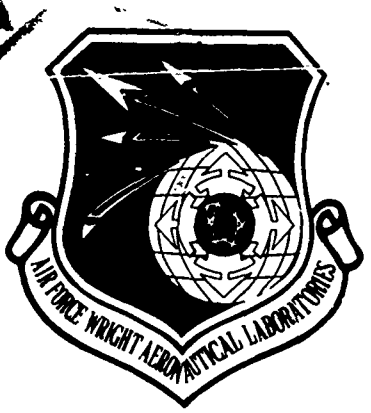
LEVEL II
(3)



AD A099404

AFWAL-TR-80-3115

AERODYNAMIC ANALYSIS OF A FIGHTER AIRCRAFT WITH A HIGHER ORDER PANELING METHOD

A. R. DUSTO

Boeing Military Airplane Company
Advanced Airplane Branch
P.O. Box 3707
Seattle, Washington 98124

DTIC
ELECTE
MAY 27 1981
S C

NOVEMBER 1980

TECHNICAL REPORT AFWAL-TR-80-3115
Final Report for Period September 1978 - January 1981

Approved for public release; distribution unlimited

DTIC FILE COPY

FLIGHT DYNAMIC LABORATORY
AIR FORCE WRIGHT AERONAUTICAL LABORATORIES
AIR FORCE SYSTEMS COMMAND
WRIGHT-PATTERSON AIR FORCE BASE, OHIO 45433

81 5 26 061

NOTICE

When Government drawings, specifications, or other data are used for any purpose other than in connection with a definitely related Government procurement operation, the United States Government thereby incurs no responsibility nor any obligation whatsoever; and the fact that the government may have formulated, furnished, or in any way supplied the said drawings, specifications, or other data, is not to be regarded by implication or otherwise as in any manner licensing the holder or any other person or corporation, or conveying any rights or permission to manufacture use, or sell any patented invention that may in any way be related thereto.

This report has been reviewed by the Office of Public Affairs (ASD/PA) and is releasable to the National Technical Information Service (NTIS). At NTIS, it will be available to the general public, including foreign nations.

This technical report has been reviewed and is approved for publication.

William A. Sotomayor

WILLIAM A. SOTOMAYER
Aerospace Engineer
Aeroelastic Group

Fred A. Picchioni

FREDERICK A. PICCHIONI, Lt Col, USAF
Chief, Analysis & Optimization Branch

FOR THE COMMANDER

Ralph L. Kuster Jr.

RALPH L. KUSTER, JR., COLONEL, USAF
CHIEF, STRUCTURES AND DYNAMICS DIVISION
FLIGHT DYNAMICS LABORATORY

"If your address has changed, if you wish to be removed from our mailing list, or if the addressee is no longer employed by your organization please notify AFWAL/FIBRC, W-PAFB, OH 45433 to help us maintain a current mailing list".

Copies of this report should not be returned unless return is required by security considerations, contractual obligations, or notice on a specific document.

AIR FORCE/56780/24 April 1981 — 160

SECURITY CLASSIFICATION OF THIS PAGE (When Data Entered)

REPORT DOCUMENTATION PAGE

READ INSTRUCTIONS BEFORE COMPLETING FORM

1. REPORT NUMBER	2. GOVT ACCESSION NO.	3. RECIPIENT'S CATALOG NUMBER
AFWAL-TR-80-3115	AD-A099404	

4. TITLE (and Subtitle)
Aerodynamic Analysis of a Fighter Aircraft with a Higher Order Paneling Method

5. TYPE OF REPORT & PERIOD COVERED
Final Report
Sept 1978 - Sept 1980 Jan 81

6. PERFORMING ORG. REPORT NUMBER

7. AUTHOR(s)
A. R. Dusto

8. CONTRACT OR GRANT NUMBER(s)
F33615-77-C-3051

9. PERFORMING ORGANIZATION NAME AND ADDRESS
Boeing Military Airplane Company
Advanced Airplane Branch
P. O. Box 3707
Seattle, WA 98124

10. PROGRAM ELEMENT, PROJECT, TASK AREA & WORK UNIT NUMBERS
Project 2404
Task 10, Work Unit 01

11. CONTROLLING OFFICE NAME AND ADDRESS
Air Force Flight Dynamics Laboratory (FXM)
Wright-Patterson Air Force Base, Ohio 45433

12. REPORT DATE
November 1980

13. NUMBER OF PAGES
625

14. MONITORING AGENCY NAME & ADDRESS *(if different from Controlling Office)*

15. SECURITY CLASS. *(of this report)*
Unclassified

15a. DECLASSIFICATION/DOWNGRADING SCHEDULE

16. DISTRIBUTION STATEMENT *(of this Report)*
Approved for public release; distribution unlimited

17. DISTRIBUTION STATEMENT *(of the abstract entered in Block 20, if different from Report)*

DTIC ELECTE MAY 27 1981 S C

18. SUPPLEMENTARY NOTES

19. KEY WORDS *(Continue on reverse side if necessary and identify by block number)*

F-5 Airplane
Helmhotz Equation
Higher Order
Linear Flow
Panel Method
Potential Flow
Unsteady Flow
Wing

20. ABSTRACT *(Continue on reverse side if necessary and identify by block number)*

This report presents results from analyses of steady and unsteady flows about several configurations involving the wing of the F-5 fighter airplane. The analyses were performed using higher order panel methods and the configurations analyzed included the following: the clean wing (both in an unbounded and in a wind tunnel wall bounded atmosphere), the wing with an external missile store mounted at the wing tip, and the wing with an external missile store mounted on a pylon at the lower surface of the wing. The flow Mach number ranged from 0.6 to 1.35 in steady flow and from 0.6 to 0.95 in unsteady

DD FORM 1 JAN 73 1473 EDITION OF 1 NOV 65 IS OBSOLETE

SECURITY CLASSIFICATION OF THIS PAGE (When Data Entered)

411593

flow. Each steady flow case is analyzed at three angles of attack (0.5^{0}, 0.0^{0}, -0.5^{0}) while each unsteady flow case consisted of unsteady pitch oscillation about zero angle of attack. The reduced frequency of the oscillation was in the range from 0.2498 to 0.3955. The computed results include chordwise pressure distributions along wing sections at eight spanwise locations from 18.1 to 97.7 per cent semispan. The results also include the coefficients of lift and pitching moment for each complete configuration as well as the coefficients of aerodynamic force and couple arising from the pressure on only the surface of the missile store.

FOREWORD

The report was prepared by the Boeing Aerospace Company, Seattle, Washington. The work was sponsored by the Flight Dynamics Laboratory (AFWAL/FIBR) at Wright-Patterson Air Force Base, Ohio. The sponsorship was through contract F33615-77-C-3051 with W. A. Sotomayer as technical monitor.

The report consists of a summary of the aerodyanmic theory used in the steady and unsteady numerical calculations, a presentation of the aerodynamic modeling, and surface pressures and force coefficients.

The principal investigators were Dr. A. Dusto and Dr. M. A. Epton of Boeing. They were assisted by Dr. F. T. Johnson, Dr. E. J. Zeppa, and Dr. P. E. Rubbert of Boeing.

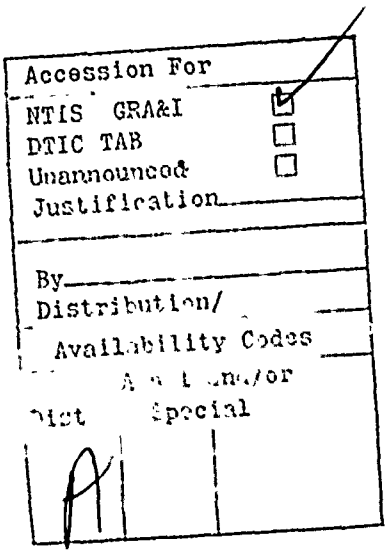


TABLE OF CONTENTS

		Page
1.	Summary	1
2.	Introduction	2
3.	Description of Configuration Evaluated	3
4.	Analytical Method	4
	4.1 Problem Formulation	4
	4.2 Numerical Method	8
5.	Panel Method Model	9
	5.1 Surface Paneling	9
	5.2 Steady Flow Boundary Conditions	12
	5.3 Unsteady Flow Boundary Conditions	16
6.	Computed Results	17
	6.1 Aerodynamic Surface Pressure Distribution	18
	6.2 Missile Store Aerodynamics Force Coefficients	19
7.	Conclusions	22
References		23

PRECEDING PAGE BLANK-NOT FILMED

LIST OF SYMBOLS

LATIN

a_o	freestream speed of sound, m/sec
BET	right hand side of general boundary condition
b_R	wing span, m
c	coefficient of mass flux normal component in general boundary condition
C_ℓ	rolling moment coefficient
C_m	pitching moment coefficient
C_p	$\frac{p - p_o}{\frac{1}{2}\rho_o U_o^2}$ pressure coefficient
C_R	reference chord length, m
C_Y	side force coefficient
C_Z	lift force coefficient
D	coefficient of velocity potential in general boundary condition
$\vec{D}$	surface point displacement vector, m
$\hat{i}, \hat{j}, \hat{k}$	unit base vectors of reference coordinate system
$k = \bar{\omega} C_R/2$	reduced frequency
M_o	Mach number of freestream
$\hat{n}$	unit vector normal to a surface
p	pressure, kg/m^2
p_o	freestream pressure, kg/m^2
$\vec{R}$	position vector of an arbitrary point, m
$\vec{R}_R$	position vector of a reference point, m
S	surface,
S_R	reference surface area, m^2
$\vec{T}$	unit vector in an arbitrary direction, also coefficient of the flow velocity in general boundary condition

U_o	freestream velocity, m/sec
$\vec{v}$	disturbance flow velocity, m/sec
$\vec{W}$	flow mass flux vector, kg/m sec^3
$\vec{w}$	disturbance flow mass flux vector, kg/m sec^3
x,y,z	coordinates of a point in the reference coordinate system, m

GREEK

α	angle of attack, radians
α_c	camber angle of incidence, radians
α_t	thickness angle of incidence, radians
$\beta \equiv \sqrt{1 - M_o^2}$	compressibility coefficient
$\vec{\nabla}$	gradient operator, 1/m
ϕ	disturbance velocity potential, m^2/sec
Φ	total velocity potential, m^2/sec
ρ	fluid mass density, kg/m^2 sec^2
ρ_o	freestream mass density, kg/m^2 sec^2
$\vec{\theta} = \frac{1}{2}\vec{\nabla} x \vec{D}$	surface rotation, radians
ζ, η	local coordinates
σ	source strength
$\sigma_o, \sigma_\xi, \sigma_\eta$	coefficients of Taylor series expansion of σ in local panel coordinates
μ	doublet strength
$\mu_o, \mu_\xi, \mu_\eta, \mu_{\xi\xi}, \mu_{\xi\eta}, \mu_{\eta\eta}$	coefficients of Taylor series expansion of μ in local panel coordinates
ω	circular frequency of oscillation, radians/sec
$\bar{\omega} \equiv \omega/U_o$	reduced frequency relative to unit of length, 1/m

OPERATORS

$( )_{\ell}$	limiting value of ( ) at a point approaching a surface point from the lower side
$( )_{max}$	maximum value of ( )
$( )_{u}$	limiting value of ( ) at a point approaching a surface point from the upper side
$( )_{x}$	x component of ( )
$( )_{y}$	y component of ( )
$( )_{z}$	z component of ( )
$( )^{*}$	complex amplitude of ( )
$\Delta( ) \equiv ( )_{u} - ( )_{\ell}$	jump in ( ) across a surface

SUMMARY OF FIGURES

Configuration		Figures
I.	Clean Wing Panel Geometry	18
	Steady Flow Pressure Distributions	19-210
	Unsteady Flow Pressure Distributions	211-274
II.	Clean Wing + Tunnel Walls Panel Geometry	275
	Steady Flow Pressure Distributions	276-323
	Unsteady Flow Pressure Distributions	324-353
III.	Clean Wing + Tip Launcher Panel Geometry	356
	Steady Flow Pressure Distributions	357-380
	Unsteady Flow Pressure Distributions	381-396
IV.	Clean Wing + Tip Launcher + Missile Body Panel Geometry	397
	Steady Flow Pressure Distributions	398-421
	Unsteady Flow Pressure Distributions	422-437
V.	Clean Wing + Tip Launcher + Missile Body + Aft Fins Panel Geometry	438
	Steady Flow Pressure Distributions	439-462
	Unsteady Flow Pressure Distributions	463-478
VI.	Clean Wing + Tip Store Panel Geometry	479
	Steady Flow Pressure Distributions	480-503
	Unsteady Flow Pressure Distributions	504-519
VII.	Clean Wing + Underwing Pylon Store Panel Geometry	520
	Steady Flow Pressure Distributions	521-568
	Unsteady Flow Pressure Distributions	569-584

1. SUMMARY

This report presents results from analyses of steady and unsteady flows about several configurations involving the wing of the F-5 fighter airplane. The analyses were performed using higher order panels methods and the configurations analyzed included the following: the clean wing (both in an unbounded and in a wind tunnel wall bounded atmosphere), the wing with an external missile store mounted at the wing tip, and the wing with an external missile store mounted on a pylon at the lower surface of the wing. The flow Macn number ranged from 0.6 to 1.35 in steady flow and from 0.6 to 0.95 in unsteady flow. Each steady flow case is analyzed at three angles of attack (0.5°, 0.0°, -0.5°) while each unsteady flow case consisted of unsteady pitch oscillation about zero angle of attack.* The reduced frequency of the oscillation was in the range from 0.2498 to 0.3955. The computed results include chordwise pressure distributions along wing sections at eight spanwise locations from 18.1 to 97.7 per cent semispan. The results also include the coefficients of lift and pitching moment for each complete configuration as well as the coefficients of aerodynamic force and couple arising from the pressure on only the surface of the missile store.

* Some clarification here: steady solution was generated from the CAT II pilot code [subsonic, steady] and served as input to the subsonic unsteady pilot code.

2. INTRODUCTION

Steady and unsteady flows about the wing of the F-5 fighter airplane have been calculated using the panel methods described by references 1 and 2. Calculations are performed for several configurations. The configurations consist of the clean wing and the wing with several external store arrangements which are described in section 3. The results presented here are to be used as part of a larger study. In that study the F-5 wing configurations will be evaluated by alternative analytical methods as well as by wind tunnel testing. This report presents the results of the panel method analysis in the form of chordwise pressure distributions and in the form of aerodynamic forces and couples evaluated at selected reference points on the configurations. This report does not provide a discussion of the results nor does it draw conclusions; it presents only the computed results and the basis of the computations.

Section 4 contains a description of the analytical method. There is a brief description of the flow theory and the panel method for its evaluation. Those descriptions are not complete, and they are provided only as a point of contact with their complete descriptions appearing in refs. 1 and 2. Section 4 also contains those geometric details of the F-5 wing which are required for the panel method of analysis. Section 5 describes the aerodynamic surface paneling and the boundary conditions used in the computations. Section 6 presents the computed results.

3. DESCRIPTION OF THE CONFIGURATIONS EVALUATED

The configurations evaluated consist of the F-5 fighter airplane wing, figure 1*, accompanied by a missile attached to a launcher and mounted in either of two positions: (1) at the wing tip, and (2) suspended from a pylon below the wing surface, figure 2. Figure 3 provides the details of the launcher and of the pylon while figure 4 shows the details of the missile including the planforms of the fins.

The F-5 wing has an airfoil section which is constant with span and which has the upper and lower surface coordinates shown in figure 1. The wing section aft of the 40 percent chord point is symmetric about the wing reference plane. The wing tip has a fairing which increases the wing span by 0.025 meters when the tip launcher is removed. The reference semi-span of the wing, which is 0.6226 meters, does not include the tip fairing. The reference wing area is 0.2604 square meters.

Figure 2 shows the locations of three strain gage balances, which were used in wind tunnel tests to measure the aerodynamic force and couple acting on the launcher and the missile. Figure 2 also shows the coordinate system which is used as the reference frame for the computations. The origin of this system is seen to be located at the apex of the wing; and the position of the missile, in each of its two positions, is described in figure 2 by identifying the coordinates of the missile forebody nose relative to the wing apex.

The dimensions shown on figures 1 through 4 are the dimensions of a wind tunnel model of the F-5 wing. The model was tested in a wind tunnel having a rectangular test section whose dimensions relative to the model are shown by figure 5.

---

* Figures are located on pages 34 thru 584.

4. ANALYTICAL METHOD

4.1 PROBLEM FORMULATION

The theoretical model used in the calculations is based on the assumptions that both the steady and unsteady flows are small disturbance flows, references 1 and 2. Thus, a steady component of flow is approximated by a potential, ϕ, satisfying the following flow equation:

$$\beta^2 \phi_{xx} + \phi_{yy} + \phi_{zz} = 0; \tag{1}$$

while an unsteady component of flow is approximated by a complex potential amplitude, ϕ^*, satisfying the following flow equation:

$$\beta^2 \phi^*_{xx} + \phi^*_{yy} + \phi^*_{zz} - 2\bar{\omega} M_o^2 \phi^*_x i + (\bar{\omega}^2) M_o^2 \phi^* = 0 \tag{2}$$

where

$$\beta^2 = 1-M_o^2, \tag{3}$$

M_o = freestream Mach number,

$$\bar{\omega} = \omega/U_o, \tag{4}$$

U_o = freestream velocity magnitude, and

ω = circular frequency of the unsteady flow component.

The steady flow boundary condition at aerodynamic surfaces, reference 1, is given by

$$\vec{W} \cdot \hat{n} = 0 \tag{5}$$

where $\vec{W}$ is the first order approximation to the steady mass flux vector given by the following expression (which may be developed from the linearized Bernoulli equation in steady-state form plus a first order perturbation of the density*);

$$\vec{W} = \rho_o \left[(U_o + \beta^2 \phi_x)\, \hat{i} + \phi_y\, \hat{j} + \phi_z\, \hat{k} \right], \tag{6}$$

and $\hat{n}$ is a unit vector normal to the surface. The disturbance pressure and the aerodynamic forces are computed assuming that the pressure coefficient is related to the velocity potential by the following second order equation:

$$C_p = -\left(\frac{1}{U_o}\right)2 \left[2U_o\, \phi_x + \vec{\nabla}\phi \cdot \vec{\nabla}\phi - M_o^2\, (\phi_x^2) \right] \tag{7}$$

where $\vec{v} = \vec{\nabla}\phi$ represents the steady disturbance velocity.

In the case of oscillatory unsteady flow, the total velocity potential is given by

$$\Phi = U_o\, x + \phi + R\, (\phi^*\, e^{\,i\omega t}) \tag{8}$$

where R( ) denotes the real part, ϕ denotes the mean steady flow perturbation potential, and ϕ^* denotes the complex amplitude of the unsteady perturbation velocity potential which must satisfy eqn. (2). The aerodynamic surface boundary condition for the unsteady component of flow, reference 2, is given by

where

$$\vec{w}^* \cdot \hat{n} = -\vec{W} \cdot (\vec{\theta}^* \times \hat{n}) + \rho U_o\, \bar{\omega}\, \vec{D}^* \cdot \hat{n}\, i \tag{9}$$

$$\vec{w}^* = \rho_o \left(\vec{\nabla}\phi^* - M_o^2\, (i\bar{\omega}\phi^* + \phi_x^*)\, \hat{i} \right) \tag{10}$$

* See reference 3 for pertinent background information

$= \quad$ complex amplitude of the unsteady disturbance mass flux vector,

$\rho_0 \quad =$ freestream fluid mass density,

$\vec{D}^* \quad =$ complex amplitude of the unsteady displacement of the aerodynamic surface,

$$\vec{\theta}^* = 1/2\ \vec{\nabla} \times \vec{D}^* \tag{11}$$

$=$ first order approximation to the complex amplitude of unsteady surface rotation, and

$$\rho = \rho_0 \left(1 - \frac{M_0}{U_0} \phi_x\right) \tag{12}$$

$=$ fluid mass density in the steady component of flow

In the numerical implementation, equation 9 was imposed directly on the wing, launcher pylon, and missile fins. On the thick missile body it was imposed indirectly by requiring that the perturbation potential remain zero inside the missile body, combined with the imposition of an oscillatory amplitude of the surface source strength so as to create the conditions required by equation 9 on the exterior surface of the missile body.

The unsteady pressure coefficient is shown by reference 2 to have a complex amplitude related linearly to the complex amplitude of the unsteady velocity potential. The relationship is as follows:

$$C_p^* = -\frac{2}{U_0} \left[i\bar{\omega}\, \rho\phi^*/\rho_0 + (\vec{W}/\rho_0 U_0) \cdot \vec{\nabla}\phi^* \right] \tag{13}$$

This expression was used to evaluate the pressure at the surface of the missile body. At all other surfaces (namely, those of the wing, the launcher, the pylon, and the missile fins) the unsteady pressure coefficient was evaluated using the following expression:

$$C_p^* = -\frac{2}{U_0}(i\bar{\omega}\,\phi^* + \phi_x^*) \tag{14}$$

The boundary conditions at the aerodynamic surfaces are approximated by truncated Taylor series expansions. In the case of the missile body, the expansion is about the mean steady location of the surface, Appendix B of ref. 2; while, in the case of all other surfaces, the expansion is about a reference surface which is either planar or cylindrical and which is generated by a straight line parallel to the freestream direction. In the case of these other surfaces, the unsteady flow boundary condition, shown as eqn. (9), reduces to the following expression evaluated at the reference surface:

$$\vec{w}^* \cdot \hat{n} = -\rho_0 [\vec{U}_0 \cdot (\vec{\theta}^* \times \hat{n}) - U_0\,\bar{\omega}\,\vec{D}^* \cdot \hat{n}\, i] \tag{15}$$

where $\hat{n}$ is a unit vector normal to the reference surface. Similarly, the boundary condition associated with the mean steady component of flow is expressed by eqn. (5) linearized in the conventional manner about a mean wing plane.

For the case of pitch oscillation the complex amplitude of unsteady surface displacement at any point (x,z) on the surface is given by

$$\vec{D}^* = \theta_0 [(z - z_0)\,\hat{i} - (x - x_0)\,\hat{k}] \tag{16}$$

where θ_0 is the maximum angle of the pitching motion, (x_0, z_0) is the location of the pitch axis, and where $\hat{i}$, $\hat{j}$, $\hat{k}$ represent the unit base vectors of the coordinate system. The pitch rate, Q, is given by

$$Q = iw\,\theta_0\,R\,(e^{iwt}) \tag{17}$$

where R( ) denotes the real part. The surface rotation shown by eqn. (11) is computed from eqn. (16) to find

$$\theta^* = \theta_o \hat{j}. \tag{18}$$

At all surfaces except the missile body surface, the vector $\hat{n}$, normal to the reference surface is such that

$$\hat{n} \cdot \hat{i} = 0;$$

hence, using this result and substituting eqs. (16) and (18) into eqn. (15), the boundary condition is found to be as follows:

$$\vec{w}^* \cdot \hat{n} = - \rho_o U_o \theta_o n_z [1 + i\bar{\omega} (x - x_o)] \tag{19}$$

where this expression is evaluated at the reference surfaces of the configuration components.

The boundary conditions associated with the mean steady flow satisfy eq. (5) on the missile body, and they are linearized in the conventional manner for all other surfaces.

4.2 NUMERICAL METHOD

The numerical method used is the higher order panel method of ref. 1 and 2 wherein the velocity potential is expressed in terms of sources and doublets distributed over the aerodynamic surfaces. The aerodynamic surfaces are subdivided into small panels. On each panel the strength of the source distribution is a linear function of the coordinates of a point on the panel, i.e.,

$$\sigma(Q) = \sigma_0 + \sigma_\xi \xi + \sigma_\eta \eta \tag{20a}$$

where ξ, η are the coordinates of the point Q lying on the panel. Similarly, the strength of the doublet distribution on each panel is a quadratic function of the panel surface coordinates, i.e.,

$$\mu(Q) = \mu_0 + \mu_\xi \xi + \mu_\eta \eta + \frac{1}{2} \mu_{\xi\xi} \xi^2 + \mu_{\xi\eta} \xi \eta + \frac{1}{2} \mu_{\eta\eta} \eta^2 \tag{20b}$$

Equations (20a) and (21b) describe the strength distribution of steady sources and doublets. Completely analogous expressions describe the complex amplitudes of the strength distributions of unsteady sources and doublets, namely:

$$\sigma^*(Q) = \sigma_0^* + \sigma_\xi^* \xi + \sigma_\eta^* \eta \tag{21a}$$

$$\mu^*(Q) = \mu_0^* + \mu_\xi^* \xi + \mu_\eta^* \eta + \frac{1}{2} \mu_{\xi\xi}^* \xi^2 + \mu_{\xi\eta}^* \xi\eta + \frac{1}{2} \mu_{\eta\eta}^* \eta^2 \tag{21b}$$

The source and doublet distribution coefficients in the right-hand members of eqns. (20) and (21) are related by a least squares method to the source and doublet strength at control points, references 1 and 2. The control points are located at panel centers and at the edge of a panel which forms part of the edge of a network, references 1 and 2.

5. PANEL METHOD MODEL

5.1 SURFACE PANELING

Figures 6 through 15 show the wing with two cases of external missile store: (1) mounted at the wing tip, and (2) mounted at the under wing pylon.

In both cases the wing paneling is coincident with the wing reference plane shown in figure 1. The launcher, when tip mounted, lies in the wing reference plane; and, when the launcher is under wing mounted, the launcher and pylon lie in a plane parallel with the freestream direction and normal to the wing reference plane. The missile body is a body of revolution whose generator, when the wing is at zero angle of attack, is parallel with the freestream. The missile fins are infinitesimally thin, planar surfaces intersecting the missile body at body generators at azimuth angles which are ninety degrees apart around the missile body.

Figure 16 shows the wing paneling consisting of thirteen panels in the chordwise direction and thirteen panels in the spanwise direction. The location of the edges of the panels in the chordwise direction relative to the wing leading edge are given by the following formula:

$$\xi_M = 0.5c\ [1- \cos\ (\pi S_M)] \qquad (22)$$

where c is the local chord length and

$$S_M = (M-1)/(MMAX-1) \qquad (23)$$

where

$M = 1,2,3...,MMAX$

$MMAX = 11.$

Three additional panel edges are introduced to provide panel edges intersecting the pylon at its ends and providing the panel density (in the region of the pylon) necessary to represent the pylon induced interference flow. The panel edges are located at the streamwise locations shown in Table 1*.

---

* Tables are located on pages 23 thru 32.

The spanwise locations of the panel edges are computed using the following equation:

$$\eta_N = b \sin (S_N \pi/2) \tag{24}$$

where b is the span of the wing shown in figure 1 including the tip fairing (viz., b = 0.6476 meters) and

$$S_N = (N-1)/(NMAX-1) \tag{25}$$

for

$$N = 1,2,3\ldots,NMAX$$

$$NMAX = 11.$$

Three additional spanwise edges are inserted to accommodate the intersection of the underwing pylon and the tip launcher. This leads to panel edges at the locations shown in Table 2.

where c_R (= 0.6396 meters) denotes the wing root chord length, figure 1.

Wake surfaces trail downstream from each of the following surfaces: the wing, the pylon, the launcher, the aft end of the missile body, and each of the missile fins. In all cases the wake surface is a cylindrical surface whose generator is parallel with the freestream. These surfaces are paneled such that the panel spacing in the freestream direction is equal to one-sixteenth of the wave length of the doublet strength harmonic variation along the wake surface. The doublet strength varies as follows (ref. 2, eqn. (5.28)):

$$\mu^*(x,s) = \mu^*(c,s)[\cos(\omega(x-c)) + i \sin(\omega(x-c))] \qquad (26)$$

where $\mu^*(c,s)$ is the doublet strength at the trailing edge of the surface from whence the wake emanates and $(x-c)$ is the distance downstream from the trailing edge. The wave length of the harmonic variation is

$$L_\mu = 2\pi/\omega;$$

hence, the streamwise panel spacing is chosen as

$$2\pi/(16\omega)$$

This panel spacing is chosen so that the quadratic distribution of doublet strength on each panel, eqn. (21), will accurately approximate the harmonic variation shown by eqn. (26). Each wake surface extends downstream 7.5 root-chord lengths.

The wind tunnel walls shown by figure 5 are represented by panel networks extending from $x = -3.0$ to $x = 5.0$; thus, the tunnel walls extend 1.5 root-chord lengths upstream and downstream of wing. The tunnel walls are treated as solid and a wake surface extends downstream from each wall. The tunnel is modeled like a ring-wing having zero incidence to the undisturbed freestream.

5.2 STEADY FLOW BOUNDARY CONDITIONS

As noted in the preceeding, the configurations are constructed from six types of components: (1) the wing, (2) pylon, (3) launcher, (4) missile body, (5) aft fins, and (6) forward fins. All of these components, except the missile body, are approximated by thin-wing theory, cf., chapter 5 of reference 4; thus, their aerodynamic surface boundary conditions are expressed in terms of a truncated Taylor series expansion about mean, defining surfaces. Equation (5) becomes

$$\frac{1}{\rho_0 U_0} \vec{w} \cdot \hat{n} = -n_x \tag{27}$$

where:

$$\frac{\vec{w}}{\rho_0} = \beta^2 \phi_x \hat{i} + \phi_y \hat{j} + \phi_z \hat{k} \quad = \text{perturbation mass flux vector} \tag{28}$$

$\hat{n}$ is a unit vector normal to the mean surface of definition; and n_x is the x-axis component of the actual, aerodynamic surface normal. Letting α represent angle of attack in radians and letting the airfoil surface be decomposed into camber plus thickness, so that $(\pi/2 - \alpha - \alpha_c \mp \alpha_t)$ approximates the angle between the aerodynamic surface normal and the x axis, eqn. (27) becomes

$$\frac{1}{\rho_0 U_0} \vec{w} \cdot \hat{n} = - \cos (\pi/2 - \alpha - \alpha_c \mp \alpha_t) \approx - \alpha - \alpha_c \mp \alpha_t \tag{29}$$

where

$$\vec{w} = \vec{W} - \rho_0 U_0 \hat{i}$$

and where the plus and minus sign before α_t is a result of the symmetry of the thickness shape relative to the mean defining surface. Letting the strength of the source distribution at the mean, defining surface be given by (p. 129 of ref. 4)

$$\frac{\sigma}{U_0} = -2\alpha_t \tag{30}$$

eqn. (29) reduces to eqn. (30) plus the following:

$$\frac{1}{\rho_0 U_0} \vec{w} \cdot \hat{n} = - \alpha - \alpha_c \tag{31}$$

which is the boundary condition which must be satisfied at the mean, defining surfaces.

The wing, the pylon, and the launcher were treated as having thickness using eqn. (30) but the thickness of the missile fins was completely ignored. For the wing the thickness and camber are computed from the airfoil data shown on figure 1. The wing boundary conditions, shown by eqns. (30) and (31), are applied at control points located on the wing planform edges and at the centers of the panels shown by figure 16. The values of the camber and thickness slope angles at control points along a typical chordwise wing section are shown in Table 3, where ξ_M is the distance from the wing leading edge to the Mth control point and C is the chord. Neither the pylon nor launcher have camber but they have the thickness shapes shown in figure 3.

At the missile body surface at points indefinitely near the surface but exterior to the missile body the flow incidence is,

$$- \vec{U}_0 \cdot \hat{n}$$

where $\vec{U}_0$ is the freestream velocity vector, is set equal to the strength of sources distributed on the missile surface, i.e.,

$$\sigma = - \vec{U}_0 \cdot \hat{n} \qquad (32)$$

At points indefinitely near the surface but interior to the missile body the disturbance velocity potential is set to zero by imposing a Dirichlet boundary condition. As a result of satisfying these two requirements, the boundary condition shown in eqn. (5) is satisfied at the surface of the missile body and the flow interior to the body is the undisturbed freestream.

As shown by ref. 5, section 1.3, the general form of the boundary condition, which can be applied at a control point of the panel method, is given by the following equation:

$$C_u (\vec{w}_u \cdot \hat{n}) + \vec{T}_u \cdot \vec{v}_u + D_u \phi_u + C_\ell (\vec{w}_\ell \cdot \hat{n}) + \vec{T}_\ell \cdot \vec{v}_\ell + D_\ell \phi_\ell = BET \qquad (33)$$

where $\vec{w}$, $\vec{v}$, ϕ, respectively, represent the mean steady values of the disturbance mass flux, velocity, and potential. The subscripts u and ℓ, respectively, imply evaluation at the upper and lower sides of a surface when the upper side is the side where $\hat{n}$ is positive. The coefficients C_u, C_ℓ, $\vec{T}_u$, $\vec{T}_\ell$, D_ℓ, and D_u as well as the value of BET are specified by the user of the panel method computer program. The values of these quantities are specified by exercising the options listed in tables 2.2 and 2.3 of ref. 5. The option choice and the types of networks (ref. 5, section 2.4) chosen for each configuration component are shown in Table 4.

The option NROPT2=1 indicates that the value of BET, appearing in eqn. (33) for the second boundary condition is supplied by the subroutine called INPUT. The values supplied were as follows:

$$BET = \alpha_c - \alpha(IACASE) \qquad \text{for IACASE} = 1,2,3 \qquad (34)$$

where

$$\alpha(1) = 0.0^o$$

$$\alpha(2) = -0.5^o$$

$$\alpha(3) = 0.5^o$$

The values of α_c (i.e., the camber surface slopes) are given by table 3. Similarly, NROPT1=1 indicates that the value of BET for the first boundary condition is supplied by INPUT. The values supplied were

$$BET = 2.0\alpha_t$$

where the values of α_t are given by table 3. The option NROPT2=5 indicates that the value of BET for the second boundary condition is computed in subroutine CBET. Subroutine CBET performs the following computation:

$$BET = -n_x \cos\alpha(IACASE) - n_z \sin\alpha(IACASE) \qquad (35)$$

$$\text{for IACASE} = 1,2,3$$

where n_x and n_z are the x and z axis components of the unit vector normal to the surface.

5.3 UNSTEADY FLOW BOUNDARY CONDITIONS

Equations (9) and (15) show the unsteady flow boundary conditions used. Eqn. (9) is applied for control points at the missile body surface while eqn. (15) is applied at the mean, defining surfaces of all other components. The surface displacement $\vec{D}^*$ and rotation $\vec{\theta}^*$ for the case of pitch oscillation are shown by eqn. (16) and (18). Eqn. (19) shows the result of substituting these expressions into eqn. (15); eqn. (19), therefore, represents the boundary condition which is applied everywhere except at the missile body surface. Substituting eqns. (16) and (18) into eqn. (9) yields

$$\vec{w}^* \, n = - \rho_0 \left[(U_0 + \beta^2 \phi_x) \, n_z - \phi_z \, n_x \right] \tag{36}$$

$$- i \left(1 - \frac{M_0^2}{U_0} \phi_x\right) \bar{\omega} \left[(z - z_0) \, n_x - (x - x_0) \, n_z \right] \theta_0$$

This expression describes the boundary condition applied at control points on the missile body surface; hence, ϕ_x and ϕ_z represent derivatives of the mean steady flow potential evaluated at those control points.

The general form of the boundary condition in unsteady flow has the same form as (33) except that BET, $\vec{w}$, $\vec{v}$, and ϕ are all complex. The choice of network type and the boundary condition option used to determine the coefficients of the unsteady flow form of eqn. (33) for each configuration component are shown in Table 5. The option implied by NROPT1 and NROPT2 is that the real and imaginary parts of complex BET, see eqn. (33), are supplied by subroutine CBET. If the control point is on the missile body surface,

subroutine CBET sets BET equal to the right-hand side of eqn. (36) evaluated at the control point. If the control point is at any other surface, BET is set equal to the right-hand side of eqn. (19). The unsteady flow boundary condition applied to the missile base is indential to the base boundary condition in steady flow, where it correctly produces a Kutta condition off the aft end of the missile body. Analysis of the unsteady results shows that we did not achieve a Kutta condition in unsteady flow and upon reflection we now believe that a different base boundary condition is required in unsteady flow. Unfortunately we have not had time to derive and implement such a boundary condition.

6. COMPUTED RESULTS

Seven configurations were evaluated; they are listed in Table 6.

Each configuration was evaluated at three steady angles of attack (viz., 0.0°, 0.5°, and -0.5°) measured from the wing reference plane, figure 1. Each configuration was also evaluated at unsteady pitch oscillation about a spanwise axis at 50 percent of the root chord, figure 9. The maximum amplitude of pitch is

$$\theta_{max} = 0.00199 \text{ radians} \tag{38}$$

and the frequency of the oscillations is 40 Hz. so that

$$\omega = 80\ \pi \text{ radians/second} \tag{39}$$

Also, the freestream velocity is given by

$$U_o = M_o\ a_o \tag{40}$$

where

$$a_o = 338.7 \text{ meters/second} \tag{41}$$

is the freestream speed of sound so that the reduced frequency of the pitch oscillation is

$$\kappa = .2373/M_o \tag{42}$$

where the characteristic length has been chosen to be one-half of the wing root chord.

The Mach numbers at which the configurations were evaluated are as shown in Table 7.

6.1 AERODYNAMIC SURFACE PRESSURE DISTRIBUTIONS

The aerodynamic surface pressure coefficient (both steady and unsteady) was evaluated along chordwise lines at the eight spanwise stations shown in figure 17. As indicated by figure 17 these eight chordwise sections are the locations where pressure orifices were positioned for wind-tunnel tests of the wing. The upper and lower surface pressure coefficients (C_{p_u} and C_{p_ℓ}) were evaluated using eqns. (7) and (13). The lifting pressure coefficient namely;

$$\Delta C_p = C_{p_u} - C_{p_\ell} \tag{43}$$

is also evaluated. In the case of unsteady flow the real and imaginary parts of the pressure coefficient complex amplitude were normalized by the maximum amplitude of the pitch oscillation; thus,

$$C_p^*/\theta_{max}$$

is computed as a basis for evaluating the unsteady pressure coefficient correspo nding to a unit (i.e., one radian) amplitude of pitch oscillation.

The paneled geometry used for case 1 is displayed in figure 18. The steady flow pressure distributions for this case are shown in figures 19-210 and the unsteady flow pressure distributions are shown in figures 211-274. The paneled geometry used for case 2 is displayed in figure 275. The steady flow pressure distributions for this case are shown in figures 276-323 and the unsteady flow pressure distributions are shown in figures 324-355. The paneled geometry used for case 3 is displayed in figure 356. The steady flow pressure distributions for this case are shown in figures 357-380 and the unsteady flow pressure distributions are shown in figures 381-396. The paneled geometry used for case 4 is displayed in figure 397. The steady flow pressure distributions for this case are shown in figures 398-421 and the unsteady flow pressure distributions are shown in figures 422-437. The paneled geometry for case 5 is displayed in figure 438. The steady flow pressure distributions for this case are shown in figures 439-462 and the unsteady flow pressure distributions are shown in figures 463-478. The paneled geometry for case 6 is displayed in figure 479. The steady flow pressure distributions for this case are shown in figures 480-503. The unsteady flow pressure distributions are shown in figures 504-519. The paneled geometry for case 7 is displayed in figure 520. The steady flow pressure distributions for this case are shown in figures 521-568. The unsteady flow pressure distributions are shown in figures 569-584.

The points shown graphically and tabularly on figures 18-584 are a result of a linear interpolation of the data computed by the panel methods. The panel methods compute the values of the pressure coefficient at the centers of the wing panels shown by figure 16. The spanwise locations of the panel centers do not coincide with the spanwise locations of the pressure orifices shown by figure 17. The values shown in figures 18-584 are the result of linear interpolation between the panel method values at the panel centers at

either side of the wing section where the pressure is evaluated in these figures.

6.2 MISSILE STORE AERODYNAMIC FORCE AND MOMENT

Tables 8-11 contain the steady and unsteady aerodynamic force and moment coefficients which evaluate the airloads on each configuration and on the missile stores at the centers of balance locations shown on figure 2. The coefficients are computed from the following formulas:

$$C_y = \frac{1}{S_R} \iint_S C_p \, \hat{n} \cdot \hat{j} \, ds \qquad \sim \text{side force} \qquad (44)$$

$$C_z = \frac{1}{S_R} \iint_S C_p \, \hat{n} \cdot \hat{k} \, ds \qquad \sim \text{lift force} \qquad (45)$$

$$C_m = \frac{1}{S_R C_R} \iint_S C_p \, [(\vec{R} - \vec{R}_R) \times \hat{n}] \cdot \hat{j} \, ds \sim \text{pitching moment} \qquad (46)$$

$$C_\ell = \frac{1}{S_R b_R} \iint_S C_p \, [(\vec{R} - \vec{R}_R) \times \hat{n}] \cdot \hat{i} \, ds \sim \text{rolling moment} \qquad (47)$$

where C_p is the pressure coefficient from eqn. (7) in steady flow and from eqns. (13) and (14) in unsteady flow; $\hat{n}$ is a unit vector normal to the aerodynamic surface S; $\hat{i}$, $\hat{j}$, $\hat{k}$ are the unit base vectors of the coordinate system shown on figure 2; $\vec{R}_R$ is the position of the balance center (labeled "center of balance" in figure 2) relative to the origin of the coordinate system; S_R (= 0.2604 sq. meters) is the reference area of the wing; b_R (= 0.6224 meters) is the reference semi-span; and C_R (= 0.4183 meters) is the mean reference chord.

Table 8 shows the lift coefficient and pitching moment coefficient for each configuration at the three steady angles of attack: 0.5°, 0.0°, -0.5°. The lift force is regarded as being in the direction of the z coordinate line

(figure 2) and the pitching moment is about a spanwise axis at the half root chord. The surface of integration, S, in the case of this table of data, is the entire aerodynamic surface of the wing and missile store. The position vector $\vec{R}_R$ is given by

$$\vec{R}_R = .3198 \text{ (meters)} \hat{i} \tag{47}$$

For Case 1 the lift force obtained from the wake circulation is shown in parentheses. This method is known to be quite accurate and the disagreement with integrated values can be attributed to coarse leading edge paneling.

Table 9 shows the complex amplitudes of unsteady lift and pitching moment coefficient for each configuration. These coefficients correspond to pitch oscillation with a maximum amplitude of one radian. The surface of integration, S, is the entire aerodynamic surface and the reference position vector $\vec{R}_R$ is, again, given by eq. (47).

Table 10 shows the side and lifting force coefficients and the rolling and pitching moment coefficients for the missile store when the wing is at a steady angle of attack. In each case eqs. (44 - 47) are evaluated choosing the surface of integration to be that of the missile and the missile launcher. In the case of the tip mounted missile

$$\vec{R}_R = .48 \text{ (meters)} \hat{i} + .635 \text{ (meters)} \hat{j} \tag{48}$$

in the case of the under wing, pylon mounted missile

$$\vec{R}_R = .43 \text{ (meters)} \hat{i} + .477 \text{ (meters)} \hat{j} - .066 \text{ (meters)} \hat{k} \tag{49}$$

Table 11 shows the complex amplitudes of the corresponding unsteady force and moment coefficients.

7. CONCLUSIONS

Numerical calculations for steady and unsteady flow have been made for a fighter aircraft wing with external stores. These calculations were made for harmonic pitch oscillations about a line through the midpoint of the root chord for reduced frequencies of up to $k = 0.4$. Calculations took the form of pressure distributions for both the upper and lower wing surface. Force coefficients were also calculated over the Mach range of $M = 0.6$ to $M = 1.35$. These data are provided for comparisons of the numerical calculations with other numerical methods and with experimental results.

REFERENCES

1. Ehlers, E. F., Epton, M. A., Johnson, F. T., Magnus, A. E., and Rubbert, P. E.: "A Higher Order Panel Method for Linearized Supersonic Flow," NASA CR-3062, 1979.

2. Dusto, A. R. and Epton, M. A.: "An Advanced Panel Method of Analysis of Arbitrary Configurations in Unsteady Subsonic Flow," NASA CR-152323, 1980.

3. Ward, G. N., "Linearized Theory of High Speed Flow," Cambridge University Press, 1955.

4. Ashley, H. and Landahl, M.: "Aerodynamics of Wings and Bodies," Addison-Wesley, 1965.

5. Moran, J., Tinoco, E. N., and Johnson, F. T.: "User's Manual, Subsonic/Supersonic Advanced Panel Pilot Code," NASA CR-152047, 1978.

Table 1 Chordwise Coordinates of Panels on Wing Surface

M	ξ_M/c
1	0.0
2	0.02447
3	0.09549
4	0.2061
5	0.2504
6	0.3455
7	0.5000
8	0.6545
9	0.7032
10	0.7362
11	0.8117
12	0.9045
13	0.9755
14	1.0000

Table 2 Spanwise Coordinates of Panels on Wing Surface

N	$2\eta_N/c_R$
1	0.0
2	0.3168
3	0.6258
4	0.9193
5	1.1903
6	1.4319
7	1.4916
8	1.5520
9	1.6383
10	1.8043
11	1.9259
12	1.9468
13	2.001
14	2.0250

Table 3 Camber and Thickness Angle of Slope of Wing Airfoil

M	ξ_M/C	α_c, radians	α_t, radians
1	1.0000	0.0000	- - -
2	0.9875	0.0000	-0.06119
3	0.9389	0.0000	-0.06118
4	0.8068	0.0000	-0.06112
5	0.7735	0.0000	-0.05637
6	0.7199	0.0000	-0.04572
7	0.6788	0.0000	-0.03770
8	0.5754	0.0000	-0.02404
9	0.4218	0.0000	-0.002439
10	0.2987	0.0037	0.02214
11	0.2291	0.01612	0.03472
12	0.1518	0.03039	0.05127
13	0.06126	0.05775	0.0933
14	0.01289	0.07366	0.3164
15	0.0000	0.078	- - -

Table 4 Steady Flow Boundary Condition Options

COMPONENT	NTS	NTD	NLOPT1	NROPT1	NLOPT2	NROPT2
wing	1	12	5	1	4	1
			(0	0	4	1)*
launcher	1	12	5	1	4	5
			(0	0	4	5)*
pylon	1	12	5	1	4	5
			(0	0	4	5)*
missile body	1	12	5	3	7	2
			(0	0	7	2)**
missile body base closure	1	12	6	2	7	2
			(0	0	7	2)*
missile fins	0	12	0	0	4	5
wind tunnel walls	0	12	0	0	4	3
wakes	0	18	0	0	4	3

* Network edge control point choice of options where they differ from the panel center control point choice.

** At network edges abutting a missile body base closure network, NLOPT2 = 3.

Table 5 Unsteady Flow Boundary Condition Options

COMPONENT	NTS	NTD	NLOPT1	NROPT1	NLOPT2	NROPT2
wing	0	12	0	0	4	5
launcher	0	12	0	0	4	5
pylon	0	12	0	0	4	5
missile body	1	12	5 (0	5 0	7 7	2 2)*
missile body base closure	1	12	6 (0	2 0	7 7	2 2)**
missile fins	0	12	0	0	4	5
wind tunnel walls	0	12	0	0	4	3
wakes	0	18	0	0	4	3

* At network edge control points on network edge abutting a missile body base closure network.

** Network edge control point.

Table 6 Configuration Indentification Numbers

1. Clean wing including tip fairing, figure 1.
2. Clean wing including tip fairing and mounted in a wind-tunnel, figure 5.
3. Wing without tip fairing but with tip launcher.
4. Case 3 plus tip missile body.
5. Case 4 plus aft missile fins.
6. Case 5 plus canard fins.
7. Case 1 plus under wing pylon, launcher and missile (including both aft and canard fins).

Table 7 Flow Evaluation Conditions

Configuration Number	Steady Evaluation Mach Numbers	Unsteady Evaluation Mach Numbers
1	.6, .8, .9, .95, 1.05, 1.1, 1.35	.6, .8, .9, .95
2	.6, .8	.6, .8
3	.8	.8
4	.8	.8
5	.8	.8
6	.8	.8
7	.6, .8	.6

Table 8 Steady Lift and Pitching Moment Coefficients

	-.5°	0.°	.5°	-.5°	0.°	.5°	-.5°	0.°	.5°
	C1, M = .6			C1, M = .8			C1, M = .9		
C_z	-.03182 (-.03650)	.00101 (-.00473)	.03383 (.02704)	-.03459 (-.03939)	.00143 (-.00432)	.03746 (.03075)	-.03670 (-.04161)	.00222 (-.00354)	.04115 (.03452)
C_m	-.00935	-.00721	-.00508	-.01128	-.00889	.03075	-.01331	-.01065	-.00800
	C2, M = .6			C2, M = .8					
C_z	-.03378	.00075	.03535	-.03658	.00137	.03949			
C_m	-.00925	-.00714	-.00501	-.01093	-.00868	-.00639			
				C3, M = .8					
C_z				-.03452	.00189	.03847			
C_m				-.00658	-.00875	-.01092			
				C4, M = .8					
C_z				-.03883	.00143	.04137			
C_m				-.00576	-.00873	-.01167			
				C5, M = .8					
C_z				-.04095	.00121	.04355			
C_m				-.00923	-.00848	-.00770			

Table 8 Concluded

	−.5°	0.°	.5°	−.5°	0.°	.5°	−.5°	0.°	.5°
				C6, M = .8					
C_z				−.04119	.00116	.04371			
C_m				−.00481	−.00865	−.01249			
	C7, M = .6			C7, M = .8					
C_z	−.03608	−.00245	.03123	−.03993	−.00326	.03358			
C_m	−.00782	−.00815	−.00845	−.00877	−.00917	−.00955			
	C1, M = .95			C1, M = 1.05			C1, M = 1.10		
C_z	−.03798 (−.04293)	.00320 (−.00256)	.04437 (.03781)	−.04666 (−.05125)	.00516 (.00032)	.05698 (.05189)	−.05902 (−.06321)	−.00990 (−.01405)	.03923 (.03511)
C_m	−.01511	−.01220	−.00930	−.02701	−.02955	−.03208	−.02675	−.03071	−.03467
	C1, M = 1.2			C1, M = 1.35					
C_z	−.07387 (−.07562)	−.03085 (−.03247)	.01217 (.01067)	−.07000 (−.07063)	−.03488 (−.03534)	.00023 (−.00004)			
C_m	−.02365	−.02805	−.03246	−.01265	−.01732	−.02199			

Table 9 Unsteady Lift and Pitching Moment Coefficients

	C1, M = .6		C1, M = .8		C1, M = .9		C1, M = .95	
C_z^*	3.5563	1.1276	3.9957	.6578	4.5043	.4646	4.7764	.2197
C_m^*	-.07585	-.5834	-.1475	-.5863	-.2818	-.7893	-.5969	-.9292

	C2, M = .6		C2, M = .8	
C_z^*	3.7649	1.0839	4.4828	.5308
C_m^*	.3540	-.4645	.3346	-.5769

	C3, M = .8	
C_z^*	4.1001	.7014
C_m^*	.3139	-.5376

	C4, M = .8	
C_z^*	4.4216	.6556
C_m^*	-.2467	-.6399

	C5, M = .8	
C_z^*	4.6544	.5680
C_m^*	-.3917	-.6180

	C6, M = .8	
C_z^*	4.7840	.4629
C_m^*	-.4709	-.5619

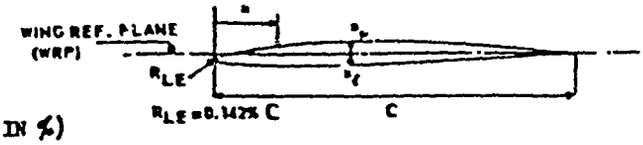
	C7, M = .8	
C_z^*	3.6673	1.1413
C_m^*	.0788	-.5813

Table 10 Steady Force and Moment Coefficients for Missile Store

	C3, M = .6			C3, M = .8		
	$\alpha = -.5$	$\alpha = 0$	$\alpha = .5$	$\alpha = -.5$	$\alpha = 0$	$\alpha = .5$
C_y				0	0	0
C_z				-.00076	-.00007	.00063
C_ℓ				0	0	0
C_m				-.00013	-.00005	.00003
				C4, M = .8		
C_y				-.00076	-.00086	-.00081
C_z				-.00196	-.00019	.00158
C_ℓ				-.00004	-.00001	-.00003
C_m				-.00052	-.00013	.00026
				C.5, M = .8		
C_y				-.00455	-.00460	-.00459
C_z				-.00317	-.00028	.00261
C_ℓ				-.00341	-.00030	.00281
C_m				-.00070	-.00015	-.00323
				C6, M = .8		
C_y				-.00458	-.00460	-.00460
C_z				-.00323	-.00029	.00265
C_ℓ				-.00018	-.00002	.00014
C_m				-.00073	-.00016	.00041
		C7, M = .6			C7, M = .8	
C_y	-.00299	-.00196	-.00095	-.00374	-.00254	-.00137
C_z	.00466	.00493	.00519	.00546	.00574	.00601
C_ℓ	-.00015	-.00009	-.00005	-.00018	-.00013	-.00007
C_m	-.00288	-.00248	-.00209	-.00318	-.00278	-.00236

Table 11 Unsteady Force and Moment Coefficients for Missile Store

	C3, M = .8	
C_y^*	0	0
C_z^*	.0612	.0096
C_ℓ^*	.0626	.0098
C_m^*	.0232	-.0012
	C4, M = .8	
C_y^*	-.0022	.0003
C_z^*	.1652	.0270
C_ℓ^*	.0034	.0009
C_m^*	.05490	-.0083
	C5, M = .8	
C_y^*	-.0836	.0260
C_z^*	.2955	.0176
C_ℓ^*	.0168	-.0001
C_m^*	.0298	-.0083
	C6, M = .8	
C_y^*	.3203	-.1194
C_z^*	.4191	-.0289
C_ℓ^*	.0230	-.0023
C_m^*	.0233	-.0017
	C7, M = .6	
C_y^*	.0998	-.0008
C_z^*	.0421	.0420
C_ℓ^*	.0049	-.0004
C_m^*	.0290	-.0414



AEROFOIL CO-ORDINATES (IN %)

x/C	z_u/C	z_l/C
0	-1.03300	-1.03300
0.1	-0.85917	-1.19123
0.2	-0.78409	-1.25078
0.3	-0.72529	-1.29413
0.4	-0.67494	-1.32912
0.5	-0.62999	-1.35879
0.6	-0.58889	-1.38470
0.7	-0.55074	-1.40774
0.8	-0.51489	-1.42855
0.9	-0.48095	-1.44754
1.0	-0.44861	-1.46502
1.25	-0.37338	-1.50342
1.50	-0.30449	-1.53608
1.75	-0.24019	-1.56446
2.00	-0.17900	-1.58950
2.25	-0.12256	-1.61188
2.50	-0.06801	-1.63204
3.00	0.03448	-1.66716
4.00	0.21918	-1.72259
5.00	0.38403	-1.76521
6.00	0.53408	-1.79977
7.00	0.67239	-1.82904
8.00	0.80092	-1.85474
9.00	0.92107	-1.87801
10	1.03386	-1.89966
11	1.14006	-1.92024
12	1.24024	-1.94013
13	1.33490	-1.95962

x/C	z_u/C	z_l/C
14	1.42438	-1.97891
15	1.50900	-1.99811
16	1.58897	-2.01730
17	1.66449	-2.03650
18	1.73574	-2.05568
19	1.80284	-2.07488
20	1.86588	-2.09407
21	1.92499	-2.11326
22	1.98022	-2.13245
23	2.03164	-2.15164
24	2.07933	-2.17083
25	2.12334	-2.19002
26	2.16373	-2.20921
27	2.20056	-2.22840
28	2.23391	-2.24760
29	2.26384	-2.26679
30	2.29043	-2.28598
31	2.31376	-2.30509
32	2.33396	-2.32367
33	2.35113	-2.34117
34	2.36540	-2.35704
35	2.37693	-2.37079
36	2.38588	-2.38202
37	2.39243	-2.39049
38	2.39681	-2.39614
39	2.39924	-2.39915
40	2.40000	-2.40000

x/C	z_u/C(-z_l/C)
41	2.39930
42	2.39720
43	2.39372
44	2.38885
45	2.38260
46	2.37496
47	2.36597
48	2.35560
49	2.34257
50	2.33078
51	2.31633
52	2.30054
53	2.28341
54	2.26491
55	2.24512
56	2.22398
57	2.20152
58	2.17774
59	2.15263
60	2.12622
61	2.09850
62	2.06948
63	2.03916
64	2.00755
65	1.97465
66	1.94047
67	1.90501
68	1.86814
69	1.82961
70	1.78920

x/C	z_u/C(-z_l/C)
71	1.74675
72	1.70213
73	1.65530
74	1.60623
75	1.55497
76	1.50162
77	1.44631
78	1.38924
79	1.33066
80	1.27087
81	1.21023
82	1.14913
83	1.08798
84	1.02680
85	0.96563
86	0.90445
87	0.84328
88	0.78210
89	0.72093
90	0.65975
91	0.59858
92	0.53740
93	0.47623
94	0.41505
95	0.35388
96	0.29270
97	0.23153
98	0.17035
99	0.10918
100	0.04800

Co-ordinates of the aerofoil of the wing

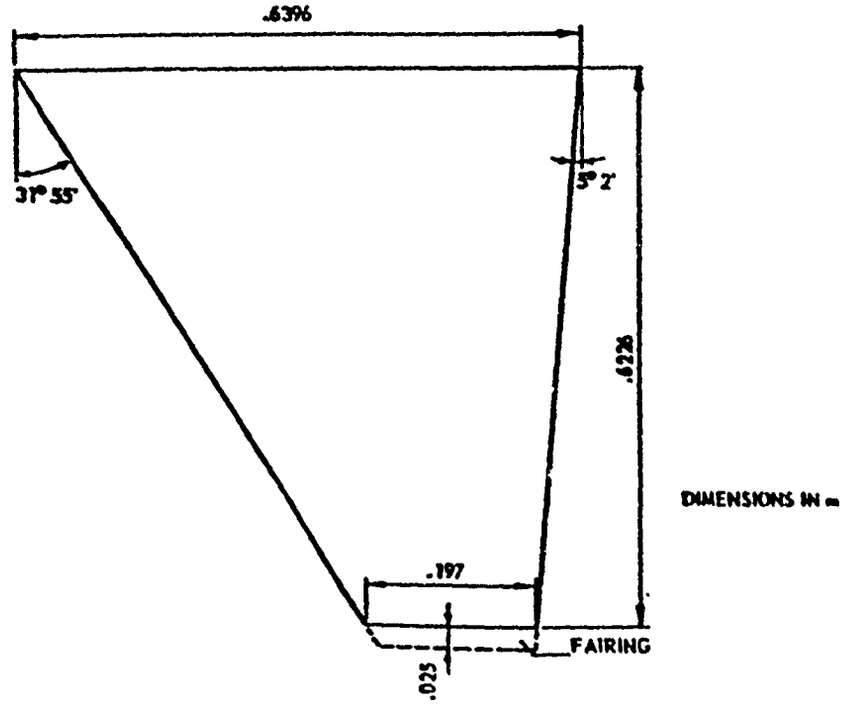


FIGURE 1 DIMENSIONS OF THE WING

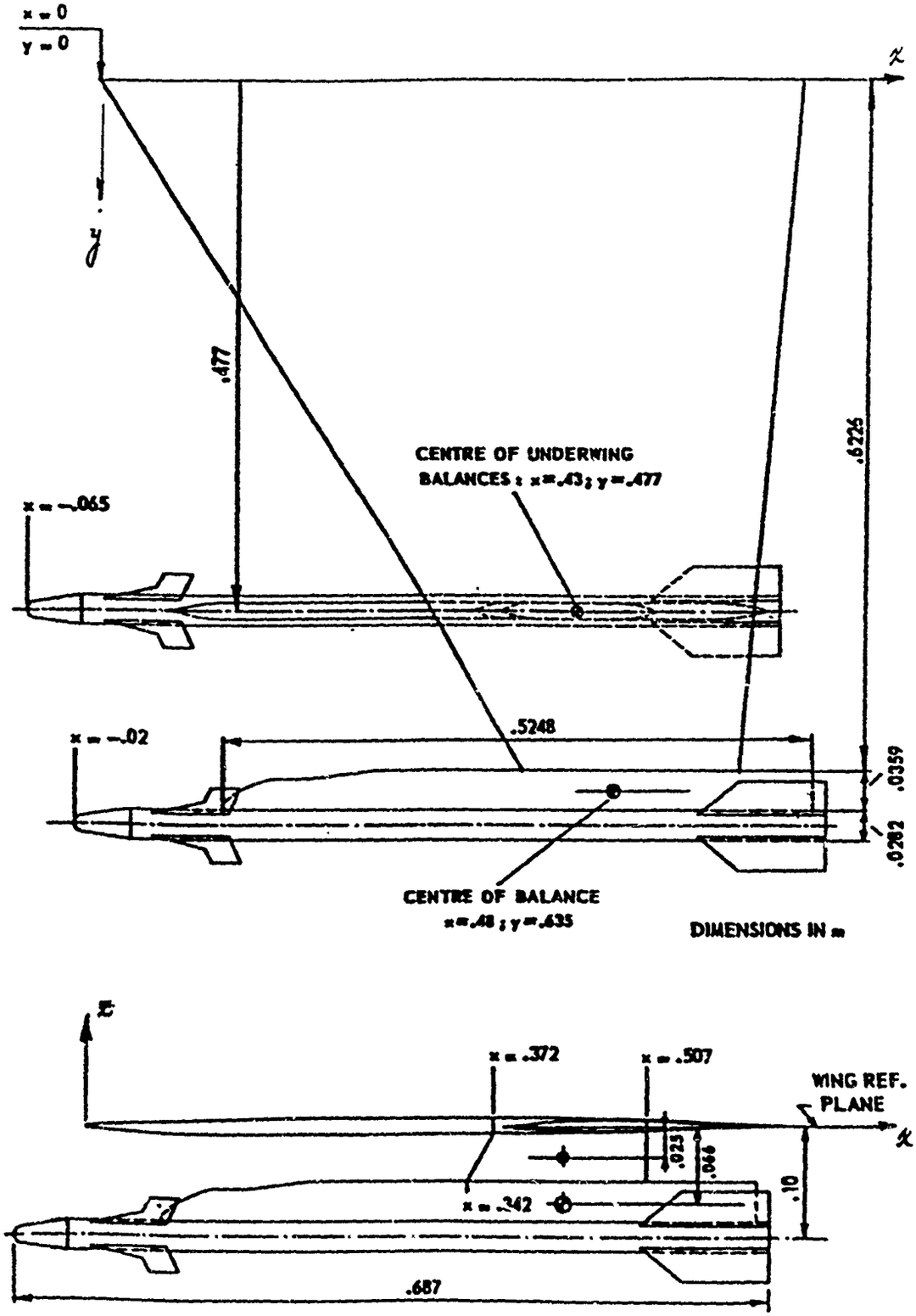


FIGURE 2 POSITION OF THE STORE AND STRAIN GAGE BALANCES

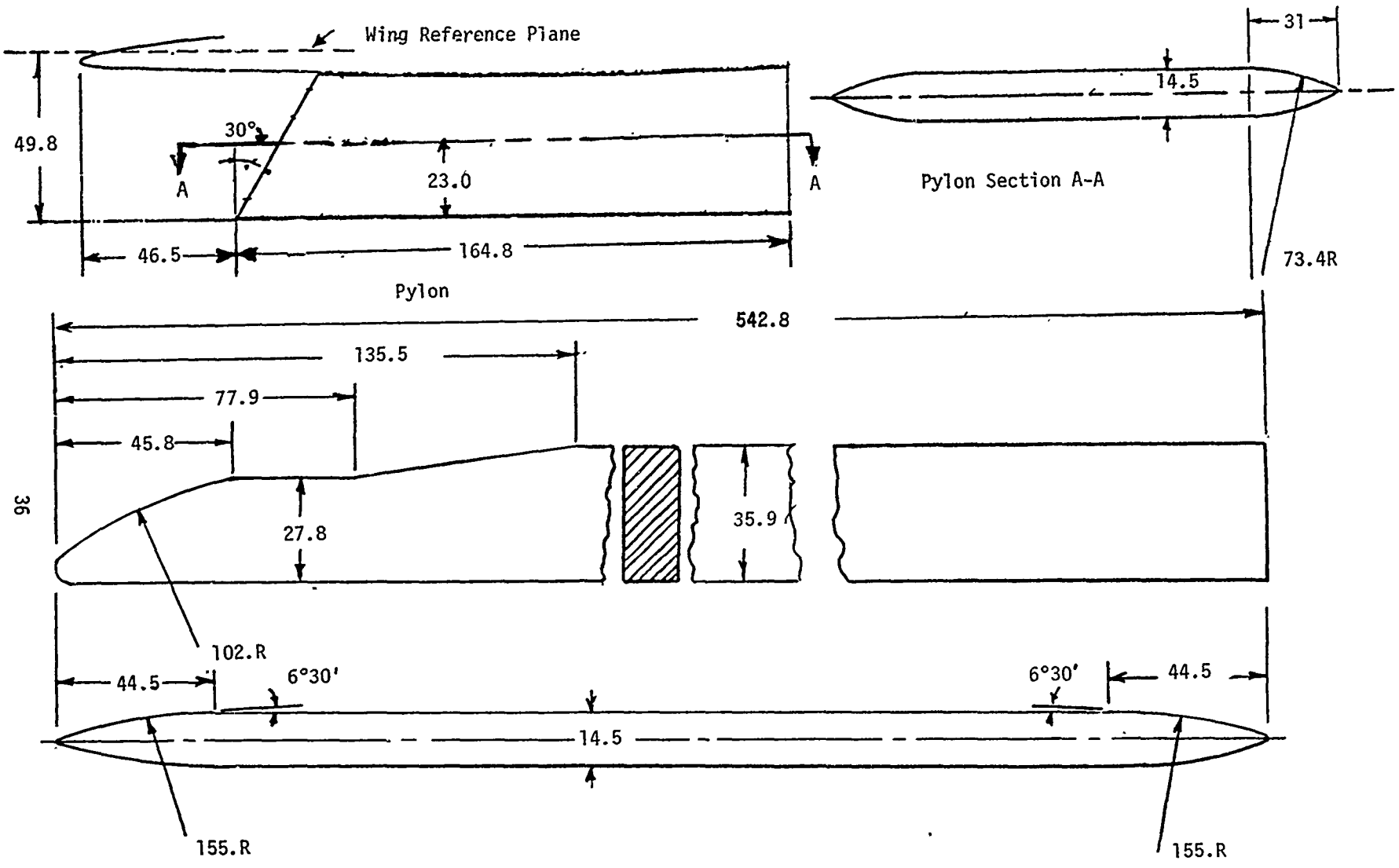
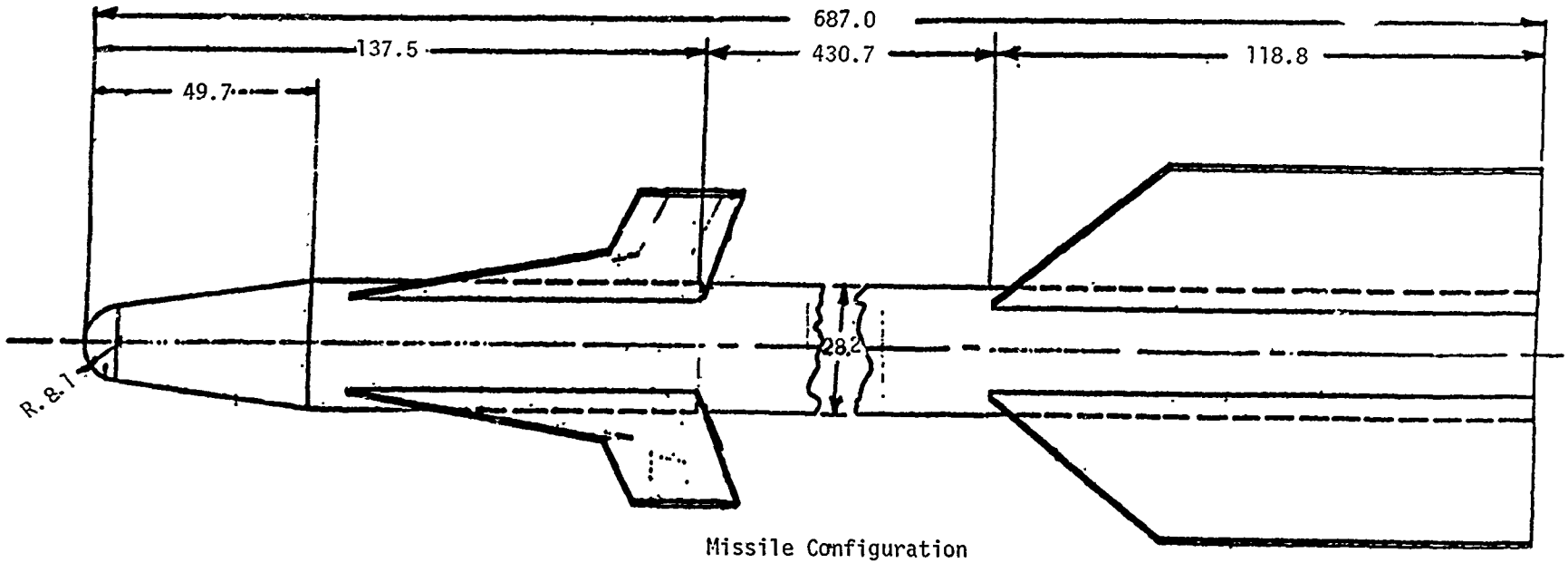
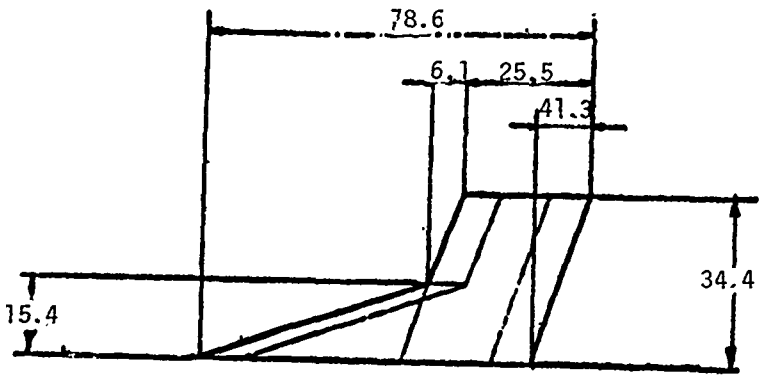


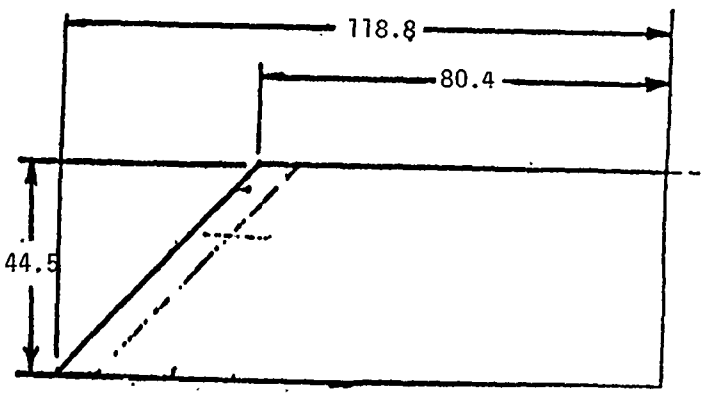
FIGURE 3 MISSILE LAUNCHER AND PYLON DETAILS



Missile Configuration
Dimensions in Millimeters



Forward Fin Planform



AFT Fin Planform

FIGURE 4 MISSILE DETAILS

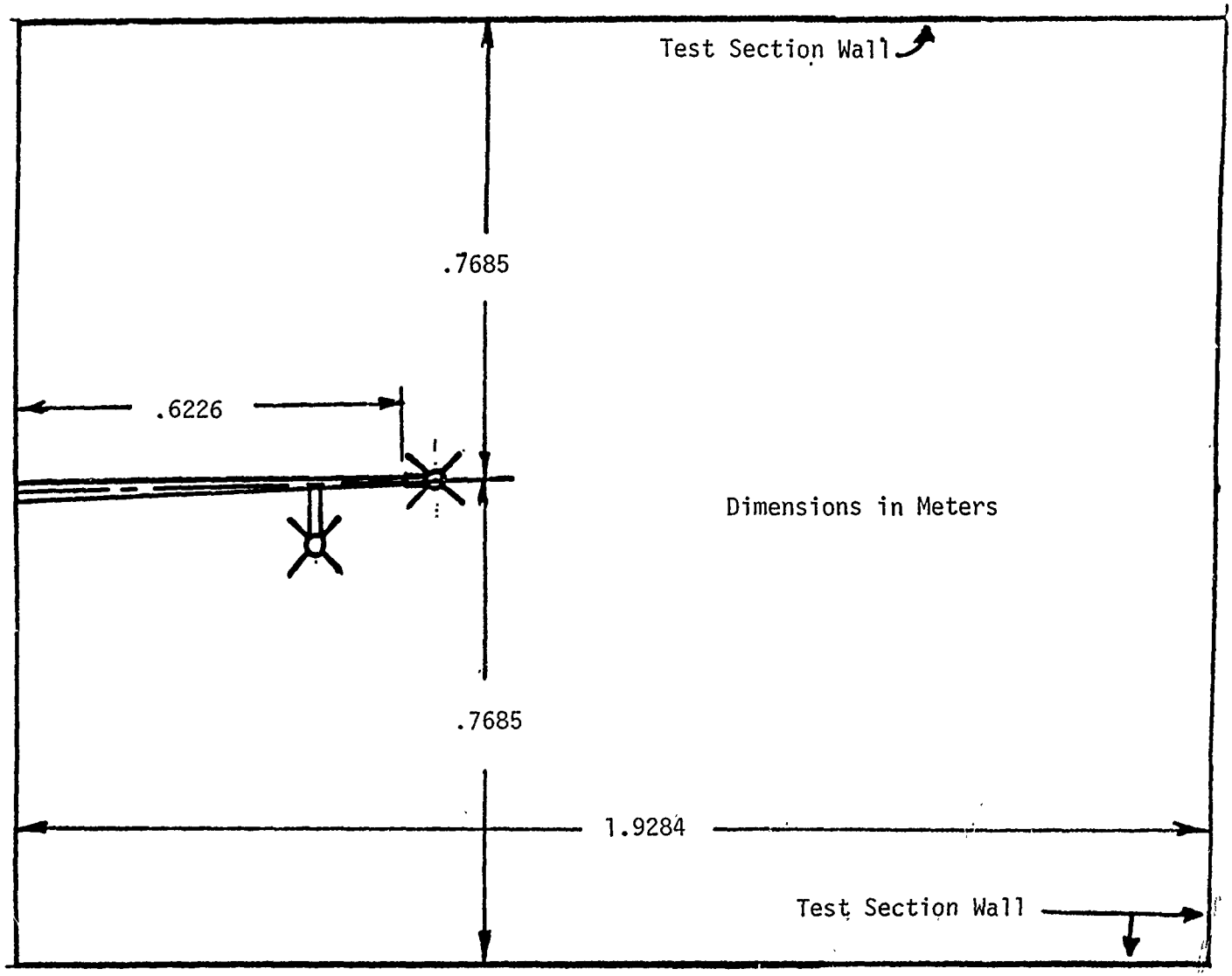


FIGURE 5 DIMENSIONS OF WIND TUNNEL TEST SECTION

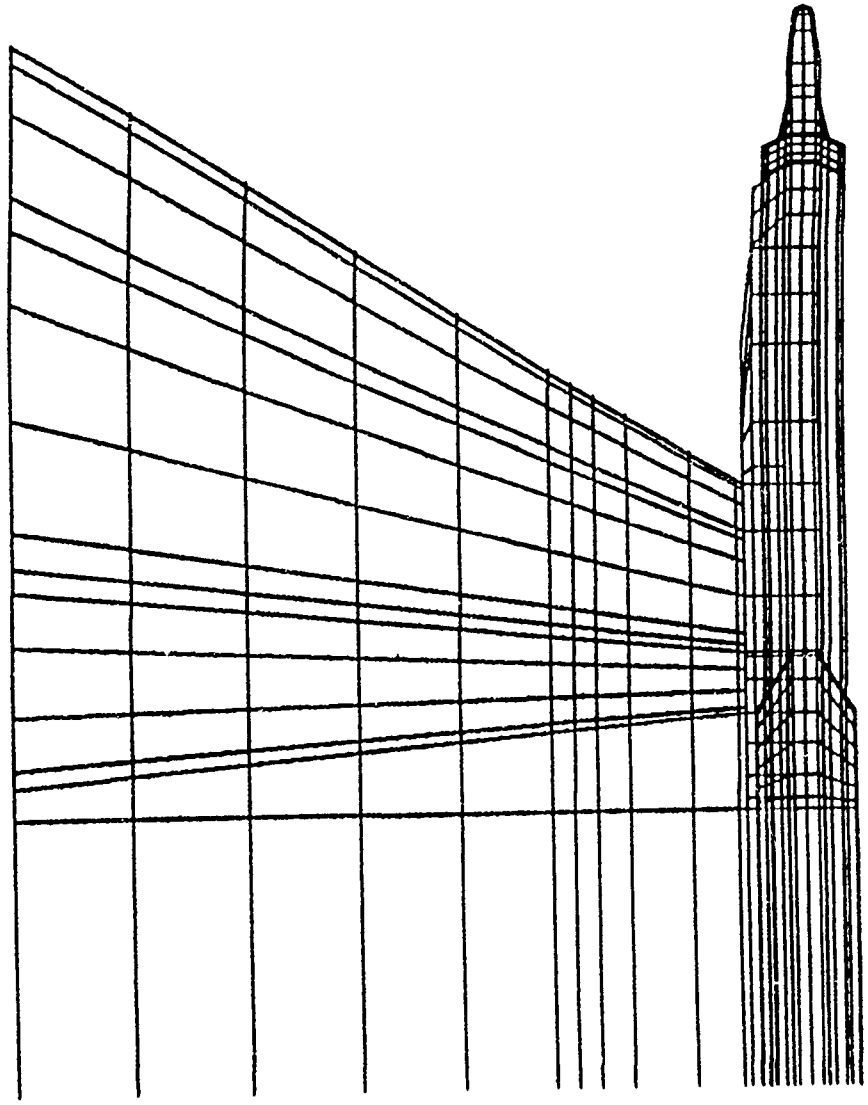


FIGURE 6 PLAN VIEW OF PANELED WING AND TIP MOUNTED MISSILE

FIGURE 7 FRONT VIEW OF PANELED WING AND TIP MOUNTED MISSILE

FIGURE 8 SIDE VIEW OF PANELED WING AND TIP MOUNTED MISSILE

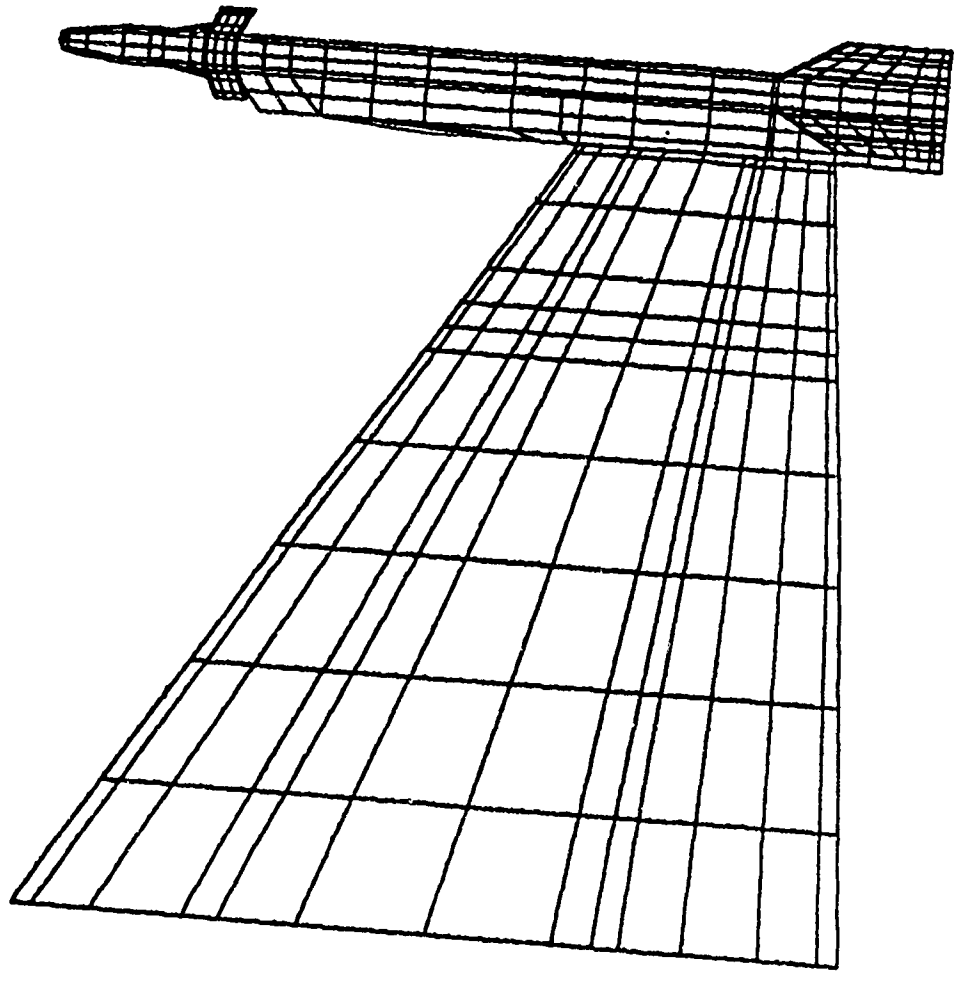


FIGURE 9 PLAN VIEW OF PANELED WING AND TIP MOUNTED MISSILE WITHOUT WAKE

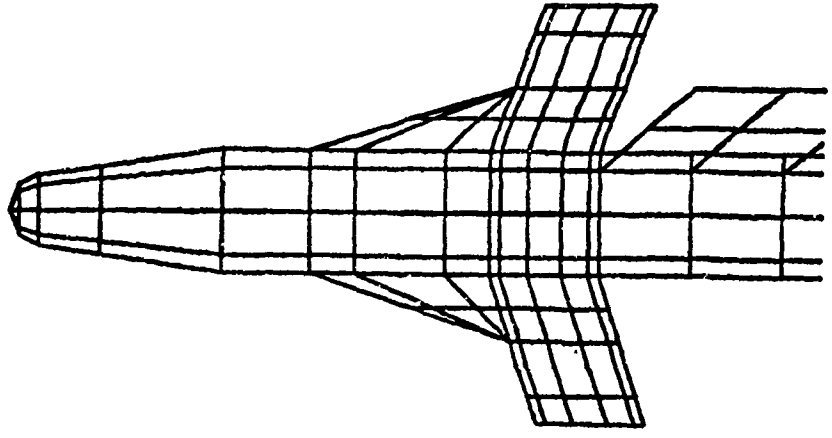


FIGURE 10 FORWARD PORTION OF PANELED MISSILE WITH CANARD FINS IN PLAN VIEW

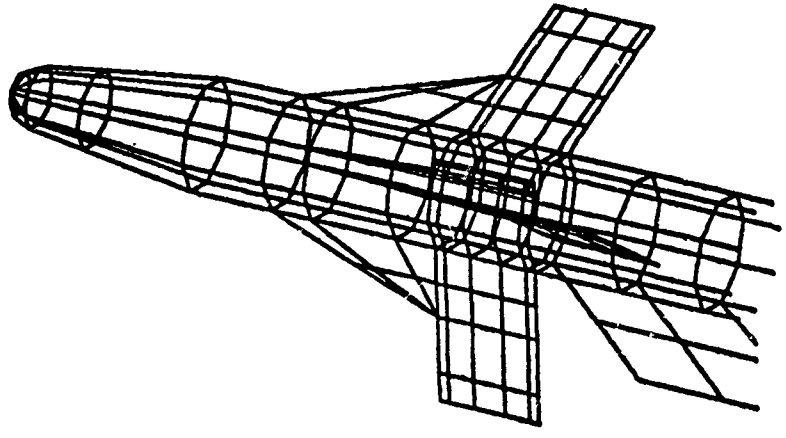


FIGURE 11 FORWARD PORTION OF PANELED MISSILE SHOWING BODY SECTION

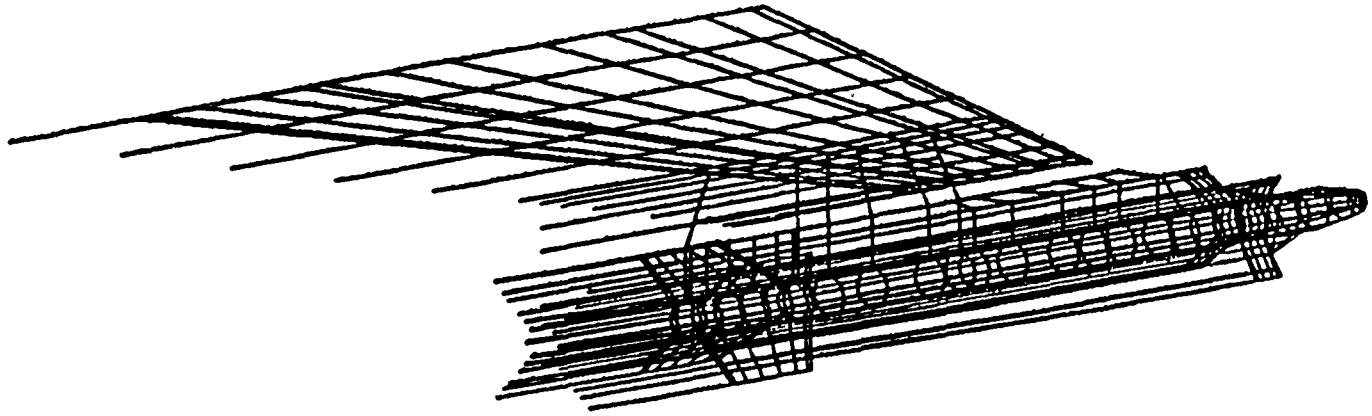


FIGURE 12 PANELED WING AND MISSILE ON PYLON

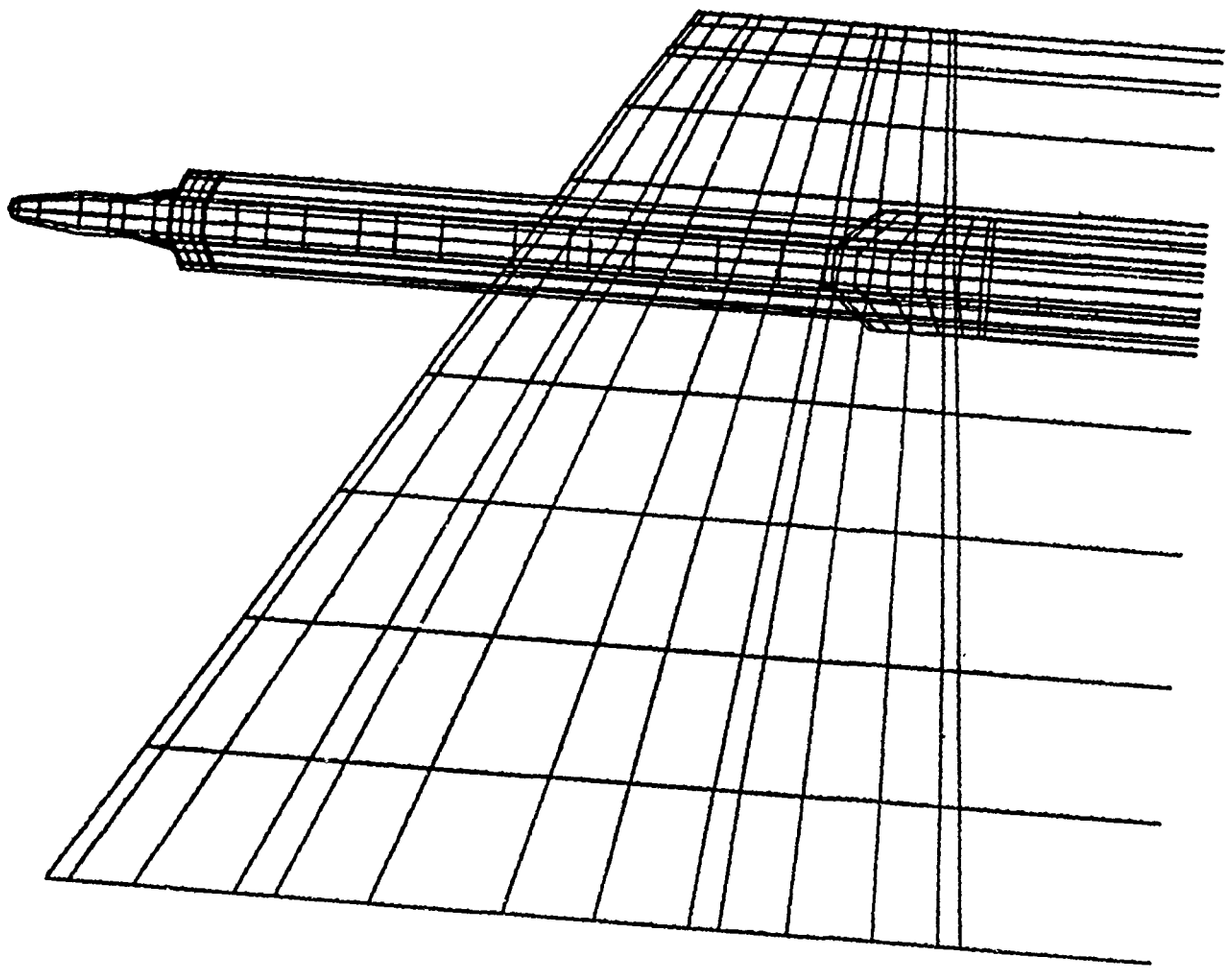


FIGURE 13 PLAN VIEW OF PANELED WING AND MISSILE ON PYLON

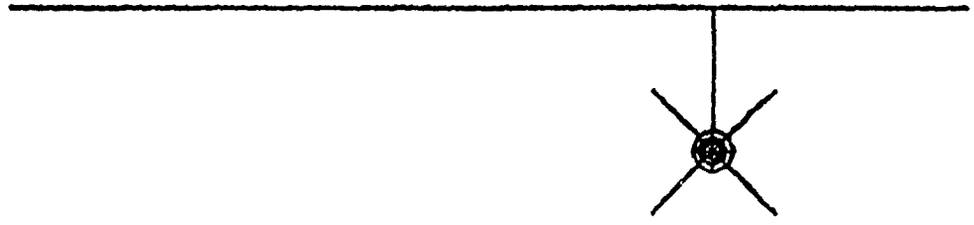


FIGURE 14 FRONT VIEW OF PANELED WING AND MISSILE ON PYLON

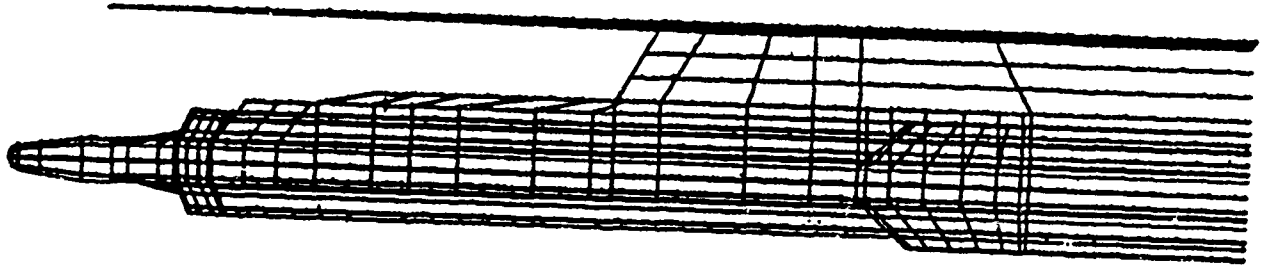


FIGURE 15 SIDE VIEW OF PANELED WING AND MISSILE ON PYLON

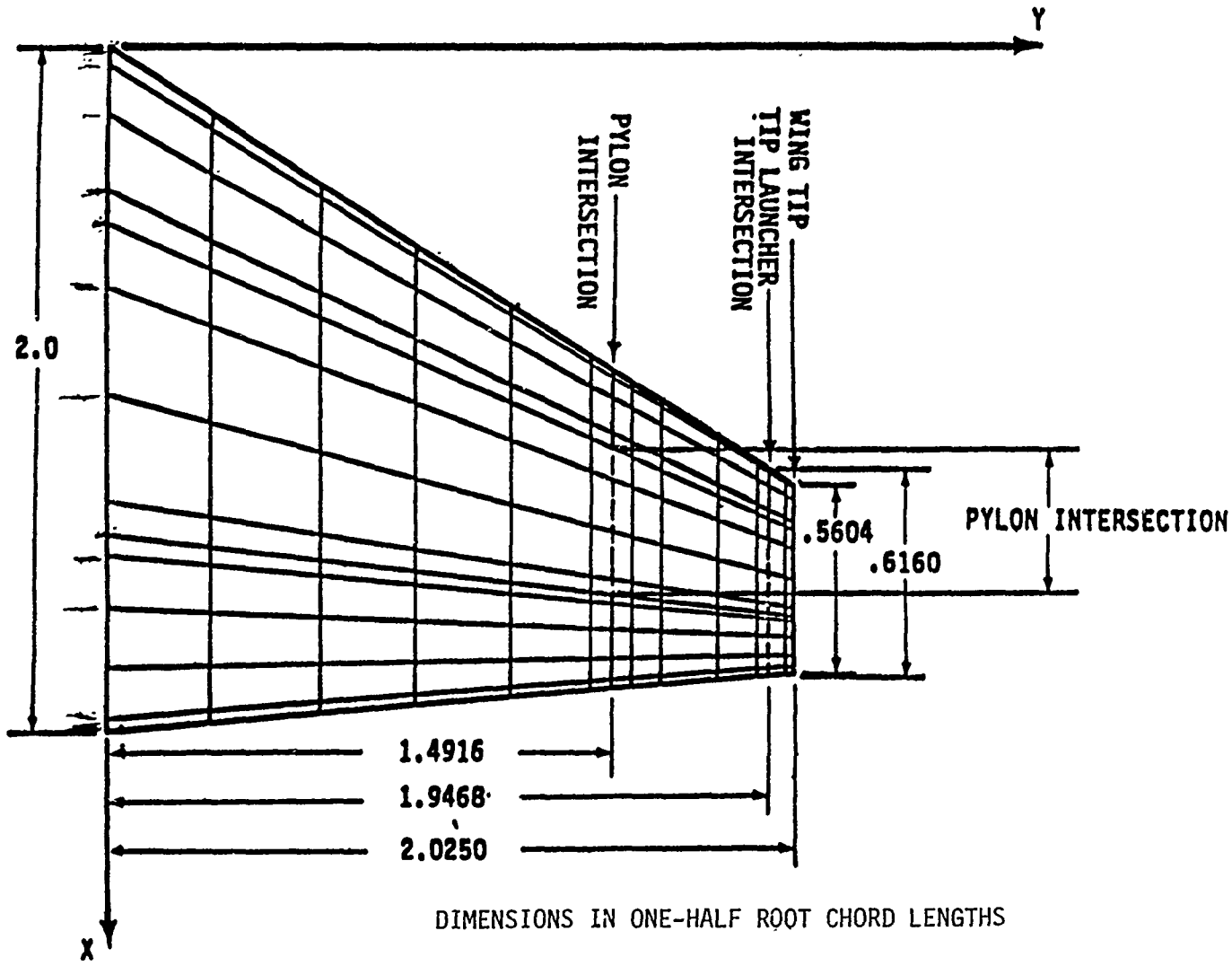
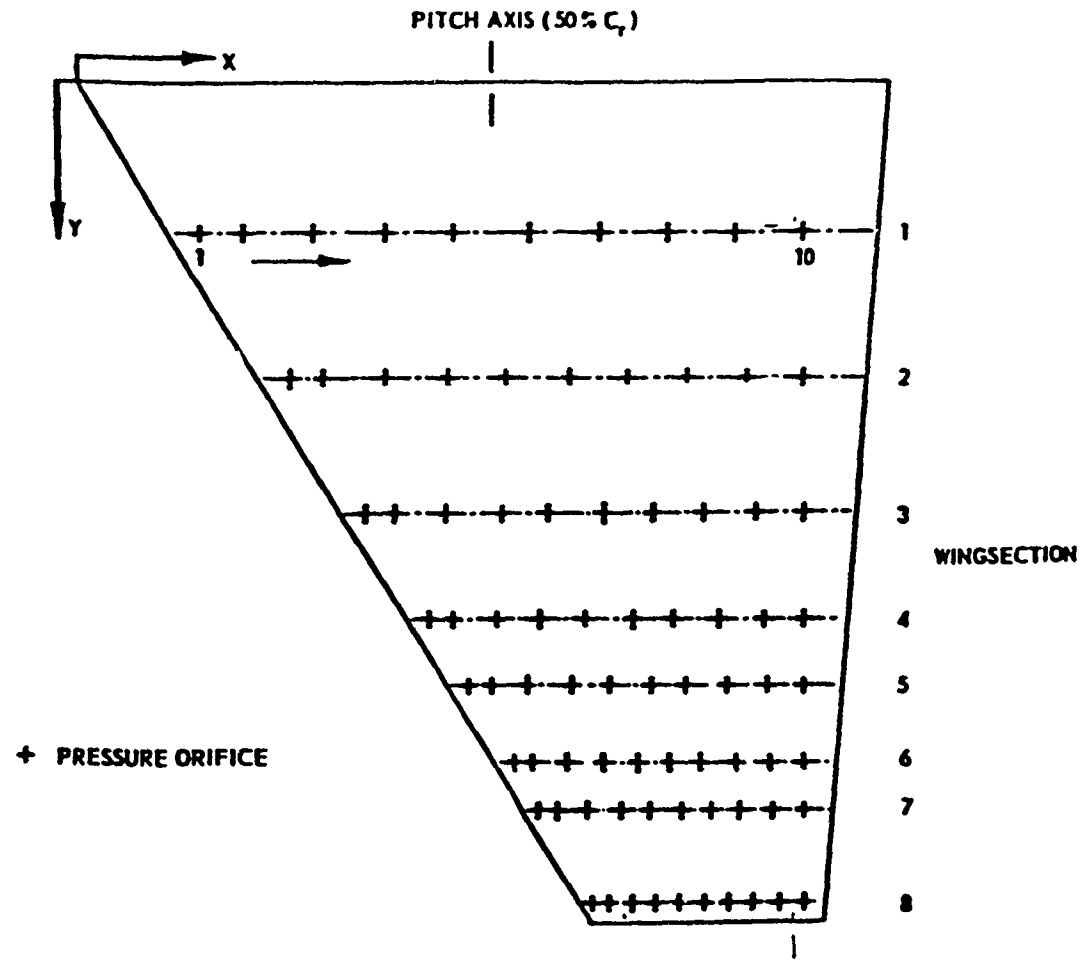


FIGURE 16 PANELING OF THE WING PLANFORM



PRESSURE ORIFICES			
SECTION	% SPAN	ORIFICE NUMBER	% CHORD
1	18.1	1	3
2	35.5	2	10
3	51.2	3	20
4	64.1	4	30
5	72.1	5	40
6	81.7	6	50
7	87.5	7	60
8	97.7	8	70
		9	80
		10	90

SPAN = 0.6226 METERS

FIGURE 17 LOCATION OF PRESSURE ORIFICES AND TRANDUCERS

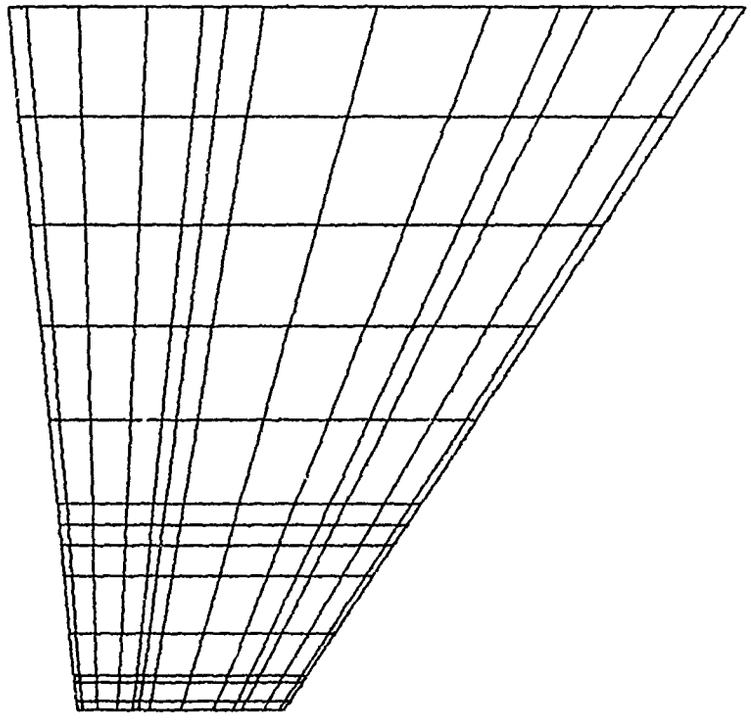


Figure 18, Configuration 1

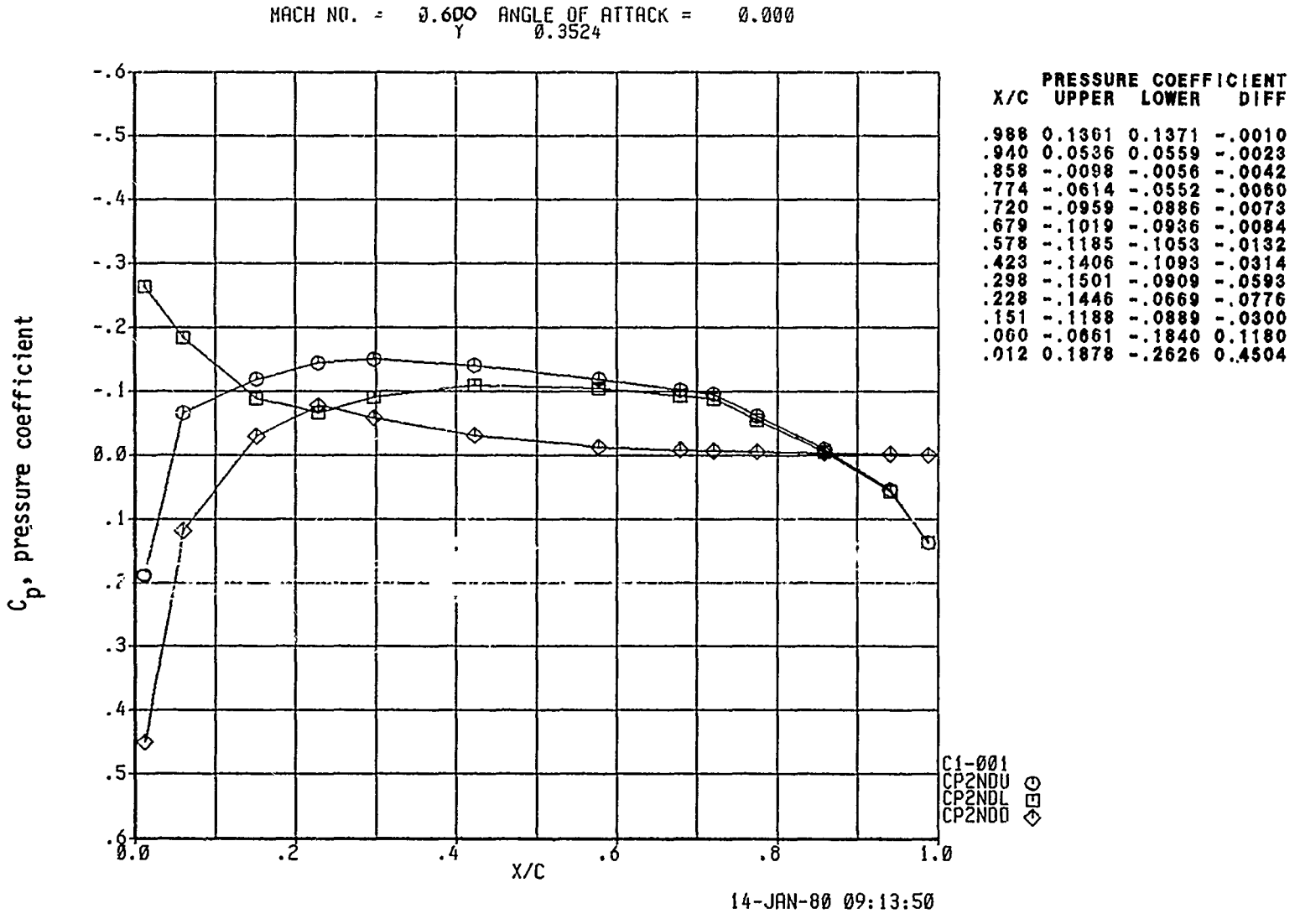
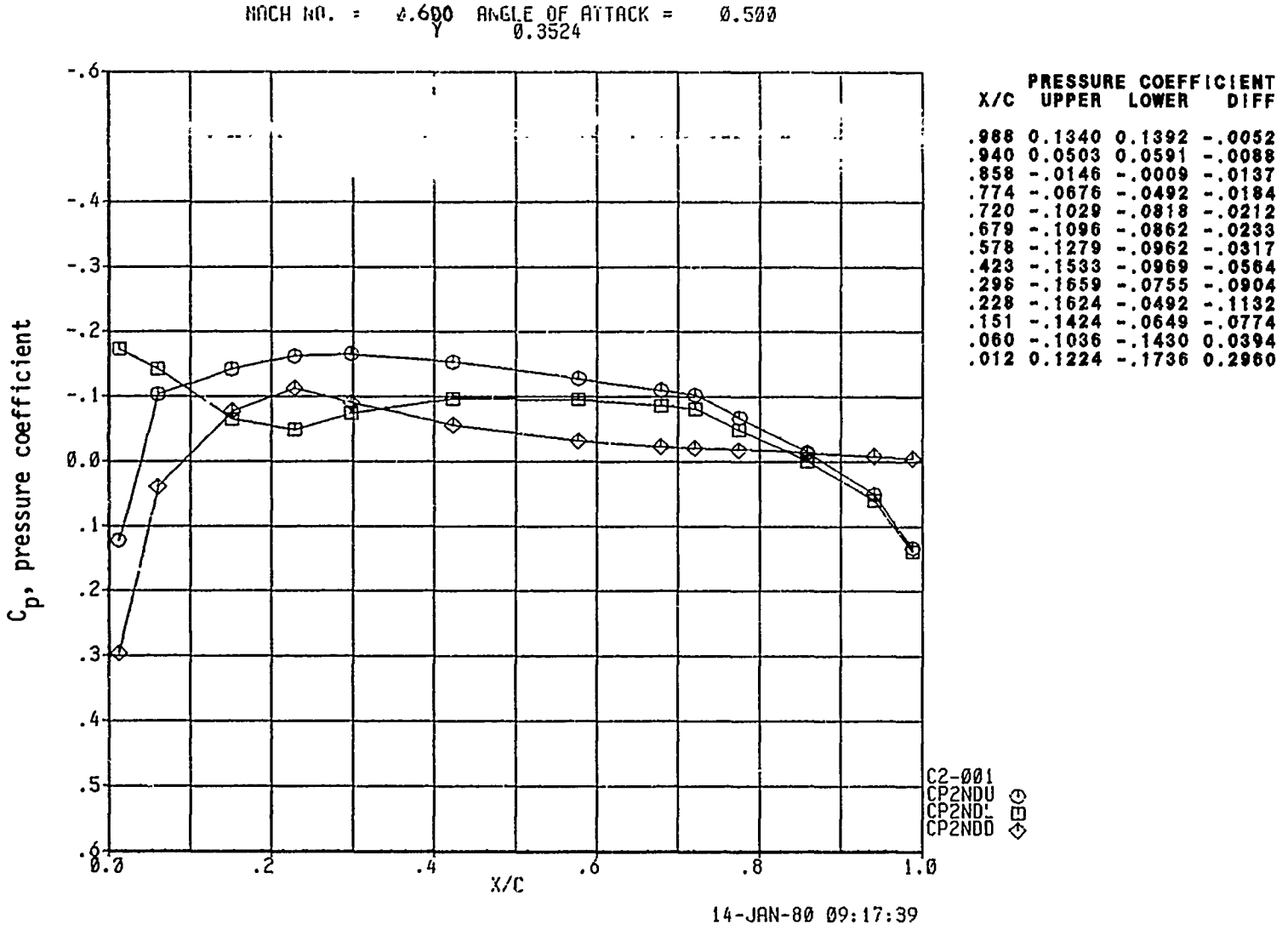
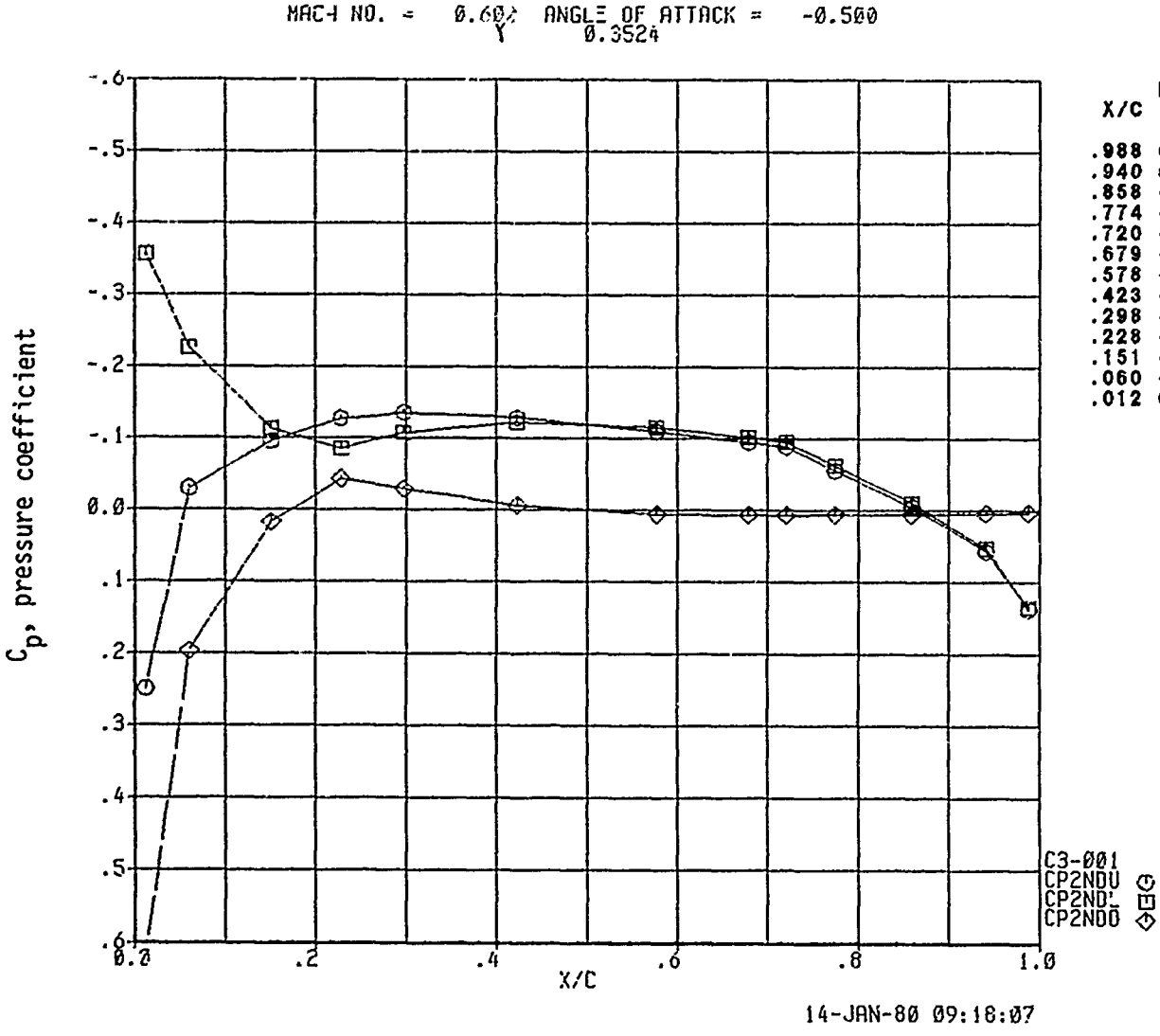


Figure 19 , Chordwise Pressure Distribution, Steady, Configuration 1



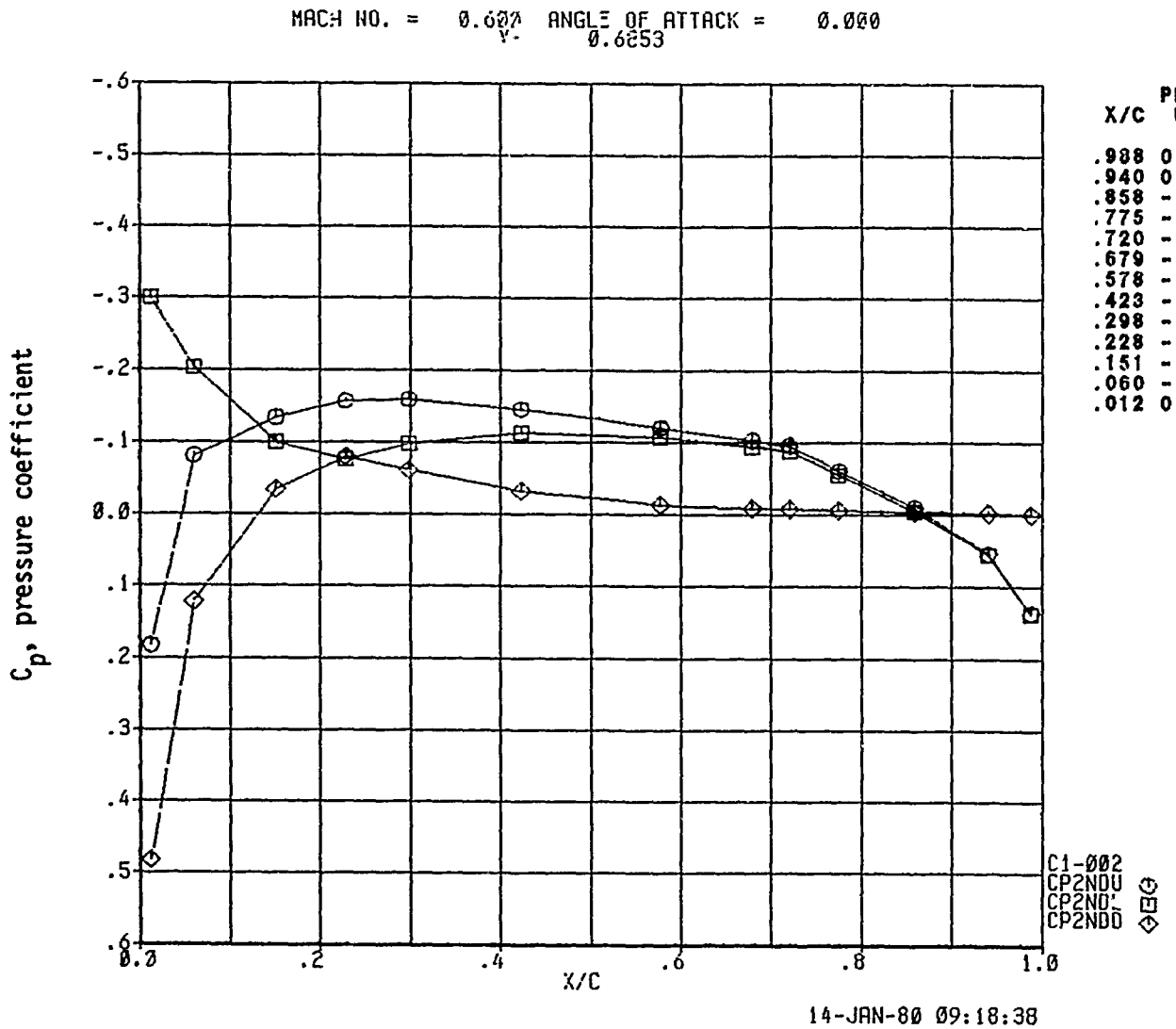
X/C	PRESSURE COEFFICIENT UPPER	LOWER	DIFF
.988	0.1340	0.1392	-.0052
.940	0.0503	0.0591	-.0088
.858	-.0146	-.0009	-.0137
.774	-.0676	-.0492	-.0184
.720	-.1029	-.0818	-.0212
.679	-.1096	-.0862	-.0233
.578	-.1279	-.0962	-.0317
.423	-.1533	-.0969	-.0564
.296	-.1659	-.0755	-.0904
.228	-.1624	-.0492	-.1132
.151	-.1424	-.0649	-.0774
.060	-.1036	-.1430	0.0394
.012	0.1224	-.1736	0.2960

Figure 20 , Chordwise Pressure Distribution, Steady, Configuration 1



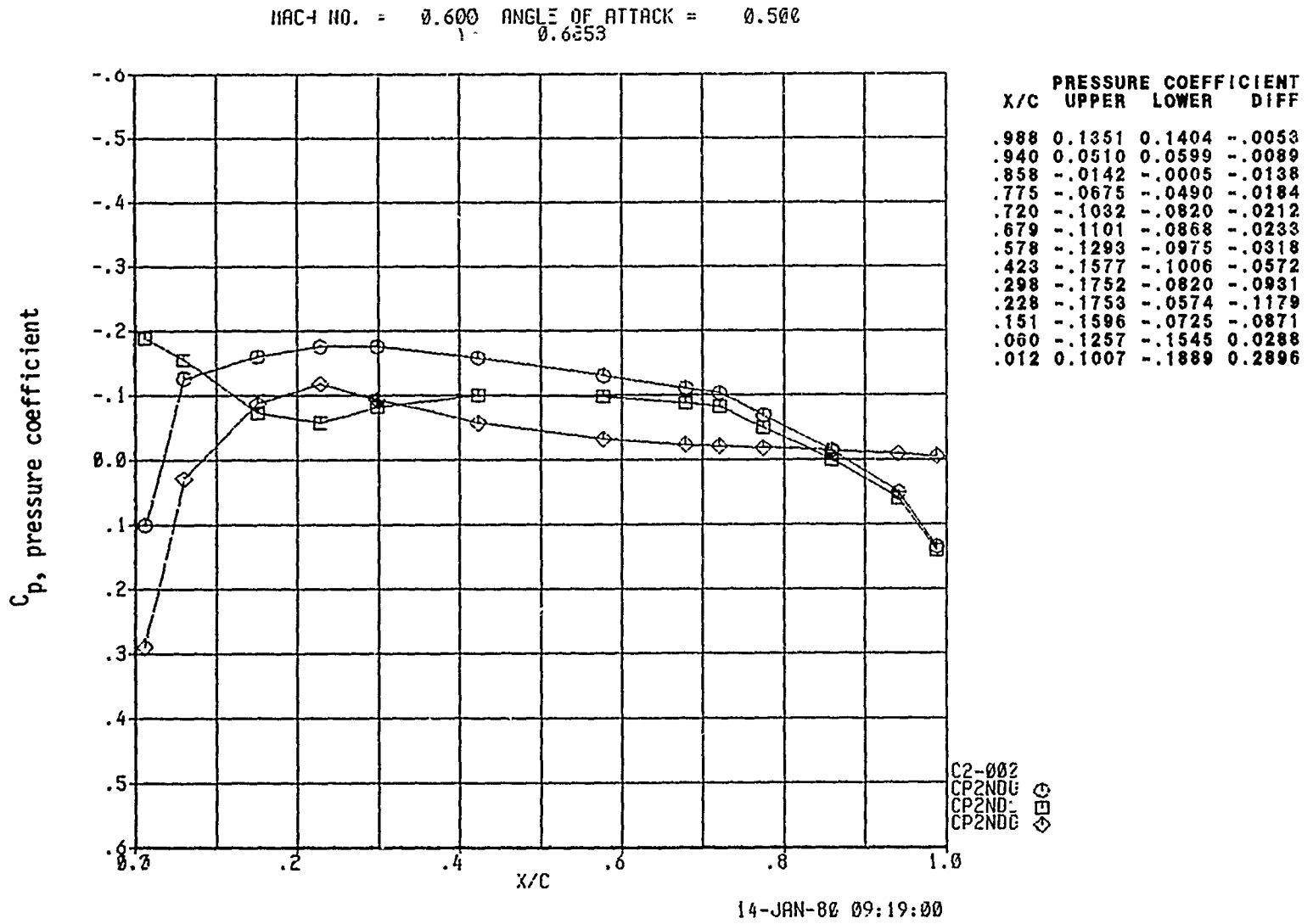
X/C	PRESSURE COEFFICIENT UPPER	LOWER	DIFF
.988	0.1381	0.1350	0.0032
.940	0.0568	0.0526	0.0042
.858	-.0051	-.0104	0.0054
.774	-.0552	-.0615	0.0062
.720	-.0891	-.0955	0.0065
.679	-.0946	-.1012	0.0066
.578	-.1094	-.1147	0.0054
.423	-.1281	-.1218	-.0063
.298	-.1347	-.1064	-.0282
.228	-.1270	-.0848	-.0422
.151	-.0957	-.1132	0.0175
.060	-.0294	-.2259	0.1965
.012	0.2492	-.3557	0.6049

Figure 21 , Chordwise Pressure Distribution, Steady, Configuration 1



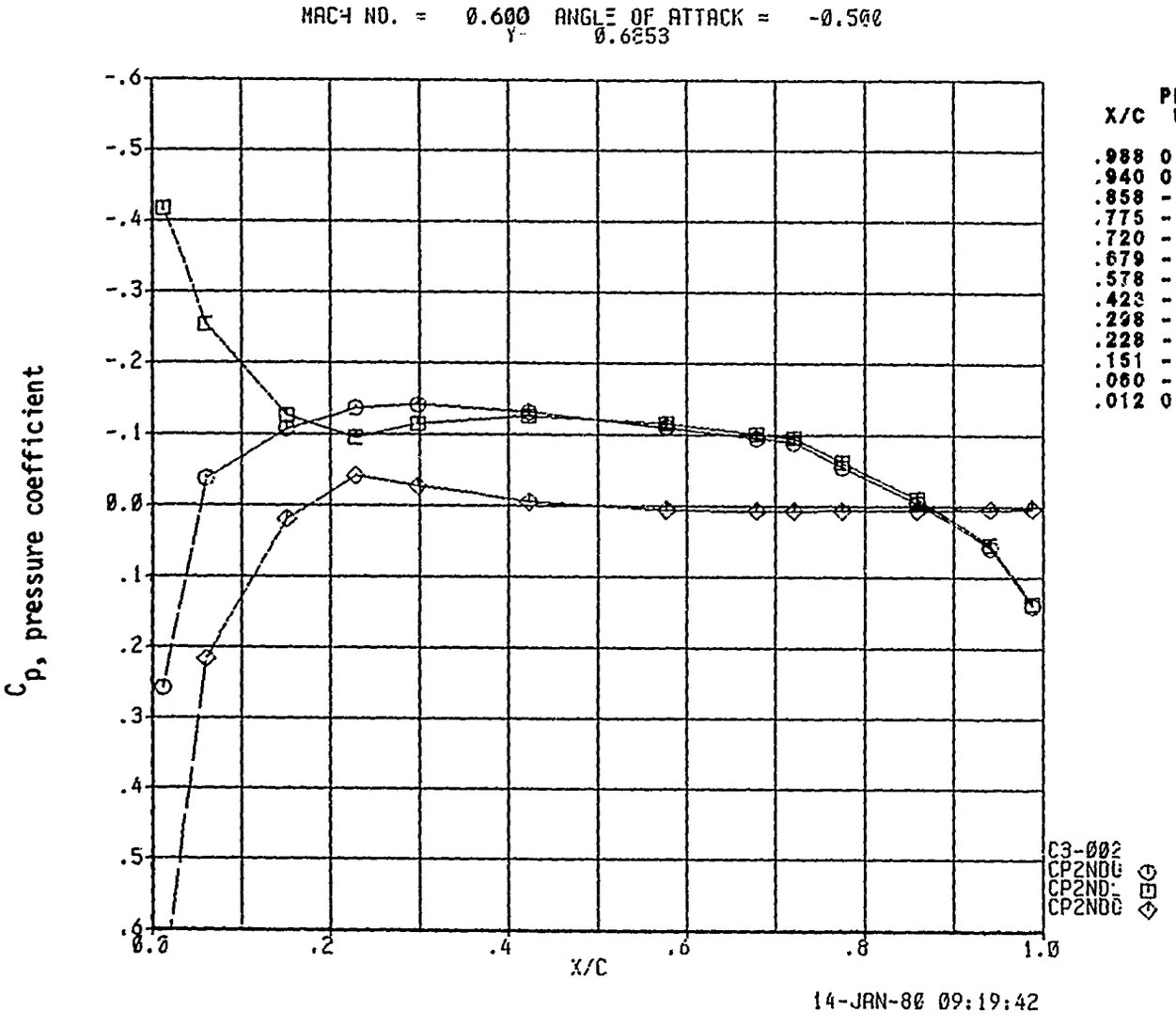
X/C	PRESSURE COEFFICIENT UPPER	LOWER	DIFF
.988	0.1373	0.1383	-.0010
.940	0.0543	0.0567	-.0023
.858	-.0094	-.0052	-.0042
.775	-.0612	-.0551	-.0061
.720	-.0962	-.0888	-.0074
.679	-.1025	-.0941	-.0084
.578	-.1199	-.1067	-.0132
.423	-.1447	-.1133	-.0314
.298	-.1585	-.0981	-.0604
.228	-.1559	-.0764	-.0796
.151	-.1332	-.0993	-.0339
.060	-.0809	-.2034	0.1226
.012	0.1819	-.2997	0.4817

Figure 22 , Chordwise Pressure Distribution, Steady, Configuration 1



X/C	PRESSURE COEFFICIENT UPPER	LOWER	DIFF
.988	0.1351	0.1404	-.0053
.940	0.0510	0.0599	-.0089
.858	-.0142	-.0005	-.0138
.775	-.0675	-.0490	-.0184
.720	-.1032	-.0820	-.0212
.679	-.1101	-.0868	-.0233
.578	-.1293	-.0975	-.0318
.423	-.1577	-.1006	-.0572
.298	-.1752	-.0820	-.0931
.228	-.1753	-.0574	-.1179
.151	-.1596	-.0725	-.0871
.060	-.1257	-.1545	0.0288
.012	0.1007	-.1889	0.2896

Figure 23 , Chordwise Pressure Distribution, Steady, Configuration 1



X/C	PRESSURE COEFFICIENT UPPER	LOWER	DIFF
.988	0.1393	0.1362	0.0032
.940	0.0575	0.0533	0.0042
.858	-.0046	-.0100	0.0054
.775	-.0551	-.0614	0.0063
.720	-.0893	-.0958	0.0065
.679	-.0951	-.1017	0.0067
.578	-.1106	-.1162	0.0055
.423	-.1319	-.1262	-.0057
.298	-.1421	-.1145	-.0275
.228	-.1369	-.0957	-.0413
.151	-.1072	-.1266	0.0193
.060	-.0372	-.2535	0.2163
.012	0.2572	-.4166	0.6737

Figure 24 , Chordwise Pressure Distribution, Steady, Configuration 1

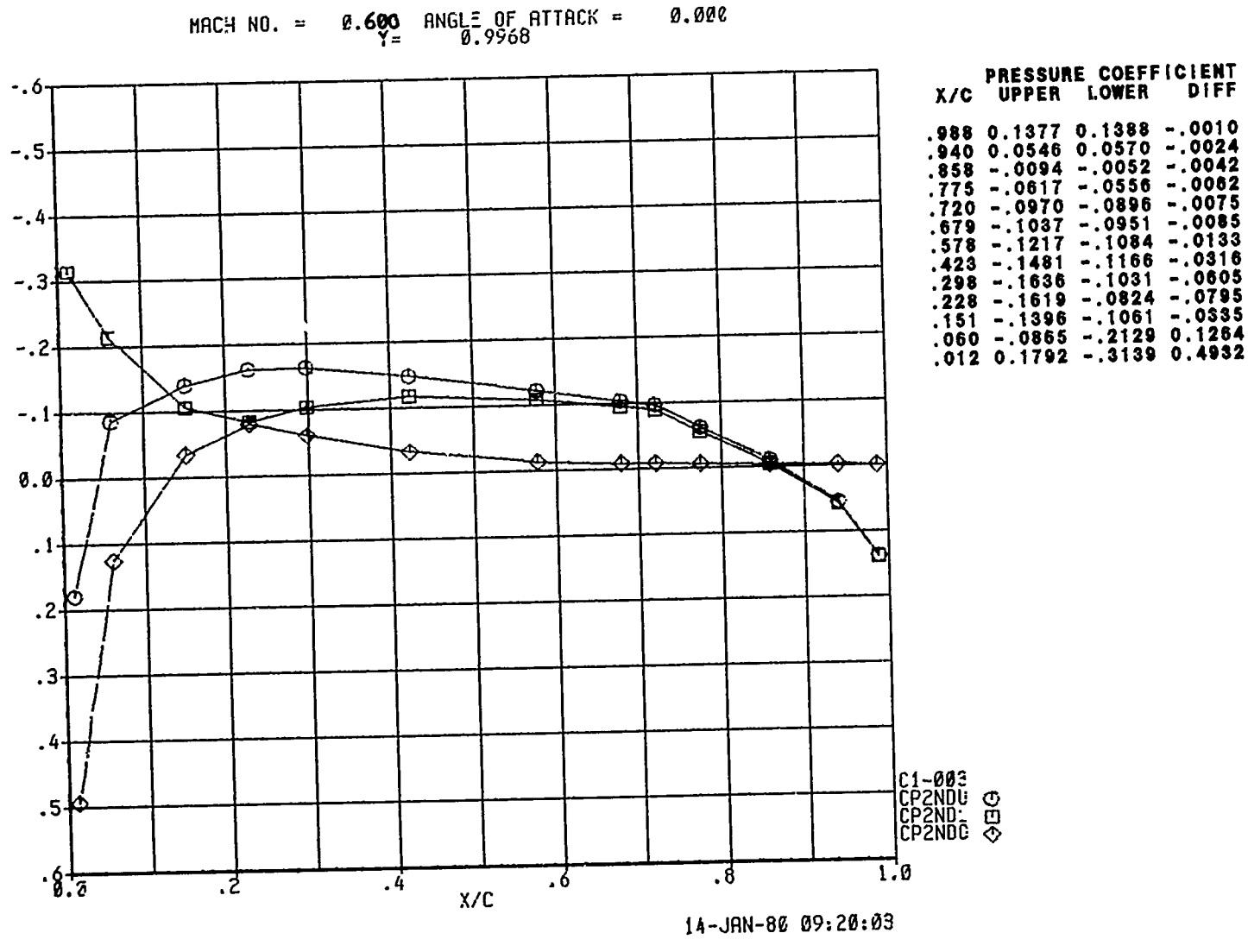
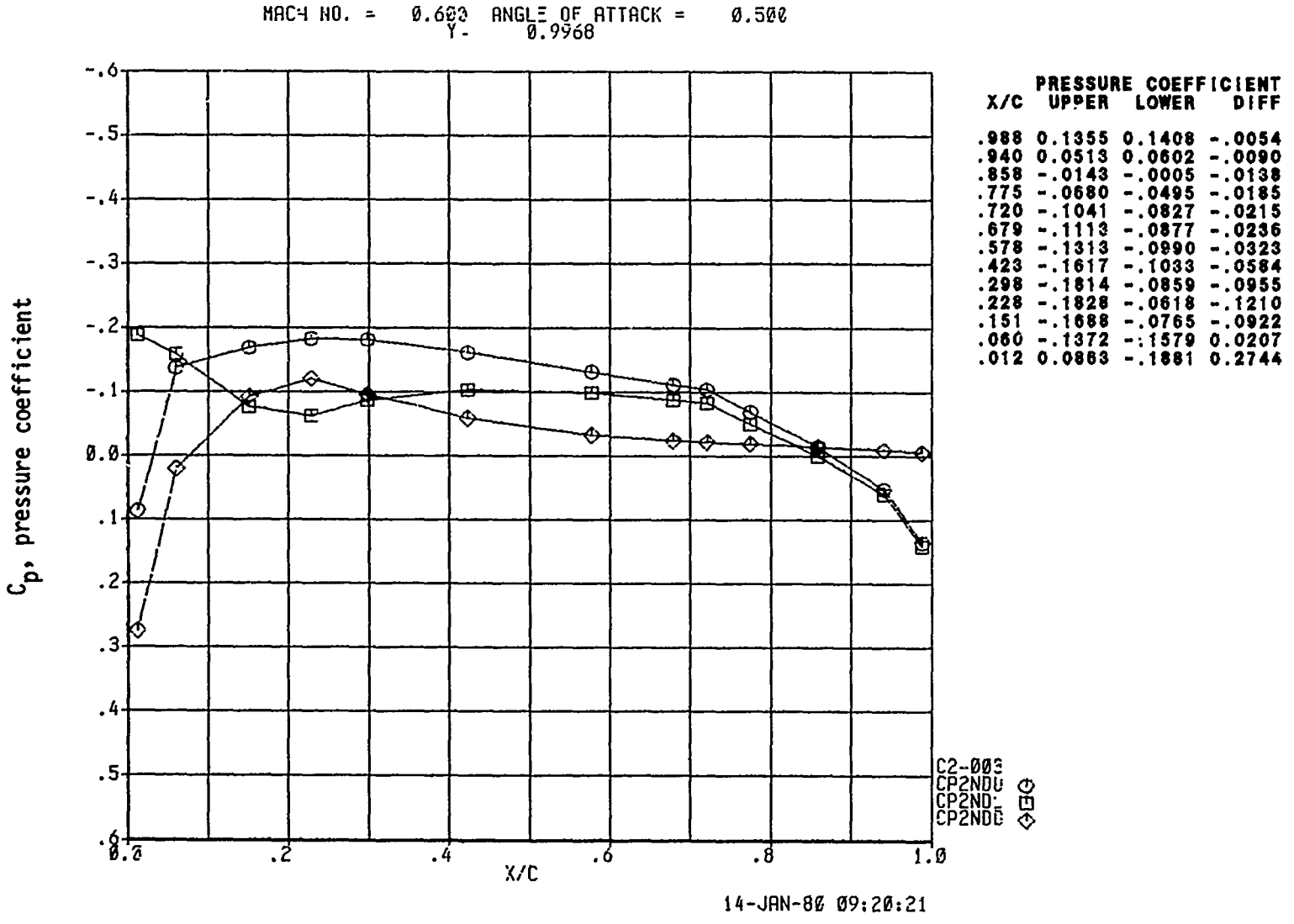
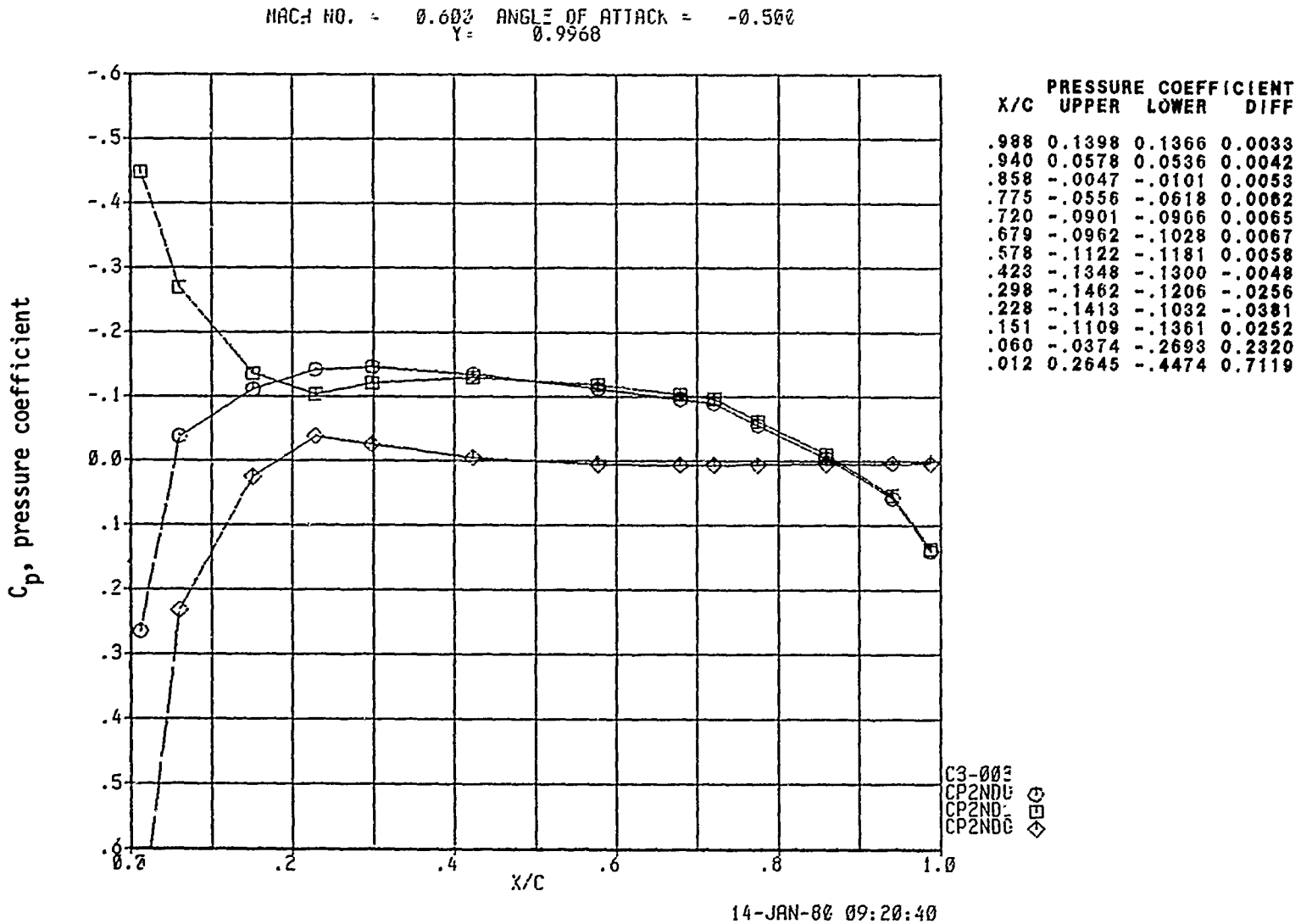


Figure 25 , Chordwise Pressure Distribution, Steady, Configuration 1



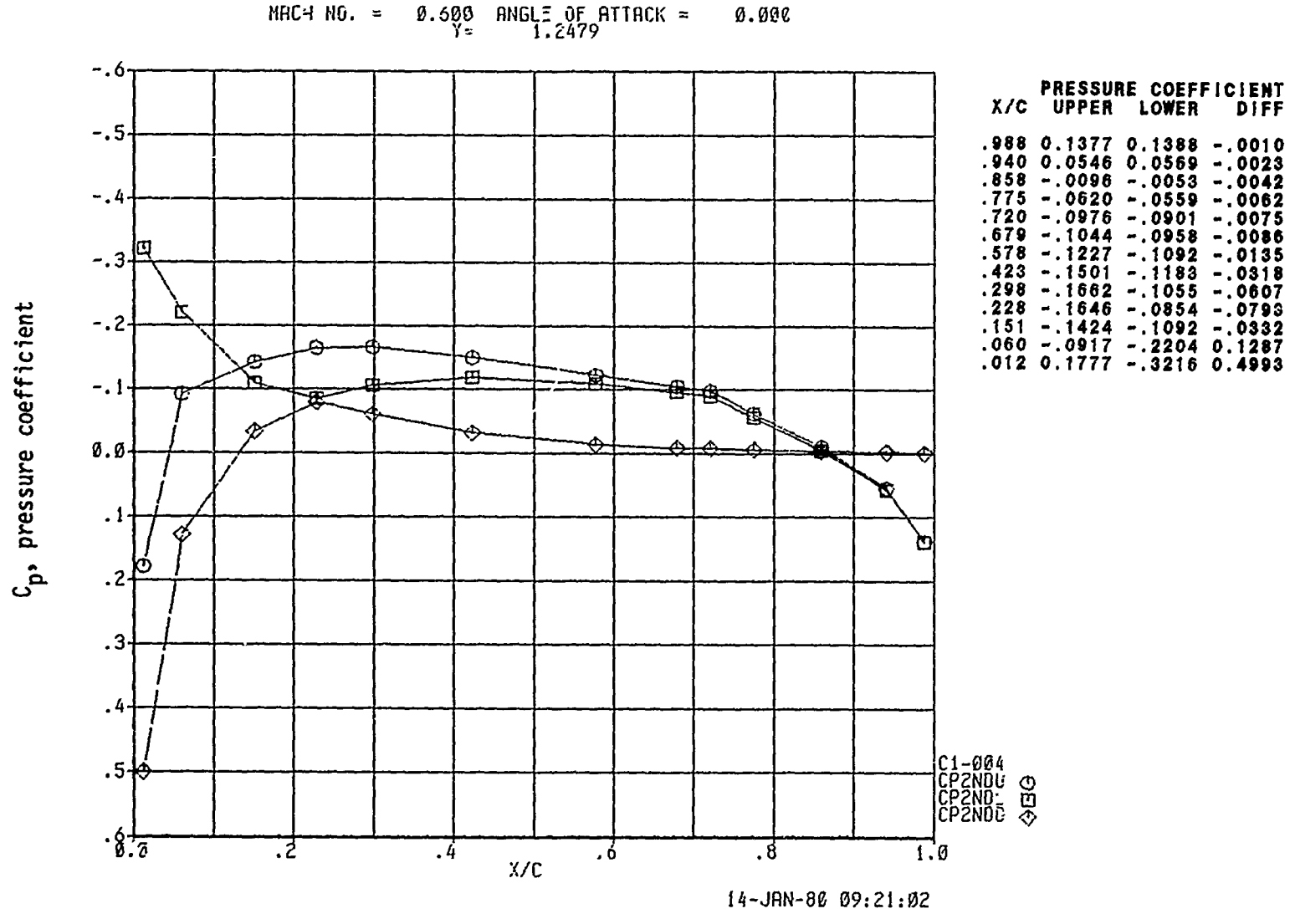
X/C	PRESSURE COEFFICIENT UPPER	LOWER	DIFF
.988	0.1355	0.1408	-.0054
.940	0.0513	0.0602	-.0090
.858	-.0143	-.0005	-.0138
.775	-.0680	-.0495	-.0185
.720	-.1041	-.0827	-.0215
.679	-.1113	-.0877	-.0236
.578	-.1313	-.0990	-.0323
.423	-.1617	-.1033	-.0584
.298	-.1814	-.0859	-.0955
.228	-.1828	-.0618	-.1210
.151	-.1688	-.0765	-.0922
.060	-.1372	-.1579	0.0207
.012	0.0863	-.1881	0.2744

Figure 26 , Chordwise Pressure Distribution, Steady, Configuration 1



X/C	PRESSURE COEFFICIENT UPPER	LOWER	DIFF
.988	0.1398	0.1366	0.0033
.940	0.0578	0.0536	0.0042
.858	-.0047	-.0101	0.0053
.775	-.0556	-.0618	0.0062
.720	-.0901	-.0966	0.0065
.679	-.0962	-.1028	0.0067
.578	-.1122	-.1181	0.0058
.423	-.1348	-.1300	-.0048
.298	-.1462	-.1206	-.0256
.228	-.1413	-.1032	-.0381
.151	-.1109	-.1361	0.0252
.060	-.0374	-.2693	0.2320
.012	0.2645	-.4474	0.7119

Figure 27 , Chordwise Pressure Distribution, Steady, Configuration 1



X/C	PRESSURE COEFFICIENT UPPER	LOWER	DIFF
.988	0.1377	0.1388	-.0010
.940	0.0546	0.0569	-.0023
.858	-.0096	-.0053	-.0042
.775	-.0620	-.0559	-.0062
.720	-.0976	-.0901	-.0075
.679	-.1044	-.0958	-.0086
.578	-.1227	-.1092	-.0135
.423	-.1501	-.1183	-.0318
.298	-.1662	-.1055	-.0607
.228	-.1646	-.0854	-.0793
.151	-.1424	-.1092	-.0332
.060	-.0917	-.2204	0.1287
.012	0.1777	-.3216	0.4993

Figure 28 , Chordwise Pressure Distribution, Steady, Configuration 1

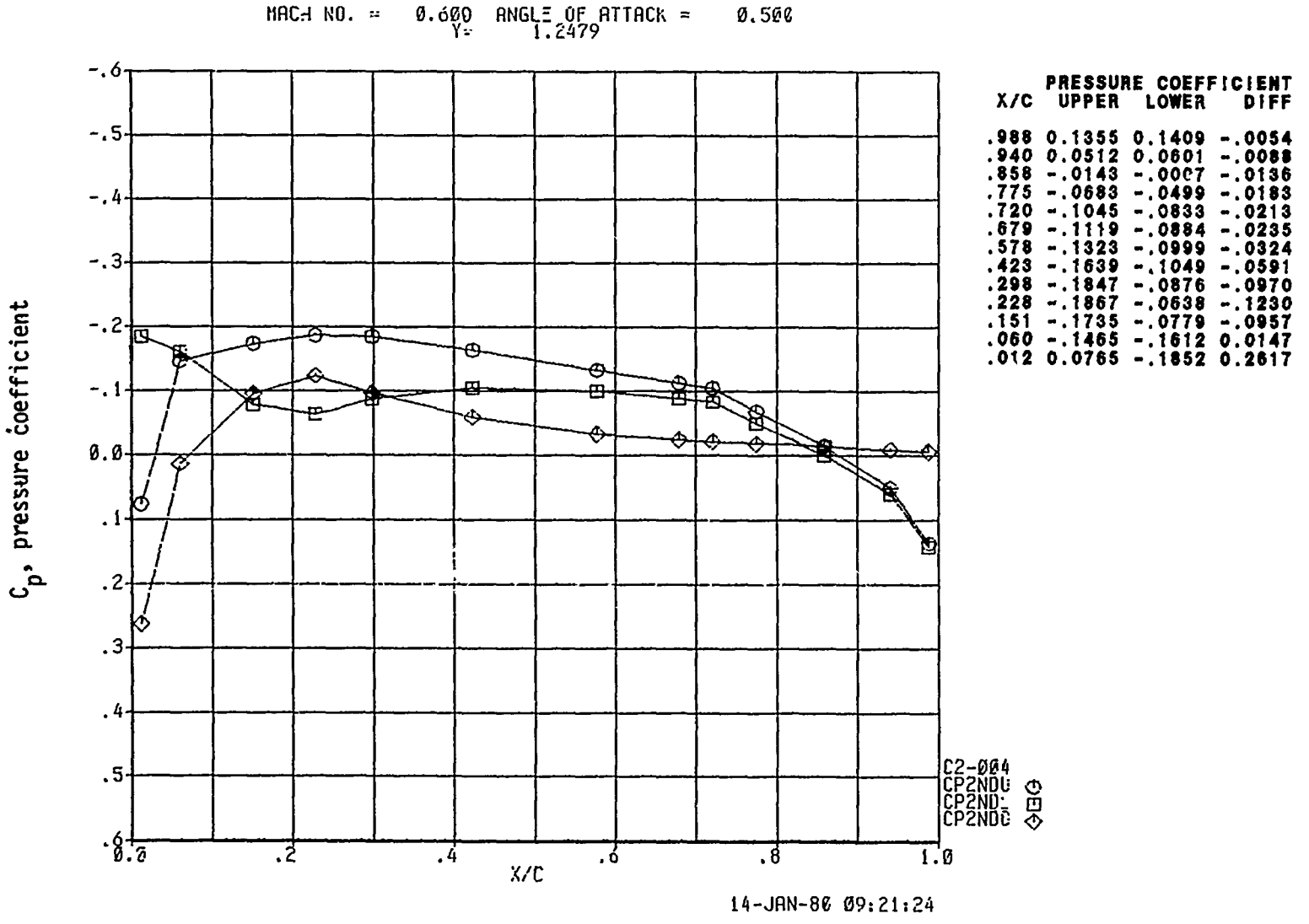
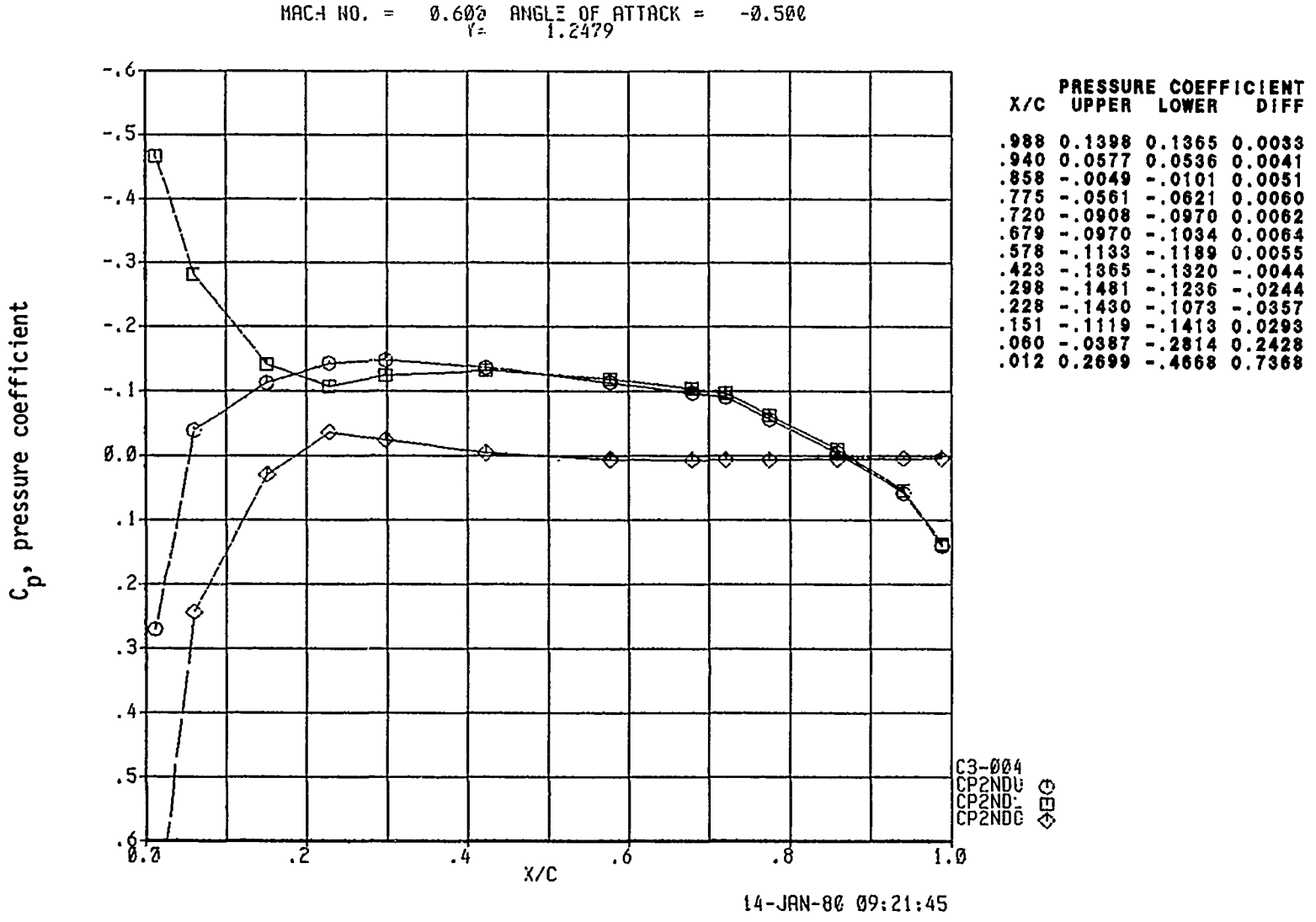
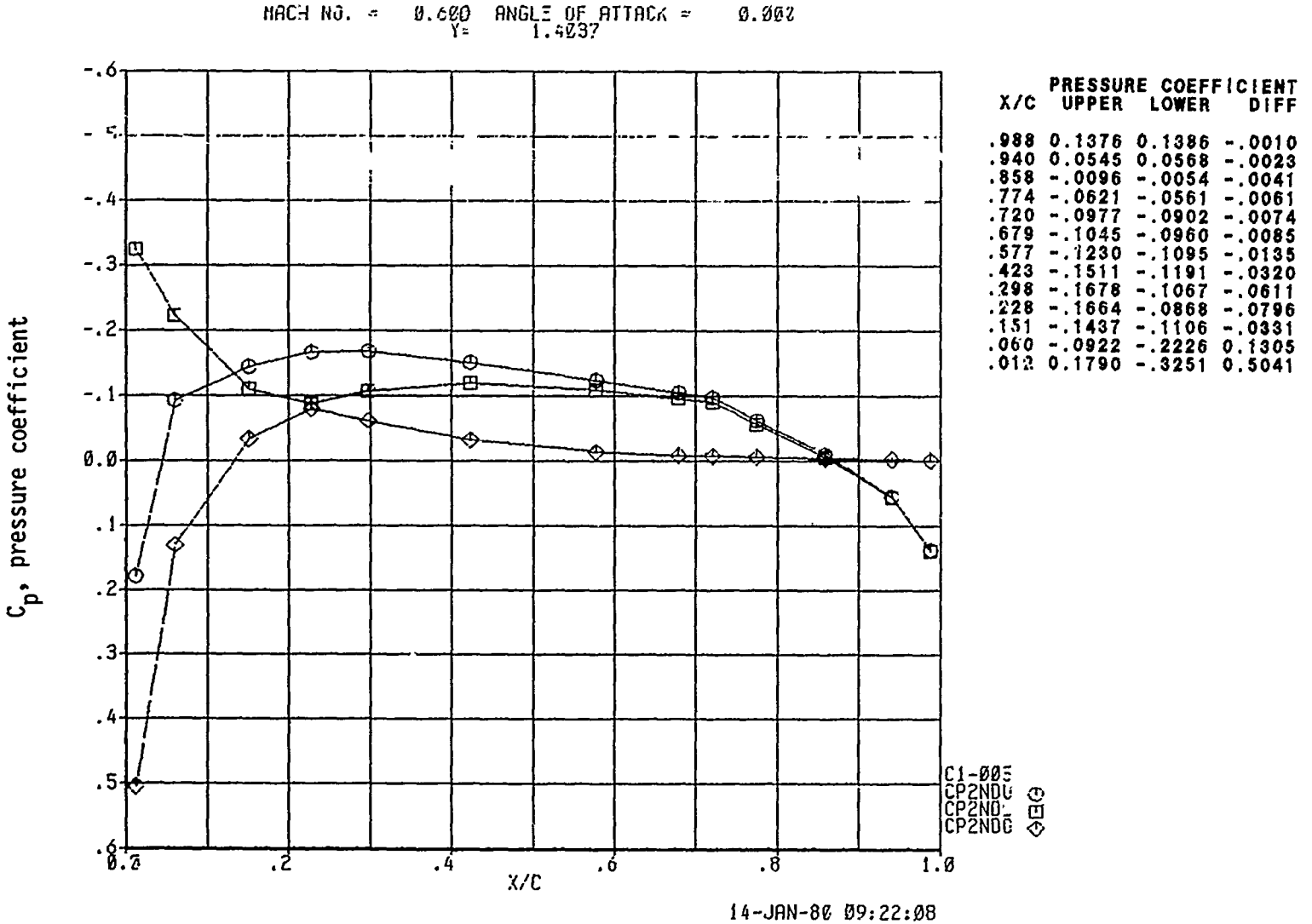


Figure 29 , Chordwise Pressure Distribution, Steady, Configuration 1



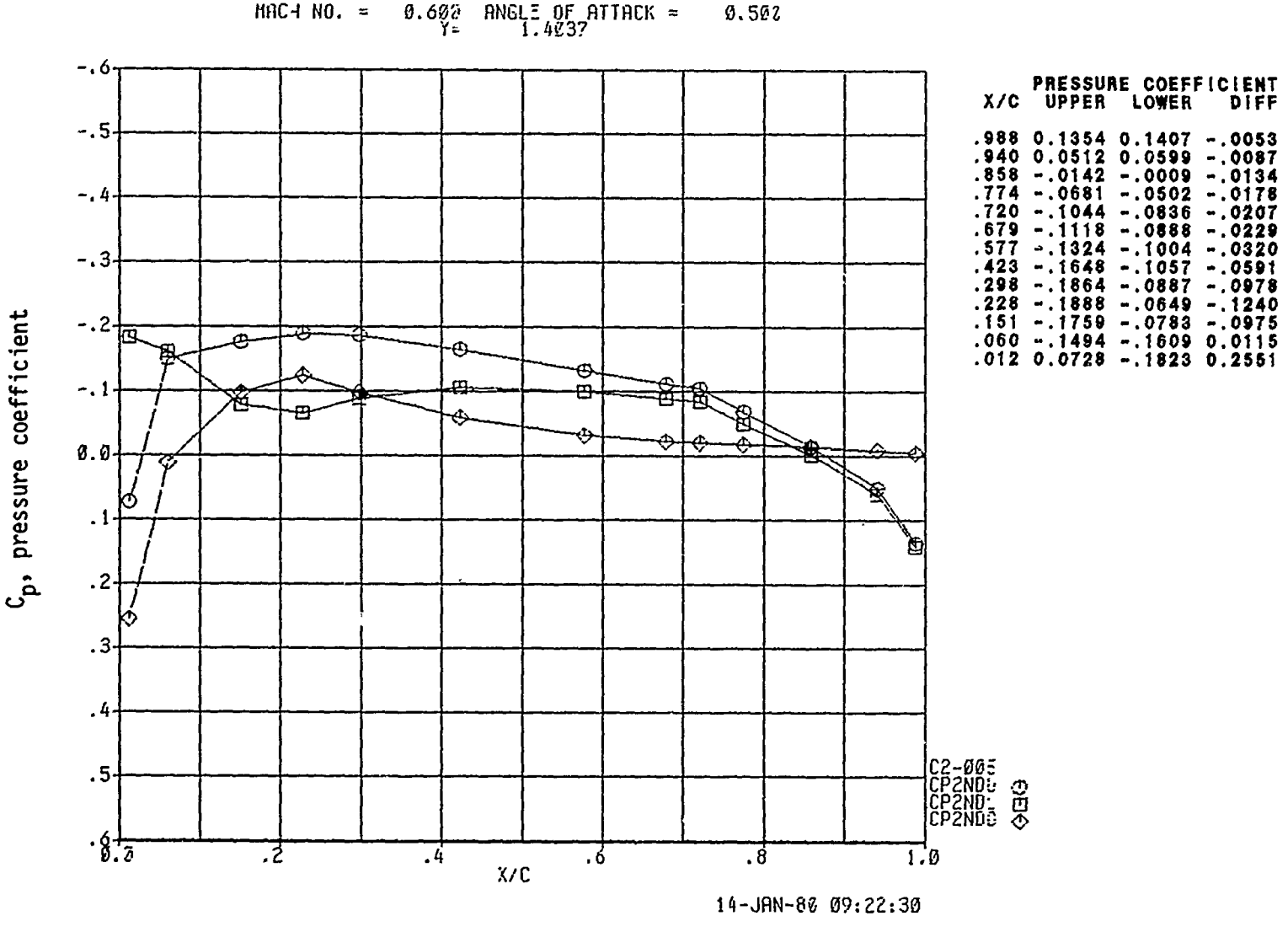
X/C	PRESSURE COEFFICIENT UPPER	LOWER	DIFF
.988	0.1398	0.1365	0.0033
.940	0.0577	0.0536	0.0041
.858	-.0049	-.0101	0.0051
.775	-.0561	-.0621	0.0060
.720	-.0908	-.0970	0.0062
.679	-.0970	-.1034	0.0064
.578	-.1133	-.1189	0.0055
.423	-.1365	-.1320	-.0044
.298	-.1481	-.1236	-.0244
.228	-.1430	-.1073	-.0357
.151	-.1119	-.1413	0.0293
.060	-.0387	-.2814	0.2428
.012	0.2699	-.4668	0.7368

Figure 30 , Chordwise Pressure Distribution, Steady, Configuration 1



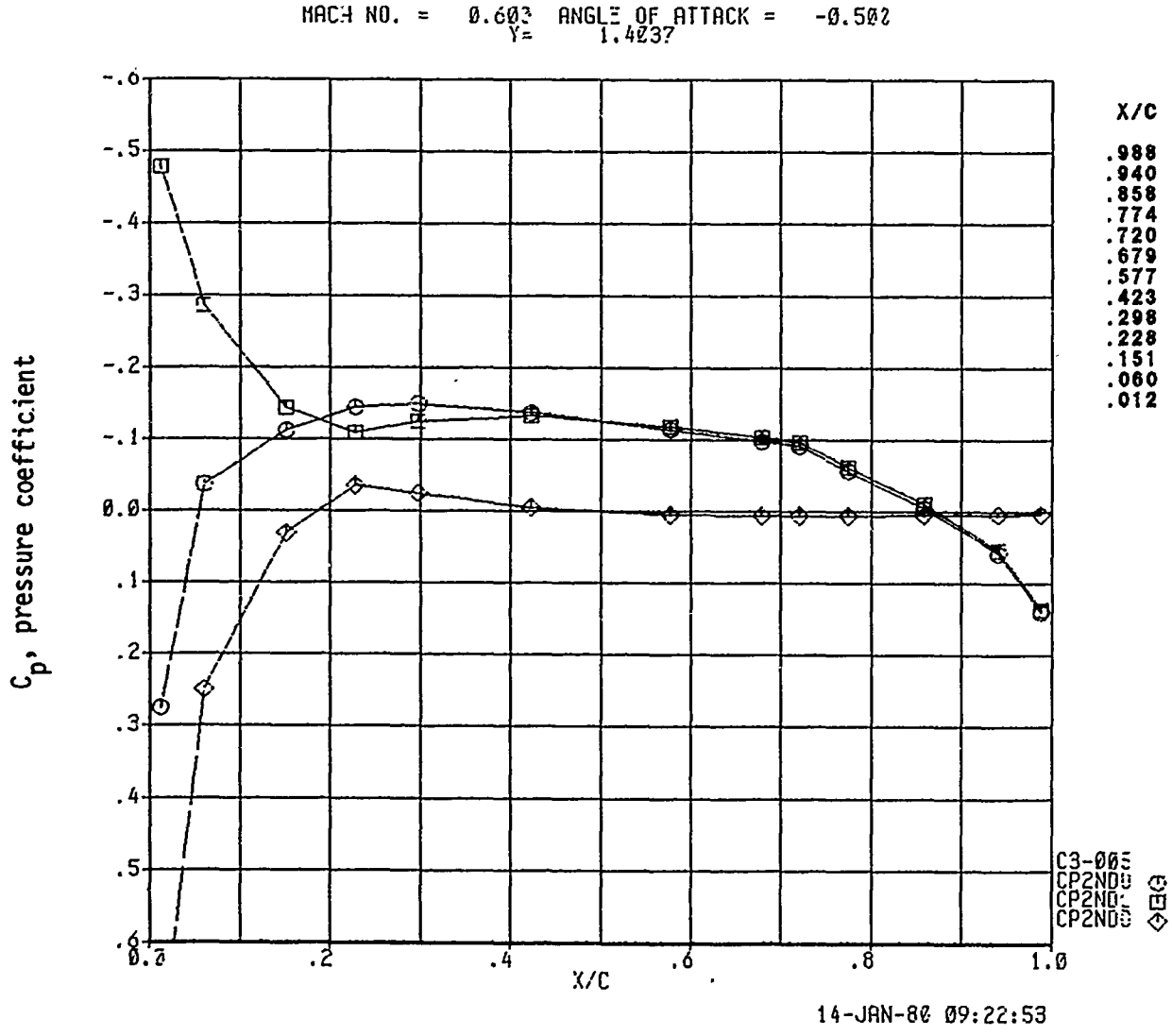
X/C	PRESSURE COEFFICIENT UPPER	LOWER	DIFF
.988	0.1376	0.1386	-.0010
.940	0.0545	0.0568	-.0023
.858	-.0096	-.0054	-.0041
.774	-.0621	-.0561	-.0061
.720	-.0977	-.0902	-.0074
.679	-.1045	-.0960	-.0085
.577	-.1230	-.1095	-.0135
.423	-.1511	-.1191	-.0320
.298	-.1678	-.1067	-.0611
.228	-.1664	-.0868	-.0796
.151	-.1437	-.1106	-.0331
.060	-.0922	-.2226	0.1305
.012	0.1790	-.3251	0.5041

Figure 31 , Chordwise Pressure Distribution, Steady, Configuration 1



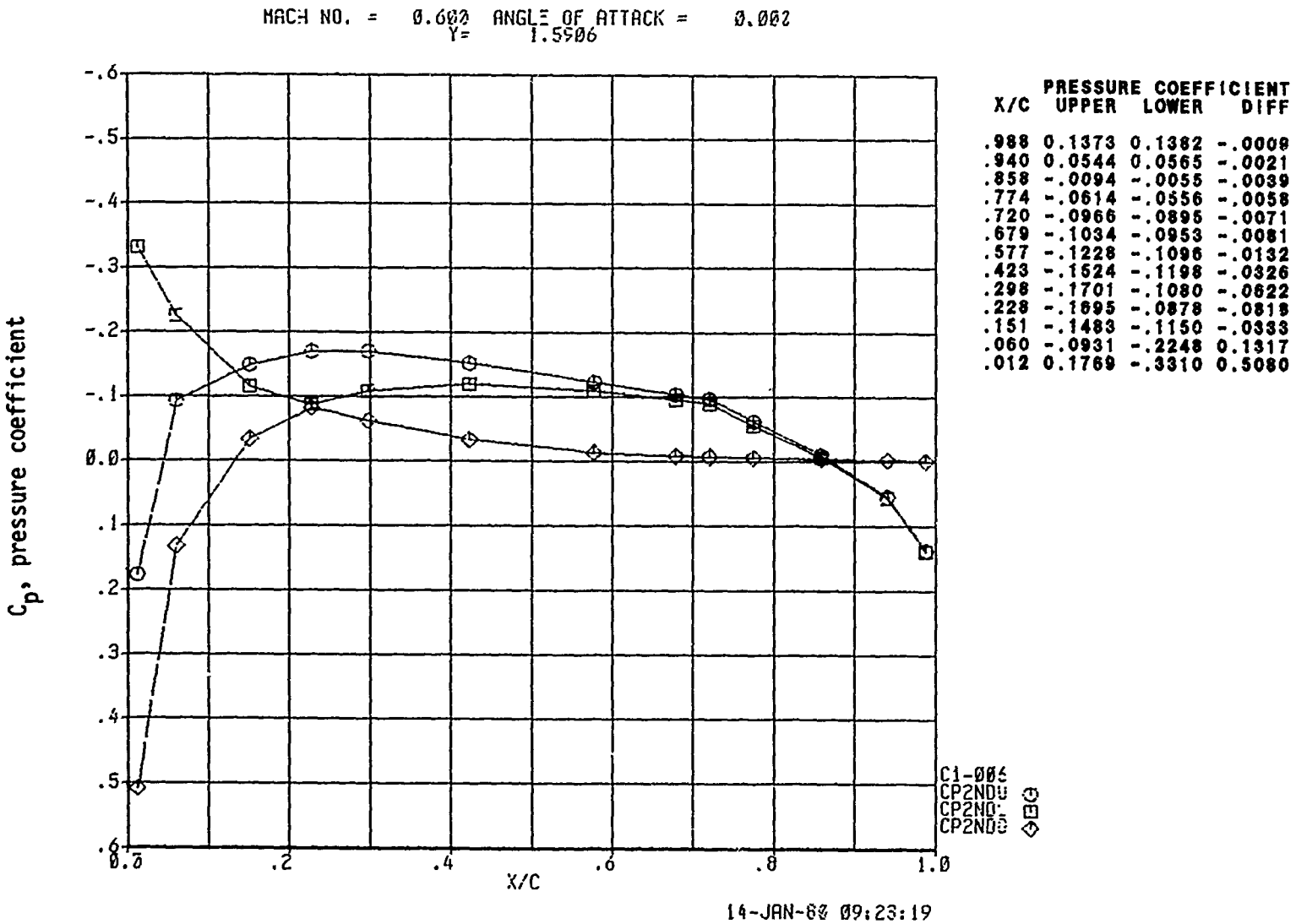
X/C	PRESSURE COEFFICIENT UPPER	LOWER	DIFF
.988	0.1354	0.1407	-.0053
.940	0.0512	0.0599	-.0087
.858	-.0142	-.0009	-.0134
.774	-.0681	-.0502	-.0178
.720	-.1044	-.0836	-.0207
.679	-.1118	-.0888	-.0229
.577	-.1324	-.1004	-.0320
.423	-.1648	-.1057	-.0591
.298	-.1864	-.0887	-.0978
.228	-.1888	-.0649	-.1240
.151	-.1759	-.0783	-.0975
.060	-.1494	-.1609	0.0115
.012	0.0728	-.1823	0.2551

Figure 32 , Chordwise Pressure Distribution, Steady, Configuration 1



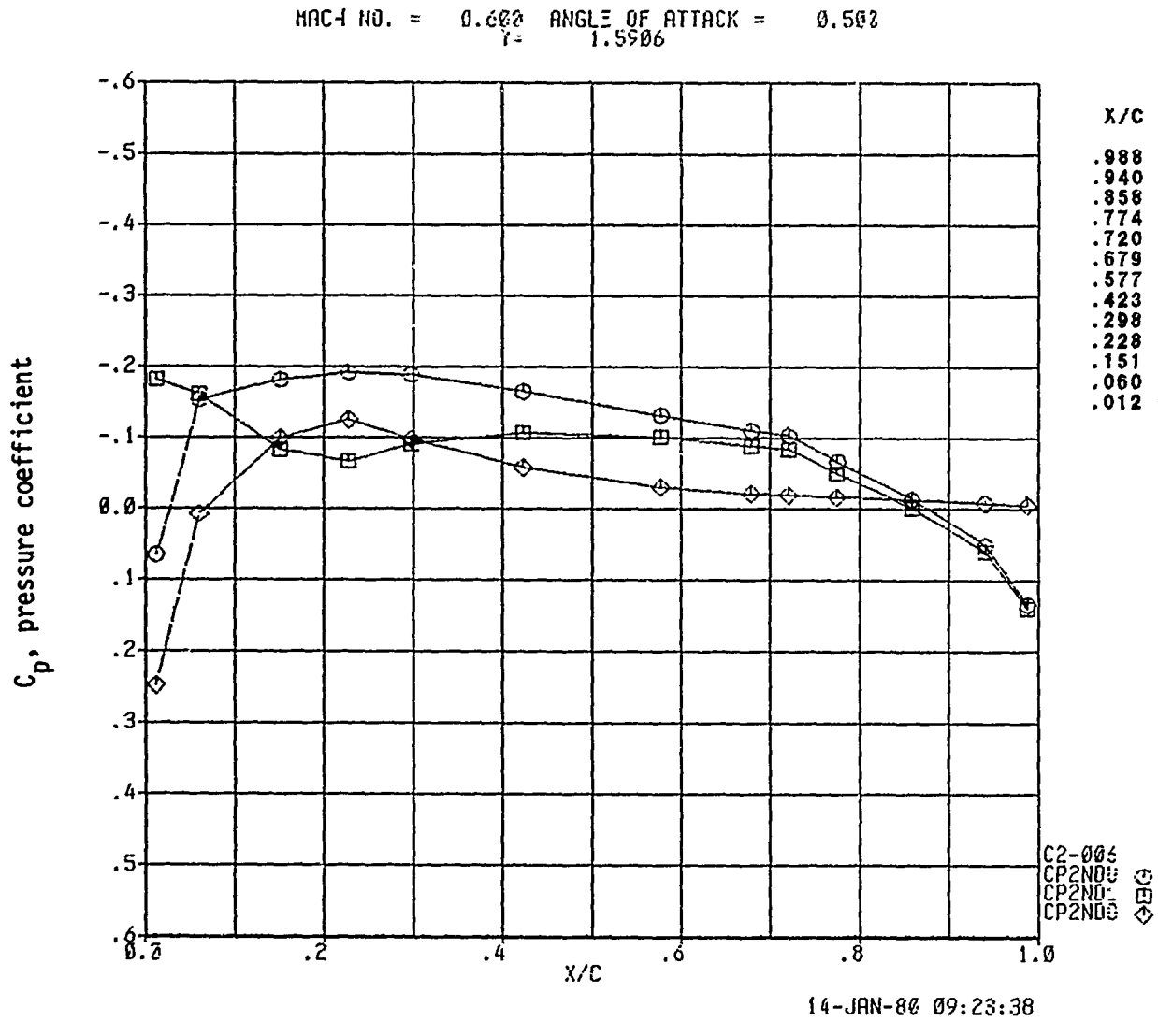
X/C	PRESSURE COEFFICIENT UPPER	LOWER	DIFF
.988	0.1397	0.1363	0.0033
.940	0.0576	0.0535	0.0041
.858	-.0051	-.0101	0.0050
.774	-.0564	-.0620	0.0057
.720	-.0912	-.0970	0.0058
.679	-.0974	-.1033	0.0059
.577	-.1139	-.1188	0.0050
.423	-.1376	-.1326	-.0049
.298	-.1495	-.1250	-.0245
.228	-.1443	-.1091	-.0352
.151	-.1123	-.1436	0.0313
.060	-.0369	-.2863	0.2494
.012	0.2755	-.4775	0.7531

Figure 33 , Chordwise Pressure Distribution, Steady, Configuration 1



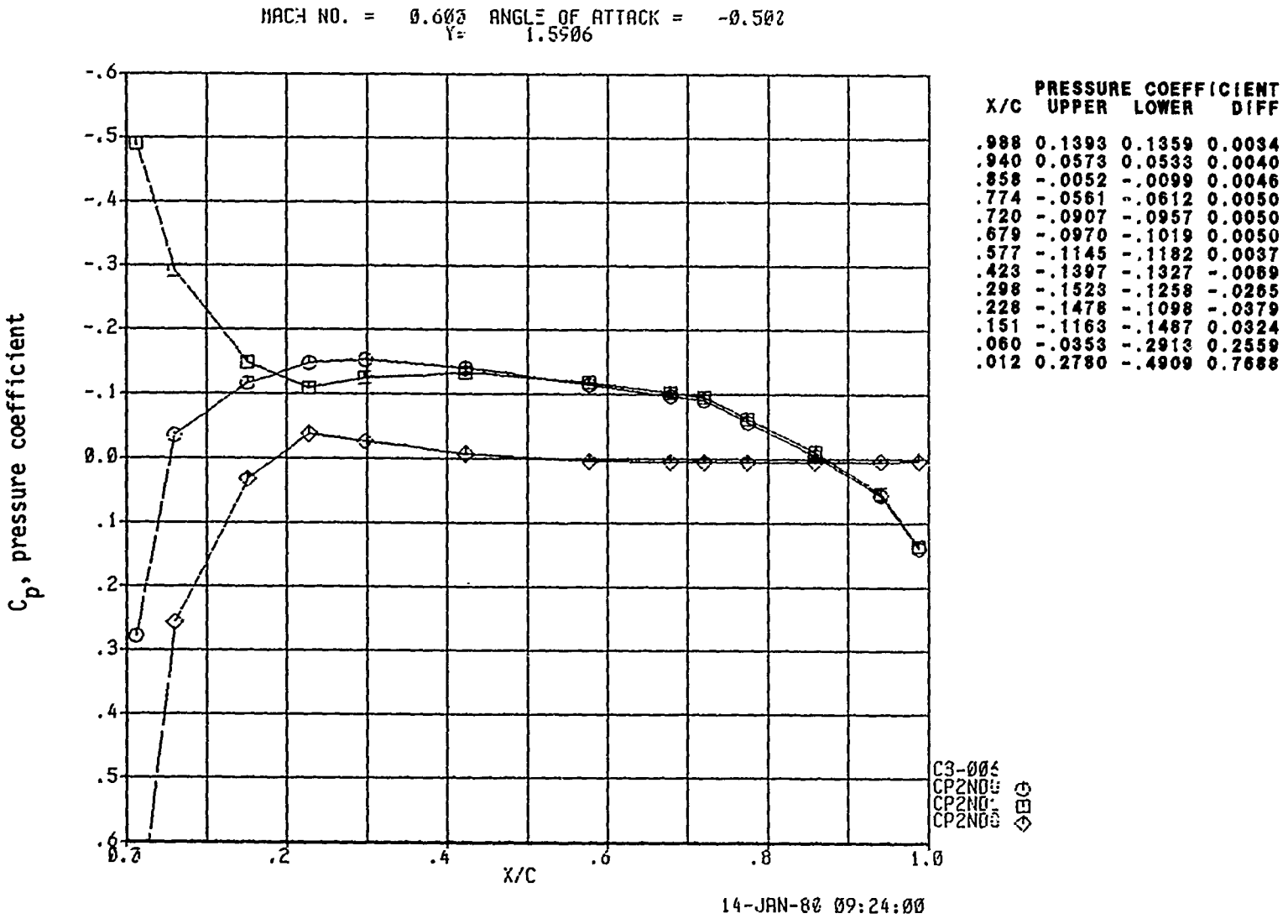
X/C	PRESSURE COEFFICIENT UPPER	LOWER	DIFF
.988	0.1373	0.1382	-.0009
.940	0.0544	0.0565	-.0021
.858	-.0094	-.0055	-.0039
.774	-.0614	-.0556	-.0058
.720	-.0966	-.0895	-.0071
.679	-.1034	-.0953	-.0081
.577	-.1228	-.1096	-.0132
.423	-.1524	-.1198	-.0326
.298	-.1701	-.1080	-.0622
.228	-.1695	-.0878	-.0818
.151	-.1483	-.1150	-.0333
.060	-.0931	-.2248	0.1317
.012	0.1769	-.3310	0.5080

Figure 34 , Chordwise Pressure Distribution, Steady, Configuration 1



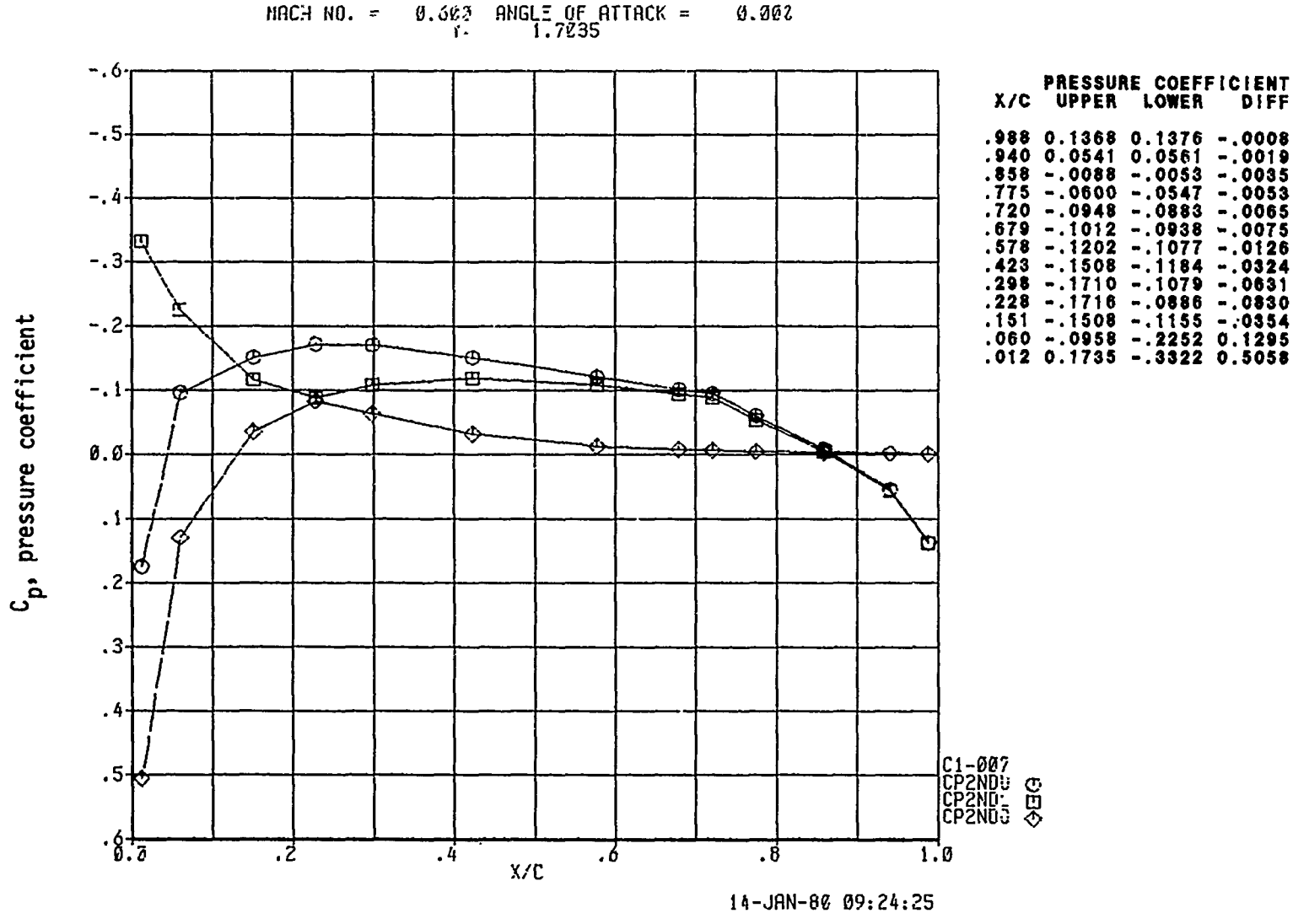
X/C	PRESSURE COEFFICIENT UPPER	LOWER	DIFF
.988	0.1351	0.1403	-.0052
.940	0.0512	0.0595	-.0082
.858	-.0137	-.0013	-.0124
.774	-.0669	-.0503	-.0166
.720	-.1029	-.0836	-.0192
.679	-.1101	-.0888	-.0212
.577	-.1314	-.1013	-.0301
.423	-.1654	-.1072	-.0582
.298	-.1883	-.0906	-.0977
.228	-.1916	-.0662	-.1255
.151	-.1811	-.0821	-.0990
.060	-.1529	-.1604	0.0075
.012	0.0654	-.1817	0.2470

Figure 35 , Chordwise Pressure Distribution, Steady, Configuration 1



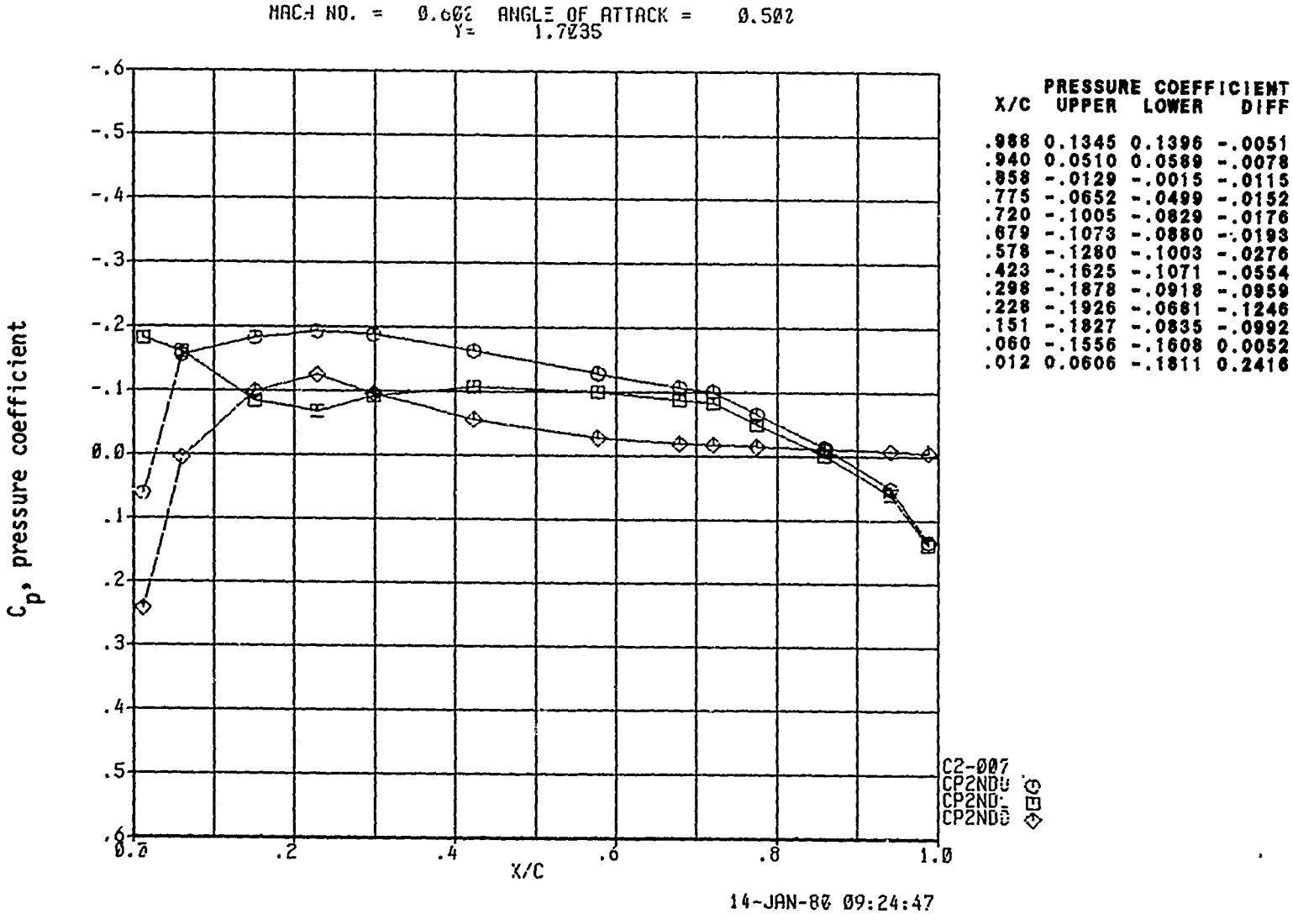
X/C	PRESSURE COEFFICIENT UPPER	LOWER	DIFF
.988	0.1393	0.1359	0.0034
.940	0.0573	0.0533	0.0040
.858	-.0052	-.0099	0.0046
.774	-.0561	-.0612	0.0050
.720	-.0907	-.0957	0.0050
.679	-.0970	-.1019	0.0050
.577	-.1145	-.1182	0.0037
.423	-.1397	-.1327	-.0069
.298	-.1523	-.1258	-.0265
.228	-.1478	-.1098	-.0379
.151	-.1163	-.1487	0.0324
.060	-.0353	-.2913	0.2559
.012	0.2780	-.4909	0.7688

Figure 36 , Chordwise Pressure Distribution, Steady, Configuration 1



X/C	PRESSURE COEFFICIENT UPPER	LOWER	DIFF
.988	0.1368	0.1376	-.0008
.940	0.0541	0.0561	-.0019
.858	-.0088	-.0053	-.0035
.775	-.0600	-.0547	-.0053
.720	-.0948	-.0883	-.0065
.679	-.1012	-.0938	-.0075
.578	-.1202	-.1077	-.0126
.423	-.1508	-.1184	-.0324
.298	-.1710	-.1079	-.0631
.228	-.1716	-.0886	-.0830
.151	-.1508	-.1155	-.0354
.060	-.0958	-.2252	0.1295
.012	0.1735	-.3322	0.5058

Figure 37 , Chordwise Pressure Distribution, Steady, Configuration 1



X/C	PRESSURE COEFFICIENT UPPER	LOWER	DIFF
.988	0.1345	0.1396	-.0051
.940	0.0510	0.0589	-.0078
.858	-.0129	-.0015	-.0115
.775	-.0652	-.0499	-.0152
.720	-.1005	-.0829	-.0176
.679	-.1073	-.0880	-.0193
.578	-.1280	-.1003	-.0276
.423	-.1625	-.1071	-.0554
.298	-.1878	-.0918	-.0959
.228	-.1926	-.0681	-.1246
.151	-.1827	-.0835	-.0992
.060	-.1556	-.1608	0.0052
.012	0.0606	-.1811	0.2416

Figure 38 , Chordwise Pressure Distribution, Steady, Configuration 1

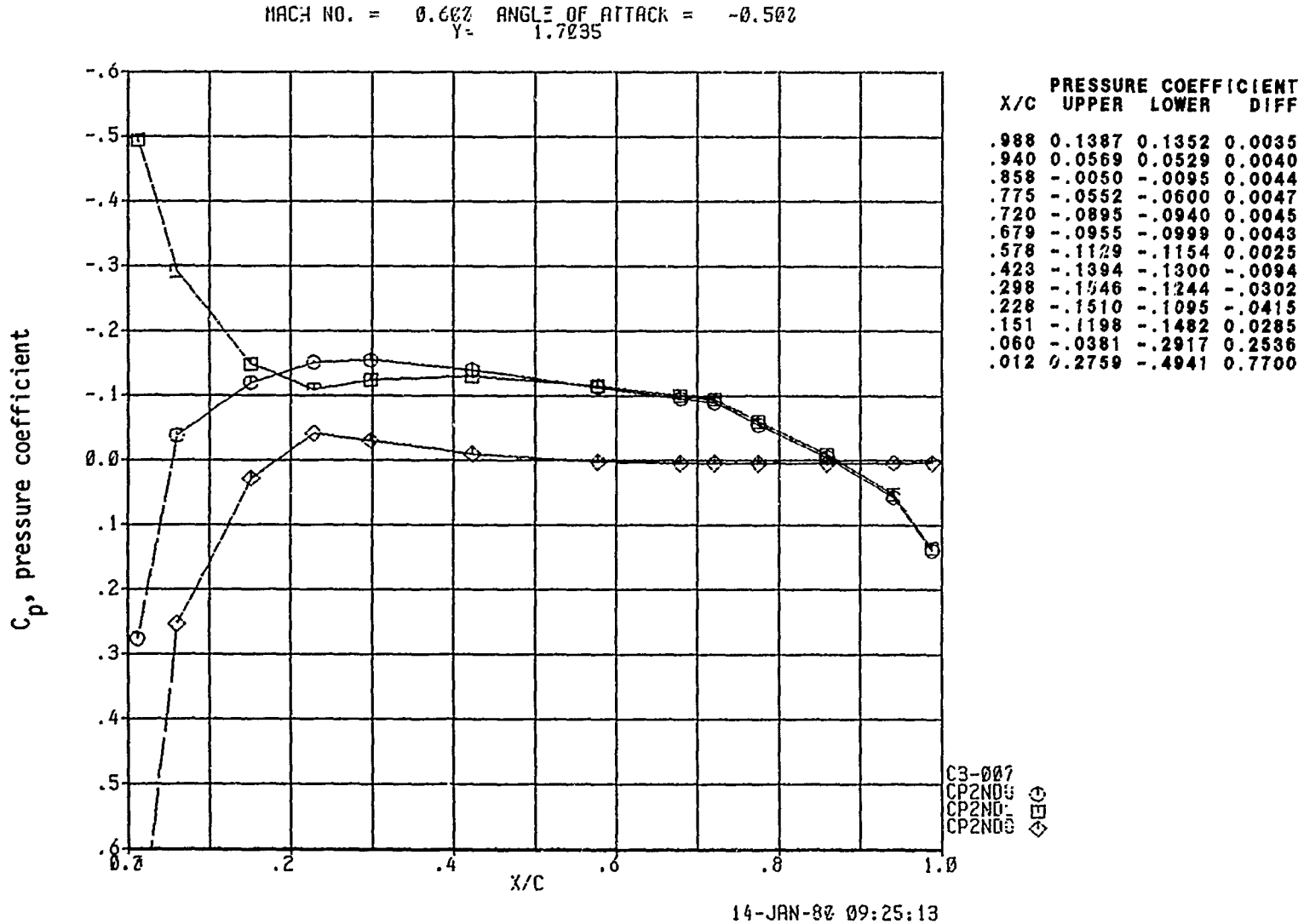
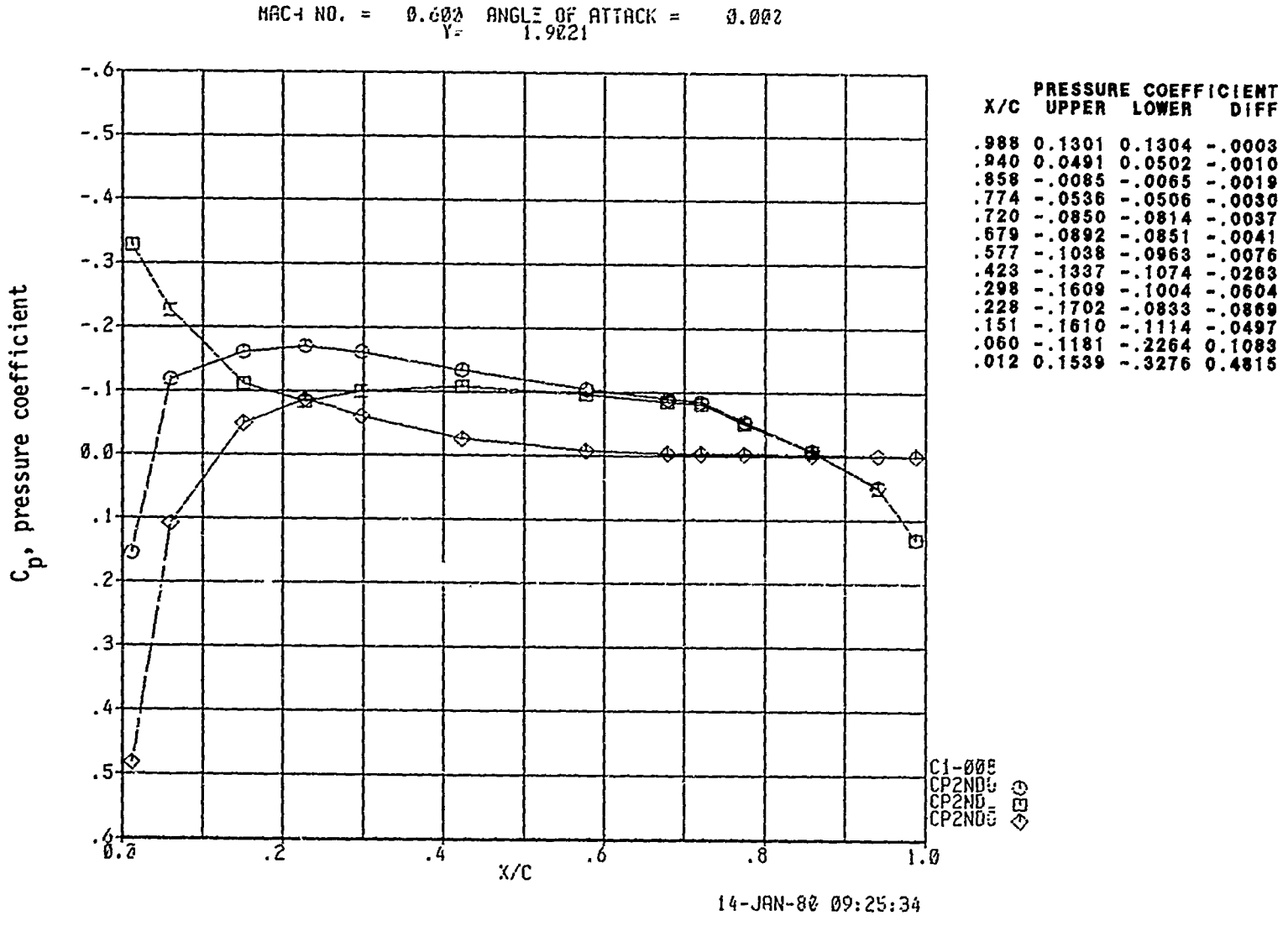
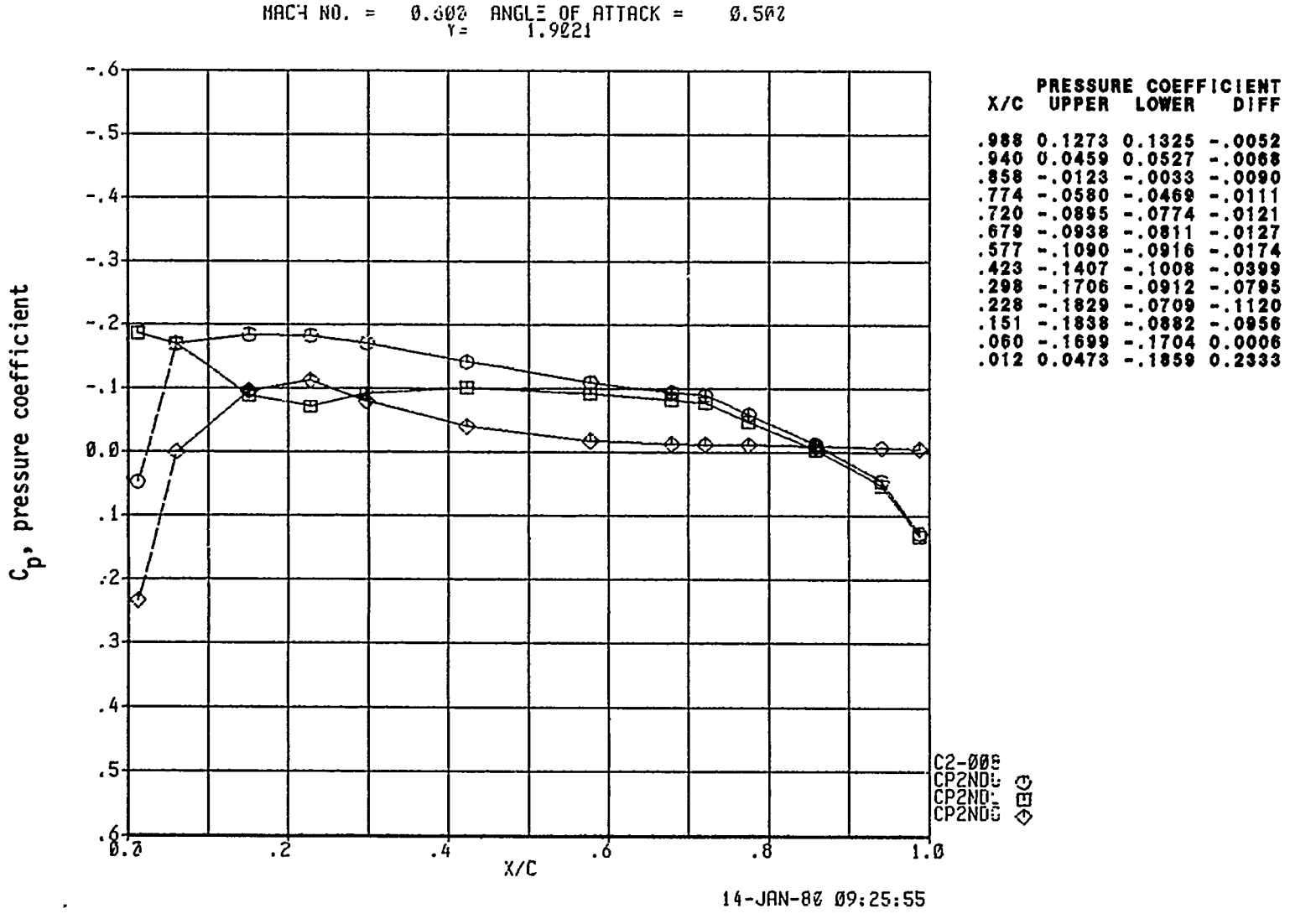


Figure 39 , Chordwise Pressure Distribution, Steady, Configuration 1



X/C	PRESSURE COEFFICIENT UPPER	LOWER	DIFF
.988	0.1301	0.1304	-.0003
.940	0.0491	0.0502	-.0010
.858	-.0085	-.0065	-.0019
.774	-.0536	-.0506	-.0030
.720	-.0850	-.0814	-.0037
.679	-.0892	-.0851	-.0041
.577	-.1038	-.0963	-.0076
.423	-.1337	-.1074	-.0263
.298	-.1609	-.1004	-.0604
.228	-.1702	-.0833	-.0869
.151	-.1610	-.1114	-.0497
.060	-.1181	-.2264	0.1083
.012	0.1539	-.3276	0.4815

Figure 40 , Chordwise Pressure Distribution, Steady, Configuration 1



X/C	PRESSURE COEFFICIENT UPPER	LOWER	DIFF
.988	0.1273	0.1325	-.0052
.940	0.0459	0.0527	-.0068
.858	-.0123	-.0033	-.0090
.774	-.0580	-.0469	-.0111
.720	-.0895	-.0774	-.0121
.679	-.0938	-.0811	-.0127
.577	-.1090	-.0916	-.0174
.423	-.1407	-.1008	-.0399
.298	-.1706	-.0912	-.0795
.228	-.1829	-.0709	-.1120
.151	-.1838	-.0882	-.0956
.060	-.1699	-.1704	0.0006
.012	0.0473	-.1859	0.2333

Figure 41 , Chordwise Pressure Distribution, Steady, Configuration 1

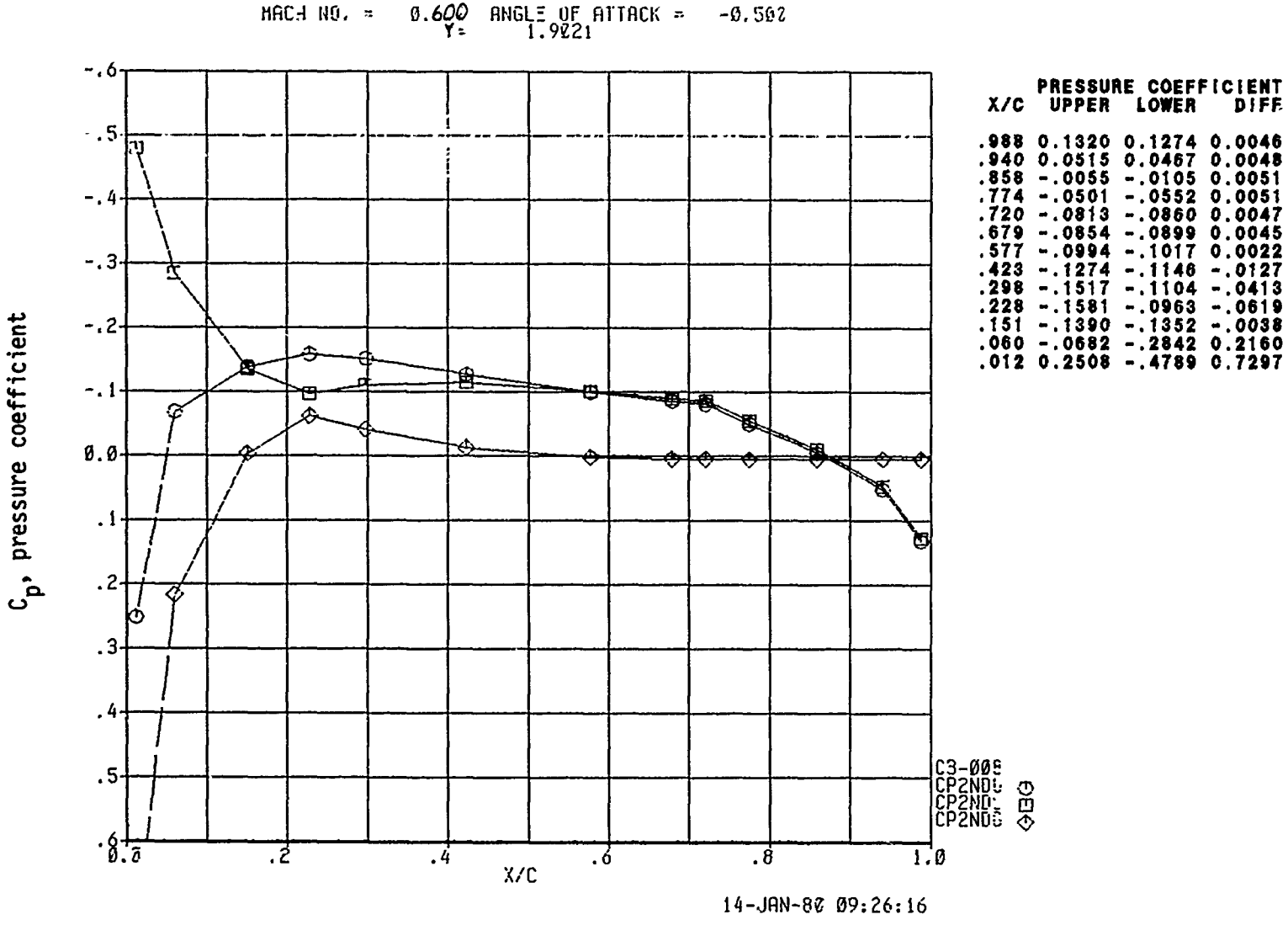
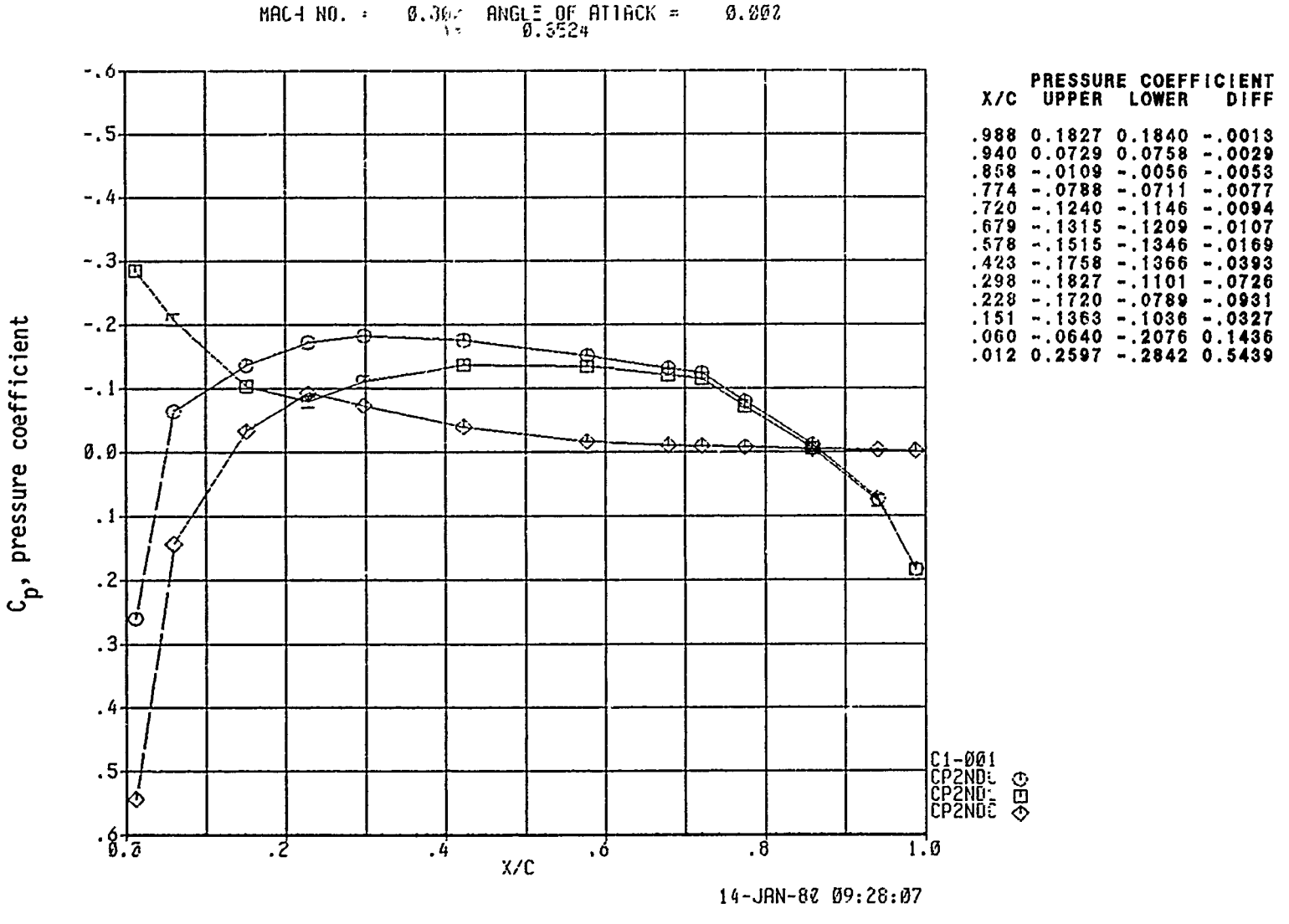
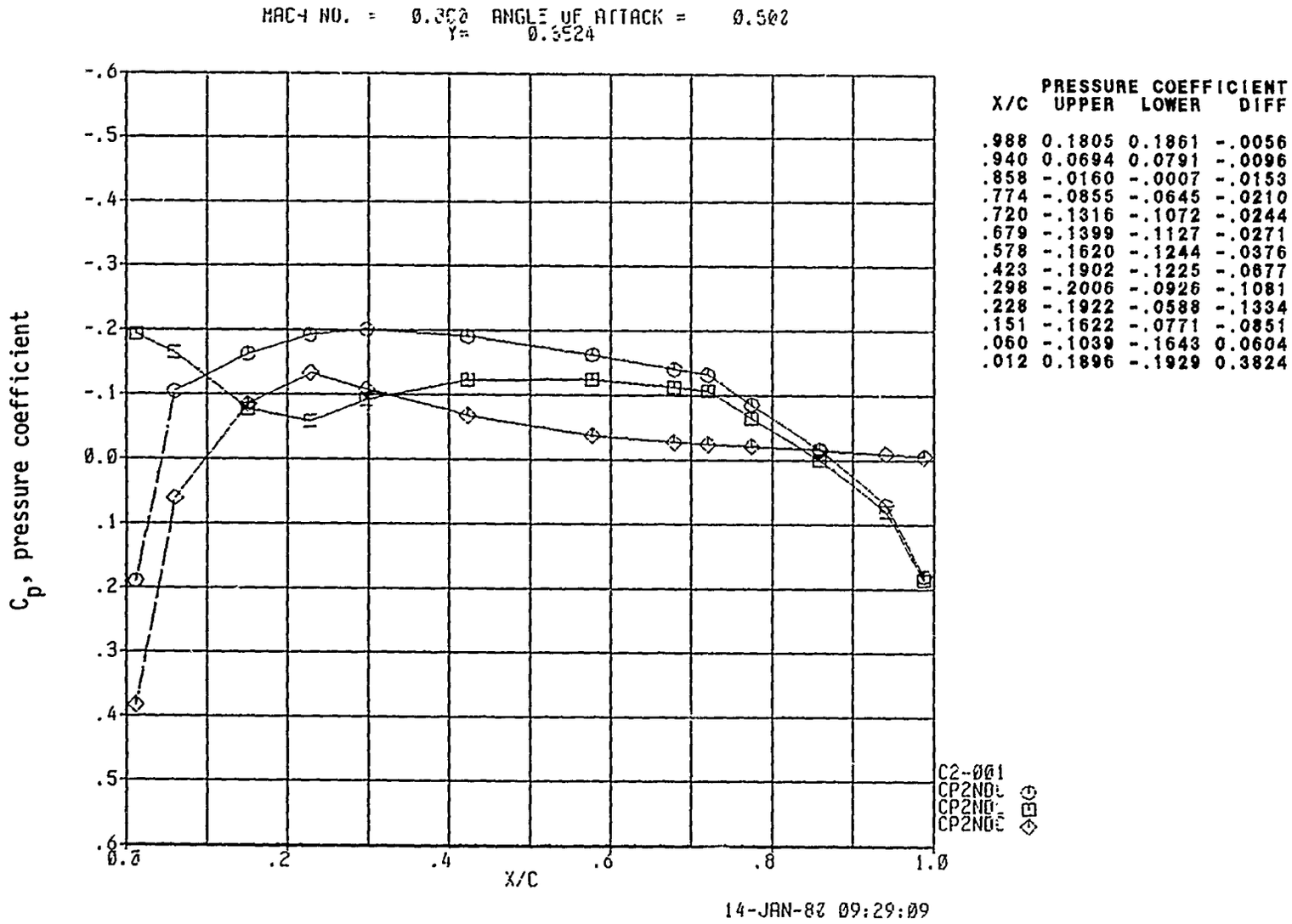


Figure 42 , Chordwise Pressure Distribution, Steady, Configuration 1



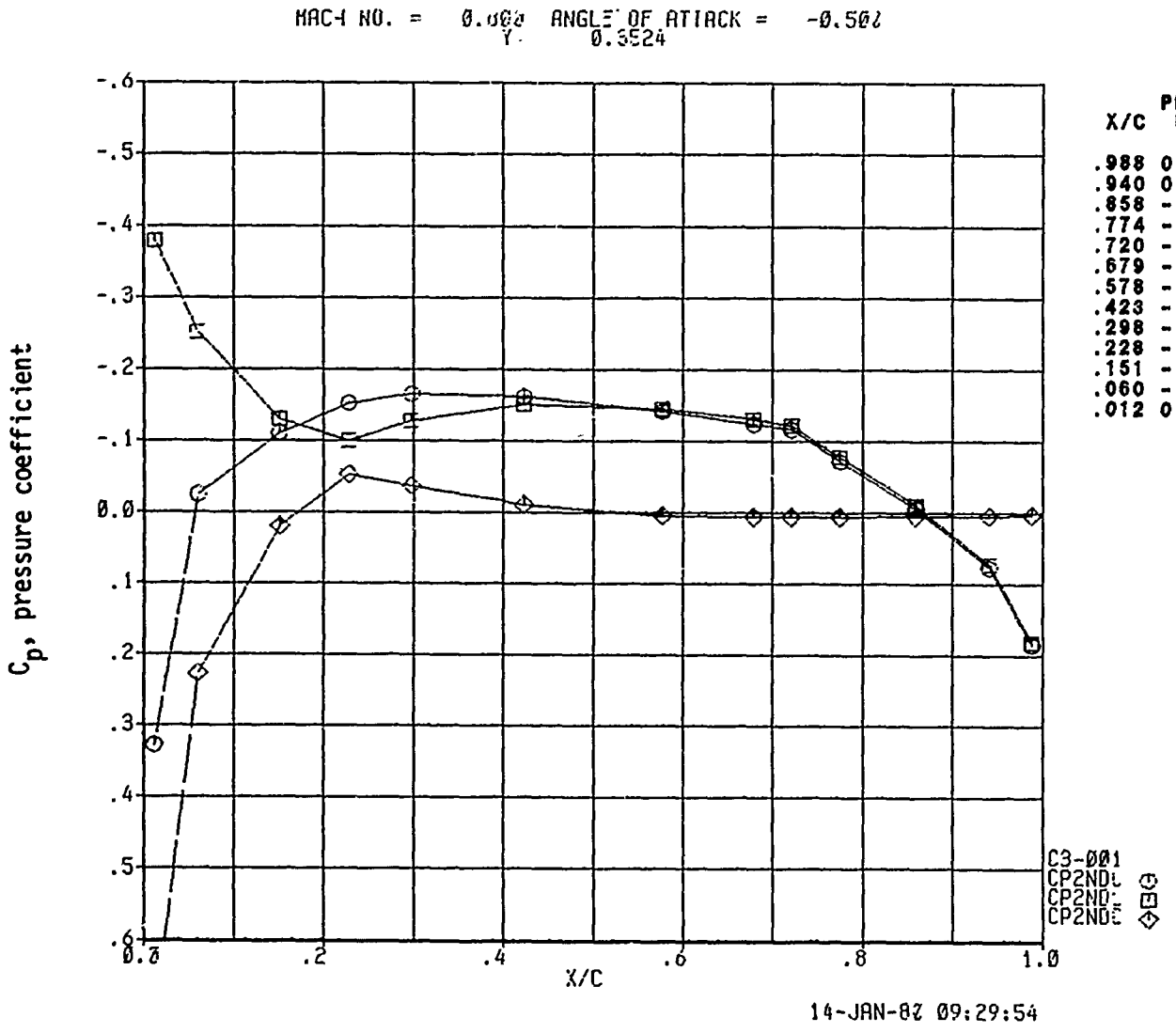
X/C	PRESSURE COEFFICIENT UPPER	LOWER	DIFF
.988	0.1827	0.1840	-.0013
.940	0.0729	0.0758	-.0029
.858	-.0109	-.0056	-.0053
.774	-.0788	-.0711	-.0077
.720	-.1240	-.1146	-.0094
.679	-.1315	-.1209	-.0107
.578	-.1515	-.1346	-.0169
.423	-.1758	-.1366	-.0393
.298	-.1827	-.1101	-.0726
.228	-.1720	-.0789	-.0931
.151	-.1363	-.1036	-.0327
.060	-.0640	-.2076	0.1436
.012	0.2597	-.2842	0.5439

Figure 43 , Chordwise Pressure Distribution, Steady, Configuration 1



X/C	PRESSURE COEFFICIENT UPPER	LOWER	DIFF
.988	0.1805	0.1861	-.0056
.940	0.0694	0.0791	-.0096
.858	-.0160	-.0007	-.0153
.774	-.0855	-.0645	-.0210
.720	-.1316	-.1072	-.0244
.679	-.1399	-.1127	-.0271
.578	-.1620	-.1244	-.0376
.423	-.1902	-.1225	-.0677
.298	-.2006	-.0926	-.1081
.228	-.1922	-.0588	-.1334
.151	-.1622	-.0771	-.0851
.060	-.1039	-.1643	0.0604
.012	0.1896	-.1929	0.3824

Figure 44 , Chordwise Pressure Distribution, Steady, Configuration 1



X/C	PRESSURE COEFFICIENT UPPER	LOWER	DIFF
.988	0.1848	0.1818	0.0030
.940	0.0762	0.0723	0.0039
.858	-.0059	-.0108	0.0048
.774	-.0722	-.0778	0.0055
.720	-.1166	-.1222	0.0056
.679	-.1234	-.1291	0.0057
.578	-.1413	-.1451	0.0038
.423	-.1616	-.1508	-.0108
.298	-.1651	-.1279	-.0372
.228	-.1521	-.0993	-.0528
.151	-.1107	-.1304	0.0197
.060	-.0249	-.2515	0.2267
.012	0.3267	-.3787	0.7054

Figure 45 , Chordwise Pressure Distribution, Steady, Configuration 1

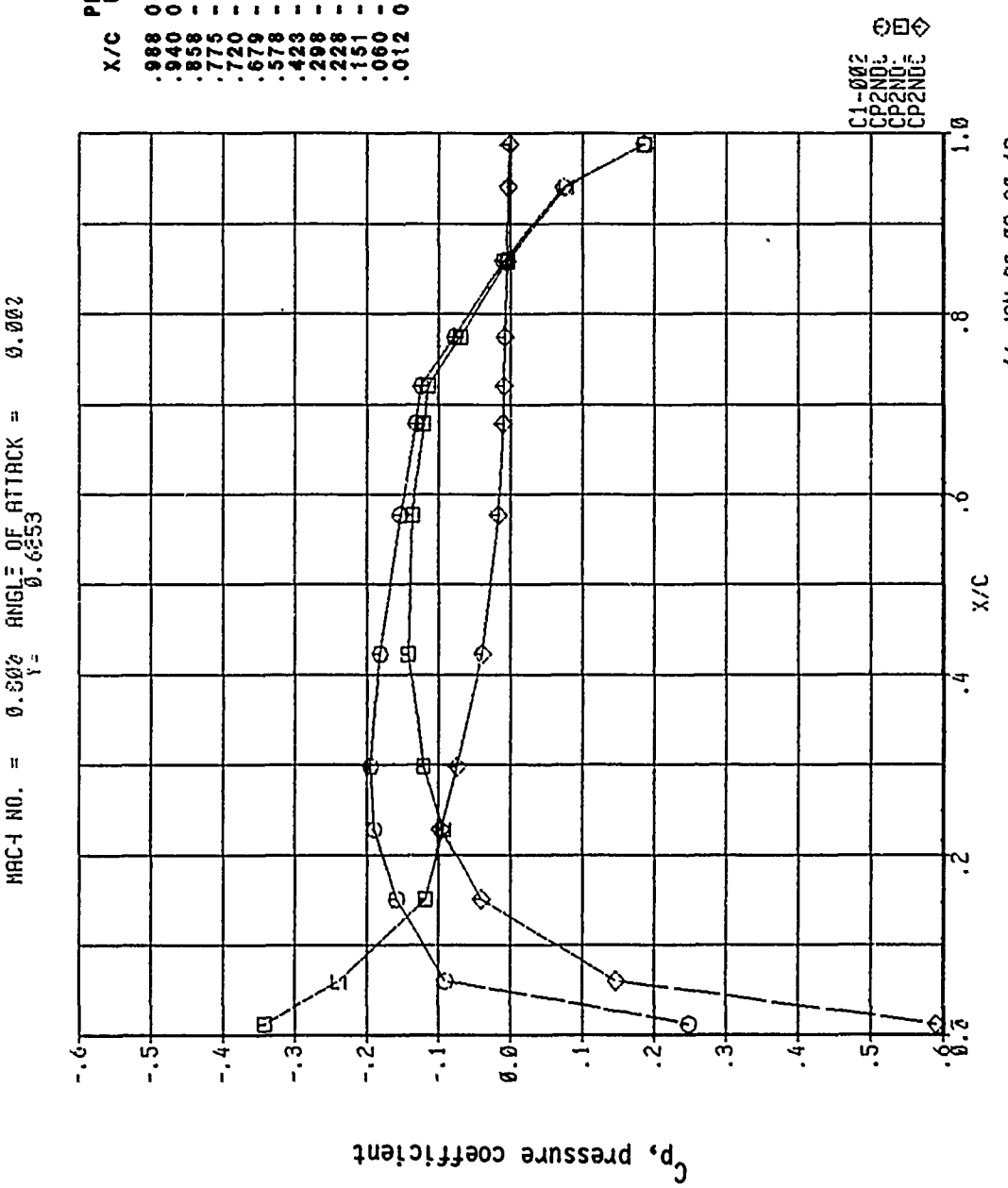
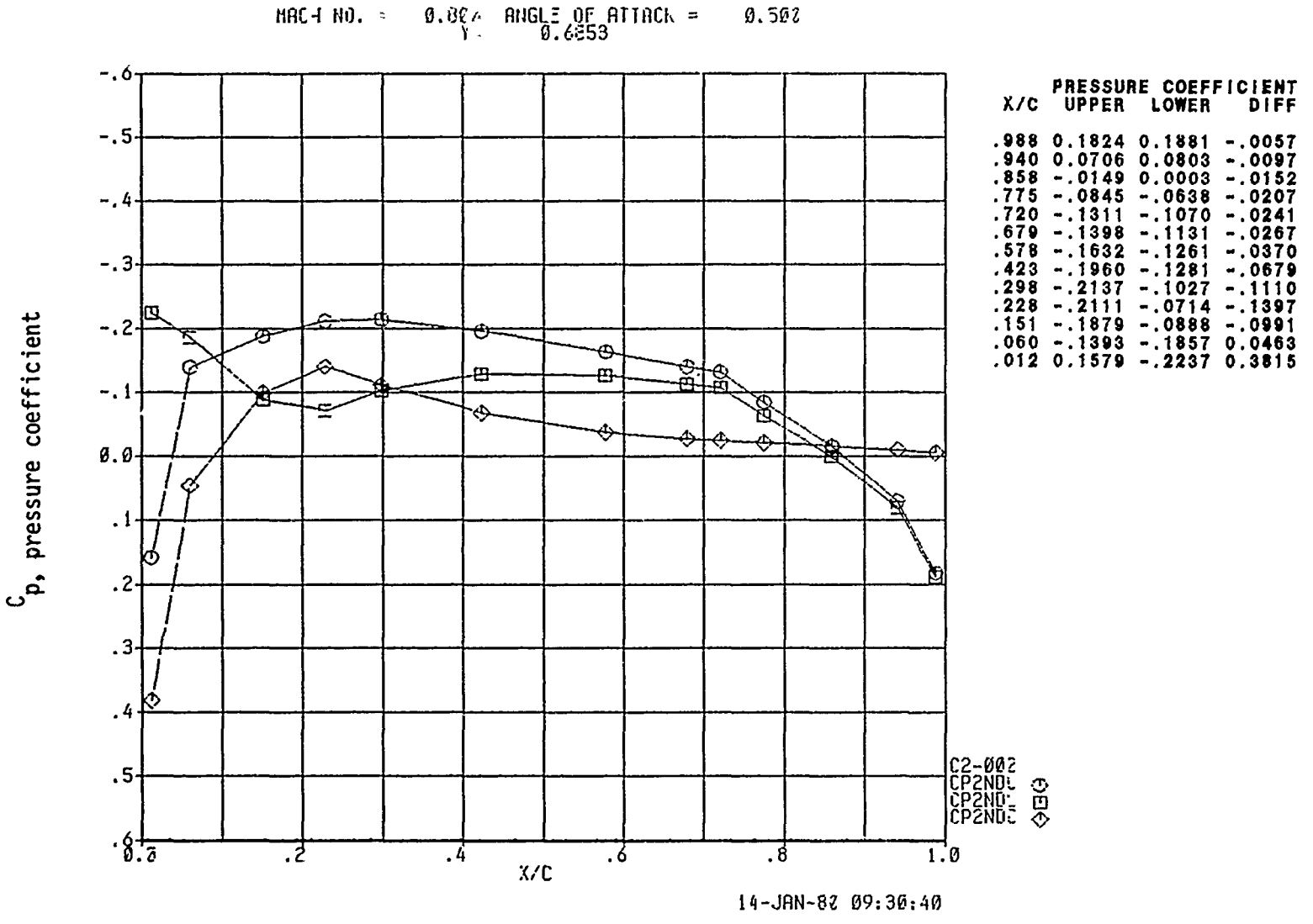
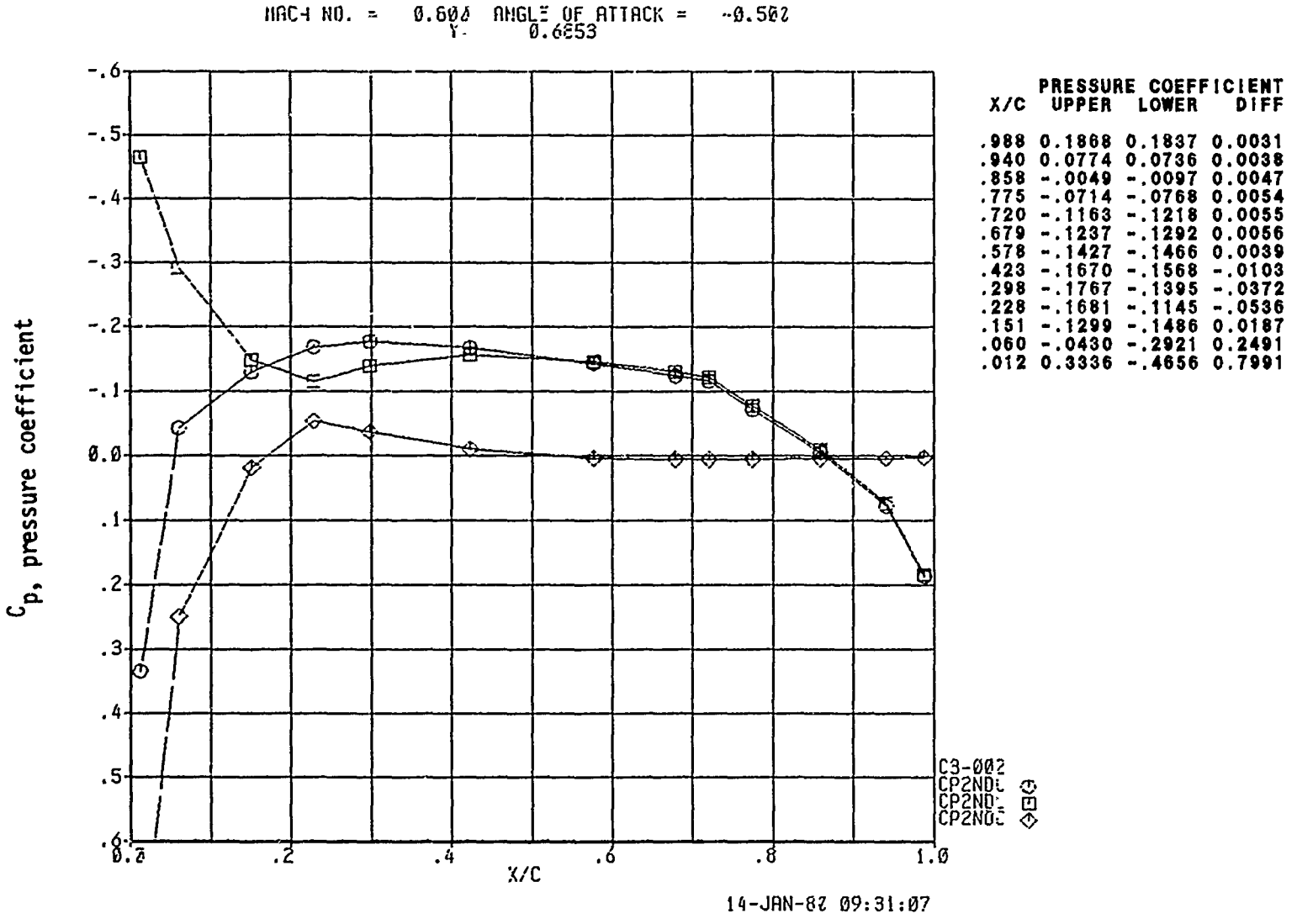


Figure 46 , Chordwise Pressure Distribution, Steady, Configuration 1



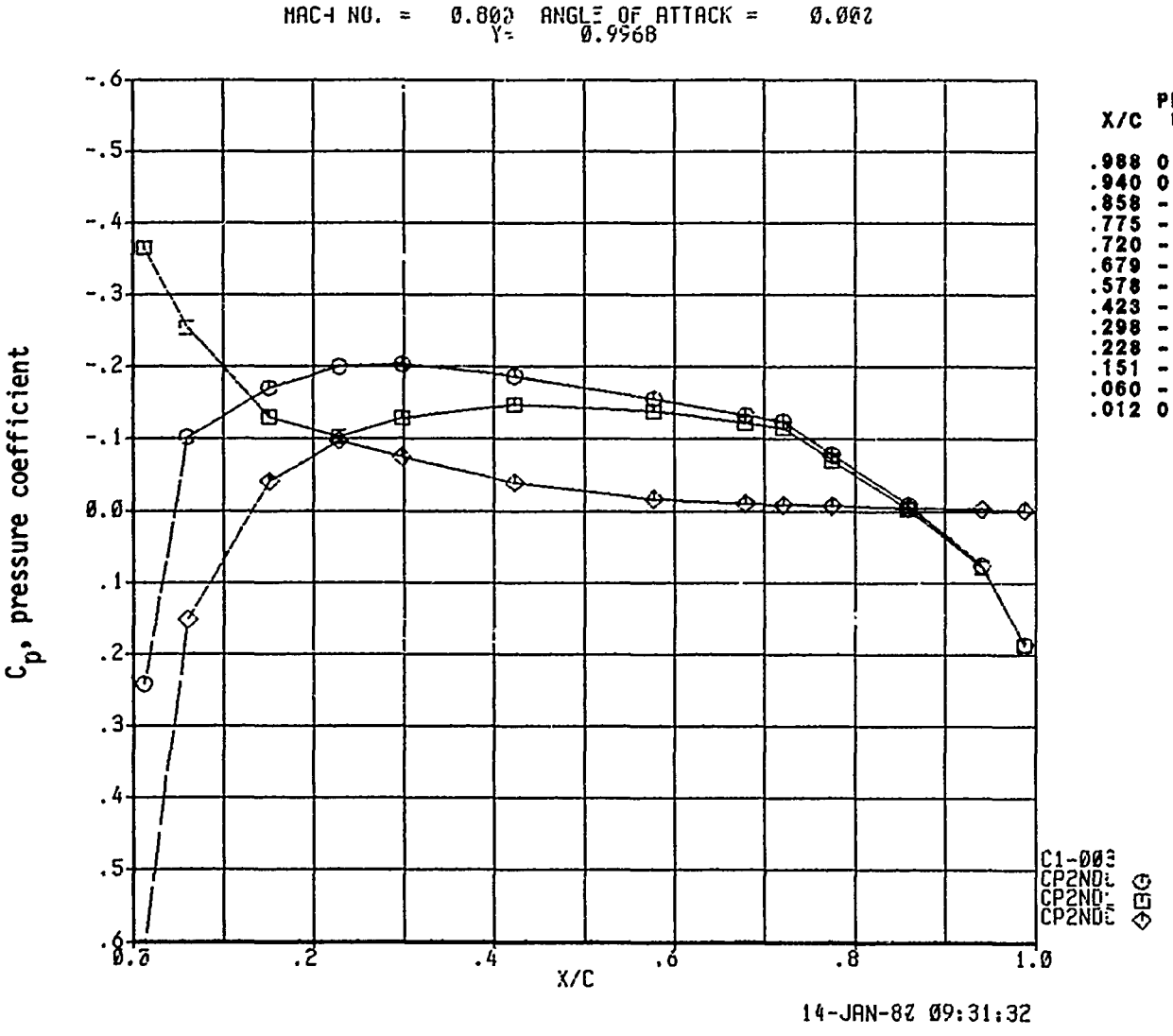
X/C	PRESSURE COEFFICIENT UPPER	LOWER	DIFF
.988	0.1824	0.1881	-.0057
.940	0.0706	0.0803	-.0097
.858	-.0149	0.0003	-.0152
.775	-.0845	-.0638	-.0207
.720	-.1311	-.1070	-.0241
.679	-.1398	-.1131	-.0267
.578	-.1632	-.1261	-.0370
.423	-.1960	-.1281	-.0679
.298	-.2137	-.1027	-.1110
.228	-.2111	-.0714	-.1397
.151	-.1879	-.0888	-.0991
.060	-.1393	-.1857	0.0463
.012	0.1579	-.2237	0.3815

Figure 47 , Chordwise Pressure Distribution, Steady, Configuration 1



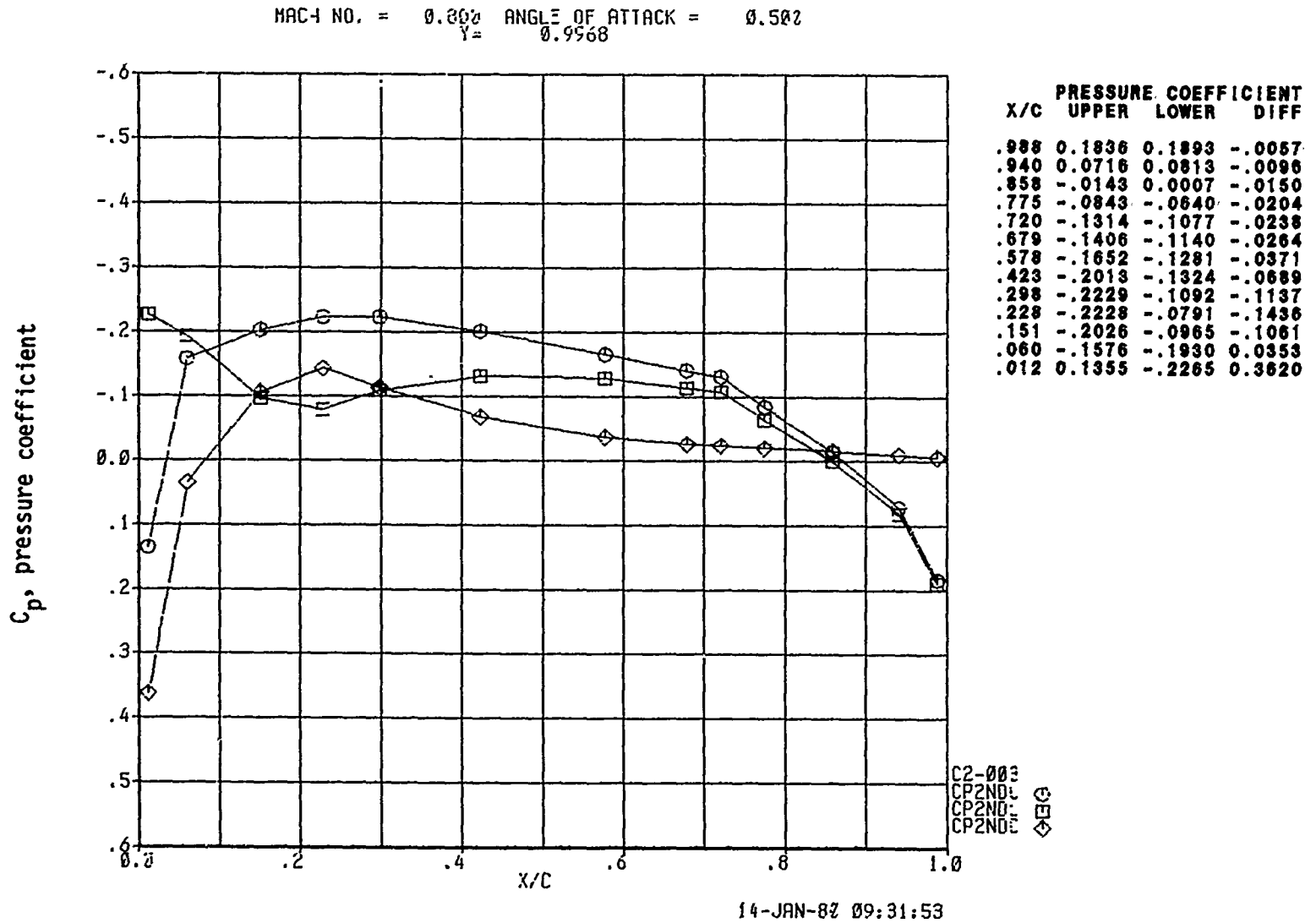
X/C	PRESSURE COEFFICIENT UPPER	LOWER	DIFF
.988	0.1868	0.1837	0.0031
.940	0.0774	0.0736	0.0038
.858	-.0049	-.0097	0.0047
.775	-.0714	-.0768	0.0054
.720	-.1163	-.1218	0.0055
.679	-.1237	-.1292	0.0056
.578	-.1427	-.1466	0.0039
.423	-.1670	-.1568	-.0103
.298	-.1767	-.1395	-.0372
.228	-.1681	-.1145	-.0536
.151	-.1299	-.1486	0.0187
.060	-.0430	-.2921	0.2491
.012	0.3336	-.4656	0.7991

Figure 48 , Chordwise Pressure Distribution, Steady, Configuration 1



X/C	PRESSURE COEFFICIENT UPPER	LOWER	DIFF
.988	0.1859	0.1872	-.0013
.940	0.0751	0.0780	-.0029
.858	-.0093	-.0041	-.0052
.775	-.0779	-.0702	-.0077
.720	-.1241	-.1148	-.0093
.679	-.1325	-.1219	-.0107
.578	-.1549	-.1382	-.0168
.423	-.1863	-.1469	-.0393
.298	-.2032	-.1285	-.0746
.228	-.1994	-.1022	-.0972
.151	-.1701	-.1294	-.0407
.060	-.1016	-.2533	0.1517
.012	0.2412	-.3644	0.6056

Figure 49 , Chordwise Pressure Distribution, Steady, Configuration 1



X/C	PRESSURE COEFFICIENT UPPER	LOWER	DIFF
.988	0.1836	0.1893	-.0057
.940	0.0716	0.0813	-.0096
.858	-.0143	0.0007	-.0150
.775	-.0843	-.0640	-.0204
.720	-.1314	-.1077	-.0238
.679	-.1406	-.1140	-.0264
.578	-.1652	-.1281	-.0371
.423	-.2013	-.1324	-.0689
.298	-.2229	-.1092	-.1137
.228	-.2228	-.0791	-.1436
.151	-.2026	-.0965	-.1061
.060	-.1576	-.1930	0.0353
.012	0.1355	-.2265	0.3620

Figure 50 , Chordwise Pressure Distribution, Steady, Configuration 1

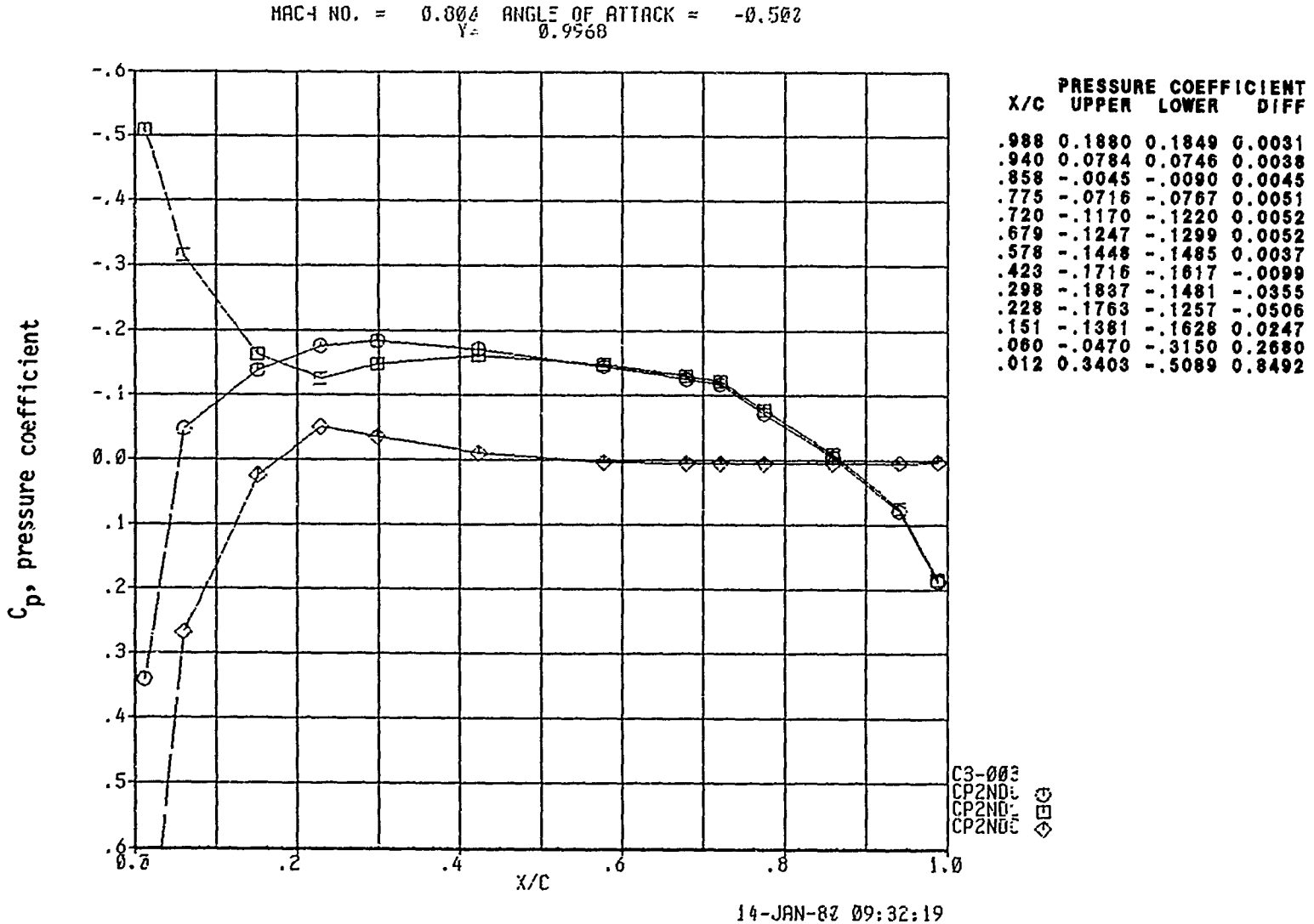
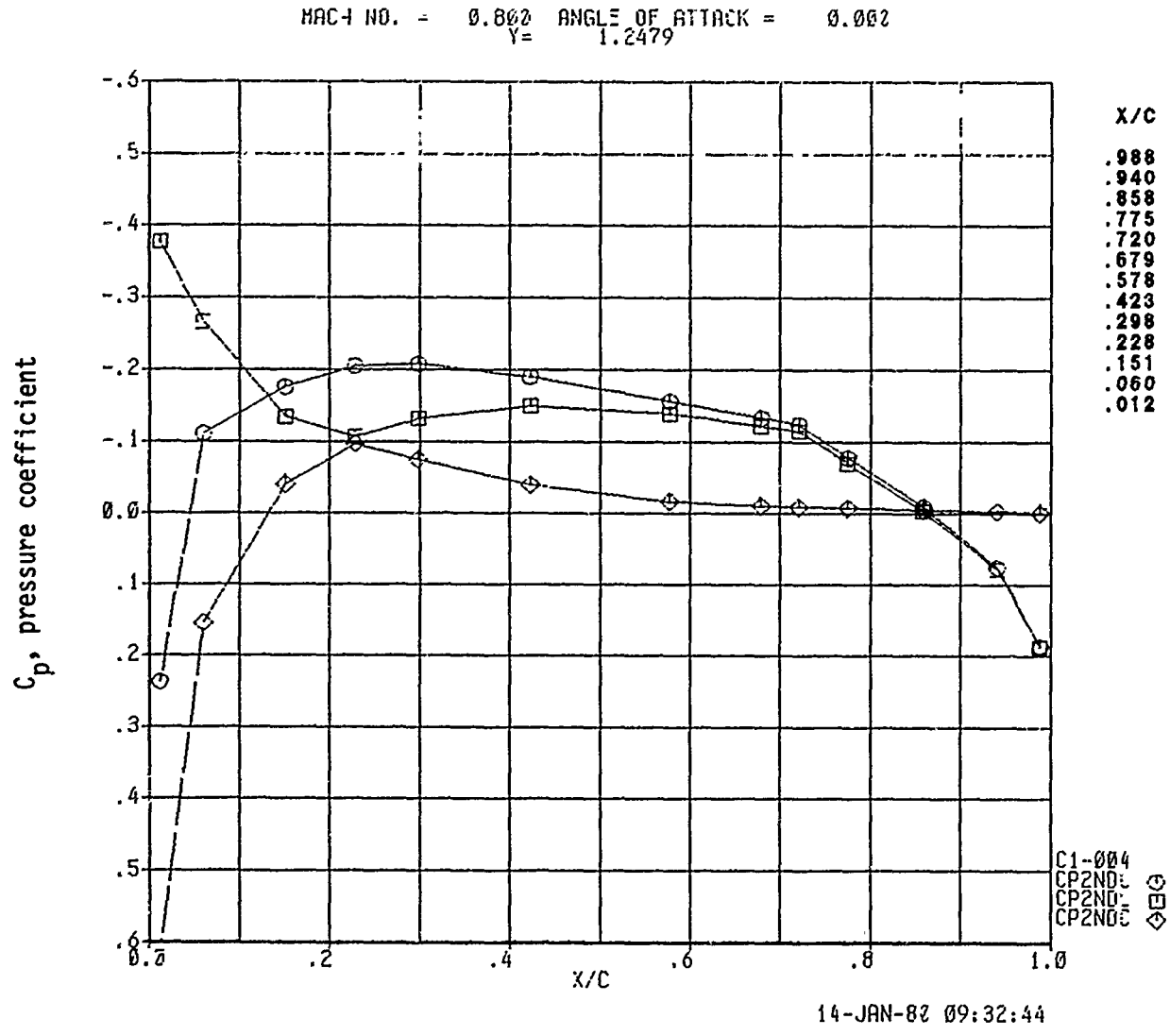
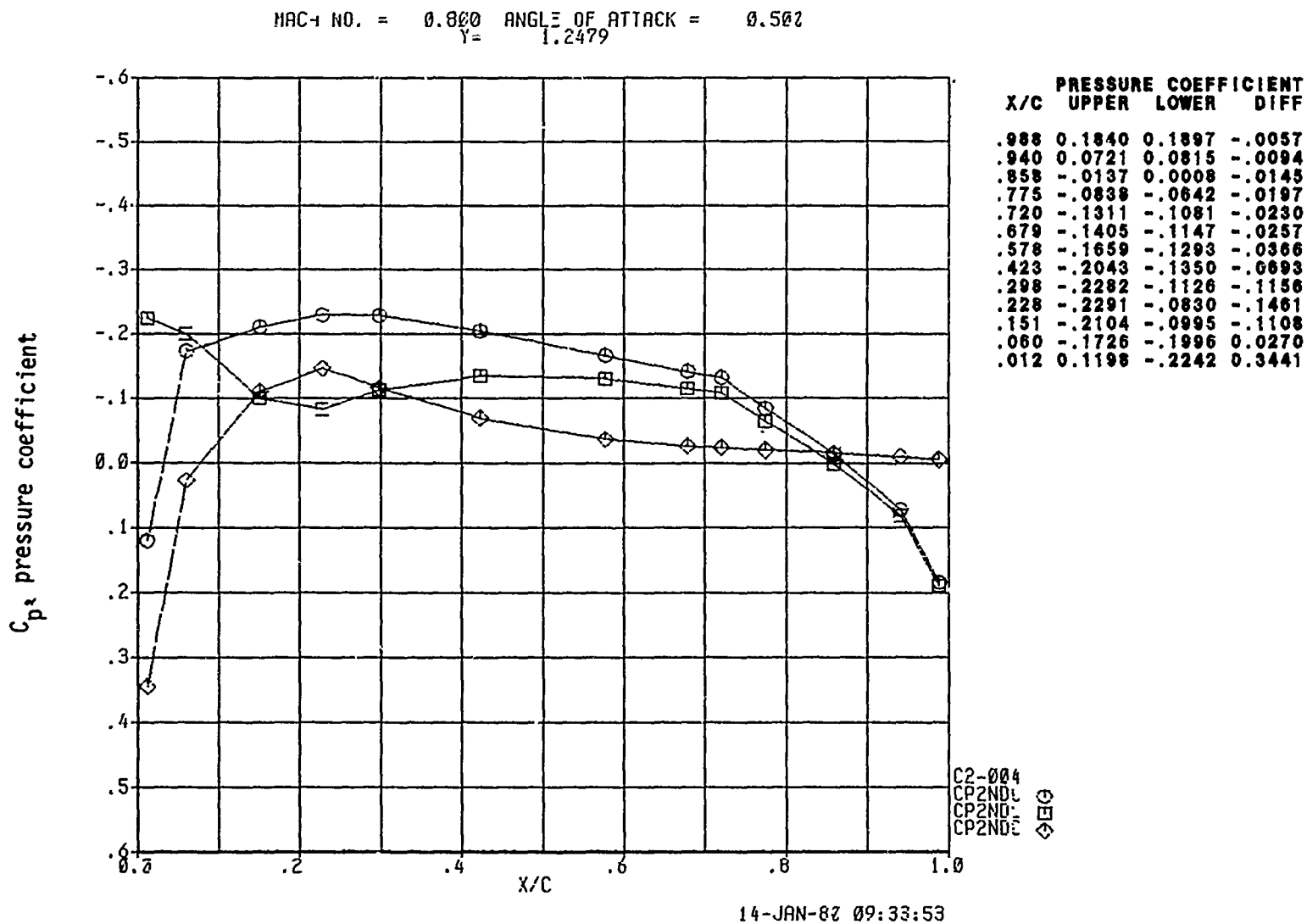


Figure 51 , Chordwise Pressure Distribution, Steady, Configuration 1



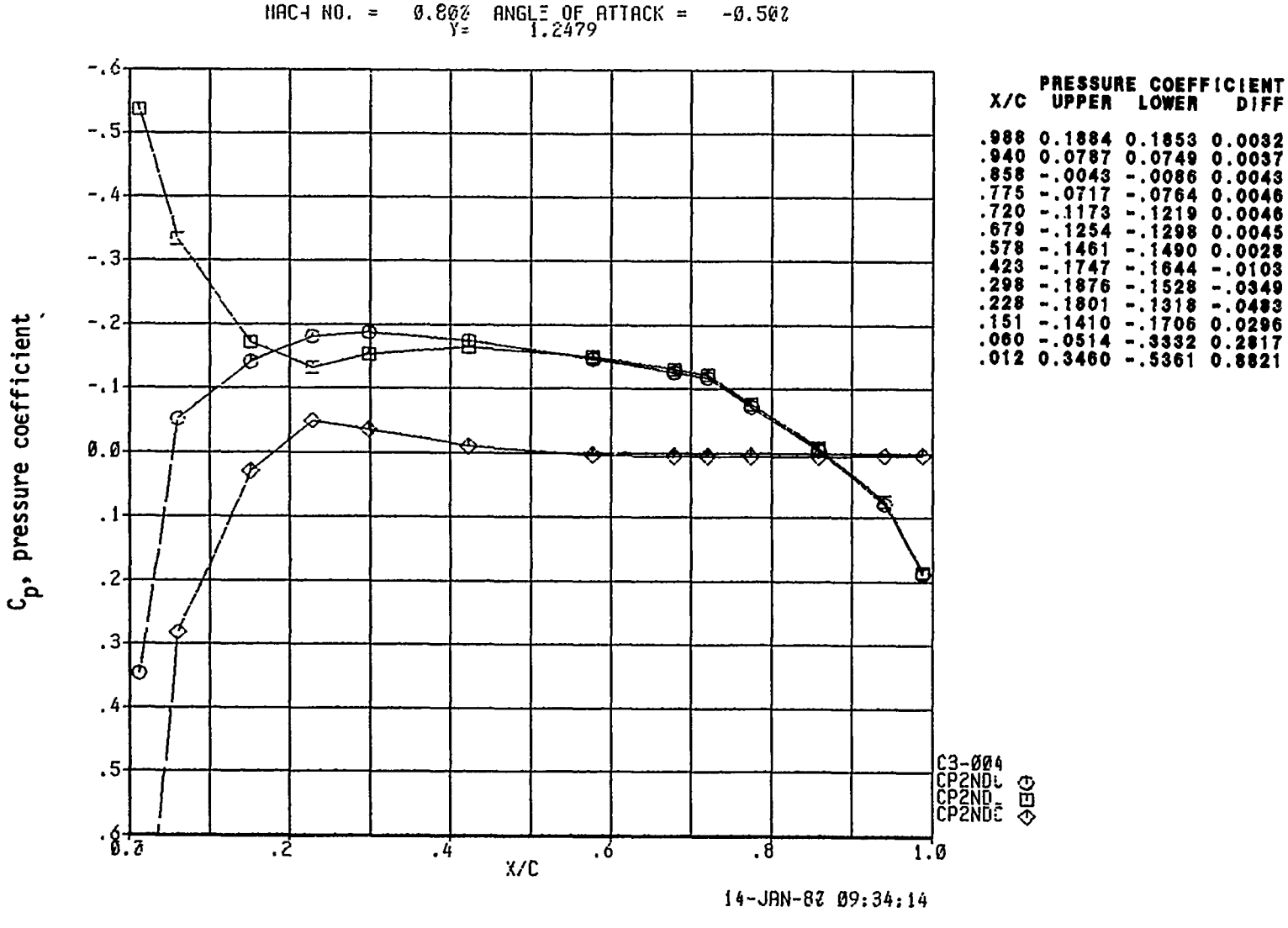
X/C	PRESSURE COEFFICIENT UPPER	LOWER	DIFF
.988	0.1863	0.1876	-.0012
.940	0.0755	0.0783	-.0028
.858	-.0089	-.0038	-.0051
.775	-.0777	-.0701	-.0075
.720	-.1241	-.1149	-.0092
.679	-.1329	-.1222	-.0106
.578	-.1559	-.1390	-.0169
.423	-.1894	-.1496	-.0398
.298	-.2077	-.1325	-.0752
.228	-.2044	-.1072	-.0972
.151	-.1754	-.1348	-.0406
.060	-.1112	-.2656	0.1544
.012	0.2370	-.3761	0.6131

Figure 52 , Chordwise Pressure Distribution, Steady, Configuration 1



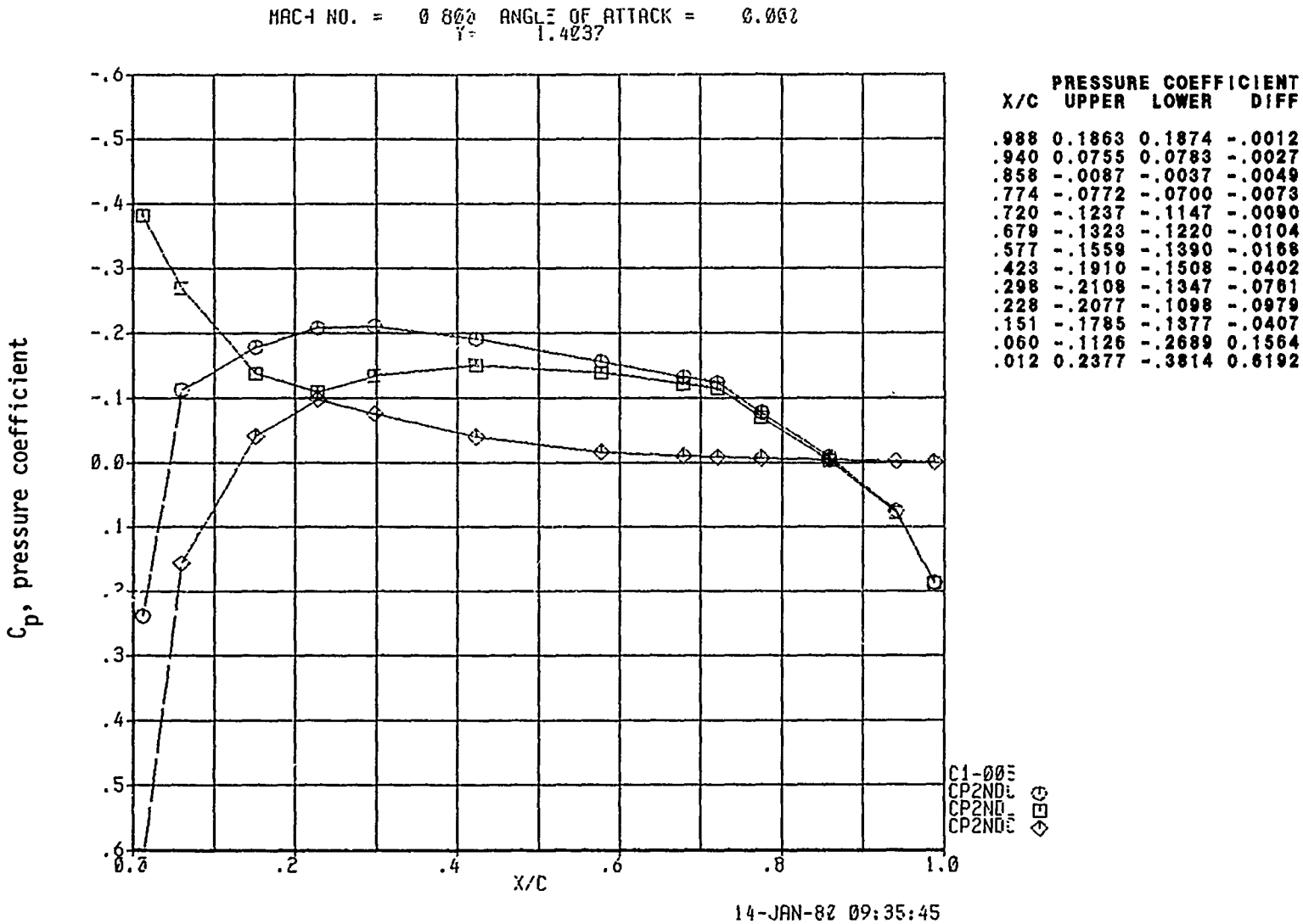
X/C	PRESSURE COEFFICIENT UPPER	LOWER	DIFF
.988	0.1840	0.1897	-.0057
.940	0.0721	0.0815	-.0094
.858	-.0137	0.0008	-.0145
.775	-.0838	-.0642	-.0197
.720	-.1311	-.1081	-.0230
.679	-.1405	-.1147	-.0257
.578	-.1659	-.1293	-.0366
.423	-.2043	-.1350	-.0693
.298	-.2282	-.1126	-.1156
.228	-.2291	-.0830	-.1461
.151	-.2104	-.0995	-.1108
.060	-.1726	-.1996	0.0270
.012	0.1198	-.2242	0.3441

Figure 53 , Chordwise Pressure Distribution, Steady, Configuration 1



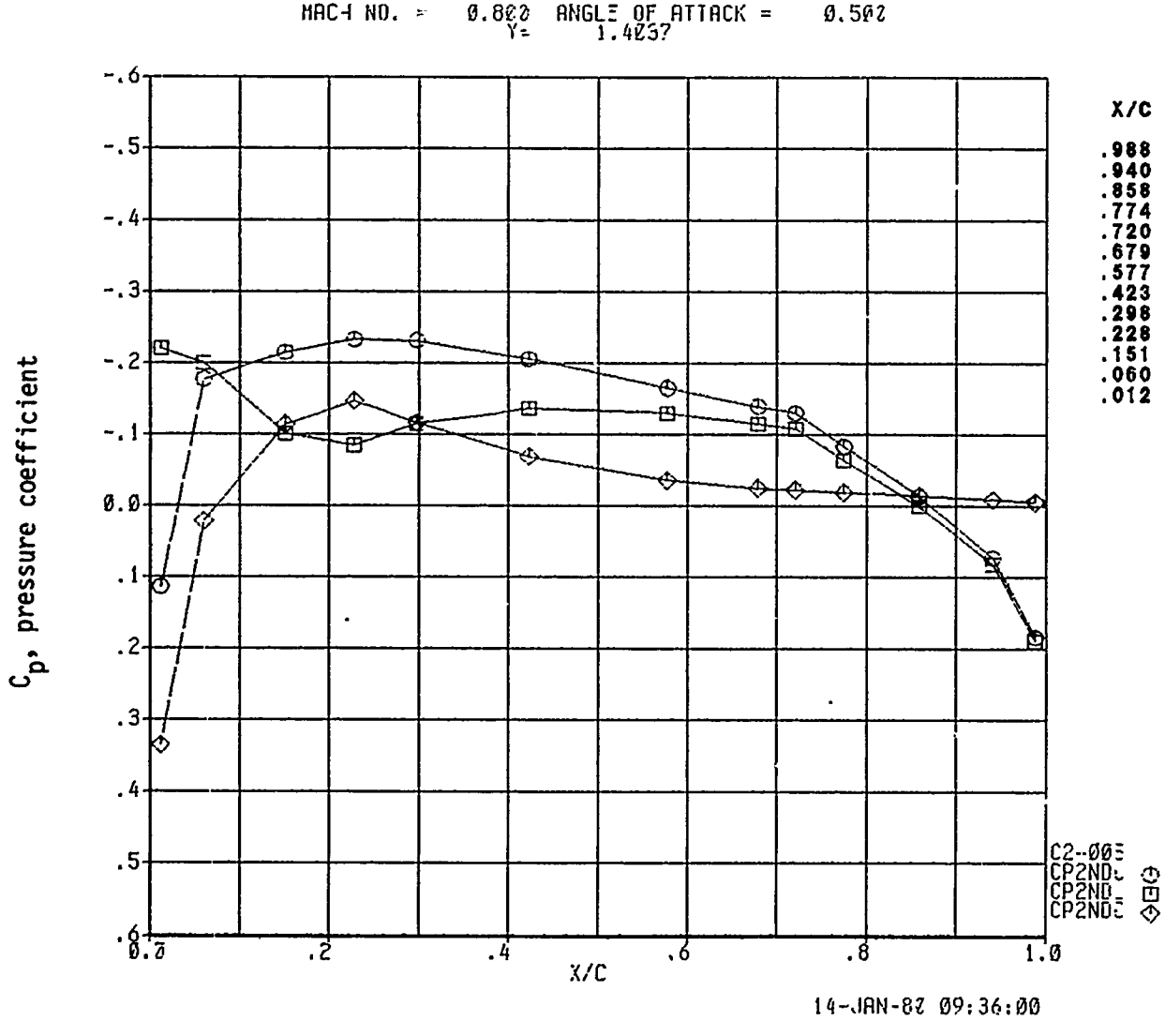
X/C	PRESSURE COEFFICIENT UPPER	LOWER	DIFF
.988	0.1884	0.1853	0.0032
.940	0.0787	0.0749	0.0037
.858	-.0043	-.0086	0.0043
.775	-.0717	-.0764	0.0046
.720	-.1173	-.1219	0.0046
.679	-.1254	-.1298	0.0045
.578	-.1461	-.1490	0.0028
.423	-.1747	-.1644	-.0103
.298	-.1876	-.1528	-.0349
.228	-.1801	-.1318	-.0483
.151	-.1410	-.1706	0.0296
.060	-.0514	-.3332	0.2817
.012	0.3460	-.5361	0.8821

Figure 54 , Chordwise Pressure Distribution, Steady, Configuration 1



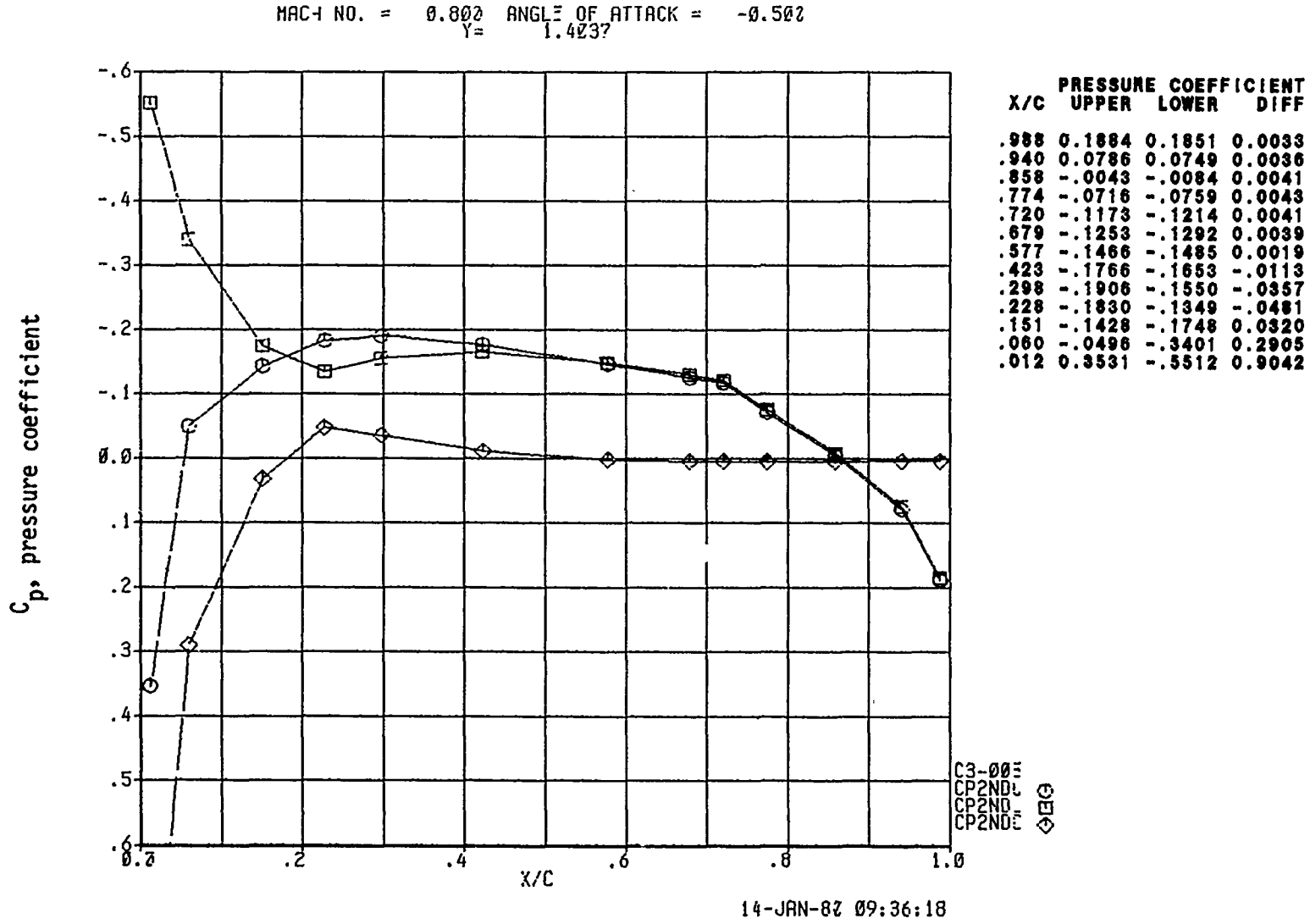
X/C	PRESSURE COEFFICIENT UPPER	LOWER	DIFF
.988	0.1863	0.1874	-.0012
.940	0.0755	0.0783	-.0027
.858	-.0087	-.0037	-.0049
.774	-.0772	-.0700	-.0073
.720	-.1237	-.1147	-.0090
.679	-.1323	-.1220	-.0104
.577	-.1559	-.1390	-.0168
.423	-.1910	-.1508	-.0402
.298	-.2108	-.1347	-.0761
.228	-.2077	-.1098	-.0979
.151	-.1785	-.1377	-.0407
.060	-.1126	-.2689	0.1564
.012	0.2377	-.3814	0.6192

Figure 55 , Chordwise Pressure Distribution, Steady, Configuration 1



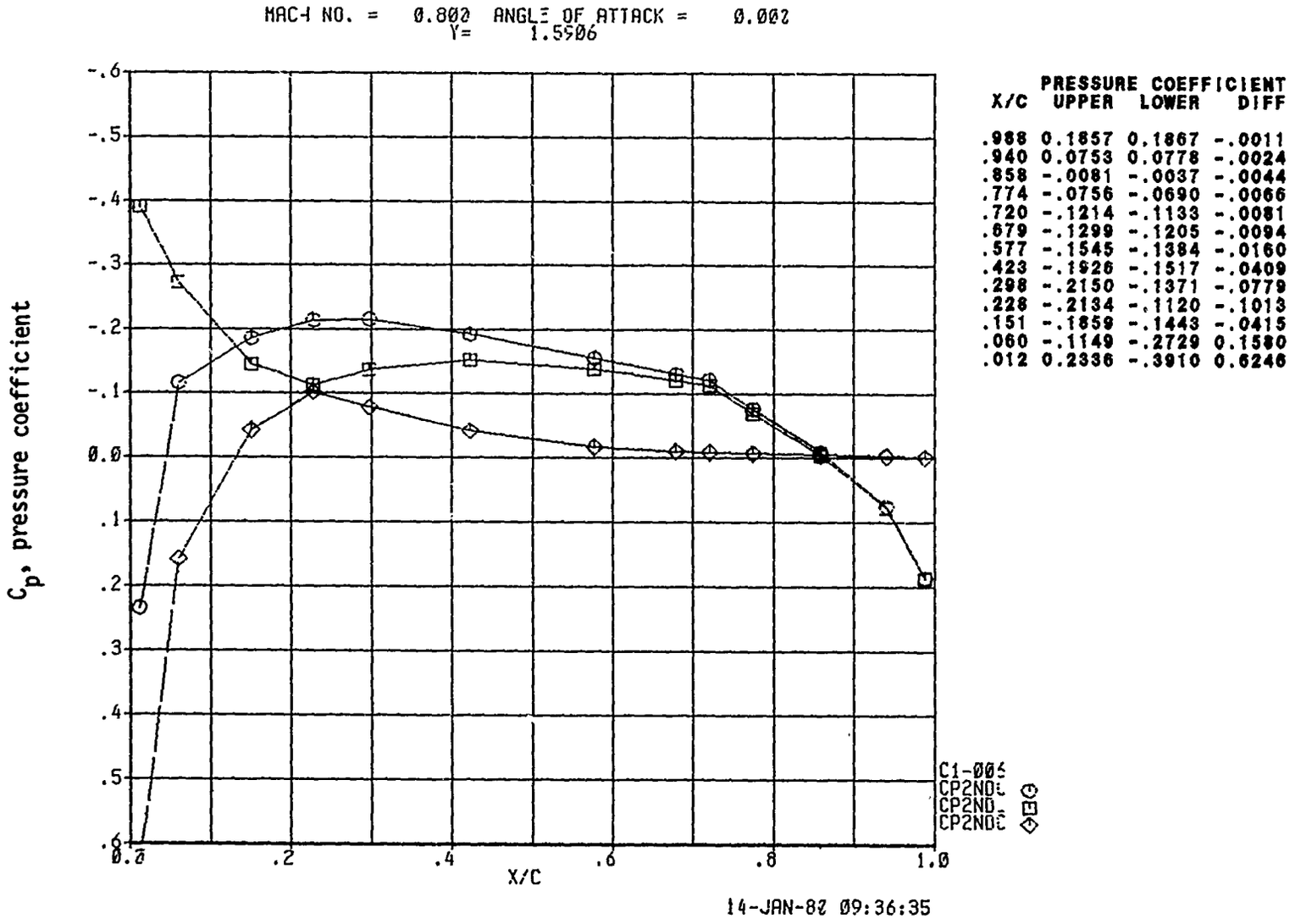
X/C	PRESSURE COEFFICIENT UPPER	LOWER	DIFF
.988	0.1840	0.1896	-.0056
.940	0.0723	0.0813	-.0091
.858	-.0133	0.0007	-.0140
.774	-.0831	-.0643	-.0188
.720	-.1303	-.1083	-.0220
.679	-.1396	-.1150	-.0246
.577	-.1654	-.1297	-.0356
.423	-.2056	-.1365	-.0692
.298	-.2312	-.1148	-.1164
.226	-.2328	-.0852	-.1476
.151	-.2148	-.1012	-.1135
.060	-.1773	-.1996	0.0223
.012	0.1134	-.2208	0.3342

Figure 56 , Chordwise Pressure Distribution, Steady, Configuration 1



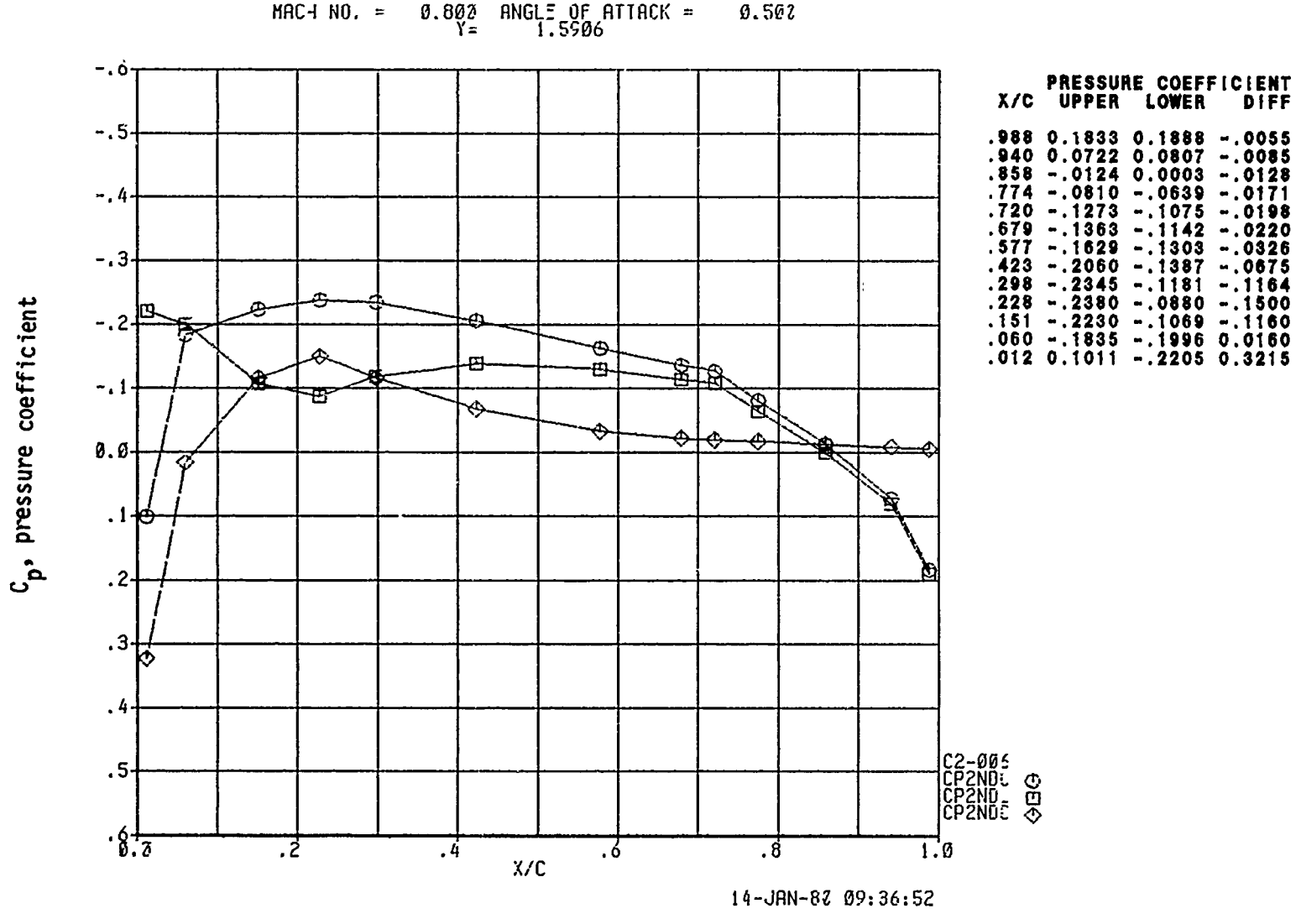
X/C	PRESSURE COEFFICIENT UPPER	LOWER	DIFF
.988	0.1884	0.1851	0.0033
.940	0.0786	0.0749	0.0036
.858	-.0043	-.0084	0.0041
.774	-.0716	-.0759	0.0043
.720	-.1173	-.1214	0.0041
.679	-.1253	-.1292	0.0039
.577	-.1466	-.1485	0.0019
.423	-.1766	-.1653	-.0113
.298	-.1906	-.1550	-.0357
.228	-.1830	-.1349	-.0481
.151	-.1428	-.1748	0.0320
.060	-.0496	-.3401	0.2905
.012	0.3531	-.5512	0.9042

Figure 57 , Chordwise Pressure Distribution, Steady, Configuration 1



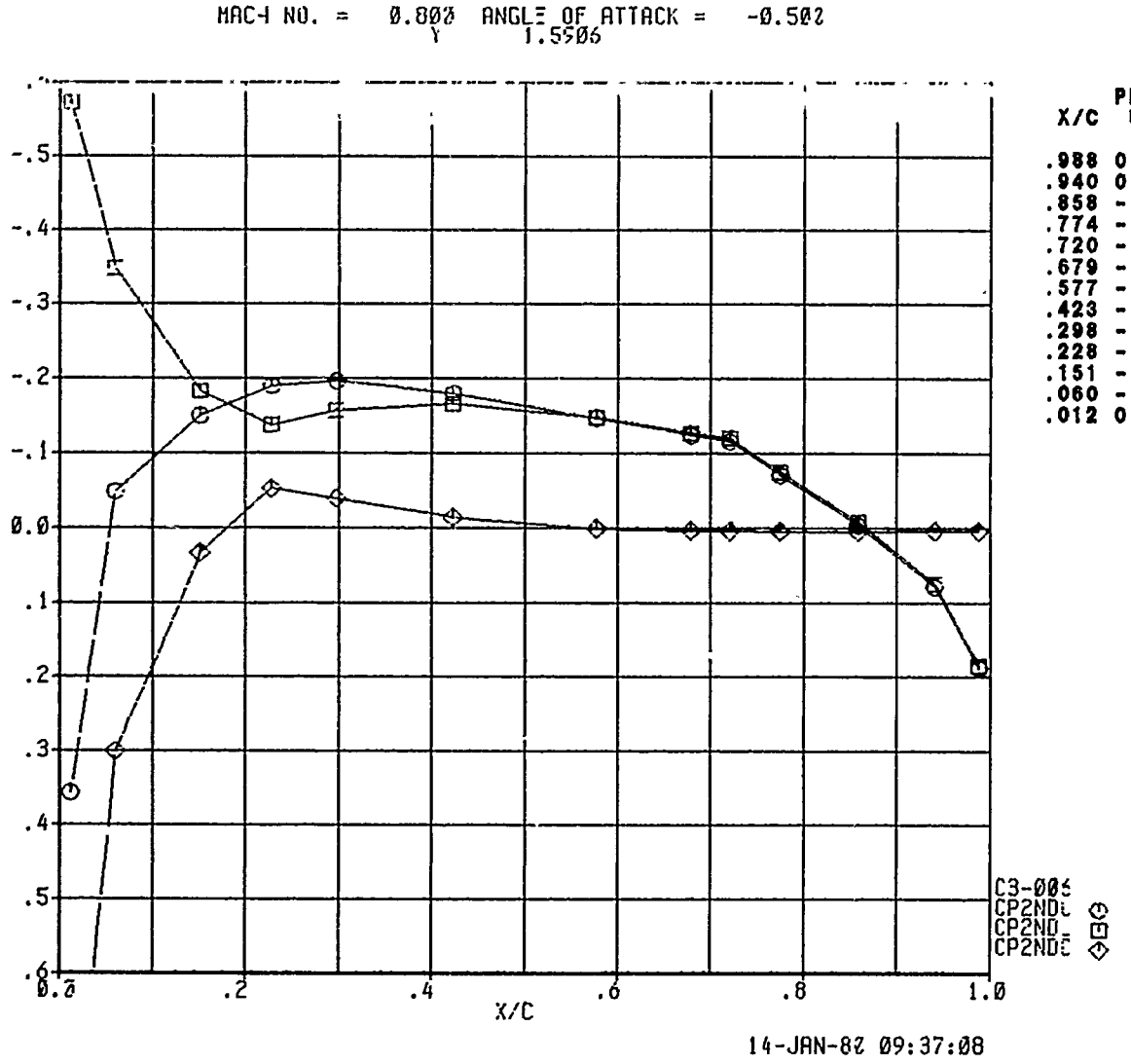
X/C	PRESSURE COEFFICIENT UPPER	LOWER	DIFF
.988	0.1857	0.1867	-.0011
.940	0.0753	0.0778	-.0024
.858	-.0081	-.0037	-.0044
.774	-.0756	-.0690	-.0066
.720	-.1214	-.1133	-.0081
.679	-.1299	-.1205	-.0094
.577	-.1545	-.1384	-.0160
.423	-.1926	-.1517	-.0409
.298	-.2150	-.1371	-.0779
.228	-.2134	-.1120	-.1013
.151	-.1859	-.1443	-.0415
.060	-.1149	-.2729	0.1580
.012	0.2336	-.3910	0.6246

