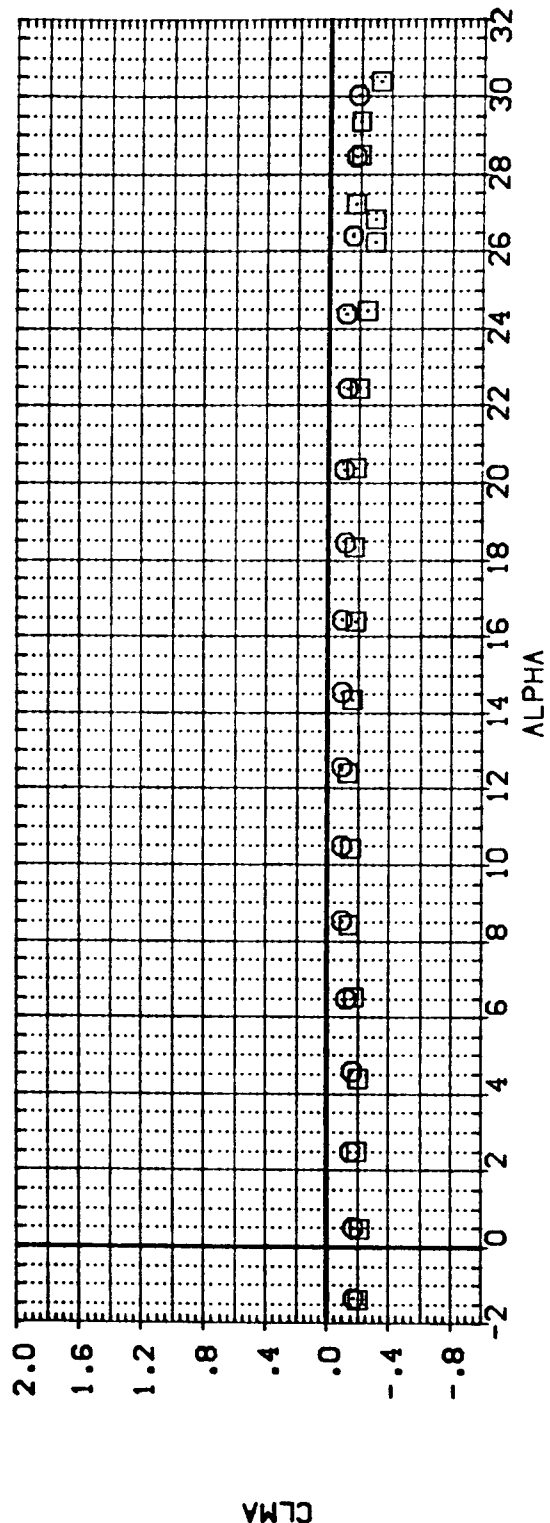
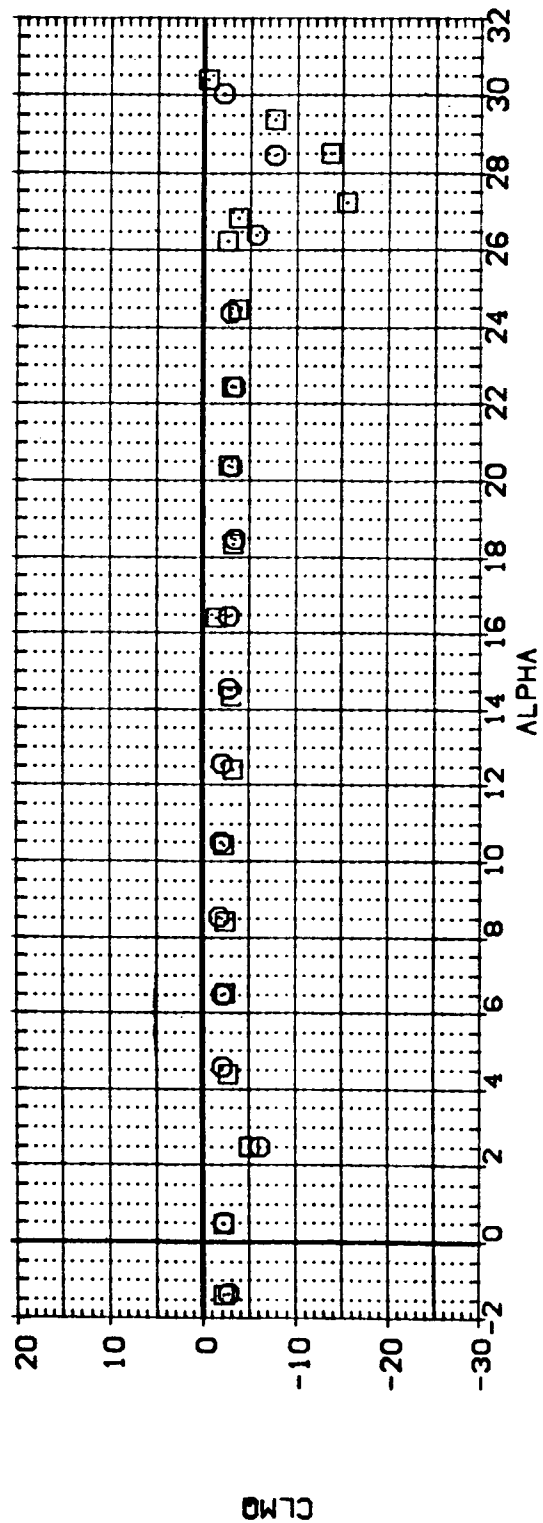


FIGURE 12. EFFECT OF BODY FLAP ON DYNAMIC STABILITY PARAMETERS IN PITCH

(C)MACH = 2.36

DATA SET SYMBOL (RFGP03) (RFGPOS) □

CONFIGURATION DESCRIPTION
 LA-14: ROCKWELL CR8 0698 V/MOD; NOISE (BVM) }
 LA-14: ROCKWELL CR8 0698 V/MOD; NOISE (BVMNF) }

CG-LOC 1.000
 ELEVTR .000
 BDFLAP .000
 RUDELR 40.000

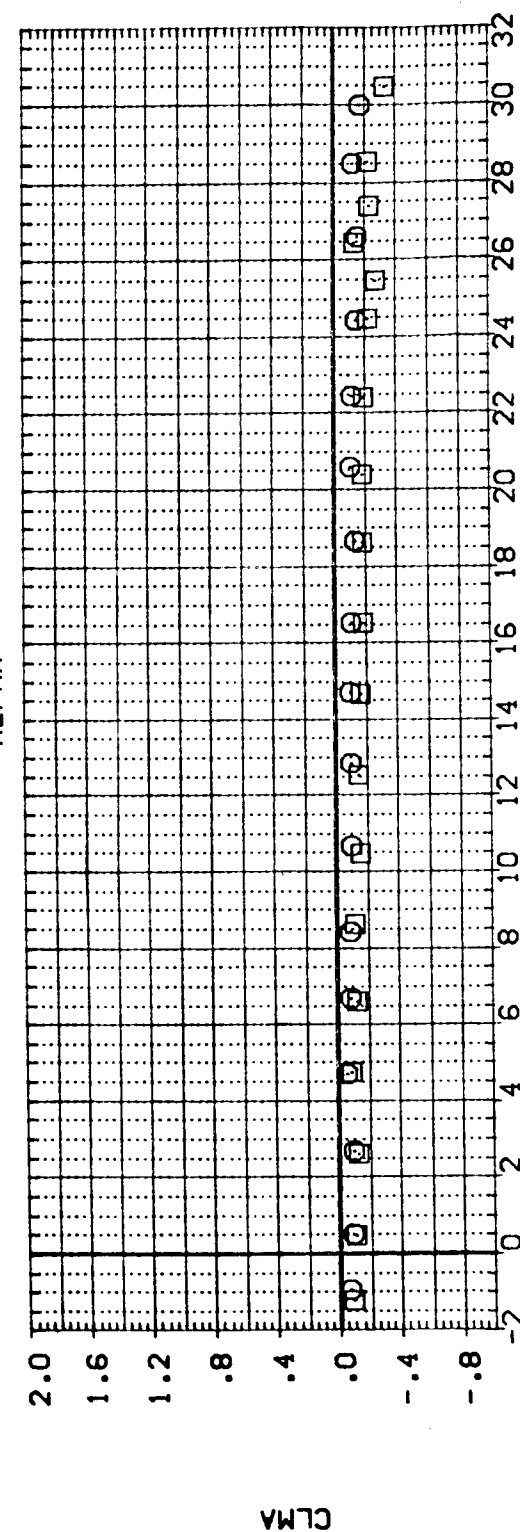
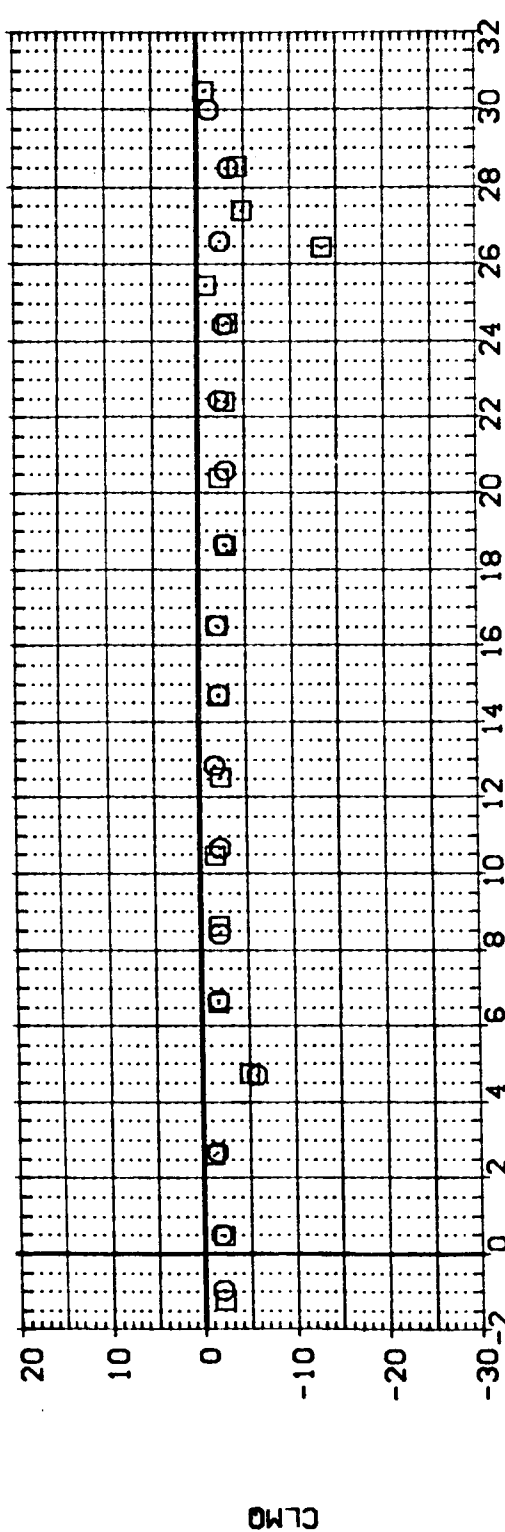


FIGURE 12. EFFECT OF BODY FLAP ON DYNAMIC STABILITY PARAMETERS IN PITCH

(COM)MACH = 2.86

DATA SET SYMBOL CONFIGURATION DESCRIPTION CG-LOC ELEVTR BOFLAP RUOFLR
 (RFGP03) LA-14: ROCKWELL CRB D898 V/MOD; NOSE (BVMV) } 1.000 .000 .000 40.000
 (RFGP05) LA-14: ROCKWELL CRB D898 V/MOD; NOSE (BVMV) } 1.000 .000 .000 40.000

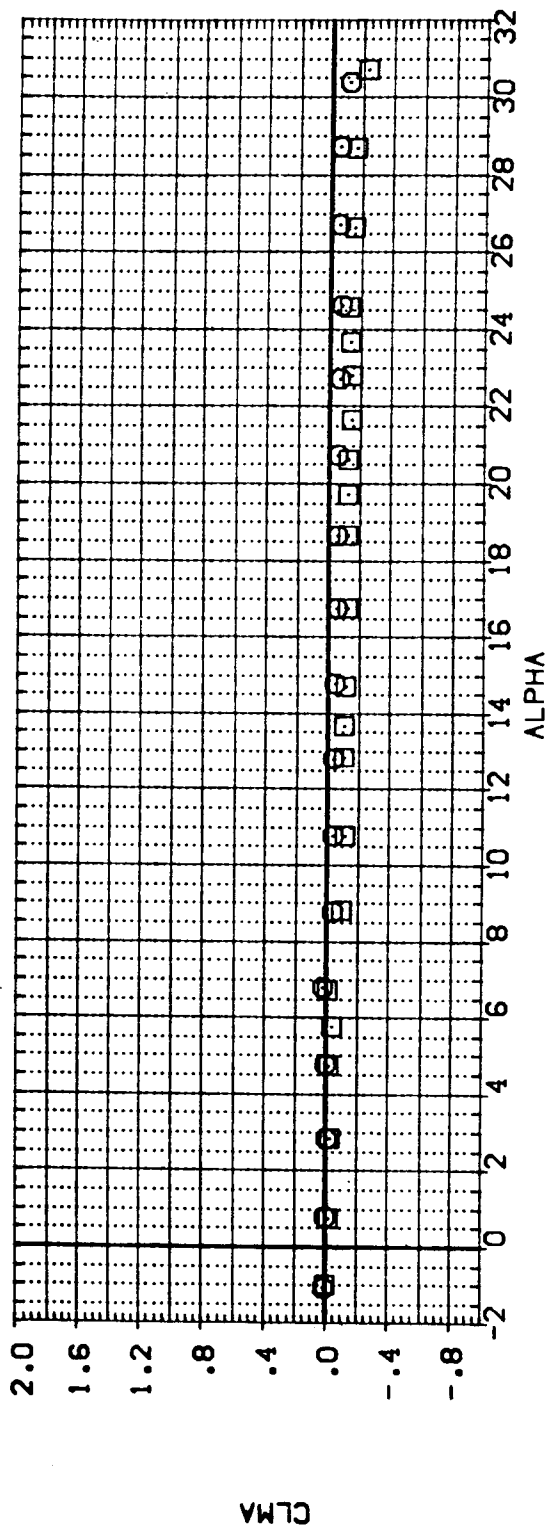
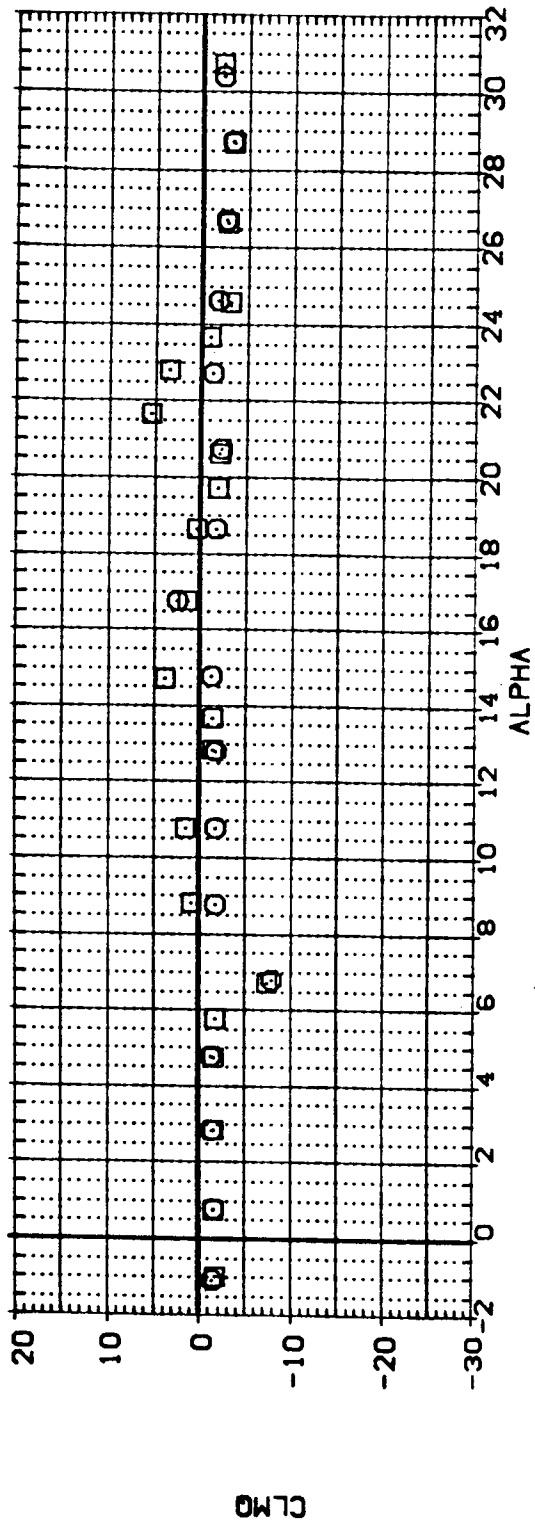


