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WIND TUNNEL INVESTIGATION OF AN OBLIQUE WING TRANSPORT MODEL AT MACH NUMBERS BETWEEN 0.6 AND 1.4

by R. L. Black, J. K. Beamish and W. K. Alexander

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WIND TUNNEL INVESTIGATION OF AN OBLIQUE WING TRANSPORT MODEL AT MACH NUMBERS BETWEEN 0.6 AND 1.4

By R. L. Black, J. K. Beamish, and W. K. Alexander

Convair Division of General Dynamics

SUMMARY

Models of three practical oblique-wing transport configurations were tested in the NASA Ames 11-foot wind tunnel. The three configurations used a common forward fuselage, wing, and support system but employed different aft fuselage sections simulating alternate propulsion system installations. These included an integrated propulsion system, pylon-mounted nacelles, and clean (no propulsion system) configuration. The tests were conducted over a Mach number range from 0.6 to 1.4 and at sweep angles from 0 to 60 degrees. The nominal unit Reynolds number was 1.83 million per meter (6 million per foot) and the angle of attack range was -3 to +6 degrees. The models were mounted in the tunnel by means of a lower blade support system. The interference effects of this lower blade and the flow inclination were determined by using an image blade system and testing the configuration in both the upright and inverted positions.

The reduced aerodynamic data, corrected to account for internal flow and base pressure effects where appropriate, were received from NASA on magnetic tape. At General Dynamics, the data were tabulated and plotted, the aerodynamic tares (lower blade and flow inclination effects) were determined, and the tares were applied to the performance data. The performance data, corrected for aerodynamic tares, are included in Section I of this report in plotted form. The tares are also included in both tabulated and plotted form.

Wing deflection measurements were obtained by the use of analytical stereophotogrammetic procedures. The wing deflection data are presented in plotted and tabulated form in Section II.

INTRODUCTION

The objective of the test program described herein was to acquire aerodynamic and aeroelastic data for use in evaluating the performance characteristics of an oblique wing mounted on three different fuselage configurations characteristic of different propulsion system installations. These included an integrated system, a pod-pylon arrangement, and a reference clean configuration. The program was part of a continuing effort on oblique wing concepts by the Ames Research Center. This report is presented as a documentation of the wing aeroclastic deflection and the performance data, adjusted for the interference effects of the wind tunnel model support system that was used.

The test was conducted in the Ames 11- by 11-foot unitary plan wind tunnel during February 1975. Data were obtained at a Reynolds number of 1.83 million per meter (6 million per foot) over a Mach number range of 0.60 to 1.40. The wing sweep was varied from 0 to 60 degrees.

To support the model in the tunnel without extensive modifications to the aft fuselage and propulsion system, a primary blade support located at the lower rear of the model was selected. A photograph of the installation is shown in Figure 1 and a detailed illustration is presented in Figure 2. To evaluate the aerodynamic effect of the support, an image, or dummy, strut was installed and the model was tested both upright and inverted, with and without the image strut. This resulted in the documentation of both lower blade and flow inclination effects. The performance data were then corrected to account for these effects on the integrated propulsion system fuselage and the clean, no propulsion system, configurations. No tares were obtained for the pod/pylon propulsion system fuselage configuration.

The aerodynamic twist and hence the spanwise loading of an oblique wing is a direct function of the wing deflection. To aid in the analysis of the wind tunnel results, the shape of the model wing while under aerodynamic load in the wing tunnel was determined simultaneously with the force measurements. This was accomplished using a stereo-photogrammetric technique, in which stereo pairs of negatives were analyzed and the shapes of the aeroclastic surface (wing) were computed relative to the rigid model components (fuselage).

NOMENCLATURE

The data are presented in the stability axis system.

Symbol	Definition
b	wing span, 144.539 cm (56.905 in.)
c	wing chord
c_{root}	wing root chord, 17.226 cm (6.782 in.)
C_D	drag coefficient, drag/qS
C_ℓ	rolling moment coefficient, rolling moment/qSb
C_L	lift coefficient, lift/qS

Symbol	Definition
C_m	pitching moment coefficient, pitching moment/qSc_{root}
C_n	yawing moment coefficient, yawing moment/qSb
C_Y	side force coefficient, side force/qS
L/D	lift-to-drag ratio
M, MACH	free-stream Mach number
q	free-stream dynamic pressure
Re/ℓ	unit Reynolds number, million per foot
S	wing area, 1550.55 cm^2 (240.336 $in.^2$)
α, ALPHA	angle of attack
β, BETA	angle of sideslip
Λ, SWEEP	angle between a line perpendicular to the body longitudinal axis and the 0.40 chord line of the wing, measured in a horizontal plane

TEST FACILITY

The tests were conducted in the Ames 11- by-11-foot Transonic Wind Tunnel, which is a variable density, closed return, continuous flow tunnel. It has an adjustable nozzle (two flexible walls) and a slotted test section to permit transonic testing over a Mach number range continuously variable from 0.4 to 1.4.

MODEL DESCRIPTION

The model consisted of an extended span planform wing mounted on three different fuselage configurations. The fuselage configurations consisted of a common long slender forebody (containing the balance and wing pivot point), coupled with three different afterbody configurations: 1) the integrated fuselage had an afterbody with two integral inlets and internal airflow, Figures 3 and 4; 2) the pod/pylon fuselage had an afterbody with an external pylon-mounted engine pod on each side of the fuselage, Figure 5; 3) the clean fuselage had a faired afterbody with no propulsion system, Figure 6. All three configurations were designed to have the same area distribution at Mach number 1.2 at 55° of sweep. The same vertical and horizontal tail configuration was available for use with any fuselage configuration. Pertinent dimensions of each fuselage configuration are shown in Figures 4, 5, and 6.

The wing was pivoted in the horizontal plane about the 0.40 root chord point (right hand wing panel forward) to obtain oblique angles of 0, 25, 35, 45, 50, 55, 60 degrees.

The wing was unsymmetrical about the root chord in the vertical plane with different amounts of spanwise pre-bend built into the right- and left-hand panels. The extended span planform had curved leading and trailing edges with a straight 40-percent chord line. Wing dimensions, rigging, and airfoil descriptions are shown in Figure 7.

SECTION I – AERODYNAMICS

Testing and Procedure

The model was mounted in the tunnel by means of an off-set blade arrangement as shown in Figures 1 and 2. It was designed so as to be mounted upright or inverted on the strut with or without an image (dummy) offset strut attached. The strut(s) supported the Ames 2-inch MK XII Task internal six-component strain gage balance, from which the force and moment data were obtained. The moment reference center was located at the wing pivot point longitudinally ($0.4c_{root}$) and on the balance center line (W. L. 2.625 in.) vertically. Details of the model configurations are shown in Figures 3 through 7.

The measured balance data were adjusted to account for the effects of model base pressure and duct (nacelle) internal flow on applicable configurations. A flexible seal was installed between the model and strut(s) to prevent significant air-flow from occurring in the balance cavity, as shown in Figure 2.

The testing reported herein was conducted at a Reynolds number of 1.83 million per meter (6 million per foot). The model angle of attack range, selected to define maximum life-to-drag ratio, was nominally -3 to +6 degrees. Six-component force and moment data were obtained for the wing at oblique angles of 0, 25, 35, 45, 50, 55, and 60 degrees. The Mach numbers investigated were 0.60, 0.70, 0.80, 0.90, 0.95, 0.98, 1.05, 1.10, 1.15, 1.20, and 1.40. The combinations of Mach/sweep angle tested on each configuration are shown in Table 1. Other test data obtained during the program were not concerned with the determination of the aerodynamic interference effects and so are omitted from this report.

Data Reduction

The pertinent data as recorded during the test were reduced to engineering units at Ames; that is, all standard corrections such as the effects due to model weight, air-load deflections, base pressures, and internal drag (when applicable) were applied to the computed data prior to transmittal to Convair.

From the Ames-supplied magnetic tape data, Convair determined the additional corrections that were to be applied to the data. These accounted for the effects due to tunnel flow angularity and the model support strut. These are referred to as flow inclination (I) tares and lower blade (LB) tares. Combined, they formed the aerodynamic

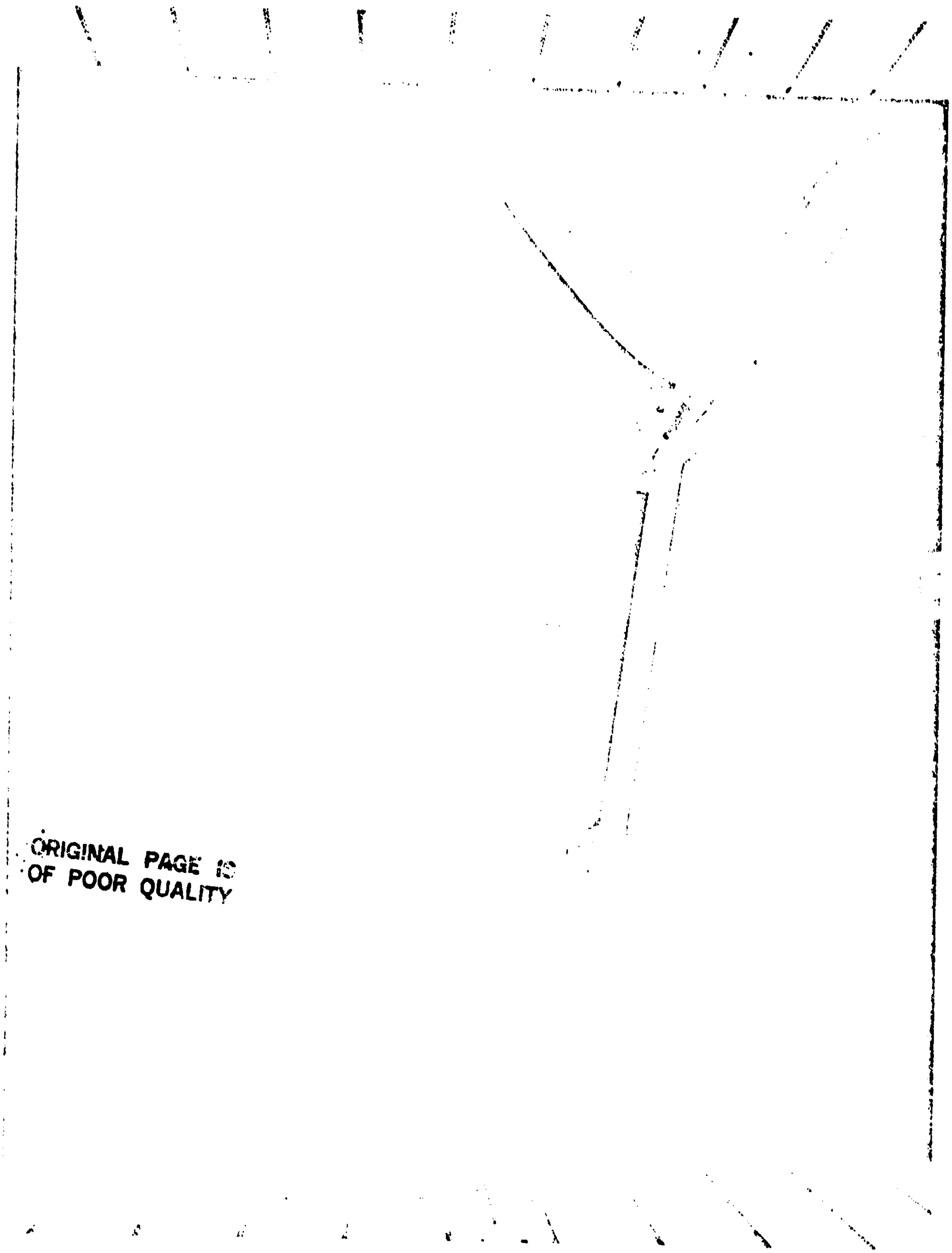

Figure 1. Model Installation, Integrated Fuselage Configuration

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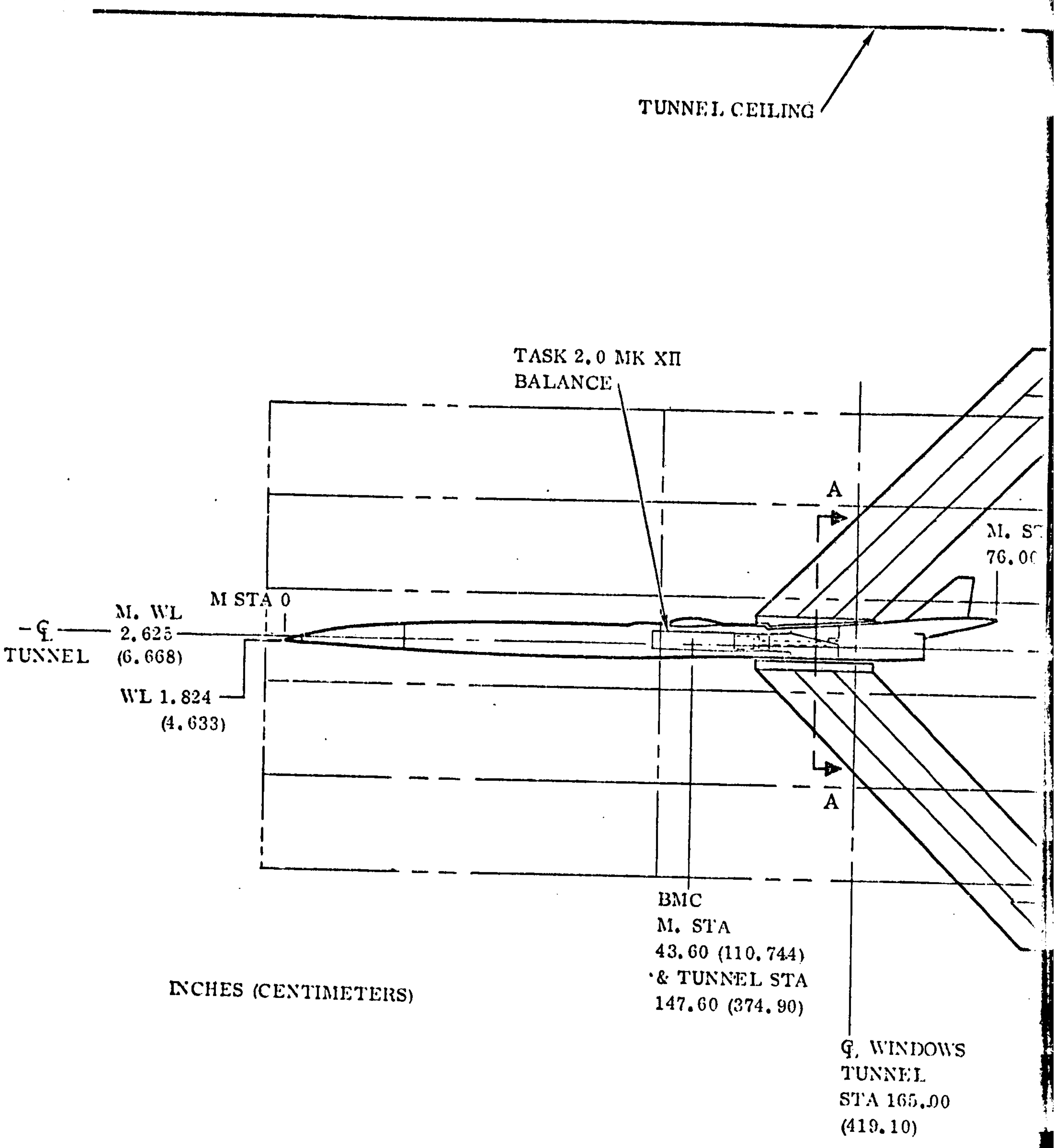
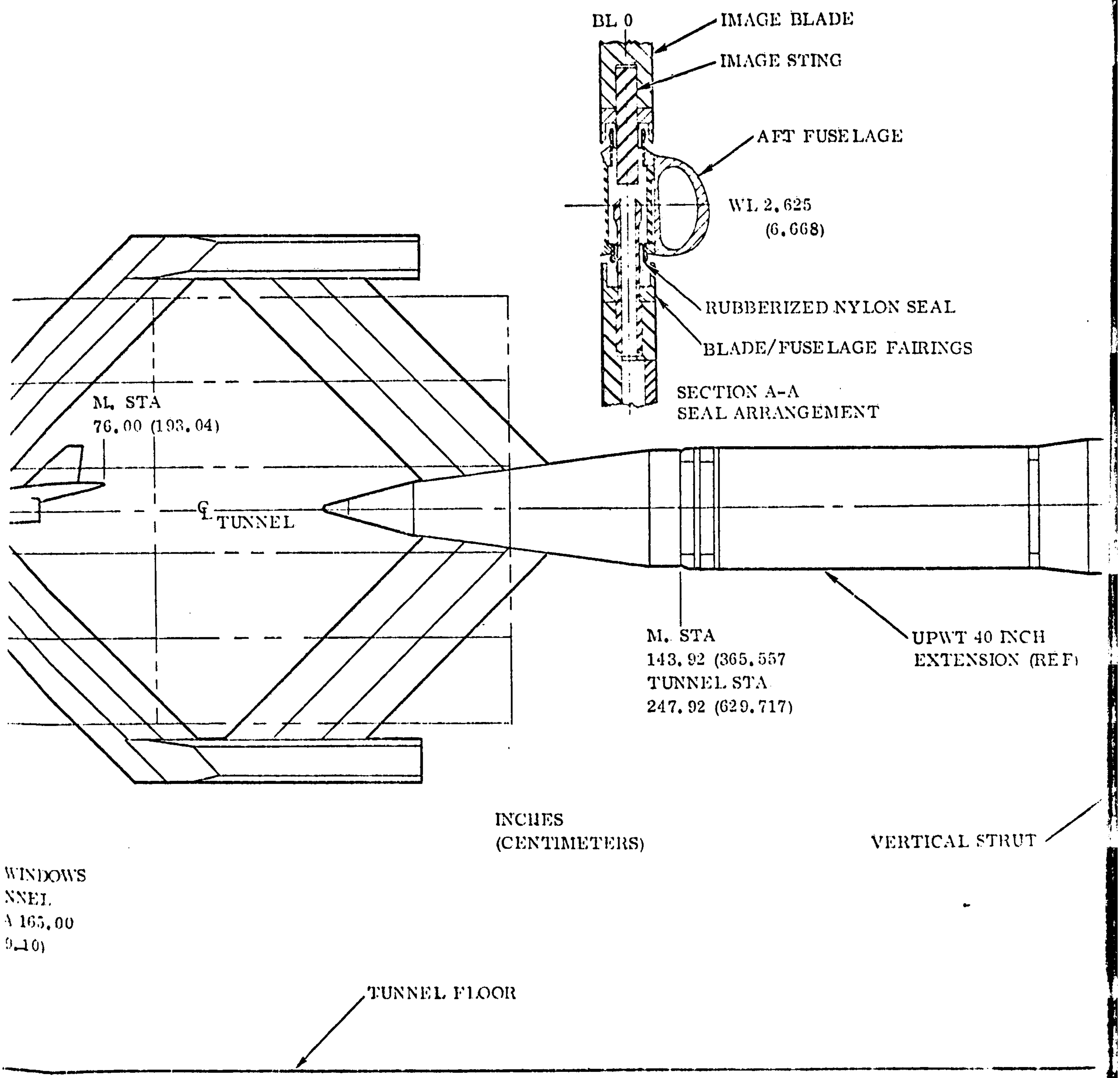


Figure 2. Tunnel Installation Drawing



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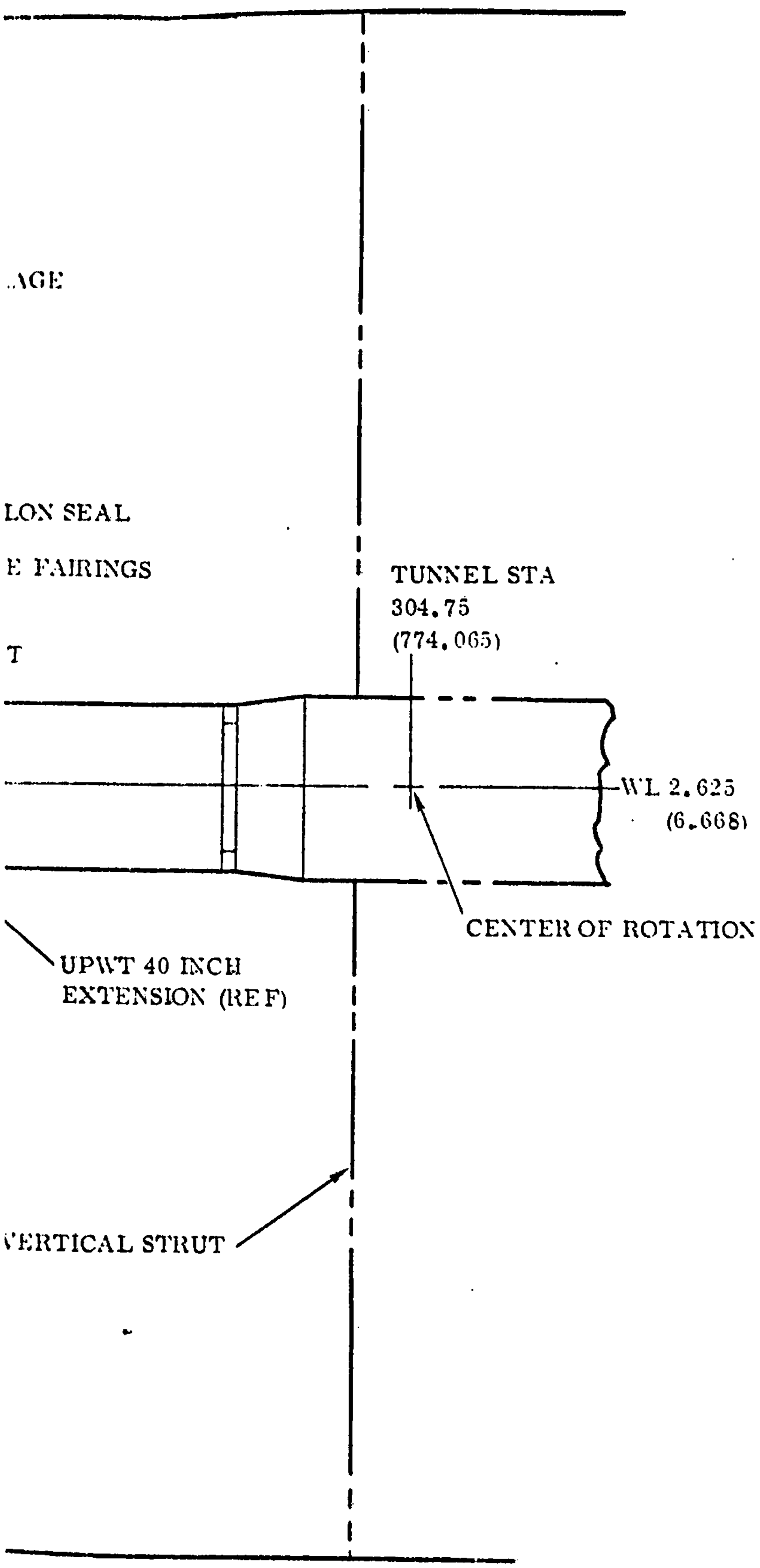


.AGE
LON SEAL
E FAIRINGS
TUNNEL STA
304.75
(774.065)
T
WL 2.625
(6.668)
CENTER OF ROTATION
UPWT 40 INCH
EXTENSION (REF)
VERTICAL STRUT

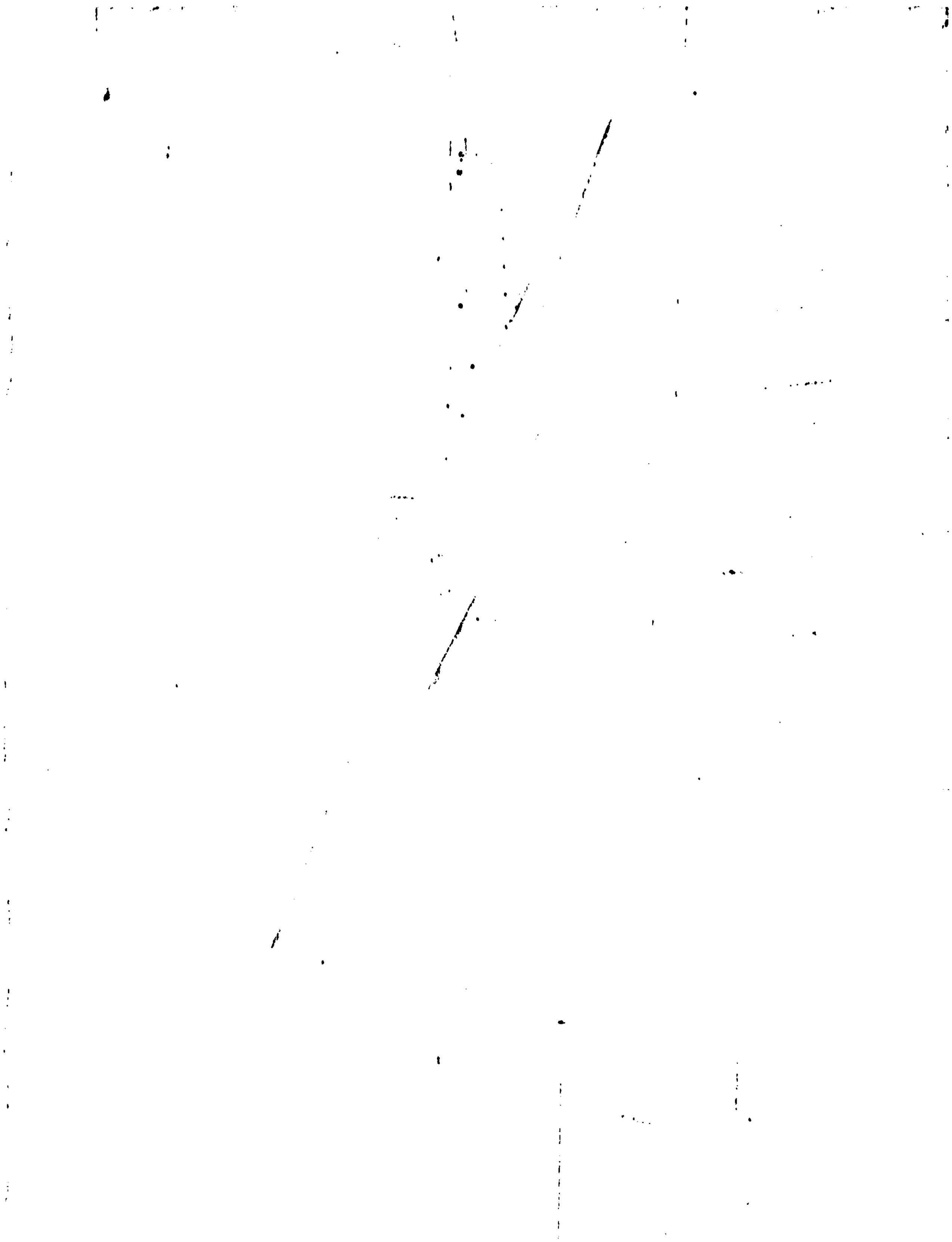


Figure 3. Integrated Fuselage Configuration

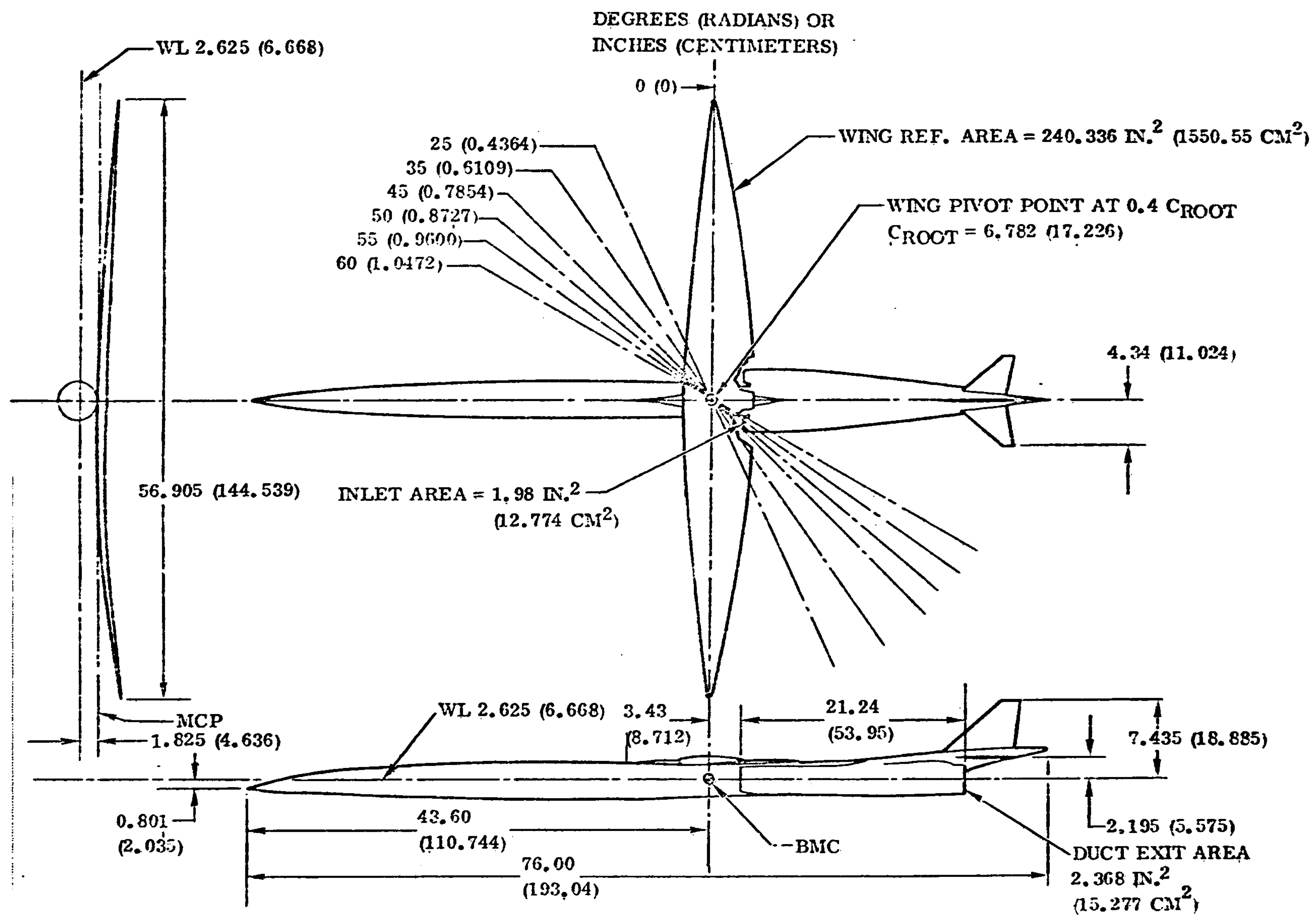


Figure 4. Integrated Fuselage Configuration

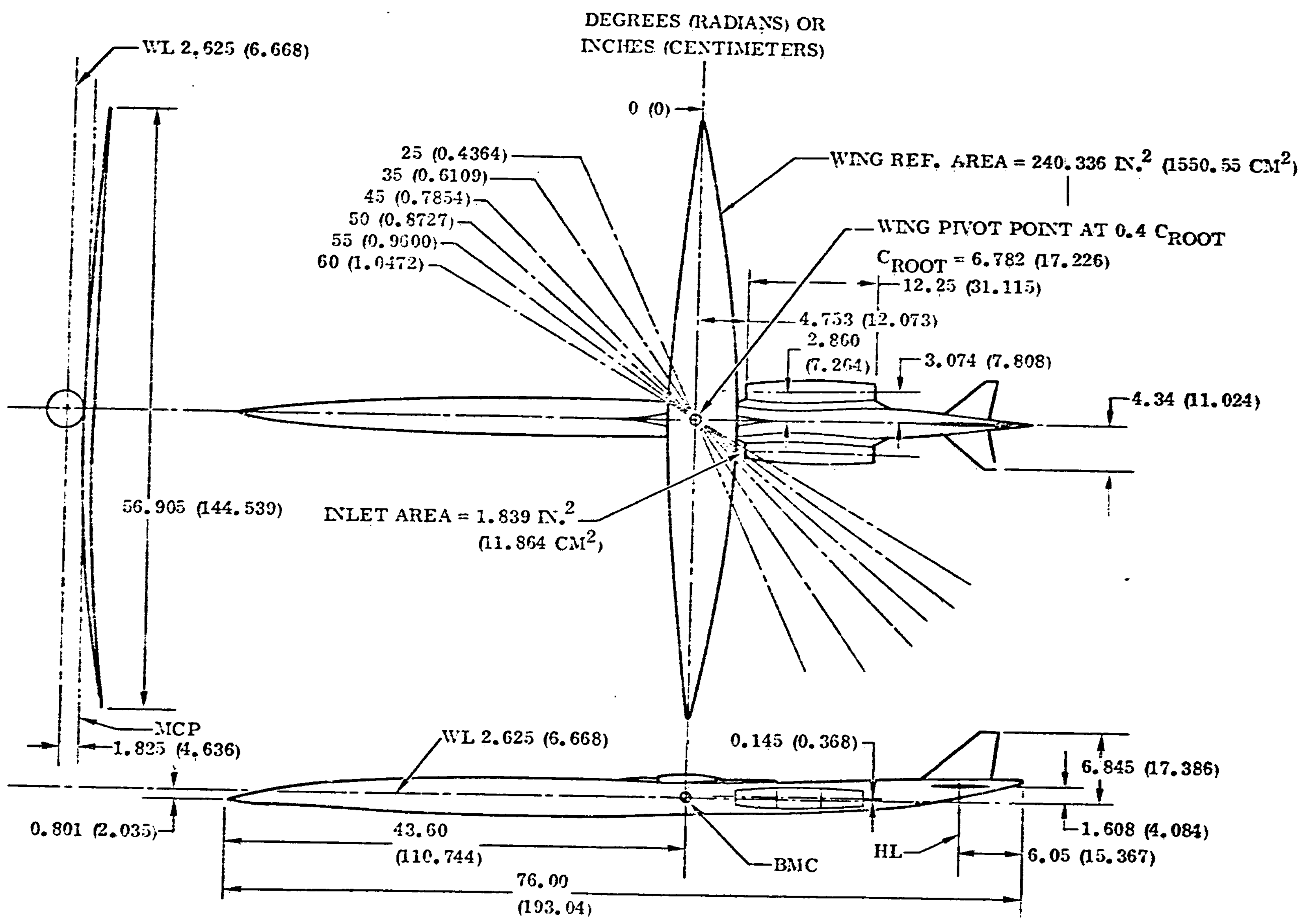


Figure 5. Pod/Pylon Fuselage Configuration

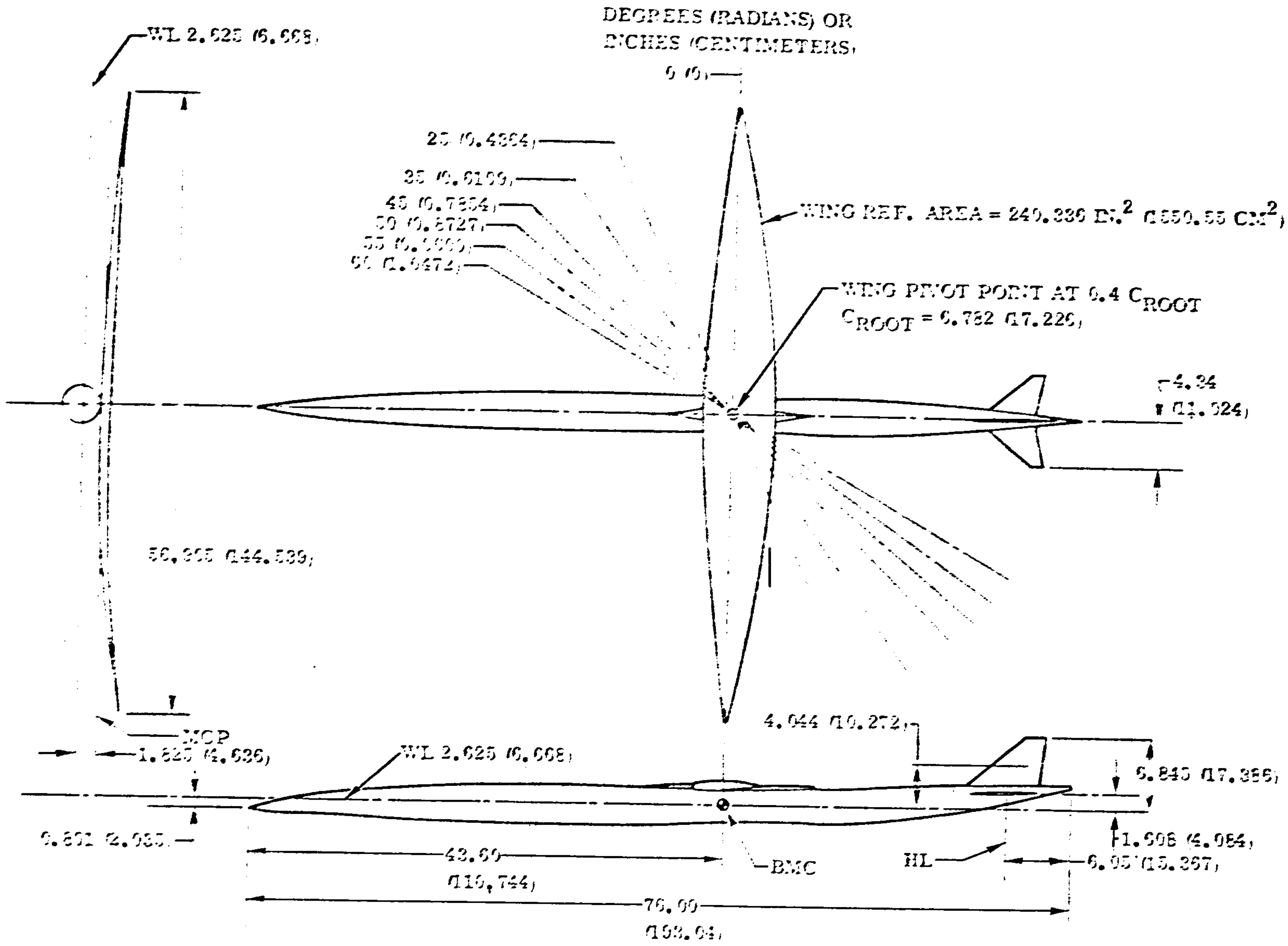
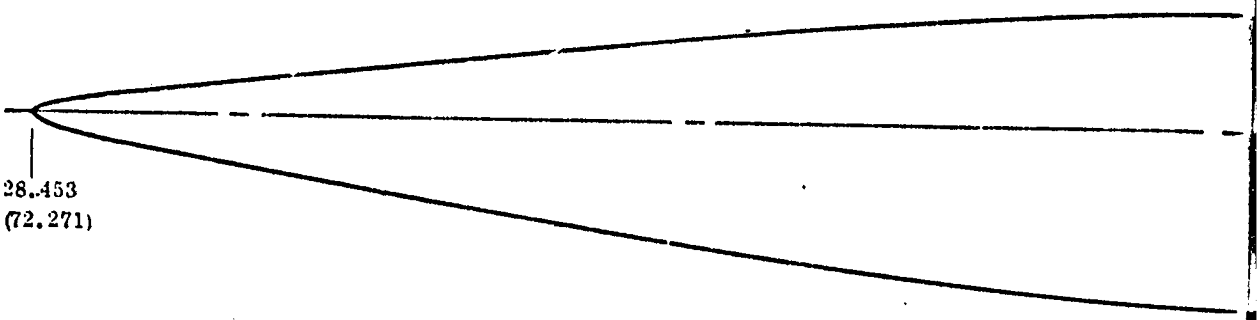
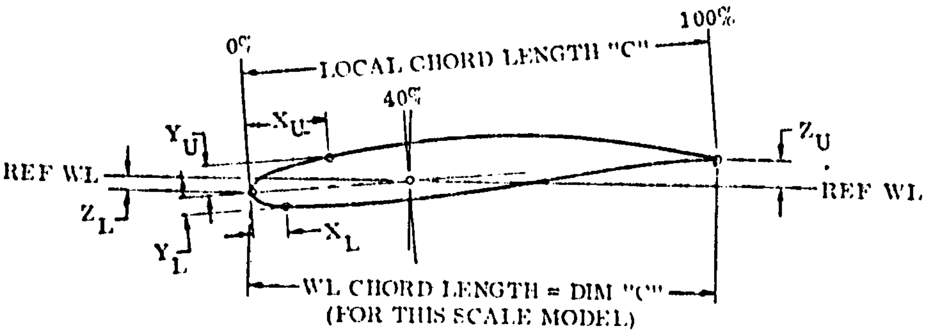
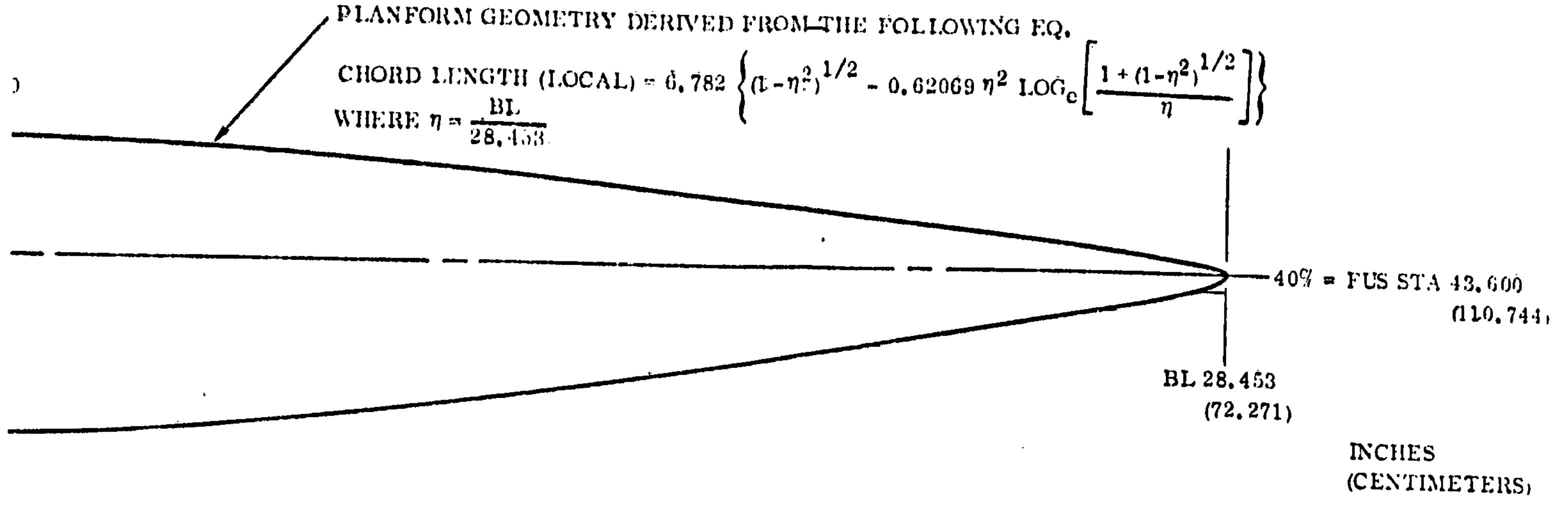


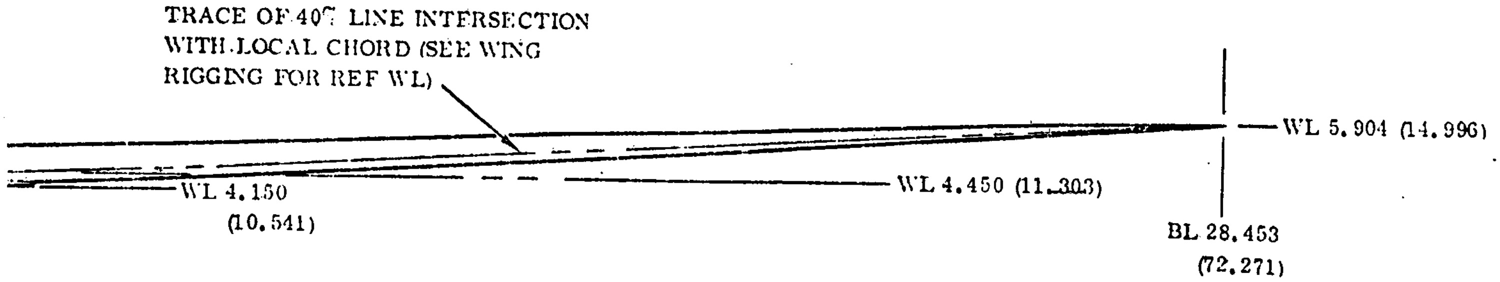
Figure 6. Clean Fuselage Configuration





B. L.	
(IN.)	(CM)
0	0
2.000	5.080
4.000	10.160
6.000	15.240
8.000	20.320
12.000	30.480
16.000	40.640
20.000	50.800
22.000	55.880
23.000	58.420
24.000	60.960
26.000	66.040
27.000	68.580
28.000	71.120
28.453	72.271





EXTENDED SPAN PLANFORM WING RIGGING

CHORD		REF. W.L.				Z_L		Z_U	
		L.H. WING		R.H. WING					
N.)	(CM)	(IN.)	(CM)	(IN.)	(CM)	(IN.)	(CM)	(IN.)	(CM)
782	17.226	4.450	11.303	4.450	11.303	0	0	0	0
696	17.008	4.410	11.201	4.518	11.476	0.006	0.015	0.009	0.023
494	16.495	4.392	11.156	4.608	11.704	0.011	0.028	0.017	0.043
210	15.773	4.402	11.181	4.714	11.974	0.016	0.041	0.024	0.061
862	14.889	4.445	11.290	4.820	12.243	0.020	0.051	0.030	0.076
020	12.751	4.670	11.862	5.032	12.781	0.026	0.066	0.039	0.099
040	10.262	5.000	12.700	5.244	13.320	0.028	0.071	0.042	0.107
973	7.551	5.426	13.782	5.456	13.858	0.026	0.066	0.039	0.099
417	6.139	5.680	14.427	5.562	14.127	0.023	0.058	0.031	0.086
134	5.120	5.815	14.770	5.615	14.262	0.021	0.053	0.032	0.081
845	4.686	5.960	15.138	5.668	14.397	0.019	0.048	0.029	0.074
240	3.150	6.252	15.880	5.774	14.666	0.013	0.033	0.021	0.053
901	2.287	6.397	16.248	5.827	14.801	0.010	0.025	0.016	0.041
473	1.201	6.543	16.619	5.880	14.935	0.006	0.015	0.009	0.023
	0	6.611	16.792	5.904	14.996	0	0	0	0

NON-DIMENSIONAL
AIRFOIL ORDINATES
SECTION-3612-02-40

X_U (% "C")	Y_U (% "C")	X_L (% "C")	Y_L (% "C")
0	0	0	0
0.564	1.801	0.507	1.335
1.029	2.281	1.051	1.873
2.565	3.239	2.519	2.635
5.011	4.139	5.080	3.241
7.580	4.795	7.513	3.517
9.663	5.227	10.035	3.670
14.641	6.080	15.359	3.793
19.636	6.796	20.364	3.801
24.646	7.414	25.354	3.759
29.669	7.933	30.330	3.674
39.757	8.615	40.243	3.373
49.887	8.710	50.113	2.860
60.032	8.128	59.968	2.138
70.149	6.855	69.851	1.268
80.196	4.974	79.804	0.481
90.149	2.669	89.851	0.002
95.096	1.443	94.904	-0.002
100	0.225	100	0.225

Figure 7. Wing Drawing

interference (τ) tares. The equations used in the determination of these tares are given below.

At each value of lift coefficient (wind axes) the interference-free data is:

$$\alpha = \alpha(A) + \Delta\alpha_\tau \qquad C_\ell = C_\ell(A) + \Delta C_{\ell_\tau}$$

$$C_D = C_D(A) + \Delta C_{D_\tau} \qquad C_n = C_n(A) + \Delta C_{n_\tau}$$

$$C_m = C_m(A) + \Delta C_{m_\tau}. \qquad C_Y = C_Y(A) + \Delta C_{Y_\tau}$$

where the letters in parentheses refer to data from support configurations as shown in Figure 8.

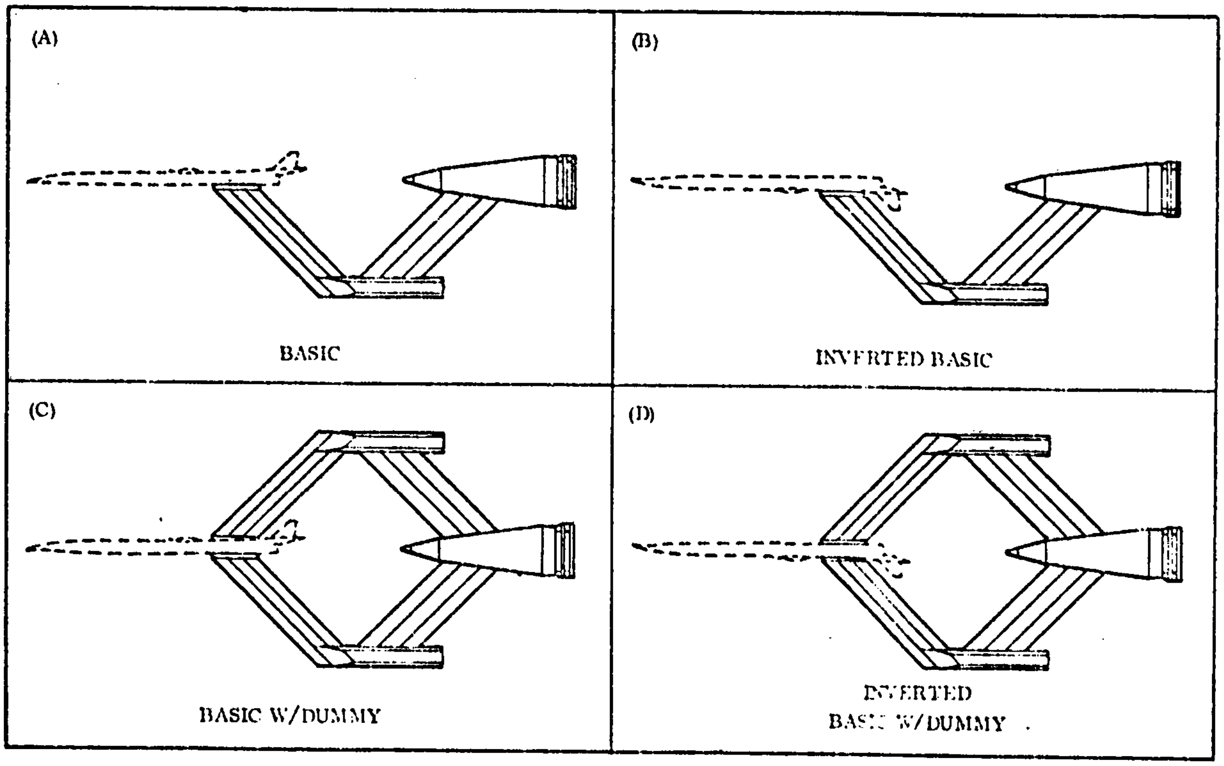


Figure 8. Support Configurations

With the interference tares defined as:

$$\Delta\alpha_\tau = \Delta\alpha_I + \Delta\alpha_{LB} \qquad \Delta C_{\ell_\tau} = \Delta C_{\ell_I} + \Delta C_{\ell_{LB}}$$

$$\Delta C_{D_\tau} = \Delta C_{D_I} + \Delta C_{D_{LB}} \qquad \Delta C_{n_\tau} = \Delta C_{n_I} + \Delta C_{n_{LB}}$$

$$\Delta C_{m_\tau} = \Delta C_{m_I} + \Delta C_{m_{LB}} \qquad \Delta C_{Y_\tau} = \Delta C_{Y_I} + \Delta C_{Y_{LB}}$$

The corrections for flow inclination (Δ_I) are:

$$\Delta\alpha_I = 1/2\ [\alpha(D) - \alpha(C)] \qquad \Delta C_{\ell_I} = 1/2\ [C_\ell(D) - C_\ell(C)]$$

$$\Delta C_{D_I} = 1/2\ [C_D(D) - C_D(C)] \qquad \Delta C_{n_I} = 1/2\ [C_n(D) - C_n(C)]$$

$$\Delta C_{m_I} = 1/2\ [C_m(D) - C_m(C)] \qquad \Delta C_{Y_I} = 1/2\ [C_Y(D) - C_Y(C)]$$

And the lower blade corrections (Δ_{LB}) are:

$$\Delta\alpha_{LB} = \alpha(B) - \alpha(D) \qquad \Delta C_{\ell_{LB}} = C_\ell(B) - C_\ell(D)$$

$$\Delta C_{D_{LB}} = C_D(B) - C_D(D) \qquad \Delta C_{n_{LB}} = C_n(B) - C_n(D)$$

$$\Delta C_{m_{LB}} = C_m(B) - C_m(D) \qquad \Delta C_{Y_{LB}} = C_Y(B) - C_Y(D)$$

The process for obtaining interference-free data then, was to make four identical runs with the model/support configurations (A) through (D).[1] Since all four runs could not be made with the resulting lift coefficient values exactly the same, it became necessary to linearly interpolate (or extrapolate) between data points. Noting that the (D) run was common to both the inclination (I) and blade (LB) tare computations, these data points were used as the exact lift coefficient value to be used in the total tare (τ) determination. This required that the data fromthe (B) and (C) runs be interpolated to the lift coefficient values of the (D) runs in the Δ_I and Δ_{LB} calculations. Also, the data from the Δ_τ calculations were then interpolated to the (A) run (performance data) lift coefficient values.

The method just described assumes that for every performance run (A), there were three tare runs (B), (C), (D) made. Since the testing time in the wind tunnel precluded this, it became necessary to obtain tares data where no tares runs were made. In these instances, adjacent or similar Mach/sweep combination tares runs were used to determnei total tare (τ) data. These data are susceptible to individual interpretation and should be used with discretion.

Results and Discussion

The results are presented in three basic groups of data: 1) tare data runs, 2) aerodynamic tares data, and (3) performance data runs. Within these groups, the data are presented by configuration, Mach number and wing sweep angle. A summary of the aerodynamic tares, and performance data is presented in Table 1.

(1) Reference: Hammond, D. G., and Wilkerson, C. Jr.: An Evaluation of Single and Multiple Sting Support Methods to Obtain Unmodified Interference-Free Wind Tunnel Data. AIAA 6th Aerodynamic Testing Conference, Albuquerque, N.M., March 1971.

Table 1. Data Summary

Configuration	Sweep Angle	0.60	0.70	0.80	0.90	0.95	0.98	1.05	1.10	1.15	1.20	1.40
Integrated Fuselage	0	68/83 701/40	69/84 702/41	70/85 703/42								
	25		71/86 731/43	72/87 732/44	73/88 733/45							
	35		74/89 704/46	75/90 705/47	76/91 706/48	77/92 734/49						
	45			64/93 707/50		65/94 708/51	66/95 709/52	67/96 710/53				
	50			82/97 735/54		81/98 736/55	80/99 737/56		79/100 738/57		78/101 739/58	
	55			83/102 711/59		84/103 712/60	85/104 713/61		86/105 714/62	87/106 715/63	88/107 716/64	
	60			95/108 740/65			94/109 717/66		93/110 718/67		92/111 719/68	91/112 720/69
Integrated Fuselage with Alternate Duct Flow	0	106/113 701/40	107/114 702/41	108/115 703/42								
	45			102/116 707/51		103/117 708/51	104/118 709/52	105/119 710/53				
	55			98/120 711/59			99/121 713/61		100/122 714/62		101/123 716/64	
	60										97/124 719/68	96/125 720/69
Clean Fuselage	0	240/126 721/70	241/127 722/71	242/128 723/72								
	45			236/129 724/73		237/130 725/74	238/131 741/75	239/132 726/76				
	55			230/133 727/97		231/134 742/78	232/135 728/79		233/136 729/80	234/137 743/81	235/138 730/82	
Pod/Pylon Fuselage	0	260/139	261/140	262/141								
	45			259/142		258/143	257/144	256/145				
	55			255/146		254/147	253/148		252/149	251/150	250/151	
Wing Off:	All On Fig. 9											
Int. Fuse.		135		134		133	132	131	130		129	
Clean Fuse.		243		244		245	246	247	248		249	

Key: Perf. Run/Fig. No. / Tare Run/Fig. No.

The tares data runs, Figures 10 through 39, are the data as received from Ames (plus interpolated or extrapolated data points) that were used in the computations of the aerodynamic tares. The three runs required to determine the tares are plotted together.

The aerodynamic tares data, Figures 40 through 82, are numbered as runs 701 through 743 for ease in identification. Runs 731 through 743 are tares that were obtained through interpolation; therefore, data points are not symbolized. All the tares data are listed in Table 2, and are numbered as corresponding runs 701 through 743.

Figures 83 through 151 contain the performance data. For the integrated and clean fuselage runs, the data on each plot are as received from Ames and as adjusted for aerodynamic interference tares. For the pod/pylon fuselage runs, only the unadjusted data are plotted since no tares data are available for adjustment. These data, along with the wing-off data in Figure 9, are included in this report for documentation purposes only.

On the integrated propulsion system configuration, a flow-restricting screen was installed for a series of runs. This screen reduced the duct internal area by 37.7 percent. The tares for the open (100-percent) flow configuration were applied to the data obtained on these alternate duct flow performance runs.

* DATE * TIME * CONFIGURATION * GENERAL DYNAMICS *
* 05-25-75 * 0935 * * HIGH SPEED WIND TUNNEL * TOC * SOC * TEST * TAB * RUN *
* * * FINAL DATA * 00 * 00 * 344-0 * 002 * 701 *

LOWER BLADE CORRECTIONS

PT	TEST PARAMS WING SWEEP	MACH NO.	INPUT RUNS INVERTED ONLY	INVERTED W/DUMMY	UPRIGHT W/DUMMY	LIFT	ALPHA (DEG)	DRAG	PITCHING MOMENT	SIDE FORCE	YAWING MOMENT	ROLLING MOMENT
0001	0.00000	0.60000	179.000	156.000	136.000	-0.10310	0.17584	-0.00149	-0.02518	0.00036	0.00024	-0.00021
0002						-0.00900	0.06950	0.00071	-0.02317	0.00030	0.00036	-0.00016
0003						0.11140	0.11223	0.00043	-0.02417	0.00020	0.00023	-0.00019
0004						0.23810	0.12646	0.00052	-0.02508	0.00013	0.00013	-0.00030
0005						0.36580	0.12817	0.00085	-0.02530	0.00003	0.00013	-0.00018
0006						0.49010	0.13830	0.00125	-0.02432	0.00010	0.00014	-0.00025
0007						0.60570	0.16962	0.00196	-0.02323	0.00010	0.00004	-0.00021
0008						0.70330	0.17237	0.00211	-0.02264	0.00020	0.00010	-0.00014
0009						0.79390	0.14442	0.00249	-0.02200	0.00015	0.00010	0.00004

FLOW INCLINATION CORRECTIONS 003

PT	TEST PARAMS WING SWEEP	MACH NO.	INPUT RUNS INVERTED ONLY	INVERTED W/DUMMY	UPRIGHT W/DUMMY	LIFT	ALPHA (DEG)	DRAG	PITCHING MOMENT	SIDE FORCE	YAWING MOMENT	ROLLING MOMENT
0001	0.00000	0.60000	179.000	156.000	136.000	-0.10310	0.08766	-0.00015	0.00435	-0.00030	-0.00030	0.00054
0002						-0.00900	0.19494	0.00000	0.00114	-0.00034	-0.00034	0.00041
0003						0.11140	0.17063	0.00048	0.00067	-0.00030	-0.00030	0.00035
0004						0.23810	0.16766	0.00083	0.00071	-0.00029	-0.00029	0.00041
0005						0.36580	0.15774	0.00124	0.00085	-0.00025	-0.00028	0.00036
0006						0.49010	0.15287	0.00164	0.00050	-0.00030	-0.00030	0.00038
0007						0.60570	0.14650	0.00181	0.00033	-0.00028	-0.00026	0.00038
0008						0.70330	0.14953	0.00210	0.00028	-0.00030	-0.00028	0.00028
0009						0.79380	0.17600	0.00244	0.00062	-0.00029	-0.00024	0.00022

TOTAL TARE CORRECTIONS 004

PT	TEST PARAMS WING SWEEP	MACH NO.	INPUT RUNS INVERTED ONLY	INVERTED W/DUMMY	UPRIGHT W/DUMMY	LIFT	ALPHA (DEG)	DRAG	PITCHING MOMENT	SIDE FORCE	YAWING MOMENT	ROLLING MOMENT
0001	0.00000	0.60000	179.000	156.000	136.000	-0.10310	0.26350	-0.00164	-0.02083	0.00006	0.00004	0.00033
0002						-0.00900	0.26444	0.00072	-0.02203	-0.00004	0.00002	0.00025
0003						0.11140	0.28287	0.00092	-0.02350	-0.00010	-0.00006	0.00016
0004						0.23810	0.28612	0.00135	-0.02437	-0.00015	-0.00015	0.00011
0005						0.36580	0.28591	0.00209	-0.02444	-0.00021	-0.00015	0.00017
0006						0.49010	0.29118	0.00289	-0.02381	-0.00020	-0.00015	0.00012
0007						0.60570	0.31813	0.00378	-0.02289	-0.00018	-0.00024	0.00017
0008						0.70330	0.32190	0.00421	-0.02236	-0.00010	-0.00018	0.00014
0009						0.79380	0.37[illegible]	0.00454	-0.02187	-0.00024	-0.00014	0.00027

* ZERO * BASE * TARE * ALTER DECKS
* IZ0 * 4002 * FORE *

TABLE 2

AERODYNAMIC TARES DATA

* TEST * TAB * RUN *
* 344-0 * 002 * 701 *

* DATE * TIME * CONFIGURATION * GENERAL DYNAMICS * TOC * SOC * TEST * TAP * RUN *
* 05-25-75 * 0935 * HIGH SPEED WIND TUNNEL * 00 * 00 * 344-0 * 002 * 702 *
FINAL DATA

PT	TEST PARAMS WING SWEEP	MACH NO.	INPUT RUNS INVERTED ONLY	INVERTED W/DUMMY	UPRIGHT W/DUMMY	LIFT	ALPHA (DEG)	LOWER BLADE CORRECTIONS DRAG	PITCHING MOMENT	SIDE FORCE	YAWING MOMENT	ROLLING MOMENT
0001	0.00000	0.70000	180.000	157.000	137.000	-0.06060	0.16117	-0.00043	-0.02461	0.00010	0.00010	-0.00025
0002						0.00930	0.09627	0.00095	-0.02643	0.00000	0.00000	-0.00013
0003						0.11380	0.09390	0.00130	-0.02487	0.00013	0.00003	-0.00005
0004						0.25140	0.12364	0.00113	-0.02697	0.00010	0.00003	-0.00014
0005						0.39150	0.11880	0.00130	-0.02677	0.00014	0.00010	-0.00005
0006						0.53000	0.14639	0.00154	-0.02573	0.00010	0.00004	-0.00007
0007						0.64990	0.17519	0.00240	-0.02427	0.00004	0.00004	0.00035
0008						0.74760	0.08595	0.00282	-0.02669	0.00000	0.00010	0.00030
0009						0.94770	0.21324	0.00375	-0.02274	-0.00010	-0.00014	-0.00000

003

PT	TEST PARAMS WING SWEEP	MACH NO.	INPUT RUNS INVERTED ONLY	INVERTED W/DUMMY	UPRIGHT W/DUMMY	LIFT	ALPHA (DEG)	FLOW INCLINATION CORRECTIONS DRAG	PITCHING MOMENT	SIDE FORCE	YAWING MOMENT	ROLLING MOMENT
0001	0.00000	0.70000	180.000	157.000	137.000	-0.06060	-0.20037	-0.00024	0.01627	-0.00020	-0.00030	0.00043
0002						0.00930	0.17190	-0.00019	0.00132	-0.00015	-0.00024	0.00036
0003						0.11380	0.15616	0.00022	0.00125	-0.00025	-0.00023	0.00034
0004						0.25140	0.13766	0.00072	0.00113	-0.00025	-0.00025	0.00036
0005						0.39150	0.13761	0.00112	0.00095	-0.00030	-0.00028	0.00029
0006						0.53000	0.12458	0.00159	0.00042	-0.00028	-0.00023	0.00030
0007						0.64990	0.12955	0.00174	0.00024	-0.00025	-0.00023	0.00018
0008						0.74760	0.19959	0.00206	0.00090	-0.00025	-0.00024	0.00031
0009						0.94770	0.15517	0.00311	0.00025	-0.00020	-0.00015	0.00038

004

PT	TEST PARAMS WING SWEEP	MACH NO.	INPUT RUNS INVERTED ONLY	INVERTED W/DUMMY	UPRIGHT W/DUMMY	LIFT	ALPHA (DEG)	TOTAL TARE CORRECTIONS DRAG	PITCHING MOMENT	SIDE FORCE	YAWING MOMENT	ROLLING MOMENT
0001	0.00000	0.70000	180.000	157.000	137.000	-0.06060	-0.03920	-0.00067	-0.00834	-0.00010	-0.00020	0.00017
0002						0.00930	0.26817	0.00076	-0.02505	-0.00015	-0.00024	0.00023
0003						0.11380	0.25007	0.00153	-0.02362	-0.00011	-0.00020	0.00028
0004						0.25140	0.26131	0.00186	-0.02584	-0.00015	-0.00021	0.00021
0005						0.39150	0.25642	0.00243	-0.02582	-0.00015	-0.00016	0.00023
0006						0.53000	0.27108	0.00314	-0.02531	-0.00018	-0.00019	0.00022
0007						0.64990	0.30475	0.00414	-0.02403	-0.00020	-0.00019	0.00054
0008						0.74760	0.28555	0.00489	-0.02578	-0.00025	-0.00014	0.00061
0009						0.94770	0.36842	0.00686	-0.02349	-0.00030	-0.00029	0.00038

* ZERO * BASE * TARE * ALTER DECKS
* IZ?? * ?002 * NONE *

TABLE 2

AERODYNAMIC TARES DATA
(continued)

* TEST * TAP * RUN *
* 344-0 * 002 * 702 *

DATE	TIME	CONFIGURATION	GENERAL DYNAMICS HIGH SPEED WIND TUNNEL FINAL DATA	TOC	SOC	TEST	TAB	RUN
05-25-75	0035			00	00	349-0	002	703

PT	TEST PARAMS WING SWEEP	MACH NO.	INPUT RUNS INVERTED ONLY	INVERTED W/DUMMY	UPRIGHT W/DUMMY	LIFT	ALPHA (DEG)	DRAG	LOWER BLADE CORRECTIONS PITCH'G MOMENT	SIDE FORCE	YAWING MOMENT	ROLLING MOMENT
0001	0.00000	0.80000	181.000	158.000	138.000	-0.12980	0.75656	-0.00405	-0.02588	0.00040	0.00050	-0.00146
0002						-0.07950	0.53962	-0.00071	-0.02563	0.00041	0.00041	-0.00055
0003						-0.00940	0.38044	0.00042	-0.02560	0.00039	0.00049	-0.00030
0004						0.05340	0.19993	0.00261	-0.02378	0.00019	0.00021	-0.00041
0005						0.17540	0.25421	0.00260	-0.02615	0.00036	0.00030	-0.00029
0006						0.29290	0.24240	0.00347	-0.02601	0.00037	0.00032	-0.00041
0007						0.40510	0.22328	0.00319	-0.02678	0.00023	0.00013	-0.00060
0008						0.52440	0.18588	0.00404	-0.02805	0.00065	0.00000	-0.00055
0009						0.63490	0.24116	0.00535	-0.02540	0.00000	-0.00010	-0.00072

003

PT	TEST PARAMS WING SWEEP	MACH NO.	INPUT RUNS INVERTED ONLY	INVERTED W/DUMMY	UPRIGHT W/DUMMY	LIFT	ALPHA (DEG)	DRAG	FLOW INCLINATION CORRECTIONS PITCH'G MOMENT	SIDE FORCE	YAWING MOMENT	ROLLING MOMENT
0001	0.00000	0.60000	181.000	158.000	138.000	-0.12980	0.03923	0.00002	0.00234	-0.00040	-0.00054	0.00120
0002						-0.07950	0.12023	-0.00046	0.00094	-0.00040	-0.00043	0.00038
0003						-0.00940	0.09846	-0.00007	0.00320	-0.00033	-0.00036	0.00036
0004						0.05340	0.15846	-0.00049	-0.00075	-0.00033	-0.00033	0.00048
0005						0.17540	0.11767	-0.00011	0.00048	-0.00041	-0.00040	0.00043
0006						0.29290	0.11853	0.00001	0.00032	-0.00043	-0.00043	0.00041
0007						0.40510	0.12347	0.00063	0.00055	-0.00035	-0.00033	0.00040
0008						0.52440	0.12621	0.00079	0.00053	-0.00025	-0.00025	0.00027
0009						0.63490	0.14577	0.00140	0.00059	-0.00021	-0.00020	0.00020

004

PT	TEST PARAMS WING SWEEP	MACH NO.	INPUT RUNS INVERTED ONLY	INVERTED W/DUMMY	UPRIGHT W/DUMMY	LIFT	ALPHA (DEG)	DRAG	TOTAL TARE CORRECTIONS PITCH'G MOMENT	SIDE FORCE	YAWING MOMENT	ROLLING MOMENT
0001	0.00000	0.80000	181.000	158.000	138.000	-0.12980	0.79580	-0.00403	-0.02353	0.00000	-0.00004	-0.00026
0002						-0.07950	0.65985	-0.00117	-0.02469	0.00001	-0.00001	-0.00016
0003						-0.00940	0.47890	0.00034	-0.02640	0.00006	0.00013	-0.00000
0004						0.05340	0.35840	0.00211	-0.02453	-0.00014	-0.00012	0.00006
0005						0.17540	0.37199	0.00249	-0.02566	-0.00011	-0.00010	0.00013
0006						0.29290	0.36093	0.00349	-0.02568	-0.00006	-0.00010	-0.00000
0007						0.40510	0.34875	0.00382	-0.02623	-0.00011	-0.00020	-0.00020
0008						0.52440	0.31209	0.00483	-0.02752	-0.00019	-0.00025	-0.00028
0009						0.63490	0.38694	0.00676	-0.02460	-0.00021	-0.00030	-0.00052

ZERO	BASE	TARE	ALTER DECKS
1203	5002	NONE	

TABLE 2

AERODYNAMIC TARES DATA
(continued)

TEST	TAB	RUN
349-0	002	703

* DATE *	TIME *	CONFIGURATION	* GENERAL DYNAMICS
* 03-25-75 *	0075 *		* HIGH SPEED WIND TUNNEL
			* FINAL DATA

* TOC	* SOC	* TEST	* TAR	* RUN *
* 00	* 00	* 344-0	* 002	* 704 *

LOWER BLADE CORRECTIONS

PT	TEST PARAMS WING SWEEP	MACH NO.	INPUT RUNS INVERTED ONLY	INVERTED W/DUMMY	UPRIGHT W/DUMMY	LIFT	ALPHA (DEG)	DRAG	PITCHING MOMENT	SIDE FORCE	YAWING MOMENT	ROLLING MOMENT
0001	35.0000	0.70000	182.000	159.000	139.000	-0.13540	0.09519	0.00049	-0.01741	-0.00063	-0.00075	-0.00060
0002						-0.04960	0.08765	0.00019	-0.01759	-0.00075	-0.00076	-0.00073
0003						0.04290	0.12767	-0.00017	-0.01606	-0.00070	-0.00080	-0.00110
0004						0.13750	0.14571	-0.00003	-0.01523	-0.00063	-0.00069	-0.00120
0005						0.23200	0.15050	0.00024	-0.01561	-0.00052	-0.00061	-0.00124
0006						0.32100	0.15091	0.00077	-0.01521	-0.00050	-0.00062	-0.00118
0007						0.40100	0.12424	0.00100	-0.01421	-0.00047	-0.00054	-0.00119
0008						0.47890	0.16148	0.00145	-0.01246	-0.00046	-0.00057	-0.00128
0009						0.55950	0.15678	0.00201	-0.01110	-0.00034	-0.00061	-0.00139

003

FLOW INCLINATION CORRECTIONS

PT	TEST PARAMS WING SWEEP	MACH NO.	INPUT RUNS INVERTED ONLY	INVERTED W/DUMMY	UPRIGHT W/DUMMY	LIFT	ALPHA (DEG)	DRAG	PITCHING MOMENT	SIDE FORCE	YAWING MOMENT	ROLLING MOMENT
0001	35.0000	0.70000	182.000	159.000	139.000	-0.13540	0.12381	-0.00011	-0.00191	-0.00034	-0.00045	0.00049
0002						-0.04960	0.17287	-0.00032	0.00002	-0.00028	-0.00035	0.00038
0003						0.04290	0.14204	0.00009	-0.00075	-0.00035	-0.00036	0.00017
0004						0.13750	0.13092	0.00032	-0.00087	-0.00039	-0.00044	0.00014
0005						0.23200	0.12395	0.00049	-0.00076	-0.00041	-0.00043	0.00009
0006						0.32100	0.12310	0.00075	-0.00063	-0.00038	-0.00038	0.00003
0007						0.40100	0.13319	0.00105	-0.00079	-0.00034	-0.00036	0.00004
0008						0.47890	0.11472	0.00131	-0.00151	-0.00032	-0.00032	0.00012
0009						0.55950	0.11549	0.00141	-0.00149	-0.00038	-0.00033	0.00008

004

TOTAL TARE CORRECTIONS

PT	TEST PARAMS WING SWEEP	MACH NO.	INPUT RUNS INVERTED ONLY	INVERTED W/DUMMY	UPRIGHT W/DUMMY	LIFT	ALPHA (DEG)	DRAG	PITCHING MOMENT	SIDE FORCE	YAWING MOMENT	ROLLING MOMENT
0001	35.0000	0.70000	182.000	159.000	139.000	-0.13540	0.21981	0.00032	-0.01933	-0.00118	-0.00120	-0.00010
0002						-0.04960	0.26052	-0.00013	-0.01756	-0.00103	-0.00111	-0.00065
0003						0.04290	0.26971	-0.00008	-0.01681	-0.00105	-0.00116	-0.00092
0004						0.13750	0.27664	0.00029	-0.01610	-0.00102	-0.00114	-0.00105
0005						0.23200	0.27445	0.00074	-0.01638	-0.00093	-0.00105	-0.00114
0006						0.32100	0.27401	0.00153	-0.01584	-0.00088	-0.00101	-0.00115
0007						0.40100	0.25744	0.00205	-0.01500	-0.00081	-0.00091	-0.00114
0008						0.47890	0.27620	0.00276	-0.01397	-0.00078	-0.00090	-0.00114
0009						0.55950	0.27228	0.00343	-0.01259	-0.00072	-0.00094	-0.00131

* ZERO	* BASE	* TARE	* ALTER DECKS
* 1200	* 7002	* NONE	*

TABLE 2

AERODYNAMIC TARES DATA
(continued)

* TEST	* TAB	* RUN *
* 344-0	* 002	* 704 *

* DATE *	TIME *	CONFIGURATION	* GENERAL DYNAMICS	* TCC *	SOC *	TEST *	TAB *	RUN *
* 05-25-75 *	0035 *		* HIGH SPEED WIND TUNNEL	* 00 *	00 *	344-0 *	002 *	705 *
			FINAL DATA					

LOWER BLADE CORRECTIONS

PT	TEST PARAMS WING SWEEP	TEST PARAMS MACH NO.	INPUT RUNS INVERTED ONLY	INPUT RUNS INVERTED W/DUMMY	INPUT RUNS UPRIGHT W/DUMMY	LIFT	ALPHA (DEG)	DRAG	PITCHING MOMENT	SIDE FORCE	YAWING MOMENT	ROLLING MOMENT
0001	35.0000	0.80000	183.000	160.000	140.000	-0.12740	0.19042	-0.00152	-0.02177	-0.00047	-0.00033	-0.00082
0002						-0.04980	0.11628	-0.00011	-0.01407	-0.00091	-0.00065	-0.00077
0003						0.04410	0.13793	-0.00012	-0.01761	-0.00086	-0.00066	-0.00117
0004						0.14440	0.15293	-0.00007	-0.01596	-0.00090	-0.00096	-0.00136
0005						0.24550	0.17029	0.00025	-0.01538	-0.00079	-0.00069	-0.00130
0006						0.33890	0.17619	0.00047	-0.01506	-0.00069	-0.00084	-0.00125
0007						0.42420	0.10949	0.00080	-0.01090	-0.00061	-0.00087	-0.00170
0008						0.52940	0.13648	0.00128	-0.01215	-0.00050	-0.00090	-0.00151
0009						0.64640	0.12094	0.00208	-0.01434	-0.00048	-0.00077	-0.00112

003

FLOW INCLINATION CORRECTIONS

PT	TEST PARAMS WING SWEEP	TEST PARAMS MACH NO.	INPUT RUNS INVERTED ONLY	INPUT RUNS INVERTED W/DUMMY	INPUT RUNS UPRIGHT W/DUMMY	LIFT	ALPHA (DEG)	DRAG	PITCHING MOMENT	SIDE FORCE	YAWING MOMENT	ROLLING MOMENT
0001	35.0000	0.80000	183.000	160.000	140.000	-0.12740	0.08381	0.00038	0.00134	-0.00065	-0.00068	0.00058
0002						-0.04980	0.15543	-0.00014	0.00119	-0.00038	-0.00042	0.00004
0003						0.04410	0.13955	0.00009	-0.00019	-0.00042	-0.00047	0.00017
0004						0.14440	0.12944	0.00026	-0.00079	-0.00042	-0.00043	0.00020
0005						0.24530	0.11844	0.00052	-0.00049	-0.00042	-0.00044	0.00007
0006						0.33890	0.11809	0.00087	-0.00047	-0.00037	-0.00043	0.00003
0007						0.42420	0.14431	0.00108	-0.00188	-0.00034	-0.00034	0.00021
0008						0.52940	0.13997	0.00129	-0.00148	-0.00035	-0.00035	0.00015
0009						0.64640	0.14609	0.00162	-0.00038	-0.00036	-0.00043	-0.00003

004

TOTAL TARE CORRECTIONS

PT	TEST PARAMS WING SWEEP	TEST PARAMS MACH NO.	INPUT RUNS INVERTED ONLY	INPUT RUNS INVERTED W/DUMMY	INPUT RUNS UPRIGHT W/DUMMY	LIFT	ALPHA (DEG)	DRAG	PITCHING MOMENT	SIDE FORCE	YAWING MOMENT	ROLLING MOMENT
0001	35.0000	0.80000	183.000	160.000	140.000	-0.12740	0.27424	-0.00114	-0.02042	-0.00112	-0.00102	-0.00023
0002						-0.04980	0.27171	-0.00026	-0.01788	-0.00129	-0.00128	-0.00073
0003						0.04410	0.27748	-0.00003	-0.01781	-0.00126	-0.00134	-0.00099
0004						0.14440	0.28237	0.00019	-0.01675	-0.00132	-0.00140	-0.00115
0005						0.24550	0.28873	0.00078	-0.01567	-0.00122	-0.00133	-0.00122
0006						0.33890	0.29709	0.00135	-0.01554	-0.00106	-0.00127	-0.00122
0007						0.42420	0.25341	0.00169	-0.01278	-0.00096	-0.00122	-0.00148
0008						0.52940	0.27046	0.00257	-0.01363	-0.00095	-0.00125	-0.00135
0009						0.64640	0.26704	0.00370	-0.01473	-0.00065	-0.00120	-0.00115

* ZERO *	BASE *	TARE *	ALTER DECKS
* IZRO *	9062 *	NONE *	

TABLE 2

AERODYNAMIC TARES DATA
(continued)

* TEST *	TAB *	RUN *
* 344-0 *	002 *	705 *

* DATE	* TIME *	CONFIGURATION
* 05-25-75	* 0035 *	

GENERAL DYNAMICS
HIGH SPEED WIND TUNNEL
FINAL DATA

* TOC	* SOC	* TEST	* TAB	* RUN *
* 00	* 00	* 244-0	* 002	* 706 *

PT	TEST PARAMS WING SWEEP	MACH NO.	INPUT RUNS INVERTED ONLY	INVERTED W/DUMMY	UPRIGHT W/DUMMY	LIFT	LOWER PLACE CORRECTIONS ALPHA (DEG)	DRAG	PITCHING MOMENT	SIDE FORCE	YAWING MOMENT	ROLLING MOMENT
0001	35.0000	0.90000	184.000	161.000	141.000	-0.13180	0.15659	-0.00183	-0.01502	-0.00096	-0.00084	-0.00195
0002						-0.05290	0.12776	-0.00055	-0.01671	-0.00098	-0.00095	-0.00130
0003						0.03730	0.11626	-0.00002	-0.01664	-0.00150	-0.00153	-0.00129
0004						0.14340	0.15967	0.00027	-0.01713	-0.00152	-0.00160	-0.00158
0005						0.24790	0.21822	0.00070	-0.01664	-0.00145	-0.00164	-0.00188
0006						0.33900	0.19756	0.00073	-0.01526	-0.00120	-0.00130	-0.00166
0007						0.43080	0.12567	0.00142	-0.02182	-0.00108	-0.00114	-0.00153
0008						0.54490	0.17141	0.00238	-0.01942	-0.00075	-0.00085	-0.00145
0009						0.64450	0.24293	0.00367	-0.01630	-0.00046	-0.00069	-0.00198

003

PT	TEST PARAMS WING SWEEP	MACH NO.	INPUT RUNS INVERTED ONLY	INVERTED W/DUMMY	UPRIGHT W/DUMMY	LIFT	FLOW INCLINATION CORRECTIONS ALPHA (DEG)	DRAG	PITCHING MOMENT	SIDE FORCE	YAWING MOMENT	ROLLING MOMENT
0001	35.0000	0.90000	184.000	161.000	141.000	-0.13180	0.17998	-0.00063	-0.00131	-0.00025	-0.00039	0.00016
0002						-0.05290	0.17736	-0.00008	-0.00003	-0.00040	-0.00049	0.00004
0003						0.03730	0.13625	0.00012	-0.00140	-0.00040	-0.00045	0.00029
0004						0.14340	0.13359	0.00028	-0.00117	-0.00042	-0.00043	0.00018
0005						0.24790	0.11705	0.00058	-0.00148	-0.00038	-0.00039	0.00019
0006						0.33900	0.13408	0.00108	-0.00165	-0.00036	-0.00041	0.00004
0007						0.43080	0.11644	0.00105	0.00151	-0.00031	-0.00033	-0.00021
0008						0.54490	-0.05851	0.00050	0.00680	-0.00032	-0.00073	-0.00122
0009						0.64450	-0.28290	-0.00181	0.01650	-0.00101	-0.00109	-0.00178

004

PT	TEST PARAMS WING SWEEP	MACH NO.	INPUT RUNS INVERTED ONLY	INVERTED W/DUMMY	UPRIGHT W/DUMMY	LIFT	TOTAL TARE CORRECTIONS ALPHA (DEG)	DRAG	PITCHING MOMENT	SIDE FORCE	YAWING MOMENT	ROLLING MOMENT
0001	35.0000	0.90000	184.000	161.000	141.000	-0.13180	0.34658	-0.00246	-0.01633	-0.00121	-0.00123	-0.00178
0002						-0.05290	0.30483	-0.00056	-0.01674	-0.00136	-0.00145	-0.00126
0003						0.03730	0.25232	0.00009	-0.01804	-0.00190	-0.00198	-0.00100
0004						0.14340	0.29318	0.00056	-0.01830	-0.00195	-0.00203	-0.00140
0005						0.24790	0.33528	0.00128	-0.01812	-0.00184	-0.00203	-0.00168
0006						0.33900	0.33164	0.00181	-0.01692	-0.00156	-0.00171	-0.00162
0007						0.43080	0.24211	0.00247	-0.02030	-0.00139	-0.00147	-0.00175
0008						0.54490	0.11289	0.00289	-0.01262	-0.00137	-0.00159	-0.00268
0009						0.64450	-0.03996	0.00186	-0.00060	-0.00148	-0.00179	-0.00377

* ZERO	* BASE	* TARE	* ALTER DECKS
* IZERO	* 0002	* NONE *	

TABLE 2

AERODYNAMIC TARES DATA
(continued)

* TEST	* TAB	* RUN *
* 244-0	* 002	* 706 *

* DATE * TIME * CONFIGURATION * GENERAL DYNAMICS * TOC * SOC * TEST * TAB * RUN *
* 05-25-75 * 0635 * * HIGH SPEED WING TUNNEL * NO. * 04 * 344-0 * 002 * 707 *
FINAL DATA

PT	TEST PARAMS WING SWEEP	MACH NO.	INPUT RUNS INVERTED ONLY	INVERTED W/DUMMY	UPRIGHT W/DUMMY	LIFT	LOWER BLADE CORRECTIONS ALPHA (DEG)	DRAG	PITCHING MOMENT	SIDE FORCE	YAWING MOMENT	ROLLING MOMENT
0001	45.0000	0.80000	185.000	162.000	142.000	-0.14660	0.16094	-0.00051	-0.01386	-0.00106	-0.00163	-0.00099
0002						-0.07380	0.14865	-0.00059	-0.01461	-0.00107	-0.00110	-0.00084
0003						0.00270	0.16266	-0.00059	-0.01385	-0.00112	-0.00114	-0.00107
0004						0.08260	0.15850	-0.00035	-0.01223	-0.00101	-0.00069	-0.00110
0005						0.16170	0.19082	-0.00029	-0.01294	-0.00092	-0.00056	-0.00110
0006						0.23310	0.18550	-0.00008	-0.01327	-0.00080	-0.00090	-0.00102
0007						0.30000	0.18702	0.00042	-0.01240	-0.00072	-0.00085	-0.00100
0008						0.36750	0.17365	0.00079	-0.01068	-0.00062	-0.00083	-0.00116
0009						0.43510	0.16804	0.00124	-0.02146	-0.00064	-0.00061	-0.00107

003

PT	TEST PARAMS WING SWEEP	MACH NO.	INPUT RUNS INVERTED ONLY	INVERTED W/DUMMY	UPRIGHT W/DUMMY	LIFT	FLOW INCLINATION CORRECTIONS ALPHA (DEG)	DRAG	PITCHING MOMENT	SIDE FORCE	YAWING MOMENT	ROLLING MOMENT
0001	45.0000	0.80000	185.000	162.000	142.000	-0.14660	0.06867	-0.00032	0.00027	-0.00039	-0.00050	0.00009
0002						-0.07383	0.18645	-0.00011	0.00249	-0.00031	-0.00039	-0.00013
0003						0.00270	0.15260	0.00007	0.00075	-0.00028	-0.00034	0.00010
0004						0.08260	0.13716	0.00024	-0.00005	-0.00033	-0.00040	0.00009
0005						0.16170	0.11961	0.00035	0.00044	-0.00036	-0.00040	0.00003
0006						0.23310	0.12537	0.00052	0.00019	-0.00040	-0.00038	0.00003
0007						0.30000	0.12653	0.00057	-0.00044	-0.00037	-0.00038	0.00004
0008						0.36750	0.12604	0.00069	-0.00088	-0.00035	-0.00037	0.00009
0009						0.43510	0.13396	0.00080	-0.00015	-0.00036	-0.00041	0.00000

004

PT	TEST PARAMS WING SWEEP	MACH NO.	INPUT RUNS INVERTED ONLY	INVERTED W/DUMMY	UPRIGHT W/DUMMY	LIFT	TOTAL TARE CORRECTIONS ALPHA (DEG)	DRAG	PITCHING MOMENT	SIDE FORCE	YAWING MOMENT	ROLLING MOMENT
0001	45.0000	0.80000	185.000	162.000	142.000	-0.14660	0.22961	-0.00123	-0.01358	-0.00146	-0.00150	-0.00089
0002						-0.07380	0.33530	-0.00070	-0.01211	-0.00139	-0.00149	-0.00097
0003						0.00270	0.31527	-0.00051	-0.01310	-0.00141	-0.00148	-0.00096
0004						0.08260	0.29566	-0.00011	-0.01229	-0.00134	-0.00140	-0.00101
0005						0.16170	0.31064	0.00005	-0.01249	-0.00128	-0.00136	-0.00107
0006						0.23310	0.31087	0.00044	-0.01307	-0.00120	-0.00129	-0.00098
0007						0.30000	0.31356	0.00100	-0.01264	-0.00110	-0.00124	-0.00096
0008						0.36750	0.29970	0.00147	-0.01157	-0.00104	-0.00121	-0.00106
0009						0.43510	0.30201	0.00205	-0.01162	-0.00100	-0.00123	-0.00107

* ZERO * BASE * TARE * ALTER DECKS
* 1700 * 0002 * NONE *

TABLE 2

AERODYNAMIC TARES DATA
(continued)

* TEST * TAB * RUN *
* 344-0 * 002 * 707 *

* DATE * TIME * CONFIGURATION * GENERAL DYNAMICS * TOC * SOC * TEST * TAB * RUN *
* 05-25-75 * 0035 * HIGH SPEED WIND TUNNEL * 00 * 00 * 344-0 * 002 * 708 *
FINAL DATA

LOWER BLADE CORRECTIONS

PT	TEST PARAMS WING SWEEP	TEST PARAMS MACH NO.	INPUT RUNS INVERTED ONLY	INPUT RUNS INVERTED W/DUMMY	INPUT RUNS UPRIGHT W/DUMMY	LIFT	ALPHA (DEG)	DRAG	PITCHING MOMENT	SIDE FORCE	YAWING MOMENT	ROLLING MOMENT
0001	45.0000	0.95000	186.000	163.000	143.000	-0.14300	0.33191	-0.00239	-0.00333	-0.00207	-0.00205	-0.00224
0002						-0.08050	0.13695	-0.00104	-0.01155	-0.00267	-0.00269	-0.00094
0003						0.00070	0.17928	-0.00125	-0.00904	-0.00287	-0.00289	-0.00139
0004						0.08580	0.16741	-0.00115	-0.00716	-0.00273	-0.00264	-0.00172
0005						0.17090	0.16320	-0.00106	-0.00573	-0.00246	-0.00253	-0.00180
0006						0.25020	0.13837	-0.00111	-0.00376	-0.00208	-0.00226	-0.00189
0007						0.33510	0.10090	-0.00060	-0.00645	-0.00165	-0.00186	-0.00179
0008						0.42910	0.06846	-0.00006	-0.00735	-0.00122	-0.00136	-0.00167
0009						0.52630	0.09392	0.00112	-0.00960	-0.00103	-0.00125	-0.00170

FLOW INCLINATION CORRECTIONS 003

PT	TEST PARAMS WING SWEEP	TEST PARAMS MACH NO.	INPUT RUNS INVERTED ONLY	INPUT RUNS INVERTED W/DUMMY	INPUT RUNS UPRIGHT W/DUMMY	LIFT	ALPHA (DEG)	DRAG	PITCHING MOMENT	SIDE FORCE	YAWING MOMENT	ROLLING MOMENT
0001	45.0000	0.95000	186.000	163.000	143.000	-0.14300	0.11282	0.00004	-0.00205	-0.00041	-0.00047	0.00047
0002						-0.08050	0.20216	-0.00020	0.00260	-0.00023	-0.00026	-0.00024
0003						0.00070	0.15091	0.00008	0.00166	-0.00010	-0.00013	-0.00011
0004						0.08580	0.13969	0.00020	0.00026	-0.00003	-0.00014	-0.00002
0005						0.17090	0.12916	0.00026	-0.00021	-0.00005	-0.00010	-0.00004
0006						0.25020	0.13592	0.00053	-0.00049	-0.00007	-0.00008	-0.00002
0007						0.33510	0.13308	0.00062	-0.00067	-0.00012	-0.00013	0.00002
0008						0.42910	0.12732	0.00079	-0.00158	-0.00027	-0.00031	0.00007
0009						0.52630	0.05707	-0.00028	0.00062	-0.00063	-0.00059	0.00038

TOTAL TARE CORRECTIONS 004

PT	TEST PARAMS WING SWEEP	TEST PARAMS MACH NO.	INPUT RUNS INVERTED ONLY	INPUT RUNS INVERTED W/DUMMY	INPUT RUNS UPRIGHT W/DUMMY	LIFT	ALPHA (DEG)	DRAG	PITCHING MOMENT	SIDE FORCE	YAWING MOMENT	ROLLING MOMENT
0001	45.0000	0.95000	186.000	163.000	143.000	-0.14300	0.44474	-0.00235	-0.00539	-0.00249	-0.00252	-0.00177
0002						-0.08050	0.33911	-0.00124	-0.00895	-0.00290	-0.00295	-0.00118
0003						0.00070	0.33019	-0.00118	-0.00737	-0.00297	-0.00302	-0.00150
0004						0.08580	0.30710	-0.00095	-0.00689	-0.00277	-0.00279	-0.00174
0005						0.17090	0.29236	-0.00080	-0.00609	-0.00251	-0.00264	-0.00185
0006						0.25020	0.27430	-0.00057	-0.00425	-0.00215	-0.00234	-0.00192
0007						0.33510	0.23398	0.00001	-0.00712	-0.00177	-0.00200	-0.00176
0008						0.42910	0.19579	0.00073	-0.00893	-0.00149	-0.00167	-0.00160
0009						0.52630	0.15099	0.00083	-0.00897	-0.00166	-0.00185	-0.00131

* ZERO * BASE * TARE * ALTER DECKS
* IZ00 * B002 * NONE *

TABLE 2

AERODYNAMIC TARES DATA
(continued)

* TEST * TAB * RUN *
* 344-0 * 002 * 708 *

DATE	TYPE	CONFIGURATION	GENERAL DYNAMICS HIGH SPEED WIND TUNNEL FINAL DATA	TOC	SOC	TEST	TAB	RUN
05-25-75	0035			00	00	344-0	002	709

	TEST PARAMS		INPUT RUNS				LOWER BLADE CORRECTIONS					
PT	WING SWEEP	MACH NO.	INVERTED ONLY	INVERTED W/DUMMY	UPRIGHT W/DUMMY	LIFT	ALPHA (DEG)	DRAG	PITCHING MOMENT	SIDE FORCE	YAWING MOMENT	ROLLING MOMENT
0001	45.0000	0.98000	188.000	164.000	144.000	-0.13380	0.31131	-0.00263	0.00272	-0.00075	-0.00073	-0.00275
0002						-0.07590	0.18647	-0.00085	-0.00559	-0.00148	-0.00154	-0.00202
0003						0.00060	0.17203	-0.00041	-0.00357	-0.00211	-0.00213	-0.00183
0004						0.08710	0.18464	-0.00018	0.00016	-0.00224	-0.00232	-0.00215
0005						0.17500	0.19987	-0.00016	0.00205	-0.00220	-0.00238	-0.00235
0006						0.25620	0.13666	-0.00049	0.00057	-0.00213	-0.00225	-0.00198
0007						0.34680	0.11270	0.00024	0.00171	-0.00204	-0.00215	-0.00178
0008						0.44170	0.13749	0.00212	0.00650	-0.00189	-0.00224	-0.00240
0009						0.53050	0.16972	0.00277	0.01074	-0.00214	-0.00244	-0.00250

003

	TEST PARAMS		INPUT RUNS				FLOW INCLINATION CORRECTIONS					
PT	WING SWEEP	MACH NO.	INVERTED ONLY	INVERTED W/DUMMY	UPRIGHT W/DUMMY	LIFT	ALPHA (DEG)	DRAG	PITCHING MOMENT	SIDE FORCE	YAWING MOMENT	ROLLING MOMENT
0001	45.0000	0.98000	188.000	164.000	144.000	-0.13380	0.11353	0.00023	-0.00182	-0.00001	-0.00003	0.00006
0002						-0.07590	0.20200	-0.00009	0.00334	-0.00002	-0.00001	-0.00032
0003						0.00060	0.16008	0.00005	0.00134	-0.00005	-0.00006	-0.00008
0004						0.08710	0.14391	0.00012	0.00001	-0.00007	-0.00010	0.00001
0005						0.17500	0.11956	0.00026	-0.00021	-0.00009	-0.00014	-0.00000
0006						0.25620	0.13766	0.00052	0.00063	-0.00012	-0.00018	-0.00008
0007						0.34620	0.13330	0.00060	-0.00056	-0.00013	-0.00020	0.00000
0008						0.44170	0.08857	0.00019	-0.00096	-0.00019	-0.00018	0.00023
0009						0.53050	-0.08115	-0.00134	0.00713	-0.00090	-0.00088	0.00013

004

	TEST PARAMS		INPUT RUNS				TOTAL TARE CORRECTIONS					
PT	WING SWEEP	MACH NO.	INVERTED ONLY	INVERTED W/DUMMY	UPRIGHT W/DUMMY	LIFT	ALPHA (DEG)	DRAG	PITCHING MOMENT	SIDE FORCE	YAWING MOMENT	ROLLING MOMENT
0001	45.0000	0.98000	188.000	164.000	144.000	-0.13390	0.42435	-0.00179	0.00090	-0.00076	-0.00077	-0.00268
0002						-0.07590	0.38848	-0.00094	-0.00224	-0.00151	-0.00155	-0.00234
0003						0.00060	0.33212	-0.00035	-0.00222	-0.00216	-0.00220	-0.00192
0004						0.08710	0.32876	-0.00006	0.00018	-0.00231	-0.00242	-0.00214
0005						0.17500	0.31944	0.00010	0.00183	-0.00229	-0.00252	-0.00236
0006						0.25620	0.27432	0.00011	0.00120	-0.00226	-0.00244	-0.00207
0007						0.34680	0.24601	0.00084	0.00114	-0.00218	-0.00236	-0.00178
0008						0.44170	0.22567	0.00232	0.00554	-0.00209	-0.00243	-0.00217
0009						0.53050	0.08857	0.00142	0.01788	-0.00304	-0.00332	-0.00236

ZERO	BASE	TARE	ALTER DECKS
IZ??	8002	NONE	

TABLE 2

AERODYNAMIC TARES DATA
(continued)

TEST	TAB	RUN
344-0	002	709

DATE	TIME	CONFIGURATION	GENERAL DYNAMICS HIGH SPEED WIND TUNNEL FINAL DATA	TDC	SDC	TEST	TAB	RUN
05-25-75	0035			CC	00	344-0	002	710

PT	TEST PARAMS WING SWEEP	TEST PARAMS MACH NO.	INPUT RUNS INVERTED ONLY	INPUT RUNS INVERTED W/DUMMY	INPUT RUNS UPRIGHT W/DUMMY	LIFT	ALPHA (DEG)	LOWER PLATE CORRECTIONS DRAG	PITCHING MOMENT	SIDE FORCE	YAWING MOMENT	ROLLING MOMENT
0001	45.0000	1.05000	189.000	165.000	145.000	-0.12460	0.54992	-0.00132	0.04659	-0.00195	-0.00176	-0.00570
0002						-0.07090	0.58248	-0.00025	0.03287	-0.00216	-0.00212	-0.00562
0003						-0.02420	0.22191	0.00078	0.02457	-0.00304	-0.00312	-0.00331
0004						0.05850	0.22322	0.00116	0.01990	-0.00318	-0.00320	-0.00314
0005						0.14650	0.25458	0.00164	0.03061	-0.00352	-0.00370	-0.00347
0006						0.23210	0.16497	0.00155	0.01933	-0.00280	-0.00294	-0.00310
0007						0.33170	0.17978	0.00346	0.02905	-0.00227	-0.00260	-0.00374
0008						0.41820	0.16811	0.00454	0.05273	-0.00292	-0.00335	-0.00393
0009						0.50010	0.19343	0.00523	0.05414	-0.00294	-0.00344	-0.00383

003

PT	TEST PARAMS WING SWEEP	TEST PARAMS MACH NO.	INPUT RUNS INVERTED ONLY	INPUT RUNS INVERTED W/DUMMY	INPUT RUNS UPRIGHT W/DUMMY	LIFT	ALPHA (DEG)	FLOW INCLINATION CORRECTIONS DRAG	PITCHING MOMENT	SIDE FORCE	YAWING MOMENT	ROLLING MOMENT
0001	45.0000	1.05000	189.000	165.000	145.000	-0.12460	0.25329	0.00002	0.00379	0.00029	0.00024	-0.00003
0002						-0.07090	0.14847	0.00001	0.00365	-0.00016	-0.00015	-0.00005
0003						-0.02420	0.19779	-0.00000	0.00428	-0.00007	-0.00010	-0.00052
0004						0.05850	0.16962	0.00033	0.00228	-0.00005	-0.00012	-0.00021
0005						0.14650	0.14336	0.00047	-0.00162	0.00001	0.00000	-0.00018
0006						0.23210	0.15256	0.00072	0.00220	-0.00022	-0.00029	-0.00027
0007						0.33170	0.13351	0.00071	0.00126	-0.00037	-0.00038	-0.00011
0008						0.41820	0.12347	0.00103	0.00139	-0.00044	-0.00050	-0.00020
0009						0.50010	0.07692	0.00077	0.00804	-0.00075	-0.00079	-0.00012

004

PT	TEST PARAMS WING SWEEP	TEST PARAMS MACH NO.	INPUT RUNS INVERTED ONLY	INPUT RUNS INVERTED W/DUMMY	INPUT RUNS UPRIGHT W/DUMMY	LIFT	ALPHA (DEG)	TOTAL TARE CORRECTIONS DRAG	PITCHING MOMENT	SIDE FORCE	YAWING MOMENT	ROLLING MOMENT
0001	45.0000	1.05000	189.000	165.000	145.000	-0.12460	0.80321	-0.00129	0.05038	-0.00165	-0.00151	-0.00573
0002						-0.07090	0.73065	-0.00023	0.03653	-0.00233	-0.00227	-0.00567
0003						-0.02420	0.41971	0.00077	0.02885	-0.00312	-0.00322	-0.00384
0004						0.05850	0.38264	0.00150	0.02229	-0.00324	-0.00332	-0.00335
0005						0.14650	0.39795	0.00212	0.02898	-0.00351	-0.00370	-0.00365
0006						0.23210	0.31753	0.00229	0.02154	-0.00303	-0.00323	-0.00337
0007						0.33170	0.31290	0.00417	0.03030	-0.00265	-0.00298	-0.00385
0008						0.41820	0.29158	0.00558	0.05412	-0.00336	-0.00385	-0.00413
0009						0.50010	0.27035	0.00601	0.06219	-0.00369	-0.00423	-0.00396

ZERO	BASE	TARE	ALTER DECKS
1700	0002	DONE	

TABLE 2

AERODYNAMIC TARES DATA
(continued)

TEST	TAB	RUN
344-0	002	710

* DATE * TIME * CONFIGURATION * GENERAL DYNAMICS * TOC * SOC * TEST * TAB * RUN *
* 05-25-75 * 0035 * * HIGH SPEED WIND TUNNEL * 00 * 00 * 344-0 * 002 * 711 *
* * * FINAL DATA * * * * * *

PT	TEST PARAMS WING SWEEP	MACH NO.	INPUT RUNS INVERTED ONLY	INVERTED W/DUMMY	UPRIGHT W/DUMMY	LIFT	LOWER BLADE CORRECTIONS ALPHA (DEG)	DRAG	PITCH'G MOMENT	SIDE FORCE	YAWING MOMENT	ROLLING MOMENT
0001	55.0000	0.80000	195.000	171.000	146.000	-0.14730	0.17875	-0.00160	-0.01439	-0.00133	-0.00138	-0.00041
0002						-0.09200	0.14446	-0.00094	-0.01480	-0.00125	-0.00127	-0.00052
0003						-0.03470	0.14464	-0.00098	-0.01529	-0.00107	-0.00118	-0.00063
0004						0.02320	0.13447	-0.00087	-0.01406	-0.00091	-0.00095	-0.00068
0005						0.08040	0.14031	-0.00073	-0.01473	-0.00080	-0.00091	-0.00065
0006						0.13450	0.13358	-0.00040	-0.01478	-0.00072	-0.00079	-0.00060
0007						0.18760	0.14253	-0.00019	-0.01505	-0.00065	-0.00068	-0.00063
0008						0.23760	0.13327	0.00026	-0.01415	-0.00050	-0.00059	-0.00070
0009						0.28670	0.14034	0.00102	-0.01264	-0.00041	-0.00043	-0.00088

003

PT	TEST PARAMS WING SWEEP	MACH NO.	INPUT RUNS INVERTED ONLY	INVERTED W/DUMMY	UPRIGHT W/DUMMY	LIFT	FLOW INCLINATION CORRECTIONS ALPHA (DEG)	DRAG	PITCH'G MOMENT	SIDE FORCE	YAWING MOMENT	ROLLING MOMENT
0001	55.0000	0.80000	195.000	171.000	146.000	-0.14730	0.19406	0.00034	0.00324	-0.00062	-0.00061	-0.00001
0002						-0.09200	0.18929	0.00011	0.00195	-0.00042	-0.00045	-0.00001
0003						-0.03470	0.15453	0.00003	0.00020	-0.00034	-0.00036	0.00009
0004						0.02320	0.13898	0.00011	-0.00052	-0.00036	-0.00038	0.00013
0005						0.08040	0.13411	0.00022	-0.00050	-0.00035	-0.00038	0.00012
0006						0.13450	0.13324	0.00030	-0.00074	-0.00039	-0.00041	0.00008
0007						0.18760	0.12841	0.00043	-0.00075	-0.00035	-0.00037	0.00010
0008						0.23760	0.12955	0.00042	-0.00134	-0.00039	-0.00042	0.00012
0009						0.28670	0.13152	0.00023	-0.00217	-0.00039	-0.00046	0.00019

004

PT	TEST PARAMS WING SWEEP	MACH NO.	INPUT RUNS INVERTED ONLY	INVERTED W/DUMMY	UPRIGHT W/DUMMY	LIFT	TOTAL TARE CORRECTIONS ALPHA (DEG)	DRAG	PITCH'G MOMENT	SIDE FORCE	YAWING MOMENT	ROLLING MOMENT
0001	55.0000	0.80000	195.000	171.000	146.000	-0.14730	0.37282	-0.00125	-0.01115	-0.00196	-0.00199	-0.00043
0002						-0.09200	0.33375	-0.00082	-0.01284	-0.00167	-0.00173	-0.00054
0003						-0.03470	0.29918	-0.00094	-0.01508	-0.00141	-0.00155	-0.00054
0004						0.02320	0.27345	-0.00076	-0.01458	-0.00127	-0.00134	-0.00054
0005						0.08040	0.27442	-0.00051	-0.01523	-0.00116	-0.00129	-0.00053
0006						0.13450	0.27183	-0.00010	-0.01552	-0.00111	-0.00120	-0.00051
0007						0.18760	0.27094	0.00023	-0.01591	-0.00101	-0.00106	-0.00052
0008						0.23760	0.26282	0.00063	-0.01549	-0.00090	-0.00101	-0.00057
0009						0.28670	0.27187	0.00126	-0.01481	-0.00081	-0.00090	-0.00068

TABLE 2

AERODYNAMIC TARES DATA
(continued)

* ZERO * BASE * TARE * ALTER DECKS
* 1700 * 0002 * NONE *

* TEST * TAB * RUN *
* 344-0 * 002 * 711 *

ORIGINAL PAGE IS
OF POOR QUALITY

* DATE * TIME * CONFIGURATION * GENERAL DYNAMICS * TCC * SCC * TEST * TAB * RUN *
* 05-25-75 * 0035 * * HIGH SPEED WIND TUNNEL * 00 * 00 * 344-0 * 002 * 712 *
FINAL DATA

PT	TEST PARAMS WING SWEEP	MACH NO.	INPUT RUNS INVERTED ONLY	INVERTED W/DUMMY	UPRIGHT W/DUMMY	LIFT	LOWER BLADE CORRECTIONS ALPHA (DEG)	DRAG	PITCH*G MOMENT	SIDE FORCE	YAWING MOMENT	ROLLING MOMENT
0001	55.0000	0.95000	194.000	170.000	147.000	-0.14830	0.20301	-0.00283	-0.01295	-0.00284	-0.00289	-0.00056
0002						-0.09080	0.20902	-0.00219	-0.00949	-0.00304	-0.00308	-0.00086
0003						-0.03160	0.19778	-0.00219	-0.00974	-0.00313	-0.00316	-0.00096
0004						0.02770	0.17326	-0.00214	-0.00960	-0.00281	-0.00293	-0.00103
0005						0.08780	0.17988	-0.00221	-0.01068	-0.00245	-0.00259	-0.00087
0006						0.14370	0.16167	-0.00202	-0.00970	-0.00200	-0.00213	-0.00106
0007						0.19900	0.16893	-0.00159	-0.00967	-0.00149	-0.00162	-0.00113
0008						0.25230	0.15374	-0.00132	-0.00934	-0.00110	-0.00128	-0.00124
0009						0.30460	0.19055	-0.00036	-0.00414	-0.00129	-0.00150	-0.00147

003

PT	TEST PARAMS WING SWEEP	MACH NO.	INPUT RUNS INVERTED ONLY	INVERTED W/DUMMY	UPRIGHT W/DUMMY	LIFT	FLOW INCLINATION CORRECTIONS ALPHA (DEG)	DRAG	PITCH*G MOMENT	SIDE FORCE	YAWING MOMENT	ROLLING MOMENT
0001	55.0000	0.95000	194.000	170.000	147.000	-0.14830	0.10983	0.00041	0.00165	-0.00035	-0.00034	0.00003
0002						-0.09060	0.17833	-0.00003	0.00129	-0.00015	-0.00018	-0.00001
0003						-0.03160	0.15174	0.00006	0.00086	-0.00000	-0.00006	-0.00001
0004						0.02770	0.14524	0.00009	0.00051	-0.00005	-0.00007	-0.00004
0005						0.08780	0.12754	0.00025	0.00050	-0.00000	-0.00001	-0.00008
0006						0.14370	0.13019	0.00032	-0.00024	-0.00005	-0.00004	-0.00000
0007						0.19960	0.12214	0.00031	-0.00039	-0.00019	-0.00021	0.00000
0008						0.25230	0.12060	0.00040	-0.00094	-0.00035	-0.00036	0.00004
0009						0.30460	0.12570	0.00034	-0.00159	-0.00030	-0.00034	0.00004

004

PT	TEST PARAMS WING SWEEP	MACH NO.	INPUT RUNS INVERTED ONLY	INVERTED W/DUMMY	UPRIGHT W/DUMMY	LIFT	TOTAL TARE CORRECTIONS ALPHA (DEG)	DRAG	PITCH*G MOMENT	SIDE FORCE	YAWING MOMENT	ROLLING MOMENT
0001	55.0000	0.95000	194.000	170.000	147.000	-0.14830	0.39285	-0.00241	-0.01107	-0.00320	-0.00324	-0.00053
0002						-0.09080	0.38735	-0.00222	-0.00820	-0.00319	-0.00326	-0.00087
0003						-0.03160	0.34953	-0.00212	-0.00887	-0.00313	-0.00323	-0.00098
0004						0.02770	0.31851	-0.00204	-0.00908	-0.00286	-0.00301	-0.00108
0005						0.08780	0.30742	-0.00206	-0.01017	-0.00246	-0.00261	-0.00095
0006						0.14370	0.29126	-0.00170	-0.00994	-0.00205	-0.00217	-0.00106
0007						0.19900	0.29167	-0.00127	-0.01006	-0.00168	-0.00184	-0.00113
0008						0.25230	0.27435	-0.00091	-0.01028	-0.00145	-0.00154	-0.00119
0009						0.30460	0.31626	-0.00002	-0.00574	-0.00159	-0.00185	-0.00142

* ZERO * BASE * TARE * ALTER DECKS
* I200 * R002 * NONE *

TABLE 2

AERODYNAMIC TARES DATA
(continued)

* TEST * TAB * RUN *
* 344-0 * 002 * 712 *

* DATE * TIME * CONFIGURATION * GENERAL DYNAMICS * TOC * SOC * TEST * TAB * RUN *
* 05-25-75 * 0035 * HIGH SPEED WIND TUNNEL * 00 * 00 * 344-0 * 002 * 713 *
FINAL DATA

PT	TEST PARAMS WING SWEEP	MACH NO.	INPUT RUNS INVERTED ONLY	INVERTED W/DUMMY	UPRIGHT W/DUMMY	LIFT	ALPHA (DEG)	LOWER BLADE CORRECTIONS DRAG	PITCHING MOMENT	SIDE FORCE	YAWING MOMENT	ROLLING MOMENT
0001	55.0000	0.98000	193.000	169.000	148.000	-0.14660	0.21057	-0.00226	-0.01420	-0.00173	-0.00180	-0.00095
0002						-0.08870	0.22413	-0.00165	-0.00813	-0.00222	-0.00218	-0.00114
0003						-0.02990	0.21034	-0.00145	-0.00357	-0.00243	-0.00244	-0.00126
0004						0.03070	0.20723	-0.00143	-0.00262	-0.00239	-0.00252	-0.00132
0005						0.09140	0.22546	-0.00174	-0.00297	-0.00232	-0.00239	-0.00122
0006						0.14770	0.20842	-0.00138	-0.00155	-0.00229	-0.00240	-0.00124
0007						0.20270	0.18531	-0.00116	-0.00096	-0.00226	-0.00235	-0.00126
0008						0.25840	0.15860	-0.00095	-0.00094	-0.00212	-0.00230	-0.00130
0009						0.31260	0.17314	-0.00050	0.00014	-0.00218	-0.00236	-0.00143

003

PT	TEST PARAMS WING SWEEP	MACH NO.	INPUT RUNS INVERTED ONLY	INVERTED W/DUMMY	UPRIGHT W/DUMMY	LIFT	ALPHA (DEG)	FLOW INCLINATION CORRECTIONS DRAG	PITCHING MOMENT	SIDE FORCE	YAWING MOMENT	ROLLING MOMENT
0001	55.0000	0.98000	193.000	169.000	148.000	-0.14660	0.18459	0.00034	0.00126	-0.00010	-0.00012	-0.00000
0002						-0.08870	0.17219	0.00001	0.00158	-0.00005	-0.00007	-0.00010
0003						-0.02990	0.15279	0.00014	0.00095	-0.00006	-0.00009	-0.00004
0004						0.03070	0.14138	0.00011	0.00064	-0.00007	-0.00009	-0.00001
0005						0.09140	0.13168	0.00037	0.00100	-0.00010	-0.00012	-0.00005
0006						0.14770	0.13568	0.00036	0.00023	-0.00012	-0.00013	-0.00003
0007						0.20270	0.13265	0.00049	-0.00020	-0.00007	-0.00009	0.00000
0008						0.25540	0.13421	0.00052	-0.00035	-0.00002	-0.00004	-0.00000
0009						0.31260	0.12813	0.00033	-0.00133	-0.00000	-0.00003	0.00005

004

PT	TEST PARAMS WING SWEEP	MACH NO.	INPUT RUNS INVERTED ONLY	INVERTED W/DUMMY	UPRIGHT W/DUMMY	LIFT	ALPHA (DEG)	TOTAL TARE CORRECTIONS DRAG	PITCHING MOMENT	SIDE FORCE	YAWING MOMENT	ROLLING MOMENT
0001	55.0000	0.98000	193.000	169.000	148.000	-0.14660	0.39516	-0.00191	-0.01263	-0.00183	-0.00192	-0.00096
0002						-0.08870	0.39632	-0.00163	-0.00655	-0.00227	-0.00225	-0.00125
0003						-0.02990	0.36313	-0.00130	-0.00301	-0.00249	-0.00253	-0.00131
0004						0.03070	0.34861	-0.00132	-0.00197	-0.00247	-0.00262	-0.00134
0005						0.09140	0.35656	-0.00137	-0.00197	-0.00242	-0.00252	-0.00129
0006						0.14770	0.34410	-0.00101	-0.00131	-0.00241	-0.00253	-0.00128
0007						0.20270	0.31756	-0.00069	-0.00116	-0.00233	-0.00245	-0.00126
0008						0.25840	0.29282	-0.00038	-0.00130	-0.00214	-0.00234	-0.00130
0009						0.31260	0.33128	-0.00017	-0.00119	-0.00218	-0.00229	-0.00138

* ZE... * BASE * TARE * ALTER DEC*S
* IZ.. * P032 * NONE *

TABLE 2

AERODYNAMIC TARES DATA
(continued)

* TEST * T/R * RUN *
* 344-0 * 002 * 713 *

PT	TEST PARAMS WING SWEEP	MACH NO.	INPUT RUNS INVERTED ONLY	INVERTED W/DUMMY	UPRIGHT W/DUMMY	LIFT	ALPHA (DEG)	LOWER BLADE CORRECTIONS DRAG	PITCHING MOMENT	SIDE FORCE	YAWING MOMENT	ROLLING MOMENT
0001	55.0000	1.10000	192.000	168.000	149.000	-0.14360	0.27606	-0.00132	0.00608	-0.00186	-0.00162	-0.00216
0002						-0.08980	0.23036	-0.00050	0.00037	-0.00184	-0.00186	-0.00174
0003						-0.03240	0.17754	-0.00020	-0.00456	-0.00209	-0.00214	-0.00125
0004						0.02950	0.16314	-0.00033	-0.00259	-0.00197	-0.00201	-0.00136
0005						0.09280	0.17958	-0.00037	-0.00244	-0.00191	-0.00201	-0.00142
0006						0.15290	0.14569	-0.00022	0.00216	-0.00190	-0.00192	-0.00151
0007						0.21850	0.13163	0.00007	0.00273	-0.00183	-0.00184	-0.00138
0008						0.28830	0.10246	0.00025	0.00303	-0.00189	-0.00205	-0.00130
0009						0.36210	0.12326	0.00066	-0.00064	-0.00193	-0.00219	-0.00111

003

PT	TEST PARAMS WING SWEEP	MACH NO.	INPUT RUNS INVERTED ONLY	INVERTED W/DUMMY	UPRIGHT W/DUMMY	LIFT	ALPHA (DEG)	FLOW INCLINATION CORRECTIONS DRAG	PITCHING MOMENT	SIDE FORCE	YAWING MOMENT	ROLLING MOMENT
0001	55.0000	1.10000	192.000	168.000	149.000	-0.14360	0.13999	0.00038	-0.00041	-0.00022	-0.00033	0.00028
0002						-0.08980	0.15091	0.00003	-0.00015	-0.00027	-0.00034	0.00008
0003						-0.03240	0.13972	-0.00002	-0.00058	-0.00021	-0.00023	-0.00003
0004						0.02950	0.14125	0.00018	-0.00043	-0.00027	-0.00030	-0.00004
0005						0.09280	0.12269	0.00028	0.00018	-0.00026	-0.00028	-0.00005
0006						0.15290	0.13457	0.00034	-0.00101	-0.00030	-0.00038	-0.00001
0007						0.21850	0.12517	0.00036	-0.00099	-0.00033	-0.00040	0.00030
0008						0.28830	0.12861	0.00055	-0.00088	-0.00035	-0.00037	0.00004
0009						0.36210	0.12194	0.00057	0.00070	-0.00038	-0.00039	-0.00001

004

PT	TEST PARAMS WING SWEEP	MACH NO.	INPUT RUNS INVERTED ONLY	INVERTED W/DUMMY	UPRIGHT W/DUMMY	LIFT	ALPHA (DEG)	TOTAL TARE CORRECTIONS DRAG	PITCHING MOMENT	SIDE FORCE	YAWING MOMENT	ROLLING MOMENT
0001	55.0000	1.10000	192.000	168.000	149.000	-0.14360	0.41605	-0.00093	0.00567	-0.00208	-0.00216	-0.00187
0002						-0.08980	0.38127	-0.00046	0.00022	-0.00212	-0.00223	-0.00165
0003						-0.03240	0.31726	-0.00022	-0.00515	-0.00231	-0.00238	-0.00128
0004						0.02950	0.30439	-0.00015	-0.00302	-0.00225	-0.00231	-0.00141
0005						0.09280	0.30248	-0.00006	-0.00226	-0.00217	-0.00230	-0.00148
0006						0.15290	0.28026	0.00011	0.00116	-0.00220	-0.00230	-0.00152
0007						0.21850	0.25681	0.00044	0.00273	-0.00216	-0.00225	-0.00138
0008						0.28830	0.23108	0.00081	0.00214	-0.00225	-0.00242	-0.00125
0009						0.36210	0.24431	0.00144	0.00006	-0.00232	-0.00259	-0.00112

TABLE 2

AERODYNAMIC TARES DATA
(continued)

DATE	TIME	CONFIGURATION
05-25-75	0035	

GENERAL DYNAMICS
HIGH SPEED WIND TUNNEL
FINAL DATA

TOC	SOC	TEST	TAB	RUN
00	00	344-0	002	715

PT	TEST PARAMS WING SWEEP	TEST PARAMS MACH NO.	INPUT RUNS INVERTED ONLY	INPUT RUNS INVERTED W/DUMMY	INPUT RUNS UPRIGHT W/DUMMY	LIFT	ALPHA (DEG)	LOWER BLADE CORRECTIONS DRAG	PITCHING MOMENT	SIDE FORCE	YAWING MOMENT	ROLLING MOMENT
0001	55.0000	1.15000	191.000	167.000	151.000	-0.14200	0.34060	-0.00140	0.01112	-0.00197	-0.00185	-0.00247
0002						-0.09270	0.22803	-0.00030	0.00814	-0.00221	-0.00215	-0.00211
0003						-0.03520	0.16715	-0.00016	0.00013	-0.00238	-0.00240	-0.00145
0004						0.02670	0.14859	-0.00009	-0.00007	-0.00227	-0.00237	-0.00142
0005						0.09050	0.14538	-0.00012	-0.00073	-0.00206	-0.00219	-0.00136
0006						0.15280	0.10604	-0.00022	0.00196	-0.00185	-0.00196	-0.00136
0007						0.22280	0.10973	0.00010	0.00208	-0.00191	-0.00202	-0.00137
0008						0.29750	0.09618	0.00082	-0.00018	-0.00200	-0.00210	-0.00119
0009						0.37690	0.13077	0.00160	-0.00226	-0.00195	-0.00210	-0.00125

003

PT	TEST PARAMS WING SWEEP	TEST PARAMS MACH NO.	INPUT RUNS INVERTED ONLY	INPUT RUNS INVERTED W/DUMMY	INPUT RUNS UPRIGHT W/DUMMY	LIFT	ALPHA (DEG)	FLOW INCLINATION CORRECTIONS DRAG	PITCHING MOMENT	SIDE FORCE	YAWING MOMENT	ROLLING MOMENT
0001	55.0000	1.15000	191.000	167.000	151.000	-0.14200	0.10888	-0.00032	0.00090	-0.00021	-0.00023	0.00013
0002						-0.09270	0.16861	-0.00011	0.00150	-0.00017	-0.00020	0.00000
0003						-0.03520	0.15947	0.00011	0.00272	-0.00015	-0.00018	-0.00008
0004						0.02670	0.15011	0.00017	0.00125	-0.00019	-0.00021	0.00004
0005						0.09050	0.14754	0.00023	0.00263	-0.00021	-0.00023	-0.00008
0006						0.15200	0.16006	0.00040	0.00239	-0.00024	-0.00027	-0.00008
0007						0.22250	0.14790	0.00042	0.00224	-0.00020	-0.00022	-0.00002
0008						0.29750	0.14073	0.00041	0.00277	-0.00020	-0.00022	-0.00004
0009						0.37690	0.15454	0.00075	0.00350	-0.00022	-0.00025	-0.00009

004

PT	TEST PARAMS WING SWEEP	TEST PARAMS MACH NO.	INPUT RUNS INVERTED ONLY	INPUT RUNS INVERTED W/DUMMY	INPUT RUNS UPRIGHT W/DUMMY	LIFT	ALPHA (DEG)	TOTAL TARE CORRECTIONS DRAG	PITCHING MOMENT	SIDE FORCE	YAWING MOMENT	ROLLING MOMENT
0001	55.0000	1.15000	191.000	167.000	151.000	-0.14200	0.44949	-0.00172	0.01202	-0.00219	-0.00209	-0.00234
0002						-0.09270	0.39685	-0.00041	0.00964	-0.00239	-0.00236	-0.00211
0003						-0.03520	0.32662	-0.00005	0.00285	-0.00254	-0.00259	-0.00154
0004						0.02670	0.29871	0.00008	0.00118	-0.00246	-0.00259	-0.00138
0005						0.09050	0.29293	0.00010	0.00189	-0.00227	-0.00243	-0.00145
0006						0.15280	0.26613	0.00018	0.00426	-0.00209	-0.00224	-0.00144
0007						0.22280	0.25763	0.00052	0.00432	-0.00211	-0.00224	-0.00140
0008						0.29750	0.24492	0.00124	0.00258	-0.00220	-0.00232	-0.00124
0009						0.37690	0.28531	0.00235	0.00124	-0.00217	-0.00236	-0.00135

ZERO	BASE	TARE	ALTER DECKS
I200	B002	NONE	

TABLE 2

AERODYNAMIC TARES DATA
(continued)

TEST	TAB	RUN
344-0	002	715

* DATE * TIME * CONFIGURATION * GENERAL DYNAMICS * TOC * SOC * TEST * TAP * RUN *
* 05-25-75 * 0035 * HIGH SPEED WIND TUNNEL * 00 * 00 * 344-0 * 002 * 716 *
FINAL DATA

PT	TEST PARAMS WING SWEEP	MACH NO.	INPUT RUNS INVERTED ONLY	INVERTED W/DUMMY	UPRIGHT W/DUMMY	LIFT	ALPHA (DEG)	LOWER BLADE CORRECTIONS DRAG	PITCHING MOMENT	SIDE FORCE	YAWING MOMENT	ROLLING MOMENT
0001	55.0000	1.20000	190.000	166.000	150.000	-0.14780	0.30888	-0.00082	0.01093	-0.00237	-0.00235	-0.00206
0002						-0.10030	0.15662	-0.00036	0.00624	-0.00282	-0.00276	-0.00159
0003						-0.04020	0.17048	-0.00032	0.00624	-0.00271	-0.00273	-0.00152
0004						0.02300	0.17415	-0.00011	0.00693	-0.00269	-0.00271	-0.00146
0005						0.08730	0.16057	-0.00003	0.00680	-0.00243	-0.00256	-0.00143
0006						0.15360	0.13160	-0.00006	0.00745	-0.00196	-0.00198	-0.00135
0007						0.22580	0.11714	0.00064	0.00497	-0.00185	-0.00196	-0.00140
0008						0.30450	0.12787	0.00143	0.00771	-0.00176	-0.00192	-0.00156
0009						0.38240	0.21812	0.00170	0.01167	-0.00183	-0.00261	-0.00144

003

PT	TEST PARAMS WING SWEEP	MACH NO.	INPUT RUNS INVERTED ONLY	INVERTED W/DUMMY	UPRIGHT W/DUMMY	LIFT	ALPHA (DEG)	FLOW INCLINATION CORRECTIONS DRAG	PITCHING MOMENT	SIDE FORCE	YAWING MOMENT	ROLLING MOMENT
0001	55.0000	1.20000	190.000	166.000	150.000	-0.14780	0.06901	-0.00003	-0.00287	-0.00039	-0.00040	0.00026
0002						-0.10030	0.17497	-0.00002	0.00134	-0.00017	-0.00020	-0.00009
0003						-0.04020	0.15886	0.00016	0.00175	-0.00020	-0.00023	-0.00012
0004						0.02300	0.14578	0.00031	0.00124	-0.00021	-0.00024	-0.00016
0005						0.08730	0.14245	0.00031	0.00018	-0.00022	-0.00025	-0.00009
0006						0.15360	0.14376	0.00042	0.00004	-0.00026	-0.00034	-0.00014
0007						0.22580	0.13533	0.00029	0.00014	-0.00022	-0.00025	-0.00007
0008						0.30450	0.12892	0.00057	-0.00065	-0.00027	-0.00029	-0.00003
0009						0.38240	0.13118	0.00085	0.00093	-0.00027	-0.00033	-0.00000

004

PT	TEST PARAMS WING SWEEP	MACH NO.	INPUT RUNS INVERTED ONLY	INVERTED W/DUMMY	UPRIGHT W/DUMMY	LIFT	ALPHA (DEG)	TOTAL TARE CORRECTIONS DRAG	PITCHING MOMENT	SIDE FORCE	YAWING MOMENT	ROLLING MOMENT
0001	55.0000	1.20000	190.000	166.000	150.000	-0.14780	0.37790	-0.00085	0.00805	-0.00276	-0.00276	-0.00179
0002						-0.10030	0.32540	-0.00040	0.00758	-0.00299	-0.00297	-0.00168
0003						-0.04020	0.32934	-0.00015	0.00800	-0.00292	-0.00297	-0.00164
0004						0.02300	0.31993	0.00019	0.00818	-0.00282	-0.00295	-0.00162
0005						0.08730	0.30302	0.00028	0.00698	-0.00265	-0.00281	-0.00153
0006						0.15360	0.27537	0.00036	0.00750	-0.00222	-0.00232	-0.00150
0007						0.22580	0.25247	0.00103	0.00512	-0.00206	-0.00221	-0.00148
0008						0.30450	0.25680	0.00200	0.00706	-0.00204	-0.00222	-0.00159
0009						0.38240	0.24930	0.00256	0.01261	-0.00211	-0.00234	-0.00145

* ZERO * BASE * TARE * ALTER DECKS
* IZ00 * E002 * NONE *

TABLE 2

AERODYNAMIC TARES DATA
(continued)

* TEST * TAB * RUN *
* 344-0 * 002 * 716 *

* DATE	* TIME *	CONFIGURATION	*	GENERAL DYNAMICS	* TCC	* SOC	* TEST	* TAR	* RUN *
* 05-25-75	* 0035 *		*	HIGH SPEED WIND TUNNEL	* 00	* 00	* 344-0	* 002	* 717 *
			*	FINAL DATA					

* TEST PARAMS * INPUT RUNS * * LOWER BLADE CORRECTIONS *

PT	WING SWEEP	MACH NO.	INVERTED ONLY	INVERTED W/DUMMY	UPRIGHT W/DUMMY	LIFT	ALPHA (DEG)	DRAG	PITCHING MOMENT	SIDE FORCE	YAWING MOMENT	ROLLING MOMENT
0001	60.0000	0.96000	199.000	175.000	155.000	-0.14300	0.24967	-0.00239	-0.01236	-0.00246	-0.00244	-0.00071
0002						-0.09440	0.25317	-0.00216	-0.00934	-0.00255	-0.00252	-0.00081
0003						-0.04540	0.26103	-0.00217	-0.00779	-0.00253	-0.00258	-0.00084
0004						0.00430	0.23655	-0.00218	-0.00693	-0.00247	-0.00253	-0.00090
0005						0.05420	0.22891	-0.00221	-0.00799	-0.00244	-0.00250	-0.00080
0006						0.10070	0.20625	-0.00204	-0.00762	-0.00230	-0.00235	-0.00078
0007						0.14720	0.19008	-0.00184	-0.00786	-0.00214	-0.00228	-0.00083
0008						0.19210	0.14727	-0.00172	-0.00761	-0.00203	-0.00206	-0.00081
0009						0.23740	0.10846	-0.00120	+0.00602	+0.00231	-0.00245	-0.00074

003

* TEST PARAMS * INPUT RUNS * * FLOW INCLINATION CORRECTIONS *

PT	WING SWEEP	MACH NO.	INVERTED ONLY	INVERTED W/DUMMY	UPRIGHT W/DUMMY	LIFT	ALPHA (DEG)	DRAG	PITCHING MOMENT	SIDE FORCE	YAWING MOMENT	ROLLING MOMENT
0001	60.0000	0.98000	199.000	175.000	155.000	-0.14300	0.14121	-0.00045	0.00033	-0.00031	-0.00033	0.00006
0002						-0.09440	0.13225	-0.00007	0.00008	-0.00025	-0.00028	0.00000
0003						-0.04540	0.11282	0.00002	-0.00012	-0.00027	-0.00029	-0.00000
0004						0.00430	0.10144	0.00004	-0.00049	-0.00028	-0.00030	0.00003
0005						0.05420	0.08514	0.00013	-0.00096	-0.00027	-0.00030	0.00002
0006						0.10070	0.08443	0.00022	-0.00135	-0.00032	-0.00037	0.00001
0007						0.14720	0.08220	0.00021	-0.00161	-0.00035	-0.00032	0.00005
0008						0.19210	0.08263	0.00020	-0.00266	-0.00033	-0.00035	0.00009
0009						0.23740	0.10033	0.00010	-0.00297	-0.00034	-0.00035	0.00009

004

* TEST PARAMS * INPUT RUNS * * TOTAL TARE CORRECTIONS *

PT	WING SWEEP	MACH NO.	INVERTED ONLY	INVERTED W/DUMMY	UPRIGHT W/DUMMY	LIFT	ALPHA (DEG)	DRAG	PITCHING MOMENT	SIDE FORCE	YAWING MOMENT	ROLLING MOMENT
0001	60.0000	0.96000	199.000	175.000	155.000	-0.14300	0.39069	-0.00284	-0.01203	-0.00277	-0.00277	-0.00065
0002						-0.09440	0.38543	-0.00226	-0.00926	-0.00281	-0.00260	-0.00080
0003						-0.04540	0.37426	-0.00214	-0.00791	-0.00280	-0.00287	-0.00085
0004						0.00430	0.33799	-0.00213	-0.00743	-0.00276	-0.00283	-0.00086
0005						0.05420	0.31406	-0.00207	-0.00886	-0.00271	-0.00280	-0.00078
0006						0.10070	0.29069	-0.00182	-0.00898	-0.00263	-0.00272	-0.00076
0007						0.14720	0.26288	-0.00163	-0.00948	-0.00250	-0.00260	-0.00076
0008						0.19210	0.22990	-0.00151	-0.01026	-0.00237	-0.00241	-0.00072
0009						0.23740	0.20879	-0.00105	-0.00899	-0.00266	-0.00280	-0.00065

* ZERO * BASE * TARE * ALTER DECKS
* 1200 * 9202 * NONE *

TABLE 2

AERODYNAMIC TARES DATA
(continued)

* TEST * TAR * RUN *
* 344-0 * 002 * 717 *

* DATE	* TIME *	CONFIGURATION	* GENERAL DYNAMICS	* TOC * SOC * TEST * TAB * RUN *
* 05-25-75 *	0035 *		* HIGH SPEED WIND TUNNEL	* 00 * 00 * 344-0 * 002 * 718 *
			* FINAL DATA	

LOWER BLADE CORRECTIONS

PT	TEST PARAMS WING SWEEP	MACH NO.	INPUT RUNS INVERTED ONLY	INVERTED W/DUMMY	UPRIGHT W/DUMMY	LIFT	ALPHA (DEG)	DRAG	PITCH'G MOMENT	SIDE FORCE	YAWING MOMENT	ROLLING MOMENT
0001	60.0000	1.10000	198.000	174.000	154.000	-0.14580	0.27957	-0.00153	-0.00475	-0.00155	-0.00163	-0.00133
0002						-0.09700	0.23586	-0.00107	-0.00832	-0.00163	-0.00170	-0.00104
0003						-0.04730	0.22525	-0.00094	-0.00687	-0.00180	-0.00186	-0.00111
0004						0.00410	0.20106	-0.00106	-0.00598	-0.00175	-0.00180	-0.00117
0005						0.05620	0.19339	-0.00104	-0.00599	-0.00166	-0.00171	-0.00105
0006						0.10590	0.17316	-0.00087	-0.00549	-0.00186	-0.00192	-0.00099
0007						0.15540	0.17147	-0.00068	-0.00289	-0.00199	-0.00202	-0.00095
0008						0.20480	0.16148	-0.00029	-0.00197	-0.00202	-0.00211	-0.00088
0009						0.25460	0.14831	0.00024	0.00198	-0.00214	-0.00218	-0.00083

FLOW INCLINATION CORRECTIONS

003

PT	TEST PARAMS WING SWEEP	MACH NO.	INPUT RUNS INVERTED ONLY	INVERTED W/DUMMY	UPRIGHT W/DUMMY	LIFT	ALPHA (DEG)	DRAG	PITCH'G MOMENT	SIDE FORCE	YAWING MOMENT	ROLLING MOMENT
0001	60.0000	1.10000	198.000	174.000	154.000	-0.14580	0.12162	-0.00039	-0.00077	-0.00027	-0.00029	0.00008
0002						-0.09700	0.12492	-0.00011	-0.00072	-0.00032	-0.00034	0.00003
0003						-0.04730	0.11034	0.00001	-0.00142	-0.00032	-0.00034	0.00004
0004						0.00410	0.10523	0.00014	-0.00085	-0.00033	-0.00035	0.00000
0005						0.05620	0.09123	0.00020	-0.00100	-0.00040	-0.00042	0.00002
0006						0.10590	0.09681	0.00026	-0.00061	-0.00041	-0.00038	0.00003
0007						0.15840	0.09342	0.00032	-0.00079	-0.00048	-0.00046	0.00006
0008						0.20480	0.09486	0.00025	-0.00072	-0.00062	-0.00063	0.00011
0009						0.25460	0.10755	0.00019	-0.00160	-0.00062	-0.00065	0.00011

TOTAL TARE CORRECTIONS

004

PT	TEST PARAMS WING SWEEP	MACH NO.	INPUT RUNS INVERTED ONLY	INVERTED W/DUMMY	UPRIGHT W/DUMMY	LIFT	ALPHA (DEG)	DRAG	PITCH'G MOMENT	SIDE FORCE	YAWING MOMENT	ROLLING MOMENT
0001	60.0000	1.10000	198.000	174.000	154.000	-0.14580	0.40120	-0.00193	-0.00553	-0.00183	-0.00193	-0.00124
0002						-0.09700	0.36079	-0.00118	-0.00904	-0.00195	-0.00204	-0.00101
0003						-0.04730	0.33559	-0.00093	-0.00830	-0.00212	-0.00220	-0.00107
0004						0.00410	0.30630	-0.00091	-0.00684	-0.00209	-0.00215	-0.00117
0005						0.05620	0.28462	-0.00084	-0.00760	-0.00207	-0.00213	-0.00102
0006						0.10590	0.26998	-0.00061	-0.00611	-0.00227	-0.00230	-0.00095
0007						0.15540	0.26490	-0.00036	-0.00369	-0.00247	-0.00246	-0.00089
0008						0.20480	0.25635	-0.00003	-0.00269	-0.00266	-0.00275	-0.00076
0009						0.25460	0.25576	0.00044	0.00037	-0.00276	-0.00283	-0.00072

* ZERO * BASE * TARE * ALTER DECKS
* I2RO * 6002 * NONE *

TABLE 2

AERODYNAMIC TARES DATA
(continued)

* TEST * TAB * RUN *
* 344-0 * 002 * 718 *

ORIGINAL PAGE IS
OF POOR QUALITY

DATE	TIME	CONFIGURATION	GENERAL DYNAMICS HIGH SPEED WIND TUNNEL FINAL DATA	TOC	SOC	TEST	TAP	RUN
05-25-75	0035			05	00	349-0	002	719

003

LOWER BLADE CORRECTIONS

PT	TEST PARAMS WING SWEEP	MACH NO.	INPUT RUNS INVERTED ONLY	INVERTED W/DUMMY	UPRIGHT W/DUMMY	LIFT	ALPHA (DEG)	DRAG	PITCHING MOMENT	SIDE FORCE	YAWING MOMENT	ROLLING MOMENT
0001	60.0000	1.20000	197.000	173.000	153.000	-0.14080	0.23192	-0.00130	0.01006	-0.00286	-0.00284	-0.00141
0002						-0.09200	0.24361	-0.00073	0.00722	-0.00274	-0.00271	-0.00131
0003						-0.04280	0.21169	-0.00069	0.00355	-0.00263	-0.00268	-0.00104
0004						0.00840	0.12669	-0.00062	0.00126	-0.00238	-0.00243	-0.00105
0005						0.06030	0.17764	-0.00069	0.00004	-0.00216	-0.00220	-0.00094
0006						0.11070	0.15000	-0.00058	0.00173	-0.00188	-0.00201	-0.00103
0007						0.16370	0.13415	-0.00043	0.00161	-0.00186	-0.00198	-0.00095
0008						0.22040	0.14676	-0.00017	0.00126	-0.00199	-0.00204	-0.00082
0009						0.28000	0.18407	0.00038	0.00266	-0.00197	-0.00212	-0.00088

004

FLOW INCLINATION CORRECTIONS

PT	TEST PARAMS WING SWEEP	MACH NO.	INPUT RUNS INVERTED ONLY	INVERTED W/DUMMY	UPRIGHT W/DUMMY	LIFT	ALPHA (DEG)	DRAG	PITCHING MOMENT	SIDE FORCE	YAWING MOMENT	ROLLING MOMENT
0001	60.0000	1.20000	197.000	173.000	153.000	-0.14080	0.11503	-0.00005	-0.00174	-0.00010	-0.00012	0.00003
0002						-0.09200	0.11832	-0.00003	-0.00033	-0.00015	-0.00017	-0.00001
0003						-0.04280	0.11406	0.00010	0.00042	-0.00015	-0.00014	-0.00009
0004						0.00840	0.09903	0.00016	-0.00005	-0.00013	-0.00015	-0.00004
0005						0.06030	0.09197	0.00025	-0.00007	-0.00017	-0.00020	-0.00005
0006						0.11070	0.09970	0.00035	-0.00061	-0.00025	-0.00026	-0.00001
0007						0.16370	0.09898	0.00041	-0.00016	-0.00025	-0.00026	-0.00006
0008						0.22040	0.10042	0.00044	-0.00006	-0.00030	-0.00031	-0.00010
0009						0.28000	0.10715	0.00042	-0.00057	-0.00030	-0.00031	-0.00002

TOTAL TARE CORRECTIONS

PT	TEST PARAMS WING SWEEP	MACH NO.	INPUT RUNS INVERTED ONLY	INVERTED W/DUMMY	UPRIGHT W/DUMMY	LIFT	ALPHA (DEG)	DRAG	PITCHING MOMENT	SIDE FORCE	YAWING MOMENT	ROLLING MOMENT
0001	60.0000	1.20000	197.000	173.000	153.000	-0.14080	0.39695	-0.00136	0.00831	-0.00296	-0.00296	-0.00137
0002						-0.09200	0.36194	-0.00077	0.00688	-0.00290	-0.00288	-0.00133
0003						-0.04280	0.32576	-0.00058	0.00398	-0.00279	-0.00283	-0.00114
0004						0.00840	0.28572	-0.00045	0.00121	-0.00252	-0.00258	-0.00110
0005						0.06030	0.26961	-0.00043	-0.00003	-0.00233	-0.00240	-0.00100
0006						0.11070	0.25050	-0.00023	0.00112	-0.00213	-0.00227	-0.00105
0007						0.16370	0.23313	-0.00001	0.00145	-0.00211	-0.00225	-0.00102
0008						0.22040	0.24719	0.00025	0.00120	-0.00222	-0.00235	-0.00092
0009						0.28000	0.29123	0.00040	0.00209	-0.00227	-0.00244	-0.00090

ZERO	BASE	TARE	ALTER DECKS
1700	1002	NONE	

TABLE 2

AERODYNAMIC TARES DATA
(continued)

TEST	TAB	RUN
349-0	002	719

* DATE	* TIME *	CONFIGURATION	* GENERAL DYNAMICS	* TOC * SOC * TEST * TAB * RUN *
* 05-25-75 *	0035 *		* HIGH SPEED WIND TUNNEL	* 00 * 00 * 344-0 * 002 * 720 *
*	* *		* FINAL DATA	* * * * * *

PT	TEST PARAMS WING SWEEP	MACH NO.	INPUT RUNS INVERTED ONLY	INVERTED W/DUMMY	UPRIGHT W/DUMMY	LIFT	LOWER BLADE CORRECTIONS ALPHA (DEG)	DRAG	PITCHING MOMENT	SIDE FORCE	YAWING MOMENT	ROLLING MOMENT
0001	60.0000	1.40000	196.000	172.000	152.000	-0.13630	0.18003	-0.00135	-0.00023	-0.00317	-0.00325	-0.00106
0002						-0.08940	0.08566	-0.00095	-0.00705	-0.00316	-0.00313	-0.00069
0003						-0.03940	0.07414	-0.00078	-0.00913	-0.00302	-0.00295	-0.00053
0004						0.01170	0.07904	-0.00077	-0.00768	-0.00272	-0.00275	-0.00070
0005						0.06540	0.09227	-0.00066	-0.00412	-0.00252	-0.00254	-0.00083
0006						0.12170	0.10751	-0.00071	-0.00167	-0.00200	-0.00212	-0.00067
0007						0.18200	0.11911	-0.00012	0.00160	-0.00195	-0.00200	-0.00104
0008						0.24470	0.13911	-0.00008	0.00269	-0.00179	-0.00191	-0.00110
0009						0.30610	0.18473	0.00048	0.00107	-0.00165	-0.00177	-0.00111

003

PT	TEST PARAMS WING SWEEP	MACH NO.	INPUT RUNS INVERTED ONLY	INVERTED W/DUMMY	UPRIGHT W/DUMMY	LIFT	FLOW INCLINATION CORRECTIONS ALPHA (DEG)	DRAG	PITCHING MOMENT	SIDE FORCE	YAWING MOMENT	ROLLING MOMENT
0001	60.0000	1.40000	196.000	172.000	152.000	-0.13630	0.08533	0.00007	0.00344	-0.00036	-0.00034	0.00011
0002						-0.08940	0.11453	0.00009	0.00541	-0.00031	-0.00035	-0.00003
0003						-0.03940	0.11021	0.00015	0.00666	-0.00033	-0.00040	-0.00011
0004						0.01170	0.11062	0.00020	0.00729	-0.00038	-0.00039	-0.00010
0005						0.06540	0.10241	0.00024	0.00728	-0.00034	-0.00035	-0.00013
0006						0.12170	0.09101	0.00034	0.00668	-0.00037	-0.00036	-0.00015
0007						0.18200	0.09829	0.00031	0.00608	-0.00033	-0.00035	-0.00011
0008						0.24470	0.09645	0.00059	0.00665	-0.00041	-0.00039	-0.00009
0009						0.30610	0.10457	0.00066	0.00585	-0.00036	-0.00040	-0.00013

004

PT	TEST PARAMS WING SWEEP	MACH NO.	INPUT RUNS INVERTED ONLY	INVERTED W/DUMMY	UPRIGHT W/DUMMY	LIFT	TOTAL TARE CORRECTIONS ALPHA (DEG)	DRAG	PITCHING MOMENT	SIDE FORCE	YAWING MOMENT	ROLLING MOMENT
0001	60.0000	1.40000	196.000	172.000	152.000	-0.13630	0.26537	-0.00128	0.00321	-0.00354	-0.00360	-0.00094
0002						-0.08940	0.20320	-0.00085	-0.00164	-0.00348	-0.00348	-0.00072
0003						-0.03940	0.18436	-0.00062	-0.00246	-0.00336	-0.00336	-0.00065
0004						0.01170	0.18967	-0.00056	-0.00038	-0.00310	-0.00315	-0.00080
0005						0.06540	0.19469	-0.00041	0.00315	-0.00286	-0.00290	-0.00097
0006						0.12170	0.19852	-0.00037	0.00501	-0.00237	-0.00246	-0.00103
0007						0.18200	0.20740	0.00019	0.00709	-0.00229	-0.00236	-0.00115
0008						0.24470	0.23556	0.00050	0.00935	-0.00220	-0.00230	-0.00120
0009						0.30610	0.28930	0.00115	0.00693	-0.00202	-0.00217	-0.00125

* ZERO	* BASE	* TARE	* ALTER DECKS
* 1700	* 0002	* NONE	*

TABLE 2

AERODYNAMIC TARES DATA
(continued)

* TEST	* TAB	* RUN *
* 344-0	* 002	* 720 *

DATE 05-25-75 TIME 0035 CONFIGURATION

GENERAL DYNAMICS
HIGH SPEED WIND TUNNEL
FINAL DATA

TOC 00 SOC 00 TEST 349-0 TAB 002 RUN 721

PT	TEST PARAMS WING SWEEP	MACH NO.	INPUT RUNS INVERTED ONLY	INVERTED W/DUMMY	UPRIGHT W/DUMMY	LIFT	LOWER BLADE CORRECTIONS ALPHA (DEG)	DRAG	PITCH'G MOMENT	SIDE FORCE	YAWING MOMENT	ROLLING MOMENT
0001	0.00000	0.60000	200.000	217.000	220.000	-0.06780	0.09122	-0.00061	-0.01939	0.00068	0.00070	0.00008
0002						0.04530	0.12498	-0.00106	-0.02015	0.00050	0.00058	0.00016
0003						0.16920	0.15064	-0.00105	-0.02036	0.00048	0.00038	0.00020
0004						0.29330	0.13416	-0.00082	-0.01942	0.00030	0.00030	0.00028
0005						0.41590	0.14272	-0.00082	-0.01939	0.00019	0.00029	0.00019
0006						0.53380	0.13445	-0.00043	-0.01831	0.00010	0.00009	0.00029
0007						0.64030	0.14347	-0.00018	-0.01774	0.00005	0.00004	0.00019
0008						0.73330	0.14062	-0.00000	-0.01781	-0.00000	0.00000	0.00010
0009						0.82210	0.12447	0.00054	-0.01748	-0.00009	0.00000	0.00036

003

PT	TEST PARAMS WING SWEEP	MACH NO.	INPUT RUNS INVERTED ONLY	INVERTED W/DUMMY	UPRIGHT W/DUMMY	LIFT	FLOW INCLINATION CORRECTIONS ALPHA (DEG)	DRAG	PITCH'G MOMENT	SIDE FORCE	YAWING MOMENT	ROLLING MOMENT
0001	0.00000	0.60000	200.000	217.000	220.000	-0.06780	0.11531	0.00000	0.00093	-0.00015	-0.00015	0.00019
0002						0.04580	0.10641	0.00015	0.00096	-0.00010	-0.00010	0.00024
0003						0.16920	0.10156	0.00049	0.00099	-0.00016	-0.00005	0.00024
0004						0.29330	0.10944	0.00075	0.00088	-0.00009	-0.00009	0.00020
0005						0.41590	0.10304	0.00106	0.00084	-0.00005	-0.00010	0.00019
0006						0.53580	0.11437	0.00138	0.00054	-0.00009	-0.00005	0.00019
0007						0.64030	0.10719	0.00161	0.00025	-0.00009	-0.00005	0.00019
0008						0.73330	0.12001	0.00181	0.00009	-0.00005	-0.00005	0.00015
0009						0.82210	0.14046	0.00221	0.00009	-0.00005	-0.00005	0.00015

004

PT	TEST PARAMS WING SWEEP	MACH NO.	INPUT RUNS INVERTED ONLY	INVERTED W/DUMMY	UPRIGHT W/DUMMY	LIFT	TOTAL TARE CORRECTIONS ALPHA (DEG)	DRAG	PITCH'G MOMENT	SIDE FORCE	YAWING MOMENT	ROLLING MOMENT
0001	0.00000	0.60000	200.000	217.000	220.000	-0.06780	0.20653	-0.00061	-0.01845	0.00053	0.00055	0.00028
0002						0.04580	0.23140	-0.00090	-0.01919	0.00040	0.00048	0.00040
0003						0.16920	0.25220	-0.00056	-0.01936	0.00038	0.00033	0.00044
0004						0.29330	0.24361	-0.00007	-0.01853	0.00020	0.00020	0.00048
0005						0.41590	0.24577	0.00024	-0.01755	0.00014	0.00019	0.00039
0006						0.53580	0.24862	0.00094	-0.01777	0.00000	0.00004	0.00049
0007						0.64030	0.25066	0.00142	-0.01749	-0.00004	-0.00000	0.00038
0008						0.73330	0.26063	0.00181	-0.01771	-0.00005	-0.00004	0.00025
0009						0.82216	0.26453	0.00276	-0.01738	-0.00014	-0.00005	0.00052

ZERO 1700 BASE 0002 TARE NONE ALTER DECKS

TABLE 2

AERODYNAMIC TARES DATA
(continued)