Figure 58 , Chordwise Pressure Distribution, Steady, Configuration 1



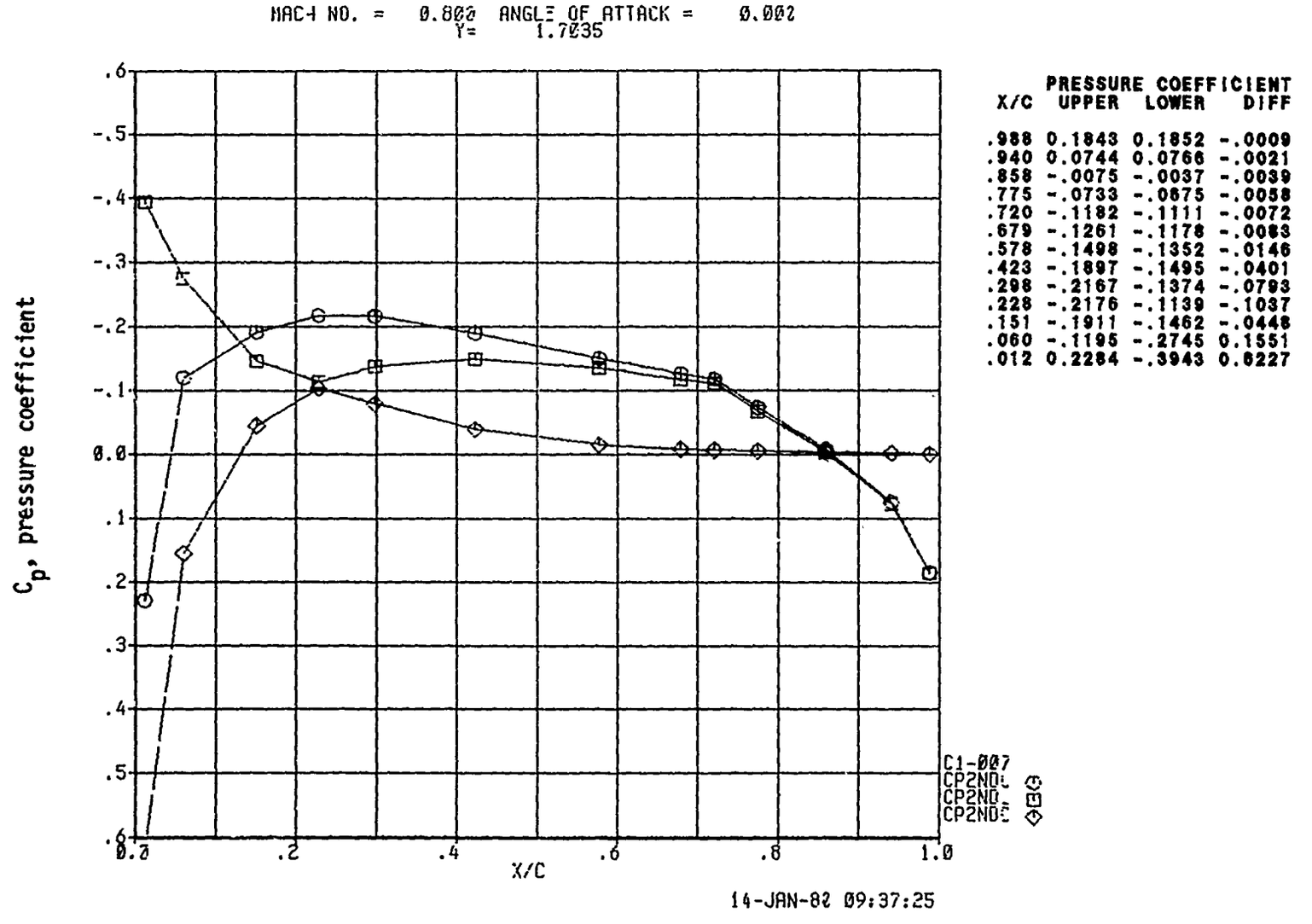
X/C	PRESSURE COEFFICIENT UPPER	LOWER	DIFF
.988	0.1833	0.1888	-.0055
.940	0.0722	0.0807	-.0085
.858	-.0124	0.0003	-.0128
.774	-.0810	-.0639	-.0171
.720	-.1273	-.1075	-.0198
.679	-.1363	-.1142	-.0220
.577	-.1629	-.1303	-.0326
.423	-.2060	-.1387	-.0675
.298	-.2345	-.1181	-.1164
.228	-.2380	-.0880	-.1500
.151	-.2230	-.1069	-.1160
.060	-.1835	-.1996	0.0160
.012	0.1011	-.2205	0.3215

Figure 59 , Chordwise Pressure Distribution, Steady, Configuration 1



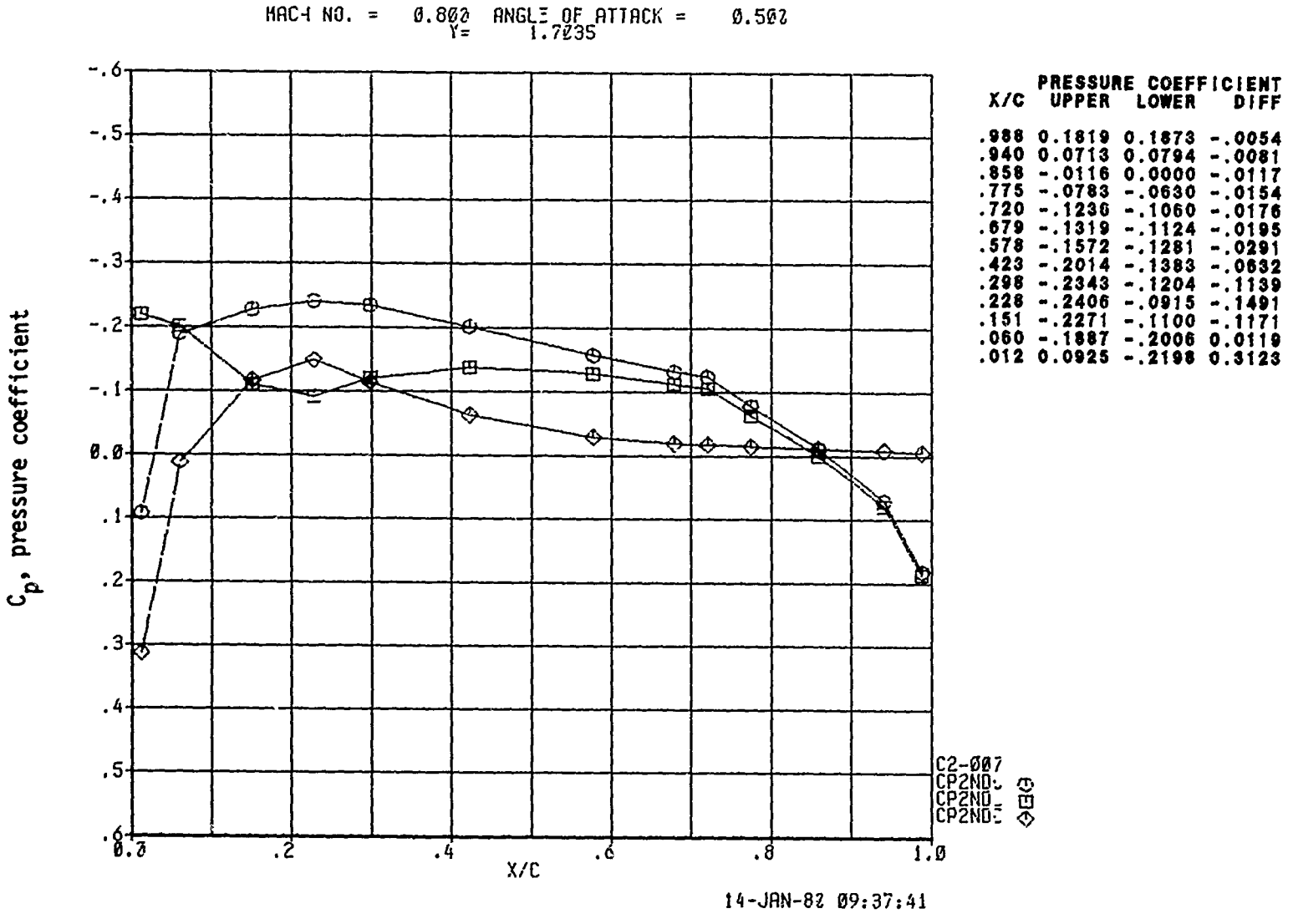
X/C	PRESSURE COEFFICIENT UPPER	LOWER	DIFF
.988	0.1877	0.1843	0.0034
.940	0.0782	0.0746	0.0036
.858	-.0041	-.0080	0.0039
.774	-.0705	-.0744	0.0039
.720	-.1158	-.1193	0.0035
.679	-.1238	-.1269	0.0032
.577	-.1463	-.1469	0.0005
.423	-.1794	-.1650	-.0143
.298	-.1958	-.1564	-.0394
.228	-.1892	-.1366	-.0527
.151	-.1494	-.1823	0.0330
.060	-.0483	-.3482	0.2999
.012	0.3560	-.5716	0.9277

Figure 60, Chordwise Pressure Distribution, Steady, Configuration 1



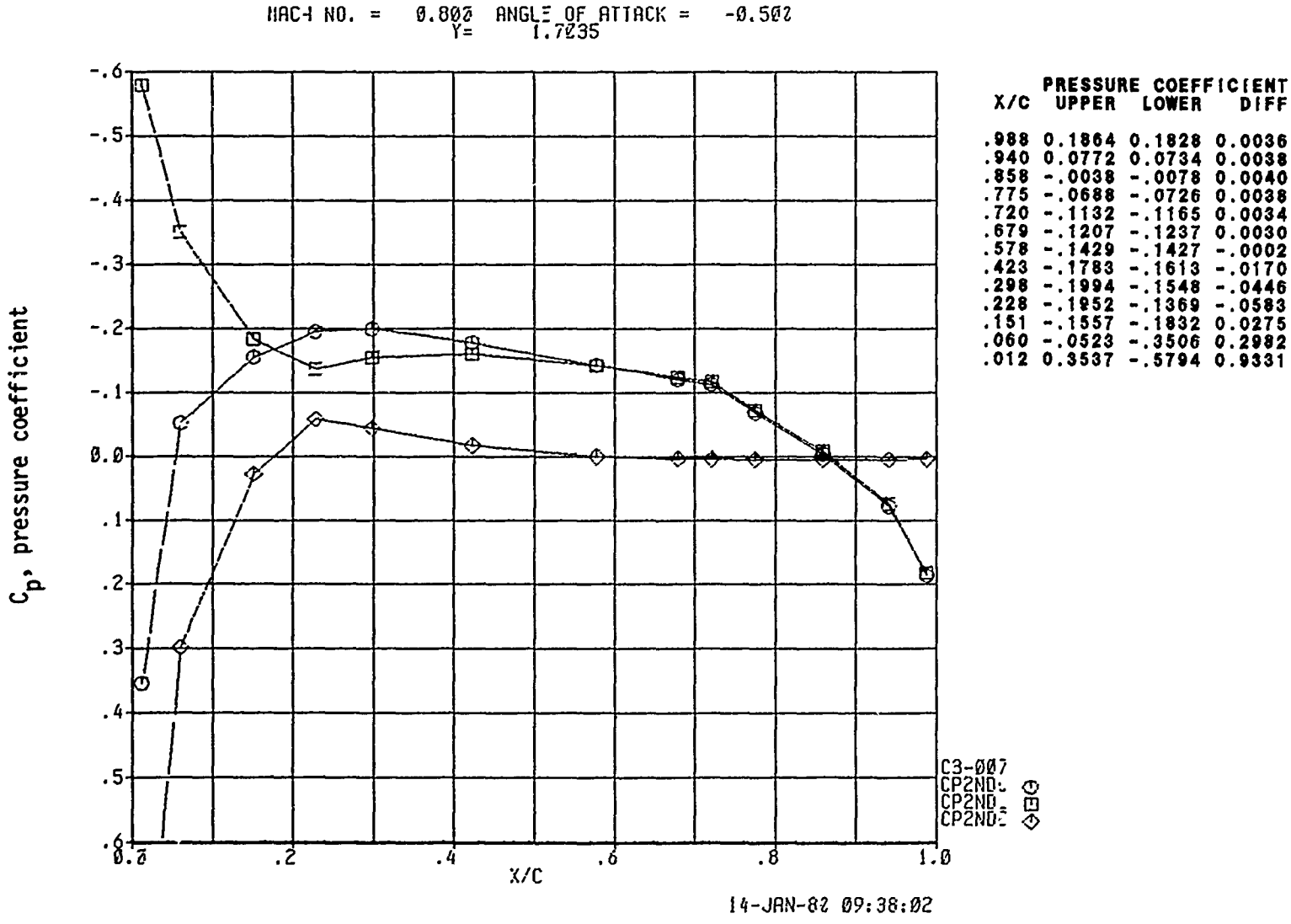
X/C	PRESSURE COEFFICIENT UPPER	LOWER	DIFF
.988	0.1843	0.1852	-.0009
.940	0.0744	0.0766	-.0021
.858	-.0075	-.0037	-.0039
.775	-.0733	-.0675	-.0058
.720	-.1182	-.1111	-.0072
.679	-.1261	-.1178	-.0083
.578	-.1498	-.1352	-.0146
.423	-.1897	-.1495	-.0401
.298	-.2167	-.1374	-.0793
.228	-.2176	-.1139	-.1037
.151	-.1911	-.1462	-.0448
.060	-.1195	-.2745	0.1551
.012	0.2284	-.3943	0.6227

Figure 61 , Chordwise Pressure Distribution, Steady, Configuration 1



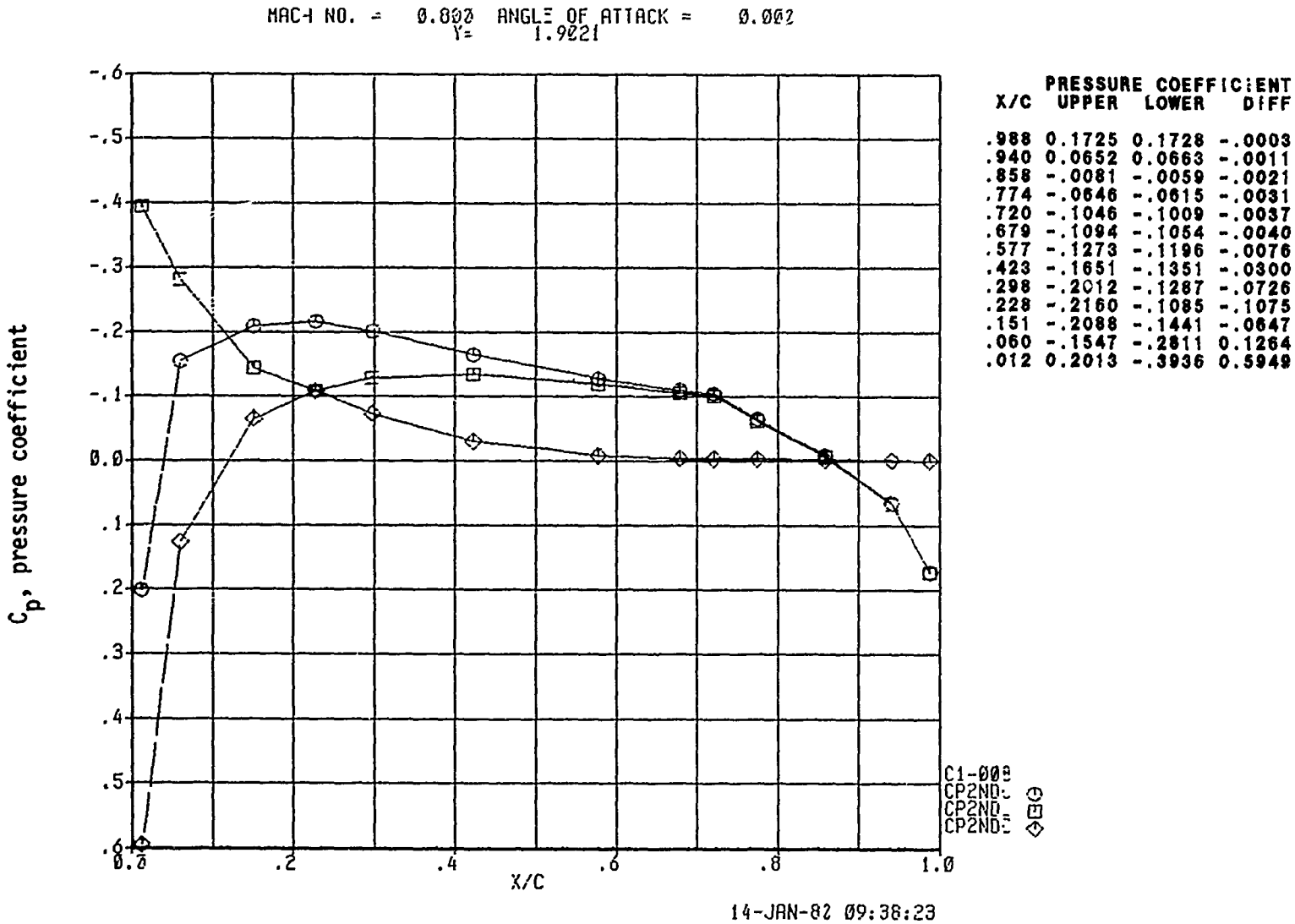
X/C	PRESSURE COEFFICIENT UPPER	LOWER	DIFF
.988	0.1819	0.1873	-.0054
.940	0.0713	0.0794	-.0081
.858	-.0116	0.0000	-.0117
.775	-.0783	-.0630	-.0154
.720	-.1236	-.1060	-.0176
.679	-.1319	-.1124	-.0195
.578	-.1572	-.1281	-.0291
.423	-.2014	-.1383	-.0632
.298	-.2343	-.1204	-.1139
.228	-.2406	-.0915	-.1491
.151	-.2271	-.1100	-.1171
.060	-.1887	-.2006	0.0119
.012	0.0925	-.2198	0.3123

Figure 62, Chordwise Pressure Distribution, Steady, Configuration 1



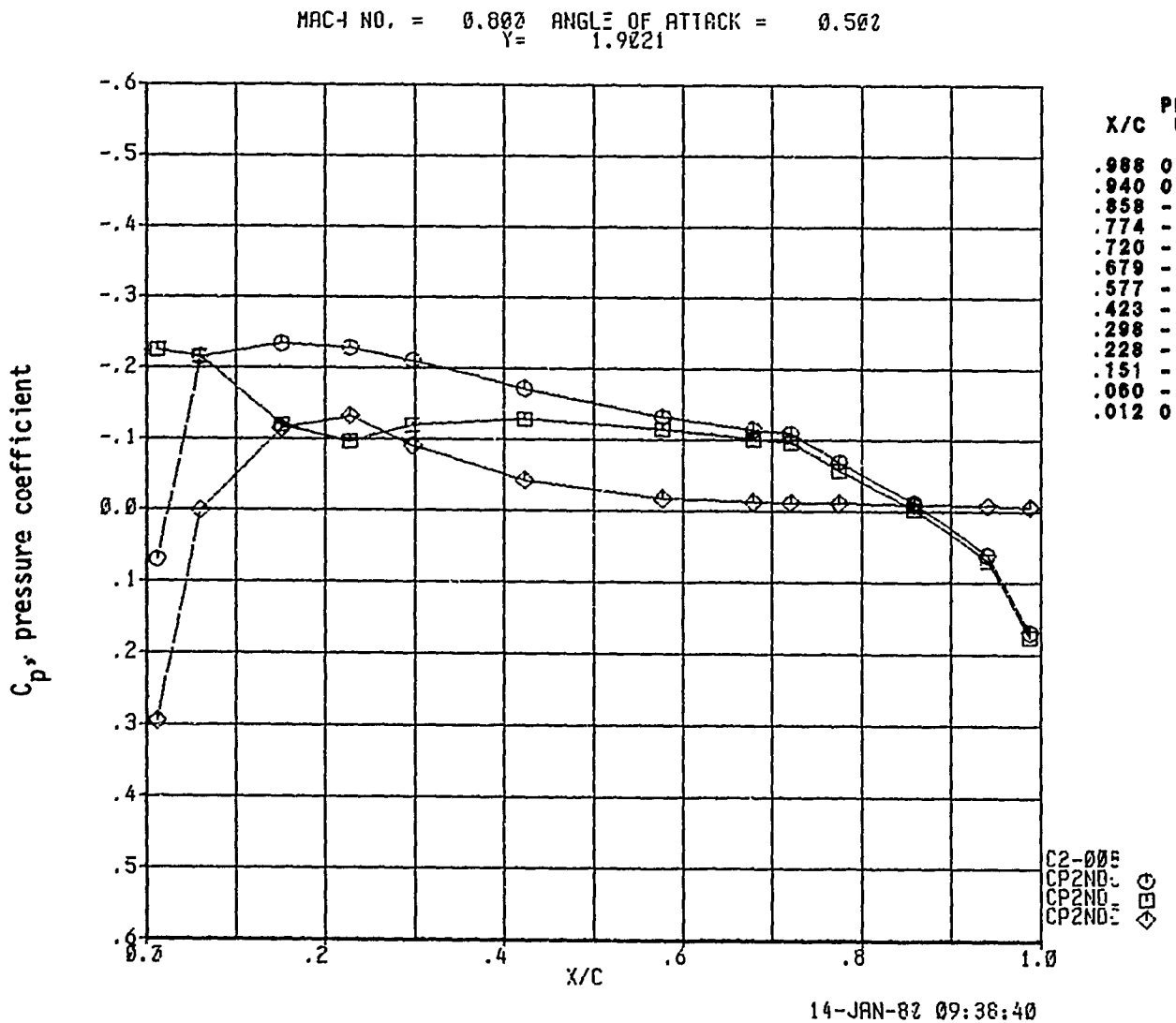
X/C	PRESSURE COEFFICIENT UPPER	LOWER	DIFF
.988	0.1864	0.1828	0.0036
.940	0.0772	0.0734	0.0038
.858	-.0038	-.0078	0.0040
.775	-.0688	-.0726	0.0038
.720	-.1132	-.1165	0.0034
.679	-.1207	-.1237	0.0030
.578	-.1429	-.1427	-.0002
.423	-.1783	-.1613	-.0170
.298	-.1994	-.1548	-.0446
.228	-.1952	-.1369	-.0583
.151	-.1557	-.1832	0.0275
.060	-.0523	-.3506	0.2982
.012	0.3537	-.5794	0.9331

Figure 63 , Chordwise Pressure Distribution, Steady, Configuration 1



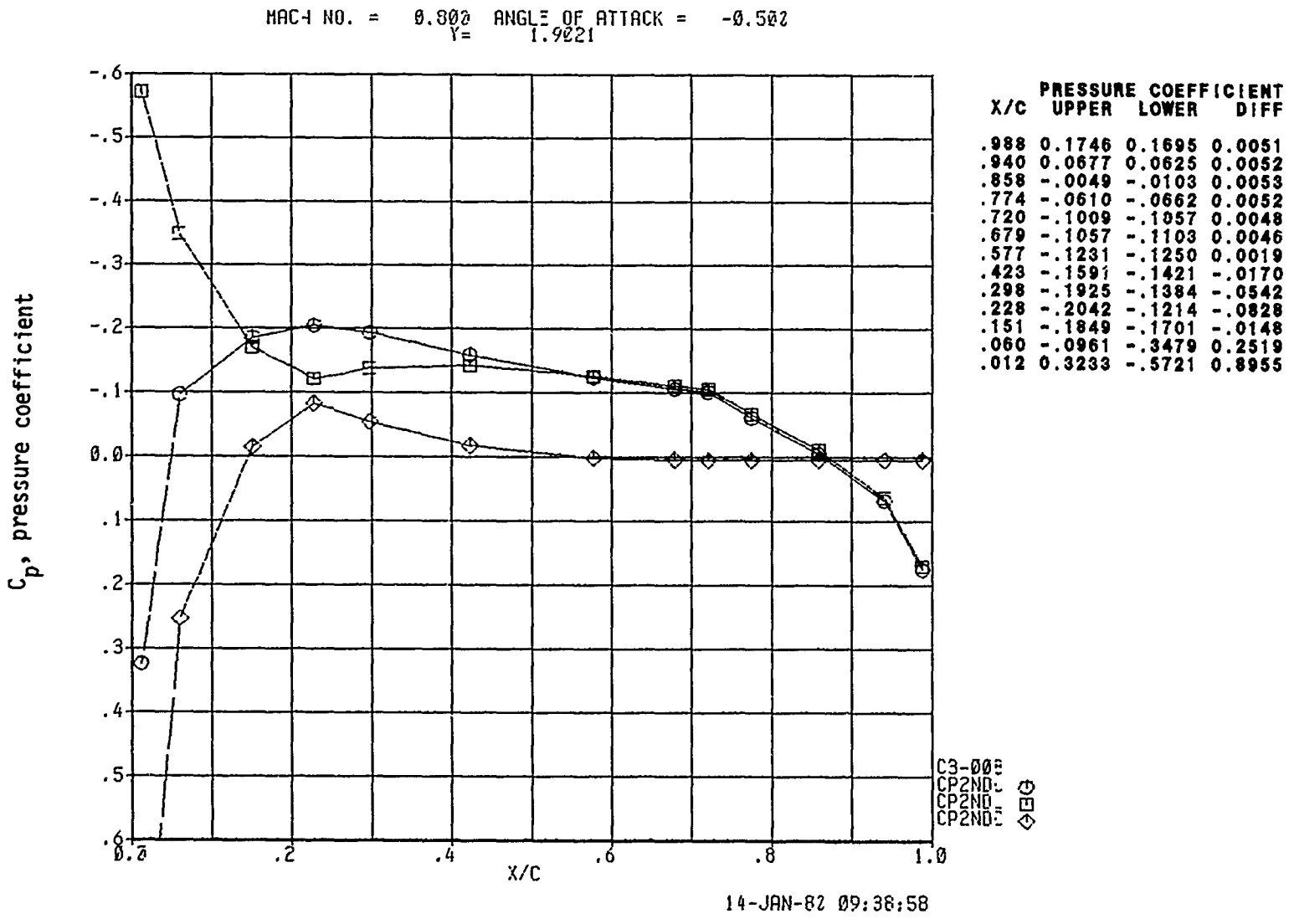
X/C	PRESSURE COEFFICIENT UPPER	LOWER	DIFF
.988	0.1725	0.1728	-.0003
.940	0.0652	0.0663	-.0011
.858	-.0081	-.0059	-.0021
.774	-.0646	-.0615	-.0031
.720	-.1046	-.1009	-.0037
.679	-.1094	-.1054	-.0040
.577	-.1273	-.1196	-.0076
.423	-.1651	-.1351	-.0300
.298	-.2012	-.1287	-.0726
.228	-.2160	-.1085	-.1075
.151	-.2088	-.1441	-.0647
.060	-.1547	-.2811	0.1264
.012	0.2013	-.3936	0.5949

Figure 64 , Chordwise Pressure Distribution, Steady, Configuration 1



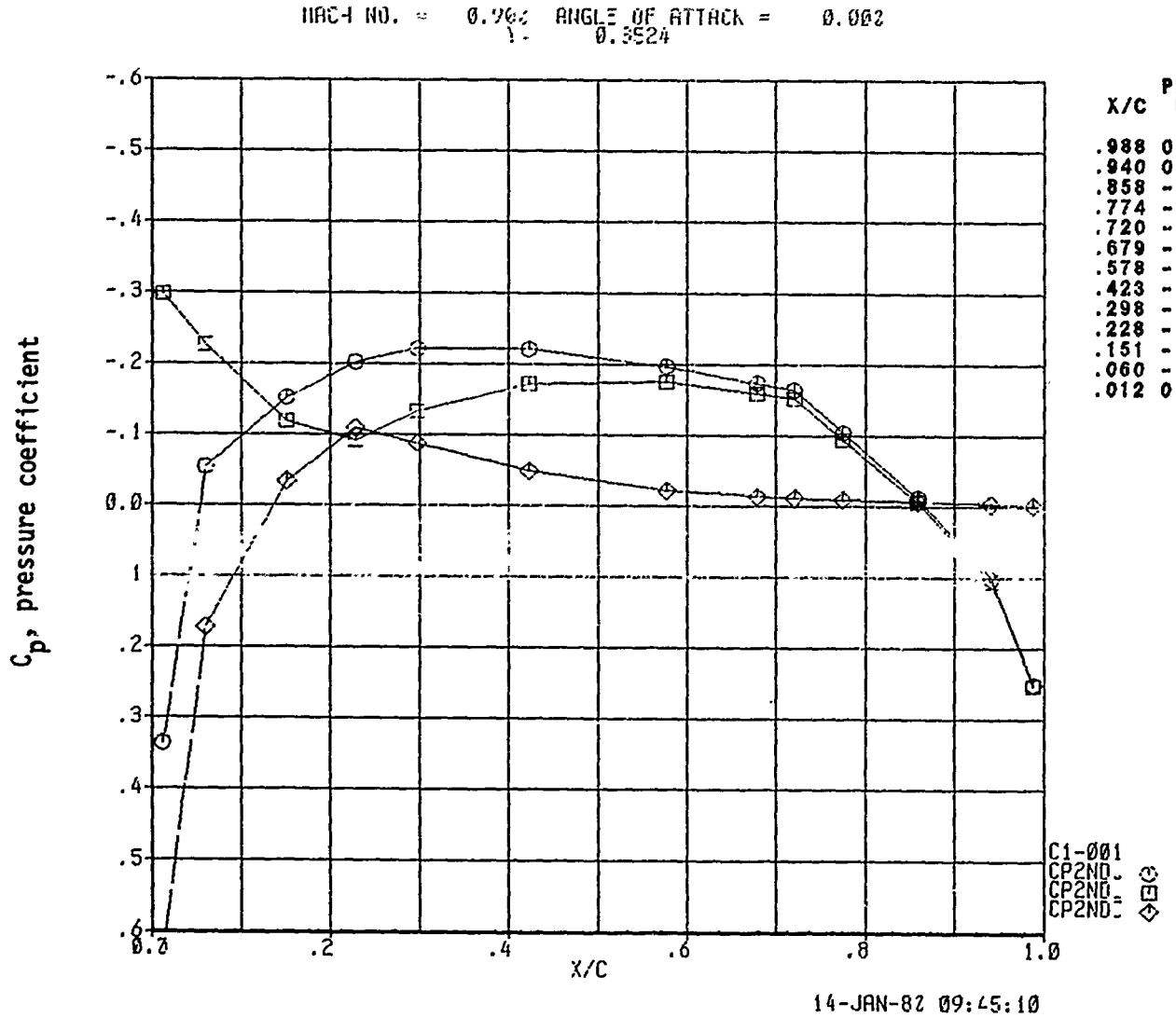
X/C	PRESSURE COEFFICIENT UPPER	LOWER	DIFF
.988	0.1693	0.1752	-.0059
.940	0.0616	0.0691	-.0074
.858	-.0121	-.0026	-.0095
.774	-.0691	-.0577	-.0114
.720	-.1092	-.0970	-.0122
.679	-.1140	-.1014	-.0126
.577	-.1323	-.1152	-.0171
.423	-.1719	-.1288	-.0430
.298	-.2107	-.1198	-.0909
.228	-.2284	-.0963	-.1321
.151	-.2336	-.1190	-.1145
.060	-.2153	-.2162	0.0010
.012	0.0692	-.2251	0.2943

Figure 65, Chordwise Pressure Distribution, Steady, Configuration 1



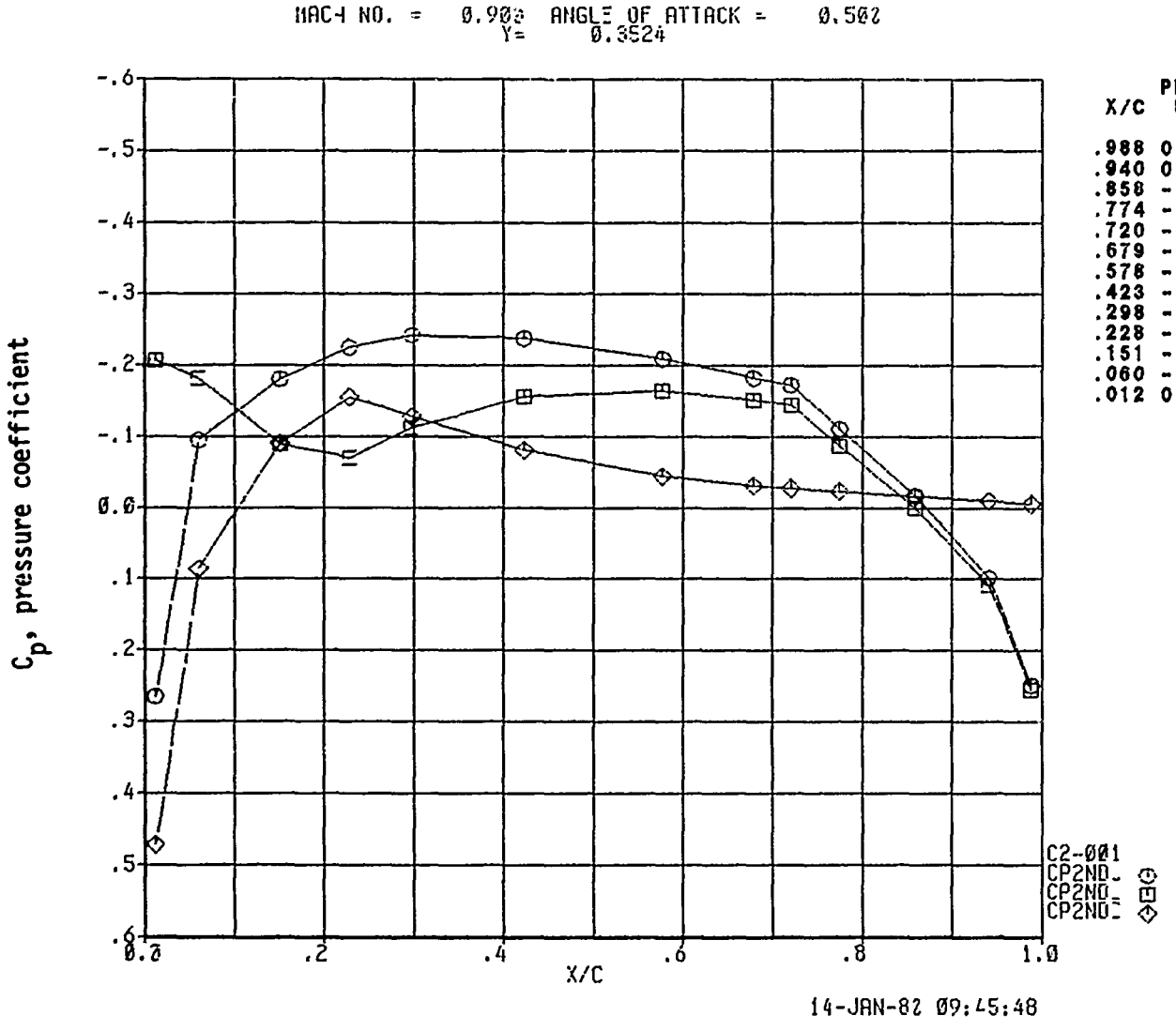
X/C	PRESSURE COEFFICIENT UPPER	LOWER	DIFF
.988	0.1746	0.1695	0.0051
.940	0.0677	0.0625	0.0052
.858	-.0049	-.0103	0.0053
.774	-.0610	-.0662	0.0052
.720	-.1009	-.1057	0.0048
.679	-.1057	-.1103	0.0046
.577	-.1231	-.1250	0.0019
.423	-.1591	-.1421	-.0170
.298	-.1925	-.1384	-.0542
.228	-.2042	-.1214	-.0828
.151	-.1849	-.1701	-.0148
.060	-.0961	-.3479	0.2519
.012	0.3233	-.5721	0.8955

Figure 66, Chordwise Pressure Distribution, Steady, Configuration 1



X/C	PRESSURE COEFFICIENT UPPER	LOWER	DIFF
.988	0.2512	0.2526	-.0015
.940	0.1017	0.1051	-.0035
.858	-.0122	-.0057	-.0064
.774	-.1039	-.0944	-.0096
.720	-.1644	-.1526	-.0118
.679	-.1735	-.1600	-.0135
.578	-.1969	-.1754	-.0215
.423	-.2210	-.1722	-.0488
.298	-.2211	-.1332	-.0878
.228	-.2018	-.0925	-.1093
.151	-.1521	-.1187	-.0333
.060	-.0538	-.2260	0.1722
.012	0.3358	-.2978	0.6336

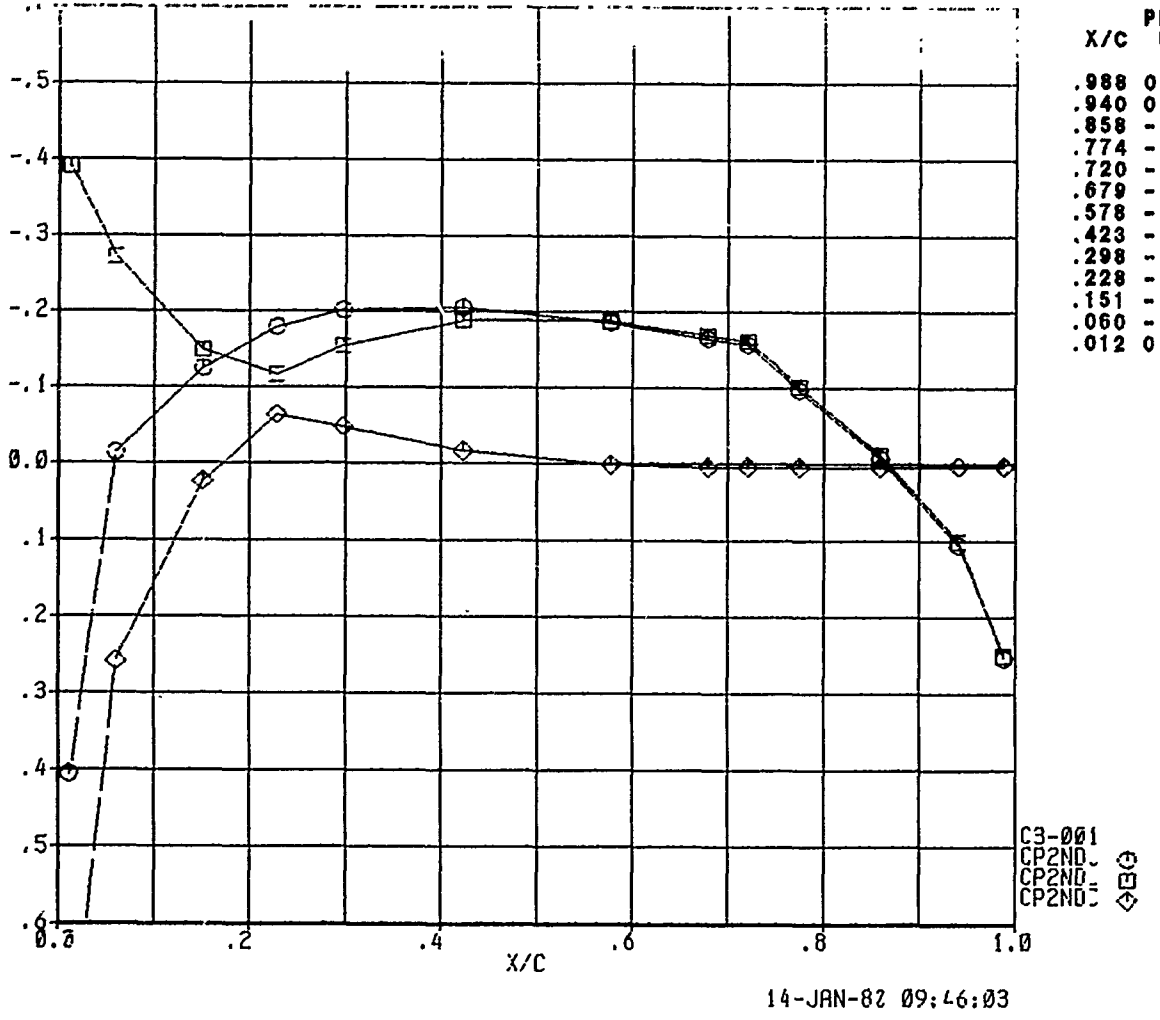
Figure 67, Chordwise Pressure Distribution, Steady, Configuration 1



X/C	PRESSURE COEFFICIENT UPPER	LOWER	DIFF
.988	0.2490	0.2547	-.0057
.940	0.0983	0.1084	-.0101
.858	-.0173	-.0007	-.0166
.774	-.1109	-.0875	-.0233
.720	-.1723	-.1448	-.0276
.679	-.1824	-.1513	-.0311
.578	-.2085	-.1640	-.0445
.423	-.2373	-.1562	-.0812
.298	-.2414	-.1131	-.1283
.228	-.2246	-.0696	-.1550
.151	-.1803	-.0897	-.0905
.060	-.0951	-.1813	0.0862
.012	0.2641	-.2071	0.4711

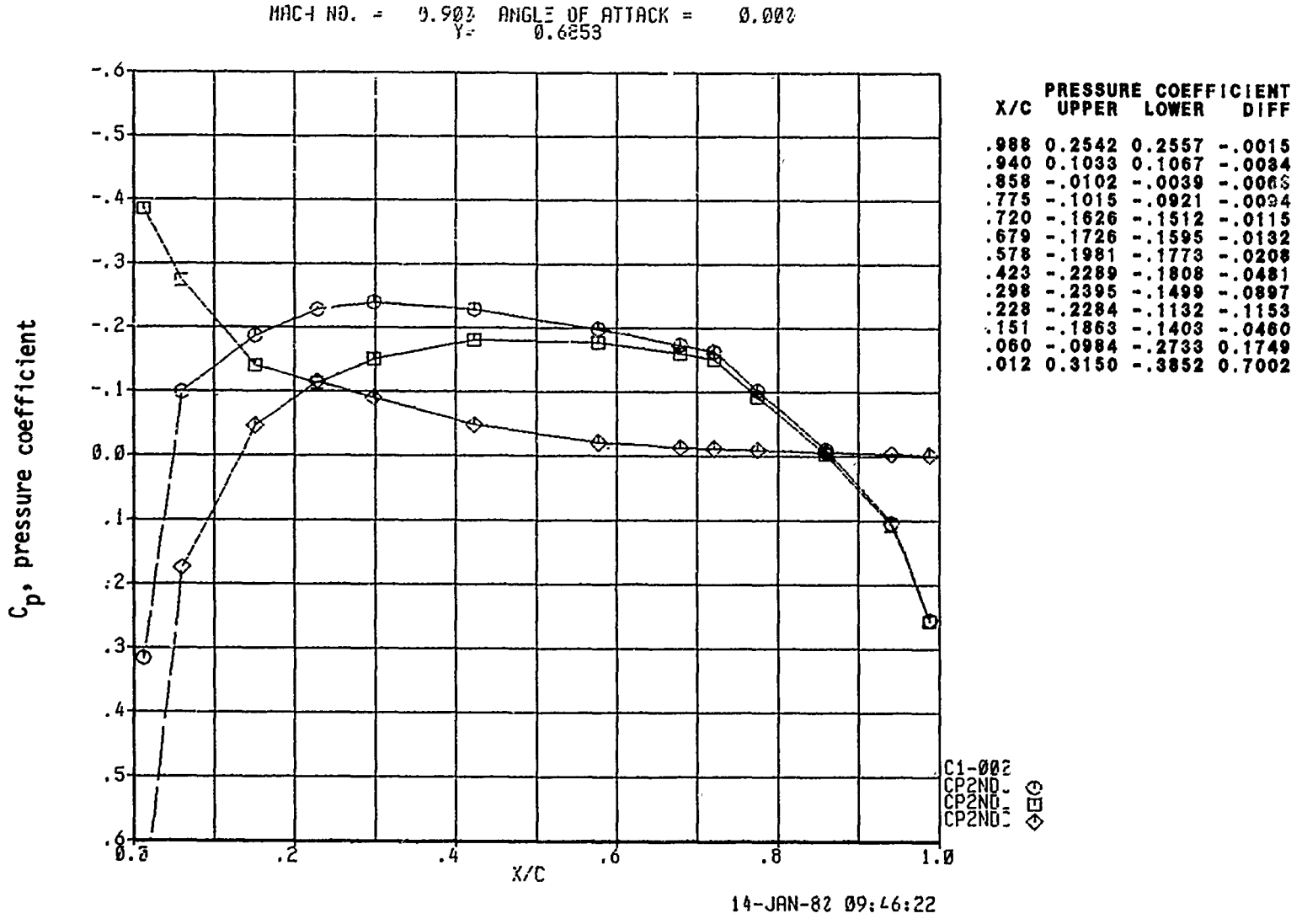
Figure 68, Chordwise Pressure Distribution, Steady, Configuration 1

MACH NO. = 0.900 ANGLE OF ATTACK = -0.50?
Y= 0.3524



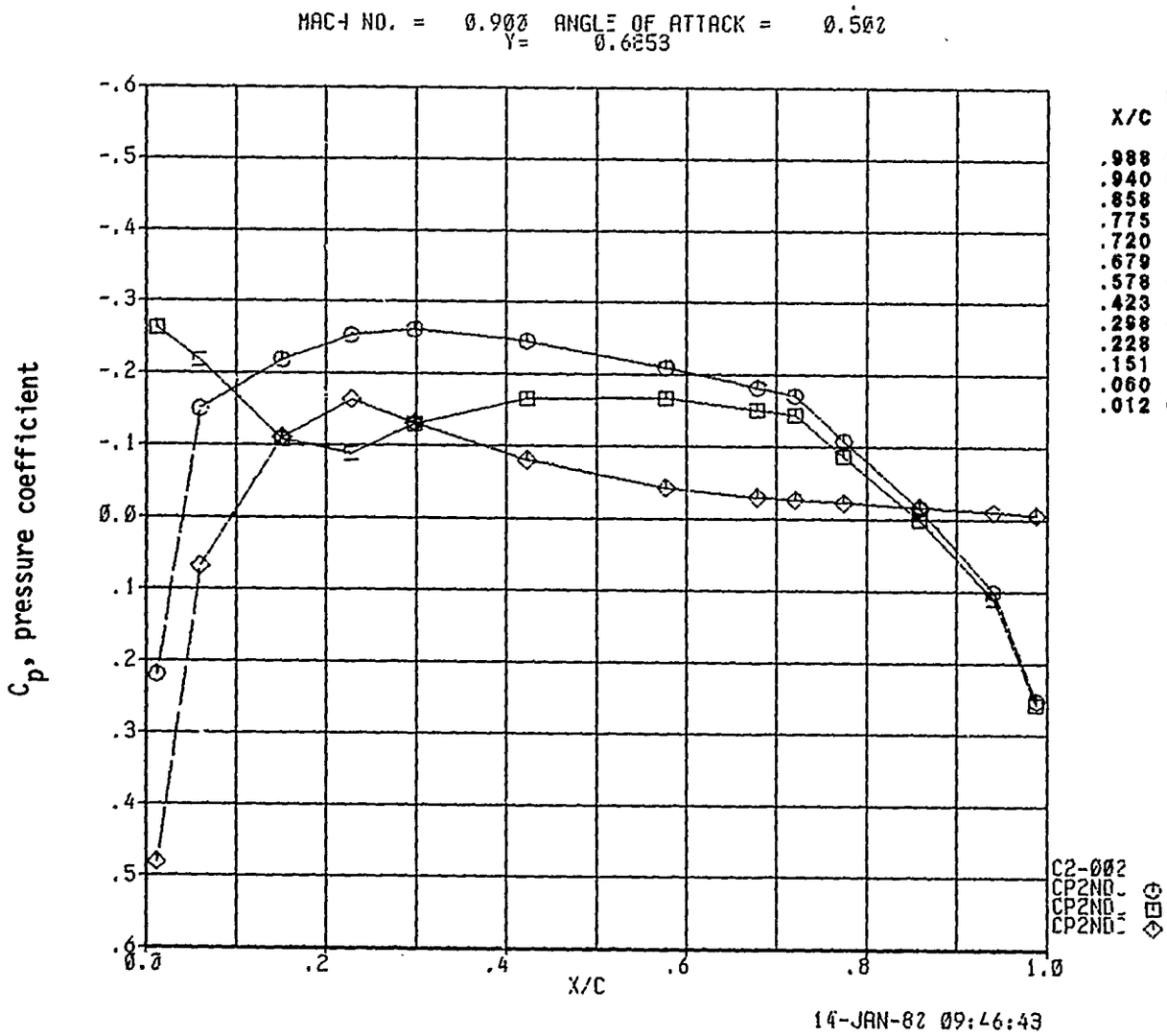
X/C	PRESSURE COEFFICIENT UPPER	LOWER	DIFF
.988	0.2532	0.2505	0.0028
.940	0.1049	0.1017	0.0032
.858	-.0071	-.0109	0.0038
.774	-.0972	-.1012	0.0041
.720	-.1565	-.1606	0.0041
.679	-.1648	-.1688	0.0041
.578	-.1855	-.1870	0.0014
.423	-.2048	-.1885	-.0164
.298	-.2009	-.1535	-.0474
.228	-.1792	-.1155	-.0637
.151	-.1241	-.1479	0.0238
.060	-.0131	-.2711	0.2581
.012	0.4051	-.3909	0.7960

Figure 69, Chordwise Pressure Distribution, Steady, Configuration 1



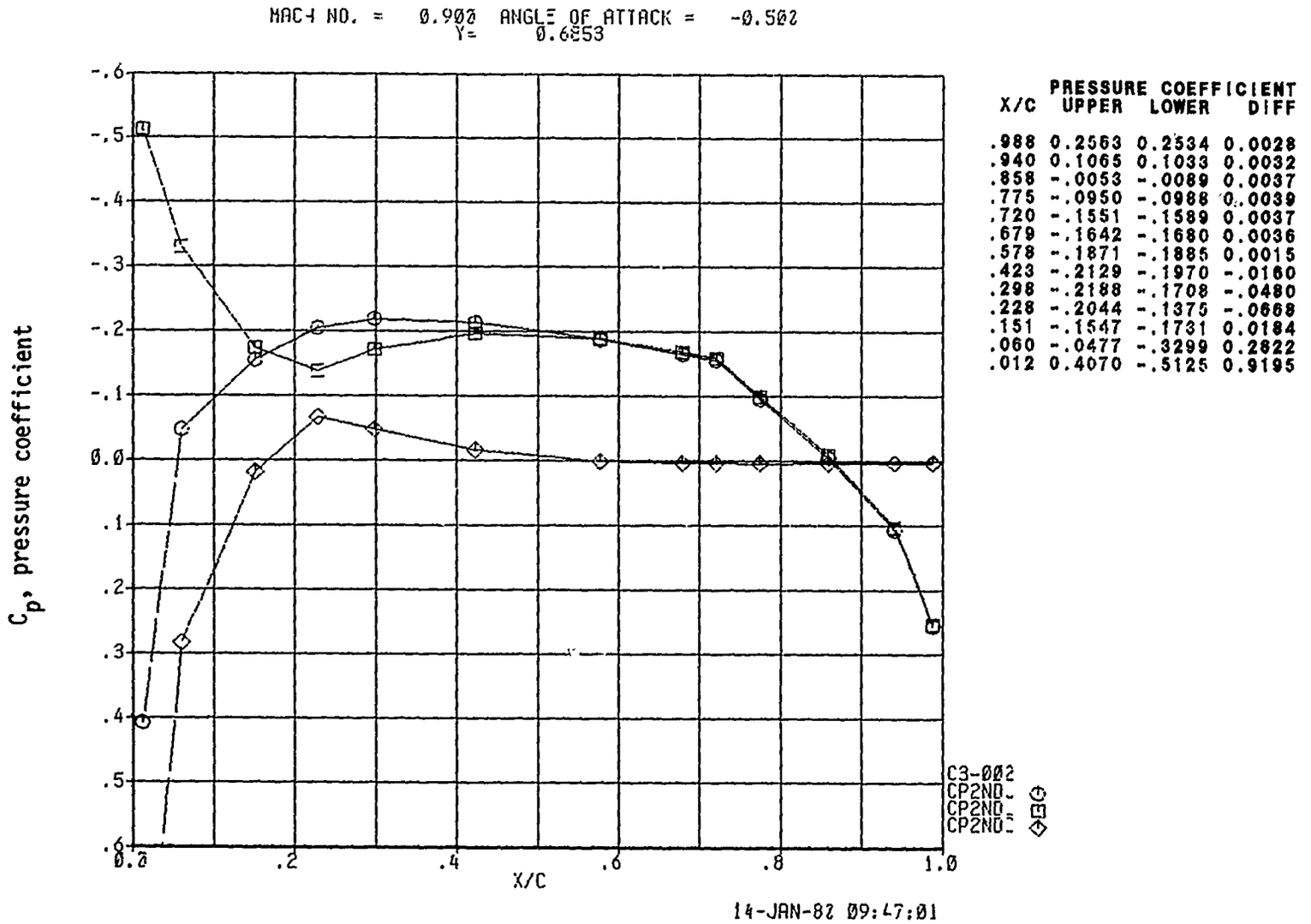
X/C	PRESSURE COEFFICIENT UPPER	LOWER	DIFF
.988	0.2542	0.2557	-.0015
.940	0.1033	0.1067	-.0034
.858	-.0102	-.0039	-.0063
.775	-.1015	-.0921	-.0094
.720	-.1626	-.1512	-.0115
.679	-.1726	-.1595	-.0132
.578	-.1981	-.1773	-.0208
.423	-.2289	-.1808	-.0481
.298	-.2395	-.1499	-.0897
.228	-.2284	-.1132	-.1153
.151	-.1863	-.1403	-.0460
.060	-.0984	-.2733	0.1749
.012	0.3150	-.3852	0.7002

Figure 70, Chordwise Pressure Distribution, Steady, Configuration 1



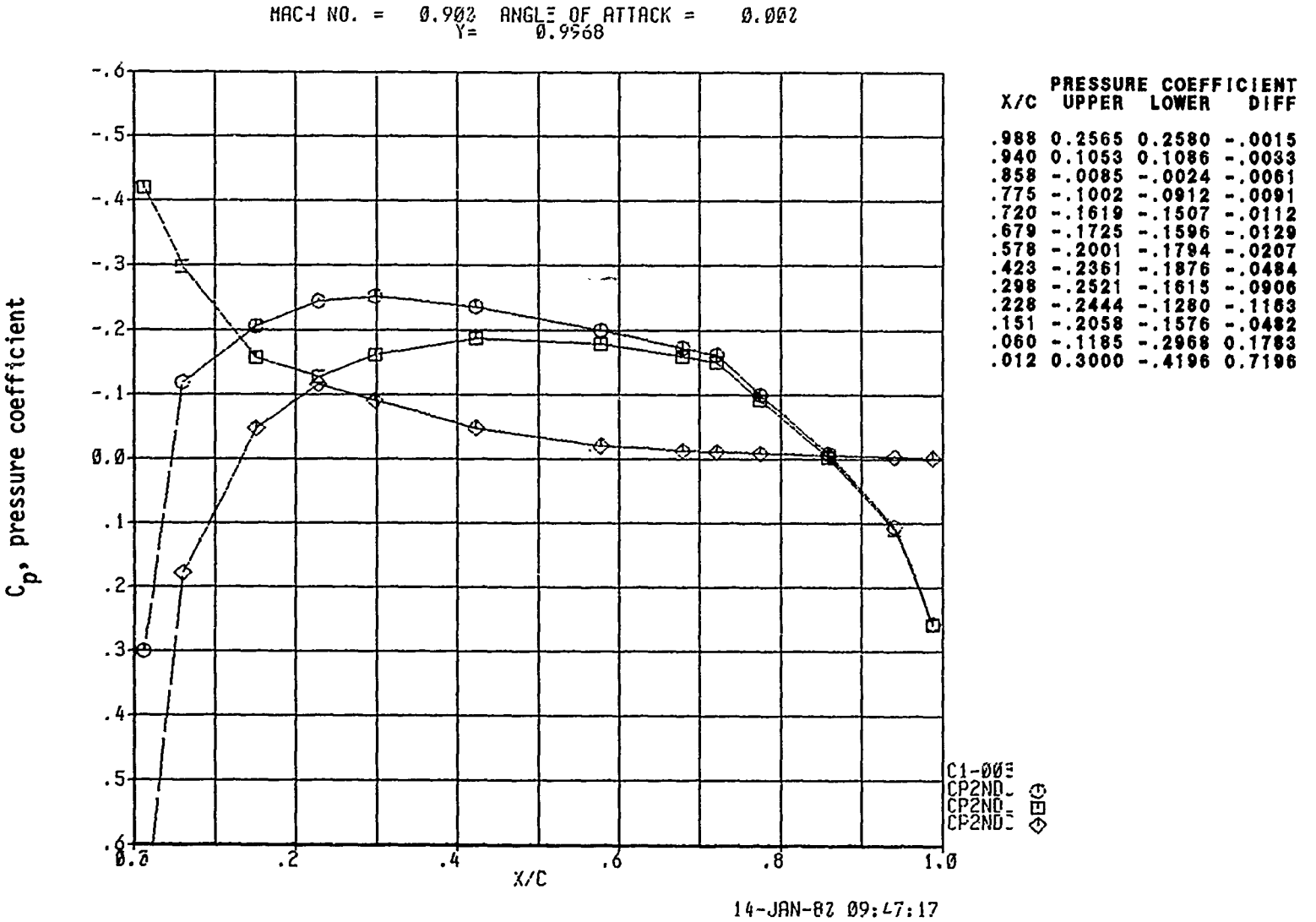
X/C	PRESSURE COEFFICIENT UPPER	LOWER	DIFF
.988	0.2519	0.2578	-.0059
.940	0.0999	0.1099	-.0101
.858	-.0152	0.0010	-.0162
.775	-.1082	-.0857	-.0225
.720	-.1703	-.1437	-.0266
.679	-.1811	-.1512	-.0300
.578	-.2092	-.1664	-.0430
.423	-.2452	-.1649	-.0804
.298	-.2606	-.1292	-.1314
.228	-.2527	-.0890	-.1637
.151	-.2183	-.1077	-.1106
.060	-.1501	-.2177	0.0676
.012	0.2187	-.2622	0.4808

Figure 71 , Chordwise Pressure Distribution, Steady, Configuration 1



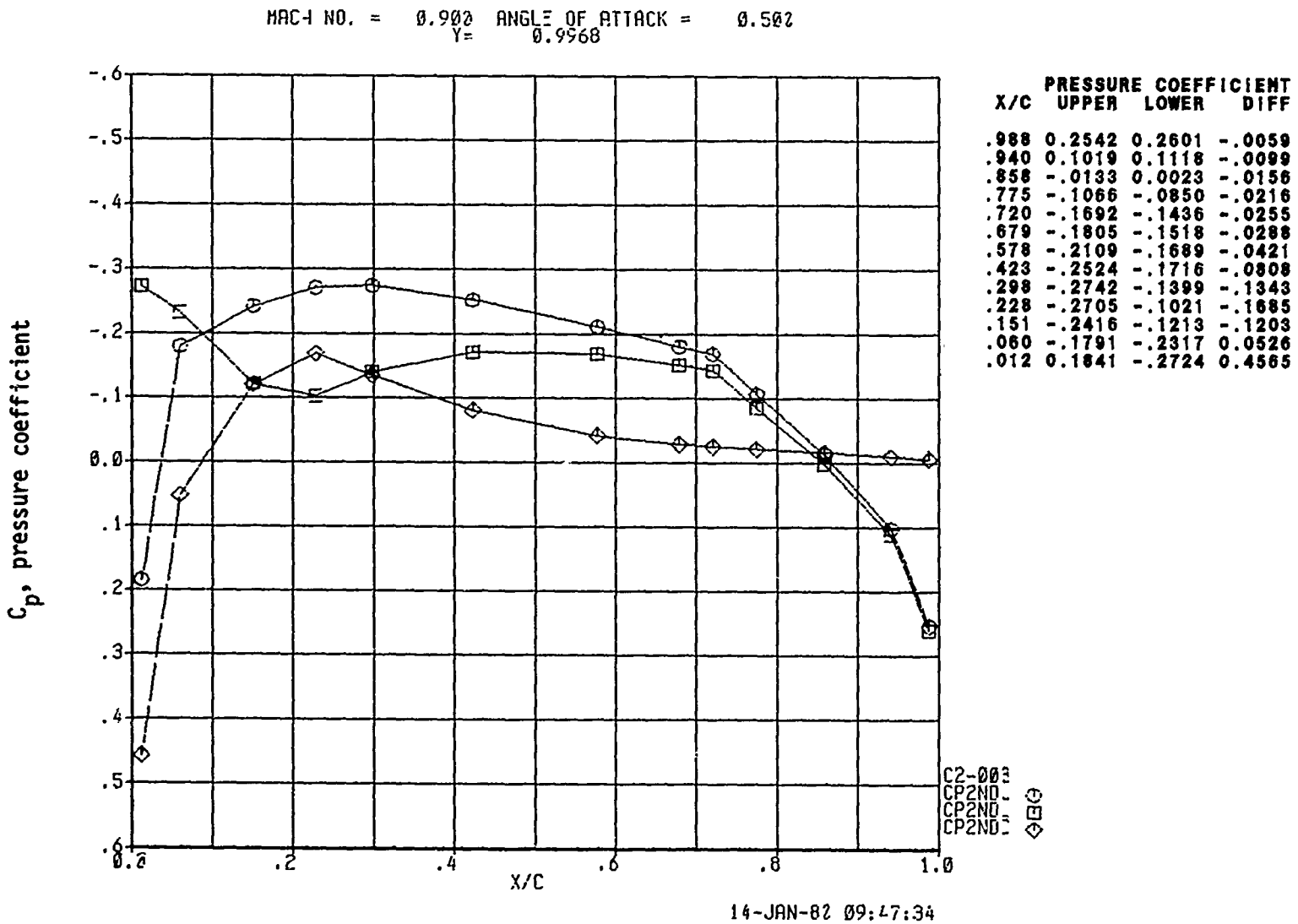
X/C	PRESSURE COEFFICIENT UPPER	LOWER	DIFF
.988	0.2563	0.2534	0.0028
.940	0.1065	0.1033	0.0032
.858	-.0053	-.0089	0.0037
.775	-.0950	-.0988	0.0039
.720	-.1551	-.1589	0.0037
.679	-.1642	-.1680	0.0036
.578	-.1871	-.1885	0.0015
.423	-.2129	-.1970	-.0160
.298	-.2188	-.1708	-.0480
.228	-.2044	-.1375	-.0668
.151	-.1547	-.1731	0.0184
.060	-.0477	-.3299	0.2822
.012	0.4070	-.5125	0.9195

Figure 72, Chordwise Pressure Distribution, Steady, Configuration 1



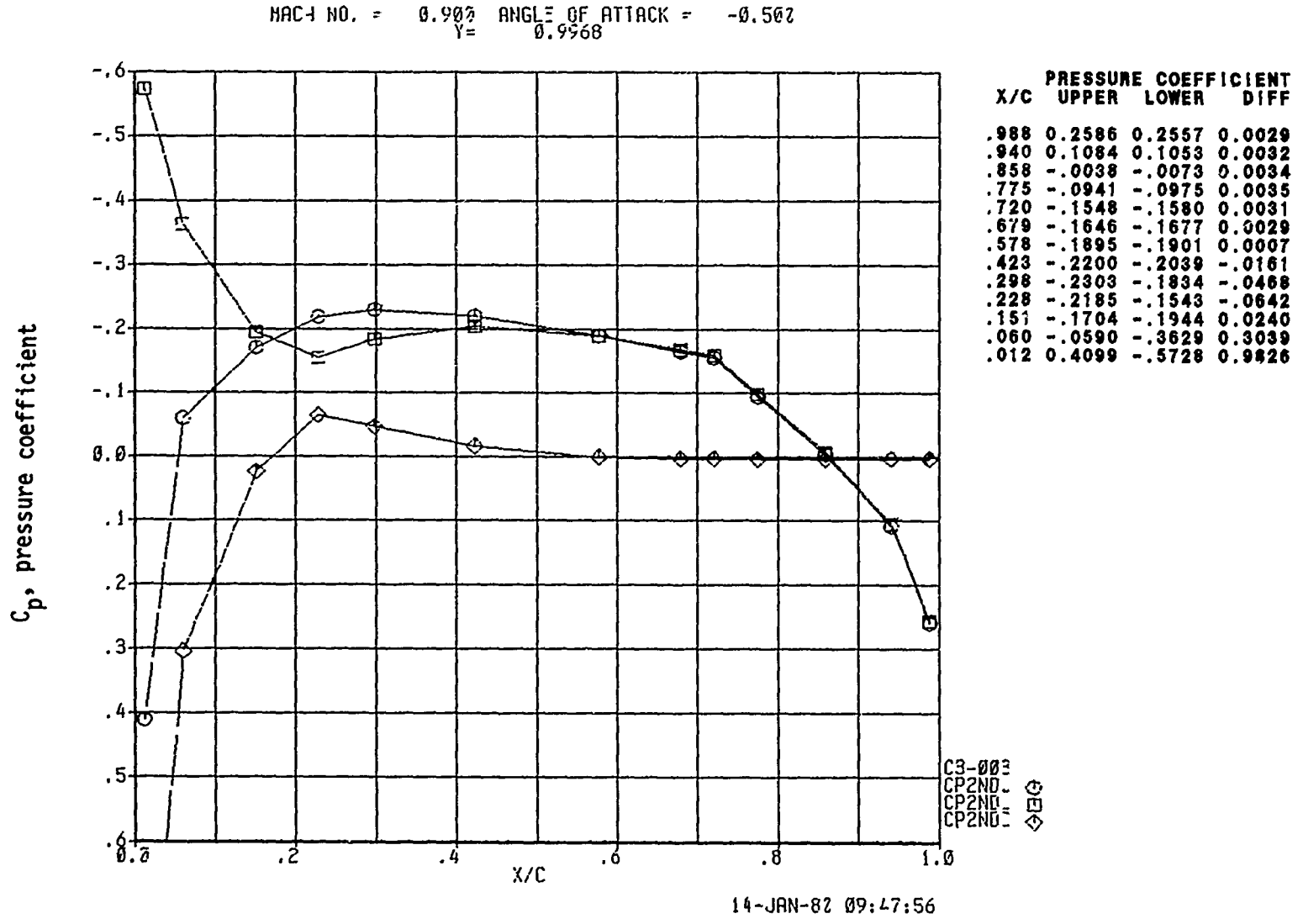
X/C	PRESSURE COEFFICIENT UPPER	LOWER	DIFF
.988	0.2565	0.2580	-.0015
.940	0.1053	0.1086	-.0033
.858	-.0085	-.0024	-.0061
.775	-.1002	-.0912	-.0091
.720	-.1619	-.1507	-.0112
.679	-.1725	-.1596	-.0129
.578	-.2001	-.1794	-.0207
.423	-.2361	-.1876	-.0484
.298	-.2521	-.1615	-.0906
.228	-.2444	-.1280	-.1163
.151	-.2058	-.1576	-.0482
.060	-.1185	-.2968	0.1783
.012	0.3000	-.4196	0.7196

Figure 73, Chordwise Pressure Distribution, Steady, Configuration 1



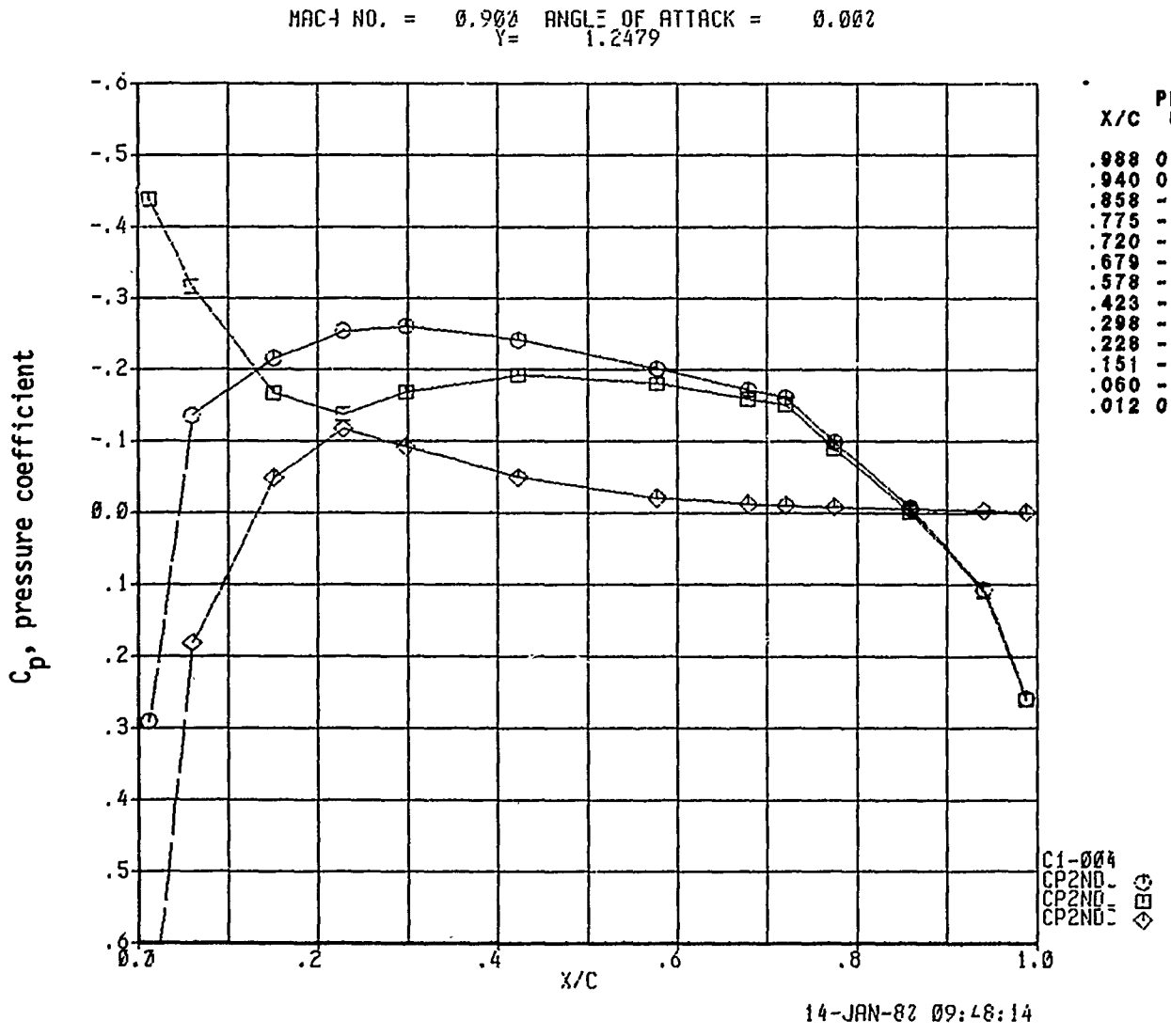
X/C	PRESSURE COEFFICIENT UPPER	LOWER	DIFF
.988	0.2542	0.2601	-.0059
.940	0.1019	0.1118	-.0099
.858	-.0133	0.0023	-.0156
.775	-.1066	-.0850	-.0216
.720	-.1692	-.1436	-.0255
.679	-.1805	-.1518	-.0288
.578	-.2109	-.1689	-.0421
.423	-.2524	-.1716	-.0808
.298	-.2742	-.1399	-.1343
.228	-.2705	-.1021	-.1685
.151	-.2416	-.1213	-.1203
.060	-.1791	-.2317	0.0526
.012	0.1841	-.2724	0.4565

Figure 74, Chordwise Pressure Distribution, Steady, Configuration 1



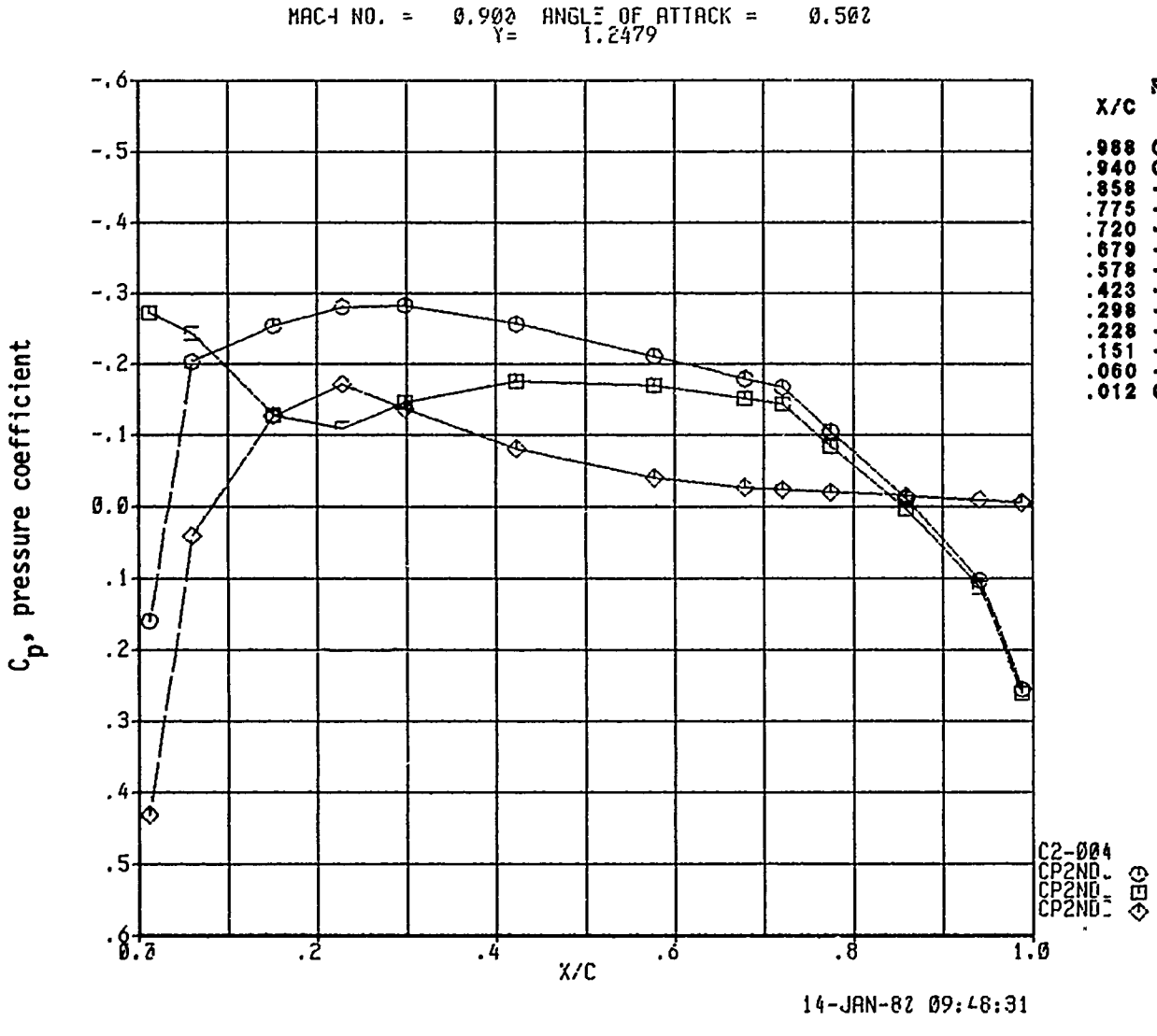
X/C	PRESSURE COEFFICIENT UPPER	LOWER	DIFF
.988	0.2586	0.2557	0.0029
.940	0.1084	0.1053	0.0032
.858	-.0038	-.0073	0.0034
.775	-.0941	-.0975	0.0035
.720	-.1548	-.1580	0.0031
.679	-.1646	-.1677	0.0029
.578	-.1895	-.1901	0.0007
.423	-.2200	-.2039	-.0161
.298	-.2303	-.1834	-.0468
.228	-.2185	-.1543	-.0642
.151	-.1704	-.1944	0.0240
.060	-.0590	-.3629	0.3039
.012	0.4099	-.5728	0.9826

Figure 75 , Chordwise Pressure Distribution, Steady, Configuration 1



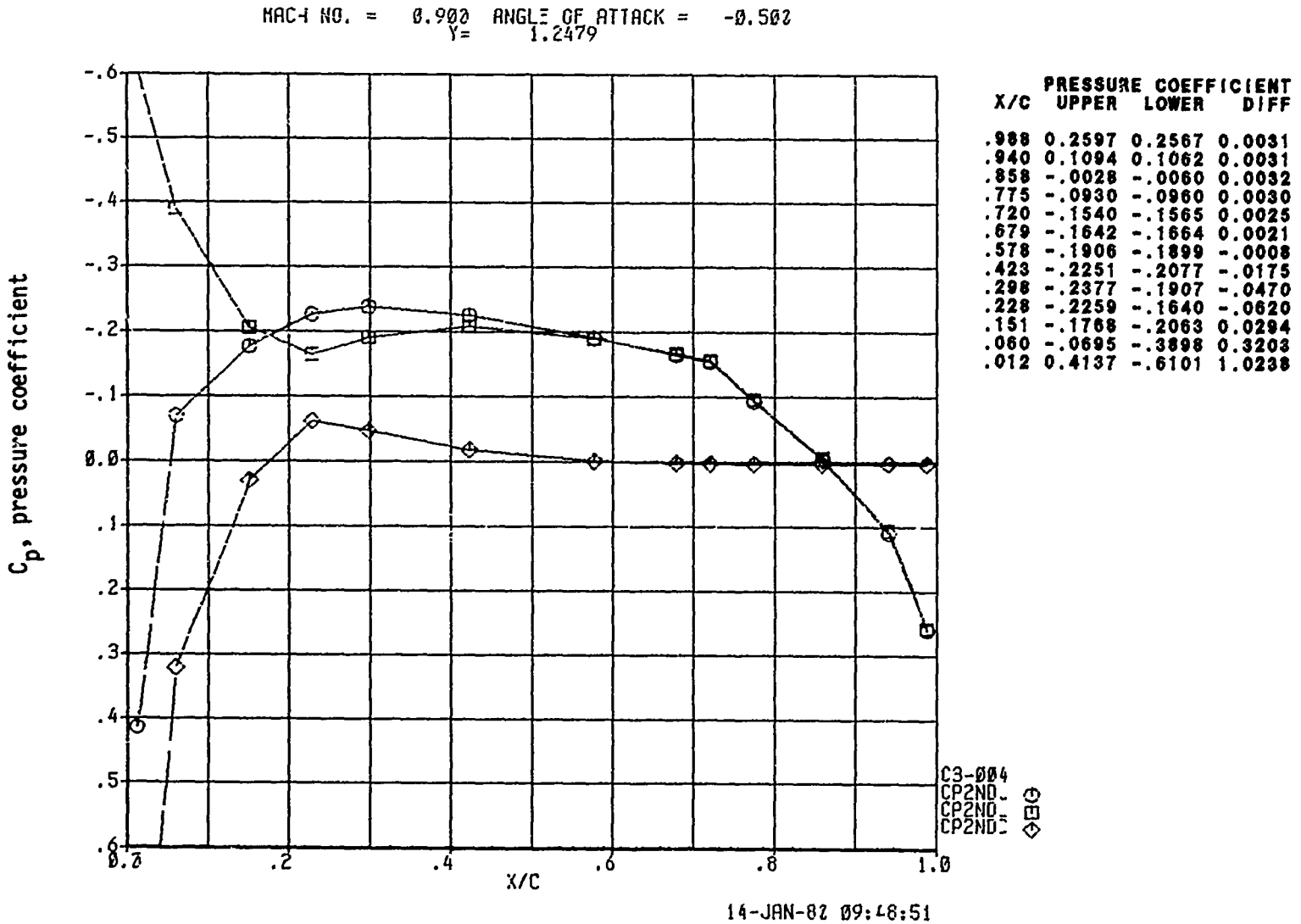
X/C	PRESSURE COEFFICIENT UPPER	LOWER	DIFF
.988	0.2576	0.2590	-.0014
.940	0.1064	0.1095	-.0031
.858	-.0071	-.0014	-.0058
.775	-.0987	-.0901	-.0085
.720	-.1605	-.1498	-.0106
.679	-.1714	-.1590	-.0124
.578	-.2004	-.1798	-.0207
.423	-.2409	-.1917	-.0491
.298	-.2601	-.1683	-.0917
.228	-.2532	-.1363	-.1169
.151	-.2152	-.1665	-.0487
.060	-.1355	-.3162	0.1806
.012	0.2904	-.4373	0.7277

Figure 76 , Chordwise Pressure Distribution, Steady, Configuration 1



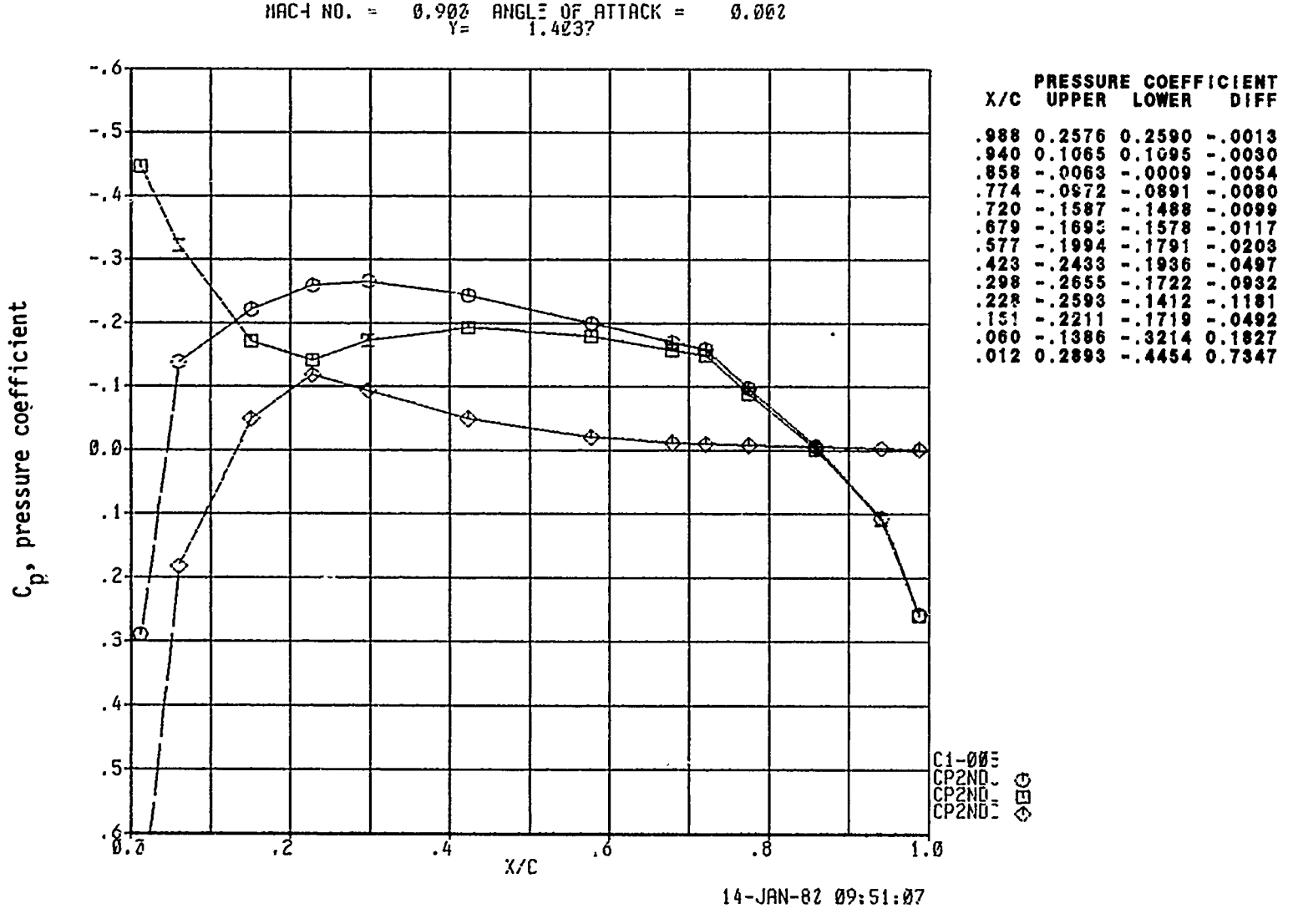
X/C	PRESSURE COEFFICIENT UPPER	LOWER	DIFF
.988	0.2553	0.2611	-.0058
.940	0.1030	0.1126	-.0095
.858	-.0117	0.0030	-.0147
.775	-.1046	-.0844	-.0202
.720	-.1672	-.1434	-.0239
.679	-.1788	-.1518	-.0270
.578	-.2105	-.1700	-.0405
.423	-.2569	-.1761	-.0807
.298	-.2827	-.1462	-.1364
.228	-.2808	-.1091	-.1717
.151	-.2540	-.1272	-.1267
.060	-.2031	-.2440	0.0409
.012	0.1595	-.2719	0.4315

Figure 77, Chordwise Pressure Distribution, Steady, Configuration 1



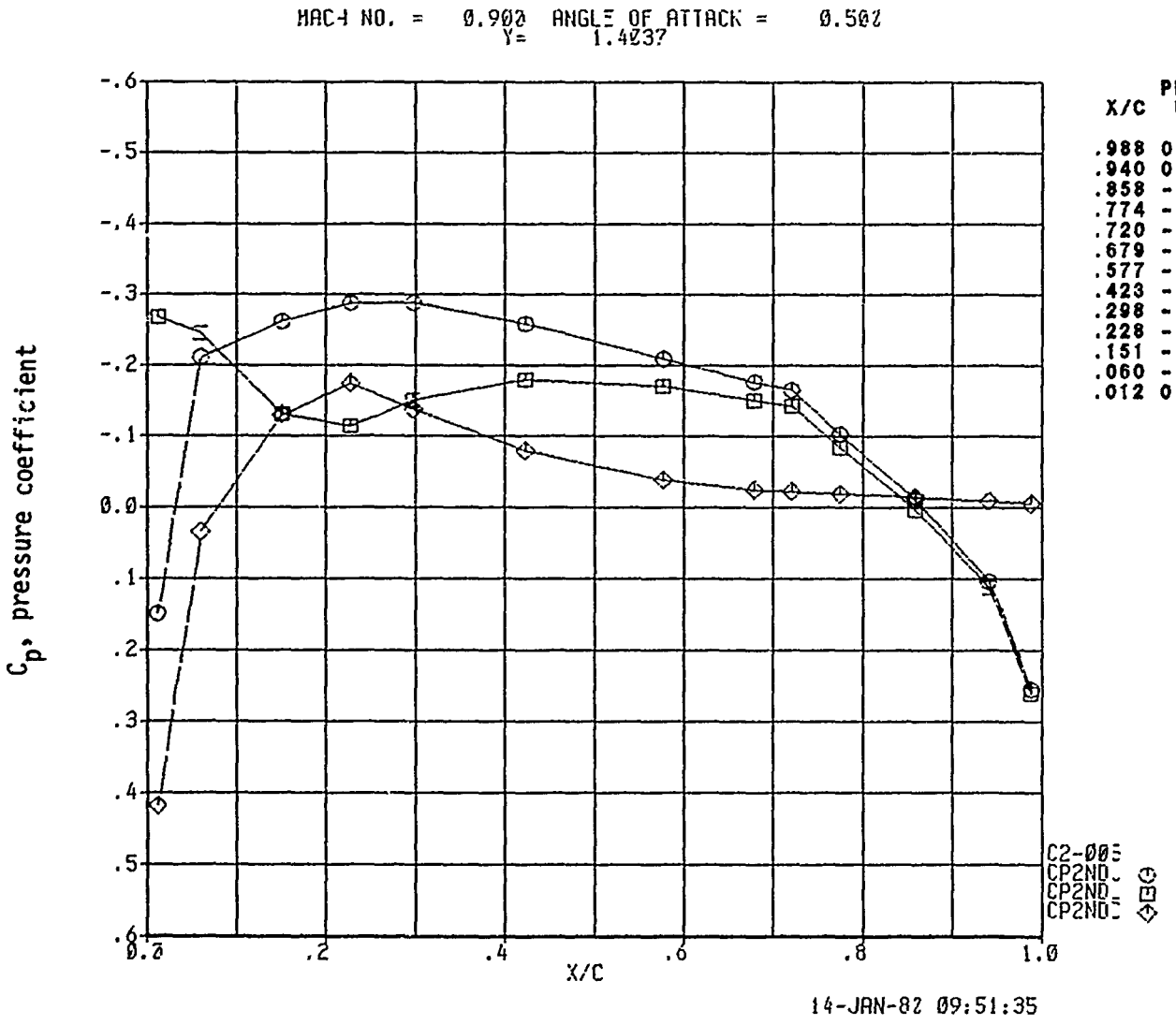
X/C	PRESSURE COEFFICIENT UPPER	LOWER	DIFF
.988	0.2597	0.2567	0.0031
.940	0.1094	0.1062	0.0031
.858	-.0028	-.0060	0.0032
.775	-.0930	-.0960	0.0030
.720	-.1540	-.1565	0.0025
.679	-.1642	-.1664	0.0021
.578	-.1906	-.1899	-.0008
.423	-.2251	-.2077	-.0175
.298	-.2377	-.1907	-.0470
.228	-.2259	-.1640	-.0620
.151	-.1768	-.2063	0.0294
.060	-.0695	-.3898	0.3203
.012	0.4137	-.6101	1.0238

Figure 78 , Chordwise Pressure Distribution, Steady, Configuration 1



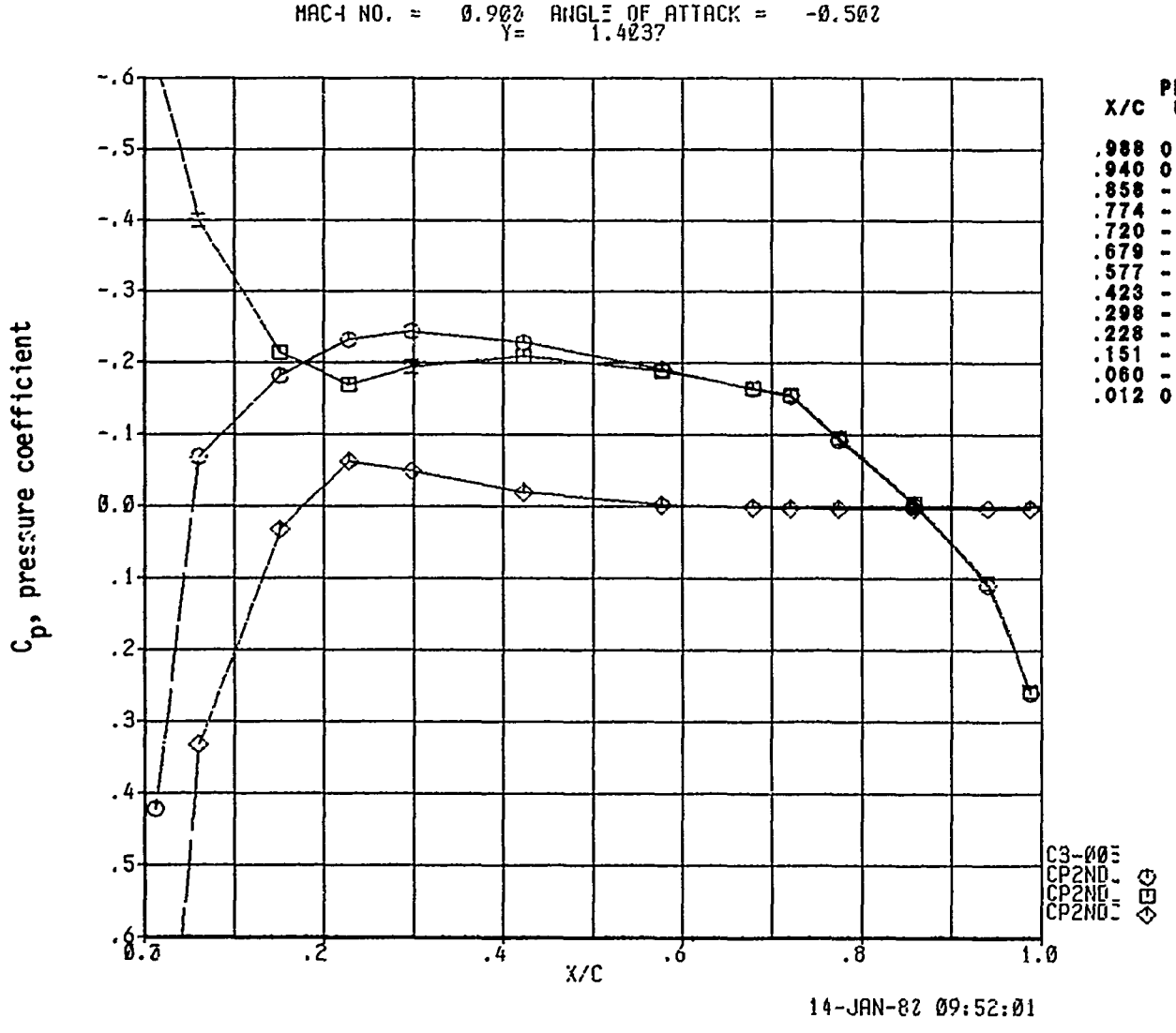
X/C	PRESSURE COEFFICIENT UPPER	LOWER	DIFF
.988	0.2576	0.2590	-.0013
.940	0.1065	0.1095	-.0030
.858	-.0063	-.0009	-.0054
.774	-.0972	-.0891	-.0080
.720	-.1587	-.1488	-.0099
.679	-.1693	-.1578	-.0117
.577	-.1994	-.1791	-.0203
.423	-.2433	-.1936	-.0497
.298	-.2655	-.1722	-.0932
.228	-.2593	-.1412	-.1181
.151	-.2211	-.1719	-.0492
.060	-.1386	-.3214	0.1827
.012	0.2893	-.4454	0.7347

Figure 79, Chordwise Pressure Distribution, Steady, Configuration 1



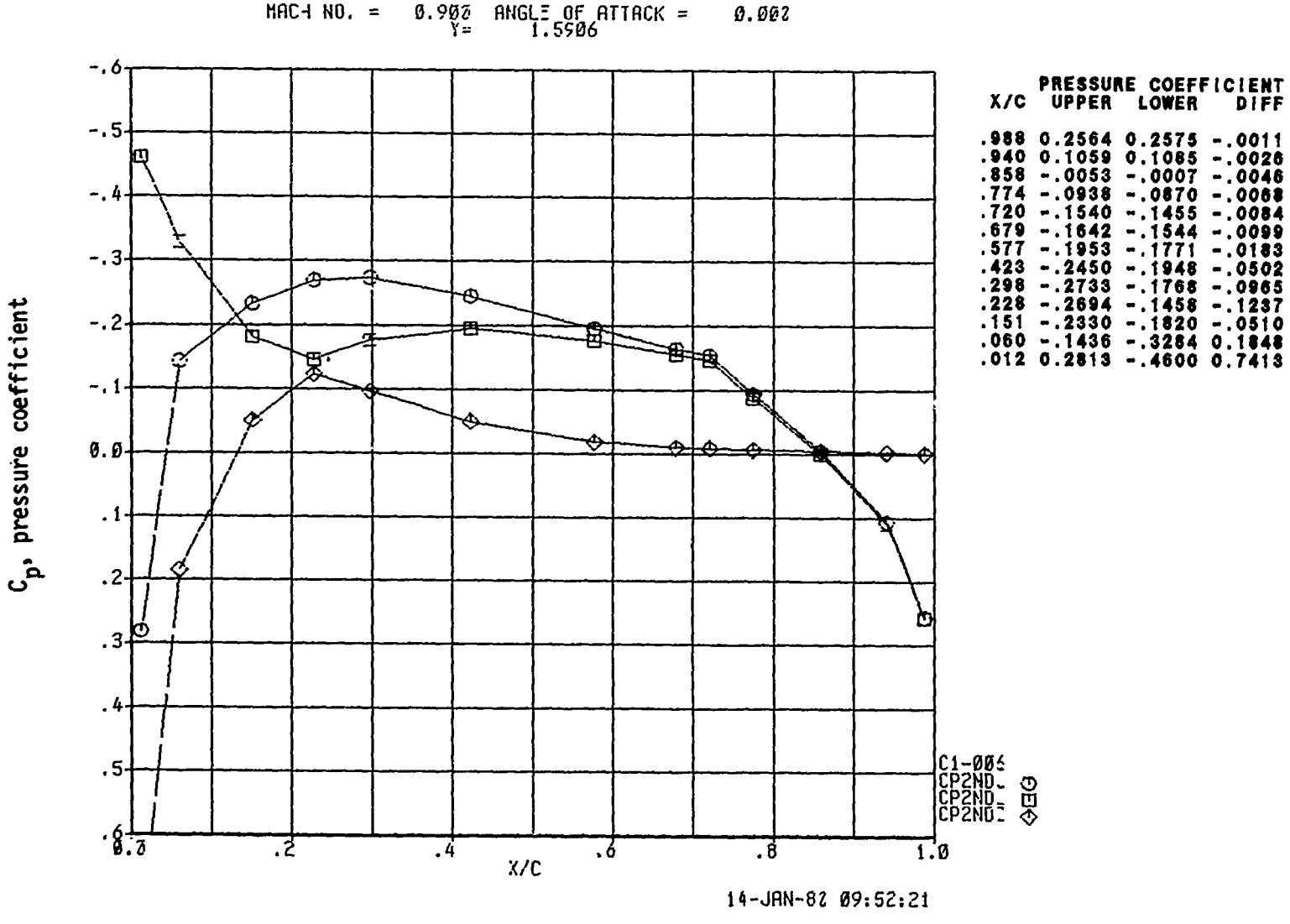
X/C	PRESSURE COEFFICIENT UPPER	LOWER	DIFF
.988	0.2553	0.2611	-.0057
.940	0.1034	0.1125	-.0091
.858	-.0107	0.0032	-.0139
.774	-.1026	-.0839	-.0189
.720	-.1649	-.1428	-.0222
.679	-.1763	-.1512	-.0250
.577	-.2087	-.1701	-.0386
.423	-.2586	-.1786	-.0800
.298	-.2879	-.1504	-.1375
.228	-.2873	-.1135	-.1737
.151	-.2617	-.1311	-.1305
.060	-.2105	-.2446	0.0341
.012	0.1487	-.2684	0.4171

Figure 80 , Chordwise Pressure Distribution, Steady, Configuration 1



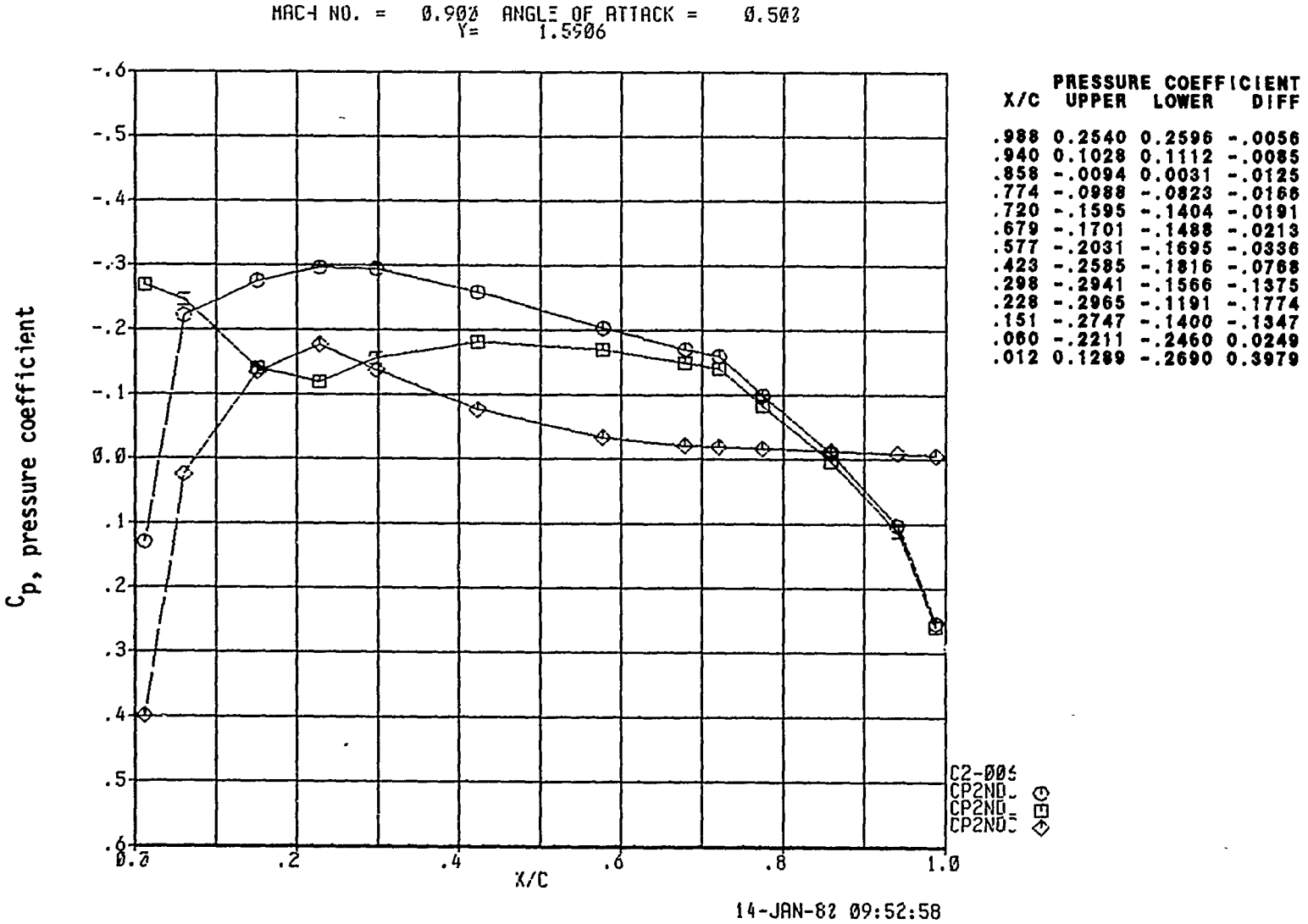
X/C	PRESSURE COEFFICIENT UPPER	LOWER	DIFF
.988	0.2597	0.2566	0.0032
.940	0.1095	0.1063	0.0032
.858	-.0022	-.0053	0.0031
.774	-.0919	-.0947	0.0028
.720	-.1528	-.1550	0.0023
.679	-.1630	-.1646	0.0017
.577	-.1903	-.1885	-.0019
.423	-.2283	-.2088	-.0194
.298	-.2434	-.1944	-.0489
.228	-.2316	-.1692	-.0625
.151	-.1812	-.2134	0.0322
.060	-.0683	-.3997	0.3314
.012	0.4214	-.6309	1.0523

Figure 81 , Chordwise Pressure Distribution, Steady, Configuration 1



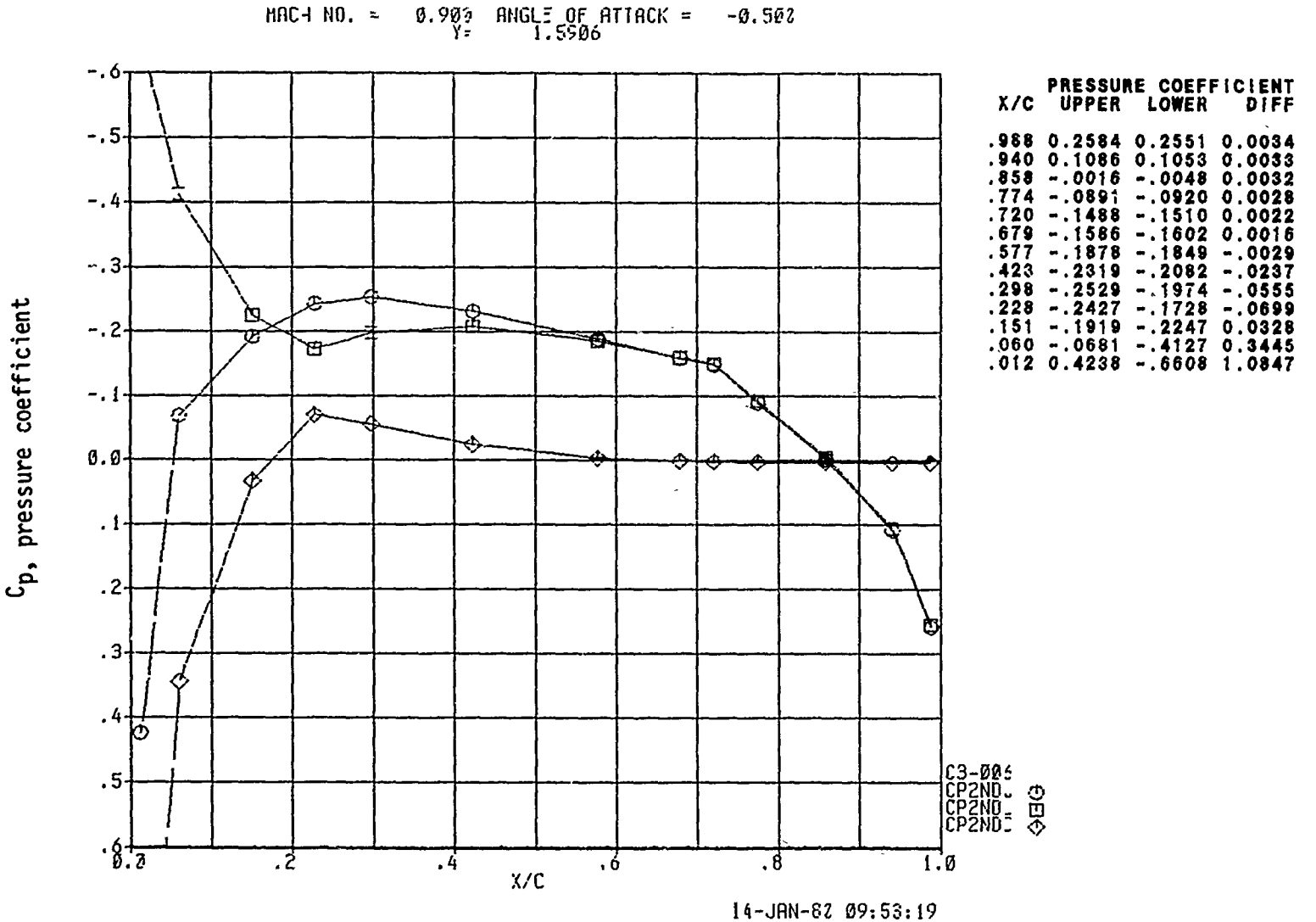
X/C	PRESSURE COEFFICIENT UPPER	LOWER	DIFF
.988	0.2564	0.2575	-.0011
.940	0.1059	0.1085	-.0026
.858	-.0053	-.0007	-.0046
.774	-.0938	-.0870	-.0068
.720	-.1540	-.1455	-.0084
.679	-.1642	-.1544	-.0099
.577	-.1953	-.1771	-.0183
.423	-.2450	-.1948	-.0502
.298	-.2733	-.1768	-.0965
.228	-.2694	-.1456	-.1237
.151	-.2330	-.1820	-.0510
.060	-.1436	-.3284	0.1848
.012	0.2813	-.4600	0.7413

Figure 82 , Chordwise Pressure Distribution, Steady, Configuration 1



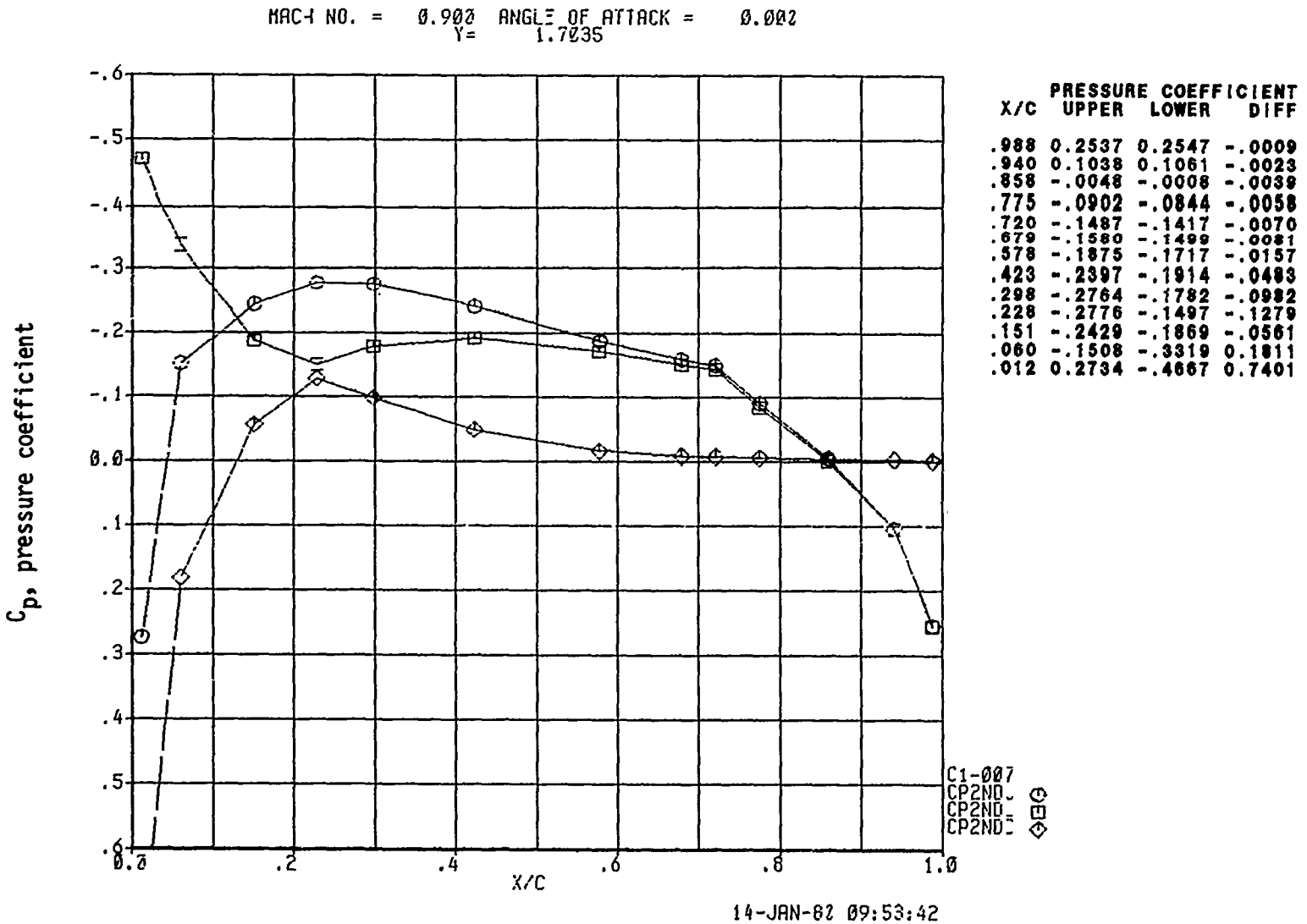
X/C	PRESSURE COEFFICIENT UPPER	LOWER	DIFF
.988	0.2540	0.2596	-.0056
.940	0.1028	0.1112	-.0085
.858	-.0094	0.0031	-.0125
.774	-.0988	-.0823	-.0166
.720	-.1595	-.1404	-.0191
.679	-.1701	-.1488	-.0213
.577	-.2031	-.1695	-.0336
.423	-.2585	-.1816	-.0768
.298	-.2941	-.1566	-.1375
.228	-.2965	-.1191	-.1774
.151	-.2747	-.1400	-.1347
.060	-.2211	-.2460	0.0249
.012	0.1289	-.2690	0.3979

Figure 83 , Chordwise Pressure Distribution, Steady, Configuration 1



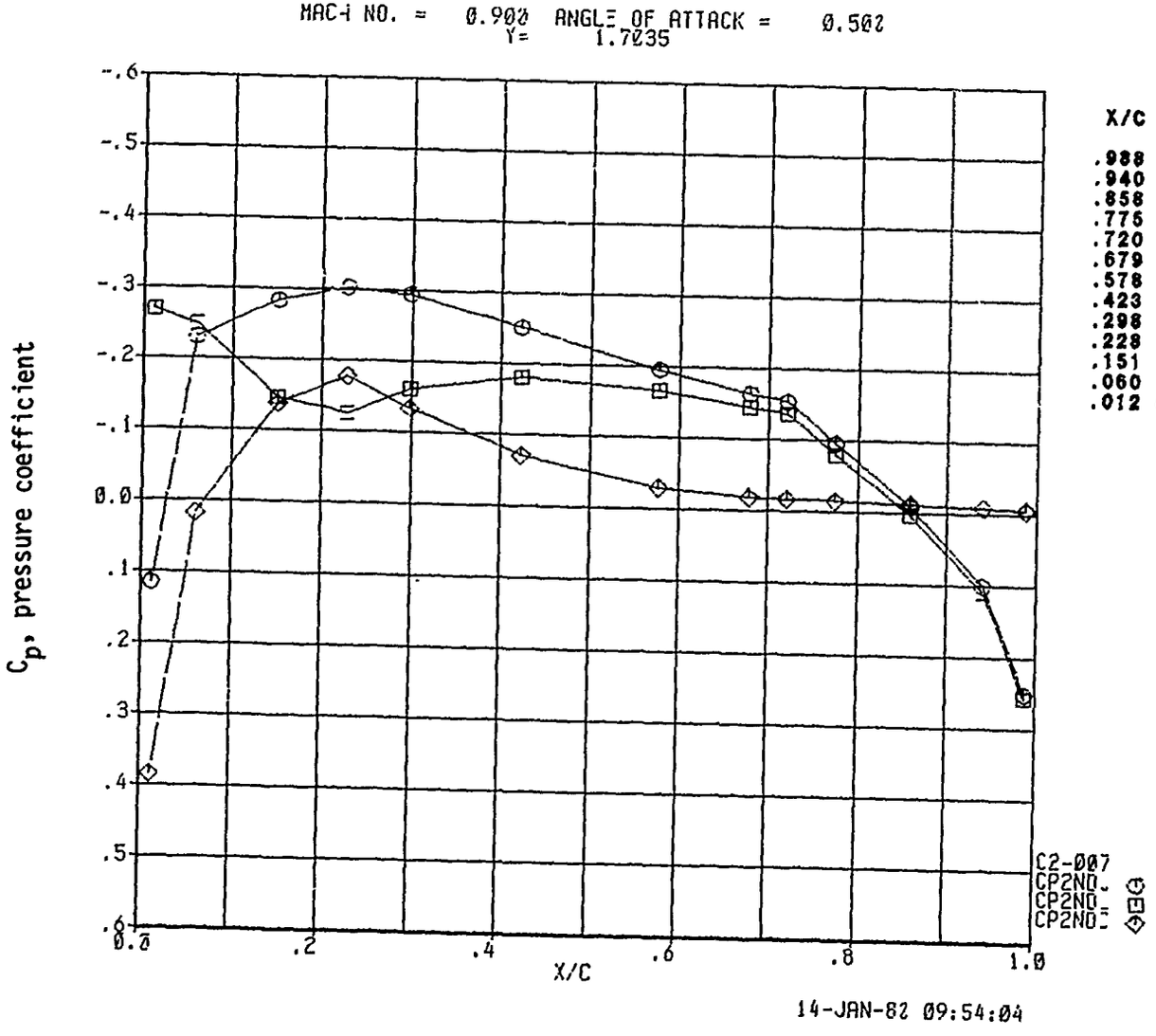
X/C	PRESSURE COEFFICIENT UPPER	LOWER	DIFF
.988	0.2584	0.2551	0.0034
.940	0.1086	0.1053	0.0033
.858	-.0016	-.0048	0.0032
.774	-.0891	-.0920	0.0028
.720	-.1488	-.1510	0.0022
.679	-.1586	-.1602	0.0016
.577	-.1878	-.1849	-.0029
.423	-.2319	-.2082	-.0237
.298	-.2529	-.1974	-.0555
.228	-.2427	-.1728	-.0699
.151	-.1919	-.2247	0.0328
.060	-.0681	-.4127	0.3445
.012	0.4238	-.6608	1.0847

Figure 84, Chordwise Pressure Distribution, Steady, Configuration 1



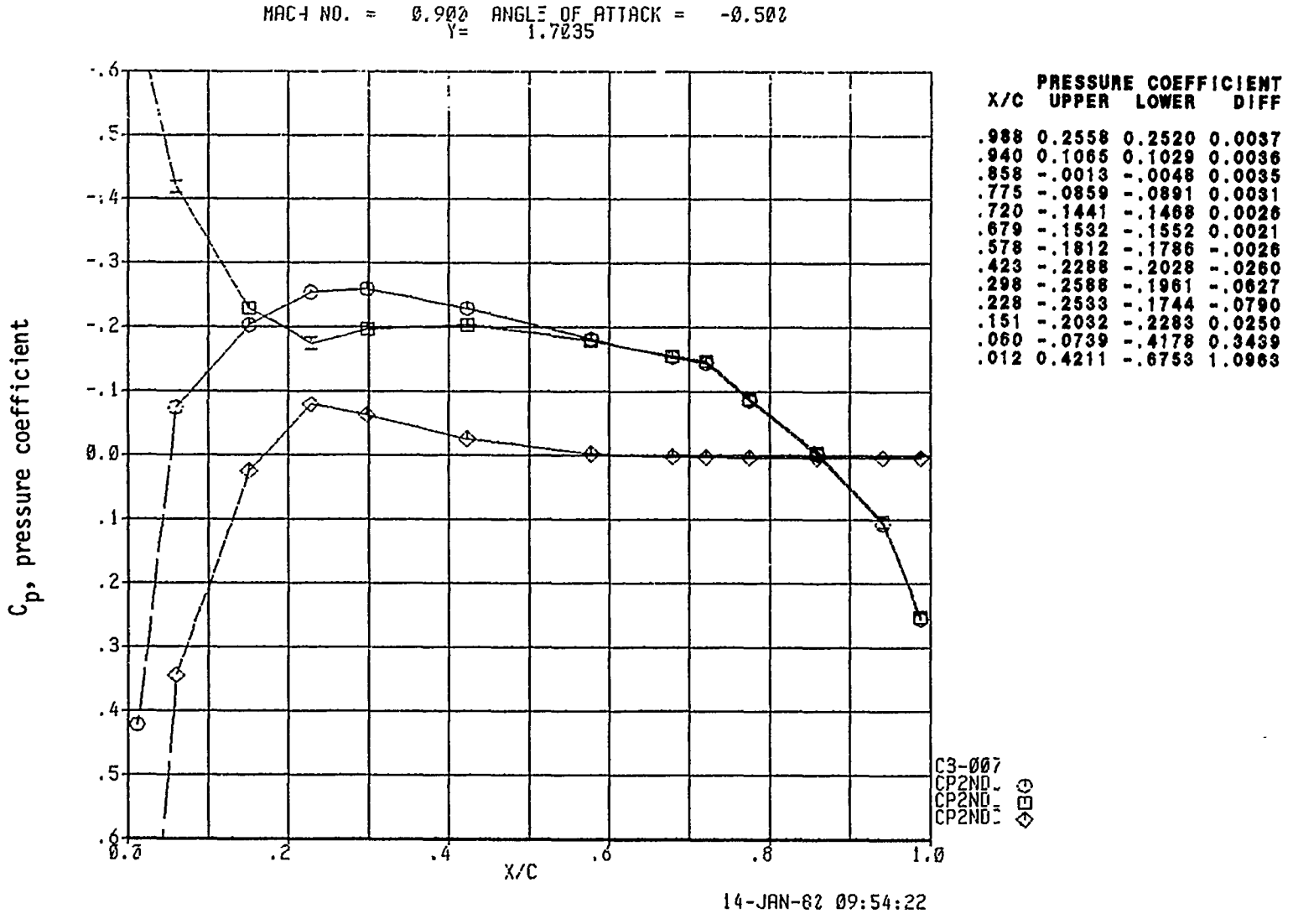
X/C	PRESSURE COEFFICIENT UPPER	LOWER	DIFF
.988	0.2537	0.2547	-.0009
.940	0.1038	0.1061	-.0023
.858	-.0048	-.0008	-.0039
.775	-.0902	-.0844	-.0058
.720	-.1487	-.1417	-.0070
.679	-.1580	-.1499	-.0081
.578	-.1875	-.1717	-.0157
.423	-.2397	-.1914	-.0483
.298	-.2764	-.1782	-.0982
.228	-.2776	-.1497	-.1279
.151	-.2429	-.1869	-.0561
.060	-.1508	-.3319	0.1811
.012	0.2734	-.4667	0.7401

Figure 85, Chordwise Pressure Distribution, Steady, Configuration 1



X/C	PRESSURE COEFFICIENT UPPER	LOWER	DIFF
.988	0.2512	0.2568	-.0057
.940	0.1007	0.1088	-.0081
.858	-.0087	0.0028	-.0115
.775	-.0948	-.0800	-.0148
.720	-.1537	-.1370	-.0167
.679	-.1633	-.1450	-.0183
.578	-.1942	-.1654	-.0288
.423	-.2512	-.1805	-.0707
.298	-.2945	-.1607	-.1337
.228	-.3024	-.1254	-.1770
.151	-.2834	-.1462	-.1372
.060	-.2297	-.2480	0.0182
.012	0.1151	-.2687	0.3839

Figure 86, Chordwise Pressure Distribution, Steady, Configuration 1



X/C	PRESSURE COEFFICIENT UPPER	LOWER	DIFF
.988	0.2558	0.2520	0.0037
.940	0.1065	0.1029	0.0036
.858	-.0013	-.0048	0.0035
.775	-.0859	-.0891	0.0031
.720	-.1441	-.1468	0.0026
.679	-.1532	-.1552	0.0021
.578	-.1812	-.1786	-.0026
.423	-.2288	-.2028	-.0260
.298	-.2588	-.1961	-.0627
.228	-.2533	-.1744	-.0790
.151	-.2032	-.2283	0.0250
.060	-.0739	-.4178	0.3439
.012	0.4211	-.6753	1.0963

Figure 87, Chordwise Pressure Distribution, Steady, Configuration 1

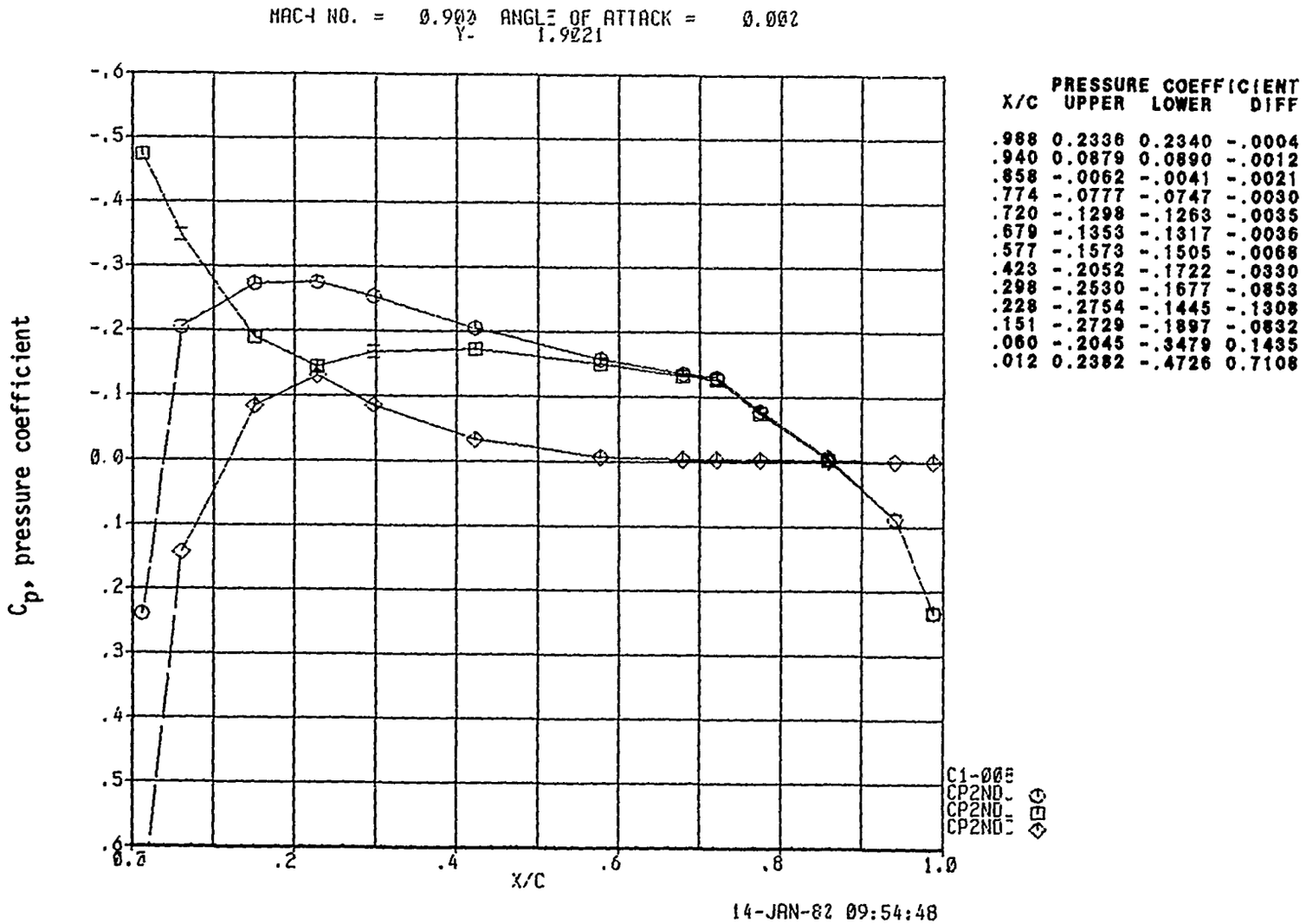
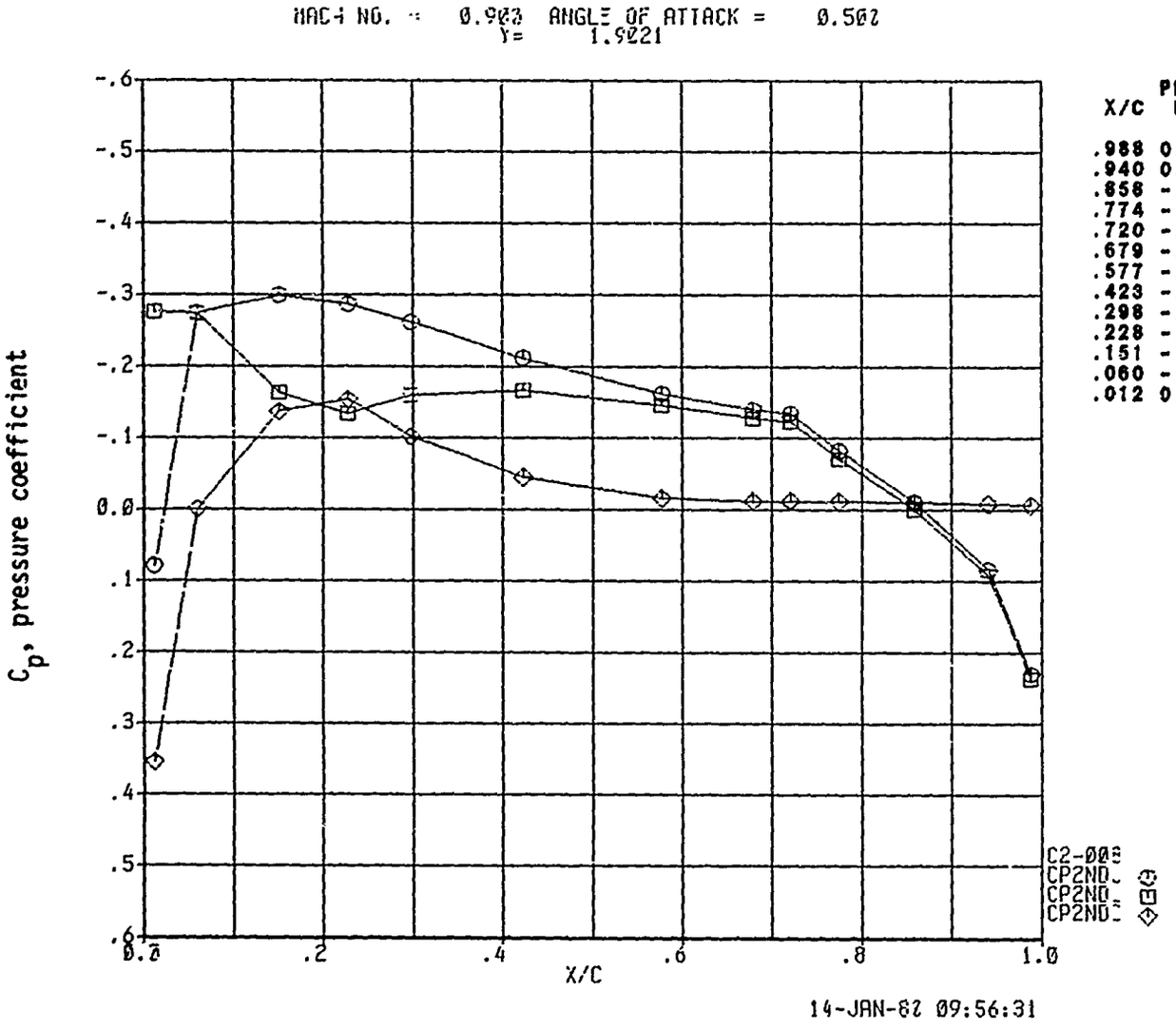
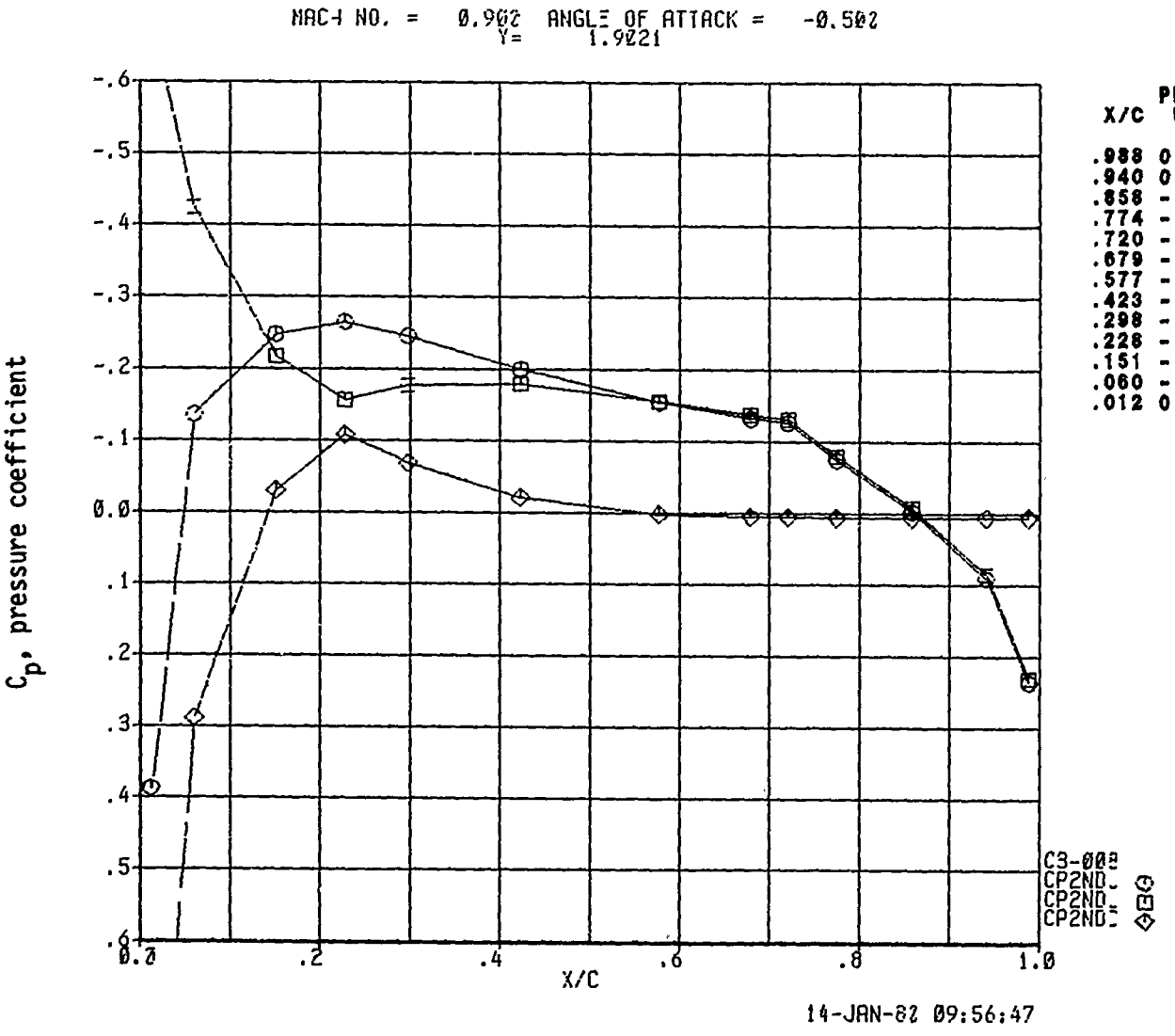


Figure 88, Chordwise Pressure Distribution, Steady, Configuration 1



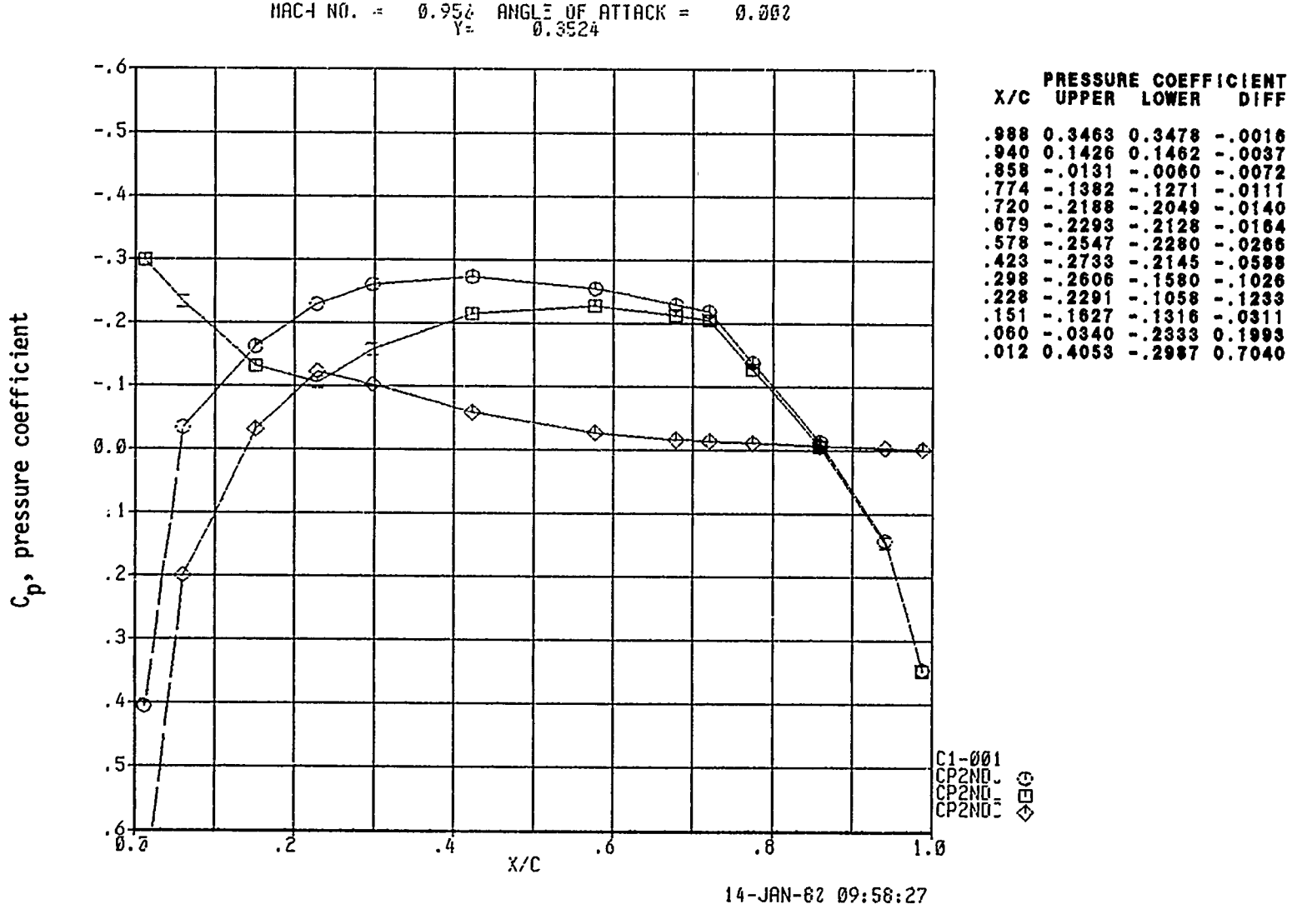
X/C	PRESSURE COEFFICIENT UPPER	LOWER	DIFF
.988	0.2300	0.2366	-.0066
.940	0.0840	0.0920	-.0080
.858	-.0106	-.0007	-.0099
.774	-.0824	-.0709	-.0115
.720	-.1345	-.1225	-.0120
.679	-.1400	-.1279	-.0121
.577	-.1622	-.1464	-.0158
.423	-.2115	-.1666	-.0449
.298	-.2616	-.1596	-.1019
.228	-.2869	-.1333	-.1536
.151	-.2991	-.1630	-.1362
.060	-.2743	-.2735	-.0008
.012	0.0790	-.2751	0.3541

Figure 89, Chordwise Pressure Distribution, Steady, Configuration 1



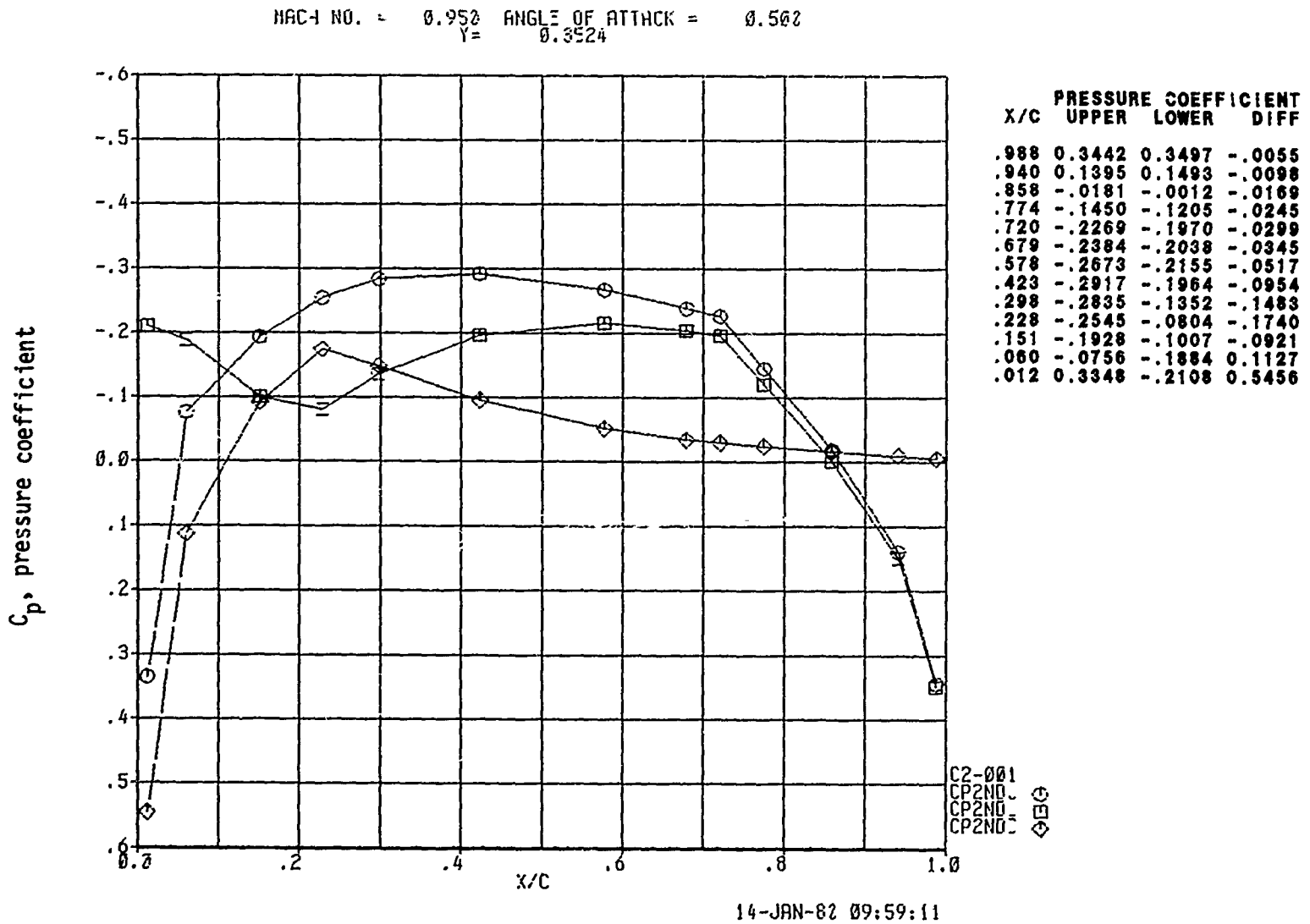
X/C	PRESSURE COEFFICIENT UPPER	LOWER	DIFF
.988	0.2360	0.2303	0.0057
.940	0.0906	0.0850	0.0057
.858	-.0029	-.0087	0.0057
.774	-.0742	-.0796	0.0054
.720	-.1262	-.1312	0.0050
.679	-.1317	-.1367	0.0049
.577	-.1535	-.1557	0.0022
.423	-.1999	-.1788	-.0211
.298	-.2452	-.1767	-.0686
.228	-.2647	-.1566	-.1081
.151	-.2476	-.2174	-.0302
.060	-.1366	-.4243	0.2878
.012	0.3866	-.6809	1.0675

Figure 90, Chordwise Pressure Distribution, Steady, Configuration 1



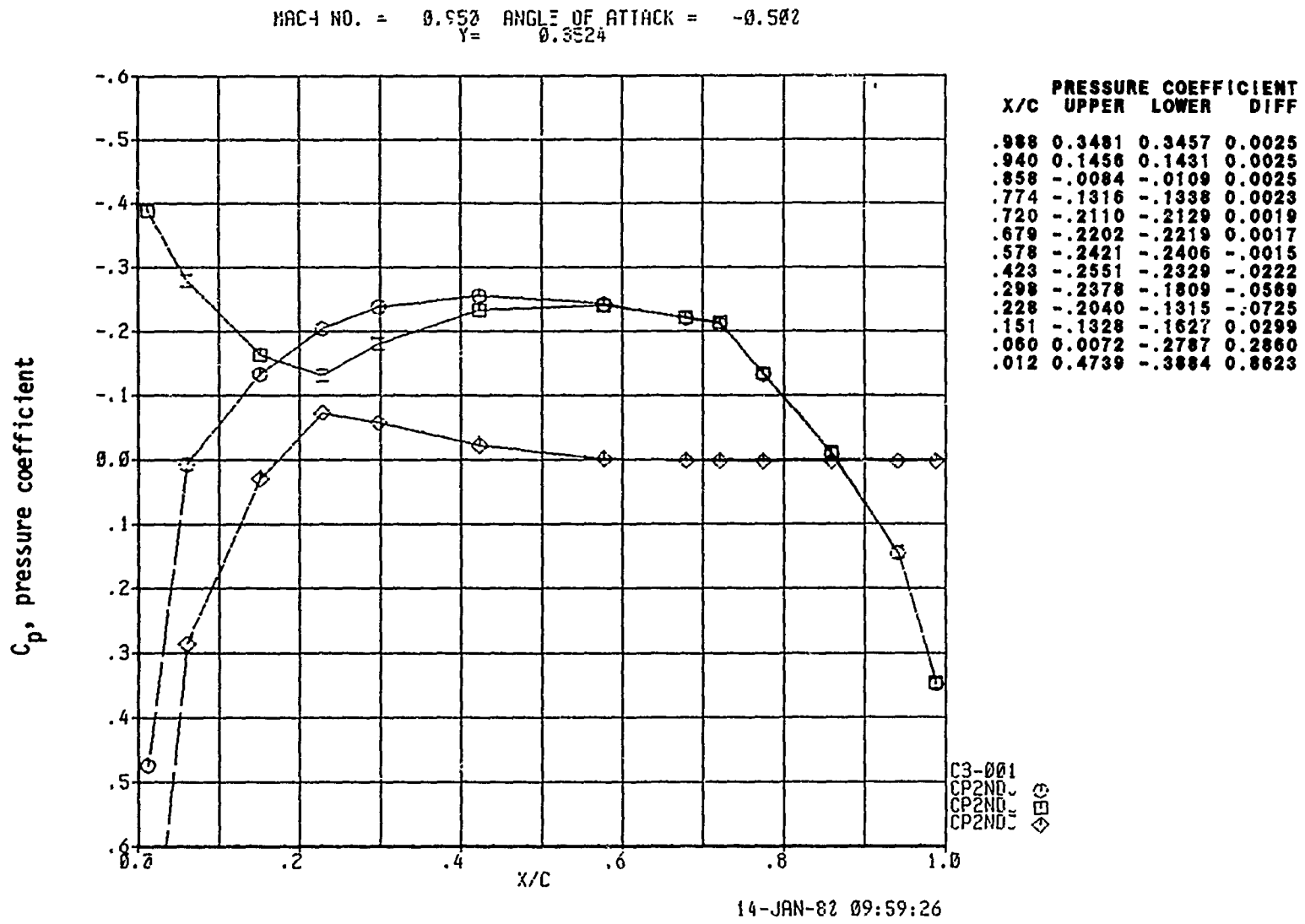
X/C	PRESSURE COEFFICIENT UPPER	LOWER	DIFF
.988	0.3463	0.3478	-.0016
.940	0.1426	0.1462	-.0037
.858	-.0131	-.0060	-.0072
.774	-.1382	-.1271	-.0111
.720	-.2188	-.2049	-.0140
.679	-.2293	-.2128	-.0164
.578	-.2547	-.2280	-.0266
.423	-.2733	-.2145	-.0588
.298	-.2606	-.1580	-.1026
.228	-.2291	-.1058	-.1233
.151	-.1627	-.1316	-.0311
.060	-.0340	-.2333	0.1993
.012	0.4053	-.2987	0.7040

Figure 91, Chordwise Pressure Distribution, Steady, Configuration 1



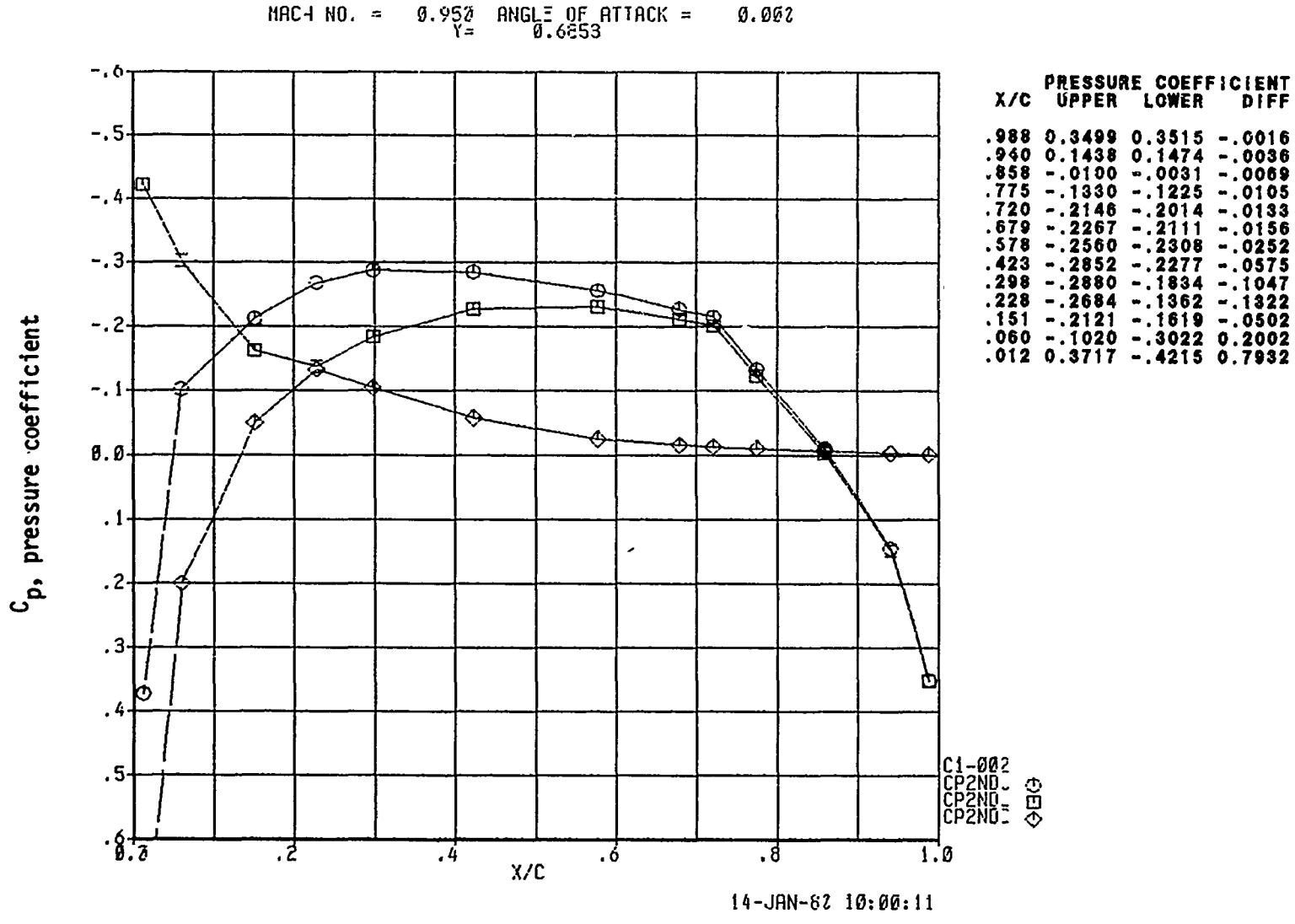
X/C	PRESSURE COEFFICIENT UPPER	LOWER	DIFF
.988	0.3442	0.3497	-.0055
.940	0.1395	0.1493	-.0098
.858	-.0181	-.0012	-.0169
.774	-.1450	-.1205	-.0245
.720	-.2269	-.1970	-.0299
.679	-.2384	-.2038	-.0345
.578	-.2673	-.2155	-.0517
.423	-.2917	-.1964	-.0954
.298	-.2835	-.1352	-.1483
.228	-.2545	-.0804	-.1740
.151	-.1928	-.1007	-.0921
.060	-.0756	-.1884	0.1127
.012	0.3348	-.2108	0.5456

Figure 92, Chordwise Pressure Distribution, Steady, Configuration 1



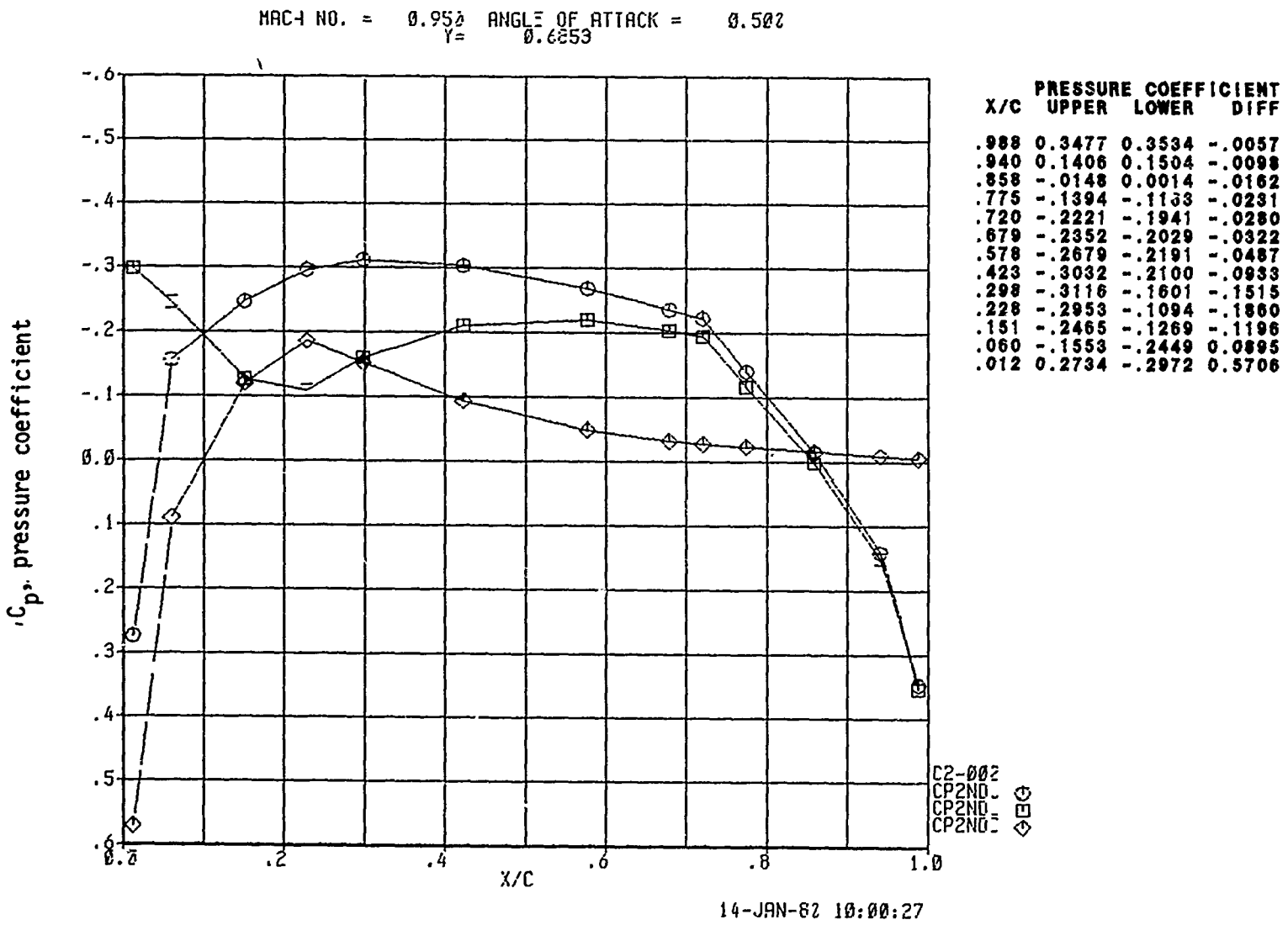
X/C	PRESSURE COEFFICIENT UPPER	LOWER	DIFF
.988	0.3481	0.3457	0.0025
.940	0.1456	0.1431	0.0025
.858	-.0084	-.0109	0.0025
.774	-.1316	-.1338	0.0023
.720	-.2110	-.2129	0.0019
.679	-.2202	-.2219	0.0017
.578	-.2421	-.2406	-.0015
.423	-.2551	-.2329	-.0222
.298	-.2378	-.1809	-.0569
.228	-.2040	-.1315	-.0725
.151	-.1328	-.1627	0.0299
.060	0.0072	-.2787	0.2860
.012	0.4739	-.3884	0.8623

Figure 93, Chordwise Pressure Distribution, Steady, Configuration 1



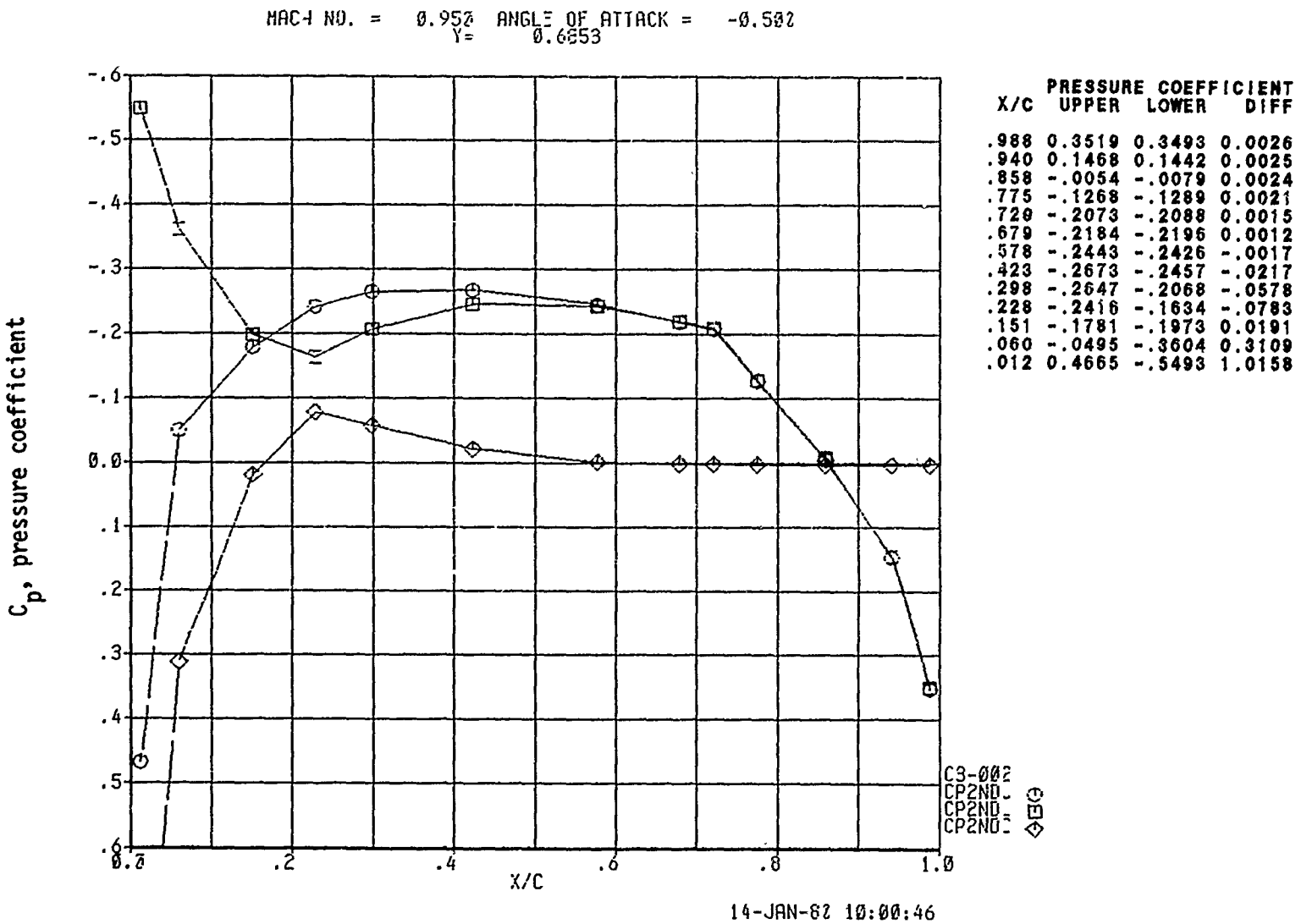
X/C	PRESSURE COEFFICIENT UPPER	LOWER	DIFF
.988	0.3499	0.3515	-.0016
.940	0.1438	0.1474	-.0036
.858	-.0100	-.0031	-.0069
.775	-.1330	-.1225	-.0105
.720	-.2146	-.2014	-.0133
.679	-.2267	-.2111	-.0156
.578	-.2560	-.2308	-.0252
.423	-.2852	-.2277	-.0575
.298	-.2880	-.1834	-.1047
.228	-.2684	-.1362	-.1322
.151	-.2121	-.1619	-.0502
.060	-.1020	-.3022	0.2002
.012	0.3717	-.4215	0.7932

Figure 94 , Chordwise Pressure Distribution, Steady, Configuration 1



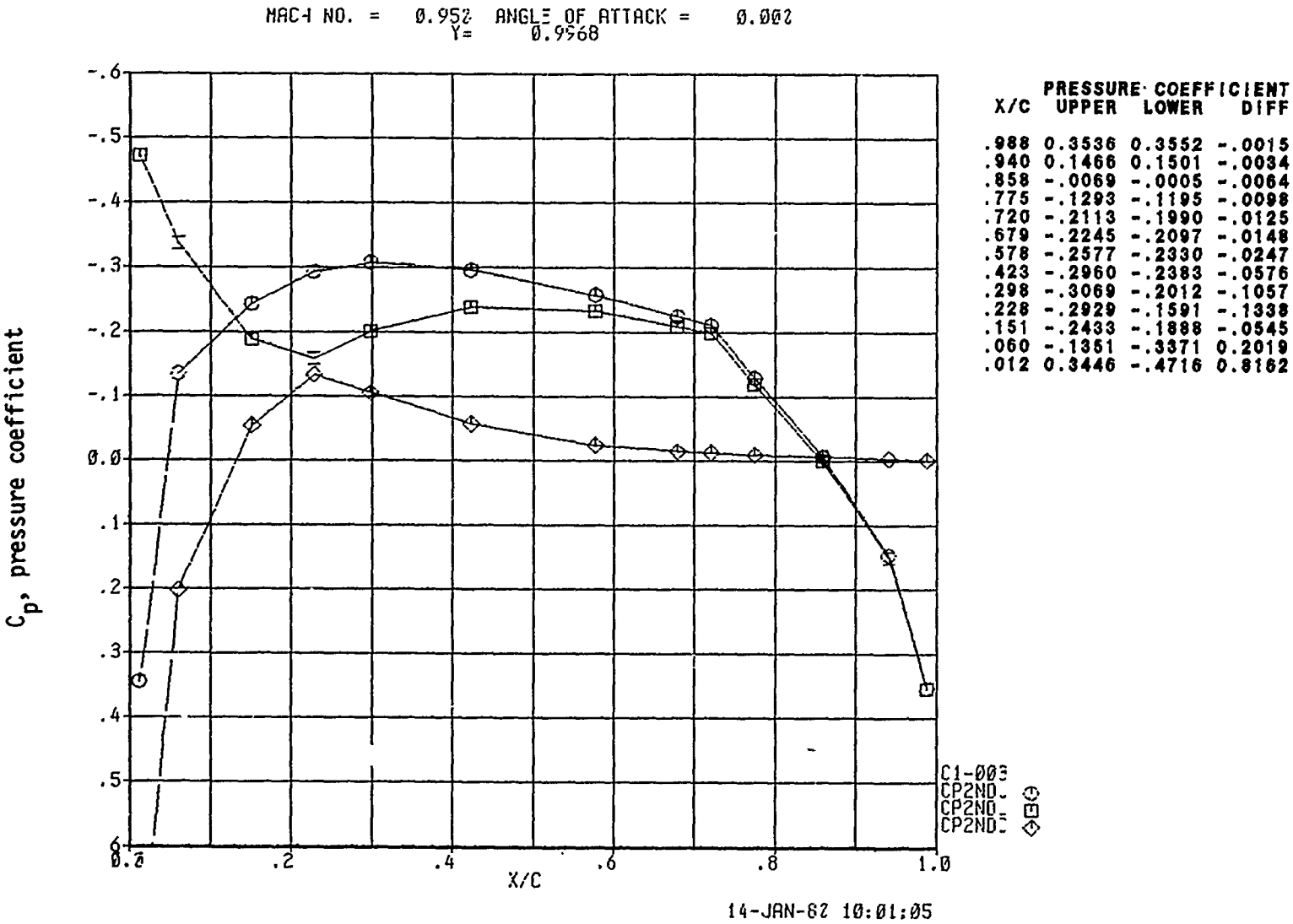
X/C	PRESSURE COEFFICIENT UPPER	LOWER	DIFF
.988	0.3477	0.3534	-.0057
.940	0.1406	0.1504	-.0098
.858	-.0148	0.0014	-.0162
.775	-.1394	-.1163	-.0231
.720	-.2221	-.1941	-.0280
.679	-.2352	-.2029	-.0322
.578	-.2679	-.2191	-.0487
.423	-.3032	-.2100	-.0933
.298	-.3116	-.1601	-.1515
.228	-.2953	-.1094	-.1860
.151	-.2465	-.1269	-.1196
.060	-.1553	-.2449	0.0895
.012	0.2734	-.2972	0.5706

Figure 95 , Chordwise Pressure Distribution, Steady, Configuration 1.



X/C	PRESSURE COEFFICIENT UPPER	LOWER	DIFF
.988	0.3519	0.3493	0.0026
.940	0.1468	0.1442	0.0025
.858	-.0054	-.0079	0.0024
.775	-.1268	-.1289	0.0021
.720	-.2073	-.2088	0.0015
.679	-.2184	-.2196	0.0012
.578	-.2443	-.2426	-.0017
.423	-.2673	-.2457	-.0217
.298	-.2647	-.2068	-.0578
.228	-.2416	-.1634	-.0783
.151	-.1781	-.1973	0.0191
.060	-.0495	-.3604	0.3109
.012	0.4665	-.5493	1.0158

Figure 96, Chordwise Pressure Distribution, Steady, Configuration 1



X/C	PRESSURE COEFFICIENT UPPER	LOWER	DIFF
.988	0.3536	0.3552	-.0015
.940	0.1466	0.1501	-.0034
.858	-.0069	-.0005	-.0064
.775	-.1293	-.1195	-.0098
.720	-.2113	-.1990	-.0125
.679	-.2245	-.2097	-.0148
.578	-.2577	-.2330	-.0247
.423	-.2960	-.2383	-.0576
.298	-.3069	-.2012	-.1057
.228	-.2929	-.1591	-.1338
.151	-.2433	-.1888	-.0545
.060	-.1351	-.3371	0.2019
.012	0.3446	-.4716	0.8162

Figure 97, Chordwise Pressure Distribution, Steady, Configuration 1

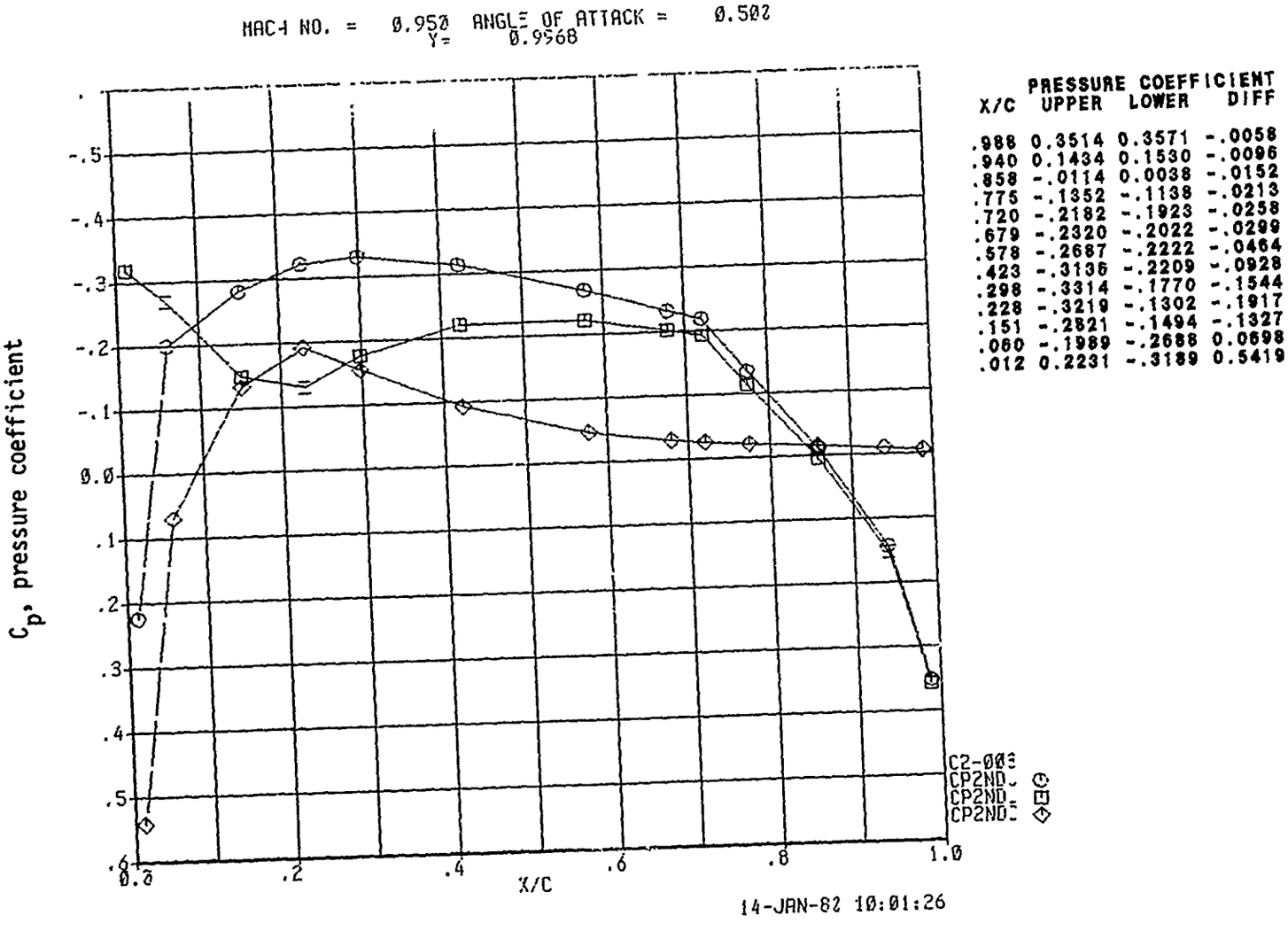
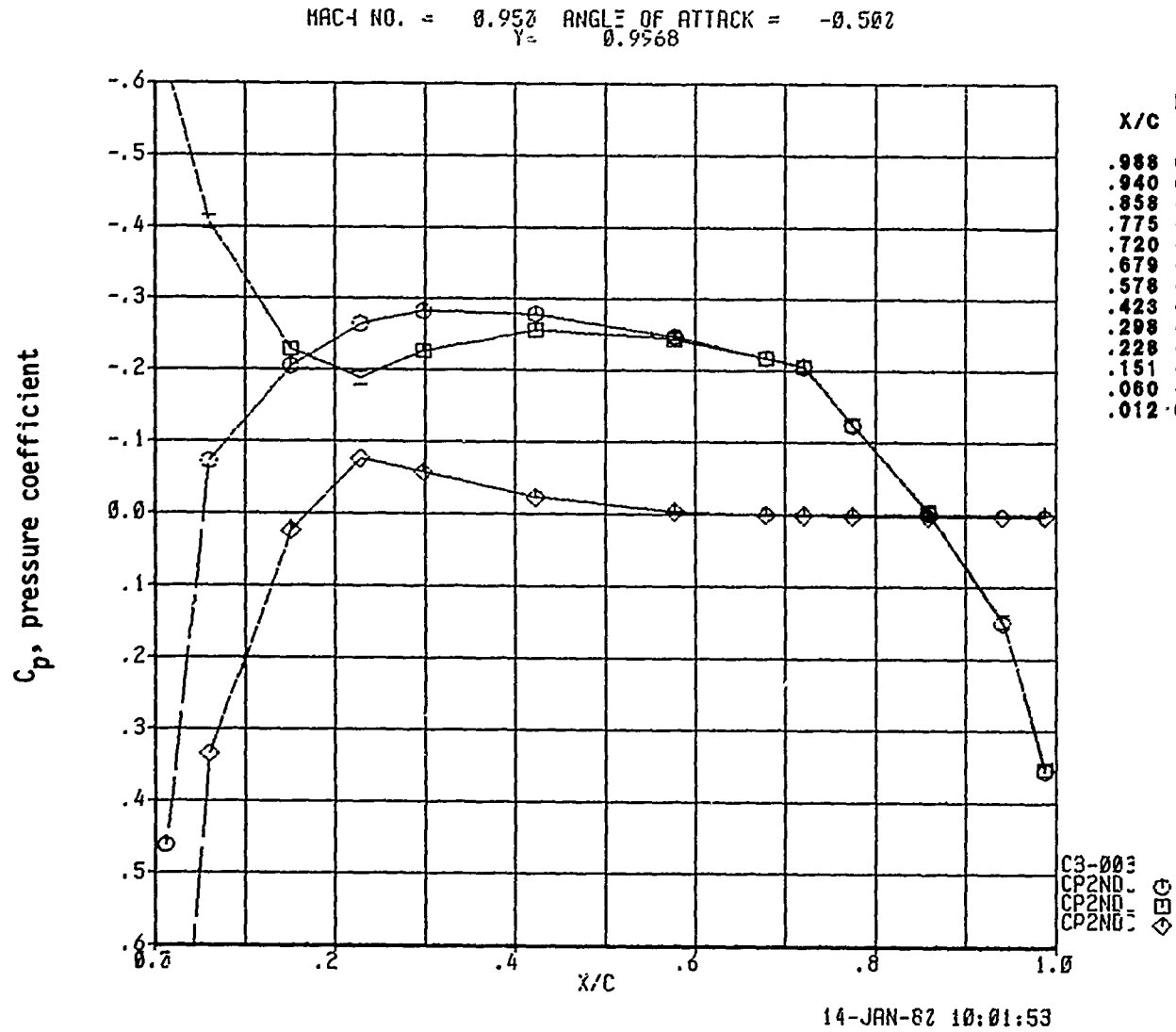
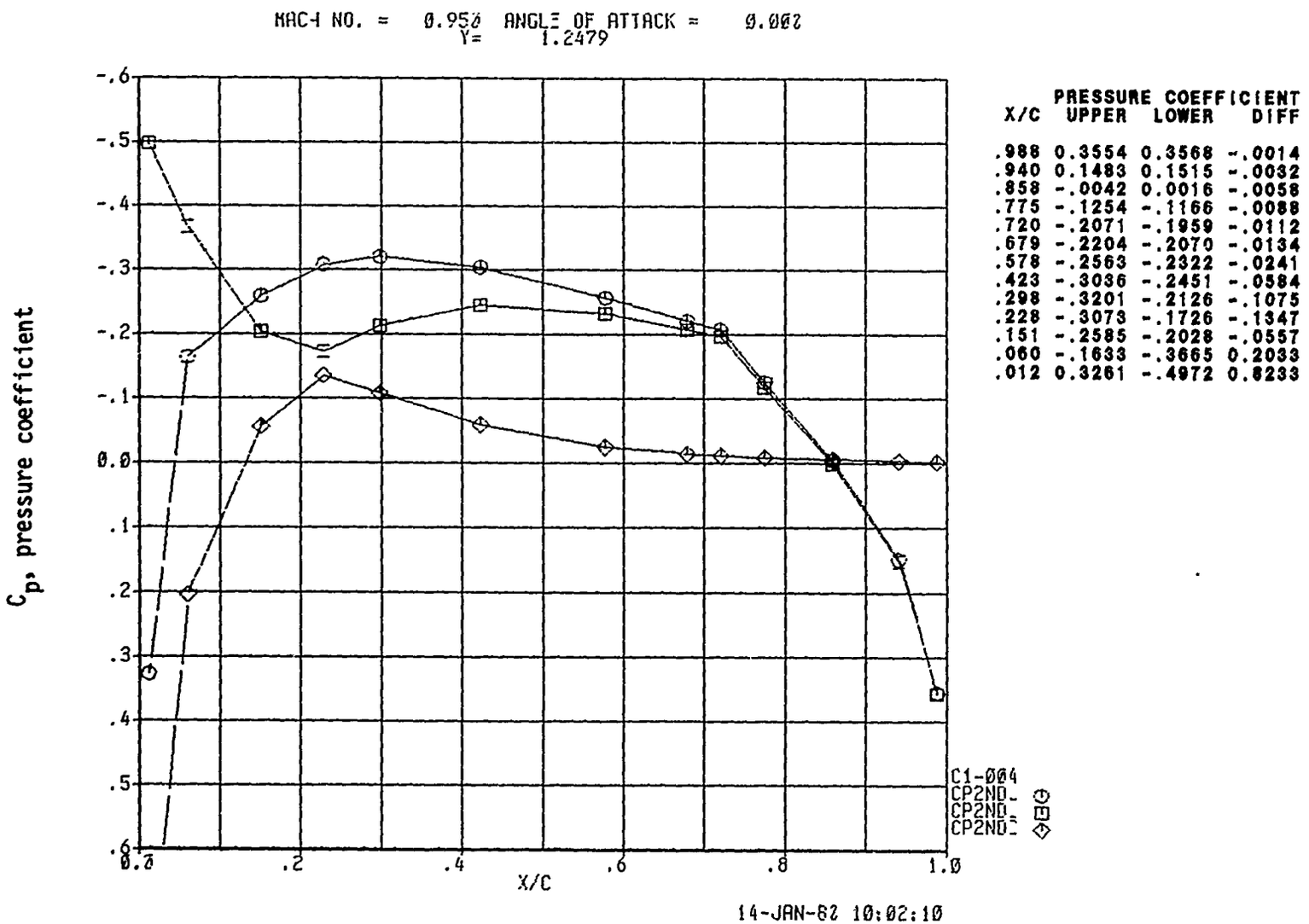


Figure 98, Chordwise Pressure Distribution, Steady, Configuration 1



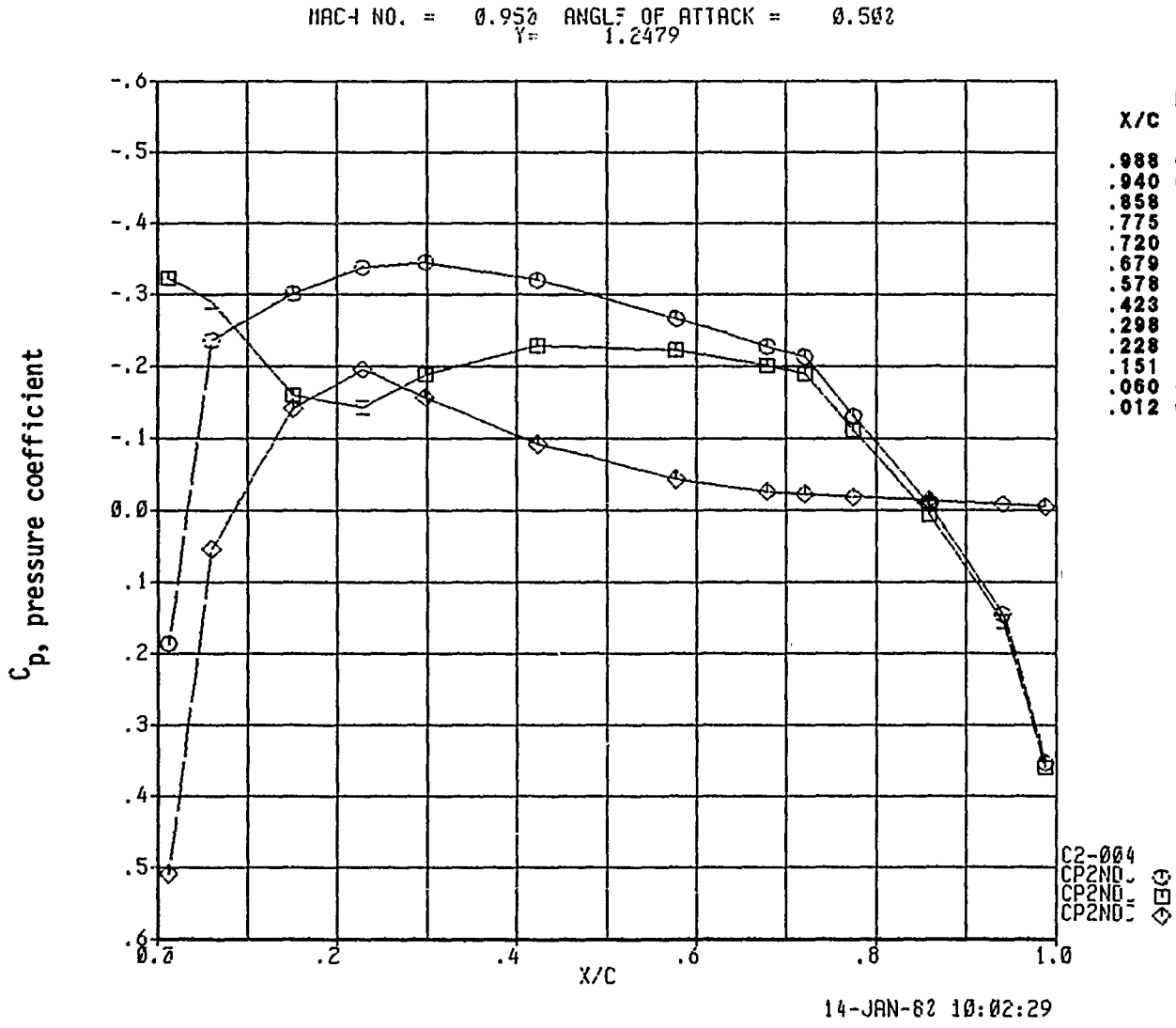
X/C	PRESSURE COEFFICIENT UPPER	LOWER	DIFF
.988	0.3556	0.3530	0.0027
.940	0.1495	0.1469	0.0026
.858	-.0026	-.0050	0.0023
.775	-.1237	-.1254	0.0018
.720	-.2048	-.2057	0.0010
.679	-.2170	-.2173	0.0004
.578	-.2469	-.2439	-.0030
.423	-.2784	-.2559	-.0225
.298	-.2825	-.2256	-.0570
.228	-.2641	-.1882	-.0759
.151	-.2049	-.2287	0.0237
.060	-.0724	-.4064	0.3340
.012	0.4608	-.6298	1.0906

Figure 99, Chordwise Pressure Distribution, Steady, Configuration 1



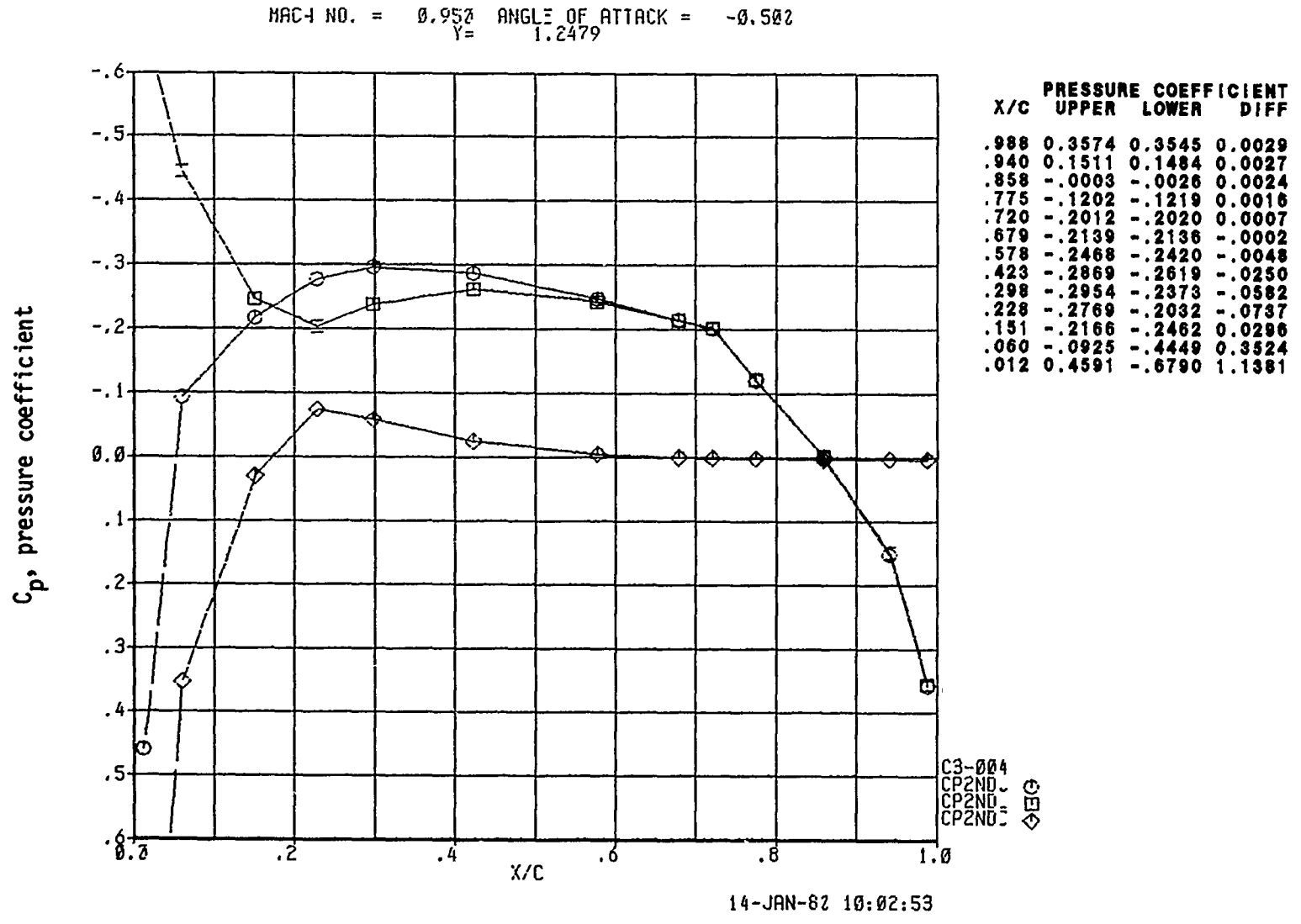
X/C	PRESSURE COEFFICIENT UPPER	LOWER	DIFF
.988	0.3554	0.3568	-.0014
.940	0.1483	0.1515	-.0032
.858	-.0042	0.0016	-.0058
.775	-.1254	-.1166	-.0088
.720	-.2071	-.1959	-.0112
.679	-.2204	-.2070	-.0134
.578	-.2563	-.2322	-.0241
.423	-.3036	-.2451	-.0584
.298	-.3201	-.2126	-.1075
.228	-.3073	-.1726	-.1347
.151	-.2585	-.2028	-.0557
.060	-.1633	-.3665	0.2033
.012	0.3261	-.4972	0.8233

Figure 100, Chordwise Pressure Distribution, Steady, Configuration 1



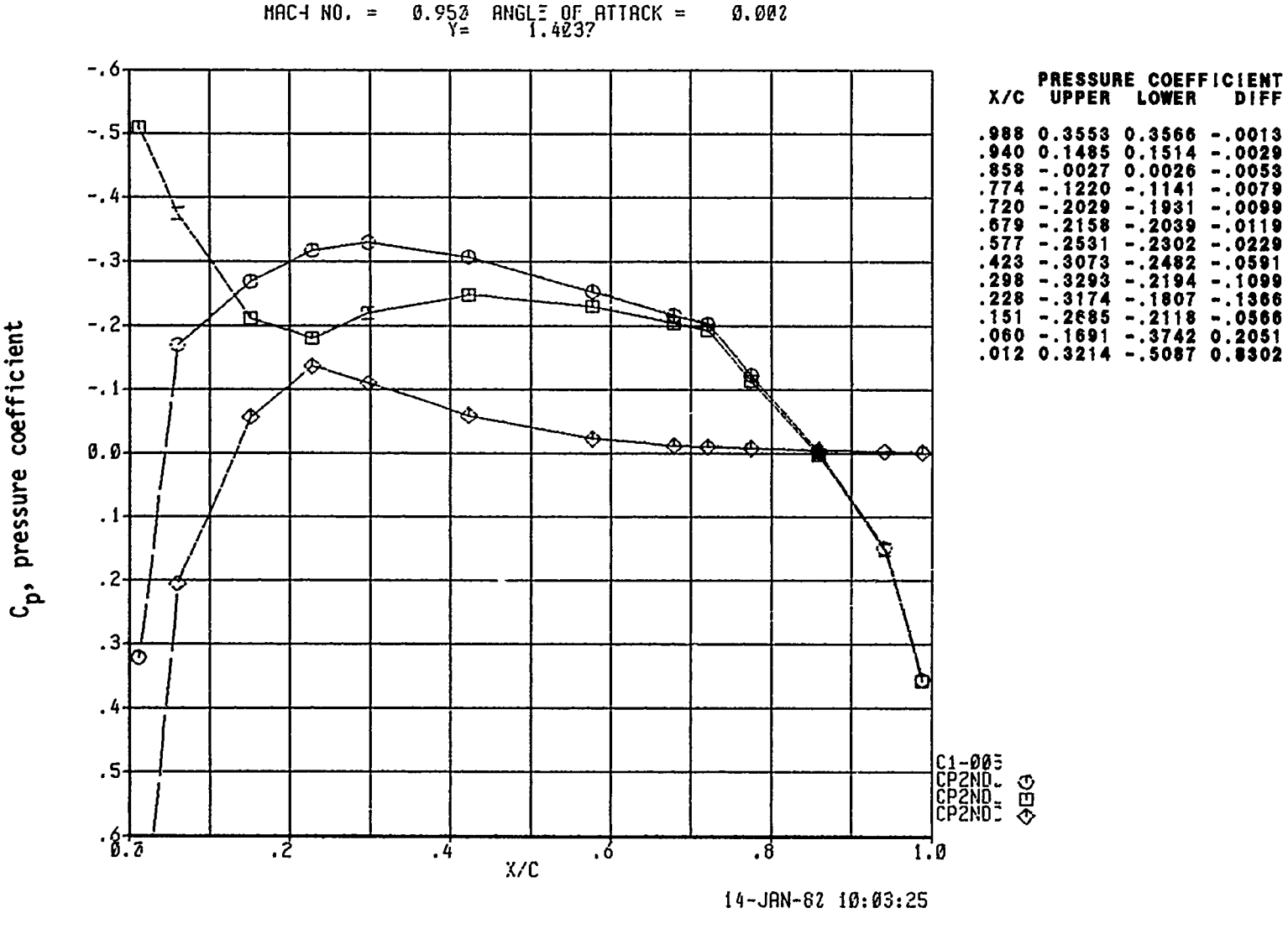
X/C	PRESSURE COEFFICIENT UPPER	LOWER	DIFF
.988	0.3532	0.3589	-.0057
.940	0.1452	0.1543	-.0090
.858	-.0085	0.0056	-.0140
.775	-.1307	-.1114	-.0193
.720	-.2131	-.1900	-.0231
.679	-.2271	-.2004	-.0266
.578	-.2661	-.2227	-.0434
.423	-.3204	-.2285	-.0919
.298	-.3449	-.1881	-.1568
.228	-.3379	-.1422	-.1956
.151	-.3009	-.1599	-.1411
.060	-.2355	-.2896	0.0541
.012	0.1861	-.3225	0.5085

Figure 101, Chordwise Pressure Distribution, Steady, Configuration 1



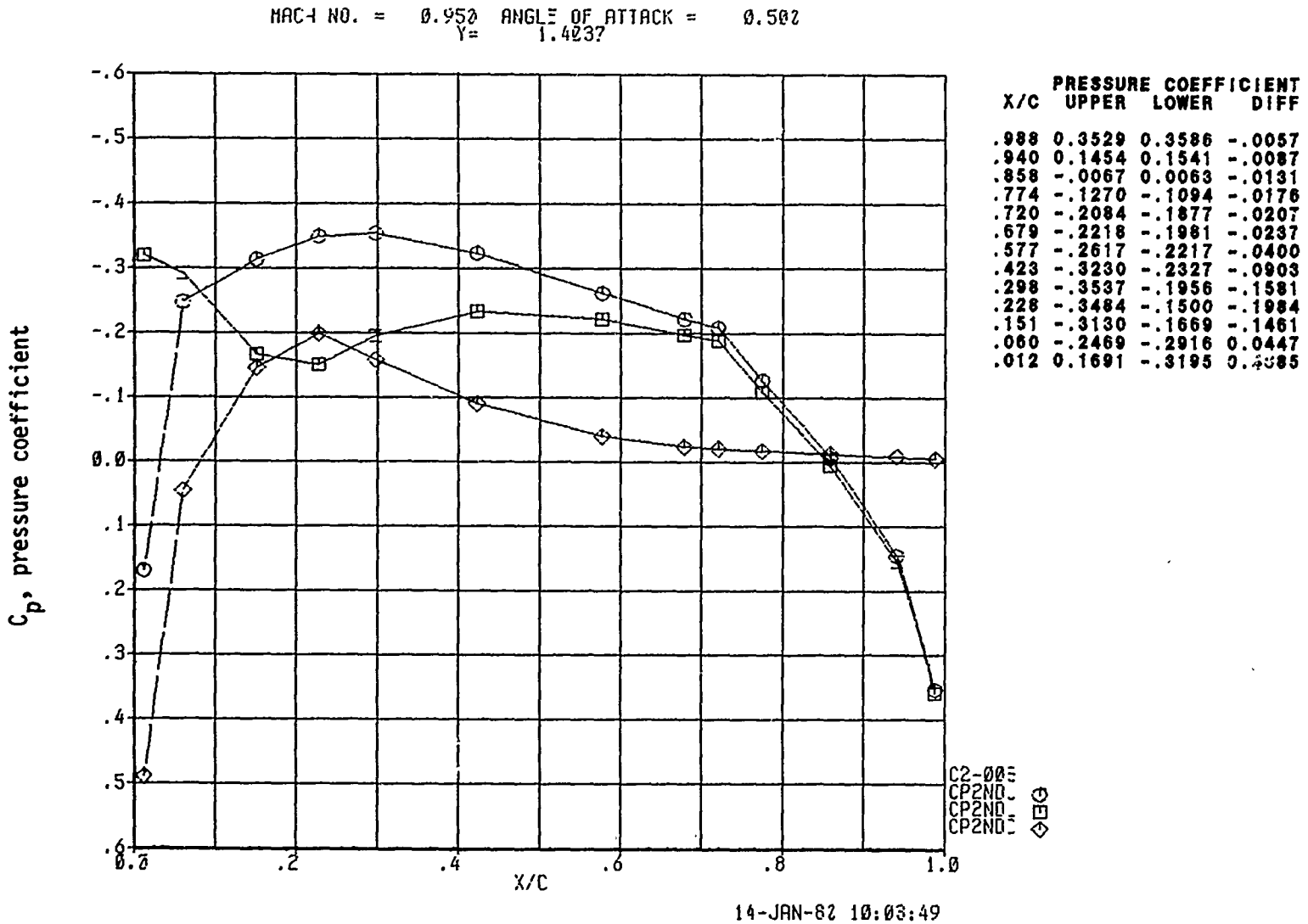
X/C	PRESSURE COEFFICIENT UPPER	LOWER	DIFF
.988	0.3574	0.3545	0.0029
.940	0.1511	0.1484	0.0027
.858	-.0003	-.0026	0.0024
.775	-.1202	-.1219	0.0016
.720	-.2012	-.2020	0.0007
.679	-.2139	-.2136	-.0002
.578	-.2468	-.2420	-.0048
.423	-.2869	-.2619	-.0250
.298	-.2954	-.2373	-.0582
.228	-.2769	-.2032	-.0737
.151	-.2166	-.2462	0.0296
.060	-.0925	-.4449	0.3524
.012	0.4591	-.6790	1.1381

Figure 102, Chordwise Pressure Distribution, Steady, Configuration 1



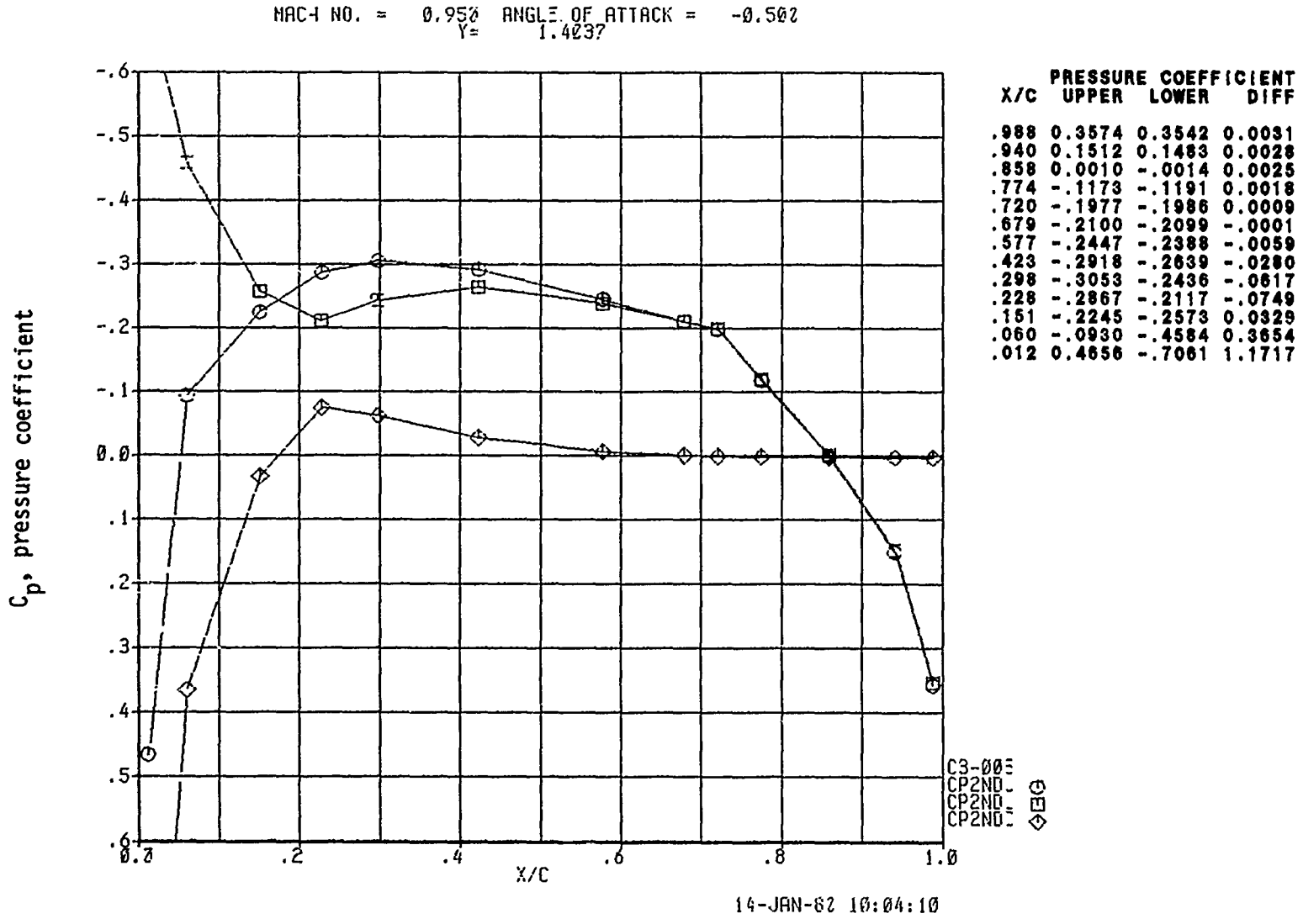
X/C	PRESSURE COEFFICIENT UPPER	LOWER	DIFF
.988	0.3553	0.3566	-.0013
.940	0.1485	0.1514	-.0029
.858	-.0027	0.0026	-.0053
.774	-.1220	-.1141	-.0079
.720	-.2029	-.1931	-.0099
.679	-.2158	-.2039	-.0119
.577	-.2531	-.2302	-.0229
.423	-.3073	-.2482	-.0591
.298	-.3293	-.2194	-.1099
.228	-.3174	-.1807	-.1366
.151	-.2685	-.2118	-.0566
.060	-.1691	-.3742	0.2051
.012	0.3214	-.5087	0.8302

Figure 103, Chordwise Pressure Distribution, Steady, Configuration 1



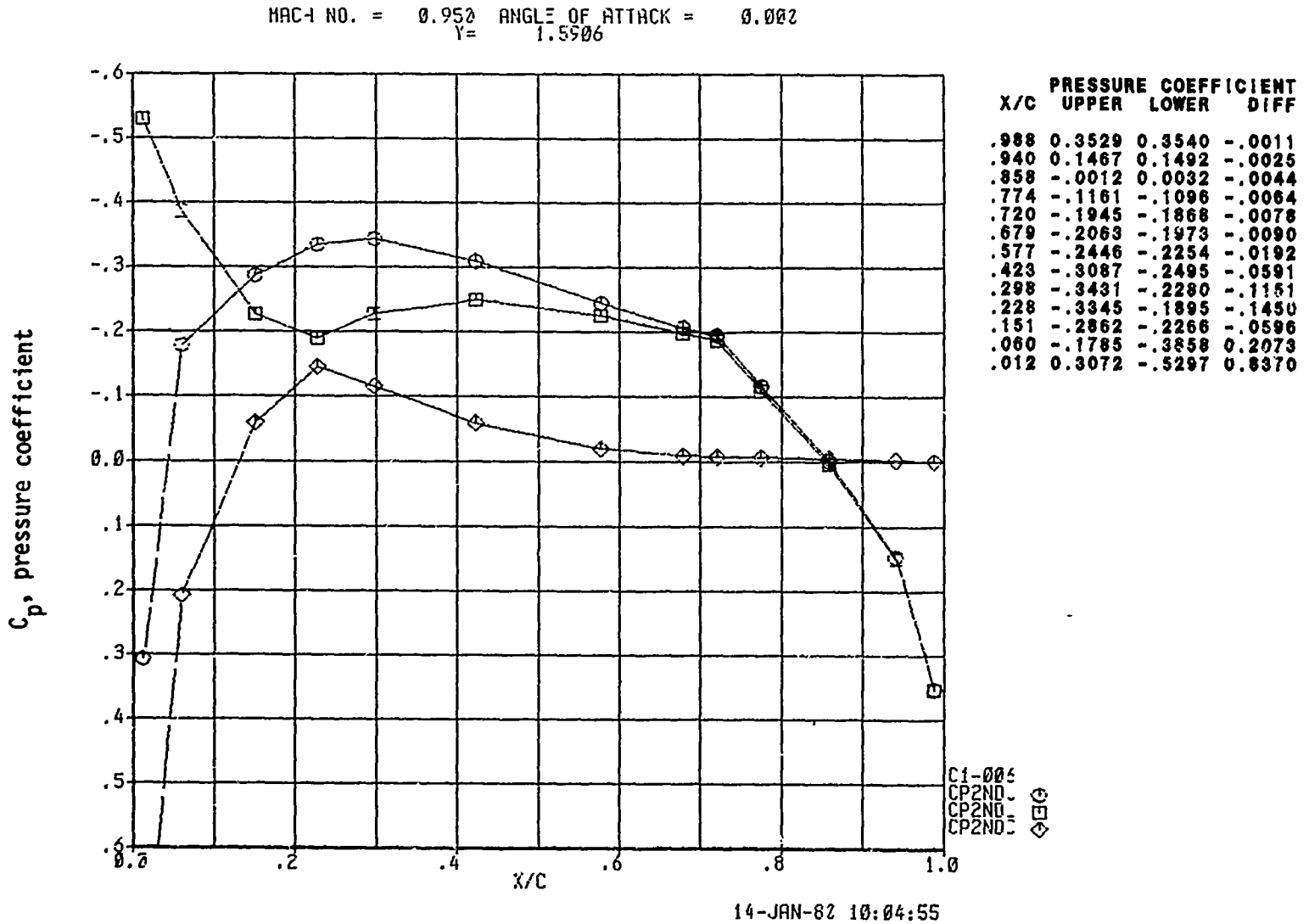
X/C	PRESSURE COEFFICIENT UPPER	LOWER	DIFF
.988	0.3529	0.3586	-.0057
.940	0.1454	0.1541	-.0087
.858	-.0067	0.0063	-.0131
.774	-.1270	-.1094	-.0176
.720	-.2084	-.1877	-.0207
.679	-.2218	-.1981	-.0237
.577	-.2617	-.2217	-.0400
.423	-.3230	-.2327	-.0903
.298	-.3537	-.1956	-.1581
.228	-.3484	-.1500	-.1984
.151	-.3130	-.1669	-.1461
.060	-.2469	-.2916	0.0447
.012	0.1691	-.3195	0.4085

Figure 104, Chordwise Pressure Distribution, Steady, Configuration 1



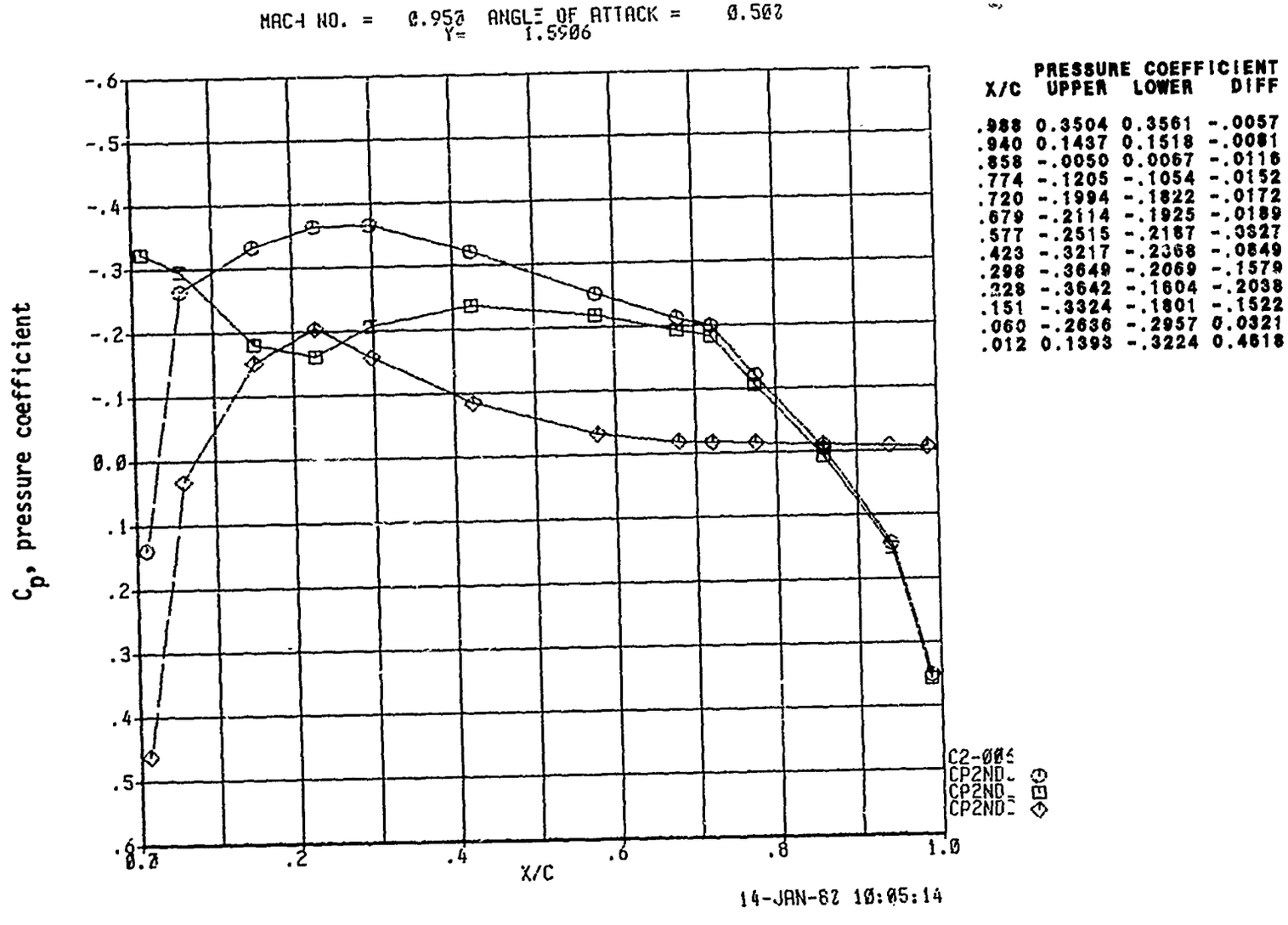
X/C	PRESSURE COEFFICIENT UPPER	LOWER	DIFF
.988	0.3574	0.3542	0.0031
.940	0.1512	0.1483	0.0028
.858	0.0010	-.0014	0.0025
.774	-.1173	-.1191	0.0018
.720	-.1977	-.1986	0.0009
.679	-.2100	-.2099	-.0001
.577	-.2447	-.2388	-.0059
.423	-.2918	-.2639	-.0280
.298	-.3053	-.2436	-.0617
.228	-.2867	-.2117	-.0749
.151	-.2245	-.2573	0.0329
.060	-.0930	-.4584	0.3654
.012	0.4656	-.7061	1.1717

Figure 105, Chordwise Pressure Distribution, Steady, Configuration 1



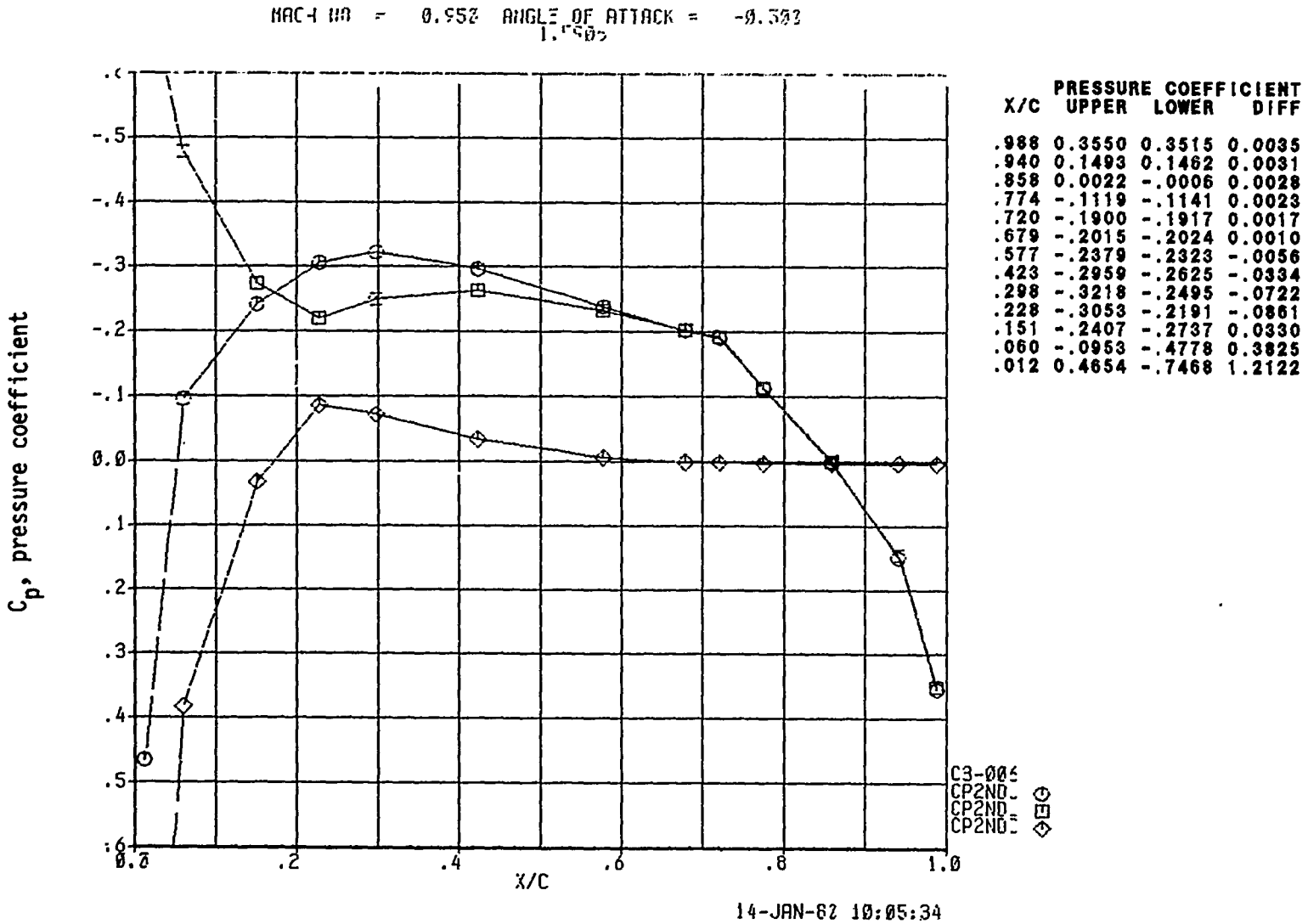
X/C	PRESSURE COEFFICIENT UPPER	LOWER	DIFF
.988	0.3529	0.3540	-.0011
.940	0.1467	0.1492	-.0025
.858	-.0012	0.0032	-.0044
.774	-.1161	-.1096	-.0064
.720	-.1945	-.1868	-.0078
.679	-.2063	-.1973	-.0090
.577	-.2446	-.2254	-.0192
.423	-.3087	-.2495	-.0591
.298	-.3431	-.2280	-.1151
.228	-.3345	-.1895	-.1450
.151	-.2862	-.2266	-.0596
.060	-.1785	-.3858	0.2073
.012	0.3072	-.5297	0.8370

Figure 106, Chordwise Pressure Distribution, Steady, Configuration 1



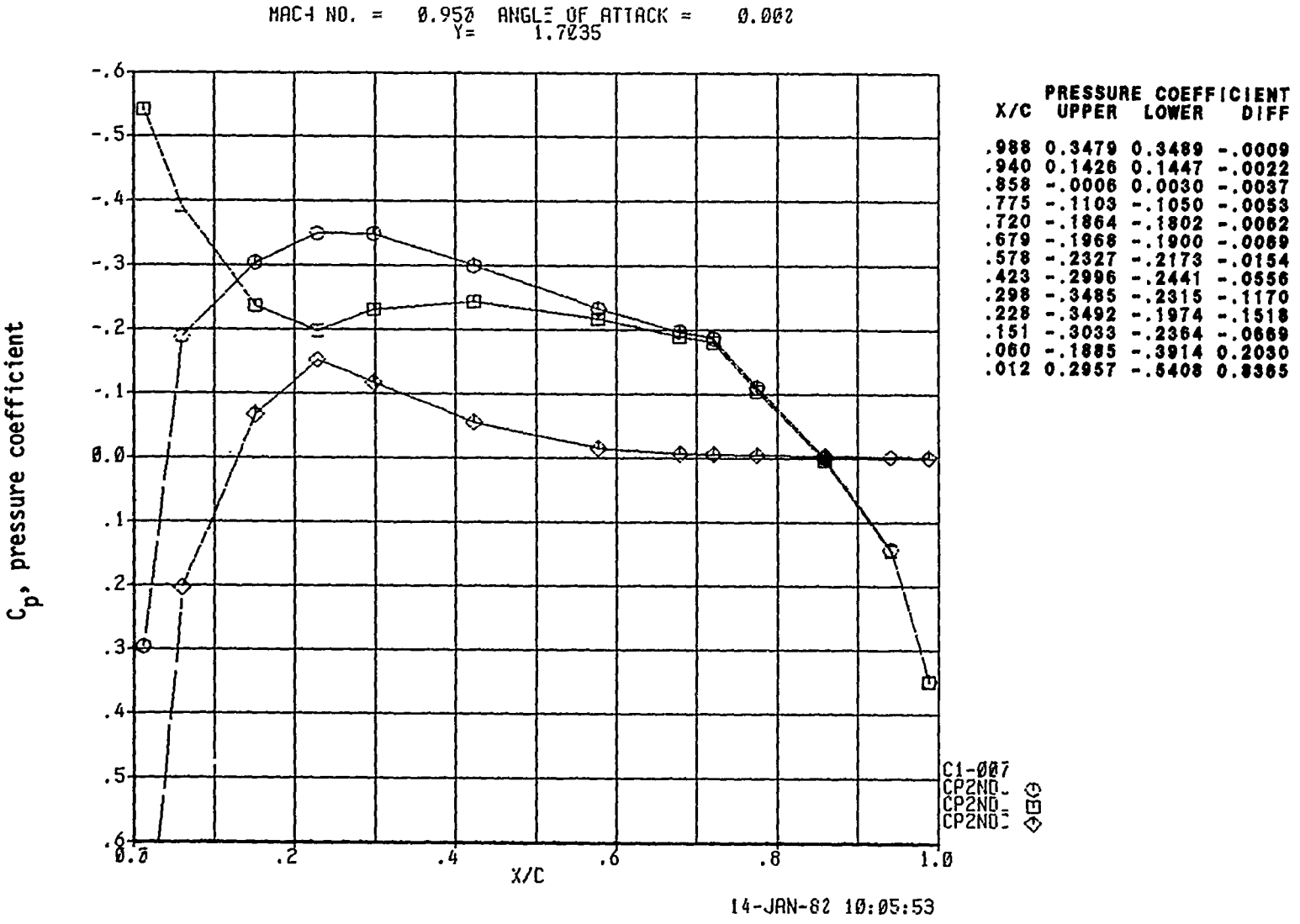
X/C	PRESSURE COEFFICIENT UPPER	LOWER	DIFF
.988	0.3504	0.3561	-.0057
.940	0.1437	0.1518	-.0081
.858	-.0050	0.0067	-.0116
.774	-.1205	-.1054	-.0152
.720	-.1994	-.1822	-.0172
.679	-.2114	-.1925	-.0189
.577	-.2515	-.2187	-.0327
.423	-.3217	-.2368	-.0849
.298	-.3649	-.2069	-.1579
.228	-.3642	-.1604	-.2038
.151	-.3324	-.1801	-.1522
.060	-.2636	-.2957	0.0321
.012	0.1393	-.3224	0.4618

Figure 107, Chordwise Pressure Distribution, Steady, Configuration 1



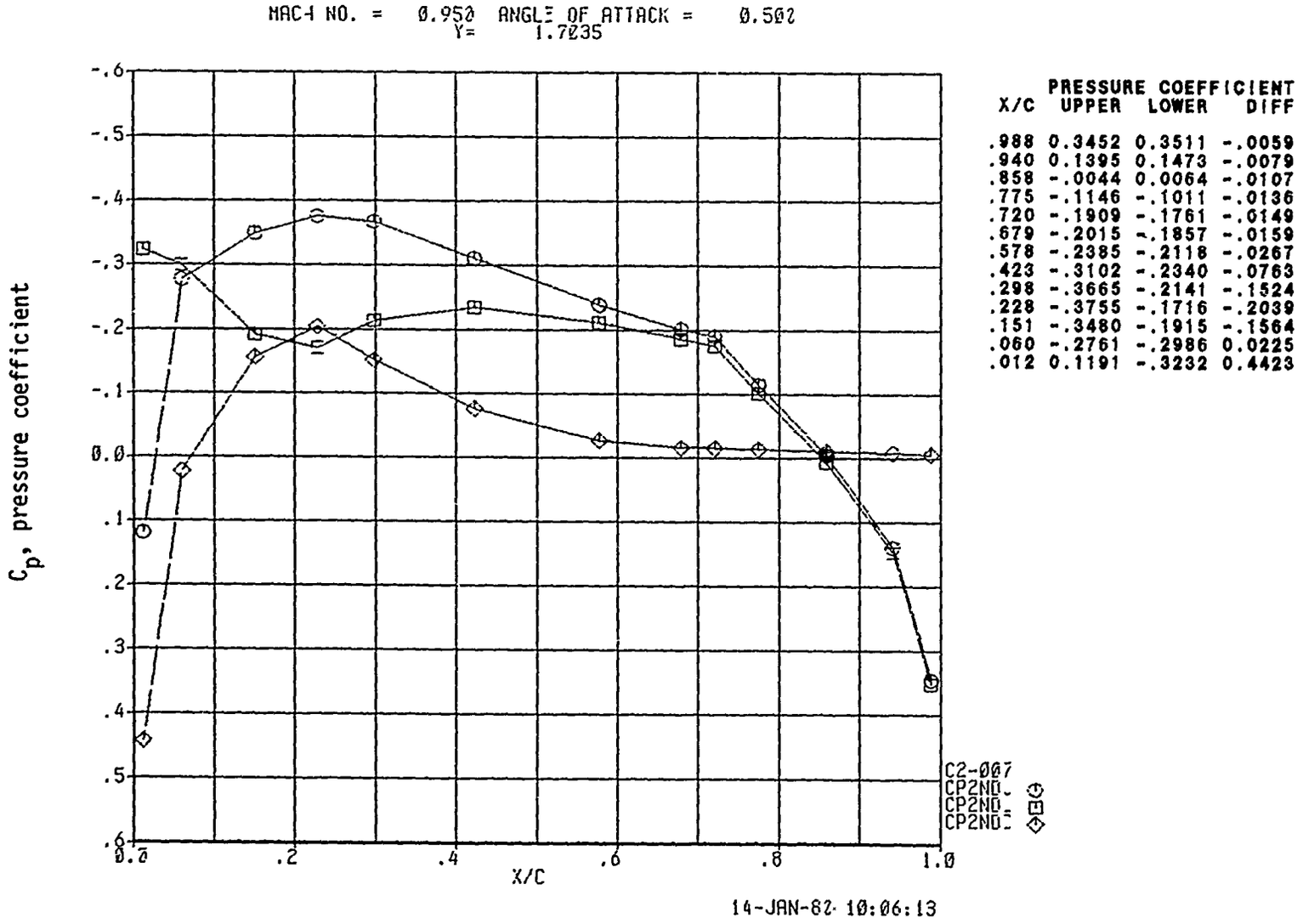
X/C	PRESSURE COEFFICIENT UPPER	LOWER	DIFF
.988	0.3550	0.3515	0.0035
.940	0.1493	0.1462	0.0031
.858	0.0022	-.0006	0.0028
.774	-.1119	-.1141	0.0023
.720	-.1900	-.1917	0.0017
.679	-.2015	-.2024	0.0010
.577	-.2379	-.2323	-.0056
.423	-.2959	-.2625	-.0334
.298	-.3218	-.2495	-.0722
.228	-.3053	-.2191	-.0861
.151	-.2407	-.2737	0.0330
.060	-.0953	-.4778	0.3825
.012	0.4654	-.7468	1.2122

Figure 108, Chordwise Pressure Distribution, Steady, Configuration 1



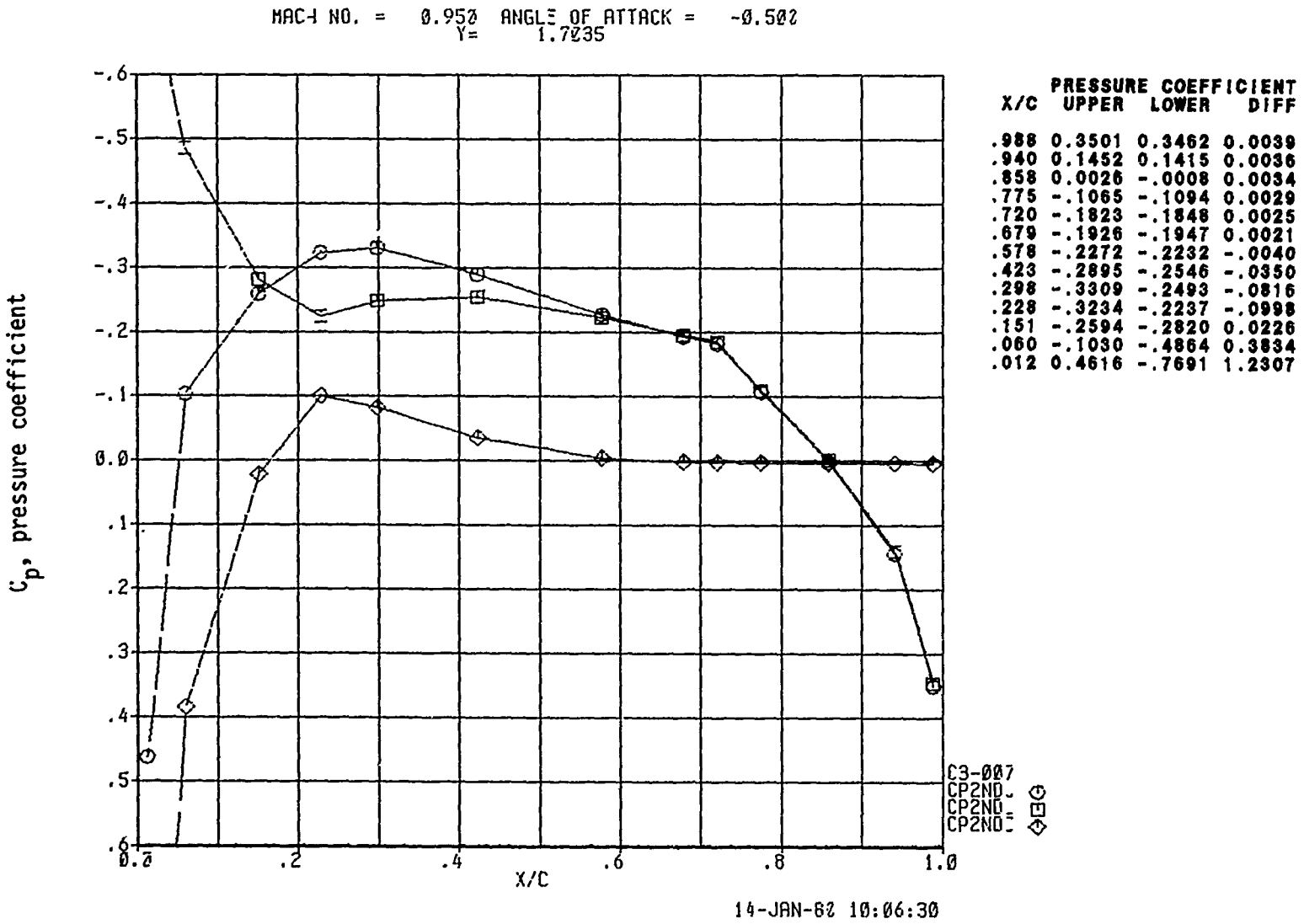
X/C	PRESSURE COEFFICIENT UPPER	LOWER	DIFF
.988	0.3479	0.3489	-.0009
.940	0.1426	0.1447	-.0022
.858	-.0006	0.0030	-.0037
.775	-.1103	-.1050	-.0053
.720	-.1864	-.1802	-.0062
.679	-.1968	-.1900	-.0069
.578	-.2327	-.2173	-.0154
.423	-.2996	-.2441	-.0556
.298	-.3485	-.2315	-.1170
.228	-.3492	-.1974	-.1518
.151	-.3033	-.2364	-.0669
.060	-.1885	-.3914	0.2030
.012	0.2957	-.5408	0.8365

Figure 109, Chordwise Pressure Distribution, Steady, Configuration 1



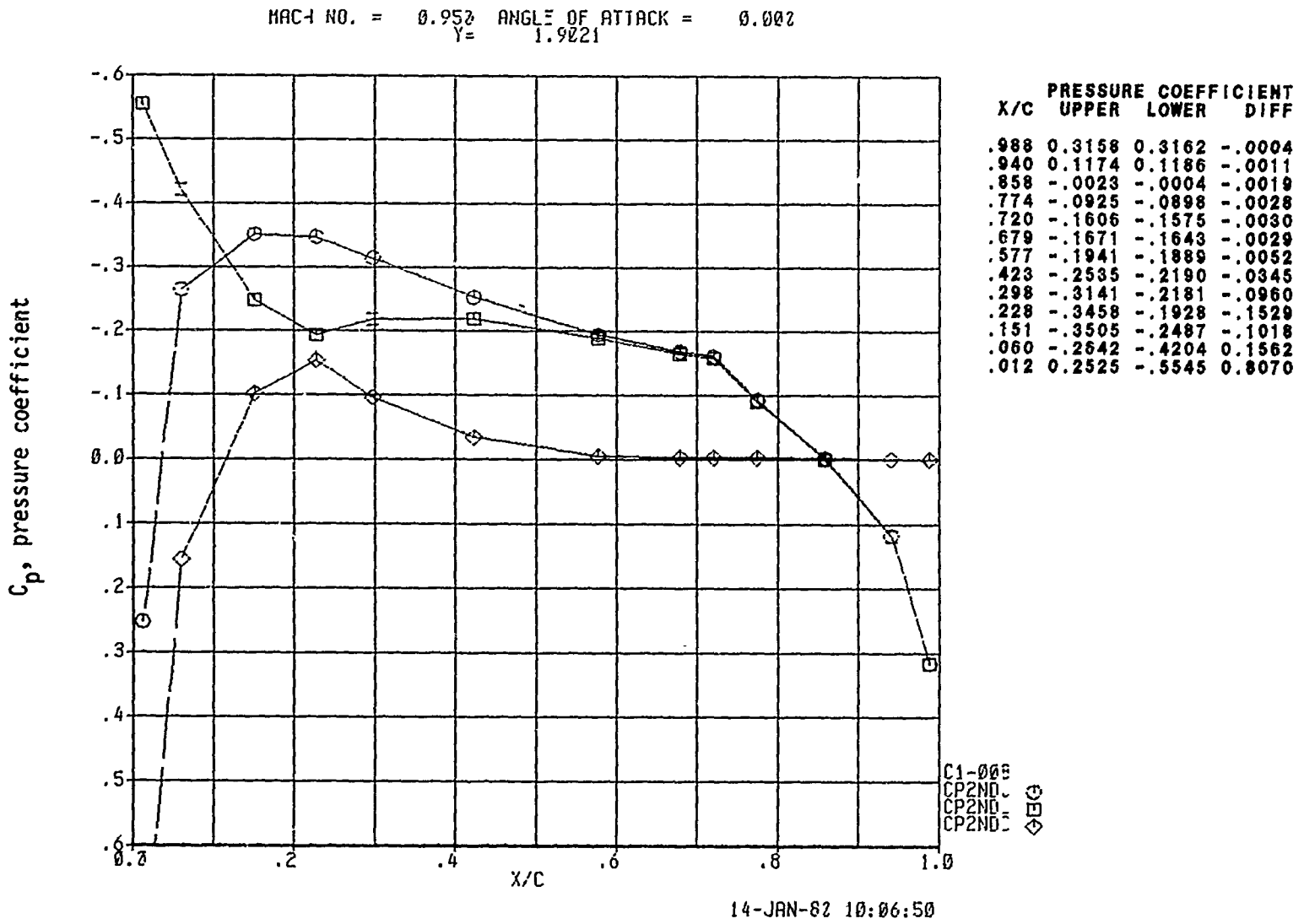
X/C	PRESSURE COEFFICIENT UPPER	LOWER	DIFF
.988	0.3452	0.3511	-.0059
.940	0.1395	0.1473	-.0079
.858	-.0044	0.0064	-.0107
.775	-.1146	-.1011	-.0136
.720	-.1909	-.1761	-.0149
.679	-.2015	-.1857	-.0159
.578	-.2385	-.2118	-.0267
.423	-.3102	-.2340	-.0763
.298	-.3665	-.2141	-.1524
.228	-.3755	-.1716	-.2039
.151	-.3480	-.1915	-.1564
.060	-.2761	-.2986	0.0225
.012	0.1191	-.3232	0.4423

Figure 110, Chordwise Pressure Distribution, Steady, Configuration 1



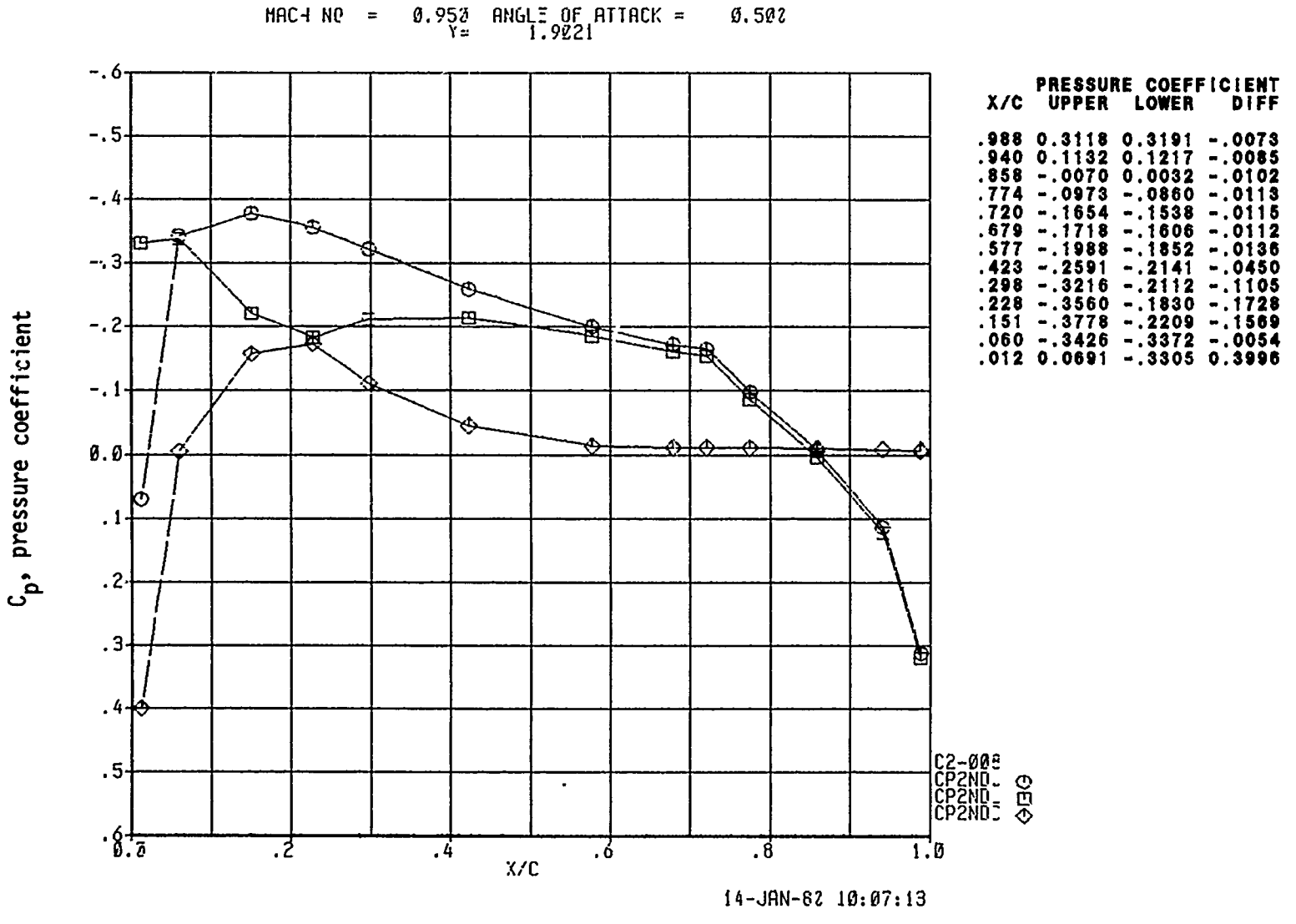
X/C	PRESSURE COEFFICIENT UPPER	LOWER	DIFF
.988	0.3501	0.3462	0.0039
.940	0.1452	0.1415	0.0036
.858	0.0026	-.0008	0.0034
.775	-.1065	-.1094	0.0029
.720	-.1823	-.1848	0.0025
.679	-.1926	-.1947	0.0021
.578	-.2272	-.2232	-.0040
.423	-.2895	-.2546	-.0350
.298	-.3309	-.2493	-.0816
.228	-.3234	-.2237	-.0998
.151	-.2594	-.2820	0.0226
.060	-.1030	-.4664	0.3834
.012	0.4616	-.7691	1.2307

Figure 111, Chordwise Pressure Distribution, Steady, Configuration 1



X/C	PRESSURE COEFFICIENT UPPER	LOWER	DIFF
.988	0.3158	0.3162	-.0004
.940	0.1174	0.1186	-.0011
.858	-.0023	-.0004	-.0019
.774	-.0925	-.0898	-.0028
.720	-.1606	-.1575	-.0030
.679	-.1671	-.1643	-.0029
.577	-.1941	-.1889	-.0052
.423	-.2535	-.2190	-.0345
.298	-.3141	-.2181	-.0960
.228	-.3458	-.1928	-.1529
.151	-.3505	-.2487	-.1018
.060	-.2642	-.4204	0.1562
.012	0.2525	-.5545	0.8070

Figure 112, Chordwise Pressure Distribution, Steady, Configuration 1



X/C	PRESSURE COEFFICIENT UPPER	LOWER	DIFF
.988	0.3118	0.3191	-.0073
.940	0.1132	0.1217	-.0085
.858	-.0070	0.0032	-.0102
.774	-.0973	-.0860	-.0113
.720	-.1654	-.1538	-.0115
.679	-.1718	-.1606	-.0112
.577	-.1988	-.1852	-.0136
.423	-.2591	-.2141	-.0450
.298	-.3216	-.2112	-.1105
.228	-.3560	-.1830	-.1728
.151	-.3778	-.2209	-.1569
.060	-.3426	-.3372	-.0054
.012	0.0691	-.3305	0.3996

Figure 113, Chordwise Pressure Distribution, Steady, Configuration 1

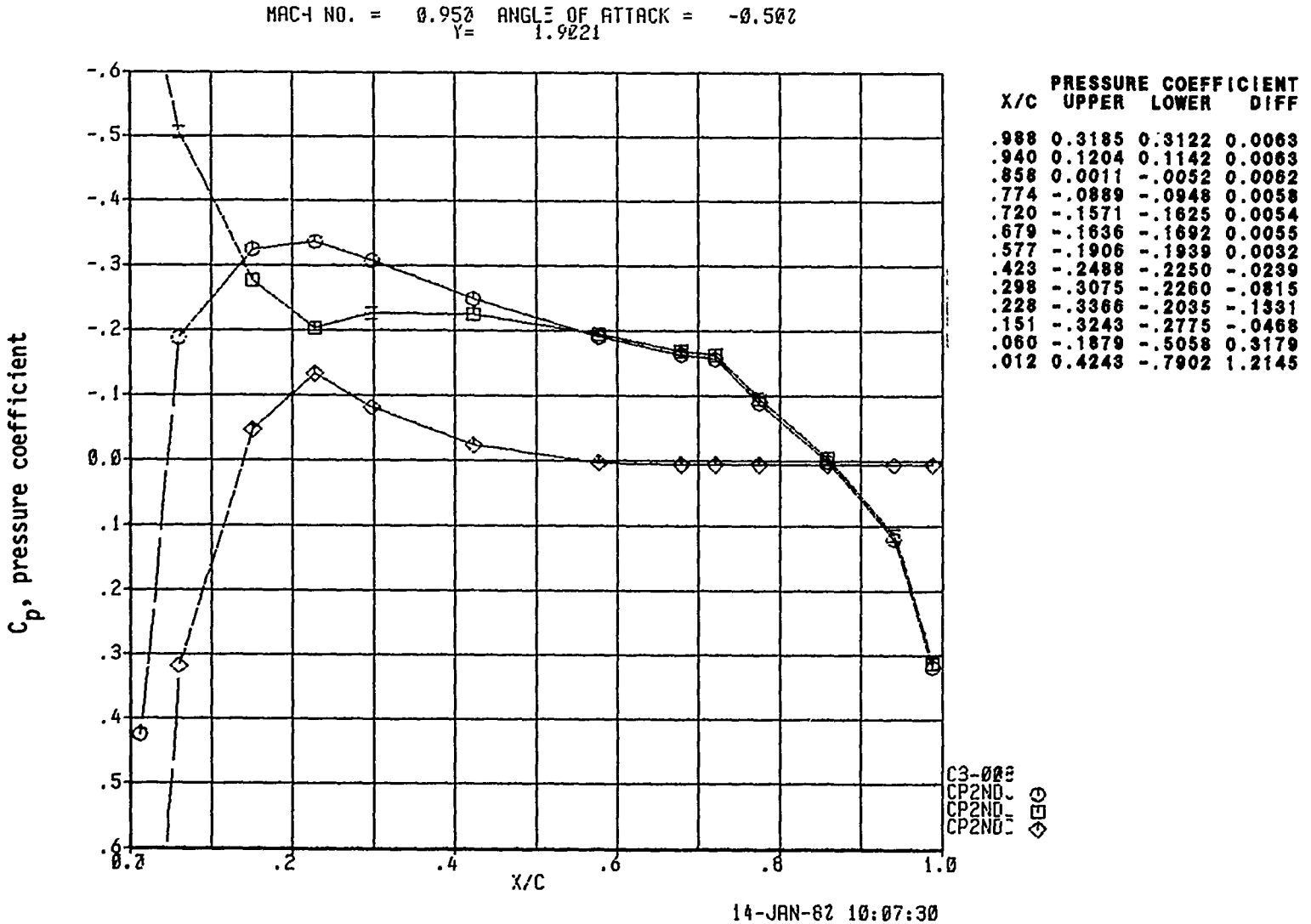
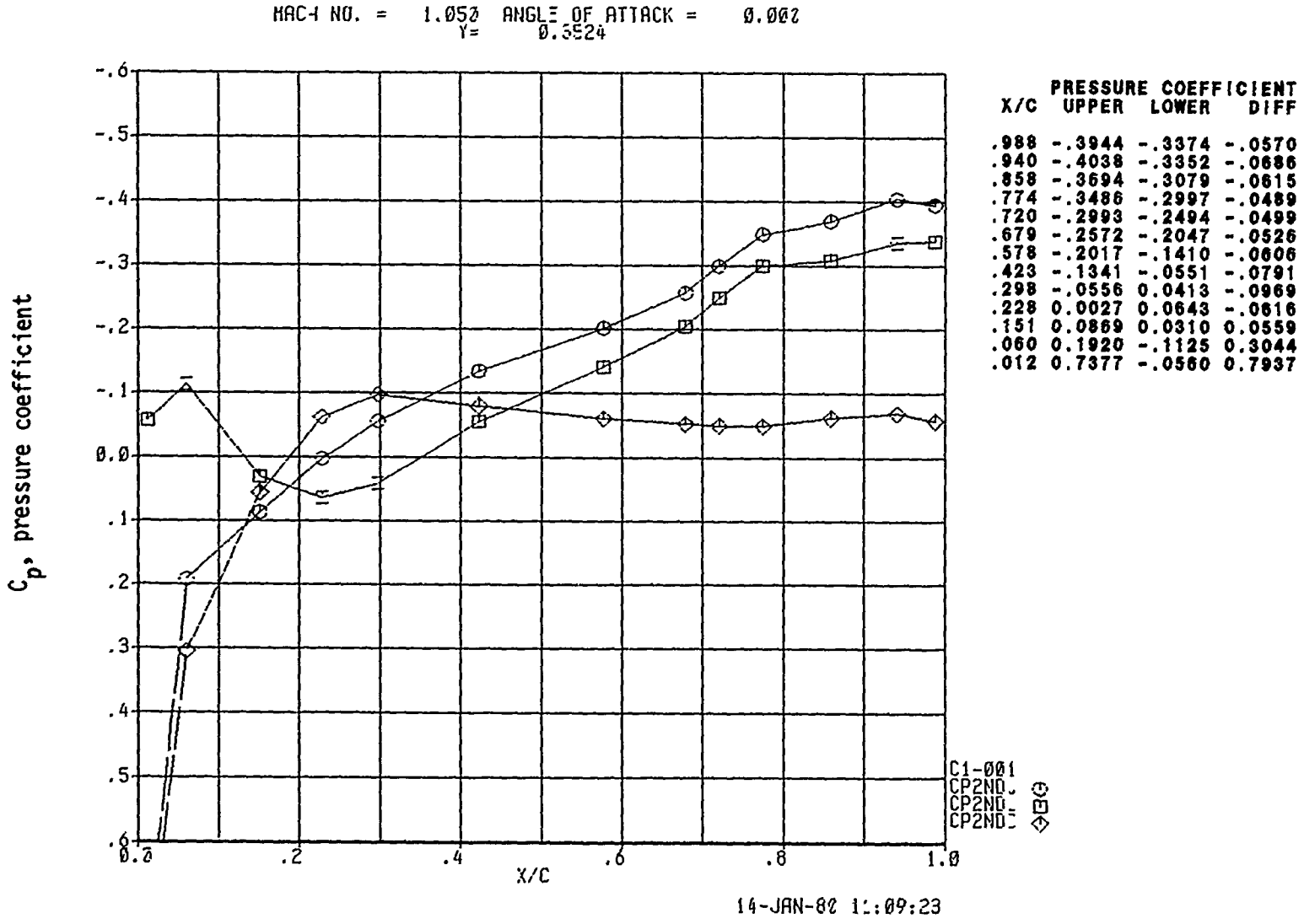
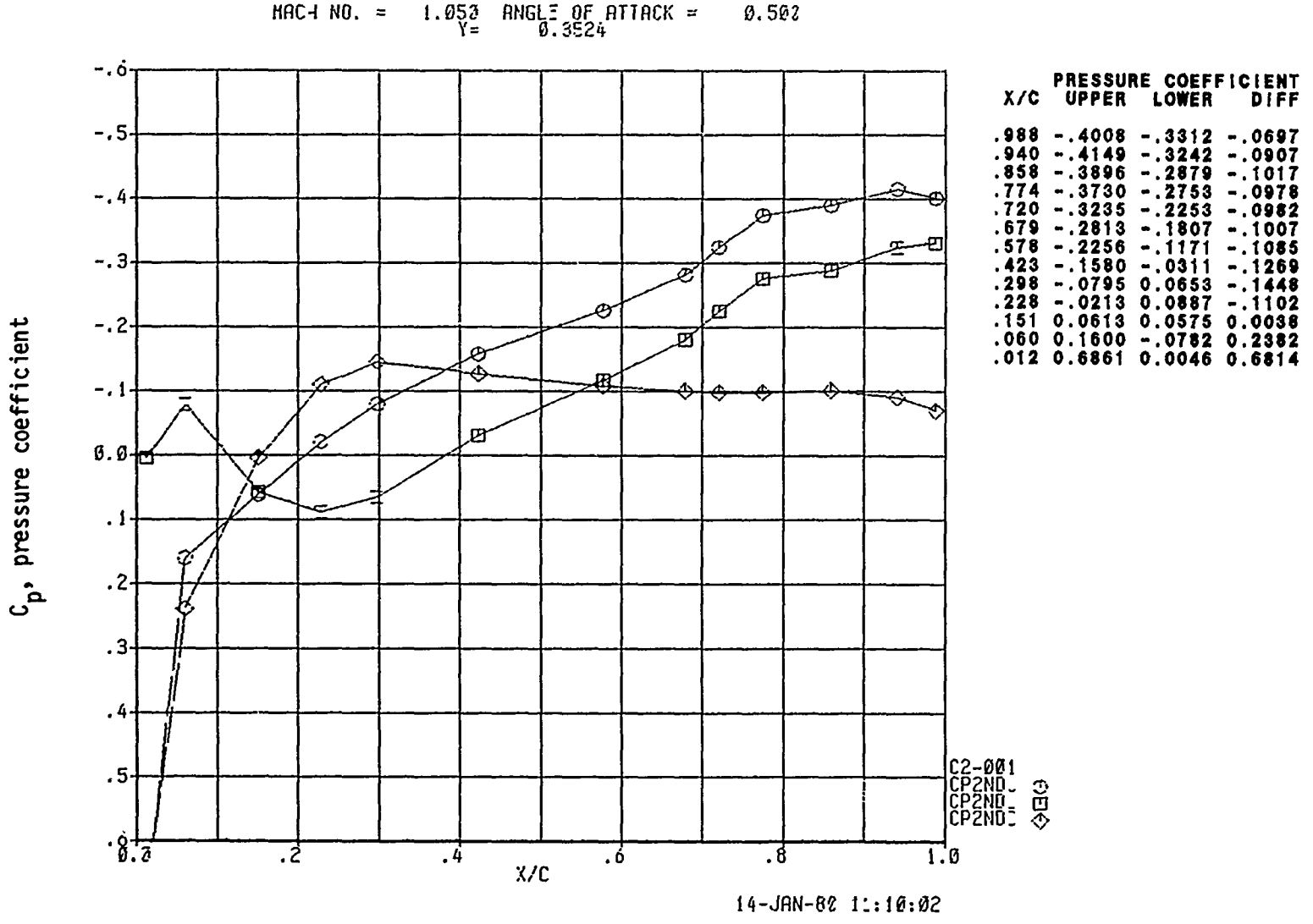


Figure 114, Chordwise Pressure Distribution, Steady, Configuration 1



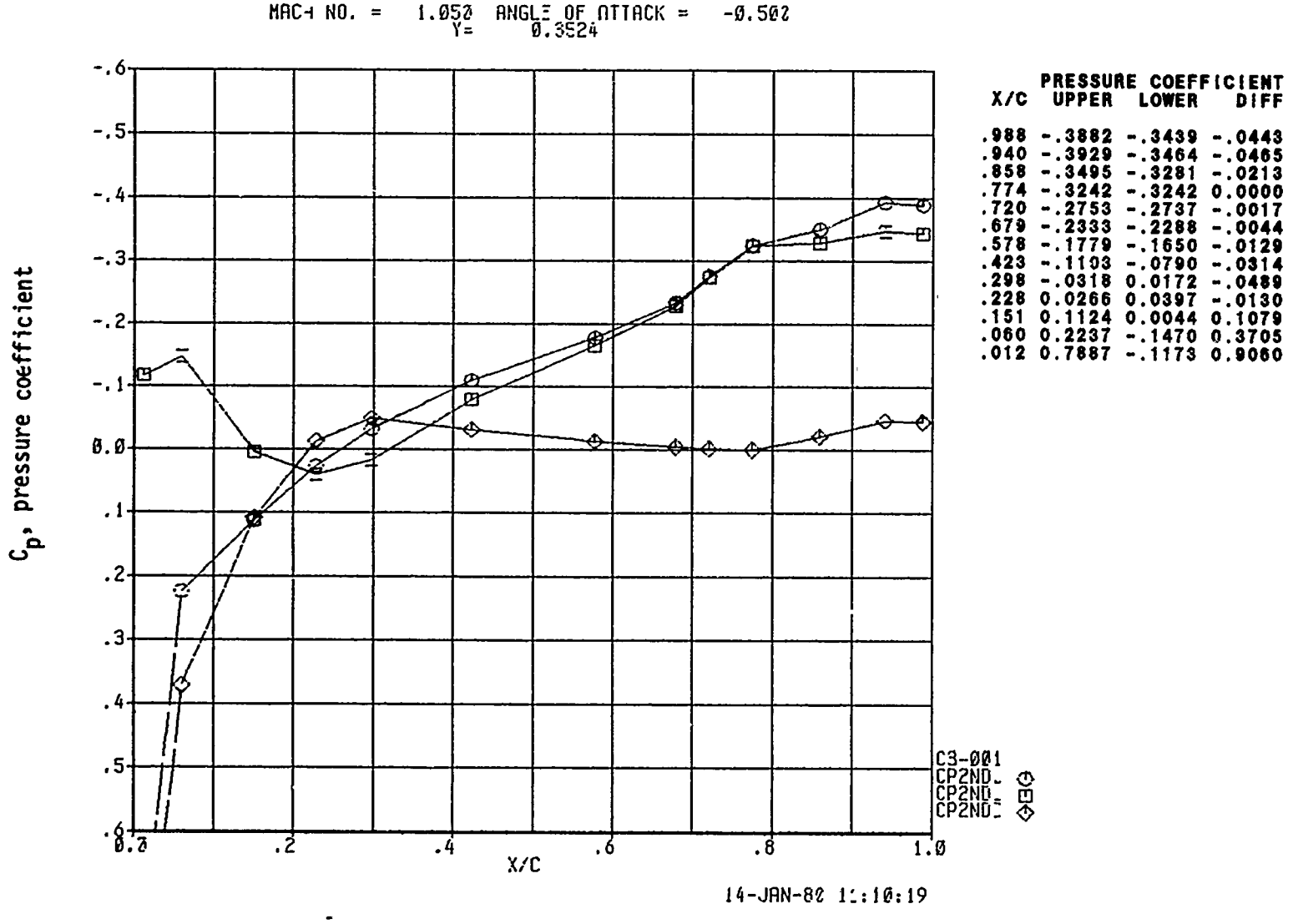
X/C	PRESSURE COEFFICIENT UPPER	LOWER	DIFF
.988	-.3944	-.3374	-.0570
.940	-.4038	-.3352	-.0686
.858	-.3694	-.3079	-.0615
.774	-.3486	-.2997	-.0489
.720	-.2993	-.2494	-.0499
.679	-.2572	-.2047	-.0526
.578	-.2017	-.1410	-.0606
.423	-.1341	-.0551	-.0791
.298	-.0556	0.0413	-.0969
.228	0.0027	0.0643	-.0616
.151	0.0869	0.0310	0.0559
.060	0.1920	-.1125	0.3044
.012	0.7377	-.0560	0.7937

Figure 115, Chordwise Pressure Distribution, Steady, Configuration 1



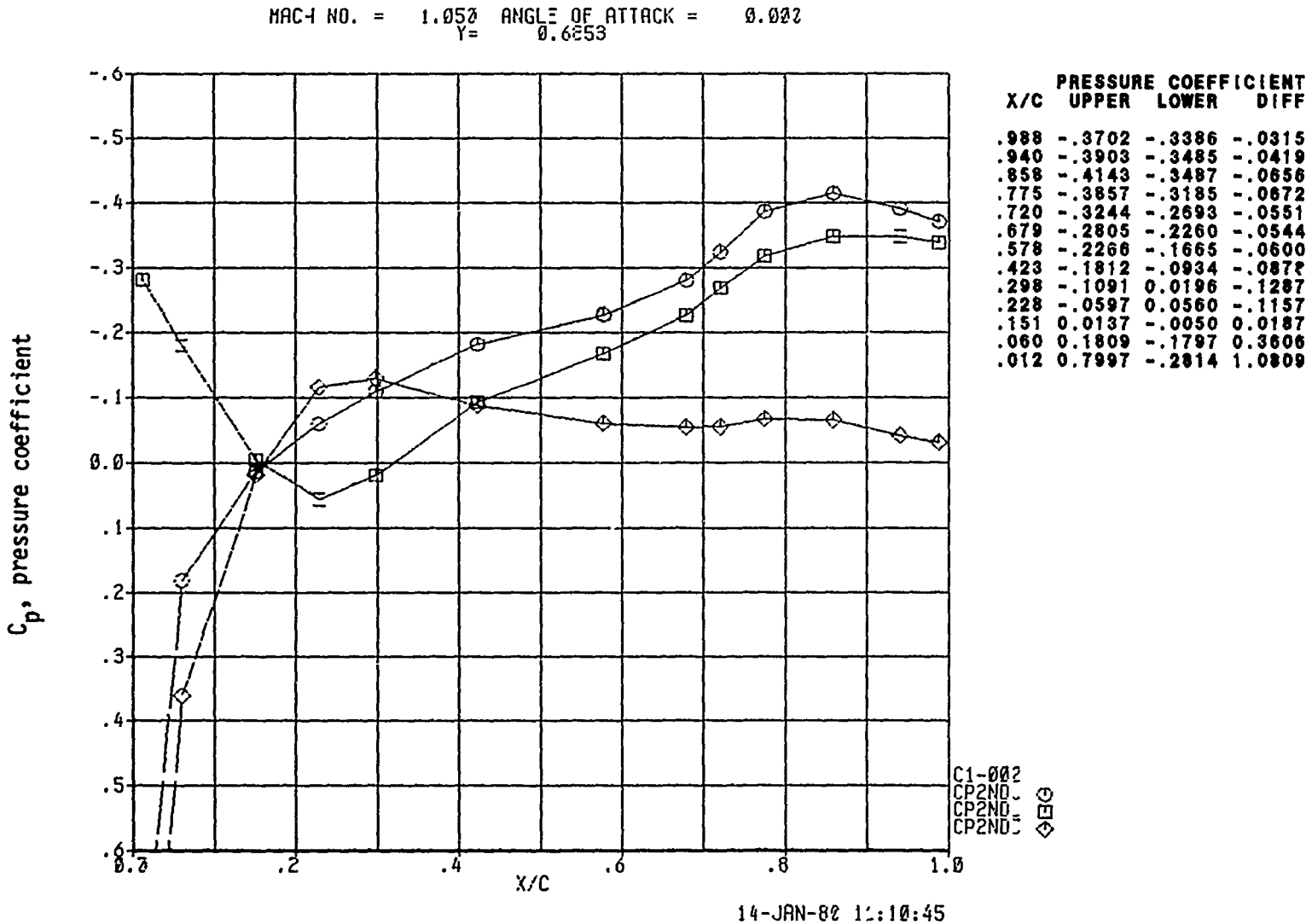
X/C	PRESSURE COEFFICIENT UPPER	LOWER	DIFF
.988	-.4008	-.3312	-.0697
.940	-.4149	-.3242	-.0907
.858	-.3896	-.2879	-.1017
.774	-.3730	-.2753	-.0978
.720	-.3235	-.2253	-.0982
.679	-.2813	-.1807	-.1007
.578	-.2256	-.1171	-.1085
.423	-.1580	-.0311	-.1269
.298	-.0795	0.0653	-.1448
.228	-.0213	0.0887	-.1102
.151	0.0613	0.0575	0.0038
.060	0.1600	-.0782	0.2382
.012	0.6861	0.0046	0.6814

Figure 116, Chordwise Pressure Distribution, Steady, Configuration 1



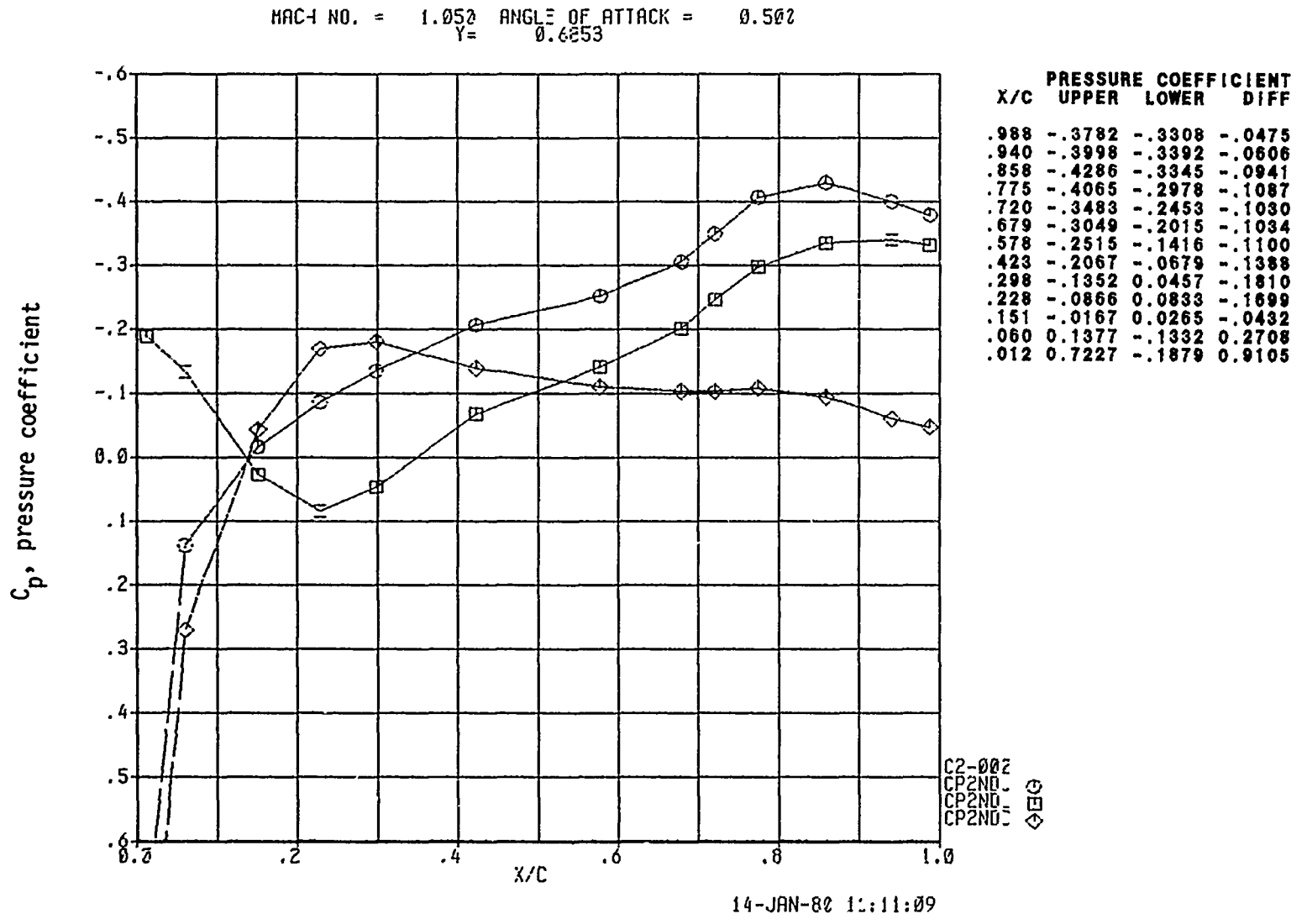
X/C	PRESSURE COEFFICIENT UPPER	LOWER	DIFF
.988	-.3882	-.3439	-.0443
.940	-.3929	-.3464	-.0465
.858	-.3495	-.3281	-.0213
.774	-.3242	-.3242	0.0000
.720	-.2753	-.2737	-.0017
.679	-.2333	-.2288	-.0044
.578	-.1779	-.1650	-.0129
.423	-.1103	-.0790	-.0314
.298	-.0318	0.0172	-.0489
.228	0.0266	0.0397	-.0130
.151	0.1124	0.0044	0.1079
.060	0.2237	-.1470	0.3705
.012	0.7887	-.1173	0.9060

Figure 117, Chordwise Pressure Distribution, Steady, Configuration 1



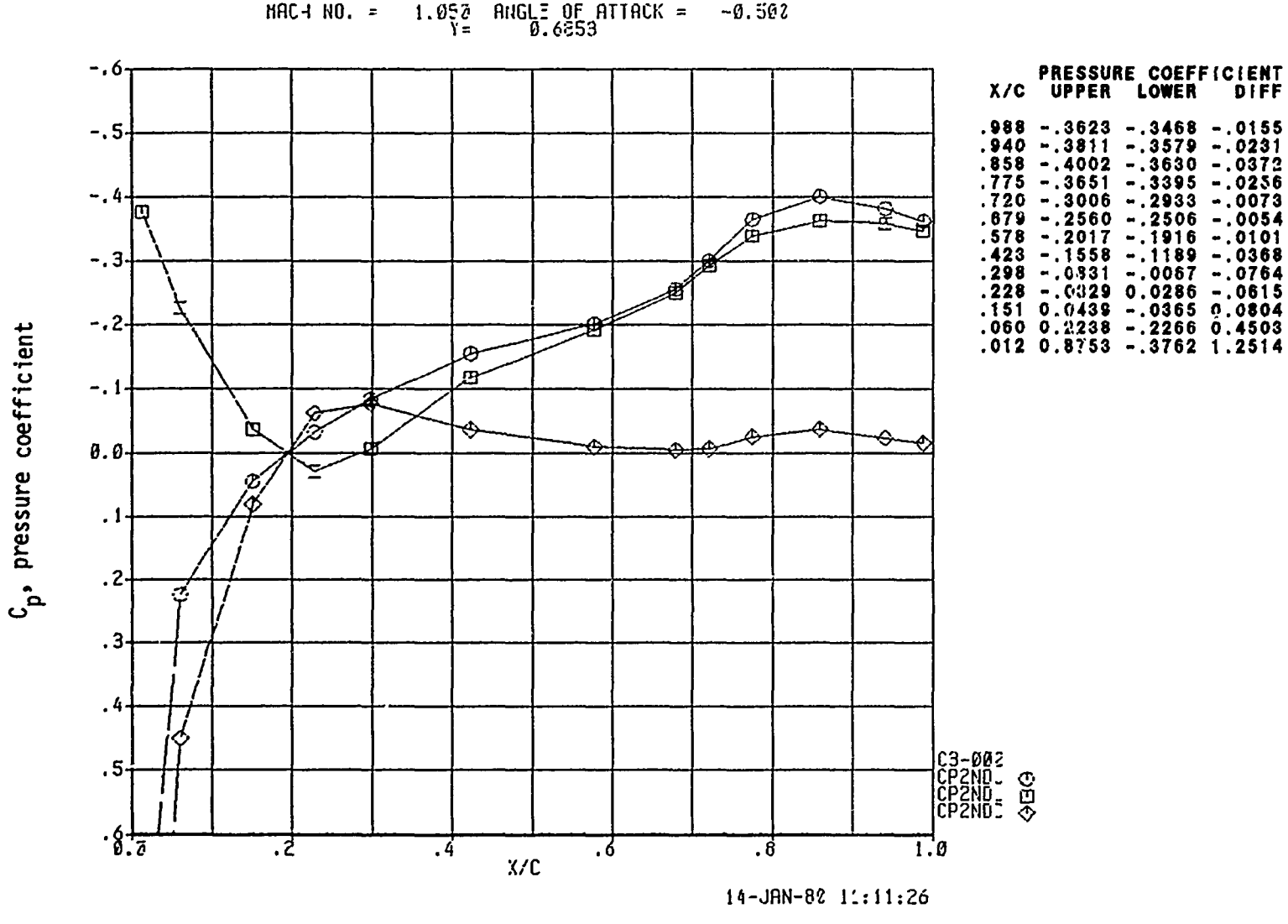
X/C	PRESSURE COEFFICIENT UPPER	LOWER	DIFF
.988	-.3702	-.3386	-.0315
.940	-.3903	-.3485	-.0419
.858	-.4143	-.3487	-.0656
.775	-.3857	-.3185	-.0672
.720	-.3244	-.2693	-.0551
.679	-.2805	-.2260	-.0544
.578	-.2266	-.1665	-.0600
.423	-.1812	-.0934	-.0878
.298	-.1091	0.0196	-.1287
.228	-.0597	0.0560	-.1157
.151	0.0137	-.0050	0.0187
.060	0.1809	-.1797	0.3606
.012	0.7997	-.2814	1.0809

Figure 118, Chordwise Pressure Distribution, Steady, Configuration 1



X/C	PRESSURE COEFFICIENT UPPER	LOWER	DIFF
.988	-.3782	-.3308	-.0475
.940	-.3998	-.3392	-.0606
.858	-.4286	-.3345	-.0941
.775	-.4065	-.2978	-.1087
.720	-.3483	-.2453	-.1030
.679	-.3049	-.2015	-.1034
.578	-.2515	-.1416	-.1100
.423	-.2067	-.0679	-.1388
.298	-.1352	0.0457	-.1810
.228	-.0866	0.0833	-.1699
.151	-.0167	0.0265	-.0432
.060	0.1377	-.1332	0.2708
.012	0.7227	-.1879	0.9105

Figure 119, Chordwise Pressure Distribution, Steady, Configuration 1



X/C	PRESSURE COEFFICIENT UPPER	LOWER	DIFF
.988	-.3623	-.3468	-.0155
.940	-.3811	-.3579	-.0231
.858	-.4002	-.3630	-.0372
.775	-.3651	-.3395	-.0256
.720	-.3006	-.2933	-.0073
.679	-.2560	-.2506	-.0054
.578	-.2017	-.1916	-.0101
.423	-.1558	-.1189	-.0368
.298	-.0931	-.0067	-.0764
.228	-.0329	0.0286	-.0615
.151	0.0439	-.0365	0.0804
.060	0.2238	-.2266	0.4503
.012	0.8753	-.3762	1.2514

Figure 120, Chordwise Pressure Distribution, Steady, Configuration 1

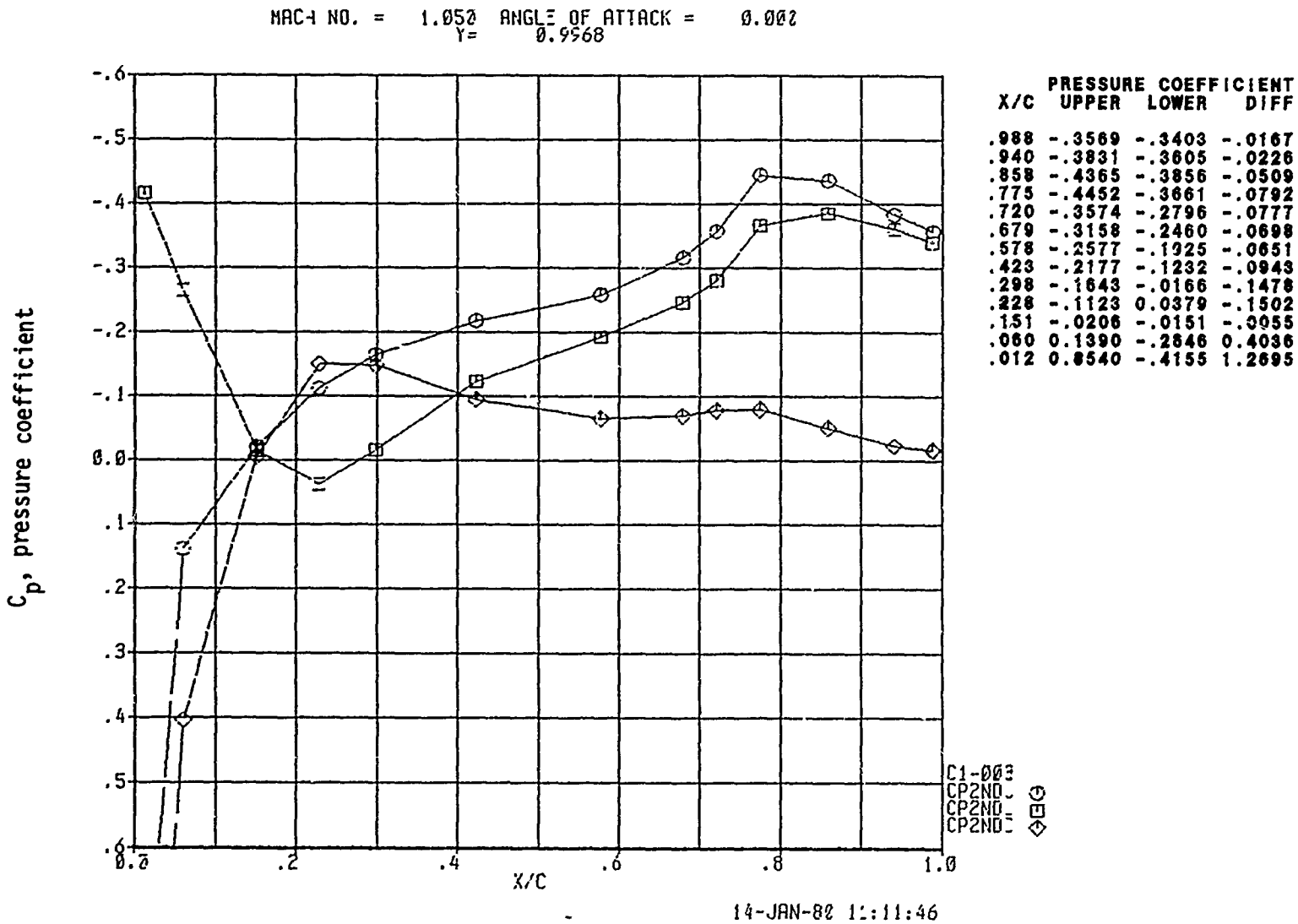
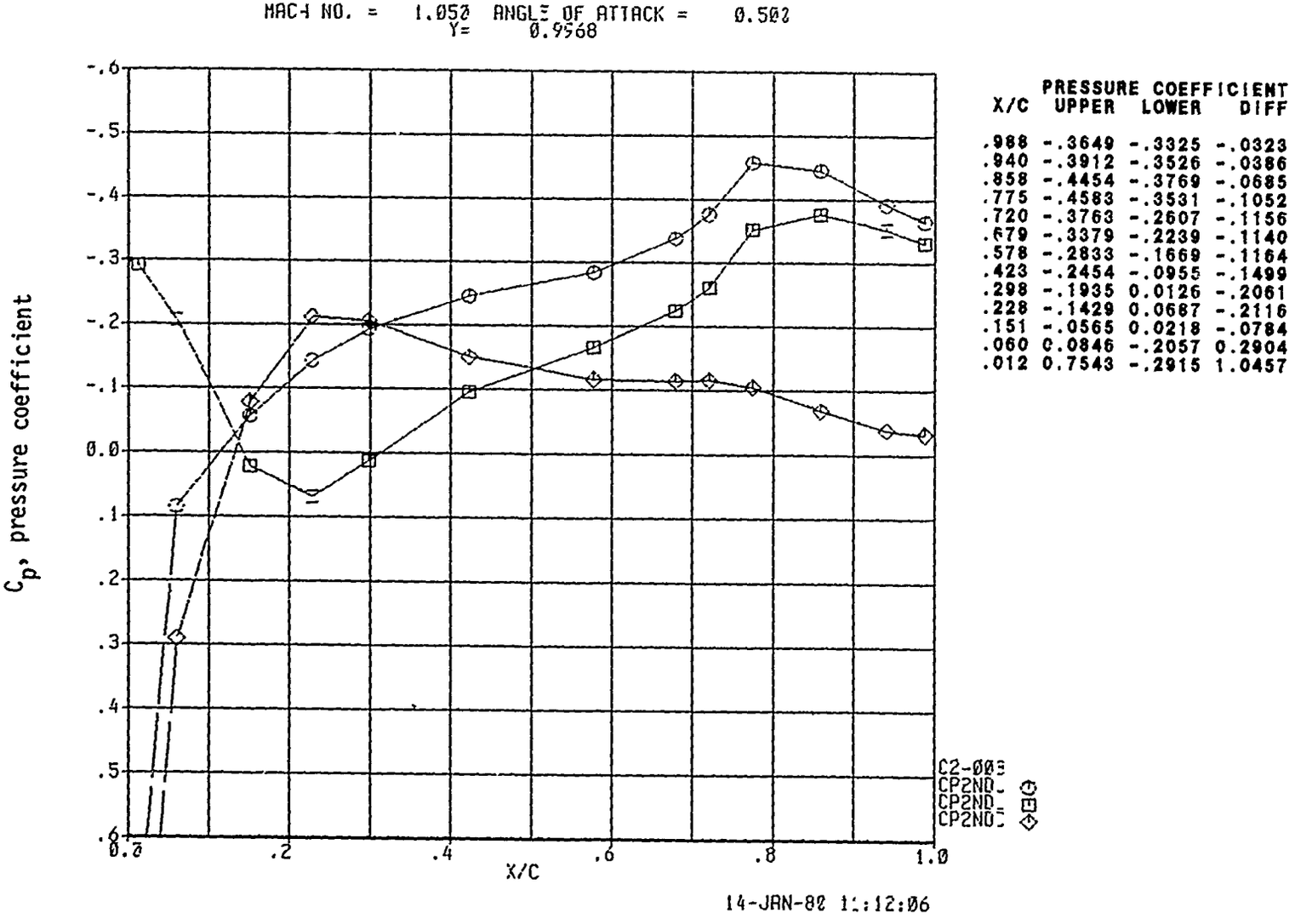
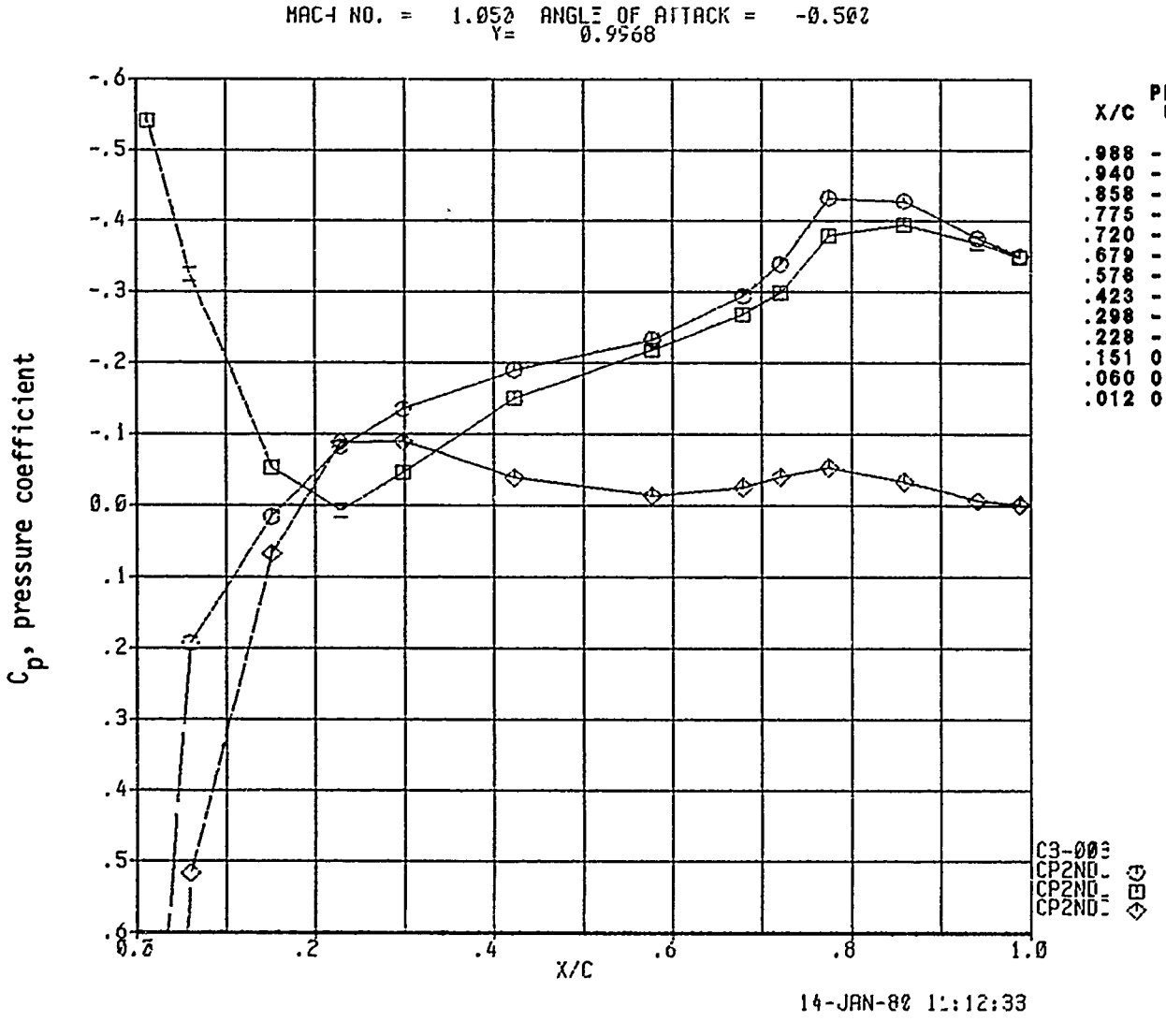