FIGURE 12. EFFECT OF BODY FLAP ON DYNAMIC STABILITY PARAMETERS IN PITCH

(E)MACH = 3.96

DATA SET SYMBOL: (RPG03) (RPG05)
 CONFIGURATION DESCRIPTION: LA-14; ROCKWELL ORB 0888 V/MOD. NOSE (BVM1) LA-14; ROCKWELL ORB 0888 V/MOD. NOSE (BVMF)
 CG-LOC: 1.000 1.000
 ELEVTR: .000 .000
 BOFLAP: .000 .000
 RUOFLR: 40.000 40.000

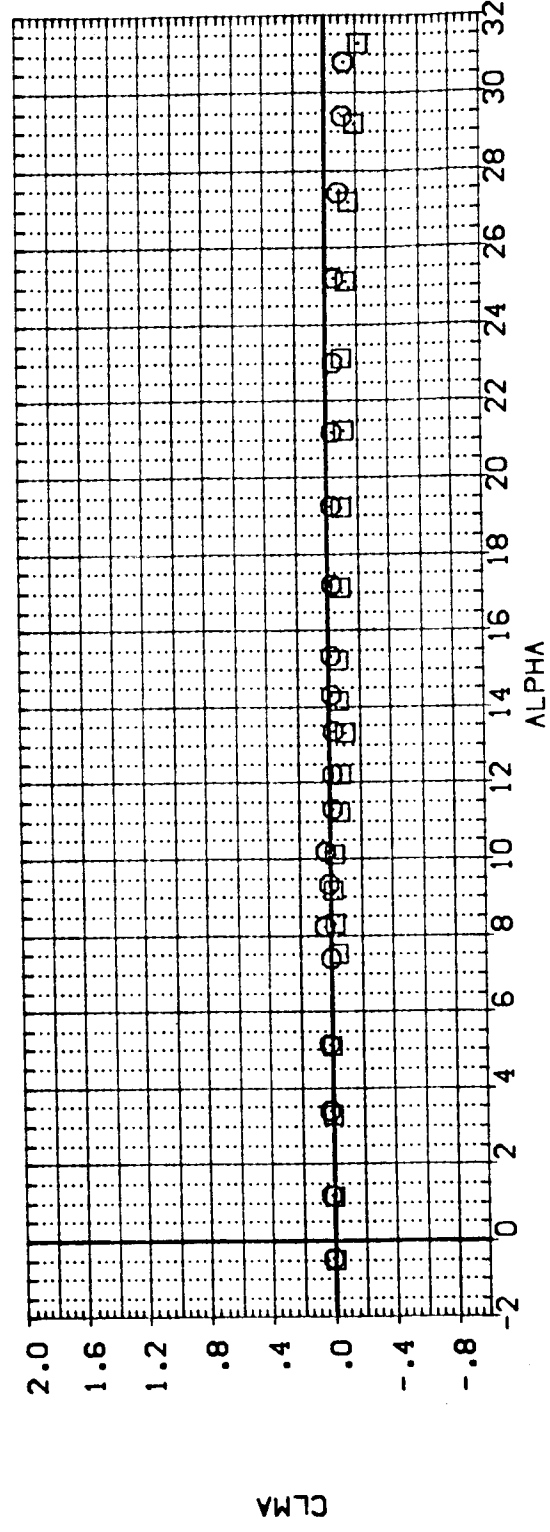
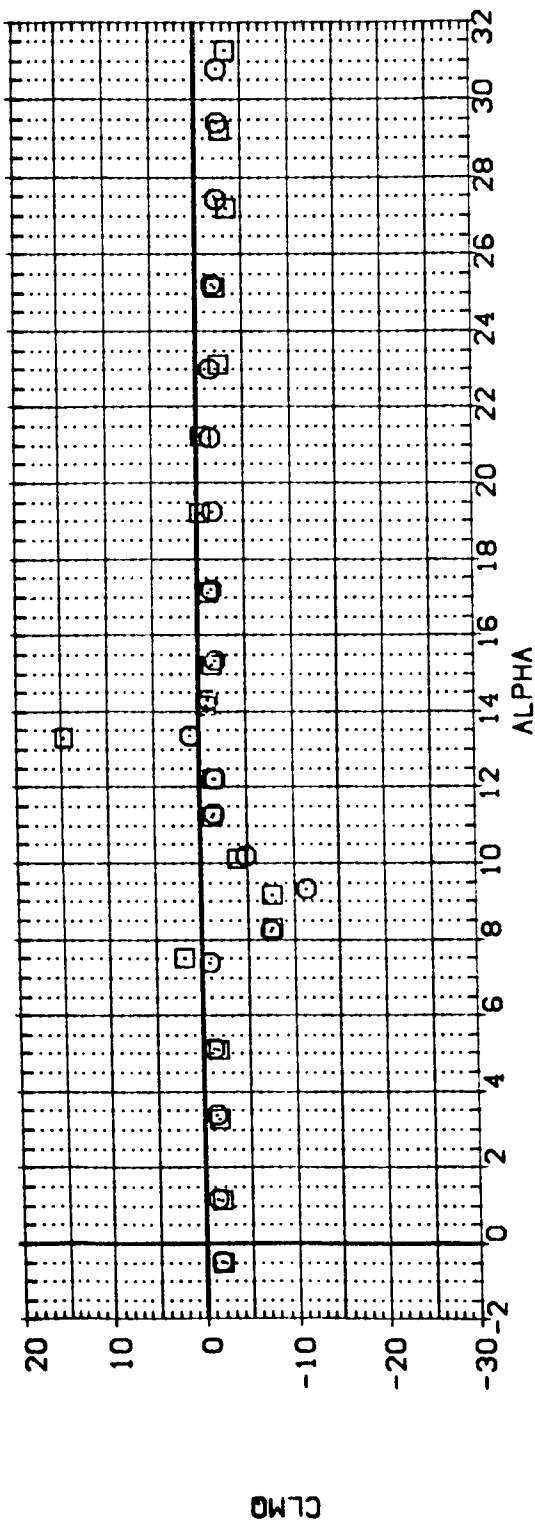


FIGURE 12. EFFECT OF BODY FLAP ON DYNAMIC STABILITY PARAMETERS IN PITCH

(F)MACH = 4.63

APPENDIX
TABULATED SOURCE DATA

Plotted data tabulations are
available from DMS on request.

(RPGFD01)

LA-14, ROCKWELL CRB 0888 W/NOSE (B/M)

PARAMETRIC DATA
 BETA = 0.000 ELEVTR = 0.000
 ATURON = 0.000 CG-LCC = 1.000
 RUDFLR = 40.000

GRADIENT INTERVAL = -5.00/ 5.00

RUN NO. 910/ 0

MACH	ALPHA	CLM2	CLM4	CM3	CM4	CM5	Q (KPA)	BETA
2.360	0.416	-1.85233	-0.13342	-2.92393	2.01556	26.82472	0.00000	0.00000
2.360	4.558	-1.77330	-0.10462	-3.35867	1.95227	26.82472	0.00000	0.00000
2.360	8.606	-1.75433	-0.08530	-1.24131	2.04328	26.82472	0.00000	0.00000
2.360	12.631	-2.11583	-0.07684	-3.27281	2.18048	26.82472	0.00000	0.00000
2.360	16.574	-0.30962	-0.09187	-5.39566	2.31398	26.82472	0.00000	0.00000
2.360	18.403	-2.33222	-0.08468	-4.39812	2.37027	26.82472	0.00000	0.00000
2.360	20.469	-1.97980	-0.15478	-0.85113	2.40470	26.82472	0.00000	0.00000
2.360	22.427	-2.75672	-0.06680	-0.86225	2.38412	26.82472	0.00000	0.00000
2.360	24.372	-5.96486	-0.08373	3.27502	2.44158	26.82472	0.00000	0.00000
2.360	26.477	-3.66493	-0.13439	-0.37774	2.54797	26.82472	0.00000	0.00000
2.360	28.471	-7.05555	-0.09437	-3.50536	2.45892	26.82472	0.00000	0.00000
2.360	30.084	-4.32730	-0.15965	-9.07355	2.62416	26.82472	0.00000	0.00000
GRADIENT	0.01908	0.00695	0.00695	-0.10496	-0.01528	0.00000	0.00000	0.00000

GRADIENT INTERVAL = -5.00/ 5.00

RUN NO. 911/ 0

MACH	ALPHA	CLM2	CLM4	CM3	CM4	CM5	Q (KPA)	BETA
2.860	0.584	-1.50826	-0.04397	-4.24644	1.66884	23.67863	0.00000	0.00000
2.860	4.477	-5.67773	-0.00382	-20.61896	1.89763	23.67863	0.00000	0.00000
2.860	8.653	-2.03087	-0.06418	-2.66236	1.88310	23.67863	0.00000	0.00000
2.860	12.632	-1.93783	-0.06019	-1.14805	2.02828	23.67863	0.00000	0.00000
2.860	16.573	1.82875	-0.10705	-9.39787	2.24733	23.67863	0.00000	0.00000
2.860	18.503	-2.32708	-0.10800	-1.88983	2.27031	23.67863	0.00000	0.00000
2.860	20.569	-2.74403	-0.12192	-2.78636	2.36785	23.67863	0.00000	0.00000
2.860	22.616	-2.75069	-0.11800	-1.21237	2.40010	23.67863	0.00000	0.00000
2.860	24.539	-3.08899	-0.09250	-2.29821	2.41307	23.67863	0.00000	0.00000
2.860	25.424	-2.26142	-0.13102	-0.15139	2.44545	23.67863	0.00000	0.00000
2.860	26.615	6.76040	-0.13877	13.44208	2.28934	23.67863	0.00000	0.00000
2.860	27.459	-3.31636	-0.07700	5.19942	2.33744	23.67863	0.00000	0.00000
2.860	28.598	-7.51130	-0.05536	-2.57666	2.40132	23.67863	0.00000	0.00000
2.860	30.221	-2.59636	-0.14072	-3.34873	2.47187	23.67863	0.00000	0.00000
GRADIENT	-1.07102	0.01029	0.01029	-4.20560	0.05892	-0.00000	0.00000	0.00000

LA-14, ROOSEVELT ORB 0898 W/MCD. NOSE (BMW)

(RPGP01)

PARAMETRIC DATA
 BETA = 0.000 ELEVTR = 0.000
 AIRLON = 0.000 CG-LOC = 1.000
 RUOFLR = 40.000

GRADIENT INTERVAL = -5.00/ 5.00

RUN NO. 912/ 0

MACH	ALPHA	CLM3	CLM4	CM3	CM4	Q (KPA)	BETA
3.960	0.689	-1.53231	0.03139	-5.22241	1.32242	17.62188	0.00000
3.960	4.818	-1.55235	0.03932	-6.52062	1.44335	17.62188	0.00000
3.960	8.488	-1.83077	0.00848	-3.87252	1.63197	17.62188	0.00000
3.960	12.680	-1.88081	-0.01318	-1.83710	1.84980	17.62188	0.00000
3.960	16.760	-1.74944	-0.04673	-0.76810	2.06631	17.62188	0.00000
3.960	18.782	-1.64727	-0.09809	-0.98860	2.17909	17.62188	0.00000
3.960	20.809	-1.92684	-0.04691	-1.08799	2.28557	17.62188	0.00000
3.960	22.856	-2.09966	-0.06564	-0.17017	2.35592	17.62188	0.00000
3.960	24.766	-2.92222	-0.06937	-4.44377	2.44365	17.62188	0.00000
3.960	26.741	-3.10115	-0.07242	-3.15089	2.51343	17.62188	0.00000
3.960	28.968	-1.86916	-0.07660	23.58394	2.41162	17.62188	0.00000
3.960	30.394	-3.01387	-0.08666	1.34638	2.54557	17.62188	0.00000
GRADIENT		-0.00485	0.00192	-0.31441	0.02829	0.00000	0.00000

GRADIENT INTERVAL = -5.00/ 5.00

RUN NO. 913/ 0

MACH	ALPHA	CLM3	CLM4	CM3	CM4	Q (KPA)	BETA
4.630	1.091	-1.35200	0.05193	-5.51240	1.20449	13.92910	0.00000
4.630	3.363	-1.42398	0.06098	-6.02028	1.28957	13.92910	0.00000
4.630	5.388	-1.41058	0.06055	-6.69498	1.34833	13.92910	0.00000
4.630	7.054	-1.27399	0.04676	-5.67955	1.41271	13.92910	0.00000
4.630	8.173	-7.69661	0.07498	-20.34528	1.70115	13.92910	0.00000
4.630	9.197	-11.71606	0.05635	-40.84998	1.77199	13.92910	0.00000
4.630	10.219	-6.30889	0.05696	-22.80689	1.86866	13.92910	0.00000
4.630	11.318	-1.54539	-0.01509	-0.89464	1.75246	13.92910	0.00000
4.630	13.275	-2.89115	-0.00377	-4.62800	1.89428	13.92910	0.00000
4.630	15.292	-1.71506	-0.02154	-0.55505	1.93938	13.92910	0.00000
4.630	17.368	-2.16532	-0.03171	-0.54097	2.05572	13.92910	0.00000
4.630	19.245	-2.00416	-0.02582	0.24136	2.15970	13.92910	0.00000
4.630	21.471	-2.04349	-0.02380	1.25210	2.25650	13.92910	0.00000
4.630	23.186	-1.65795	-0.04537	0.46865	2.32283	13.92910	0.00000
4.630	25.270	-2.53112	-0.06244	2.25284	2.37907	13.92910	0.00000
4.630	27.494	-3.38704	-0.08646	1.56077	2.41867	13.92910	0.00000
4.630	29.248	-2.46087	-0.13512	-1.76553	2.55598	13.92910	0.00000
4.630	30.830	-3.71072	-0.12192	-4.70440	2.60828	13.92910	0.00000
GRADIENT		-0.03168	0.00398	-0.22354	0.03745	0.00000	0.00000

(RPGF03)

LA-14, ROOSEVELT CFB 0898 W/NO. NOSE (BMM)

PARAMETRIC DATA
 BETA = 0.000 ELEVTR = 0.000
 ATURON = 0.000 CG-LOC = 1.000
 RUDFLR = 40.000

RUN NO. 603/ 0 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CLMA	CLMA	ON2	ON2	ON2	BETA
1.600	-1.048	-3.24103	-0.45270	-9.63767	2.60279	23.01698	0.00000
1.600	0.478	-2.14848	-0.45241	-0.57144	2.75083	23.01698	0.00000
1.600	2.635	-1.94920	-0.43328	-1.37268	2.72708	23.01698	0.00000
1.600	4.460	-1.90444	-0.40318	-1.08078	2.70561	23.01698	0.00000
1.600	6.827	-2.74517	-0.35130	0.50678	2.59355	23.01698	0.00000
1.600	8.451	-1.61781	-0.39368	1.60417	2.67092	23.01698	0.00000
1.600	10.639	-1.75110	-0.31462	-1.71853	2.56019	23.01698	0.00000
1.600	12.642	-1.66956	-0.24471	-4.45237	2.51227	23.01698	0.00000
GRADIENT	0.21793	0.00909	1.25686	-0.01529	0.00000	0.00000	0.00000

RUN NO. 604/ 0 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CLMA	CLMA	ON2	ON2	ON2	BETA
1.900	-0.632	-3.14195	-0.31236	-2.22029	2.36074	22.93458	0.00000
1.900	0.866	-2.48291	-0.31175	4.41367	2.36183	22.93458	0.00000
1.900	3.065	-1.62400	-0.32136	-1.00516	2.35211	22.93458	0.00000
1.900	4.969	-2.01664	-0.29467	0.06978	2.29372	22.93458	0.00000
1.900	7.037	-2.47521	-0.26554	0.29769	2.23157	22.93458	0.00000
1.900	9.961	-2.57912	-0.20636	0.10223	2.21436	22.93458	0.00000
1.900	10.963	-2.69511	-0.14975	-0.17840	2.18912	22.93458	0.00000
1.900	13.046	-2.89984	-0.14005	0.55573	2.27460	22.93458	0.00000
1.900	15.040	-2.43748	-0.12625	-1.15939	2.30974	22.93458	0.00000
1.900	16.962	-2.22178	-0.13649	-1.66535	2.37245	22.93458	0.00000
1.900	18.937	-2.41000	-0.18747	-0.44049	2.43105	22.93458	0.00000
1.900	21.162	-2.69381	-0.22470	-0.00297	2.46527	22.93458	0.00000
GRADIENT	0.22598	0.00228	-0.00480	-0.01440	0.00000	0.00000	0.00000



LA-14, ROCKWELL CRB 0898 W/MCD. NOSE (B/M/M)

(R/F/P/O/S)