TEST 349-0 TAB 002 RUN 721

DATE	TIME	CONFIGURATION	GENERAL DYNAMICS HIGH SPEED WIND TUNNEL FINAL DATA	TCC	SOC	TEST	TAB	RUN
05-25-75	0035			0C	00	344-0	002	722

PT	TEST PARAMS WING SWEEP	MACH NO.	INPUT RUNS INVERTED ONLY	INVERTED W/DUMMY	UPRIGHT W/DUMMY	LIFT	ALPHA (DEG)	LOWER BLADE CORRECTIONS DRAG	PITCH'G MOMENT	SIDE FORCE	YAWING MOMENT	ROLLING MOMENT
0001	0.00000	0.70000	201.000	218.000	221.000	-0.04030	0.08394	-0.00016	-0.01819	0.00068	0.00070	-0.00022
0002						0.04070	0.08815	-0.00044	-0.01747	0.00049	0.00059	-0.00003
0003						0.16520	0.11847	-0.00077	-0.02017	0.00030	0.00039	-0.00001
0004						0.30220	0.12179	-0.00083	-0.01934	0.00019	0.00019	-0.00000
0005						0.43620	0.13134	-0.00055	-0.01792	0.00000	-0.00005	0.00009
0006						0.56660	0.13906	-0.00038	-0.01734	-0.00010	-0.00009	0.00020
0007						0.66870	0.09661	-0.00001	-0.02004	-0.00023	-0.00027	0.00022
0008						0.80020	0.08255	0.00054	-0.01830	-0.00029	-0.00038	0.00001
0009						0.97780	0.18442	0.00273	-0.01699	-0.00030	-0.00031	-0.00012

003

PT	TEST PARAMS WING SWEEP	MACH NO.	INPUT RUNS INVERTED ONLY	INVERTED W/DUMMY	UPRIGHT W/DUMMY	LIFT	ALPHA (DEG)	FLOW INCLINATION CORRECTIONS DRAG	PITCH'G MOMENT	SIDE FORCE	YAWING MOMENT	ROLLING MOMENT
0001	0.00000	0.70000	201.000	218.000	221.000	-0.04030	0.12083	0.00001	0.00139	-0.00020	-0.00025	0.00023
0002						0.04070	0.11779	-0.00001	0.00056	-0.00015	-0.00015	0.00028
0003						0.16520	0.10710	0.00054	0.00127	-0.00010	-0.00014	0.00024
0004						0.30220	0.10458	0.00084	0.00099	-0.00010	-0.00010	0.00035
0005						0.43620	0.10043	0.00112	0.00053	-0.00009	-0.00005	0.00029
0006						0.56650	0.10643	0.00152	0.00034	-0.00005	-0.00005	0.00029
0007						0.66870	0.11552	0.00174	0.00004	0.00000	0.00002	0.00029
0008						0.80020	0.15654	0.00249	0.00024	0.00000	0.00004	0.00043
0009						0.97780	0.13648	0.00234	-0.00018	-0.00009	-0.00004	0.00018

004

PT	TEST PARAMS WING SWEEP	MACH NO.	INPUT RUNS INVERTED ONLY	INVERTED W/DUMMY	UPRIGHT W/DUMMY	LIFT	ALPHA (DEG)	TOTAL TARE CORRECTIONS DRAG	PITCH'G MOMENT	SIDE FORCE	YAWING MOMENT	ROLLING MOMENT
0001	0.00000	0.70000	201.000	218.000	221.000	-0.04030	0.20478	-0.00014	-0.01679	0.00048	0.00044	0.00001
0002						0.04070	0.20595	-0.00045	-0.01691	0.00034	0.00043	0.00025
0003						0.16520	0.22557	-0.00022	-0.01889	0.00020	0.00024	0.00023
0004						0.30220	0.22636	0.00001	-0.01834	0.00009	0.00009	0.00034
0005						0.43620	0.23177	0.00056	-0.01738	-0.00009	-0.00005	0.00039
0006						0.56660	0.24549	0.00113	-0.01699	-0.00015	-0.00014	0.00050
0007						0.66870	0.21213	0.00173	-0.02000	-0.00023	-0.00027	0.00051
0008						0.80020	0.23939	0.00304	-0.01605	-0.00029	-0.00033	0.00045
0009						0.97780	0.32091	0.00506	-0.01717	-0.00039	-0.00035	0.00006

ZERO	BASE	TARE	ALTER DECKS
I20P	9002	NONE	

TABLE 2

AERODYNAMIC TARES DATA
(Continued)

TEST	TAB	RUN
344-0	002	722

DATE	TIME	CONFIGURATION
[illegible]	[illegible]	

GENERAL DYNAMICS
HIGH SPEED WIND TUNNEL
FINAL DATA

TCC	SCC	TEST	TAP	RUN
CC	CC	344-C	002	723

LOWER BLADE CORRECTIONS

PT	TEST PARAMS WING SWEEP	TEST PARAMS MACH NO.	INPUT RUNS INVERTED ONLY	INPUT RUNS INVERTED W/DUMMY	INPUT RUNS UPRIGHT W/DUMMY	LIFT	ALPHA (DEG)	DRAG	PITCHING MOMENT	SIDE FORCE	YAWING MOMENT	ROLLING MOMENT
0001	0.00000	0.80000	242.000	219.000	222.000	-0.14350	0.43625	-0.00160	-0.02094	0.00055	0.00055	-0.00079
0002						-0.07330	0.46702	-0.00107	-0.02243	0.00044	0.00044	-0.00070
0003						0.01240	0.36300	[illegible]	[illegible]	0.00036	[illegible]	-0.00047
0004						0.08600	0.22213	[illegible]	-0.02152	[illegible]	0.00037	-0.00035
0005						[illegible]	[illegible]	[illegible]	-0.02295	[illegible]	[illegible]	-0.00024
0006						0.31660	0.23594	[illegible]	-0.02029	0.00015	[illegible]	-0.00012
0007						0.42840	0.23828	[illegible]	-0.02042	[illegible]	[illegible]	-0.00005
0008						0.54660	0.22257	0.00096	-0.02001	-0.00020	-0.00020	-0.00009
0009						0.63930	0.22475	[illegible]	-0.02001	-0.00020	-0.00020	0.00010

FLOW INCLINATION CORRECTIONS

PT	TEST PARAMS WING SWEEP	TEST PARAMS MACH NO.	INPUT RUNS INVERTED ONLY	INPUT RUNS INVERTED W/DUMMY	INPUT RUNS UPRIGHT W/DUMMY	LIFT	ALPHA (DEG)	DRAG	PITCHING MOMENT	SIDE FORCE	YAWING MOMENT	ROLLING MOMENT
0001	0.00000	0.80000	242.000	219.000	222.000	-0.14350	0.11593	-0.00020	0.00128	0.00010	0.00015	-0.00027
0002						-0.07330	0.13595	-0.00052	0.00130	0.00005	0.00005	0.00005
0003						0.01240	0.13394	-0.00028	0.00192	-0.00004	-0.00004	0.00035
0004						0.08600	0.13592	-0.00004	0.00221	0.00004	0.00005	0.00040
0005						[illegible]	0.17839	0.00045	0.00229	0.00004	0.00009	0.00045
0006						0.31660	0.10128	0.00052	0.00128	0.00005	[illegible]	0.00034
0007						0.42840	0.11335	0.00107	0.00107	0.00005	[illegible]	0.00025
0008						0.54660	0.12217	0.00125	0.00115	[illegible]	[illegible]	0.00034
0009						0.63930	0.12926	0.00146	0.00110	0.00005	0.00005	0.00024

TOTAL TARE CORRECTIONS

PT	TEST PARAMS WING SWEEP	TEST PARAMS MACH NO.	INPUT RUNS INVERTED ONLY	INPUT RUNS INVERTED W/DUMMY	INPUT RUNS UPRIGHT W/DUMMY	LIFT	ALPHA (DEG)	DRAG	PITCHING MOMENT	SIDE FORCE	YAWING MOMENT	ROLLING MOMENT
0001	0.00000	0.80000	242.000	219.000	222.000	-0.14350	0.55218	-0.00184	-0.01966	0.00055	0.00070	-0.00107
0002						-0.07330	0.60277	-0.00159	-0.02152	0.00050	0.00050	-0.00064
0003						0.01240	0.50345	-0.00018	-0.02205	0.00032	0.00037	-0.00010
0004						0.08600	0.35806	0.00400	-0.01621	0.00044	0.00042	0.00004
0005						[illegible]	0.35149	0.00221	-0.01827	0.00034	0.00029	0.00020
0006						0.31660	0.33722	0.00149	[illegible]	0.00024	0.00018	0.00022
0007						0.42840	0.30173	0.00186	-0.02034	0.00009	0.00009	0.00019
0008						0.54660	0.34300	0.00233	-0.01883	-0.00009	-0.00009	0.00025
0009						0.63930	0.35392	0.00240	-0.01890	-0.00024	-0.00014	0.00031

TABLE 2

AERODYNAMIC TABLE DATA
(Continued)

TEST	TAP	RUN
344-C	002	723

DATE	TIME	CONFIGURATION	GENERAL DYNAMICS HIGH SPEED WIND TUNNEL FINAL DATA	TCC	SCC	TEST	TAP	RUN
05-28-75	0835			00	00	344-0	002	724

LOWER BLADE CORRECTIONS

PT	TEST PARAMS WING SWEEP	TEST PARAMS MACH NO.	INPUT RUNS INVERTED ONLY	INPUT RUNS INVERTED W/DUMMY	INPUT RUNS UPRIGHT W/DUMMY	LIFT	ALPHA (DEG)	DRAG	PITCHING MOMENT	SIDE FORCE	YAWING MOMENT	ROLLING MOMENT
0001	45.0000	0.80000	203.000	214.000	225.000	-0.11050	0.14800	-0.00135	-0.01081	-0.00052	-0.00058	-0.00069
0002						-0.03630	0.15883	-0.00138	-0.00904	-0.00068	-0.00063	-0.00090
0003						0.04000	0.16642	-0.00159	-0.00795	-0.00054	-0.00060	-0.00100
0004						0.11880	0.16632	-0.00167	-0.00724	-0.00038	-0.00052	-0.00109
0005						0.19190	0.17212	-0.00151	-0.00728	-0.00036	-0.00048	-0.00112
0006						0.26190	0.16876	-0.00146	-0.00643	-0.00024	-0.00036	-0.00115
0007						0.32610	0.15896	-0.00122	-0.00612	-0.00033	-0.00035	-0.00120
0008						0.39700	0.15096	-0.00095	-0.00760	-0.00030	-0.00041	-0.00112
0009						0.46500	0.13368	-0.00057	-0.00713	-0.00049	-0.00058	-0.00107

003

FLOW INCLINATION CORRECTIONS

PT	TEST PARAMS WING SWEEP	TEST PARAMS MACH NO.	INPUT RUNS INVERTED ONLY	INPUT RUNS INVERTED W/DUMMY	INPUT RUNS UPRIGHT W/DUMMY	LIFT	ALPHA (DEG)	DRAG	PITCHING MOMENT	SIDE FORCE	YAWING MOMENT	ROLLING MOMENT
0001	45.0000	0.80000	203.000	214.000	225.000	-0.11050	0.13742	-0.00066	0.00134	-0.00018	-0.00019	-0.00003
0002						-0.03630	0.12827	-0.00065	0.00098	-0.00013	-0.00015	0.00002
0003						0.04000	0.12317	-0.00044	0.00062	-0.00015	-0.00016	0.00005
0004						0.11880	0.11746	-0.00027	0.00075	-0.00020	-0.00021	0.00001
0005						0.19190	0.12137	-0.00009	0.00064	-0.00021	-0.00022	0.00006
0006						0.26190	0.12353	0.00016	0.00079	-0.00022	-0.00027	0.00002
0007						0.32310	0.11547	0.00049	0.00073	-0.00023	-0.00026	0.00001
0008						0.39700	0.12423	0.00057	0.00020	-0.00030	-0.00036	-0.00000
0009						0.46500	0.13046	0.00069	0.00057	-0.00029	-0.00036	-0.00003

004

TOTAL TARE CORRECTIONS

PT	TEST PARAMS WING SWEEP	TEST PARAMS MACH NO.	INPUT RUNS INVERTED ONLY	INPUT RUNS INVERTED W/DUMMY	INPUT RUNS UPRIGHT W/DUMMY	LIFT	ALPHA (DEG)	DRAG	PITCHING MOMENT	SIDE FORCE	YAWING MOMENT	ROLLING MOMENT
0001	45.0000	0.80000	203.000	214.000	225.000	-0.11050	0.28543	-0.00201	-0.00947	-0.00070	-0.00077	-0.00072
0002						-0.03630	0.28740	-0.00203	-0.00806	-0.00082	-0.00083	-0.00087
0003						0.04000	0.29159	-0.00204	-0.00733	-0.00069	-0.00076	-0.00095
0004						0.11880	0.30378	-0.00184	-0.00638	-0.00059	-0.00074	-0.00108
0005						0.19190	0.29641	-0.00161	-0.00674	-0.00058	-0.00071	-0.00105
0006						0.26190	0.29399	-0.00127	-0.00763	-0.00046	-0.00063	-0.00112
0007						0.32820	0.30044	-0.00072	-0.00739	-0.00054	-0.00061	-0.00115
0008						0.39700	0.27519	-0.00042	-0.00739	-0.00060	-0.00077	-0.00113
0009						0.46500	0.26414	0.00012	-0.00655	-0.00079	-0.00094	-0.00111

ZERO	BASE	TARE	FILTER DECKS
1200	2002	NONE	

TABLE 2

AERODYNAMIC TARES DATA
(continued)

TEST	TAP	RUN
344-0	002	724

* DATE * TIME * CONFIGURATION * GENERAL DYNAMICS
* 05-25-75 * 0835 * HIGH SPEED WIND TUNNEL
FINAL DATA

* TOC * SOC * TEST * TAB * RUN *
* 00 * 00 * 344-0 * 002 * 725 *

PT	TEST PARAMS WING SWEEP	MACH NO.	INPUT RUNS INVERTED ONLY	INVERTED W/DUMMY	UPRIGHT W/DUMMY	LIFT	ALPHA (DEG)	LOWER BLADE CORRECTIONS DRAG	PITCHING MOMENT	SIDE FORCE	YAWING MOMENT	ROLLING MOMENT
0001	45.0000	0.95000	204.000	215.000	224.000	-0.11460	0.16958	-0.00165	-0.00137	-0.00192	-0.00190	-0.00111
0002						-0.04040	0.17007	-0.00168	-0.00517	-0.00238	-0.00235	-0.00084
0003						0.03990	0.17540	-0.00170	-0.00137	-0.00233	-0.00247	-0.00133
0004						0.12370	0.17129	-0.00167	-0.00043	-0.00223	-0.00237	-0.00154
0005						0.20440	0.16546	-0.00141	-0.00126	-0.00204	-0.00215	-0.00167

003

PT	TEST PARAMS WING SWEEP	MACH NO.	INPUT RUNS INVERTED ONLY	INVERTED W/DUMMY	UPRIGHT W/DUMMY	LIFT	ALPHA (DEG)	FLOW INCLINATION CORRECTIONS DRAG	PITCHING MOMENT	SIDE FORCE	YAWING MOMENT	ROLLING MOMENT
0001	45.0000	0.95000	204.000	215.000	224.000	-0.11460	0.12996	-0.00063	0.00061	-0.00009	-0.00010	0.00011
0002						-0.04040	0.13044	-0.00061	0.00140	0.00090	0.00085	-0.00013
0003						0.03990	0.12475	-0.00051	0.00067	0.00104	0.00103	-0.00010
0004						0.12370	0.12609	-0.00038	0.00012	0.00094	0.00094	-0.00008
0005						0.20440	0.11265	-0.00029	0.00015	0.00084	0.00083	-0.00008

004

PT	TEST PARAMS WING SWEEP	MACH NO.	INPUT RUNS INVERTED ONLY	INVERTED W/DUMMY	UPRIGHT W/DUMMY	LIFT	ALPHA (DEG)	TOTAL TARE CORRECTIONS DRAG	PITCHING MOMENT	SIDE FORCE	YAWING MOMENT	ROLLING MOMENT
0001	45.0000	0.95000	204.000	215.000	224.000	-0.11460	0.29954	-0.00227	-0.00076	-0.00203	-0.00203	-0.00100
0002						-0.04040	0.30051	-0.00229	-0.00377	-0.00147	-0.00150	-0.00098
0003						0.03990	0.30015	-0.00222	-0.00120	-0.00128	-0.00144	-0.00144
0004						0.12370	0.29738	-0.00206	-0.00030	-0.00128	-0.00142	-0.00162
0005						0.20440	0.27812	-0.00171	-0.00111	-0.00119	-0.00132	-0.00176

* ZERO * BASE * TARE * ALTER DECKS
* IZERO * 0002 * NONE *

TABLE 2

AERODYNAMIC TARES DATA
(continued)

* TEST * TAB * RUN *
* 344-0 * 002 * 725 *

* DATE	* TIME	* CONFIGURATION	* GENERAL DYNAMICS	* TOC	* SOC	* TEST	* TAB	* RUN *
* 05-25-75	* 0035	*	* HIGH SPEED WIND TUNNEL	* 00	* 00	* 344-0	* 002	* 726 *
*	*	*	* FINAL DATA	*	*	*	*	* *

LOWER BLADE CORRECTIONS

PT	TEST PARAMS WING SWEEP	TEST PARAMS MACH NO.	INPUT RUNS INVERTED ONLY	INPUT RUNS INVERTED W/DUMMY	INPUT RUNS UPRIGHT W/DUMMY	LIFT	ALPHA (DEG)	DRAG	PITCH'G MOMENT	SIDE FORCE	YAWING MOMENT	ROLLING MOMENT
0001	45.0000	1.05000	205.000	216.000	223.000	-0.14000	0.34411	-0.00022	0.02440	-0.00164	-0.00161	-0.00453
0002						-0.06470	0.31110	-0.00004	0.02371	-0.00249	-0.00251	-0.00410
0003						0.01320	0.22621	0.00056	0.01592	-0.00261	-0.00269	-0.00262
0004						0.09940	0.20354	0.00080	0.01217	-0.00242	-0.00258	-0.00240
0005						0.18200	0.17721	0.00037	0.01037	-0.00229	-0.00241	-0.00253
0006						0.26830	0.17562	0.00098	0.00411	-0.00195	-0.00216	-0.00255
0007						0.35190	0.12898	0.00115	-0.00271	-0.00171	-0.00191	-0.00211
0008						0.42940	0.19416	0.00245	0.00293	-0.00149	-0.00169	-0.00229
0009						0.50220	0.16554	0.00269	-0.00459	-0.00107	-0.00116	-0.00136

003

FLOW INCLINATION CORRECTIONS

PT	TEST PARAMS WING SWEEP	TEST PARAMS MACH NO.	INPUT RUNS INVERTED ONLY	INPUT RUNS INVERTED W/DUMMY	INPUT RUNS UPRIGHT W/DUMMY	LIFT	ALPHA (DEG)	DRAG	PITCH'G MOMENT	SIDE FORCE	YAWING MOMENT	ROLLING MOMENT
0001	45.0000	1.05000	205.000	216.000	223.000	-0.14000	0.15318	-0.00085	-0.00144	0.00002	0.00001	0.00014
0002						-0.06470	0.13491	-0.00060	-0.00084	0.00006	0.00005	0.00005
0003						0.01320	0.12026	-0.00054	-0.00059	-0.00004	-0.00005	0.00006
0004						0.09940	0.12597	-0.00034	-0.00014	-0.00000	-0.00001	0.00005
0005						0.18200	0.12940	-0.00006	-0.00001	-0.00005	-0.00007	-0.00003
0006						0.26830	0.14105	0.00016	-0.00059	-0.00010	-0.00011	-0.00010
0007						0.35190	0.16898	0.00072	-0.00061	-0.00005	-0.00012	-0.00017
0008						0.42940	0.16270	0.00124	-0.00174	-0.00006	-0.00018	-0.00022
0009						0.50220	0.15636	0.00159	-0.00221	-0.00015	-0.00022	0.00000

004

TOTAL TARE CORRECTIONS

PT	TEST PARAMS WING SWEEP	TEST PARAMS MACH NO.	INPUT RUNS INVERTED ONLY	INPUT RUNS INVERTED W/DUMMY	INPUT RUNS UPRIGHT W/DUMMY	LIFT	ALPHA (DEG)	DRAG	PITCH'G MOMENT	SIDE FORCE	YAWING MOMENT	ROLLING MOMENT
0001	45.0000	1.05000	205.000	216.000	223.000	-0.14000	0.49730	-0.00107	0.02295	-0.00162	-0.00160	-0.00438
0002						-0.06470	0.44602	-0.00073	0.02286	-0.00242	-0.00245	-0.00404
0003						0.01320	0.34648	0.00002	0.01533	-0.00266	-0.00275	-0.00255
0004						0.09940	0.32952	0.00046	0.01202	-0.00243	-0.00259	-0.00234
0005						0.18200	0.30662	0.00031	0.01035	-0.00234	-0.00248	-0.00256
0006						0.26830	0.31667	0.00114	0.00352	-0.00205	-0.00226	-0.00266
0007						0.35190	0.29796	0.00188	-0.00332	-0.00177	-0.00203	-0.00228
0008						0.42940	0.35687	0.00369	0.00219	-0.00155	-0.00187	-0.00251
0009						0.50220	0.32190	0.00429	-0.00680	-0.00122	-0.00139	-0.00136

* ZERO	* BASE	* TARE	* ALTER DECKS
* I200	* 9002	* NONE	*

TABLE 2

AERODYNAMIC TARES DATA
(continued)

* TEST	* TAB	* RUN *
* 344-0	* 002	* 726 *

DATE	TIME	CONFIGURATION
05-25-75	0035	

GENERAL DYNAMICS
HIGH SPEED WIND TUNNEL
FINAL DATA

TOC	SCC	TEST	TAB	RUN
00	00	344-0	002	727

PT	TEST PARAMS WING SWEEP	MACH NO.	INPUT RUNS INVERTED ONLY	INVERTED W/DUMMY	UPRIGHT W/DUMMY	LIFT	ALPHA (DEG)	LOWER BLADE CORRECTIONS DRAG	PITCH'G MOMENT	SIDE FORCE	YAWING MOMENT	ROLLING MOMENT
0001	55.0000	0.80000	206.000	210.000	229.000	-0.11860	0.16188	-0.00168	-0.00803	-0.00100	-0.00096	-0.00065
0002						-0.06140	0.15573	-0.00184	-0.00861	-0.00111	-0.00117	-0.00060
0003						-0.00550	0.14467	-0.00189	-0.00818	-0.00087	-0.00090	-0.00062
0004						0.05170	0.13416	-0.00193	-0.00923	-0.00058	-0.00060	-0.00064
0005						0.10690	0.12210	-0.00190	-0.00986	-0.00046	-0.00048	-0.00065
0006						0.16020	0.11000	-0.00166	-0.01049	-0.00045	-0.00046	-0.00078
0007						0.21110	0.11856	-0.00158	-0.01101	-0.00043	-0.00055	-0.00080
0008						0.26120	0.10978	-0.00139	-0.01172	-0.00050	-0.00051	-0.00071
0009						0.31140	0.11094	-0.00119	-0.01070	-0.00070	-0.00080	-0.00060

003

PT	TEST PARAMS WING SWEEP	MACH NO.	INPUT RUNS INVERTED ONLY	INVERTED W/DUMMY	UPRIGHT W/DUMMY	LIFT	ALPHA (DEG)	FLOW INCLINATION CORRECTIONS DRAG	PITCH'G MOMENT	SIDE FORCE	YAWING MOMENT	ROLLING MOMENT
0001	55.0000	0.80000	206.000	210.000	229.000	-0.11860	0.15167	-0.00073	0.00178	-0.00030	-0.00036	0.00006
0002						-0.06140	0.14047	-0.00060	0.00200	-0.00020	-0.00026	0.00001
0003						-0.00550	0.13916	-0.00051	0.00196	-0.00026	-0.00032	-0.00002
0004						0.05170	0.12658	-0.00038	0.00151	-0.00031	-0.00037	-0.00003
0005						0.10690	0.11669	-0.00026	0.00129	-0.00032	-0.00037	-0.00003
0006						0.16020	0.12538	-0.00008	0.00131	-0.00032	-0.00032	0.00001
0007						0.21110	0.12672	0.00010	0.00109	-0.00032	-0.00032	0.00000
0008						0.26120	0.12944	0.00024	0.00127	-0.00031	-0.00037	-0.00004
0009						0.31140	0.13734	0.00034	0.00095	-0.00053	-0.00040	-0.00003

004

PT	TEST PARAMS WING SWEEP	MACH NO.	INPUT RUNS INVERTED ONLY	INVERTED W/DUMMY	UPRIGHT W/DUMMY	LIFT	ALPHA (DEG)	TOTAL TARE CORRECTIONS DRAG	PITCH'G MOMENT	SIDE FORCE	YAWING MOMENT	ROLLING MOMENT
0001	55.0000	0.80000	206.000	210.000	229.000	-0.11860	0.31355	-0.00242	-0.00624	-0.00130	-0.00132	-0.00059
0002						-0.06140	0.29620	-0.00245	-0.00661	-0.00132	-0.00143	-0.00059
0003						-0.00550	0.28404	-0.00240	-0.00621	-0.00113	-0.00123	-0.00064
0004						0.05170	0.26074	-0.00231	-0.00772	-0.00089	-0.00097	-0.00067
0005						0.10690	0.23880	-0.00216	-0.00857	-0.00079	-0.00086	-0.00069
0006						0.16020	0.23630	-0.00175	-0.00918	-0.00077	-0.00079	-0.00076
0007						0.21110	0.24528	-0.00148	-0.00991	-0.00076	-0.00087	-0.00079
0008						0.26120	0.23922	-0.00114	-0.01045	-0.00061	-0.00068	-0.00076
0009						0.31140	0.24828	-0.00087	-0.00974	-0.00103	-0.00120	-0.00064

ZERO	BASE	TARE	ALTER DECKS
I200	B002	NONE	

TABLE 2

AERODYNAMIC TARES DATA
(continued)

TEST	TAB	RUN
344-0	002	727

DATE 05-25-75 · TIME 0035 · CONFIGURATION

GENERAL DYNAMICS
HIGH SPEED WIND TUNNEL
FINAL DATA

TOC 00 · SOC 00 · TEST 344-0 · TAB 002 · RUN 728

PT	TEST PARAMS WING SWEEP	MACH NO.	INPUT RUNS INVERTED ONLY	INVERTED W/DUMMY	UPRIGHT W/DUMMY	LIFT	ALPHA (DEG)	LOWER BLADE CORRECTIONS DRAG	PITCH'G MOMENT	SIDE FORCE	YAWING MOMENT	ROLLING MOMENT
0001	55.0000	0.98000	207.000	211.000	228.000	-0.11750	0.26083	-0.00198	0.00289	-0.00210	-0.00208	-0.00147
0002						-0.05950	0.24250	-0.00202	0.00425	-0.00225	-0.00220	-0.00142
0003						-0.00070	0.23269	-0.00220	0.00504	-0.00216	-0.00222	-0.00139
0004						0.05930	0.20944	-0.00253	0.00249	-0.00190	-0.00195	-0.00131
0005						0.11710	0.18496	-0.00255	0.00131	-0.00187	-0.00200	-0.00134
0006						0.17100	0.14486	-0.00251	0.00020	-0.00184	-0.00195	-0.00130
0007						0.22570	0.10871	-0.00265	-0.00164	-0.00201	-0.00211	-0.00130

003

PT	TEST PARAMS WING SWEEP	MACH NO.	INPUT RUNS INVERTED ONLY	INVERTED W/DUMMY	UPRIGHT W/DUMMY	LIFT	ALPHA (DEG)	FLOW INCLINATION CORRECTIONS DRAG	PITCH'G MOMENT	SIDE FORCE	YAWING MOMENT	ROLLING MOMENT
0001	55.0000	0.98000	207.000	211.000	228.000	-0.11750	0.14833	-0.00086	0.00111	-0.00009	-0.00010	0.00005
0002						-0.05950	0.13595	-0.00076	0.00101	-0.00009	-0.00015	0.00005
0003						-0.00070	0.13542	-0.00051	0.00108	-0.00015	-0.00011	-0.00003
0004						0.05930	0.12254	-0.00032	0.00066	-0.00006	-0.00011	-0.00004
0005						0.11710	0.11575	-0.00001	0.00016	0.00026	0.00026	-0.00003
0006						0.17100	0.12689	0.00017	-0.00021	0.00042	0.00036	-0.00008
0007						0.22570	0.12395	0.00071	0.00228	0.00067	0.00057	-0.00028

004

PT	TEST PARAMS WING SWEEP	MACH NO.	INPUT RUNS INVERTED ONLY	INVERTED W/DUMMY	UPRIGHT W/DUMMY	LIFT	ALPHA (DEG)	TOTAL TARE CORRECTIONS DRAG	PITCH'G MOMENT	SIDE FORCE	YAWING MOMENT	ROLLING MOMENT
0001	55.0000	0.98000	207.000	211.000	228.000	-0.11750	0.40916	-0.00284	0.00401	-0.00219	-0.00219	-0.00141
0002						-0.05950	0.37845	-0.00278	0.00526	-0.00234	-0.00235	-0.00137
0003						-0.00070	0.36811	-0.00272	0.00613	-0.00232	-0.00234	-0.00142
0004						0.05930	0.33198	-0.00285	0.00315	-0.00196	-0.00207	-0.00135
0005						0.11710	0.29982	-0.00256	0.00147	-0.00161	-0.00174	-0.00138
0006						0.17100	0.27171	-0.00234	-0.00001	-0.00141	-0.00158	-0.00138
0007						0.22570	0.23767	-0.00193	0.00063	-0.00133	-0.00154	-0.00158

ZERO 1700 · BASE 3002 · TARE NONE · ALTER DECKS

TABLE 2

AERODYNAMIC TARES DATA
(continued)

TEST 344-0 · TAB 002 · RUN 728

* DATE *	TIME *	CONFIGURATION	* GENERAL DYNAMICS HIGH SPEED WIND TUNNEL FINAL DATA	* TCC * SOC * TEST * TAP * RUN *
* 05-25-75 *	0035 *			* 00 * 00 * 344-0 * 002 * 729 *

PT	TEST PARAMS: WING SWEEP	MACH NO.	INPUT RUNS: INVERTED ONLY	INVERTED W/DUMMY	UPRIGHT W/DUMMY	LIFT	ALPHA (DEG)	LOWER BLADE CORRECTIONS: DRAG	PITCH'G MOMENT	SIDE FORCE	YAWING MOMENT	ROLLING MOMENT
0001	55.0000	1.10000	208.000	212.000	227.000	-0.12020	0.28030	-0.00084	0.01116	-0.00223	-0.00219	-0.00206
0002						-0.06430	0.20952	-0.00067	0.00321	-0.00244	-0.00241	-0.00127
0003						-0.00380	0.20196	-0.00054	0.00429	-0.00243	-0.00249	-0.00129
0004						0.05950	0.17113	-0.00091	0.00174	-0.00198	-0.00209	-0.00124
0005						0.12070	0.16295	-0.00113	0.00245	-0.00186	-0.00188	-0.00125
0006						0.18250	0.14861	-0.00096	0.00185	-0.00172	-0.00174	-0.00119
0007						0.24960	0.13275	-0.00097	0.00114	-0.00190	-0.00200	-0.00110
0008						0.32060	0.10966	-0.00086	0.00021	-0.00210	-0.00219	-0.00100
0009						0.39290	0.11605	-0.00039	-0.00143	-0.00231	-0.00239	-0.00087

003

PT	TEST PARAMS: WING SWEEP	MACH NO.	INPUT RUNS: INVERTED ONLY	INVERTED W/DUMMY	UPRIGHT W/DUMMY	LIFT	ALPHA (DEG)	FLOW INCLINATION CORRECTIONS: DRAG	PITCH'G MOMENT	SIDE FORCE	YAWING MOMENT	ROLLING MOMENT
0001	55.0000	1.10000	208.000	212.000	227.000	-0.12020	0.12567	-0.00074	-0.00055	-0.00020	-0.00020	0.00007
0002						-0.06430	0.12175	-0.00075	-0.00034	-0.00015	-0.00020	0.00003
0003						-0.00380	0.12943	-0.00062	-0.00055	-0.00020	-0.00021	-0.00003
0004						0.05950	0.11991	-0.00046	-0.00058	-0.00025	-0.00026	0.00000
0005						0.12070	0.10528	-0.00029	-0.00060	-0.00026	-0.00026	0.00000
0006						0.18250	0.10376	-0.00018	-0.00046	-0.00025	-0.00025	0.00000
0007						0.24960	0.10662	0.00004	-0.00048	-0.00020	-0.00025	0.00000
0008						0.32060	0.11513	0.00032	-0.00075	-0.00014	-0.00020	-0.00004
0009						0.39290	0.11697	0.00052	-0.00059	-0.00013	-0.00019	-0.00001

004

PT	TEST PARAMS: WING SWEEP	MACH NO.	INPUT RUNS: INVERTED ONLY	INVERTED W/DUMMY	UPRIGHT W/DUMMY	LIFT	ALPHA (DEG)	TOTAL TARE CORRECTIONS: DRAG	PITCH'G MOMENT	SIDE FORCE	YAWING MOMENT	ROLLING MOMENT
0001	55.0000	1.10000	208.000	212.000	227.000	-0.12020	0.40597	-0.00159	0.01060	-0.00243	-0.00239	-0.00198
0002						-0.06430	0.33127	-0.00142	0.00286	-0.00259	-0.00261	-0.00124
0003						-0.00380	0.33140	-0.00117	0.00374	-0.00264	-0.00270	-0.00132
0004						0.05950	0.29104	-0.00136	0.00116	-0.00224	-0.00235	-0.00123
0005						0.12070	0.26823	-0.00143	0.00184	-0.00212	-0.00214	-0.00125
0006						0.18250	0.25237	-0.00115	0.00132	-0.00198	-0.00200	-0.00119
0007						0.24960	0.23937	-0.00093	0.00065	-0.00210	-0.00226	-0.00110
0008						0.32060	0.22440	-0.00054	-0.00054	-0.00224	-0.00239	-0.00105
0009						0.39290	0.23383	0.00014	-0.00202	-0.00244	-0.00259	-0.00089

* ZERO * BASE * TARE * ALTER DECKS
* IZ00 * B002 * NONE *

TABLE 2

AERODYNAMIC TARES DATA
(continued)

* TEST * TAP * RUN *
* 344-0 * 002 * 729 *

* DATE * TIME * CONFIGURATION * GENERAL DYNAMICS * TOC * SOC * TEST * TAB * RUN *
* 05-25-75 * 0035 * * HIGH SPEED WIND TUNNEL * 00 * 00 * 344-0 * 002 * 730 *
FINAL DATA

PT	TEST PARAMS WING SWEEP	MACH NO.	INPUT RUNS INVERTED ONLY	INVERTED W/DUMMY	UPRIGHT W/DUMMY	LIFT	ALPHA (DEG)	LOWER BLADE CORRECTIONS DRAG	PITCH'G MOMENT	SIDE FORCE	YAWING MOMENT	ROLLING MOMENT
0001	55.0000	1.20000	209.000	213.000	226.000	-0.12870	0.16598	-0.00060	0.00469	-0.00250	-0.00244	-0.00146
0002						-0.07310	0.13848	-0.00071	0.00397	-0.00264	-0.00278	-0.00131
0003						-0.00950	0.14622	-0.00063	0.00468	-0.00285	-0.00279	-0.00124
0004						0.05620	0.14492	-0.00060	0.00492	-0.00263	-0.00266	-0.00114
0005						0.12140	0.14151	-0.00065	0.00344	-0.00222	-0.00233	-0.00116
0006						0.18920	0.13169	-0.00085	0.00371	-0.00200	-0.00210	-0.00108
0007						0.26090	0.08973	-0.00059	0.00331	-0.00190	-0.00199	-0.00110
0008						0.33350	0.15686	-0.00022	0.00283	-0.00199	-0.00219	-0.00119
0009						0.40350	0.18586	0.00050	0.00636	-0.00200	-0.00220	-0.00108

003

PT	TEST PARAMS WING SWEEP	MACH NO.	INPUT RUNS INVERTED ONLY	INVERTED W/DUMMY	UPRIGHT W/DUMMY	LIFT	ALPHA (DEG)	FLOW INCLINATION CORRECTIONS DRAG	PITCH'G MOMENT	SIDE FORCE	YAWING MOMENT	ROLLING MOMENT
0001	55.0000	1.20000	209.000	213.000	226.000	-0.12870	0.12876	-0.00060	0.00126	-0.00020	-0.00026	-0.00005
0002						-0.07310	0.14244	-0.00055	0.00136	-0.00021	-0.00016	-0.00010
0003						-0.00950	0.12917	-0.00046	0.00053	-0.00010	-0.00016	-0.00008
0004						0.05620	0.11520	-0.00026	-0.00011	-0.00020	-0.00020	-0.00009
0005						0.12140	0.10410	-0.00024	-0.00011	-0.00020	-0.00021	-0.00009
0006						0.18920	0.10560	0.00000	-0.00050	-0.00020	-0.00020	-0.00009
0007						0.26090	0.11210	0.00025	-0.00092	-0.00015	-0.00020	-0.00009
0008						0.33350	0.11159	0.00045	-0.00164	-0.00010	-0.00010	-0.00000
0009						0.40350	0.11144	0.00073	0.00092	-0.00014	-0.00019	0.00002

004

PT	TEST PARAMS WING SWEEP	MACH NO.	INPUT RUNS INVERTED ONLY	INVERTED W/DUMMY	UPRIGHT W/DUMMY	LIFT	ALPHA (DEG)	TOTAL TARE CORRECTIONS DRAG	PITCH'G MOMENT	SIDE FORCE	YAWING MOMENT	ROLLING MOMENT
0001	55.0000	1.20000	209.000	213.000	226.000	-0.12870	0.29474	-0.00121	0.00615	-0.00271	-0.00270	-0.00151
0002						-0.07310	0.28092	-0.00130	0.00533	-0.00295	-0.00294	-0.00142
0003						-0.00950	0.27540	-0.00110	0.00522	-0.00296	-0.00295	-0.00133
0004						0.05620	0.26013	-0.00086	0.00481	-0.00283	-0.00267	-0.00124
0005						0.12140	0.24561	-0.00090	0.00333	-0.00243	-0.00254	-0.00125
0006						0.18920	0.23745	-0.00085	0.00321	-0.00220	-0.00231	-0.00118
0007						0.26090	0.20183	-0.00032	0.00239	-0.00205	-0.00220	-0.00120
0008						0.33350	0.26881	0.00022	0.00119	-0.00210	-0.00230	-0.00120
0009						0.40350	0.29731	0.00123	0.00729	-0.00214	-0.00239	-0.00106

* ZERO * BASE * TARE * ALTER DECKS
* IZRO * RUN? * TARE *

TABLE 2

AERODYNAMIC TARES DATA
(continued)

* TEST * TAB * RUN *
* 344-0 * 002 * 730 *

* DATE * TIME * CONFIGURATION
* 06-09-75 * 1117 *

* GENERAL DYNAMICS
* HIGH SPEED WIND TUNNEL
* FINAL DATA

* TOC * SOC * TEST * TAB * RUN *
* 00 * 00 * 344-0 * 004 * 731 *

TOTAL TARE CORRECTIONS

PT	TEST PARAMS WING SWEEP	MACH NO.	LIFT	ALPHA (DEG)	DRAG	PITCH'G MOMENT	SIDE FORCE	YAWING MOMENT	ROLLING MOMENT
0001	25.0000	0.70000	-0.10000	0.18000	-0.00010	-0.02100	-0.00100	-0.00100	-0.00030
0002			0.00000	0.23000	0.00010	-0.01900	-0.00090	-0.00100	-0.00060
0003			0.10000	0.25000	0.00040	-0.01800	-0.00090	-0.00100	-0.00080
0004			0.20000	0.26000	0.00090	-0.01800	-0.00080	-0.00090	-0.00090
0005			0.30000	0.27000	0.00160	-0.01800	-0.00080	-0.00090	-0.00100
0006			0.40000	0.28000	0.00230	-0.01700	-0.00070	-0.00080	-0.00100
0007			0.50000	0.28000	0.00310	-0.01600	-0.00060	-0.00080	-0.00110
0008			0.60000	0.28000	0.00350	-0.01400	-0.00050	-0.00060	-0.00120

* DATE * TIME * CONFIGURATION
* 06-09-75 * 1117 *

* GENERAL DYNAMICS
* HIGH SPEED WIND TUNNEL
* FINAL DATA

* TOC * SOC * TEST * TAB * RUN *
* 00 * 00 * 344-0 * 004 * 732 *

TOTAL TARE CORRECTIONS

PT	TEST PARAMS WING SWEEP	MACH NO.	LIFT	ALPHA (DEG)	DRAG	PITCH'G MOMENT	SIDE FORCE	YAWING MOMENT	ROLLING MOMENT
0001	25.0000	0.80000	-0.10000	0.36000	-0.00100	-0.02100	-0.00100	-0.00090	-0.00040
0002			0.00000	0.31000	0.00000	-0.02000	-0.00120	-0.00110	-0.00080
0003			0.10000	0.29000	0.00020	-0.01900	-0.00130	-0.00120	-0.00100
0004			0.20000	0.30000	0.00050	-0.01800	-0.00120	-0.00130	-0.00110
0005			0.30000	0.31000	0.00130	-0.01700	-0.00110	-0.00130	-0.00120
0006			0.40000	0.29000	0.00200	-0.01500	-0.00100	-0.00120	-0.00130
0007			0.50000	0.29000	0.00270	-0.01500	-0.00090	-0.00120	-0.00120
0008			0.60000	0.29000	0.00340	-0.01600	-0.00080	-0.00110	-0.00110
0009			0.70000	0.29000	0.00400	-0.01700	-0.00080	-0.00110	-0.00100

* DATE * TIME * CONFIGURATION
* 06-09-75 * 1117 *

* GENERAL DYNAMICS
* HIGH SPEED WIND TUNNEL
* FINAL DATA

* TOC * SOC * TEST * TAB * RUN *
* 00 * 00 * 344-0 * 004 * 733 *

TOTAL TARE CORRECTIONS

PT	TEST PARAMS WING SWEEP	MACH NO.	LIFT	ALPHA (DEG)	DRAG	PITCH'G MOMENT	SIDE FORCE	YAWING MOMENT	ROLLING MOMENT
0001	25.0000	0.90000	-0.10000	0.38000	-0.00090	-0.02200	-0.00090	-0.00100	-0.00050
0002			0.00000	0.33000	-0.00010	-0.02100	-0.00120	-0.00120	-0.00080
0003			0.10000	0.31000	0.00020	-0.01900	-0.00130	-0.00130	-0.00100
0004			0.20000	0.31000	0.00070	-0.01800	-0.00120	-0.00130	-0.00120
0005			0.30000	0.30000	0.00130	-0.01600	-0.00110	-0.00130	-0.00120
0006			0.40000	0.30000	0.00200	-0.01500	-0.00100	-0.00120	-0.00120
0007			0.50000	0.30000	0.00280	-0.01500	-0.00100	-0.00120	-0.00120
0008			0.60000	0.30000	0.00350	-0.01600	-0.00090	-0.00120	-0.00110

* ZERO * BASE * TARE * ALTER DECKS
* IZ00 * B002 * NONE * A201

TABLE 2

AERODYNAMIC TARES DATA
(continued)

* TEST * TAB * RUN *
* 344-0 * 004 * 731 *
* 732 *
733

DATE	TIME	CONFIGURATION
06-09-75	1117	

GENERAL DYNAMICS
HIGH SPEED WIND TUNNEL
FINAL DATA

TOC	SOC	TEST	TAB	RUN
00	00	344-0	004	734

PT	TEST PARAMS WING SWEEP	TEST PARAMS MACH NO.	LIFT	ALPHA (DEG)	TOTAL TARE CORRECTIONS DRAG	PITCH'G MOMENT	SIDE FORCE	YAWING MOMENT	ROLLING MOMENT
0001	35.0000	0.95000	-0.20000	0.58000	-0.00300	-0.00200	-0.00200	-0.00200	-0.00210
0002			-0.10000	0.40000	-0.00130	-0.00500	-0.00250	-0.00250	-0.00160
0003			0.00000	0.32000	-0.00100	-0.00600	-0.00300	-0.00290	-0.00160
0004			0.10000	0.28000	-0.00060	-0.00500	-0.00290	-0.00290	-0.00190
0005			0.20000	0.26000	-0.00030	-0.00200	-0.00250	-0.00280	-0.00200
0006			0.30000	0.22000	0.00020	-0.00500	-0.00220	-0.00240	-0.00190
0007			0.40000	0.17000	0.00050	-0.01000	-0.00180	-0.00190	-0.00150
0008			0.50000	0.13000	0.00070	-0.01100	-0.00160	-0.00170	-0.00130

DATE	TIME	CONFIGURATION
06-09-75	1118	

GENERAL DYNAMICS
HIGH SPEED WIND TUNNEL
FINAL DATA

TOC	SOC	TEST	TAB	RUN
00	00	344-0	004	735

PT	TEST PARAMS WING SWEEP	TEST PARAMS MACH NO.	LIFT	ALPHA (DEG)	TOTAL TARE CORRECTIONS DRAG	PITCH'G MOMENT	SIDE FORCE	YAWING MOMENT	ROLLING MOMENT
0001	50.0000	0.80000	-0.20000	0.30000	-0.00140	-0.01200	-0.00190	-0.00180	-0.00060
0002			-0.10000	0.32000	-0.00110	-0.01300	-0.00170	-0.00170	-0.00070
0003			0.00000	0.30000	-0.00070	-0.01500	-0.00140	-0.00150	-0.00080
0004			0.10000	0.29000	-0.00030	-0.01500	-0.00130	-0.00140	-0.00080
0005			0.20000	0.29000	0.00040	-0.01400	-0.00110	-0.00120	-0.00080
0006			0.30000	0.29000	0.00100	-0.01400	-0.00100	-0.00110	-0.00080
0007			0.40000	0.29000	0.00180	-0.01300	-0.00090	-0.00110	-0.00090

DATE	TIME	CONFIGURATION
06-09-75	1118	

GENERAL DYNAMICS
HIGH SPEED WIND TUNNEL
FINAL DATA

TOC	SOC	TEST	TAB	RUN
00	00	344-0	004	736

PT	TEST PARAMS WING SWEEP	TEST PARAMS MACH NO.	LIFT	ALPHA (DEG)	TOTAL TARE CORRECTIONS DRAG	PITCH'G MOMENT	SIDE FORCE	YAWING MOMENT	ROLLING MOMENT
0001	50.0000	0.95000	-0.20000	0.44000	-0.00260	-0.00800	-0.00280	-0.00280	-0.00110
0002			-0.10000	0.38000	-0.00220	-0.00700	-0.00300	-0.00300	-0.00110
0003			0.00000	0.33000	-0.00190	-0.00800	-0.00300	-0.00300	-0.00120
0004			0.10000	0.30000	-0.00140	-0.00800	-0.00260	-0.00270	-0.00130
0005			0.20000	0.28000	-0.00090	-0.00800	-0.00210	-0.00230	-0.00150
0006			0.30000	0.28000	-0.00020	-0.00700	-0.00160	-0.00200	-0.00160
0007			0.40000	0.28000	0.00060	-0.00600	-0.00150	-0.00200	-0.00170

ZERO	BASE	TARE	ALTER DECKS
I700	8002	NONE	A201

TABLE 2

AERODYNAMIC TARES DATA
(continued)

TEST	TAB	RUN
344-0	004	734
		735
		736

* DATE * TIME * CONFIGURATION
* 06-09-75 * 1118 *

* GENERAL DYNAMICS
* HIGH SPEED WIND TUNNEL
* FINAL DATA

* TOC * SOC * TEST * TAB * RUN *
* 00 * 00 * 344-0 * 004 * 737 *

TOTAL TARE CORRECTIONS

PT	WING SWEEP	MACH NO.	LIFT	ALPHA (DEG)	DRAG	PITCH'G MOMENT	SIDE FORCE	YAWING MOMENT	ROLLING MOMENT
0001	50.0000	0.90000	-0.20000	0.44000	-0.00210	-0.00600	-0.00100	-0.00100	-0.00190
0002			-0.10000	0.36000	-0.00170	-0.00400	-0.00170	-0.00170	-0.00180
0003			0.00000	0.36000	-0.00110	-0.00200	-0.00230	-0.00230	-0.01160
0004			0.10000	0.35000	-0.00070	0.00000	-0.00240	-0.00250	-0.00170
0005			0.20000	0.32000	-0.00020	0.00000	-0.00230	-0.00250	-0.00170
0006			0.30000	0.29000	0.00010	0.00000	-0.00220	-0.00240	-0.00160
0007			0.40000	0.23000	0.00060	0.00100	-0.00220	-0.00250	-0.00170
0008			0.50000	0.15000	0.00110	0.00500	-0.00240	-0.00260	-0.00190

* DATE * TIME * CONFIGURATION
* 06-09-75 * 1118 *

* GENERAL DYNAMICS
* HIGH SPEED WIND TUNNEL
* FINAL DATA

* TOC * SOC * TEST * TAB * RUN *
* 00 * 00 * 344-0 * 004 * 738 *

TOTAL TARE CORRECTIONS

PT	WING SWEEP	MACH NO.	LIFT	ALPHA (DEG)	DRAG	PITCH'G MOMENT	SIDE FORCE	YAWING MOMENT	ROLLING MOMENT
0001	50.0000	1.10000	-0.10000	0.40000	-0.00020	0.00500	-0.00230	-0.00240	-0.00190
0002			0.00000	0.36000	0.00010	0.00000	-0.00230	-0.00240	-0.00180
0003			0.10000	0.30000	0.00030	0.00100	-0.00210	-0.00220	-0.00170
0004			0.20000	0.25000	0.00060	0.00400	-0.00200	-0.00210	-0.00180
0005			0.30000	0.23000	0.00110	0.00500	-0.00210	-0.00220	-0.00170

* DATE * TIME * CONFIGURATION
* 06-09-75 * 1118 *

* GENERAL DYNAMICS
* HIGH SPEED WIND TUNNEL
* FINAL DATA

* TOC * SOC * TEST * TAB * RUN *
* 00 * 00 * 344-0 * 004 * 739 *

TOTAL TARE CORRECTIONS

PT	WING SWEEP	MACH NO.	LIFT	ALPHA (DEG)	DRAG	PITCH'G MOMENT	SIDE FORCE	YAWING MOMENT	ROLLING MOMENT
0001	50.0000	1.20000	-0.20000	0.34000	-0.00100	0.00900	-0.00310	-0.00300	-0.00220
0002			-0.10000	0.31000	-0.00020	0.01000	-0.00310	-0.00310	-0.00210
0003			0.00000	0.34000	0.00040	0.01000	-0.00300	-0.00310	-0.00200
0004			0.10000	0.32000	0.00070	0.01000	-0.00270	-0.00290	-0.00190
0005			0.20000	0.28000	0.00140	0.01000	-0.00210	-0.00230	-0.00190
0006			0.30000	0.30000	0.00220	0.01200	-0.00190	-0.00210	-0.00190
0007			0.40000	0.38000	0.00300	0.01600	-0.00190	-0.00200	-0.00180

* ZERO * BASE * TARE * ALTER DECKS
* IZ09 * R002 * NONE * A201

TABLE 2

AERODYNAMIC TARES DATA
(continued)

* TEST * TAB * RUN *
* 344-0 * 004 * 737 *
* 738 *
739

DATE	TIME	CONFIGURATION
06-09-75	1118	

GENERAL DYNAMICS
HIGH SPEED WING TUNNEL
FINAL DATA

TOC	SOC	TEST	TAB	RUN
00	00	344-0	004	740

PT	TEST PARAMS WING SWEEP	TEST PARAMS MACH NO.
0001	60.0000	0.80000
0002		
0003		
0004		
0005		

LIFT	ALPHA (DEG)	TOTAL TARE CORRECTIONS DRAG	PITCH'G MOMENT	SIDE FORCE	YAWING MOMENT	ROLLING MOMENT
-0.10000	0.36000	-0.00140	-0.01300	-0.00190	-0.00180	-0.00020
0.00000	0.29000	-0.00090	-0.01600	-0.00130	-0.00130	-0.00030
0.10000	0.27000	-0.00030	-0.01700	-0.00110	-0.00110	-0.00030
0.20000	0.26000	0.00050	-0.01700	-0.00090	-0.00090	-0.00030
0.30000	0.26000	0.00140	-0.01600	-0.00070	-0.00080	-0.00040

DATE	TIME	CONFIGURATION
06-09-75	1118	

GENERAL DYNAMICS
HIGH SPEED WING TUNNEL
FINAL DATA

TOC	SOC	TEST	TAB	RUN
00	00	344-0	004	741

PT	TEST PARAMS WING SWEEP	TEST PARAMS MACH NO.
0001	45.0000	0.98000
0002		
0003		
0004		
0005		
0006		
0007		

LIFT	ALPHA (DEG)	TOTAL TARE CORRECTIONS DRAG	PITCH'G MOMENT	SIDE FORCE	YAWING MOMENT	ROLLING MOMENT
-0.10000	0.34000	-0.00190	0.00400	-0.00070	-0.00080	-0.00160
0.00000	0.33000	-0.00140	0.00300	-0.00080	-0.00100	-0.00170
0.10000	0.31000	-0.00080	0.00200	-0.00080	-0.00110	-0.00180
0.20000	0.28000	-0.00040	0.00100	-0.00080	-0.00120	-0.00200
0.30000	0.26000	0.00010	-0.00300	-0.00070	-0.00120	-0.00200
0.40000	0.22000	0.00070	-0.00700	-0.00070	-0.00110	-0.00190
0.50000	0.17000	0.00120	-0.01100	-0.00050	-0.00090	-0.00180

DATE	TIME	CONFIGURATION
06-09-75	1118	

GENERAL DYNAMICS
HIGH SPEED WIND TUNNEL
FINAL DATA

TOC	SOC	TEST	TAB	RUN
00	00	344-0	004	742

PT	TEST PARAMS WING SWEEP	TEST PARAMS MACH NO.
0001	55.0000	0.95000
0002		
0003		
0004		
0005		

LIFT	ALPHA (DEG)	TOTAL TARE CORRECTIONS DRAG	PITCH'G MOMENT	SIDE FORCE	YAWING MOMENT	ROLLING MOMENT
-0.10000	0.37000	-0.00330	-0.00100	-0.00200	-0.00200	-0.00100
0.00000	0.33000	-0.00320	-0.00200	-0.00190	-0.00160	-0.00110
0.10000	0.28000	-0.00330	-0.00300	-0.00140	-0.00150	-0.00110
0.20000	0.25000	-0.00270	-0.00400	-0.00110	-0.00130	-0.00120
0.30000	0.26000	-0.00260	-0.00400	-0.00120	-0.00140	-0.00140

ZERO	BASE	TARE	ALTER DECKS
1200	5002	NONE	4205

TABLE 2

AERODYNAMIC TARES DATA
(continued)

TEST	TAB	RUN
344-0	004	740
		741
		742

DATE 06-09-75 · TIME 1118 · CONFIGURATION

GENERAL DYNAMICS
HIGH SPEED WIND TUNNEL
FINAL DATA

TOC 00 · SOC 00 · TEST 344-0 · TAB 004 · RUN 743

PT	WING SWEEP	MACH NO.	LIFT	ALPHA (DEG)	DRAG	PITCHING MOMENT	SIDE FORCE	YAWING MOMENT	ROLLING MOMENT
	TEST PARAMS		TOTAL TARE CORRECTIONS						
0001	55.0000	1.15000	-0.10000	0.34000	-0.00140	0.00400	-0.00260	-0.00260	-0.00160
0002			0.00000	0.30000	-0.00120	0.00400	-0.00260	-0.00280	-0.00130
0003			0.10000	0.27000	-0.00110	0.00300	-0.00230	-0.00250	-0.00120
0004			0.20000	0.23000	-0.00090	0.00200	-0.00210	-0.00220	-0.00120
0005			0.30000	0.23000	-0.00020	0.00100	-0.00210	-0.00230	-0.00110
0006			0.40000	0.26000	0.00070	-0.00100	-0.00230	-0.00250	-0.00100

ZERO IZ00 · BASE B002 · TARE NONE · ALTER DECKS A201

TABLE 2

AERODYNAMIC TARES DATA
(continued)