Figure 121, Chordwise Pressure Distribution, Steady, Configuration 1



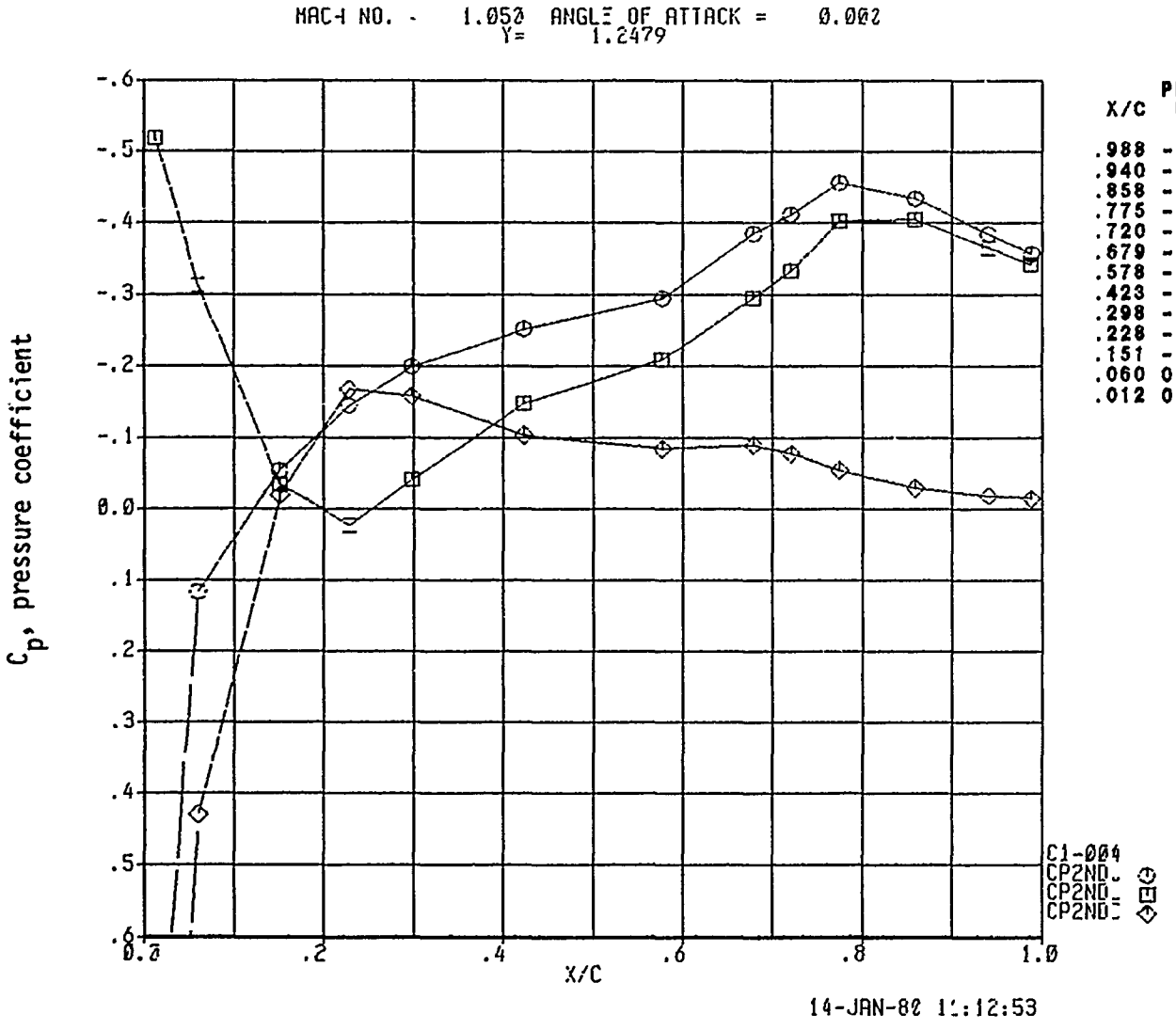
X/C	PRESSURE COEFFICIENT UPPER	LOWER	DIFF
.988	-.3649	-.3325	-.0323
.940	-.3912	-.3526	-.0386
.858	-.4454	-.3769	-.0685
.775	-.4583	-.3531	-.1052
.720	-.3763	-.2607	-.1156
.679	-.3379	-.2239	-.1140
.578	-.2833	-.1669	-.1164
.423	-.2454	-.0955	-.1499
.298	-.1935	0.0126	-.2061
.228	-.1429	0.0687	-.2116
.151	-.0565	0.0218	-.0784
.060	0.0846	-.2057	0.2904
.012	0.7543	-.2915	1.0457

Figure 122, Chordwise Pressure Distribution, Steady, Configuration 1



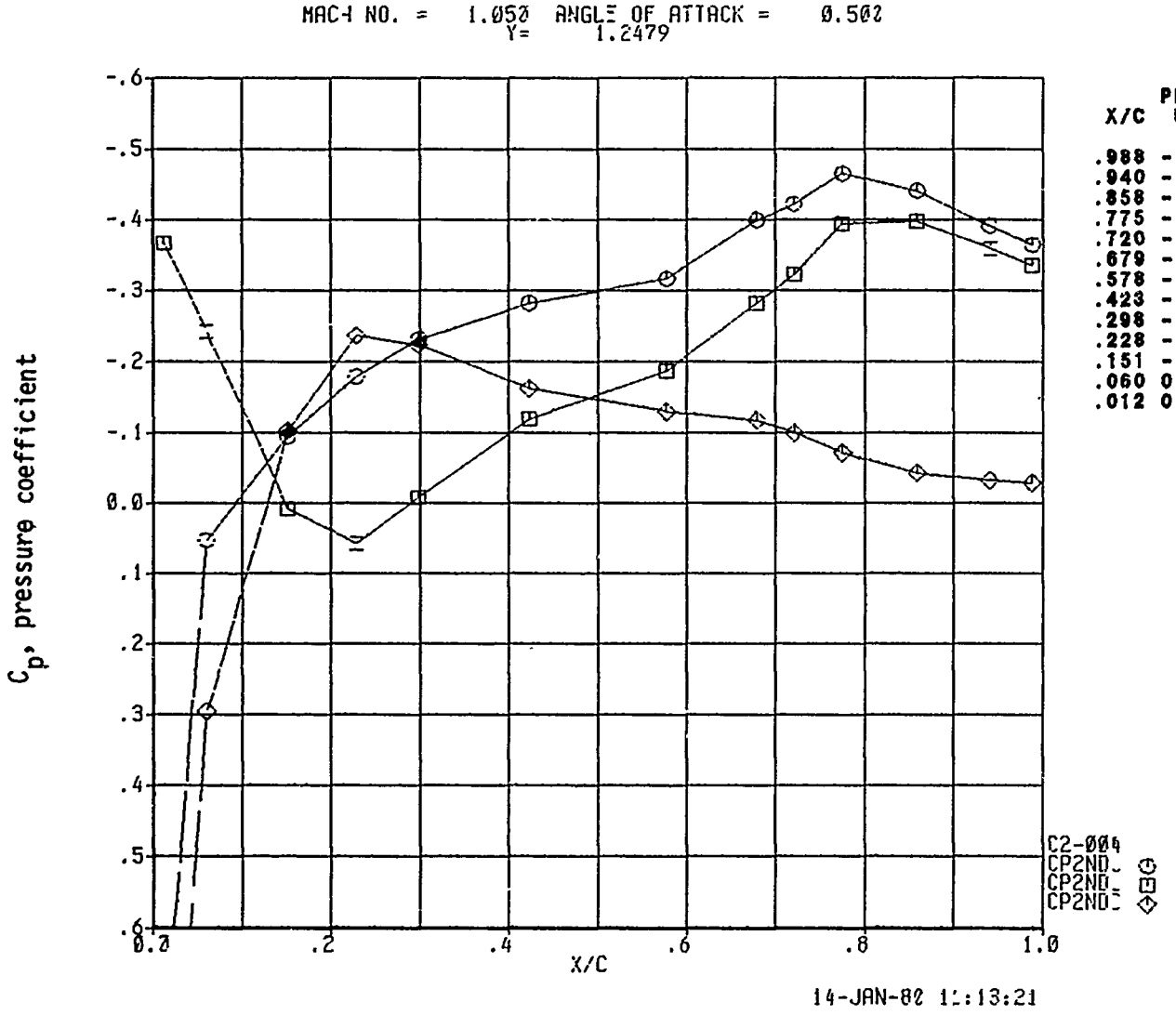
X/C	PRESSURE COEFFICIENT UPPER	LOWER	DIFF
.988	-.3493	-.3482	-.0010
.940	-.3752	-.3686	-.0066
.858	-.4278	-.3946	-.0332
.775	-.4323	-.3793	-.0530
.720	-.3385	-.2987	-.0399
.679	-.2939	-.2683	-.0255
.578	-.2321	-.2183	-.0138
.423	-.1900	-.1512	-.0389
.298	-.1353	-.0459	-.0894
.228	-.0820	0.0068	-.0888
.151	0.0151	-.0523	0.0673
.060	0.1929	-.3238	0.5167
.012	0.9517	-.5416	1.4933

Figure 123, Chordwise Pressure Distribution, Steady, Configuration 1



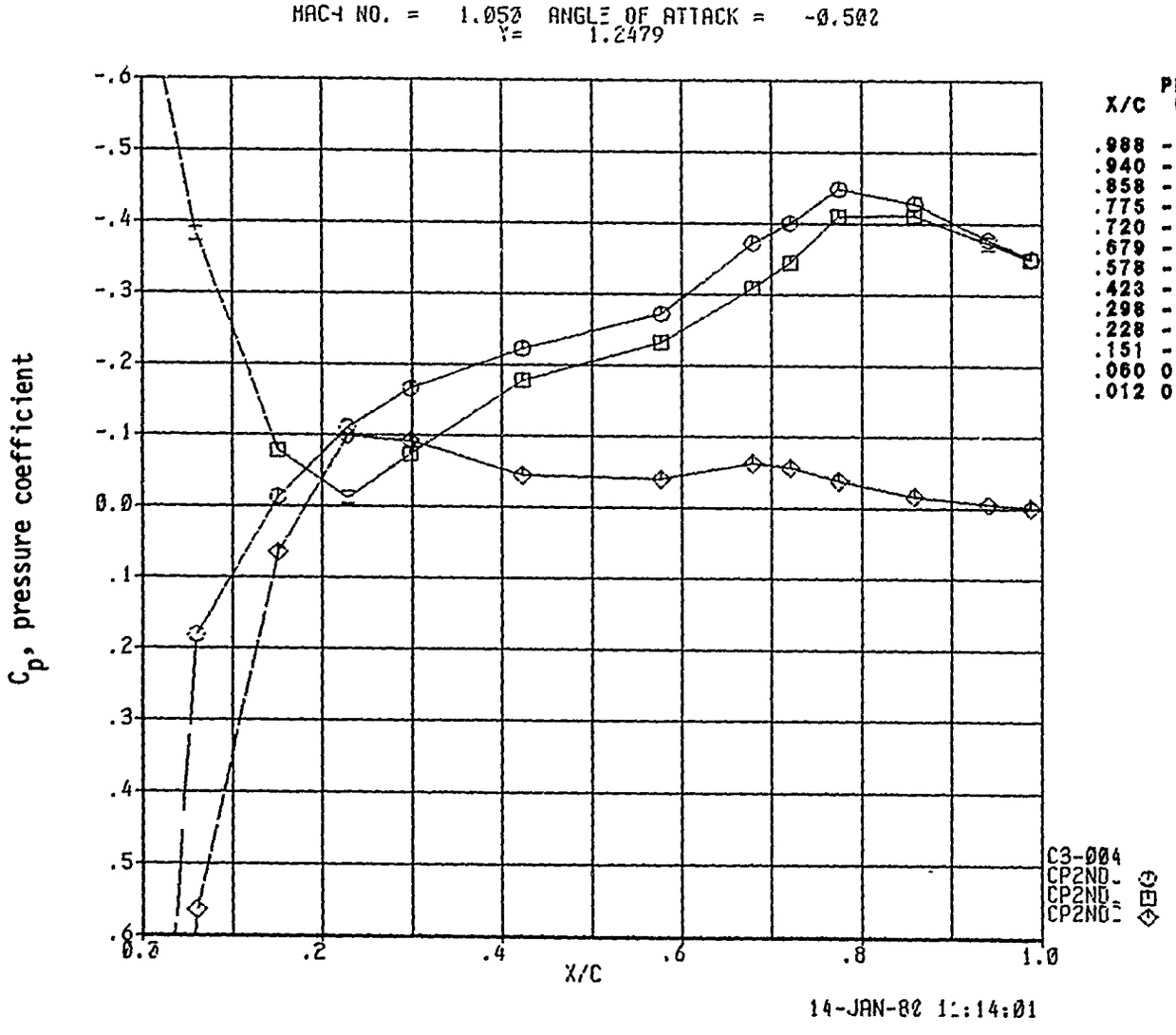
X/C	PRESSURE COEFFICIENT UPPER	LOWER	DIFF
.988	-.3569	-.3423	-.0148
.940	-.3840	-.3652	-.0188
.858	-.4338	-.4041	-.0298
.775	-.4561	-.4016	-.0545
.720	-.4109	-.3331	-.0778
.679	-.3850	-.2952	-.0898
.578	-.2943	-.2096	-.0847
.423	-.2520	-.1486	-.1034
.298	-.1988	-.0409	-.1579
.228	-.1449	0.0228	-.1677
.151	-.0539	-.0350	-.0190
.060	0.1171	-.3123	0.4294
.012	0.8694	-.5176	1.3869

Figure 124, Chordwise Pressure Distribution, Steady, Configuration 1



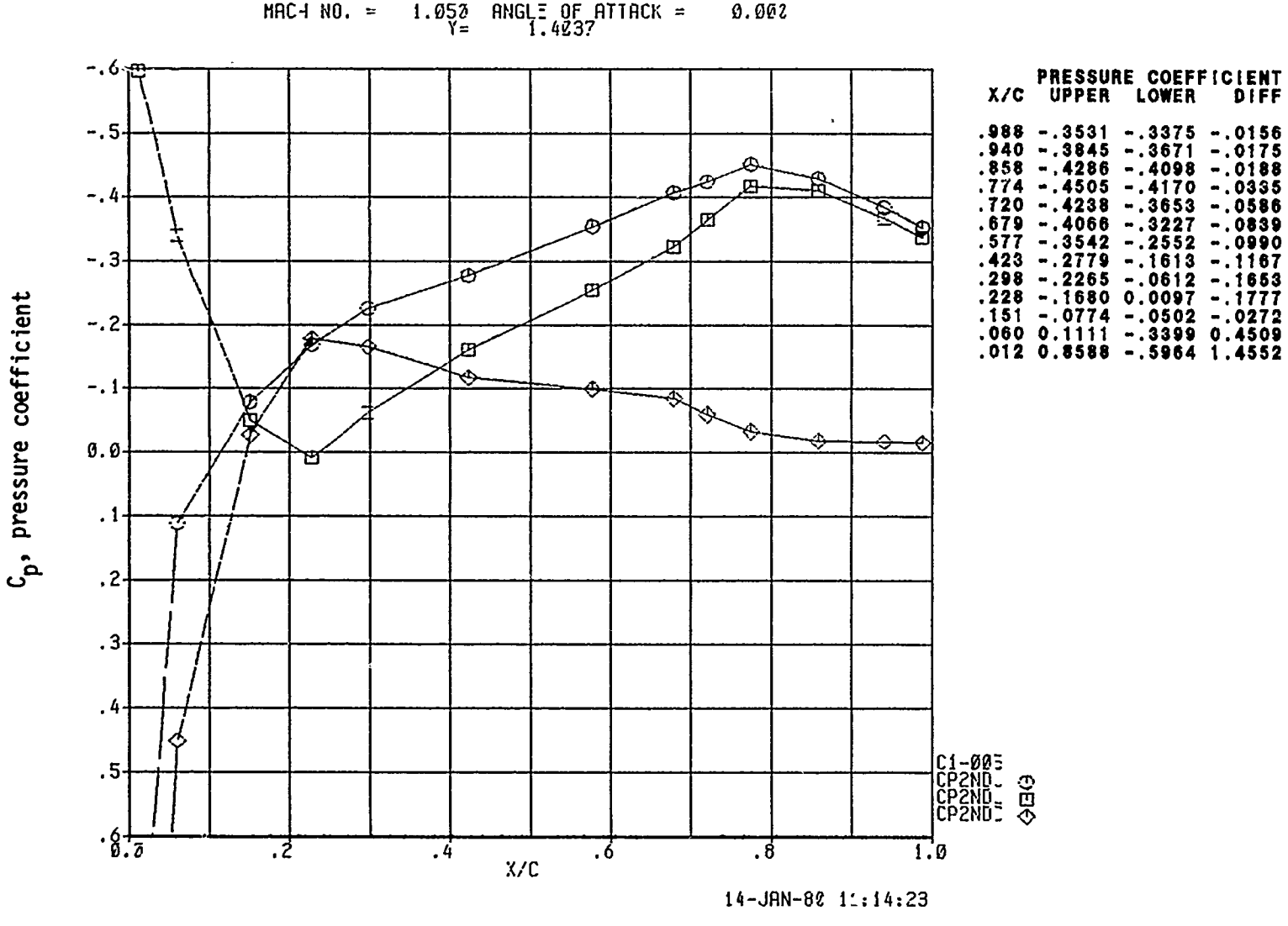
X/C	PRESSURE COEFFICIENT UPPER	LOWER	DIFF
.988	-.3642	-.3354	-.0288
.940	-.3908	-.3587	-.0321
.858	-.4405	-.3976	-.0428
.775	-.4646	-.3933	-.0712
.720	-.4218	-.3222	-.0996
.679	-.3989	-.2812	-.1177
.578	-.3168	-.1872	-.1296
.423	-.2817	-.1190	-.1627
.298	-.2315	-.0083	-.2233
.228	-.1792	0.0574	-.2366
.151	-.0952	0.0074	-.1026
.060	0.0527	-.2425	0.2951
.012	0.7493	-.3665	1.1158

Figure 125, Chordwise Pressure Distribution, Steady, Configuration 1



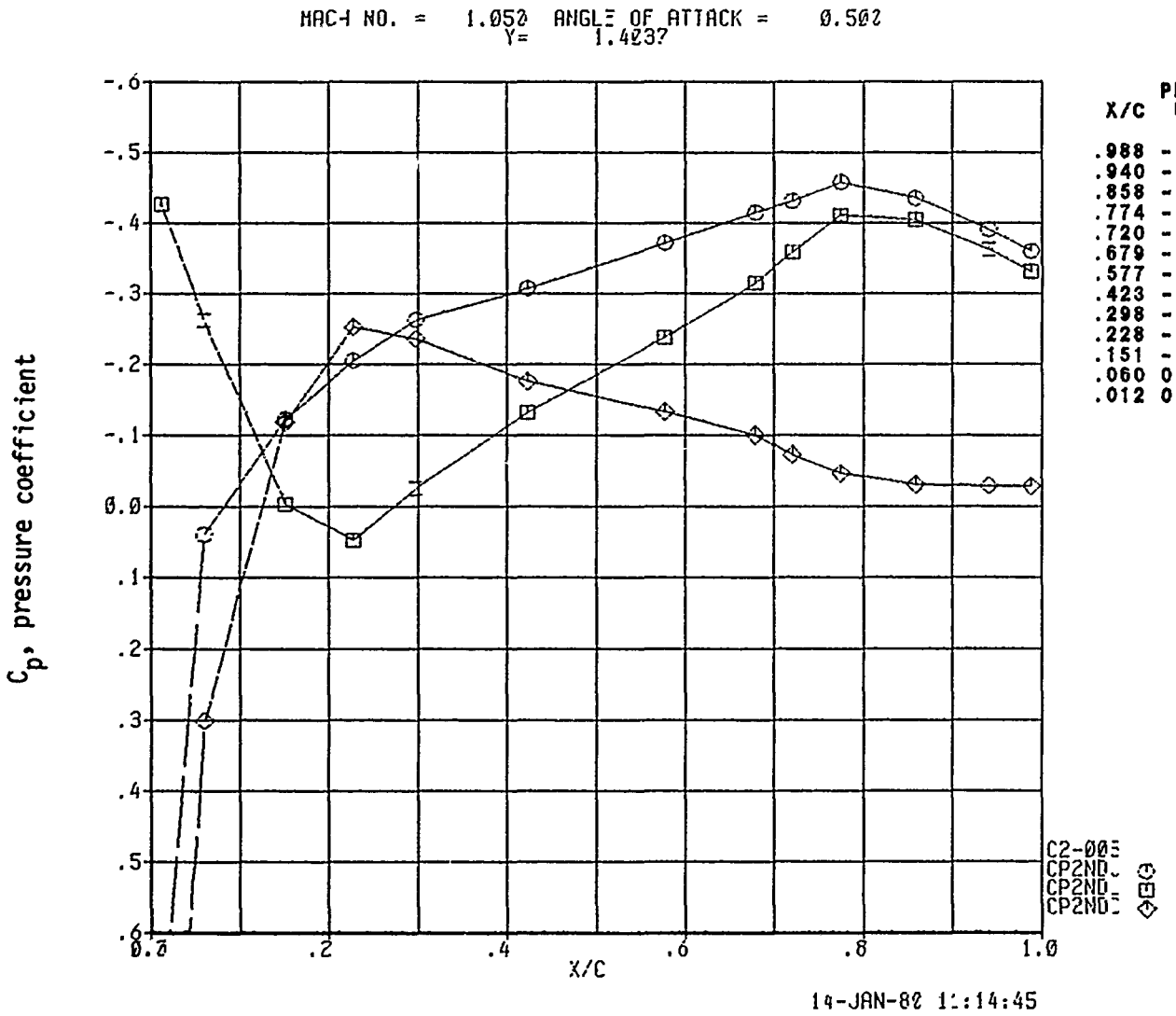
X/C	PRESSURE COEFFICIENT UPPER	LOWER	DIFF
.988	-.3501	-.3494	-.0008
.940	-.3775	-.3719	-.0055
.858	-.4274	-.4108	-.0166
.775	-.4480	-.4102	-.0378
.720	-.4001	-.3443	-.0559
.679	-.3713	-.3093	-.0619
.578	-.2720	-.2323	-.0398
.423	-.2226	-.1783	-.0443
.298	-.1663	-.0738	-.0926
.228	-.1108	-.0121	-.0987
.151	-.0129	-.0777	0.0646
.060	0.1809	-.3827	0.5637
.012	0.9863	-.6716	1.6579

Figure 126, Chordwise Pressure Distribution, Steady, Configuration 1



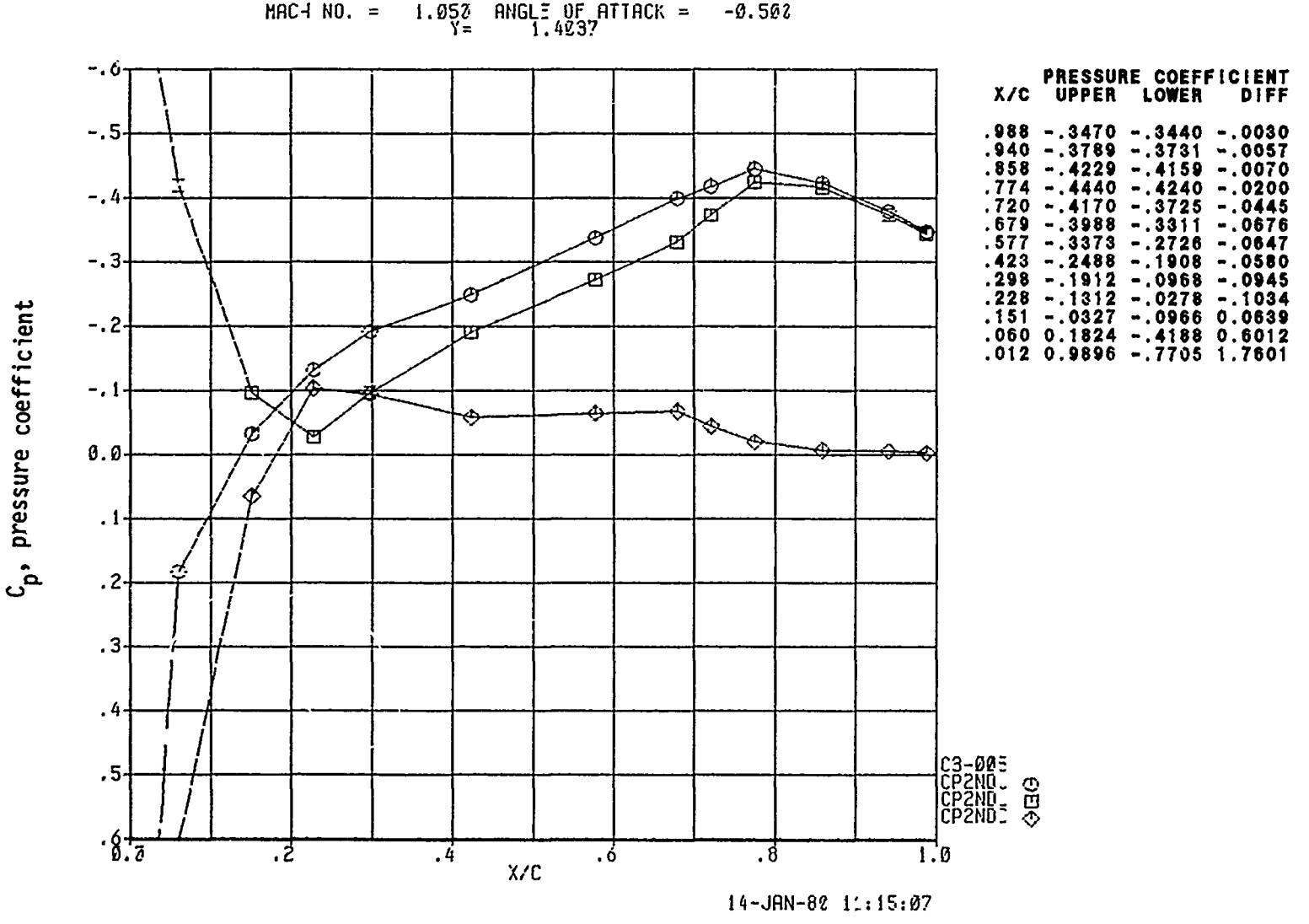
X/C	PRESSURE COEFFICIENT UPPER	LOWER	DIFF
.988	-.3531	-.3375	-.0156
.940	-.3845	-.3671	-.0175
.858	-.4286	-.4098	-.0188
.774	-.4505	-.4170	-.0335
.720	-.4238	-.3653	-.0586
.679	-.4066	-.3227	-.0839
.577	-.3542	-.2552	-.0990
.423	-.2779	-.1613	-.1167
.298	-.2265	-.0612	-.1653
.228	-.1680	0.0097	-.1777
.151	-.0774	-.0502	-.0272
.060	0.1111	-.3399	0.4509
.012	0.8588	-.5964	1.4552

Figure 127, Chordwise Pressure Distribution, Steady, Configuration 1



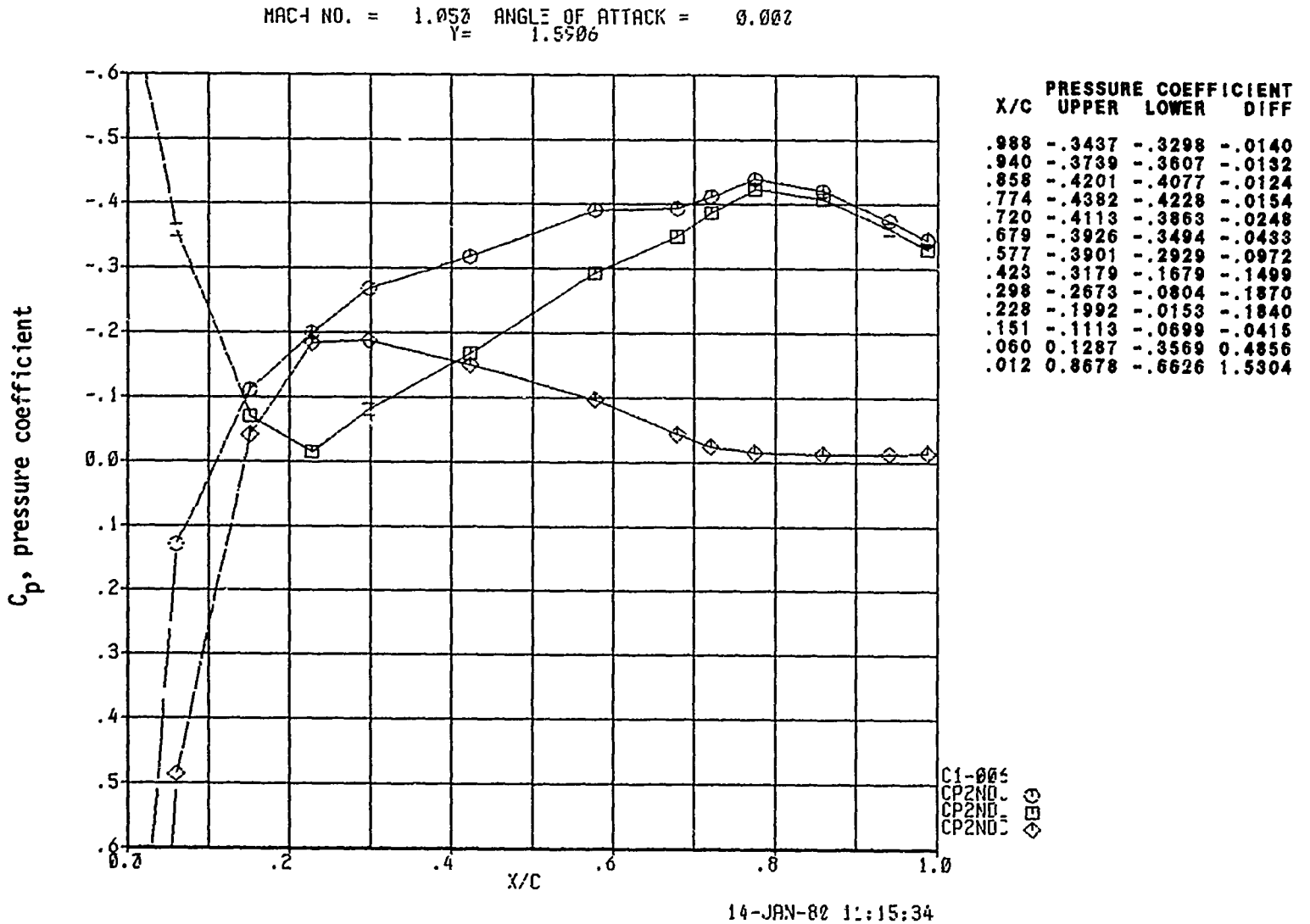
X/C	PRESSURE COEFFICIENT UPPER	LOWER	DIFF
.988	-.3596	-.3314	-.0282
.940	-.3906	-.3614	-.0292
.858	-.4347	-.4040	-.0306
.774	-.4574	-.4104	-.0470
.720	-.4310	-.3583	-.0726
.679	-.4148	-.3146	-.1002
.577	-.3713	-.2380	-.1333
.423	-.3073	-.1320	-.1754
.298	-.2619	-.0259	-.2361
.228	-.2049	0.0470	-.2520
.151	-.1224	-.0041	-.1182
.060	0.0389	-.2618	0.3007
.012	0.7242	-.4262	1.1503

Figure 128, Chordwise Pressure Distribution, Steady, Configuration 1



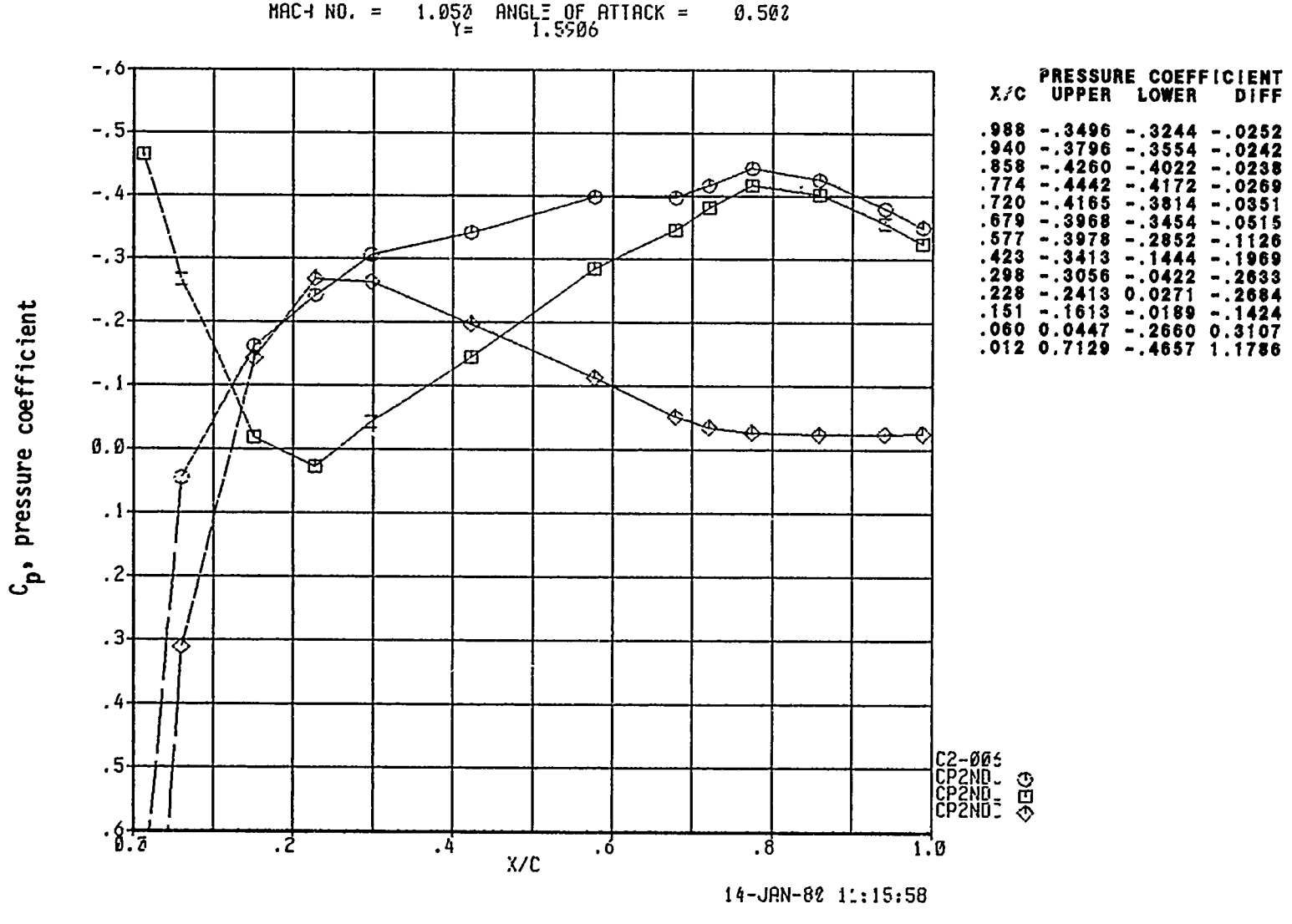
X/C	PRESSURE COEFFICIENT UPPER	LOWER	DIFF
.988	-.3470	-.3440	-.0030
.940	-.3789	-.3731	-.0057
.858	-.4229	-.4159	-.0070
.774	-.4440	-.4240	-.0200
.720	-.4170	-.3725	-.0445
.679	-.3988	-.3311	-.0676
.577	-.3373	-.2726	-.0647
.423	-.2488	-.1908	-.0580
.298	-.1912	-.0968	-.0945
.228	-.1312	-.0278	-.1034
.151	-.0327	-.0966	0.0639
.060	0.1824	-.4188	0.6012
.012	0.9896	-.7705	1.7601

Figure 129, Chordwise Pressure Distribution, Steady, Configuration 1



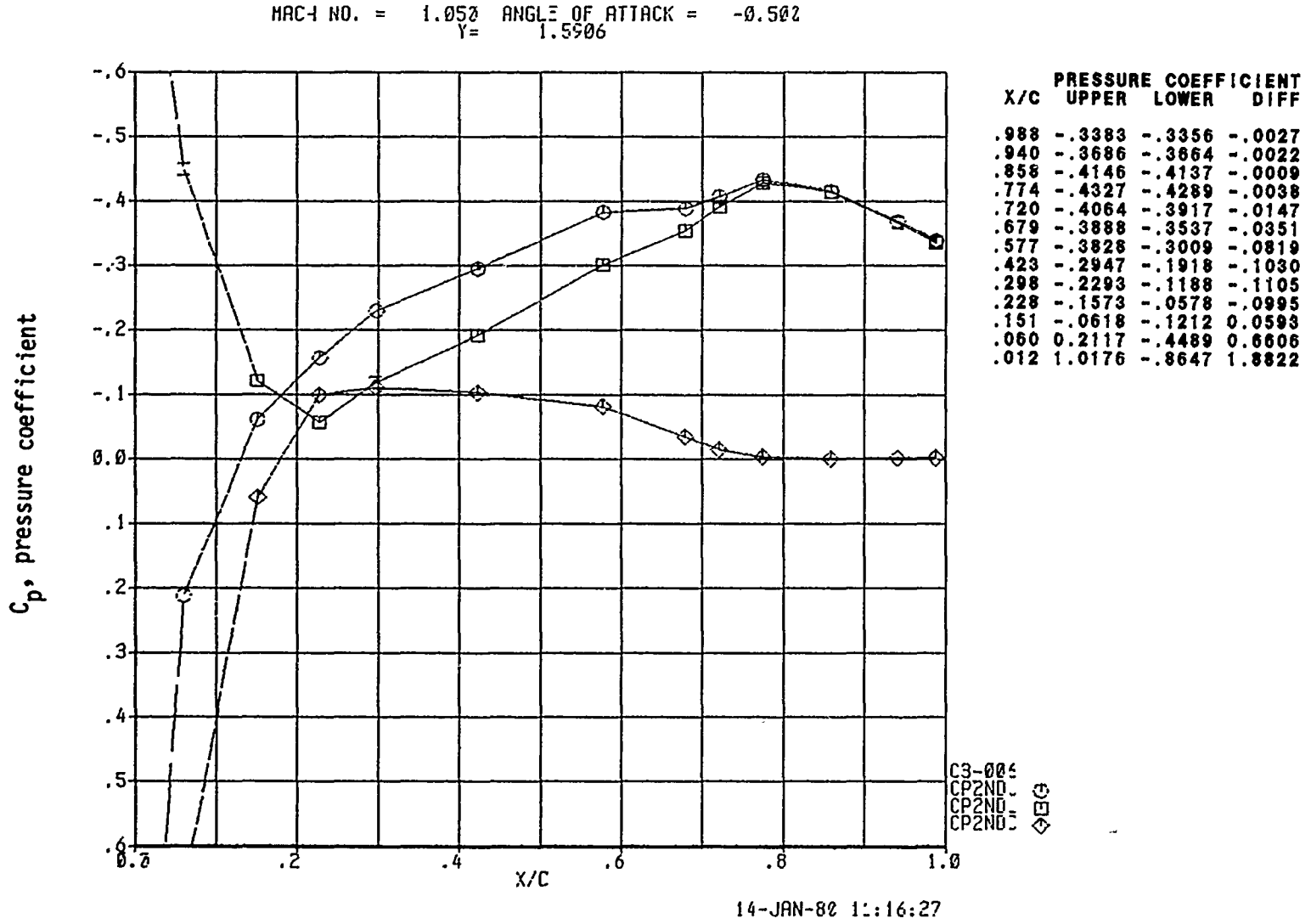
X/C	PRESSURE COEFFICIENT UPPER	LOWER	DIFF
.988	-.3437	-.3298	-.0140
.940	-.3739	-.3607	-.0132
.858	-.4201	-.4077	-.0124
.774	-.4382	-.4228	-.0154
.720	-.4113	-.3863	-.0248
.679	-.3926	-.3494	-.0433
.577	-.3901	-.2929	-.0972
.423	-.3179	-.1679	-.1499
.298	-.2673	-.0804	-.1870
.228	-.1992	-.0153	-.1840
.151	-.1113	-.0699	-.0415
.060	0.1287	-.3569	0.4856
.012	0.8678	-.6626	1.5304

Figure 130, Chordwise Pressure Distribution, Steady, Configuration 1



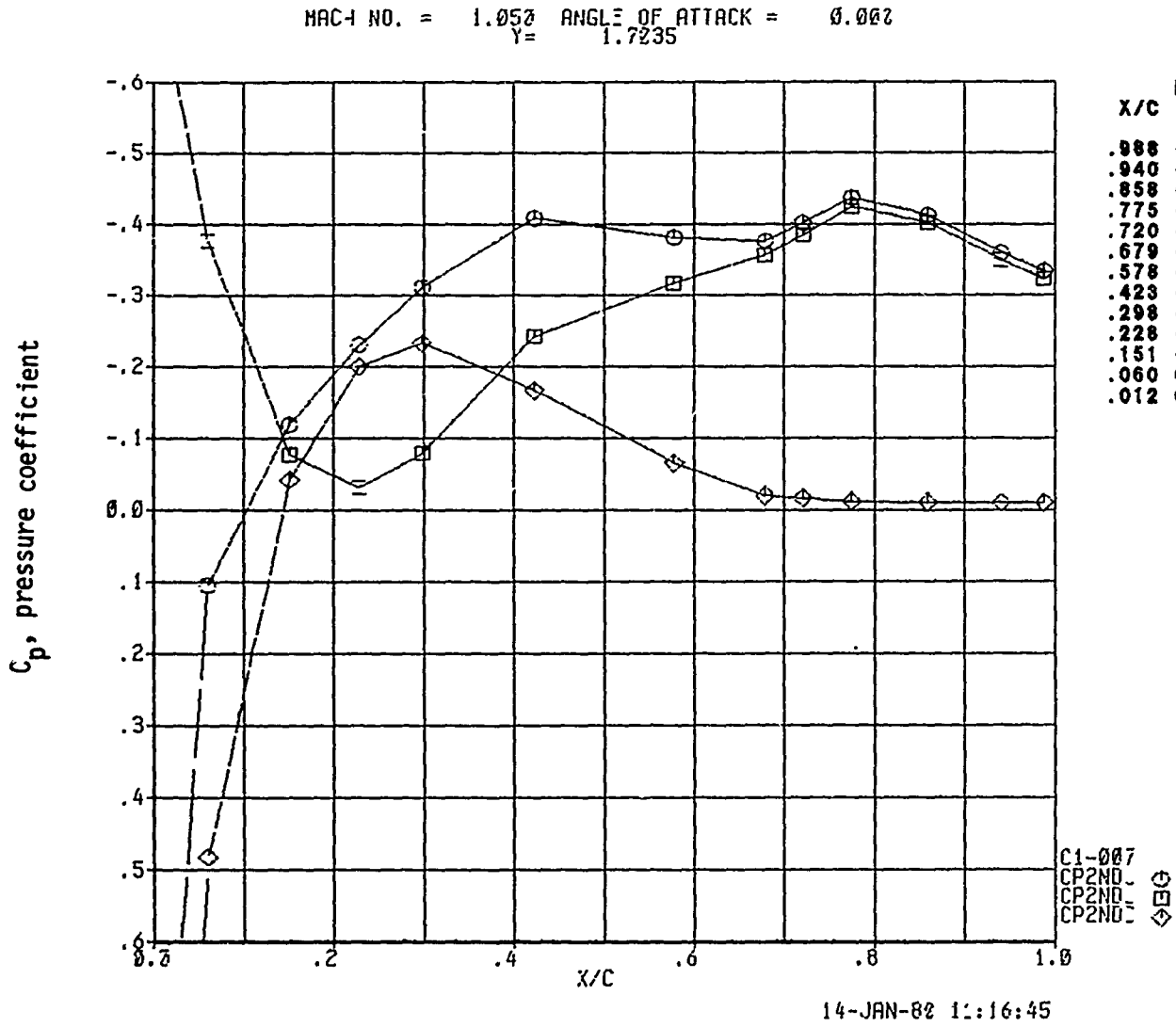
X/C	PRESSURE COEFFICIENT UPPER	LOWER	DIFF
.988	-.3496	-.3244	-.0252
.940	-.3796	-.3554	-.0242
.858	-.4260	-.4022	-.0238
.774	-.4442	-.4172	-.0269
.720	-.4165	-.3814	-.0351
.679	-.3968	-.3454	-.0515
.577	-.3978	-.2852	-.1126
.423	-.3413	-.1444	-.1969
.298	-.3056	-.0422	-.2633
.228	-.2413	0.0271	-.2684
.151	-.1613	-.0189	-.1424
.060	0.0447	-.2660	0.3107
.012	0.7129	-.4657	1.1786

Figure 131, Chordwise Pressure Distribution, Steady, Configuration 1



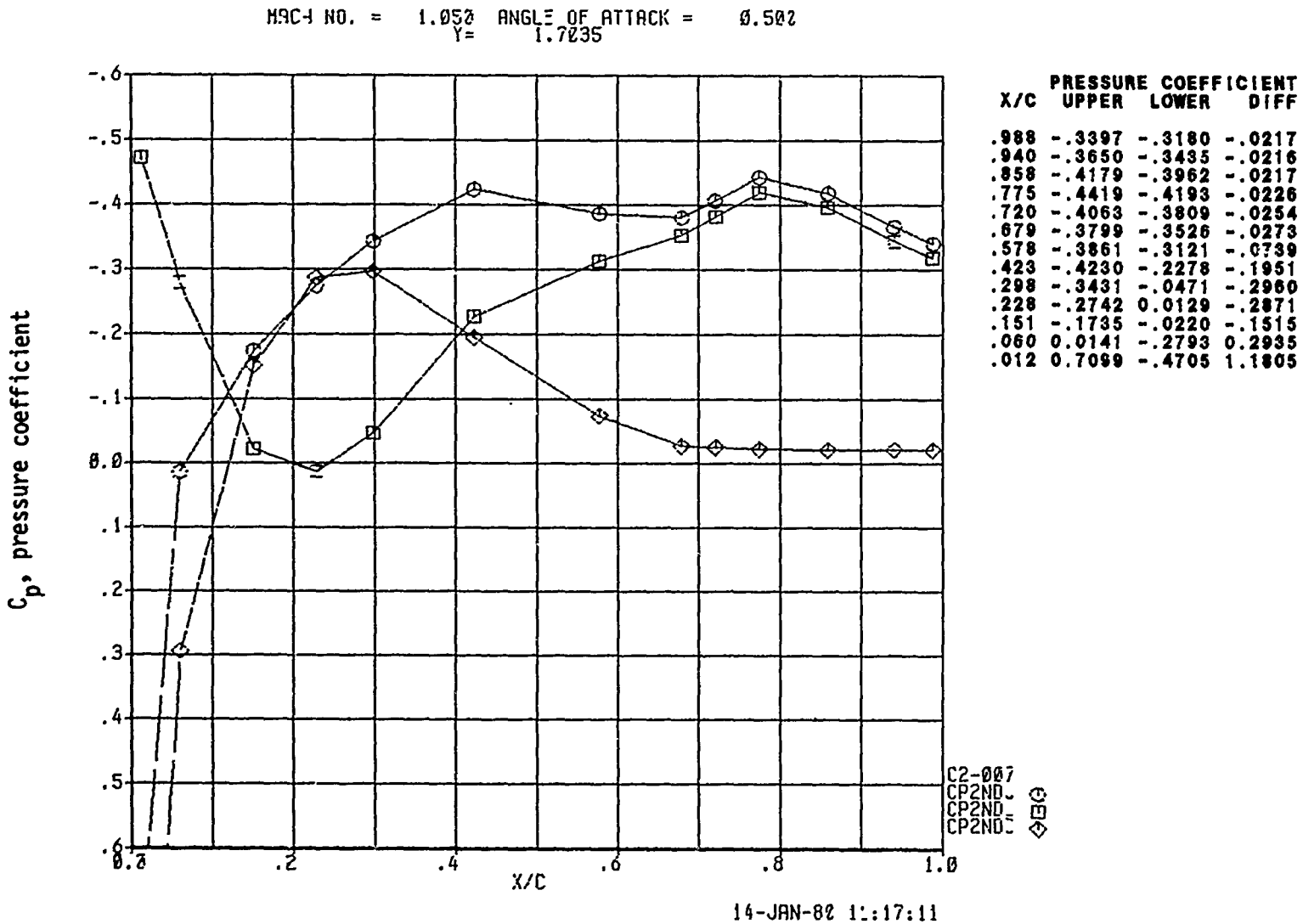
X/C	PRESSURE COEFFICIENT UPPER	LOWER	DIFF
.988	-.3383	-.3356	-.0027
.940	-.3686	-.3664	-.0022
.858	-.4146	-.4137	-.0009
.774	-.4327	-.4289	-.0038
.720	-.4064	-.3917	-.0147
.679	-.3888	-.3537	-.0351
.577	-.3828	-.3009	-.0819
.423	-.2947	-.1918	-.1030
.298	-.2293	-.1188	-.1105
.228	-.1573	-.0578	-.0995
.151	-.0618	-.1212	0.0593
.060	0.2117	-.4489	0.6606
.012	1.0176	-.8647	1.8822

Figure 132, Chordwise Pressure Distribution, Steady, Configuration 1



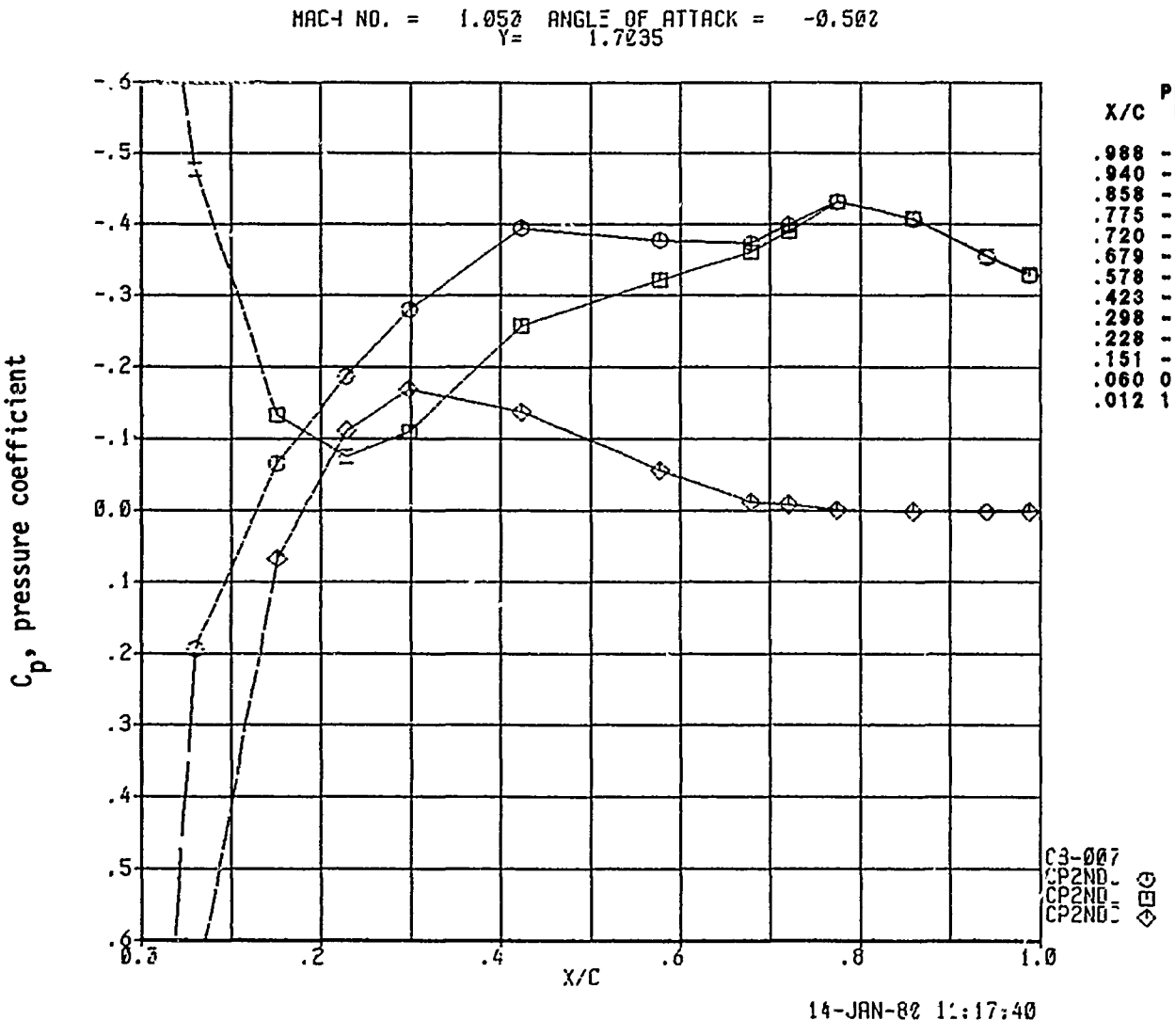
X/C	PRESSURE COEFFICIENT UPPER	LOWER	DIFF
.988	-.3336	-.3234	-.0103
.940	-.3590	-.3490	-.0100
.858	-.4120	-.4016	-.0104
.775	-.4363	-.4243	-.0119
.720	-.4017	-.3850	-.0167
.679	-.3759	-.3562	-.0197
.578	-.3814	-.3165	-.0649
.423	-.4084	-.2423	-.1662
.298	-.3113	-.0787	-.2326
.228	-.2304	-.0311	-.1994
.151	-.1193	-.0772	-.0421
.060	0.1045	-.3771	0.4816
.012	0.8783	-.6856	1.5640

Figure 133, Chordwise Pressure Distribution, Steady, Configuration 1



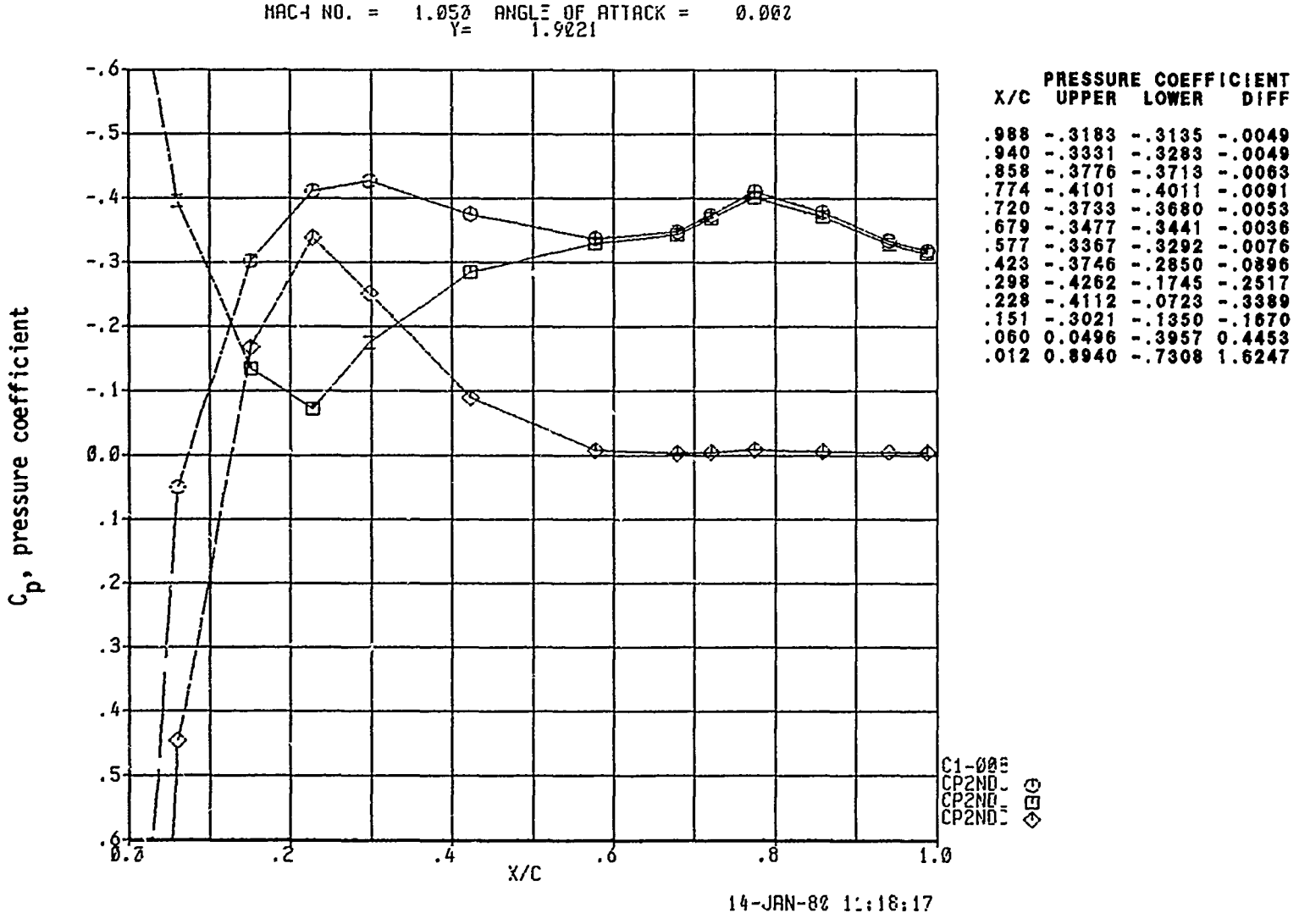
X/C	PRESSURE COEFFICIENT UPPER	LOWER	DIFF
.988	-.3397	-.3180	-.0217
.940	-.3650	-.3435	-.0216
.858	-.4179	-.3962	-.0217
.775	-.4419	-.4193	-.0226
.720	-.4063	-.3809	-.0254
.679	-.3799	-.3526	-.0273
.578	-.3861	-.3121	-.0739
.423	-.4230	-.2278	-.1951
.298	-.3431	-.0471	-.2960
.228	-.2742	0.0129	-.2871
.151	-.1735	-.0220	-.1515
.060	0.0141	-.2793	0.2935
.012	0.7099	-.4705	1.1805

Figure 134, Chordwise Pressure Distribution, Steady, Configuration 1



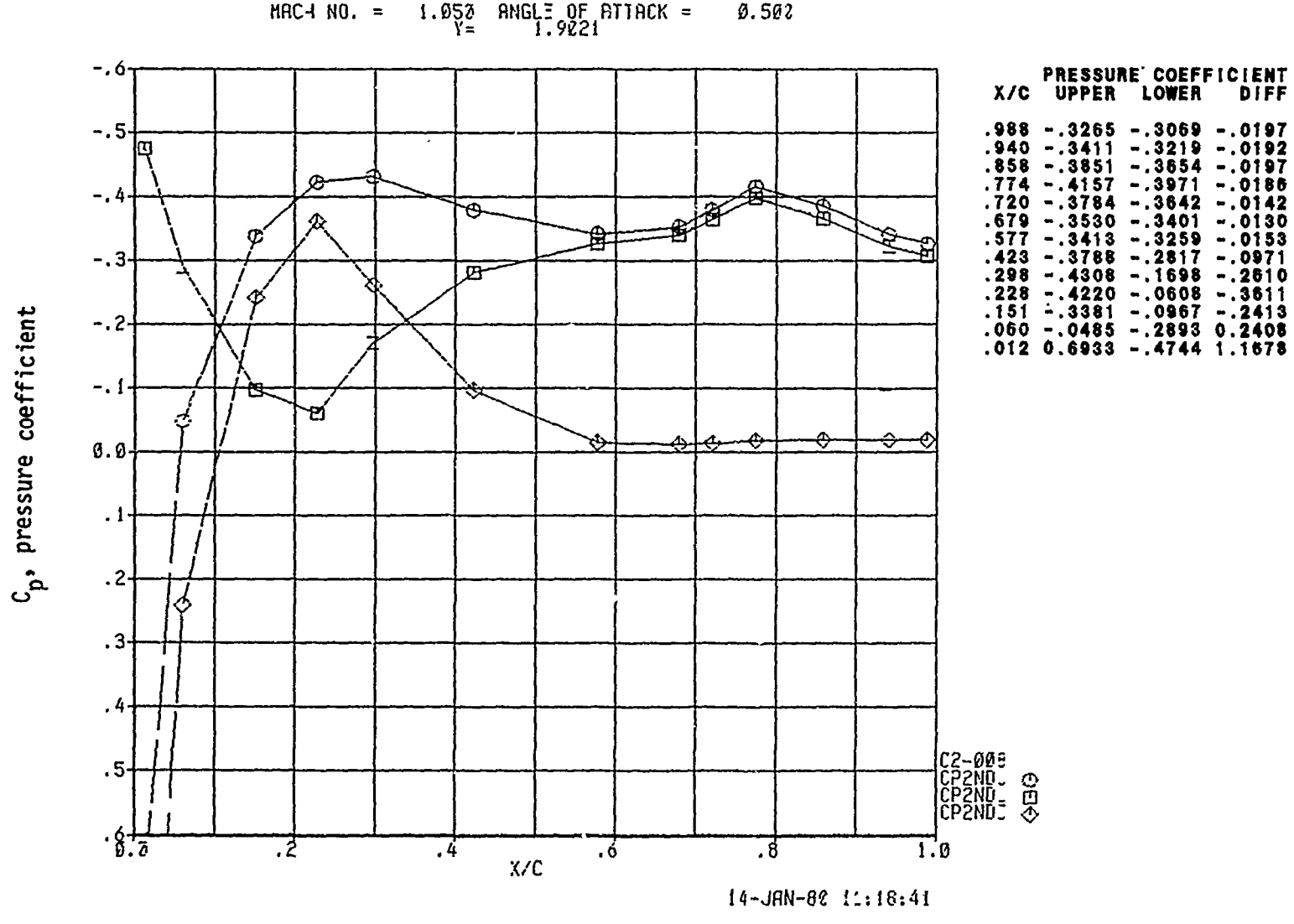
X/C	PRESSURE COEFFICIENT UPPER	LOWER	DIFF
.988	-.3283	-.3294	0.0012
.940	-.3535	-.3551	0.0016
.858	-.4067	-.4076	0.0009
.775	-.4312	-.4301	-.0012
.720	-.3978	-.3897	-.0082
.679	-.3725	-.3603	-.0121
.578	-.3773	-.3215	-.0559
.423	-.3945	-.2571	-.1373
.298	-.2799	-.1108	-.1691
.228	-.1870	-.0755	-.1116
.151	-.0658	-.1330	0.0672
.060	0.1934	-.4762	0.6697
.012	1.0408	-.9067	1.9475

Figure 135, Chordwise Pressure Distribution, Steady, Configuration 1



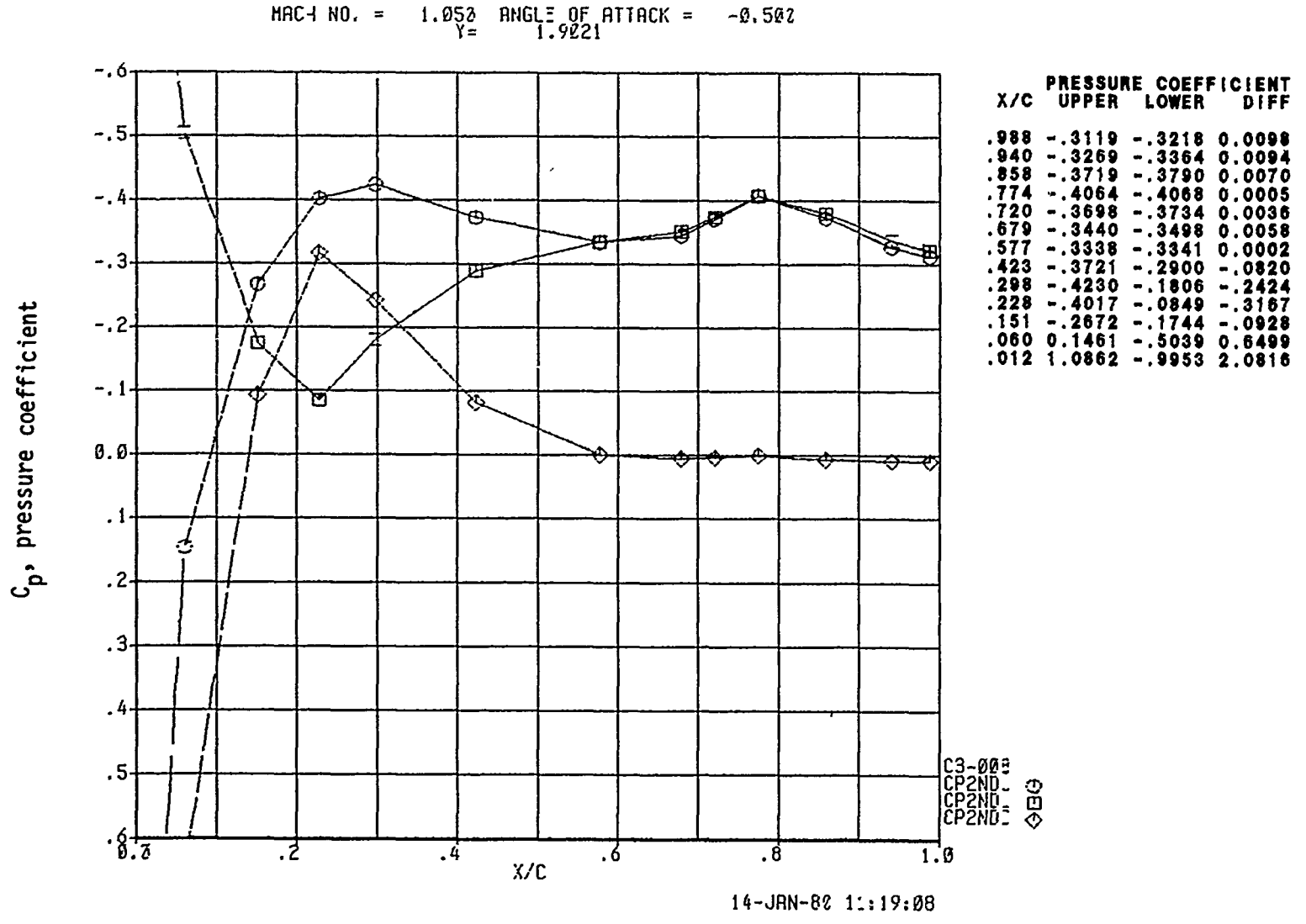
X/C	PRESSURE COEFFICIENT UPPER	LOWER	DIFF
.988	-.3183	-.3135	-.0049
.940	-.3331	-.3283	-.0049
.858	-.3776	-.3713	-.0063
.774	-.4101	-.4011	-.0091
.720	-.3733	-.3680	-.0053
.679	-.3477	-.3441	-.0036
.577	-.3367	-.3292	-.0076
.423	-.3746	-.2850	-.0896
.298	-.4262	-.1745	-.2517
.228	-.4112	-.0723	-.3389
.151	-.3021	-.1350	-.1670
.060	0.0496	-.3957	0.4453
.012	0.8940	-.7308	1.6247

Figure 136, Chordwise Pressure Distribution, Steady, Configuration 1



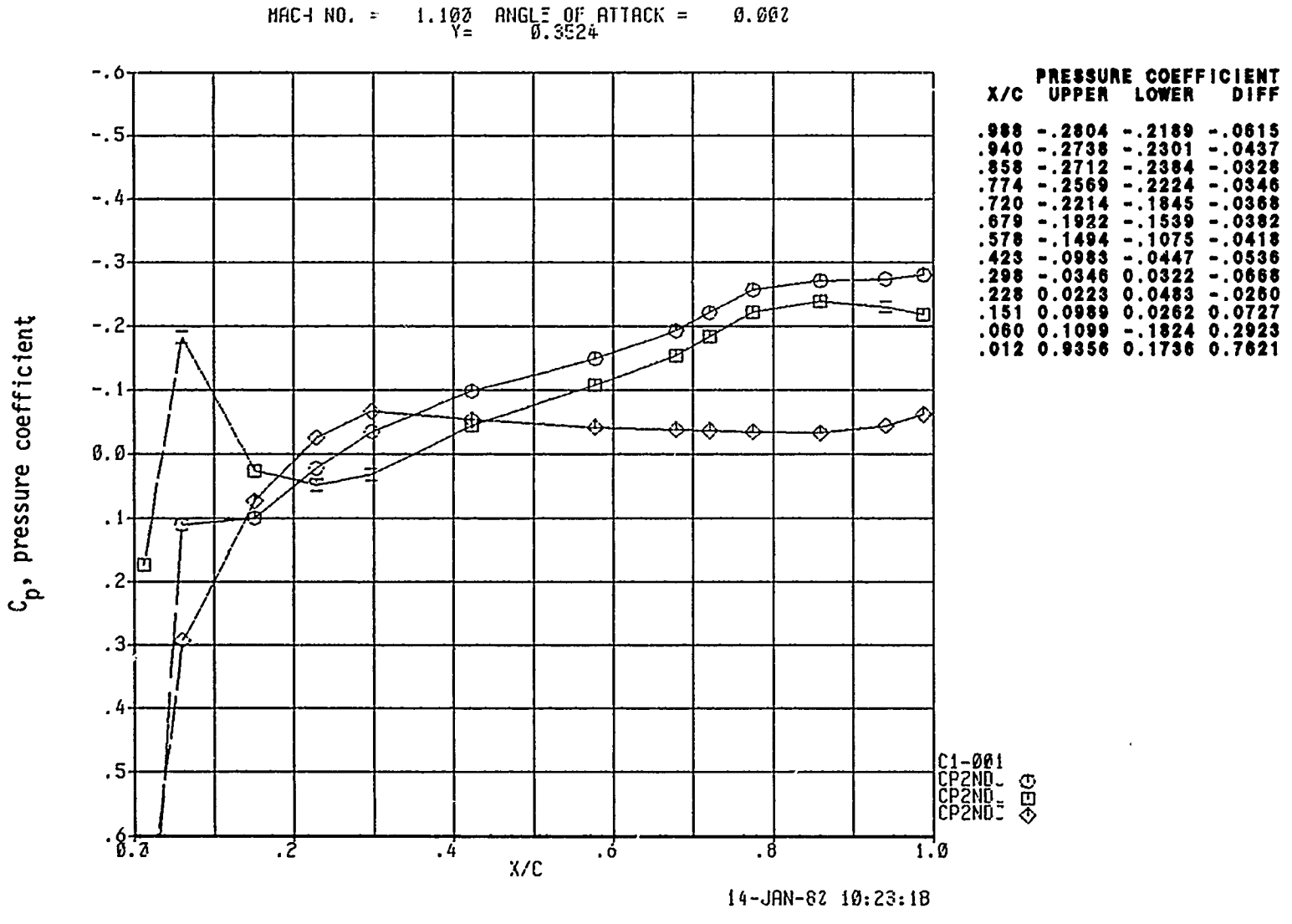
X/C	PRESSURE COEFFICIENT UPPER	LOWER	DIFF
.988	-.3265	-.3069	-.0197
.940	-.3411	-.3219	-.0192
.858	-.3851	-.3654	-.0197
.774	-.4157	-.3971	-.0186
.720	-.3784	-.3642	-.0142
.679	-.3530	-.3401	-.0130
.577	-.3413	-.3259	-.0153
.423	-.3788	-.2817	-.0971
.298	-.4308	-.1698	-.2610
.228	-.4220	-.0608	-.3611
.151	-.3381	-.0967	-.2413
.060	-.0485	-.2893	0.2408
.012	0.6933	-.4744	1.1678

Figure 137, Chordwise Pressure Distribution, Steady, Configuration 1



X/C	PRESSURE COEFFICIENT UPPER	LOWER	DIFF
.988	-.3119	-.3218	0.0098
.940	-.3269	-.3364	0.0094
.858	-.3719	-.3790	0.0070
.774	-.4064	-.4068	0.0005
.720	-.3698	-.3734	0.0036
.679	-.3440	-.3498	0.0058
.577	-.3338	-.3341	0.0002
.423	-.3721	-.2900	-.0820
.298	-.4230	-.1806	-.2424
.228	-.4017	-.0849	-.3167
.151	-.2672	-.1744	-.0928
.060	0.1461	-.5039	0.6499
.012	1.0862	-.9953	2.0816

Figure 138, Chordwise Pressure Distribution, Steady, Configuration 1



X/C	PRESSURE COEFFICIENT UPPER	LOWER	DIFF
.988	-.2804	-.2189	-.0615
.940	-.2738	-.2301	-.0437
.858	-.2712	-.2384	-.0328
.774	-.2569	-.2224	-.0346
.720	-.2214	-.1845	-.0368
.679	-.1922	-.1539	-.0382
.578	-.1494	-.1075	-.0418
.423	-.0983	-.0447	-.0536
.298	-.0346	0.0322	-.0668
.228	0.0223	0.0483	-.0260
.151	0.0989	0.0262	0.0727
.060	0.1099	-.1824	0.2923
.012	0.9356	0.1736	0.7621

Figure 139, Chordwise Pressure Distribution, Steady, Configuration 1

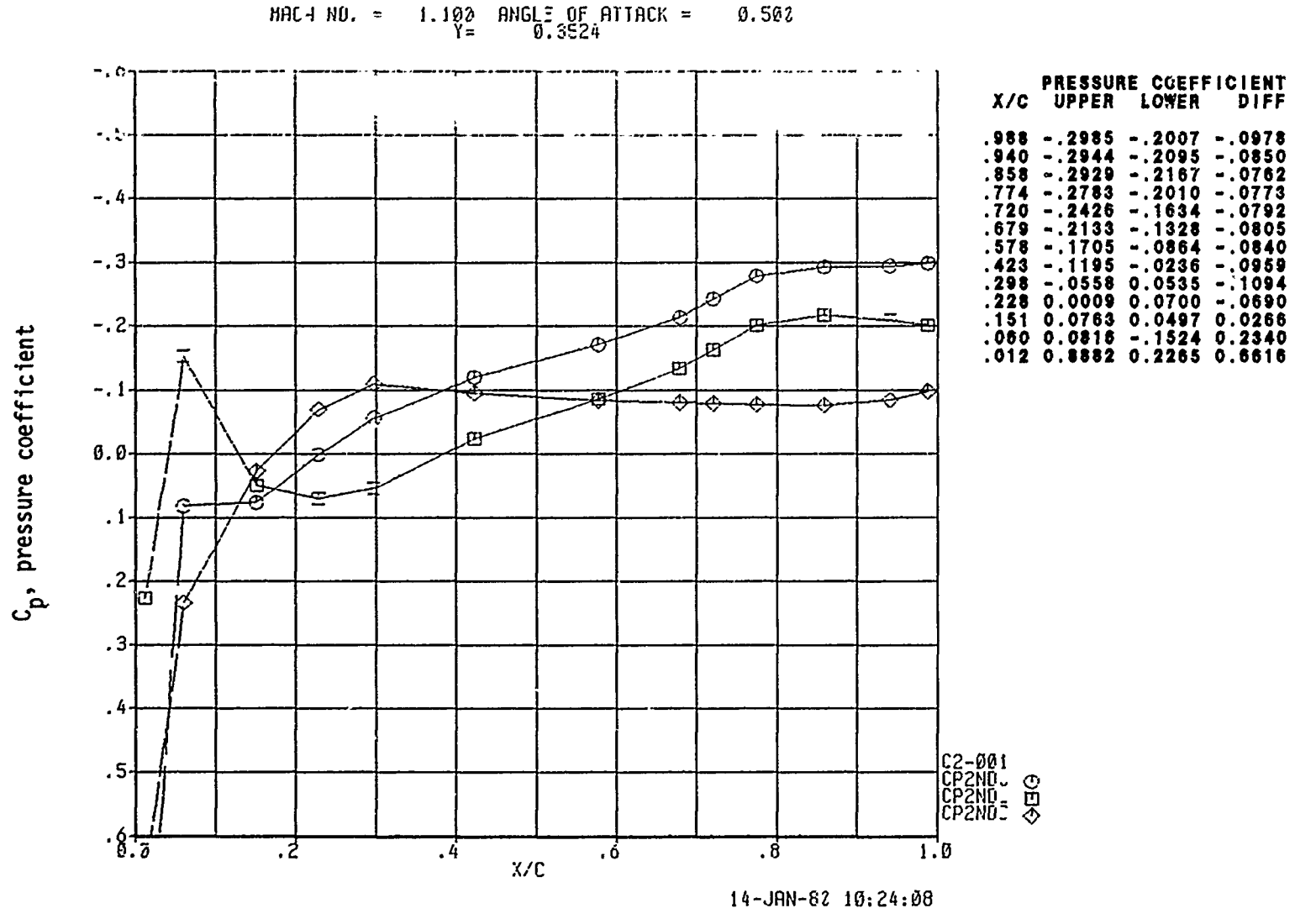
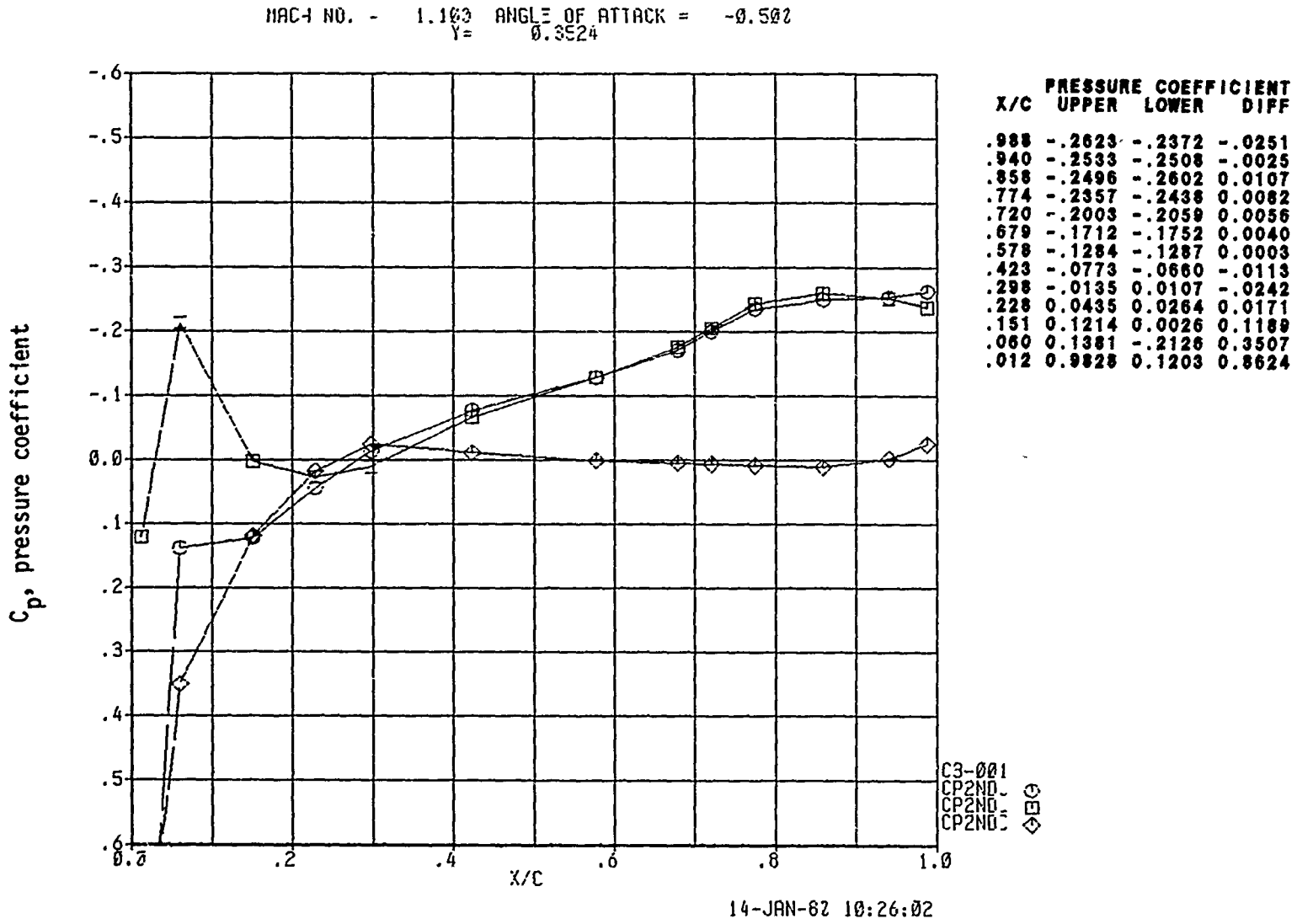
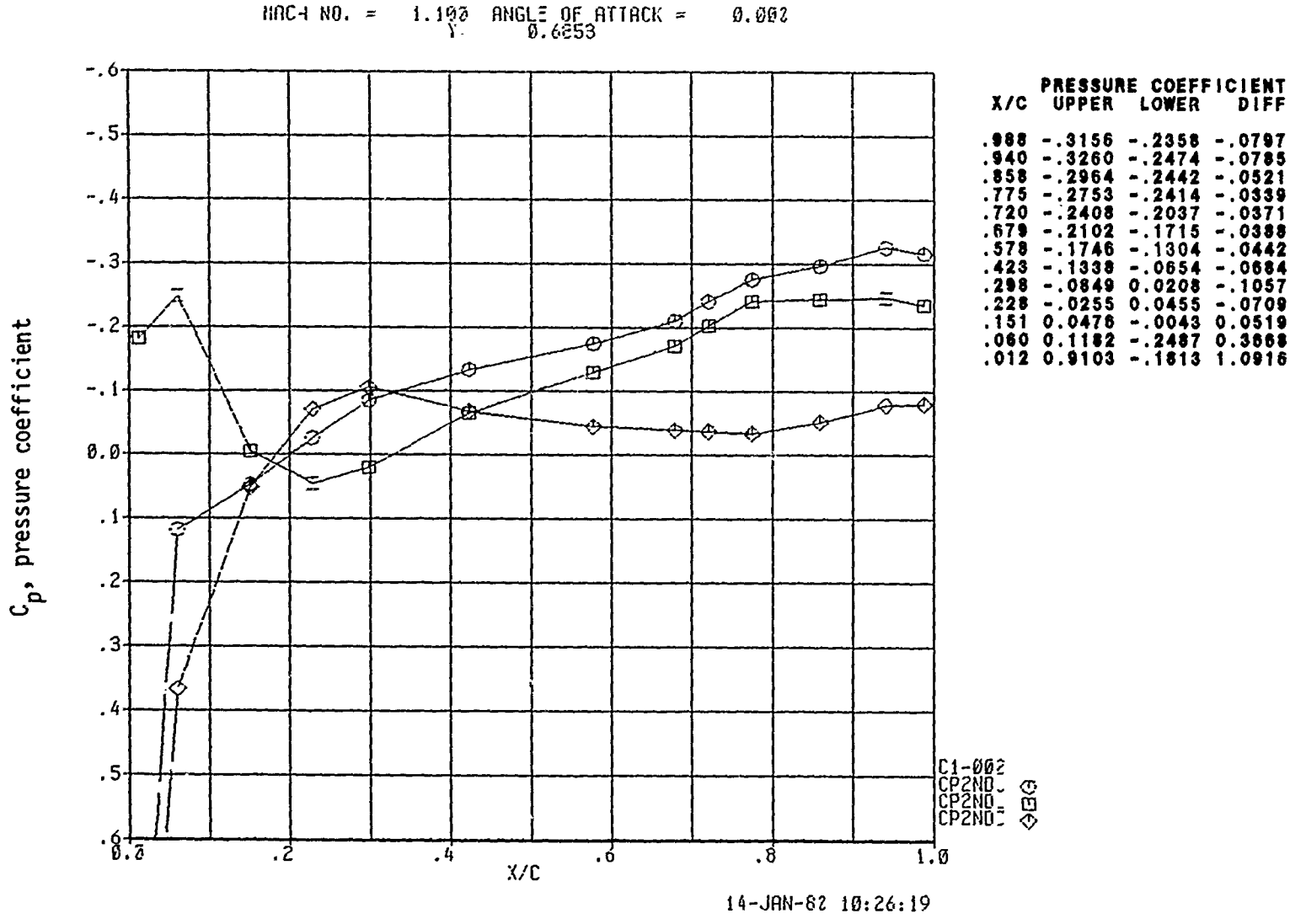


Figure 140, Chordwise Pressure Distribution, Steady, Configuration 1



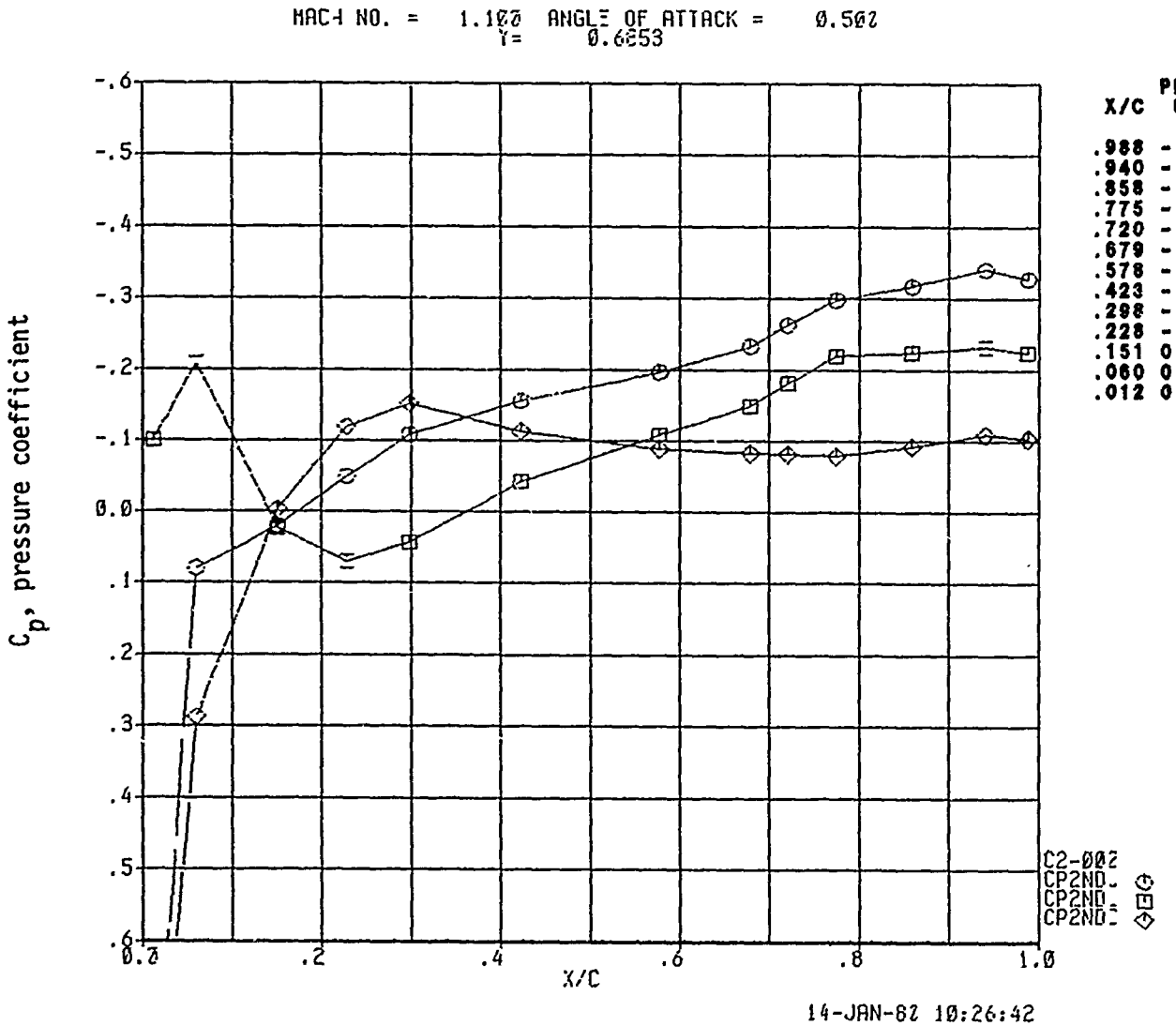
X/C	PRESSURE COEFFICIENT UPPER	LOWER	DIFF
.988	-.2623	-.2372	-.0251
.940	-.2533	-.2508	-.0025
.858	-.2496	-.2602	0.0107
.774	-.2357	-.2438	0.0082
.720	-.2003	-.2059	0.0056
.679	-.1712	-.1752	0.0040
.578	-.1284	-.1287	0.0003
.423	-.0773	-.0660	-.0113
.298	-.0135	0.0107	-.0242
.228	0.0435	0.0264	0.0171
.151	0.1214	0.0026	0.1189
.060	0.1381	-.2126	0.3507
.012	0.9828	0.1203	0.8624

Figure 141 , Chordwise Pressure Distribution, Steady, Configuration 1



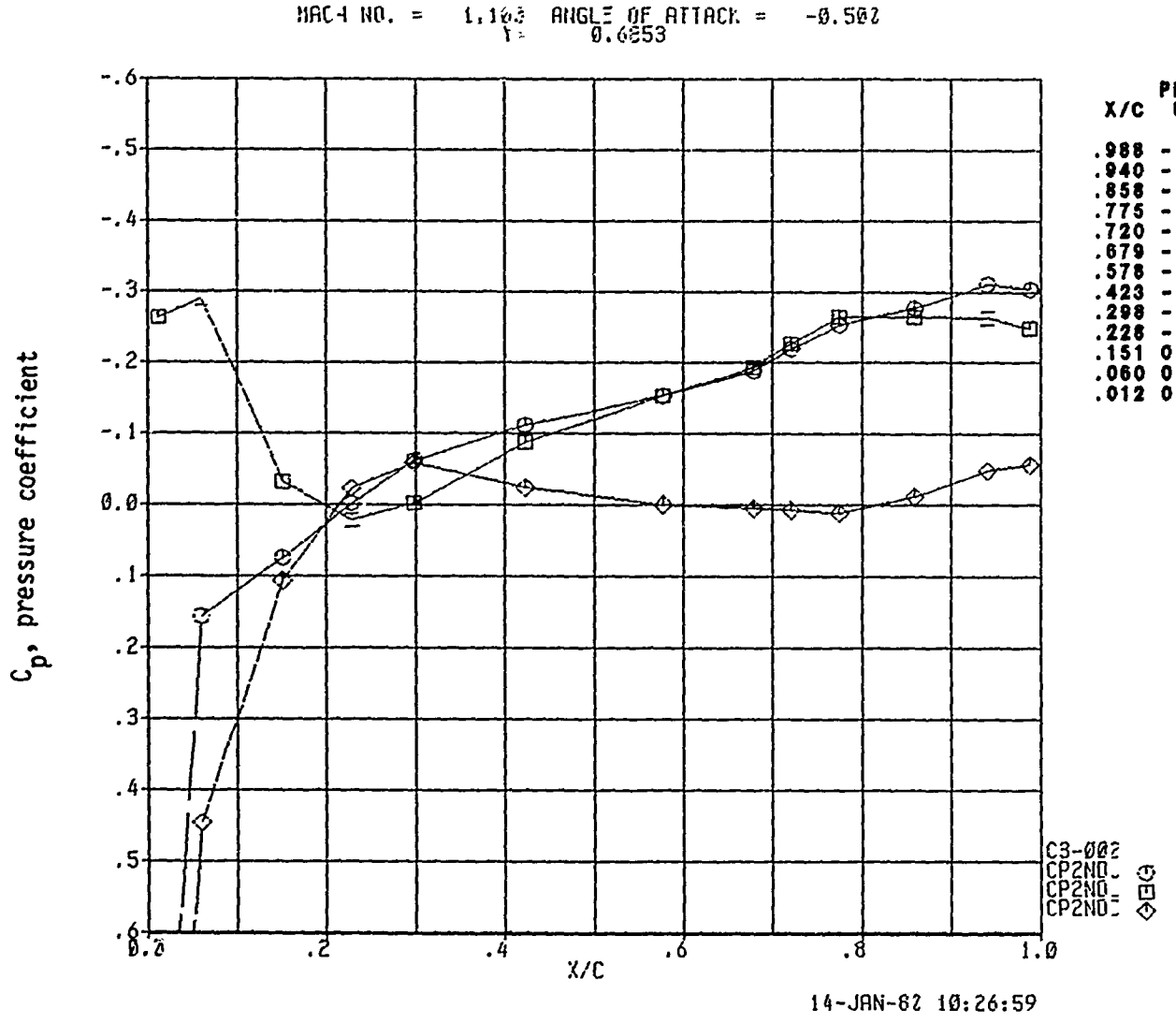
X/C	PRESSURE COEFFICIENT UPPER	LOWER	DIFF
.988	-.3156	-.2358	-.0797
.940	-.3260	-.2474	-.0785
.858	-.2964	-.2442	-.0521
.775	-.2753	-.2414	-.0339
.720	-.2408	-.2037	-.0371
.679	-.2102	-.1715	-.0388
.578	-.1746	-.1304	-.0442
.423	-.1338	-.0654	-.0684
.298	-.0849	0.0208	-.1057
.228	-.0255	0.0455	-.0709
.151	0.0476	-.0043	0.0519
.060	0.1182	-.2487	0.3668
.012	0.9103	-.1813	1.0916

Figure 142, Chordwise Pressure Distribution, Steady, Configuration 1



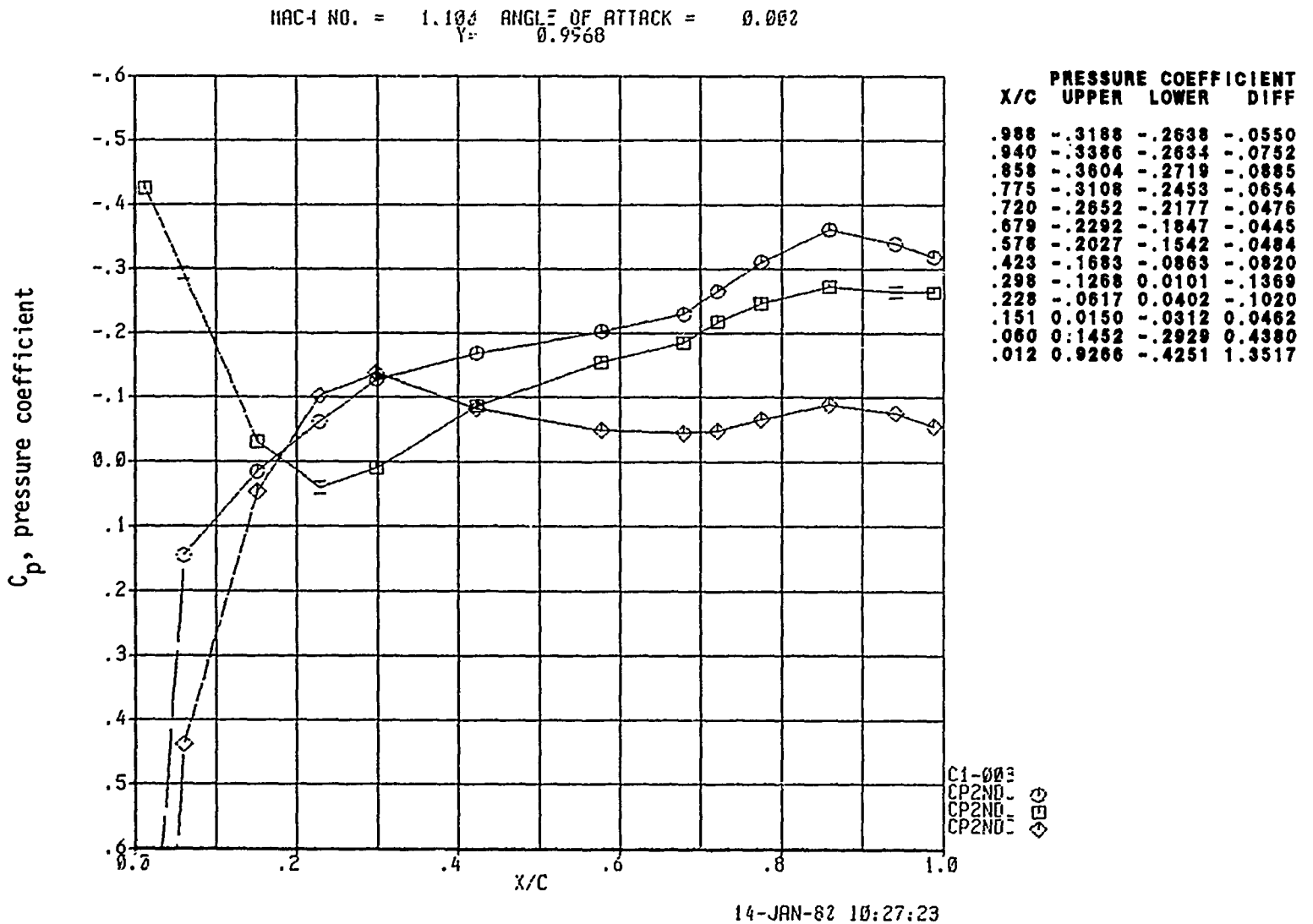
X/C	PRESSURE COEFFICIENT UPPER	LOWER	DIFF
.988	-.3273	-.2240	-.1033
.940	-.3411	-.2321	-.1089
.858	-.3106	-.2240	-.0925
.775	-.2977	-.2190	-.0787
.720	-.2628	-.1817	-.0811
.679	-.2322	-.1495	-.0827
.578	-.1966	-.1084	-.0882
.423	-.1563	-.0429	-.1133
.298	-.1080	0.0440	-.1520
.228	-.0493	0.0698	-.1191
.151	0.0207	0.0235	-.0028
.060	0.0797	-.2079	0.2876
.012	0.8391	-.1002	0.9393

Figure 143, Chordwise Pressure Distribution, Steady, Configuration 1



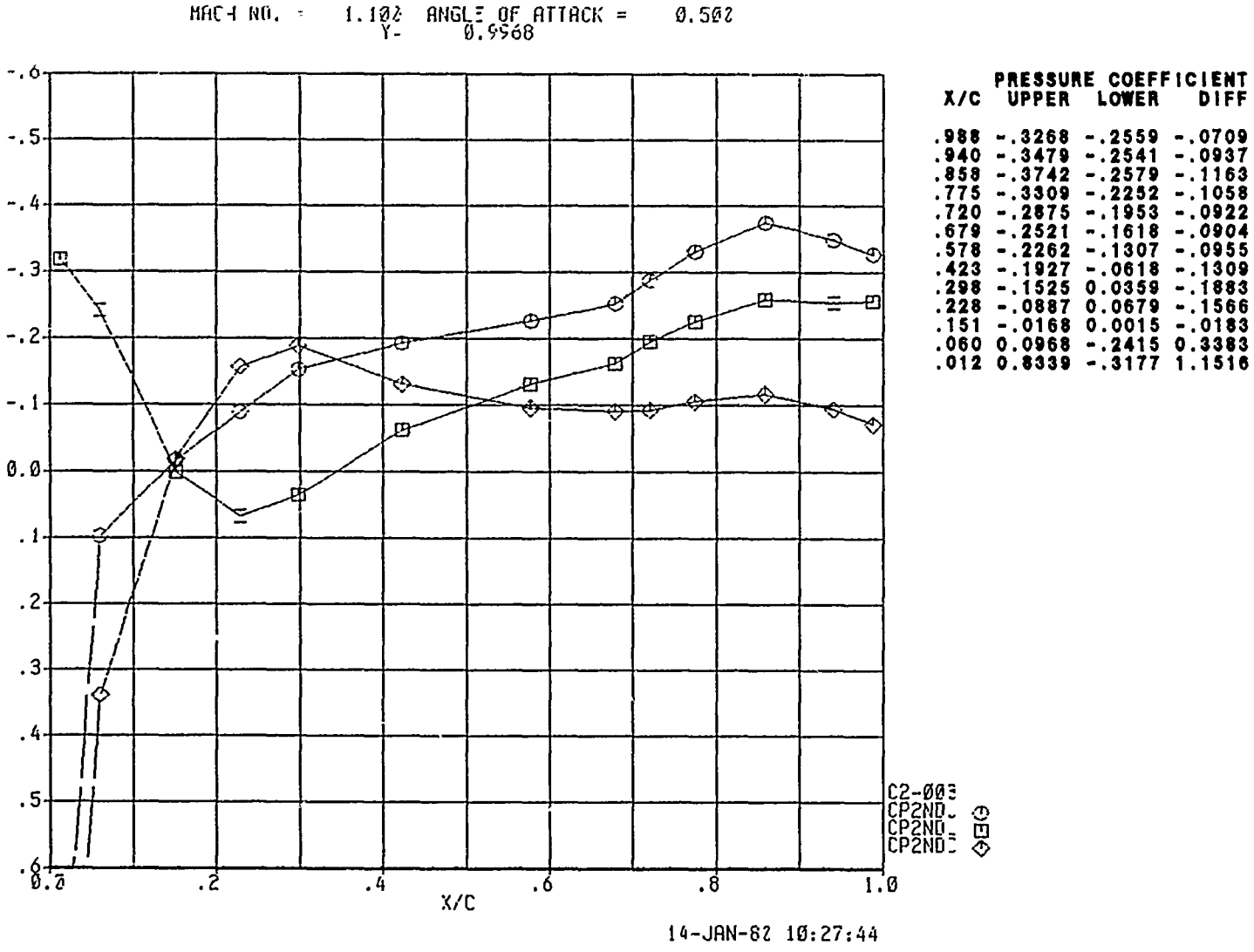
X/C	PRESSURE COEFFICIENT UPPER	LOWER	DIFF
.988	-.3040	-.2478	-.0562
.940	-.3109	-.2628	-.0482
.858	-.2763	-.2646	-.0117
.775	-.2529	-.2639	0.0109
.720	-.2189	-.2258	0.0069
.679	-.1884	-.1935	0.0051
.578	-.1527	-.1525	-.0002
.423	-.1114	-.0880	-.0235
.298	-.0619	-.0027	-.0593
.226	-.0017	0.0210	-.0228
.151	0.0743	-.0322	0.1066
.060	0.1563	-.2896	0.4459
.012	0.9809	-.2631	1.2439

Figure 144, Chordwise Pressure Distribution, Steady, Configuration 1



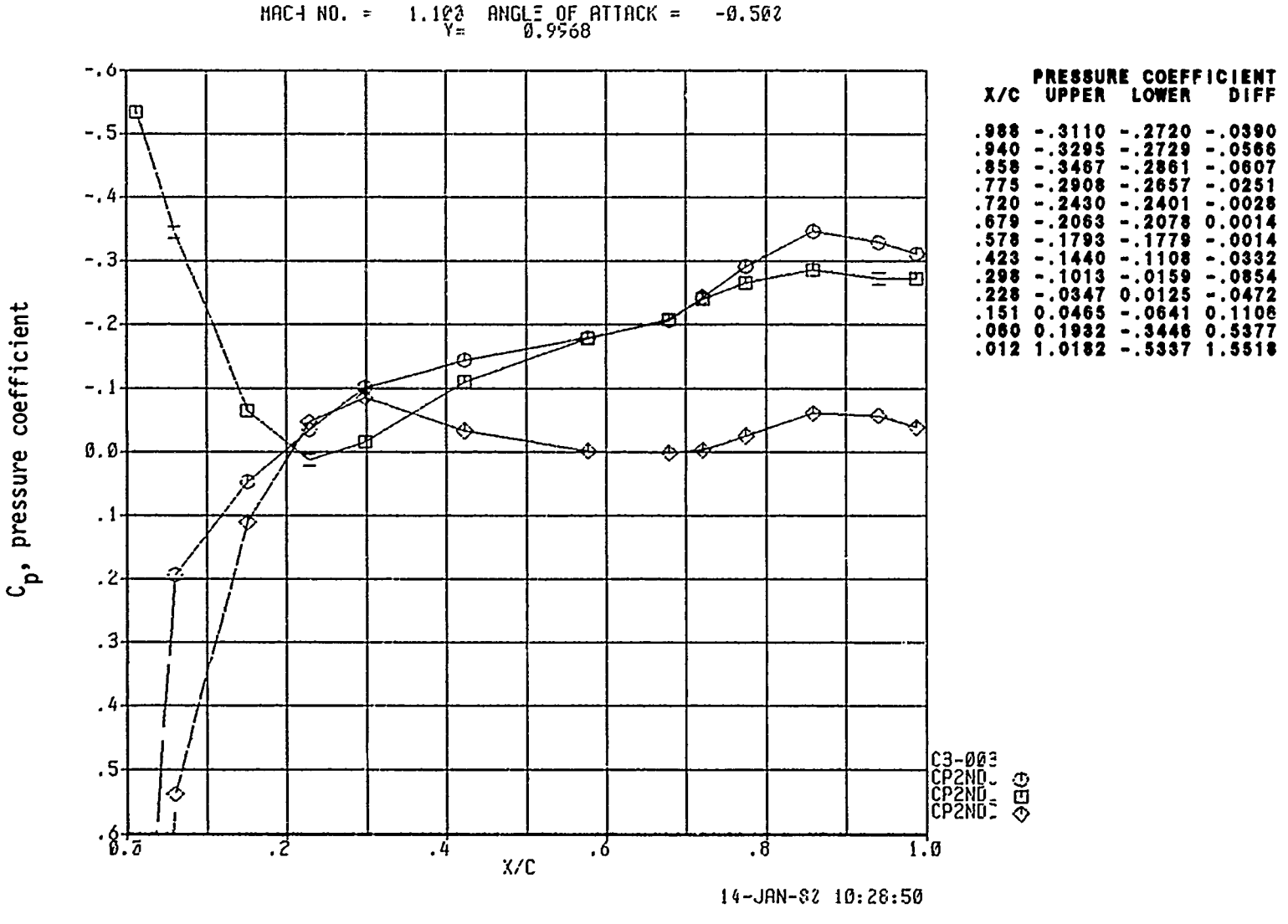
X/C	PRESSURE COEFFICIENT UPPER	LOWER	DIFF
.988	-.3188	-.2638	-.0550
.940	-.3386	-.2634	-.0752
.858	-.3604	-.2719	-.0885
.775	-.3108	-.2453	-.0654
.720	-.2652	-.2177	-.0476
.679	-.2292	-.1847	-.0445
.576	-.2027	-.1542	-.0484
.423	-.1683	-.0863	-.0820
.298	-.1268	0.0101	-.1369
.228	-.0617	0.0402	-.1020
.151	0.0150	-.0312	0.0462
.060	0.1452	-.2929	0.4380
.012	0.9266	-.4251	1.3517

Figure 145, Chordwise Pressure Distribution, Steady, Configuration 1



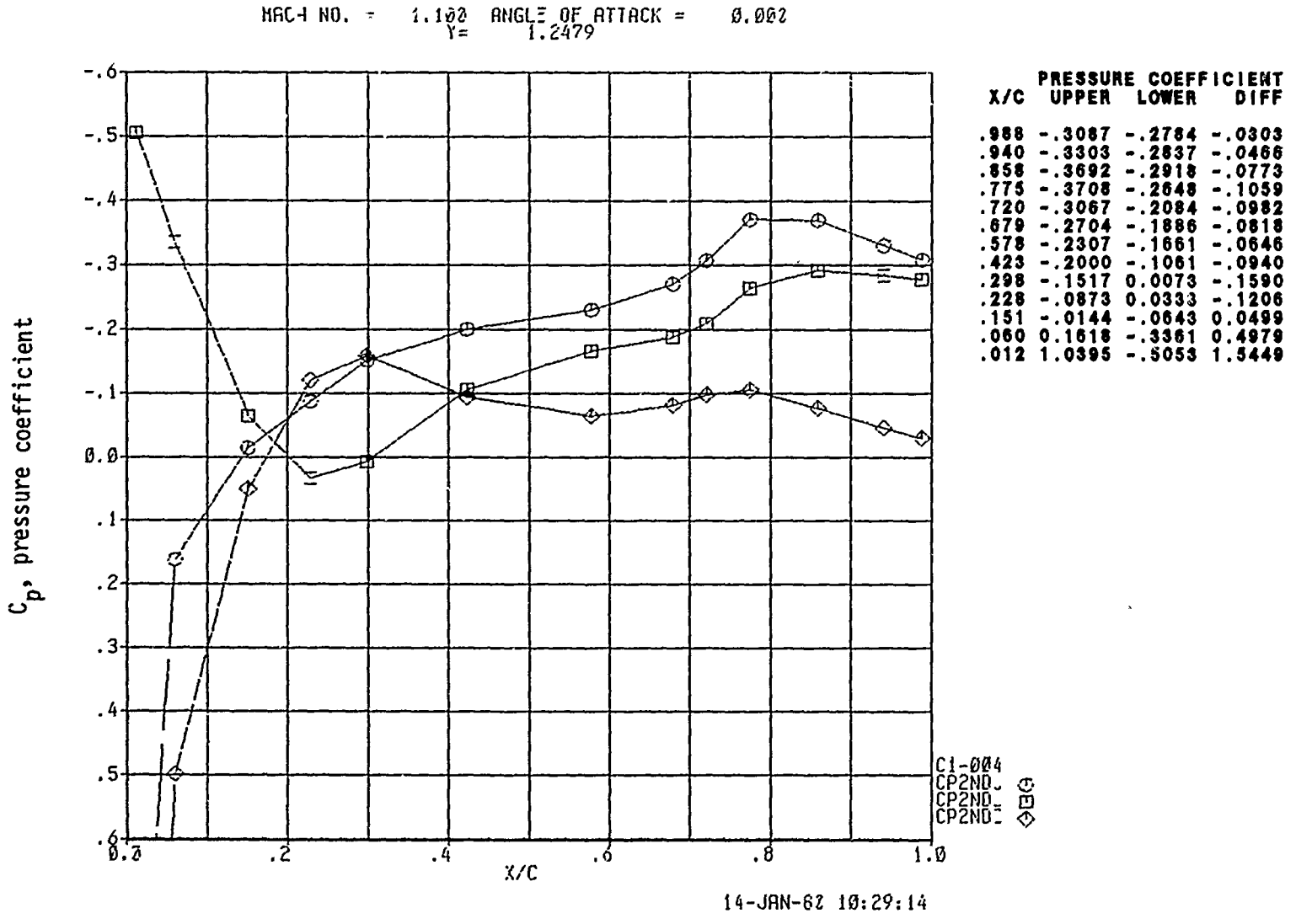
X/C	PRESSURE COEFFICIENT UPPER	LOWER	DIFF
.988	-.3268	-.2559	-.0709
.940	-.3479	-.2541	-.0937
.858	-.3742	-.2579	-.1163
.775	-.3309	-.2252	-.1058
.720	-.2875	-.1953	-.0922
.679	-.2521	-.1618	-.0904
.578	-.2262	-.1307	-.0955
.423	-.1927	-.0618	-.1309
.298	-.1525	0.0359	-.1883
.228	-.0887	0.0679	-.1566
.151	-.0168	0.0015	-.0183
.060	0.0968	-.2415	0.3383
.012	0.8339	-.3177	1.1516

Figure 146 , Chordwise Pressure Distribution, Steady, Configuration 1



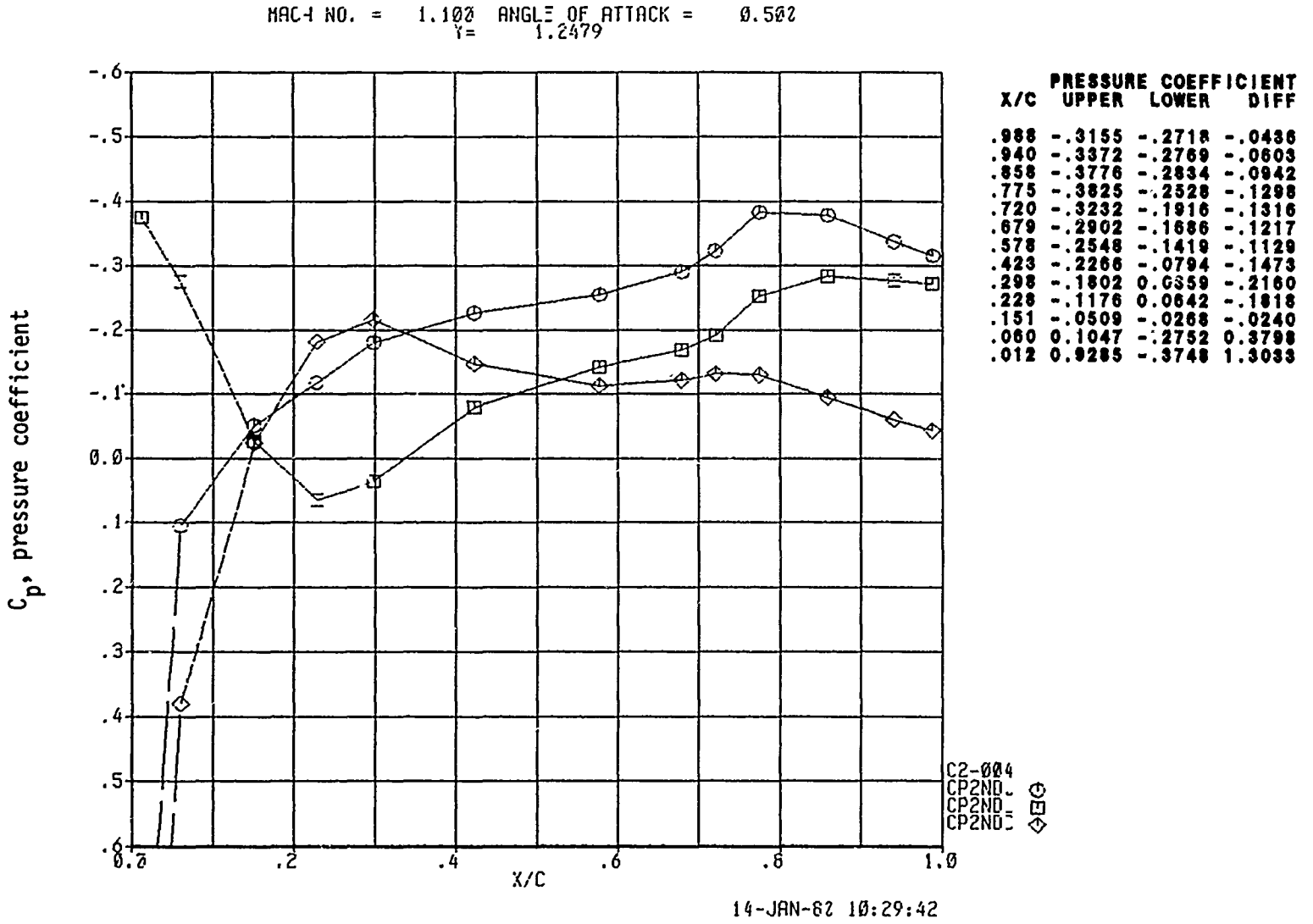
X/C	PRESSURE COEFFICIENT UPPER	LOWER	DIFF
.988	-.3110	-.2720	-.0390
.940	-.3295	-.2729	-.0566
.858	-.3467	-.2861	-.0607
.775	-.2908	-.2657	-.0251
.720	-.2430	-.2401	-.0028
.679	-.2063	-.2078	0.0014
.578	-.1793	-.1779	-.0014
.423	-.1440	-.1108	-.0332
.298	-.1013	-.0159	-.0854
.228	-.0347	0.0125	-.0472
.151	0.0465	-.0641	0.1106
.060	0.1932	-.3446	0.5377
.012	1.0182	-.5337	1.5518

Figure 147, Chordwise Pressure Distribution, Steady, Configuration 1



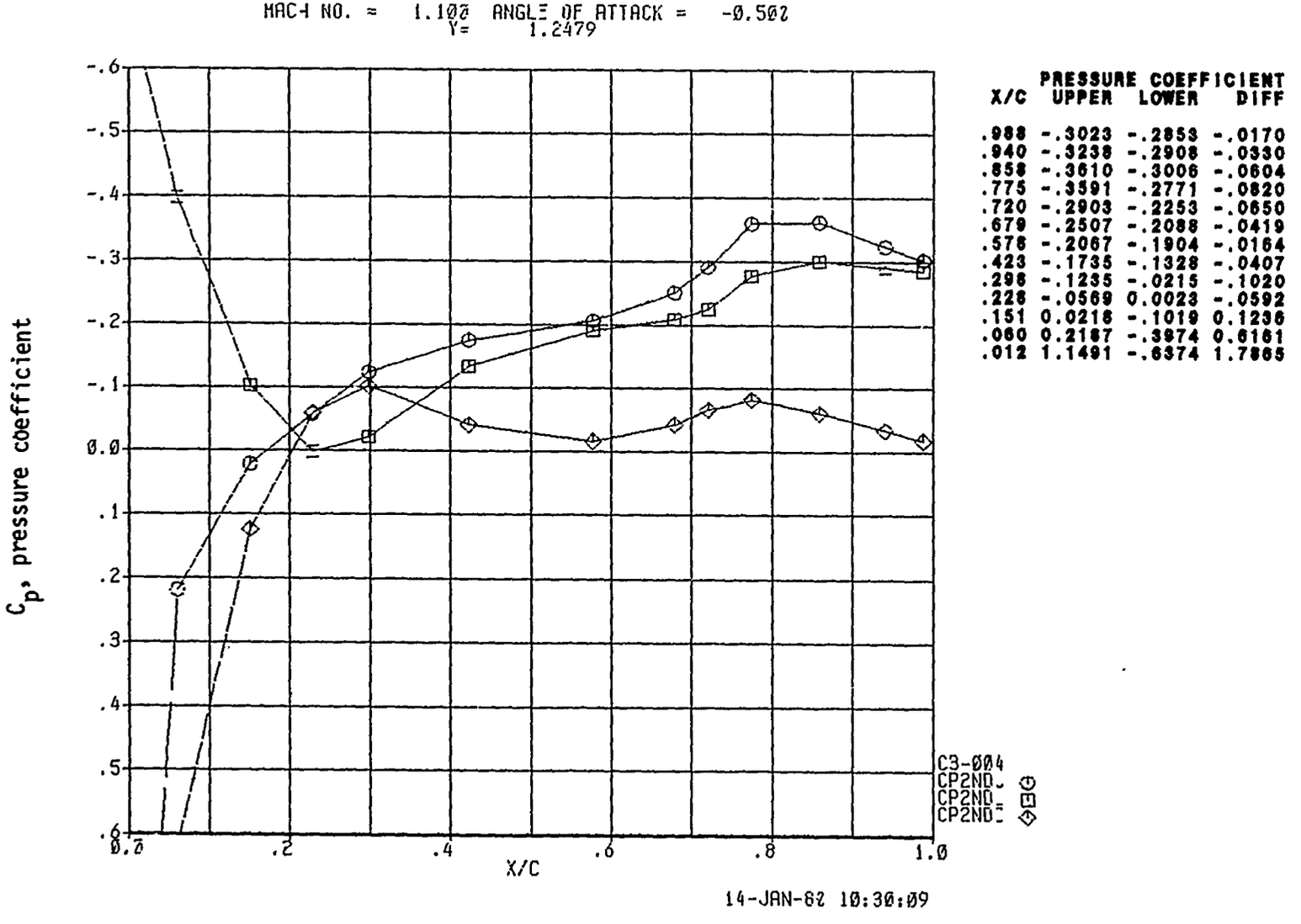
X/C	PRESSURE COEFFICIENT UPPER	LOWER	DIFF
.988	-.3087	-.2784	-.0303
.940	-.3303	-.2837	-.0466
.858	-.3692	-.2918	-.0773
.775	-.3708	-.2648	-.1059
.720	-.3067	-.2084	-.0982
.679	-.2704	-.1886	-.0818
.578	-.2307	-.1661	-.0646
.423	-.2000	-.1061	-.0940
.298	-.1517	0.0073	-.1590
.228	-.0873	0.0333	-.1206
.151	-.0144	-.0643	0.0499
.060	0.1618	-.3361	0.4979
.012	1.0395	-.5053	1.5449

Figure 148, Chordwise Pressure Distribution, Steady, Configuration 1



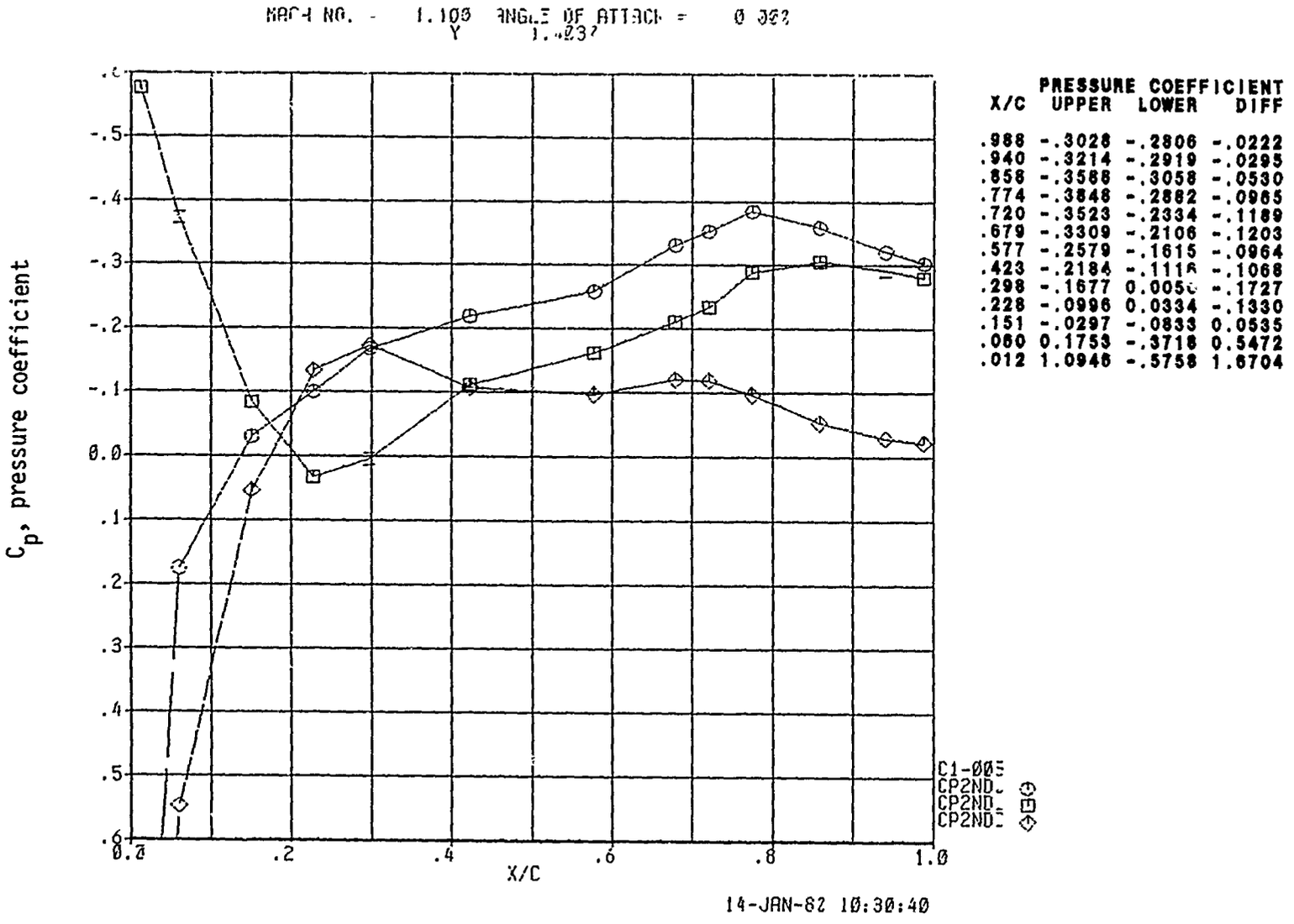
X/C	PRESSURE COEFFICIENT UPPER	LOWER	DIFF
.988	-.3155	-.2718	-.0436
.940	-.3372	-.2769	-.0603
.858	-.3776	-.2834	-.0942
.775	-.3825	-.2528	-.1298
.720	-.3232	-.1916	-.1316
.679	-.2902	-.1686	-.1217
.578	-.2548	-.1419	-.1129
.423	-.2266	-.0794	-.1473
.298	-.1802	0.0359	-.2160
.228	-.1176	0.0642	-.1818
.151	-.0509	-.0268	-.0240
.060	0.1047	-.2752	0.3798
.012	0.9285	-.3748	1.3033

Figure 149, Chordwise Pressure Distribution, Steady, Configuration 1



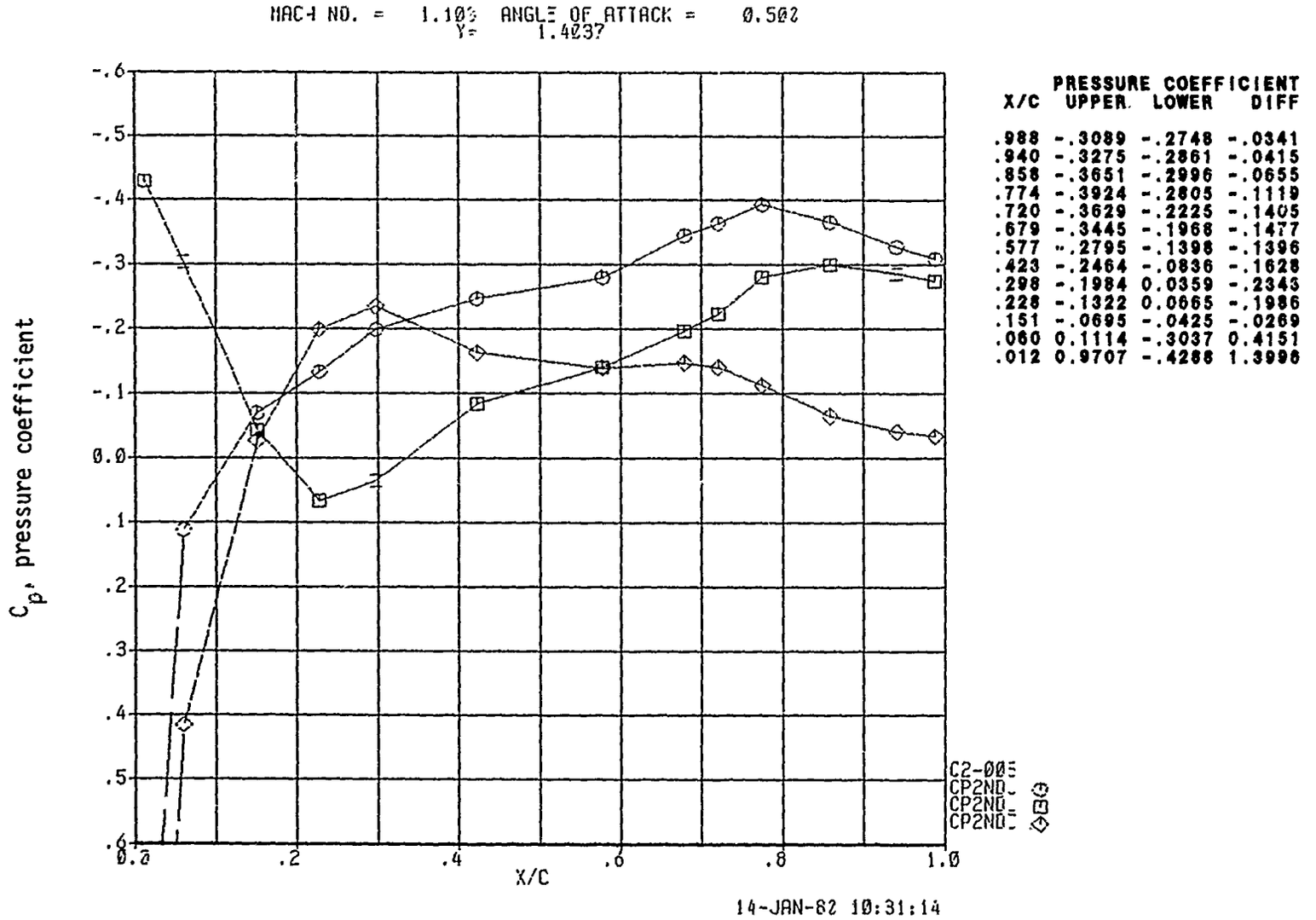
X/C	PRESSURE COEFFICIENT UPPER	LOWER	DIFF
.988	-.3023	-.2853	-.0170
.940	-.3238	-.2908	-.0330
.858	-.3610	-.3006	-.0604
.775	-.3591	-.2771	-.0820
.720	-.2903	-.2253	-.0650
.679	-.2507	-.2088	-.0419
.576	-.2067	-.1904	-.0164
.423	-.1735	-.1328	-.0407
.298	-.1235	-.0215	-.1020
.228	-.0569	0.0023	-.0592
.151	0.0218	-.1019	0.1236
.060	0.2187	-.3974	0.6161
.012	1.1491	-.6374	1.7865

Figure 150, Chordwise Pressure Distribution, Steady, Configuration 1



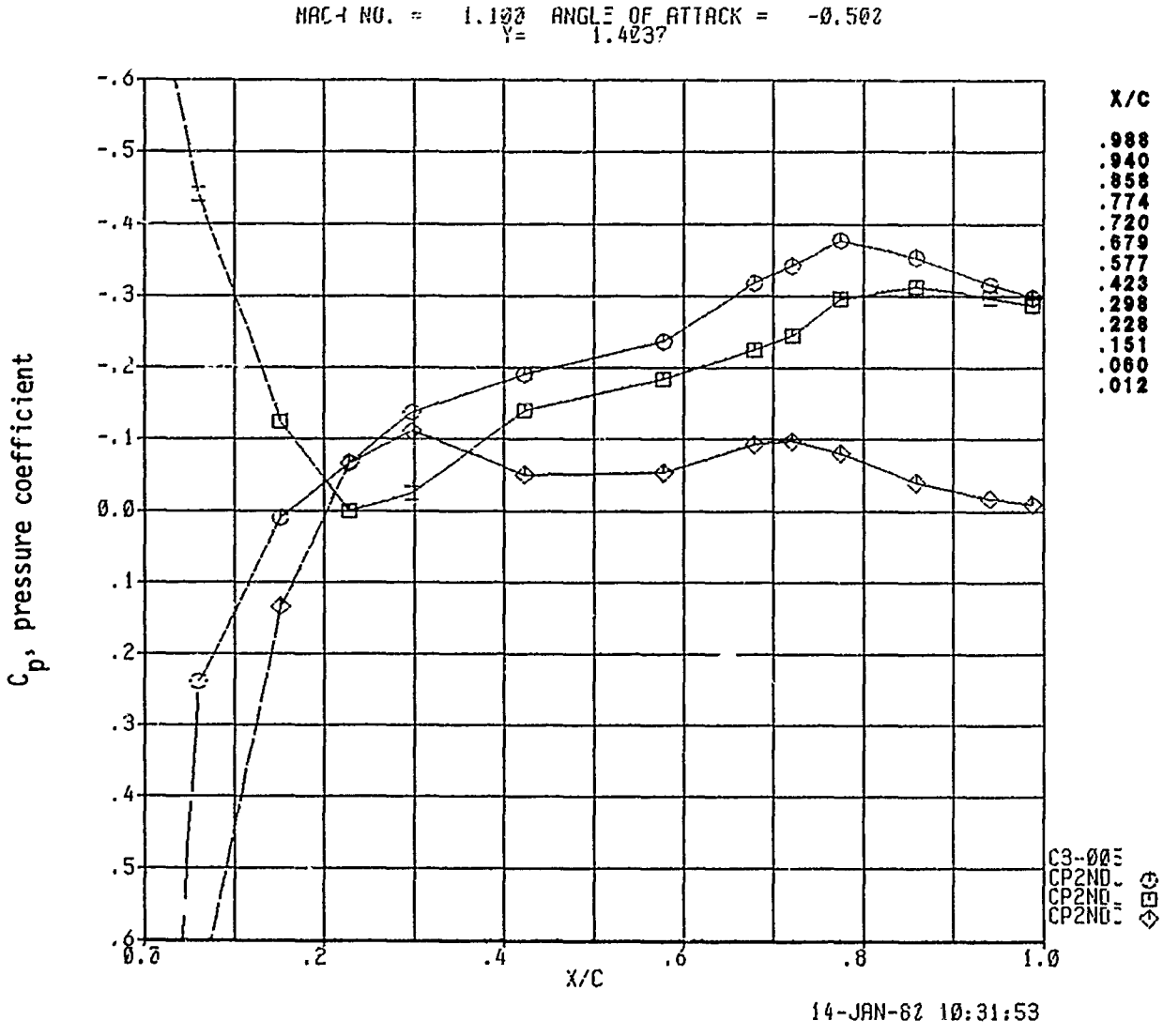
X/C	PRESSURE COEFFICIENT UPPER	LOWER	DIFF
.988	-.3028	-.2806	-.0222
.940	-.3214	-.2919	-.0295
.858	-.3588	-.3058	-.0530
.774	-.3848	-.2882	-.0965
.720	-.3523	-.2334	-.1189
.679	-.3309	-.2106	-.1203
.577	-.2579	-.1615	-.0964
.423	-.2184	-.1116	-.1068
.298	-.1677	0.0050	-.1727
.228	-.0996	0.0334	-.1330
.151	-.0297	-.0833	0.0535
.060	0.1753	-.3718	0.5472
.012	1.0946	-.5758	1.6704

Figure 151, Chordwise Pressure Distribution, Steady, Configuration 1



X/C	PRESSURE COEFFICIENT UPPER	LOWER	DIFF
.988	-.3089	-.2748	-.0341
.940	-.3275	-.2861	-.0415
.858	-.3651	-.2996	-.0655
.774	-.3924	-.2805	-.1119
.720	-.3629	-.2225	-.1405
.679	-.3445	-.1968	-.1477
.577	-.2795	-.1398	-.1396
.423	-.2464	-.0836	-.1628
.298	-.1984	0.0359	-.2343
.228	-.1322	0.0665	-.1986
.151	-.0695	-.0425	-.0269
.060	0.1114	-.3037	0.4151
.012	0.9707	-.4288	1.3996

Figure 152, Chordwise Pressure Distribution, Steady, Configuration 1



X/C	PRESSURE COEFFICIENT UPPER	LOWER	DIFF
.988	-.2971	-.2868	-.0103
.940	-.3157	-.2982	-.0175
.858	-.3529	-.3124	-.0405
.774	-.3774	-.2964	-.0810
.720	-.3420	-.2445	-.0975
.679	-.3176	-.2247	-.0930
.577	-.2366	-.1833	-.0533
.423	-.1906	-.1398	-.0508
.298	-.1372	-.0260	-.1112
.228	-.0671	0.0002	-.0673
.151	0.0097	-.1243	0.1340
.060	0.2388	-.4404	0.6792
.012	1.2166	-.7246	1.9412

Figure 153, Chordwise Pressure Distribution, Steady, Configuration 1

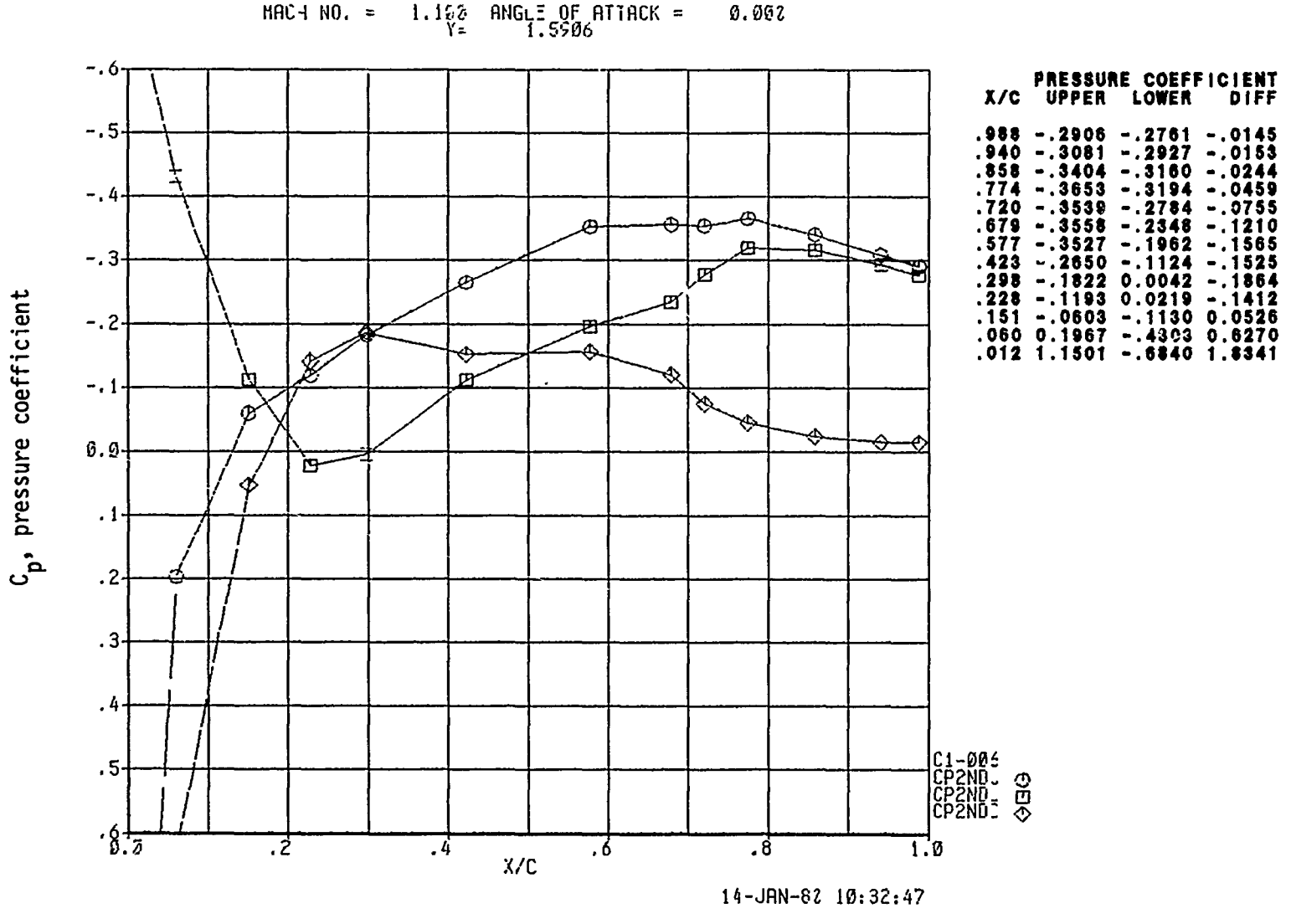
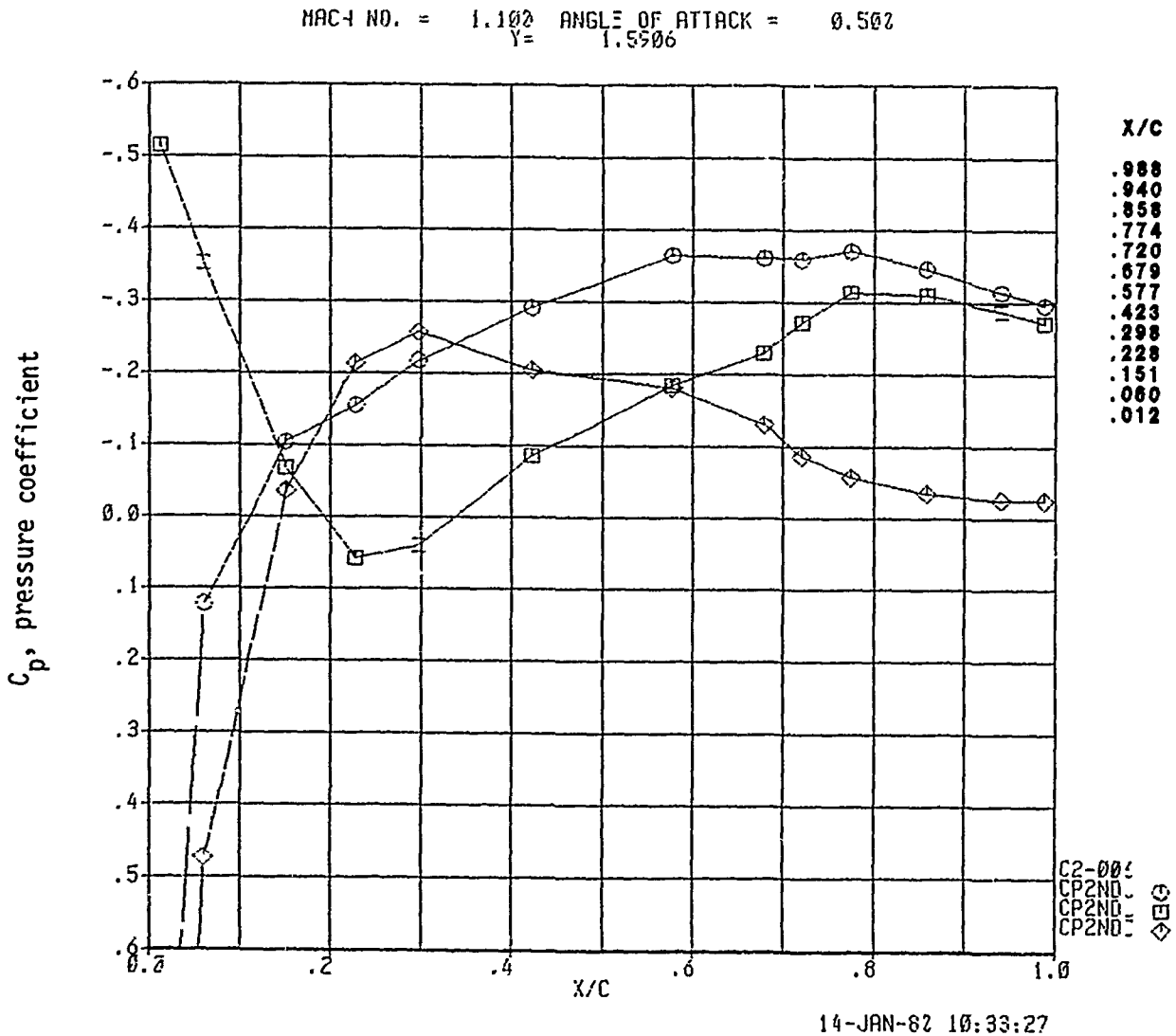
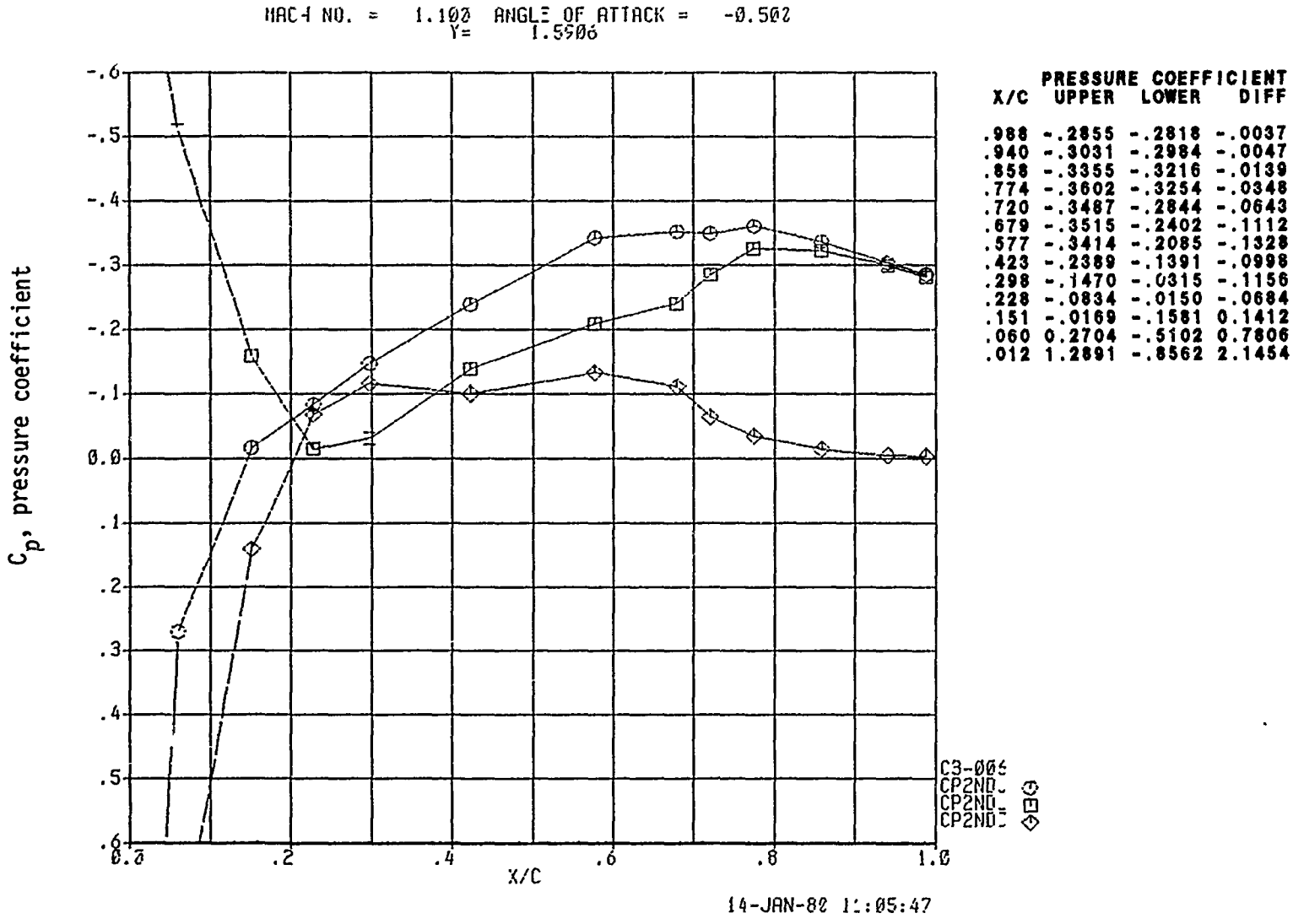


Figure 154, Chordwise Pressure Distribution, Steady, Configuration 1



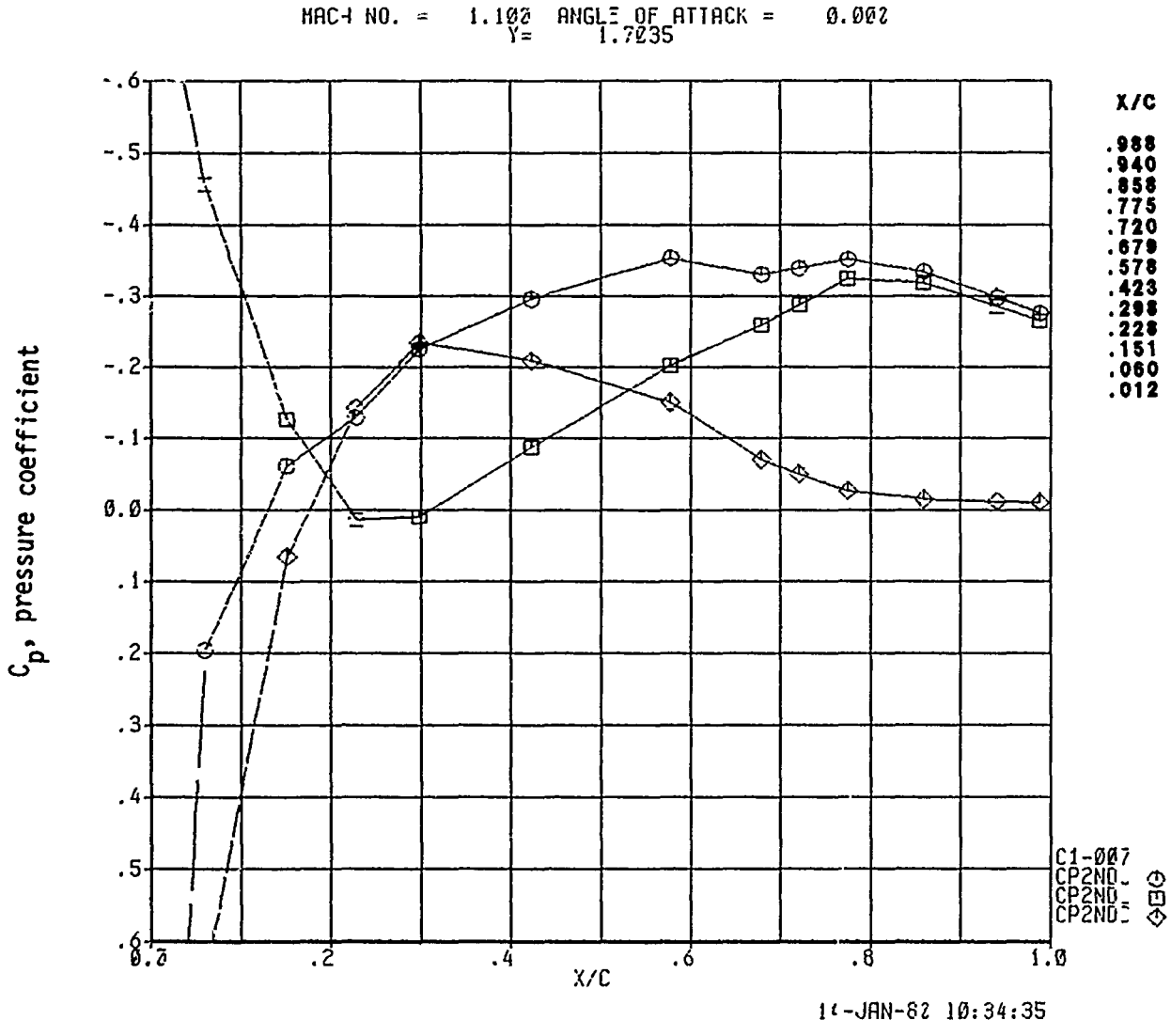
X/C	PRESSURE COEFFICIENT UPPER	LOWER	DIFF
.988	-.2961	-.2709	-.0253
.940	-.3135	-.2876	-.0259
.858	-.3458	-.3108	-.0350
.774	-.3708	-.3139	-.0569
.720	-.3593	-.2728	-.0866
.679	-.3606	-.2299	-.1308
.577	-.3643	-.1841	-.1803
.423	-.2912	-.0860	-.2053
.298	-.2175	0.0397	-.2571
.228	-.1555	0.0585	-.2141
.151	-.1041	-.0680	-.0360
.060	0.1224	-.3510	0.4734
.012	1.0086	-.5142	1.5227

Figure 155, Chordwise Pressure Distribution, Steady, Configuration 1



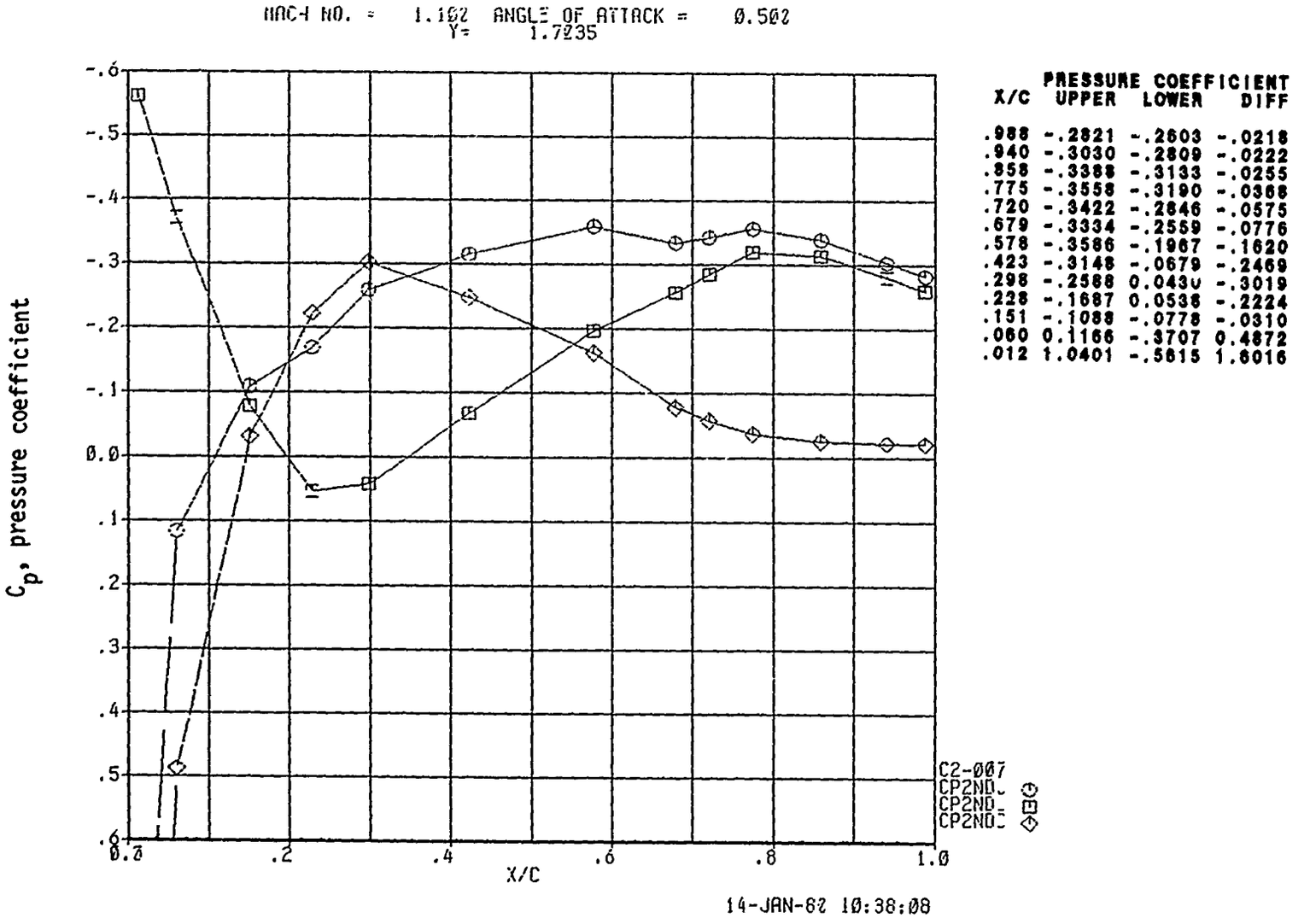
X/C	PRESSURE COEFFICIENT UPPER	LOWER	DIFF
.988	-.2855	-.2818	-.0037
.940	-.3031	-.2984	-.0047
.858	-.3355	-.3216	-.0139
.774	-.3602	-.3254	-.0348
.720	-.3487	-.2844	-.0643
.679	-.3515	-.2402	-.1112
.577	-.3414	-.2085	-.1328
.423	-.2389	-.1391	-.0998
.298	-.1470	-.0315	-.1156
.228	-.0834	-.0150	-.0684
.151	-.0169	-.1581	0.1412
.060	0.2704	-.5102	0.7806
.012	1.2891	-.8562	2.1454

Figure 156, Chordwise Pressure Distribution, Steady, Configuration 1



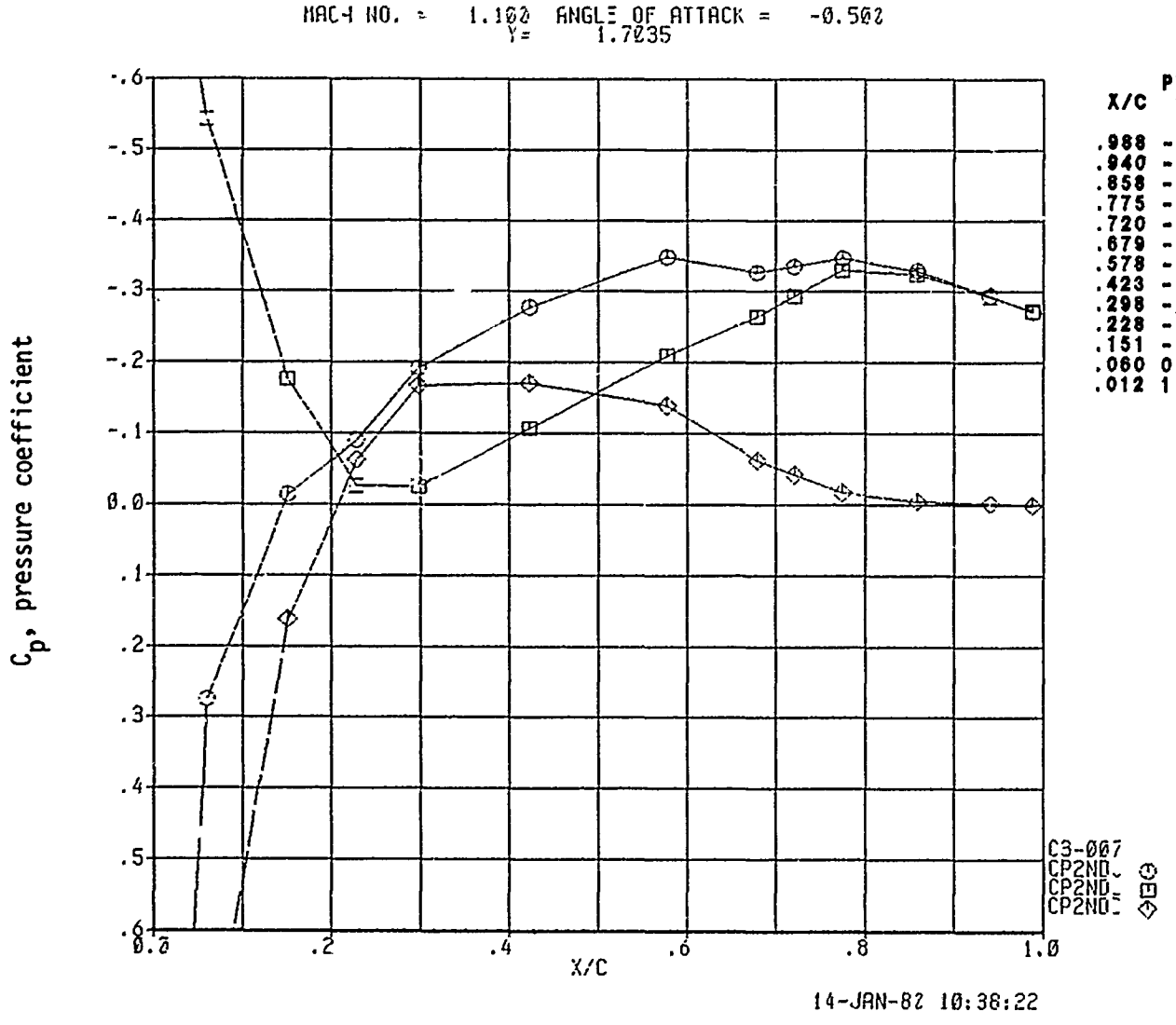
X/C	PRESSURE COEFFICIENT UPPER	LOWER	DIFF
.988	-.2764	-.2657	-.0107
.940	-.2978	-.2857	-.0121
.858	-.3334	-.3183	-.0151
.775	-.3508	-.3239	-.0270
.720	-.3383	-.2883	-.0500
.679	-.3297	-.2596	-.0701
.578	-.3529	-.2025	-.1504
.423	-.2959	-.0873	-.2086
.298	-.2252	0.0091	-.2342
.228	-.1292	0.0136	-.1427
.151	-.0613	-.1266	0.0654
.060	0.1960	-.4559	0.6519
.012	1.1934	-.7474	1.9409

Figure 157, Chordwise Pressure Distribution, Steady, Configuration 1



X/C	PRESSURE COEFFICIENT UPPER	LOWER	DIFF
.988	-.2821	-.2603	-.0218
.940	-.3030	-.2809	-.0222
.858	-.3388	-.3133	-.0255
.775	-.3558	-.3190	-.0368
.720	-.3422	-.2846	-.0575
.679	-.3334	-.2559	-.0776
.578	-.3586	-.1967	-.1620
.423	-.3148	-.0679	-.2469
.298	-.2588	0.0430	-.3019
.228	-.1687	0.0538	-.2224
.151	-.1088	-.0778	-.0310
.060	0.1166	-.3707	0.4872
.012	1.0401	-.5815	1.6016

Figure 158, Chordwise Pressure Distribution, Steady, Configuration 1



X/C	PRESSURE COEFFICIENT UPPER	LOWER	DIFF
.988	-.2713	-.2717	0.0005
.940	-.2932	-.2912	-.0021
.858	-.3287	-.3239	-.0048
.775	-.3464	-.3292	-.0172
.720	-.3351	-.2927	-.0423
.679	-.3265	-.2639	-.0626
.578	-.3479	-.2090	-.1388
.423	-.2773	-.1070	-.1703
.298	-.1919	-.0252	-.1667
.228	-.0899	-.0267	-.0632
.151	-.0140	-.1758	0.1618
.060	0.2748	-.5417	0.8167
.012	1.3439	-.9362	2.2801

Figure 159, Chordwise Pressure Distribution, Steady, Configuration 1

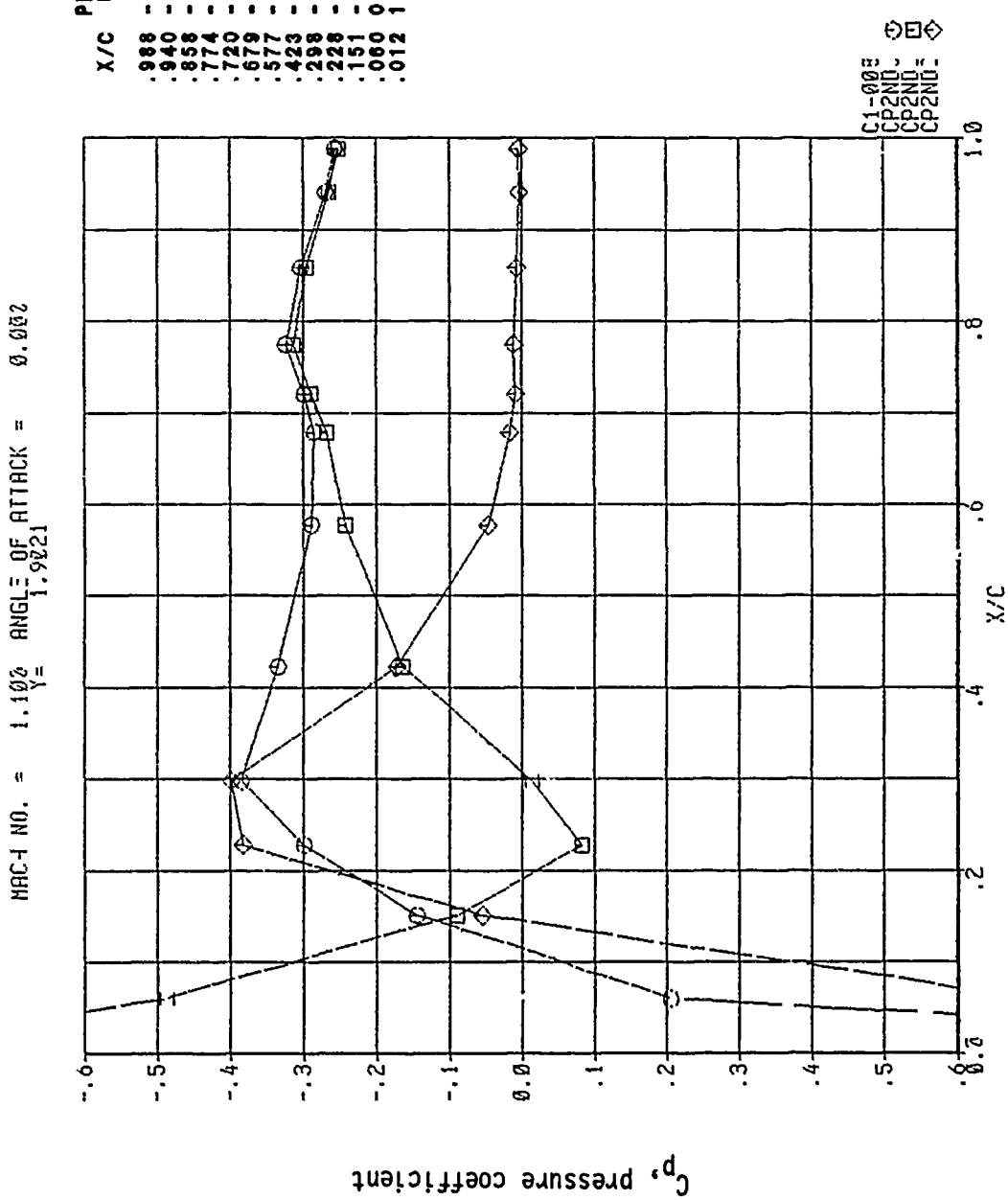
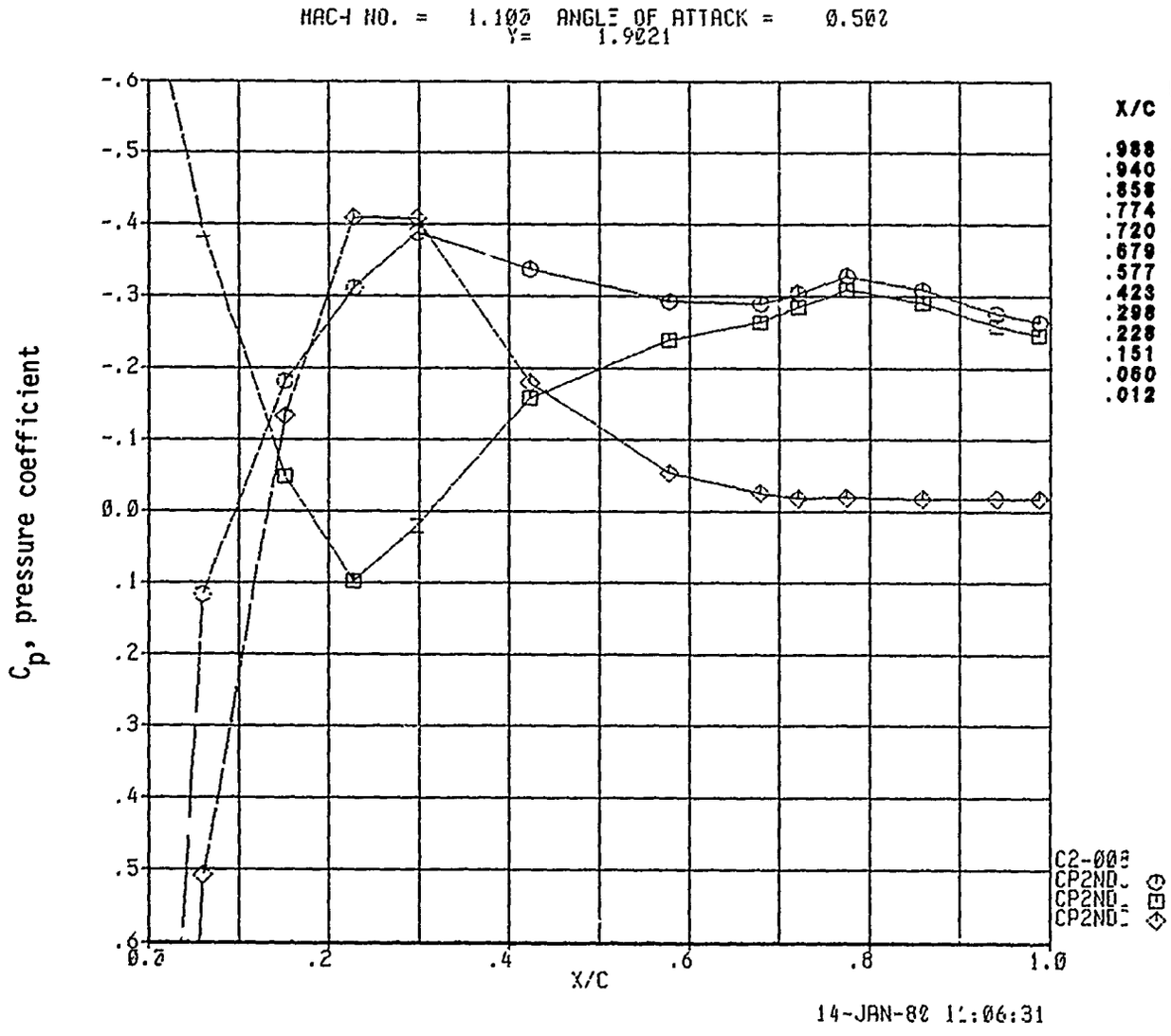
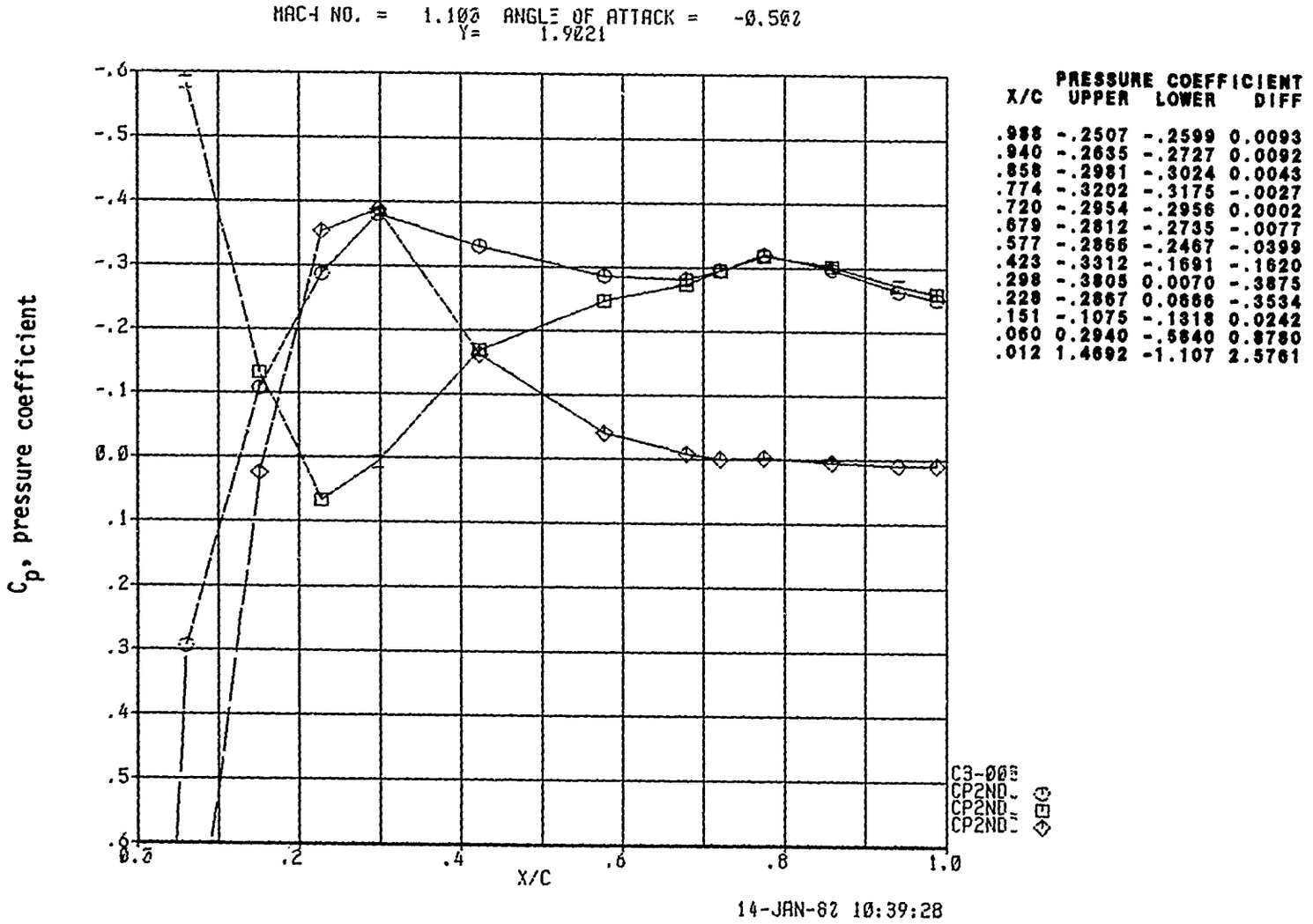


Figure 160, Chordwise Pressure Distribution, Steady, Configuration 1



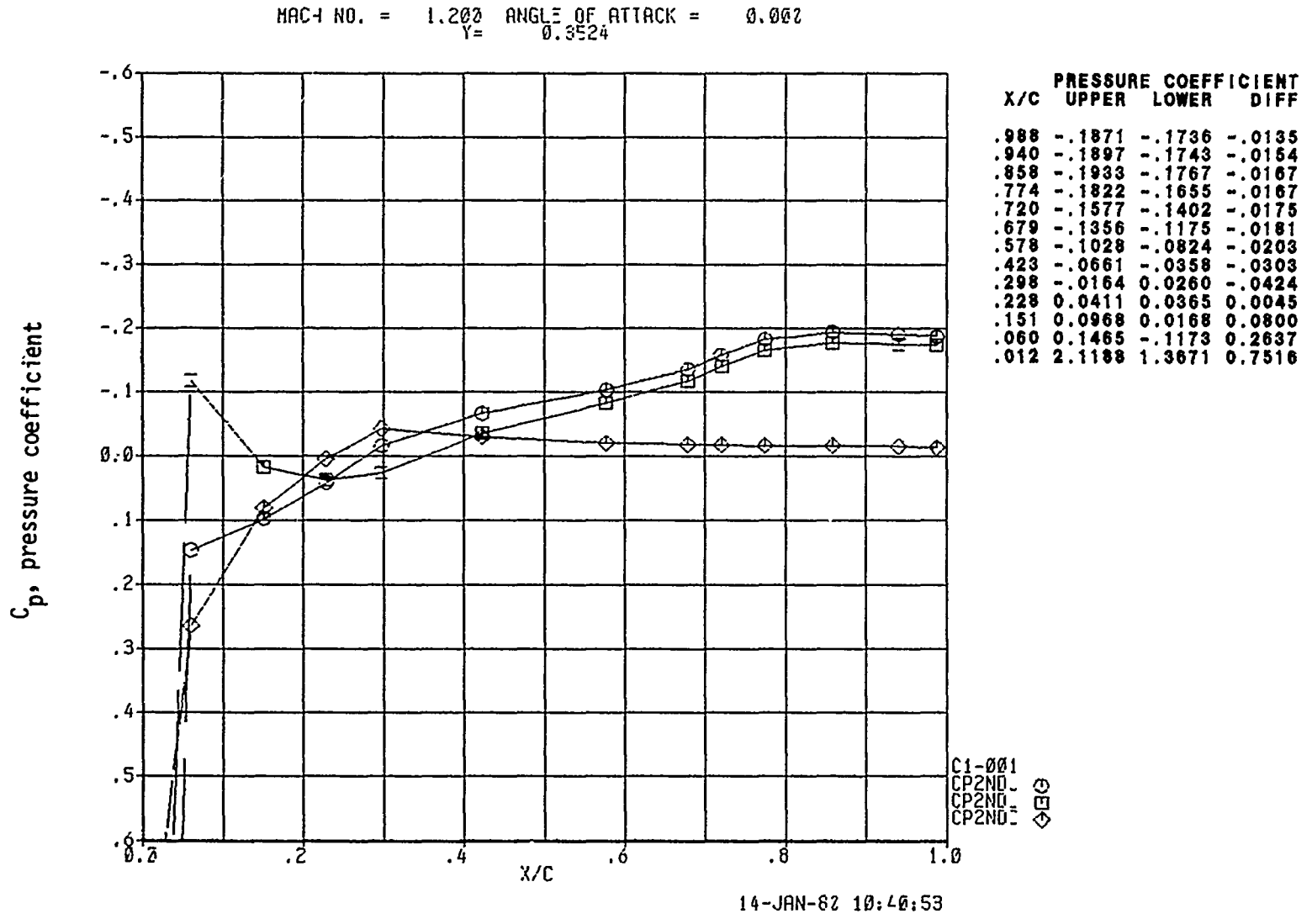
X/C	PRESSURE COEFFICIENT UPPER	LOWER	DIFF
.988	-.2635	-.2457	-.0178
.940	-.2760	-.2588	-.0172
.858	-.3085	-.2906	-.0178
.774	-.3277	-.3087	-.0190
.720	-.3037	-.2855	-.0182
.679	-.2893	-.2635	-.0258
.577	-.2922	-.2388	-.0534
.423	-.3374	-.1579	-.1794
.298	-.3879	0.0204	-.4083
.228	-.3110	0.0981	-.4090
.151	-.1815	-.0486	-.1329
.060	0.1166	-.3908	0.5074
.012	1.1108	-.6574	1.7683

Figure 161, Chordwise Pressure Distribution, Steady, Configuration 1



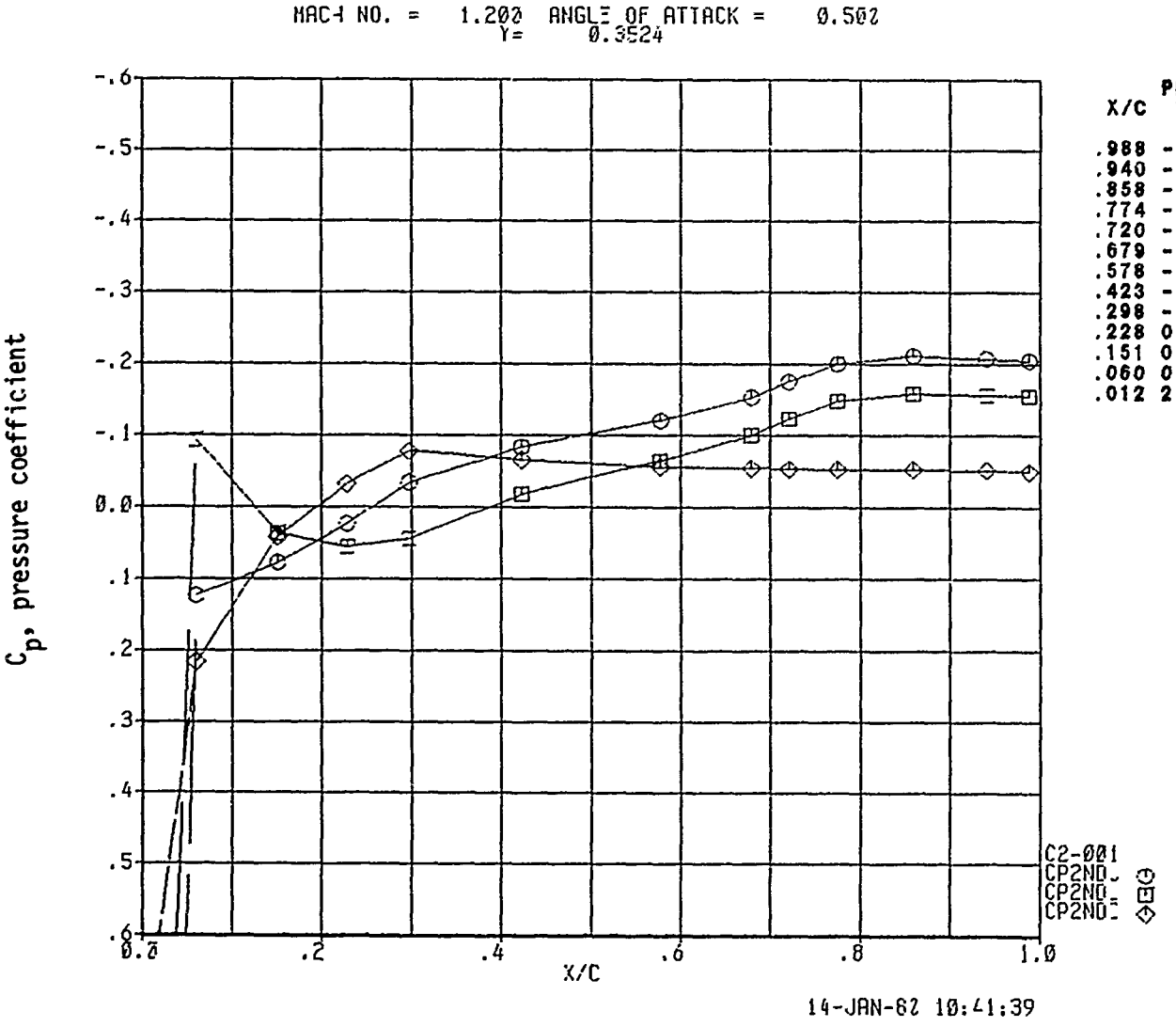
X/C	PRESSURE COEFFICIENT UPPER	LOWER	DIFF
.988	-.2507	-.2599	0.0093
.940	-.2635	-.2727	0.0092
.858	-.2981	-.3024	0.0043
.774	-.3202	-.3175	-.0027
.720	-.2954	-.2956	0.0002
.679	-.2812	-.2735	-.0077
.577	-.2866	-.2467	-.0399
.423	-.3312	-.1691	-.1620
.298	-.3805	0.0070	-.3875
.228	-.2867	0.0666	-.3534
.151	-.1075	-.1318	0.0242
.060	0.2940	-.5840	0.8780
.012	1.4692	-1.107	2.5761

Figure 162, Chordwise Pressure Distribution, Steady, Configuration 1



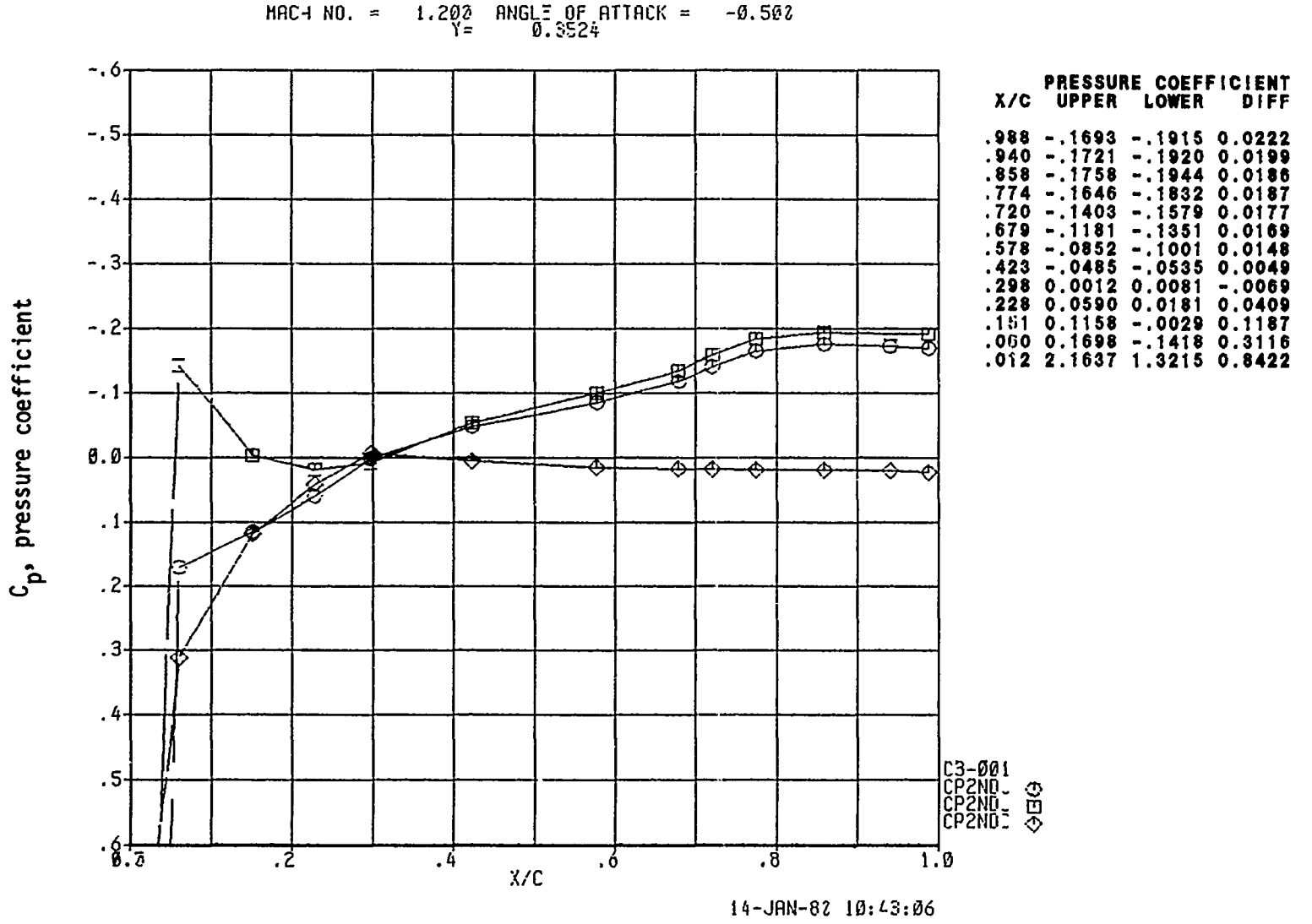
X/C	PRESSURE COEFFICIENT UPPER	LOWER	DIFF
.988	-.1871	-.1736	-.0135
.940	-.1897	-.1743	-.0154
.858	-.1933	-.1767	-.0167
.774	-.1822	-.1655	-.0167
.720	-.1577	-.1402	-.0175
.679	-.1356	-.1175	-.0181
.578	-.1028	-.0824	-.0203
.423	-.0661	-.0358	-.0303
.298	-.0164	0.0260	-.0424
.228	0.0411	0.0365	0.0045
.151	0.0968	0.0168	0.0800
.060	0.1465	-.1173	0.2637
.012	2.1188	1.3671	0.7516

Figure 163, Chordwise Pressure Distribution, Steady, Configuration 1



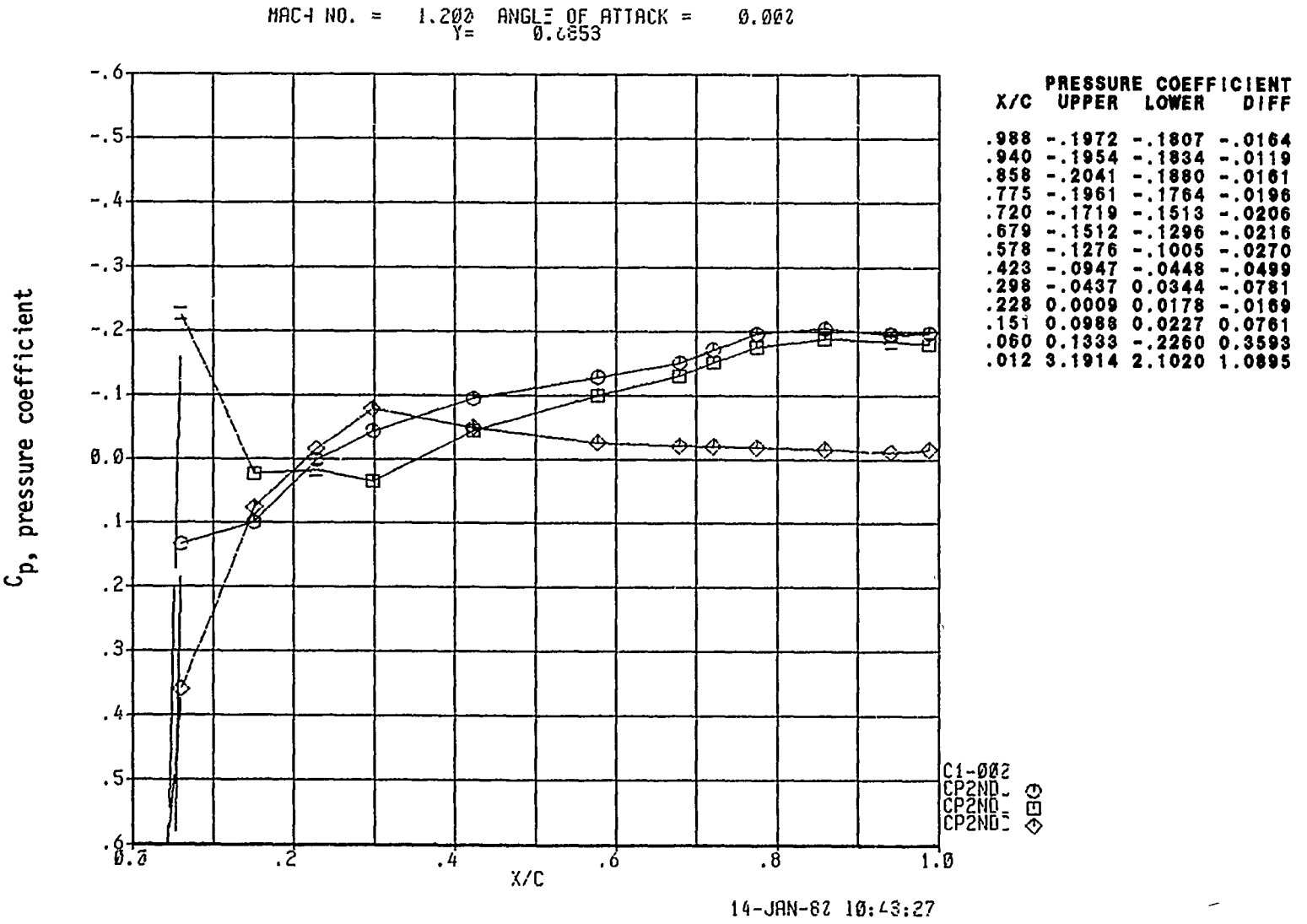
X/C	PRESSURE COEFFICIENT UPPER	LOWER	DIFF
.988	-.2049	-.1558	-.0491
.940	-.2073	-.1566	-.0508
.858	-.2110	-.1590	-.0520
.774	-.1998	-.1479	-.0520
.720	-.1754	-.1227	-.0526
.679	-.1532	-.0999	-.0533
.578	-.1203	-.0648	-.0554
.423	-.0837	-.0182	-.0656
.298	-.0340	0.0438	-.0779
.228	0.0231	0.0549	-.0318
.151	0.0777	0.0365	0.0412
.060	0.1230	-.0928	0.2157
.012	2.0738	1.4126	0.6611

Figure 164 , Chordwise Pressure Distribution, Steady, Configuration 1



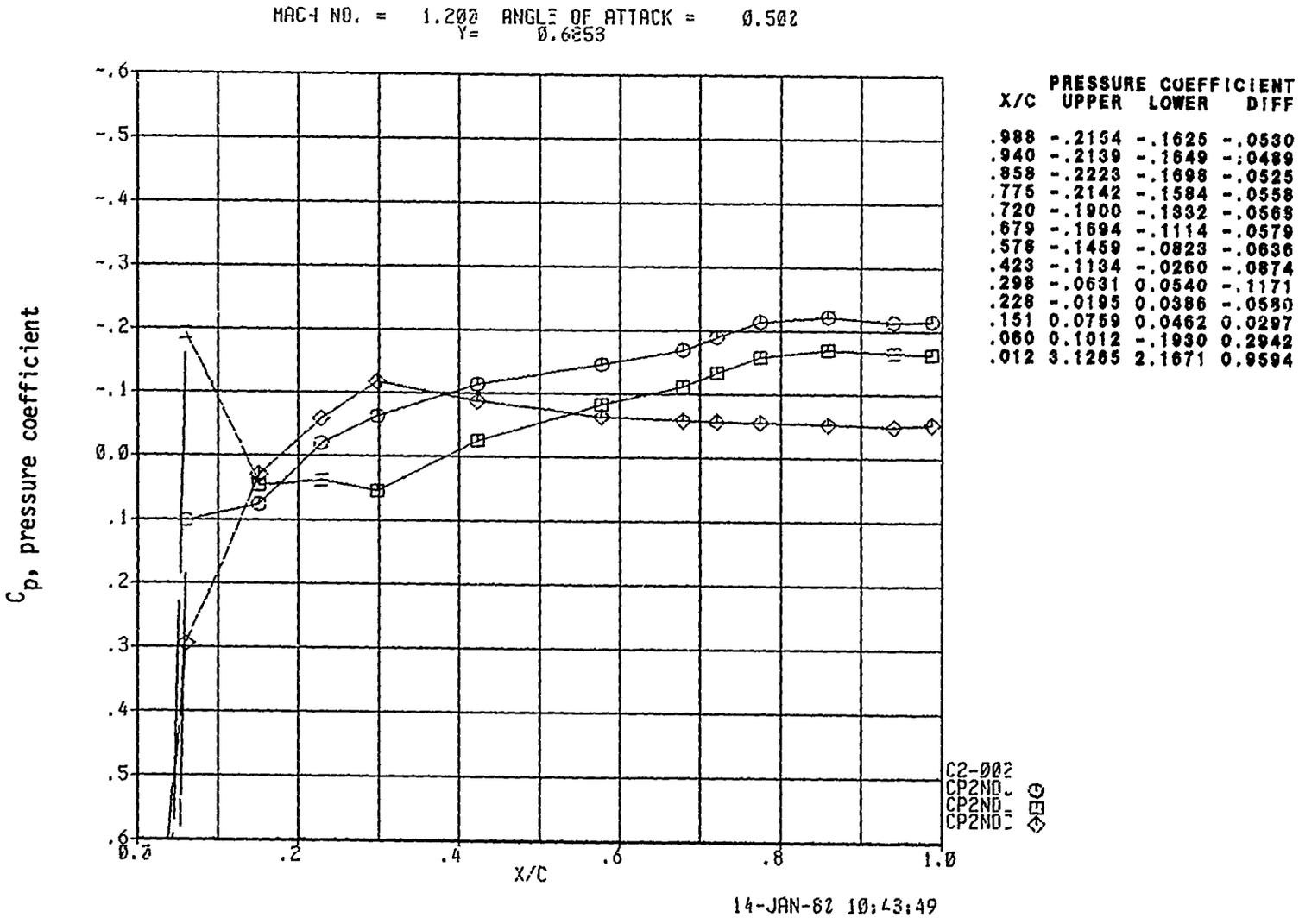
X/C	PRESSURE COEFFICIENT UPPER	LOWER	DIFF
.988	-.1693	-.1915	0.0222
.940	-.1721	-.1920	0.0199
.858	-.1758	-.1944	0.0186
.774	-.1646	-.1832	0.0187
.720	-.1403	-.1579	0.0177
.679	-.1181	-.1351	0.0169
.578	-.0852	-.1001	0.0148
.423	-.0485	-.0535	0.0049
.298	0.0012	0.0081	-.0069
.228	0.0590	0.0181	0.0409
.151	0.1158	-.0029	0.1187
.060	0.1698	-.1418	0.3116
.012	2.1637	1.3215	0.8422

Figure 165, Chordwise Pressure Distribution, Steady, Configuration 1



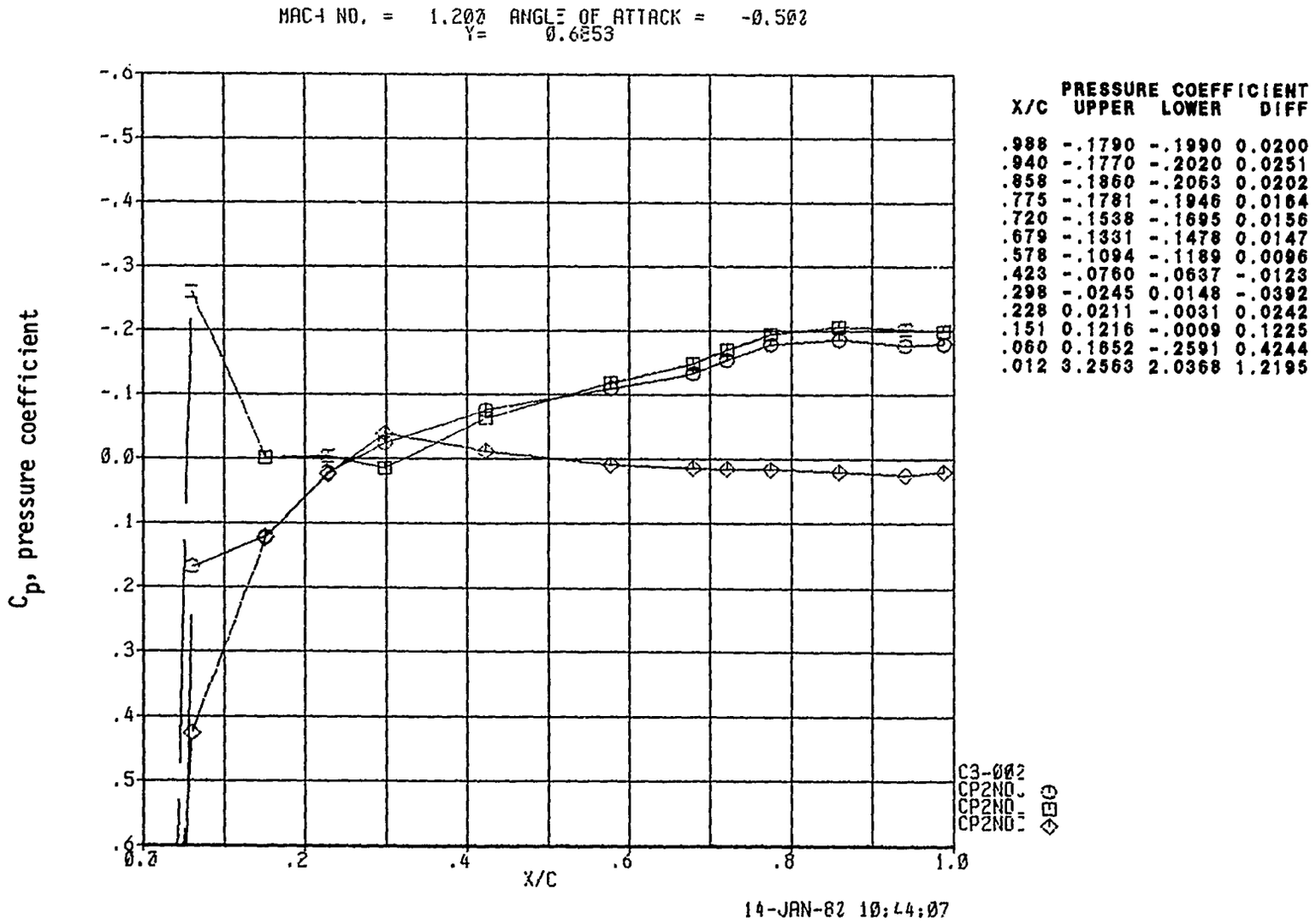
X/C	PRESSURE COEFFICIENT UPPER	LOWER	DIFF
.988	-.1972	-.1807	-.0164
.940	-.1954	-.1834	-.0119
.858	-.2041	-.1880	-.0161
.775	-.1961	-.1764	-.0196
.720	-.1719	-.1513	-.0206
.679	-.1512	-.1296	-.0216
.578	-.1276	-.1005	-.0270
.423	-.0947	-.0448	-.0499
.298	-.0437	0.0344	-.0781
.228	0.0009	0.0178	-.0169
.151	0.0988	0.0227	0.0761
.060	0.1333	-.2260	0.3593
.012	3.1914	2.1020	1.0895

Figure 166, Chordwise Pressure Distribution, Steady, Configuration 1



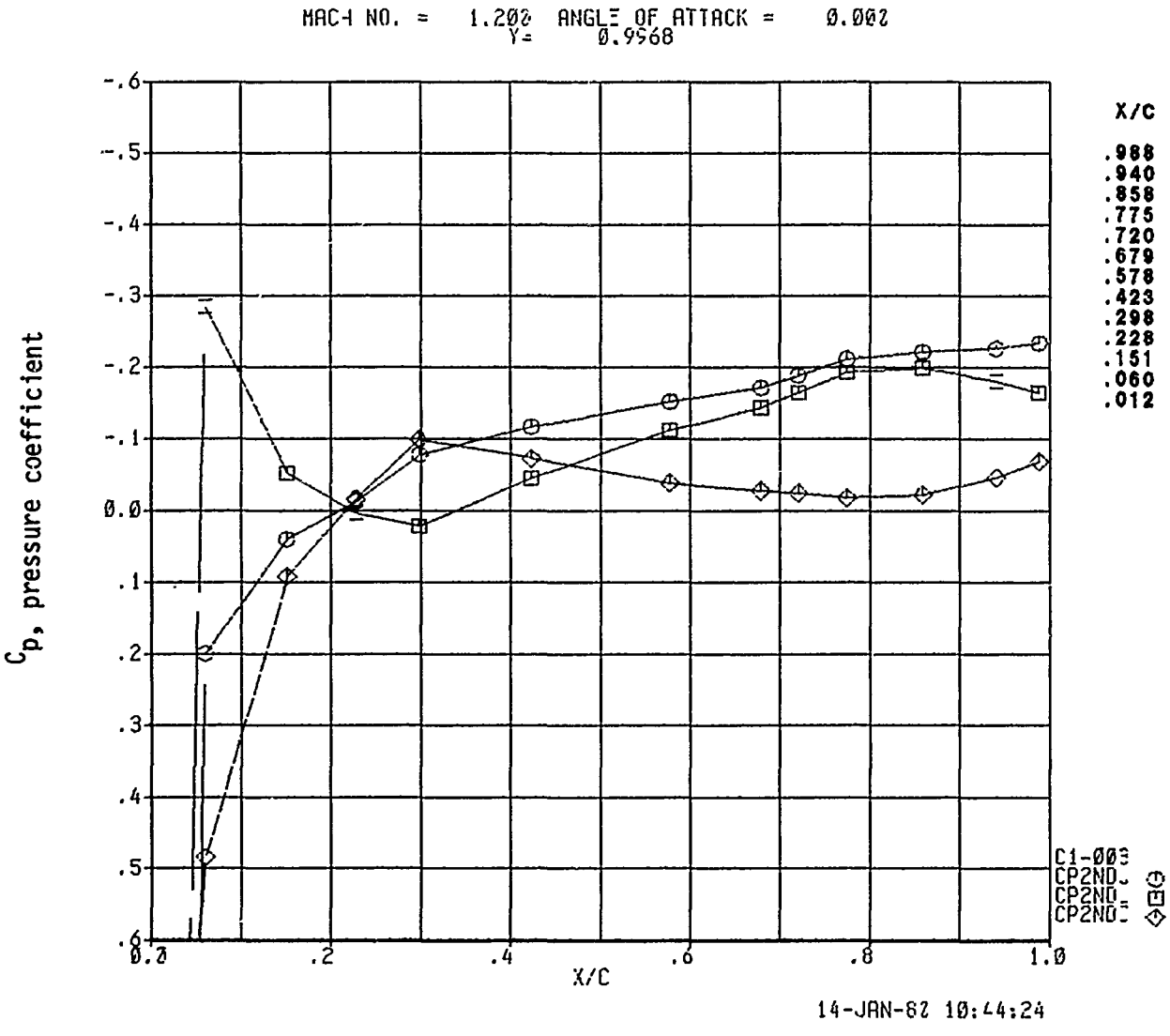
X/C	PRESSURE COEFFICIENT UPPER	LOWER	DIFF
.988	-.2154	-.1625	-.0530
.940	-.2139	-.1649	-.0489
.858	-.2223	-.1698	-.0525
.775	-.2142	-.1584	-.0558
.720	-.1900	-.1332	-.0568
.679	-.1694	-.1114	-.0579
.578	-.1459	-.0823	-.0636
.423	-.1134	-.0260	-.0874
.298	-.0631	0.0540	-.1171
.228	-.0195	0.0386	-.0580
.151	0.0759	0.0462	0.0297
.060	0.1012	-.1930	0.2942
.012	3.1265	2.1671	0.9594

Figure 167, Chordwise Pressure Distribution, Steady, Configuration 1



X/C	PRESSURE COEFFICIENT UPPER	LOWER	DIFF
.988	-.1790	-.1990	0.0200
.940	-.1770	-.2020	0.0251
.858	-.1860	-.2063	0.0202
.775	-.1781	-.1946	0.0164
.720	-.1538	-.1695	0.0156
.679	-.1331	-.1478	0.0147
.578	-.1094	-.1189	0.0096
.423	-.0760	-.0637	-.0123
.298	-.0245	0.0148	-.0392
.228	0.0211	-.0031	0.0242
.151	0.1216	-.0009	0.1225
.060	0.1652	-.2591	0.4244
.012	3.2563	2.0368	1.2195

Figure 168, Chordwise Pressure Distribution, Steady, Configuration 1



X/C	PRESSURE COEFFICIENT UPPER	LOWER	DIFF
.988	-.2331	-.1648	-.0683
.940	-.2259	-.1801	-.0458
.858	-.2208	-.1985	-.0224
.775	-.2106	-.1925	-.0181
.720	-.1884	-.1639	-.0245
.679	-.1710	-.1434	-.0276
.578	-.1515	-.1130	-.0384
.423	-.1171	-.0452	-.0720
.298	-.0773	0.0218	-.0991
.228	-.0133	0.0030	-.0164
.151	0.0400	-.0514	0.0913
.060	0.1995	-.2842	0.4836
.012	3.4448	2.1619	1.2829

Figure 169, Chordwise Pressure Distribution, Steady, Configuration 1

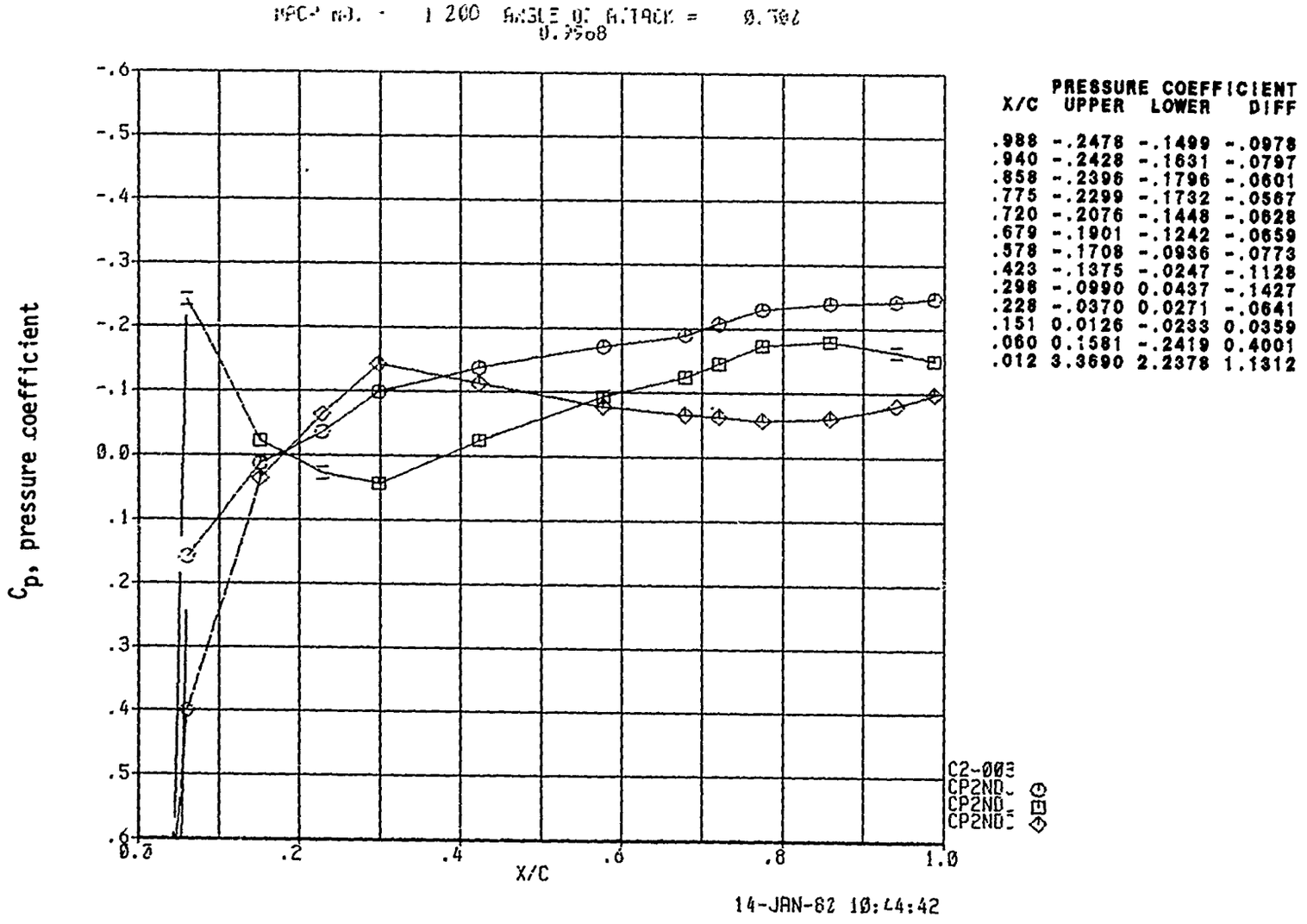
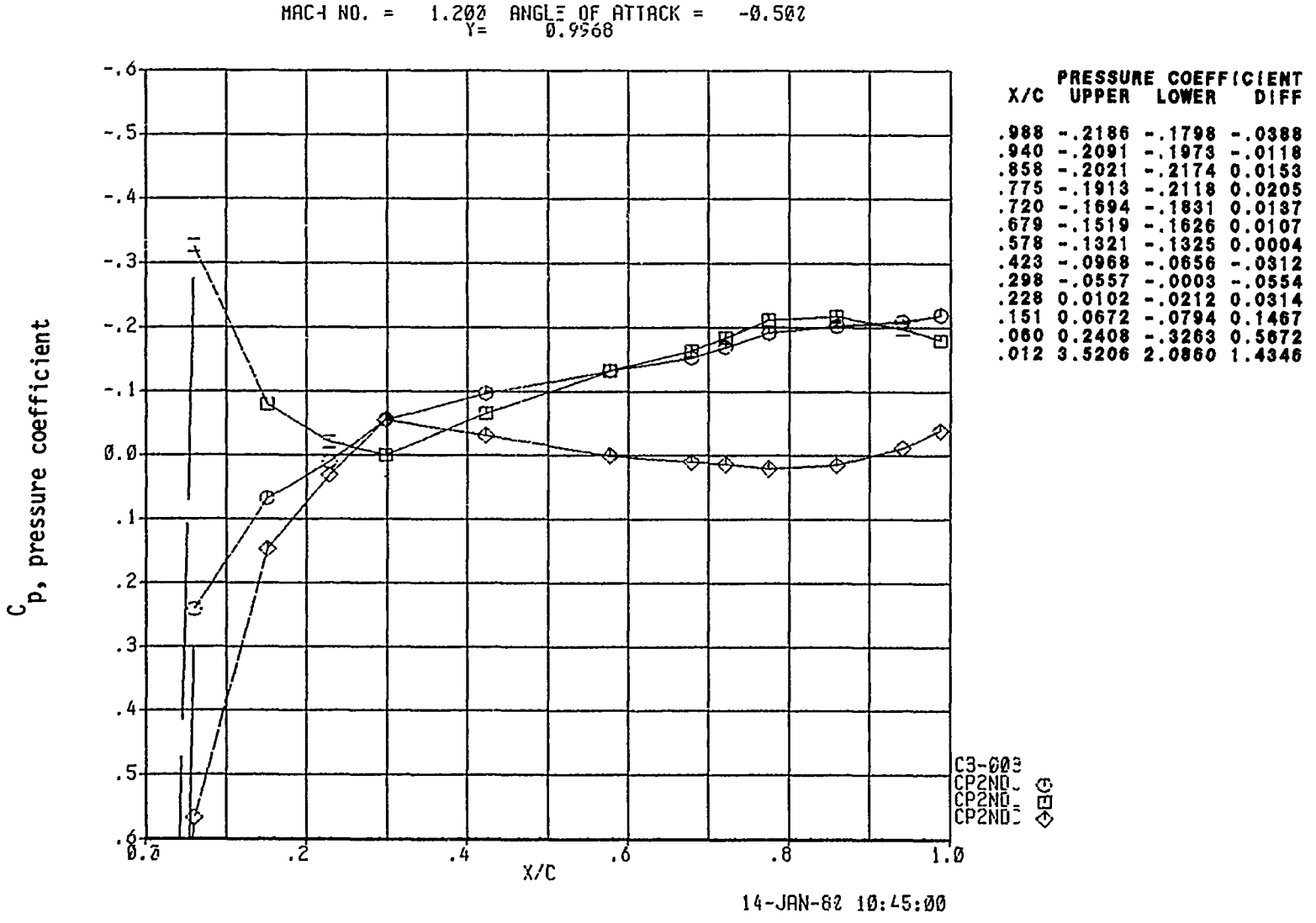
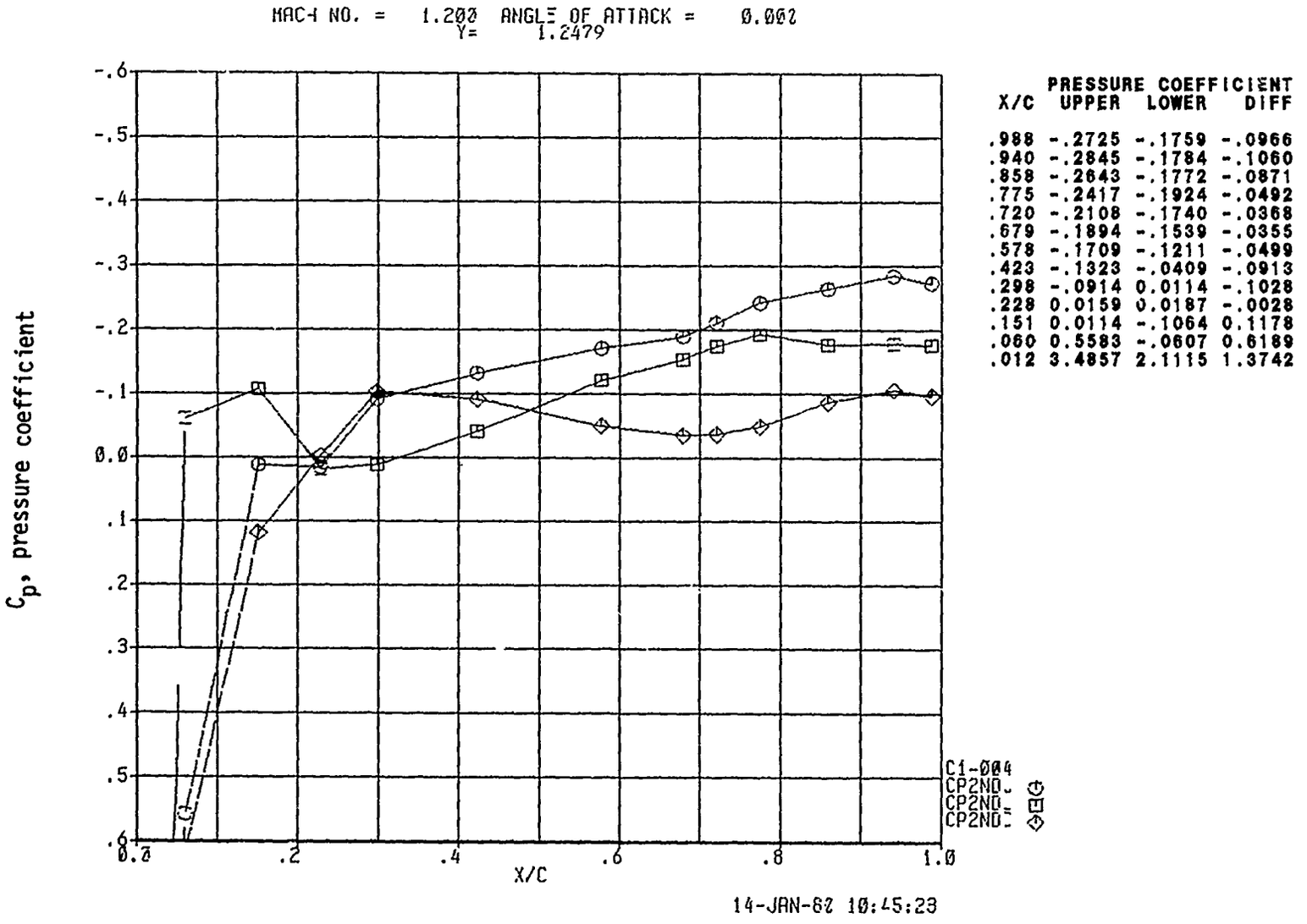


Figure 170, Chordwise Pressure Distribution, Steady, Configuration 1



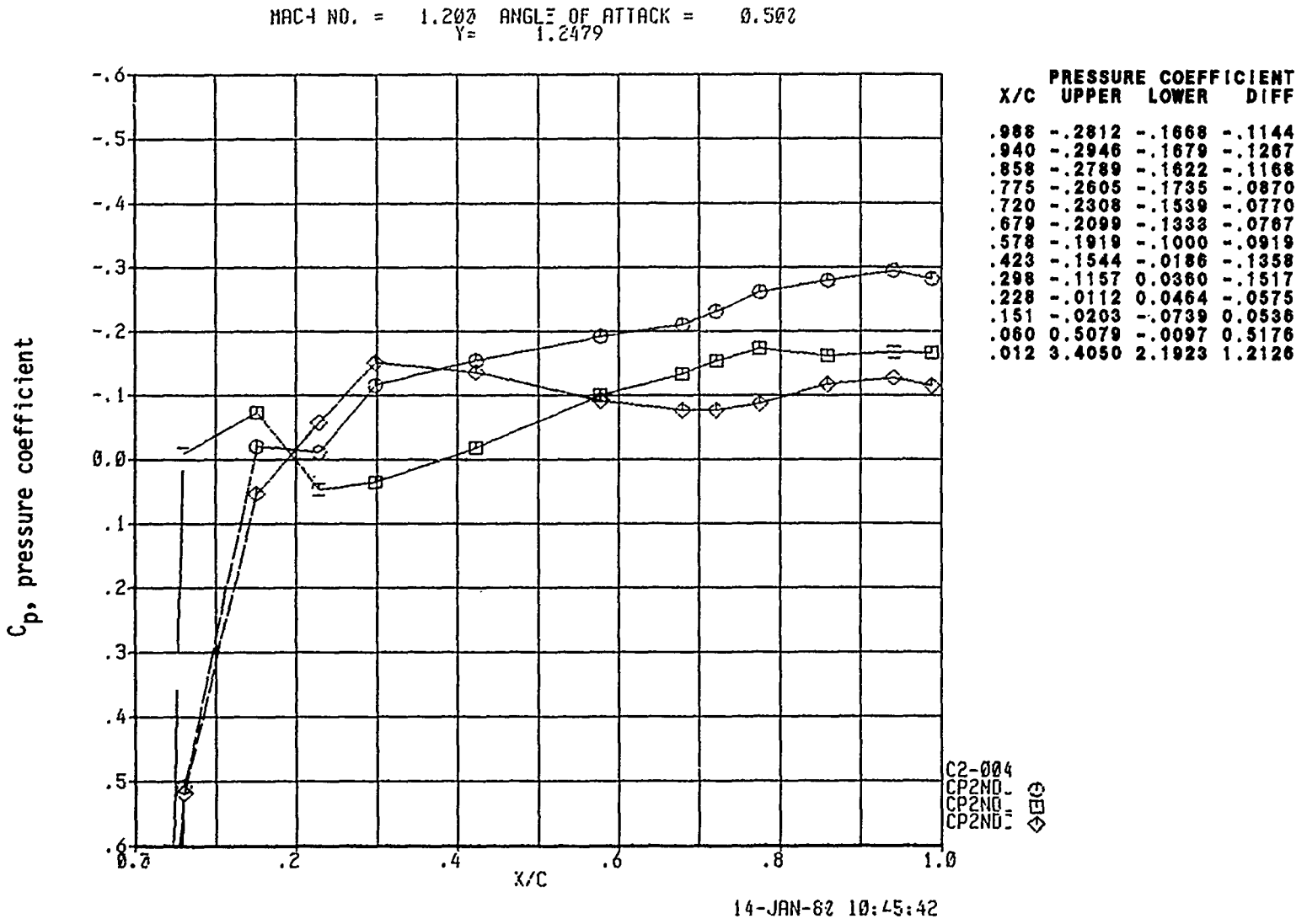
X/C	PRESSURE COEFFICIENT UPPER	LOWER	DIFF
.988	-.2186	-.1798	-.0388
.940	-.2091	-.1973	-.0118
.858	-.2021	-.2174	0.0153
.775	-.1913	-.2118	0.0205
.720	-.1694	-.1831	0.0137
.679	-.1519	-.1626	0.0107
.578	-.1321	-.1325	0.0004
.423	-.0968	-.0656	-.0312
.298	-.0557	-.0003	-.0554
.228	0.0102	-.0212	0.0314
.151	0.0672	-.0794	0.1467
.060	0.2408	-.3263	0.5672
.012	3.5206	2.0860	1.4346

Figure 171, Chordwise Pressure Distribution, Steady, Configuration 1



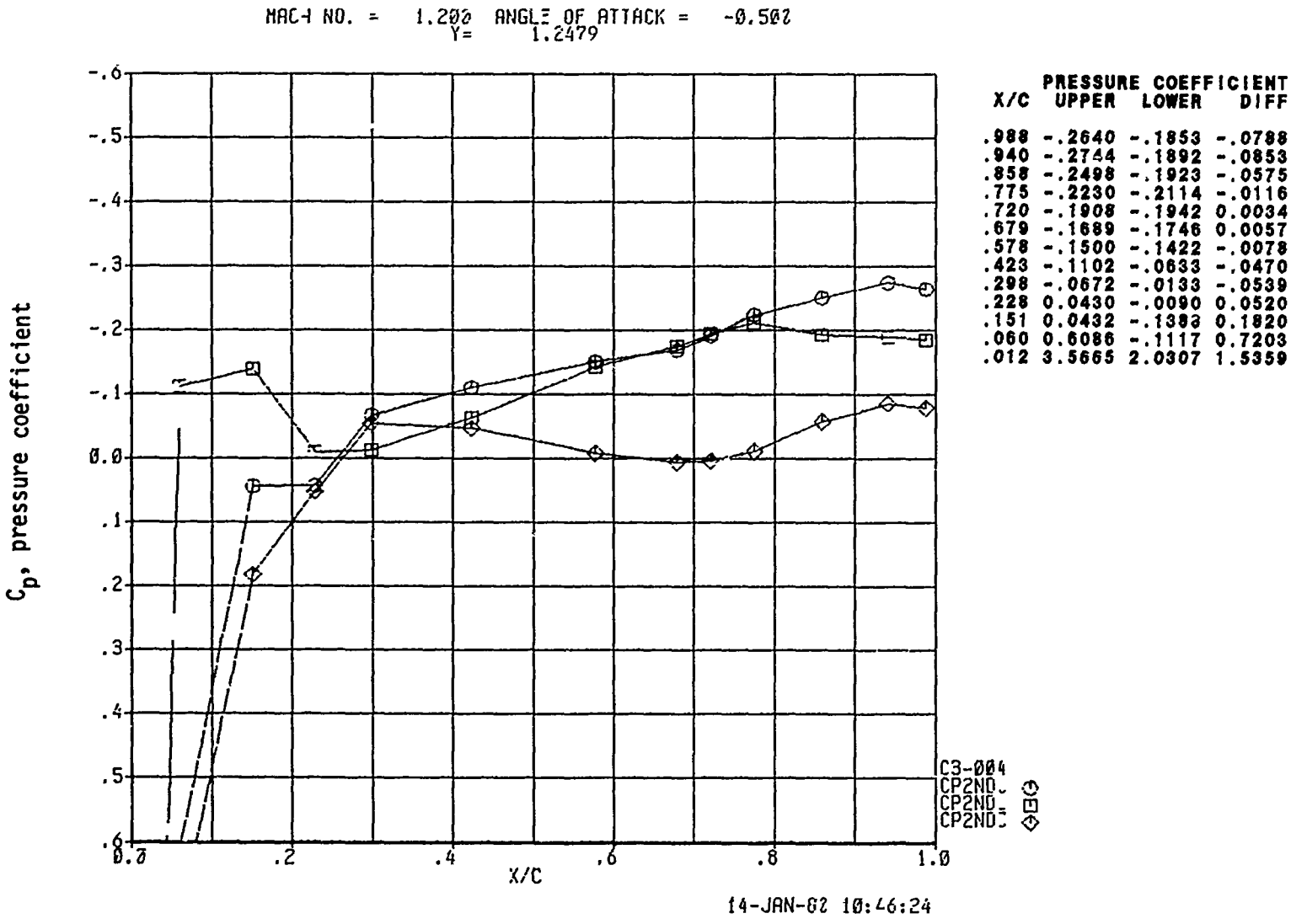
X/C	PRESSURE COEFFICIENT UPPER	LOWER	DIFF
.988	-.2725	-.1759	-.0966
.940	-.2845	-.1784	-.1060
.858	-.2643	-.1772	-.0871
.775	-.2417	-.1924	-.0492
.720	-.2108	-.1740	-.0368
.679	-.1894	-.1539	-.0355
.578	-.1709	-.1211	-.0499
.423	-.1323	-.0409	-.0913
.298	-.0914	0.0114	-.1028
.228	0.0159	0.0187	-.0028
.151	0.0114	-.1064	0.1178
.060	0.5583	-.0607	0.6189
.012	3.4857	2.1115	1.3742

Figure 172, Chordwise Pressure Distribution, Steady, Configuration 1



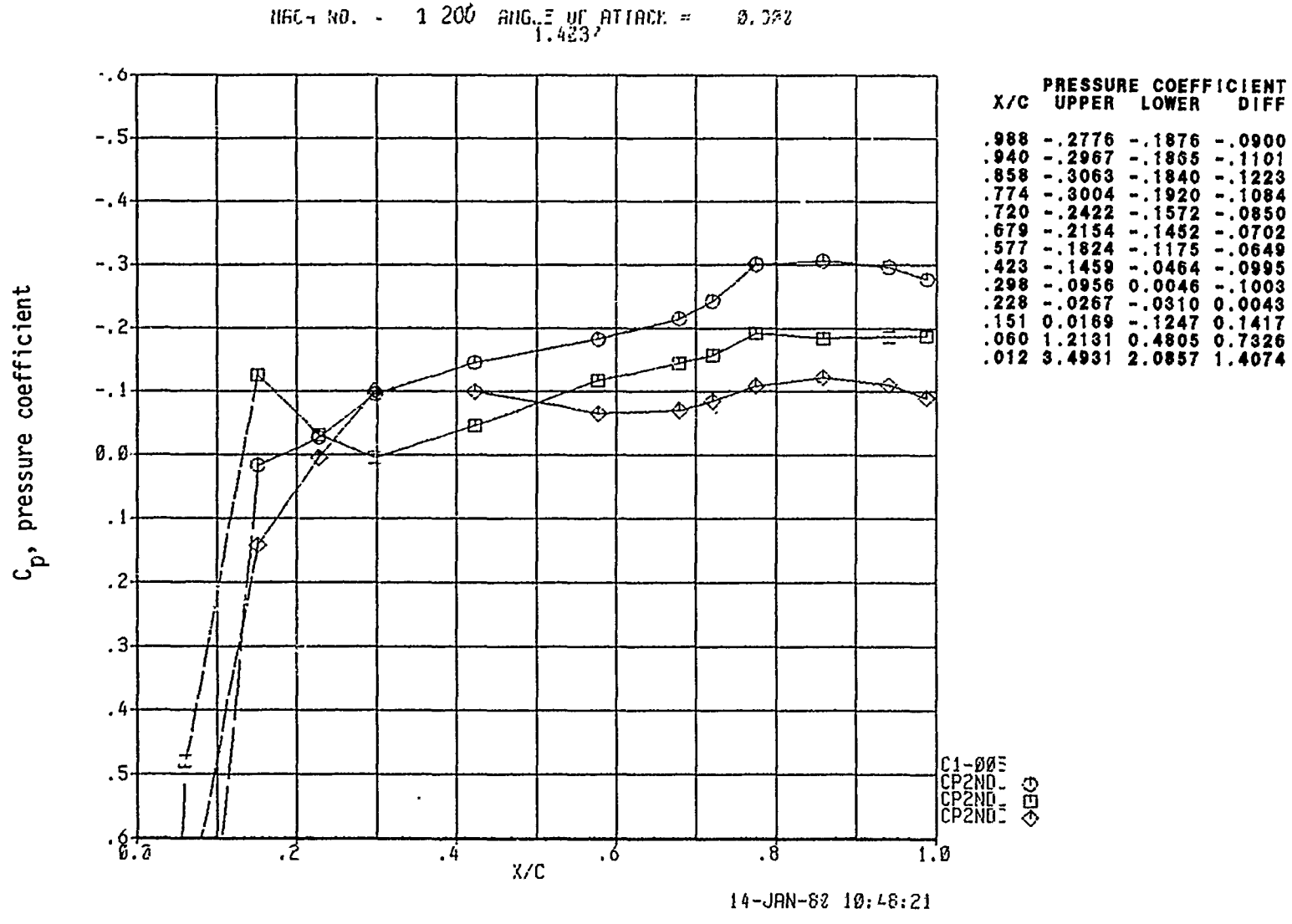
X/C	PRESSURE COEFFICIENT UPPER	LOWER	DIFF
.988	-.2812	-.1668	-.1144
.940	-.2946	-.1679	-.1267
.858	-.2789	-.1622	-.1168
.775	-.2605	-.1735	-.0870
.720	-.2308	-.1539	-.0770
.679	-.2099	-.1333	-.0767
.578	-.1919	-.1000	-.0919
.423	-.1544	-.0186	-.1358
.298	-.1157	0.0360	-.1517
.228	-.0112	0.0464	-.0575
.151	-.0203	-.0739	0.0536
.060	0.5079	-.0097	0.5176
.012	3.4050	2.1923	1.2126

Figure 173, Chordwise Pressure Distribution, Steady, Configuration 1



X/C	PRESSURE COEFFICIENT UPPER	LOWER	DIFF
.988	-.2640	-.1853	-.0788
.940	-.2744	-.1892	-.0853
.858	-.2498	-.1923	-.0575
.775	-.2230	-.2114	-.0116
.720	-.1908	-.1942	0.0034
.679	-.1689	-.1746	0.0057
.578	-.1500	-.1422	-.0078
.423	-.1102	-.0633	-.0470
.298	-.0672	-.0133	-.0539
.228	0.0430	-.0090	0.0520
.151	0.0432	-.1388	0.1820
.060	0.6086	-.1117	0.7203
.012	3.5665	2.0307	1.5359

Figure 174, Chordwise Pressure Distribution, Steady, Configuration 1



X/C	PRESSURE COEFFICIENT UPPER	LOWER	DIFF
.988	-.2776	-.1876	-.0900
.940	-.2967	-.1865	-.1101
.858	-.3063	-.1840	-.1223
.774	-.3004	-.1920	-.1084
.720	-.2422	-.1572	-.0850
.679	-.2154	-.1452	-.0702
.577	-.1824	-.1175	-.0649
.423	-.1459	-.0464	-.0995
.298	-.0956	0.0046	-.1003
.228	-.0267	-.0310	0.0043
.151	0.0169	-.1247	0.1417
.060	1.2131	0.4805	0.7326
.012	3.4931	2.0857	1.4074

Figure 175, Chordwise Pressure Distribution, Steady, Configuration 1

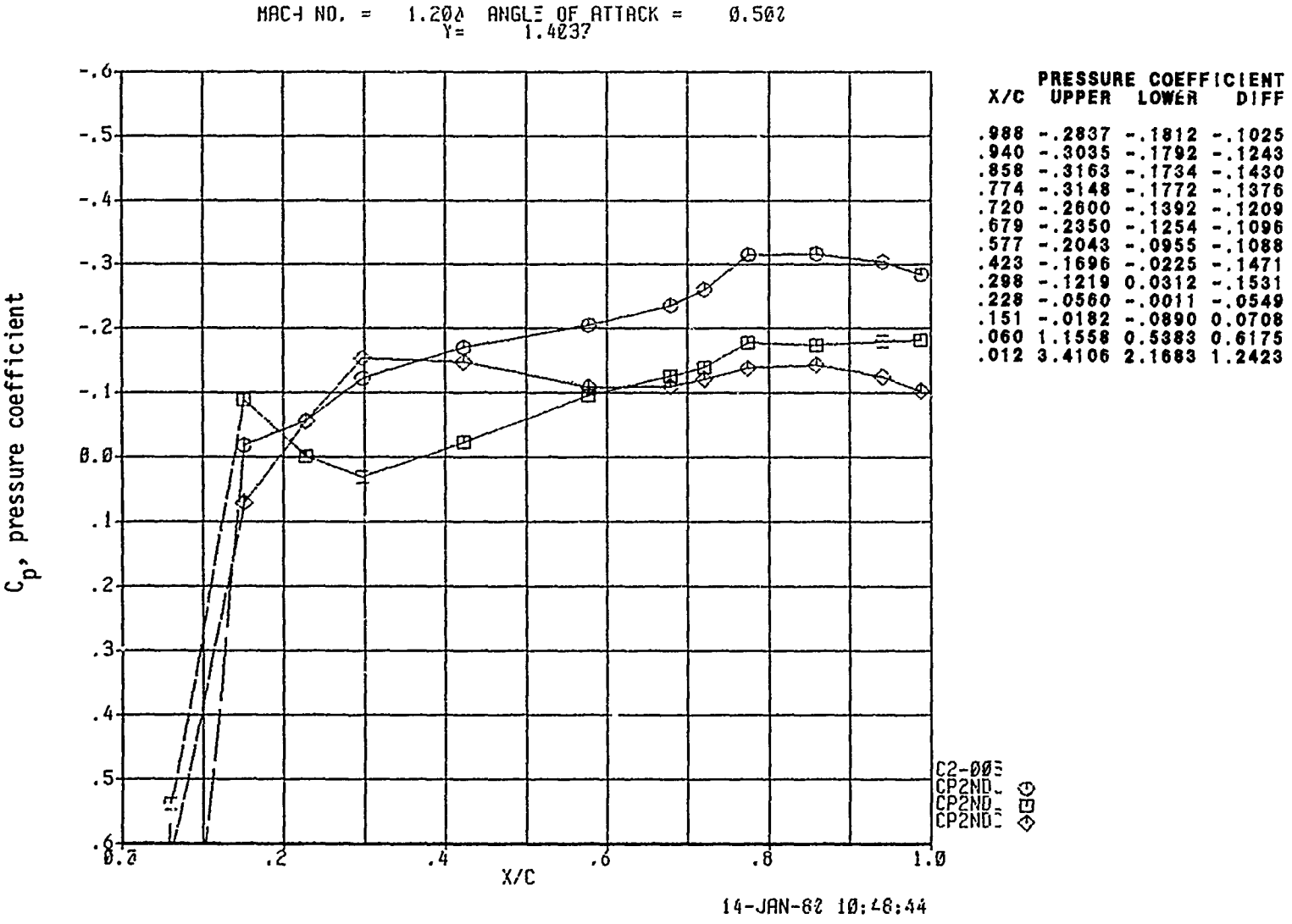
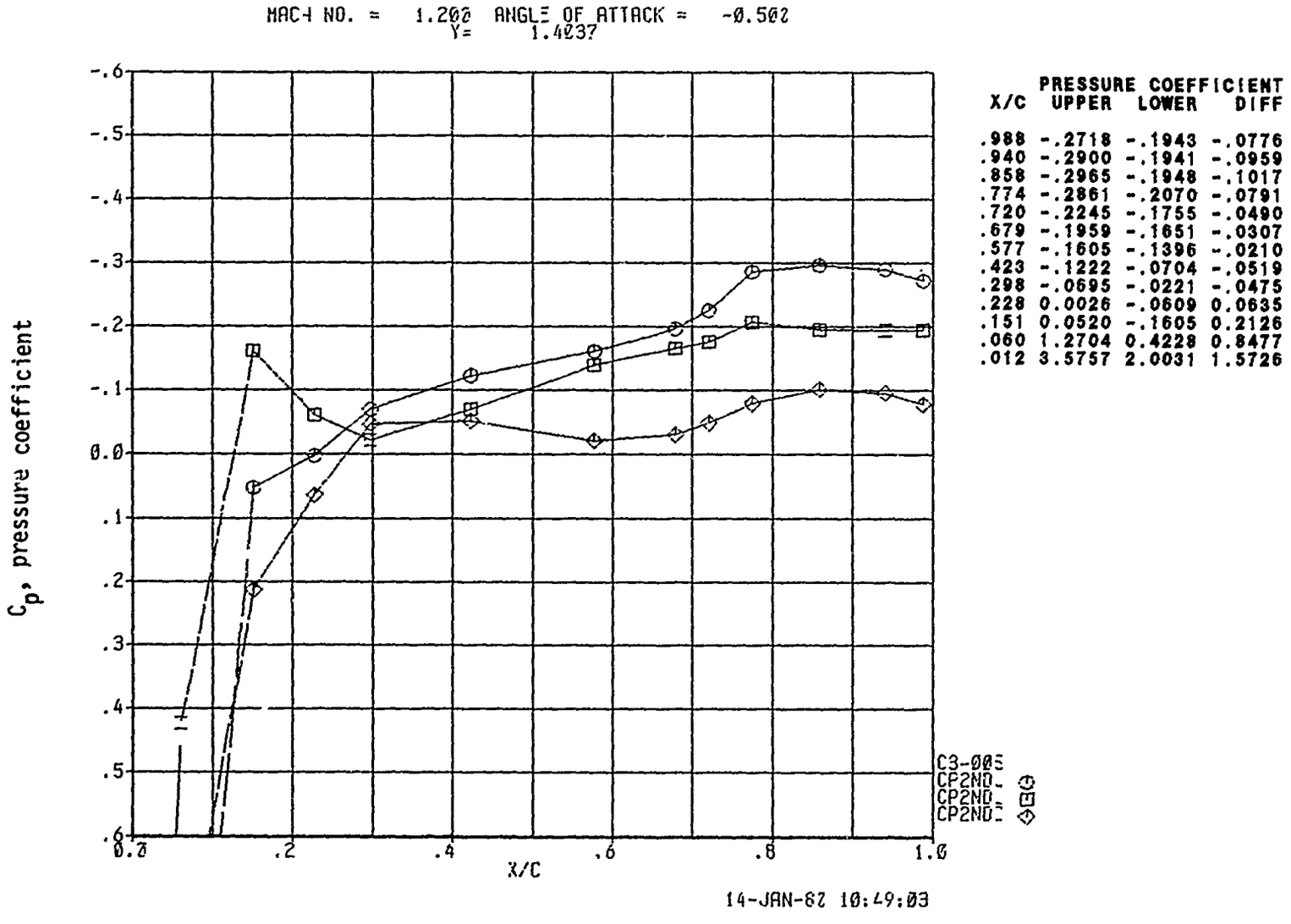


Figure 176, Chordwise Pressure Distribution, Steady, Configuration 1



X/C	PRESSURE COEFFICIENT UPPER	LOWER	DIFF
.988	-.2718	-.1943	-.0776
.940	-.2900	-.1941	-.0959
.858	-.2965	-.1948	-.1017
.774	-.2861	-.2070	-.0791
.720	-.2245	-.1755	-.0490
.679	-.1959	-.1651	-.0307
.577	-.1605	-.1396	-.0210
.423	-.1222	-.0704	-.0519
.298	-.0695	-.0221	-.0475
.228	0.0026	-.0609	0.0635
.151	0.0520	-.1605	0.2126
.060	1.2704	0.4228	0.8477
.012	3.5757	2.0031	1.5726

Figure 177, Chordwise Pressure Distribution, Steady, Configuration 1

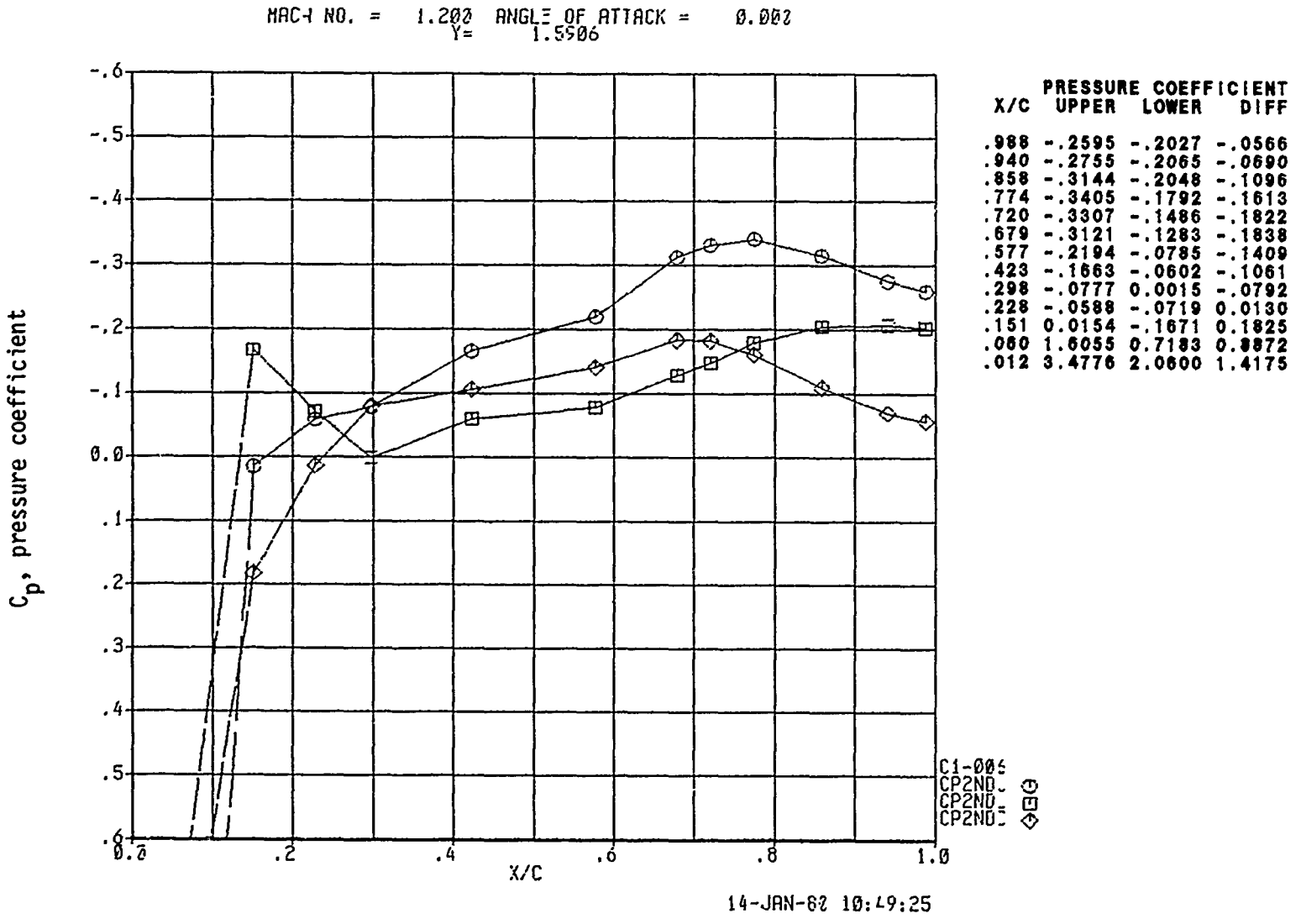
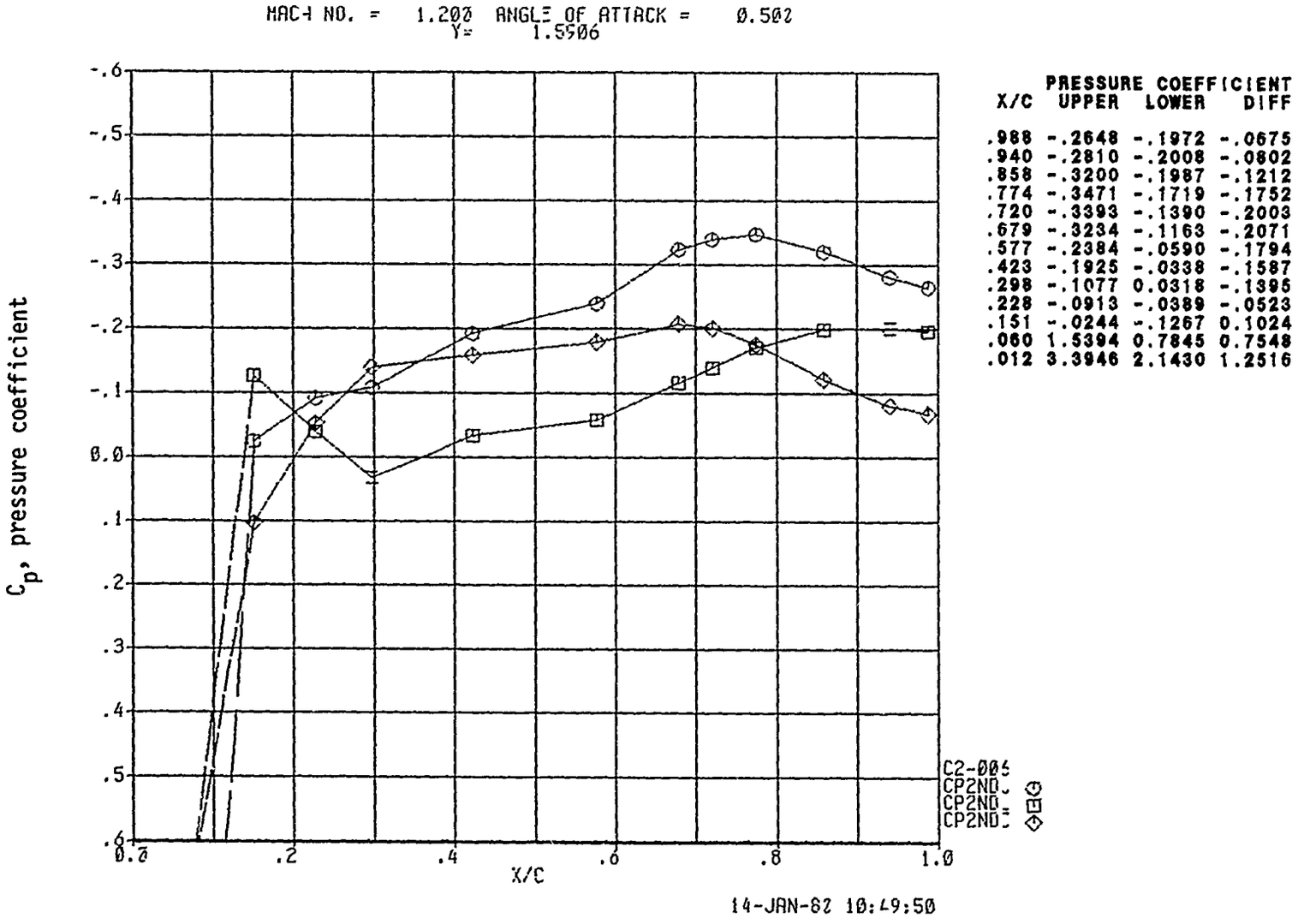
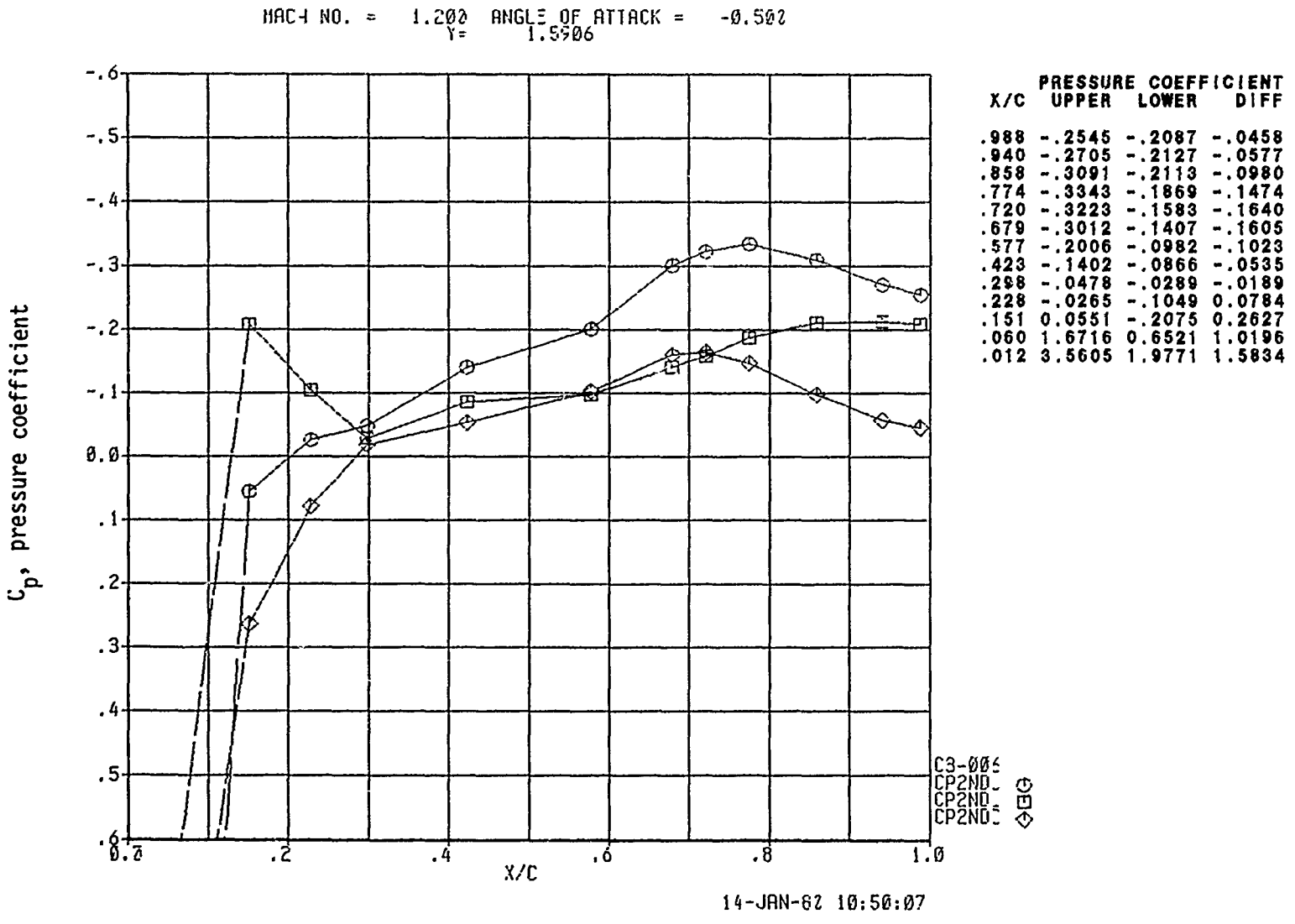


Figure 178, Chordwise Pressure Distribution, Steady, Configuration 1



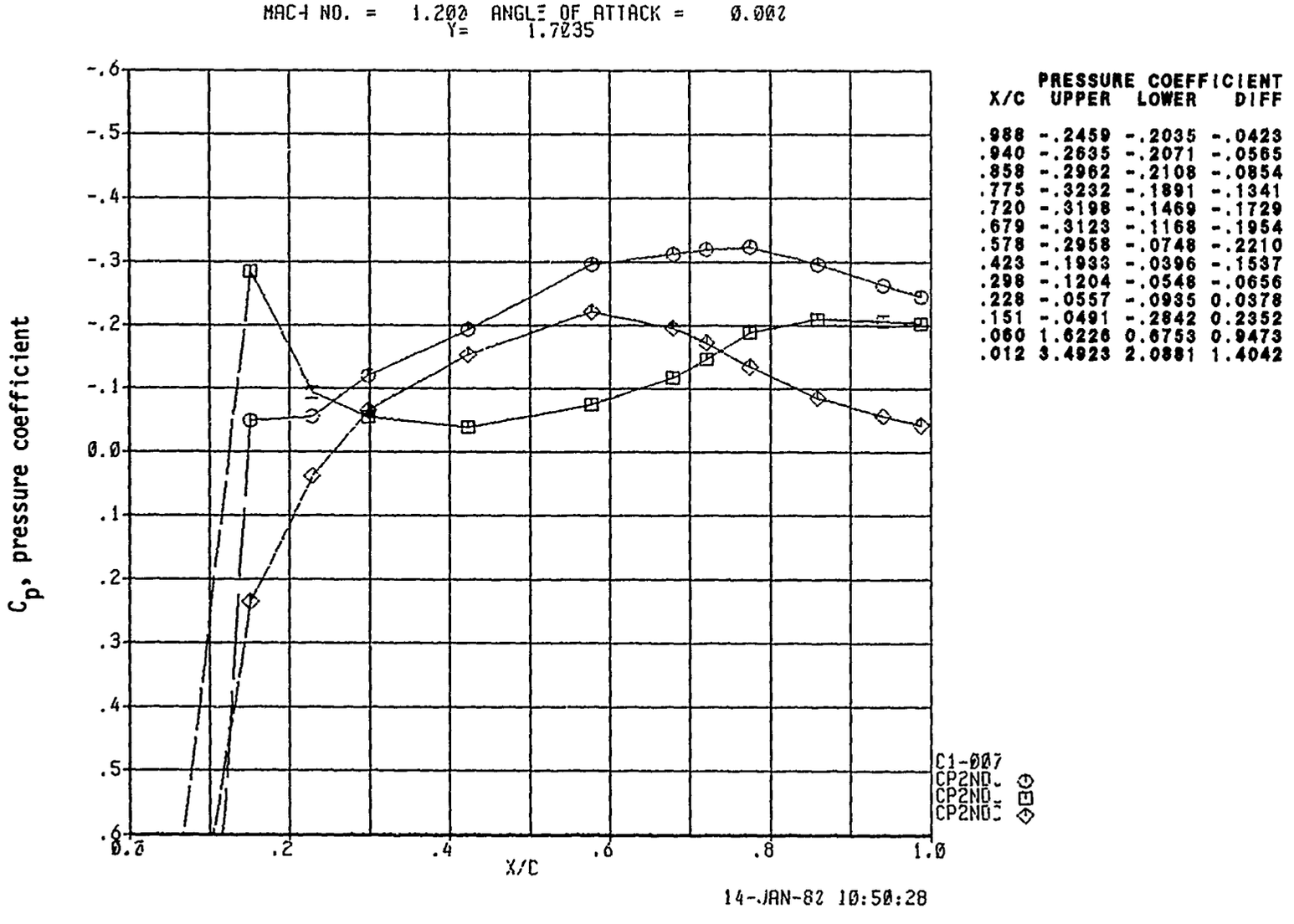
X/C	PRESSURE COEFFICIENT UPPER	LOWER	DIFF
.988	-.2648	-.1972	-.0675
.940	-.2810	-.2008	-.0802
.858	-.3200	-.1987	-.1212
.774	-.3471	-.1719	-.1752
.720	-.3393	-.1390	-.2003
.679	-.3234	-.1163	-.2071
.577	-.2384	-.0590	-.1794
.423	-.1925	-.0338	-.1587
.298	-.1077	0.0318	-.1395
.228	-.0913	-.0389	-.0523
.151	-.0244	-.1267	0.1024
.060	1.5394	0.7845	0.7548
.012	3.3946	2.1430	1.2516

Figure 179, Chordwise Pressure Distribution, Steady, Configuration 1



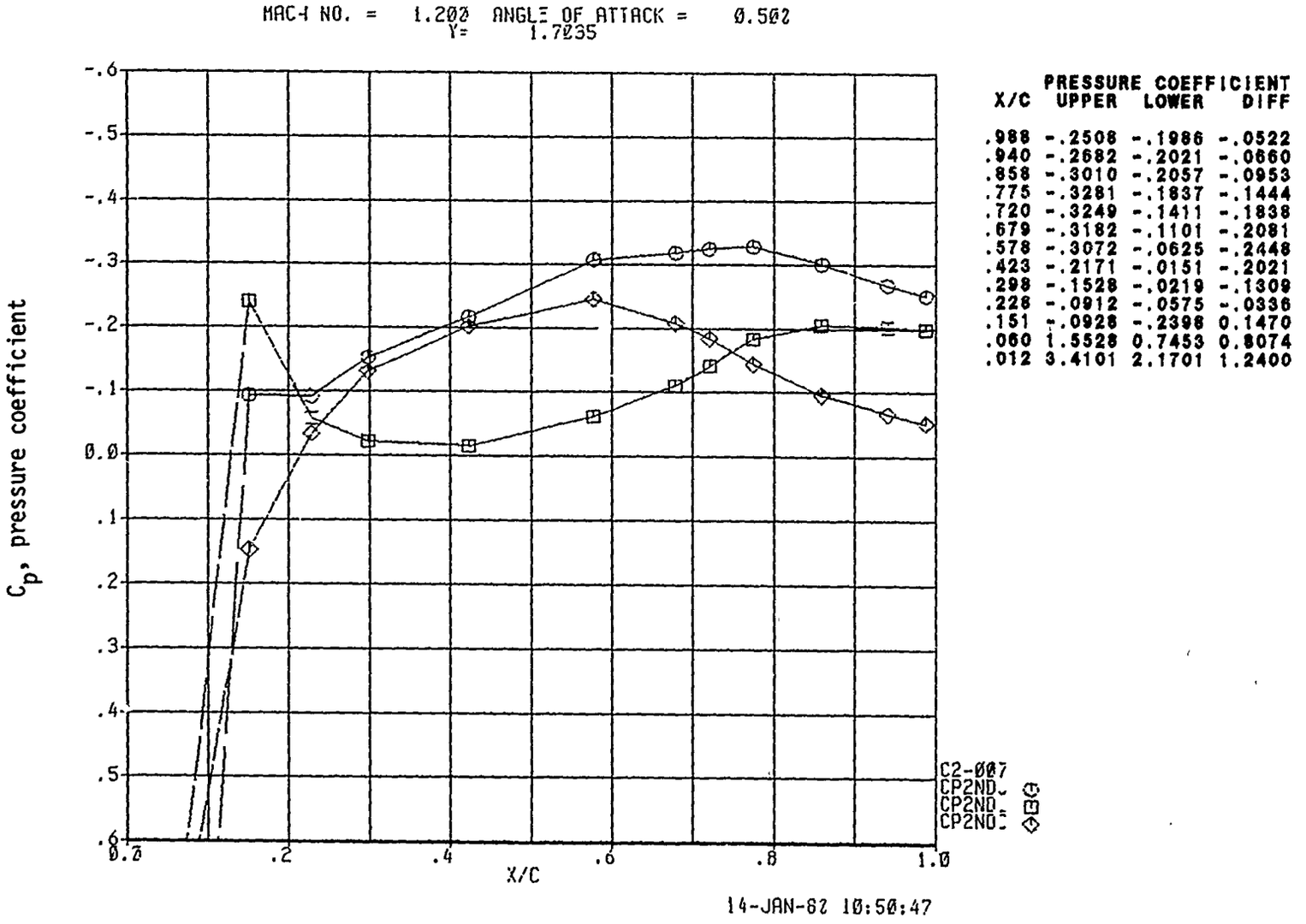
X/C	PRESSURE COEFFICIENT UPPER	LOWER	DIFF
.988	-.2545	-.2087	-.0458
.940	-.2705	-.2127	-.0577
.858	-.3091	-.2113	-.0980
.774	-.3343	-.1869	-.1474
.720	-.3223	-.1583	-.1640
.679	-.3012	-.1407	-.1605
.577	-.2006	-.0982	-.1023
.423	-.1402	-.0866	-.0535
.298	-.0478	-.0289	-.0189
.228	-.0265	-.1049	0.0784
.151	0.0551	-.2075	0.2627
.060	1.6716	0.6521	1.0196
.012	3.5605	1.9771	1.5834

Figure 180, Chordwise Pressure Distribution, Steady, Configuration 1



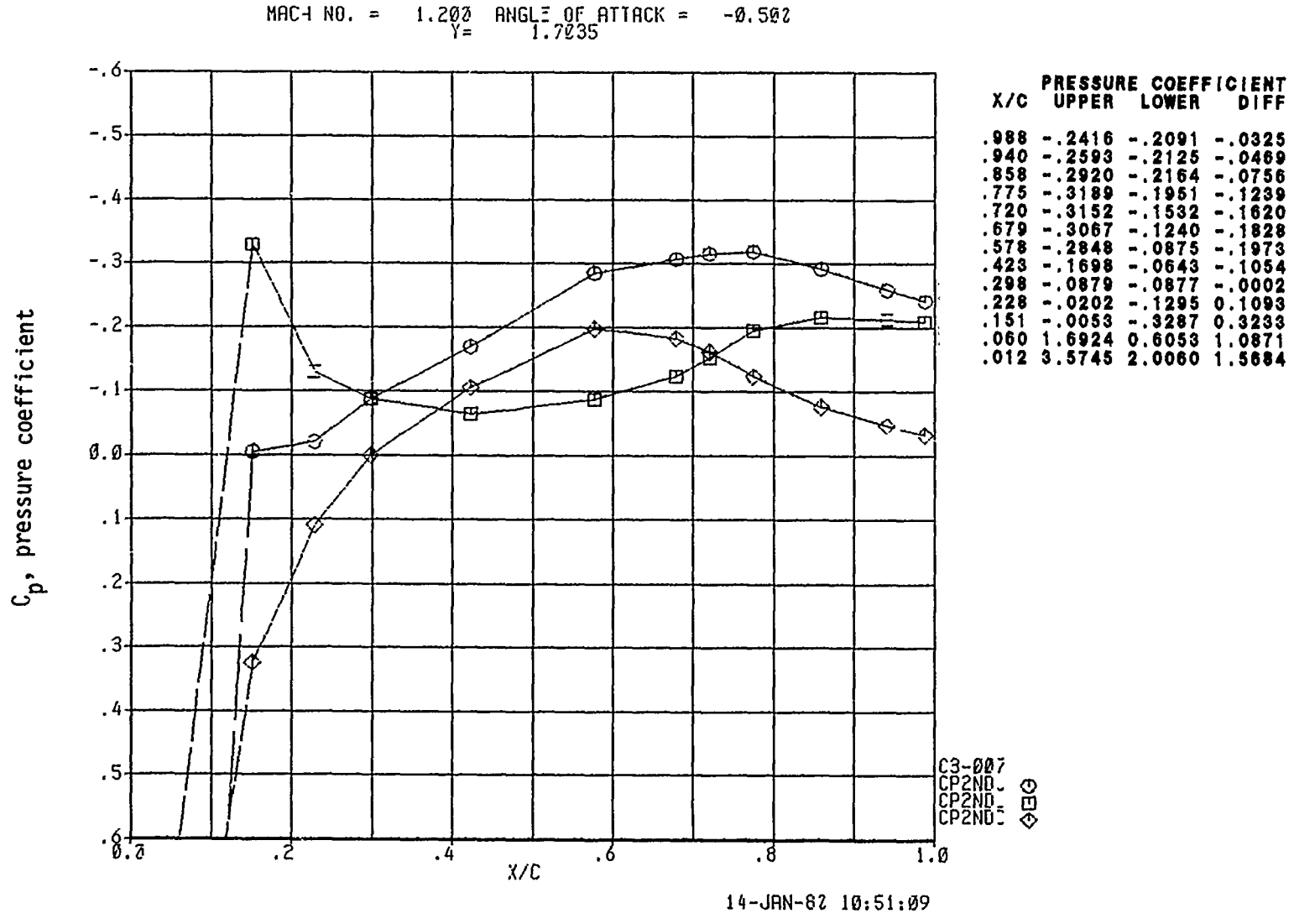
X/C	PRESSURE COEFFICIENT UPPER	LOWER	DIFF
.988	-.2459	-.2035	-.0423
.940	-.2635	-.2071	-.0565
.858	-.2962	-.2108	-.0854
.775	-.3232	-.1891	-.1341
.720	-.3198	-.1469	-.1729
.679	-.3123	-.1168	-.1954
.578	-.2958	-.0748	-.2210
.423	-.1933	-.0396	-.1537
.298	-.1204	-.0548	-.0656
.228	-.0557	-.0935	0.0378
.151	-.0491	-.2842	0.2352
.060	1.6226	0.6753	0.9473
.012	3.4923	2.0881	1.4042

Figure 181, Chordwise Pressure Distribution, Steady, Configuration 1



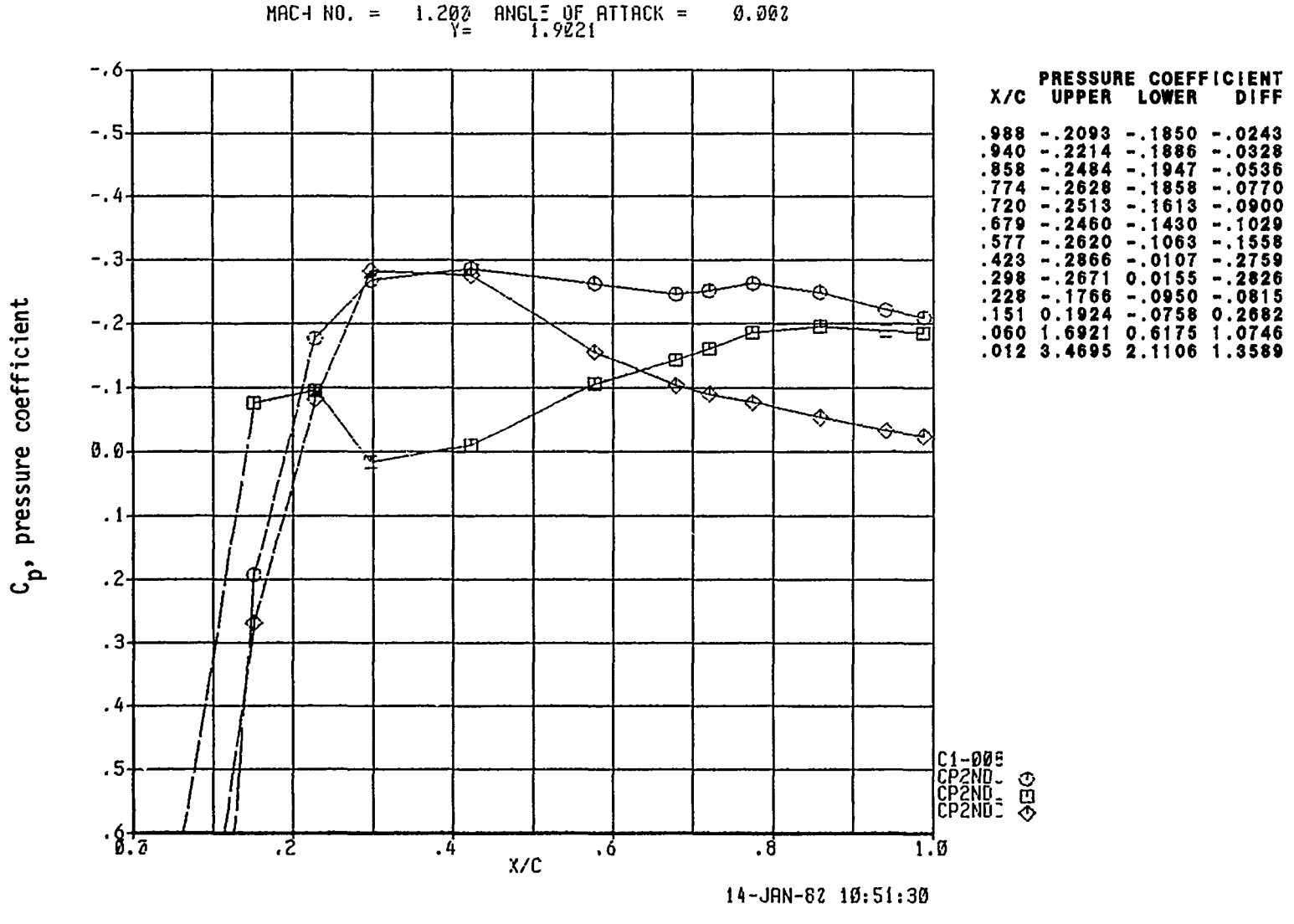
X/C	PRESSURE COEFFICIENT UPPER	LOWER	DIFF
.988	-.2508	-.1986	-.0522
.940	-.2682	-.2021	-.0660
.858	-.3010	-.2057	-.0953
.775	-.3281	-.1837	-.1444
.720	-.3249	-.1411	-.1838
.679	-.3182	-.1101	-.2081
.578	-.3072	-.0625	-.2448
.423	-.2171	-.0151	-.2021
.298	-.1528	-.0219	-.1309
.228	-.0912	-.0575	-.0336
.151	-.0928	-.2398	0.1470
.060	1.5528	0.7453	0.8074
.012	3.4101	2.1701	1.2400

Figure 182, Chordwise Pressure Distribution, Steady, Configuration 1



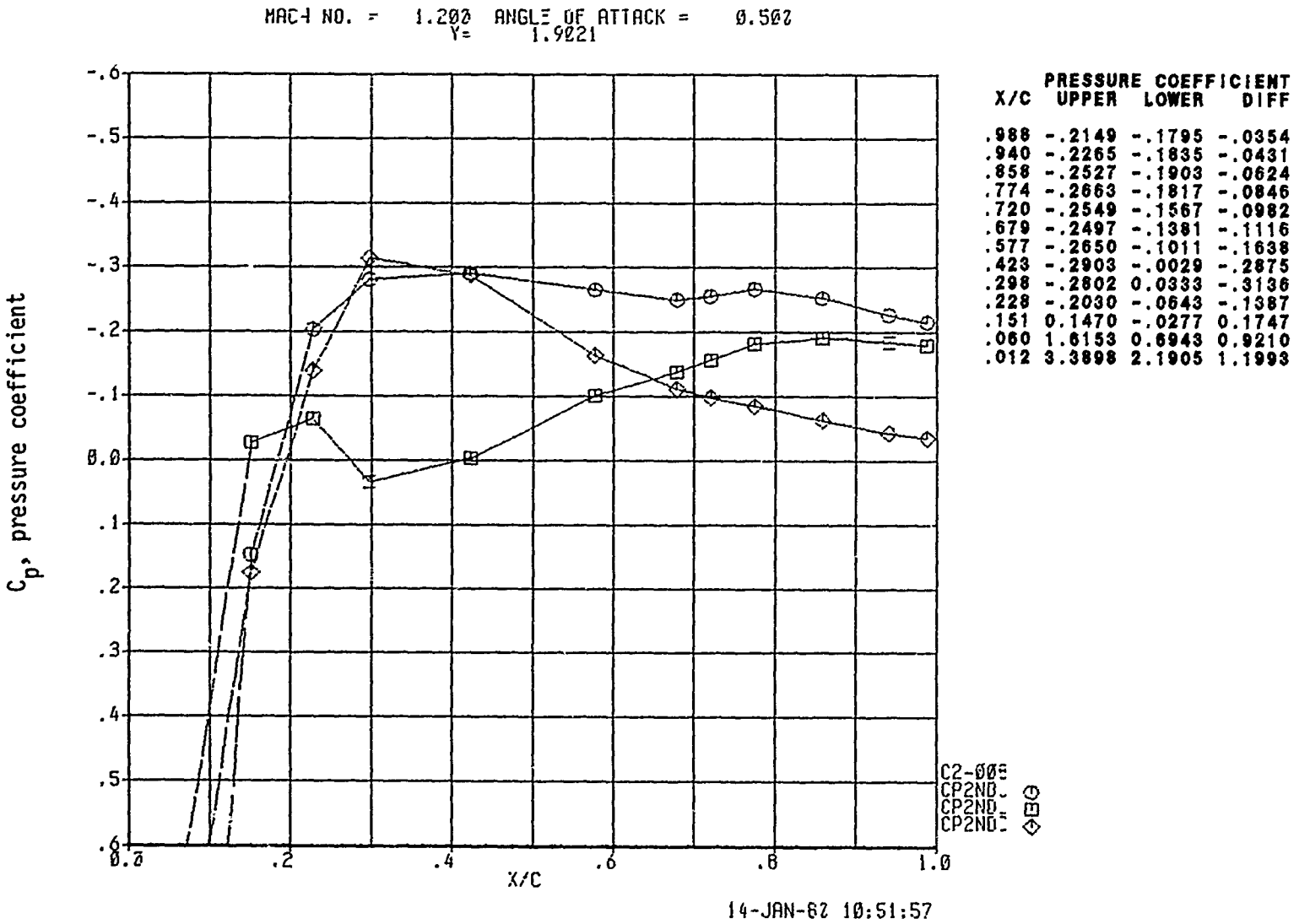
X/C	PRESSURE COEFFICIENT UPPER	LOWER	DIFF
.988	-.2416	-.2091	-.0325
.940	-.2593	-.2125	-.0469
.858	-.2920	-.2164	-.0756
.775	-.3189	-.1951	-.1239
.720	-.3152	-.1532	-.1620
.679	-.3067	-.1240	-.1828
.578	-.2848	-.0875	-.1973
.423	-.1698	-.0643	-.1054
.298	-.0879	-.0877	-.0002
.228	-.0202	-.1295	0.1093
.151	-.0053	-.3287	0.3233
.060	1.6924	0.6053	1.0871
.012	3.5745	2.0060	1.5684

Figure 183, Chordwise Pressure Distribution, Steady, Configuration 1



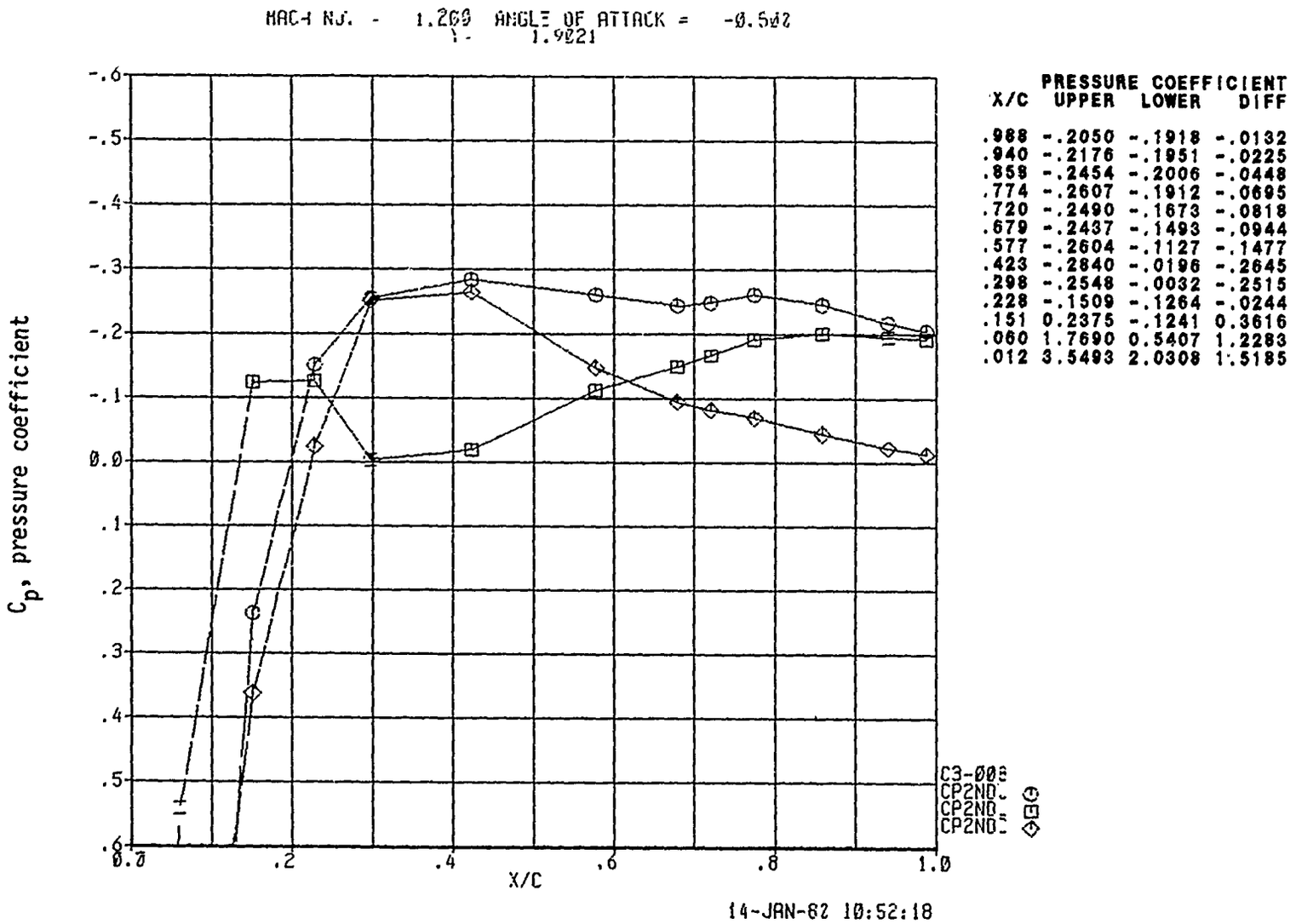
X/C	PRESSURE COEFFICIENT UPPER	LOWER	DIFF
.988	-.2093	-.1850	-.0243
.940	-.2214	-.1886	-.0328
.858	-.2484	-.1947	-.0536
.774	-.2628	-.1858	-.0770
.720	-.2513	-.1613	-.0900
.679	-.2460	-.1430	-.1029
.577	-.2620	-.1063	-.1558
.423	-.2866	-.0107	-.2759
.298	-.2671	0.0155	-.2826
.228	-.1766	-.0950	-.0815
.151	0.1924	-.0758	0.2682
.060	1.6921	0.6175	1.0746
.012	3.4695	2.1106	1.3589

Figure 184, Chordwise Pressure Distribution, Steady, Configuration 1



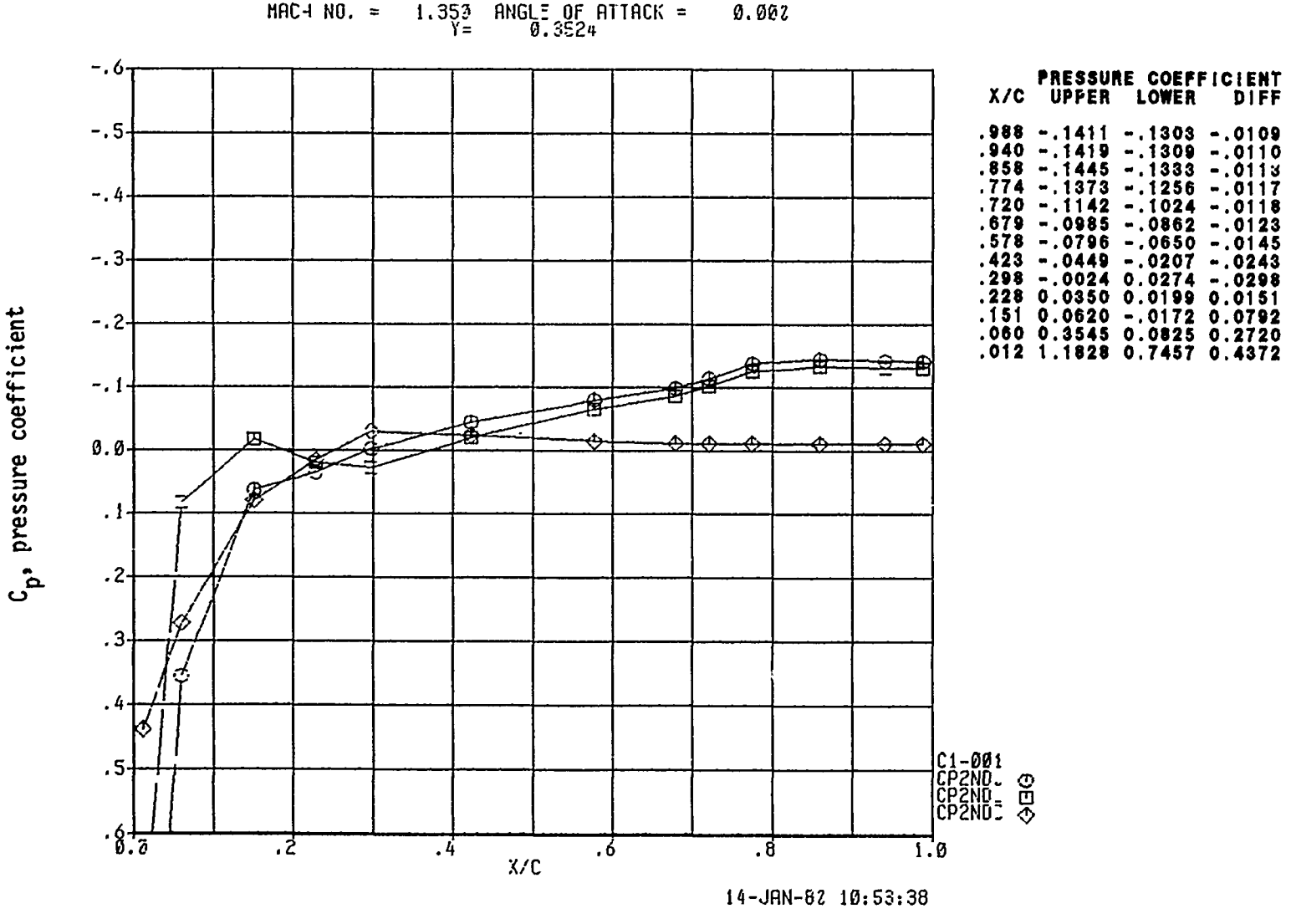
X/C	PRESSURE COEFFICIENT UPPER	LOWER	DIFF
.988	-.2149	-.1795	-.0354
.940	-.2265	-.1835	-.0431
.858	-.2527	-.1903	-.0624
.774	-.2663	-.1817	-.0846
.720	-.2549	-.1567	-.0982
.679	-.2497	-.1381	-.1116
.577	-.2650	-.1011	-.1638
.423	-.2903	-.0029	-.2875
.298	-.2802	0.0333	-.3136
.228	-.2030	-.0643	-.1387
.151	0.1470	-.0277	0.1747
.060	1.6153	0.6943	0.9210
.012	3.3898	2.1905	1.1993