PARAMETRIC DATA
BETA = 0.000 ELEVTR = 0.000
ATURON = 0.000 CG-LOC = 1.000
RUDFLR = 40.000

GRADIENT INTERVAL = -5.00/ 5.00

RUN NO. 906/ 0

MACH	ALPHA	CLM3	CLM4	CLM5	CLM6	CLM7	CLM8	CLM9	CLM10	BETA
2.360	-1.349	-2.70790	-0.17677	-4.06242	2.07441	26.82472	0.00000	0.00000	0.00000	0.00000
2.360	0.493	-2.20522	-0.17782	-1.75456	2.05044	26.82472	0.00000	0.00000	0.00000	0.00000
2.360	2.492	-6.15991	-0.15993	-16.55954	2.24255	26.82472	0.00000	0.00000	0.00000	0.00000
2.360	4.565	-2.09733	-0.16099	-1.64813	2.03452	26.82472	0.00000	0.00000	0.00000	0.00000
2.360	6.482	-1.99797	-0.12774	-1.14794	2.02022	26.82472	0.00000	0.00000	0.00000	0.00000
2.360	8.547	-1.70169	-0.09904	1.17463	2.06258	26.82472	0.00000	0.00000	0.00000	0.00000
2.360	10.529	-1.92635	-0.09897	-0.95998	2.14035	26.82472	0.00000	0.00000	0.00000	0.00000
2.360	12.565	-2.09445	-0.09780	-0.70750	2.19553	26.82472	0.00000	0.00000	0.00000	0.00000
2.360	14.532	-2.69245	-0.09432	-3.86753	2.25405	26.82472	0.00000	0.00000	0.00000	0.00000
2.360	16.454	-2.70850	-0.09912	-2.42698	2.30864	26.82472	0.00000	0.00000	0.00000	0.00000
2.360	18.469	-3.32944	-0.11645	-2.81074	2.39271	26.82472	0.00000	0.00000	0.00000	0.00000
2.360	20.363	-3.00953	-0.10396	-1.09817	2.41188	26.82472	0.00000	0.00000	0.00000	0.00000
2.360	22.436	-3.32678	-0.12173	-0.58923	2.45202	26.82472	0.00000	0.00000	0.00000	0.00000
2.360	24.399	-2.92573	-0.11542	-2.37738	2.56460	26.82472	0.00000	0.00000	0.00000	0.00000
2.360	26.387	-5.68130	-0.15822	-1.70337	2.50522	26.82472	0.00000	0.00000	0.00000	0.00000
2.360	28.471	-7.62435	-0.17267	5.85296	2.49742	26.82472	0.00000	0.00000	0.00000	0.00000
2.360	30.009	-2.03177	-0.18072	0.85506	2.49987	26.82472	0.00000	0.00000	0.00000	0.00000
GRADIENT		-0.08957	0.00336	-0.39636	0.00325	0.00000				

GRADIENT INTERVAL = -5.00/ 5.00

RUN NO. 907/ 0

MACH	ALPHA	CLM3	CLM4	CLM5	CLM6	CLM7	CLM8	CLM9	CLM10	BETA
2.860	-0.947	-1.92454	-0.06544	-3.57596	1.71345	23.67863	0.00000	0.00000	0.00000	0.00000
2.860	0.502	-1.68236	-0.08442	-2.54729	1.71159	23.67863	0.00000	0.00000	0.00000	0.00000
2.860	2.696	-1.40194	-0.09550	-3.97502	1.77828	23.67863	0.00000	0.00000	0.00000	0.00000
2.860	4.691	-5.79294	-0.05961	-20.05298	1.97511	23.67863	0.00000	0.00000	0.00000	0.00000
2.860	6.697	-1.74696	-0.08842	0.11870	1.87628	23.67863	0.00000	0.00000	0.00000	0.00000
2.860	8.401	-1.93767	-0.09419	-0.31044	1.90518	23.67863	0.00000	0.00000	0.00000	0.00000
2.860	10.668	-1.99366	-0.09833	-1.55475	1.98778	23.67863	0.00000	0.00000	0.00000	0.00000
2.860	12.837	-1.63917	-0.09781	-1.19881	2.06048	23.67863	0.00000	0.00000	0.00000	0.00000
2.860	14.718	-2.03117	-0.09314	-0.33349	2.10676	23.67863	0.00000	0.00000	0.00000	0.00000
2.860	16.507	-1.94380	-0.10814	-2.07769	2.18873	23.67863	0.00000	0.00000	0.00000	0.00000
2.860	18.648	-2.76053	-0.13313	-0.25681	2.27433	23.67863	0.00000	0.00000	0.00000	0.00000
2.860	20.609	-2.95412	-0.10978	-4.73757	2.37995	23.67863	0.00000	0.00000	0.00000	0.00000
2.860	22.450	-2.18567	-0.11629	-1.54432	2.42251	23.67863	0.00000	0.00000	0.00000	0.00000
2.860	24.446	-2.74377	-0.14142	-2.69433	2.48769	23.67863	0.00000	0.00000	0.00000	0.00000
2.860	26.608	-2.45517	-0.15821	1.93477	2.41969	23.67863	0.00000	0.00000	0.00000	0.00000
2.860	28.503	-3.36300	-0.12421	-1.60109	2.45564	23.67863	0.00000	0.00000	0.00000	0.00000
2.860	30.016	-1.28728	-0.17532	-2.05969	2.59494	23.67863	0.00000	0.00000	0.00000	0.00000
GRADIENT		-0.161260	0.00065	-2.75141	0.04566	0.00000				

(RPGF03)

LA-14, ROOMWELL CRB 0898 W/MCD, NOSE (BMM)

PARAMETRIC DATA
 BETA = 0.000 ELEVTR = 0.000
 AILRON = 0.000 CG-LOC = 1.000
 RUOFLR = 40.000

GRADIENT INTERVAL = -5.00/ 5.00

RUN NO. 908/ 0

MACH	ALPHA	CLM3	CLM4	CM2	CM3	Q (KPA)	BETA
3.960	-1.086	-1.48444	0.01125	-3.49490	1.32128	17.62188	0.00000
3.960	0.798	-1.52310	-0.00163	-4.03990	1.36197	17.62188	0.00000
3.960	2.846	-1.44125	-0.00945	-4.65669	1.45078	17.62188	0.00000
3.960	4.798	-1.19932	0.00001	-5.08228	1.48828	17.62188	0.00000
3.960	6.791	-7.96072	0.02079	-28.66953	1.73293	17.62188	0.00000
3.960	8.787	-1.66295	-0.03861	-5.14119	1.71768	17.62188	0.00000
3.960	10.802	-1.75870	-0.04144	-1.27951	1.79079	17.62188	0.00000
3.960	12.812	-1.71023	-0.03909	-1.74699	1.89359	17.62188	0.00000
3.960	14.780	-1.23947	-0.04382	-2.34127	1.96981	17.62188	0.00000
3.960	16.740	2.56108	-0.05842	-2.23677	2.07253	17.62188	0.00000
3.960	18.663	-1.68205	-0.06011	-0.74963	2.17593	17.62188	0.00000
3.960	20.742	-2.15074	-0.08226	-1.28284	2.27127	17.62188	0.00000
3.960	22.710	-1.27059	-0.06957	-1.92704	2.35912	17.62188	0.00000
3.960	24.646	-1.69254	-0.07950	-1.74899	2.43473	17.62188	0.00000
3.960	26.741	-2.57329	-0.08238	-1.99497	2.47148	17.62188	0.00000
3.960	28.757	-3.20210	-0.08603	0.29085	2.51419	17.62188	0.00000
3.960	30.380	-2.22209	-0.11312	-1.34334	2.61772	17.62188	0.00000
GRADIENT		0.04610	-0.00210	-0.27447	0.03016	0.00000	0.00000



LA-14, ROCKWELL CRB D868 W/MCD. NOISE (BMM)

(RRGP03)

PARAMETRIC DATA
 BETA = 0.000 ELEVTR = 0.000
 ATLRON = 0.000 CG-LCC = 1.000
 RUDFLR = 40.000

GRADIENT INTERVAL = -9.00/ 5.00

RUN NO.	908/ 0	ALPHA	CLM2	CLM3	CLM4	ON2	ON4	ON6	g (KPA)	BETA
4.630		-0.475	-1.55644	0.01144	-3.17980	1.21485	13.92910	0.00000	0.00000	
4.630		1.180	-1.30846	0.02103	-2.84510	1.23445	13.92910	0.00000	0.00000	
4.630		3.377	-1.24831	0.02178	-4.14033	1.34482	13.92910	0.00000	0.00000	
4.630		5.154	-1.15629	0.02409	-4.89626	1.38592	13.92910	0.00000	0.00000	
4.630		7.374	-0.74603	0.03828	-9.09733	1.52326	13.92910	0.00000	0.00000	
4.630		8.227	-7.50150	0.03967	-23.80199	1.73917	13.92910	0.00000	0.00000	
4.630		9.343	-11.35959	0.01266	-43.90401	1.83328	13.92910	0.00000	0.00000	
4.630		10.206	-4.82521	0.03495	-29.71684	1.91134	13.92910	0.00000	0.00000	
4.630		11.305	-1.49007	-0.01567	-2.30545	1.75102	13.92910	0.00000	0.00000	
4.630		12.198	-1.60344	-0.01972	-2.28718	1.78625	13.92910	0.00000	0.00000	
4.630		13.368	1.03047	-0.02626	-2.81281	1.84564	13.92910	0.00000	0.00000	
4.630		14.305	-0.95504	-0.02257	-2.22018	1.87596	13.92910	0.00000	0.00000	
4.630		15.322	-1.74330	-0.01537	-0.53676	1.91805	13.92910	0.00000	0.00000	
4.630		17.190	-1.48167	-0.03110	0.05509	2.01710	13.92910	0.00000	0.00000	
4.630		19.245	-1.59052	-0.02859	-0.48141	2.12844	13.92910	0.00000	0.00000	
4.630		21.179	-1.43296	-0.03772	0.03041	2.21343	13.92910	0.00000	0.00000	
4.630		23.013	-1.34651	-0.04883	0.01712	2.28446	13.92910	0.00000	0.00000	
4.630		25.216	-1.66917	-0.05786	-0.28894	2.32452	13.92910	0.00000	0.00000	
4.630		27.447	-2.29181	-0.06862	1.01105	2.39498	13.92910	0.00000	0.00000	
4.630		29.411	-2.35607	-0.11538	-1.05894	2.50353	13.92910	0.00000	0.00000	
4.630		30.775	-2.36120	-0.12809	-3.28873	2.57014	13.92910	0.00000	0.00000	
4.630		GRADIENT	0.07722	0.00256	-0.26744	0.03462	0.00000	0.00000	0.00000	



LA-14, ROCKWELL CRB 0688 W/MOD. NOISE (BMAWF)

(RFGP05)

PARAMETRIC DATA
 BETA = 0.000 ELEVTR = 0.000
 ALURON = 0.000 CG-LOC = 1.000
 RUDFLR = 40.000 BDFLAP = 0.000

GRADIENT INTERVAL = -5.00/ 5.00

RUN NO. 601/ 0

MACH	ALPHA	CLM2	CLM4	CLM8	CLM16	CLM32	CLM64	Q (KPA)	BETA
1.600	-1.014	-5.32997	-0.47194	-4.61679	2.61049	23.01698	0.00000	0.00000	
1.600	0.423	-3.63089	-0.46841	1.06400	2.73384	23.01698	0.00000	0.00000	
1.600	2.716	-3.19691	-0.44665	1.07032	2.72266	23.01698	0.00000	0.00000	
1.600	4.968	-2.81523	-0.44827	0.91587	2.72026	23.01698	0.00000	0.00000	
1.600	6.707	-2.49147	-0.41077	0.74013	2.65025	23.01698	0.00000	0.00000	
1.600	8.577	-2.49830	-0.40877	0.69125	2.70242	23.01698	0.00000	0.00000	
1.600	10.837	-4.21846	-0.36533	0.60512	2.59182	23.01698	0.00000	0.00000	
1.600	12.596	-2.33751	-0.30667	0.67364	2.54981	23.01698	0.00000	0.00000	
1.600	14.775	-0.11165	-0.28068	-4.39387	2.53776	23.01698	0.00000	0.00000	
	GRADIENT	0.37467	0.00458	0.74297	-0.01294	0.00000	0.00000	0.00000	

GRADIENT INTERVAL = -5.00/ 5.00

RUN NO. 602/ 0

MACH	ALPHA	CLM2	CLM4	CLM8	CLM16	CLM32	CLM64	Q (KPA)	BETA
1.900	-0.680	-3.05795	-0.33772	-2.28128	2.38223	22.93458	0.00000	0.00000	
1.900	0.839	-2.49125	-0.39007	-2.43875	2.37457	22.93458	0.00000	0.00000	
1.900	3.119	-2.32223	-0.37455	-1.18132	2.37970	22.93458	0.00000	0.00000	
1.900	4.923	-2.40603	-0.36582	-1.95774	2.38904	22.93458	0.00000	0.00000	
1.900	7.037	-2.43075	-0.36210	-0.11763	2.26482	22.93458	0.00000	0.00000	
1.900	9.133	-2.57256	-0.24606	-0.28638	2.23263	22.93458	0.00000	0.00000	
1.900	11.160	-3.08861	-0.18766	0.42882	2.24221	22.93458	0.00000	0.00000	
1.900	13.046	-1.89276	-0.17238	-0.37695	2.28825	22.93458	0.00000	0.00000	
1.900	15.146	-1.96197	-0.20299	-0.17518	2.37870	22.93458	0.00000	0.00000	
1.900	17.047	-2.59660	-0.21180	-0.78876	2.41127	22.93458	0.00000	0.00000	
1.900	19.073	-1.48528	-0.27841	0.25593	2.48365	22.93458	0.00000	0.00000	
1.900	20.830	-2.68749	-0.24727	-1.06081	2.50873	22.93458	0.00000	0.00000	
1.900	21.202	-3.79281	-0.22272	2.12591	2.48285	22.93458	0.00000	0.00000	
	GRADIENT	0.10770	-0.00408	0.12534	-0.00947	0.00000	0.00000	0.00000	



(RPGPOS)

LA-14, ROCKWELL CRB 0898 WIND, NOISE (BAMMF)

PARAMETRIC DATA

BETA = 0.000 ELEVTR = 0.000
 ATURON = 0.000 CG-LCC = 1.000
 RUDFLR = 40.000 EDFLAP = 0.000

GRADIENT INTERVAL = -5.00/ 5.00

RUN NO. 901/ 0

	ALPHA	CLM2	CLM4	ONG	OMA	Q (KPA)	BETA
2.360	-1.376	-2.25707	-0.20311	-6.41120	2.06745	26.82472	0.00000
2.360	0.462	-2.17560	-0.20997	-0.84154	2.05676	26.82472	0.00000
2.360	2.478	-5.03176	-0.19652	-11.85635	2.26619	26.82472	0.00000
2.360	4.390	-2.65015	-0.20973	-0.20082	2.06077	26.82472	0.00000
2.360	6.522	-2.32869	-0.17778	-1.11718	2.04892	26.82472	0.00000
2.360	8.434	-2.31412	-0.14547	-0.14468	2.08101	26.82472	0.00000
2.360	10.423	-2.17959	-0.15735	0.59659	2.16793	26.82472	0.00000
2.360	12.398	-3.17540	-0.13861	0.89634	2.18249	26.82472	0.00000
2.360	14.334	-3.07926	-0.16063	1.50716	2.22363	26.82472	0.00000
2.360	16.407	-1.47008	-0.18469	-3.46952	2.29789	26.82472	0.00000
2.360	18.350	-3.14837	-0.17621	-4.78021	2.37864	26.82472	0.00000
2.360	20.412	-2.64978	-0.18376	-0.18390	2.42361	26.82472	0.00000
2.360	22.436	-3.09694	-0.20068	-0.04188	2.36339	26.82472	0.00000
2.360	24.488	-3.62263	-0.25117	1.22511	2.48334	26.82472	0.00000
2.360	26.234	-2.48582	-0.29890	0.06612	2.57351	26.82472	0.00000
2.360	28.840	-3.62426	-0.30196	2.59552	2.59417	26.82472	0.00000
2.360	27.237	-15.48497	-0.17908	17.77737	2.32597	26.82472	0.00000
2.360	28.493	-13.68055	-0.20032	23.80225	2.31025	26.82472	0.00000
2.360	29.369	-7.60547	-0.20277	7.14348	2.41229	26.82472	0.00000
2.360	30.409	-0.44823	-0.33175	2.80026	2.59650	26.82472	0.00000
2.360		-0.21277	0.00032	0.37060	0.01009	0.00000	0.00000

(RPPROB)

LA-14, ROCKWELL CRB 0898 W/MCD, NOSE (BMMF)