TEST 344-0 · TAB 004 · RUN 743

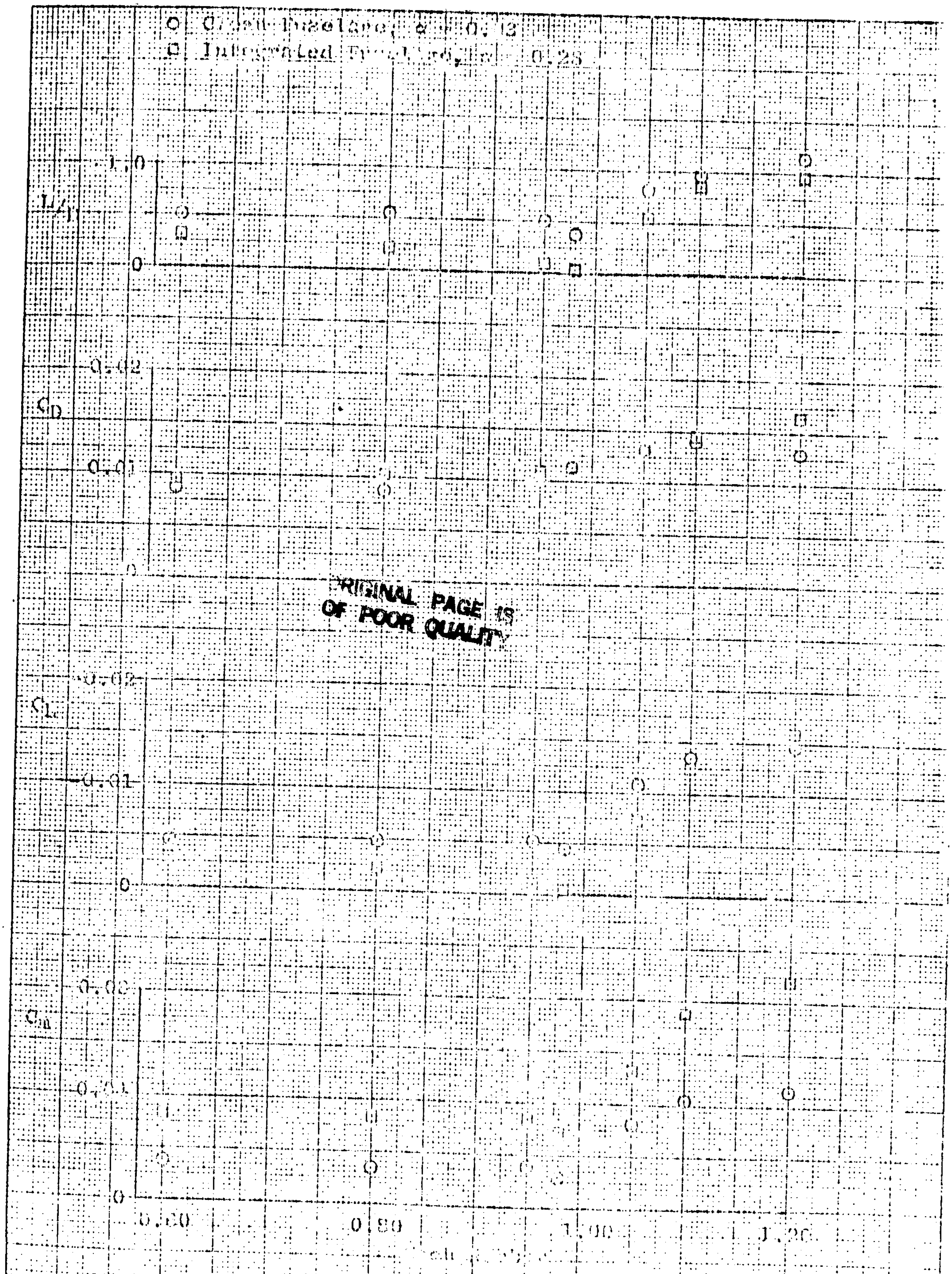


Figure [illegible] Wing-Off [illegible] vs. [illegible] Number

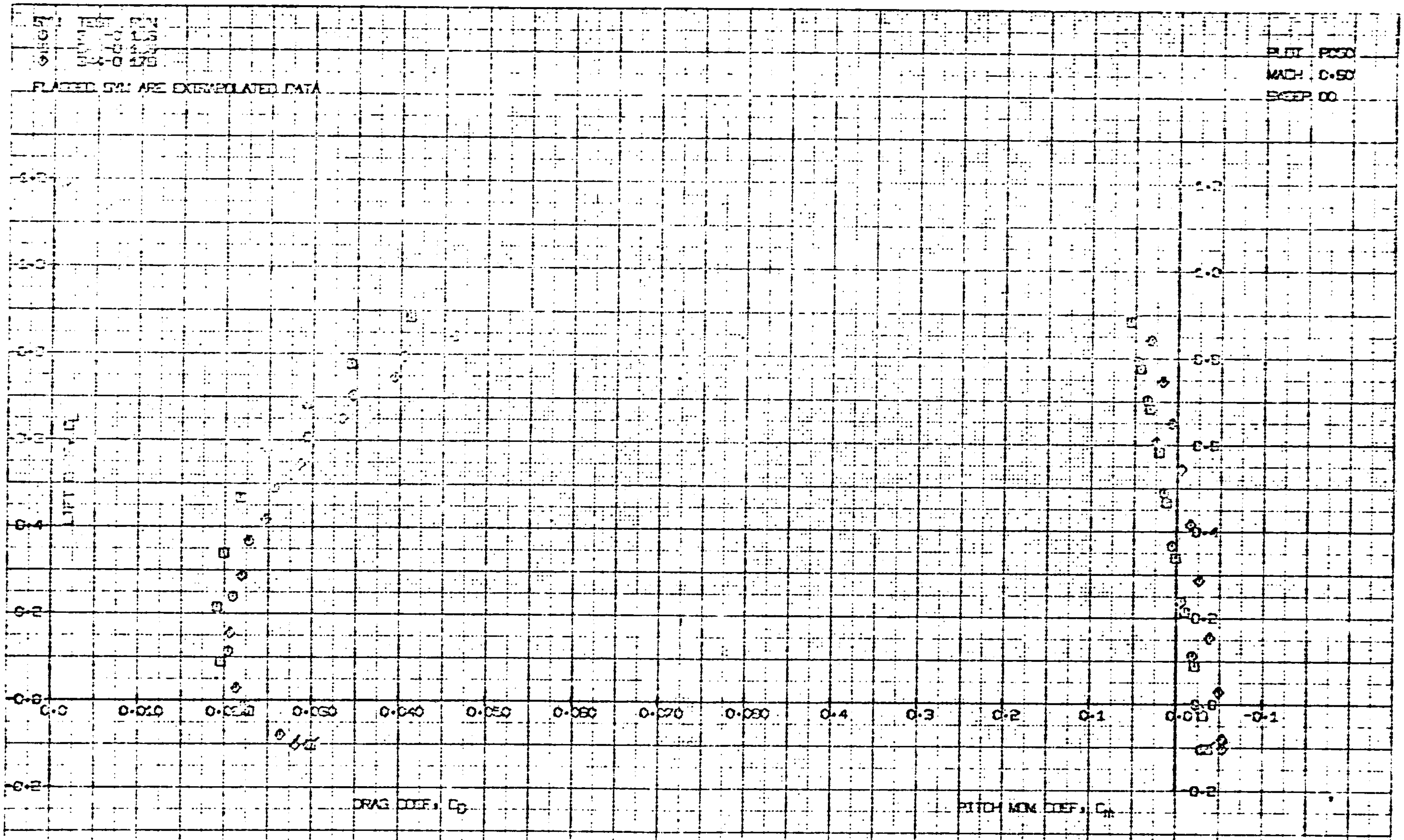


FIGURE 10. TARE DATA RUNS, INTEGRATED FUSELAGE

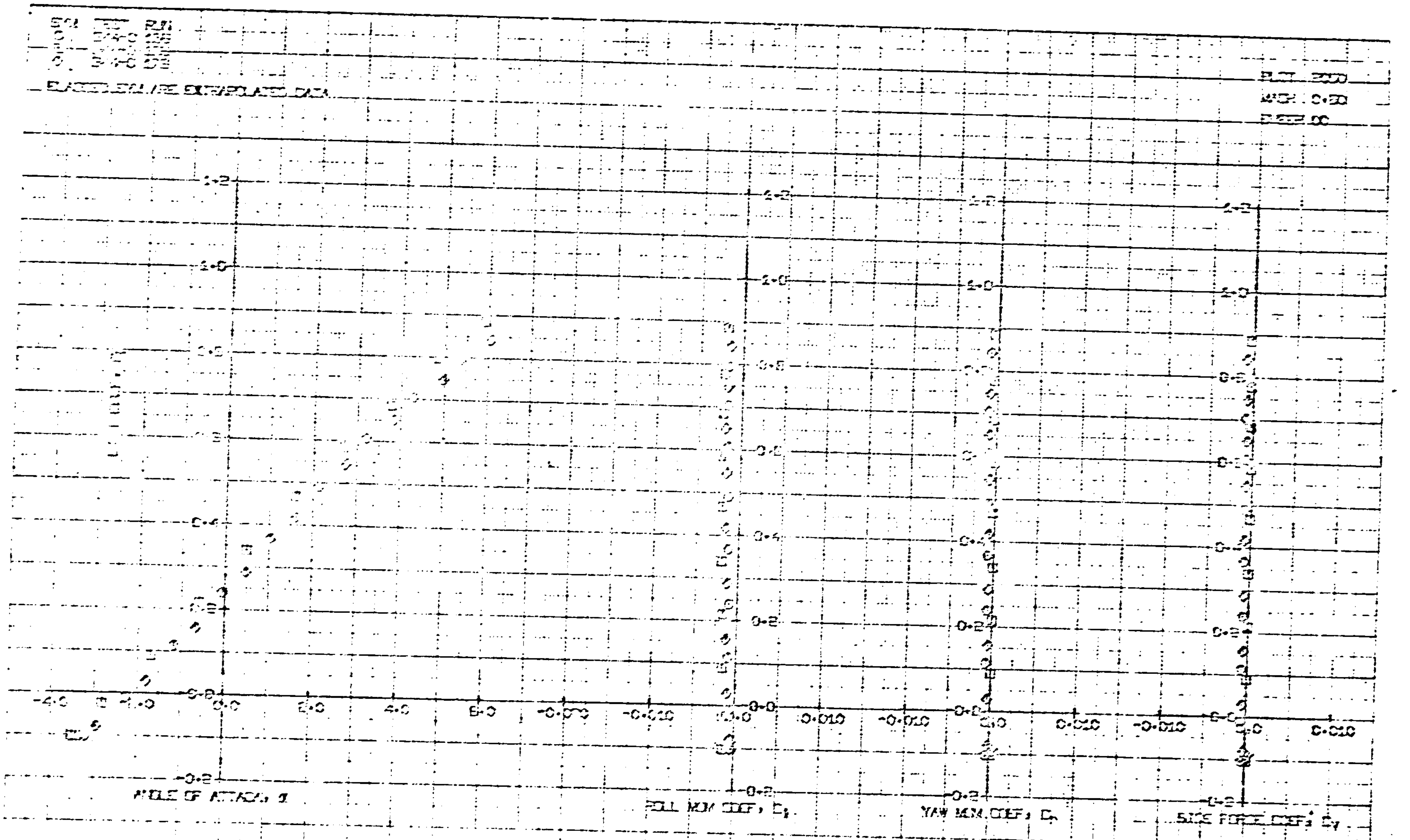


FIGURE 10. TARE DATA RUNS, INTEGRATED FUSELAGE

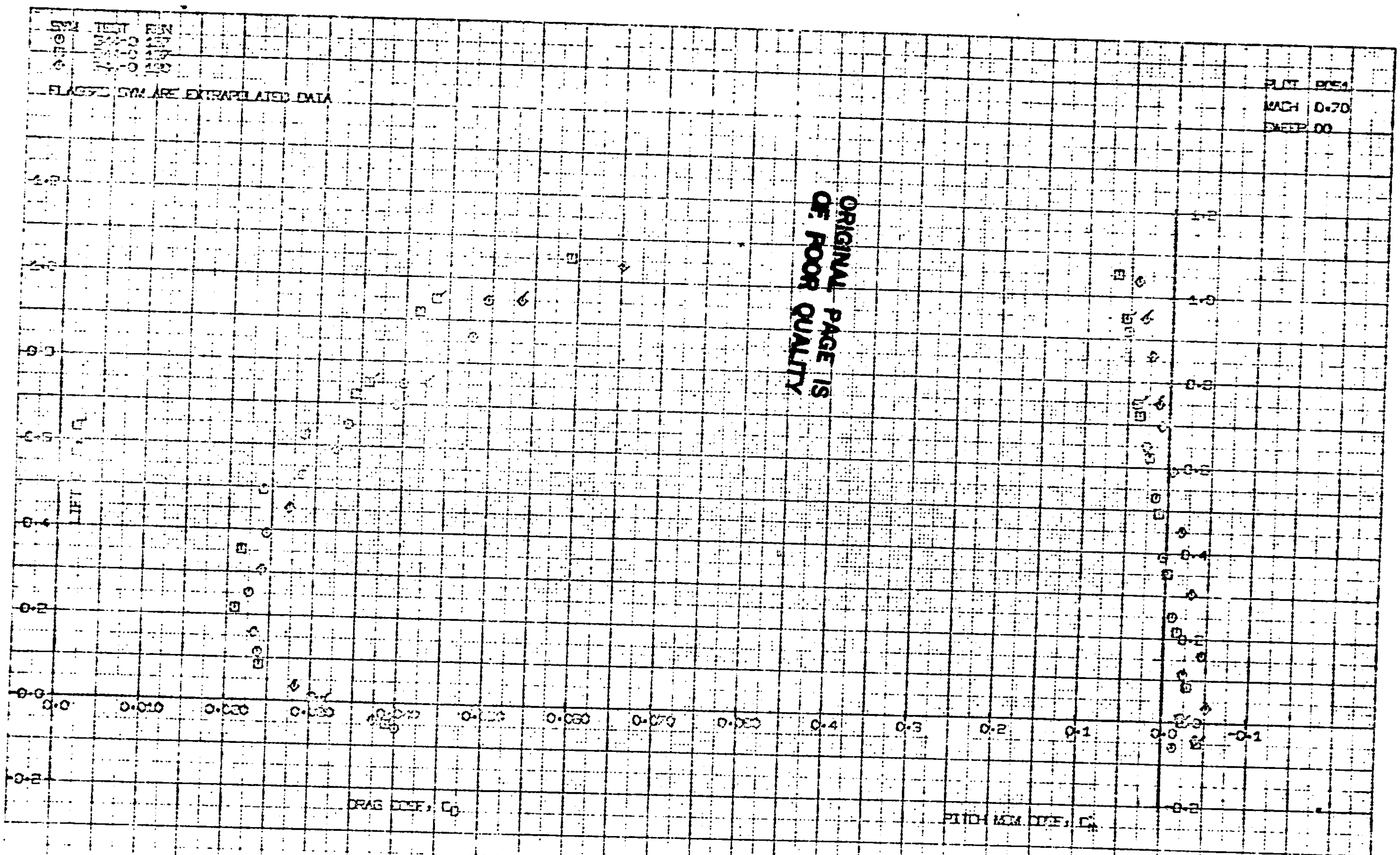


FIGURE 11. TARE DATA RUNS, INTEGRATED FUSELAGE

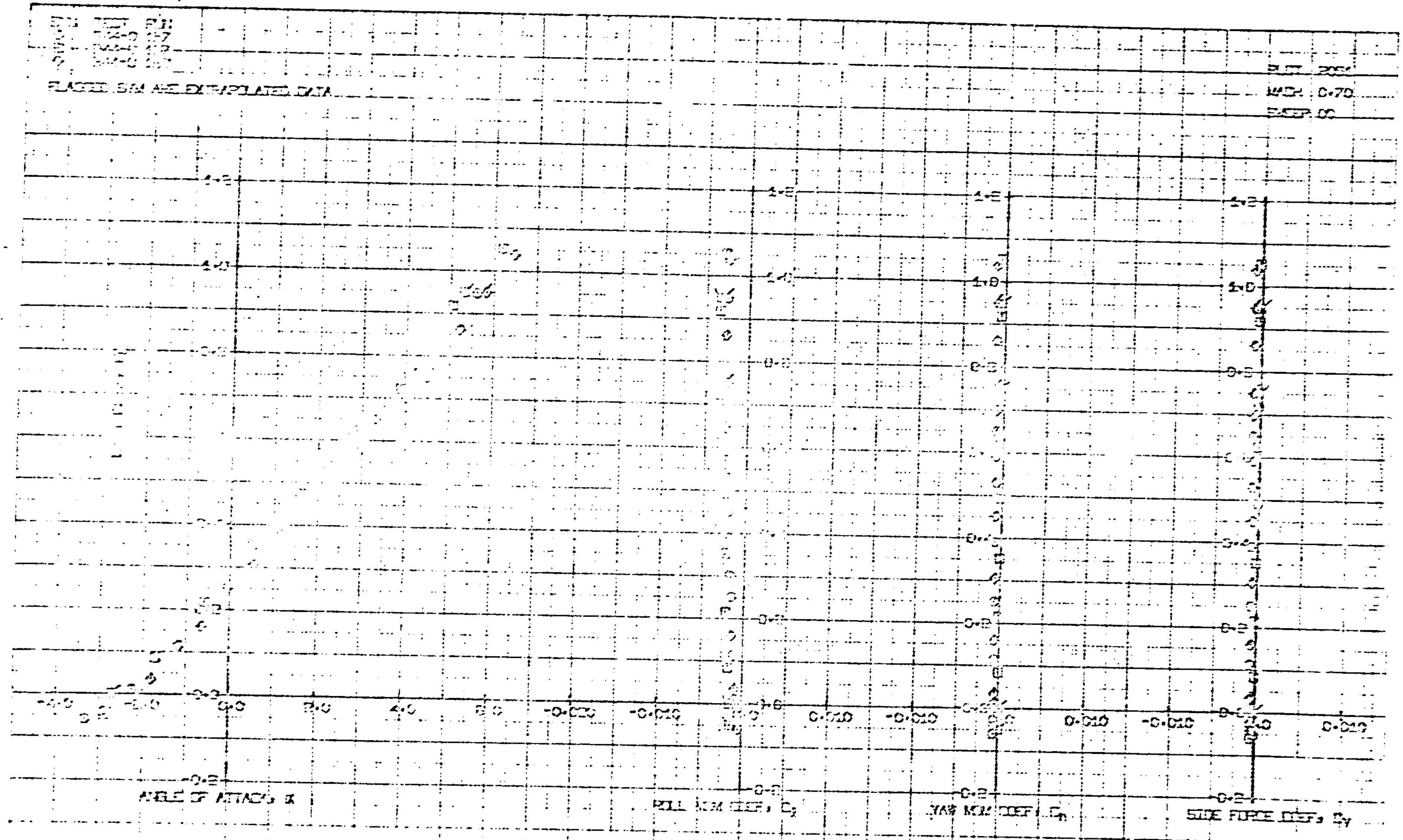


FIGURE 11. YAW DATA FROM INFLATED FUSELAGE

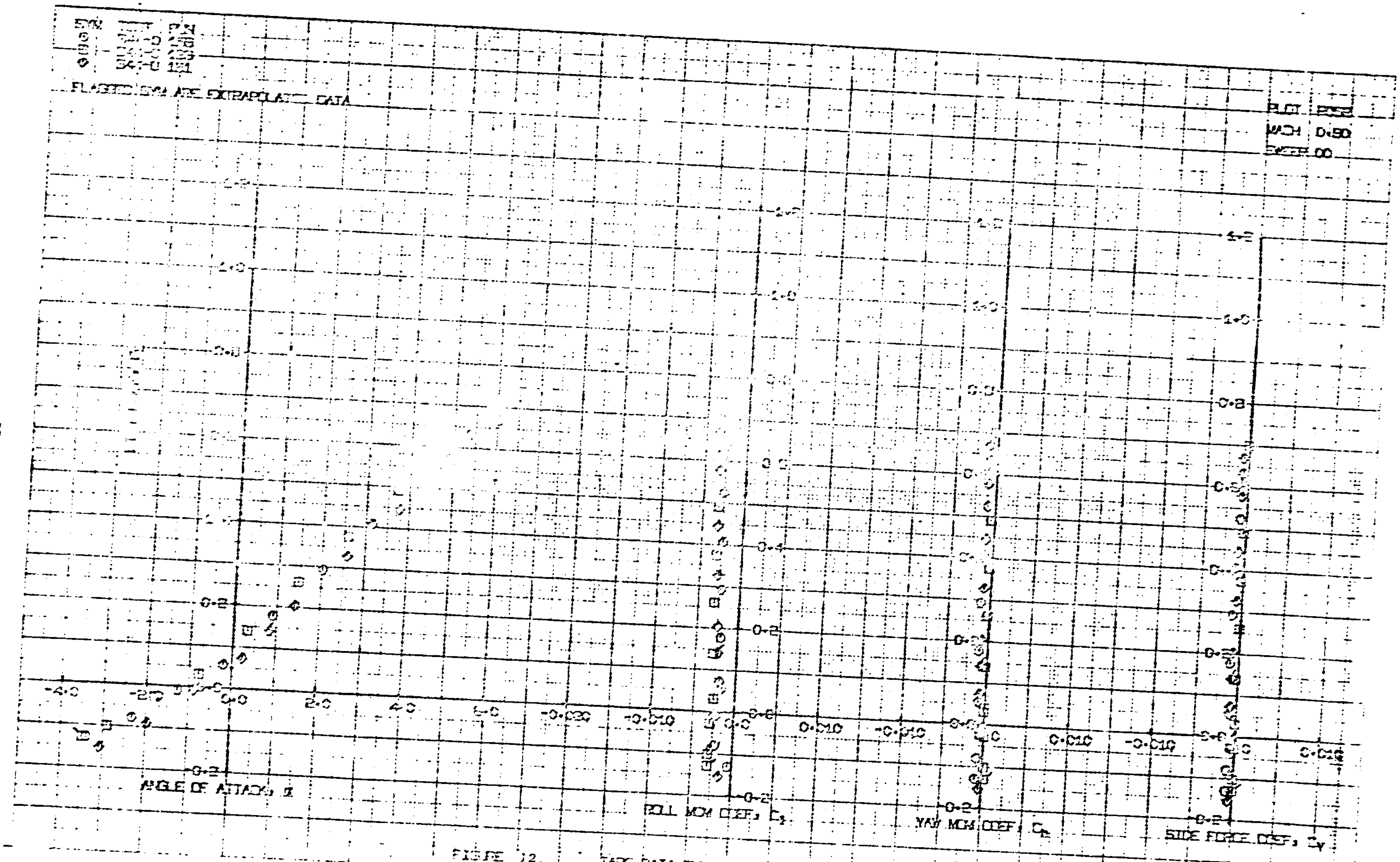


FIGURE 12. TARE DATA RUNS, INTEGRATED FUSELAGE

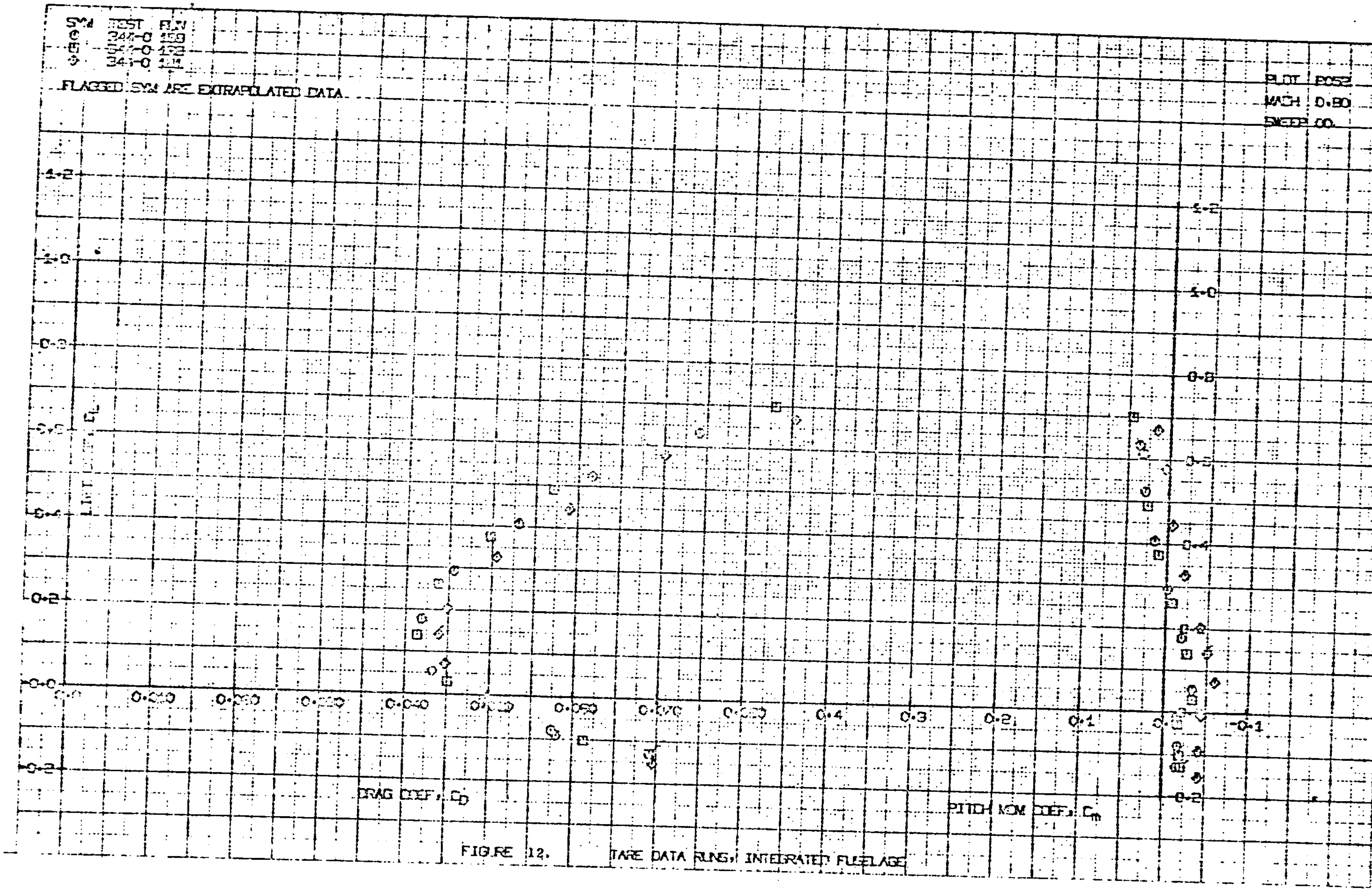


FIGURE 12. TARE DATA RUNS, INTEGRATED FUSELAGE

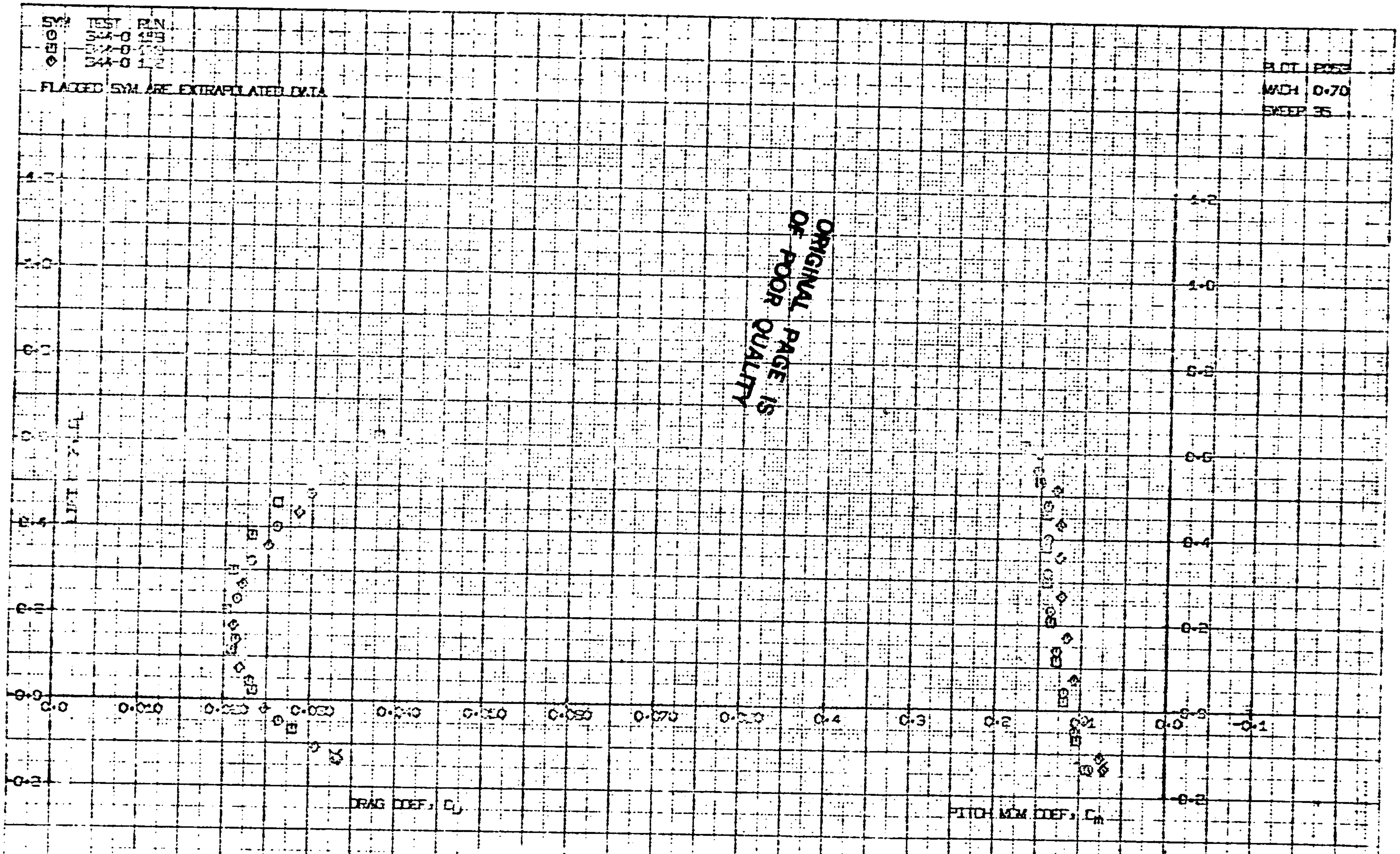


FIGURE 33. TARE DATA RUNS, INTEGRATED FUSELAGE

FIGURE [illegible]. TARE DATA RUNS, INTEGRATED FUSELAGE

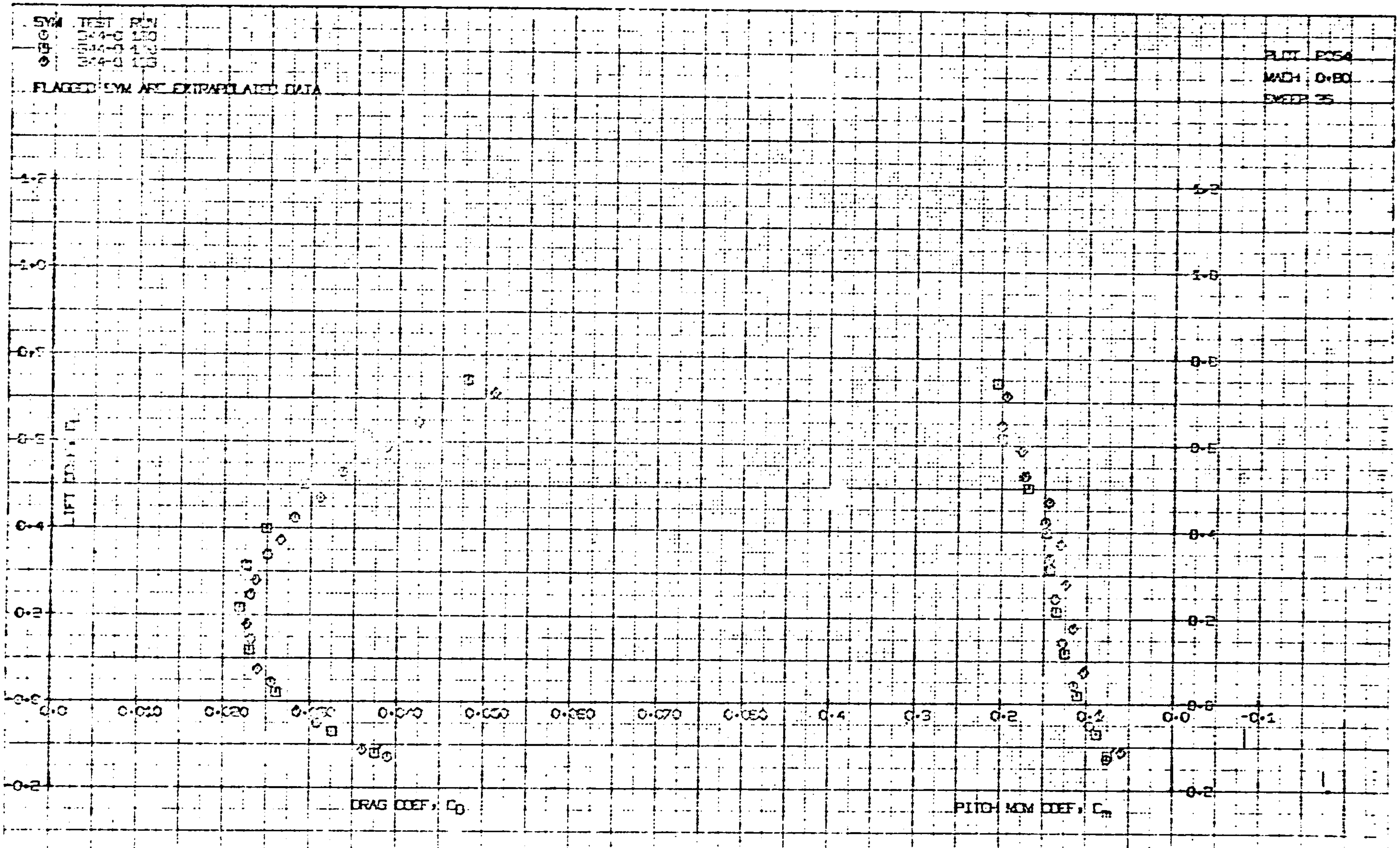


FIGURE 14. TAPE DATA RUNS, INTEGRATED FUSELAGE

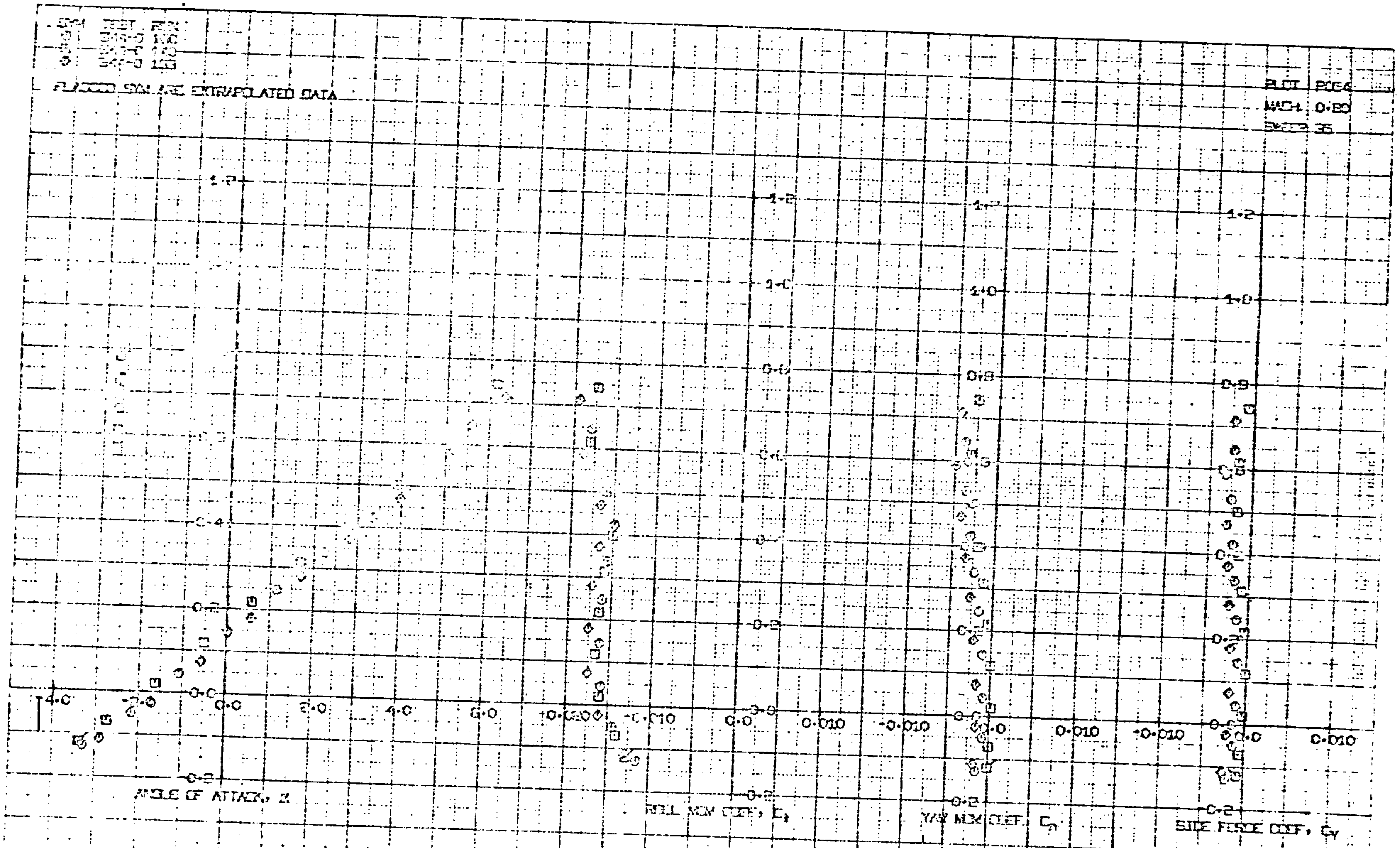


FIGURE 14. TARE DATA RUNS, INTEGRATED FUSELAGE

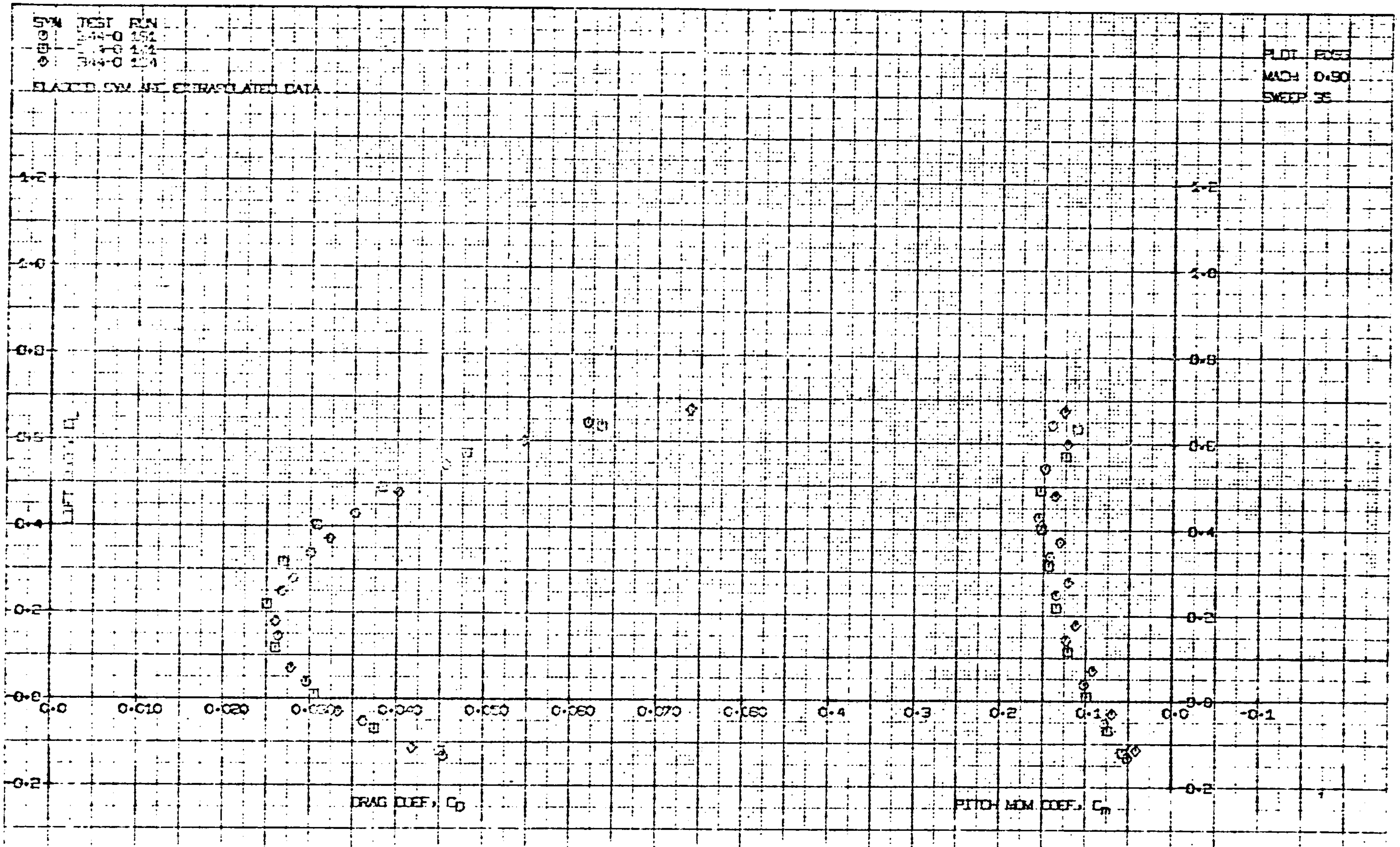


FIGURE 15. TARE DATA RUNS, INTEGRATED FUSELAGE

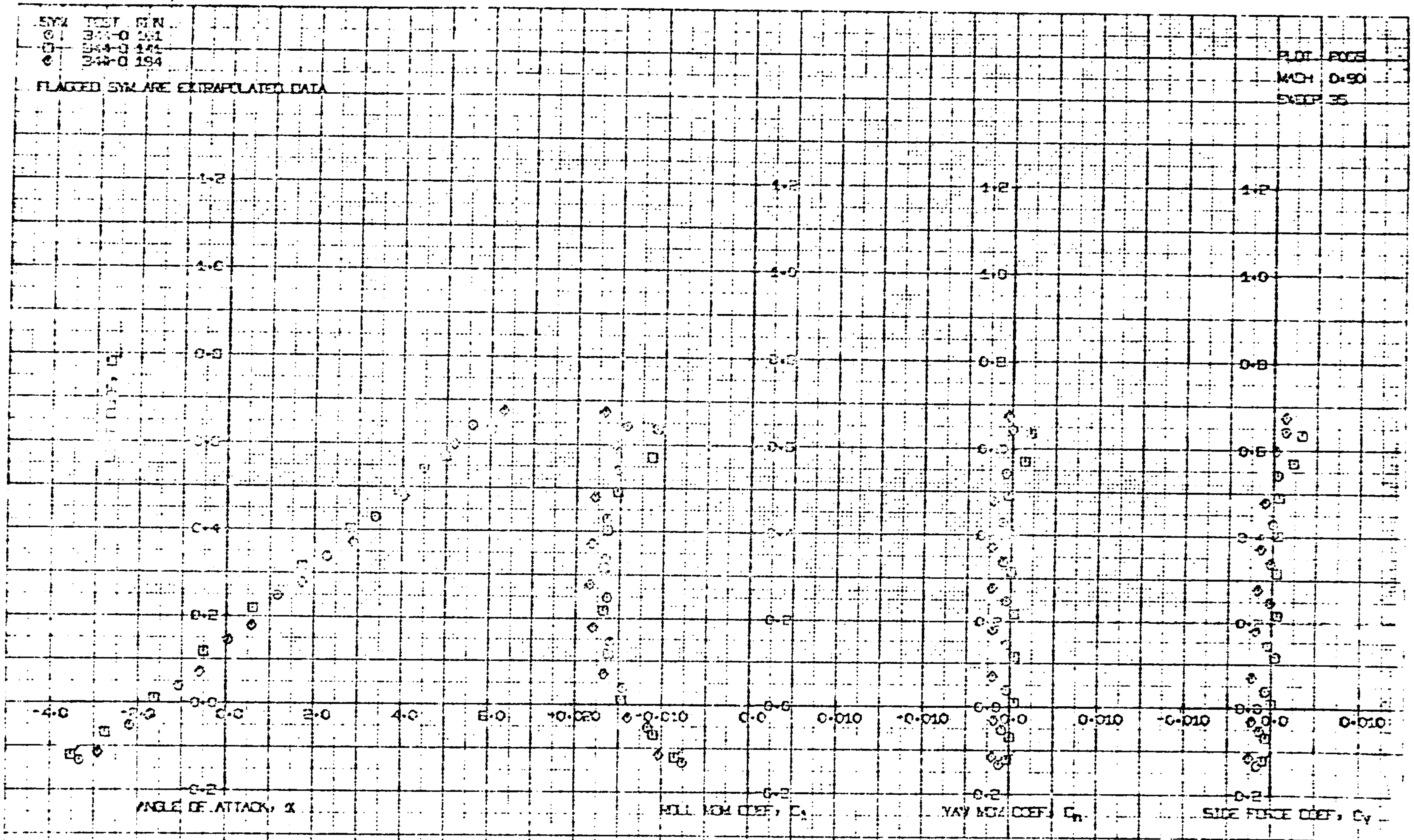


FIGURE 15. TARE DATA RUNS, INTEGRATED FUSELAGE

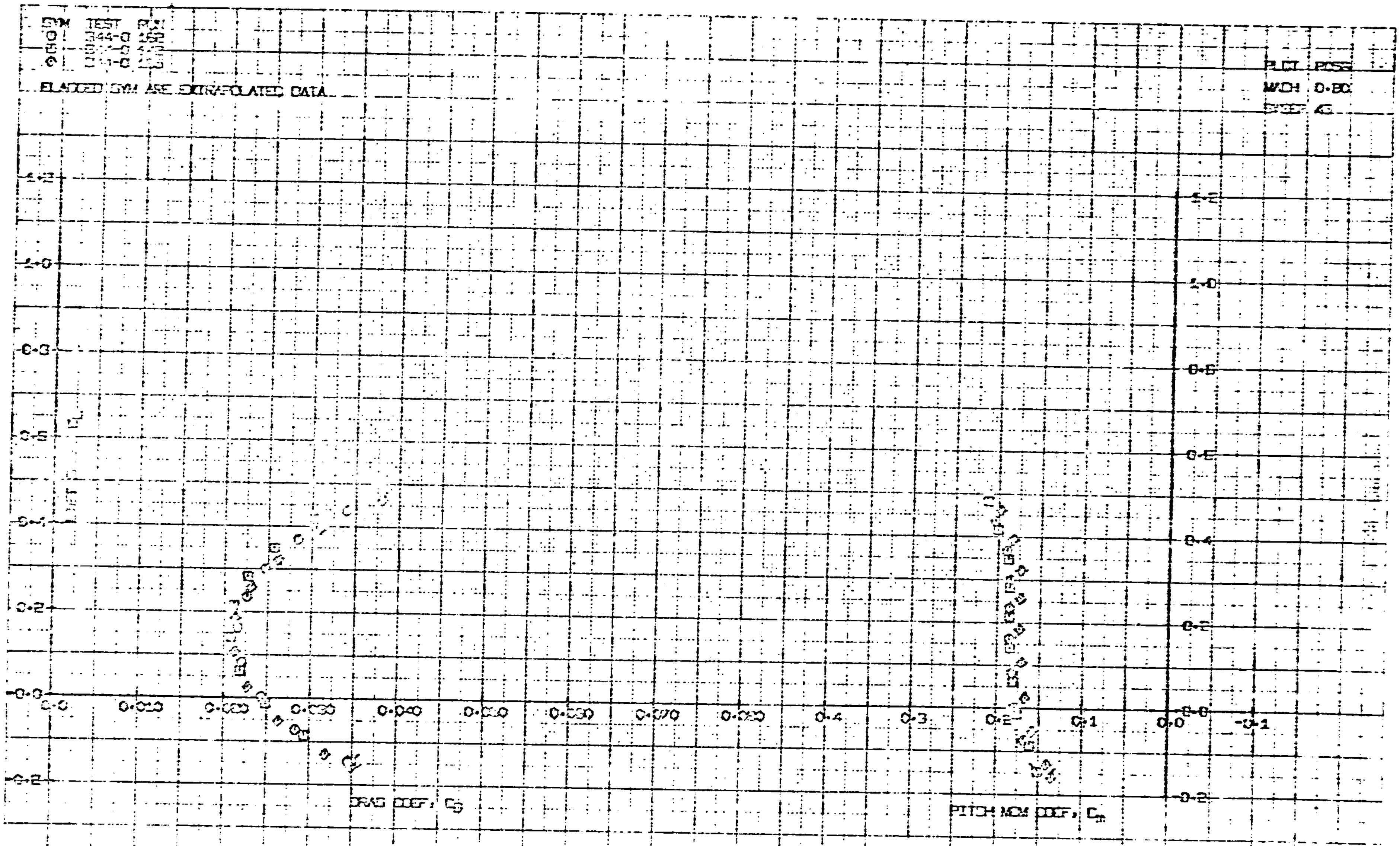


FIGURE 16. TARE DATA RUNS, INTEGRATED FUSELAGE

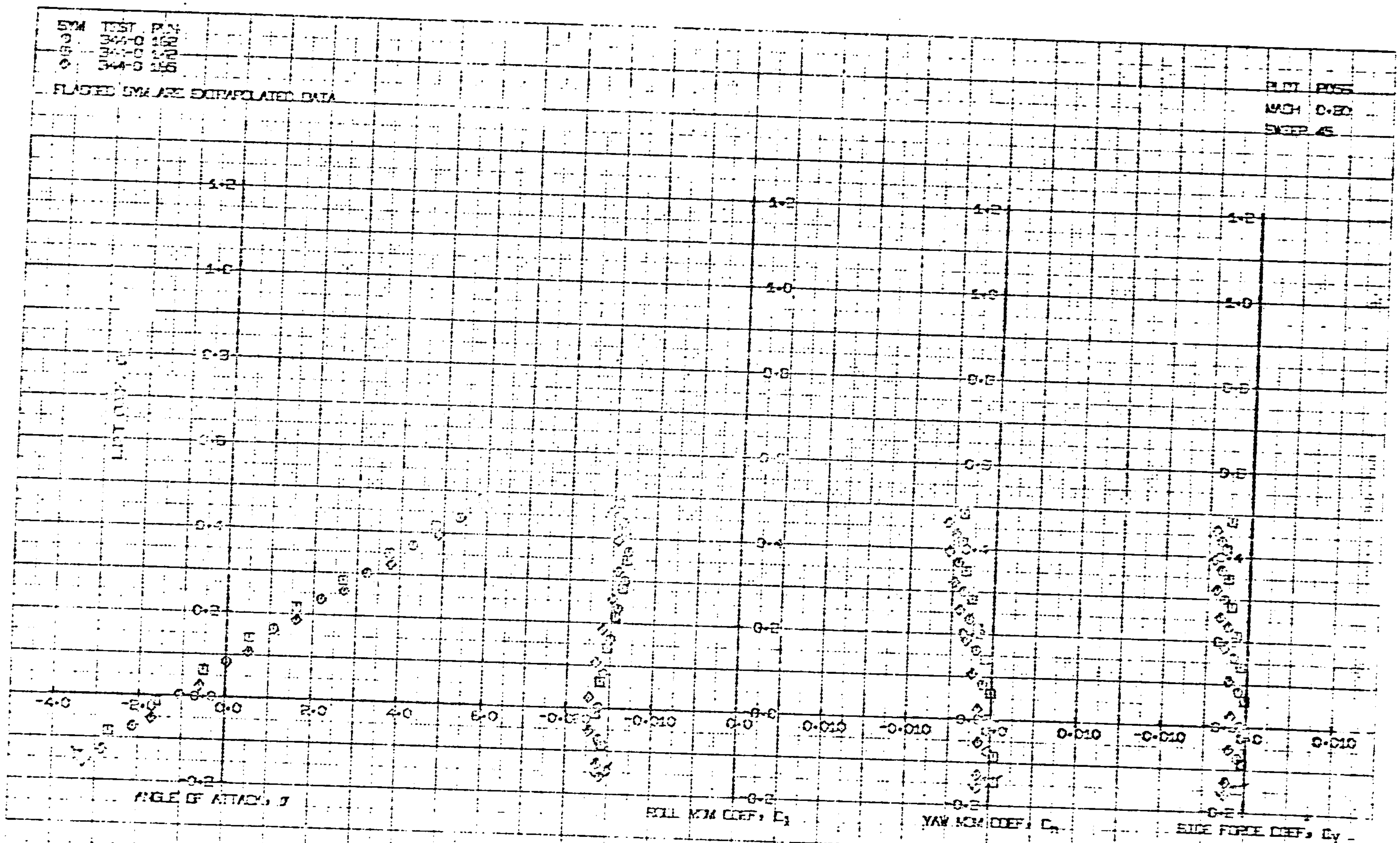


FIGURE 16. TARE DATA RUNS, INTEGRATED FUSELAGE

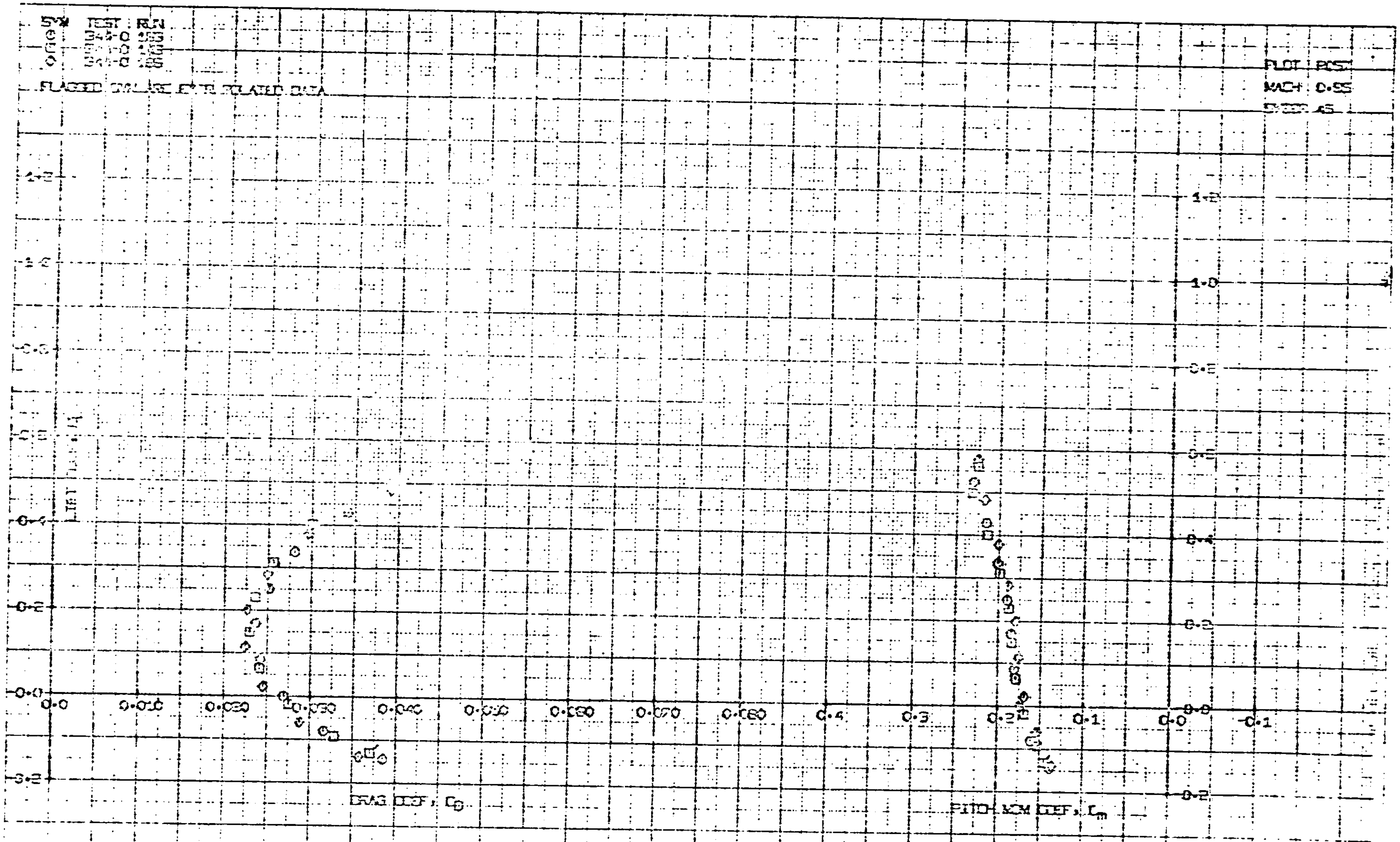


FIGURE 17. TARE DATA RUNS, INTEGRATED FUSELAGE

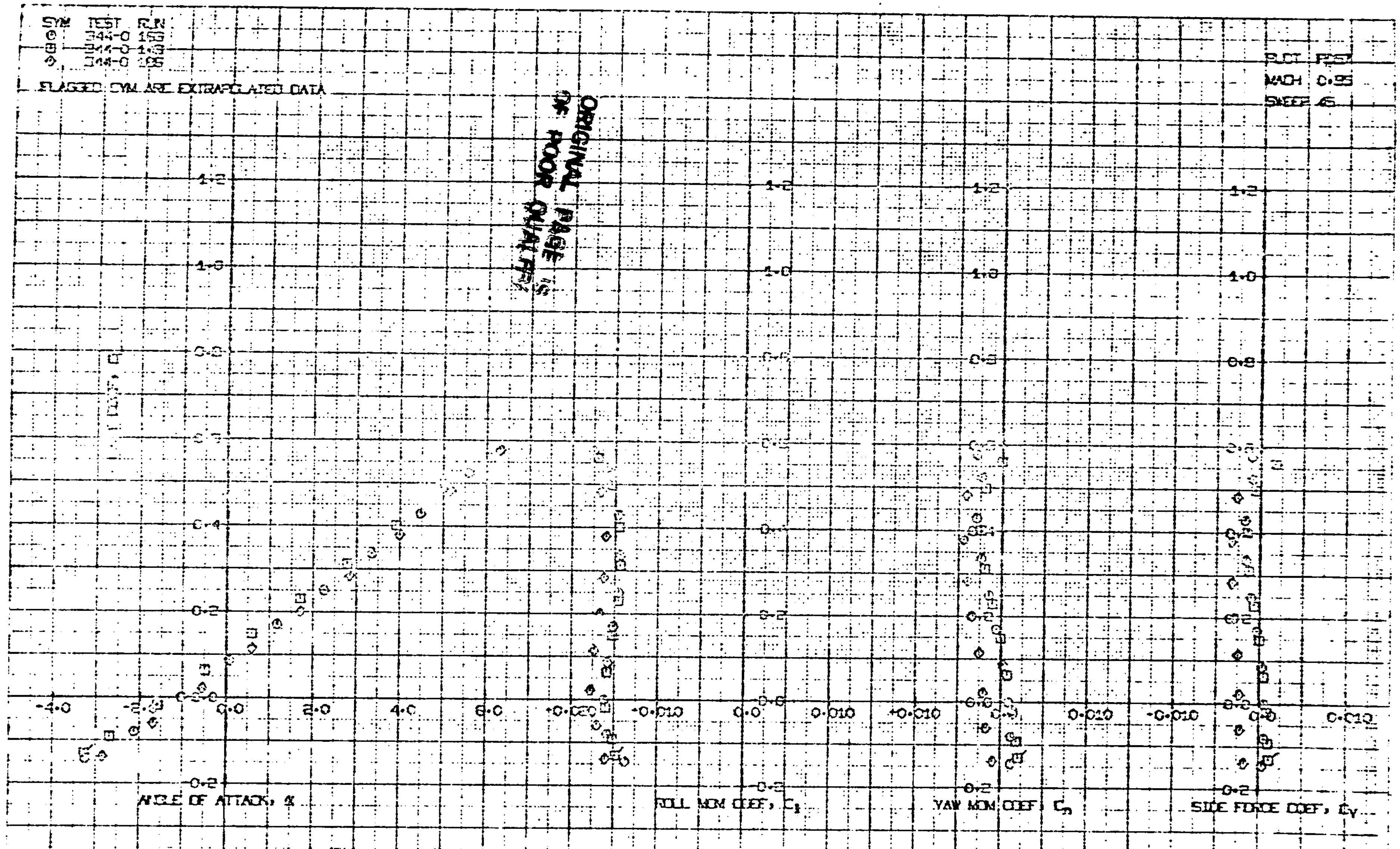


FIGURE 17. TARE DATA RUNS, INTEGRATED FUSELAGE

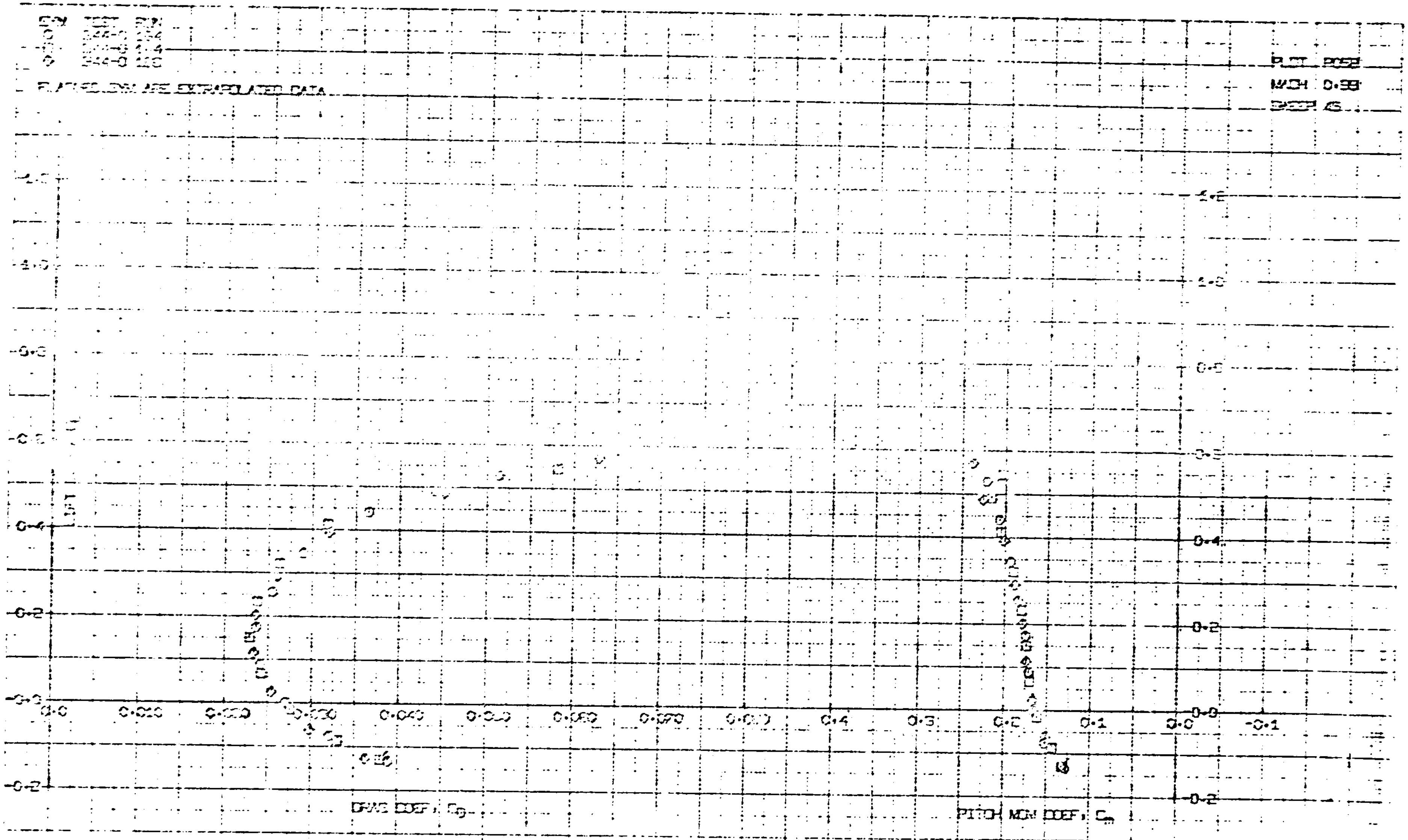


FIGURE [illegible]. TEST DATA WING, INTEGRATED FUSELAGE

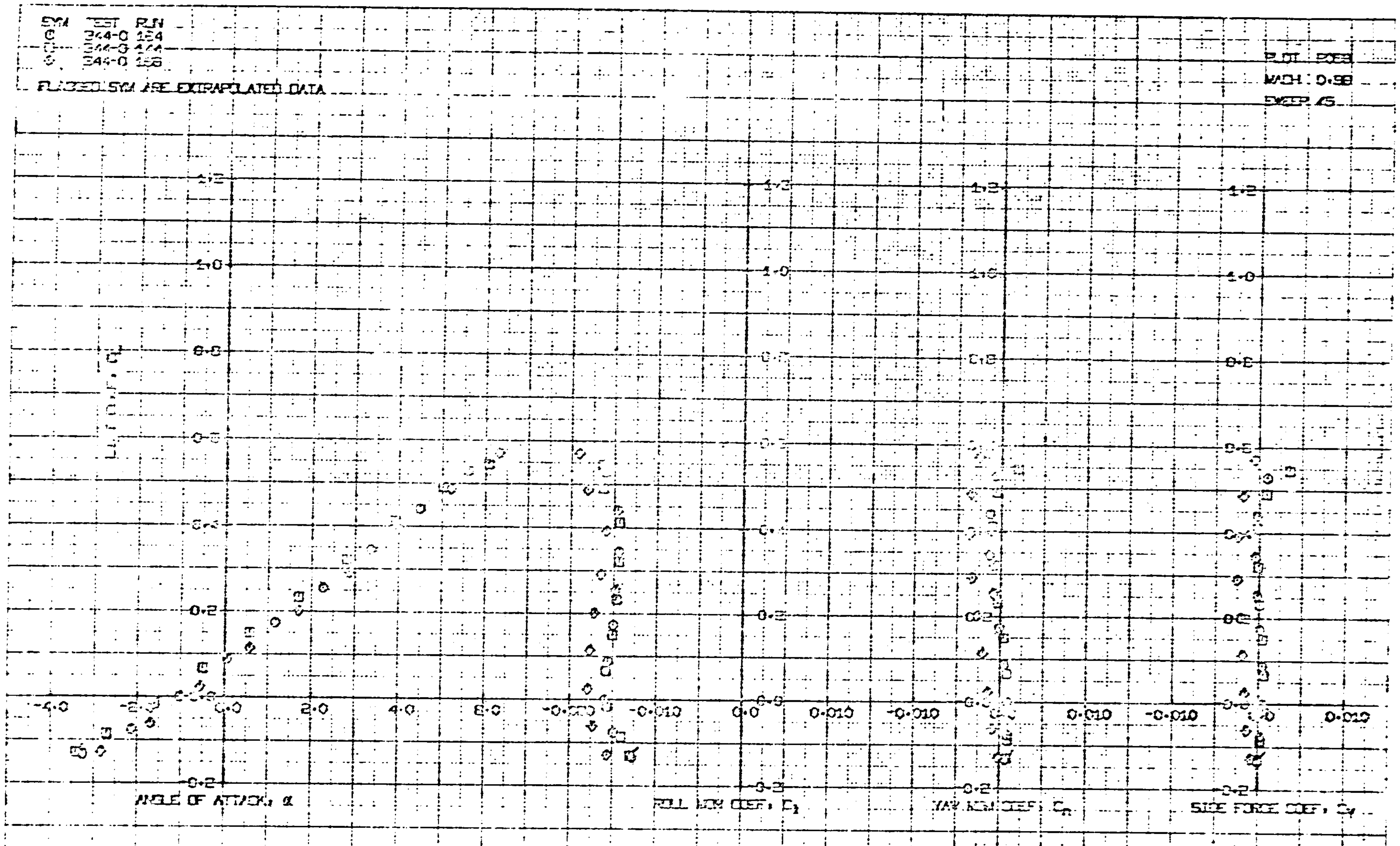


FIGURE 18. TARE DATA RUNS, INTEGRATED FUSELAGE

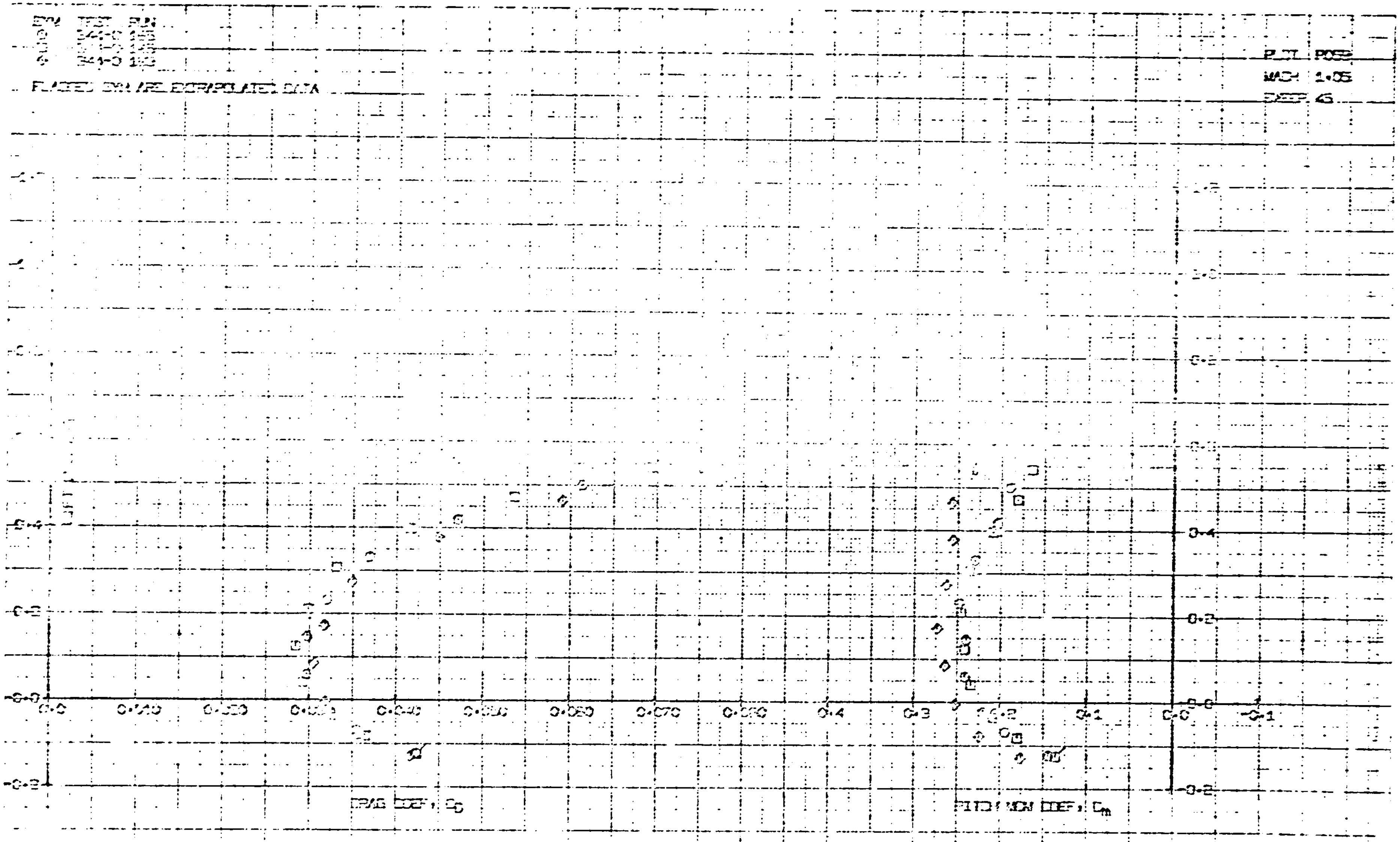


FIGURE 13 TEST DATA [illegible] INTEGRATED FUSELAGE

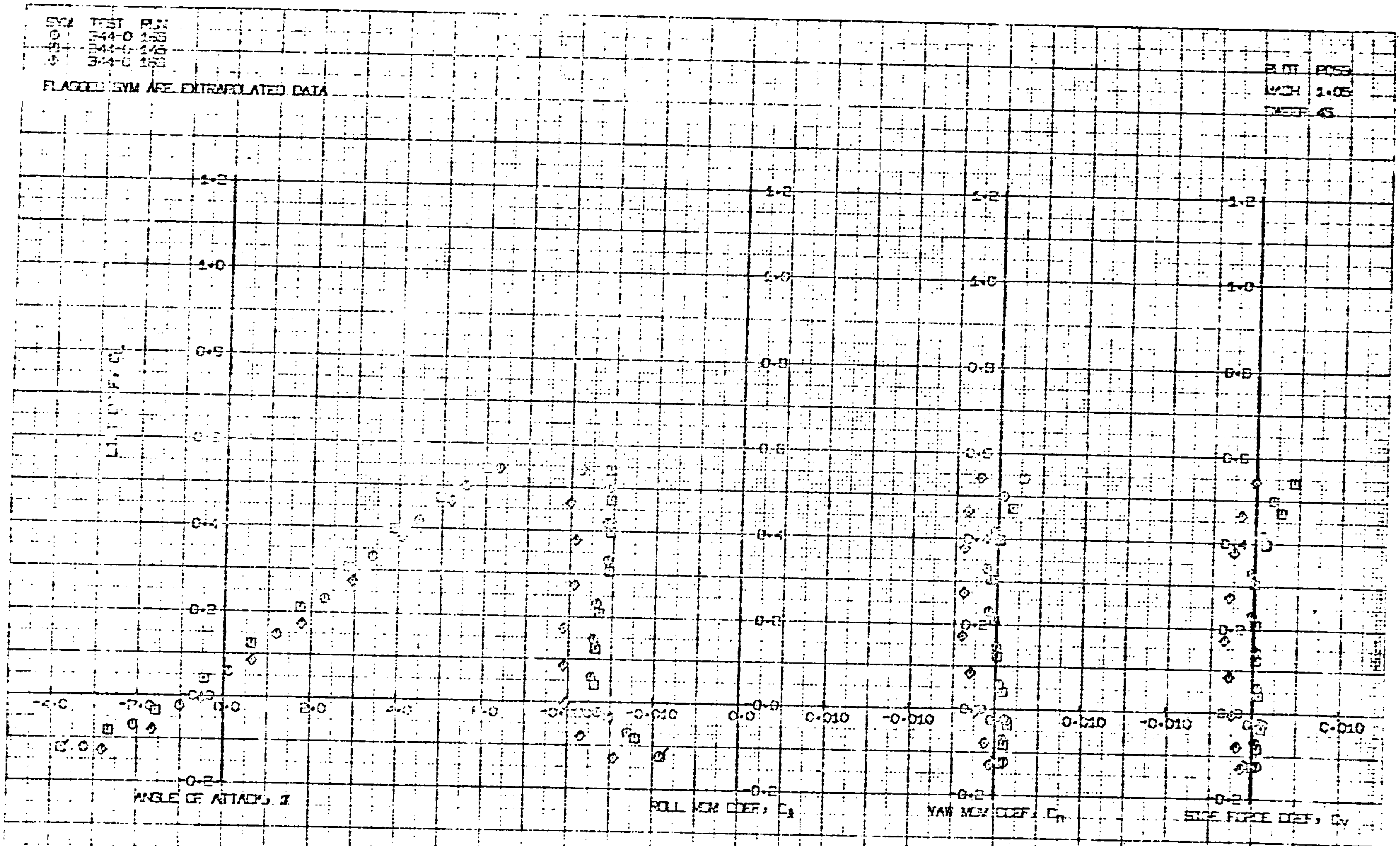


FIGURE 19. TARE DATA RUNS, INTEGRATED FUSELAGE

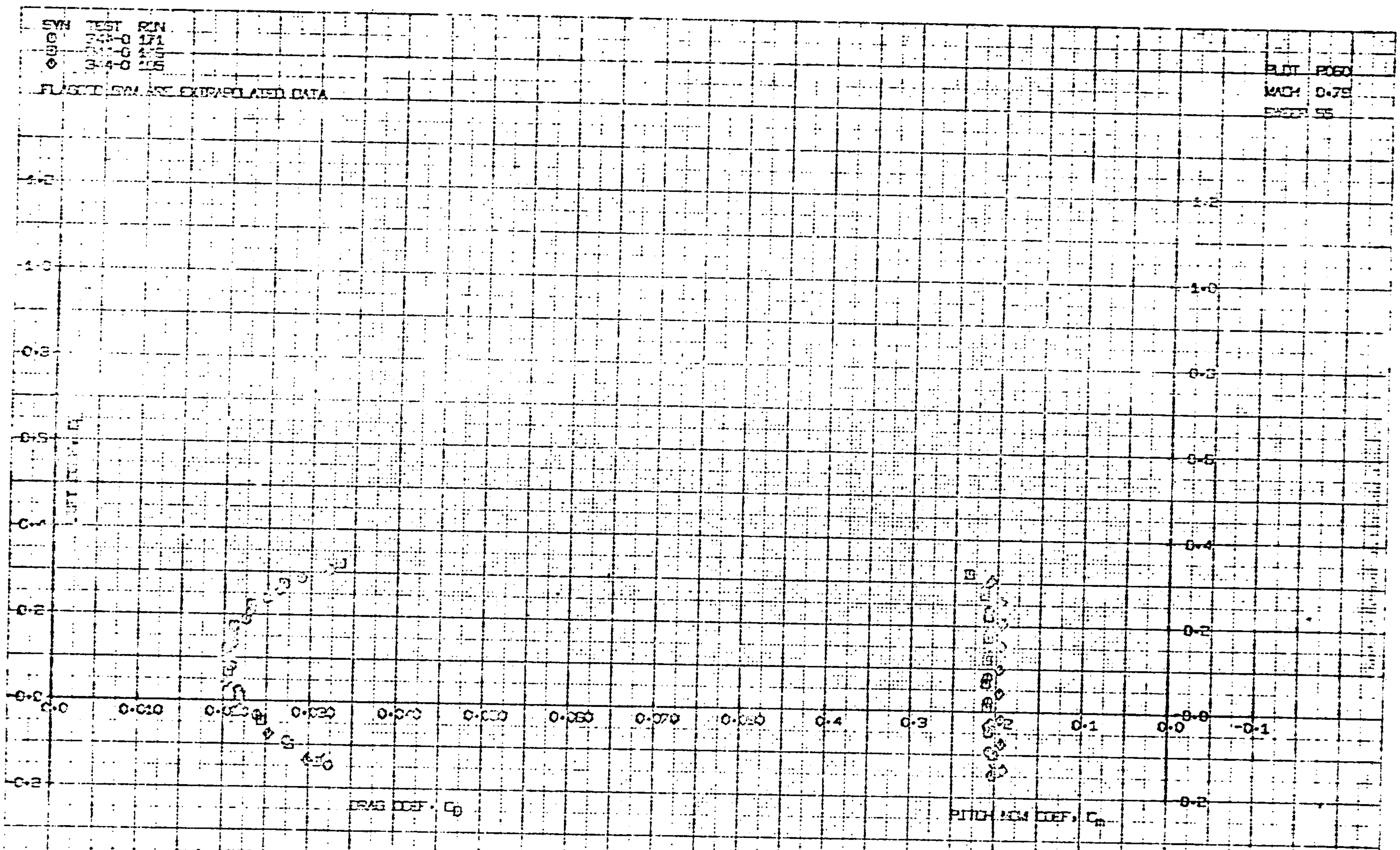


FIGURE NO. TASE DATA PLUS, INTEGRATED FUSELAGE

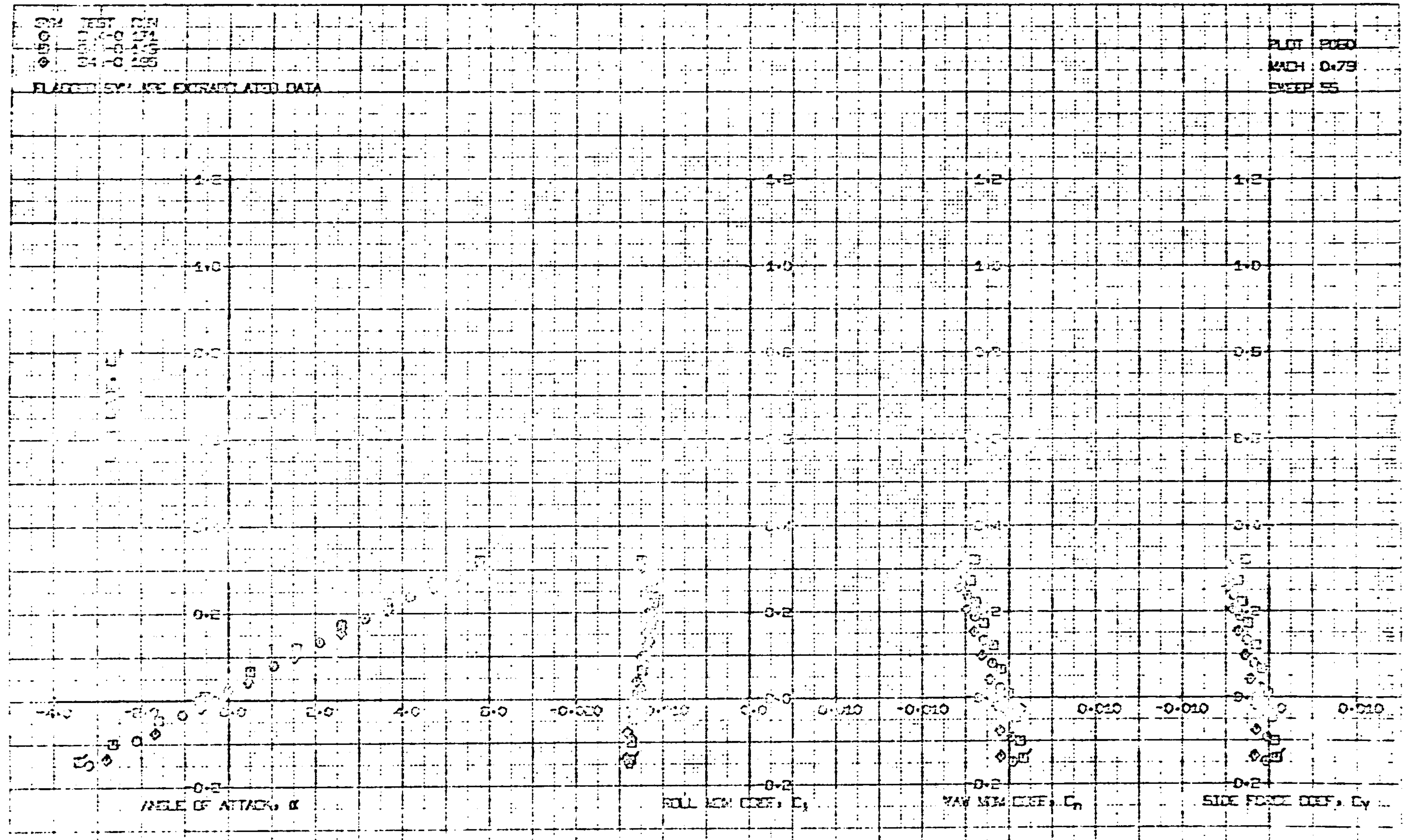


FIGURE 20. TARE DATA RUNS, INTEGRATED FUSELAGE

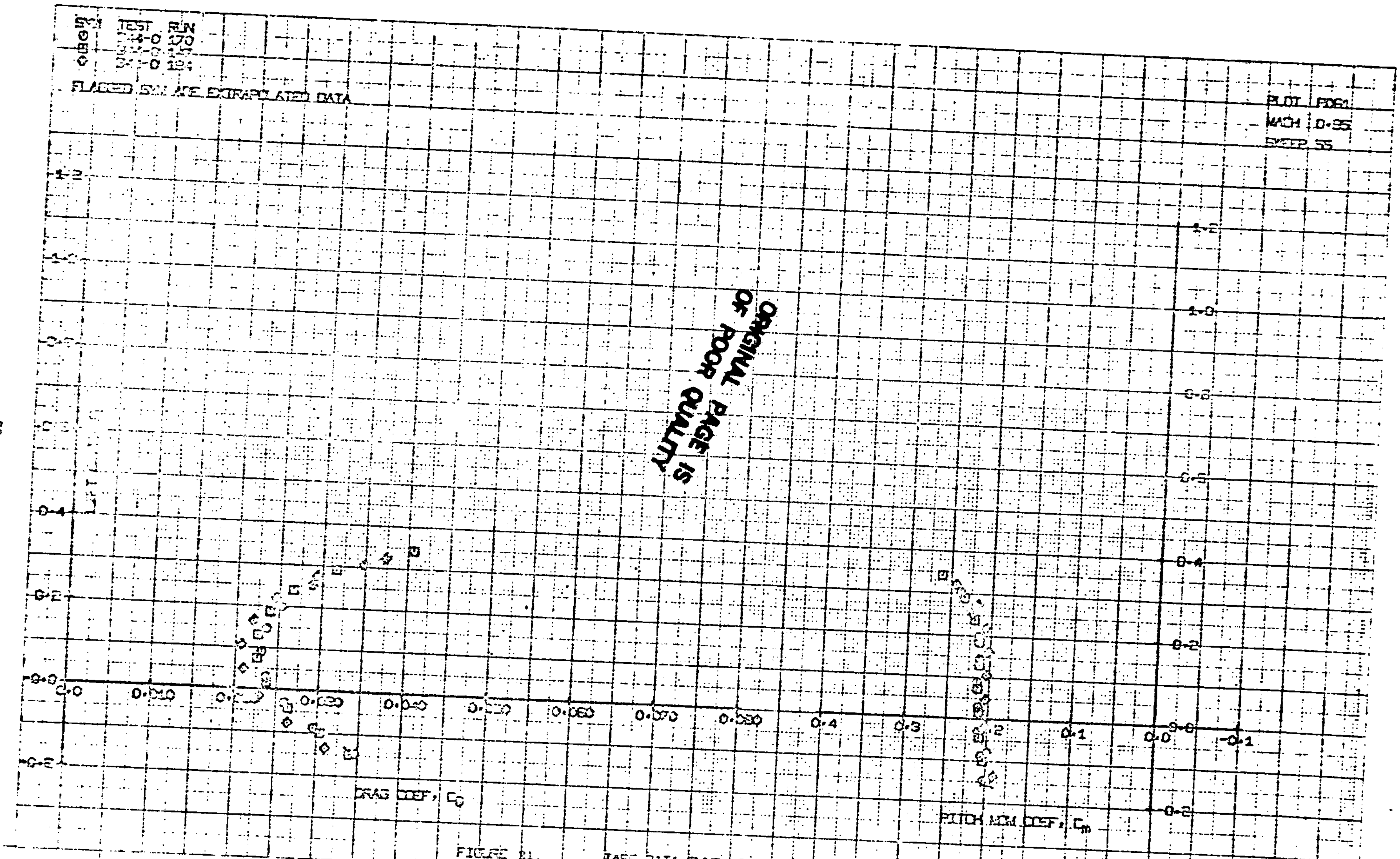


FIGURE 21. TARE DATA RUNS, INTEGRATED FUSELAGE

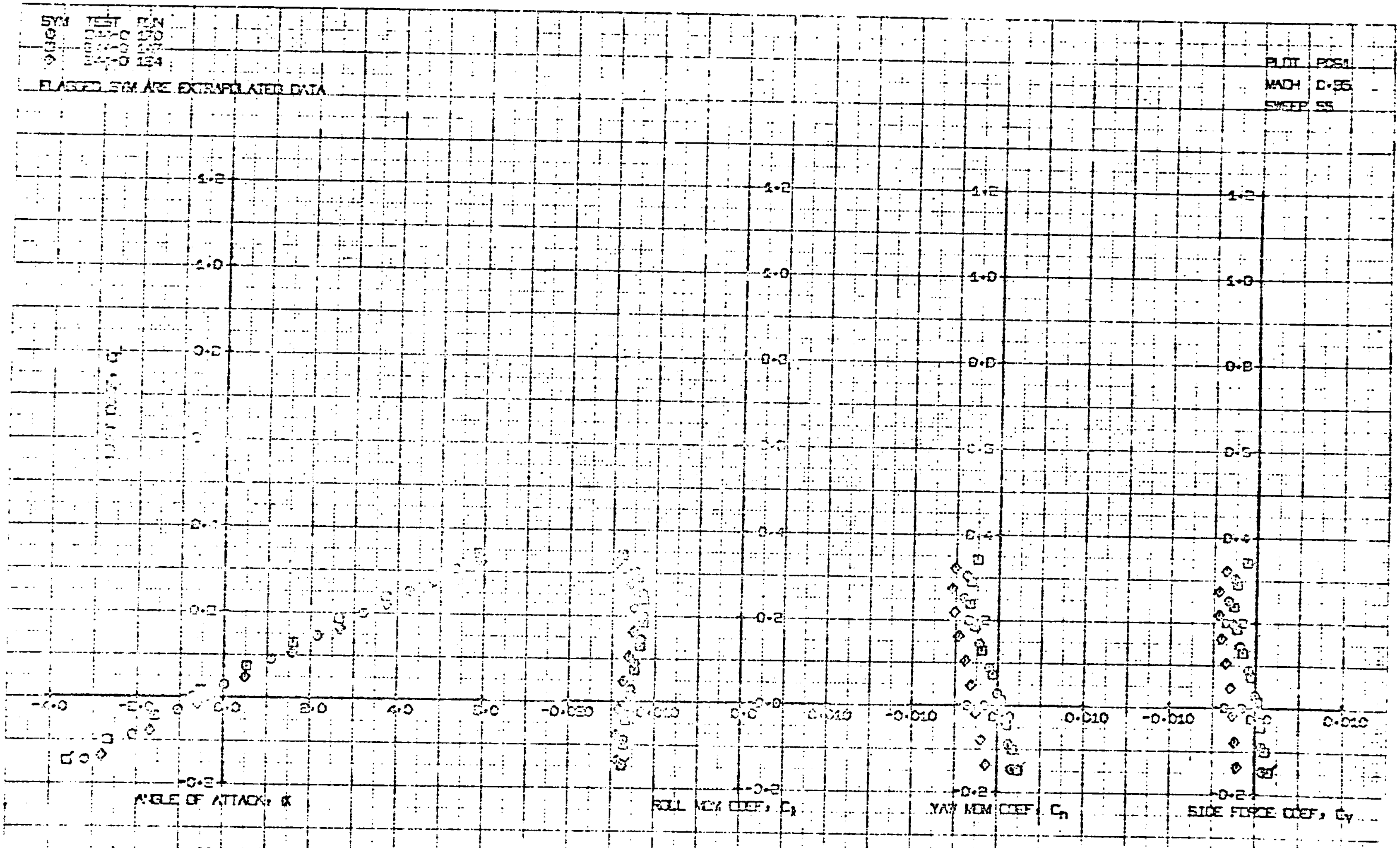


FIGURE 21. TARE DATA RUNS, INTEGRATED FUSELAGE

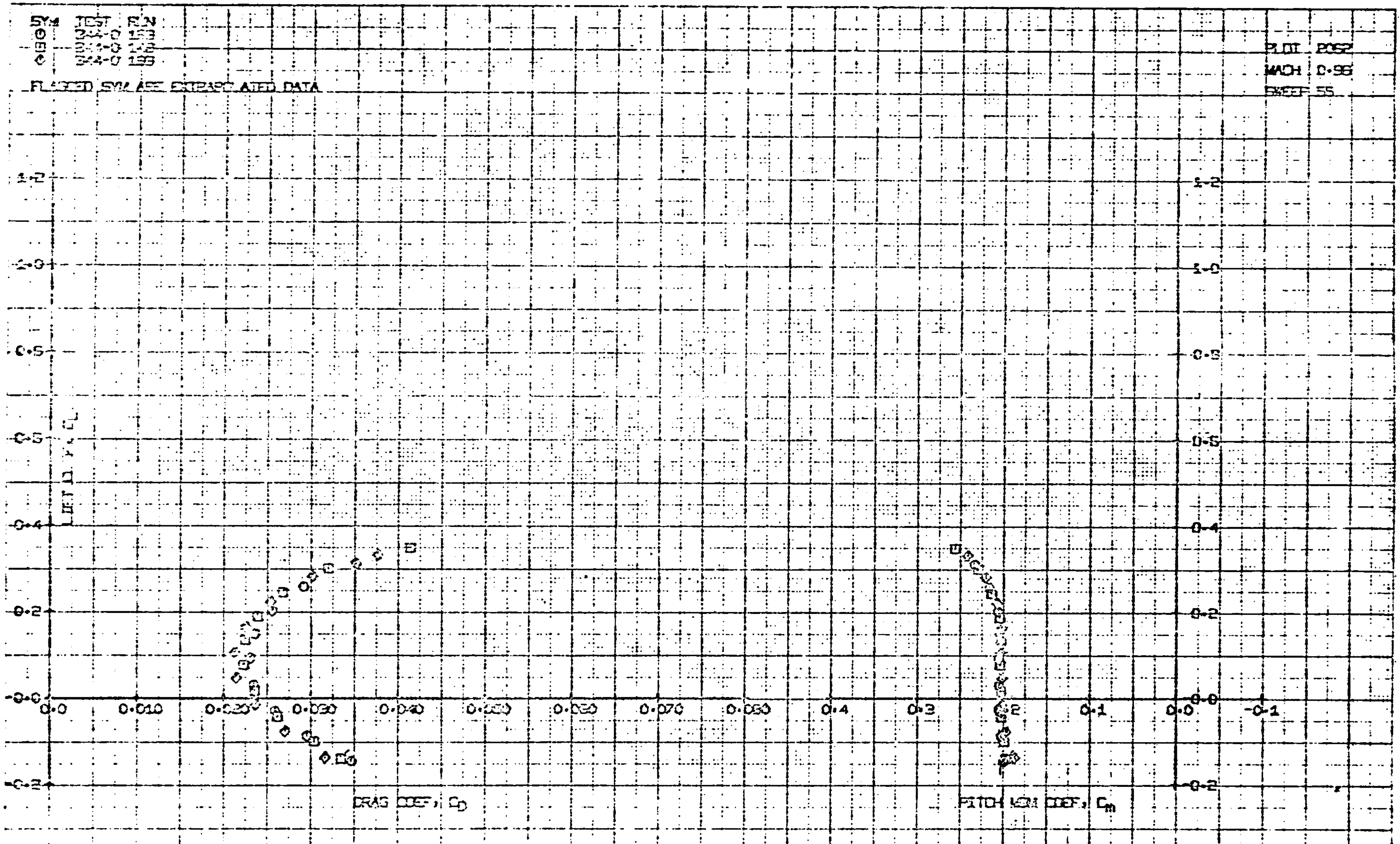


FIGURE 22. TARE DATA RUNS, INTEGRATED FUSELAGE

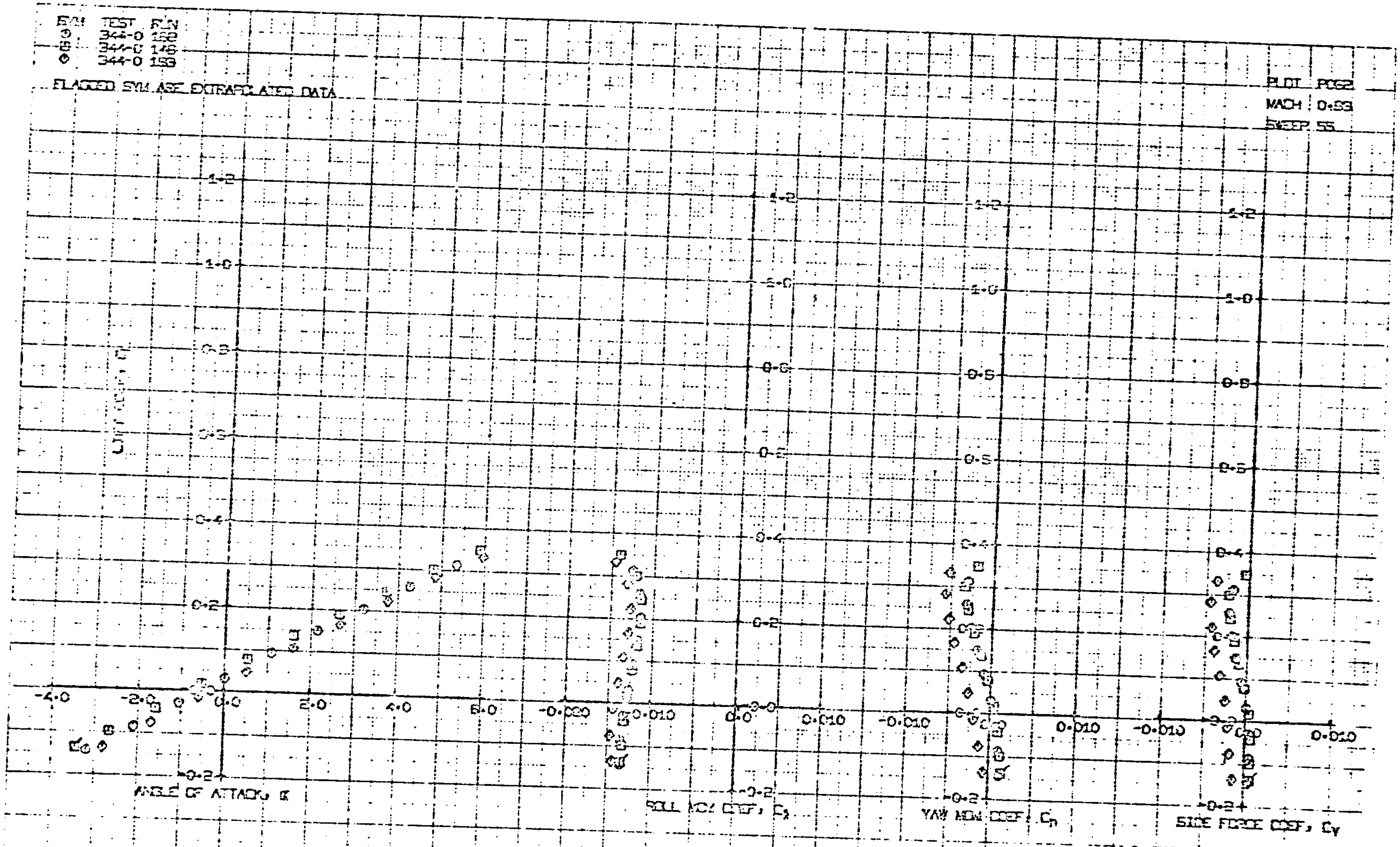


FIGURE 22. TARE DATA RUNS, INTEGRATED FUSELAGE

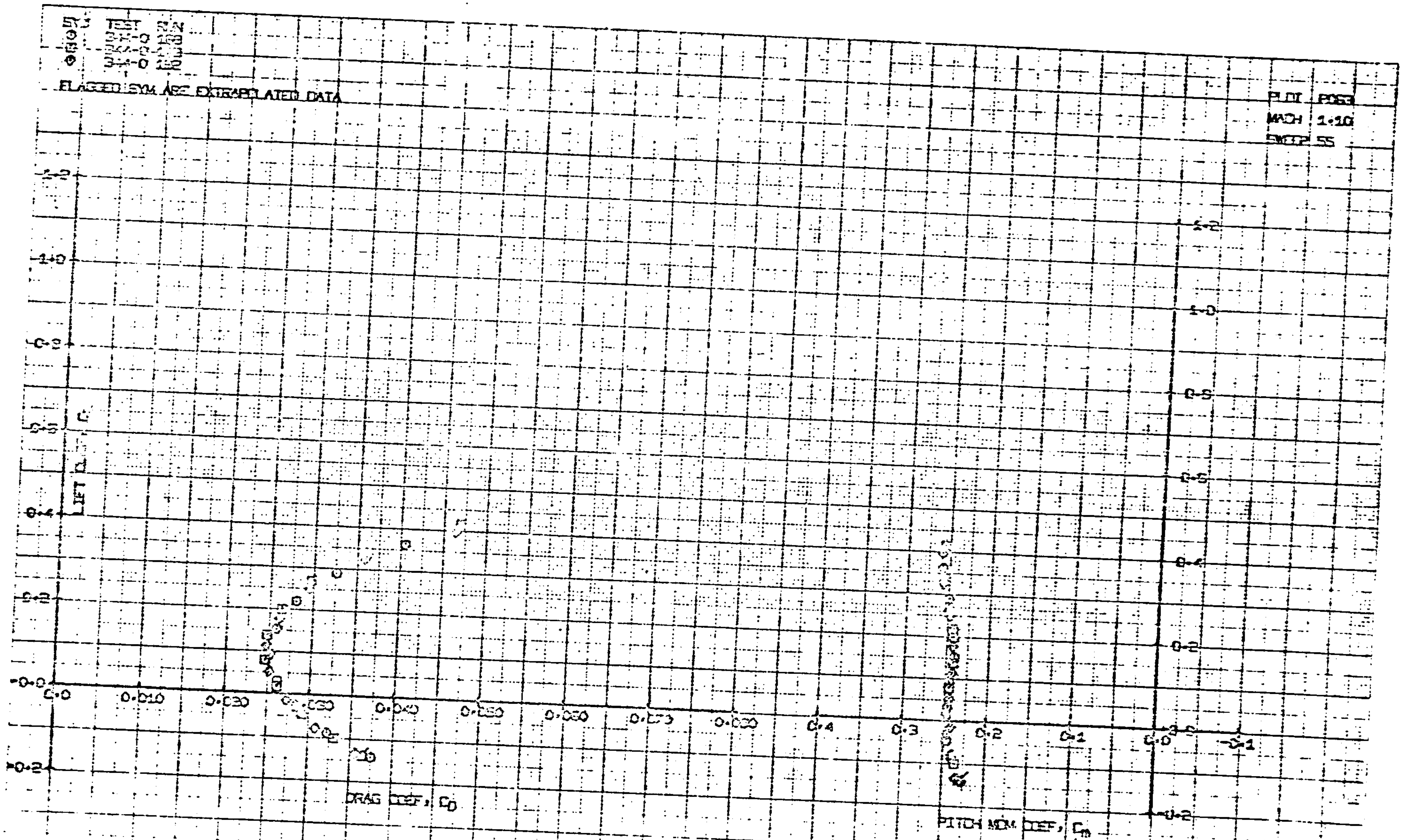


FIGURE 23. TARE DATA RUNS, INTEGRATED FUSELAGE

FIGURE 23. TARE DATA RUNS, INTEGRATED FUSELAGE

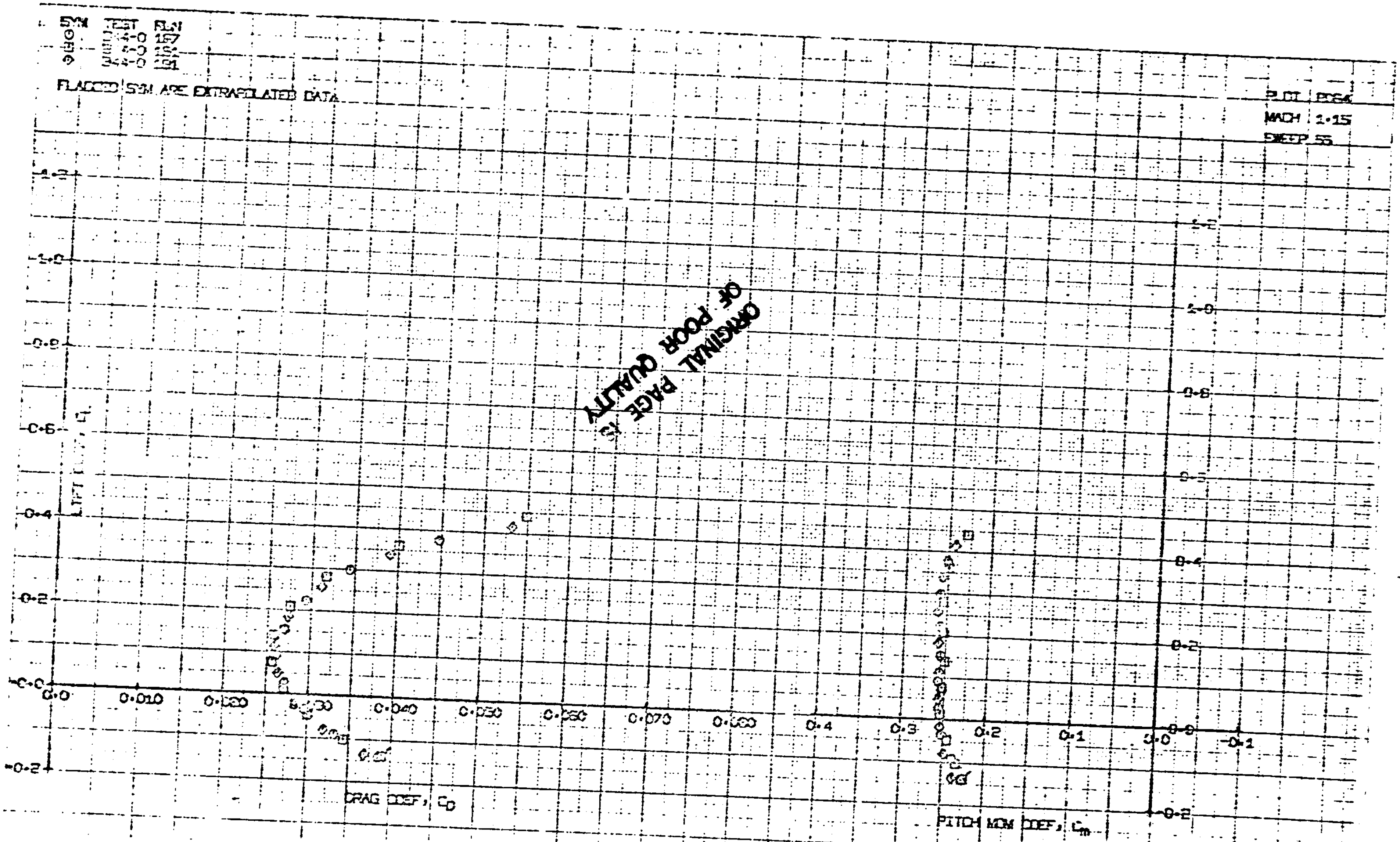


FIGURE 24. TARE DATA RUNS, INTEGRATED FUSELAGE

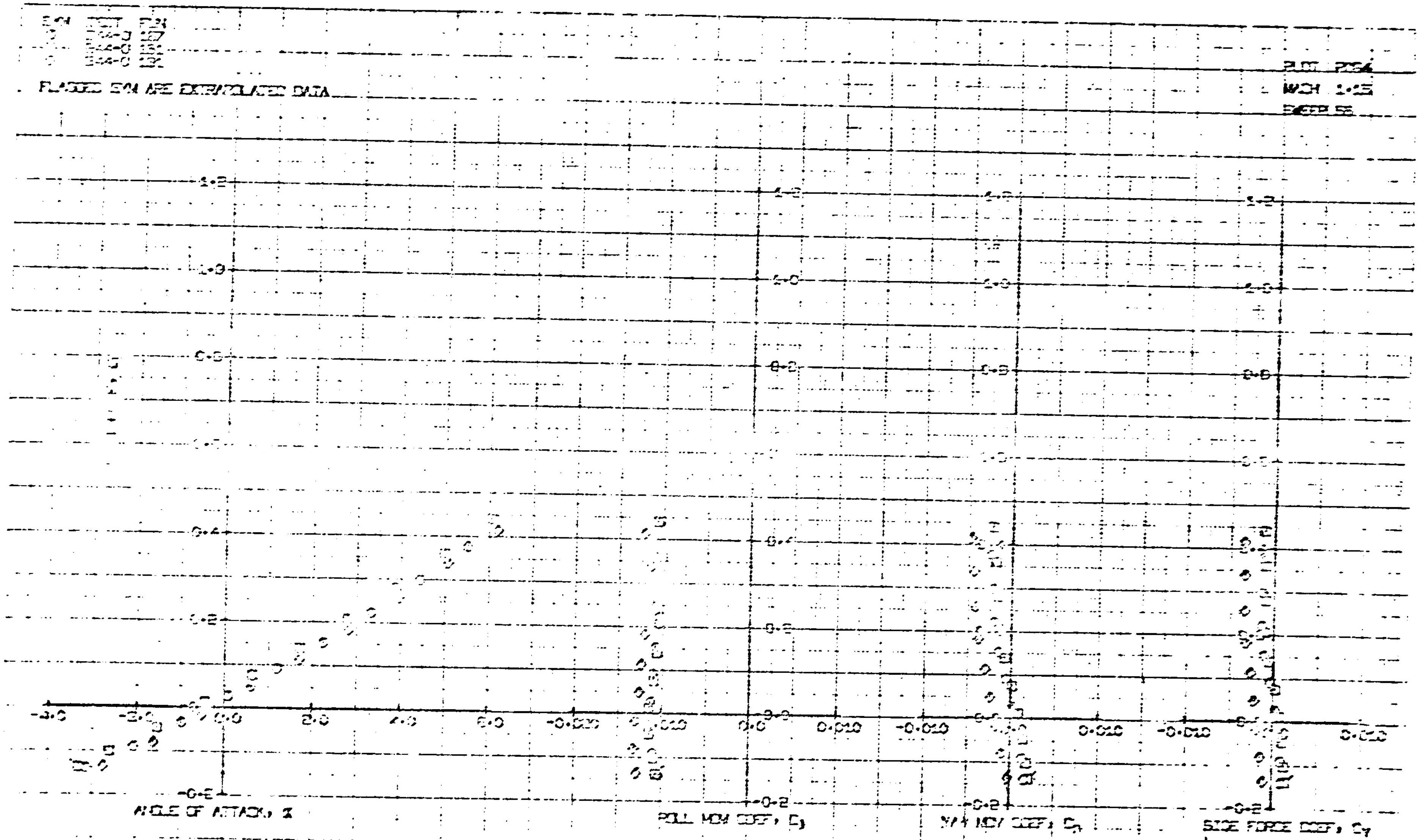


FIGURE 24. TASS DATA RUNS, INTEGRATED FUSELAGE

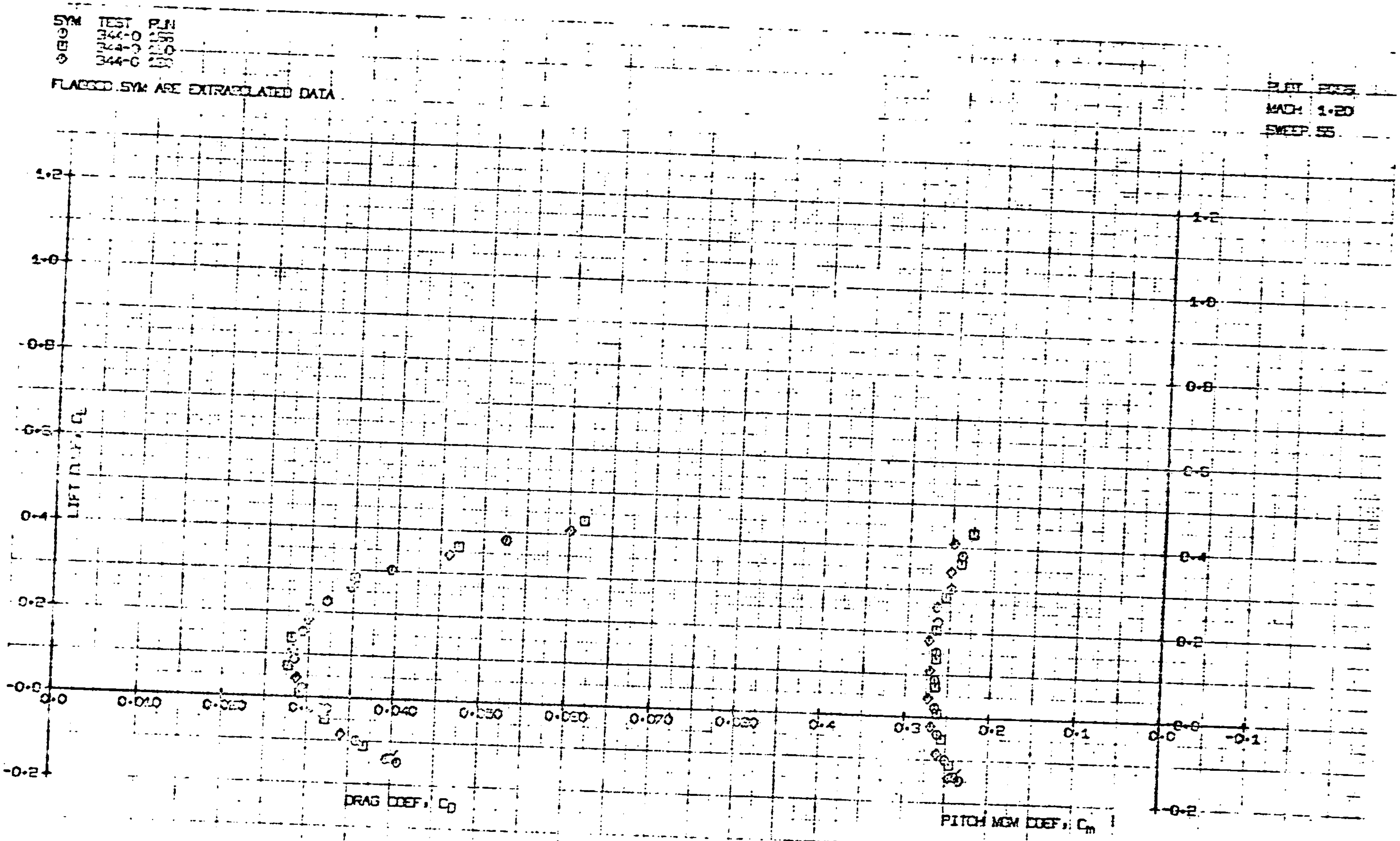


FIGURE 25. TARE DATA RUNS, INTEGRATED FUSELAGE

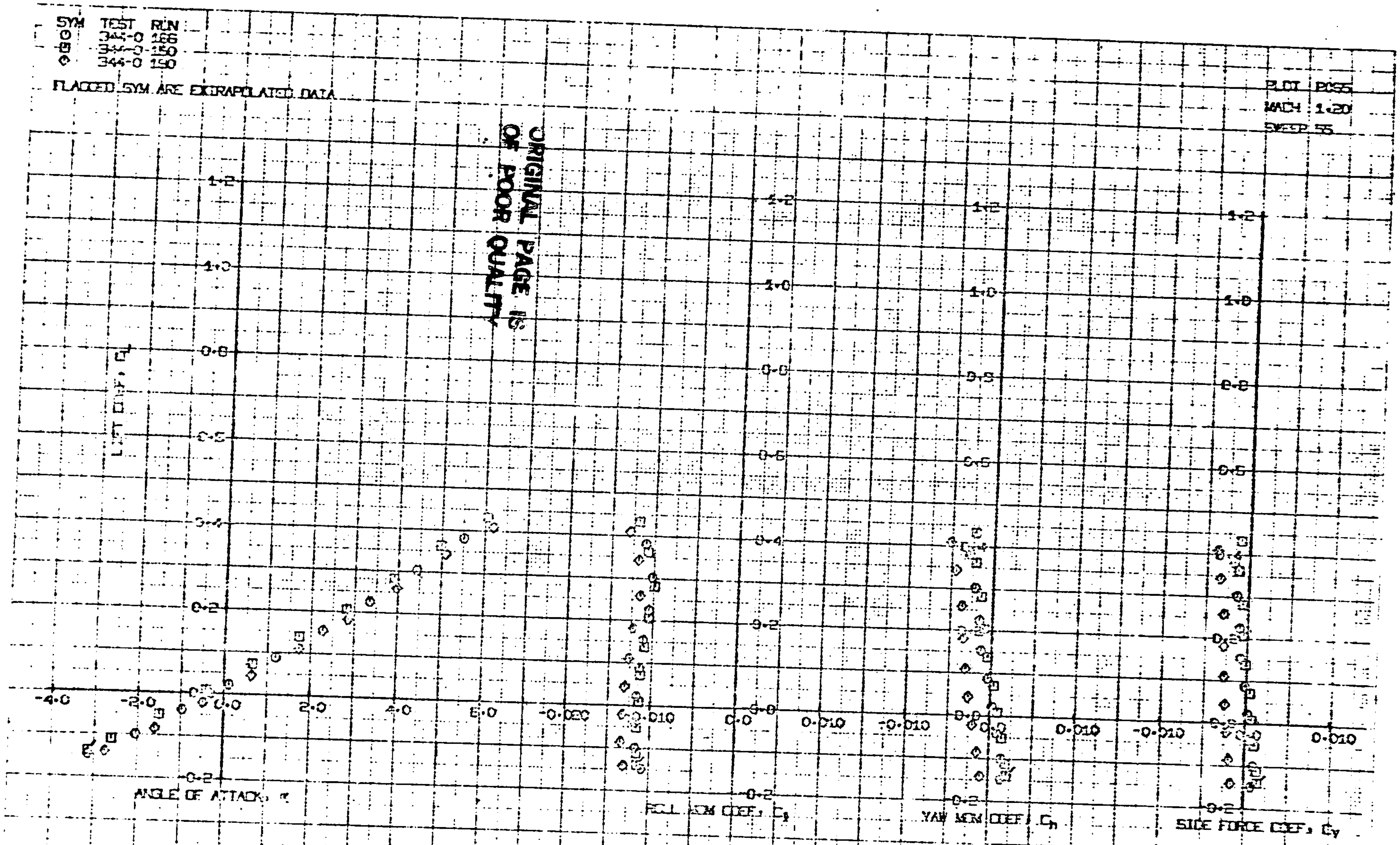


FIGURE 25. TARE DATA RUNS, INTEGRATED FUSELAGE

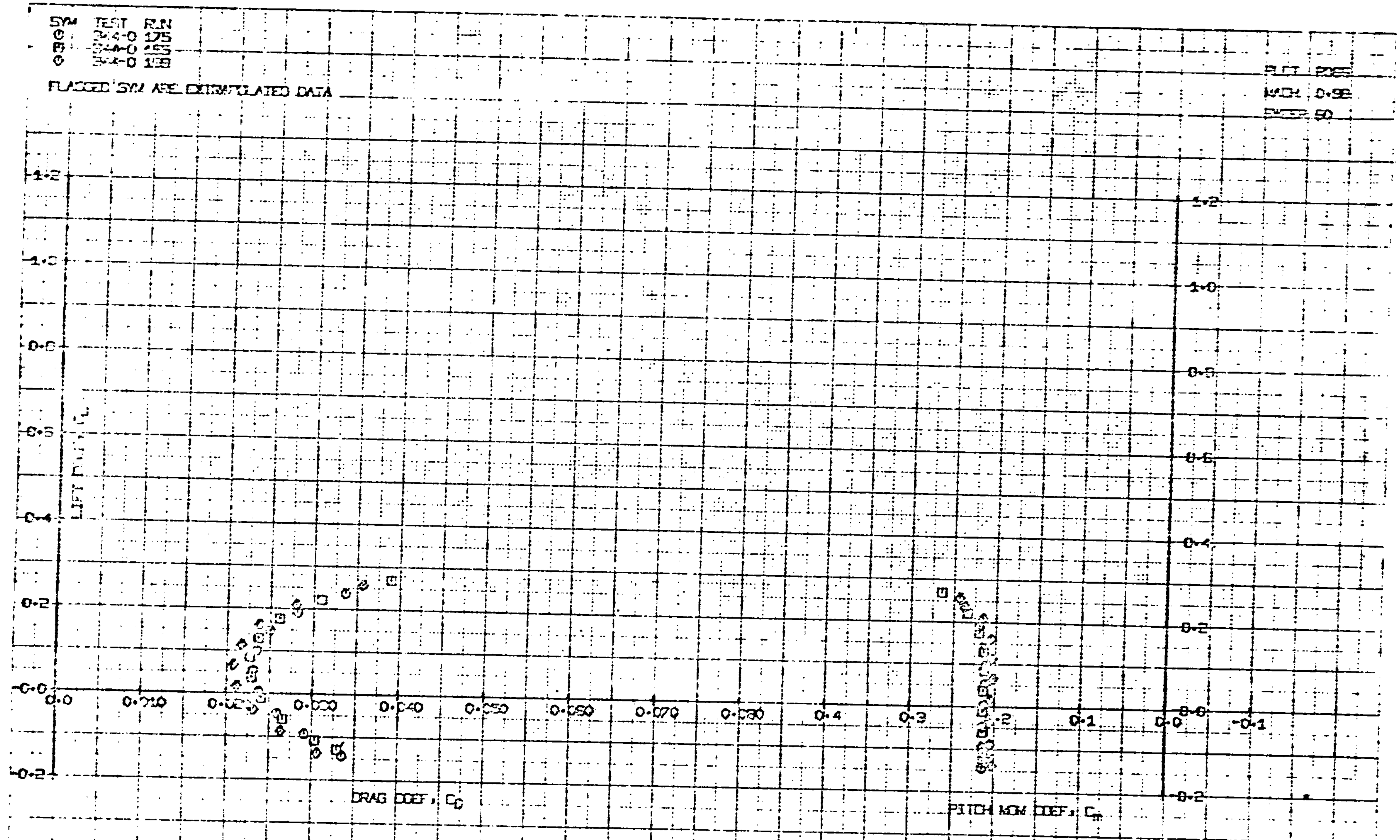


FIGURE 26. TARE DATA RUNS, INTEGRATED FUSELAGE

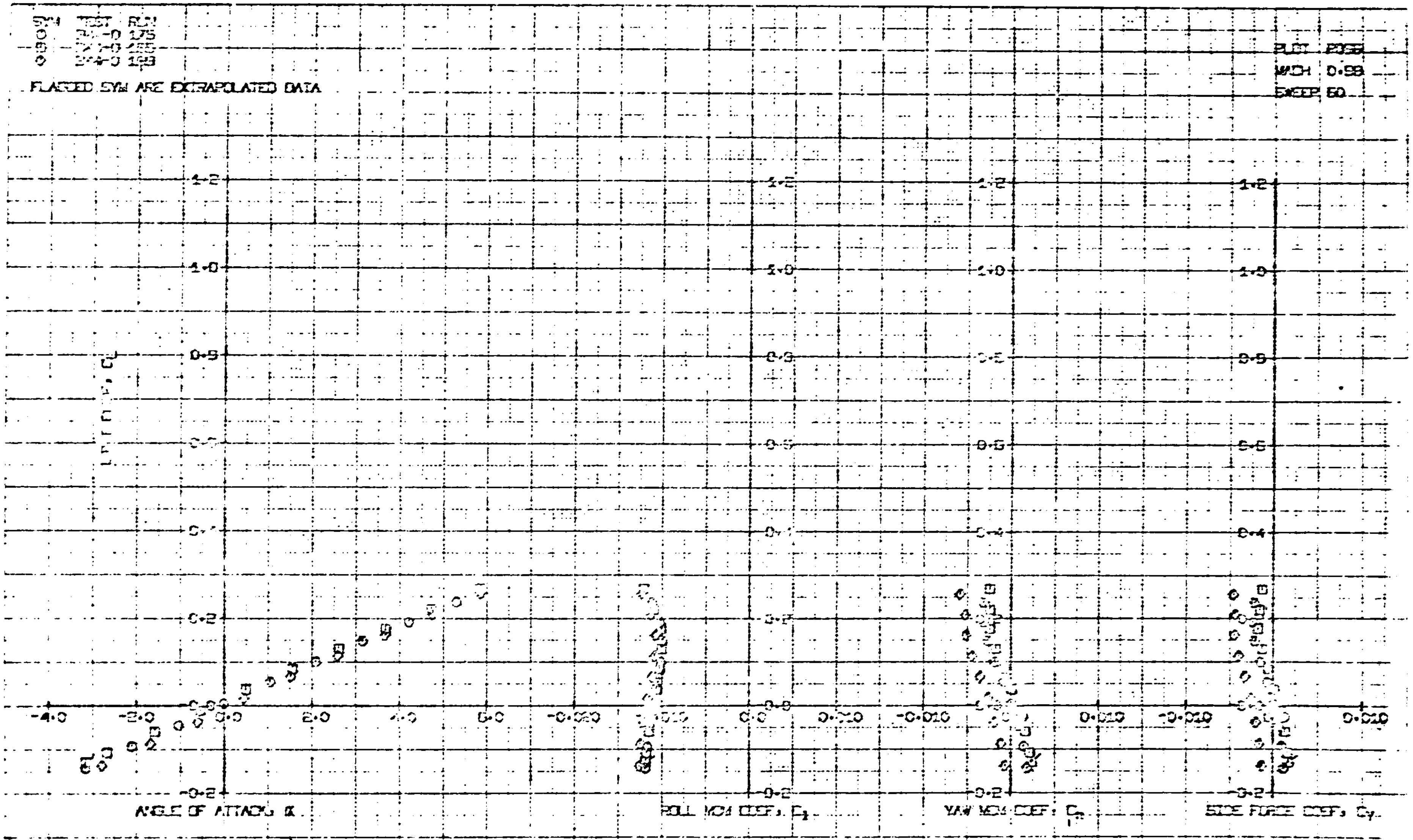


FIGURE 26. TARE DATA RUNS, INTEGRATED FUSELAGE

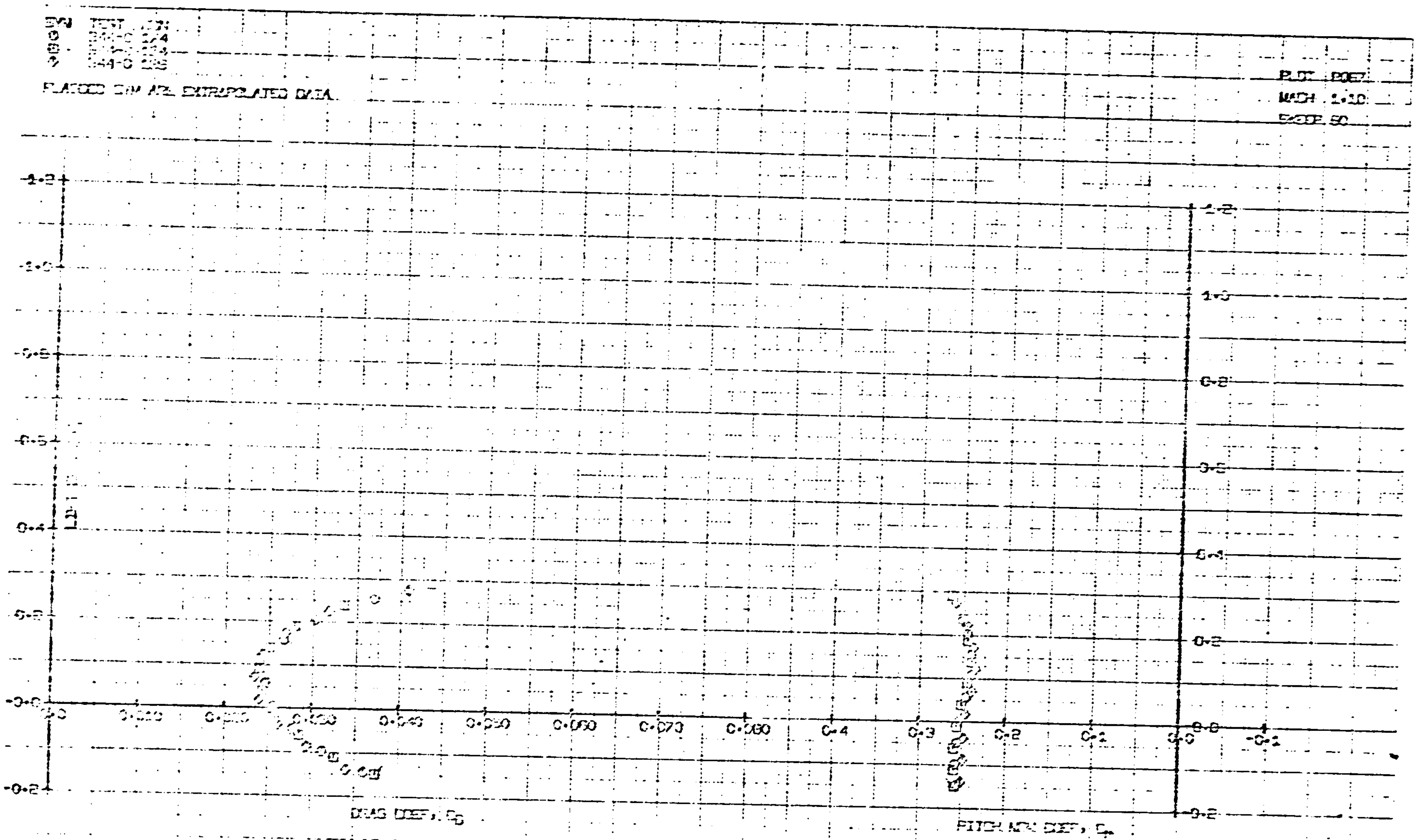


FIGURE 37. TARE DATA RUNS, INTEGRATED FUSELAGE

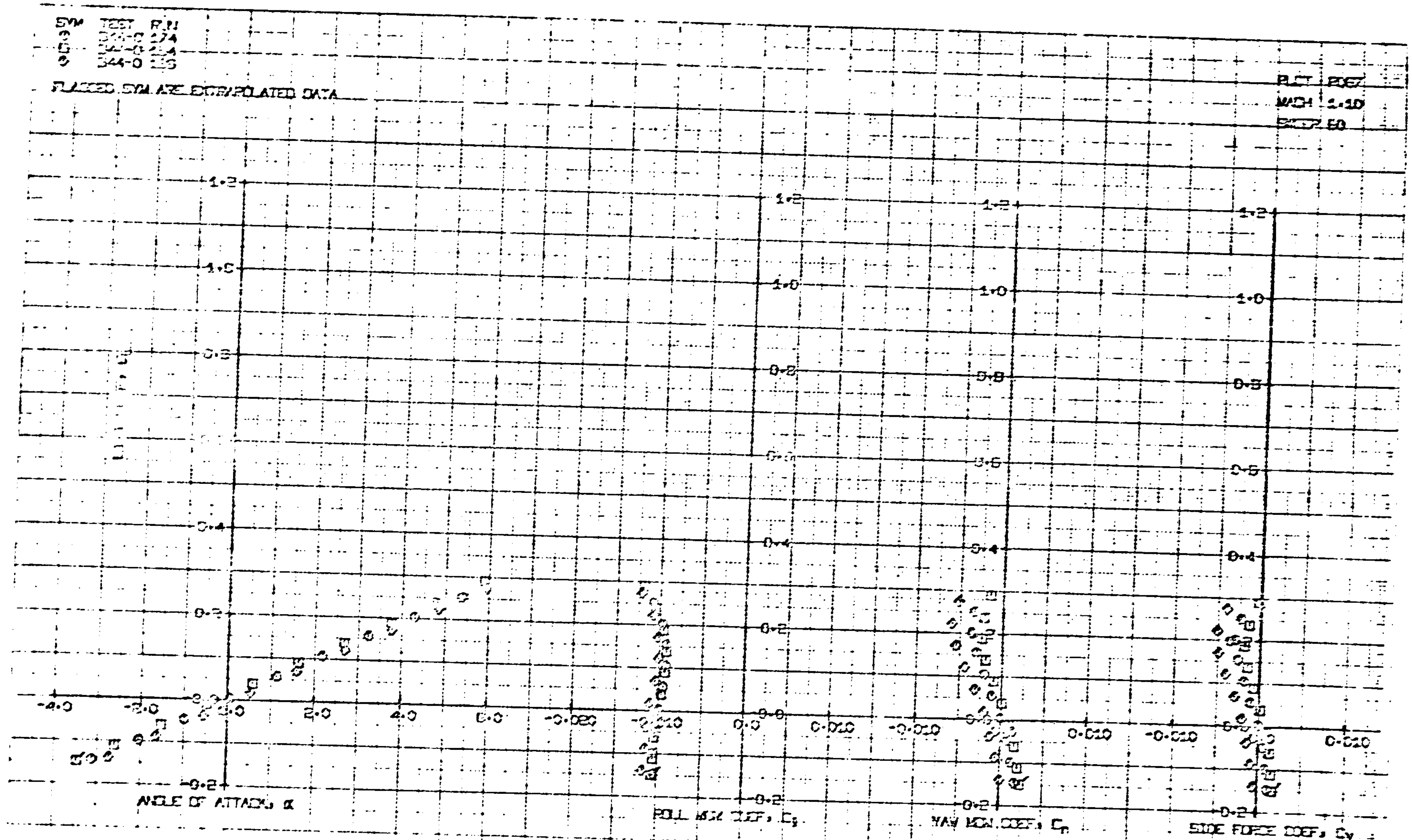


FIGURE 27. TARE DATA RUNS, INTEGRATED FUSELAGE

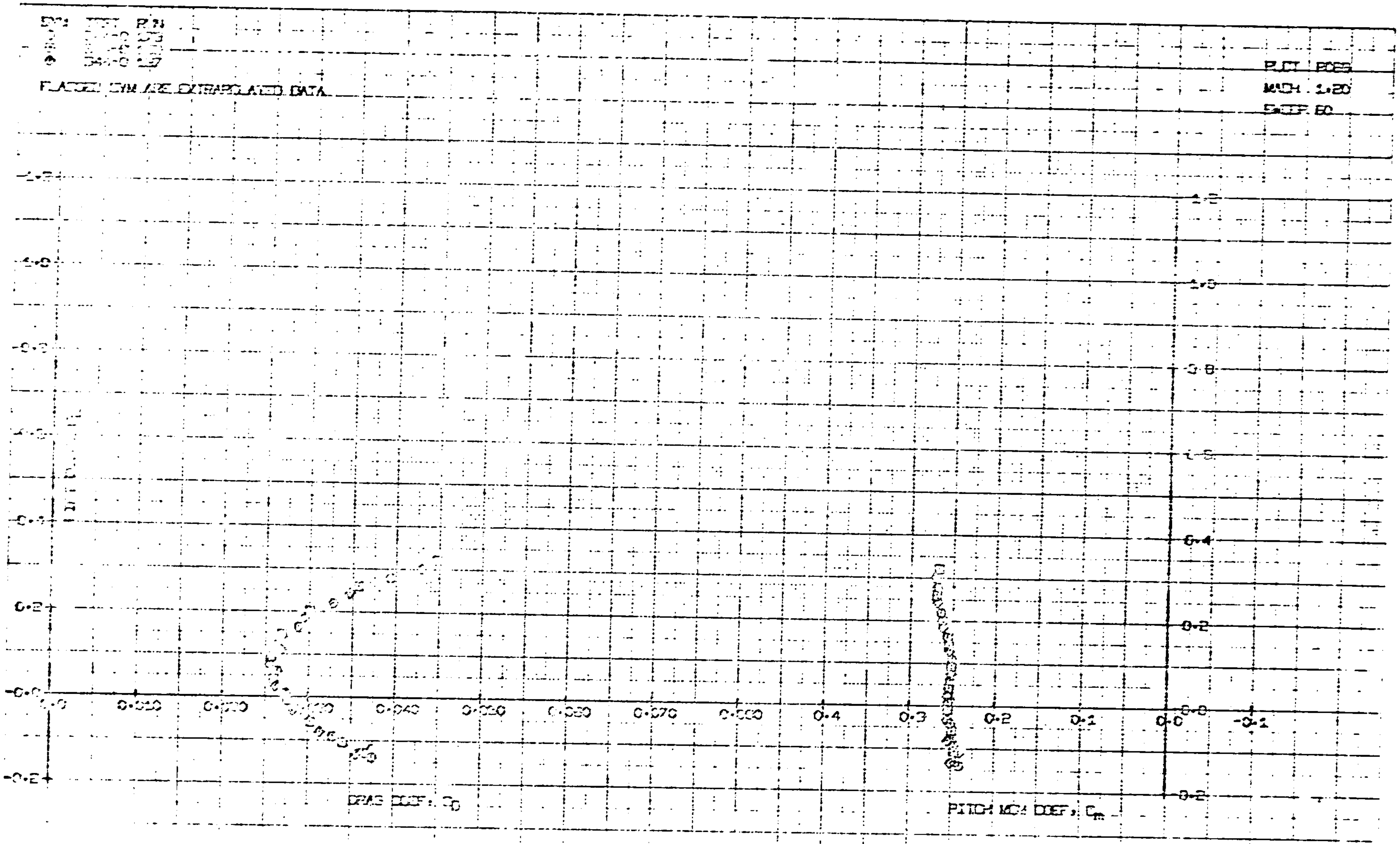


FIGURE [illegible]. [illegible] INTEGRATED FUSELAGE

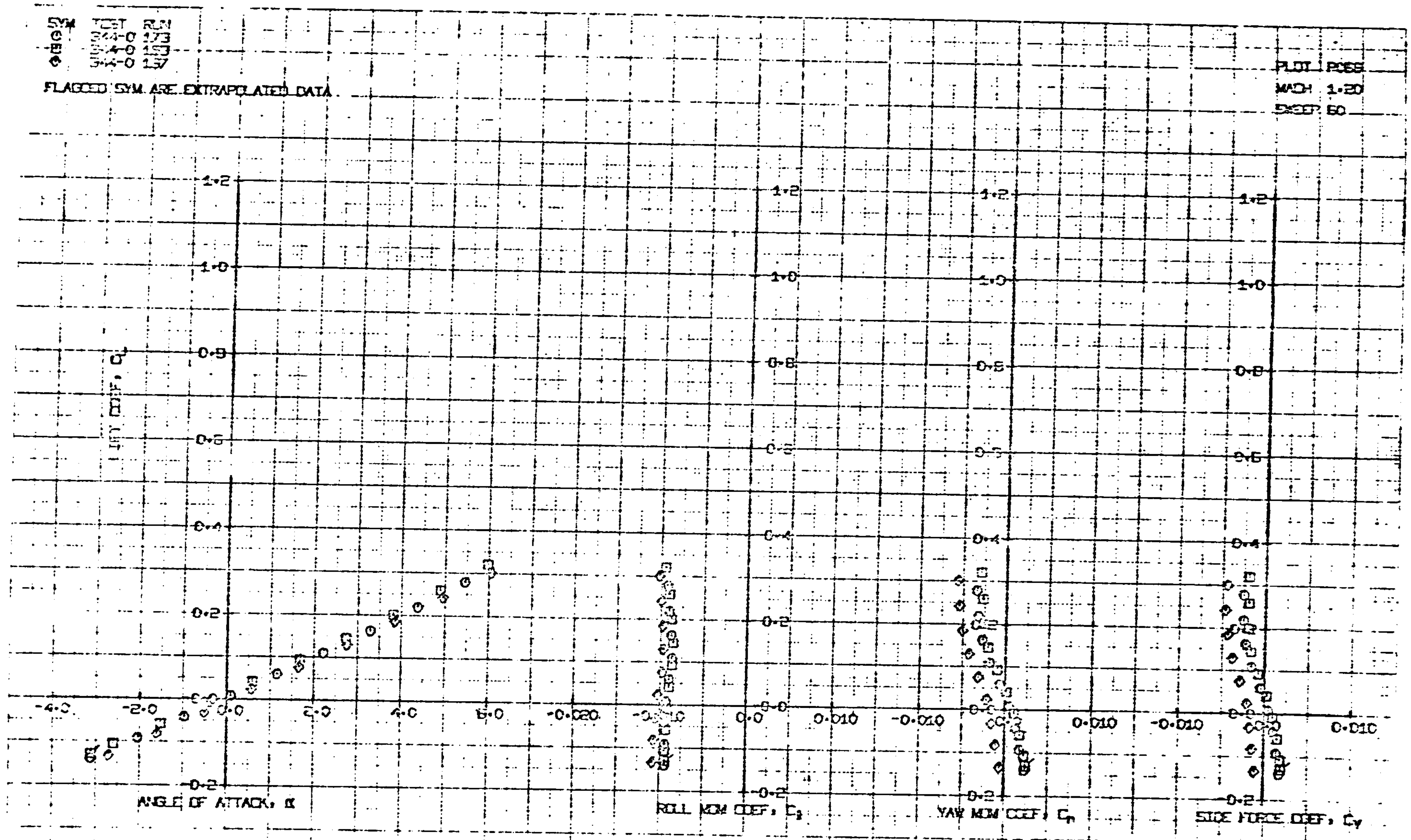


FIGURE 28. TARE DATA RUNS, INTEGRATED FUSELAGE

FIGURE 29. TAKE DATA RUNS, INTEGRATED FUSELAGE

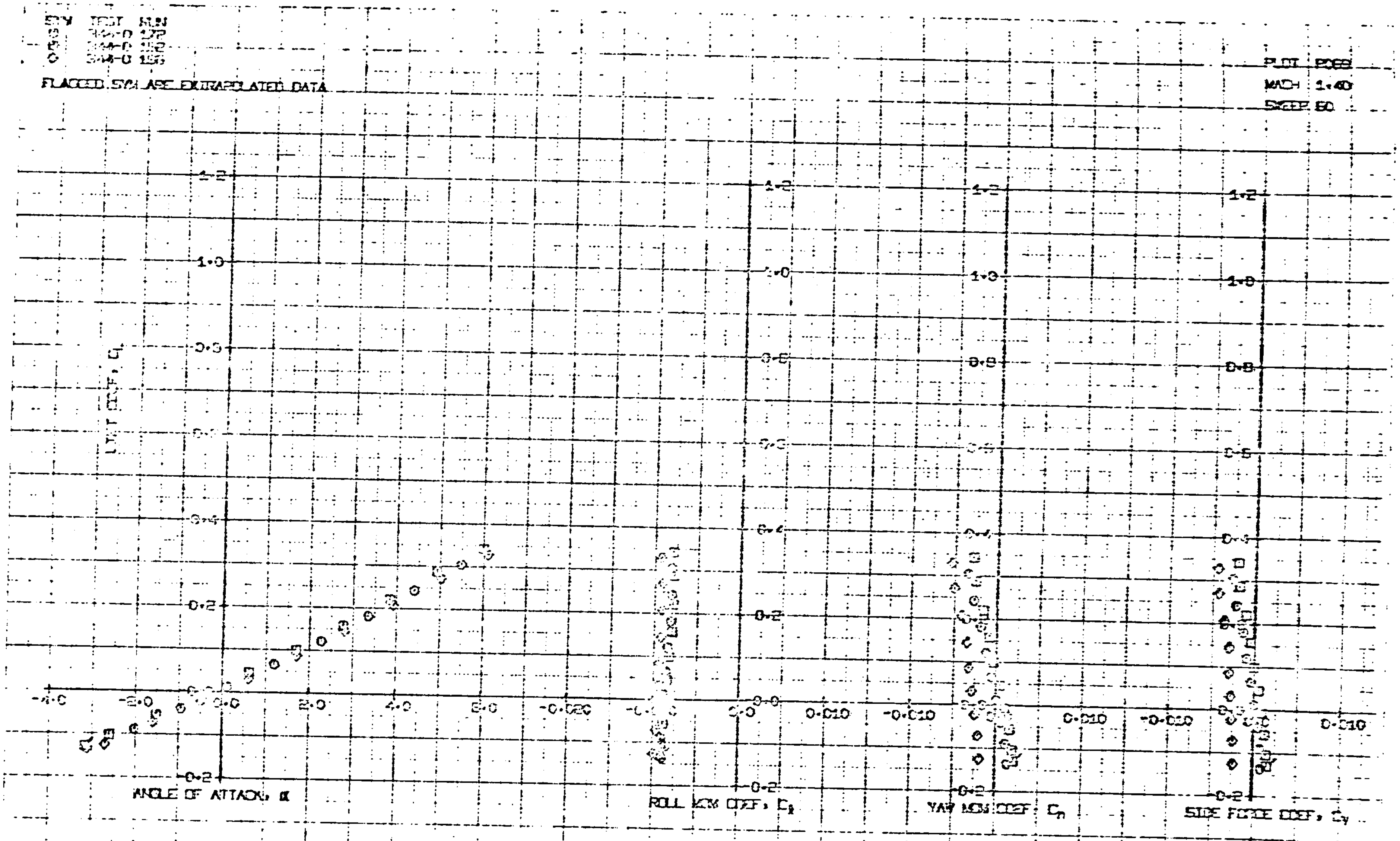


FIGURE 29. TARE DATA RUNS, INTEGRATED FUSELAGE

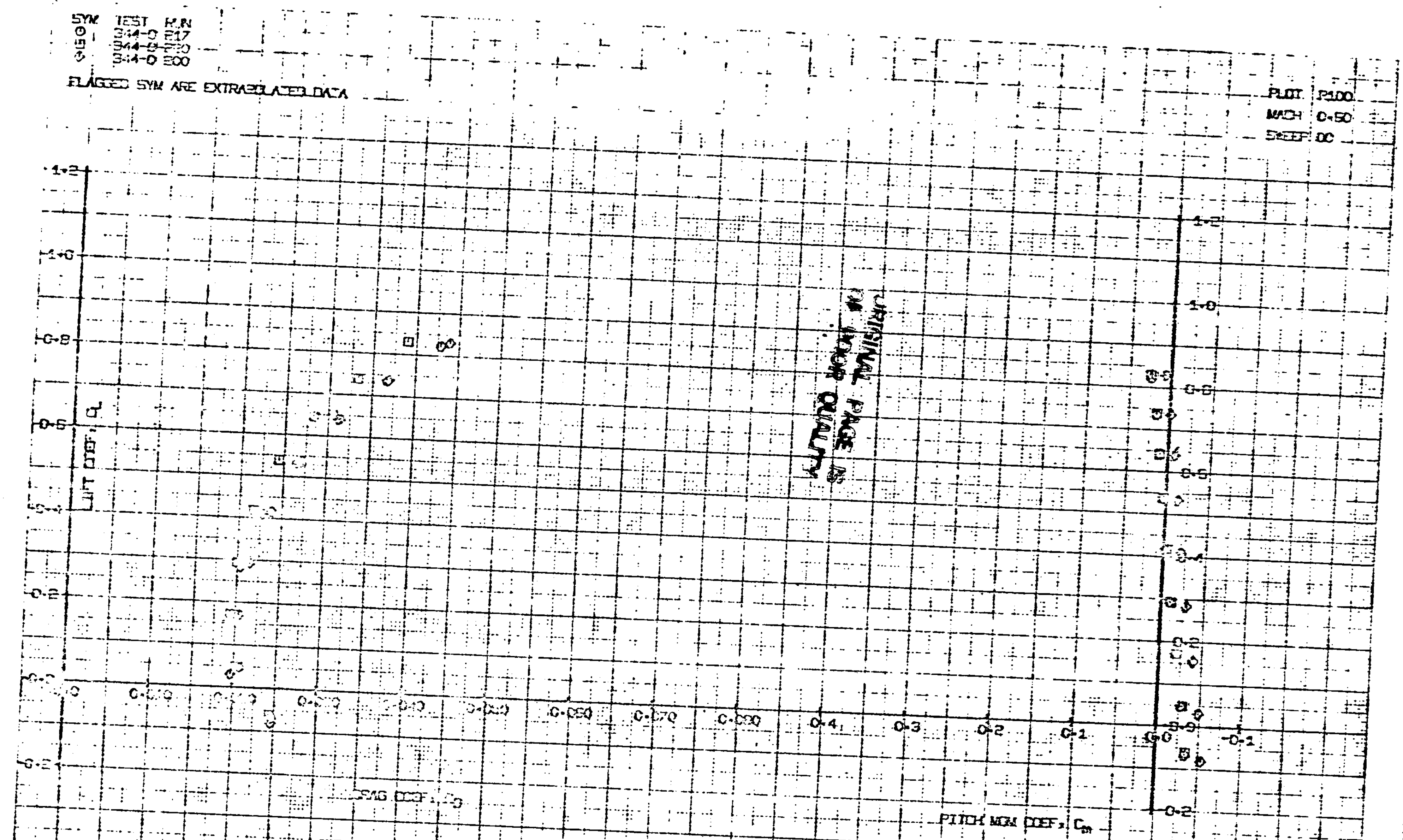
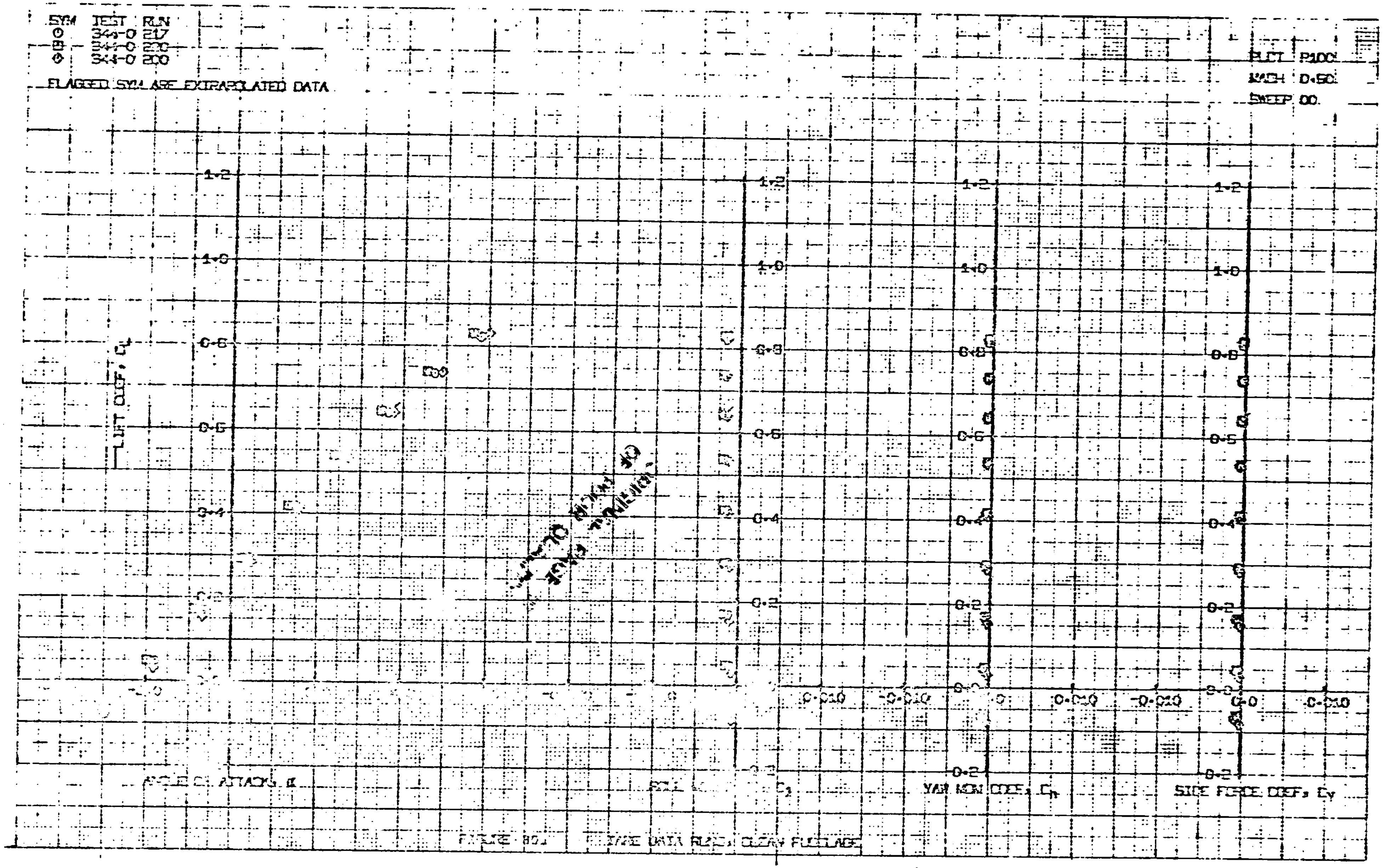


FIGURE 30. TARE DATA RUNS; CLEAN FUSELAGE

C 2



SYM TEST RUN
344-0 217
344-0 220
344-0 200
FLAGGED SYM ARE EXTRAPOLATED DATA
PLOT P100
MACH 0.60
SWEEP 00.
LIFT COEF, C_L
ANGLE OF ATTACK, α
YAW MOM COEF, C_n
SIDE FORCE COEF, C_Y

FIGURE 81. TAPE DATA RUNS, CLEAN FUSELAGE

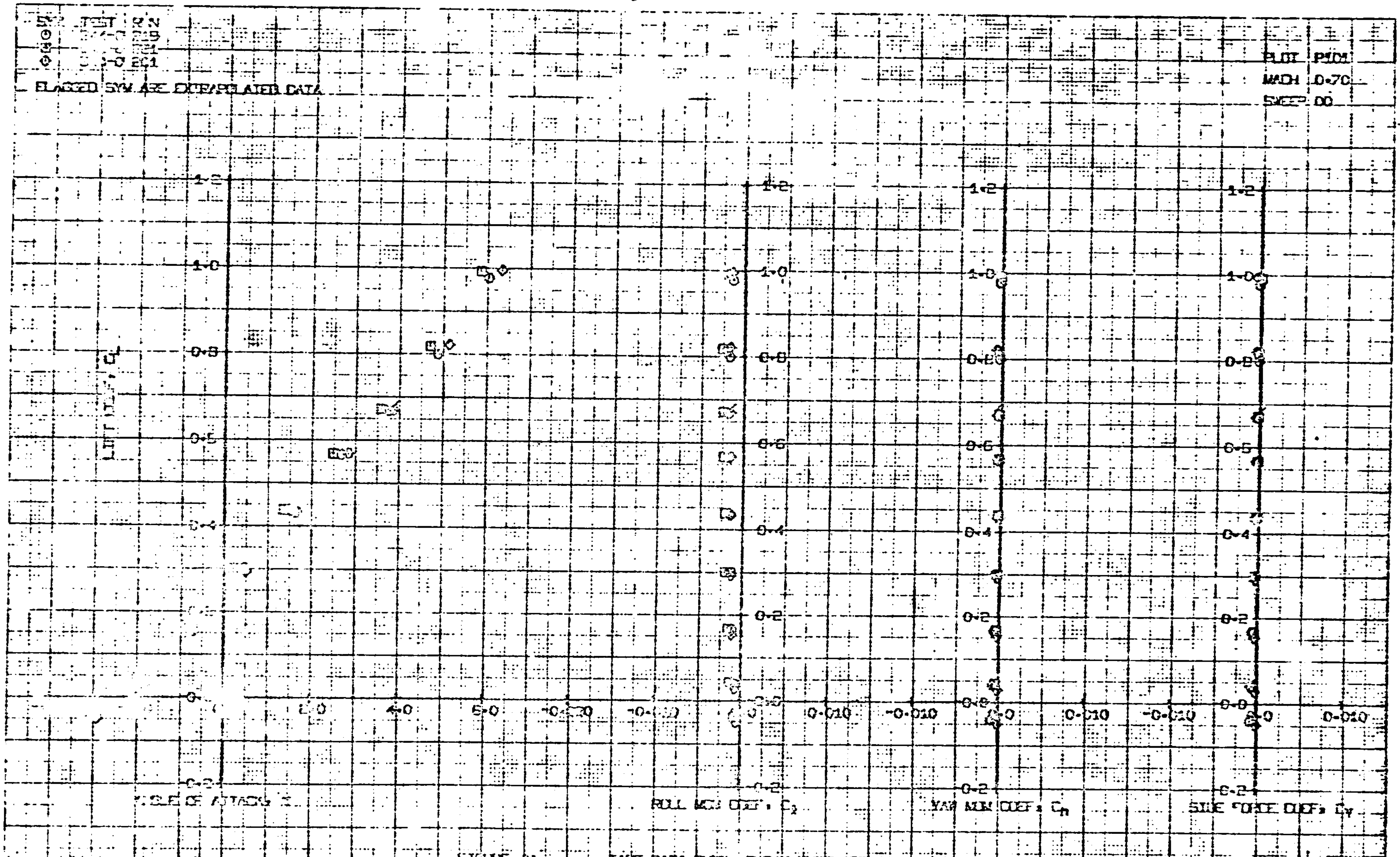


FIGURE 81 TARE DATA RUNS, CLEAN FUSELAGE

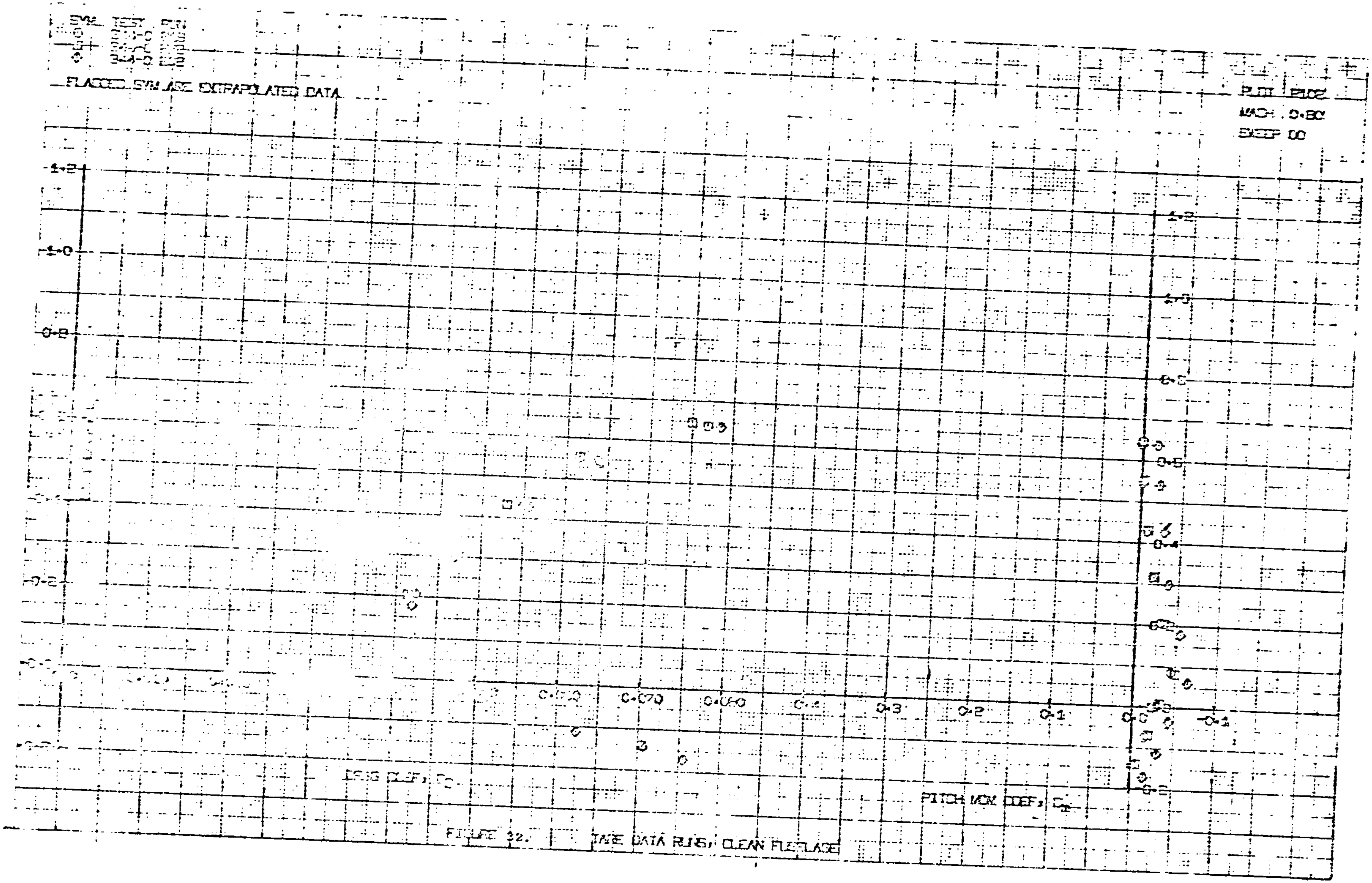


FIGURE 32. TARE DATA RUNS, CLEAN FUSELAGE

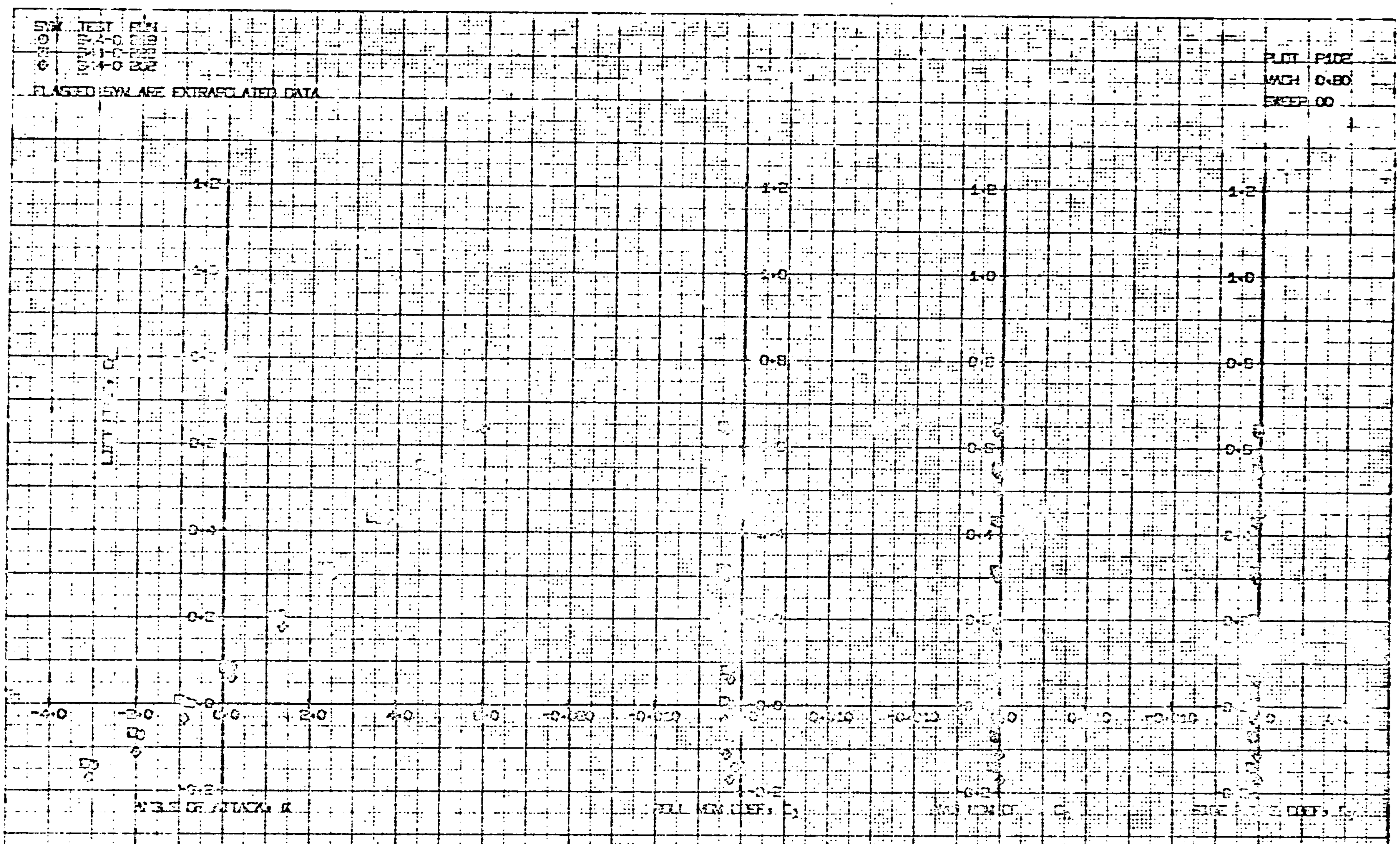


FIGURE 32. TARE DATA RUNS, CLEAN [illegible]