Figure 185, Chordwise Pressure Distribution, Steady, Configuration 1



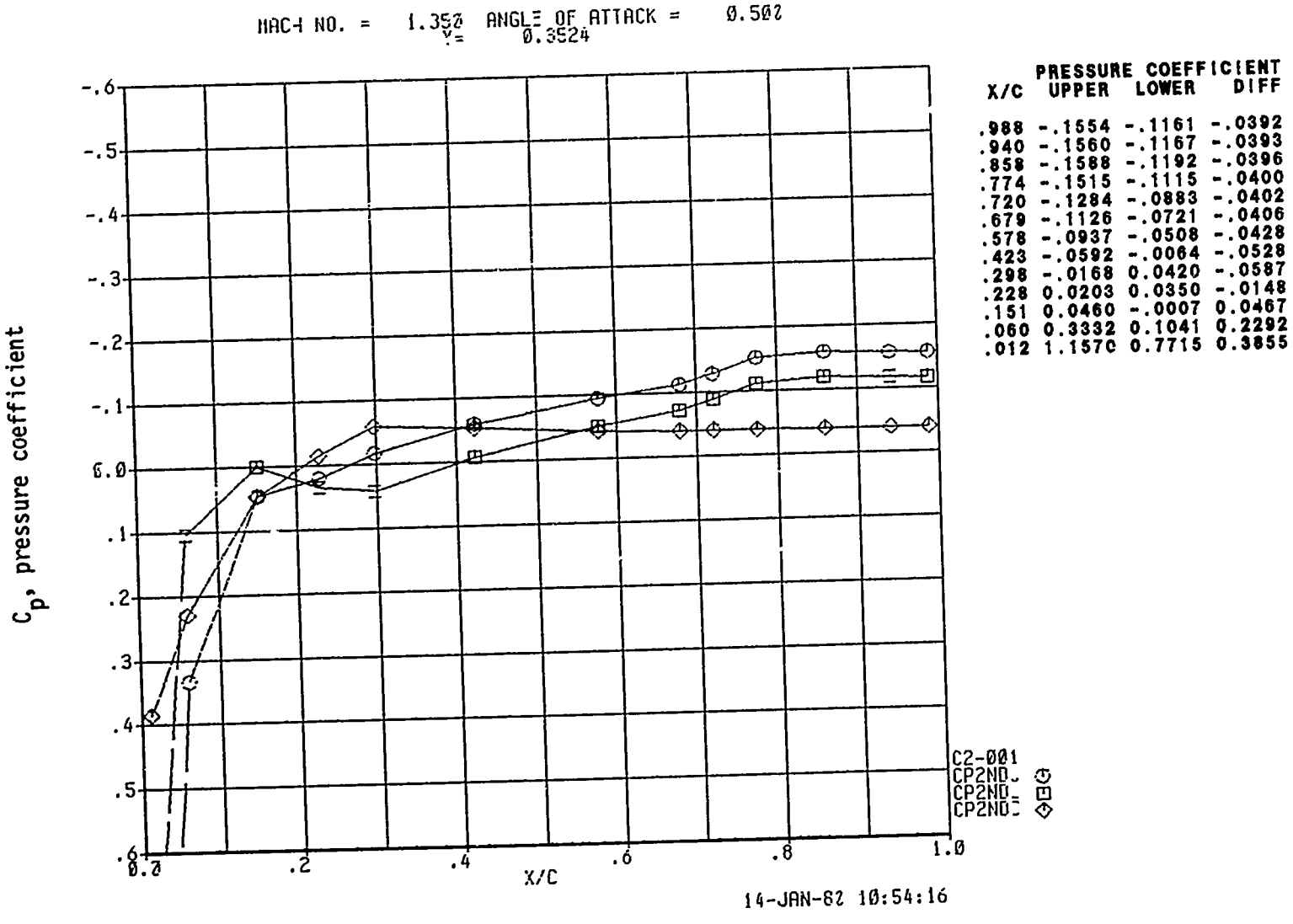
X/C	PRESSURE COEFFICIENT UPPER	LOWER	DIFF
.988	-.2050	-.1918	-.0132
.940	-.2176	-.1951	-.0225
.859	-.2454	-.2006	-.0448
.774	-.2607	-.1912	-.0695
.720	-.2490	-.1673	-.0818
.679	-.2437	-.1493	-.0944
.577	-.2604	-.1127	-.1477
.423	-.2840	-.0196	-.2645
.298	-.2548	-.0032	-.2515
.228	-.1509	-.1264	-.0244
.151	0.2375	-.1241	0.3616
.060	1.7690	0.5407	1.2283
.012	3.5493	2.0308	1.5185

Figure 186, Chordwise Pressure Distribution, Steady, Configuration 1



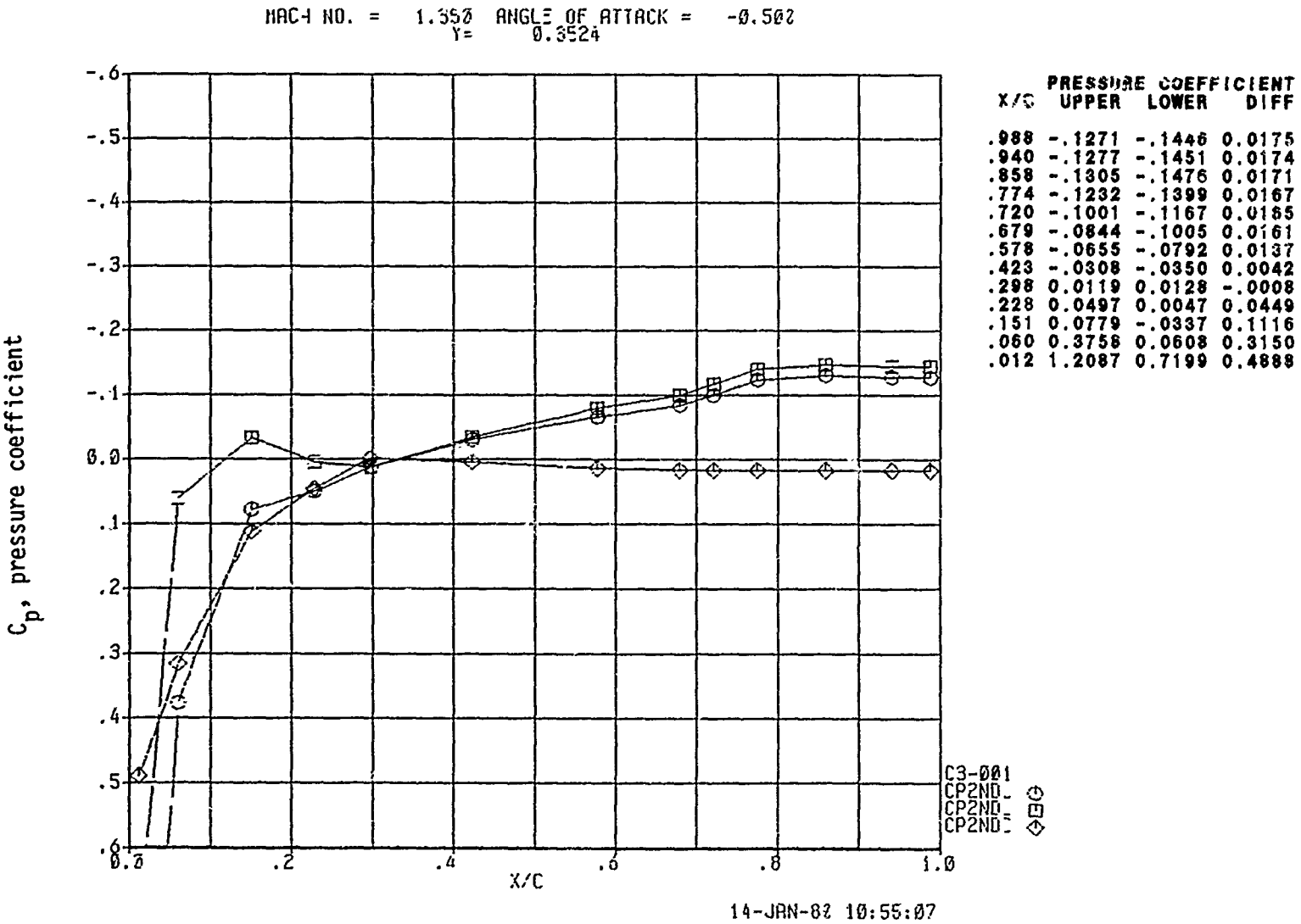
X/C	PRESSURE COEFFICIENT UPPER	LOWER	DIFF
.988	-.1411	-.1303	-.0109
.940	-.1419	-.1309	-.0110
.858	-.1445	-.1333	-.0113
.774	-.1373	-.1256	-.0117
.720	-.1142	-.1024	-.0118
.679	-.0985	-.0862	-.0123
.578	-.0796	-.0650	-.0145
.423	-.0449	-.0207	-.0243
.298	-.0024	0.0274	-.0298
.228	0.0350	0.0199	0.0151
.151	0.0620	-.0172	0.0792
.060	0.3545	0.0825	0.2720
.012	1.1828	0.7457	0.4372

Figure 187, Chordwise Pressure Distribution, Steady, Configuration 1



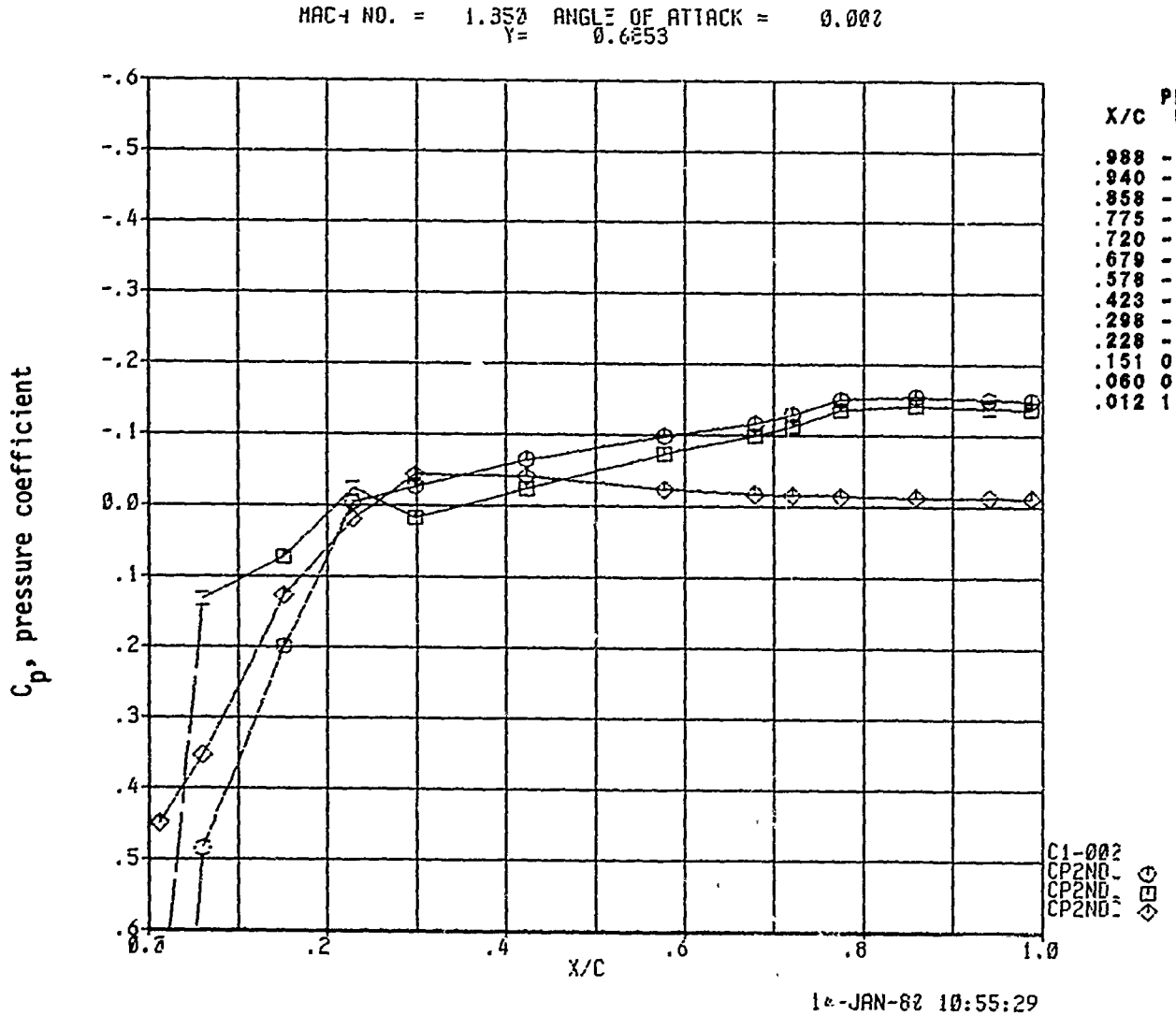
X/C	PRESSURE COEFFICIENT UPPER	LOWER	DIFF
.988	-.1554	-.1161	-.0392
.940	-.1560	-.1167	-.0393
.858	-.1588	-.1192	-.0396
.774	-.1515	-.1115	-.0400
.720	-.1284	-.0883	-.0402
.679	-.1126	-.0721	-.0406
.578	-.0937	-.0508	-.0428
.423	-.0592	-.0064	-.0528
.298	-.0168	0.0420	-.0587
.228	0.0203	0.0350	-.0148
.151	0.0460	-.0007	0.0467
.060	0.3332	0.1041	0.2292
.012	1.1570	0.7715	0.3855

Figure 188, Chordwise Pressure Distribution, Steady, Configuration 1



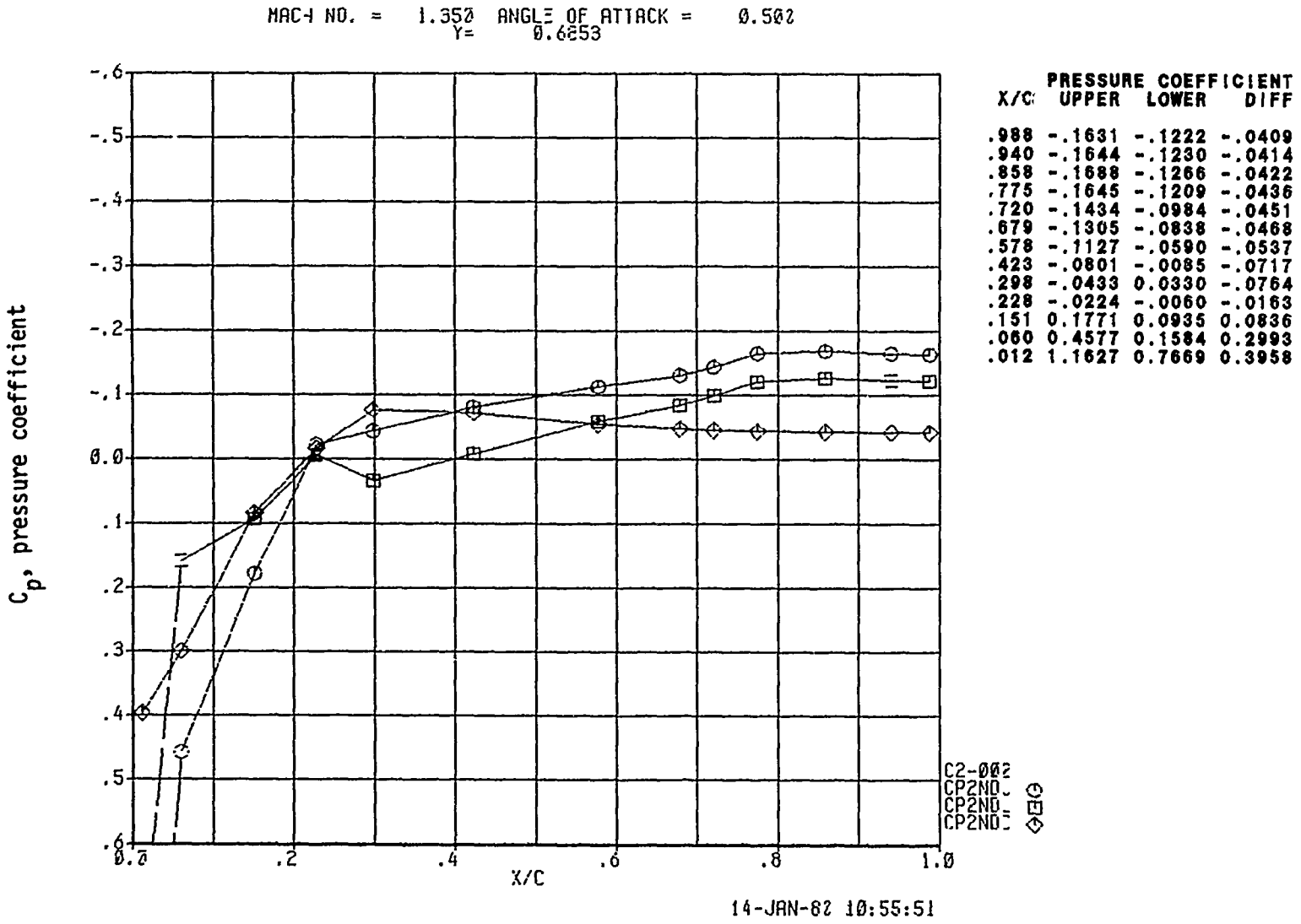
X/C	PRESSURE COEFFICIENT UPPER	LOWER	DIFF
.988	-.1271	-.1446	0.0175
.940	-.1277	-.1451	0.0174
.858	-.1305	-.1476	0.0171
.774	-.1232	-.1399	0.0167
.720	-.1001	-.1167	0.0165
.679	-.0844	-.1005	0.0161
.578	-.0655	-.0792	0.0137
.423	-.0308	-.0350	0.0042
.298	0.0119	0.0128	-.0008
.228	0.0497	0.0047	0.0449
.151	0.0779	-.0337	0.1116
.060	0.3758	0.0608	0.3150
.012	1.2087	0.7199	0.4888

Figure 189, Chordwise Pressure Distribution, Steady, Configuration 1



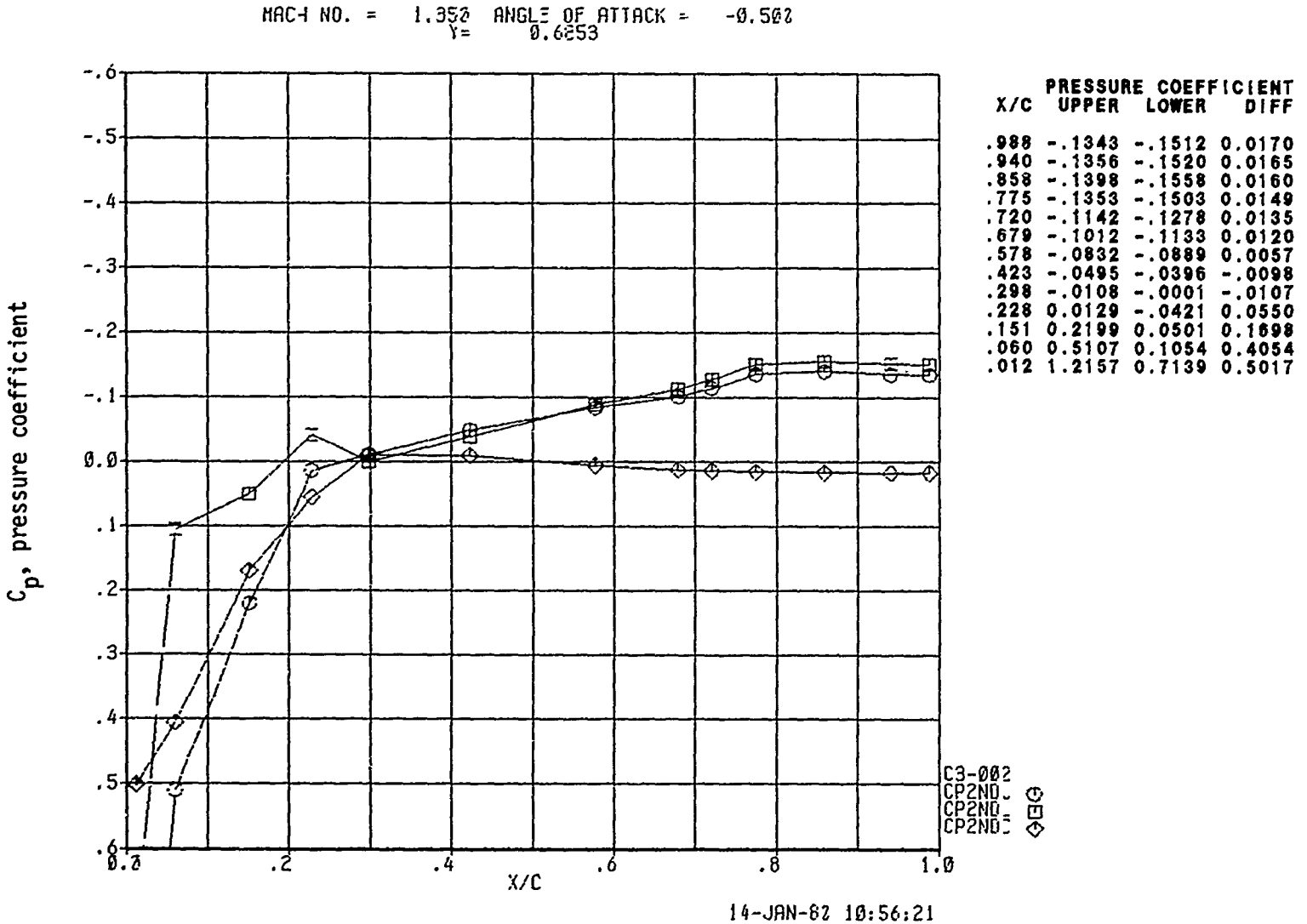
X/C	PRESSURE COEFFICIENT UPPER	LOWER	DIFF
.988	-.1486	-.1367	-.0120
.940	-.1500	-.1375	-.0125
.858	-.1542	-.1412	-.0132
.775	-.1499	-.1355	-.0144
.720	-.1288	-.1130	-.0157
.679	-.1158	-.0984	-.0174
.578	-.0979	-.0739	-.0239
.423	-.0648	-.0240	-.0407
.298	-.0270	0.0165	-.0436
.228	-.0047	-.0240	0.0193
.151	0.1985	0.0719	0.1267
.060	0.4842	0.1319	0.3523
.012	1.1892	0.7404	0.4488

Figure 190, Chordwise Pressure Distribution, Steady, Configuration 1



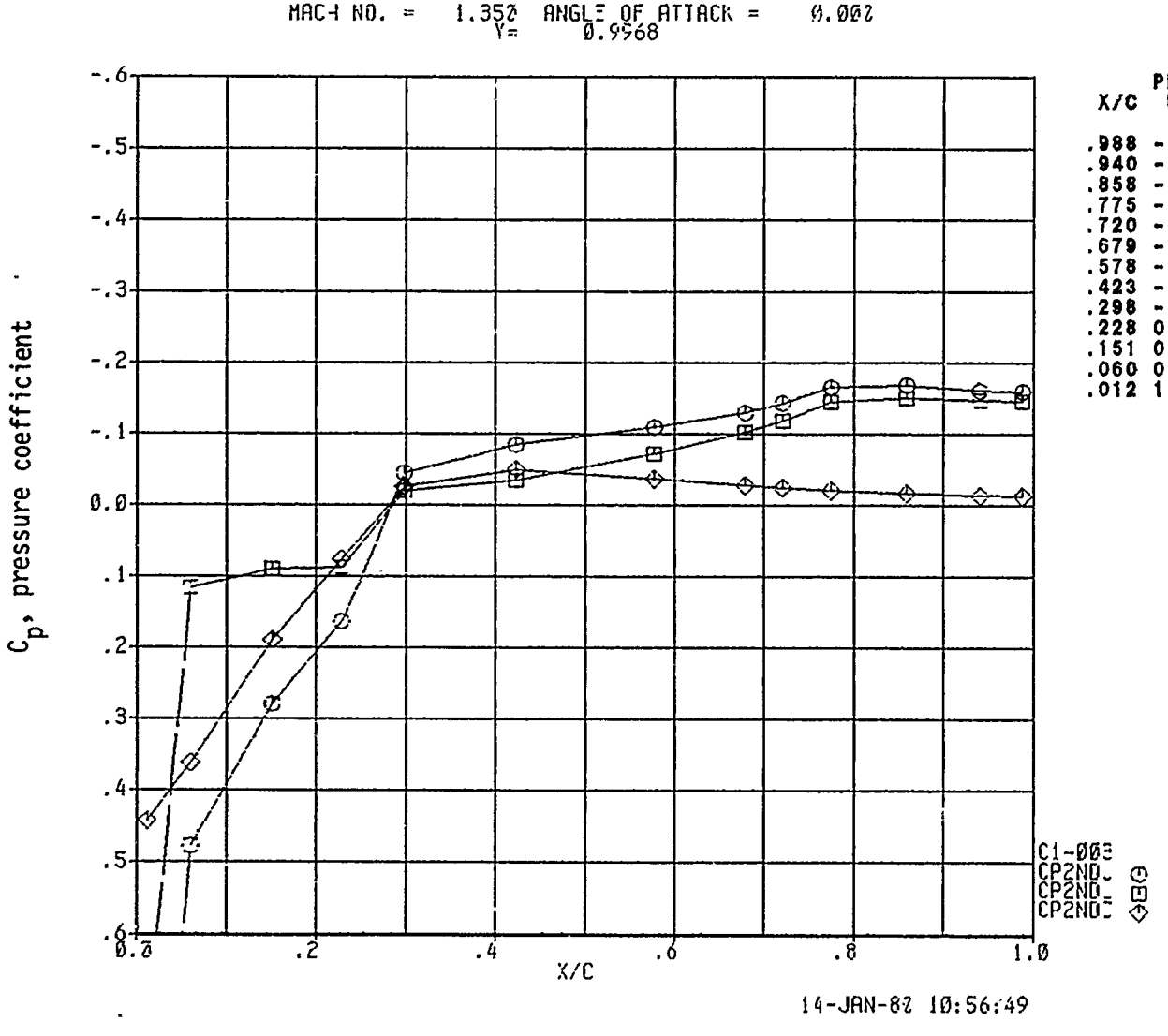
X/C	PRESSURE COEFFICIENT UPPER	LOWER	DIFF
.988	-.1631	-.1222	-.0409
.940	-.1644	-.1230	-.0414
.858	-.1688	-.1266	-.0422
.775	-.1645	-.1209	-.0436
.720	-.1434	-.0984	-.0451
.679	-.1305	-.0838	-.0468
.578	-.1127	-.0590	-.0537
.423	-.0801	-.0085	-.0717
.298	-.0433	0.0330	-.0764
.228	-.0224	-.0060	-.0163
.151	0.1771	0.0935	0.0836
.060	0.4577	0.1584	0.2993
.012	1.1627	0.7669	0.3958

Figure 191, Chordwise Pressure Distribution, Steady, Configuration 1



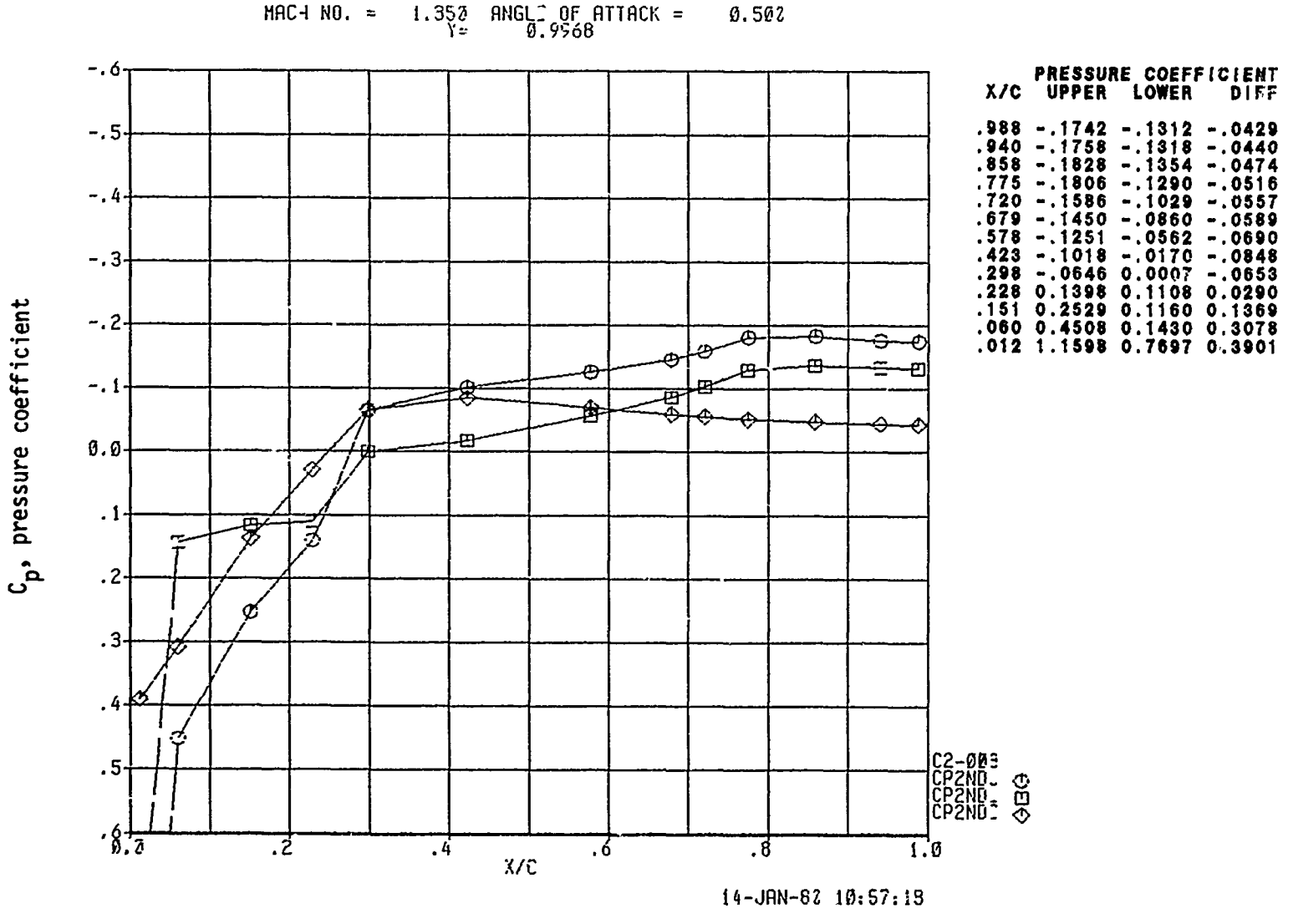
X/C	PRESSURE COEFFICIENT UPPER	LOWER	DIFF
.988	-.1343	-.1512	0.0170
.940	-.1356	-.1520	0.0165
.858	-.1398	-.1558	0.0160
.775	-.1353	-.1503	0.0149
.720	-.1142	-.1278	0.0135
.679	-.1012	-.1133	0.0120
.578	-.0832	-.0889	0.0057
.423	-.0495	-.0396	-.0098
.298	-.0108	-.0001	-.0107
.228	0.0129	-.0421	0.0550
.151	0.2199	0.0501	0.1698
.060	0.5107	0.1054	0.4054
.012	1.2157	0.7139	0.5017

Figure 192 , Chordwise Pressure Distribution, Steady, Configuration 1



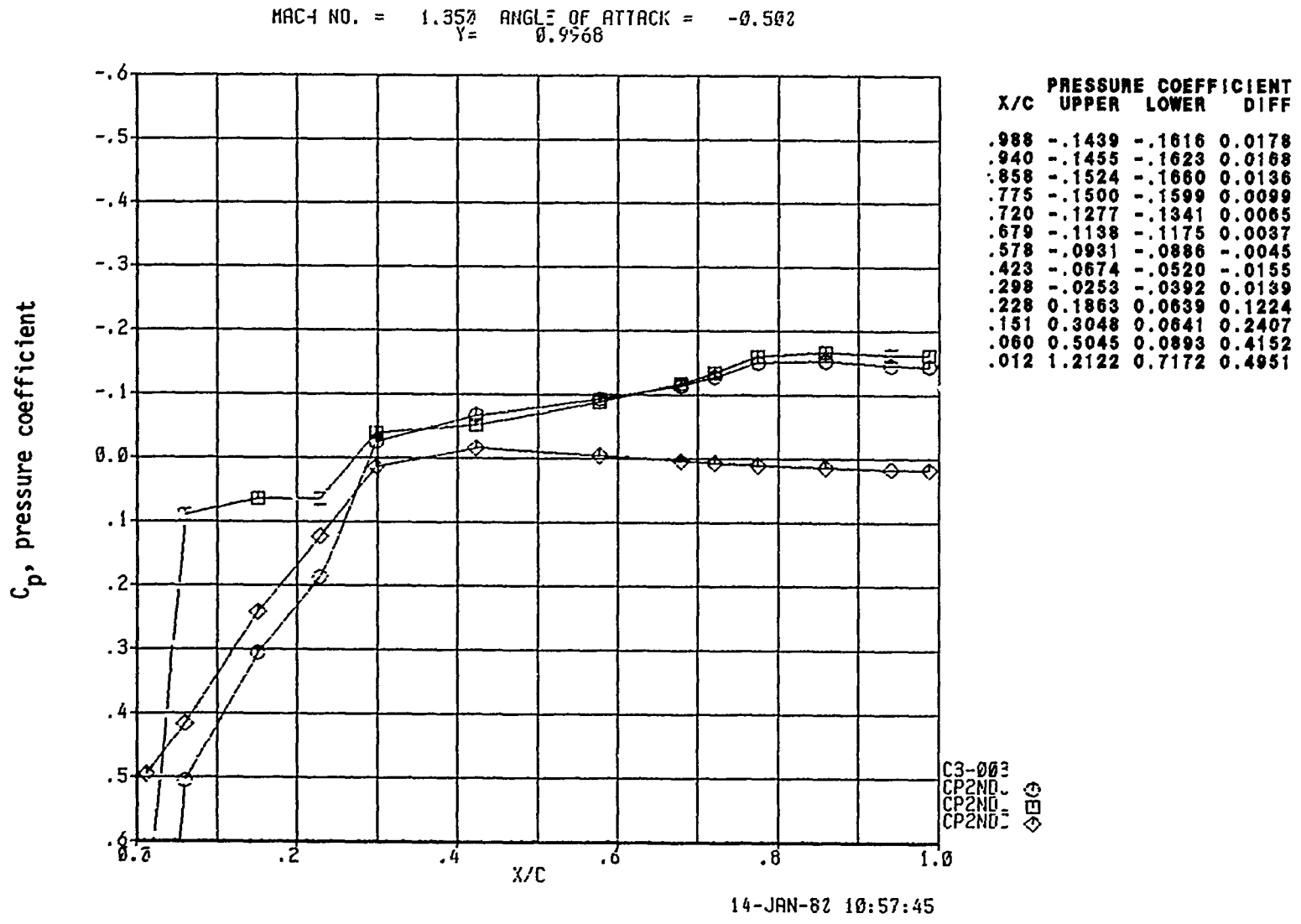
X/C	PRESSURE COEFFICIENT UPPER	LOWER	DIFF
.988	-.1589	-.1464	-.0125
.940	-.1606	-.1470	-.0136
.858	-.1675	-.1507	-.0169
.775	-.1653	-.1444	-.0208
.720	-.1431	-.1185	-.0246
.679	-.1293	-.1018	-.0276
.578	-.1091	-.0723	-.0367
.423	-.0846	-.0345	-.0502
.298	-.0450	-.0193	-.0257
.228	0.1631	0.0873	0.0757
.151	0.2789	0.0901	0.1888
.060	0.4777	0.1161	0.3615
.012	1.1860	0.7435	0.4425

Figure 193, Chordwise Pressure Distribution, Steady, Configuration 1



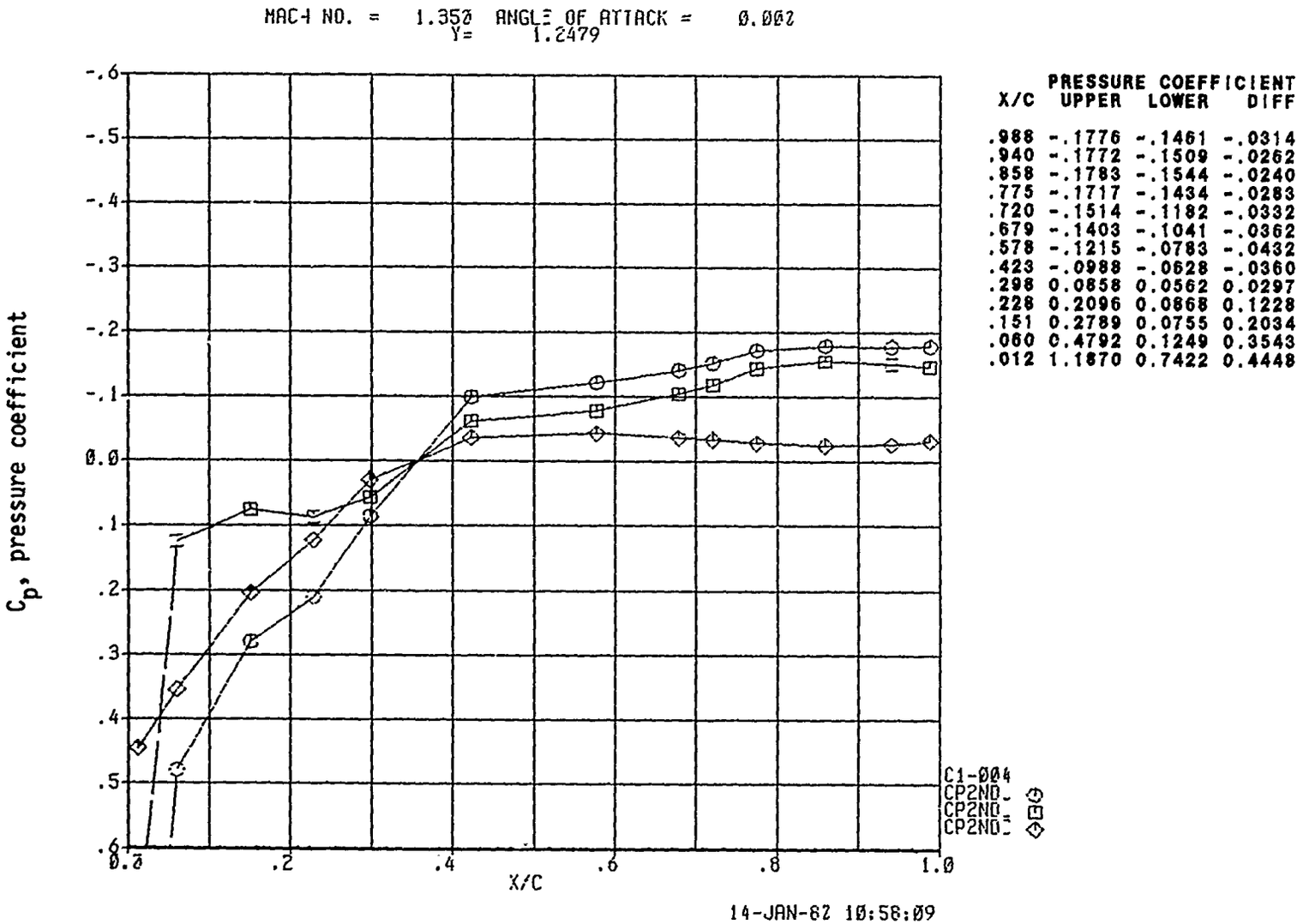
X/C	PRESSURE COEFFICIENT UPPER	LOWER	DIFF
.988	-.1742	-.1312	-.0429
.940	-.1758	-.1318	-.0440
.858	-.1828	-.1354	-.0474
.775	-.1806	-.1290	-.0516
.720	-.1586	-.1029	-.0557
.679	-.1450	-.0860	-.0589
.578	-.1251	-.0562	-.0690
.423	-.1018	-.0170	-.0848
.298	-.0646	0.0007	-.0653
.228	0.1398	0.1108	0.0290
.151	0.2529	0.1160	0.1369
.060	0.4508	0.1430	0.3078
.012	1.1598	0.7697	0.3901

Figure 194, Chordwise Pressure Distribution, Steady, Configuration 1



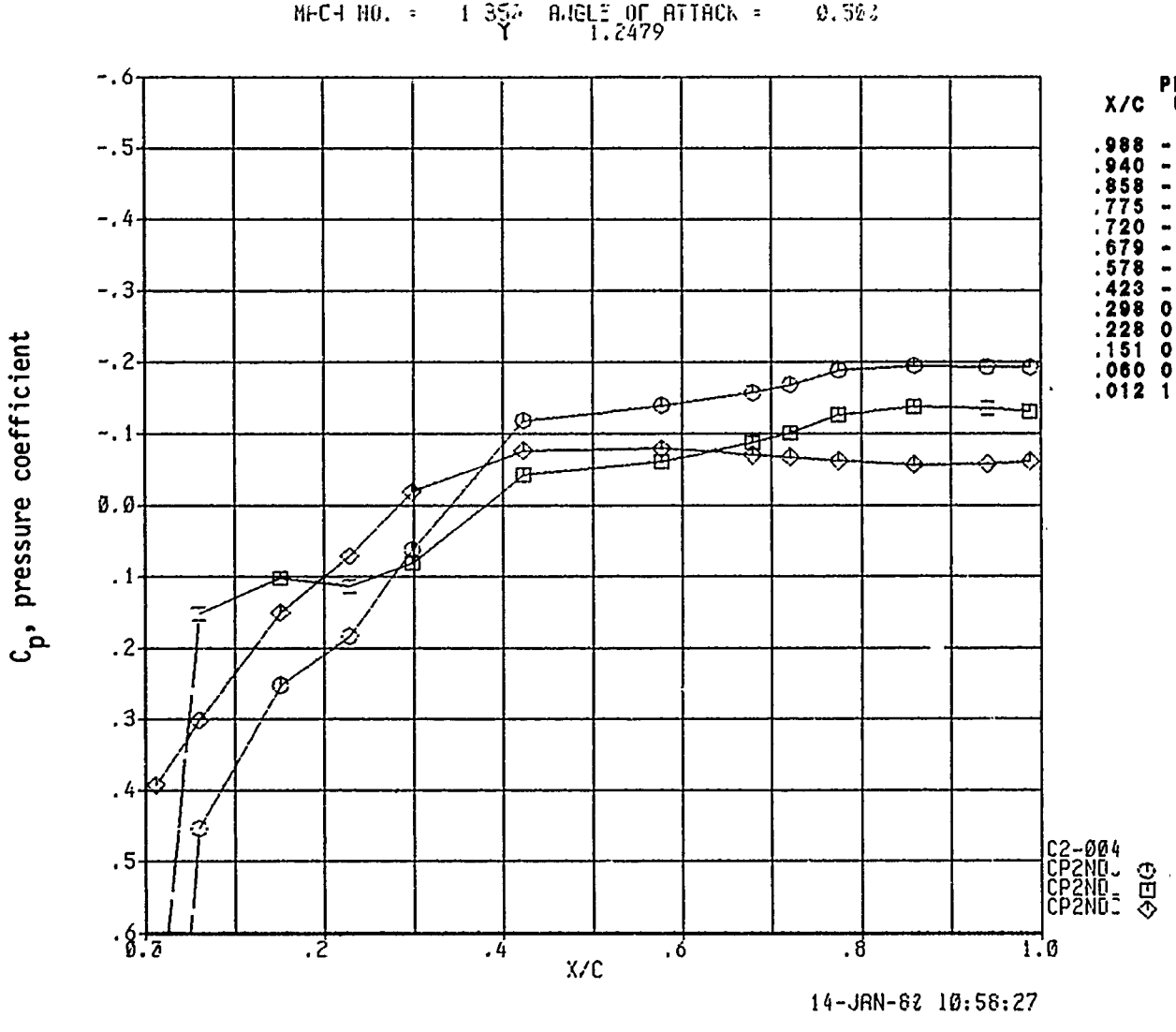
X/C	PRESSURE COEFFICIENT UPPER	LOWER	DIFF
.988	-.1439	-.1616	0.0178
.940	-.1455	-.1623	0.0168
.858	-.1524	-.1660	0.0136
.775	-.1500	-.1599	0.0099
.720	-.1277	-.1341	0.0065
.679	-.1138	-.1175	0.0037
.578	-.0931	-.0886	-.0045
.423	-.0674	-.0520	-.0155
.298	-.0253	-.0392	0.0139
.228	0.1863	0.0639	0.1224
.151	0.3048	0.0641	0.2407
.060	0.5045	0.0893	0.4152
.012	1.2122	0.7172	0.4951

Figure 195, Chordwise Pressure Distribution, Steady, Configuration 1



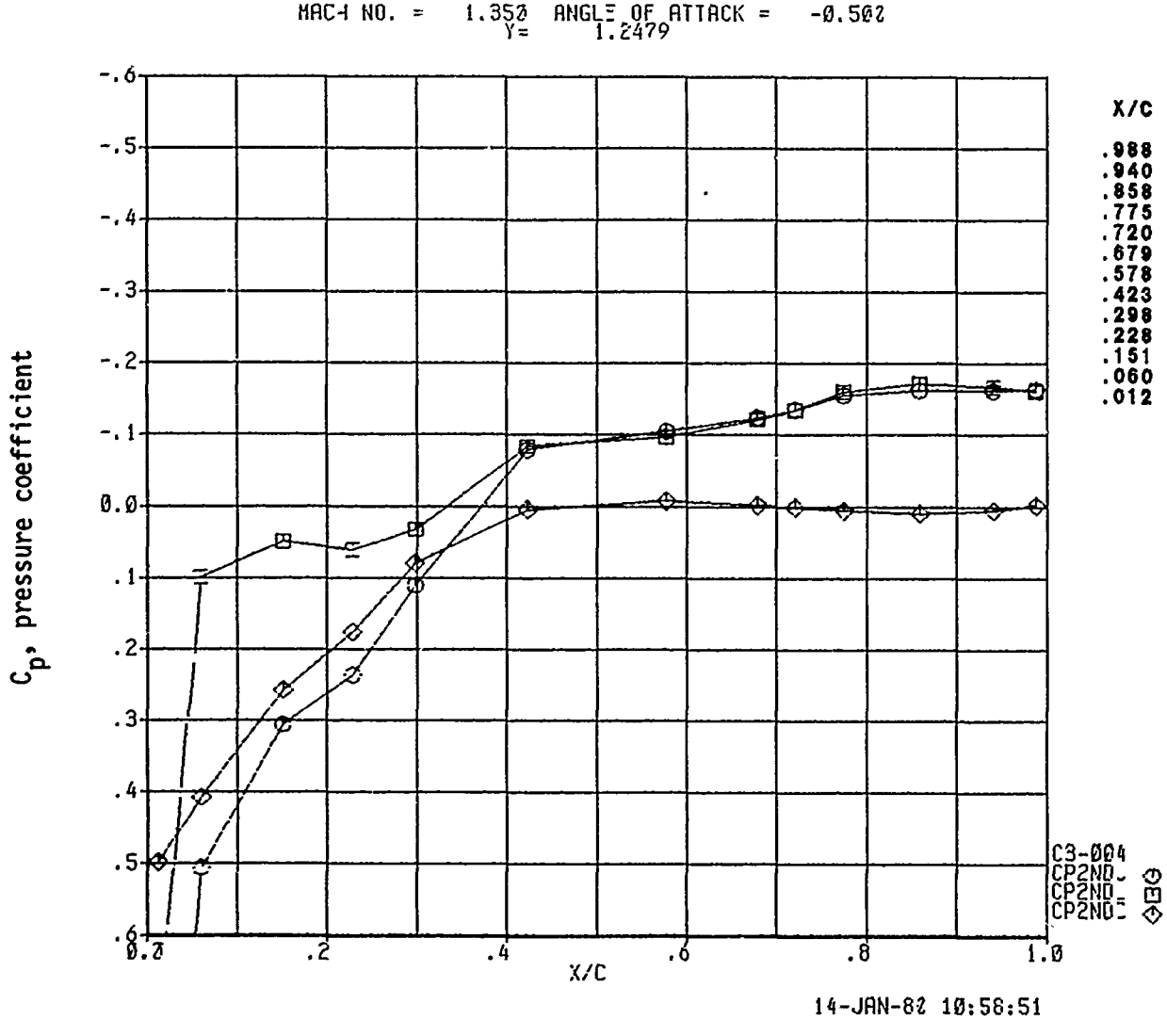
X/C	PRESSURE COEFFICIENT UPPER	LOWER	DIFF
.988	-.1776	-.1461	-.0314
.940	-.1772	-.1509	-.0262
.858	-.1783	-.1544	-.0240
.775	-.1717	-.1434	-.0283
.720	-.1514	-.1182	-.0332
.679	-.1403	-.1041	-.0362
.578	-.1215	-.0783	-.0432
.423	-.0988	-.0628	-.0360
.298	0.0858	0.0562	0.0297
.228	0.2096	0.0868	0.1228
.151	0.2789	0.0755	0.2034
.060	0.4792	0.1249	0.3543
.012	1.1870	0.7422	0.4448

Figure 196, Chordwise Pressure Distribution, Steady, Configuration 1



X/C	PRESSURE COEFFICIENT UPPER	LOWER	DIFF
.988	-.1924	-.1312	-.0612
.940	-.1927	-.1353	-.0574
.858	-.1946	-.1381	-.0566
.775	-.1883	-.1266	-.0616
.720	-.1681	-.1012	-.0670
.679	-.1573	-.0870	-.0703
.578	-.1392	-.0605	-.0787
.423	-.1188	-.0427	-.0761
.298	0.0614	0.0807	-.0193
.228	0.1832	0.1132	0.0700
.151	0.2522	0.1022	0.1500
.060	0.4528	0.1513	0.3015
.012	1.1606	0.7686	0.3919

Figure 197, Chordwise Pressure Distribution, Steady, Configuration 1



X/C	PRESSURE COEFFICIENT UPPER	LOWER	DIFF
.988	-.1629	-.1611	-.0018
.940	-.1617	-.1667	0.0050
.858	-.1621	-.1708	0.0087
.775	-.1551	-.1602	0.0051
.720	-.1347	-.1351	0.0006
.679	-.1234	-.1213	-.0021
.578	-.1039	-.0963	-.0077
.423	-.0790	-.0831	0.0041
.298	0.1102	0.0317	0.0786
.228	0.2360	0.0604	0.1756
.151	0.3056	0.0488	0.2568
.060	0.5056	0.0985	0.4071
.012	1.2134	0.7158	0.4976

Figure 198, Chordwise Pressure Distribution, Steady, Configuration 1

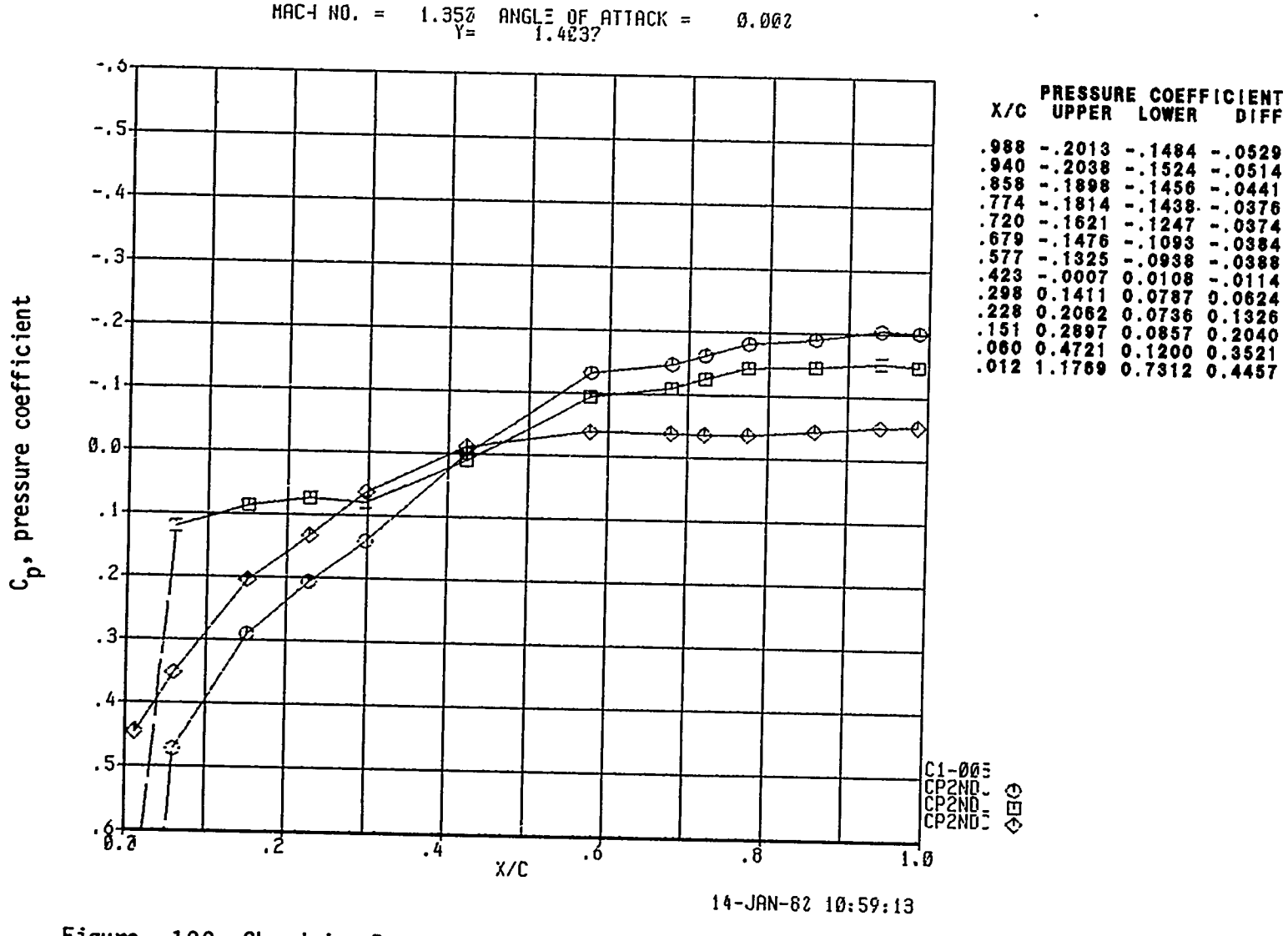
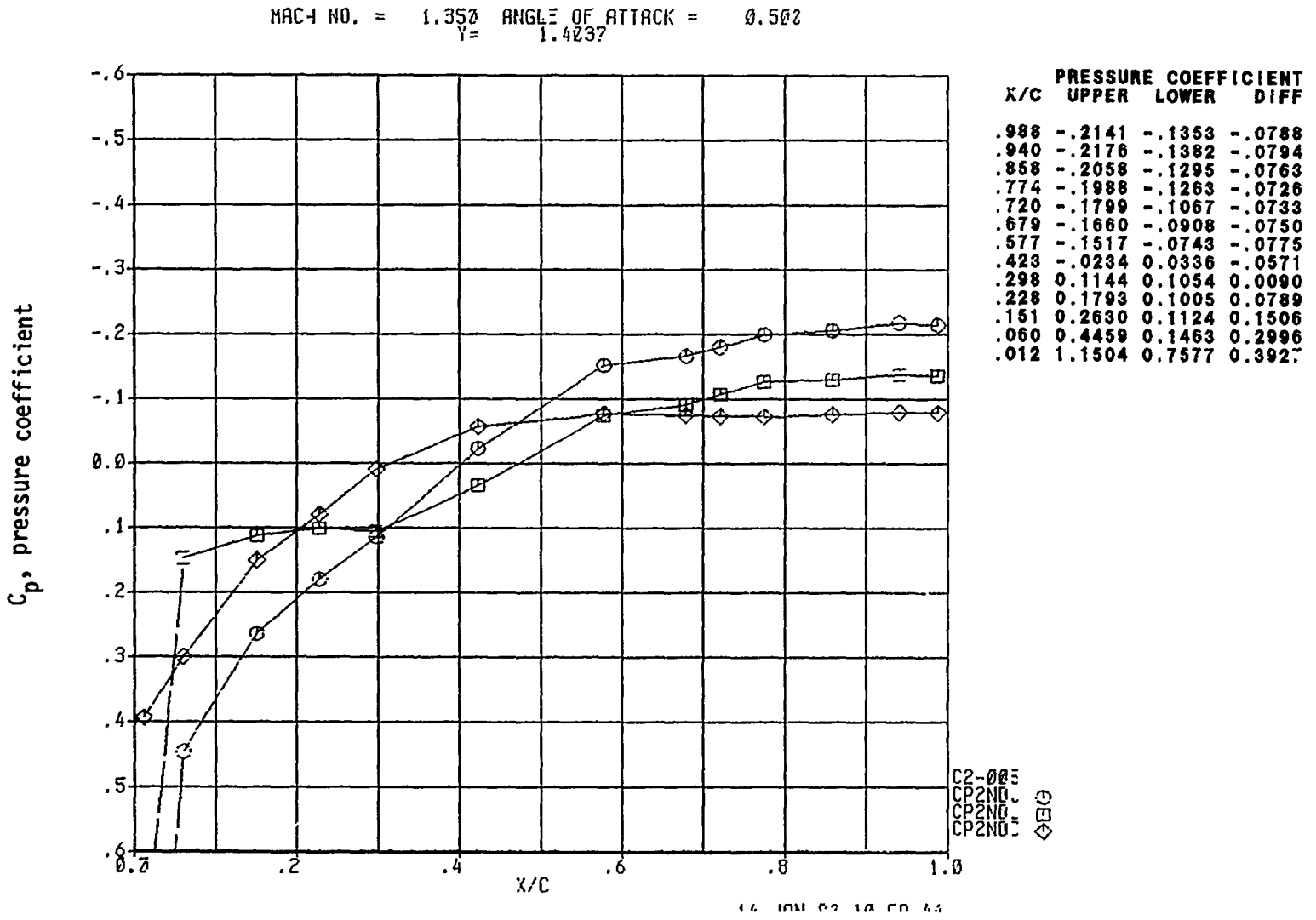


Figure 199, Chordwise Pressure Distribution, Steady, Configuration 1



X/C	PRESSURE COEFFICIENT UPPER	LOWER	DIFF
.988	-.2141	-.1353	-.0788
.940	-.2176	-.1382	-.0794
.858	-.2058	-.1295	-.0763
.774	-.1988	-.1263	-.0726
.720	-.1799	-.1067	-.0733
.679	-.1660	-.0908	-.0750
.577	-.1517	-.0743	-.0775
.423	-.0234	0.0336	-.0571
.298	0.1144	0.1054	0.0090
.228	0.1793	0.1005	0.0789
.151	0.2630	0.1124	0.1506
.060	0.4459	0.1463	0.2996
.012	1.1504	0.7577	0.392

Figure 200, Chordwise Pressure Distribution, Steady, Configuration 1

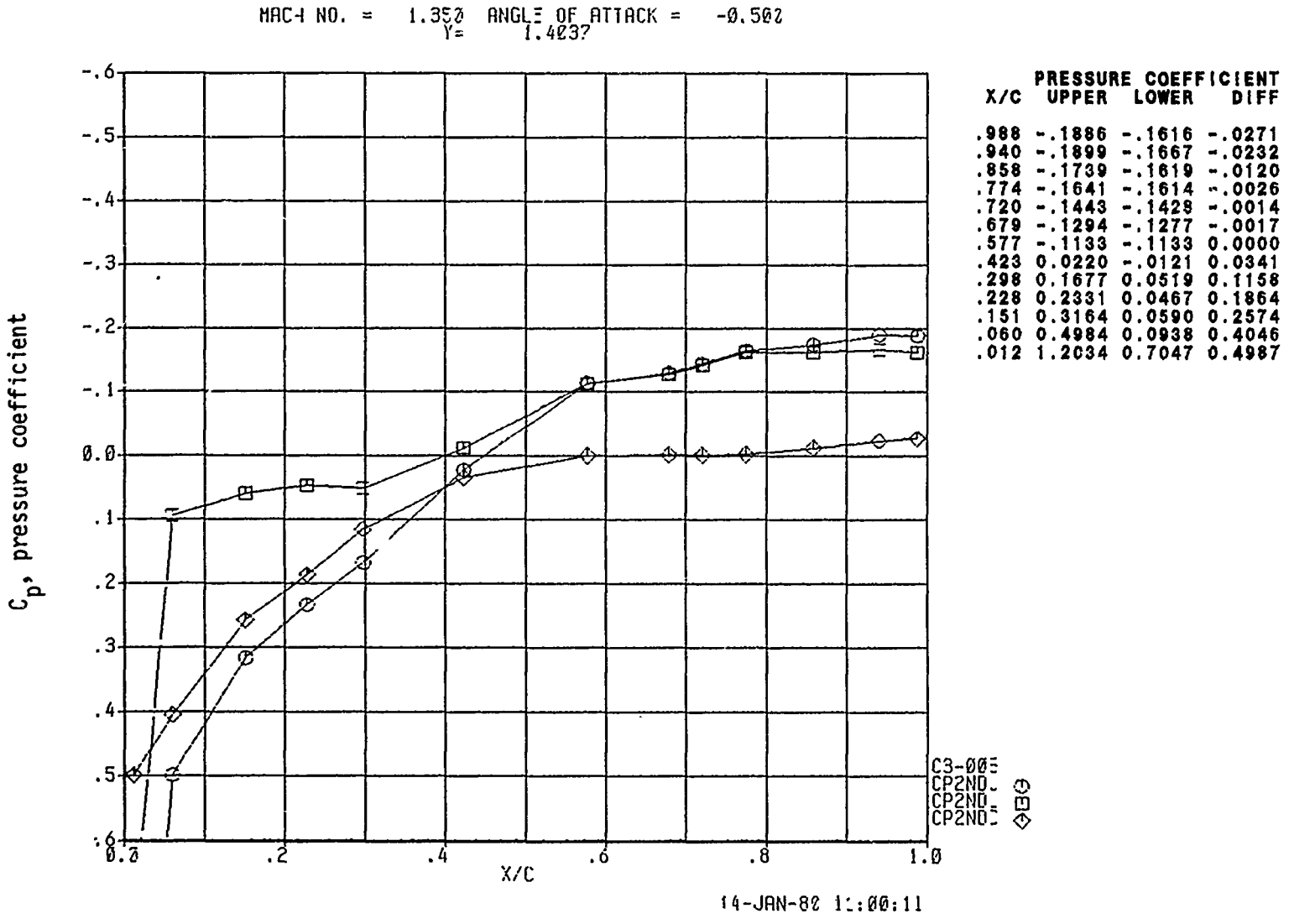
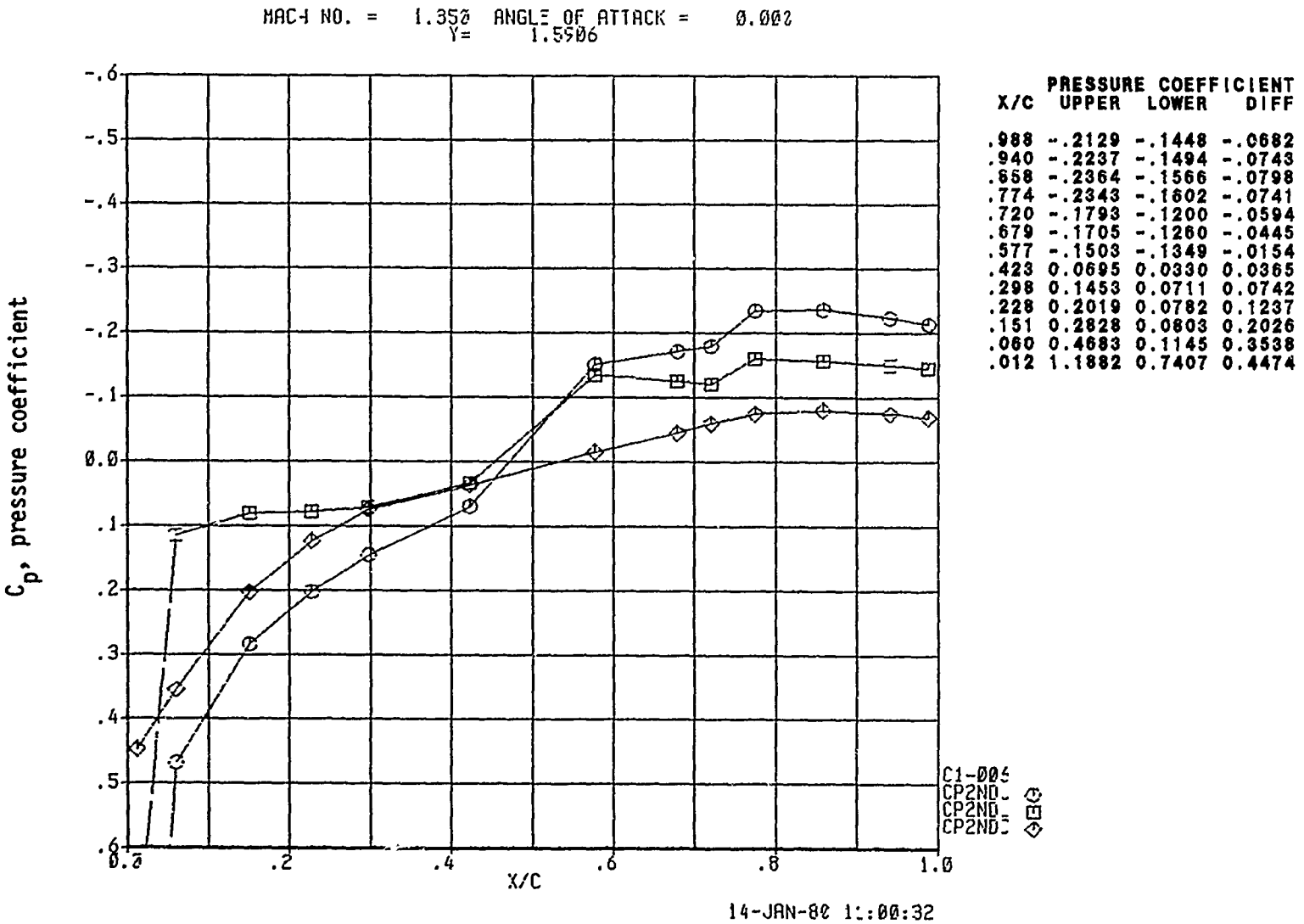
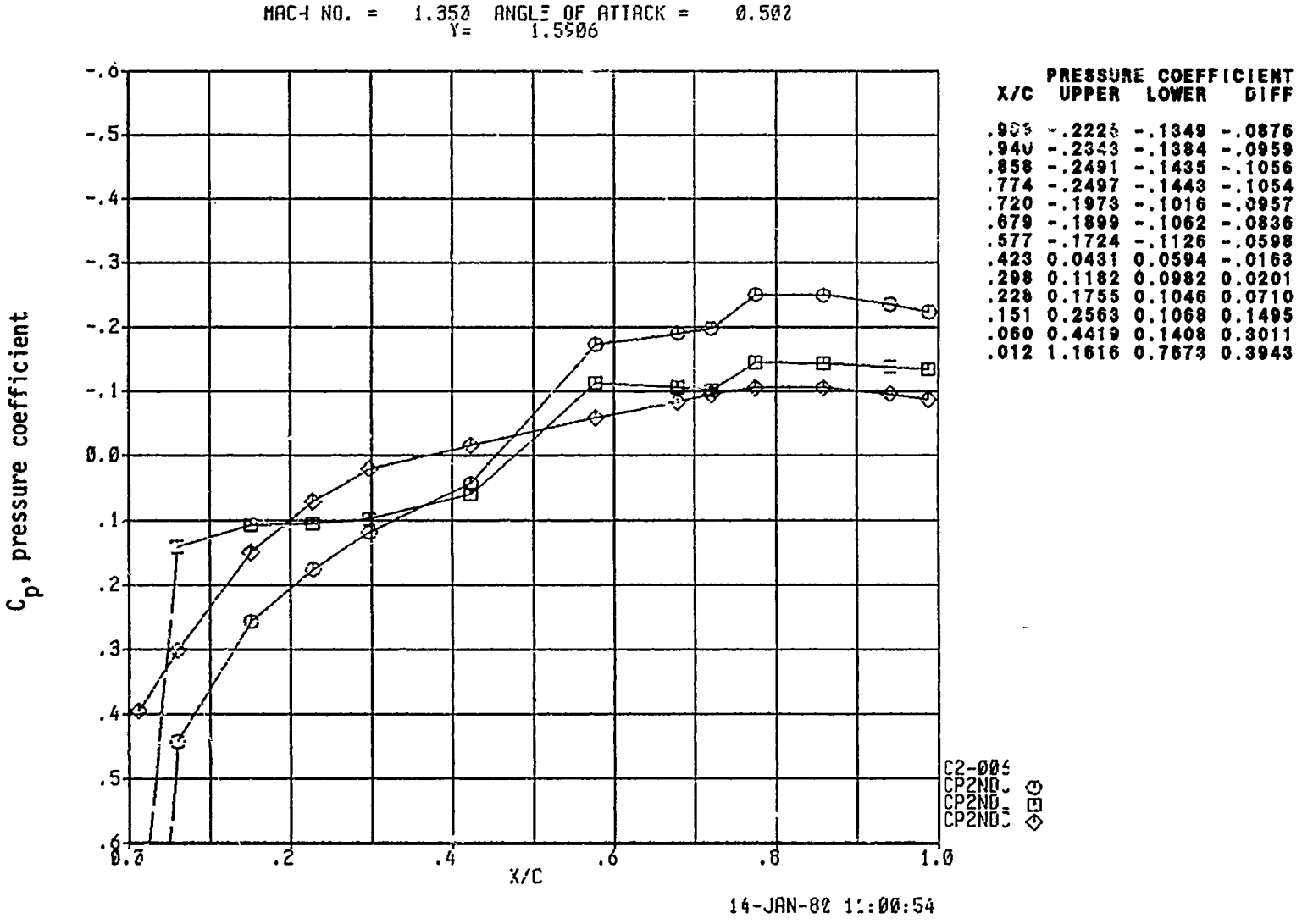


Figure 201, Chordwise Pressure Distribution, Steady, Configuration 1



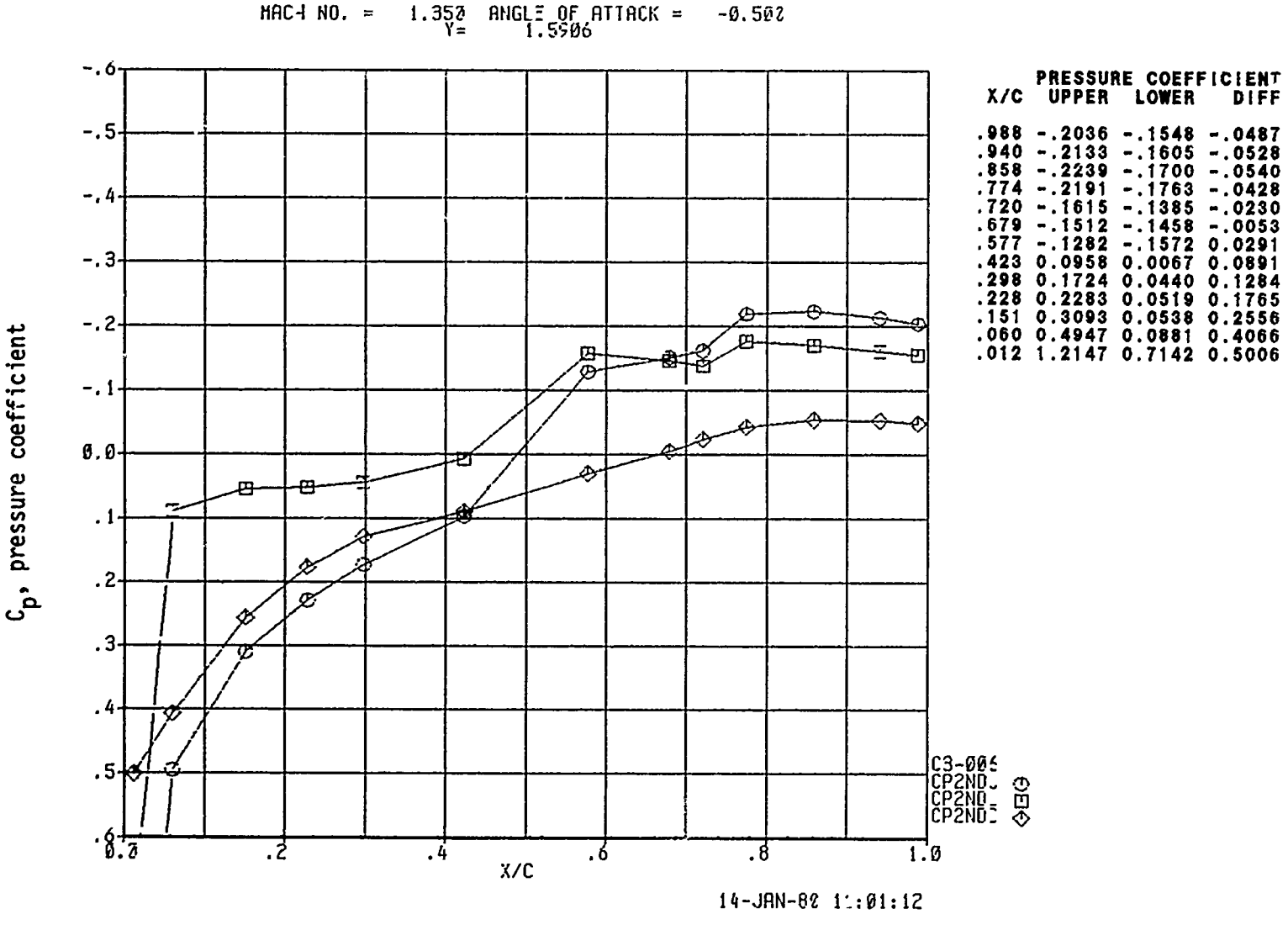
X/C	PRESSURE COEFFICIENT UPPER	LOWER	DIFF
.988	-.2129	-.1448	-.0682
.940	-.2237	-.1494	-.0743
.858	-.2364	-.1566	-.0798
.774	-.2343	-.1602	-.0741
.720	-.1793	-.1200	-.0594
.679	-.1705	-.1260	-.0445
.577	-.1503	-.1349	-.0154
.423	0.0695	0.0330	0.0365
.298	0.1453	0.0711	0.0742
.228	0.2019	0.0782	0.1237
.151	0.2828	0.0803	0.2026
.060	0.4683	0.1145	0.3538
.012	1.1882	0.7407	0.4474

Figure 202, Chordwise Pressure Distribution, Steady, Configuration 1



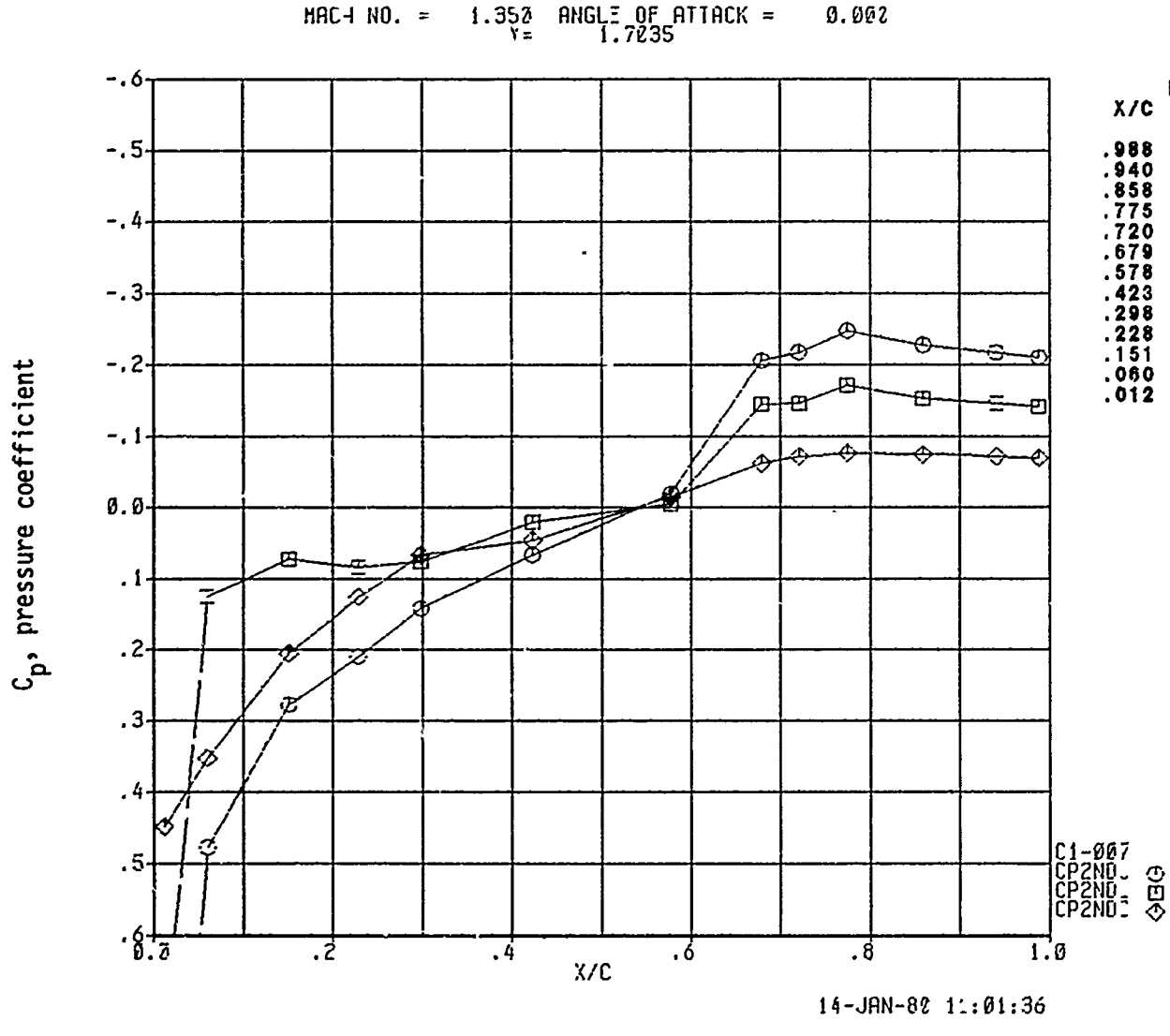
X/C	PRESSURE COEFFICIENT UPPER	LOWER	DIFF
.905	-.2226	-.1349	-.0876
.940	-.2343	-.1384	-.0959
.858	-.2491	-.1435	-.1056
.774	-.2497	-.1443	-.1054
.720	-.1973	-.1016	-.0957
.679	-.1899	-.1062	-.0836
.577	-.1724	-.1126	-.0598
.423	0.0431	0.0594	-.0163
.298	0.1182	0.0982	0.0201
.228	0.1755	0.1046	0.0710
.151	0.2563	0.1068	0.1495
.060	0.4419	0.1408	0.3011
.012	1.1616	0.7673	0.3943

Figure 203, Chordwise Pressure Distribution, Steady, Configuration 1



X/C	PRESSURE COEFFICIENT UPPER	LOWER	DIFF
.988	-.2036	-.1548	-.0487
.940	-.2133	-.1605	-.0528
.858	-.2239	-.1700	-.0540
.774	-.2191	-.1763	-.0428
.720	-.1615	-.1385	-.0230
.679	-.1512	-.1458	-.0053
.577	-.1282	-.1572	0.0291
.423	0.0958	0.0067	0.0891
.298	0.1724	0.0440	0.1284
.228	0.2283	0.0519	0.1765
.151	0.3093	0.0538	0.2556
.060	0.4947	0.0881	0.4066
.012	1.2147	0.7142	0.5006

Figure 204, Chordwise Pressure Distribution, Steady, Configuration 1



X/C	PRESSURE COEFFICIENT UPPER	LOWER	DIFF
.988	-.2101	-.1412	-.0690
.940	-.2170	-.1461	-.0710
.858	-.2272	-.1528	-.0744
.775	-.2477	-.1716	-.0761
.720	-.2178	-.1461	-.0716
.679	-.2058	-.1444	-.0615
.578	-.0198	-.0053	-.0144
.423	0.0664	0.0203	0.0460
.298	0.1416	0.0752	0.0665
.228	0.2098	0.0840	0.1259
.151	0.2767	0.0716	0.2051
.060	0.4773	0.1253	0.3520
.012	1.1888	0.7408	0.4480

Figure 205, Chordwise Pressure Distribution, Steady, Configuration 1

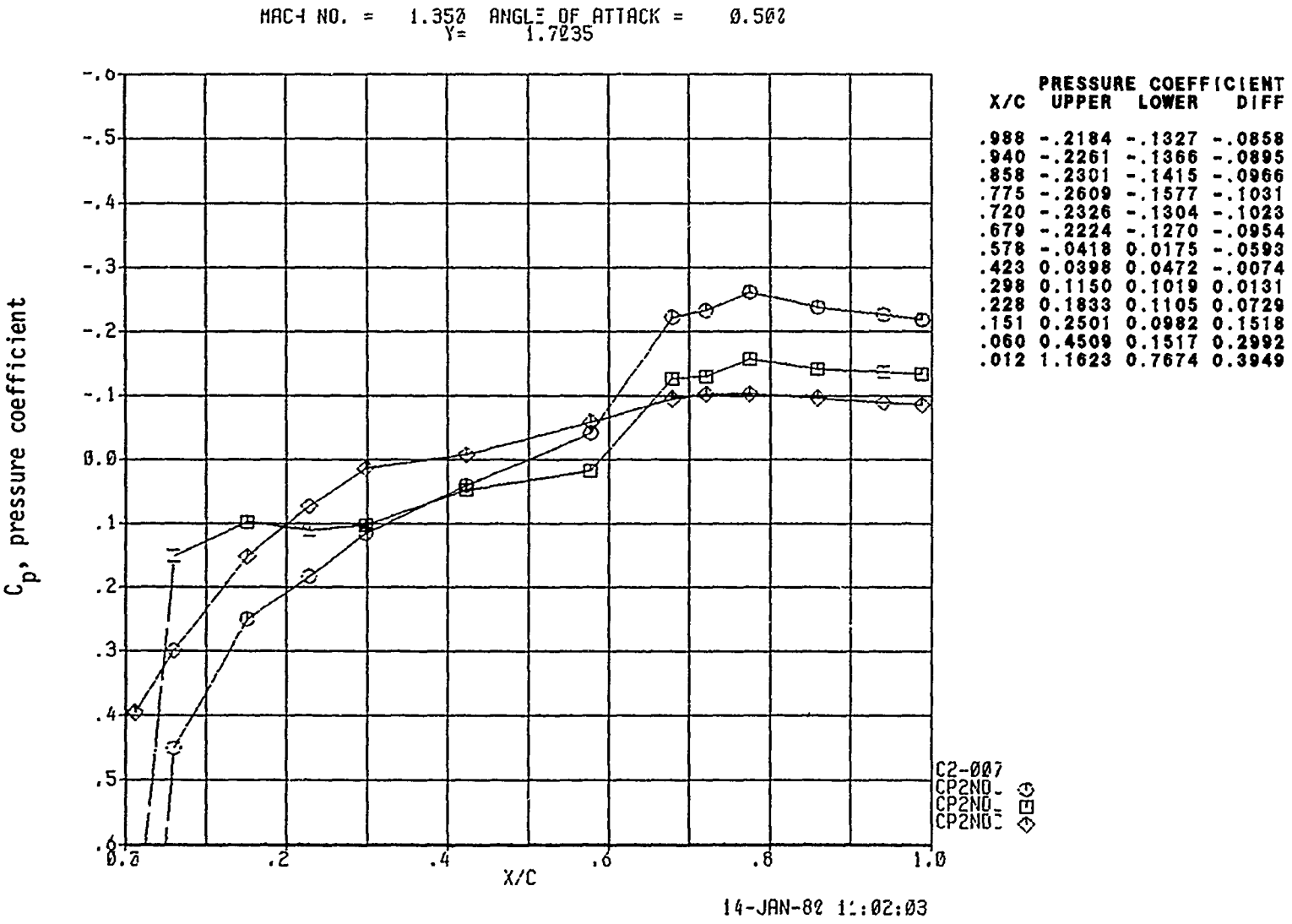
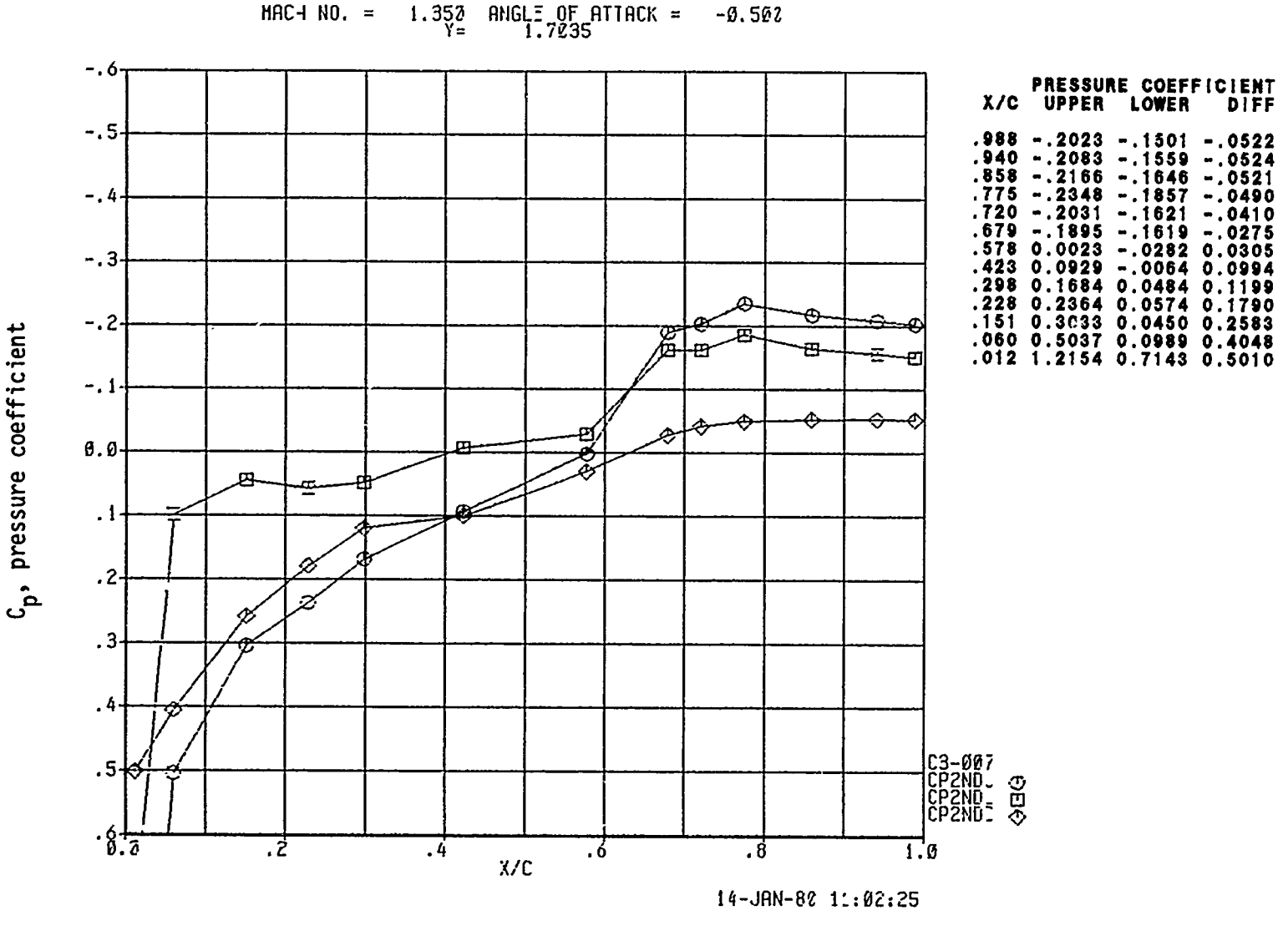
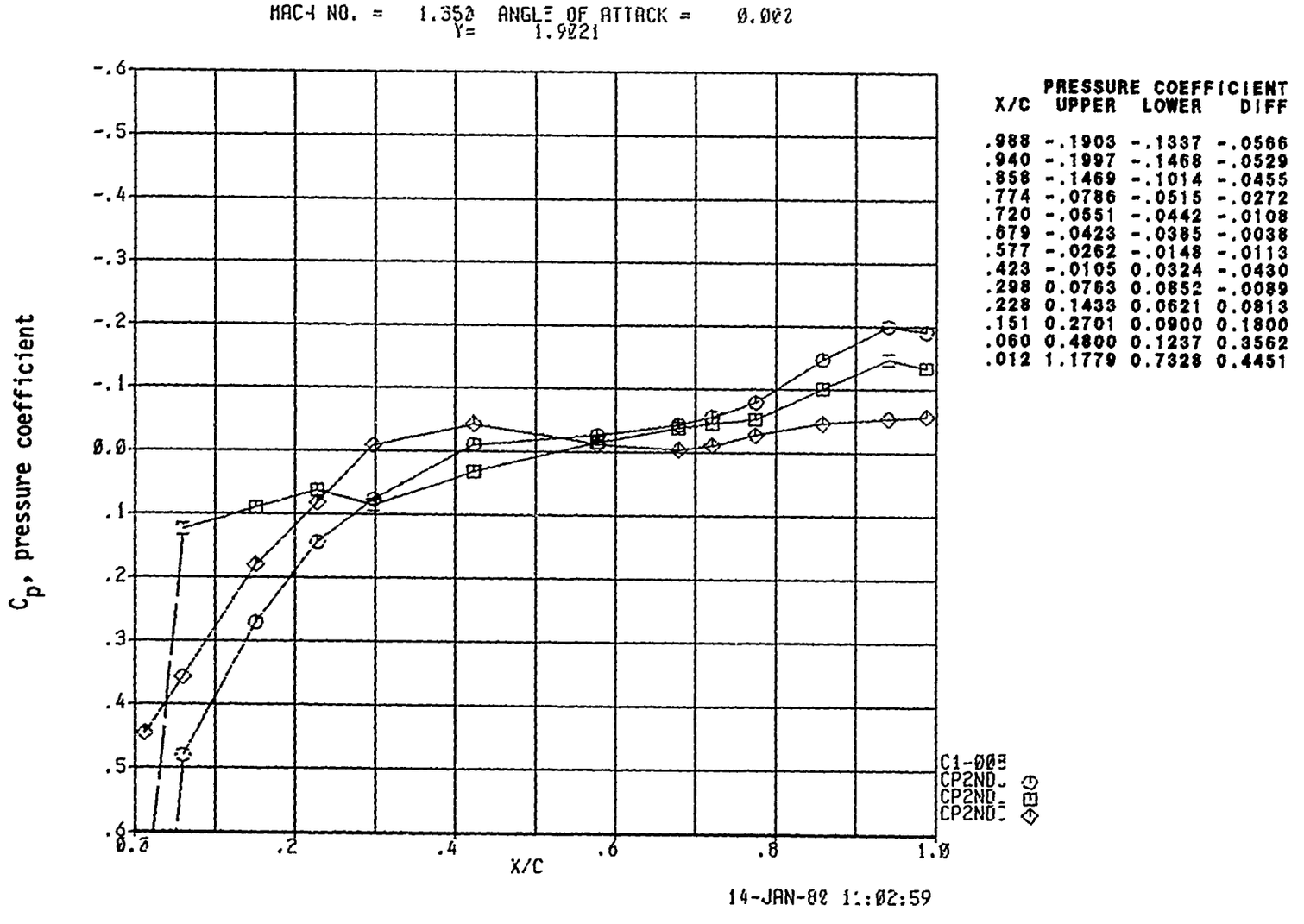


Figure 206, Chordwise Pressure Distribution, Steady, Configuration 1



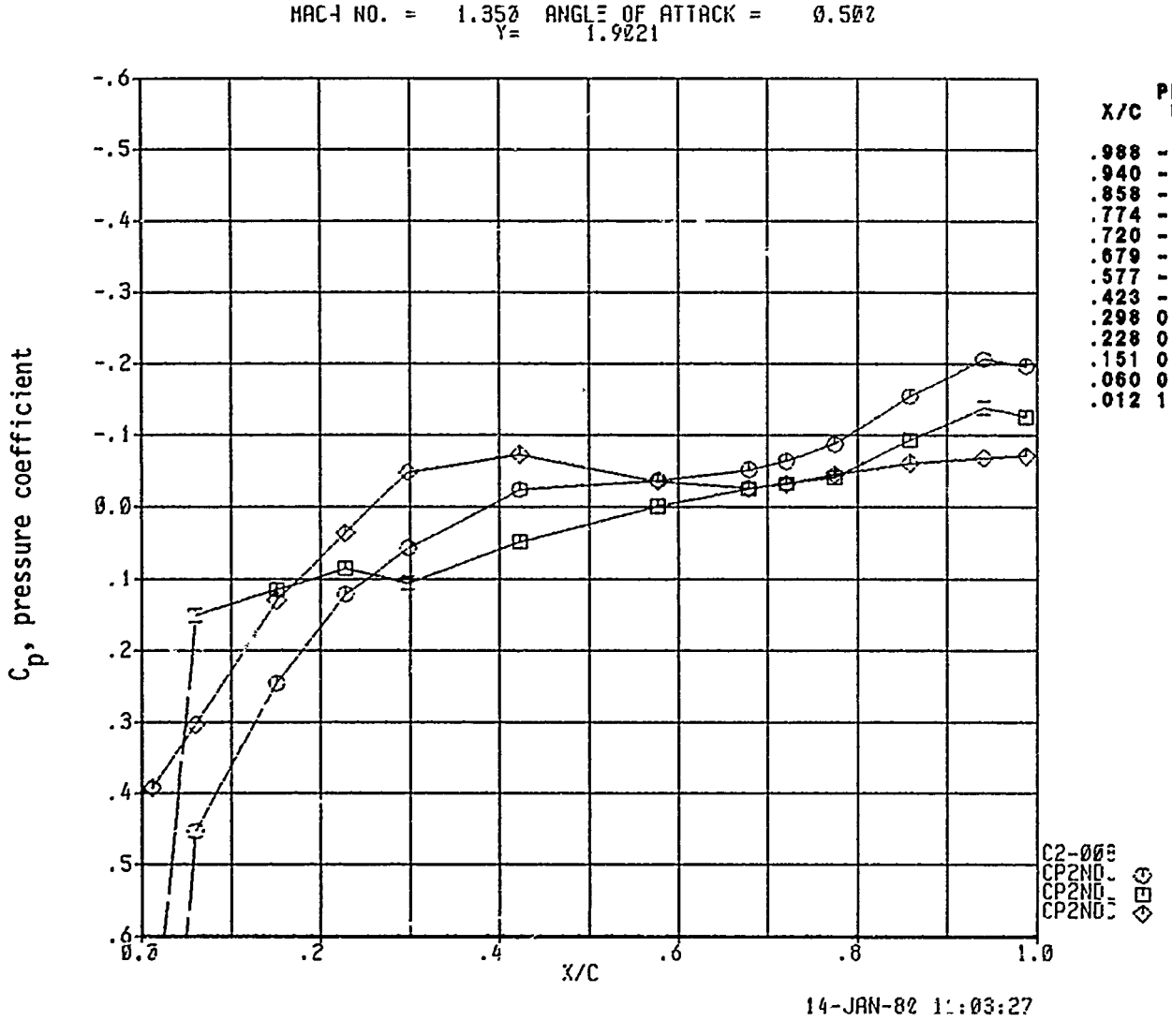
X/C	PRESSURE COEFFICIENT UPPER	LOWER	DIFF
.988	-.2023	-.1501	-.0522
.940	-.2083	-.1559	-.0524
.858	-.2166	-.1646	-.0521
.775	-.2348	-.1857	-.0490
.720	-.2031	-.1621	-.0410
.679	-.1895	-.1619	-.0275
.578	0.0023	-.0282	0.0305
.423	0.0929	-.0064	0.0994
.298	0.1684	0.0484	0.1199
.228	0.2364	0.0574	0.1790
.151	0.3033	0.0450	0.2583
.060	0.5037	0.0989	0.4048
.012	1.2154	0.7143	0.5010

Figure 207, Chordwise Pressure Distribution, Steady, Configuration 1



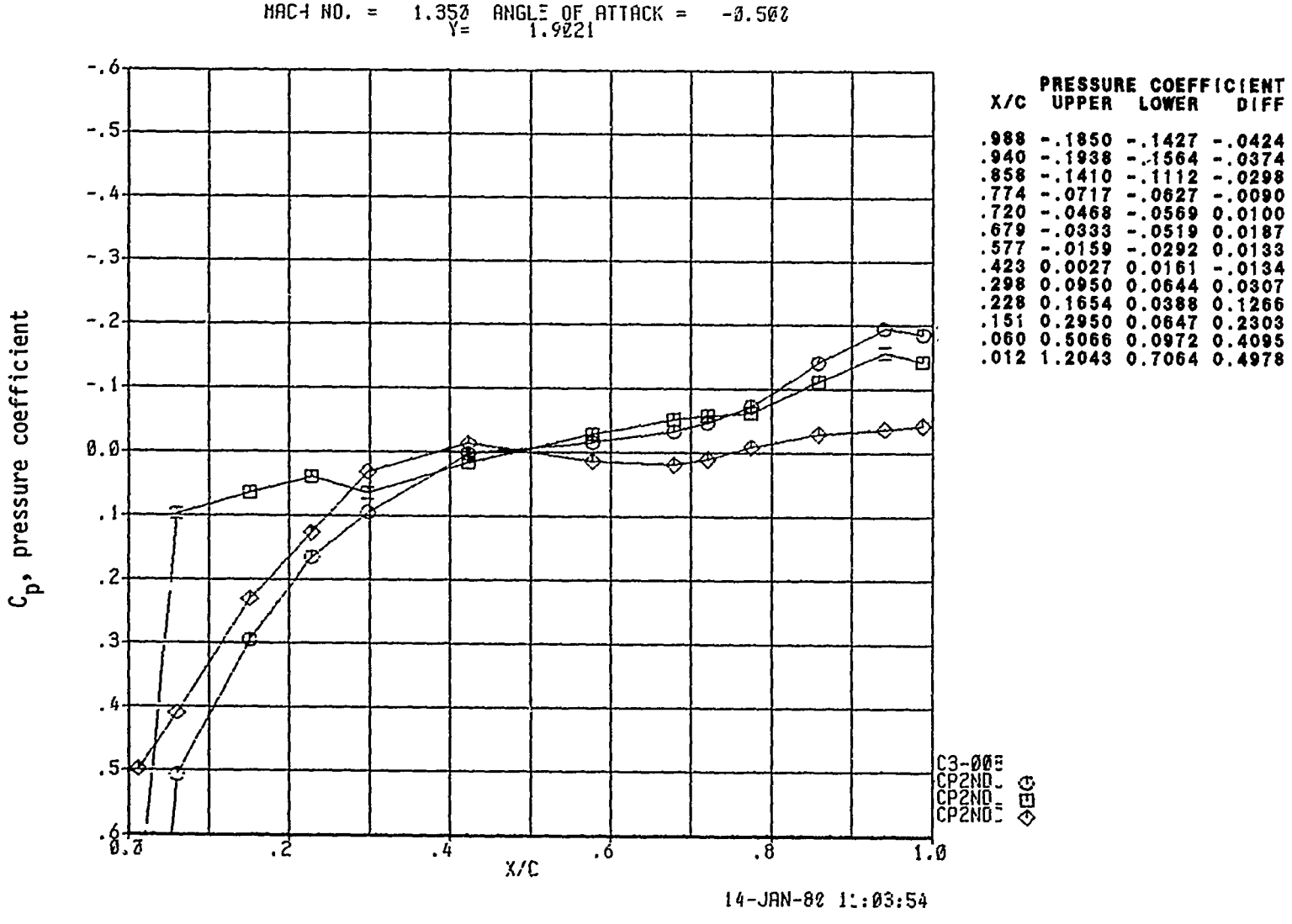
X/C	PRESSURE COEFFICIENT UPPER	LOWER	DIFF
.988	-.1903	-.1337	-.0566
.940	-.1997	-.1468	-.0529
.858	-.1469	-.1014	-.0455
.774	-.0786	-.0515	-.0272
.720	-.0551	-.0442	-.0108
.679	-.0423	-.0385	-.0038
.577	-.0262	-.0148	-.0113
.423	-.0105	0.0324	-.0430
.298	0.0763	0.0852	-.0089
.228	0.1433	0.0621	0.0813
.151	0.2701	0.0900	0.1800
.060	0.4800	0.1237	0.3562
.012	1.1779	0.7328	0.4451

Figure 208, Chordwise Pressure Distribution, Steady, Configuration 1



X/C	PRESSURE COEFFICIENT UPPER	LOWER	DIFF
.988	-.1968	-.1259	-.0709
.940	-.2067	-.1383	-.0684
.858	-.1539	-.0927	-.0611
.774	-.0867	-.0413	-.0454
.720	-.0642	-.0326	-.0317
.679	-.0522	-.0259	-.0263
.577	-.0372	-.0012	-.0361
.423	-.0242	0.0484	-.0726
.298	0.0573	0.1057	-.0484
.228	0.1211	0.0852	0.0358
.151	0.2451	0.1153	0.1298
.060	0.4534	0.1503	0.3030
.012	1.1515	0.7592	0.3923

Figure 209, Chordwise Pressure Distribution, Steady, Configuration 1



X/C	PRESSURE COEFFICIENT UPPER	LOWER	DIFF
.988	-.1850	-.1427	-.0424
.940	-.1938	-.1564	-.0374
.858	-.1410	-.1112	-.0298
.774	-.0717	-.0627	-.0090
.720	-.0468	-.0569	0.0100
.679	-.0333	-.0519	0.0187
.577	-.0159	-.0292	0.0133
.423	0.0027	0.0161	-.0134
.298	0.0950	0.0644	0.0307
.228	0.1654	0.0388	0.1266
.151	0.2950	0.0647	0.2303
.060	0.5066	0.0972	0.4095
.012	1.2043	0.7064	0.4978

Figure 210, Chordwise Pressure Distribution, Steady, Configuration 1

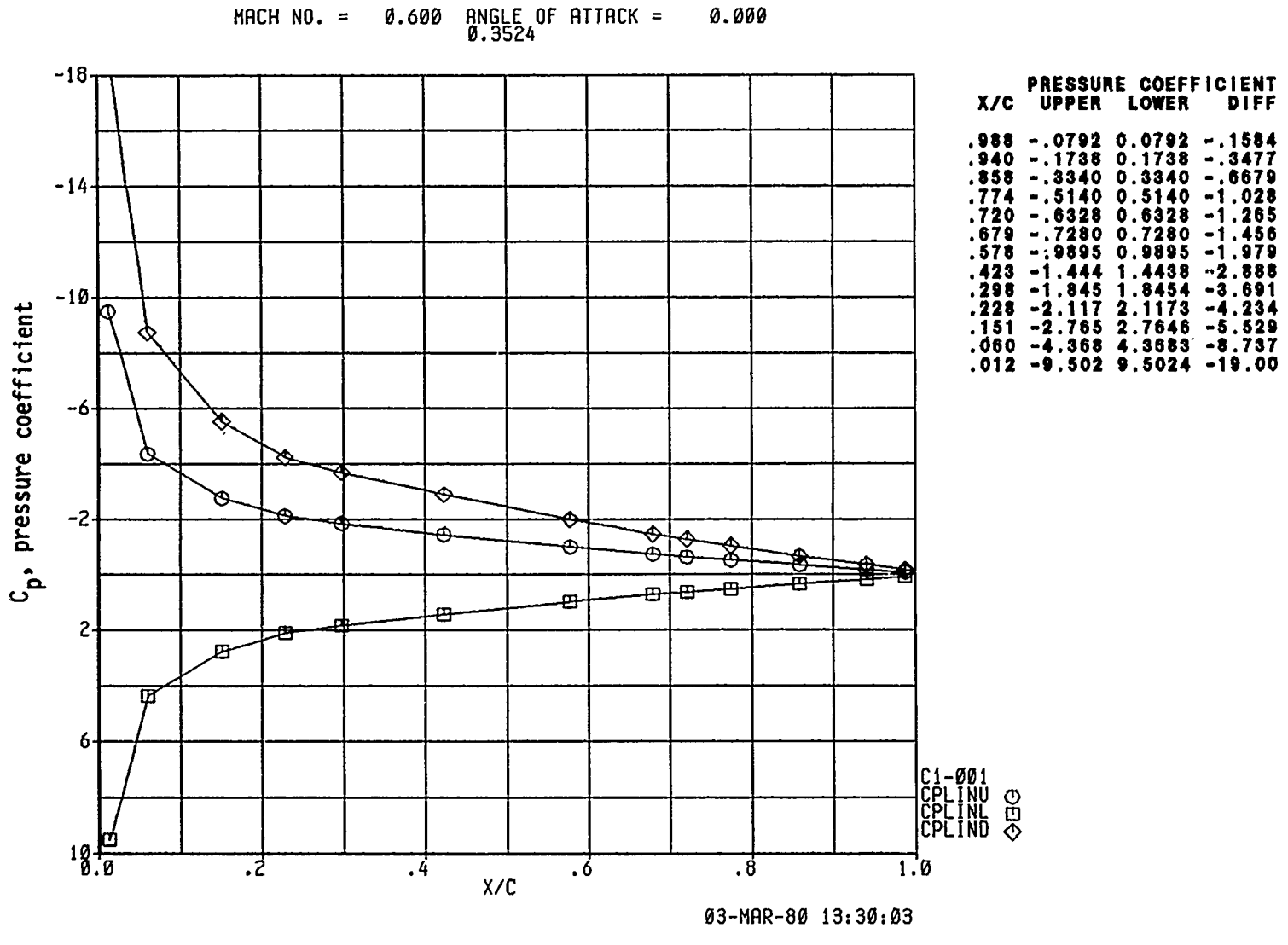
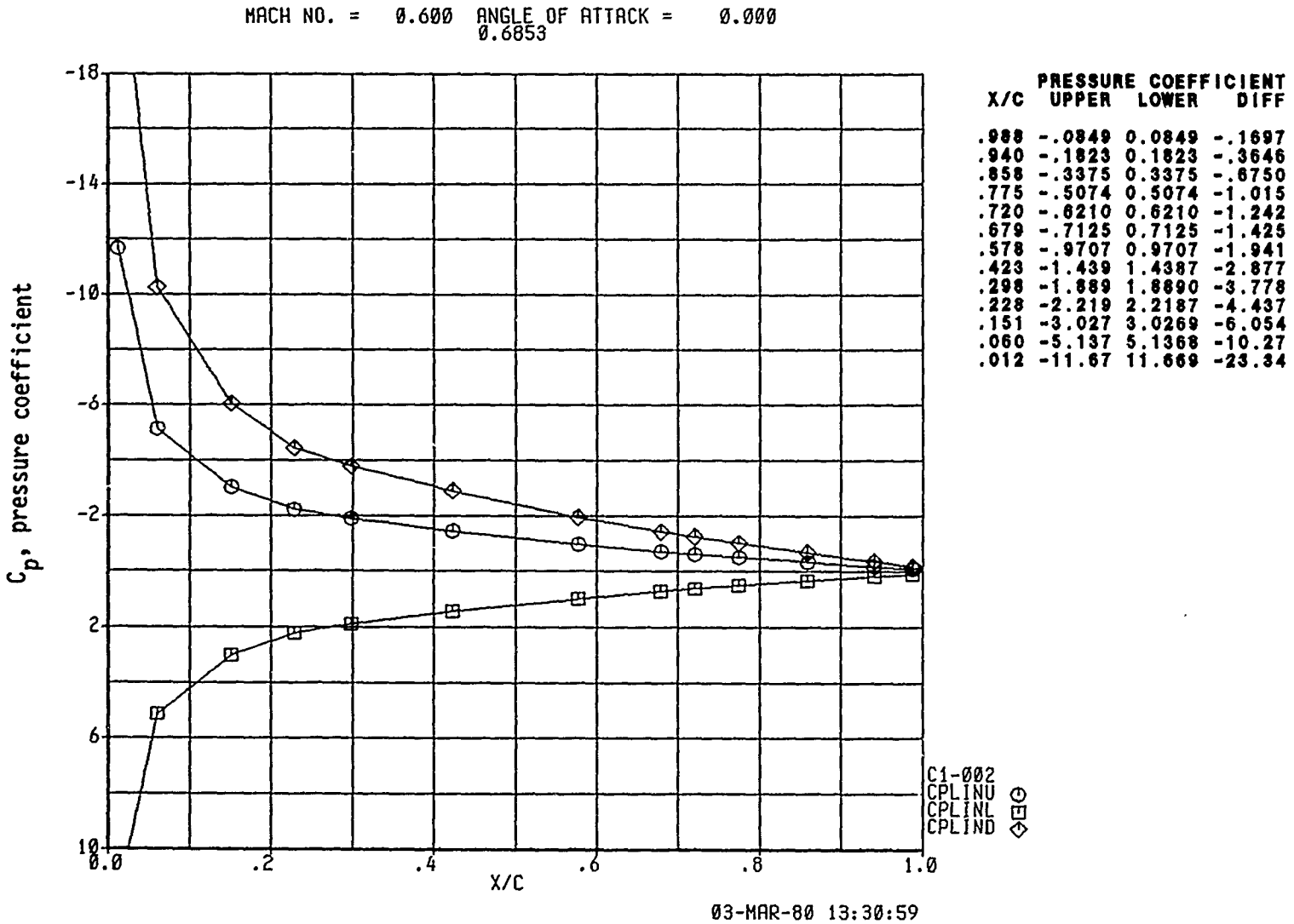
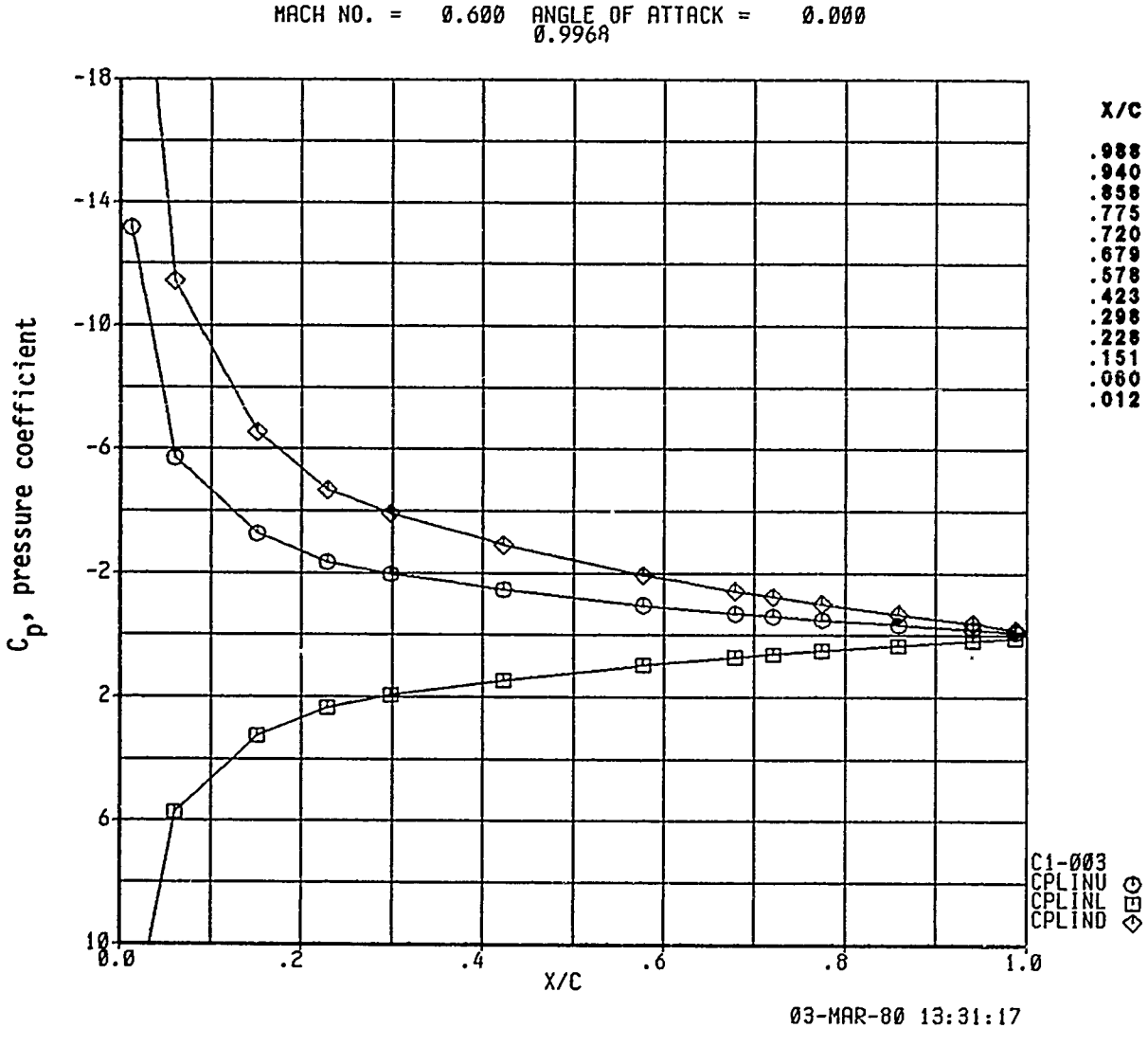


Figure 211, Chordwise Pressure Distribution, Real, Configuration 1



X/C	PRESSURE COEFFICIENT UPPER	LOWER	DIFF
.988	-.0849	0.0849	-.1697
.940	-.1823	0.1823	-.3646
.858	-.3375	0.3375	-.6750
.775	-.5074	0.5074	-1.015
.720	-.6210	0.6210	-1.242
.679	-.7125	0.7125	-1.425
.578	-.9707	0.9707	-1.941
.423	-1.439	1.4387	-2.877
.298	-1.889	1.8890	-3.778
.228	-2.219	2.2187	-4.437
.151	-3.027	3.0269	-6.054
.060	-5.137	5.1368	-10.27
.012	-11.67	11.669	-23.34

Figure 212, Chordwise Pressure Distribution, Real, Configuration 1



X/C	PRESSURE COEFFICIENT UPPER	LOWER	DIFF
.988	-.0895	0.0895	-.1790
.940	-.1887	0.1887	-.3772
.858	-.3396	0.3396	-.6791
.775	-.5043	0.5043	-1.008
.720	-.6151	0.6151	-1.230
.679	-.7041	0.7041	-1.408
.578	-.9634	0.9634	-1.927
.423	-1.454	1.4545	-2.909
.298	-1.957	1.9568	-3.914
.226	-2.337	2.3371	-4.674
.151	-3.270	3.2699	-6.540
.060	-5.725	5.7245	-11.45
.012	-13.18	13.183	-26.37

Figure 213, Chordwise Pressure Distribution, Real, Configuration 1

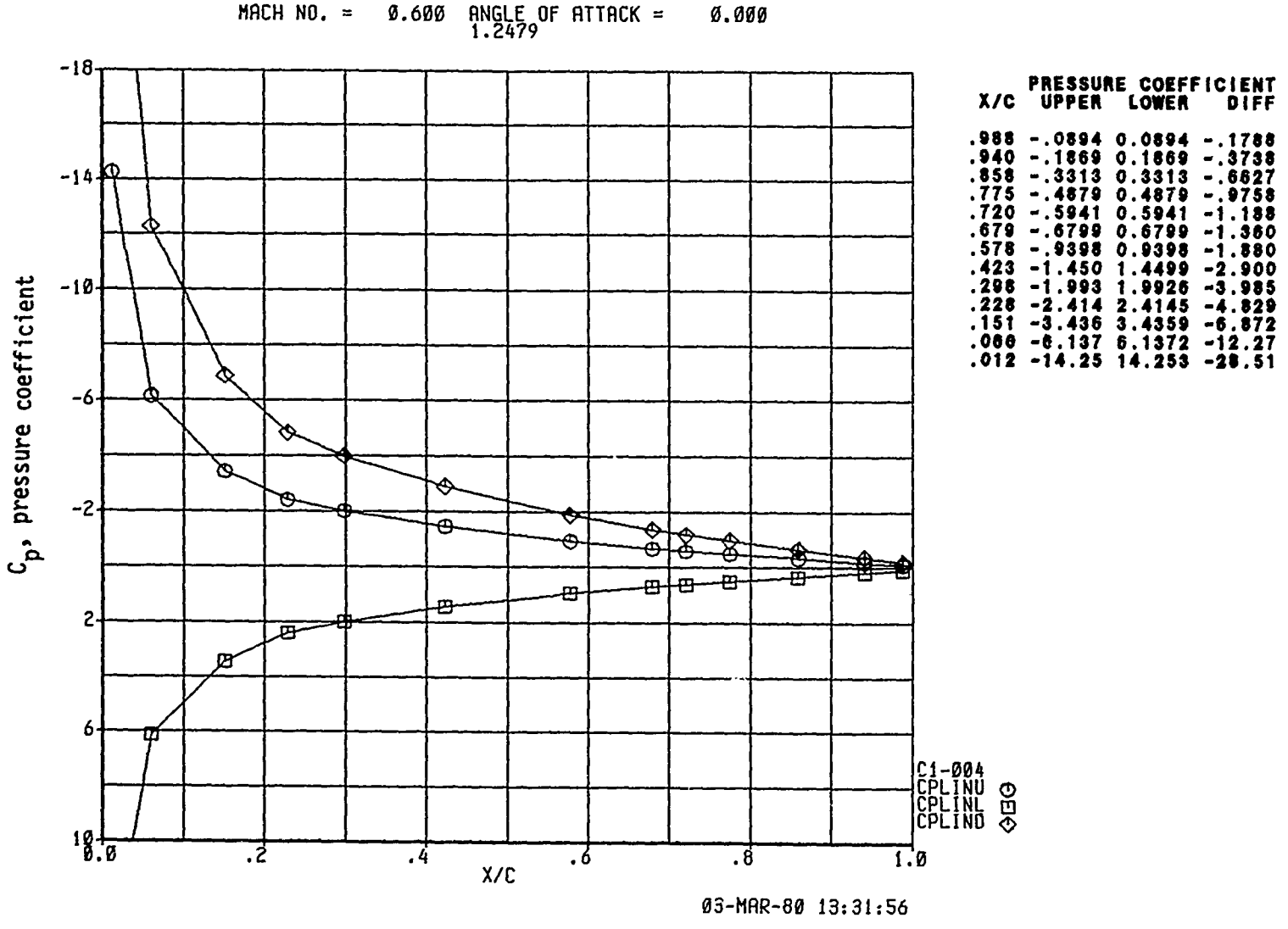
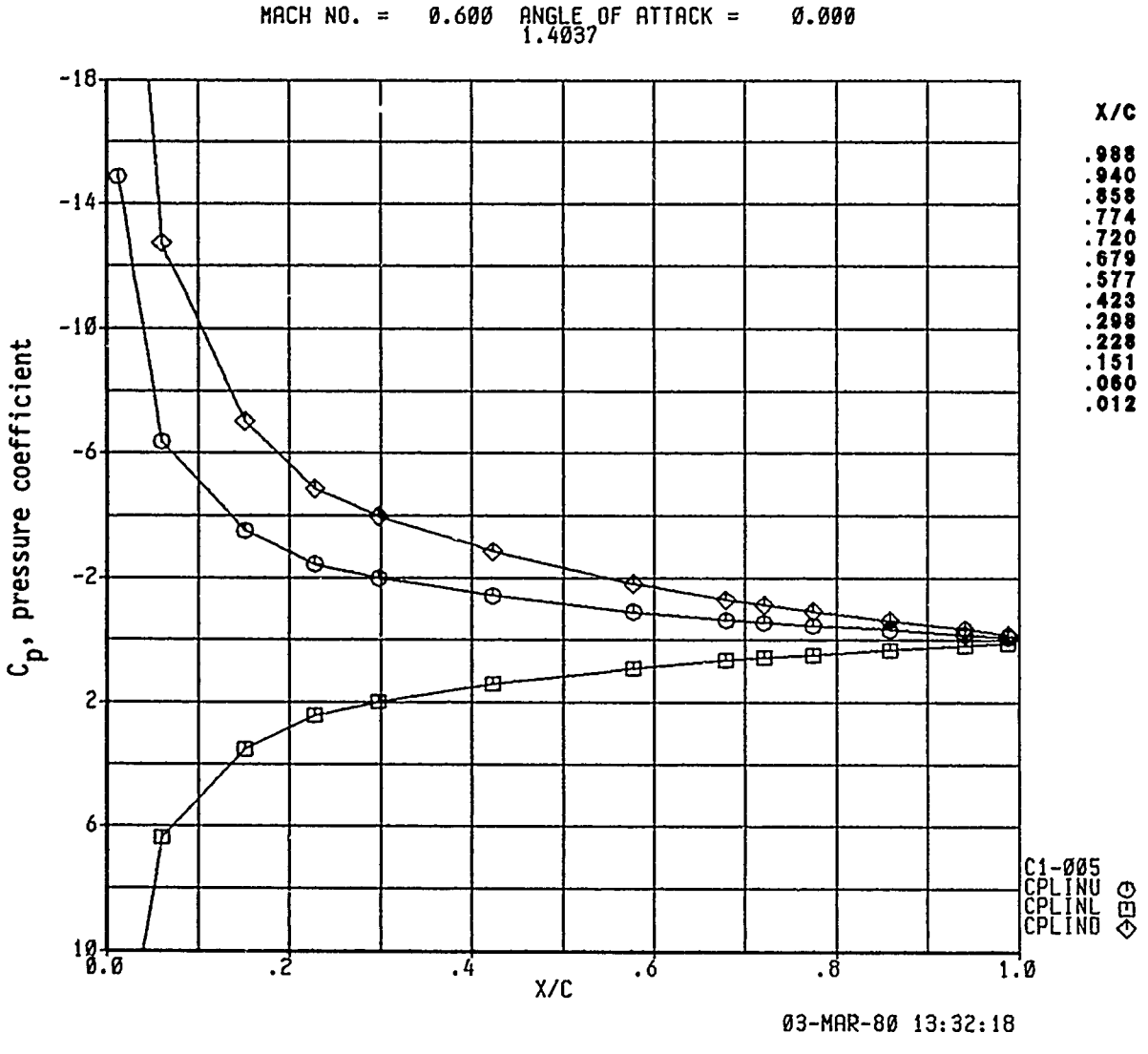
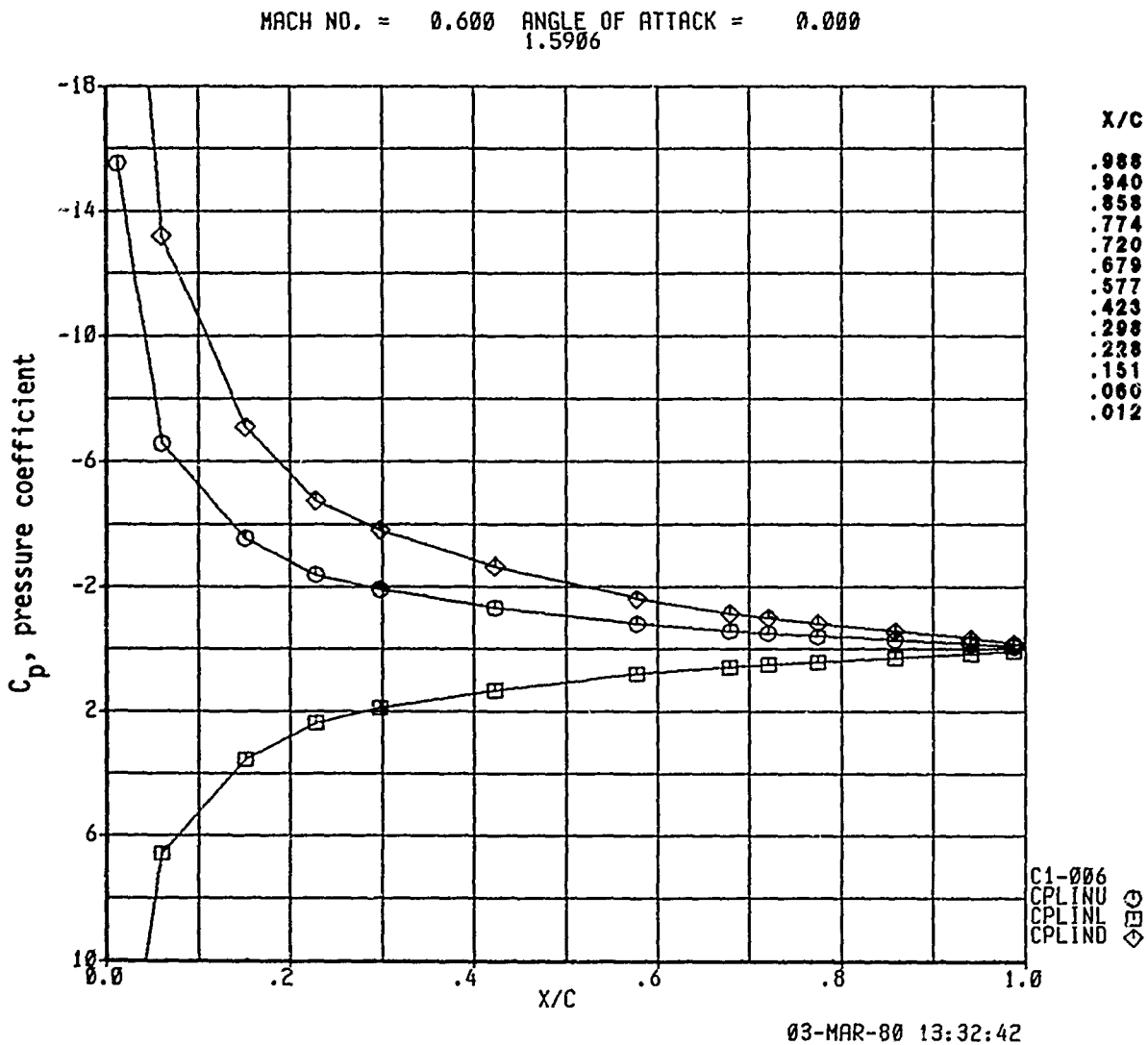


Figure 214, Chordwise Pressure Distribution, Real, Configuration 1



X/C	PRESSURE COEFFICIENT UPPER	LOWER	DIFF
.988	-.0866	0.0866	-.1732
.940	-.1803	0.1803	-.3607
.858	-.3176	0.3176	-.6353
.774	-.4642	0.4642	-.9284
.720	-.5637	0.5637	-1.127
.679	-.6451	0.6451	-1.290
.577	-.9018	0.9018	-1.804
.423	-1.423	1.4229	-2.846
.298	-1.987	1.9868	-3.974
.228	-2.432	2.4323	-4.865
.151	-3.515	3.5154	-7.031
.060	-6.374	6.3743	-12.75
.012	-14.88	14.879	-29.76

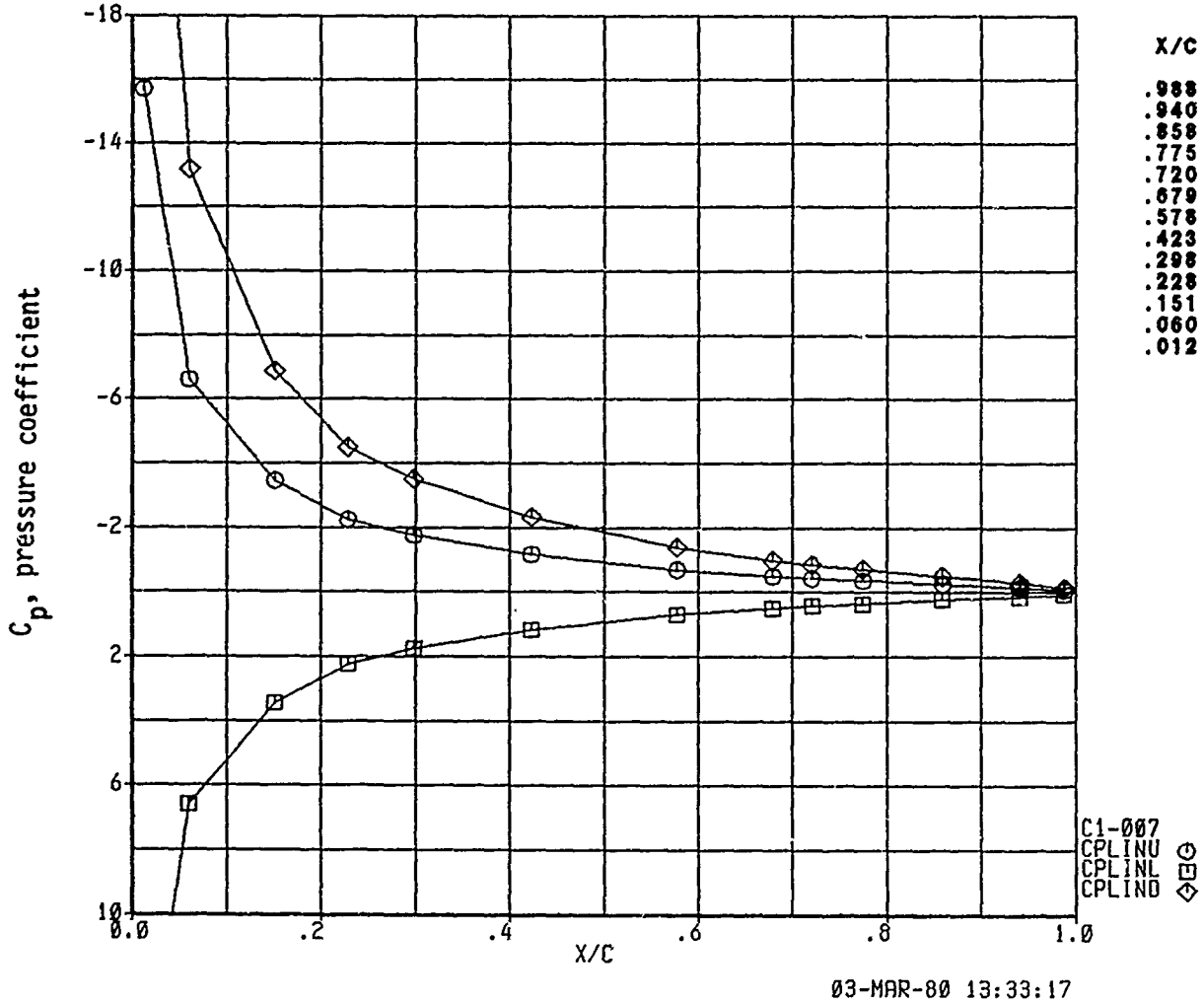
Figure 215, Chordwise Pressure Distribution, Real, Configuration 1



X/C	PRESSURE COEFFICIENT UPPER	LOWER	DIFF
.988	-.0783	0.0783	-.1564
.940	-.1619	0.1619	-.3237
.858	-.2823	0.2823	-.5645
.774	-.4101	0.4101	-.8202
.720	-.4961	0.4961	-.9924
.679	-.5665	0.5665	-1.133
.577	-.8021	0.8021	-1.604
.423	-1.321	1.3214	-2.643
.298	-1.908	1.9075	-3.815
.238	-2.376	2.3761	-4.752
.151	-3.552	3.5520	-7.104
.060	-6.596	6.5962	-13.19
.012	-15.52	15.522	-31.04

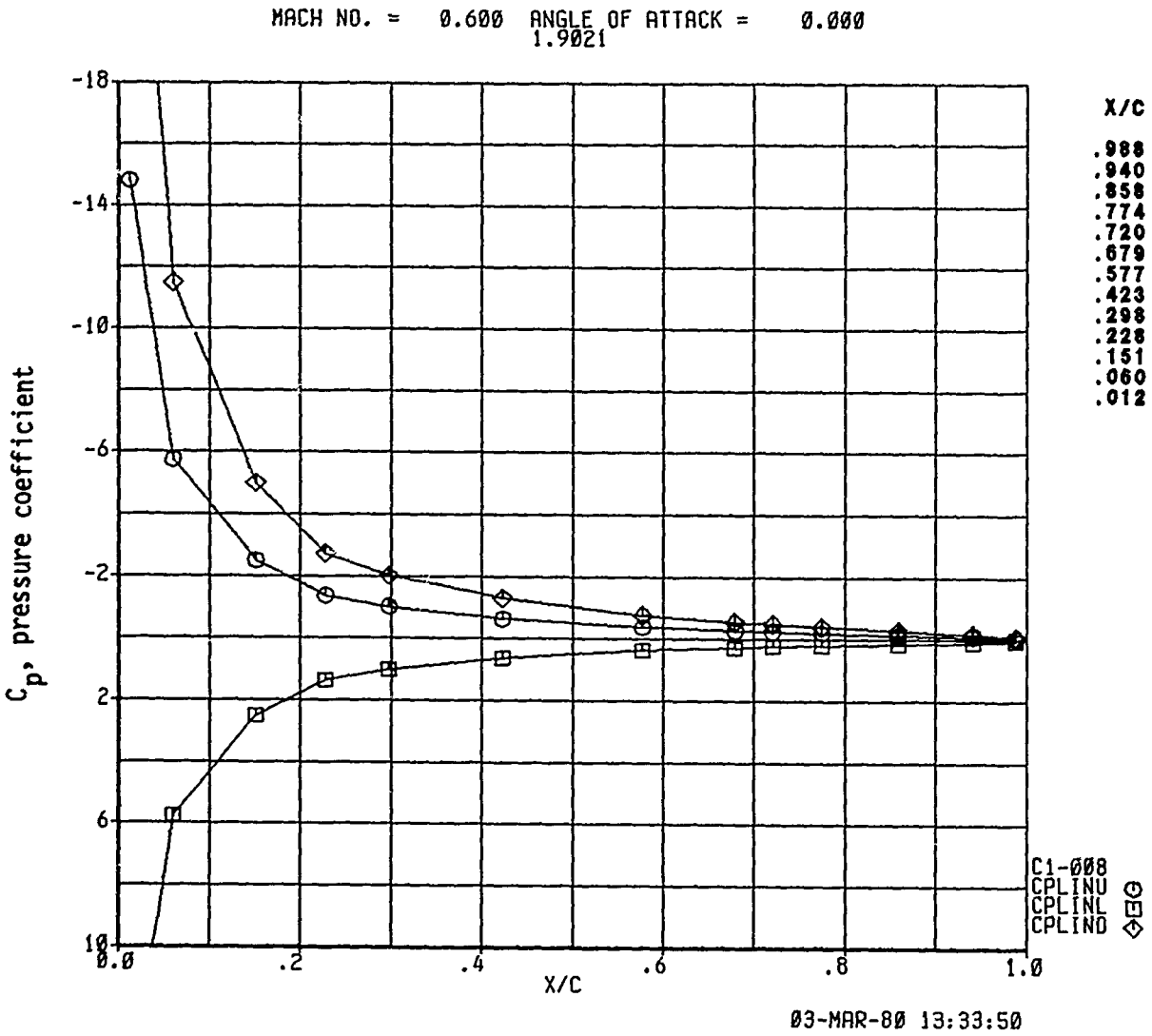
Figure 216, Chordwise Pressure Distribution, Real, Configuration 1

MACH NO. = 0.600 ANGLE OF ATTACK = 0.000
1.7035



X/C	PRESSURE COEFFICIENT UPPER	LOWER	DIFF
.988	-.0696	0.0696	-.1392
.940	-.1425	0.1425	-.2850
.858	-.2443	0.2443	-.4886
.775	-.3557	0.3557	-.7113
.720	-.4284	0.4284	-.8569
.679	-.4885	0.4885	-.9769
.578	-.6924	0.6924	-1.385
.423	-1.165	1.1654	-2.331
.298	-1.747	1.7469	-3.494
.228	-2.244	2.2436	-4.487
.151	-3.441	3.4407	-6.881
.060	-6.599	6.5989	-13.20
.012	-15.72	15.716	-31.43

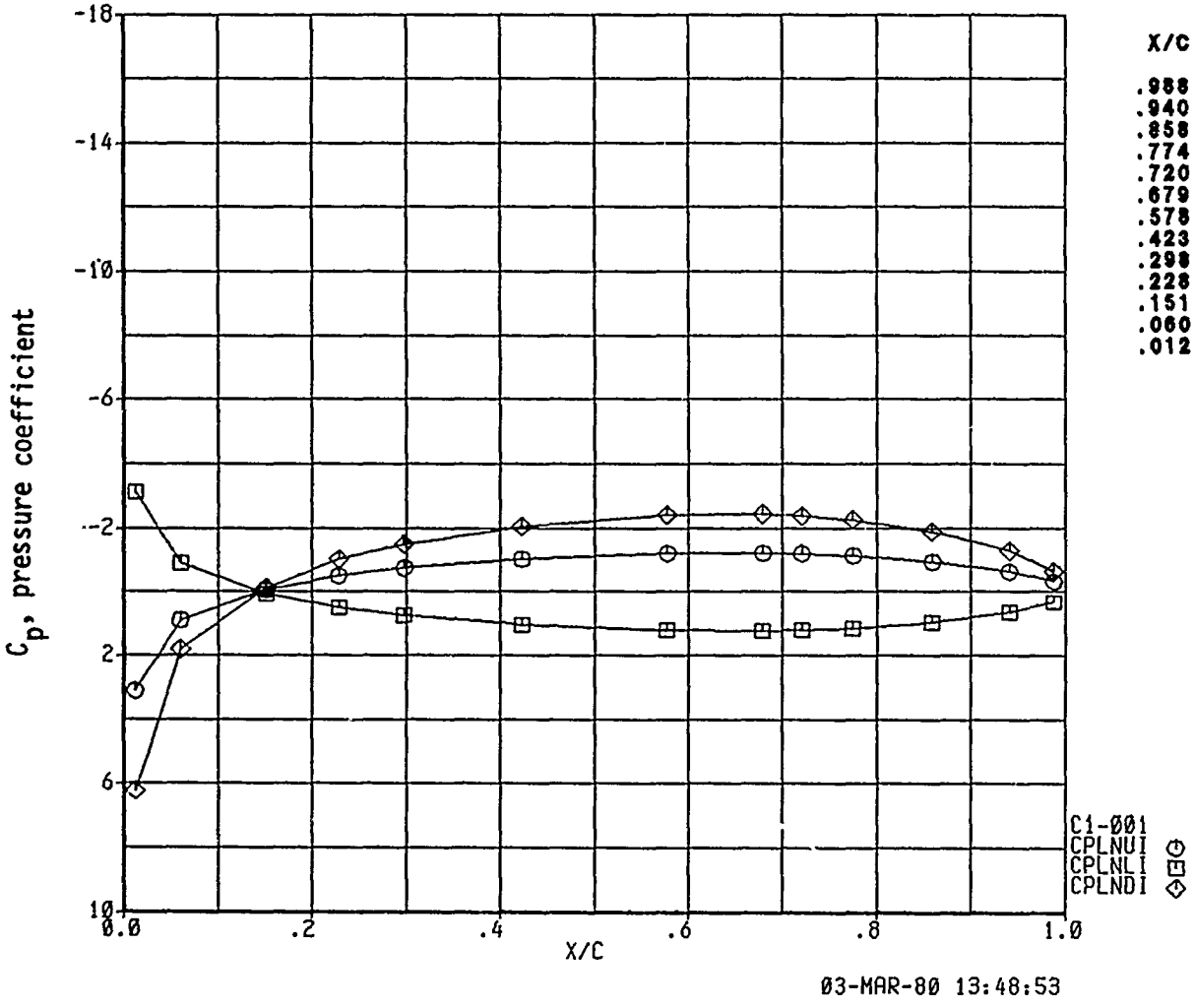
Figure 217, Chordwise Pressure Distribution, Real, Configuration 1



X/C	PRESSURE COEFFICIENT UPPER	LOWER	DIFF
.988	-.0453	0.0453	-.0906
.940	-.0891	0.0891	-.1781
.858	-.1449	0.1449	-.2897
.774	-.2049	0.2049	-.4097
.720	-.2418	0.2418	-.4836
.679	-.2732	0.2732	-.5463
.577	-.3769	0.3769	-.7538
.423	-.6461	0.6461	-1.292
.298	-1.006	1.0057	-2.011
.228	-1.364	1.3641	-2.728
.151	-2.500	2.5003	-5.001
.060	-5.752	5.7517	-11.50
.012	-14.82	14.821	-29.64

Figure 218, Chordwise Pressure Distribution, Real, Configuration 1

MACH NO. = 0.600 ANGLE OF ATTACK = 0.000
0.3524



X/C	PRESSURE COEFFICIENT UPPER	LOWER	DIFF
.988	-.3235	0.3235	-.6471
.940	-.6454	0.6454	-1.291
.858	-.9454	0.9454	-1.891
.774	-1.136	1.1360	-2.272
.720	-1.196	1.1957	-2.391
.679	-1.221	1.2206	-2.441
.578	-1.205	1.2048	-2.409
.423	-1.027	1.0266	-2.053
.298	-.7440	0.7440	-1.488
.228	-.5074	0.5074	-1.015
.151	-.0632	0.0632	-.1266
.060	0.9023	-.9023	1.8046
.012	3.1115	-3.112	6.2231

Figure 219, Chordwise Pressure Distribution, Imaginary, Configuration 1

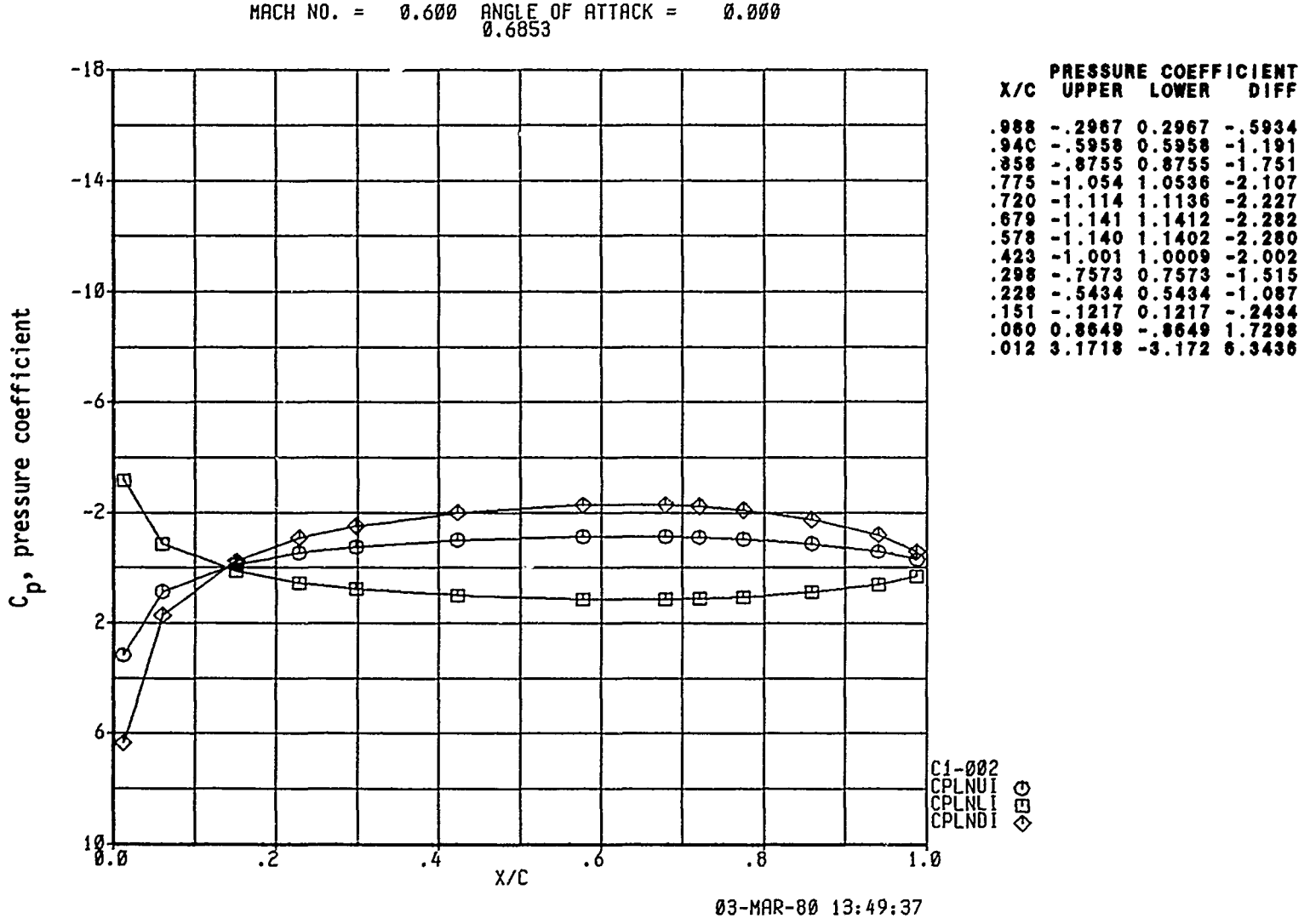
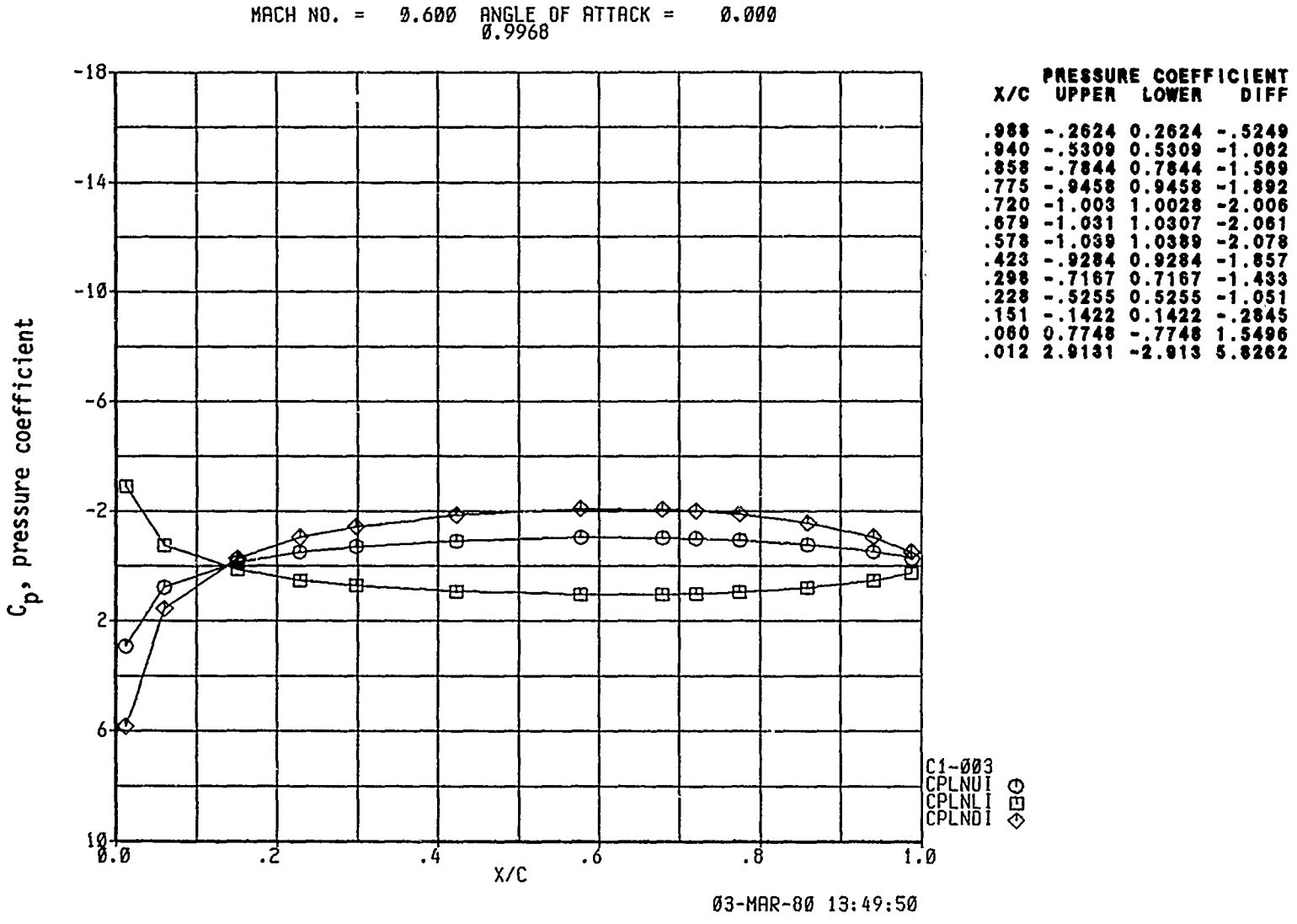
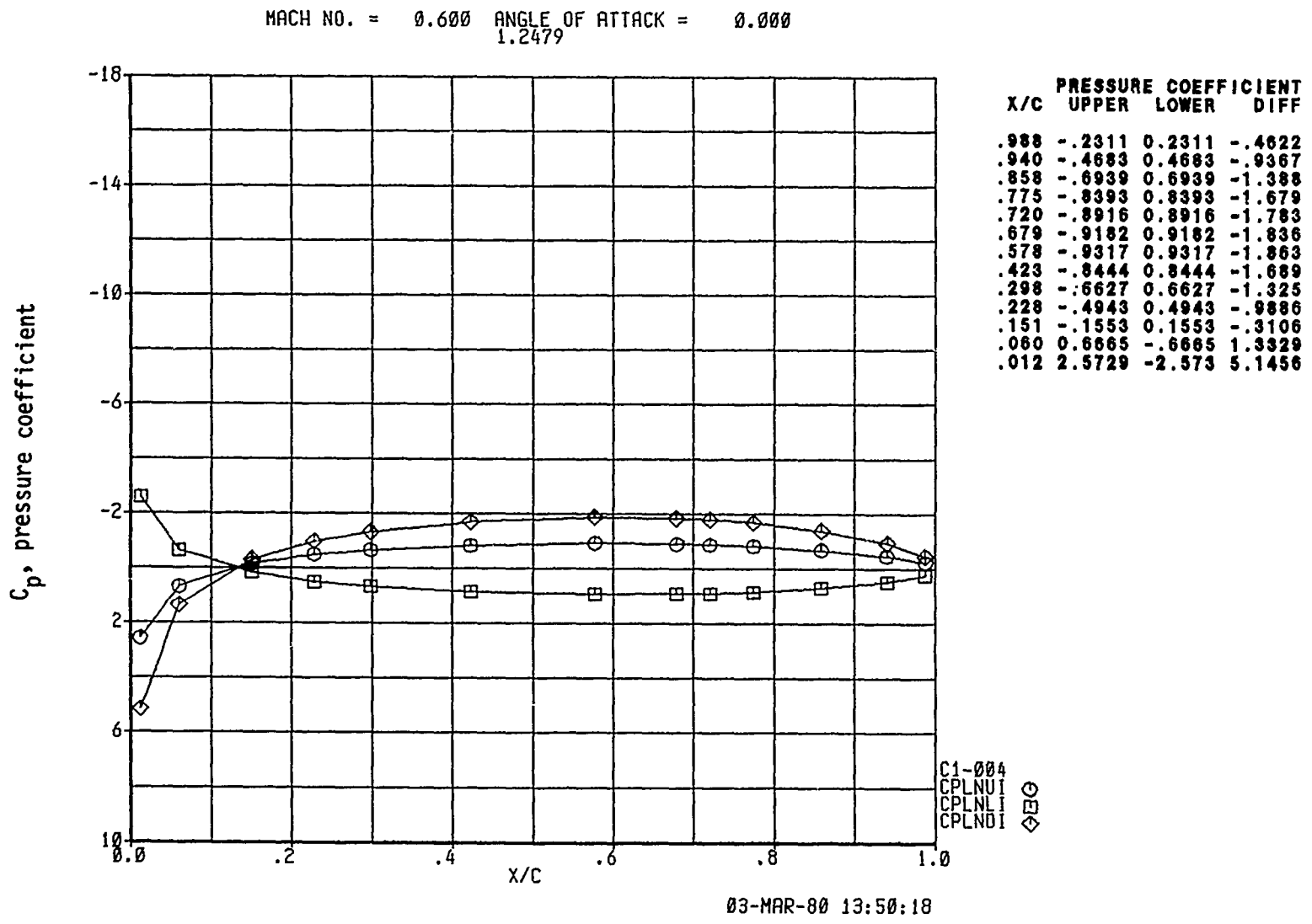


Figure 220, Chordwise Pressure Distribution, Imaginary, Configuration 1



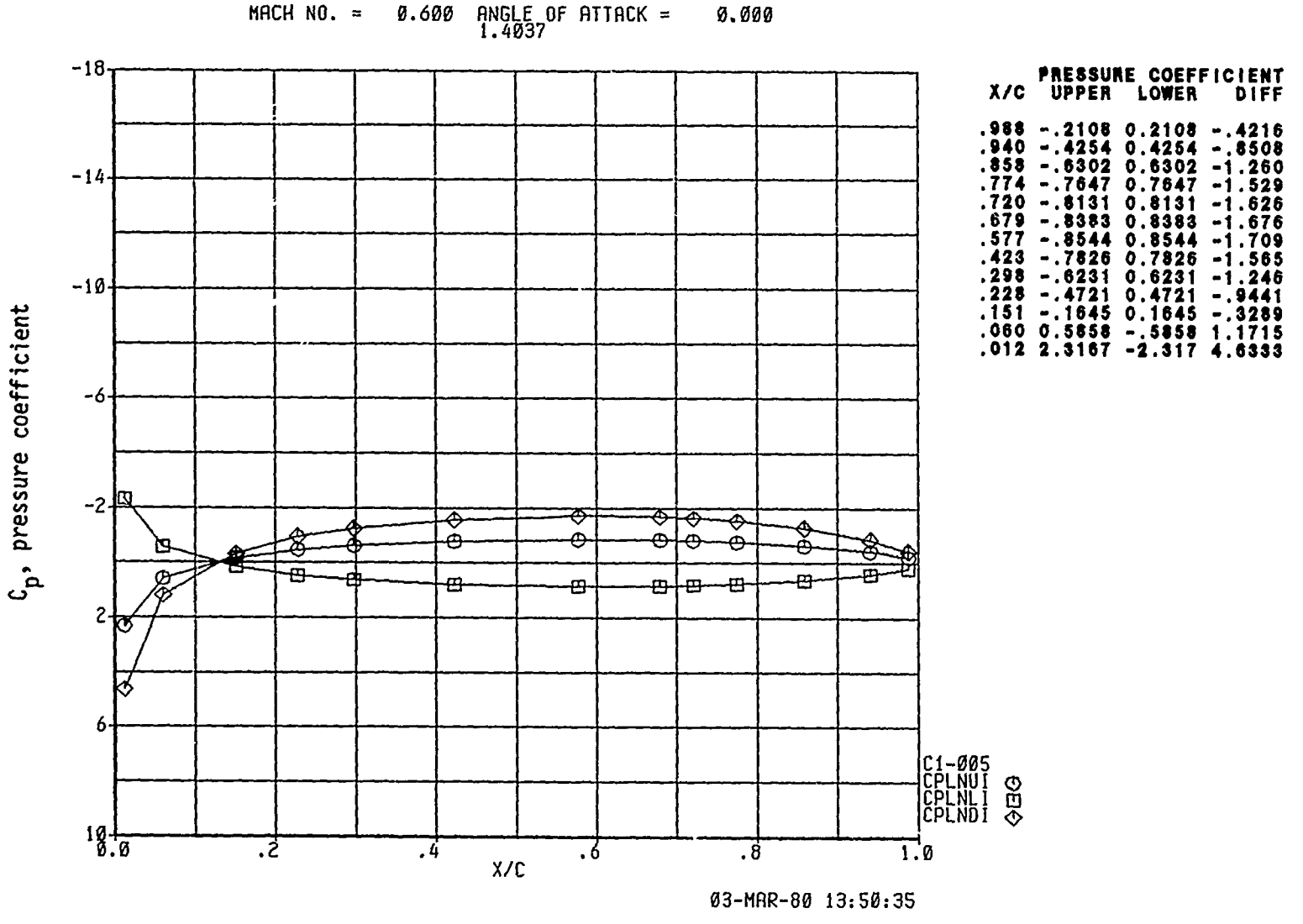
X/C	PRESSURE COEFFICIENT UPPER	LOWER	DIFF
.988	-.2624	0.2624	-.5249
.940	-.5309	0.5309	-1.062
.858	-.7844	0.7844	-1.569
.775	-.9458	0.9458	-1.892
.720	-1.003	1.0028	-2.006
.679	-1.031	1.0307	-2.061
.578	-1.039	1.0389	-2.078
.423	-.9284	0.9284	-1.857
.298	-.7167	0.7167	-1.433
.228	-.5255	0.5255	-1.051
.151	-.1422	0.1422	-.2845
.060	0.7748	-.7748	1.5496
.012	2.9131	-2.913	5.8262

Figure 221, Chordwise Pressure Distribution, Imaginary, Configuration 1



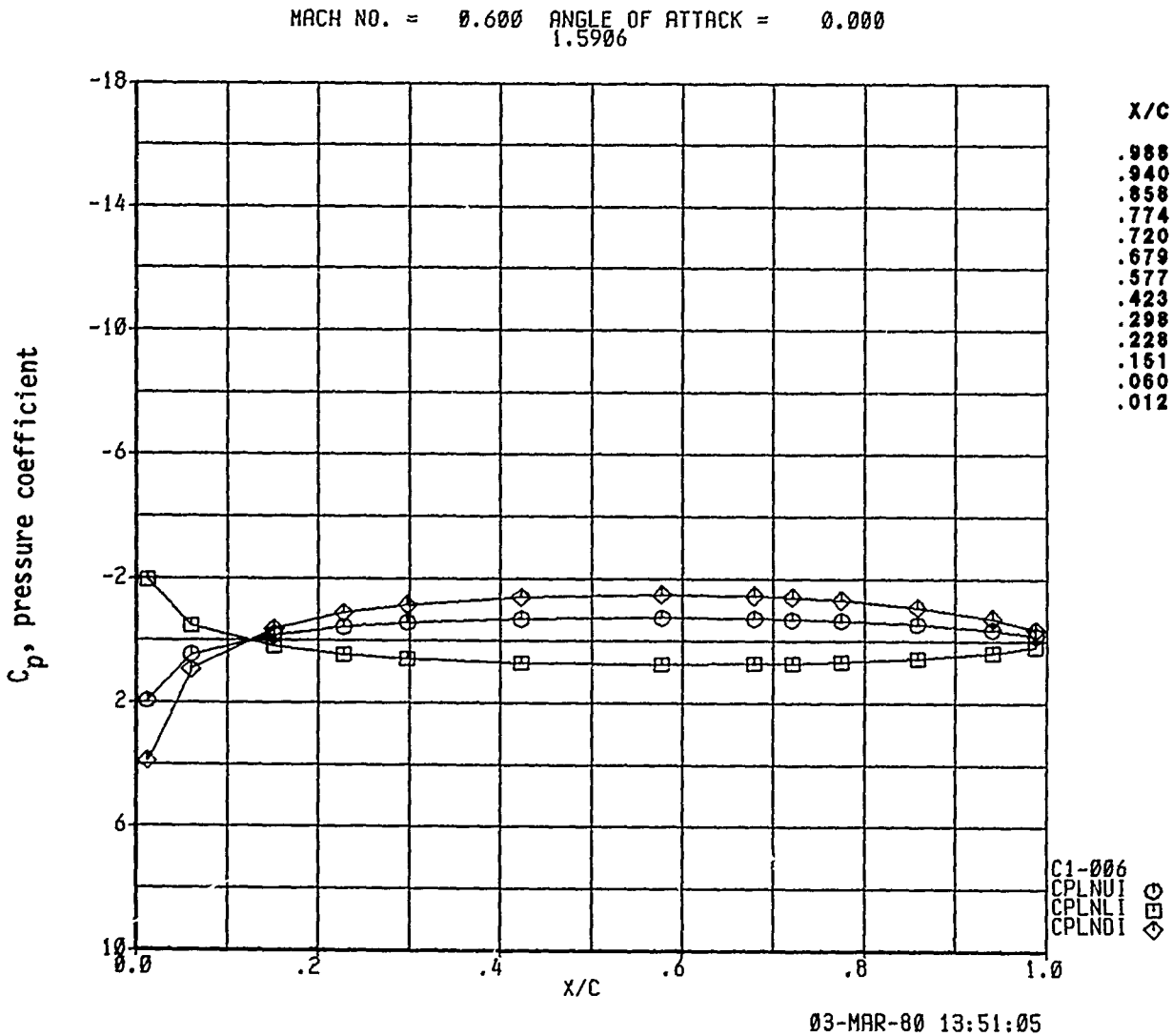
X/C	PRESSURE COEFFICIENT UPPER	LOWER	DIFF
.988	-.2311	0.2311	-.4622
.940	-.4683	0.4683	-.9367
.858	-.6939	0.6939	-1.388
.775	-.8393	0.8393	-1.679
.720	-.8916	0.8916	-1.783
.679	-.9182	0.9182	-1.836
.578	-.9317	0.9317	-1.863
.423	-.8444	0.8444	-1.689
.298	-.6627	0.6627	-1.325
.228	-.4943	0.4943	-.9886
.151	-.1553	0.1553	-.3106
.060	0.6665	-.6665	1.3329
.012	2.5729	-2.573	5.1456

Figure 222, Chordwise Pressure Distribution, Imaginary, Configuration 1



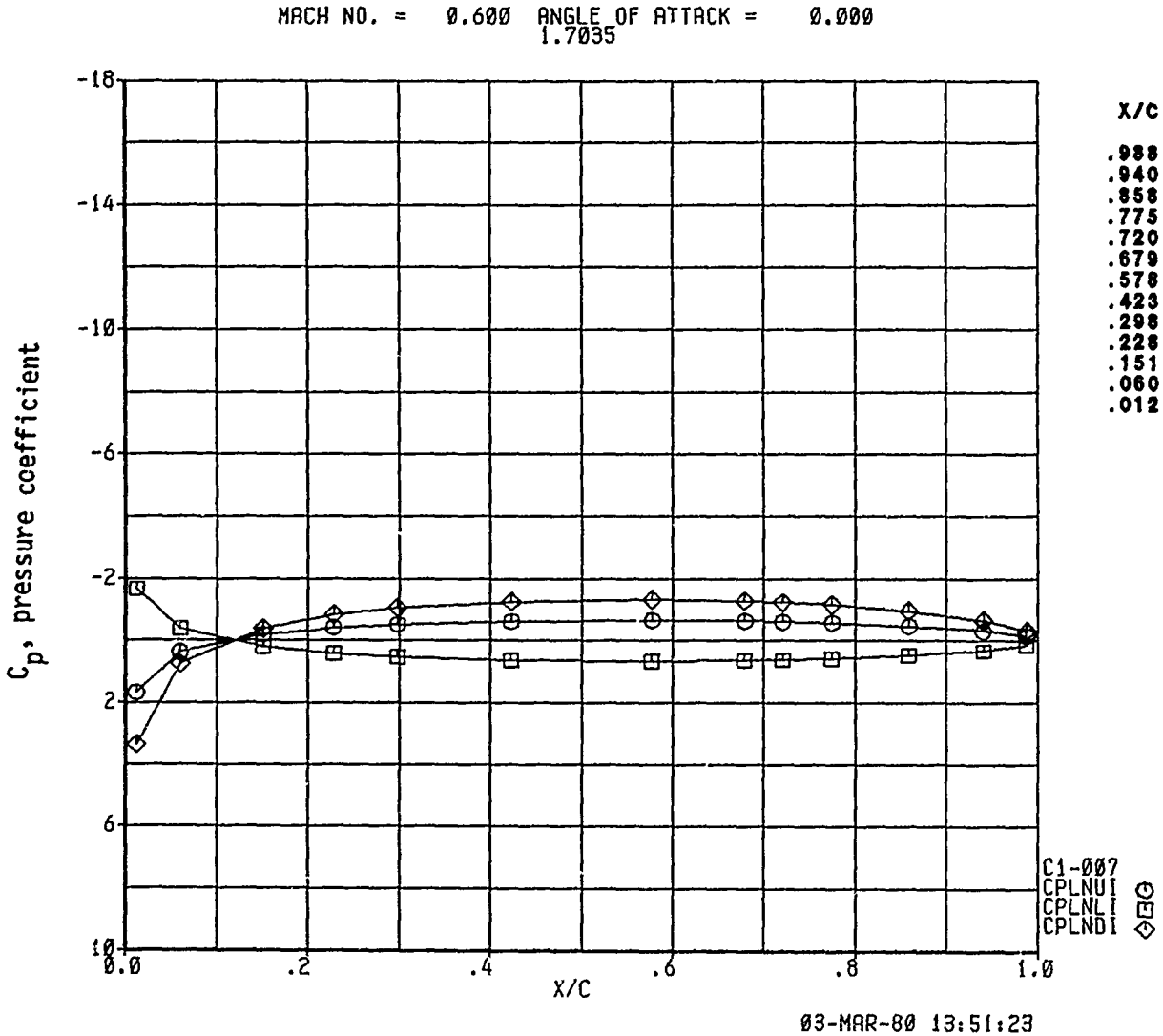
X/C	PRESSURE COEFFICIENT UPPER	LOWER	DIFF
.988	-.2108	0.2108	-.4216
.940	-.4254	0.4254	-.8508
.858	-.6302	0.6302	-1.260
.774	-.7647	0.7647	-1.529
.720	-.8131	0.8131	-1.626
.679	-.8383	0.8383	-1.676
.577	-.8544	0.8544	-1.709
.423	-.7826	0.7826	-1.565
.298	-.6231	0.6231	-1.246
.228	-.4721	0.4721	-.9441
.151	-.1645	0.1645	-.3289
.060	0.5858	-.5858	1.1715
.012	2.3167	-2.317	4.6333

Figure 223, Chordwise Pressure Distribution, Imaginary, Configuration 1



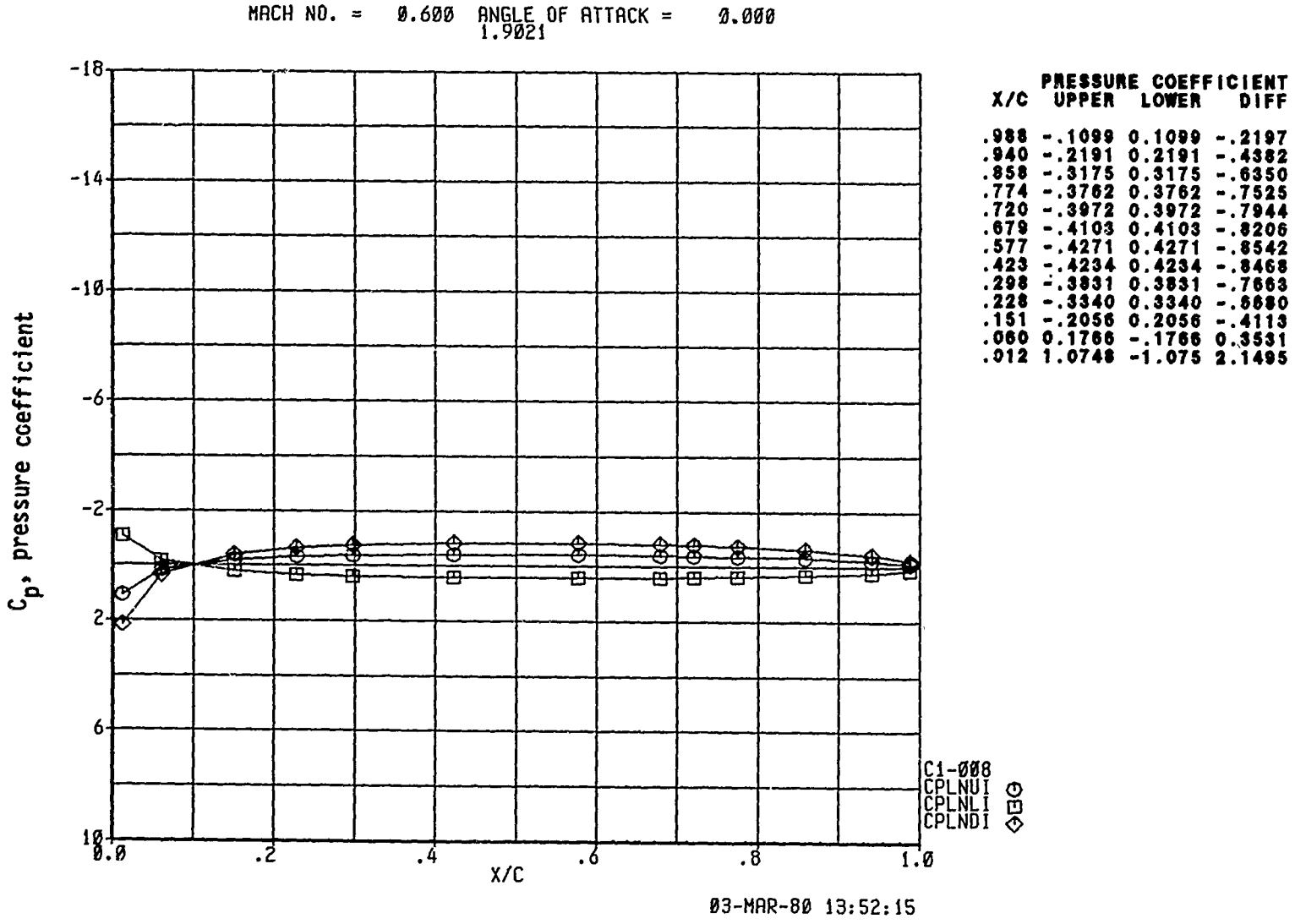
X/C	PRESSURE COEFFICIENT UPPER	LOWER	DIFF
.988	-.1822	0.1822	-.3644
.940	-.3679	0.3679	-.7357
.858	-.5437	0.5437	-1.087
.774	-.6605	0.6605	-1.321
.720	-.7033	0.7033	-1.406
.679	-.7264	0.7264	-1.453
.577	-.7459	0.7459	-1.492
.423	-.6962	0.6962	-1.393
.298	-.5684	0.5684	-1.137
.228	-.4432	0.4432	-.8862
.151	-.1795	0.1795	-.3592
.060	0.4666	-.4666	0.9333
.012	1.9456	-1.946	3.8912

Figure 224, Chordwise Pressure Distribution, Imaginary, Configuration 1



X/C	PRESSURE COEFFICIENT UPPER	LOWER	DIFF
.988	-.1584	0.1584	-.3169
.940	-.3242	0.3242	-.6485
.858	-.4806	0.4806	-.9613
.775	-.5795	0.5795	-1.159
.720	-.6173	0.6173	-1.235
.679	-.6384	0.6384	-1.277
.578	-.6596	0.6596	-1.319
.423	-.6271	0.6271	-1.254
.298	-.5246	0.5246	-1.049
.228	-.4184	0.4184	-.8367
.151	-.1931	0.1931	-.3861
.060	0.3775	-.3775	0.7549
.012	1.6749	-1.675	3.3499

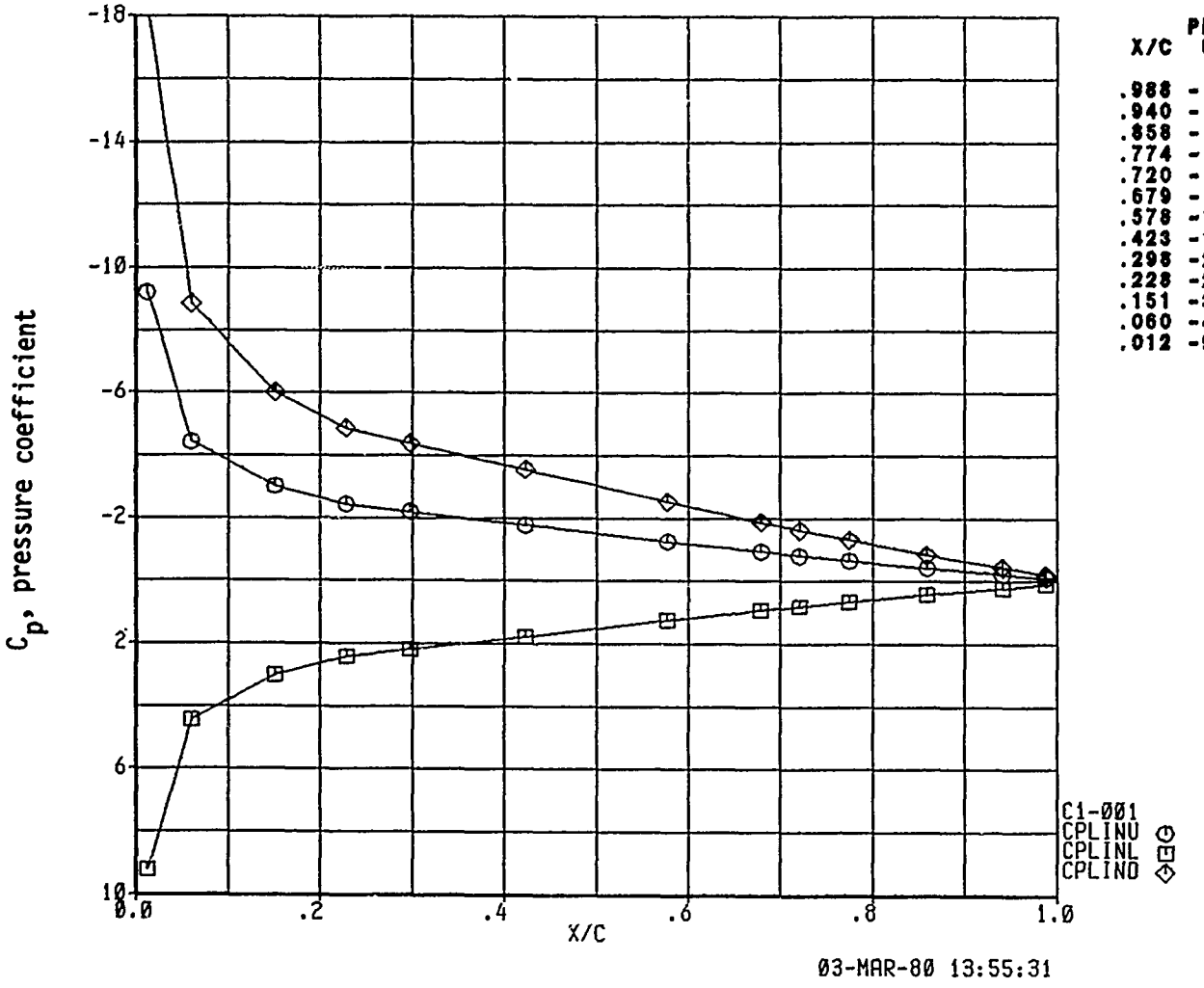
Figure 225, Chordwise Pressure Distribution, Imaginary, Configuration 1



X/C	PRESSURE COEFFICIENT UPPER	LOWER	DIFF
.988	-.1099	0.1099	-.2197
.940	-.2191	0.2191	-.4382
.858	-.3175	0.3175	-.6350
.774	-.3762	0.3762	-.7525
.720	-.3972	0.3972	-.7944
.679	-.4103	0.4103	-.8206
.577	-.4271	0.4271	-.8542
.423	-.4234	0.4234	-.8468
.298	-.3831	0.3831	-.7663
.228	-.3340	0.3340	-.6680
.151	-.2056	0.2056	-.4113
.060	0.1766	-.1766	0.3531
.012	1.0748	-1.075	2.1495

Figure 226, Chordwise Pressure Distribution, Imaginary, Configuration 1

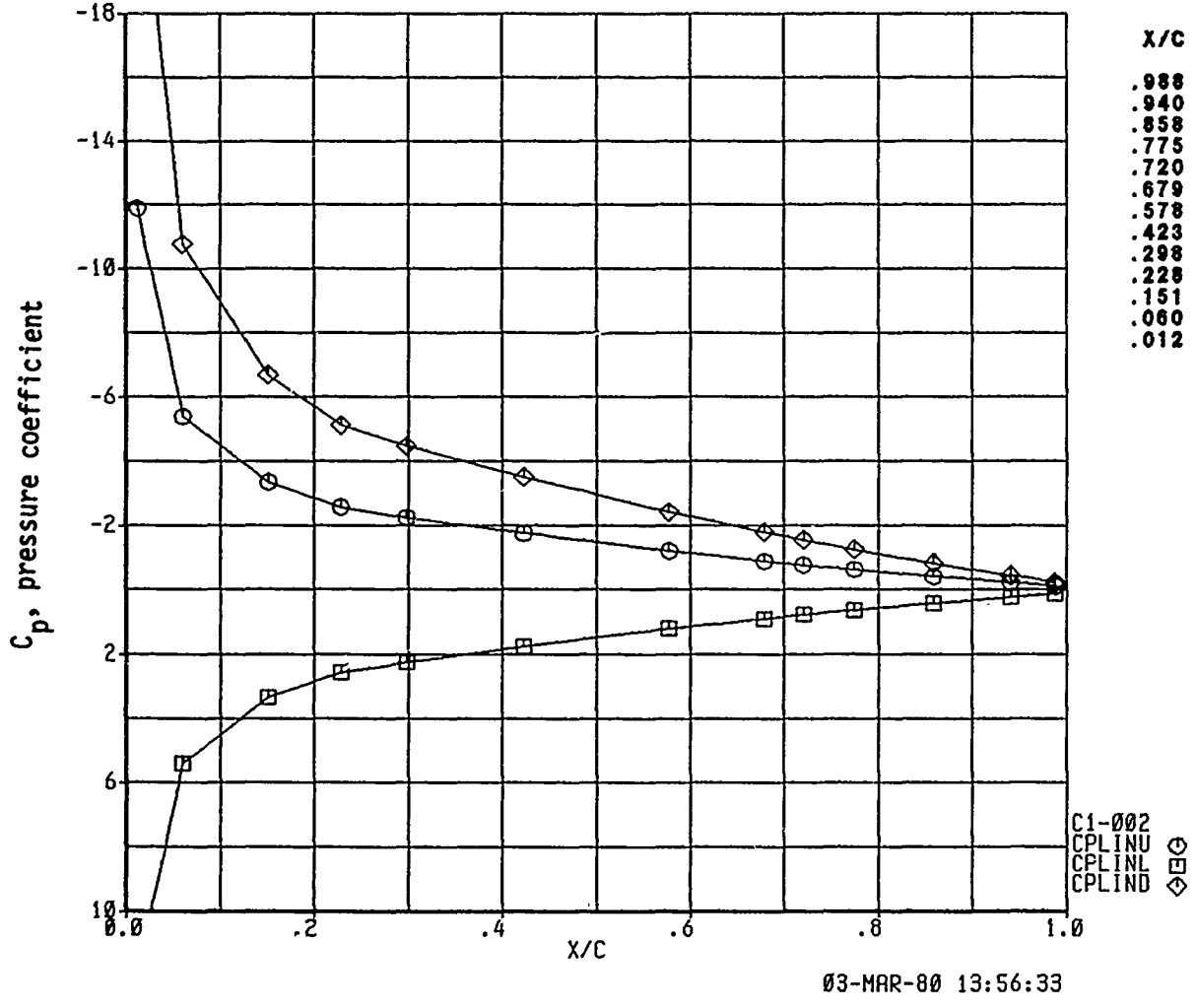
MACH NO. = 0.800 ANGLE OF ATTACK = 0.000
0.3524



X/C	PRESSURE COEFFICIENT UPPER	LOWER	DIFF
.988	-.1025	0.1025	-.2049
.940	-.2132	0.2132	-.4265
.858	-.4144	0.4144	-.8289
.774	-.6548	0.6548	-1.309
.720	-.8112	0.8112	-1.622
.679	-.9351	0.9351	-1.870
.578	-1.259	1.2587	-2.517
.423	-1.778	1.7779	-3.556
.298	-2.187	2.1866	-4.373
.228	-2.434	2.4335	-4.867
.151	-3.006	3.0061	-6.012
.060	-4.426	4.4265	-8.853
.012	-9.211	9.2108	-18.42

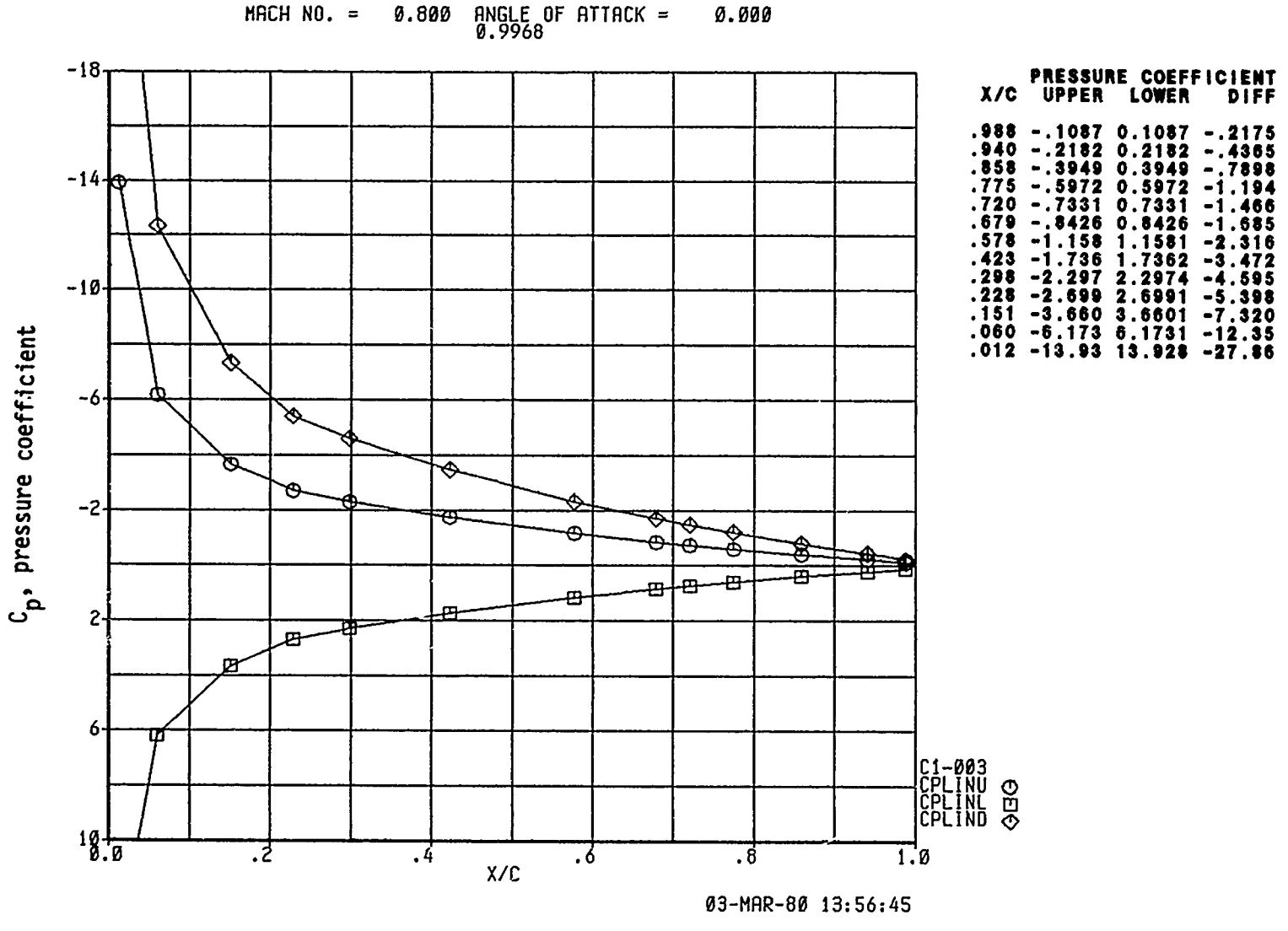
Figure 227, Chordwise Pressure Distribution, Real, Configuration 1

MACH NO. = 0.800 ANGLE OF ATTACK = 0.000
0.6853



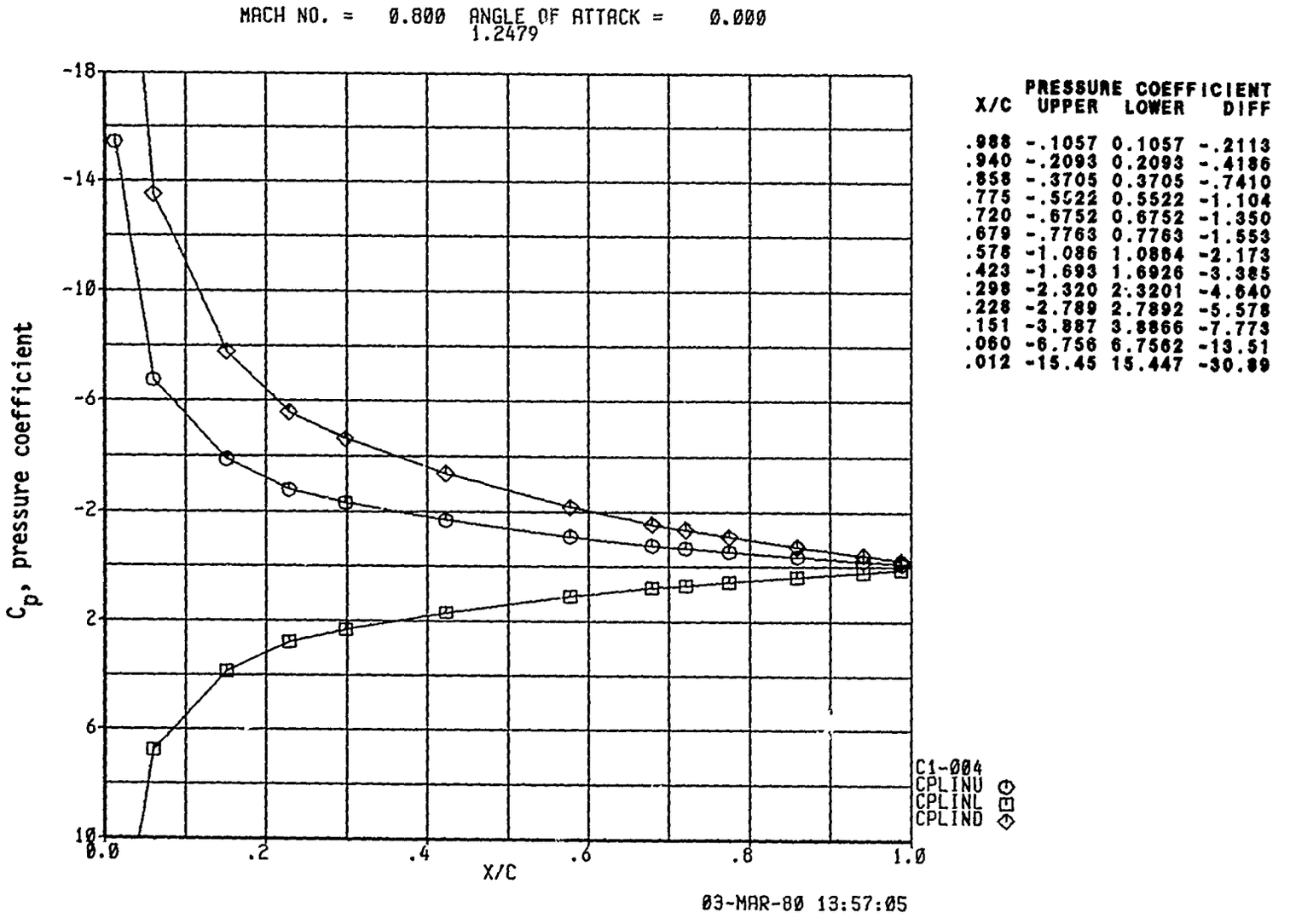
X/C	PRESSURE COEFFICIENT UPPER	LOWER	DIFF
.988	-.1071	0.1071	-.2140
.940	-.2183	0.2183	-.4366
.858	-.4079	0.4079	-.8158
.775	-.6280	0.6280	-1.256
.720	-.7739	0.7739	-1.548
.679	-.8900	0.8900	-1.780
.578	-1.207	1.2067	-2.413
.423	-1.750	1.7499	-3.500
.298	-2.233	2.2327	-4.465
.228	-2.560	2.5599	-5.120
.151	-3.343	3.3431	-6.686
.060	-5.388	5.3878	-10.76
.012	-11.90	11.898	-23.80

Figure 228, Chordwise Pressure Distribution, Real, Configuration 1



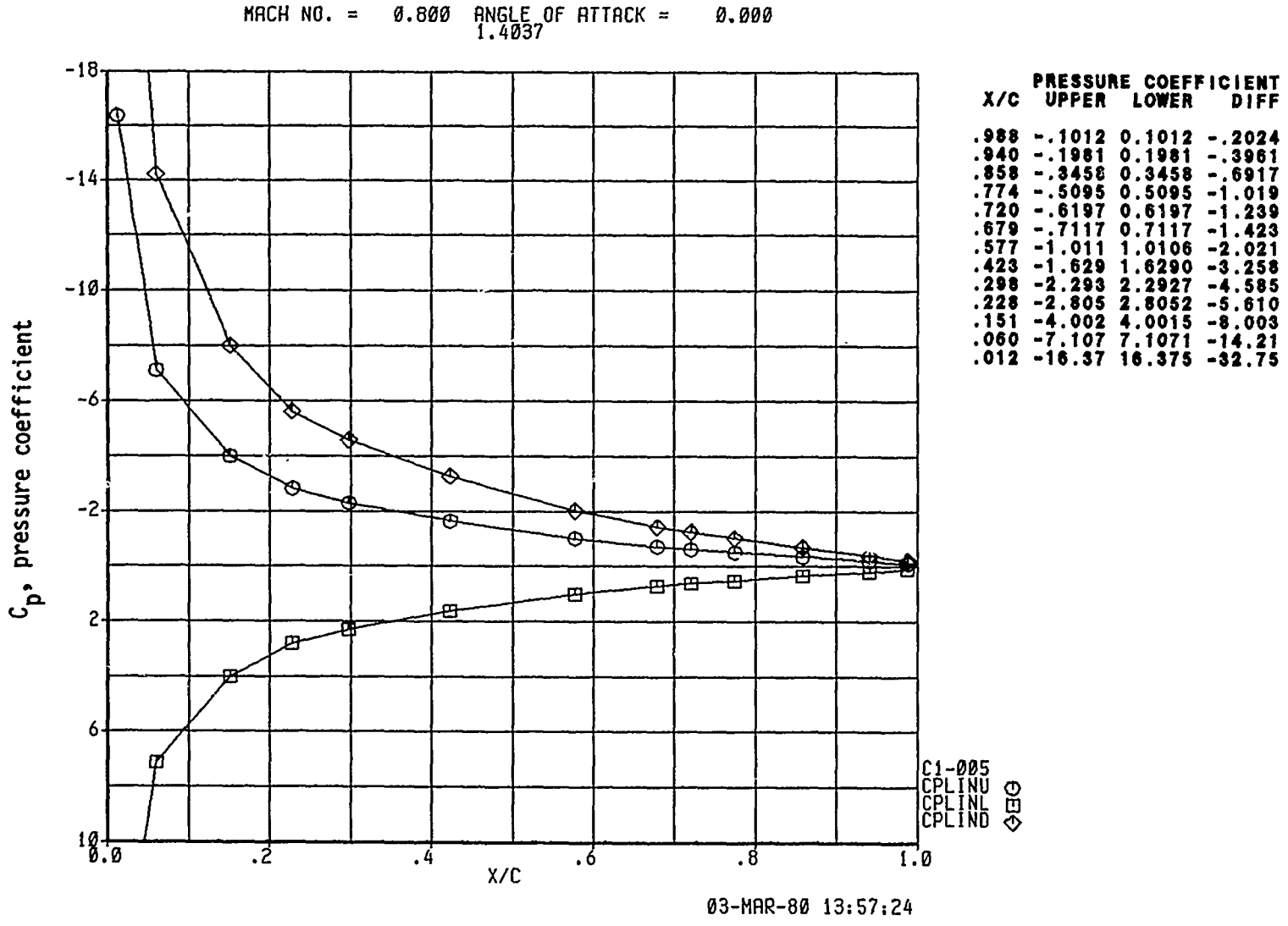
X/C	PRESSURE COEFFICIENT UPPER	LOWER	DIFF
.988	-.1087	0.1087	-.2175
.940	-.2182	0.2182	-.4365
.858	-.3949	0.3949	-.7898
.775	-.5972	0.5972	-1.194
.720	-.7331	0.7331	-1.466
.679	-.8426	0.8426	-1.685
.578	-1.158	1.1581	-2.316
.423	-1.736	1.7362	-3.472
.298	-2.297	2.2974	-4.595
.228	-2.699	2.6991	-5.398
.151	-3.660	3.6601	-7.320
.060	-6.173	6.1731	-12.35
.012	-13.93	13.928	-27.86

Figure 229, Chordwise Pressure Distribution, Real, Configuration 1



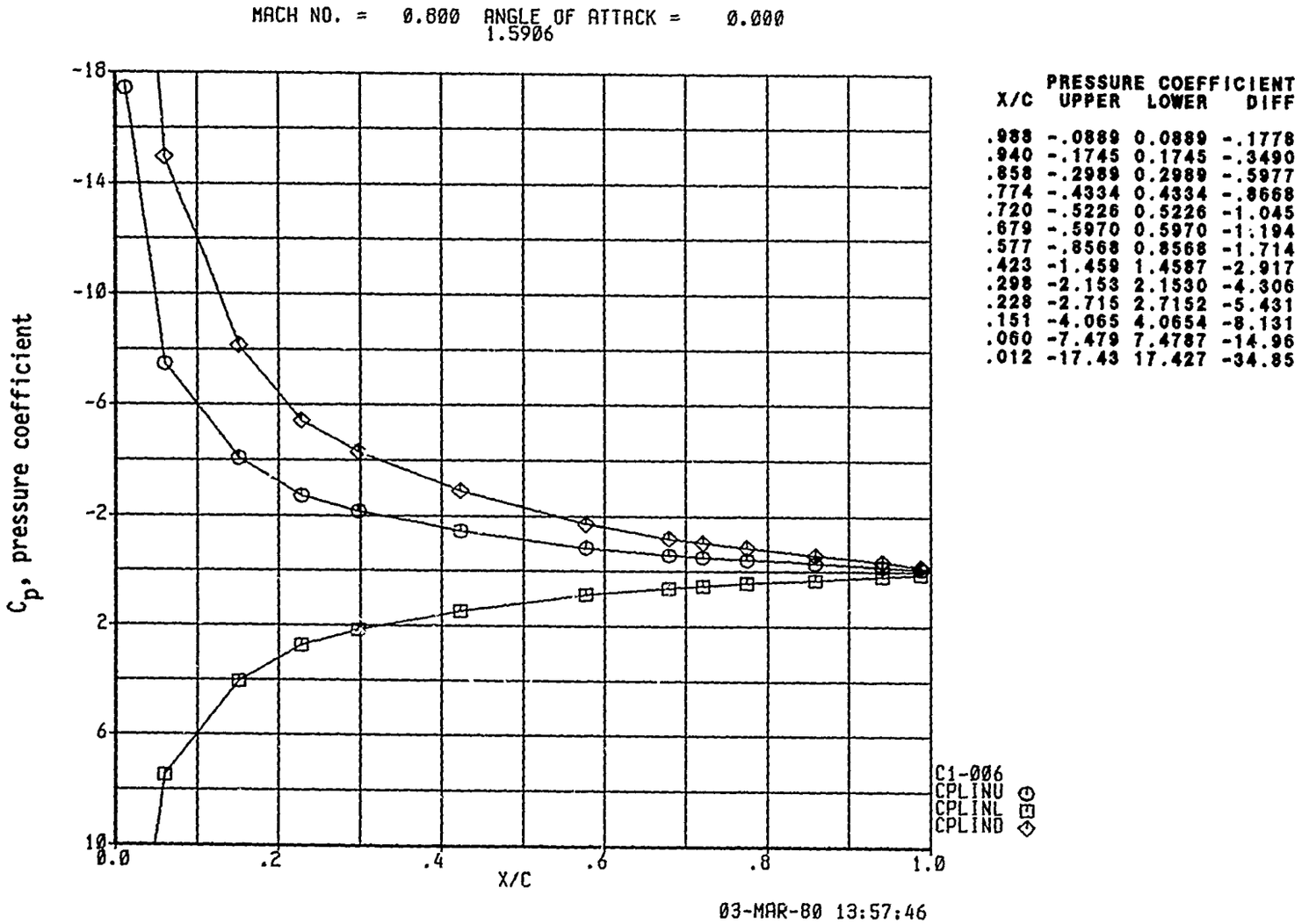
X/C	PRESSURE COEFFICIENT UPPER	LOWER	DIFF
.988	-.1057	0.1057	-.2113
.940	-.2093	0.2093	-.4186
.858	-.3705	0.3705	-.7410
.775	-.5522	0.5522	-1.104
.720	-.6752	0.6752	-1.350
.679	-.7763	0.7763	-1.553
.576	-1.086	1.0864	-2.173
.423	-1.693	1.6926	-3.385
.298	-2.320	2.3201	-4.640
.228	-2.789	2.7892	-5.578
.151	-3.887	3.8866	-7.773
.060	-6.756	6.7562	-13.51
.012	-15.45	15.447	-30.89

Figure 230, Chordwise Pressure Distribution, Real, Configuration 1



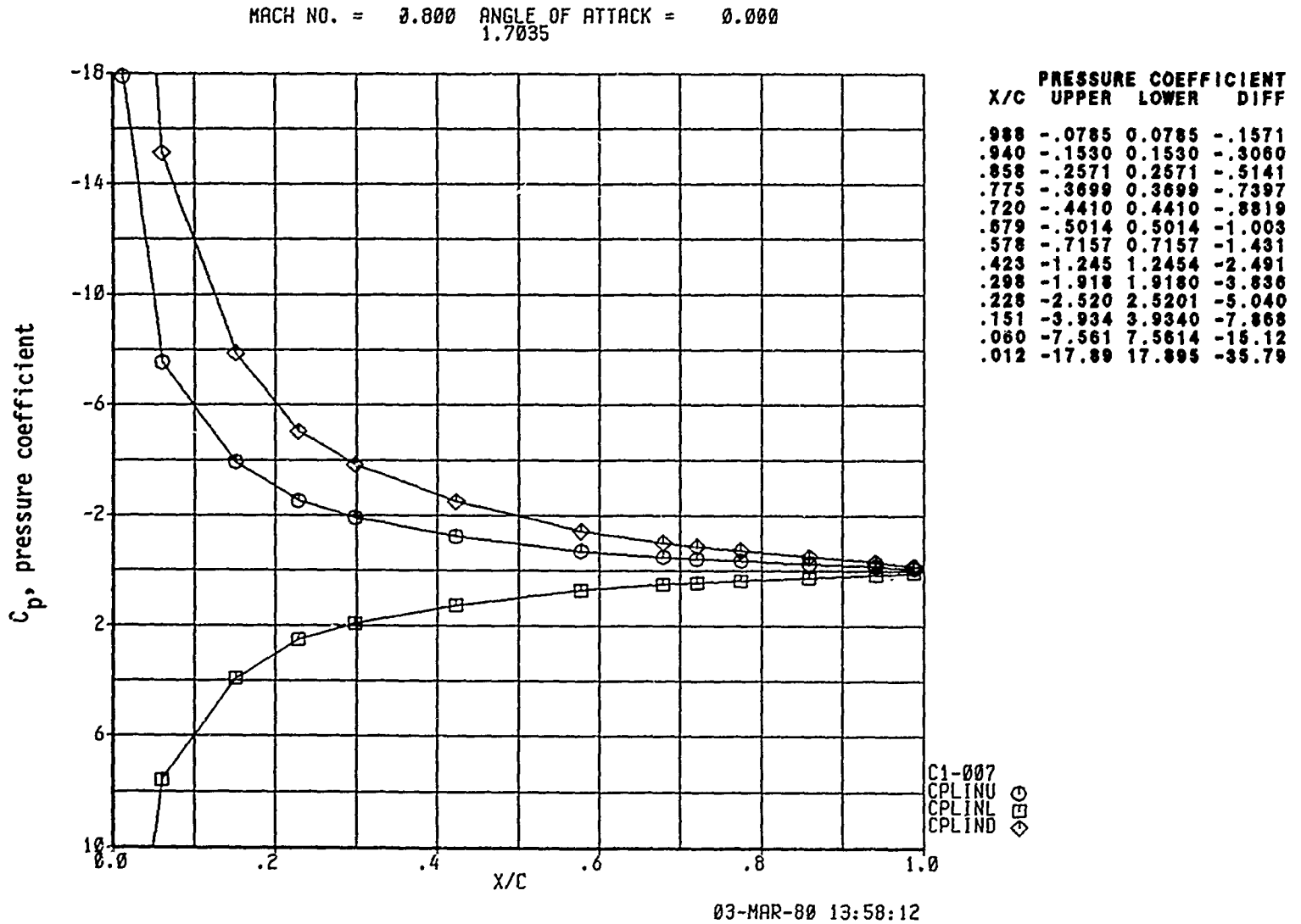
X/C	PRESSURE COEFFICIENT UPPER	LOWER	DIFF
.988	-.1012	0.1012	-.2024
.940	-.1981	0.1981	-.3961
.858	-.3458	0.3458	-.6917
.774	-.5095	0.5095	-1.019
.720	-.6197	0.6197	-1.239
.679	-.7117	0.7117	-1.423
.577	-1.011	1.0106	-2.021
.423	-1.629	1.6290	-3.258
.298	-2.293	2.2927	-4.585
.228	-2.805	2.8052	-5.610
.151	-4.002	4.0015	-8.003
.060	-7.107	7.1071	-14.21
.012	-16.37	16.375	-32.75

Figure 231, Chordwise Pressure Distribution, Real, Configuration 1



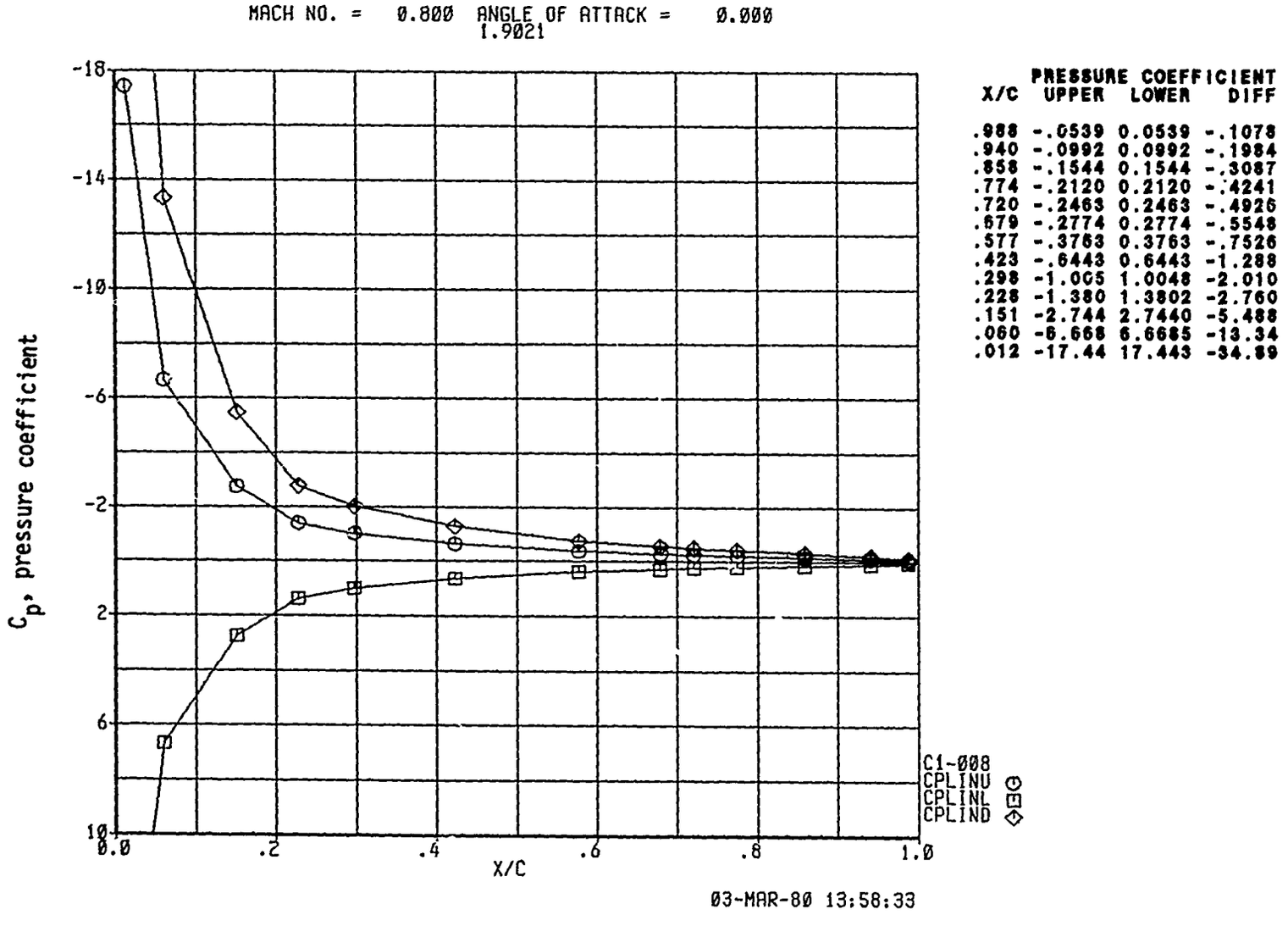
X/C	PRESSURE COEFFICIENT UPPER	LOWER	DIFF
.988	-.0889	0.0889	-.1778
.940	-.1745	0.1745	-.3490
.858	-.2989	0.2989	-.5977
.774	-.4334	0.4334	-.8668
.720	-.5226	0.5226	-1.045
.679	-.5970	0.5970	-1.194
.577	-.8568	0.8568	-1.714
.423	-1.459	1.4587	-2.917
.298	-2.153	2.1530	-4.306
.228	-2.715	2.7152	-5.431
.151	-4.065	4.0654	-8.131
.060	-7.479	7.4787	-14.96
.012	-17.43	17.427	-34.85

Figure 232, Chordwise Pressure Distribution, Real, Configuration 1



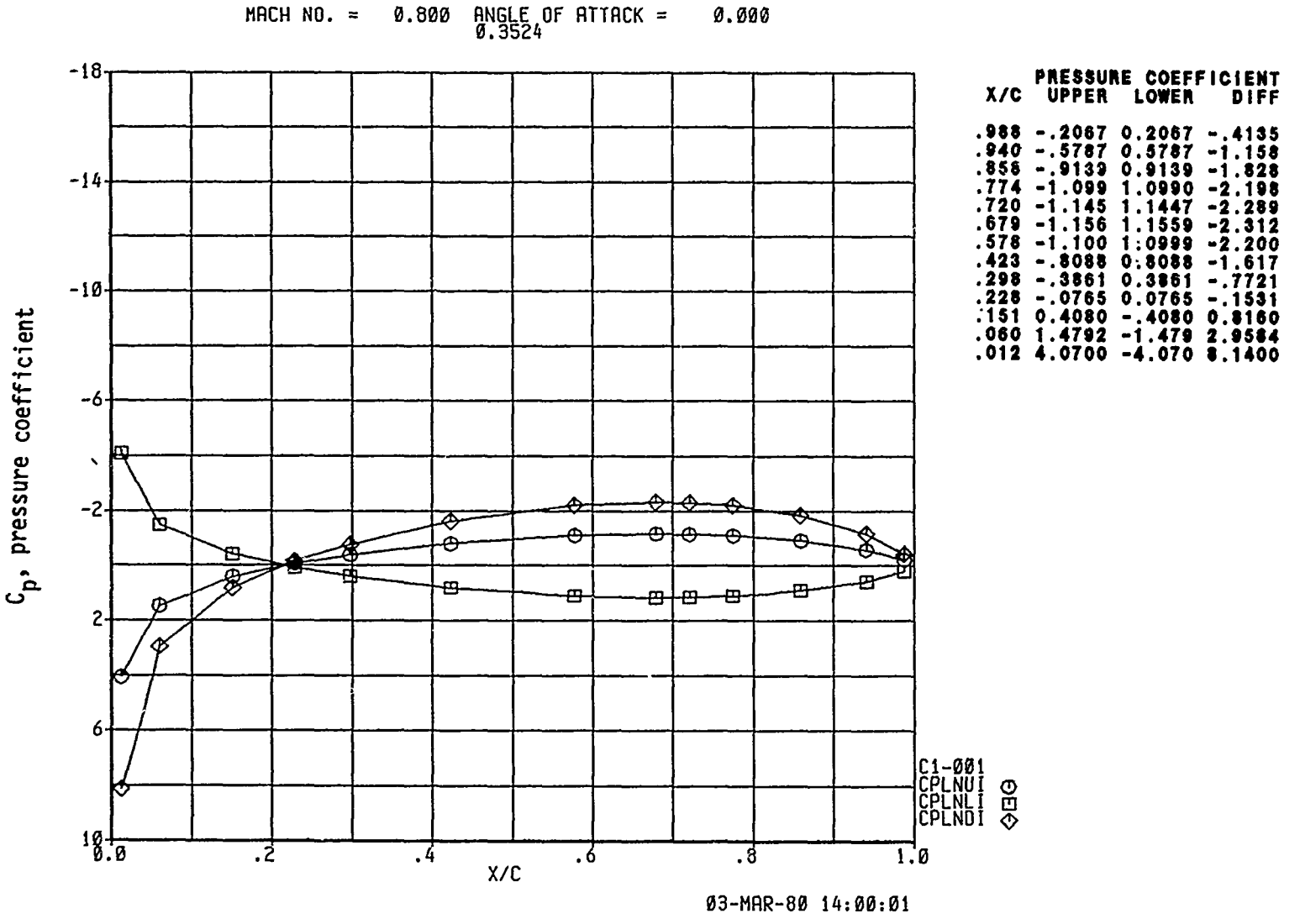
X/C	PRESSURE COEFFICIENT UPPER	LOWER	DIFF
.988	-.0785	0.0785	-.1571
.940	-.1530	0.1530	-.3060
.858	-.2571	0.2571	-.5141
.775	-.3699	0.3699	-.7397
.720	-.4410	0.4410	-.8819
.679	-.5014	0.5014	-1.003
.578	-.7157	0.7157	-1.431
.423	-1.245	1.2454	-2.491
.298	-1.918	1.9180	-3.836
.228	-2.520	2.5201	-5.040
.151	-3.934	3.9340	-7.868
.060	-7.561	7.5614	-15.12
.012	-17.89	17.895	-35.79

Figure 233, Chordwise Pressure Distribution, Real, Configuration 1



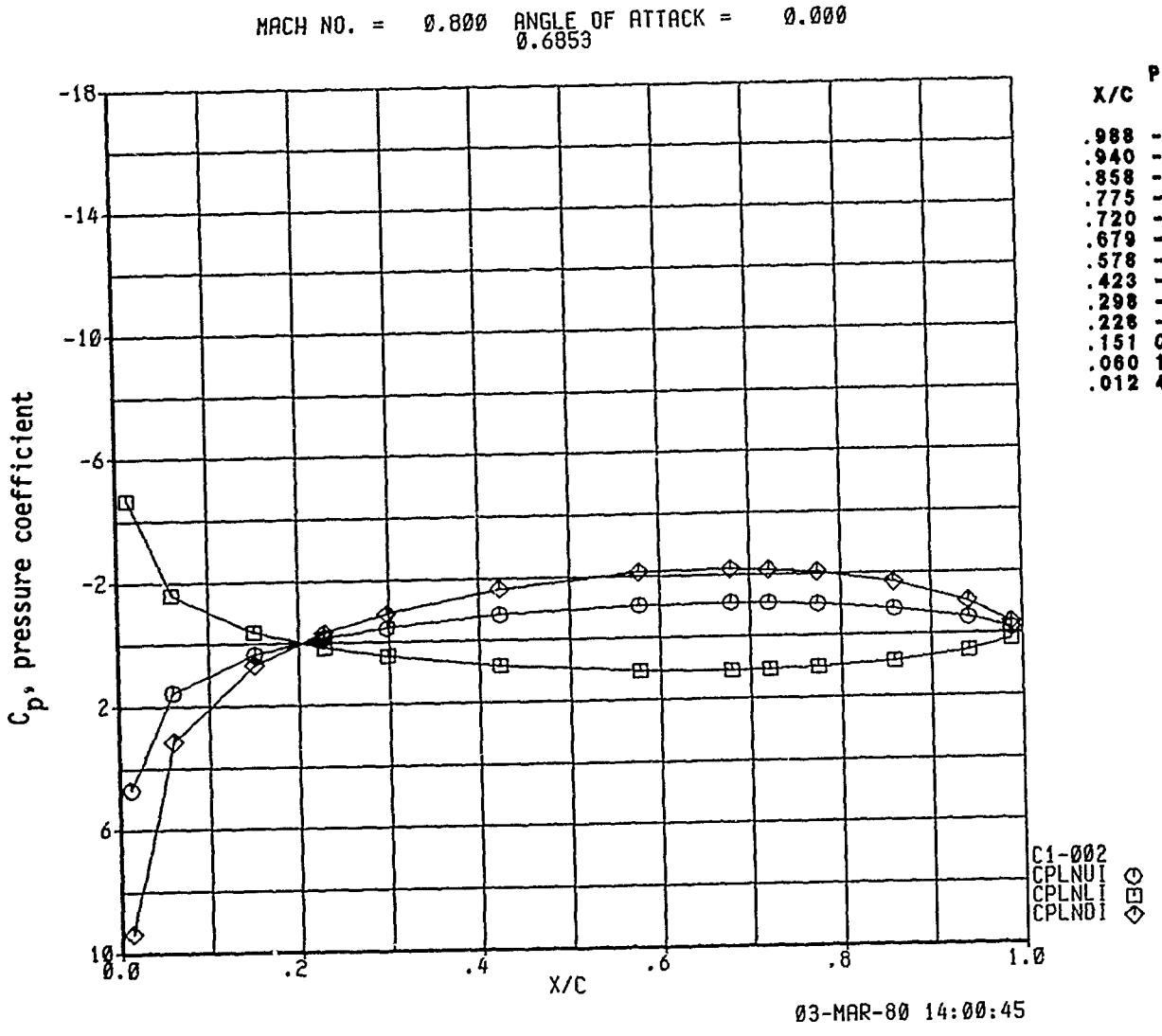
X/C	PRESSURE COEFFICIENT UPPER	LOWER	DIFF
.988	-.0539	0.0539	-.1078
.940	-.0992	0.0992	-.1984
.858	-.1544	0.1544	-.3087
.774	-.2120	0.2120	-.4241
.720	-.2463	0.2463	-.4926
.679	-.2774	0.2774	-.5548
.577	-.3763	0.3763	-.7526
.423	-.6443	0.6443	-1.288
.298	-1.005	1.0048	-2.010
.228	-1.380	1.3802	-2.760
.151	-2.744	2.7440	-5.488
.060	-6.668	6.6685	-13.34
.012	-17.44	17.443	-34.89

Figure 234, Chordwise Pressure Distribution, Real, Configuration 1



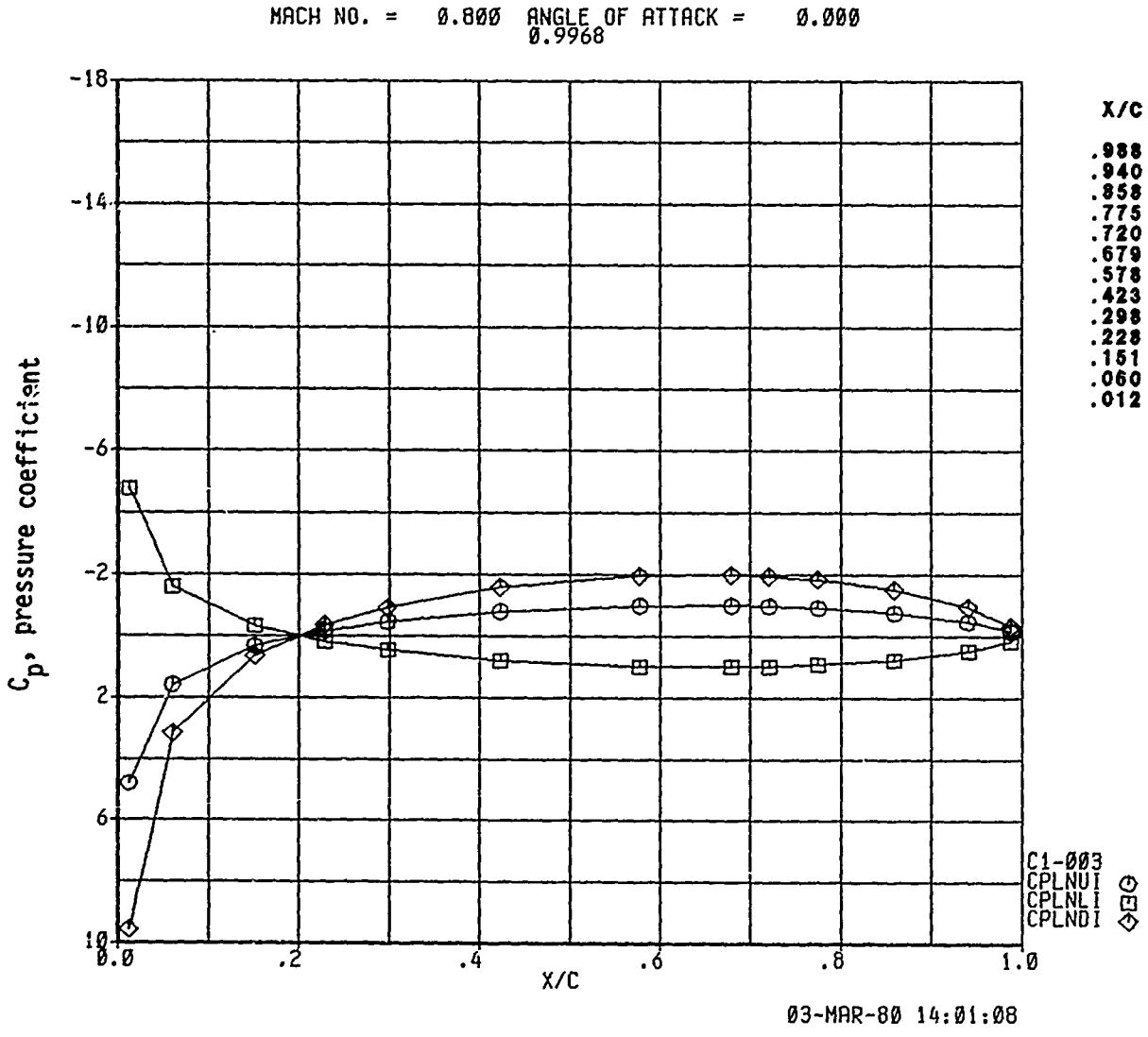
X/C	PRESSURE COEFFICIENT UPPER	LOWER	DIFF
.988	-.2067	0.2067	-.4135
.940	-.5787	0.5787	-1.158
.856	-.9139	0.9139	-1.828
.774	-1.099	1.0990	-2.198
.720	-1.145	1.1447	-2.289
.679	-1.156	1.1559	-2.312
.578	-1.100	1.0999	-2.200
.423	-.8088	0.8088	-1.617
.298	-.3861	0.3861	-.7721
.228	-.0765	0.0765	-.1531
.151	0.4080	-.4080	0.8160
.060	1.4792	-1.479	2.9584
.012	4.0700	-4.070	8.1400

Figure 235, Chordwise Pressure Distribution, Imaginary, Configuration 1



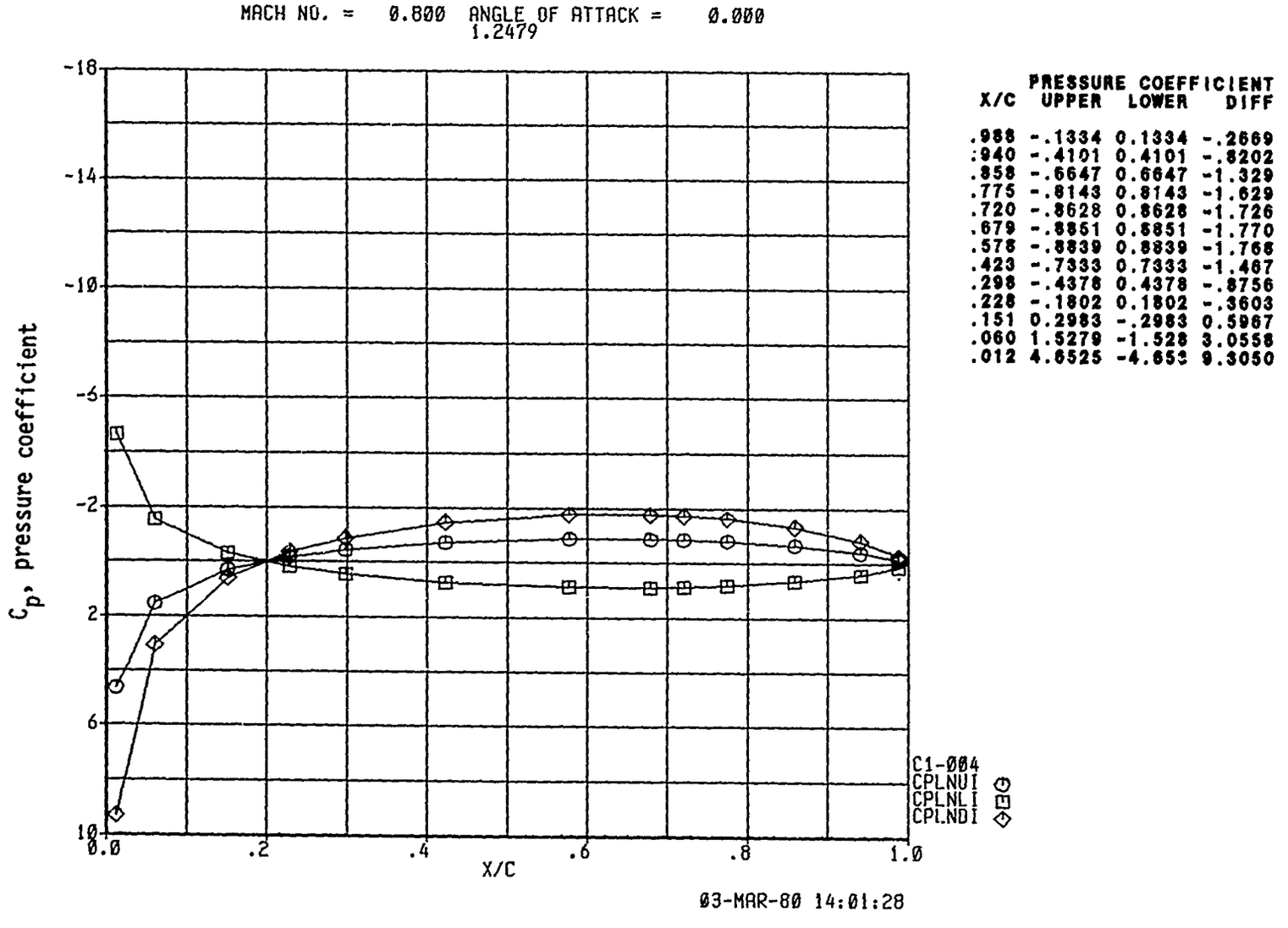
X/C	PRESSURE COEFFICIENT UPPER	LOWER	DIFF
.988	-.1849	0.1849	-.3698
.940	-.5332	0.5332	-1.066
.858	-.8472	0.8472	-1.694
.775	-1.023	1.0225	-2.045
.720	-1.072	1.0717	-2.143
.679	-1.089	1.0892	-2.178
.578	-1.059	1.0592	-2.118
.423	-.8284	0.8284	-1.657
.298	-.4558	0.4558	-.9116
.226	-.1605	0.1605	-.3212
.151	0.3460	-.3460	0.6920
.060	1.5786	-1.579	3.1573
.012	4.6811	-4.681	9.3620

Figure 236, Chordwise Pressure Distribution, Imaginary, Configuration 1



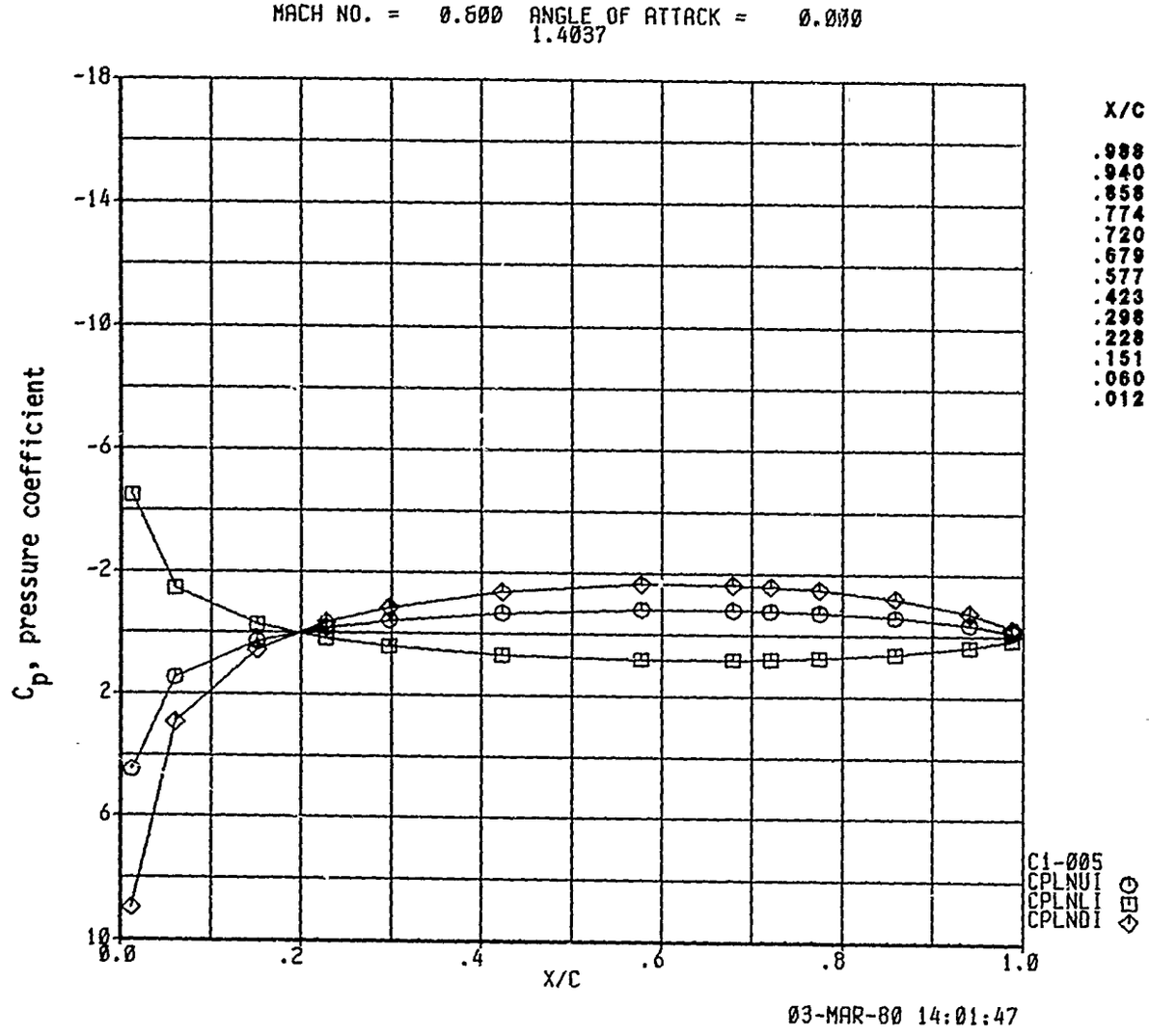
X/C	PRESSURE COEFFICIENT UPPER	LOWER	DIFF
.988	-.1563	0.1563	-.3125
.940	-.4702	0.4702	-.9406
.858	-.7566	0.7566	-1.513
.775	-.9192	0.9192	-1.838
.720	-.9694	0.9694	-1.939
.679	-.9906	0.9906	-1.981
.578	-.9779	0.9779	-1.956
.423	-.7914	0.7914	-1.583
.298	-.4588	0.4588	-.9178
.228	-.1822	0.1822	-.3645
.151	0.3196	-.3196	0.6391
.060	1.5844	-1.584	3.1690
.012	4.7871	-4.787	9.5743

Figure 237, Chordwise Pressure Distribution, Imaginary, Configuration 1



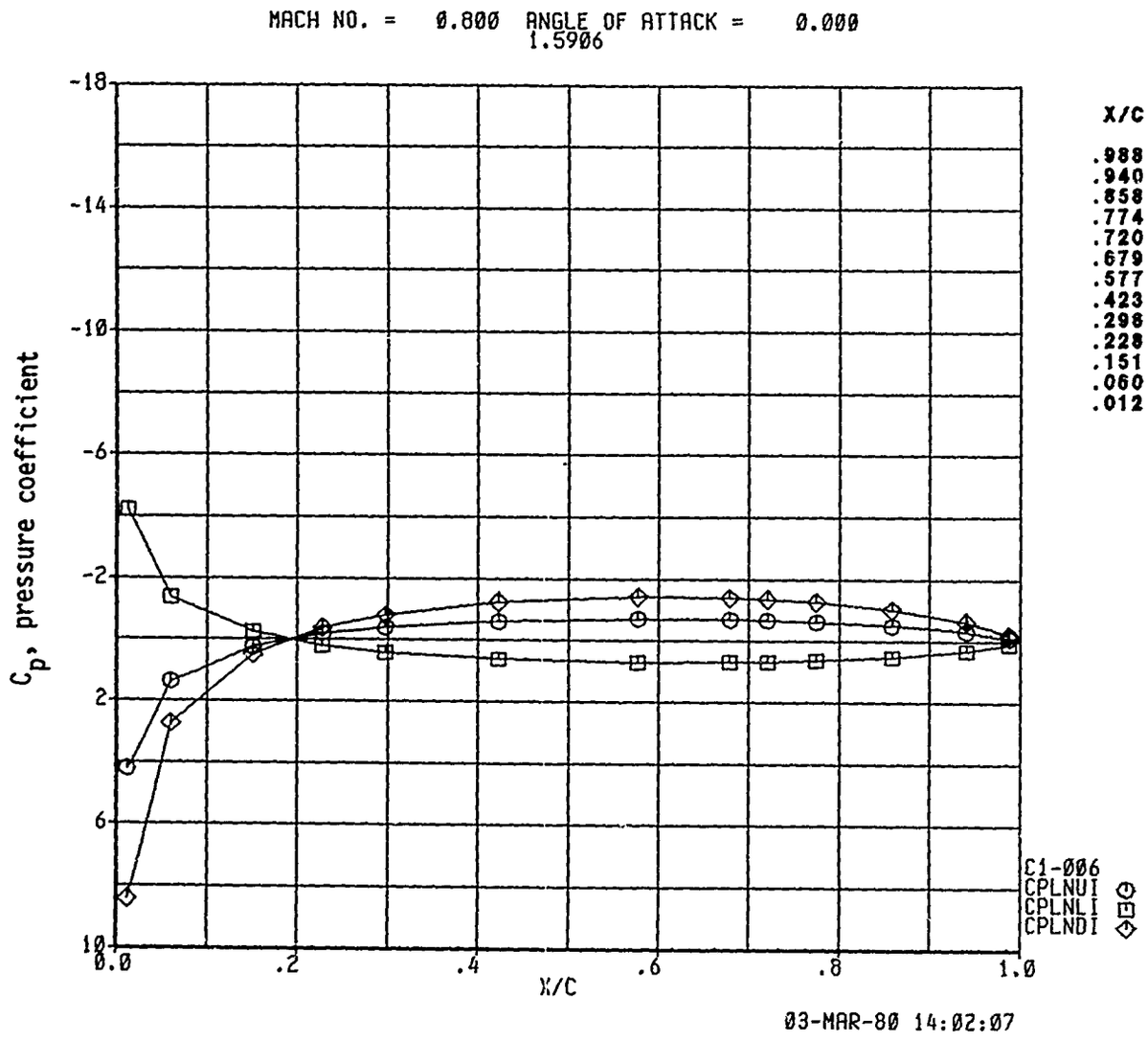
X/C	PRESSURE COEFFICIENT UPPER	LOWER	DIFF
.988	-.1334	0.1334	-.2669
.940	-.4101	0.4101	-.8202
.858	-.6647	0.6647	-1.329
.775	-.8143	0.8143	-1.629
.720	-.8628	0.8628	-1.726
.679	-.8851	0.8851	-1.770
.578	-.8839	0.8839	-1.768
.423	-.7333	0.7333	-1.467
.298	-.4378	0.4378	-.8756
.228	-.1802	0.1802	-.3603
.151	0.2983	-.2983	0.5967
.060	1.5279	-1.528	3.0558
.012	4.6525	-4.653	9.3050

Figure 238, Chordwise Pressure Distribution, Imaginary, Configuration 1



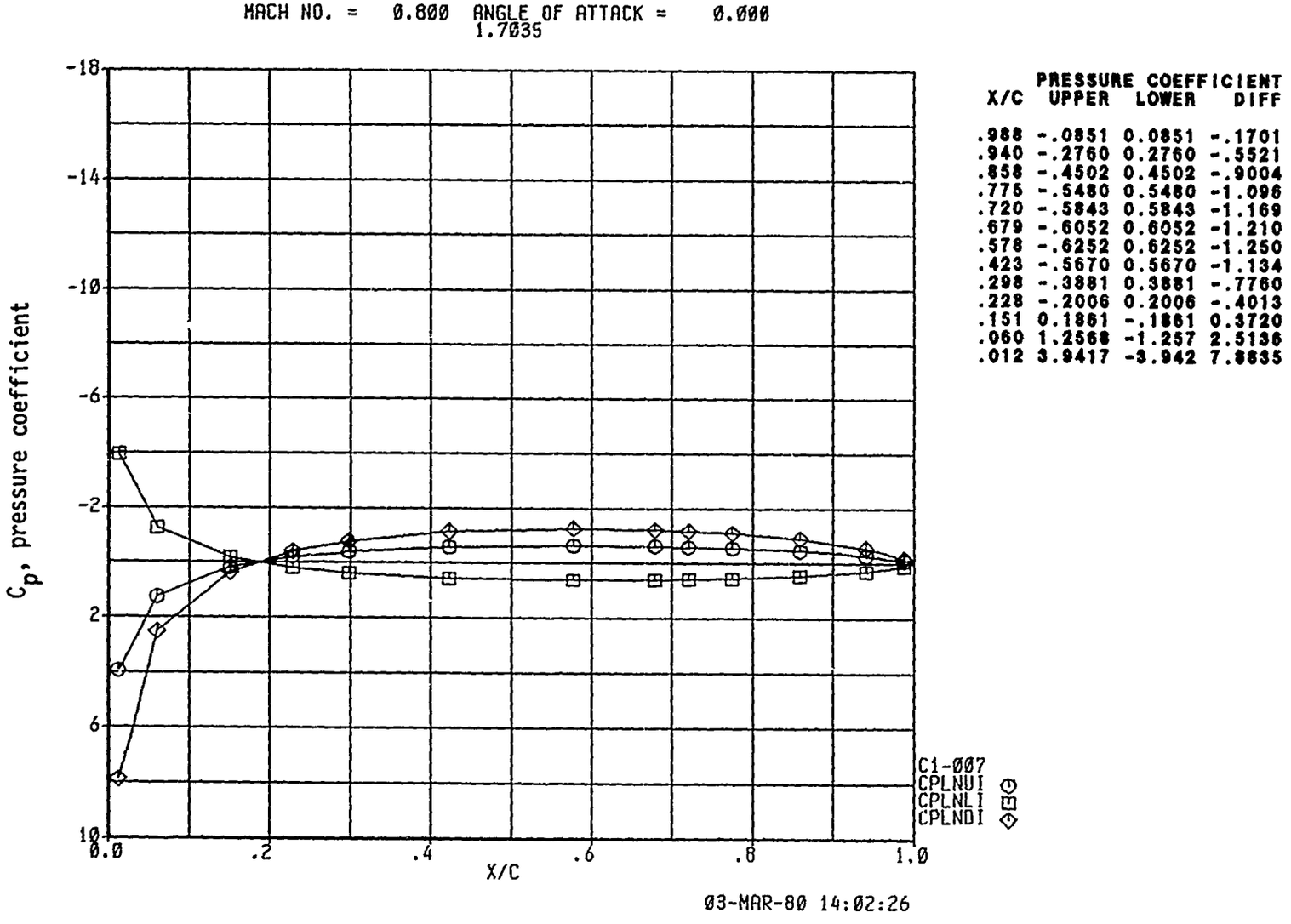
X/C	PRESSURE COEFFICIENT UPPER	LOWER	DIFF
.988	-.1201	0.1201	-.2402
.940	-.3693	0.3693	-.7387
.858	-.5993	0.5993	-1.199
.774	-.7395	0.7395	-1.479
.720	-.7855	0.7855	-1.571
.679	-.8077	0.8077	-1.615
.577	-.8132	0.8132	-1.627
.423	-.6873	0.6873	-1.375
.298	-.4217	0.4217	-.8433
.228	-.1805	0.1805	-.3610
.151	0.2794	-.2794	0.5588
.060	1.4720	-1.472	2.9439
.012	4.4947	-4.495	8.9894

Figure 239, Chordwise Pressure Distribution, Imaginary, Configuration 1



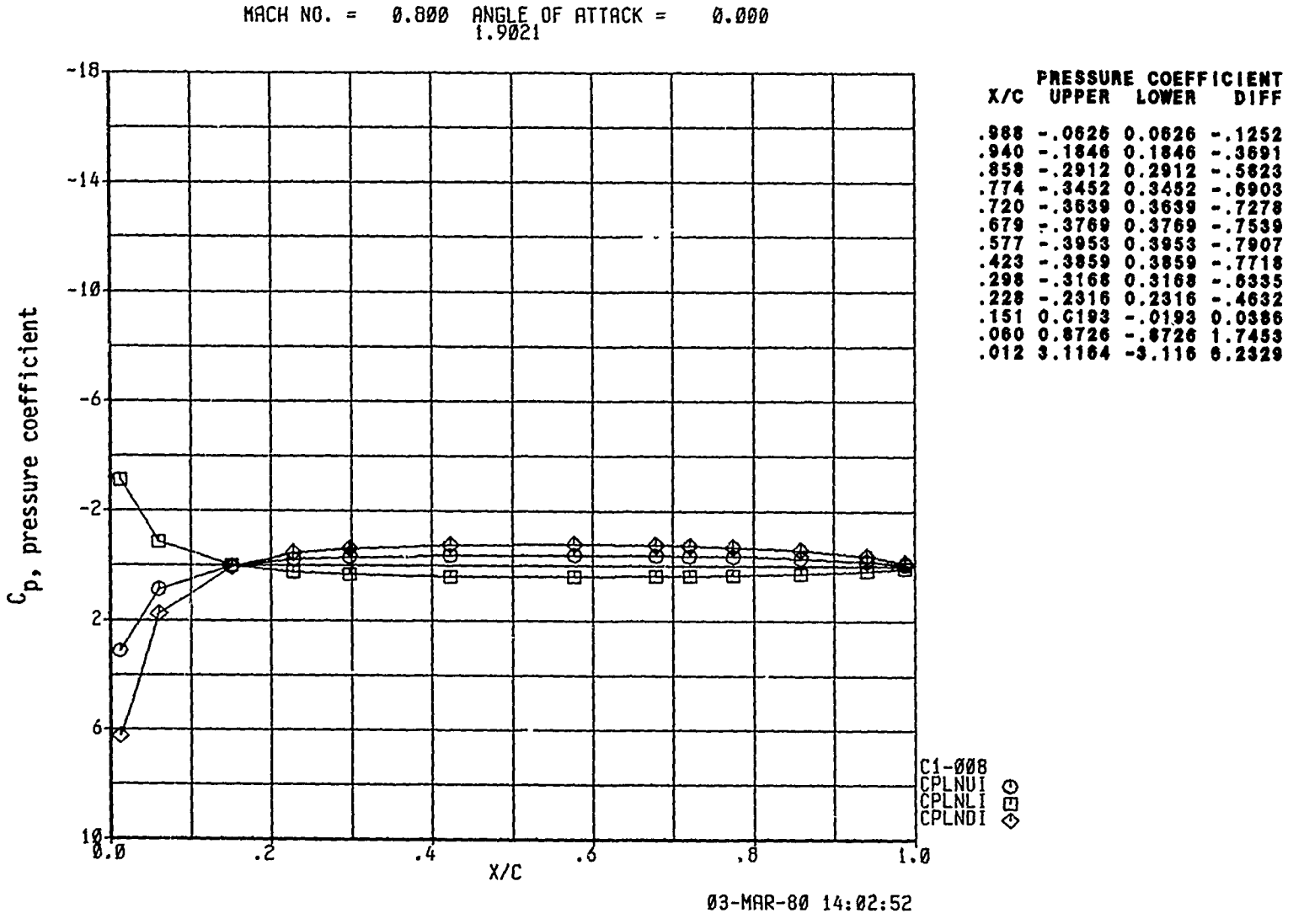
X/C	PRESSURE COEFFICIENT UPPER	LOWER	DIFF
.988	-.1021	0.1021	-.2043
.940	-.3162	0.3162	-.6324
.858	-.5121	0.5121	-1.024
.774	-.6328	0.6328	-1.266
.720	-.6742	0.6742	-1.349
.679	-.6960	0.6960	-1.392
.577	-.7108	0.7108	-1.421
.423	-.6220	0.6220	-1.244
.298	-.4025	0.4025	-.8051
.228	-.1913	0.1913	-.3825
.151	0.2367	-.2367	0.4735
.060	1.3695	-1.370	2.7390
.012	4.2139	-4.214	8.4278

Figure 240, Chordwise Pressure Distribution, Imaginary, Configuration 1



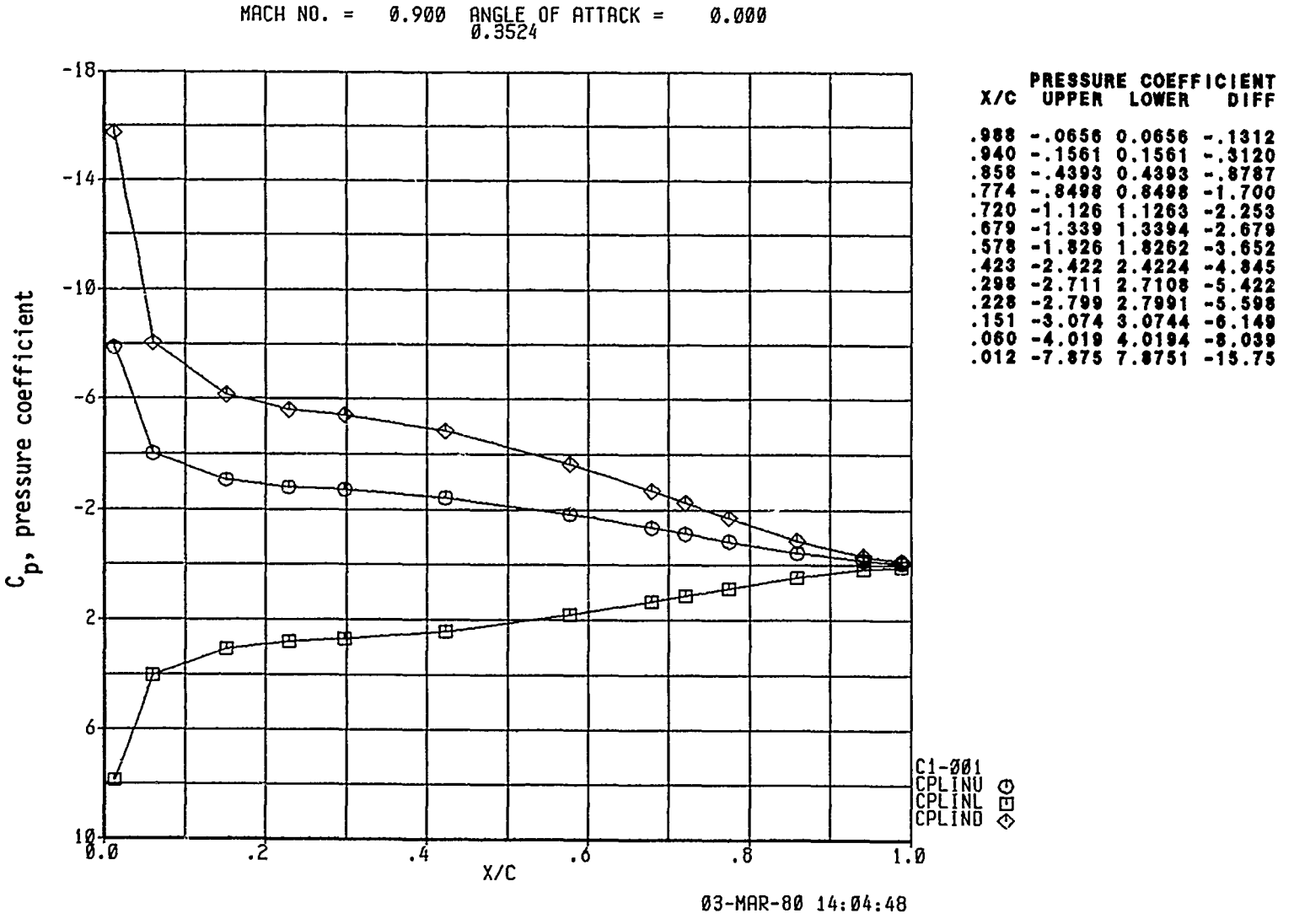
X/C	PRESSURE COEFFICIENT UPPER	LOWER	DIFF
.988	-.0851	0.0851	-.1701
.940	-.2760	0.2760	-.5521
.858	-.4502	0.4502	-.9004
.775	-.5480	0.5480	-1.096
.720	-.5843	0.5843	-1.169
.679	-.6052	0.6052	-1.210
.578	-.6252	0.6252	-1.250
.423	-.5670	0.5670	-1.134
.298	-.3881	0.3881	-.7760
.228	-.2006	0.2006	-.4013
.151	0.1861	-.1861	0.3720
.060	1.2568	-1.257	2.5136
.012	3.9417	-3.942	7.8835

Figure 241, Chordwise Pressure Distribution, Imaginary, Configuration 1



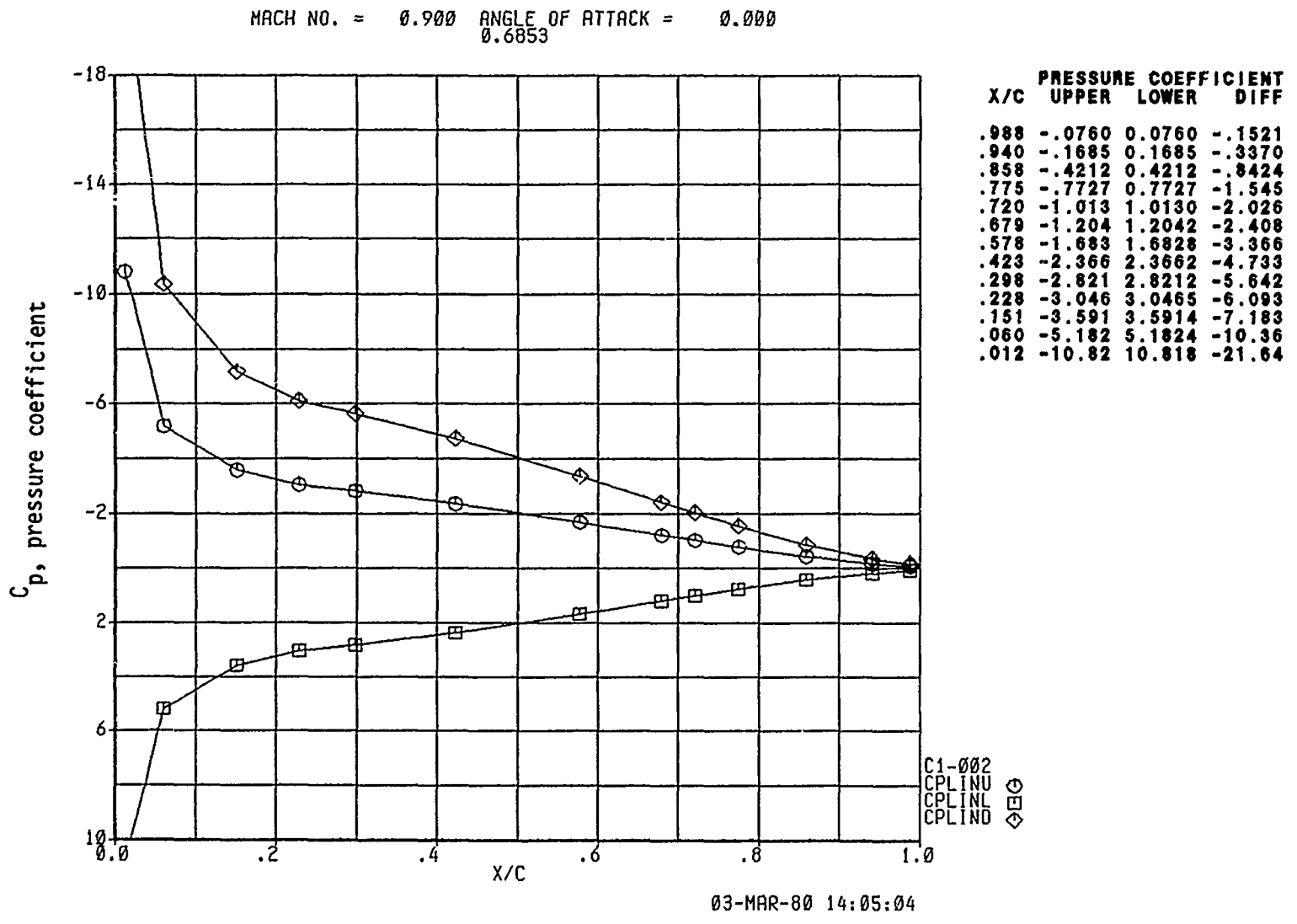
X/C	PRESSURE COEFFICIENT UPPER	LOWER	DIFF
.988	-.0626	0.0626	-.1252
.940	-.1846	0.1846	-.3691
.858	-.2912	0.2912	-.5823
.774	-.3452	0.3452	-.6903
.720	-.3639	0.3639	-.7278
.679	-.3769	0.3769	-.7539
.577	-.3953	0.3953	-.7907
.423	-.3859	0.3859	-.7718
.298	-.3168	0.3168	-.6335
.228	-.2316	0.2316	-.4632
.151	0.0193	-.0193	0.0386
.060	0.8726	-.8726	1.7453
.012	3.1164	-3.116	6.2329

Figure 242, Chordwise Pressure Distribution, Imaginary, Configuration 1



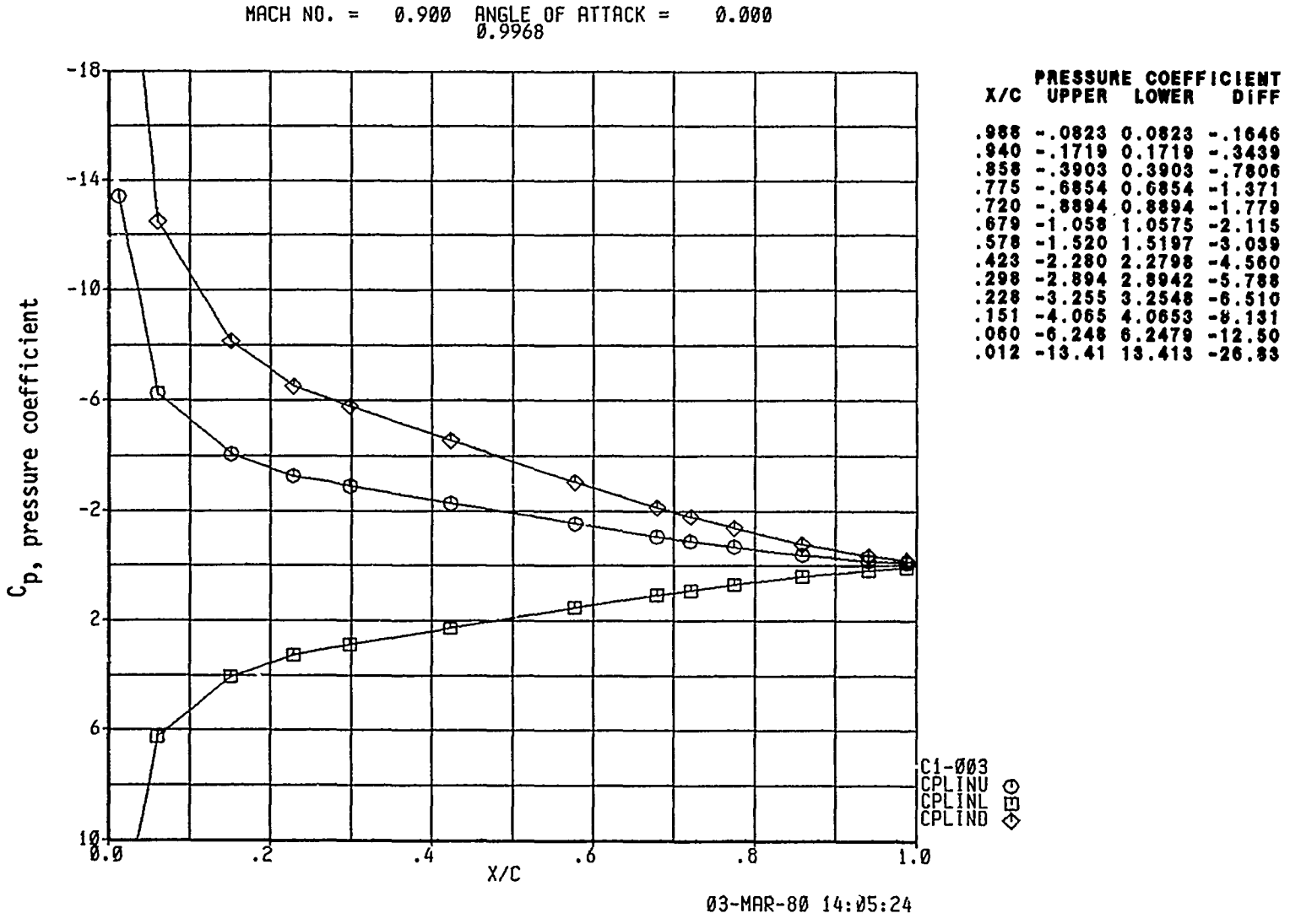
X/C	PRESSURE COEFFICIENT UPPER	LOWER	DIFF
.988	-.0656	0.0656	-.1312
.940	-.1561	0.1561	-.3120
.858	-.4393	0.4393	-.8787
.774	-.8498	0.8498	-1.700
.720	-1.126	1.1263	-2.253
.679	-1.339	1.3394	-2.679
.578	-1.826	1.8262	-3.652
.423	-2.422	2.4224	-4.845
.298	-2.711	2.7108	-5.422
.228	-2.799	2.7991	-5.598
.151	-3.074	3.0744	-6.149
.060	-4.019	4.0194	-8.039
.012	-7.875	7.8751	-15.75

Figure 243, Chordwise Pressure Distribution, Real, Configuration 1



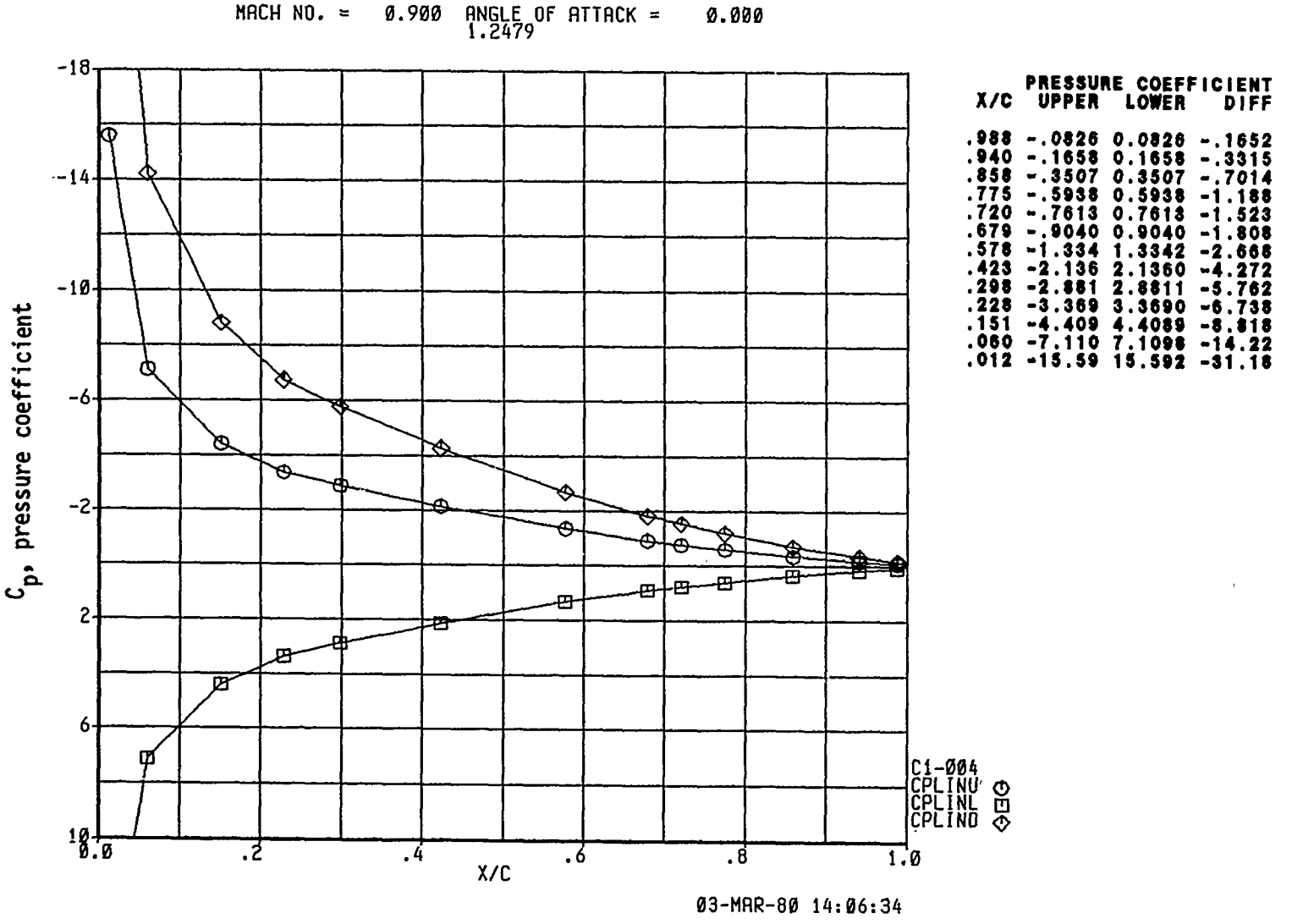
X/C	PRESSURE COEFFICIENT UPPER	LOWER	DIFF
.988	-.0760	0.0760	-.1521
.940	-.1685	0.1685	-.3370
.858	-.4212	0.4212	-.8424
.775	-.7727	0.7727	-1.545
.720	-1.013	1.0130	-2.026
.679	-1.204	1.2042	-2.408
.578	-1.683	1.6828	-3.366
.423	-2.366	2.3662	-4.733
.298	-2.821	2.8212	-5.642
.228	-3.046	3.0465	-6.093
.151	-3.591	3.5914	-7.183
.060	-5.182	5.1824	-10.36
.012	-10.82	10.818	-21.64

Figure 244, Chordwise Pressure Distribution, Real, Configuration 1



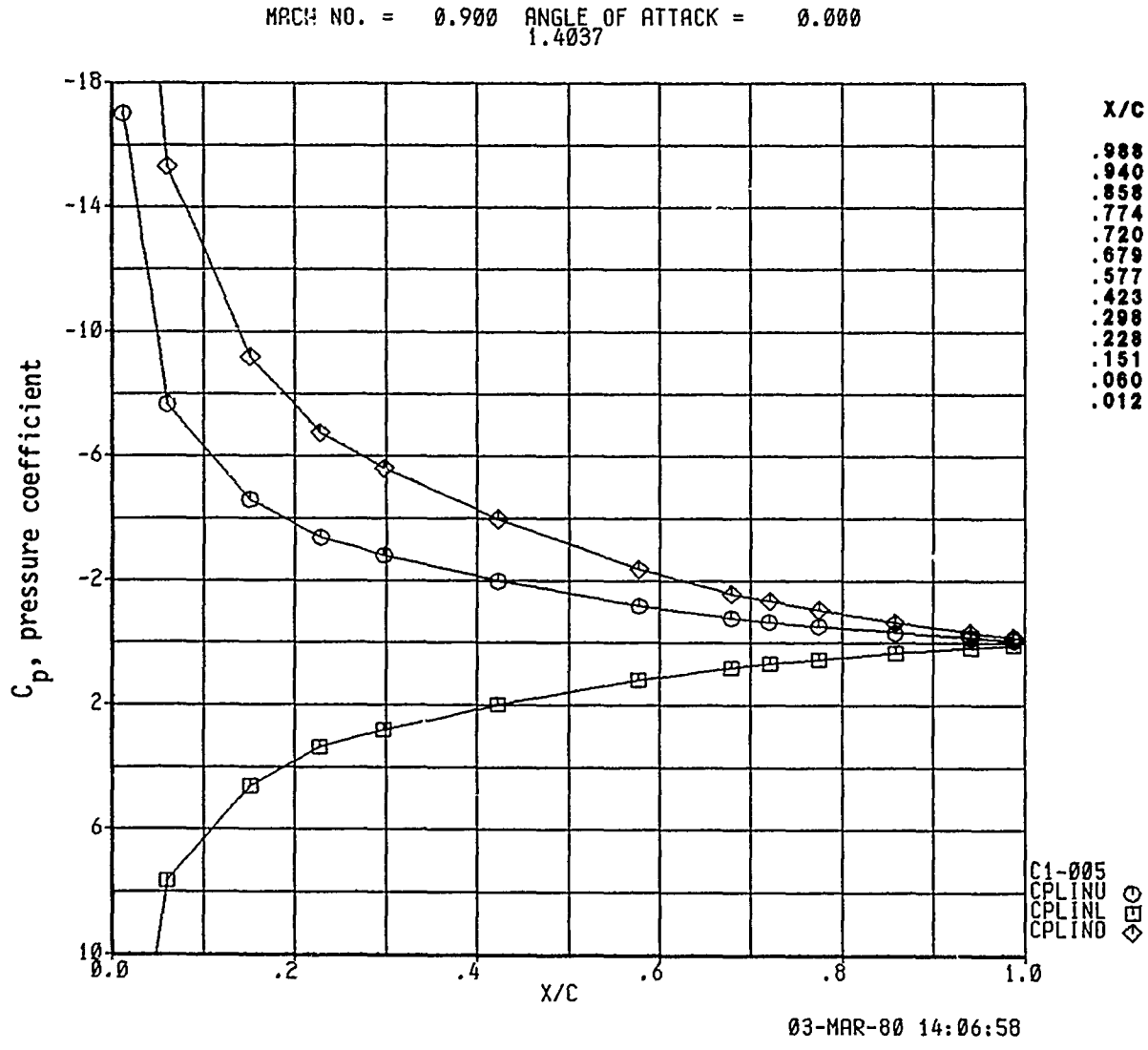
X/C	PRESSURE COEFFICIENT UPPER	LOWER	DIFF
.988	-.0823	0.0823	-.1646
.940	-.1719	0.1719	-.3439
.858	-.3903	0.3903	-.7806
.775	-.6854	0.6854	-1.371
.720	-.8894	0.8894	-1.779
.679	-1.058	1.0575	-2.115
.578	-1.520	1.5197	-3.039
.423	-2.280	2.2798	-4.560
.298	-2.894	2.8942	-5.788
.228	-3.255	3.2548	-6.510
.151	-4.065	4.0653	-8.131
.060	-6.248	6.2479	-12.50
.012	-13.41	13.413	-26.83

Figure 245, Chordwise Pressure Distribution, Real, Configuration 1



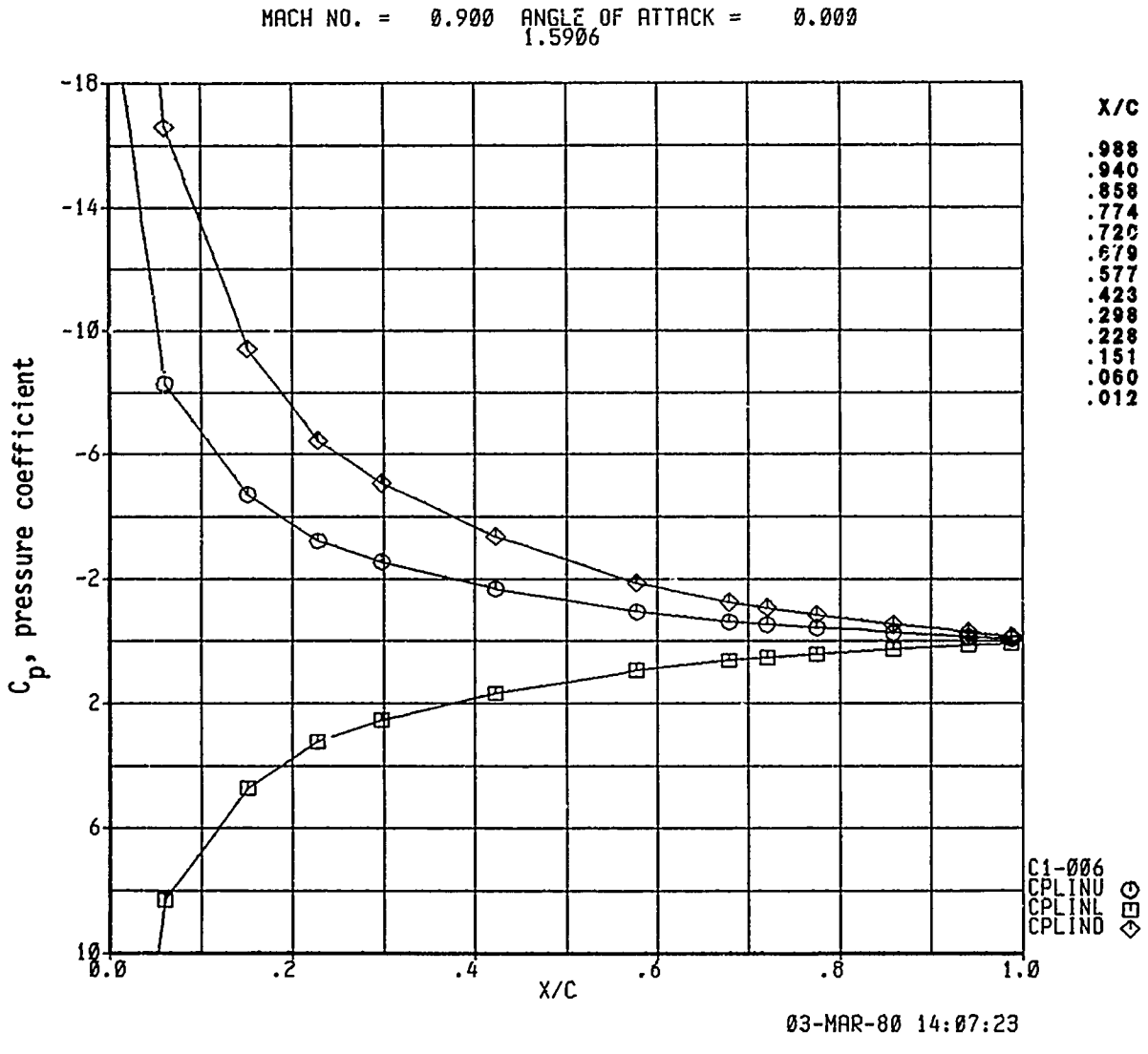
X/C	PRESSURE COEFFICIENT UPPER	LOWER	DIFF
.988	-.0826	0.0826	-.1652
.940	-.1658	0.1658	-.3315
.858	-.3507	0.3507	-.7014
.775	-.5938	0.5938	-1.188
.720	-.7613	0.7613	-1.523
.679	-.9040	0.9040	-1.808
.578	-1.334	1.3342	-2.668
.423	-2.136	2.1360	-4.272
.298	-2.881	2.8811	-5.762
.228	-3.369	3.3690	-6.738
.151	-4.409	4.4089	-8.818
.060	-7.110	7.1098	-14.22
.012	-15.59	15.592	-31.18

Figure 246, Chordwise Pressure Distribution, Real, Configuration 1



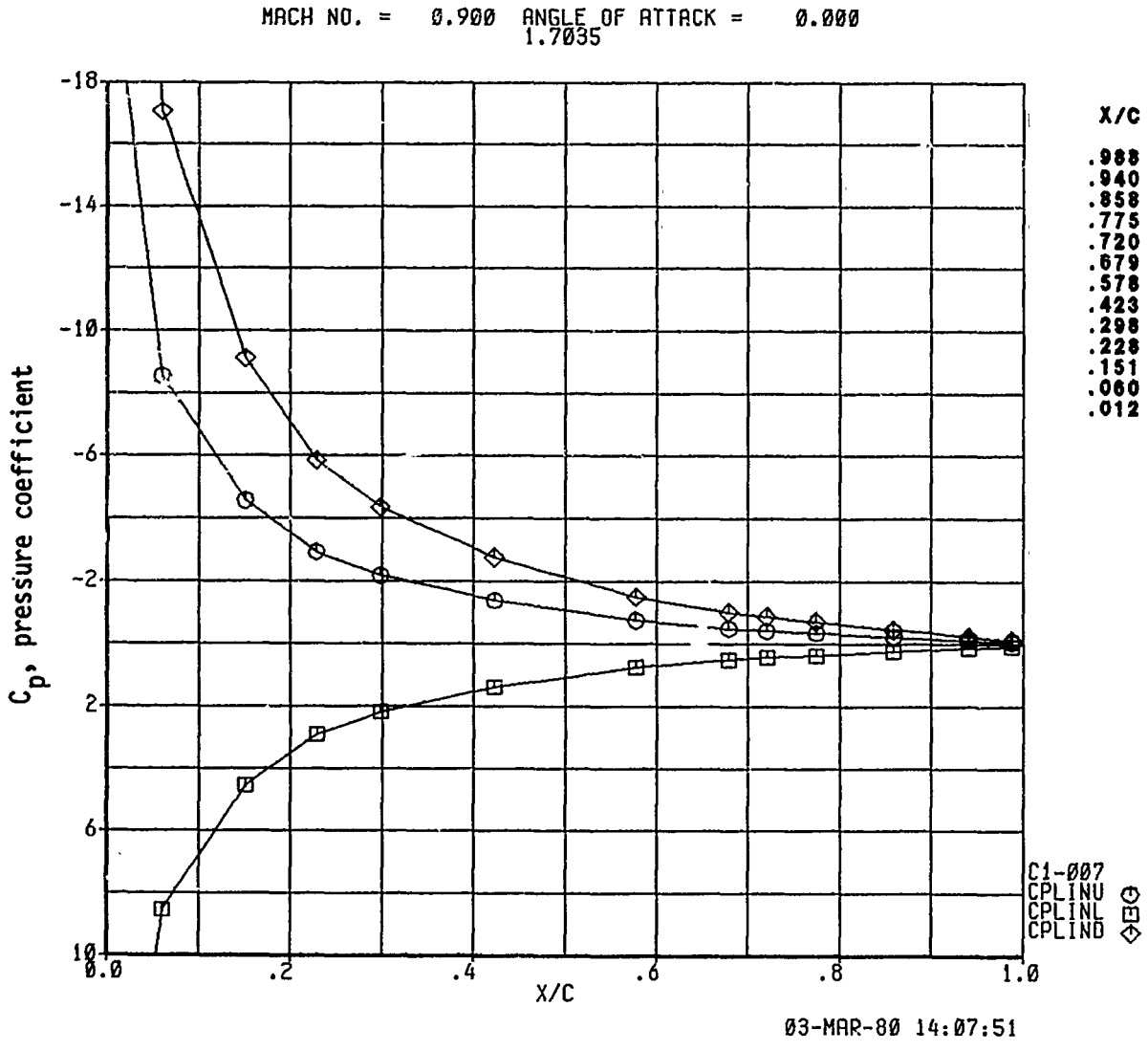
X/C	PRESSURE COEFFICIENT UPPER	LOWER	DIFF
.988	-.0811	0.0811	-.1622
.940	-.1575	0.1575	-.3150
.858	-.3178	0.3178	-.6358
.774	-.5253	0.5253	-1.051
.720	-.6663	0.6663	-1.332
.679	-.7869	0.7869	-1.574
.577	-1.180	1.1797	-2.359
.423	-1.987	1.9875	-3.975
.298	-2.803	2.8025	-5.605
.228	-3.378	3.3784	-6.757
.151	-4.590	4.5899	-9.180
.060	-7.655	7.6553	-15.31
.012	-17.01	17.006	-34.01

Figure 247, Chordwise Pressure Distribution, Real, Configuration 1



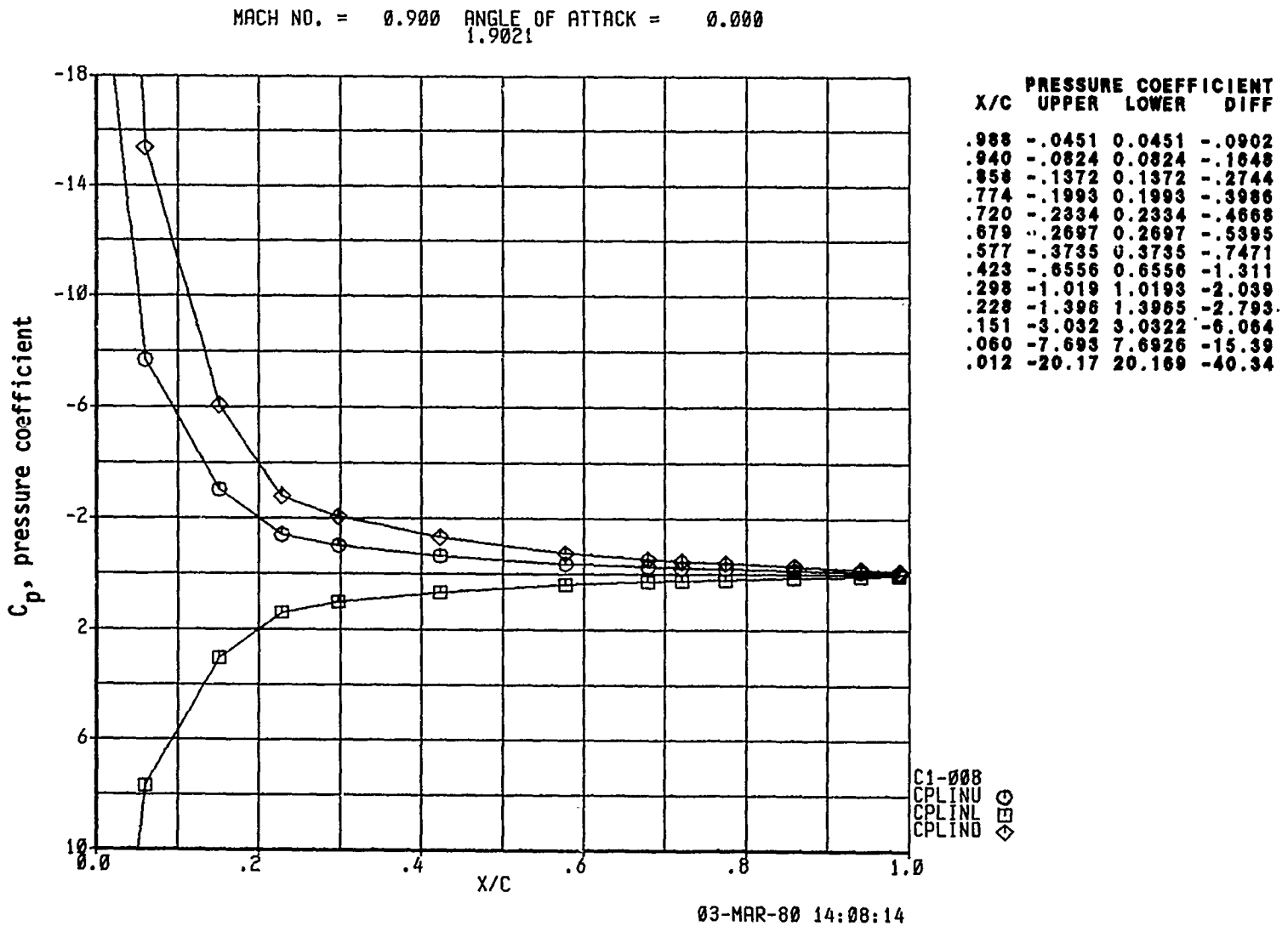
X/C	PRESSURE COEFFICIENT UPPER	LOWER	DIFF
.988	-.0719	0.0719	-.1438
.940	-.1398	0.1398	-.2797
.858	-.2667	0.2667	-.5335
.774	-.4258	0.4258	-.8518
.720	-.5322	0.5322	-1.064
.679	-.6208	0.6208	-1.242
.577	-.9317	0.9317	-1.863
.423	-1.679	1.6795	-3.359
.298	-2.538	2.5383	-5.076
.228	-3.224	3.2239	-6.448
.151	-4.709	4.7095	-9.419
.060	-8.292	8.2919	-16.58
.012	-18.75	18.751	-37.50

Figure 248, Chordwise Pressure Distribution, Real, Configuration 1



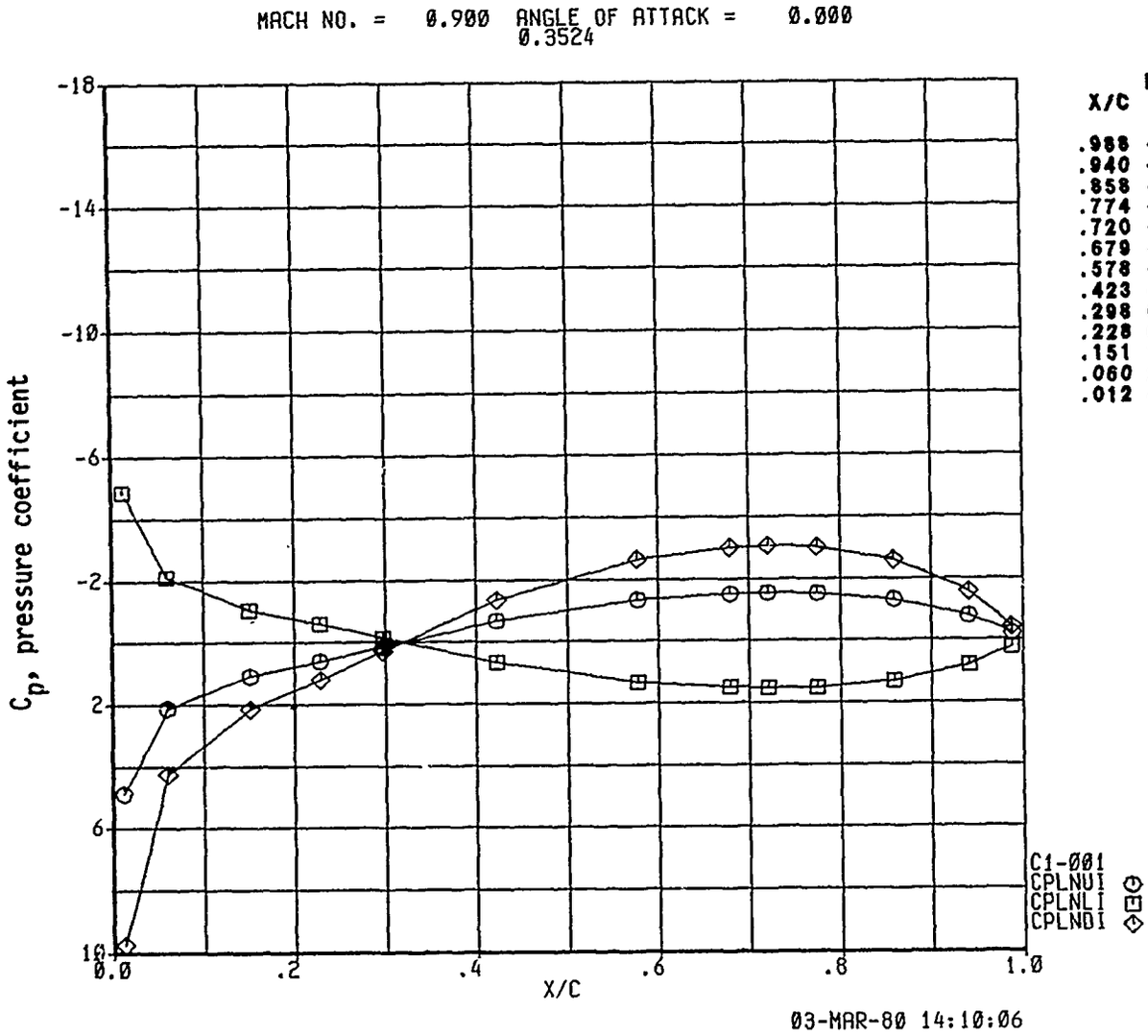
X/C	PRESSURE COEFFICIENT UPPER	LOWER	DIFF
.988	-.0630	0.0630	-.1260
.940	-.1232	0.1232	-.2464
.858	-.2285	0.2285	-.4568
.775	-.3552	0.3552	-.7104
.720	-.4347	0.4347	-.8694
.679	-.5042	0.5042	-1.008
.578	-.7455	0.7455	-1.491
.423	-1.372	1.3720	-2.744
.298	-2.172	2.1724	-4.345
.228	-2.917	2.9174	-5.835
.151	-4.559	4.5588	-9.118
.060	-8.534	8.5337	-17.07
.012	-19.71	19.710	-39.42