PARAMETRIC DATA
 BETA = 0.000 ELEVTR = 0.000
 AIRCON = 0.000 CG-LOC = 1.000
 RUDFLR = 40.000 EDFLAP = 0.000

GRADIENT INTERVAL = -5.00/ 5.00

WACH	ALPHA	CLM3	CLM4	ON3	ON4	Q (KPA)	BETA
2.860	-1.235	-2.05230	-0.06664	-1.36141	1.72016	23.67863	0.00000
2.860	0.489	-2.09408	-0.10982	-1.77264	1.71028	23.67863	0.00000
2.860	2.605	-1.15808	-0.13023	-1.22921	1.77999	23.67863	0.00000
2.860	4.732	-5.06319	-0.08998	-17.49510	1.98578	23.67863	0.00000
2.860	6.591	-1.78494	-0.12368	0.14773	1.87958	23.67863	0.00000
2.860	8.627	-1.97386	-0.12018	-1.06315	1.93038	23.67863	0.00000
2.860	10.485	-1.62507	-0.15127	-1.20123	2.02612	23.67863	0.00000
2.860	12.546	-2.18208	-0.14884	-1.70157	2.09010	23.67863	0.00000
2.860	14.665	-2.05228	-0.16631	-0.28973	2.16670	23.67863	0.00000
2.860	16.507	-1.96044	-0.18549	-0.38258	2.23391	23.67863	0.00000
2.860	18.602	-2.86788	-0.18166	-0.17318	2.31582	23.67863	0.00000
2.860	20.410	-2.25189	-0.18355	-4.00077	2.40077	23.67863	0.00000
2.860	22.430	-2.92149	-0.19158	0.36171	2.41079	23.67863	0.00000
2.860	24.466	-3.25354	-0.22369	1.27046	2.47212	23.67863	0.00000
2.860	25.438	-0.89803	-0.26973	5.59340	2.48662	23.67863	0.00000
2.860	26.447	-13.41614	-0.13432	17.73326	2.25759	23.67863	0.00000
2.860	27.401	-4.78873	-0.22908	2.76660	2.41065	23.67863	0.00000
2.860	28.557	-4.32140	-0.22048	1.50462	2.46401	23.67863	0.00000
2.860	30.485	-0.72940	-0.33185	3.64413	2.68890	23.67863	0.00000
GRADIENT		-0.41739	-0.00081	-2.44784	0.04452	0.00000	0.00000



(RFGP05)

LA-14, ROONWELL CRB 0888 W/MOD. NCSE (BAMNF)

PARAMETRIC DATA
 BETA = 0.000 ELEVTR = 0.000
 AILRON = 0.000 CG-LCC = 1.000
 RUDFLR = 40.000 EDFLAP = 0.000

GRADIENT INTERVAL = -5.00/ 5.00

RUN NO. 903/ 0

MACH	ALPHA	CLM2	CLM4	ON2	ON4	q (KPA)	BETA
3.960	-0.987	-1.75578	-0.00311	-1.95571	1.31612	17.62188	0.00000
3.960	0.757	-1.64346	-0.01904	-2.54582	1.35803	17.62188	0.00000
3.960	2.846	-1.55767	-0.03020	-2.89890	1.44207	17.62188	0.00000
3.960	4.737	-1.50760	-0.02175	-3.21490	1.48278	17.62188	0.00000
3.960	5.775	-1.70090	-0.03601	-4.48482	1.55302	17.62188	0.00000
3.960	6.737	-7.38880	-0.00426	-26.28782	1.73508	17.62188	0.00000
3.960	8.614	0.81326	-0.09261	-3.31793	1.75529	17.62188	0.00000
3.960	10.776	1.52451	-0.11359	-6.34218	1.87281	17.62188	0.00000
3.960	12.852	-1.47695	-0.10182	-1.52638	1.93218	17.62188	0.00000
3.960	13.671	-1.44851	-0.10413	-0.83822	1.97451	17.62188	0.00000
3.960	14.705	3.84089	-0.11308	-3.39039	2.02096	17.62188	0.00000
3.960	16.740	1.36360	-0.12456	-1.61727	2.08293	17.62188	0.00000
3.960	18.676	0.40010	-0.12748	-2.96021	2.20495	17.62188	0.00000
3.960	19.722	-1.84264	-0.12482	-0.40741	2.24920	17.62188	0.00000
3.960	20.623	-2.04210	-0.12392	-0.86345	2.29277	17.62188	0.00000
3.960	21.659	5.39856	-0.14466	-6.06043	2.36307	17.62188	0.00000
3.960	22.803	3.46855	-0.14816	-4.35624	2.38991	17.62188	0.00000
3.960	23.693	-0.88947	-0.13346	-1.78036	2.40665	17.62188	0.00000
3.960	24.579	-3.05403	-0.12421	-0.04096	2.40766	17.62188	0.00000
3.960	26.640	-2.69089	-0.15408	-1.90825	2.51108	17.62188	0.00000
3.960	28.689	-3.42430	-0.16163	1.66451	2.58221	17.62188	0.00000
3.960	30.709	-2.20820	-0.23030	0.18189	2.68321	17.62188	0.00000
GRADIENT		0.04295	-0.00345	-0.21284	0.03041	0.00000	0.00000

LA-14, ROCKWELL CRB 0698 W/MCD, NCSE. (BMMF)

(RPGF05)

PARAMETRIC DATA
 BETA = 0.000 ELEVTR = 0.000
 ALURON = 0.000 CG-LCC = 1.000
 RUOFLR = 40.000 EOFAPL = 0.000

GRADIENT INTERVAL = -5.00/ 5.00

RUN NO. 904/ 0

MAO1	ALPHA	CLM2	CLM4	CN3	CN4	Q (KPA)	BETA
4.630	-0.516	-1.81368	-0.00107	-1.16419	1.20037	13.92910	0.00000
4.630	1.159	-1.80596	0.00364	1.99763	1.20843	13.92910	0.00000
4.630	3.262	-1.62059	-0.00132	-2.21032	1.32681	13.92910	0.00000
4.630	5.100	-1.52294	0.00336	-2.65523	1.37242	13.92910	0.00000
4.630	7.521	2.02920	-0.04910	-9.39436	1.53741	13.92910	0.00000
4.630	9.280	-7.57470	-0.02536	-25.47961	1.75370	13.92910	0.00000
4.630	9.171	-7.61487	-0.02265	-32.62726	1.87909	13.92910	0.00000
4.630	10.100	-3.92131	-0.02696	-24.51025	1.97439	13.92910	0.00000
4.630	11.212	-1.18705	-0.06329	-0.52805	1.75429	13.92910	0.00000
4.630	12.198	-1.44445	-0.07315	-0.32557	1.80635	13.92910	0.00000
4.630	13.328	14.66214	-0.10337	-6.31591	1.88874	13.92910	0.00000
4.630	14.160	-0.83788	-0.07027	-0.11916	1.87813	13.92910	0.00000
4.630	15.203	-1.43823	-0.07060	1.41948	1.93490	13.92910	0.00000
4.630	17.131	-1.05984	-0.09610	0.20957	2.04356	13.92910	0.00000
4.630	19.219	-0.22295	-0.09887	-0.45809	2.16328	13.92910	0.00000
4.630	21.219	-0.47850	-0.11942	-0.47989	2.27002	13.92910	0.00000
4.630	23.126	-2.31510	-0.10671	2.16690	2.30392	13.92910	0.00000
4.630	25.136	-2.10090	-0.13833	0.82924	2.36615	13.92910	0.00000
4.630	27.177	-3.29871	-0.15875	3.66682	2.41153	13.92910	0.00000
4.630	29.194	-2.75599	-0.19527	1.07214	2.53661	13.92910	0.00000
4.630	31.269	-3.36039	-0.22777	-1.46171	2.66034	13.92910	0.00000
GRADIENT	0.05244	-0.00017	-0.35011	-0.03422	0.00000	0.00000	0.00000



LA-14, ROOSEVELT CRB 0888 WAKCD, NOISE (BMMWF)

(RPGF06)

PARAMETRIC DATA
 BETA = 0.000 ELEVTR = 0.000
 ALIUNON = 0.000 CG-LOC = 2.000
 RUOFLR = 40.000 E0FLAP = 0.000

GRADIENT INTERVAL = -5.00/ 5.00

RUN NO. 606/ 0

MACH	ALPHA	CLM3	CLM4	ON3	ON4	Q (KPA)	BETA
1.600	-1.098	-4.32934	-0.32337	-6.13284	2.69726	23.01698	0.00000
1.600	0.566	-2.93919	-0.32166	-2.08064	2.79095	23.01698	0.00000
1.600	2.365	-3.45100	-0.30725	-1.24904	2.78269	23.01698	0.00000
1.600	4.598	-2.81796	-0.28717	-2.44129	2.77068	23.01698	0.00000
1.600	6.814	-2.92969	-0.25702	3.00395	2.65560	23.01698	0.00000
1.600	8.617	-1.89130	-0.27727	1.21483	2.75474	23.01698	0.00000
1.600	10.626	-2.05421	-0.25037	2.23253	2.66963	23.01698	0.00000
1.600	12.537	-1.92664	-0.16662	0.30990	2.61088	23.01698	0.00000
GRADIENT	0.20808	0.00662	0.58769	-0.01980	0.00000	0.00000	0.00000

GRADIENT INTERVAL = -5.00/ 5.00

RUN NO. 607/ 0

MACH	ALPHA	CLM3	CLM4	ON3	ON4	Q (KPA)	BETA
1.900	-0.680	-3.69658	-0.21117	-6.02125	2.42541	22.93458	0.00000
1.900	1.023	-3.06545	-0.22563	-2.74287	2.39139	22.93458	0.00000
1.900	3.191	-2.33378	-0.24122	-0.12700	2.42421	22.93458	0.00000
1.900	5.272	-2.27396	-0.22662	-1.36737	2.39098	22.93458	0.00000
1.900	7.064	-2.49815	-0.19786	-2.58753	2.31079	22.93458	0.00000
1.900	8.954	-2.80672	-0.15960	0.58469	2.27150	22.93458	0.00000
1.900	11.062	-2.25398	-0.07034	-2.05696	2.26216	22.93458	0.00000
1.900	13.218	-1.18922	-0.08237	-0.28763	2.3327	22.93458	0.00000
1.900	14.974	-2.20909	-0.09543	0.41474	2.38414	22.93458	0.00000
1.900	17.549	-2.48666	-0.07730	0.96009	2.46402	22.93458	0.00000
1.900	19.214	-1.41930	-0.08516	0.60254	2.52317	22.93458	0.00000
1.900	20.936	-1.89457	-0.10157	-0.64633	2.50487	22.93458	0.00000
GRADIENT	0.35140	-0.00774	1.50856	0.00038	0.00000	0.00000	0.00000

GRADIENT INTERVAL = -5.00/ 5.00

RUN NO. 918/ 0

MACH	ALPHA	CLM3	CLM4	ON3	ON4	Q (KPA)	BETA
2.360	0.430	-2.95498	-0.09299	-4.59565	2.08442	26.82472	0.00000
2.360	4.739	-2.19154	-0.08799	-2.13324	2.08285	26.82472	0.00000
2.360	8.527	-2.46973	-0.02684	-1.78869	2.12940	26.82472	0.00000
2.360	12.367	-3.33992	-0.02367	0.12780	2.23728	26.82472	0.00000
2.360	16.592	-1.81374	-0.06241	-2.24723	2.38984	26.82472	0.00000
2.360	18.509	-2.39430	-0.04948	-2.53237	2.46416	26.82472	0.00000
2.360	20.509	-2.61511	-0.05807	-2.20146	2.48558	26.82472	0.00000
2.360	22.583	-3.18278	-0.07383	-0.38640	2.54516	26.82472	0.00000
2.360	24.546	-2.35823	-0.12040	-5.16462	2.65721	26.82472	0.00000
2.360	26.650	-6.43269	-0.15521	-1.41762	2.76996	26.82472	0.00000
2.360	28.240	-16.16894	-0.04842	2.82430	2.49607	26.82472	0.00000
2.360	29.920	-4.31122	-0.11792	-3.89653	2.68544	26.82472	0.00000
GRADIENT	0.17717	0.00116	0.57146	-0.00036	0.00000	0.00000	0.00000

(RPGP08)

LA-14, ROOMWELL CR8 DR88 W/MOD. NOSE (BMWFF)

PARAMETRIC DATA
 BETA = 0.0000 ELEVTR = 0.0000
 ALLCON = 0.0000 CG-LCC = 2.0000
 RUOFLR = 40.0000 BDFLAP = 0.0000

GRADIENT INTERVAL = -5.00/ 5.00

GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CLM2	CLM4	CLM6	CLM8	CLM10	CLM12	CLM14	CLM16	CLM18	CLM20	BETA
2.860	0.543	-1.24214	-0.01501	-0.56842	1.74326	23.67863	0.00000					0.00000
2.860	4.611	-5.22207	0.01650	-17.12690	2.02359	23.67863	0.00000					0.00000
2.860	8.614	-1.83082	-0.01412	-1.95576	1.96267	23.67863	0.00000					0.00000
2.860	12.744	-1.98162	-0.03669	-0.32203	2.12749	23.67863	0.00000					0.00000
2.860	16.474	-2.42373	-0.05552	-0.71173	2.26854	23.67863	0.00000					0.00000
2.860	18.622	-2.07084	-0.04642	-0.83992	2.37235	23.67863	0.00000					0.00000
2.860	20.516	-2.48674	-0.05044	-4.74366	2.45160	23.67863	0.00000					0.00000
2.860	22.476	-2.45439	-0.06148	-2.13794	2.48989	23.67863	0.00000					0.00000
2.860	24.459	-2.34183	-0.08996	-2.17929	2.56963	23.67863	0.00000					0.00000
2.860	26.496	-9.24842	-0.02156	13.13283	2.41406	23.67863	0.00000					0.00000
2.860	28.435	-3.81155	-0.08764	-3.63985	2.60957	23.67863	0.00000					0.00000
2.860	30.239	-1.93497	-0.16305	-5.99443	2.78121	23.67863	0.00000					0.00000
	GRADIENT	-0.97835	0.01775	-4.07040	0.06891	0.00000						0.00000

GRADIENT INTERVAL = -5.00/ 5.00

GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CLM2	CLM4	CLM6	CLM8	CLM10	CLM12	CLM14	CLM16	CLM18	CLM20	BETA
3.960	0.648	-1.50245	0.06004	-5.66797	1.37353	17.62188	0.00000					0.00000
3.960	4.985	-1.51335	0.05656	-5.96928	1.51104	17.62188	0.00000					0.00000
3.960	8.800	0.70120	0.01015	-7.03409	1.76988	17.62188	0.00000					0.00000
3.960	12.825	-1.43202	0.00099	-1.15253	1.96975	17.62188	0.00000					0.00000
3.960	16.786	3.24032	-0.05737	-2.30299	2.17034	17.62188	0.00000					0.00000
3.960	18.723	5.23532	-0.02517	-6.88179	2.27745	17.62188	0.00000					0.00000
3.960	20.756	-1.76493	-0.00347	-0.75620	2.35631	17.62188	0.00000					0.00000
3.960	22.836	-2.01266	0.00391	-1.06950	2.41938	17.62188	0.00000					0.00000
3.960	24.887	-2.62679	0.00692	-1.27934	2.47176	17.62188	0.00000					0.00000
3.960	26.781	-1.89027	-0.01998	-1.18827	2.55856	17.62188	0.00000					0.00000
3.960	28.716	-2.95580	-0.02255	-0.81262	2.64210	17.62188	0.00000					0.00000
3.960	30.448	-2.13801	-0.06941	-1.96787	2.72648	17.62188	0.00000					0.00000
	GRADIENT	-0.00251	-0.00080	-0.06947	0.03171	-0.00000						0.00000



LA-14, ROCKWELL CRB D898 W/MCD, NOSE (BAMWF)

(RFGP06)

PARAMETRIC DATA
 BETA = 0.000 ELEVTR = 0.000
 AILRON = 0.000 CG-LOC = 2.000
 RUOFLR = 40.000 BDFLAP = 0.000

GRADIENT INTERVAL = -5.00/ 5.00

RUN NO. 921/ 0

MAOH	ALPHA	CLM3	CLM4	CLM5	CLM6	CLM7	CLM8	CLM9	CLM10	CLM11	CLM12	CLM13	CLM14	CLM15	CLM16	CLM17	CLM18	CLM19	CLM20	BETA
4.630	1.139	-1.43565	0.07030	-4.79539	1.25347	13.92910	0.00000													0.000
4.630	4.993	-1.40426	0.06339	-4.64890	1.38736	13.92910	0.00000													0.000
4.630	6.031	-1.22460	0.07427	-4.54053	1.42290	13.92910	0.00000													0.000
4.630	8.120	-5.24733	0.07771	-24.06343	1.76979	13.92910	0.00000													0.000
4.630	9.489	-10.73606	0.06924	-42.10117	1.91973	13.92910	0.00000													0.000
4.630	10.868	-1.73060	0.04222	-3.45924	1.80358	13.92910	0.00000													0.000
4.630	12.006	-1.41631	0.02797	-3.00637	1.84603	13.92910	0.00000													0.000
4.630	13.440	12.93412	-0.00503	-7.69909	1.92362	13.92910	0.00000													0.000
4.630	14.187	0.59222	0.02794	-1.69909	1.93096	13.92910	0.00000													0.000
4.630	15.454	-1.62259	0.03420	-0.66711	1.99067	13.92910	0.00000													0.000
4.630	17.461	-0.56084	0.01861	-1.82227	2.12972	13.92910	0.00000													0.000
4.630	19.444	-1.16510	0.02460	0.24990	2.20819	13.92910	0.00000													0.000
4.630	20.980	-0.92659	0.00702	-0.01609	2.30182	13.92910	0.00000													0.000
4.630	23.106	-1.13178	-0.00351	0.13121	2.37996	13.92910	0.00000													0.000
4.630	25.256	-1.87186	-0.00407	-0.02954	2.42378	13.92910	0.00000													0.000
4.630	27.191	-2.58327	-0.01935	1.61635	2.46545	13.92910	0.00000													0.000
4.630	29.194	-2.69933	-0.03291	-0.23157	2.60391	13.92910	0.00000													0.000
4.630	30.844	-3.22272	-0.07941	-5.00046	2.71429	13.92910	0.00000													0.000
	GRADIENT	0.00814	0.00340	0.03901	0.03475	-0.00000														0.00000