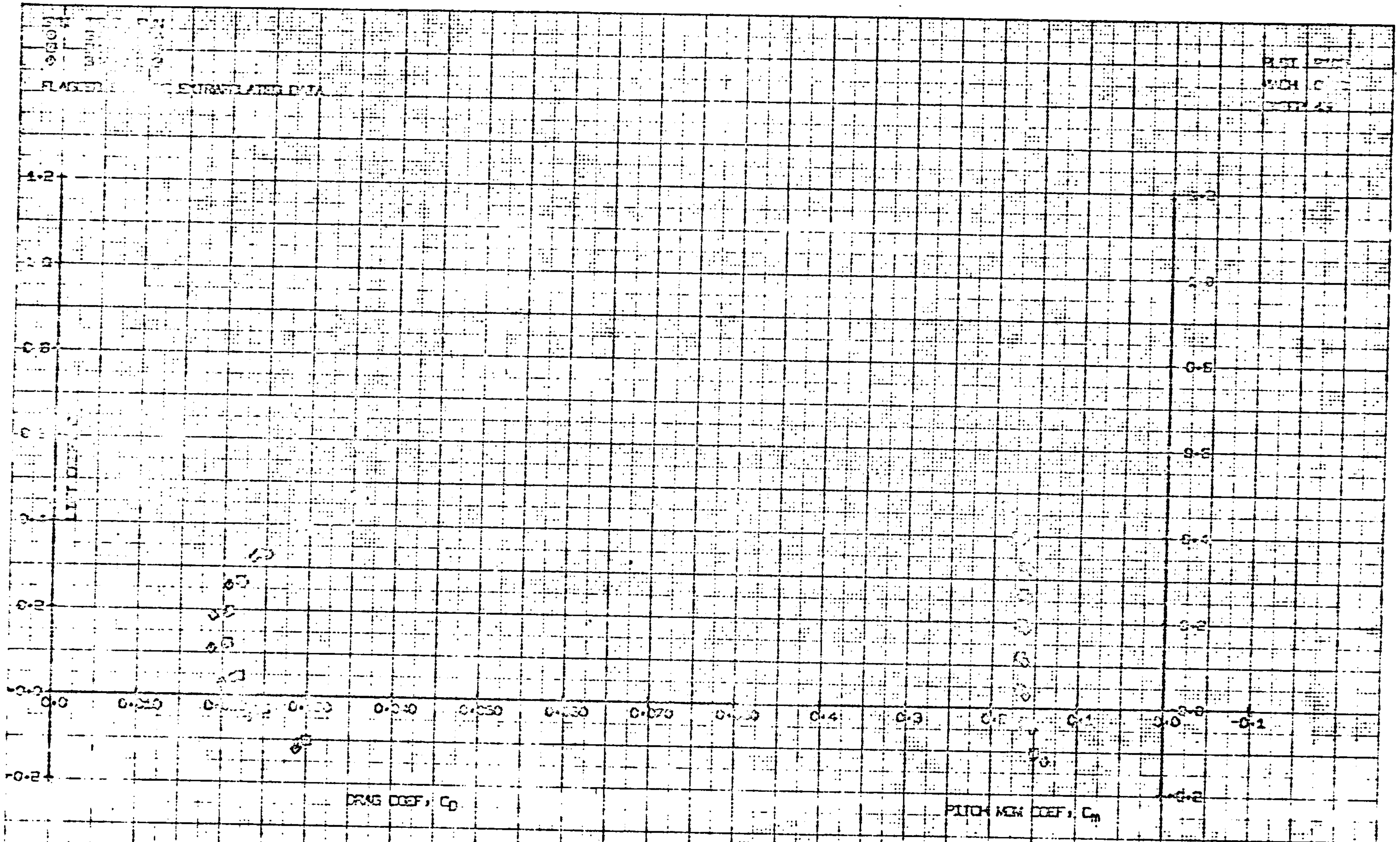


FIGURE 33. TARE DATA RUNS; CLEAN FUSELAGE

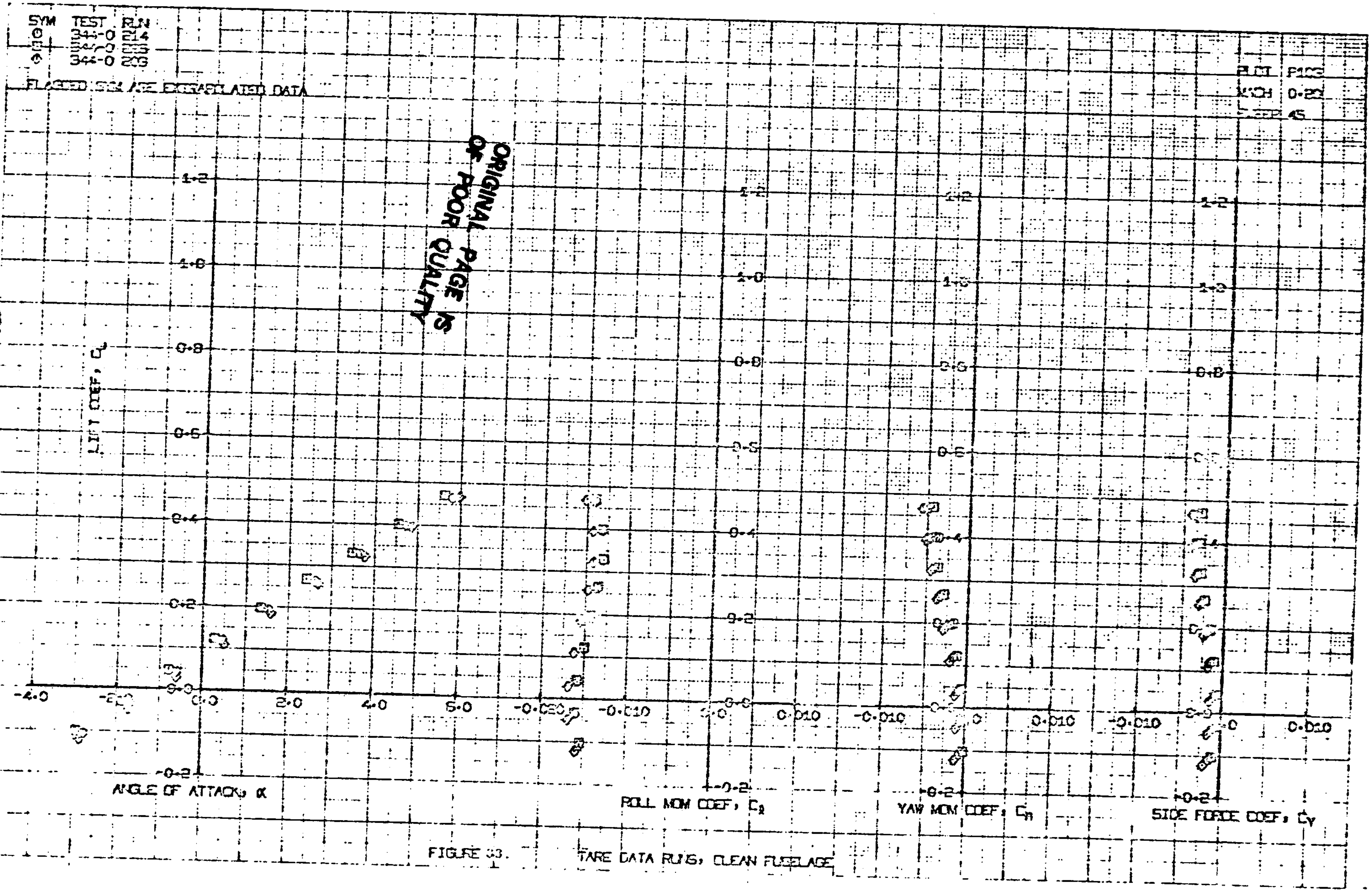


FIGURE 33. TARE DATA RUNS, CLEAN FUSELAGE

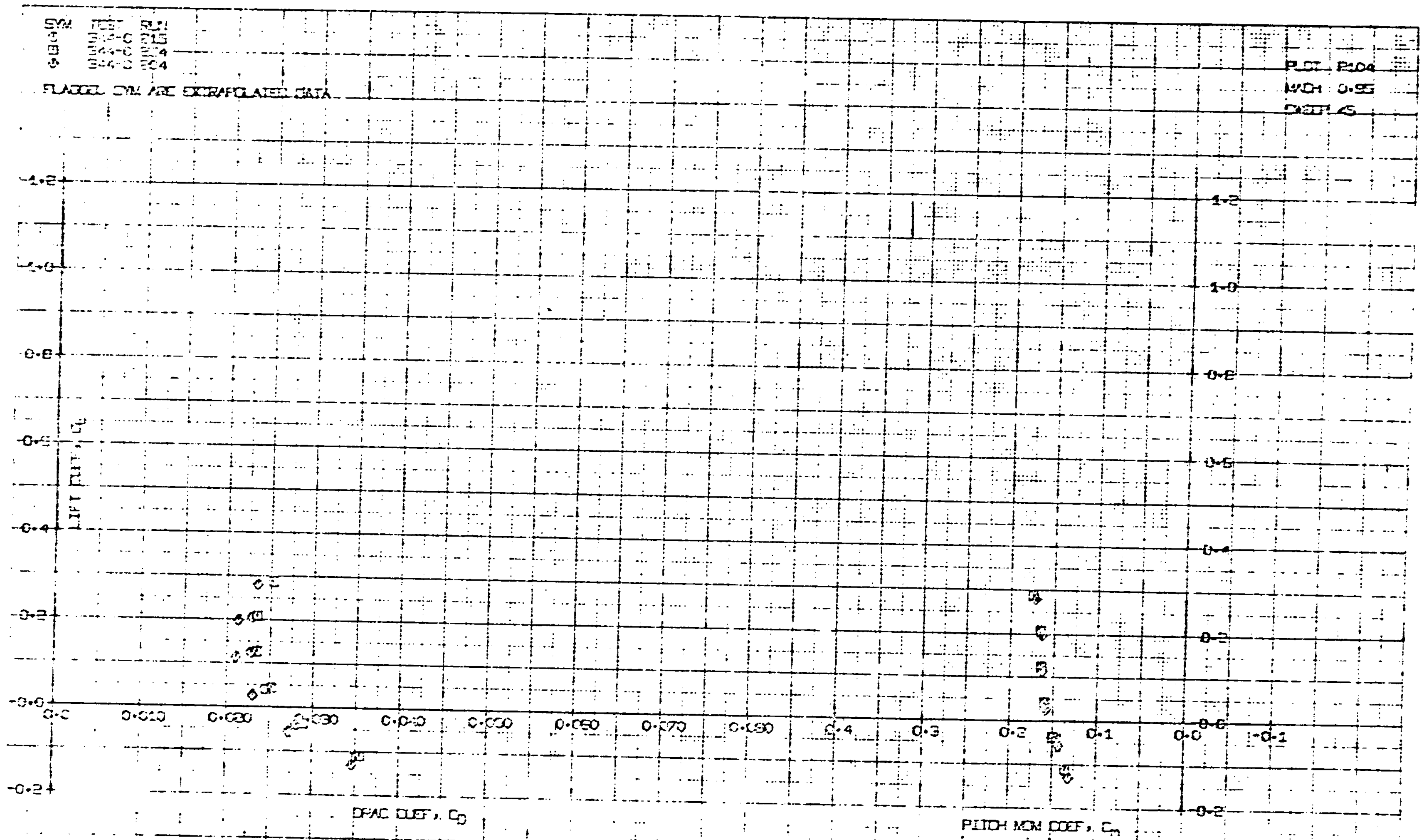


FIGURE 34. TARE DATA RUNS, CLEAN FUSELAGE

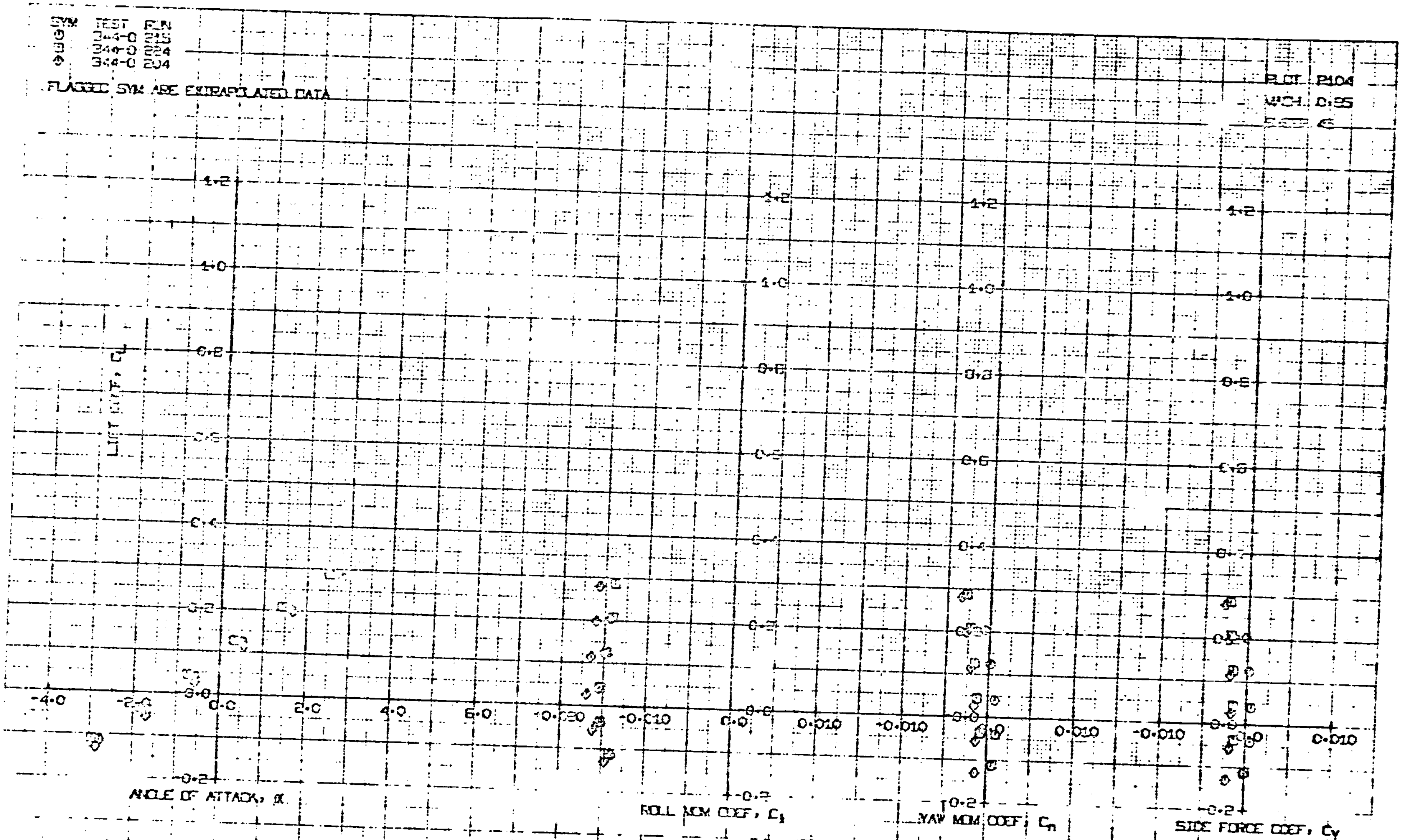


FIGURE 34. TARE DATA RUNS, CLEAN FUSELAGE

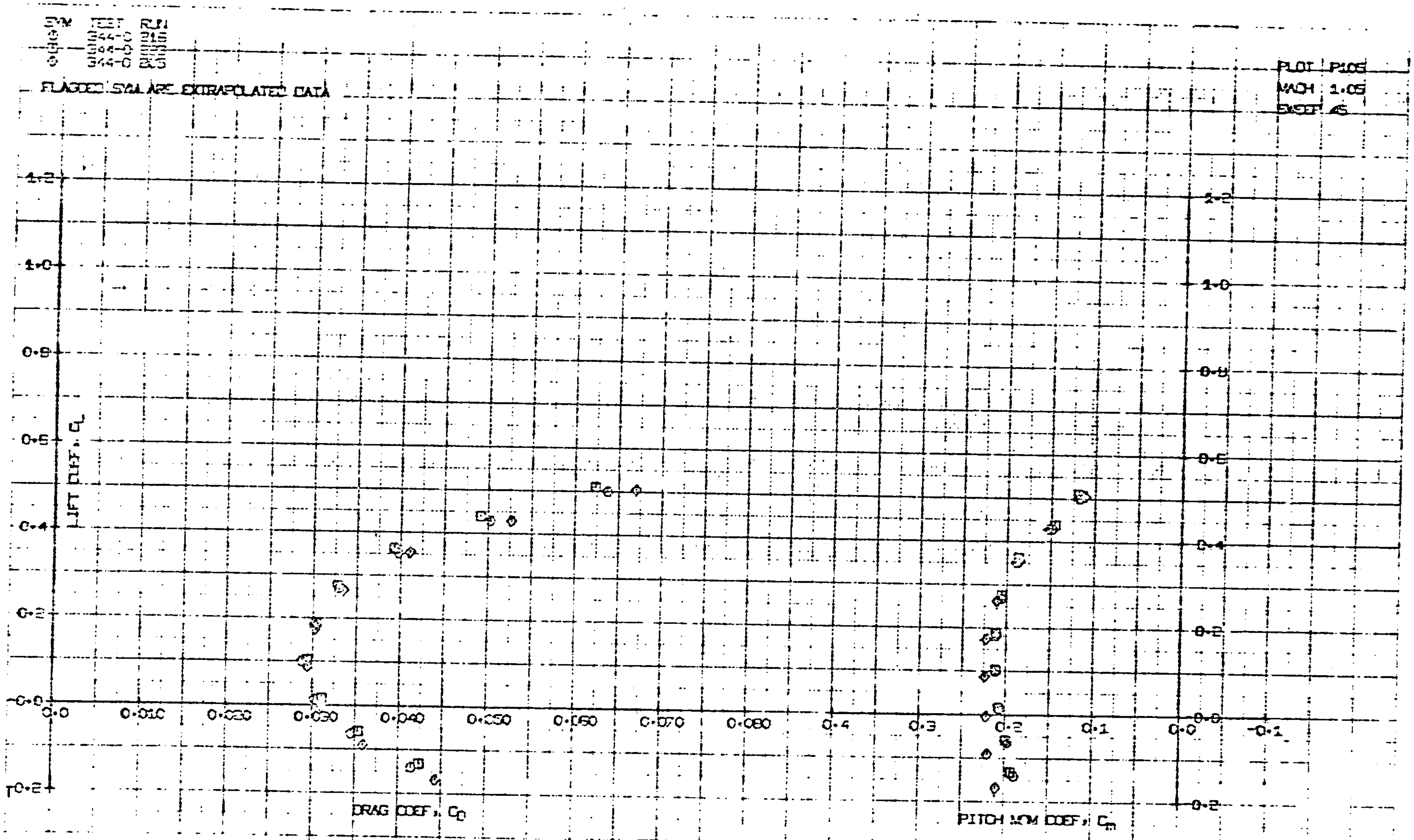


FIGURE 35. TARE DATA RUNS, CLEAN FUSELAGE

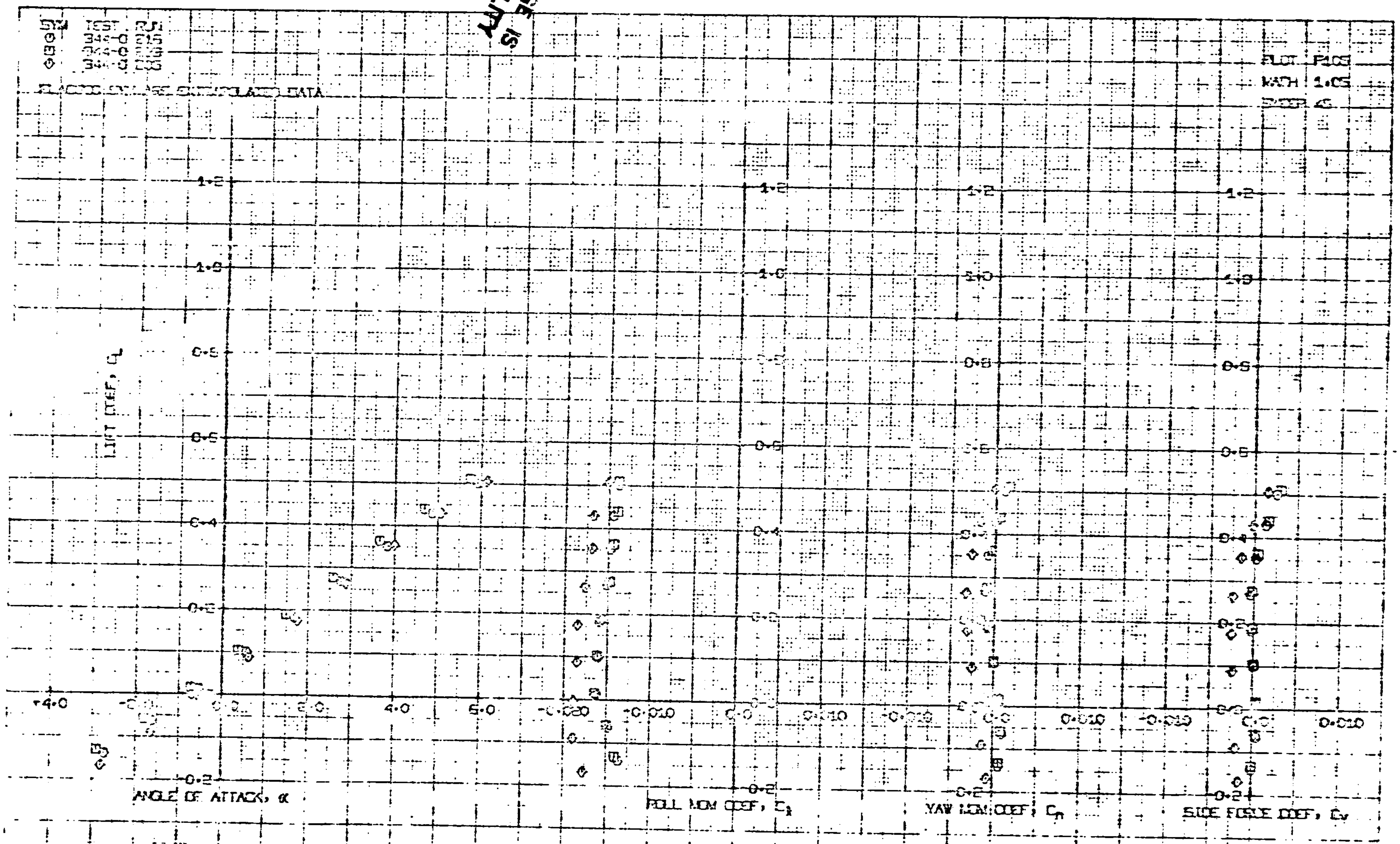


FIGURE 35. TARE DATA RUNS, CLEAN FUSELAGE

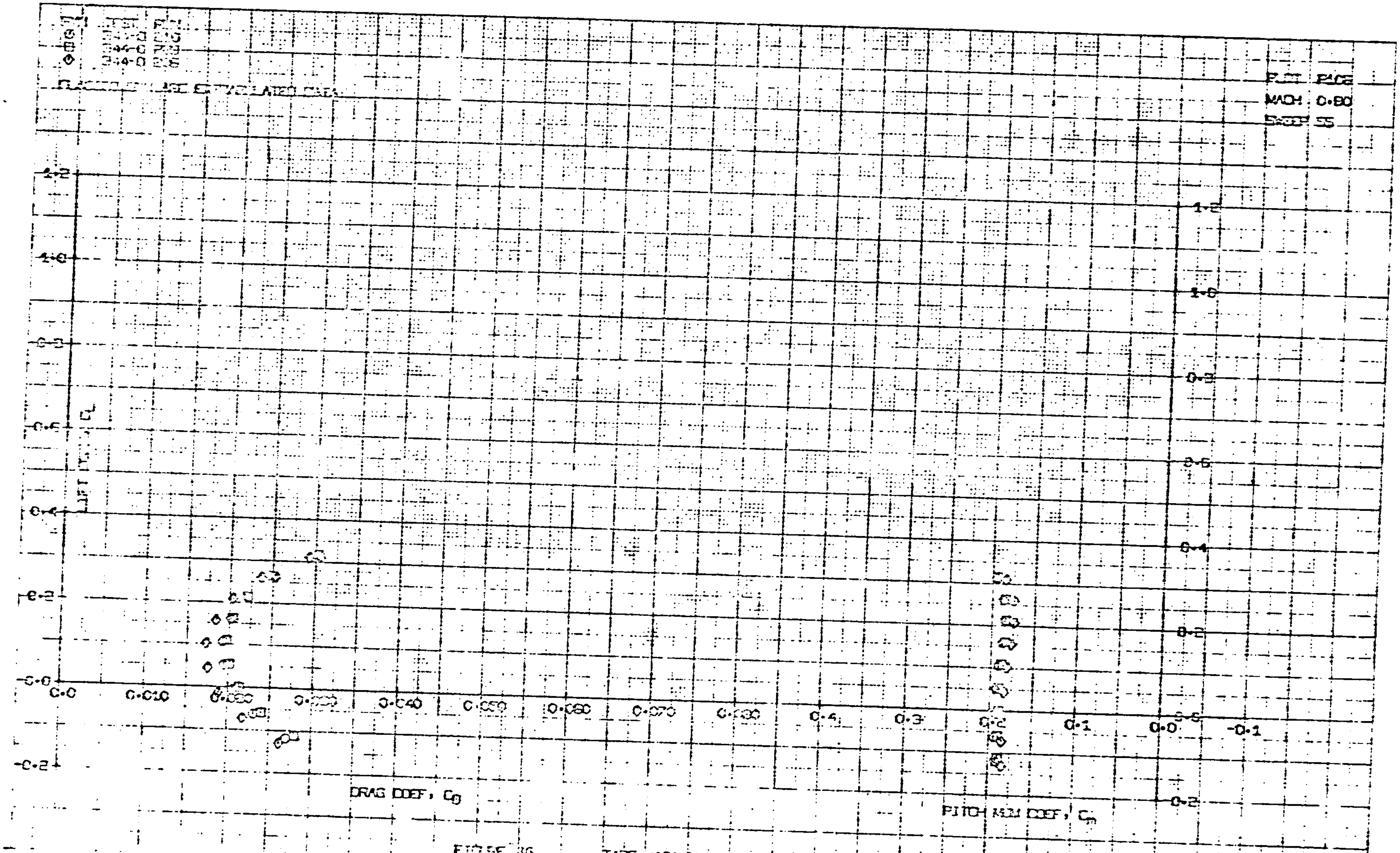


FIGURE 36. TARE DATA RUNS, CLEAN FUSELAGE

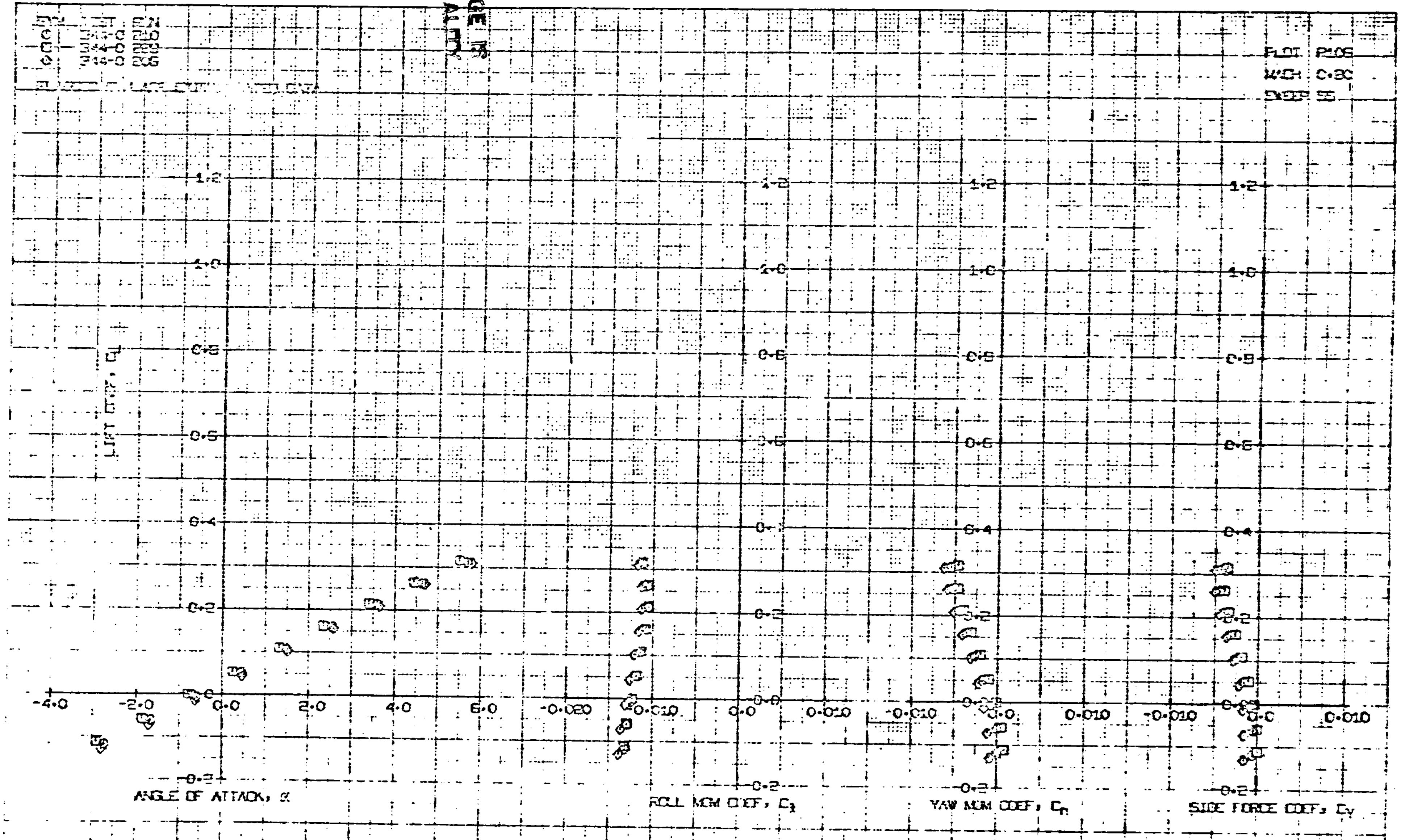


FIGURE 86. TARE DATA RUNS, CLEAN FUSELAGE

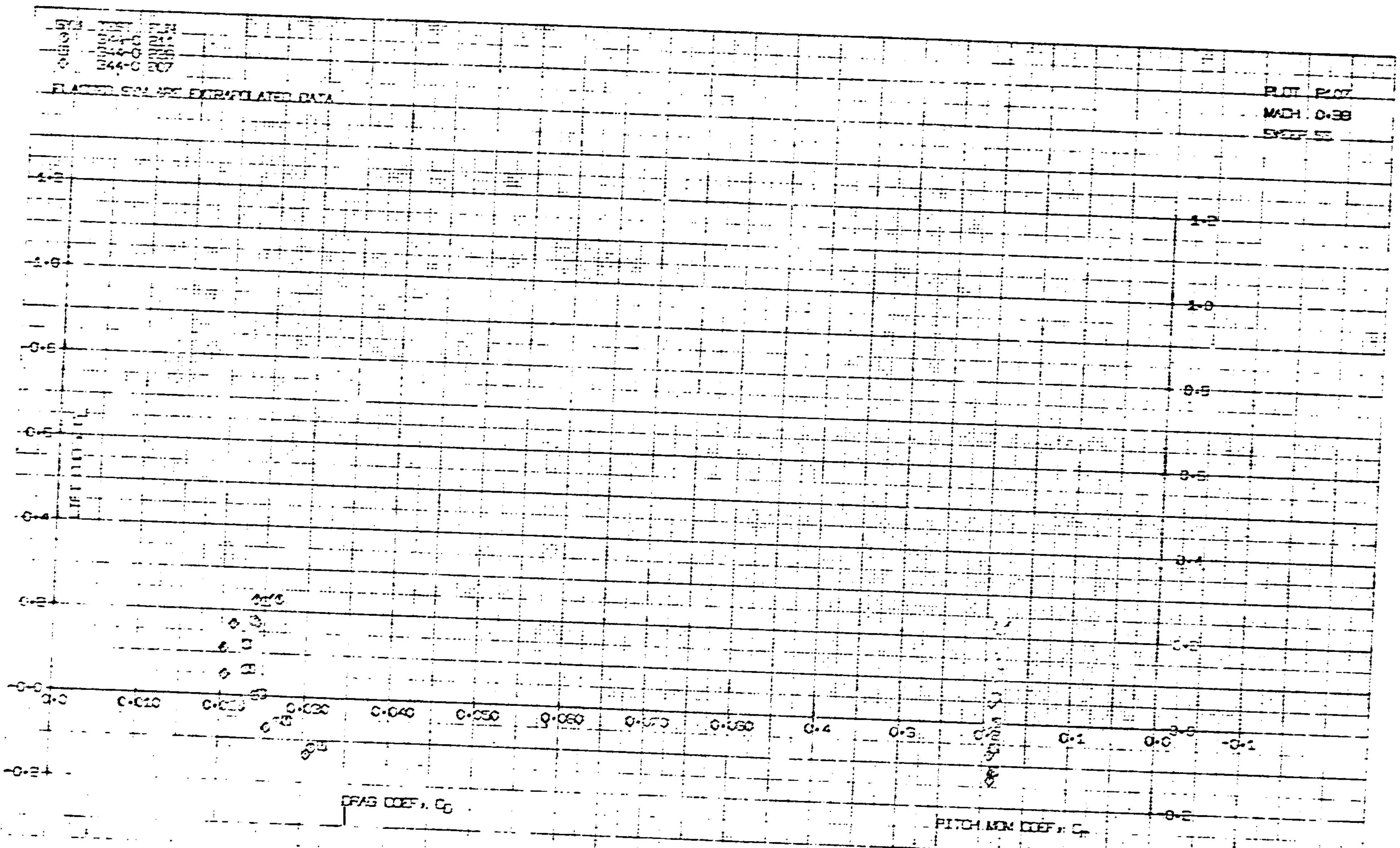


FIGURE 37. TARE DATA RUNS, CLEAN FUSELAGE

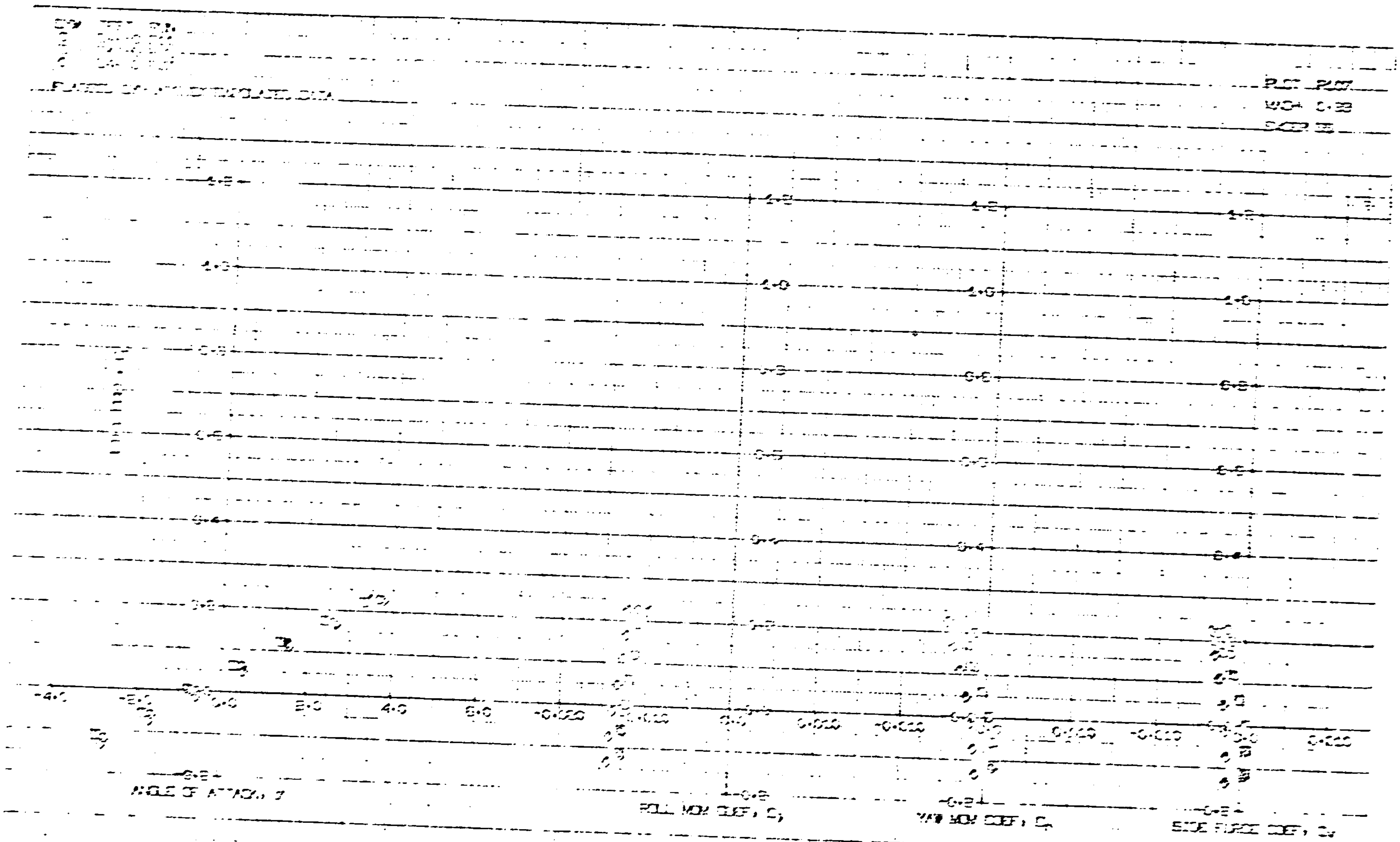


FIGURE 37. TARE DATA RUNS, CLEAN FUSELAGE

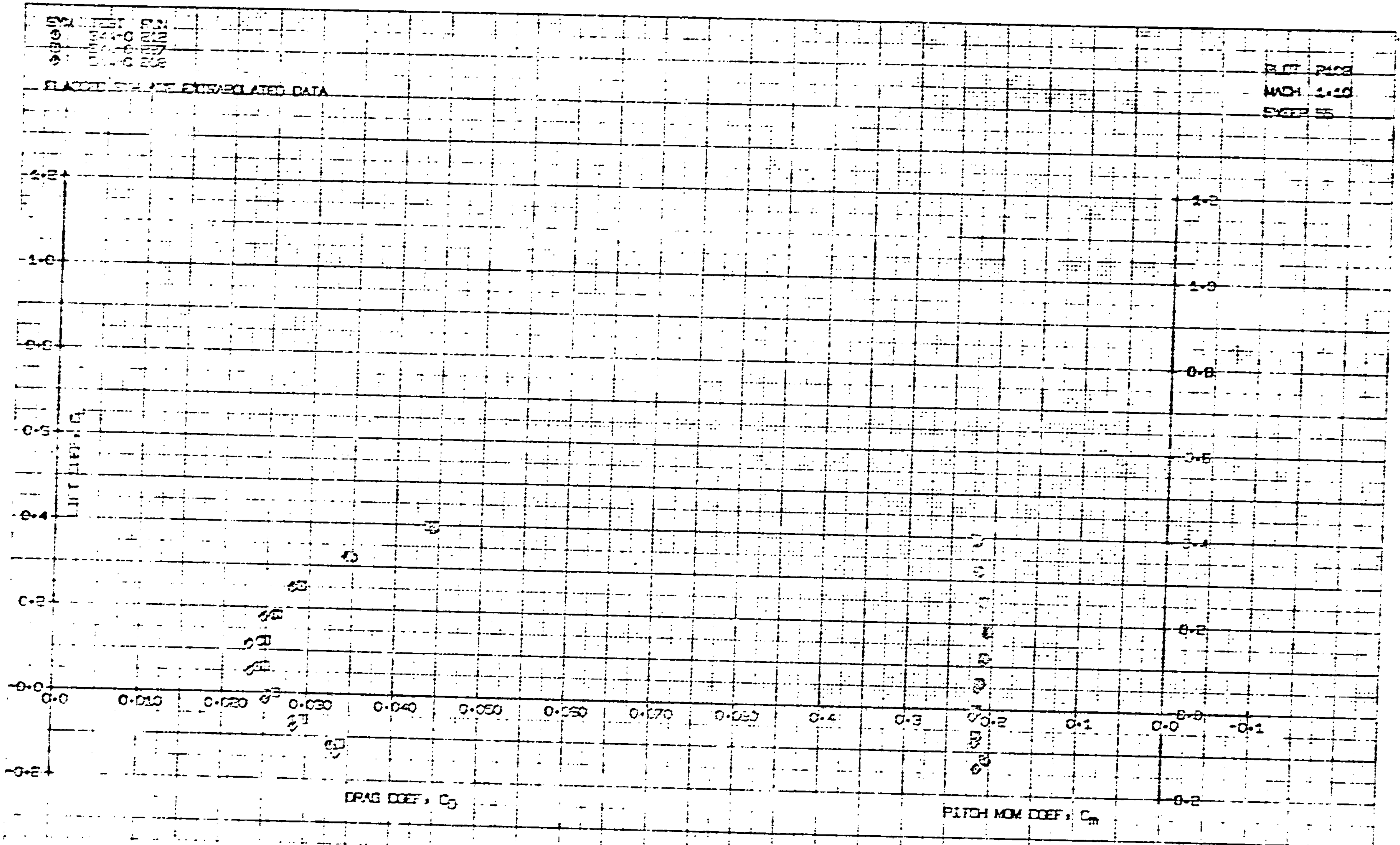


FIGURE 38. TARE DATA RUNS, CLEAN FUSELAGE

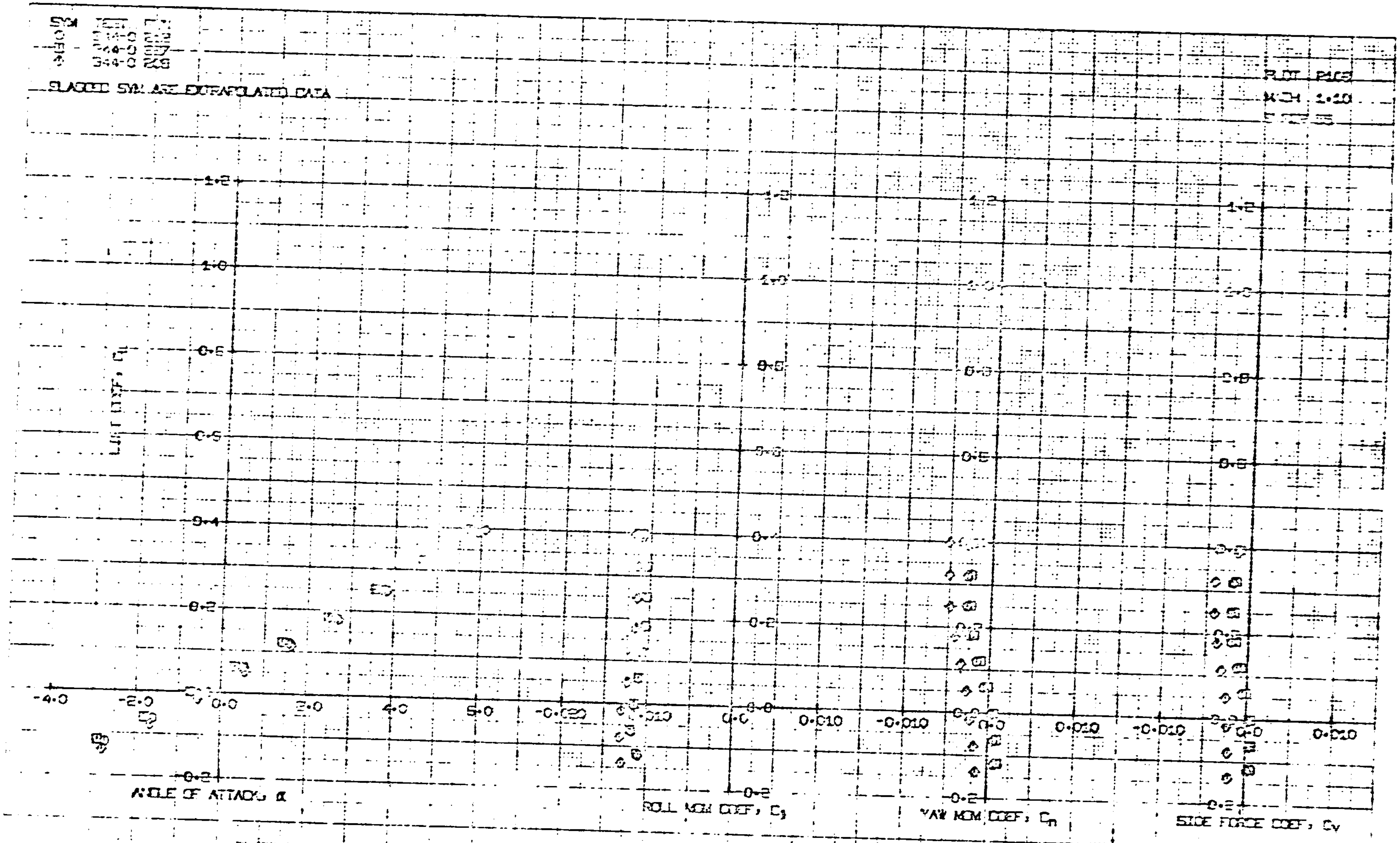


FIGURE 38. TARE DATA RUNS, CLEAN FUSELAGE

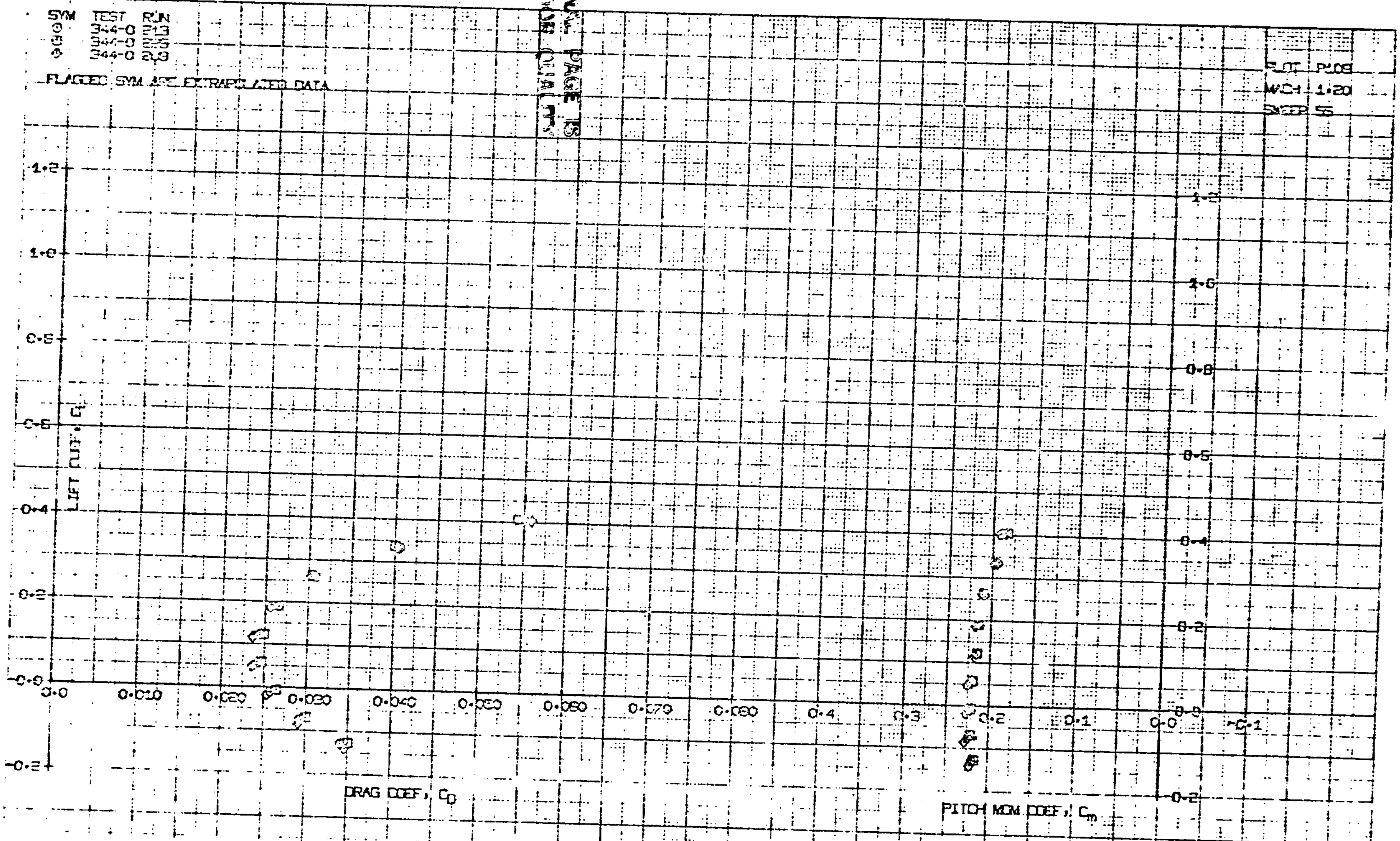


FIGURE 39. TARE DATA RUNS, CLEAN FUSELAGE

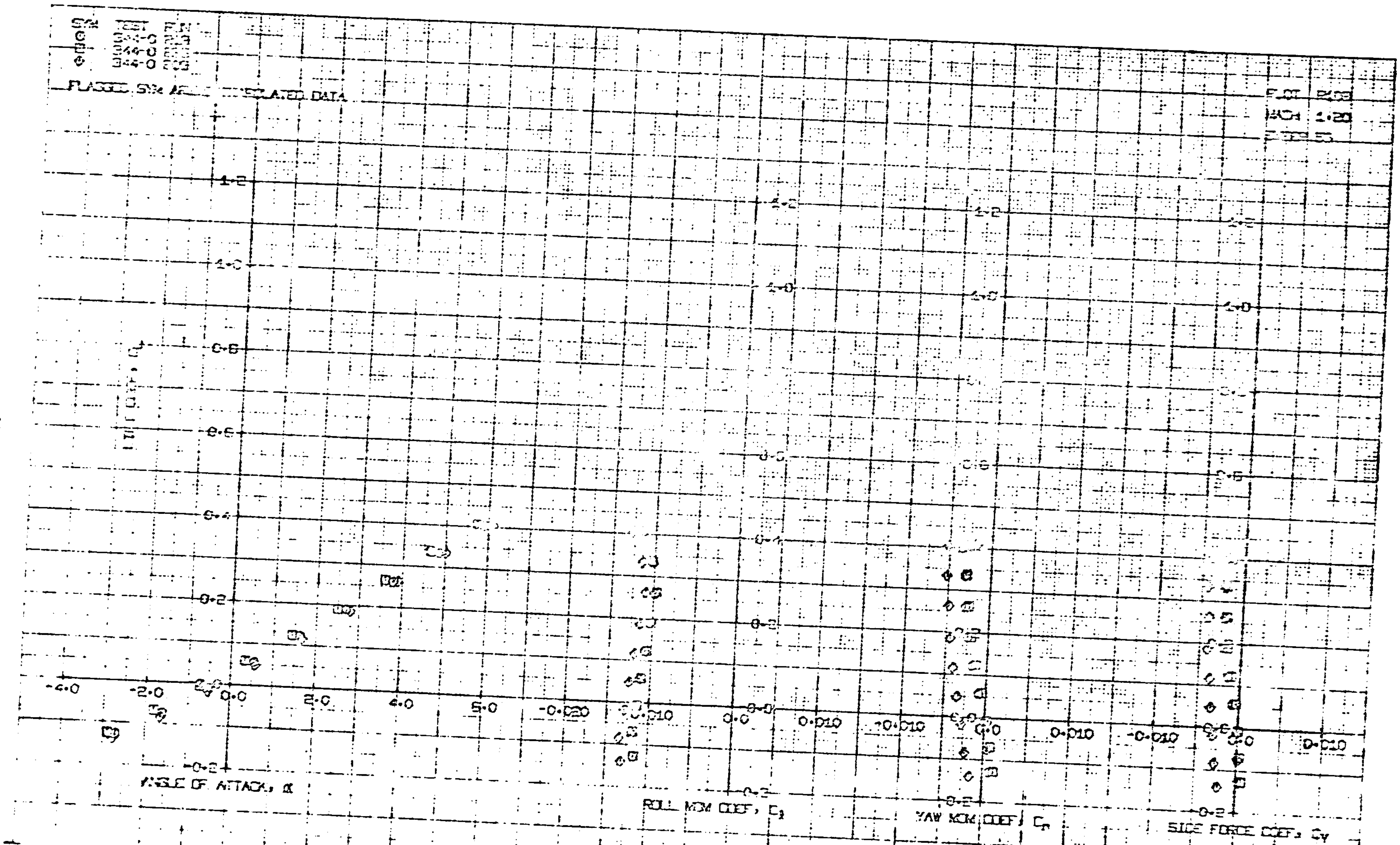


FIGURE 39. TARE DATA RUNS, CLEAN FUSELAGE

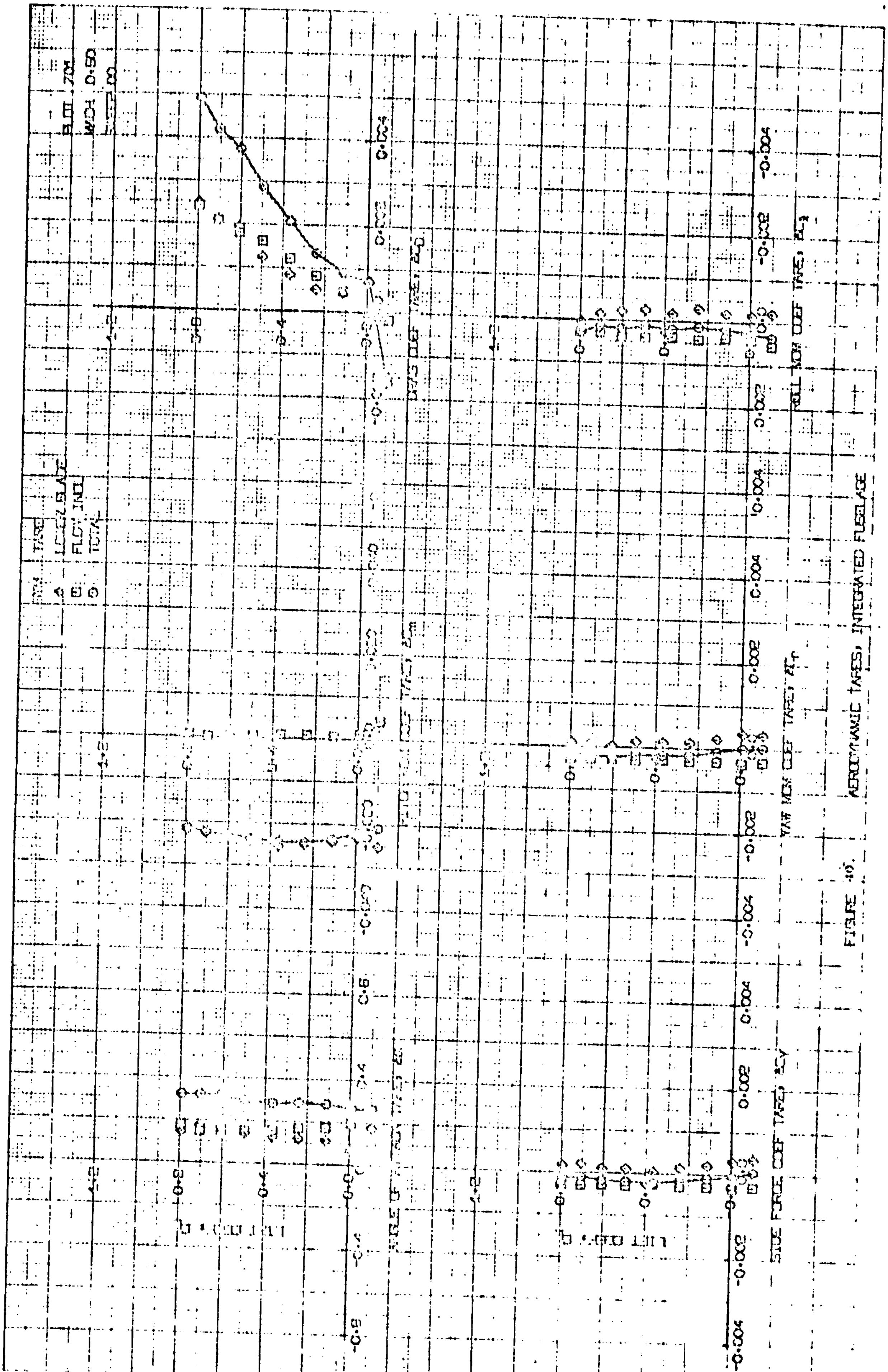


FIGURE 40. AERODYNAMIC TARES, INTEGRATED FUSELAGE

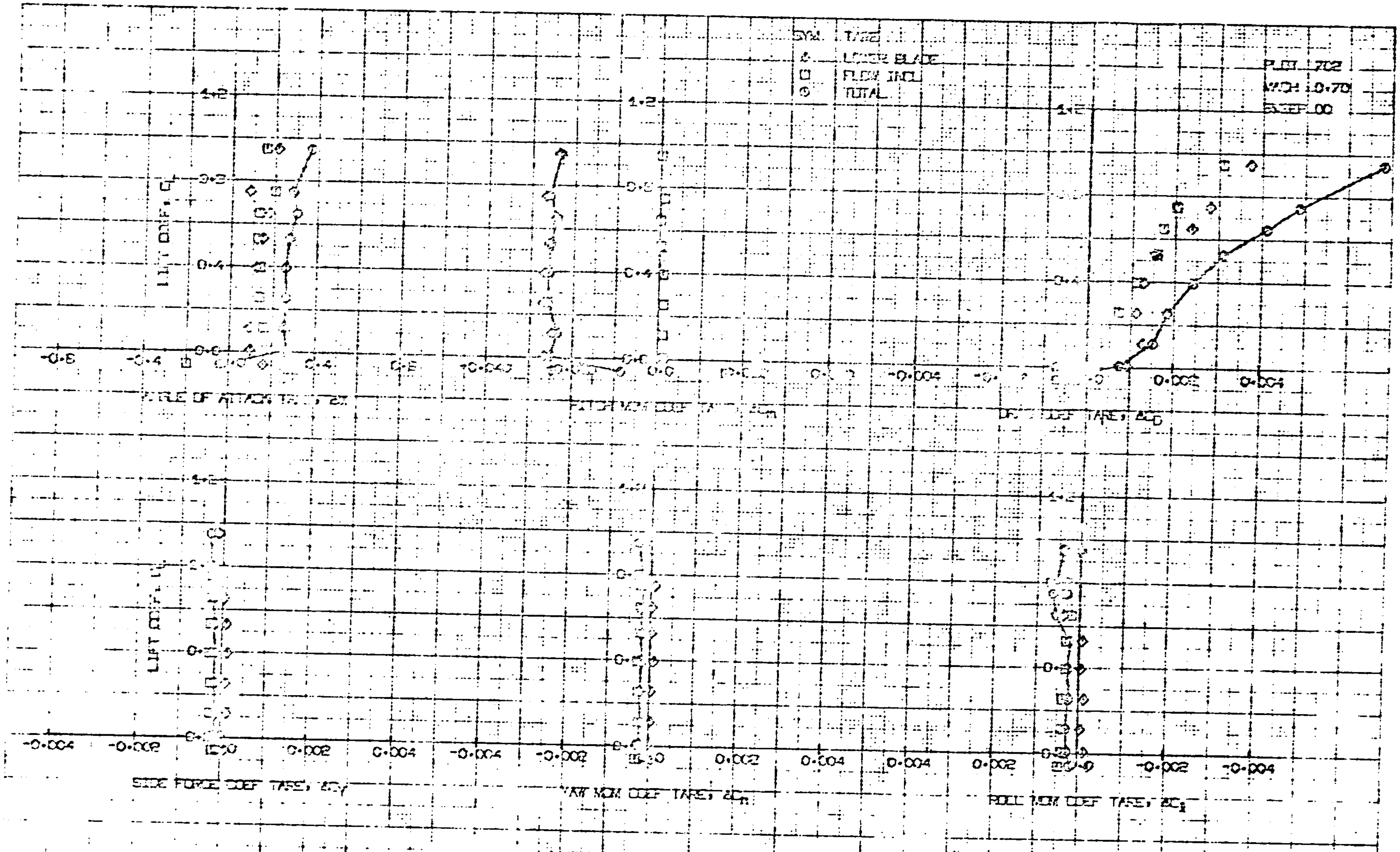


FIGURE 41. AERODYNAMIC TARES, INTEGRATED FUSELAGE

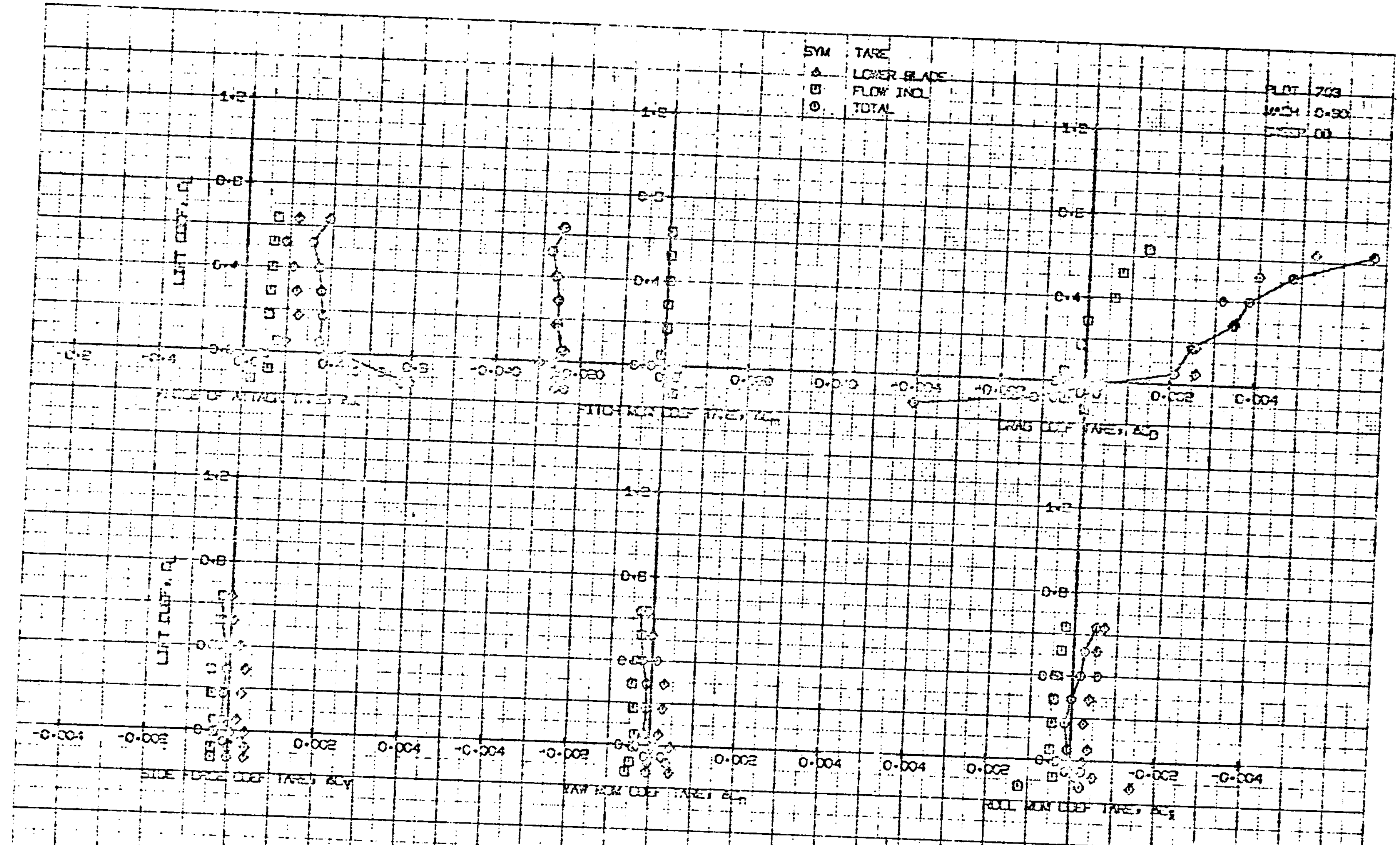


FIGURE 42. AERODYNAMIC TARES, INTEGRATED FUSELAGE

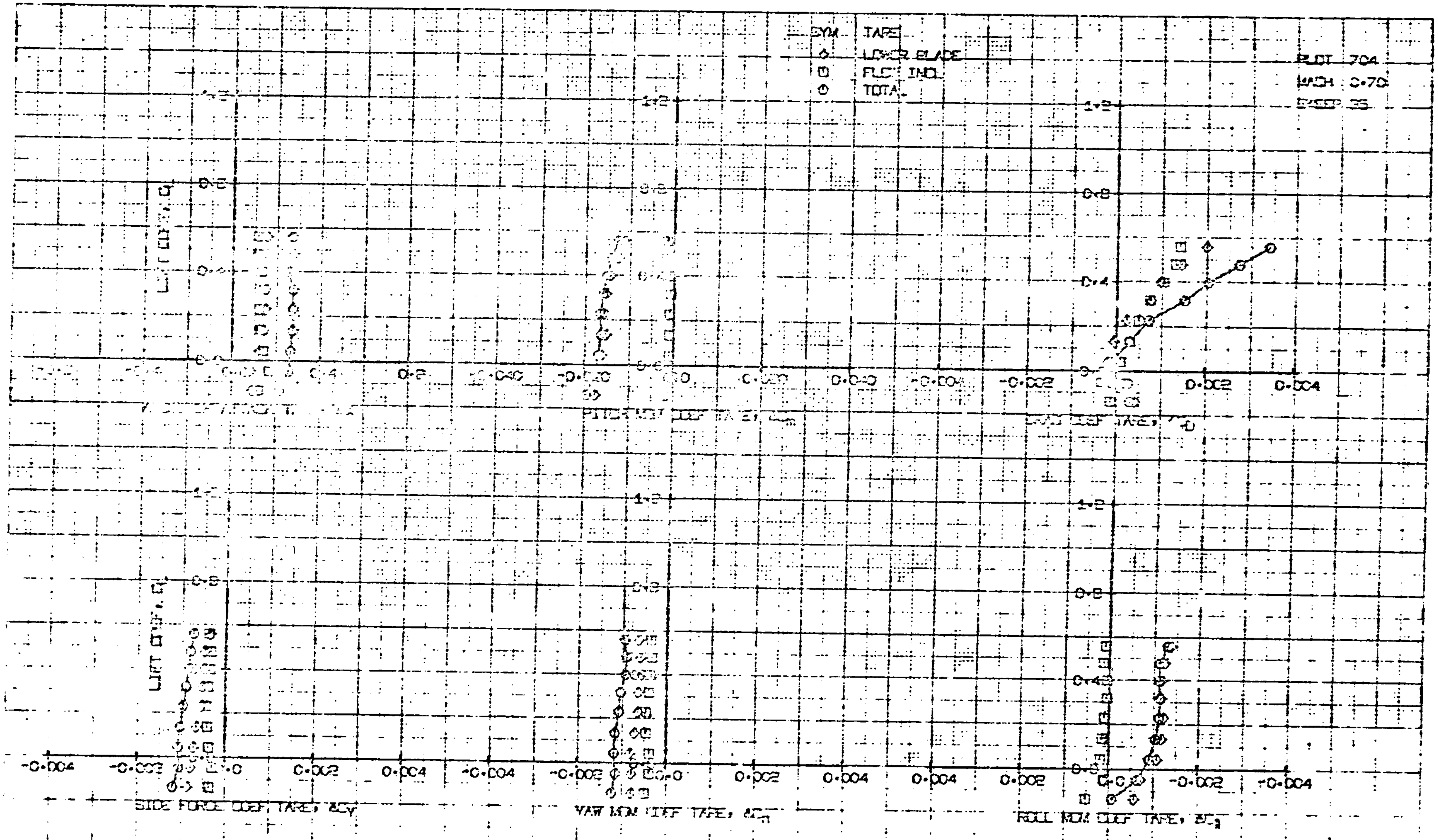


FIGURE 43. AERODYNAMIC TARES, INTEGRATED FUSELAGE

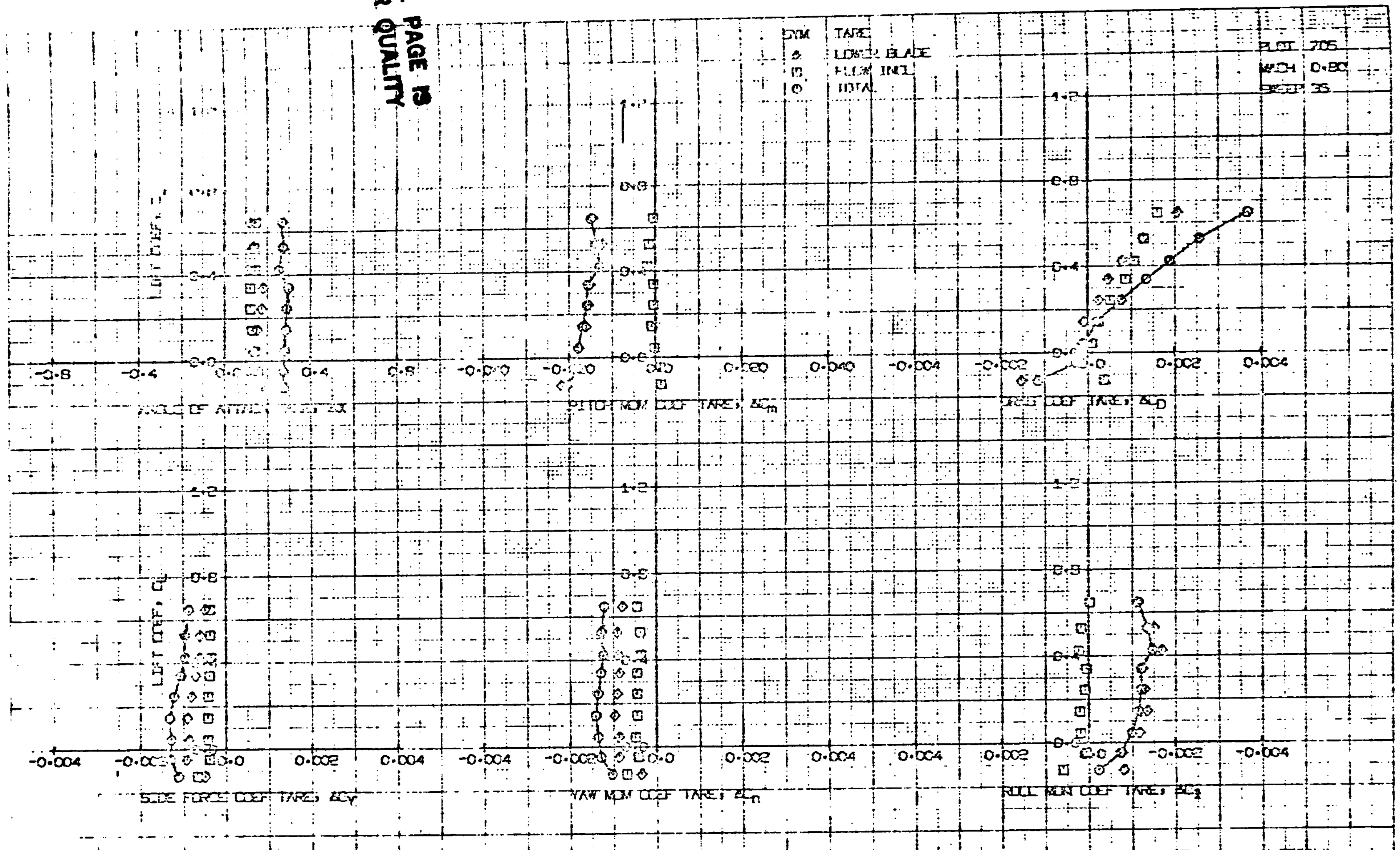


FIGURE 14. AERODYNAMIC TARES, INTEGRATED FUSELAGE

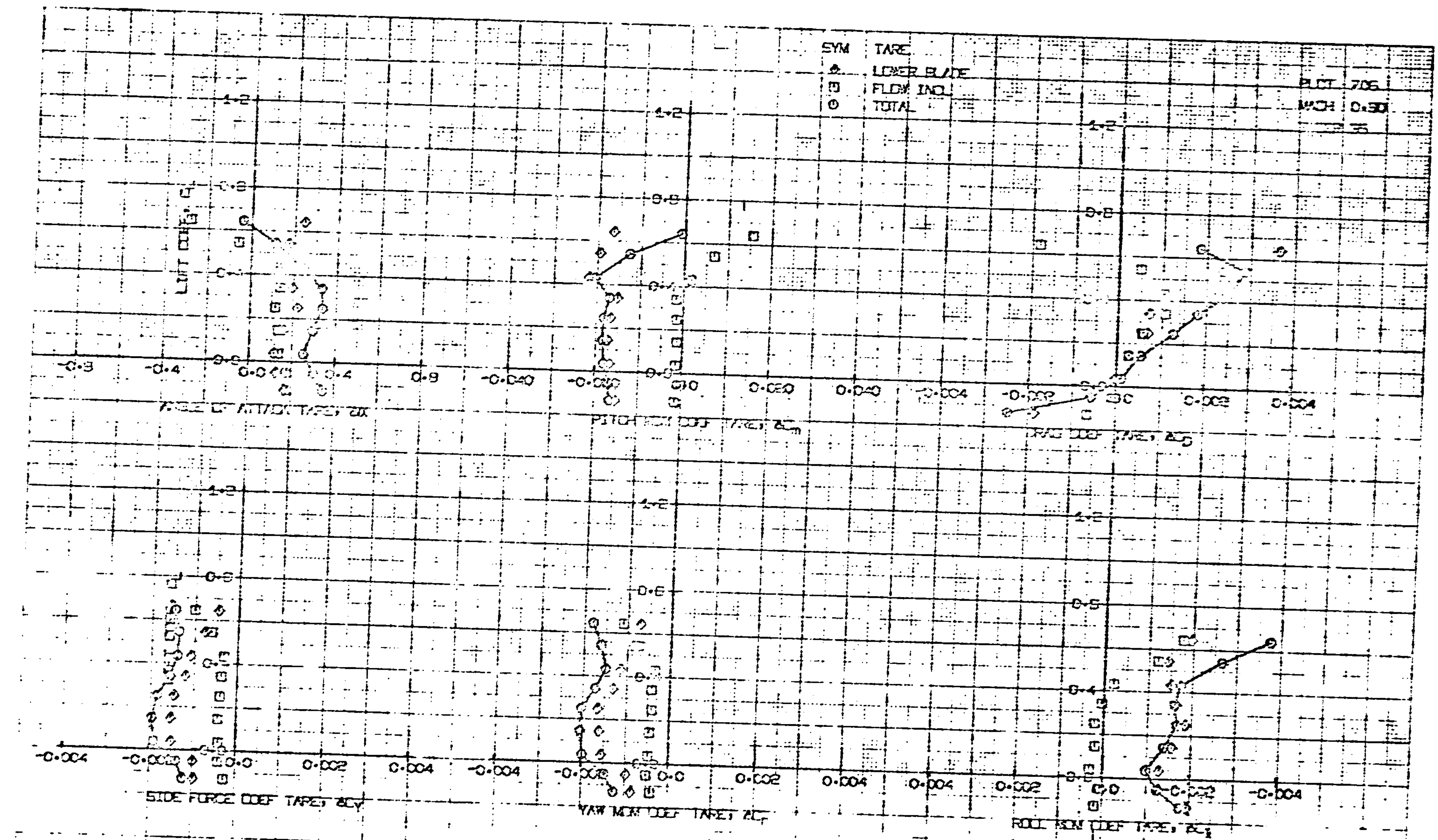


FIGURE 45. AERODYNAMIC TARES, INTEGRATED FUSELAGE

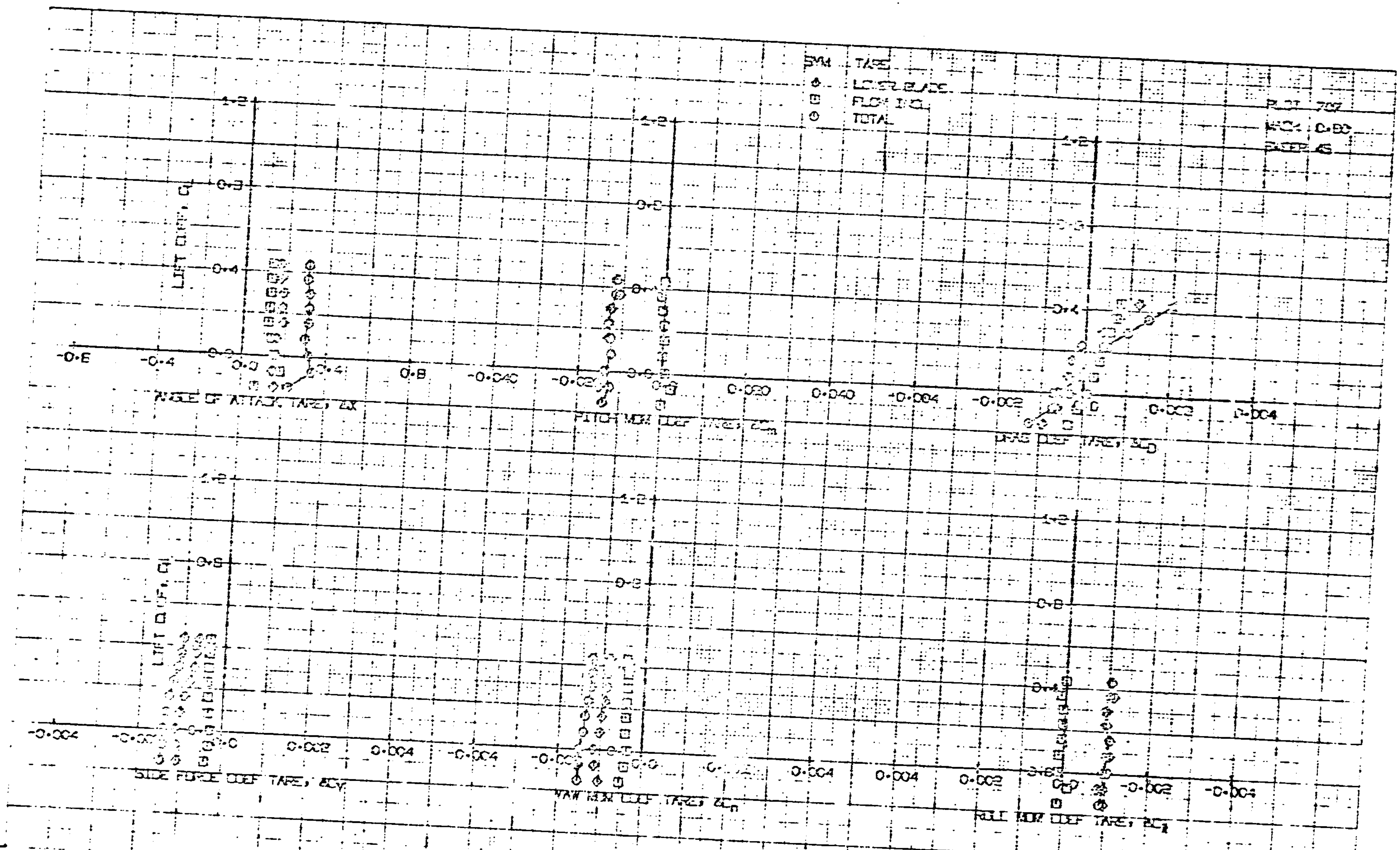


FIGURE 46. AERODYNAMIC TARES, INTEGRATED FUSELAGE

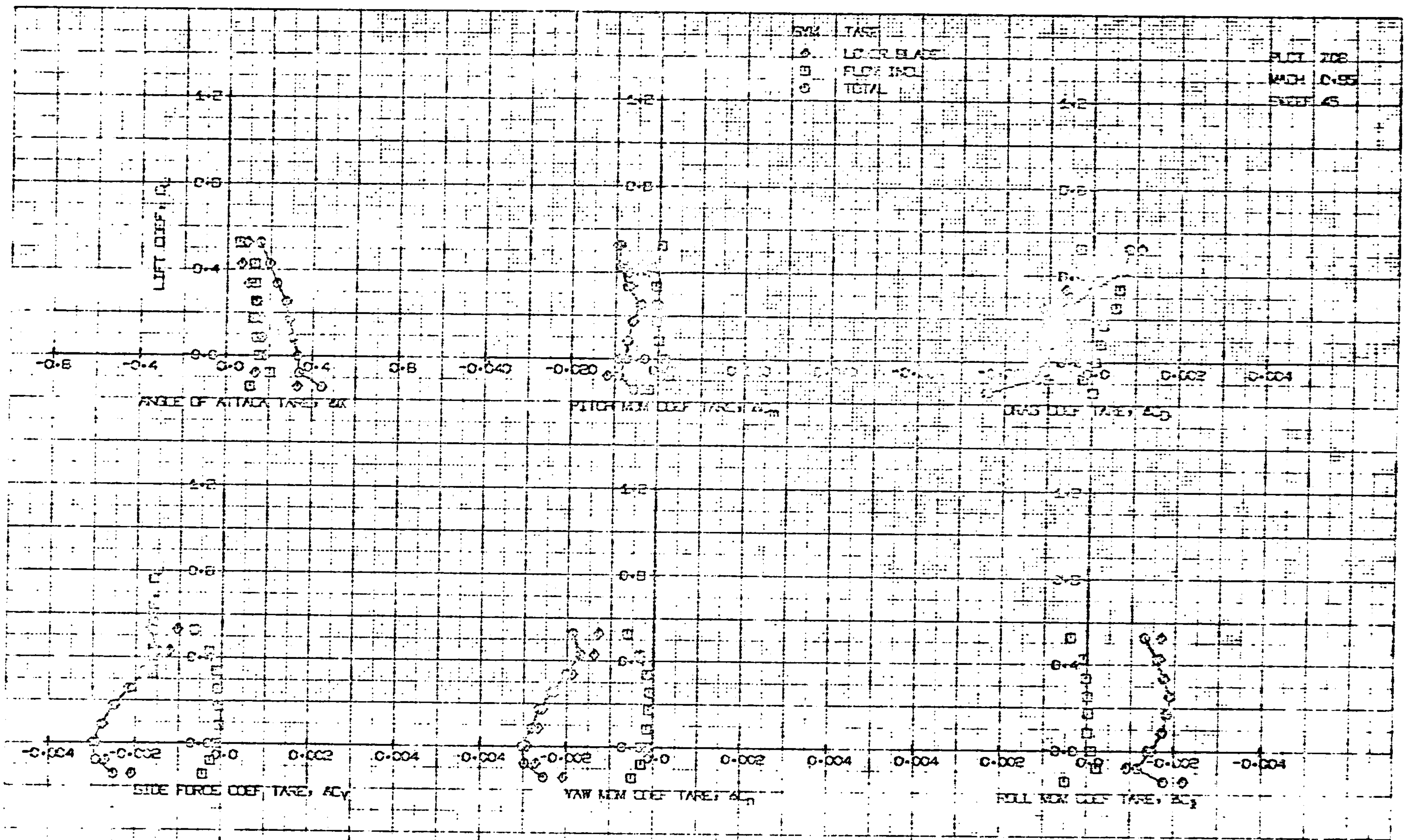


FIGURE 47. AERODYNAMIC TARES, INTEGRATED FUSELAGE

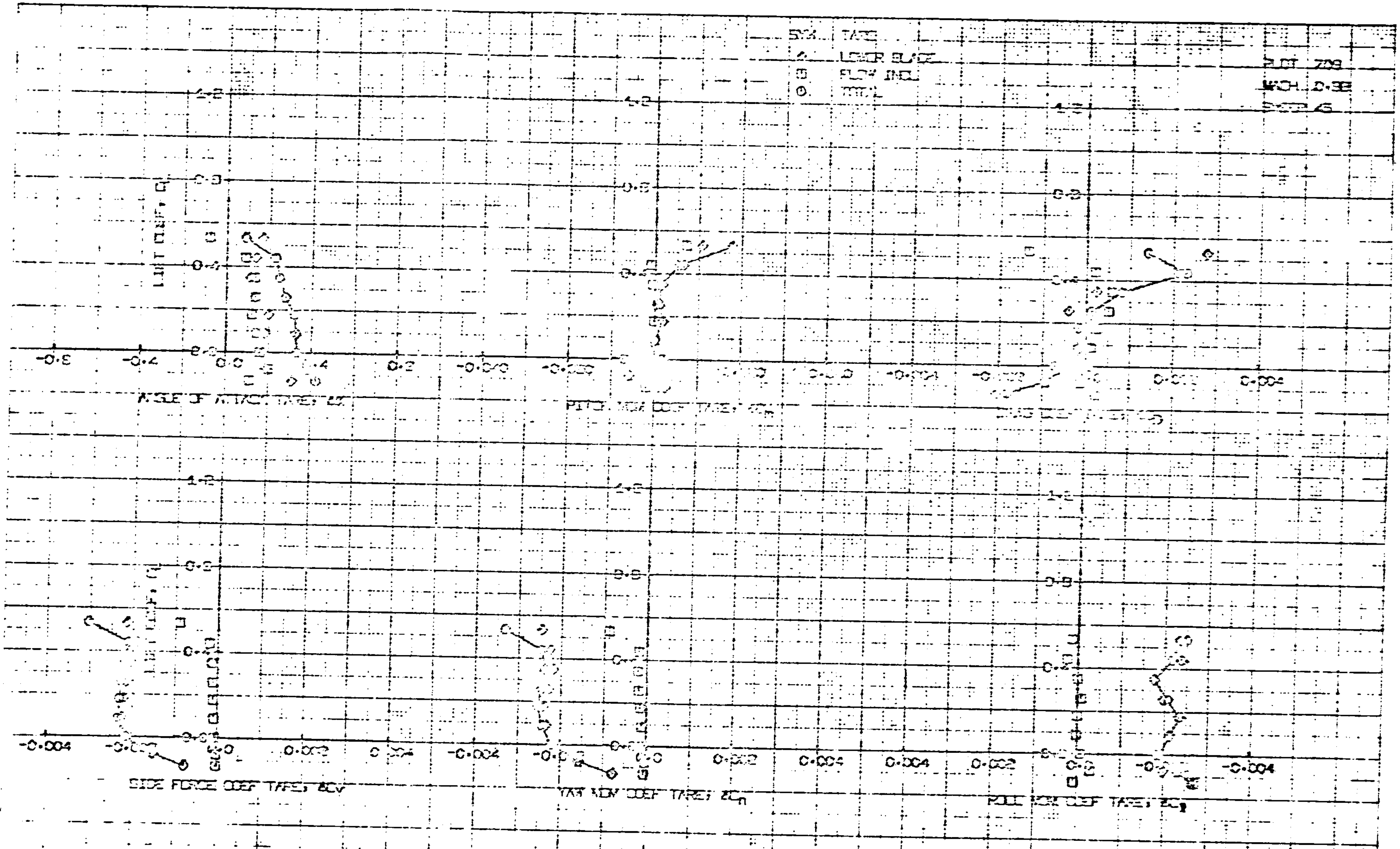


FIGURE 48. AERODYNAMIC TARES: INTEGRATED FUSELAGE

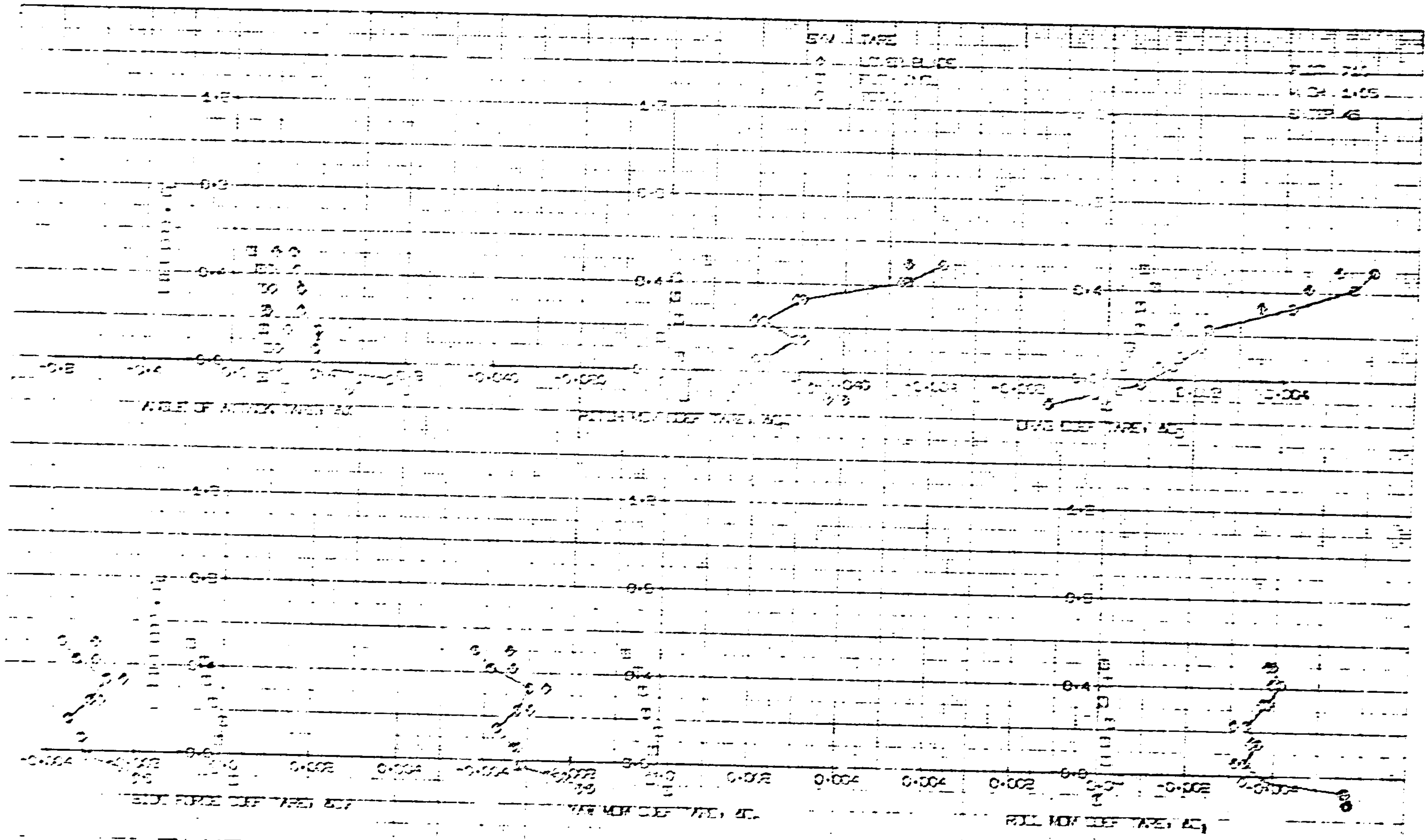


FIGURE [illegible]. AERODYNAMIC TARES, INTEGRATED FUSELAGE

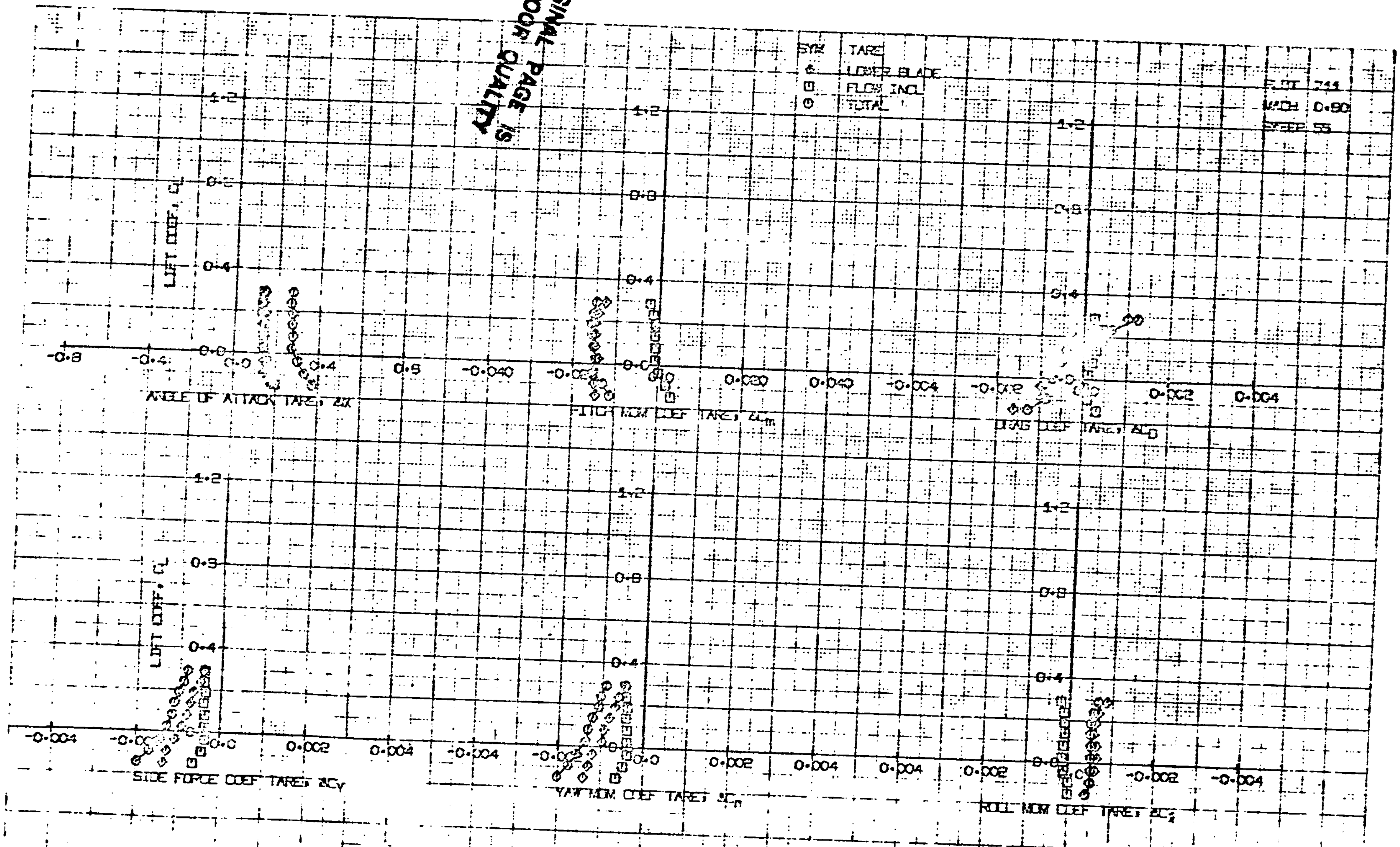


FIGURE 50. AERODYNAMIC TARES, INTEGRATED FUSELAGE

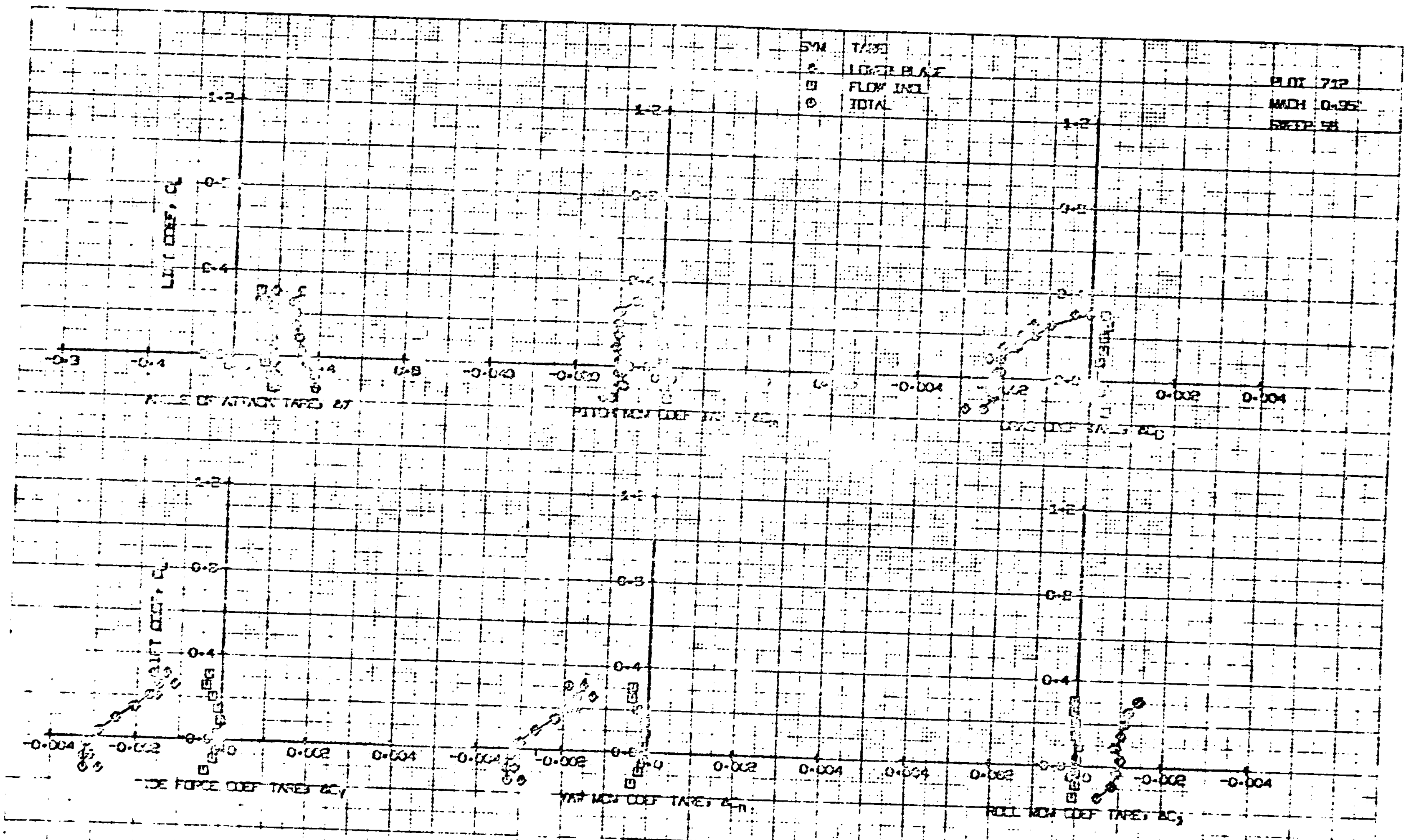


FIGURE 51. AERODYNAMIC TARES, INTEGRATED FUSELAGE

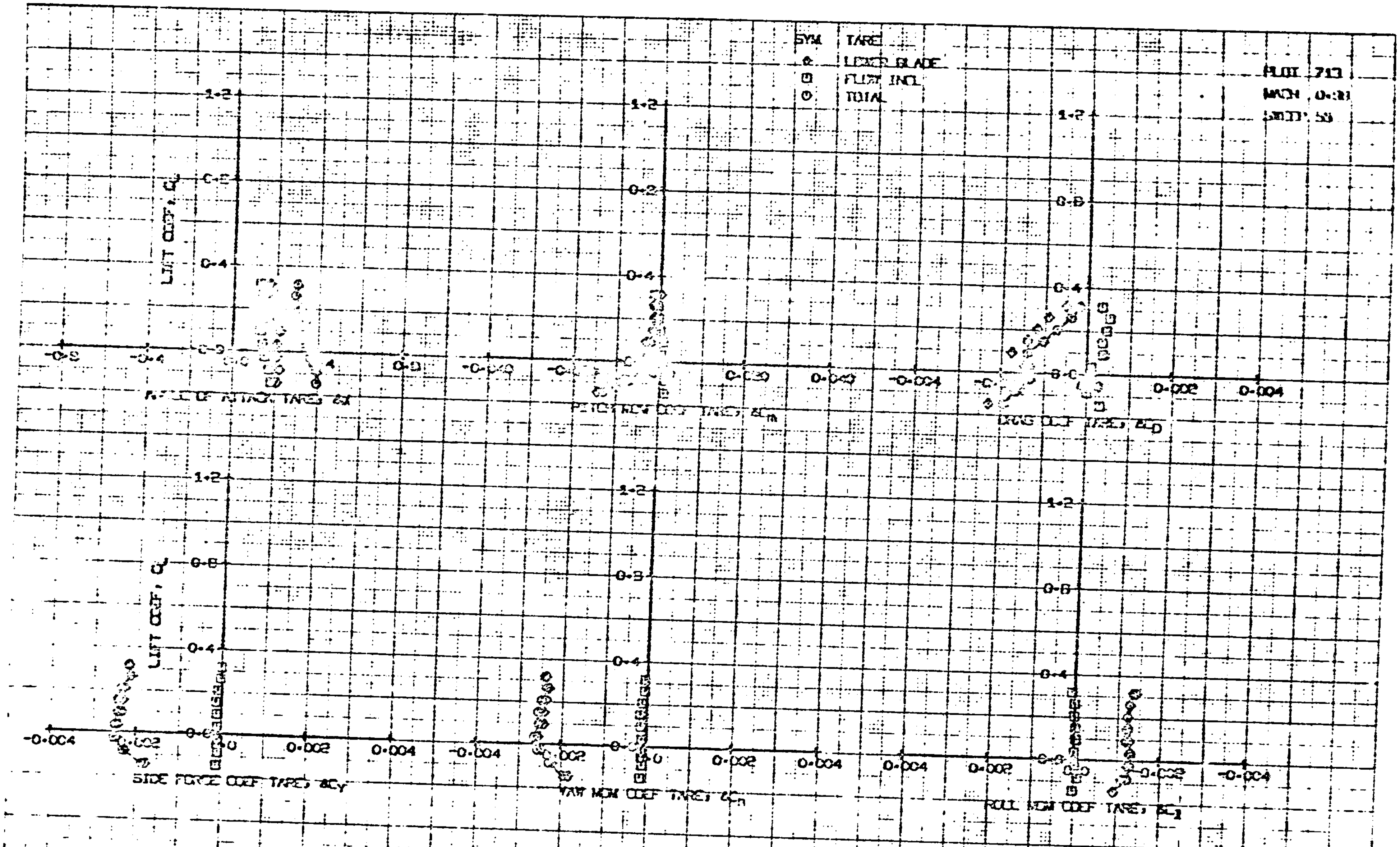


FIGURE 52. AERODYNAMIC TARES, INTEGRATED FUSELAGE

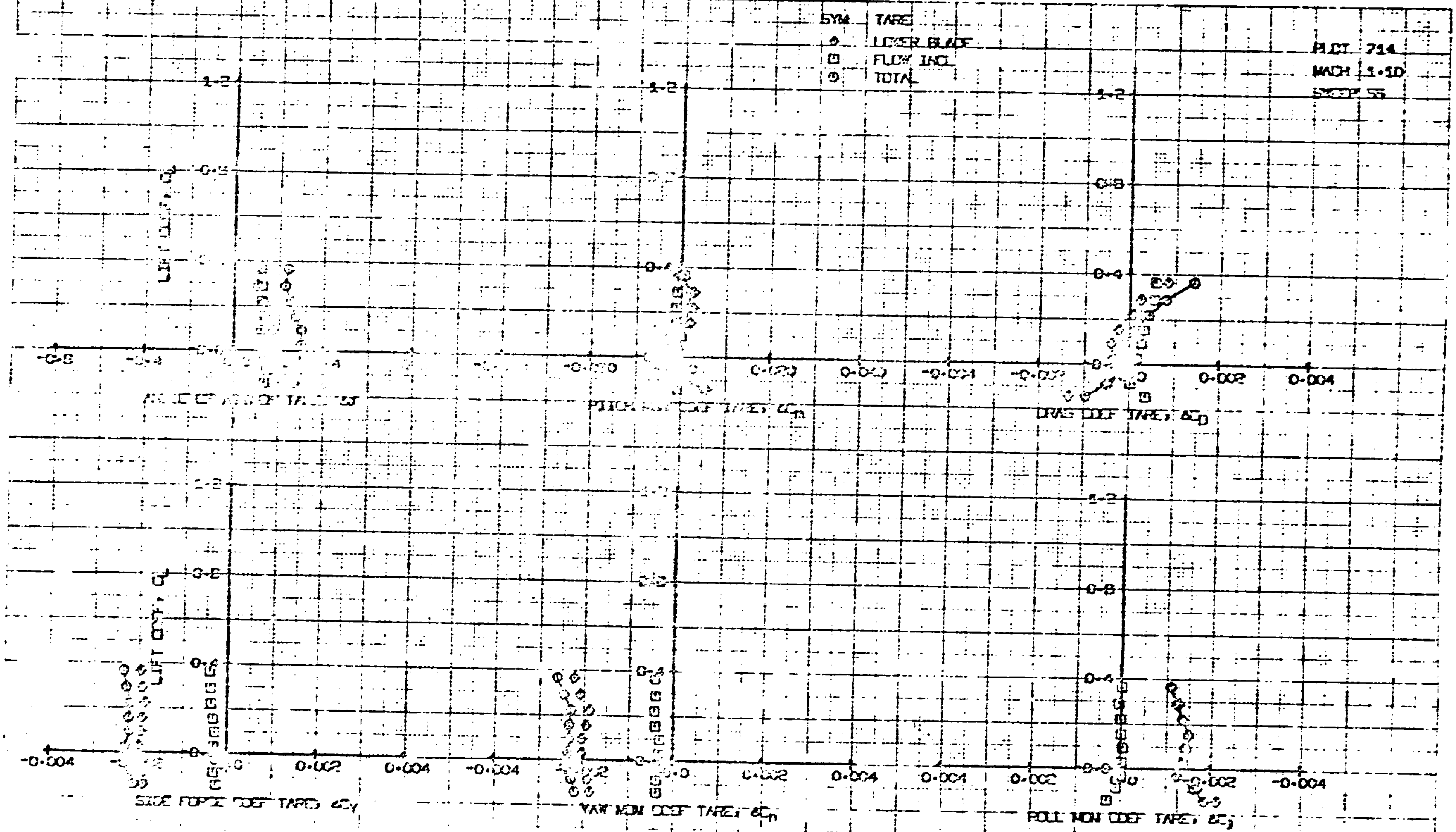


FIGURE 53. AERODYNAMIC TARES, INTEGRATED FUSELAGE

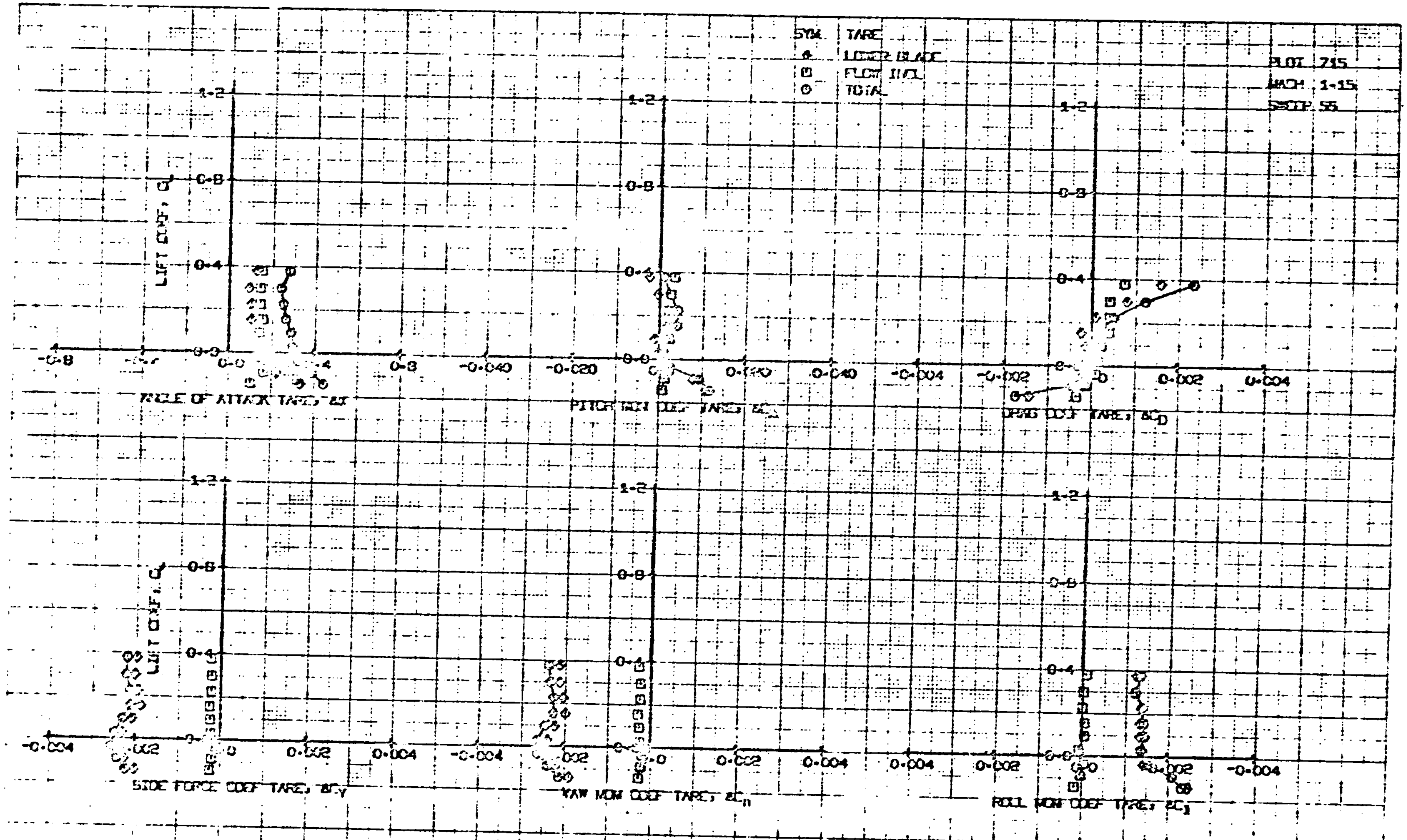


FIGURE 51. AERODYNAMIC TARES; INTEGRATED FUSELAGE

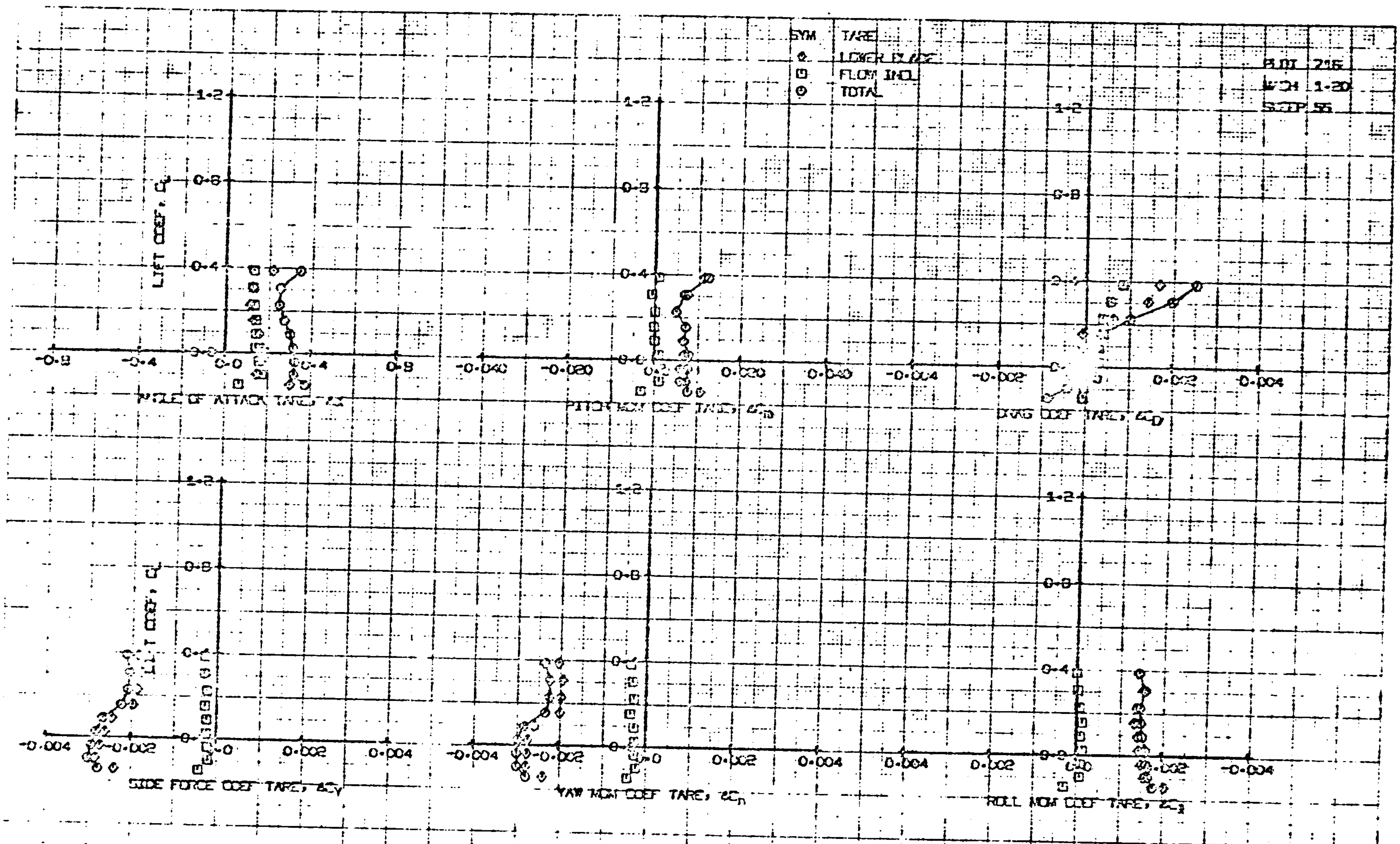


FIGURE 55. AERODYNAMIC TARES; INTEGRATED FUSELAGE

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OF POOR QUALITY

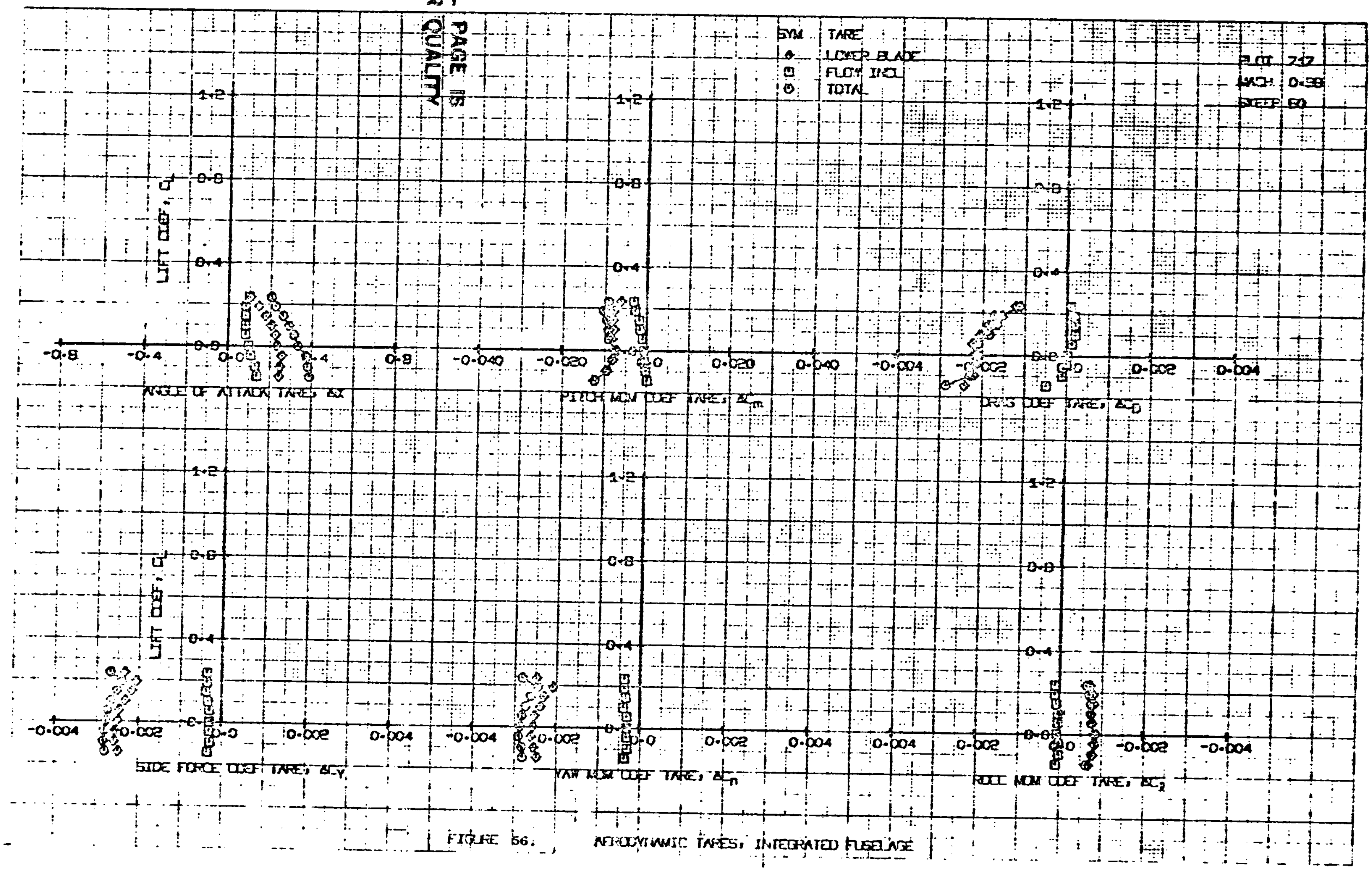


FIGURE 56. AERODYNAMIC TARES, INTEGRATED FUSELAGE

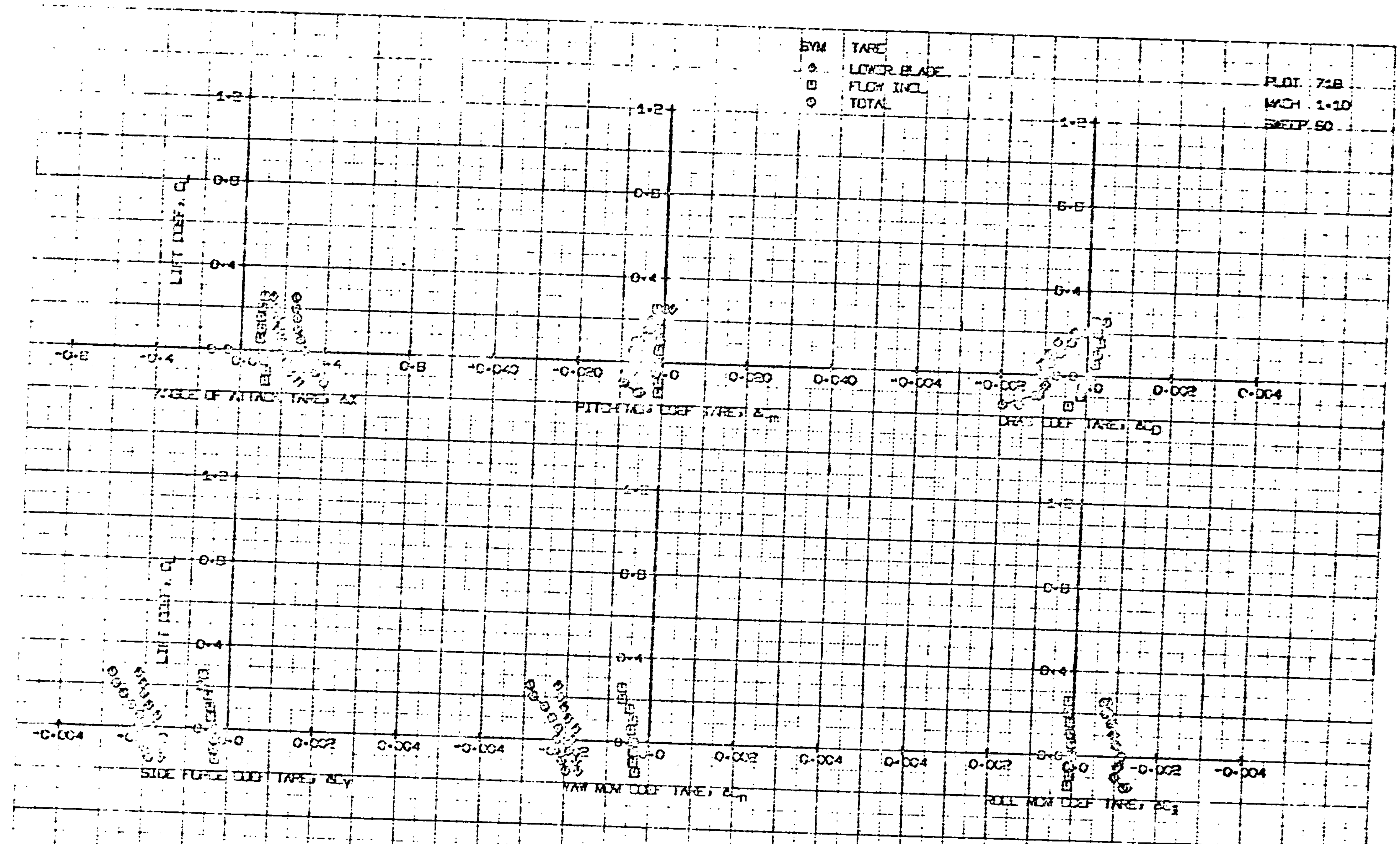


FIGURE 57. AERODYNAMIC TARES, INTEGRATED FUSELAGE

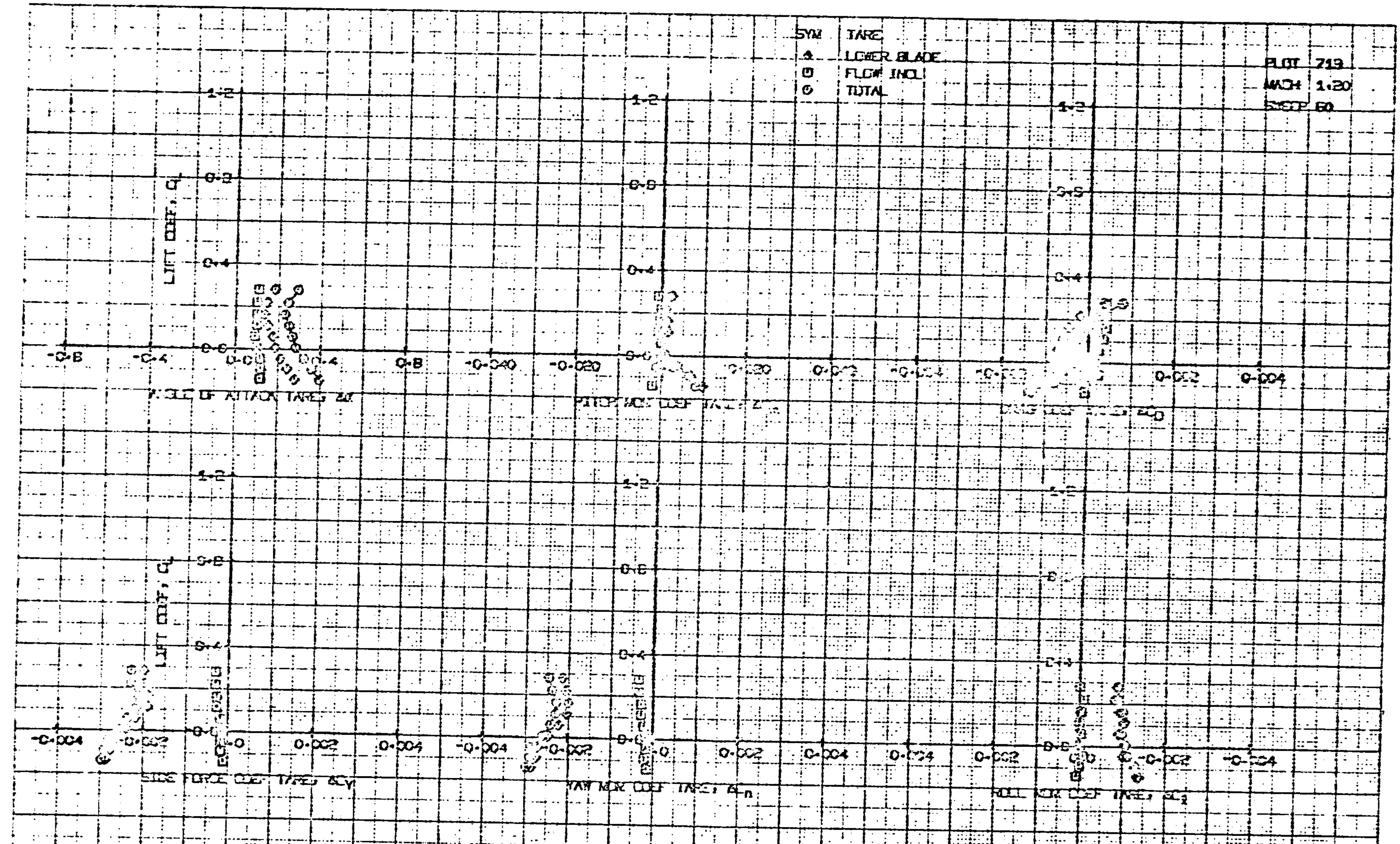


FIGURE 58. AERODYNAMIC TARES, INTEGRATED FUSELAGE

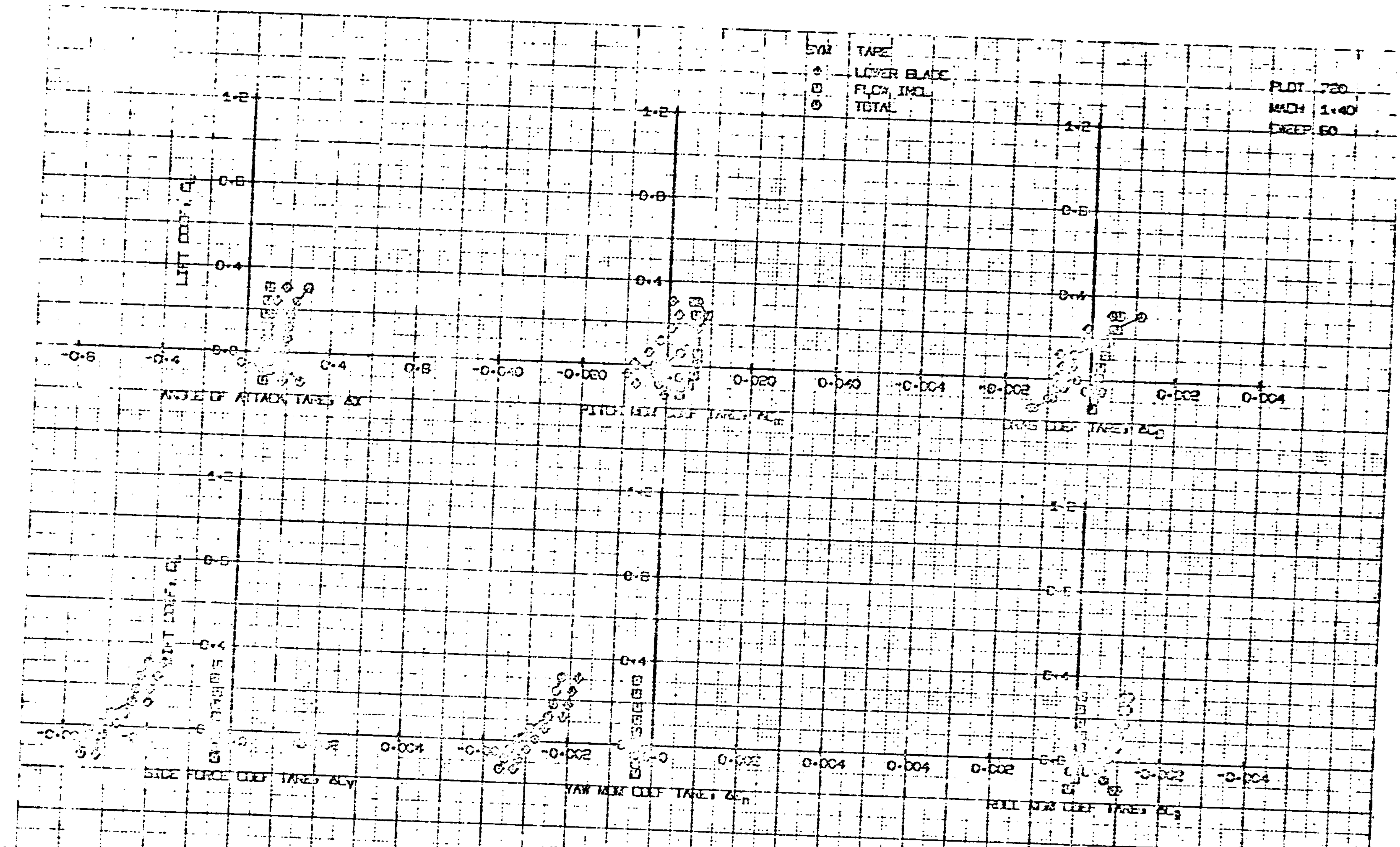


FIGURE 59. AERODYNAMIC TARES, INTEGRATED FUSELAGE

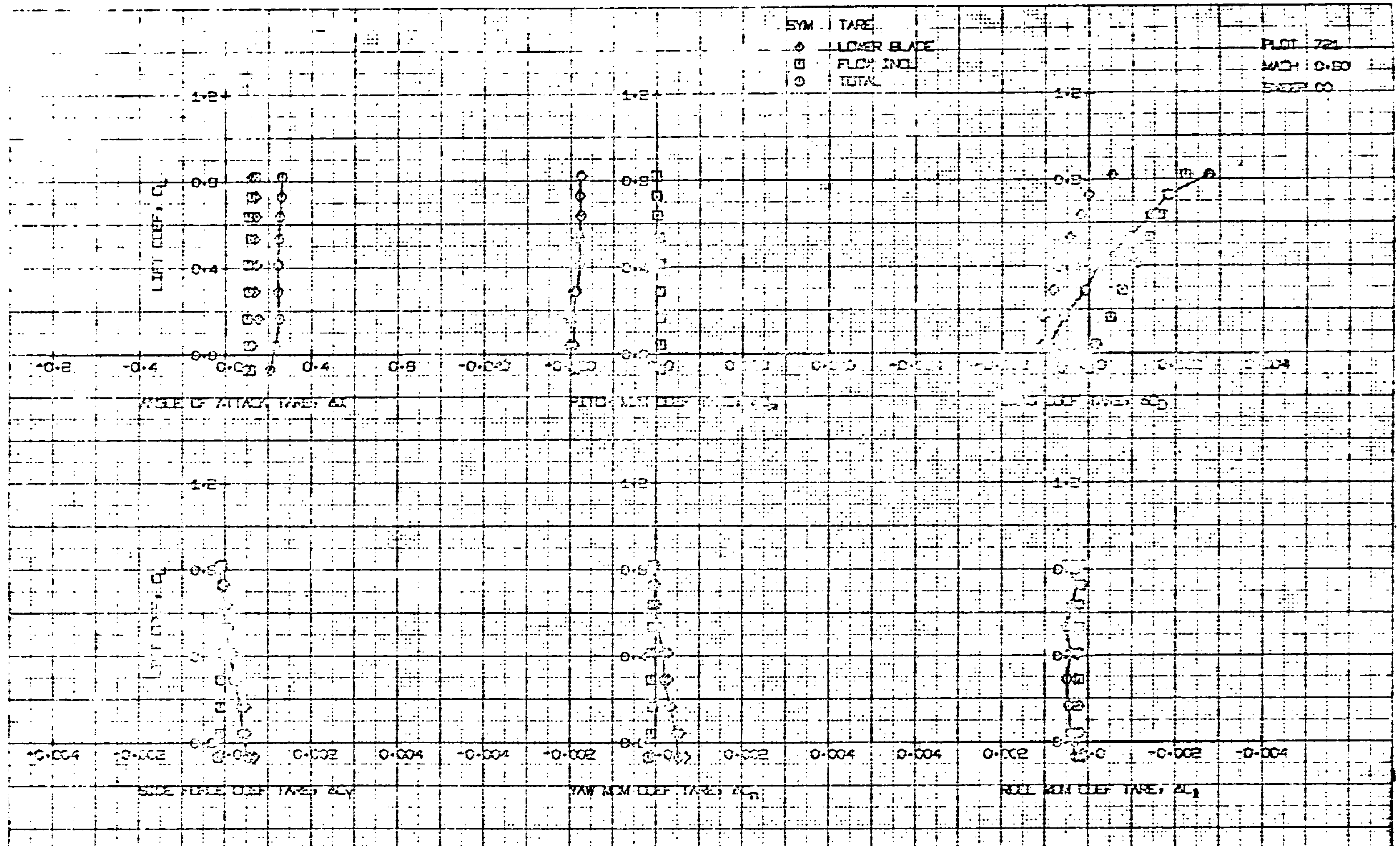


FIGURE 50. AERODYNAMIC TARES, CLEAN FUSELAGE

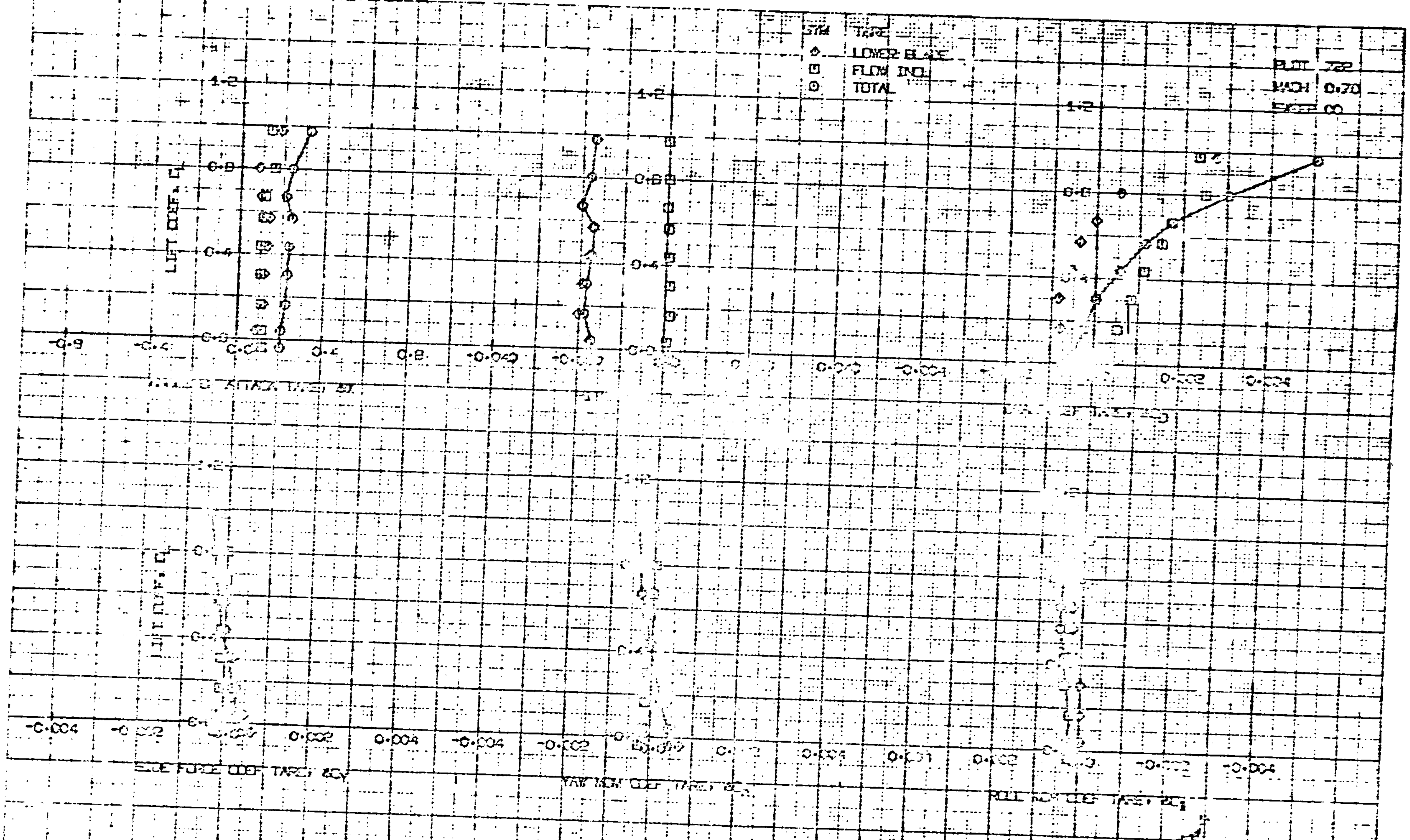


FIGURE 81. AERODYNAMIC TARES; CLEAN FUSELAGE

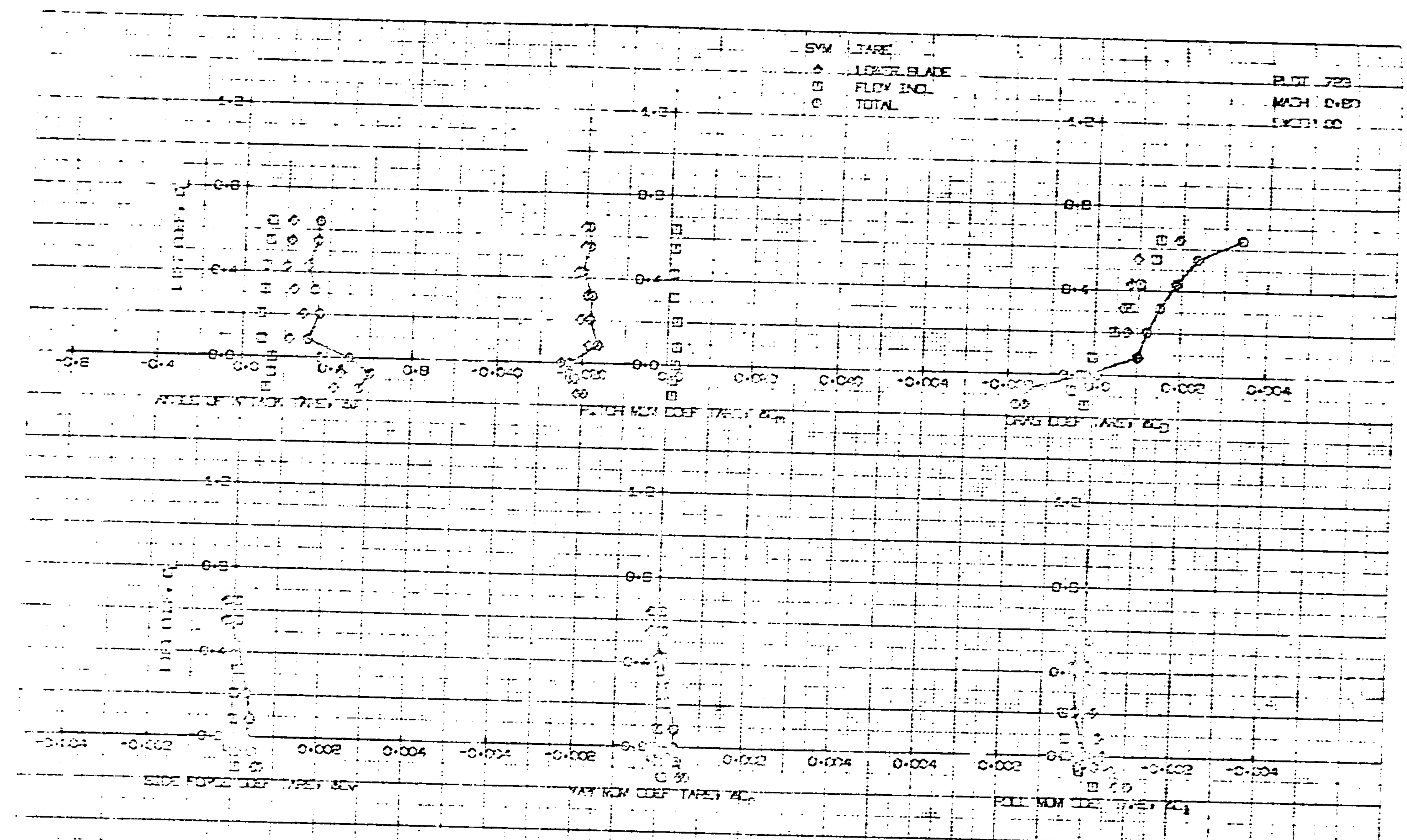
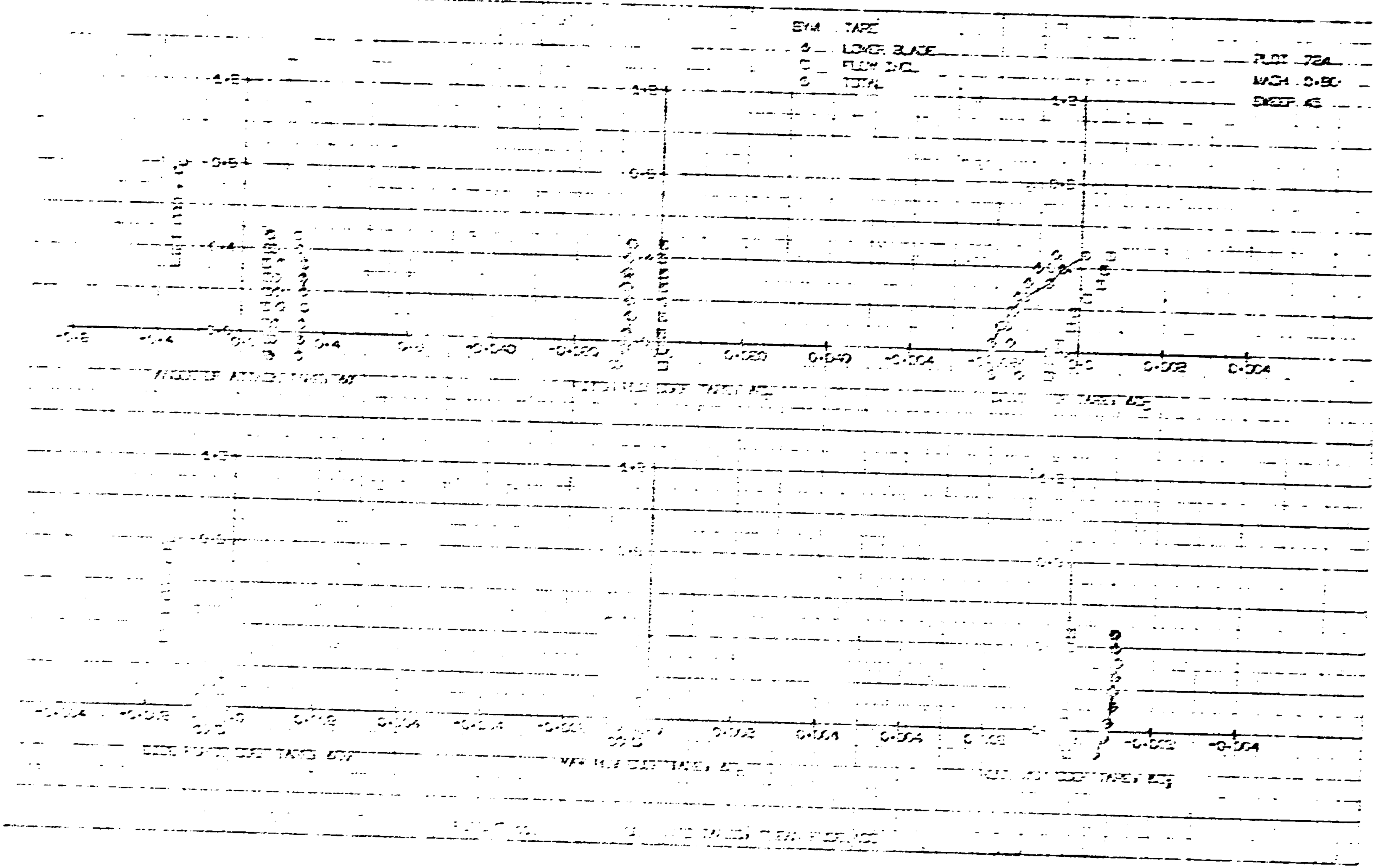


FIGURE 82. AERODYNAMIC TAPES, CLEAN FUSELAGE



SYM TAPE
LOWER BLADE
FLOW DEFL
TOTAL
PLOT 72A
MACH 0.80
SWEEP 45

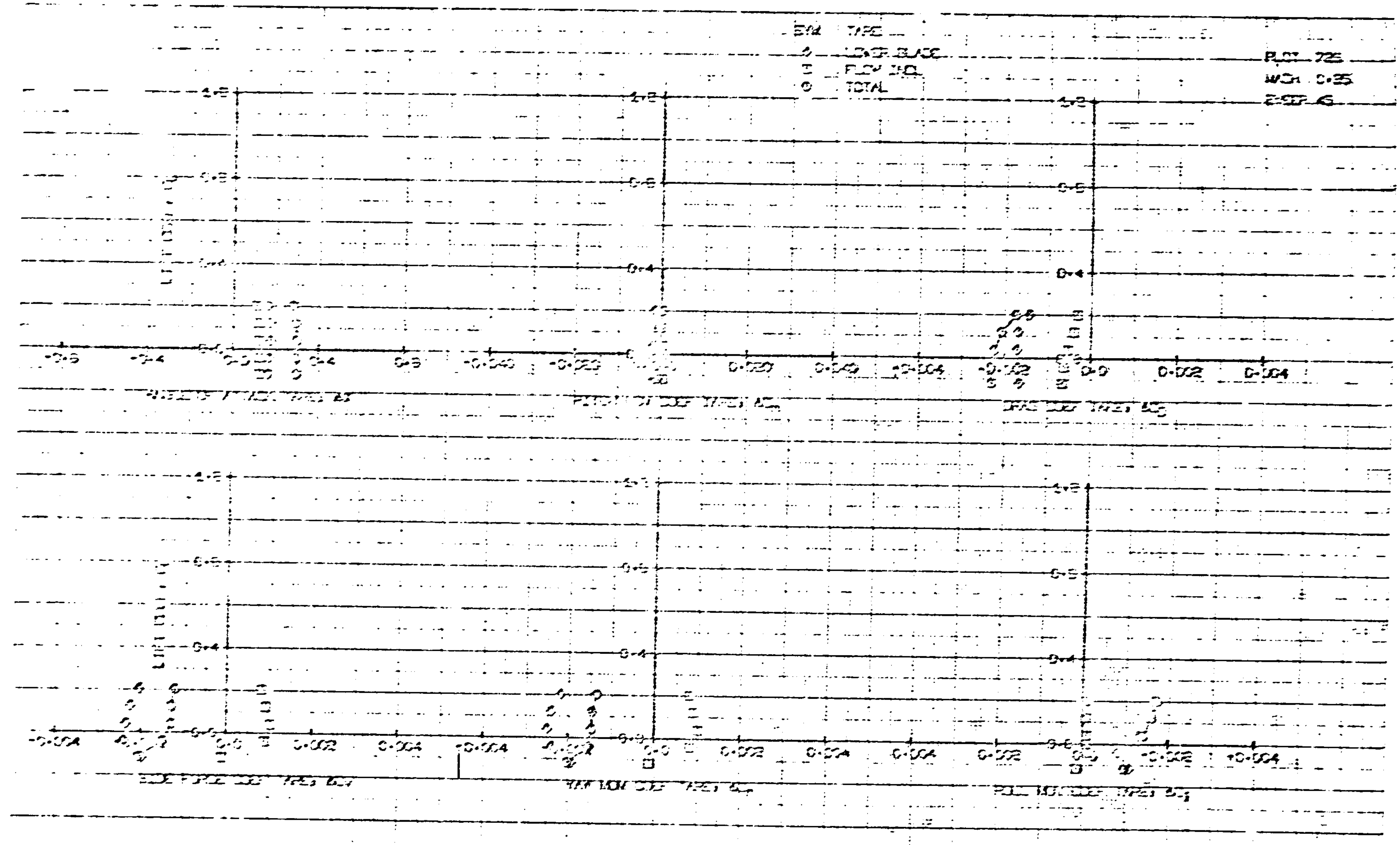


FIGURE 94. AERODYNAMIC TARES: CLEAN FUSELAGE

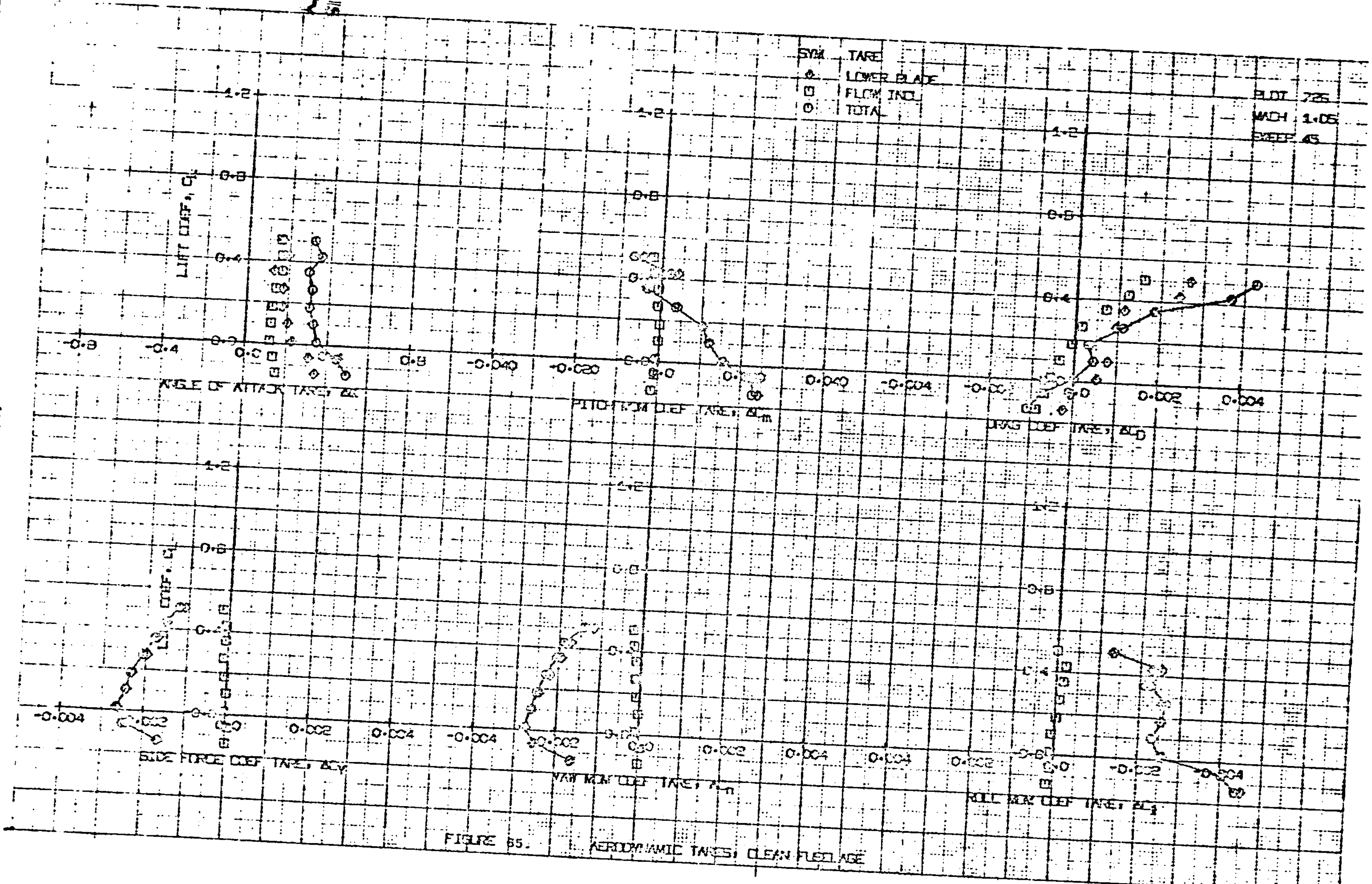


FIGURE 55. AERODYNAMIC TARES, CLEAN FUSELAGE

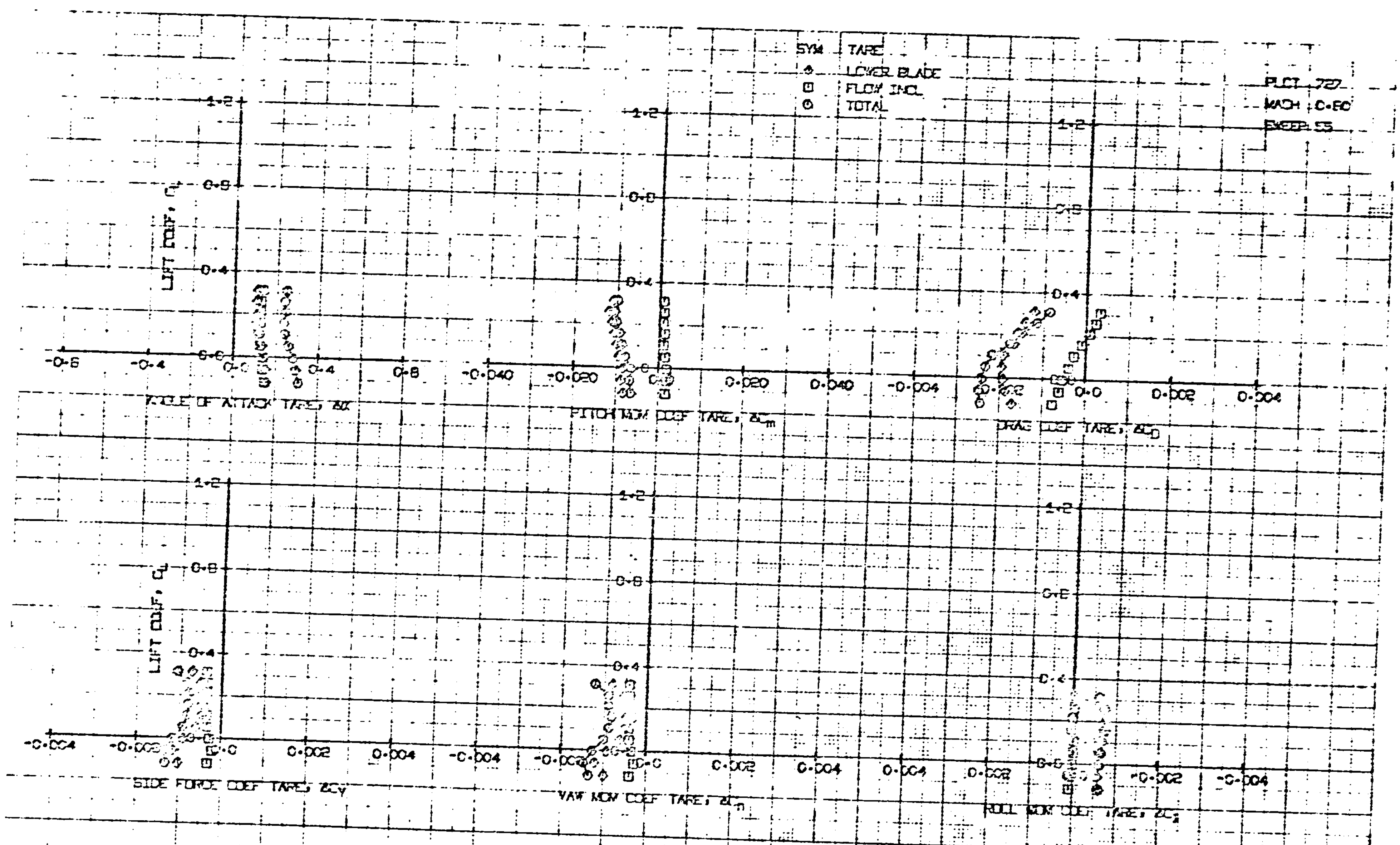


FIGURE 56. AERODYNAMIC TARES; CLEAN FUSELAGE

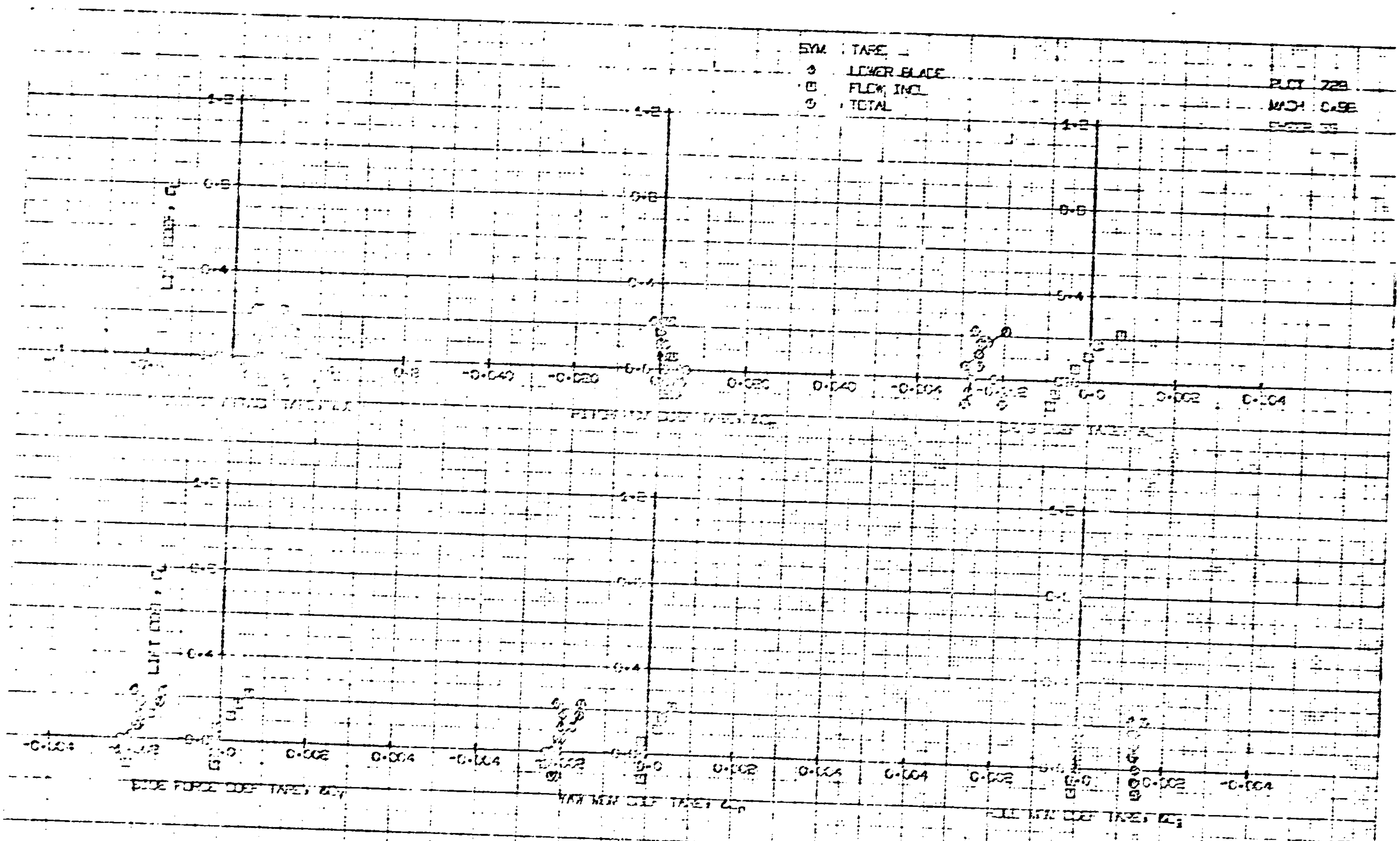


FIGURE 67. AERODYNAMIC TARES, CLEAN FUSELAGE

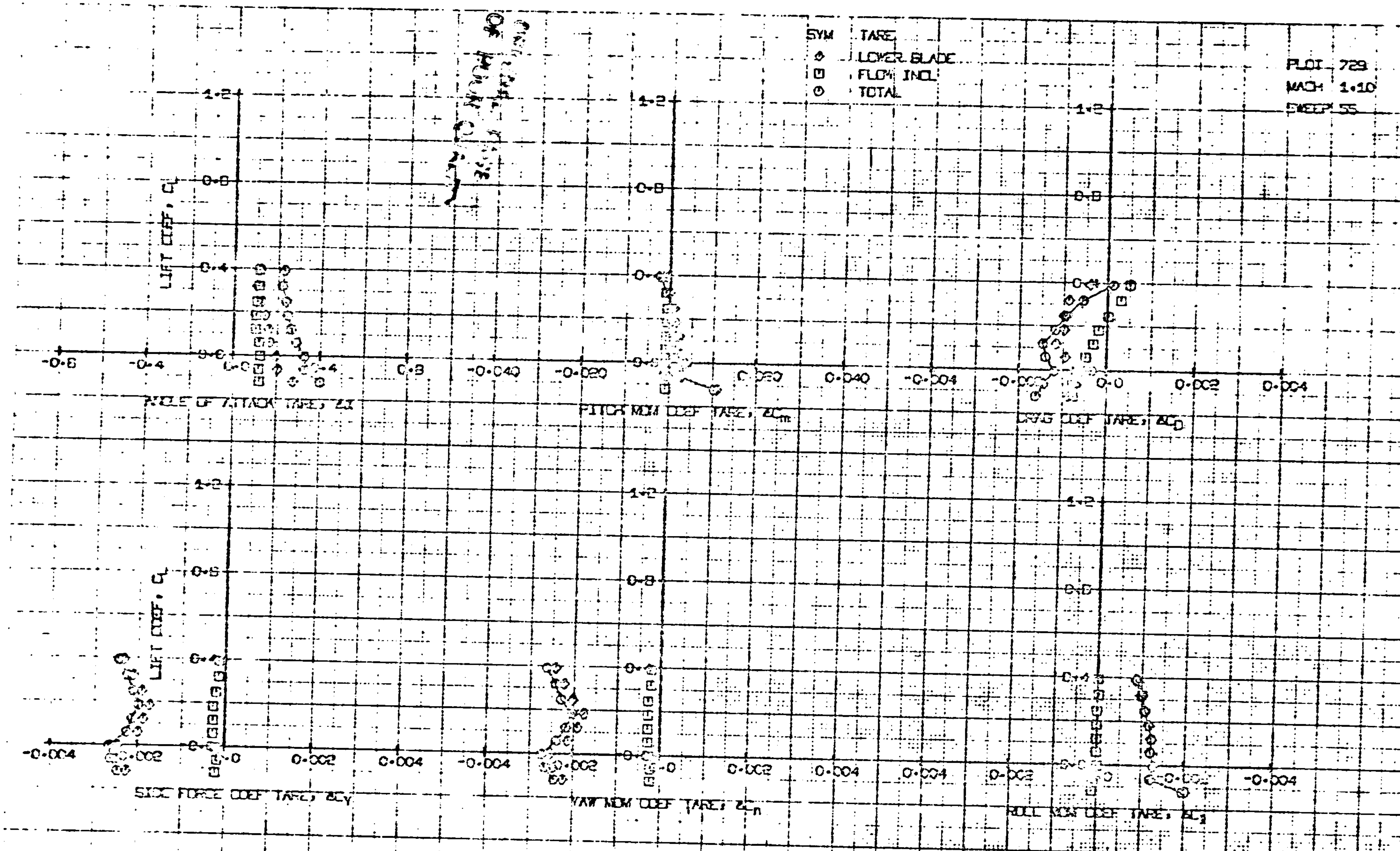


FIGURE 68. AERODYNAMIC TARES, CLEAN FUSELAGE

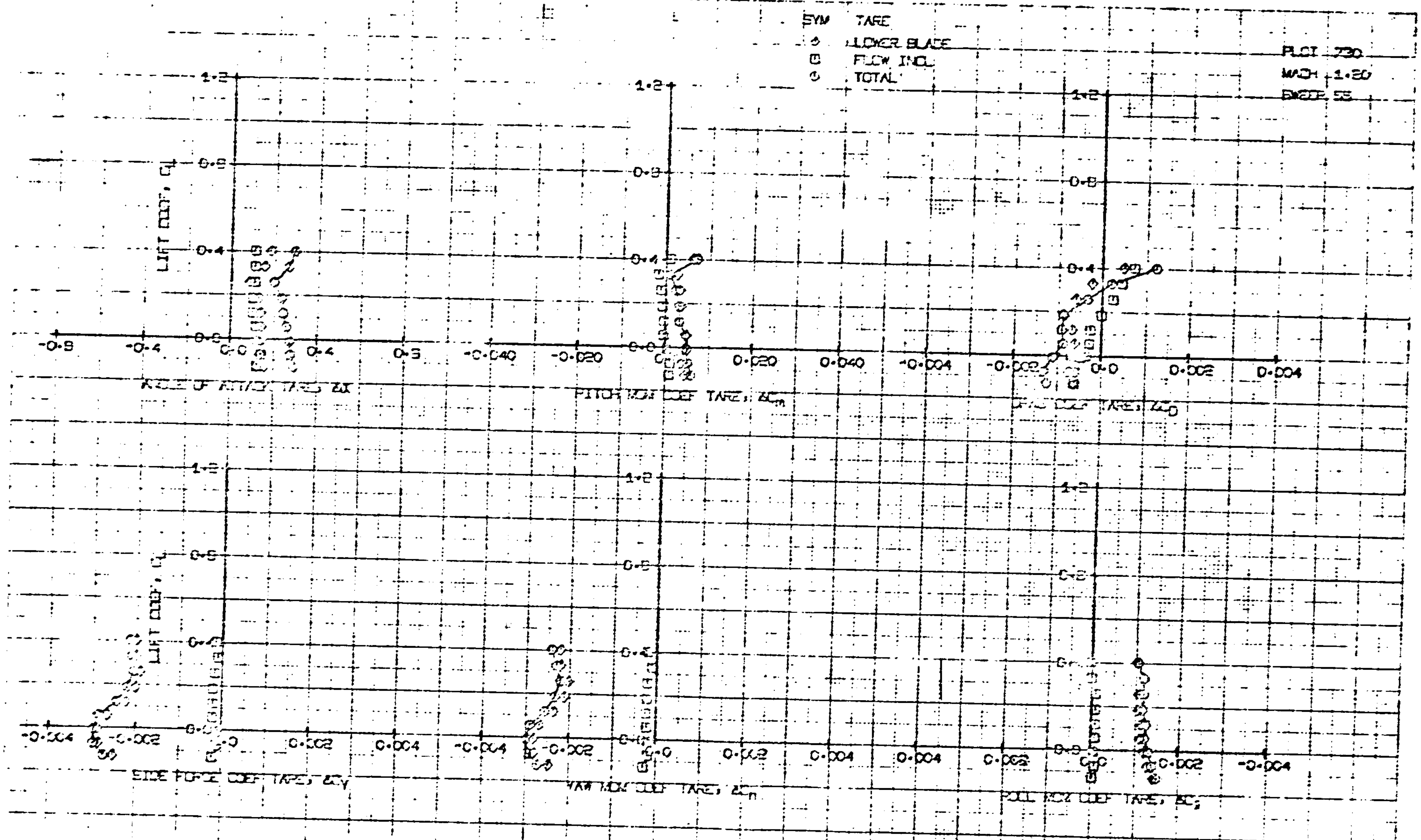


FIGURE 59. AERODYNAMIC TARES: CLEAN FUSELAGE

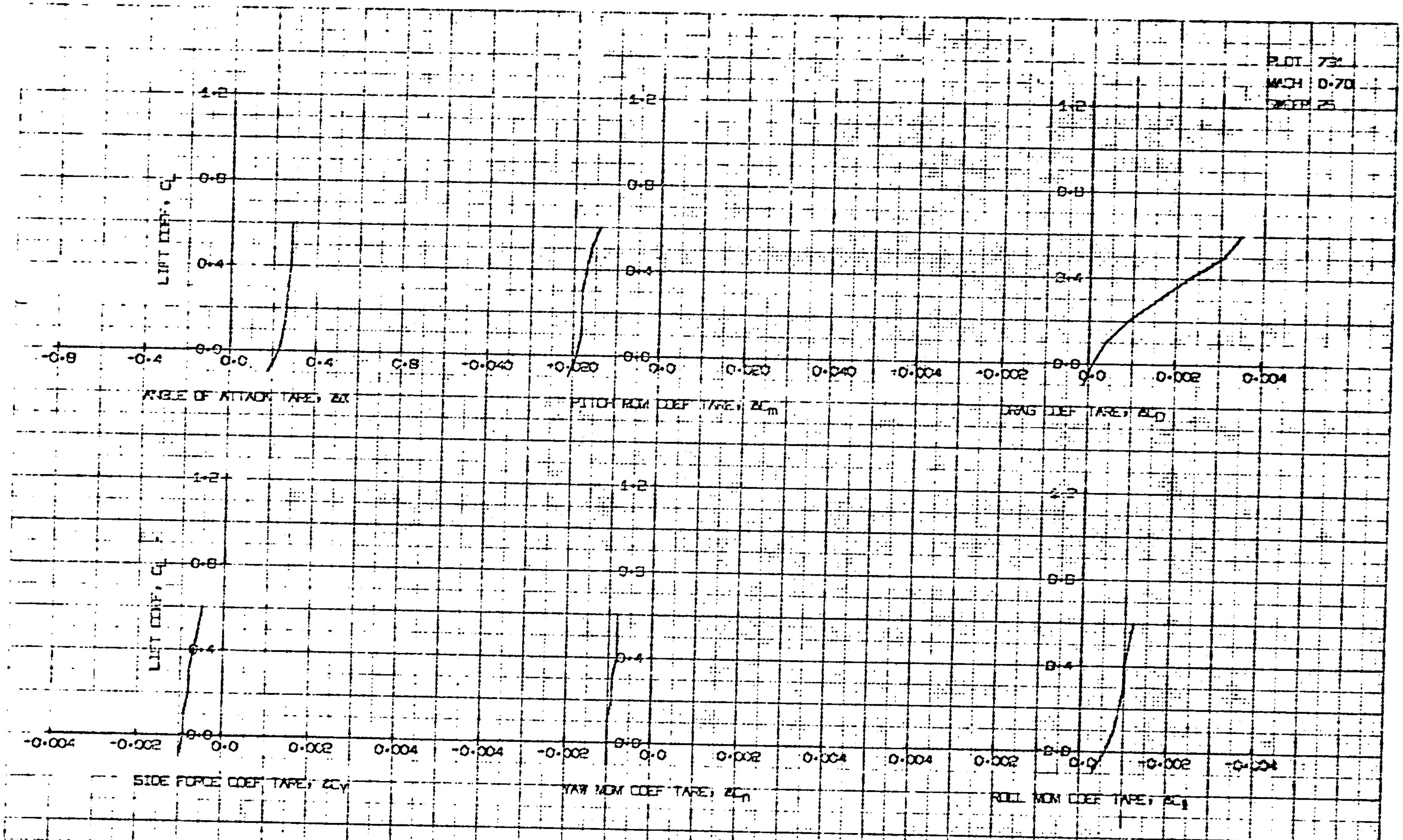


FIGURE 70. AERODYNAMIC TARES, INTEGRATED FUSELAGE

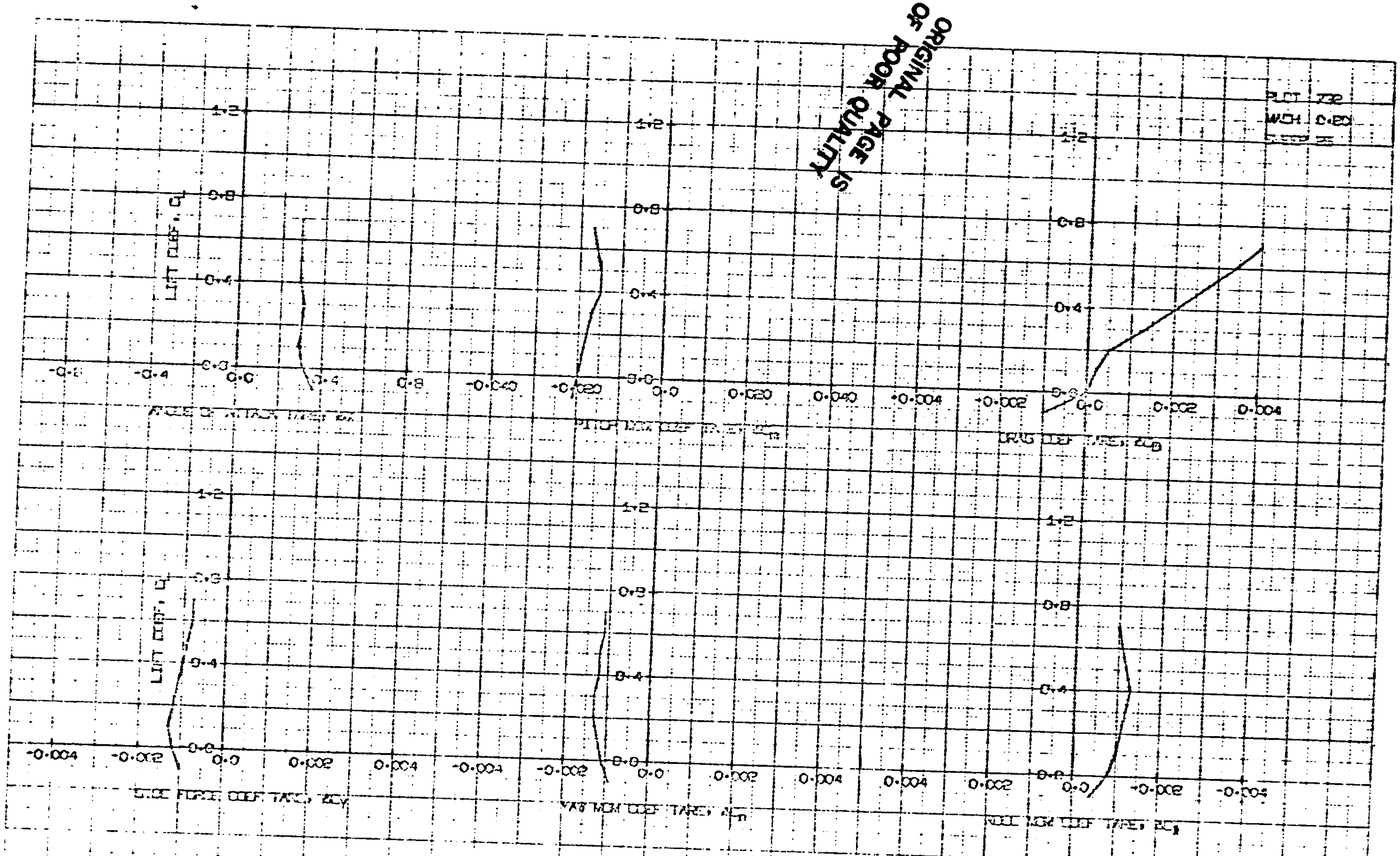


FIGURE F1. AERODYNAMIC TARES, INTEGRATED FUSELAGE

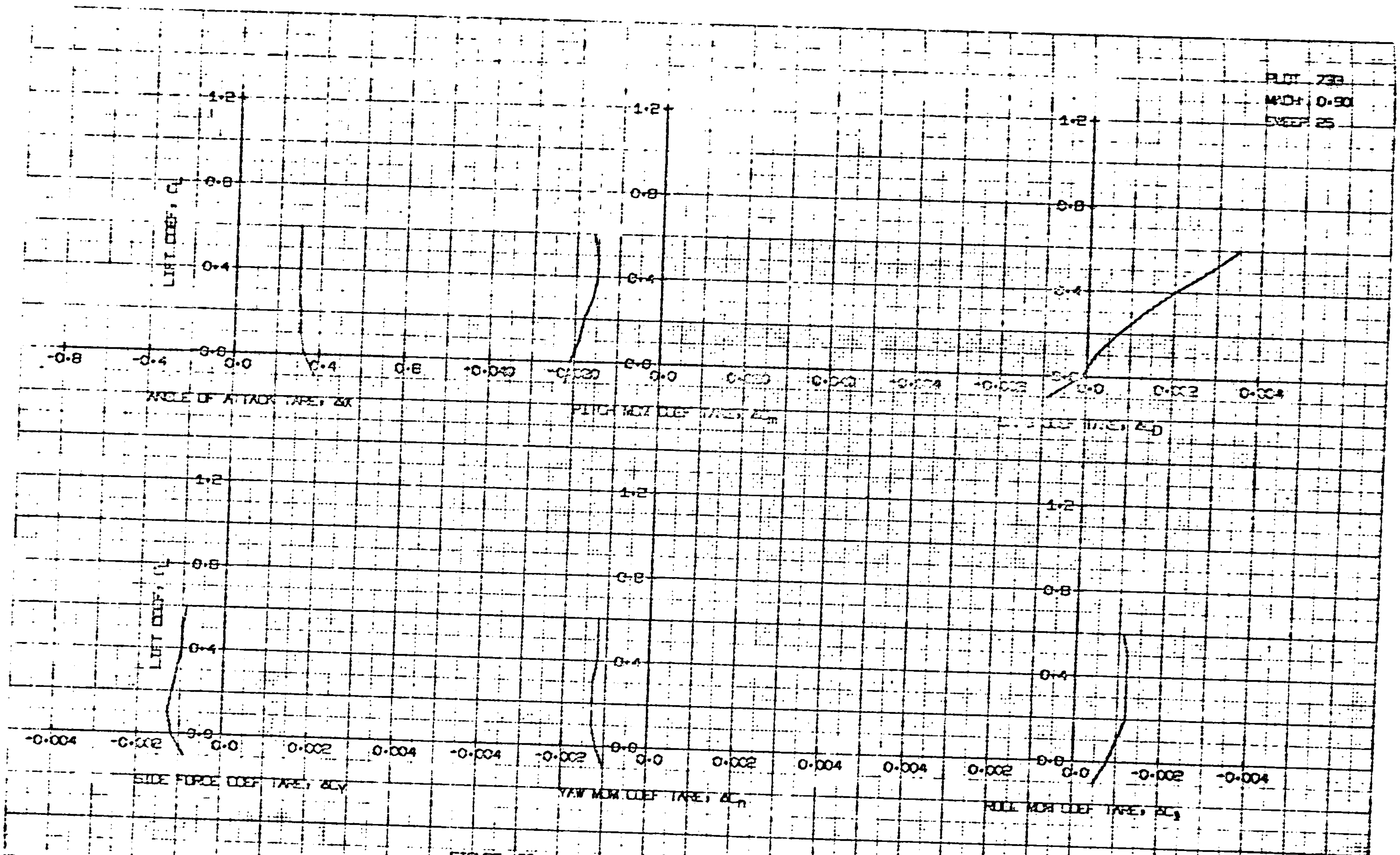


FIGURE 72. AERODYNAMIC TARES, INTEGRATED FUSELAGE

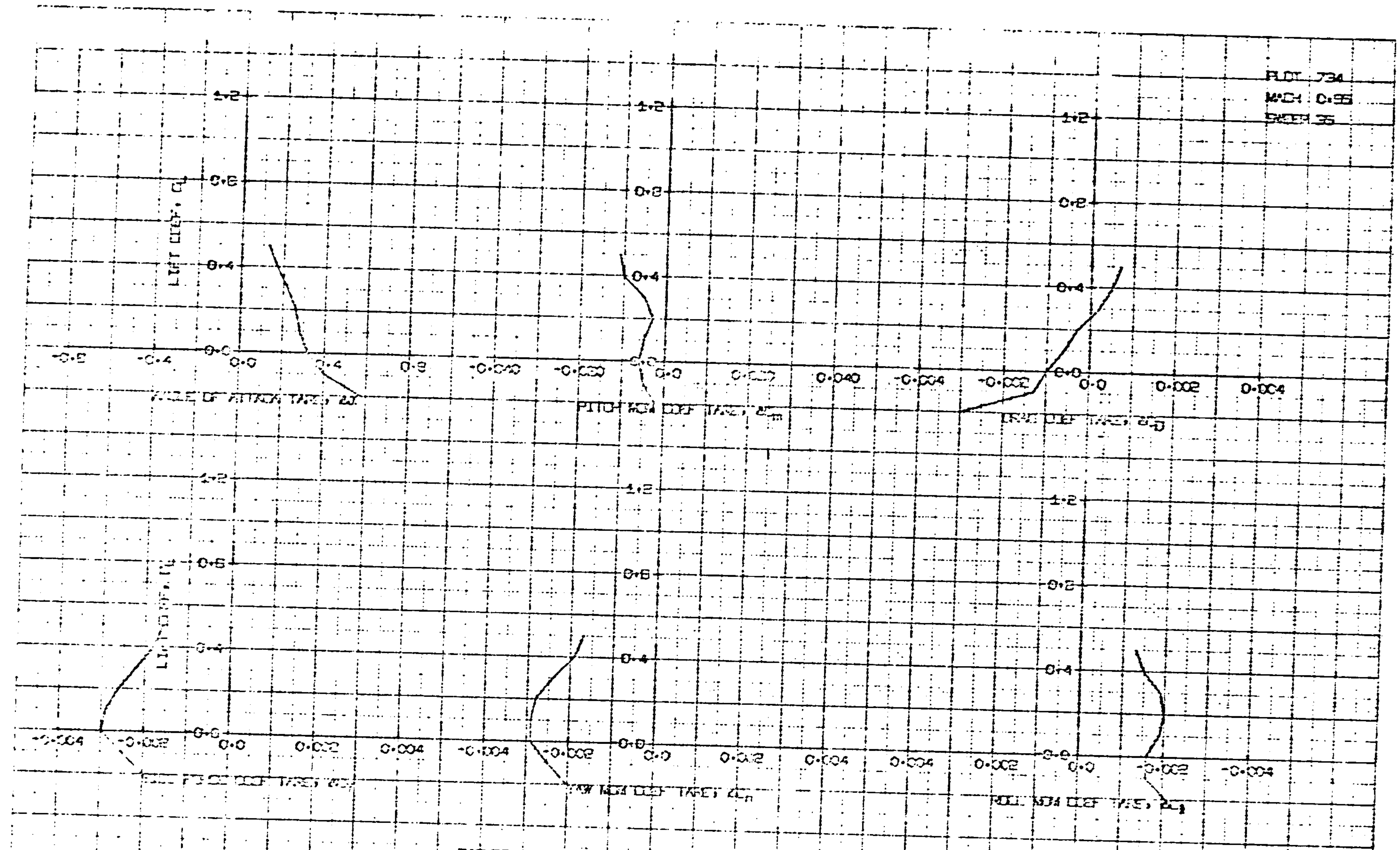


FIGURE 23. AERODYNAMIC TARES, INTEGRATED FUSELAGE

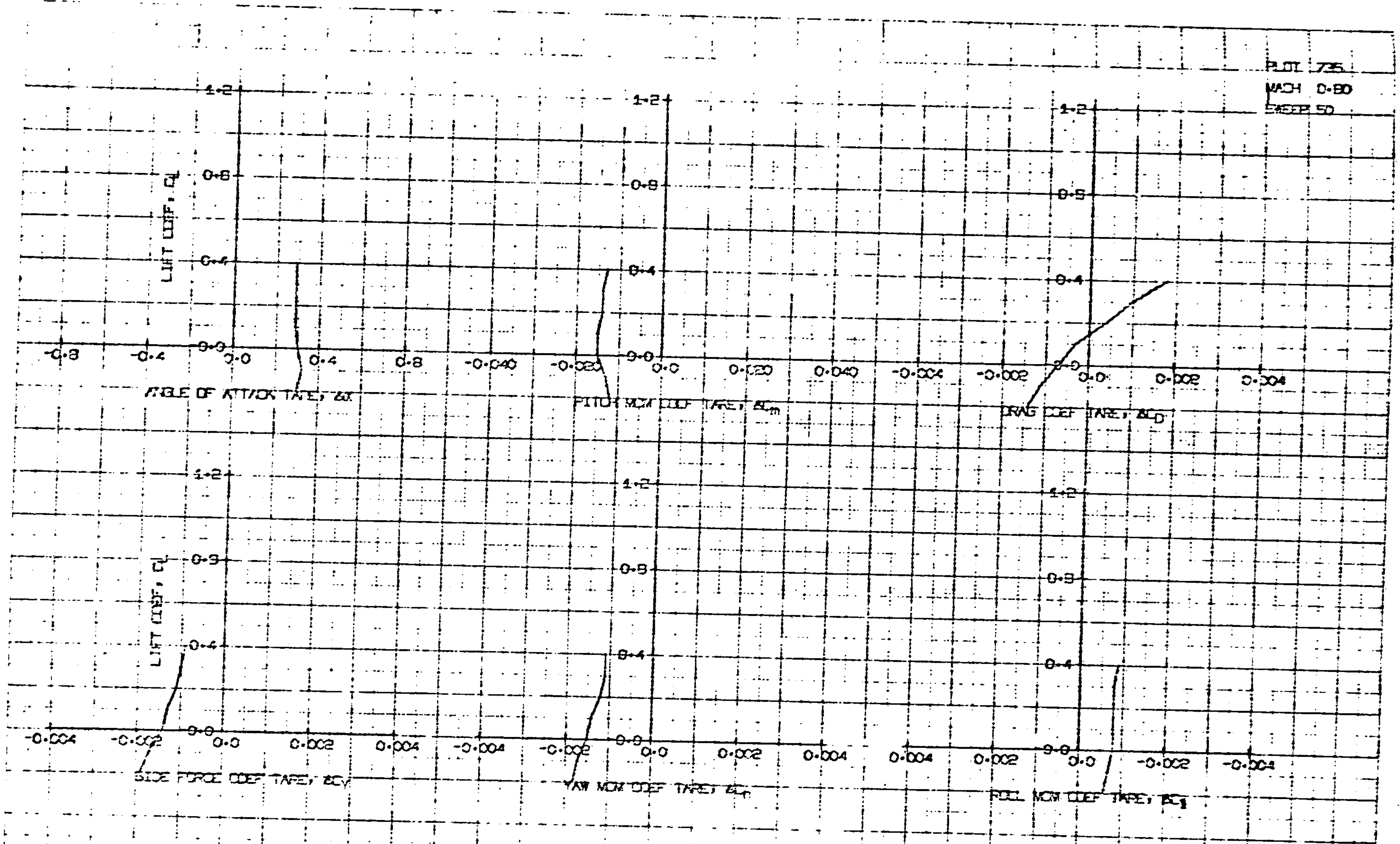


FIGURE 74. AERODYNAMIC TARES, INTEGRATED FUSELAGE

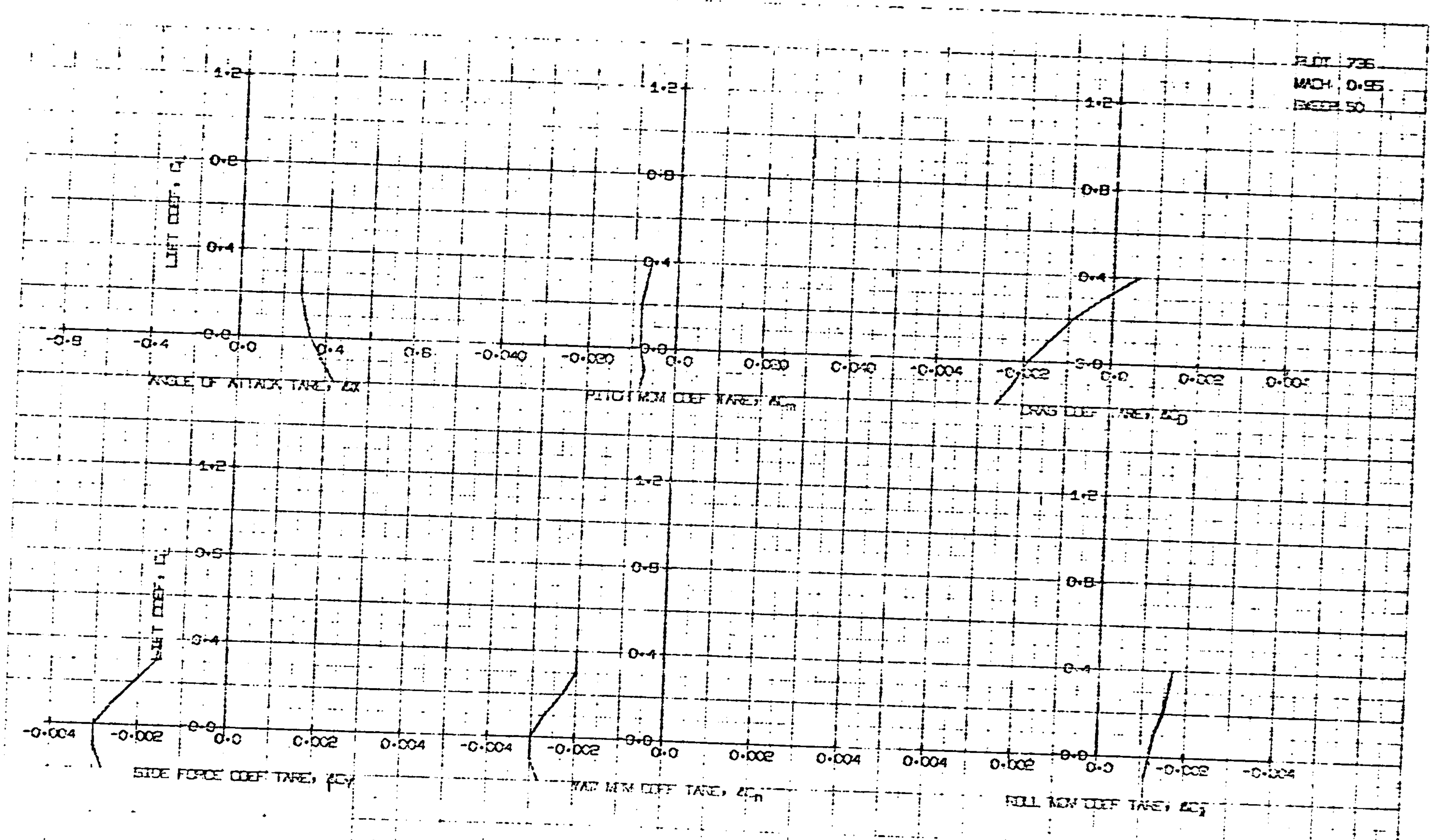


FIGURE 75. AERODYNAMIC TARES, INTEGRATED FUSELAGE

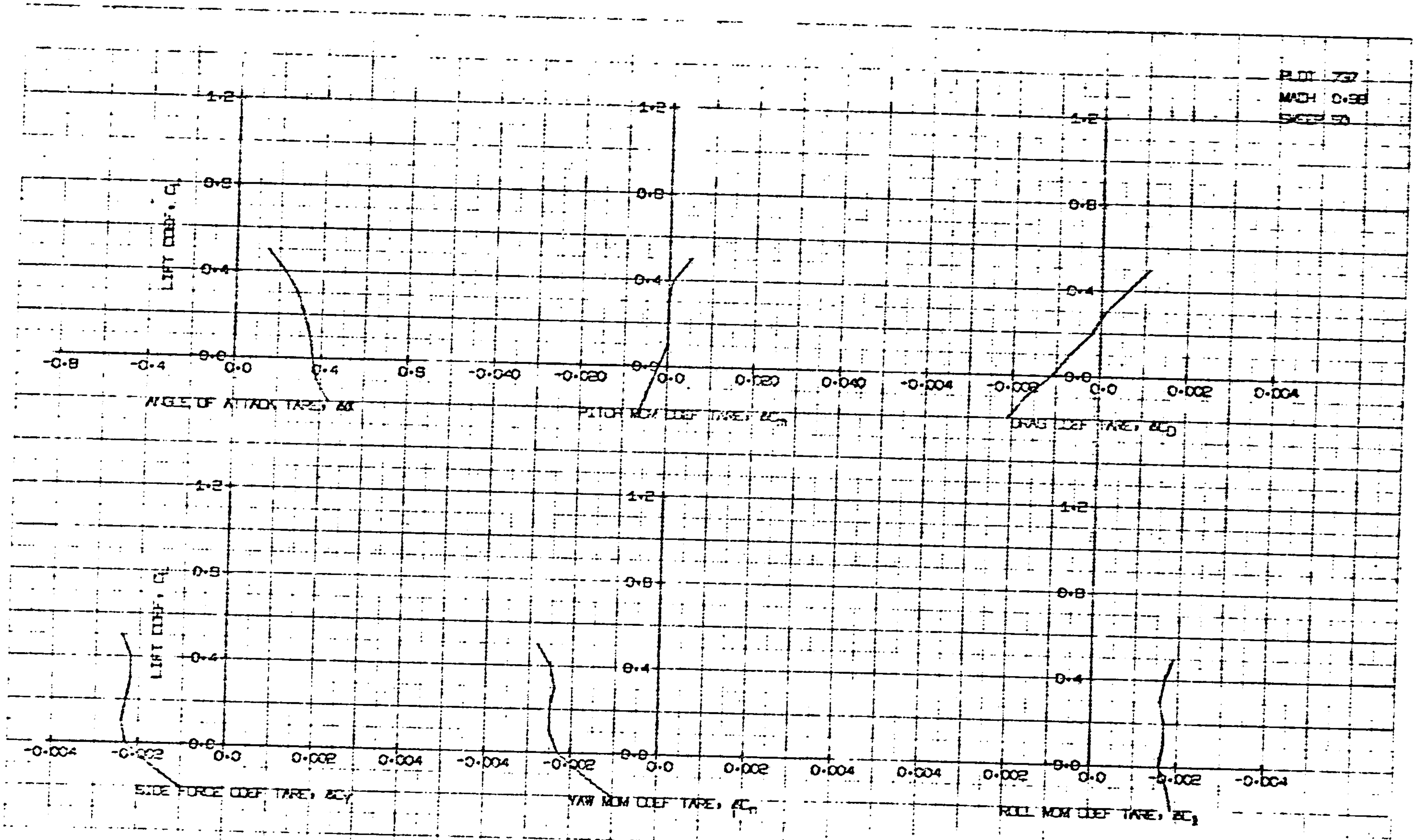
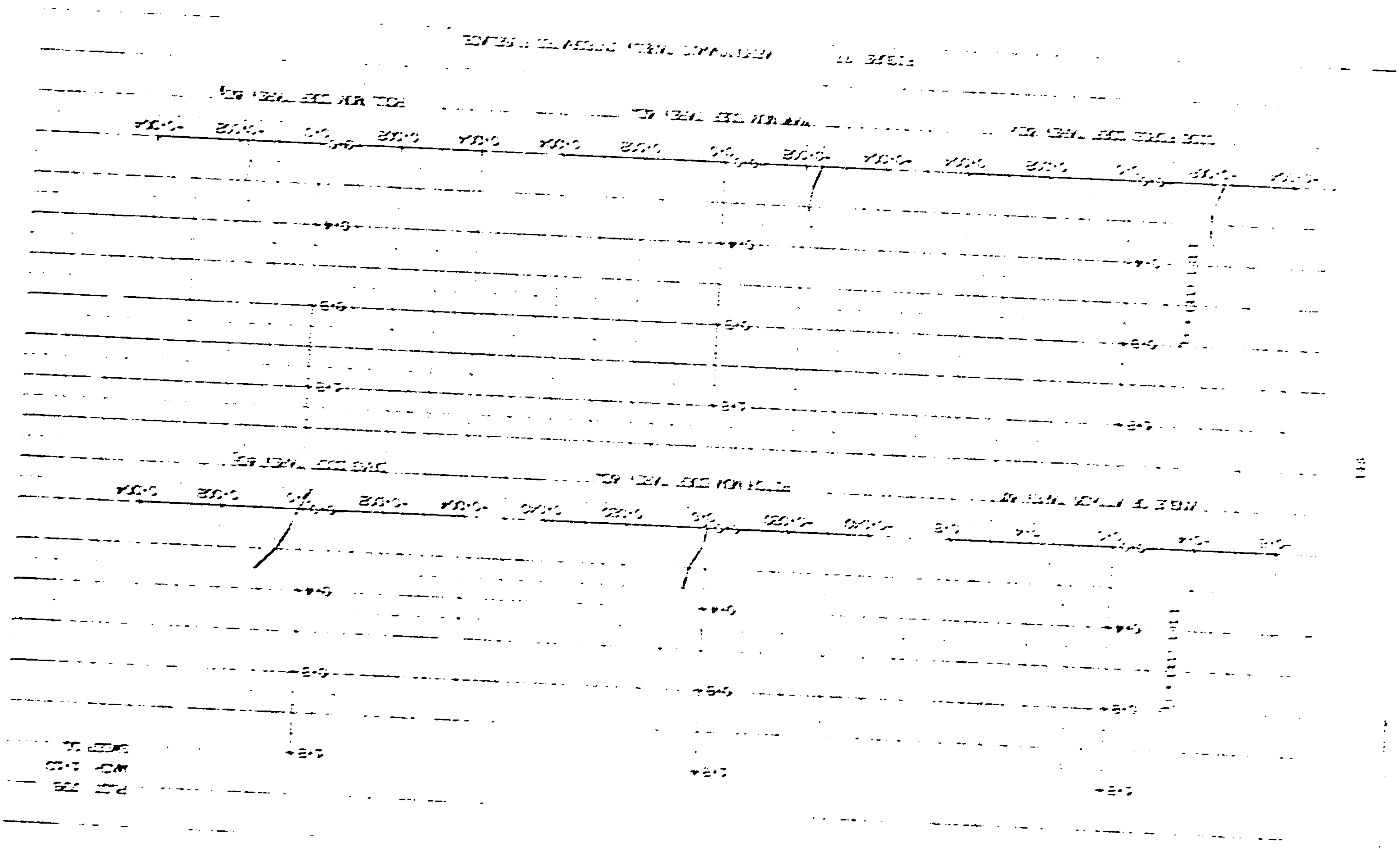