Figure 249, Chordwise Pressure Distribution, Real, Configuration 1



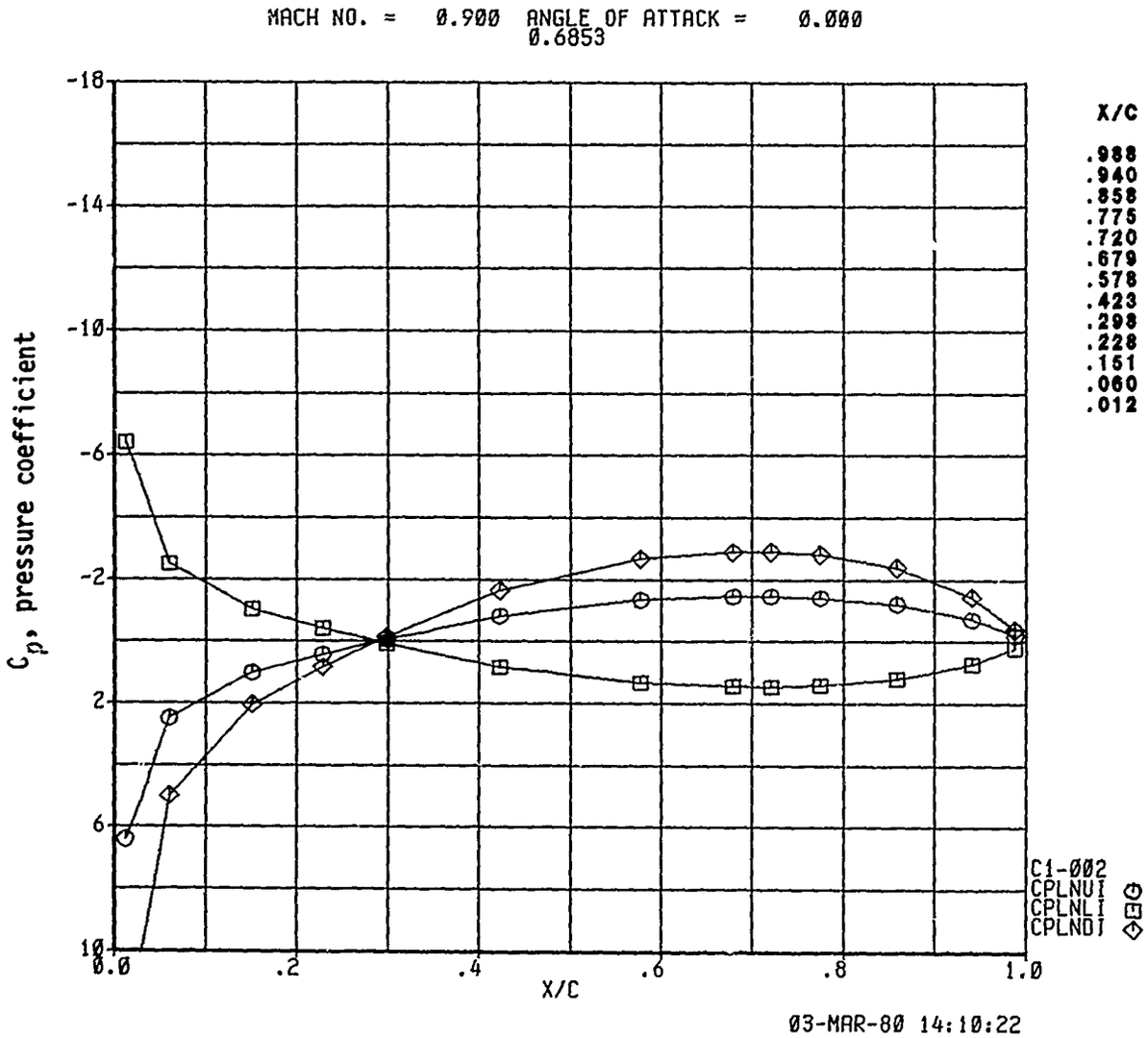
X/C	PRESSURE COEFFICIENT UPPER	LOWER	DIFF
.988	-.0451	0.0451	-.0902
.940	-.0824	0.0824	-.1648
.858	-.1372	0.1372	-.2744
.774	-.1993	0.1993	-.3986
.720	-.2334	0.2334	-.4668
.679	-.2697	0.2697	-.5395
.577	-.3735	0.3735	-.7471
.423	-.6556	0.6556	-1.311
.298	-1.019	1.0193	-2.039
.228	-1.396	1.3965	-2.793
.151	-3.032	3.0322	-6.064
.060	-7.693	7.6926	-15.39
.012	-20.17	20.169	-40.34

Figure 250, Chordwise Pressure Distribution, Real, Configuration 1



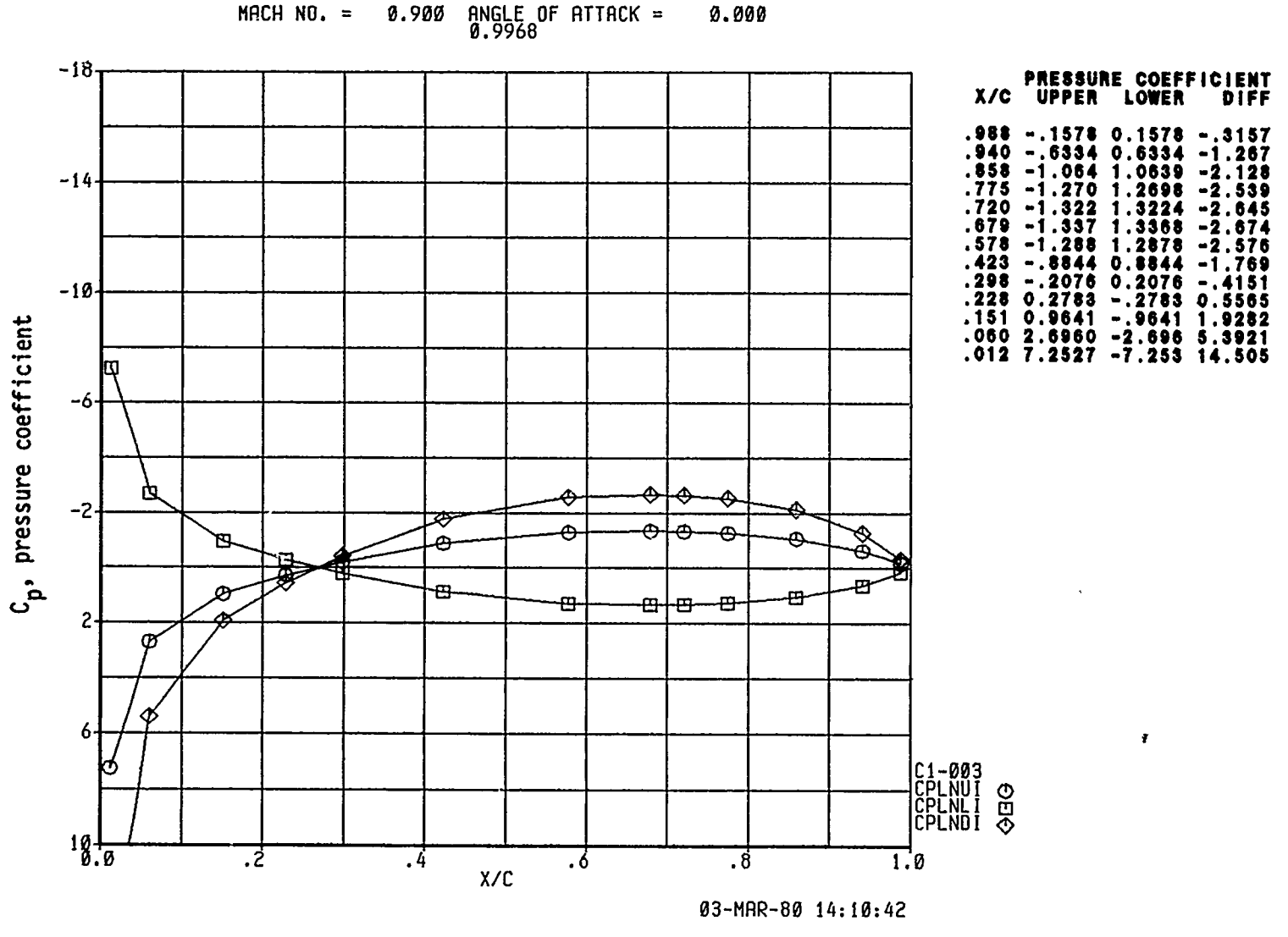
X/C	PRESSURE COEFFICIENT UPPER	LOWER	DIFF
.988	-.2166	0.2166	-.4332
.940	-.7808	0.7808	-1.562
.858	-1.296	1.2962	-2.592
.774	-1.511	1.5110	-3.022
.720	-1.532	1.5321	-3.064
.679	-1.504	1.5037	-3.007
.578	-1.324	1.3242	-2.648
.423	-.6711	0.6711	-1.342
.298	0.1449	-.1449	0.2898
.228	0.6034	-.6034	1.2067
.151	1.0700	-1.070	2.1400
.060	2.1297	-2.130	4.2594
.012	4.8751	-4.875	9.7503

Figure 251, Chordwise Pressure Distribution, Imaginary, Configuration 1



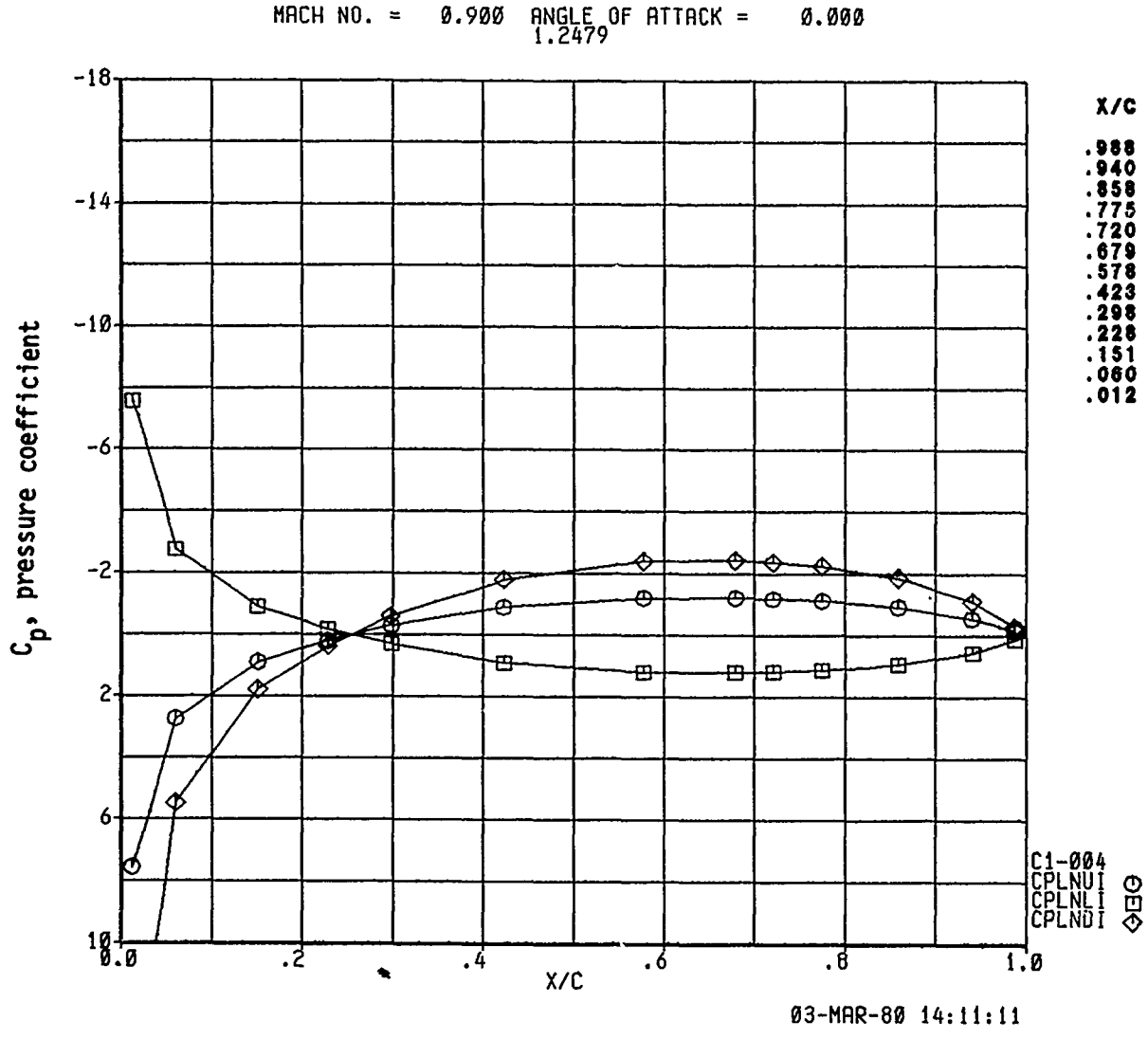
X/C	PRESSURE COEFFICIENT UPPER	LOWER	DIFF
.988	-.1936	0.1936	-.3871
.940	-.7211	0.7211	-1.442
.858	-1.197	1.1973	-2.395
.775	-1.410	1.4100	-2.820
.720	-1.451	1.4513	-2.903
.679	-1.449	1.4490	-2.898
.578	-1.341	1.3411	-2.682
.423	-.8193	0.8193	-1.639
.298	-.0698	0.0698	-.1396
.228	0.4150	-.4150	0.8300
.151	1.0199	-1.020	2.0397
.060	2.4984	-2.498	4.9968
.012	6.4078	-6.408	12.816

Figure 252, Chordwise Pressure Distribution, Imaginary, Configuration 1



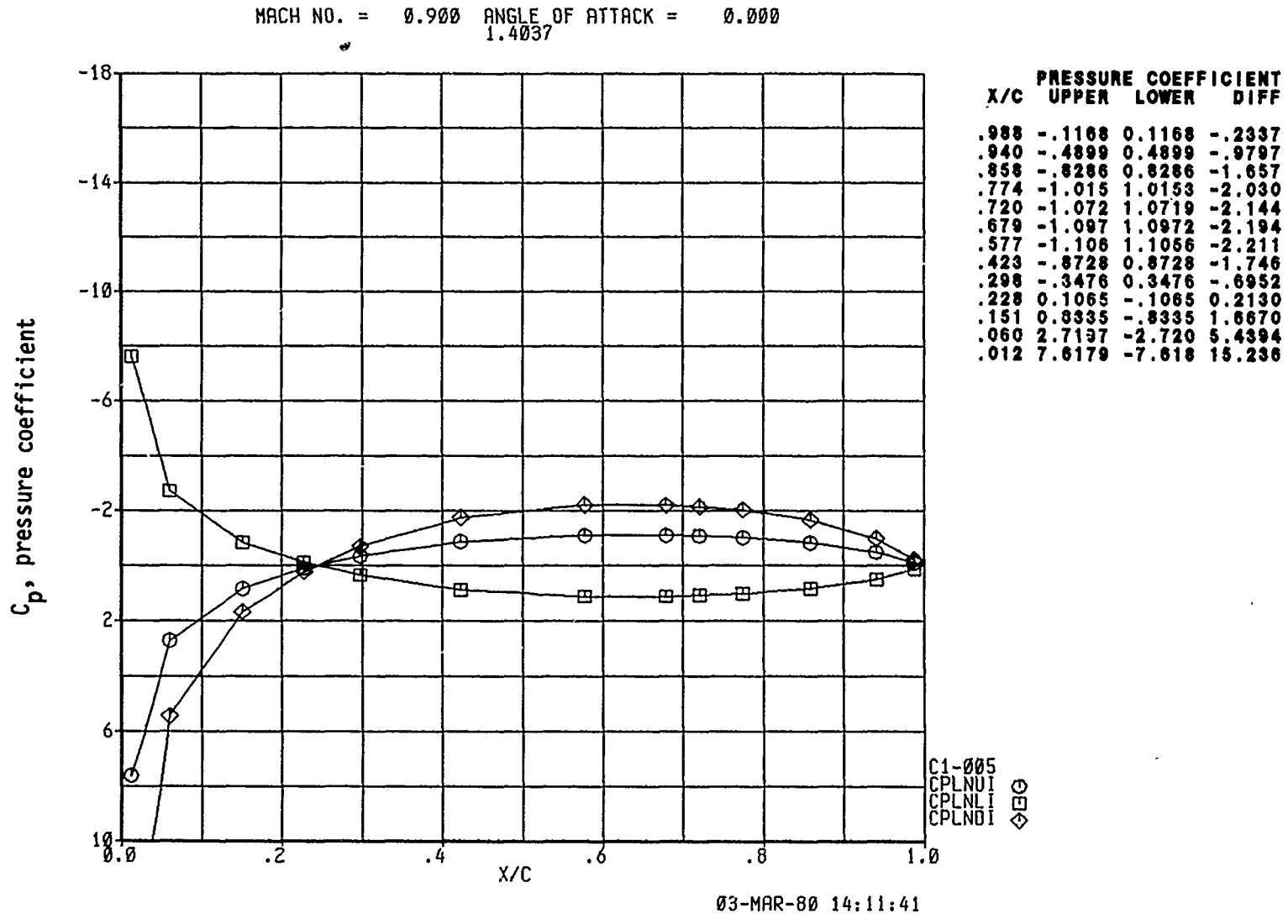
X/C	PRESSURE COEFFICIENT UPPER	LOWER	DIFF
.988	-.1578	0.1578	-.3157
.940	-.6334	0.6334	-1.267
.858	-1.064	1.0639	-2.128
.775	-1.270	1.2698	-2.539
.720	-1.322	1.3224	-2.645
.679	-1.337	1.3368	-2.674
.578	-1.288	1.2878	-2.576
.423	-.8844	0.8844	-1.769
.298	-.2076	0.2076	-.4151
.228	0.2783	-.2783	0.5565
.151	0.9641	-.9641	1.9282
.060	2.6960	-2.696	5.3921
.012	7.2527	-7.253	14.505

Figure 253, Chordwise Pressure Distribution, Imaginary, Configuration 1



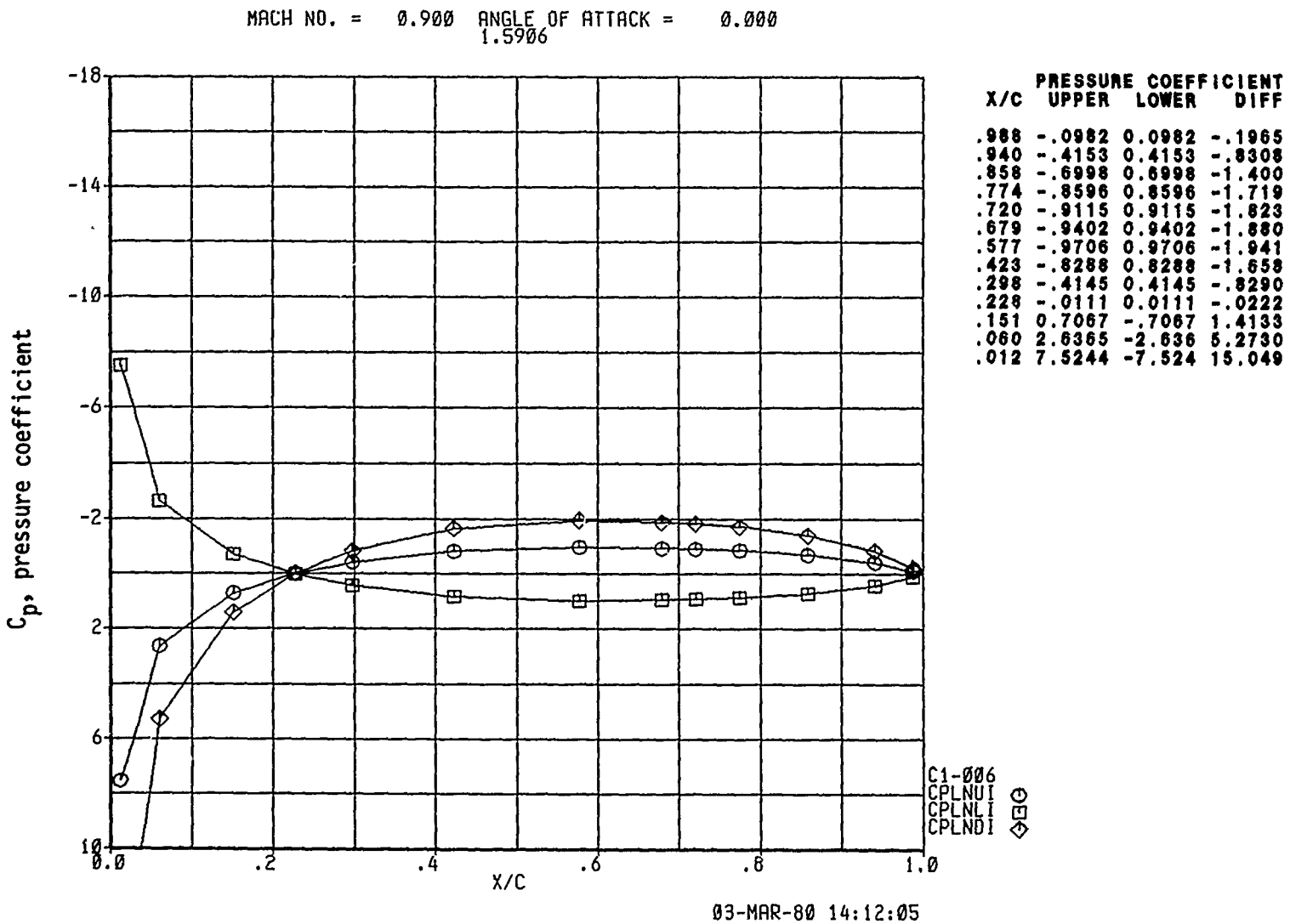
X/C	PRESSURE COEFFICIENT UPPER	LOWER	DIFF
.988	-.1317	0.1317	-.2632
.940	-.5482	0.5482	-1.096
.858	-.9270	0.9270	-1.854
.775	-1.122	1.1221	-2.244
.720	-1.179	1.1792	-2.358
.679	-1.202	1.2017	-2.403
.578	-1.191	1.1905	-2.381
.423	-.8898	0.8898	-1.780
.298	-.2948	0.2948	-.5896
.226	0.1790	-.1790	0.3580
.151	0.8948	-.8948	1.7896
.060	2.7364	-2.736	5.4729
.012	7.5657	-7.566	15.131

Figure 254, Chordwise Pressure Distribution, Imaginary, Configuration 1



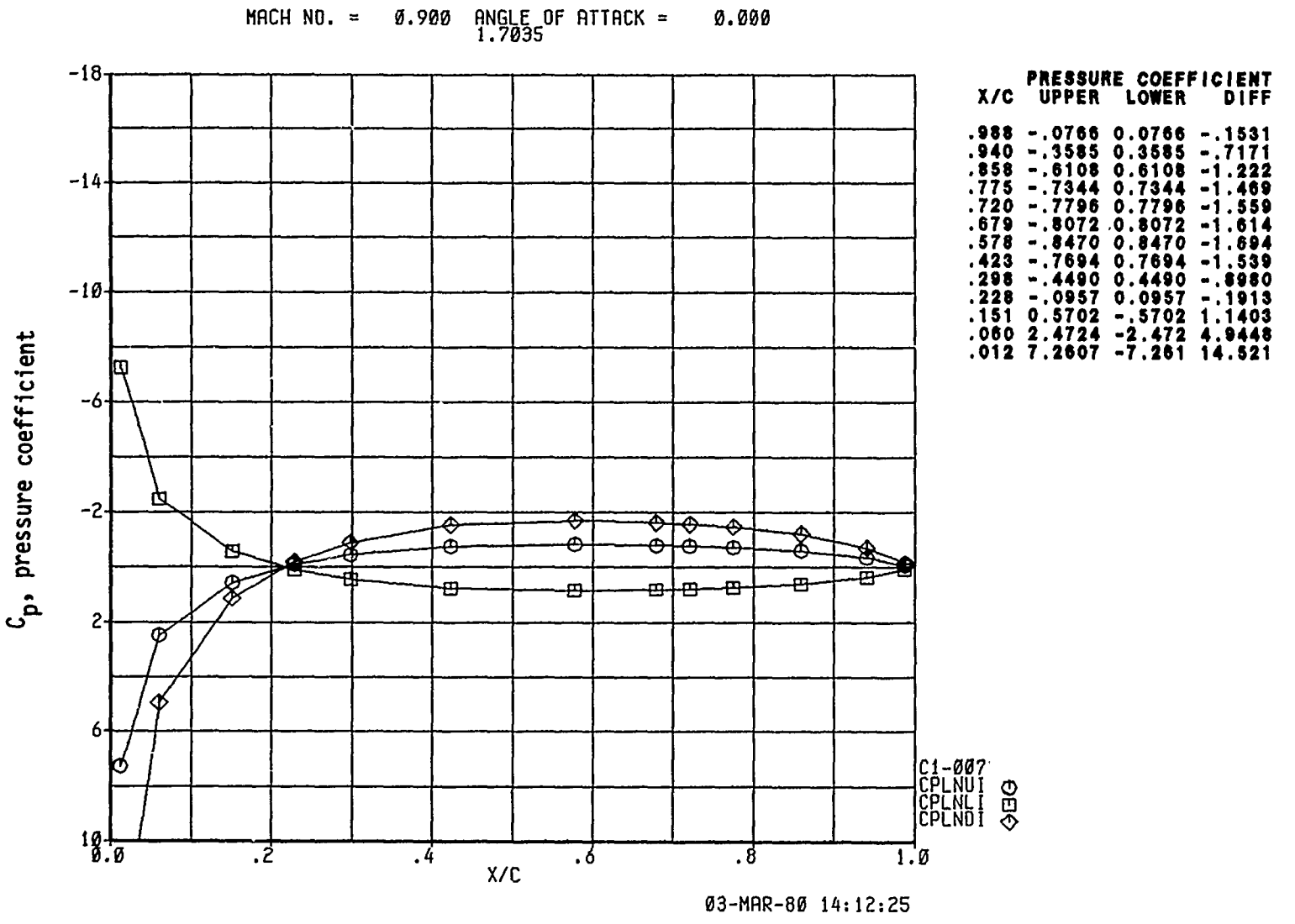
X/C	PRESSURE COEFFICIENT UPPER	LOWER	DIFF
.988	-.1168	0.1168	-.2337
.940	-.4899	0.4899	-.9797
.858	-.8286	0.8286	-1.657
.774	-1.015	1.0153	-2.030
.720	-1.072	1.0719	-2.144
.679	-1.097	1.0972	-2.194
.577	-1.106	1.1056	-2.211
.423	-.8728	0.8728	-1.746
.298	-.3476	0.3476	-.6952
.228	0.1065	-.1065	0.2130
.151	0.8335	-.8335	1.6670
.060	2.7137	-2.720	5.4394
.012	7.6179	-7.618	15.236

Figure 255, Chordwise Pressure Distribution, Imaginary, Configuration 1



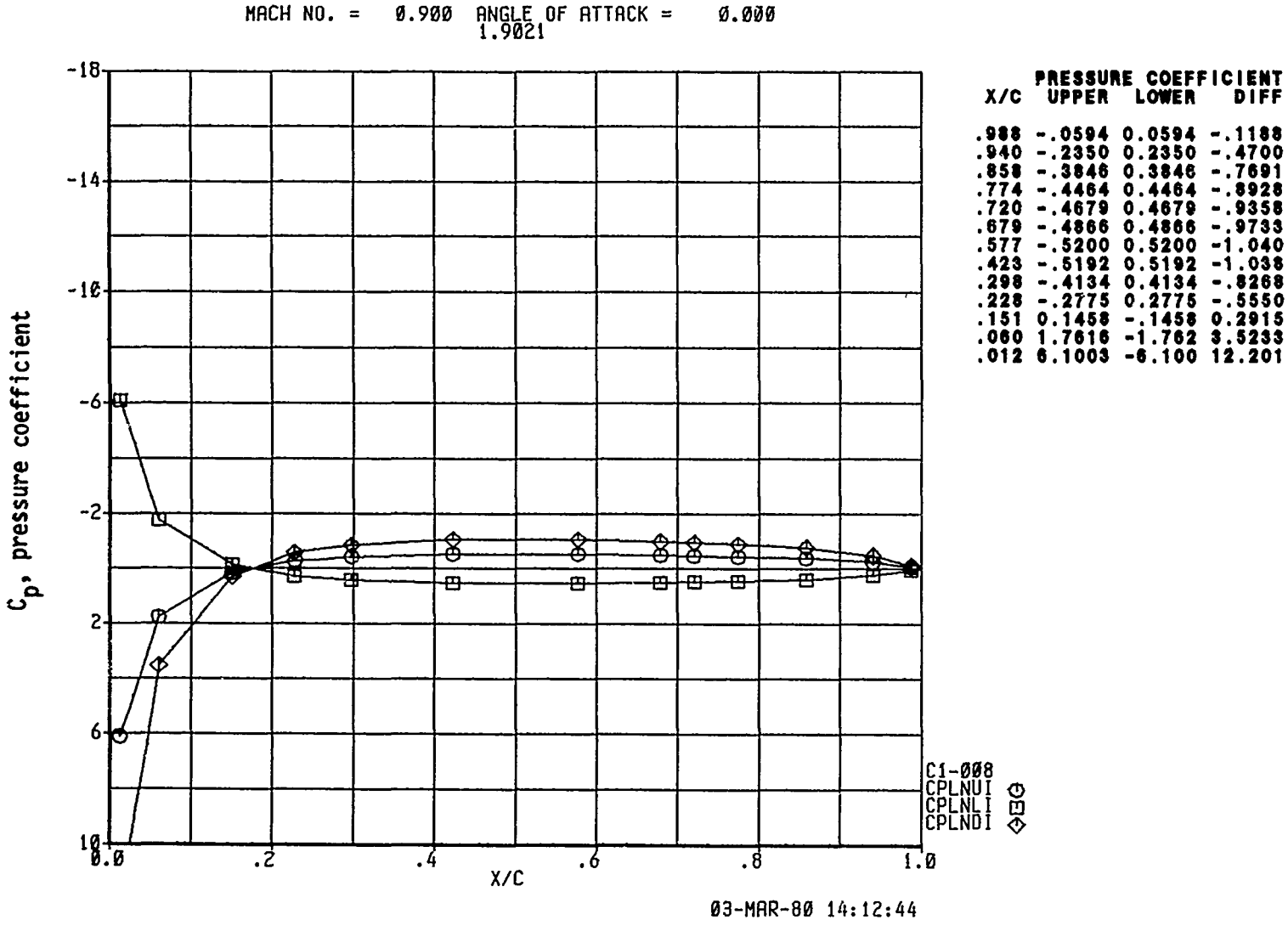
X/C	PRESSURE COEFFICIENT UPPER	LOWER	DIFF
.988	-.0982	0.0982	-.1965
.940	-.4153	0.4153	-.8308
.858	-.6998	0.6998	-1.400
.774	-.8596	0.8596	-1.719
.720	-.9115	0.9115	-1.823
.679	-.9402	0.9402	-1.880
.577	-.9706	0.9706	-1.941
.423	-.8288	0.8288	-1.658
.298	-.4145	0.4145	-.8290
.228	-.0111	0.0111	-.0222
.151	0.7067	-.7067	1.4133
.060	2.6365	-2.636	5.2730
.012	7.5244	-7.524	15.049

Figure 256, Chordwise Pressure Distribution, Imaginary, Configuration 1



X/C	PRESSURE COEFFICIENT UPPER	LOWER	DIFF
.988	-.0766	0.0766	-.1531
.940	-.3585	0.3585	-.7171
.858	-.6108	0.6108	-1.222
.775	-.7344	0.7344	-1.469
.720	-.7796	0.7796	-1.559
.679	-.8072	0.8072	-1.614
.578	-.8470	0.8470	-1.694
.423	-.7694	0.7694	-1.539
.298	-.4490	0.4490	-.8980
.228	-.0957	0.0957	-.1913
.151	0.5702	-.5702	1.1403
.060	2.4724	-2.472	4.9448
.012	7.2607	-7.261	14.521

Figure 257, Chordwise Pressure Distribution, Imaginary, Configuration 1



X/C	PRESSURE COEFFICIENT UPPER	LOWER	DIFF
.988	-.0594	0.0594	-.1188
.940	-.2350	0.2350	-.4700
.858	-.3846	0.3846	-.7691
.774	-.4464	0.4464	-.8928
.720	-.4679	0.4679	-.9358
.679	-.4866	0.4866	-.9733
.577	-.5200	0.5200	-1.040
.423	-.5192	0.5192	-1.038
.298	-.4134	0.4134	-.8268
.228	-.2775	0.2775	-.5550
.151	0.1458	-.1458	0.2915
.060	1.7616	-1.762	3.5233
.012	6.1003	-6.100	12.201

Figure 258, Chordwise Pressure Distribution, Imaginary, Configuration 1

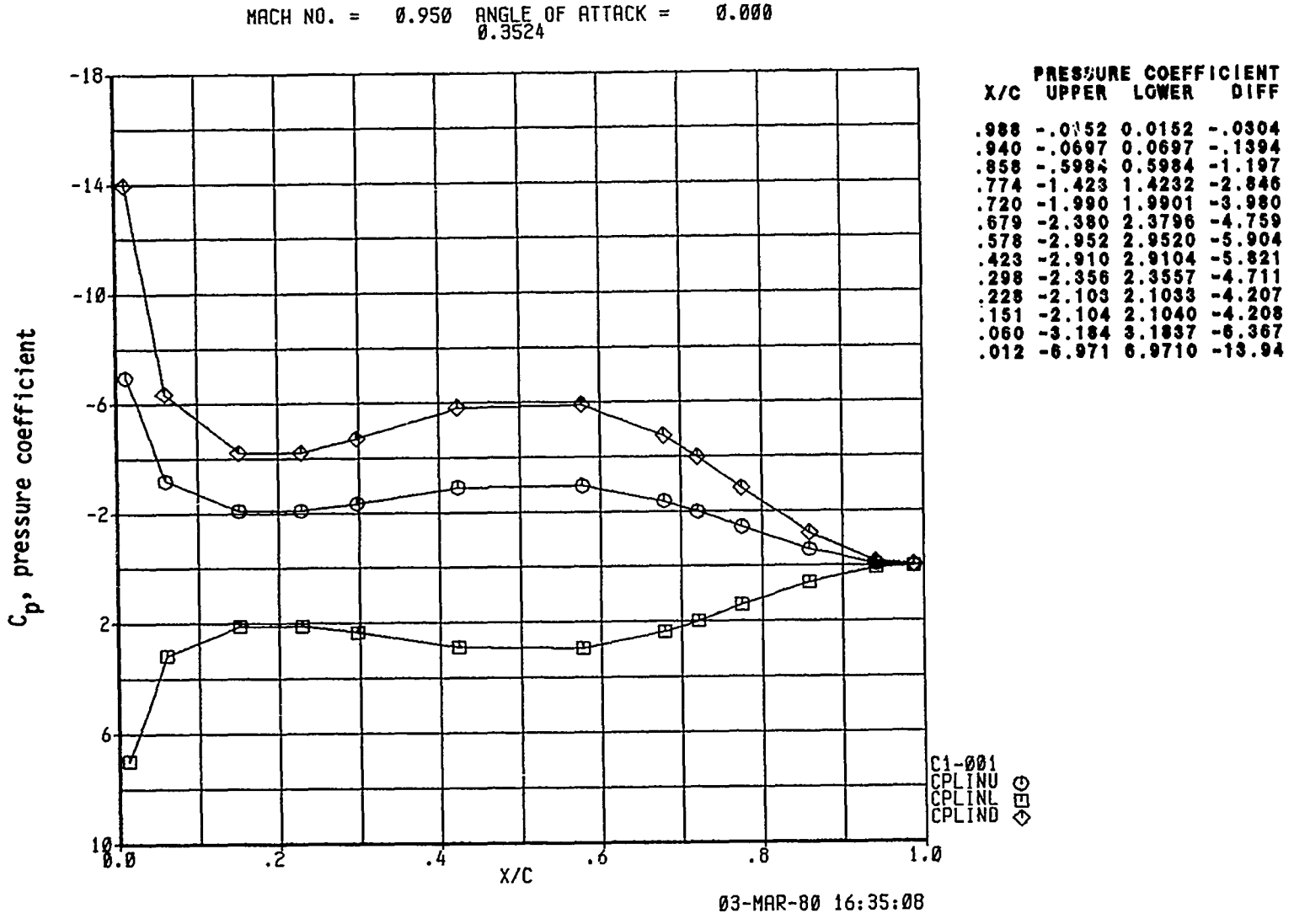
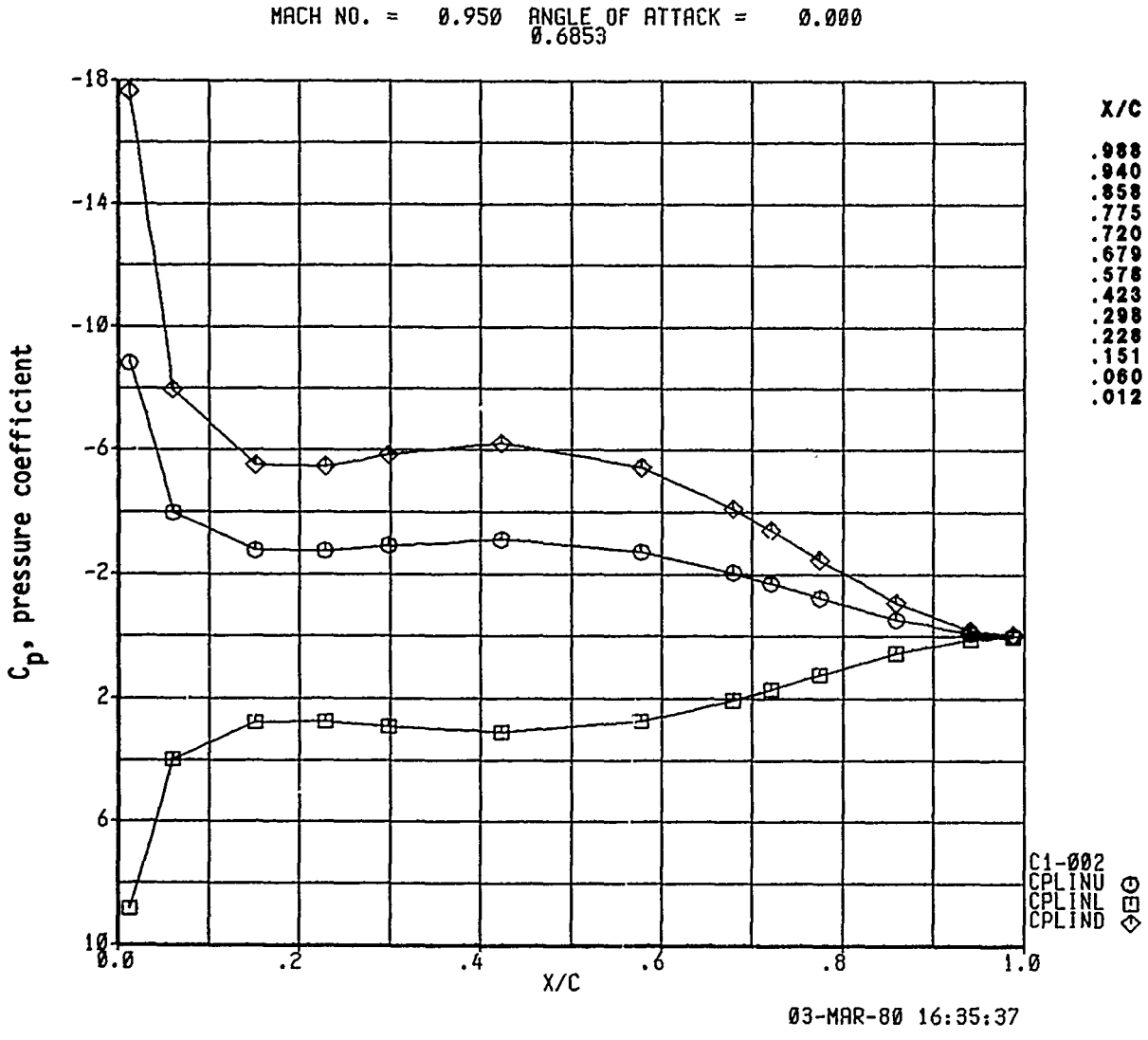
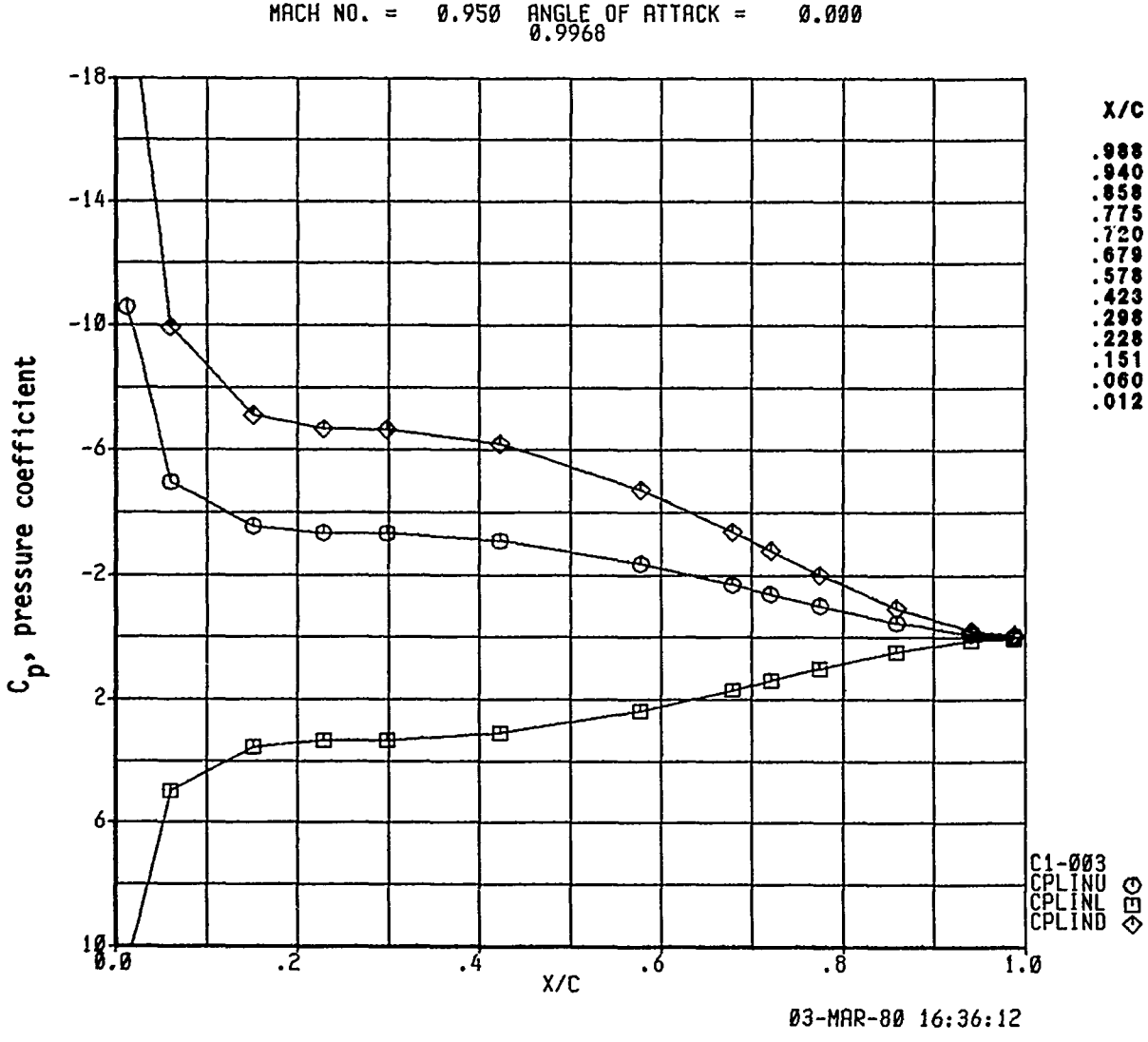


Figure 259, Chordwise Pressure Distribution, Real, Configuration 1



X/C	PRESSURE COEFFICIENT UPPER	LOWER	DIFF
.988	-.0255	0.0255	-.0511
.940	-.0873	0.0873	-.1746
.858	-.5382	0.5382	-1.076
.775	-1.226	1.2259	-2.452
.720	-1.703	1.7028	-3.406
.679	-2.058	2.0581	-4.116
.578	-2.717	2.7175	-5.435
.423	-3.105	3.1051	-6.210
.298	-2.916	2.9164	-5.833
.226	-2.736	2.7361	-5.472
.151	-2.759	2.7585	-5.517
.060	-3.976	3.9759	-7.952
.012	-8.826	8.8256	-17.65

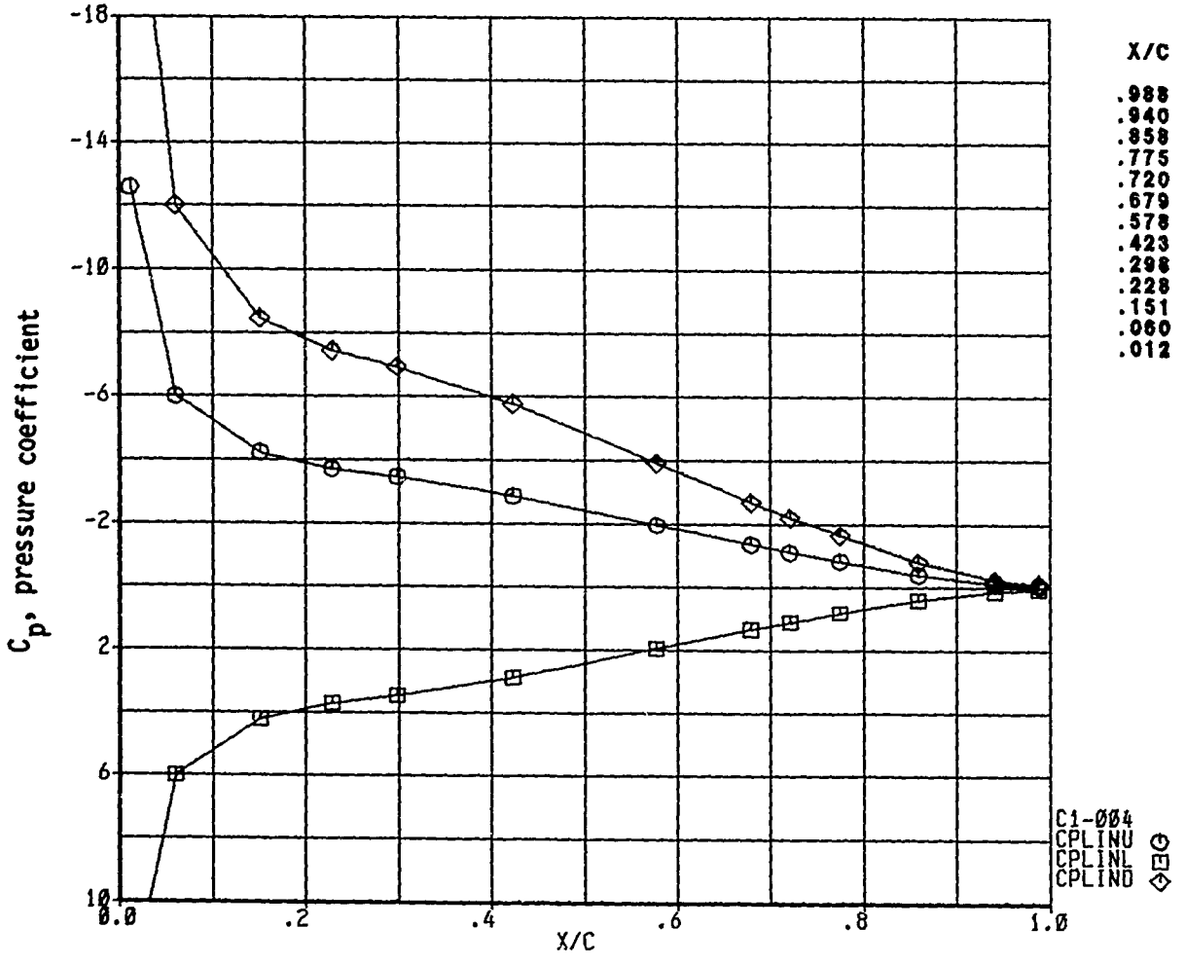
Figure 260, Chordwise Pressure Distribution, Real, Configuration 1



X/C	PRESSURE COEFFICIENT UPPER	LOWER	DIFF
.988	-.0405	0.0405	-.0810
.940	-.1029	0.1029	-.2057
.858	-.4646	0.4646	-.9293
.775	-1.005	1.0052	-2.010
.720	-1.387	1.3867	-2.773
.679	-1.686	1.6862	-3.372
.578	-2.361	2.3612	-4.722
.423	-3.098	3.0978	-6.196
.298	-3.328	3.3277	-6.656
.228	-3.339	3.3391	-6.678
.151	-3.555	3.5548	-7.109
.060	-4.966	4.9665	-9.933
.012	-10.57	10.573	-21.15

Figure 261, Chordwise Pressure Distribution, Real, Configuration 1

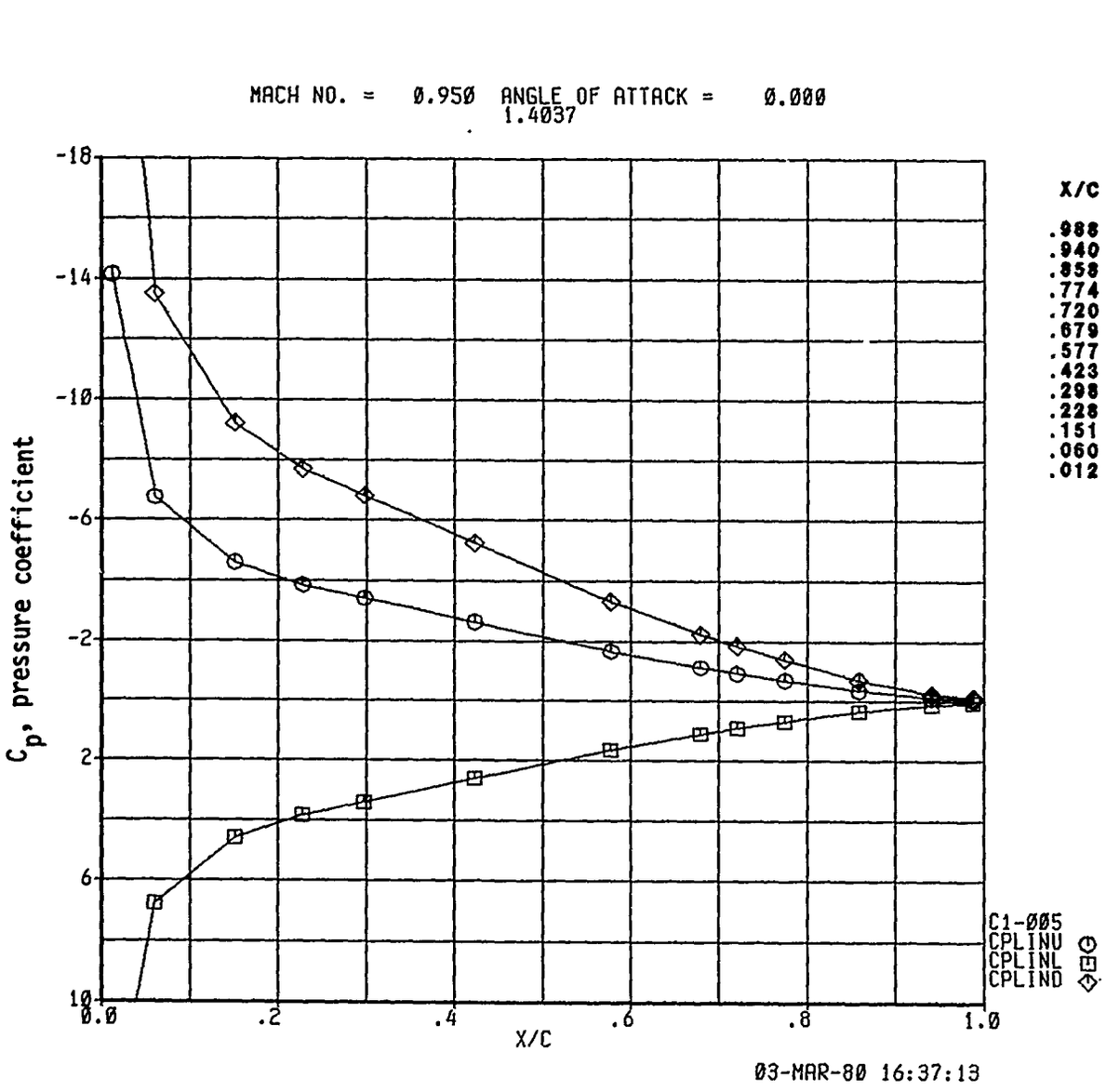
MACH NO. = 0.950 ANGLE OF ATTACK = 0.000
1.2479



X/C	PRESSURE COEFFICIENT UPPER	LOWER	DIFF
.988	-.0506	0.0506	-.1012
.940	-.1076	0.1076	-.2150
.858	-.3935	0.3935	-.7870
.775	-.8133	0.8133	-1.627
.720	-1.101	1.1007	-2.201
.679	-1.339	1.3385	-2.677
.578	-1.956	1.9559	-3.912
.423	-2.881	2.8810	-5.762
.298	-3.468	3.4684	-6.937
.228	-3.717	3.7167	-7.433
.151	-4.220	4.2204	-8.441
.060	-6.006	6.0058	-12.01
.012	-12.58	12.579	-25.16

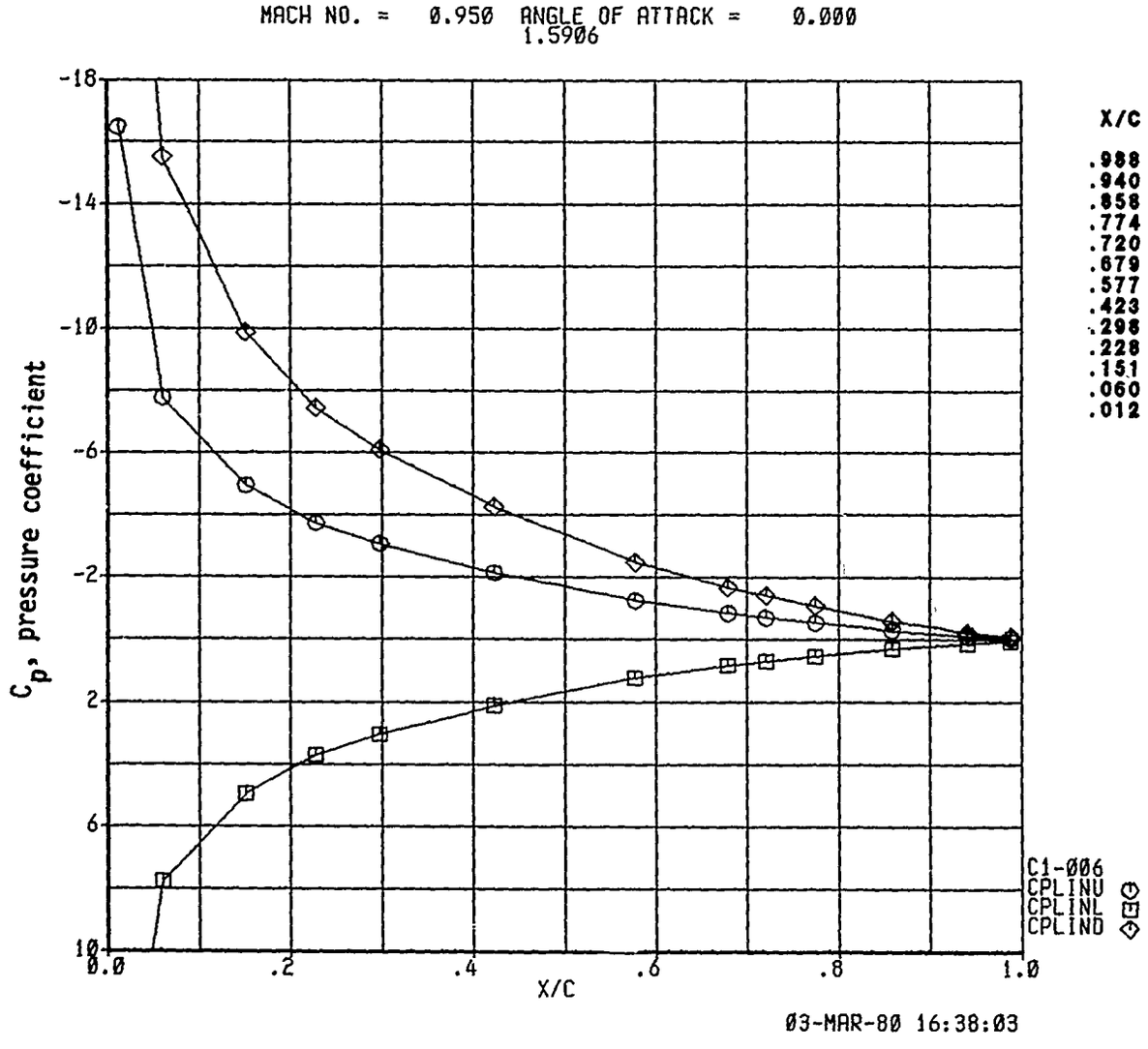
03-MAR-80 16:36:49

Figure 262, CHordwise Pressure Distribution, Real, Configuration 1



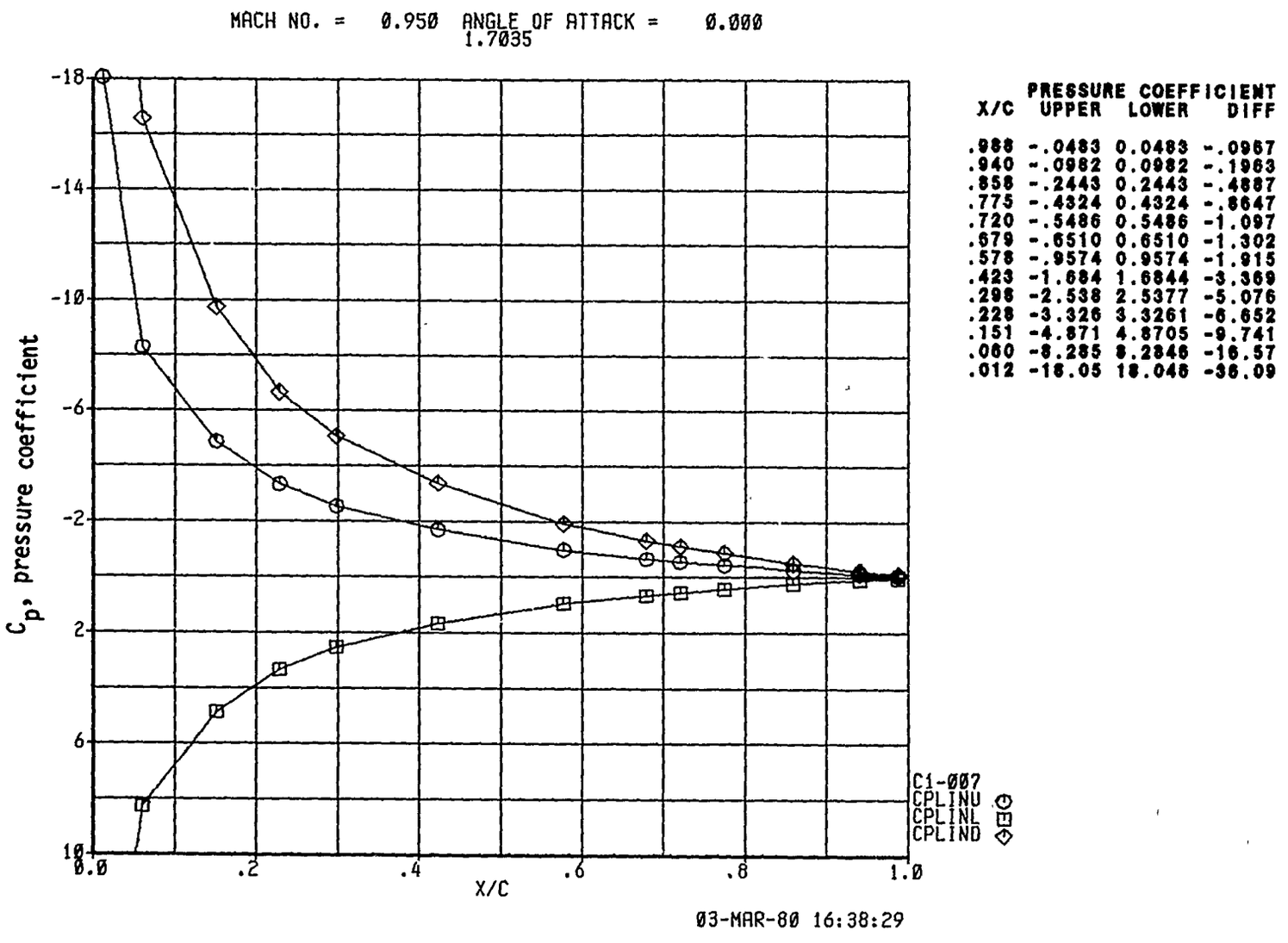
X/C	PRESSURE COEFFICIENT UPPER	LOWER	DIFF
.988	-.0546	0.0546	-.1091
.940	-.1080	0.1080	-.2160
.858	-.3451	0.3451	-.6902
.774	-.6898	0.6898	-1.380
.720	-.9169	0.9169	-1.834
.679	-1.108	1.1078	-2.216
.577	-1.651	1.6505	-3.301
.423	-2.625	2.6249	-5.250
.298	-3.413	3.4126	-6.825
.228	-3.842	3.8415	-7.683
.151	-4.603	4.6035	-9.207
.060	-6.758	6.7578	-13.52
.012	-14.16	14.160	-28.32

Figure 263, Chordwise Pressure Distribution, Real, Configuration 1



X/C	PRESSURE COEFFICIENT UPPER	LOWER	DIFF
.988	-.0524	0.0524	-.1048
.940	-.1087	0.1087	-.2175
.858	-.2839	0.2839	-.5678
.774	-.5303	0.5303	-1.061
.720	-.6956	0.6956	-1.391
.679	-.8298	0.8298	-1.660
.577	-1.232	1.2324	-2.465
.423	-2.121	2.1211	-4.242
.298	-3.047	3.0469	-6.094
.228	-3.721	3.7211	-7.442
.151	-4.941	4.9406	-9.881
.060	-7.759	7.7591	-15.52
.012	-16.48	16.478	-32.96

Figure 264, Chordwise Pressure Distribution, Real, Configuration 1



X/C	PRESSURE COEFFICIENT UPPER	LOWER	DIFF
.988	-.0483	0.0483	-.0967
.940	-.0982	0.0982	-.1963
.858	-.2443	0.2443	-.4887
.775	-.4324	0.4324	-.8647
.720	-.5486	0.5486	-1.097
.679	-.6510	0.6510	-1.302
.578	-.9574	0.9574	-1.915
.423	-1.684	1.6844	-3.369
.298	-2.538	2.5377	-5.076
.228	-3.326	3.3261	-6.652
.151	-4.871	4.8705	-9.741
.060	-8.285	8.2846	-16.57
.012	-18.05	18.046	-36.09

Figure 265, Chordwise Pressure Distribution, Real, Configuration 1

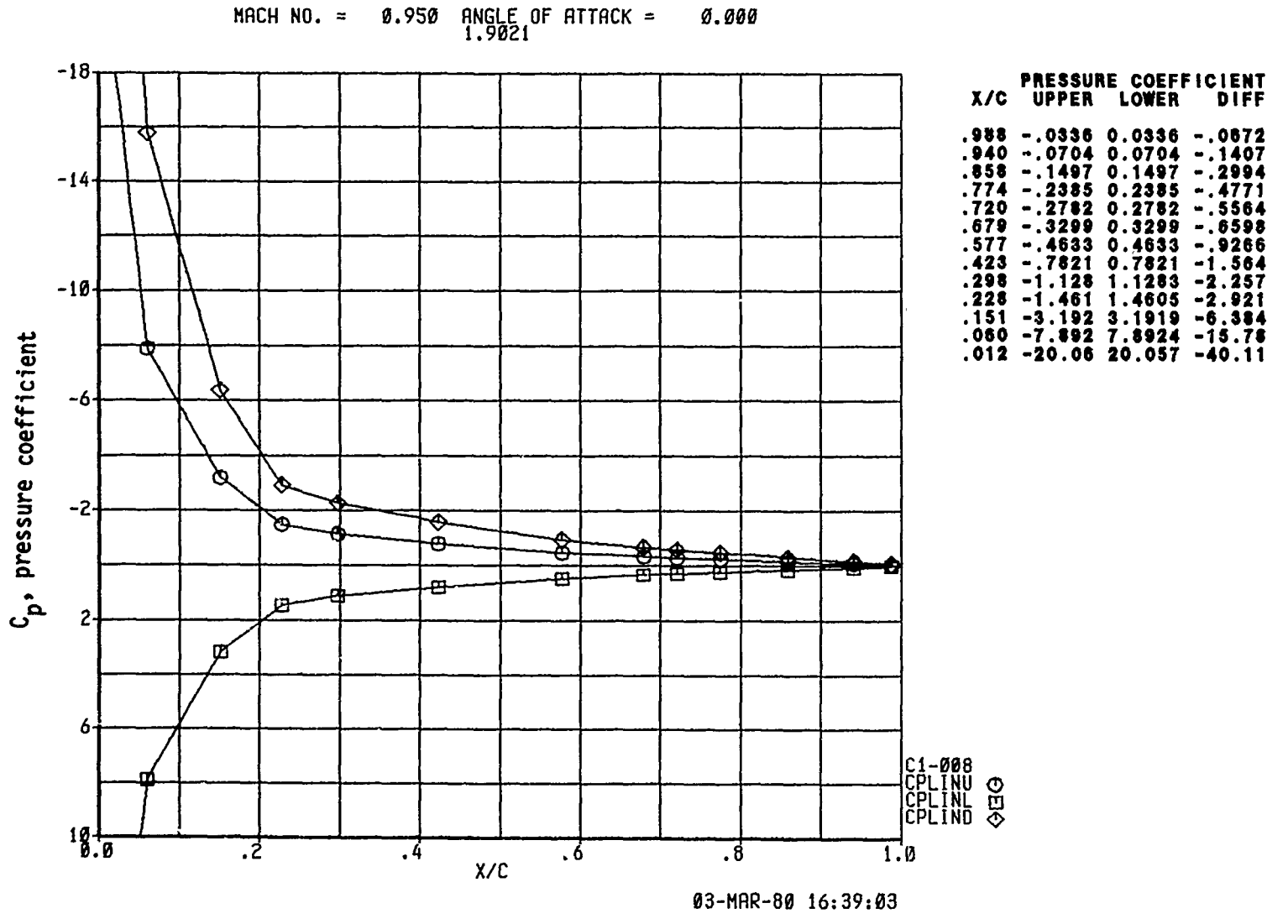
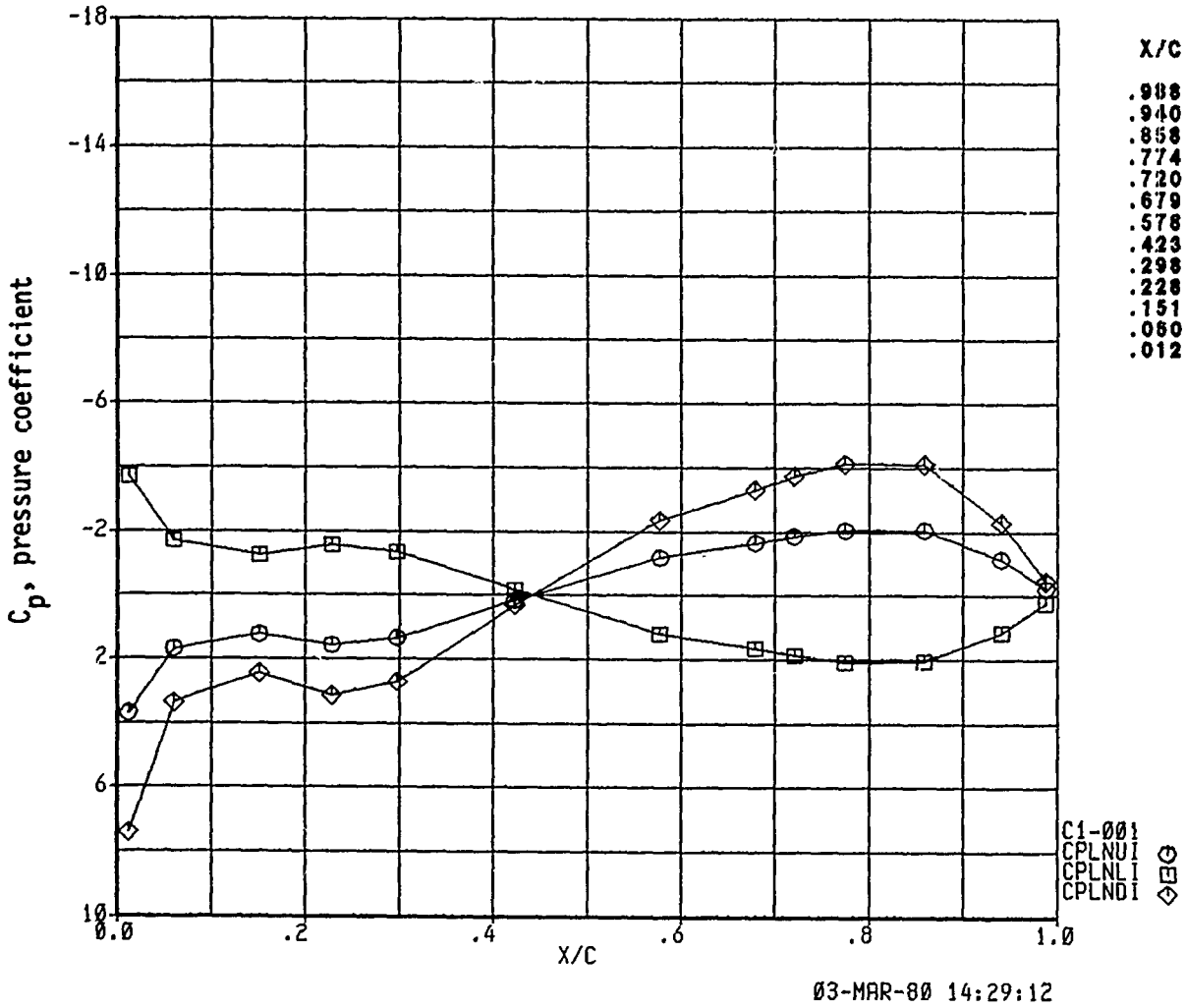


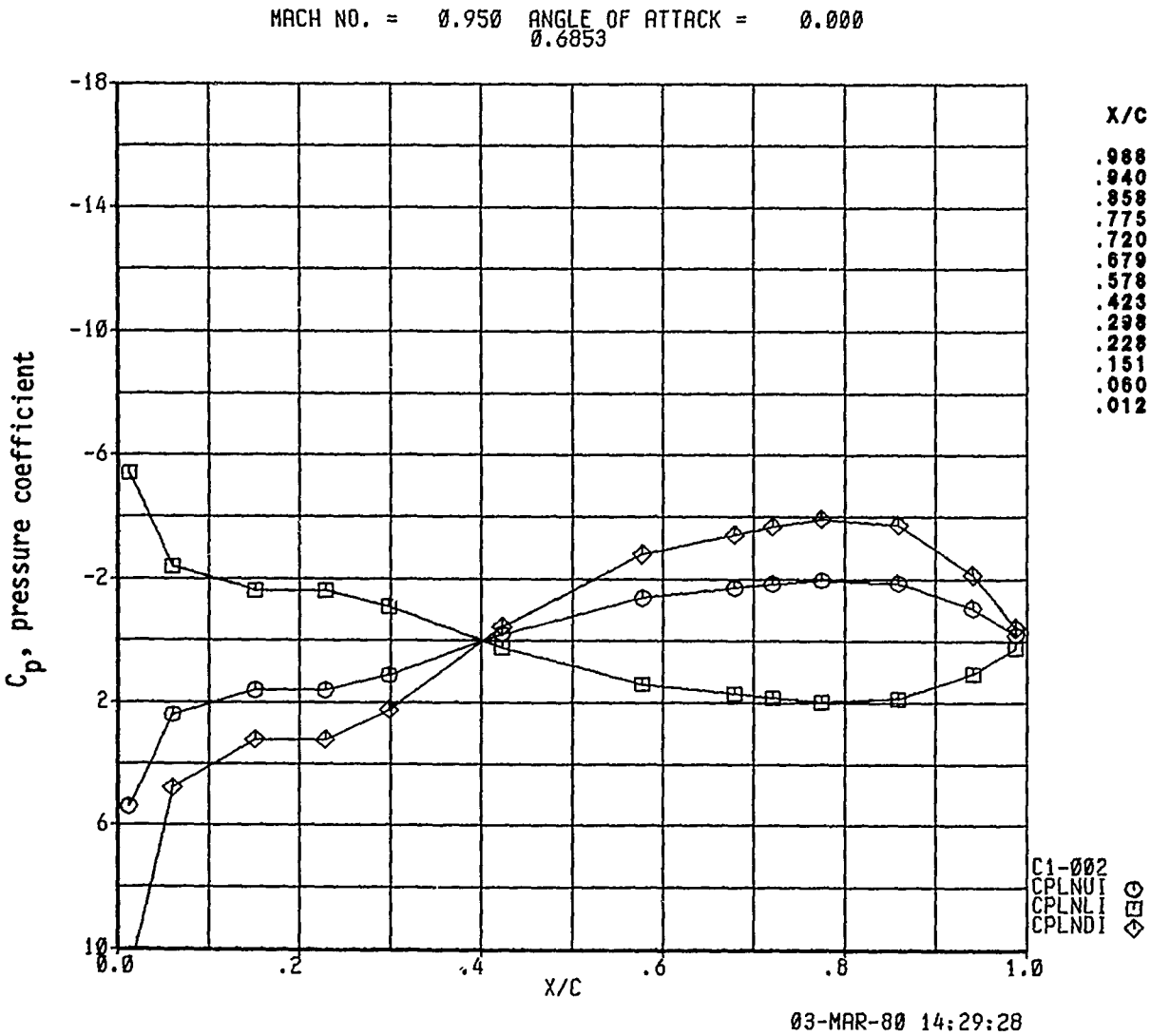
Figure 266, Chordwise Pressure Distribution, Real, Configuration 1

MACH NO. = 0.950 ANGLE OF ATTACK = 0.000
0.3524



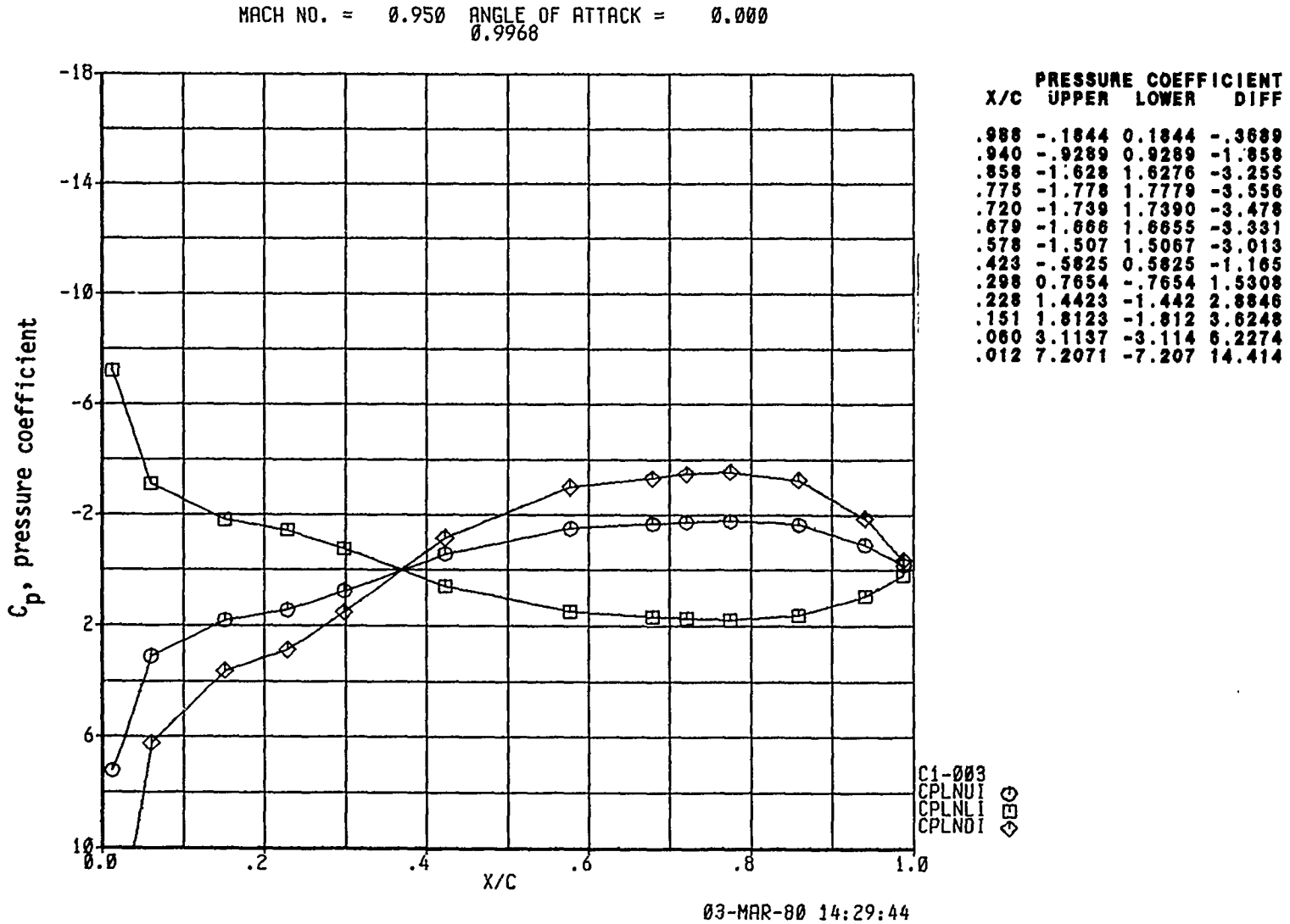
X/C	PRESSURE COEFFICIENT UPPER	LOWER	DIFF
.988	-.2276	0.2276	-.4552
.940	-1.145	1.1447	-2.289
.858	-2.051	2.0509	-4.102
.774	-2.064	2.0640	-4.128
.720	-1.872	1.8719	-3.744
.679	-1.659	1.6589	-3.318
.578	-1.179	1.1794	-2.359
.423	0.1528	-.1528	0.3055
.298	1.3557	-1.356	2.7114
.228	1.5771	-1.577	3.1541
.151	1.2309	-1.231	2.4617
.060	1.6902	-1.690	3.3804
.012	3.7073	-3.707	7.4146

Figure 267, Chordwise Pressure Distribution, Imaginary, Configuration 1



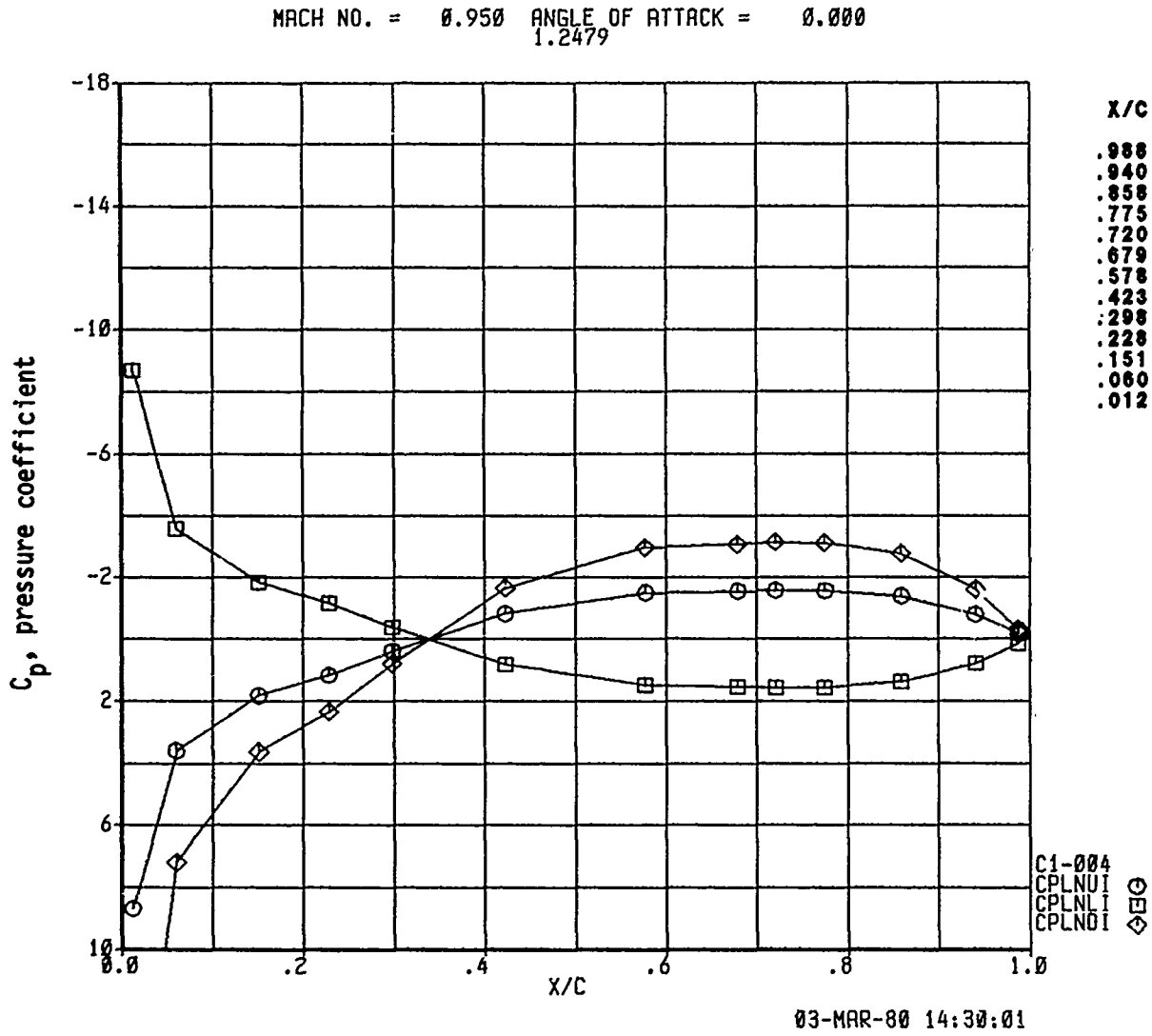
X/C	PRESSURE COEFFICIENT UPPER	LOWER	DIFF
.988	-.2200	0.2200	-.4400
.940	-1.063	1.0629	-2.126
.858	-1.870	1.8703	-3.740
.775	-1.963	1.9626	-3.925
.720	-1.847	1.8473	-3.694
.679	-1.712	1.7119	-3.424
.578	-1.398	1.3983	-2.797
.423	-.2298	0.2298	-.4595
.298	1.1154	-1.115	2.2309
.228	1.6118	-1.612	3.2235
.151	1.6099	-1.610	3.2199
.060	2.3973	-2.397	4.7947
.012	5.4168	-5.417	10.834

Figure 268, Chordwise Pressure Distribution, Imaginary, Configuration 1



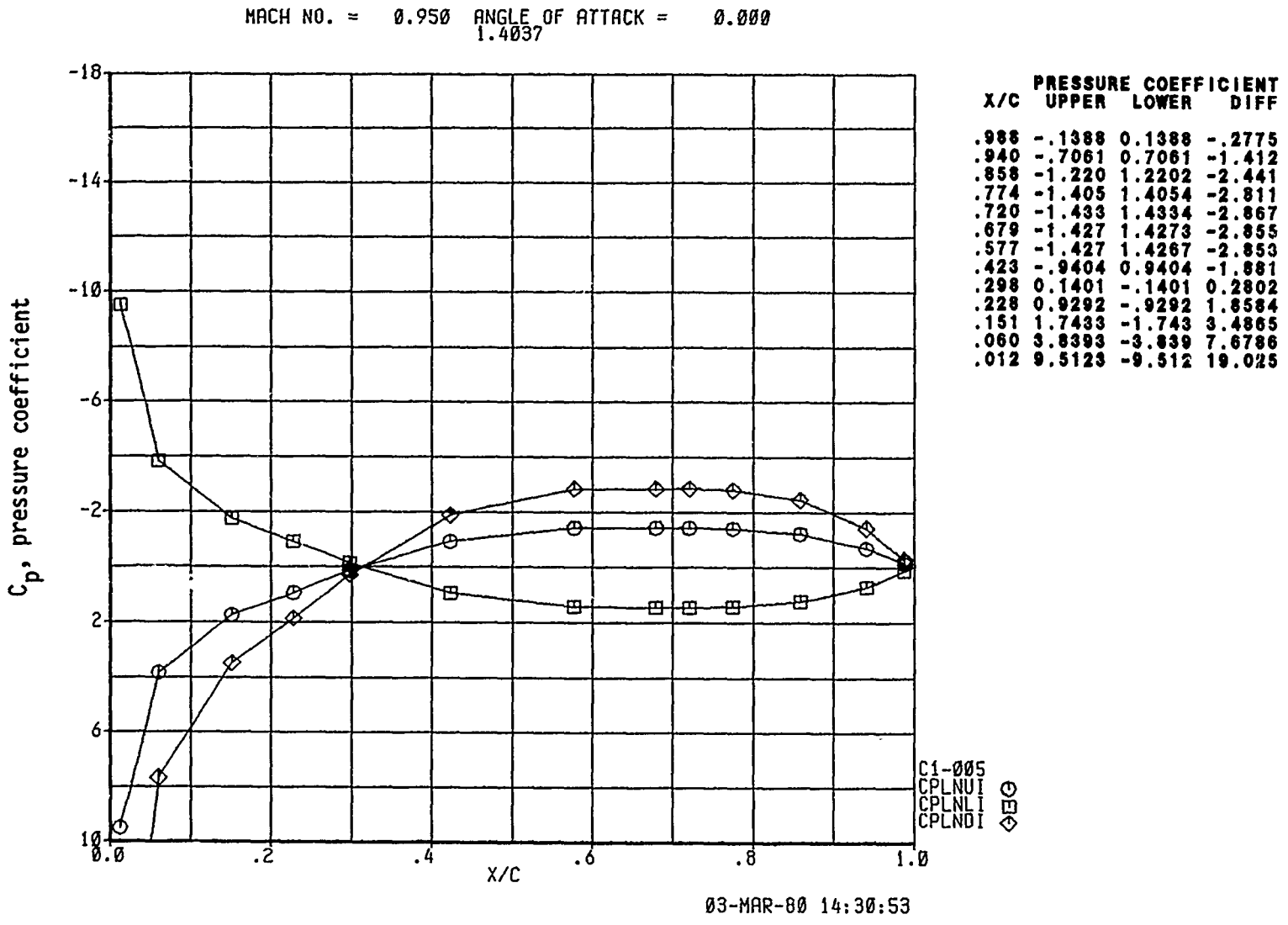
X/C	PRESSURE COEFFICIENT UPPER	LOWER	DIFF
.988	-.1844	0.1844	-.3689
.940	-.9289	0.9289	-1.858
.858	-1.628	1.6276	-3.255
.775	-1.778	1.7779	-3.556
.720	-1.739	1.7390	-3.478
.679	-1.666	1.6655	-3.331
.578	-1.507	1.5067	-3.013
.423	-.5825	0.5825	-1.165
.298	0.7654	-.7654	1.5308
.228	1.4423	-1.442	2.8846
.151	1.8123	-1.812	3.6248
.060	3.1137	-3.114	6.2274
.012	7.2071	-7.207	14.414

Figure 269, Chordwise Pressure Distribution, Imaginary, Configuration 1



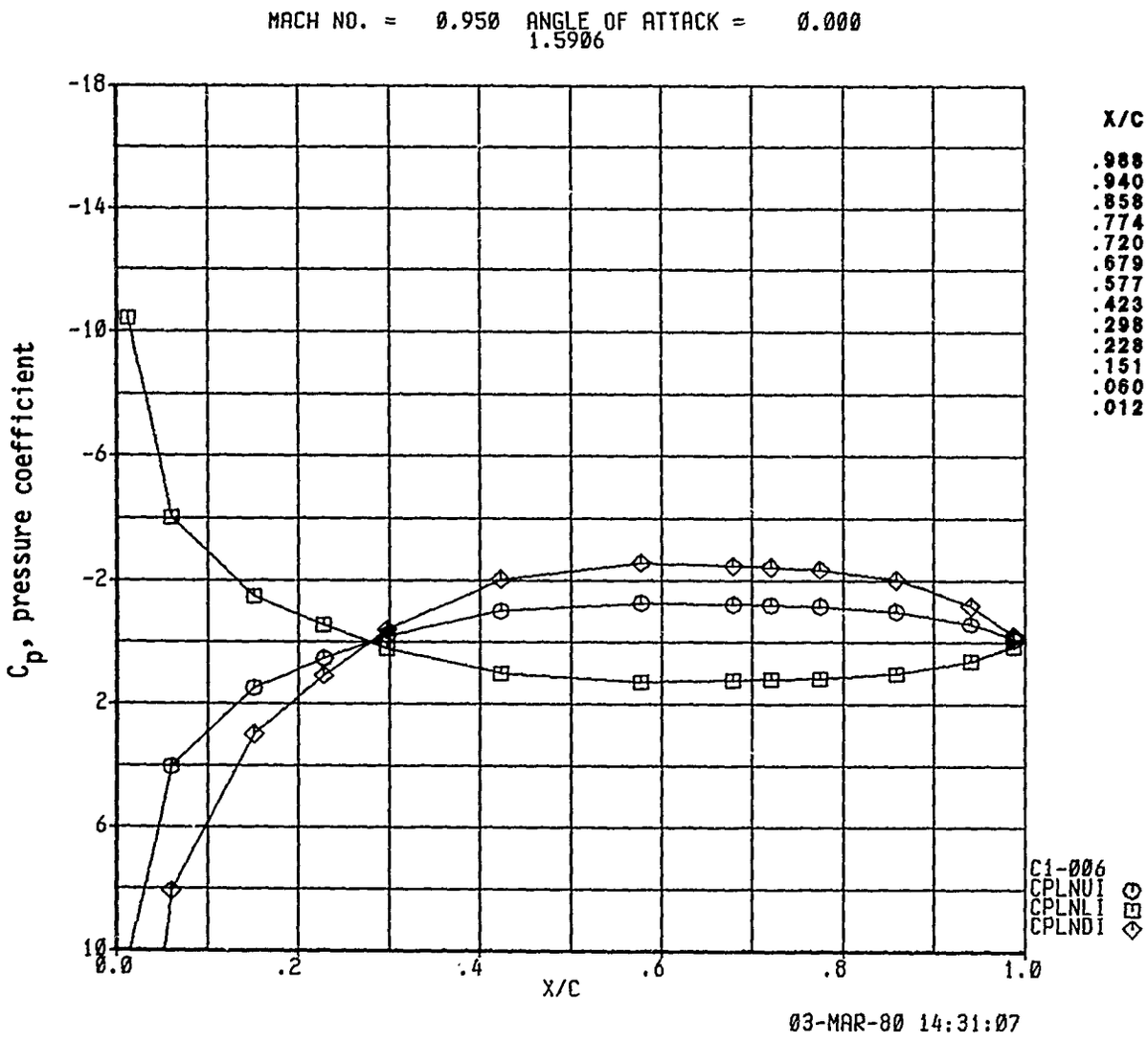
X/C	PRESSURE COEFFICIENT UPPER	LOWER	DIFF
.988	-.1558	0.1558	-.3116
.940	-.7959	0.7959	-1.592
.858	-1.387	1.3869	-2.774
.775	-1.563	1.5634	-3.127
.720	-1.573	1.5733	-3.147
.679	-1.543	1.5432	-3.086
.578	-1.490	1.4896	-2.979
.423	-.8270	0.8270	-1.654
.298	0.3997	-.3997	0.7992
.228	1.1687	-1.169	2.3375
.151	1.8179	-1.818	3.6357
.060	3.5954	-3.595	7.1907
.012	8.6762	-8.676	17.352

Figure 270, Chordwise Pressure Distribution, Imaginary, Configuration 1



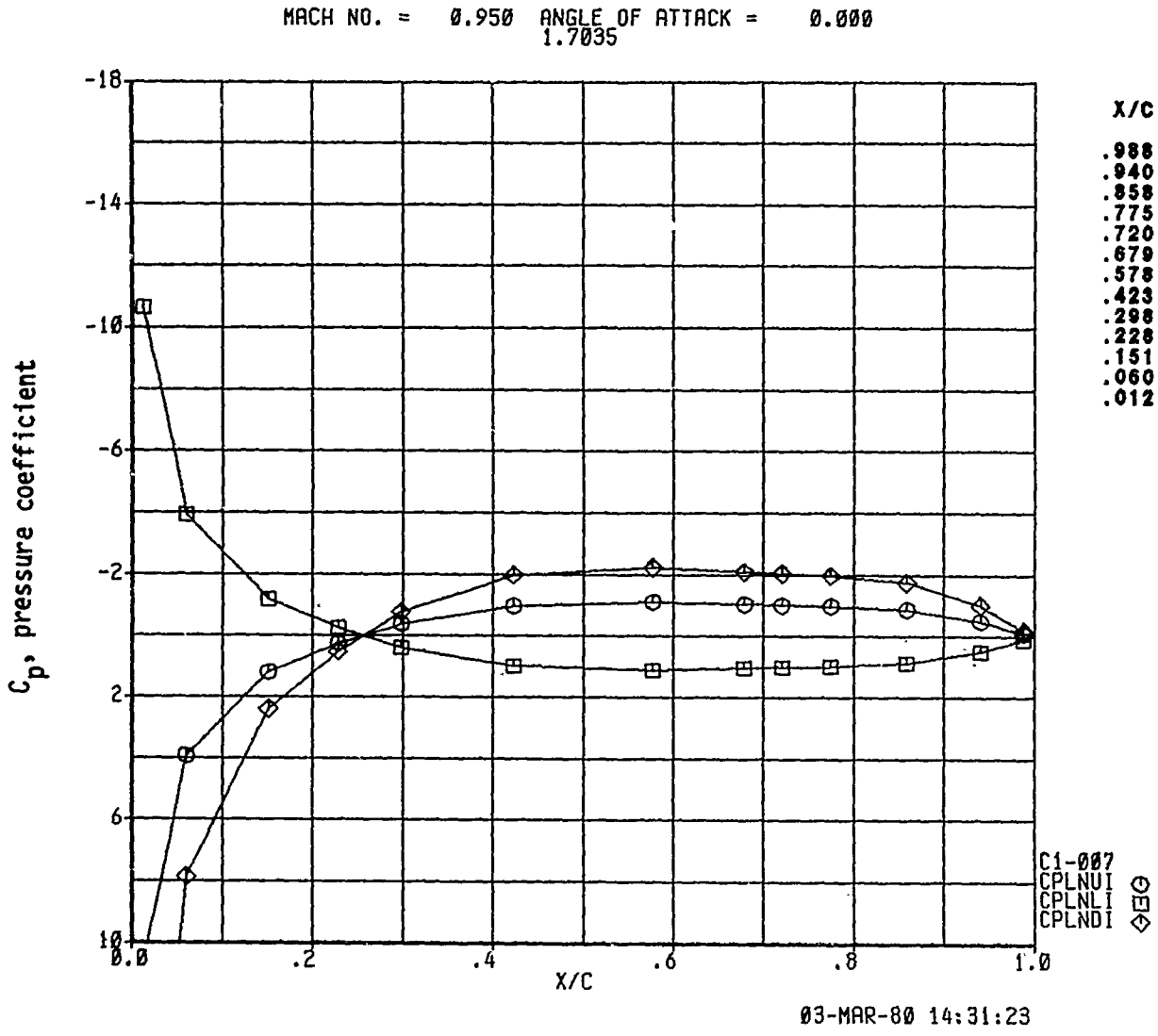
X/C	PRESSURE COEFFICIENT UPPER	LOWER	DIFF
.986	-.1388	0.1388	-.2775
.940	-.7061	0.7061	-1.412
.858	-1.220	1.2202	-2.441
.774	-1.405	1.4054	-2.811
.720	-1.433	1.4334	-2.867
.679	-1.427	1.4273	-2.855
.577	-1.427	1.4267	-2.853
.423	-.9404	0.9404	-1.881
.298	0.1401	-.1401	0.2802
.228	0.9292	-.9292	1.8584
.151	1.7433	-1.743	3.4865
.060	3.8393	-3.839	7.6786
.012	9.5123	-9.512	19.025

Figure 271, Chordwise Pressure Distribution, Imaginary, Configuration 1



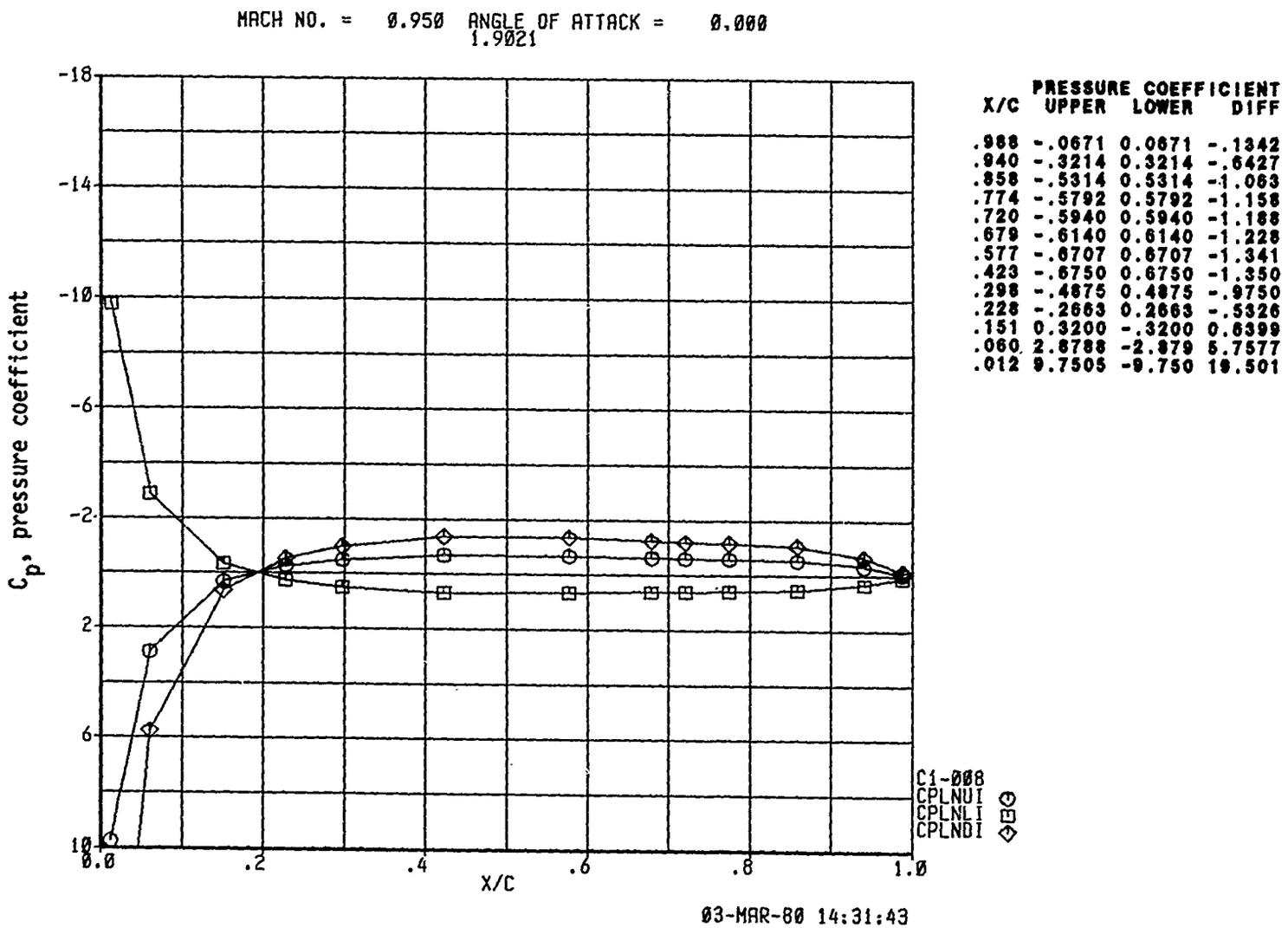
X/C	PRESSURE COEFFICIENT UPPER	LOWER	DIFF
.988	-.1164	0.1164	-.2330
.940	-.5925	0.5925	-1.185
.858	-1.012	1.0119	-2.024
.774	-1.176	1.1758	-2.352
.720	-1.213	1.2132	-2.427
.679	-1.232	1.2324	-2.465
.577	-1.281	1.2815	-2.563
.423	-1.019	1.0187	-2.037
.298	-.2010	0.2010	-.4019
.228	0.5392	-.5392	1.0784
.151	1.4936	-1.494	2.9873
.060	4.0409	-4.041	8.0818
.012	10.426	-10.43	20.853

Figure 272, Chordwise Pressure Distribution, Imaginary, Configuration 1



X/C	PRESSURE COEFFICIENT UPPER	LOWER	DIFF
.988	-.0861	0.0861	-.1723
.940	-.5057	0.5057	-1.011
.858	-.8737	0.8737	-1.747
.775	-.9887	0.9887	-1.977
.720	-1.024	1.0244	-2.049
.679	-1.047	1.0471	-2.094
.578	-1.115	1.1149	-2.230
.423	-.9880	0.9880	-1.976
.298	-.3888	0.3888	-.7775
.228	0.2541	-.2541	0.5082
.151	1.1968	-1.197	2.3937
.060	3.9271	-3.927	7.8541
.012	10.642	-10.64	21.285

Figure 273, Chordwise Pressure Distribution, Imaginary, Configuration 1



X/C	PRESSURE COEFFICIENT UPPER	LOWER	DIFF
.988	-.0671	0.0671	-.1342
.940	-.3214	0.3214	-.6427
.858	-.5314	0.5314	-1.063
.774	-.5792	0.5792	-1.158
.720	-.5940	0.5940	-1.188
.679	-.6140	0.6140	-1.228
.577	-.6707	0.6707	-1.341
.423	-.6750	0.6750	-1.350
.298	-.4875	0.4875	-.9750
.228	-.2663	0.2663	-.5326
.151	0.3200	-.3200	0.6399
.060	2.8788	-2.879	5.7577
.012	9.7505	-9.750	19.501

Figure 274, Chordwise Pressure Distribution, Imaginary, Configuration 1

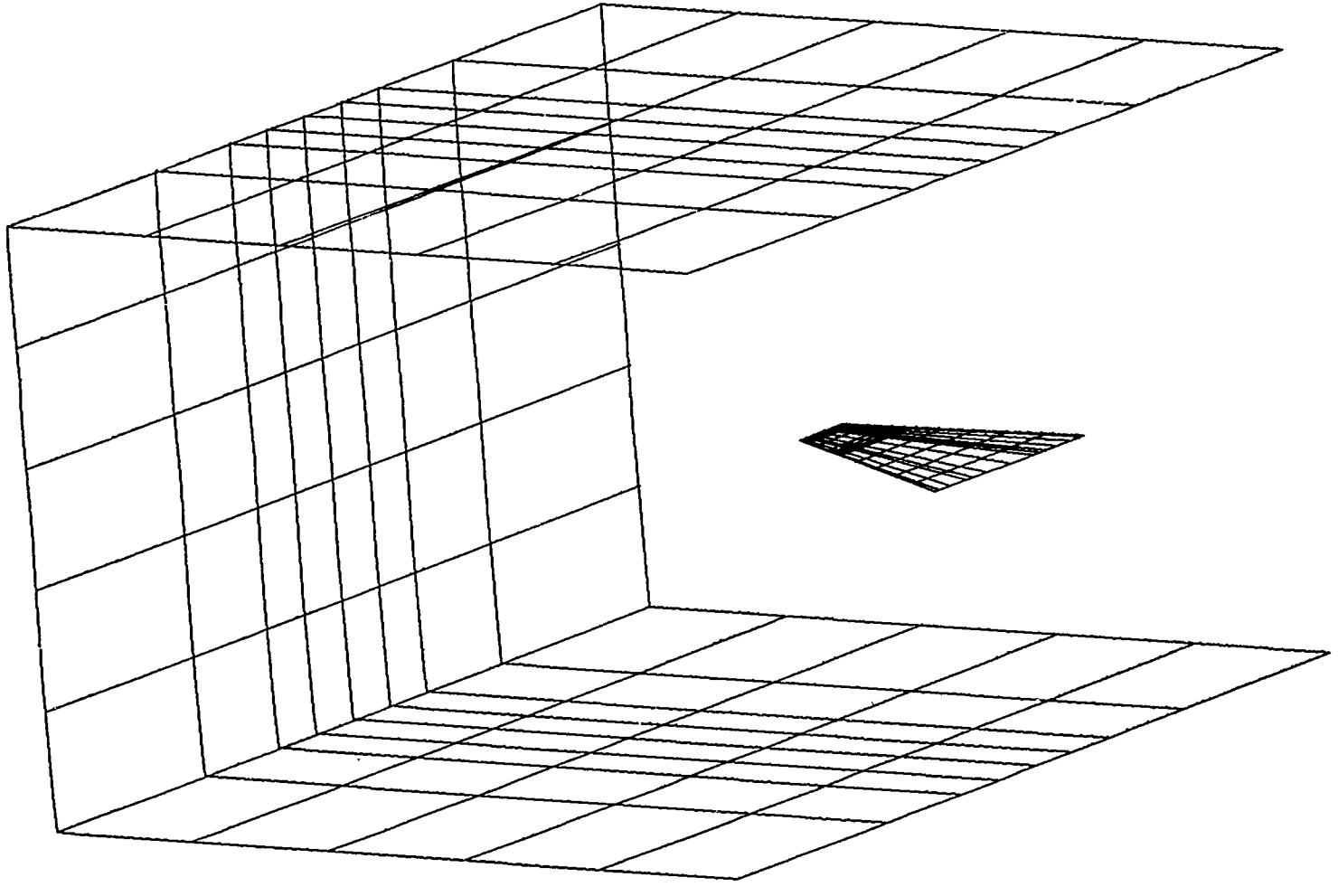
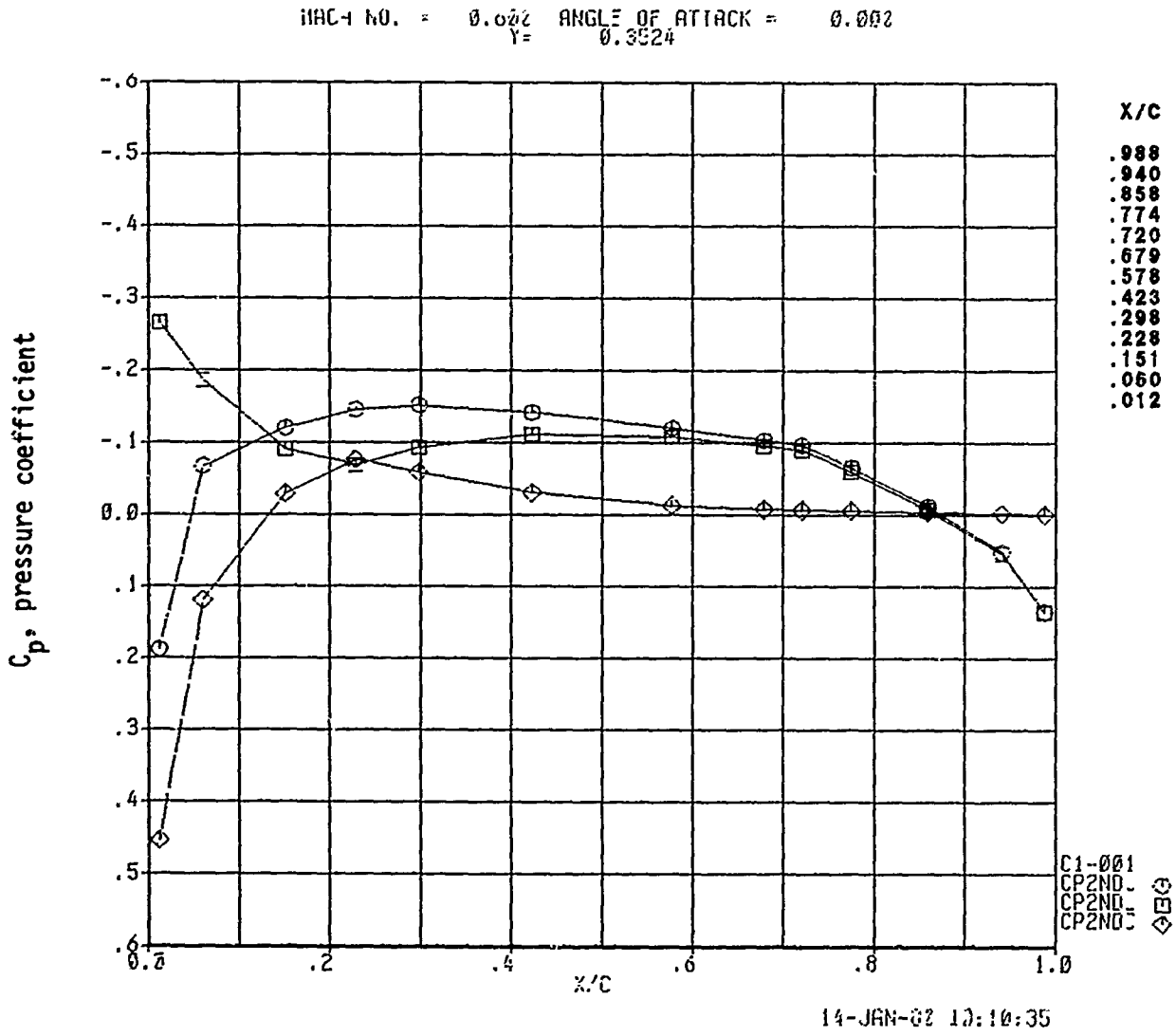
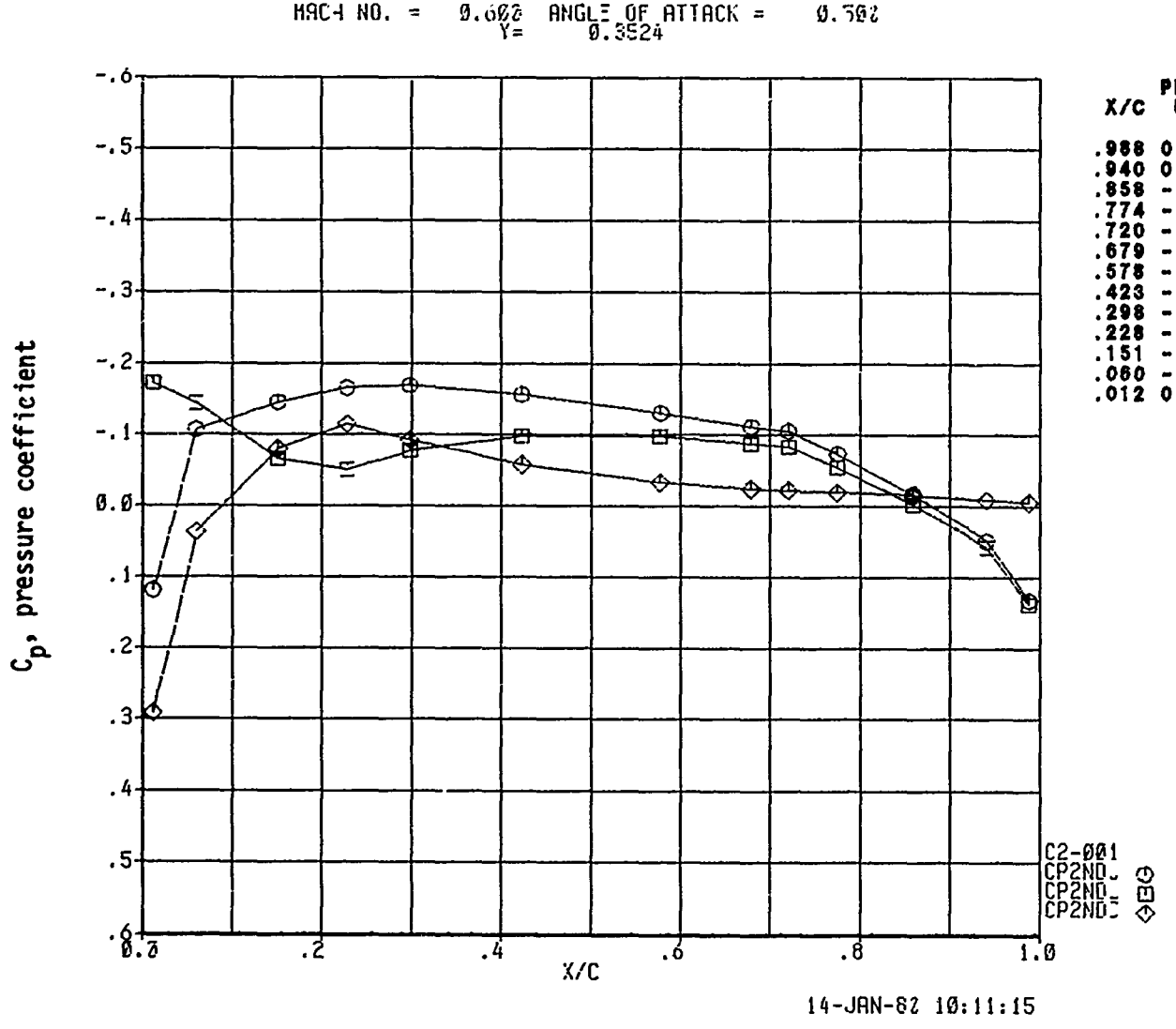


Figure 275, Configuration 2



X/C	PRESSURE COEFFICIENT UPPER	LOWER	DIFF
.988	0.1346	0.1355	-.0010
.940	0.0520	0.0542	-.0022
.858	-.0114	-.0073	-.0040
.774	-.0658	-.0599	-.0059
.720	-.0972	-.0901	-.0071
.679	-.1037	-.0955	-.0081
.578	-.1203	-.1074	-.0129
.423	-.1423	-.1115	-.0309
.298	-.1518	-.0931	-.0588
.228	-.1460	-.0691	-.0769
.151	-.1202	-.0911	-.0291
.060	-.0672	-.1864	0.1192
.012	0.1873	-.2656	0.4530

Figure 276, Chordwise Pressure Distribution, Steady, Configuration 2



X/C	PRESSURE COEFFICIENT UPPER	LOWER	DIFF
.988	0.1323	0.1376	-.0054
.940	0.0484	0.0576	-.0092
.858	-.0166	-.0022	-.0144
.774	-.0726	-.0533	-.0193
.720	-.1048	-.0826	-.0222
.679	-.1118	-.0874	-.0244
.578	-.1305	-.0975	-.0329
.423	-.1559	-.0982	-.0578
.298	-.1686	-.0767	-.0919
.228	-.1651	-.0504	-.1147
.151	-.1450	-.0658	-.0792
.060	-.1065	-.1433	0.0368
.012	0.1187	-.1726	0.2913

Figure 277, Chordwise Pressure Distribution, Steady, Configuration 2

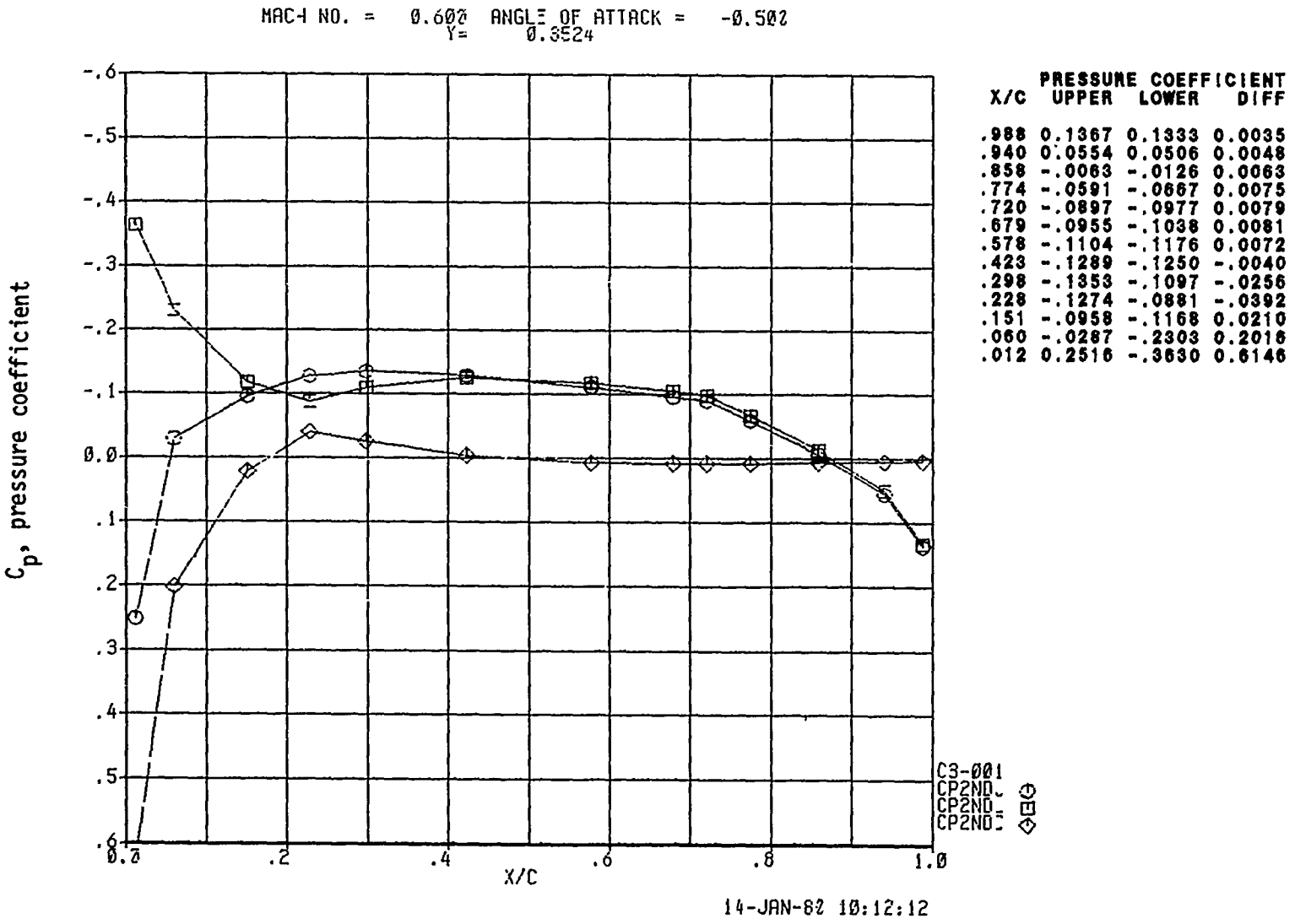


Figure 278, Chordwise Pressure Distribution, Steady, Configuration 2

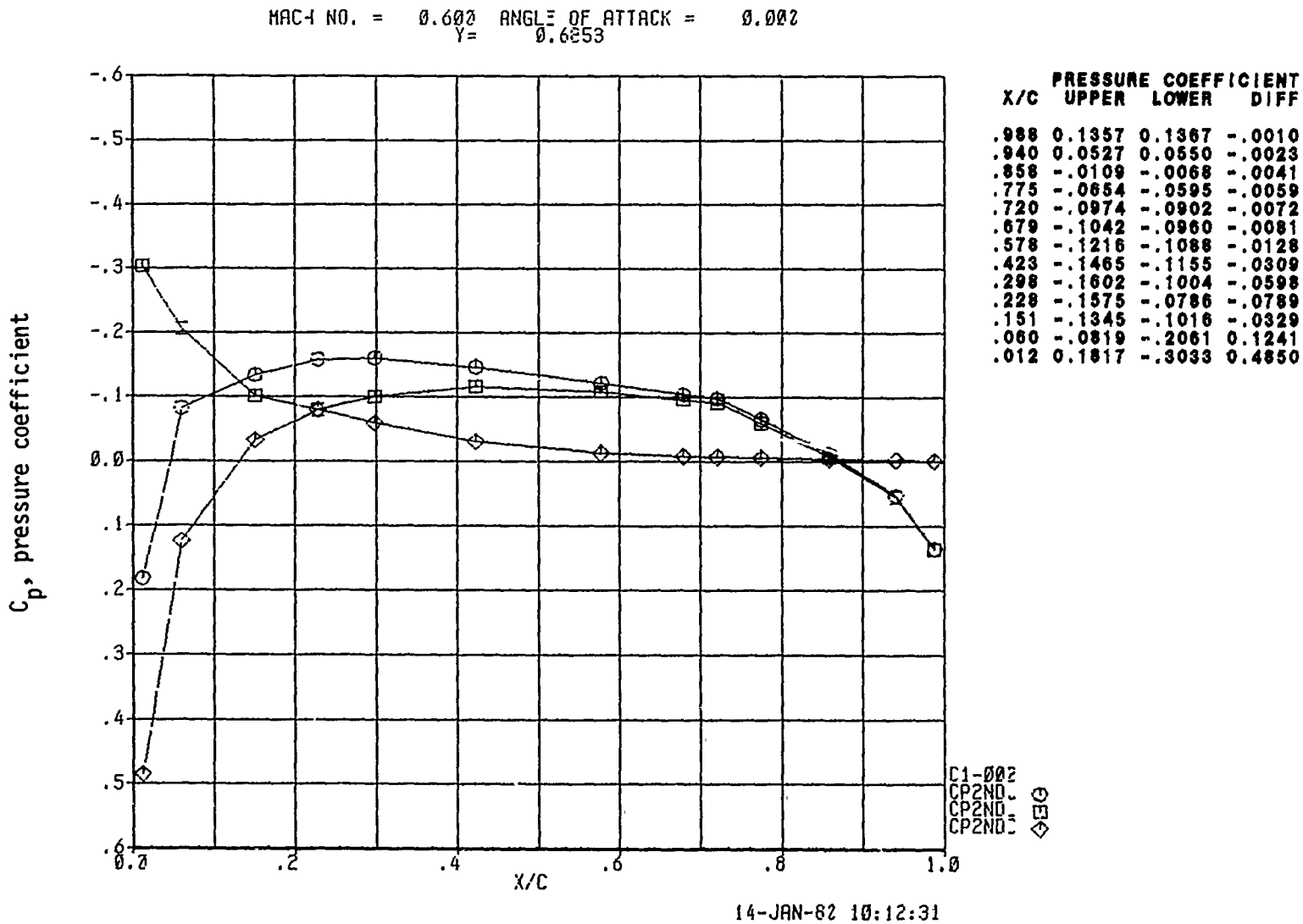


Figure 279, Chordwise Pressure Distribution, Steady, Configuration 2

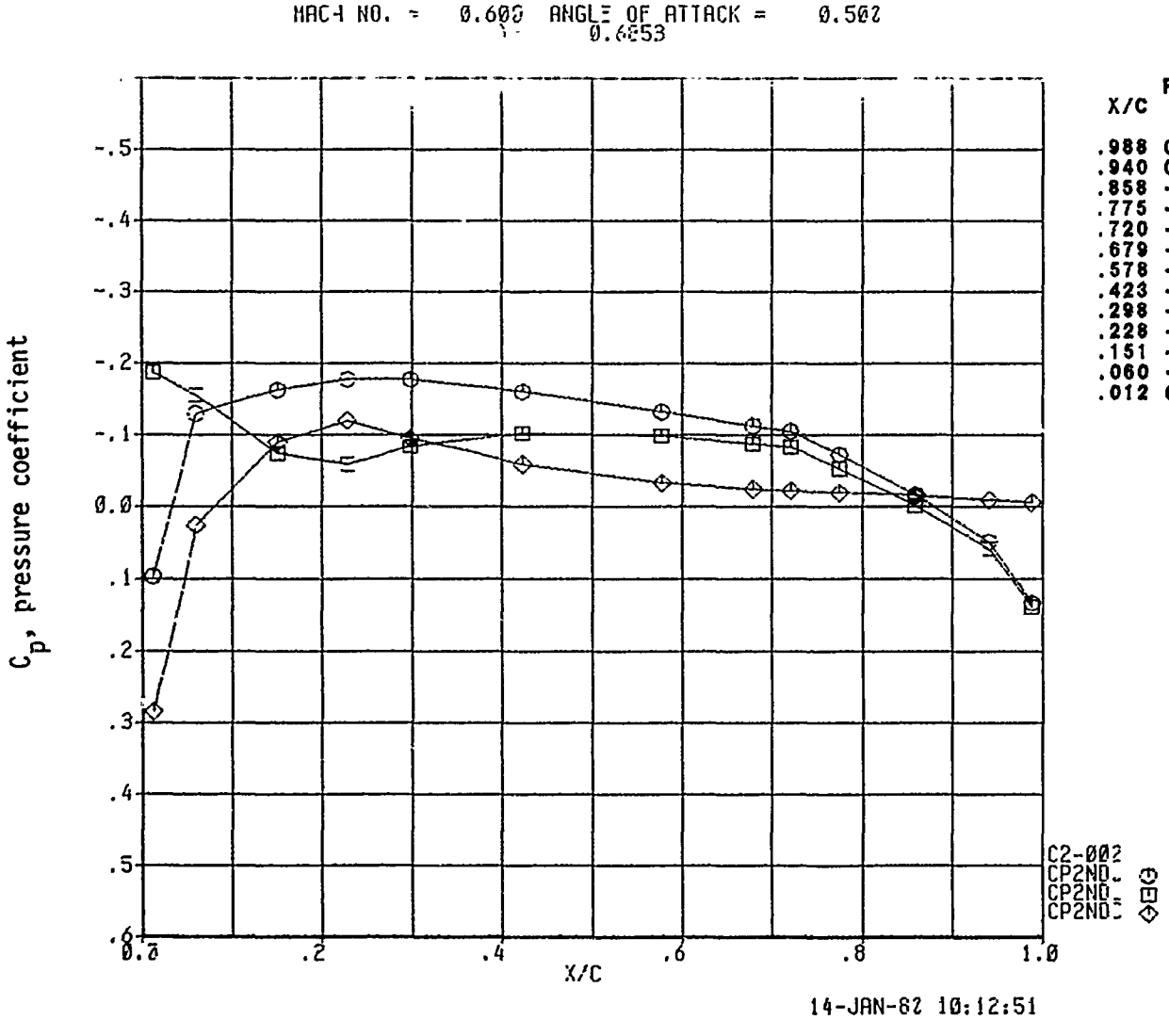


Figure 280, Chordwise Pressure Distribution, Steady, Configuration 2

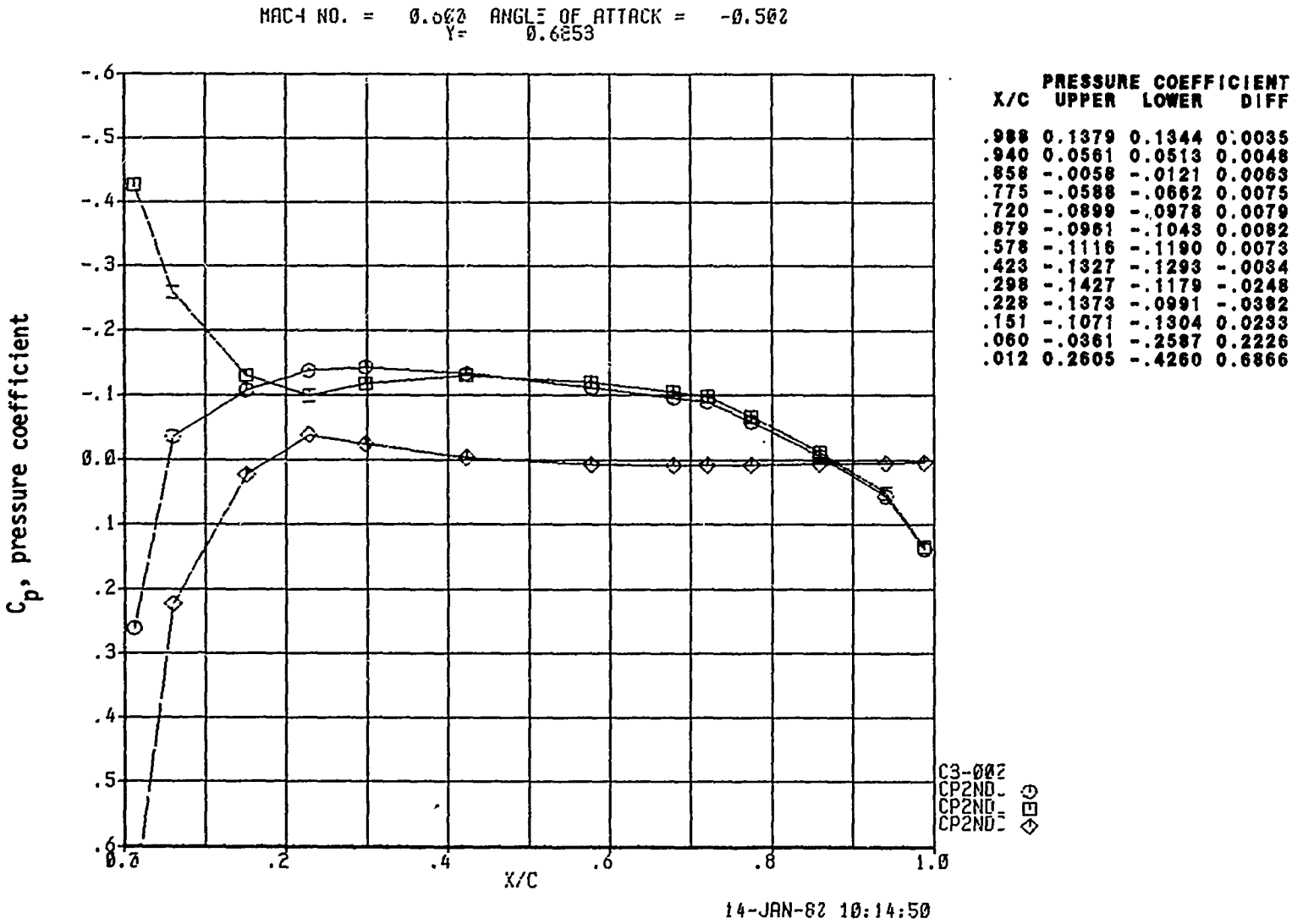


Figure 281, Chordwise Pressure Distribution, Steady, Configuration 2

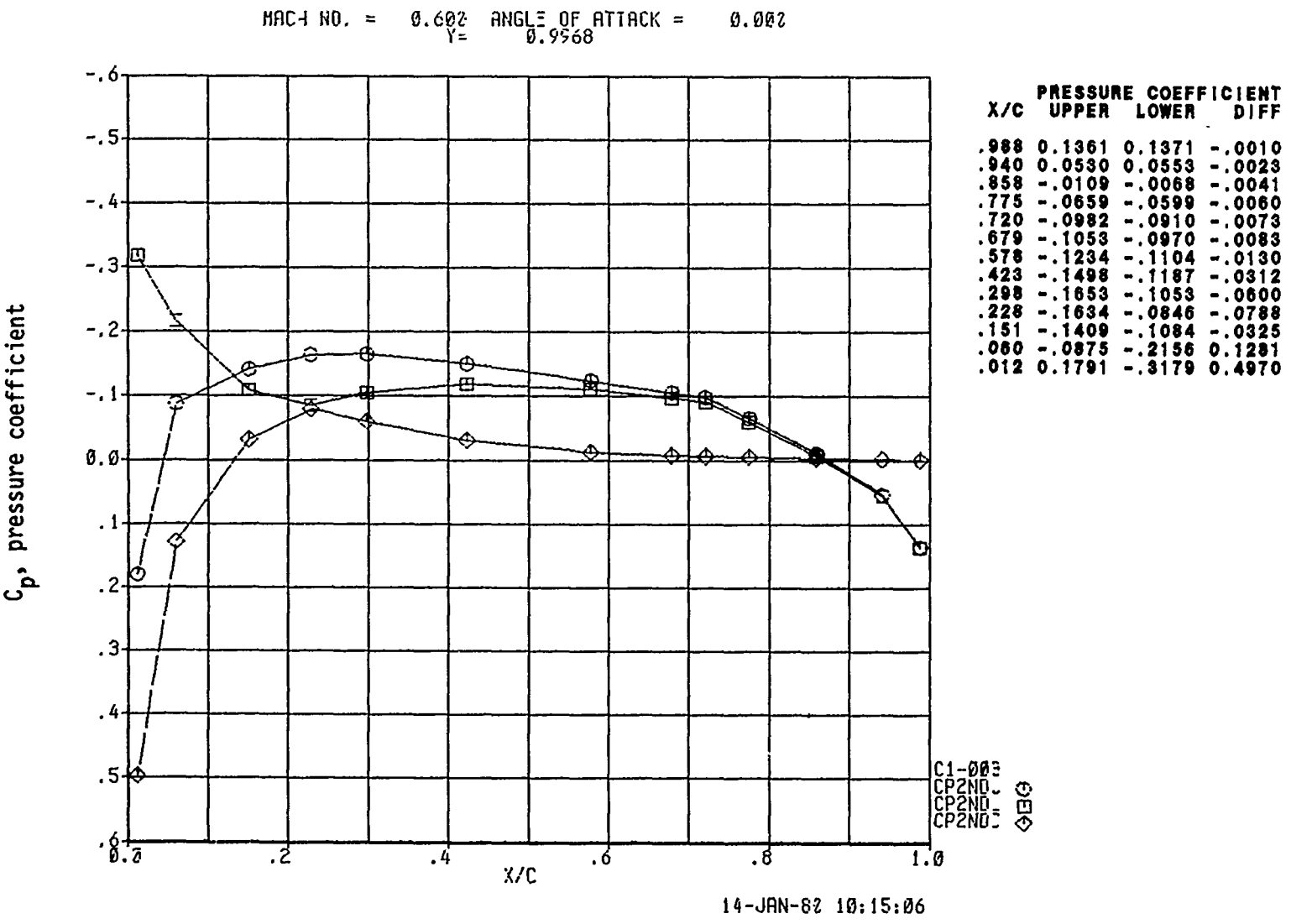


Figure 282, Chordwise Pressure Distribution, Steady, Configuration 2

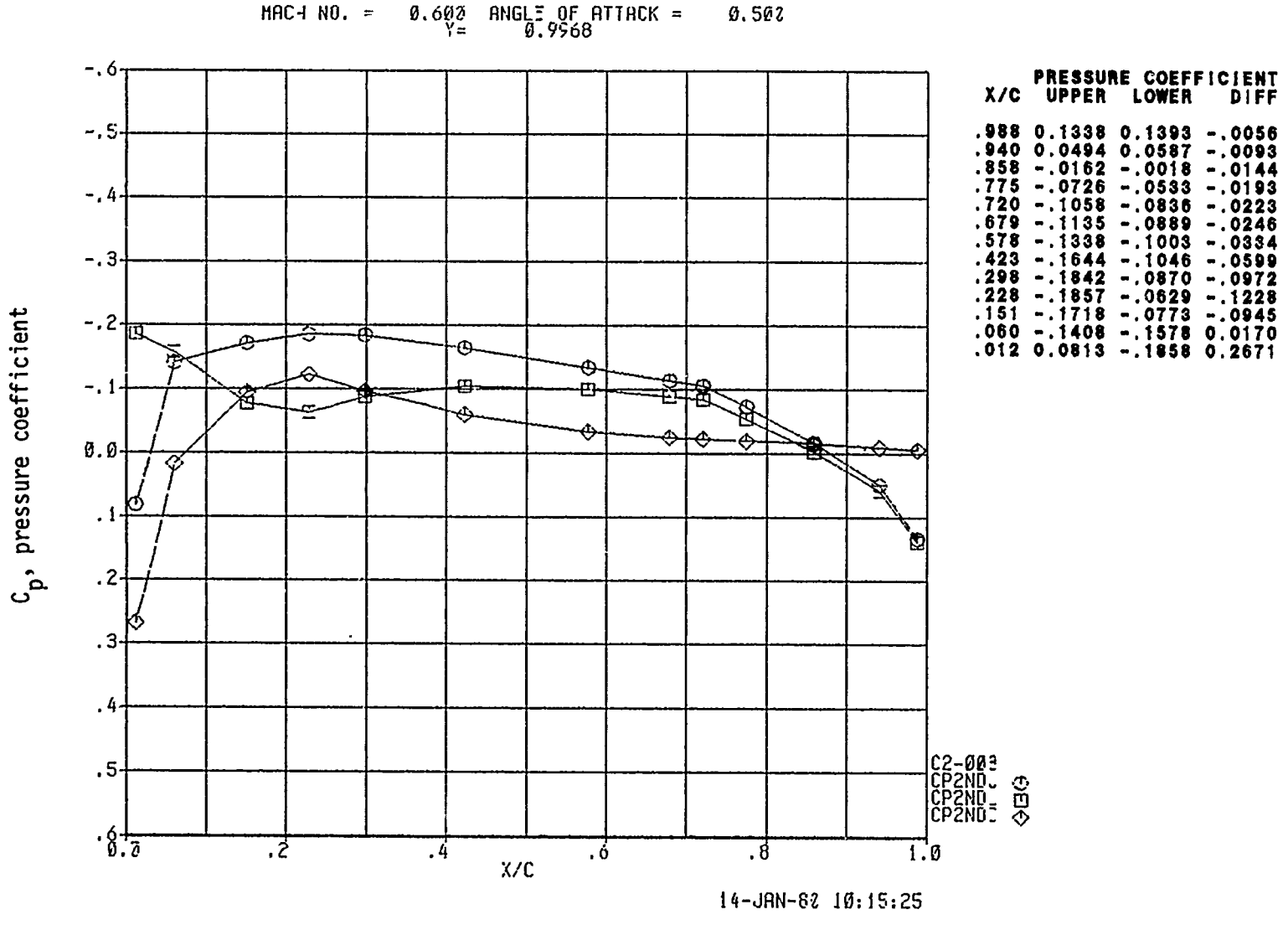
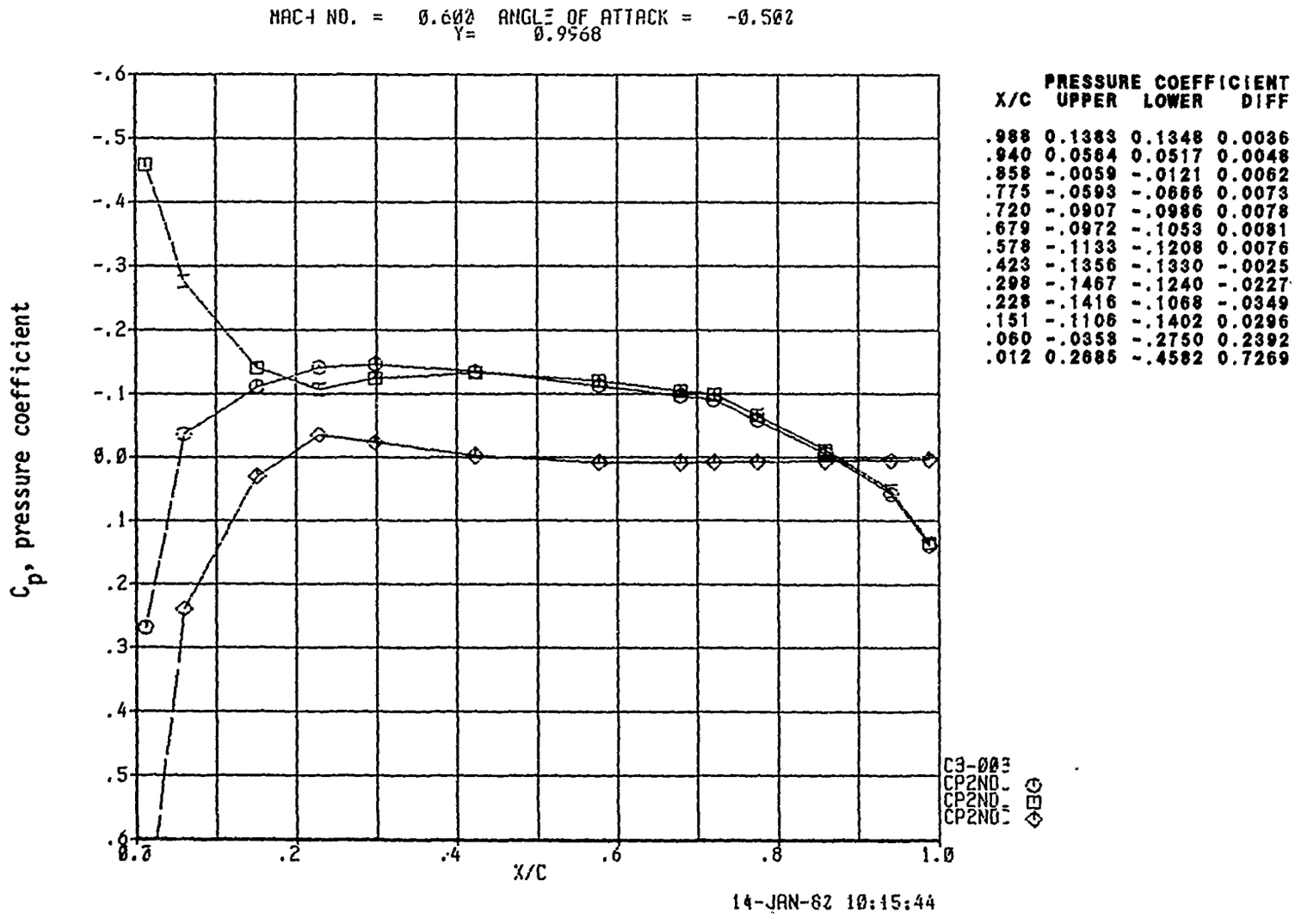


Figure 283, Chordwise Pressure Distribution, Steady, Configuration 2



X/C	PRESSURE COEFFICIENT UPPER	LOWER	DIFF
.988	0.1383	0.1348	0.0036
.940	0.0564	0.0517	0.0048
.858	-.0059	-.0121	0.0062
.775	-.0593	-.0666	0.0073
.720	-.0907	-.0986	0.0078
.679	-.0972	-.1053	0.0081
.578	-.1133	-.1208	0.0076
.423	-.1356	-.1330	-.0025
.298	-.1467	-.1240	-.0227
.228	-.1416	-.1068	-.0349
.151	-.1106	-.1402	0.0296
.060	-.0358	-.2750	0.2392
.012	0.2685	-.4582	0.7269

Figure 284, Chordwise Pressure Distribution, Steady, Configuration 2

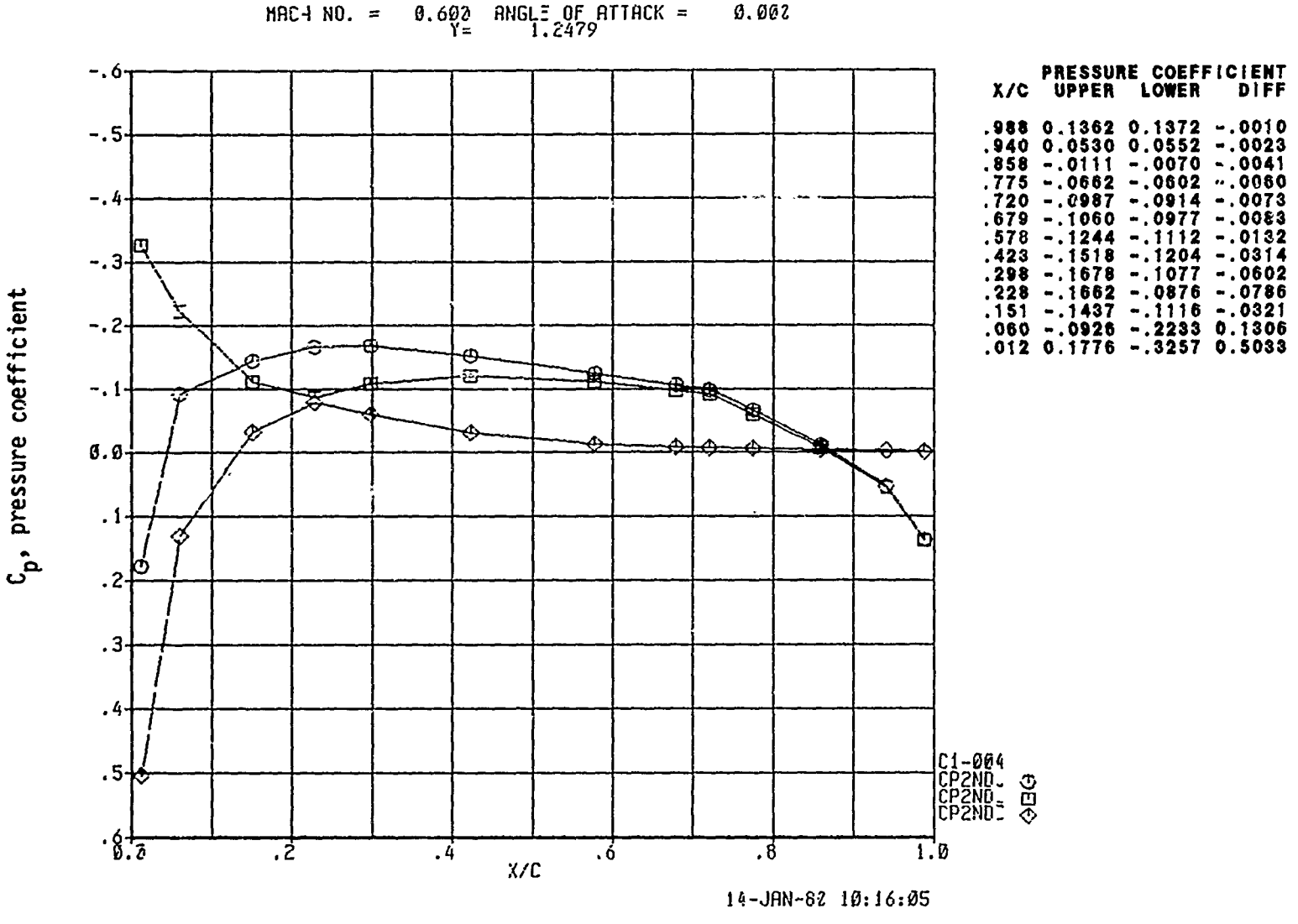
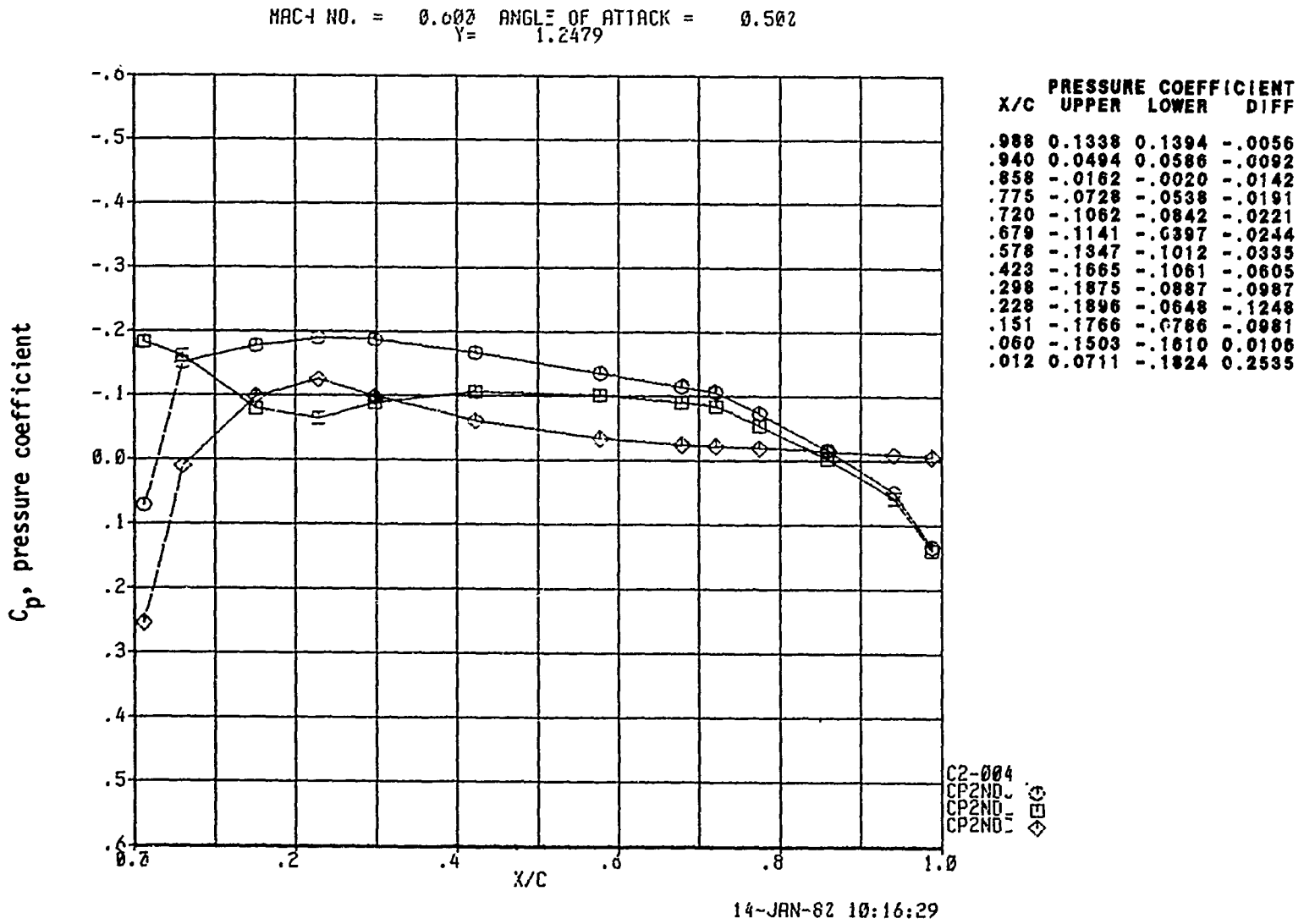
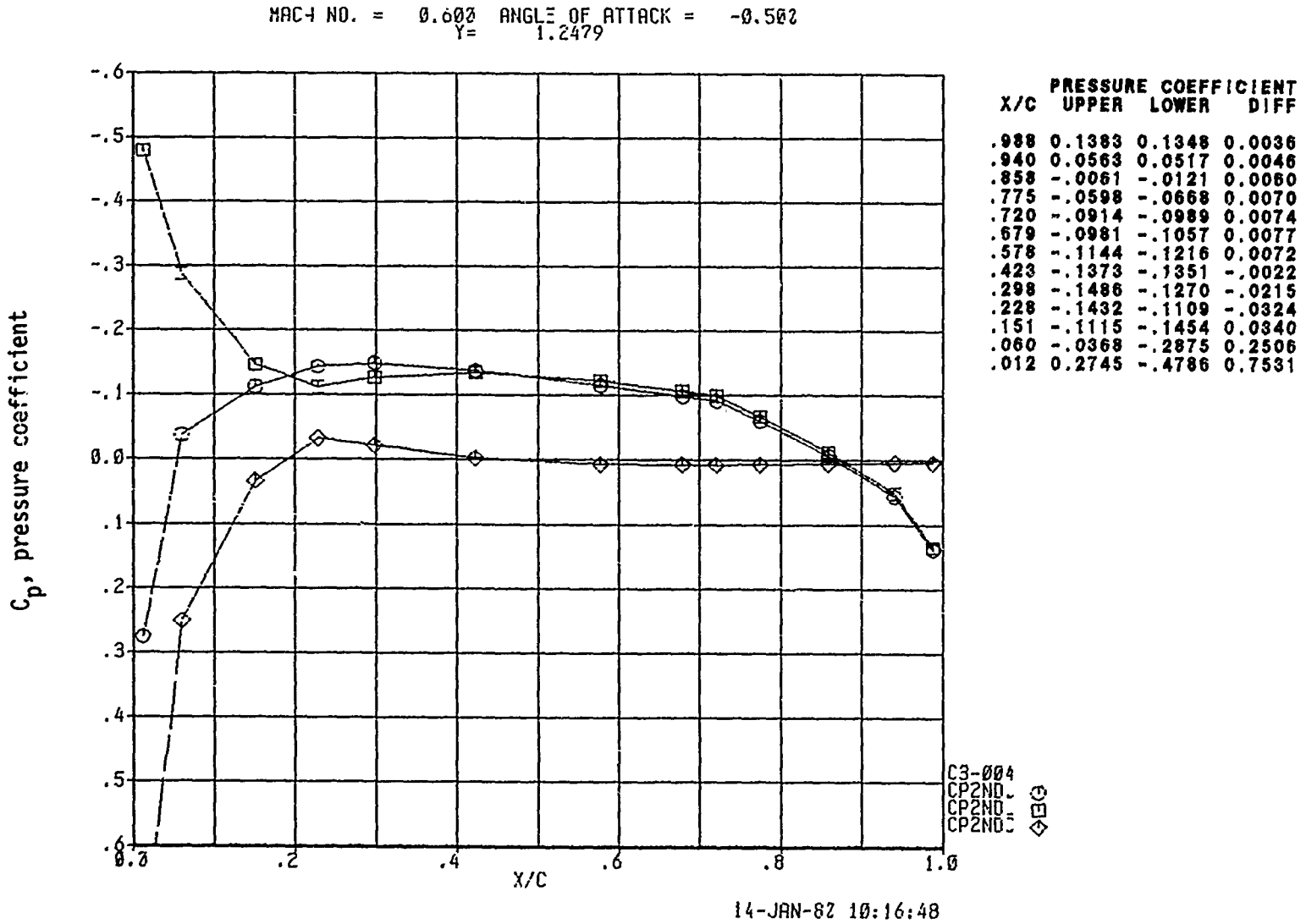


Figure 285, Chordwise Pressure Distribution, Steady, Configuration 2



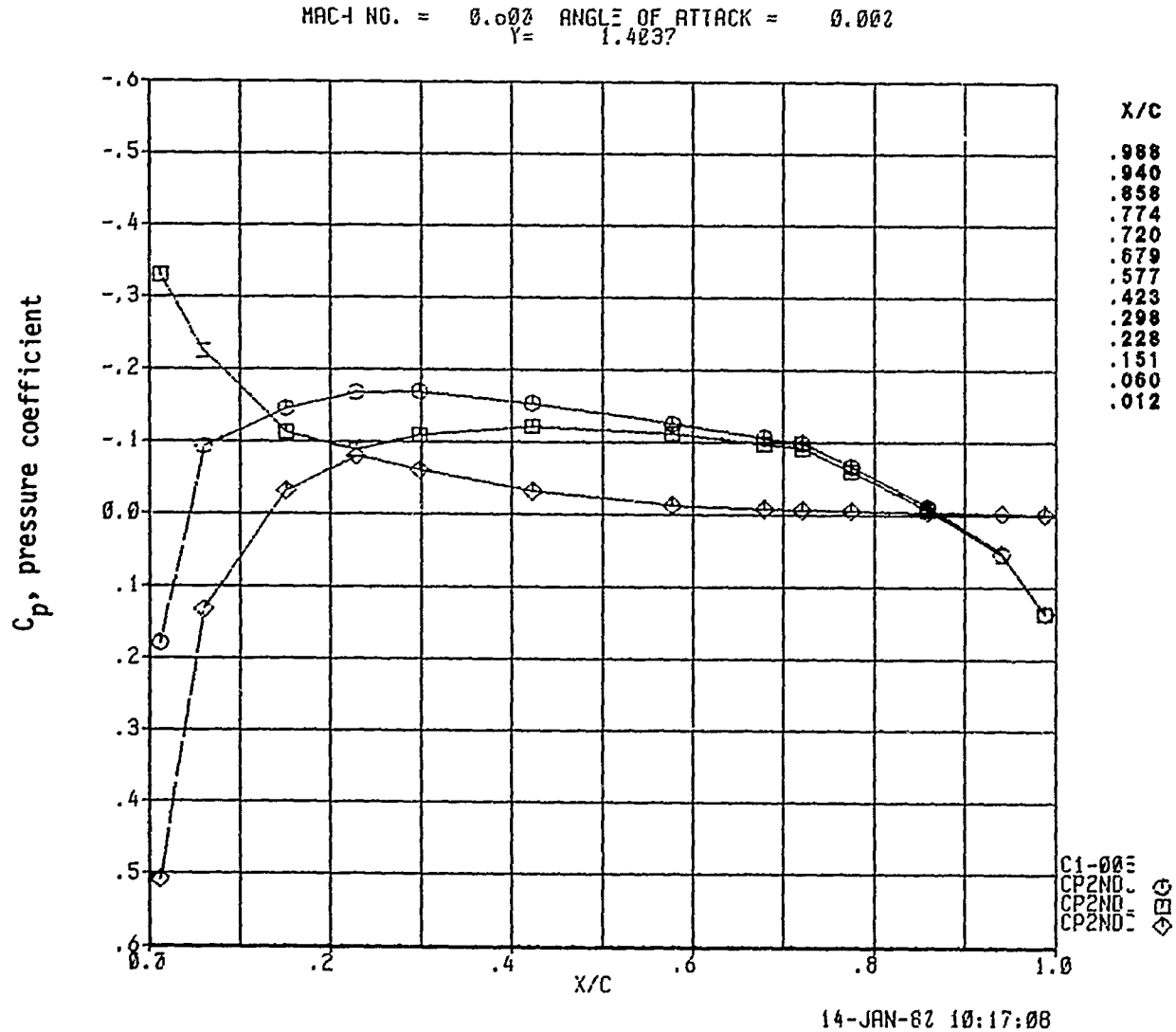
X/C	PRESSURE COEFFICIENT UPPER	LOWER	DIFF
.988	0.1338	0.1394	-.0056
.940	0.0494	0.0586	-.0092
.858	-.0162	-.0020	-.0142
.775	-.0728	-.0538	-.0191
.720	-.1062	-.0842	-.0221
.679	-.1141	-.0897	-.0244
.578	-.1347	-.1012	-.0335
.423	-.1665	-.1061	-.0605
.298	-.1875	-.0887	-.0987
.228	-.1896	-.0648	-.1248
.151	-.1766	-.0786	-.0981
.060	-.1503	-.1610	0.0106
.012	0.0711	-.1824	0.2535

Figure 286, Chordwise Pressure Distribution, Steady, Configuration 2



X/C	PRESSURE COEFFICIENT UPPER	LOWER	DIFF
.988	0.1383	0.1348	0.0036
.940	0.0563	0.0517	0.0046
.858	-.0061	-.0121	0.0060
.775	-.0598	-.0668	0.0070
.720	-.0914	-.0989	0.0074
.679	-.0981	-.1057	0.0077
.578	-.1144	-.1216	0.0072
.423	-.1373	-.1351	-.0022
.298	-.1486	-.1270	-.0215
.228	-.1432	-.1109	-.0324
.151	-.1115	-.1454	0.0340
.060	-.0368	-.2875	0.2506
.012	0.2745	-.4786	0.7531

Figure 287, Chordwise Pressure Distribution, Steady, Configuration 2



X/C	PRESSURE COEFFICIENT UPPER	LOWER	DIFF
.988	0.1361	0.1370	-.0009
.940	0.0529	0.0551	-.0022
.858	-.0110	-.0070	-.0040
.774	-.0662	-.0603	-.0059
.720	-.0988	-.0916	-.0072
.679	-.1061	-.0978	-.0083
.577	-.1247	-.1115	-.0132
.423	-.1528	-.1212	-.0316
.298	-.1694	-.1089	-.0606
.228	-.1679	-.0890	-.0789
.151	-.1450	-.1130	-.0320
.060	-.0931	-.2255	0.1324
.012	0.1790	-.3293	0.5083

Figure 288, Chordwise Pressure Distribution, Steady, Configuration 2

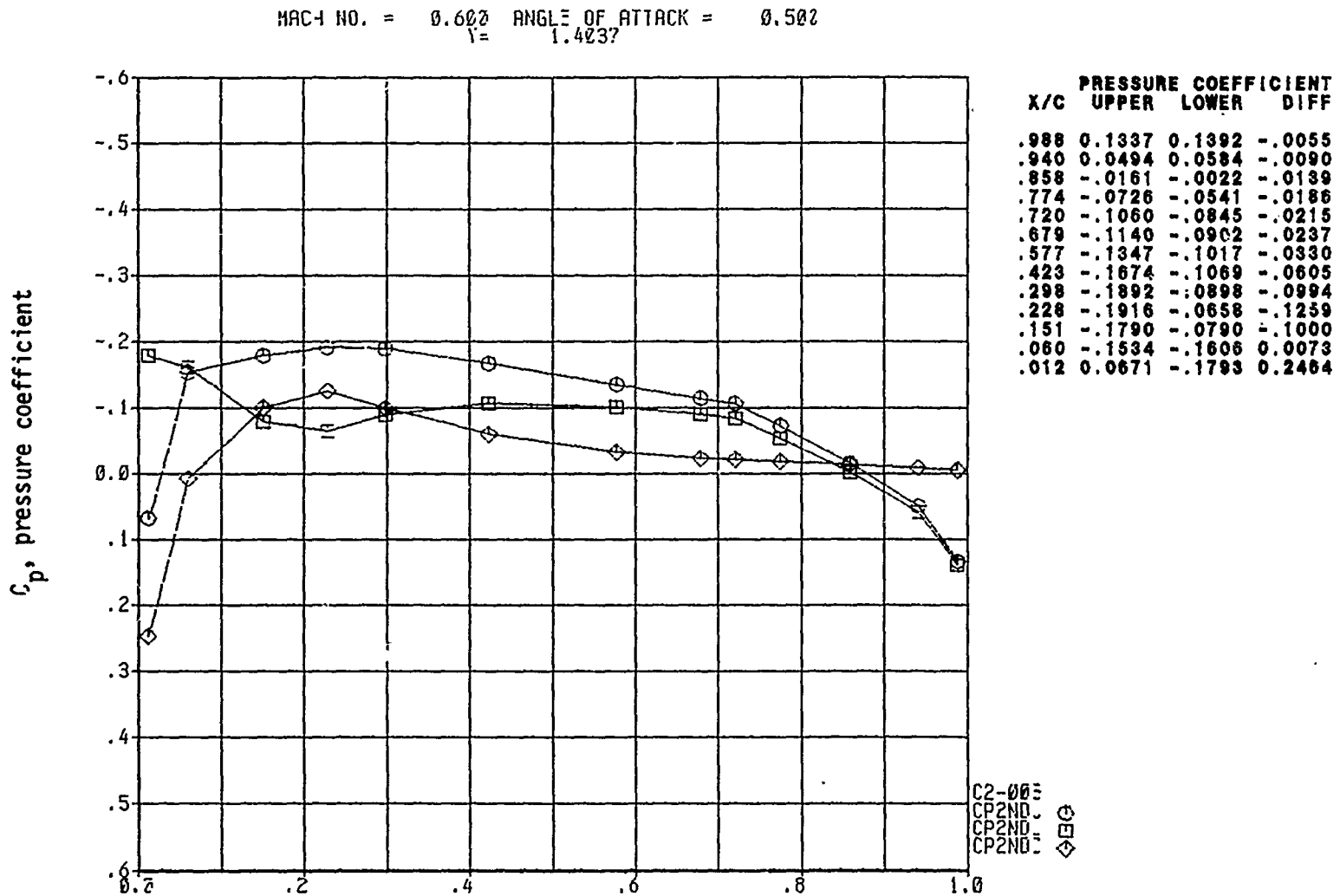


Figure 289, Chordwise Pressure Distribution, Steady, Configuration 2

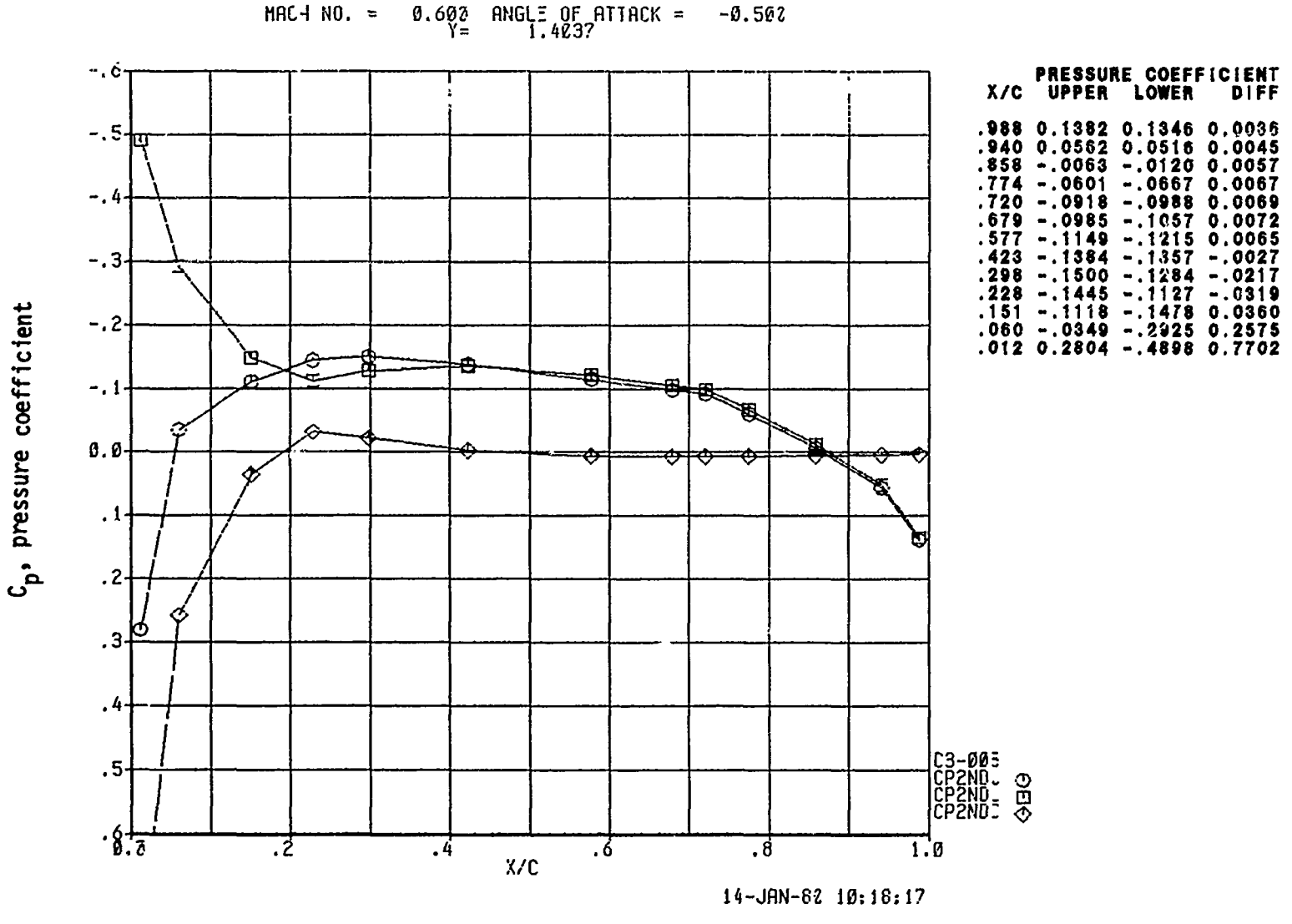
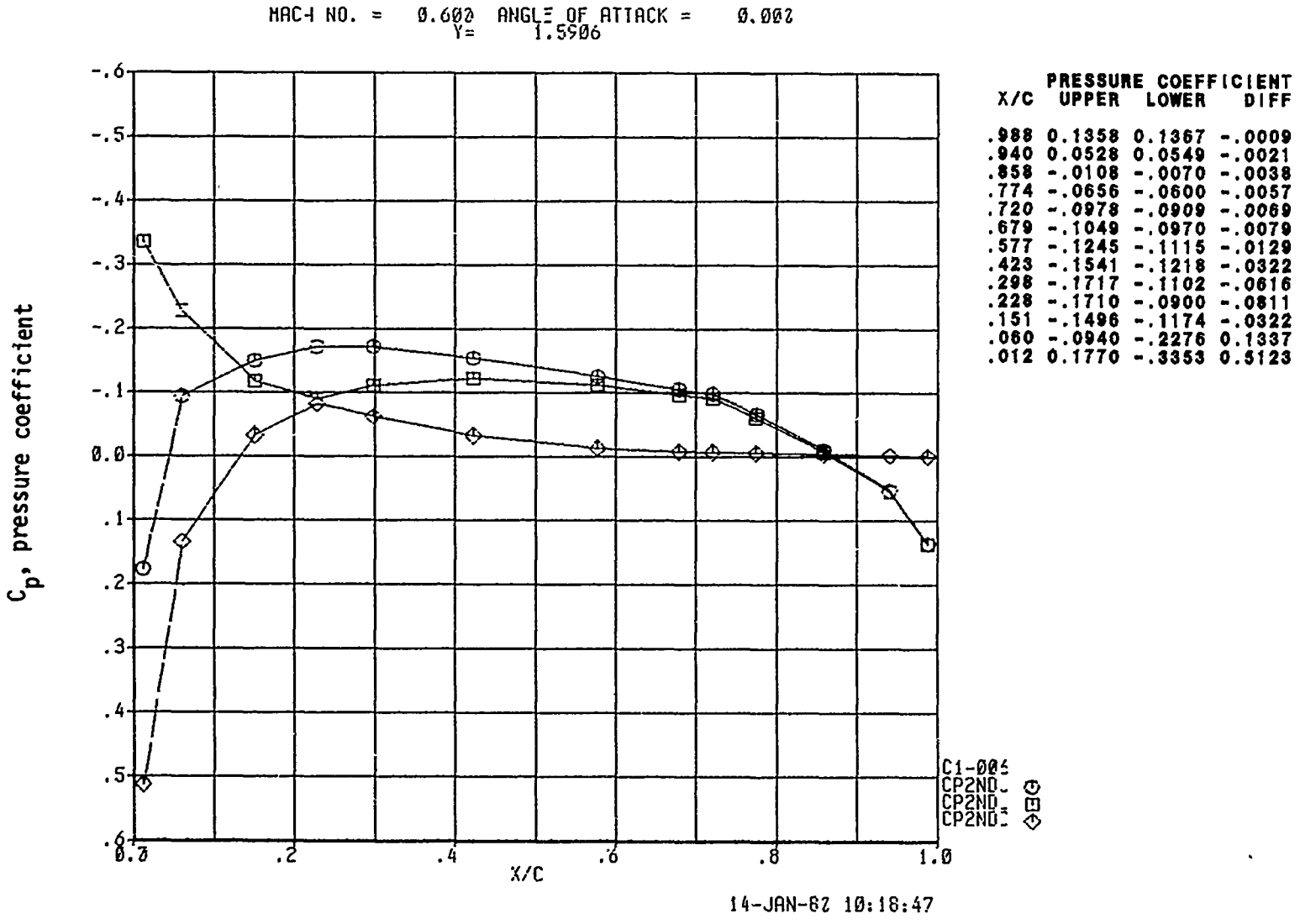
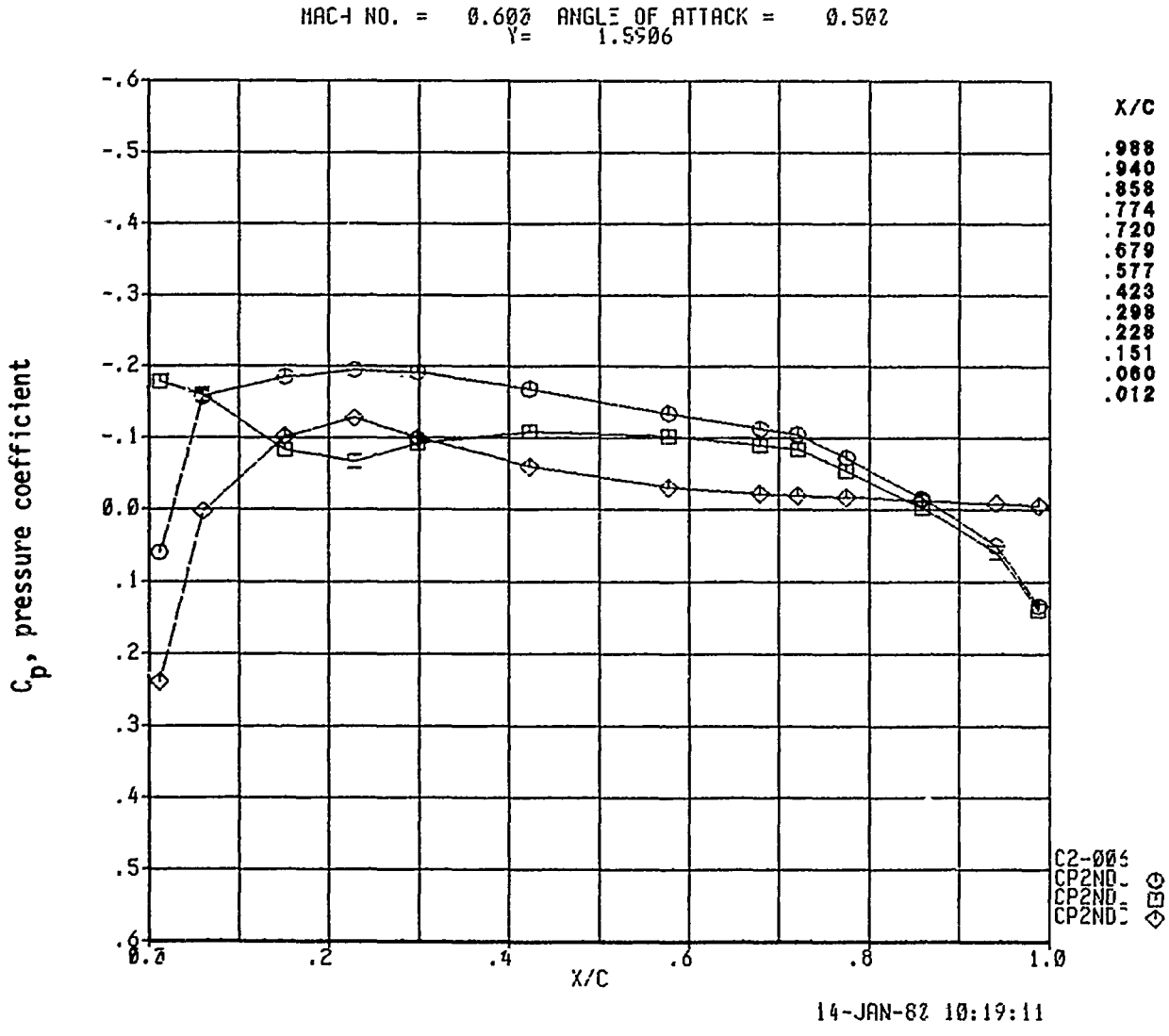


Figure 290, Chordwise Pressure Distribution, Steady, Configuration 2



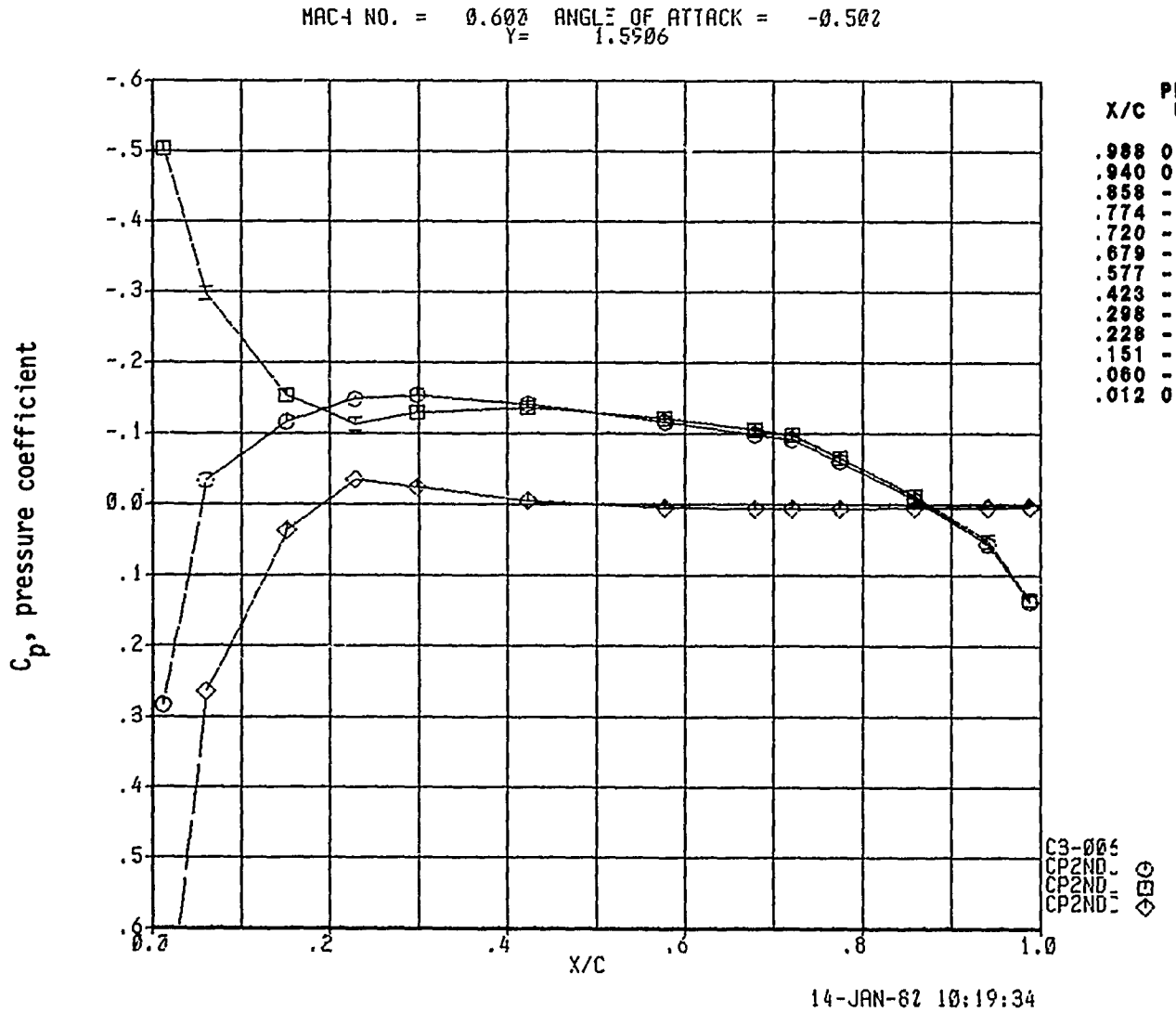
X/C	PRESSURE COEFFICIENT UPPER	LOWER	DIFF
.988	0.1358	0.1367	-.0009
.940	0.0528	0.0549	-.0021
.858	-.0108	-.0070	-.0038
.774	-.0656	-.0600	-.0057
.720	-.0978	-.0909	-.0069
.679	-.1049	-.0970	-.0079
.577	-.1245	-.1115	-.0129
.423	-.1541	-.1218	-.0322
.298	-.1717	-.1102	-.0616
.228	-.1710	-.0900	-.0811
.151	-.1496	-.1174	-.0322
.060	-.0940	-.2276	0.1337
.012	0.1770	-.3353	0.5123

Figure 291, Chordwise Pressure Distribution, Steady, Configuration 2



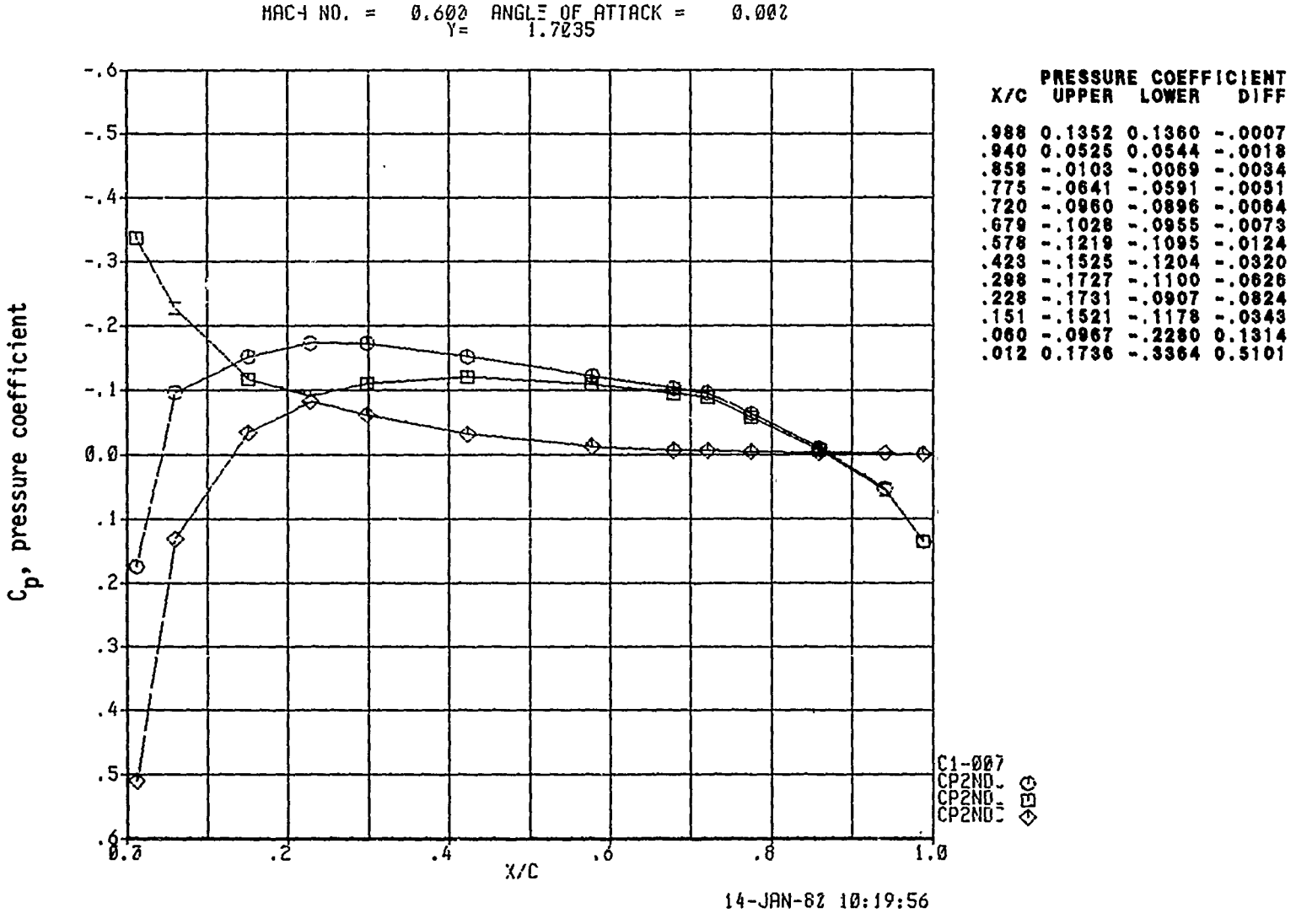
X/C	PRESSURE COEFFICIENT UPPER	LOWER	DIFF
.988	0.1334	0.1388	-.0054
.940	0.0495	0.0580	-.0085
.858	-.0155	-.0026	-.0129
.774	-.0715	-.0543	-.0172
.720	-.1045	-.0845	-.0199
.679	-.1122	-.0901	-.0220
.577	-.1337	-.1027	-.0310
.423	-.1679	-.1085	-.0594
.298	-.1910	-.0917	-.0993
.228	-.1944	-.0672	-.1273
.151	-.1842	-.0827	-.1015
.060	-.1569	-.1600	0.0030
.012	0.0595	-.1784	0.2379

Figure 292, Chordwise Pressure Distribution, Steady, Configuration 2



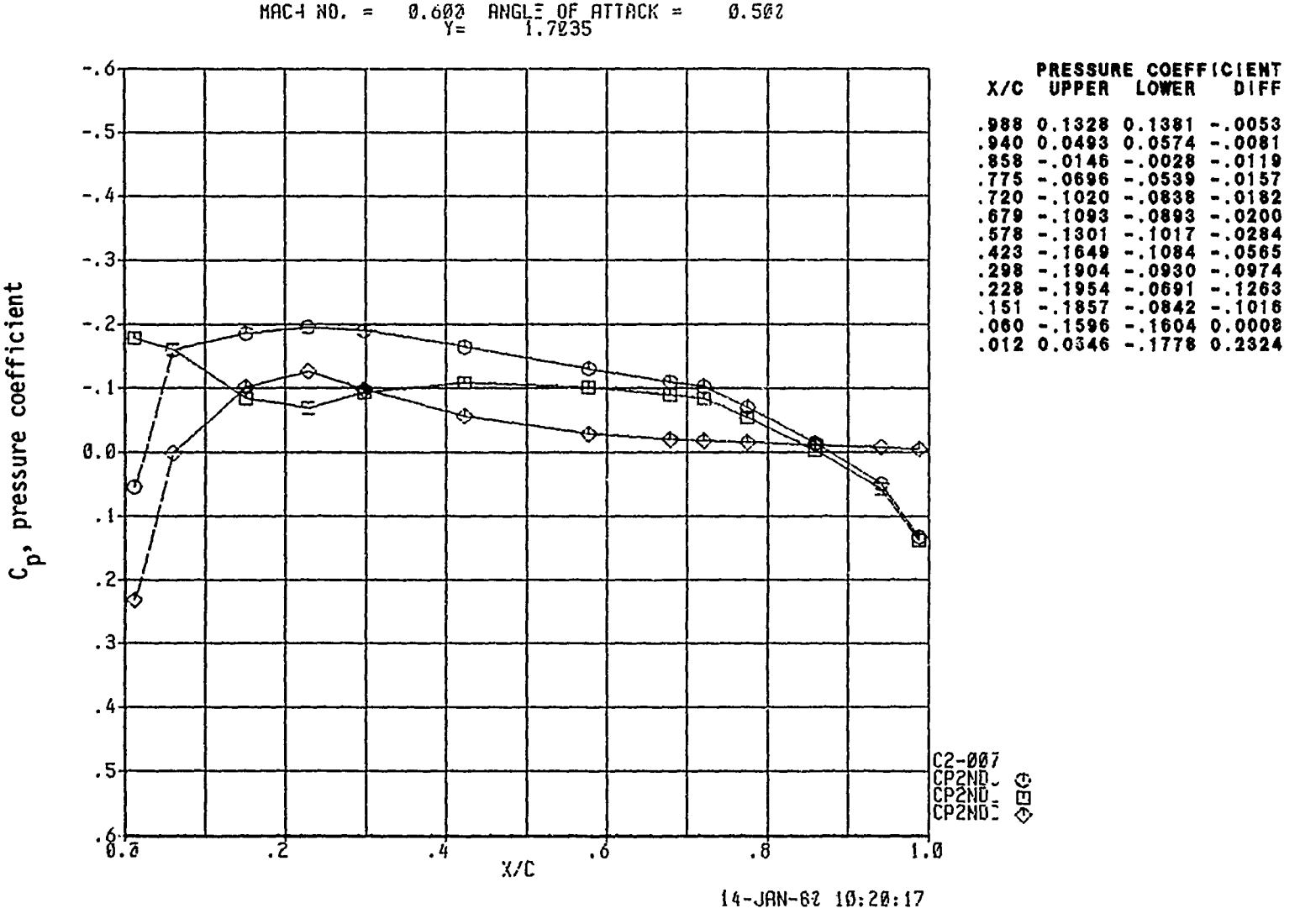
X/C	PRESSURE COEFFICIENT UPPER	LOWER	DIFF
.988	0.1379	0.1342	0.0036
.940	0.0559	0.0515	0.0044
.858	-.0064	-.0117	0.0053
.774	-.0600	-.0659	0.0059
.720	-.0915	-.0975	0.0060
.679	-.0981	-.1042	0.0061
.577	-.1156	-.1207	0.0050
.423	-.1406	-.1355	-.0049
.298	-.1529	-.1290	-.0239
.228	-.1480	-.1133	-.0347
.151	-.1158	-.1529	0.0371
.060	-.0333	-.2976	0.2643
.012	0.2830	-.5037	0.7867

Figure 293, Chordwise Pressure Distribution, Steady, Configuration 2



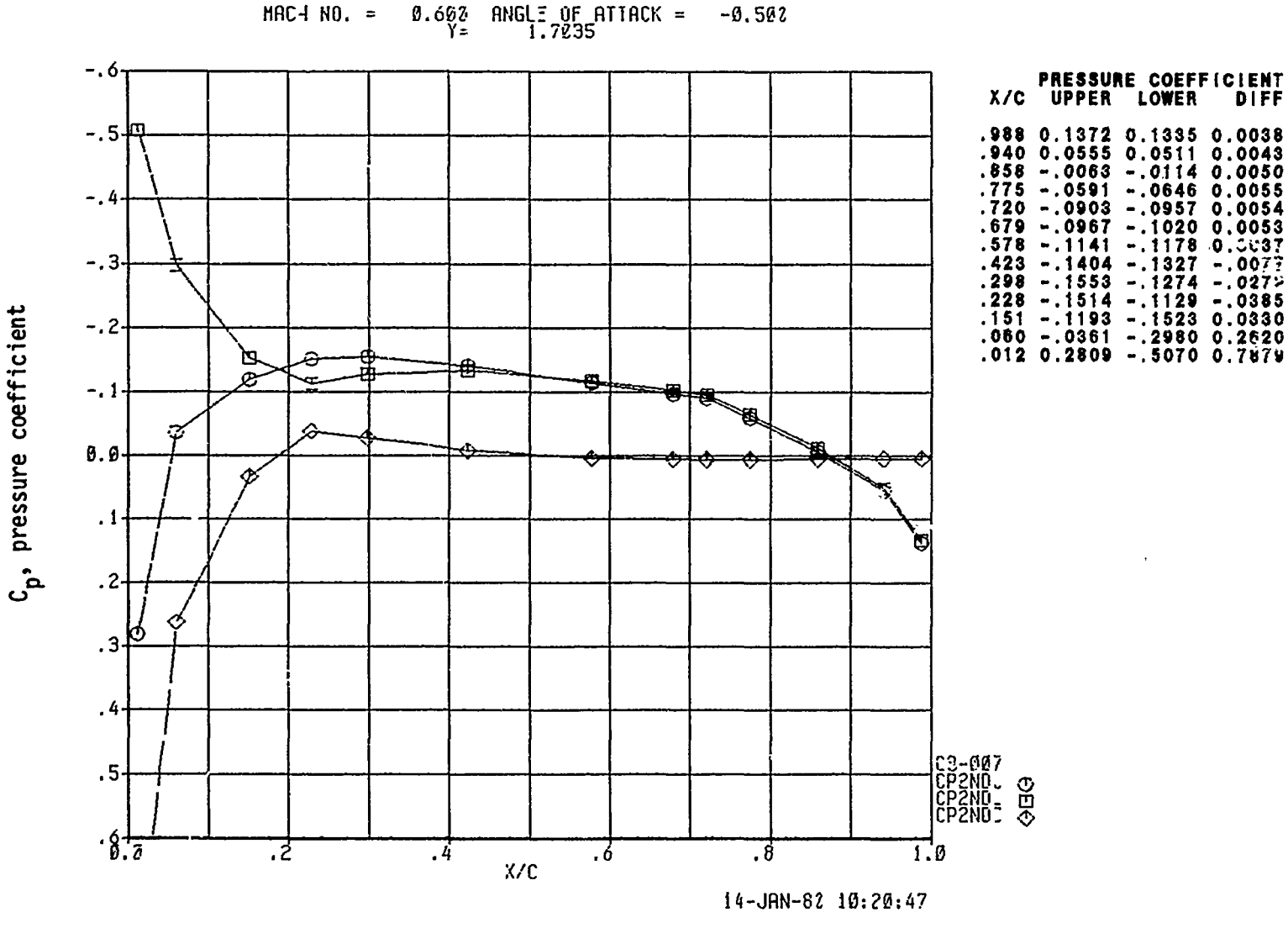
X/C	PRESSURE COEFFICIENT UPPER	LOWER	DIFF
.988	0.1352	0.1360	-.0007
.940	0.0525	0.0544	-.0018
.858	-.0103	-.0069	-.0034
.775	-.0641	-.0591	-.0051
.720	-.0960	-.0896	-.0064
.679	-.1028	-.0955	-.0073
.578	-.1219	-.1095	-.0124
.423	-.1525	-.1204	-.0320
.298	-.1727	-.1100	-.0626
.228	-.1731	-.0907	-.0824
.151	-.1521	-.1178	-.0343
.060	-.0967	-.2280	0.1314
.012	0.1736	-.3364	0.5101

Figure 294, Chordwise Pressure Distribution, Steady, Configuration 2



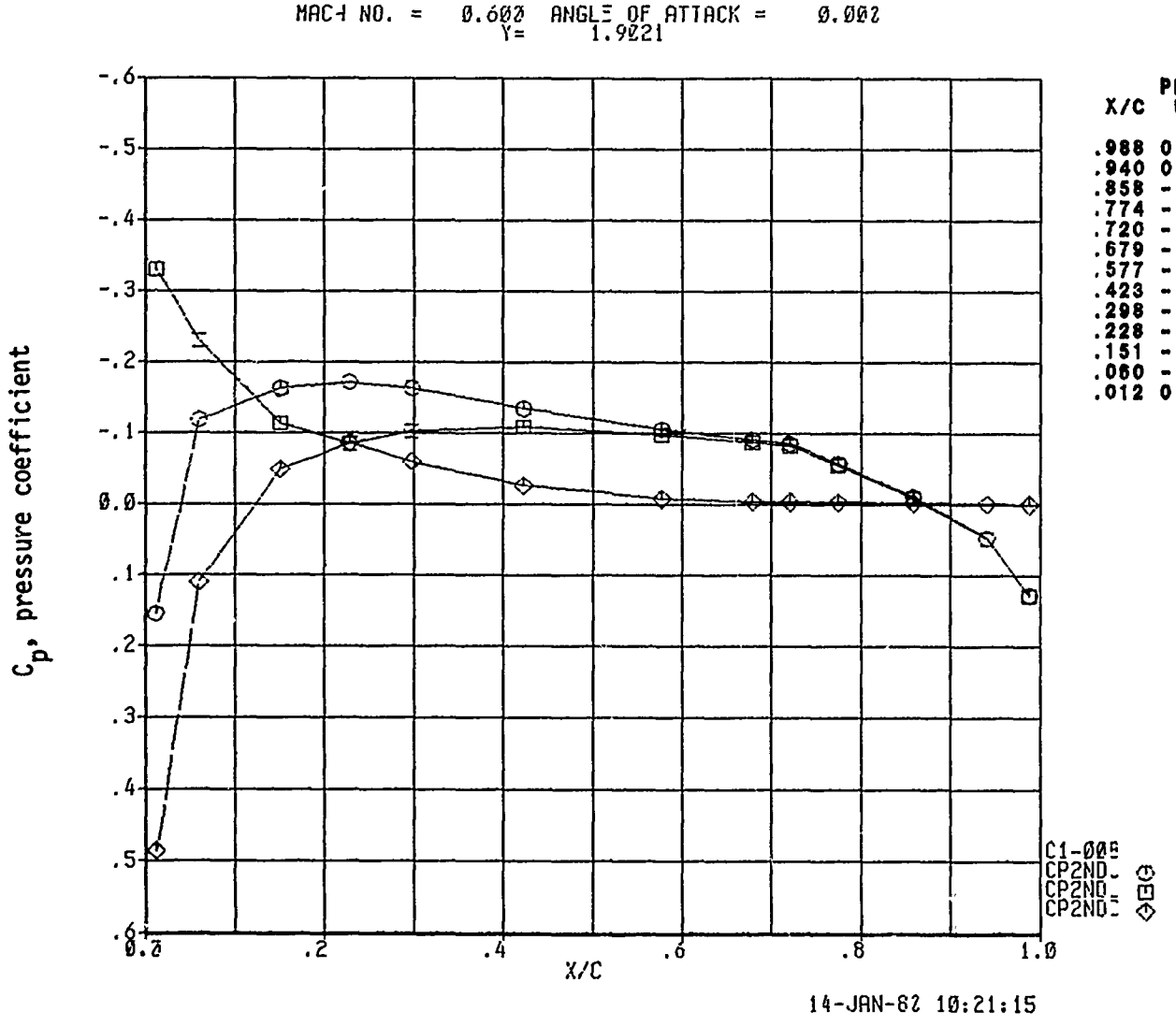
X/C	PRESSURE COEFFICIENT UPPER	LOWER	DIFF
.988	0.1328	0.1381	-.0053
.940	0.0493	0.0574	-.0081
.858	-.0146	-.0028	-.0119
.775	-.0696	-.0539	-.0157
.720	-.1020	-.0838	-.0182
.679	-.1093	-.0893	-.0200
.578	-.1301	-.1017	-.0284
.423	-.1649	-.1084	-.0565
.298	-.1904	-.0930	-.0974
.228	-.1954	-.0691	-.1263
.151	-.1857	-.0842	-.1016
.060	-.1596	-.1604	0.0008
.012	0.0346	-.1778	0.2324

Figure 295, Chordwise Pressure Distribution, Steady, Configuration 2



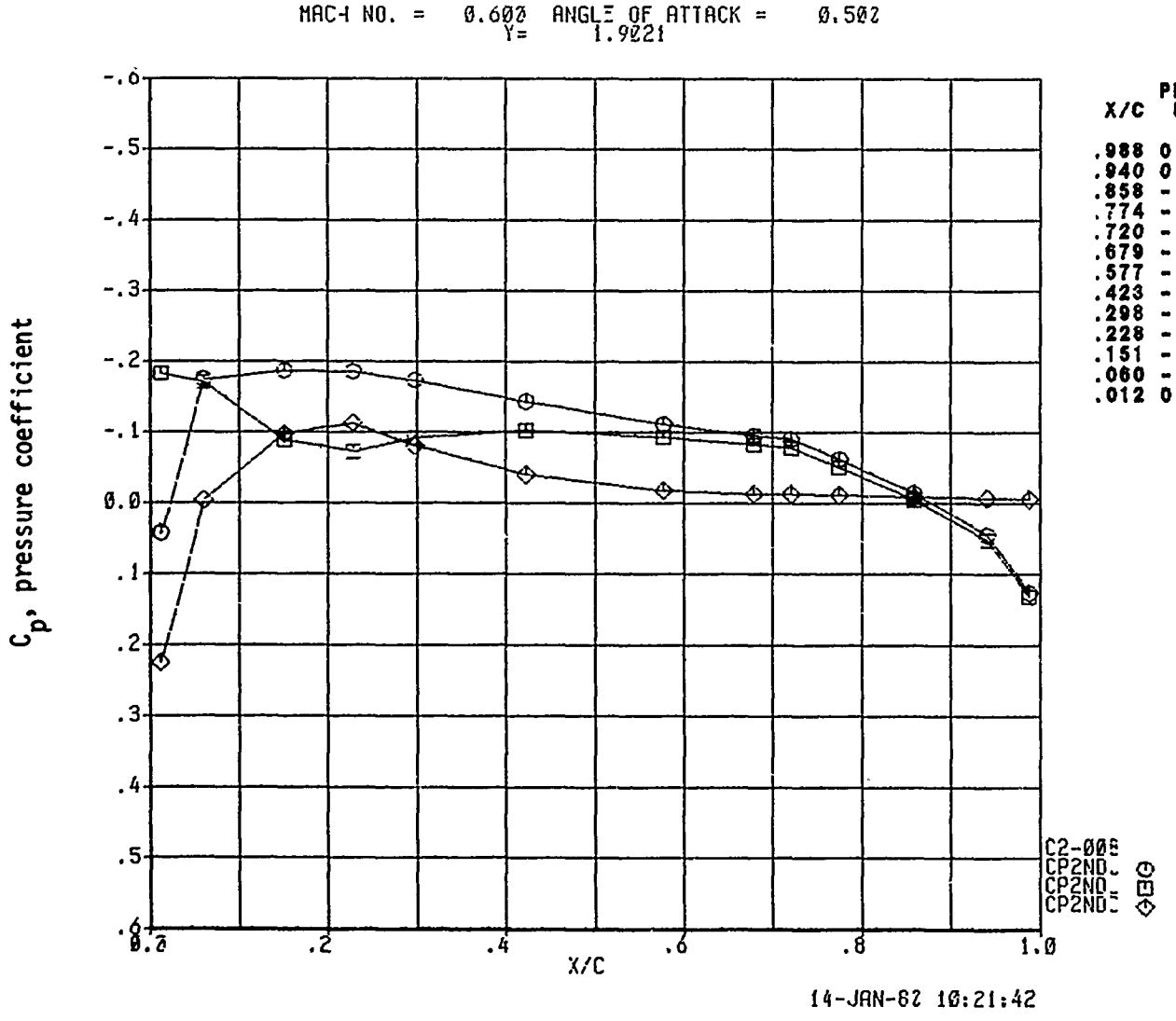
X/C	PRESSURE COEFFICIENT UPPER	LOWER	DIFF
.988	0.1372	0.1335	0.0038
.940	0.0555	0.0511	0.0043
.858	-.0063	-.0114	0.0050
.775	-.0591	-.0646	0.0055
.720	-.0903	-.0957	0.0054
.679	-.0967	-.1020	0.0053
.578	-.1141	-.1178	0.0037
.423	-.1404	-.1327	-.0077
.298	-.1553	-.1274	-.0279
.228	-.1514	-.1129	-.0385
.151	-.1193	-.1523	0.0330
.060	-.0361	-.2980	0.2620
.012	0.2809	-.5070	0.7879

Figure 296, Chordwise Pressure Distribution, Steady, Configuration 2



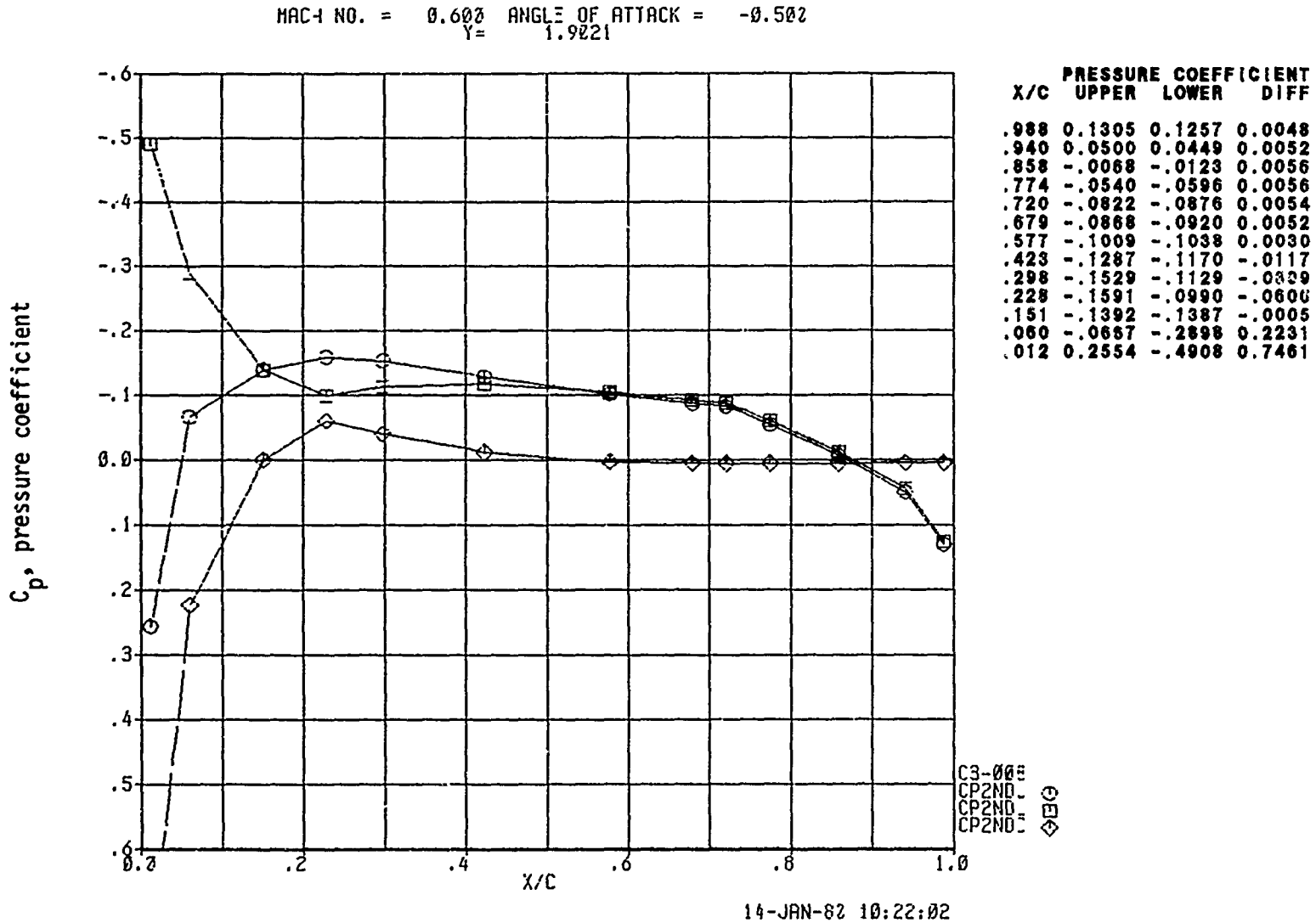
X/C	PRESSURE COEFFICIENT UPPER	LOWER	DIFF
.988	0.1285	0.1288	-.0002
.940	0.0476	0.0485	-.0009
.858	-.0099	-.0080	-.0019
.774	-.0577	-.0548	-.0029
.720	-.0861	-.0826	-.0036
.679	-.0908	-.0868	-.0040
.577	-.1055	-.0981	-.0074
.423	-.1355	-.1093	-.0262
.298	-.1626	-.1024	-.0602
.228	-.1718	-.0853	-.0865
.151	-.1624	-.1135	-.0489
.060	-.1191	-.2291	0.1099
.012	0.1539	-.3315	0.4853

Figure 297, Chordwise Pressure Distribution, Steady, Configuration 2



X/C	PRESSURE COEFFICIENT UPPER	LOWER	DIFF
.988	0.1257	0.1310	-.0054
.940	0.0442	0.0513	-.0070
.858	-.0139	-.0046	-.0093
.774	-.0623	-.0508	-.0114
.720	-.0909	-.0784	-.0125
.679	-.0957	-.0825	-.0131
.577	-.1110	-.0931	-.0179
.423	-.1429	-.1023	-.0406
.298	-.1729	-.0925	-.0804
.228	-.1853	-.0722	-.1130
.151	-.1865	-.0891	-.0974
.060	-.1736	-.1703	-.0033
.012	0.0417	-.1828	0.2246

Figure 298, Chordwise Pressure Distribution, Steady, Configuration 2



X/C	PRESSURE COEFFICIENT UPPER	LOWER	DIFF
.988	0.1305	0.1257	0.0048
.940	0.0500	0.0449	0.0052
.858	-.0068	-.0123	0.0056
.774	-.0540	-.0596	0.0056
.720	-.0822	-.0876	0.0054
.679	-.0868	-.0920	0.0052
.577	-.1009	-.1038	0.0030
.423	-.1287	-.1170	-.0117
.298	-.1529	-.1129	-.0399
.228	-.1591	-.0990	-.0600
.151	-.1392	-.1387	-.0005
.060	-.0657	-.2898	0.2231
.012	0.2554	-.4908	0.7461

Figure 299, Chordwise Pressure Distribution, Steady, Configuration 2

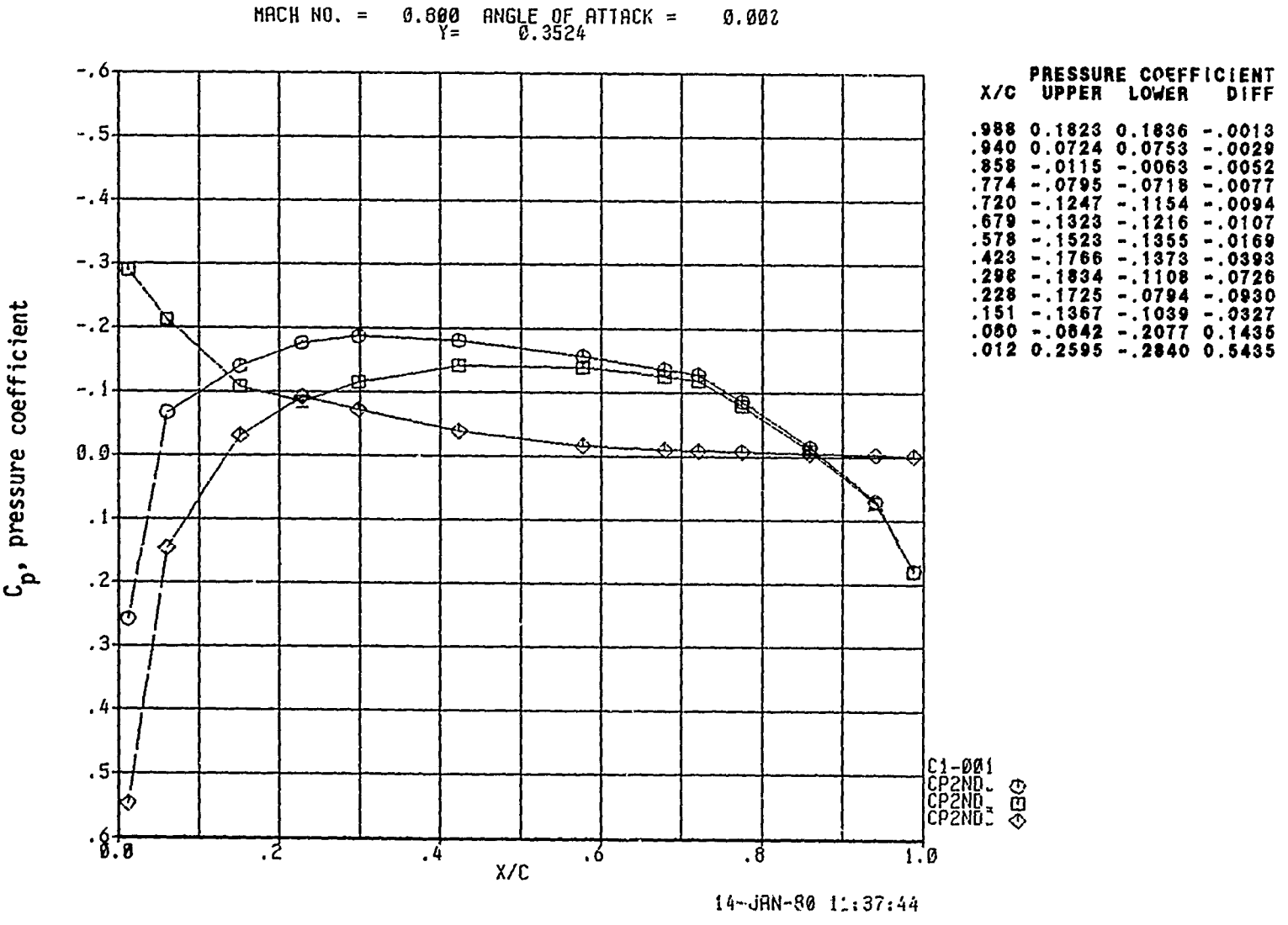
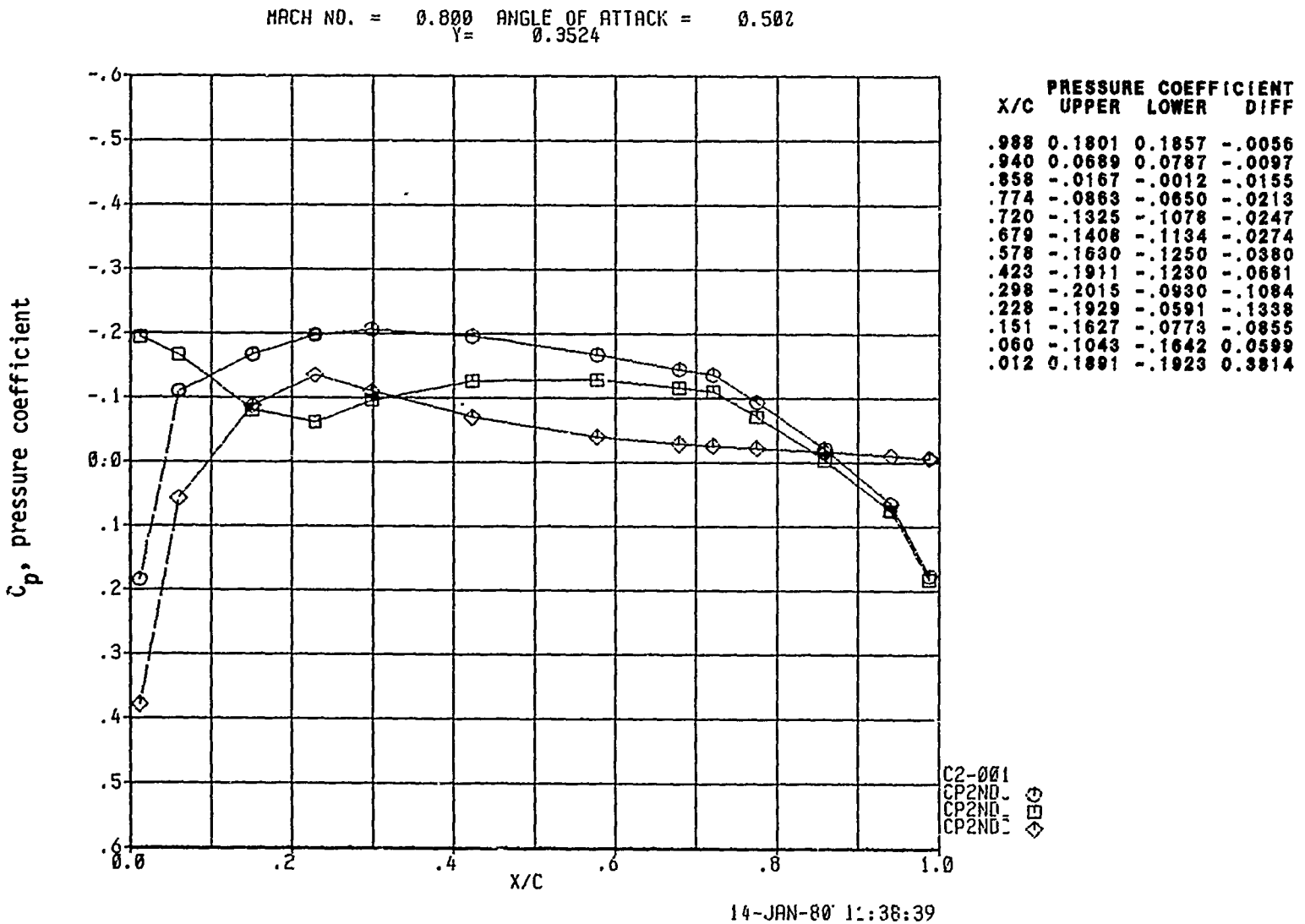


Figure 300, Chordwise Pressure Distribution, Steady, Configuration 2



X/C	PRESSURE COEFFICIENT UPPER	LOWER	DIFF
.988	0.1801	0.1857	-.0056
.940	0.0689	0.0787	-.0097
.858	-.0167	-.0012	-.0155
.774	-.0863	-.0650	-.0213
.720	-.1325	-.1078	-.0247
.679	-.1408	-.1134	-.0274
.578	-.1630	-.1250	-.0380
.423	-.1911	-.1230	-.0681
.298	-.2015	-.0930	-.1084
.228	-.1929	-.0591	-.1338
.151	-.1627	-.0773	-.0855
.060	-.1043	-.1642	0.0599
.012	0.1891	-.1923	0.3814

Figure 301, Chordwise Pressure Distribution, Steady, Configuration 2

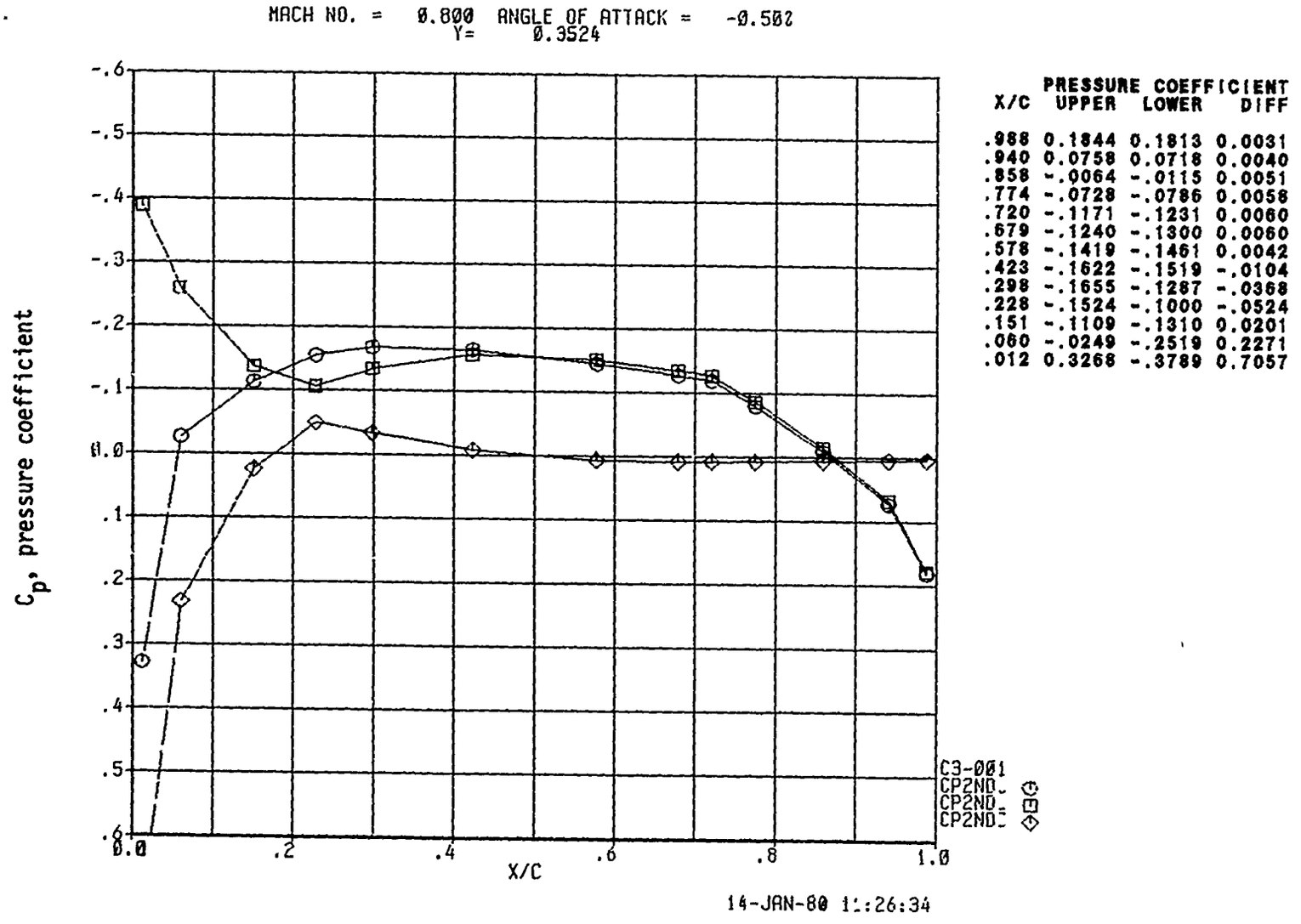
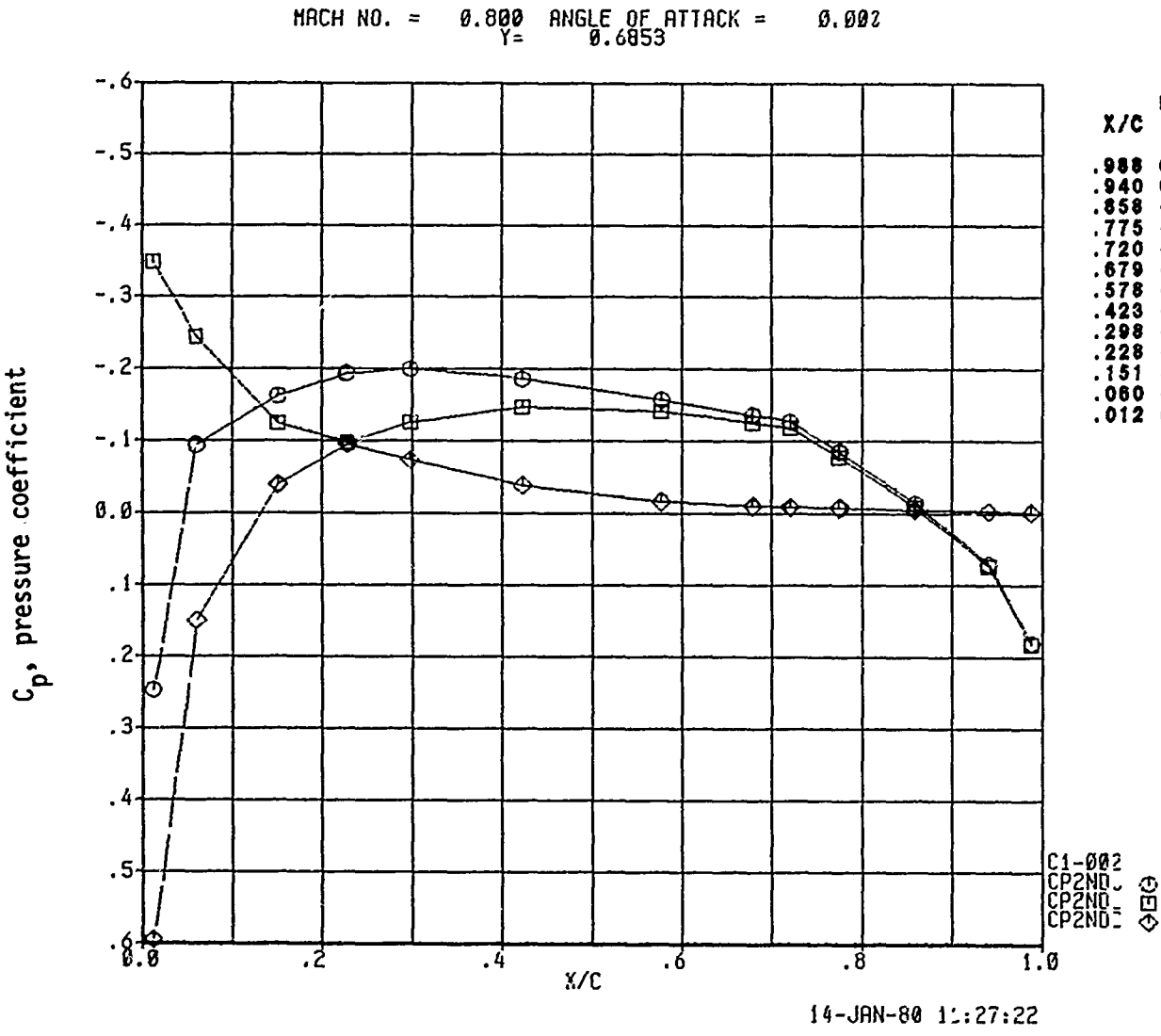


Figure 302, Chordwise Pressure Distribution, Steady, Configuration 2



X/C	PRESSURE COEFFICIENT UPPER	LOWER	DIFF
.988	0.1842	0.1855	-.0013
.940	0.0736	0.0765	-.0029
.858	-.0106	-.0054	-.0052
.775	-.0786	-.0710	-.0076
.720	-.1244	-.1152	-.0092
.679	-.1325	-.1220	-.0105
.578	-.1537	-.1372	-.0165
.423	-.1825	-.1433	-.0391
.298	-.1961	-.1219	-.0741
.228	-.1904	-.0937	-.0967
.151	-.1594	-.1192	-.0402
.060	-.0911	-.2388	0.1477
.012	0.2480	-.3424	0.5903

Figure 303, Chordwise Pressure Distribution, Steady, Configuration 2

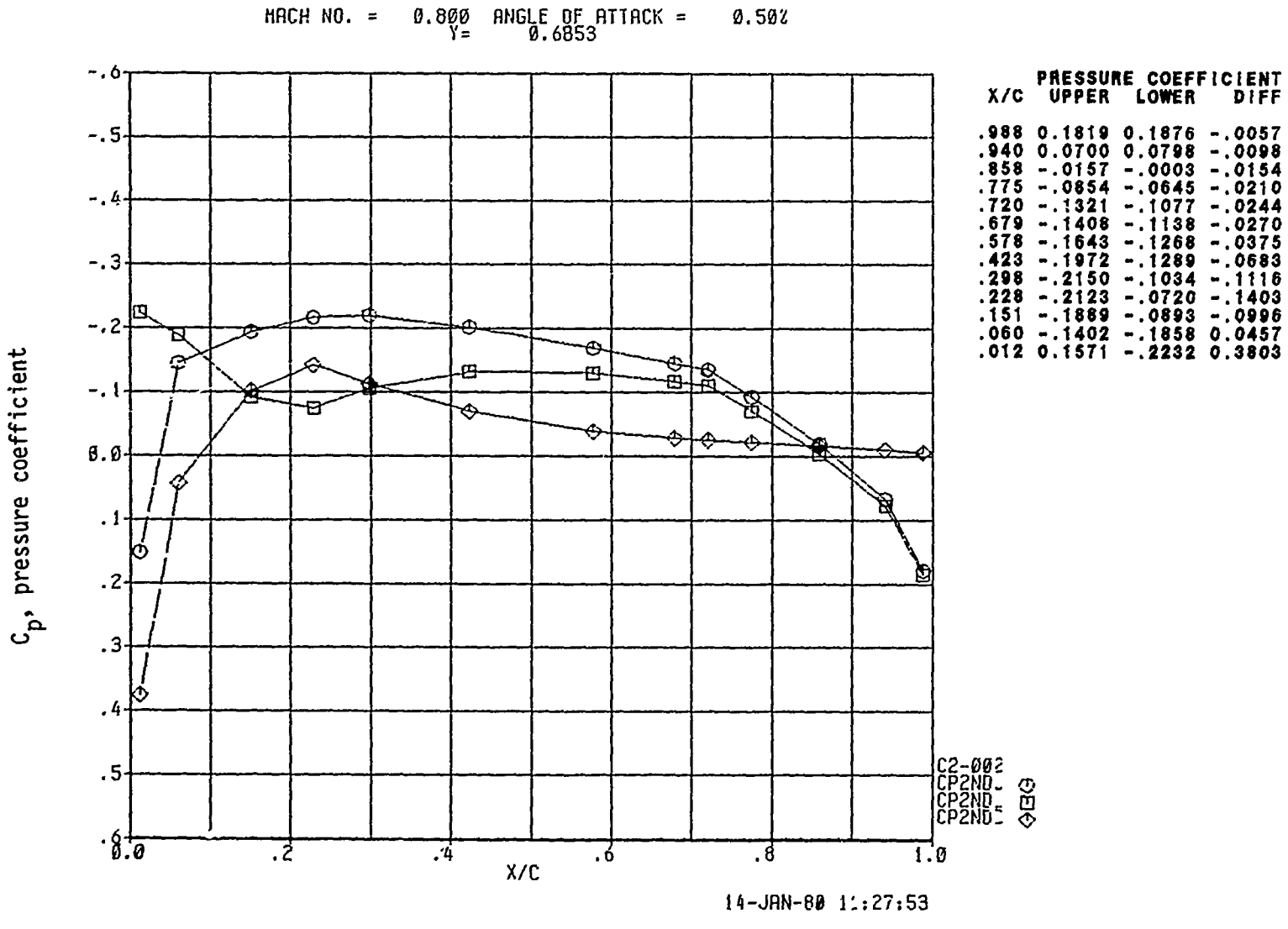
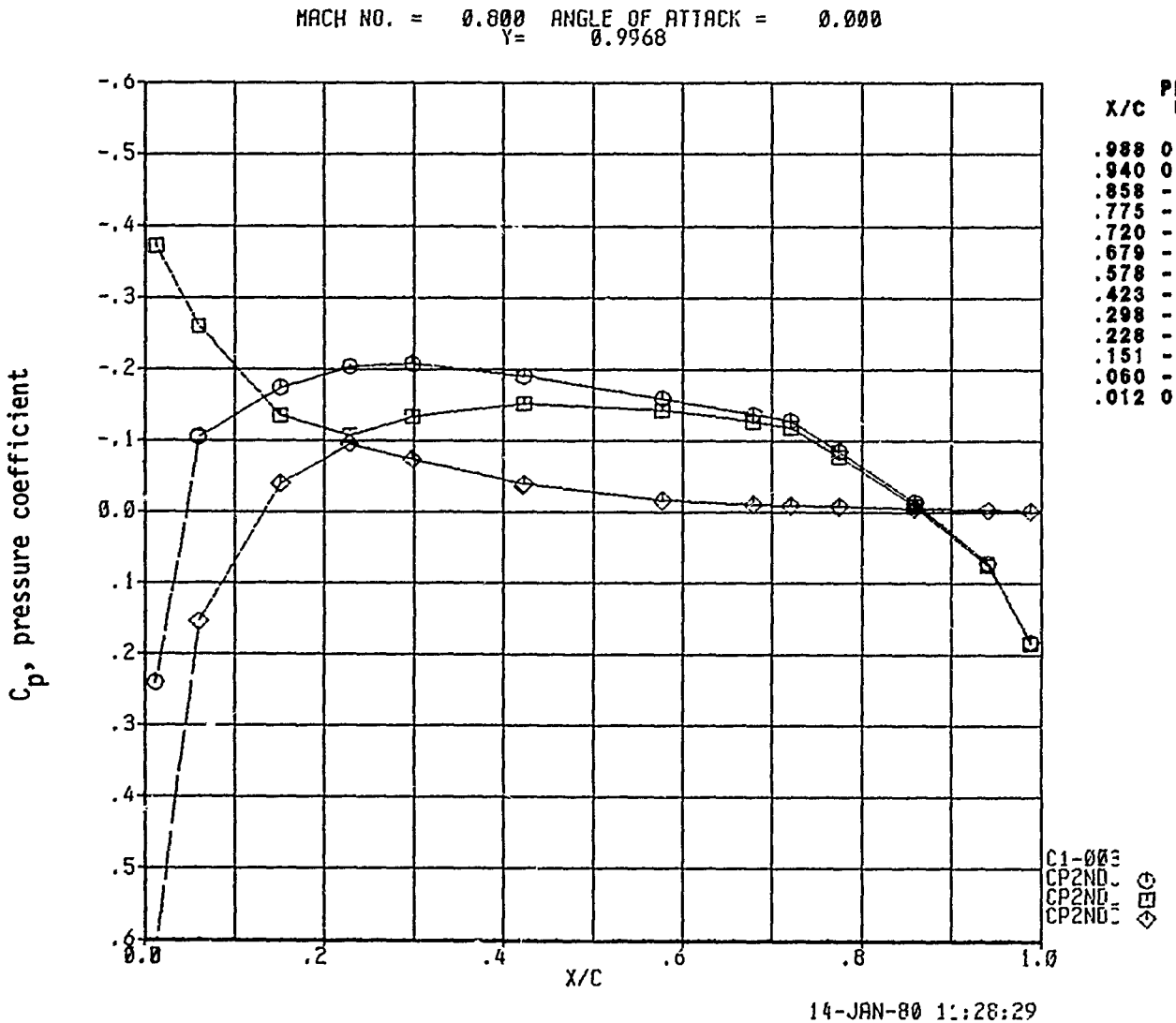


Figure 304, Chordwise Pressure Distribution, Steady, Configuration 2



X/C	PRESSURE COEFFICIENT UPPER	LOWER	DIFF
.988	0.1851	0.1863	-.0013
.940	0.0741	0.0770	-.0029
.858	-.0103	-.0051	-.0051
.775	-.0788	-.0712	-.0075
.720	-.1250	-.1158	-.0092
.679	-.1334	-.1229	-.0105
.578	-.1559	-.1392	-.0167
.423	-.1877	-.1482	-.0394
.298	-.2047	-.1300	-.0747
.228	-.2009	-.1037	-.0973
.151	-.1715	-.1308	-.0407
.060	-.1028	-.2545	0.1517
.012	0.2404	-.3654	0.6057

Figure 305, Chordwise Pressure Distribution, Steady, Configuration 2

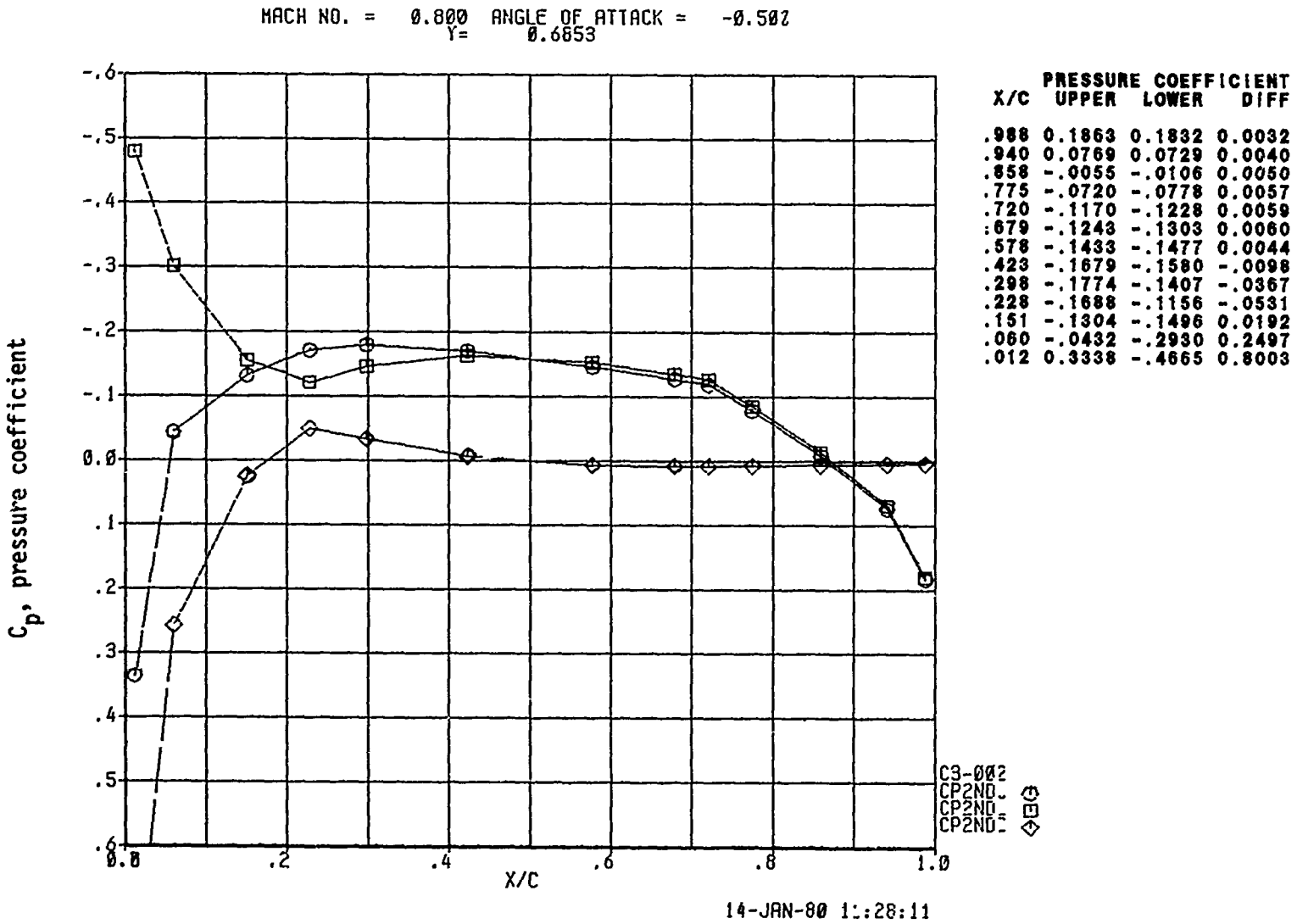
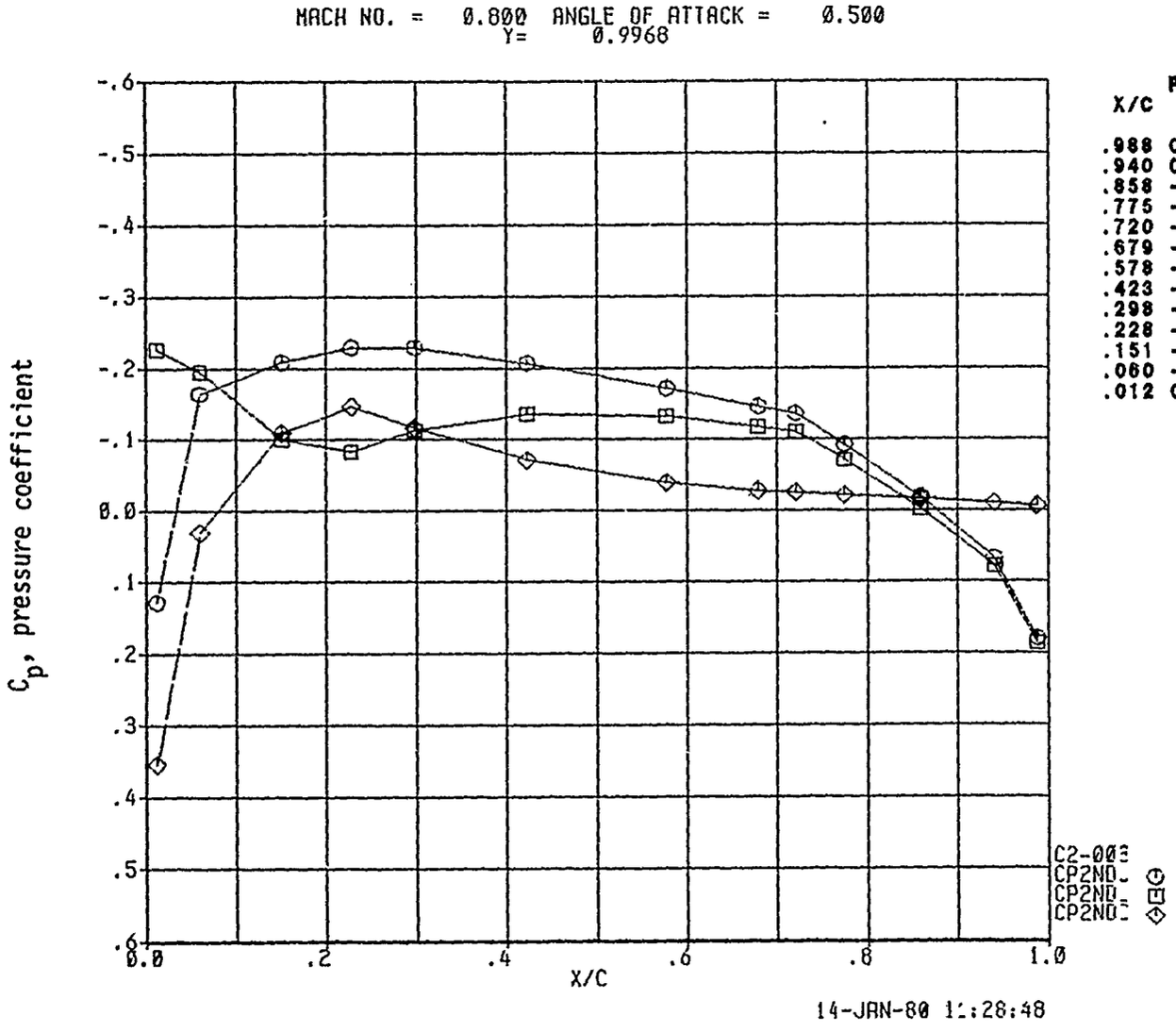
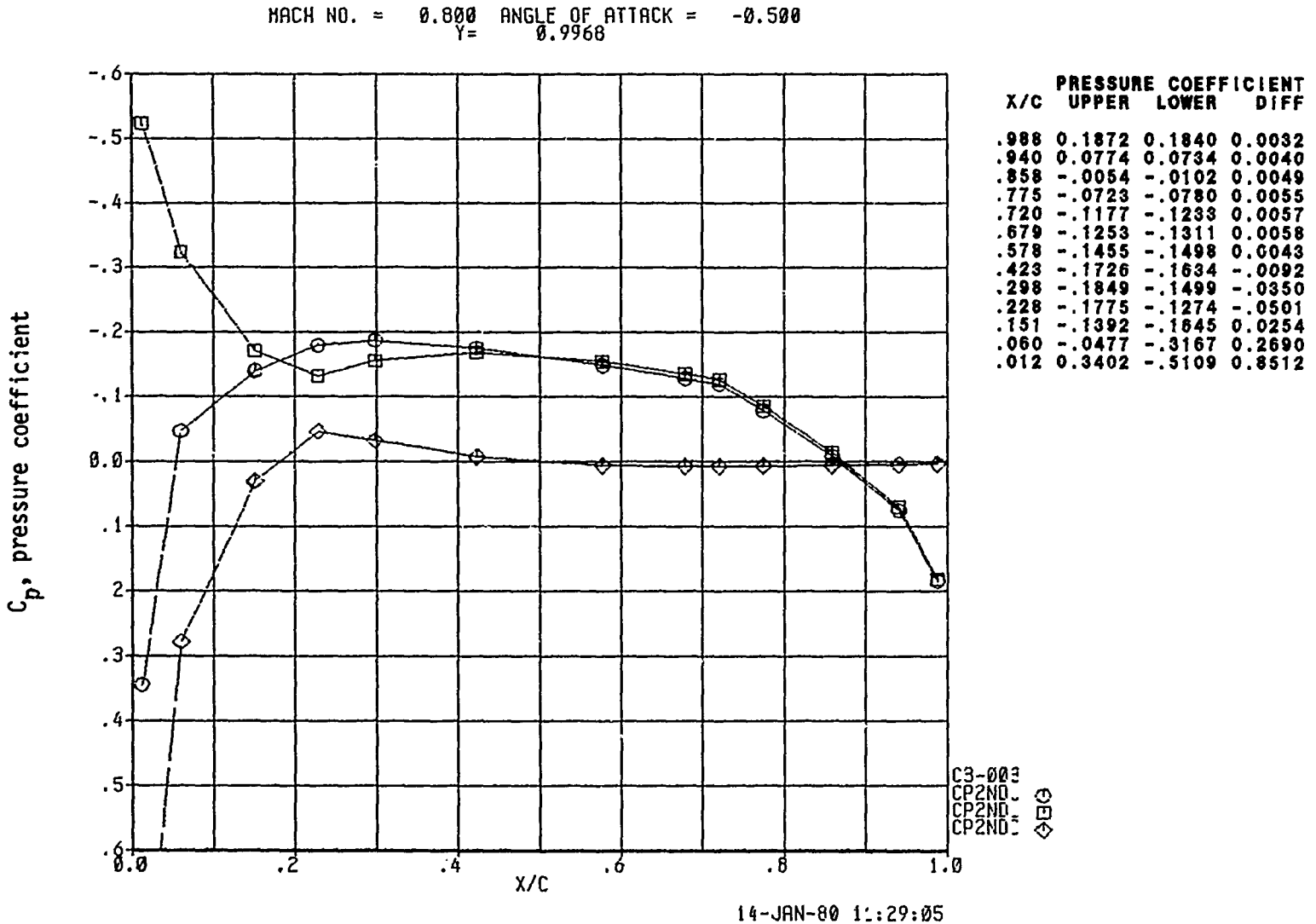


Figure 306, Chordwise Pressure Distribution, Steady, Configuration 2



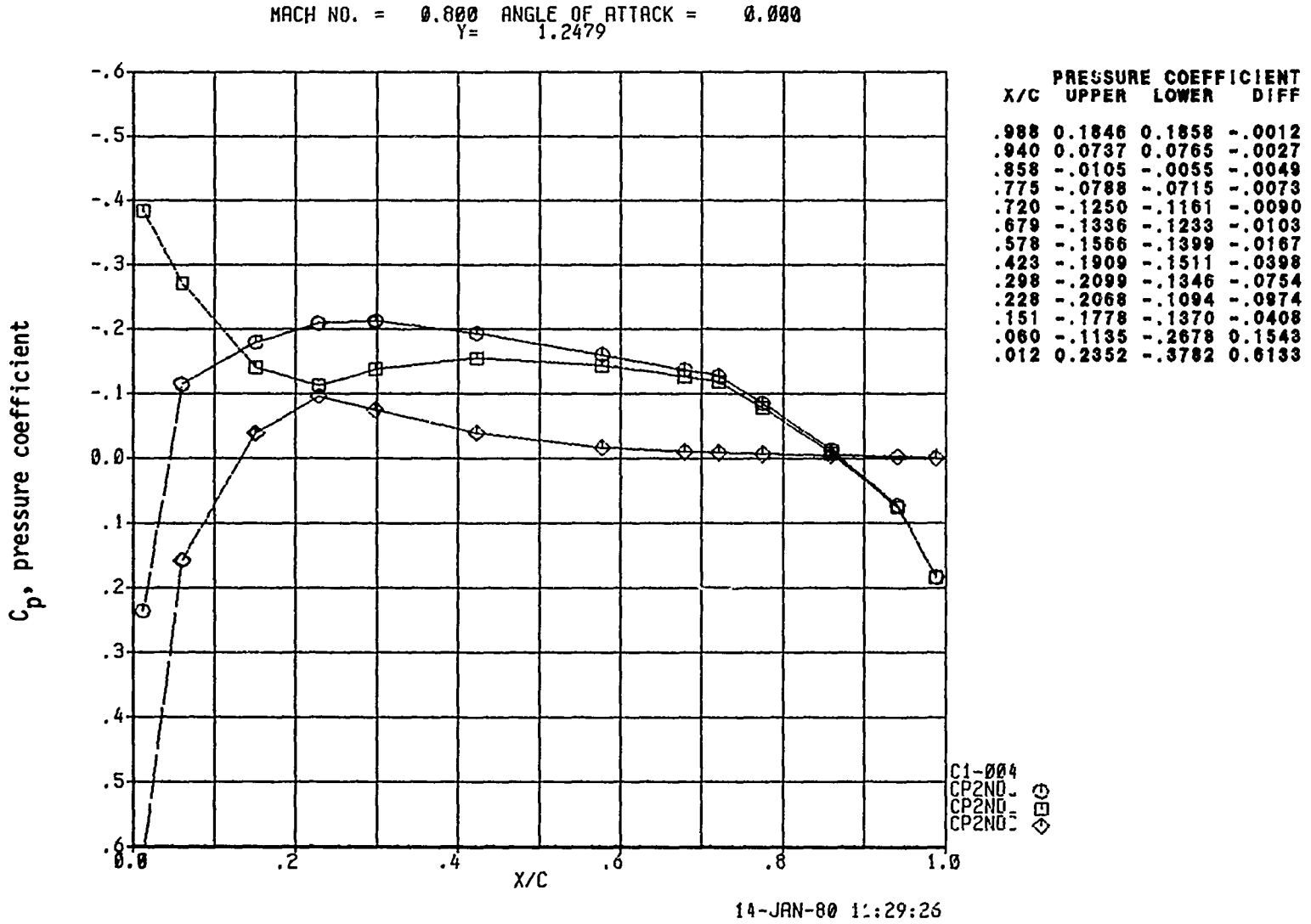
X/C	PRESSURE COEFFICIENT UPPER	LOWER	DIFF
.988	0.1827	0.1885	-.0058
.940	0.0706	0.0803	-.0097
.858	-.0154	-.0002	-.0152
.775	-.0855	-.0648	-.0207
.720	-.1326	-.1084	-.0241
.679	-.1416	-.1148	-.0268
.578	-.1665	-.1288	-.0377
.423	-.2030	-.1333	-.0696
.298	-.2248	-.1103	-.1145
.228	-.2247	-.0802	-.1445
.151	-.2044	-.0975	-.1070
.060	-.1593	-.1937	0.0344
.012	0.1338	-.2265	0.3603

Figure 307, Chordwise Pressure Distribution, Steady, Configuration 2



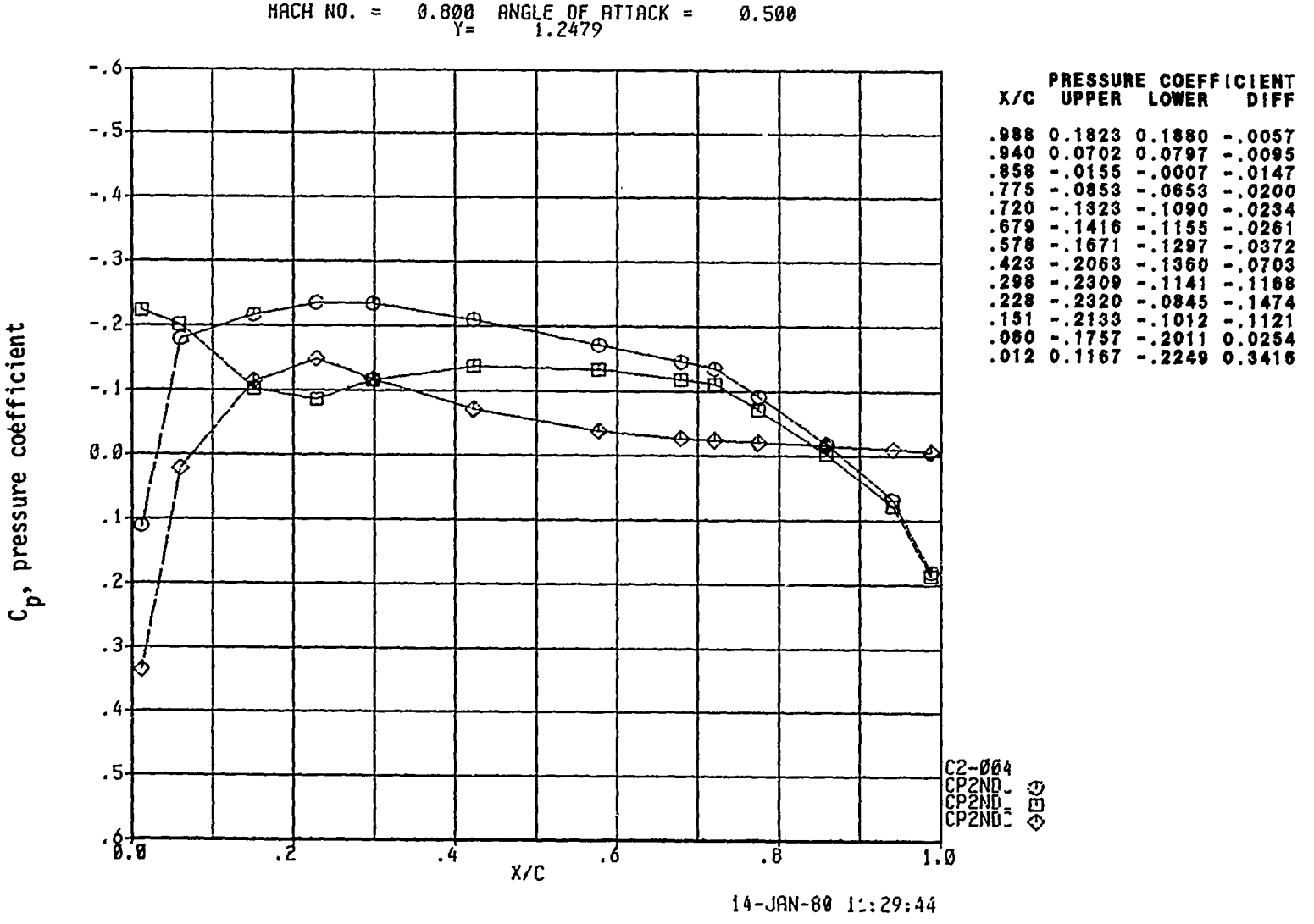
X/C	PRESSURE COEFFICIENT UPPER	LOWER	DIFF
.988	0.1872	0.1840	0.0032
.940	0.0774	0.0734	0.0040
.858	-.0054	-.0102	0.0049
.775	-.0723	-.0780	0.0055
.720	-.1177	-.1233	0.0057
.679	-.1253	-.1311	0.0058
.578	-.1455	-.1498	0.0043
.423	-.1726	-.1634	-.0092
.298	-.1849	-.1499	-.0350
.228	-.1775	-.1274	-.0501
.151	-.1392	-.1645	0.0254
.060	-.0477	-.3167	0.2690
.012	0.3402	-.5109	0.8512

Figure 308, Chordwise Pressure Distribution, Steady, Configuration 2.