LA-14, ROCKWELL CRB 0698 W/ACD, NOSE (BMMWF)

(RPGP07)

PARAMETRIC DATA
 BETA = 0.000 ELEVTR = 5.000
 AIRLON = 0.000 CG-LCC = 2.000
 RUDFLR = 40.000 BDFLAP = 13.000

RUN NO. 608/ 0 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CLM2	CLM4	CM2	CM4	Q (KPA)	BETA
1.900	-0.666	-3.16124	-0.22132	-7.80117	2.37310	22.93458	0.00000
1.900	0.893	-2.52615	-0.22257	-5.75167	2.37731	22.93458	0.00000
1.900	3.078	-2.29490	-0.24590	-5.84194	2.39089	22.93458	0.00000
1.900	4.977	-2.27578	-0.24659	-2.86108	2.34995	22.93458	0.00000
1.900	7.051	-2.11193	-0.20629	-3.44169	2.28231	22.93458	0.00000
1.900	9.280	-2.98203	-0.14258	-4.21957	2.26363	22.93458	0.00000
1.900	11.354	-3.11205	-0.11348	-4.08599	2.27453	22.93458	0.00000
1.900	12.901	-2.56343	-0.09066	-1.68605	2.35692	22.93458	0.00000
1.900	15.027	-3.18653	-0.11356	-3.74726	2.43784	22.93458	0.00000
1.900	17.179	-3.03950	-0.12196	-3.79857	2.50002	22.93458	0.00000
1.900	19.950	-2.74073	-0.17257	-2.49850	2.52542	22.93458	0.00000
1.900	20.890	-4.58971	-0.19274	-1.79705	2.61396	22.93458	0.00000
	GRADIENT	0.14716	-0.00528	0.75587	-0.00296	0.00000	0.00000

GRADIENT INTERVAL = -5.00/ 5.00

RUN NO. 914/ 0

MACH	ALPHA	CLM2	CLM4	CM2	CM4	Q (KPA)	BETA
2.360	-1.198	-1.34092	-0.11132	-3.62048	2.12979	26.82472	0.00000
2.360	0.507	-1.81296	-0.12631	-2.91931	2.11015	26.82472	0.00000
2.360	2.370	-5.23337	-0.10721	-16.65950	2.30612	26.82472	0.00000
2.360	4.685	-2.41828	-0.11733	-2.01786	2.10366	26.82472	0.00000
2.360	6.597	-2.34151	-0.09357	-3.70891	2.09940	26.82472	0.00000
2.360	8.520	-2.59824	-0.08783	-3.53327	2.16615	26.82472	0.00000
2.360	10.873	-2.90088	-0.07847	-5.58932	2.24791	26.82472	0.00000
2.360	12.591	-3.25323	-0.06990	-1.13074	2.29768	26.82472	0.00000
2.360	14.559	-2.29706	-0.10460	-1.63328	2.35488	26.82472	0.00000
2.360	16.698	-2.70613	-0.12152	-6.56434	2.44452	26.82472	0.00000
2.360	18.522	-2.62114	-0.11727	-3.44855	2.52674	26.82472	0.00000
2.360	20.555	-2.18538	-0.12580	-1.35514	2.55294	26.82472	0.00000
2.360	22.396	-3.34657	-0.14475	-3.22359	2.64981	26.82472	0.00000
2.360	24.520	-2.86685	-0.17396	-2.66103	2.75961	26.82472	0.00000
2.360	26.616	-2.51706	-0.20042	-0.91851	2.78637	26.82472	0.00000
2.360	28.543	-25.77916	-0.09284	44.44446	2.58222	26.82472	0.00000
2.360	30.071	-5.87492	-0.17648	4.67684	2.77670	26.82472	0.00000
	GRADIENT	-0.30604	0.00016	-0.31959	0.00407	0.00000	0.00000



LA-14, ROCKWELL ORB 0888 W/ACD, NOSE (BMMF)

(RRGF07)

PARAMETRIC DATA
 BETA = 0.000 ELEVTR = 5.000
 AILRON = 0.000 CG-LCC = 2.000
 RUDFLR = 40.000 BDFLAP = 13.000

RUN NO. 917/ 0 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CLM3	CLM4	CM3	CM4	Q (KPA)	BETA
4.630	-0.384	-1.97181	0.03565	-3.49977	1.16404	13.92910	0.00000
4.630	1.187	-1.60943	0.03581	-3.10366	1.18439	13.92910	0.00000
4.630	3.309	-1.57125	0.03053	-2.55046	1.30207	13.92910	0.00000
4.630	5.435	-1.46606	0.02641	-4.62330	1.39304	13.92910	0.00000
4.630	7.427	-1.29909	-0.00312	-15.21762	1.61336	13.92910	0.00000
4.630	9.396	-7.13354	0.00369	-37.20746	1.94713	13.92910	0.00000
4.630	11.305	-1.80811	-0.04525	-6.08870	1.81118	13.92910	0.00000
4.630	13.236	13.33408	-0.07279	-6.80348	1.92584	13.92910	0.00000
4.630	15.309	-0.81408	-0.05862	-1.30892	2.00075	13.92910	0.00000
4.630	16.933	-1.33952	-0.06552	-0.79690	2.10220	13.92910	0.00000
4.630	19.153	-2.01474	-0.07824	-1.21668	2.23480	13.92910	0.00000
4.630	21.120	-1.19757	-0.08601	-1.22743	2.34472	13.92910	0.00000
4.630	23.160	-2.54160	-0.11005	1.15400	2.41018	13.92910	0.00000
4.630	25.136	-3.40890	-0.10172	1.18005	2.46414	13.92910	0.00000
4.630	27.177	-3.40643	-0.12482	2.15625	2.51937	13.92910	0.00000
4.630	29.248	-3.69165	-0.15653	1.59812	2.65587	13.92910	0.00000
4.630	30.844	-4.18545	-0.17073	-1.11174	2.75482	13.92910	0.00000
4.630	GRADIENT	0.10428	-0.00148	0.26126	0.03913	0.00000	0.00000



(RPGY01)

LA-14, ROWNELL CRB 0888 W/MOD. NOSE (B/M)

PARAMETRIC DATA
 BETA = 0.000 ELEVTR = 0.000
 ATURON = 0.000 CG-LCC = 1.000
 RUDFLR = 40.000

GRADIENT INTERVAL = -5.00/ 5.00

RUN NO. 613/ 0

MAOH	ALPHA	CYMR	CYNBC	CBLR	CBLBC	q (NPA)	BETA
1.900	-1.178	-0.60423	0.12961	0.09442	-0.11561	22.93458	0.00000
1.900	0.512	-0.60636	0.11736	0.02974	-0.11052	22.93458	0.00000
1.900	2.671	-0.49500	0.10097	-0.00210	-0.10681	22.93458	0.00000
1.900	4.560	-0.72522	0.06576	0.10421	-0.10627	22.93458	0.00000
1.900	6.561	-0.69047	0.06735	0.18237	-0.10909	22.93458	0.00000
1.900	8.511	-0.77641	0.05180	0.07897	-0.10920	22.93458	0.00000
1.900	10.679	-0.73046	0.04048	0.12950	-0.11590	22.93458	0.00000
1.900	12.464	-0.68588	0.03719	0.32334	-0.12597	22.93458	0.00000
1.900	14.577	-0.75725	0.02383	0.24706	-0.12964	22.93458	0.00000
1.900	16.689	-0.72600	0.00659	0.39874	-0.13145	22.93458	0.00000
1.900	18.592	-0.89044	-0.02696	0.40775	-0.12700	22.93458	0.00000
1.900	20.327	-0.92824	-0.07256	0.09426	-0.13589	22.93458	0.00000
GRADIENT		-0.01121	-0.00739	0.00100	0.00150	0.00000	0.00000

GRADIENT INTERVAL = -5.00/ 5.00

RUN NO. 934/ 0

MAOH	ALPHA	CYMR	CYNBC	CBLR	CBLBC	q (NPA)	BETA
2.360	0.271	-0.46223	0.09719	0.09961	-0.07968	26.82472	0.00000
2.360	4.296	-0.69028	0.07967	0.14948	-0.08647	26.82472	0.00000
2.360	8.633	-0.63720	0.05101	0.16133	-0.09840	26.82472	0.00000
2.360	12.552	-0.60785	0.04783	0.12219	-0.12481	26.82472	0.00000
2.360	16.447	-0.70161	0.01619	0.42955	-0.14169	26.82472	0.00000
2.360	18.282	-0.78043	-0.02164	0.33904	-0.13850	26.82472	0.00000
2.360	20.310	-1.08903	-0.07749	0.14424	-0.12577	26.82472	0.00000
2.360	22.356	-1.27065	-0.14795	0.19201	-0.13007	26.82472	0.00000
2.360	24.433	-2.67501	-0.18118	-1.17085	-0.10544	26.82472	0.00000
2.360	26.356	-1.22374	-0.18499	0.53354	-0.08338	26.82472	0.00000
2.360	28.294	-1.47292	-0.12940	0.28847	-0.12922	26.82472	0.00000
2.360	30.107	-1.91150	-0.16649	0.30300	-0.11374	26.82472	0.00000
GRADIENT		-0.05417	-0.00435	0.01239	-0.02169	0.00000	0.00000



(RPGY08)

LA-14, ROCKWELL CRB D888 W/MCD, NOSE (BNW)

PARAMETRIC DATA
BETA = 0.000 ELEVTR = 0.000
AIRCON = 0.000 CG-LOC = 1.000
RUDFLR = 40.000

GRADIENT INTERVAL = -5.00/ 5.00

RUN NO. 935/ 0

MACH	ALPHA	CYMR	CYNBC	CBLCR	CBLCB	q (KPA)	BETA
2.860	0.407	-0.36322	0.08232	0.05911	-0.06996	23.67863	0.00000
2.860	4.215	-0.56389	0.06481	0.08090	-0.07872	23.67863	0.00000
2.860	6.255	-0.63704	0.04258	0.11966	-0.09230	23.67863	0.00000
2.860	12.691	-0.54441	0.04907	0.25713	-0.12628	23.67863	0.00000
2.860	16.335	-0.63475	0.01911	0.20901	-0.14143	23.67863	0.00000
2.860	18.496	-0.74446	-0.03194	0.32599	-0.13381	23.67863	0.00000
2.860	20.675	-0.95071	-0.08397	0.34248	-0.11773	23.67863	0.00000
2.860	22.336	-0.75658	-0.09613	0.38576	-0.11626	23.67863	0.00000
2.860	24.519	-2.02060	-0.14004	-0.40012	-0.10776	23.67863	0.00000
2.860	26.541	-0.95216	-0.16265	0.66089	-0.07267	23.67863	0.00000
2.860	28.788	-3.57863	-0.15675	2.47519	-0.10225	23.67863	0.00000
GRADIENT		-0.04747	-0.00465	0.00572	-0.00233	0.00000	0.00000

GRADIENT INTERVAL = -5.00/ 5.00

RUN NO. 936/ 0

MACH	ALPHA	CYMR	CYNBC	CBLCR	CBLCB	q (KPA)	BETA
3.960	0.443	-0.29648	0.05190	-0.01663	-0.05998	17.62188	0.00000
3.960	4.710	-0.31936	0.04492	0.03379	-0.07063	17.62188	0.00000
3.960	6.754	-0.59785	0.00459	0.04435	-0.08777	17.62188	0.00000
3.960	12.706	-0.52238	0.03615	0.09259	-0.11207	17.62188	0.00000
3.960	16.694	-0.46373	-0.01609	0.25838	-0.10837	17.62188	0.00000
3.960	18.782	-0.64468	-0.05630	0.26916	-0.09602	17.62188	0.00000
3.960	20.517	-0.67425	-0.07374	0.21124	-0.09181	17.62188	0.00000
3.960	22.523	-0.72238	-0.09835	0.20444	-0.09059	17.62188	0.00000
3.960	24.585	-0.93590	-0.11775	0.18267	-0.08976	17.62188	0.00000
3.960	26.701	-0.66369	-0.12337	0.53516	-0.07468	17.62188	0.00000
3.960	28.900	-0.70446	-0.09434	0.68442	-0.08244	17.62188	0.00000
3.960	30.352	-0.67700	-0.09888	0.34384	-0.09588	17.62188	0.00000
GRADIENT		-0.00536	-0.00164	0.01182	-0.00250	0.00000	0.00000



LA-14, ROCKWELL ORB 0698 W/MOD. NOSE (B/M)

(RFGY02)

PARAMETRIC DATA
BETA = 0.000 ELEVTR = 0.000
ALURON = 0.000 CG-LOC = 1.000

RUN NO. 612/ 0 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CYMR	CYNBC	CBUR	CBURC	Q (KPA)	BETA
1.900	-0.666	-0.28400	-0.14629	0.09629	0.06641	22.93458	0.00000
1.900	0.962	-0.06799	-0.15132	-0.26507	0.06302	22.93458	0.00000
1.900	3.078	-0.31362	-0.14189	0.14871	0.05452	22.93458	0.00000
1.900	4.869	-0.64505	-0.14038	-0.09009	0.05106	22.93458	0.00000
1.900	7.011	-0.67669	-0.14428	0.24601	0.04416	22.93458	0.00000
1.900	9.034	-0.74397	-0.14353	0.05530	0.02931	22.93458	0.00000
1.900	10.979	-0.90439	-0.14448	0.29549	0.01269	22.93458	0.00000
1.900	12.755	-0.73941	-0.14028	0.32028	0.00479	22.93458	0.00000
1.900	14.684	-0.64539	-0.13267	0.30581	-0.00979	22.93458	0.00000
1.900	17.333	-0.55064	-0.12641	0.19368	-0.03267	22.93458	0.00000
1.900	18.937	-0.72442	-0.12390	0.31769	-0.04321	22.93458	0.00000
1.900	20.790	-0.53319	-0.12555	0.57691	-0.05267	22.93458	0.00000
GRADIENT		-0.07296	0.00182	-0.00416	-0.00293	0.00000	0.00000

RUN NO. 932/ 0 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CYMR	CYNBC	CBUR	CBURC	Q (KPA)	BETA
2.360	0.266	-0.36993	-0.14120	0.17368	0.06292	26.82472	0.00000
2.360	4.202	-0.60966	-0.13624	0.26585	0.04337	26.82472	0.00000
2.360	8.173	-0.84298	-0.13836	0.09026	0.01884	26.82472	0.00000
2.360	12.257	-0.78844	-0.12339	0.06474	-0.01390	26.82472	0.00000
2.360	16.293	-0.64082	-0.11282	0.24328	-0.04504	26.82472	0.00000
2.360	18.116	-0.70727	-0.10943	0.24729	-0.05604	26.82472	0.00000
2.360	20.204	-0.75844	-0.10987	0.21939	-0.06465	26.82472	0.00000
2.360	22.163	-0.75083	-0.11176	0.34958	-0.07533	26.82472	0.00000
2.360	24.239	-0.67235	-0.11123	0.15423	-0.09364	26.82472	0.00000
2.360	26.324	-1.03055	-0.10116	0.06891	-0.10991	26.82472	0.00000
2.360	28.213	-1.30038	-0.10674	-0.35628	-0.12333	26.82472	0.00000
2.360	30.094	-1.63740	-0.12502	-0.15148	-0.13308	26.82472	0.00000
GRADIENT		-0.06585	0.00126	0.02342	-0.00497	0.00000	0.00000



(RPGY02)

LA-14, ROCKWELL CRB 0688 W/NO. NOSE (BW M)