FIGURE 76. AERODYNAMIC TARES, INTEGRATED FUSELAGE



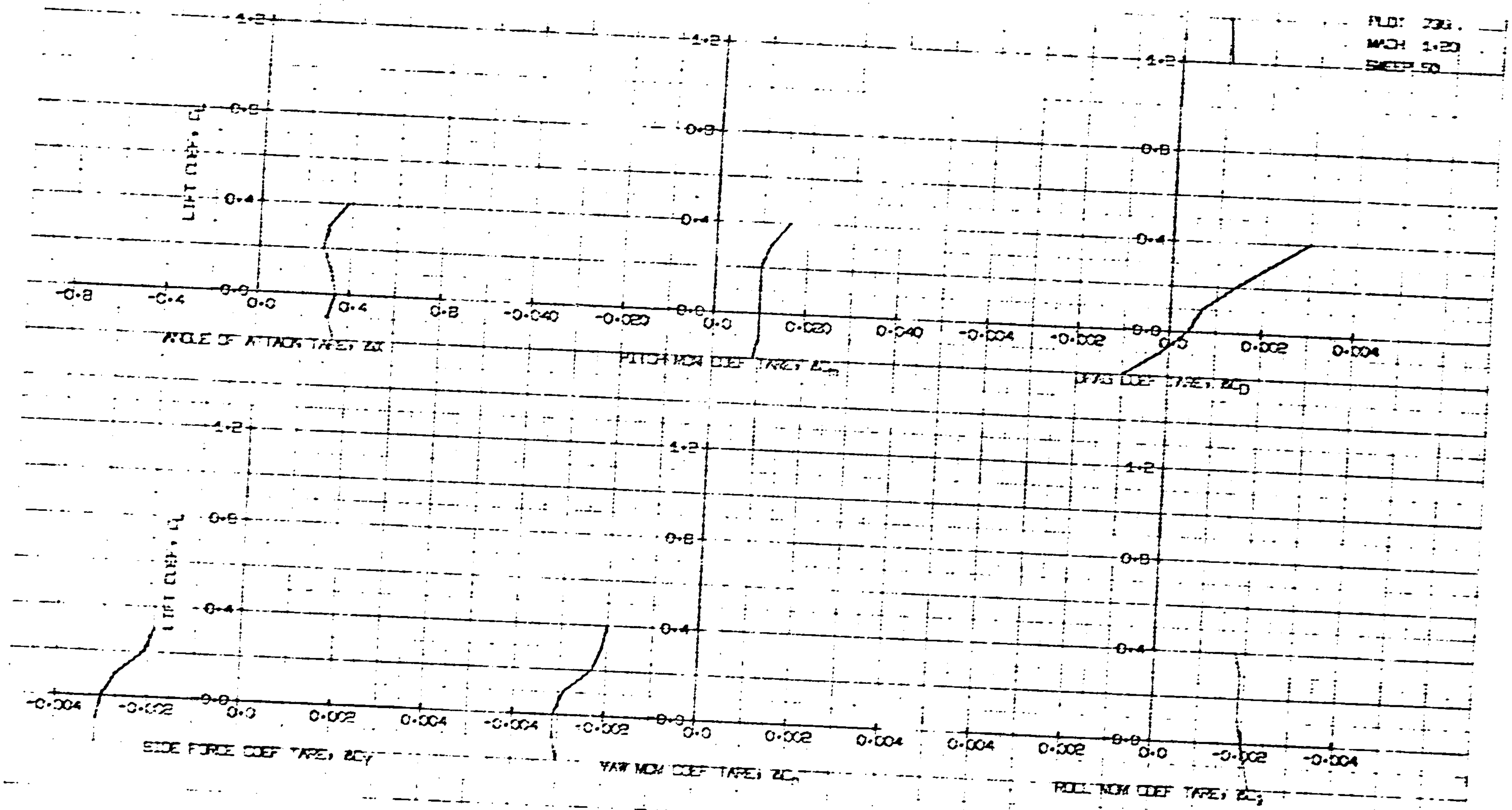


FIGURE 78. AERODYNAMIC TARES, INTEGRATED FUSELAGE

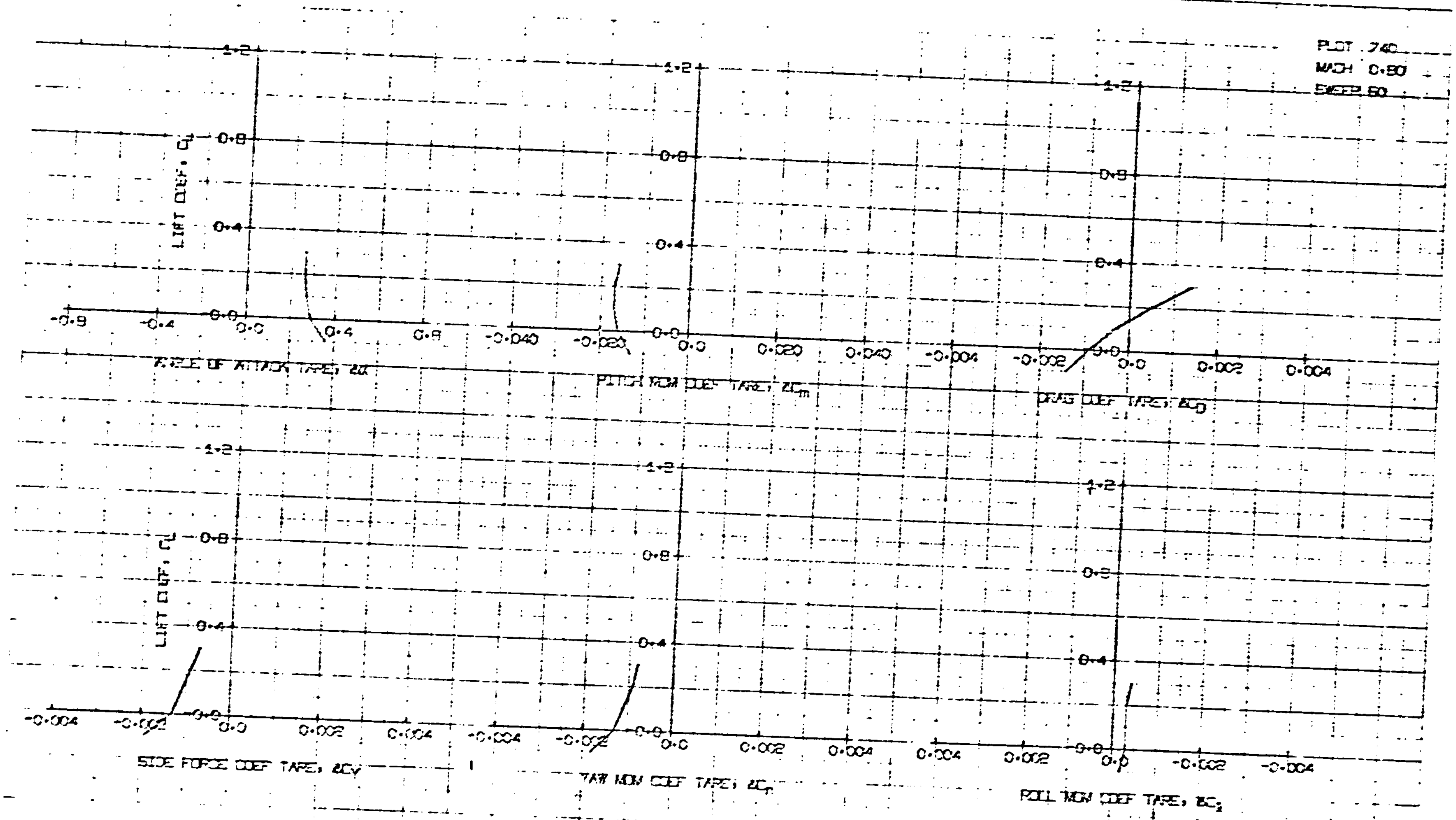


FIGURE 79. AERODYNAMIC TARES, INTEGRATED FUSELAGE

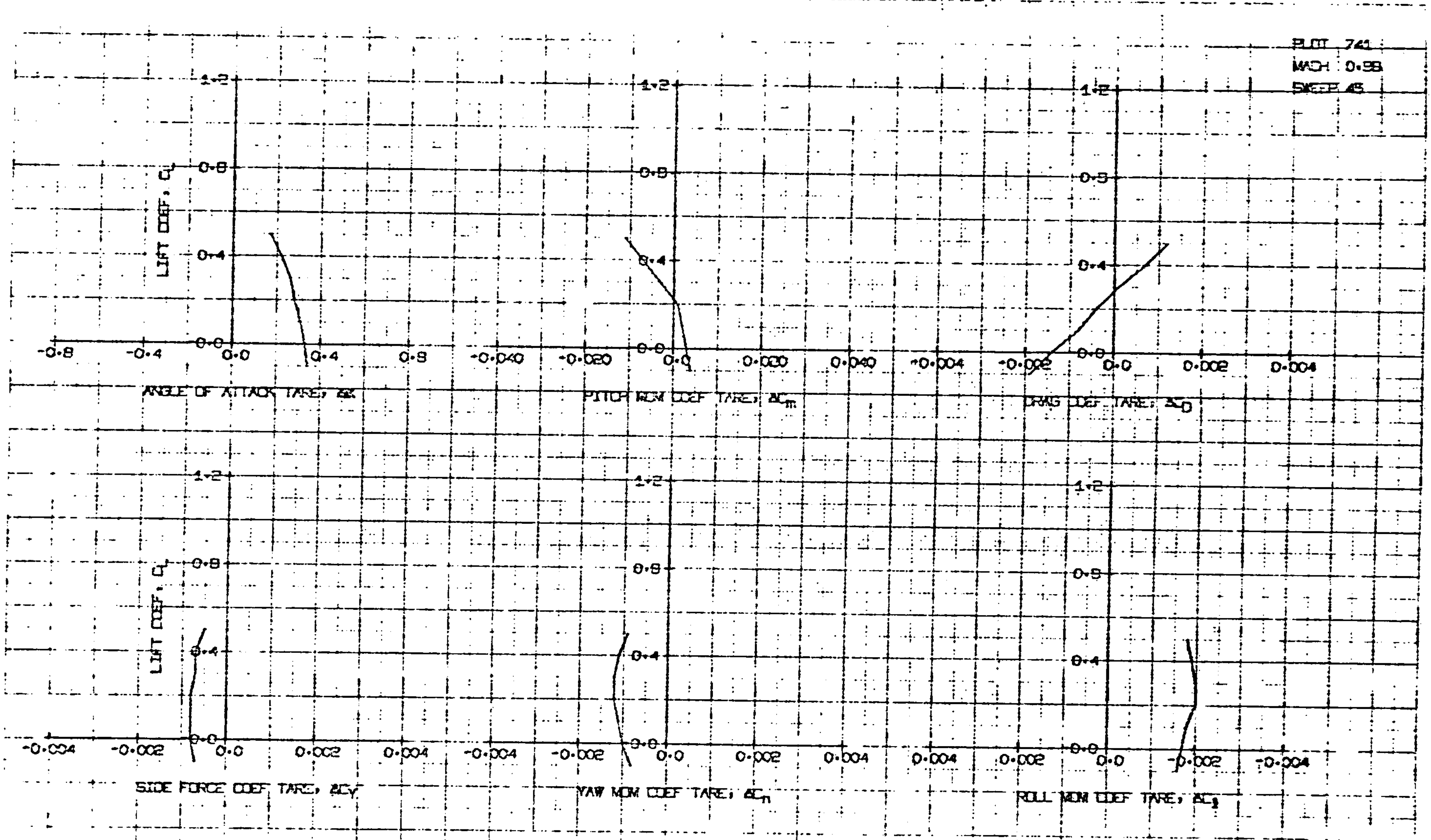


FIGURE 80. AERODYNAMIC TAPES, CLEAN FUSELAGE

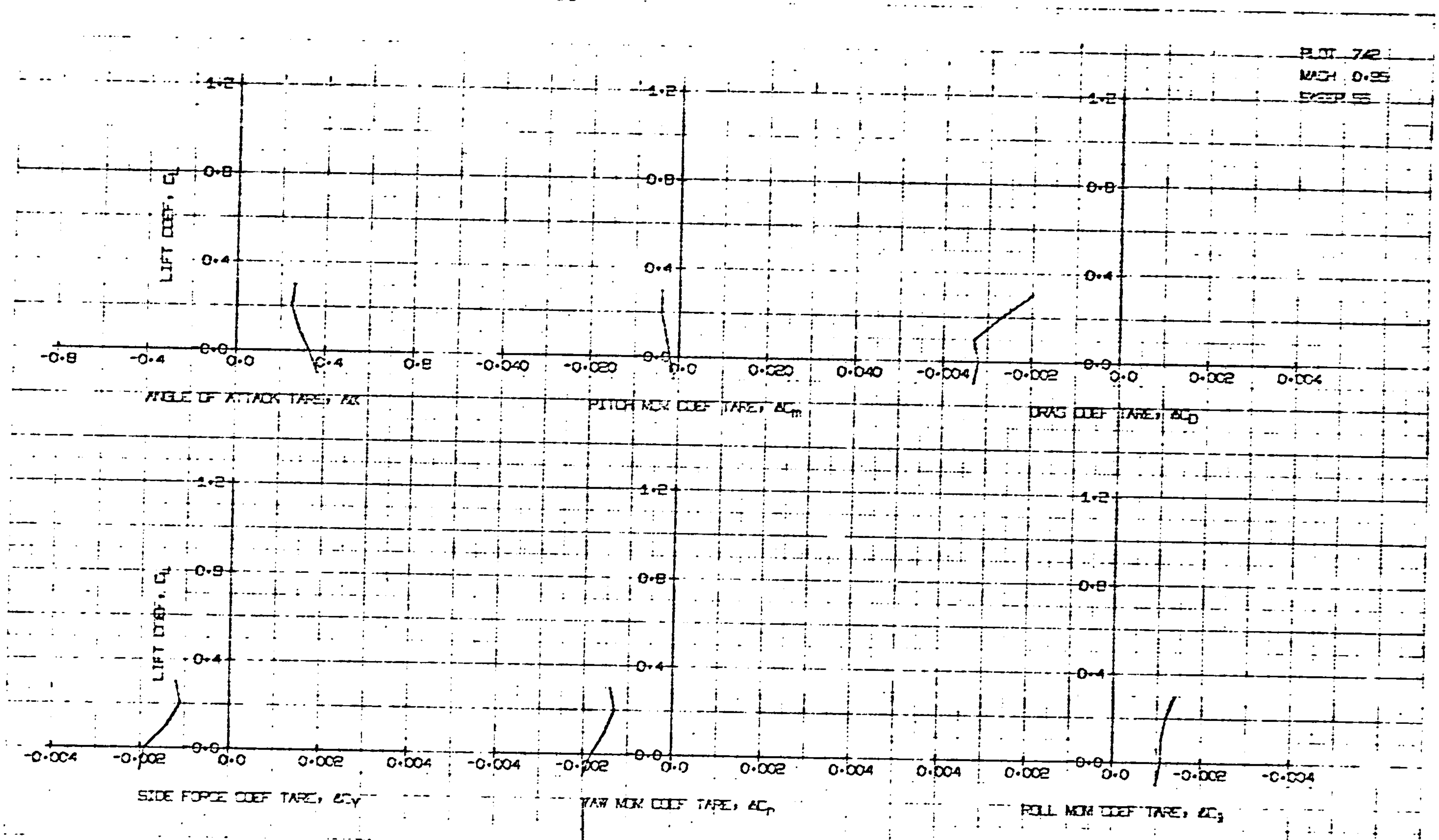


FIGURE 81. AERODYNAMIC TARES, CLEAN FUSELAGE

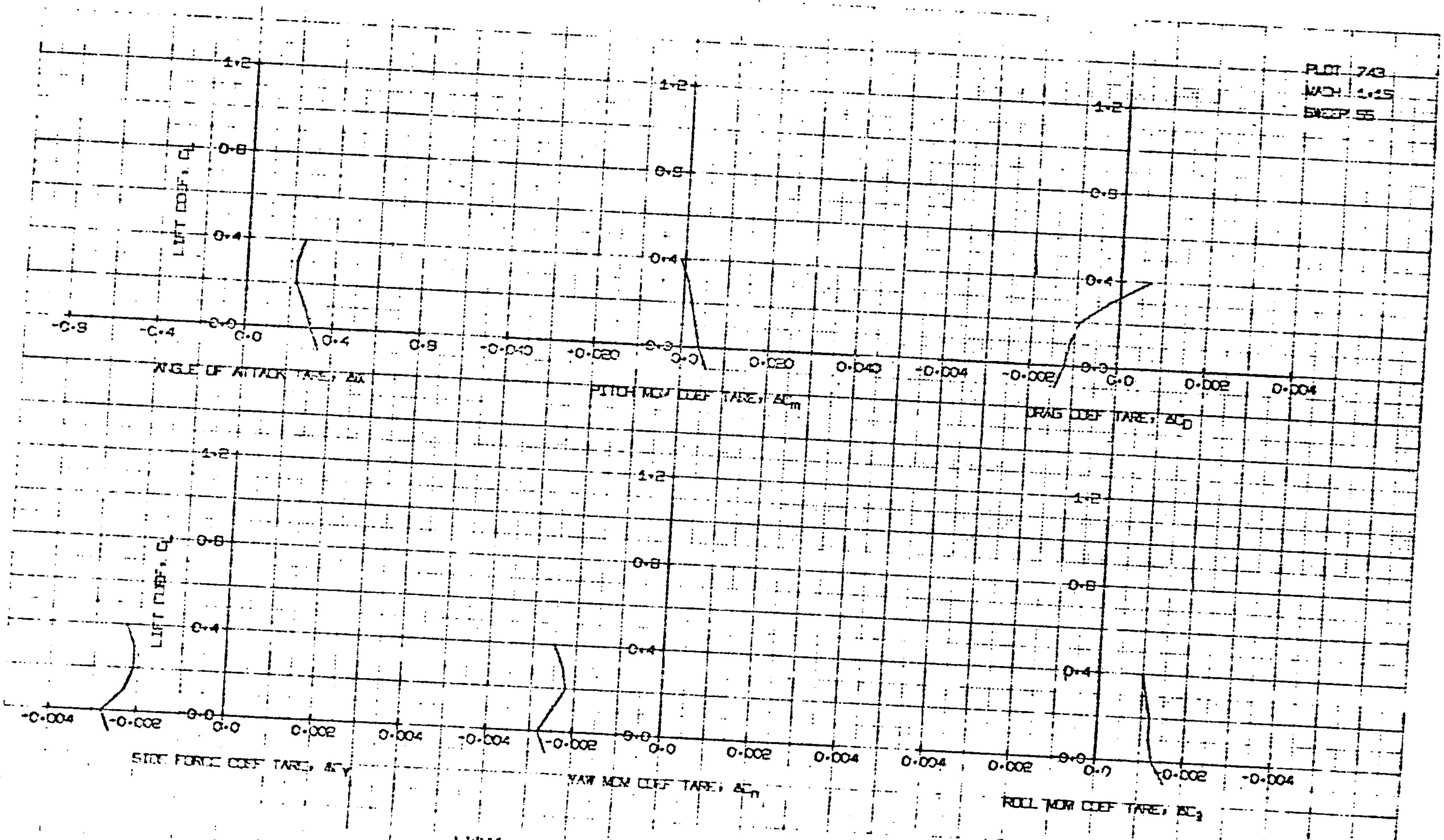


FIGURE 82 AERODYNAMIC TARES, CLEAN FUSELAGE

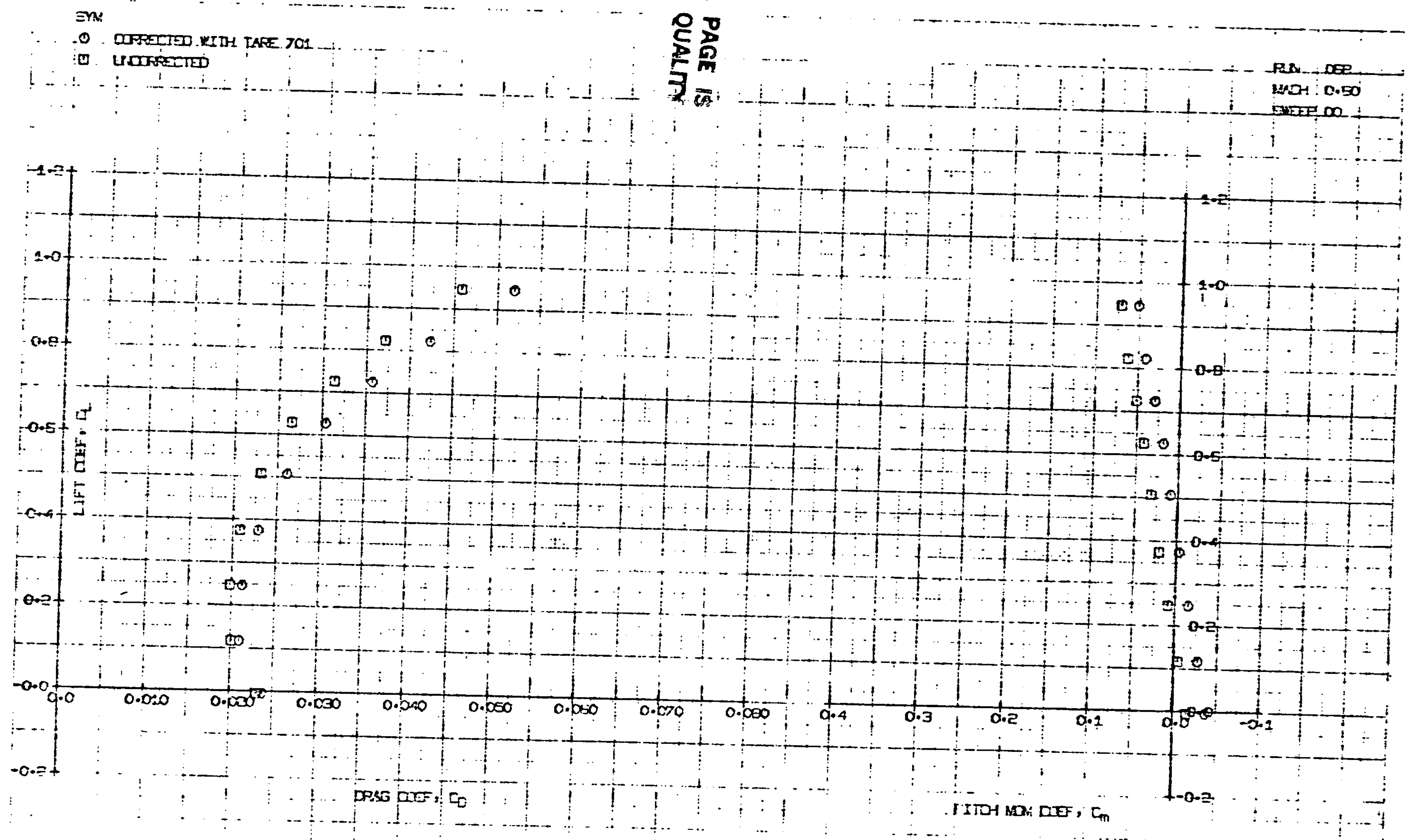


FIGURE 83. PERFORMANCE DATA RUNS, INTEGRATED FUSELAGE

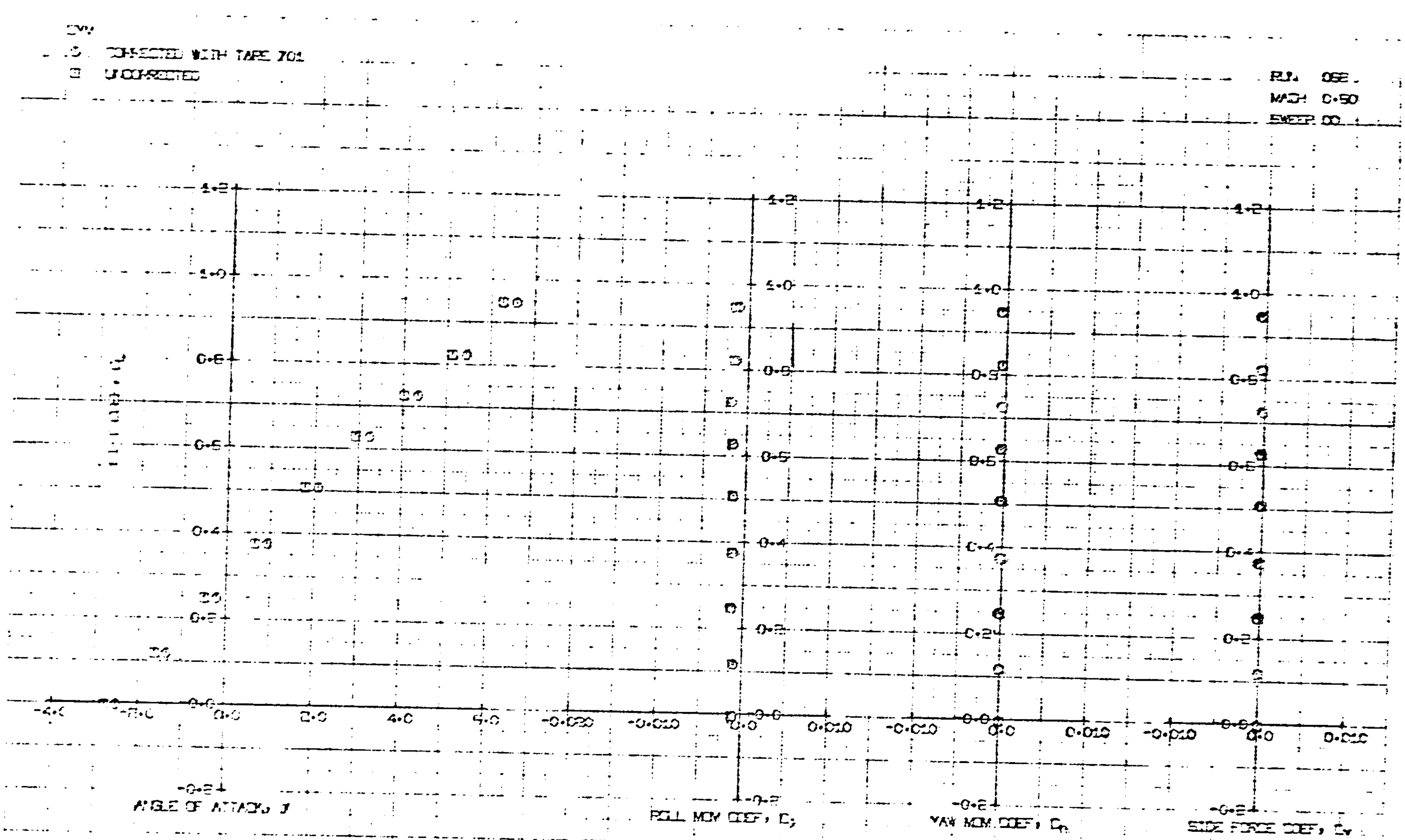


FIGURE 83. PERFORMANCE DATA RUN, INTEGRATED FUSELAGE

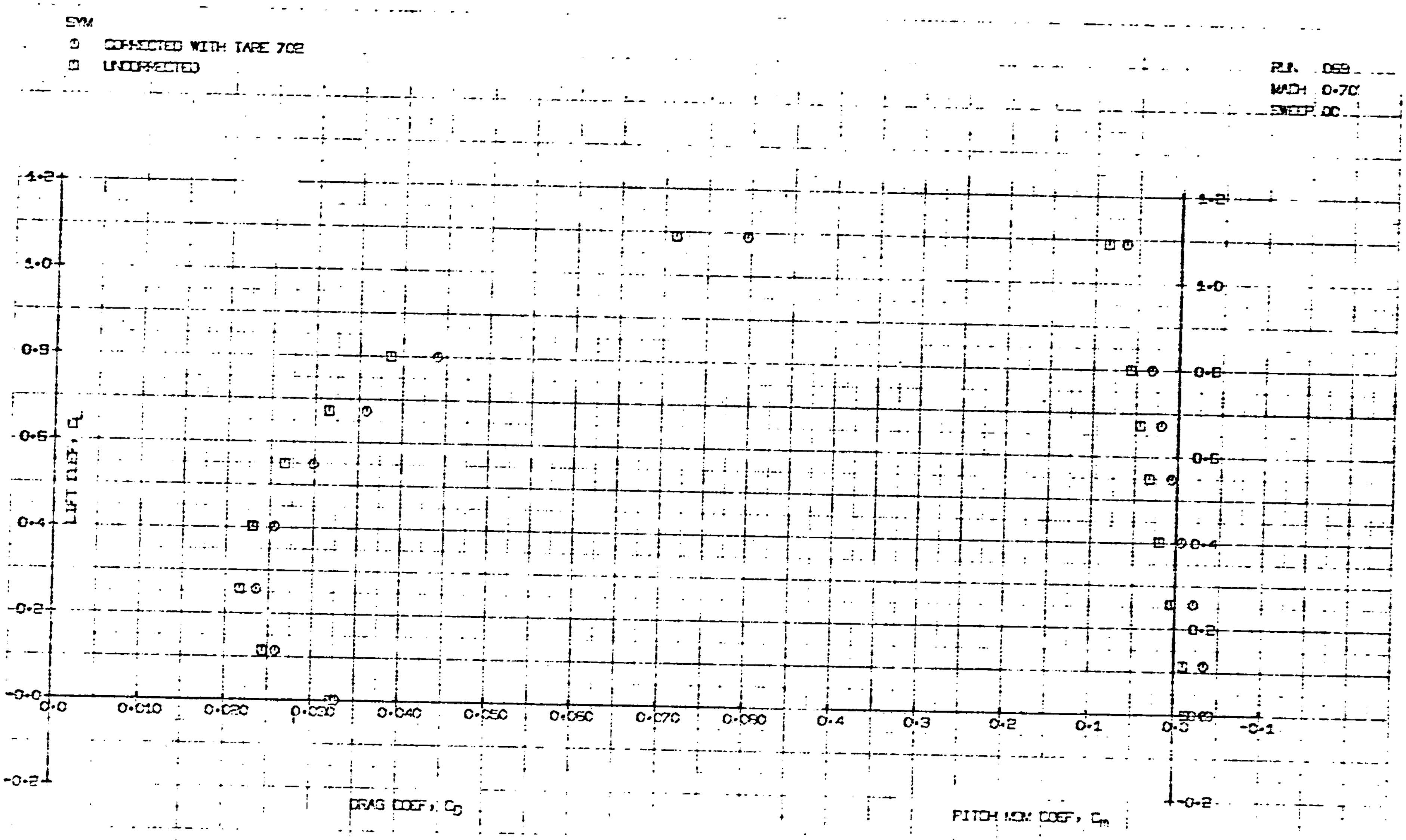


FIGURE 84. PERFORMANCE DATA RUNS, INTEGRATED FUSELAGE

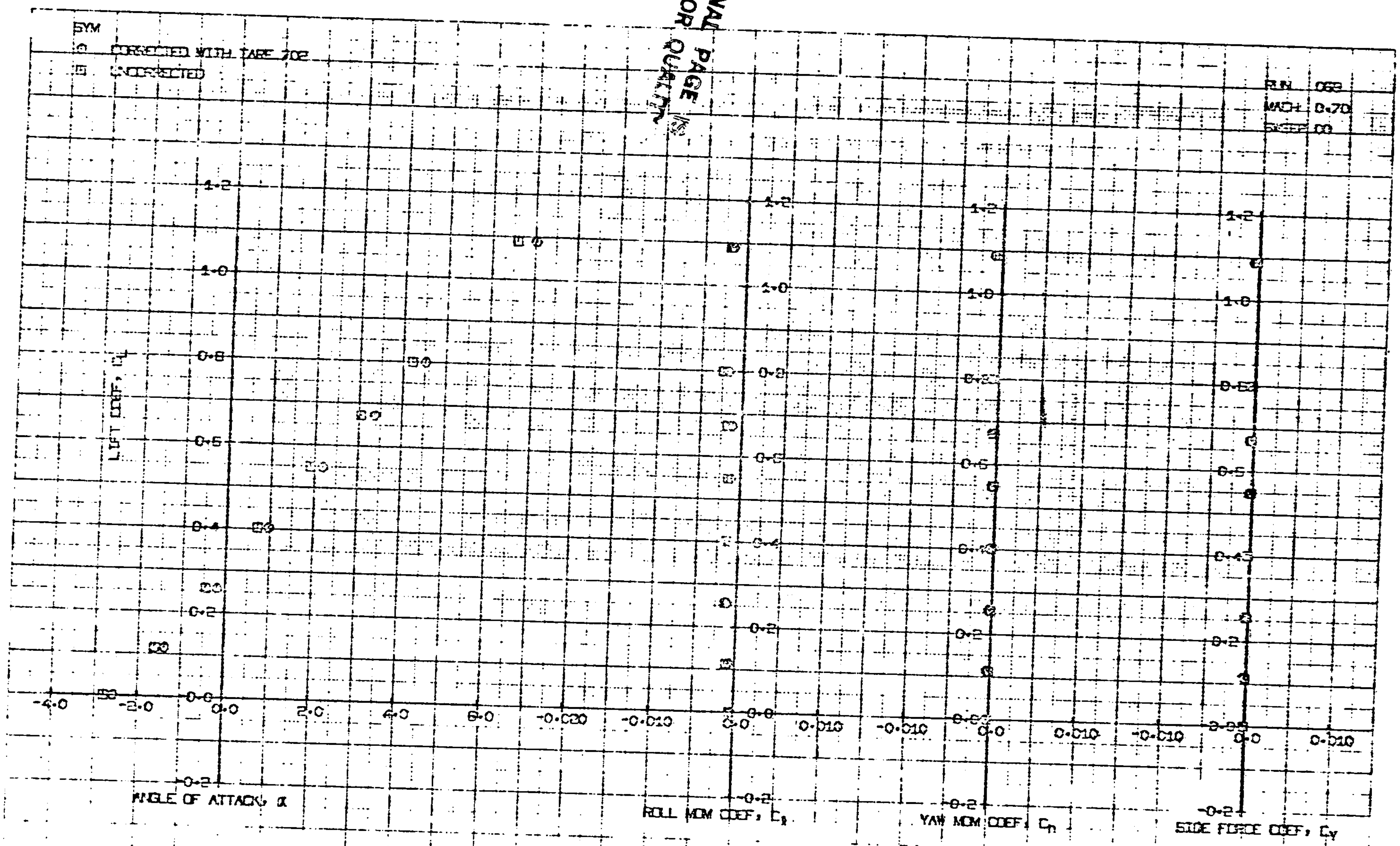


FIGURE 84. PERFORMANCE DATA RUNS, INTEGRATED FUSELAGE

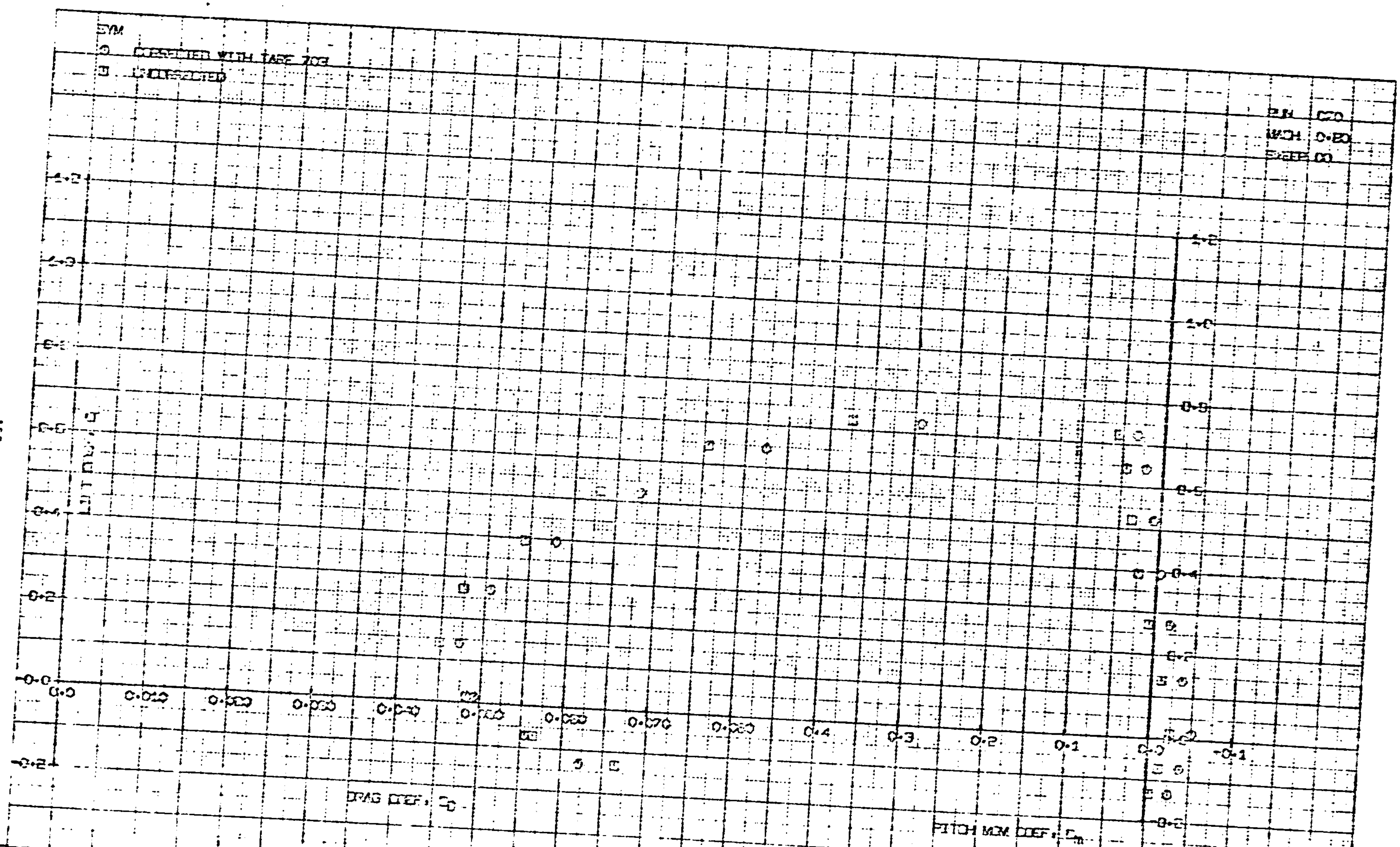


FIGURE 85. PERFORMANCE DATA RUNS, INTEGRATED FUSELAGE

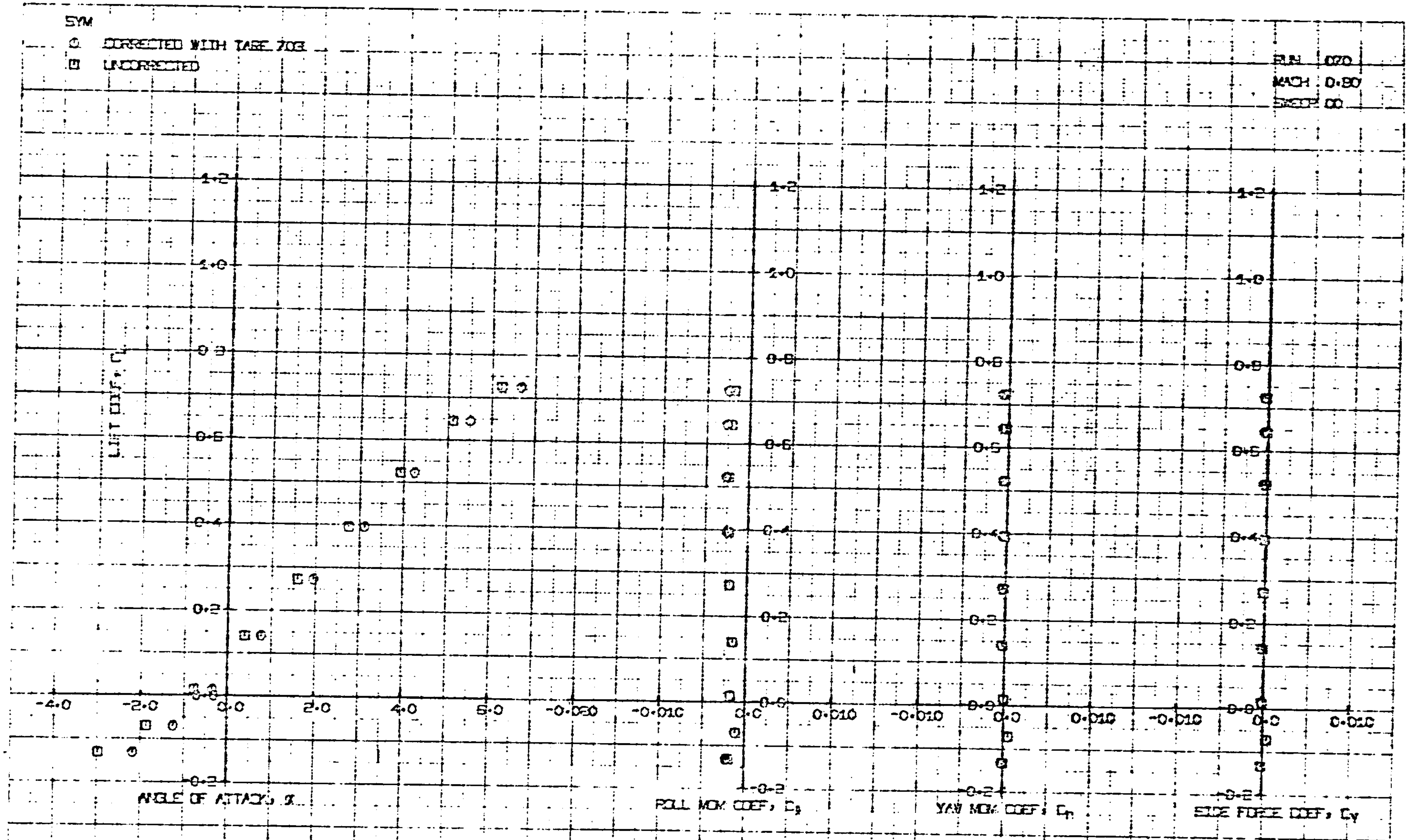


FIGURE 65. PERFORMANCE DATA RUNS, INTEGRATED FUSELAGE

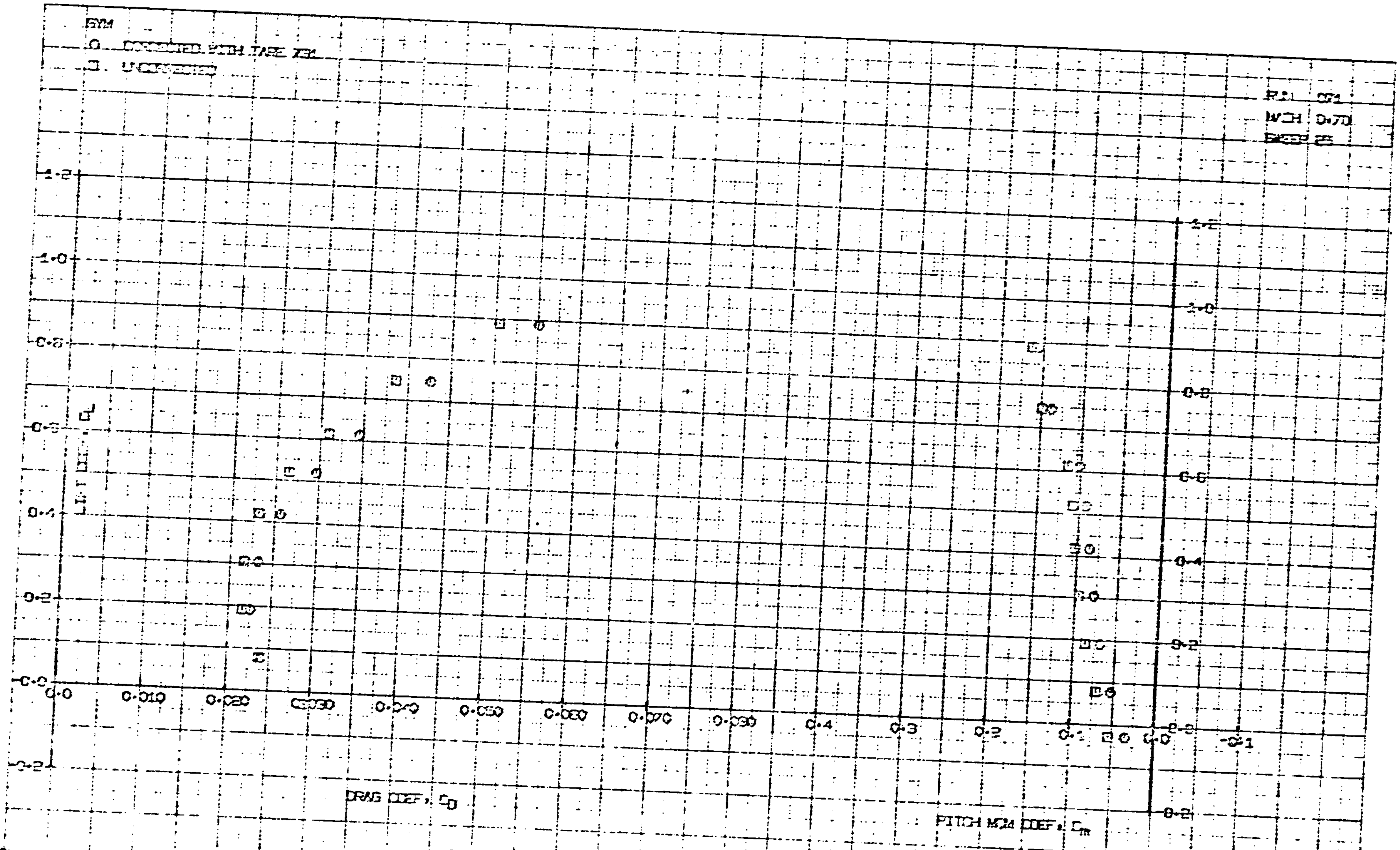


FIGURE 86. PERFORMANCE DATA RUNS, INTEGRATED FUSELAGE

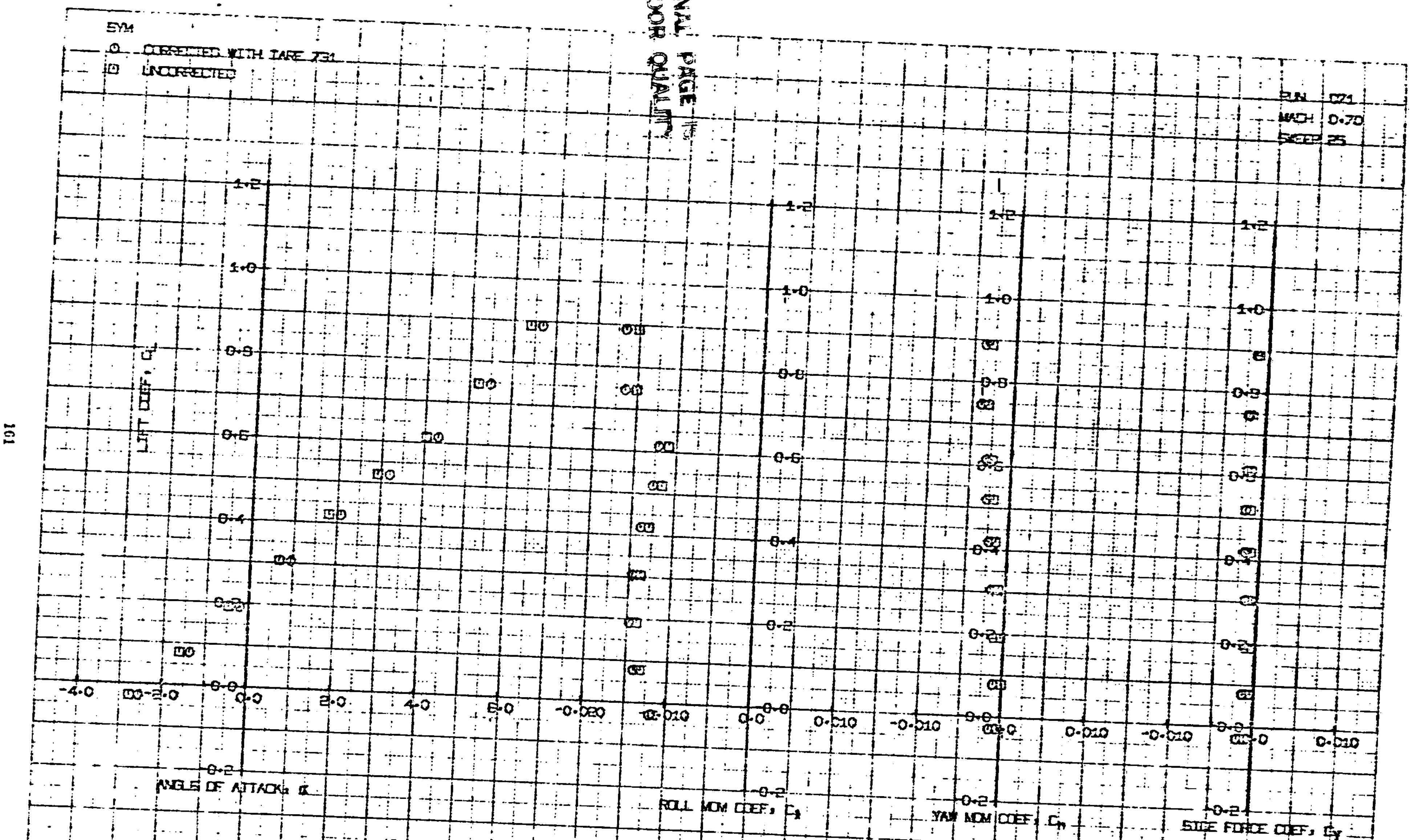


FIGURE 86. PERFORMANCE DATA RUNS, INTEGRATED FUSELAGE

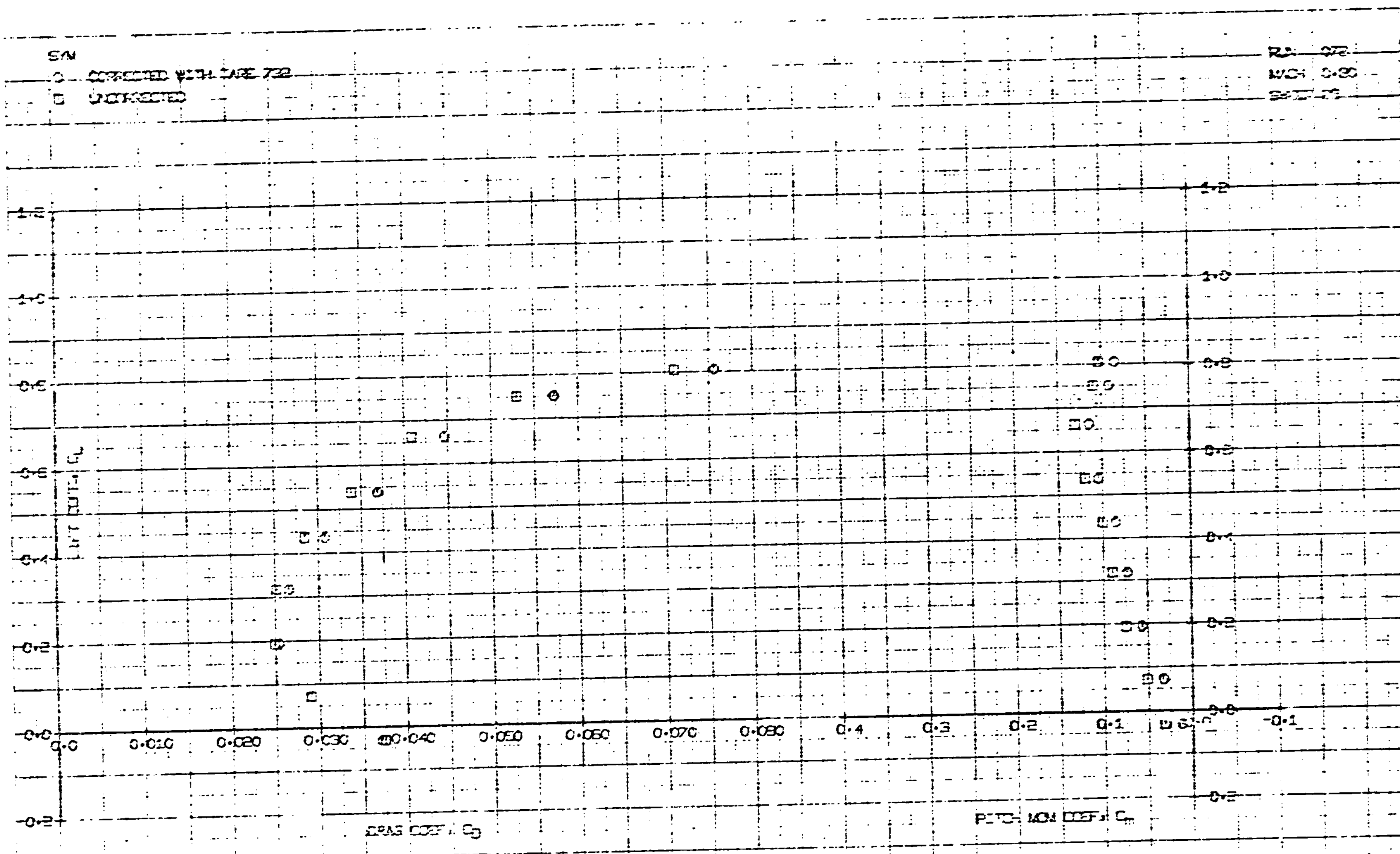


FIGURE 37. PERFORMANCE DATA RUNS, INTEGRATED FUSELAGE

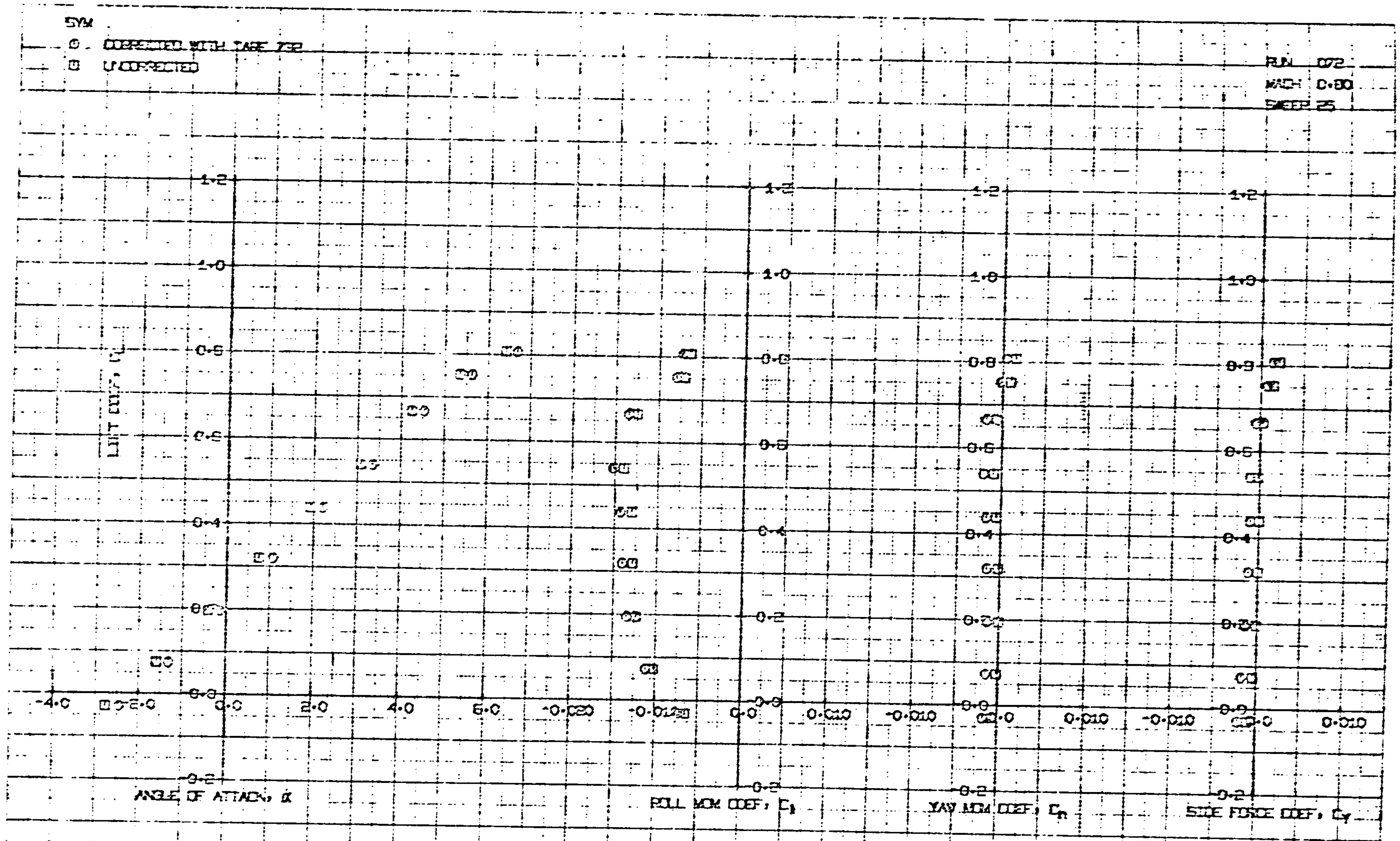


FIGURE 87. PERFORMANCE DATA RUNS, INTEGRATED FUSELAGE

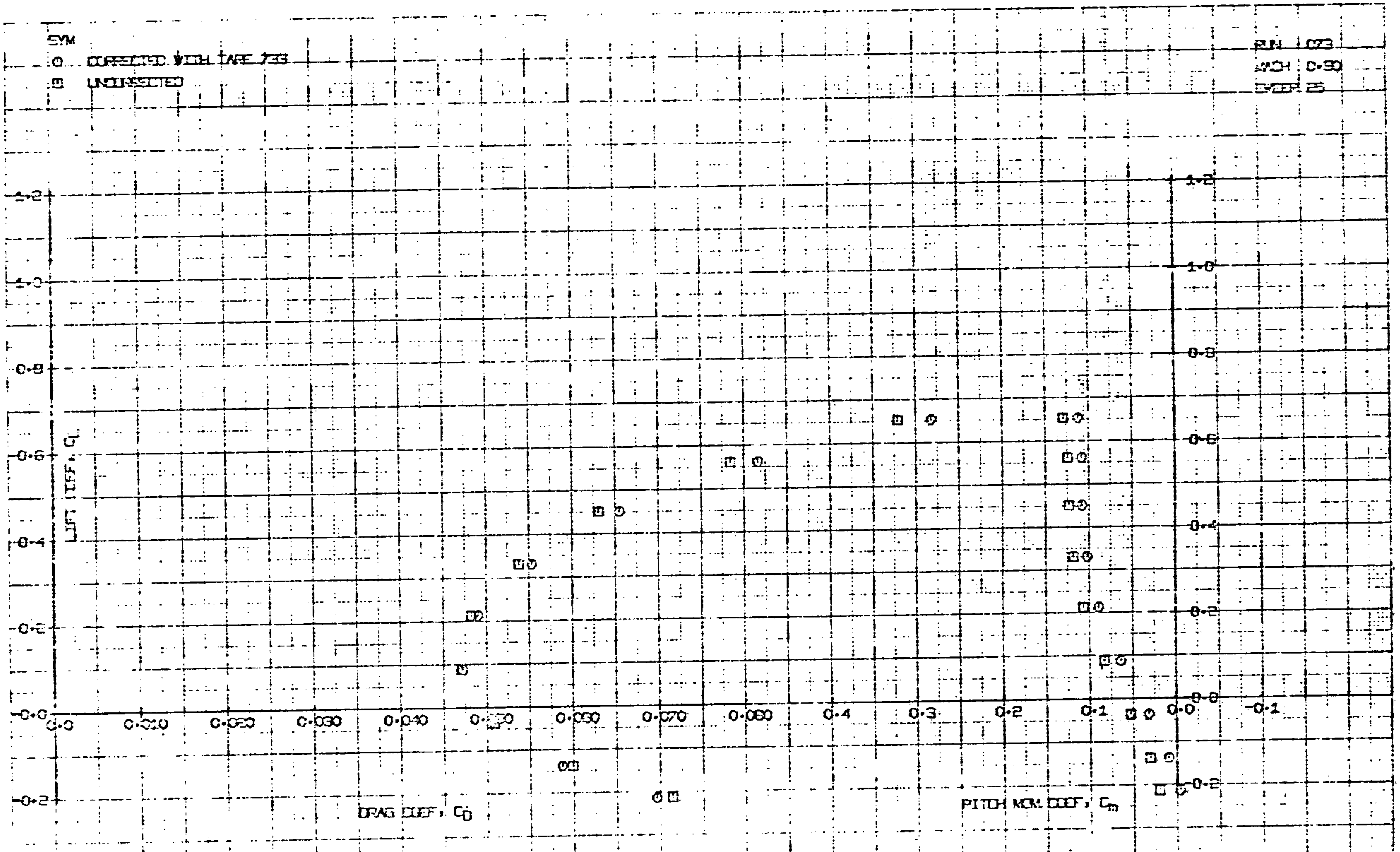


FIGURE 88. PERFORMANCE DATA RUNS, INTEGRATED FUSELAGE

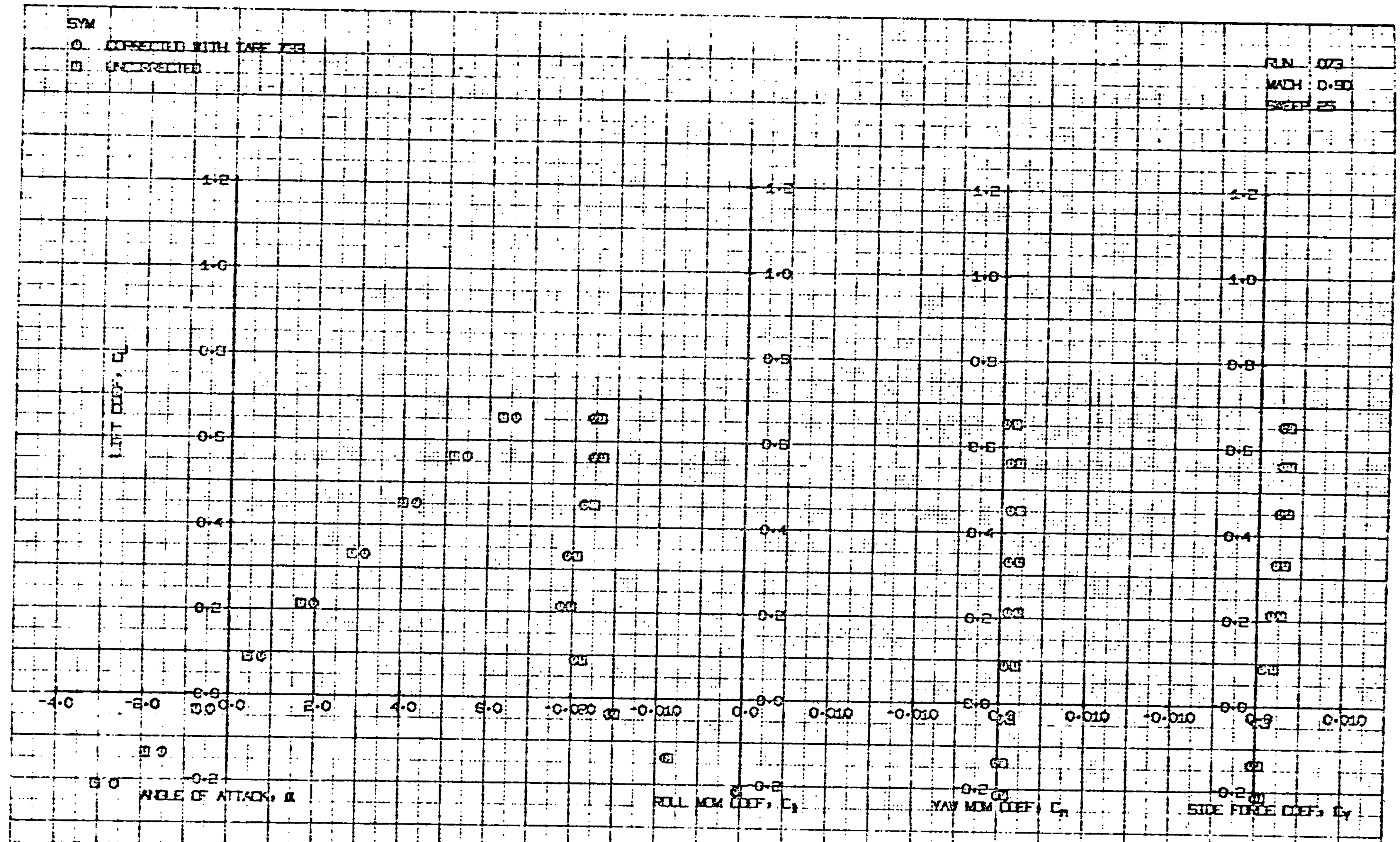


FIGURE 88. PERFORMANCE DATA RUNS, INTEGRATED FUSELAGE

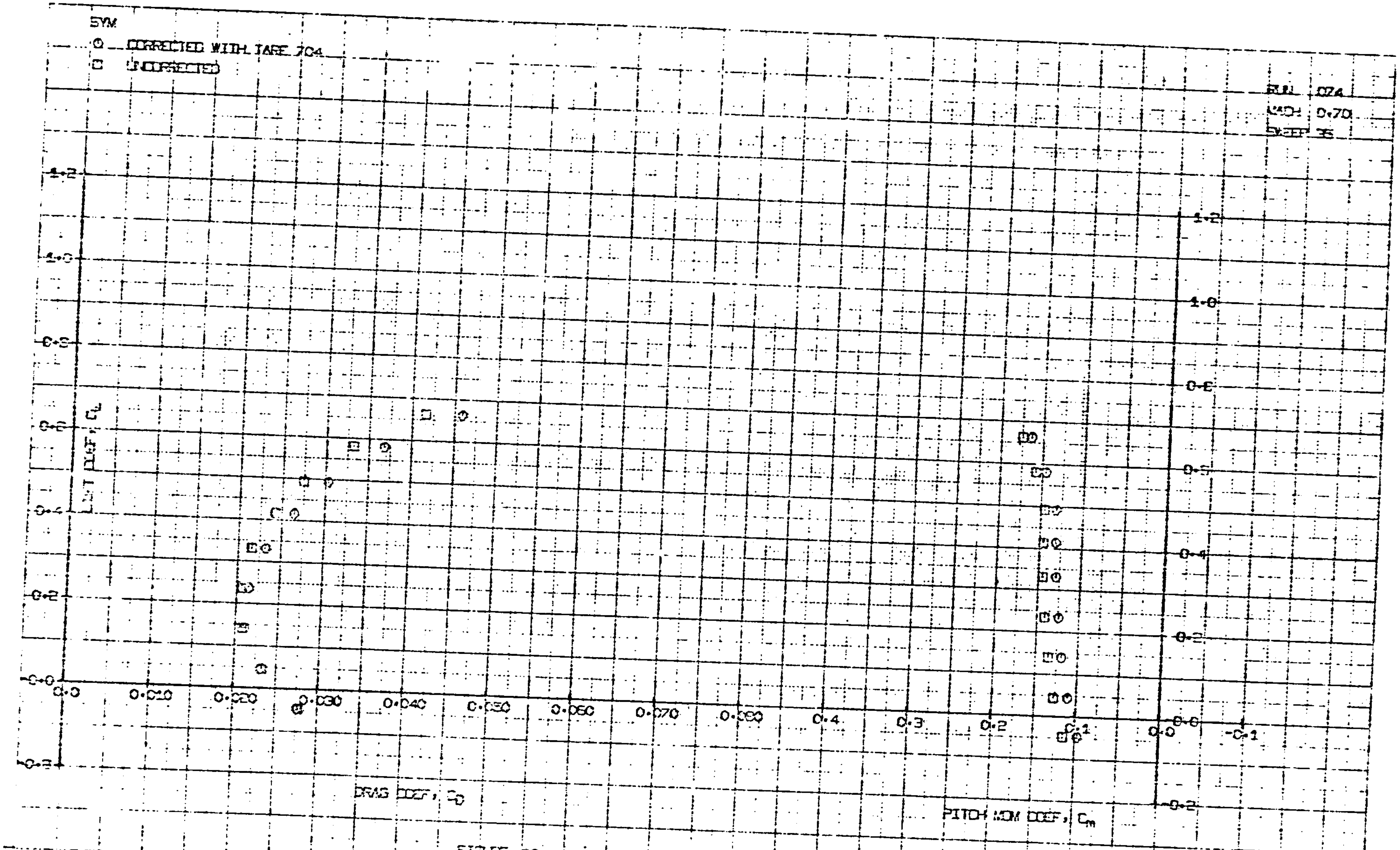


FIGURE 89. PERFORMANCE DATA RUNS, INTEGRATED FUSELAGE

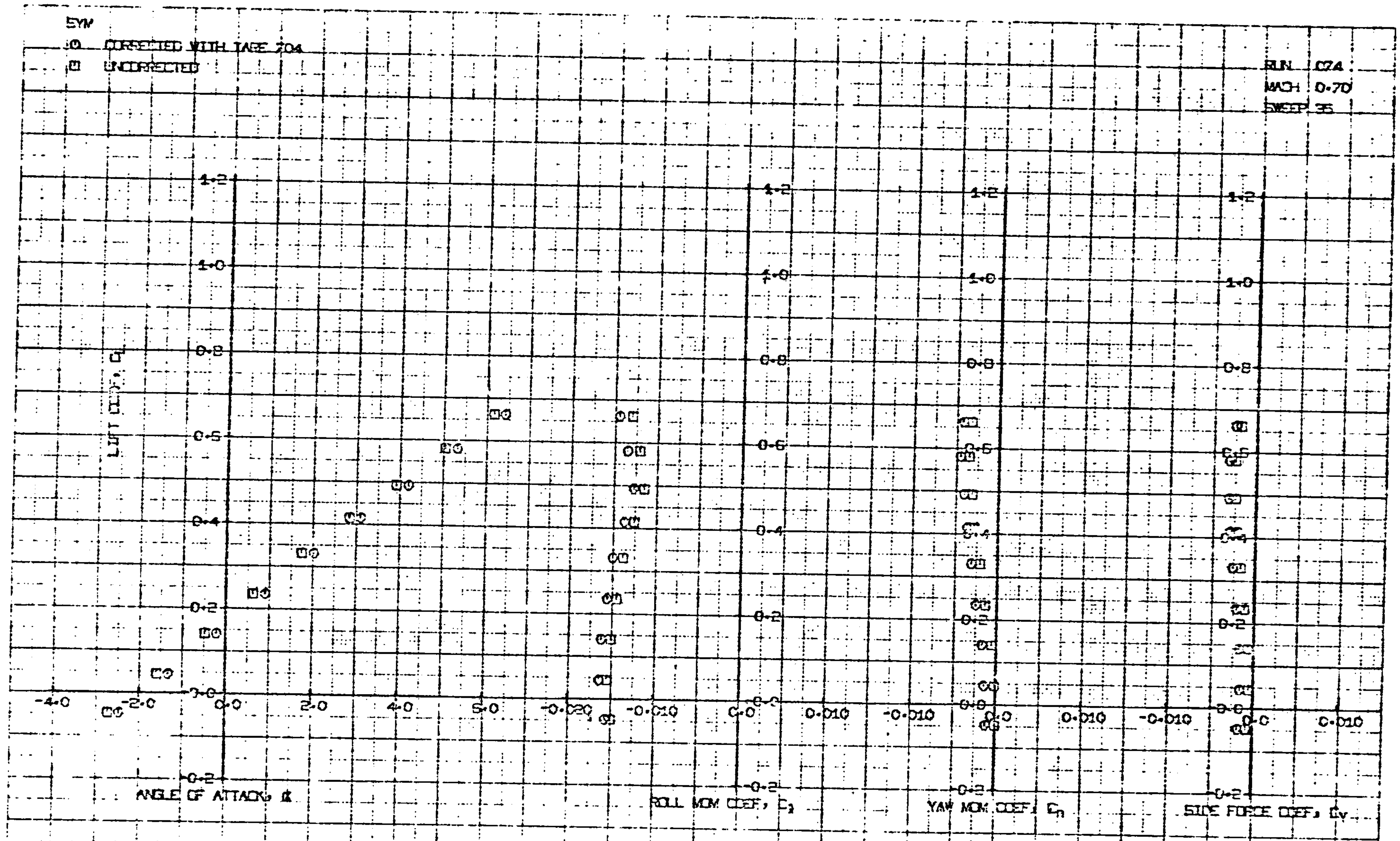


FIGURE 89. PERFORMANCE DATA RUNS, INTEGRATED FUSELAGE

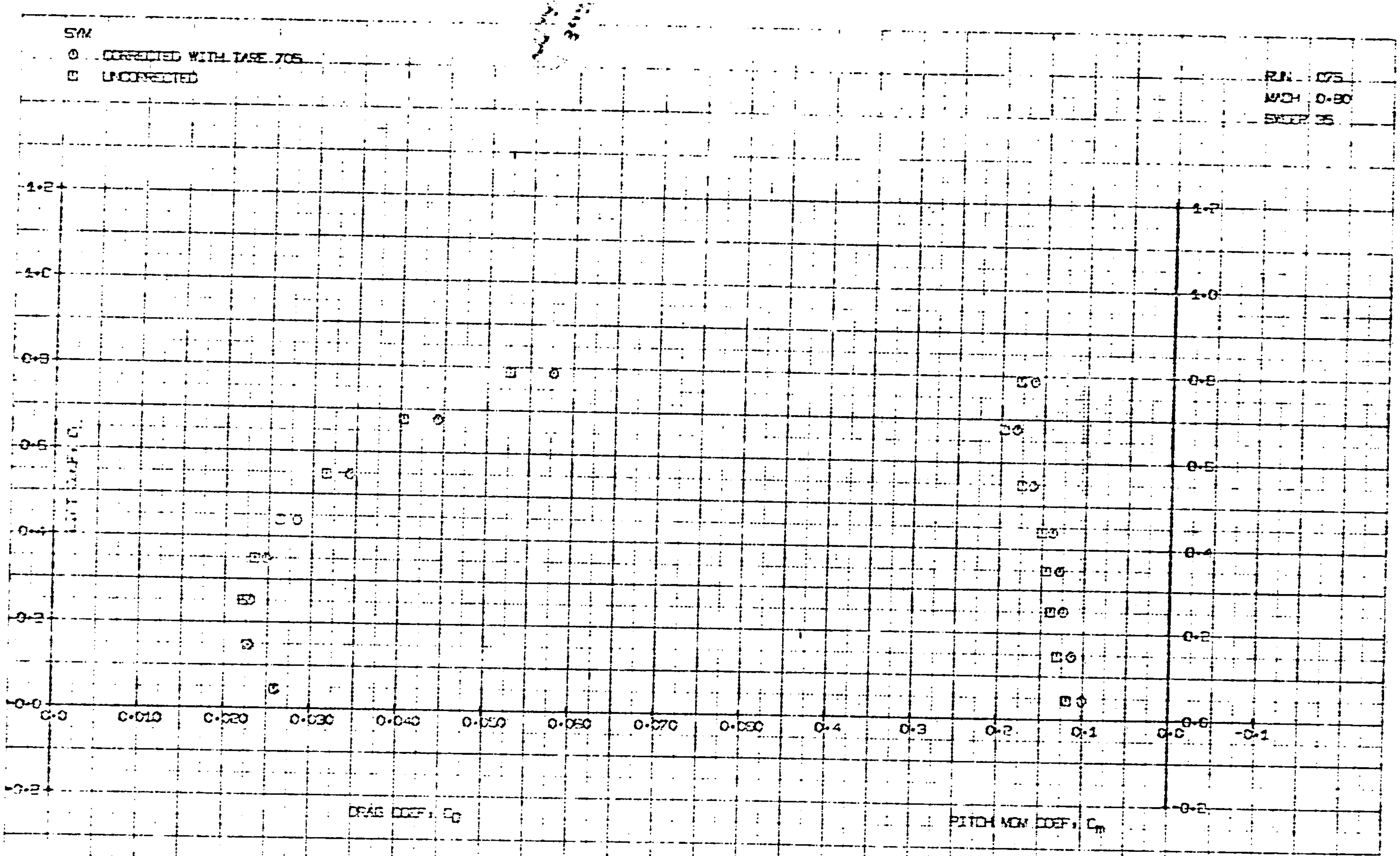


FIGURE 90. PERFORMANCE DATA RUNS, INTEGRATED FUSELAGE

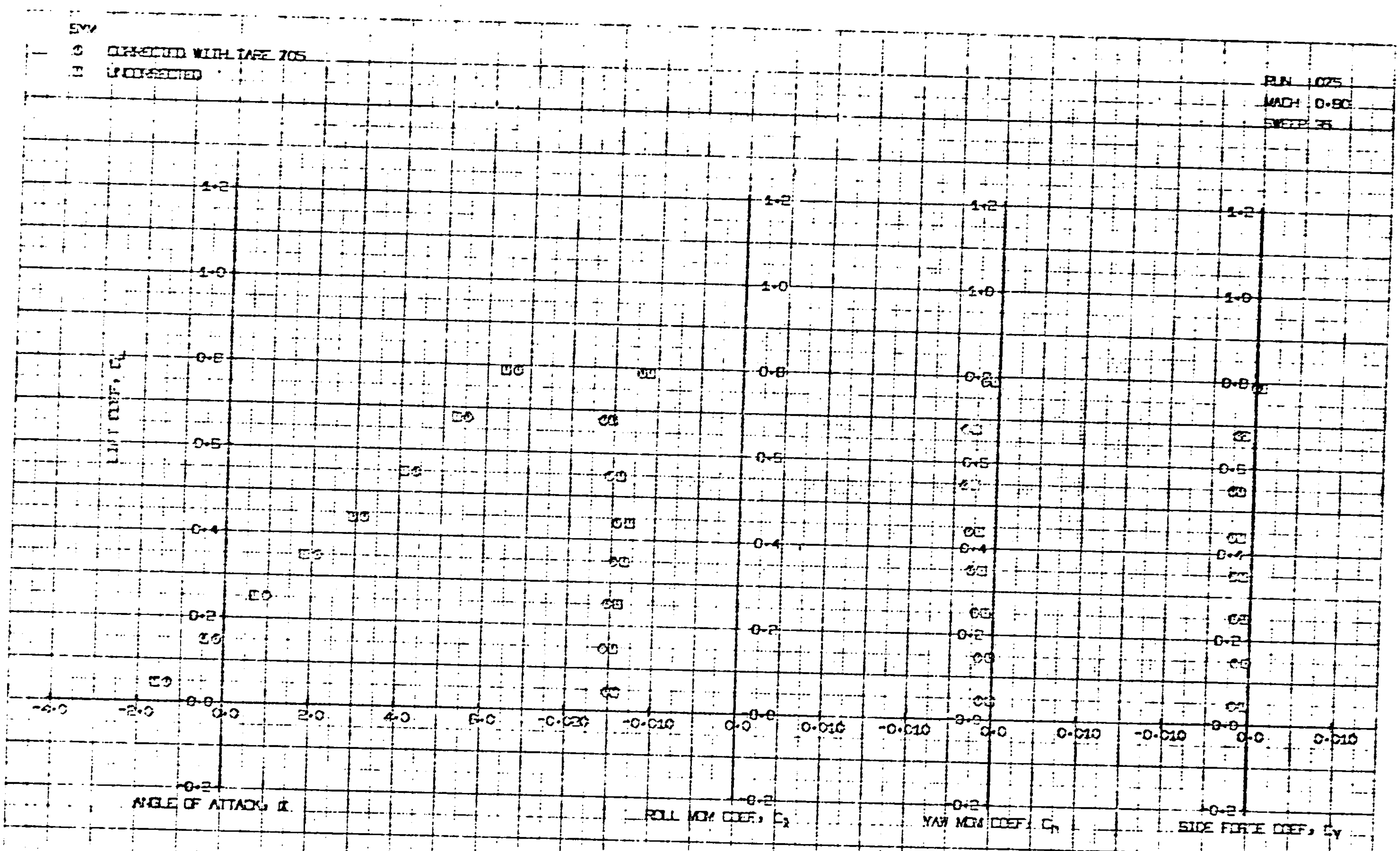


FIGURE 90. PERFORMANCE DATA RUNS, INTEGRATED FUSELAGE

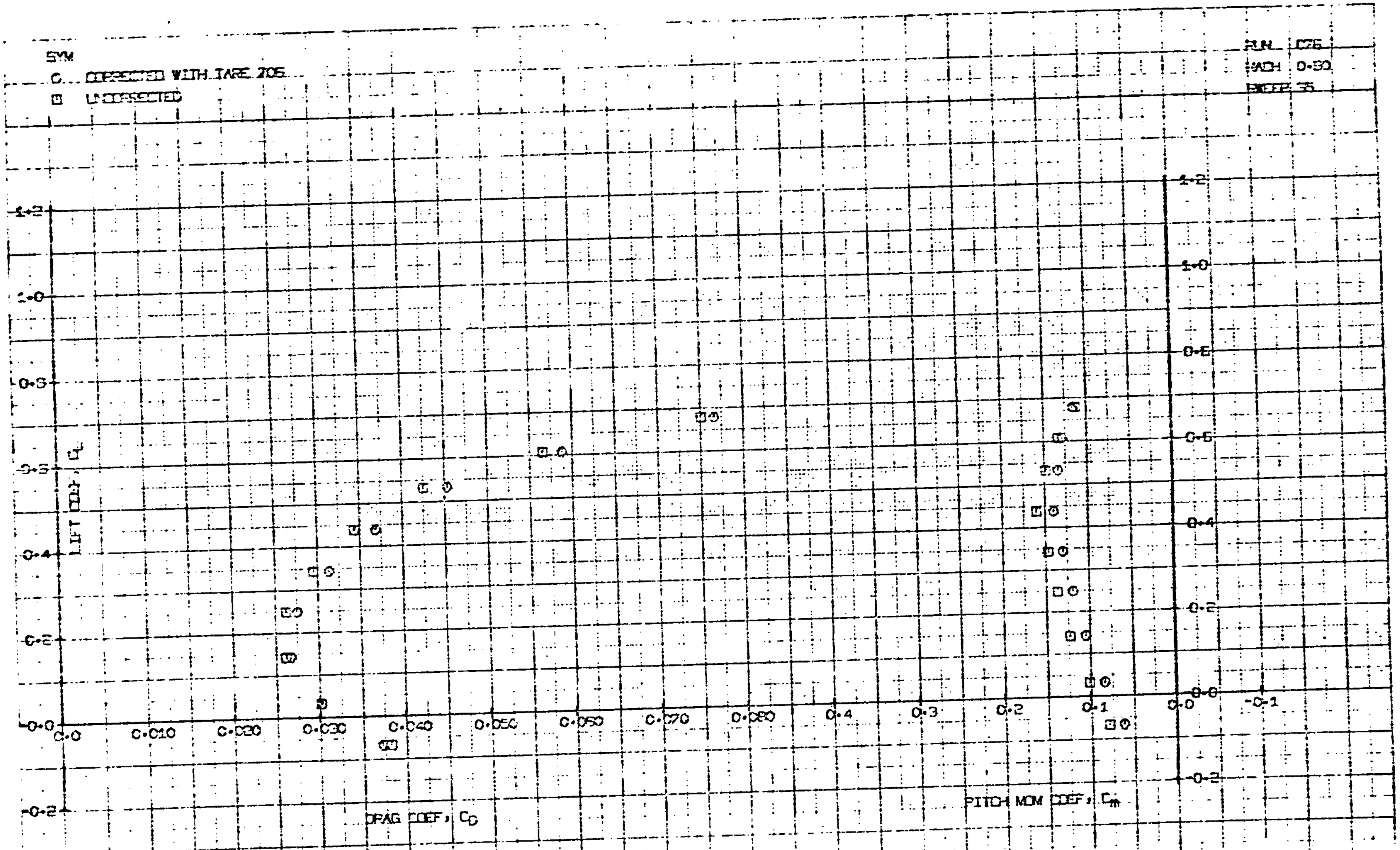


FIGURE 91. PERFORMANCE DATA RUNS, INTEGRATED FUSELAGE

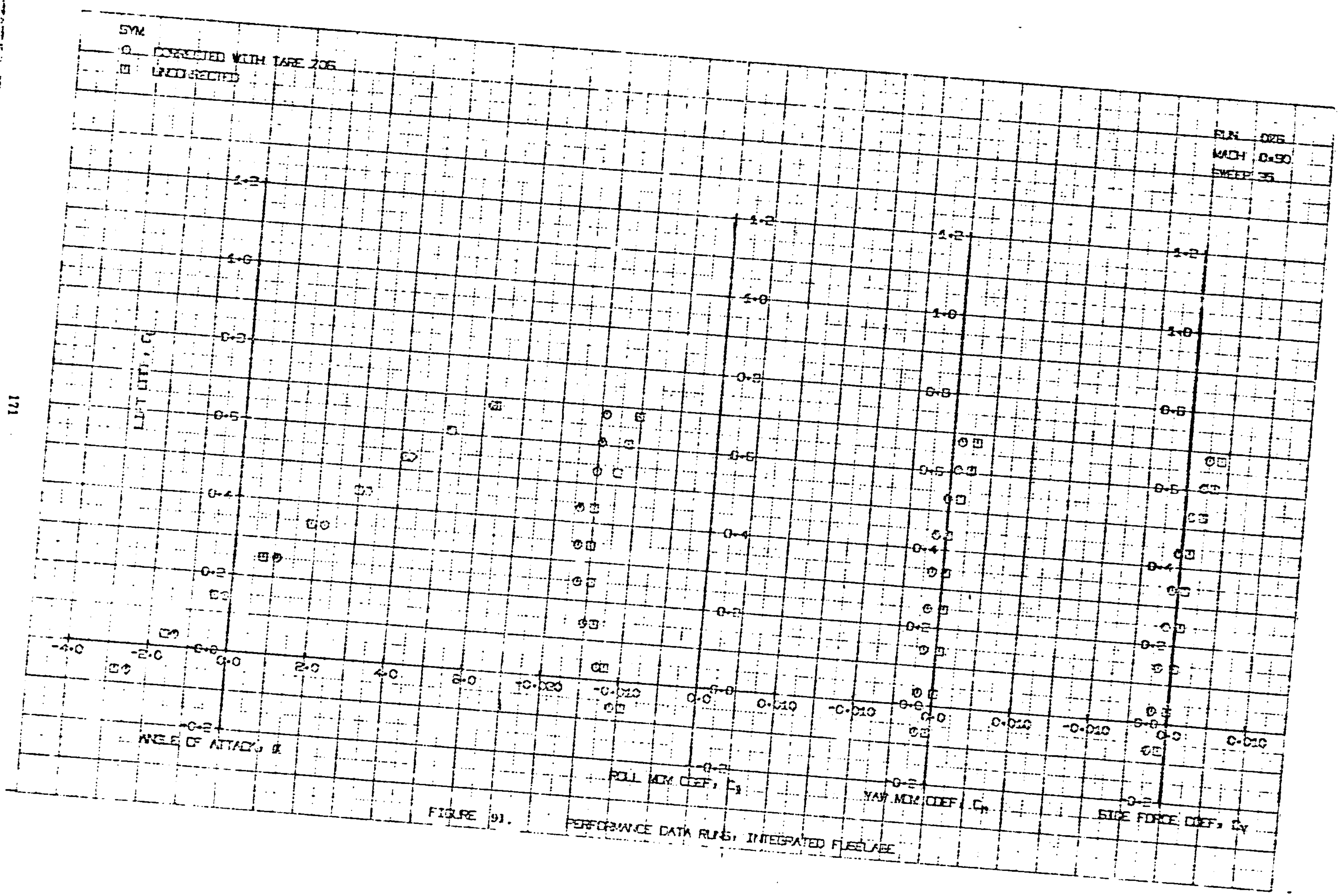


FIGURE 91. PERFORMANCE DATA RUNS, INTEGRATED FUSELAGE

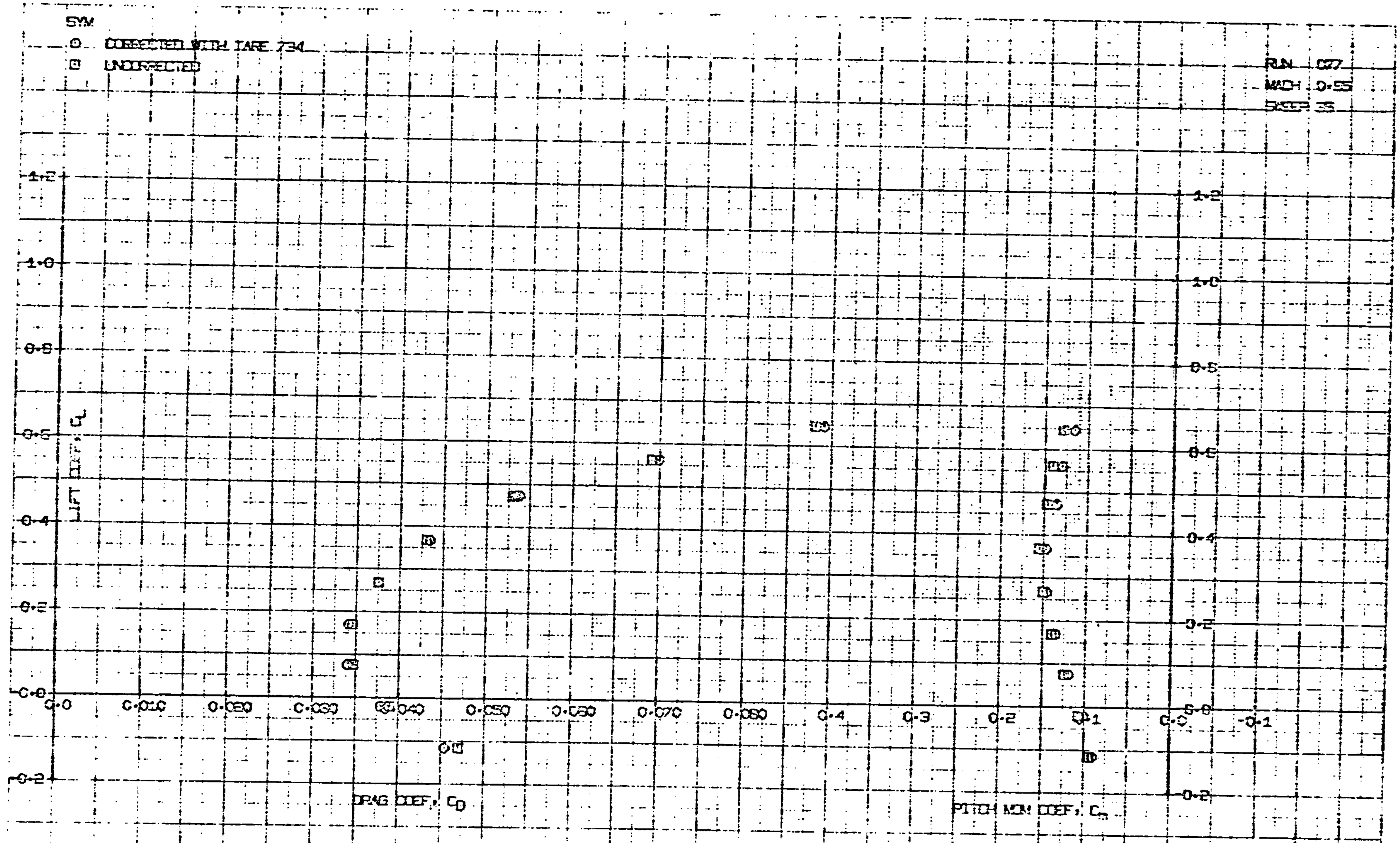


FIGURE 82. PERFORMANCE DATA RUNS, INTEGRATED FUSELAGE

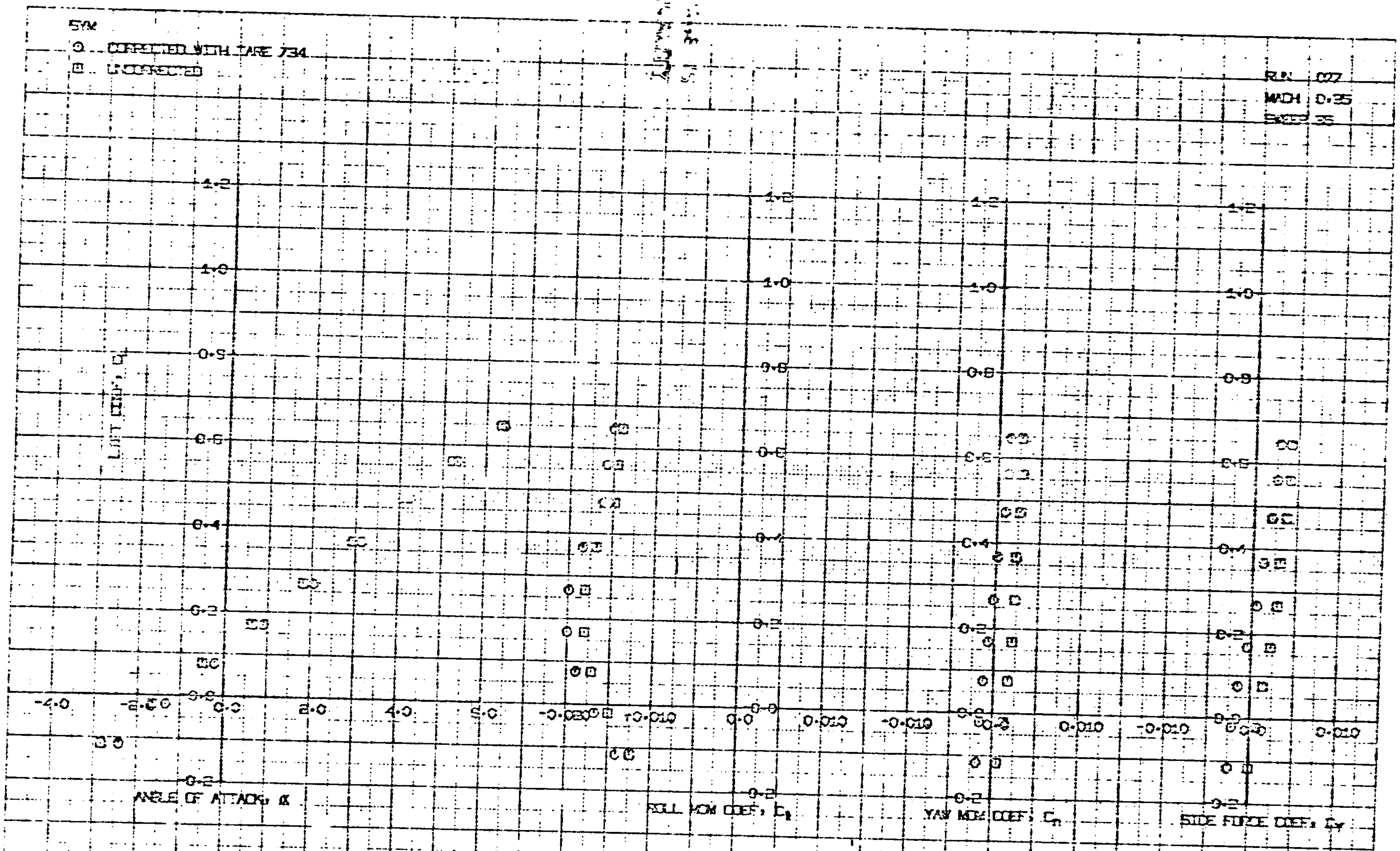


FIGURE 92. PERFORMANCE DATA RUNS, INTEGRATED FUSELAGE

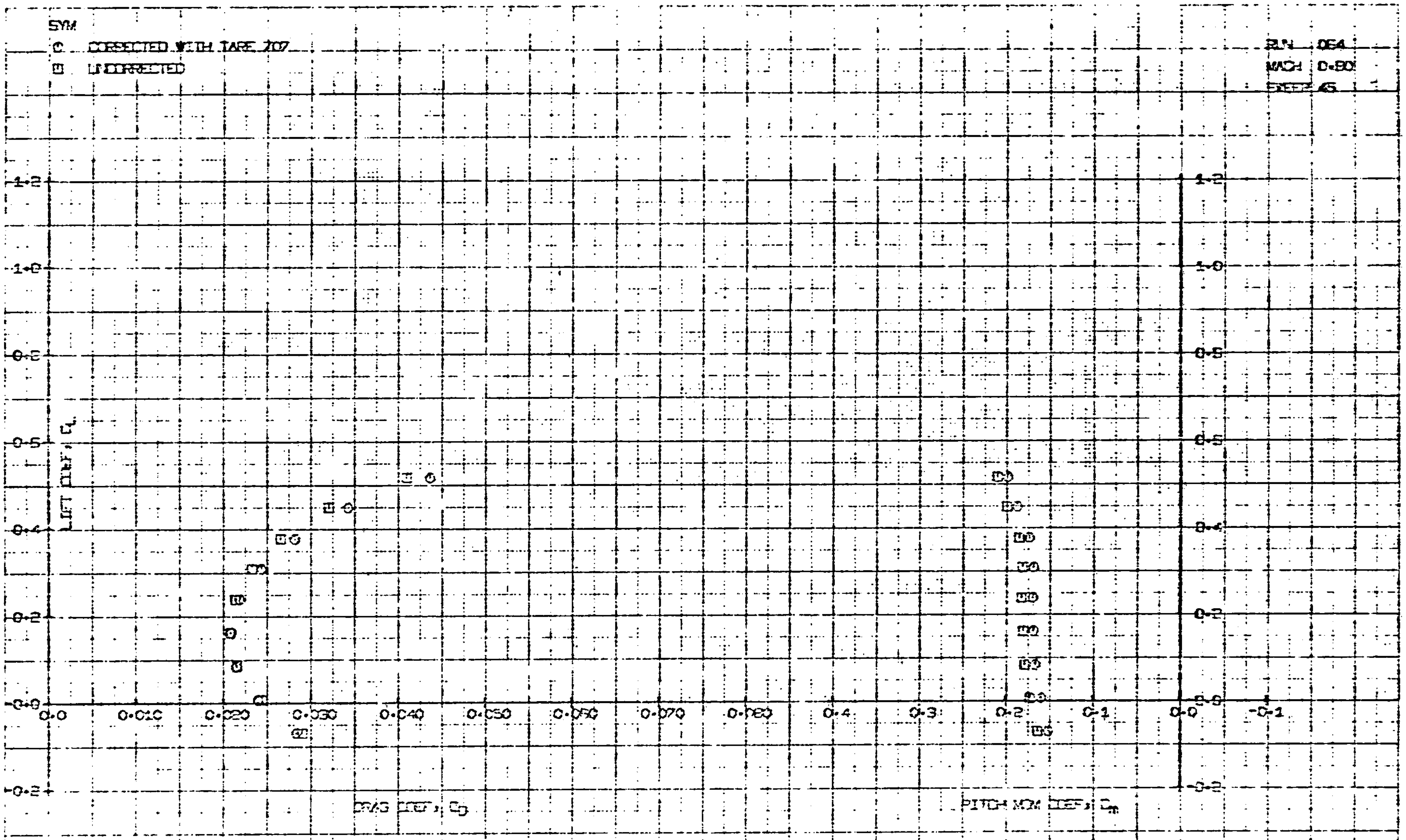


FIGURE 93. PERFORMANCE DATA RUNS, INTEGRATED FUSELAGE

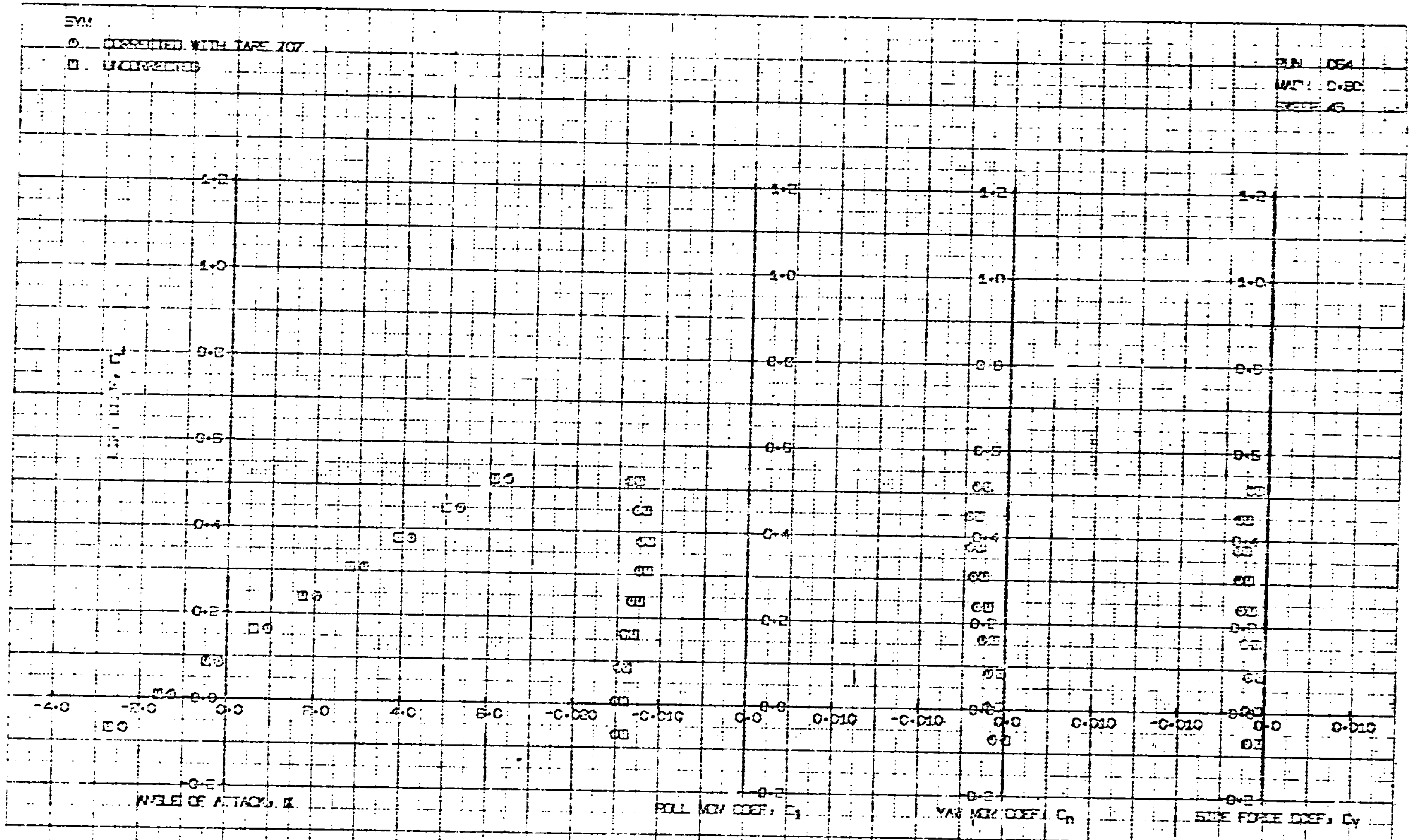


FIGURE 93. PERFORMANCE DATA RUNS: INTEGRATED FUSELAGE

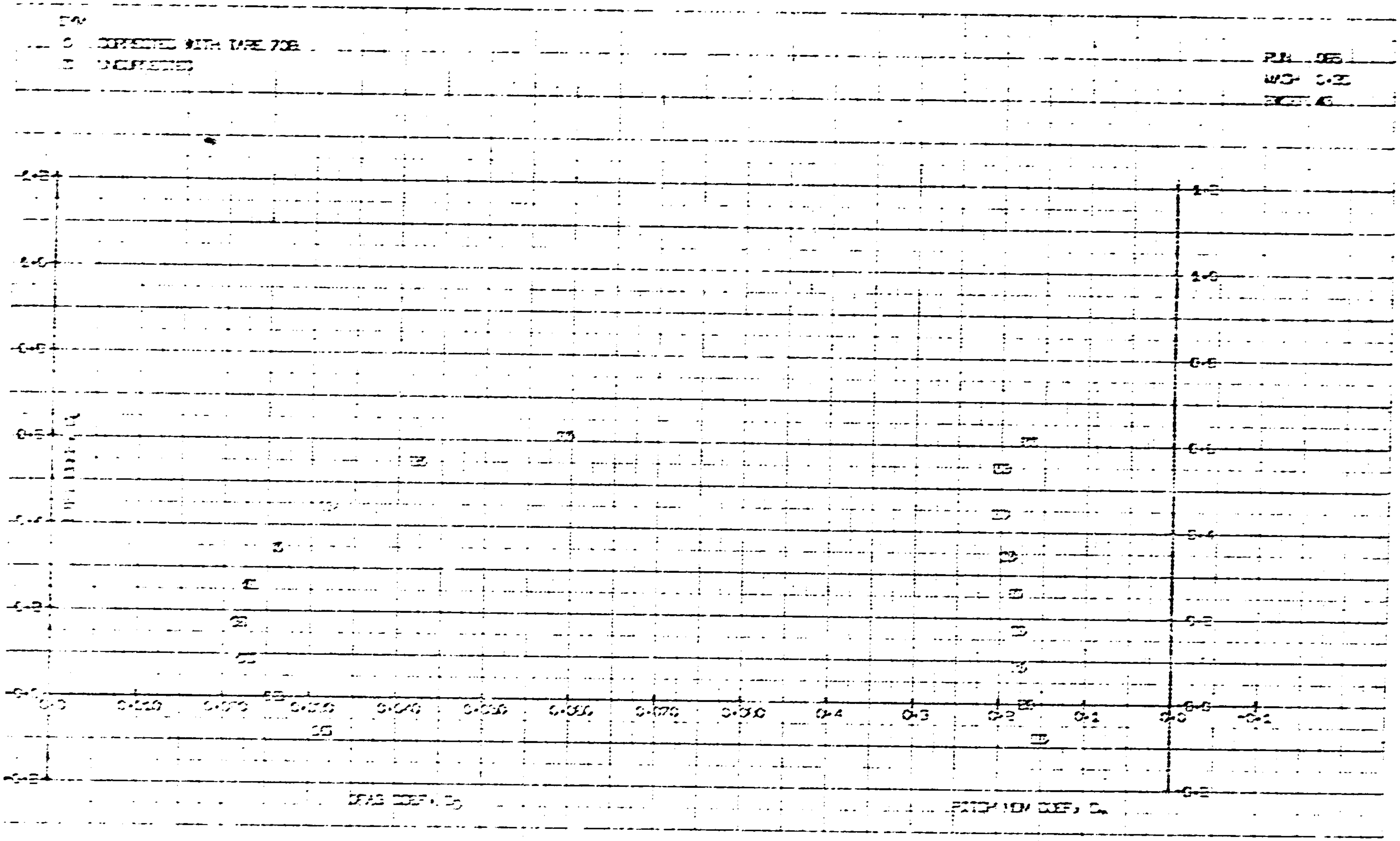


FIGURE 54. PERFORMANCE DATA RUN 6, INTEGRATED FUSELAGE

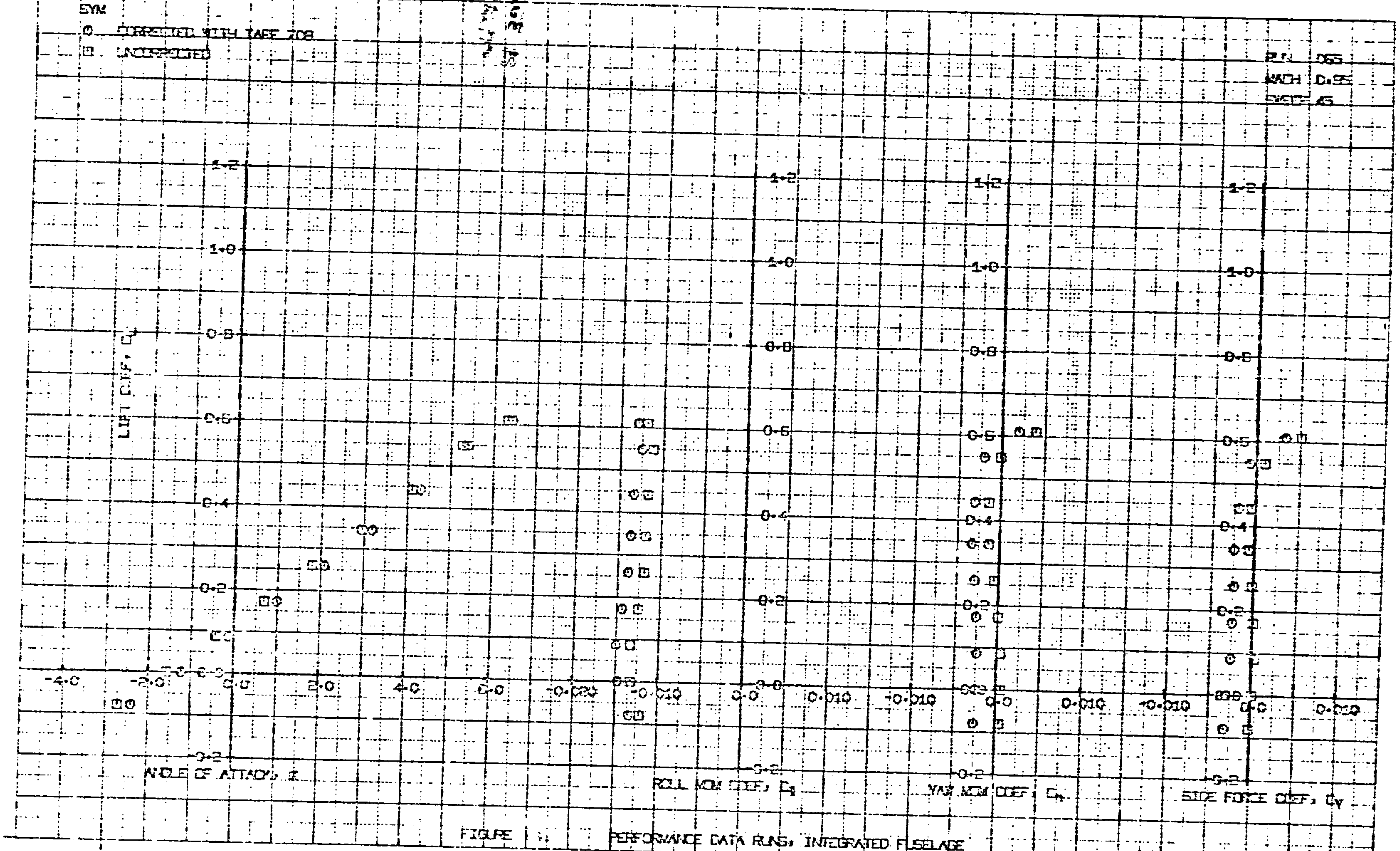


FIGURE PERFORMANCE DATA RUNS, INTEGRATED FUSELAGE

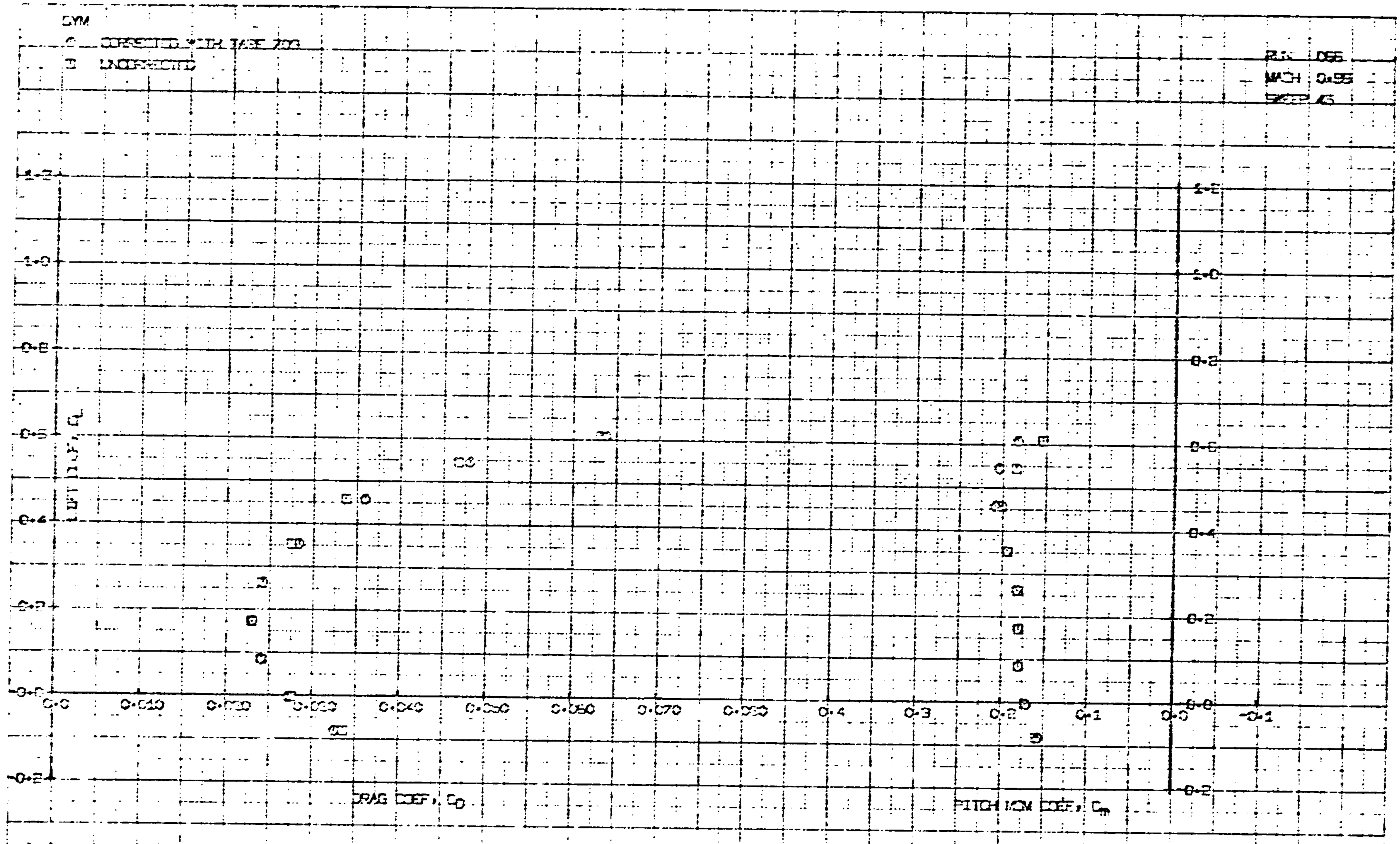


FIGURE 95. PERFORMANCE DATA RUNS, INTEGRATED FUSELAGE

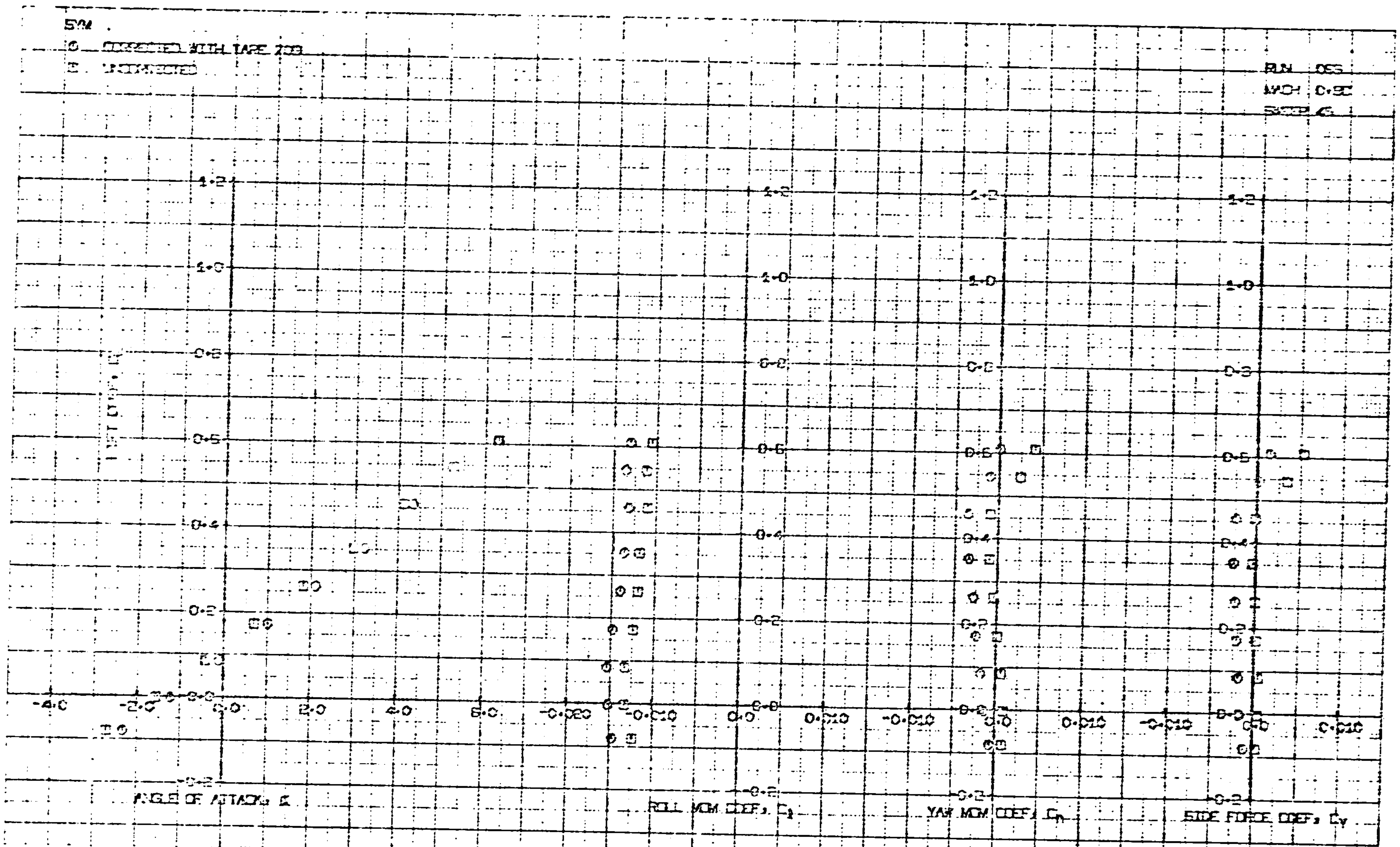


FIGURE . PERFORMANCE DATA RUNS, INTEGRATED FUSELAGE

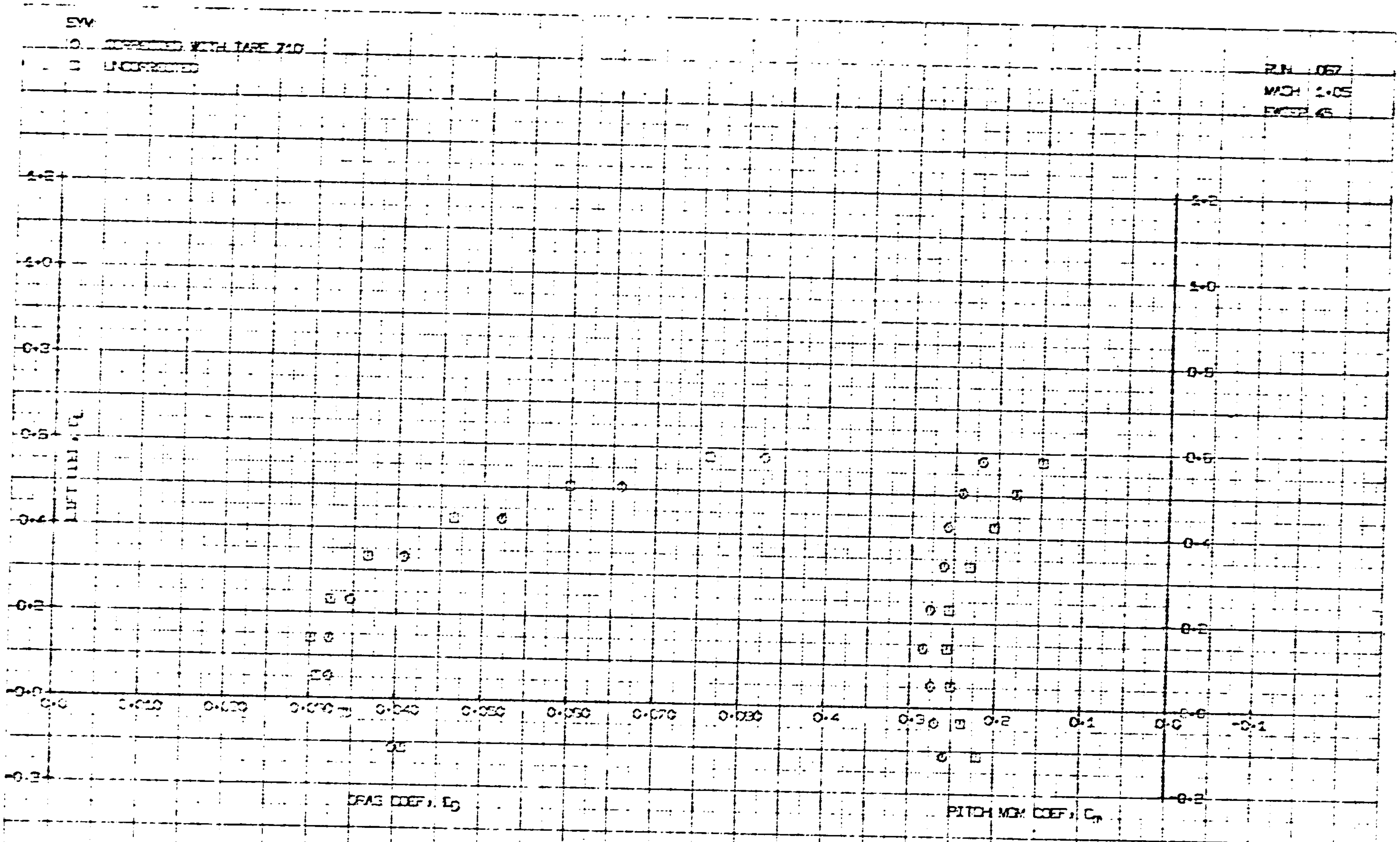


FIGURE 96. PERFORMANCE DATA RUNS, INTEGRATED FUSELAGE

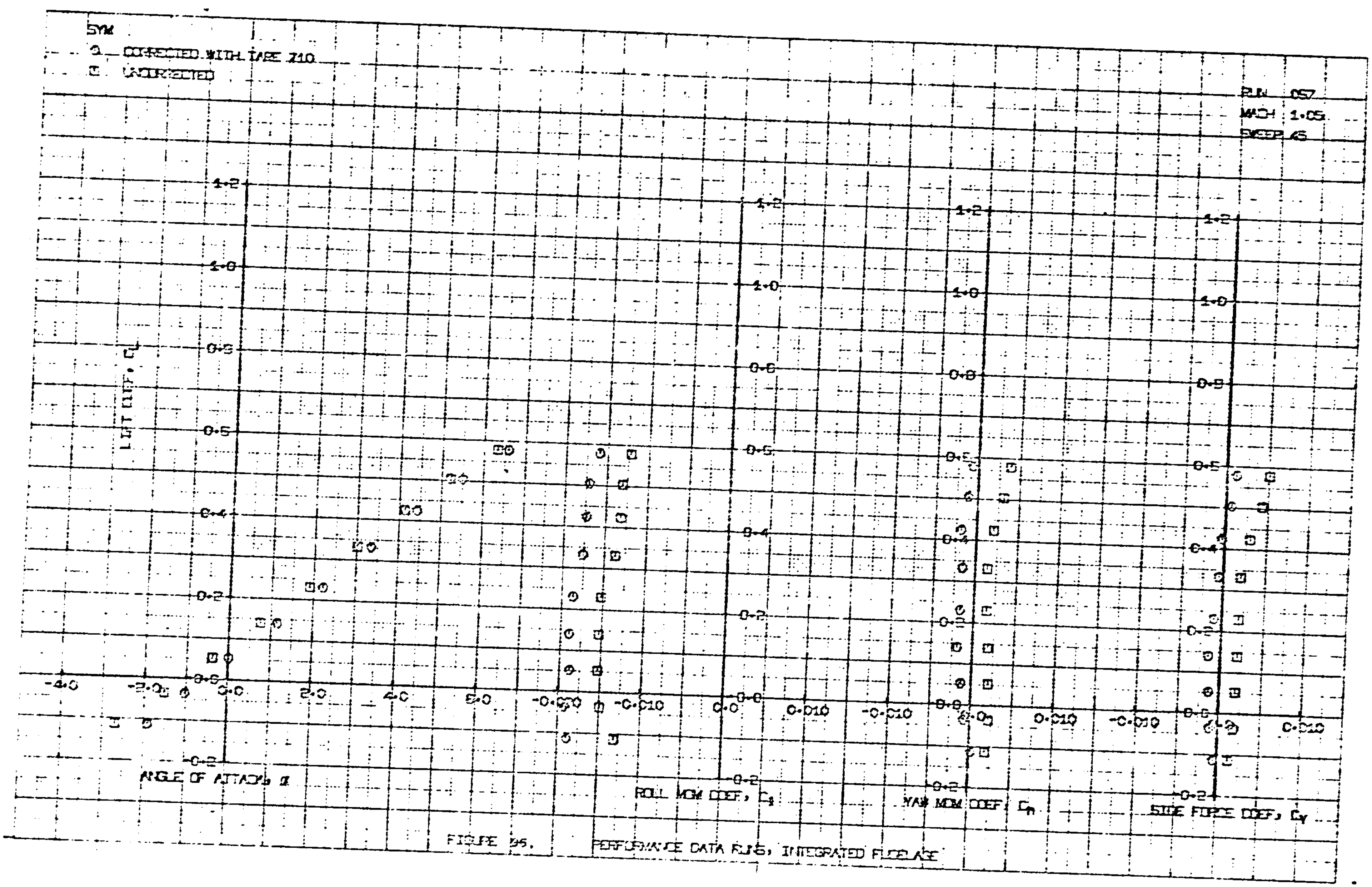


FIGURE 95. PERFORMANCE DATA RUNS, INTEGRATED FUSELAGE

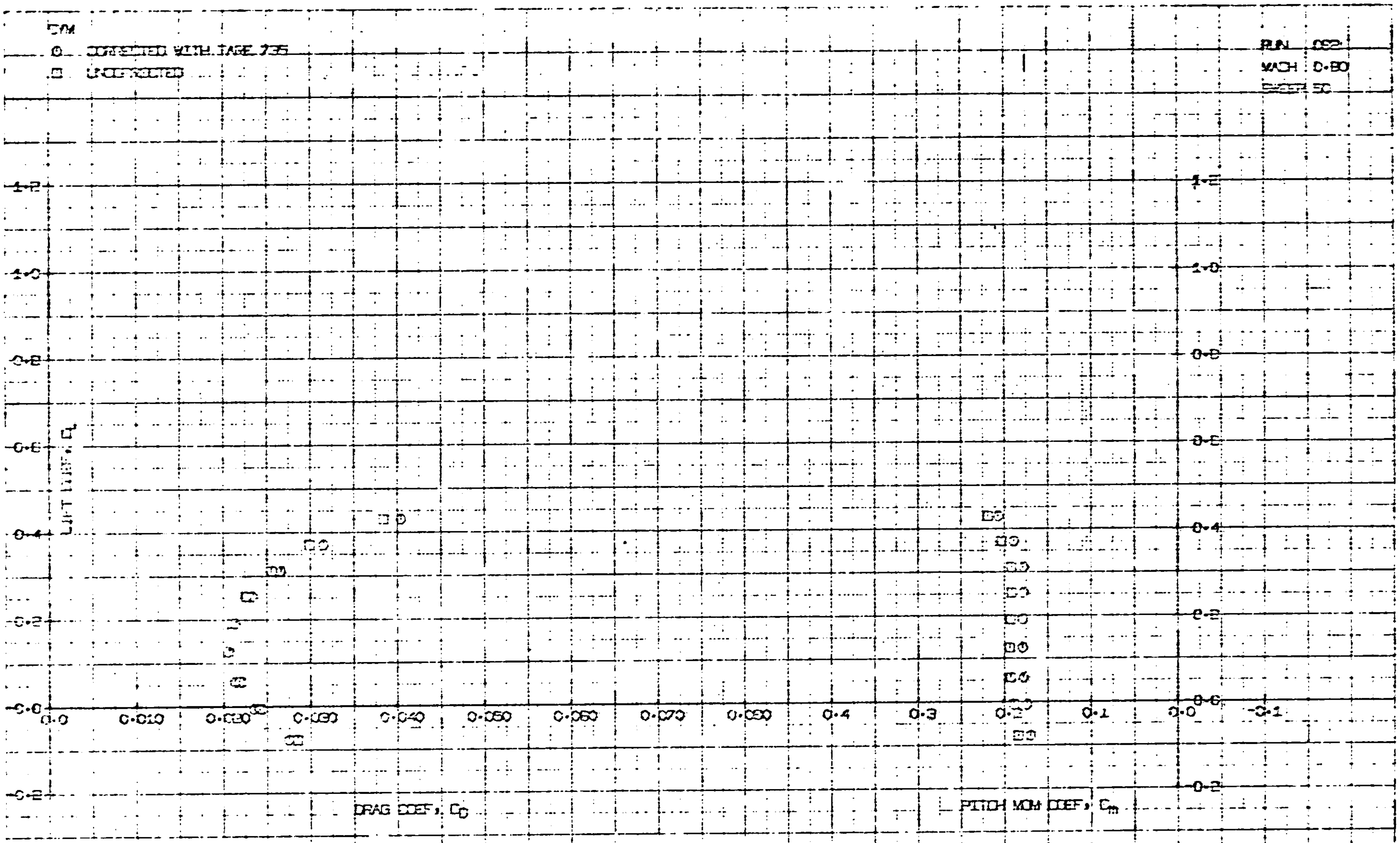


FIGURE 97. PERFORMANCE DATA RUNS, INTEGRATED FUSELAGE

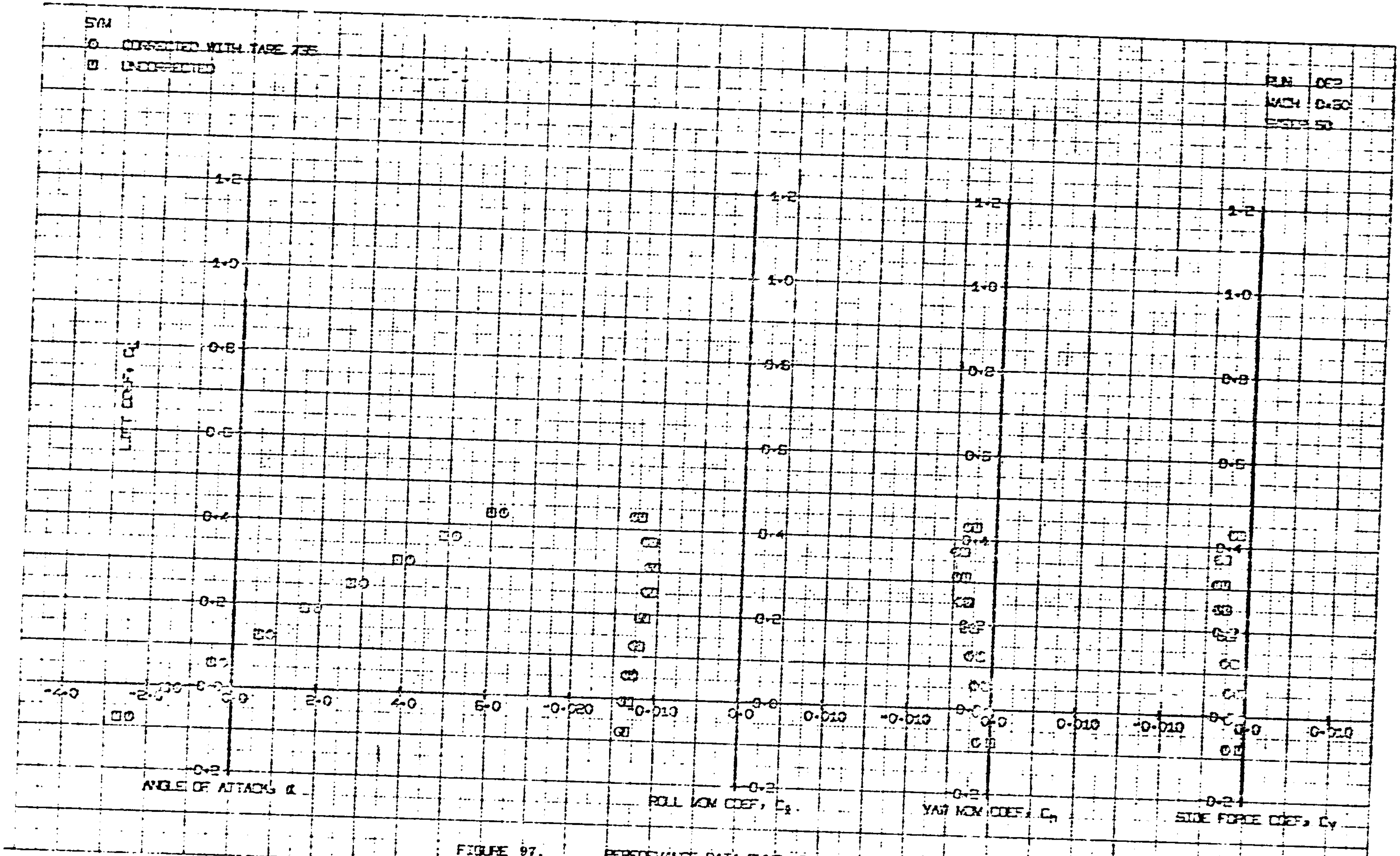


FIGURE 97. PERFORMANCE DATA RUNS, INTEGRATED FUSELAGE

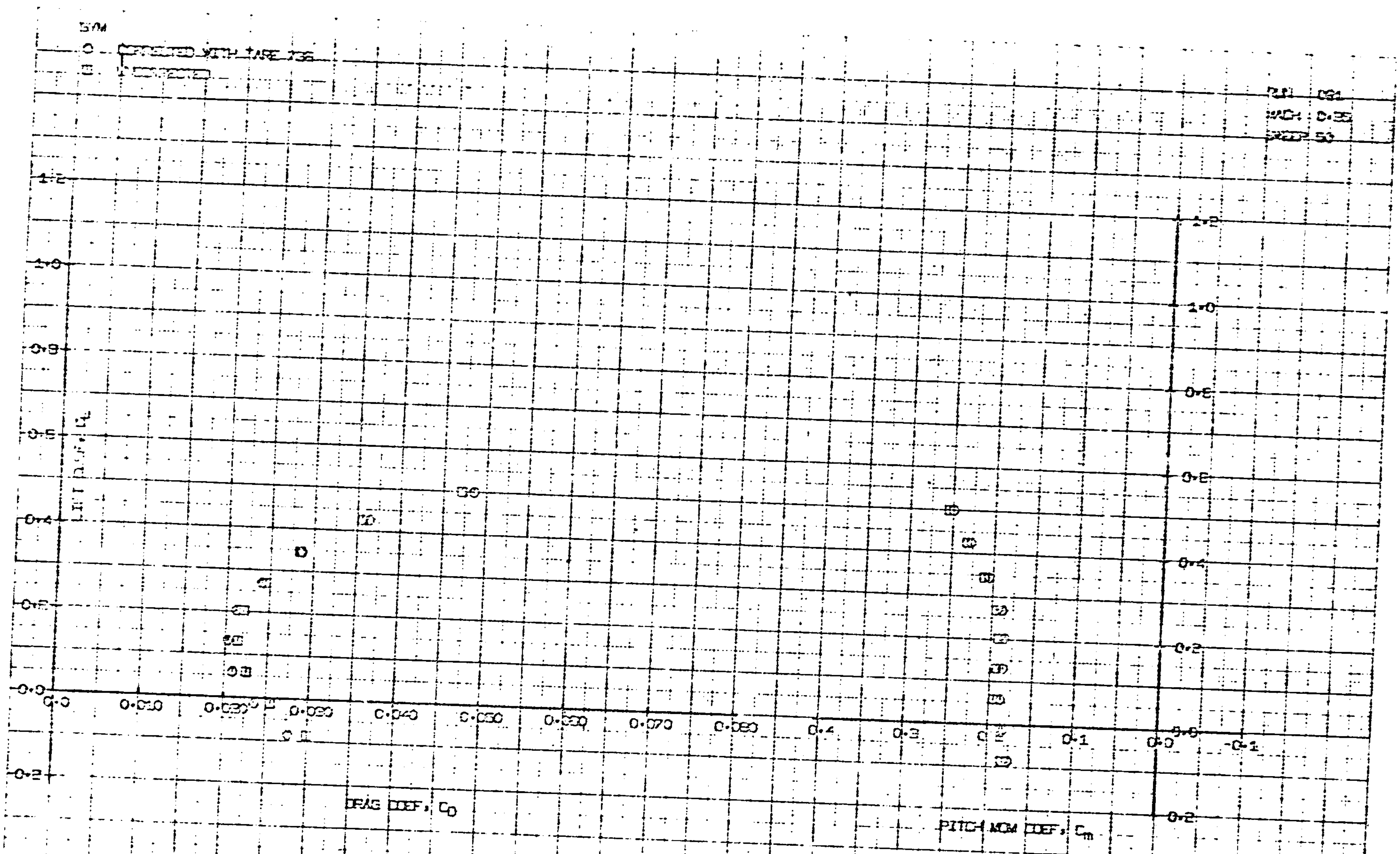


FIGURE 98. PERFORMANCE DATA RUNS, INTEGRATED FUSELAGE

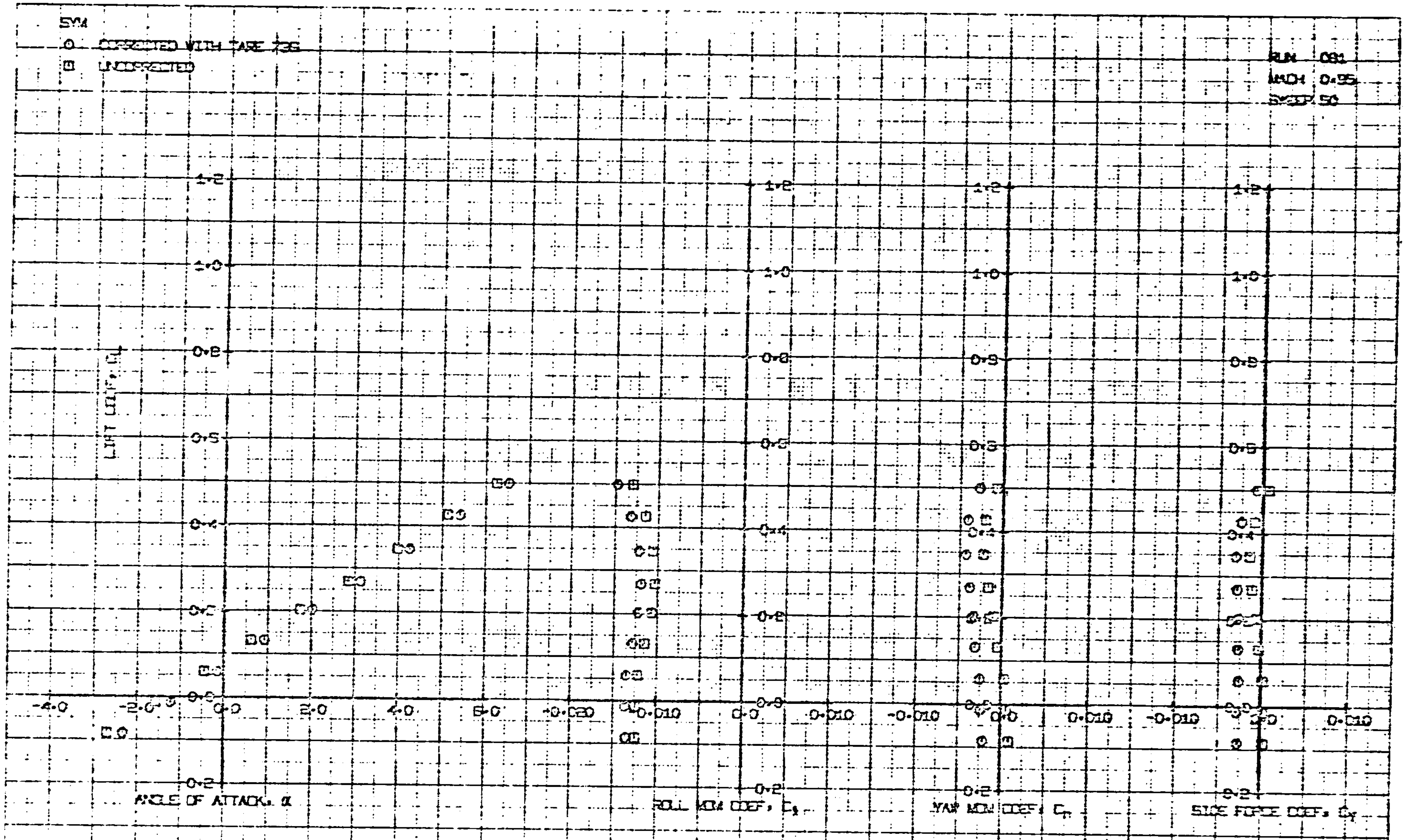


FIGURE 98. PERFORMANCE DATA RUNS, INTEGRATED FUSELAGE

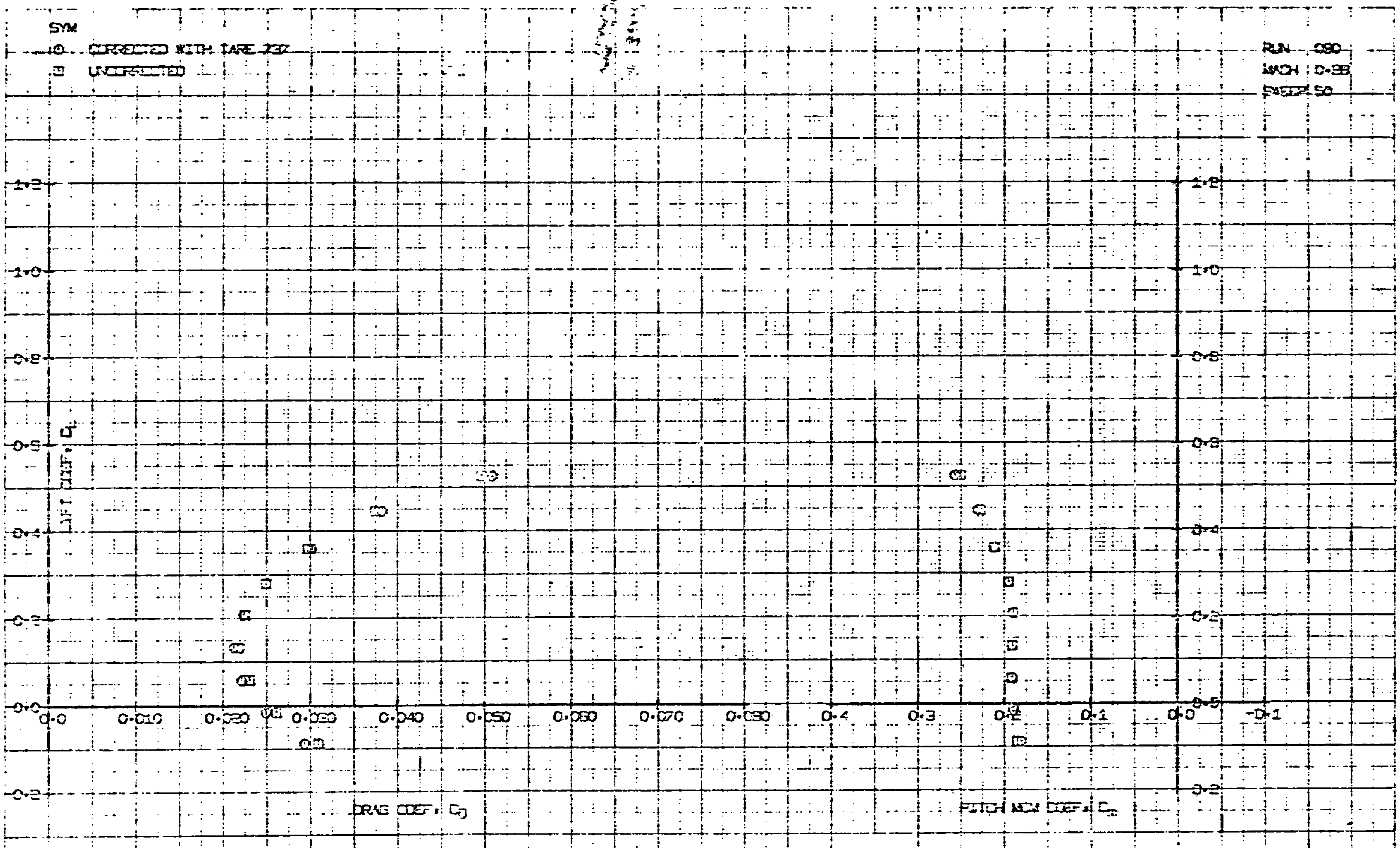


FIGURE 99. PERFORMANCE DATA RUNS, INTEGRATED FUSELAGE

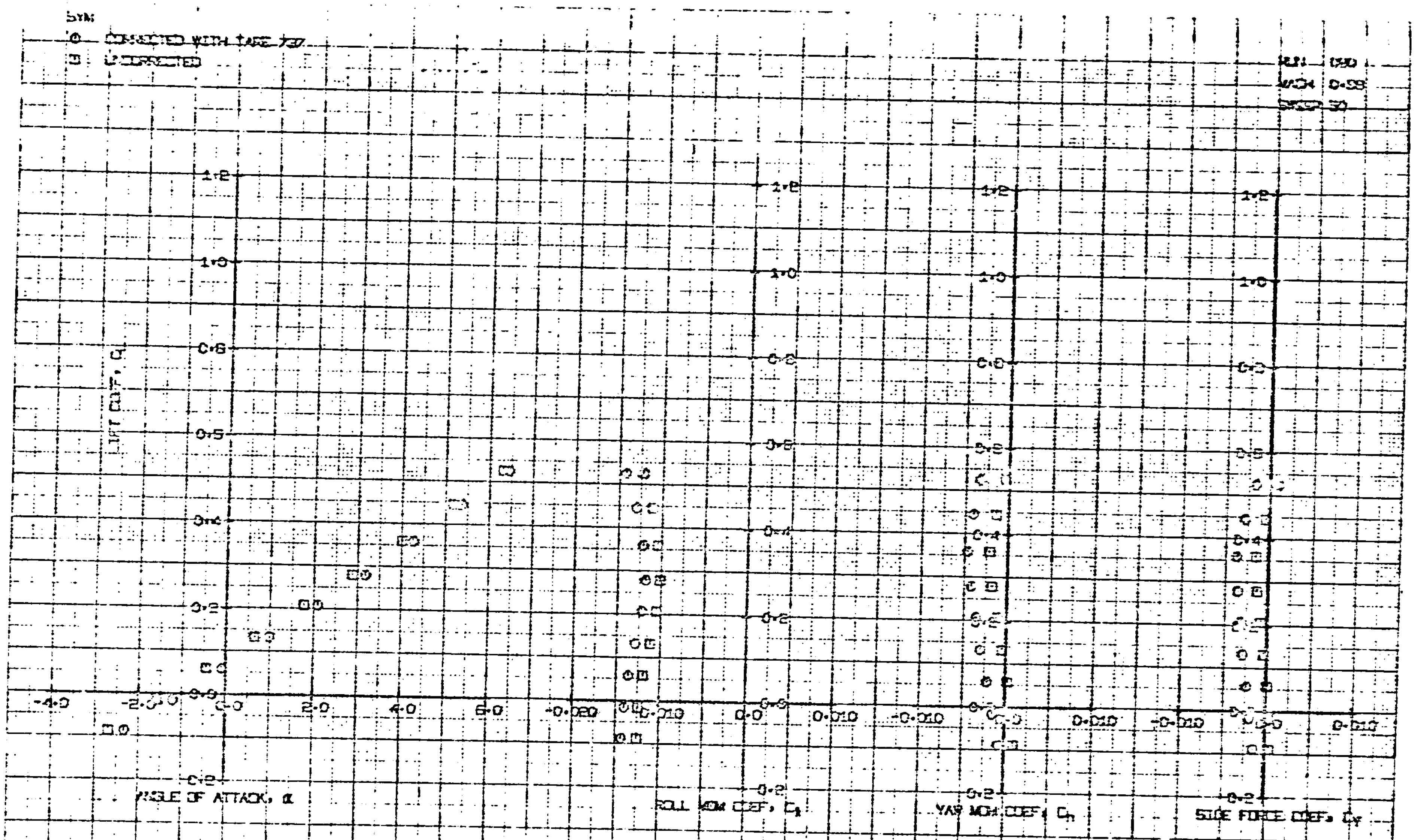


FIGURE 99. PERFORMANCE DATA RUNS, INTEGRATED FUSELAGE

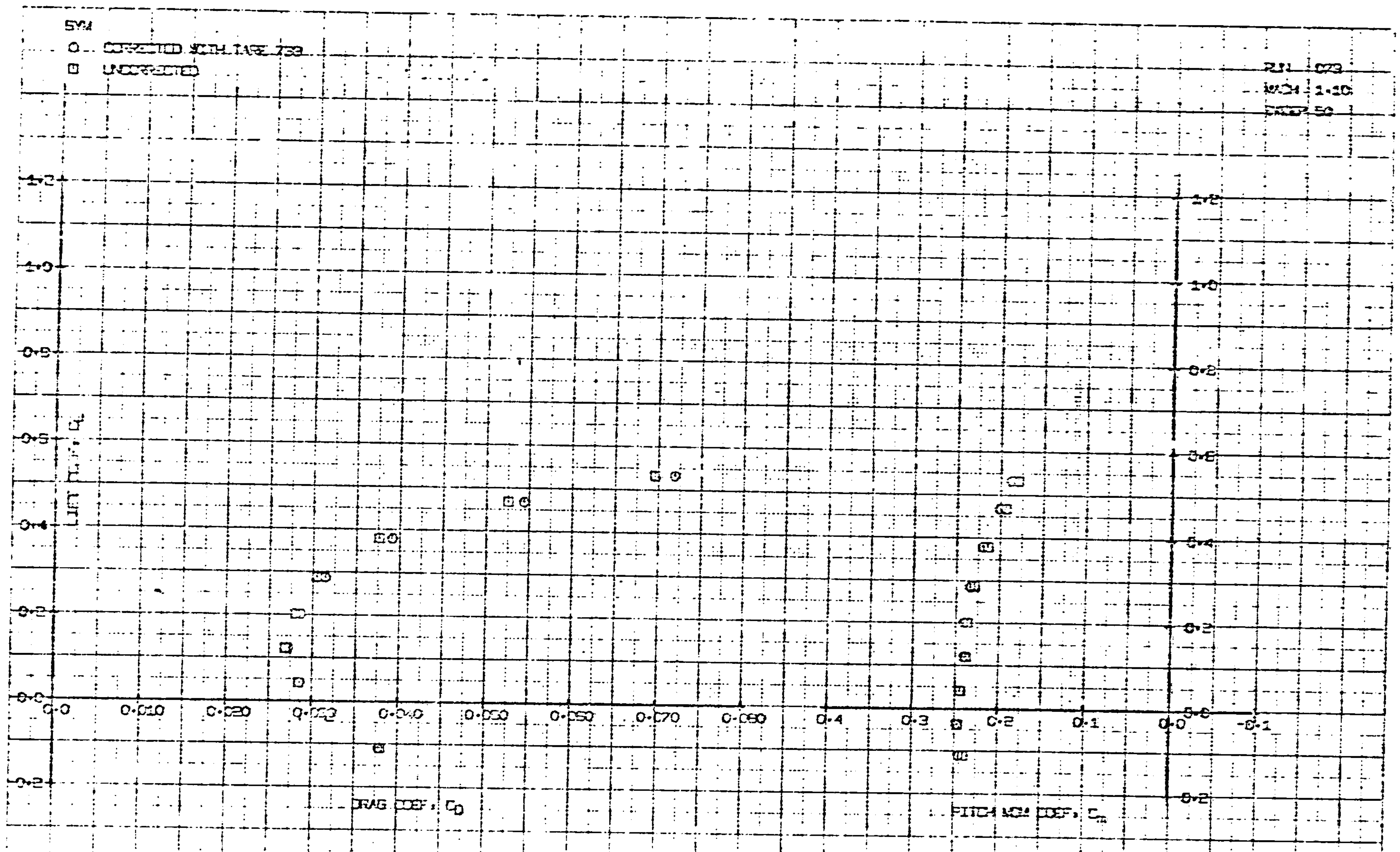


FIGURE 100. PERFORMANCE DATA RUNS, INTEGRATED FUSELAGE

C-3

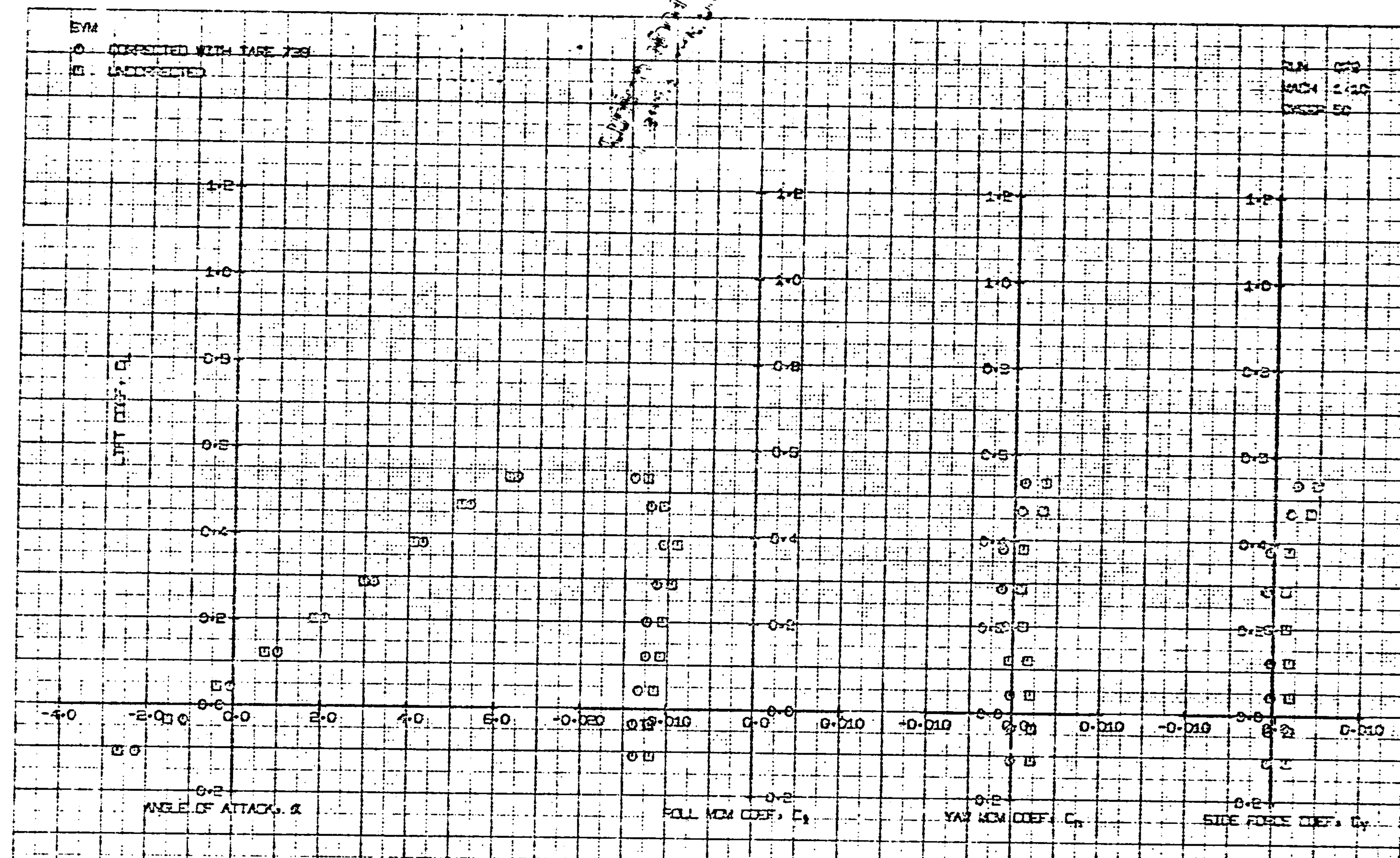


FIGURE 100. PERFORMANCE DATA RUNS, INTEGRATED FUSELAGE

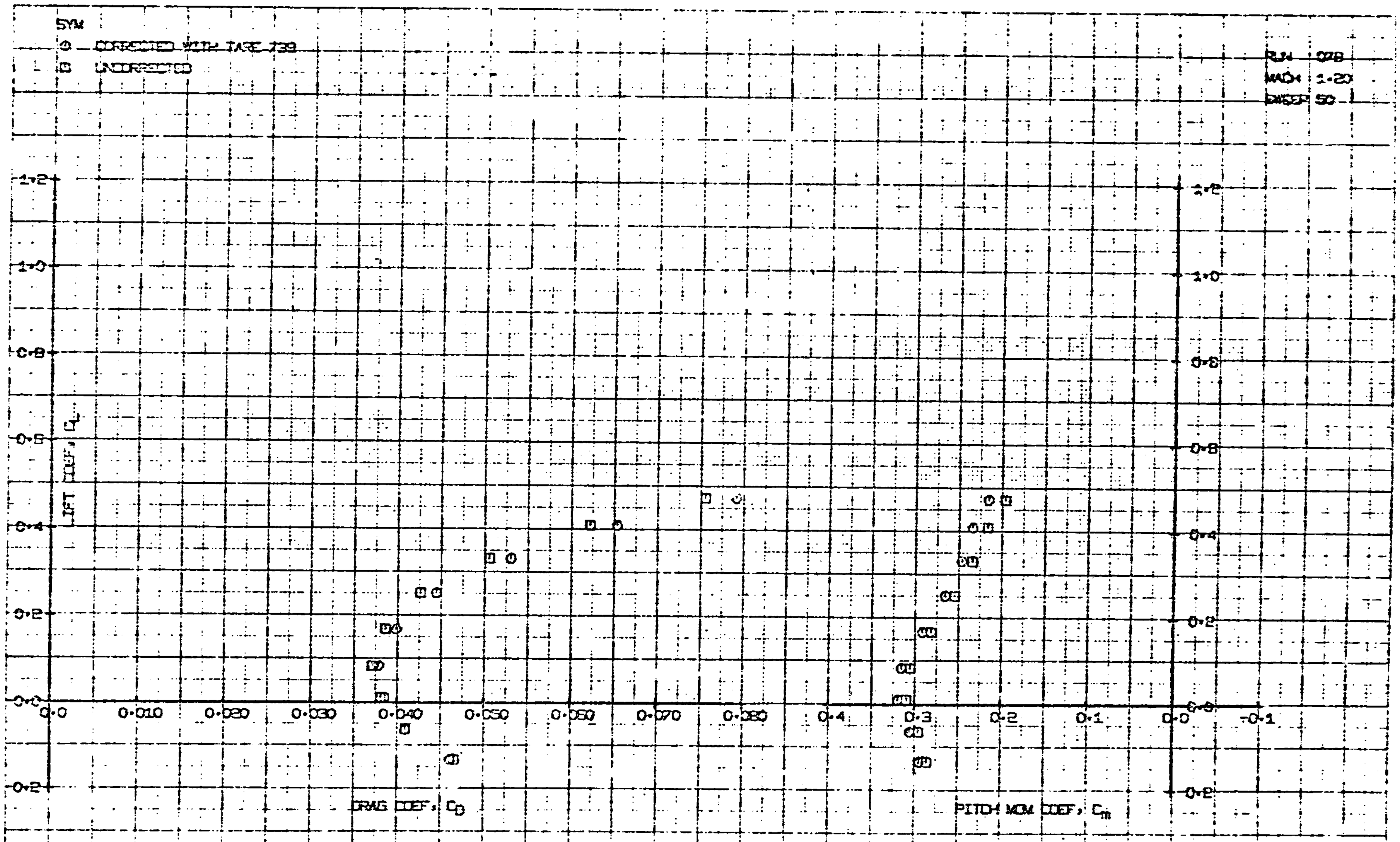


FIGURE 101. PERFORMANCE DATA RUNS, INTEGRATED FUSELAGE

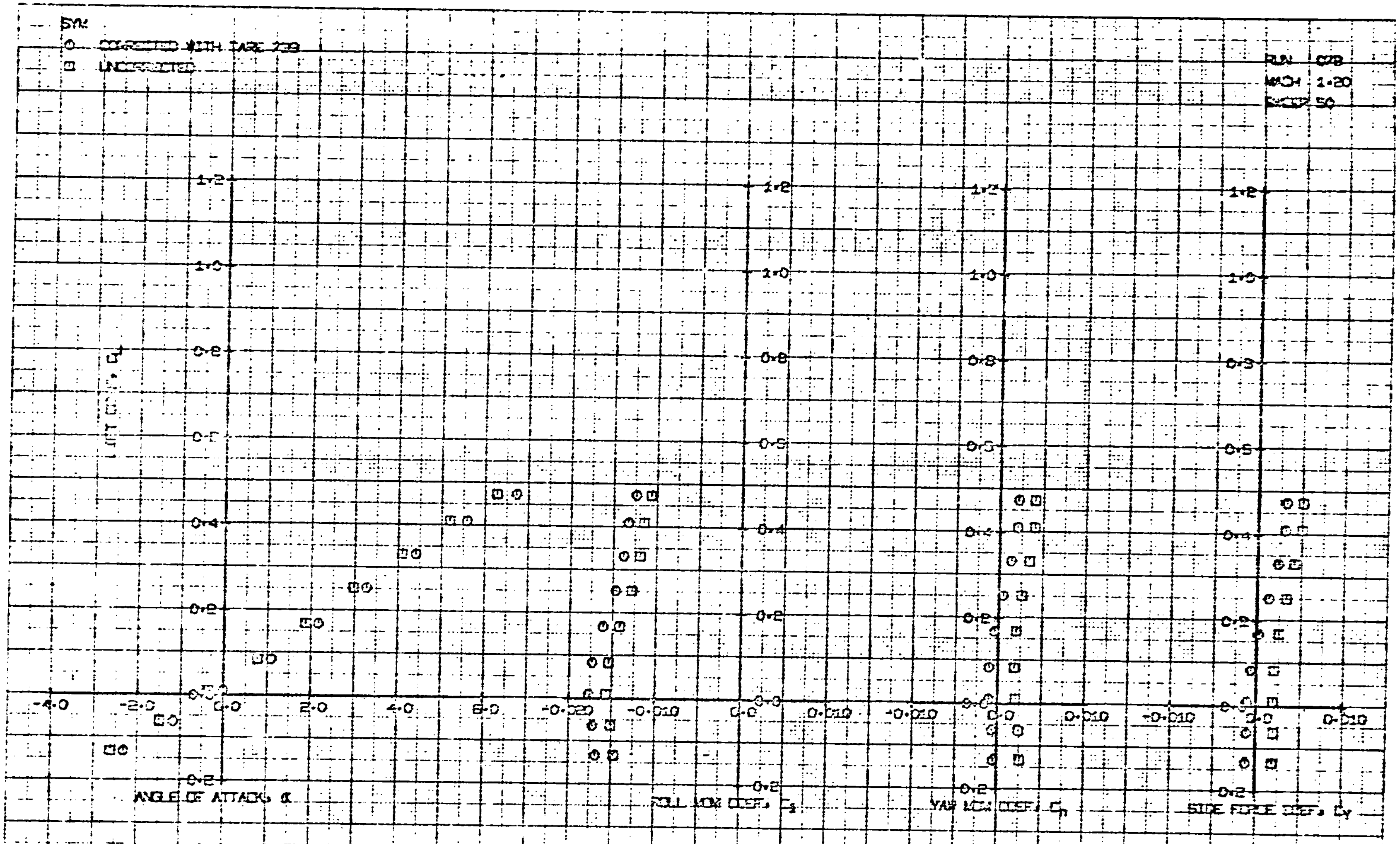


FIGURE 101. PERFORMANCE DATA RUNS, INTEGRATED FUSELAGE

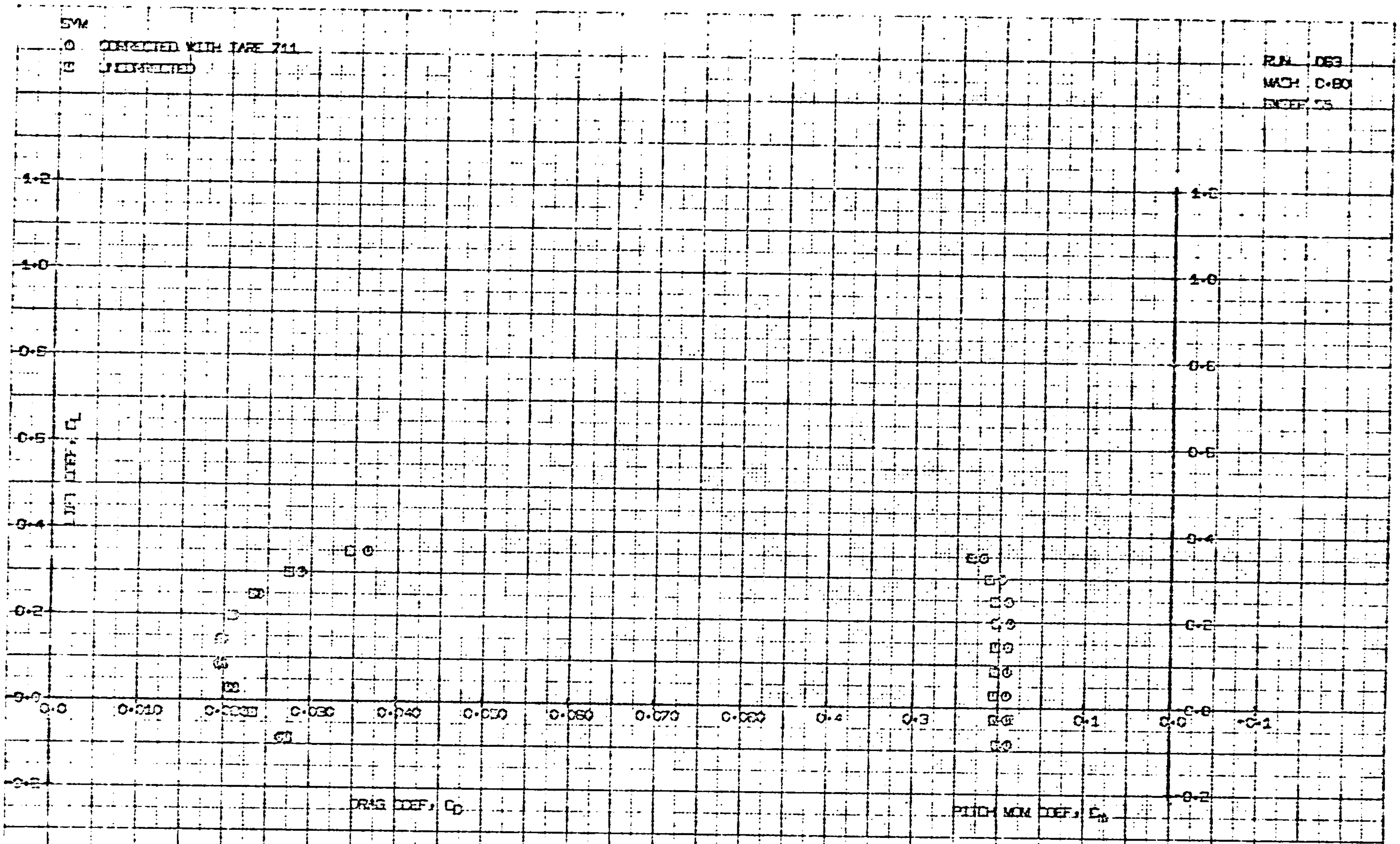


FIGURE 102. PERFORMANCE DATA RUNS, INTEGRATED FUSELAGE

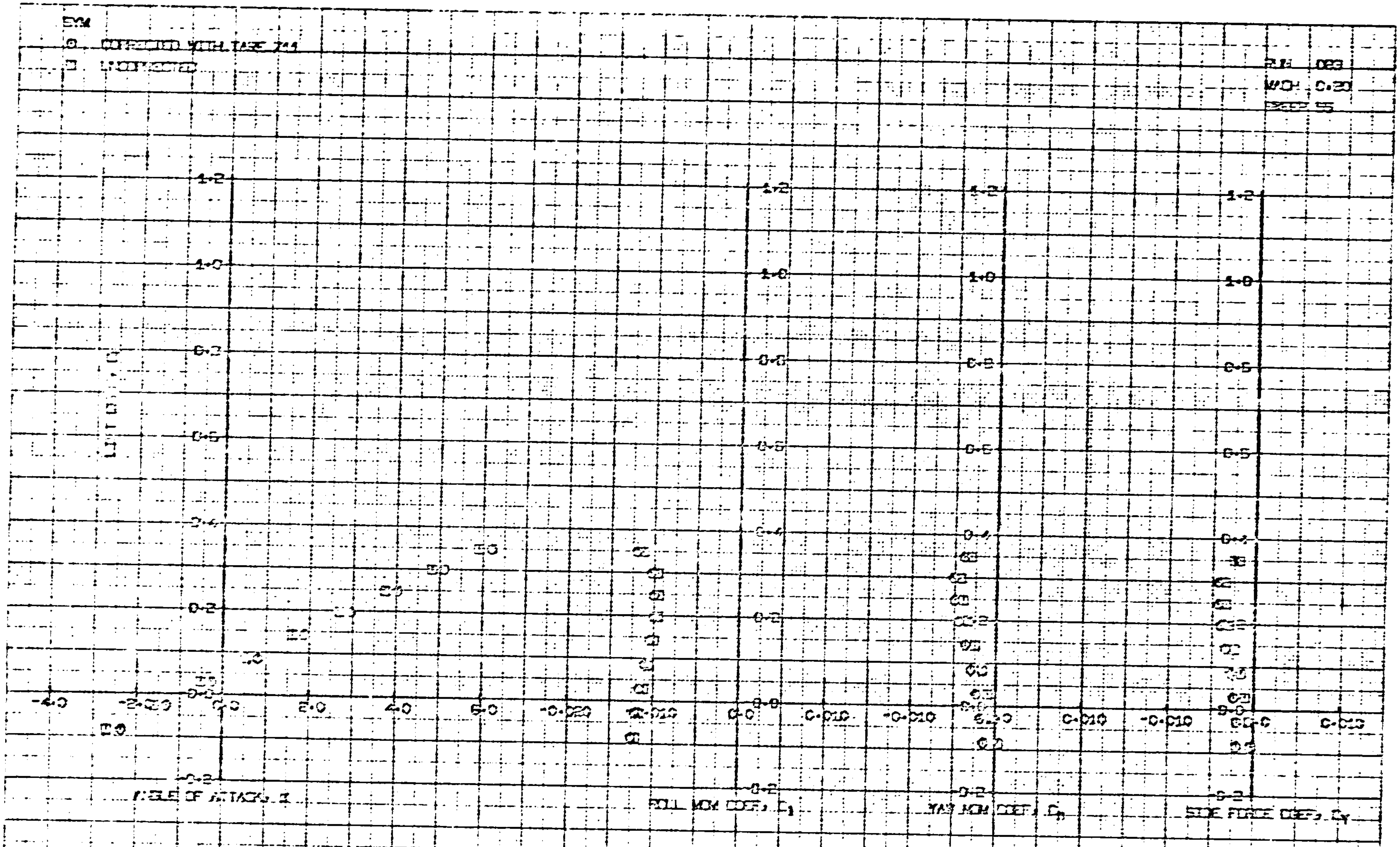


FIGURE 102. PERFORMANCE DATA RUN, INTEGRATED FUSELAGE

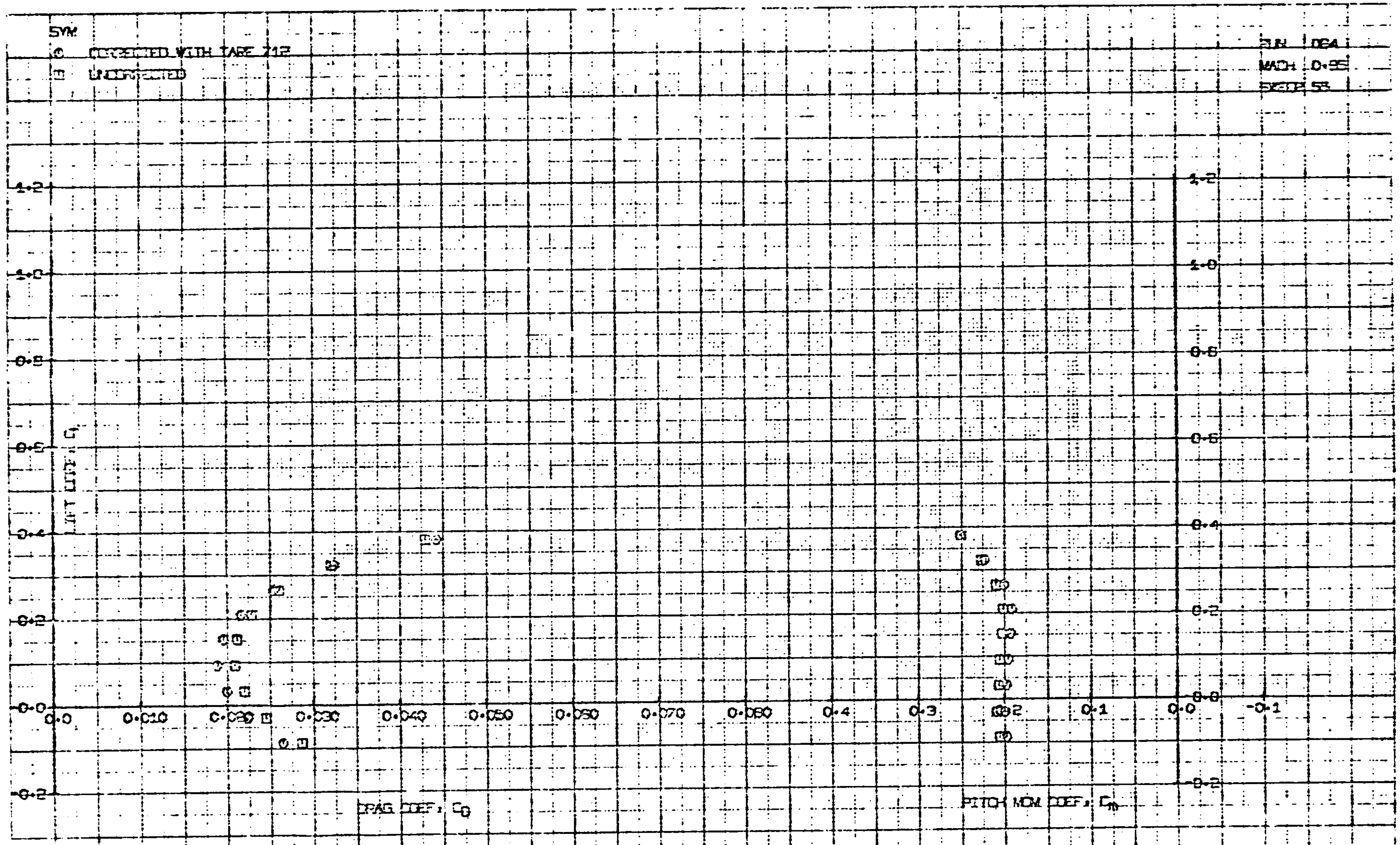


FIGURE 103. PERFORMANCE DATA RUNS, INTEGRATED FUSELAGE

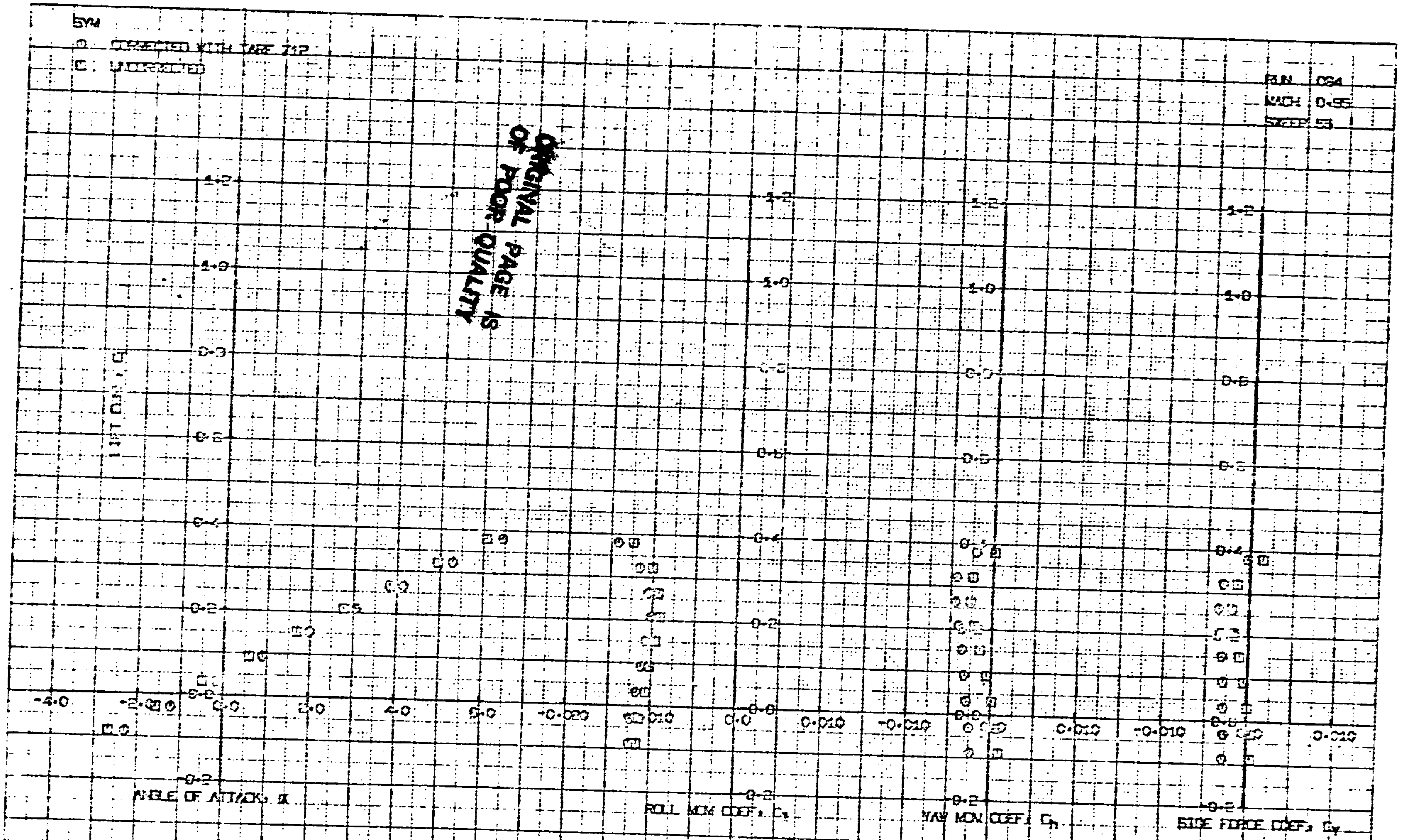


FIGURE 103. PERFORMANCE DATA RUNS, INTEGRATED FUSELAGE

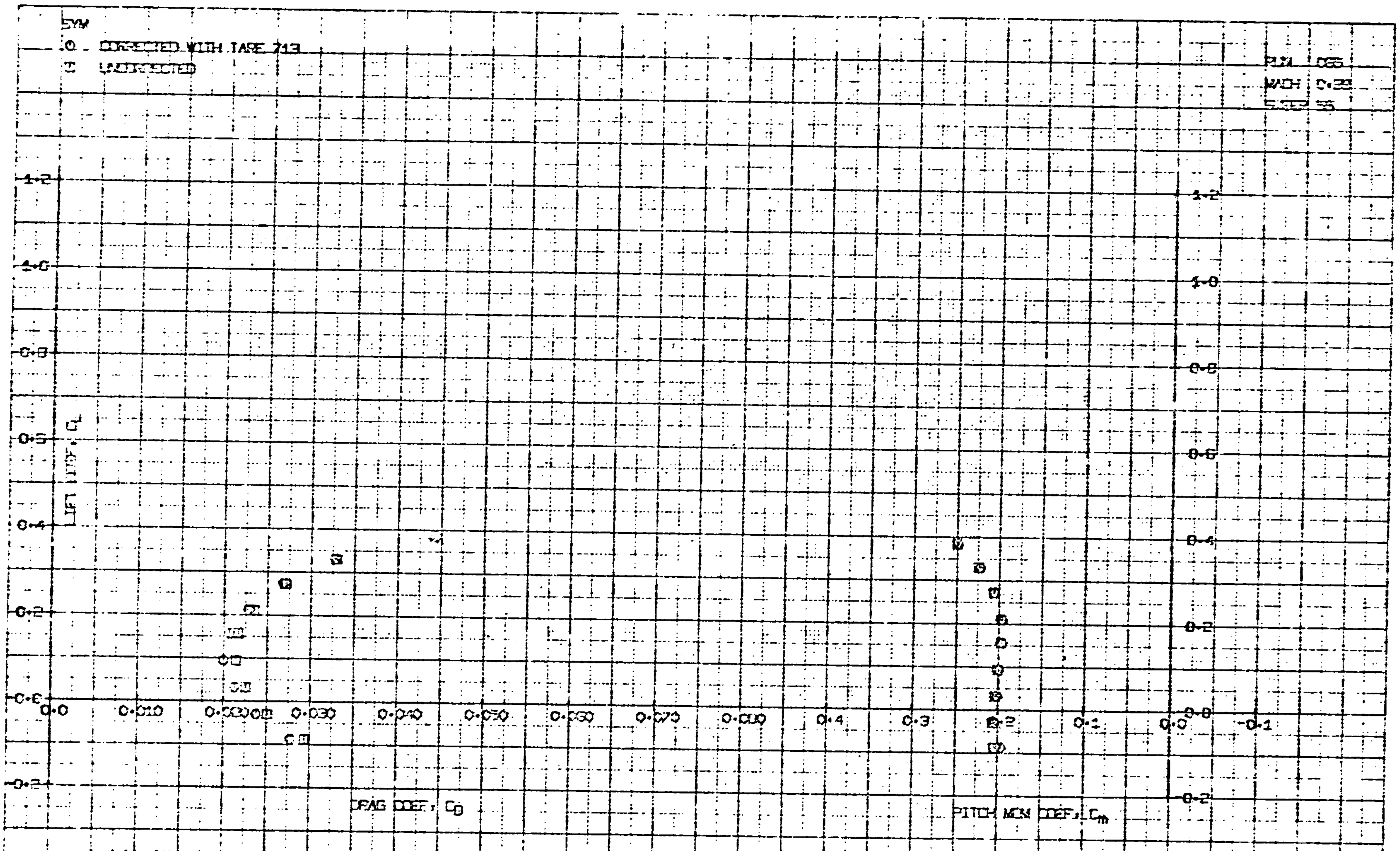


FIGURE 104. PERFORMANCE DATA RUNS, INTEGRATED FUSELAGE

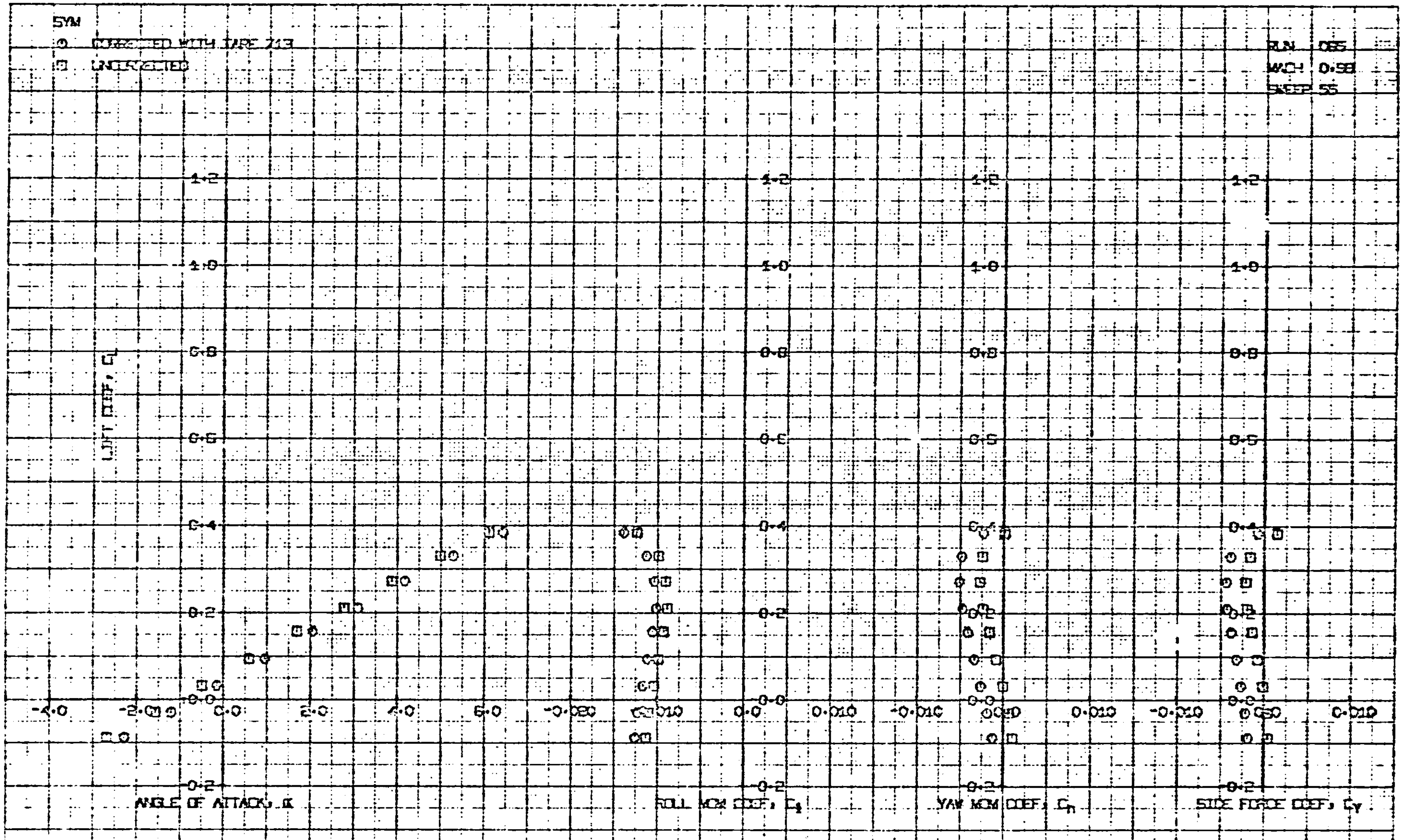