X/C	PRESSURE COEFFICIENT UPPER	LOWER	DIFF
.988	0.1846	0.1858	-.0012
.940	0.0737	0.0765	-.0027
.858	-.0105	-.0055	-.0049
.775	-.0788	-.0715	-.0073
.720	-.1250	-.1161	-.0090
.679	-.1336	-.1233	-.0103
.578	-.1566	-.1399	-.0167
.423	-.1909	-.1511	-.0398
.298	-.2099	-.1346	-.0754
.228	-.2068	-.1094	-.0974
.151	-.1778	-.1370	-.0408
.060	-.1135	-.2678	0.1543
.012	0.2352	-.3782	0.6133

Figure 309, Chordwise Pressure Distribution, Steady, Configuration 2



X/C	PRESSURE COEFFICIENT UPPER	LOWER	DIFF
.988	0.1823	0.1880	-.0057
.940	0.0702	0.0797	-.0095
.858	-.0155	-.0007	-.0147
.775	-.0853	-.0653	-.0200
.720	-.1323	-.1090	-.0234
.679	-.1416	-.1155	-.0261
.578	-.1671	-.1297	-.0372
.423	-.2063	-.1360	-.0703
.298	-.2309	-.1141	-.1168
.228	-.2320	-.0845	-.1474
.151	-.2133	-.1012	-.1121
.060	-.1757	-.2011	0.0254
.012	0.1167	-.2249	0.3416

Figure 310, Chordwise Pressure Distribution, Steady, Configuration 2

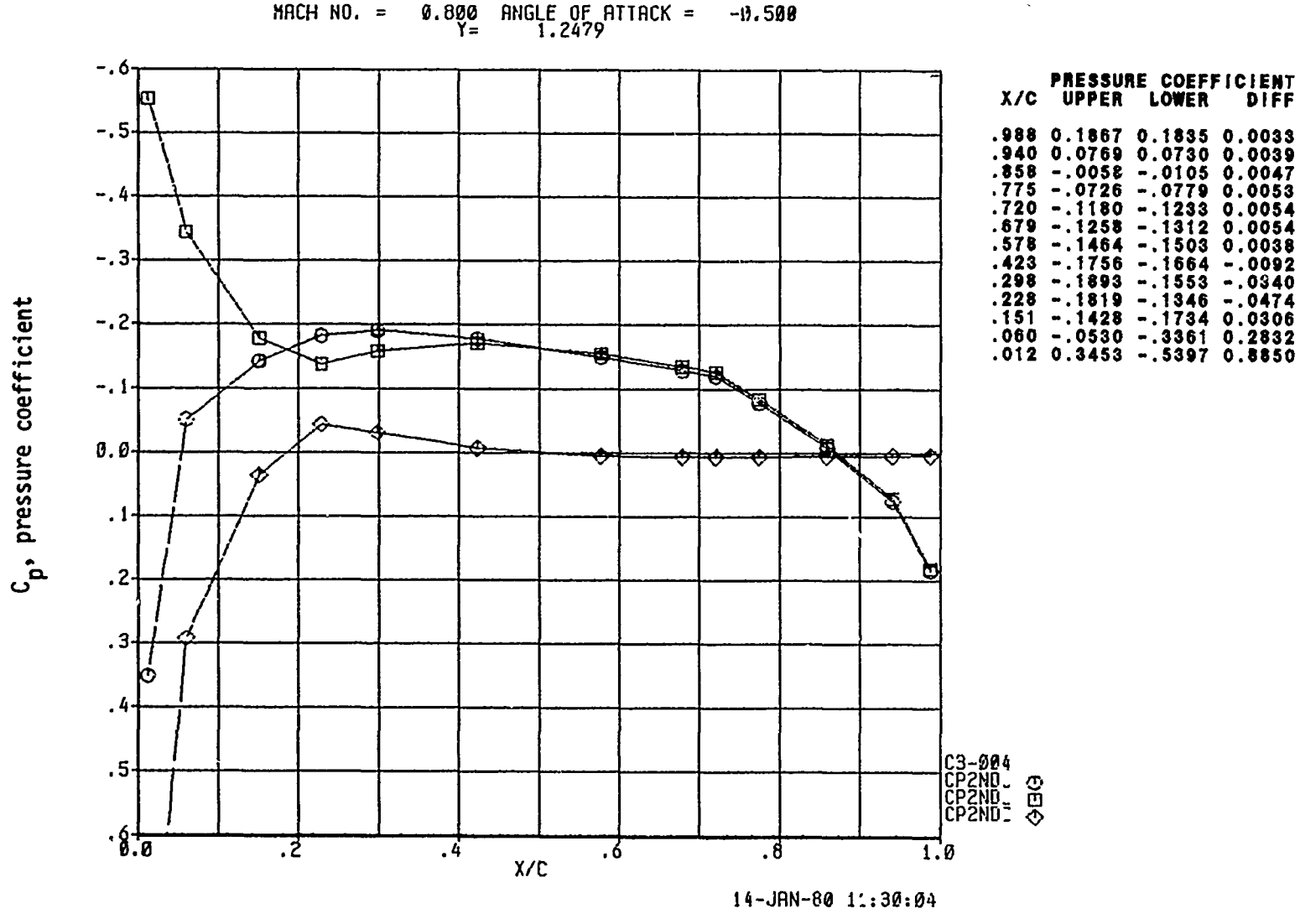
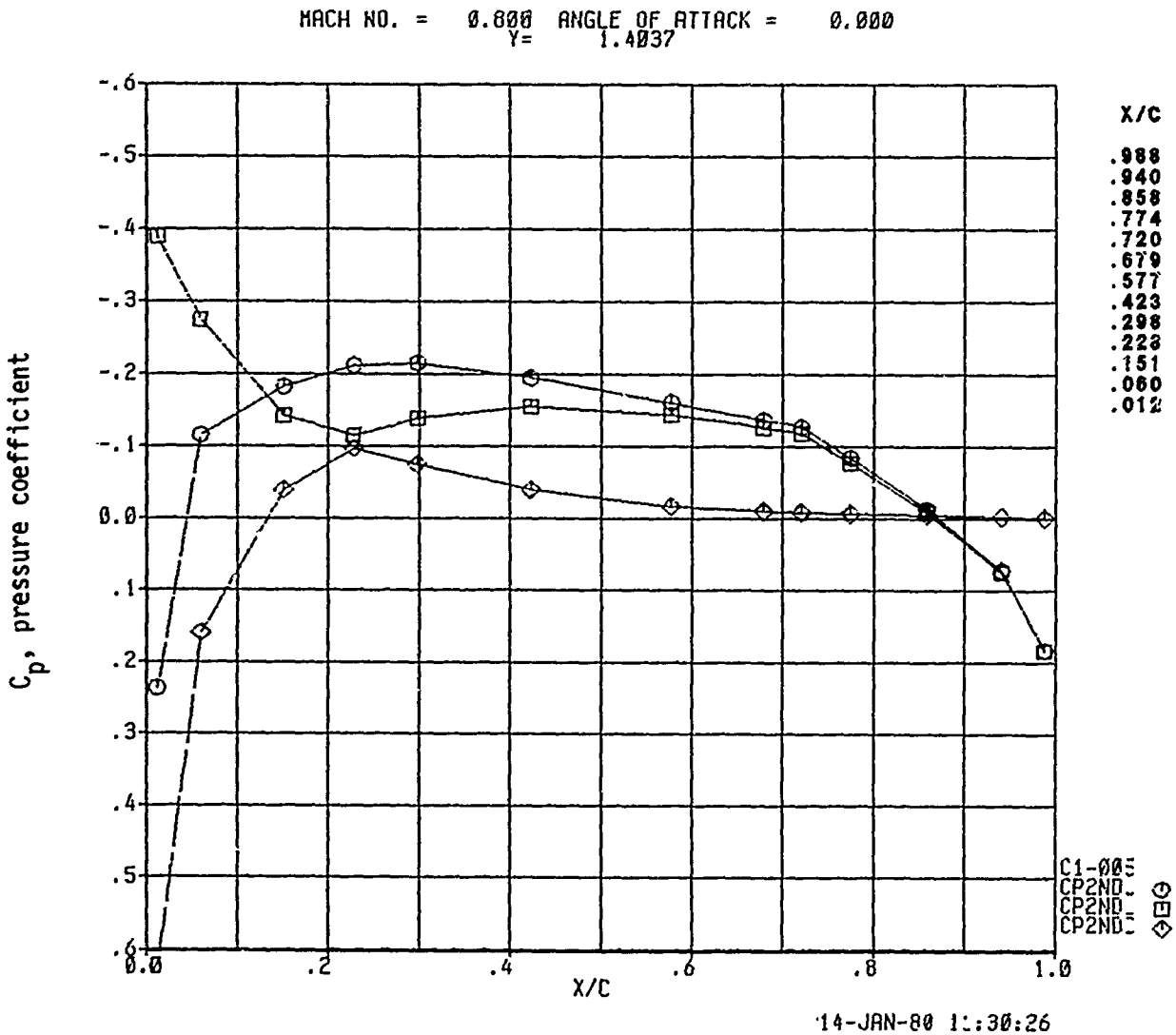
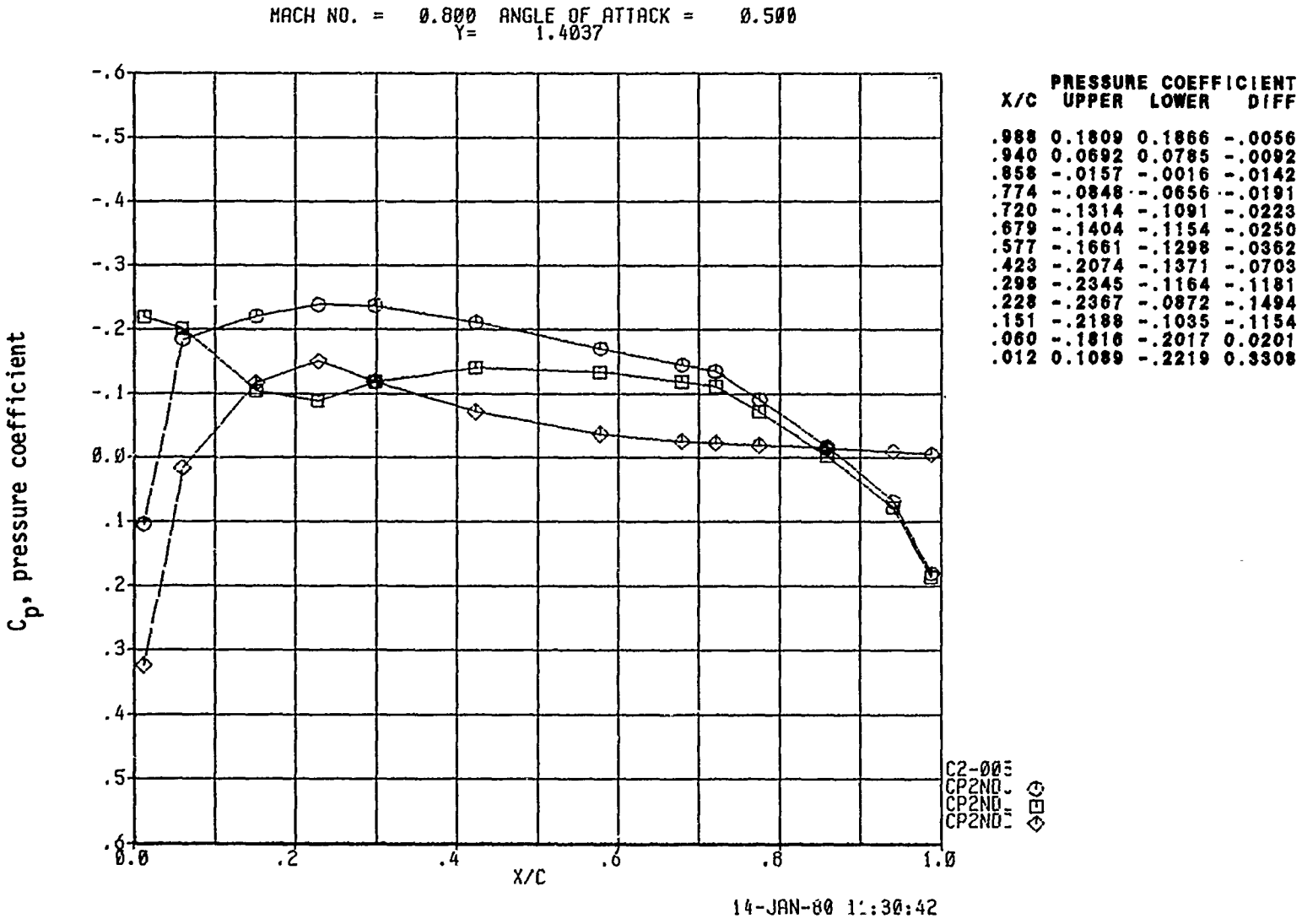


Figure 311, Chordwise Pressure Distribution, Steady, Configuration 2



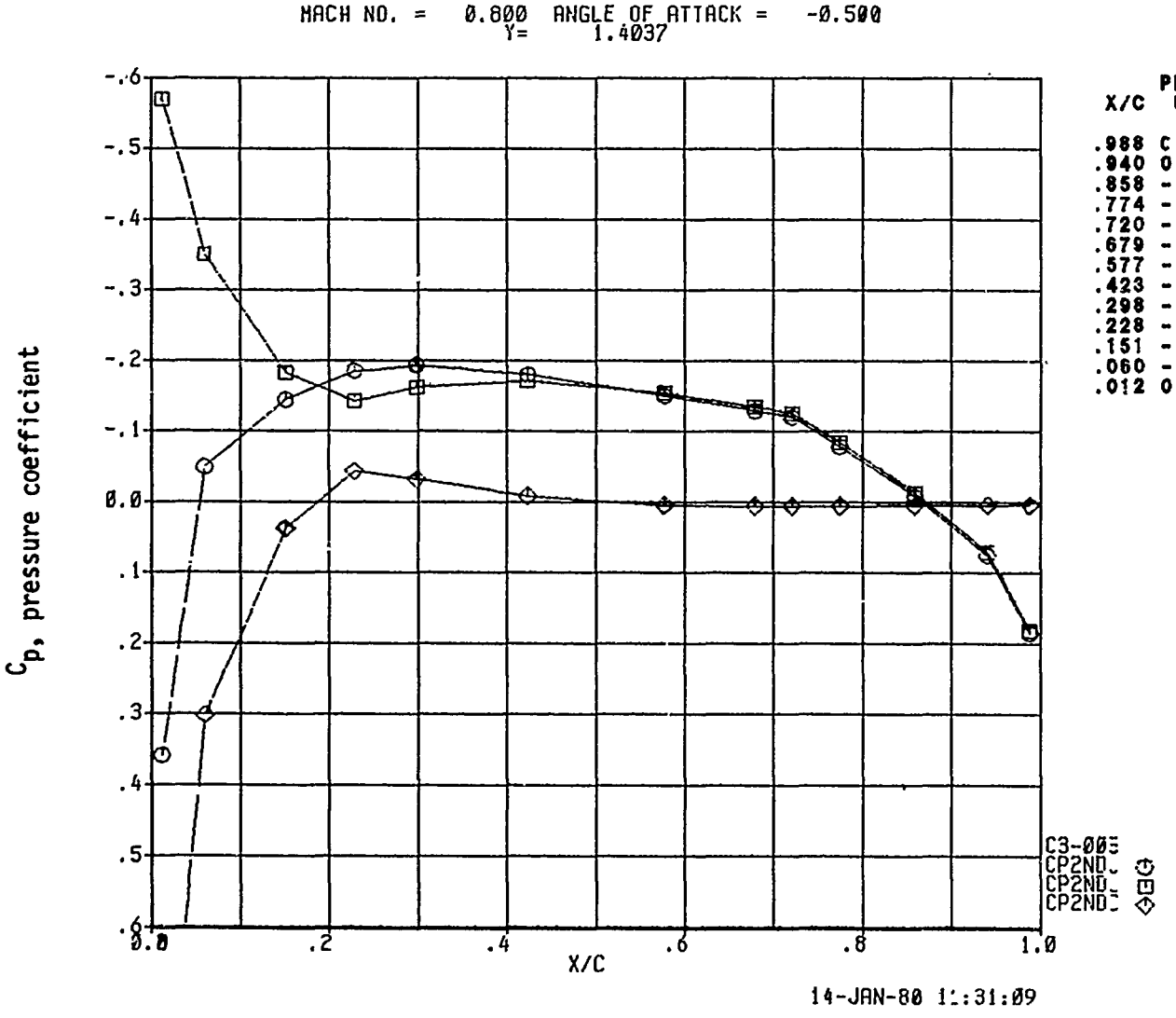
X/C	PRESSURE COEFFICIENT UPPER	LOWER	DIFF
.988	0.1833	0.1844	-.0011
.940	0.0726	0.0753	-.0026
.858	-.0110	-.0062	-.0048
.774	-.0786	-.0716	-.0071
.720	-.1244	-.1159	-.0086
.679	-.1328	-.1228	-.0100
.577	-.1560	-.1395	-.0165
.423	-.1922	-.1520	-.0401
.298	-.2133	-.1370	-.0763
.223	-.2107	-.1126	-.0982
.151	-.1818	-.1407	-.0410
.060	-.1158	-.2721	0.1562
.012	0.2349	-.3845	0.6195

Figure 312, Chordwise Pressure Distribution, Steady, Configuration 2



X/C	PRESSURE COEFFICIENT UPPER	LOWER	DIFF
.988	0.1809	0.1866	-.0056
.940	0.0692	0.0785	-.0092
.858	-.0157	-.0016	-.0142
.774	-.0848	-.0656	-.0191
.720	-.1314	-.1091	-.0223
.679	-.1404	-.1154	-.0250
.577	-.1661	-.1298	-.0362
.423	-.2074	-.1371	-.0703
.298	-.2345	-.1164	-.1181
.228	-.2367	-.0872	-.1494
.151	-.2188	-.1035	-.1154
.060	-.1816	-.2017	0.0201
.012	0.1089	-.2219	0.3308

Figure 313, Chordwise Pressure Distribution, Steady, Configuration 2



X/C	PRESSURE COEFFICIENT UPPER	LOWER	DIFF
.988	0.1854	0.1821	0.0034
.940	0.0758	0.0719	0.0039
.858	-.0064	-.0110	0.0046
.774	-.0726	-.0777	0.0051
.720	-.1178	-.1228	0.0051
.679	-.1254	-.1305	0.0050
.577	-.1462	-.1495	0.0033
.423	-.1771	-.1672	-.0099
.298	-.1924	-.1580	-.0344
.228	-.1853	-.1384	-.0469
.151	-.1454	-.1786	0.0332
.060	-.0519	-.3442	0.2924
.012	0.3518	-.5563	0.9081

Figure 314, Chordwise Pressure Distribution, Steady, Configuration 2

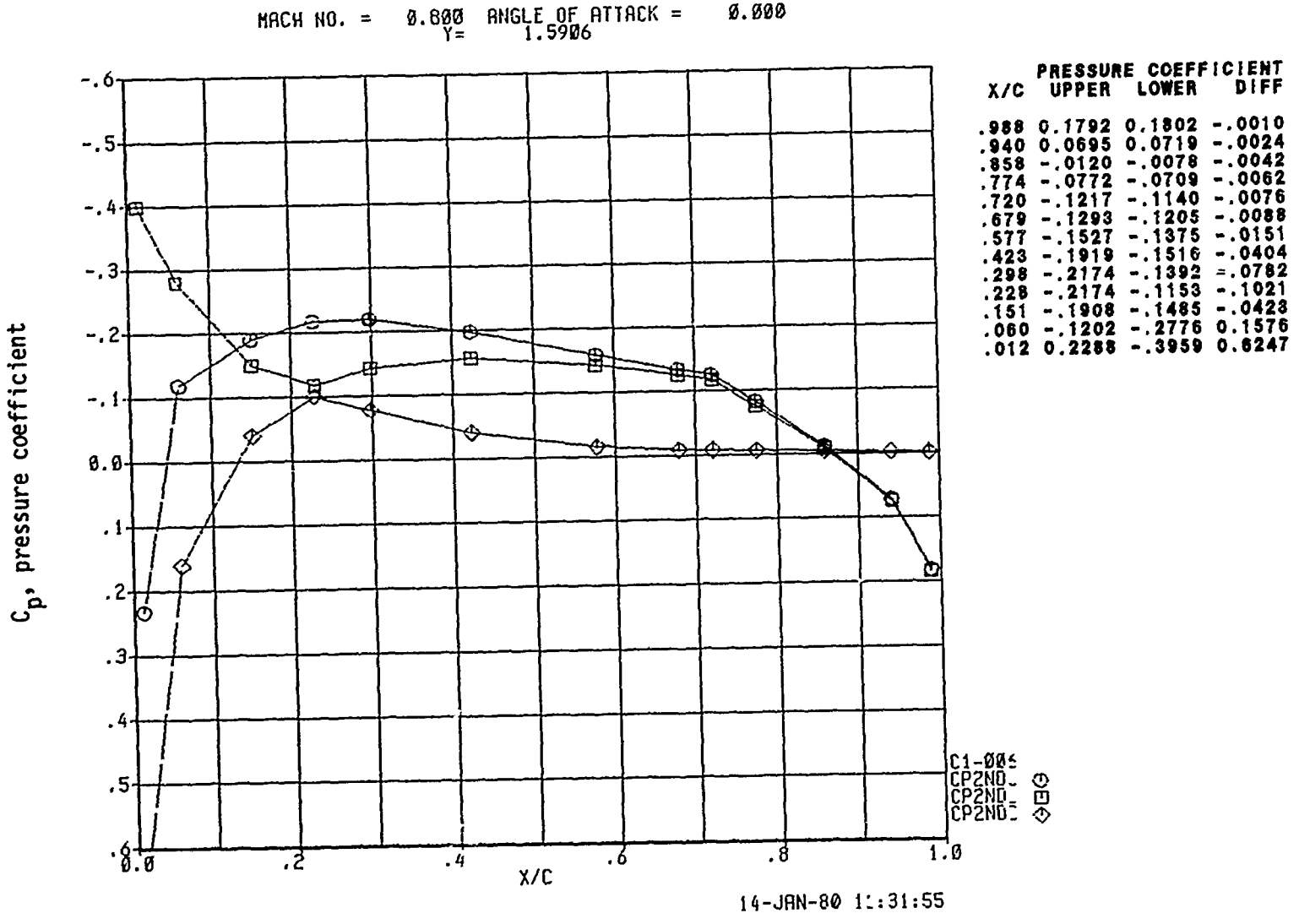
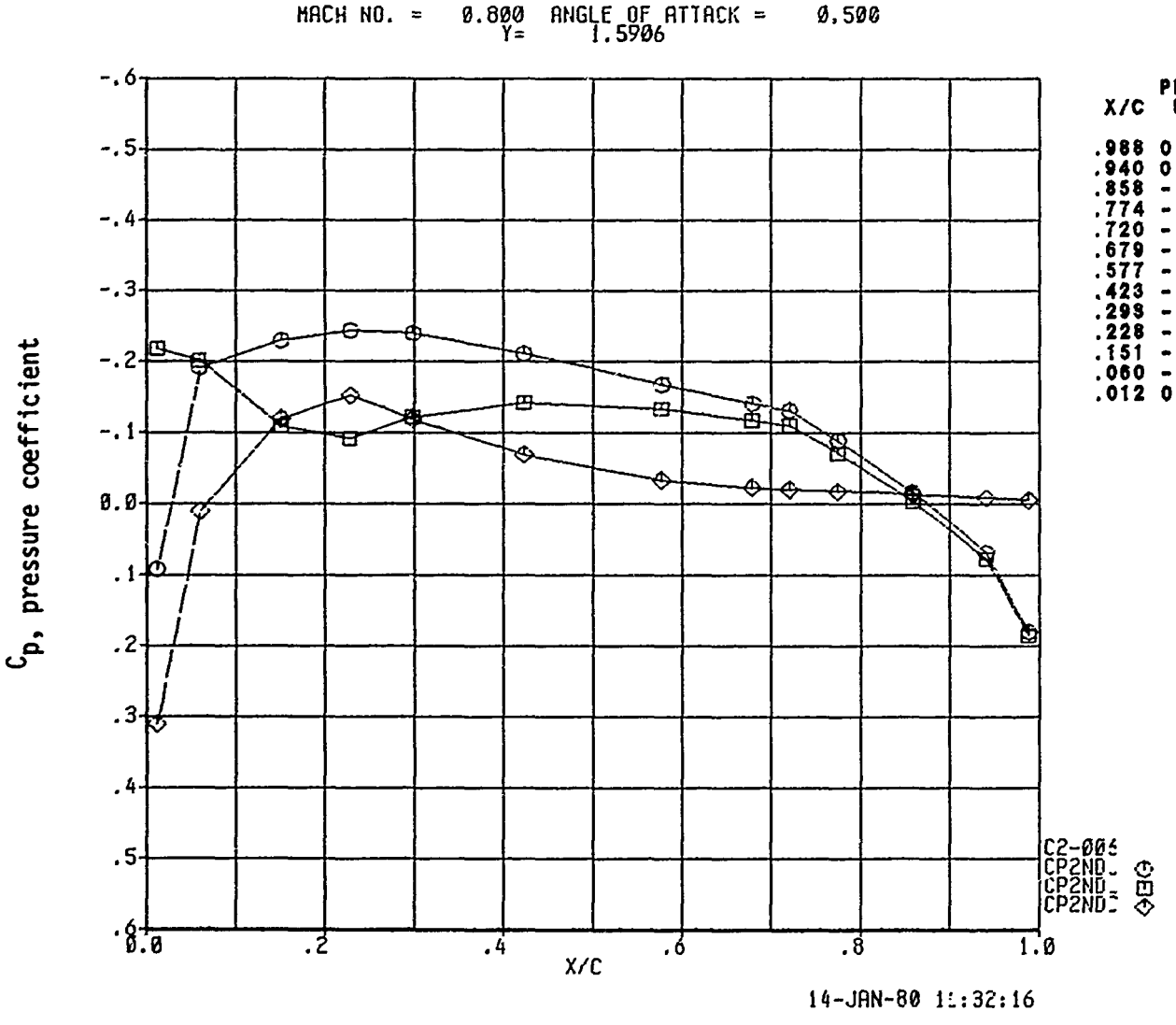
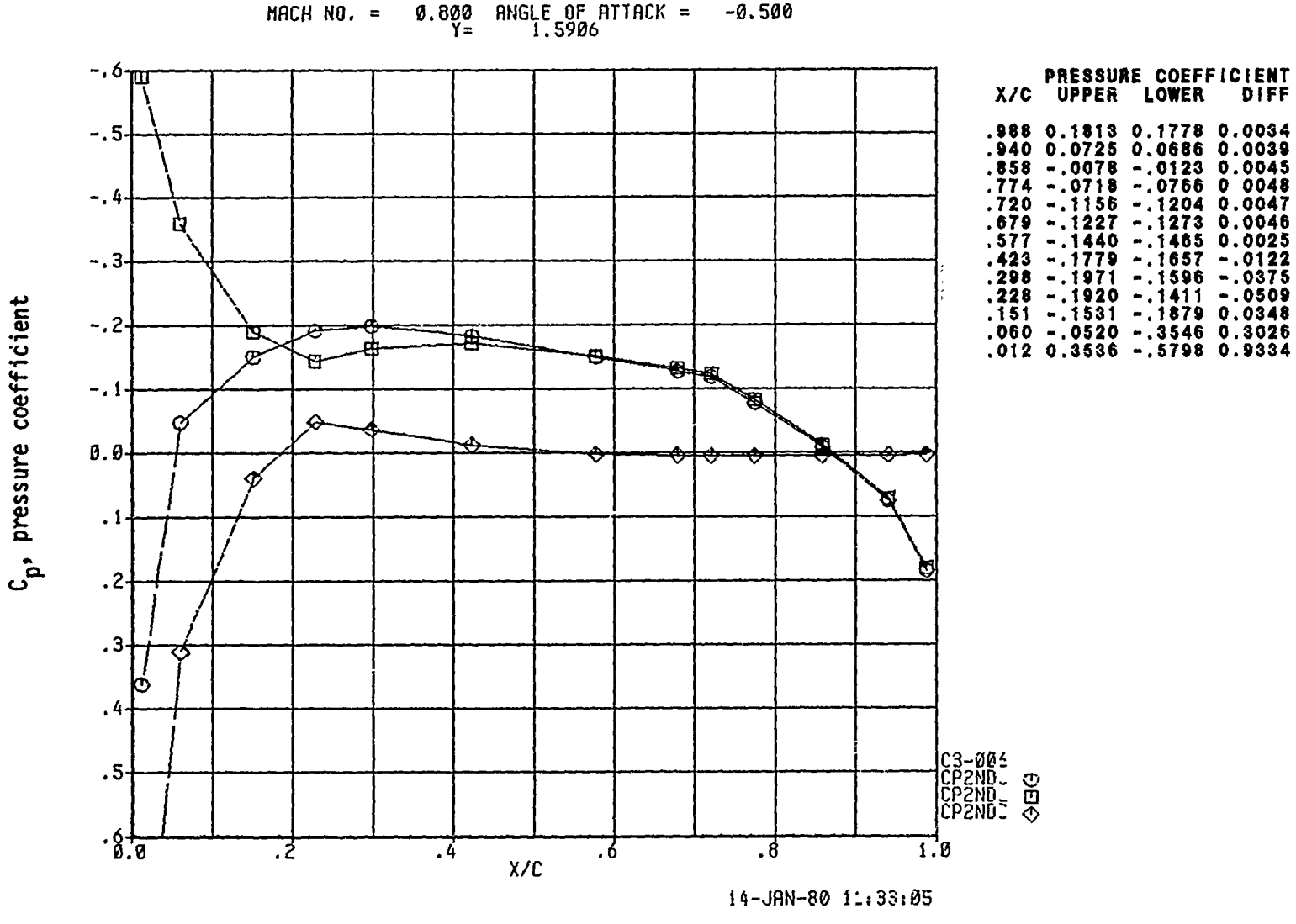


Figure 315, Chordwise Pressure Distribution, Steady, Configuration 2



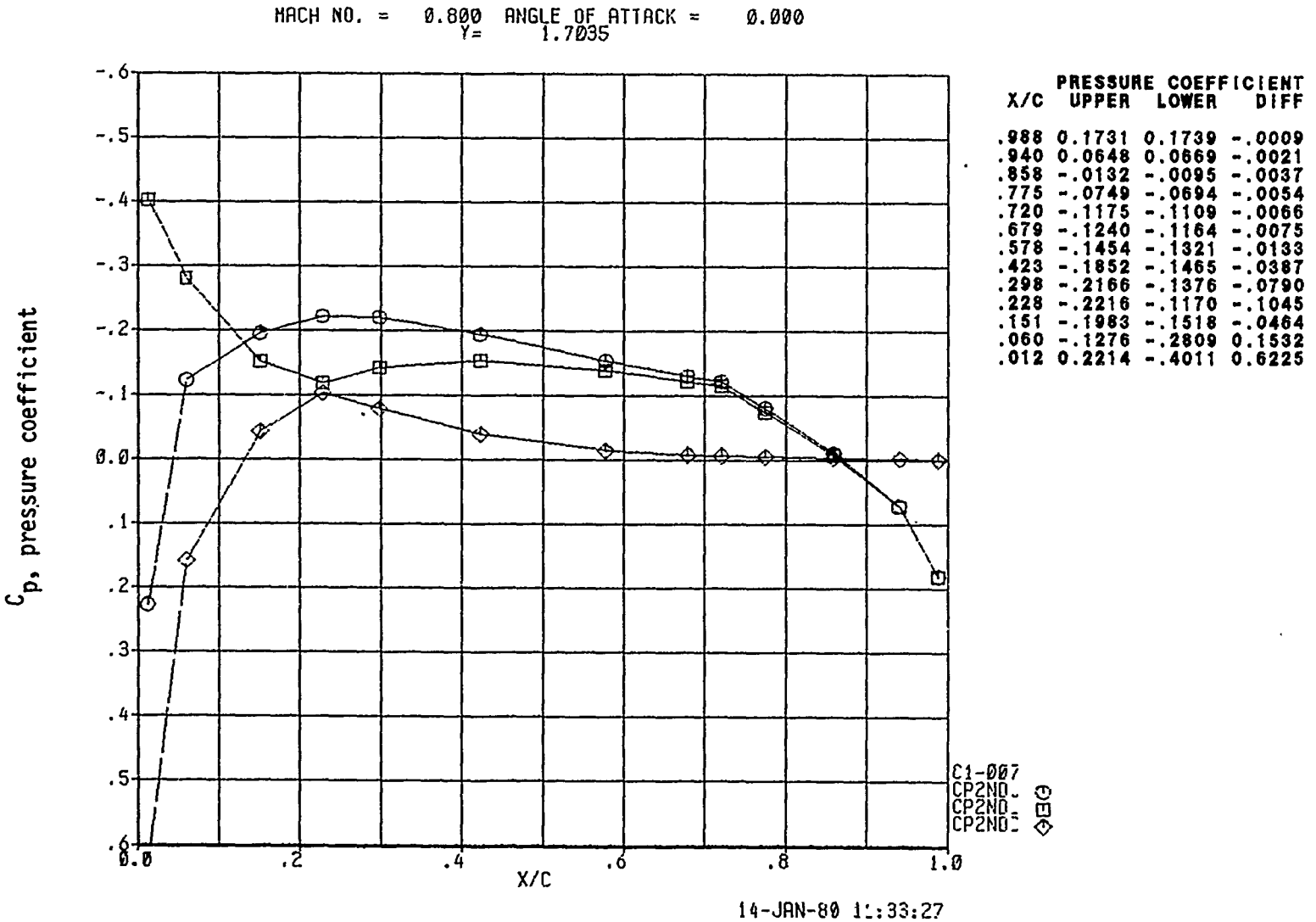
X/C	PRESSURE COEFFICIENT UPPER	LOWER	DIFF
.988	0.1768	0.1823	-.0055
.940	0.0662	0.0749	-.0086
.858	-.0165	-.0034	-.0130
.774	-.0829	-.0655	-.0173
.720	-.1280	-.1079	-.0201
.679	-.1361	-.1139	-.0222
.577	-.1617	-.1289	-.0328
.423	-.2062	-.1376	-.0685
.298	-.2361	-.1192	-.1190
.228	-.2433	-.0900	-.1533
.151	-.2293	-.1098	-.1195
.060	-.1903	-.2028	0.0125
.012	0.0938	-.2223	0.3162

Figure 316, Chordwise Pressure Distribution, Steady, Configuration 2



X/C	PRESSURE COEFFICIENT UPPER	LOWER	DIFF
.988	0.1813	0.1778	0.0034
.940	0.0725	0.0686	0.0039
.858	-.0078	-.0123	0.0045
.774	-.0718	-.0766	0 0048
.720	-.1156	-.1204	0.0047
.679	-.1227	-.1273	0.0046
.577	-.1440	-.1465	0.0025
.423	-.1779	-.1657	-.0122
.298	-.1971	-.1596	-.0375
.228	-.1920	-.1411	-.0509
.151	-.1531	-.1879	0.0348
.060	-.0520	-.3546	0.3026
.012	0.3536	-.5798	0.9334

Figure 317, Chordwise Pressure Distribution, Steady, Configuration 2



X/C	PRESSURE COEFFICIENT UPPER	LOWER	DIFF
.988	0.1731	0.1739	-.0009
.940	0.0648	0.0669	-.0021
.858	-.0132	-.0095	-.0037
.775	-.0749	-.0694	-.0054
.720	-.1175	-.1109	-.0066
.679	-.1240	-.1164	-.0075
.578	-.1454	-.1321	-.0133
.423	-.1852	-.1465	-.0387
.298	-.2166	-.1376	-.0790
.228	-.2216	-.1170	-.1045
.151	-.1983	-.1518	-.0464
.060	-.1276	-.2809	0.1532
.012	0.2214	-.4011	0.6225

Figure 318, Chordwise Pressure Distribution, Steady, Configuration 2

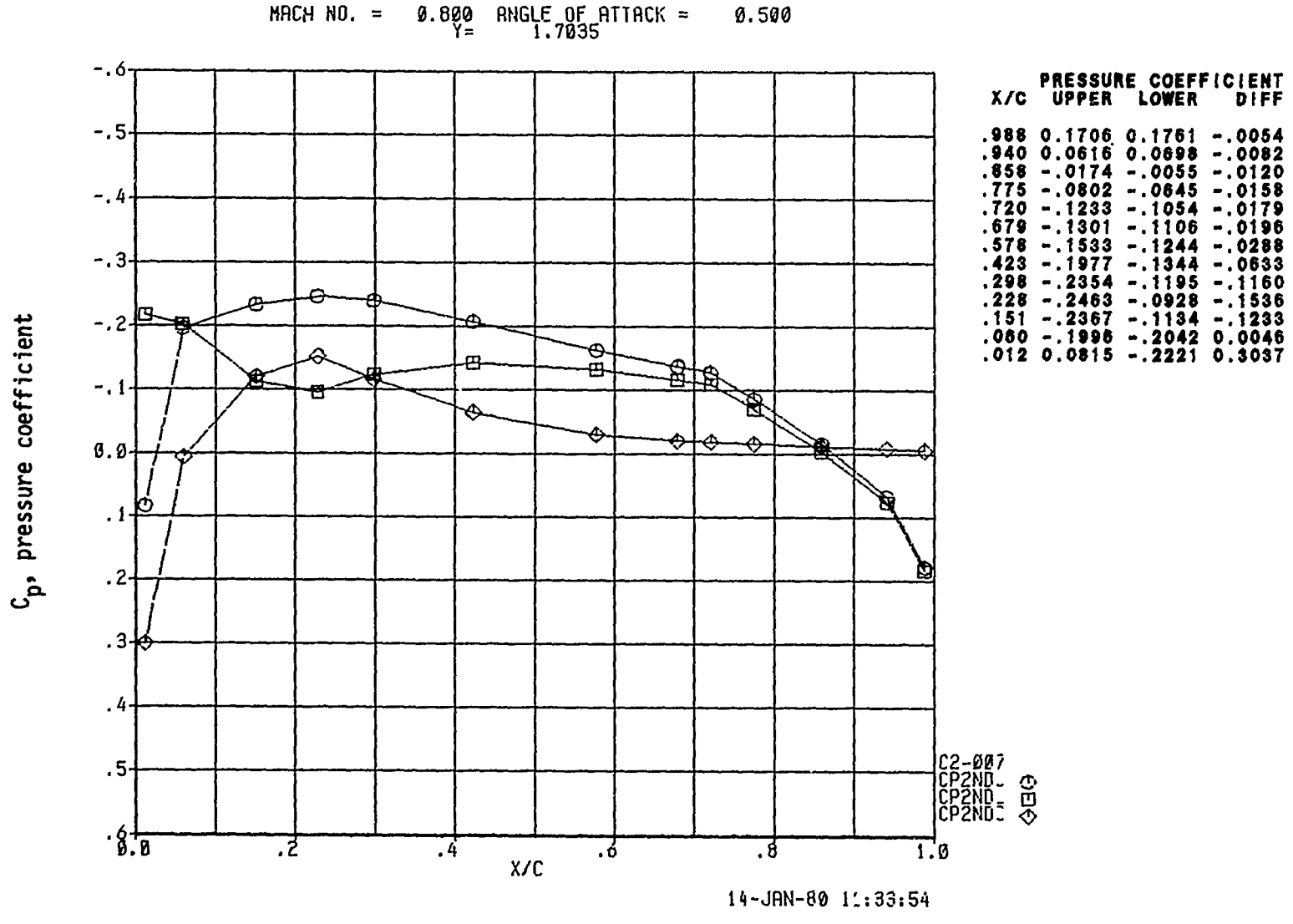
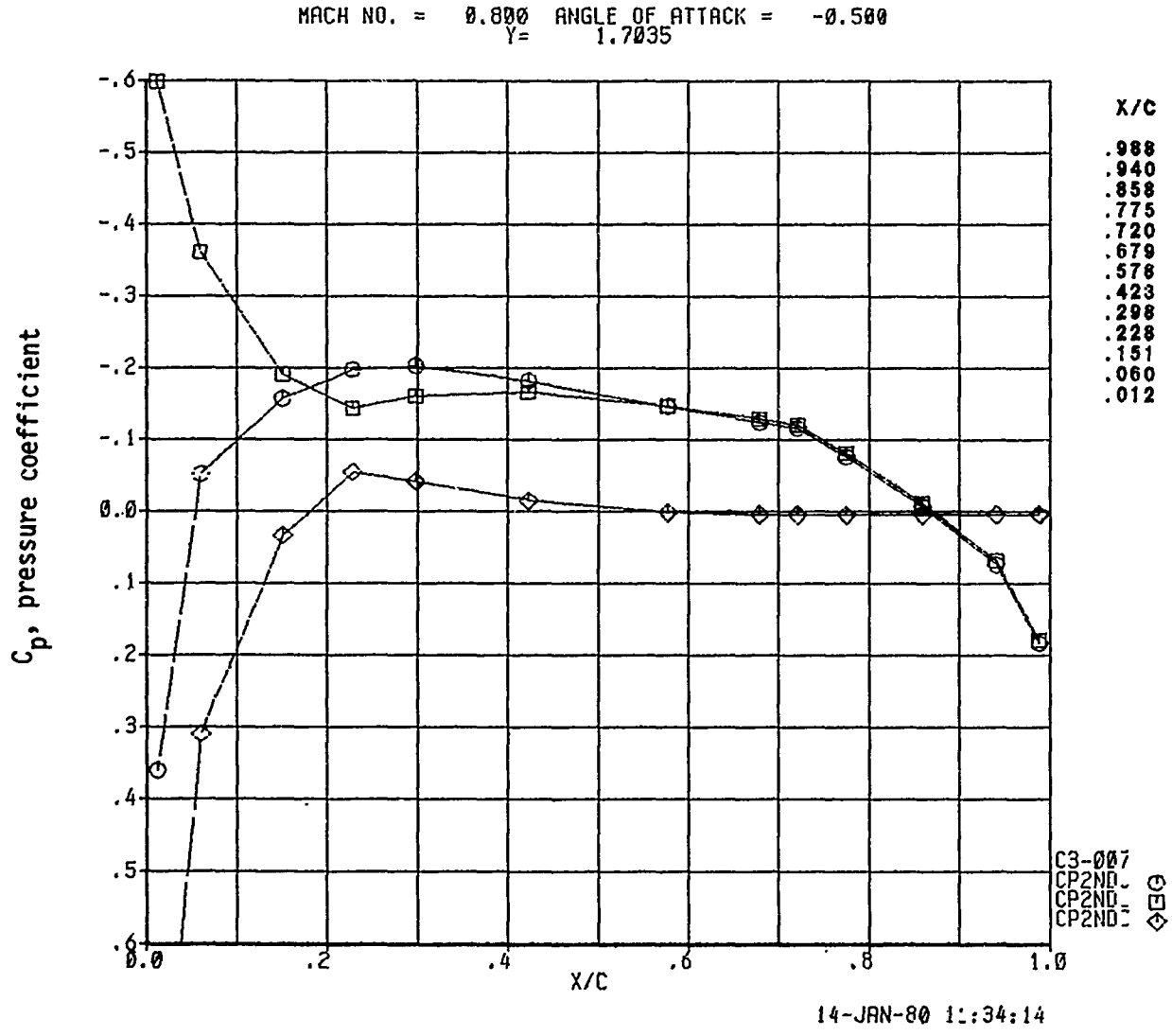


Figure 319, Chordwise Pressure Distribution, Steady, Configuration 2



X/C	PRESSURE COEFFICIENT UPPER	LOWER	DIFF
.988	0.1751	0.1714	0.0037
.940	0.0678	0.0636	0.0041
.858	-.0093	-.0139	0.0046
.775	-.0700	-.0748	0.0049
.720	-.1121	-.1168	0.0047
.679	-.1181	-.1227	0.0046
.576	-.1378	-.1400	0.0022
.423	-.1730	-.1590	-.0140
.298	-.1982	-.1562	-.0420
.228	-.1972	-.1418	-.0555
.151	-.1607	-.1911	0.0304
.060	-.0579	-.3597	0.3019
.012	0.3502	-.5912	0.9414

Figure 320, Chordwise Pressure Distribution, Steady, Configuration 2

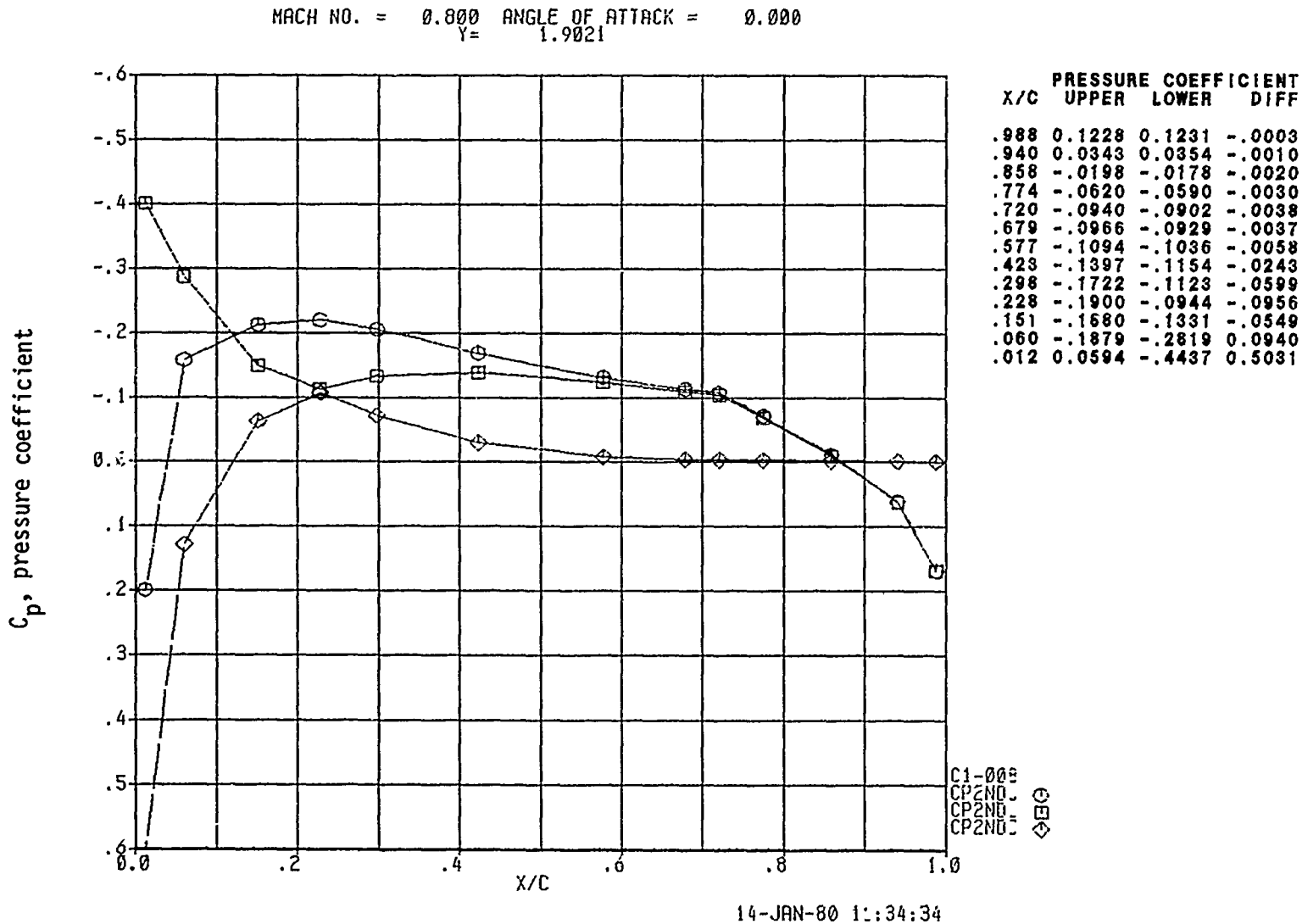


Figure 321, Chordwise Pressure Distribution, Steady, Configuration 2

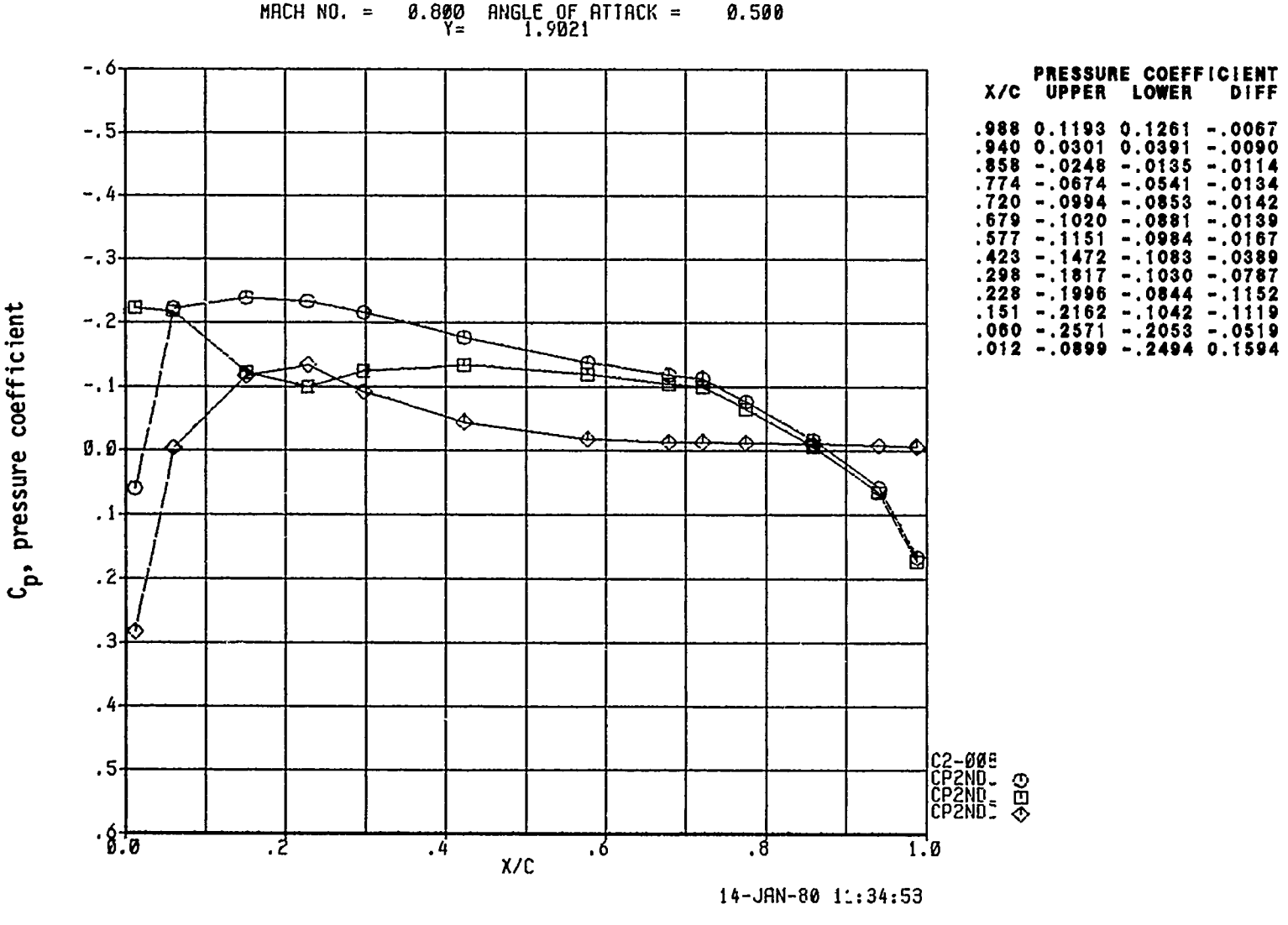
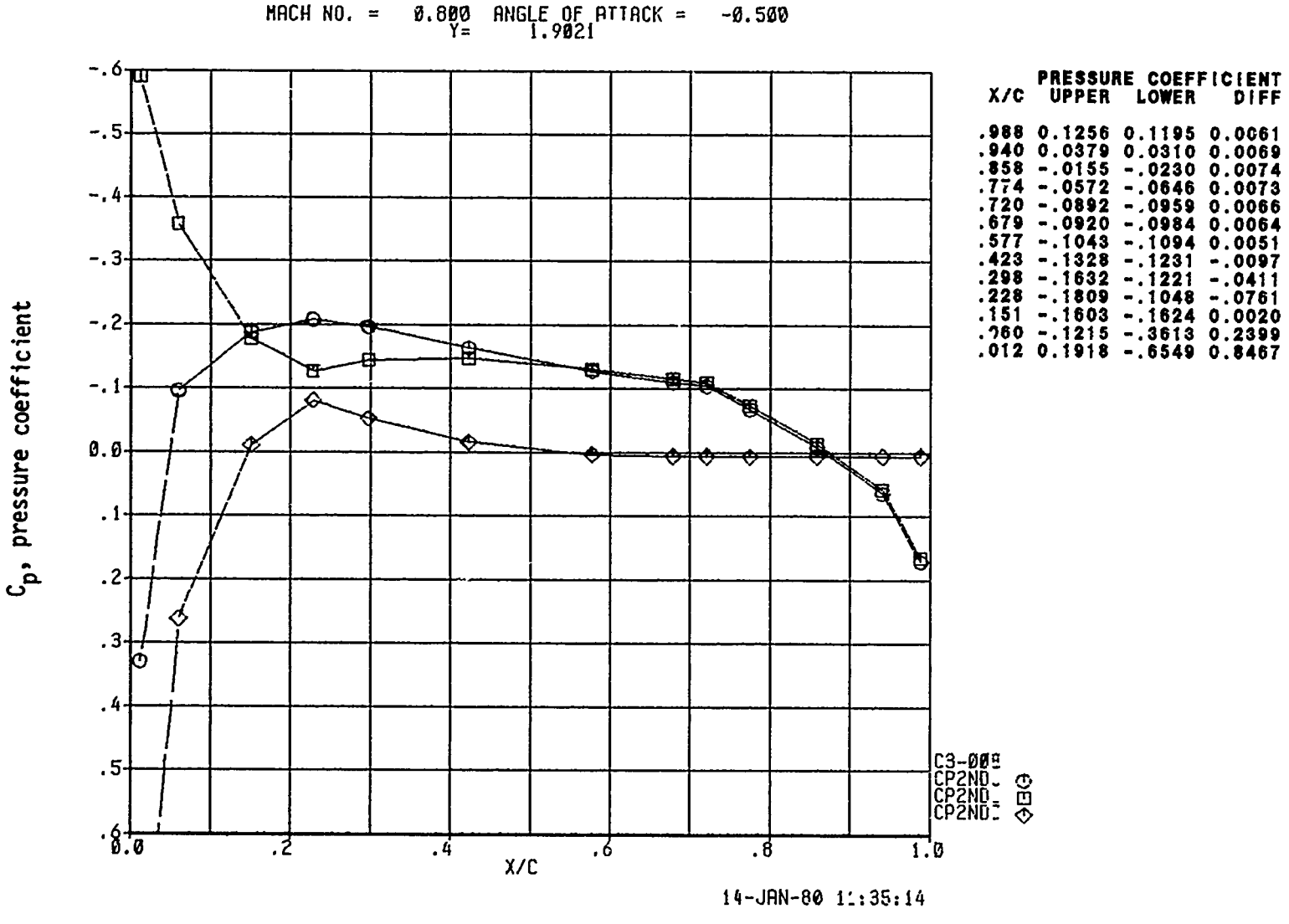
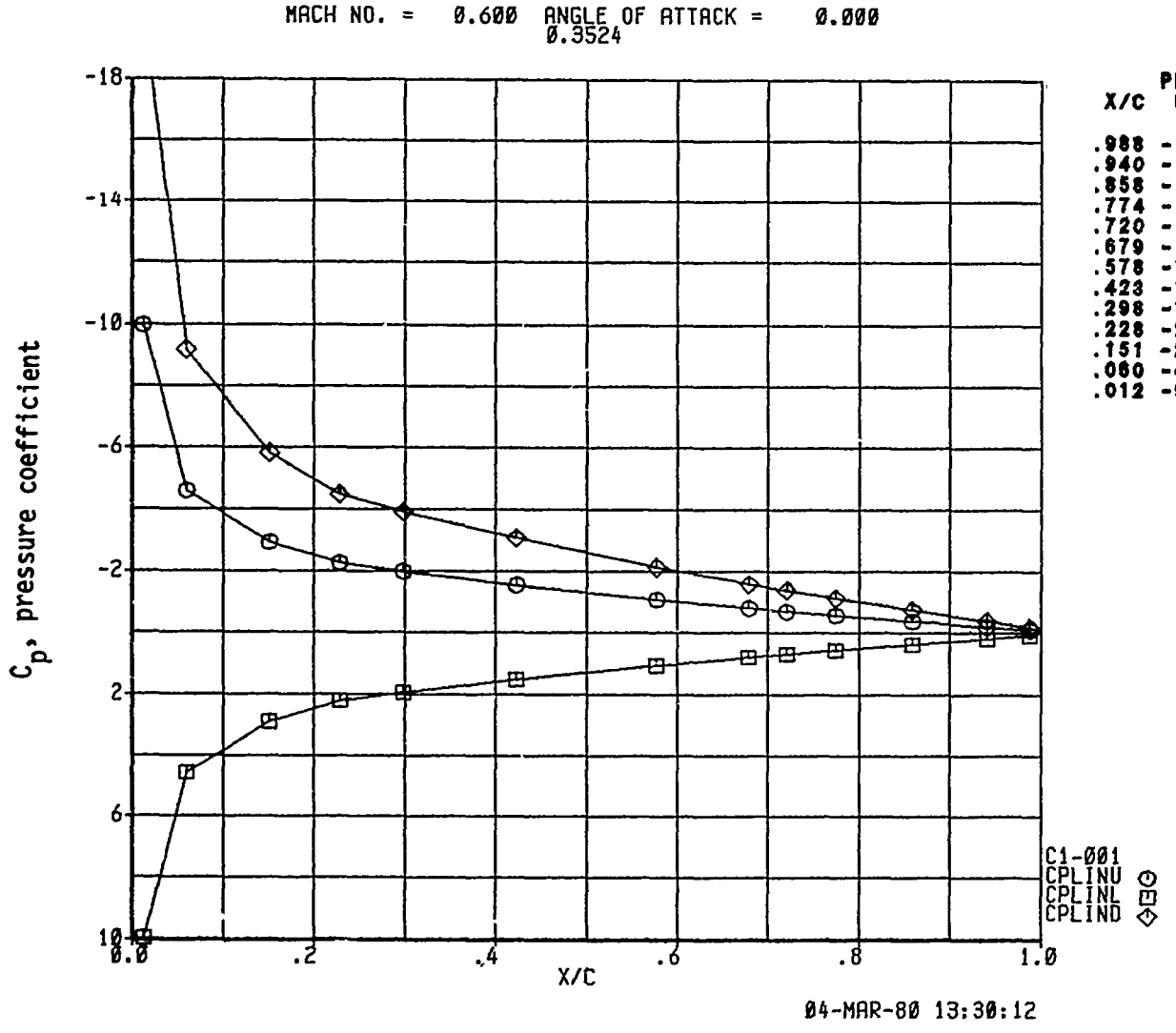


Figure 322, Chordwise Pressure Distribution, Steady, Configuration 2



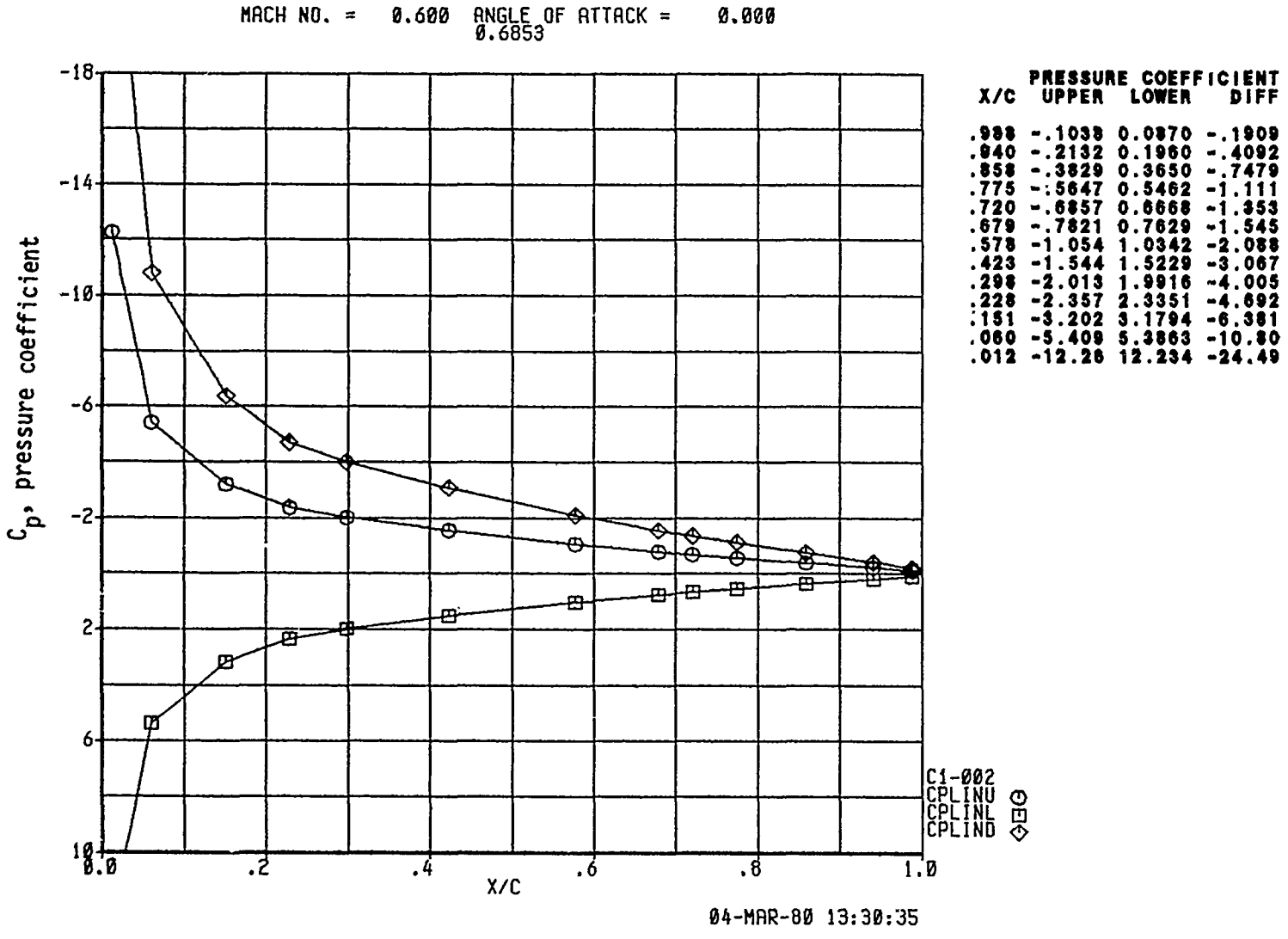
X/C	PRESSURE COEFFICIENT UPPER	LOWER	DIFF
.988	0.1256	0.1195	0.0061
.940	0.0379	0.0310	0.0069
.858	-.0155	-.0230	0.0074
.774	-.0572	-.0646	0.0073
.720	-.0892	-.0959	0.0066
.679	-.0920	-.0984	0.0064
.577	-.1043	-.1094	0.0051
.423	-.1328	-.1231	-.0097
.298	-.1632	-.1221	-.0411
.228	-.1809	-.1048	-.0761
.151	-.1603	-.1624	0.0020
.060	-.1215	-.3613	0.2399
.012	0.1918	-.6549	0.8467

Figure 323, Chordwise Pressure Distribution, Steady, Configuration 2



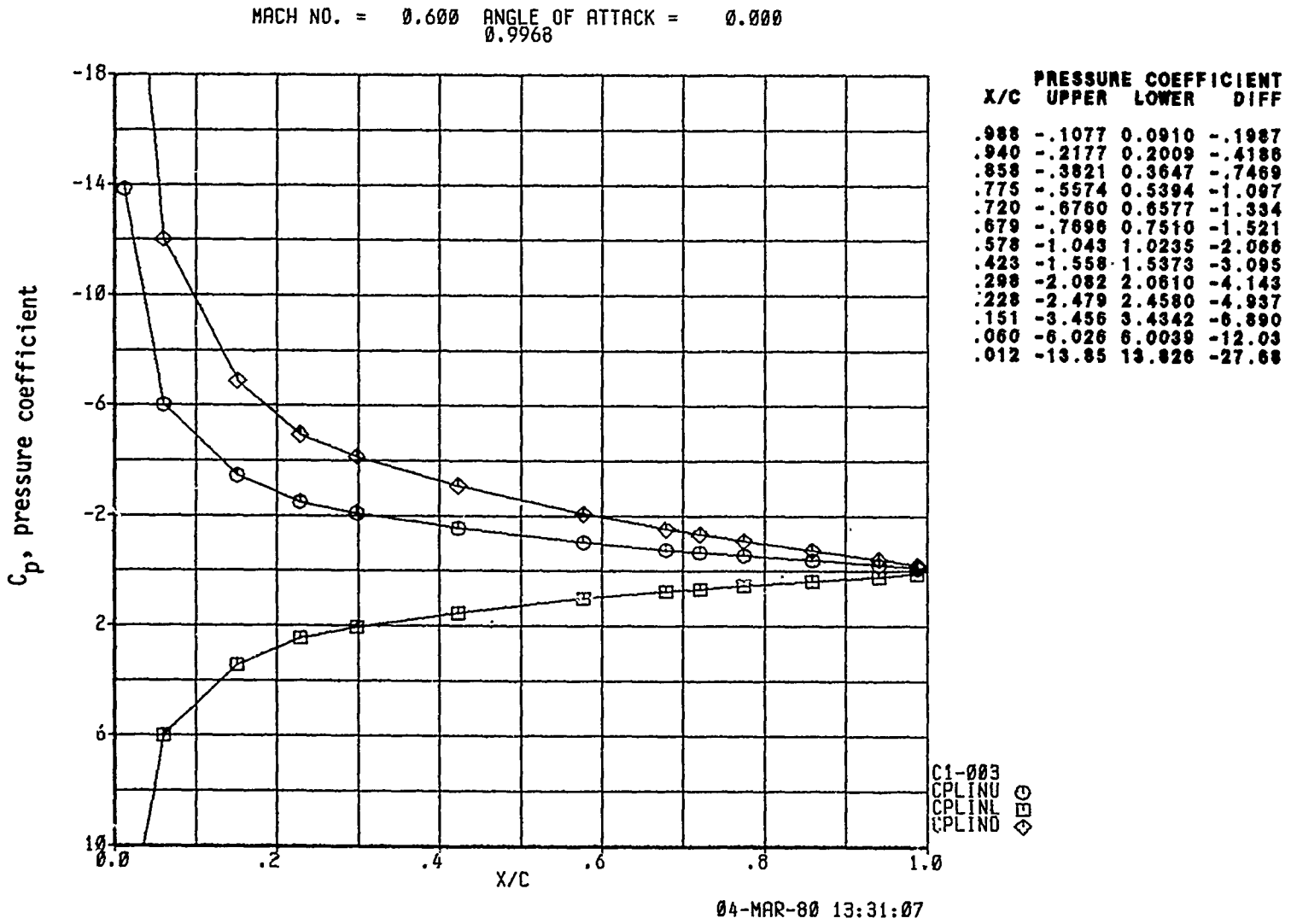
X/C	PRESSURE COEFFICIENT UPPER	LOWER	DIFF
.988	-.0987	0.0818	-.1805
.940	-.2059	0.1885	-.3943
.858	-.3813	0.3632	-.7445
.774	-.5741	0.5553	-1.129
.720	-.7011	0.6818	-1.383
.679	-.8012	0.7816	-1.583
.578	-1.076	1.0558	-2.132
.423	-1.551	1.5291	-3.080
.298	-1.968	1.9457	-3.914
.228	-2.251	2.2278	-4.479
.151	-2.925	2.9018	-5.827
.060	-4.599	4.5756	-9.175
.012	-9.976	9.9518	-19.93

Figure 324, Chordwise Pressure Distribution, Real, Configuration 2



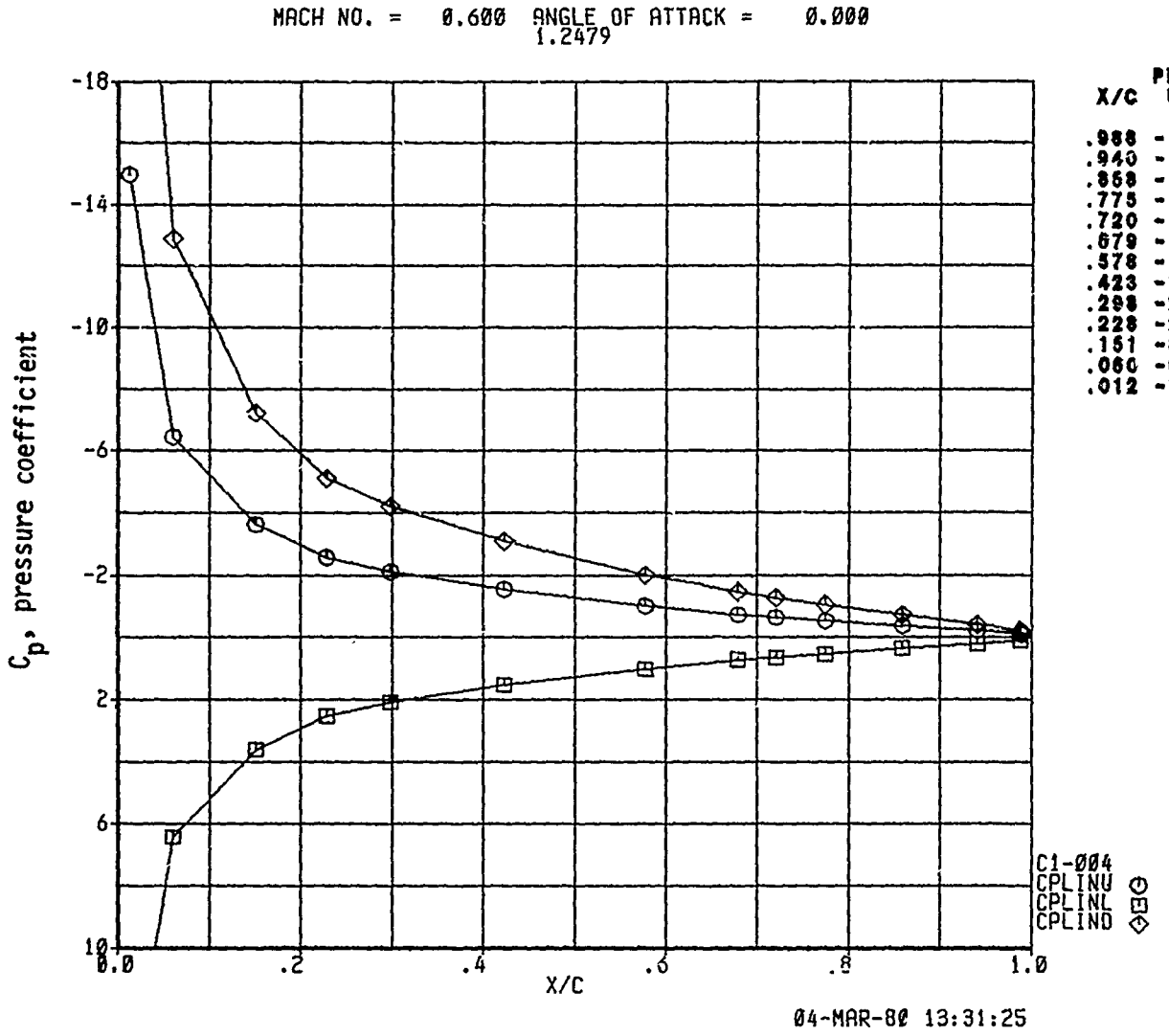
X/C	PRESSURE COEFFICIENT UPPER	LOWER	DIFF
.988	-.1038	0.0870	-.1909
.940	-.2132	0.1960	-.4092
.858	-.3829	0.3650	-.7479
.775	-.5647	0.5462	-1.111
.720	-.6857	0.6668	-1.353
.679	-.7821	0.7629	-1.545
.578	-1.054	1.0342	-2.088
.423	-1.544	1.5229	-3.067
.298	-2.013	1.9916	-4.005
.228	-2.357	2.3351	-4.692
.151	-3.202	3.1794	-6.381
.060	-5.409	5.3863	-10.80
.012	-12.26	12.234	-24.49

Figure 325, Chordwise Pressure Distribution, Real, Configuration 2



X/C	PRESSURE COEFFICIENT UPPER	LOWER	DIFF
.988	-.1077	0.0910	-.1987
.940	-.2177	0.2009	-.4186
.858	-.3821	0.3647	-.7469
.775	-.5574	0.5394	-1.097
.720	-.6760	0.6577	-1.334
.679	-.7696	0.7510	-1.521
.578	-1.043	1.0235	-2.066
.423	-1.558	1.5373	-3.095
.298	-2.082	2.0610	-4.143
.228	-2.479	2.4580	-4.937
.151	-3.456	3.4342	-6.890
.060	-6.026	6.0039	-12.03
.012	-13.85	13.826	-27.68

Figure 326, Chordwise Pressure Distribution, Real, Configuration 2



X/C	PRESSURE COEFFICIENT UPPER	LOWER	DIFF
.988	-.1065	0.0902	-.1967
.940	-.2139	0.1974	-.4112
.868	-.3706	0.3536	-.7243
.775	-.5367	0.5192	-1.056
.720	-.6504	0.6325	-1.283
.679	-.7405	0.7225	-1.463
.578	-1.014	0.9957	-2.010
.423	-1.549	1.5295	-3.079
.298	-2.118	2.0960	-4.212
.228	-2.557	2.5367	-5.094
.151	-3.627	3.6064	-7.234
.060	-6.457	6.4351	-12.89
.012	-14.97	14.946	-29.91

Figure 327, Chordwise Pressure Distribution, Real, Configuration 2

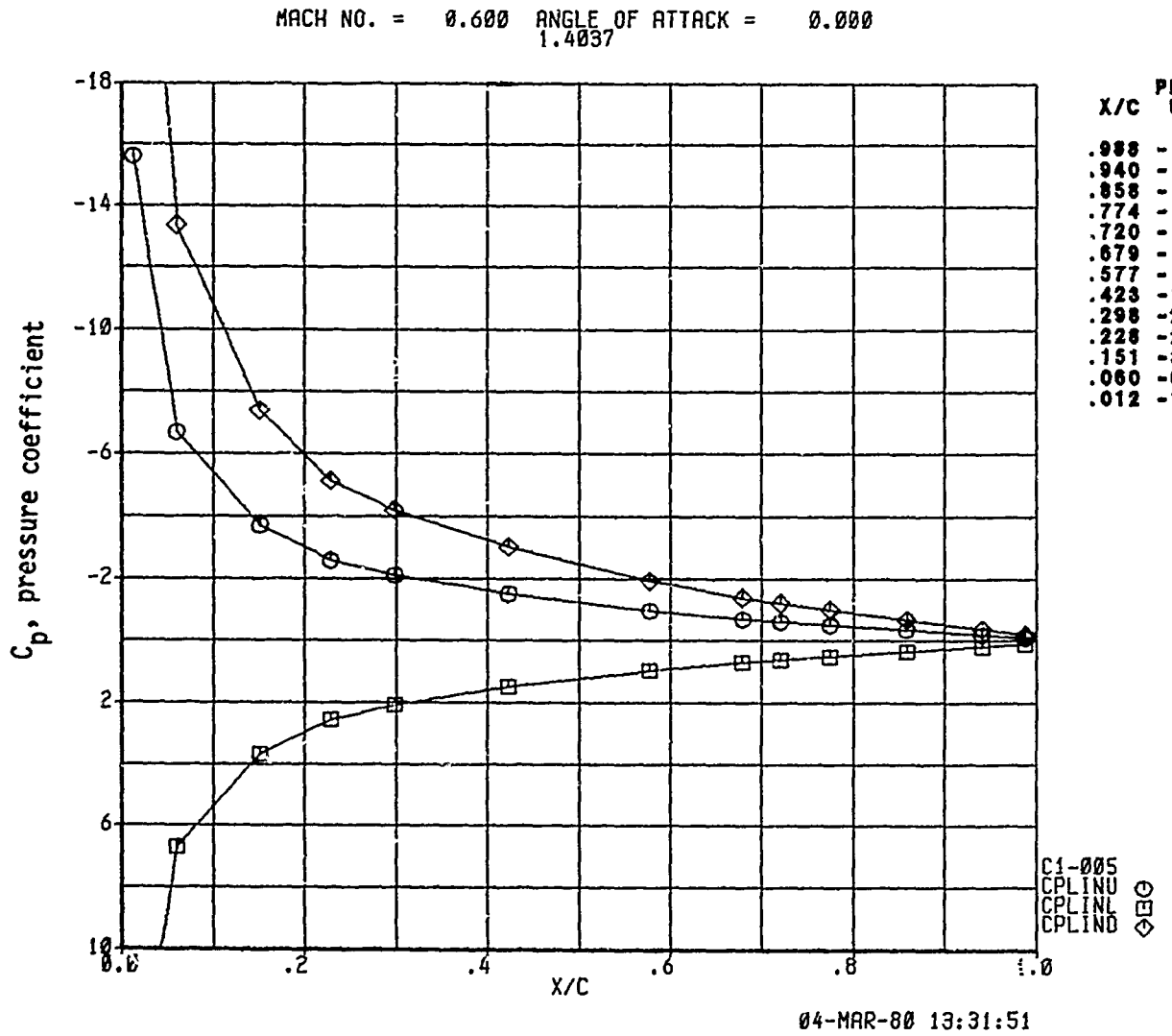


Figure 328, Chordwise Pressure Distribution, Real, Configuration 2

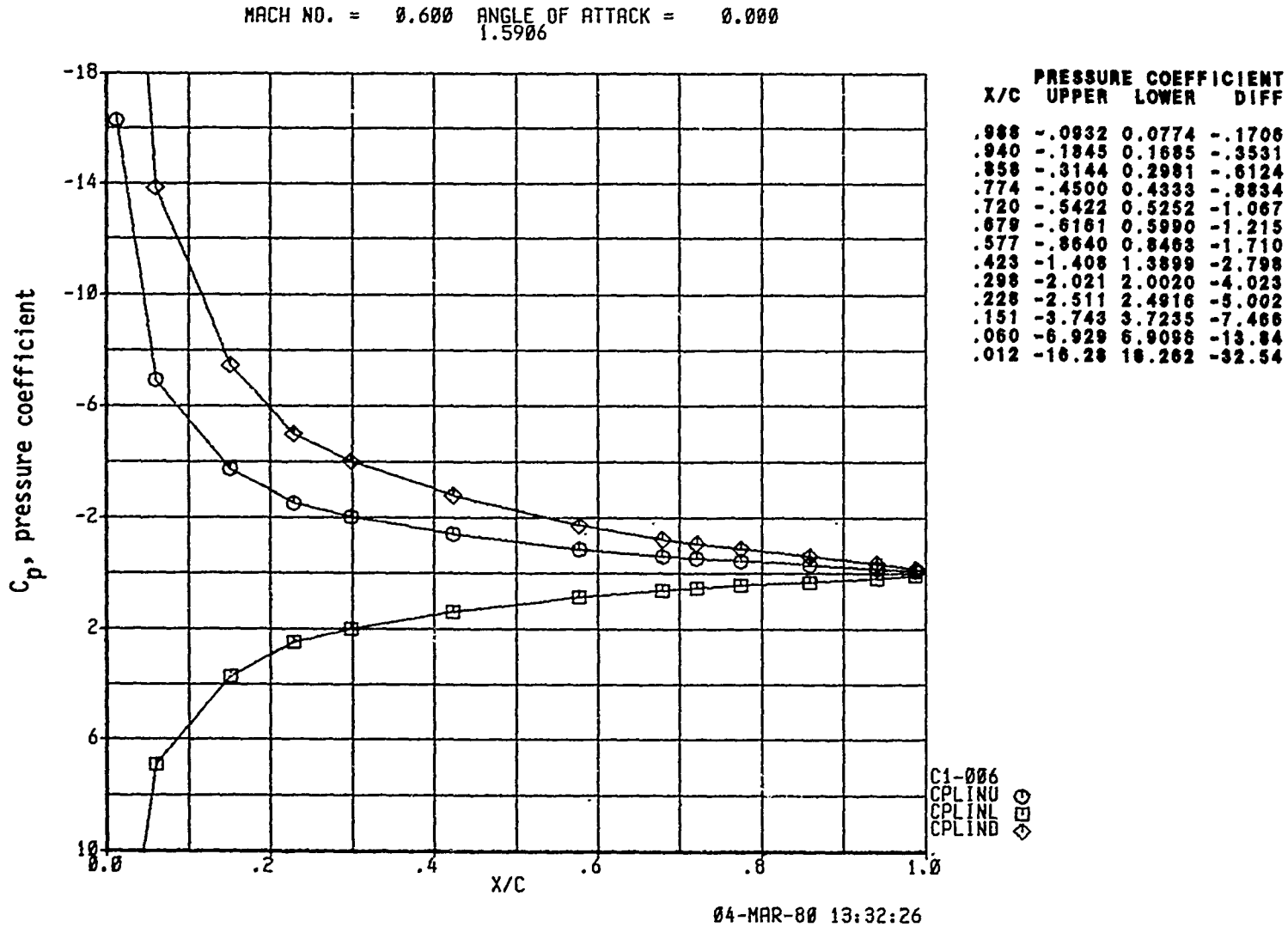
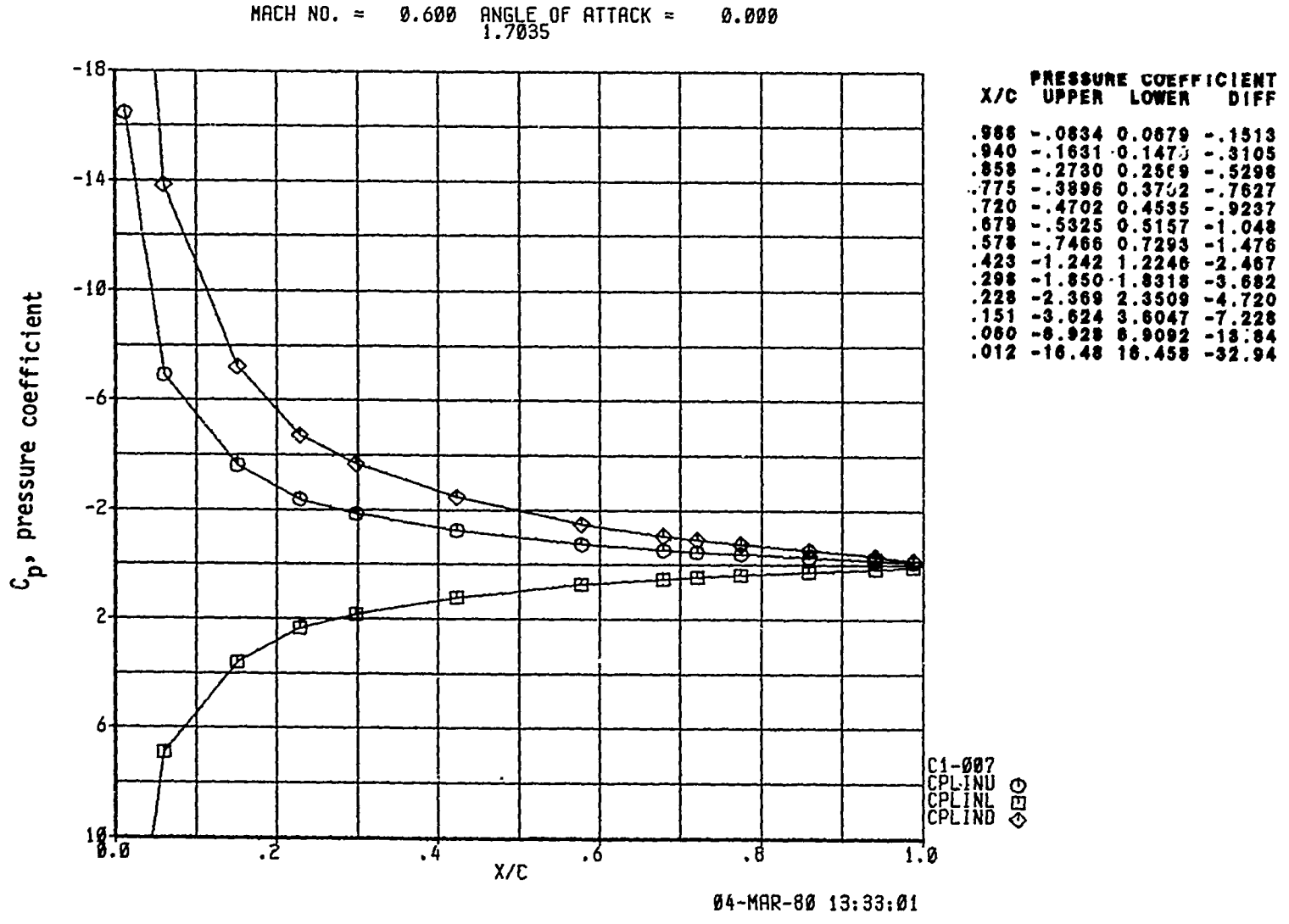
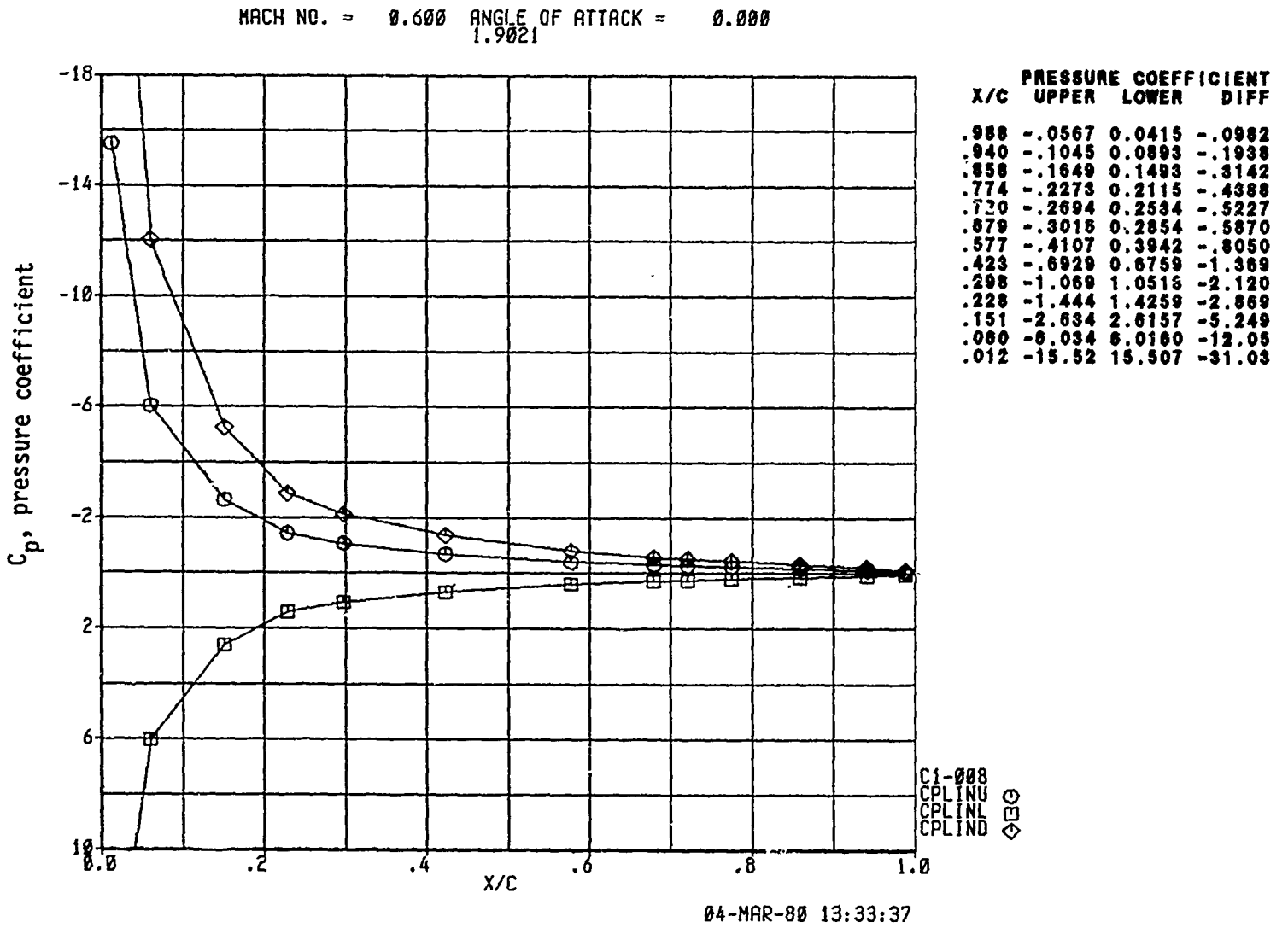


Figure 329, Chordwise Pressure Distribution, Real, Configuration 2



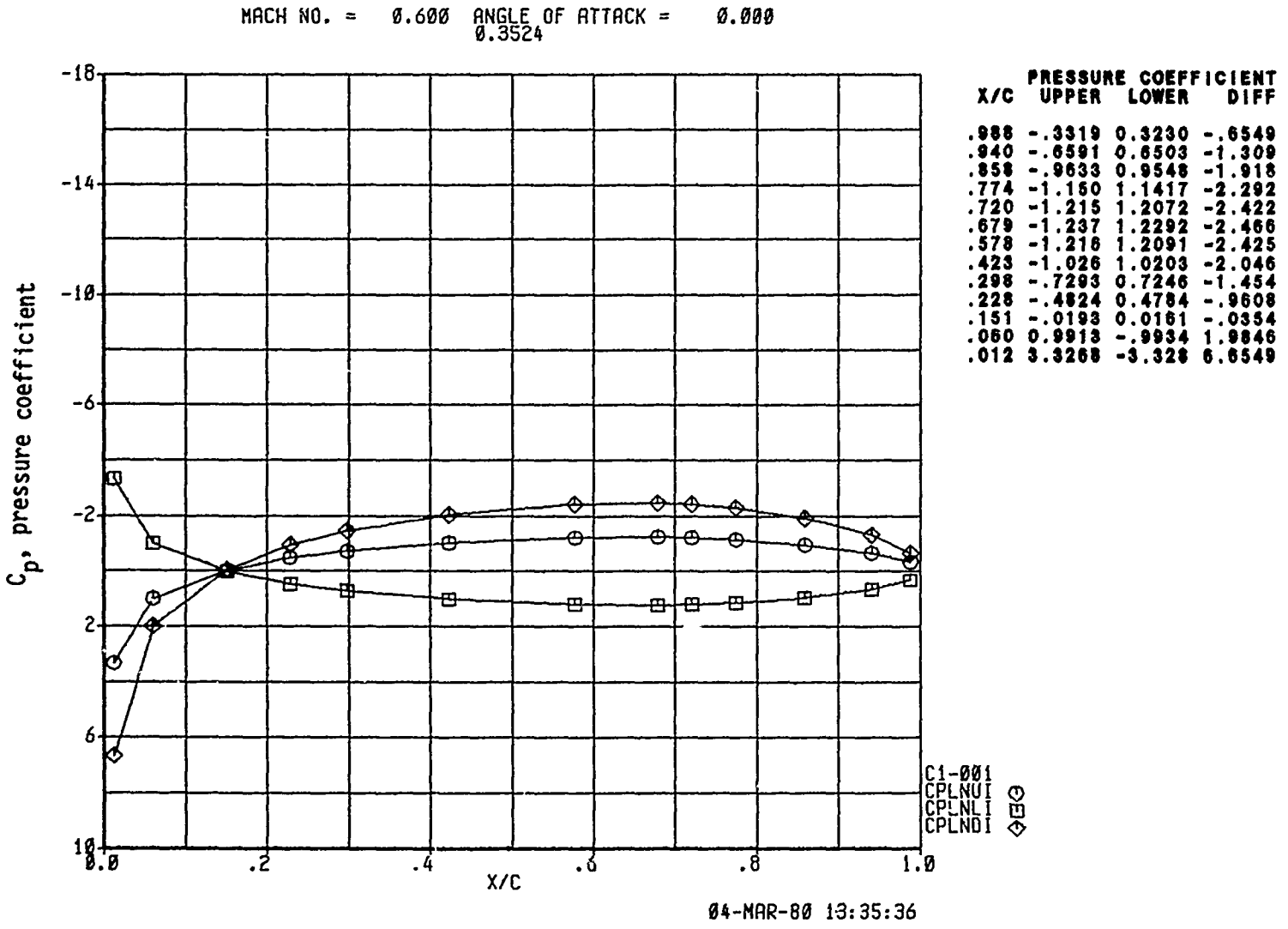
X/C	PRESSURE COEFFICIENT UPPER	LOWER	DIFF
.988	-.0834	0.0679	-.1513
.940	-.1631	0.1473	-.3105
.858	-.2730	0.2569	-.5298
.775	-.3896	0.3732	-.7627
.720	-.4702	0.4535	-.9237
.679	-.5325	0.5157	-1.048
.578	-.7466	0.7293	-1.476
.423	-1.242	1.2246	-2.467
.298	-1.850	1.8318	-3.682
.228	-2.369	2.3509	-4.720
.151	-3.624	3.6047	-7.228
.060	-8.928	8.9092	-18.84
.012	-16.48	16.458	-32.94

Figure 330, Chordwise Pressure Distribution, Real, Configuration 2



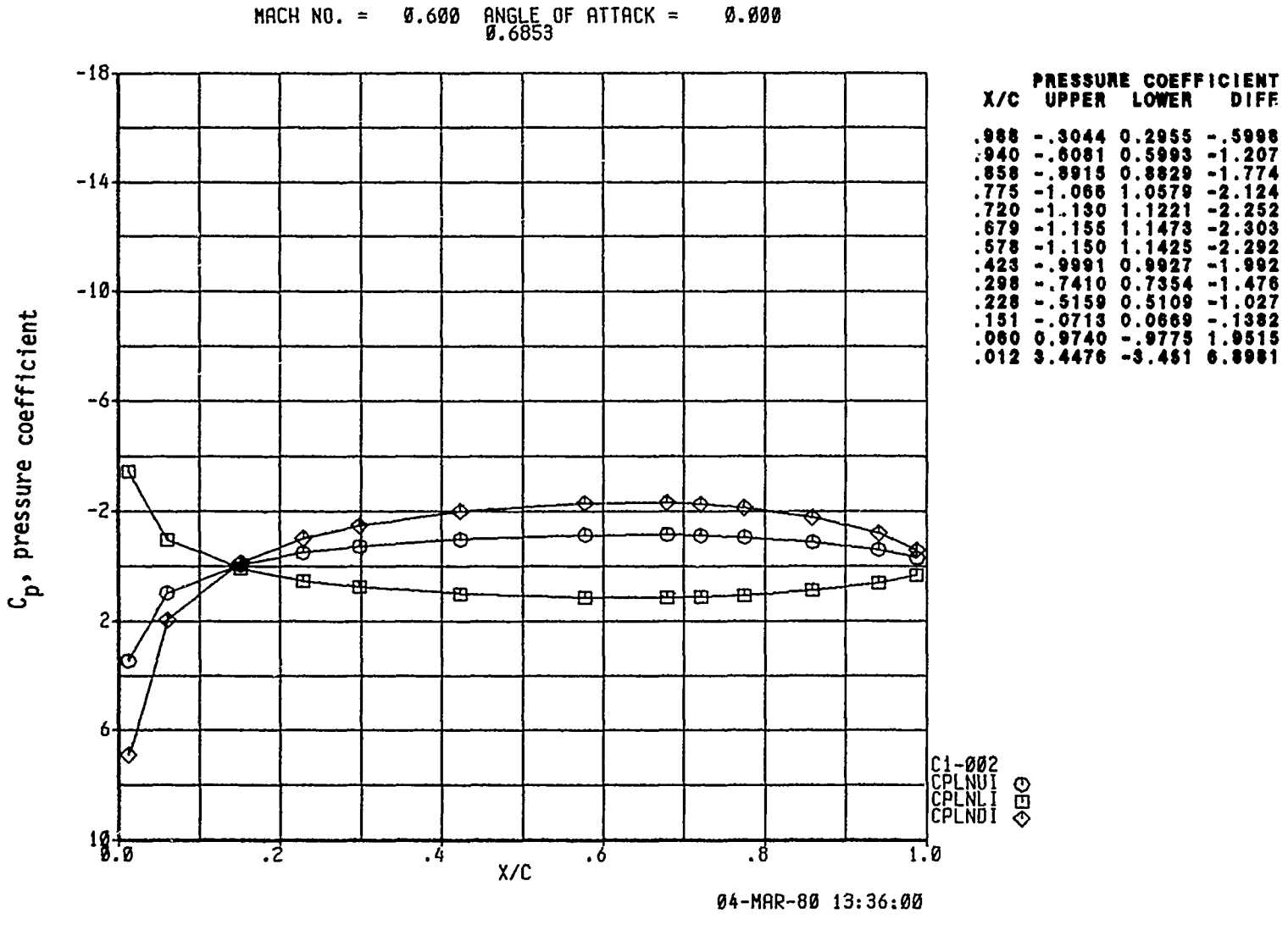
X/C	PRESSURE COEFFICIENT UPPER	LOWER	DIFF
.988	-.0567	0.0415	-.0982
.940	-.1045	0.0893	-.1938
.858	-.1649	0.1493	-.3142
.774	-.2273	0.2115	-.4388
.730	-.2694	0.2534	-.5227
.679	-.3016	0.2854	-.5870
.577	-.4107	0.3942	-.8050
.423	-.6929	0.6759	-1.369
.298	-1.069	1.0518	-2.120
.228	-1.444	1.4259	-2.869
.151	-2.634	2.6157	-5.249
.060	-6.034	6.0160	-12.05
.012	-15.52	15.507	-31.03

Figure 331, Chordwise Pressure Distribution, Real, Configuration 2



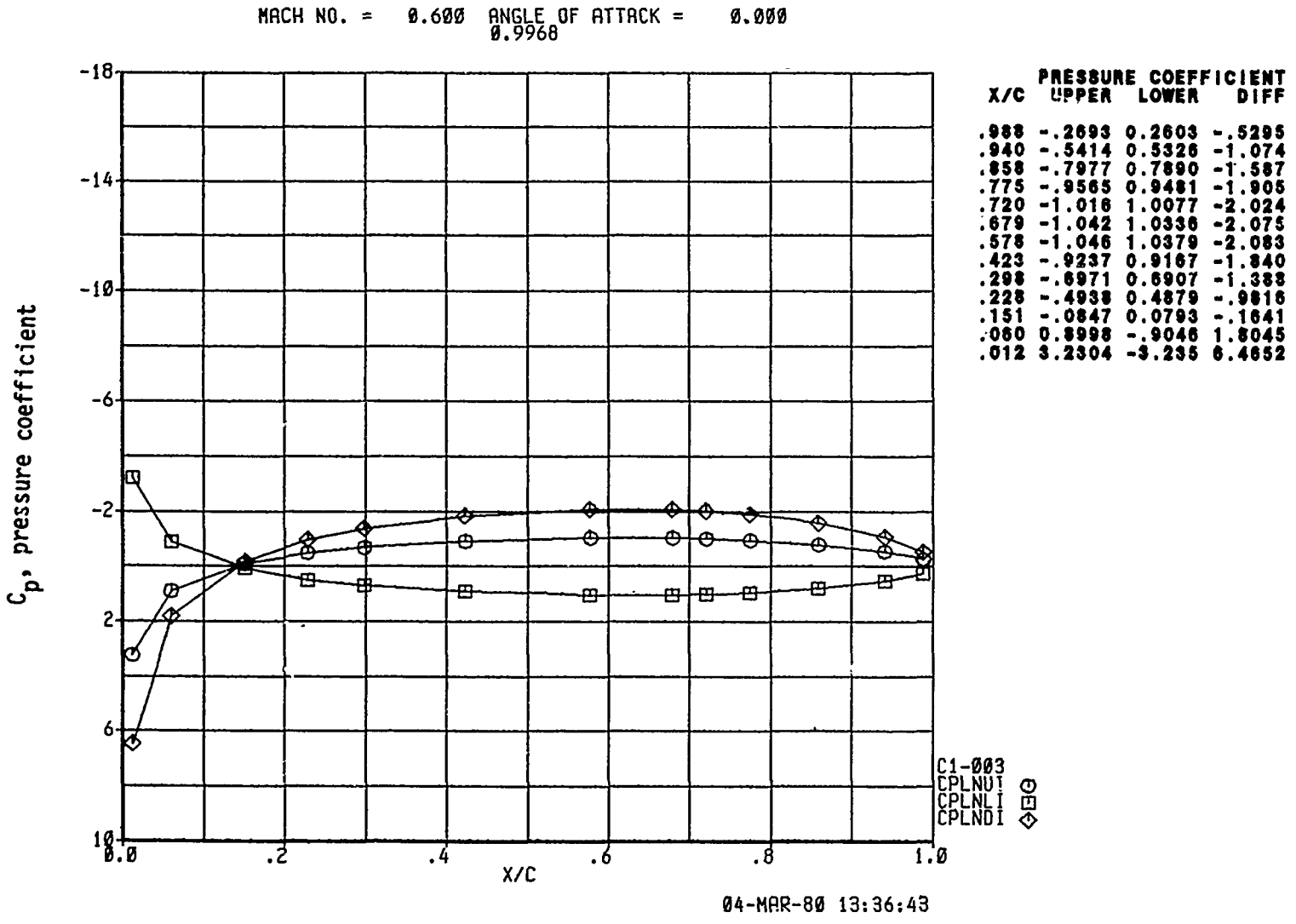
X/C	PRESSURE COEFFICIENT UPPER	LOWER	DIFF
.988	-.3319	0.3230	-.6549
.940	-.6591	0.6503	-1.309
.858	-.9633	0.9548	-1.918
.774	-1.150	1.1417	-2.292
.720	-1.215	1.2072	-2.422
.679	-1.237	1.2292	-2.466
.578	-1.218	1.2091	-2.425
.423	-1.026	1.0203	-2.046
.298	-.7293	0.7246	-1.454
.228	-.4824	0.4784	-.9608
.151	-.0193	0.0161	-.0354
.060	0.9913	-.9934	1.9846
.012	3.3268	-3.328	6.6549

Figure 332, Chordwise Pressure Distribution, Imaginary, Configuration 2



X/C	PRESSURE COEFFICIENT UPPER	LOWER	DIFF
.988	-.3044	0.2955	-.5998
.940	-.6081	0.5993	-1.207
.858	-.8915	0.8829	-1.774
.775	-1.066	1.0579	-2.124
.720	-1.130	1.1221	-2.252
.679	-1.155	1.1473	-2.303
.578	-1.150	1.1425	-2.292
.423	-.9991	0.9927	-1.992
.298	-.7410	0.7354	-1.476
.228	-.5159	0.5109	-1.027
.151	-.0713	0.0669	-.1382
.060	0.9740	-.9775	1.9515
.012	3.4476	-3.481	6.8981

Figure 333, Chordwise Pressure Distribution, Imaginary, Configuration 2



X/C	PRESSURE COEFFICIENT UPPER	LOWER	DIFF
.988	-.2693	0.2603	-.5295
.940	-.5414	0.5326	-1.074
.858	-.7977	0.7890	-1.587
.775	-.9565	0.9481	-1.905
.720	-1.016	1.0077	-2.024
.679	-1.042	1.0336	-2.075
.578	-1.046	1.0379	-2.083
.423	-.9237	0.9167	-1.840
.298	-.6971	0.6907	-1.388
.228	-.4938	0.4879	-.9816
.151	-.0847	0.0793	-.1641
.060	0.8998	-.9046	1.8045
.012	3.2304	-3.235	6.4652

Figure 334, Chordwise Pressure Distribution, Imaginary, Configuration 2

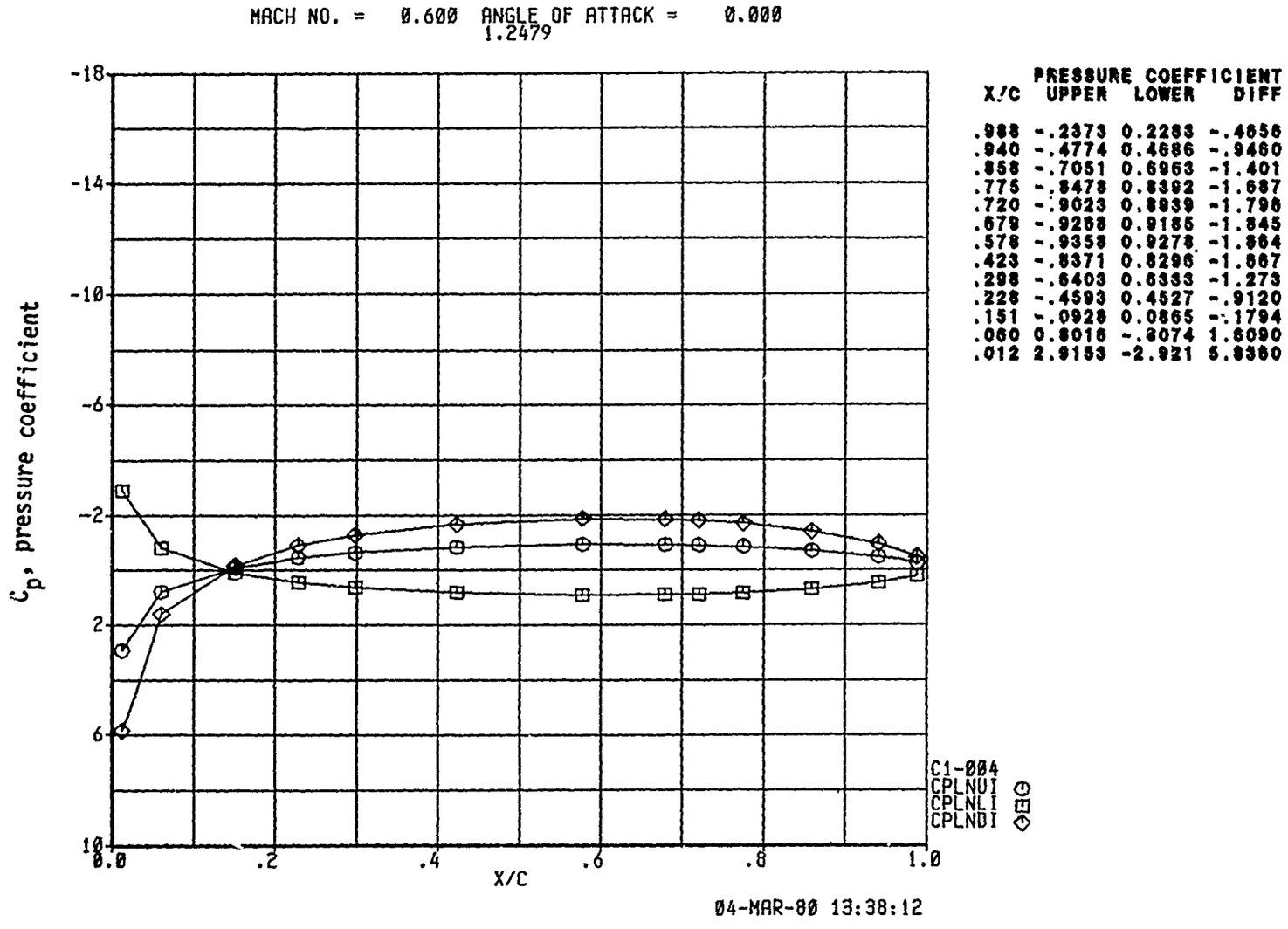
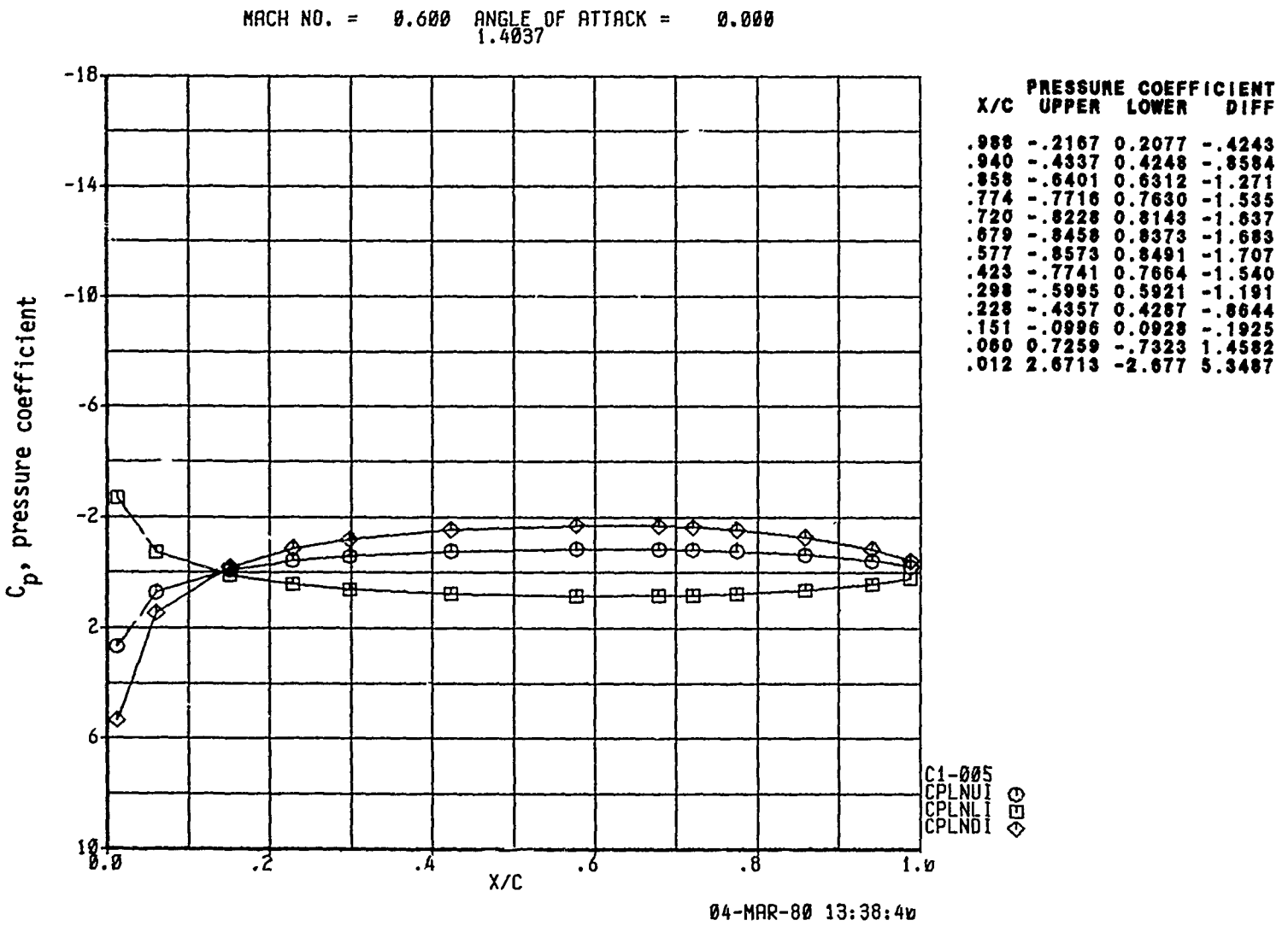


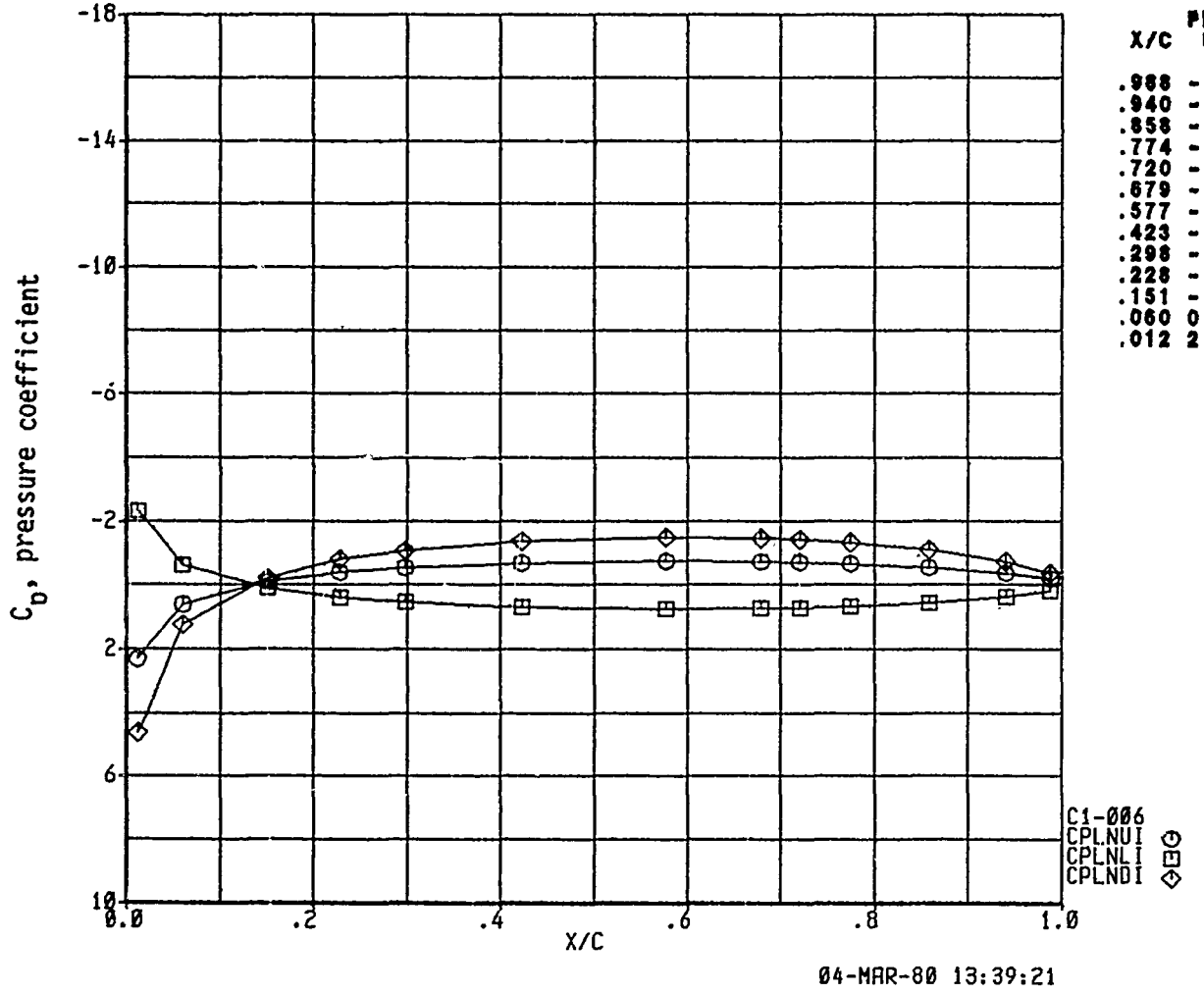
Figure 335, Chordwise Pressure Distribution, Imaginary, Configuration 2



X/C	PRESSURE COEFFICIENT UPPER	LOWER	DIFF
.988	-.2167	0.2077	-.4243
.940	-.4337	0.4248	-.8584
.858	-.6401	0.6312	-1.271
.774	-.7716	0.7630	-1.535
.720	-.8228	0.8143	-1.637
.679	-.8458	0.8373	-1.683
.577	-.8573	0.8491	-1.707
.423	-.7741	0.7664	-1.540
.298	-.5995	0.5921	-1.191
.228	-.4357	0.4287	-.8644
.151	-.0996	0.0928	-.1925
.060	0.7259	-.7323	1.4582
.012	2.6713	-2.677	5.3487

Figure 336, Chordwise Pressure Distribution, Imaginary, Configuration 2

MACH NO. = 0.600 ANGLE OF ATTACK = 0.000
1.5906



X/C	PRESSURE COEFFICIENT UPPER	LOWER	DIFF
.988	-.1878	0.1787	-.3664
.940	-.3753	0.3663	-.7415
.858	-.5523	0.5434	-1.096
.774	-.6666	0.6578	-1.324
.720	-.7117	0.7031	-1.415
.679	-.7328	0.7242	-1.457
.577	-.7482	0.7398	-1.488
.423	-.6875	0.6794	-1.367
.298	-.5449	0.5371	-1.082
.228	-.4070	0.3996	-.8066
.151	-.1138	0.1065	-.2205
.060	0.6102	-.6172	1.2273
.012	2.3087	-2.316	4.6244

Figure 337, Chordwise Pressure Distribution, Imaginary, Configuration 2

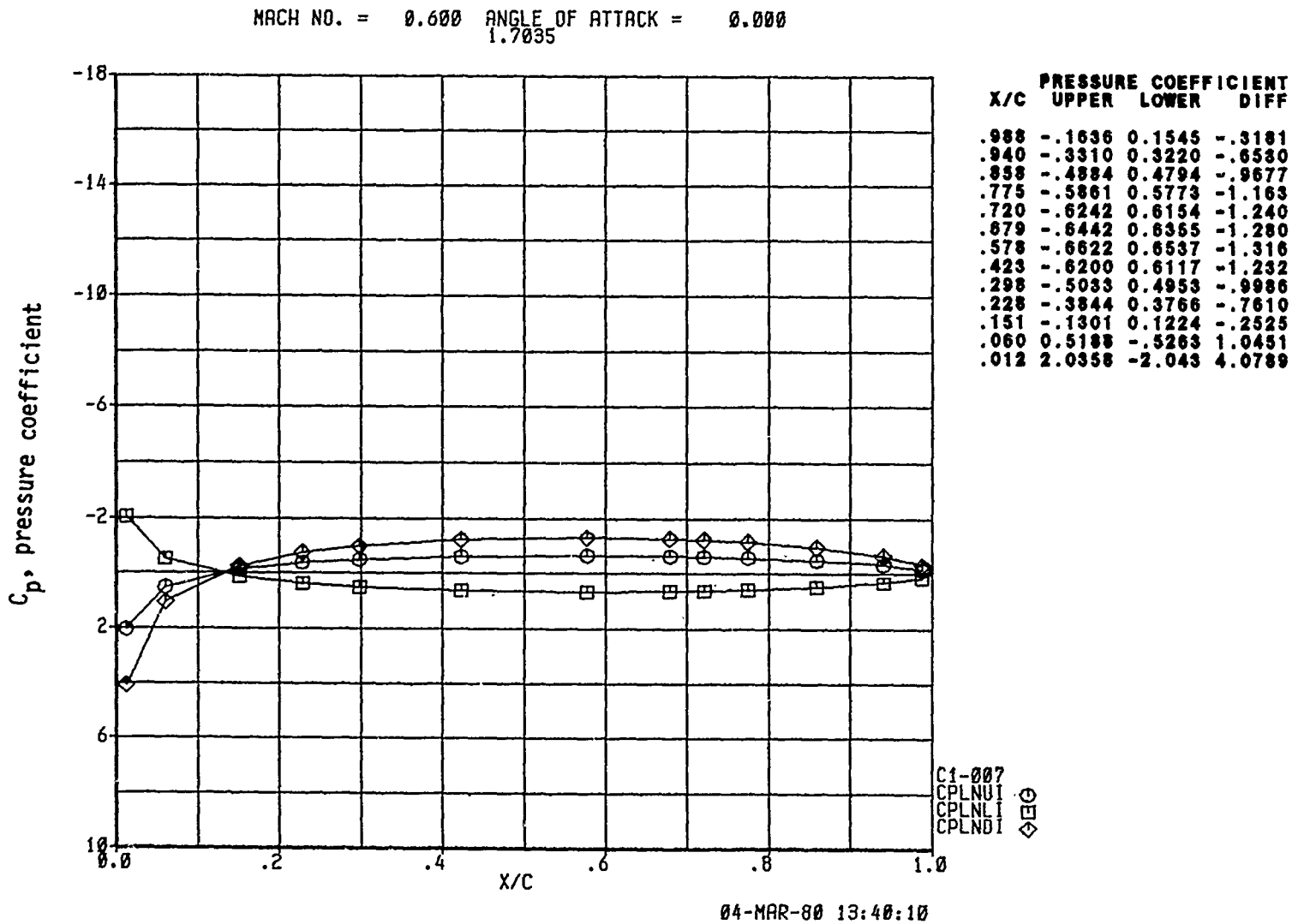
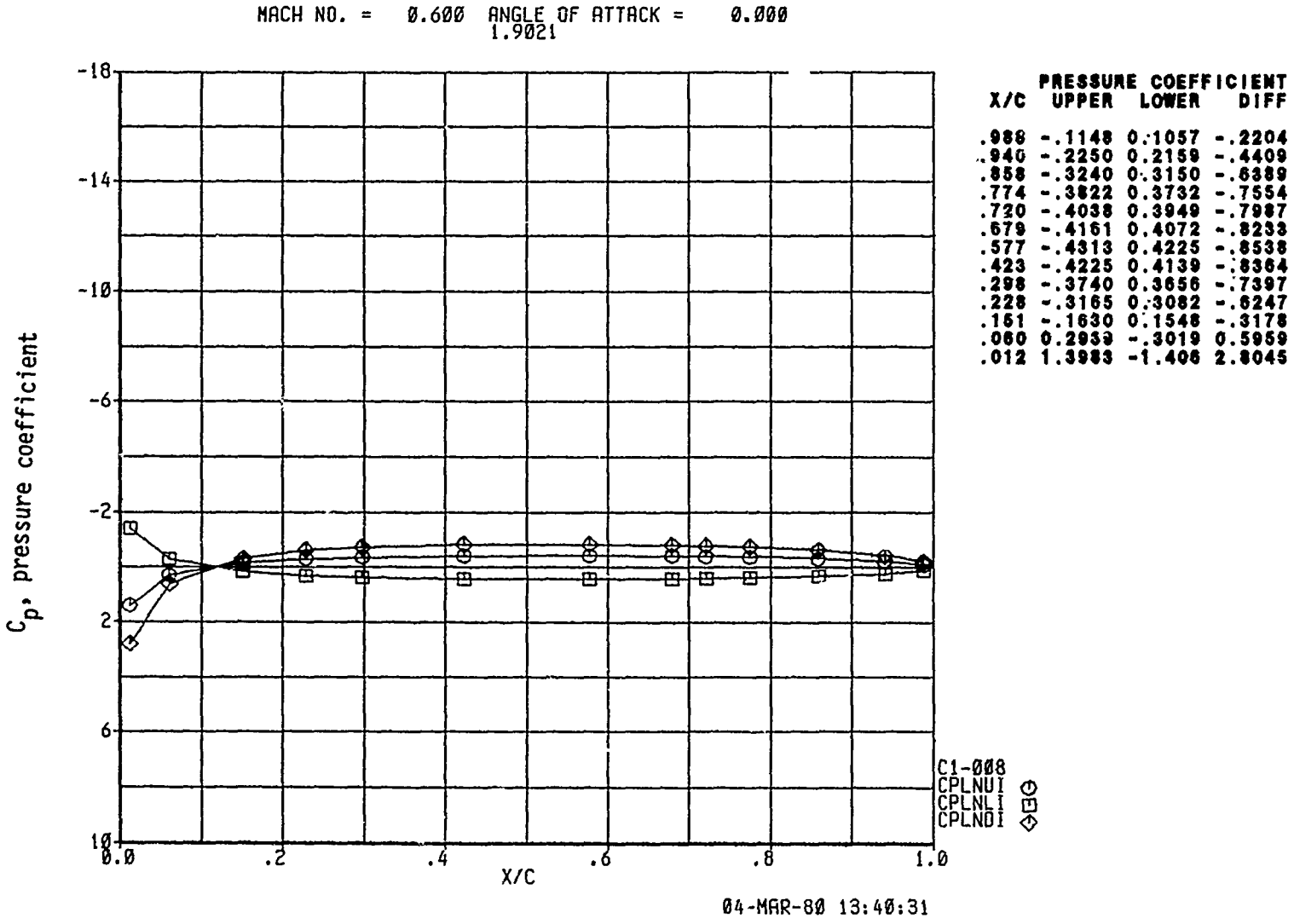
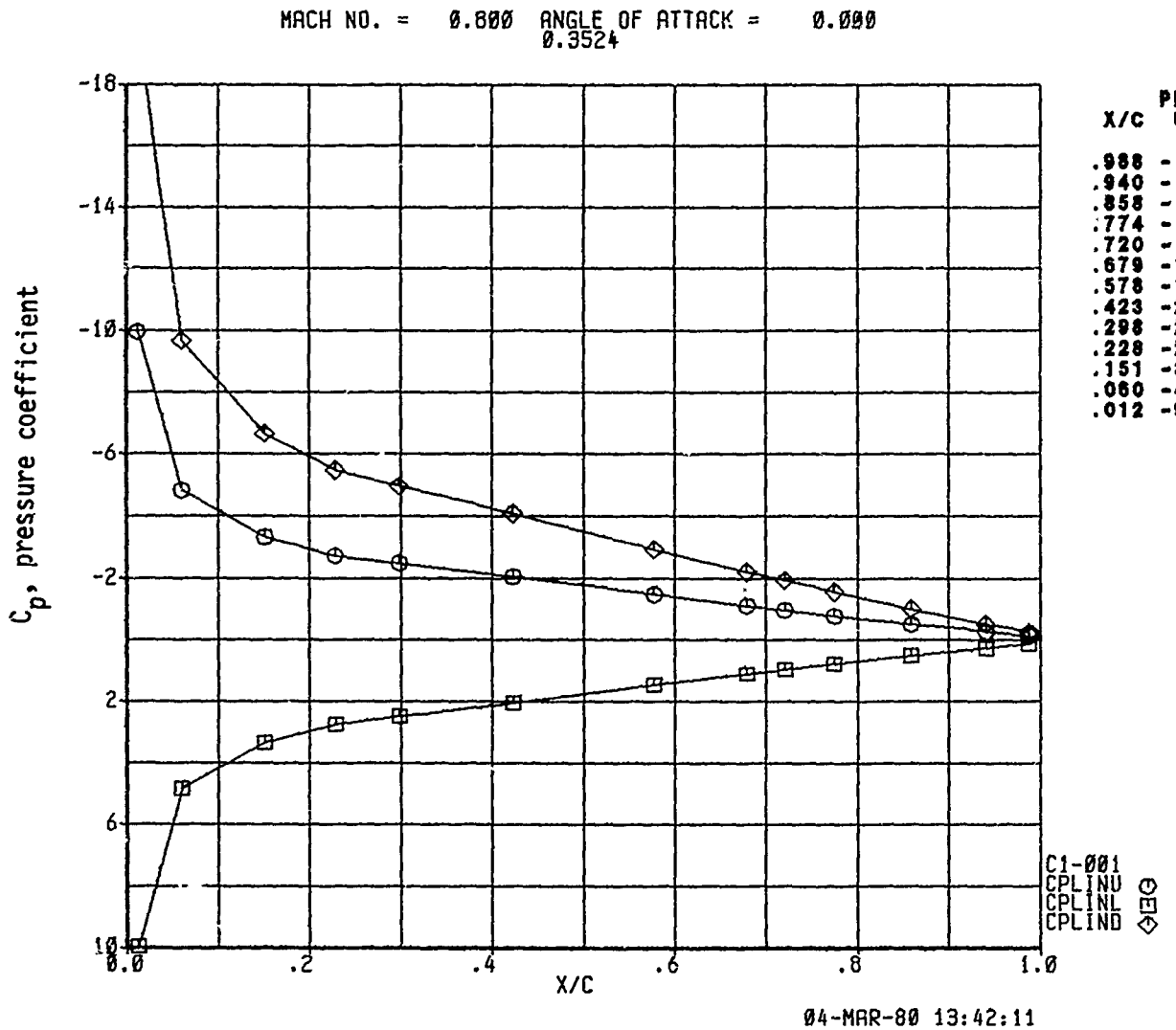


Figure 338, Chordwise Pressure Distribution, Imaginary, Configuration 2



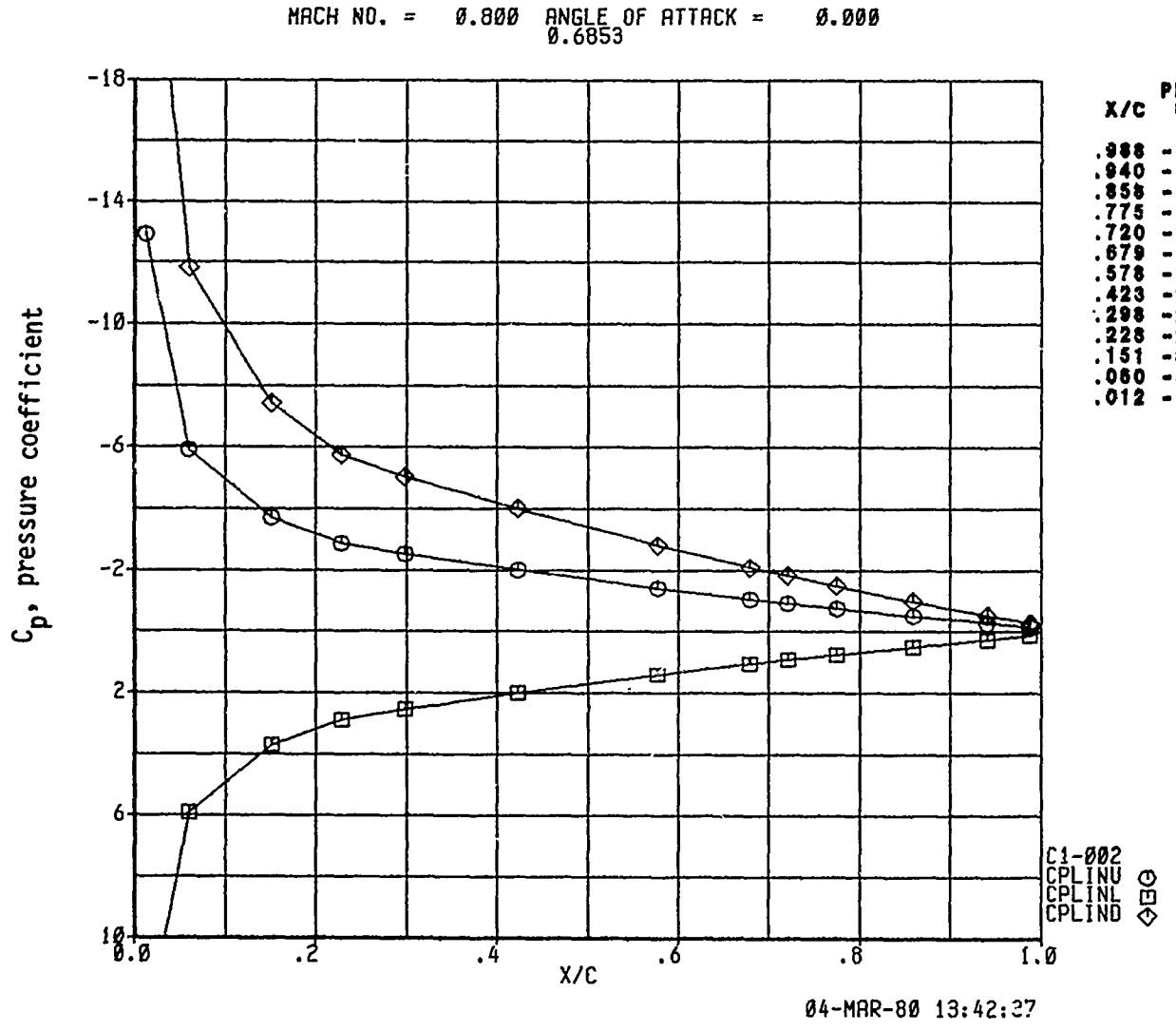
X/C	PRESSURE COEFFICIENT UPPER	LOWER	DIFF
.988	-.1148	0.1057	-.2204
.940	-.2250	0.2159	-.4409
.858	-.3240	0.3150	-.6389
.774	-.3822	0.3732	-.7554
.720	-.4038	0.3949	-.7987
.679	-.4161	0.4072	-.8233
.577	-.4313	0.4225	-.8538
.423	-.4225	0.4139	-.8364
.298	-.3740	0.3656	-.7397
.228	-.3165	0.3082	-.6247
.161	-.1630	0.1548	-.3178
.060	0.2939	-.3019	0.5959
.012	1.3983	-1.406	2.8045

Figure 339, Chordwise Pressure Distribution, Imaginary, Configuration 2



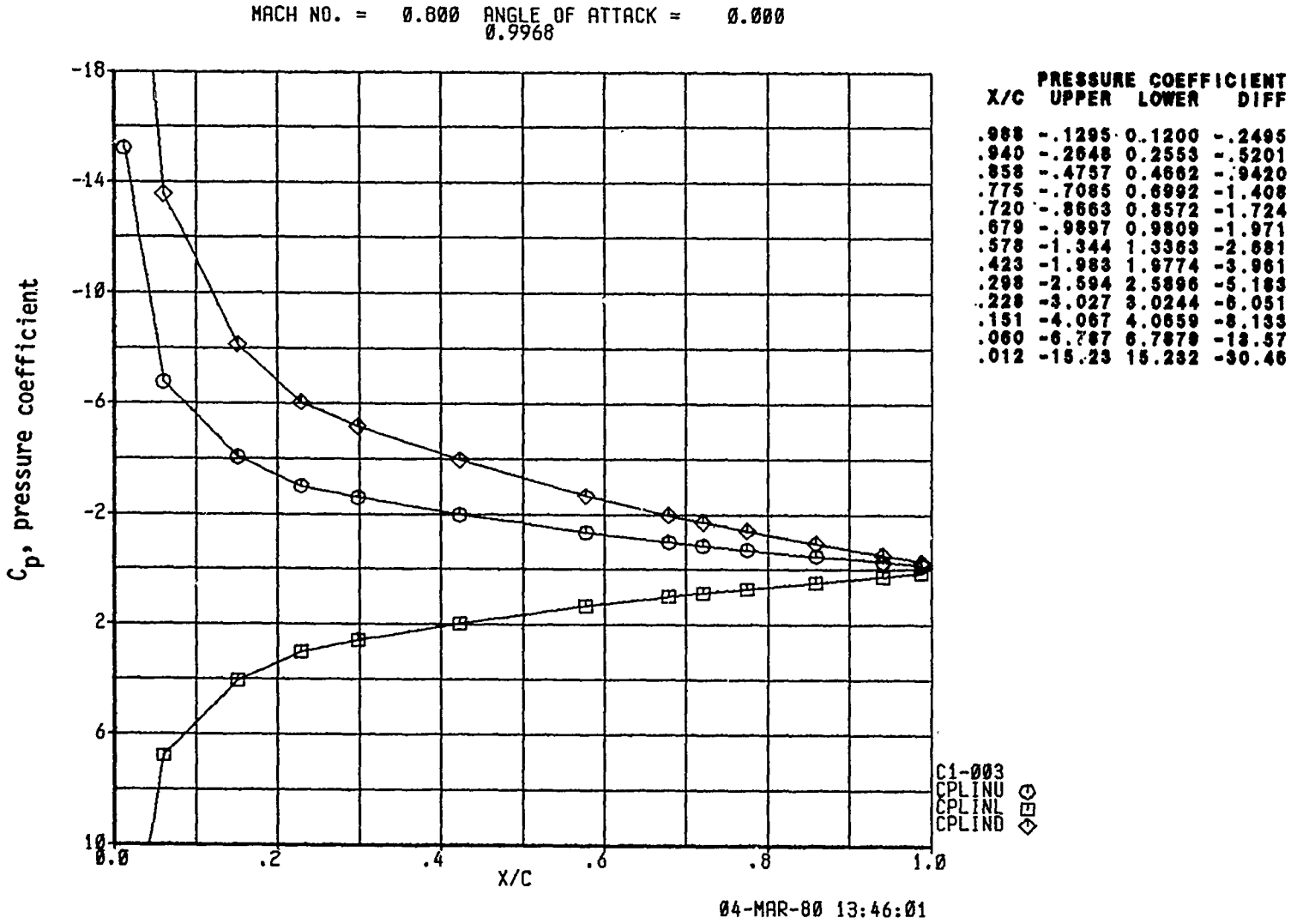
X/C	PRESSURE COEFFICIENT UPPER	LOWER	DIFF
.988	-.1246	0.1151	-.2396
.940	-.2648	0.2552	-.5200
.858	-.5075	0.4980	-1.005
.774	-.7859	0.7769	-1.563
.720	-.9693	0.9609	-1.930
.679	-1.110	1.1016	-2.211
.578	-1.473	1.4672	-2.941
.423	-2.042	2.0399	-4.082
.298	-2.476	2.4777	-4.954
.228	-2.732	2.7358	-5.468
.151	-3.330	3.3366	-6.667
.060	-4.827	4.8370	-9.664
.012	-9.958	9.9701	-19.93

Figure 340, Chordwise Pressure Distribution, Imaginary, Configuration 2



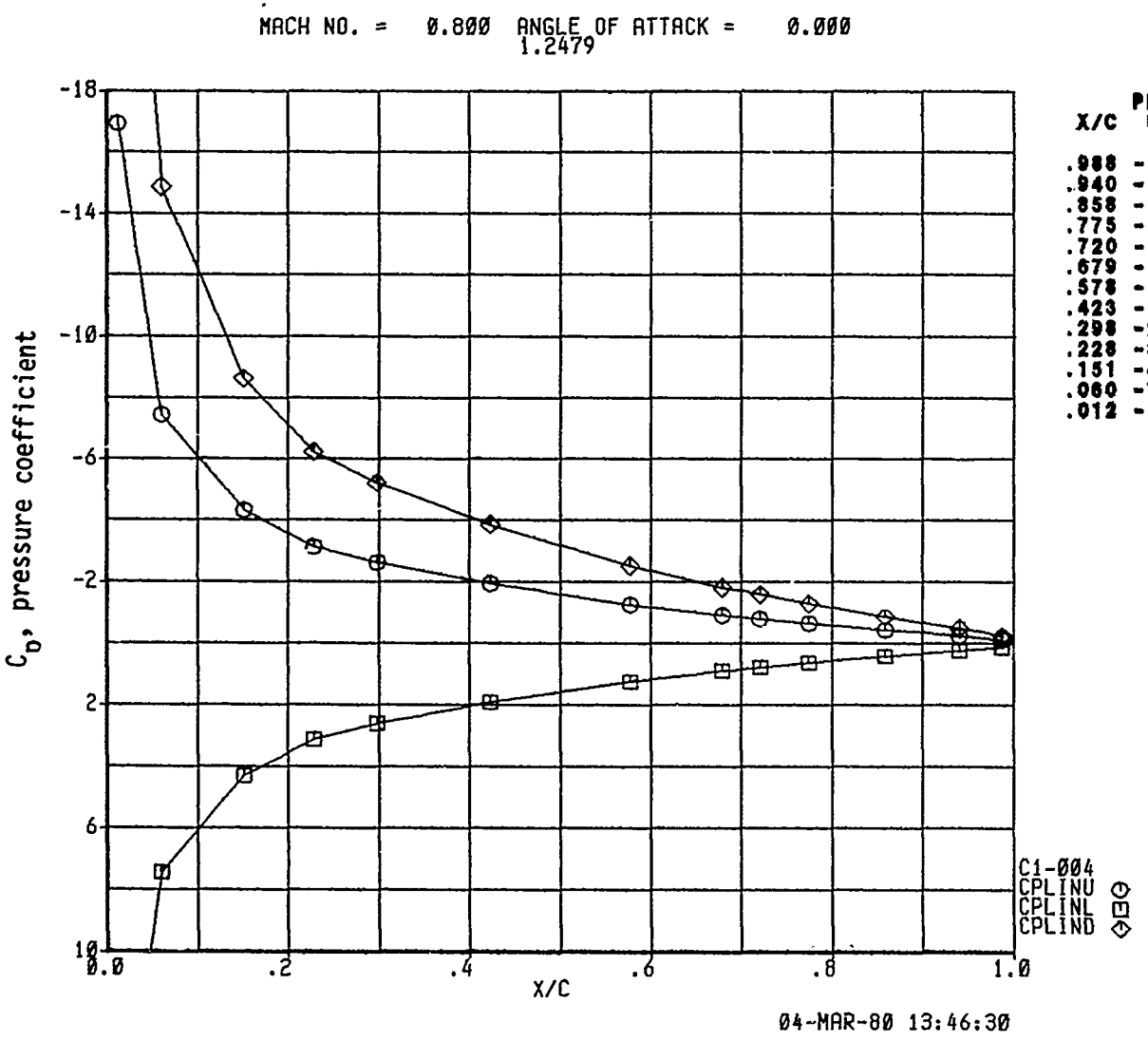
X/C	PRESSURE COEFFICIENT UPPER	LOWER	DIFF
.988	-.1290	0.1194	-.2484
.940	-.2663	0.2587	-.5269
.858	-.4959	0.4864	-.9824
.775	-.7505	0.7414	-1.492
.720	-.9201	0.9113	-1.831
.679	-1.052	1.0433	-2.095
.578	-1.408	1.4011	-2.809
.423	-2.007	2.0027	-4.010
.298	-2.528	2.5263	-5.054
.228	-2.876	2.8764	-5.752
.151	-3.713	3.7157	-7.429
.060	-5.904	5.9099	-11.81
.012	-12.95	12.955	-25.90

Figure 341, Chordwise Pressure Distribution, Imaginary, Configuration 2



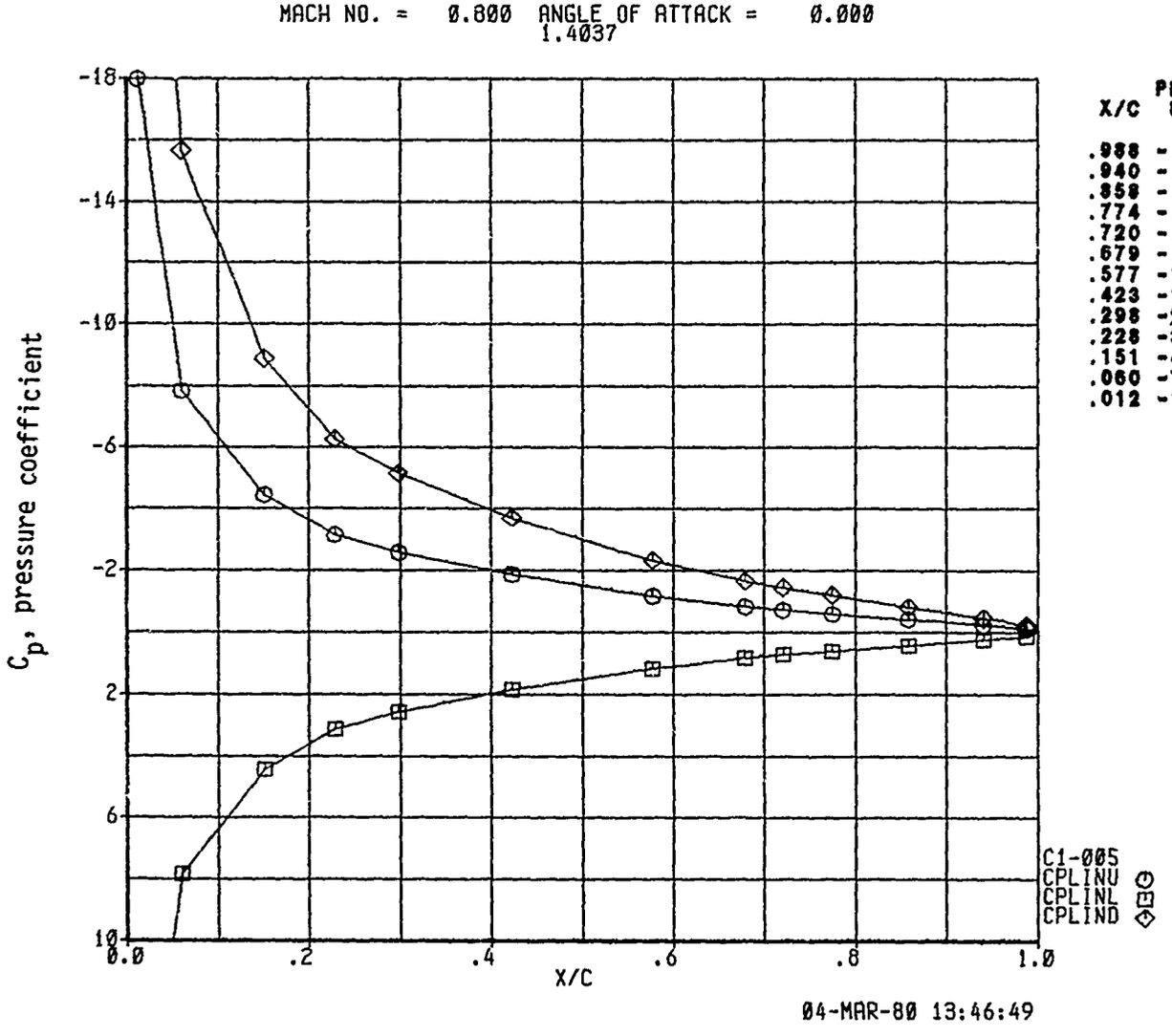
X/C	PRESSURE COEFFICIENT UPPER	LOWER	DIFF
.988	-.1295	0.1200	-.2495
.940	-.2648	0.2553	-.5201
.858	-.4757	0.4662	-.9420
.775	-.7085	0.6992	-1.408
.720	-.8663	0.8572	-1.724
.679	-.9897	0.9809	-1.971
.578	-1.344	1.3363	-2.681
.423	-1.983	1.9774	-3.961
.298	-2.594	2.5896	-5.183
.228	-3.027	3.0244	-6.051
.151	-4.067	4.0659	-8.133
.060	-6.787	6.7879	-13.57
.012	-15.23	15.232	-30.46

Figure 342, Chordwise Pressure Distribution, Real, Configuration 2



X/C	PRESSURE COEFFICIENT UPPER	LOWER	DIFF
.988	-.1251	0.1157	-.2407
.940	-.2517	0.2422	-.4940
.858	-.4431	0.4336	-.8766
.775	-.6515	0.6421	-1.294
.720	-.7939	0.7847	-1.579
.679	-.9075	0.8985	-1.806
.578	-1.255	1.2468	-2.502
.423	-1.926	1.9189	-3.845
.298	-2.611	2.6057	-5.217
.228	-3.121	3.1162	-6.237
.151	-4.316	4.3128	-8.629
.060	-7.439	7.4376	-14.88
.012	-16.94	16.937	-33.87

Figure 343, Chordwise Pressure Distribution, Real, Configuration 2



X/C	PRESSURE COEFFICIENT UPPER	LOWER	DIFF
.988	-.1196	0.1102	-.2298
.940	-.2372	0.2277	-.4649
.858	-.4118	0.4023	-.8141
.774	-.5996	0.5901	-1.190
.720	-.7267	0.7173	-1.444
.679	-.8300	0.8208	-1.651
.577	-1.165	1.1562	-2.321
.423	-1.842	1.8417	-3.691
.298	-2.576	2.5691	-5.145
.228	-3.134	3.1285	-6.263
.151	-4.441	4.4365	-8.878
.060	-7.831	7.8268	-15.66
.012	-17.98	17.974	-35.95

Figure 344, Chordwise Pressure Distribution, Real, Configuration 2

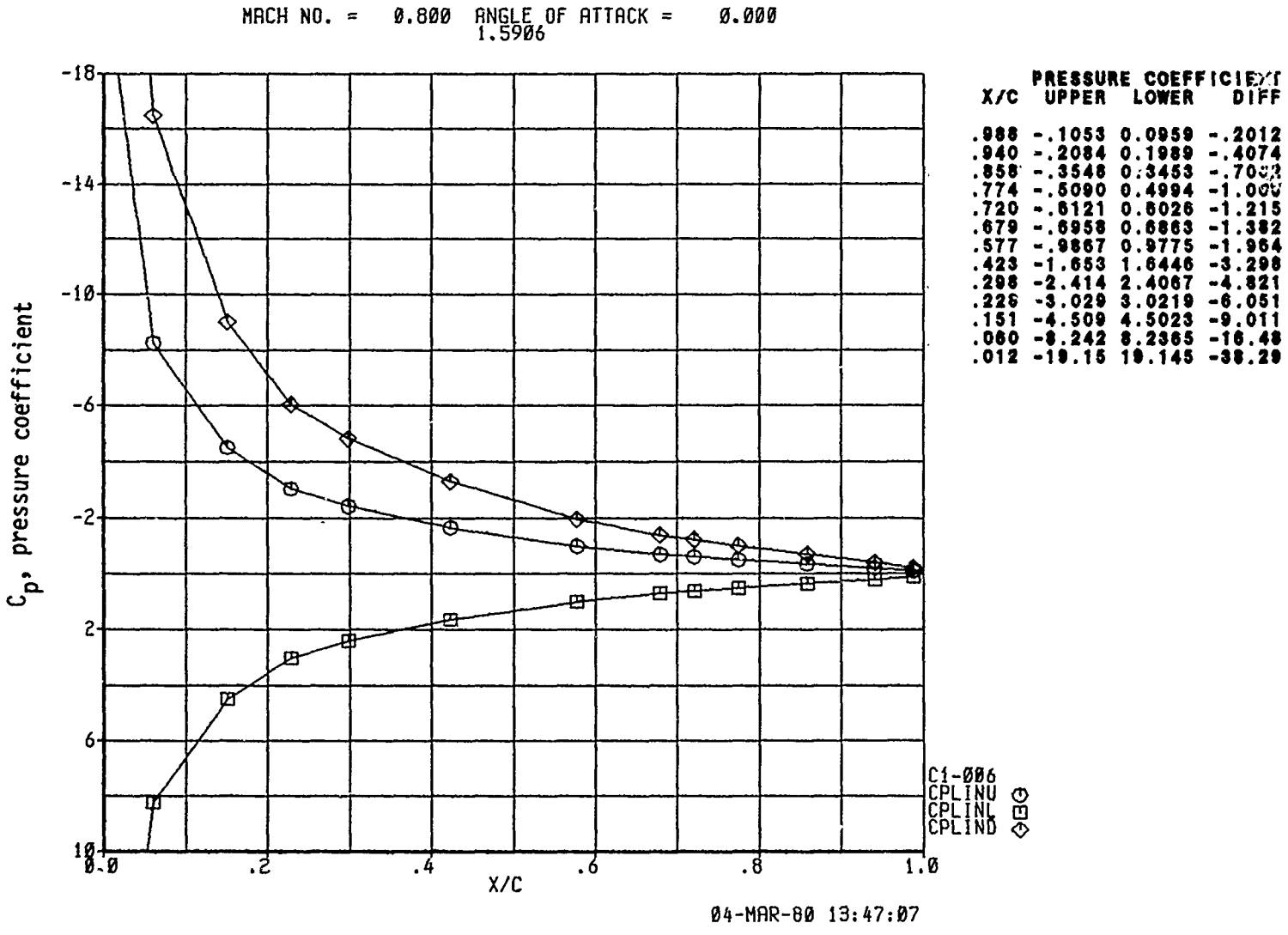


Figure 345, Chordwise Pressure Distribution, Real, Configuration 2

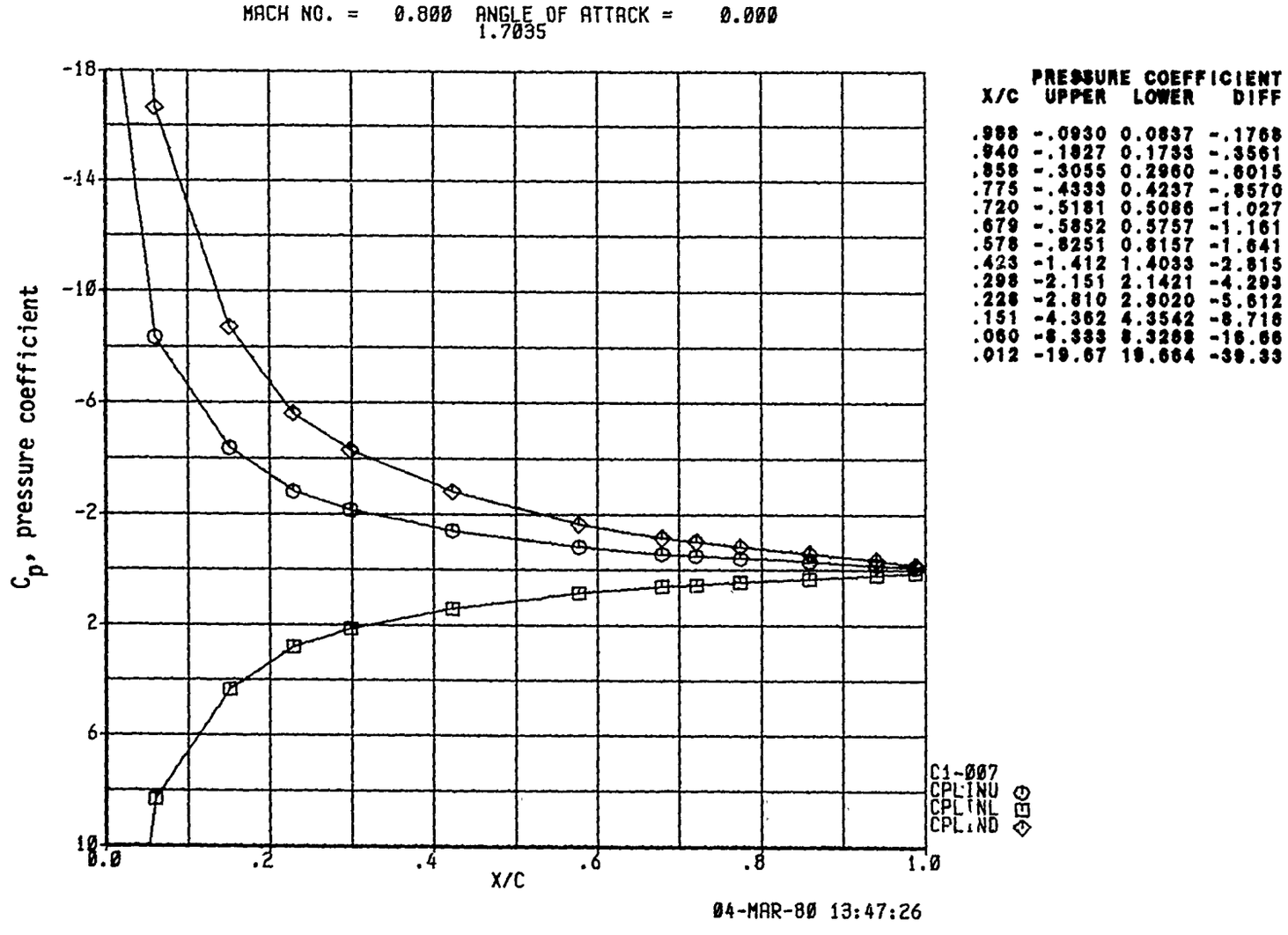
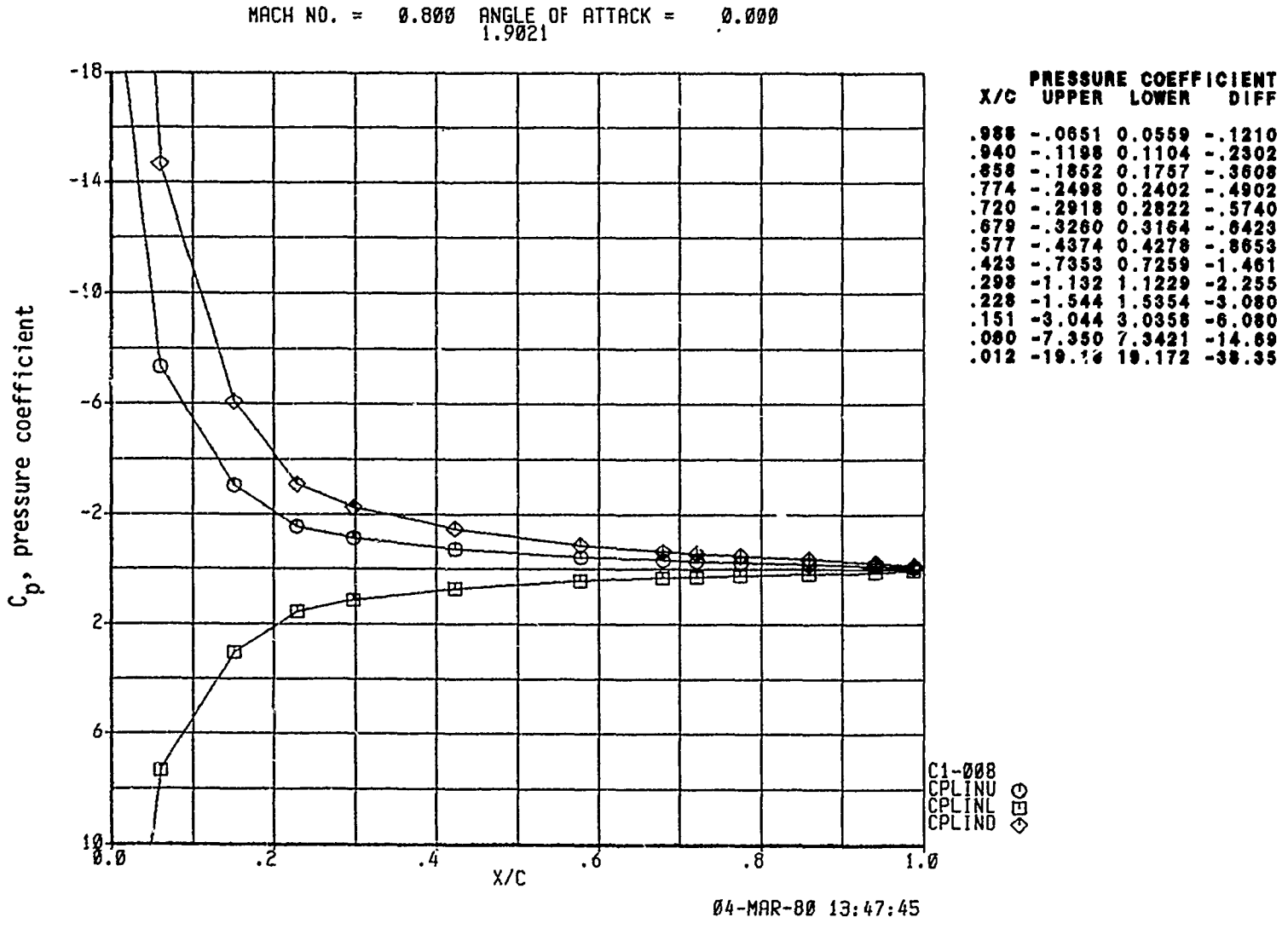
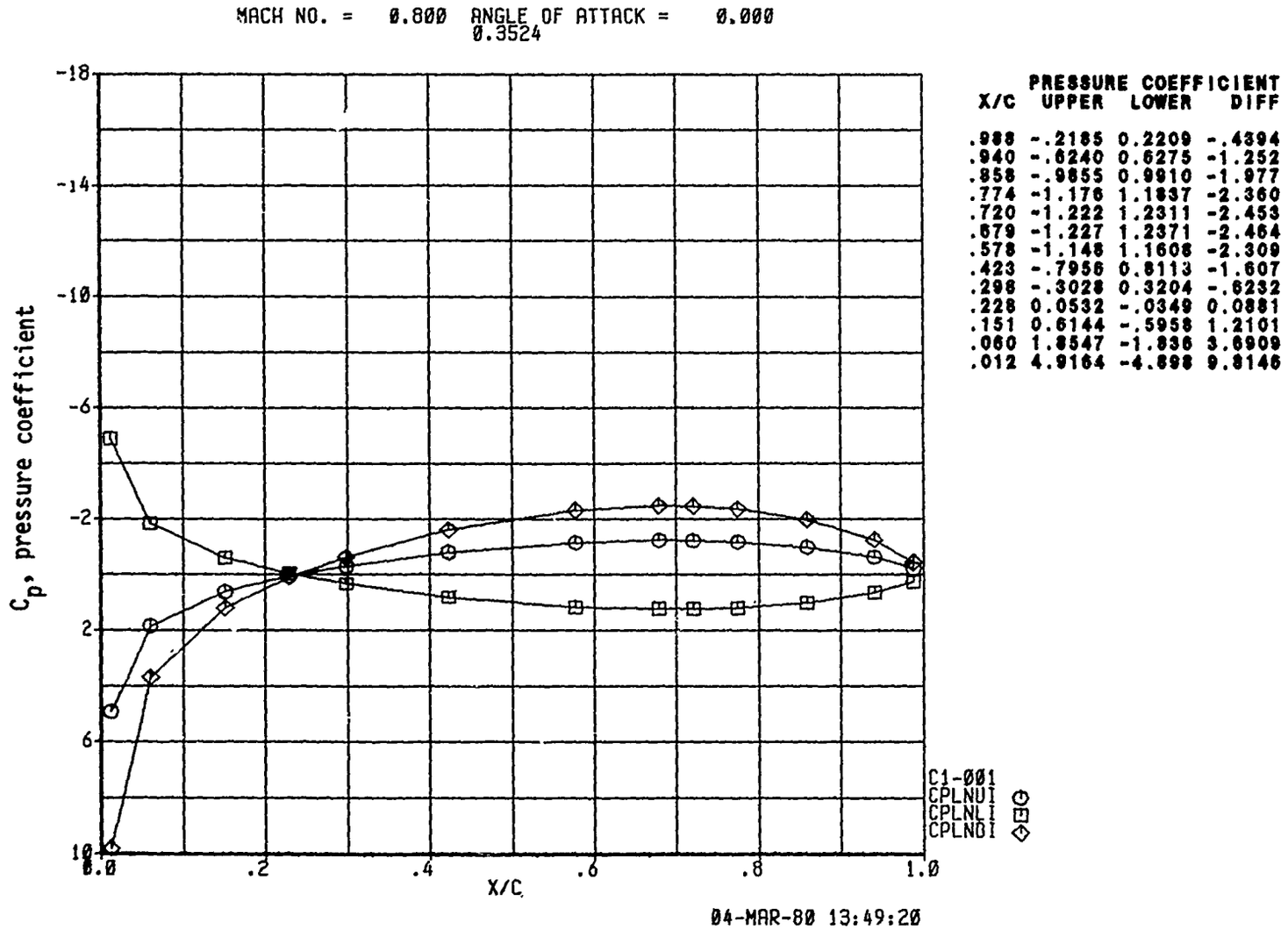


Figure 346, Chordwise Pressure Distribution, Real, Configuration 2



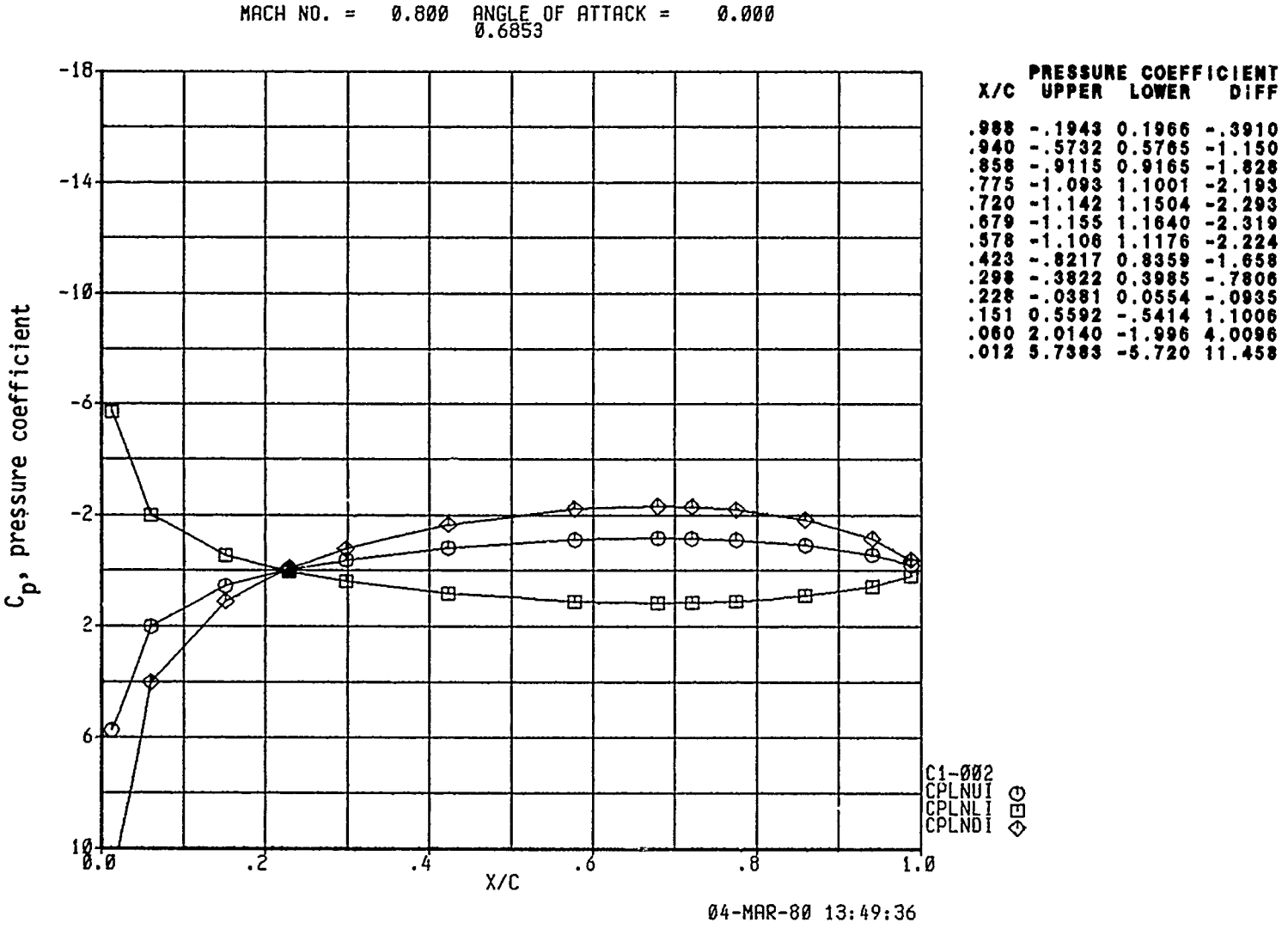
X/C	PRESSURE COEFFICIENT UPPER	LOWER	DIFF
.988	-.0651	0.0559	-.1210
.940	-.1198	0.1104	-.2302
.858	-.1852	0.1757	-.3608
.774	-.2498	0.2402	-.4902
.720	-.2918	0.2822	-.5740
.679	-.3260	0.3164	-.6423
.577	-.4374	0.4278	-.8653
.423	-.7353	0.7259	-1.461
.298	-1.132	1.1229	-2.255
.228	-1.544	1.5354	-3.080
.151	-3.044	3.0358	-6.080
.080	-7.350	7.3421	-14.69
.012	-19.16	19.172	-38.35

Figure 347, Chordwise Pressure Distribution, Real, Configuration 2



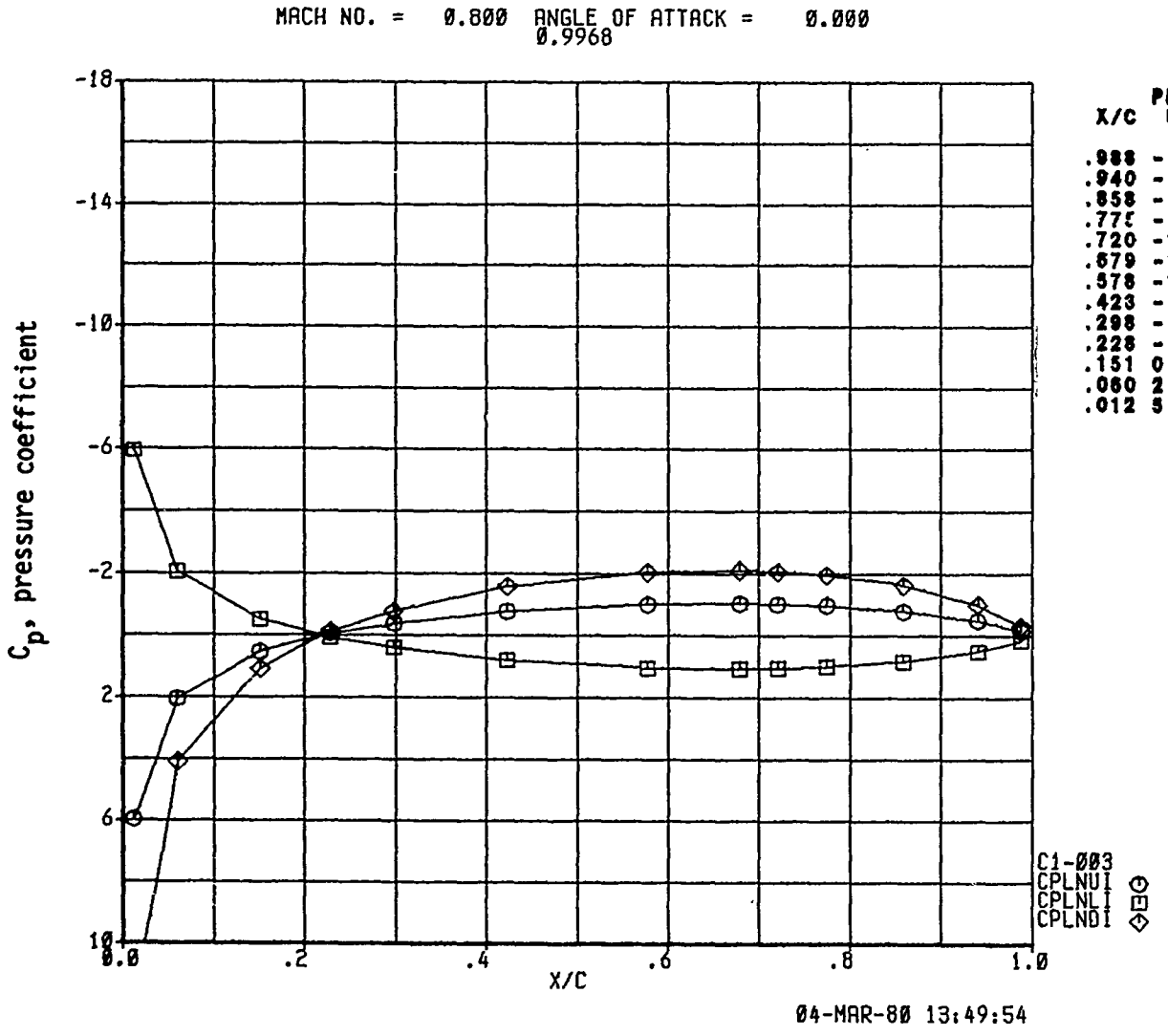
X/C	PRESSURE COEFFICIENT UPPER	LOWER	DIFF
.988	-.2185	0.2209	-.4394
.940	-.6240	0.6275	-1.252
.858	-.9855	0.9910	-1.977
.774	-1.176	1.1837	-2.360
.720	-1.222	1.2311	-2.453
.679	-1.227	1.2371	-2.464
.578	-1.148	1.1608	-2.309
.423	-.7956	0.8113	-1.607
.298	-.3028	0.3204	-.6232
.228	0.0532	-.0349	0.0881
.151	0.6144	-.5958	1.2101
.060	1.8547	-1.836	3.6909
.012	4.9164	-4.898	9.8146

Figure 348, Chordwise Pressure Distribution, Imaginary, Configuration 2



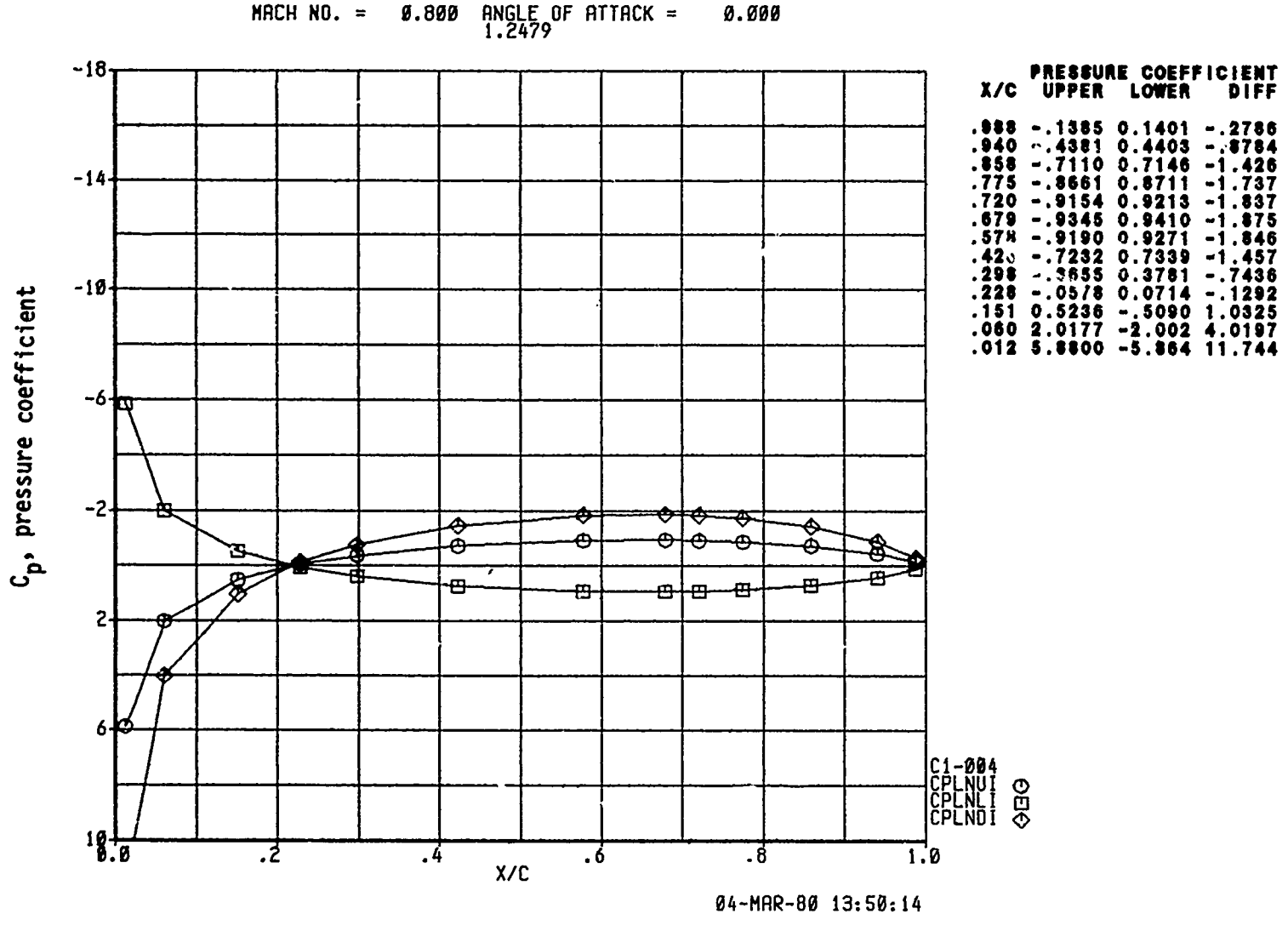
X/C	PRESSURE COEFFICIENT UPPER	LOWER	DIFF
.988	-.1943	0.1966	-.3910
.940	-.5732	0.5765	-1.150
.858	-.9115	0.9165	-1.828
.775	-1.093	1.1001	-2.193
.720	-1.142	1.1504	-2.293
.679	-1.155	1.1640	-2.319
.578	-1.106	1.1176	-2.224
.423	-.8217	0.8359	-1.658
.298	-.3822	0.3985	-.7806
.228	-.0381	0.0554	-.0935
.151	0.5592	-.5414	1.1006
.060	2.0140	-1.996	4.0096
.012	5.7383	-5.720	11.458

Figure 349, Chordwise Pressure Distribution, Imaginary, Configuration 2



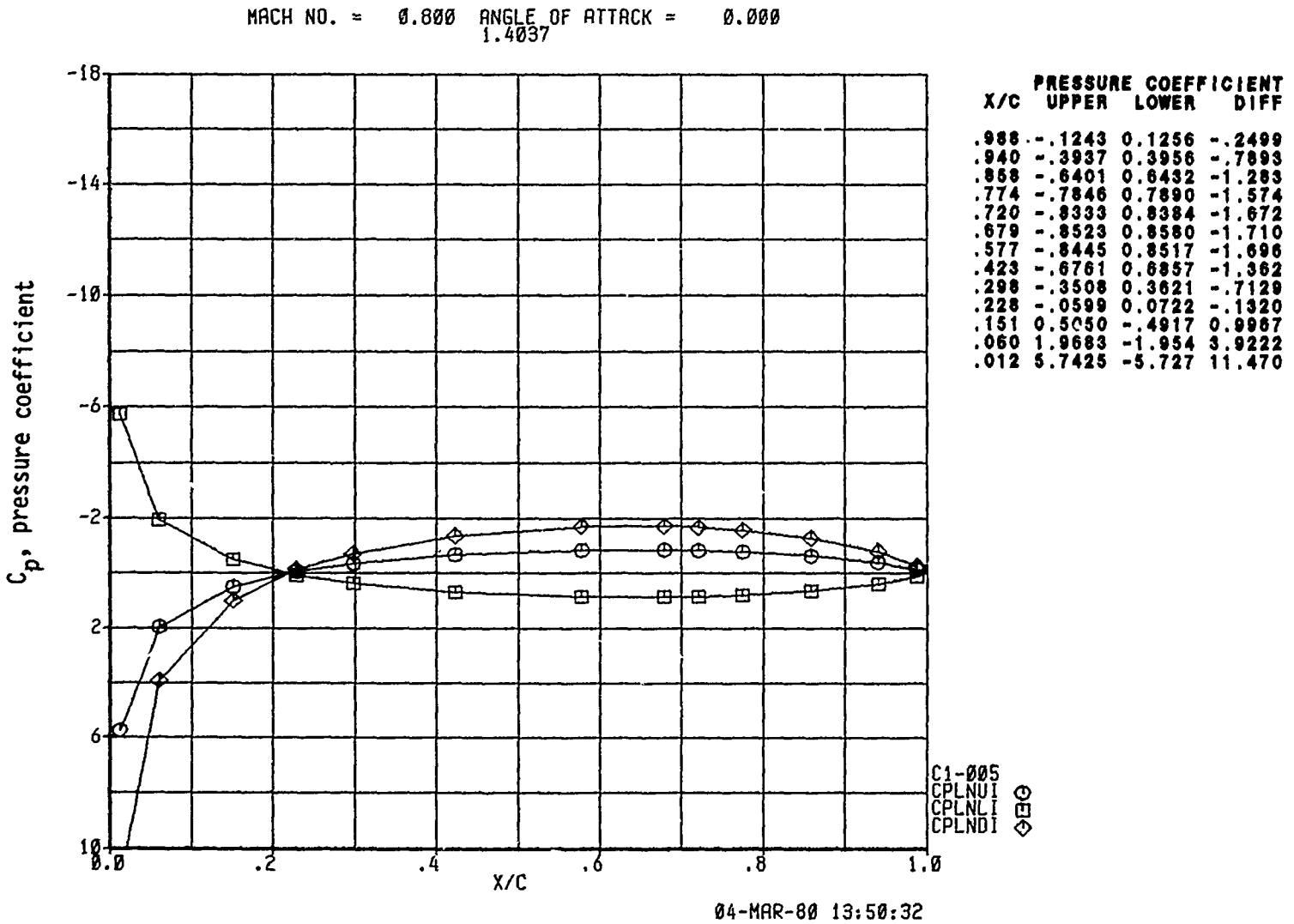
X/C	PRESSURE COEFFICIENT UPPER	LOWER	DIFF
.988	-.1632	0.1651	-.3283
.940	-.5039	0.5067	-1.010
.858	-.8115	0.8157	-1.627
.775	-.9806	0.9865	-1.967
.720	-1.030	1.0371	-2.067
.679	-1.048	1.0556	-2.104
.578	-1.019	1.0288	-2.048
.423	-.7838	0.7963	-1.580
.298	-.3868	0.4013	-.7881
.228	-.0604	0.0759	-.1363
.151	0.5407	-.5243	1.0651
.060	2.0569	-2.040	4.0965
.012	5.9605	-5.943	11.903

Figure 350, Chordwise Pressure Distribution, Imaginary, Configuration 2



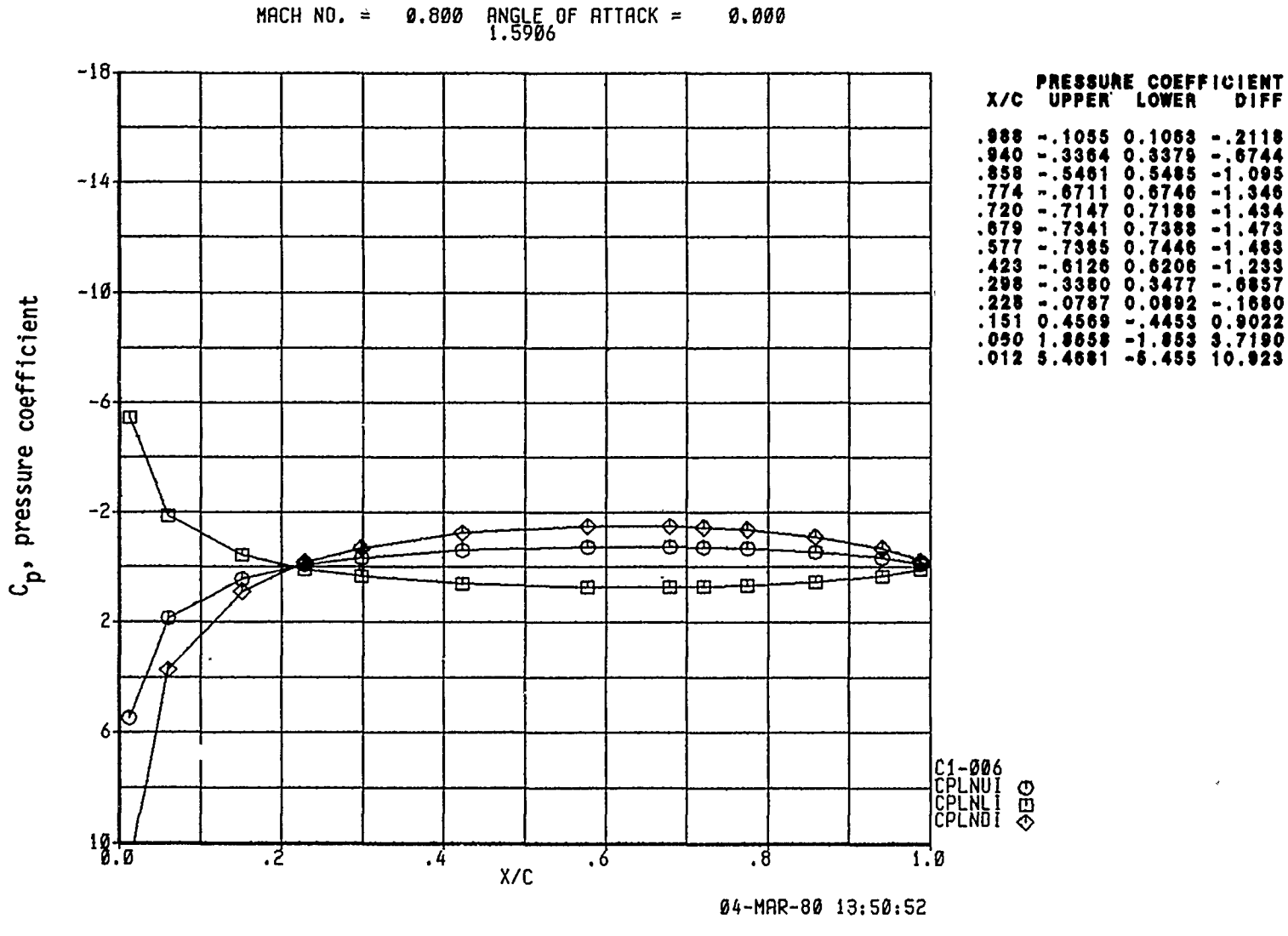
X/C	PRESSURE COEFFICIENT UPPER	LOWER	DIFF
.988	-.1385	0.1401	-.2786
.940	-.4381	0.4403	-.8784
.858	-.7110	0.7146	-1.426
.775	-.8661	0.8711	-1.737
.720	-.9154	0.9213	-1.837
.679	-.9345	0.9410	-1.875
.578	-.9190	0.9271	-1.846
.42[illegible]	-.7232	0.7339	-1.457
.298	-.3655	0.3781	-.7436
.228	-.0578	0.0714	-.1292
.151	0.5236	-.5090	1.0325
.060	2.0177	-2.002	4.0197
.012	5.8800	-5.864	11.744

Figure 351, Chordwise Pressure Distribution, Imaginary, Configuration 2



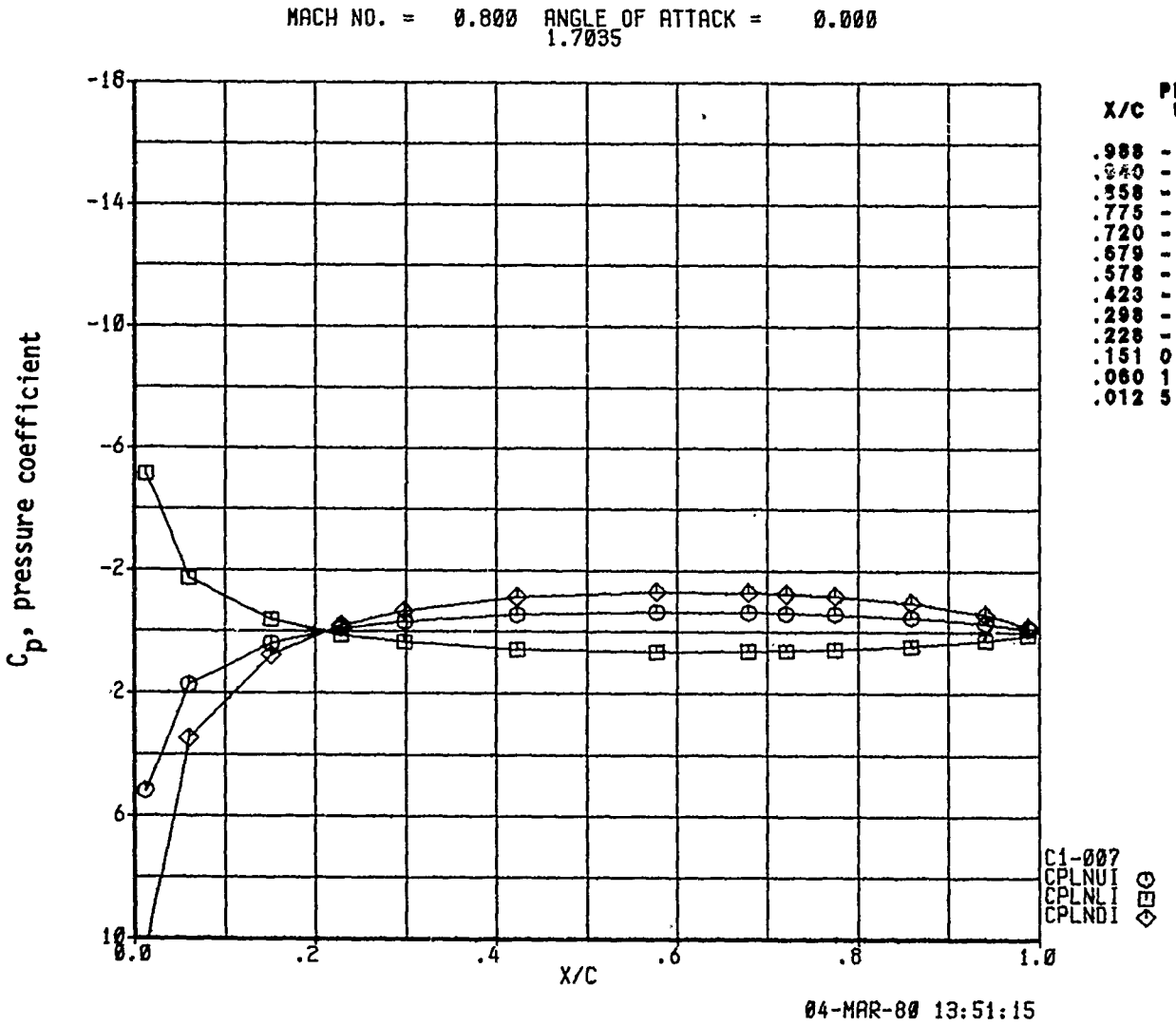
X/C	PRESSURE COEFFICIENT UPPER	LOWER	DIFF
.988	-.1243	0.1256	-.2499
.940	-.3937	0.3956	-.7893
.858	-.6401	0.6432	-1.283
.774	-.7846	0.7890	-1.574
.720	-.8333	0.8384	-1.672
.679	-.8523	0.8580	-1.710
.577	-.8445	0.8517	-1.696
.423	-.6761	0.6857	-1.362
.298	-.3508	0.3621	-.7129
.228	-.0599	0.0722	-.1320
.151	0.5050	-.4917	0.9967
.060	1.9683	-1.954	3.9222
.012	5.7425	-5.727	11.470

Figure 352, Chordwise Pressure Distribution, Imaginary, Configuration 2



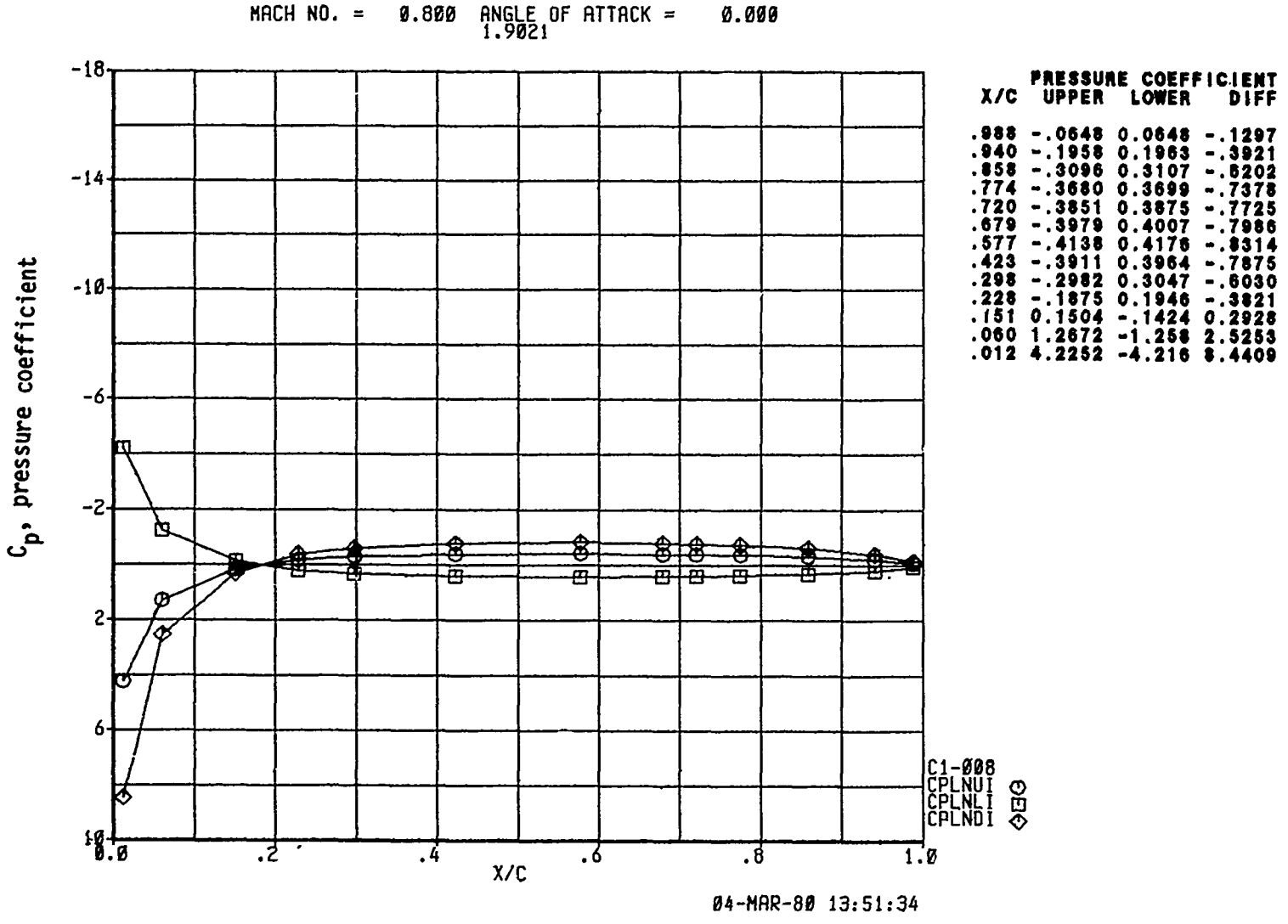
X/C	PRESSURE COEFFICIENT UPPER	LOWER	DIFF
.988	-.1055	0.1063	-.2118
.940	-.3364	0.3379	-.6744
.858	-.5461	0.5485	-1.095
.774	-.6711	0.6746	-1.346
.720	-.7147	0.7188	-1.434
.679	-.7341	0.7388	-1.473
.577	-.7385	0.7446	-1.483
.423	-.6126	0.6206	-1.233
.298	-.3380	0.3477	-.6857
.228	-.0787	0.0892	-.1680
.151	0.4569	-.4453	0.9022
.050	1.8658	-1.853	3.7190
.012	5.4681	-5.455	10.923

Figure 353, Chordwise Pressure Distribution, Imaginary, Configuration 2



X/C	PRESSURE COEFFICIENT UPPER	LOWER	DIFF
.988	-.0873	0.0878	-.1751
.940	-.2931	0.2943	-.5874
.858	-.4795	0.4814	-.9606
.775	-.5832	0.5861	-1.169
.720	-.6175	0.6210	-1.238
.679	-.6373	0.6419	-1.280
.578	-.6506	0.6559	-1.307
.423	-.5622	0.5694	-1.132
.298	-.3338	0.3423	-.6761
.228	-.0995	0.1089	-.2084
.151	0.3923	-.3820	0.7741
.060	1.7403	-1.729	3.4694
.012	5.1783	-5.167	10.345

Figure 354, Chordwise Pressure Distribution, Imaginary, Configuration 2



X/C	PRESSURE COEFFICIENT UPPER	LOWER	DIFF
.988	-.0648	0.0648	-.1297
.940	-.1958	0.1963	-.3921
.858	-.3096	0.3107	-.6202
.774	-.3680	0.3699	-.7378
.720	-.3851	0.3875	-.7725
.679	-.3979	0.4007	-.7986
.577	-.4138	0.4176	-.8314
.423	-.3911	0.3964	-.7875
.298	-.2982	0.3047	-.6030
.228	-.1875	0.1946	-.3821
.151	0.1504	-.1424	0.2928
.060	1.2672	-1.258	2.5253
.012	4.2252	-4.216	8.4409

Figure 355, Chordwise Pressure Distribution, Imaginary, Configuration 2

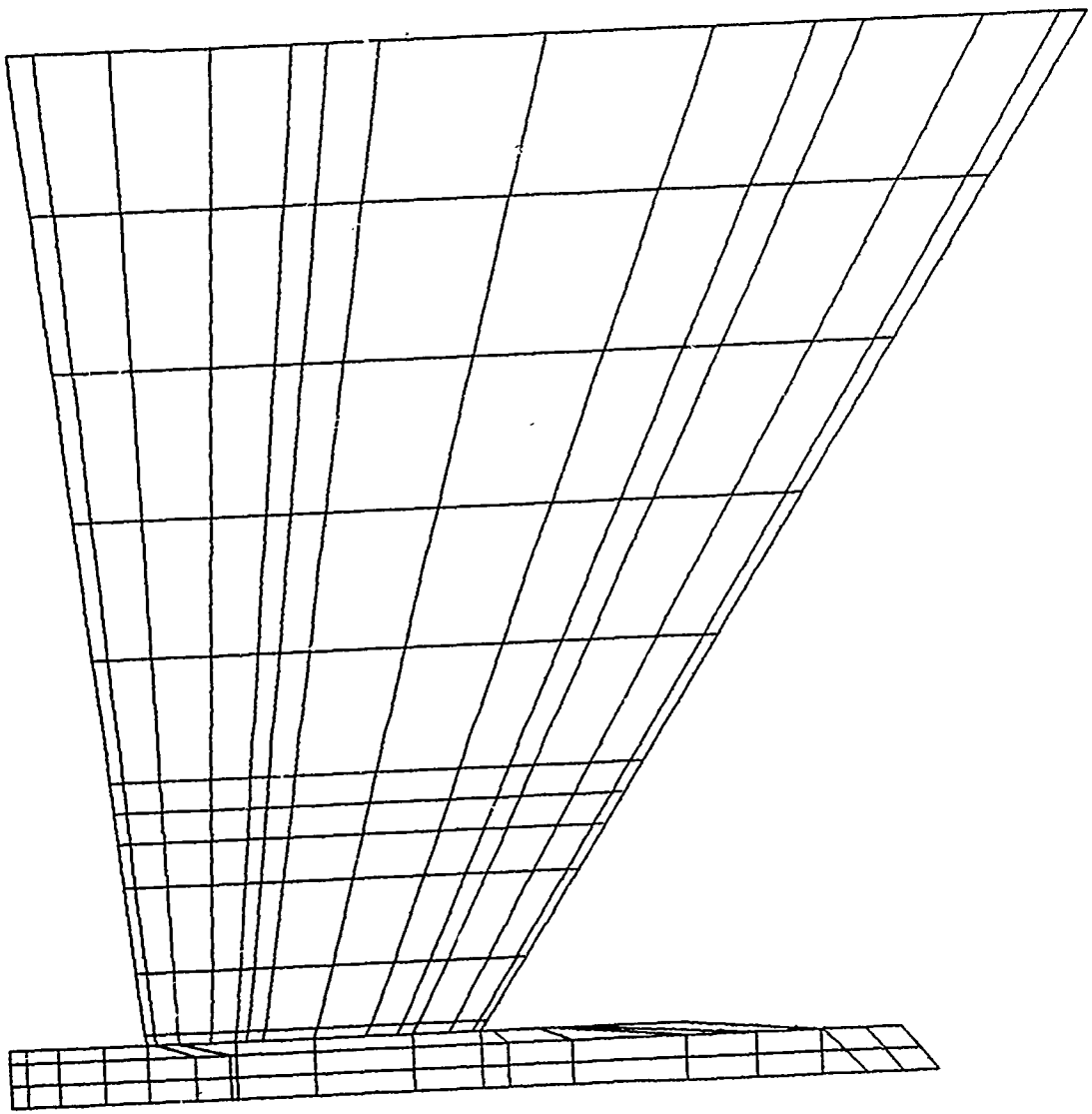
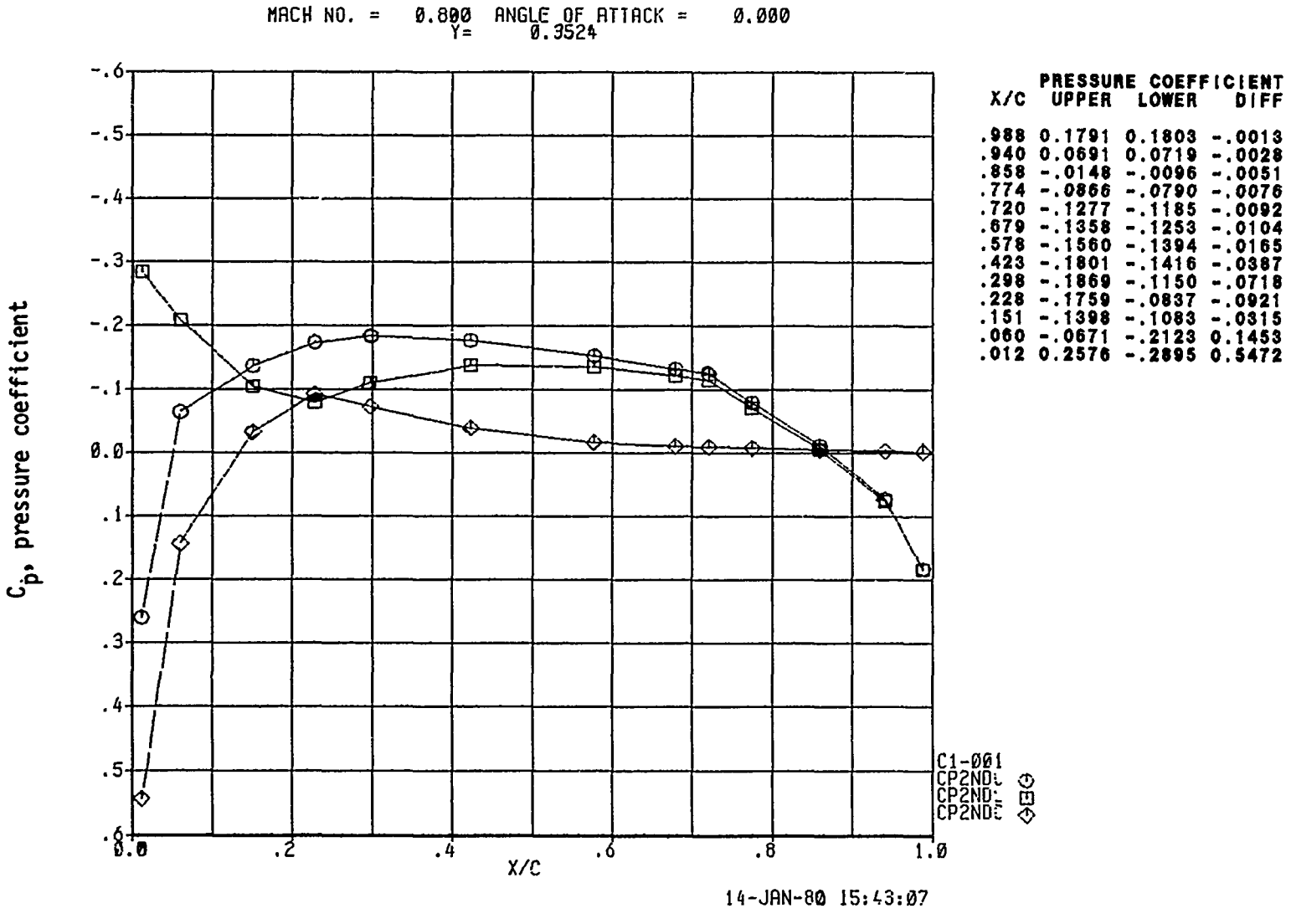
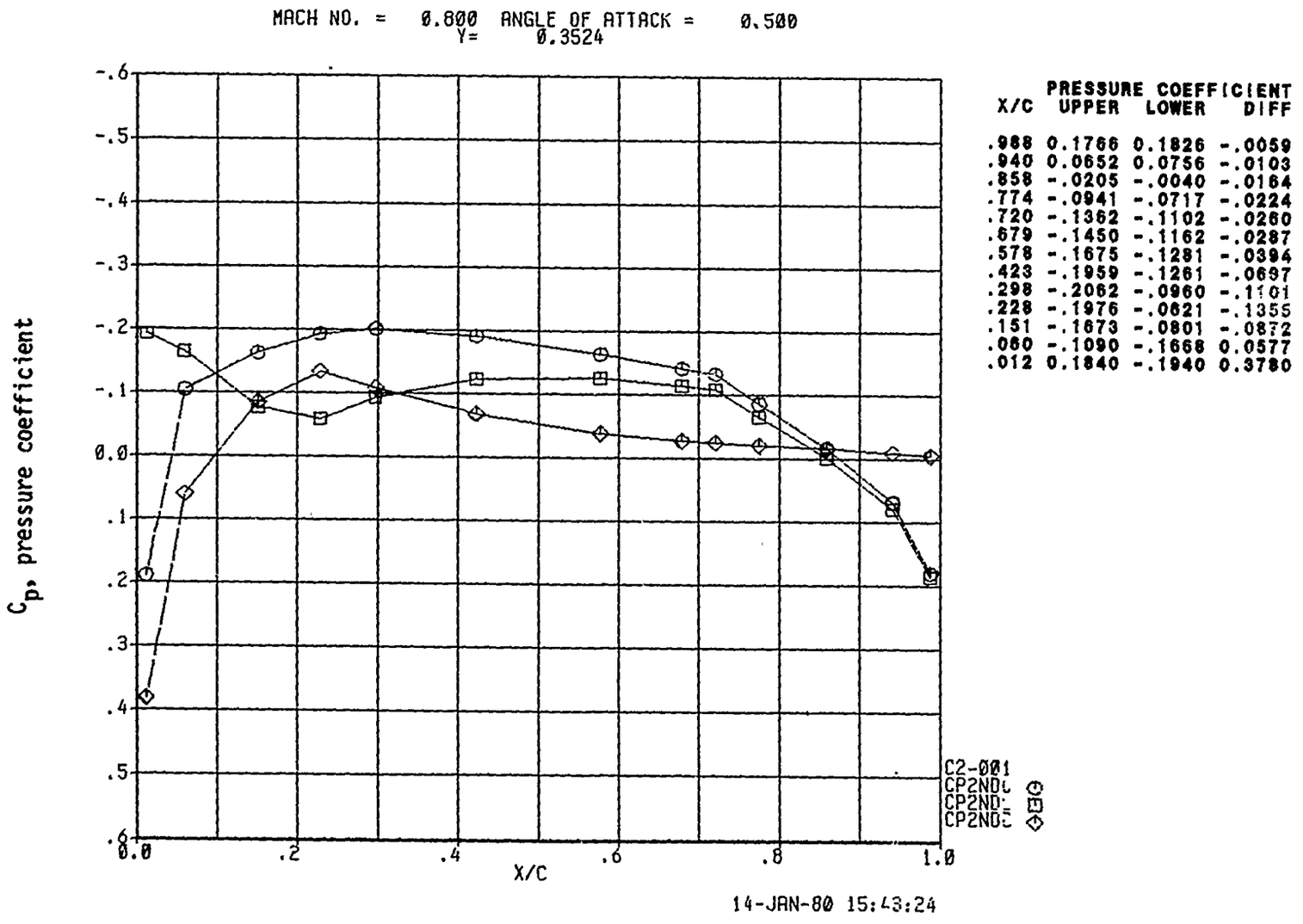


Figure 356, Configuration 3



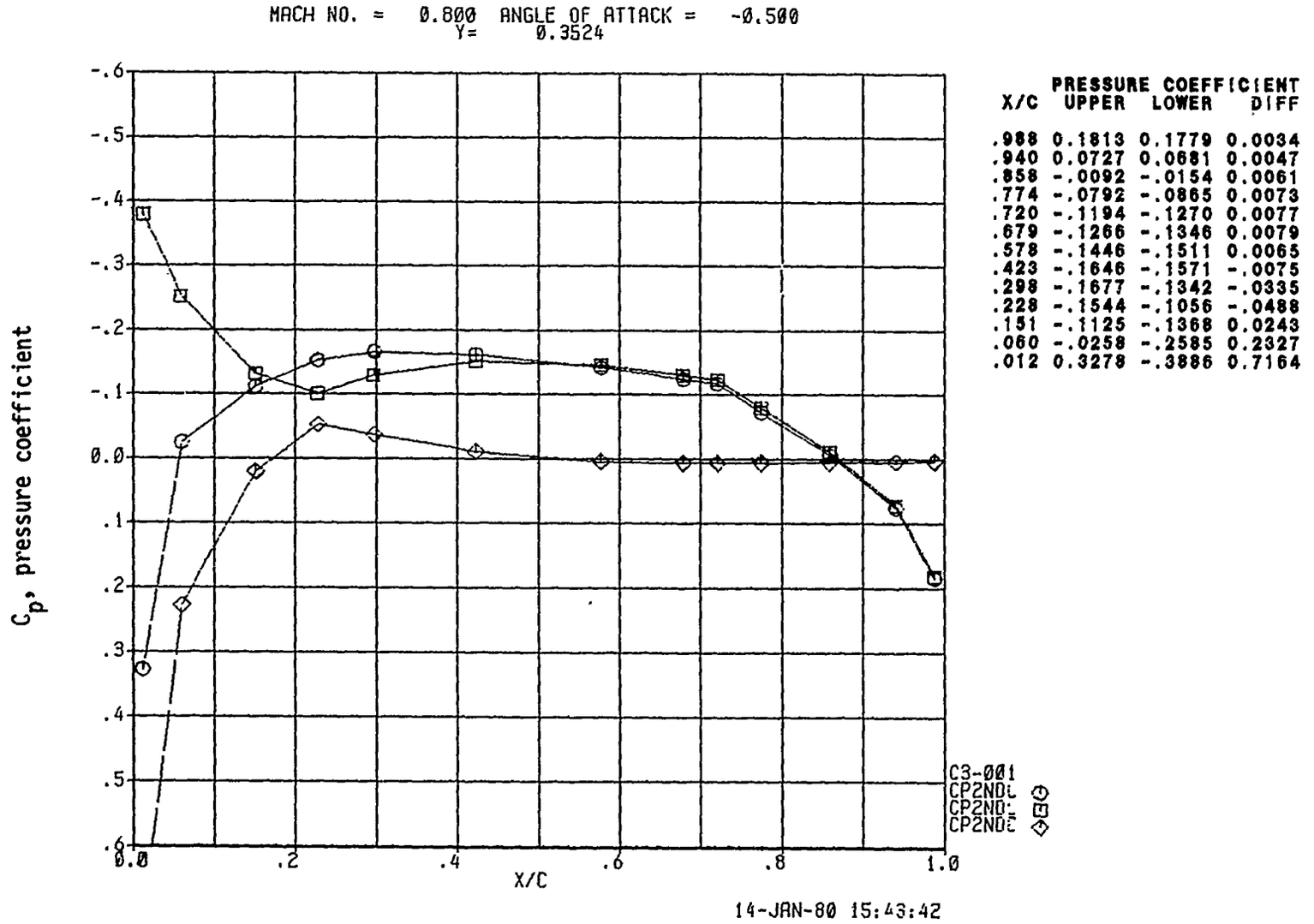
X/C	PRESSURE COEFFICIENT UPPER	LOWER	DIFF
.988	0.1791	0.1803	-.0013
.940	0.0691	0.0719	-.0028
.858	-.0148	-.0096	-.0051
.774	-.0866	-.0790	-.0076
.720	-.1277	-.1185	-.0092
.679	-.1358	-.1253	-.0104
.578	-.1560	-.1394	-.0165
.423	-.1801	-.1416	-.0387
.298	-.1869	-.1150	-.0718
.228	-.1759	-.0837	-.0921
.151	-.1398	-.1083	-.0315
.060	-.0671	-.2123	0.1453
.012	0.2576	-.2895	0.5472

Figure 357, Chordwise Pressure Distribution, Steady, Configuration 3



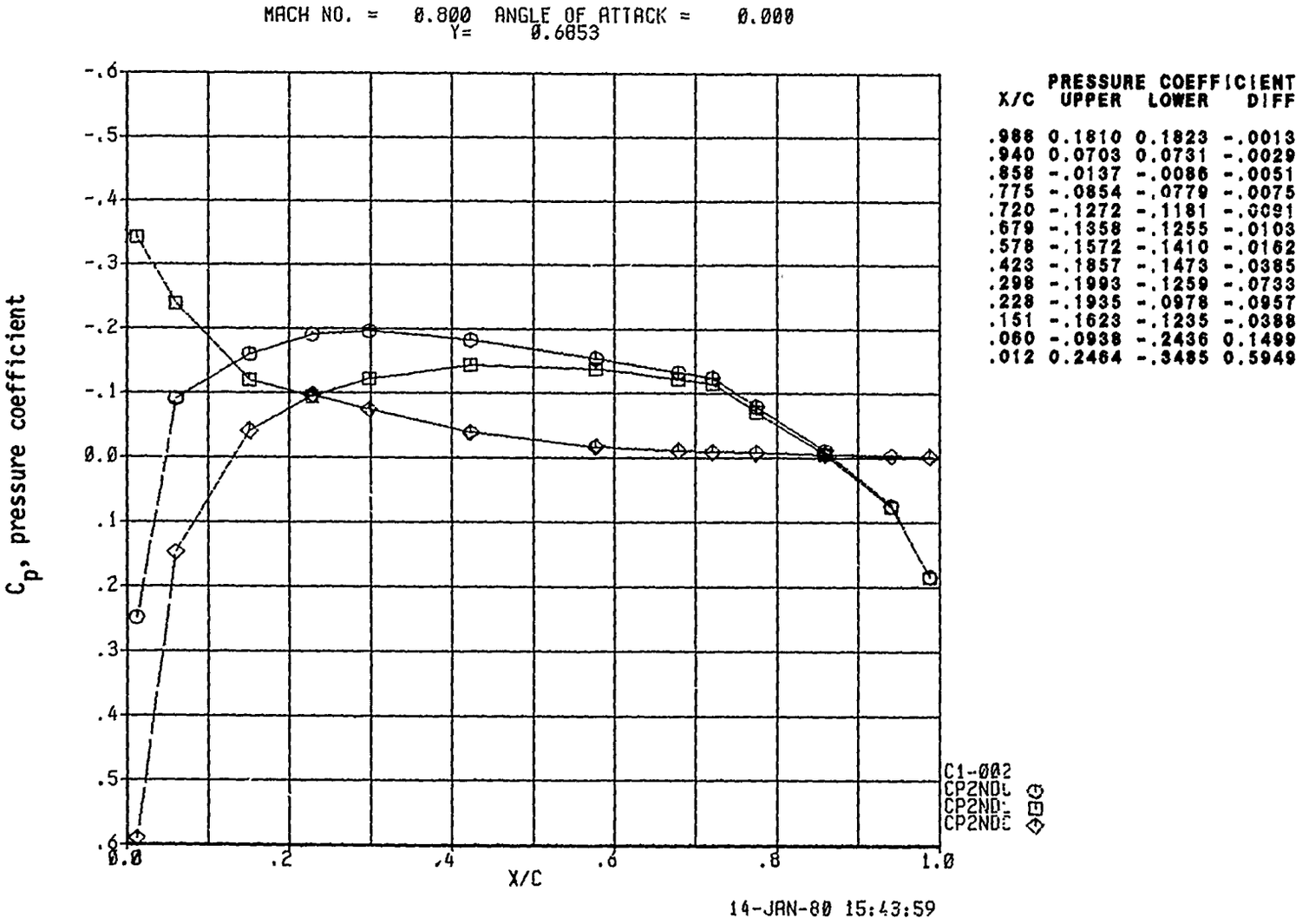
X/C	PRESSURE COEFFICIENT UPPER	LOWER	DIFF
.988	0.1766	0.1826	-.0059
.940	0.0652	0.0756	-.0103
.858	-.0205	-.0040	-.0164
.774	-.0941	-.0717	-.0224
.720	-.1362	-.1102	-.0260
.679	-.1450	-.1162	-.0287
.578	-.1675	-.1281	-.0394
.423	-.1959	-.1261	-.0697
.298	-.2062	-.0960	-.1101
.228	-.1976	-.0621	-.1355
.151	-.1673	-.0801	-.0872
.060	-.1090	-.1668	0.0577
.012	0.1840	-.1940	0.3780

Figure 358, Chordwise Pressure Distribution, Steady, Configuration 3



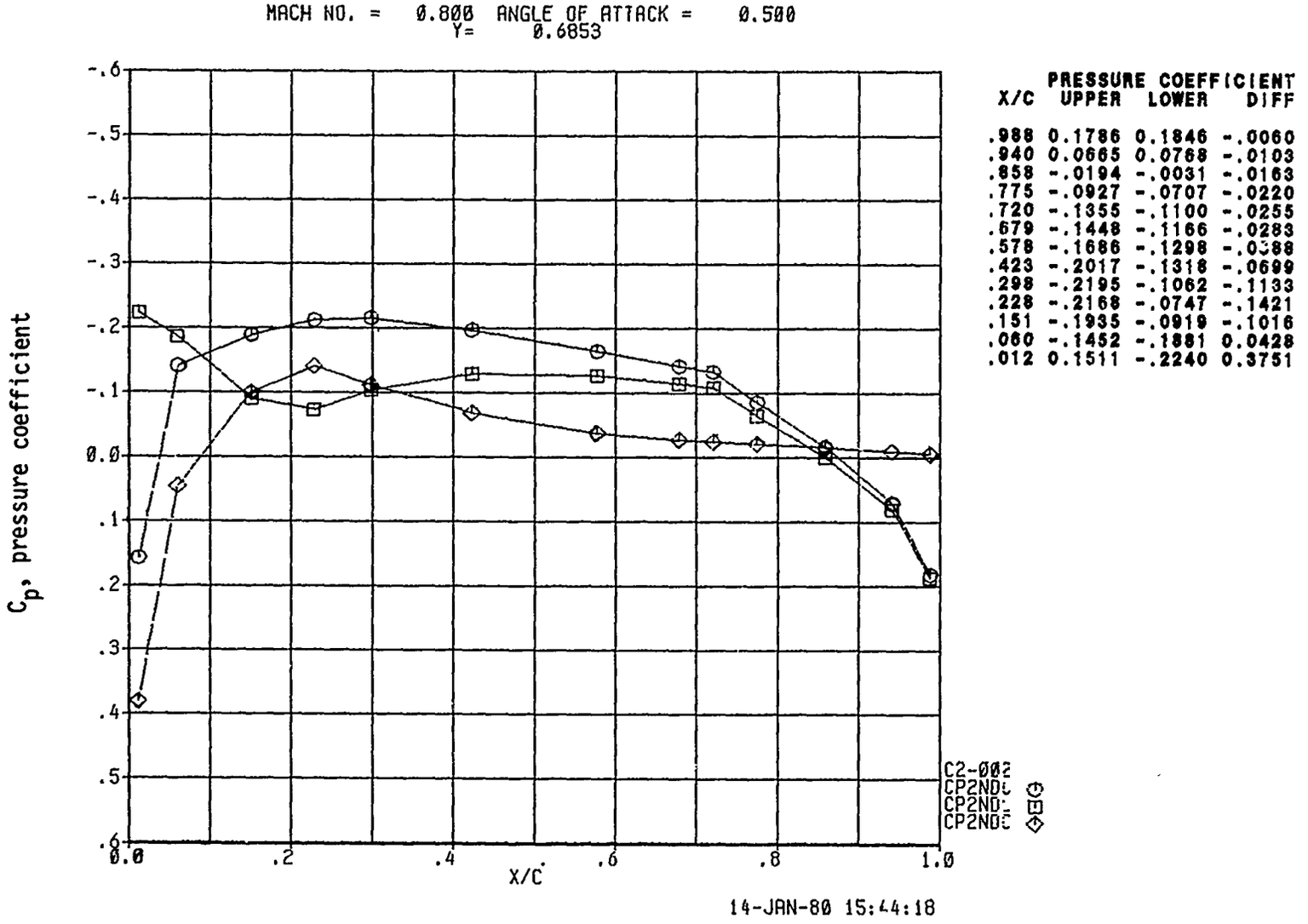
X/C	PRESSURE COEFFICIENT UPPER	LOWER	DIFF
.988	0.1813	0.1779	0.0034
.940	0.0727	0.0681	0.0047
.858	-.0092	-.0154	0.0061
.774	-.0792	-.0865	0.0073
.720	-.1194	-.1270	0.0077
.679	-.1266	-.1346	0.0079
.578	-.1446	-.1511	0.0065
.423	-.1646	-.1571	-.0075
.298	-.1677	-.1342	-.0335
.228	-.1544	-.1056	-.0488
.151	-.1125	-.1368	0.0243
.060	-.0258	-.2585	0.2327
.012	0.3278	-.3886	0.7164

Figure 359, Chordwise Pressure Distribution, Steady, Configuration 3



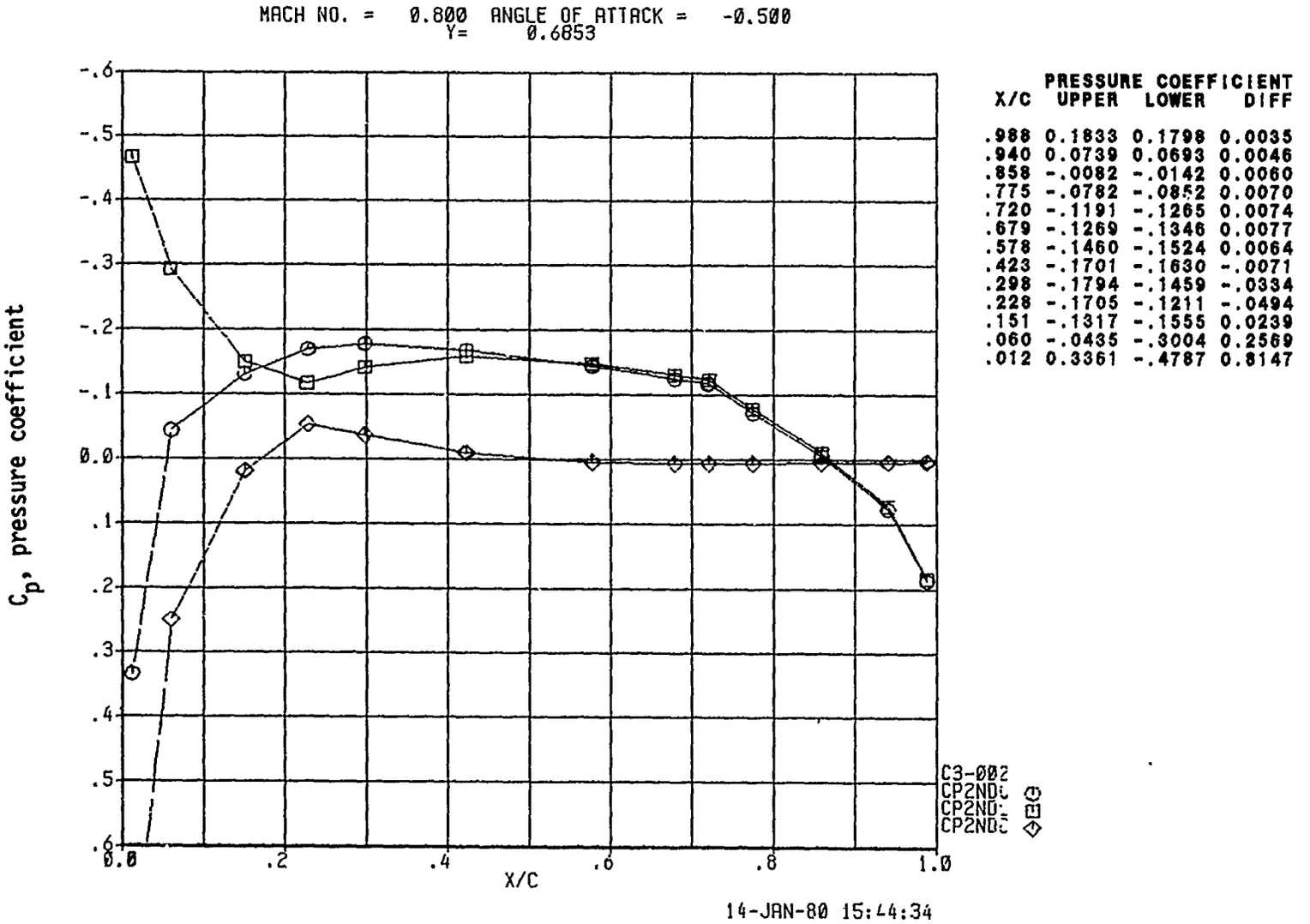
X/C	PRESSURE COEFFICIENT UPPER	LOWER	DIFF
.988	0.1810	0.1823	-.0013
.940	0.0703	0.0731	-.0029
.858	-.0137	-.0086	-.0051
.775	-.0854	-.0779	-.0075
.720	-.1272	-.1181	-.0091
.679	-.1358	-.1255	-.0103
.578	-.1572	-.1410	-.0162
.423	-.1857	-.1473	-.0385
.298	-.1993	-.1259	-.0733
.228	-.1935	-.0978	-.0957
.151	-.1623	-.1235	-.0388
.060	-.0938	-.2436	0.1499
.012	0.2464	-.3485	0.5949

Figure 360, Chordwise Pressure Distribution, Steady, Configuration 3



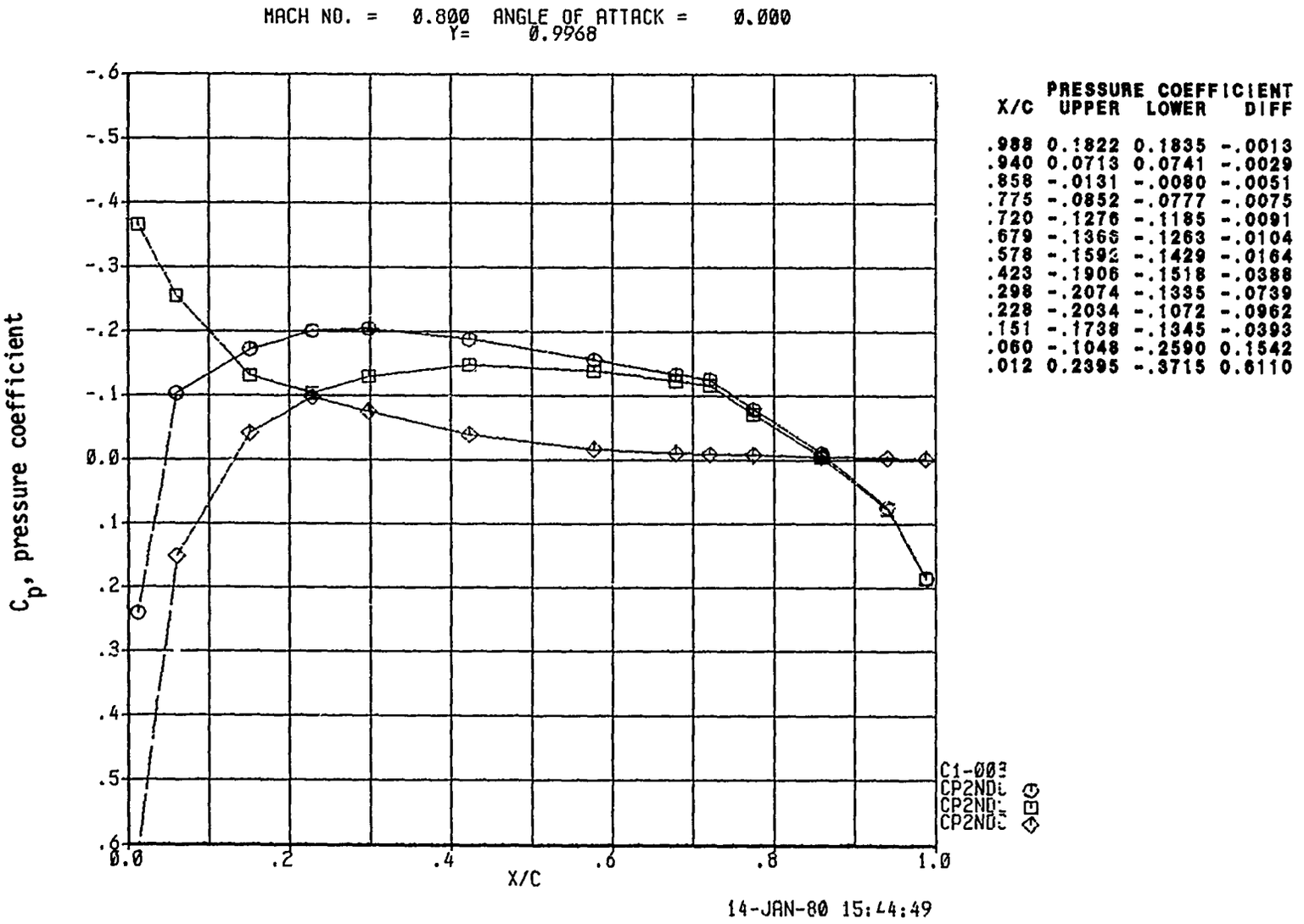
X/C	PRESSURE COEFFICIENT UPPER	LOWER	DIFF
.988	0.1786	0.1846	-.0060
.940	0.0665	0.0768	-.0103
.858	-.0194	-.0031	-.0163
.775	-.0927	-.0707	-.0220
.720	-.1355	-.1100	-.0255
.679	-.1448	-.1166	-.0283
.578	-.1686	-.1298	-.0388
.423	-.2017	-.1318	-.0699
.298	-.2195	-.1062	-.1133
.228	-.2168	-.0747	-.1421
.151	-.1935	-.0919	-.1016
.060	-.1452	-.1881	0.0428
.012	0.1511	-.2240	0.3751

Figure 361, Chordwise Pressure Distribution, Steady, Configuration 3



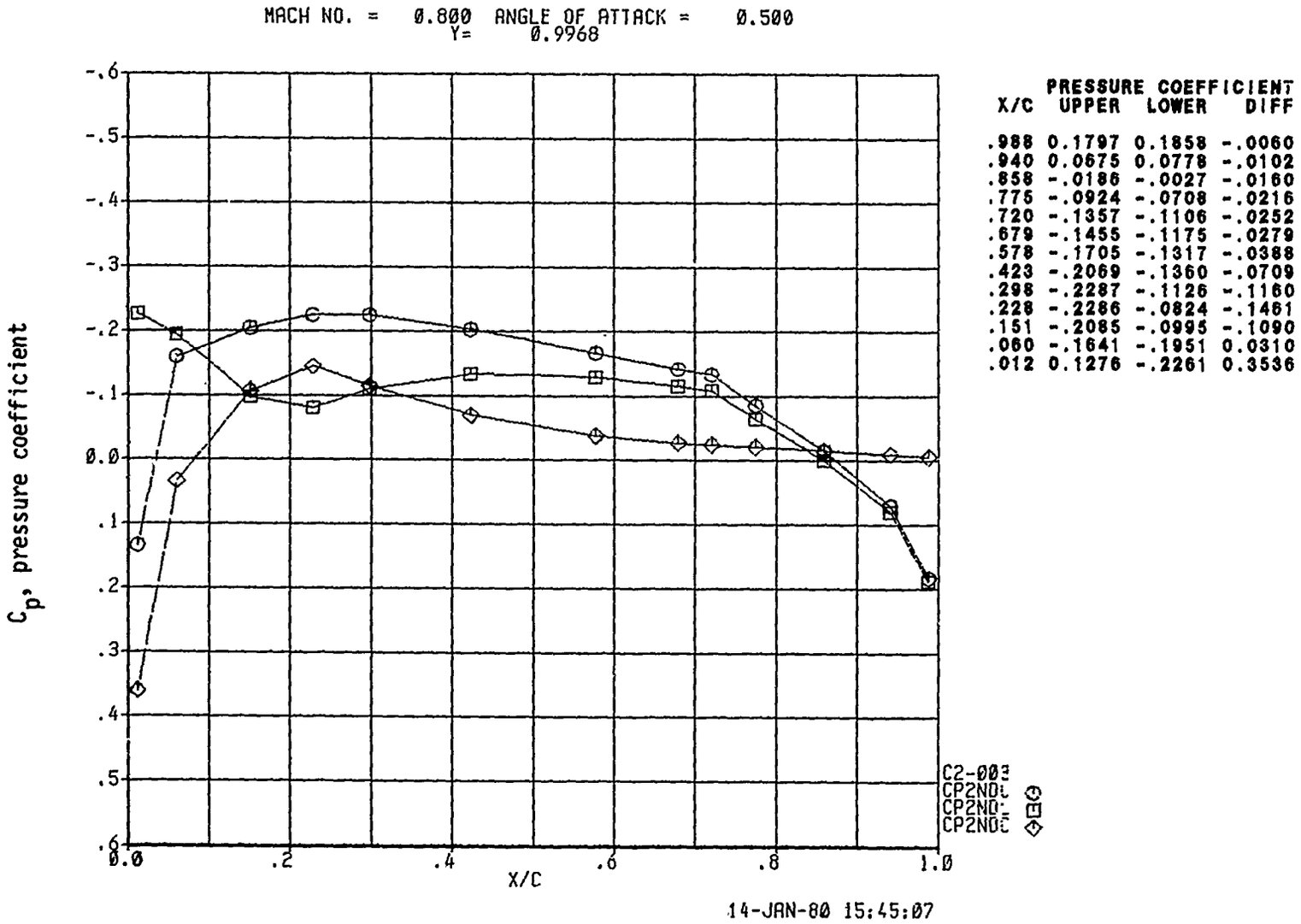
X/C	PRESSURE COEFFICIENT UPPER	LOWER	DIFF
.988	0.1833	0.1798	0.0035
.940	0.0739	0.0693	0.0046
.858	-.0082	-.0142	0.0060
.775	-.0782	-.0852	0.0070
.720	-.1191	-.1265	0.0074
.679	-.1269	-.1346	0.0077
.578	-.1460	-.1524	0.0064
.423	-.1701	-.1630	-.0071
.298	-.1794	-.1459	-.0334
.228	-.1705	-.1211	-.0494
.151	-.1317	-.1555	0.0239
.060	-.0435	-.3004	0.2569
.012	0.3361	-.4787	0.8147

Figure 362, Chordwise Pressure Distribution, Steady, Configuration 3



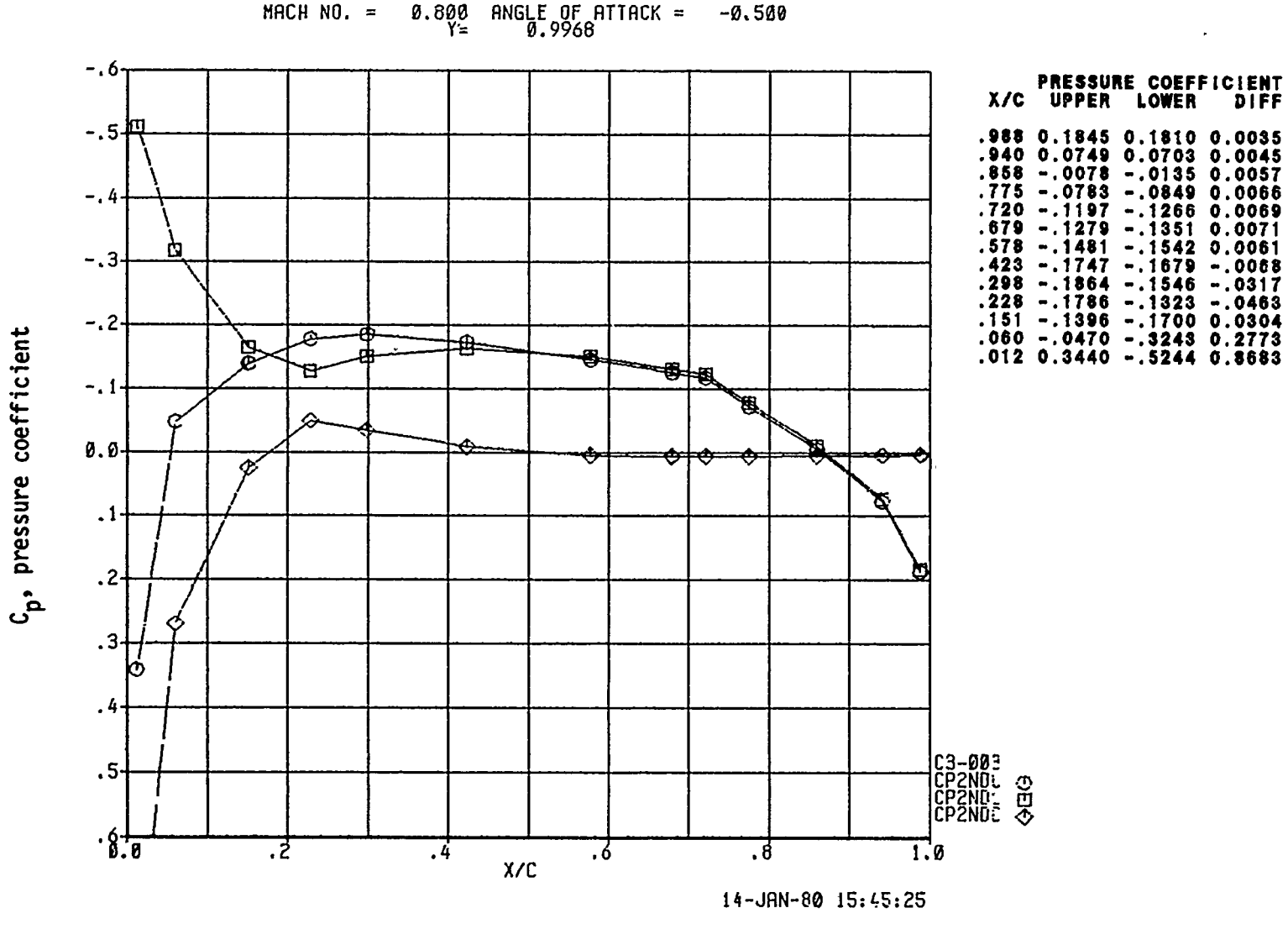
X/C	PRESSURE COEFFICIENT UPPER	LOWER	DIFF
.988	0.1822	0.1835	-.0013
.940	0.0713	0.0741	-.0029
.858	-.0131	-.0080	-.0051
.775	-.0852	-.0777	-.0075
.720	-.1276	-.1185	-.0091
.679	-.1366	-.1263	-.0104
.578	-.1592	-.1429	-.0164
.423	-.1906	-.1518	-.0388
.298	-.2074	-.1335	-.0739
.228	-.2034	-.1072	-.0962
.151	-.1738	-.1345	-.0393
.060	-.1048	-.2590	0.1542
.012	0.2395	-.3715	0.6110

Figure 363, Chordwise Pressure Distribution, Steady, Configuration 3



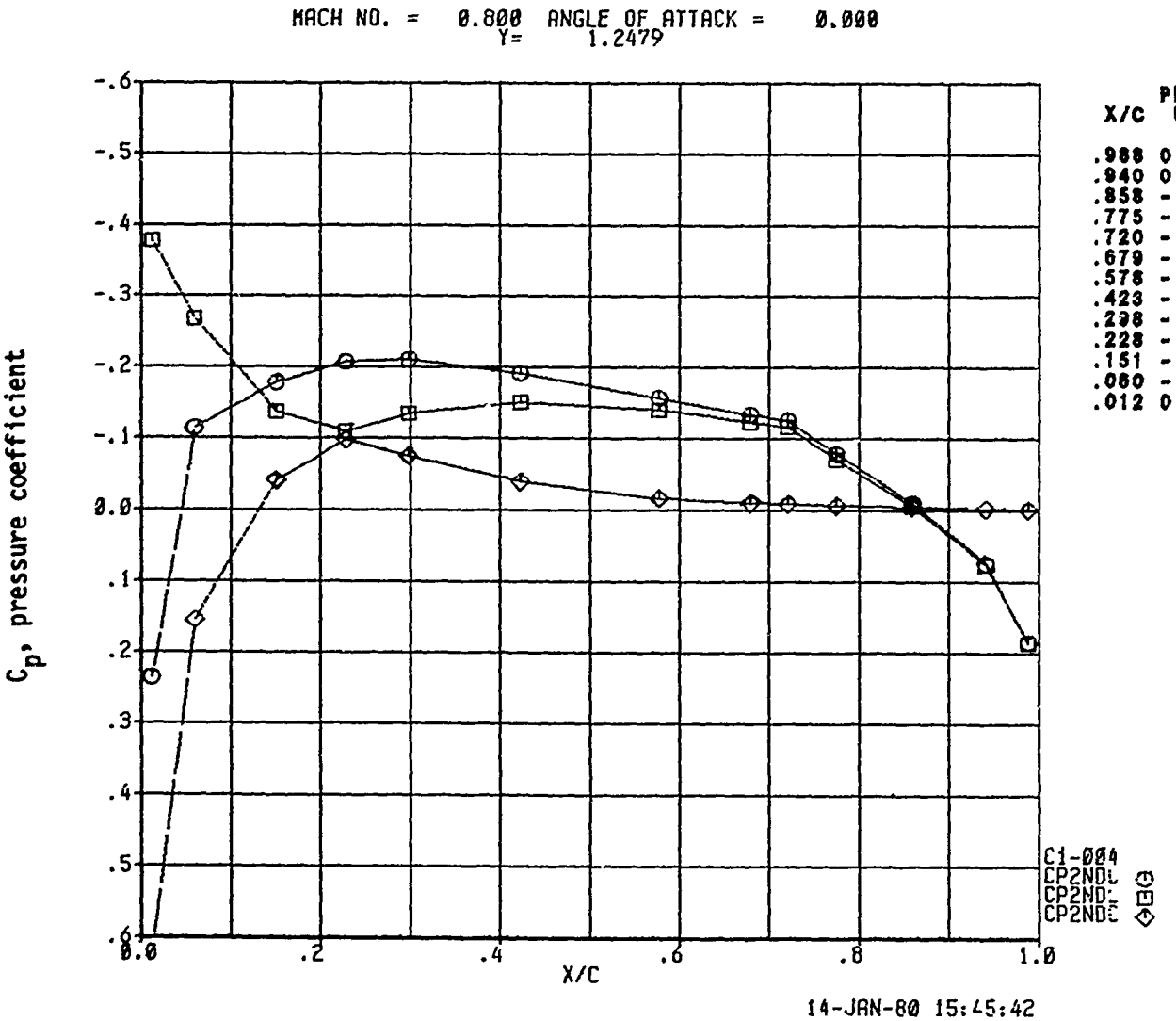
X/C	PRESSURE COEFFICIENT UPPER	LOWER	DIFF
.988	0.1797	0.1858	-.0060
.940	0.0675	0.0778	-.0102
.858	-.0186	-.0027	-.0160
.775	-.0924	-.0708	-.0216
.720	-.1357	-.1106	-.0252
.679	-.1455	-.1175	-.0279
.578	-.1705	-.1317	-.0388
.423	-.2069	-.1360	-.0709
.298	-.2287	-.1126	-.1160
.228	-.2286	-.0824	-.1461
.151	-.2085	-.0995	-.1090
.060	-.1641	-.1951	0.0310
.012	0.1276	-.2261	0.3536

Figure 364, Chordwise Pressure Distribution, Steady, Configuration 3



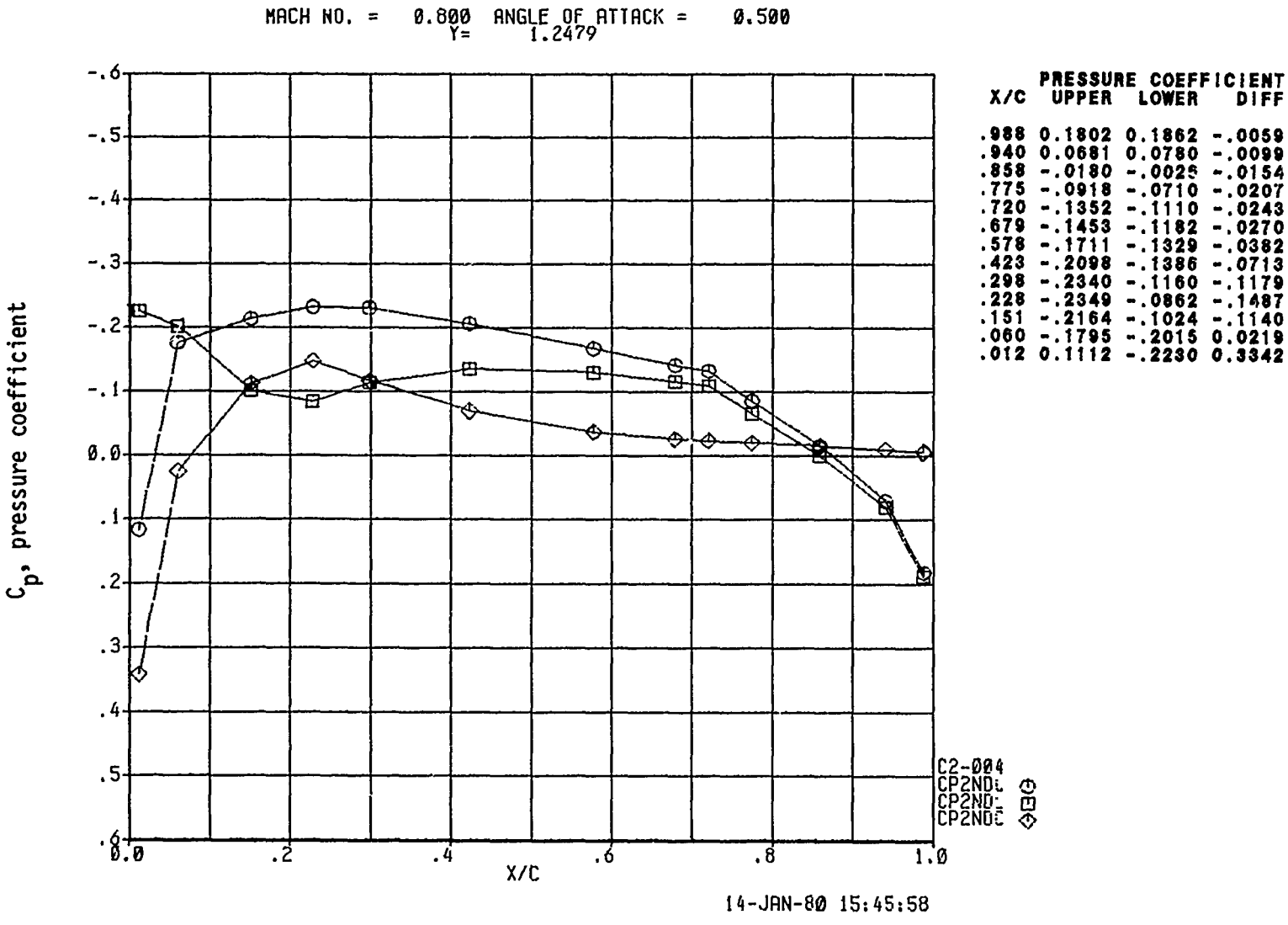
X/C	PRESSURE COEFFICIENT UPPER	LOWER	DIFF
.988	0.1845	0.1810	0.0035
.940	0.0749	0.0703	0.0045
.858	-.0078	-.0135	0.0057
.775	-.0783	-.0849	0.0066
.720	-.1197	-.1266	0.0069
.679	-.1279	-.1351	0.0071
.578	-.1481	-.1542	0.0061
.423	-.1747	-.1679	-.0068
.298	-.1864	-.1546	-.0317
.228	-.1786	-.1323	-.0463
.151	-.1396	-.1700	0.0304
.060	-.0470	-.3243	0.2773
.012	0.3440	-.5244	0.8683

Figure 365, Chordwise Pressure Distribution, Steady, Configuration 3



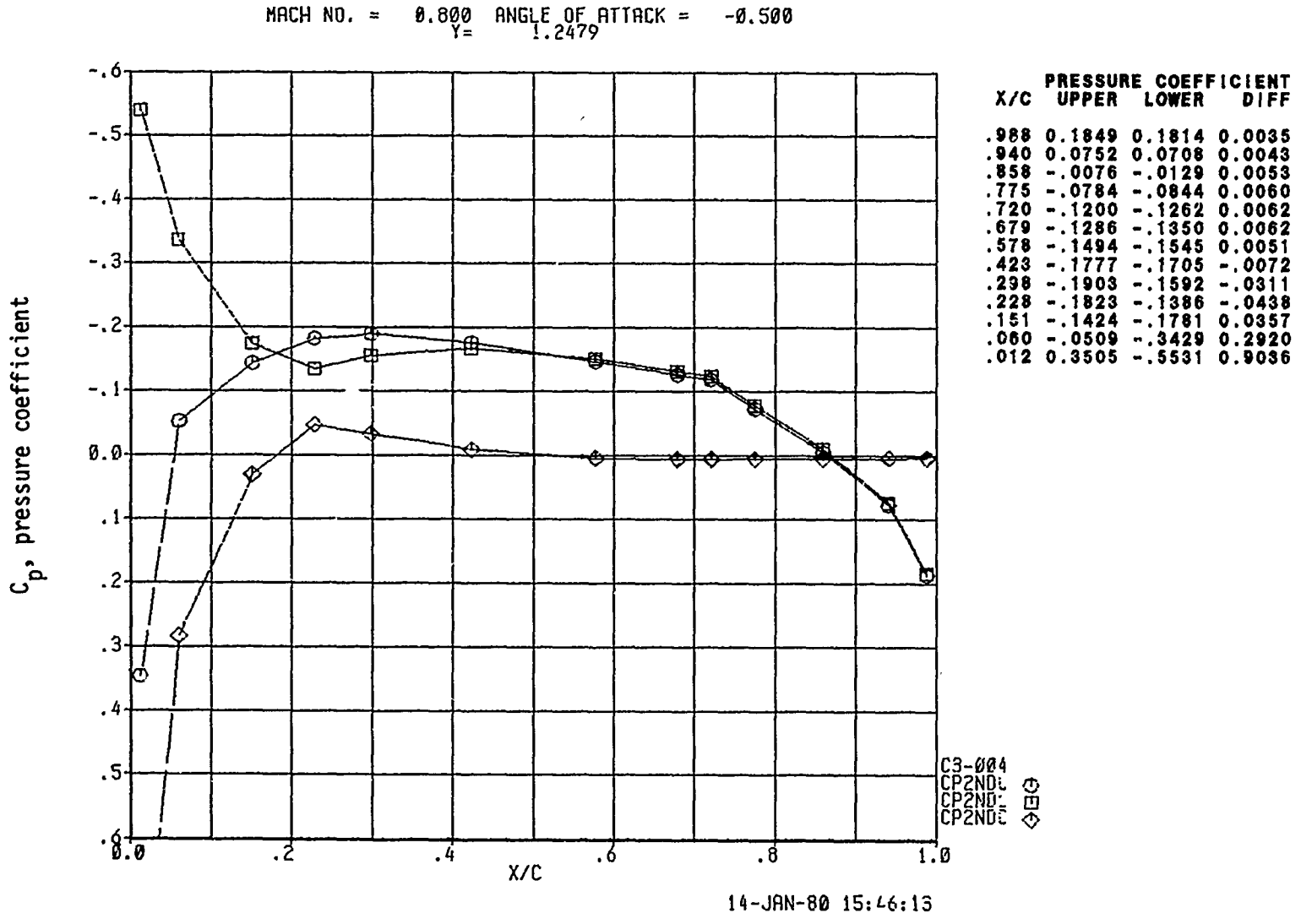
X/C	PRESSURE COEFFICIENT UPPER	LOWER	DIFF
.988	0.1826	0.1839	-.0012
.940	0.0717	0.0745	-.0028
.858	-.0127	-.0077	-.0050
.775	-.0850	-.0776	-.0073
.720	-.1275	-.1185	-.0090
.679	-.1369	-.1265	-.0103
.578	-.1601	-.1436	-.0166
.423	-.1936	-.1544	-.0393
.298	-.2119	-.1374	-.0745
.228	-.2084	-.1122	-.0962
.151	-.1791	-.1399	-.0391
.060	-.1144	-.2714	0.1570
.012	0.2354	-.3836	0.6189

Figure 366, Chordwise Pressure Distribution, Steady, Configuration 3



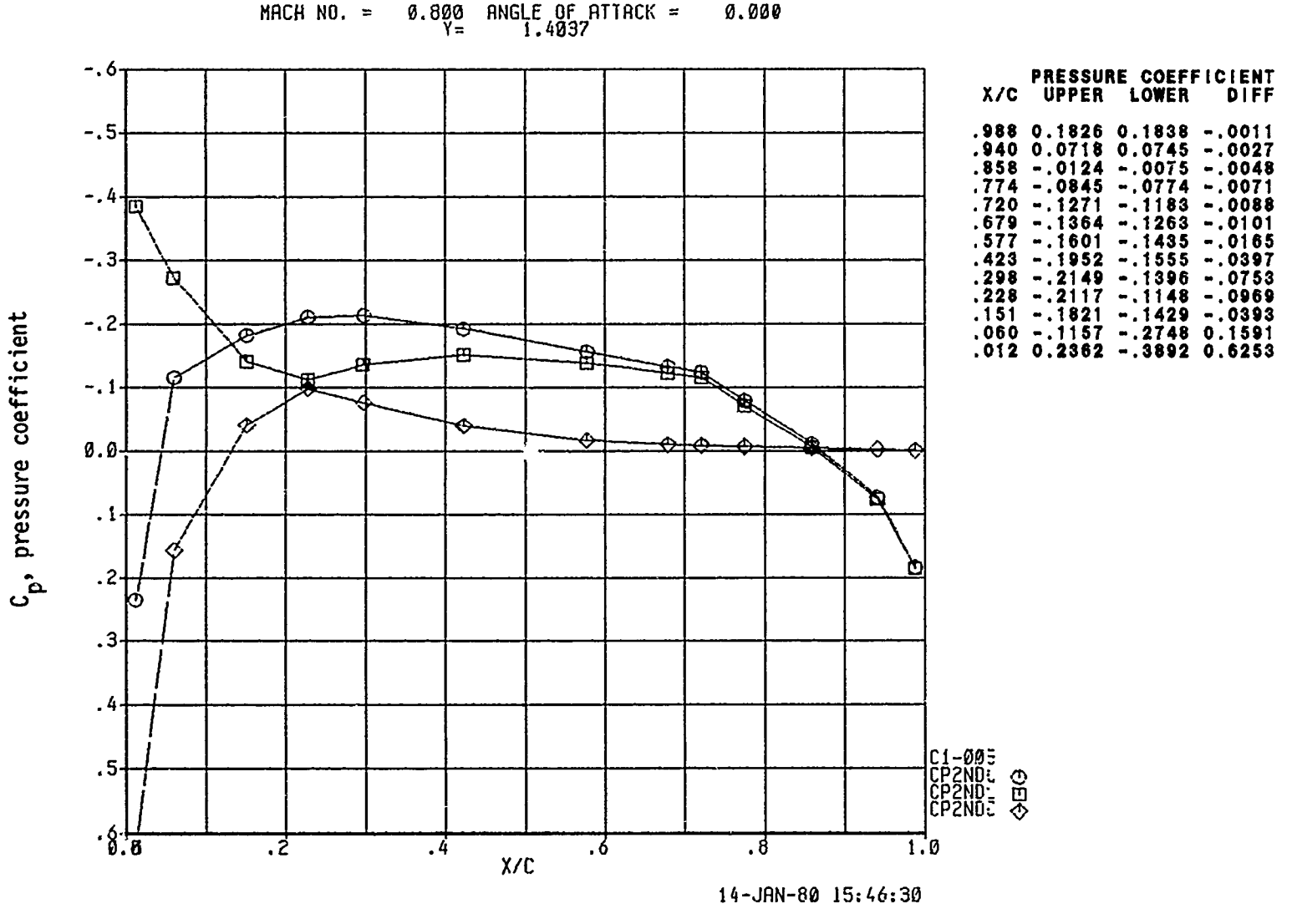
X/C	PRESSURE COEFFICIENT UPPER	LOWER	DIFF
.988	0.1802	0.1862	-.0059
.940	0.0681	0.0780	-.0099
.858	-.0180	-.0026	-.0154
.775	-.0918	-.0710	-.0207
.720	-.1352	-.1110	-.0243
.679	-.1453	-.1182	-.0270
.578	-.1711	-.1329	-.0382
.423	-.2098	-.1386	-.0713
.298	-.2340	-.1160	-.1179
.228	-.2349	-.0862	-.1487
.151	-.2164	-.1024	-.1140
.060	-.1795	-.2015	0.0219
.012	0.1112	-.2230	0.3342

Figure 367, Chordwise Pressure Distribution, Steady, Configuration 3



X/C	PRESSURE COEFFICIENT UPPER	LOWER	DIFF
.988	0.1849	0.1814	0.0035
.940	0.0752	0.0708	0.0043
.858	-.0076	-.0129	0.0053
.775	-.0784	-.0844	0.0060
.720	-.1200	-.1262	0.0062
.679	-.1286	-.1350	0.0062
.578	-.1494	-.1545	0.0051
.423	-.1777	-.1705	-.0072
.298	-.1903	-.1592	-.0311
.228	-.1823	-.1386	-.0438
.151	-.1424	-.1781	0.0357
.060	-.0509	-.3429	0.2920
.012	0.3505	-.5531	0.9036

Figure 368, Chordwise Pressure Distribution, Steady, Configuration 3



X/C	PRESSURE COEFFICIENT UPPER	LOWER	DIFF
.988	0.1826	0.1838	-.0011
.940	0.0718	0.0745	-.0027
.858	-.0124	-.0075	-.0048
.774	-.0845	-.0774	-.0071
.720	-.1271	-.1183	-.0088
.679	-.1364	-.1263	-.0101
.577	-.1601	-.1435	-.0165
.423	-.1952	-.1555	-.0397
.298	-.2149	-.1396	-.0753
.228	-.2117	-.1148	-.0969
.151	-.1821	-.1429	-.0393
.060	-.1157	-.2748	0.1591
.012	0.2362	-.3892	0.6253

Figure 369, Chordwise Pressure Distribution, Steady, Configuration 3

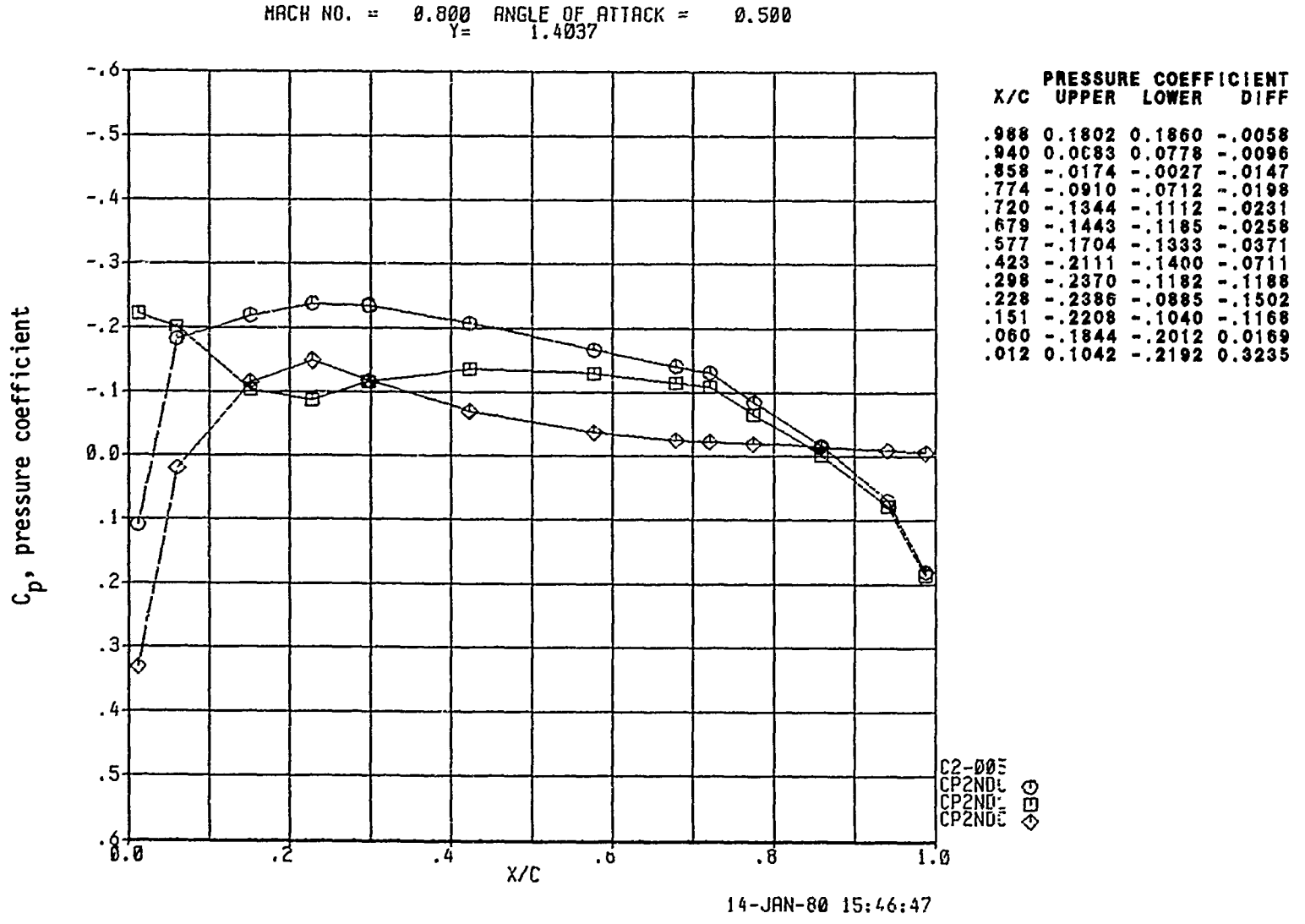
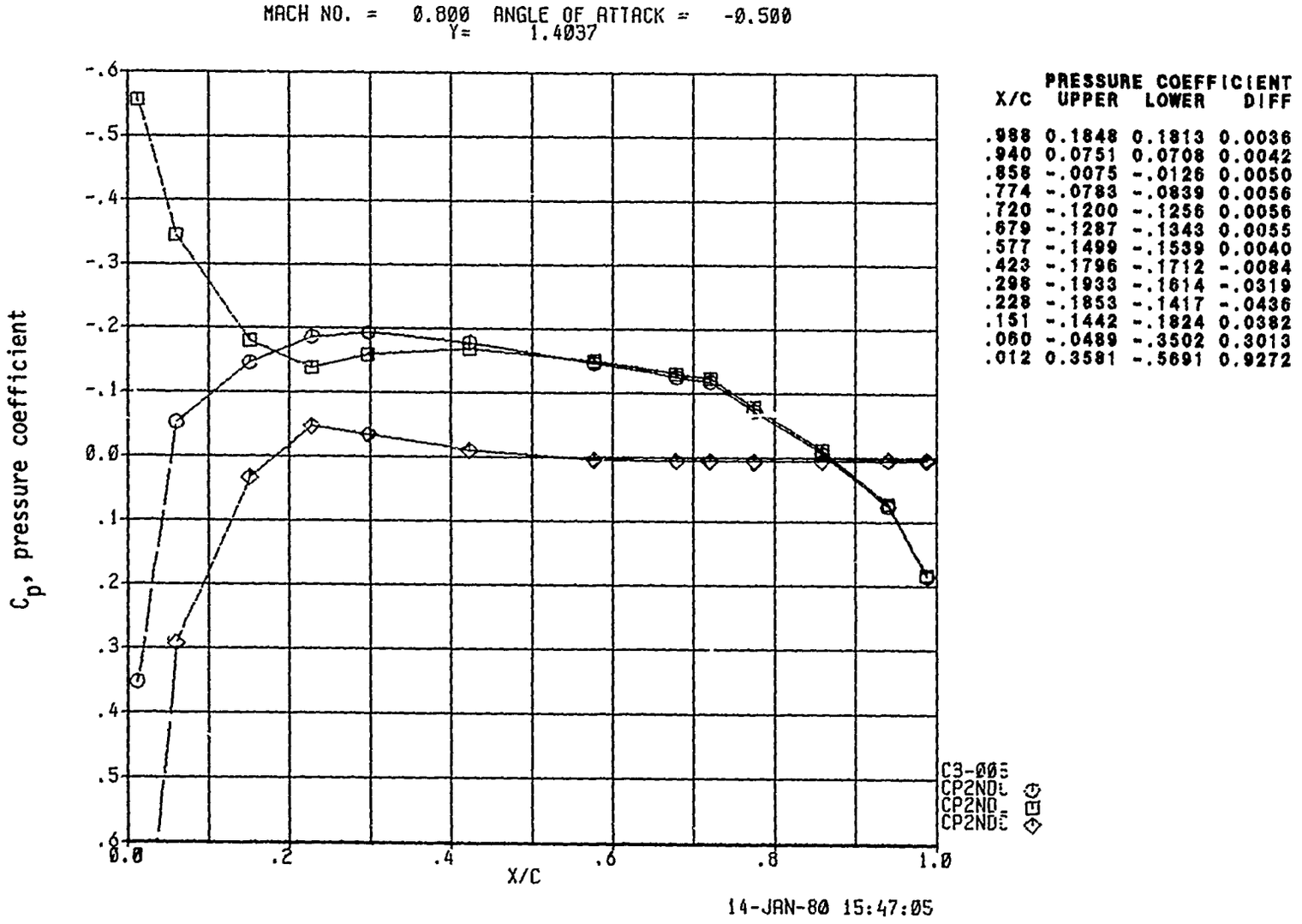
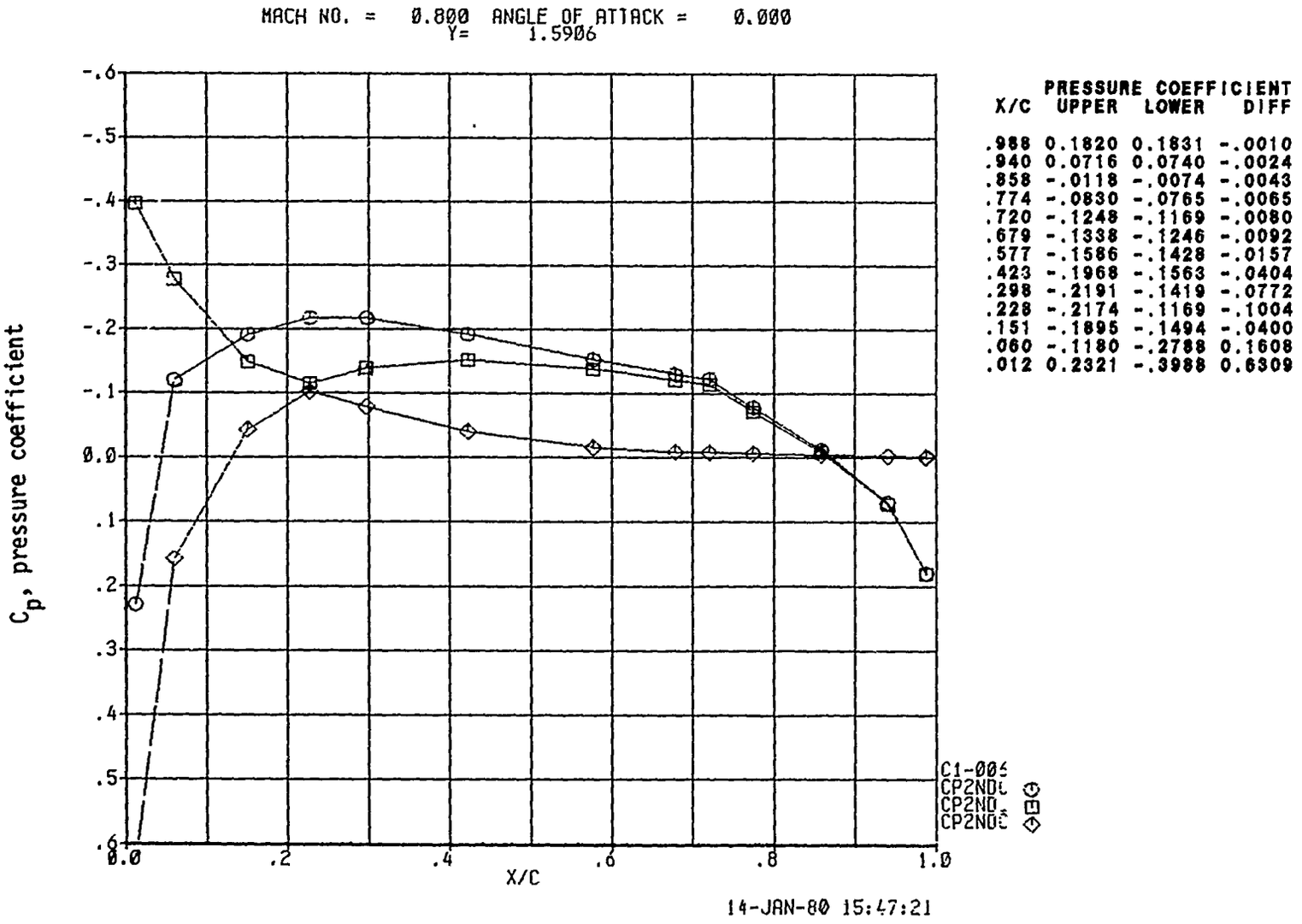


Figure 370, Chordwise Pressure Distribution, Steady, Configuration 3



X/C	PRESSURE COEFFICIENT UPPER	LOWER	DIFF
.988	0.1848	0.1813	0.0036
.940	0.0751	0.0708	0.0042
.858	-.0075	-.0126	0.0050
.774	-.0783	-.0839	0.0056
.720	-.1200	-.1256	0.0056
.679	-.1287	-.1343	0.0055
.577	-.1499	-.1539	0.0040
.423	-.1796	-.1712	-.0084
.298	-.1933	-.1614	-.0319
.228	-.1853	-.1417	-.0436
.151	-.1442	-.1824	0.0382
.060	-.0489	-.3502	0.3013
.012	0.3581	-.5691	0.9272

Figure 371, Chordwise Pressure Distribution, Steady, Configuration 3



X/C	PRESSURE COEFFICIENT UPPER	LOWER	DIFF
.988	0.1820	0.1831	-.0010
.940	0.0716	0.0740	-.0024
.858	-.0118	-.0074	-.0043
.774	-.0830	-.0765	-.0065
.720	-.1248	-.1169	-.0080
.679	-.1338	-.1246	-.0092
.577	-.1586	-.1428	-.0157
.423	-.1968	-.1563	-.0404
.298	-.2191	-.1419	-.0772
.228	-.2174	-.1169	-.1004
.151	-.1895	-.1494	-.0400
.060	-.1180	-.2788	0.1608
.012	0.2321	-.3988	0.6309

Figure 372, Chordwise Pressure Distribution, Steady, Configuration 3

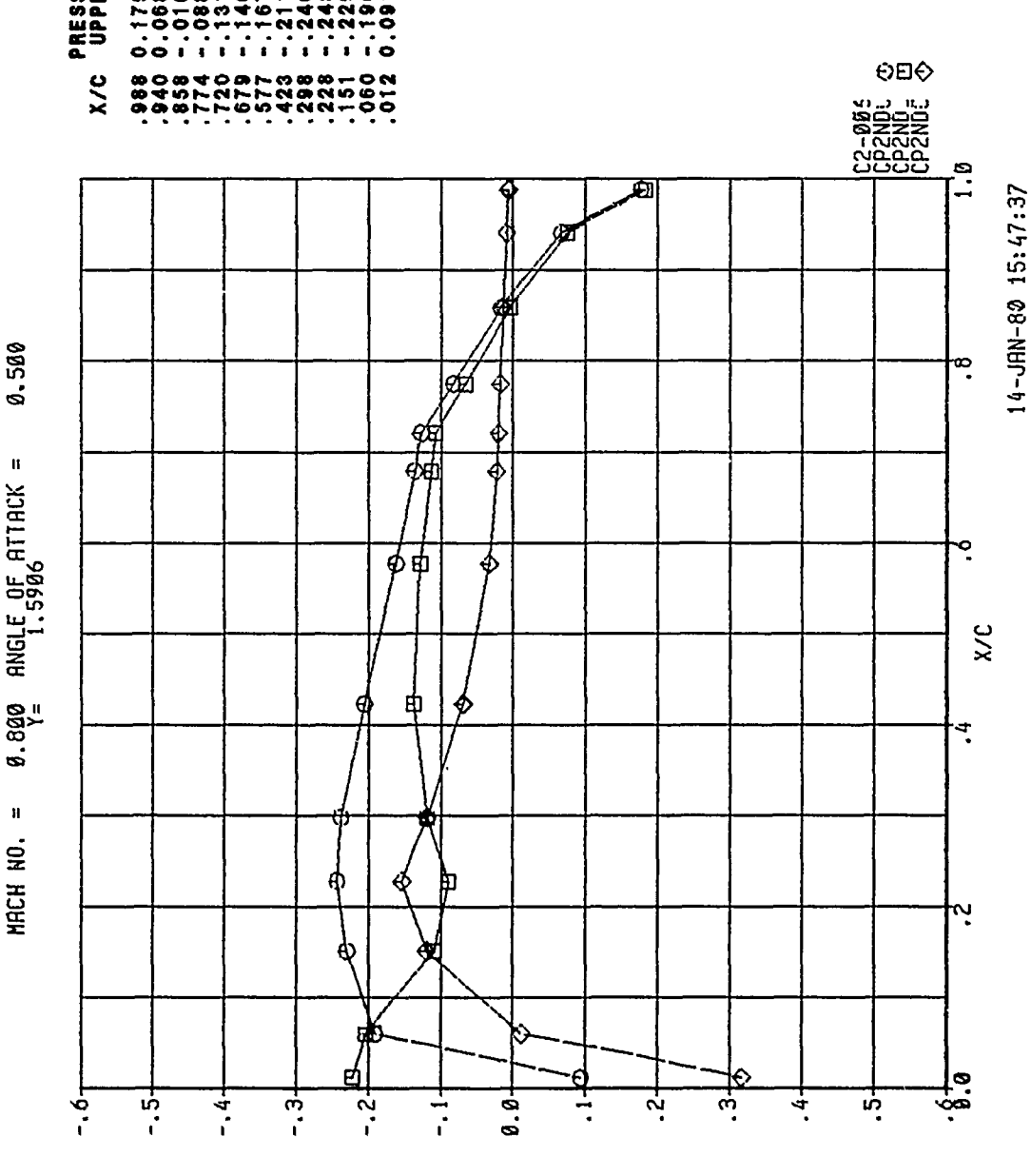
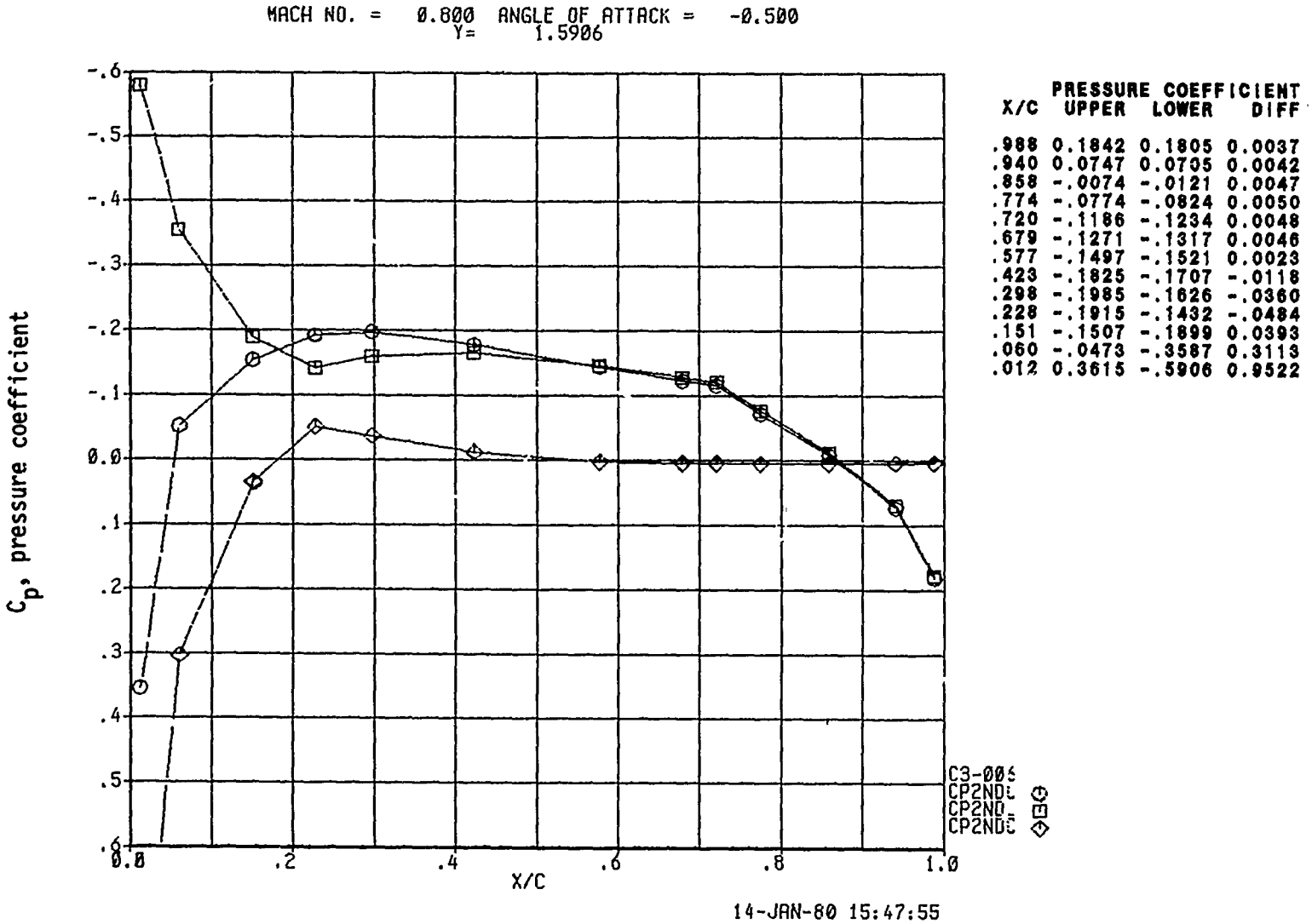
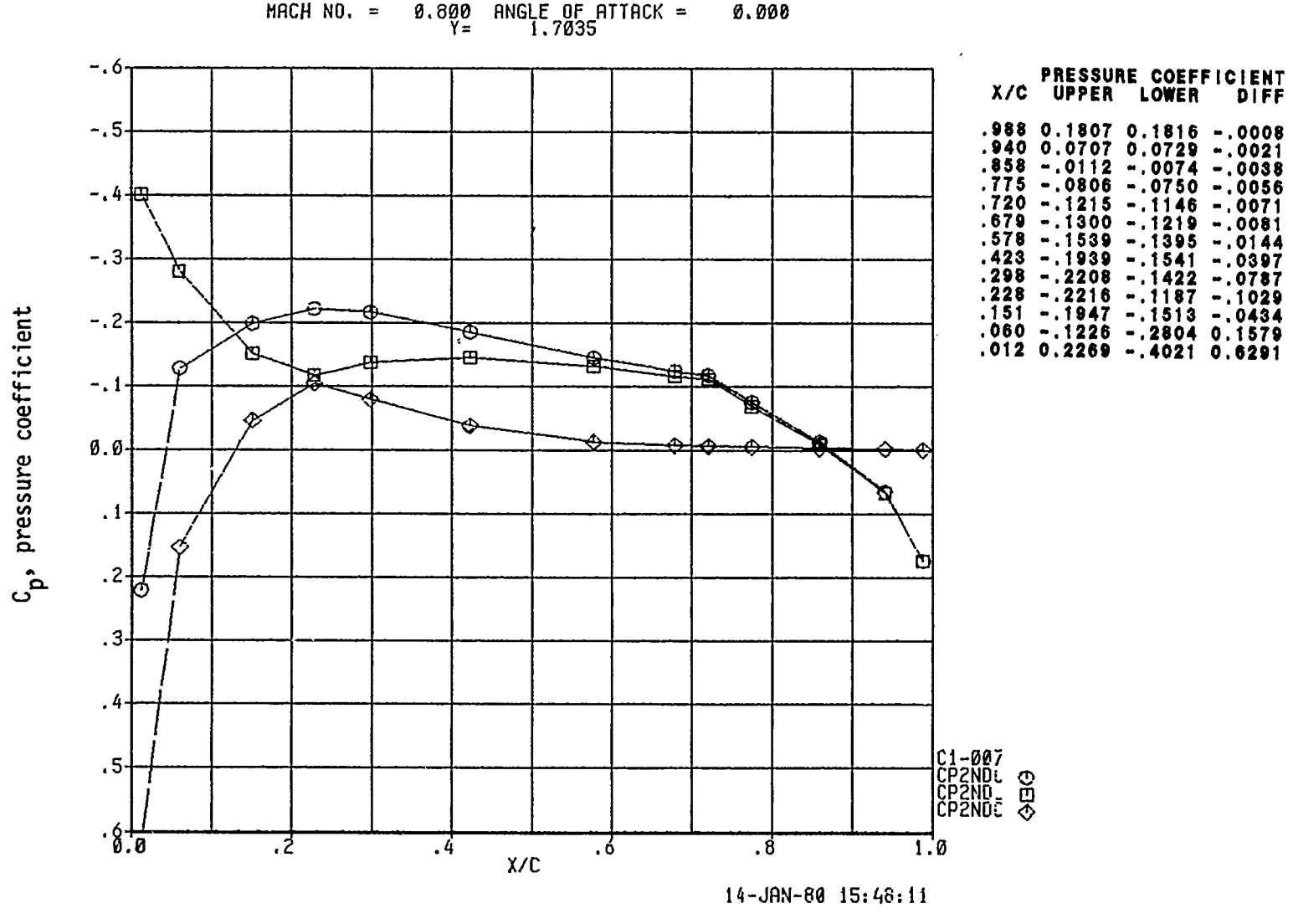


Figure 373, Chordwise Pressure Distribution, Steady, Configuration 3



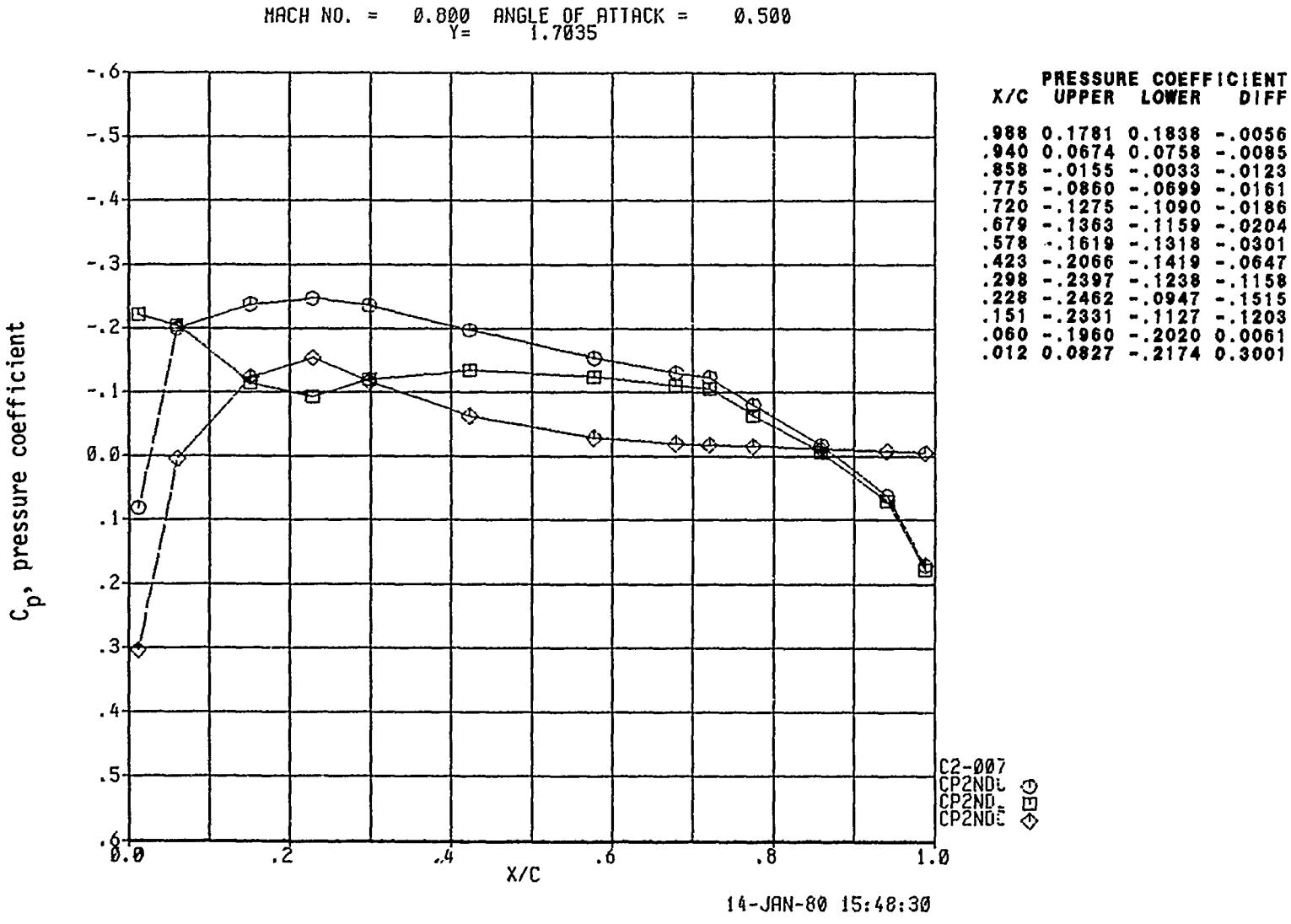
X/C	PRESSURE COEFFICIENT UPPER	LOWER	DIFF
.988	0.1842	0.1805	0.0037
.940	0.0747	0.0705	0.0042
.858	-.0074	-.0121	0.0047
.774	-.0774	-.0824	0.0050
.720	-.1186	-.1234	0.0048
.679	-.1271	-.1317	0.0046
.577	-.1497	-.1521	0.0023
.423	-.1825	-.1707	-.0118
.298	-.1985	-.1626	-.0360
.228	-.1915	-.1432	-.0484
.151	-.1507	-.1899	0.0393
.060	-.0473	-.3587	0.3113
.012	0.3615	-.5906	0.9522

Figure 374, Chordwise Pressure Distribution, Steady, Configuration 3



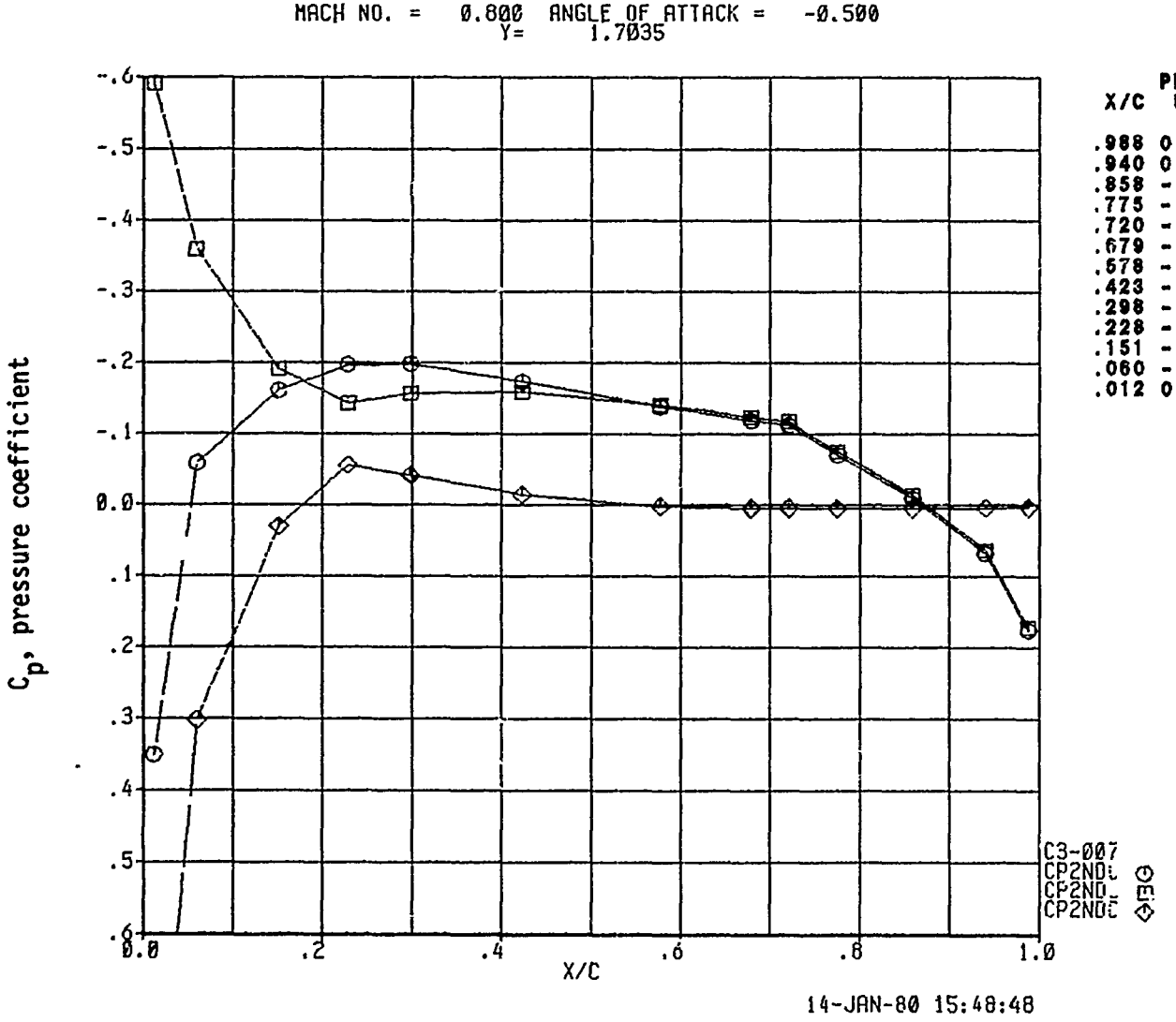
X/C	PRESSURE COEFFICIENT UPPER	LOWER	DIFF
.988	0.1807	0.1816	-.0008
.940	0.0707	0.0729	-.0021
.858	-.0112	-.0074	-.0038
.775	-.0806	-.0750	-.0056
.720	-.1215	-.1146	-.0071
.679	-.1300	-.1219	-.0081
.578	-.1539	-.1395	-.0144
.423	-.1939	-.1541	-.0397
.298	-.2208	-.1422	-.0787
.228	-.2216	-.1187	-.1029
.151	-.1947	-.1513	-.0434
.060	-.1226	-.2804	0.1579
.012	0.2269	-.4021	0.6291

Figure 375, Chordwise Pressure Distribution, Steady, Configuration 3



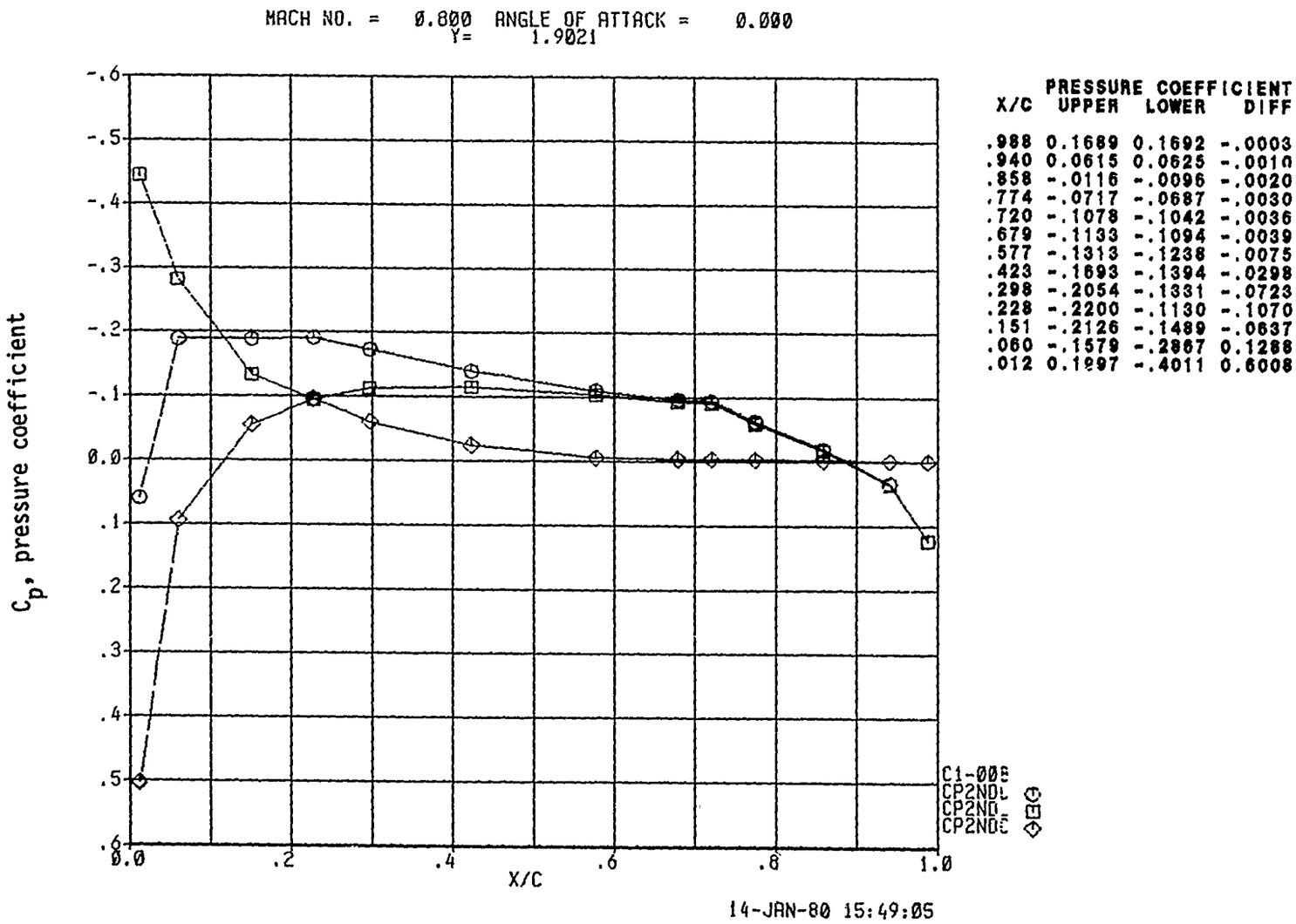
X/C	PRESSURE COEFFICIENT UPPER	LOWER	DIFF
.988	0.1781	0.1838	-.0056
.940	0.0674	0.0758	-.0085
.858	-.0155	-.0033	-.0123
.775	-.0860	-.0699	-.0161
.720	-.1275	-.1090	-.0186
.679	-.1363	-.1159	-.0204
.578	-.1619	-.1318	-.0301
.423	-.2066	-.1419	-.0647
.298	-.2397	-.1238	-.1158
.228	-.2462	-.0947	-.1515
.151	-.2331	-.1127	-.1203
.060	-.1960	-.2020	0.0061
.012	0.0827	-.2174	0.3001

Figure 376, Chordwise Pressure Distribution, Steady, Configuration 3



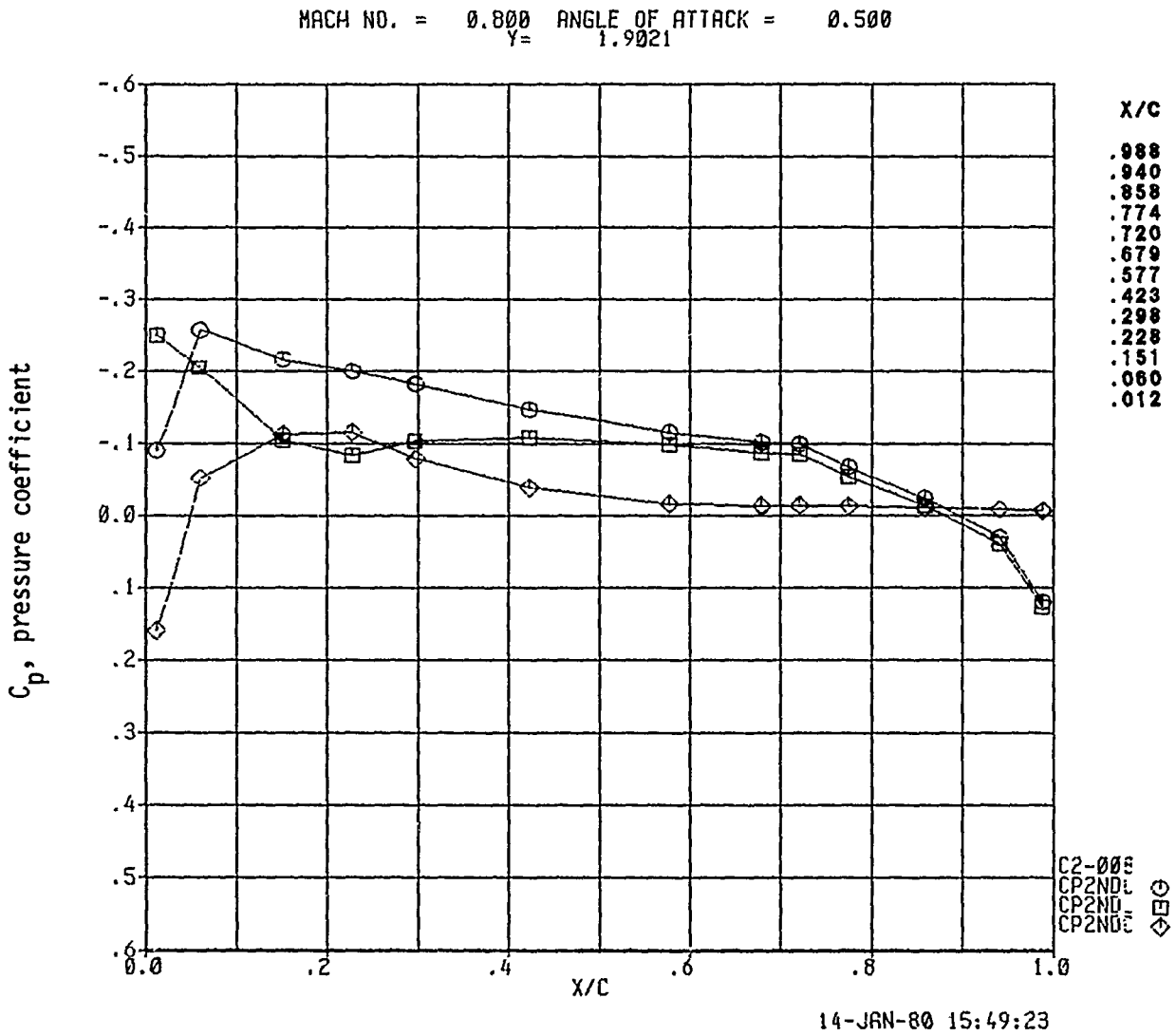
X/C	PRESSURE COEFFICIENT UPPER	LOWER	DIFF
.988	0.1828	0.1790	0.0039
.940	0.0737	0.0694	0.0043
.858	-.0072	-.0119	0.0047
.775	-.0757	-.0804	0.0048
.720	-.1161	-.1205	0.0045
.679	-.1241	-.1283	0.0043
.578	-.1463	-.1477	0.0014
.423	-.1816	-.1668	-.0147
.298	-.2023	-.1608	-.0415
.228	-.1976	-.1432	-.0544
.151	-.1571	-.1906	0.0336
.060	-.0513	-.3611	0.3097
.012	0.3594	-.5987	0.9581

Figure 377, Chordwise Pressure Distribution, Steady, Configuration 3



X/C	PRESSURE COEFFICIENT UPPER	LOWER	DIFF
.988	0.1689	0.1692	-.0003
.940	0.0615	0.0625	-.0010
.858	-.0116	-.0096	-.0020
.774	-.0717	-.0687	-.0030
.720	-.1078	-.1042	-.0036
.679	-.1133	-.1094	-.0039
.577	-.1313	-.1238	-.0075
.423	-.1693	-.1394	-.0298
.298	-.2054	-.1331	-.0723
.228	-.2200	-.1130	-.1070
.151	-.2126	-.1489	-.0637
.060	-.1579	-.2867	0.1288
.012	0.1997	-.4011	0.6008

Figure 378, Chordwise Pressure Distribution, Steady, Configuration 3



X/C	PRESSURE COEFFICIENT UPPER	LOWER	DIFF
.988	0.1656	0.1716	-.0061
.940	0.0577	0.0655	-.0078
.858	-.0160	-.0060	-.0099
.774	-.0765	-.0646	-.0119
.720	-.1128	-.1000	-.0129
.679	-.1183	-.1050	-.0133
.577	-.1368	-.1190	-.0178
.423	-.1766	-.1326	-.0439
.298	-.2155	-.1235	-.0920
.228	-.2333	-.1000	-.1334
.151	-.2390	-.1222	-.1168
.060	-.2221	-.2179	-.0042
.012	0.0595	-.2228	0.2824