PARAMETRIC DATA
 BETA = 0.000 ELEVTR = 0.000
 ALLCON = 0.000 CG-LCC = 1.000

GRADIENT INTERVAL = -5.00/ 5.00

RUN NO. 933/ 0

MACH	ALPHA	CYMR	CYNBC	CBUR	GBLBC	Q (KPA)	BETA
2.860	0.343	-0.37130	-0.12176	0.01562	0.05024	23.67863	0.00000
2.860	4.468	-0.44652	-0.11833	0.07185	0.02698	23.67863	0.00000
2.860	8.463	-0.72823	-0.12214	0.06780	0.00643	23.67863	0.00000
2.860	12.467	-0.69186	-0.10921	0.10628	-0.02453	23.67863	0.00000
2.860	16.481	-0.59611	-0.10090	0.08923	-0.05516	23.67863	0.00000
2.860	18.375	-0.69435	-0.09939	-0.01113	-0.07171	23.67863	0.00000
2.860	20.357	-0.73582	-0.10129	0.09341	-0.07701	23.67863	0.00000
2.860	22.310	-0.77960	-0.10086	0.19674	-0.07701	23.67863	0.00000
2.860	24.459	-0.77581	-0.10098	0.16499	-0.08153	23.67863	0.00000
2.860	26.447	-1.01131	-0.11079	-0.54964	-0.10319	23.67863	0.00000
2.860	28.367	-0.83608	-0.10859	-0.04252	-0.10553	23.67863	0.00000
2.860	30.207	-1.24638	-0.12426	0.01953	-0.11672	23.67863	0.00000
GRADIENT		-0.01824	0.00083	0.01363	-0.00564	0.00000	0.00000

GRADIENT INTERVAL = -5.00/ 5.00

RUN NO. 930/ 0

MACH	ALPHA	CYMR	CYNBC	CBUR	GBLBC	Q (KPA)	BETA
3.960	0.553	-0.32320	-0.09290	0.03828	0.02296	17.62188	0.00000
3.960	4.663	-0.39789	-0.09383	0.05154	0.00840	17.62188	0.00000
3.960	8.694	-0.50221	-0.09977	0.09678	-0.00678	17.62188	0.00000
3.960	12.521	-0.57218	-0.08322	0.04039	-0.02906	17.62188	0.00000
3.960	16.806	-0.65729	-0.09428	0.12189	-0.04775	17.62188	0.00000
3.960	18.518	-0.67373	-0.09694	0.16314	-0.05441	17.62188	0.00000
3.960	20.676	-0.66150	-0.09463	0.18626	-0.05945	17.62188	0.00000
3.960	22.463	-0.69059	-0.09751	0.29849	-0.06262	17.62188	0.00000
3.960	24.793	-0.84622	-0.10049	0.31314	-0.07315	17.62188	0.00000
3.960	26.431	-0.83177	-0.10516	0.25730	-0.08078	17.62188	0.00000
3.960	28.540	-0.70847	-0.10642	0.19628	-0.08975	17.62188	0.00000
3.960	30.407	-0.85771	-0.11515	0.42406	-0.07670	17.62188	0.00000
GRADIENT		-0.01817	-0.00025	0.00323	-0.00352	0.00000	0.00000

(RPGYD2)

LA-14, ROCKWELL CRB 0898 W/MCD, NOISE (BW M)

PARAMETRIC DATA
 BETA = 0.000 ELEVTR = 0.000
 ATLRON = 0.000 CG-LCC = 1.000

GRADIENT INTERVAL = -3.00/ 5.00

RUN NO. 931/ 0

MACH	ALPHA	CYR	CYR	CYR	CYR	CBUR	CBUR	CBUR	Q (KPA)	BETA
4.630	1.003	-0.33756	-0.06284	0.00017	0.01701	13.92910	0.00000	0.00000	0.00000	0.00000
4.630	5.167	-0.36554	-0.09532	0.01301	-0.00277	13.92910	0.00000	0.00000	0.00000	0.00000
4.630	9.061	-0.38503	-0.08992	0.06482	-0.01384	13.92910	0.00000	0.00000	0.00000	0.00000
4.630	13.117	-0.65080	-0.09060	0.05685	-0.02654	13.92910	0.00000	0.00000	0.00000	0.00000
4.630	17.501	-0.55244	-0.08757	0.13045	-0.04530	13.92910	0.00000	0.00000	0.00000	0.00000
4.630	19.054	-0.56979	-0.08933	0.17282	-0.04618	13.92910	0.00000	0.00000	0.00000	0.00000
4.630	21.033	-0.60672	-0.08283	0.23766	-0.05630	13.92910	0.00000	0.00000	0.00000	0.00000
4.630	23.026	-0.59501	-0.09117	0.27057	-0.06328	13.92910	0.00000	0.00000	0.00000	0.00000
4.630	24.928	-0.57322	-0.09146	0.25148	-0.07136	13.92910	0.00000	0.00000	0.00000	0.00000
4.630	27.258	-0.43354	-0.09451	0.16127	-0.07876	13.92910	0.00000	0.00000	0.00000	0.00000
4.630	29.105	-0.74296	-0.10275	0.37153	-0.06697	13.92910	0.00000	0.00000	0.00000	0.00000
4.630	30.844	-0.68855	-0.10185	0.44749	-0.07065	13.92910	0.00000	0.00000	0.00000	0.00000
	GRADIENT	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000



(RPGY03)

LA-14, CORNELL CRB D898 W/MCD, NOISE (BMMH)

PARAMETRIC DATA
 BETA = 0.000 ELEVTR = 0.000
 ATURON = 0.000 CG-LCC = 1.000
 RUOFLR = 40.000

GRADIENT INTERVAL = -5.00/ 5.00

RUN NO.	611/ 0	ALPHA	CTNR	CYNBC	CBLR	CBLCB	Q (NPA)	BETA
1.900		-0.666	-0.51532	0.07479	0.10360	-0.07234	22.93458	0.00000
1.900		0.890	-0.55235	0.07044	0.06906	-0.07582	22.93458	0.00000
1.900		2.916	-0.61089	0.05674	0.16330	-0.07309	22.93458	0.00000
1.900		5.017	-0.78087	0.04269	0.08947	-0.07180	22.93458	0.00000
1.900		7.033	-0.75671	0.02399	0.08104	-0.07096	22.93458	0.00000
1.900		8.954	-0.73475	0.01869	0.24726	-0.08064	22.93458	0.00000
1.900		11.043	-0.58133	0.01669	0.24262	-0.09655	22.93458	0.00000
1.900		13.112	-0.66815	0.01124	0.23065	-0.09913	22.93458	0.00000
1.900		15.264	-0.66626	-0.00741	0.32677	-0.10107	22.93458	0.00000
1.900		17.113	-0.75489	-0.03398	0.32941	-0.10270	22.93458	0.00000
1.900		19.333	-0.73873	-0.07894	0.63813	-0.09274	22.93458	0.00000
1.900		21.062	-0.97941	-0.11840	0.34113	-0.07917	22.93458	0.00000
	GRADIENT		-0.02673	-0.00313	0.01819	-0.00013	-0.00000	0.00000

GRADIENT INTERVAL = -5.00/ 5.00

RUN NO.	926/ 0	ALPHA	CTNR	CYNBC	CBLR	CBLCB	Q (NPA)	BETA
2.360		-1.253	-0.40958	0.06995	-0.08204	-0.06372	26.82472	0.00000
2.360		0.171	-0.46571	0.06210	0.20554	-0.06346	26.82472	0.00000
2.360		0.498	-0.52855	0.05918	0.32336	-0.06173	26.82472	0.00000
2.360		2.336	-0.63117	0.04625	0.14147	-0.06042	26.82472	0.00000
2.360		4.323	-0.64272	0.04296	0.02498	-0.06844	26.82472	0.00000
2.360		6.310	-0.69497	0.02724	0.28177	-0.07218	26.82472	0.00000
2.360		8.394	-0.77461	0.01999	0.05404	-0.06362	26.82472	0.00000
2.360		10.390	-0.72048	0.01846	-0.02320	-0.09352	26.82472	0.00000
2.360		12.347	-0.75979	0.01534	0.16622	-0.10450	26.82472	0.00000
2.360		14.374	-0.86259	-0.00443	0.17318	-0.10991	26.82472	0.00000
2.360		16.684	-0.95315	-0.04222	0.24528	-0.10795	26.82472	0.00000
2.360		18.284	-1.04482	-0.07365	0.27958	-0.10125	26.82472	0.00000
2.360		20.350	-1.04641	-0.11815	0.27346	-0.08612	26.82472	0.00000
2.360		22.316	-1.06535	-0.15340	0.50918	-0.07518	26.82472	0.00000
2.360		24.627	-1.74755	-0.16276	0.23403	-0.07289	26.82472	0.00000
2.360		26.396	-1.75757	-0.18035	-0.09804	-0.06676	26.82472	0.00000
2.360		28.661	-2.07975	-0.19667	-0.03694	-0.09524	26.82472	0.00000
2.360		30.048	-1.50357	-0.17617	-0.13029	-0.11873	26.82472	0.00000
	GRADIENT		-0.04455	-0.00508	-0.00042	-0.00068	0.00000	0.00000

(RPG103)

LA-14, ROCKWELL CRB D898 W/MCD. NOISE (BMM)

PARAMETRIC DATA
 BETA = 0.000 ELEVTR = 0.000
 ATURON = 0.000 CG-LOC = 1.000
 RUDPLR = 40.000

GRADIENT INTERVAL = -5.00/ 5.00

RUN NO. 927/ 0

MAOH	ALPHA	CYMR	CYNBC	CBUR	CBURC	Q (KPA)	BETA
2.860	-1.221	-0.47928	0.06660	0.01153	-0.07058	23.67863	0.00000
2.860	0.373	-0.45290	0.07549	0.04048	-0.07089	23.67863	0.00000
2.860	2.078	-0.54247	0.06207	0.08341	-0.07120	23.67863	0.00000
2.860	4.369	-0.57120	0.04816	0.04203	-0.07593	23.67863	0.00000
2.860	6.457	-0.63979	0.03746	0.04638	-0.08201	23.67863	0.00000
2.860	8.454	-0.75580	0.02512	0.08633	-0.09792	23.67863	0.00000
2.860	10.483	-0.67370	0.02581	0.03351	-0.10057	23.67863	0.00000
2.860	12.599	-0.69904	0.02773	0.24192	-0.11624	23.67863	0.00000
2.860	14.791	-0.73352	0.00342	0.08726	-0.12181	23.67863	0.00000
2.860	16.520	-0.83236	-0.01884	0.17468	-0.12458	23.67863	0.00000
2.860	18.384	-0.96427	-0.05164	0.00255	-0.12846	23.67863	0.00000
2.860	20.450	-1.06273	-0.08549	0.24823	-0.10896	23.67863	0.00000
2.860	22.443	-1.05629	-0.08812	0.35871	-0.09876	23.67863	0.00000
2.860	24.499	-0.97618	-0.12157	0.49894	-0.08736	23.67863	0.00000
2.860	26.366	-1.31530	-0.15879	0.25513	-0.08549	23.67863	0.00000
2.860	28.231	-2.36074	-0.18054	-0.26029	-0.10957	23.67863	0.00000
2.860	30.221	-0.59715	-0.10700	-0.49862	-0.12788	23.67863	0.00000
GRADIENT		-0.01994	-0.00694	0.00637	-0.00093	0.00000	0.00000

GRADIENT INTERVAL = -5.00/ 5.00

RUN NO. 928/ 0

MAOH	ALPHA	CYMR	CYNBC	CBUR	CBURC	Q (KPA)	BETA
3.960	-0.987	-0.40686	0.07234	0.05159	-0.06534	17.62188	0.00000
3.960	0.546	-0.32851	0.06943	0.00714	-0.07072	17.62188	0.00000
3.960	2.785	-0.40734	0.06277	0.02464	-0.07798	17.62188	0.00000
3.960	4.764	-0.43264	0.05411	0.03725	-0.08000	17.62188	0.00000
3.960	6.824	-0.51101	0.04924	0.02543	-0.08692	17.62188	0.00000
3.960	8.860	-0.43383	0.03316	-0.00388	-0.09107	17.62188	0.00000
3.960	10.736	-0.54310	0.04335	0.04520	-0.10434	17.62188	0.00000
3.960	12.607	-0.58691	0.03379	0.06901	-0.11133	17.62188	0.00000
3.960	14.766	-0.55174	0.01373	0.16120	-0.11261	17.62188	0.00000
3.960	16.628	-0.70188	0.01373	0.17355	-0.11020	17.62188	0.00000
3.960	18.551	-0.75879	-0.04658	0.22044	-0.10155	17.62188	0.00000
3.960	20.557	-0.84367	-0.06260	0.24419	-0.09208	17.62188	0.00000
3.960	22.543	-0.89381	-0.08434	0.27524	-0.08991	17.62188	0.00000
3.960	24.800	-0.89328	-0.09959	0.31370	-0.09232	17.62188	0.00000
3.960	26.539	-1.11538	-0.12108	0.23635	-0.10130	17.62188	0.00000
3.960	28.603	-1.02303	-0.10853	0.34820	-0.09615	17.62188	0.00000
3.960	30.421	-1.17093	-0.10134	0.64059	-0.08518	17.62188	0.00000
GRADIENT		-0.00912	-0.00317	-0.00080	-0.00259	0.00000	0.00000



(RPGY03)

LA-14, ROCKWELL ORB 0998 WIND, NOISE (SIAMM)

PARAMETRIC DATA
 BETA = 0.000 ELEVTR = 0.000
 ATLRON = 1.000 CG-LOC = 1.000
 RUDFLR = 40.000

RUN NO. 929/ 0 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CYMR	CYBXC	GBLR	GBLBC	Q (KPA)	BETA
4.630	-0.558	-0.36283	0.05243	0.02922	-0.05971	13.92910	0.00000
4.630	0.989	-0.31154	0.02549	-0.00959	-0.06657	13.92910	0.00000
4.630	3.107	-0.34165	0.05298	-0.03074	-0.07786	13.92910	0.00000
4.630	5.355	-0.33121	0.04106	0.01010	-0.07895	13.92910	0.00000
4.630	7.134	-0.36402	0.03358	0.03154	-0.08211	13.92910	0.00000
4.630	9.197	-0.53101	0.01993	0.07403	-0.07876	13.92910	0.00000
4.630	11.199	-0.39628	0.01709	0.19487	-0.08304	13.92910	0.00000
4.630	13.170	-0.45239	0.02250	0.04414	-0.08635	13.92910	0.00000
4.630	15.183	-0.47015	0.00858	0.13851	-0.09938	13.92910	0.00000
4.630	17.045	-0.62821	-0.02015	0.16532	-0.09375	13.92910	0.00000
4.630	19.007	-0.69494	-0.04260	0.20231	-0.08462	13.92910	0.00000
4.630	21.100	-0.77307	-0.06594	0.31029	-0.08078	13.92910	0.00000
4.630	23.090	-0.79311	-0.07951	0.23611	-0.07845	13.92910	0.00000
4.630	25.042	-0.73490	-0.09148	0.14604	-0.09225	13.92910	0.00000
4.630	27.177	-0.97932	-0.10272	0.37382	-0.07723	13.92910	0.00000
4.630	29.078	-0.92643	-0.07595	0.40084	-0.08101	13.92910	0.00000
4.630	30.844	-0.81911	-0.06019	0.44929	-0.08349	13.92910	0.00000
4.630	GRADIENT	0.00459	0.00004	-0.01598	-0.00497	0.00000	0.00000

LA-14, ROCKWELL ORB 0698 W/MOD. NOSE (BMM)

(RPGY04)

PARAMETRIC DATA
BETA = 0.000 ELEVTR = 0.000
AIIURON = 0.000 CG-LCC = 2.000
RUOFLR = 40.000

GRADIENT INTERVAL = -5.00/ 5.00

RUN NO. 610/ 0

MAOH	ALPHA	CYMR	CYNBC	CBLR	CBLCB	Q (KPA)	BETA
1.900	-0.461	-0.44219	0.04518	0.07694	-0.07284	22.93458	0.00000
1.900	1.465	-0.46341	0.03752	0.25511	-0.07121	22.93458	0.00000
1.900	3.605	-0.74242	0.02635	-0.03963	-0.07357	22.93458	0.00000
1.900	5.781	-0.90660	0.00722	0.08360	-0.07033	22.93458	0.00000
1.900	7.957	-0.77481	-0.00465	0.27336	-0.07501	22.93458	0.00000
1.900	9.664	-0.73169	-0.00909	0.17911	-0.08566	22.93458	0.00000
1.900	11.605	-0.68608	-0.00778	0.20692	-0.08671	22.93458	0.00000
1.900	13.645	-0.69964	-0.01766	0.28074	-0.08989	22.93458	0.00000
1.900	15.832	-0.66822	-0.03599	0.28936	-0.10410	22.93458	0.00000
1.900	17.502	-0.69403	-0.06283	0.48057	-0.10264	22.93458	0.00000
1.900	19.426	-0.94081	-0.10023	0.41277	-0.09262	22.93458	0.00000
1.900	21.290	-1.04839	-0.14090	0.56361	-0.07815	22.93458	0.00000
GRADIENT		-0.07488	-0.00464	-0.03116	-0.00020	0.00000	0.00000