FIGURE 104. PERFORMANCE DATA RUNS; INTEGRATED FUSELAGE

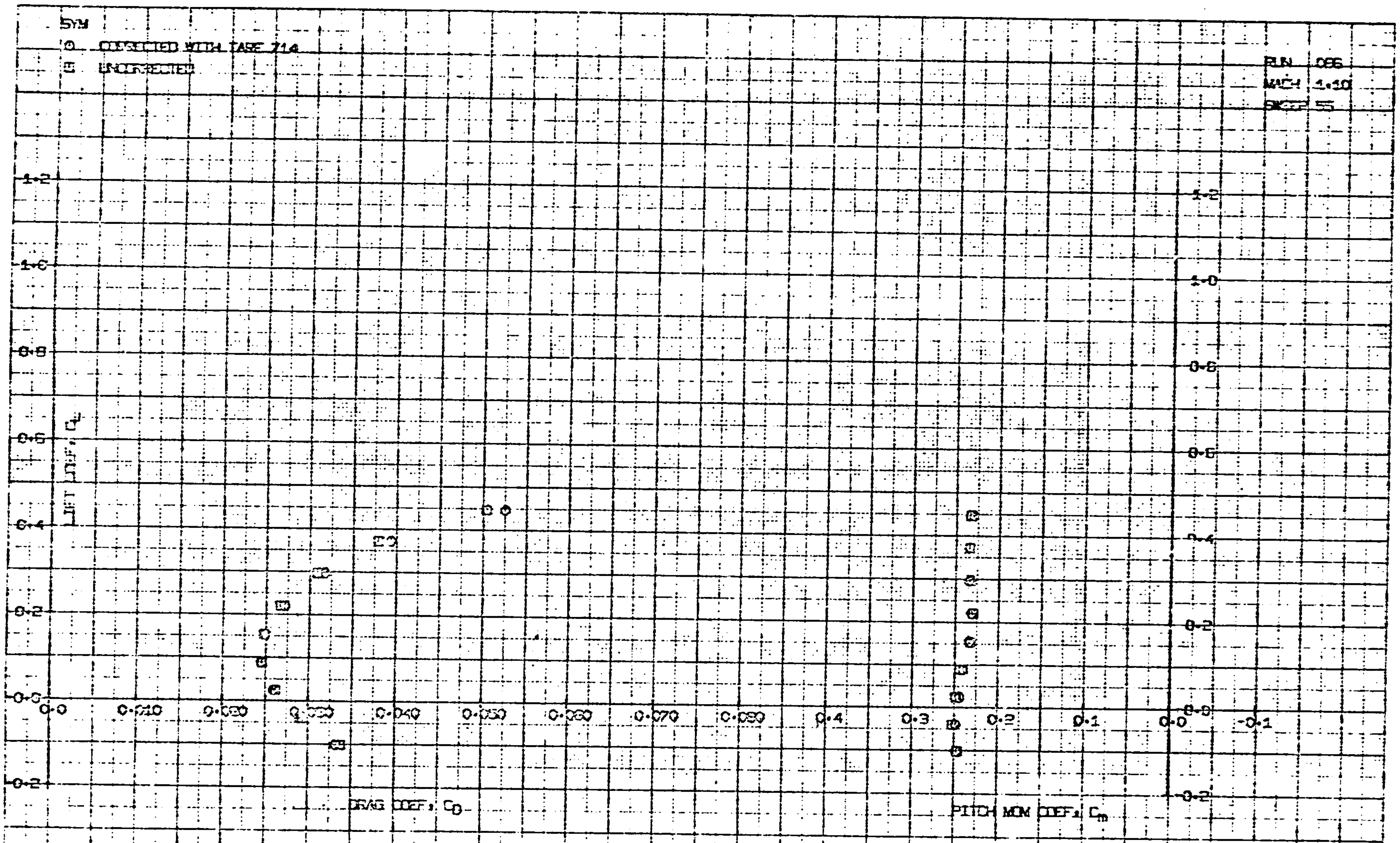


FIGURE 105. PERFORMANCE DATA RUNS, INTEGRATED FUSELAGE

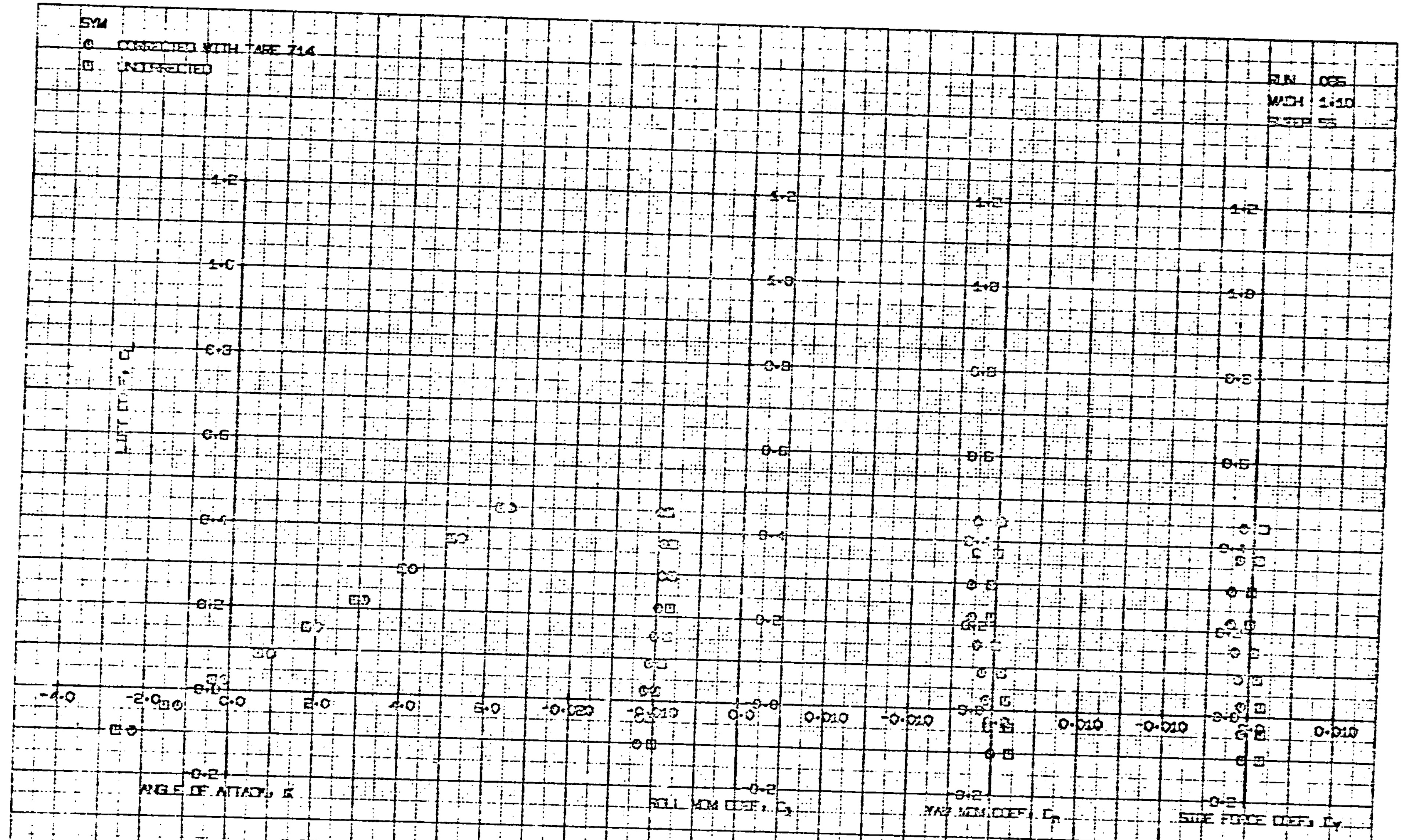


FIGURE 105. PERFORMANCE DATA RUNS, INTEGRATED FUSELAGE

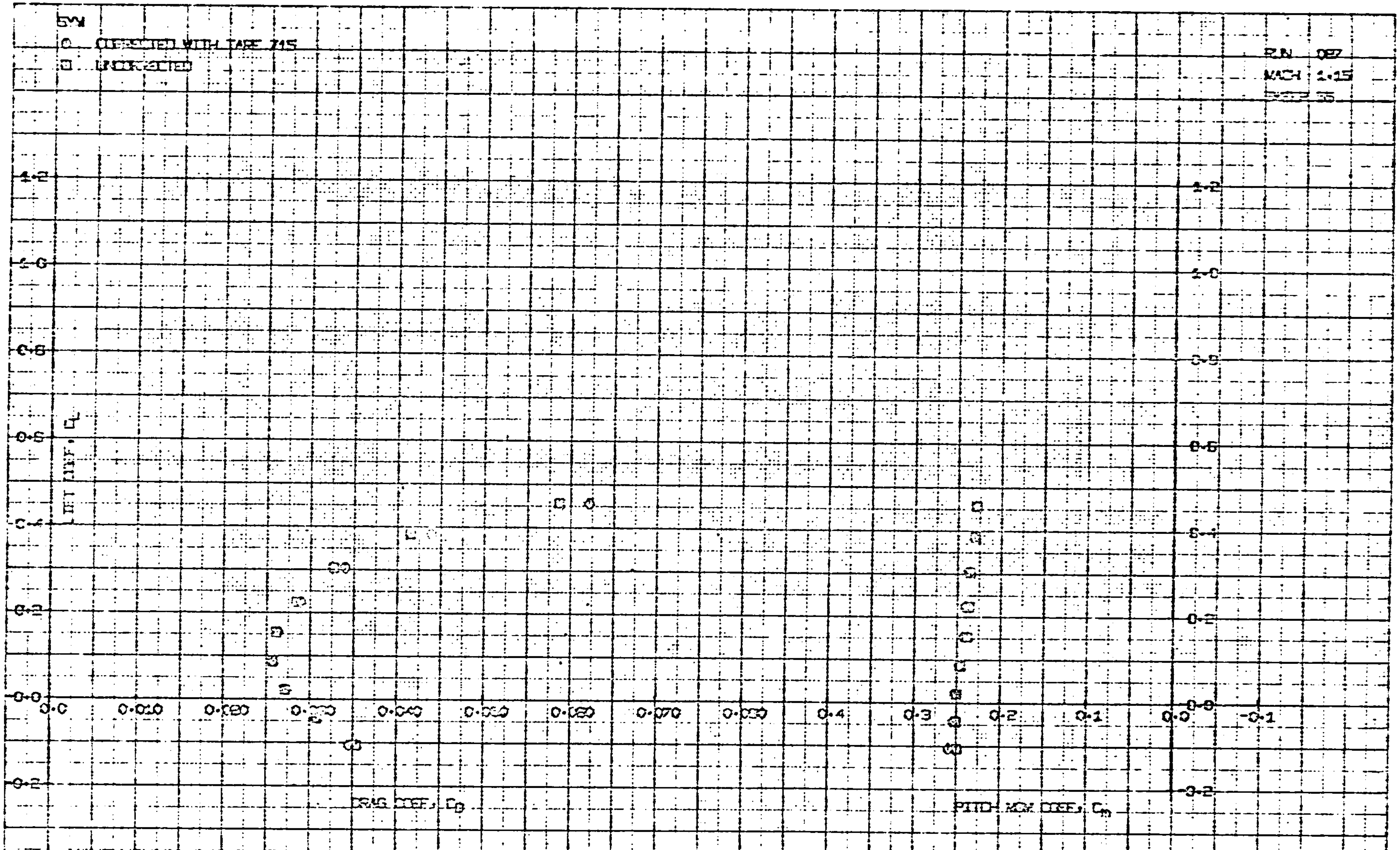


FIGURE 106. PERFORMANCE DATA RUNS, INTEGRATED FUSELAGE

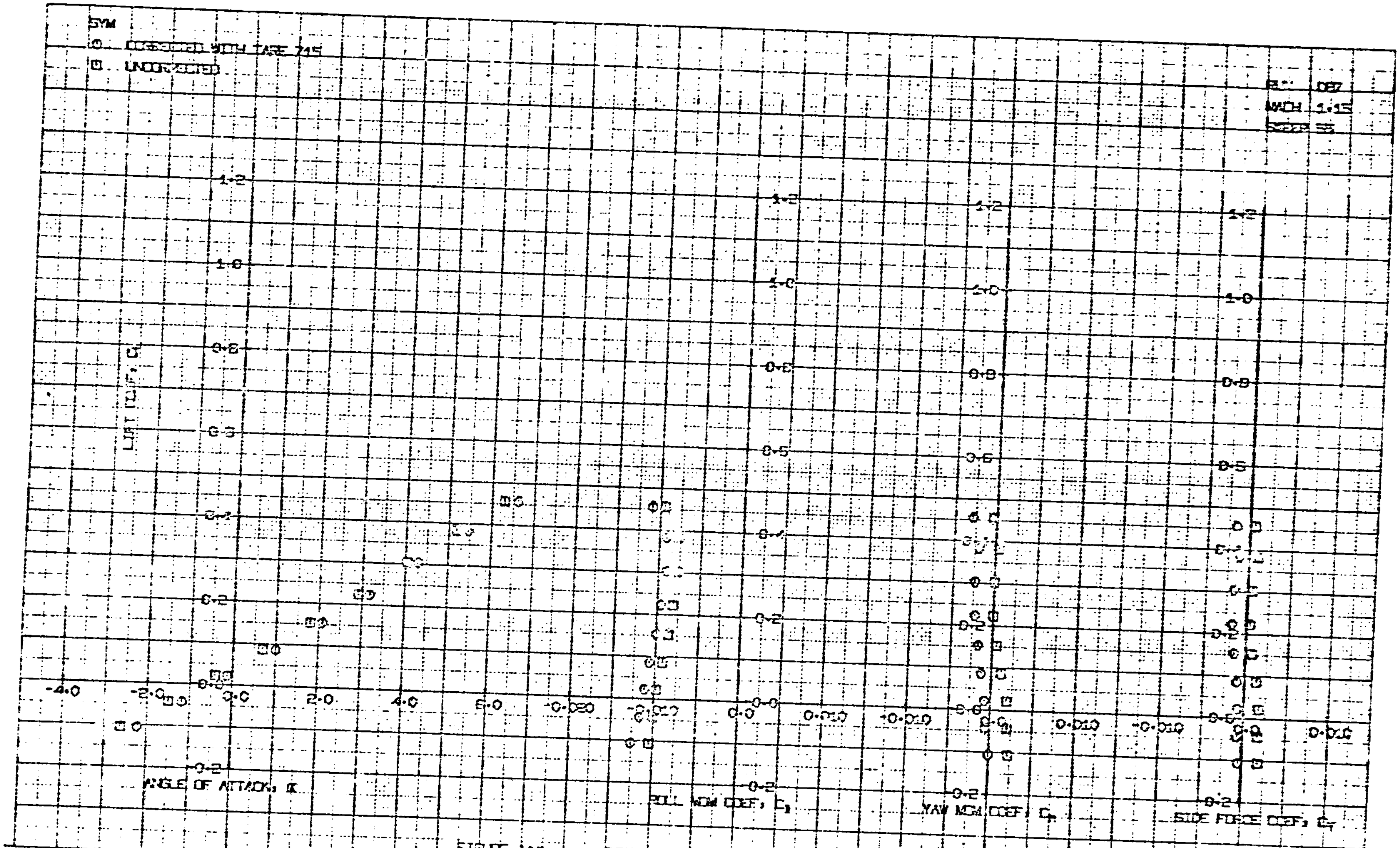


FIGURE 108. PERFORMANCE DATA RUNS; INTEGRATED FUSELAGE

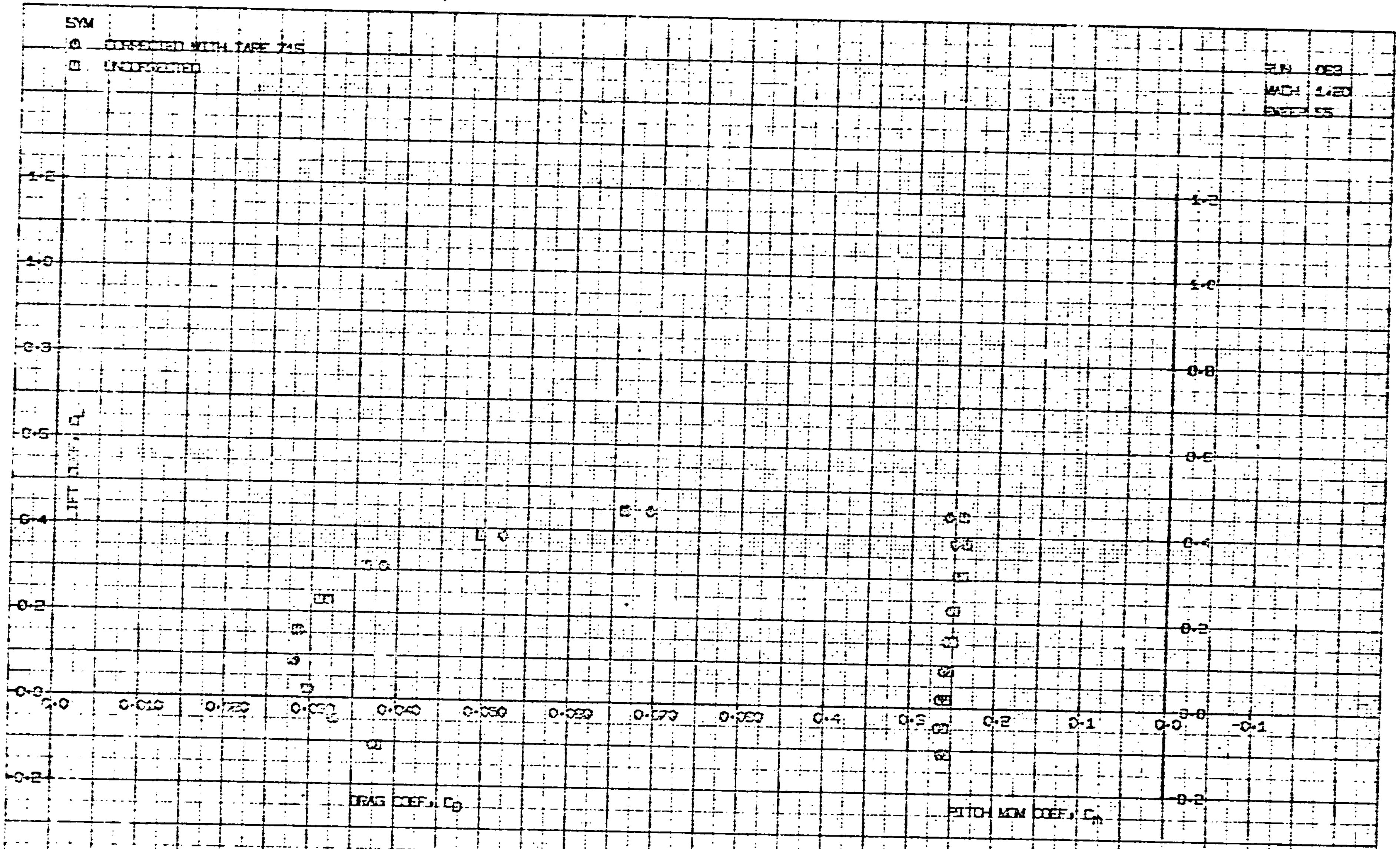


FIGURE 107. PERFORMANCE DATA RUNS, INTEGRATED FUSELAGE

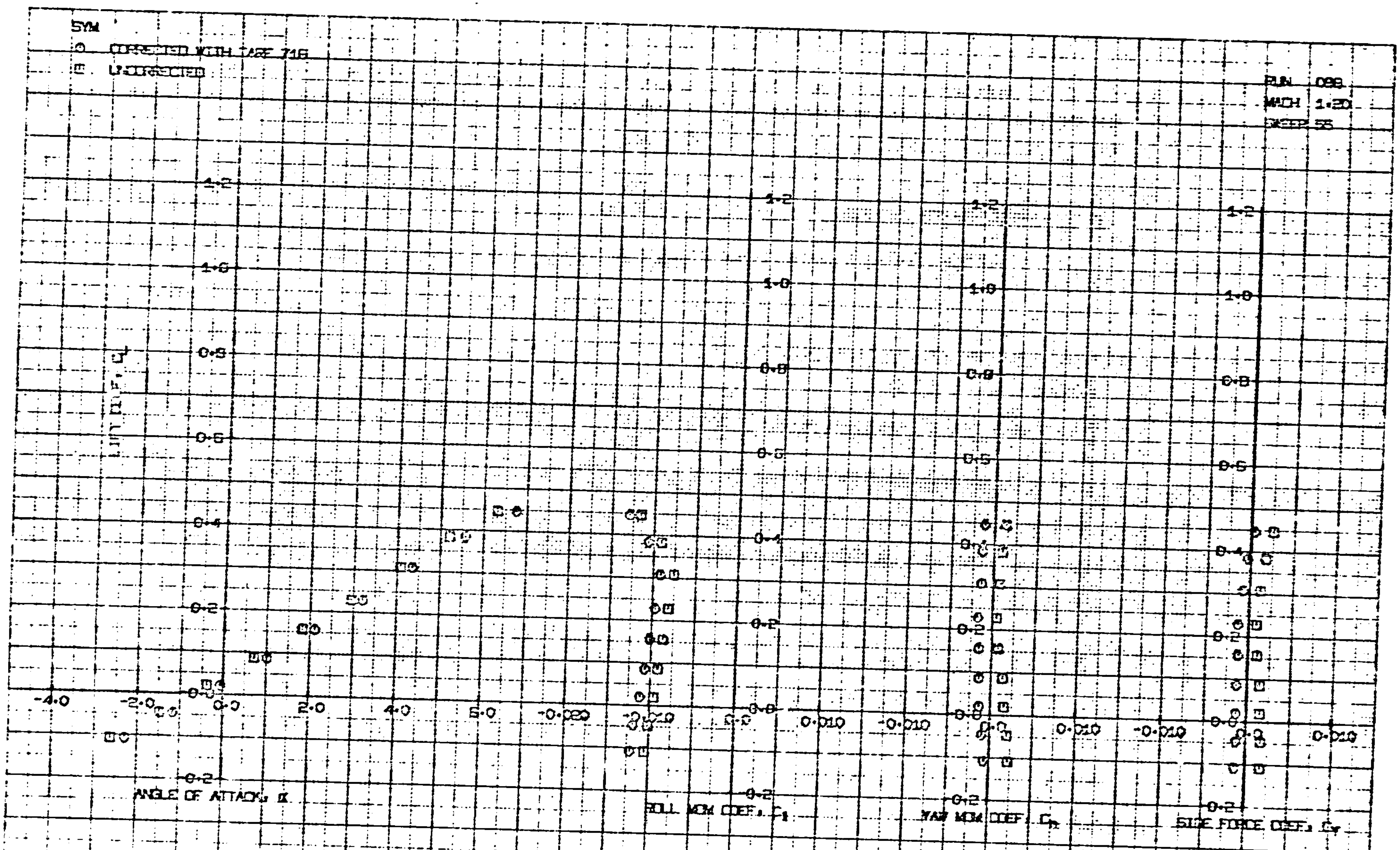


FIGURE 107. PERFORMANCE DATA RUNS, INTEGRATED FUSELAGE

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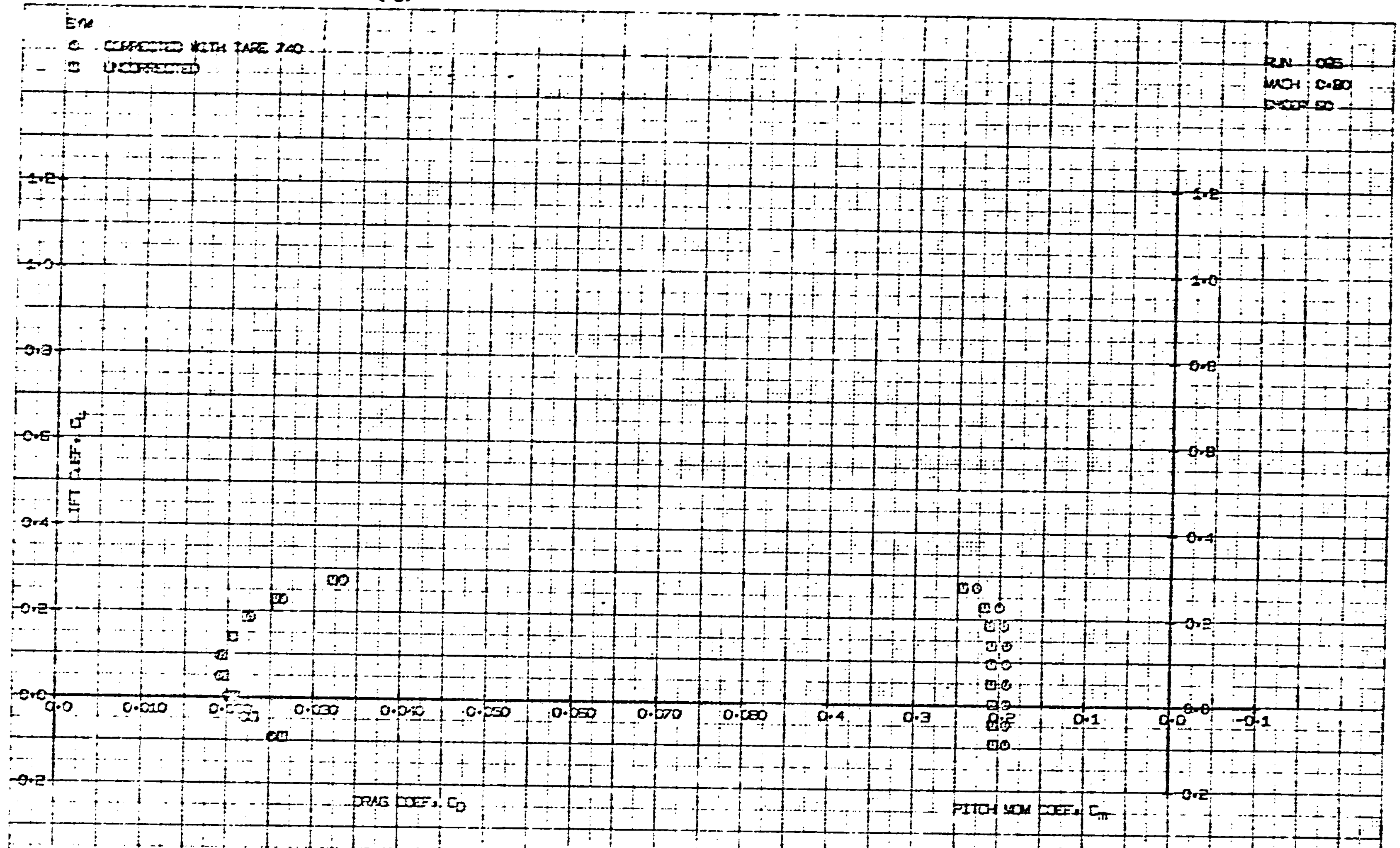

FIGURE 108. PERFORMANCE DATA RUNS, INTEGRATED FUSELAGE

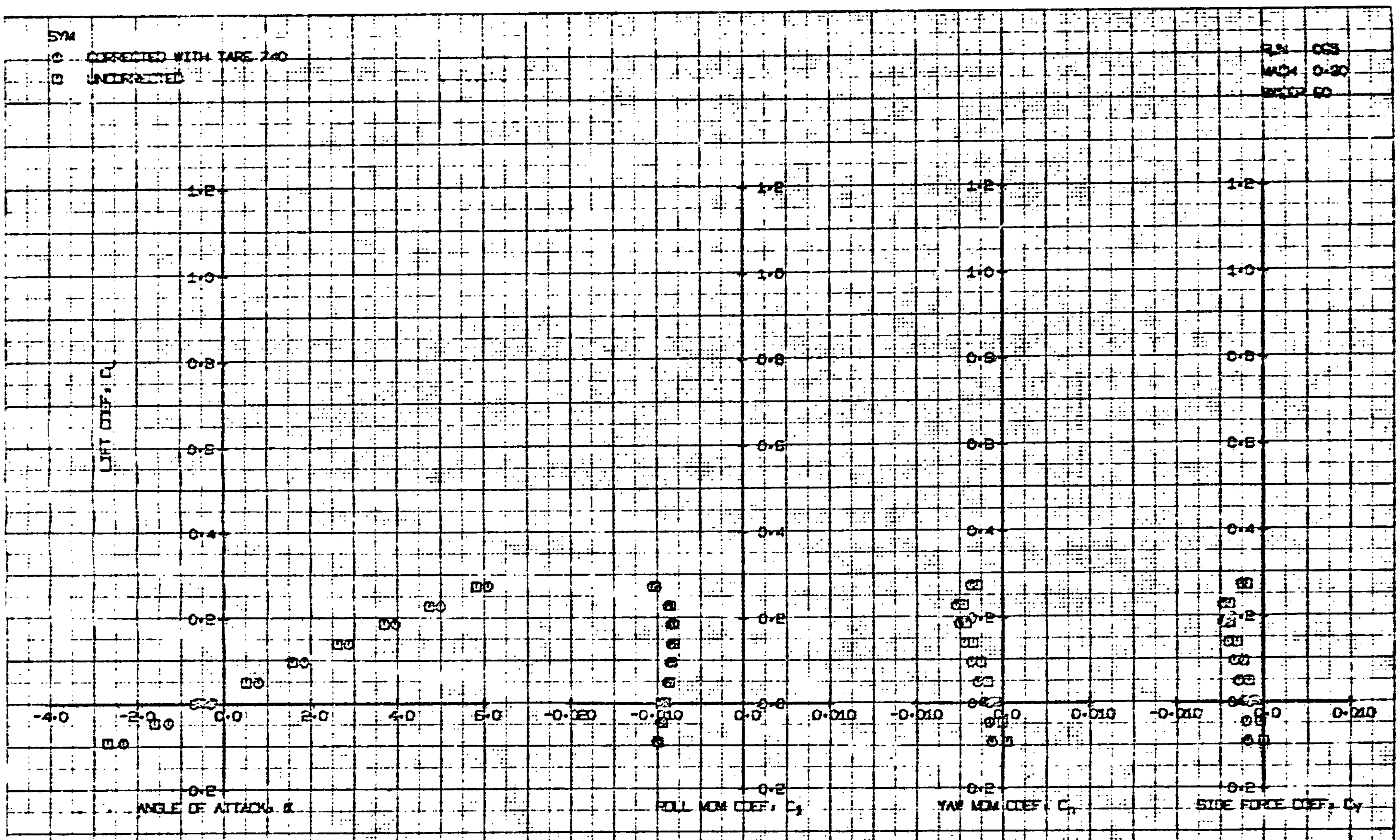

FIGURE 108. PERFORMANCE DATA RUNS, INTEGRATED FUSELAGE

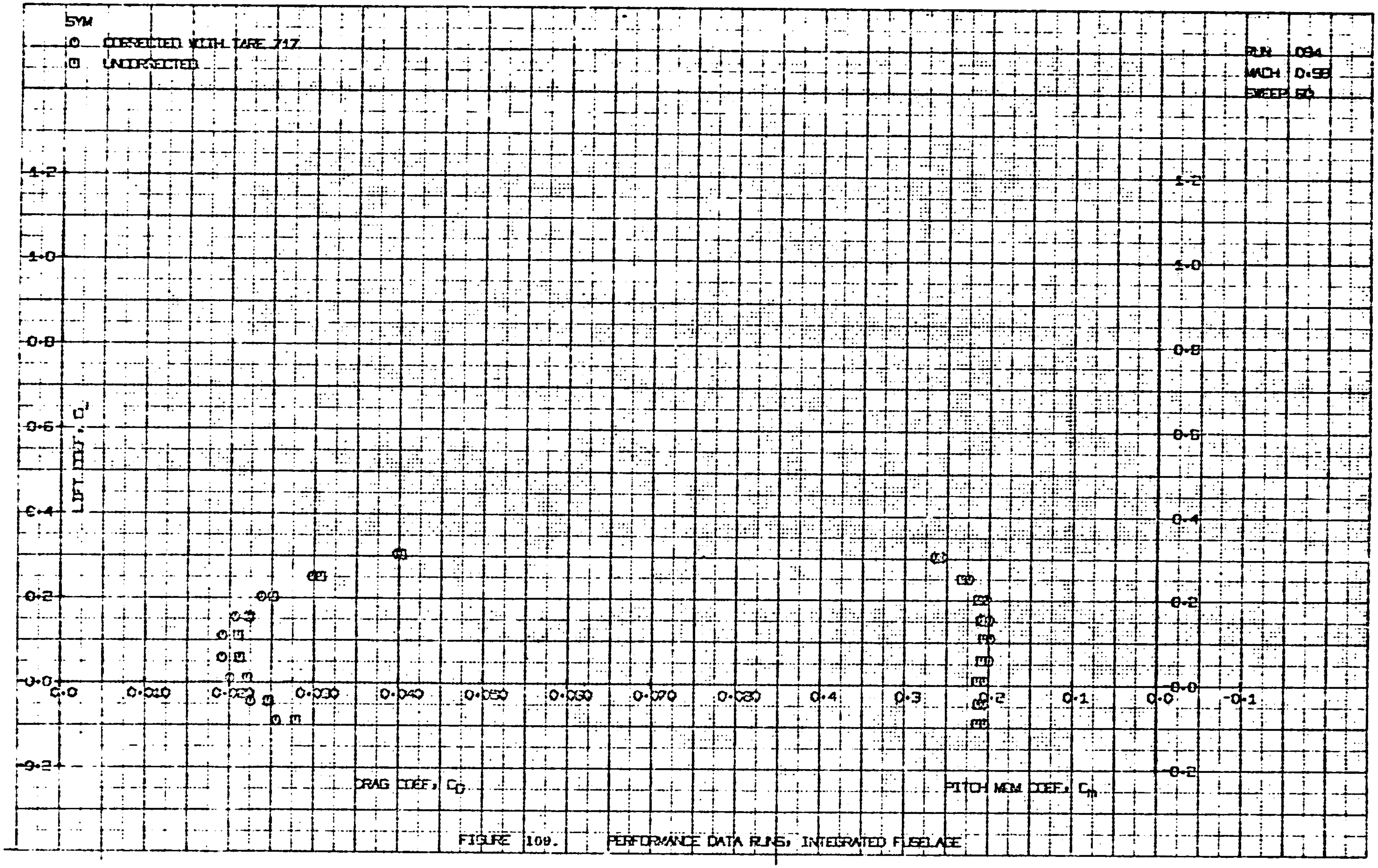

FIGURE 109. PERFORMANCE DATA RUNS, INTEGRATED FUSELAGE

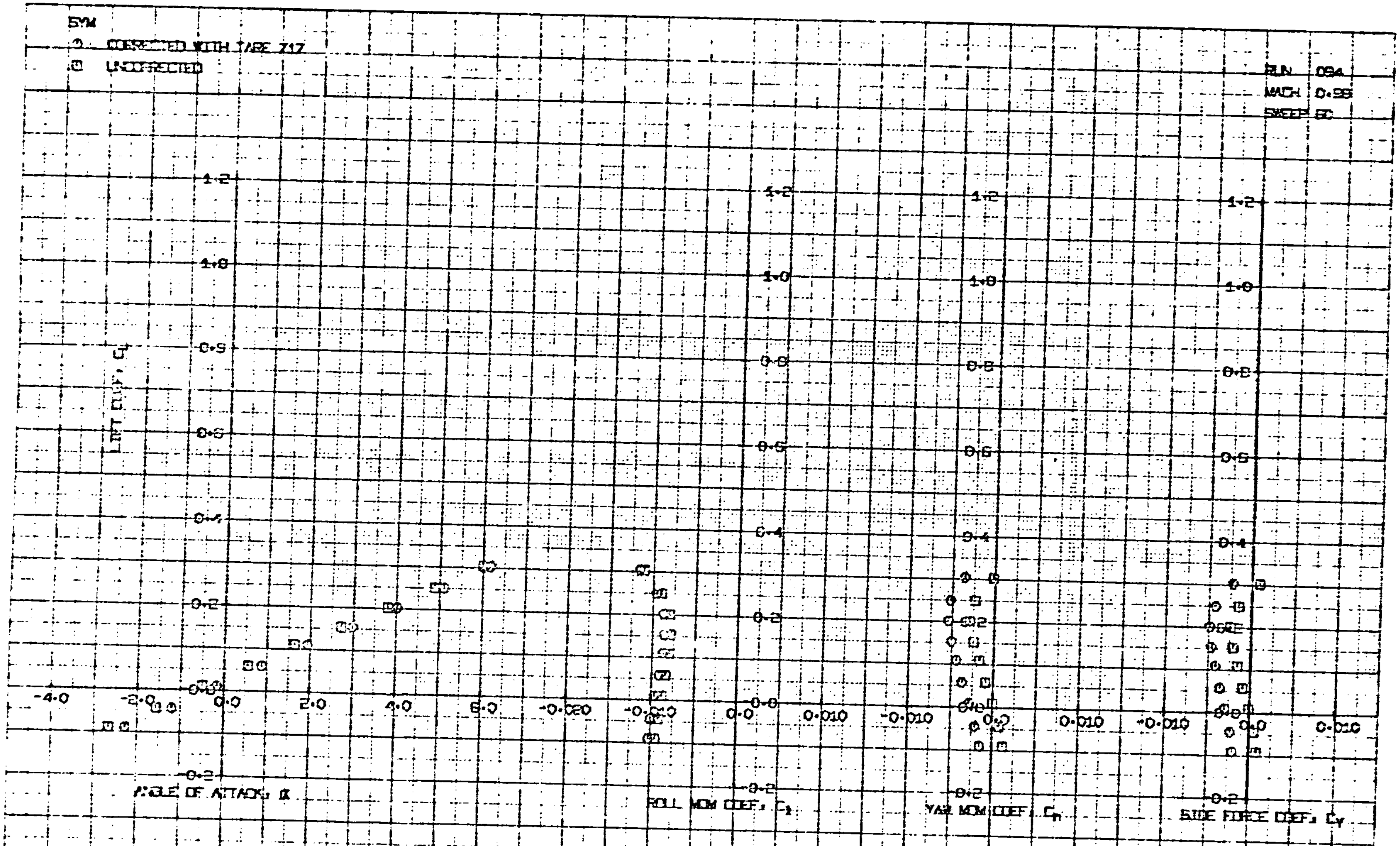

FIGURE 109. PERFORMANCE DATA RUNS, INTEGRATED FUSELAGE

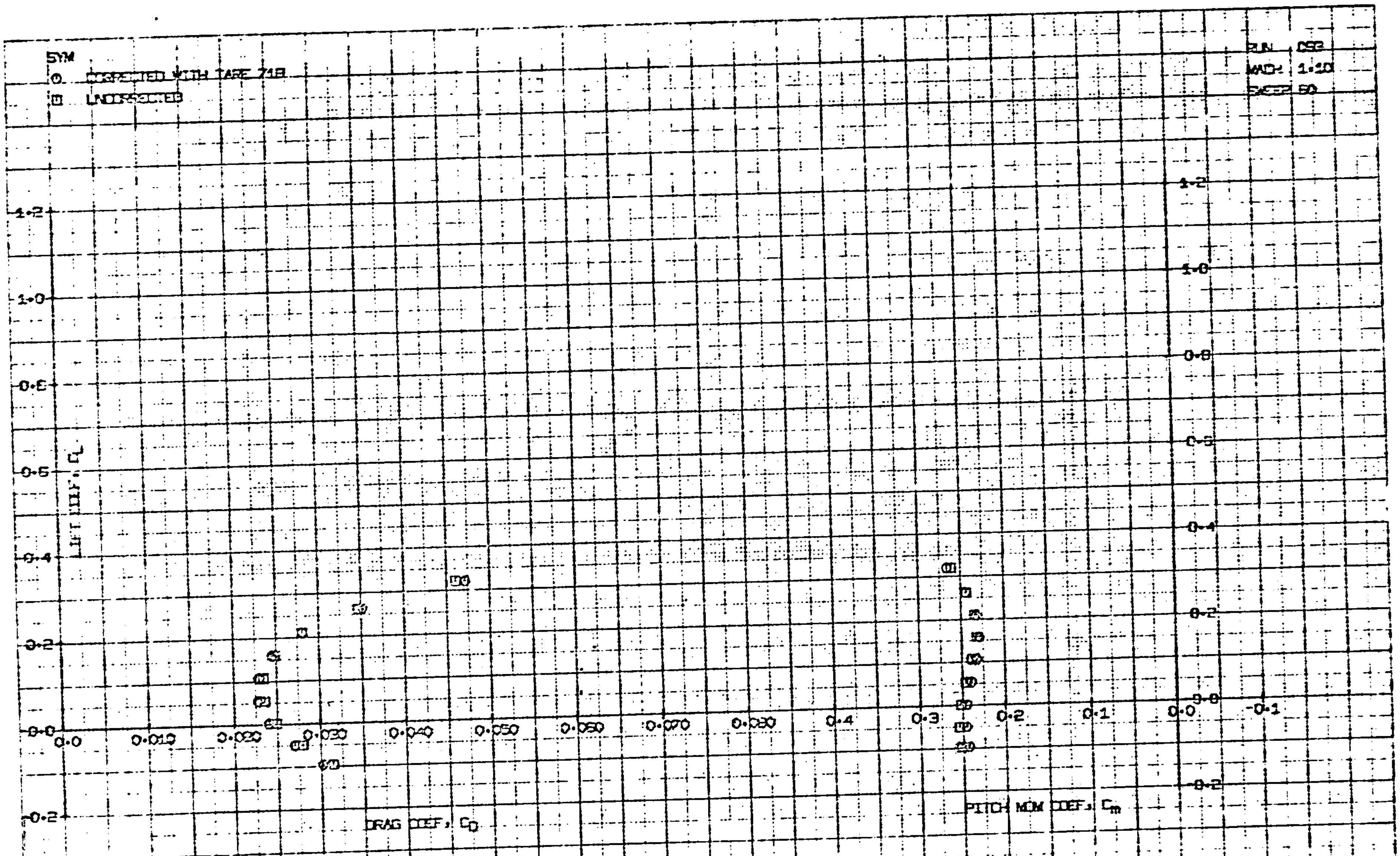

FIGURE 110. PERFORMANCE DATA RUNS, INTEGRATED FUSELAGE

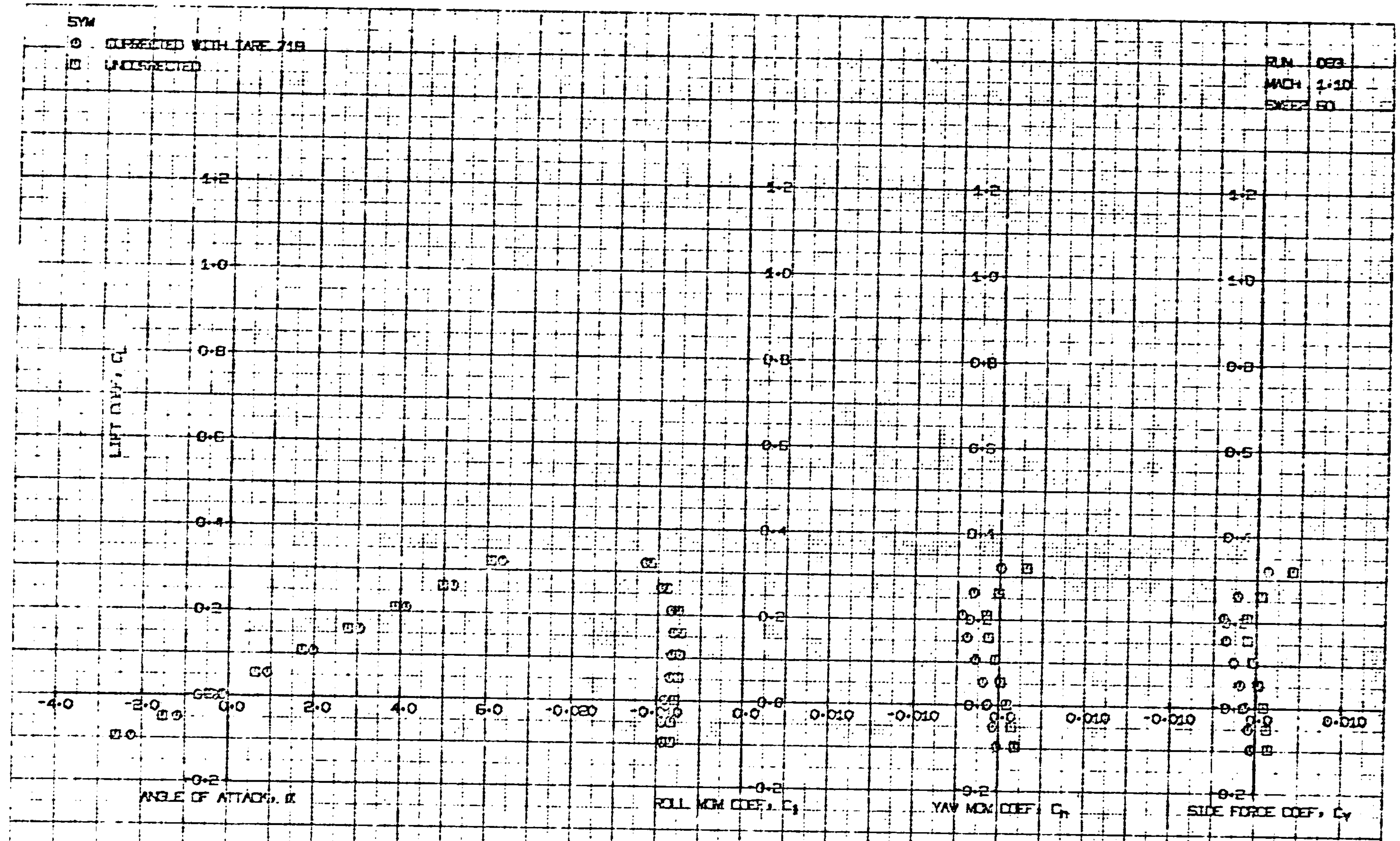

FIGURE 110. PERFORMANCE DATA RUNS, INTEGRATED FUSELAGE

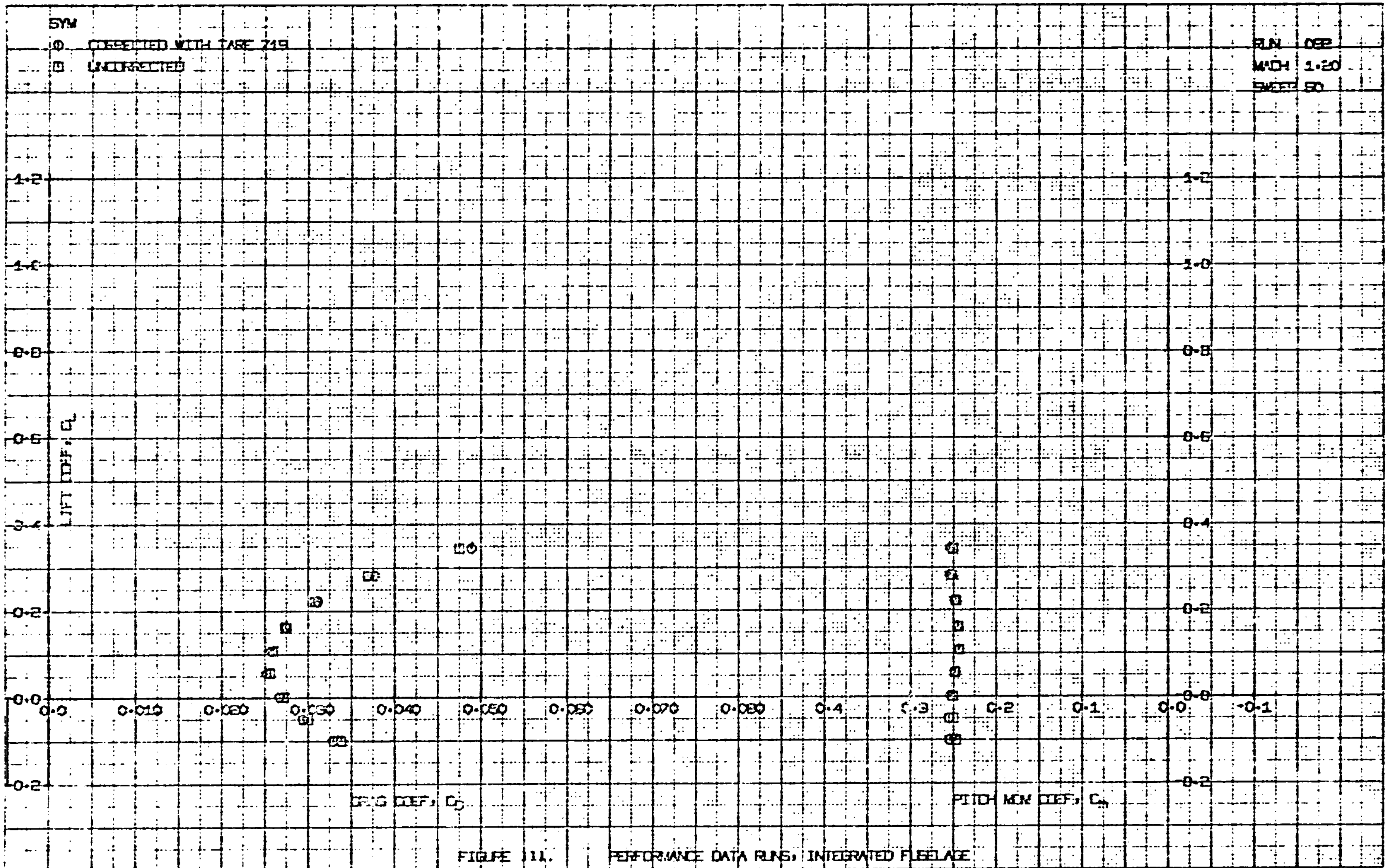

FIGURE 11. PERFORMANCE DATA RUNS, INTEGRATED FUSELAGE

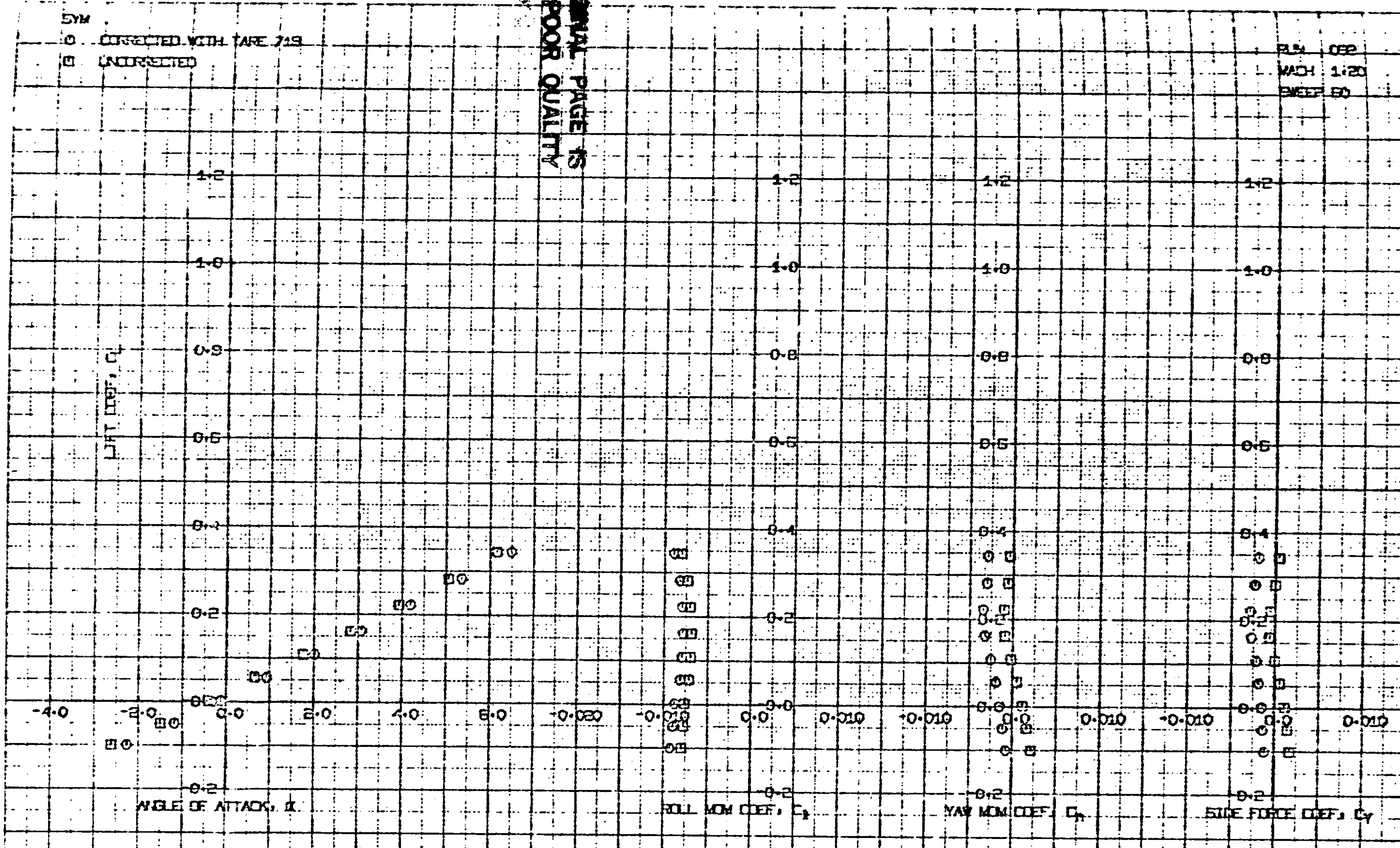

FIGURE 111. PERFORMANCE DATA RUNS, INTEGRATED FUSELAGE

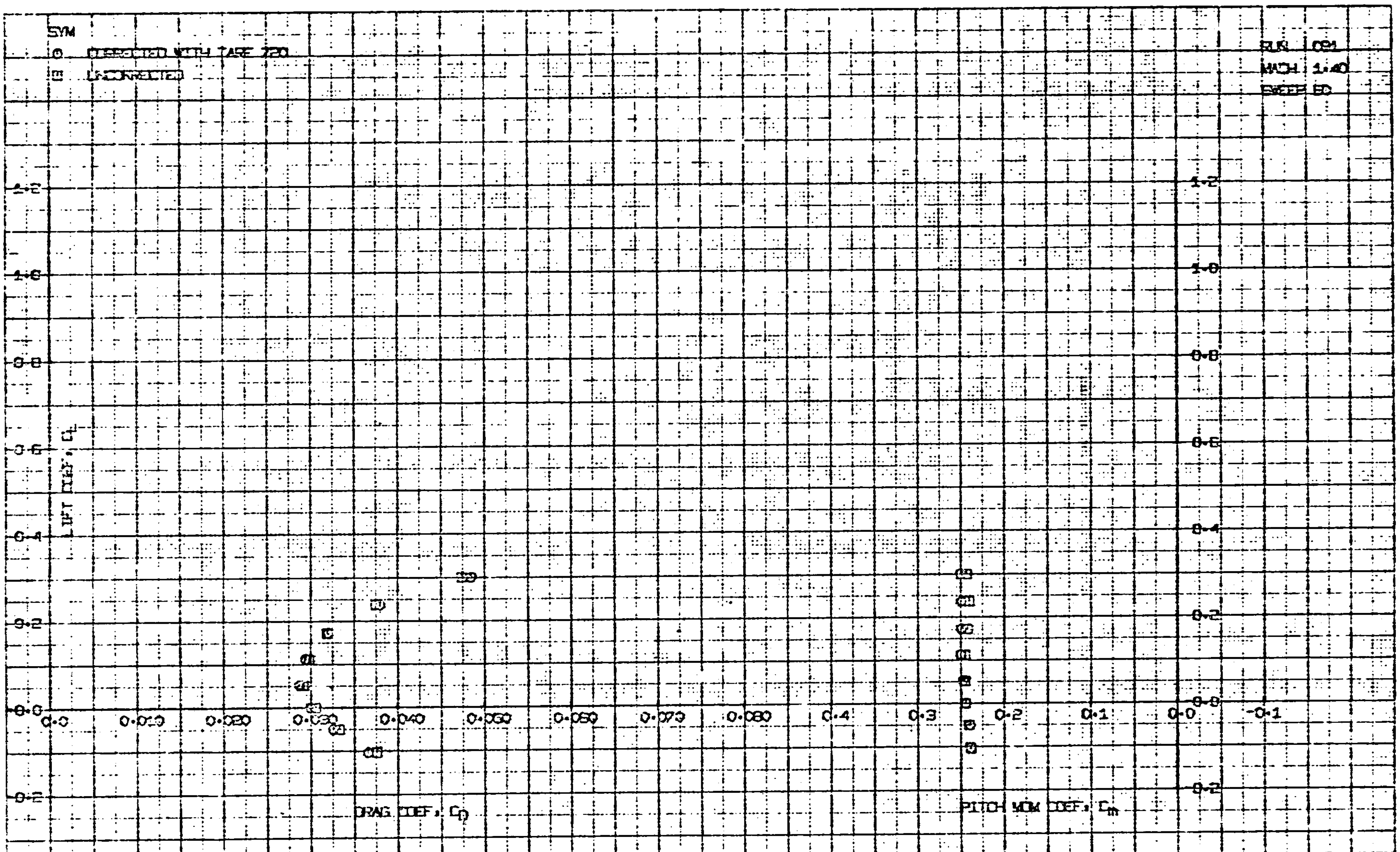

FIGURE 112 PERFORMANCE DATA RUNS, INTEGRATED FUSELAGE

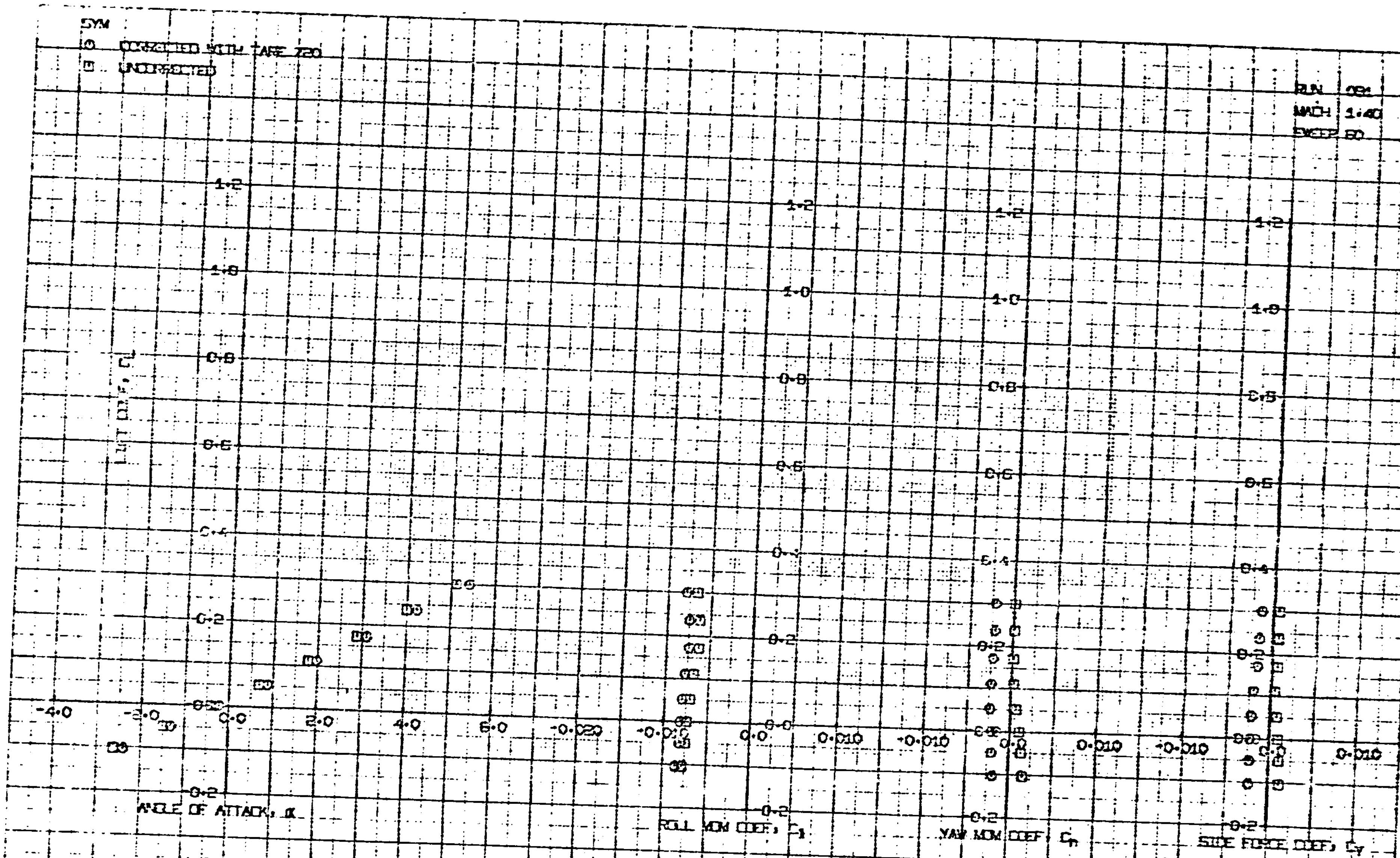

FIGURE 112. PERFORMANCE DATA RUNS, INTEGRATED FUSELAGE

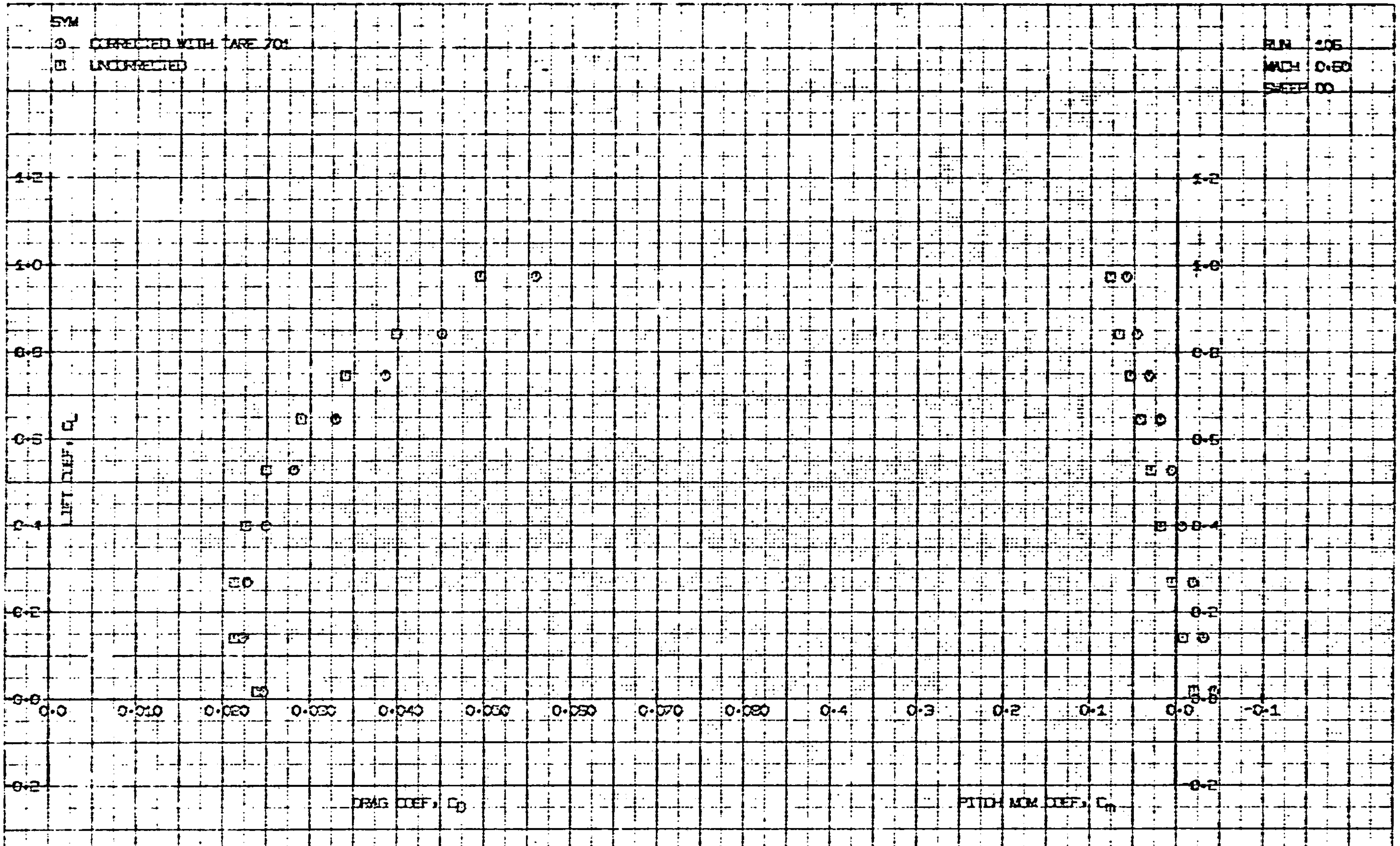

FIGURE 113. PERFORMANCE DATA RUNS, INTEGRATED FUSELAGE WITH ALTERNATE DUCT FLOW

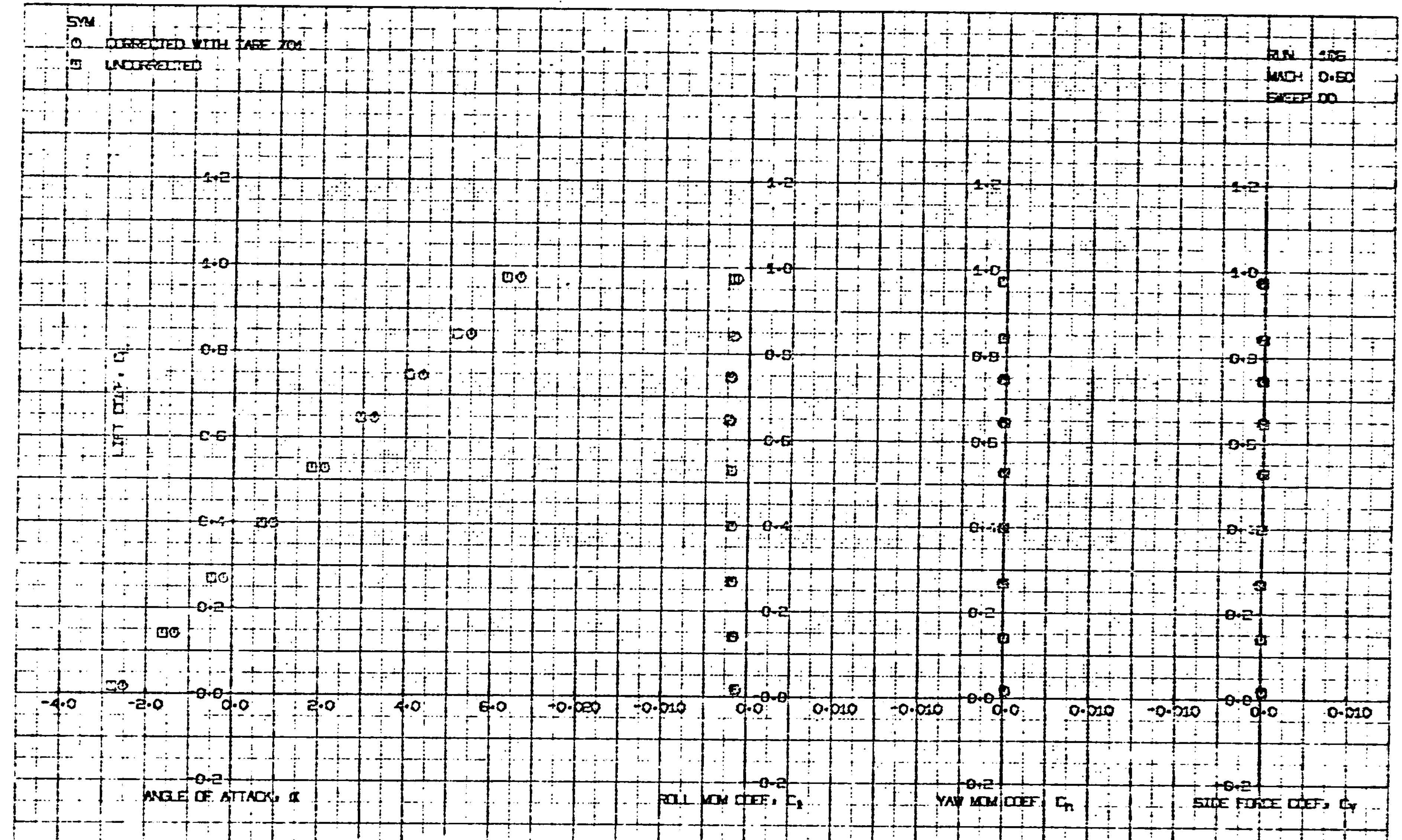

FIGURE 118. PERFORMANCE DATA RUNS, INTEGRATED FUSELAGE WITH ALTERNATE DUCT FLOW

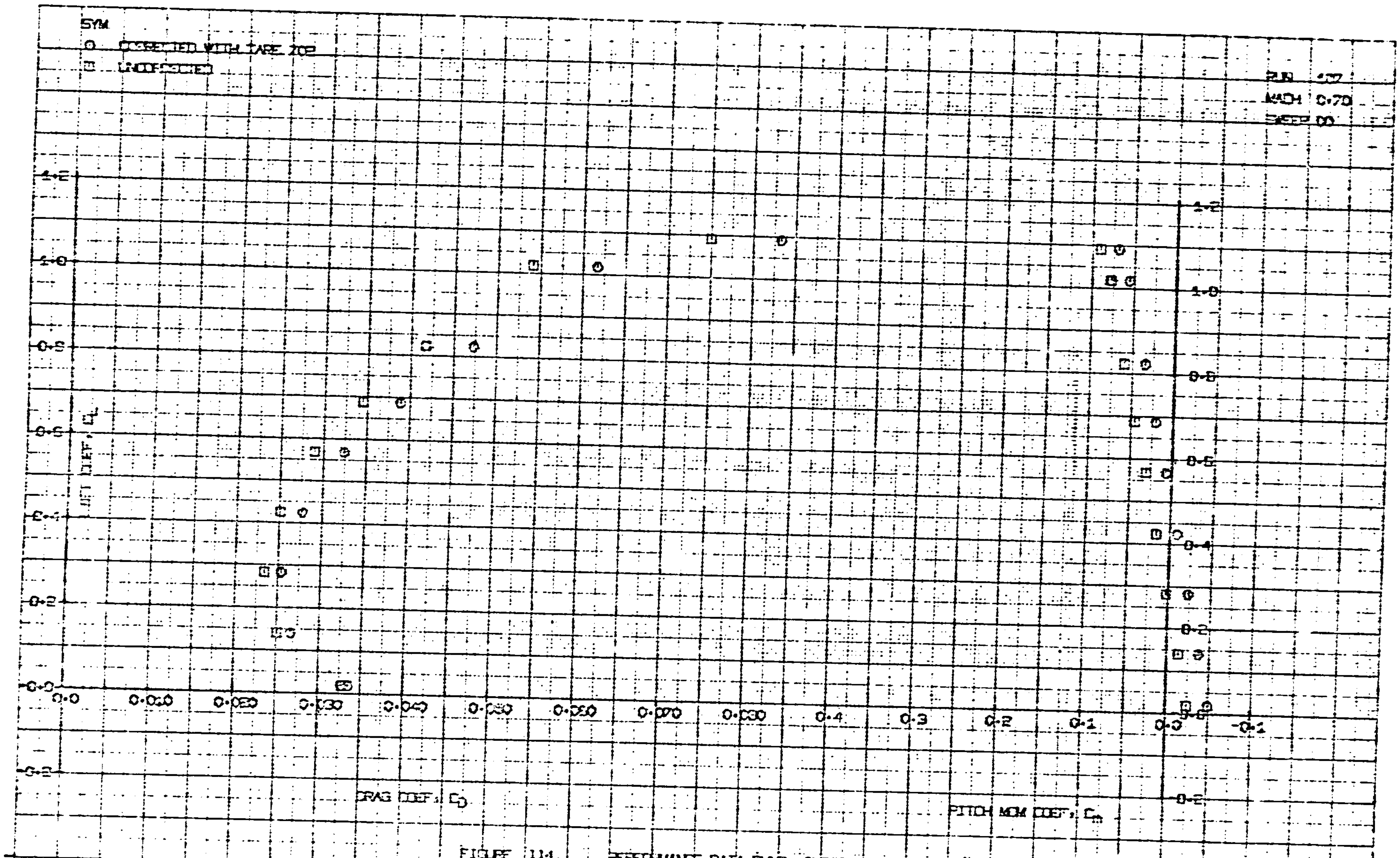

FIGURE 114. PERFORMANCE DATA RUNS, INTEGRATED FUSELAGE WITH ALTERNATE DUCT FLOW

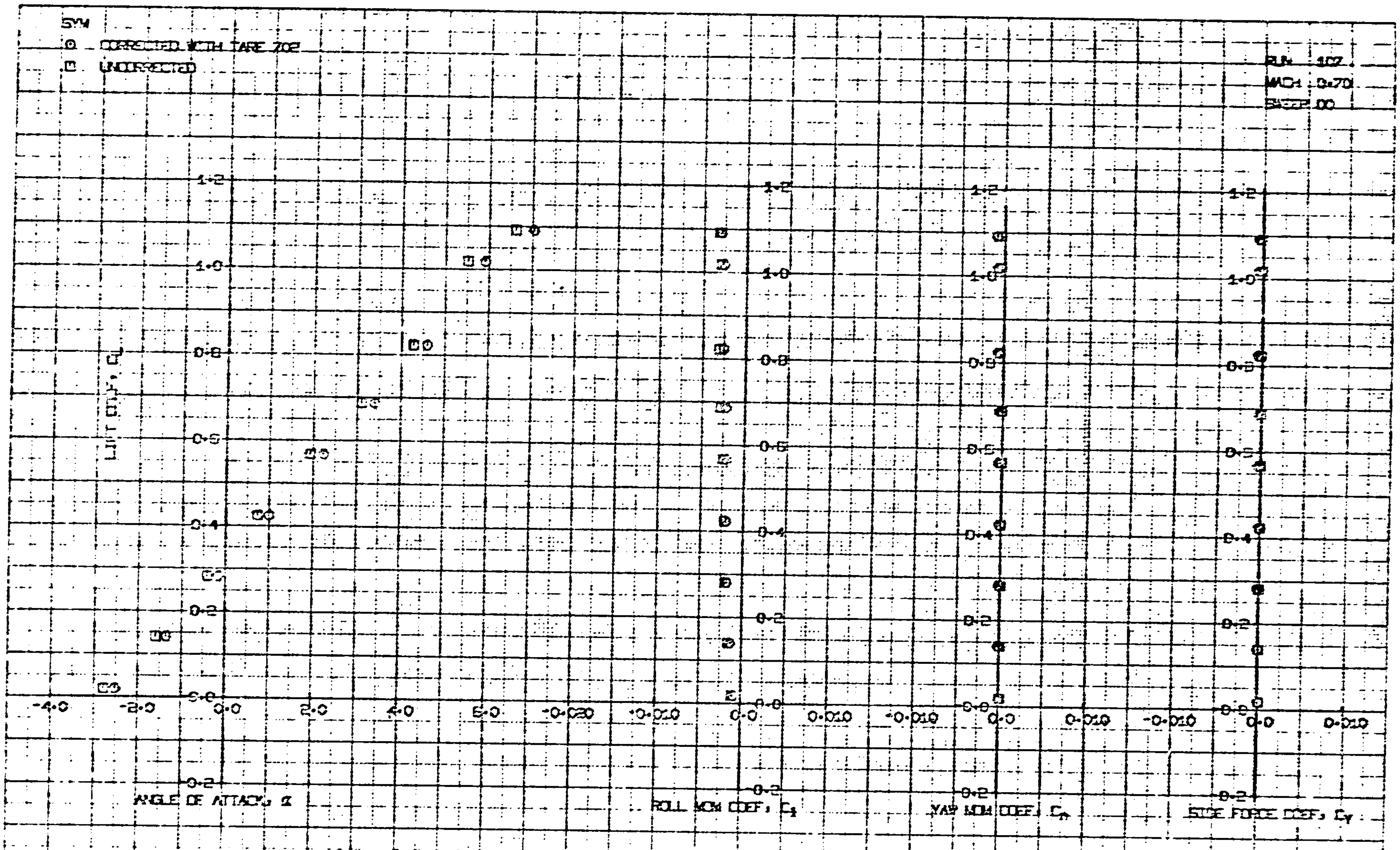

FIGURE 114. PERFORMANCE DATA RUNS, INTEGRATED FUSELAGE WITH ALTERNATE DUCT FLOW

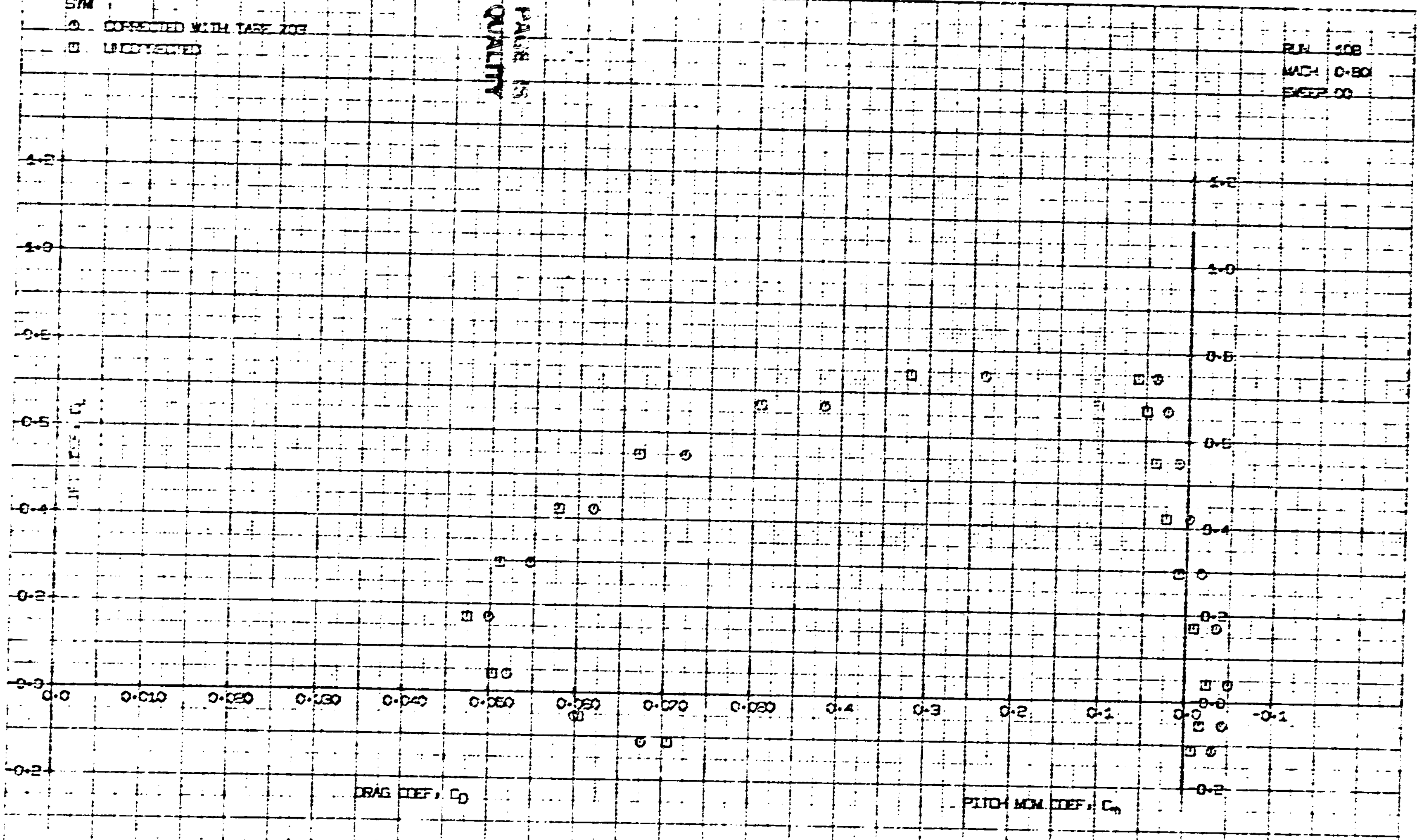

FIGURE 115. PERFORMANCE DATA RUNS, INTEGRATED FUSELAGE WITH ALTERNATE DUCT FLOW

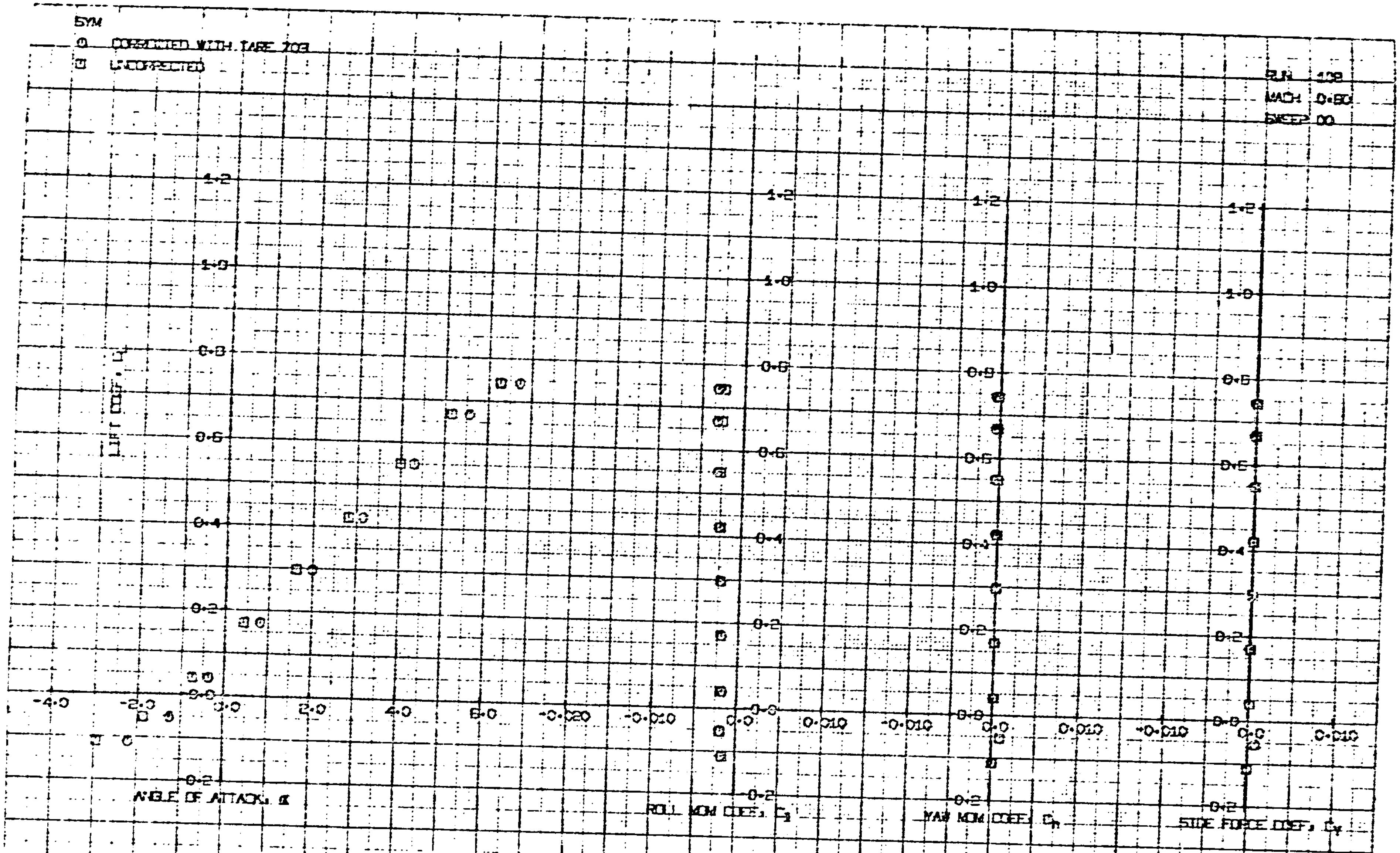

FIGURE 115. PERFORMANCE DATA RUNS, INTEGRATED FUSELAGE WITH ALTERNATE DUCT FLOW

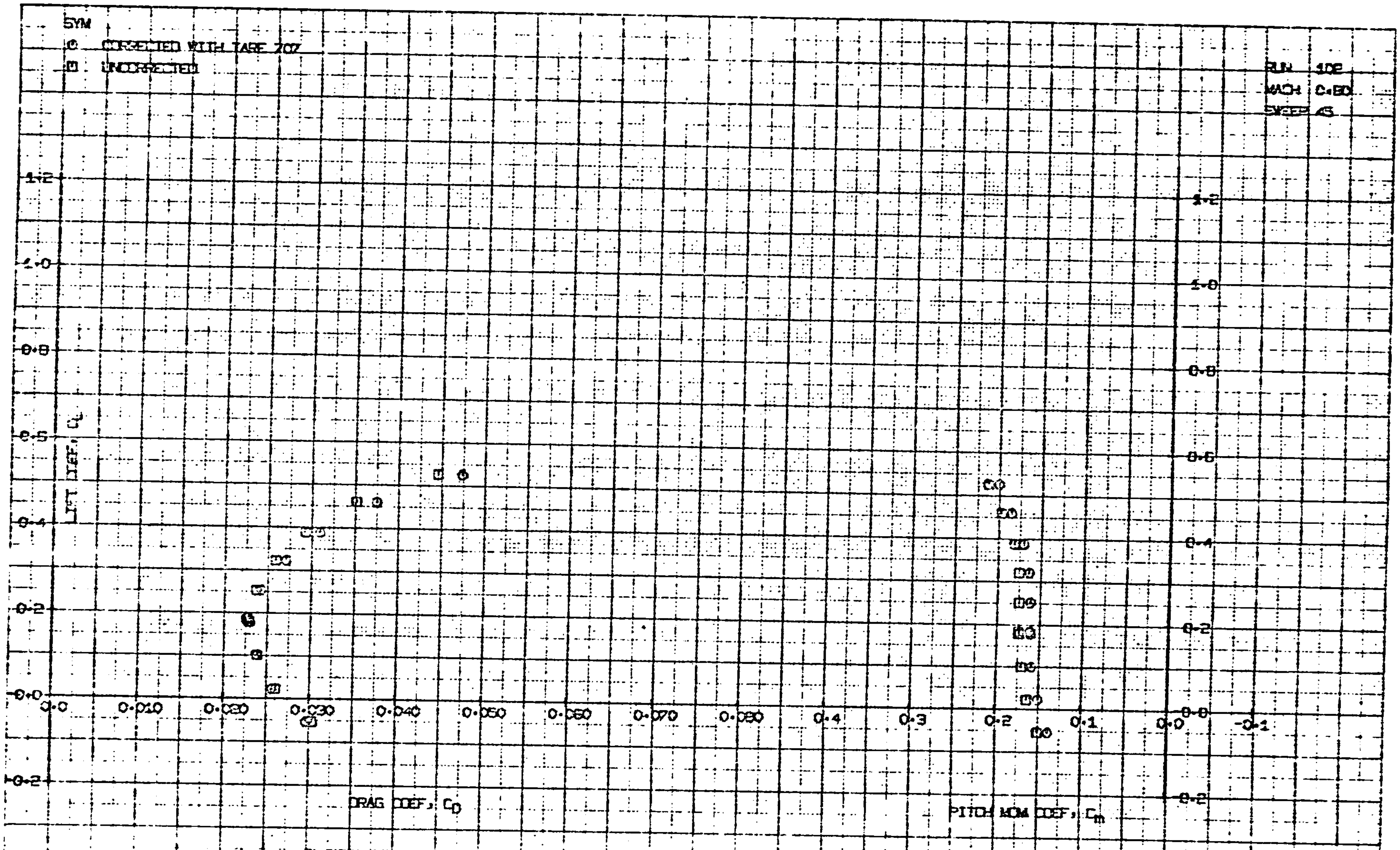

FIGURE 116. PERFORMANCE DATA RUNS, INTEGRATED FUSELAGE WITH ALTERNATE DUCT FLOW

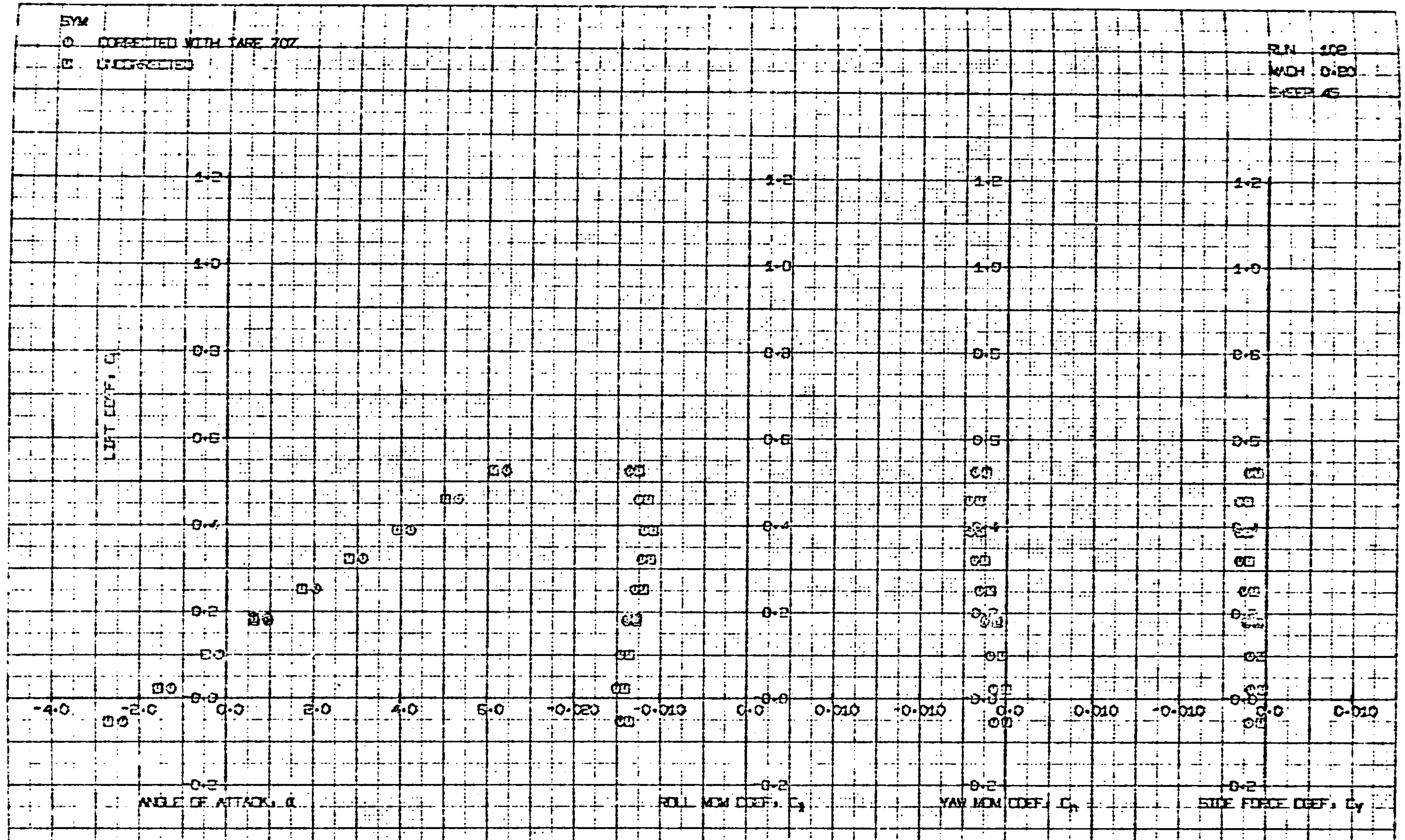

FIGURE 116. PERFORMANCE DATA RUNS, INTEGRATED FUSELAGE WITH ALTERNATE DUCT FLOW

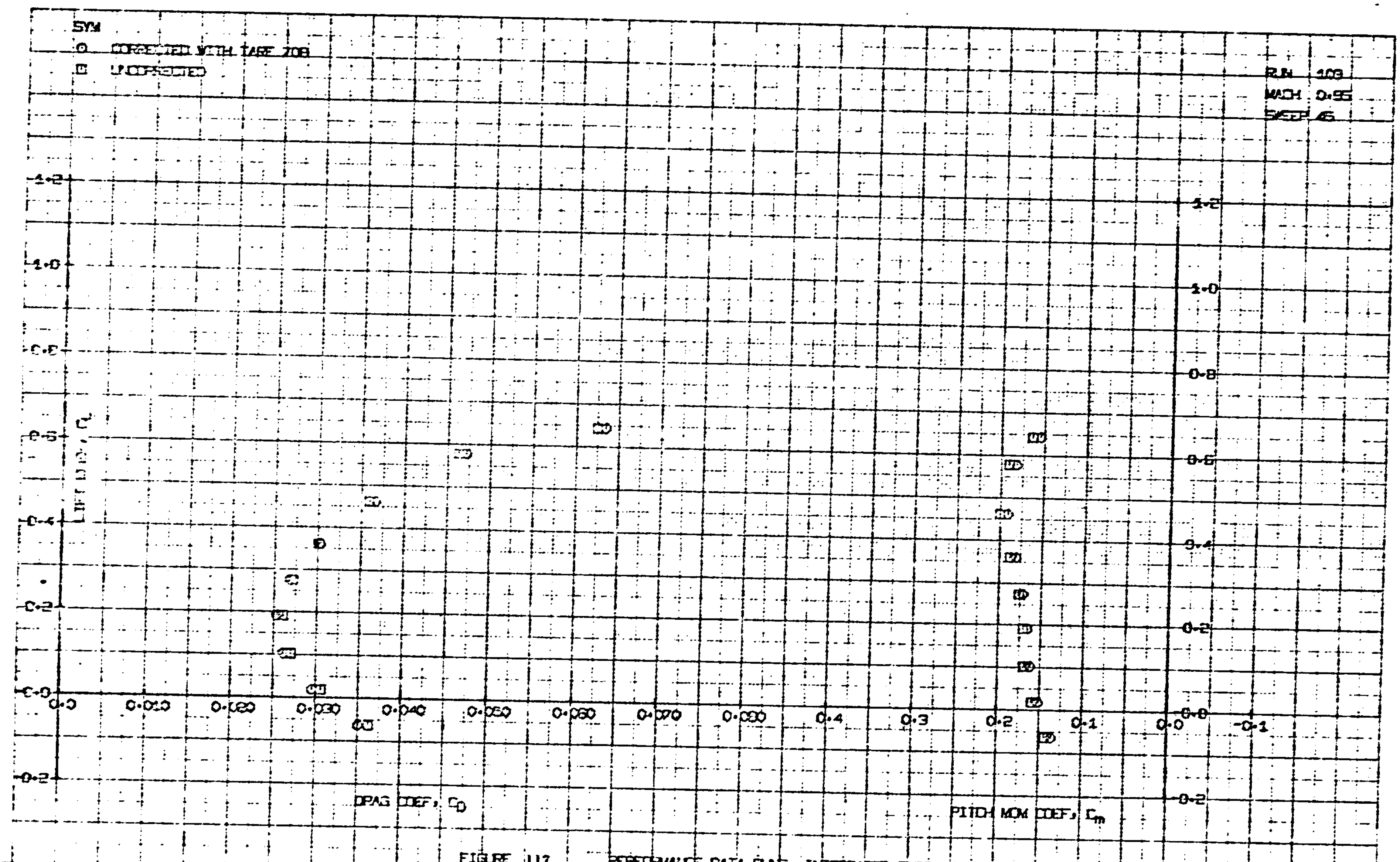

FIGURE 117. PERFORMANCE DATA PLOTS, INTEGRATED FUSELAGE WITH ALTERNATE DUCT FLOW

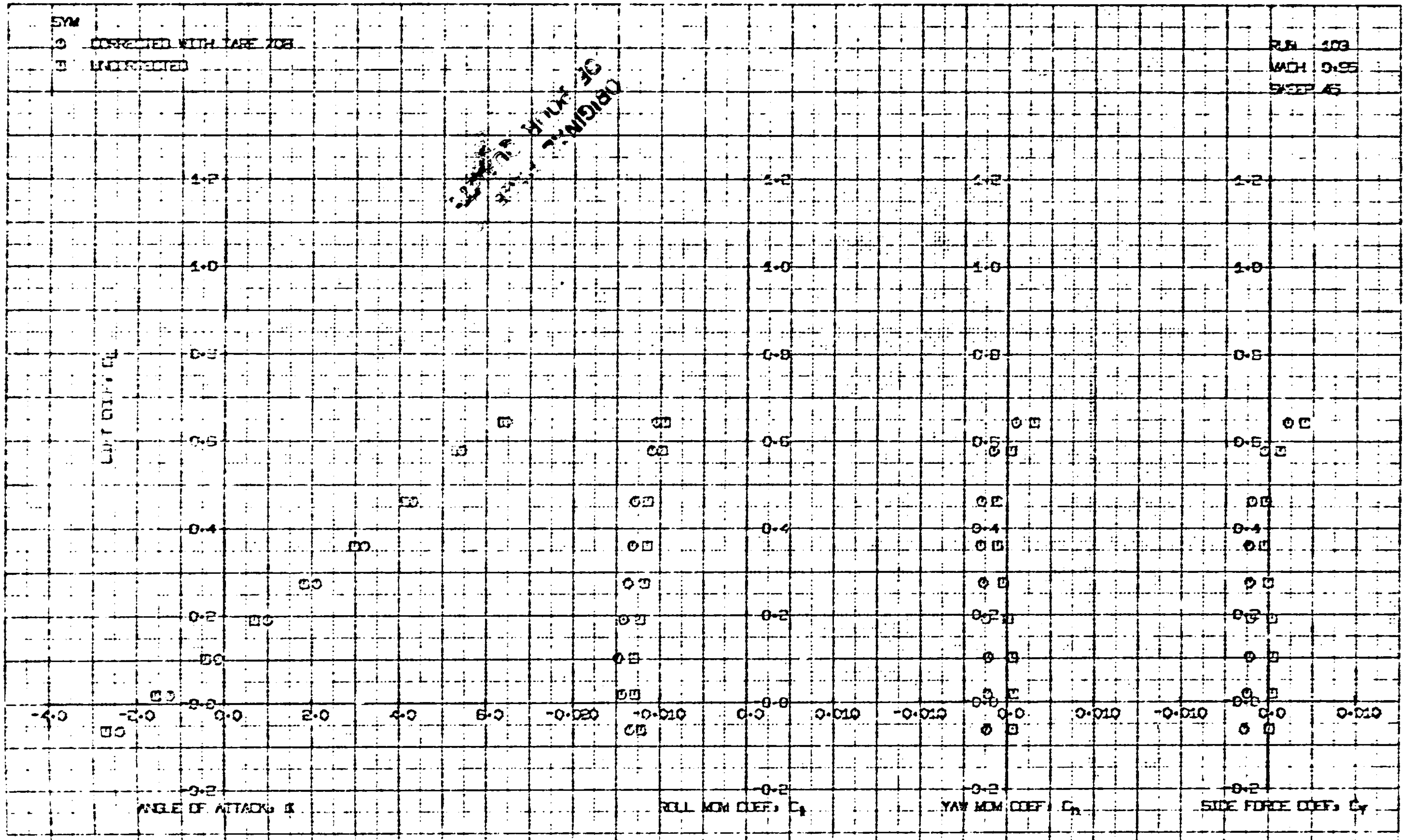

FIGURE 117. PERFORMANCE DATA RUNS, INTEGRATED FUSELAGE WITH ALTERNATE DUCT FLOW

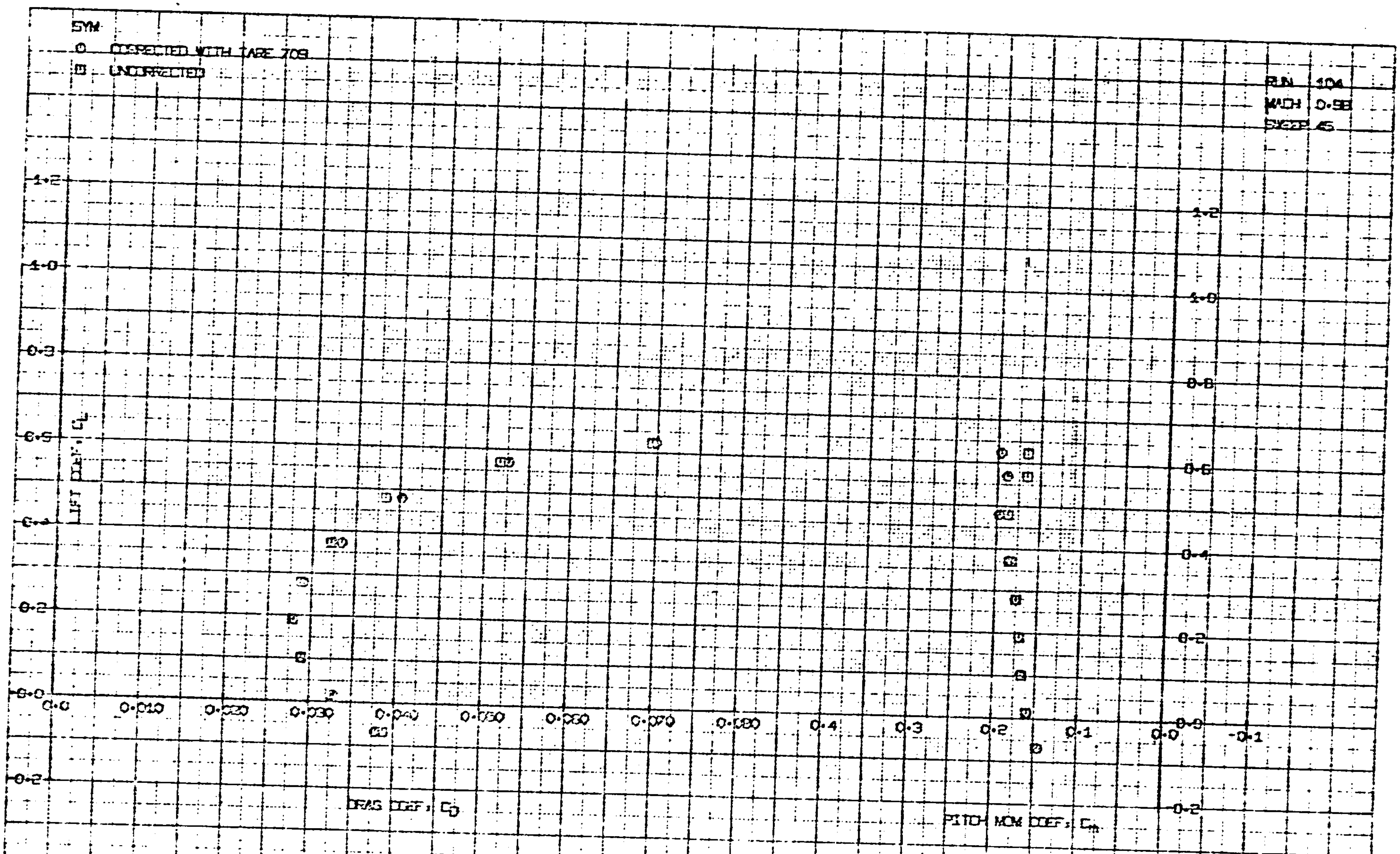

FIGURE 118. PERFORMANCE DATA RUNS, INTEGRATED FUSELAGE WITH ALTERNATE DUCT FLOW

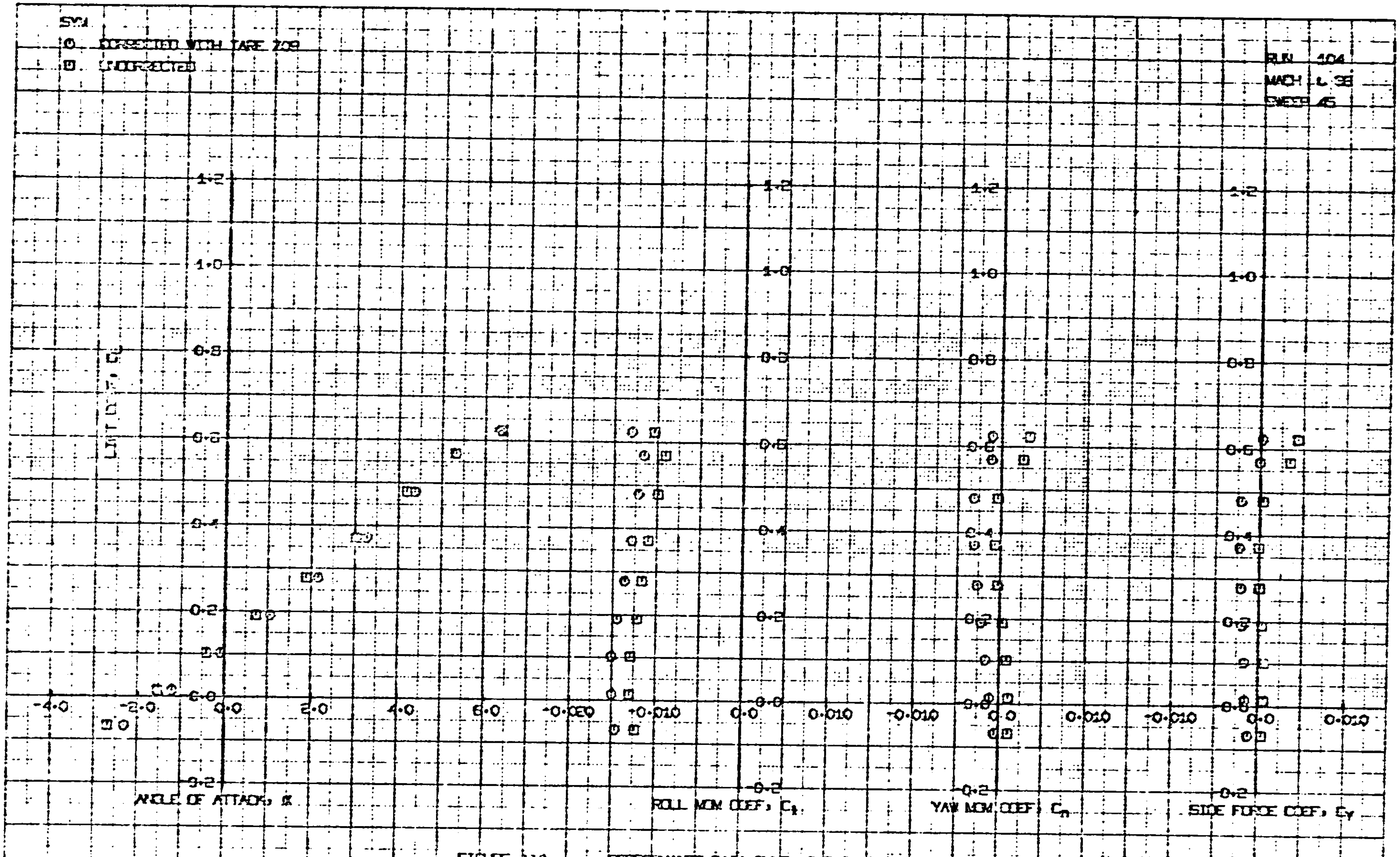

FIGURE 118. PERFORMANCE DATA RUNS; INTEGRATED FUSELAGE WITH ALTERNATE DUCT FLOW

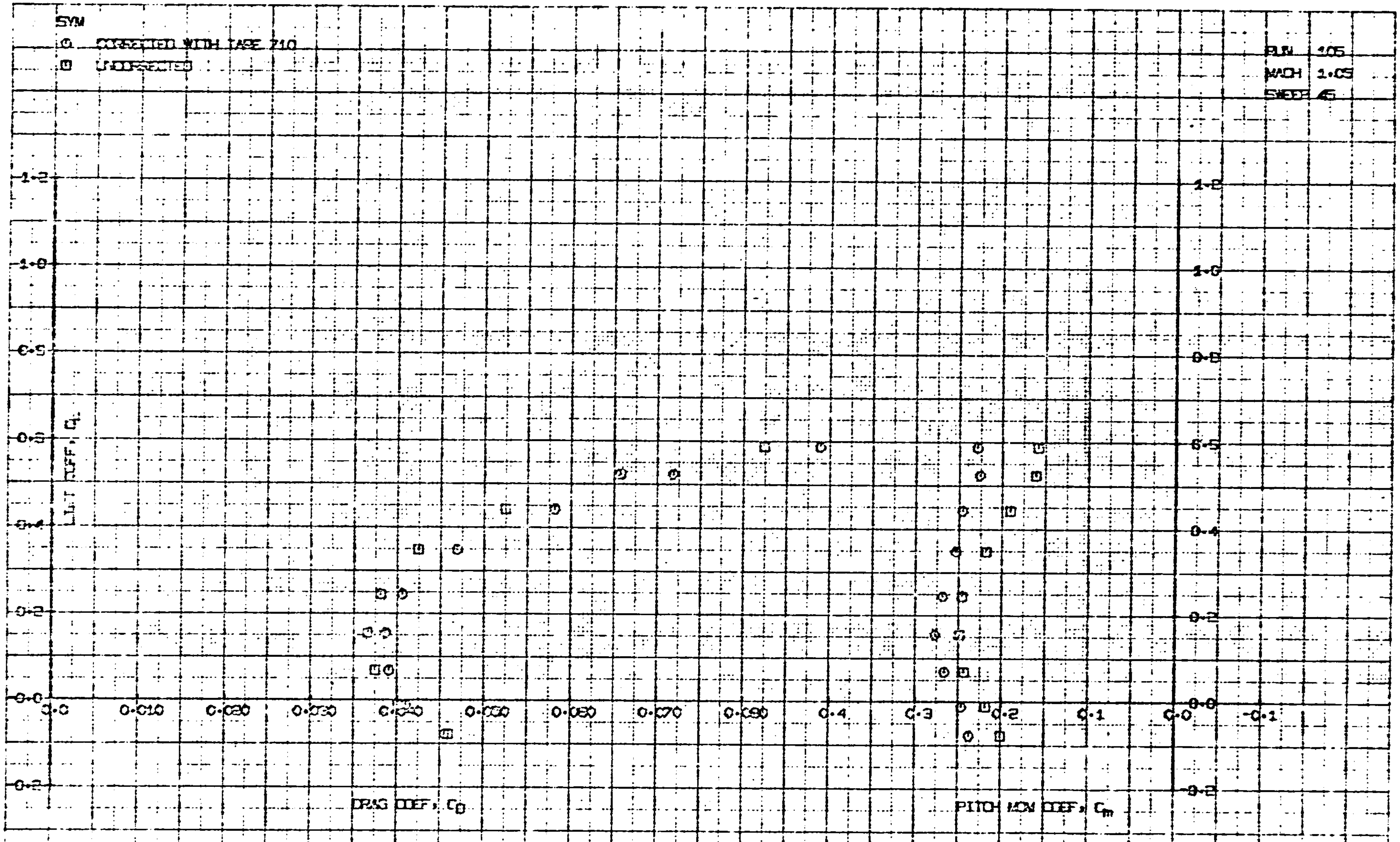

FIGURE 119. PERFORMANCE DATA RUNS, INTEGRATED FUSELAGE WITH ALTERNATE DUCT FLOW

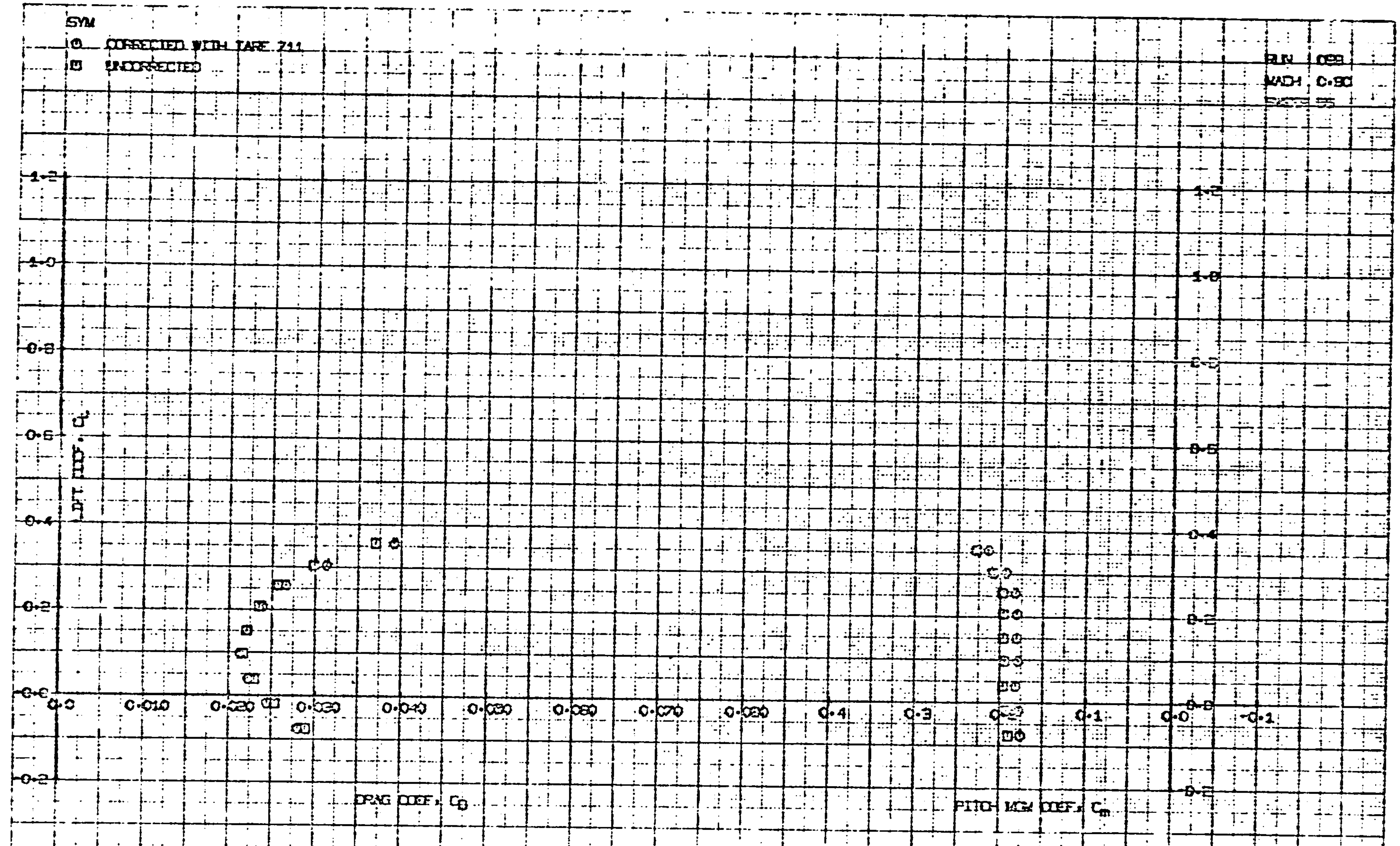

FIGURE 120. PERFORMANCE DATA RUNS, INTEGRATED FUSELAGE WITH ALTERNATE DUCT FLOW

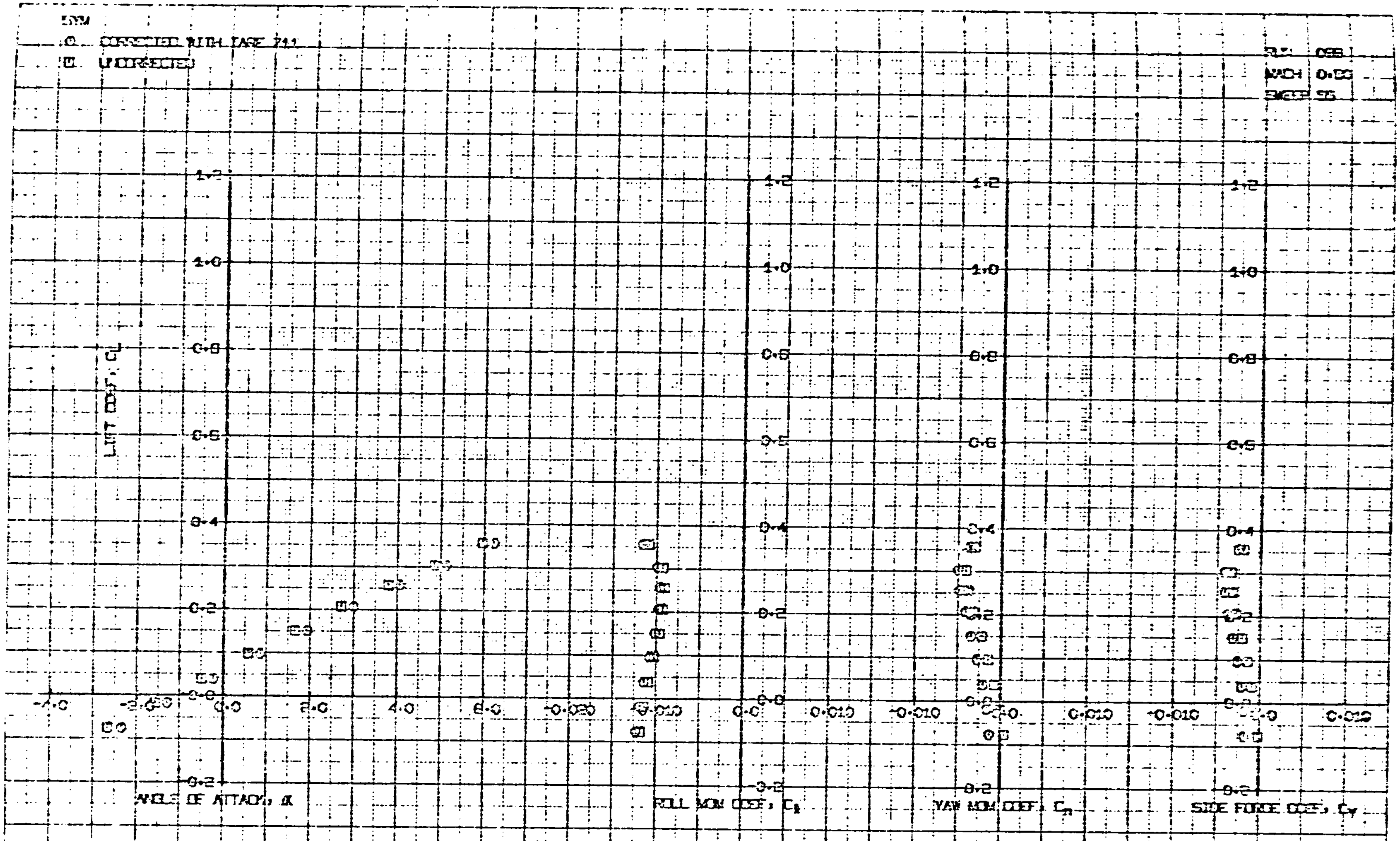

FIGURE 120. PERFORMANCE DATA RUNS, INTEGRATED FUSELAGE WITH ALTERNATE DUCT FLOW

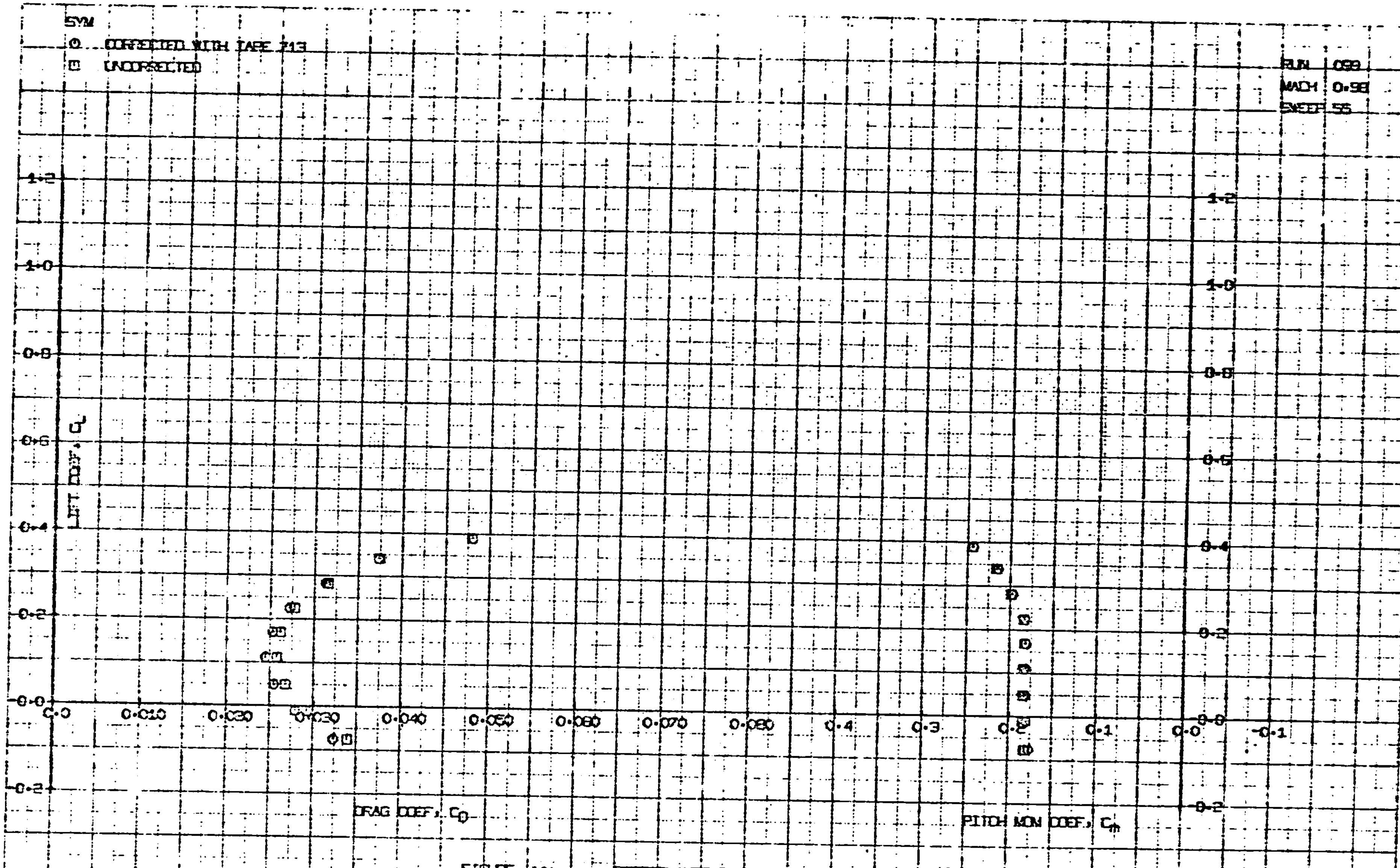

FIGURE 121. PERFORMANCE DATA RUNS, INTEGRATED FUSELAGE WITH ALTERNATE DUCT FLOW

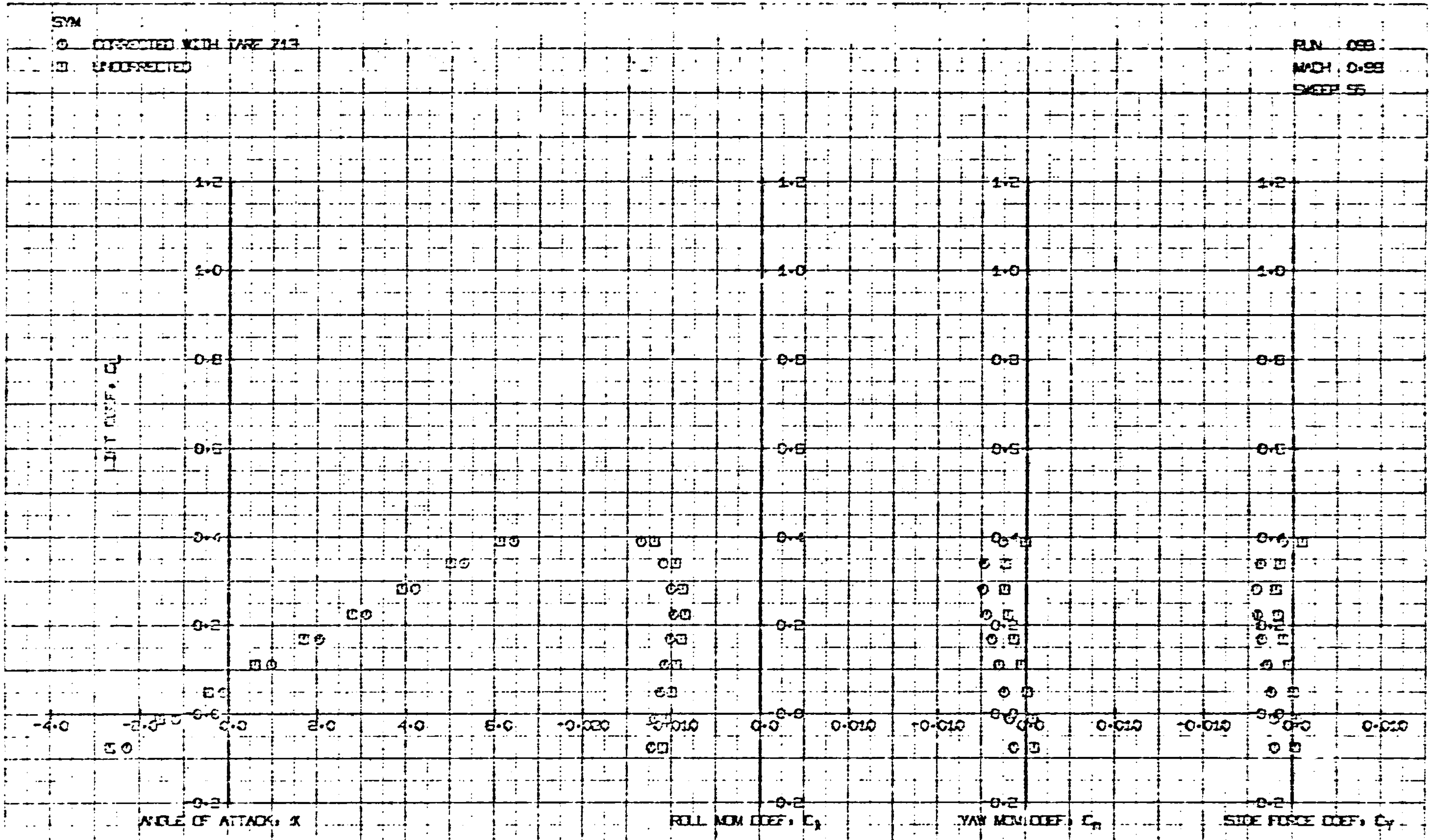

FIGURE 121. PERFORMANCE DATA RUNS, INTEGRATED FUSELAGE WITH ALTERNATE DUCT FLOW

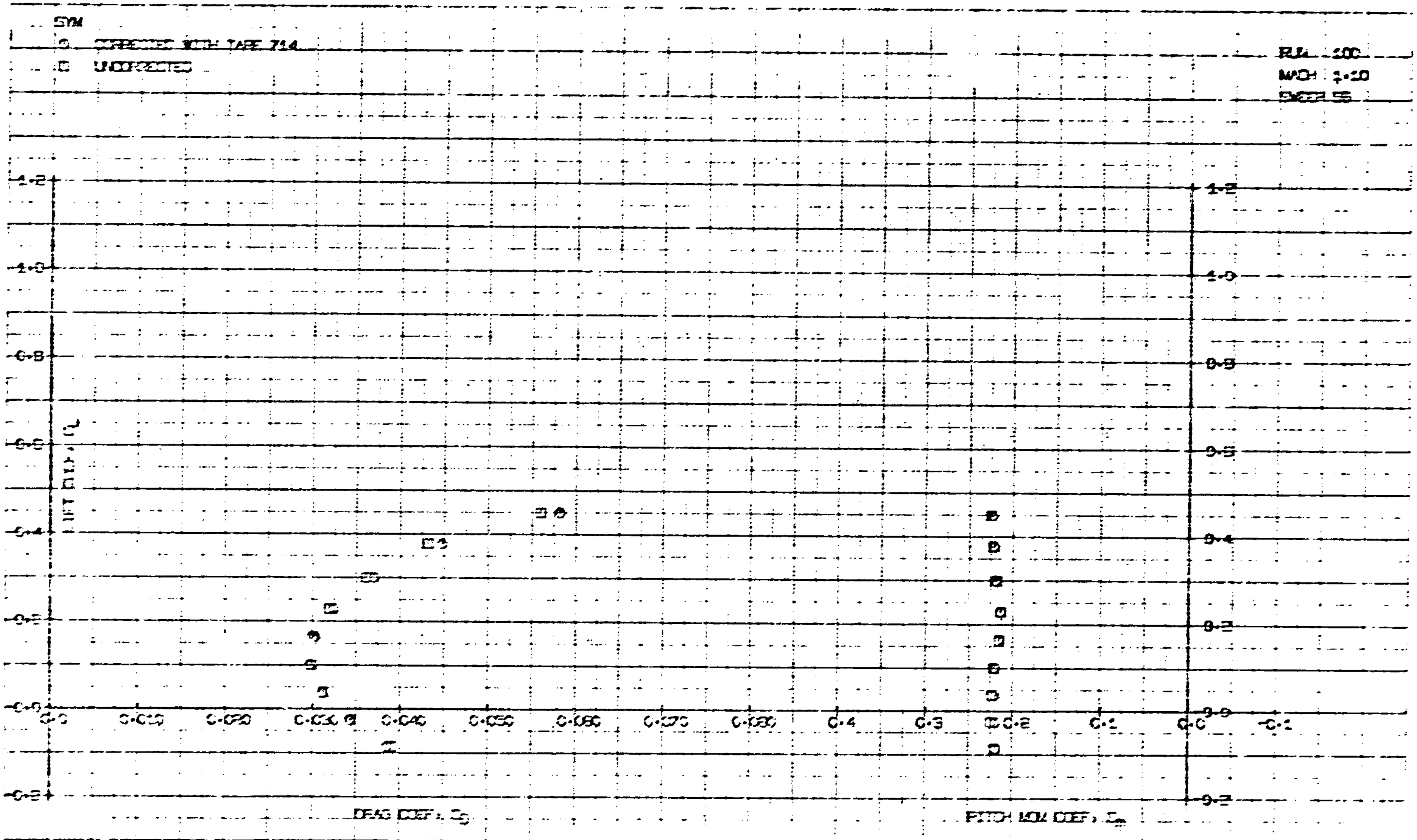

FIGURE 122. PERFORMANCE DATA RUNS, INTEGRATED FUSELAGE WITH ALTERNATE DUCT FLOW

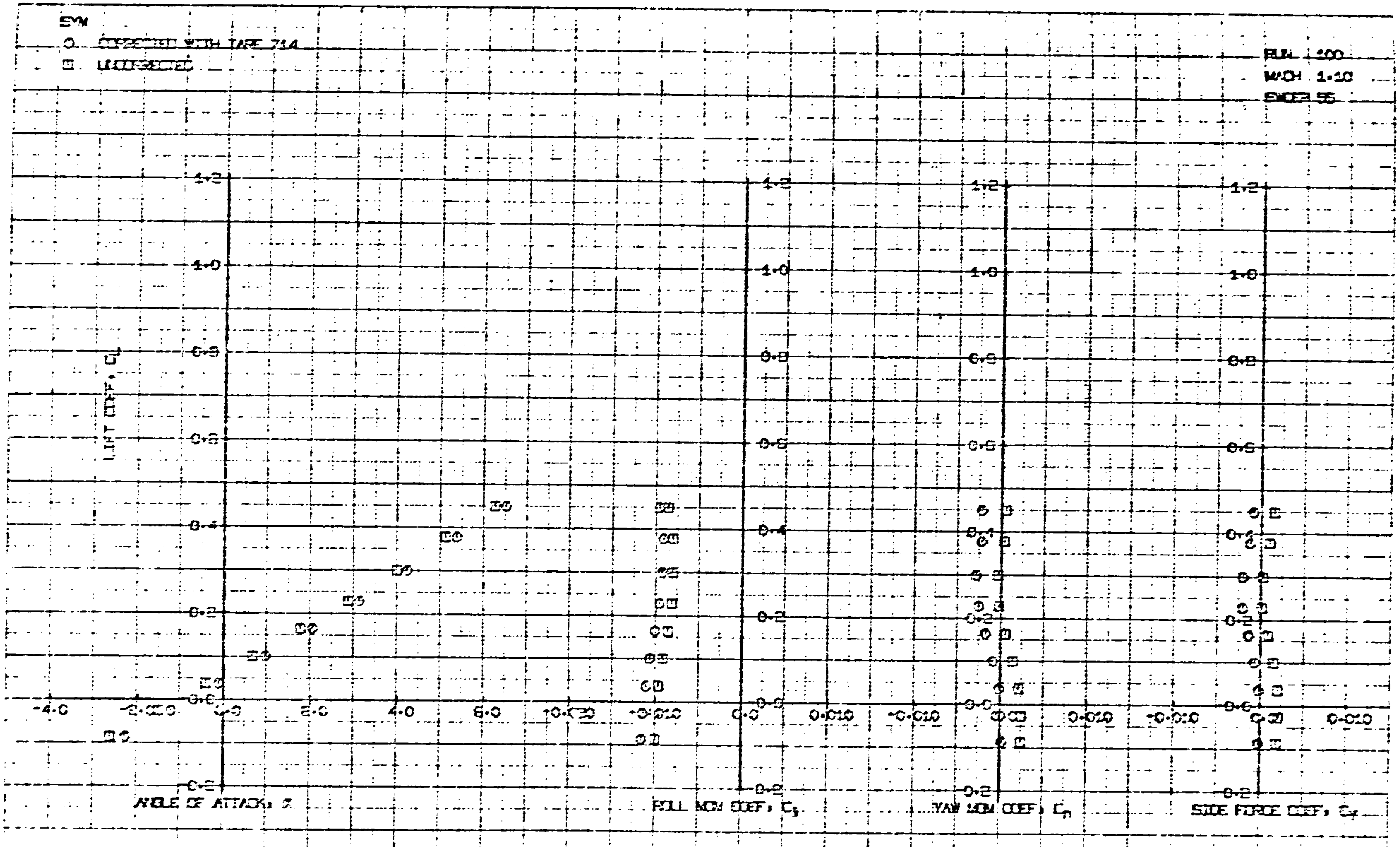

FIGURE 122. PERFORMANCE DATA RUNS, INTEGRATED FUSELAGE WITH ALTERNATE DUCT FLOW

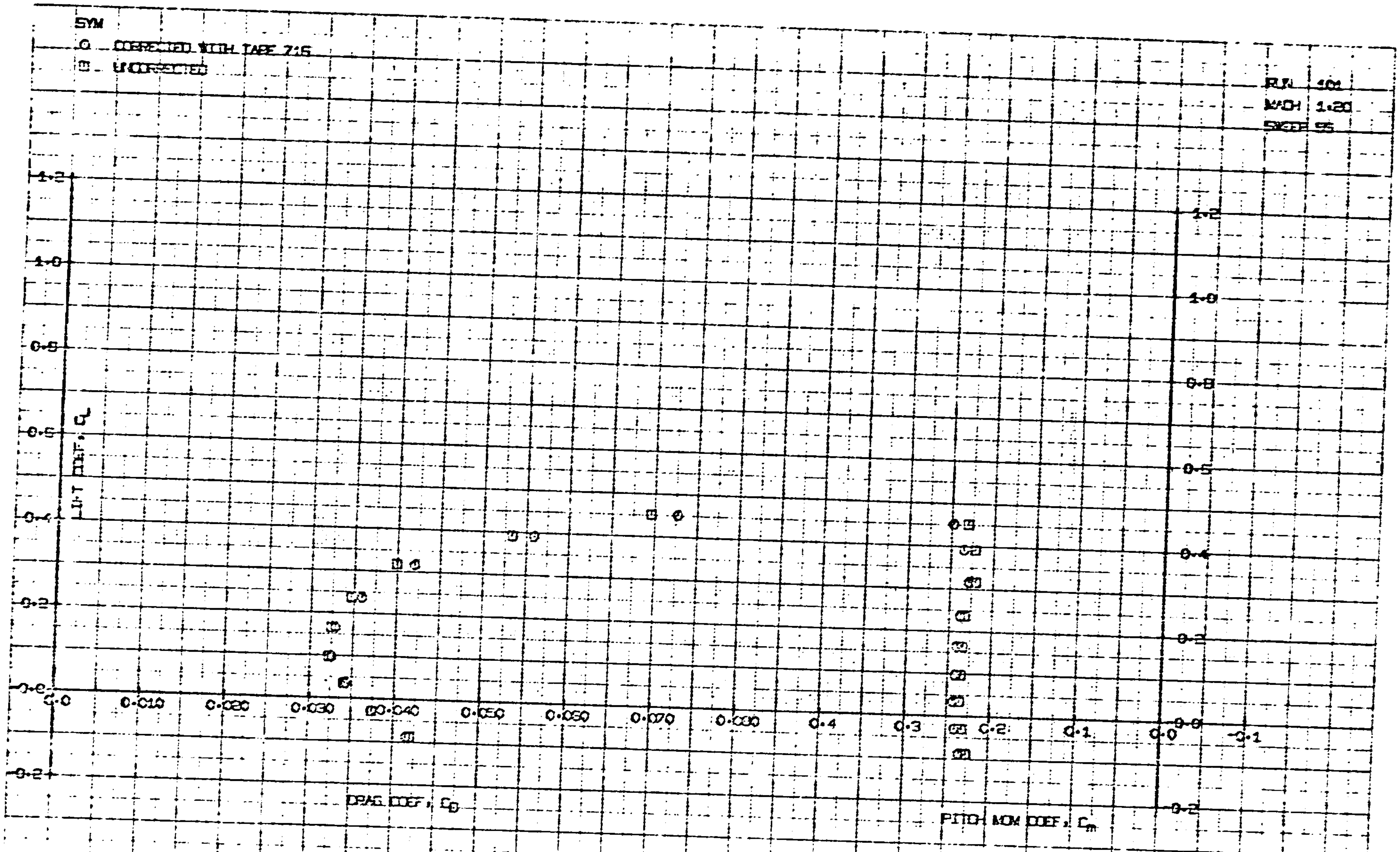

FIGURE 123. PERFORMANCE DATA RUNS, INTEGRATED FUSELAGE WITH ALTERNATE DUCT FLOW

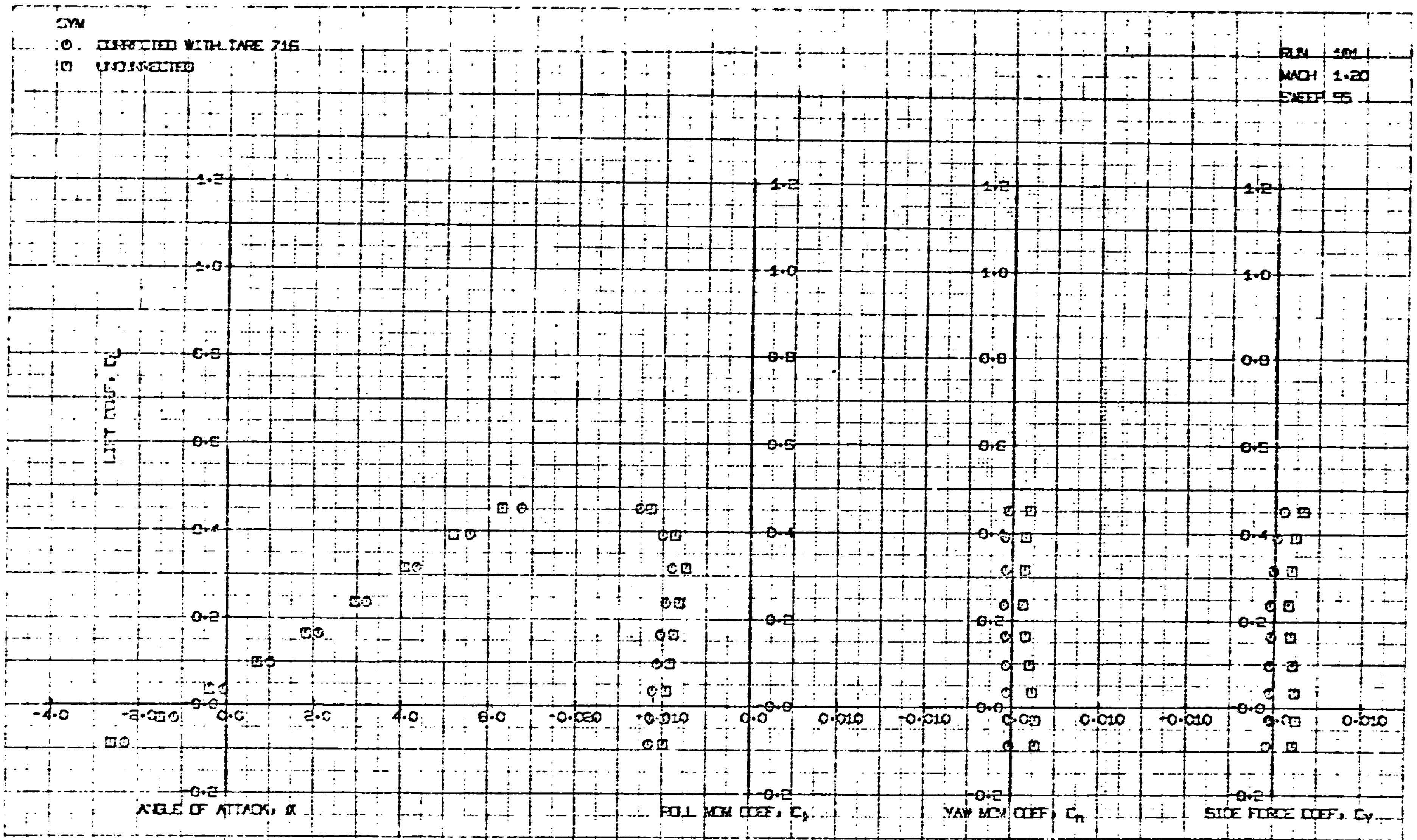

FIGURE 123. PERFORMANCE DATA RUNS, INTEGRATED FUSELAGE WITH ALTERNATE DUCT FLOW

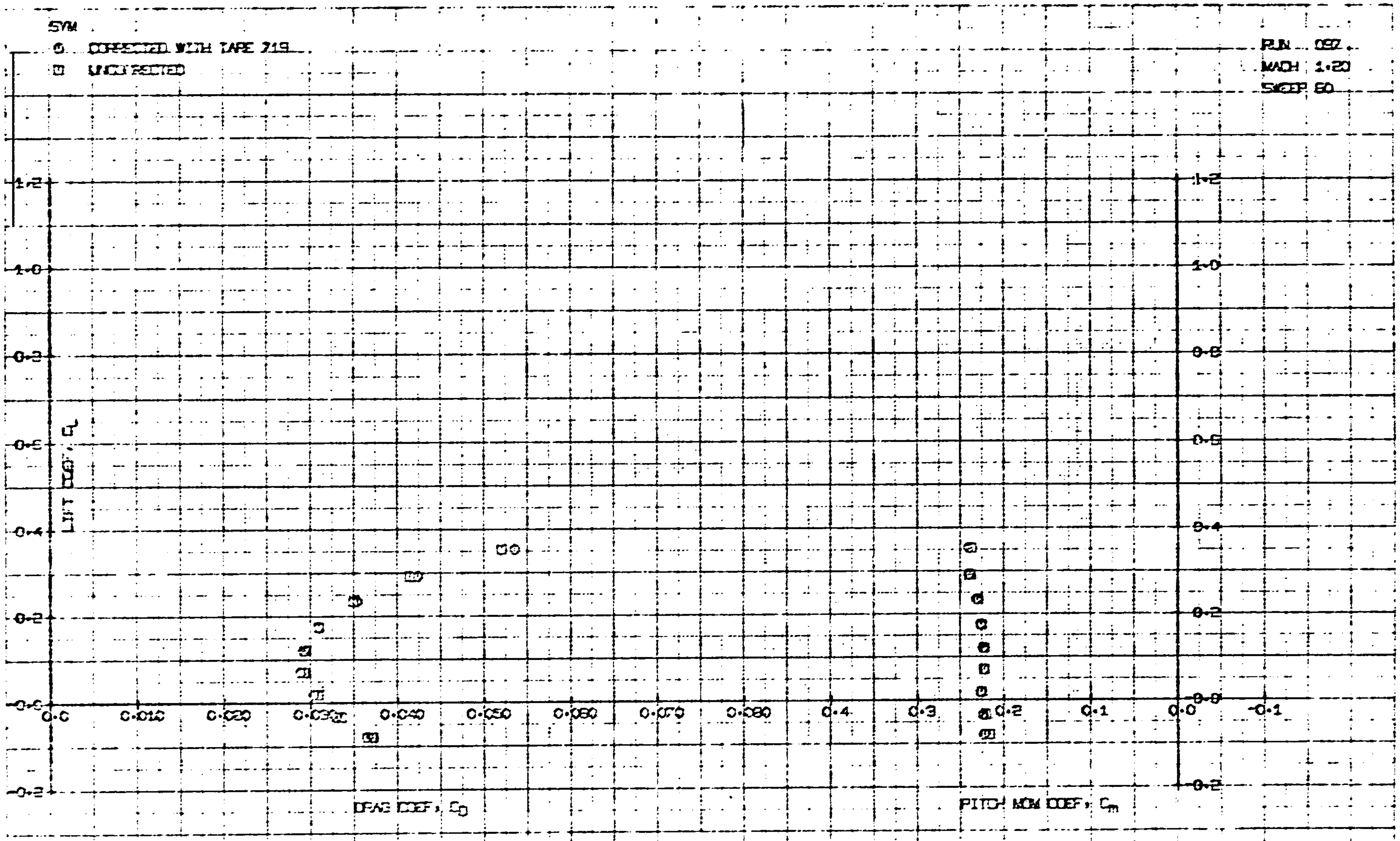

FIGURE 124. PERFORMANCE DATA RUNS, INTEGRATED FUSELAGE WITH ALTERNATE DUCT FLOW

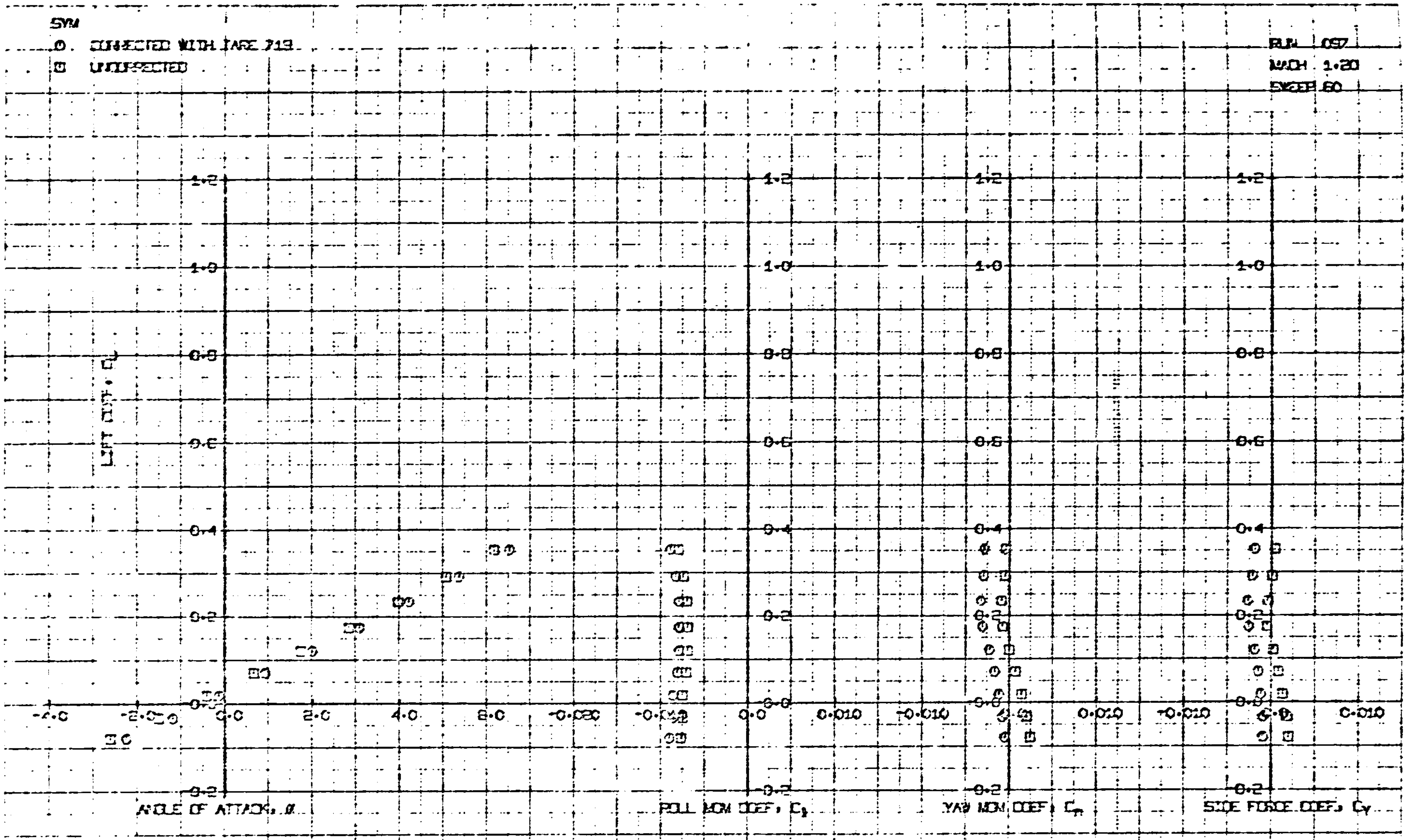

FIGURE 124. PERFORMANCE DATA RUNS, INTEGRATED FUSELAGE WITH ALTERNATE DUCT FLOW

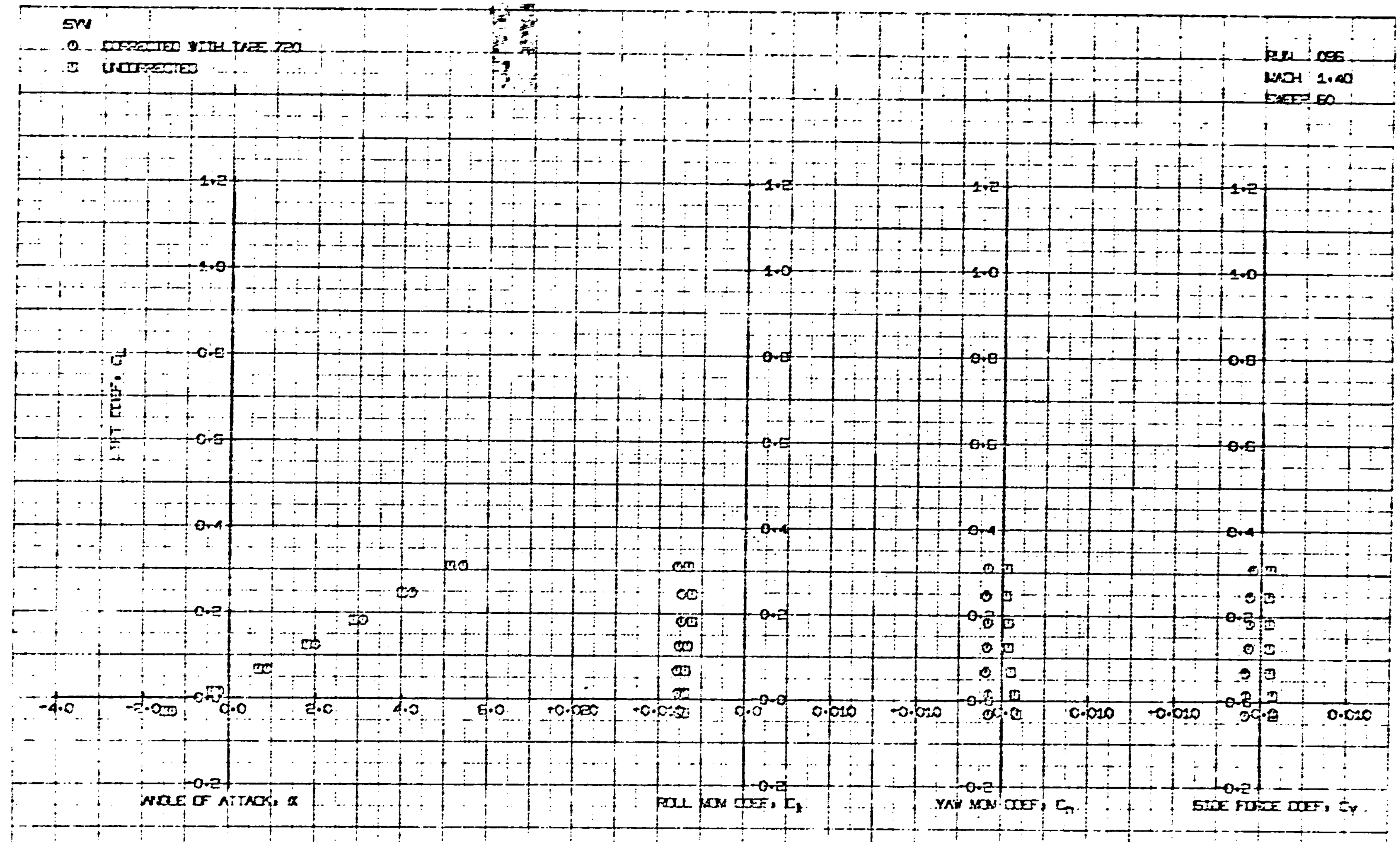

FIGURE 125. PERFORMANCE DATA RUNS, INTEGRATED FUSELAGE WITH ALTERNATE DUCT FLOW

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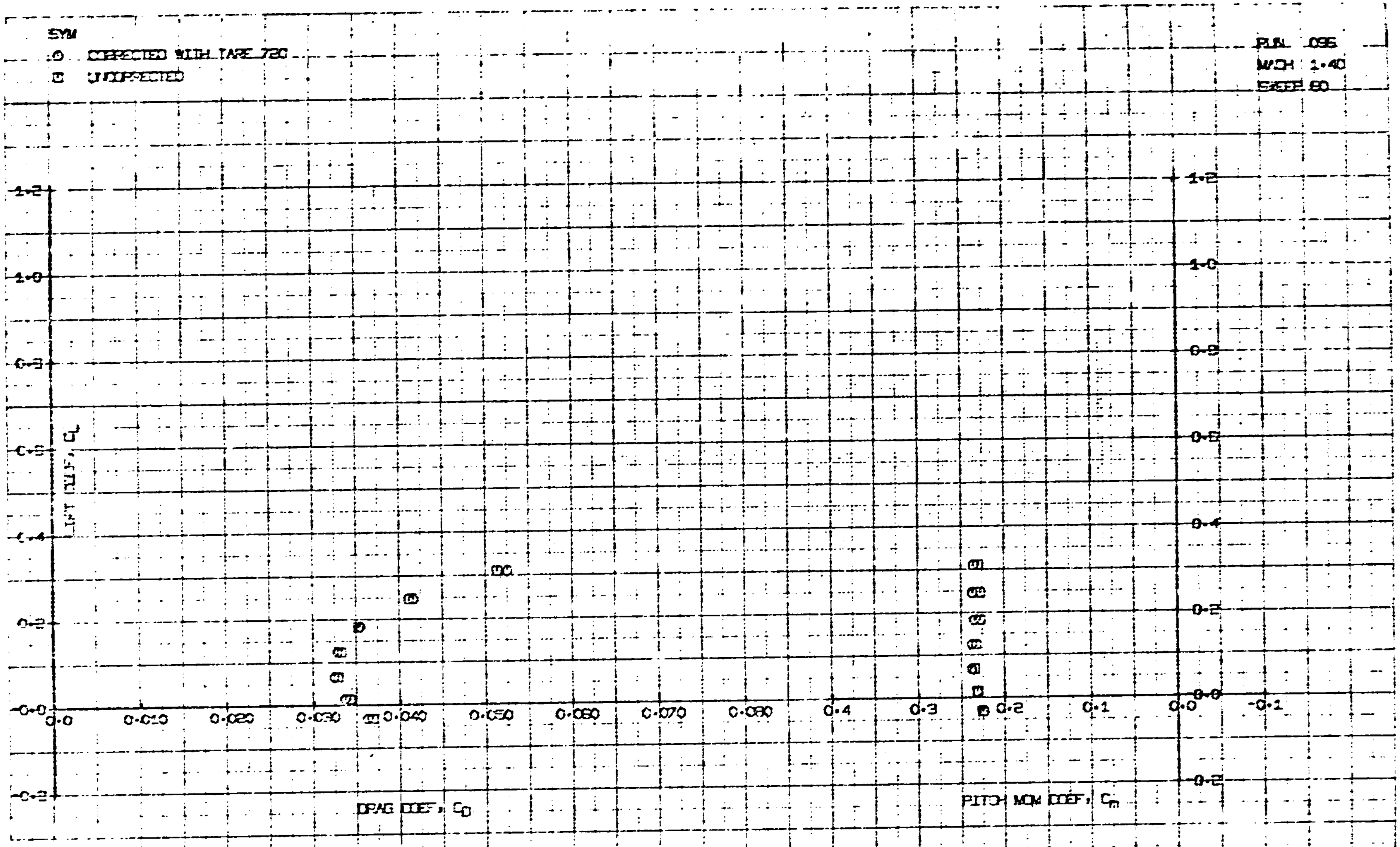