Figure 379, Chordwise Pressure Distribution, Steady, Configuration 3

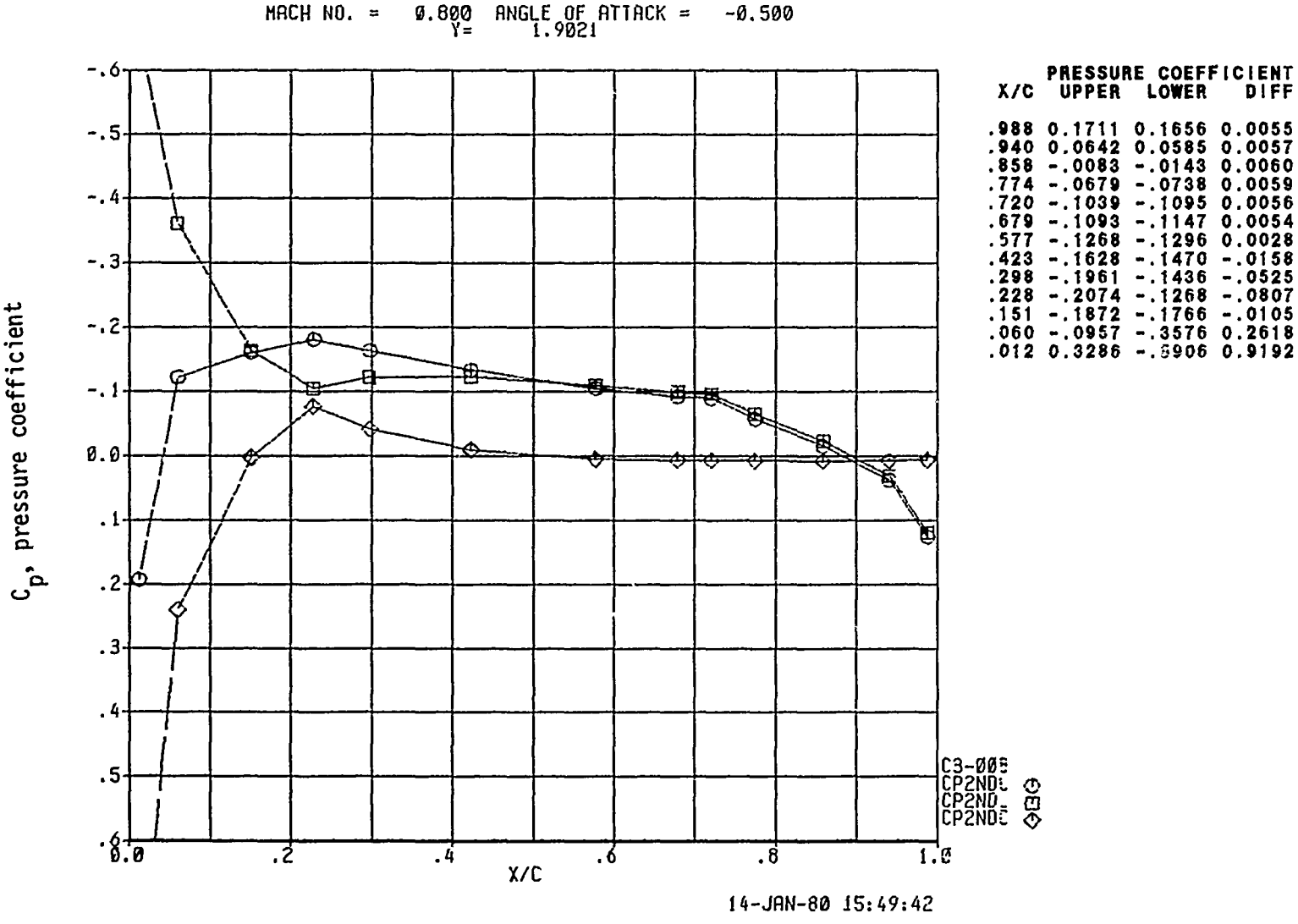


Figure 380, Chordwise Pressure Distribution, Steady, Configuration 3

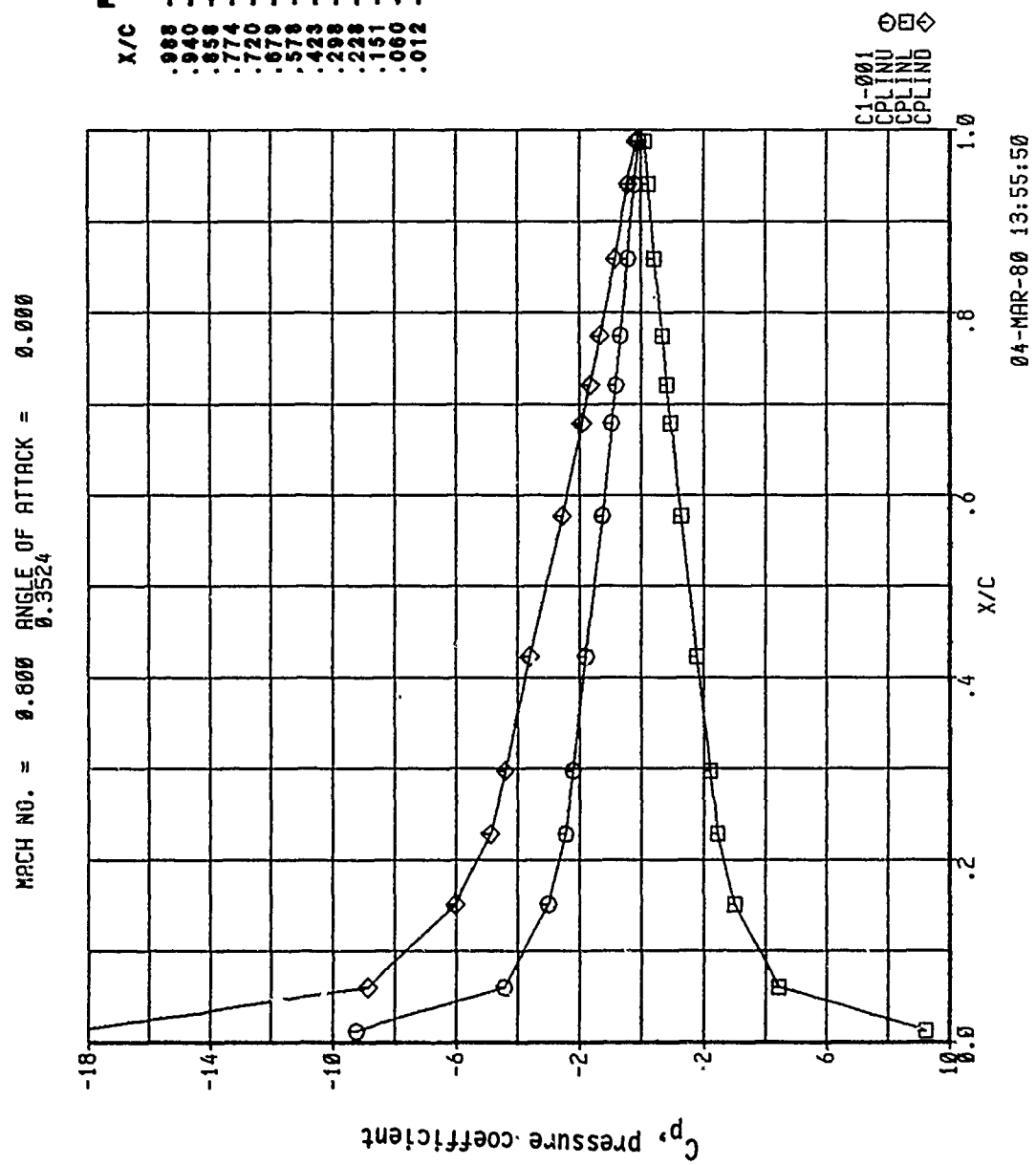


Figure 381, Chordwise Pressure Distribution, Real, Configuration 3

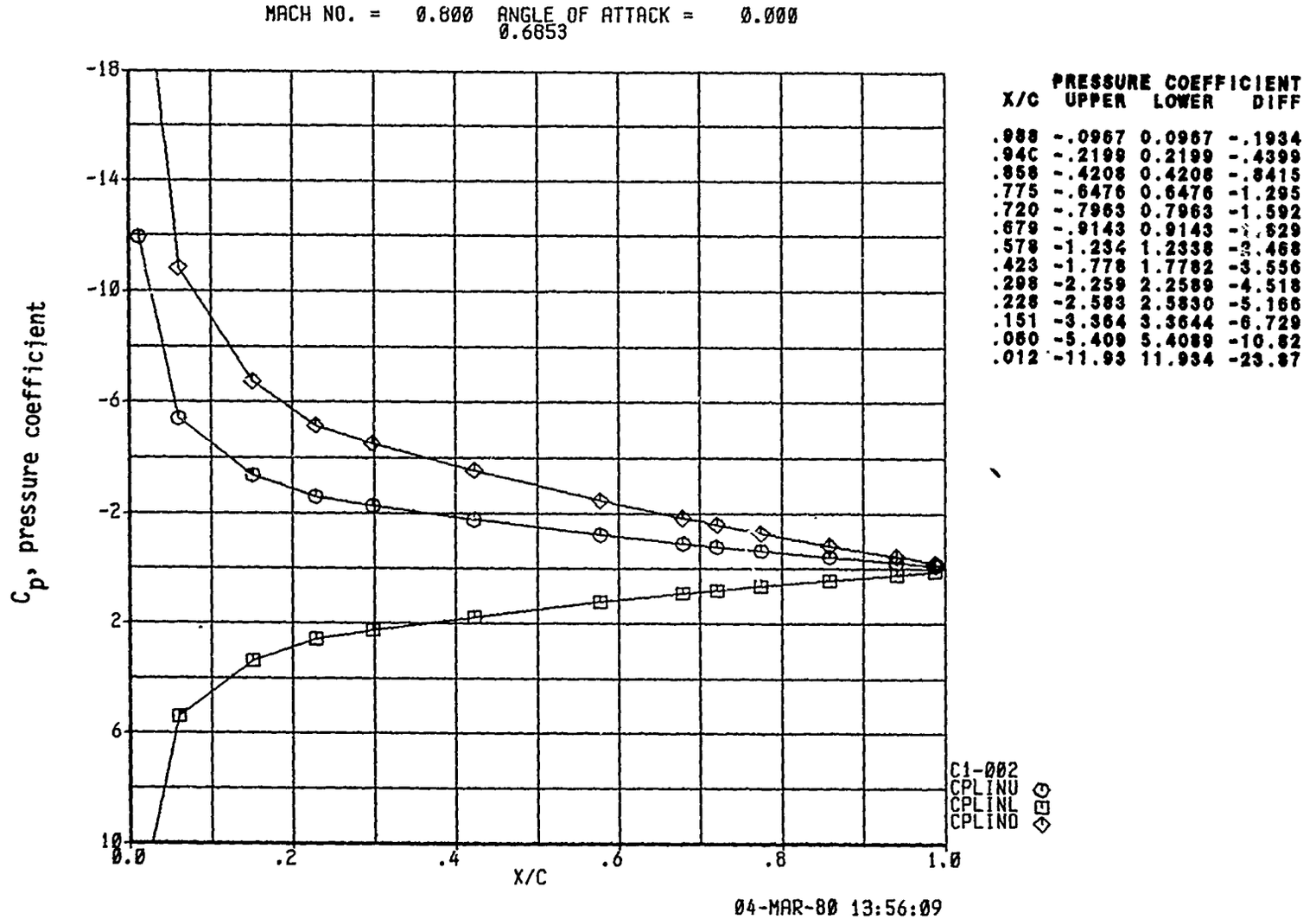
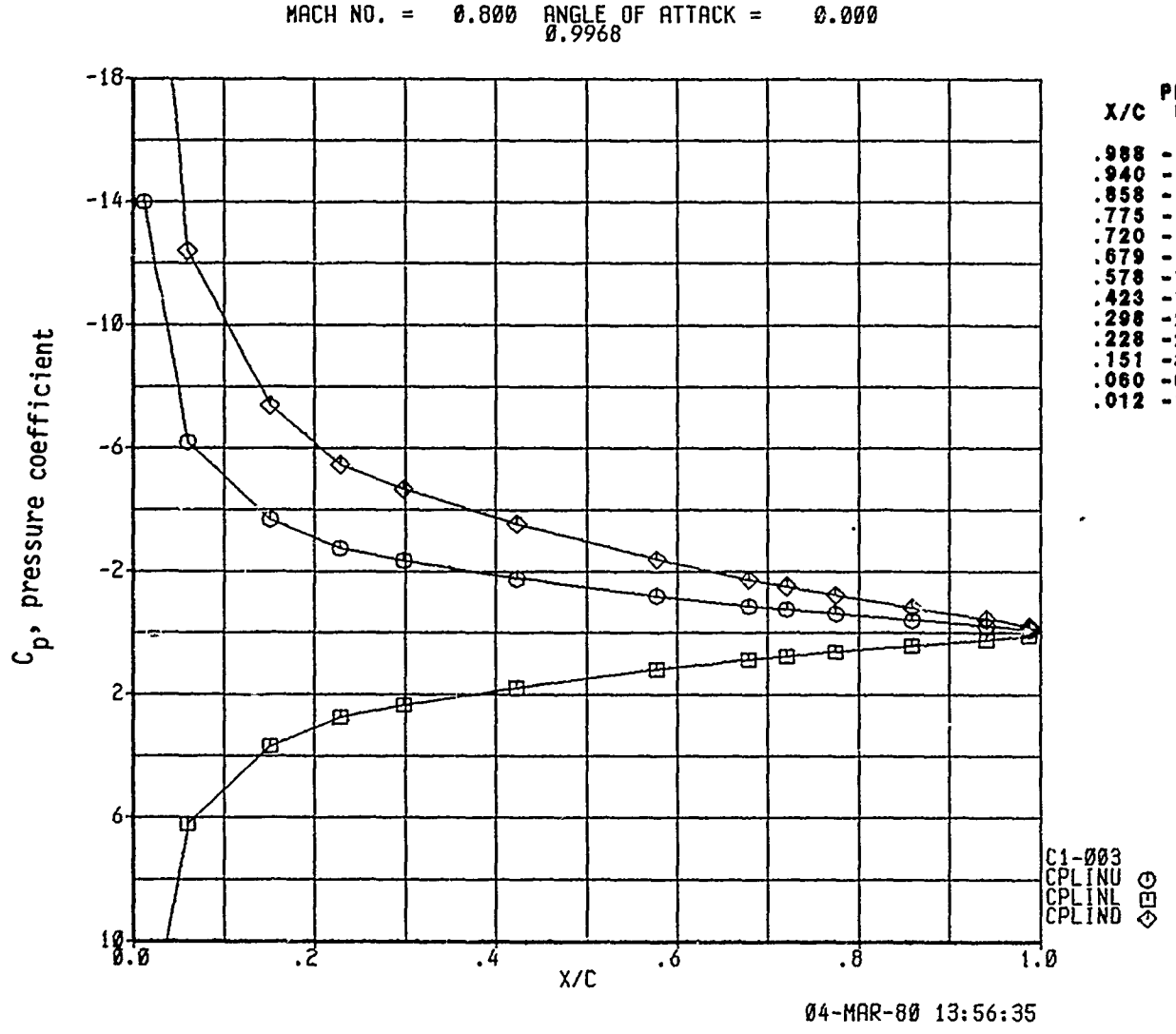
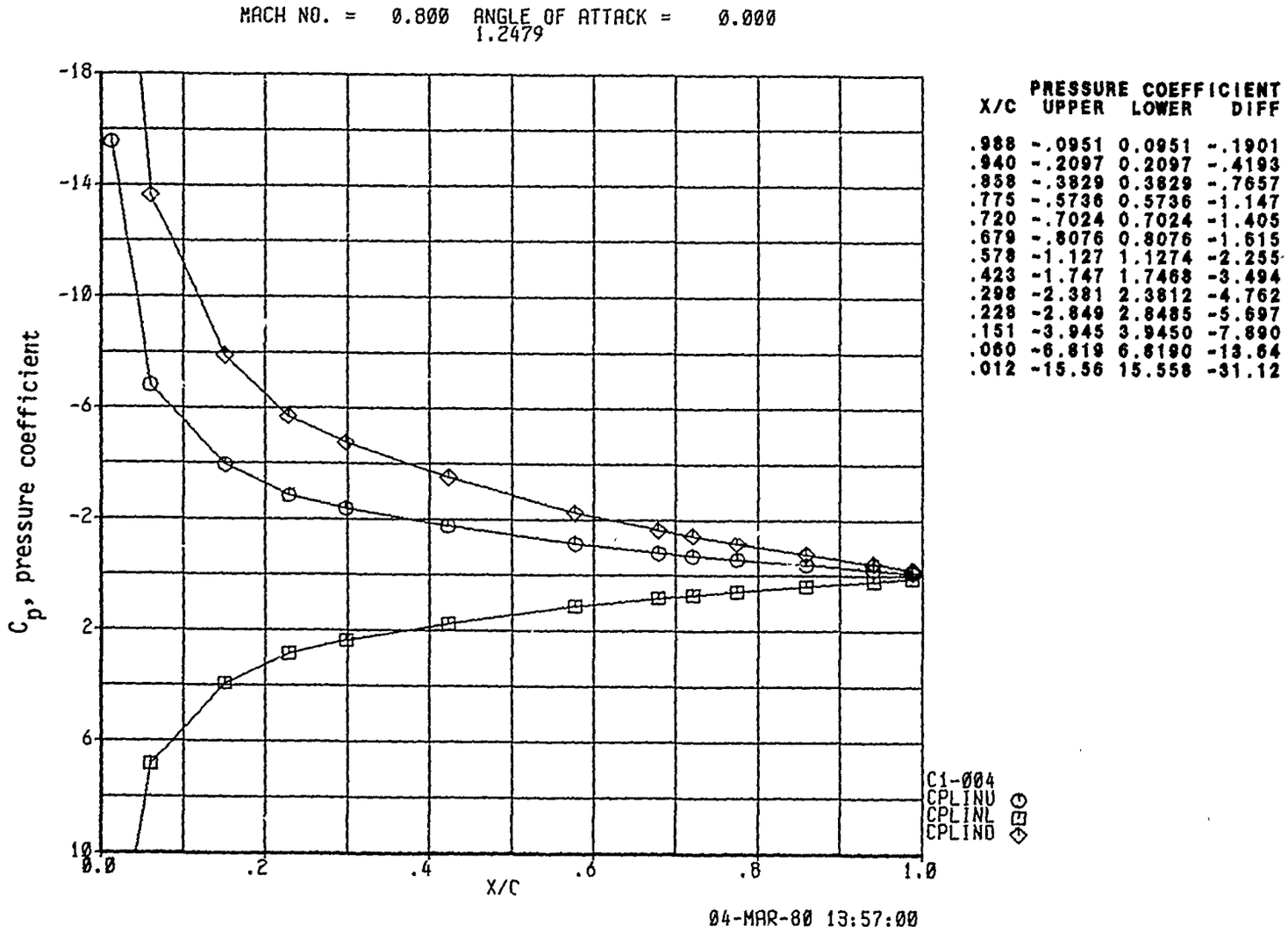


Figure 382, Chordwise Pressure Distribution, Real, Configuration 3



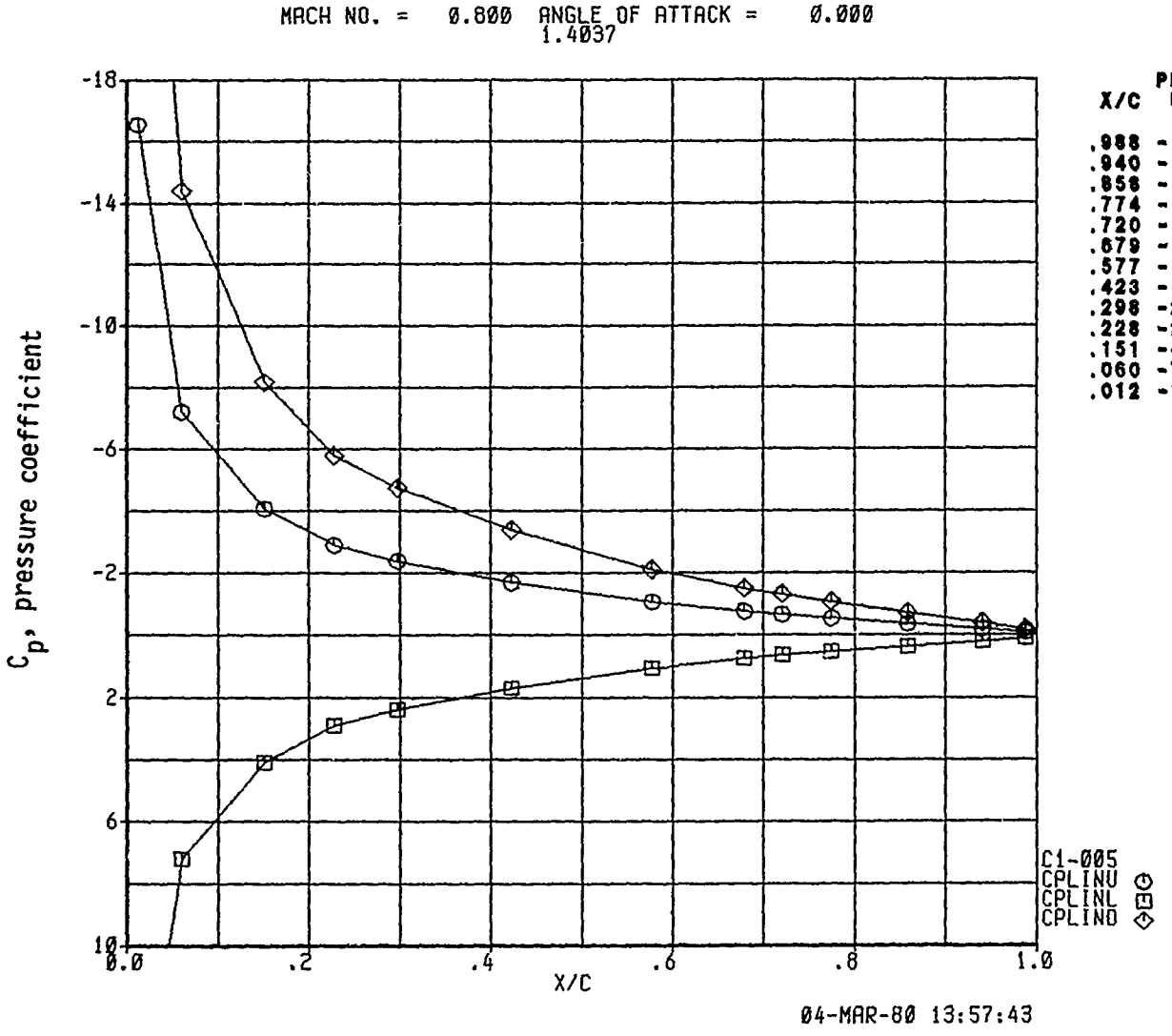
X/C	PRESSURE COEFFICIENT UPPER	LOWER	DIFF
.988	-.0979	0.0979	-.1959
.940	-.2190	0.2190	-.4380
.858	-.4073	0.4073	-.8144
.775	-.6175	0.6175	-1.235
.720	-.7582	0.7582	-1.516
.679	-.8706	0.8705	-1.741
.578	-1.191	1.1914	-2.383
.423	-1.775	1.7749	-3.550
.298	-2.336	2.3363	-4.673
.228	-2.736	2.7356	-5.471
.151	-3.695	3.6951	-7.390
.060	-6.209	6.2094	-12.42
.012	-13.99	13.991	-27.98

Figure 383, Chordwise Pressure Distribution, Real, Configuration 3



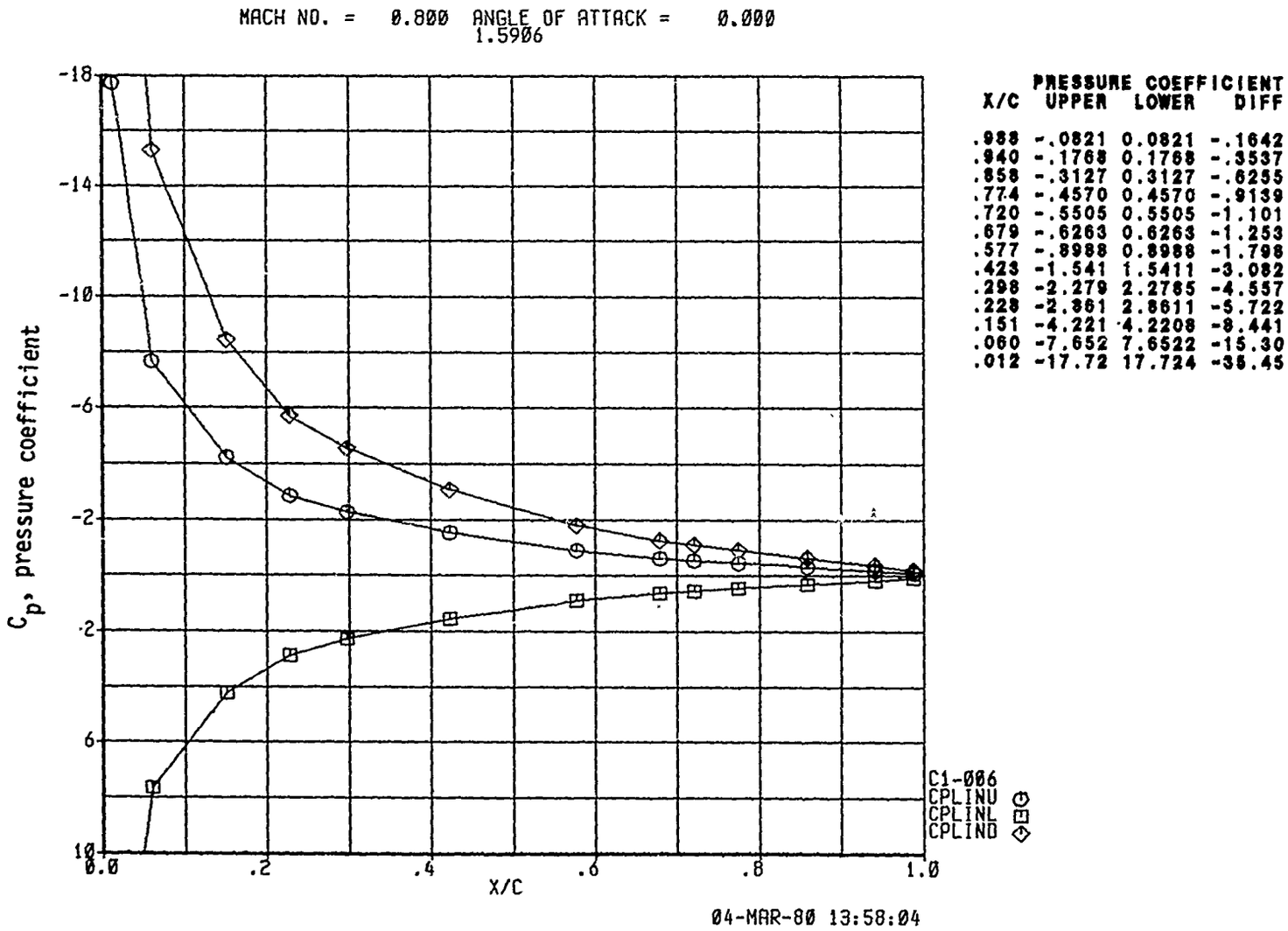
X/C	PRESSURE COEFFICIENT UPPER	LOWER	DIFF
.988	-.0951	0.0951	-.1901
.940	-.2097	0.2097	-.4193
.858	-.3829	0.3829	-.7657
.775	-.5736	0.5736	-1.147
.720	-.7024	0.7024	-1.405
.679	-.8076	0.8076	-1.615
.578	-1.127	1.1274	-2.255
.423	-1.747	1.7468	-3.494
.298	-2.381	2.3812	-4.762
.228	-2.849	2.8485	-5.697
.151	-3.945	3.9450	-7.890
.060	-6.819	6.8190	-13.64
.012	-15.56	15.558	-31.12

Figure 384, Chordwise Pressure Distribution, Real, Configuration 3



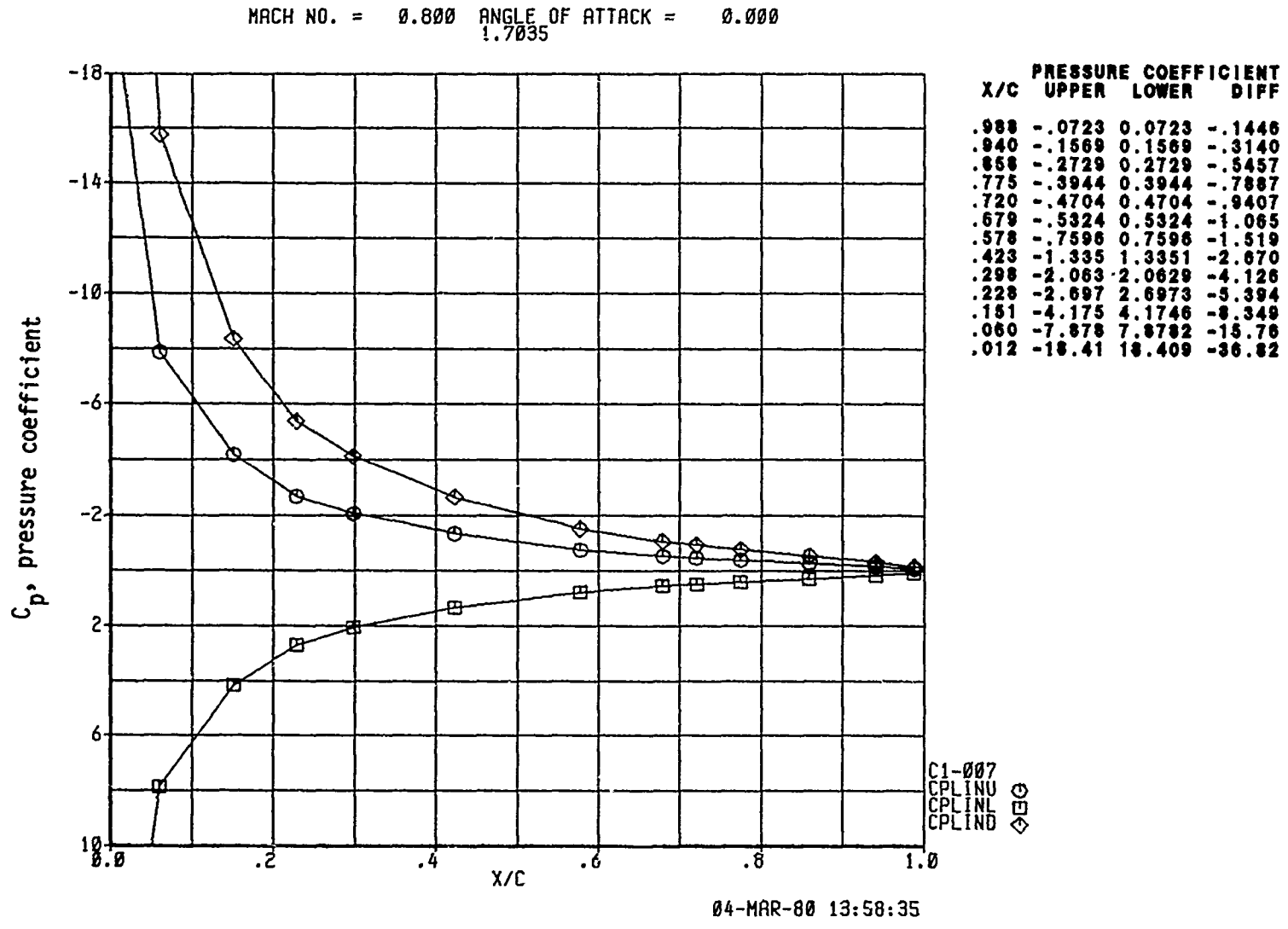
X/C	PRESSURE COEFFICIENT UPPER	LOWER	DIFF
.988	-.0913	0.0913	-.1826
.940	-.1987	0.1987	-.3973
.858	-.3585	0.3585	-.7170
.774	-.5317	0.5317	-1.063
.720	-.6477	0.6477	-1.296
.679	-.7439	0.7439	-1.488
.577	-1.054	1.0541	-2.108
.423	-1.696	1.6955	-3.391
.298	-2.379	2.3786	-4.757
.228	-2.894	2.8935	-5.787
.151	-4.087	4.0870	-8.174
.060	-7.201	7.2006	-14.40
.012	-16.54	16.541	-33.08

Figure 385, Chordwise Pressure Distribution, Real, Configuration 3



X/C	PRESSURE COEFFICIENT UPPER	LOWER	DIFF
.988	-.0821	0.0821	-.1642
.940	-.1768	0.1768	-.3537
.858	-.3127	0.3127	-.6255
.774	-.4570	0.4570	-.9139
.720	-.5505	0.5505	-1.101
.679	-.6263	0.6263	-1.253
.577	-.8988	0.8988	-1.798
.423	-1.541	1.5411	-3.082
.298	-2.279	2.2785	-4.557
.228	-2.861	2.8611	-5.722
.151	-4.221	4.2208	-8.441
.060	-7.652	7.6522	-15.30
.012	-17.72	17.724	-35.45

Figure 386, Chordwise Pressure Distribution, Real, Configuration 3



X/C	PRESSURE COEFFICIENT UPPER	LOWER	DIFF
.988	-.0723	0.0723	-.1446
.940	-.1569	0.1569	-.3140
.858	-.2729	0.2729	-.5457
.775	-.3944	0.3944	-.7887
.720	-.4704	0.4704	-.9407
.679	-.5324	0.5324	-1.065
.578	-.7596	0.7596	-1.519
.423	-1.335	1.3351	-2.670
.298	-2.063	2.0629	-4.126
.228	-2.697	2.6973	-5.394
.151	-4.175	4.1746	-8.349
.060	-7.878	7.8782	-15.76
.012	-18.41	18.409	-36.82

Figure 387, Chordwise Pressure Distribution, Real, Configuration 3

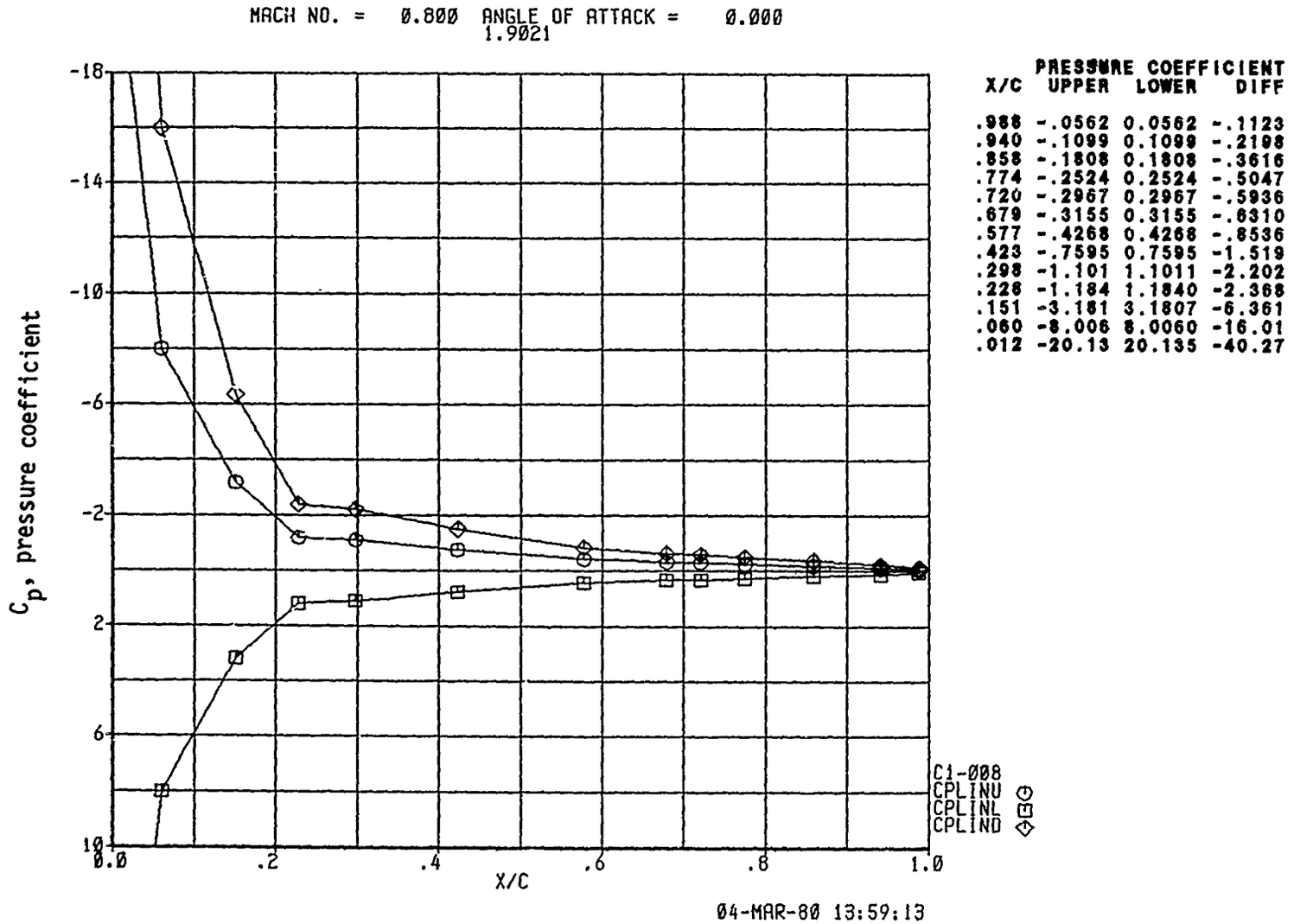
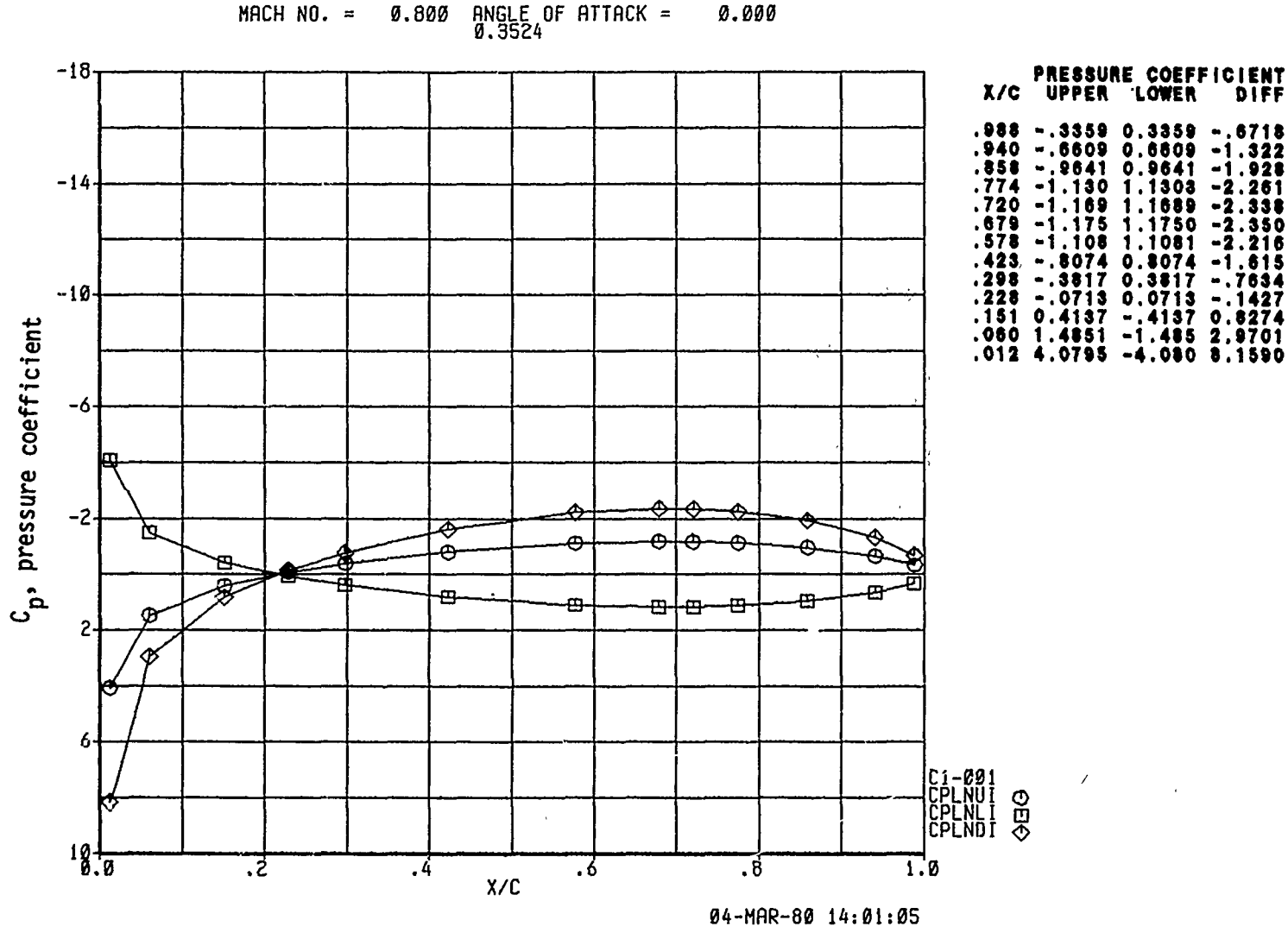


Figure 388, Chordwise Pressure Distribution, Real, Configuration 3



X/C	PRESSURE COEFFICIENT UPPER	LOWER	DIFF
.988	-.3359	0.3359	-.6718
.940	-.6609	0.6609	-1.322
.858	-.9641	0.9641	-1.928
.774	-1.130	1.1303	-2.261
.720	-1.169	1.1689	-2.338
.679	-1.175	1.1750	-2.350
.578	-1.108	1.1081	-2.216
.423	-.8074	0.8074	-1.615
.298	-.3817	0.3817	-.7634
.228	-.0713	0.0713	-.1427
.151	0.4137	-.4137	0.8274
.060	1.4851	-1.485	2.9701
.012	4.0795	-4.080	8.1590

Figure 389, Chordwise Pressure Distribution, Imaginary, Configuration 3

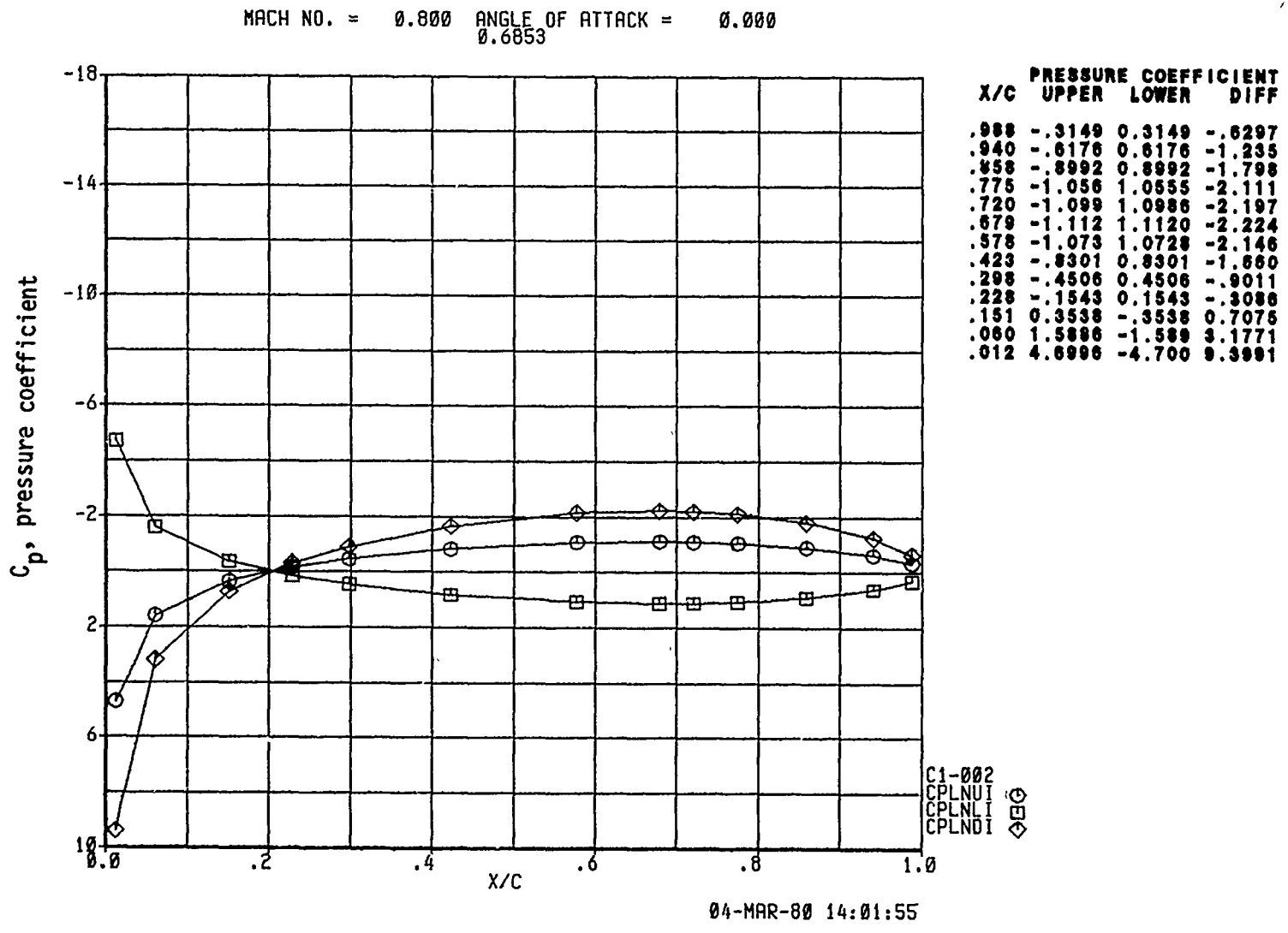
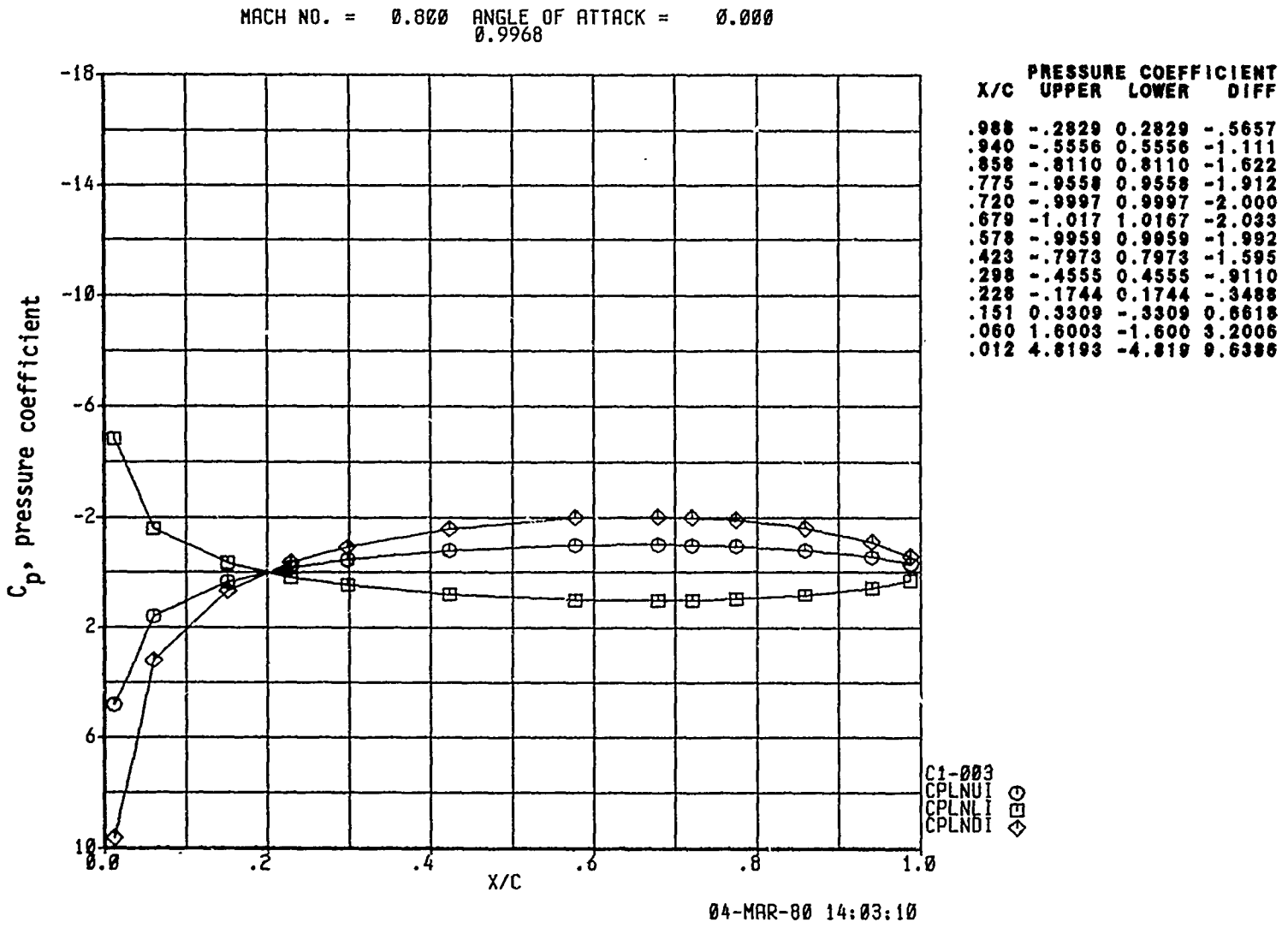
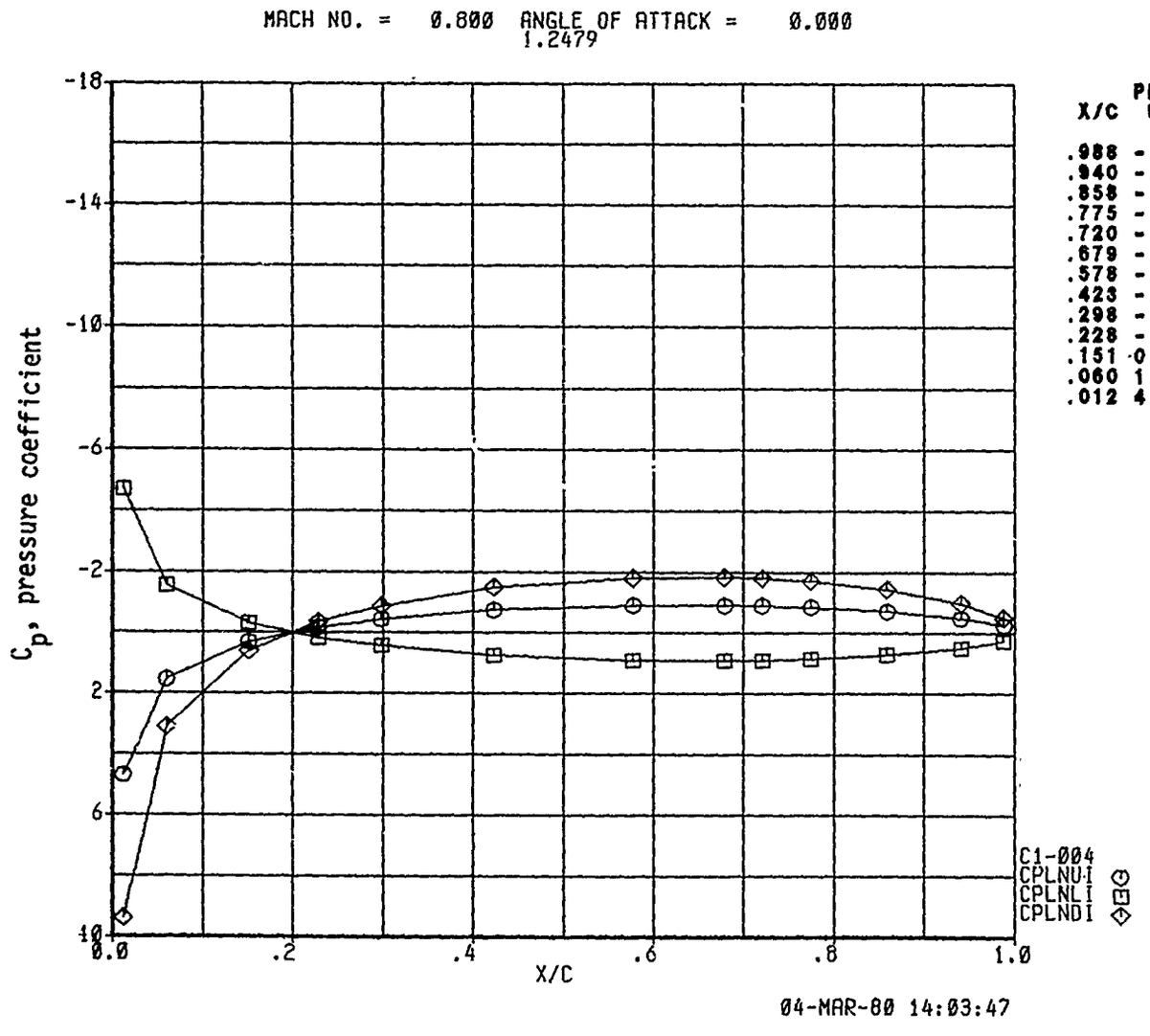


Figure 390, Chordwise Pressure Distribution, Imaginary, Configuration 3



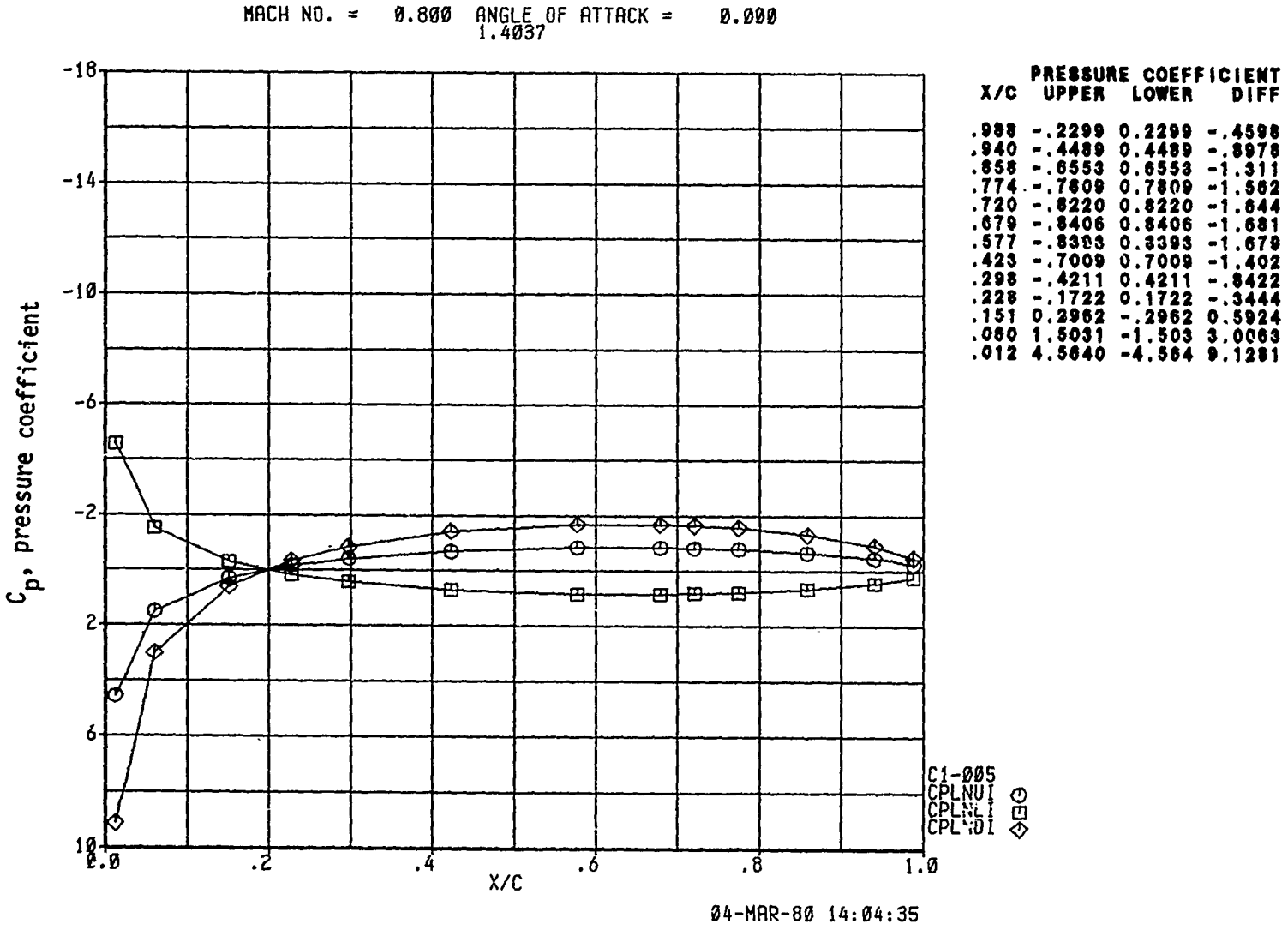
X/C	PRESSURE COEFFICIENT UPPER	LOWER	DIFF
.988	-.2829	0.2829	-.5657
.940	-.5556	0.5556	-1.111
.858	-.8110	0.8110	-1.622
.775	-.9558	0.9558	-1.912
.720	-.9997	0.9997	-2.000
.679	-1.017	1.0167	-2.033
.578	-.9959	0.9959	-1.992
.423	-.7973	0.7973	-1.595
.298	-.4555	0.4555	-.9110
.228	-.1744	0.1744	-.3488
.151	0.3309	-.3309	0.6618
.060	1.6003	-1.600	3.2006
.012	4.8193	-4.819	9.6386

Figure 391, Chordwise Pressure Distribution, Imaginary, Configuration 3



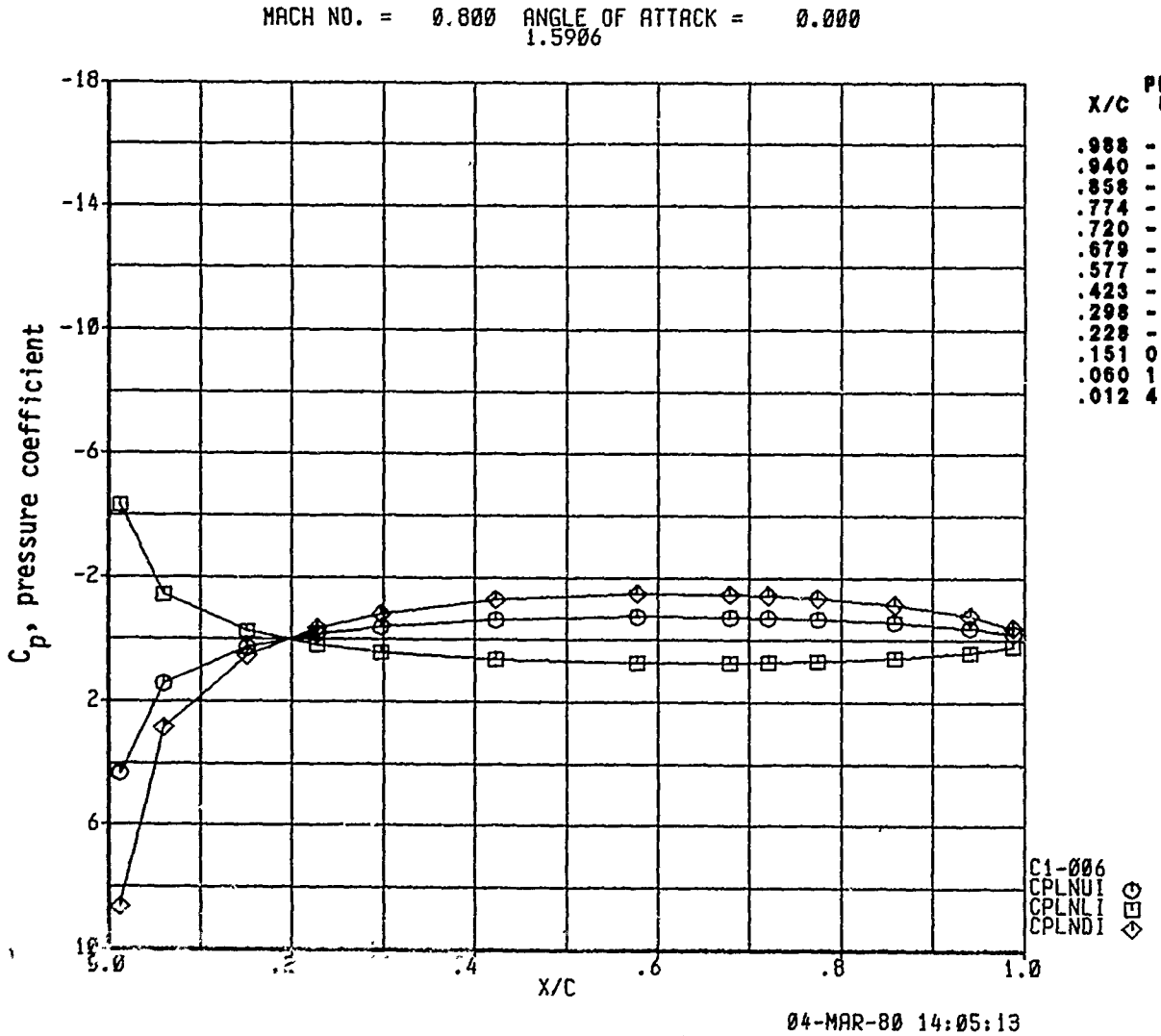
X/C	PRESSURE COEFFICIENT UPPER	LOWER	DIFF
.988	-.2511	0.2511	-.5022
.940	-.4928	0.4928	-.9856
.858	-.7203	0.7203	-1.441
.775	-.8539	0.8539	-1.708
.720	-.8967	0.8967	-1.793
.679	-.9150	0.9150	-1.830
.578	-.9061	0.9061	-1.812
.423	-.7429	0.7429	-1.486
.298	-.4363	0.4363	-.8727
.228	-.1727	0.1727	-.3454
.151	0.3126	-.3126	0.6251
.060	1.5520	-1.552	3.1040
.012	4.7041	-4.704	9.4081

Figure 392, Chordwise Pressure Distribution, Imaginary, Configuration 3



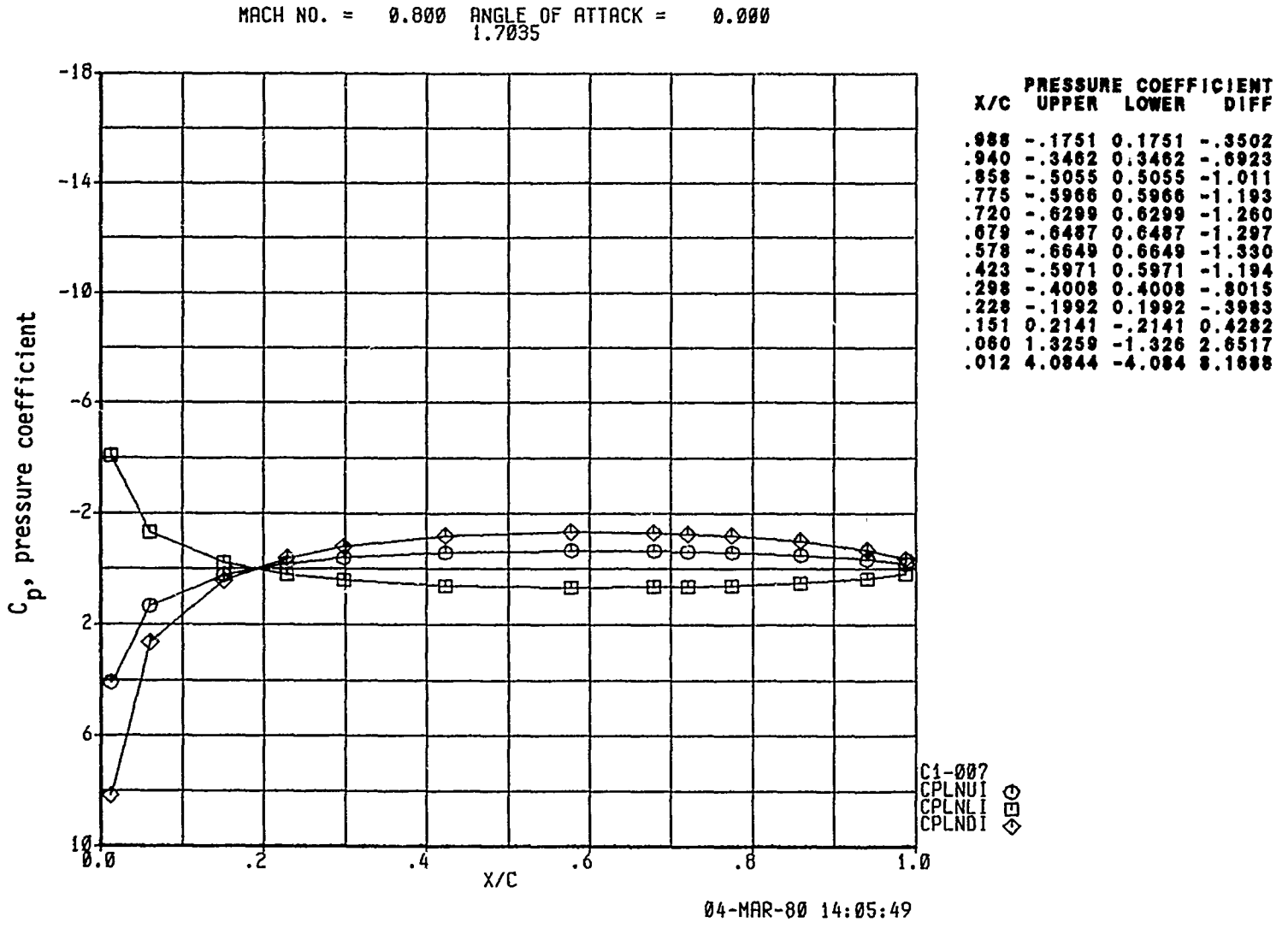
X/C	PRESSURE COEFFICIENT UPPER	LOWER	DIFF
.988	-.2299	0.2299	-.4598
.940	-.4489	0.4489	-.8978
.858	-.6553	0.6553	-1.311
.774	-.7809	0.7809	-1.562
.720	-.8220	0.8220	-1.644
.679	-.8406	0.8406	-1.681
.577	-.8393	0.8393	-1.679
.423	-.7009	0.7009	-1.402
.298	-.4211	0.4211	-.8422
.228	-.1722	0.1722	-.3444
.151	0.2962	-.2962	0.5924
.060	1.5031	-1.503	3.0063
.012	4.5640	-4.564	9.1281

Figure 393, Chordwise Pressure Distribution, Imaginary, Configuration 3



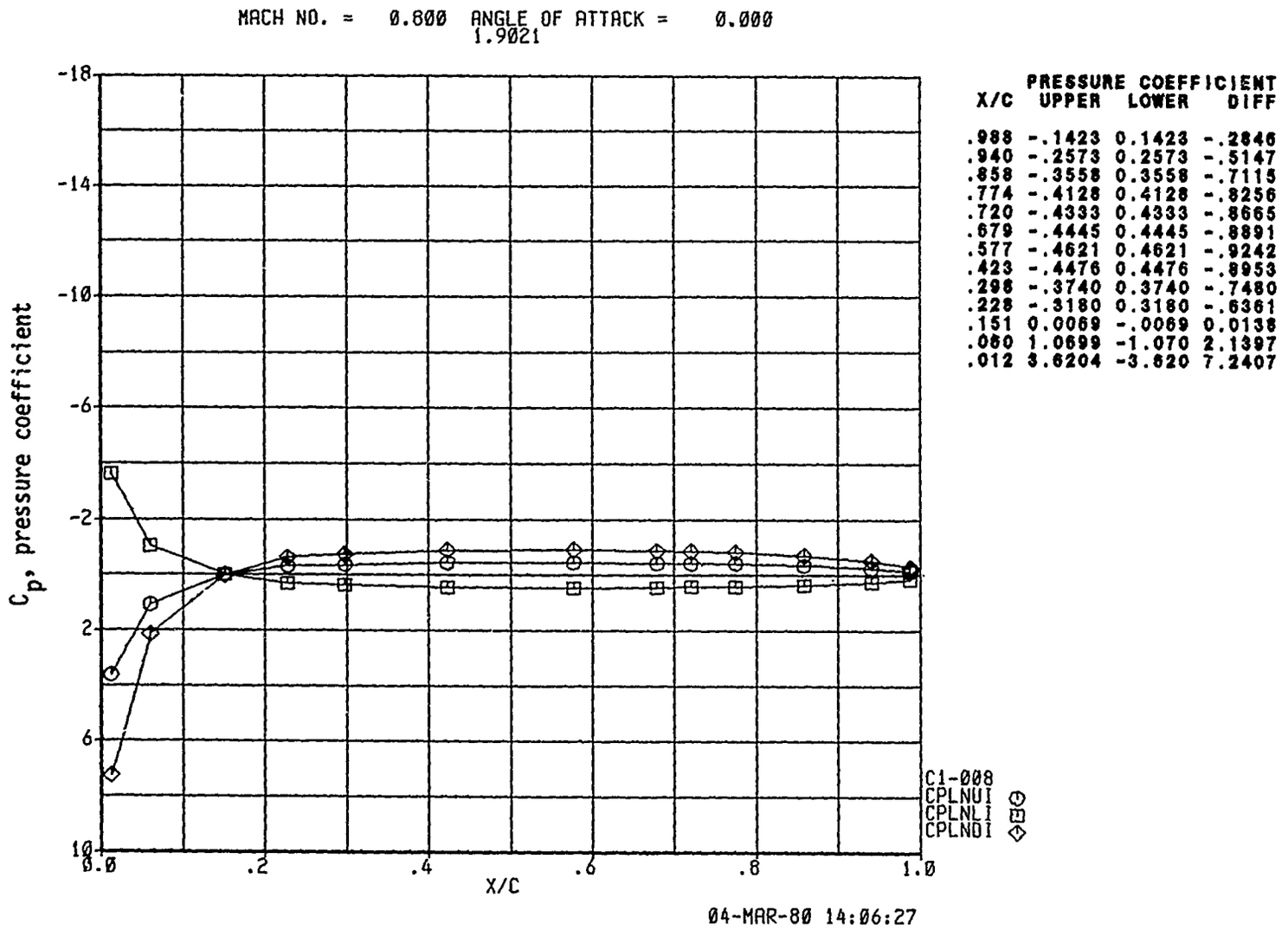
X/C	PRESSURE COEFFICIENT UPPER	LOWER	DIFF
.988	-.1999	0.1999	-.3998
.940	-.3899	0.3899	-.7798
.858	-.5675	0.5675	-1.135
.774	-.6771	0.6771	-1.354
.720	-.7150	0.7150	-1.430
.679	-.7339	0.7339	-1.468
.577	-.7438	0.7438	-1.488
.423	-.6436	0.6436	-1.287
.298	-.4064	0.4064	-.8126
.228	-.1822	0.1822	-.3643
.151	0.2604	-.2604	0.5207
.060	1.4150	-1.415	2.8301
.012	4.3140	-4.314	8.6282

Figure 394, Chordwise Pressure Distribution, Imaginary, Configuration 3



X/C	PRESSURE COEFFICIENT UPPER	LOWER	DIFF
.988	-.1751	0.1751	-.3502
.940	-.3462	0.3462	-.6923
.858	-.5055	0.5055	-1.011
.775	-.5966	0.5966	-1.193
.720	-.6299	0.6299	-1.260
.679	-.6487	0.6487	-1.297
.578	-.6649	0.6649	-1.330
.423	-.5971	0.5971	-1.194
.298	-.4008	0.4008	-.8015
.228	-.1992	0.1992	-.3983
.151	0.2141	-.2141	0.4282
.060	1.3259	-1.326	2.6517
.012	4.0844	-4.084	8.1688

Figure 395, Chordwise Pressure Distribution, Imaginary, Configuration 3



X/C	PRESSURE COEFFICIENT UPPER	LOWER	DIFF
.988	-.1423	0.1423	-.2846
.940	-.2573	0.2573	-.5147
.858	-.3558	0.3558	-.7115
.774	-.4128	0.4128	-.8256
.720	-.4333	0.4333	-.8665
.679	-.4445	0.4445	-.8891
.577	-.4621	0.4621	-.9242
.423	-.4476	0.4476	-.8953
.298	-.3740	0.3740	-.7480
.228	-.3180	0.3180	-.6361
.151	0.0069	-.0069	0.0138
.060	1.0699	-1.070	2.1397
.012	3.6204	-3.620	7.2407

Figure 396, Chordwise Pressure Distribution, Imaginary, Configuration 3

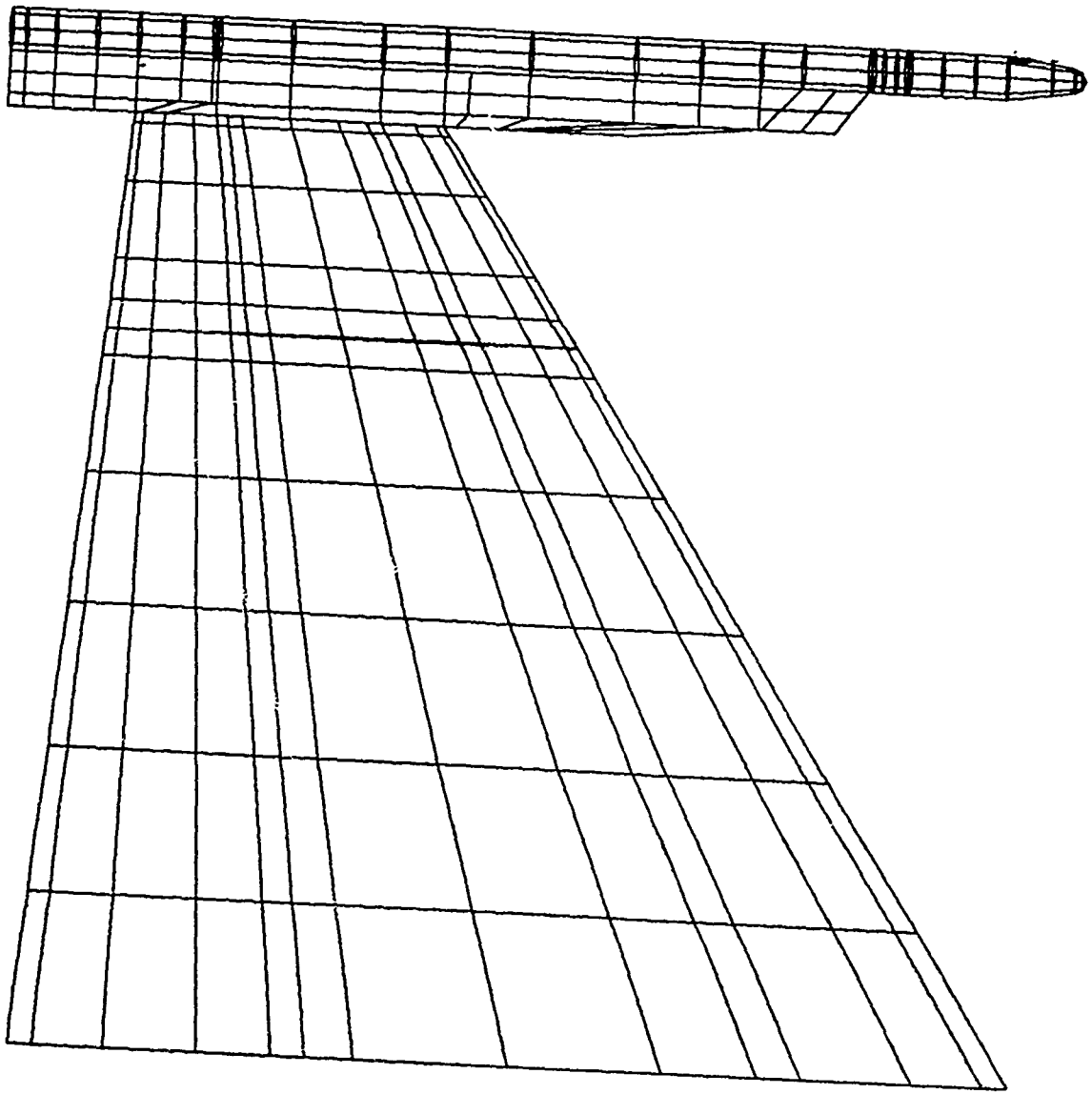


Figure 397, Configuration 4

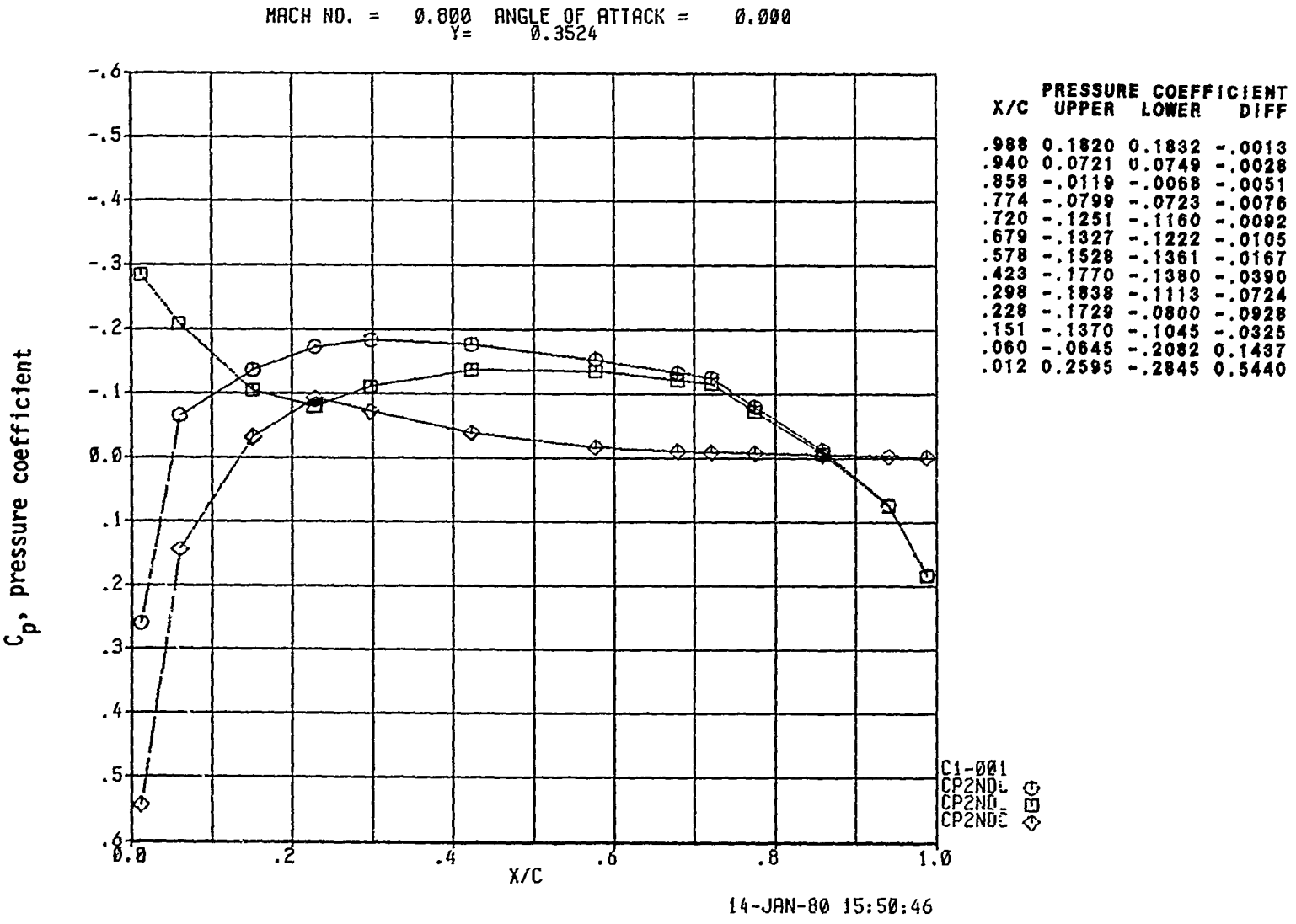


Figure 398, Chordwise Pressure Distribution, Steady, Configuration 4

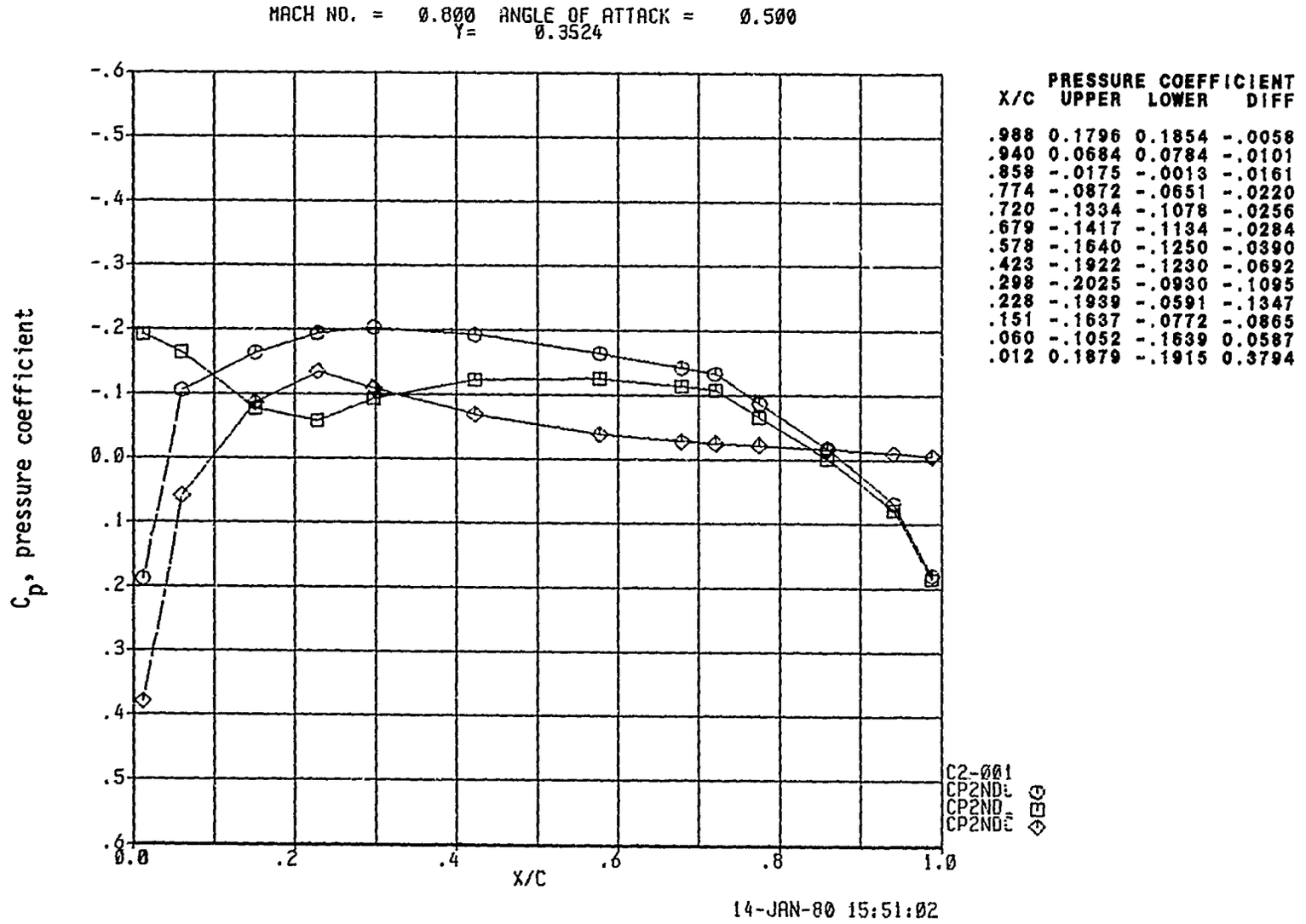
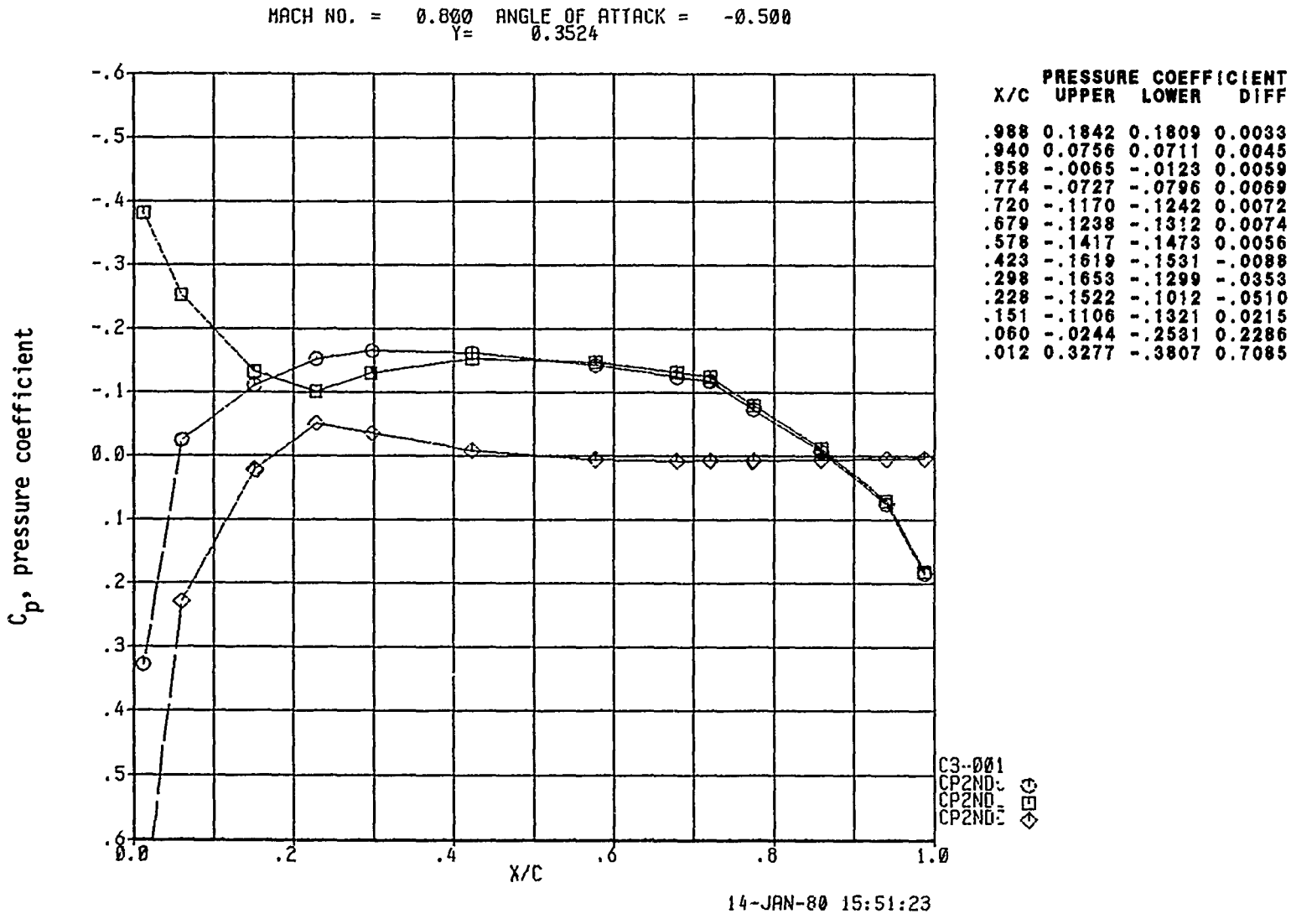
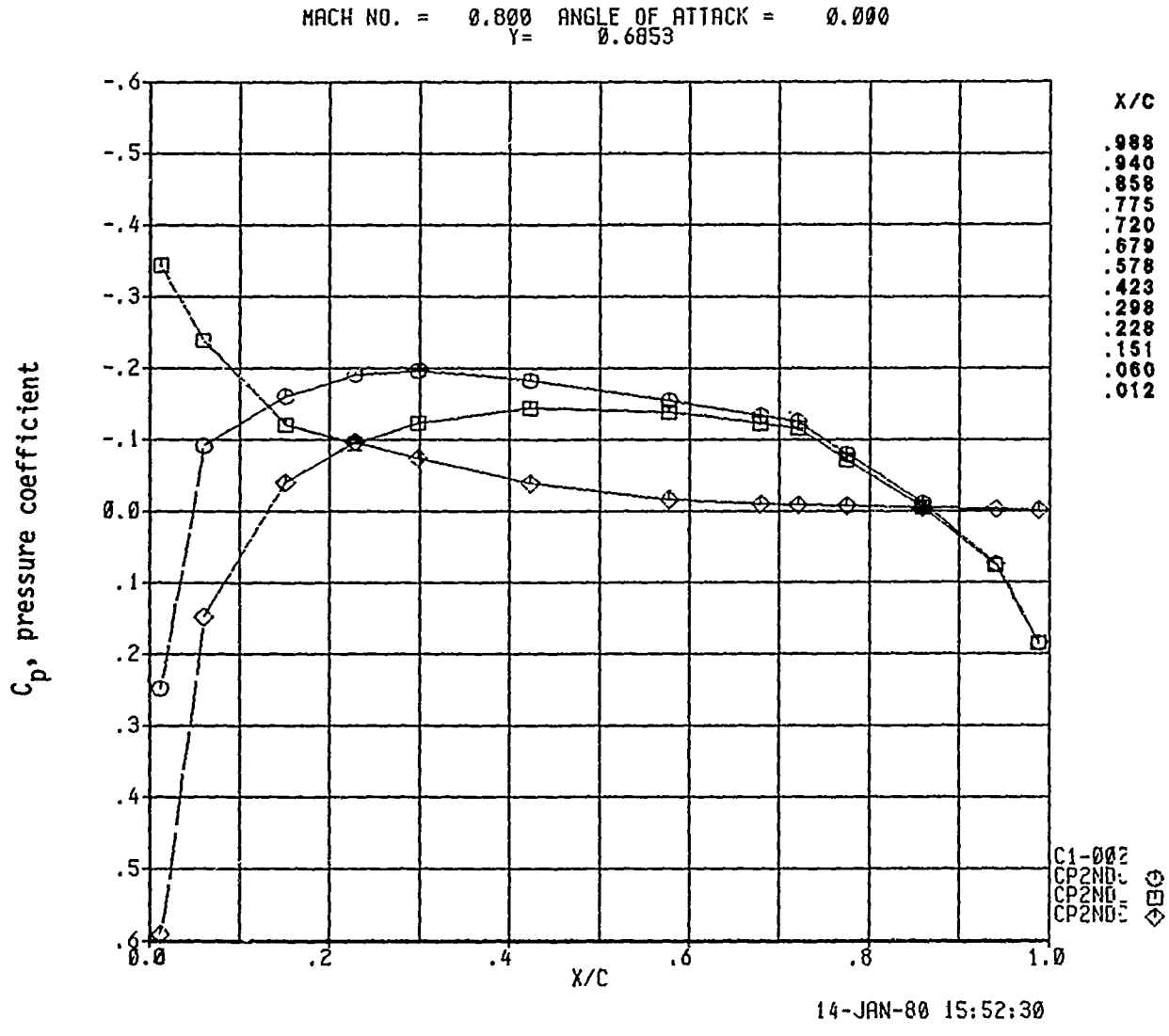


Figure 399, Chordwise Pressure Distribution, Steady, Configuration 4



X/C	PRESSURE COEFFICIENT UPPER	LOWER	DIFF
.988	0.1842	0.1809	0.0033
.940	0.0756	0.0711	0.0045
.858	-.0065	-.0123	0.0059
.774	-.0727	-.0796	0.0069
.720	-.1170	-.1242	0.0072
.679	-.1238	-.1312	0.0074
.578	-.1417	-.1473	0.0056
.423	-.1619	-.1531	-.0088
.298	-.1653	-.1299	-.0353
.228	-.1522	-.1012	-.0510
.151	-.1106	-.1321	0.0215
.060	-.0244	-.2531	0.2286
.012	0.3277	-.3807	0.7085

Figure 400, Chordwise Pressure Distribution, Steady, Configuration 4



X/C	PRESSURE COEFFICIENT UPPER	LOWER	DIFF
.988	0.1838	0.1851	-.0013
.940	0.0731	0.0760	-.0028
.858	-.0110	-.0059	-.0051
.775	-.0791	-.0716	-.0075
.720	-.1249	-.1158	-.0091
.679	-.1329	-.1225	-.0103
.578	-.1542	-.1379	-.0163
.423	-.1829	-.1441	-.0388
.298	-.1966	-.1227	-.0739
.228	-.1909	-.0944	-.0964
.151	-.1600	-.1200	-.0399
.060	-.0916	-.2396	0.1480
.012	0.2478	-.3433	0.5910

Figure 401, Chordwise Pressure Distribution, Steady, Configuration 4

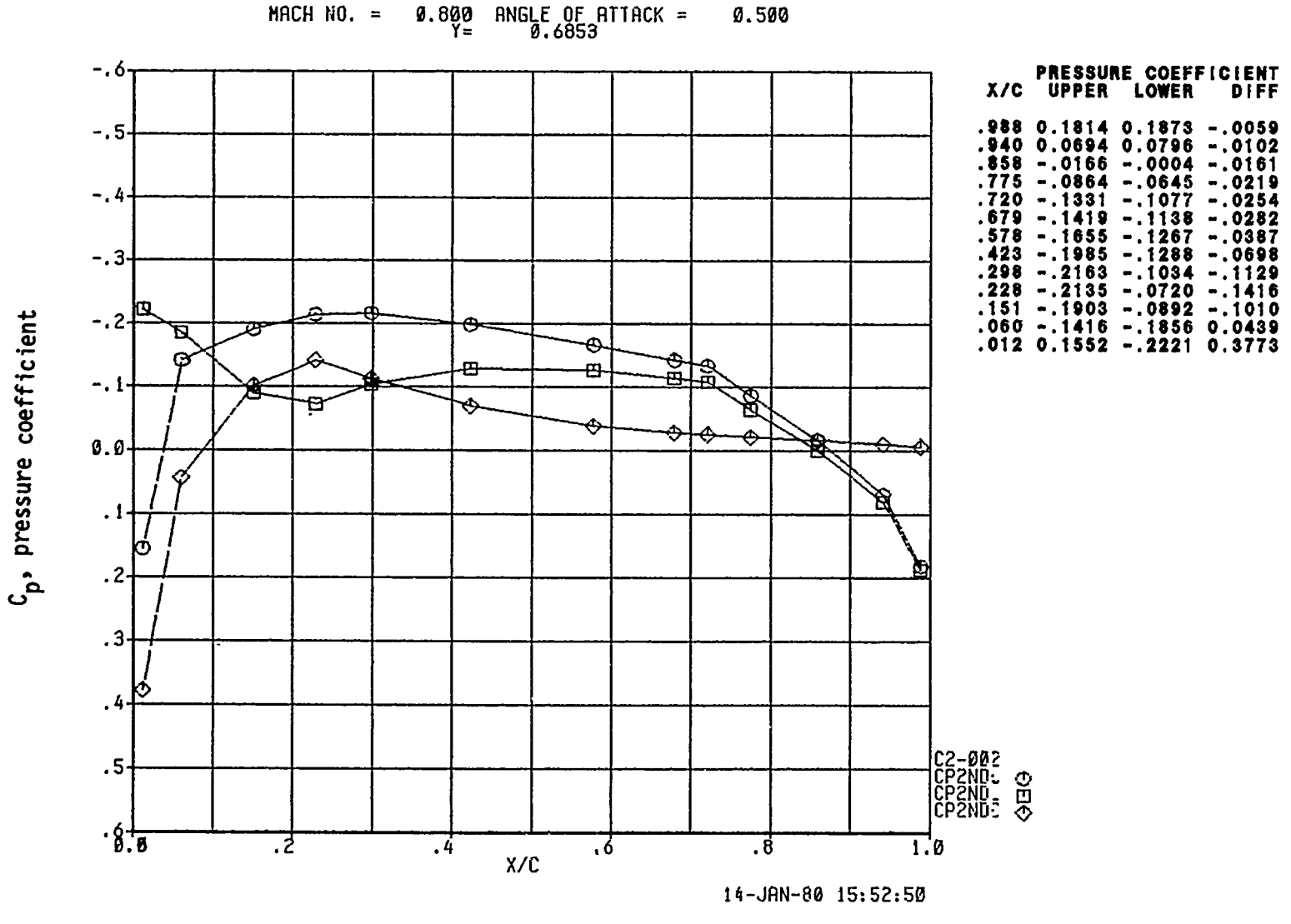
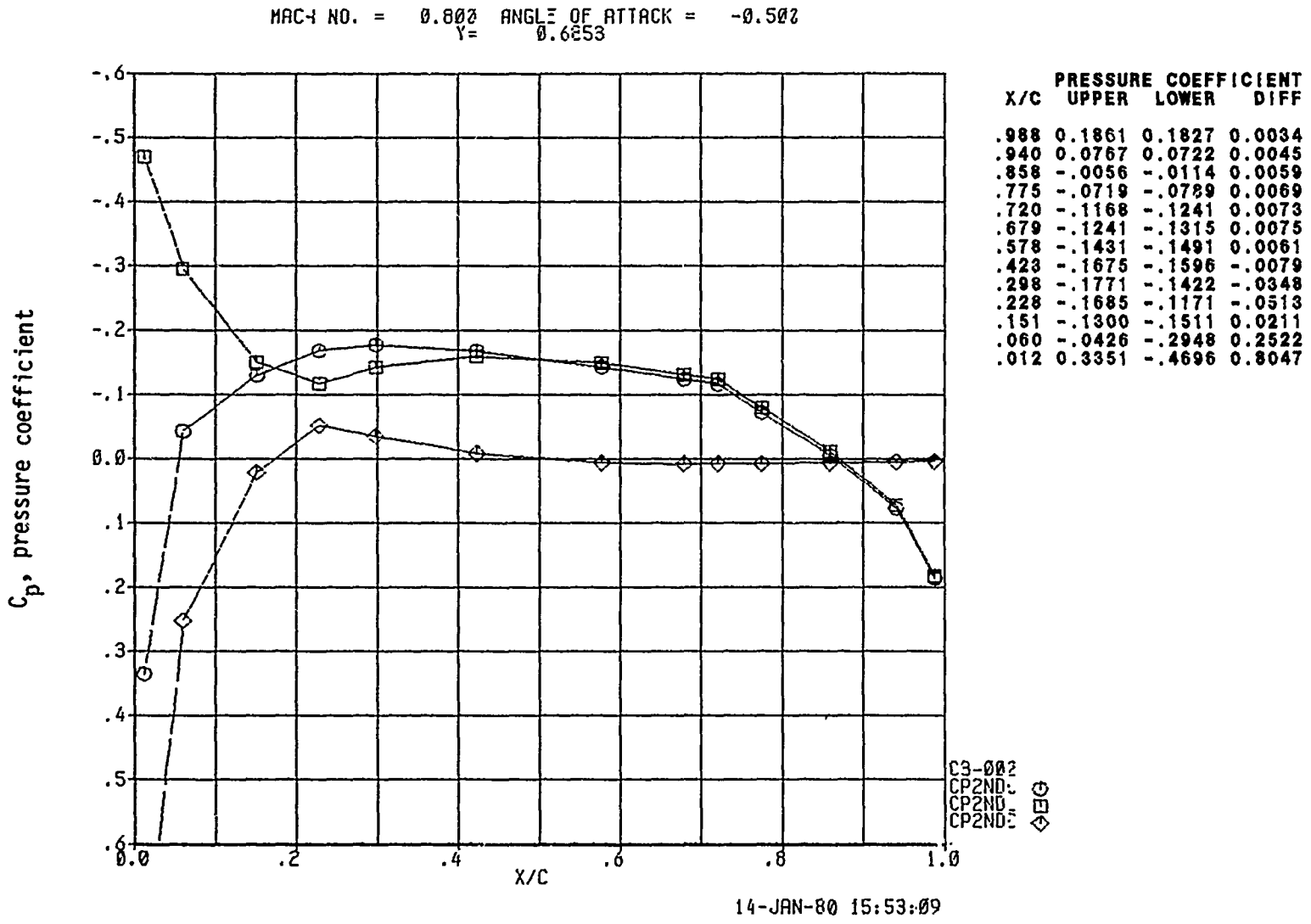
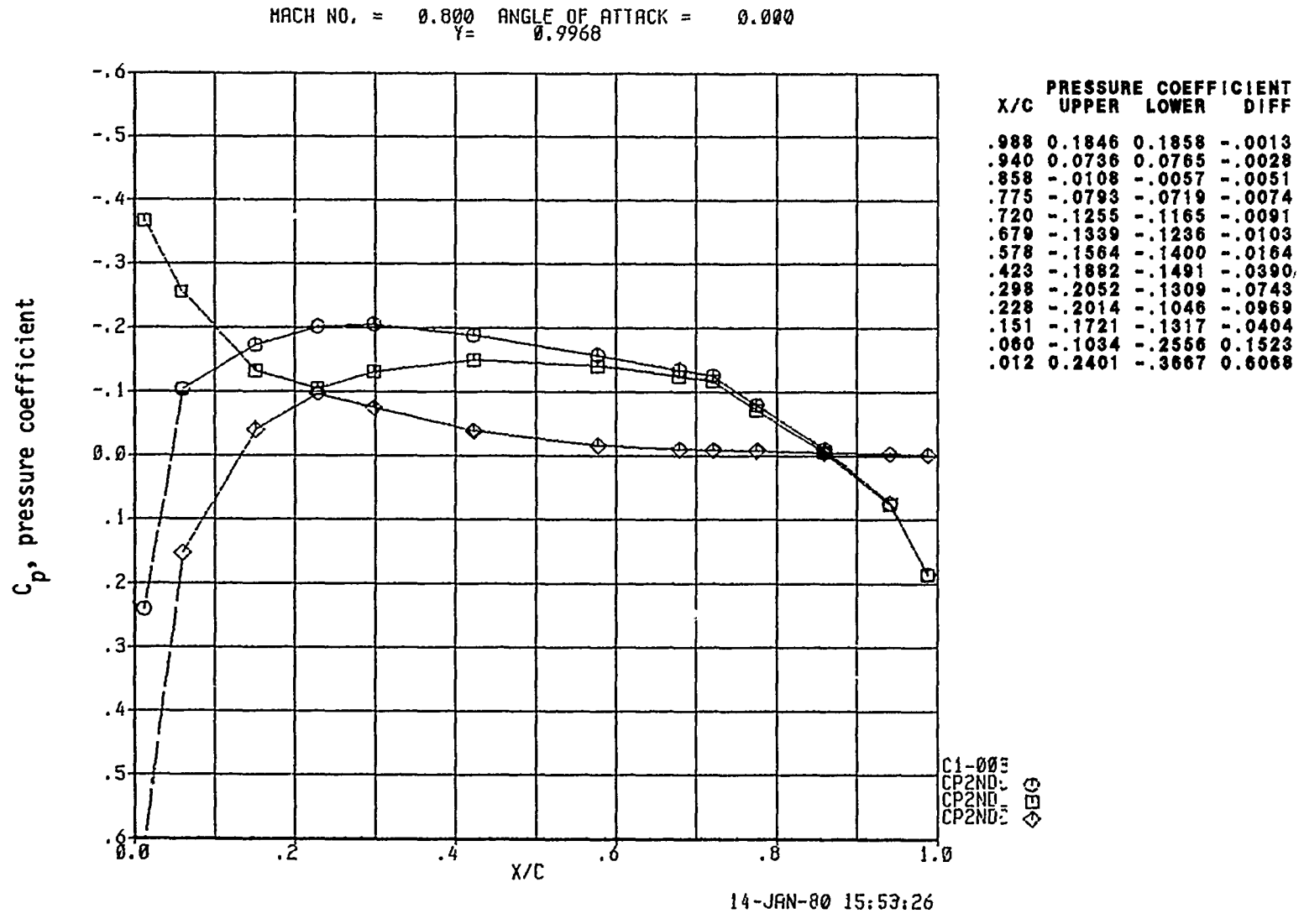


Figure 402, Chordwise Pressure Distribution, Steady, Configuration 4



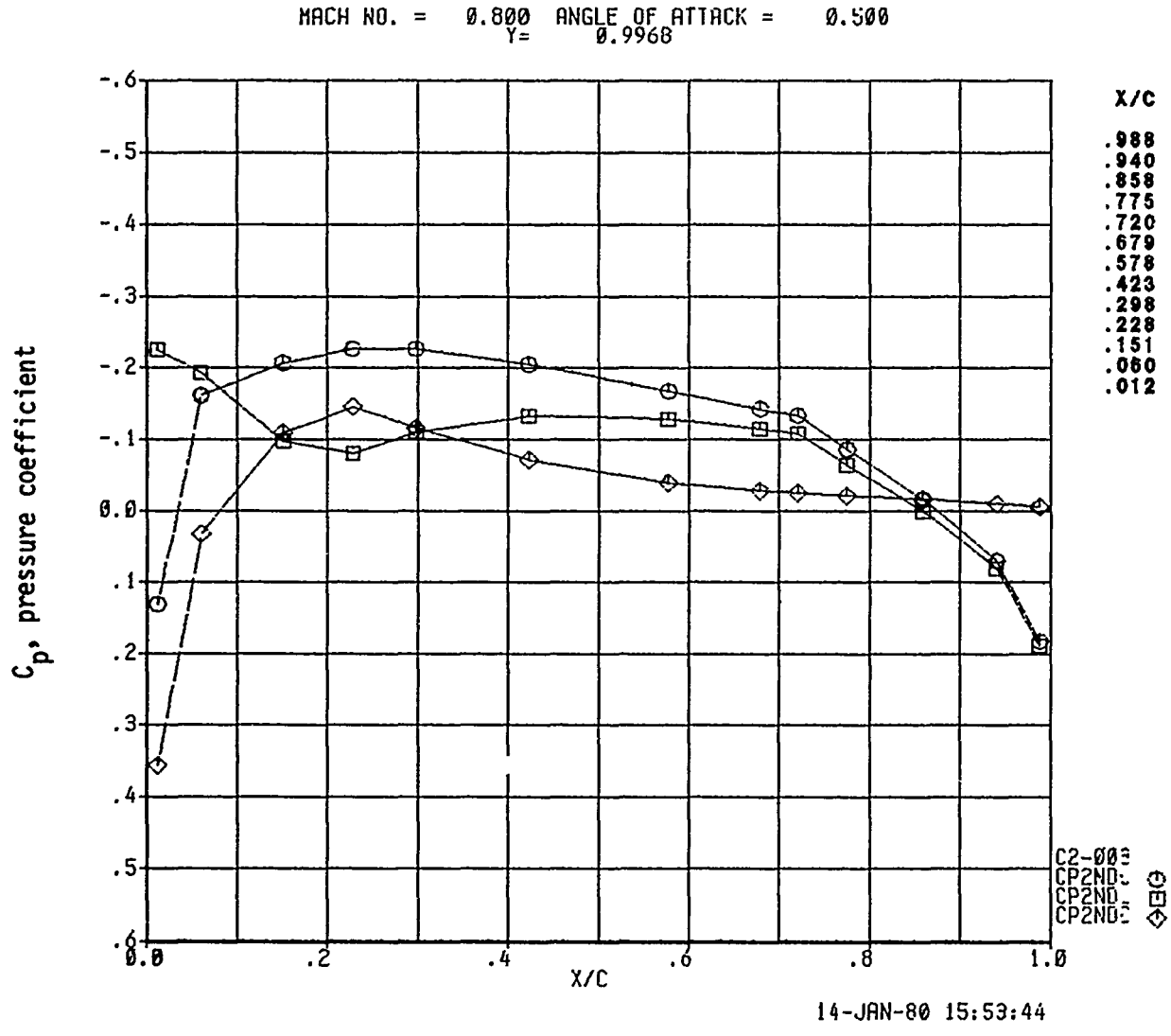
X/C	PRESSURE COEFFICIENT UPPER	LOWER	DIFF
.988	0.1861	0.1827	0.0034
.940	0.0767	0.0722	0.0045
.858	-.0056	-.0114	0.0059
.775	-.0719	-.0789	0.0069
.720	-.1168	-.1241	0.0073
.679	-.1241	-.1315	0.0075
.578	-.1431	-.1491	0.0061
.423	-.1675	-.1596	-.0079
.298	-.1771	-.1422	-.0348
.228	-.1685	-.1171	-.0513
.151	-.1300	-.1511	0.0211
.060	-.0426	-.2948	0.2522
.012	0.3351	-.4696	0.8047

Figure 403, Chordwise Pressure Distribution, Steady, Configuration 4



X/C	PRESSURE COEFFICIENT UPPER	LOWER	DIFF
.988	0.1846	0.1858	-.0013
.940	0.0736	0.0765	-.0028
.858	-.0108	-.0057	-.0051
.775	-.0793	-.0719	-.0074
.720	-.1255	-.1165	-.0091
.679	-.1339	-.1236	-.0103
.578	-.1564	-.1400	-.0164
.423	-.1882	-.1491	-.0390
.298	-.2052	-.1309	-.0743
.228	-.2014	-.1046	-.0969
.151	-.1721	-.1317	-.0404
.060	-.1034	-.2556	0.1523
.012	0.2401	-.3667	0.6068

Figure 404, Chordwise Pressure Distribution, Steady, Configuration 4



X/C	PRESSURE COEFFICIENT UPPER	LOWER	DIFF
.988	0.1821	0.1881	-.0060
.940	0.0699	0.0801	-.0102
.858	-.0164	-.0003	-.0160
.775	-.0866	-.0648	-.0218
.720	-.1338	-.1084	-.0255
.679	-.1430	-.1147	-.0283
.578	-.1679	-.1287	-.0393
.423	-.2045	-.1331	-.0715
.298	-.2265	-.1102	-.1163
.228	-.2264	-.0801	-.1463
.151	-.2062	-.0973	-.1089
.060	-.1614	-.1932	0.0319
.012	0.1310	-.2249	0.3559

Figure 405, Chordwise Pressure Distribution, Steady, Configuration 4

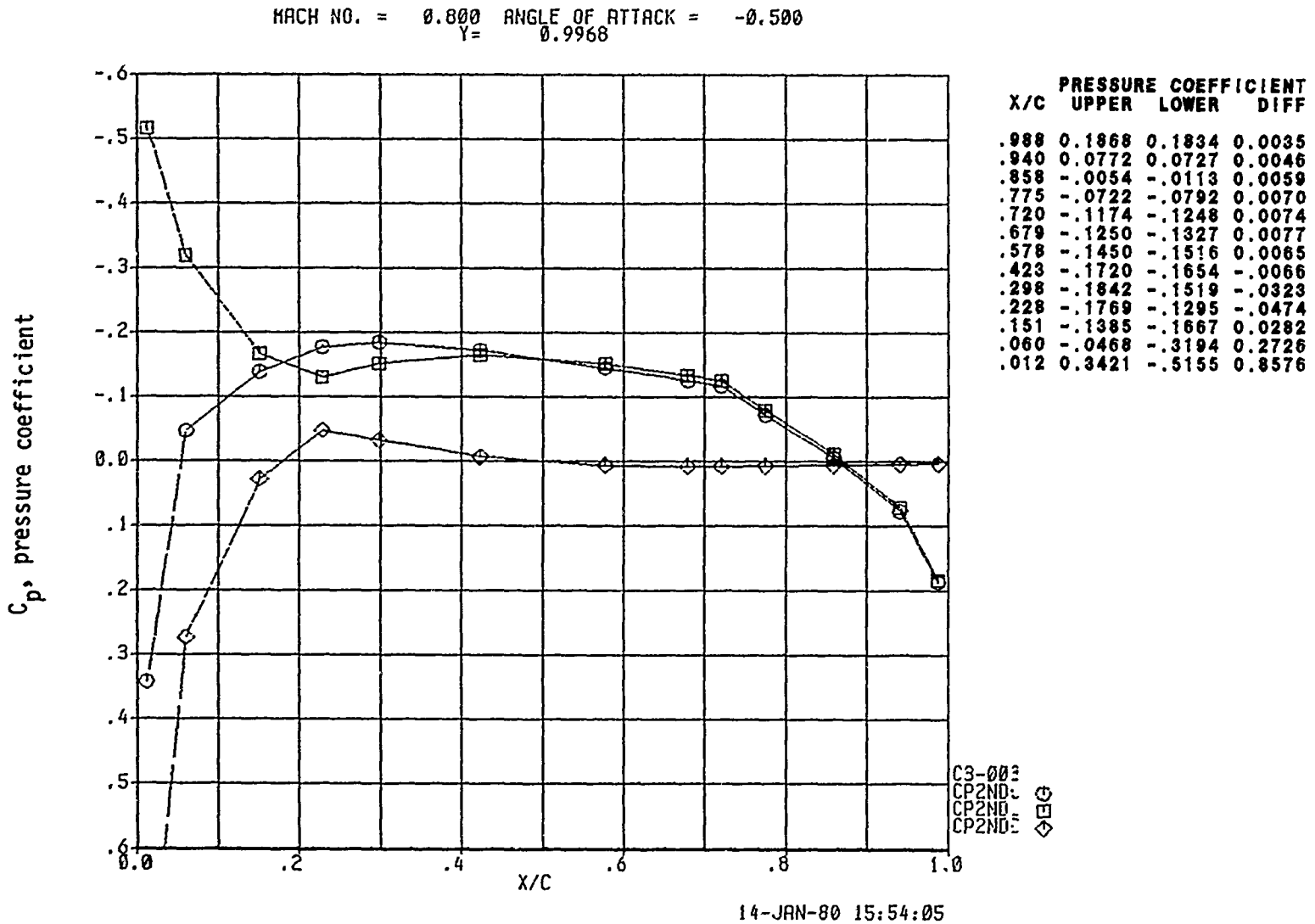
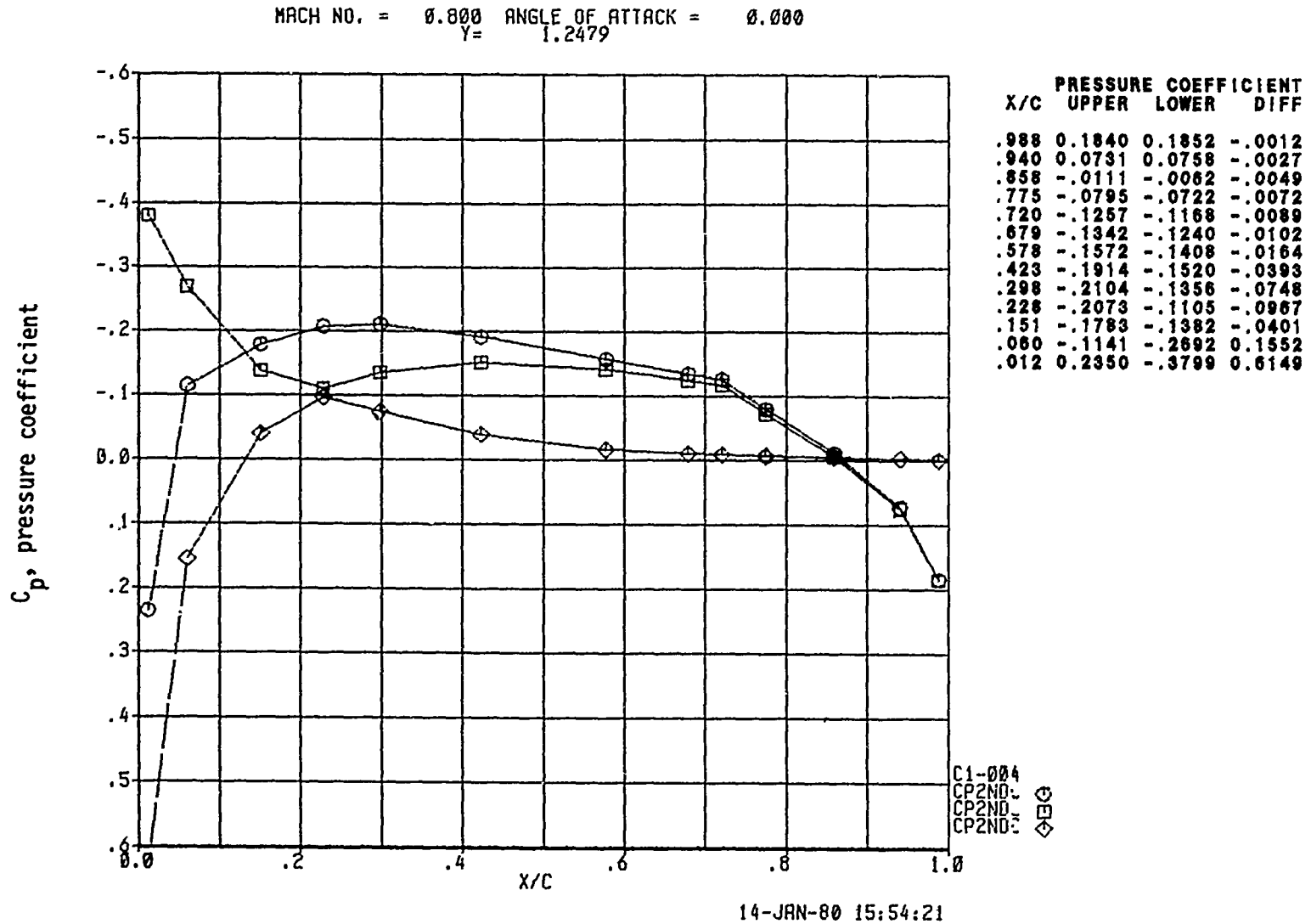
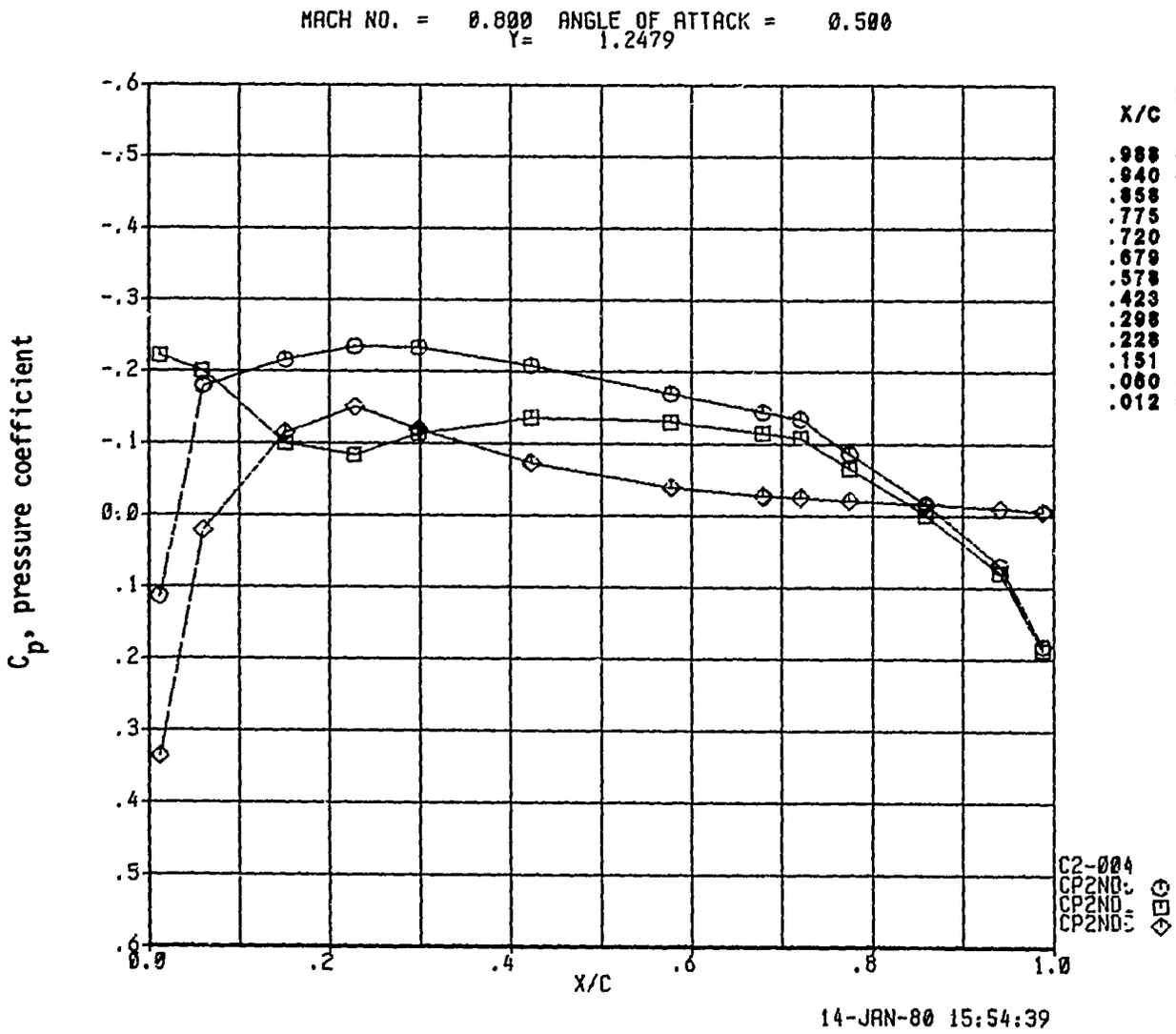


Figure 406, Chordwise Pressure Distribution, Steady, Configuration 4



X/C	PRESSURE COEFFICIENT UPPER	LOWER	DIFF
.988	0.1840	0.1852	-.0012
.940	0.0731	0.0758	-.0027
.858	-.0111	-.0062	-.0049
.775	-.0795	-.0722	-.0072
.720	-.1257	-.1168	-.0089
.679	-.1342	-.1240	-.0102
.578	-.1572	-.1408	-.0164
.423	-.1914	-.1520	-.0393
.298	-.2104	-.1356	-.0748
.226	-.2073	-.1105	-.0967
.151	-.1783	-.1382	-.0401
.060	-.1141	-.2692	0.1552
.012	0.2350	-.3799	0.6149

Figure 407, Chordwise Pressure Distribution, Steady, Configuration 4



X/C	PRESSURE COEFFICIENT UPPER	LOWER	DIFF
.988	0.1815	0.1875	-.0060
.940	0.0693	0.0794	-.0100
.858	-.0166	-.0008	-.0158
.775	-.0866	-.0652	-.0214
.720	-.1338	-.1088	-.0251
.679	-.1432	-.1152	-.0280
.578	-.1689	-.1294	-.0395
.423	-.2083	-.1355	-.0729
.298	-.2331	-.1136	-.1195
.228	-.2342	-.0841	-.1500
.151	-.2156	-.1007	-.1150
.060	-.1784	-.2002	0.0219
.012	0.1129	-.2222	0.3351

Figure 408, Chordwise Pressure Distribution, Steady, Configuration 4

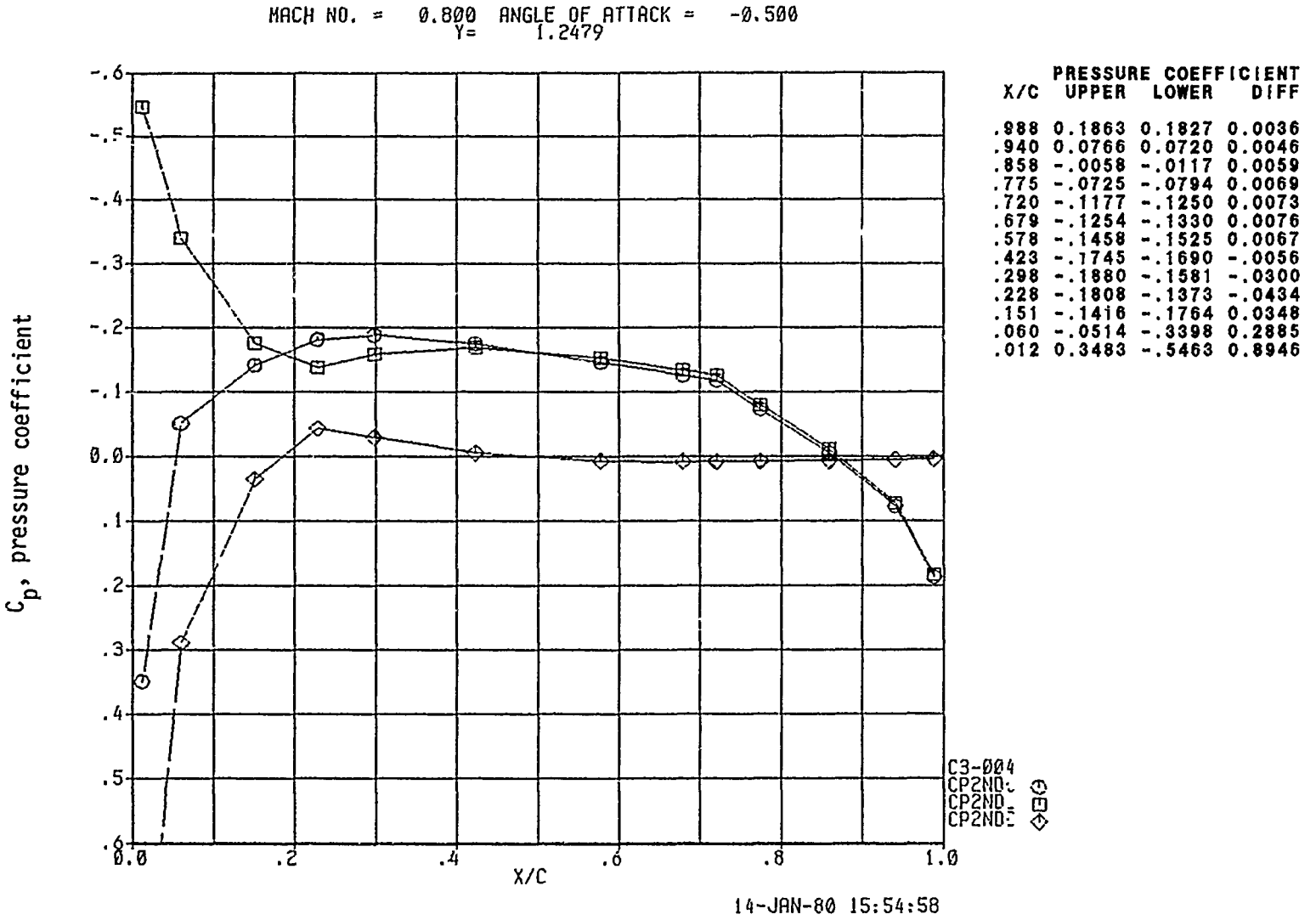


Figure 409, Chordwise Pressure Distribution, Steady, Configuration 4

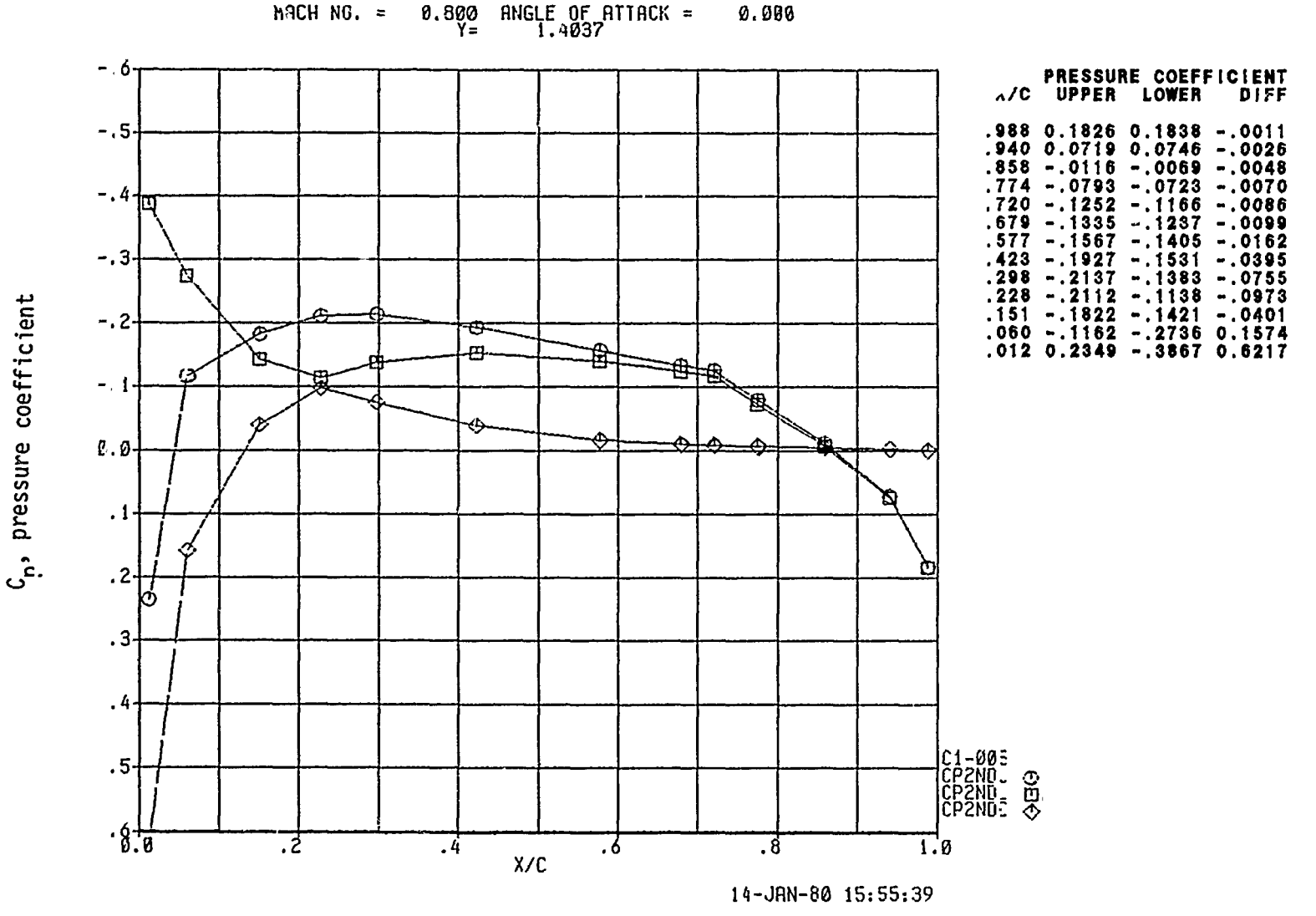


Figure 410, Chordwise Pressure Distribution, Steady, Configuration 4

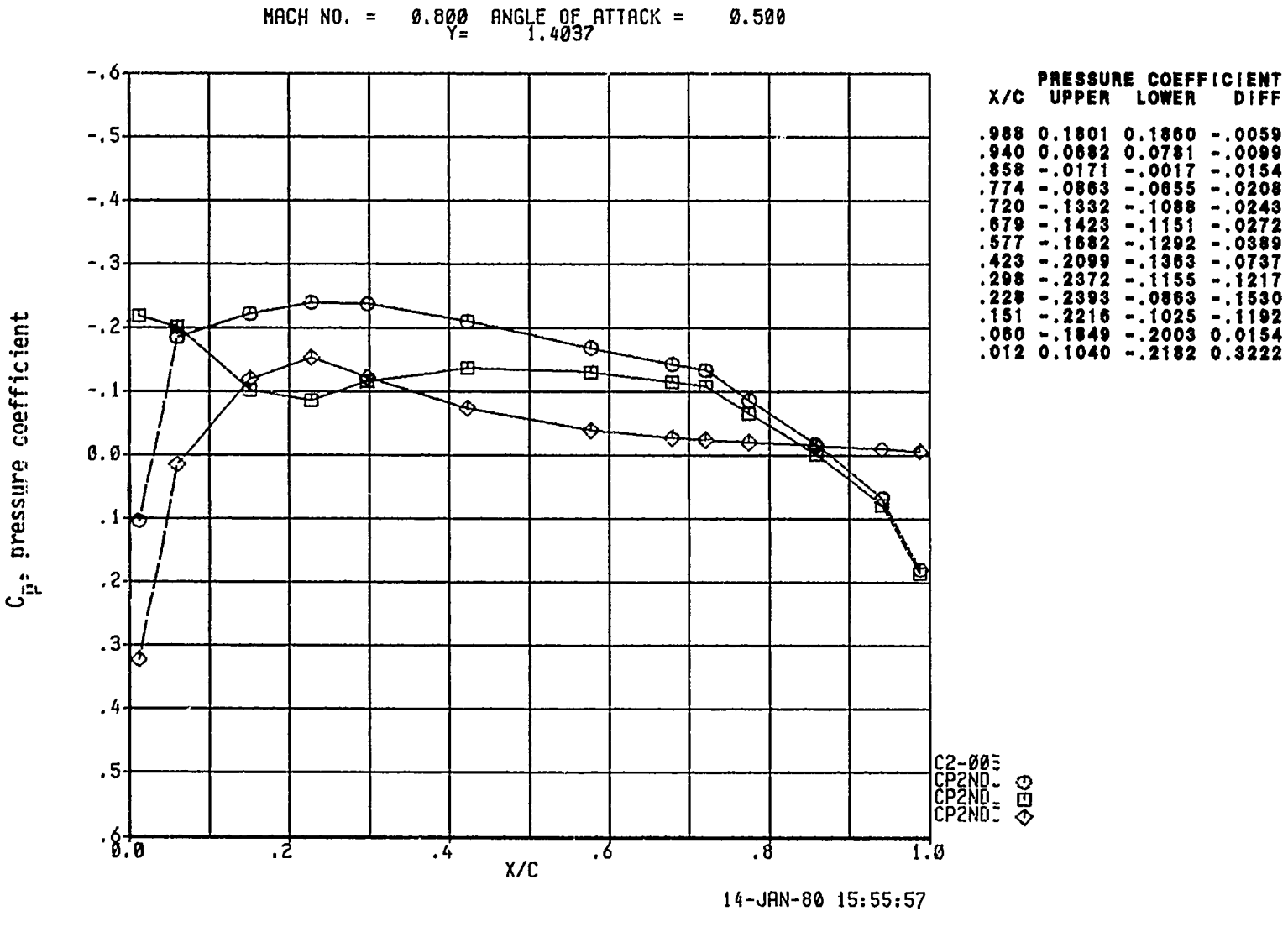
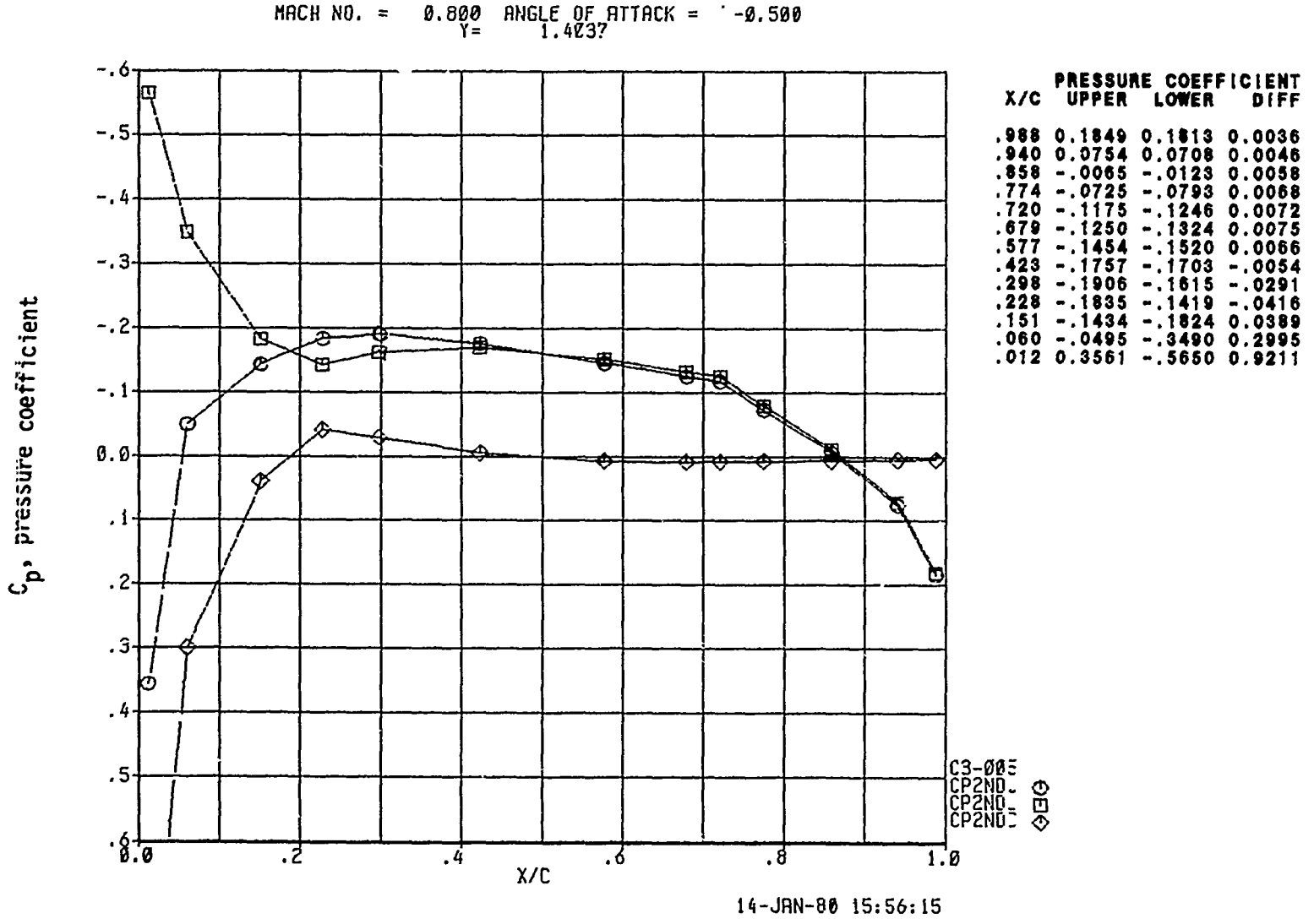
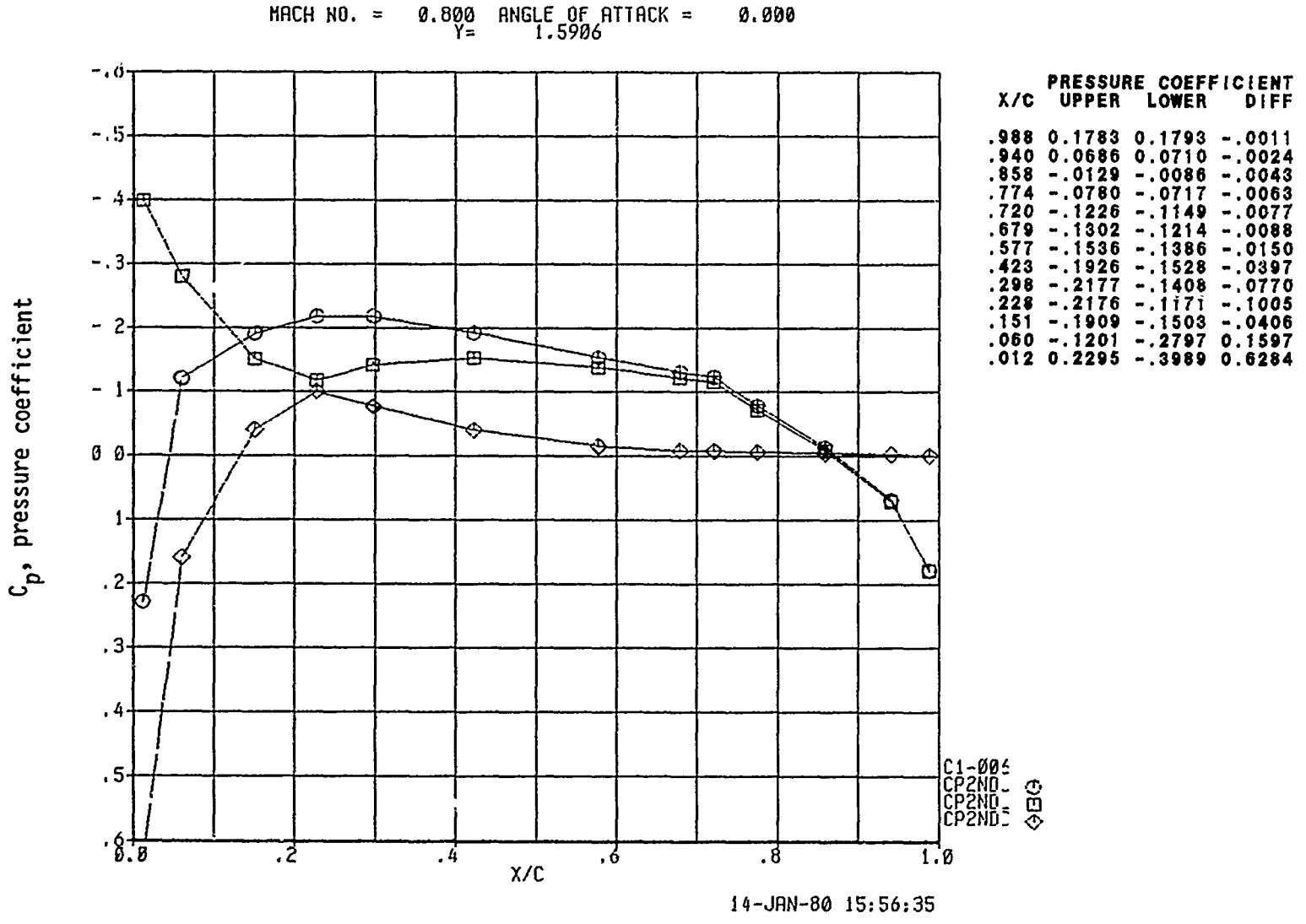


Figure 411, Chordwise Pressure Distribution, Steady, Configuration 4



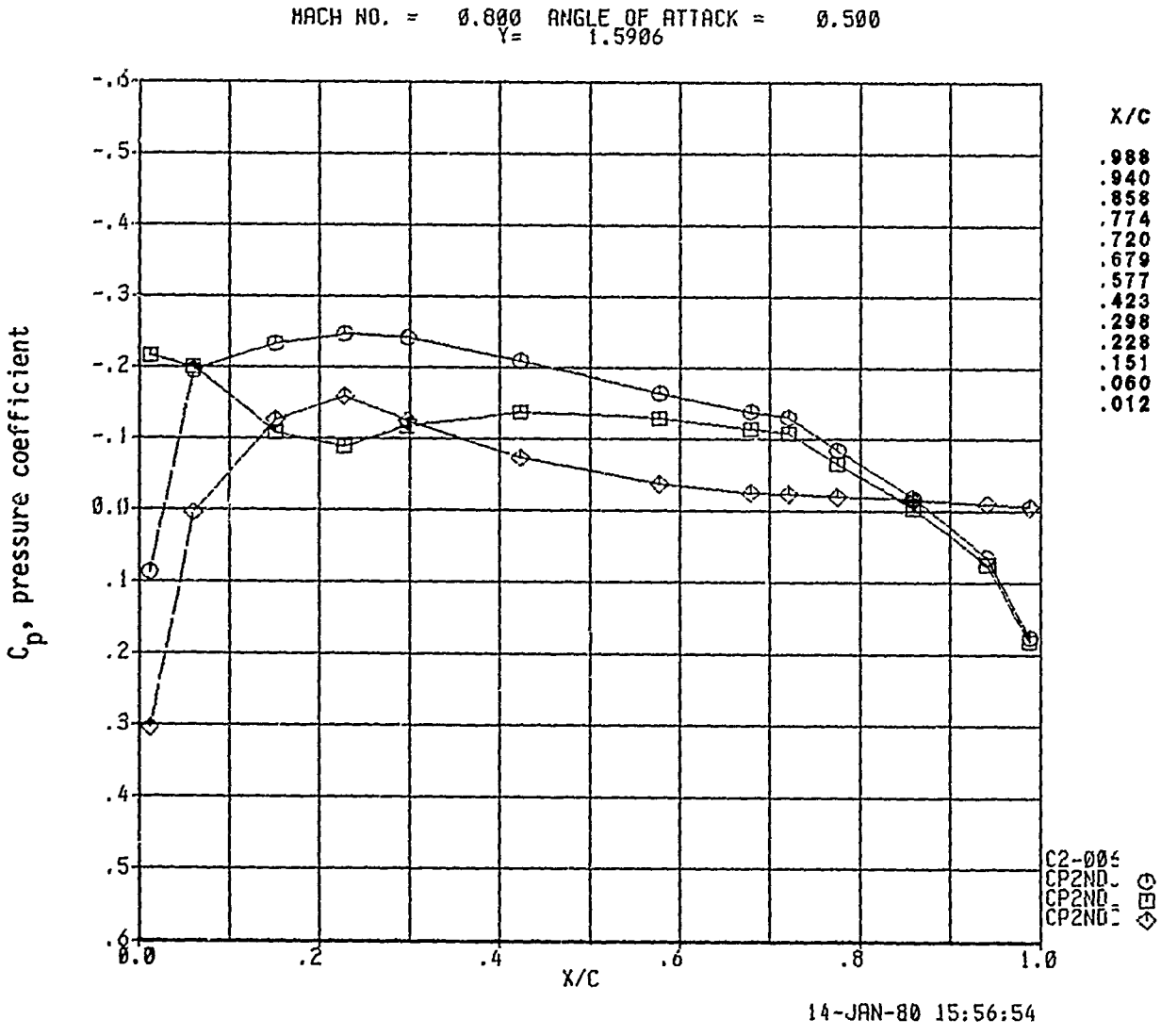
X/C	PRESSURE COEFFICIENT UPPER	LOWER	DIFF
.988	0.1849	0.1813	0.0036
.940	0.0754	0.0708	0.0046
.858	-.0065	-.0123	0.0058
.774	-.0725	-.0793	0.0068
.720	-.1175	-.1246	0.0072
.679	-.1250	-.1324	0.0075
.577	-.1454	-.1520	0.0066
.423	-.1757	-.1703	-.0054
.298	-.1906	-.1615	-.0291
.228	-.1835	-.1419	-.0416
.151	-.1434	-.1824	0.0389
.060	-.0495	-.3490	0.2995
.012	0.3561	-.5650	0.9211

Figure 412, Chordwise Pressure Distribution, Steady, Configuration 4



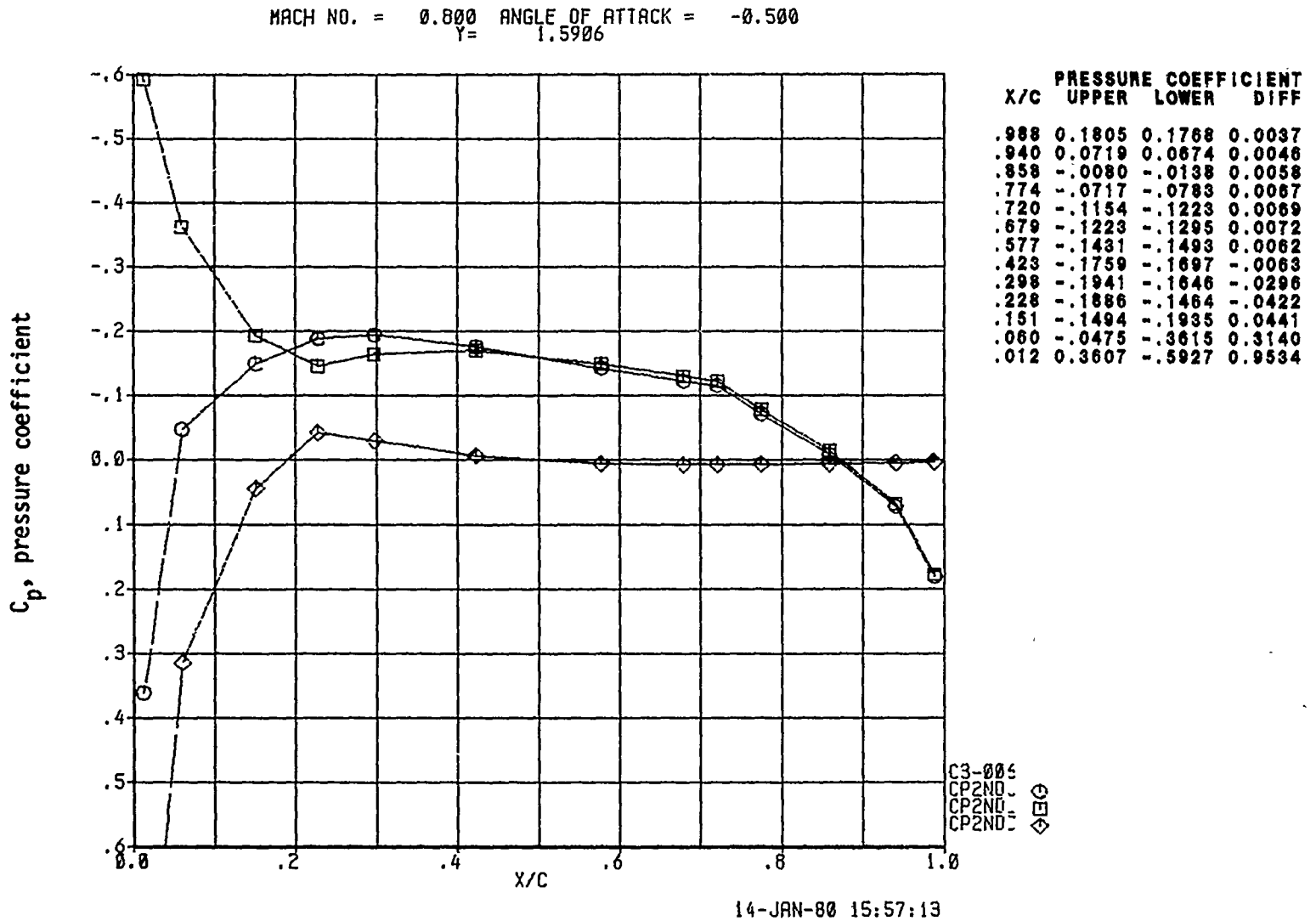
X/C	PRESSURE COEFFICIENT UPPER	LOWER	DIFF
.988	0.1783	0.1793	-.0011
.940	0.0686	0.0710	-.0024
.858	-.0129	-.0086	-.0043
.774	-.0780	-.0717	-.0063
.720	-.1226	-.1149	-.0077
.679	-.1302	-.1214	-.0088
.577	-.1536	-.1386	-.0150
.423	-.1926	-.1528	-.0397
.298	-.2177	-.1408	-.0770
.228	-.2176	-.1171	-.1005
.151	-.1909	-.1503	-.0406
.060	-.1201	-.2797	0.1597
.012	0.2295	-.3989	0.6284

Figure 413, Chordwise Pressure Distribution, Steady, Configuration 4



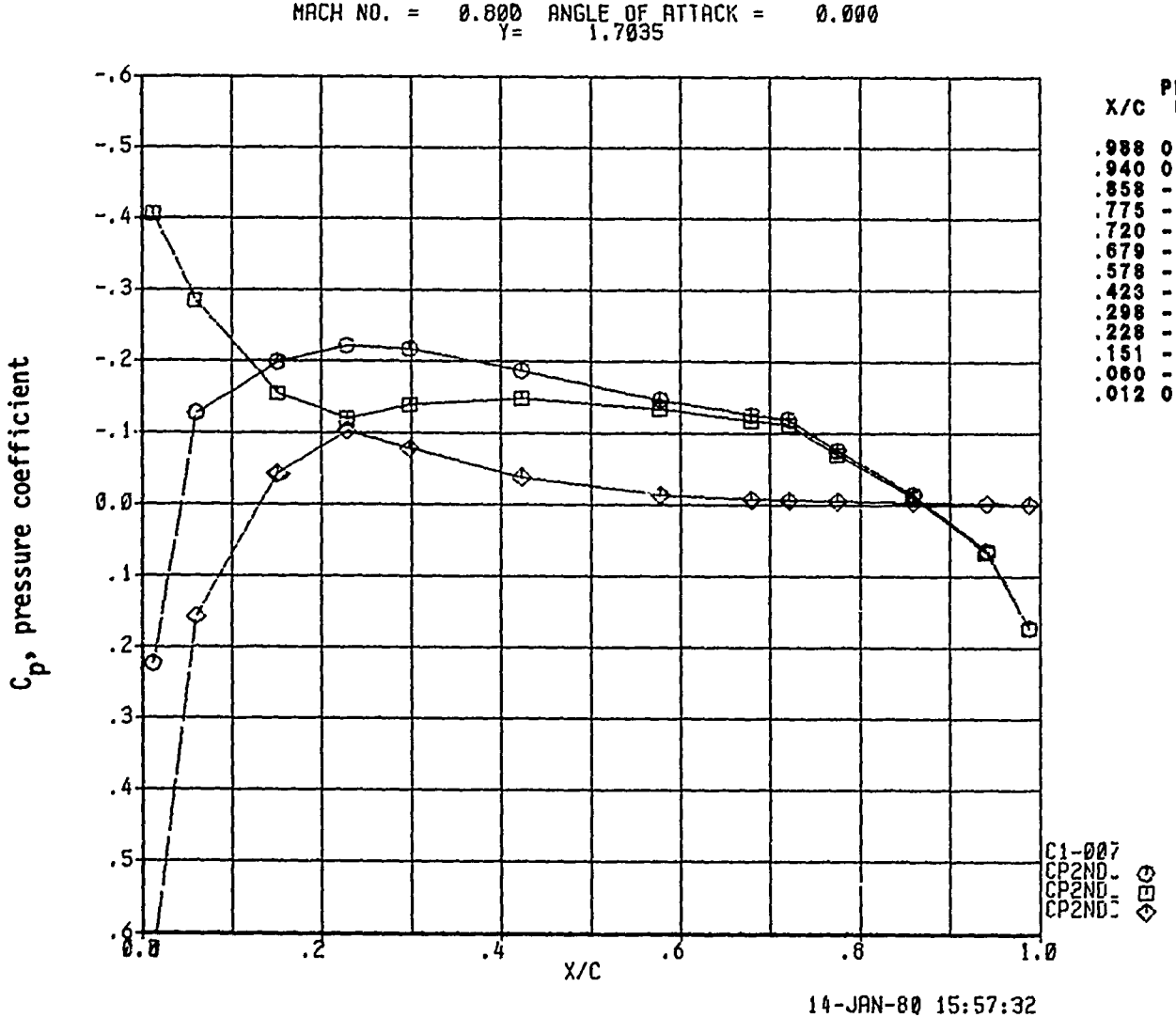
X/C	PRESSURE COEFFICIENT UPPER	LOWER	DIFF
.988	0.1758	0.1816	-.0058
.940	0.0650	0.0744	-.0094
.858	-.0181	-.0036	-.0144
.774	-.0848	-.0653	-.0193
.720	-.1301	-.1076	-.0225
.679	-.1383	-.1135	-.0250
.577	-.1643	-.1281	-.0363
.423	-.2095	-.1363	-.0731
.298	-.2418	-.1175	-.1243
.228	-.2471	-.0882	-.1589
.151	-.2333	-.1079	-.1254
.060	-.1948	-.2001	0.0053
.012	0.0869	-.2164	0.3033

Figure 414, Chordwise Pressure Distribution, Steady, Configuration 4



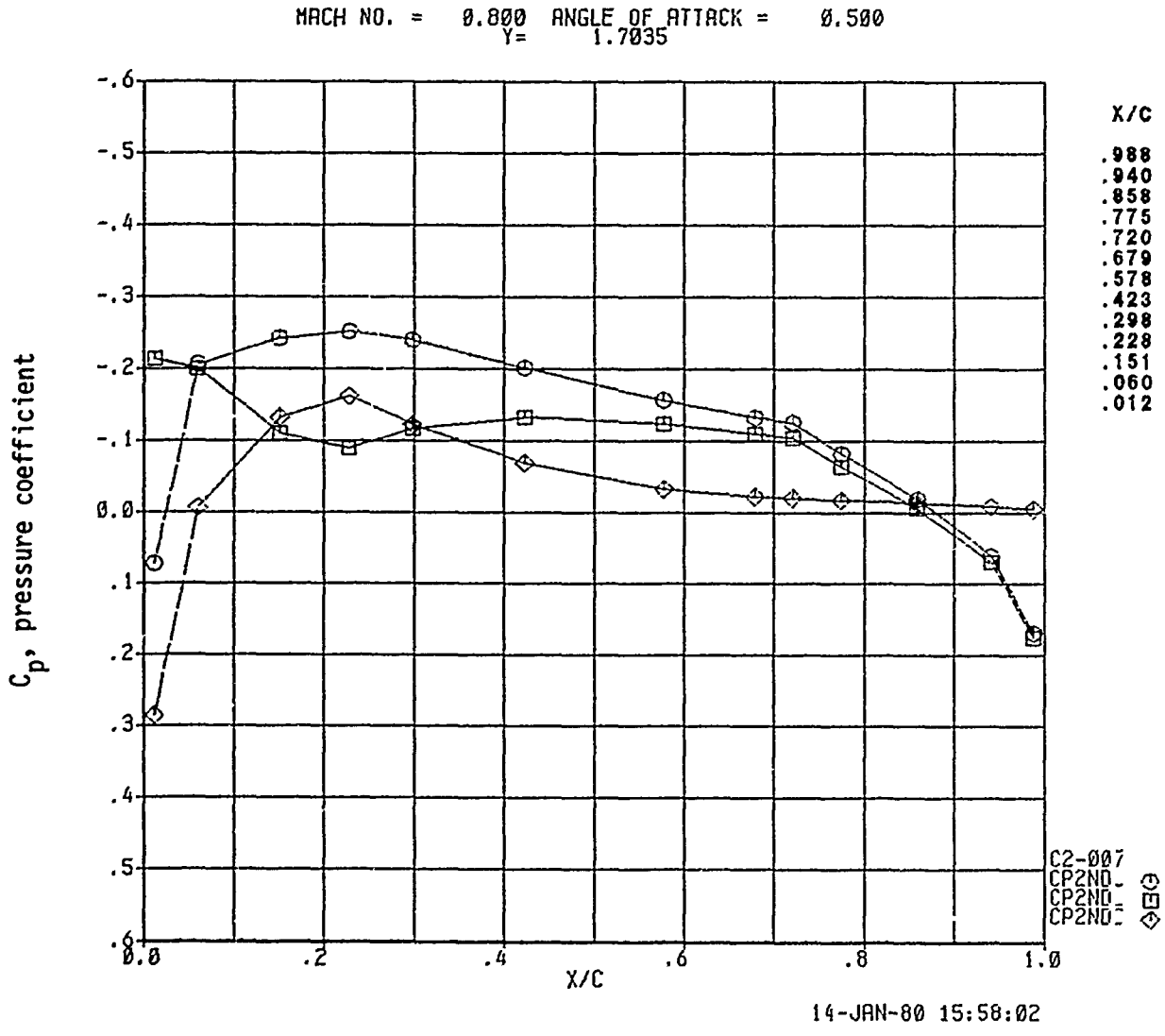
X/C	PRESSURE COEFFICIENT UPPER	LOWER	DIFF
.988	0.1805	0.1768	0.0037
.940	0.0719	0.0674	0.0046
.858	-.0080	-.0138	0.0058
.774	-.0717	-.0783	0.0067
.720	-.1154	-.1223	0.0069
.679	-.1223	-.1295	0.0072
.577	-.1431	-.1493	0.0062
.423	-.1759	-.1697	-.0063
.298	-.1941	-.1646	-.0296
.228	-.1886	-.1464	-.0422
.151	-.1494	-.1935	0.0441
.060	-.0475	-.3615	0.3140
.012	0.3607	-.5927	0.9534

Figure 415, Chordwise Pressure Distribution, Steady, Configuration 4



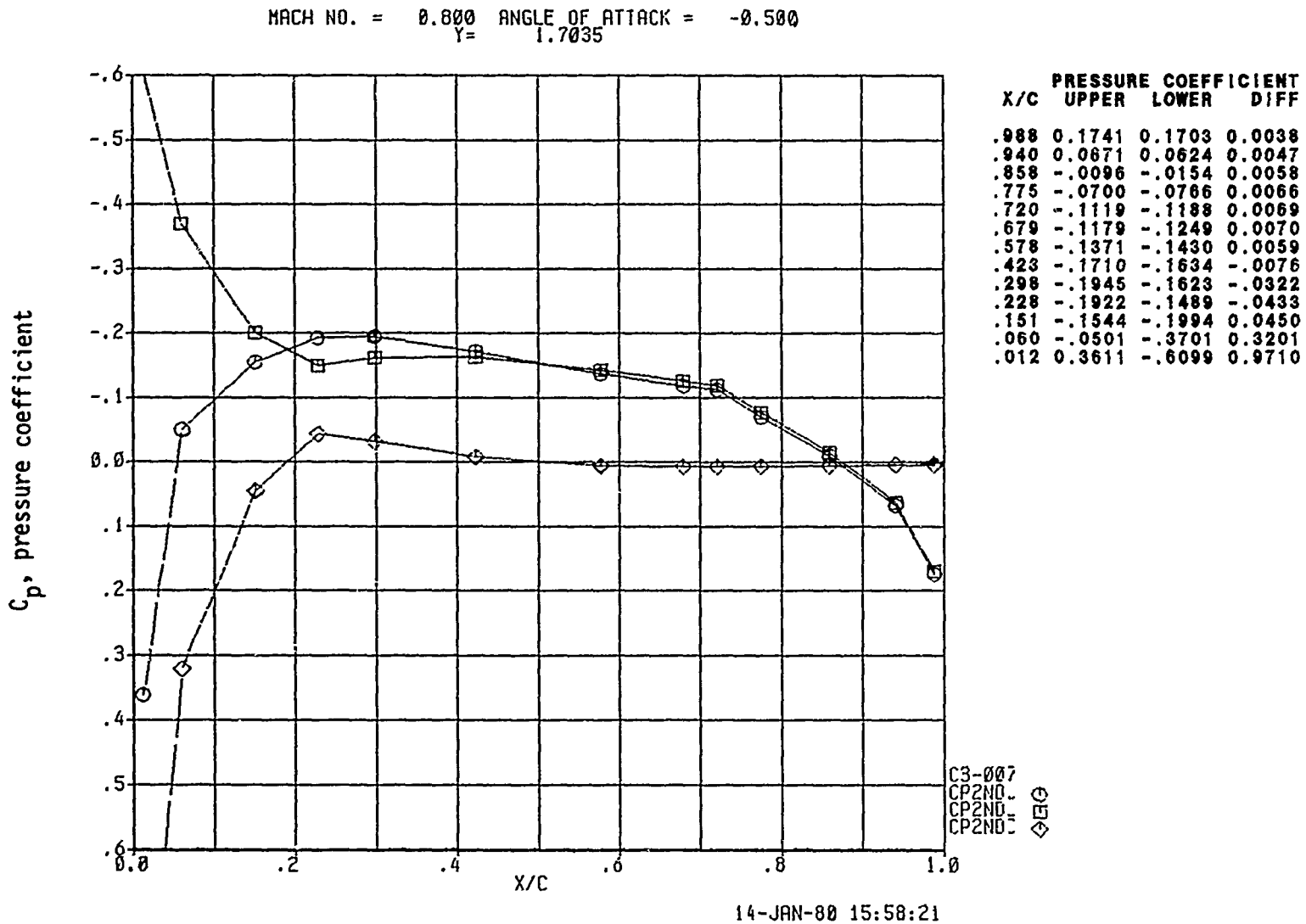
X/C	PRESSURE COEFFICIENT UPPER	LOWER	DIFF
.988	0.1719	0.1728	-.0009
.940	0.0638	0.0660	-.0021
.858	-.0142	-.0103	-.0039
.775	-.0759	-.0703	-.0057
.720	-.1186	-.1118	-.0068
.679	-.1252	-.1173	-.0078
.578	-.1466	-.1331	-.0135
.423	-.1662	-.1479	-.0383
.298	-.2171	-.1395	-.0776
.228	-.2216	-.1193	-.1023
.151	-.1979	-.1543	-.0436
.060	-.1268	-.2837	0.1569
.012	0.2230	-.4052	0.6282

Figure 416, Chordwise Pressure Distribution, Steady, Configuration 4



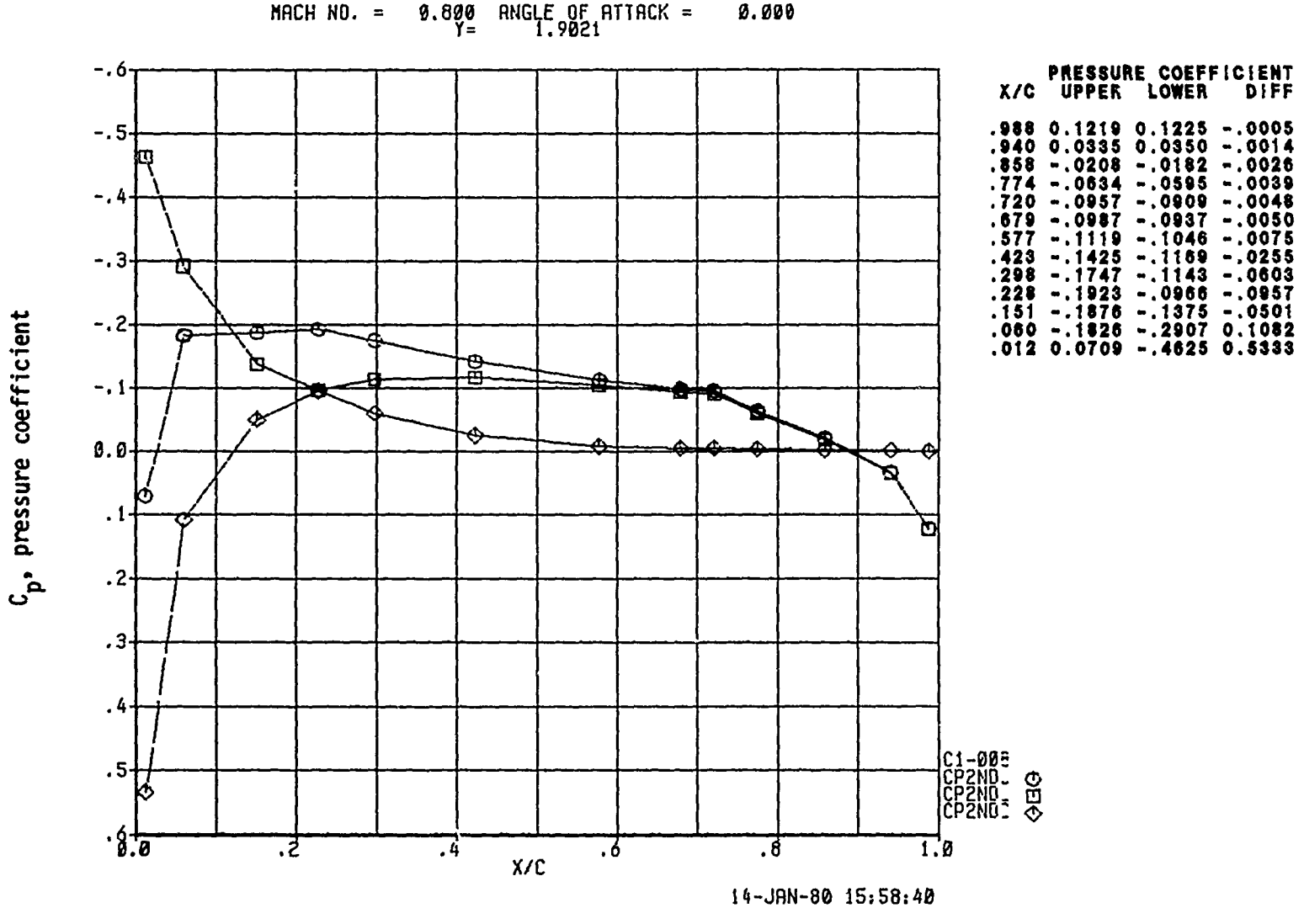
X/C	PRESSURE COEFFICIENT UPPER	LOWER	DIFF
.988	0.1694	0.1751	-.0057
.940	0.0603	0.0693	-.0091
.858	-.0191	-.0056	-.0135
.775	-.0822	-.0643	-.0179
.720	-.1256	-.1050	-.0206
.679	-.1327	-.1100	-.0227
.578	-.1564	-.1235	-.0329
.423	-.2017	-.1328	-.0690
.298	-.2401	-.1172	-.1229
.228	-.2514	-.0900	-.1614
.151	-.2422	-.1100	-.1322
.060	-.2060	-.1996	-.0064
.012	0.0721	-.2131	0.2853

Figure 417, Chordwise Pressure Distribution, Steady, Configuration 4



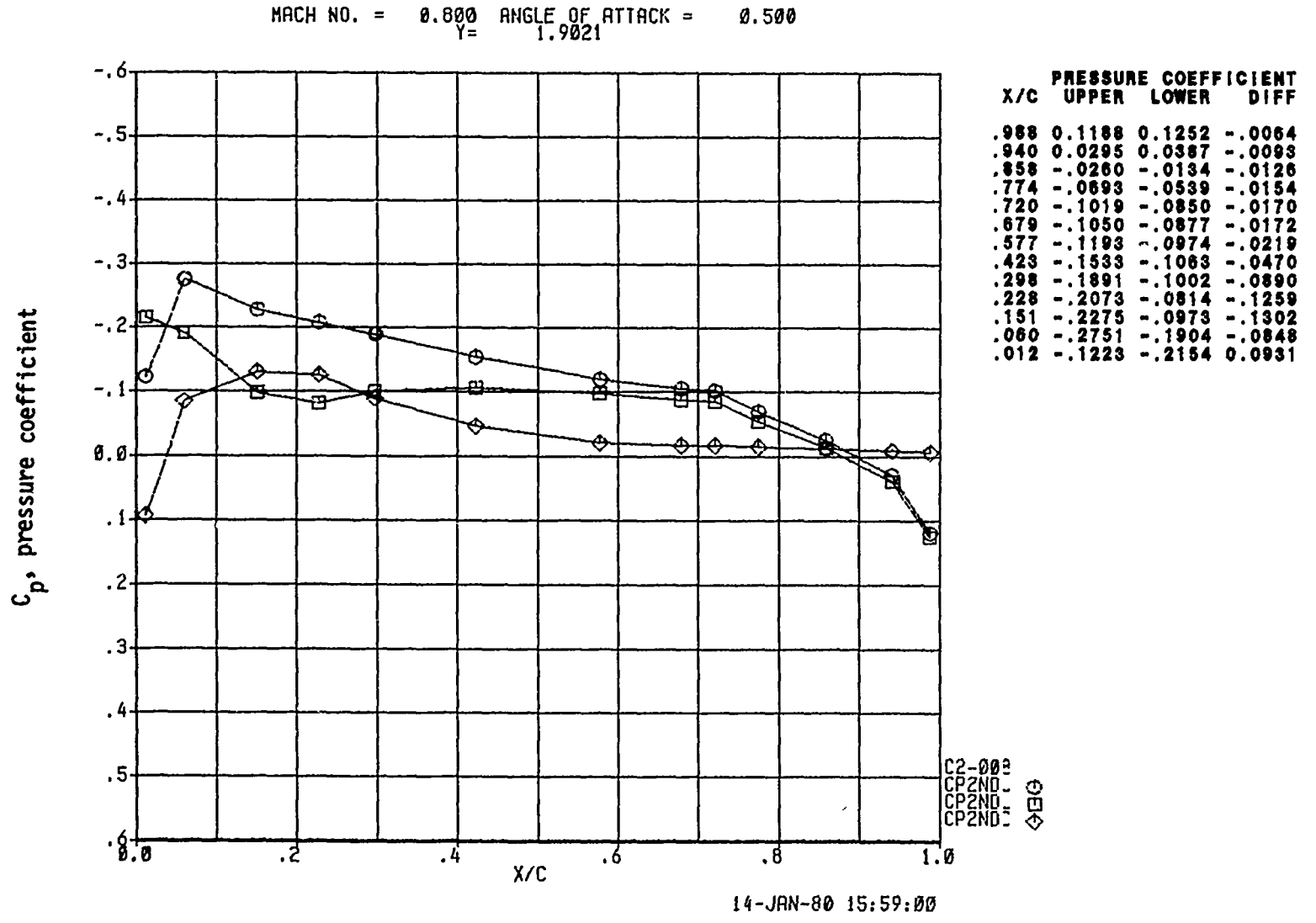
X/C	PRESSURE COEFFICIENT UPPER	LOWER	DIFF
.988	0.1741	0.1703	0.0038
.940	0.0671	0.0624	0.0047
.858	-.0096	-.0154	0.0058
.775	-.0700	-.0766	0.0066
.720	-.1119	-.1188	0.0069
.679	-.1179	-.1249	0.0070
.578	-.1371	-.1430	0.0059
.423	-.1710	-.1634	-.0076
.298	-.1945	-.1623	-.0322
.228	-.1922	-.1489	-.0433
.151	-.1544	-.1994	0.0450
.060	-.0501	-.3701	0.3201
.012	0.3611	-.6099	0.9710

Figure 418, Chordwise Pressure Distribution, Steady, Configuration 4



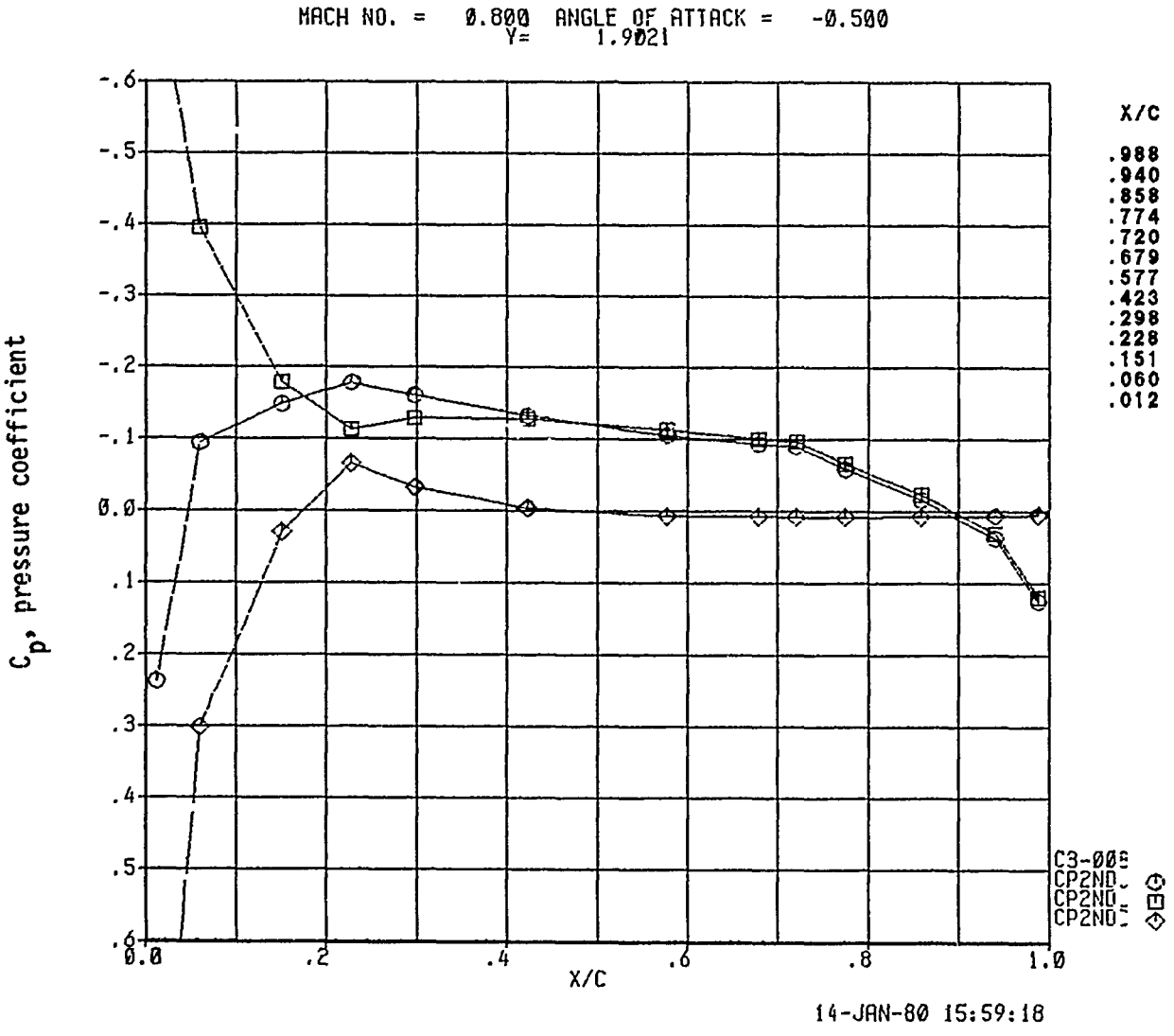
X/C	PRESSURE COEFFICIENT UPPER	LOWER	DIFF
.988	0.1219	0.1225	-.0005
.940	0.0335	0.0350	-.0014
.858	-.0208	-.0182	-.0026
.774	-.0634	-.0595	-.0039
.720	-.0957	-.0909	-.0048
.679	-.0987	-.0937	-.0050
.577	-.1119	-.1046	-.0075
.423	-.1425	-.1169	-.0255
.298	-.1747	-.1143	-.0603
.228	-.1923	-.0966	-.0957
.151	-.1876	-.1375	-.0501
.060	-.1826	-.2907	0.1082
.012	0.0709	-.4625	0.5333

Figure 419, Chordwise Pressure Distribution, Steady, Configuration 4



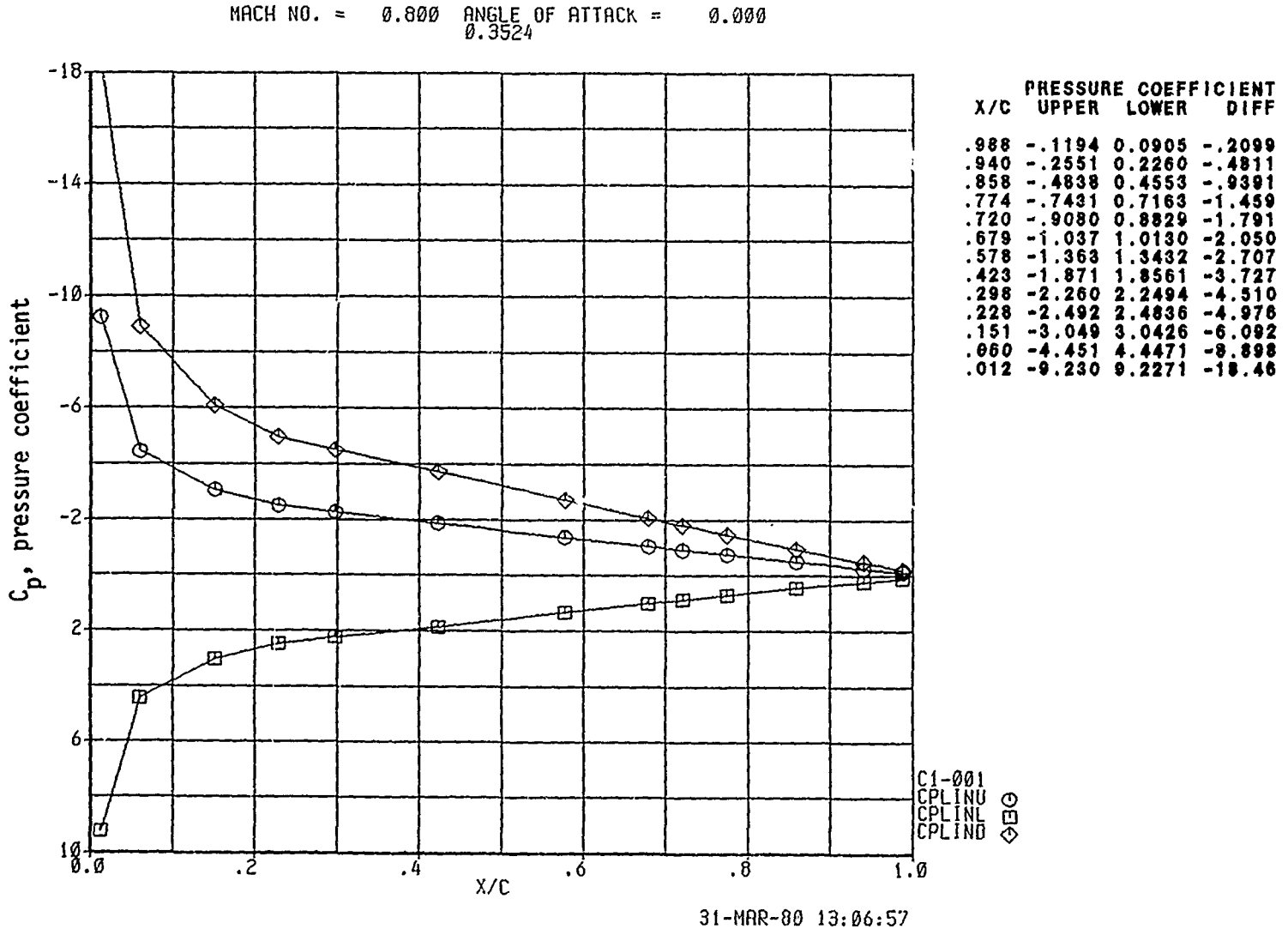
X/C	PRESSURE COEFFICIENT UPPER	LOWER	DIFF
.988	0.1188	0.1252	-.0064
.940	0.0295	0.0387	-.0093
.858	-.0260	-.0134	-.0126
.774	-.0693	-.0539	-.0154
.720	-.1019	-.0850	-.0170
.679	-.1050	-.0877	-.0172
.577	-.1193	-.0974	-.0219
.423	-.1533	-.1063	-.0470
.298	-.1891	-.1002	-.0890
.228	-.2073	-.0814	-.1259
.151	-.2275	-.0973	-.1302
.060	-.2751	-.1904	-.0848
.012	-.1223	-.2154	0.0931

Figure 420, Chordwise Pressure Distribution, Steady, Configuration 4



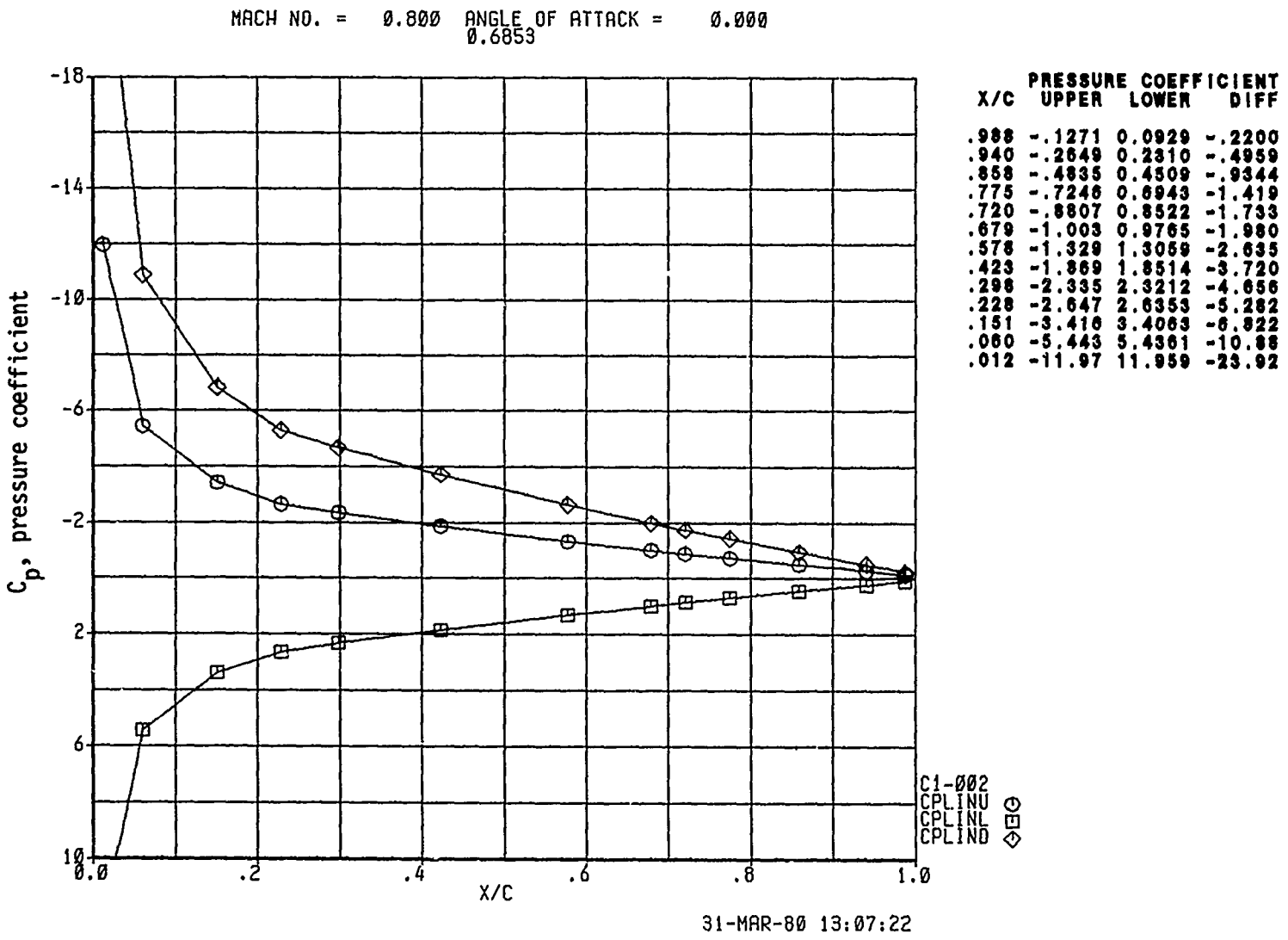
X/C	PRESSURE COEFFICIENT UPPER	LOWER	DIFF
.988	0.1246	0.1192	0.0053
.940	0.0372	0.0308	0.0064
.858	-.0161	-.0234	0.0073
.774	-.0579	-.0655	0.0076
.720	-.0898	-.0972	0.0074
.679	-.0928	-.1000	0.0073
.577	-.1050	-.1120	0.0070
.423	-.1319	-.1278	-.0041
.298	-.1605	-.1289	-.0316
.228	-.1775	-.1122	-.0654
.151	-.1482	-.1783	0.0301
.060	-.0939	-.3949	0.3011
.012	0.2371	-.7365	0.9736

Figure 421, Chordwise Pressure Distribution, Steady, Configuration 4



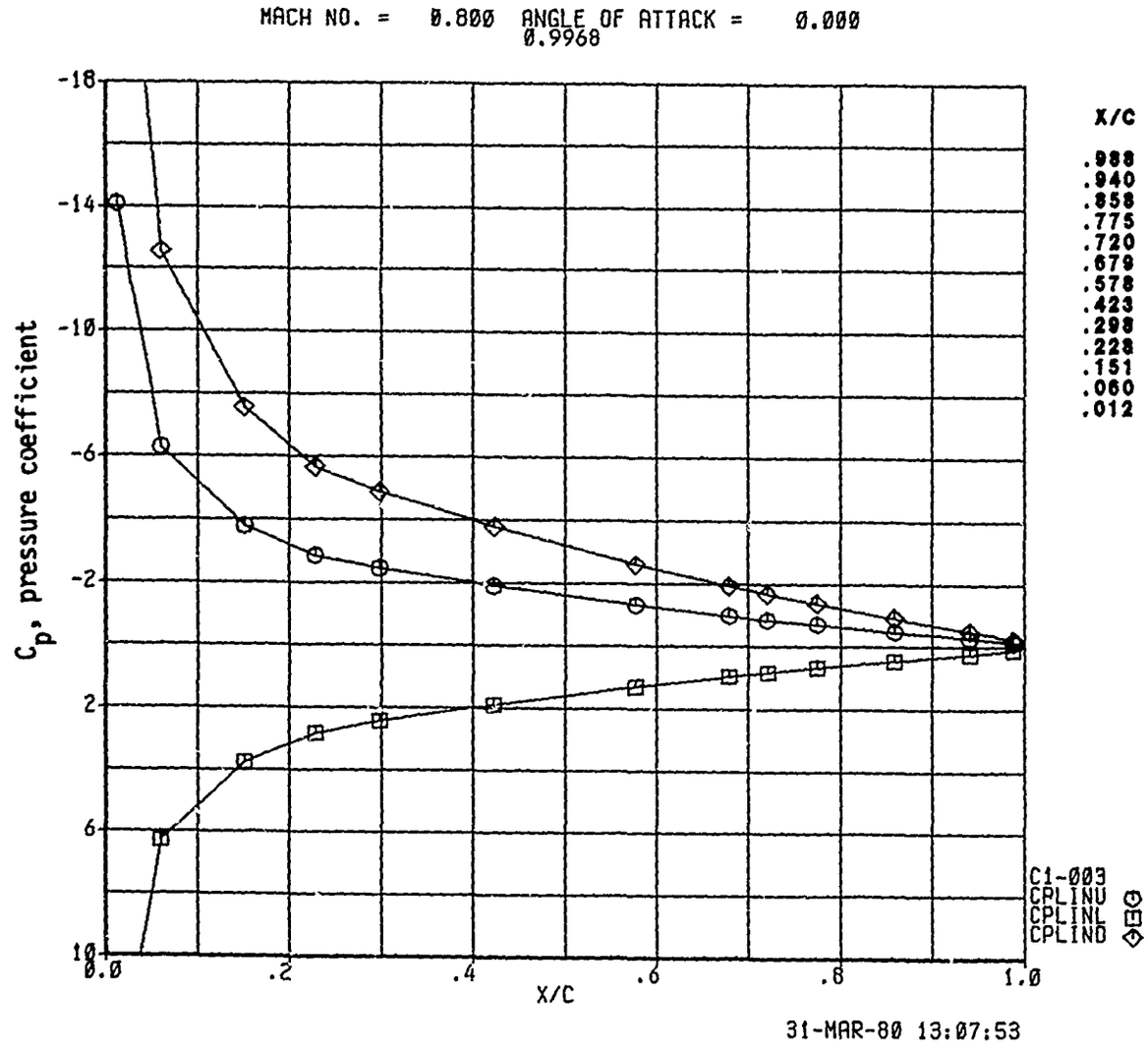
X/C	PRESSURE COEFFICIENT UPPER	LOWER	DIFF
.988	-.1194	0.0905	-.2099
.940	-.2551	0.2260	-.4811
.858	-.4838	0.4553	-.9391
.774	-.7431	0.7163	-1.459
.720	-.9080	0.8829	-1.791
.679	-1.037	1.0130	-2.050
.578	-1.363	1.3432	-2.707
.423	-1.871	1.8561	-3.727
.298	-2.260	2.2494	-4.510
.228	-2.492	2.4836	-4.976
.151	-3.049	3.0426	-6.092
.060	-4.451	4.4471	-8.898
.012	-9.230	9.2271	-18.46

Figure 422, Chordwise Pressure Distribution, Real, Configuration 4



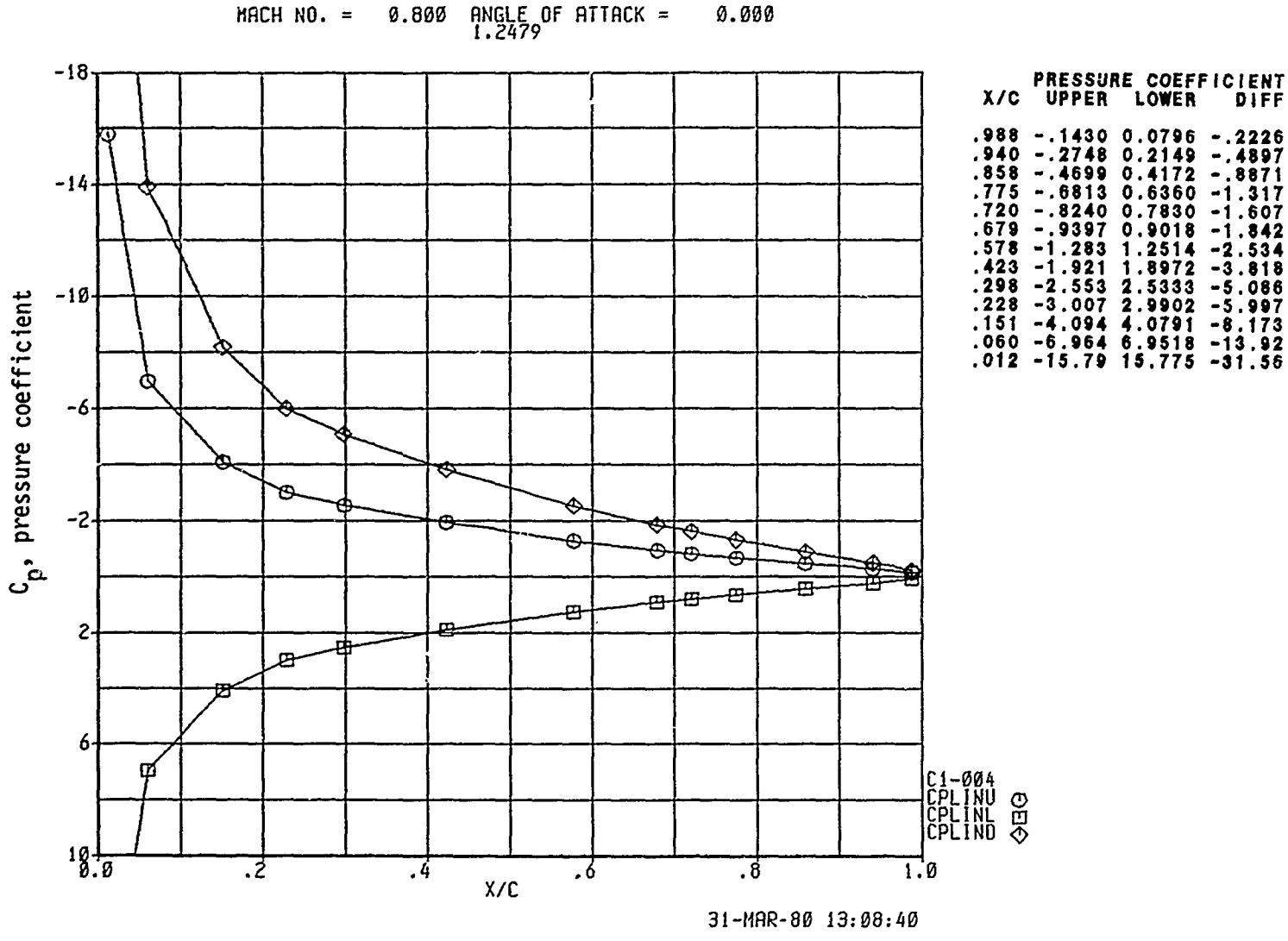
X/C	PRESSURE COEFFICIENT UPPER	LOWER	DIFF
.988	-.1271	0.0929	-.2200
.940	-.2649	0.2310	-.4959
.858	-.4835	0.4509	-.9344
.775	-.7246	0.6943	-1.419
.720	-.8807	0.8522	-1.733
.679	-1.003	0.9765	-1.980
.576	-1.329	1.3059	-2.635
.423	-1.869	1.8514	-3.720
.296	-2.335	2.3212	-4.656
.228	-2.647	2.6353	-5.282
.151	-3.416	3.4063	-6.822
.060	-5.443	5.4361	-10.88
.012	-11.97	11.959	-23.92

Figure 423, Chordwise Pressure Distribution, Real, Configuration 4



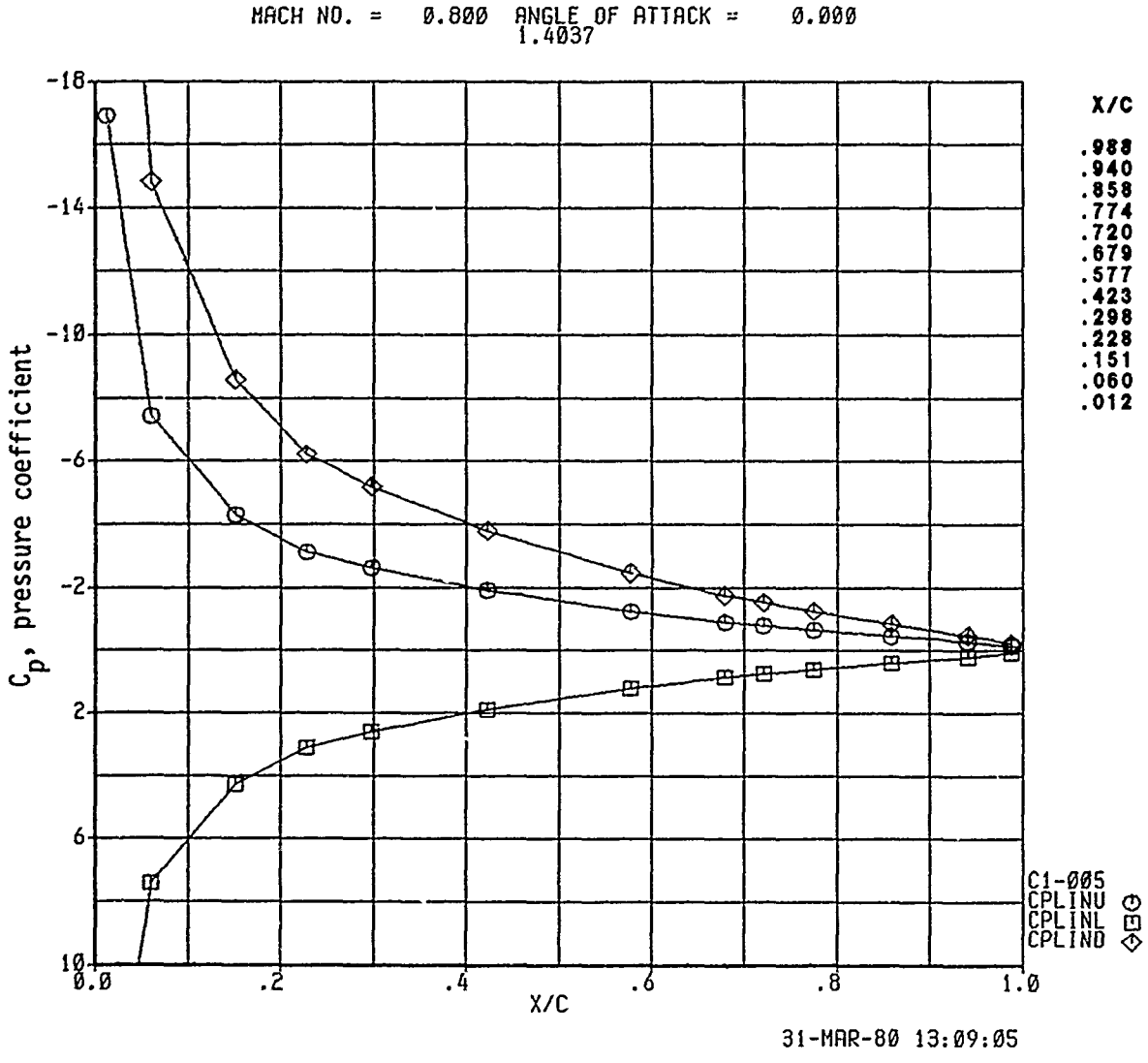
X/C	PRESSURE COEFFICIENT UPPER	LOWER	DIFF
.988	-.1351	0.0900	-.2252
.940	-.2724	0.2284	-.5008
.858	-.4806	0.4399	-.9206
.775	-.7082	0.6716	-1.380
.720	-.8589	0.8251	-1.684
.679	-.9788	0.9470	-1.926
.578	-1.313	1.2856	-2.598
.423	-1.900	1.8792	-3.779
.298	-2.449	2.4324	-4.881
.228	-2.835	2.8207	-5.656
.151	-3.784	3.7715	-7.555
.060	-6.284	6.2745	-12.56
.012	-14.09	14.084	-28.18

Figure 424, Chordwise Pressure Distribution, Real, Configuration 4



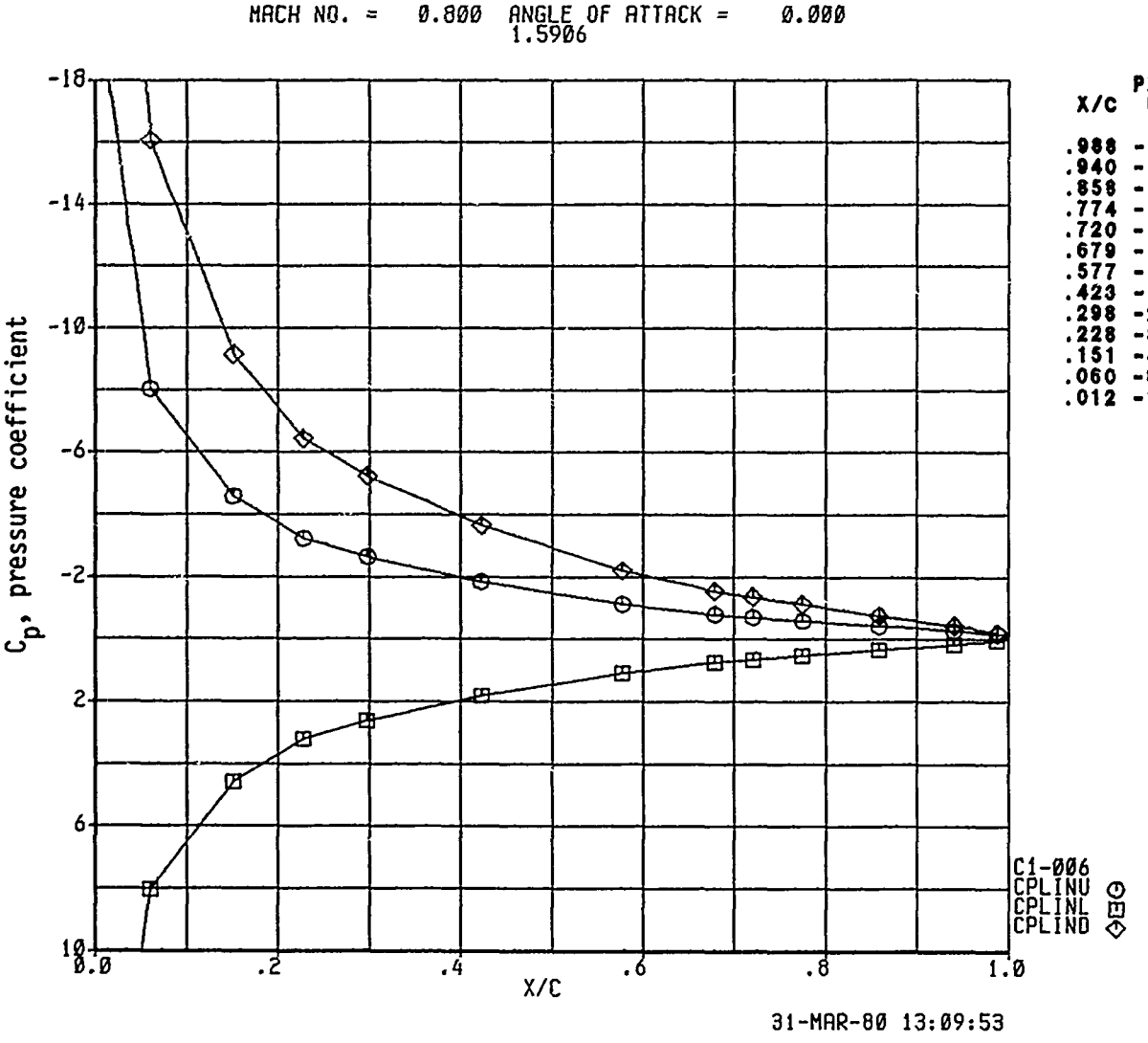
X/C	PRESSURE COEFFICIENT UPPER	LOWER	DIFF
.988	-.1430	0.0796	-.2226
.940	-.2748	0.2149	-.4897
.858	-.4699	0.4172	-.8871
.775	-.6813	0.6360	-1.317
.720	-.8240	0.7830	-1.607
.679	-.9397	0.9018	-1.842
.578	-1.283	1.2514	-2.534
.423	-1.921	1.8972	-3.818
.298	-2.553	2.5333	-5.086
.228	-3.007	2.9902	-5.997
.151	-4.094	4.0791	-8.173
.060	-6.964	6.9518	-13.92
.012	-15.79	15.775	-31.56

Figure 425, Chordwise Pressure Distribution, Real, Configuration 4



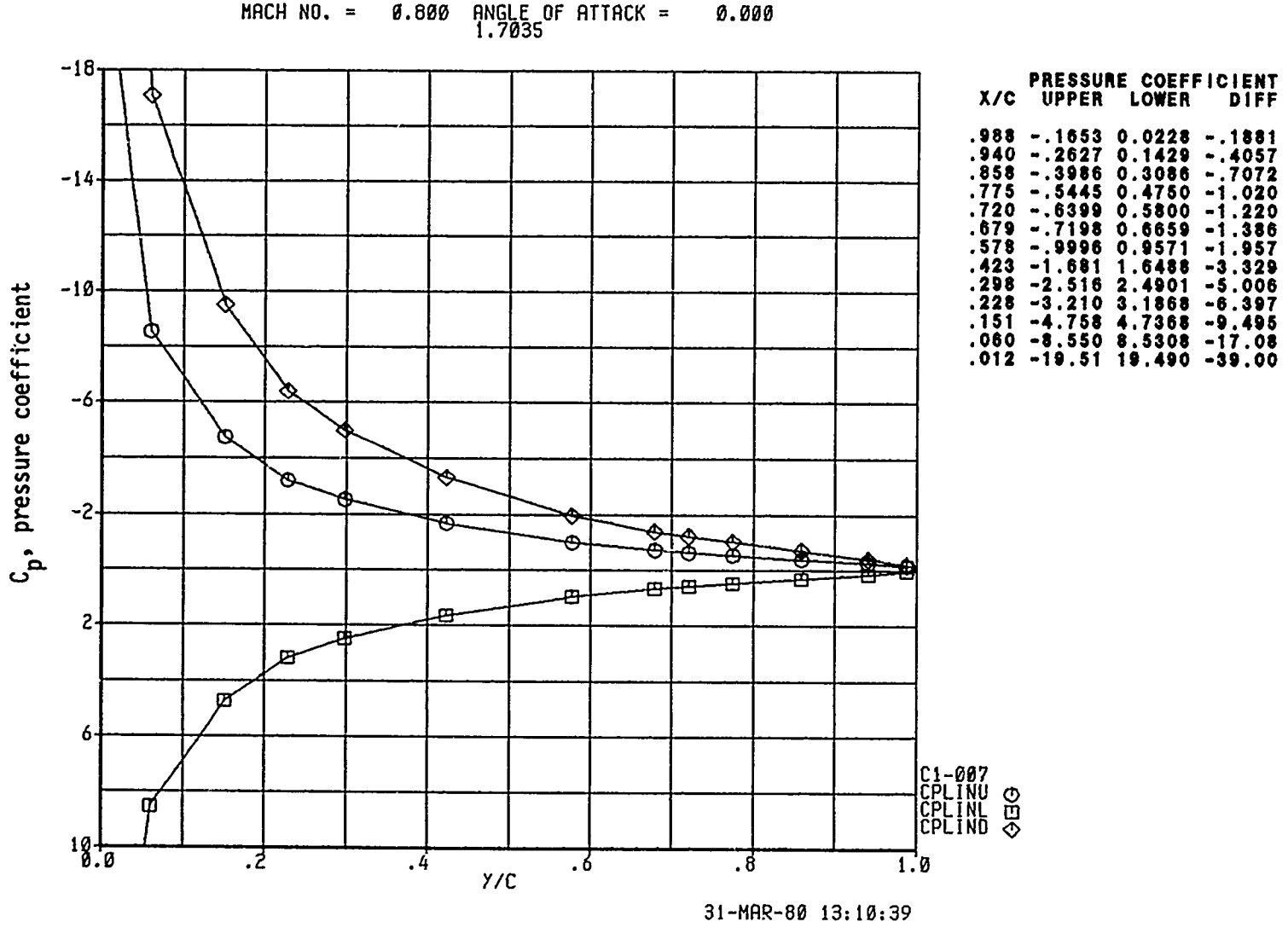
X/C	PRESSURE COEFFICIENT UPPER	LOWER	DIFF
.988	-.1495	0.0675	-.2170
.940	-.2740	0.1990	-.4730
.858	-.4564	0.3932	-.8497
.774	-.6523	0.5998	-1.252
.720	-.7845	0.7378	-1.522
.679	-.8938	0.8510	-1.745
.577	-1.238	1.2031	-2.441
.423	-1.916	1.8893	-3.805
.298	-2.608	2.5870	-5.195
.228	-3.115	3.0955	-6.210
.151	-4.300	4.2831	-8.583
.060	-7.423	7.4090	-14.83
.012	-16.91	16.901	-33.81

Figure 426, Chordwise Pressure Distribution, Real, Configuration 4



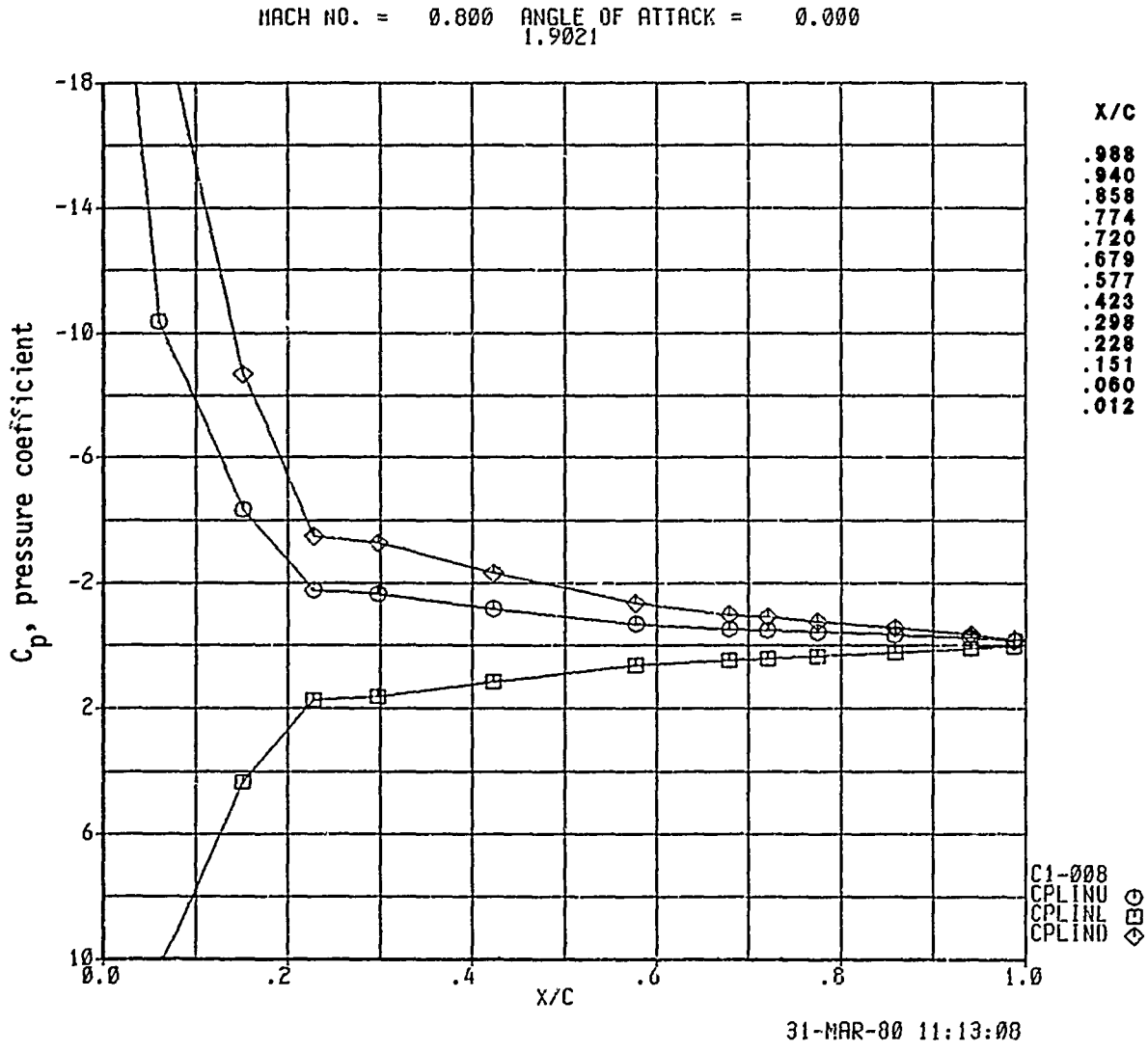
X/C	PRESSURE COEFFICIENT UPPER	LOWER	DIFF
.988	-.1592	0.0428	-.2020
.940	-.2694	0.1684	-.4379
.858	-.4270	0.3474	-.7746
.774	-.5958	0.5325	-1.128
.720	-.7073	0.6524	-1.360
.679	-.8005	0.7507	-1.551
.577	-1.119	1.0796	-2.199
.423	-1.838	1.8083	-3.646
.298	-2.632	2.6073	-5.239
.228	-3.227	3.2049	-6.432
.151	-4.584	4.5650	-9.149
.060	-8.040	8.0235	-16.06
.012	-18.40	18.385	-36.79

Figure 427, Chordwise Pressure Distribution, Real, Configuration 4



X/C	PRESSURE COEFFICIENT UPPER	LOWER	DIFF
.988	-.1653	0.0228	-.1881
.940	-.2627	0.1429	-.4057
.858	-.3986	0.3086	-.7072
.775	-.5445	0.4750	-1.020
.720	-.6399	0.5800	-1.220
.679	-.7198	0.6659	-1.386
.578	-.9996	0.9571	-1.957
.423	-1.681	1.6486	-3.329
.298	-2.516	2.4901	-5.006
.228	-3.210	3.1868	-6.397
.151	-4.758	4.7368	-9.495
.060	-8.550	8.5308	-17.08
.012	-19.51	19.490	-39.00

Figure 428, Chordwise Pressure Distribution, Real, Configuration 4



X/C	PRESSURE COEFFICIENT UPPER	LOWER	DIFF
.988	-.1715	0.0044	-.1759
.940	-.2395	0.1042	-.3437
.858	-.3292	0.2307	-.5598
.774	-.4250	0.3492	-.7742
.720	-.4886	0.4236	-.9121
.679	-.5207	0.4624	-.9831
.577	-.6923	0.6463	-1.339
.423	-1.169	1.1342	-2.303
.298	-1.647	1.6183	-3.266
.228	-1.759	1.7320	-3.491
.151	-4.350	4.3254	-8.675
.060	-10.38	10.356	-20.73
.012	-25.27	25.253	-50.53

Figure 429, Chordwise Pressure Distribution, Real, Configuration 4

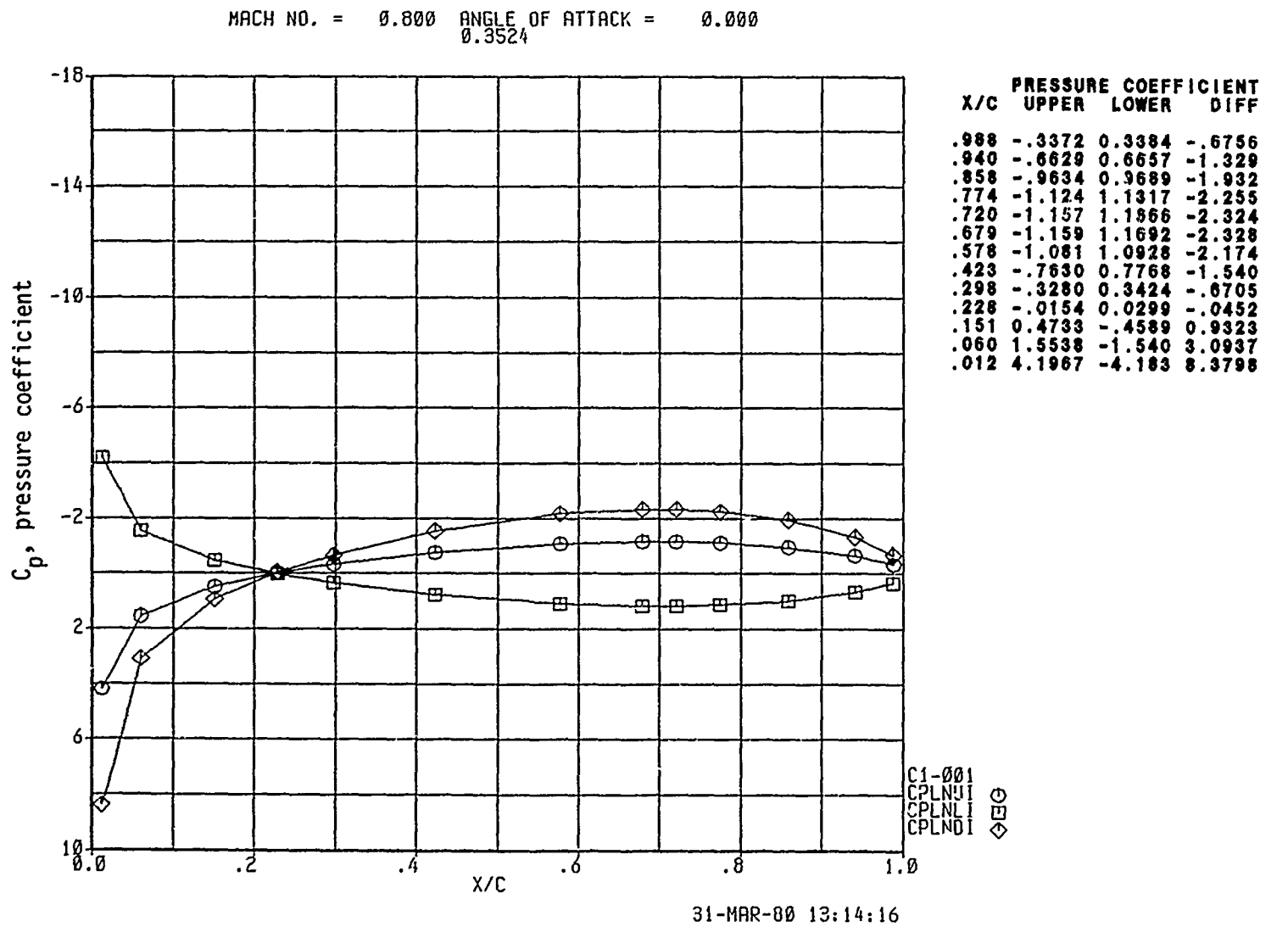
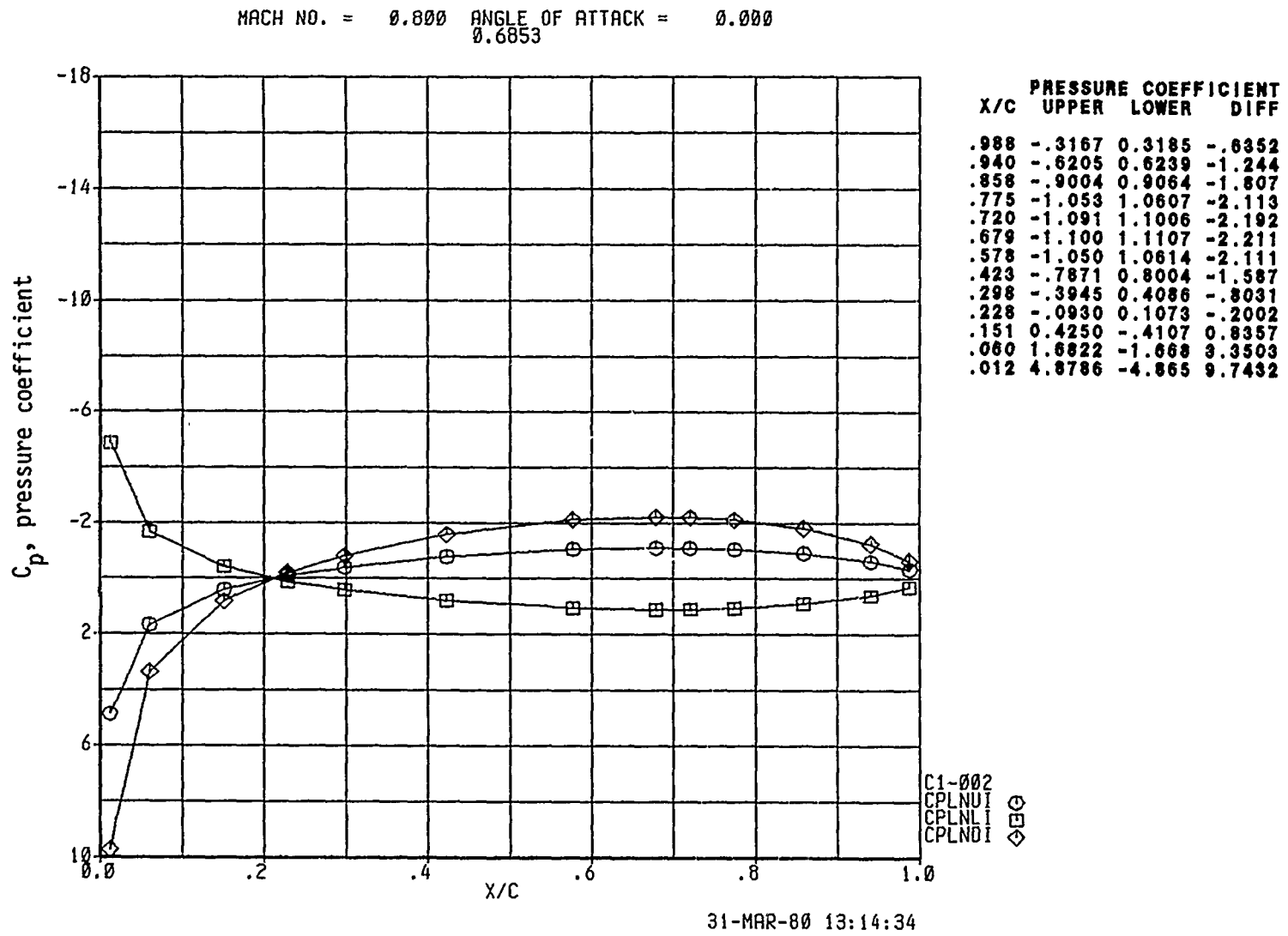
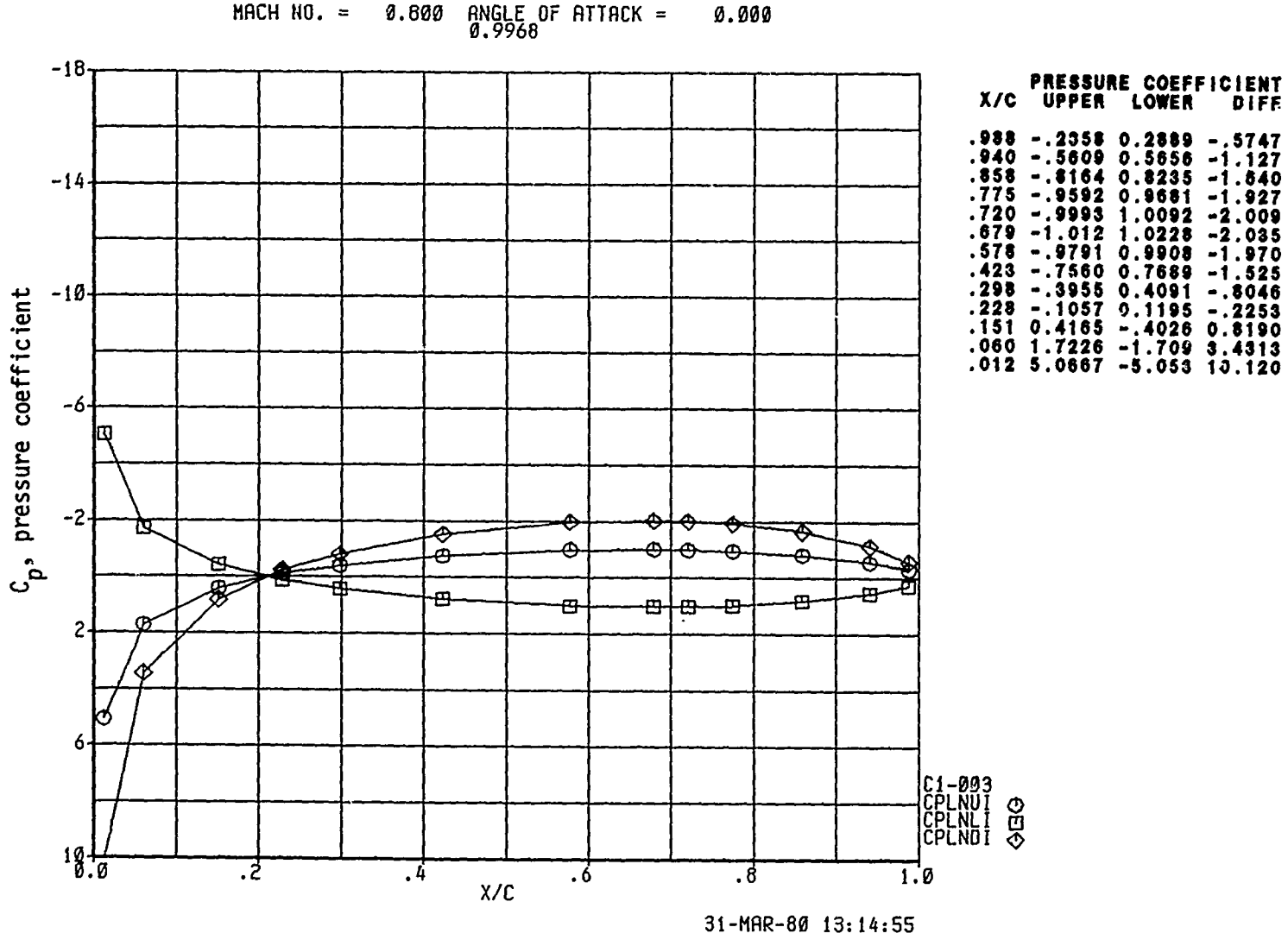


Figure 430, Chordwise Pressure Distribution, Imaginary, Configuration 4



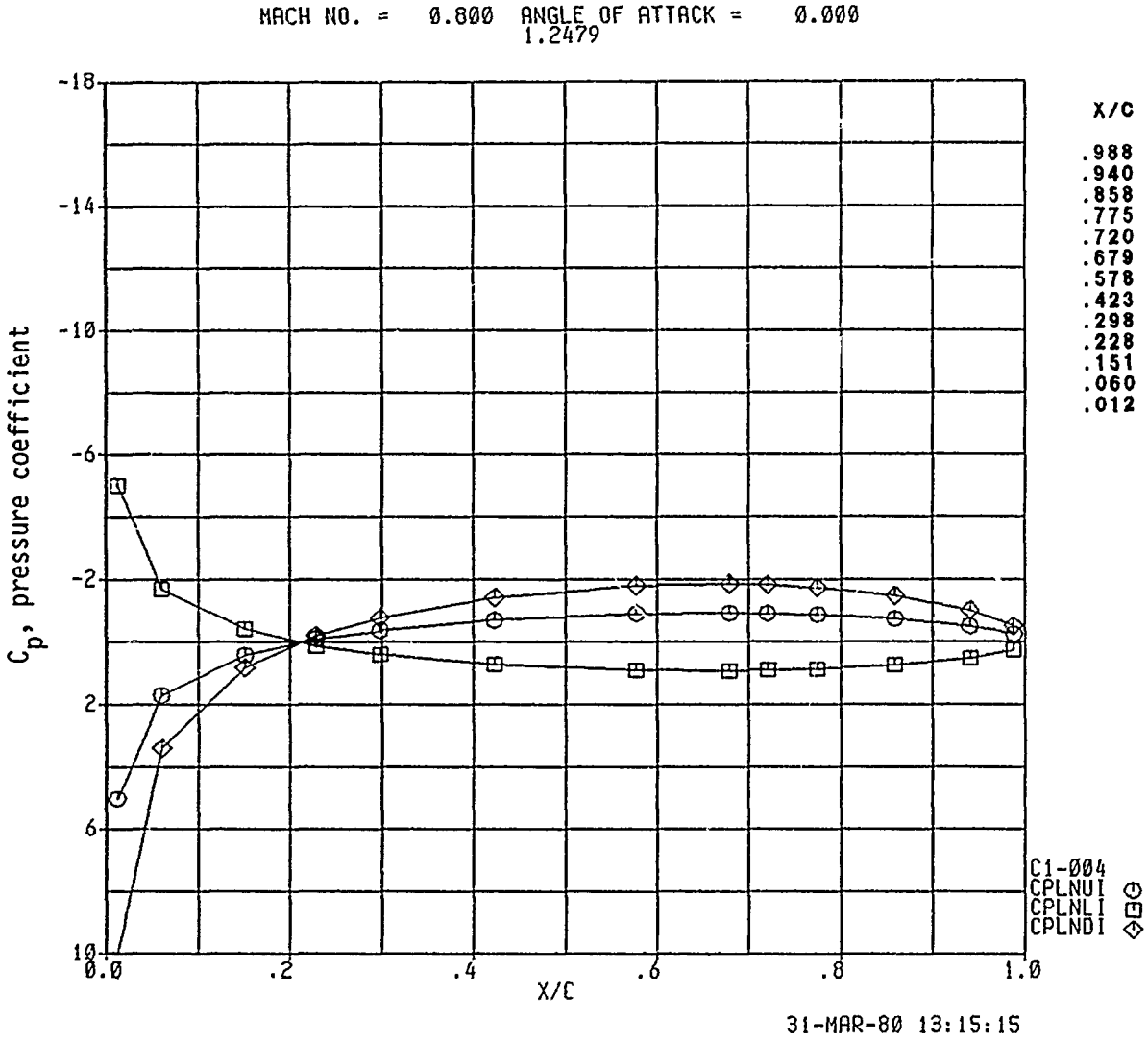
X/C	PRESSURE COEFFICIENT UPPER	LOWER	DIFF
.988	-.3167	0.3185	-.6352
.940	-.6205	0.6239	-1.244
.858	-.9004	0.9064	-1.807
.775	-1.053	1.0607	-2.113
.720	-1.091	1.1006	-2.192
.679	-1.100	1.1107	-2.211
.578	-1.050	1.0614	-2.111
.423	-.7871	0.8004	-1.587
.298	-.3945	0.4086	-.8031
.228	-.0930	0.1073	-.2002
.151	0.4250	-.4107	0.8357
.060	1.6822	-1.668	3.3503
.012	4.8786	-4.865	9.7432

Figure 431, Chordwise Pressure Distribution, Imaginary, Configuration 4



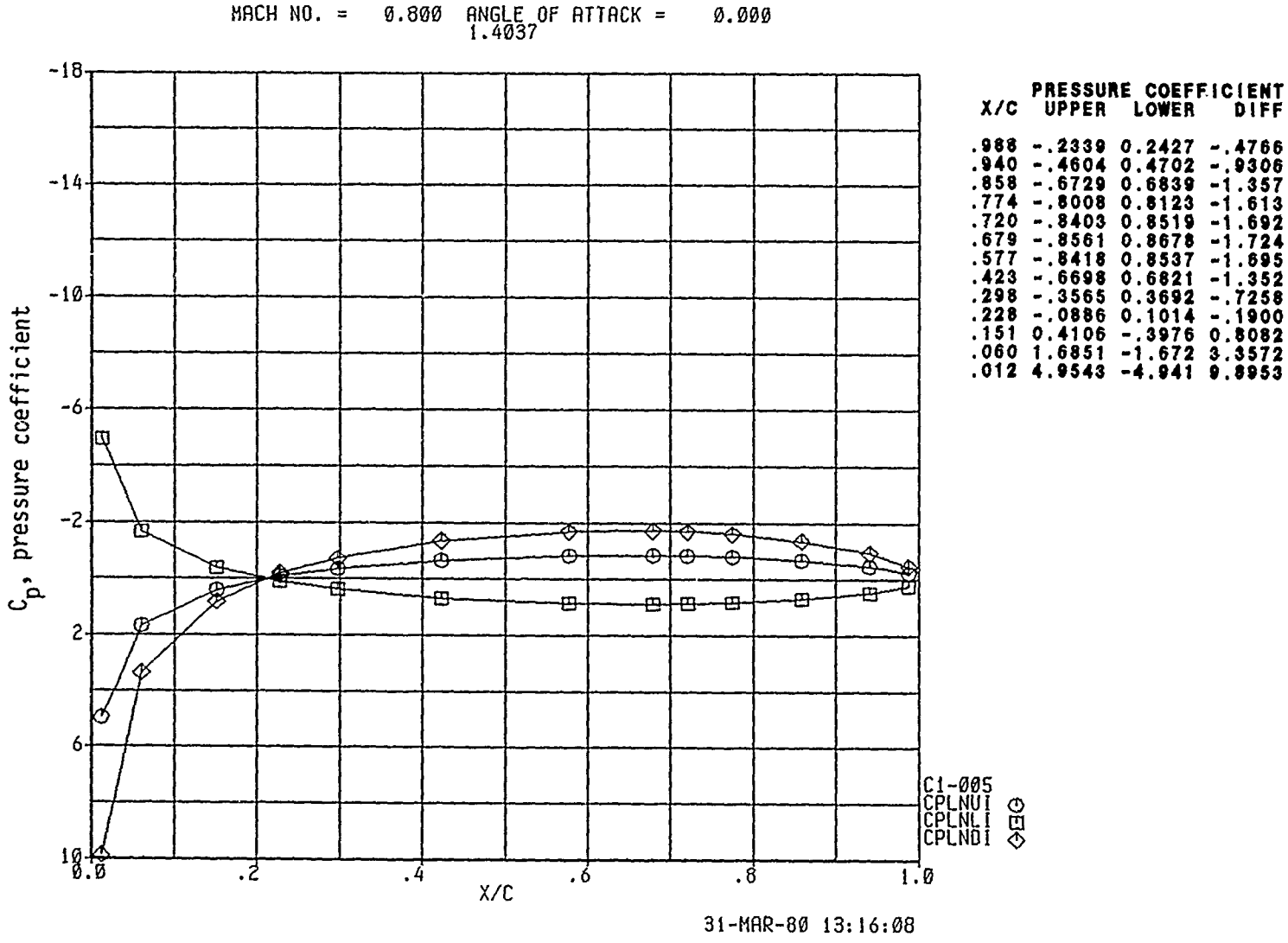
X/C	PRESSURE COEFFICIENT UPPER	LOWER	DIFF
.988	-.2358	0.2889	-.5747
.940	-.5609	0.5656	-1.127
.858	-.8164	0.8235	-1.840
.775	-.9592	0.9681	-1.927
.720	-.9993	1.0092	-2.009
.679	-1.012	1.0228	-2.035
.578	-.9791	0.9908	-1.970
.423	-.7560	0.7689	-1.525
.298	-.3955	0.4091	-.8046
.228	-.1057	0.1195	-.2253
.151	0.4165	-.4026	0.8190
.060	1.7226	-1.709	3.4313
.012	5.0667	-5.053	10.120

Figure 432, Chordwise Pressure Distribution, Imaginary, Configuration 4



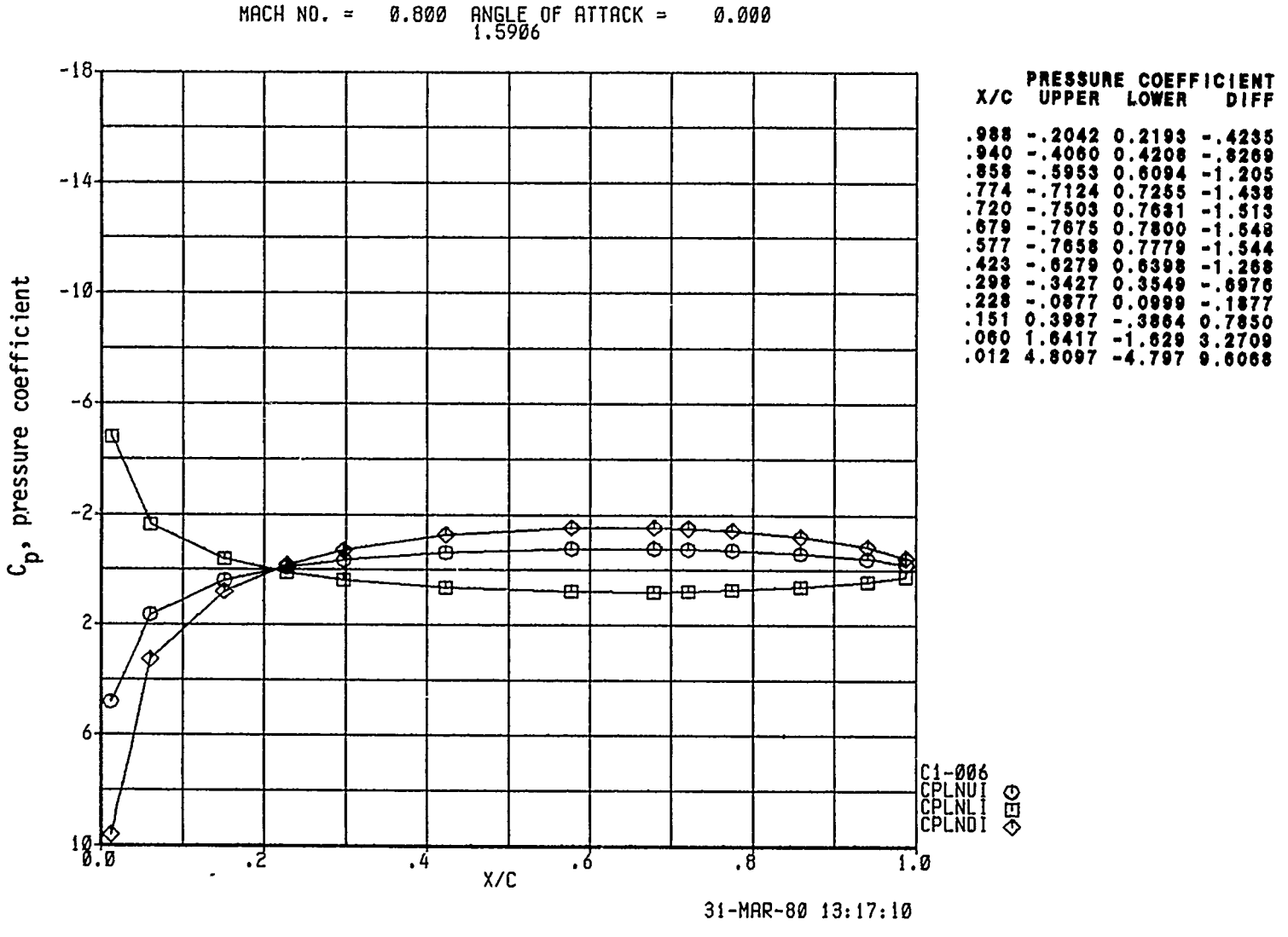
X/C	PRESSURE COEFFICIENT UPPER	LOWER	DIFF
.988	-.2550	0.2607	-.5156
.940	-.5015	0.5087	-1.010
.858	-.7320	0.7410	-1.473
.775	-.8658	0.8761	-1.742
.720	-.9060	0.9168	-1.823
.679	-.9207	0.9319	-1.853
.578	-.8989	0.9107	-1.809
.423	-.7062	0.7188	-1.425
.298	-.3730	0.3861	-.7591
.228	-.0954	0.1086	-.2039
.151	0.4141	-.4007	0.8149
.060	1.7067	-1.693	3.3999
.012	5.0286	-5.015	10.043

Figure 433, Chordwise Pressure Distribution, Imaginary, Configuration 4



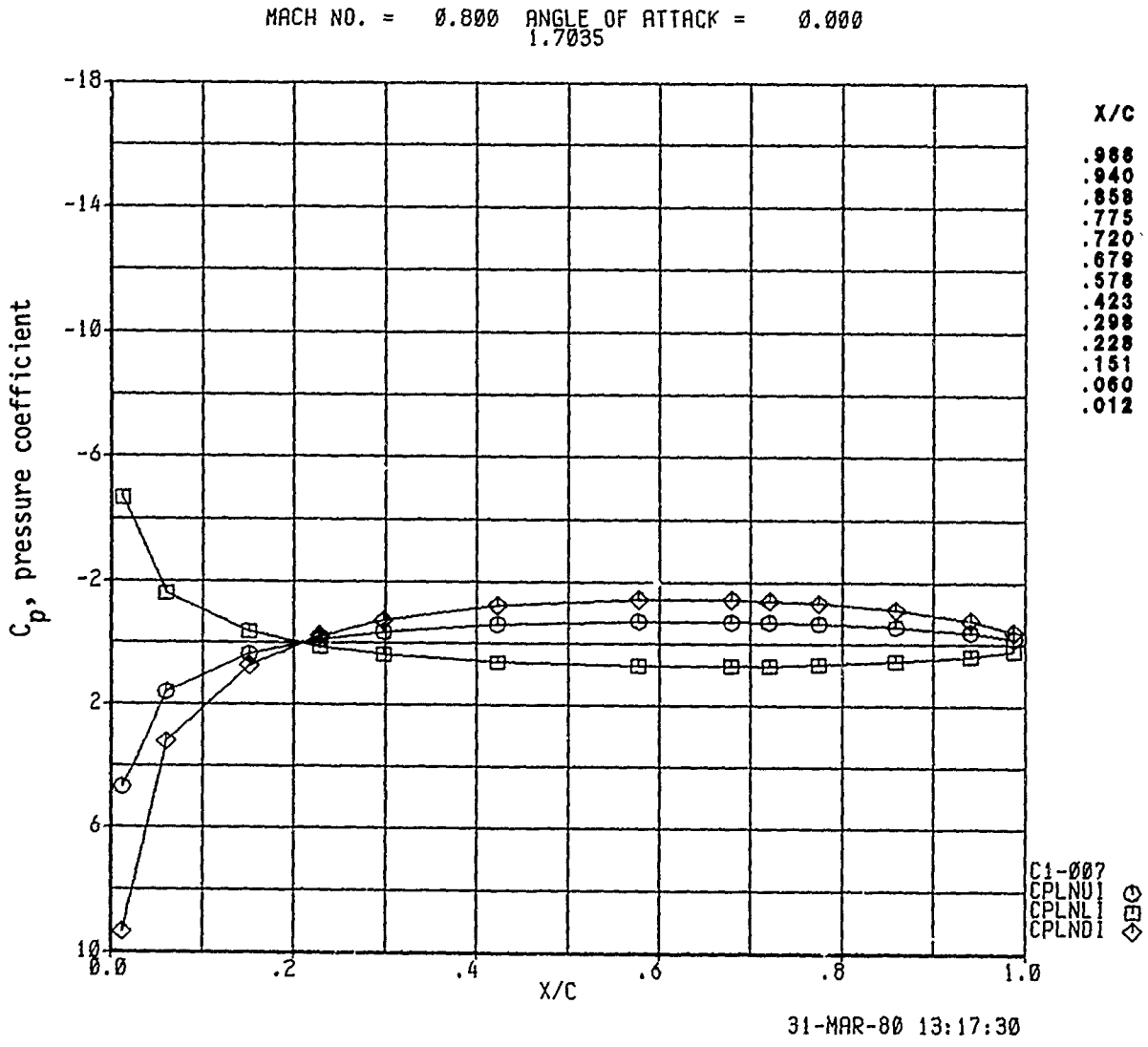
X/C	PRESSURE COEFFICIENT UPPER	LOWER	DIFF
.988	-.2339	0.2427	-.4766
.940	-.4604	0.4702	-.9306
.858	-.6729	0.6839	-1.357
.774	-.8008	0.8123	-1.613
.720	-.8403	0.8519	-1.692
.679	-.8561	0.8678	-1.724
.577	-.8418	0.8537	-1.695
.423	-.6698	0.6821	-1.352
.298	-.3565	0.3692	-.7258
.228	-.0886	0.1014	-.1900
.151	0.4106	-.3976	0.8082
.060	1.6851	-1.672	3.3572
.012	4.9543	-4.941	9.8953

Figure 434, Chordwise Pressure Distribution, Imaginary, Configuration 4



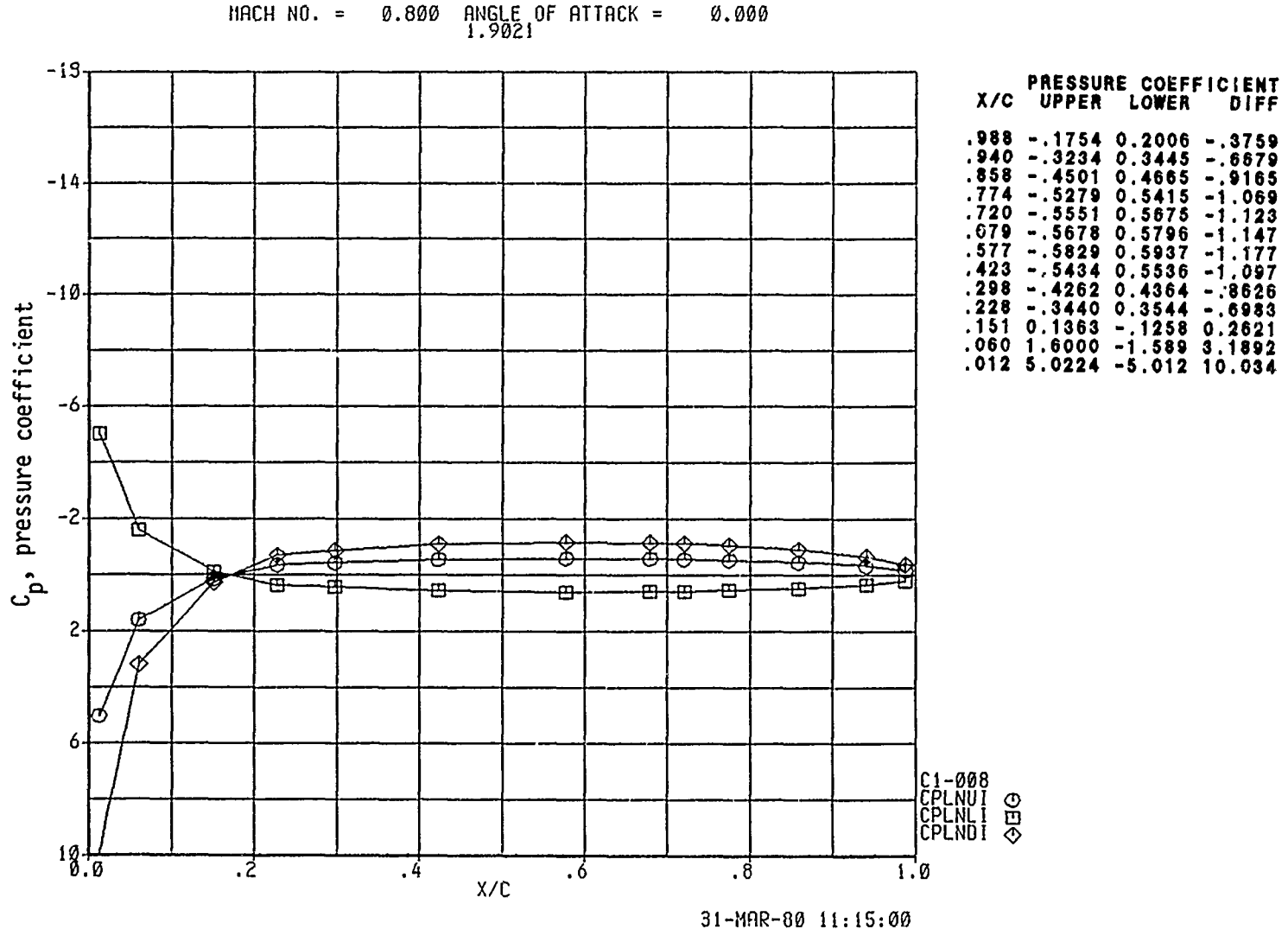
X/C	PRESSURE COEFFICIENT UPPER	LOWER	DIFF
.988	-.2042	0.2193	-.4235
.940	-.4060	0.4208	-.8269
.858	-.5953	0.6094	-1.205
.774	-.7124	0.7255	-1.438
.720	-.7503	0.7681	-1.513
.679	-.7675	0.7800	-1.548
.577	-.7658	0.7779	-1.544
.423	-.6279	0.6398	-1.268
.298	-.3427	0.3549	-.6976
.228	-.0877	0.0999	-.1877
.151	0.3987	-.3864	0.7850
.060	1.6417	-1.629	3.2709
.012	4.8097	-4.797	9.6068

Figure 435, Chordwise Pressure Distribution, Imaginary, Configuration 4



X/C	PRESSURE COEFFICIENT UPPER	LOWER	DIFF
.988	-.1626	0.2030	-.3656
.940	-.3699	0.3885	-.7584
.858	-.5452	0.5612	-1.107
.775	-.6495	0.6636	-1.313
.720	-.6852	0.6984	-1.384
.679	-.7028	0.7156	-1.418
.578	-.7095	0.7215	-1.431
.423	-.6047	0.6162	-1.221
.298	-.3534	0.3649	-.7183
.228	-.1083	0.1199	-.2283
.151	0.3759	-.3640	0.7399
.060	1.6119	-1.600	3.2119
.012	4.6691	-4.677	9.3662

Figure 436, Chordwise Pressure Distribution, Imaginary, Configuration 4



X/C	PRESSURE COEFFICIENT UPPER	LOWER	DIFF
.988	-.1754	0.2006	-.3759
.940	-.3234	0.3445	-.6679
.858	-.4501	0.4665	-.9165
.774	-.5279	0.5415	-1.069
.720	-.5551	0.5675	-1.123
.679	-.5678	0.5796	-1.147
.577	-.5829	0.5937	-1.177
.423	-.5434	0.5536	-1.097
.298	-.4262	0.4364	-.8626
.228	-.3440	0.3544	-.6983
.151	0.1363	-.1258	0.2621
.060	1.6000	-1.589	3.1892
.012	5.0224	-5.012	10.034

Figure 437, Chordwise Pressure Distribution, Imaginary, Configuration 4

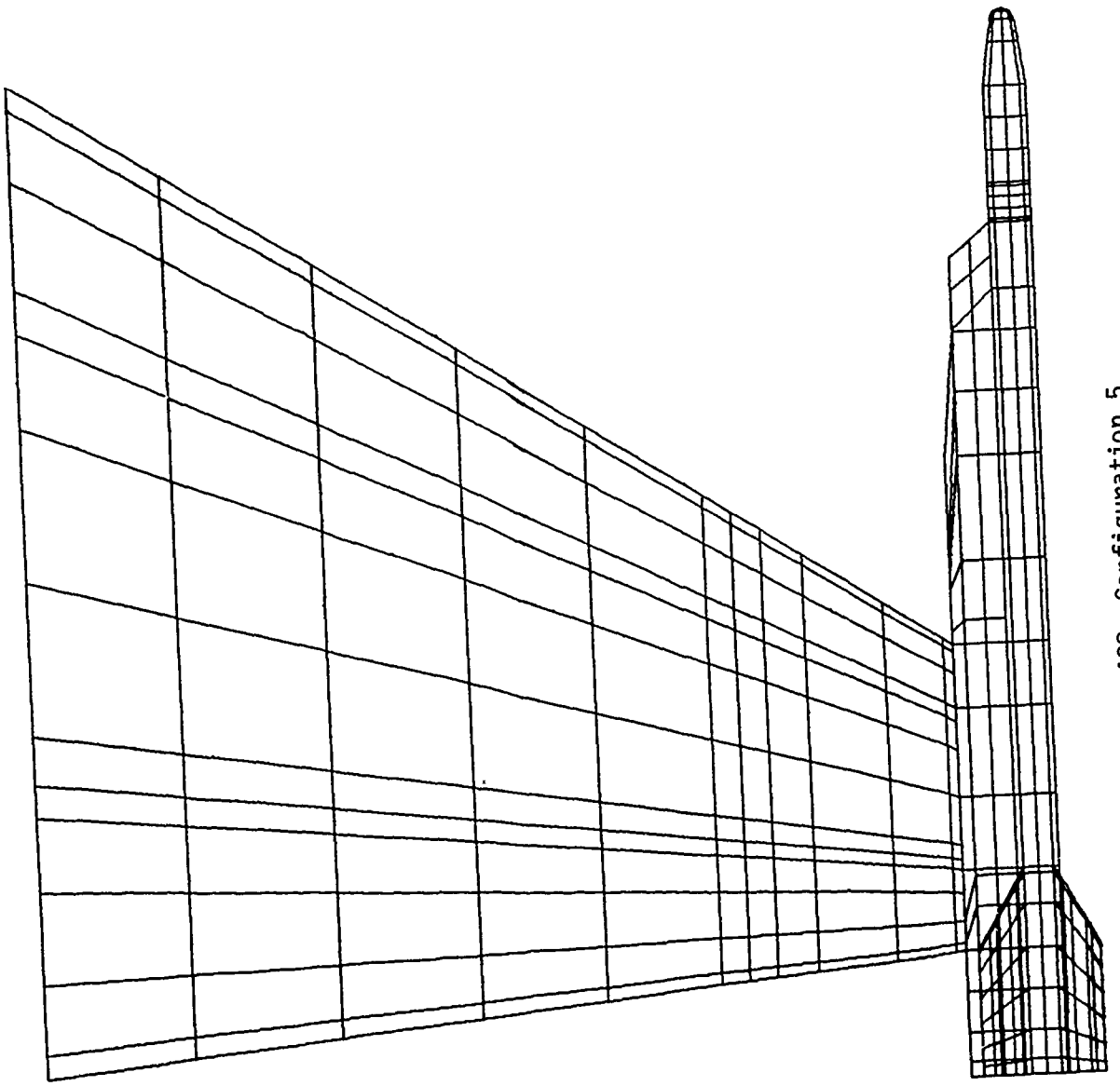
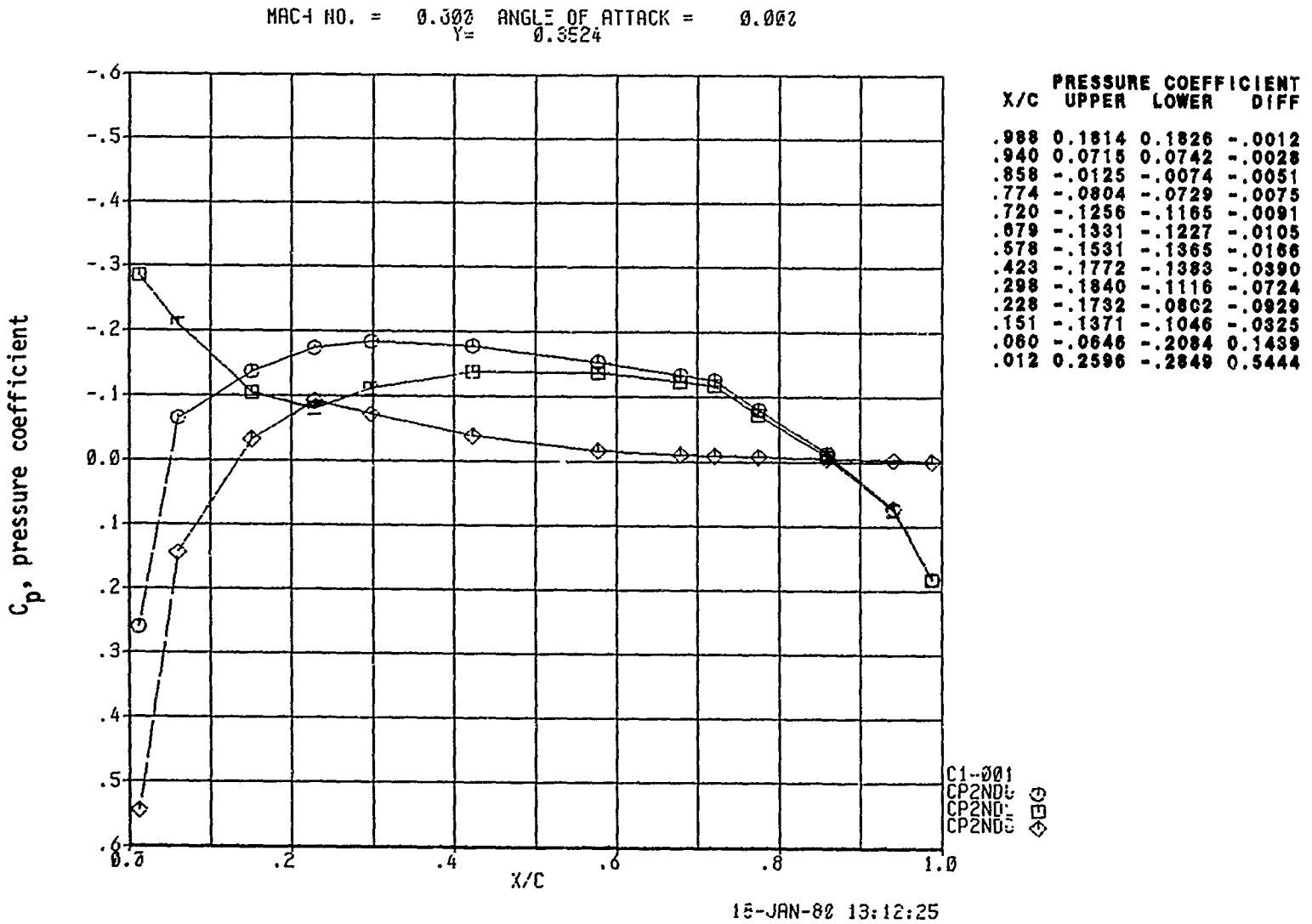
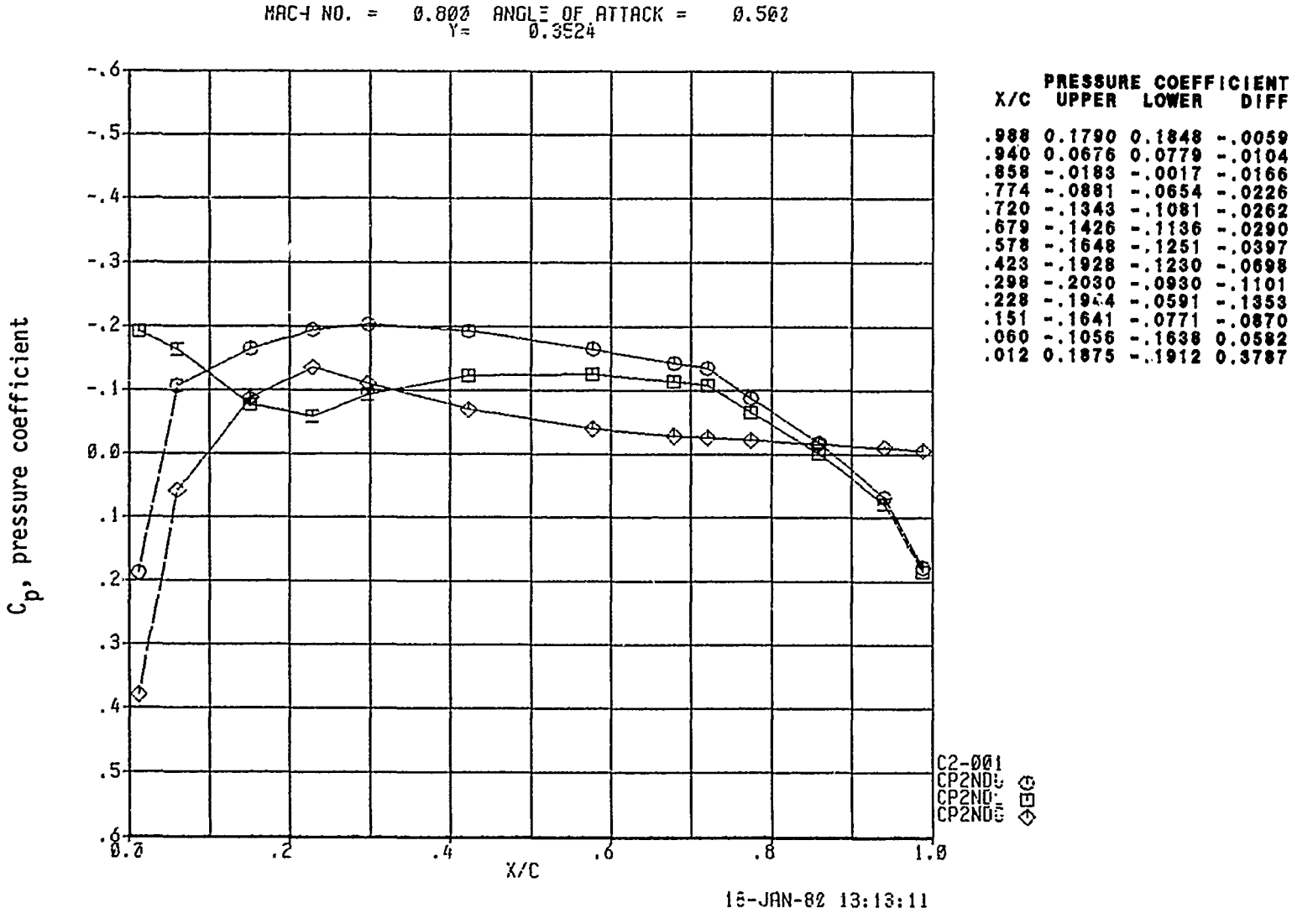


Figure 438, Configuration 5



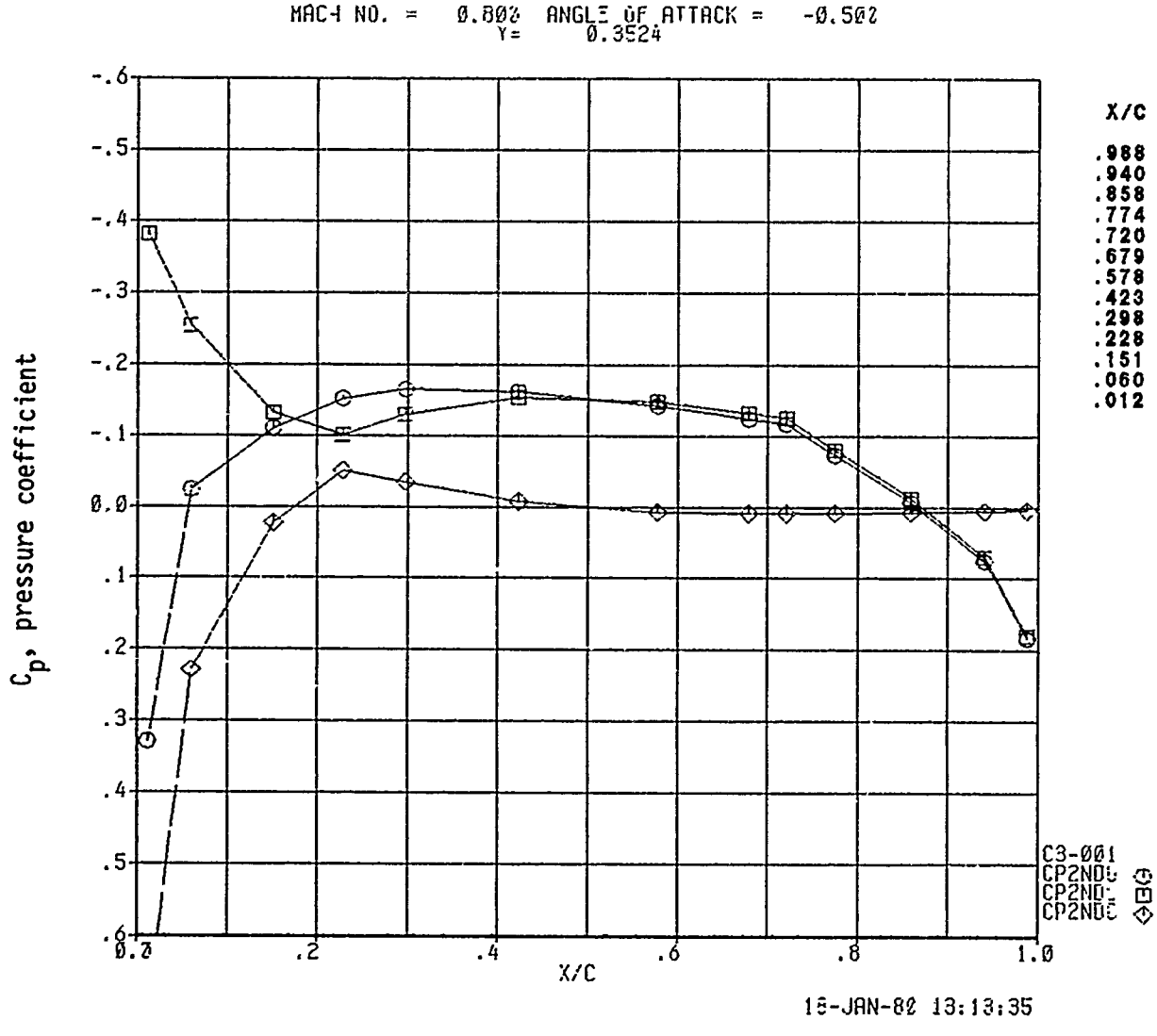
X/C	PRESSURE COEFFICIENT UPPER	LOWER	DIFF
.988	0.1814	0.1826	-.0012
.940	0.0715	0.0742	-.0028
.858	-.0125	-.0074	-.0051
.774	-.0804	-.0729	-.0075
.720	-.1256	-.1165	-.0091
.679	-.1331	-.1227	-.0105
.578	-.1531	-.1365	-.0166
.423	-.1772	-.1383	-.0390
.298	-.1840	-.1116	-.0724
.228	-.1732	-.0802	-.0929
.151	-.1371	-.1046	-.0325
.060	-.0646	-.2084	0.1439
.012	0.2596	-.2849	0.5444

Figure 439, Chordwise Pressure Distribution, Steady, Configuration 5



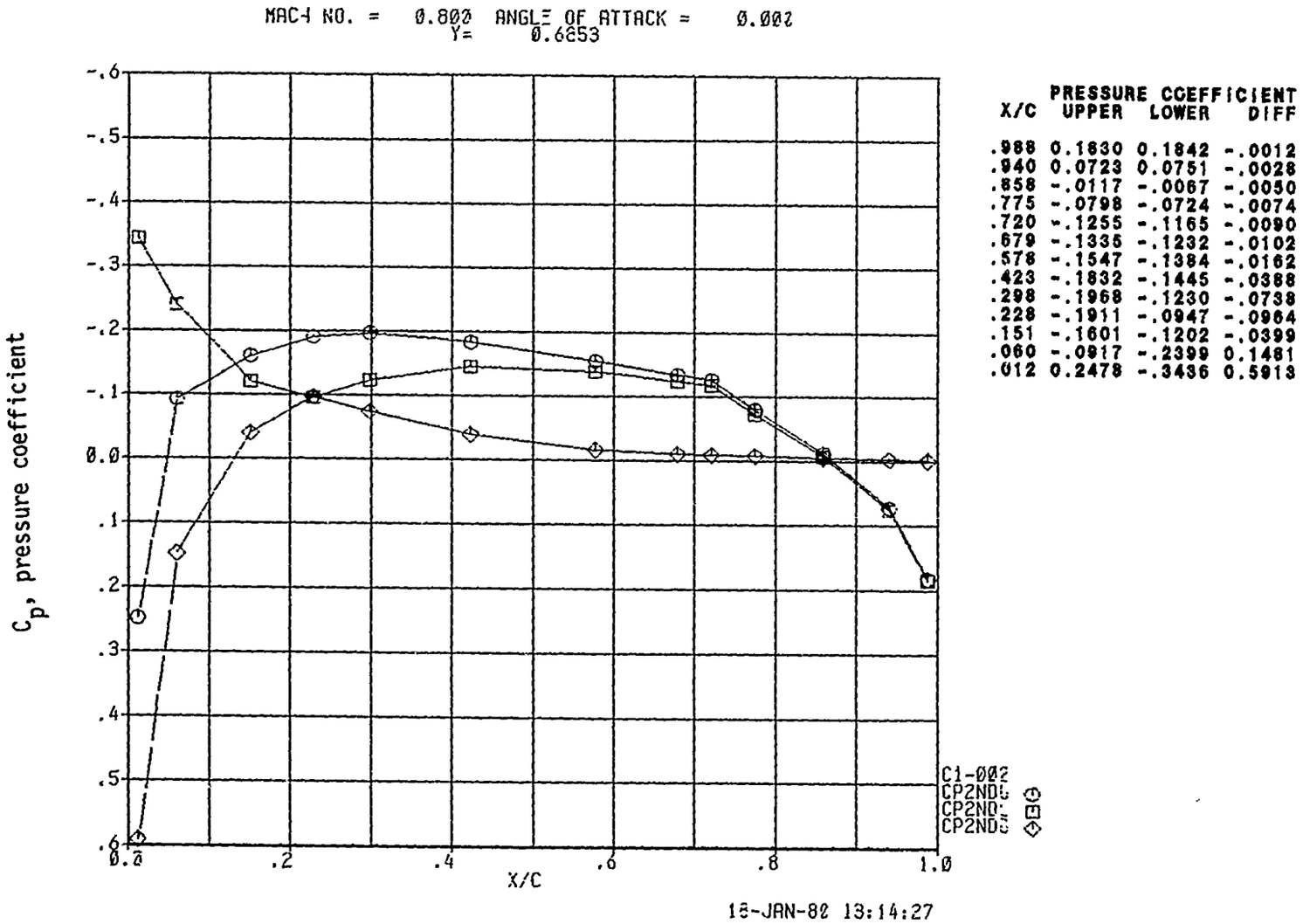
X/C	PRESSURE COEFFICIENT UPPER	LOWER	DIFF
.988	0.1790	0.1848	-.0059
.940	0.0676	0.0779	-.0104
.858	-.0183	-.0017	-.0166
.774	-.0881	-.0654	-.0226
.720	-.1343	-.1081	-.0262
.679	-.1426	-.1136	-.0290
.578	-.1648	-.1251	-.0397
.423	-.1928	-.1230	-.0698
.298	-.2030	-.0930	-.1101
.228	-.1944	-.0591	-.1353
.151	-.1641	-.0771	-.0870
.060	-.1056	-.1638	0.0582
.012	0.1875	-.1912	0.3787

Figure 440, Chordwise Pressure Distribution, Steady, Configuration 5



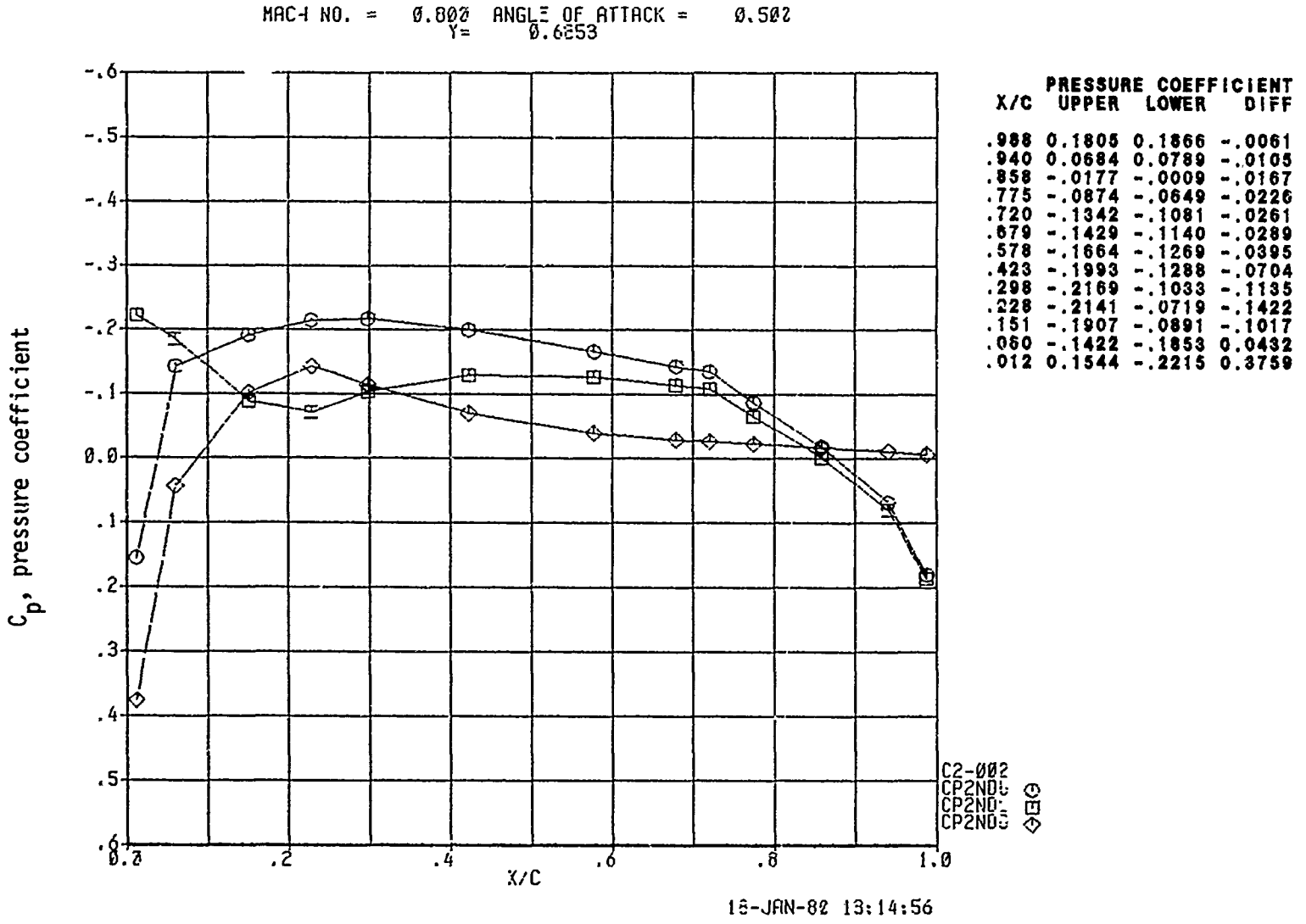
X/C	PRESSURE COEFFICIENT UPPER	LOWER	DIFF
.988	0.1836	0.1802	0.0035
.940	0.0752	0.0704	0.0049
.858	-.0068	-.0132	0.0065
.774	-.0730	-.0805	0.0076
.720	-.1172	-.1252	0.0080
.679	-.1240	-.1321	0.0082
.578	-.1417	-.1481	0.0064
.423	-.1619	-.1538	-.0082
.298	-.1652	-.1305	-.0347
.228	-.1521	-.1017	-.0504
.151	-.1105	-.1325	0.0220
.060	-.0242	-.2537	0.2295
.012	0.3284	-.3818	0.7102

Figure 441, Chordwise Pressure Distribution, Steady, Configuration 5



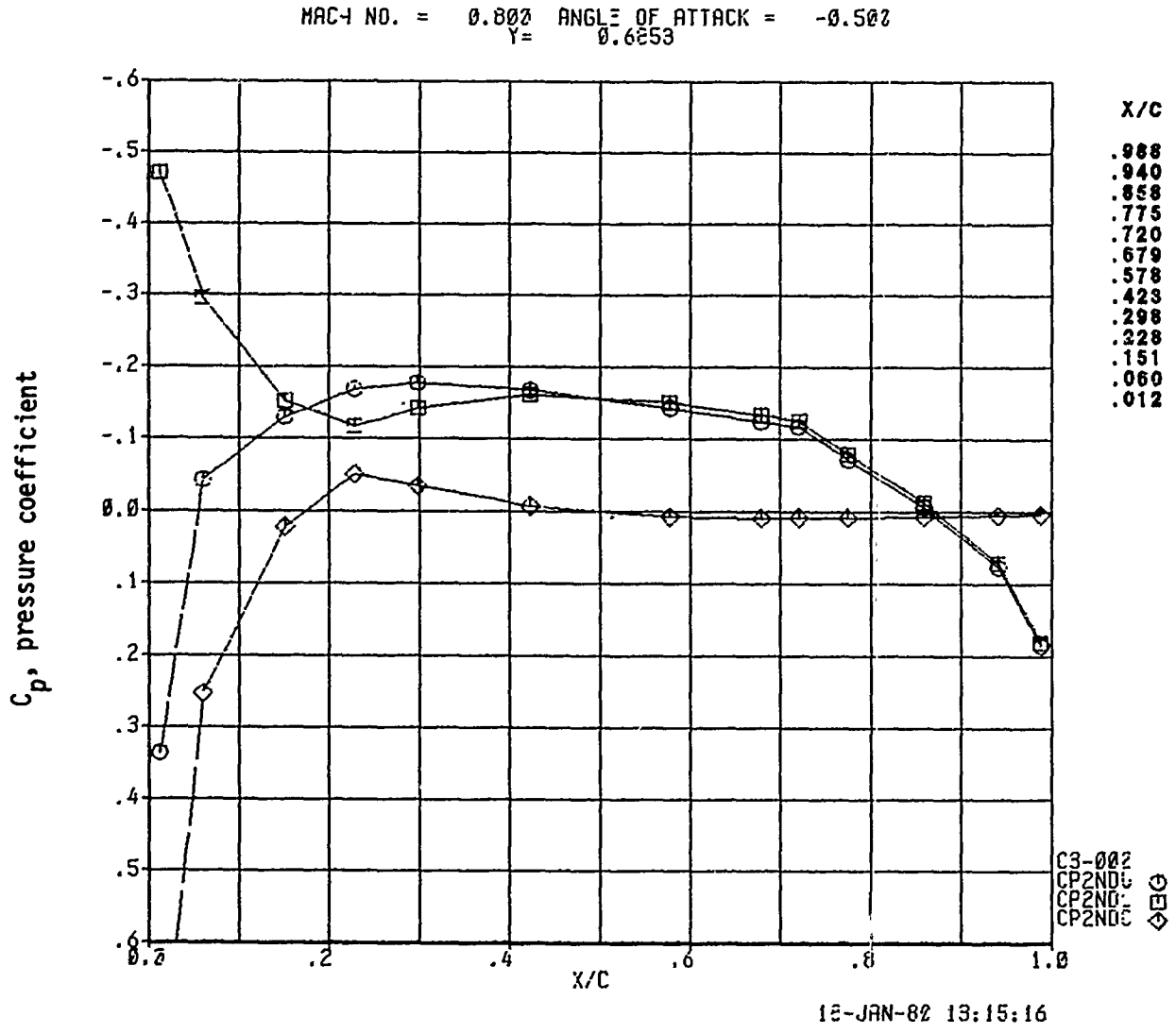
X/C	PRESSURE COEFFICIENT UPPER	LOWER	DIFF
.988	0.1830	0.1842	-.0012
.940	0.0723	0.0751	-.0028
.858	-.0117	-.0067	-.0050
.775	-.0798	-.0724	-.0074
.720	-.1255	-.1165	-.0090
.679	-.1335	-.1232	-.0102
.578	-.1547	-.1384	-.0162
.423	-.1832	-.1445	-.0388
.298	-.1968	-.1230	-.0738
.228	-.1911	-.0947	-.0964
.151	-.1601	-.1202	-.0399
.060	-.0917	-.2399	0.1481
.012	0.2478	-.3436	0.5913

Figure 442, Chordwise Pressure Distribution, Steady, Configuration 5



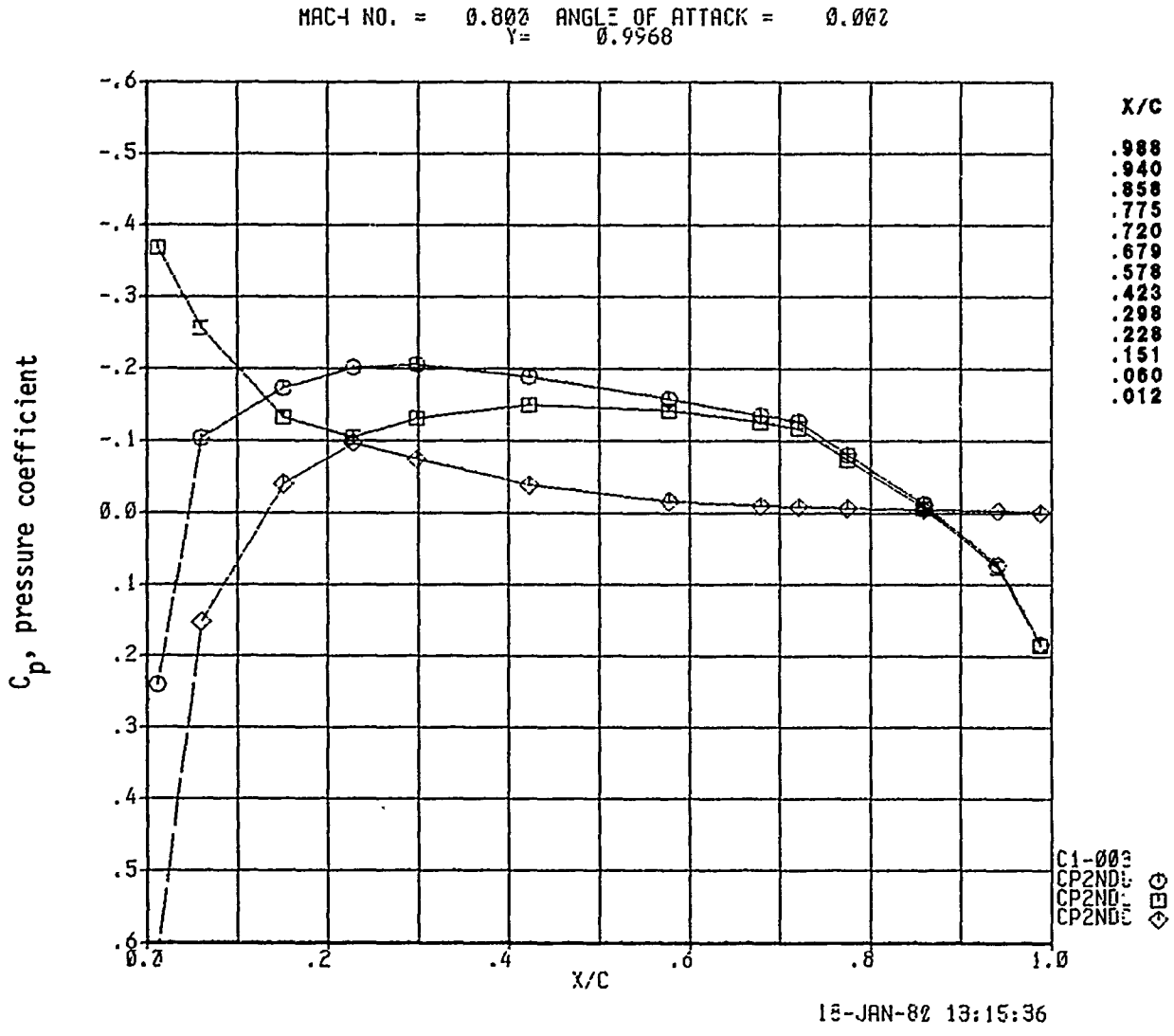
X/C	PRESSURE COEFFICIENT UPPER	LOWER	DIFF
.988	0.1805	0.1866	-.0061
.940	0.0684	0.0789	-.0105
.858	-.0177	-.0009	-.0167
.775	-.0874	-.0649	-.0226
.720	-.1342	-.1081	-.0261
.679	-.1429	-.1140	-.0289
.578	-.1664	-.1269	-.0395
.423	-.1993	-.1288	-.0704
.298	-.2169	-.1033	-.1135
.228	-.2141	-.0719	-.1422
.151	-.1907	-.0891	-.1017
.060	-.1422	-.1853	0.0432
.012	0.1544	-.2215	0.3759

Figure 443, Chordwise Pressure Distribution, Steady, Configuration 5



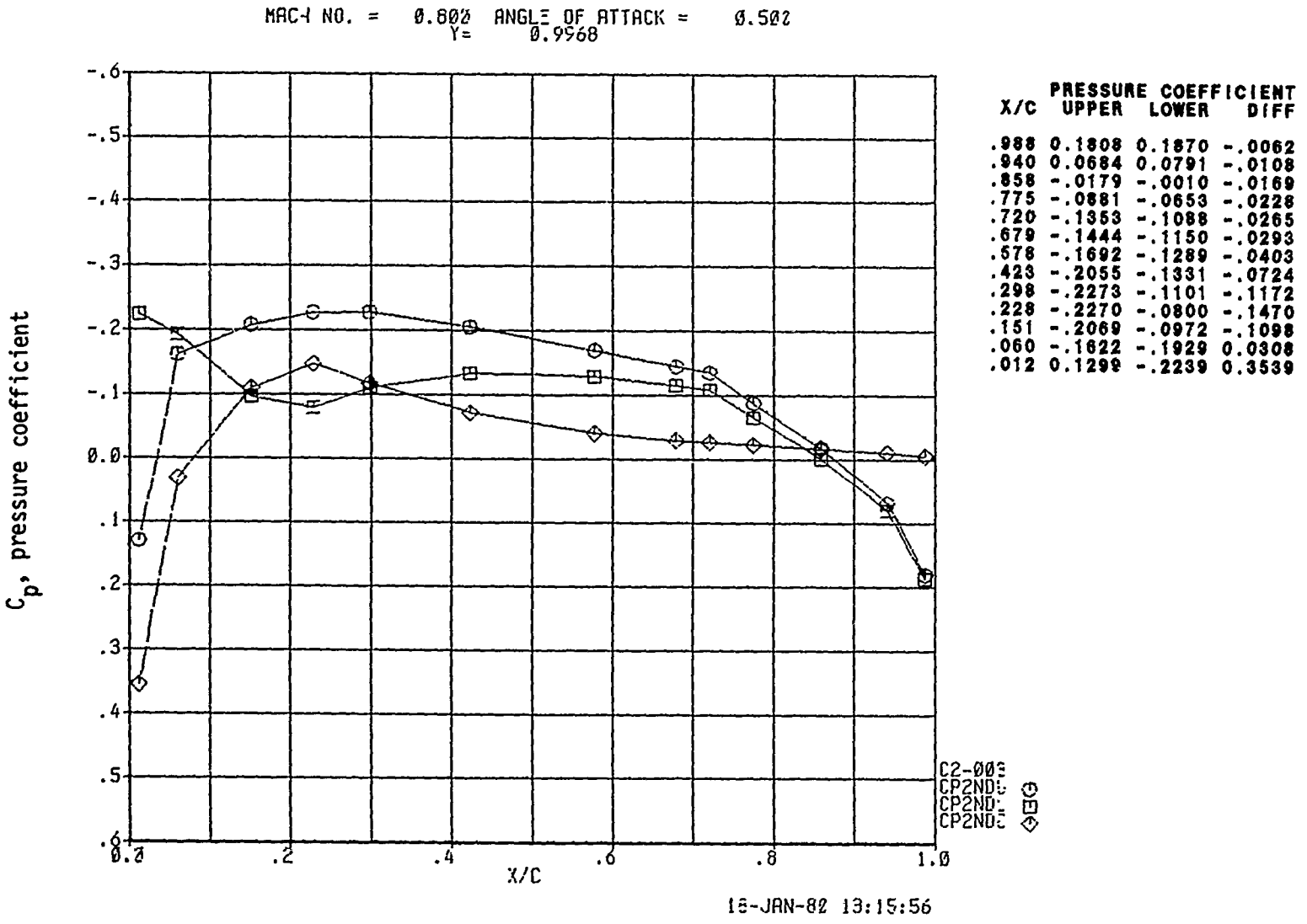
X/C	PRESSURE COEFFICIENT UPPER	LOWER	DIFF
.988	0.1853	0.1818	0.0036
.940	0.0761	0.0712	0.0050
.858	-.0060	-.0126	0.0066
.775	-.0723	-.0800	0.0077
.720	-.1170	-.1252	0.0081
.679	-.1243	-.1327	0.0084
.578	-.1431	-.1502	0.0070
.423	-.1674	-.1604	-.0070
.298	-.1769	-.1429	-.0341
.228	-.1684	-.1178	-.0506
.151	-.1299	-.1518	0.0219
.060	-.0423	-.2955	0.2532
.012	0.3358	-.4710	0.8068