GRADIENT INTERVAL = -5.00/ 5.00

RUN NO. 922/ 0

MAOH	ALPHA	CYMR	CYNBC	CBLR	CBLCB	Q (KPA)	BETA
2.360	-1.271	-0.42812	0.04194	0.15785	-0.06169	26.82472	0.00000
2.360	0.246	-0.52005	0.03451	0.24422	-0.06192	26.82472	0.00000
2.360	2.394	-0.49133	0.01933	0.24833	-0.05977	26.82472	0.00000
2.360	4.524	-0.68725	0.01851	0.15121	-0.06982	26.82472	0.00000
2.360	6.230	-0.75710	0.00454	0.07991	-0.07269	26.82472	0.00000
2.360	8.354	-0.70894	-0.00466	-0.02765	-0.06370	26.82472	0.00000
2.360	10.462	-0.53939	-0.00554	0.17114	-0.09392	26.82472	0.00000
2.360	12.393	-0.52238	-0.00938	0.33569	-0.10639	26.82472	0.00000
2.360	14.392	-0.50633	-0.02918	0.31568	-0.11070	26.82472	0.00000
2.360	16.420	-0.51799	-0.05920	0.70240	-0.10794	26.82472	0.00000
2.360	18.376	-0.67717	-0.09490	0.60912	-0.10244	26.82472	0.00000
2.360	20.283	-1.23620	-0.13328	0.79650	-0.08756	26.82472	0.00000
2.360	22.538	-1.58483	-0.17185	0.59545	-0.08066	26.82472	0.00000
2.360	24.533	-1.41644	-0.18116	0.62375	-0.07687	26.82472	0.00000
2.360	26.279	-1.79633	-0.18856	0.65730	-0.08466	26.82472	0.00000
2.360	28.308	-1.98952	-0.20842	0.17229	-0.08698	26.82472	0.00000
2.360	29.933	-1.67103	-0.18882	0.44977	-0.11395	26.82472	0.00000
GRADIENT		-0.03840	-0.00432	-0.02226	-0.00119	0.00000	0.00000



(RPGYDA)

LA-14, ROOSEVELT CRB 0698 WIND, NOSE (BMM)

PARAMETRIC DATA
 BETA = 0.000 ELEVTR = 0.000
 ALLRON = 0.000 CG-LOC = 2.000
 RUDFLR = 40.000

GRADIENT INTERVAL = -5.00/ 5.00

RUN NO. 923/ 0

MACH	ALPHA	CYNR	CYNBC	CELR	CECBC	Q (KPA)	BETA
2.860	-1.221	-0.40151	0.09807	0.02946	-0.07082	23.67863	0.00000
2.860	0.250	-0.49586	0.04942	0.03996	-0.07141	23.67863	0.00000
2.860	2.605	-0.46324	0.03070	0.07794	-0.07103	23.67863	0.00000
2.860	4.450	-0.63407	0.02446	0.06989	-0.07526	23.67863	0.00000
2.860	6.551	-0.66245	0.01400	0.16452	-0.08139	23.67863	0.00000
2.860	8.521	-0.78149	0.00285	0.12516	-0.08694	23.67863	0.00000
2.860	10.430	-0.69189	0.00375	0.09453	-0.10107	23.67863	0.00000
2.860	12.467	-0.59215	0.00478	0.18785	-0.11484	23.67863	0.00000
2.860	14.395	-0.36086	-0.01522	0.30379	-0.12220	23.67863	0.00000
2.860	16.547	-0.36488	-0.04088	0.45357	-0.12532	23.67863	0.00000
2.860	18.609	-0.78083	-0.07622	0.32455	-0.12717	23.67863	0.00000
2.860	20.397	-0.83014	-0.10079	0.53687	-0.10869	23.67863	0.00000
2.860	22.330	-0.89471	-0.11254	0.77279	-0.10042	23.67863	0.00000
2.860	24.298	-0.80280	-0.13378	0.57116	-0.08551	23.67863	0.00000
2.860	26.393	-1.24579	-0.17415	0.69763	-0.08456	23.67863	0.00000
2.860	27.047	-1.95085	-0.17255	0.46408	-0.09784	23.67863	0.00000
2.860	28.442	-1.85438	-0.19084	0.75468	-0.10865	23.67863	0.00000
2.860	28.781	-2.77254	-0.18357	0.90719	-0.10860	23.67863	0.00000
2.860	29.578	0.78638	-0.14616	-0.39579	-0.12759	23.67863	0.00000
2.860	30.125	2.32984	-0.11957	-1.29941	-0.14506	23.67863	0.00000
GRADIENT		-0.03326	-0.00620	0.00841	-0.00263	0.00000	0.00000

GRADIENT INTERVAL = -5.00/ 5.00

RUN NO. 924/ 0

MACH	ALPHA	CYNR	CYNBC	CELR	CECBC	Q (KPA)	BETA
3.960	-0.939	-0.40380	0.04579	0.00640	-0.06580	17.62188	0.00000
3.960	0.375	-0.34680	0.04407	-0.02566	-0.07058	17.62188	0.00000
3.960	2.643	-0.43953	0.04053	0.02800	-0.07748	17.62188	0.00000
3.960	4.784	-0.41956	0.03228	0.01212	-0.07950	17.62188	0.00000
3.960	6.831	-0.47946	0.02914	0.06024	-0.08834	17.62188	0.00000
3.960	8.787	-0.55344	0.01507	0.06137	-0.09131	17.62188	0.00000
3.960	10.815	-0.55838	0.02192	0.06733	-0.10542	17.62188	0.00000
3.960	12.759	-0.61937	0.01085	0.09970	-0.11255	17.62188	0.00000
3.960	14.661	-0.64224	-0.00884	0.21170	-0.11409	17.62188	0.00000
3.960	16.654	-0.45267	-0.06432	0.39783	-0.10383	17.62188	0.00000
3.960	18.603	-0.64114	-0.07839	0.43248	-0.09501	17.62188	0.00000
3.960	20.623	-0.64081	-0.10048	0.62387	-0.09060	17.62188	0.00000
3.960	22.690	-0.64081	-0.11197	0.68223	-0.09387	17.62188	0.00000
3.960	24.719	-1.02778	-0.13118	0.76735	-0.10312	17.62188	0.00000
3.960	26.697	-1.02778	-0.13118	0.71933	-0.10253	17.62188	0.00000
3.960	28.716	-1.09690	-0.12293	0.71933	-0.10253	17.62188	0.00000
3.960	30.394	-1.09389	-0.12654	1.09814	-0.07381	17.62188	0.00000
GRADIENT		-0.00826	-0.00230	0.00421	-0.00243	0.00000	0.00000

LA-14, ROCKWELL CRB 0898 W/MOD. NOSE (BMMH)

(RRG-Y04)

PARAMETRIC DATA
 BETA = 0.000 ELEVTR = 0.000
 ATURON = 0.000 CG-LCC = 2.000
 RUDFUR = 40.000

GRADIENT INTERVAL = -5.00/ 5.00

RUN NO. 925/ 0

MACH	ALPHA	CYMR	CYMC	CBLR	CBLC	Q (KPA)	BETA
4.630	-0.571	-0.35853	0.02818	0.01743	-0.06010	13.92910	0.00000
4.630	0.825	-0.33777	0.03123	0.02690	-0.06627	13.92910	0.00000
4.630	1.180	-0.38835	0.03173	0.00164	-0.06908	13.92910	0.00000
4.630	3.201	-0.40865	0.03068	-0.01002	-0.09017	13.92910	0.00000
4.630	5.100	-0.34581	0.02009	0.01528	-0.08149	13.92910	0.00000
4.630	7.214	-0.42899	0.01264	0.00465	-0.08490	13.92910	0.00000
4.630	9.197	-0.57250	-0.00041	0.04436	-0.08071	13.92910	0.00000
4.630	11.226	-0.60456	-0.00313	0.07131	-0.08532	13.92910	0.00000
4.630	13.143	-0.56600	0.00078	0.07952	-0.09763	13.92910	0.00000
4.630	15.243	-0.58913	-0.01130	0.15606	-0.10071	13.92910	0.00000
4.630	17.012	-0.60917	-0.03494	0.17246	-0.09654	13.92910	0.00000
4.630	18.968	-0.58982	-0.05781	0.33291	-0.09677	13.92910	0.00000
4.630	21.073	-0.48343	-0.07947	0.52614	-0.08165	13.92910	0.00000
4.630	22.973	-0.51445	-0.09371	0.54783	-0.07892	13.92910	0.00000
4.630	25.082	-0.44923	-0.10020	0.54879	-0.09377	13.92910	0.00000
4.630	27.076	-0.83861	-0.11228	0.66559	-0.08567	13.92910	0.00000
4.630	29.248	-0.73450	-0.09342	0.72472	-0.07677	13.92910	0.00000
4.630	30.844	-0.72862	-0.08043	0.80527	-0.08459	13.92910	0.00000
GRADIENT		-0.01545	0.00057	-0.00819	-0.00637	0.00000	0.00000



LA-14, ROCKWELL ORB 0868 W/MCD. NOSE (B/W)

(RPG001)

PARAMETRIC DATA
 BETA = 0.000 ELEVTR = 0.000
 ALURON = 0.000 CG-LCC = 1.000
 RUOFUR = 40.000

GRADIENT INTERVAL = -5.00/ 5.00

RUN NO. 619/ 0

MACH	ALPHA	CBLP	CBLS	CYMP	CYMS	Q (KPA)	BETA
1.600	-1.144	-0.32905	0.00150	0.11190	-0.00031	23.01698	0.00000
1.600	0.552	-0.25614	-0.00193	0.04001	0.00178	23.01698	0.00000
1.600	2.444	-0.34066	-0.00576	0.10285	0.00517	23.01698	0.00000
1.600	4.455	-0.30835	-0.00940	0.03968	0.00825	23.01698	0.00000
1.600	6.458	-0.27305	-0.01366	0.04918	0.01085	23.01698	0.00000
1.600	8.464	-0.29448	-0.01861	0.01408	0.01334	23.01698	0.00000
1.600	10.559	-0.22410	-0.02694	0.02349	0.01497	23.01698	0.00000
1.600	12.451	-0.28366	-0.03134	0.00505	0.01450	23.01698	0.00000
GRADIENT		-0.00144	-0.00195	-0.00812	0.00172	-0.00000	0.00000

GRADIENT INTERVAL = -5.00/ 5.00

RUN NO. 620/ 0

MACH	ALPHA	CBLP	CBLS	CYMP	CYMS	Q (KPA)	BETA
1.900	-0.680	-0.30432	0.00286	0.13245	-0.00136	22.93458	0.00000
1.900	1.009	-0.28301	-0.00111	0.10290	0.00104	22.93458	0.00000
1.900	2.970	-0.27755	-0.00437	0.12913	0.00479	22.93458	0.00000
1.900	4.954	-0.28047	-0.00787	0.10341	0.00709	22.93458	0.00000
1.900	6.944	-0.27388	-0.01164	0.06841	0.00930	22.93458	0.00000
1.900	8.914	-0.25153	-0.01646	0.03326	0.00832	22.93458	0.00000
1.900	10.943	-0.24643	-0.02259	0.04921	0.00959	22.93458	0.00000
1.900	12.861	-0.24995	-0.02808	0.02029	0.01098	22.93458	0.00000
1.900	14.796	-0.26645	-0.03416	0.03611	0.01082	22.93458	0.00000
1.900	16.783	-0.24958	-0.04090	-0.00010	0.00983	22.93458	0.00000
1.900	18.699	-0.24357	-0.04402	0.02091	-0.00138	22.93458	0.00000
1.900	20.698	-0.22727	-0.05252	0.02040	-0.02385	22.93458	0.00000
GRADIENT		0.00397	-0.00187	-0.00310	0.00154	0.00000	0.00000

(RFRGRD1)

LA-14, ROCKWELL CR8 DR98 W/MCD. NOSE (BW)

PARAMETRIC DATA
 BETA = 0.000 ELEVTR = 0.000
 AIRLON = 0.000 CG-LCC = 1.000
 RUFLR = 40.000

GRADIENT INTERVAL = -5.00/ 5.00

RUN NO. 618/ 0

MACH	ALPHA	CBLP	GBLS	CYMP	CYBS	Q (KPA)	BETA
2.360	-0.089	-0.20772	0.00089	0.11848	0.00004	26.82472	0.00000
2.360	1.493	-0.27870	0.00038	0.11185	0.00270	26.82472	0.00000
2.360	3.455	-0.23766	-0.00519	0.11551	0.00665	26.82472	0.00000
2.360	5.496	-0.28279	-0.00999	0.11717	0.00736	26.82472	0.00000
2.360	7.557	-0.22785	-0.01326	0.09613	0.00961	26.82472	0.00000
2.360	9.492	-0.28162	-0.01792	0.07912	0.01024	26.82472	0.00000
2.360	11.437	-0.21818	-0.02435	0.06146	0.01117	26.82472	0.00000
2.360	13.536	-0.20621	-0.03355	0.04156	0.01372	26.82472	0.00000
2.360	15.442	-0.22145	-0.04089	0.04506	0.01126	26.82472	0.00000
2.360	17.497	-0.21185	-0.04661	0.03072	0.00122	26.82472	0.00000
2.360	19.162	-0.25705	-0.04950	0.02057	-0.00951	26.82472	0.00000
2.360	21.466	-0.20596	-0.05312	-0.05198	-0.04183	26.82472	0.00000
2.360	23.463	-0.20951	-0.05507	-0.12769	-0.06138	26.82472	0.00000
2.360	25.398	-0.24368	-0.04647	-0.01893	-0.08387	26.82472	0.00000
2.360	27.731	-0.31171	-0.04946	-0.18113	-0.06569	26.82472	0.00000
2.360	29.291	-0.19025	-0.06160	-0.33338	-0.07888	26.82472	0.00000
GRADIENT	-0.00728	-0.00179	-0.00073	0.00179	0.00000	0.00000	0.00000

GRADIENT INTERVAL = -5.00/ 5.00

RUN NO. 946/ 0

MACH	ALPHA	CBLP	GBLS	CYMP	CYBS	Q (KPA)	BETA
3.960	0.334	-0.17833	0.00006	0.10082	-0.00367	17.62188	0.00000
3.960	4.717	-0.18277	-0.00608	0.08498	-0.00079	17.62188	0.00000
3.960	8.800	-0.19079	-0.01411	0.15666	0.00255	17.62188	0.00000
3.960	12.614	-0.21926	-0.02676	0.07505	0.00642	17.62188	0.00000
3.960	16.691	-0.24047	-0.03469	0.05792	-0.00061	17.62188	0.00000
3.960	20.676	-0.24976	-0.03403	0.07019	-0.02220	17.62188	0.00000
3.960	24.579	-0.21548	-0.03988	0.10168	-0.04166	17.62188	0.00000
3.960	29.315	-0.23719	-0.05369	-0.17492	-0.03302	17.62188	0.00000
GRADIENT	-0.00101	-0.00140	-0.00361	0.00066	-0.00000	0.00000	0.00000

GRADIENT INTERVAL = -5.00/ 5.00

RUN NO. 947/ 0

MACH	ALPHA	CBLP	GBLS	CYMP	CYBS	Q (KPA)	BETA
4.630	1.043	-0.15444	-0.00039	0.21451	-0.00020	13.92910	0.00000
4.630	5.207	-0.16893	-0.00616	0.11427	0.00115	13.92910	0.00000
4.630	9.144	-0.18263	-0.01431	0.14928	-0.00229	13.92910	0.00000
4.630	13.097	-0.19272	-0.02426	0.07932	0.00269	13.92910	0.00000
4.630	16.966	-0.20423	-0.03007	0.16547	-0.00725	13.92910	0.00000
4.630	20.954	-0.20182	-0.03563	0.12804	-0.02170	13.92910	0.00000
4.630	24.982	-0.23913	-0.03689	0.09679	-0.04023	13.92910	0.00000
GRADIENT	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000



LA-14, ROONWELL CR8 0898 W/MOD. NOISE (BW M)

(RPRGR02)

PARAMETRIC DATA
BETA = 0.000 ELEVTR = 0.000
ALURON = 0.000 CG-LCC = 1.000

GRADIENT INTERVAL = -5.00/ 5.00

RUN NO. 616/ 0

MACH	ALPHA	CBLP	CBLS	CYFP	CYNS	BETA
1.600	-1.190	-0.27105	-0.00041	0.01453	0.00249	23.01698
1.600	0.593	-0.28057	0.00200	-0.03696	-0.00049	23.01698
1.600	2.858	-0.19251	0.00257	0.00177	-0.00226	23.01698
1.600	4.554	-0.19449	0.00341	-0.04994	-0.00775	23.01698
1.600	6.641	-0.20418	0.00508	-0.05573	-0.01107	23.01698
1.600	8.649	-0.23210	0.00372	-0.06892	-0.01550	23.01698
1.600	11.009	-0.19234	0.00251	-0.07639	-0.02057	23.01698
1.600	12.517	-0.18109	0.00267	-0.07975	-0.02268	23.01698
GRADIENT	0.01676	0.00061	-0.00741	-0.00165	0.00000	0.00000