FIGURE 125. PERFORMANCE DATA RUNS, INTEGRATED FUSELAGE WITH ALTERNATE DUCT FLOW

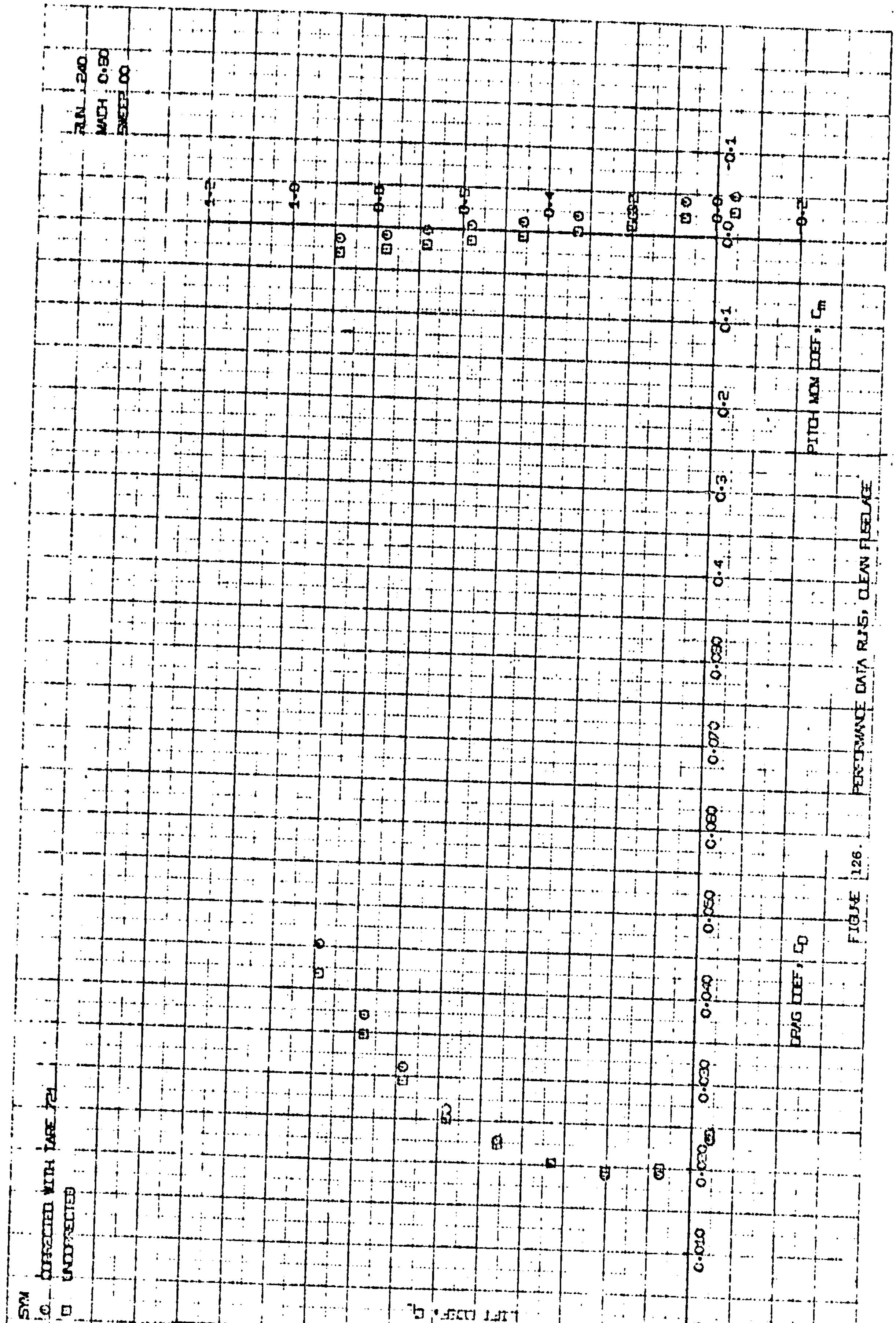

FIGURE 126. PERFORMANCE DATA RUNS, CLEAN FUSELAGE

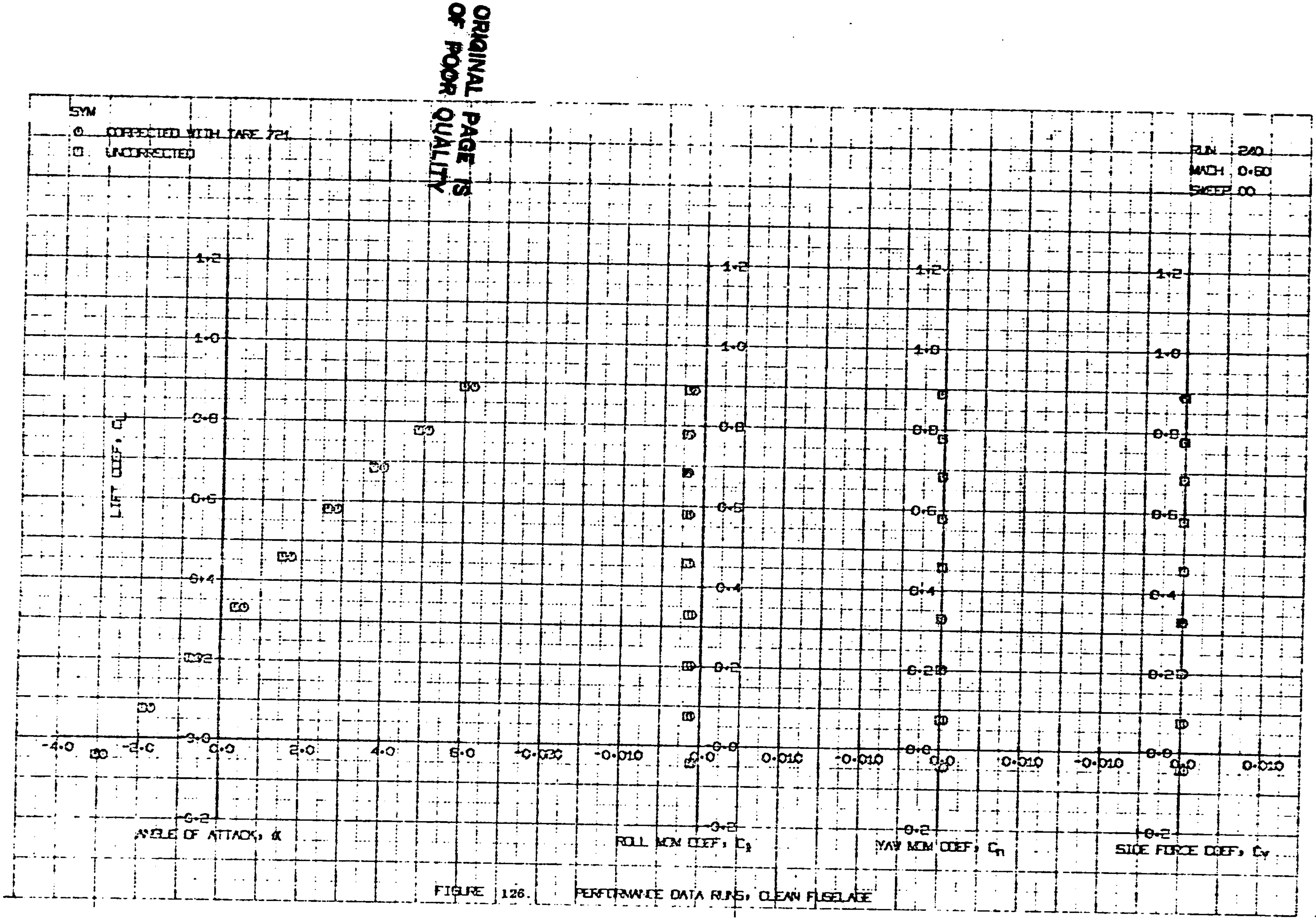

FIGURE 126. PERFORMANCE DATA RUNS, CLEAN FUSELAGE

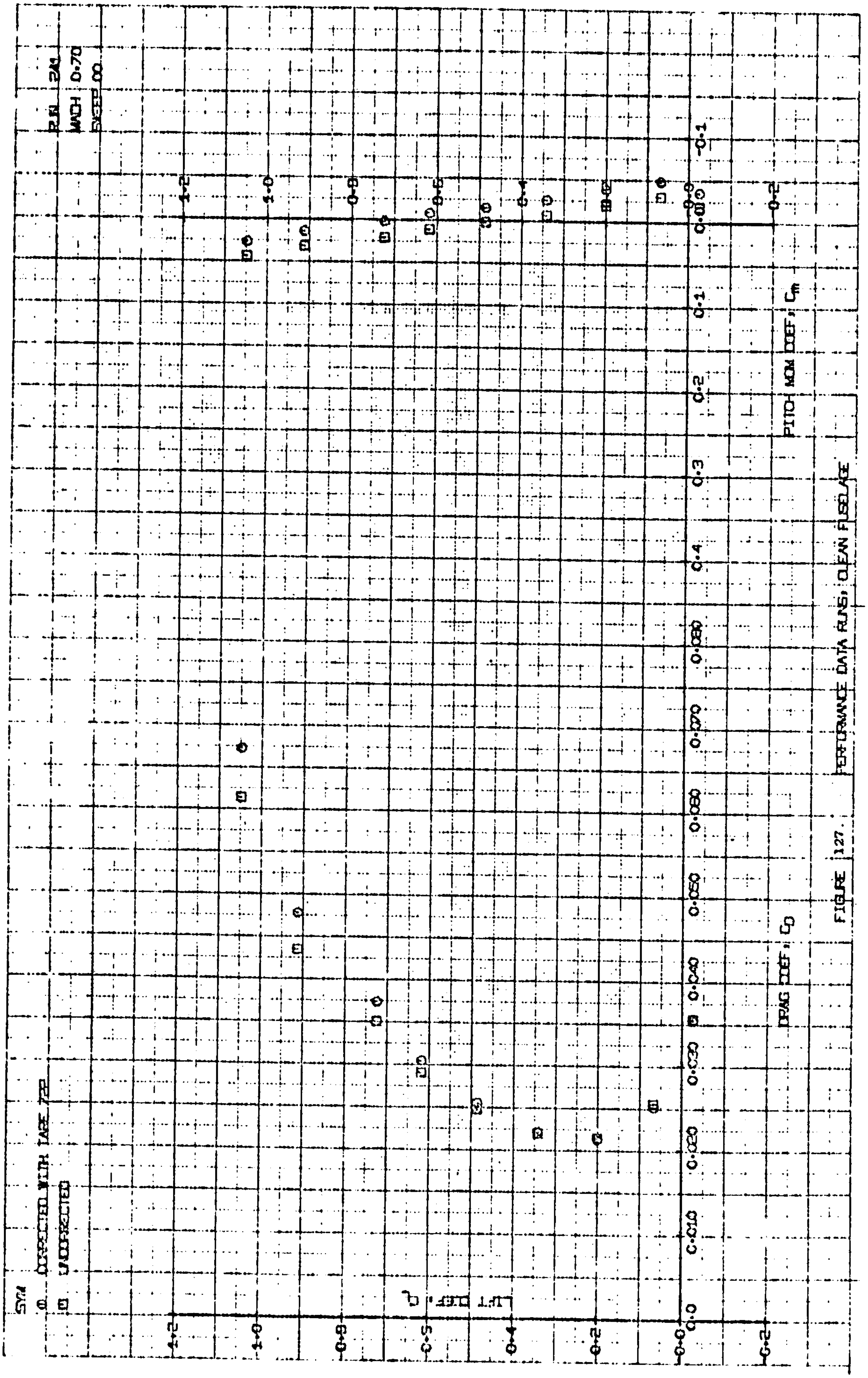

FIGURE 127. PERFORMANCE DATA RUNS, CLEAN FUSELAGE

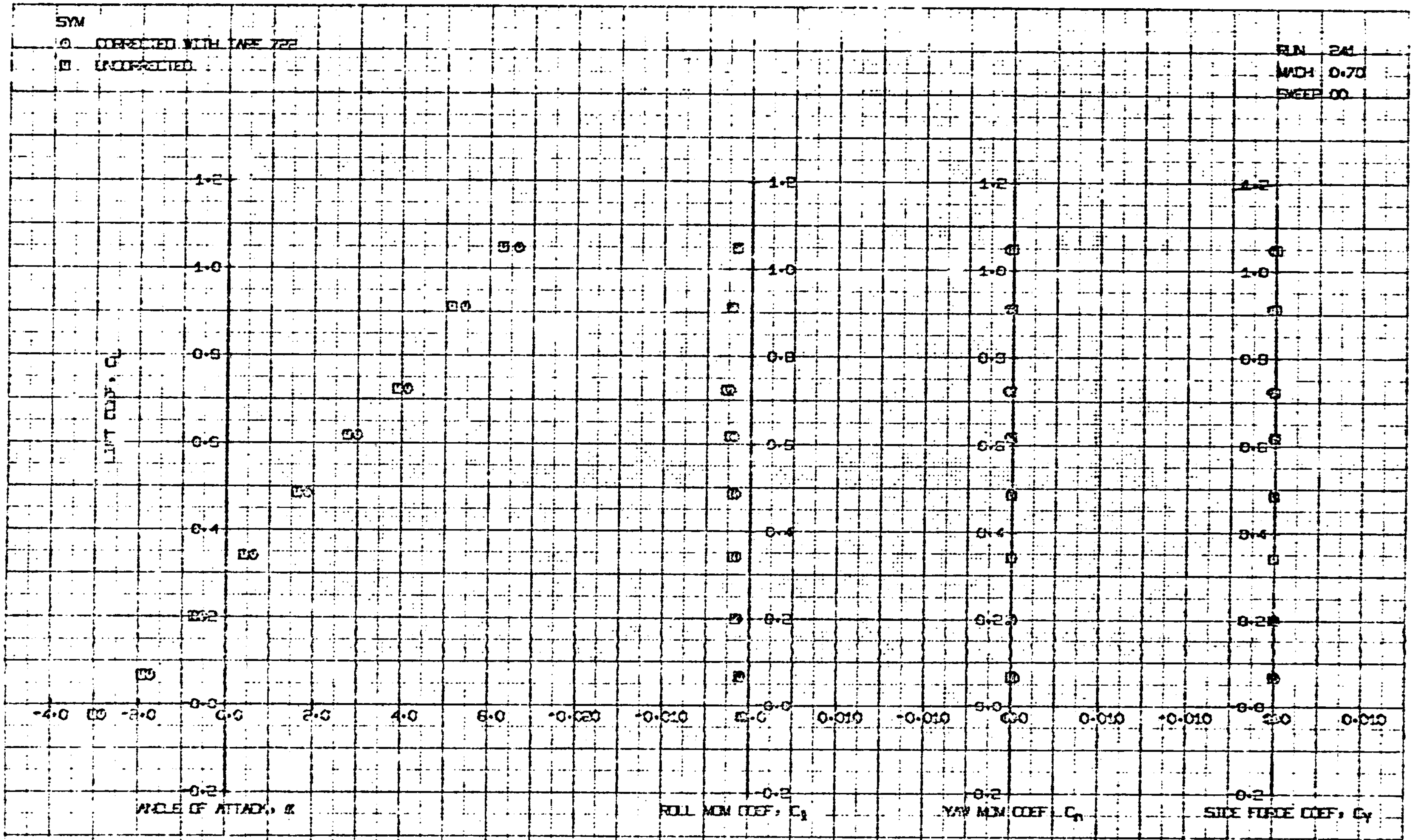

FIGURE 127. PERFORMANCE DATA RUNS, CLEAN FUSELAGE

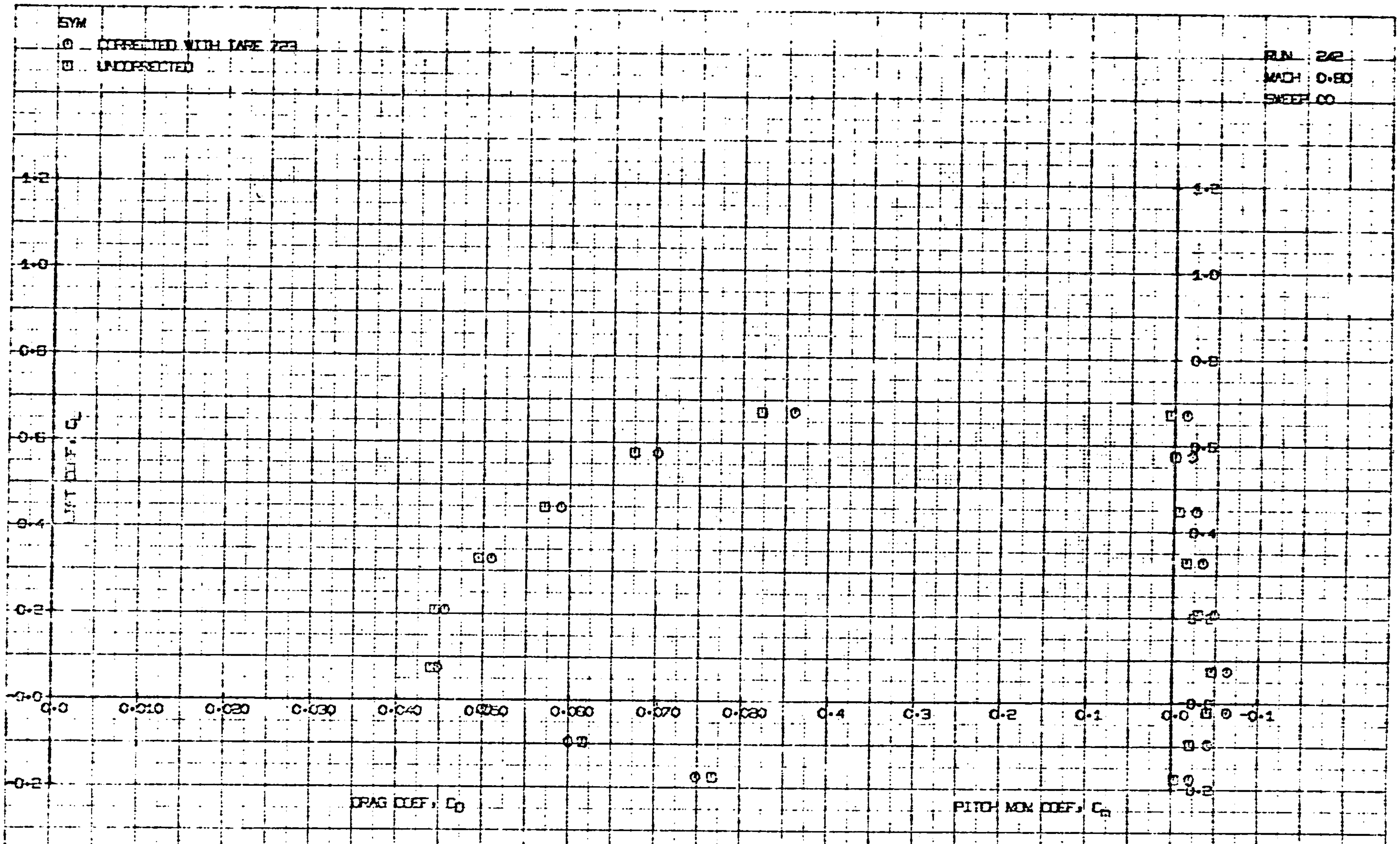

FIGURE 128. PERFORMANCE DATA RUNS, CLEAN FUSELAGE

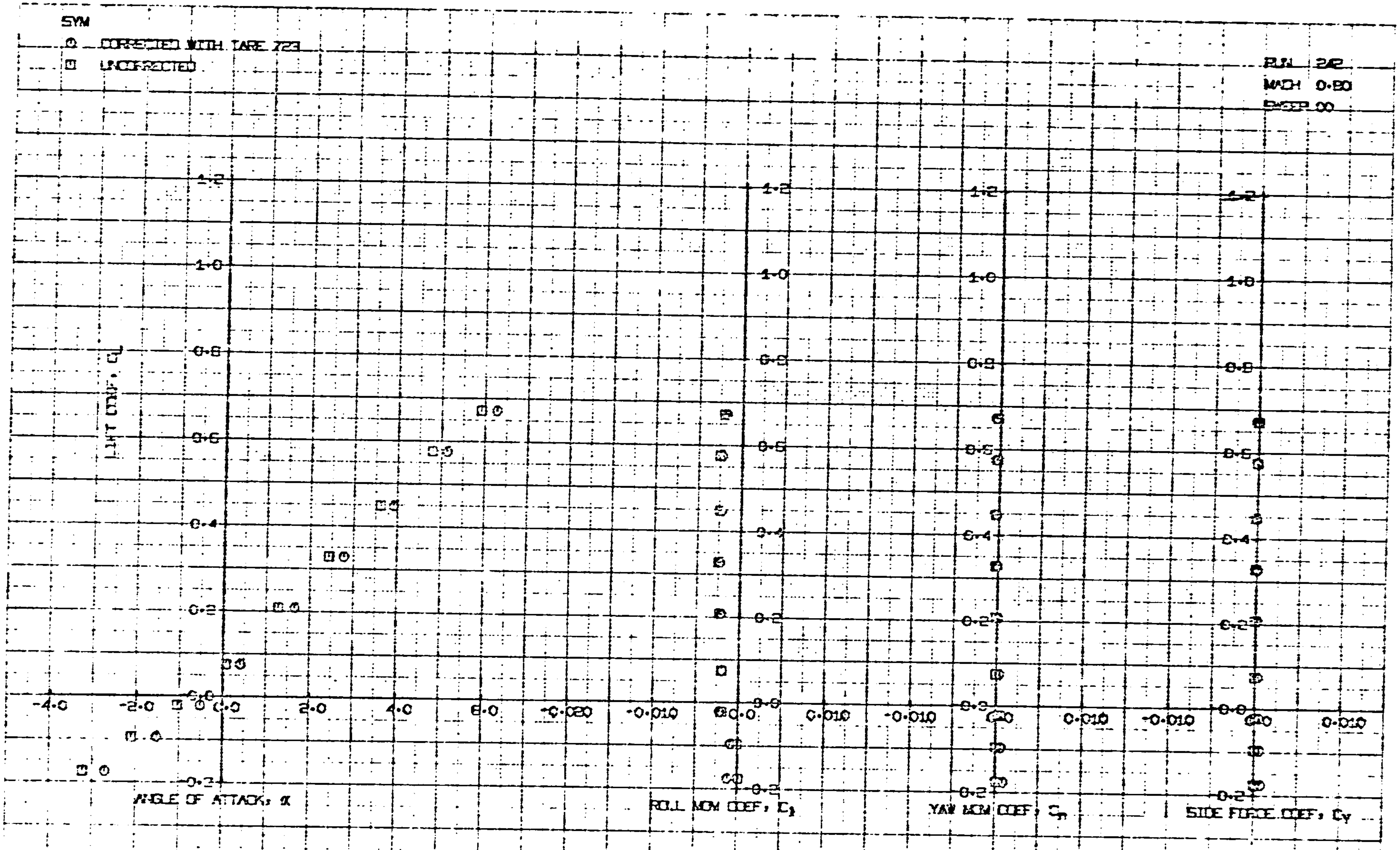

FIGURE 128. PERFORMANCE DATA RUNS, CLEAN FUSELAGE

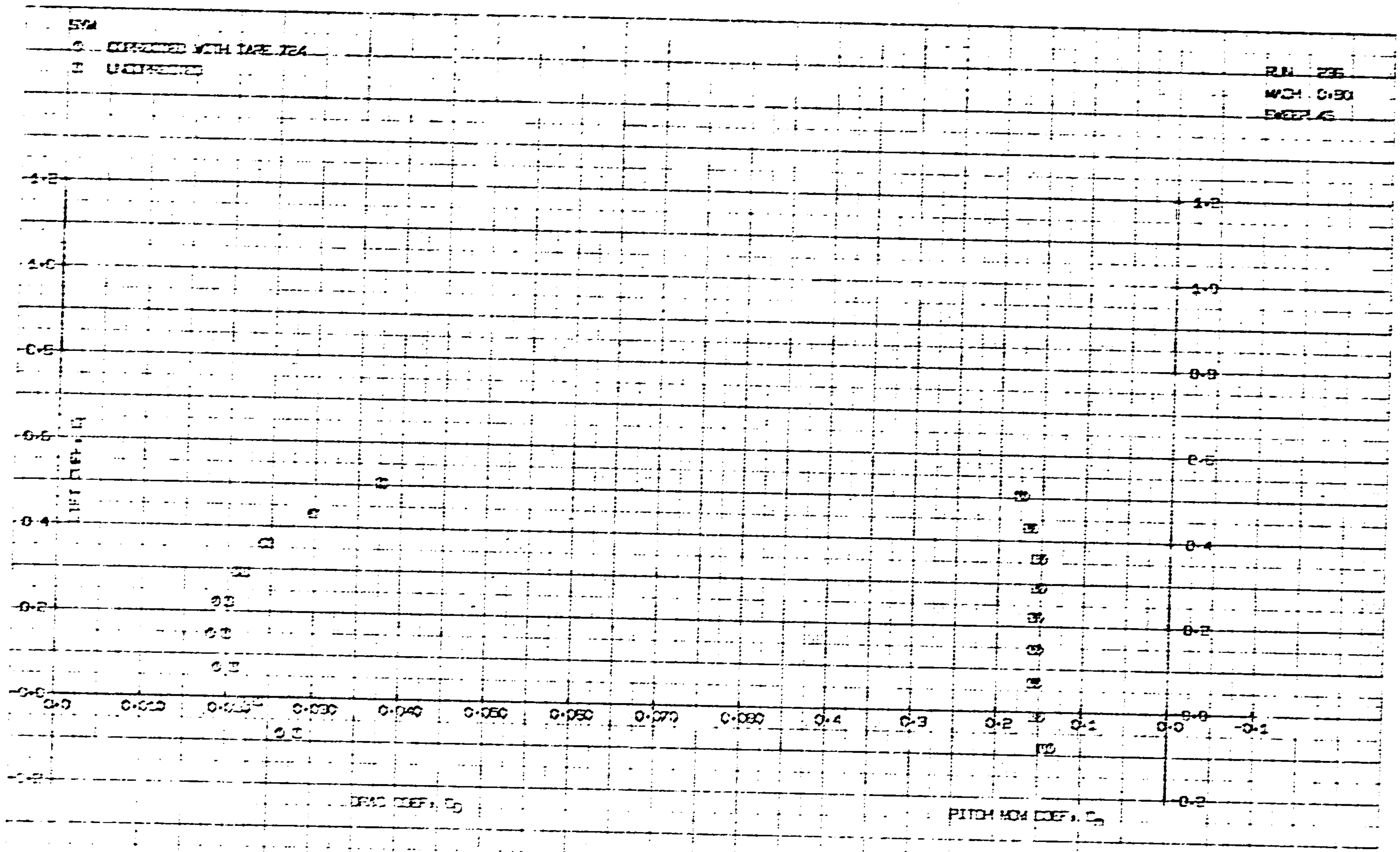

FIGURE 129. PERFORMANCE DATA RUNS, CLEAN FUSELAGE

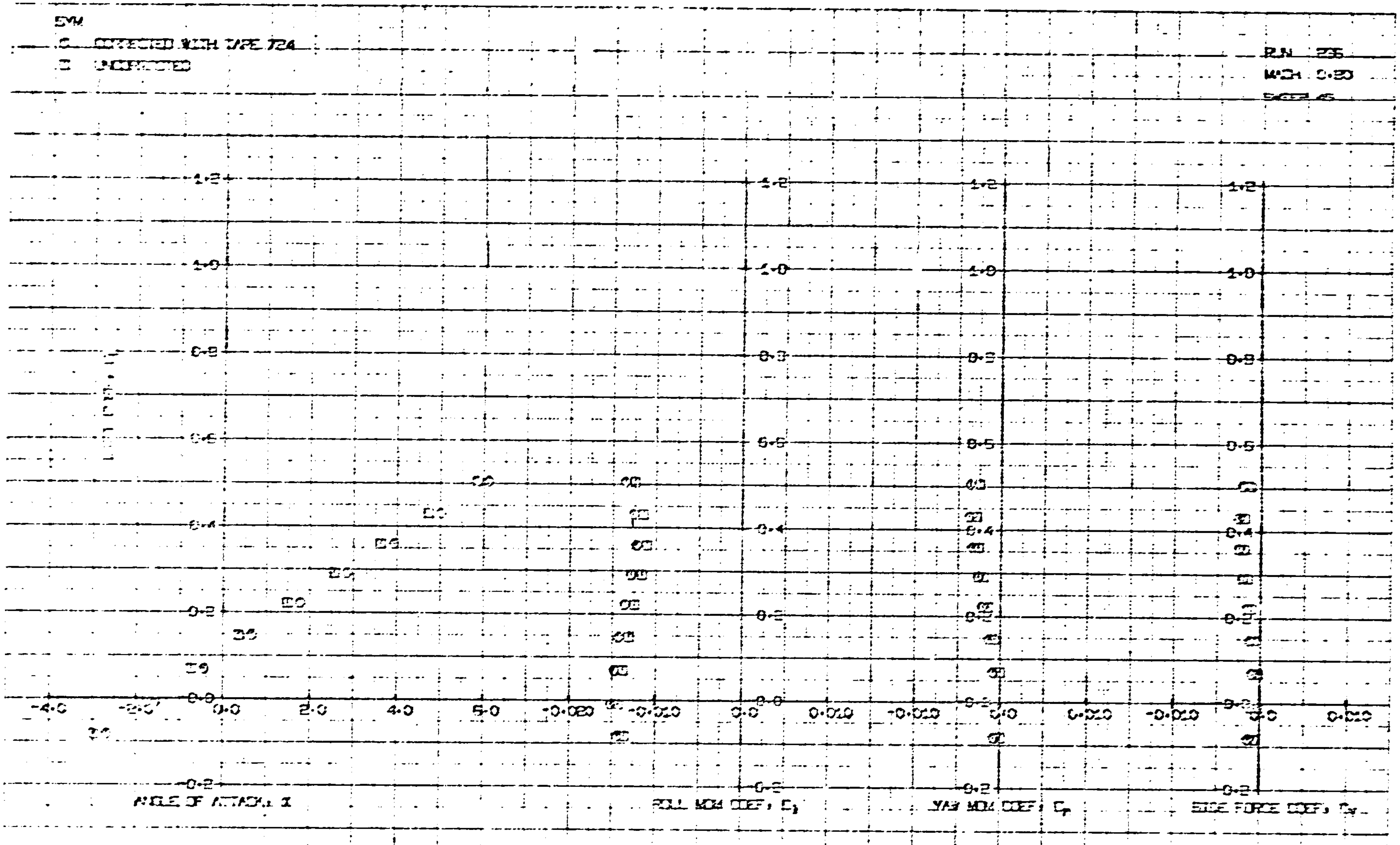

FIGURE 229. PERFORMANCE DATA RUNS, CLEAN FUSELAGE

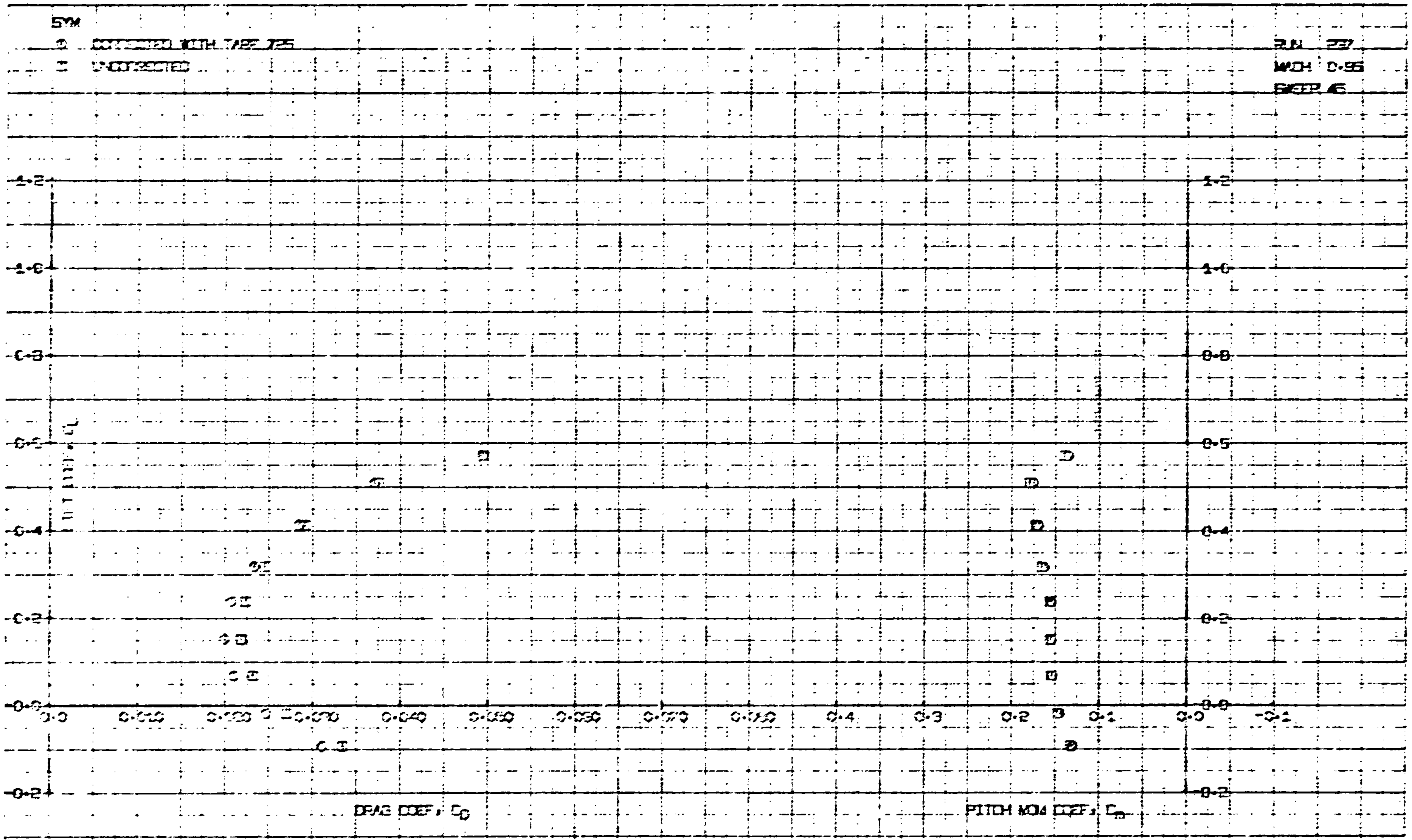

FIGURE 135. PERFORMANCE DATA RUNS, CLEAN FUSELAGE

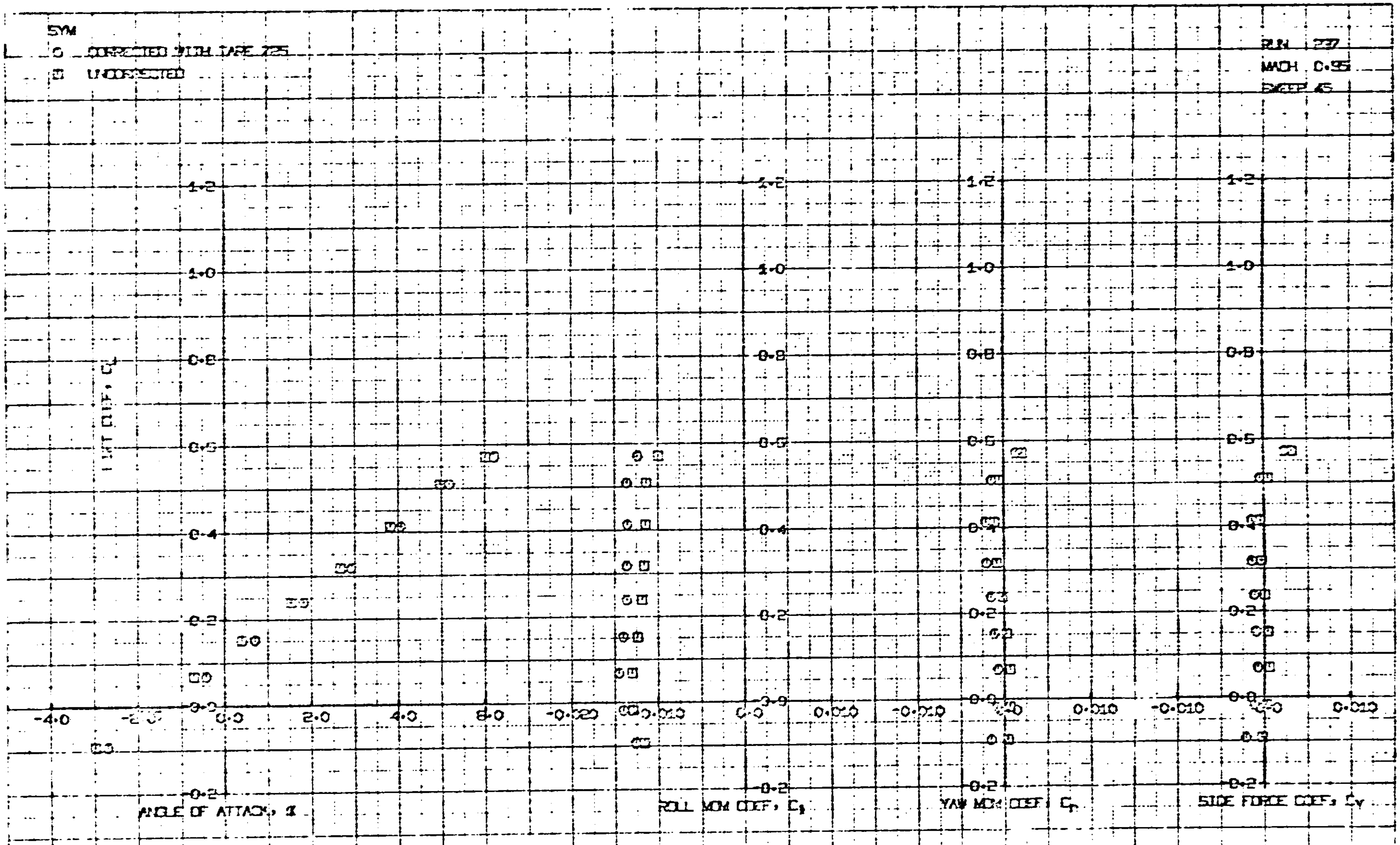

FIGURE 130. PERFORMANCE DATA RUNS, CLEAN FUSELAGE

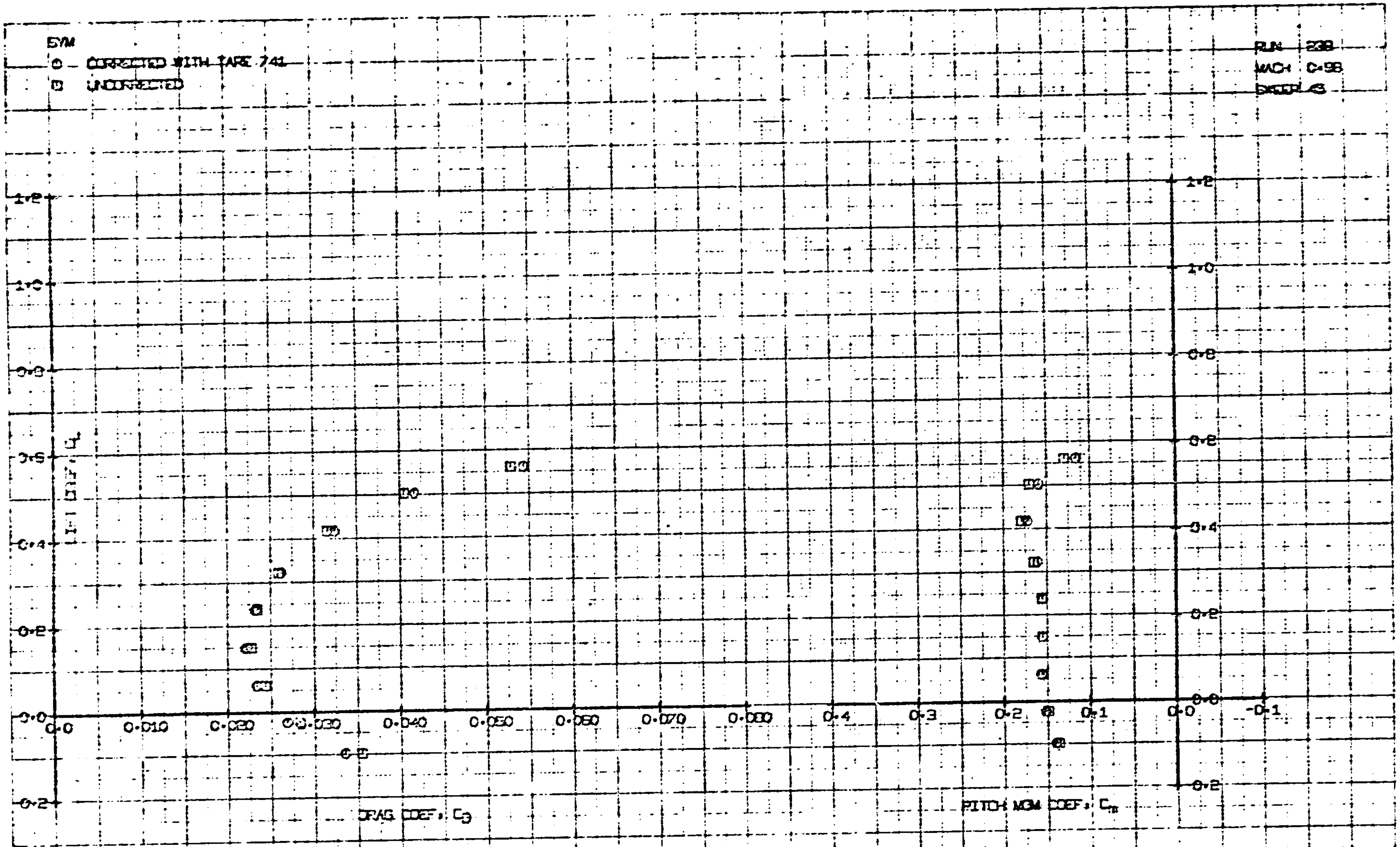

FIGURE 131. PERFORMANCE DATA RUNS, CLEAN FUSELAGE

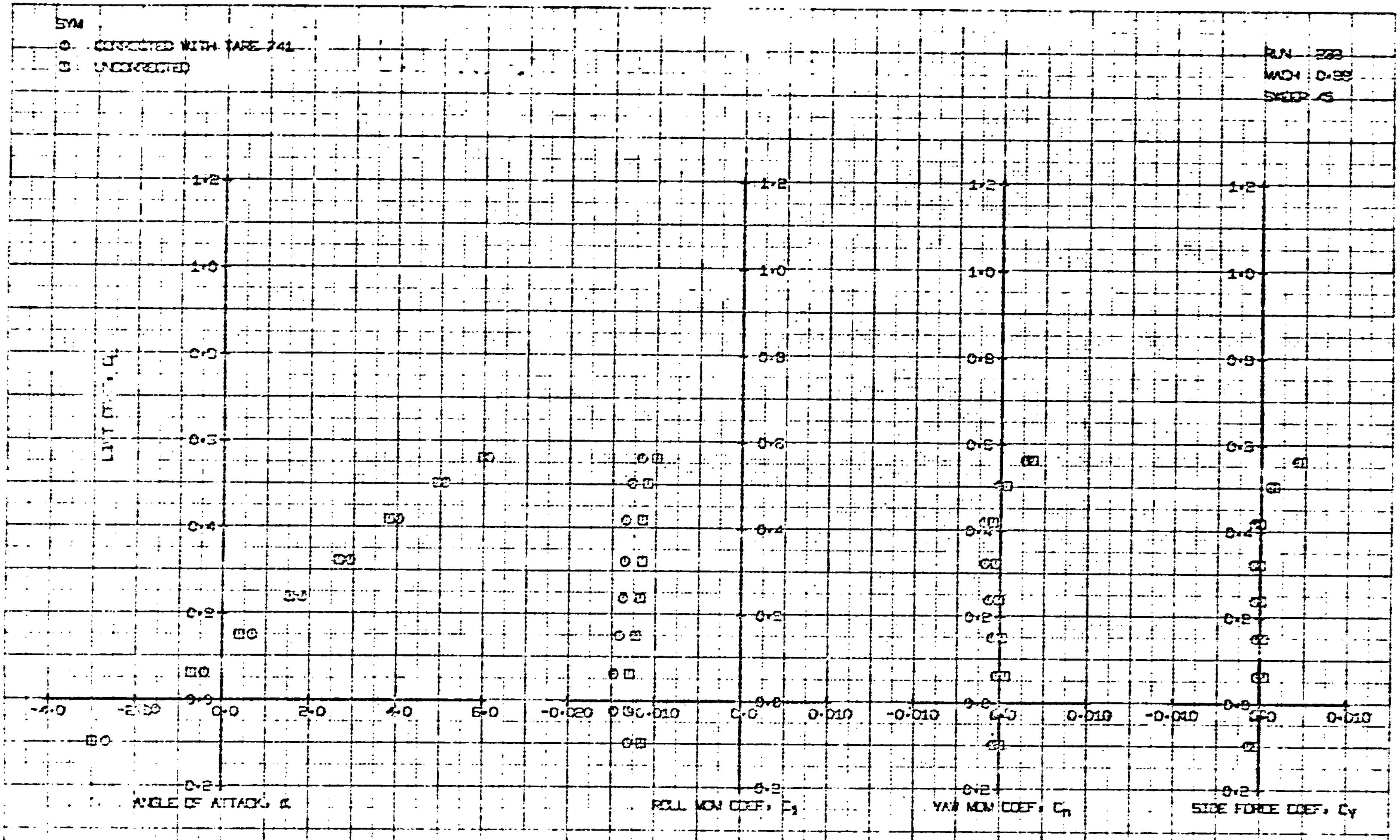

FIGURE 131. PERFORMANCE DATA RUNS, CLEAN FUSELAGE

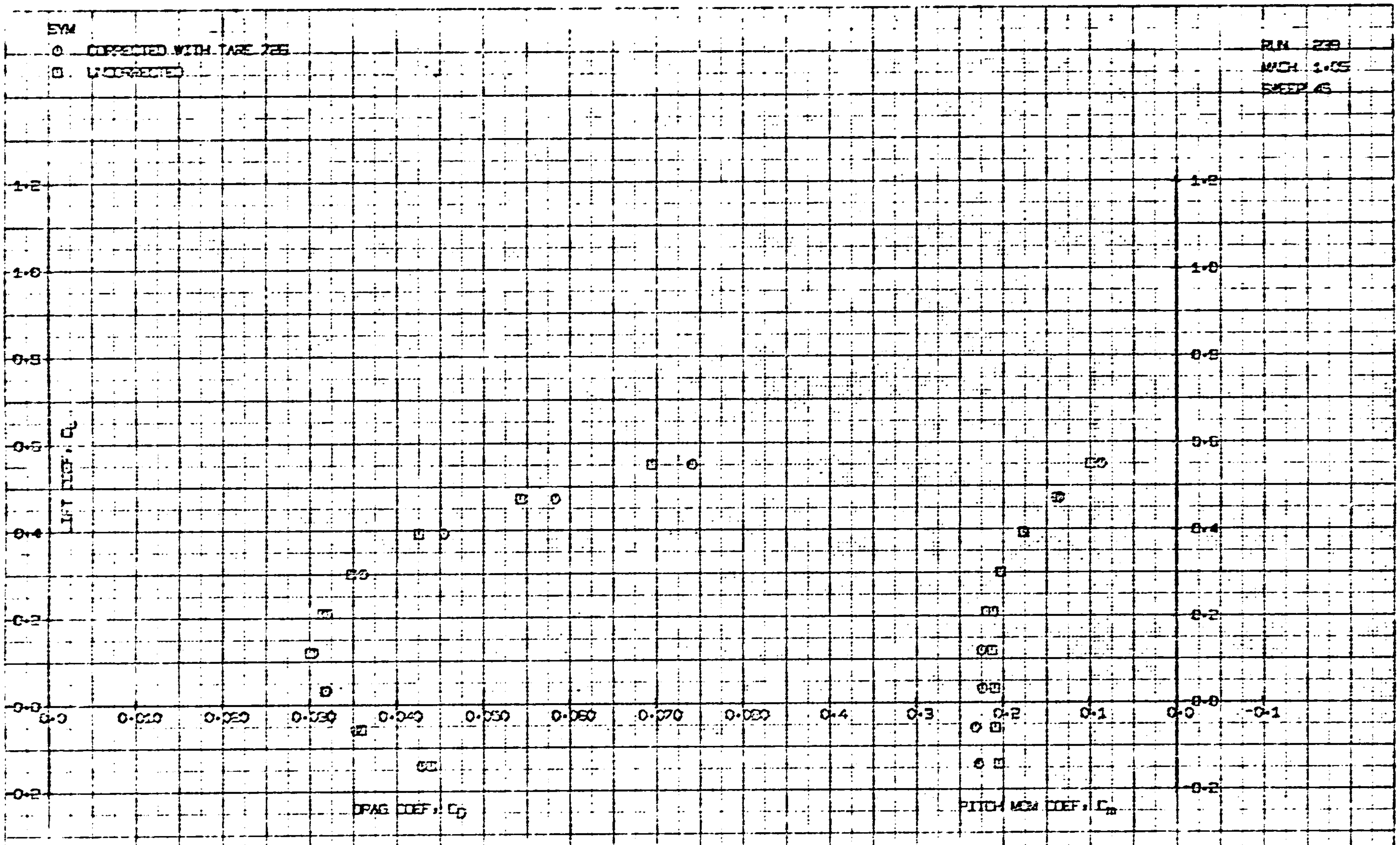

FIGURE 132. PERFORMANCE DATA RUNS, CLEAN FUSELAGE

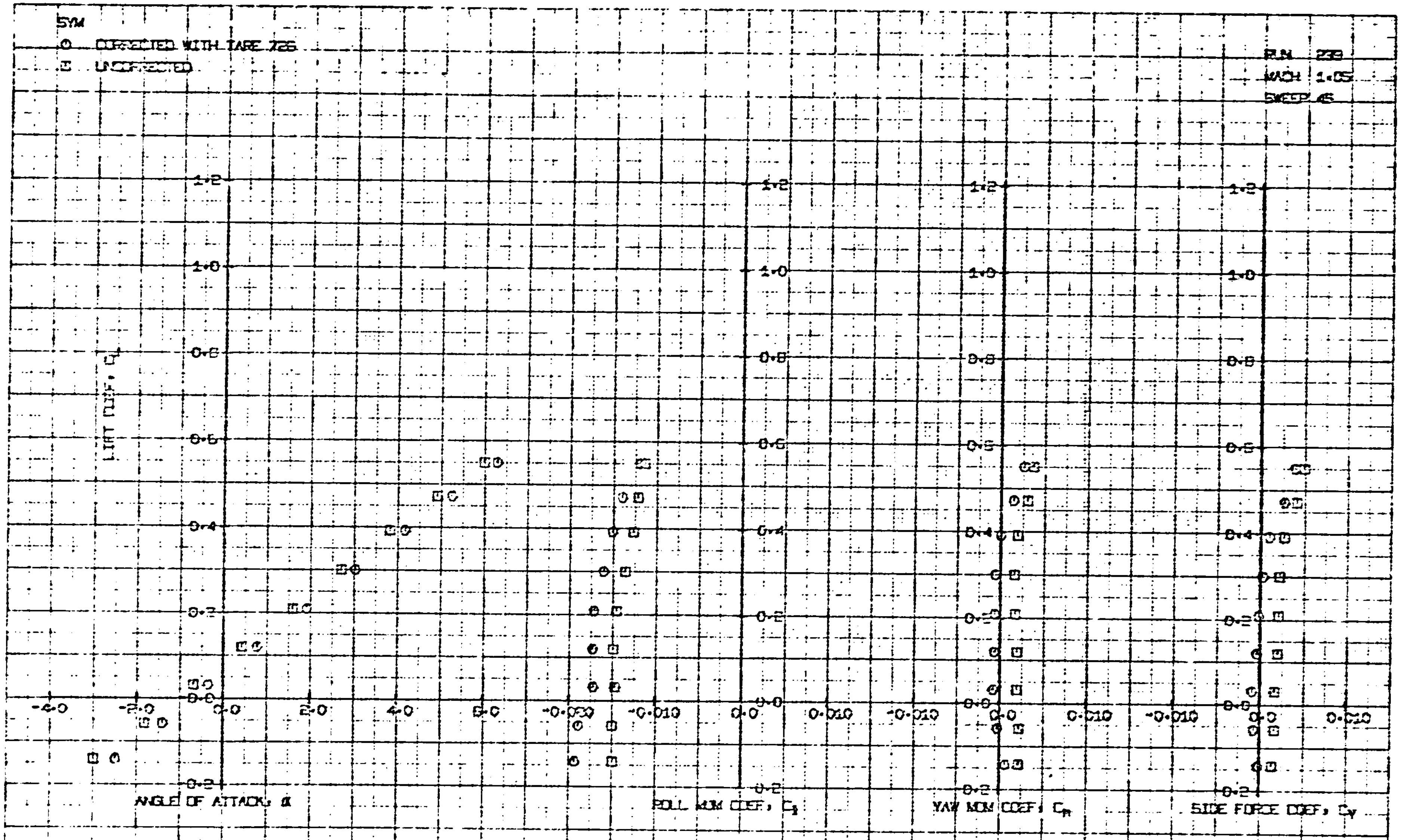

FIGURE 132. PERFORMANCE DATA RUNS, CLEAN FUSELAGE

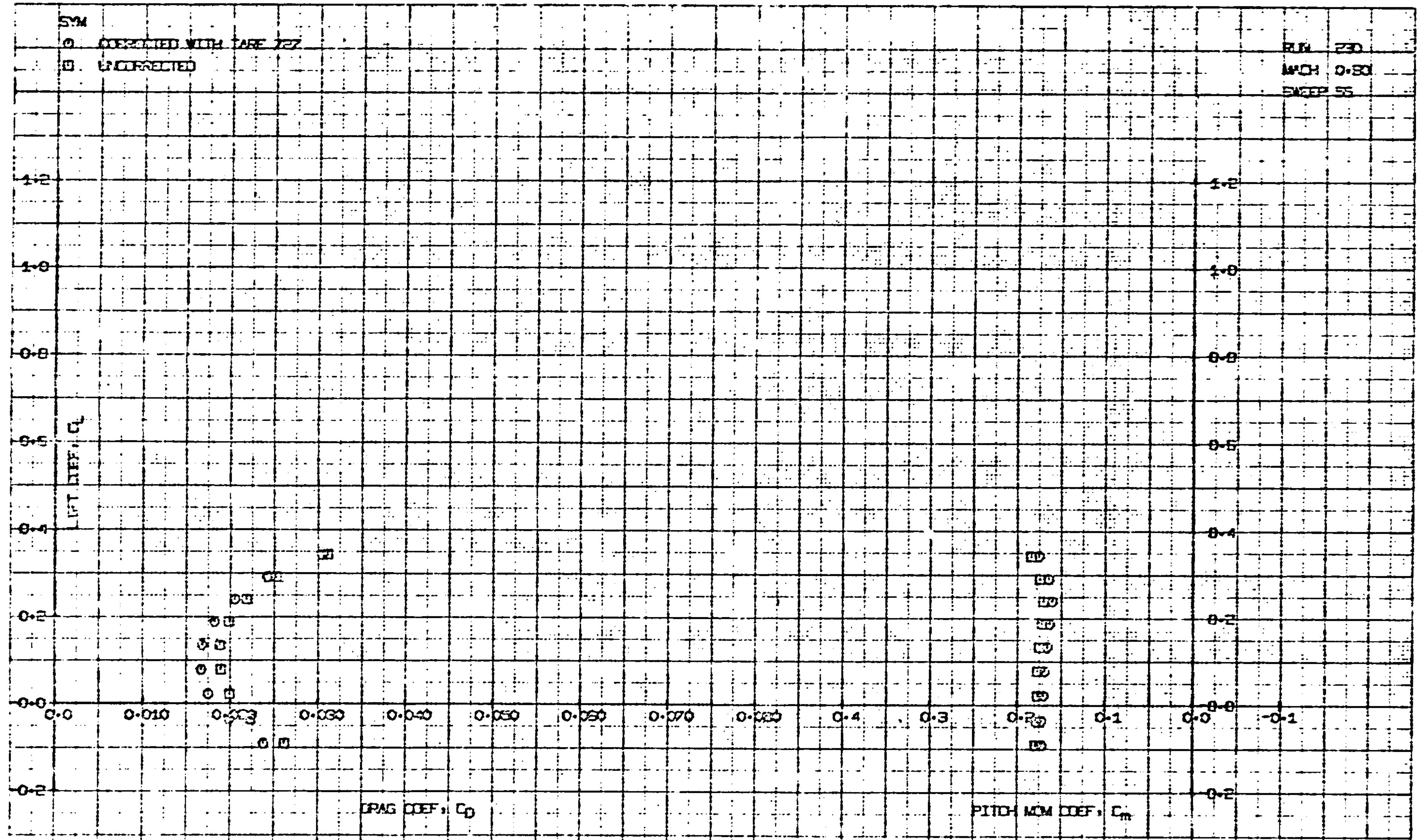

FIGURE 133. PERFORMANCE DATA RUNS, CLEAN FUSELAGE

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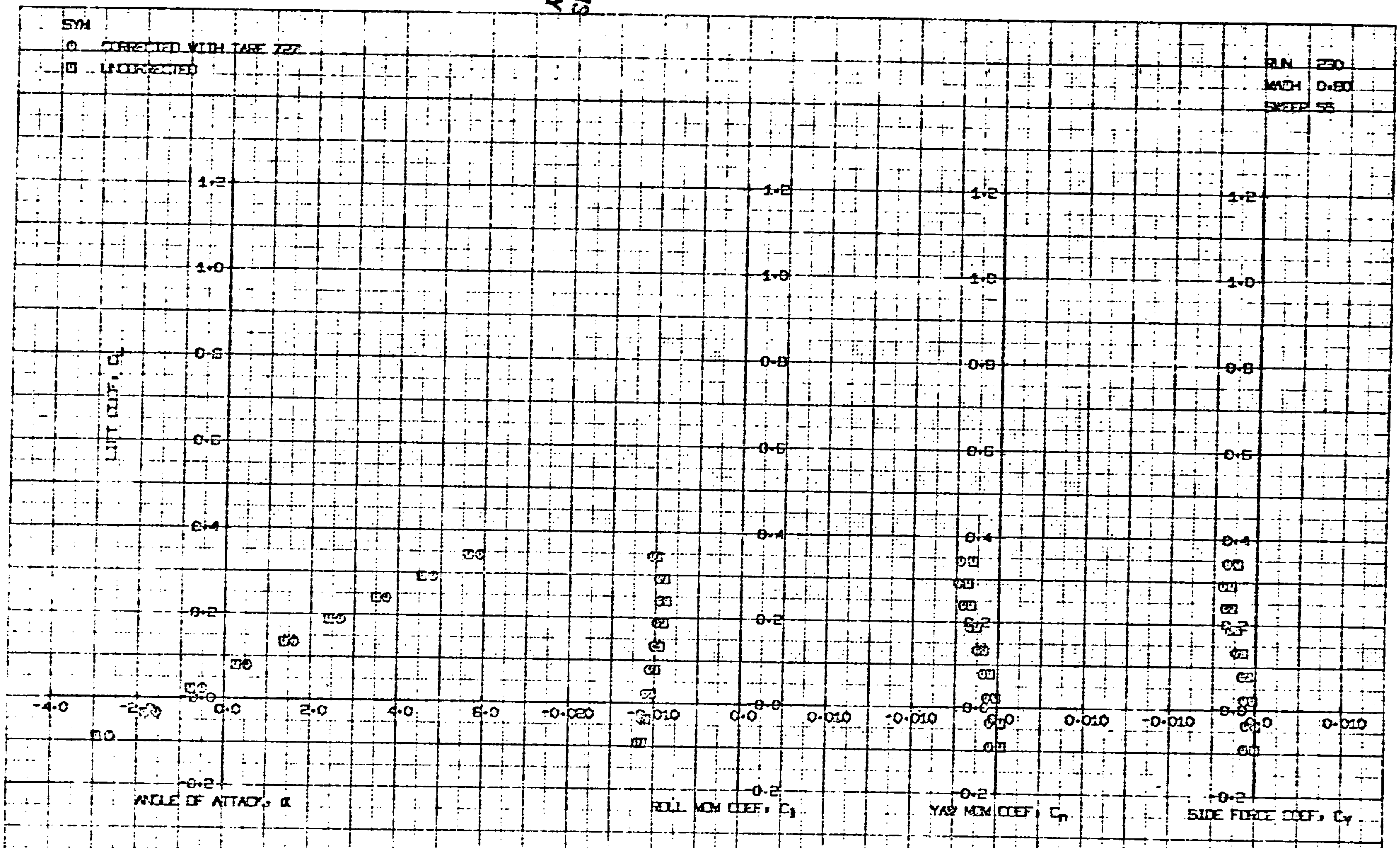


FIGURE 133. PERFORMANCE DATA RUNS, CLEAN FUSELAGE

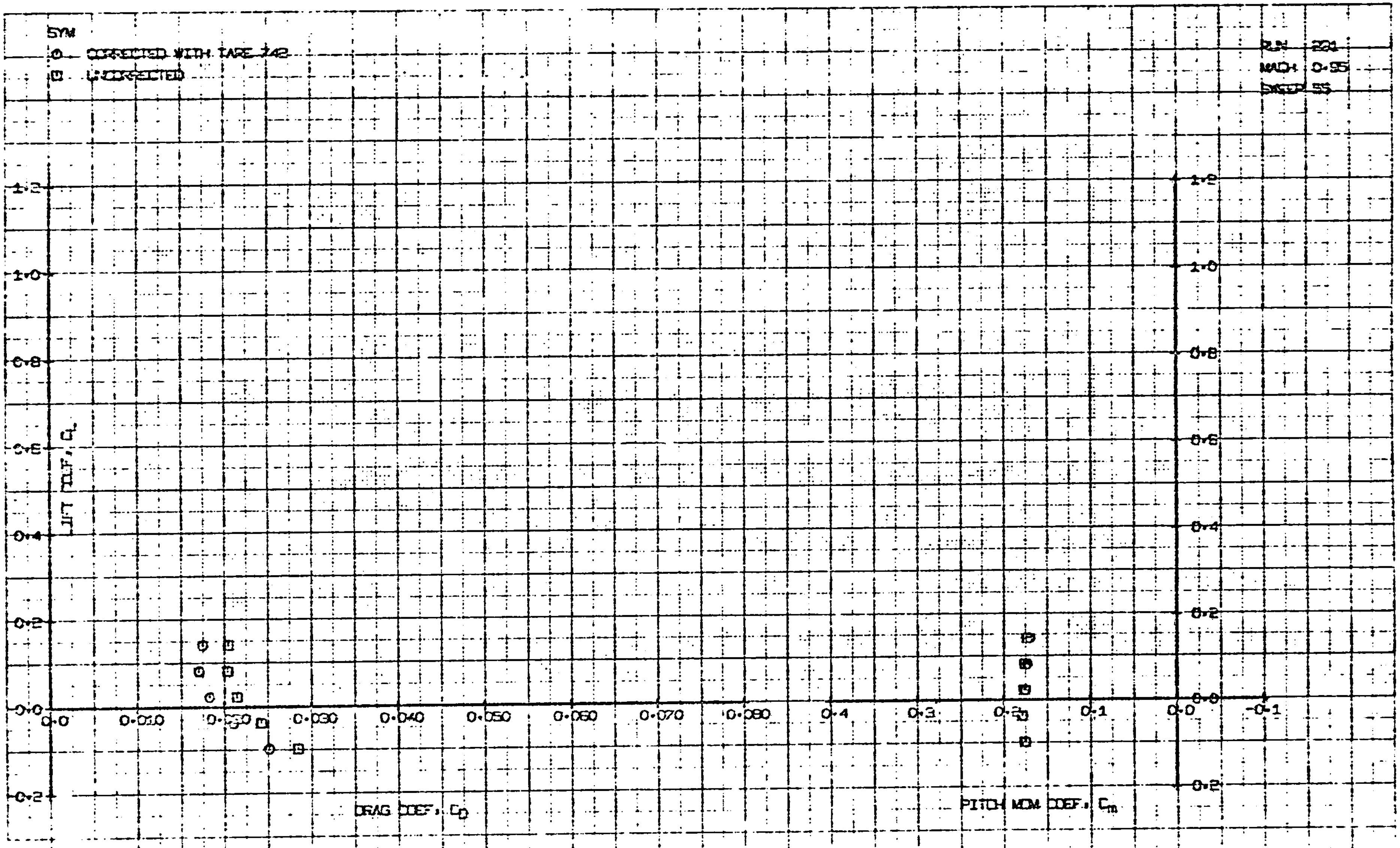


FIGURE 134. PERFORMANCE DATA RUNS; CLEAN FUSELAGE

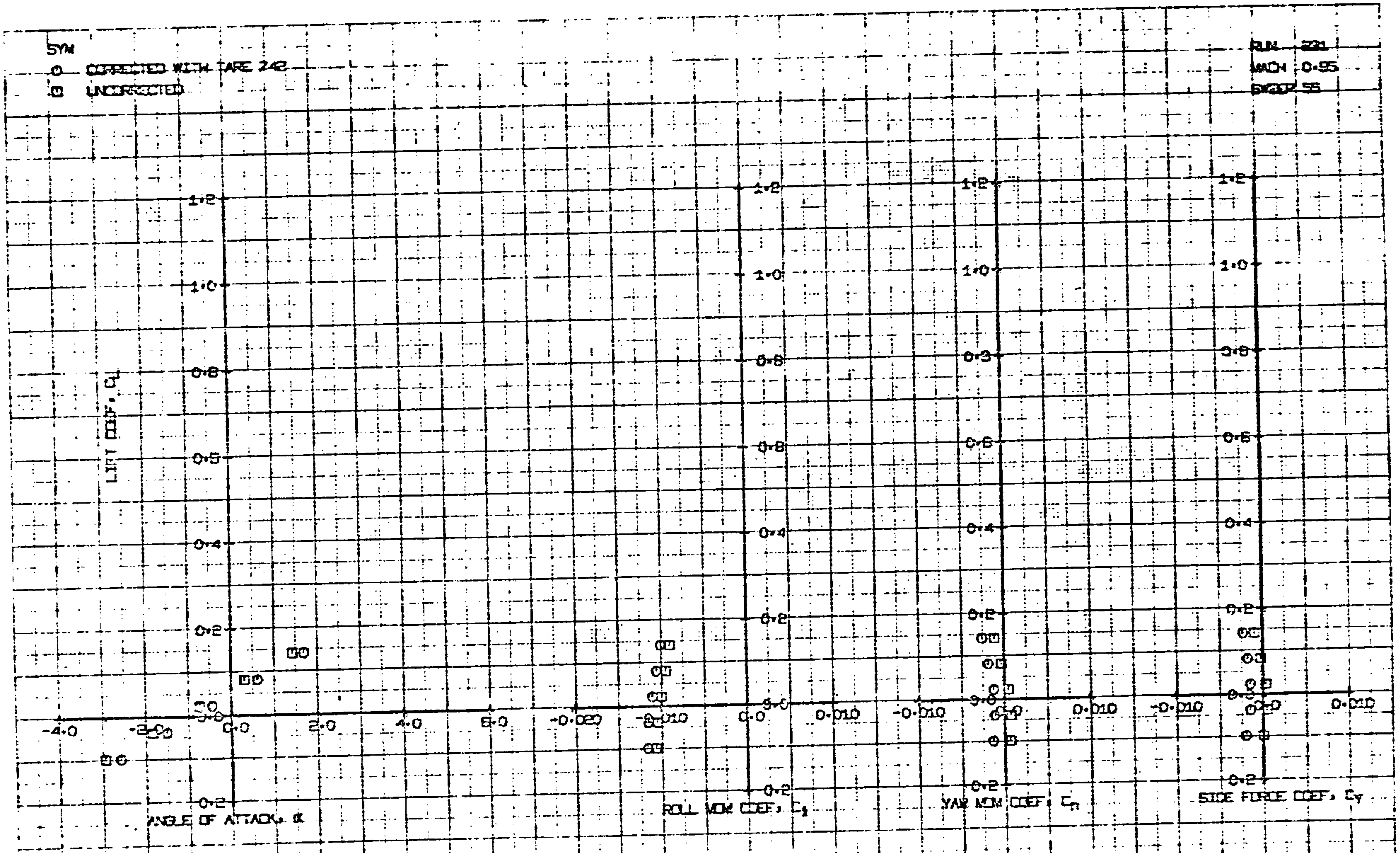


FIGURE 134. PERFORMANCE DATA RUNS, CLEAN FUSELAGE

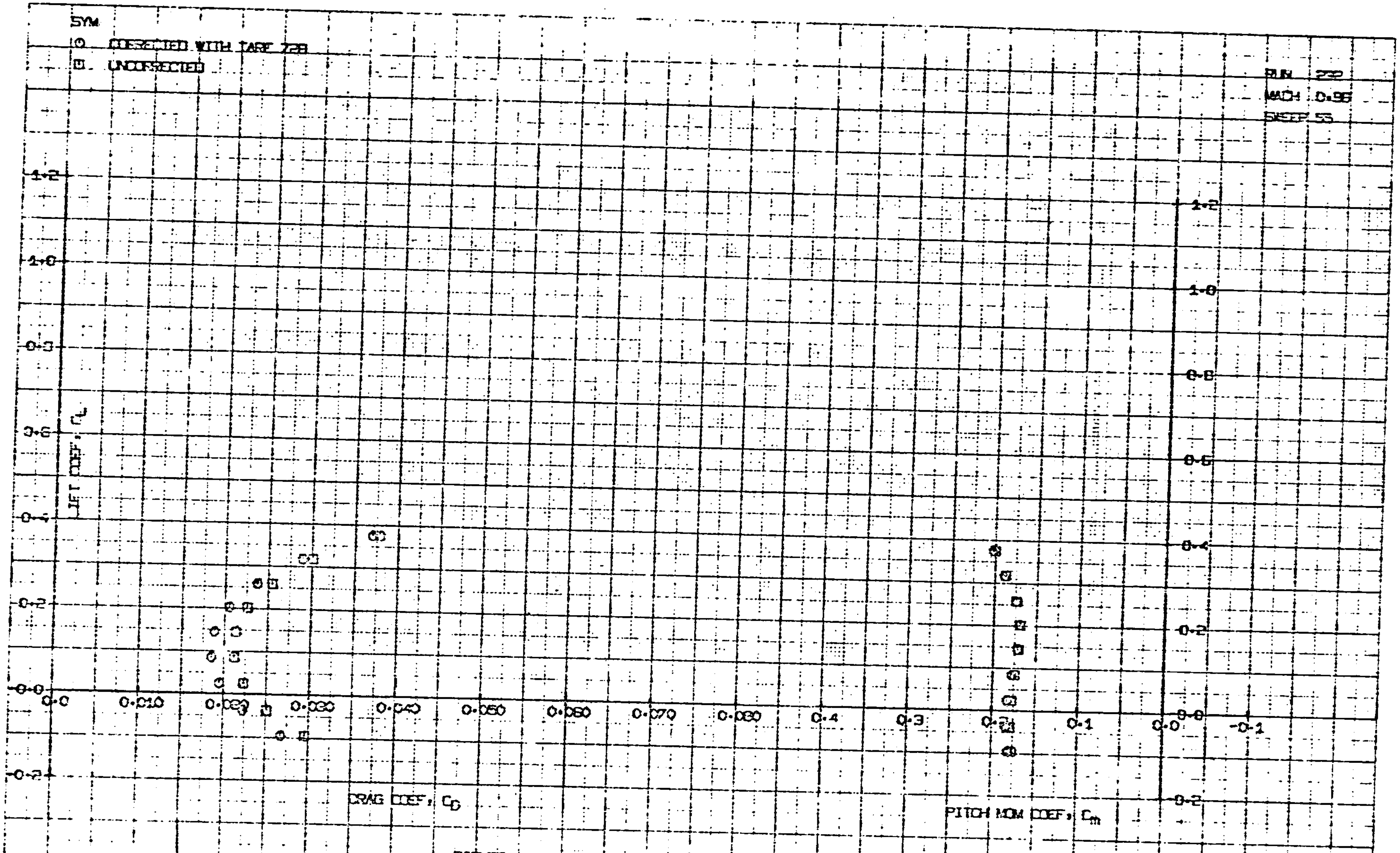


FIGURE 135. PERFORMANCE DATA RUNS, CLEAN FUSELAGE

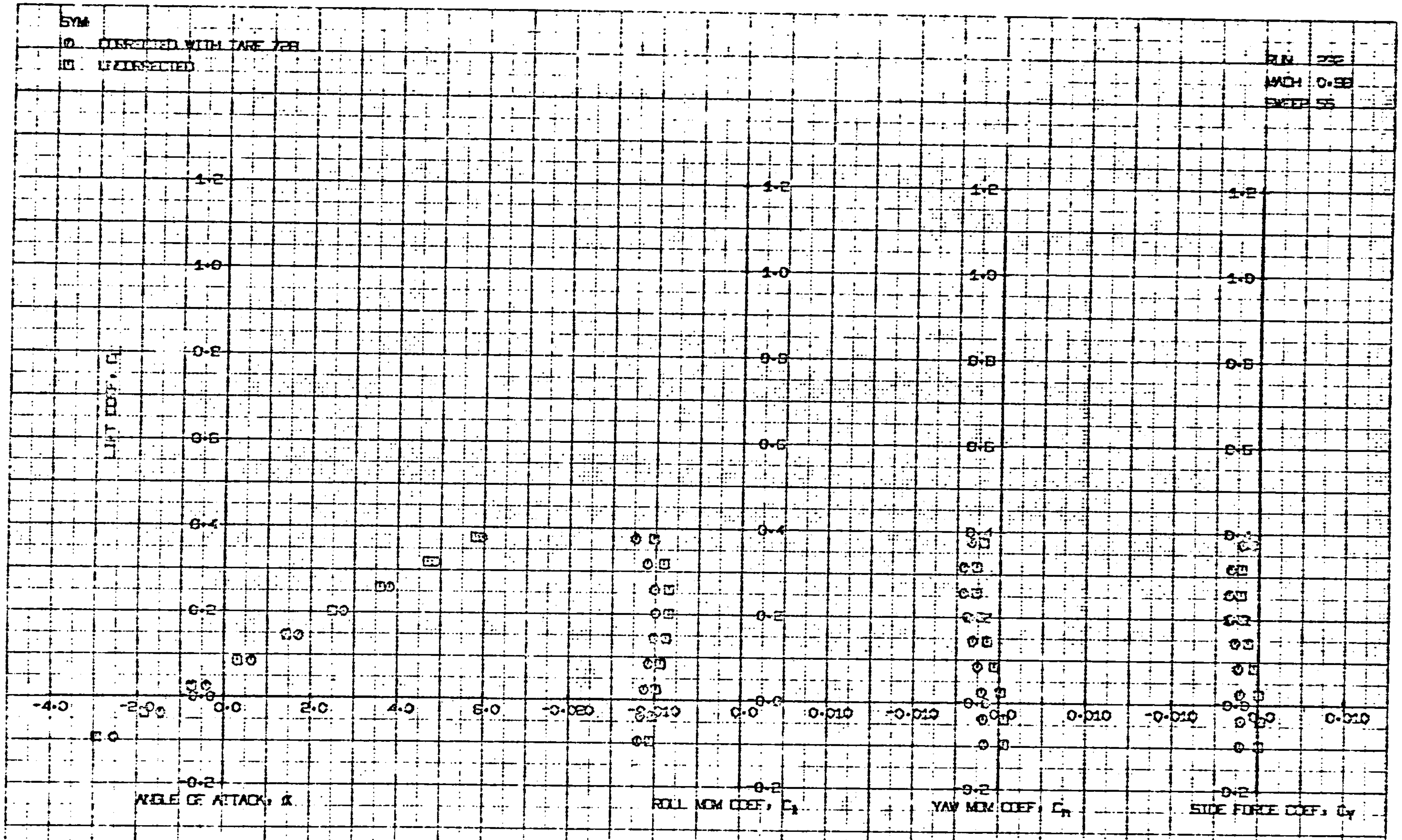
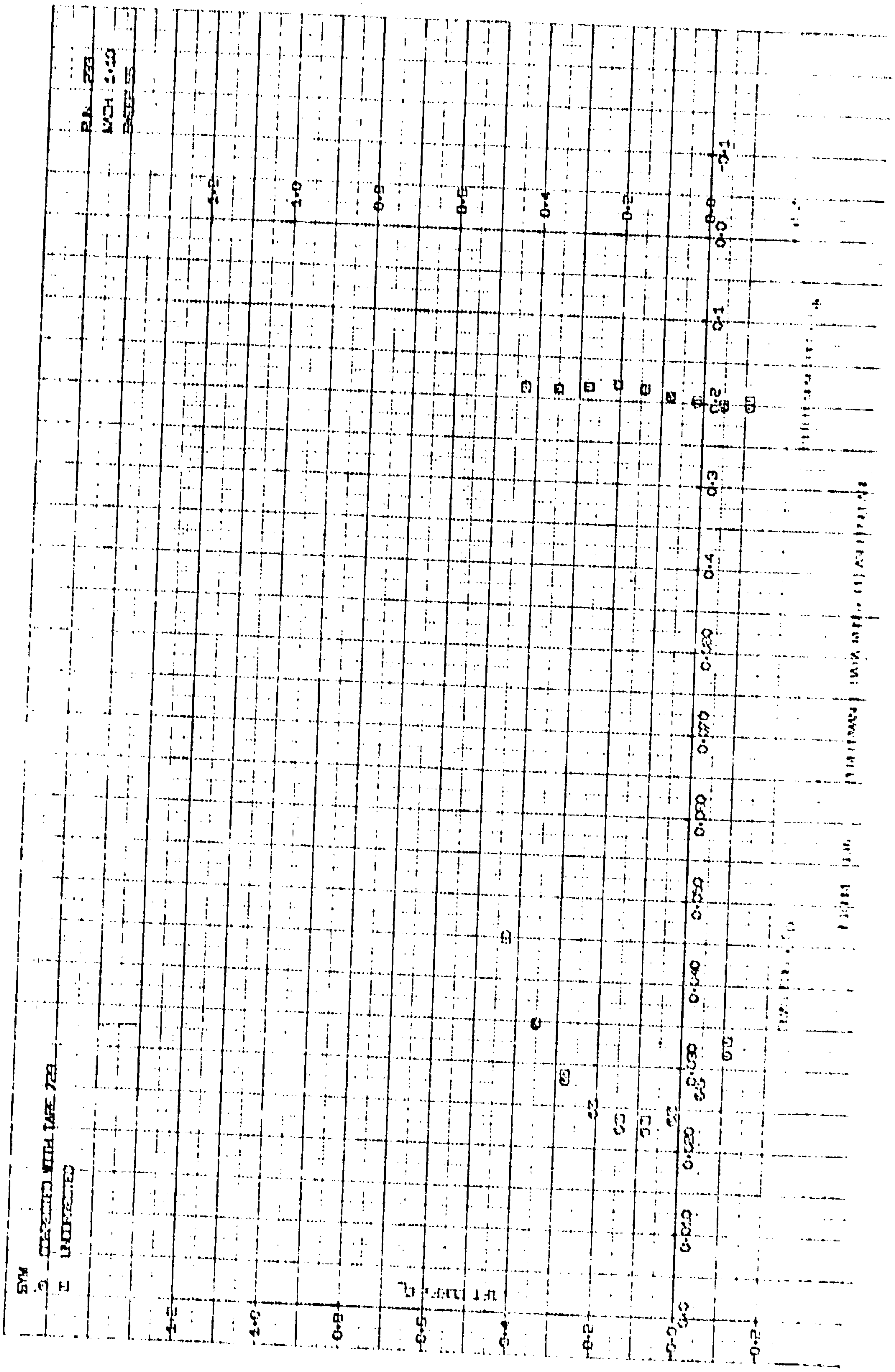


FIGURE 135. PERFORMANCE DATA RUNS, CLEAN FUSELAGE


SYM
UNCORRECTED
1.2
1.0
0.8
0.6
0.4
0.2
0.0
-0.2
0.010
0.020
0.030
0.040
0.050
0.060
0.070
0.080
0.4
0.3
0.2
0.1
0.0
-0.1

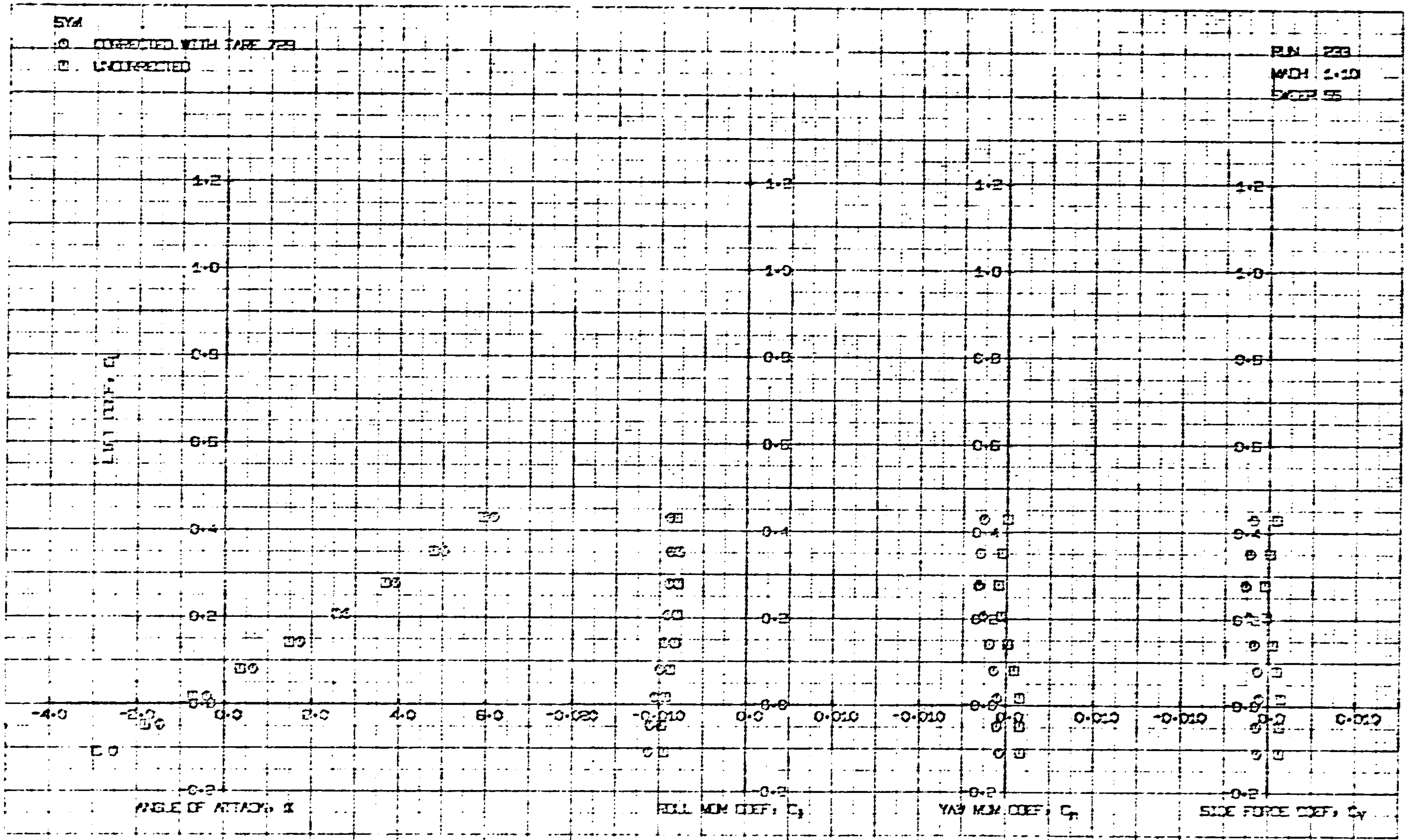


FIGURE 136.1 PERFORMANCE DATA RUNS, CLEAN FUSELAGE

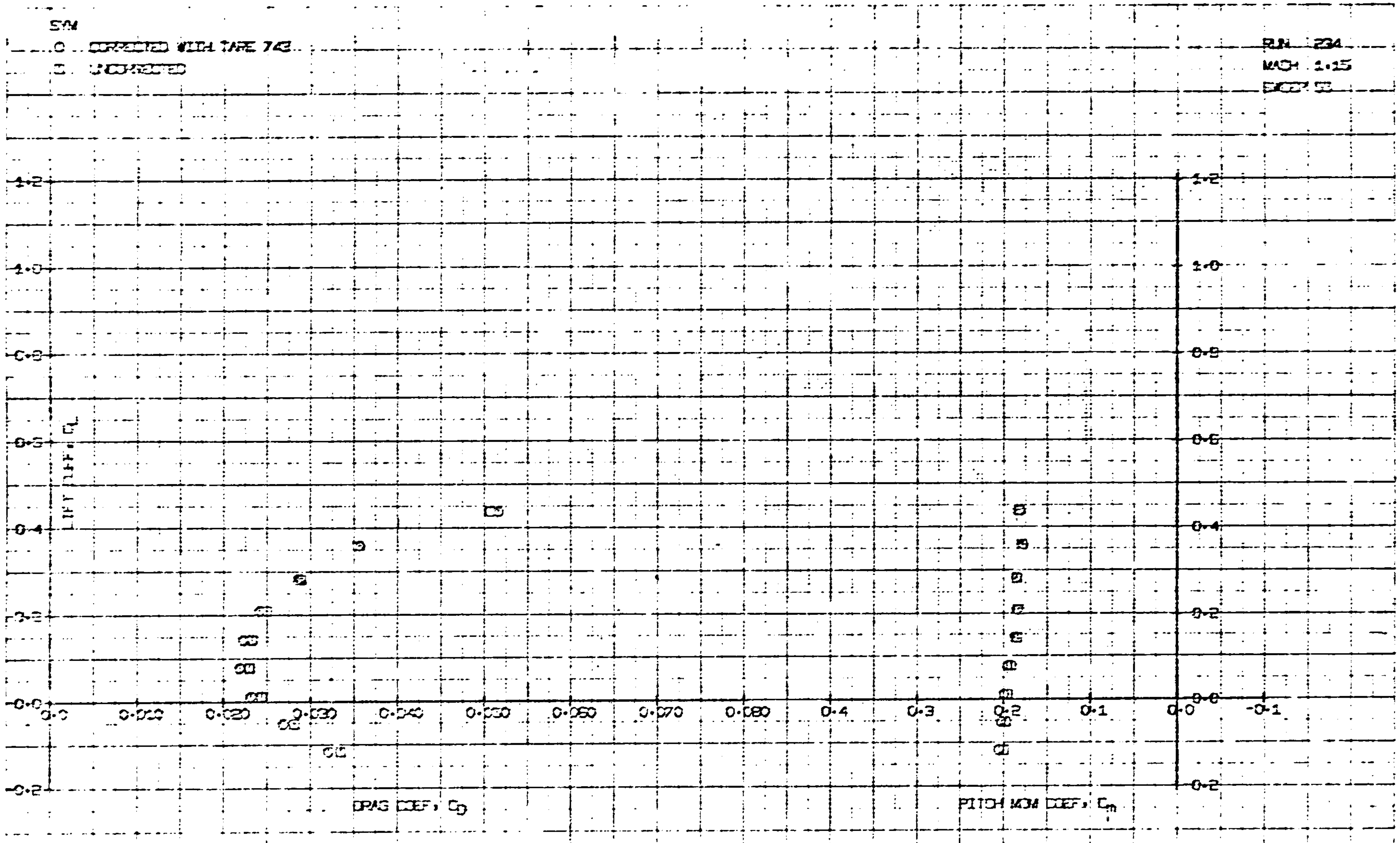


FIGURE 137. PERFORMANCE DATA RUNS, CLEAN FUSELAGE

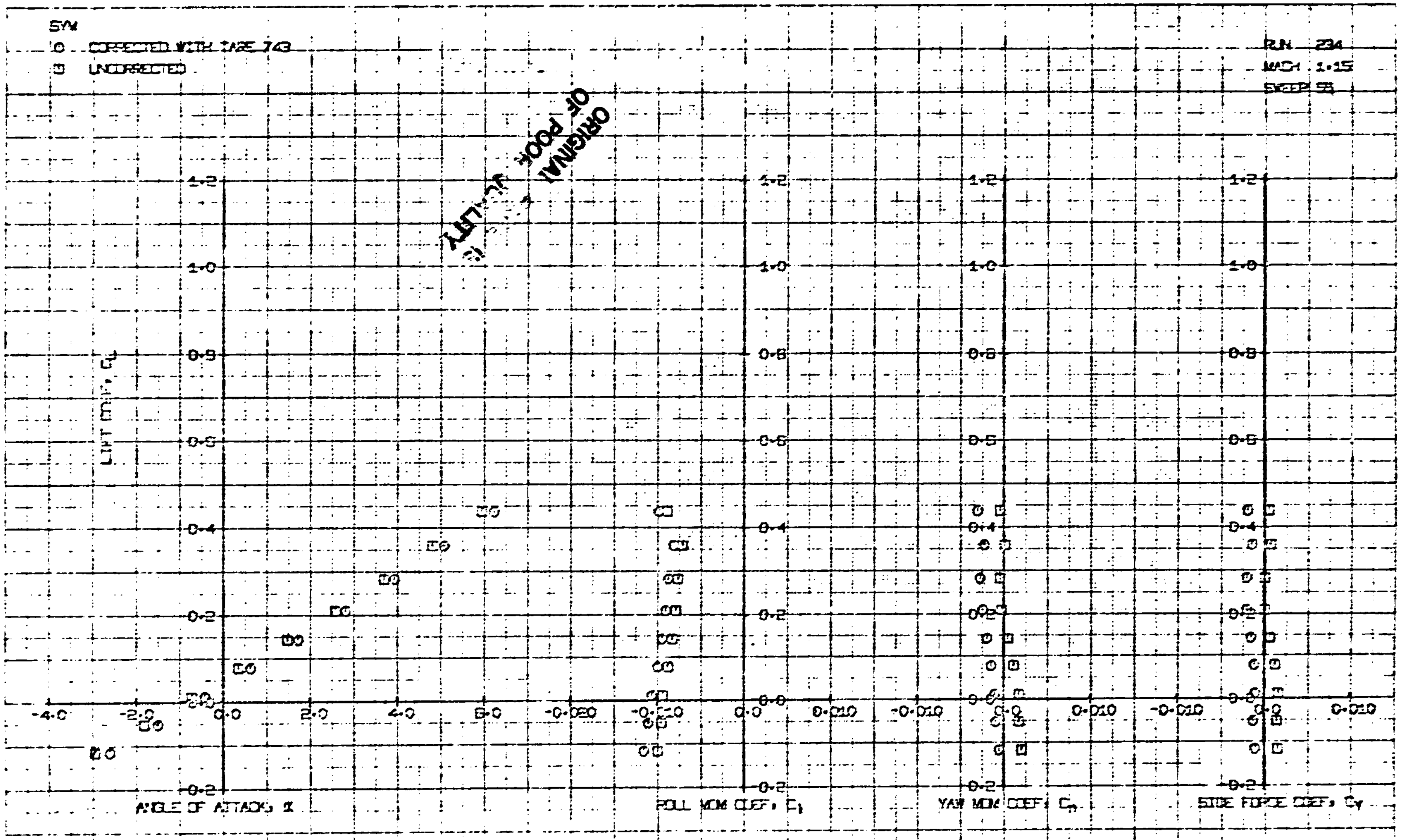


FIGURE 137. PERFORMANCE DATA RUNS, CLEAN FUSELAGE

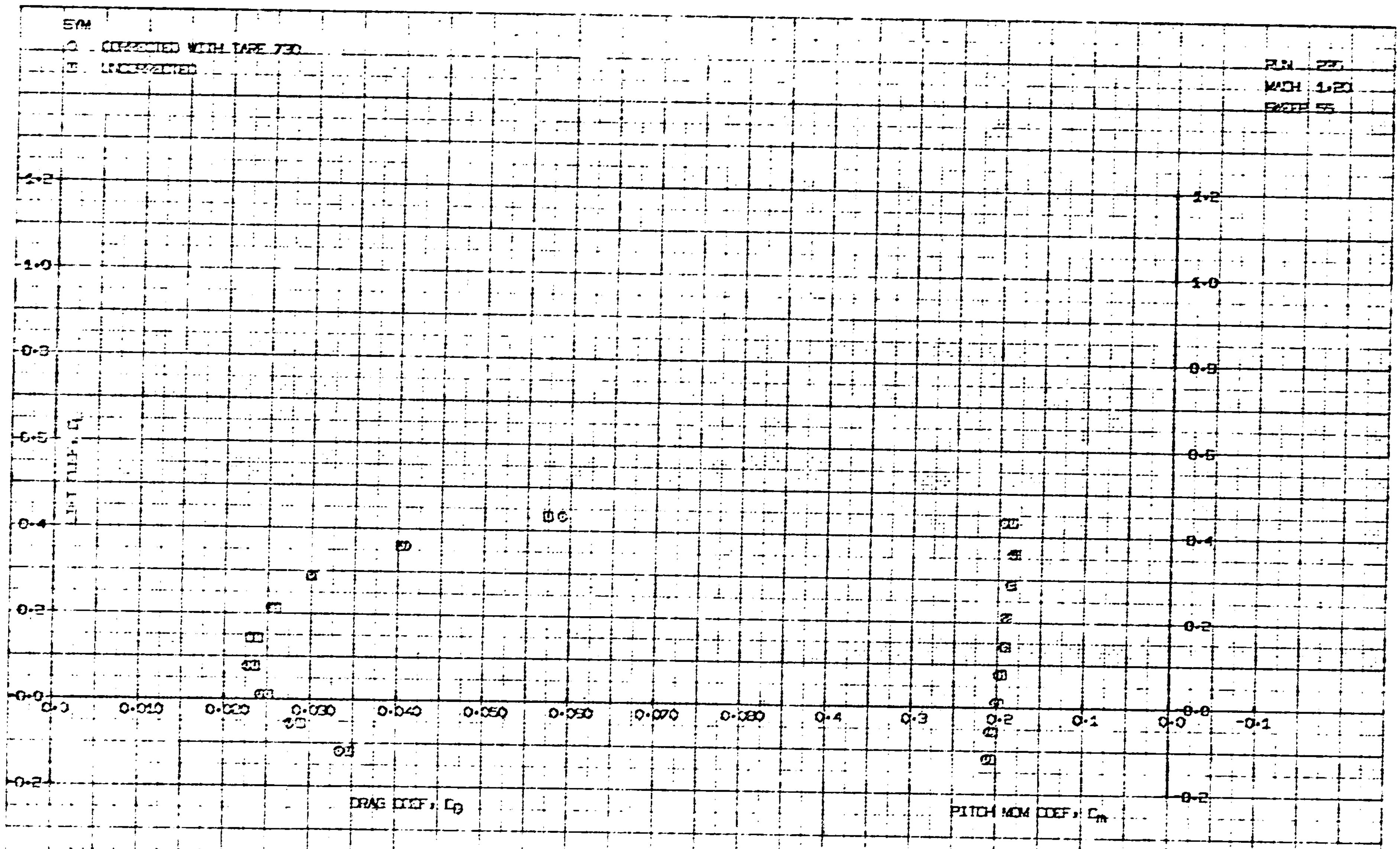


FIGURE 133. PERFORMANCE DATA RUNS, CLEAN FUSELAGE

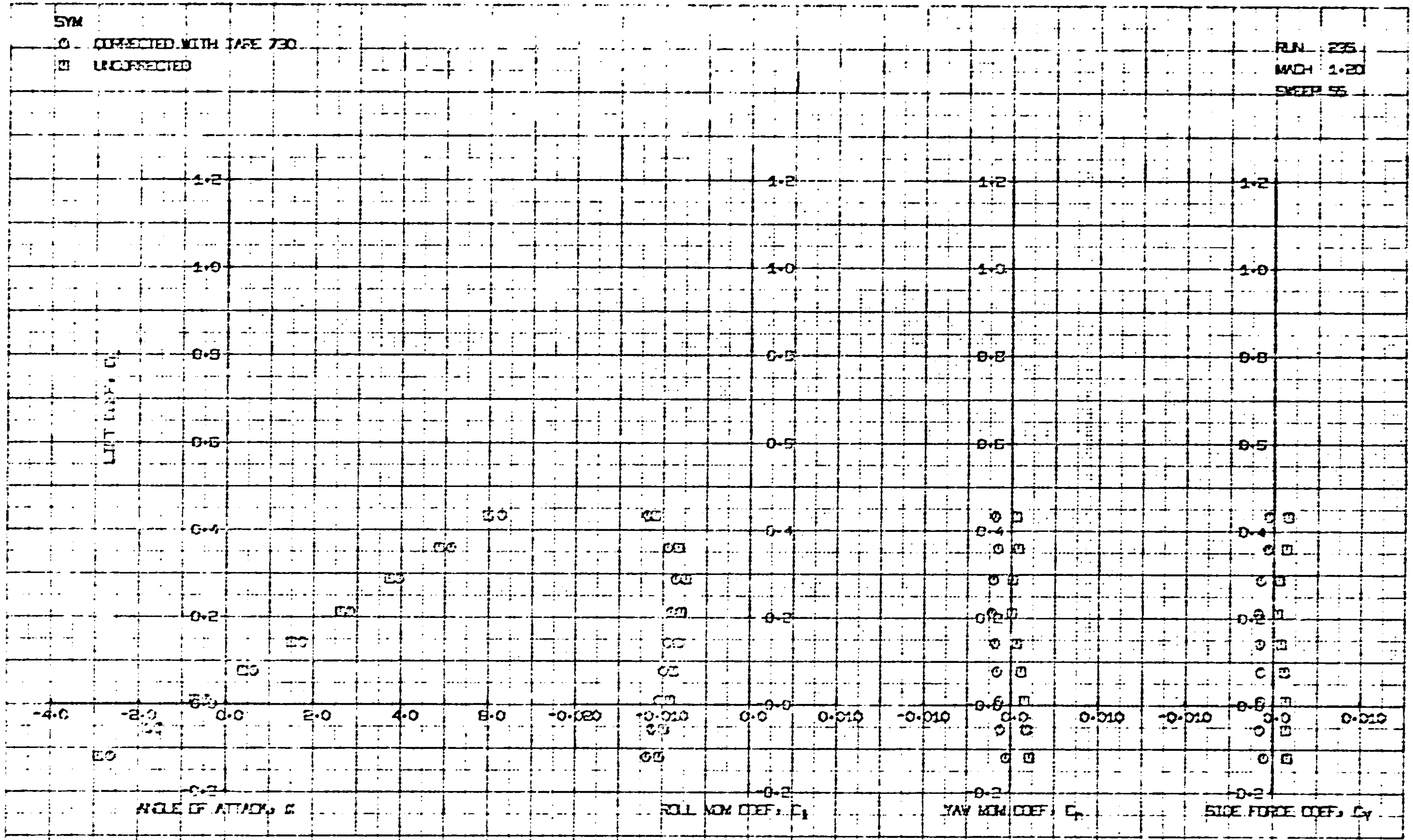


FIGURE 138. PERFORMANCE DATA RUNS, CLEAN FUSELAGE

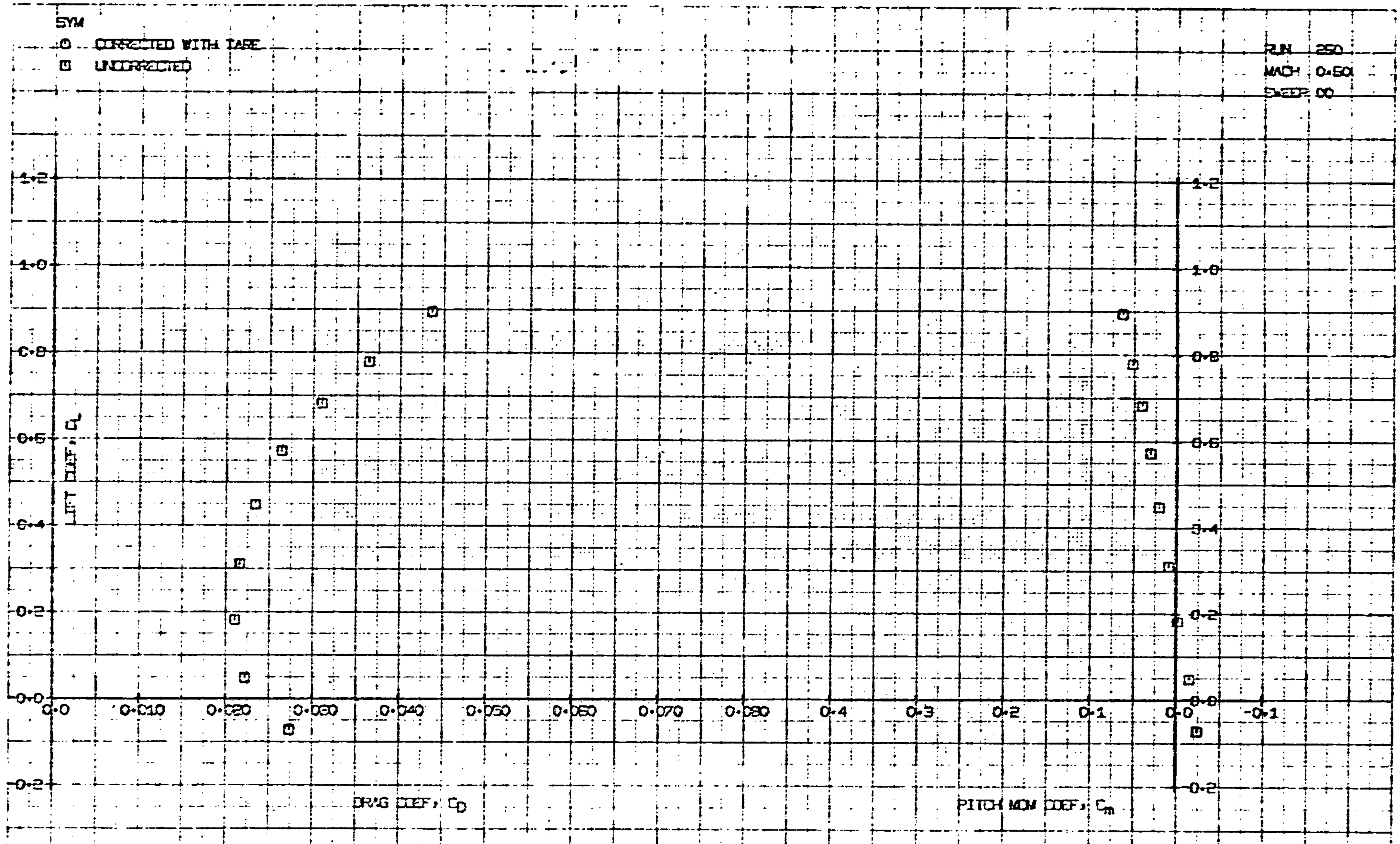


FIGURE 139. PERFORMANCE DATA RUNS, POD/PYLON FUSELAGE

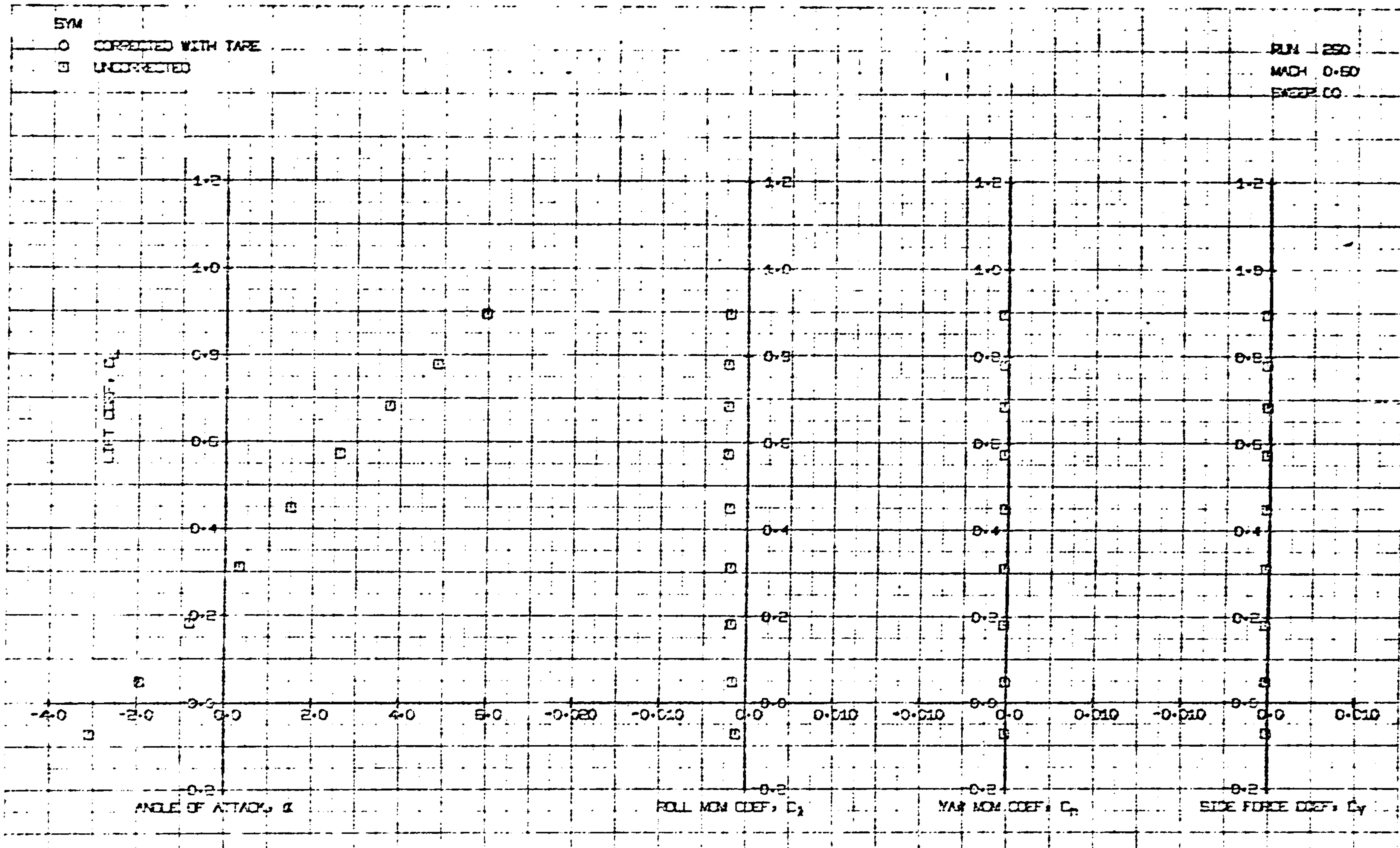


FIGURE 139. PERFORMANCE DATA RUNS, POD/PYLON FUSELAGE

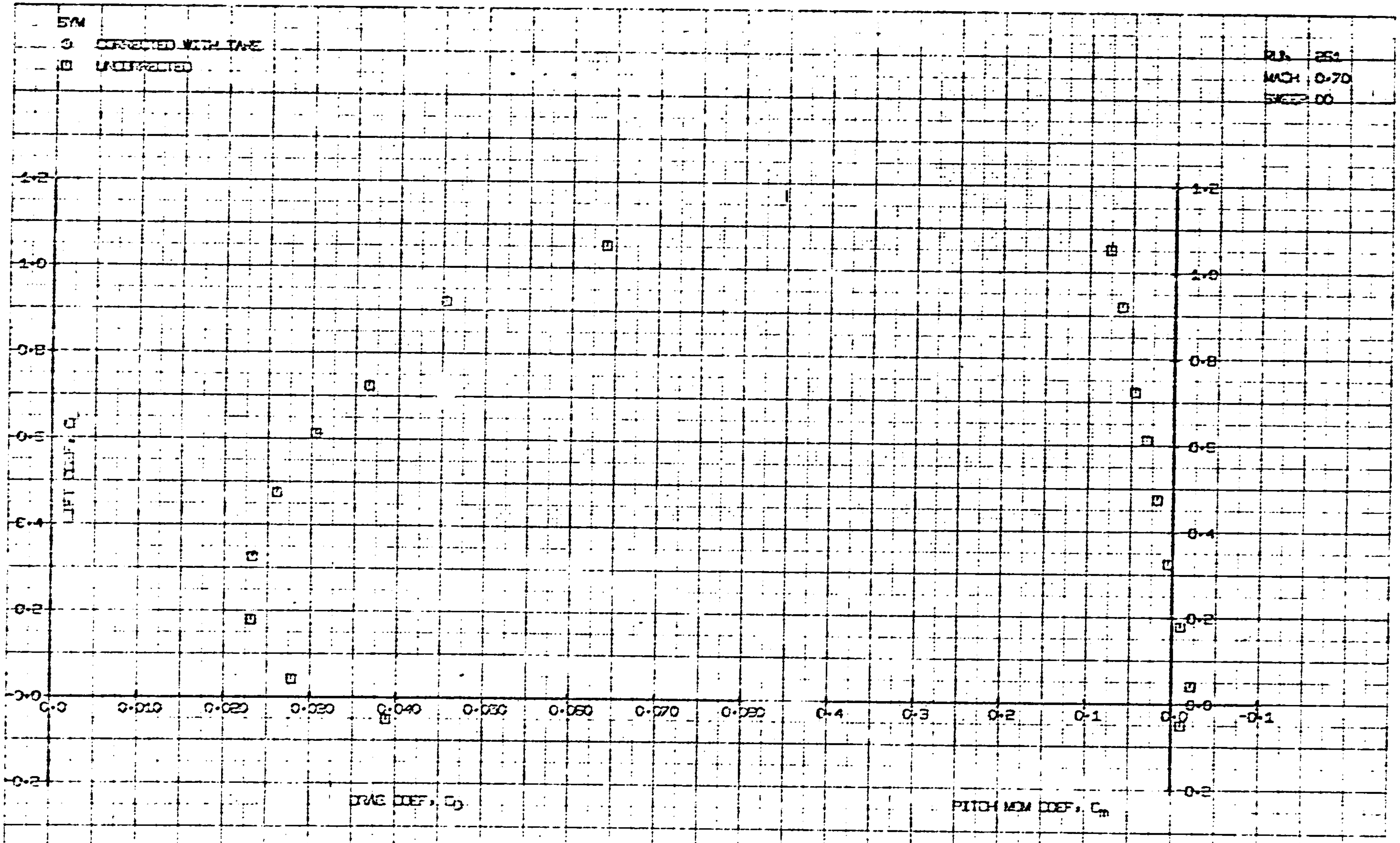


FIGURE 140. PERFORMANCE DATA RUNS, POD/PYLON FUSELAGE

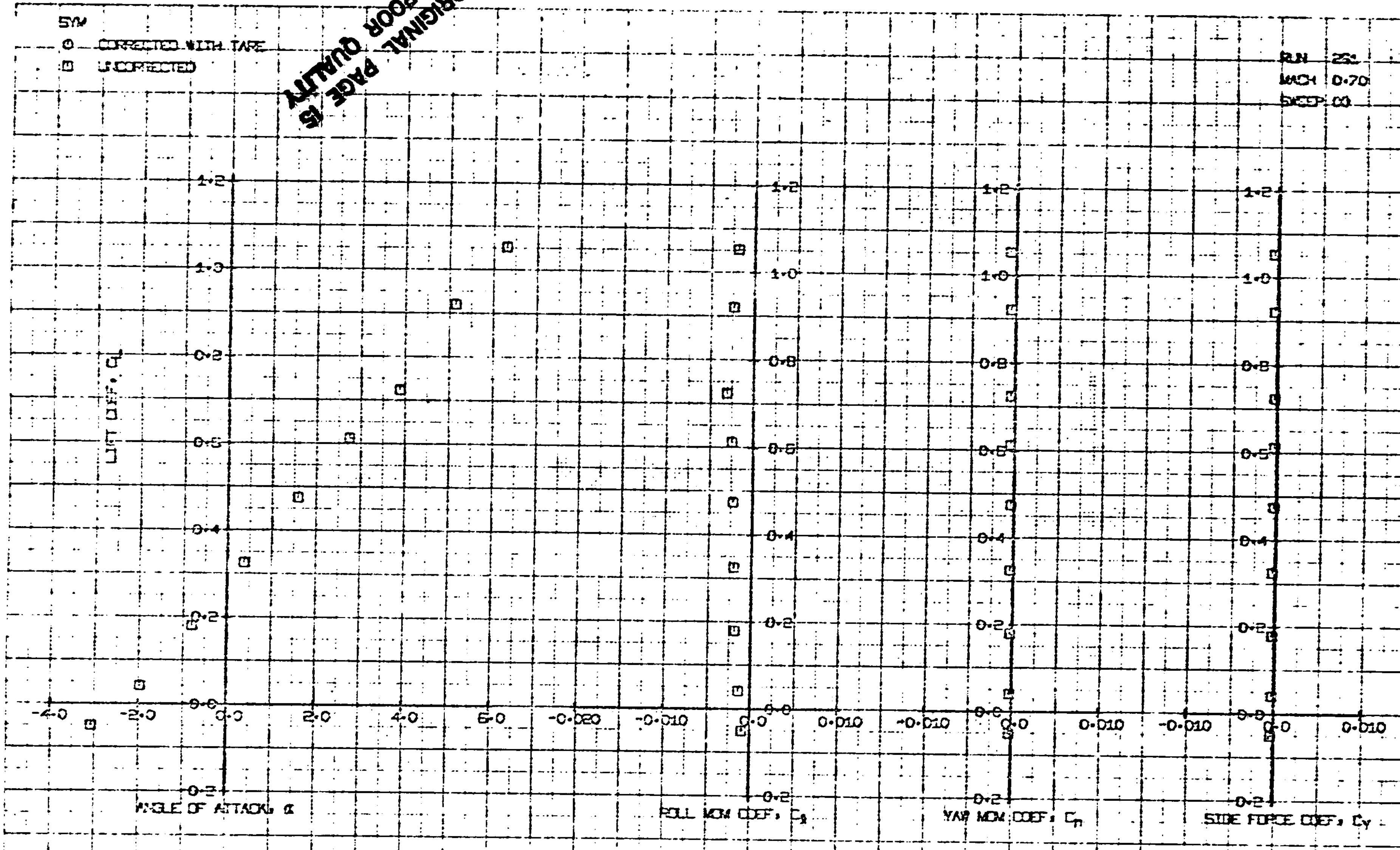


FIGURE 140. PERFORMANCE DATA RUNS, POD/PYLON FUSELAGE

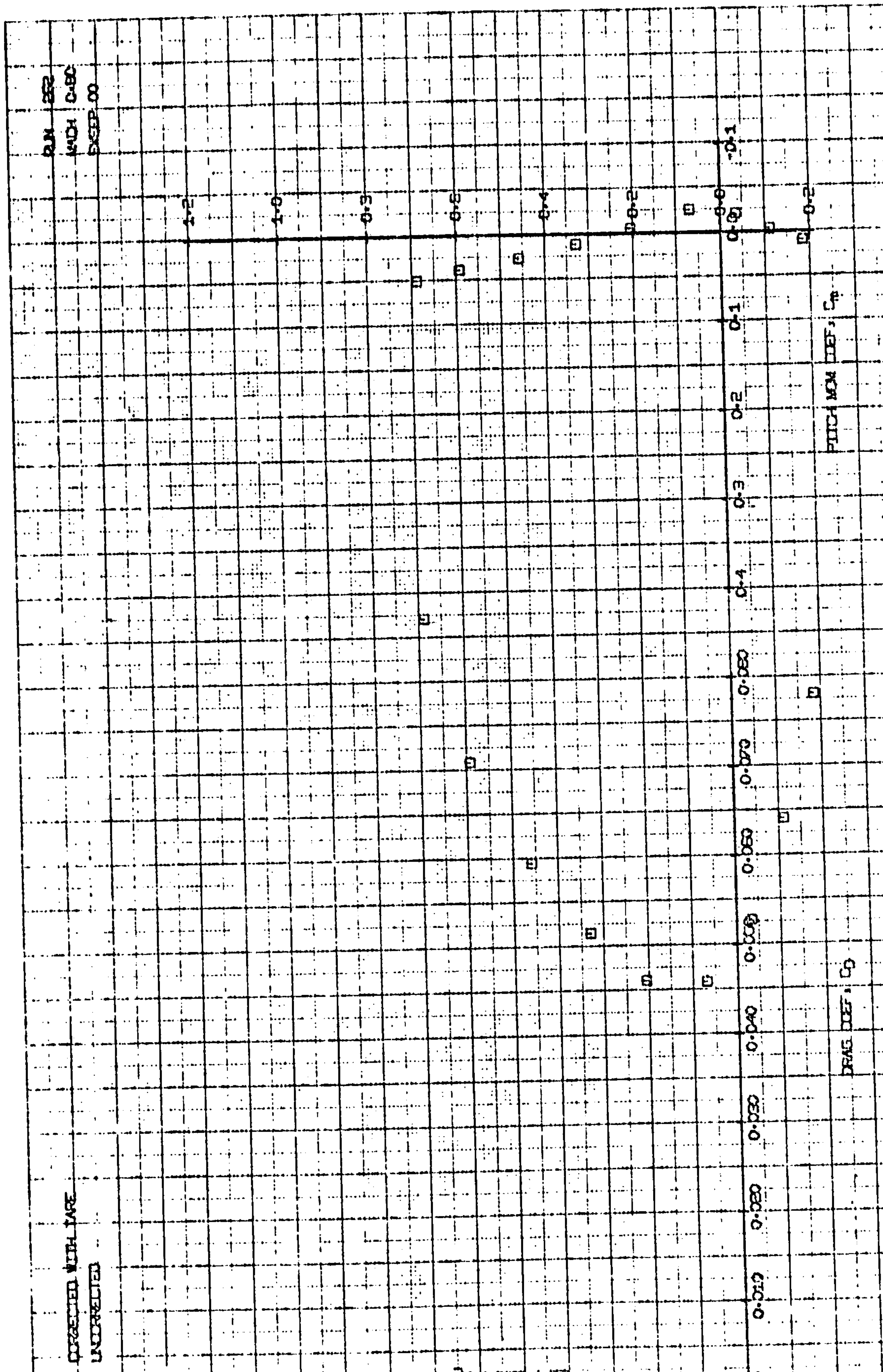


FIGURE 141. PERFORMANCE DATA RUN 6, POD/PYLON FUSELAGE

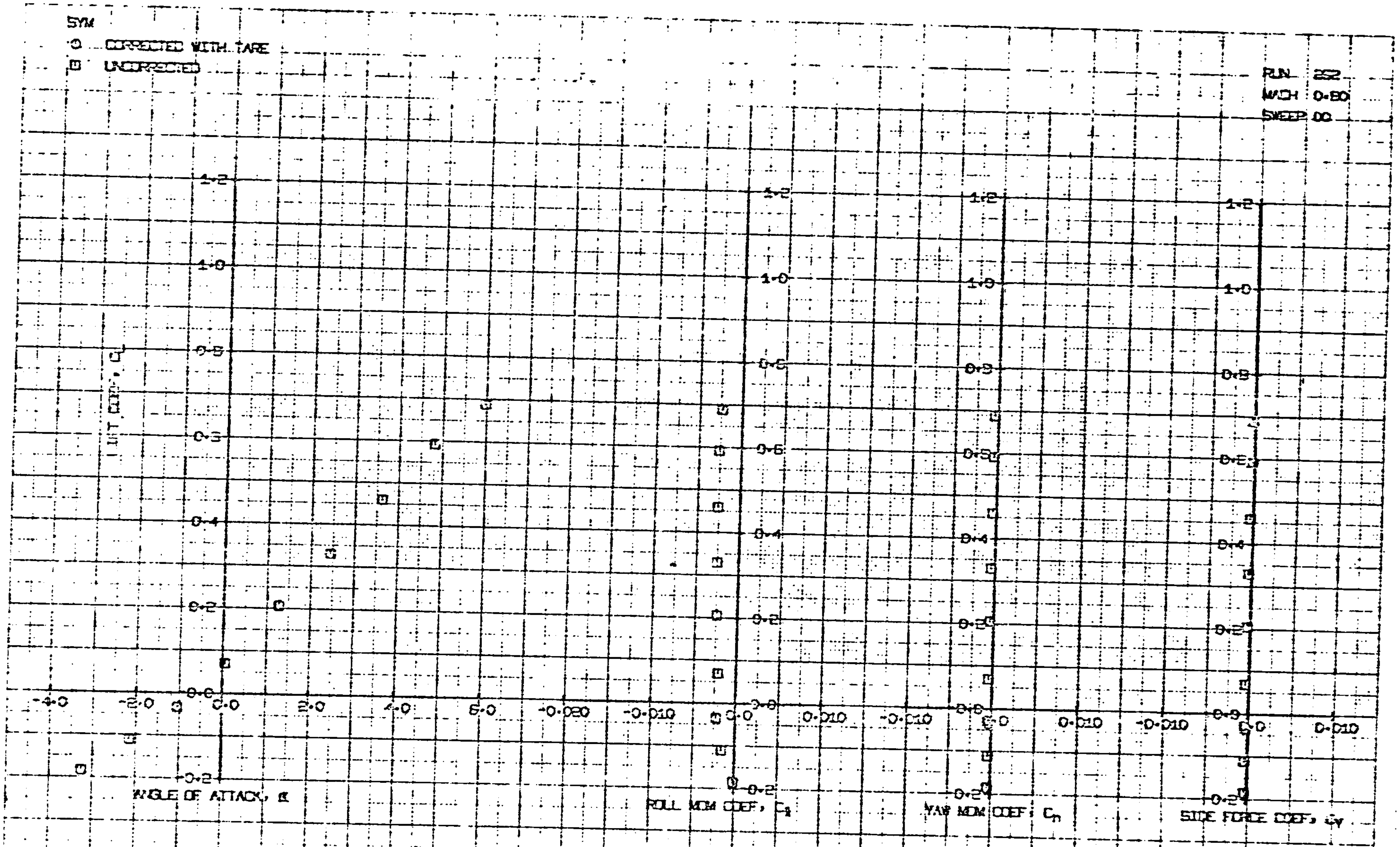


FIGURE 141. PERFORMANCE DATA RUNS, POD/PYLON FUSELAGE

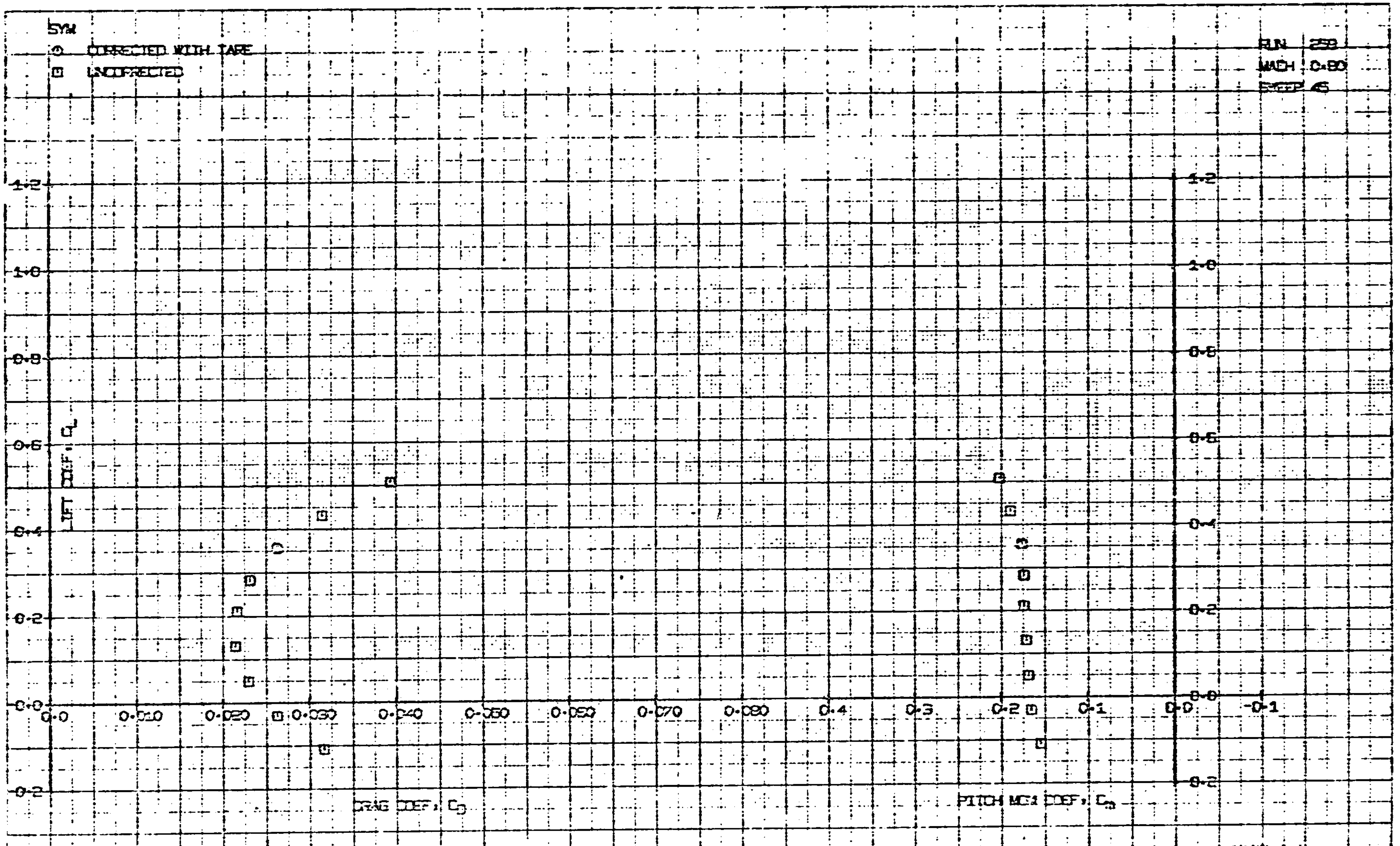


FIGURE 142. PERFORMANCE DATA RUNS, POD/PYLON FUSELAGE

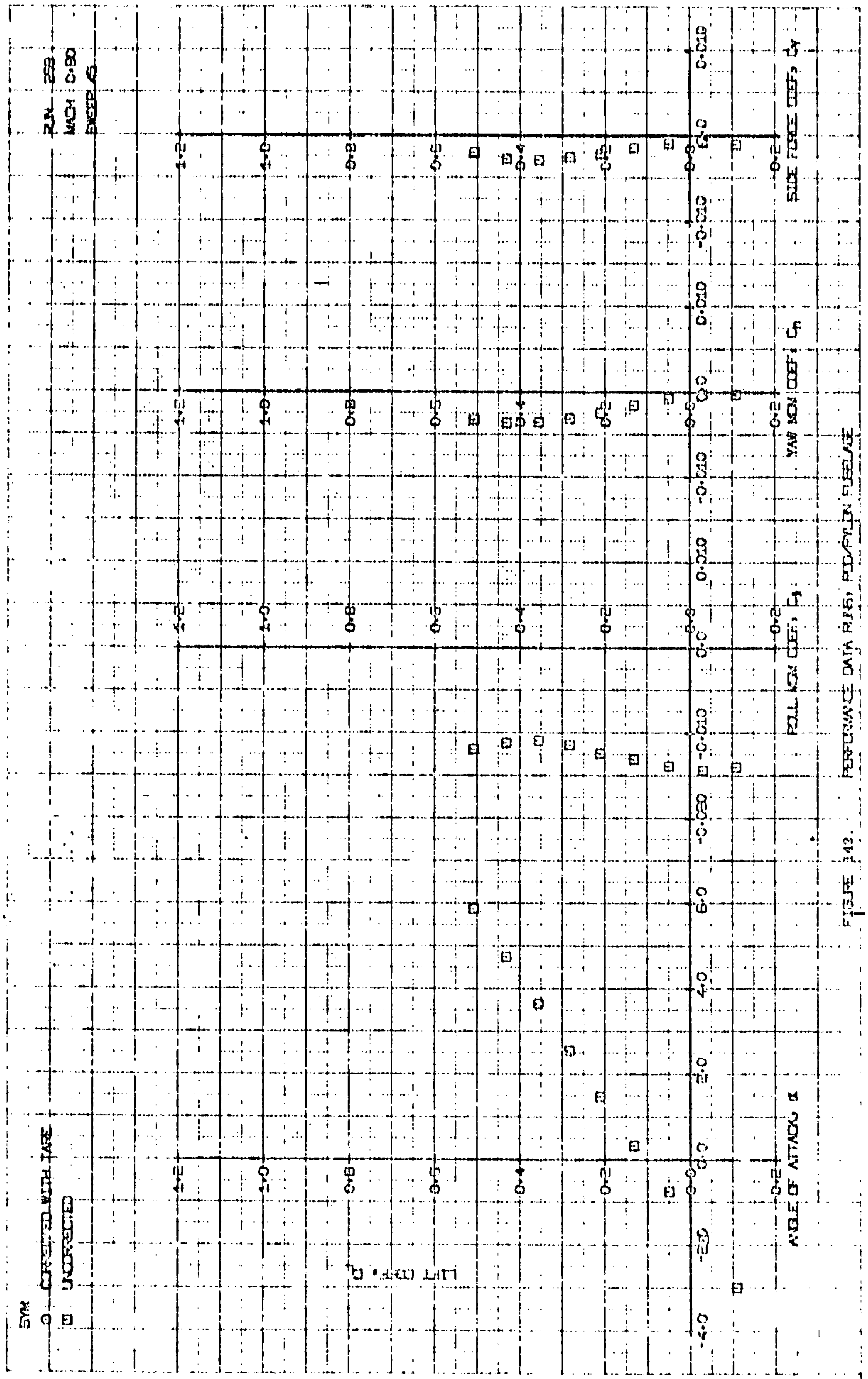


FIGURE 142. PERFORMANCE DATA RUNS, POD/PYLON FUSELAGE

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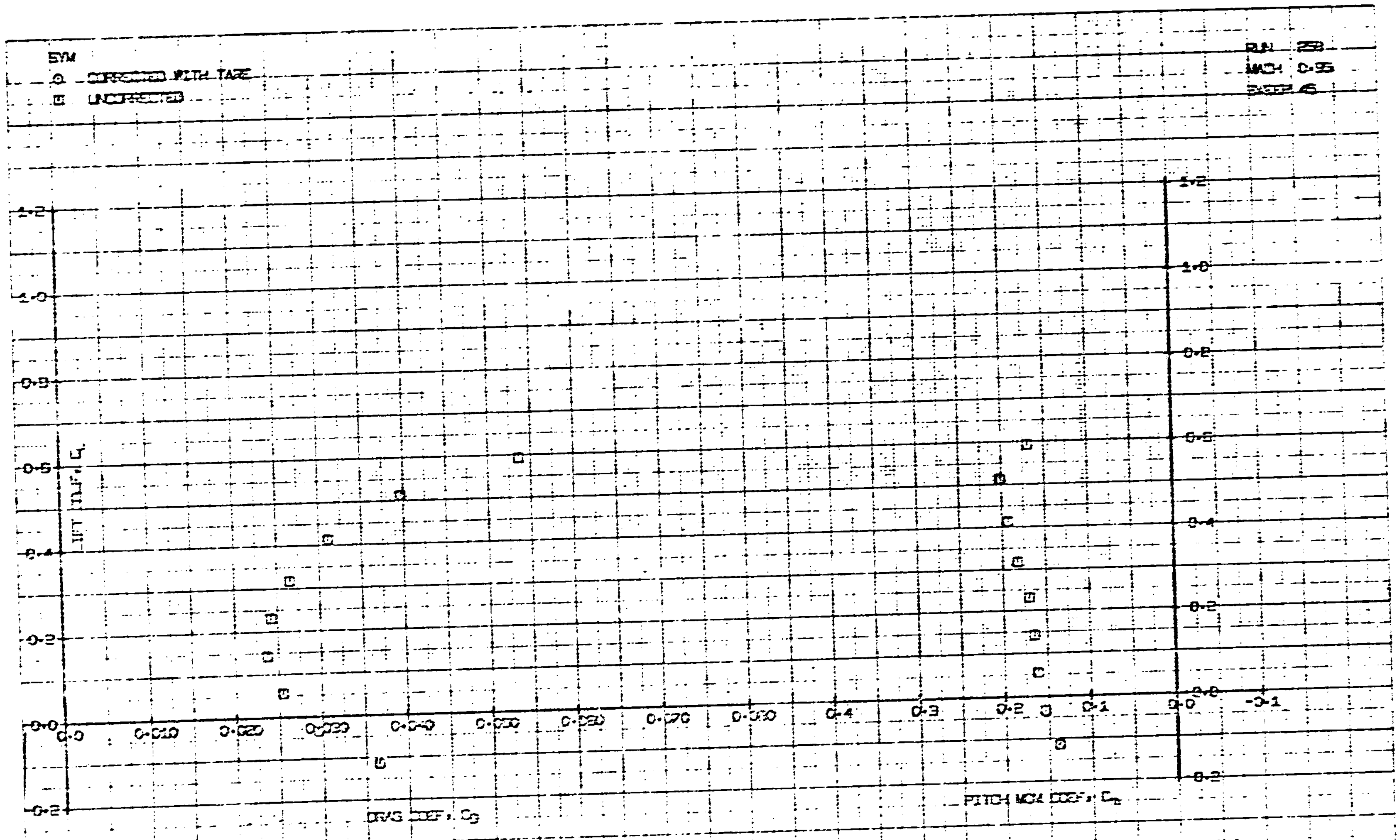

FIGURE 143. PERFORMANCE DATA RUNS, POD/PYLON FUSELAGE

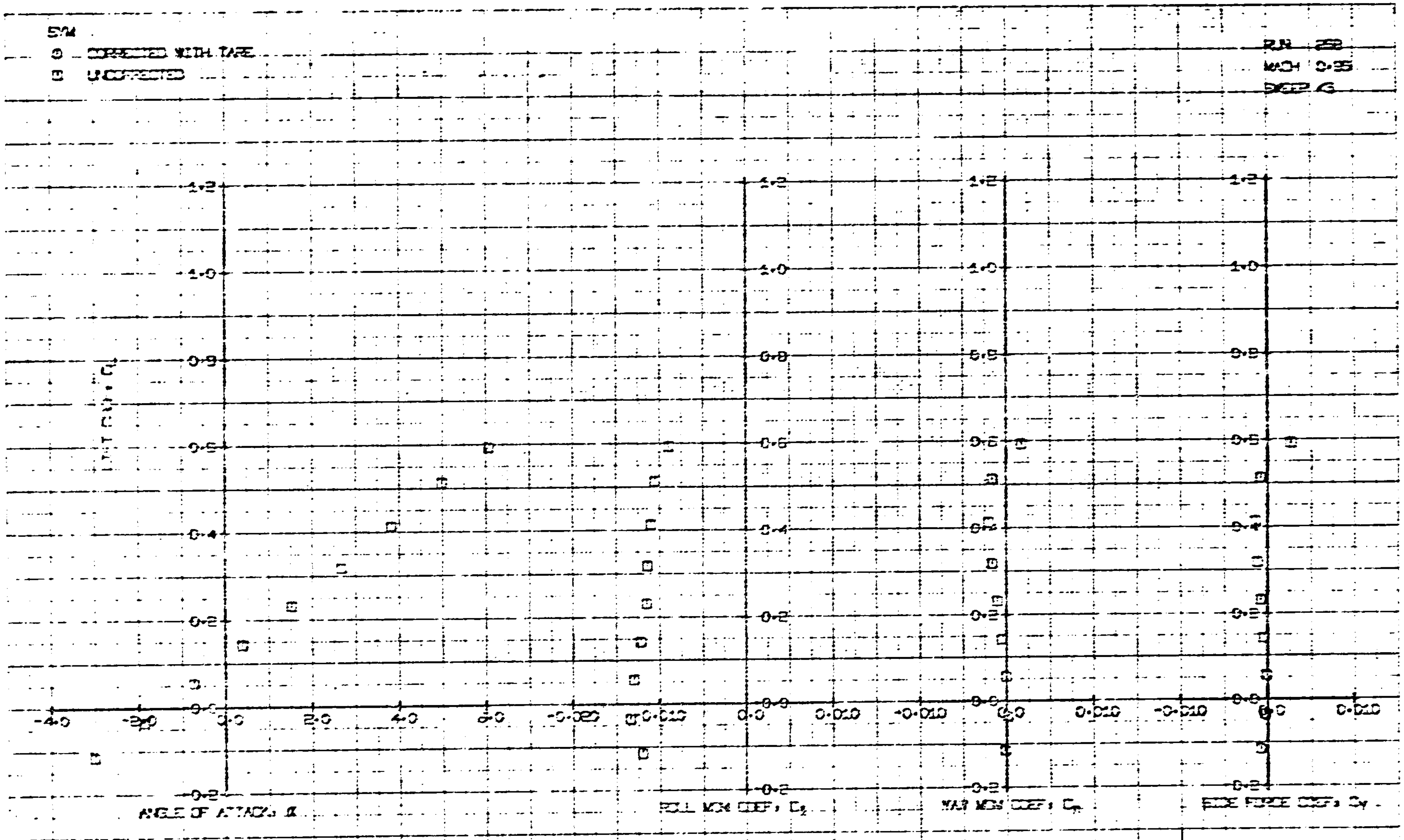

FIGURE 143. PERFORMANCE DATA RUNS, POD/PYLON FUSELAGE

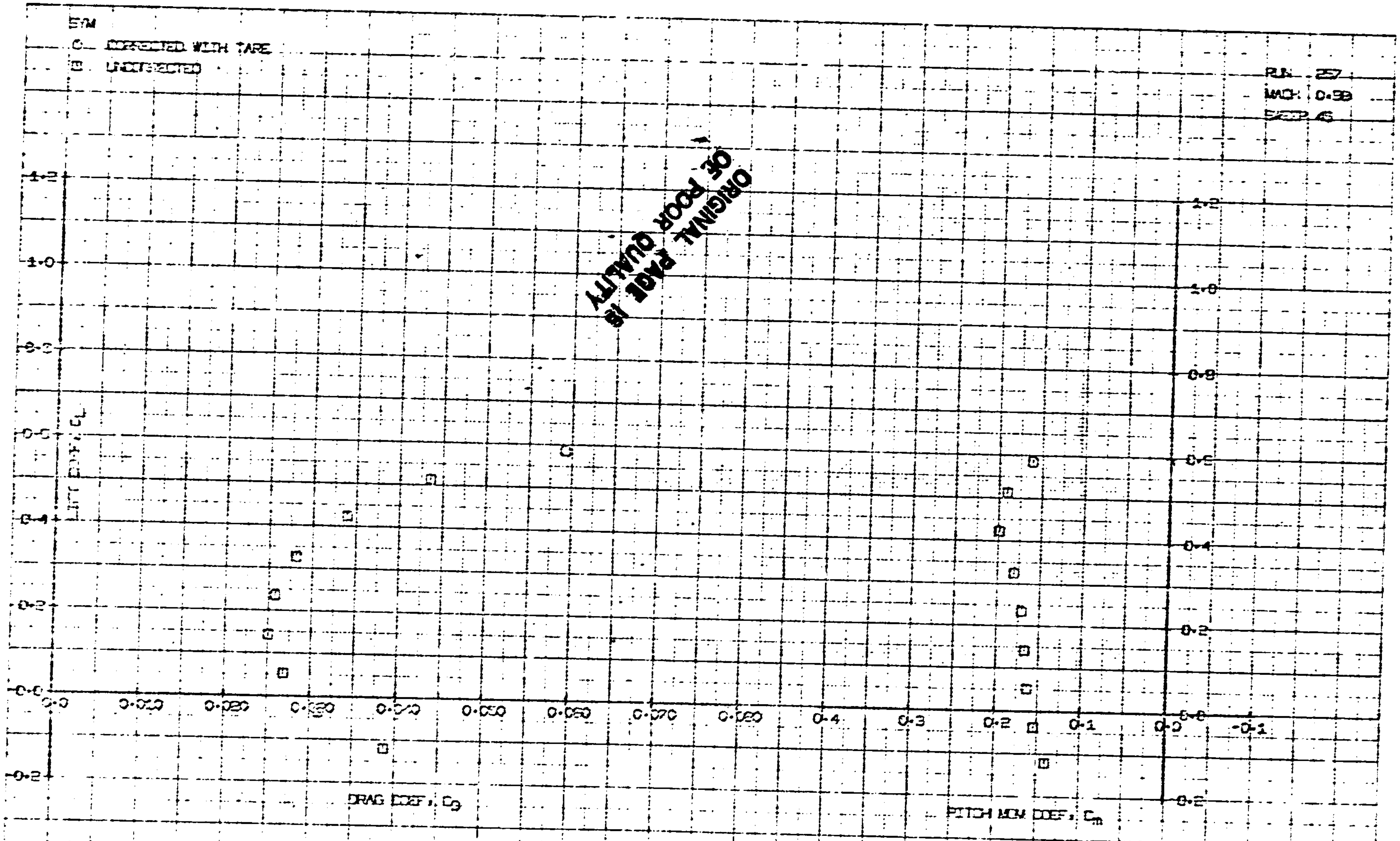

FIGURE 144. PERFORMANCE DATA RUNS, POD/PYLON FUSELAGE

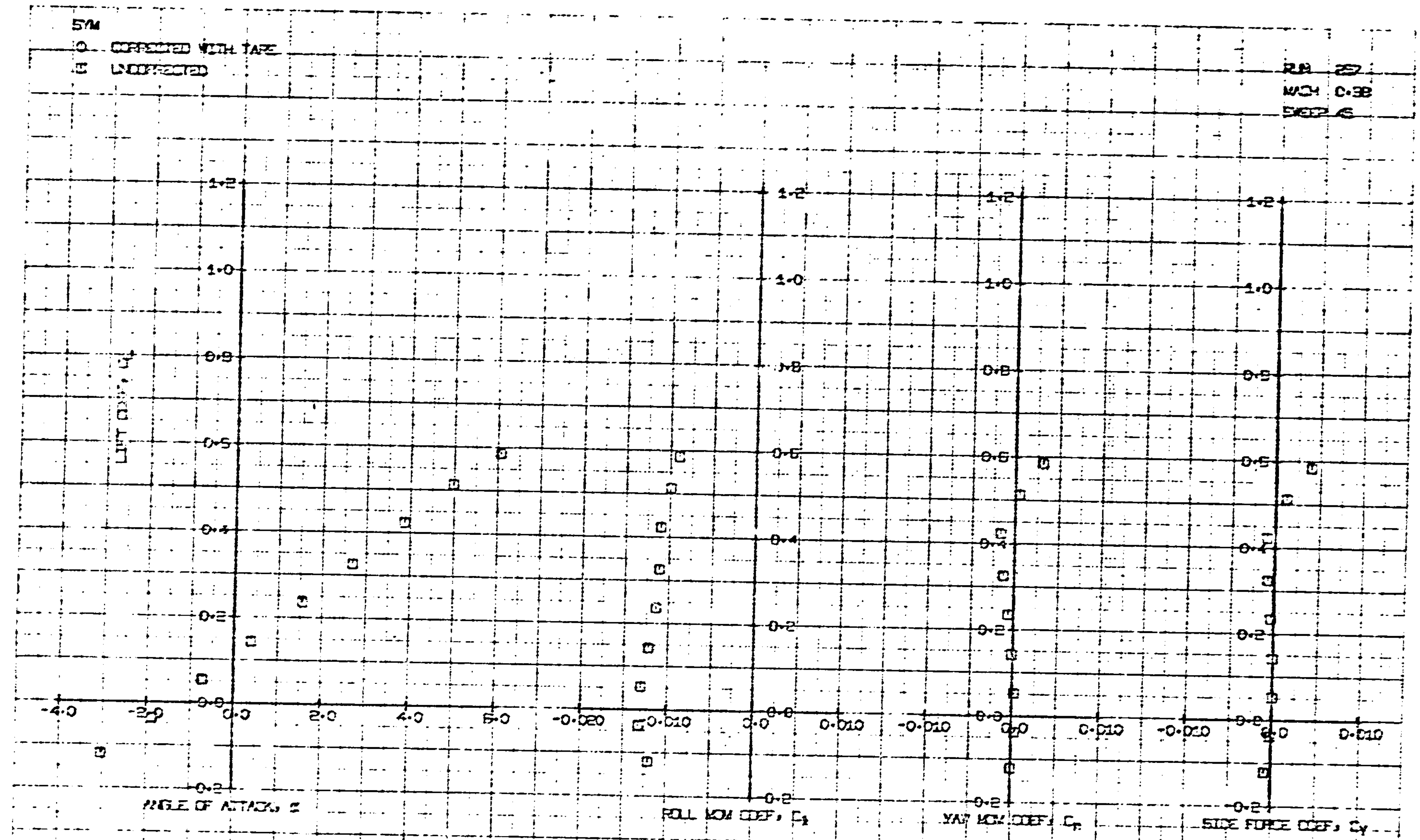

FIGURE 144. PERFORMANCE DATA RUNS, POD/PYLON FUSELAGE

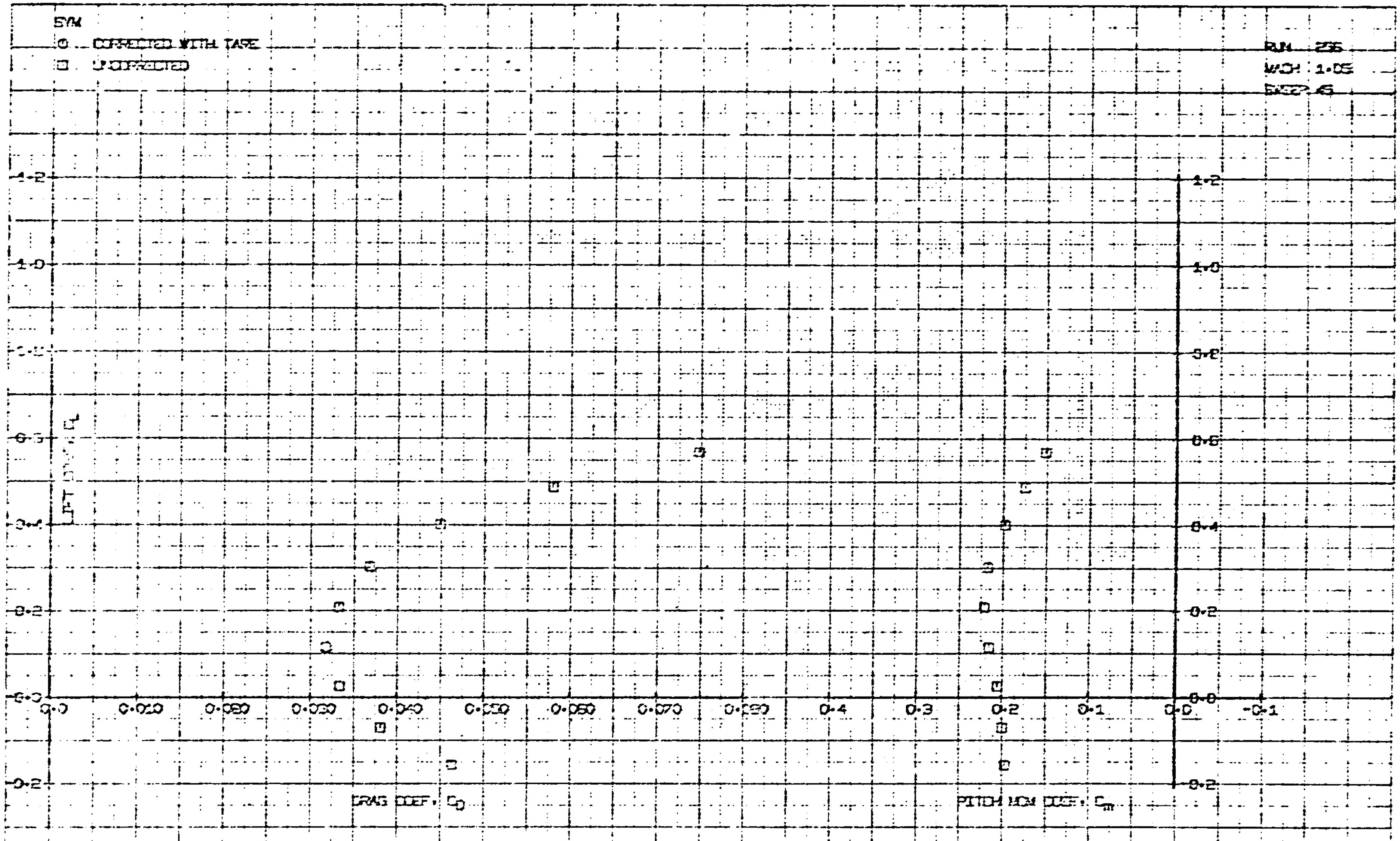

FIGURE 145. PERFORMANCE DATA RUNS, POD/PYLON FUSELAGE

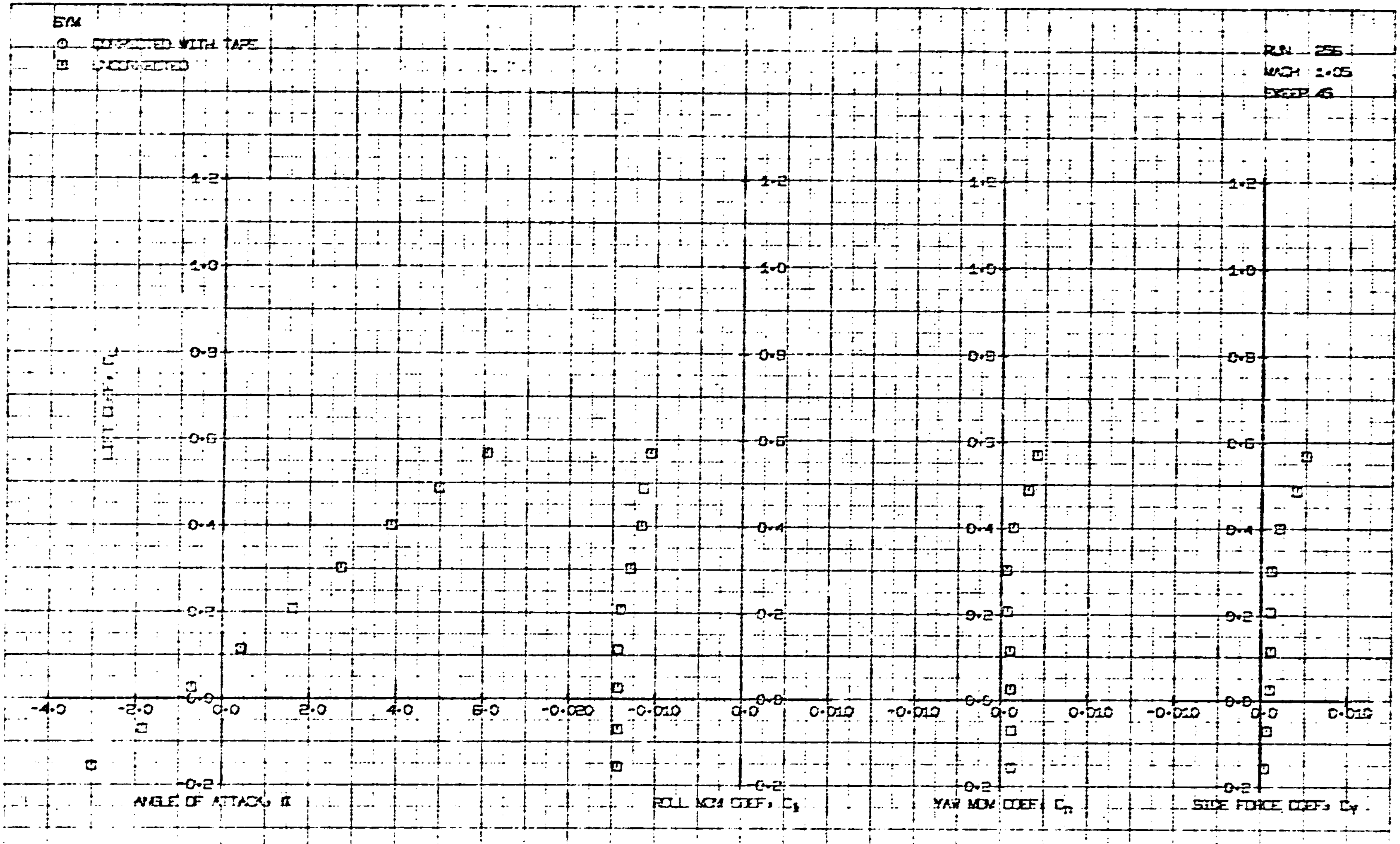

FIGURE 145. PERFORMANCE DATA RUNS, POD/PYLON FUSELAGE

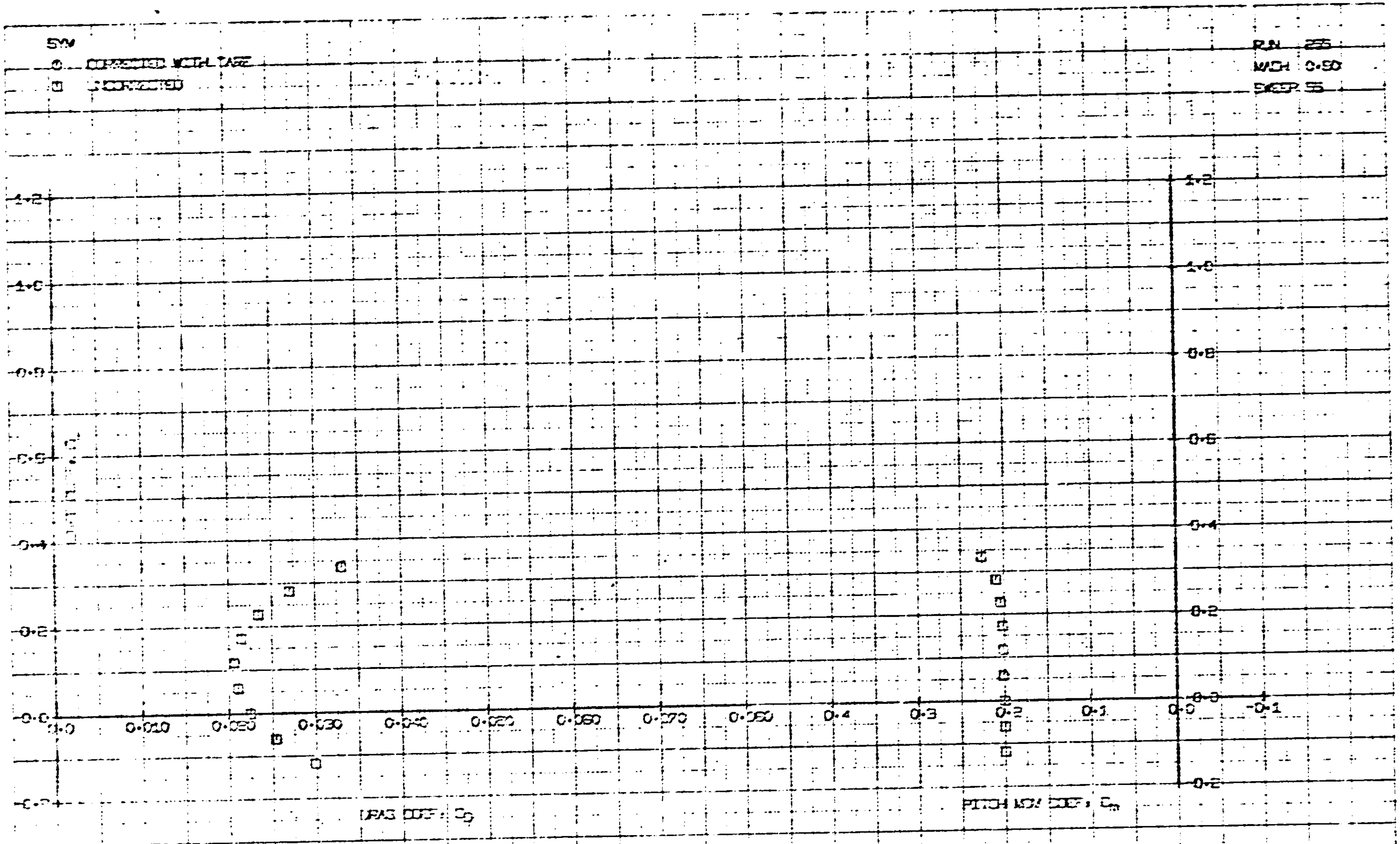

FIGURE 146. PERFORMANCE DATA RUNS, POD/PYLON FUSELAGE

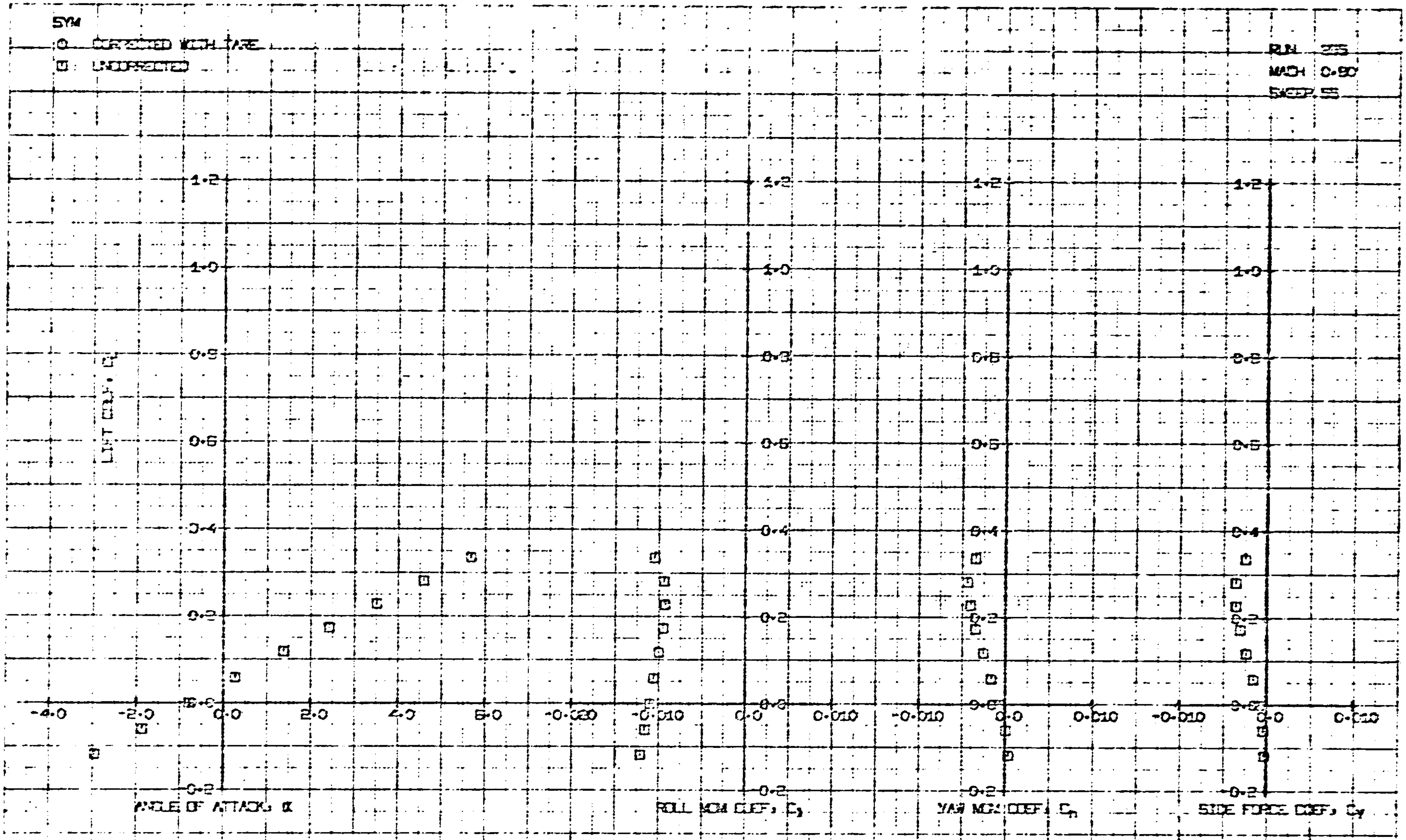

FIGURE 146. PERFORMANCE DATA RUN 6, POD/PYLON FUSELAGE

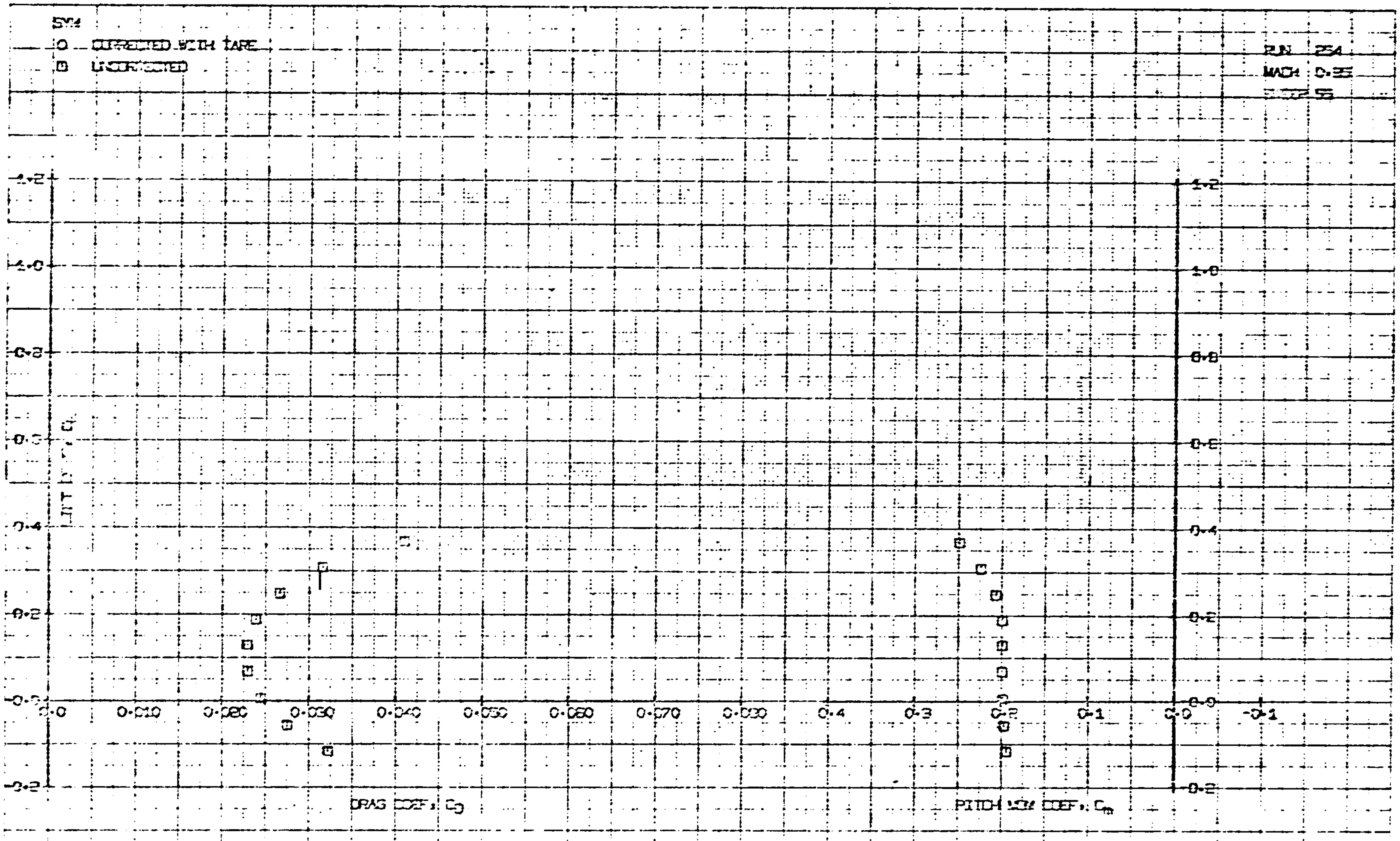

FIGURE 147. PERFORMANCE DATA RUNS, POD/PYLON FUSELAGE

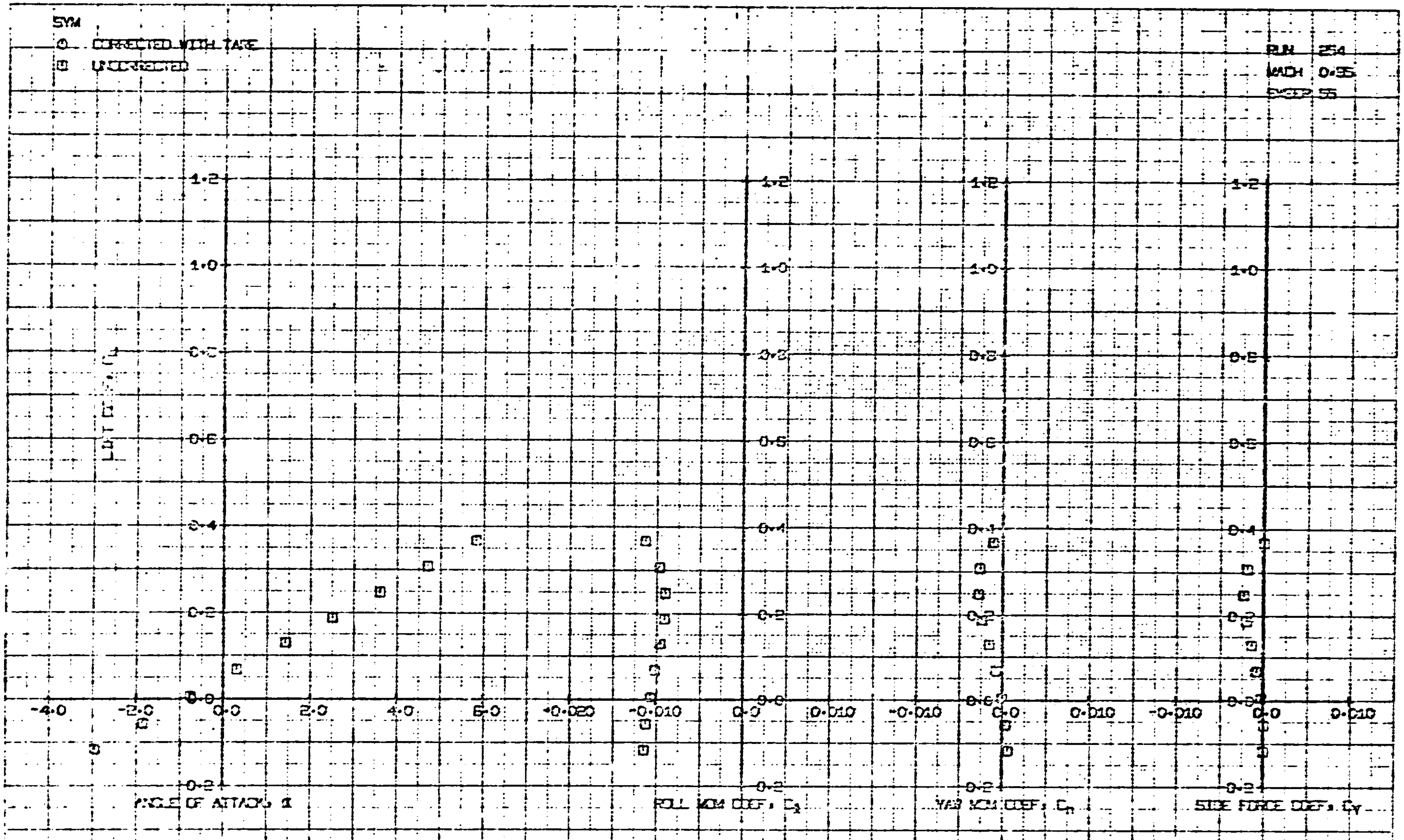

FIGURE 147. PERFORMANCE DATA RUNS, POD/PYLON FUSELAGE

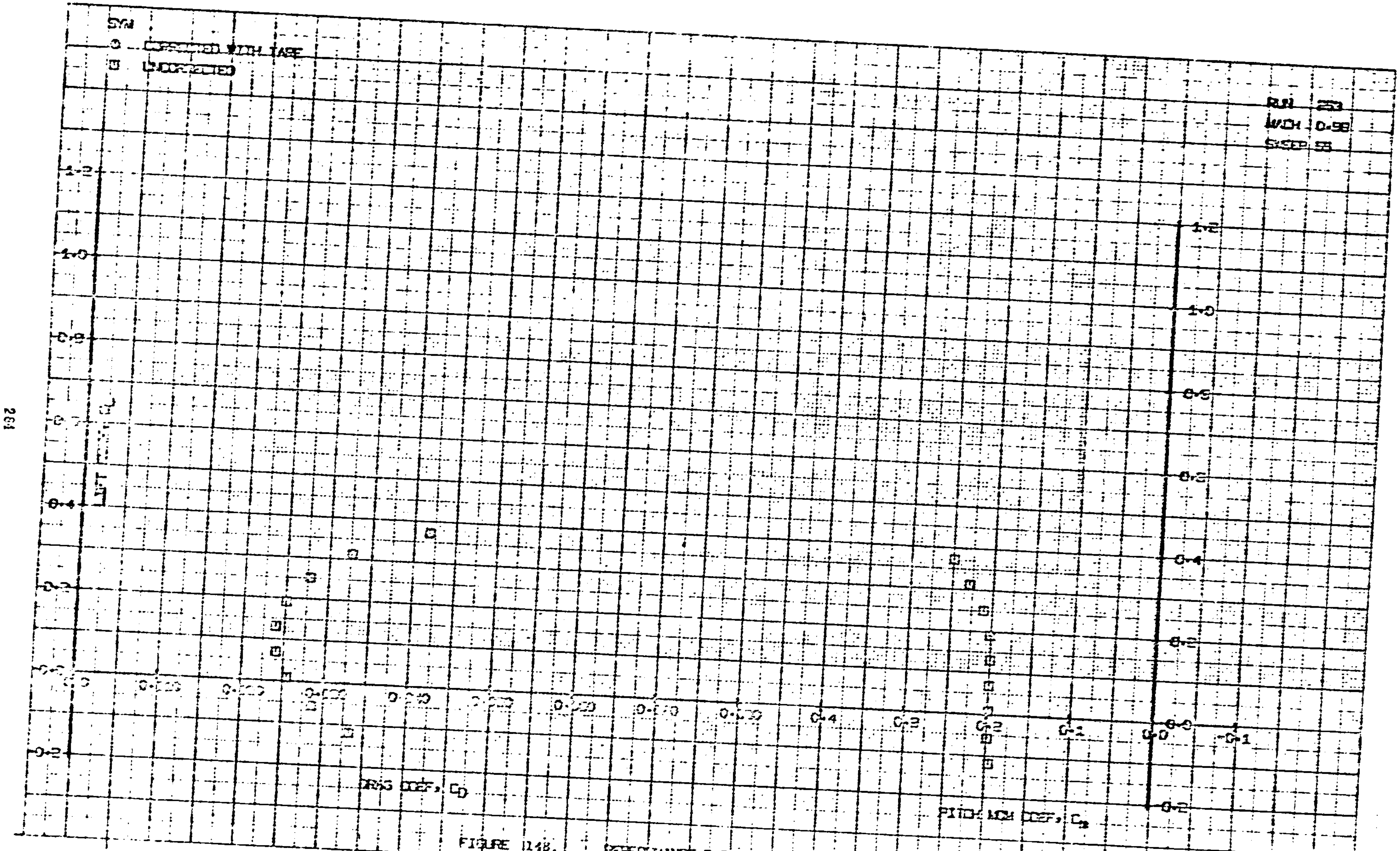

FIGURE 148. PERFORMANCE DATA RUNS, POD/PYLON FUSELAGE

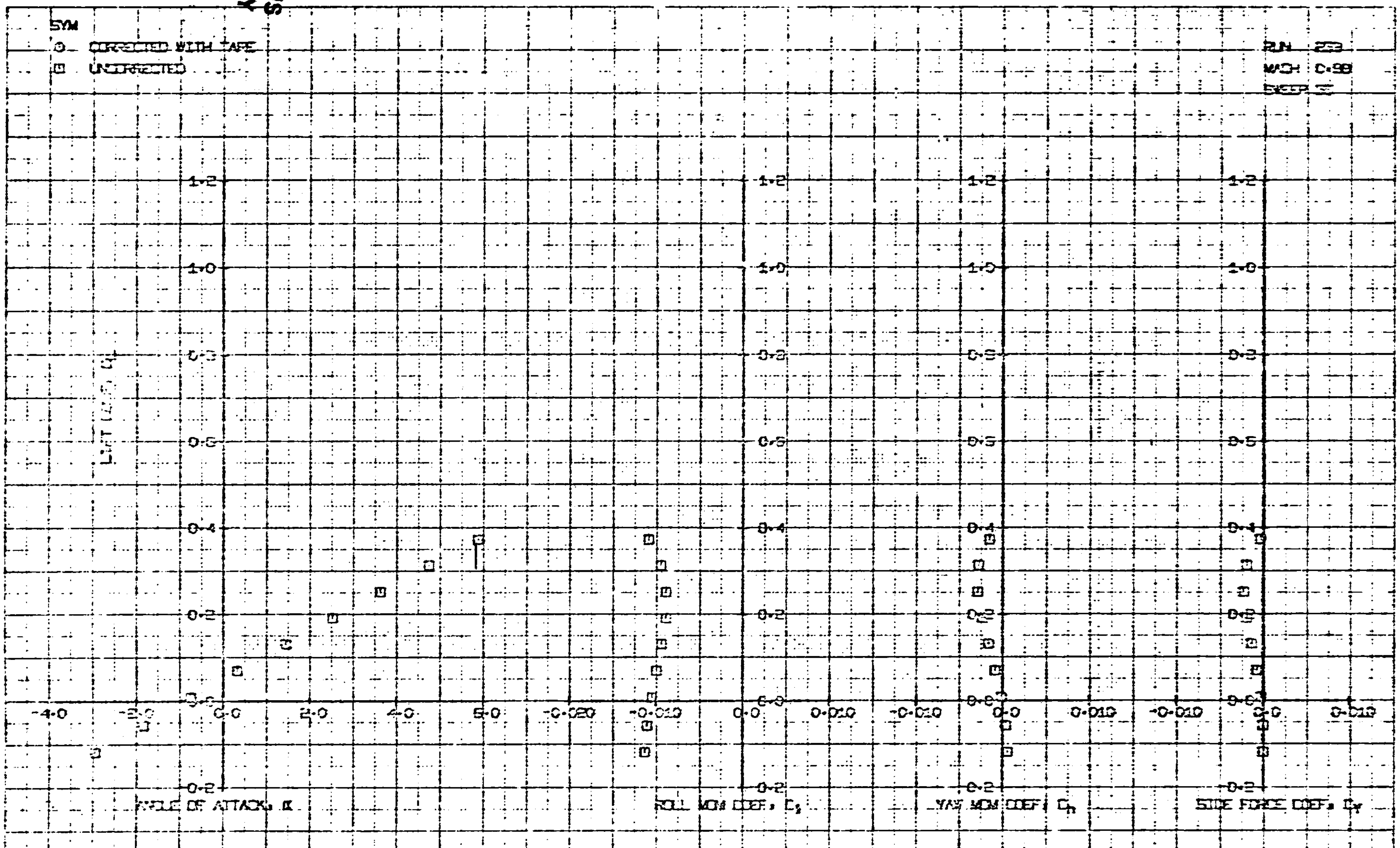

FIGURE 148. PERFORMANCE DATA RUNS, POD/PYLON FUSELAGE

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OF POOR QUALITY

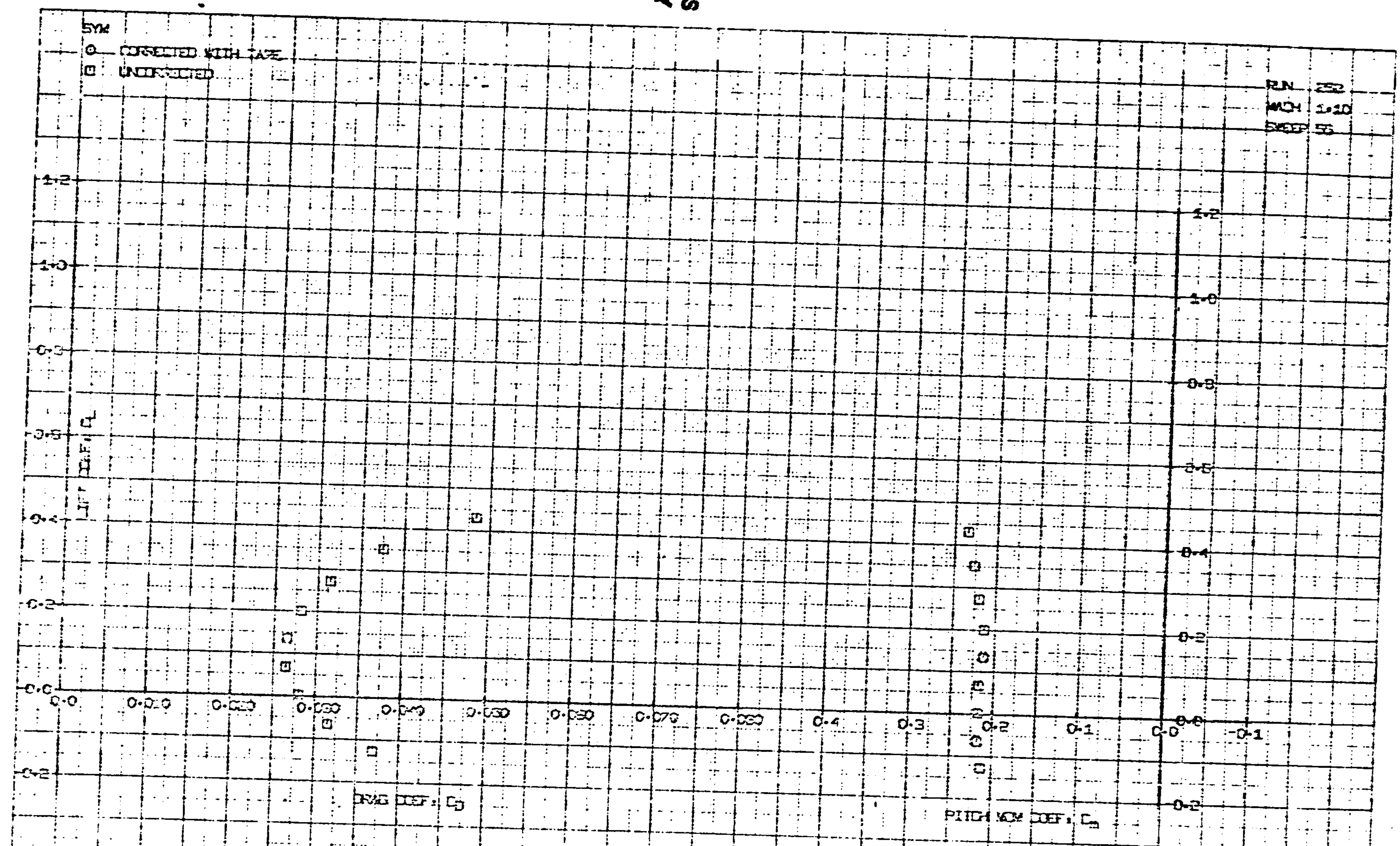


FIGURE 149. PERFORMANCE DATA RUNS, POD/PYLON FUSELAGE

C-4

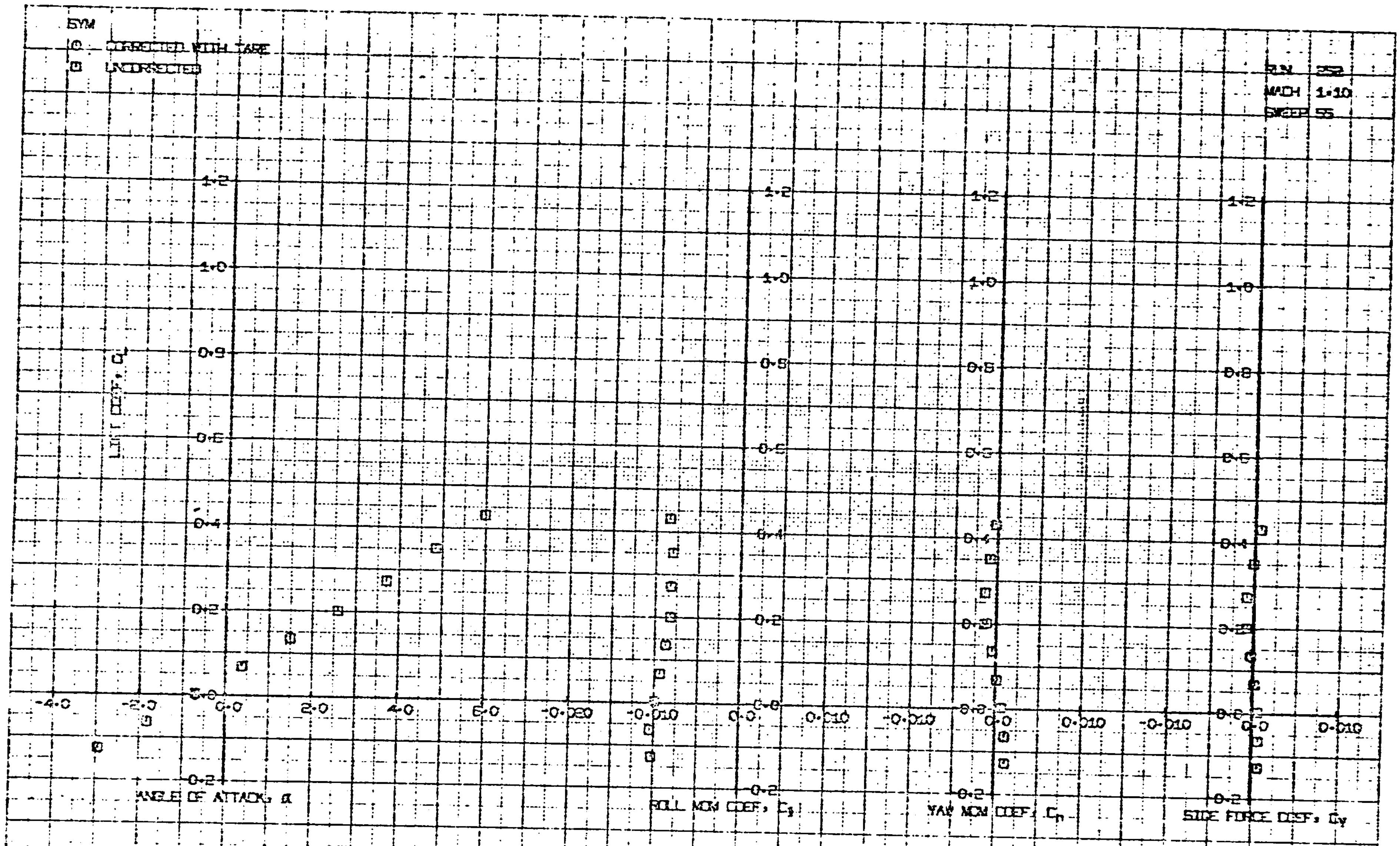


FIGURE 149. PERFORMANCE DATA RUNS, POD/PYLON FUSELAGE

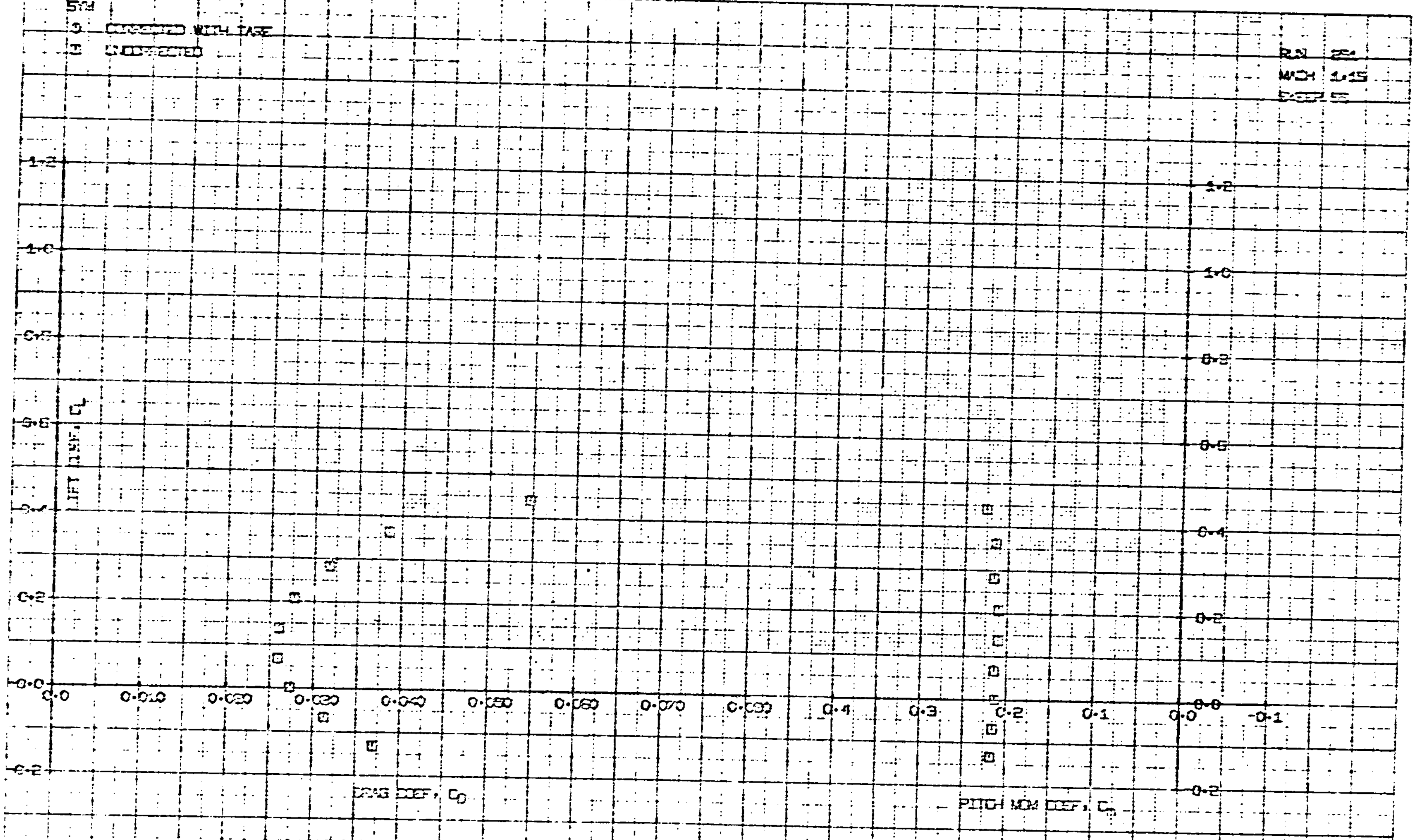


FIGURE 15d. PERFORMANCE DATA RUN 5, POD/PYLON FUSELAGE

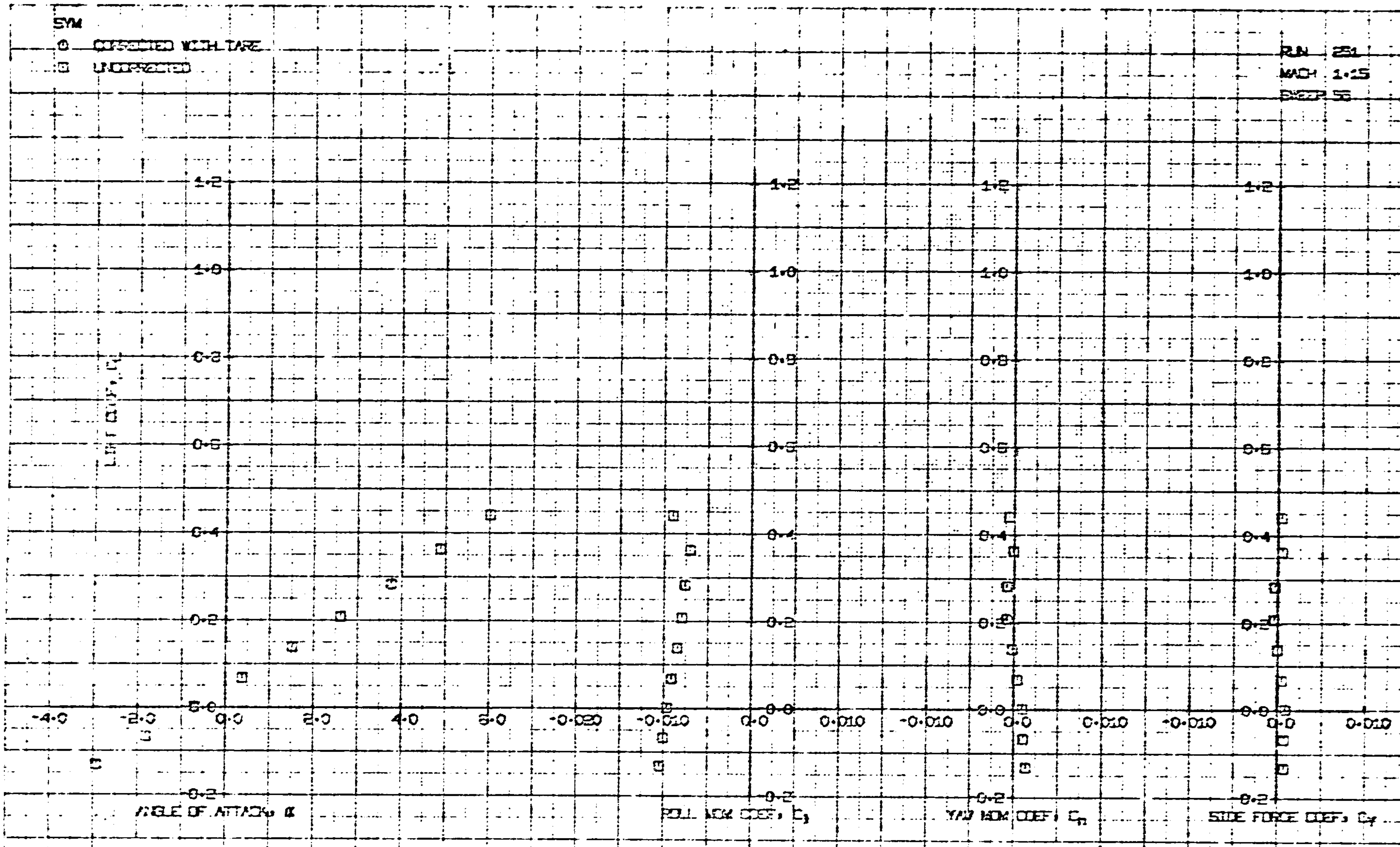


FIGURE 150. PERFORMANCE DATA RUNS, POD/PYLON FUSELAGE

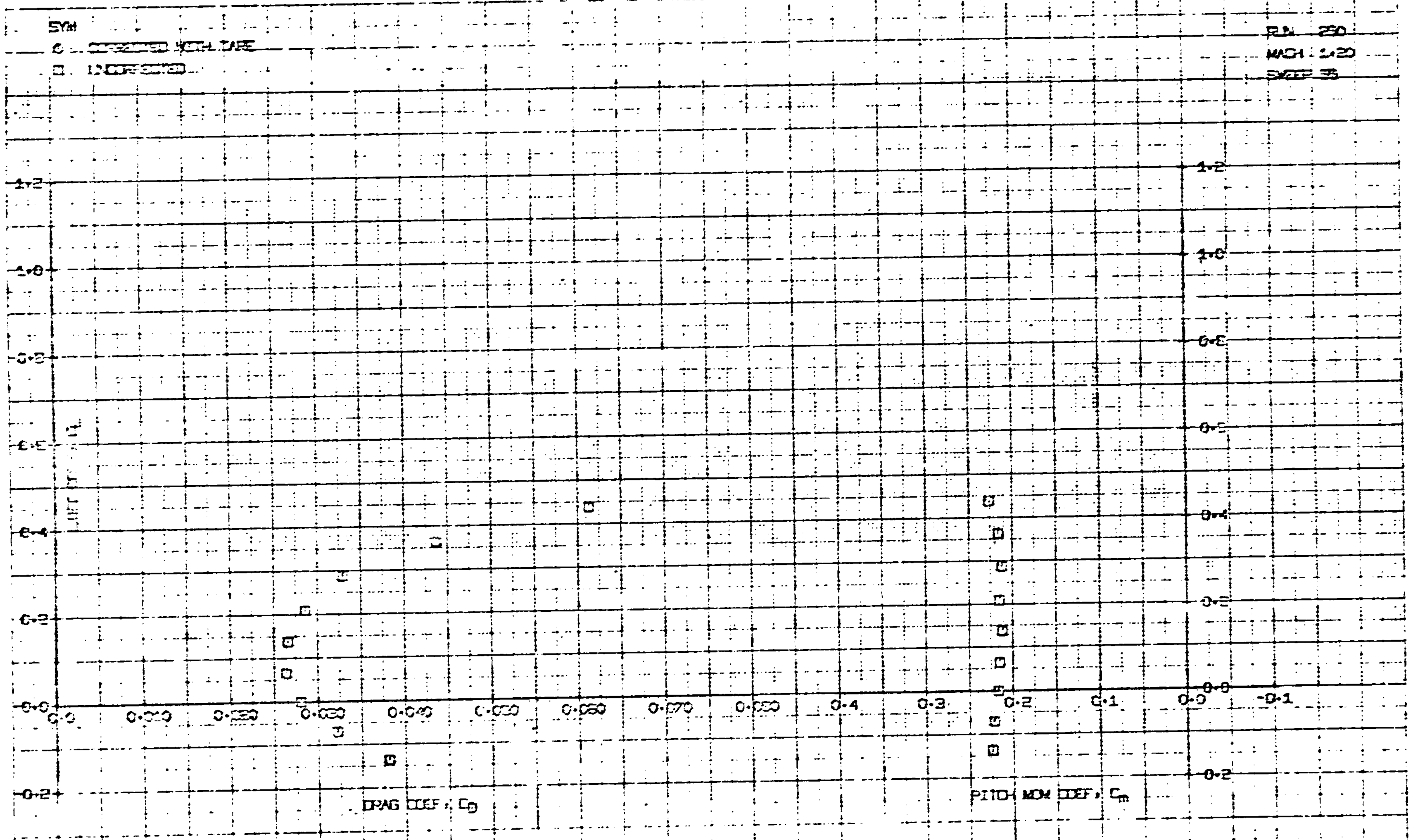


FIGURE 151. PERFORMANCE DATA RUNS, POD/PYLON FUSELAGE

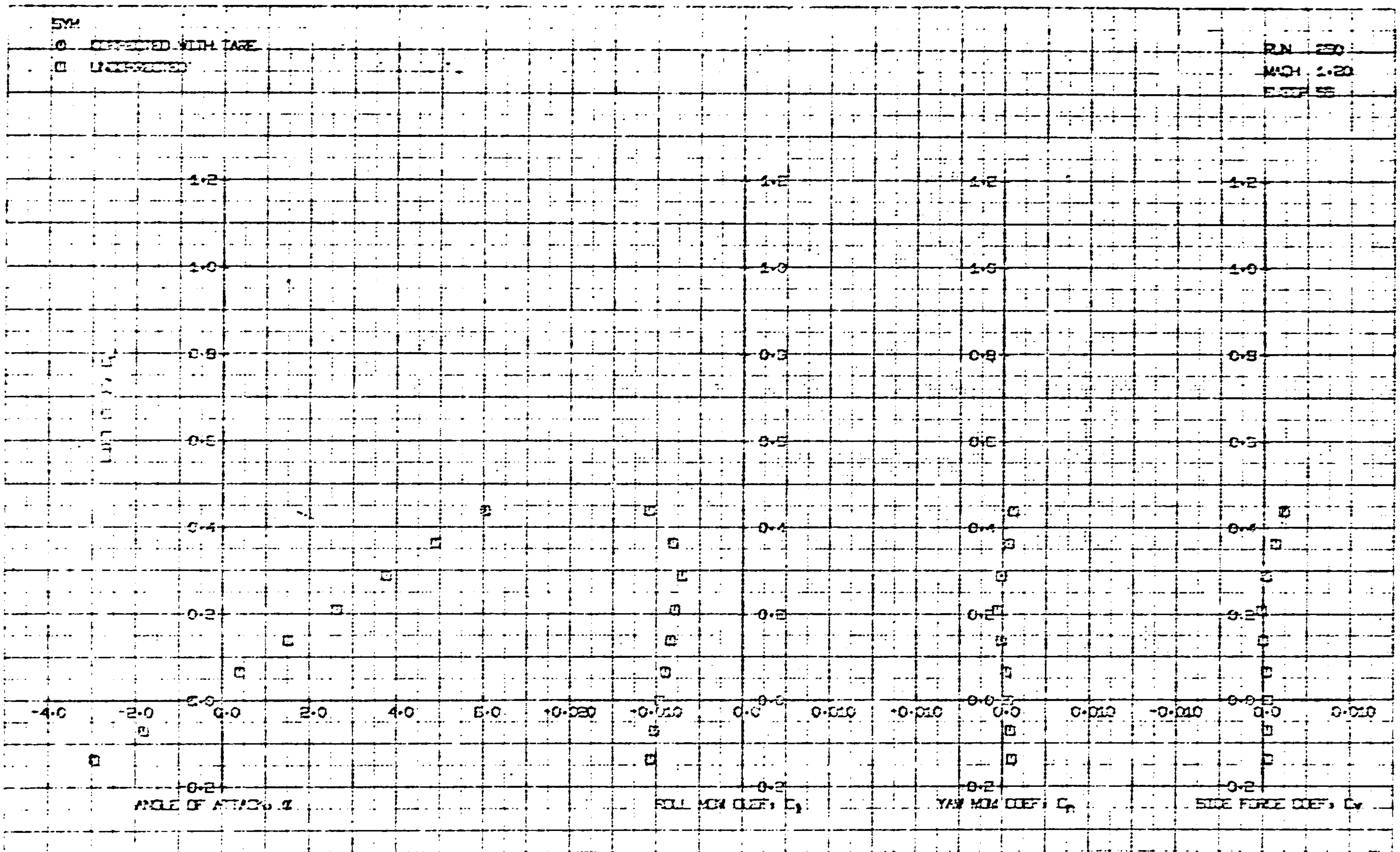


FIGURE 151. PERFORMANCE DATA RUNS, POD/PYLON FUSELAGE

SECTION II – AEROELASTIC SHAPE MEASUREMENT

The Stereophotography System

The arrangement of the camera system in the Ames 11- by 11-foot wind tunnel is illustrated in Figure 152. The camera separation and location was largely dictated by the geometric restrictions of the window blanks in the test section ceiling. Because of the relatively small angular aperature of the photogrammetric lenses, the overlapping field size from such a short distance would not allow full-span coverage of the model with a single stereo-pair of photographs. Therefore, the stereocamera system was connected to a two-position actuator to allow field coverage to be rapidly and remotely changed from left to right and back to left again. This allowed the stereophotography data to be obtained within the span time of a force data scan and therefore did not increase the run time over that required to obtain the basic force and pressure measurements.

Model Marking

A system of optical targets was installed in the model upper surface as illustrated in Figure 153. These targets were arranged to allow both spanwise and chordwise analysis of the aeroelastic deflection of the wing. A generous number of targets was provided along each constant-percent chord line so that some degree of data "smoothing" could be realized by fairing the computed data.

The optical targets were "inlaid" in both the wing and the fuselage surfaces to eliminate any local surface disturbance in the boundary layer flow. The "dimple" produced by a #68 drill approximately 0.015-inch deep was filled with a surfacing epoxy to provide a circular target 0.030 inch in diameter.

Ordinarily a white target is "inlaid" in a dark or gray background to provide a high-contrast and easily photographed surface. Unfortunately, it was necessary to maintain the highly polished stainless steel and aluminum surface finish of the wing and fuselage, respectively, for this test. This type of surface finish presents a very difficult photographic problem when one is interested in the very close examination of the surface detail as required to critically resolve the small optical targets from a distance in excess of six feet.

The best photographic contrast was achieved with a black circular target and with the model covered with a generous coat of dulling spray. Unfortunately, although the dulling spray had been used successfully for this purpose at Reynolds numbers of up to 4×10^6 per foot, it would not hold up at the test Reynolds number of 6×10^6 per foot.

As a result, many targets were not discernible, and the poor photographic image of others resulted in a severe increase in film-reading errors. The impact of this increase in film-reading errors on the computation of the deflected shape of the wing is discussed in the Air-Off Geometry Check and Aeroelastic Deflection Data paragraphs.

Non-Metric Analytical Stereophotography

The generalized non-metric solution allows for the direct transformation from film-reader coordinates to object space coordinates. Details of the mathematical analysis and the resultant transformation equations are beyond the scope of this report. The procedure simply relies on precise knowledge of the relative orientation of at least six common points in each pair of photographs. The transformation thus derived will then allow the computation of as many additional points as are identifiable and common to both camera records.

The inboard wing and fuselage centerline optical targets are in the rigidportion of the model and are therefore used as reference points for calculation of the transformation coefficients for each stereo pair of photographs. The additional rigid model points, not utilized for the determination of the transformation coefficients, are computed and compared with the rigid-model geometry inspection data as proof that a valid transformation has been derived. Thus, the computation of rigid-model geometry and the smooth fairing of the deflected surface into rigid-model geometry provides an accuracy check for each stereophotographic measurement record. The pre-test inspection of the optical target system (illustrated in Figure 154) is tabulated in Tables 3 through 9 for each of the test wing sweeps. Also, a spanwise fairing of these targets along constant-percent chord lines is presented in Figures 155 through 161.

Photographic Considerations

Model photographic lighting was accomplished with a single strobe light in the center window between the cameras. The strobe was fired by a sync-cord signal from one of the two camera lenses. The two camera lenses were fired simultaneously by a remote command unit (reed relay master with three slaves). The flash duration was nominally 1/1000th of a second. The remote fire signal to the reed relay command unit was through the facility camera control system located on the tunnel operator's console. Photographic data were taken along with force and pressure data.

The film used was Kodak 2147 Plus X Pan Professional. All test shots and data film were processed by the NASA photographic laboratory using normal processing. Film submitted to the laboratory for processing in the morning was generally available early afternoon of the same day.

Air-Off Geometry Check

So that an overall accuracy check for the non-metric stereophotography system could be obtained as installed, the data from an air-off stereo pair of photographs was read and reduced to computed surface deflections. Since no load was on the model, the computed deflections should be zero. Any deviation from zero is a direct indication of the precision of the technique in its installed test arrangement.

The results of an air-off geometry check for the trailing wing pair of photographs are shown in Figure 162 for the wing swept 55 degrees. The computed deflections of the optical target points are plotted versus body axis span station for each of the constant-percent chord lines targeted (Figure 154). The average error from the inspected model geometry ranges from 0.007 to 0.010 inch for the four constant-percent chord lines. With a better high-contrast target paint scheme, the average deviation from inspected model geometry should be in the range from 0.003 to 0.005 inch. The loss in the sharp target definition due to the more difficult-to-photograph polished metal surface is evident even in the air-off model geometry check.

The increased scatter in the film readings causes problems in both the computation of the transformation coefficients and in the increased scatter of the discrete data points. The loss of the inboard target points along the 20-percent chord line is due to the location of the boundary-layer transition grit strip nearly on top of the optical targets.

Aeroelastic Deflection Data

Aeroelastic deflection measurements are presented in Figures 163 through 168. These data represent the design-point-Mach-number wing sweep combinations near L/D max for all test configuration wing sweeps except 50 degrees. Where possible, data are presented for both the leading and trailing wing targets along constant-percent chord lines of 40, 60, and 80 percent. The nominal test point C_L is noted on each plot.

Again, the increased scatter of the data about the faired line is indication of the poor photographic contrast of the optical target system on a highly polished metallic surface. The air-loads deflection data should not exhibit any more scatter than that exhibited by the air-off rigid-model geometry computation. In the air-on case, however, the image quality was further deteriorated by removal of the dulling spray by the airflow over the model surface. The random elimination of optical targets due to removal of the dulling spray required that each pair of stereo negatives be handled as a separate computer problem with its own target numbering system and reference geometry library. Further, the increased data scatter makes it more difficult to provide a unique fairing of the experimental data that represents the true spanwise surface deflection.

Since film-measurement and data-reduction tasks comprise the majority of the manhour expenses in application of the non-metric analytical stereophotogrammetric technique, it is very expensive to compromise the photographic record to the extent it was for this test. Film reading time was increased by a factor of 3. Computer time for convergence of the transformation coefficients and point-by-point solution was increased by more than a factor of 10. Finally, the point scatter about the faired line was increased by a factor of 4 over the normal precision of the technique.

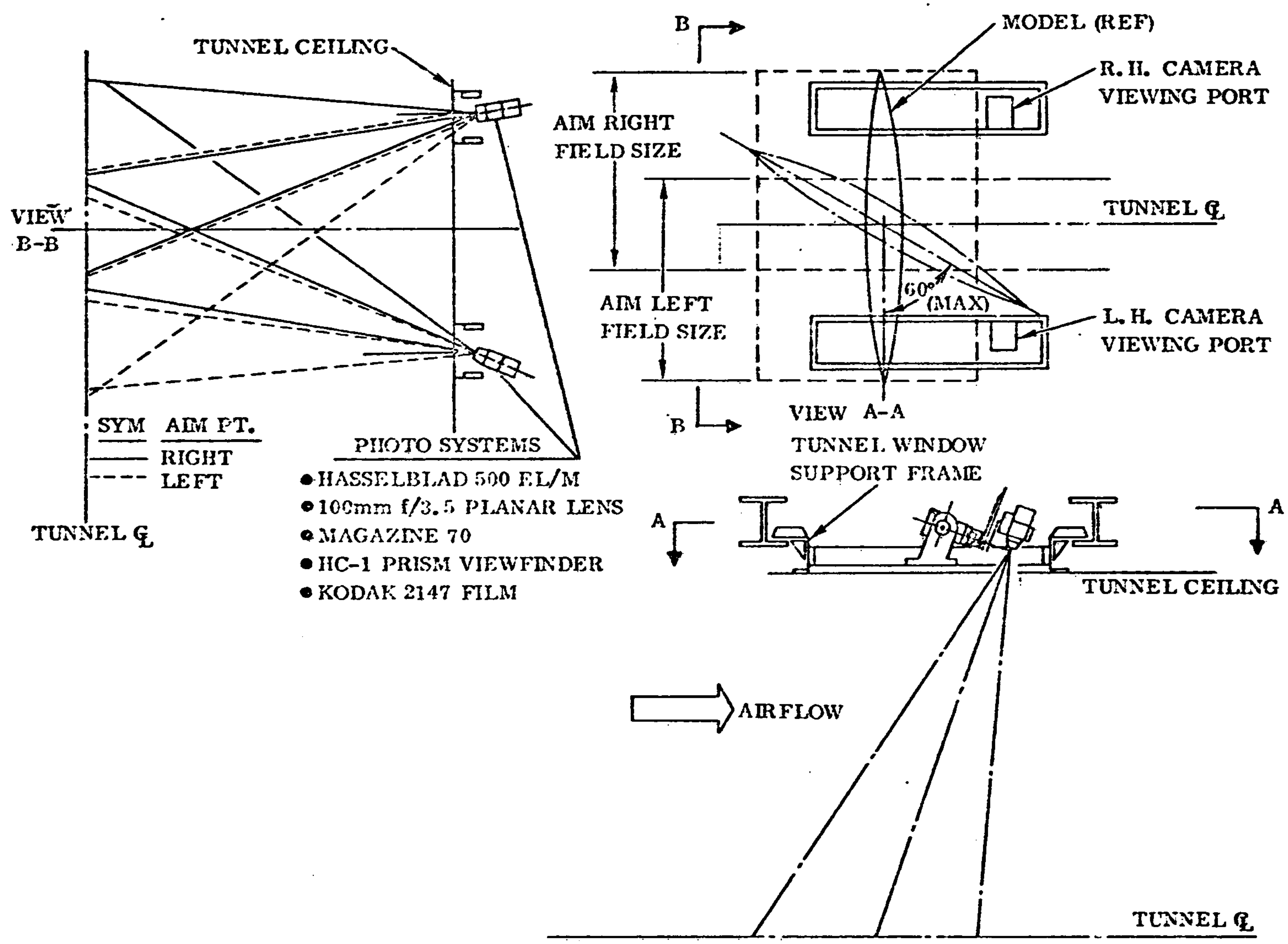


Figure 152. Stereophotography System Installation

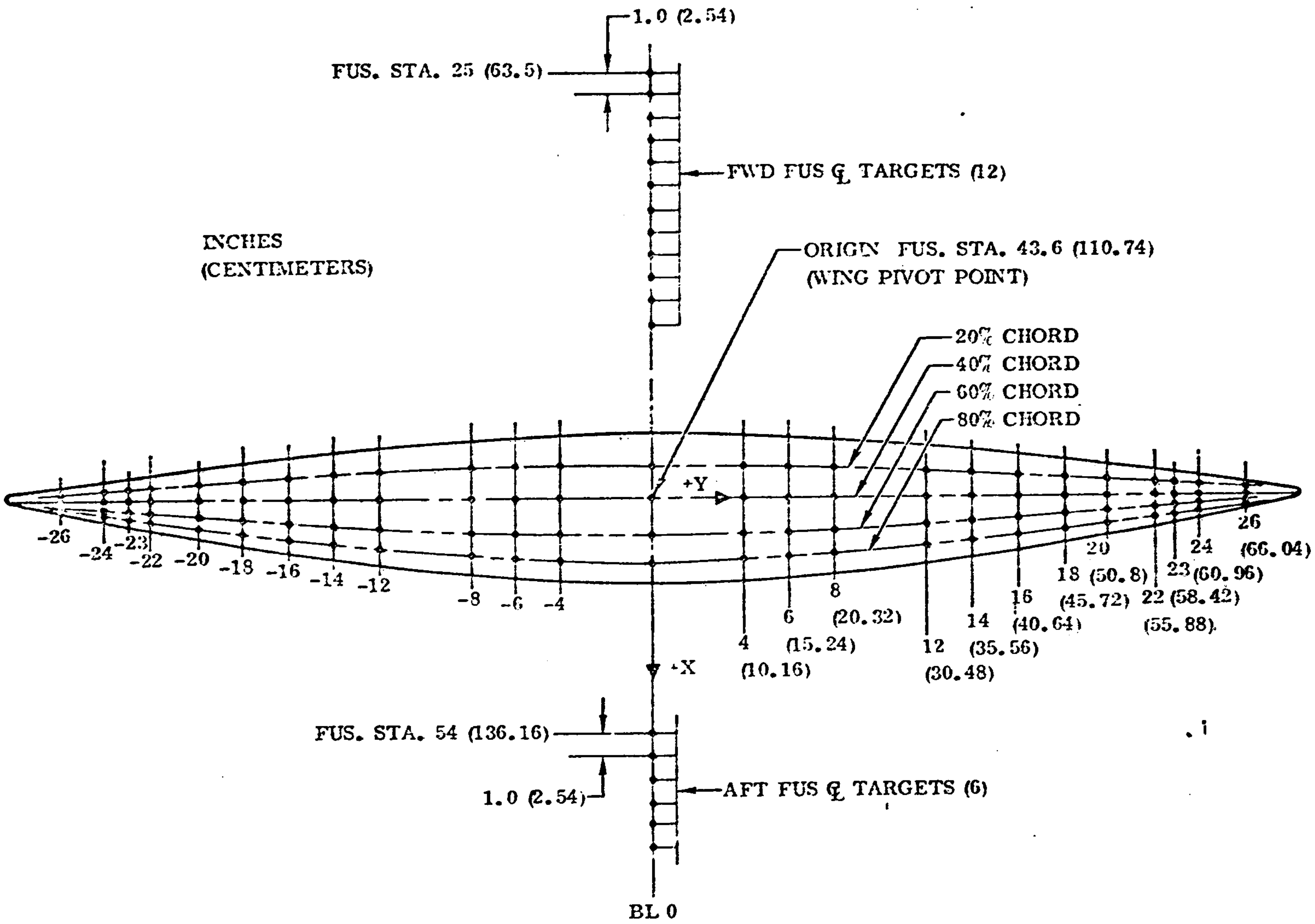


Figure 153. Optical Target Arrangement

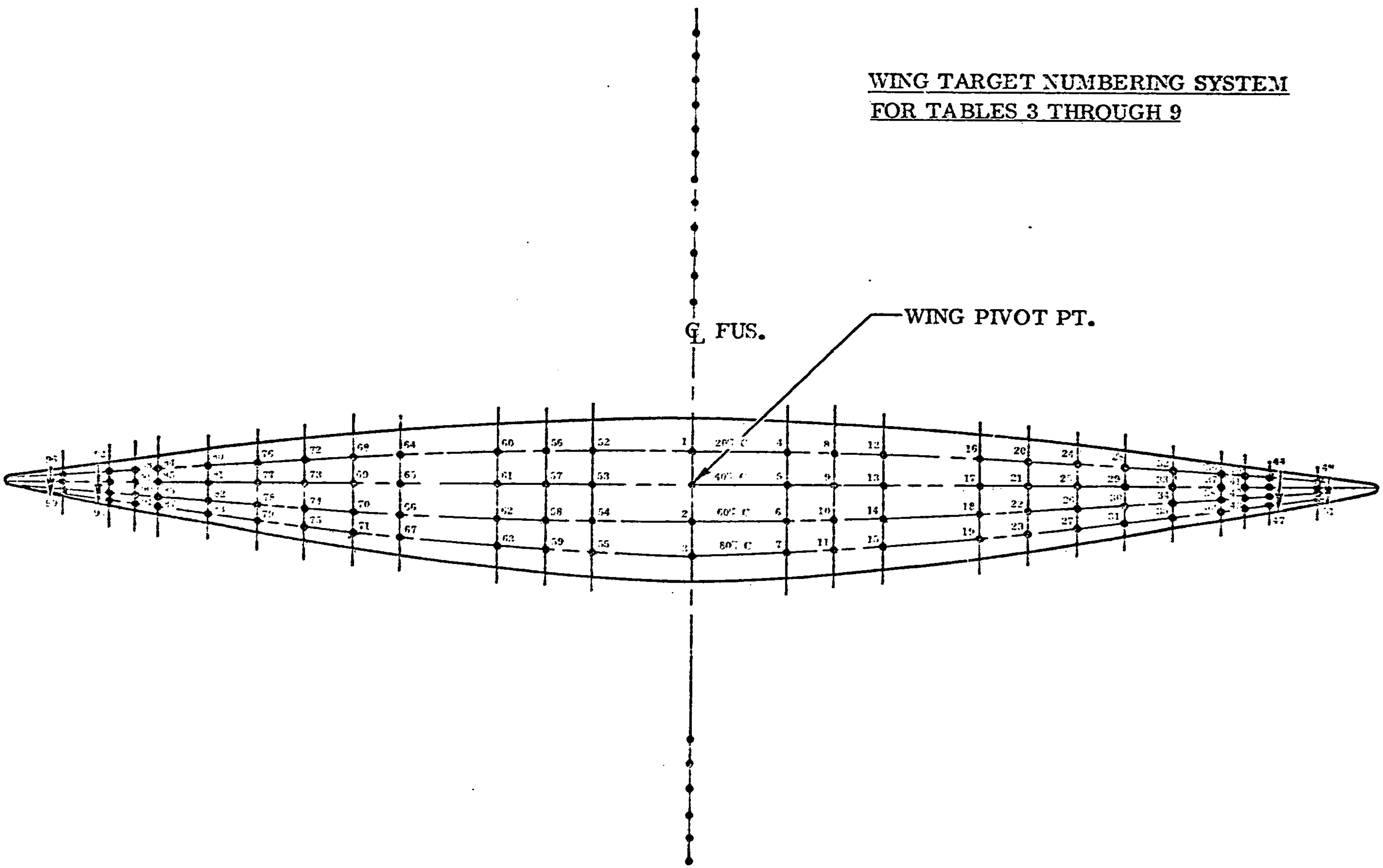
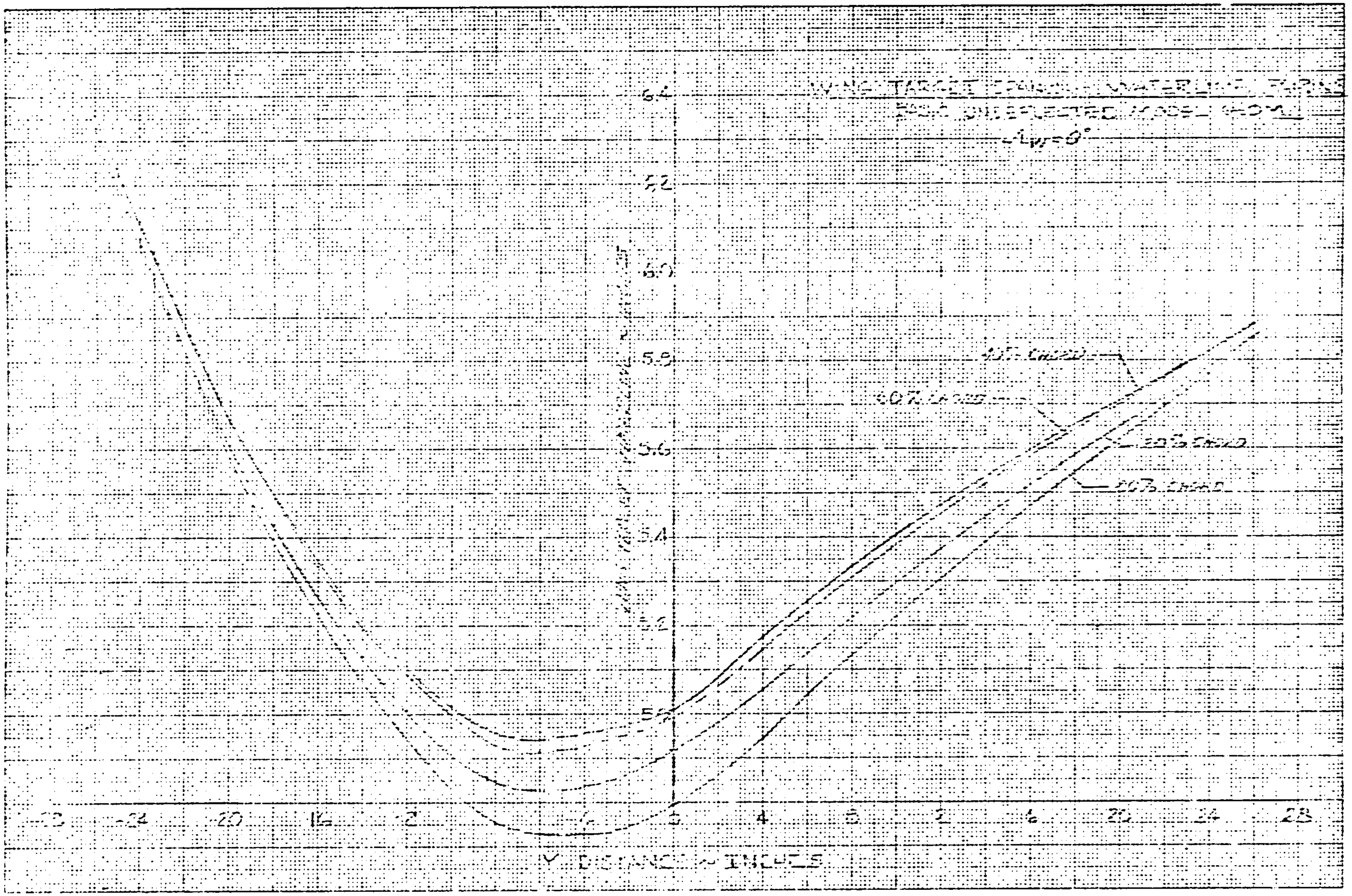


Figure 154. Optical Target Pre-test Numbering System



6.4
6.2
6.0
5.8
5.6
5.4
5.2
5.0
-24
-20
16
4
8
20
24
28
40% CHORD
60% CHORD
20% CHORD
Y DISTANCE ~ INCHES

Figure 155

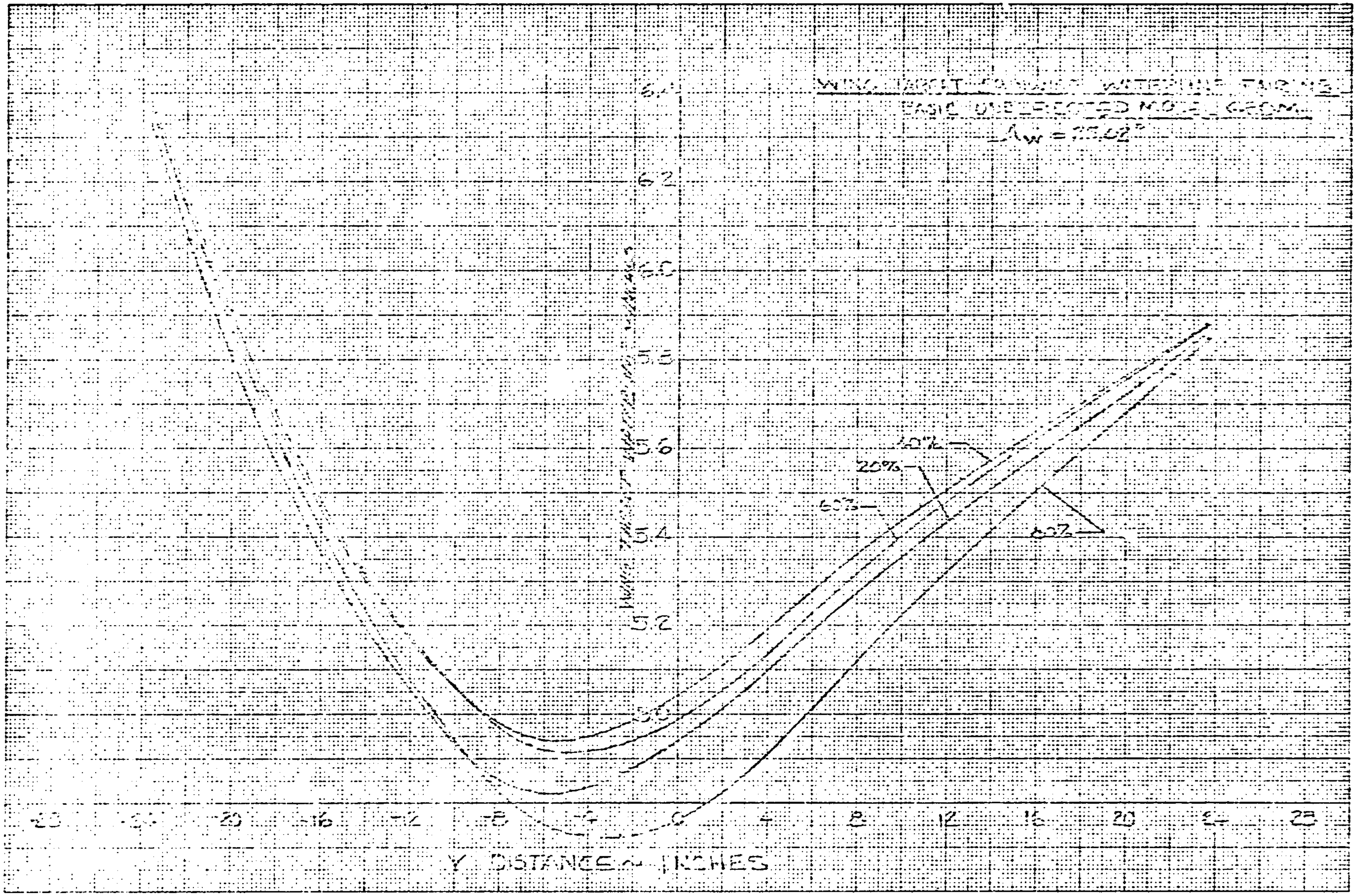


Figure 156

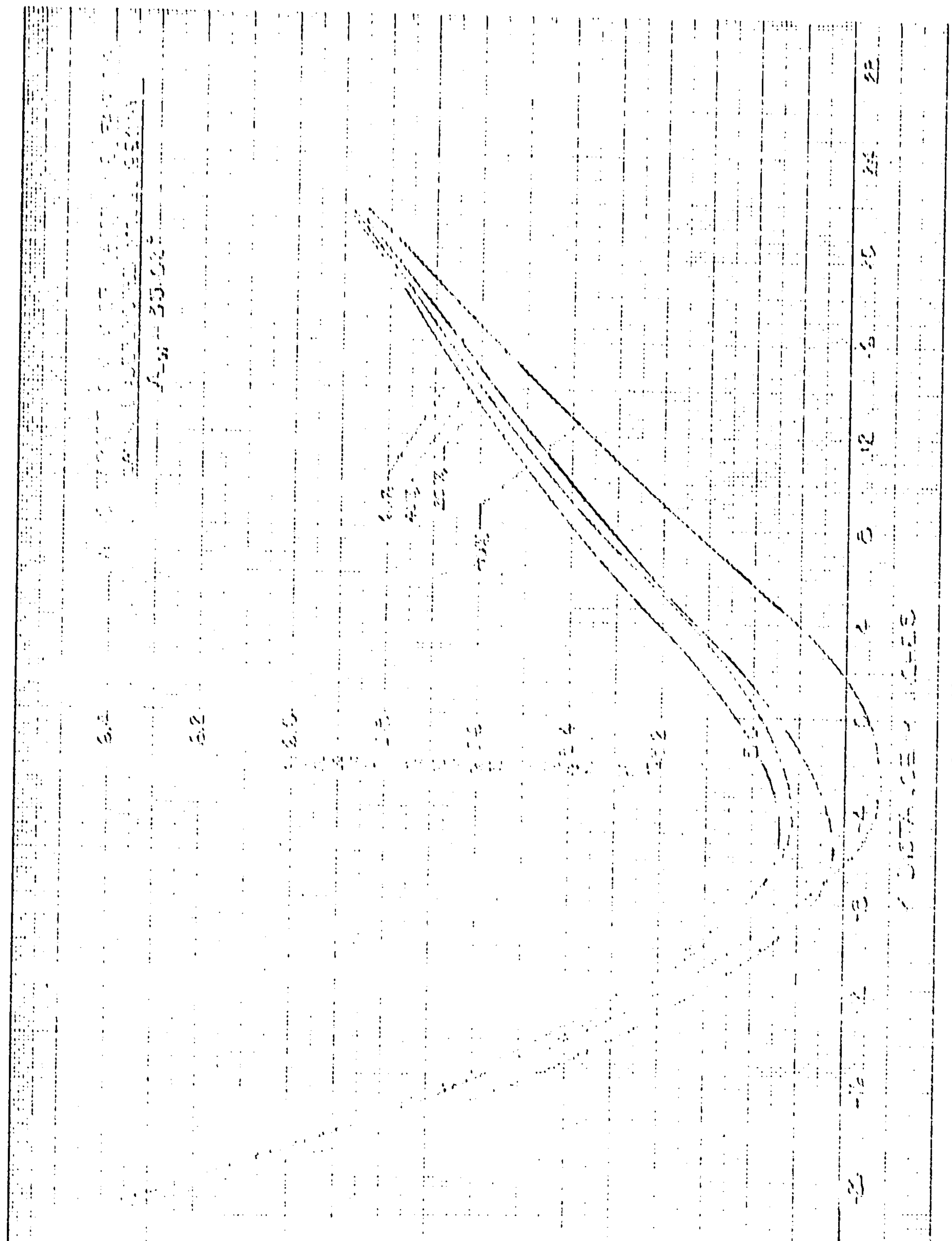


Figure 157

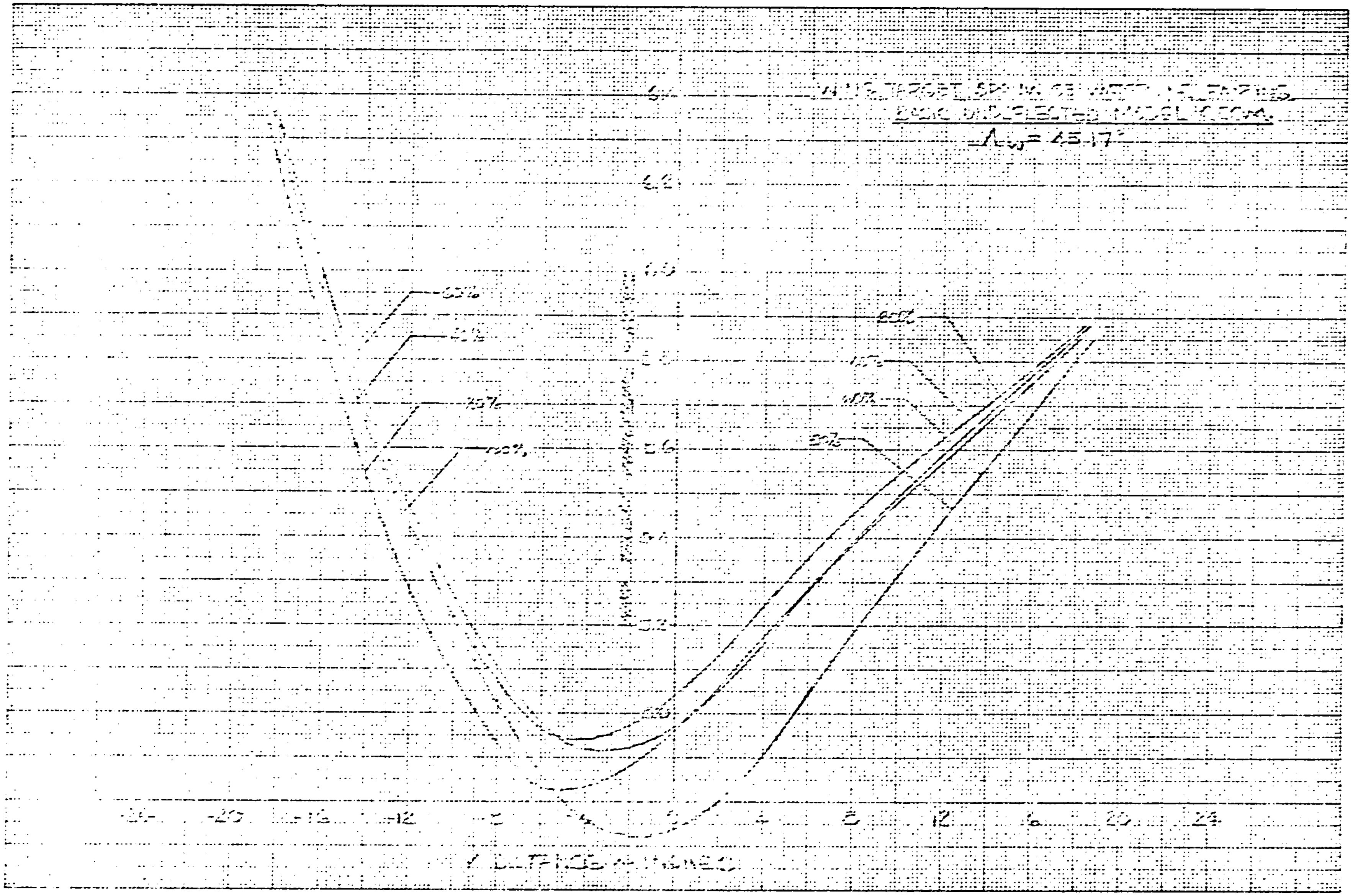


Figure 158

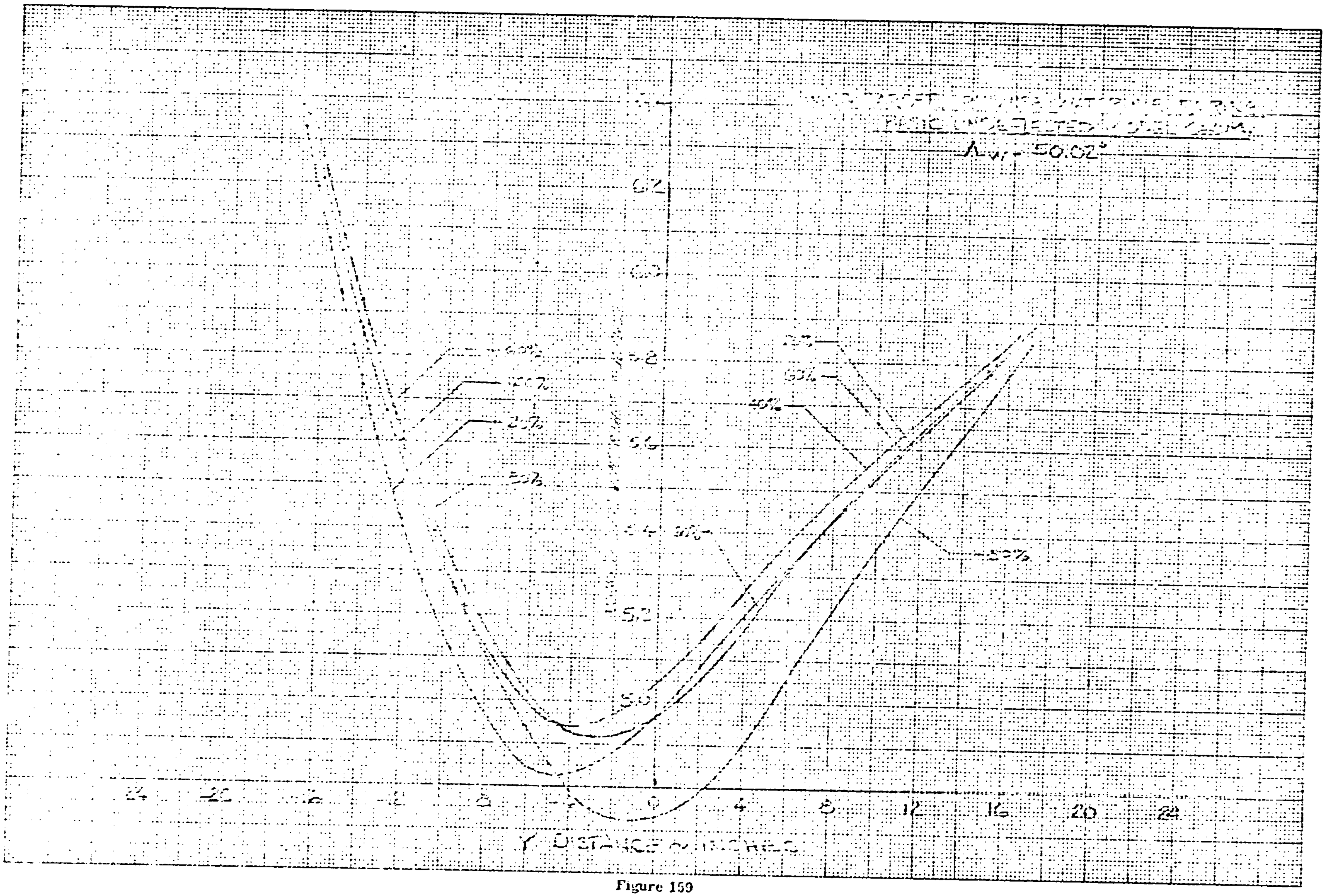


Figure 159

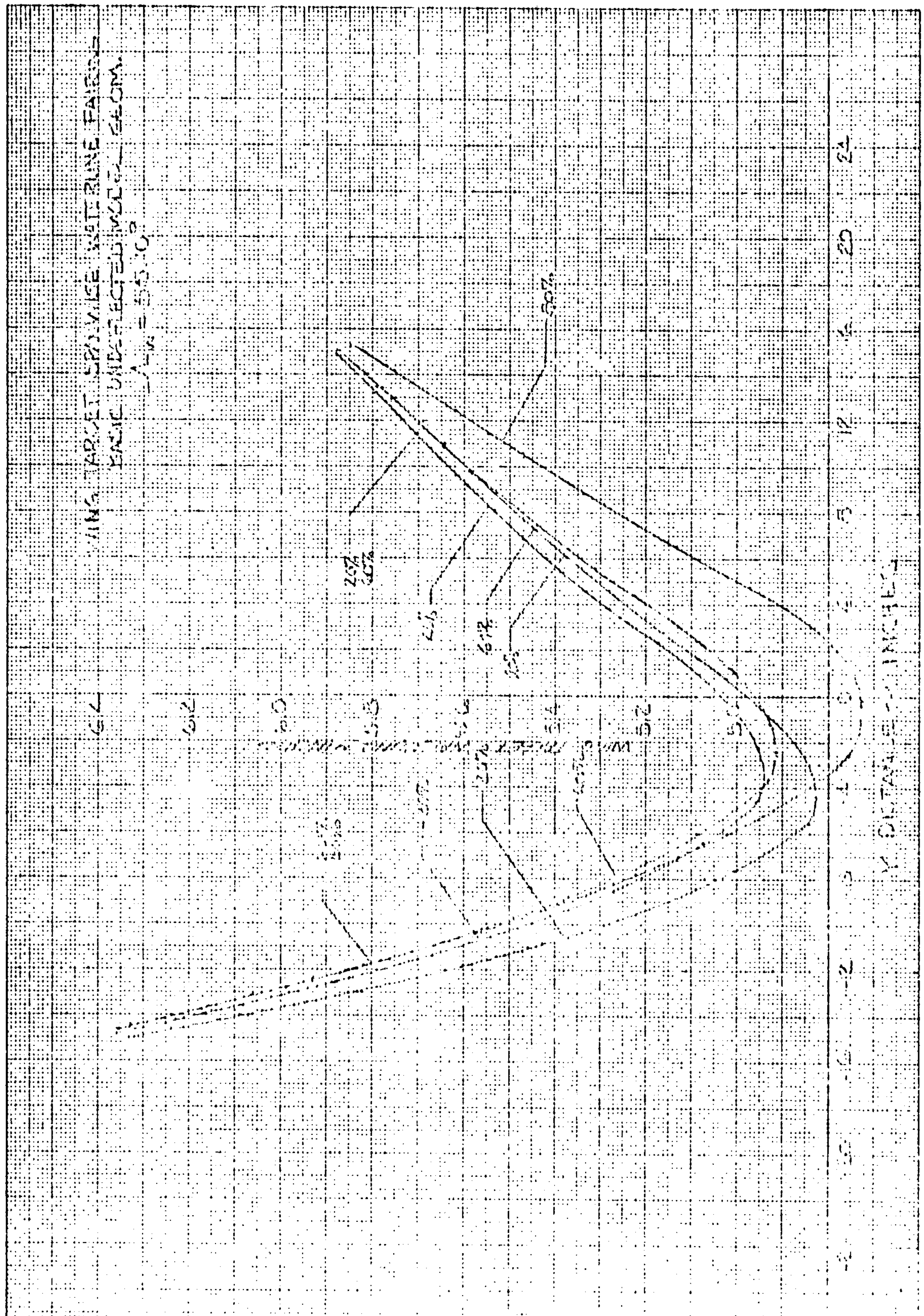


Figure 160

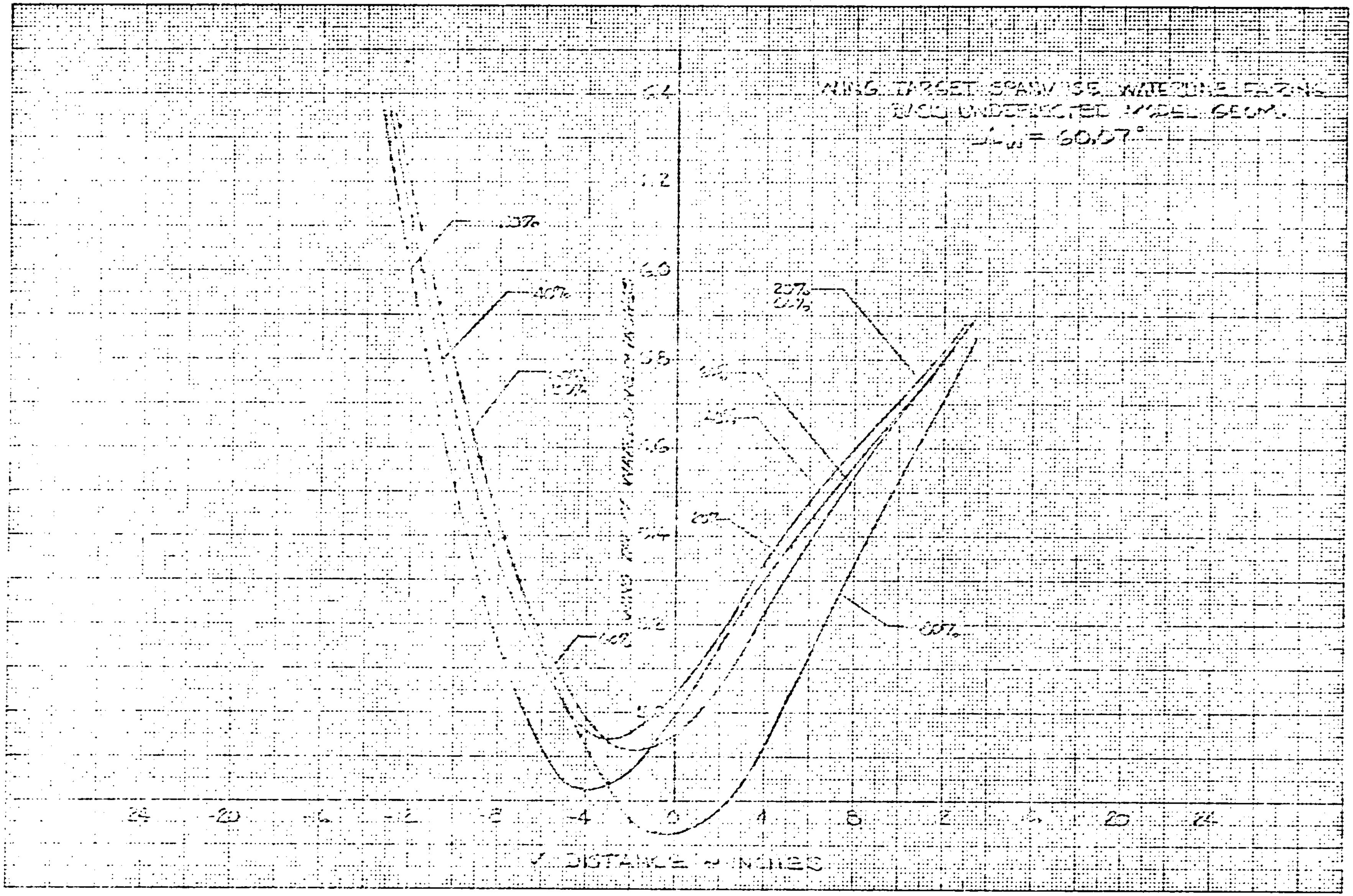


Figure 161

Table 3. BODY AXIS WING TARGET COORDINATES

.00 SWEEP

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PT	X	Y	Z
1	-1.356	.000	4.920
2	1.356	.000	5.007
3	2.713	.000	4.794
4	-1.299	4.000	5.055
5	.000	4.000	5.175
6	1.299	4.000	5.144
7	2.593	4.000	4.945
8	-1.242	6.000	5.141
9	.000	6.000	5.256
10	1.242	6.000	5.227
11	2.484	6.000	5.041
12	-1.172	8.000	5.222
13	.000	8.000	5.334
14	1.172	8.000	5.310
15	2.345	8.000	5.134
16	-1.004	12.000	5.374
17	.000	12.000	5.472
18	1.004	12.000	5.456
19	2.003	12.000	5.309
20	-.909	14.000	5.441
21	.000	14.000	5.531
22	.909	14.000	5.517
23	1.817	14.000	5.365
24	-.808	16.000	5.515
25	.000	16.000	5.595
26	.808	16.000	5.586
27	1.616	16.000	5.470
28	-.703	18.000	5.564
29	.000	18.000	5.655
30	.703	18.000	5.646
31	1.406	18.000	5.548
32	-.595	20.000	5.644
33	.000	20.000	5.706
34	.595	20.000	5.700
35	1.189	20.000	5.617
36	-.483	22.000	5.711
37	.000	22.000	5.762
38	.483	22.000	5.759
39	.967	22.000	5.693
40	-.427	23.000	5.747
41	.000	23.000	5.794
42	.427	23.000	5.790
43	.854	23.000	5.733
44	-.369	24.000	5.779
45	.000	24.000	5.819
46	.369	24.000	5.816
47	.738	24.000	5.768
48	-.248	26.000	5.852
49	.000	26.000	5.881
50	.248	26.000	5.879
51	.496	26.000	5.848

Table 3. CONCLUDED
BODY AXIS WING TARGET COORDINATES

.00 SWEEP

PT	X	Y	Z
52	-1.299	-4.000	4.836
53	.000	-4.000	4.957
54	1.299	-4.000	4.927
55	2.598	-4.000	4.727
56	-1.242	-6.000	4.825
57	.000	-6.000	4.940
58	1.242	-6.000	4.916
59	2.484	-6.000	4.730
60	-1.172	-8.000	4.843
61	.000	-8.000	4.954
62	1.172	-8.000	4.931
63	2.345	-8.000	4.756
64	-1.004	-12.000	5.005
65	.000	-12.000	5.103
66	1.004	-12.000	5.089
67	2.008	-12.000	4.944
68	-.909	-14.000	5.123
69	.000	-14.000	5.210
70	.909	-14.000	5.198
71	1.817	-14.000	5.074
72	-.808	-16.000	5.261
73	.000	-16.000	5.343
74	.808	-16.000	5.334
75	1.616	-16.000	5.221
76	-.703	-18.000	5.425
77	.000	-18.000	5.498
78	.703	-18.000	5.492
79	1.406	-18.000	5.394
80	-.595	-20.000	5.606
81	.000	-20.000	5.669
82	.595	-20.000	5.664
83	1.189	-20.000	5.580
84	-.483	-22.000	5.821
85	.000	-22.000	5.875
86	.483	-22.000	5.869
87	.967	-22.000	5.804
88	-.427	-23.000	5.946
89	.000	-23.000	5.993
90	.427	-23.000	5.988
91	.854	-23.000	5.929
92	-.369	-24.000	6.071
93	.000	-24.000	6.112
94	.369	-24.000	6.109
95	.738	-24.000	6.061
96	-.248	-26.000	6.331
97	.000	-26.000	6.358
98	.248	-26.000	6.356
99	.496	-26.000	6.326

Table 4. BODY AXIS WING TARGET COORDINATES

25.02 SWEEP

PT	X	Y	Z
1	-1.228	-.573	4.920
2	1.228	.573	5.007
3	2.453	1.147	4.794
4	-2.868	3.075	5.055
5	-1.691	3.624	5.175
6	-.514	4.174	5.144
7	.662	4.723	4.945
8	-3.663	4.911	5.141
9-	-2.537	5.436	5.256
10	-1.412	5.962	5.227
11	-.286	6.487	5.041
12	-4.445	6.753	5.222
13	-3.383	7.249	5.334
14	-2.321	7.744	5.310
15	-1.258	8.241	5.134
16	-5.985	10.449	5.374
17	-5.075	10.873	5.472
18	-4.165	11.298	5.456
19	-3.255	11.723	5.309
20	-6.744	12.301	5.441
21	-5.921	12.686	5.531
22	-5.097	13.070	5.517
23	-4.274	13.454	5.385
24	-7.499	14.156	5.515
25	-6.766	14.498	5.595
26	-6.034	14.840	5.586
27	-5.302	15.182	5.470
28	-8.249	16.013	5.584
29	-7.612	16.310	5.655
30	-6.975	16.608	5.646
31	-6.338	16.905	5.548
32	-8.997	17.871	5.644
33	-8.458	18.123	5.706
34	-7.919	18.374	5.700
35	-7.381	18.626	5.617
36	-9.742	19.731	5.711
37	-9.304	19.935	5.762
38	-8.866	20.139	5.759
39	-8.428	20.344	5.693
40	-10.114	20.661	5.747
41	-9.727	20.841	5.794
42	-9.340	21.022	5.790
43	-8.953	21.202	5.733
44	-10.484	21.591	5.779
45	-10.150	21.747	5.819
46	-9.816	21.903	5.816
47	-9.481	22.059	5.768
48	-11.221	23.455	5.852
49	-10.996	23.560	5.861
50	-10.771	23.665	5.879
51	-10.546	23.769	5.848

Table 4. CONCLUDED
BODY AXIS WING TARGET COORDINATES

25.02 SWEEP

PT	X	Y	Z
52	.514	-4.174	4.836
53	1.691	-3.624	4.957
54	2.868	-3.075	4.927
55	4.045	-2.525	4.727
56	1.412	-5.962	4.825
57	2.537	-5.436	4.940
58	3.663	-4.911	4.916
59	4.738	-4.386	4.730
60	2.321	-7.744	4.843
61	3.383	-7.249	4.954
62	4.445	-6.753	4.931
63	5.508	-6.257	4.756
64	4.165	-11.298	5.005
65	5.075	-10.873	5.103
66	5.985	-10.449	5.039
67	6.894	-10.024	4.944
68	5.097	-13.070	5.123
69	5.921	-12.686	5.210
70	6.744	-12.301	5.198
71	7.567	-11.917	5.074
72	6.034	-14.840	5.261
73	6.766	-14.498	5.343
74	7.499	-14.156	5.334
75	8.231	-13.815	5.221
76	6.975	-16.608	5.425
77	7.612	-16.310	5.498
78	8.249	-16.013	5.492
79	8.886	-15.716	5.394
80	7.919	-18.374	5.606
81	8.458	-18.123	5.669
82	8.997	-17.871	5.664
83	9.536	-17.620	5.580
84	8.866	-20.139	5.821
85	9.304	-19.935	5.875
86	9.742	-19.731	5.869
87	10.180	-19.526	5.804
88	9.340	-21.022	5.946
89	9.727	-20.841	5.993
90	10.114	-20.661	5.988
91	10.501	-20.480	5.929
92	9.816	-21.903	6.071
93	10.150	-21.747	6.112
94	10.484	-21.591	6.109
95	10.819	-21.435	6.061
96	10.771	-23.665	6.331
97	10.996	-23.560	6.358
98	11.221	-23.455	6.356
99	11.445	-23.350	6.326

Table 5. BODY AXIS WING TARGET COORDINATES

35.02 SWEEP

PT	X	Y	Z
1	-1.110	-.778	4.920
2	1.110	.778	5.007
3	2.221	1.556	4.794
4	-3.359	2.530	5.055
5	-2.295	3.275	5.175
6	-1.231	4.021	5.144
7	-.167	4.766	4.945
8	-4.460	4.200	5.141
9	-3.443	4.913	5.256
10	-2.426	5.626	5.227
11	-1.403	6.339	5.041
12	-5.550	5.879	5.222
13	-4.590	6.551	5.334
14	-3.631	7.224	5.310
15	-2.670	7.897	5.134
16	-7.708	9.251	5.374
17	-6.886	9.827	5.472
18	-6.064	10.403	5.456
19	-5.241	10.979	5.309
20	-8.778	10.943	5.441
21	-8.034	11.465	5.531
22	-7.289	11.986	5.517
23	-6.546	12.508	5.385
24	-9.843	12.639	5.515
25	-9.181	13.103	5.595
26	-8.520	13.566	5.586
27	-7.858	14.030	5.470
28	-10.905	14.337	5.584
29	-10.329	14.741	5.655
30	-9.753	15.144	5.646
31	-9.178	15.547	5.548
32	-11.964	16.037	5.644
33	-11.477	16.379	5.706
34	-10.989	16.720	5.700
35	-10.503	17.061	5.617
36	-13.020	17.739	5.711
37	-12.624	18.016	5.762
38	-12.229	18.294	5.759
39	-11.833	18.571	5.693
40	-13.548	18.590	5.747
41	-13.198	18.835	5.794
42	-12.849	19.080	5.790
43	-12.499	19.325	5.733
44	-14.074	19.443	5.779
45	-13.772	19.654	5.819
46	-13.470	19.866	5.816
47	-13.168	20.078	5.768
48	-15.123	21.150	5.852
49	-14.920	21.292	5.881
50	-14.717	21.435	5.879
51	-14.514	21.577	5.848

Table 5. CONCLUDED
BODY AXIS WING TARGET COORDINATES

35.02 SWEEP

PT	X	Y	Z
52	1.231	-4.021	4.836
53	2.295	-3.275	4.957
54	3.359	-2.530	4.927
55	4.423	-1.784	4.727
56	2.426	-5.626	4.825
57	3.443	-4.913	4.940
58	4.460	-4.200	4.916
59	5.477	-3.488	4.730
60	3.631	-7.224	4.843
61	4.590	-6.551	4.954
62	5.550	-5.879	4.931
63	6.511	-5.205	4.756
64	6.064	-10.403	5.005
65	6.886	-9.827	5.103
66	7.708	-9.251	5.089
67	8.530	-8.675	4.944
68	7.289	-11.986	5.123
69	8.034	-11.465	5.210
70	8.778	-10.943	5.198
71	9.522	-10.422	5.074
72	8.520	-13.566	5.261
73	9.181	-13.103	5.343
74	9.843	-12.639	5.334
75	10.505	-12.175	5.221
76	9.753	-15.144	5.425
77	10.329	-14.741	5.498
78	10.905	-14.337	5.492
79	11.480	-13.934	5.394
80	10.989	-16.720	5.606
81	11.477	-16.379	5.669
82	11.964	-16.037	5.664
83	12.450	-15.696	5.580
84	12.229	-18.294	5.821
85	12.624	-18.016	5.875
86	13.020	-17.739	5.869
87	13.416	-17.462	5.804
88	12.849	-19.080	5.946
89	13.198	-18.835	5.993
90	13.548	-18.590	5.988
91	13.898	-18.345	5.929
92	13.470	-19.866	6.071
93	13.772	-19.654	6.112
94	14.074	-19.443	6.109
95	14.377	-19.231	6.061
96	14.717	-21.435	6.331
97	14.920	-21.292	6.358
98	15.123	-21.150	6.356
99	15.326	-21.008	6.326

Table 6. BODY AXIS WING TARGET COORDINATES

45.17 SWEEP

PT	X	Y	Z
1	-.955	-.961	4.920
2	.955	.961	5.007
3	1.912	1.924	4.794
4	-3.752	1.898	5.055
5	-2.836	2.820	5.175
6	-1.921	3.741	5.144
7	-1.005	4.662	4.945
8	-5.130	3.349	5.141
9	-4.255	4.230	5.256
10	-3.379	5.110	5.227
11	-2.503	5.991	5.041
12	-6.499	4.808	5.222
13	-5.673	5.640	5.334
14	-4.847	6.471	5.310
15	-4.020	7.303	5.134
16	-9.218	7.748	5.374
17	-8.510	8.460	5.472
18	-7.802	9.172	5.456
19	-7.094	9.884	5.309
20	-10.569	9.225	5.441
21	-9.928	9.870	5.531
22	-9.287	10.514	5.517
23	-8.647	11.158	5.385
24	-11.916	10.707	5.515
25	-11.347	11.280	5.595
26	-10.777	11.853	5.586
27	-10.207	12.426	5.470
28	-13.261	12.191	5.584
29	-12.765	12.690	5.655
30	-12.270	13.188	5.646
31	-11.774	13.687	5.548
32	-14.603	13.678	5.644
33	-14.184	14.100	5.706
34	-13.764	14.522	5.700
35	-13.345	14.943	5.617
36	-15.942	15.167	5.711
37	-15.602	15.510	5.762
38	-15.261	15.852	5.759
39	-14.920	16.195	5.693
40	-16.612	15.912	5.747
41	-16.311	16.215	5.794
42	-16.010	16.517	5.790
43	-15.709	16.820	5.733
44	-17.280	16.658	5.779
45	-17.020	16.920	5.819
46	-16.760	17.181	5.816
47	-16.500	17.443	5.768
48	-18.614	18.154	5.852
49	-18.439	18.330	5.881
50	-18.264	18.506	5.879
51	-18.089	18.681	5.848

Table 6. CONCLUDED

BODY AXIS WING TARGET COORDINATES

45.17 SWEEP

PT	X	Y	Z
52	1.921	-3.741	4.836
53	2.836	-2.820	4.957
54	3.752	-1.898	4.927
55	4.668	-.977	4.727
56	3.379	-5.110	4.825
57	4.255	-4.230	4.940
58	5.130	-3.349	4.916
59	6.006	-2.468	4.730
60	4.847	-6.471	4.843
61	5.673	-5.640	4.954
62	6.499	-4.808	4.931
63	7.326	-3.976	4.756
64	7.802	-9.172	5.005
65	8.510	-8.460	5.103
66	9.218	-7.748	5.089
67	9.926	-7.035	4.944
68	9.287	-10.514	5.123
69	9.928	-9.870	5.210
70	10.569	-9.225	5.198
71	11.209	-8.581	5.074
72	10.777	-11.853	5.261
73	11.347	-11.280	5.343
74	11.916	-10.707	5.334
75	12.486	-10.134	5.221
76	12.270	-13.188	5.425
77	12.765	-12.690	5.498
78	13.261	-12.191	5.492
79	13.756	-11.692	5.394
80	13.764	-14.522	5.606
81	14.184	-14.100	5.669
82	14.603	-13.678	5.664
83	15.022	-13.256	5.580
84	15.261	-15.852	5.821
85	15.602	-15.510	5.875
86	15.942	-15.167	5.869
87	16.284	-14.824	5.804
88	16.010	-16.517	5.946
89	16.311	-16.215	5.993
90	16.612	-15.912	5.988
91	16.913	-15.609	5.929
92	16.760	-17.181	6.071
93	17.020	-16.920	6.112
94	17.280	-16.658	6.109
95	17.541	-16.396	6.061
96	18.264	-18.506	6.331
97	18.439	-18.330	6.358
98	18.614	-18.154	6.356
99	18.788	-17.978	6.326

Table 7. BODY AXIS WING TARGET COORDINATES

50.02 SWEEP

PT	X	Y	Z
1	-.871	-1.039	4.920
2	.871	1.039	5.007
3	1.743	2.078	4.794
4	-3.899	1.574	5.055
5	-3.065	2.570	5.175
6	-2.230	3.565	5.144
7	-1.395	4.560	4.945
8	-5.395	2.903	5.141
9	-4.597	3.855	5.256
10	-3.799	4.806	5.227
11	-3.001	5.758	5.041
12	-6.883	4.242	5.222
13	-6.130	5.140	5.334
14	-5.377	6.038	5.310
15	-4.623	6.937	5.134
16	-9.840	6.940	5.374
17	-9.195	7.710	5.472
18	-8.550	8.479	5.456
19	-7.905	9.248	5.309
20	-11.311	8.298	5.441
21	-10.727	8.995	5.531
22	-10.143	9.691	5.517
23	-9.560	10.387	5.385
24	-12.779	9.661	5.515
25	-12.260	10.280	5.595
26	-11.741	10.899	5.586
27	-11.221	11.518	5.470
28	-14.244	11.026	5.584
29	-13.792	11.565	5.655
30	-13.341	12.104	5.646
31	-12.889	12.642	5.548
32	-15.707	12.394	5.644
33	-15.325	12.850	5.706
34	-14.943	13.306	5.702
35	-14.561	13.761	5.617
36	-17.168	13.765	5.711
37	-16.857	14.135	5.762
38	-16.547	14.505	5.759
39	-16.236	14.876	5.693
40	-17.898	14.450	5.747
41	-17.624	14.777	5.794
42	-17.349	15.105	5.790
43	-17.075	15.432	5.733
44	-18.627	15.137	5.779
45	-18.390	15.420	5.819
46	-18.153	15.703	5.816
47	-17.916	15.985	5.768
48	-20.082	16.515	5.852
49	-19.922	16.705	5.881
50	-19.763	16.895	5.879
51	-19.604	17.085	5.848

Table 7. CONCLUDED
BODY AXIS WING TARGET COORDINATES

50.02 SWEEP

PT	X	Y	Z
52	2.230	-3.565	4.836
53	3.065	-2.570	4.957
54	3.899	-1.574	4.927
55	4.734	-.579	4.727
56	3.799	-4.806	4.825
57	4.597	-3.855	4.940
58	5.395	-2.903	4.916
59	6.193	-1.951	4.730
60	5.377	-6.038	4.843
61	6.130	-5.140	4.954
62	6.883	-4.242	4.931
63	7.636	-3.343	4.755
64	8.550	-8.479	5.005
65	9.195	-7.710	5.103
66	9.840	-6.940	5.089
67	10.485	-6.171	4.944
68	10.143	-9.691	5.123
69	10.727	-8.995	5.210
70	11.311	-8.298	5.198
71	11.895	-7.602	5.074
72	11.741	-10.899	5.261
73	12.260	-10.280	5.343
74	12.779	-9.661	5.334
75	13.298	-9.042	5.221
76	13.341	-12.104	5.425
77	13.792	-11.565	5.498
78	14.244	-11.026	5.492
79	14.696	-10.487	5.394
80	14.943	-13.306	5.606
81	15.325	-12.850	5.669
82	15.707	-12.394	5.664
83	16.089	-11.939	5.580
84	16.547	-14.505	5.821
85	16.857	-14.135	5.875
86	17.168	-13.765	5.869
87	17.479	-13.394	5.804
88	17.349	-15.105	5.946
89	17.624	-14.777	5.993
90	17.898	-14.450	5.988
91	18.172	-14.123	5.929
92	18.153	-15.703	6.071
93	18.390	-15.420	6.112
94	18.627	-15.137	6.109
95	18.864	-14.854	6.061
96	19.763	-16.895	6.331
97	19.922	-16.705	6.358
98	20.082	-16.515	6.356
99	20.241	-16.325	6.326

Table 8. BODY AXIS WING TARGET COORDINATES

55.10 SWEEP

PT	X	Y	Z
1	-.775	-1.112	4.920
2	.775	1.112	5.007
3	1.552	2.225	4.794
4	-4.023	1.223	5.055
5	-3.280	2.288	5.175
6	-2.537	3.353	5.144
7	-1.794	4.419	4.945
8	-5.631	2.414	5.141
9	-4.920	3.432	5.256
10	-4.210	4.451	5.227
11	-3.499	5.470	5.041
12	-7.231	3.615	5.222
13	-6.561	4.577	5.334
14	-5.890	5.538	5.310
15	-5.219	6.500	5.134
16	-10.416	6.042	5.374
17	-9.841	6.865	5.472
18	-9.267	7.689	5.456
19	-8.692	8.512	5.309
20	-12.002	7.264	5.441
21	-11.482	8.010	5.531
22	-10.962	8.755	5.517
23	-10.442	9.500	5.385
24	-13.584	8.491	5.515
25	-13.122	9.154	5.595
26	-12.660	9.817	5.586
27	-12.197	10.479	5.470
28	-15.164	9.722	5.584
29	-14.762	10.298	5.655
30	-14.360	10.875	5.646
31	-13.958	11.451	5.548
32	-16.743	10.954	5.644
33	-16.403	11.442	5.706
34	-16.062	11.930	5.700
35	-15.722	12.418	5.617
36	-18.319	12.191	5.711
37	-18.043	12.587	5.762
38	-17.766	12.983	5.759
39	-17.490	13.380	5.693
40	-19.107	12.809	5.747
41	-18.863	13.159	5.794
42	-18.619	13.509	5.790
43	-18.374	13.859	5.733
44	-19.894	13.428	5.779
45	-19.683	13.731	5.819
46	-19.472	14.034	5.816
47	-19.261	14.336	5.768
48	-21.465	14.672	5.852
49	-21.323	14.875	5.831
50	-21.182	15.079	5.879
51	-21.040	15.282	5.848

Table 8. CONCLUDED

BODY AXIS WING TARGET COORDINATES

55.10 SWEEP

PT	X	Y	Z
52	2.537	-3.353	4.836
53	3.280	-2.288	4.957
54	4.023	-1.223	4.927
55	4.767	-.157	4.727
56	4.210	-4.451	4.825
57	4.920	-3.432	4.940
58	5.631	-2.414	4.916
59	6.342	-1.395	4.730
60	5.890	-5.538	4.843
61	6.561	-4.577	4.954
62	7.231	-3.615	4.931
63	7.902	-2.653	4.756
64	9.267	-7.689	5.005
65	9.841	-6.865	5.103
66	10.416	-6.042	5.089
67	10.990	-5.218	4.944
68	10.962	-8.755	5.123
69	11.432	-8.010	5.210
70	12.002	-7.264	5.198
71	12.521	-6.519	5.074
72	12.660	-9.817	5.261
73	13.122	-9.154	5.343
74	13.584	-8.491	5.334
75	14.047	-7.828	5.221
76	14.360	-10.875	5.425
77	14.762	-10.298	5.498
78	15.164	-9.722	5.492
79	15.567	-9.145	5.394
80	16.062	-11.930	5.606
81	16.403	-11.442	5.669
82	16.743	-10.954	5.664
83	17.083	-10.467	5.580
84	17.766	-12.983	5.821
85	18.043	-12.587	5.875
86	18.319	-12.191	5.869
87	18.596	-11.794	5.804
88	18.619	-13.509	5.946
89	18.863	-13.159	5.993
90	19.107	-12.809	5.988
91	19.352	-12.458	5.929-
92	19.472	-14.034	6.071
93	19.683	-13.731	6.112
94	19.894	-13.428	6.109
95	20.105	-13.126	6.061
96	21.182	-15.079	6.331
97	21.323	-14.875	6.358
98	21.465	-14.672	6.356
99	21.607	-14.468	6.326

Table 9. BODY AXIS WING TARGET COORDINATES

60.07 SWEEP

PT.	X	Y	Z
1	-.676	-1.175	4.920
2	.676	1.175	5.007
3	1.353	2.351	4.794
4	-4.114	.870	5.055
5	-3.466	1.995	5.175
6	-2.818	3.121	5.144
7	-2.170	4.247	4.945
8	-5.819	1.917	5.141
9	-5.199	2.993	5.256
10	-4.580	4.070	5.227
11	-3.960	5.146	5.041
12	-7.517	2.975	5.222
13	-6.933	3.991	5.334
14	-6.348	5.007	5.310
15	-5.763	6.023	5.134
16	-10.900	5.117	5.374
17	-10.399	5.987	5.472
18	-9.893	6.857	5.456
19	-9.397	7.727	5.309
20	-12.586	6.197	5.441
21	-12.132	6.985	5.531
22	-11.679	7.772	5.517
23	-11.226	8.559	5.385
24	-14.269	7.282	5.515
25	-13.866	7.983	5.595
26	-13.463	8.683	5.586
27	-13.059	9.383	5.470
28	-15.950	8.371	5.584
29	-15.599	8.980	5.655
30	-15.248	9.590	5.646
31	-14.897	10.199	5.548
32	-17.629	9.463	5.644
33	-17.332	9.978	5.706
34	-17.035	10.494	5.700
35	-16.739	11.009	5.617
36	-19.306	10.558	5.711
37	-19.065	10.976	5.762
38	-18.824	11.395	5.759
39	-18.583	11.814	5.693
40	-20.145	11.105	5.747
41	-19.932	11.475	5.794
42	-19.719	11.845	5.790
43	-19.506	12.215	5.733
44	-20.983	11.654	5.779
45	-20.799	11.974	5.819
46	-20.615	12.294	5.816
47	-20.431	12.614	5.768
48	-22.656	12.757	5.852
49	-22.532	12.972	5.881
50	-22.408	13.187	5.879
51	-22.285	13.402	5.848

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Table 9. CONCLUDED
BODY AXIS WING TARGET COORDINATES

60.07 SWEEP

PT	X	Y	Z
52	2.818	-3.121	4.836
53	3.466	-1.995	4.957
54	4.114	-.870	4.927
55	4.762	.255	4.727
56	4.580	-4.070	4.825
57	5.199	-2.993	4.940
58	5.819	-1.917	4.916
59	6.439	-.840	4.730
60	6.348	-5.007	4.843
61	6.933	-3.991	4.954
62	7.517	-2.975	4.931
63	8.103	-1.959	4.756
64	9.898	-6.857	5.005
65	10.399	-5.987	5.103
66	10.900	-5.117	5.089
67	11.401	-4.247	4.944
68	11.679	-7.772	5.123
69	12.132	-6.985	5.210
70	12.586	-6.197	5.198
71	13.039	-5.410	5.074
72	13.463	-8.683	5.261
73	13.866	-7.983	5.343
74	14.269	-7.232	5.334
75	14.672	-6.582	5.221
76	15.248	-9.590	5.425
77	15.599	-8.980	5.498
78	15.950	-8.371	5.492
79	16.300	-7.762	5.394
80	17.035	-10.494	5.606
81	17.332	-9.978	5.669
82	17.629	-9.463	5.664
83	17.925	-8.948	5.580
84	18.824	-11.395	5.821
85	19.065	-10.976	5.875
86	19.306	-10.558	5.869
87	19.548	-10.138	5.804
88	19.719	-11.845	5.946
89	19.932	-11.475	5.993
90	20.145	-11.105	5.988
91	20.358	-10.735	5.929
92	20.615	-12.294	6.071
93	20.799	-11.974	6.112
94	20.983	-11.654	6.109
95	21.167	-11.335	6.061
96	22.408	-13.187	6.331
97	22.532	-12.972	6.358
98	22.656	-12.757	6.356
99	22.780	-12.542	6.326

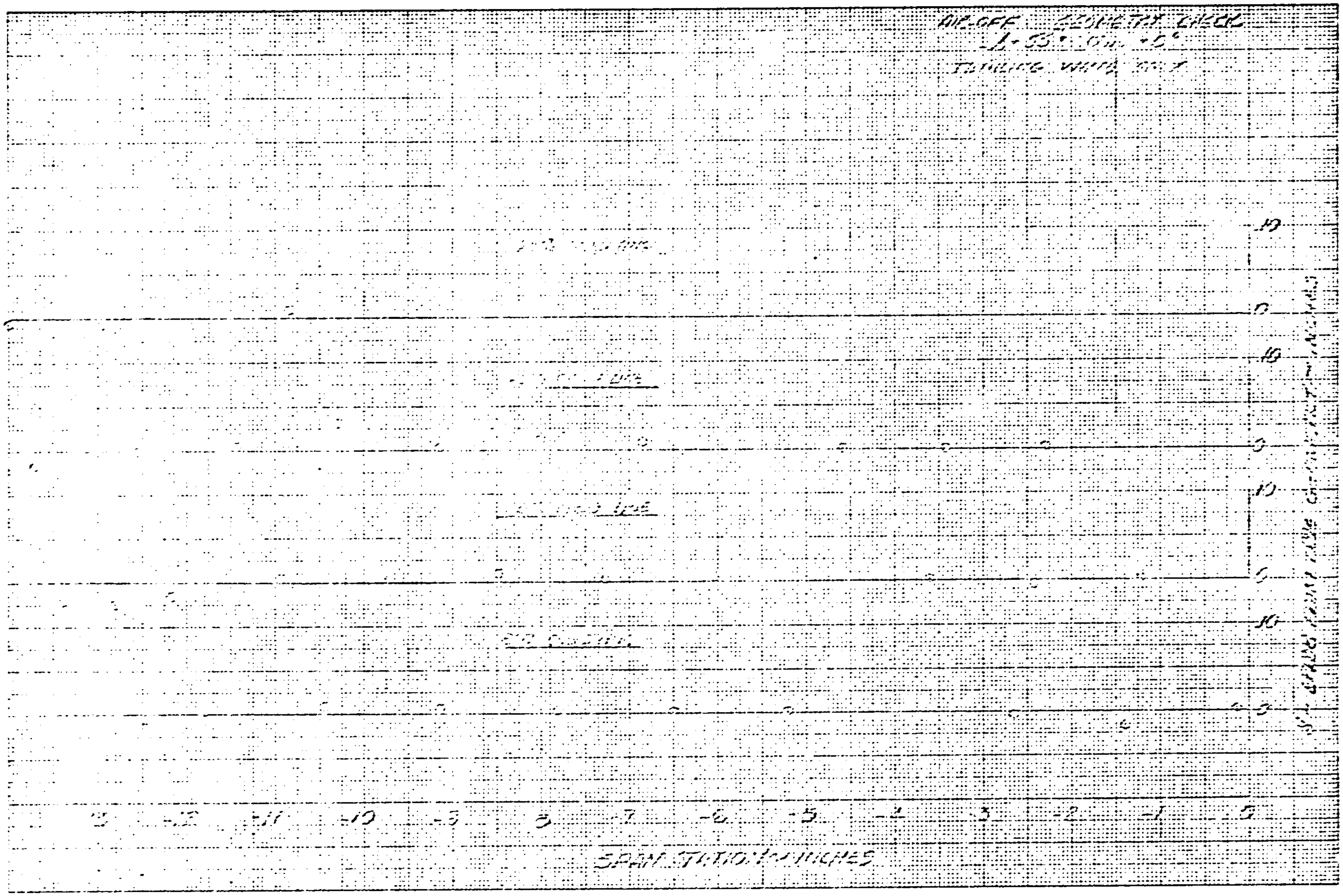
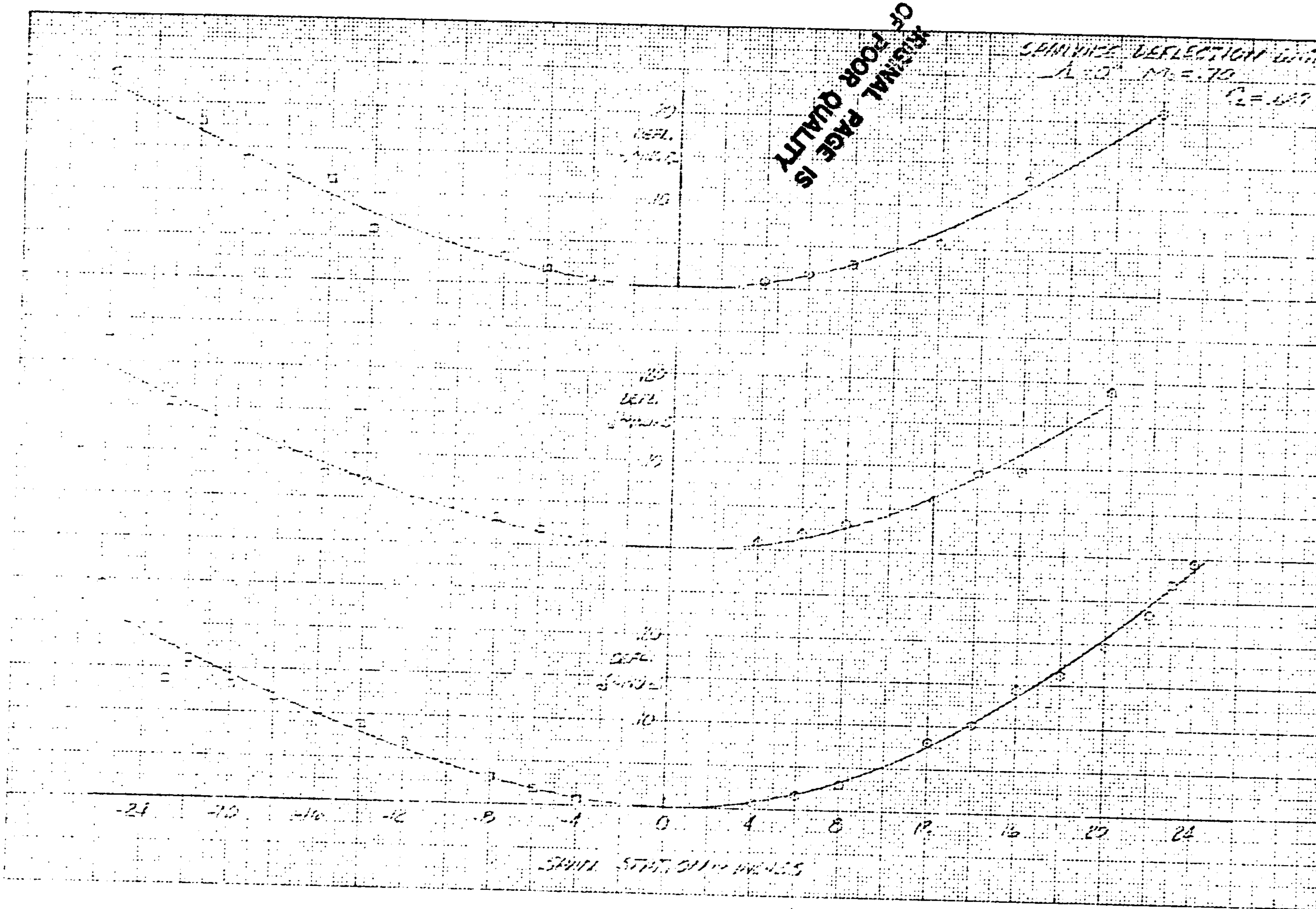


Figure 162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-20
-16
-12
-8
-4
0
4
8
12
16
20
24

Figure 163

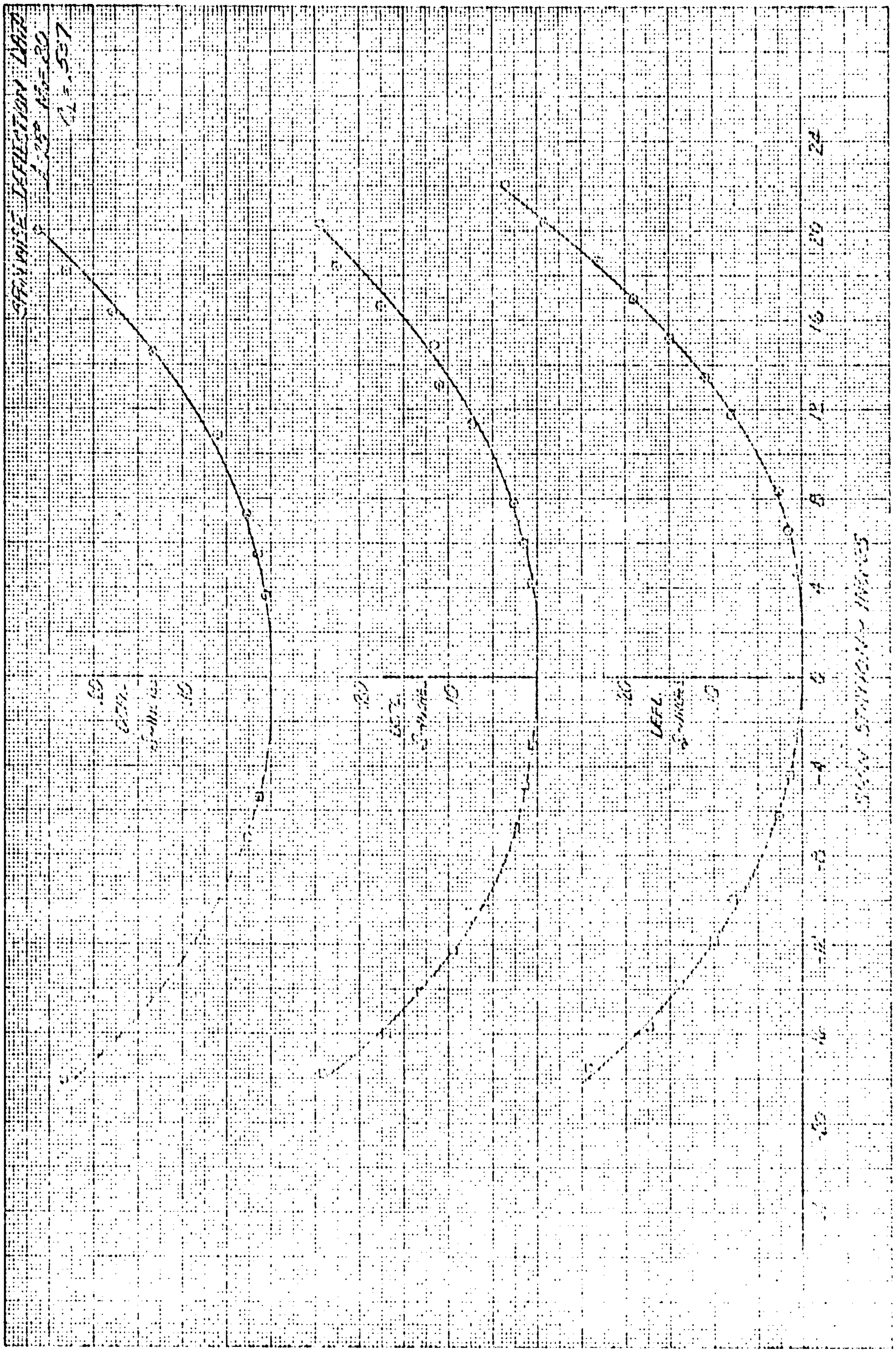
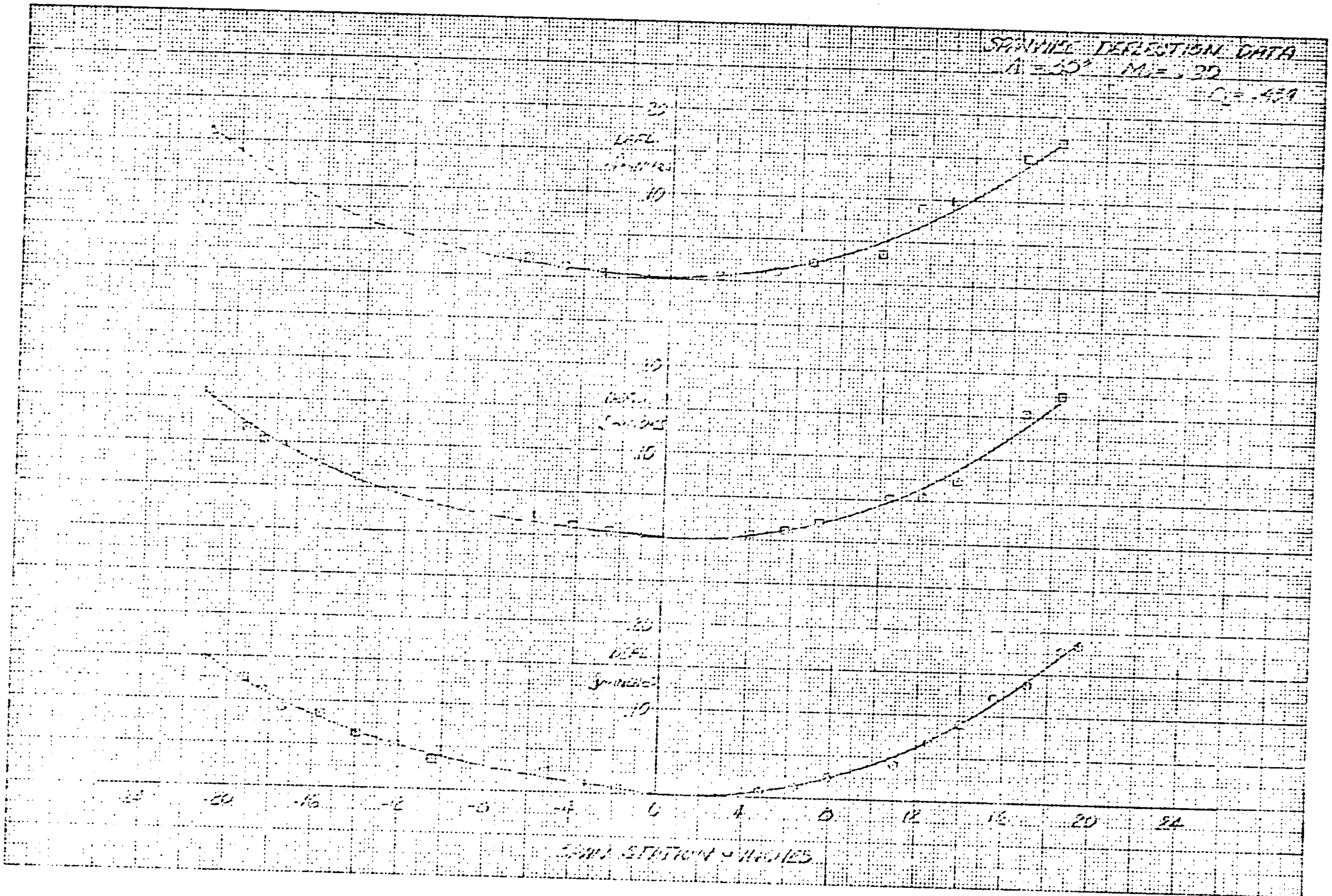


Figure 164


SPANWISE DEFLECTION DATA
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-16
-12
-8
-4
0
4
8
12
16
20
24
SPAN STATION ~ INCHES

Figure 165

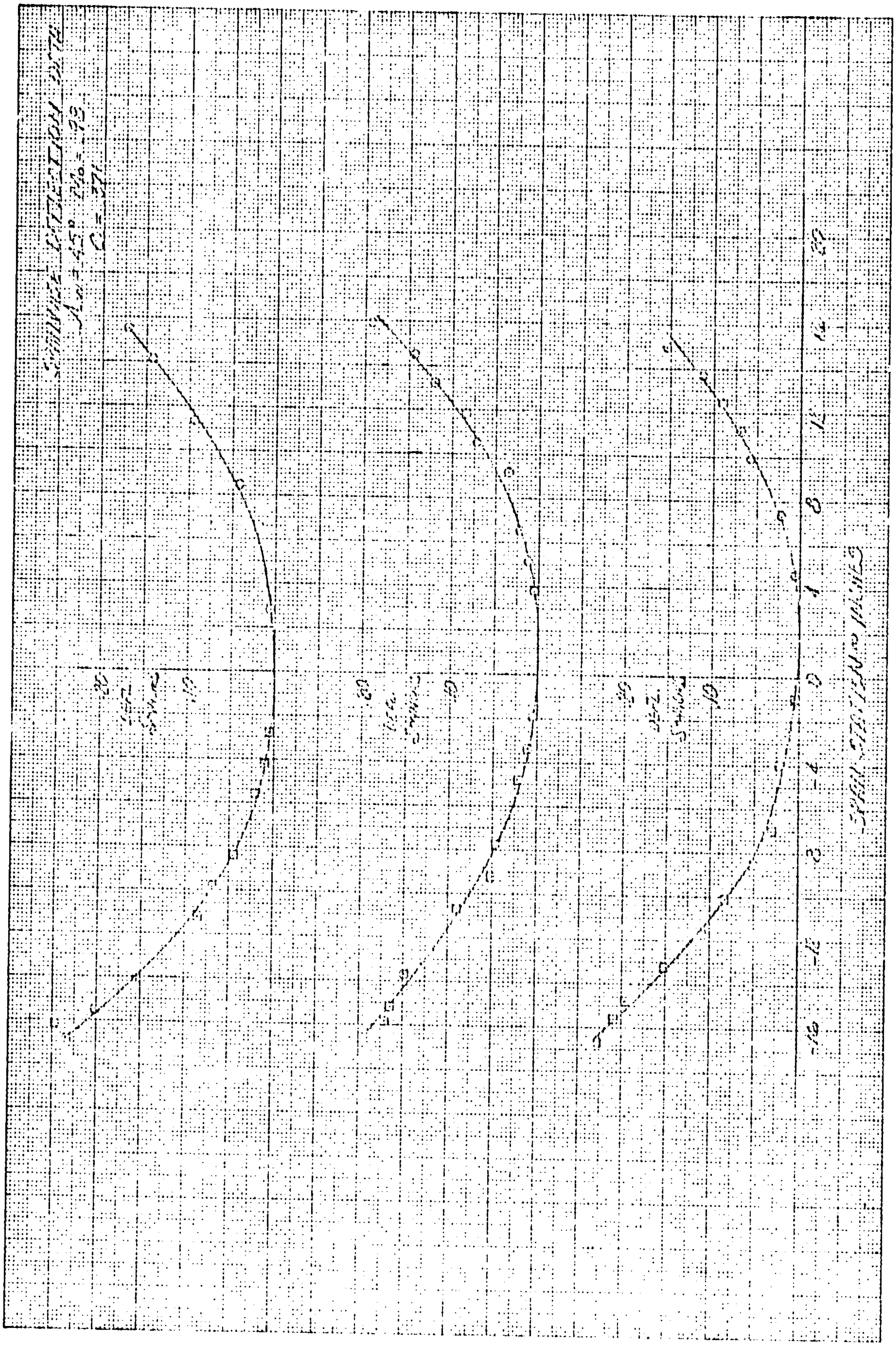

Figure 166

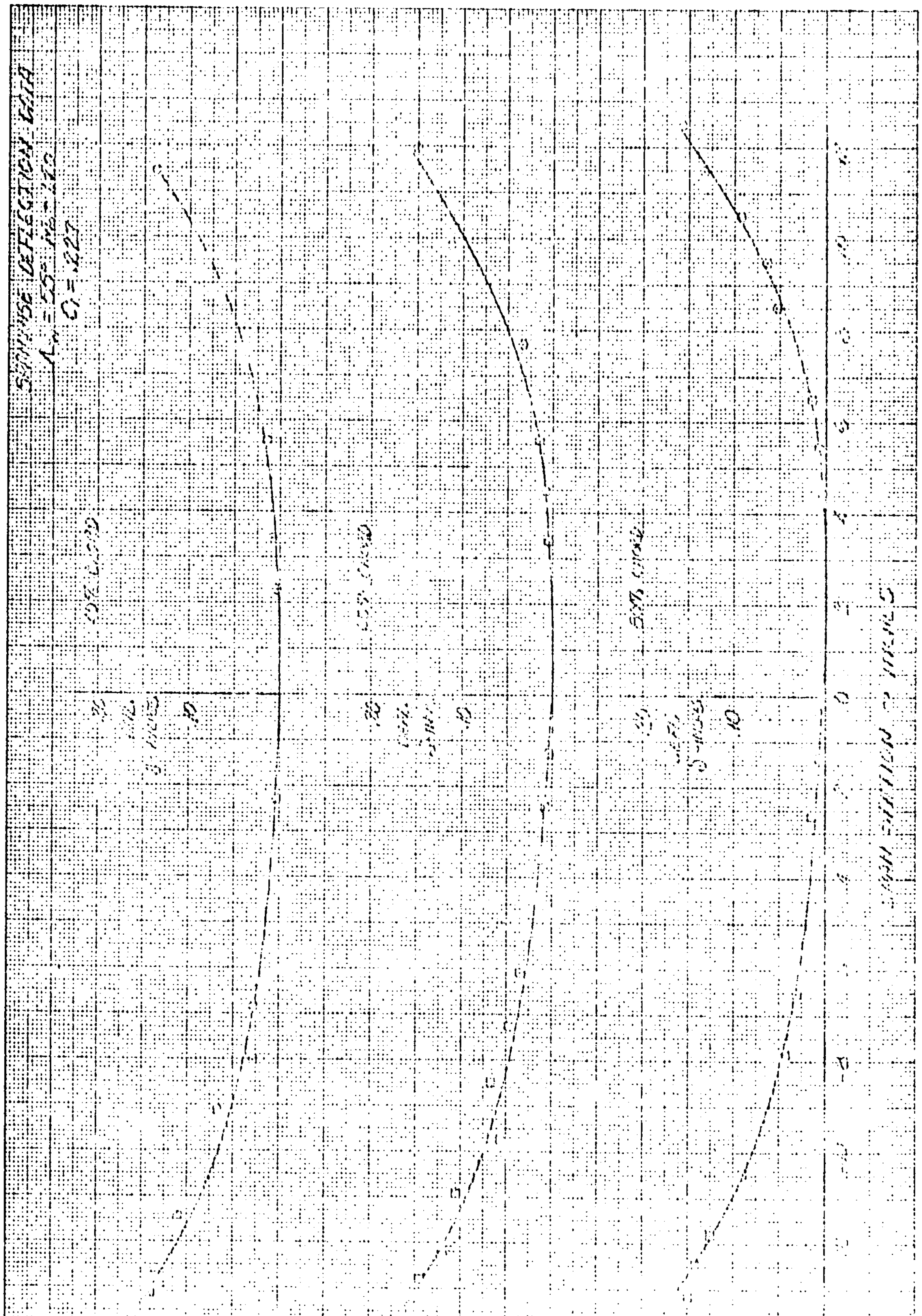

Figure 167

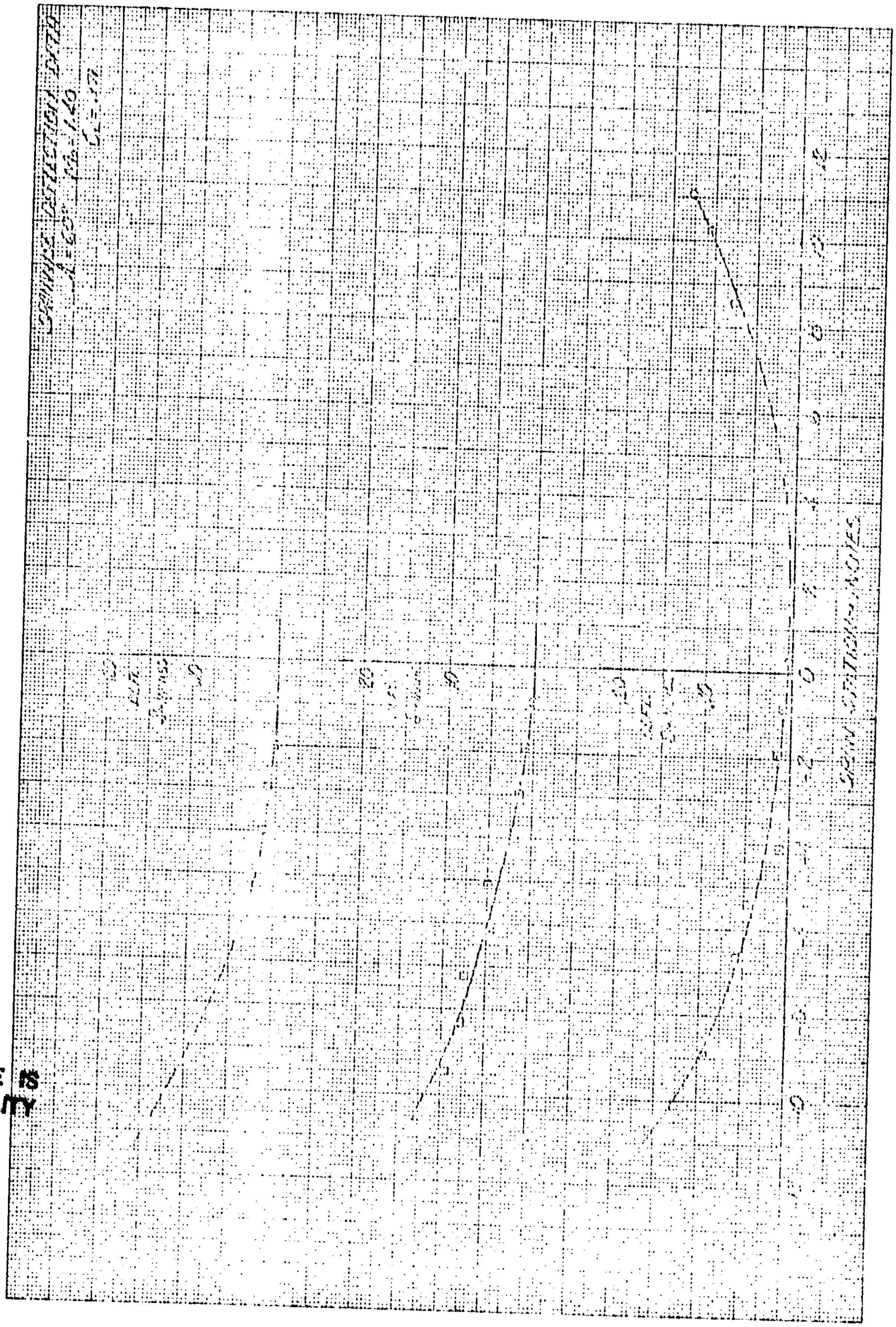

Figure 168

TABLE 2. - NACELLE MASS-FLOW RATIOS

INTEGRATED FUSELAGE: PERFORMANCE RUNS, $\alpha \approx 0.0$

SWEEP ANGLE	MACH NUMBER 0.60	0.70	0.80	0.90	0.95	0.98	1.05	1.10	1.15	1.20	1.40
0	68/83 1.02/1.03	69/84 1.00/1.01	70/85 .97/.98								
25		71/86 1.00/1.01	72/87 .97/.98	73/88 .94/.96							
35		74/89 1.00/1.01	75/90 .97/.98	76/91 .95/.96	77/92 .94/.96						
45			64/93 .97/.95		65/94 .94/.95	66/95 .93/.94	67/96 .89/.92				
50			82/97 .97/.96		81/98 .94/.95	80/99 .93/.94		79/100 .88/.88		78/101 .94/.93	
55			83/102 .98/.98		84/103 .94/.95	85/104 .93/.94		86/105 .88/.89	87/106 .91/.90	88/107 .94/.9[illegible]	
60			95/108 .97/.98			94/109 .93/.94		93/110 .88/.89		92/111 .9[illegible]/.92	91/112 .96/.95

KEY: Run No./Fig. N.
R.H. Nac./L.H. Nac.

TABLE 2.- NACELLE MASS-FLOW RATIOS

INTEGRATED FUSELAGE: PERFORMANCE RUNS, MAX L/D

SWEEP ANGLE	MACH NUMBER 0.60	0.70	0.80	0.90	0.95	0.98	1.05	1.10	1.15	1.20	1.40
0	63/83 1.01/1.03	67/84 .99/1.01	70/85 [illegible]/.97								
25		71/86 .99/1.00	72/87 .97/.97	73/88 .95/.95							
35		74/89 1.00/1.00	75/90 .97/.97	76/91 .94/.94	77/92 .94/.94						
45			64/93 .97/.97		65/94 .94/.94	66/95 .93/.93	67/96 .93/.93				
50			82/97 .96/.96		81/98 .94/.94	80/99 .93/.94		79/100 .89/.89		78/101 .95/.95	
55			83/102 .97/.97		84/103 .94/.94	85/104 .93/.94		86/105 .89/.89	87/106 .88/.87	88/107 .88/.88	
60			95/108 .96/.96			94/109 .93/.93		93/110 .89/.90		92/111 .92/.94	91/112 .94/.95

KEY: $\frac{\text{Run No./Fig. No.}}{\text{R.H. Nac./L.H. Nac.}}$

TABLE 2. - NACELLE MASS-FLOW RATIOS

INTEGRATED FUSELAGE: ALTERNATE DUCT FLOW, [illegible]

SWEEP ANGLE	MACH NUMBER 0.60	0.70	0.80	0.90	0.95	0.98	1.05	1.10	1.15	1.20	1.40
0	106/113 .53/.57	107/114 .56/.56	103/115 .54/.54								
25											
35											
45			102/116 .55/.54		103/117 .54/.53	104/118 .53/.53	95/117 .53/.53				
50											
55			98/120 .55/.55			97/121 .53/.54		100/122 .54/.53		101/123 .57/.54	
60										97/124 .57/.54	93/125 .57/.56

KEY: Run No./Fig. No.
R.H. Nac/L.H. Nac.

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TABLE 2. - NACELLE MASS-FLOW RATIOS

INTEGRATED FUSELAGE: [illegible] DUCT FLOW, MAX L/D

SWEEP ANGLE	MACH NUMBER 0.60	0.70	0.80	0.90	0.95	0.98	1.05	1.10	1.15	1.20	1.40
0	103/113 .59/.57	107/114 .55/.56	103/115 .55/.55								
25											
35											
45			102/116 .55/.55		103/114 .53/.53	104/118 [illegible]/.52	105/117 .53/.51				
50											
55			98/120 .55/.55			99/121 .54/.52		100/122 .54/.51		101/123 [illegible]	
60										99/124 [illegible]	[illegible]/125 [illegible]/.45

KEY: Run No./Fig. No.
R.H. Nac./L.H. Nac.