GRADIENT INTERVAL = -5.00/ 5.00

RUN NO. 617/ 0

MACH	ALPHA	CBLP	CBLS	CYFP	CYNS	BETA
1.900	-0.715	-0.15429	-0.00104	0.05754	0.00129	22.93458
1.900	0.907	-0.22452	0.00160	0.02296	0.00214	22.93458
1.900	2.503	-0.19271	0.00307	0.00404	-0.00661	22.93458
1.900	4.735	-0.23900	0.00485	0.02516	-0.01082	22.93458
1.900	7.197	-0.19346	0.00498	-0.03901	-0.01632	22.93458
1.900	8.868	-0.17035	0.00359	-0.05597	-0.02068	22.93458
1.900	10.798	-0.16521	0.00195	-0.06258	-0.02533	22.93458
1.900	13.033	-0.18809	-0.00037	-0.06568	-0.02700	22.93458
1.900	14.862	-0.19190	-0.00440	0.00200	-0.02845	22.93458
1.900	16.835	-0.19222	-0.01065	0.00729	-0.03103	22.93458
1.900	18.778	-0.21695	-0.01619	-0.04324	-0.03473	22.93458
1.900	21.348	-0.21050	-0.02356	-0.07149	-0.04114	22.93458
GRADIENT	-0.01244	0.00105	-0.00585	-0.00226	0.00000	0.00000

GRADIENT INTERVAL = -5.00/ 5.00

RUN NO. 942/ 0

MACH	ALPHA	CBLP	CBLS	CYFP	CYNS	BETA
2.360	0.307	-0.18688	-0.00054	-0.04610	-0.00115	26.82472
2.360	4.377	-0.16140	0.00290	-0.00935	-0.00861	26.82472
2.360	8.460	-0.18554	0.00304	-0.09362	-0.01700	26.82472
2.360	12.492	-0.16242	-0.00480	-0.05528	-0.02274	26.82472
2.360	16.427	-0.18731	-0.01621	-0.13180	-0.02728	26.82472
2.360	18.284	-0.21783	-0.02136	-0.19539	-0.02983	26.82472
2.360	20.429	-0.18955	-0.02725	-0.23236	-0.03168	26.82472
2.360	22.250	-0.16411	-0.03522	-0.28935	-0.03491	26.82472
2.360	24.265	-0.18897	-0.04588	-0.42943	-0.03142	26.82472
2.360	26.529	0.12474	-0.06982	-0.41082	-0.03602	26.82472
2.360	28.403	-0.17345	-0.06783	-0.46577	-0.03781	26.82472
GRADIENT	0.00625	0.00085	0.00803	-0.00183	0.00000	0.00000

(RRPR02)

LA-14, ROCKWELL CR8 D888 W/MOD, NOISE (BW M)

PARAMETRIC DATA
BETA = 0.000 ELEVTR = 0.000
ALTRON = 0.000 CG-LCC = 1.000

RUN NO. 943/ 0 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CBLP	CBLS	CYNP	CYNBS	Q (KPA)	BETA
2.860	0.434	-0.14247	-0.00059	-0.03534	-0.00140	23.67863	0.00000
2.860	4.490	-0.16927	0.00120	-0.05688	-0.01160	23.67863	0.00000
2.860	8.481	-0.17281	0.00025	-0.06942	-0.01684	23.67863	0.00000
2.860	12.387	-0.19716	-0.00663	-0.19296	-0.02118	23.67863	0.00000
2.860	16.468	-0.20263	-0.01885	-0.00348	-0.02545	23.67863	0.00000
2.860	18.086	-0.16084	-0.02665	-0.01522	-0.02728	23.67863	0.00000
2.860	20.609	-0.22603	-0.02988	-0.08947	-0.02991	23.67863	0.00000
2.860	22.643	-0.23678	-0.03988	-0.21824	-0.03257	23.67863	0.00000
2.860	24.392	-0.23354	-0.04118	-0.26959	-0.03337	23.67863	0.00000
2.860	26.649	-0.18304	-0.05242	-0.29825	-0.03754	23.67863	0.00000
2.860	28.503	-0.21798	-0.05791	-0.35062	-0.03946	23.67863	0.00000
2.860	30.194	-0.19561	-0.06305	-0.40044	-0.04403	23.67863	0.00000
GRADIENT		-0.02562	0.00044	-0.00531	-0.00251	0.00000	0.00000

RUN NO. 944/ 0 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CBLP	CBLS	CYNP	CYNBS	Q (KPA)	BETA
3.960	0.443	-0.13056	0.00008	-0.02091	-0.00284	17.62188	0.00000
3.960	4.596	-0.15110	0.00013	-0.05602	-0.00643	17.62188	0.00000
3.960	8.760	-0.14036	-0.00182	-0.04463	-0.01609	17.62188	0.00000
3.960	11.621	-0.18419	-0.00741	-0.11204	-0.01936	17.62188	0.00000
3.960	16.126	-0.21632	-0.01432	-0.17836	-0.02493	17.62188	0.00000
3.960	18.623	-0.21024	-0.02024	-0.13514	-0.02798	17.62188	0.00000
3.960	20.597	-0.21863	-0.02401	-0.03912	-0.02703	17.62188	0.00000
3.960	22.623	-0.22548	-0.02913	-0.02947	-0.03127	17.62188	0.00000
3.960	24.659	-0.22672	-0.03627	-0.08572	-0.03272	17.62188	0.00000
3.960	26.660	-0.21467	-0.04411	-0.11837	-0.03652	17.62188	0.00000
3.960	28.628	-0.22456	-0.04840	-0.19386	-0.03808	17.62188	0.00000
3.960	30.489	-0.26650	-0.04806	-0.24776	-0.04329	17.62188	0.00000
GRADIENT		-0.00495	0.00001	-0.00845	-0.00135	0.00000	0.00000



LA-14, ROCKWELL CRB D898 W/MCD. NOISE (BMM)

(RFR03)

PARAMETRIC DATA
 BETA = 0.000 ELEVTR = 0.000
 AILTRCN = 0.000 CG-LCC = 1.000
 RUDFLR = 40.000

GRADIENT INTERVAL = -5.00/ 5.00

RUN NO. 614/ 0

MACH	ALPHA	CELP	CELS3	CYNP	CYNS3	Q(KPA)	BETA
1.600	-1.153	-0.28397	0.00199	0.10575	-0.00277	23.01698	0.00000
1.600	0.437	-0.30008	-0.00086	0.09004	-0.00049	23.01698	0.00000
1.600	2.484	-0.29345	-0.00465	0.10175	0.00556	23.01698	0.00000
1.600	4.460	-0.27411	-0.00700	0.03729	0.00812	23.01698	0.00000
1.600	6.467	-0.25947	-0.00857	0.05936	0.01123	23.01698	0.00000
1.600	8.398	-0.30923	-0.01165	0.01994	0.01299	23.01698	0.00000
1.600	10.449	-0.23442	-0.01842	0.05491	0.01527	23.01698	0.00000
1.600	12.371	-0.27764	-0.02200	0.03193	0.01475	23.01698	0.00000
	GRADIENT	0.00242	-0.00162	-0.00839	0.00148	0.00000	0.00000

GRADIENT INTERVAL = -5.00/ 5.00

RUN NO. 615/ 0

MACH	ALPHA	CELP	CELS3	CYNP	CYNS3	Q(KPA)	BETA
1.900	-0.721	-0.27444	0.00112	0.12158	-0.00277	22.93458	0.00000
1.900	0.928	-0.30290	-0.00017	0.04635	-0.00049	22.93458	0.00000
1.900	2.896	-0.24242	-0.00271	0.12387	0.00215	22.93458	0.00000
1.900	4.869	-0.23376	-0.00608	0.07245	0.00191	22.93458	0.00000
1.900	6.953	-0.26982	-0.00730	0.05450	0.00355	22.93458	0.00000
1.900	8.828	-0.27561	-0.01199	0.02901	0.00535	22.93458	0.00000
1.900	10.923	-0.22927	-0.01834	0.03009	0.00699	22.93458	0.00000
1.900	12.887	-0.22766	-0.02295	0.04668	0.00899	22.93458	0.00000
1.900	14.855	-0.25068	-0.02759	0.04114	0.00641	22.93458	0.00000
1.900	16.829	-0.27250	-0.03207	0.05173	-0.00079	22.93458	0.00000
1.900	18.798	-0.24653	-0.03303	0.02272	-0.01304	22.93458	0.00000
1.900	20.784	-0.20638	-0.03255	0.02540	-0.00373	22.93458	0.00000
	GRADIENT	0.01002	-0.00113	-0.00336	0.00028	0.00000	0.00000



(RPGR03)

LA-14, ROOMWELL ORB 0698 WIND. NOISE (BMM)

PARAMETRIC DATA
 BETA = 0.000 ELEVTR = 0.000
 ATLRON = 0.000 CG-LOC = 1.000
 RUDFLR = 40.000

GRADIENT INTERVAL = -5.00/ 5.00

RUN NO. 940/ 0

MACH	ALPHA	CBLP	CBLS	CYMP	CYNS	Q (KPA)	BETA
2.360	-1.301	-0.23975	0.00039	0.09096	-0.00308	26.82472	0.00000
2.360	0.253	-0.25516	-0.00142	0.09242	0.00010	26.82472	0.00000
2.360	2.451	-0.25628	-0.00295	0.03309	0.00100	26.82472	0.00000
2.360	4.491	-0.25740	-0.00608	0.05158	0.00386	26.82472	0.00000
2.360	6.357	-0.22767	-0.00954	0.06083	0.00532	26.82472	0.00000
2.360	8.421	-0.25675	-0.01266	0.04969	0.00648	26.82472	0.00000
2.360	10.330	-0.24085	-0.01819	0.03479	0.00746	26.82472	0.00000
2.360	12.406	-0.24135	-0.02486	0.00704	0.00704	26.82472	0.00000
2.360	14.414	-0.22073	-0.02988	-0.00444	0.00193	26.82472	0.00000
2.360	16.579	-0.23073	-0.03515	-0.07937	-0.00849	26.82472	0.00000
2.360	18.376	-0.24844	-0.03625	-0.11764	-0.01984	26.82472	0.00000
2.360	20.343	-0.24285	-0.03554	-0.25902	-0.03685	26.82472	0.00000
2.360	22.356	-0.19340	-0.03612	-0.27302	-0.04874	26.82472	0.00000
2.360	24.272	-0.24171	-0.03687	-0.31720	-0.06338	26.82472	0.00000
2.360	25.297	-0.26984	-0.03746	-0.24194	-0.07160	26.82472	0.00000
2.360	26.225	0.06235	-0.04915	-0.16149	-0.08306	26.82472	0.00000
2.360	27.278	-0.23238	-0.04129	-0.16149	-0.09438	26.82472	0.00000
2.360	28.267	-0.37500	-0.03689	-0.25364	-0.09348	26.82472	0.00000
2.360	29.287	0.08672	-0.05788	-0.33894	-0.09348	26.82472	0.00000
2.360	29.943	0.10641	-0.06828	-0.21734	-0.09437	26.82472	0.00000
2.360	GRADIENT	-0.00263	-0.00107	-0.00920	0.00109	0.00000	0.00000

GRADIENT INTERVAL = -5.00/ 5.00

RUN NO. 941/ 0

MACH	ALPHA	CBLP	CBLS	CYMP	CYNS	Q (KPA)	BETA
2.860	-1.229	-0.20768	0.00239	0.09335	-0.00166	23.67863	0.00000
2.860	0.271	-0.23153	-0.00221	0.06739	0.00048	23.67863	0.00000
2.860	2.166	-0.21804	-0.00334	0.03329	0.00197	23.67863	0.00000
2.860	4.591	-0.22178	-0.00729	0.05054	0.00323	23.67863	0.00000
2.860	6.471	-0.23404	-0.01093	0.03772	0.00478	23.67863	0.00000
2.860	8.521	-0.23377	-0.01392	0.00732	0.00478	23.67863	0.00000
2.860	10.509	-0.21869	-0.01835	0.03083	0.00586	23.67863	0.00000
2.860	12.440	-0.22031	-0.02638	0.04390	0.00975	23.67863	0.00000
2.860	14.514	-0.23555	-0.03322	0.03199	0.00436	23.67863	0.00000
2.860	16.375	-0.24291	-0.03999	-0.00728	-0.00252	23.67863	0.00000
2.860	18.417	-0.21222	-0.04526	-0.02032	-0.01490	23.67863	0.00000
2.860	20.436	-0.29049	-0.04251	-0.08218	-0.02641	23.67863	0.00000
2.860	22.423	-0.26983	-0.04330	-0.15876	-0.03259	23.67863	0.00000
2.860	24.492	-0.29866	-0.03951	-0.21387	-0.04623	23.67863	0.00000
2.860	26.453	-0.28971	-0.03786	-0.22607	-0.06124	23.67863	0.00000
2.860	28.394	-0.12272	-0.04696	-0.24527	-0.07454	23.67863	0.00000
2.860	30.235	-0.10315	-0.07024	-0.39444	-0.07125	23.67863	0.00000
2.860	GRADIENT	-0.00125	-0.00166	-0.00775	0.00081	0.00000	0.00000

(RPGROB)

LA-14, ROCKWELL CRB 0898 W/MCD. NOSE (BMM)

PARAMETRIC DATA
 BETA = 0.000 ELEVTR = 0.000
 AILRON = 0.000 CG-LCC = 1.000
 RUOFLR = 40.000

GRADIENT INTERVAL = -5.00/ 5.00

RUN NO. 939/ 0

MACH	ALPHA	CBLP	GBLBS	CYMP	CYMS	Q (KPA)	BETA
3.960	-1.049	-0.18923	0.00211	0.08825	-0.00341	17.62188	0.00000
3.960	0.516	-0.17689	-0.00044	0.09012	-0.00142	17.62188	0.00000
3.960	2.859	-0.18627	-0.00431	0.06860	0.00129	17.62188	0.00000
3.960	4.831	-0.18939	-0.00734	0.07775	0.00291	17.62188	0.00000
3.960	6.584	-0.19763	-0.00989	0.09754	0.00148	17.62188	0.00000
3.960	8.661	-0.20703	-0.01345	0.04066	0.00294	17.62188	0.00000
3.960	10.789	-0.21013	-0.02065	0.01495	0.00709	17.62188	0.00000
3.960	12.680	-0.20972	-0.02613	-0.01054	0.00631	17.62188	0.00000
3.960	14.643	-0.18660	-0.03201	-0.01175	0.00481	17.62188	0.00000
3.960	16.635	-0.20627	-0.03484	-0.05108	-0.00412	17.62188	0.00000
3.960	18.689	-0.21570	-0.03602	-0.04732	-0.01325	17.62188	0.00000
3.960	20.815	-0.24103	-0.03711	-0.10807	-0.01892	17.62188	0.00000
3.960	22.909	-0.24322	-0.04005	-0.16676	-0.02672	17.62188	0.00000
3.960	24.592	-0.27512	-0.04374	-0.22927	-0.03637	17.62188	0.00000
3.960	24.436	-0.21469	-0.04704	-0.29222	-0.04248	17.62188	0.00000
3.960	26.635	-0.09039	-0.05339	-0.11737	-0.05570	17.62188	0.00000
3.960	28.526	-0.19783	-0.05475	-0.31986	-0.04697	17.62188	0.00000
3.960	30.298	-0.28803	-0.04286	-0.51487	-0.05526	17.62188	0.00000
GRADIENT		-0.00121	-0.00161	-0.02876	0.00108	0.00000	0.00000

GRADIENT INTERVAL = -5.00/ 5.00

RUN NO. 939/ 0

MACH	ALPHA	CBLP	GBLBS	CYMP	CYMS	Q (KPA)	BETA
4.630	-0.585	-0.16051	0.00177	0.09724	-0.00159	13.92910	0.00000
4.630	0.934	-0.15617	-0.00034	0.08571	-0.00003	13.92910	0.00000
4.630	2.850	-0.16310	-0.00357	0.06132	0.00198	13.92910	0.00000
4.630	5.328	-0.17747	-0.00755	0.06404	0.00248	13.92910	0.00000
4.630	7.361	-0.18924	-0.01092	-0.09922	-0.00009	13.92910	0.00000
4.630	9.197	-0.18997	-0.01457	0.11356	-0.02208	13.92910	0.00000
4.630	11.199	-0.19894	-0.01878	-0.01030	0.00078	13.92910	0.00000
4.630	13.222	-0.19530	-0.02439	-0.02731	0.00419	13.92910	0.00000
4.630	15.164	-0.20116	-0.02934	-0.09084	0.00347	13.92910	0.00000
4.630	17.005	-0.20540	-0.03286	-0.11210	-0.00385	13.92910	0.00000
4.630	19.126	-0.21223	-0.03401	-0.13902	-0.00987	13.92910	0.00000
4.630	21.073	-0.20583	-0.03718	-0.06407	-0.01660	13.92910	0.00000
4.630	22.953	-0.21901	-0.03959	-0.05123	-0.02044	13.92910	0.00000
4.630	24.955	-0.11884	-0.05226	-0.04478	-0.03247	13.92910	0.00000
4.630	27.023	-0.18637	-0.04805	-0.05080	-0.03957	13.92910	0.00000
4.630	28.868	-0.22290	-0.04731	-0.14659	-0.03806	13.92910	0.00000
4.630	30.885	-0.24354	-0.05019	-0.48324	-0.03227	13.92910	0.00000
GRADIENT		-0.00088	-0.00156	-0.01055	0.00104	0.00000	0.00000