Figure 444, Chordwise Pressure Distribution, Steady, Configuration 5



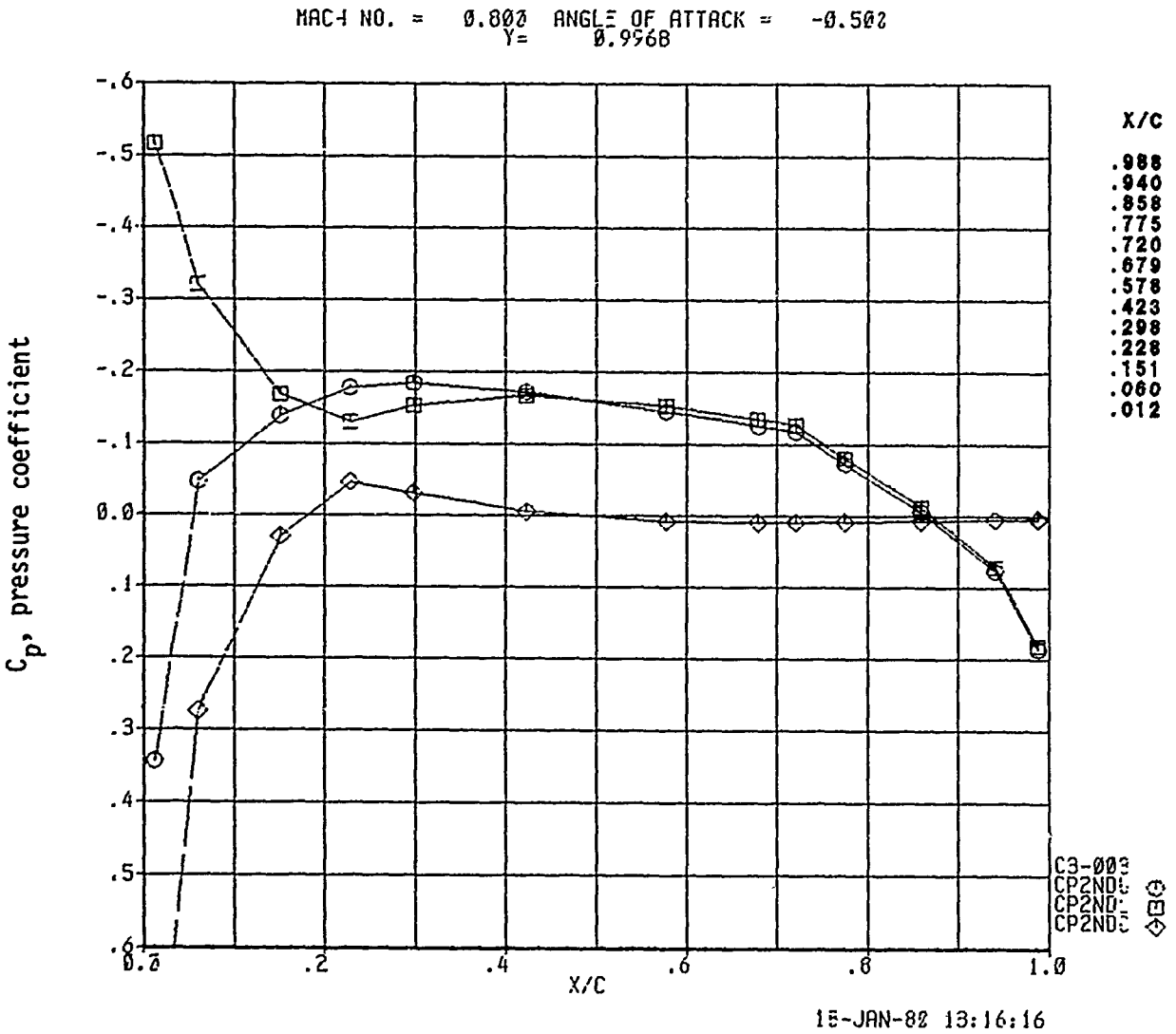
X/C	PRESSURE COEFFICIENT UPPER	LOWER	DIFF
.988	0.1834	0.1846	-.0012
.940	0.0724	0.0752	-.0028
.858	-.0119	-.0069	-.0050
.775	-.0803	-.0730	-.0073
.720	-.1264	-.1174	-.0089
.679	-.1347	-.1245	-.0102
.578	-.1570	-.1408	-.0163
.423	-.1886	-.1496	-.0390
.298	-.2055	-.1313	-.0742
.228	-.2017	-.1049	-.0968
.151	-.1723	-.1320	-.0403
.060	-.1035	-.2559	0.1524
.012	0.2401	-.3670	0.6071

Figure 445, Chordwise Pressure Distribution, Steady, Configuration 5



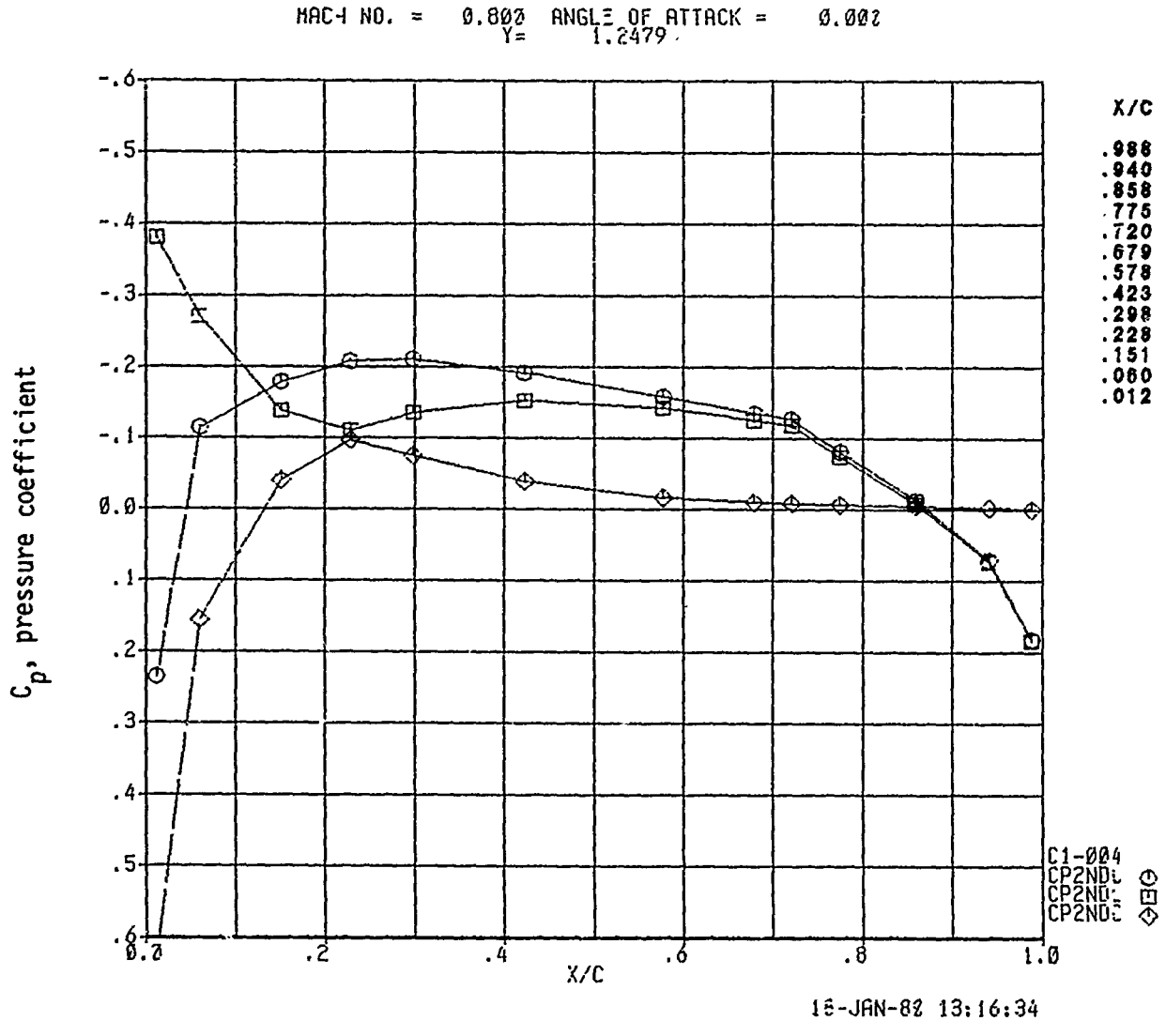
X/C	PRESSURE COEFFICIENT UPPER	LOWER	DIFF
.988	0.1808	0.1870	-.0062
.940	0.0684	0.0791	-.0108
.858	-.0179	-.0010	-.0169
.775	-.0881	-.0653	-.0228
.720	-.1353	-.1088	-.0265
.679	-.1444	-.1150	-.0293
.578	-.1692	-.1289	-.0403
.423	-.2055	-.1331	-.0724
.298	-.2273	-.1101	-.1172
.228	-.2270	-.0800	-.1470
.151	-.2069	-.0972	-.1098
.060	-.1622	-.1929	0.0308
.012	0.1299	-.2239	0.3539

Figure 446, Chordwise Pressure Distribution, Steady, Configuration 5



X/C	PRESSURE COEFFICIENT UPPER	LOWER	DIFF
.988	0.1858	0.1820	0.0038
.940	0.0763	0.0712	0.0052
.858	-.0061	-.0130	0.0069
.775	-.0726	-.0808	0.0081
.720	-.1177	-.1263	0.0086
.679	-.1252	-.1341	0.0089
.578	-.1450	-.1529	0.0078
.423	-.1719	-.1664	-.0054
.298	-.1840	-.1528	-.0313
.228	-.1767	-.1303	-.0465
.151	-.1382	-.1675	0.0292
.060	-.0463	-.3204	0.2740
.012	0.3431	-.5173	0.8604

Figure 447, Chordwise Pressure Distribution, Steady, Configuration 5



X/C	PRESSURE COEFFICIENT UPPER	LOWER	DIFF
.986	0.1820	0.1832	-.0012
.940	0.0712	0.0738	-.0026
.858	-.0128	-.0080	-.0048
.775	-.0809	-.0738	-.0071
.720	-.1269	-.1182	-.0087
.679	-.1353	-.1253	-.0100
.578	-.1580	-.1418	-.0162
.423	-.1918	-.1527	-.0392
.298	-.2108	-.1361	-.0747
.228	-.2076	-.1108	-.0966
.151	-.1785	-.1386	-.0400
.060	-.1142	-.2695	0.1554
.012	0.2349	-.3804	0.6154

Figure 448, Chordwise Pressure Distribution, Steady, Configuration 5

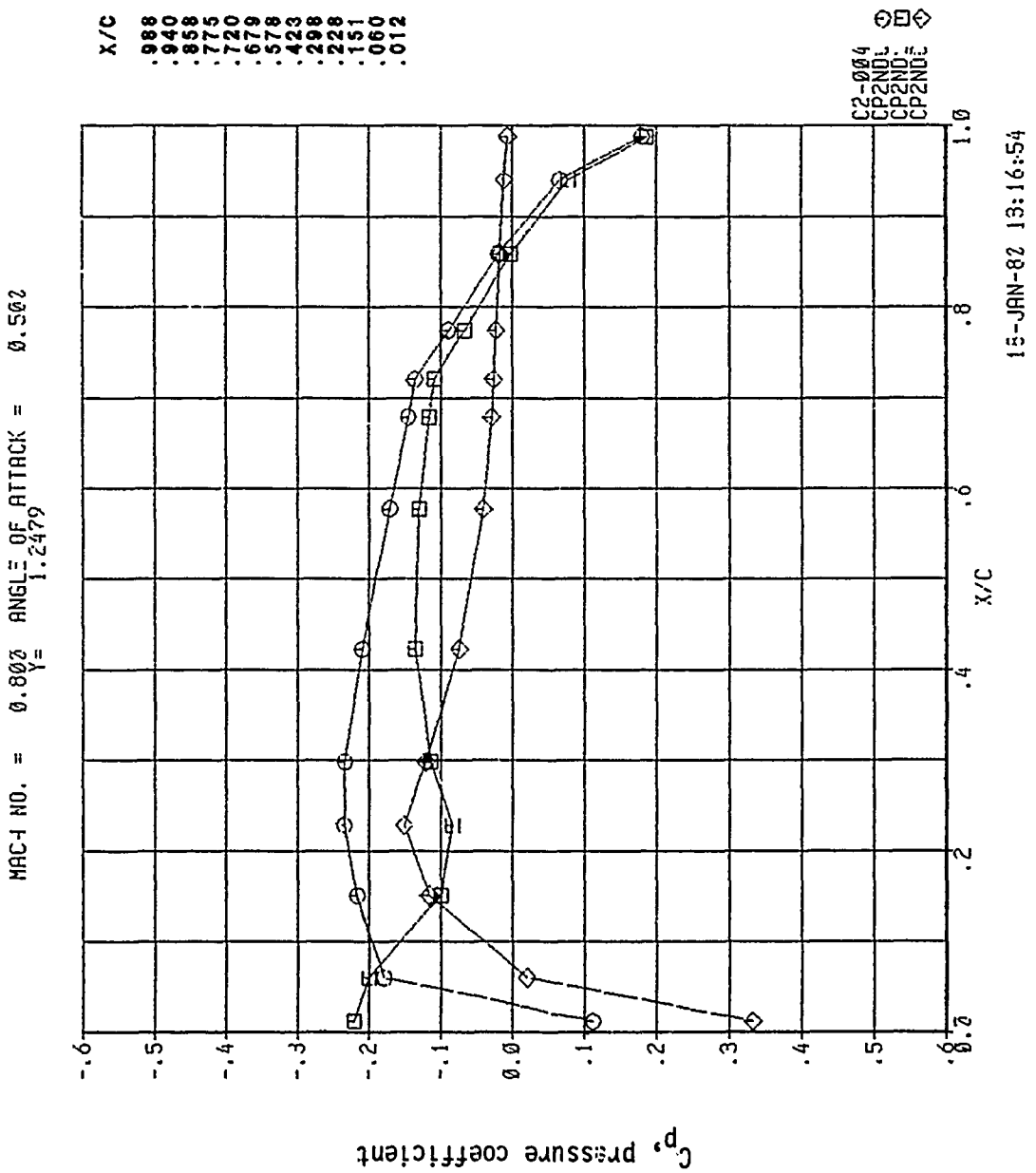
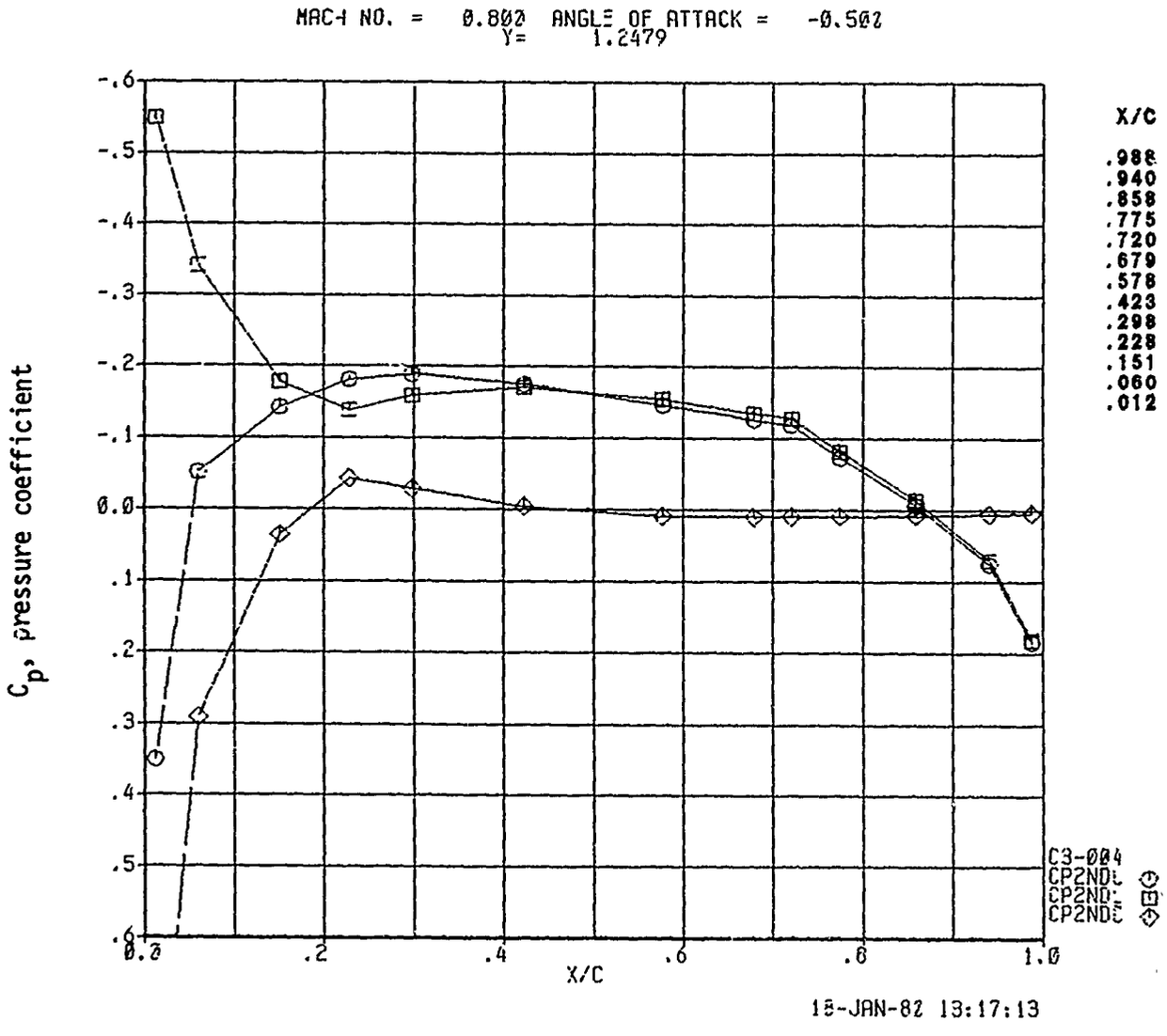
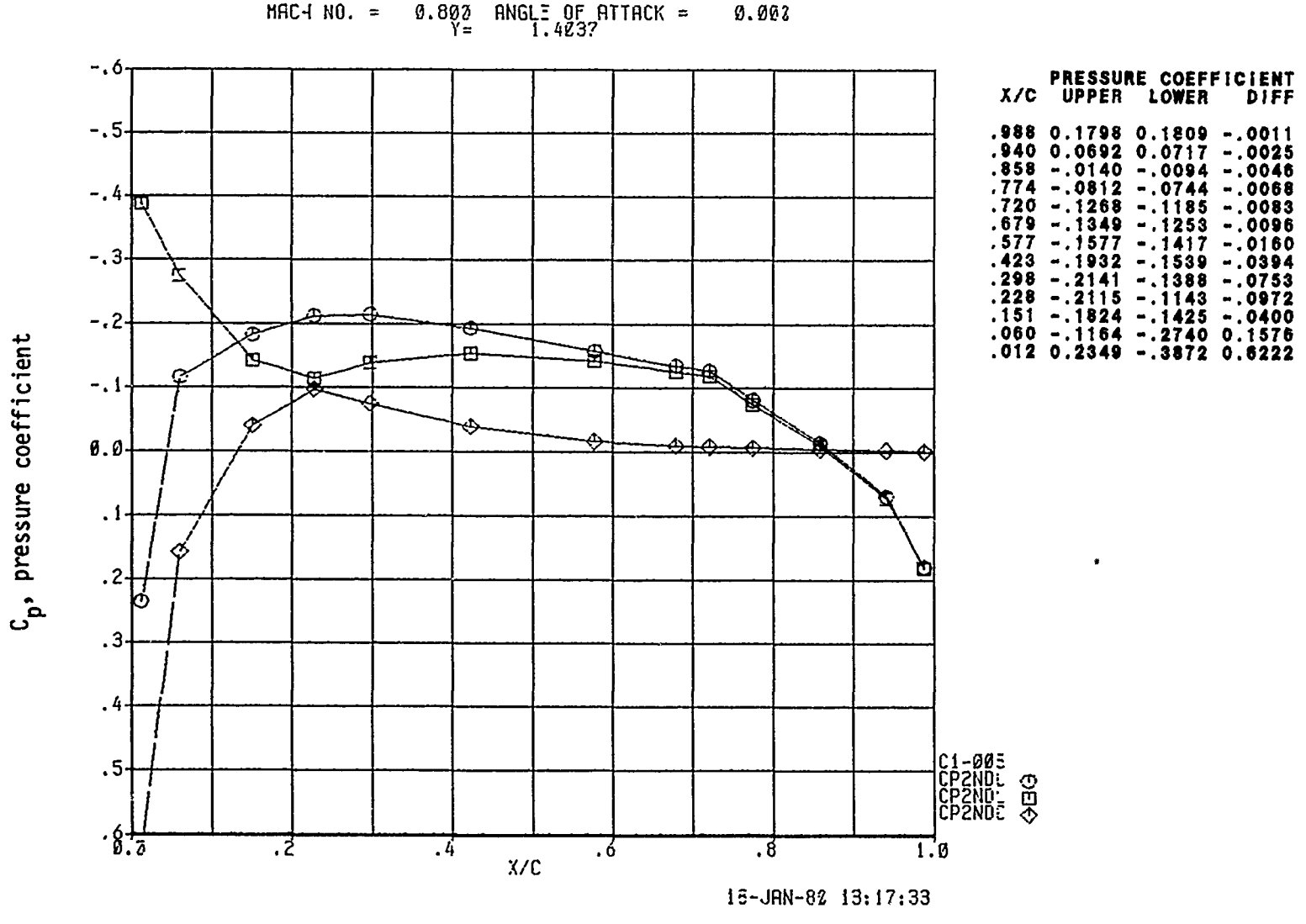


Figure 449, Chordwise Pressure Distribution, Steady, Configuration 5



X/C	PRESSURE COEFFICIENT UPPER	LOWER	DIFF
.988	0.1845	0.1806	0.0040
.940	0.0752	0.0696	0.0056
.858	-.0068	-.0142	0.0075
.775	-.0731	-.0818	0.0087
.720	-.1181	-.1273	0.0092
.679	-.1256	-.1351	0.0095
.578	-.1458	-.1542	0.0084
.423	-.1744	-.1703	-.0041
.298	-.1878	-.1591	-.0287
.228	-.1805	-.1383	-.0422
.151	-.1412	-.1774	0.0361
.060	-.0507	-.3411	0.2904
.012	0.3495	-.5487	0.8983

Figure 450, Chordwise Pressure Distribution, Steady, Configuration 5



X/C	PRESSURE COEFFICIENT UPPER	LOWER	DIFF
.988	0.1798	0.1809	-.0011
.940	0.0692	0.0717	-.0025
.858	-.0140	-.0094	-.0046
.774	-.0812	-.0744	-.0068
.720	-.1268	-.1185	-.0083
.679	-.1349	-.1253	-.0096
.577	-.1577	-.1417	-.0160
.423	-.1932	-.1539	-.0394
.298	-.2141	-.1388	-.0753
.228	-.2115	-.1143	-.0972
.151	-.1824	-.1425	-.0400
.060	-.1164	-.2740	0.1576
.012	0.2349	-.3872	0.6222

Figure 451, Chordwise Pressure Distribution, Steady, Configuration 5

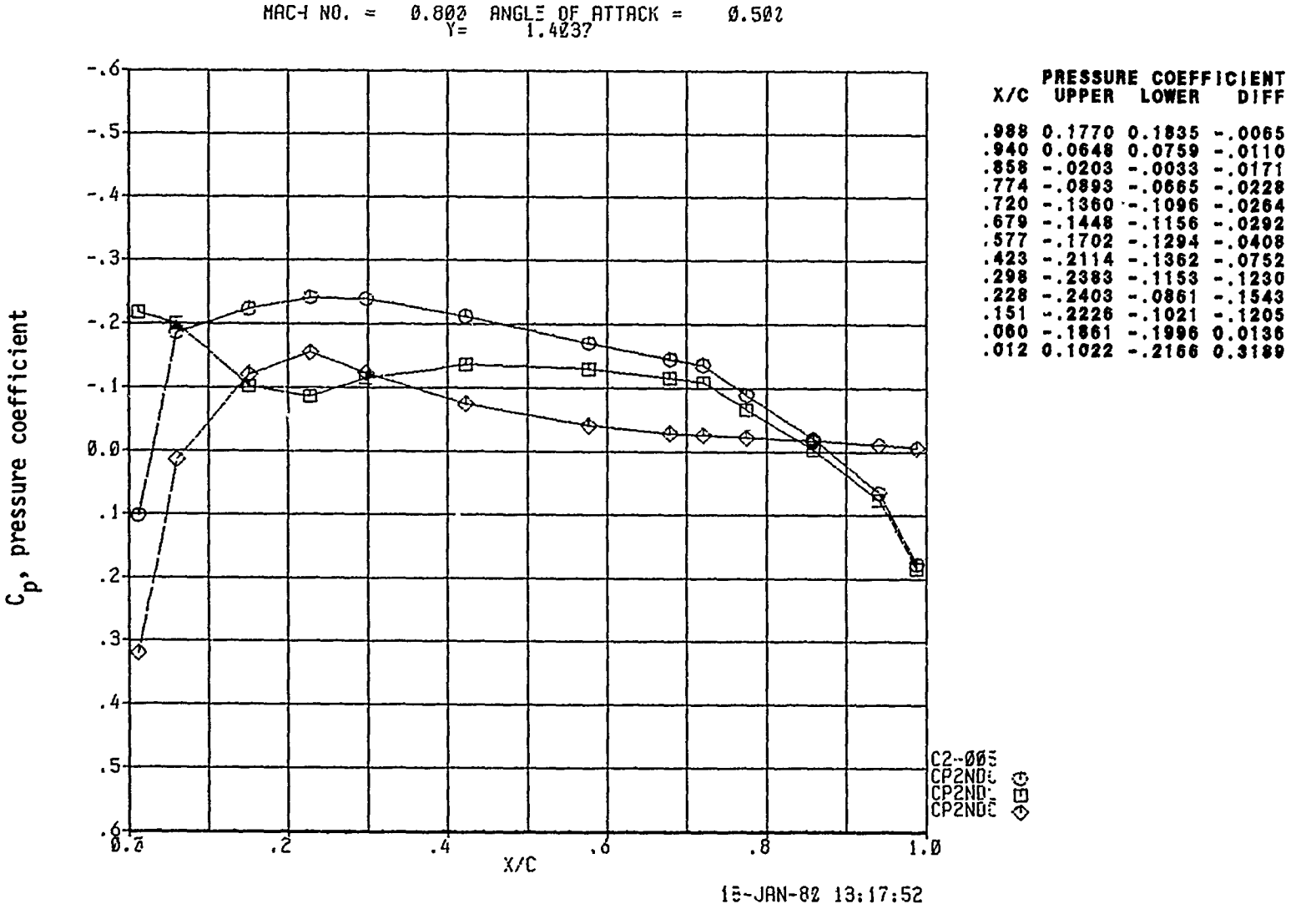
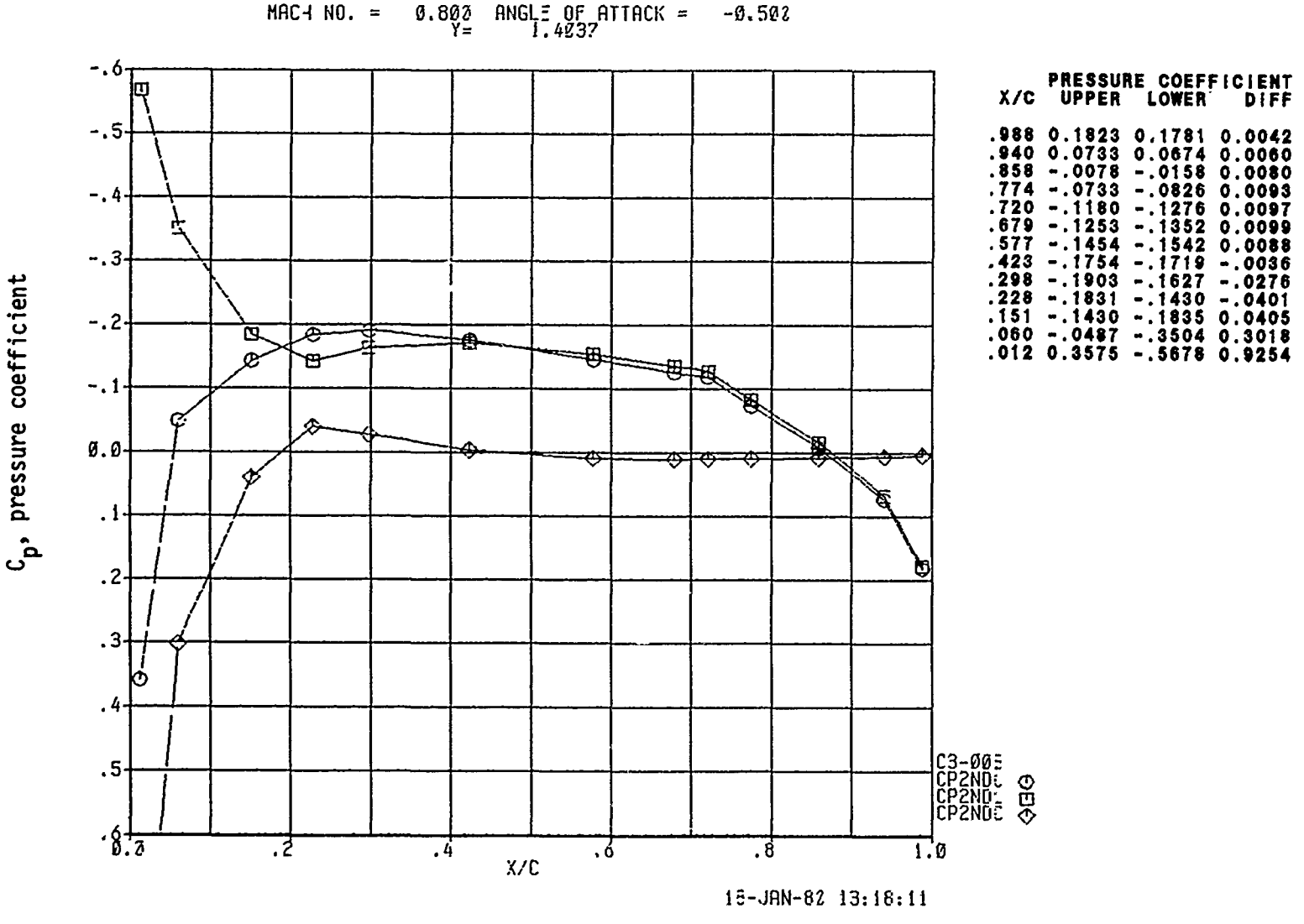
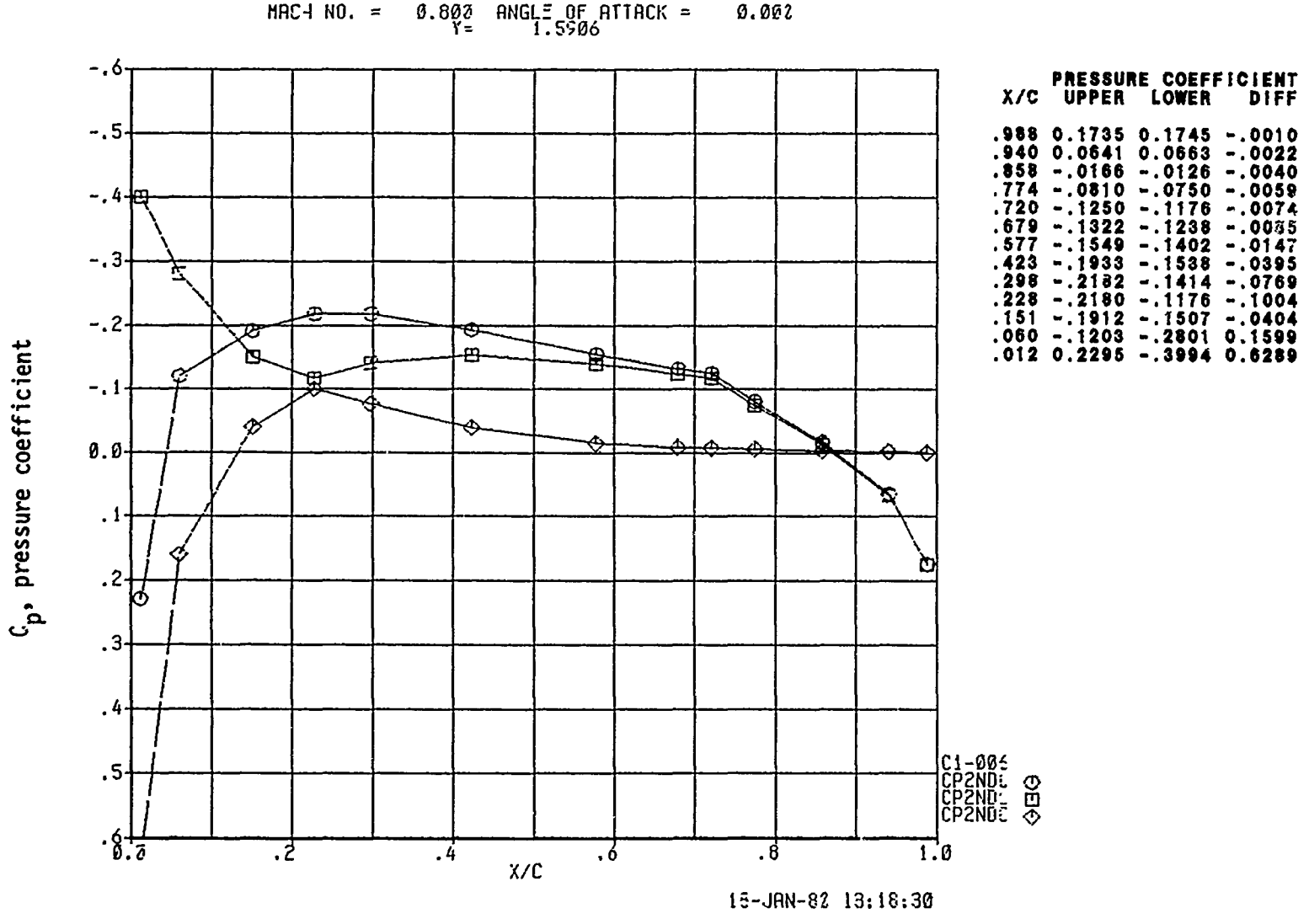


Figure 452, Chordwise Pressure Distribution, Steady, Configuration 5



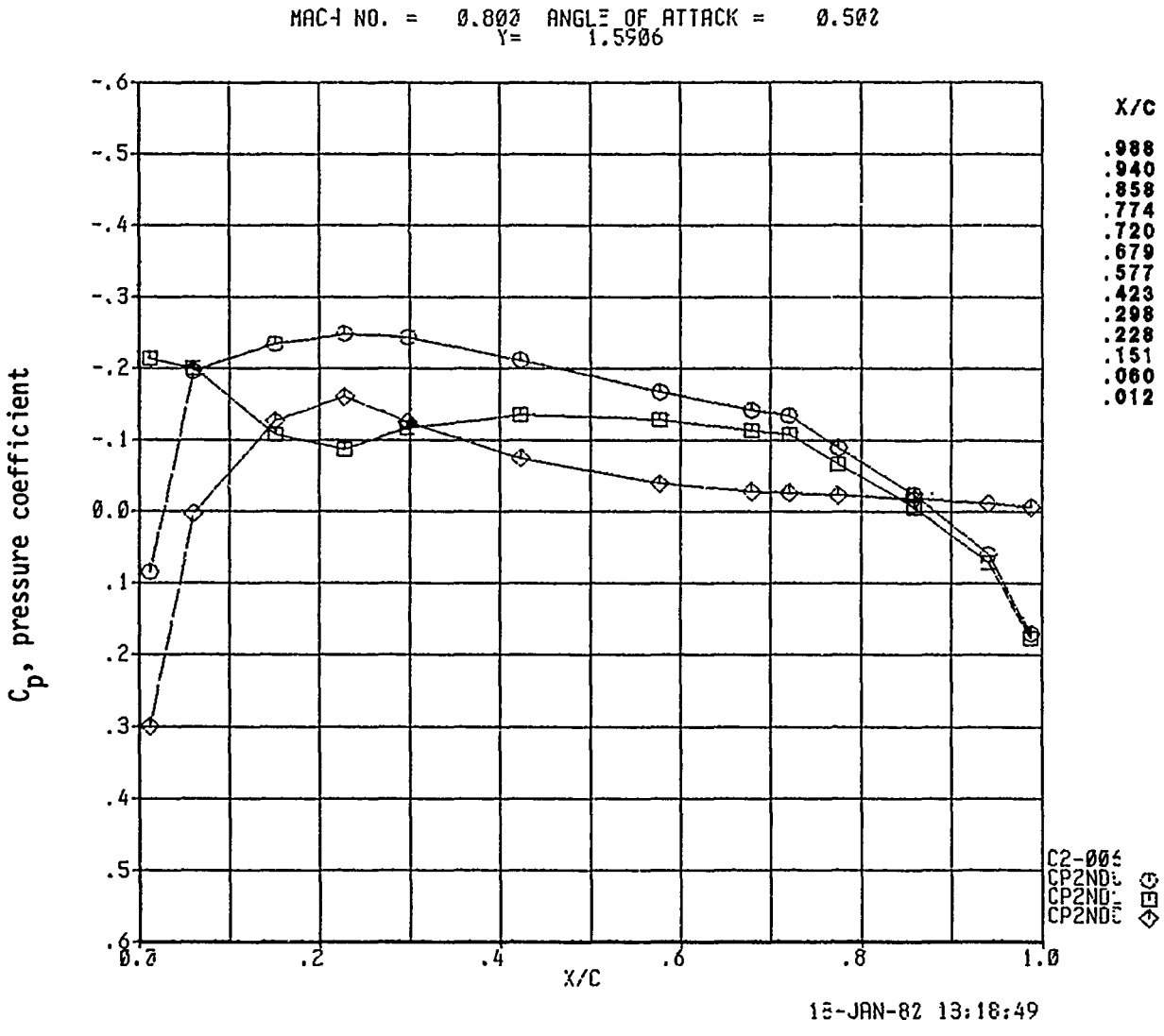
X/C	PRESSURE COEFFICIENT UPPER	LOWER	DIFF
.988	0.1823	0.1781	0.0042
.940	0.0733	0.0674	0.0060
.858	-.0078	-.0158	0.0080
.774	-.0733	-.0826	0.0093
.720	-.1180	-.1276	0.0097
.679	-.1253	-.1352	0.0099
.577	-.1454	-.1542	0.0088
.423	-.1754	-.1719	-.0036
.298	-.1903	-.1627	-.0276
.228	-.1831	-.1430	-.0401
.151	-.1430	-.1835	0.0405
.060	-.0487	-.3504	0.3018
.012	0.3575	-.5678	0.9254

Figure 453, Chordwise Pressure Distribution, Steady, Configuration 5



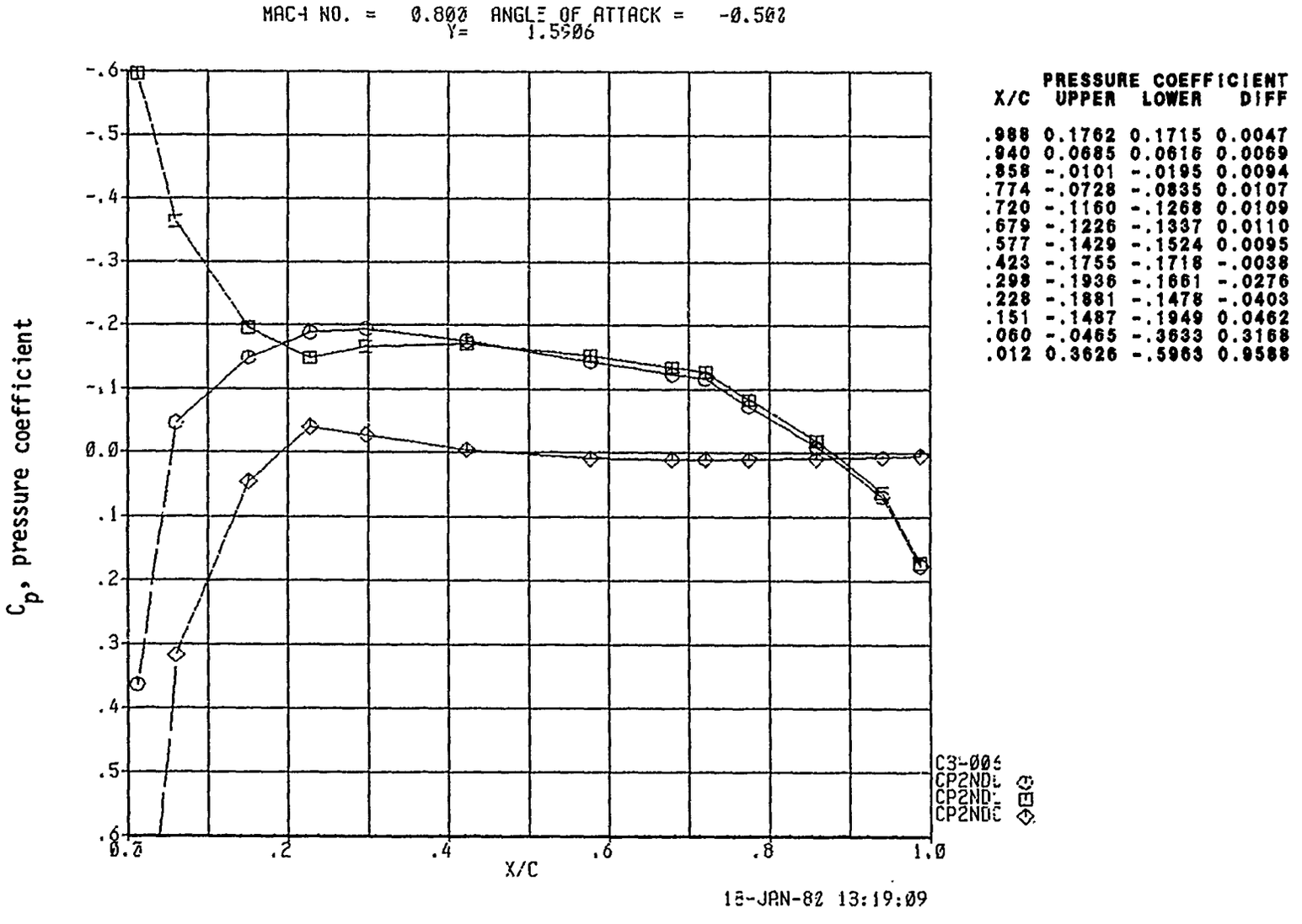
X/C	PRESSURE COEFFICIENT UPPER	LOWER	DIFF
.988	0.1735	0.1745	-.0010
.940	0.0641	0.0663	-.0022
.858	-.0166	-.0126	-.0040
.774	-.0810	-.0750	-.0059
.720	-.1250	-.1176	-.0074
.679	-.1322	-.1238	-.0085
.577	-.1549	-.1402	-.0147
.423	-.1933	-.1538	-.0395
.298	-.2182	-.1414	-.0769
.228	-.2180	-.1176	-.1004
.151	-.1912	-.1507	-.0404
.060	-.1203	-.2801	0.1599
.012	0.2295	-.3994	0.6289

Figure 454, Chordwise Pressure Distribution, Steady, Configuration 5



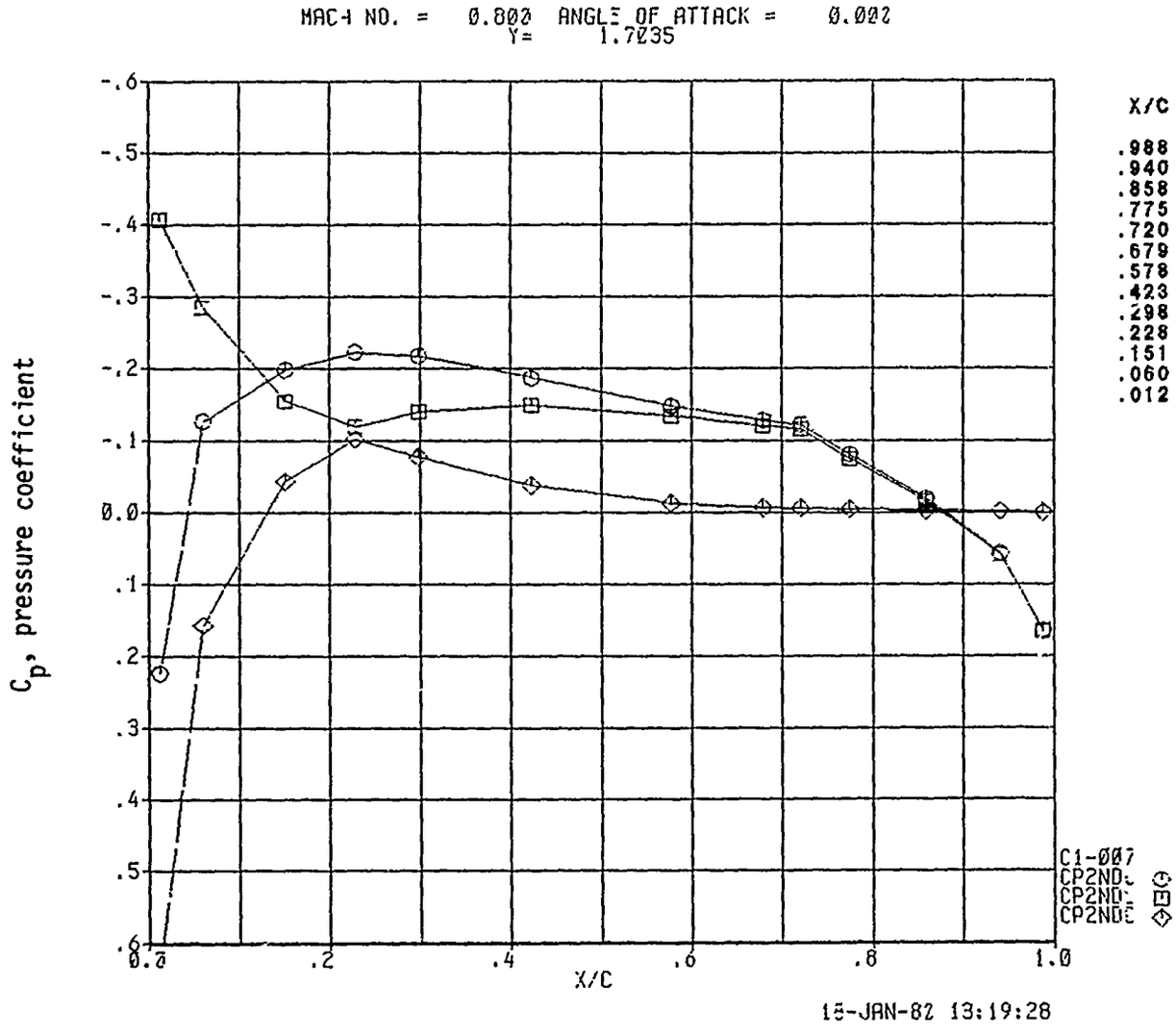
X/C	PRESSURE COEFFICIENT UPPER	LOWER	DIFF
.988	0.1706	0.1772	-.0066
.940	0.0595	0.0708	-.0113
.858	-.0234	-.0061	-.0173
.774	-.0894	-.0668	-.0226
.720	-.1343	-.1085	-.0256
.679	-.1421	-.1141	-.0280
.577	-.1671	-.1282	-.0390
.423	-.2114	-.1361	-.0751
.298	-.2432	-.1172	-.1260
.228	-.2484	-.0879	-.1605
.151	-.2345	-.1074	-.1371
.060	-.1962	-.1993	0.0030
.012	0.0847	-.2143	0.2990

Figure 455, Chordwise Pressure Distribution, Steady, Configuration 5



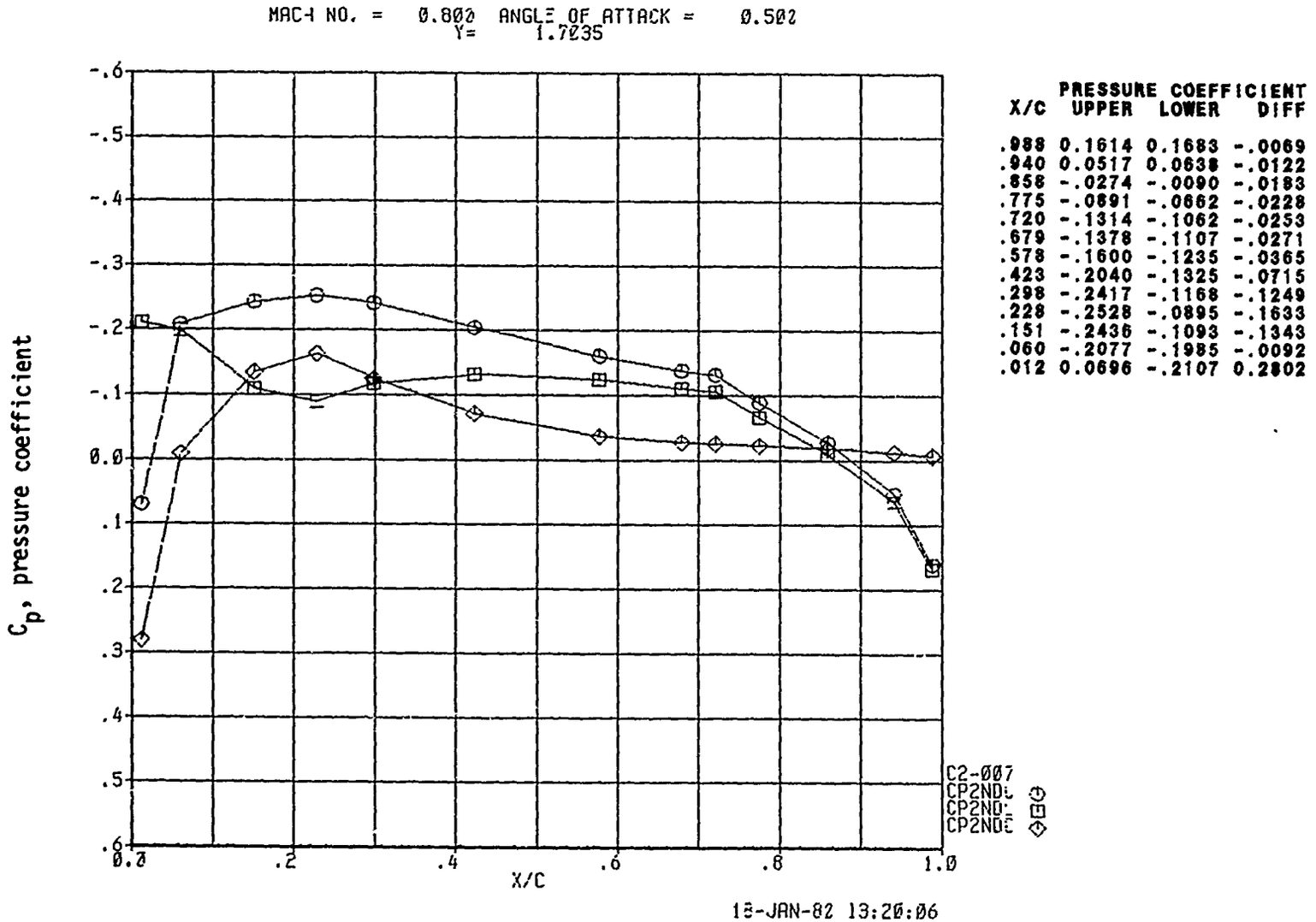
X/C	PRESSURE COEFFICIENT UPPER	LOWER	DIFF
.988	0.1762	0.1715	0.0047
.940	0.0685	0.0616	0.0069
.858	-.0101	-.0195	0.0094
.774	-.0728	-.0835	0.0107
.720	-.1160	-.1268	0.0109
.679	-.1226	-.1337	0.0110
.577	-.1429	-.1524	0.0095
.423	-.1755	-.1718	-.0038
.298	-.1936	-.1661	-.0276
.228	-.1881	-.1478	-.0403
.151	-.1487	-.1949	0.0462
.060	-.0465	-.3633	0.3168
.012	0.3626	-.5963	0.9588

Figure 456, Chordwise Pressure Distribution, Steady, Configuration 5



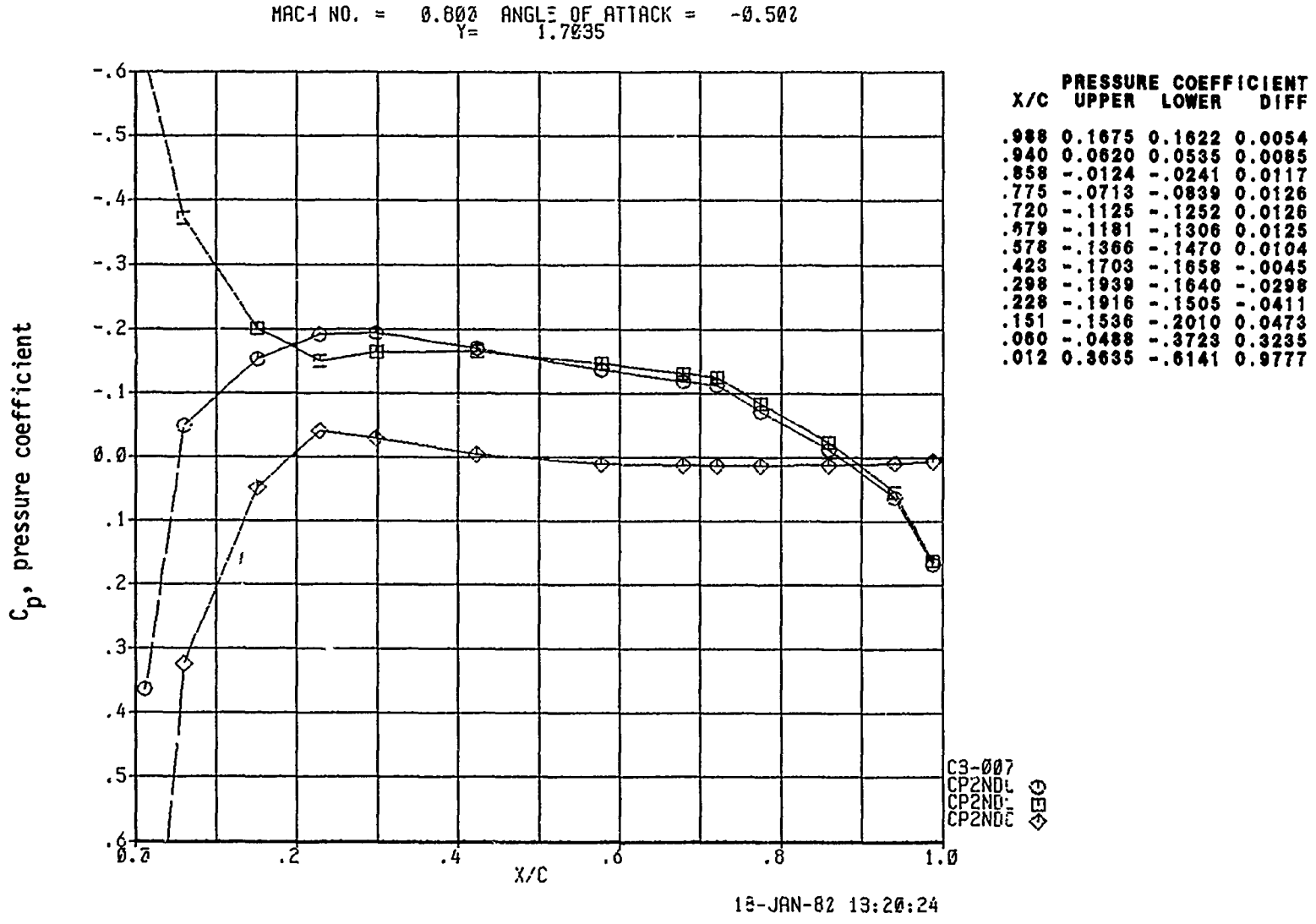
X/C	PRESSURE COEFFICIENT UPPER	LOWER	DIFF
.988	0.1645	0.1654	-.0008
.940	0.0570	0.0588	-.0018
.858	-.0197	-.0165	-.0033
.775	-.0801	-.0750	-.0051
.720	-.1219	-.1155	-.0063
.679	-.1278	-.1205	-.0073
.578	-.1482	-.1351	-.0131
.423	-.1870	-.1490	-.0379
.298	-.2176	-.1402	-.0773
.228	-.2220	-.1198	-.1022
.151	-.1982	-.1547	-.0435
.060	-.1270	-.2842	0.1571
.012	0.2230	-.4059	0.6289

Figure 457, Chordwise Pressure Distribution, Steady, Configuration 5



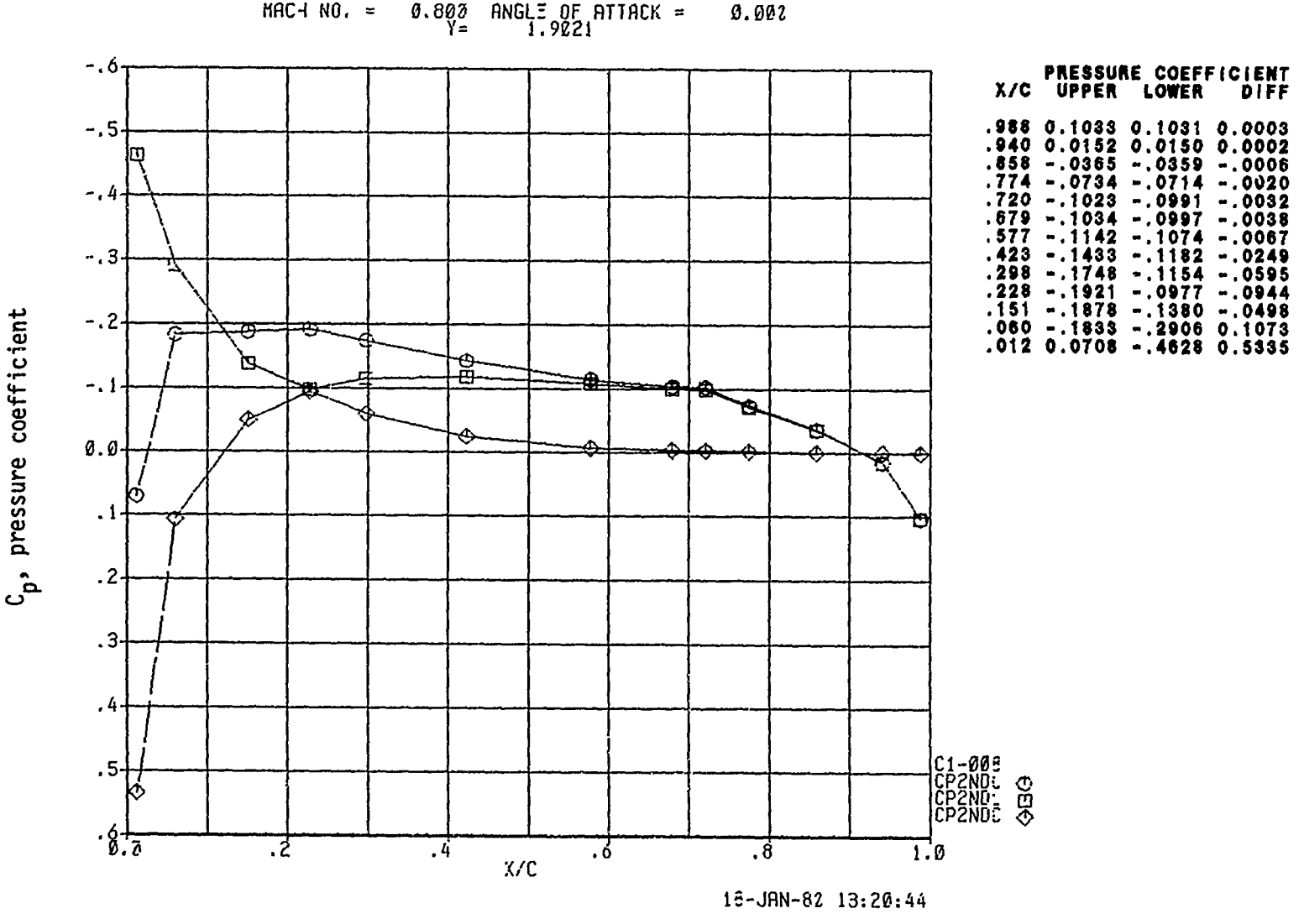
X/C	PRESSURE COEFFICIENT UPPER	LOWER	DIFF
.988	0.1614	0.1683	-.0069
.940	0.0517	0.0638	-.0122
.858	-.0274	-.0090	-.0183
.775	-.0691	-.0662	-.0228
.720	-.1314	-.1062	-.0253
.679	-.1378	-.1107	-.0271
.578	-.1600	-.1235	-.0365
.423	-.2040	-.1325	-.0715
.298	-.2417	-.1168	-.1249
.228	-.2528	-.0895	-.1633
.151	-.2436	-.1093	-.1343
.060	-.2077	-.1985	-.0092
.012	0.0696	-.2107	0.2802

Figure 458, Chordwise Pressure Distribution, Steady, Configuration 5



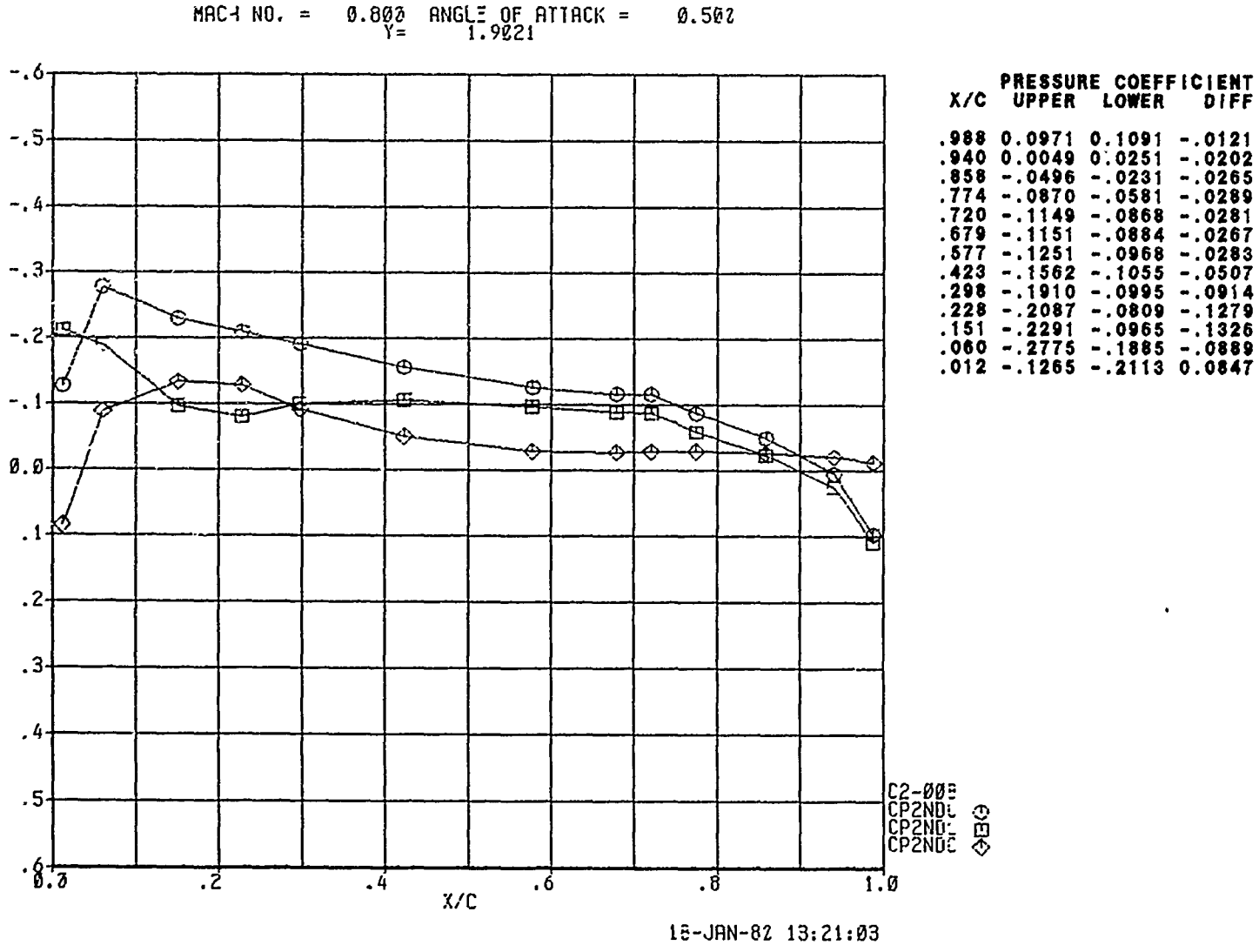
X/C	PRESSURE COEFFICIENT UPPER	LOWER	DIFF
.988	0.1675	0.1622	0.0054
.940	0.0620	0.0535	0.0085
.858	-.0124	-.0241	0.0117
.775	-.0713	-.0839	0.0126
.720	-.1125	-.1252	0.0126
.579	-.1181	-.1306	0.0125
.578	-.1366	-.1470	0.0104
.423	-.1703	-.1658	-.0045
.298	-.1939	-.1640	-.0298
.228	-.1916	-.1505	-.0411
.151	-.1536	-.2010	0.0473
.060	-.0488	-.3723	0.3235
.012	0.3635	-.6141	0.9777

Figure 459, Chordwise Pressure Distribution, Steady, Configuration 5



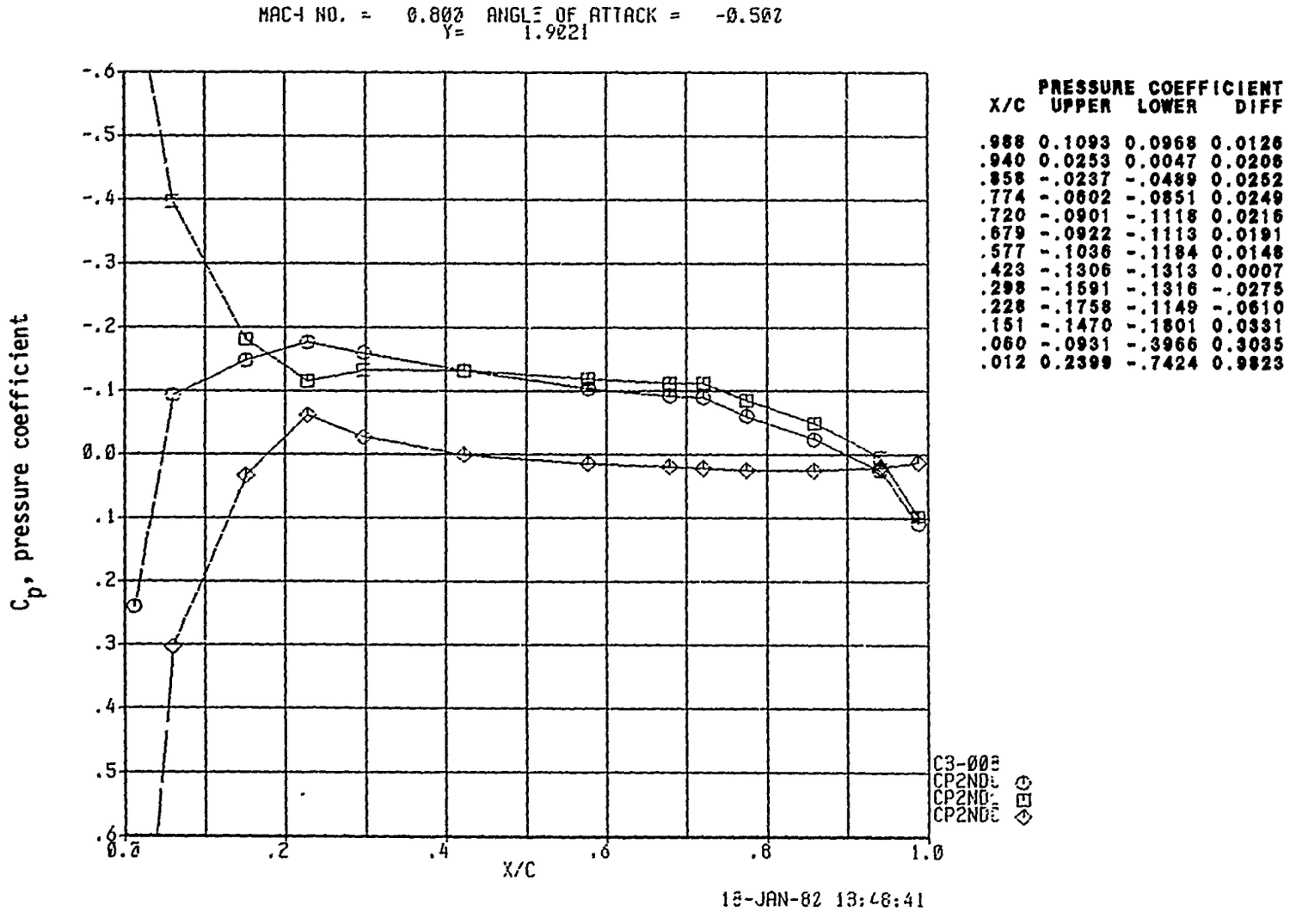
X/C	PRESSURE COEFFICIENT UPPER	LOWER	DIFF
.988	0.1033	0.1031	0.0003
.940	0.0152	0.0150	0.0002
.858	-.0365	-.0359	-.0006
.774	-.0734	-.0714	-.0020
.720	-.1023	-.0991	-.0032
.679	-.1034	-.0997	-.0038
.577	-.1142	-.1074	-.0067
.423	-.1433	-.1182	-.0249
.298	-.1748	-.1154	-.0595
.228	-.1921	-.0977	-.0944
.151	-.1878	-.1380	-.0498
.060	-.1833	-.2906	0.1073
.012	0.0708	-.4628	0.5335

Figure 460, Chordwise Pressure Distribution, Steady, Configuration 5



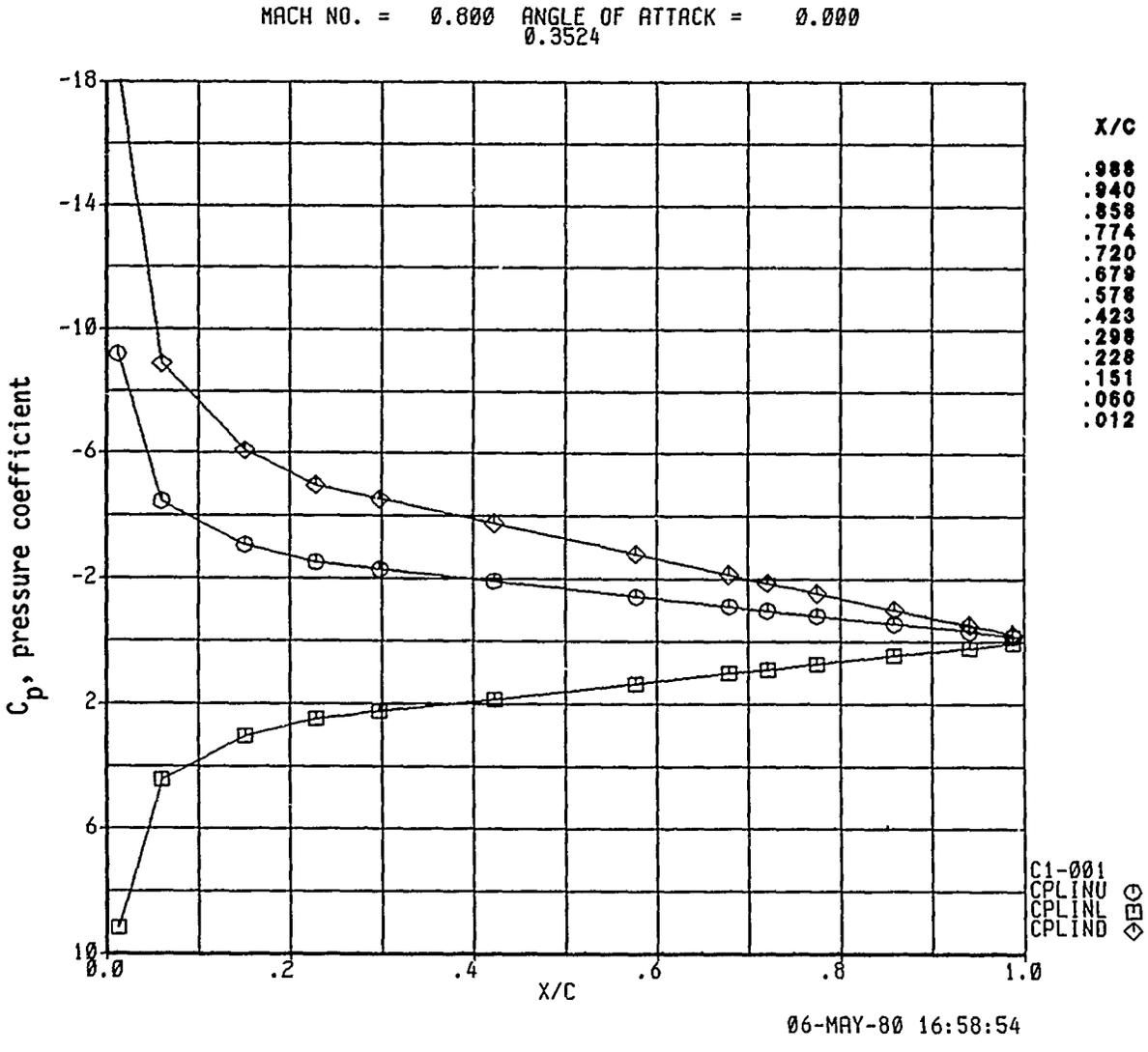
X/C	PRESSURE COEFFICIENT UPPER	LOWER	DIFF
.988	0.0971	0.1091	-.0121
.940	0.0049	0.0251	-.0202
.858	-.0496	-.0231	-.0265
.774	-.0870	-.0581	-.0289
.720	-.1149	-.0868	-.0281
.679	-.1151	-.0884	-.0267
.577	-.1251	-.0968	-.0283
.423	-.1562	-.1055	-.0507
.298	-.1910	-.0995	-.0914
.228	-.2087	-.0809	-.1279
.151	-.2291	-.0965	-.1326
.060	-.2775	-.1885	-.0889
.012	-.1265	-.2113	0.0847

Figure 461, Chordwise Pressure Distribution, Steady, Configuration 5



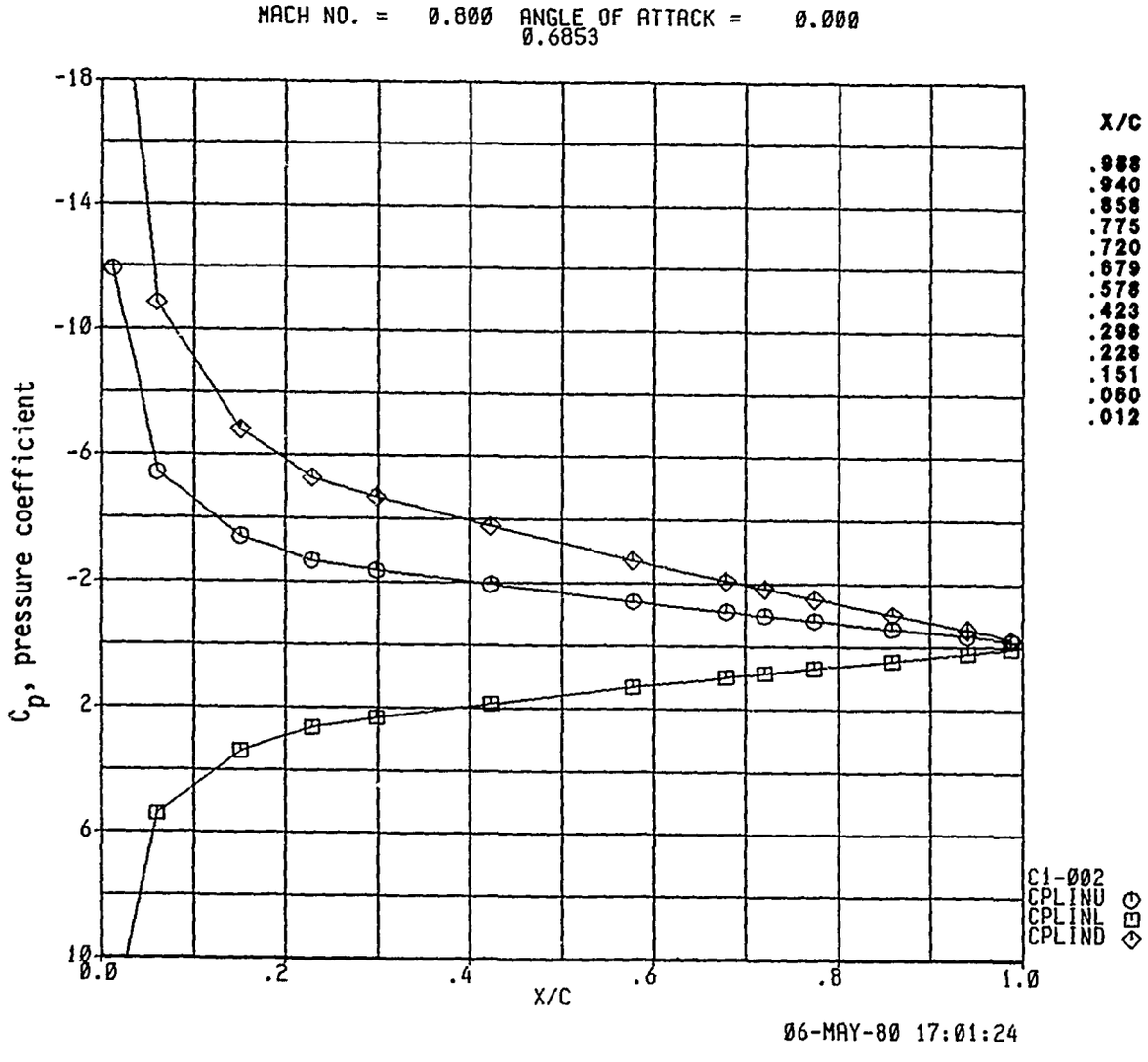
X/C	PRESSURE COEFFICIENT UPPER	LOWER	DIFF
.988	0.1093	0.0968	0.0126
.940	0.0253	0.0047	0.0206
.858	-.0237	-.0489	0.0252
.774	-.0602	-.0851	0.0249
.720	-.0901	-.1118	0.0216
.679	-.0922	-.1113	0.0191
.577	-.1036	-.1184	0.0148
.423	-.1306	-.1313	0.0007
.298	-.1591	-.1316	-.0275
.228	-.1758	-.1149	-.0610
.151	-.1470	-.1801	0.0331
.060	-.0931	-.3966	0.3035
.012	0.2399	-.7424	0.9823

Figure 462, Chordwise Pressure Distribution, Steady, Configuration 5



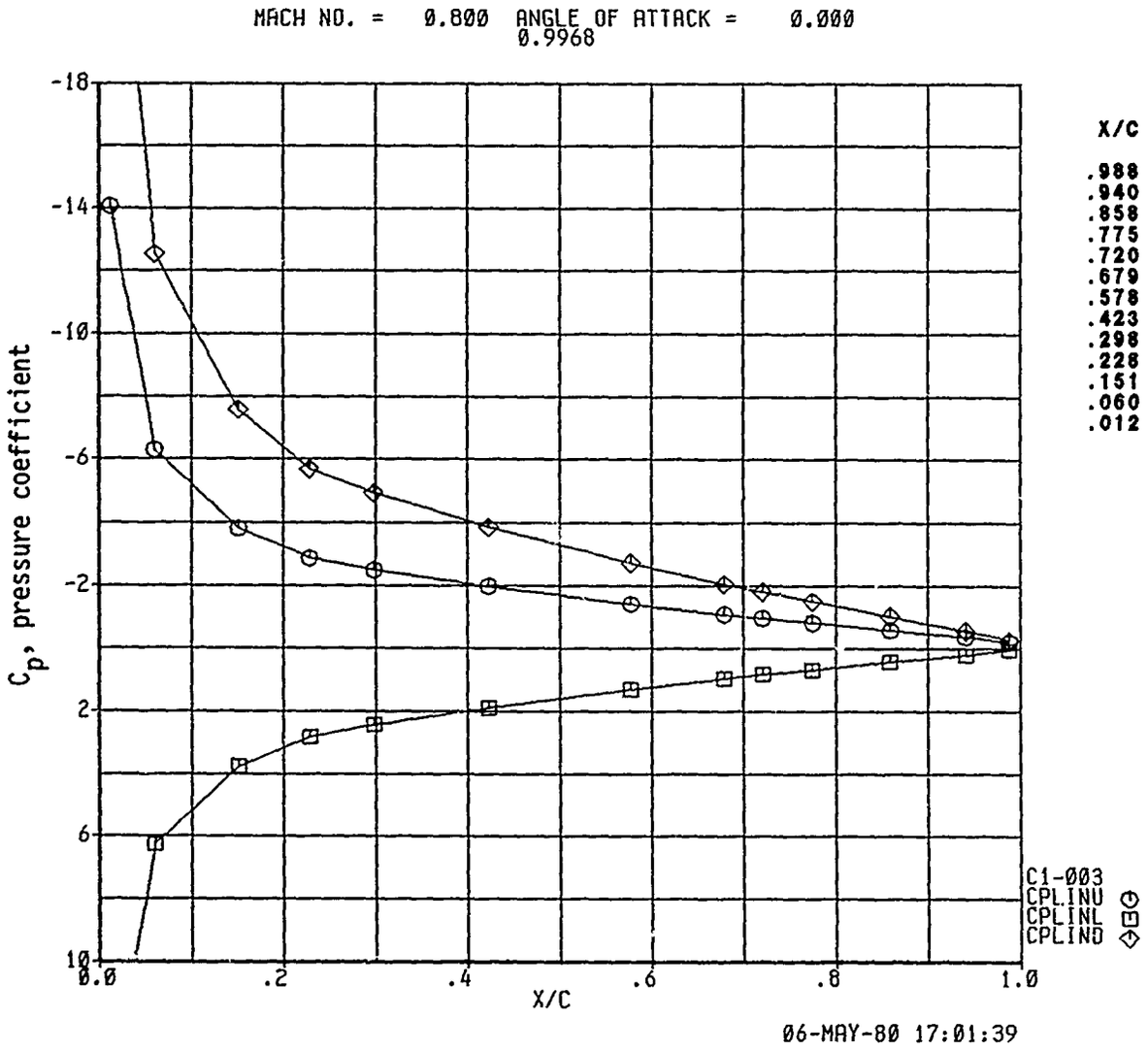
X/C	PRESSURE COEFFICIENT UPPER	LOWER	DIFF
.988	-.1746	0.0555	-.2303
.940	-.3213	0.2023	-.5235
.858	-.5591	0.4450	-1.004
.774	-.8204	0.7151	-1.536
.720	-.9825	0.8847	-1.867
.679	-1.109	1.0168	-2.125
.578	-1.424	1.3481	-2.772
.423	-1.910	1.8576	-3.768
.298	-2.282	2.2461	-4.528
.228	-2.504	2.4773	-4.982
.151	-3.050	3.0322	-6.082
.060	-4.437	4.4285	-8.866
.012	-9.190	9.1857	-18.38

Figure 463, Chordwise Pressure Distribution, Real, Configuration 5



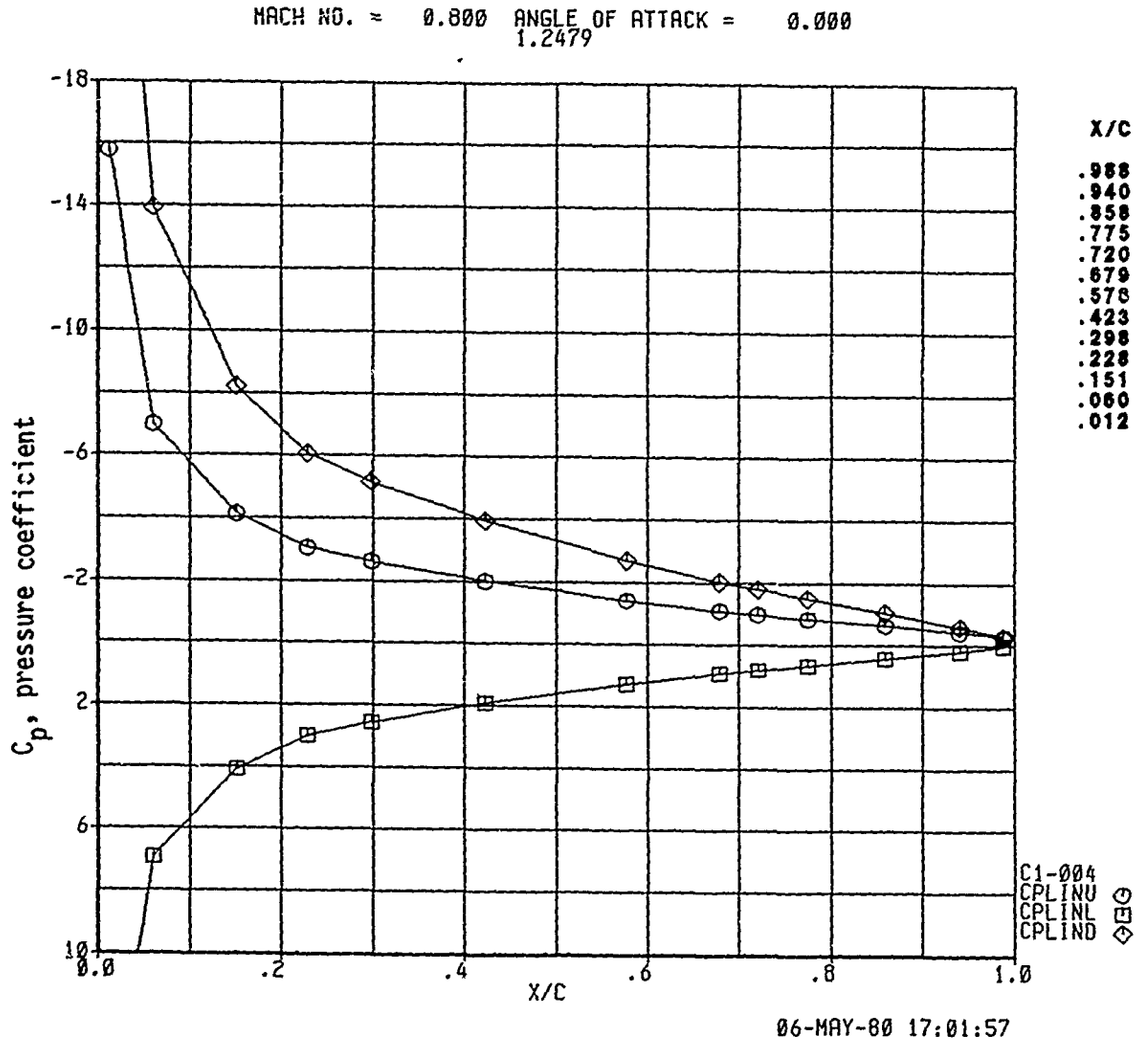
X/C	PRESSURE COEFFICIENT UPPER	LOWER	DIFF
.988	-.1937	0.0522	-.2459
.940	-.3442	0.2042	-.5484
.858	-.5725	0.4401	-1.013
.775	-.8148	0.6941	-1.509
.720	-.9681	0.8563	-1.824
.679	-1.088	0.9830	-2.071
.578	-1.402	1.3149	-2.717
.423	-1.920	1.8572	-3.778
.298	-2.367	2.3207	-4.688
.228	-2.669	2.6309	-5.300
.151	-3.426	3.3965	-6.822
.060	-5.434	5.4144	-10.85
.012	-11.92	11.908	-23.83

Figure 464, Chordwise Pressure Distribution, Real, Configuration 5



X/C	PRESSURE COEFFICIENT UPPER	LOWER	DIFF
.988	-.2252	0.0356	-.2608
.940	-.3792	0.1950	-.5743
.858	-.5994	0.4309	-1.030
.775	-.8262	0.6775	-1.504
.720	-.9728	0.8372	-1.810
.679	-1.088	0.9623	-2.051
.578	-1.407	1.3033	-2.711
.423	-1.969	1.8929	-3.862
.298	-2.496	2.4376	-4.933
.228	-2.870	2.8207	-5.691
.151	-3.806	3.7650	-7.571
.060	-6.286	6.2543	-12.54
.012	-14.06	14.034	-28.09

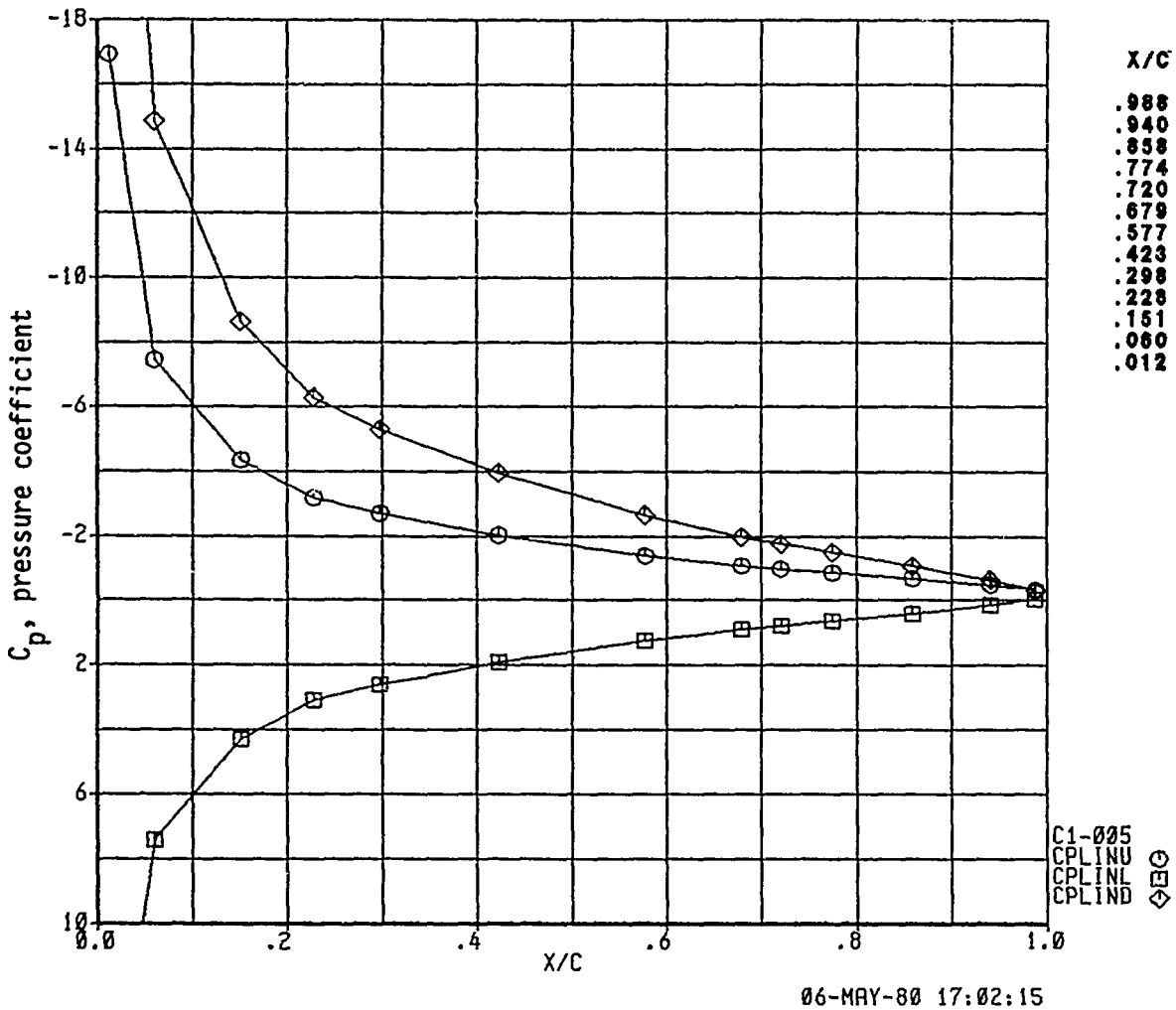
Figure 465, Chordwise Pressure Distribution, Real, Configuration 5



X/C	PRESSURE COEFFICIENT UPPER	LOWER	DIFF
.988	-.2755	0.0026	-.2781
.940	-.4300	0.1731	-.6031
.858	-.6381	0.4147	-1.053
.775	-.8458	0.6573	-1.503
.720	-.9804	0.8126	-1.793
.679	-1.089	0.9349	-2.023
.578	-1.409	1.2849	-2.693
.423	-2.013	1.9228	-3.936
.298	-2.618	2.5479	-5.166
.228	-3.059	2.9982	-6.057
.151	-4.131	4.0797	-8.211
.060	-6.981	6.9387	-13.92
.012	-15.78	15.739	-31.52

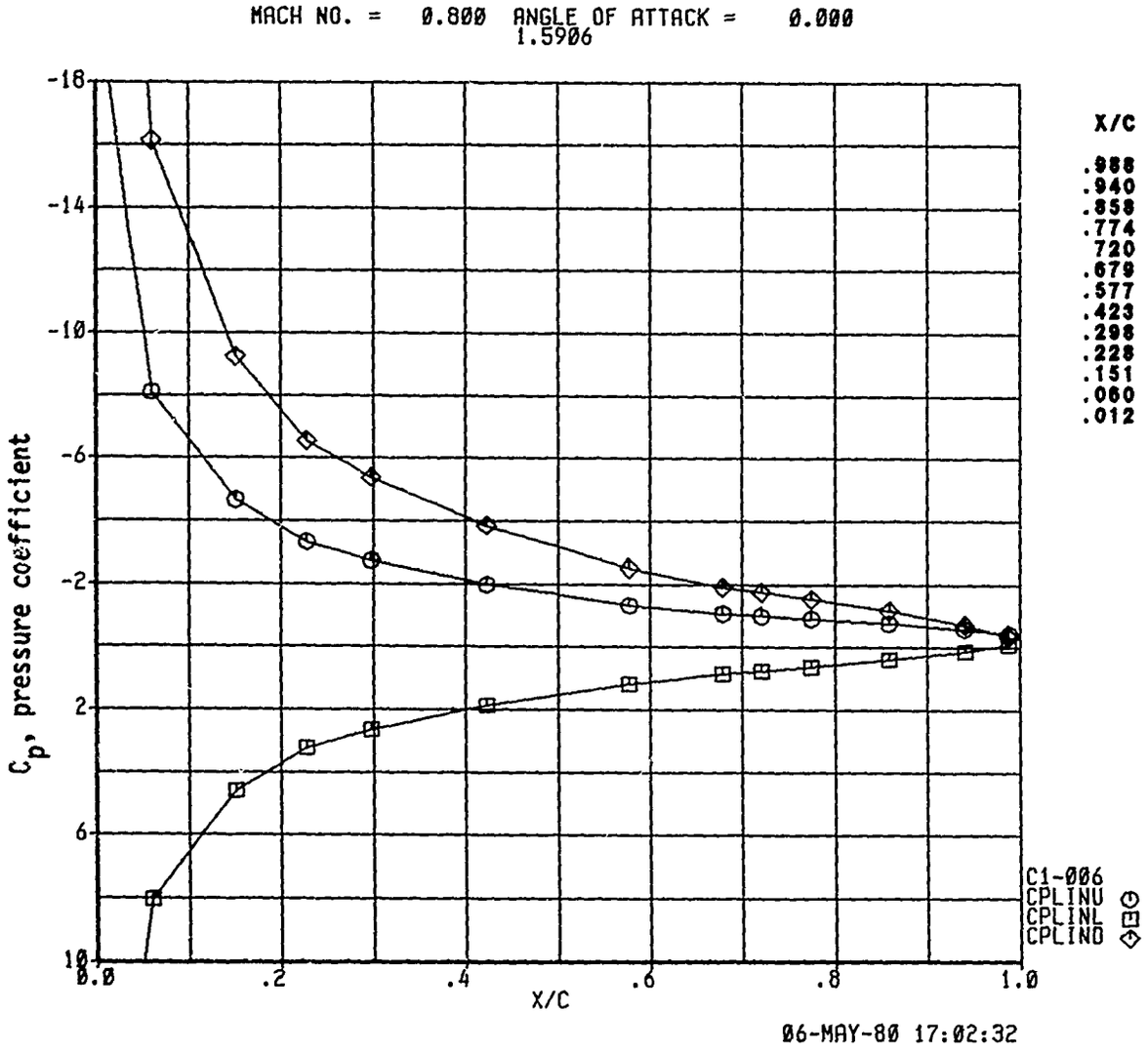
Figure 466, Chordwise Pressure Distribution, Real, Configuration 5

MACH NO. = 0.800 ANGLE OF ATTACK = 0.000
1.4037



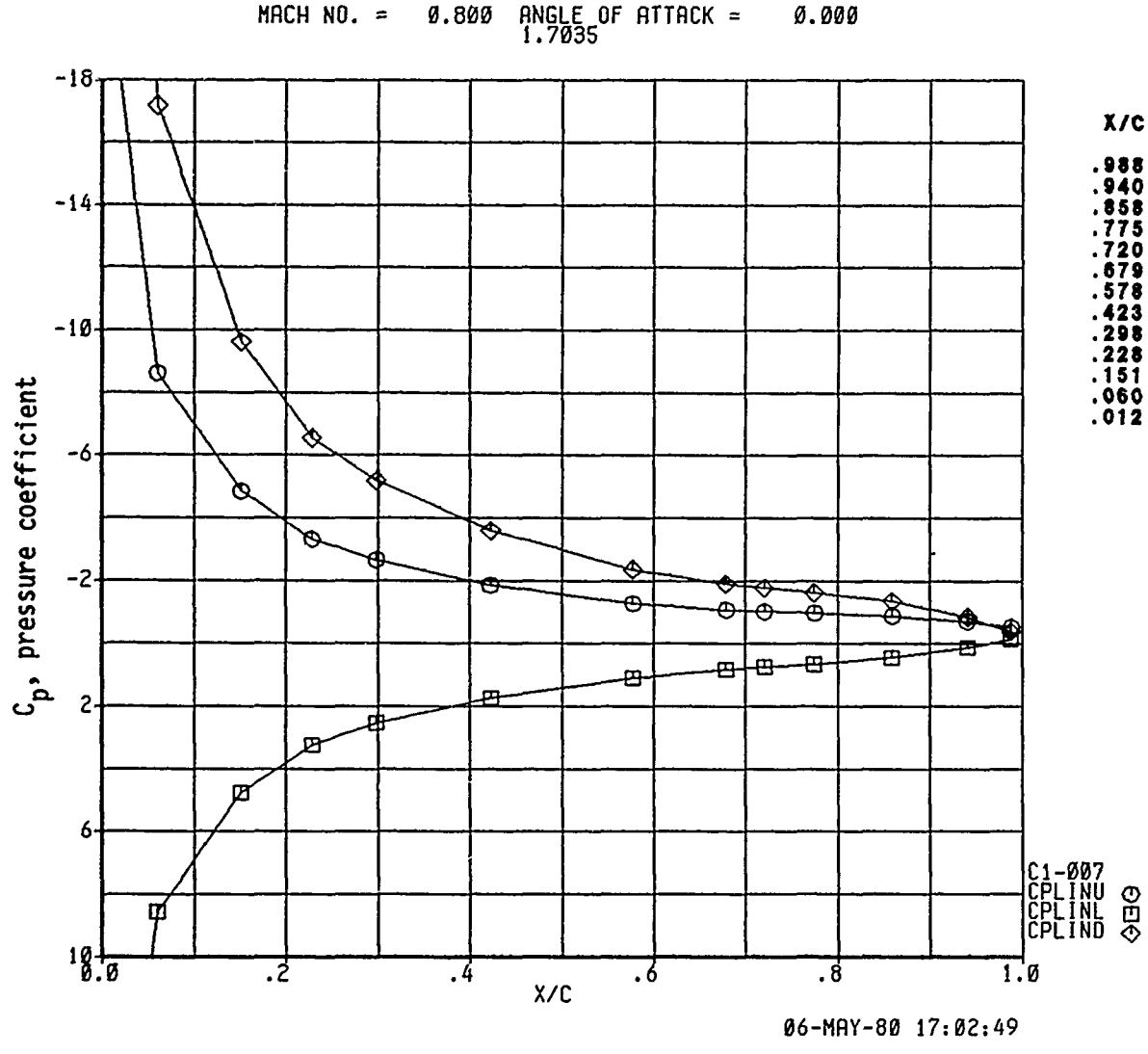
X/C	PRESSURE COEFFICIENT UPPER	LOWER	DIFF
.988	-.3282	-.0313	-.2969
.940	-.4804	0.1521	-.6325
.858	-.6752	0.4017	-1.077
.774	-.8651	0.6424	-1.508
.720	-.9839	0.7892	-1.773
.679	-1.081	0.9051	-1.986
.577	-1.393	1.2538	-2.647
.423	-2.027	1.9267	-3.954
.298	-2.689	2.6105	-5.299
.228	-3.180	3.1117	-6.292
.151	-4.351	4.2913	-8.642
.060	-7.454	7.4044	-14.86
.012	-16.93	16.882	-33.81

Figure 467, Chordwise Pressure Distribution, Real, Configuration 5



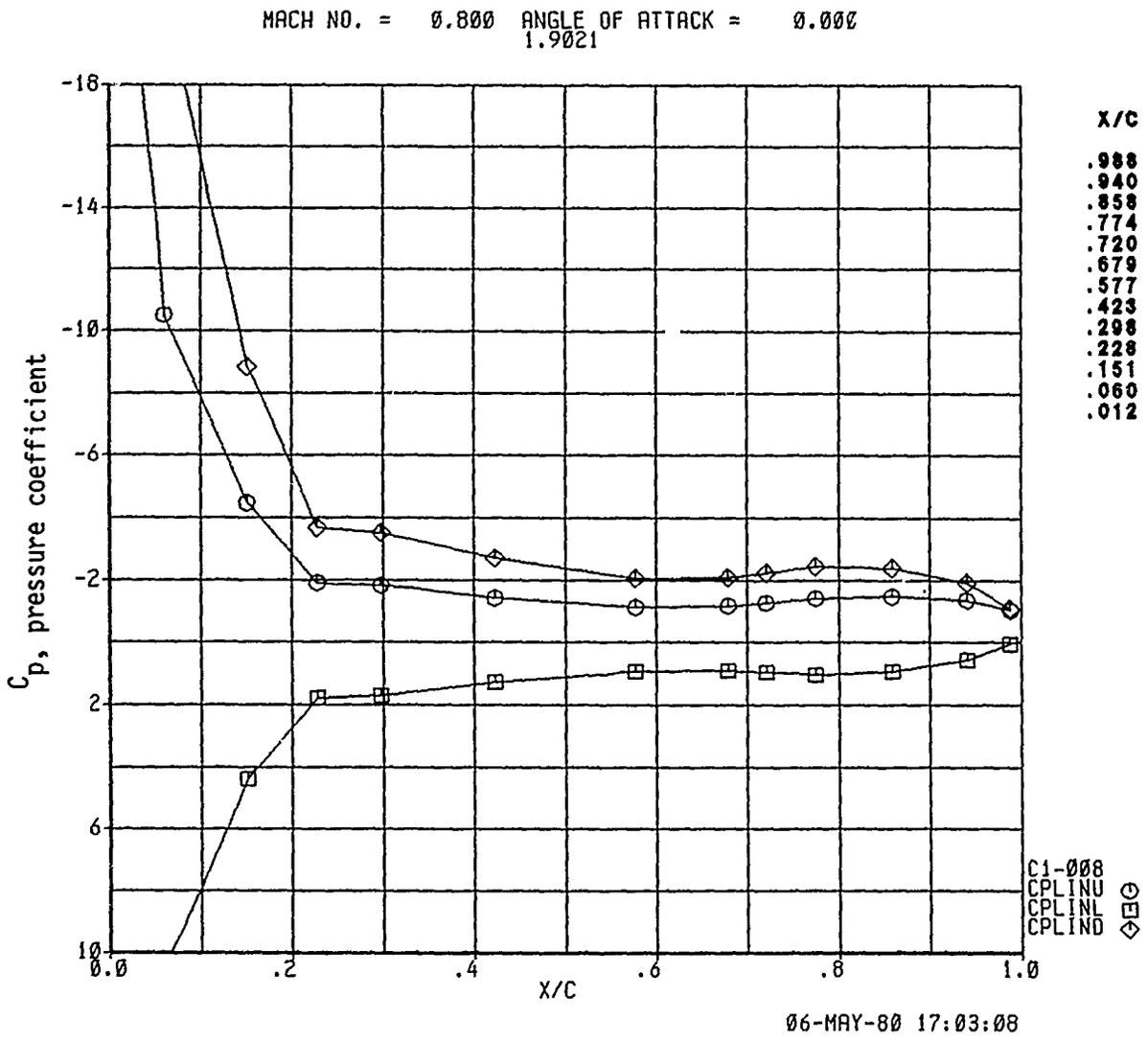
X/C	PRESSURE COEFFICIENT UPPER	LOWER	DIFF
.988	-.4318	-.0994	-.3323
.940	-.5837	0.1229	-.7066
.858	-.7564	0.3983	-1.155
.774	-.9048	0.6281	-1.533
720	-.9911	0.7553	-1.746
.679	-1.064	0.8540	-1.918
.577	-1.330	1.1661	-2.498
.423	-1.983	1.8685	-3.851
.298	-2.736	2.6459	-5.382
.228	-3.315	3.2349	-6.549
.151	-4.657	4.5878	-9.245
.060	-8.096	8.0368	-16.13
.012	-18.46	18.402	-36.86

Figure 468, Chordwise Pressure Distribution, Real, Configuration 5



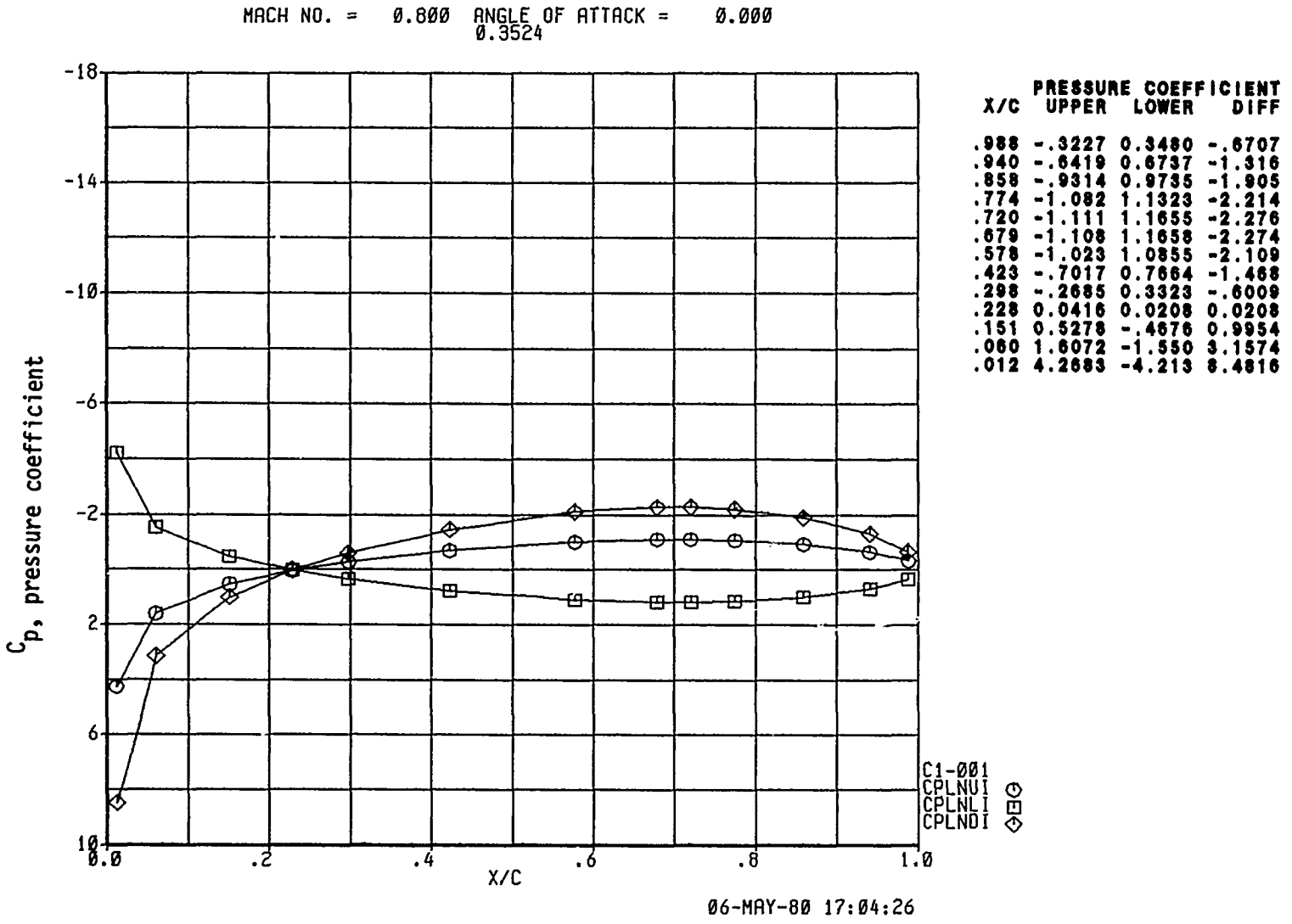
X/C	PRESSURE COEFFICIENT UPPER	LOWER	DIFF
.988	-.5408	-.1438	-.3970
.940	-.7120	0.1381	-.8501
.858	-.8788	0.4554	-1.334
.775	-.9680	0.6532	-1.621
.720	-1.018	0.7547	-1.773
.679	-1.065	0.8327	-1.897
.578	-1.265	1.0898	-2.355
.423	-1.857	1.7333	-3.590
.298	-2.640	2.5429	-5.183
.228	-3.316	3.2290	-6.545
.151	-4.850	4.7733	-9.623
.060	-8.629	8.5626	-17.19
.012	-19.60	19.543	-39.15

Figure 469, Chordwise Pressure Distribution, Real, Configuration 5



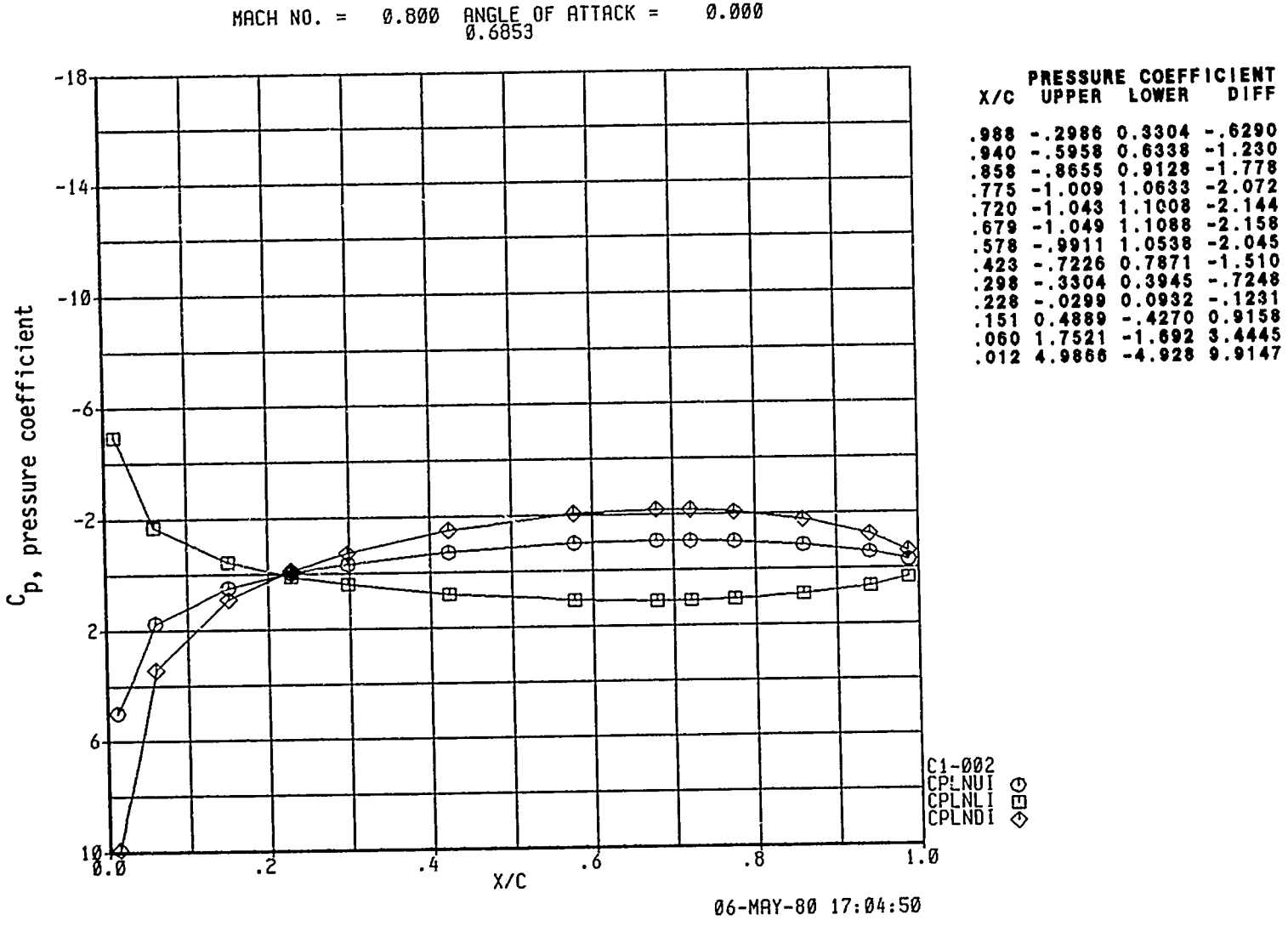
X/C	PRESSURE COEFFICIENT UPPER	LOWER	DIFF
.988	-1.043	0.0426	-1.086
.940	-1.360	0.5600	-1.919
.858	-1.474	0.9256	-2.399
.774	-1.409	1.0314	-2.440
.720	-1.267	0.9638	-2.231
.679	-1.170	0.9068	-2.079
.577	-1.123	0.9312	-2.054
.423	-1.419	1.2839	-2.703
.298	-1.819	1.7111	-3.530
.228	-1.890	1.7926	-3.682
.151	-4.473	4.3864	-8.860
.060	-10.52	10.445	-20.97
.012	-25.51	25.441	-50.96

Figure 470, Chordwise Pressure Distribution, Real, Configuration 5



X/C	PRESSURE COEFFICIENT UPPER	LOWER	DIFF
.988	-.3227	0.3480	-.6707
.940	-.6419	0.6737	-1.316
.858	-.9314	0.9735	-1.905
.774	-1.082	1.1323	-2.214
.720	-1.111	1.1655	-2.276
.679	-1.108	1.1658	-2.274
.578	-1.023	1.0855	-2.109
.423	-.7017	0.7664	-1.468
.298	-.2685	0.3323	-.6009
.228	0.0416	0.0208	0.0208
.151	0.5278	-.4676	0.9954
.060	1.6072	-1.550	3.1574
.012	4.2683	-4.213	8.4816

Figure 471, Chordwise Pressure Distribution, Imaginary, Configuration 5

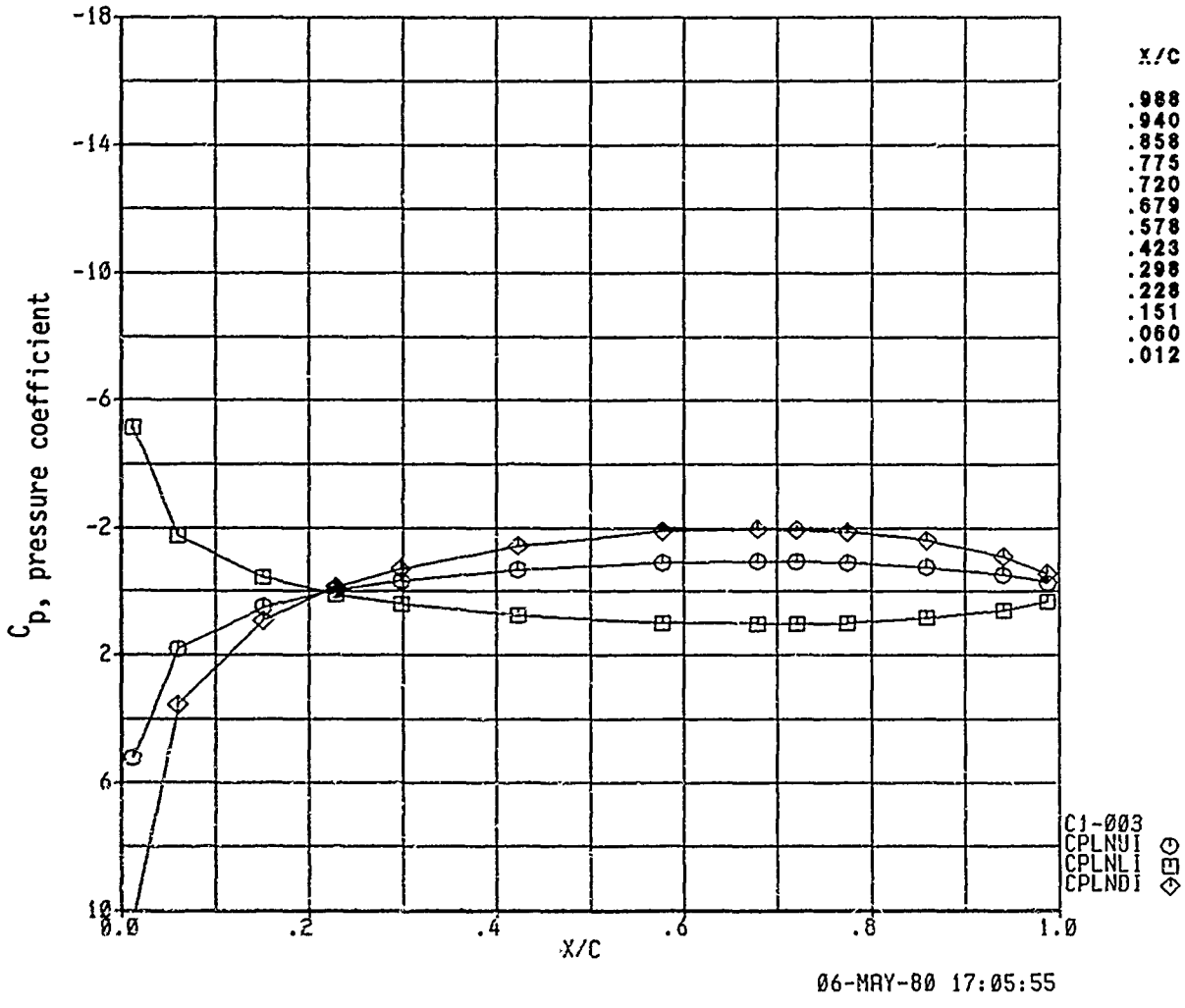


PRESSURE COEFFICIENT

X/C	UPPER	LOWER	DIFF
.988	-.2986	0.3304	-.6290
.940	-.5958	0.6338	-1.230
.858	-.8655	0.9128	-1.778
.775	-1.009	1.0633	-2.072
.720	-1.043	1.1008	-2.144
.679	-1.049	1.1088	-2.158
.578	-.9911	1.0538	-2.045
.423	-.7226	0.7871	-1.510
.298	-.3304	0.3945	-.7248
.228	-.0299	0.0932	-.1231
.151	0.4889	-.4270	0.9158
.060	1.7521	-1.692	3.4445
.012	4.9866	-4.928	9.9147

Figure 472, Chordwise Pressure Distribution, Imaginary, Configuration 5

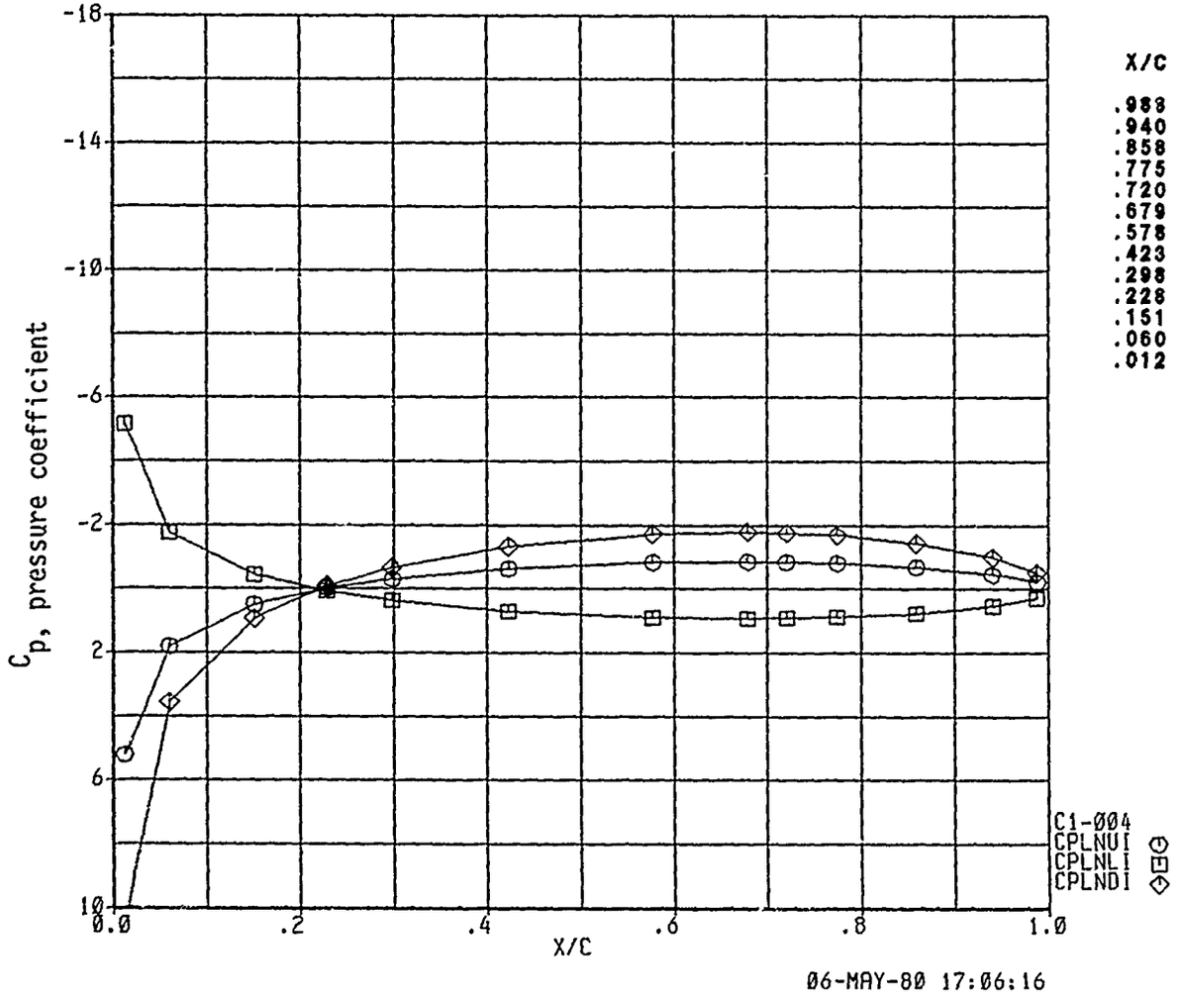
MACH NO. = 0.800 ANGLE OF ATTACK = 0.000
0.9968



X/C	PRESSURE COEFFICIENT UPPER	LOWER	DIFF
.988	-.2615	0.3068	-.5682
.940	-.5297	0.5808	-1.110
.858	-.7749	0.8333	-1.608
.775	-.9097	0.9724	-1.882
.720	-.9455	1.0098	-1.955
.679	-.9556	1.0205	-1.976
.578	-.9164	0.9819	-1.898
.423	-.6871	0.7521	-1.439
.298	-.3254	0.3894	-.7148
.228	-.0355	0.0989	-.1344
.151	0.4907	-.4284	0.9191
.060	1.8106	-1.750	3.5602
.012	5.2152	-5.155	10.370

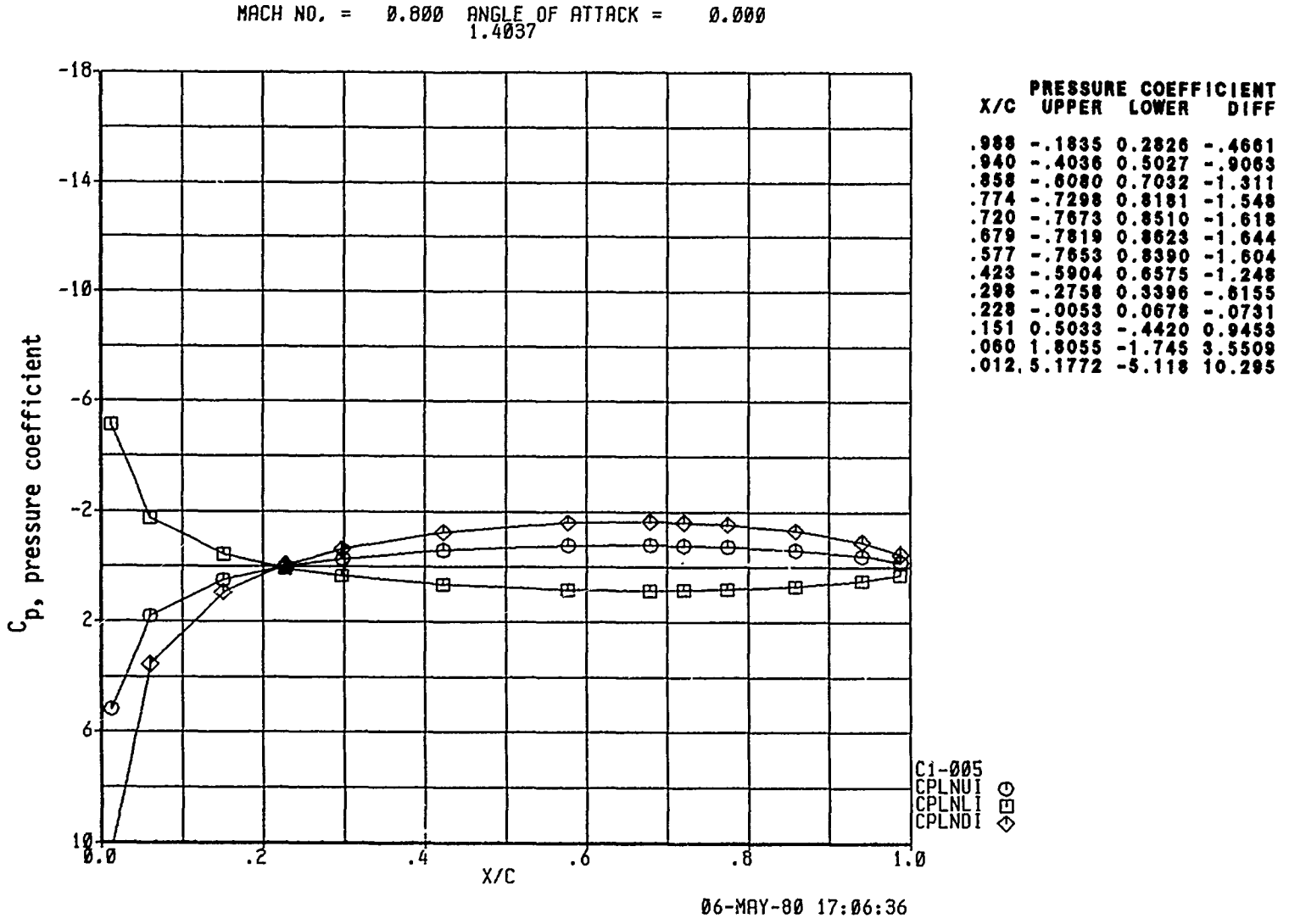
Figure 473, Chordwise Pressure Distribution, Imaginary, Configuration 5

MACH NO. = 0.800 ANGLE OF ATTACK = 0.000
1.2479



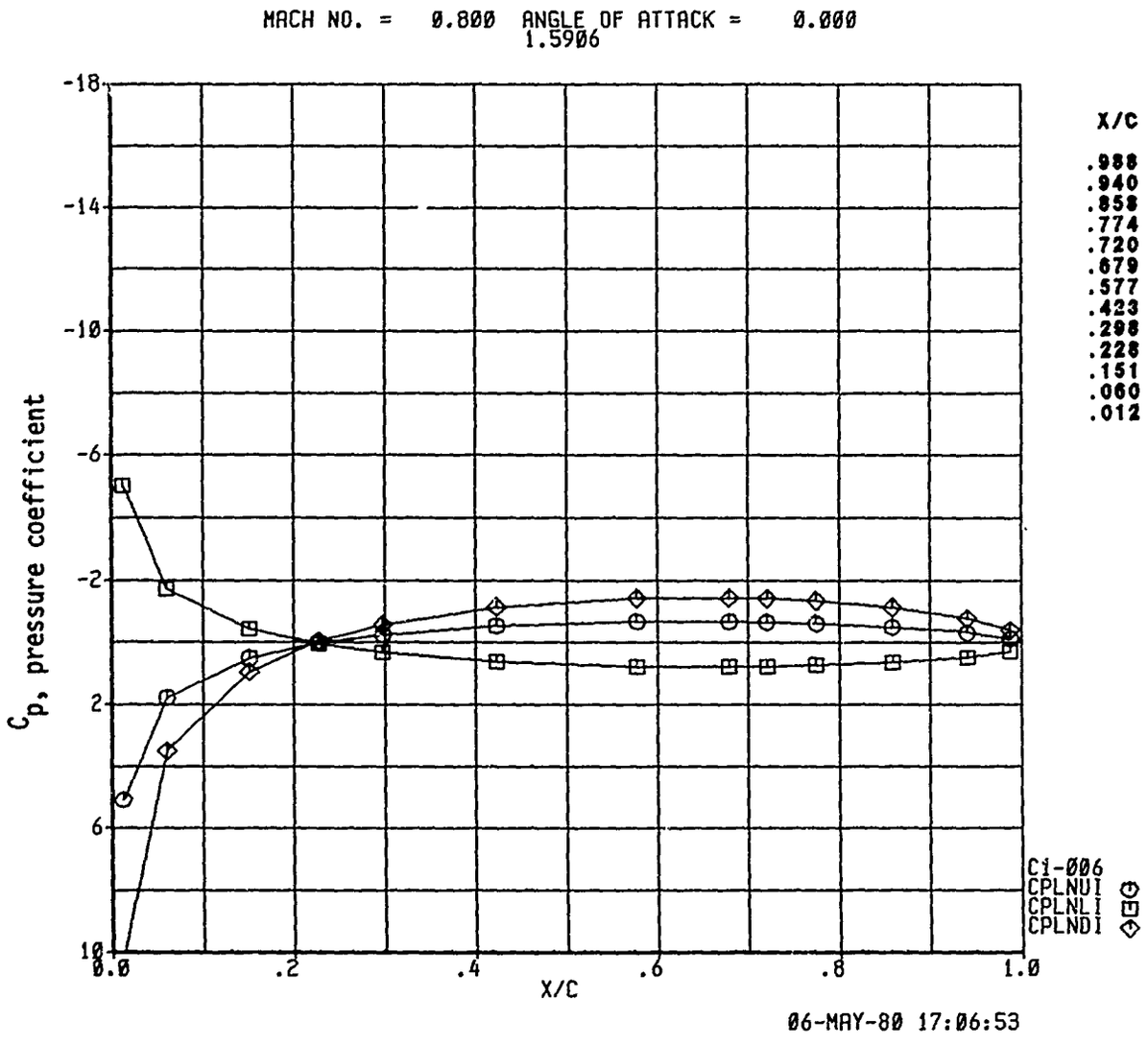
X/C	PRESSURE COEFFICIENT UPPER	LOWER	DIFF
.983	-.2186	0.2893	-.5079
.940	-.4580	0.5326	-.9906
.858	-.6788	0.7560	-1.435
.775	-.8057	0.8818	-1.687
.720	-.8425	0.9171	-1.759
.679	-.8550	0.9282	-1.783
.578	-.8289	0.8989	-1.728
.423	-.6315	0.6977	-1.329
.298	-.2967	0.3606	-.6573
.228	-.0175	0.0804	-.0979
.151	0.4989	-.4369	0.9358
.060	1.8131	-1.752	3.5653
.012	5.2191	-5.159	10.378

Figure 474, Chordwise Pressure Distribution, Imaginary, Configuration 5



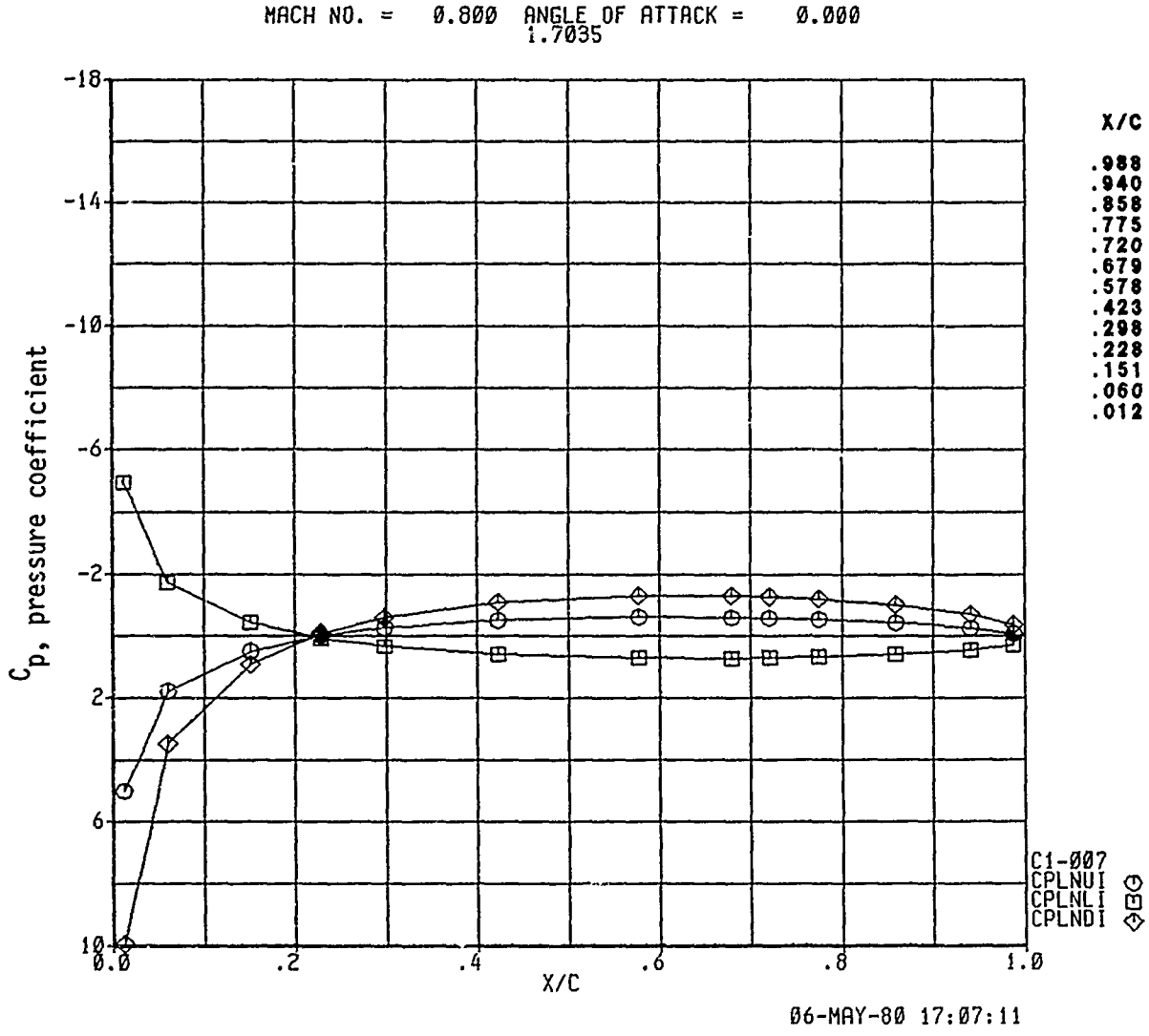
X/C	PRESSURE COEFFICIENT UPPER	LOWER	DIFF
.988	-.1835	0.2826	-.4661
.940	-.4036	0.5027	-.9063
.858	-.6080	0.7032	-1.311
.774	-.7298	0.8181	-1.548
.720	-.7673	0.8510	-1.618
.679	-.7819	0.8623	-1.644
.577	-.7653	0.8390	-1.604
.423	-.5904	0.6575	-1.248
.298	-.2758	0.3396	-.6155
.228	-.0053	0.0678	-.0731
.151	0.5033	-.4420	0.9453
.060	1.8055	-1.745	3.5509
.012	5.1772	-5.118	10.295

Figure 475, Chordwise Pressure Distribution, Imaginary, Configuration 5



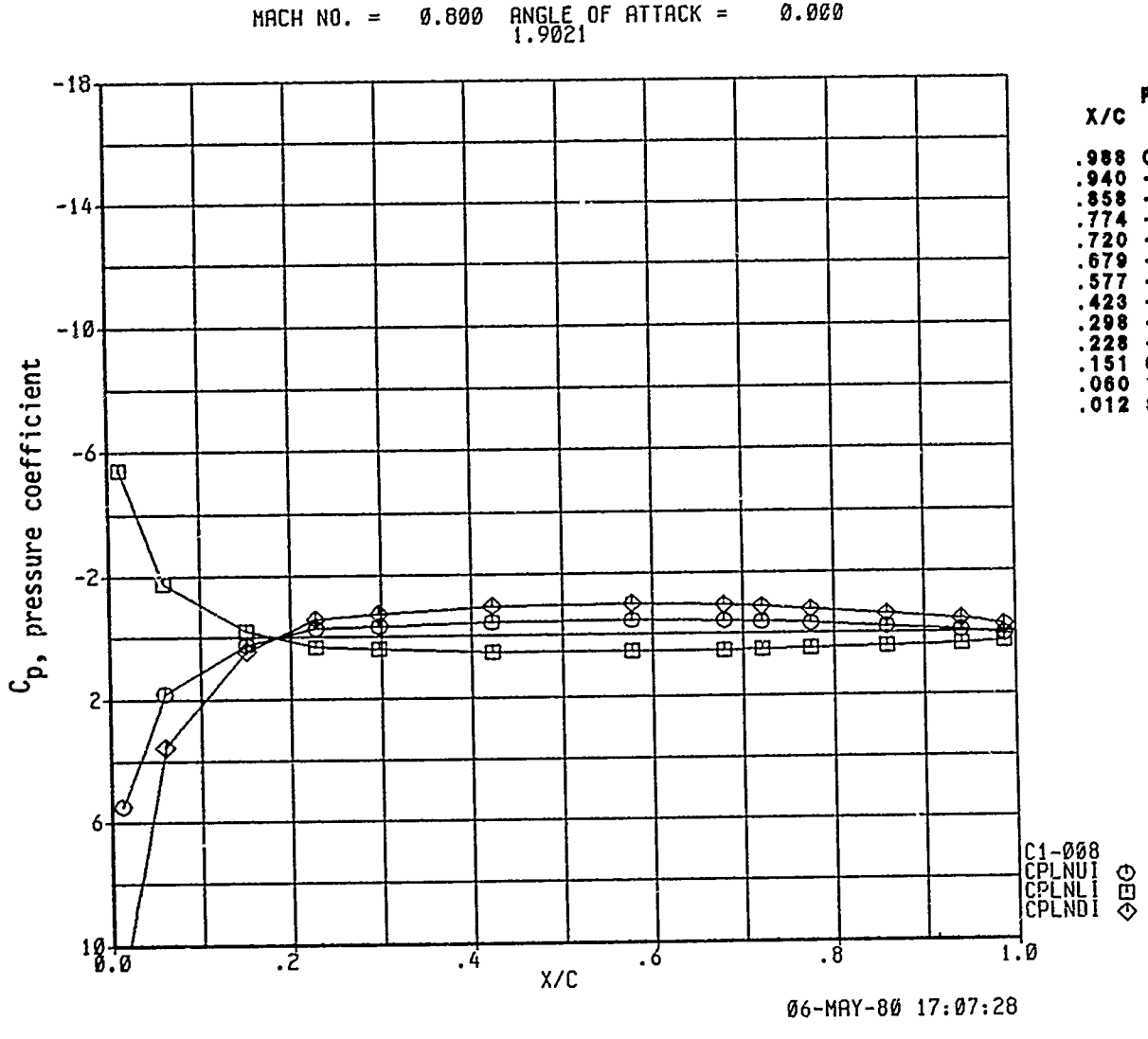
X/C	PRESSURE COEFFICIENT UPPER	LOWER	DIFF
.988	-.1243	0.2828	-.4070
.940	-.3208	0.4679	-.7887
.858	-.5056	0.6322	-1.138
.774	-.6216	0.7296	-1.351
.720	-.6600	0.7579	-1.418
.679	-.6779	0.7692	-1.447
.577	-.6780	0.7569	-1.435
.423	-.5415	0.6095	-1.151
.298	-.2556	0.3190	-.5746
.226	0.0027	0.0588	-.0561
.151	0.5024	-.4423	0.9446
.060	1.7831	-1.724	3.5075
.012	5.0813	-5.023	10.104

Figure 476, Chordwise Pressure Distribution, Imaginary, Configuration 5



X/C	PRESSURE COEFFICIENT UPPER	LOWER	DIFF
.988	-.0733	0.2887	-.3619
.940	-.2539	0.4442	-.6982
.858	-.4246	0.5769	-1.002
.775	-.5376	0.6597	-1.197
.720	-.5782	0.6853	-1.264
.679	-.5989	0.6969	-1.296
.578	-.6120	0.6936	-1.306
.423	-.5136	0.5815	-1.095
.298	-.2633	0.3257	-.5889
.228	-.0135	0.0739	-.0875
.151	0.4877	-.4289	0.9166
.060	1.7701	-1.713	3.4827
.012	4.9984	-4.942	9.9400

Figure 477, Chordwise Pressure Distribution, Imaginary, Configuration 5



X/C	PRESSURE COEFFICIENT UPPER	LOWER	DIFF
.988	0.0528	0.2928	-.2400
.940	-.0733	0.3622	-.4355
.858	-.2062	0.4158	-.6219
.774	-.3195	0.4676	-.7871
.720	-.3847	0.5049	-.8896
.679	-.4167	0.5210	-.9377
.577	-.4614	0.5417	-1.003
.423	-.4469	0.5108	-.9578
.298	-.3379	0.3957	-.7336
.228	-.2651	0.3209	-.5861
.151	0.2486	-.1943	0.4429
.060	1.8058	-1.753	3.5585
.012	5.4727	-5.420	10.893

Figure 478, Chordwise Pressure Distribution, Imaginary, Configuration 5

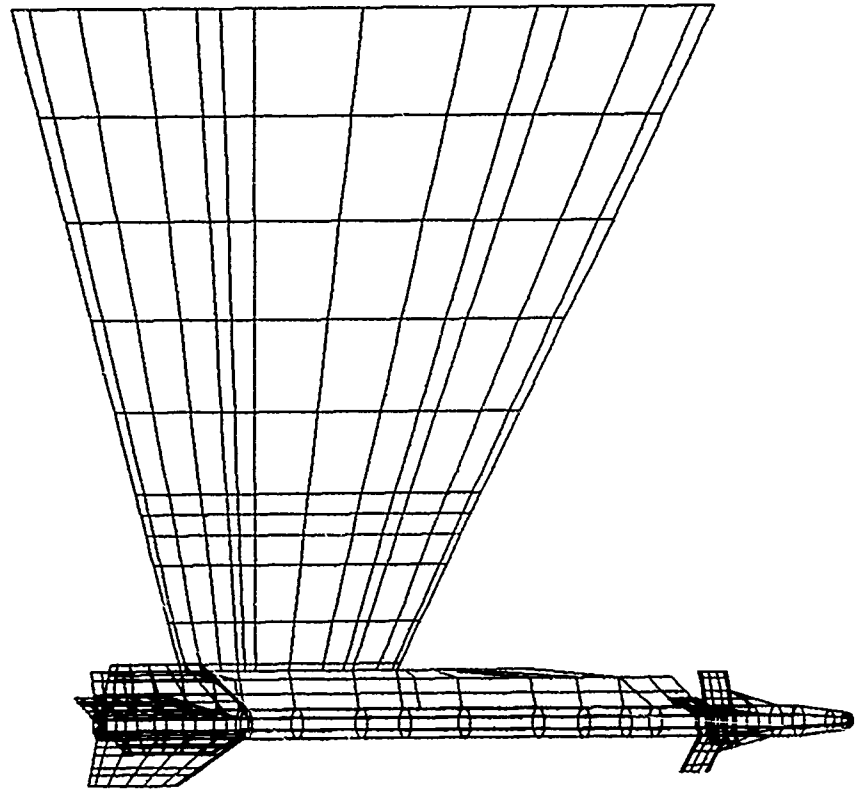
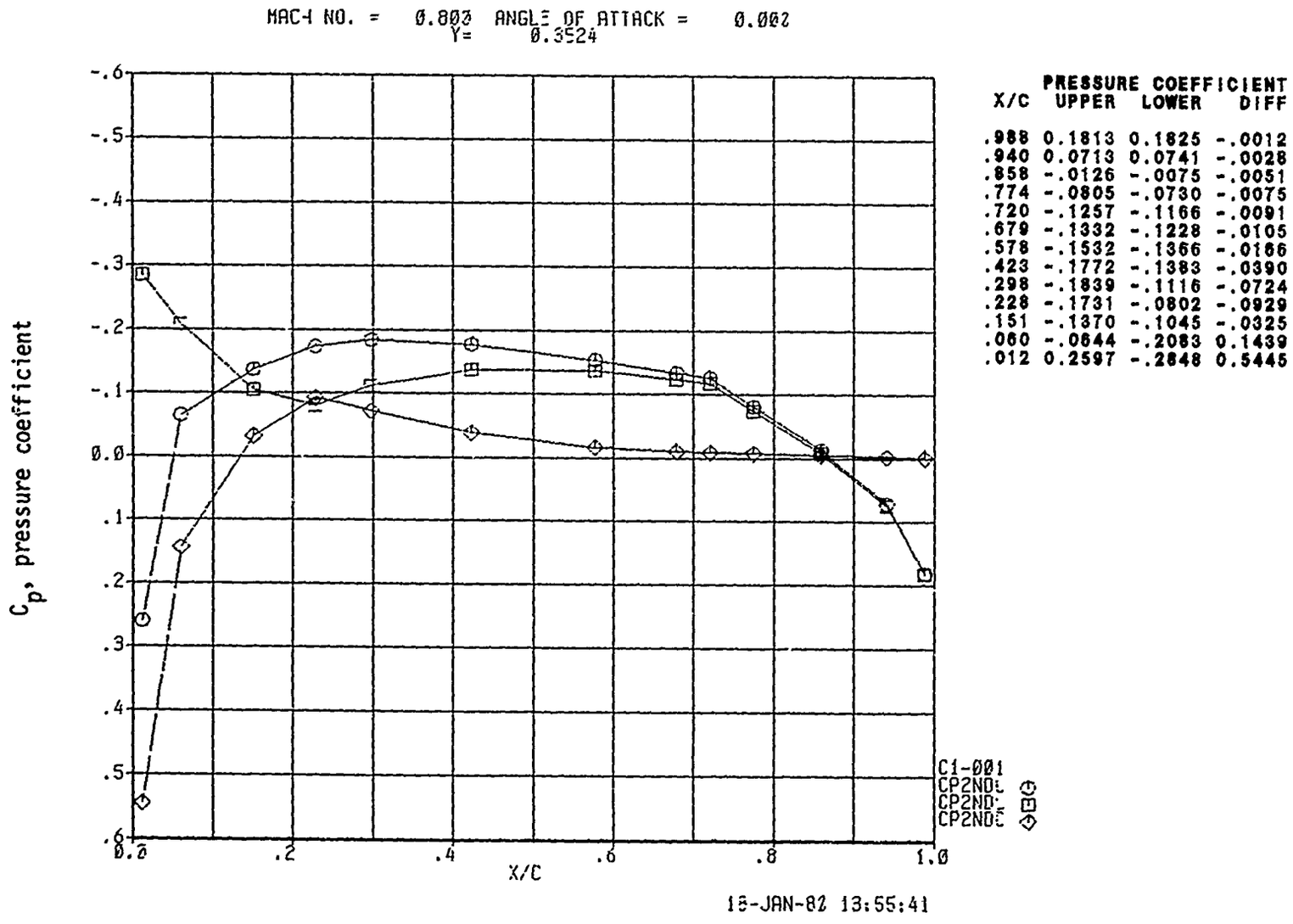
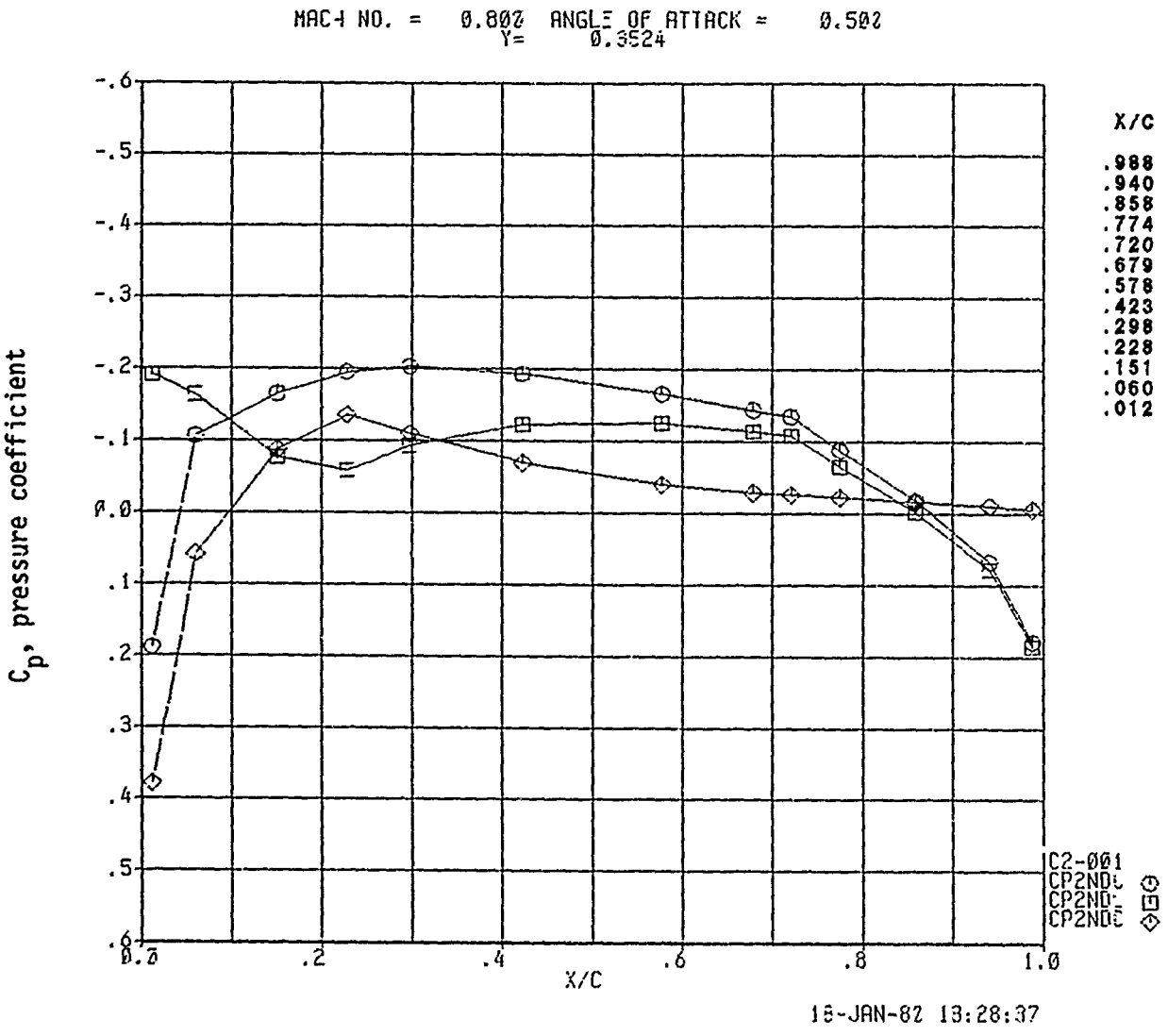


Figure 479, Configuration 6



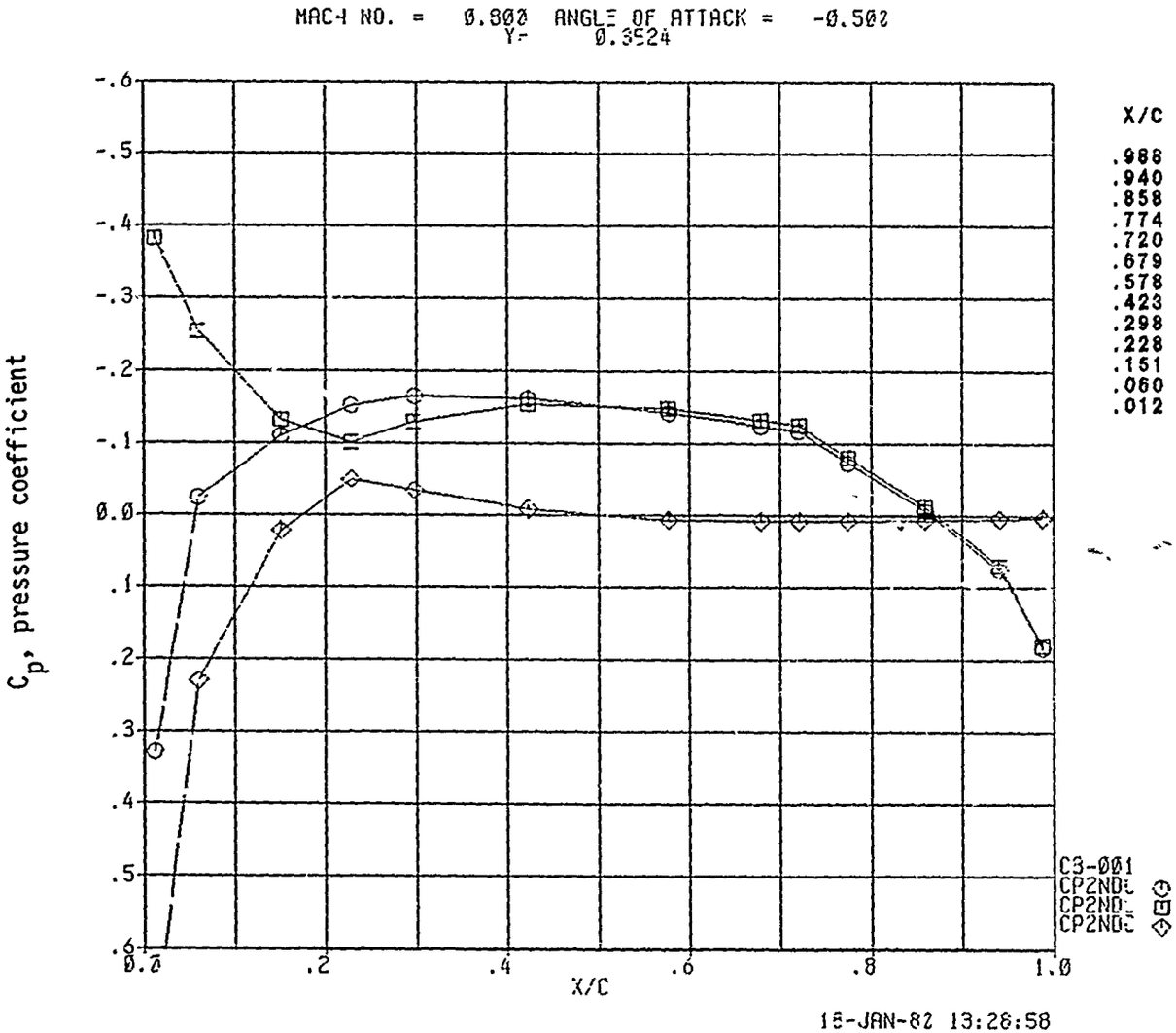
X/C	PRESSURE COEFFICIENT UPPER	LOWER	DIFF
.988	0.1813	0.1825	-.0012
.940	0.0713	0.0741	-.0028
.858	-.0126	-.0075	-.0051
.774	-.0805	-.0730	-.0075
.720	-.1257	-.1166	-.0091
.679	-.1332	-.1228	-.0105
.578	-.1532	-.1366	-.0166
.423	-.1772	-.1383	-.0390
.298	-.1839	-.1116	-.0724
.228	-.1731	-.0802	-.0929
.151	-.1370	-.1045	-.0325
.060	-.0644	-.2083	0.1439
.012	0.2597	-.2848	0.5445

Figure 480, Chordwise Pressure Distribution, Steady, Configuration 6



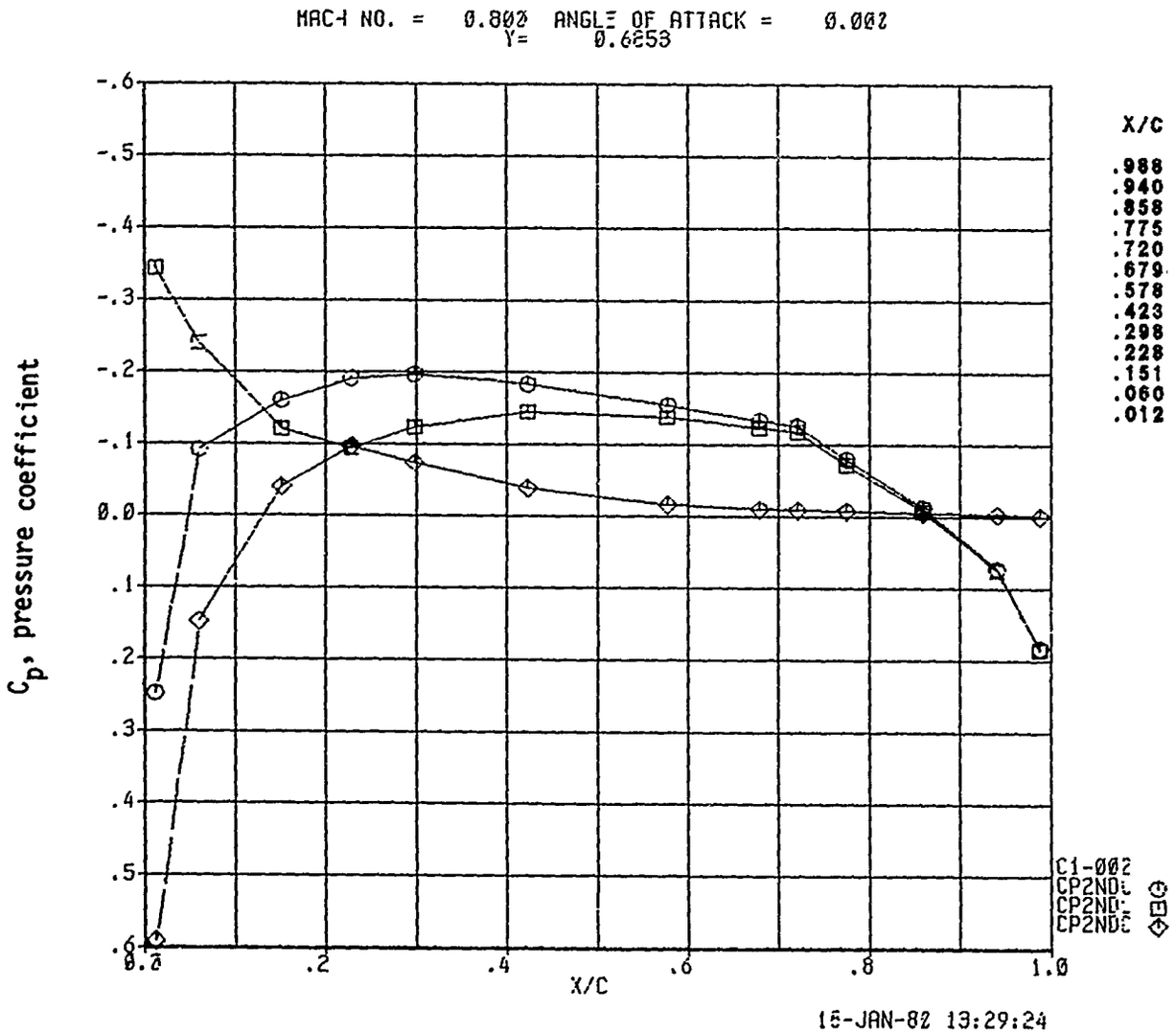
X/C	PRESSURE COEFFICIENT UPPER	LOWER	DIFF
.988	0.1788	0.1847	-.0059
.940	0.0674	0.0778	-.0104
.858	-.0184	-.0018	-.0166
.774	-.0881	-.0655	-.0226
.720	-.1344	-.1082	-.0262
.679	-.1427	-.1136	-.0290
.578	-.1649	-.1252	-.0397
.423	-.1929	-.1230	-.0699
.298	-.2030	-.0929	-.1102
.228	-.1943	-.0589	-.1354
.151	-.1641	-.0769	-.0872
.060	-.1056	-.1636	0.0580
.012	0.1874	-.1909	0.3784

Figure 481, Chordwise Pressure Distribution, Steady, Configuration 6



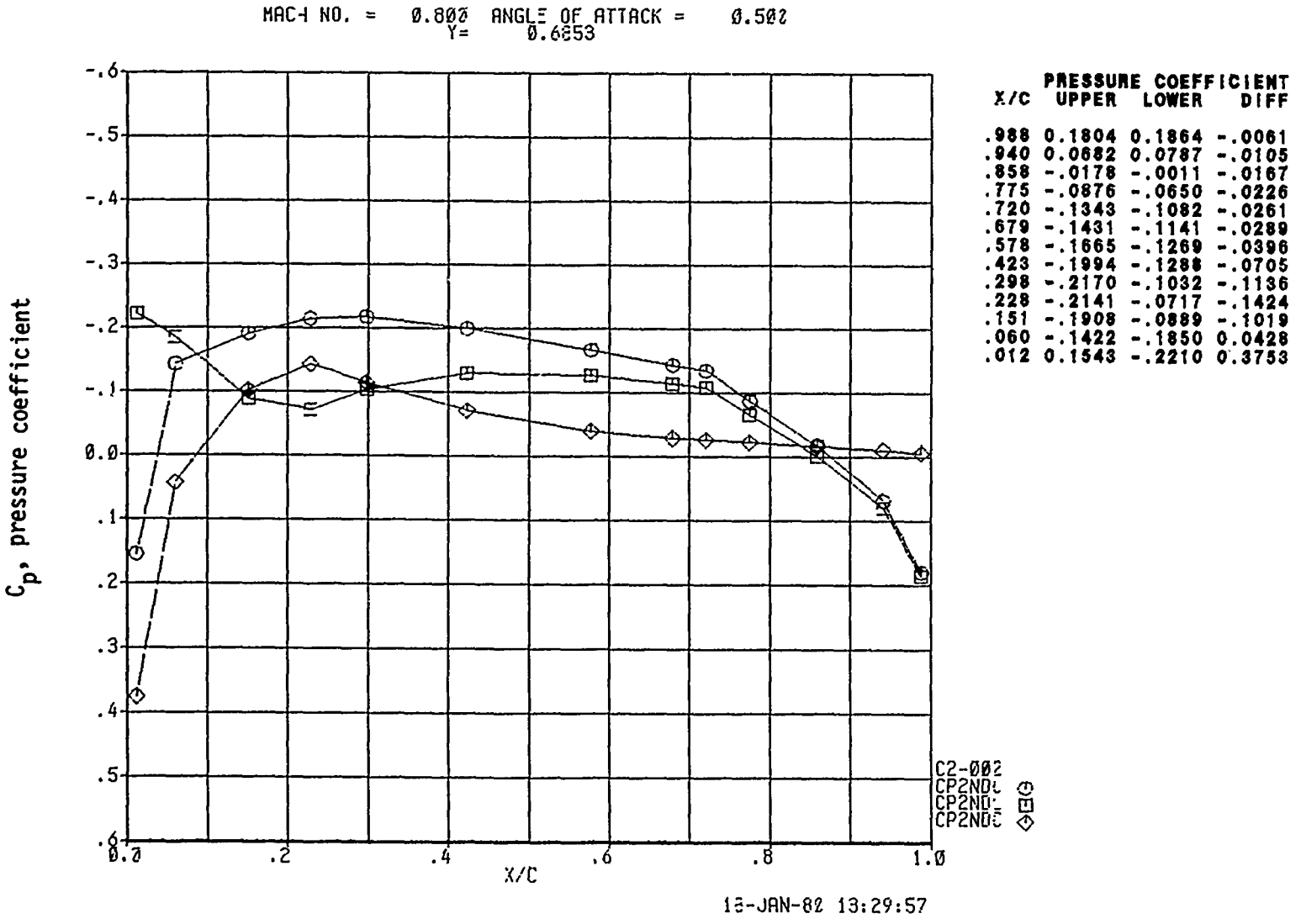
X/C	PRESSURE COEFFICIENT UPPER	LOWER	DIFF
.988	0.1835	0.1801	0.0035
.940	0.0751	0.0702	0.0049
.858	-.0069	-.0133	0.0065
.774	-.0731	-.0806	0.0076
.720	-.1173	-.1253	0.0080
.679	-.1240	-.1322	0.0082
.578	-.1417	-.1482	0.0065
.423	-.1618	-.1538	-.0080
.298	-.1650	-.1305	-.0346
.228	-.1519	-.1017	-.0502
.151	-.1103	-.1325	0.0222
.060	-.0239	-.2537	0.2298
.012	0.3286	-.3820	0.7107

Figure 482, Chordwise Pressure Distribution, Steady, Configuration 6



X/C	PRESSURE COEFFICIENT UPPER	LOWER	DIFF
.988	0.1829	0.1841	-.0012
.940	0.0721	0.0749	-.0028
.858	-.0119	-.0069	-.0050
.775	-.0799	-.0725	-.0074
.720	-.1256	-.1166	-.0090
.679	-.1336	-.1234	-.0102
.578	-.1548	-.1385	-.0162
.423	-.1832	-.1446	-.0388
.298	-.1968	-.1230	-.0738
.228	-.1910	-.0946	-.0964
.151	-.1600	-.1201	-.0398
.060	-.0915	-.2397	0.1482
.012	0.2479	-.3435	0.5914

Figure 483, Chordwise Pressure Distribution, Steady, Configuration 6



X/C	PRESSURE COEFFICIENT UPPER	LOWER	DIFF
.988	0.1804	0.1864	-.0061
.940	0.0682	0.0787	-.0105
.858	-.0178	-.0011	-.0167
.775	-.0876	-.0650	-.0226
.720	-.1343	-.1082	-.0261
.679	-.1431	-.1141	-.0289
.578	-.1665	-.1269	-.0396
.423	-.1994	-.1288	-.0705
.298	-.2170	-.1032	-.1136
.228	-.2141	-.0717	-.1424
.151	-.1908	-.0889	-.1019
.060	-.1422	-.1850	0.0428
.012	0.1543	-.2210	0.3753

Figure 484, Chordwise Pressure Distribution, Steady, Configuration 6

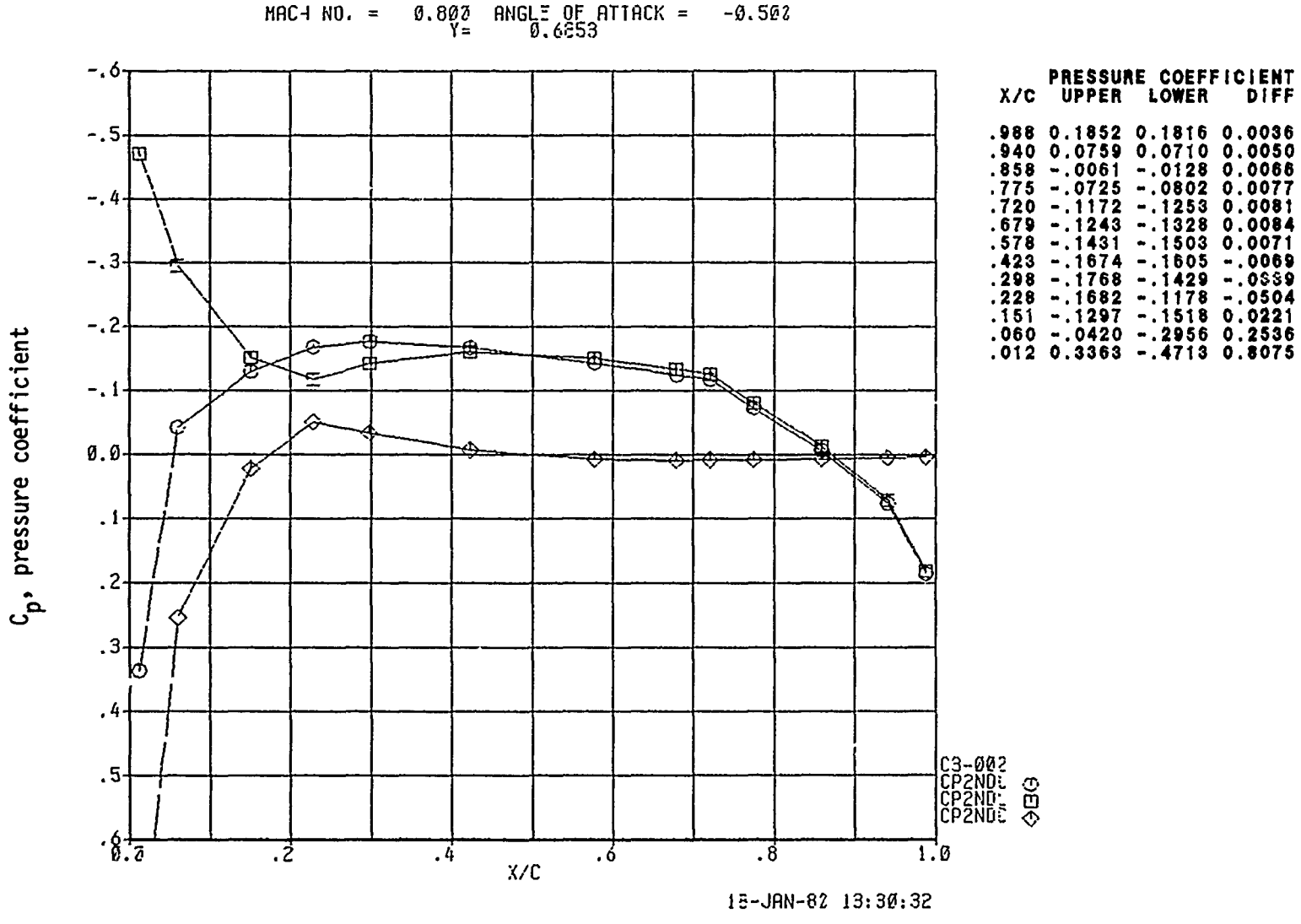
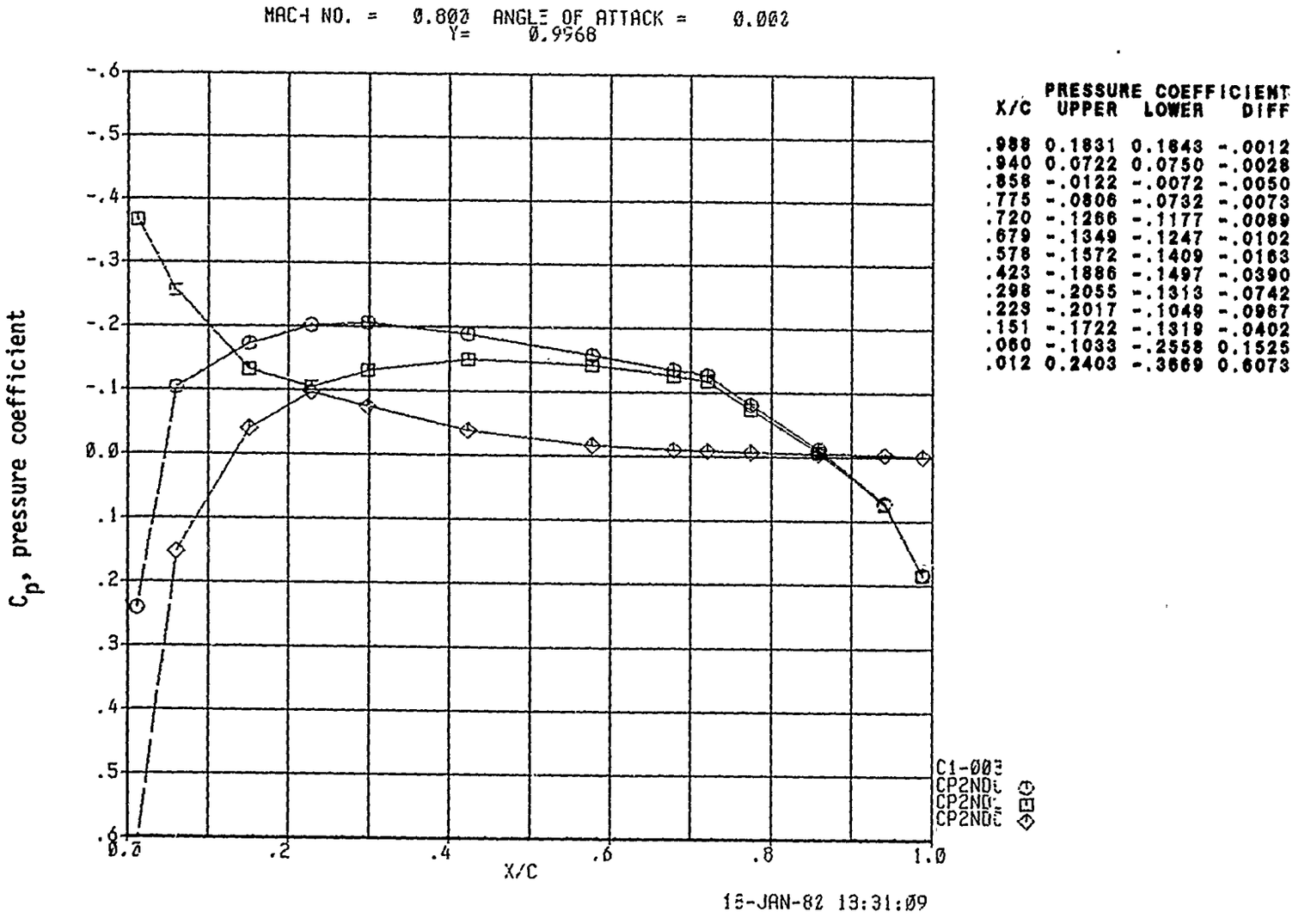
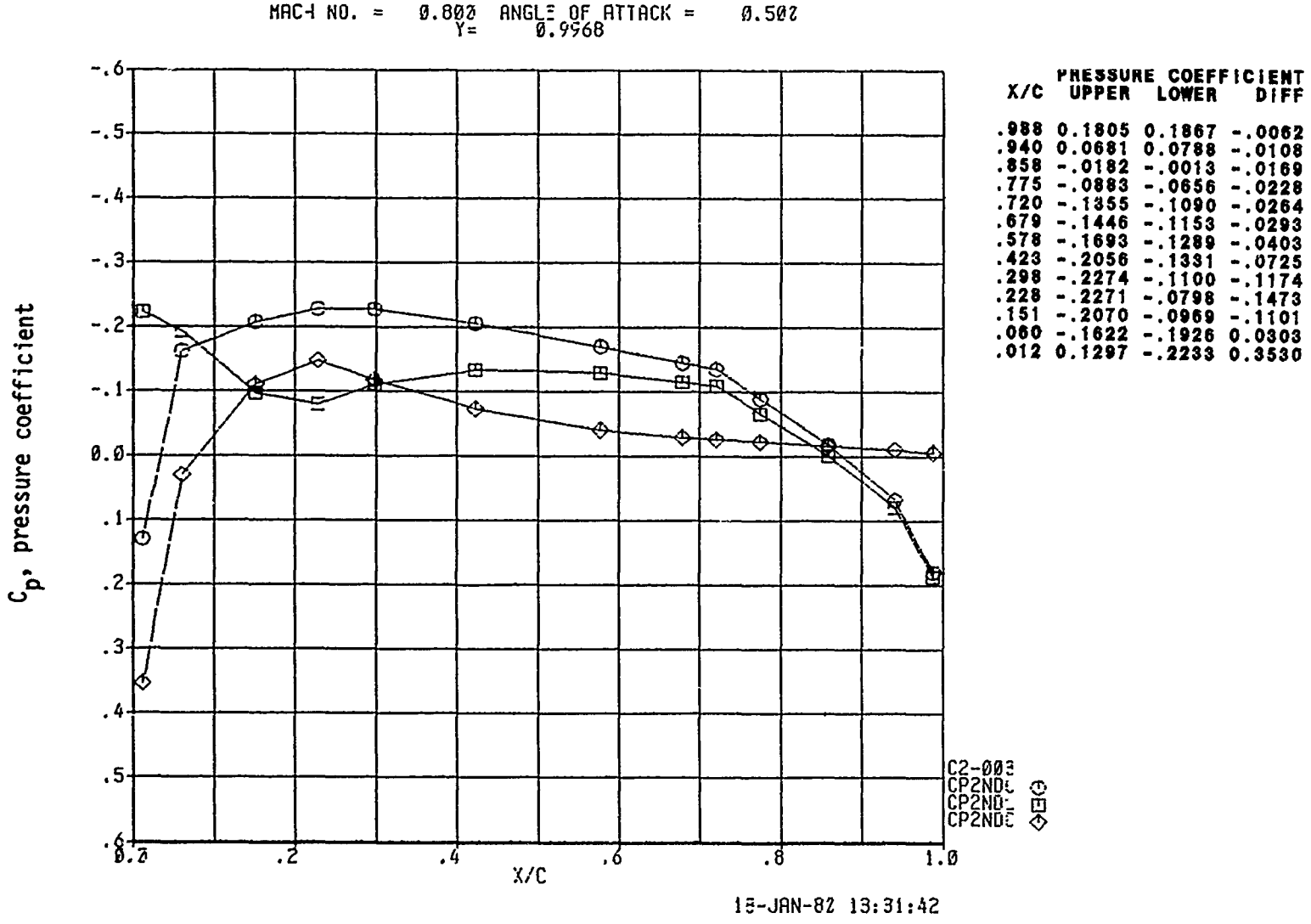


Figure 485, Chordwise Pressure Distribution, Steady, Configuration 6



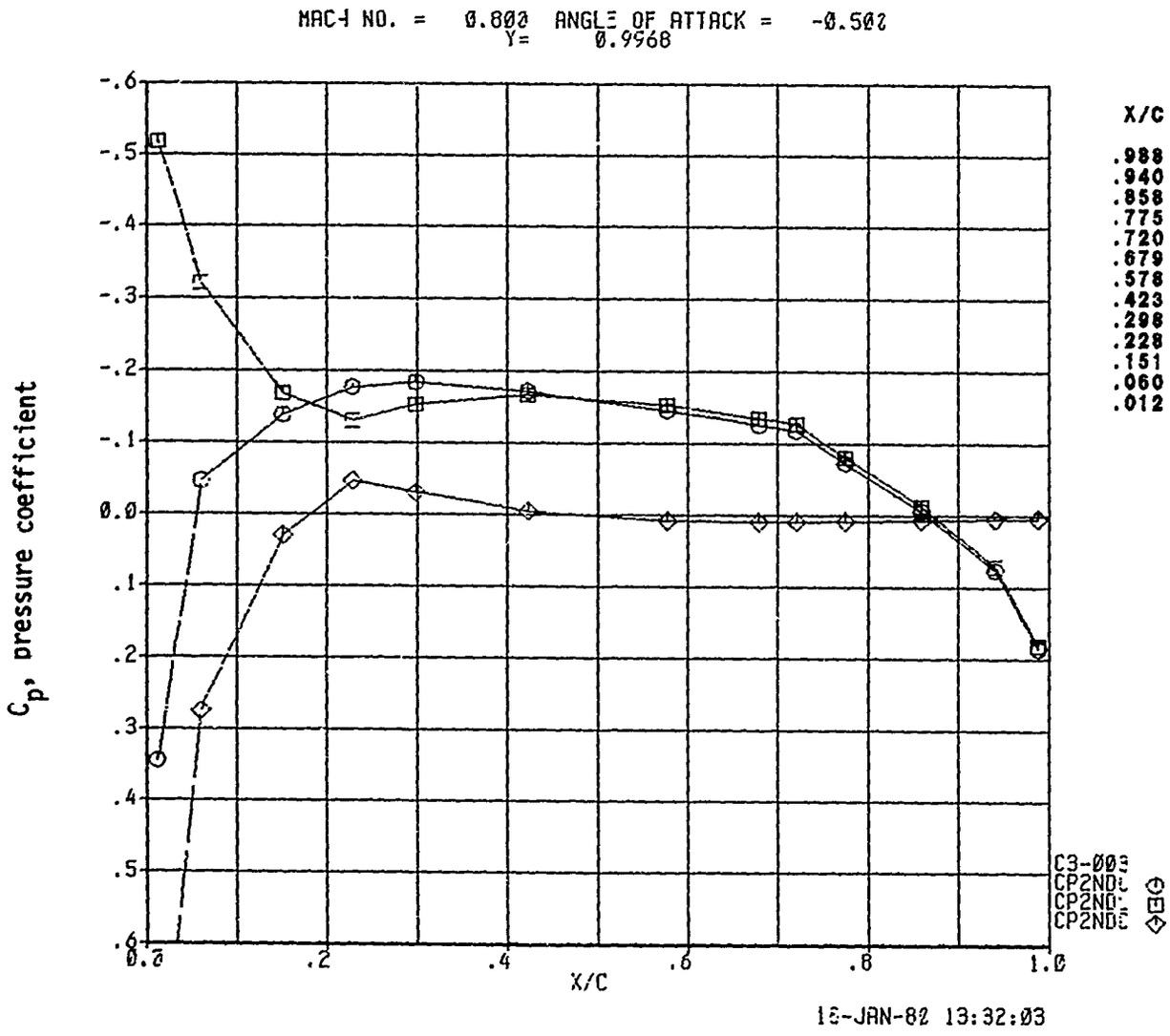
X/C	PRESSURE COEFFICIENT UPPER	LOWER	DIFF
.988	0.1831	0.1843	-.0012
.940	0.0722	0.0750	-.0028
.858	-.0122	-.0072	-.0050
.775	-.0806	-.0732	-.0073
.720	-.1266	-.1177	-.0089
.679	-.1349	-.1247	-.0102
.578	-.1572	-.1409	-.0163
.423	-.1886	-.1497	-.0390
.298	-.2055	-.1313	-.0742
.228	-.2017	-.1049	-.0967
.151	-.1722	-.1319	-.0402
.060	-.1033	-.2558	0.1525
.012	0.2403	-.3669	0.6073

Figure 486, Chordwise Pressure Distribution, Steady, Configuration 6



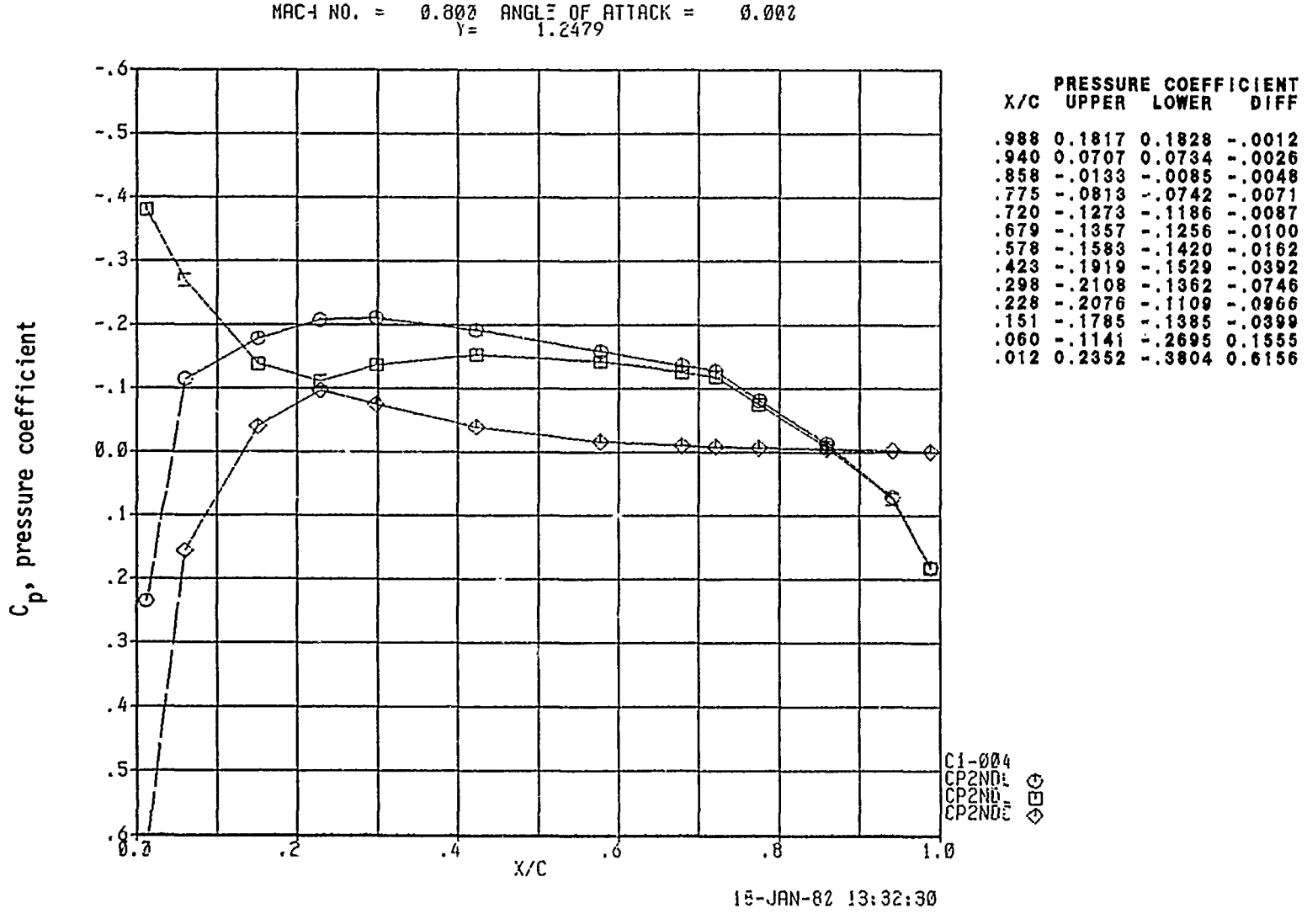
X/C	PRESSURE COEFFICIENT UPPER	LOWER	DIFF
.988	0.1805	0.1867	-.0062
.940	0.0681	0.0788	-.0108
.858	-.0182	-.0013	-.0169
.775	-.0883	-.0656	-.0228
.720	-.1355	-.1090	-.0264
.679	-.1446	-.1153	-.0293
.578	-.1693	-.1289	-.0403
.423	-.2056	-.1331	-.0725
.298	-.2274	-.1100	-.1174
.228	-.2271	-.0798	-.1473
.151	-.2070	-.0969	-.1101
.060	-.1622	-.1926	0.0303
.012	0.1297	-.2233	0.3530

Figure 487, Chordwise Pressure Distribution, Steady, Configuration 6



X/C	PRESSURE COEFFICIENT UPPER	LOWER	DIFF
.988	0.1855	0.1817	0.0038
.940	0.0760	0.0709	0.0052
.858	-.0063	-.0132	0.0068
.775	-.0729	-.0810	0.0081
.720	-.1179	-.1265	0.0086
.679	-.1255	-.1343	0.0089
.578	-.1452	-.1530	0.0079
.423	-.1719	-.1666	-.0053
.298	-.1839	-.1529	-.0310
.228	-.1765	-.1303	-.0462
.151	-.1380	-.1676	0.0296
.060	-.0459	-.3206	0.2746
.012	0.3437	-.5179	0.8616

Figure 488, Chordwise Pressure Distribution, Steady, Configuration 6



X/C	PRESSURE COEFFICIENT UPPER	LOWER	DIFF
.988	0.1817	0.1828	-.0012
.940	0.0707	0.0734	-.0026
.858	-.0133	-.0085	-.0048
.775	-.0813	-.0742	-.0071
.720	-.1273	-.1186	-.0087
.679	-.1357	-.1256	-.0100
.578	-.1583	-.1420	-.0162
.423	-.1919	-.1529	-.0392
.298	-.2108	-.1362	-.0746
.228	-.2076	-.1109	-.0966
.151	-.1785	-.1385	-.0399
.060	-.1141	-.2695	0.1555
.012	0.2352	-.3804	0.6156

Figure 489, Chordwise Pressure Distribution, Steady, Configuration 6

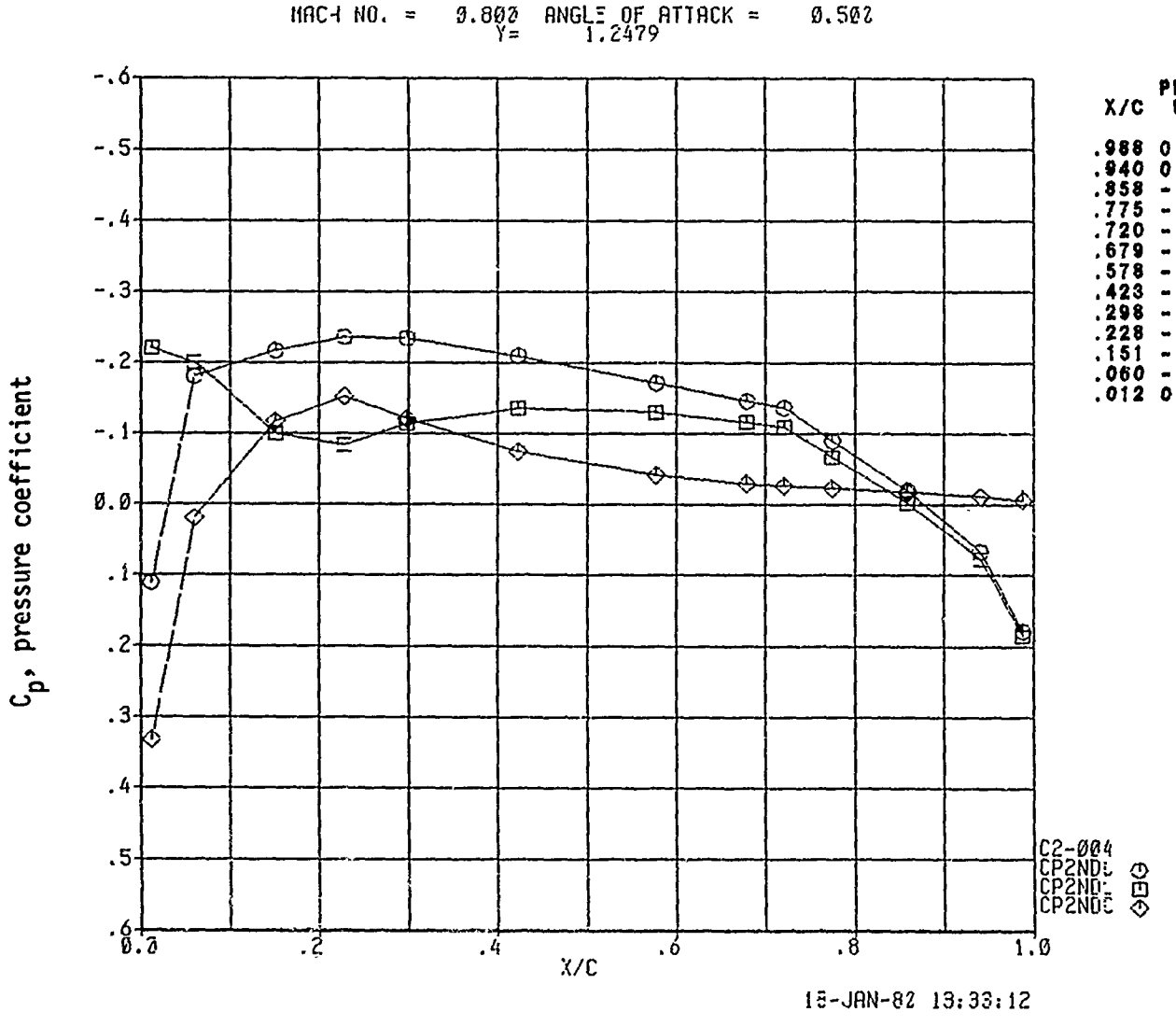
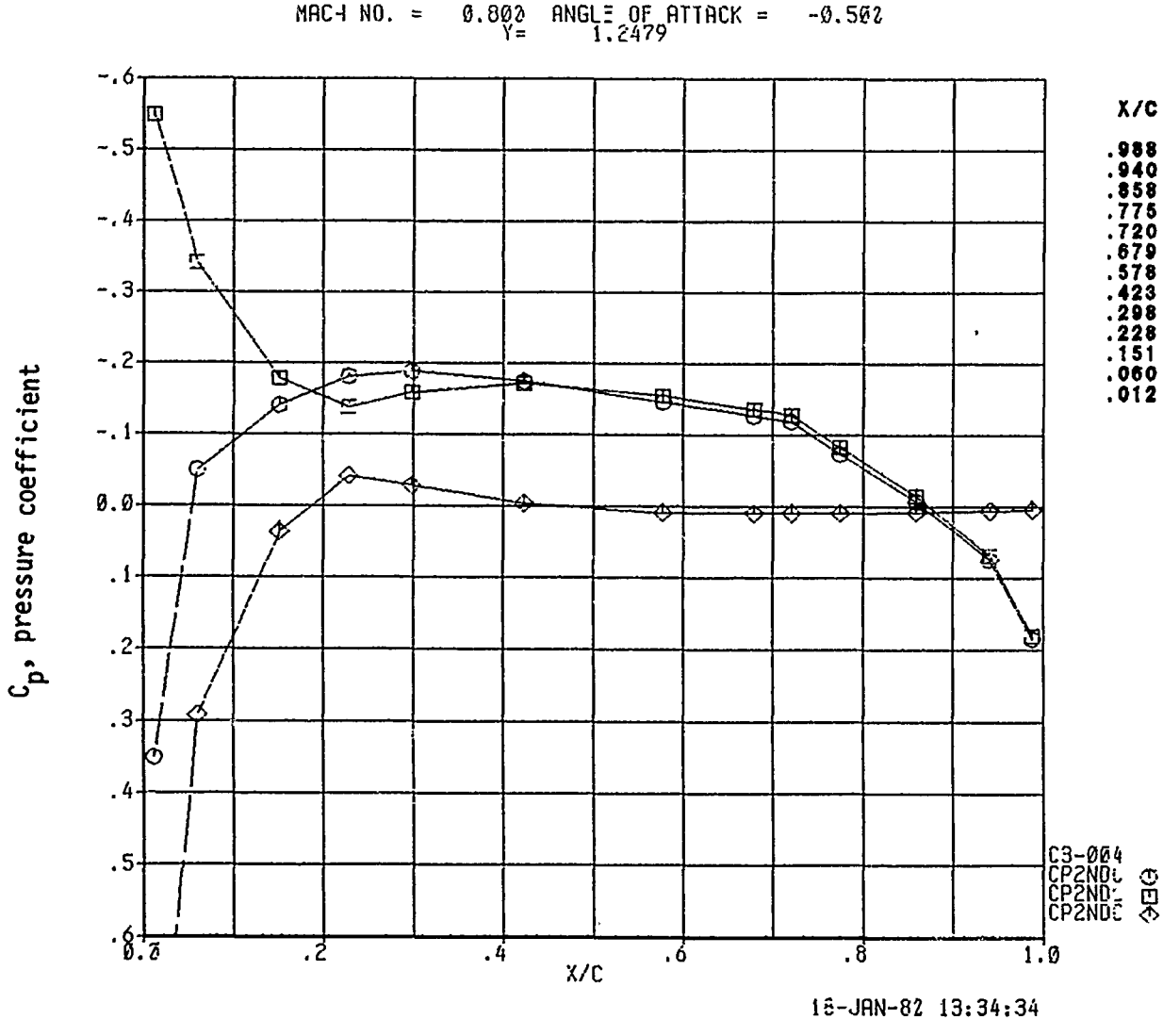


Figure 490, Chordwise Pressure Distribution, Steady, Configuration 6



X/C	PRESSURE COEFFICIENT UPPER	LOWER	DIFF
.988	0.1841	0.1801	0.0040
.940	0.0747	0.0692	0.0055
.858	-.0073	-.0147	0.0074
.775	-.0735	-.0822	0.0087
.720	-.1185	-.1276	0.0091
.679	-.1261	-.1354	0.0094
.578	-.1461	-.1544	0.0085
.423	-.1744	-.1705	-.0039
.298	-.1877	-.1593	-.0284
.228	-.1803	-.1385	-.0418
.151	-.1409	-.1776	0.0366
.060	-.0502	-.3415	0.2913
.012	0.3505	-.5497	0.9003

Figure 491, Chordwise Pressure Distribution, Steady, Configuration 6

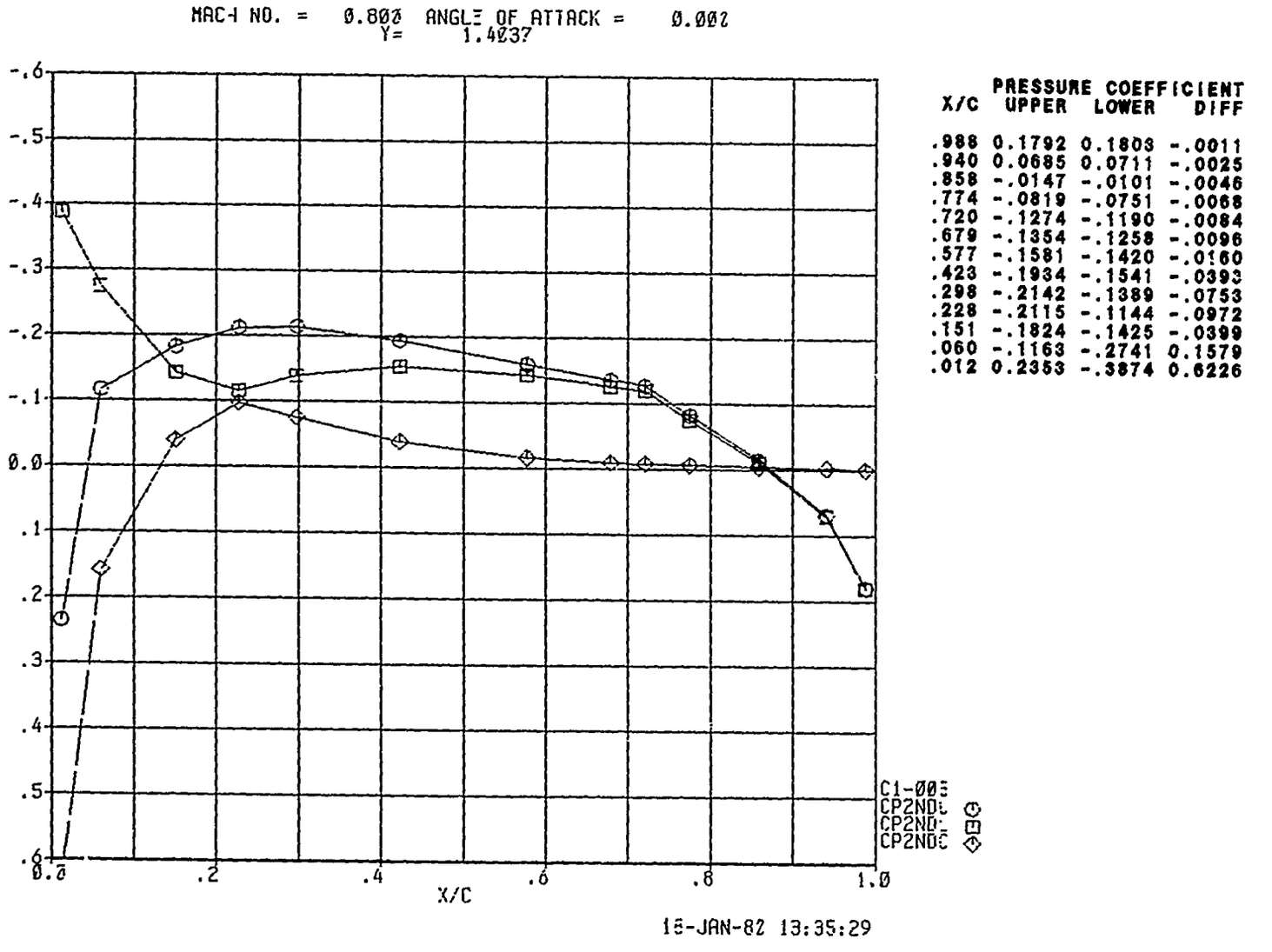
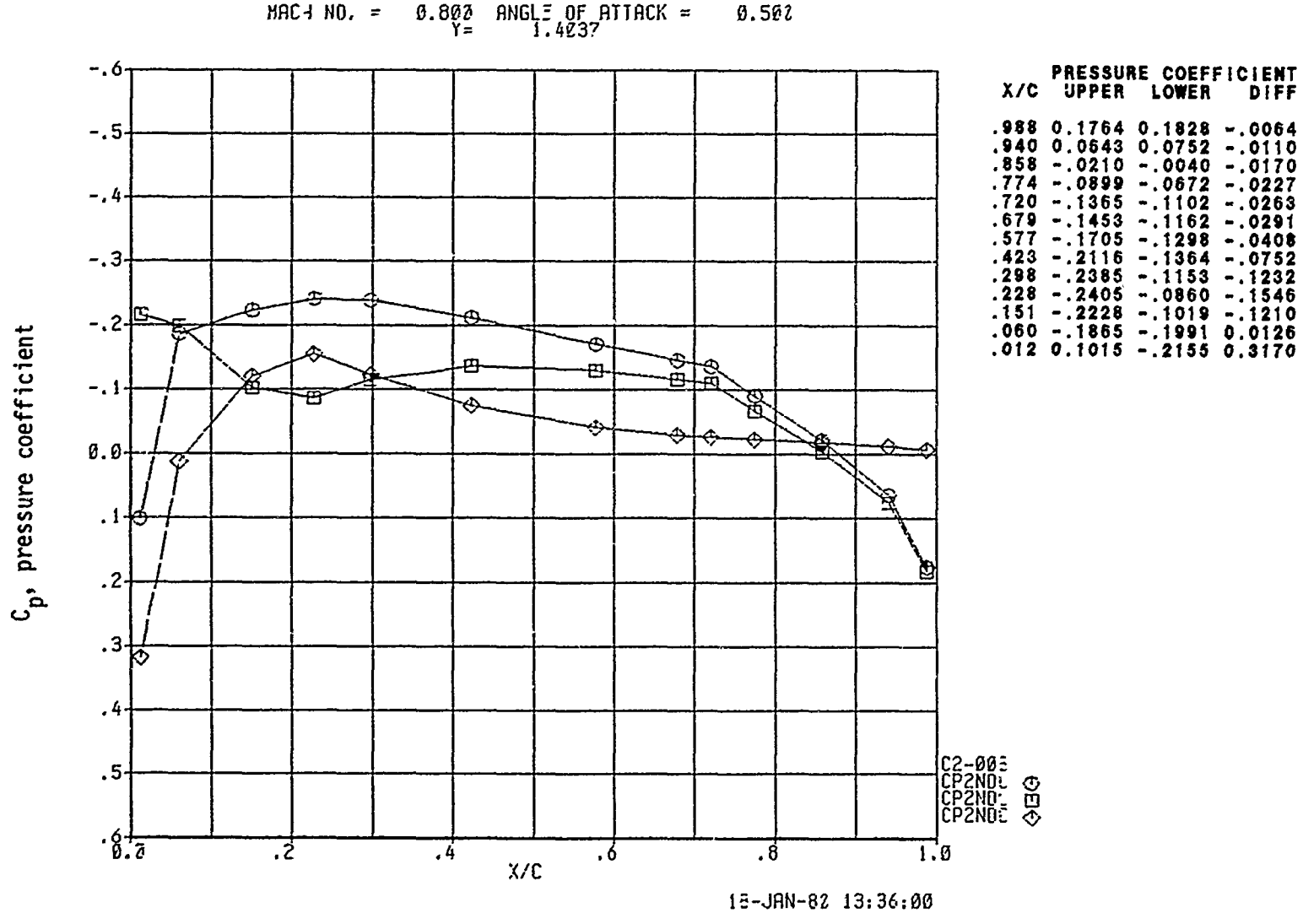
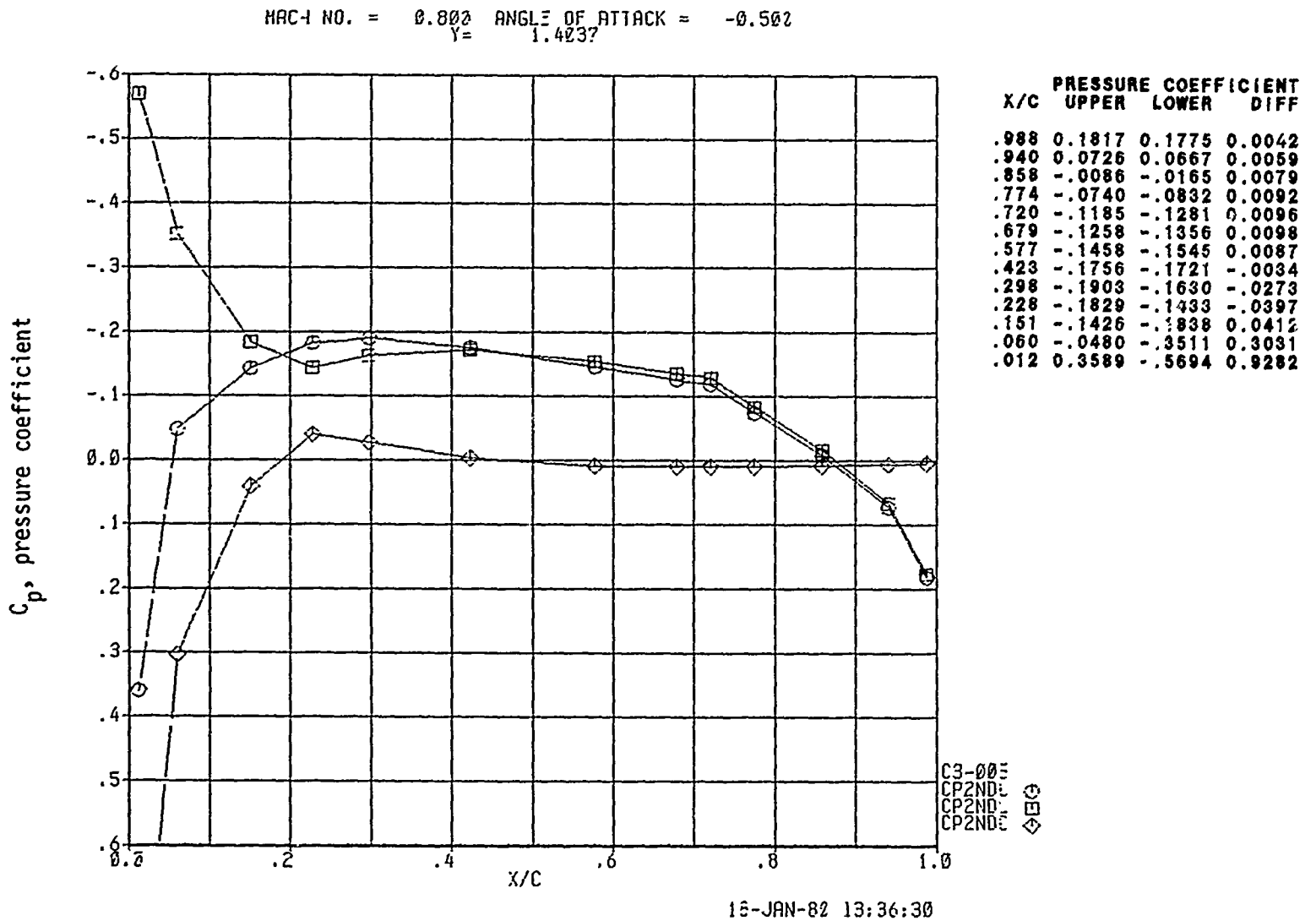


Figure 492, Chordwise Pressure Distribution, Steady, Configuration 6



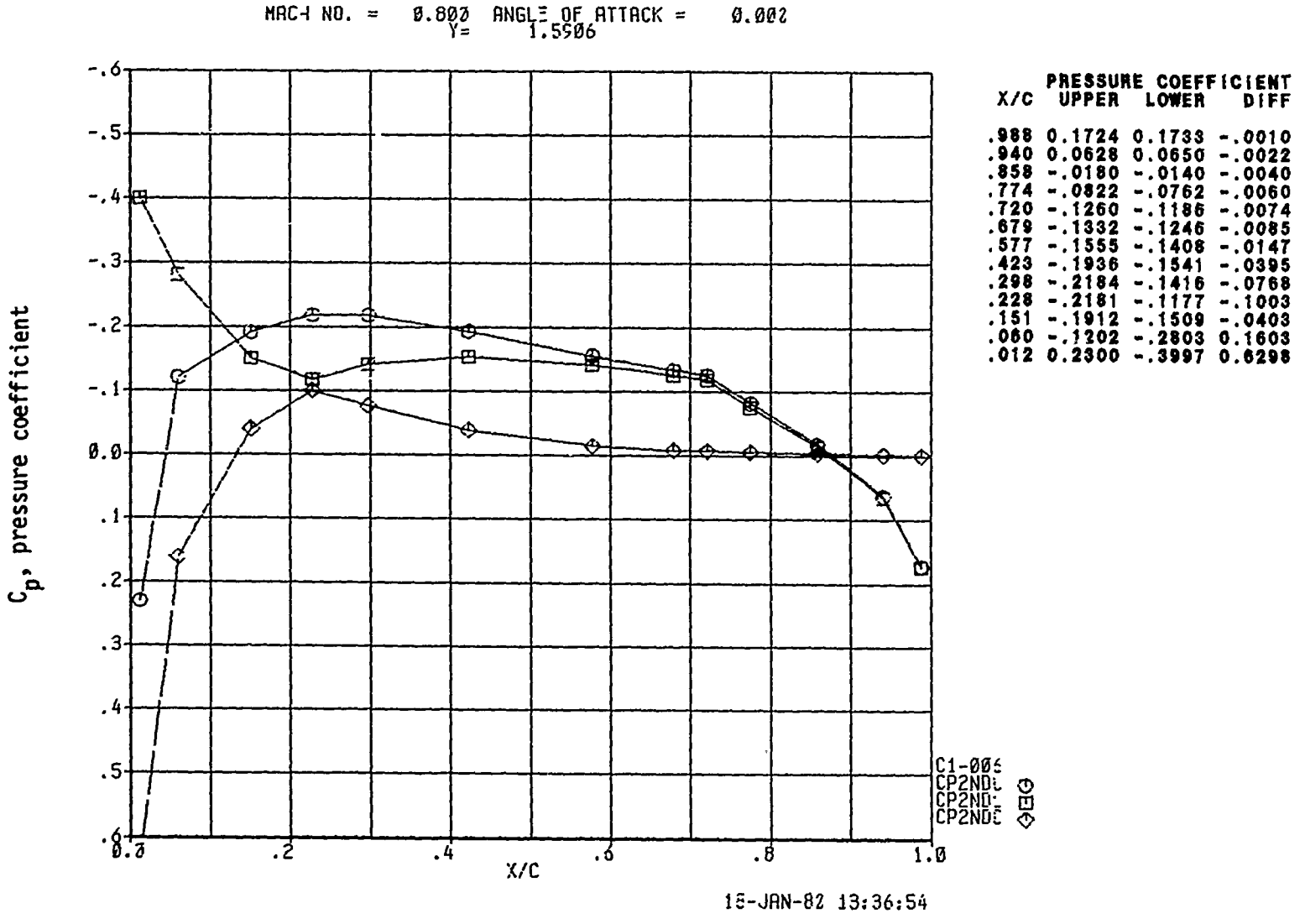
X/C	PRESSURE COEFFICIENT UPPER	LOWER	DIFF
.988	0.1764	0.1828	-.0064
.940	0.0643	0.0752	-.0110
.858	-.0210	-.0040	-.0170
.774	-.0899	-.0672	-.0227
.720	-.1365	-.1102	-.0263
.679	-.1453	-.1162	-.0291
.577	-.1705	-.1298	-.0408
.423	-.2116	-.1364	-.0752
.298	-.2385	-.1153	-.1232
.228	-.2405	-.0860	-.1546
.151	-.2228	-.1019	-.1210
.060	-.1865	-.1991	0.0126
.012	0.1015	-.2155	0.3170

Figure 493, Chordwise Pressure Distribution, Steady, Configuration 6



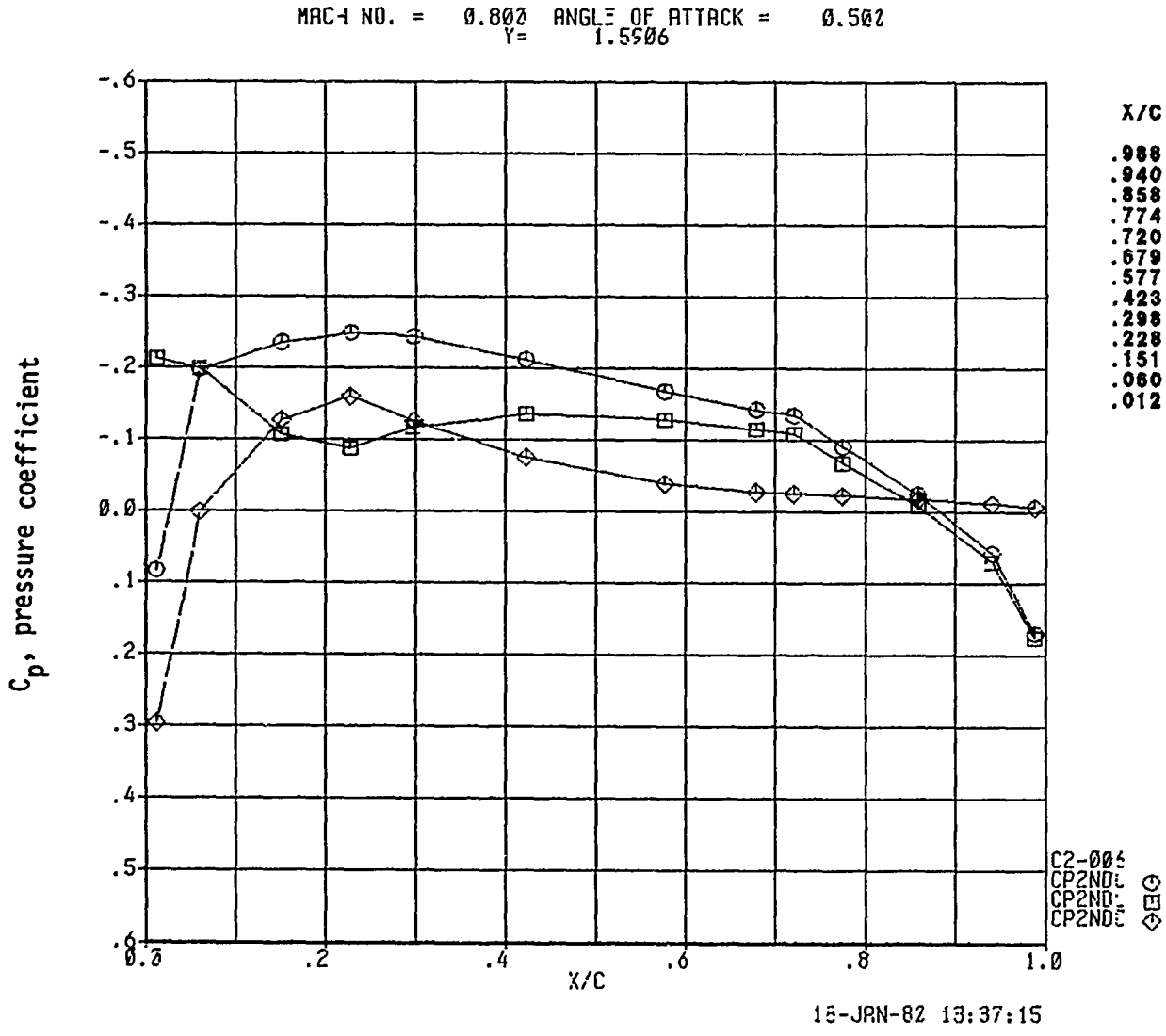
X/C	PRESSURE COEFFICIENT UPPER	LOWER	DIFF
.988	0.1817	0.1775	0.0042
.940	0.0726	0.0667	0.0059
.858	-.0086	-.0165	0.0079
.774	-.0740	-.0832	0.0092
.720	-.1185	-.1281	0.0096
.679	-.1258	-.1356	0.0098
.577	-.1458	-.1545	0.0087
.423	-.1756	-.1721	-.0034
.298	-.1903	-.1630	-.0273
.228	-.1829	-.1433	-.0397
.151	-.1426	-.1838	0.0412
.060	-.0480	-.3511	0.3031
.012	0.3589	-.5694	0.9282

Figure 494, Chordwise Pressure Distribution, Steady, Configuration 6



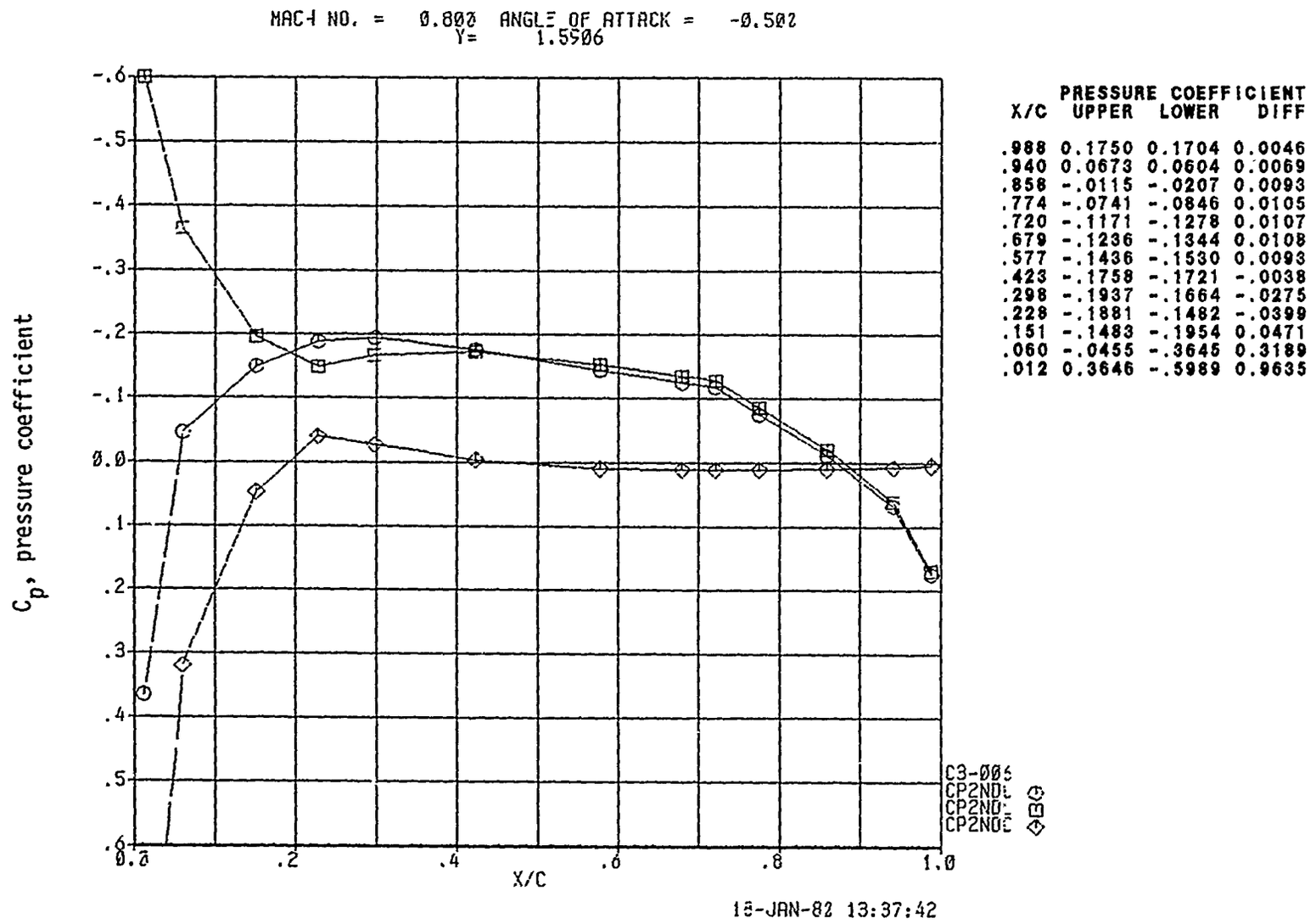
X/C	PRESSURE COEFFICIENT UPPER	LOWER	DIFF
.988	0.1724	0.1733	-.0010
.940	0.0628	0.0650	-.0022
.858	-.0180	-.0140	-.0040
.774	-.0822	-.0762	-.0060
.720	-.1260	-.1186	-.0074
.679	-.1332	-.1246	-.0085
.577	-.1555	-.1408	-.0147
.423	-.1936	-.1541	-.0395
.298	-.2184	-.1416	-.0768
.228	-.2181	-.1177	-.1003
.151	-.1912	-.1509	-.0403
.060	-.1202	-.2803	0.1603
.012	0.2300	-.3997	0.6298

Figure 495, Chordwise Pressure Distribution, Steady, Configuration 6



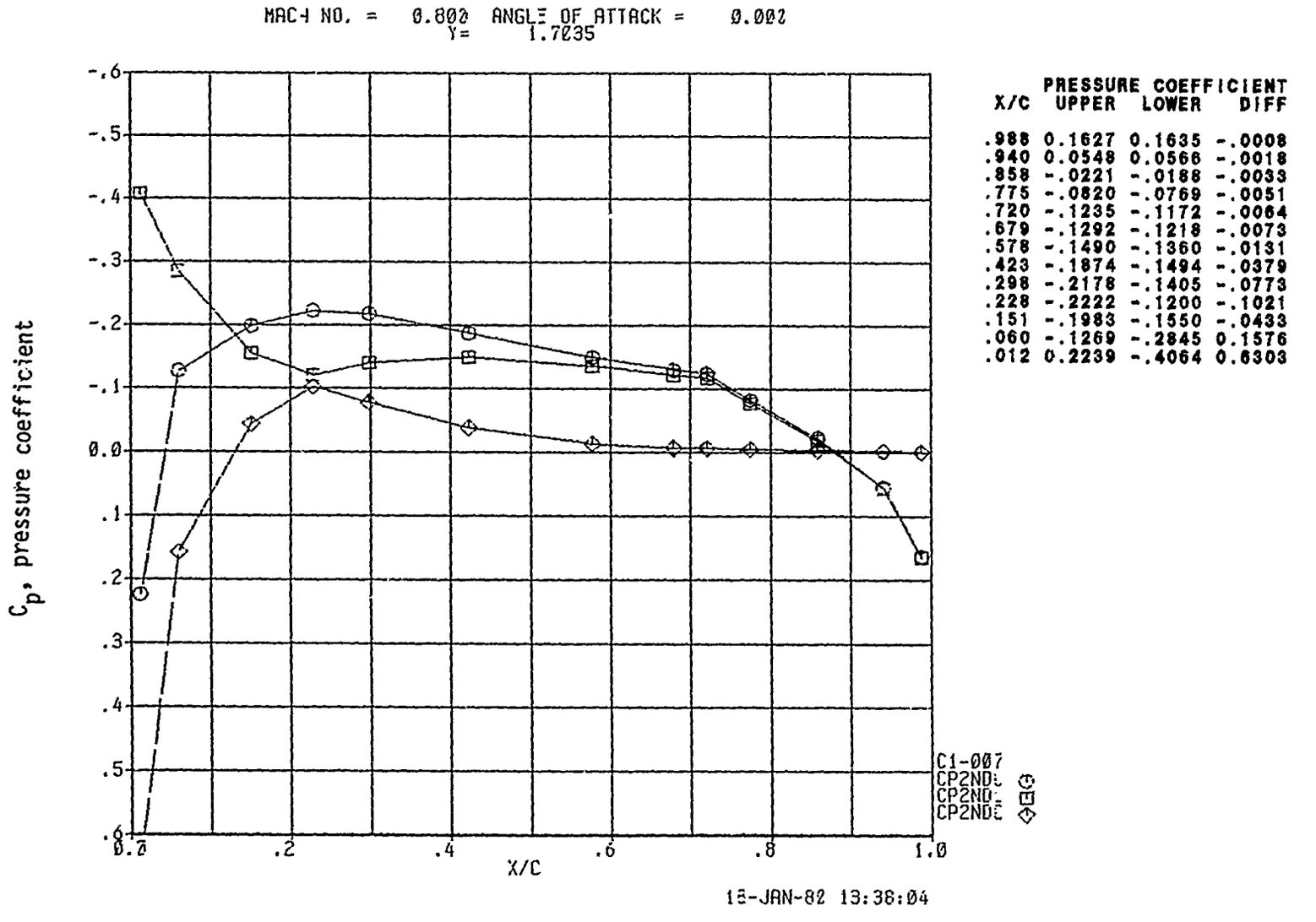
X/C	PRESSURE COEFFICIENT UPPER	LOWER	DIFF
.988	0.1695	0.1760	-.0066
.940	0.0582	0.0695	-.0113
.858	-.0247	-.0074	-.0173
.774	-.0905	-.0681	-.0225
.720	-.1352	-.1096	-.0255
.679	-.1429	-.1150	-.0278
.577	-.1677	-.1289	-.0389
.423	-.2117	-.1365	-.0751
.298	-.2434	-.1173	-.1261
.228	-.2487	-.0878	-.1608
.151	-.2350	-.1072	-.1278
.060	-.1970	-.1986	0.0016
.012	0.0834	-.2126	0.2961

Figure 496, Chordwise Pressure Distribution, Steady, Configuration 6



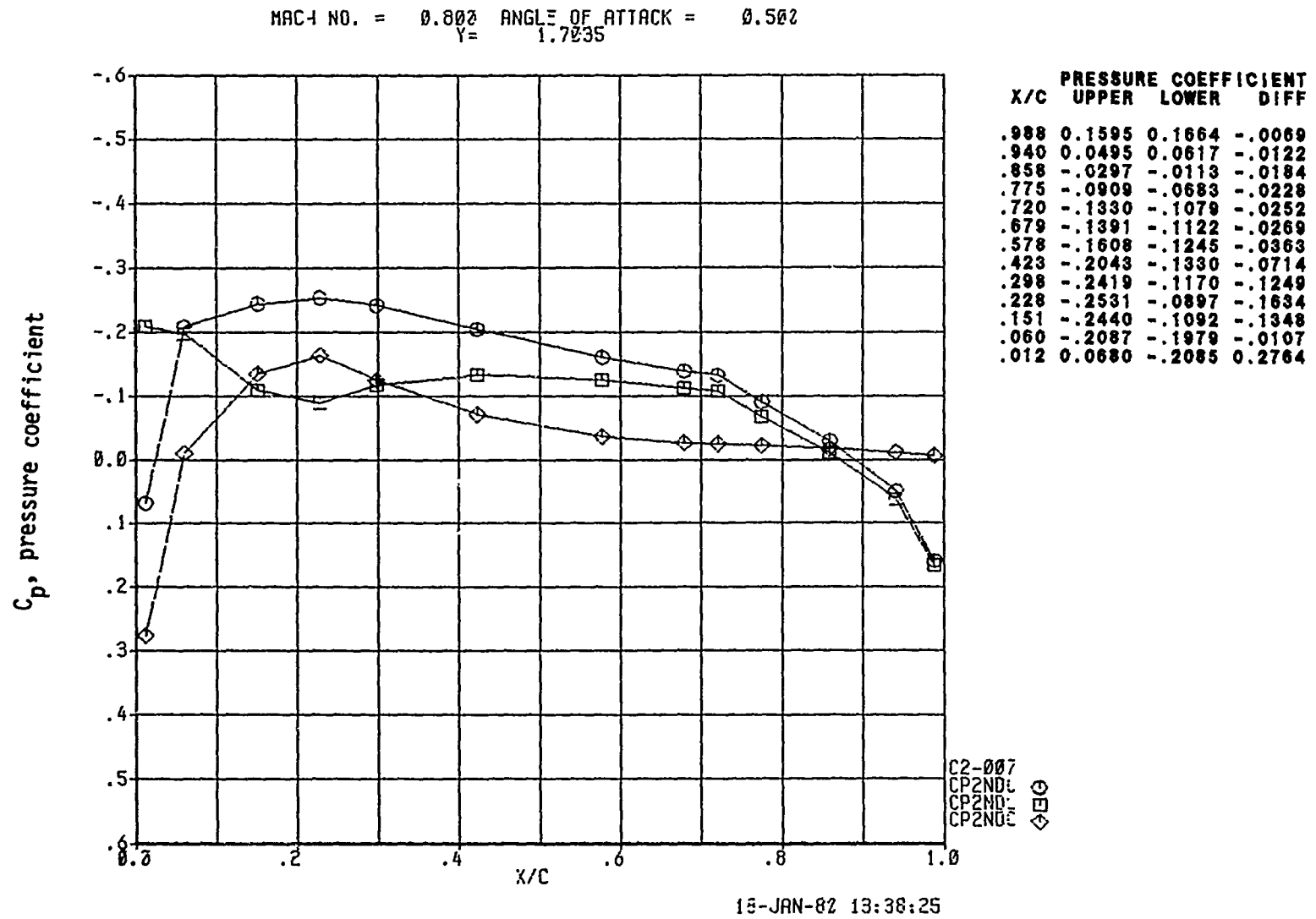
X/C	PRESSURE COEFFICIENT UPPER	LOWER	DIFF
.988	0.1750	0.1704	0.0046
.940	0.0673	0.0604	0.0069
.858	-.0115	-.0207	0.0093
.774	-.0741	-.0846	0.0105
.720	-.1171	-.1278	0.0107
.679	-.1236	-.1344	0.0108
.577	-.1436	-.1530	0.0093
.423	-.1758	-.1721	-.0038
.298	-.1937	-.1664	-.0275
.228	-.1881	-.1482	-.0399
.151	-.1483	-.1954	0.0471
.060	-.0455	-.3645	0.3189
.012	0.3646	-.5989	0.9635

Figure 497, Chordwise Pressure Distribution, Steady, Configuration 6



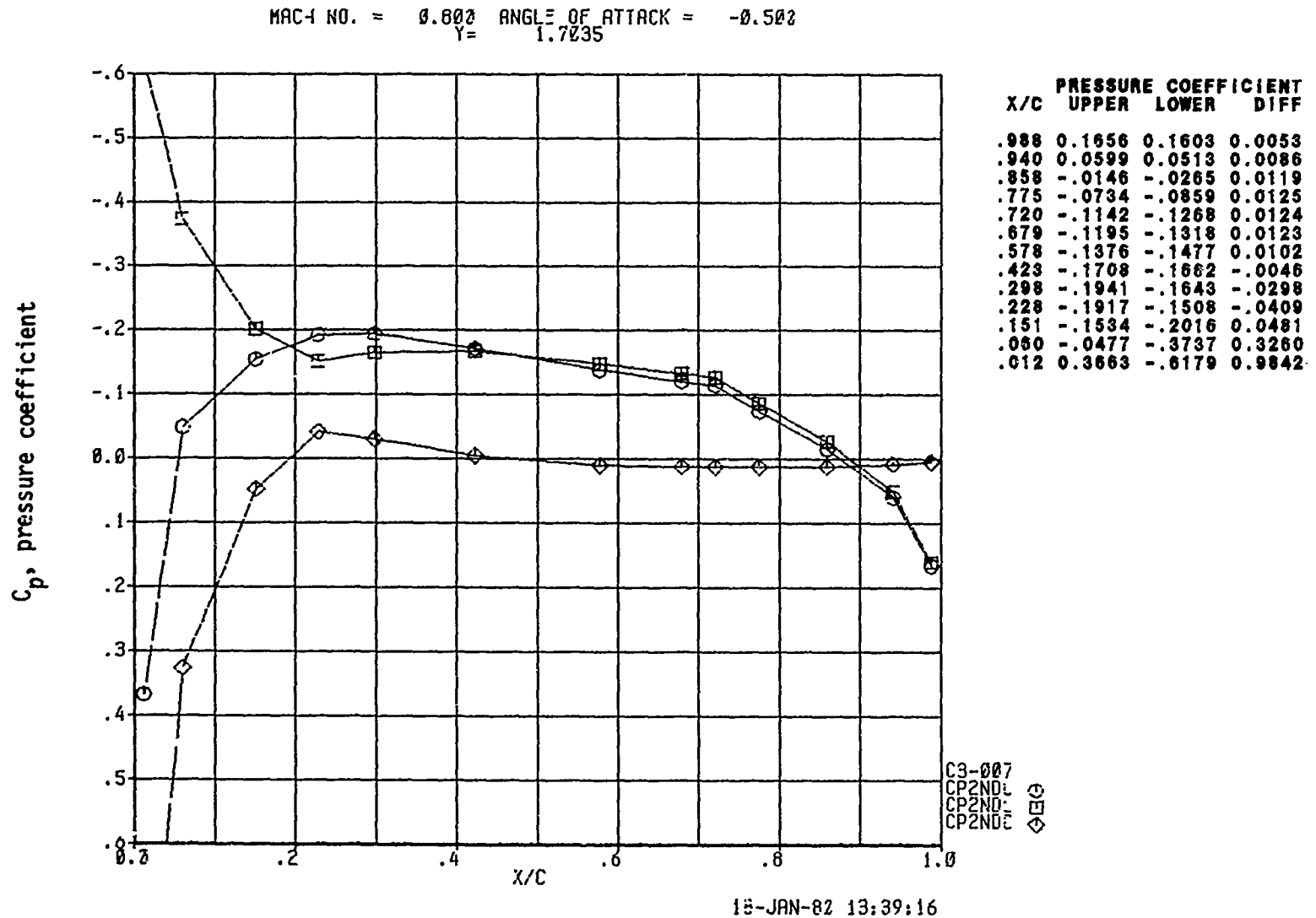
X/C	PRESSURE COEFFICIENT UPPER	LOWER	DIFF
.988	0.1627	0.1635	-.0008
.940	0.0548	0.0566	-.0018
.858	-.0221	-.0188	-.0033
.775	-.0820	-.0769	-.0051
.720	-.1235	-.1172	-.0064
.679	-.1292	-.1218	-.0073
.578	-.1490	-.1360	-.0131
.423	-.1874	-.1494	-.0379
.298	-.2178	-.1405	-.0773
.228	-.2222	-.1200	-.1021
.151	-.1983	-.1550	-.0433
.060	-.1269	-.2845	0.1576
.012	0.2239	-.4064	0.6303

Figure 498, Chordwise Pressure Distribution, Steady, Configuration 6



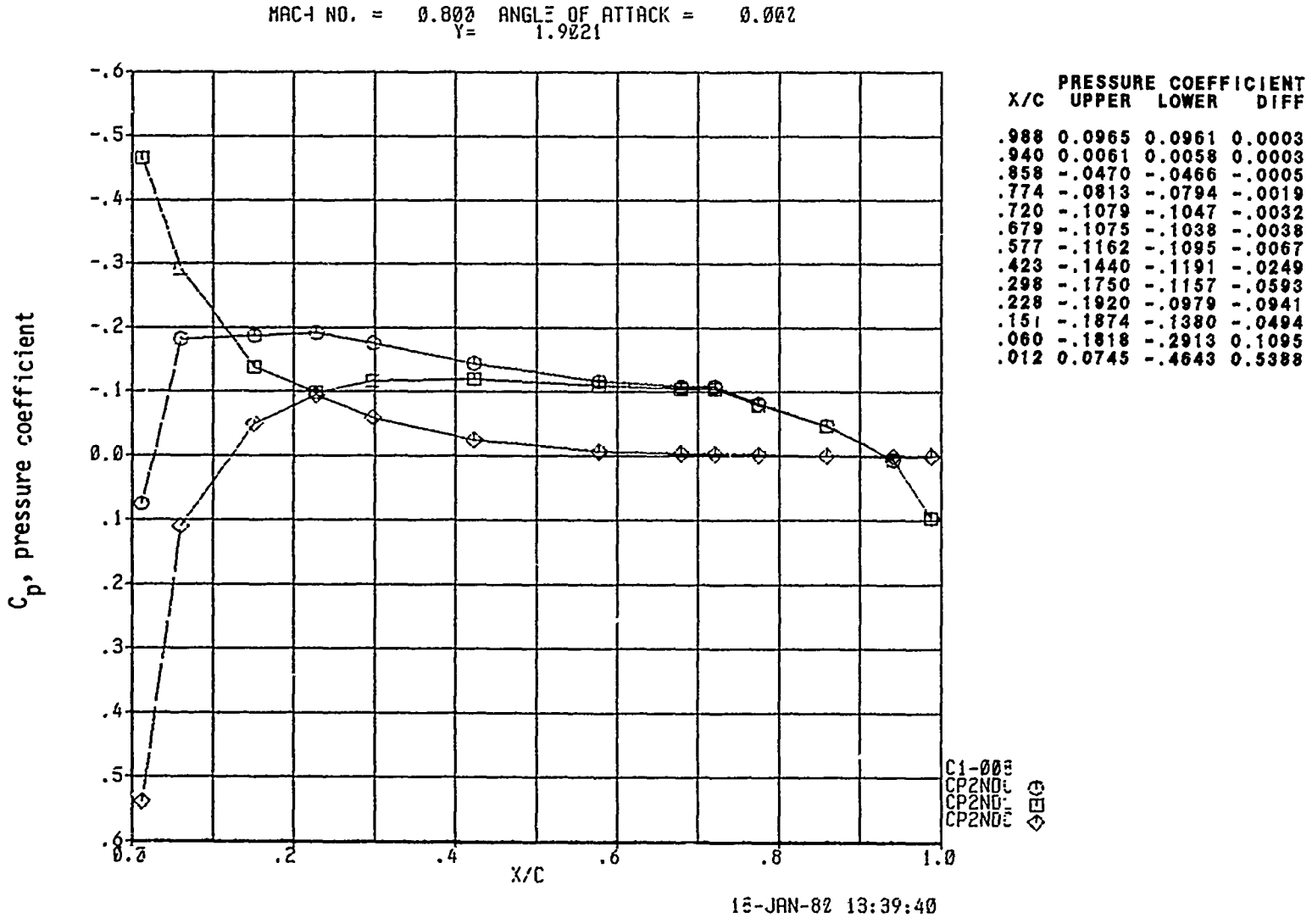
X/C	PRESSURE COEFFICIENT UPPER	LOWER	DIFF
.988	0.1595	0.1664	-.0069
.940	0.0495	0.0617	-.0122
.858	-.0297	-.0113	-.0184
.775	-.0909	-.0683	-.0228
.720	-.1330	-.1079	-.0252
.679	-.1391	-.1122	-.0269
.578	-.1608	-.1245	-.0363
.423	-.2043	-.1330	-.0714
.298	-.2419	-.1170	-.1249
.228	-.2531	-.0897	-.1634
.151	-.2440	-.1092	-.1348
.060	-.2087	-.1979	-.0107
.012	0.0680	-.2085	0.2764

Figure 499, Chordwise Pressure Distribution, Steady, Configuration 6



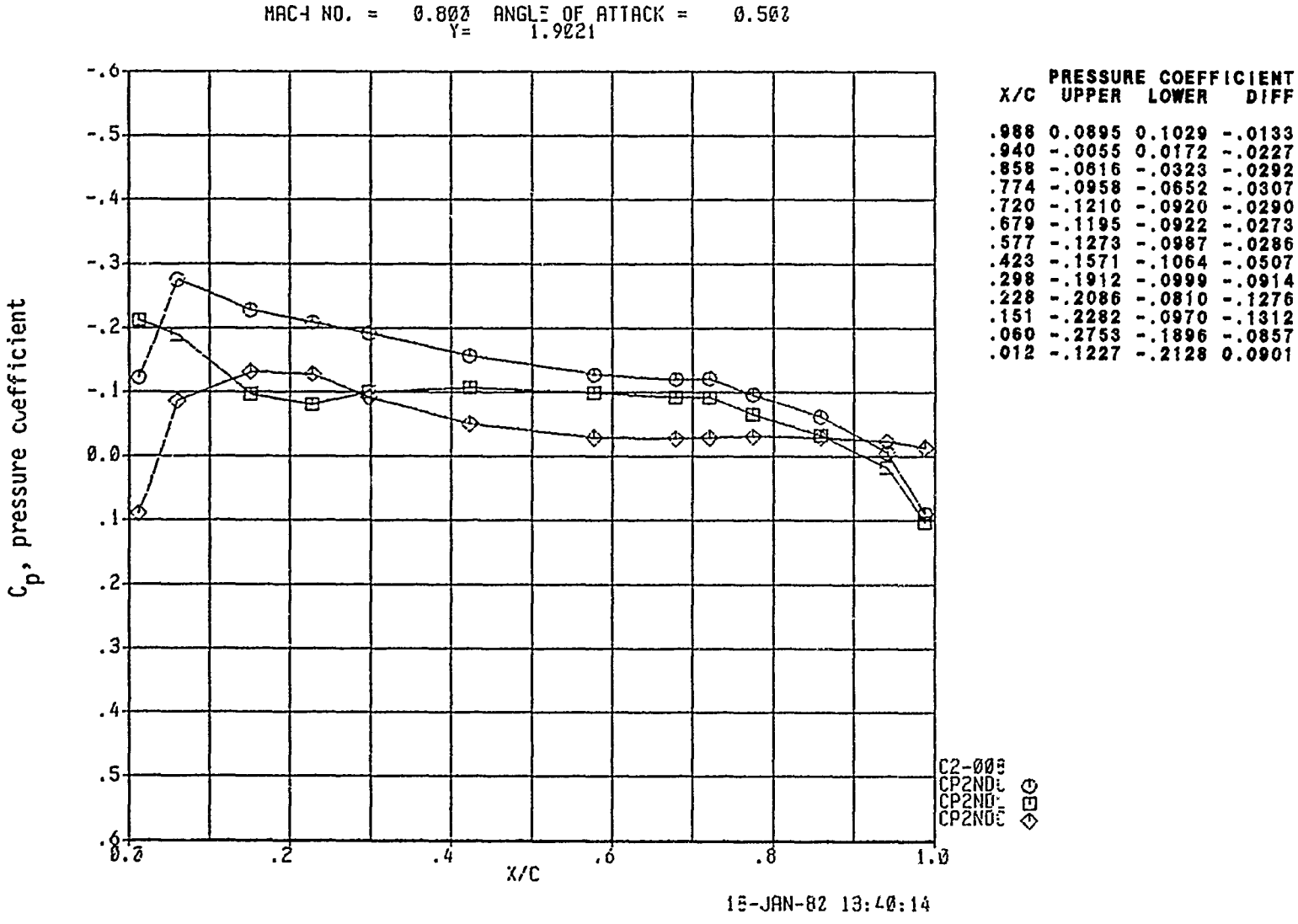
X/C	PRESSURE COEFFICIENT UPPER	LOWER	DIFF
.988	0.1656	0.1603	0.0053
.940	0.0599	0.0513	0.0086
.858	-.0146	-.0265	0.0119
.775	-.0734	-.0859	0.0125
.720	-.1142	-.1268	0.0124
.679	-.1195	-.1318	0.0123
.578	-.1376	-.1477	0.0102
.423	-.1708	-.1662	-.0046
.298	-.1941	-.1643	-.0298
.228	-.1917	-.1508	-.0409
.151	-.1534	-.2016	0.0481
.060	-.0477	-.3737	0.3260
.012	0.3663	-.6179	0.9842

Figure 500, Chordwise Pressure Distribution, Steady, Configuration 6



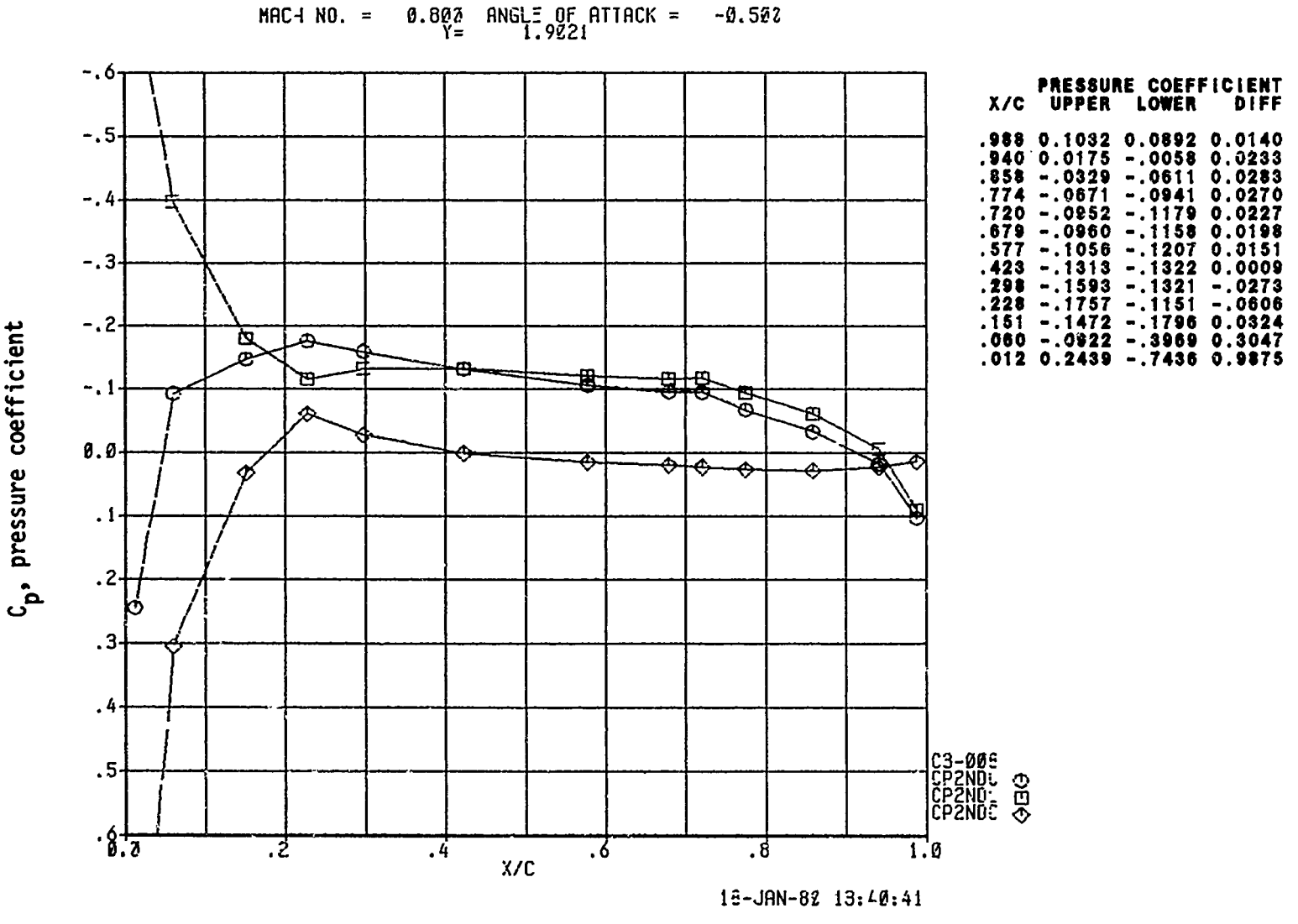
X/C	PRESSURE COEFFICIENT UPPER	LOWER	DIFF
.988	0.0965	0.0961	0.0003
.940	0.0061	0.0058	0.0003
.858	-.0470	-.0466	-.0005
.774	-.0813	-.0794	-.0019
.720	-.1079	-.1047	-.0032
.679	-.1075	-.1038	-.0038
.577	-.1162	-.1095	-.0067
.423	-.1440	-.1191	-.0249
.298	-.1750	-.1157	-.0593
.228	-.1920	-.0979	-.0941
.151	-.1874	-.1380	-.0494
.060	-.1818	-.2913	0.1095
.012	0.0745	-.4643	0.5388

Figure 501, Chordwise Pressure Distribution, Steady, Configuration 6



X/C	PRESSURE COEFFICIENT UPPER	LOWER	DIFF
.988	0.0895	0.1029	-.0133
.940	-.0055	0.0172	-.0227
.858	-.0616	-.0323	-.0292
.774	-.0958	-.0652	-.0307
.720	-.1210	-.0920	-.0290
.679	-.1195	-.0922	-.0273
.577	-.1273	-.0987	-.0286
.423	-.1571	-.1064	-.0507
.298	-.1912	-.0999	-.0914
.228	-.2086	-.0810	-.1276
.151	-.2282	-.0970	-.1312
.060	-.2753	-.1896	-.0857
.012	-.1227	-.2128	0.0901

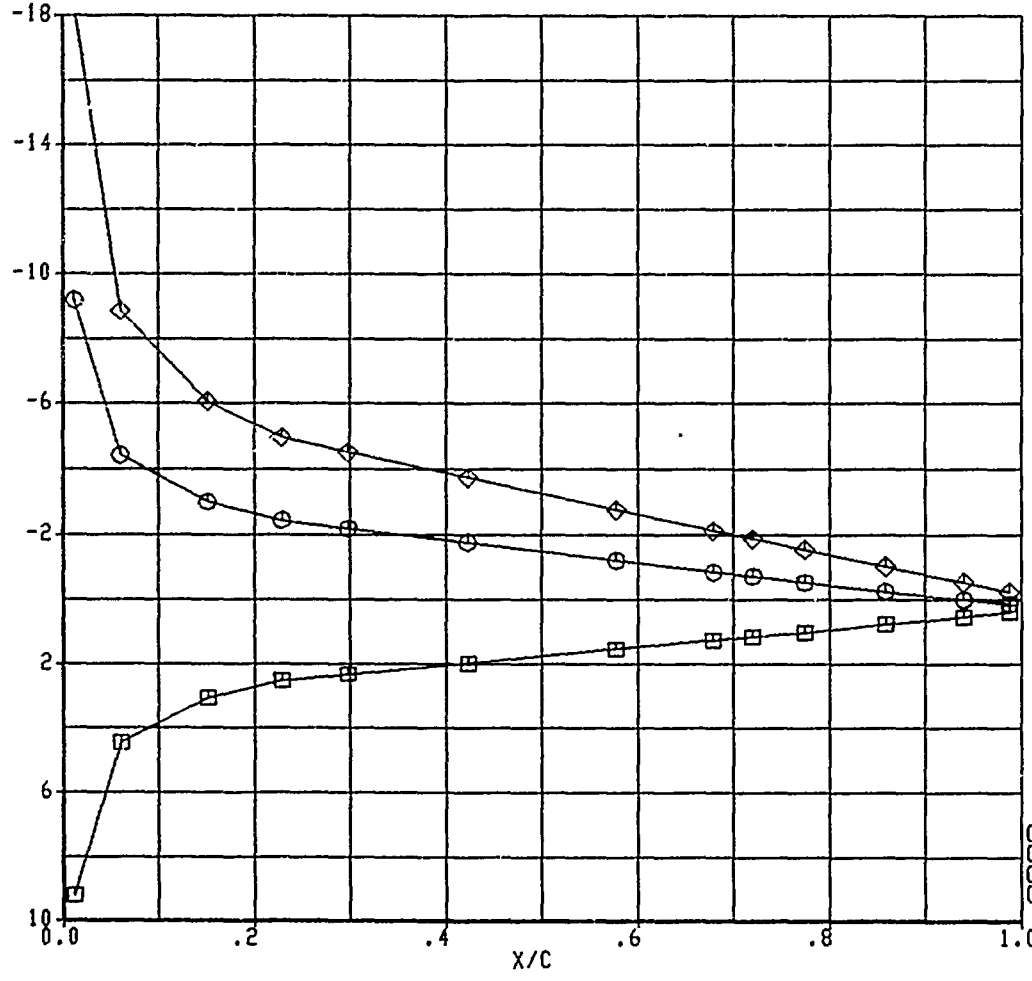
Figure 502, Chordwise Pressure Distribution, Steady, Configuration 6



X/C	PRESSURE COEFFICIENT UPPER	LOWER	DIFF
.988	0.1032	0.0892	0.0140
.940	0.0175	-.0058	0.0233
.858	-.0329	-.0611	0.0283
.774	-.0671	-.0941	0.0270
.720	-.0952	-.1179	0.0227
.679	-.0960	-.1158	0.0198
.577	-.1056	-.1207	0.0151
.423	-.1313	-.1322	0.0009
.298	-.1593	-.1321	-.0273
.228	-.1757	-.1151	-.0606
.151	-.1472	-.1796	0.0324
.060	-.0822	-.3969	0.3047
.012	0.2439	-.7436	0.9875

Figure 503, Chordwise Pressure Distribution, Steady, Configuration 6

MACH NO. = 0.800 ANGLE OF ATTACK = 0.000
0.3524



X/C	PRESSURE COEFFICIENT UPPER	LOWER	DIFF
.988	0.1416	0.3795	-.2378
.940	-.0075	0.5290	-.5365
.858	-.2571	0.7582	-1.015
.774	-.5384	1.0032	-1.542
.720	-.7183	1.1486	-1.867
.679	-.8570	1.2627	-2.120
.578	-1.210	1.5429	-2.753
.423	-1.753	1.9823	-3.736
.298	-2.171	2.3219	-4.493
.228	-2.419	2.5298	-4.949
.151	-2.993	3.0630	-6.056
.060	-4.414	4.4394	-8.853
.012	-9.188	9.1924	-18.38

Figure 50A. Chordwise Pressure Distribution, Real Configuration 6

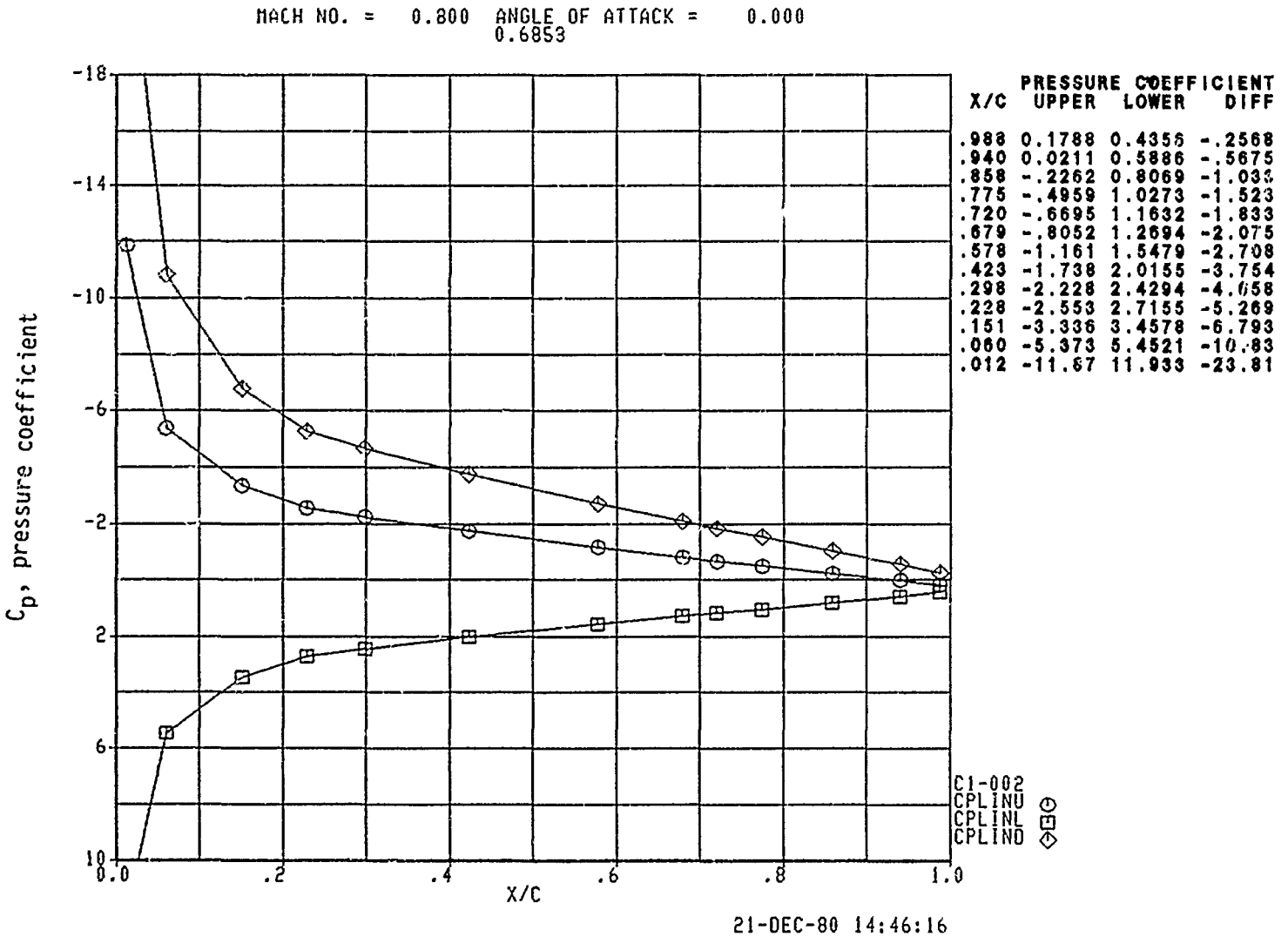
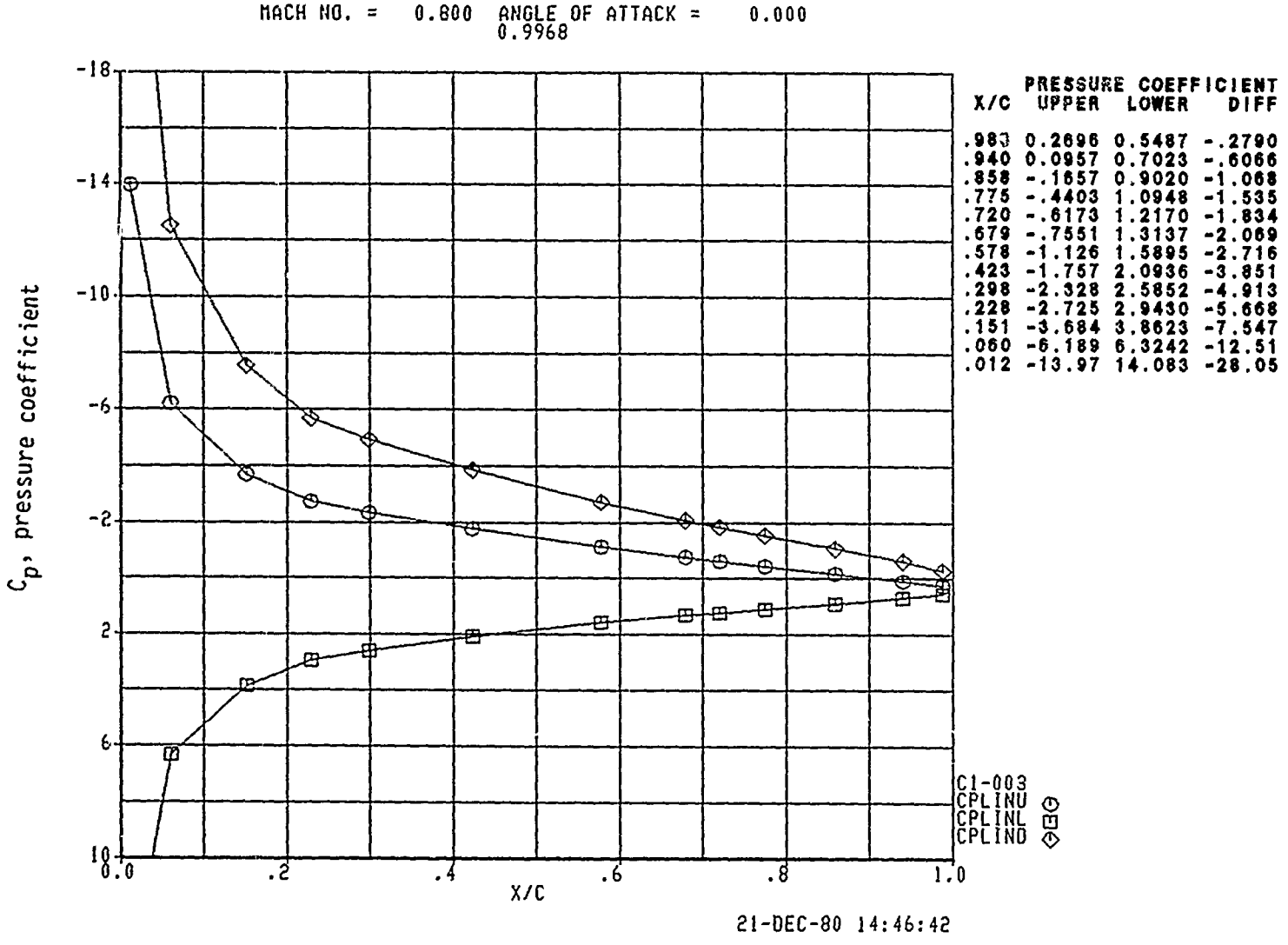
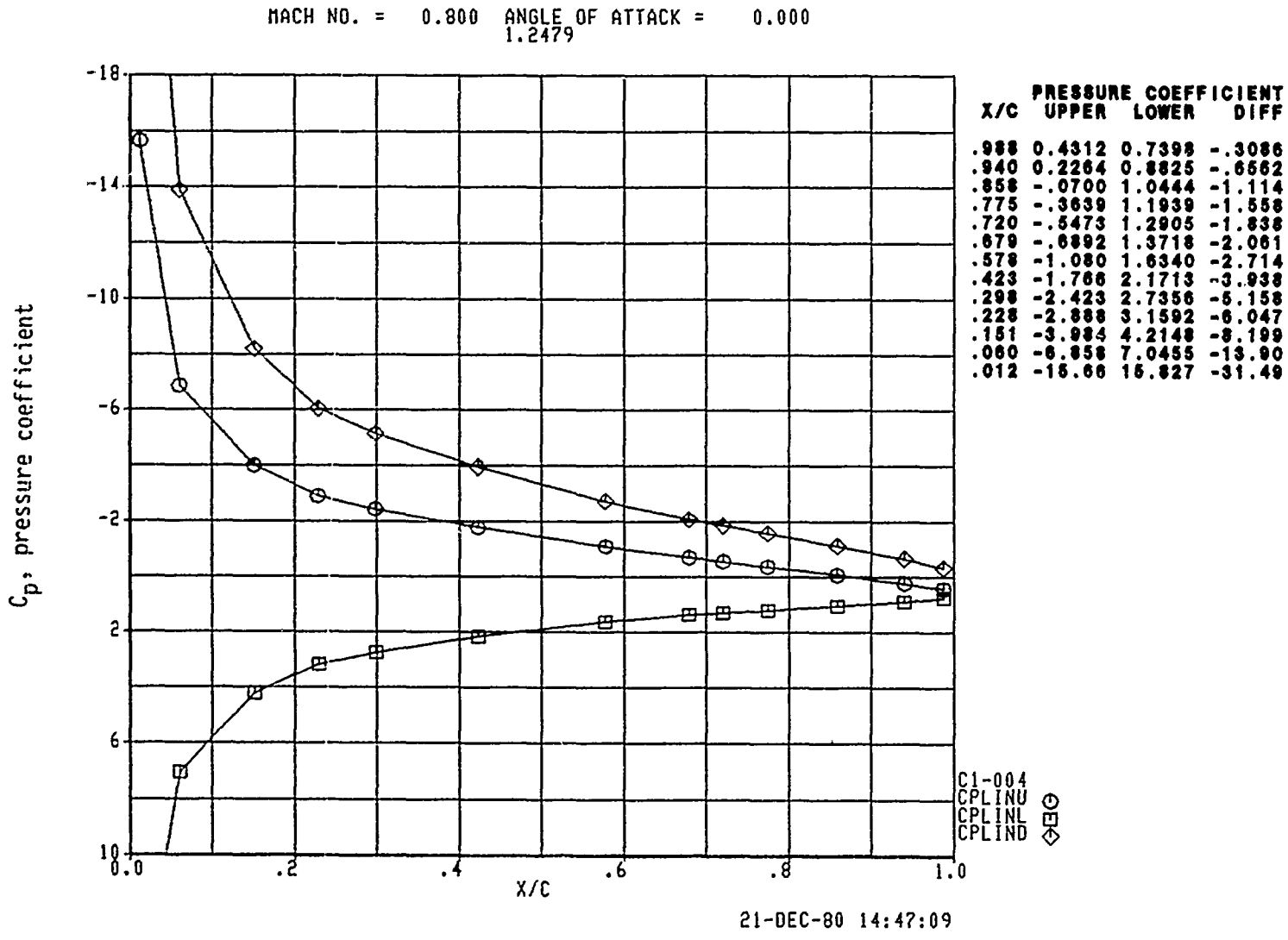


Figure 515, Chordwise Pressure Distribution, Real Configuration 6



X/C	PRESSURE COEFFICIENT UPPER	LOWER	DIFF
.983	0.2696	0.5487	-.2790
.940	0.0957	0.7023	-.6066
.858	-.1657	0.9020	-1.068
.775	-.4403	1.0948	-1.535
.720	-.6173	1.2170	-1.834
.679	-.7551	1.3137	-2.069
.578	-1.126	1.5895	-2.716
.423	-1.757	2.0936	-3.851
.298	-2.328	2.5852	-4.913
.228	-2.725	2.9430	-5.668
.151	-3.684	3.8623	-7.547
.060	-6.189	6.3242	-12.51
.012	-13.97	14.083	-28.05

Figure 506, Chordwise Pressure Distribution, Real Configuration 6



X/C	PRESSURE COEFFICIENT UPPER	LOWER	DIFF
.988	0.4312	0.7398	-.3086
.940	0.2264	0.8825	-.6562
.858	-.0700	1.0444	-1.114
.775	-.3639	1.1939	-1.558
.720	-.5473	1.2905	-1.838
.679	-.6892	1.3718	-2.061
.578	-1.080	1.6340	-2.714
.423	-1.766	2.1713	-3.938
.298	-2.423	2.7356	-5.158
.228	-2.888	3.1592	-6.047
.151	-3.984	4.2148	-8.199
.060	-6.858	7.0455	-13.90
.012	-15.66	15.827	-31.49

Figure 507, Chordwise Pressure Distribution, Real Configuration 6

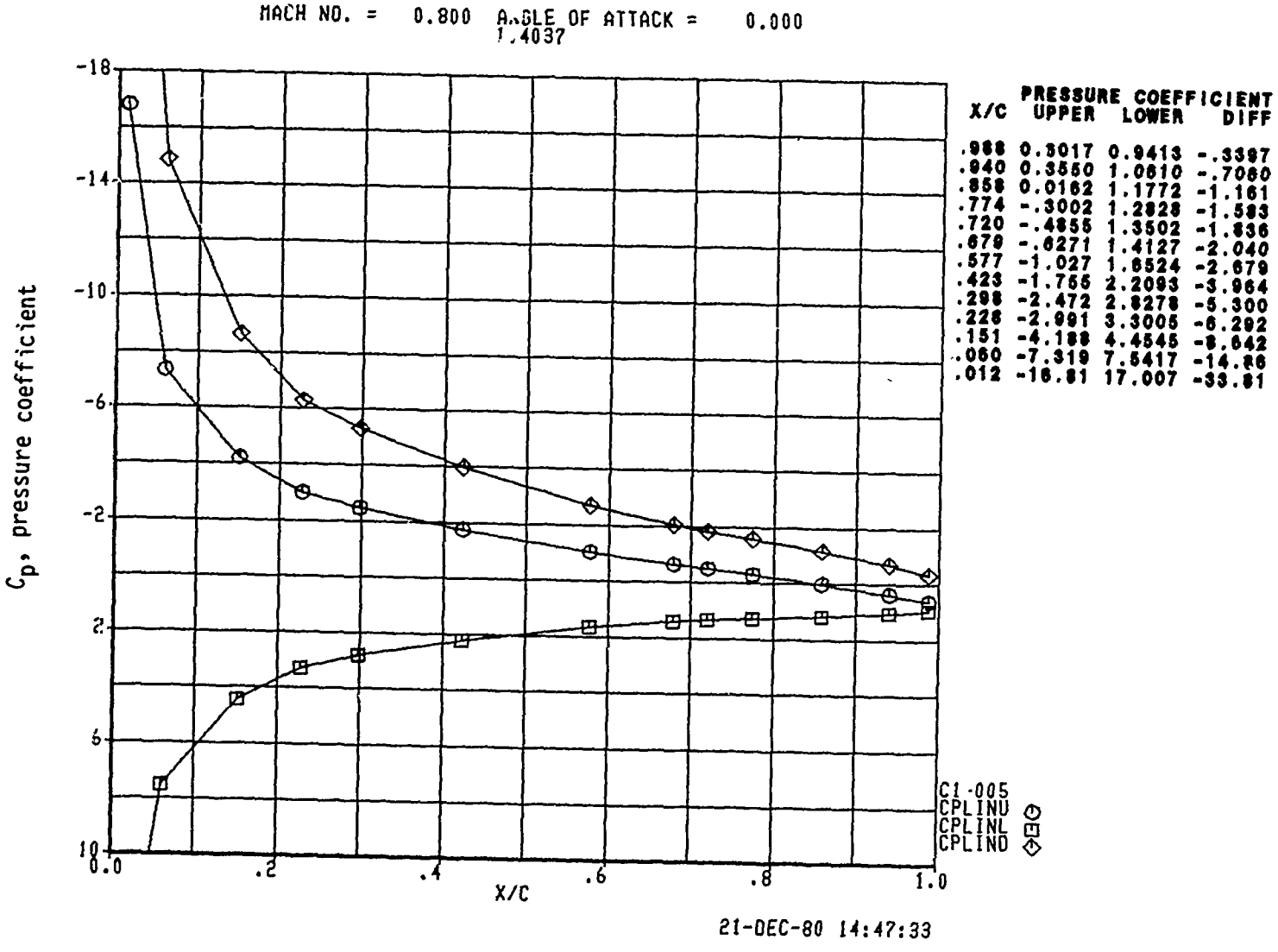
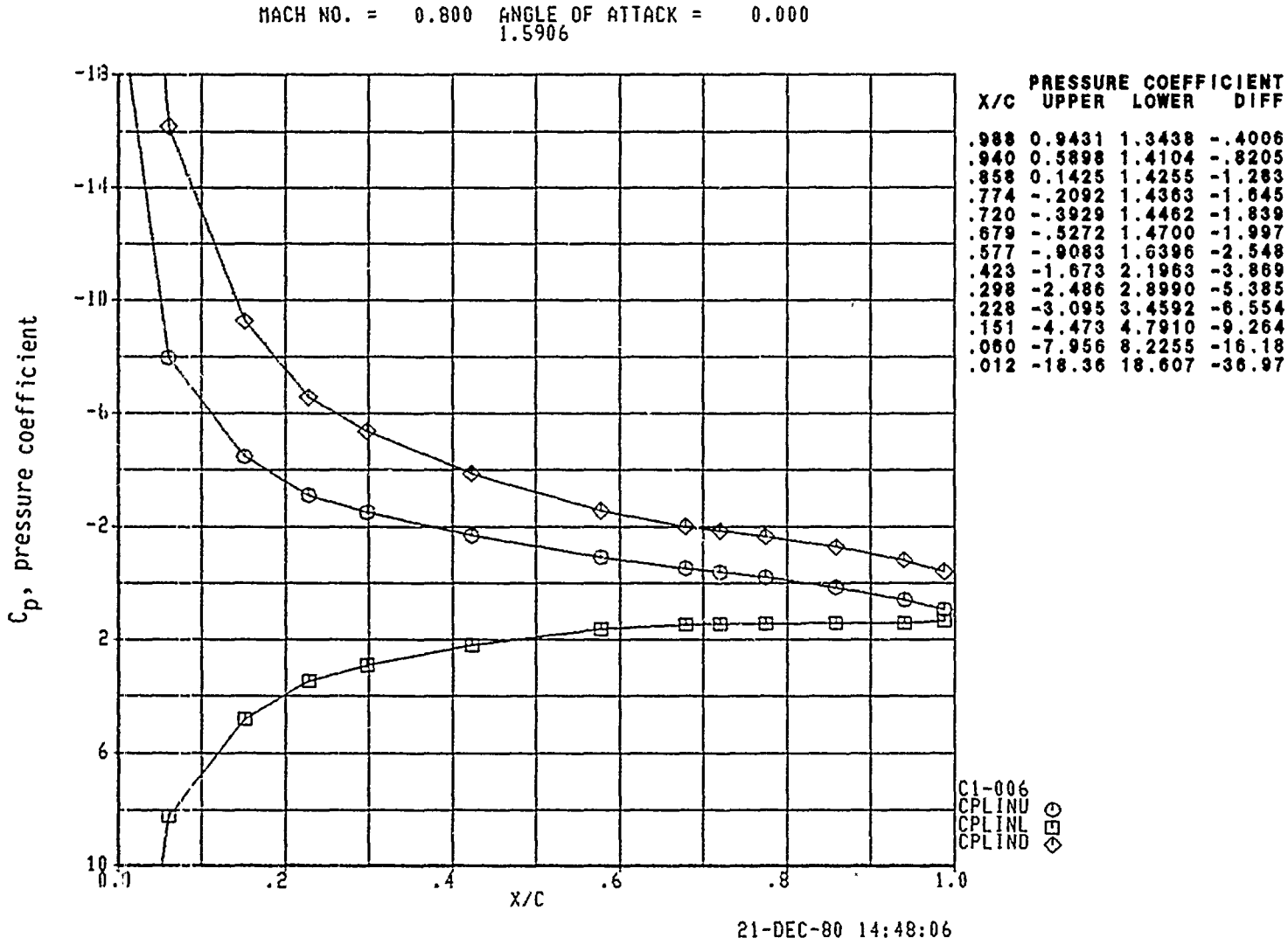


Figure 508. Chordwise Pressure Distribution, Real Configuration 6



X/C	PRESSURE COEFFICIENT UPPER	LOWER	DIFF
.988	0.9431	1.3438	-.4006
.940	0.5898	1.4104	-.8205
.858	0.1425	1.4255	-1.283
.774	-.2092	1.4363	-1.645
.720	-.3929	1.4462	-1.839
.679	-.5272	1.4700	-1.997
.577	-.9083	1.6396	-2.548
.423	-1.673	2.1963	-3.869
.298	-2.486	2.8990	-5.385
.228	-3.095	3.4592	-6.554
.151	-4.473	4.7910	-9.264
.060	-7.956	8.2255	-16.18
.012	-18.36	18.607	-36.97

Figure 509, Chordwise Pressure Distribution, Real Configuration 6

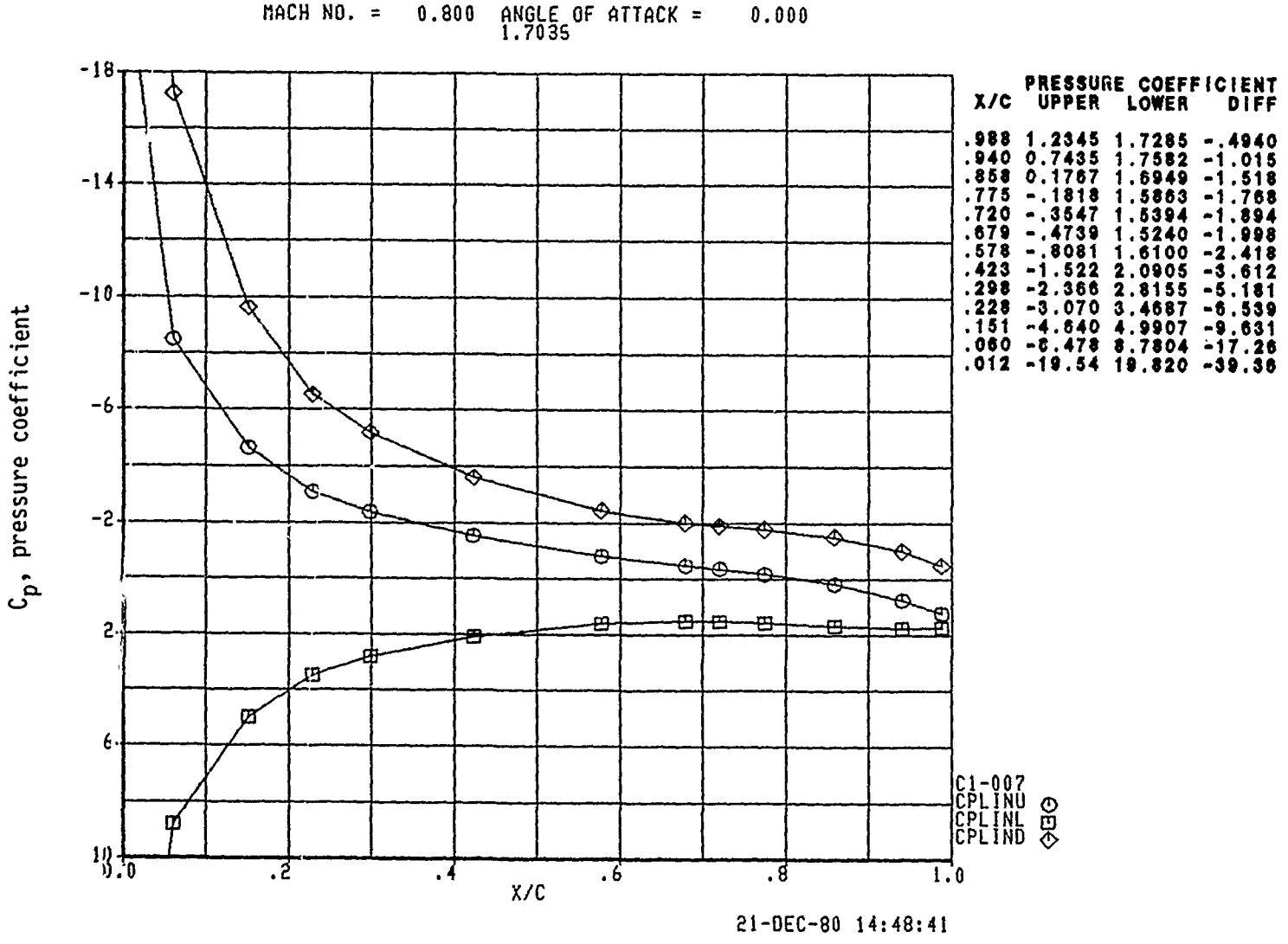
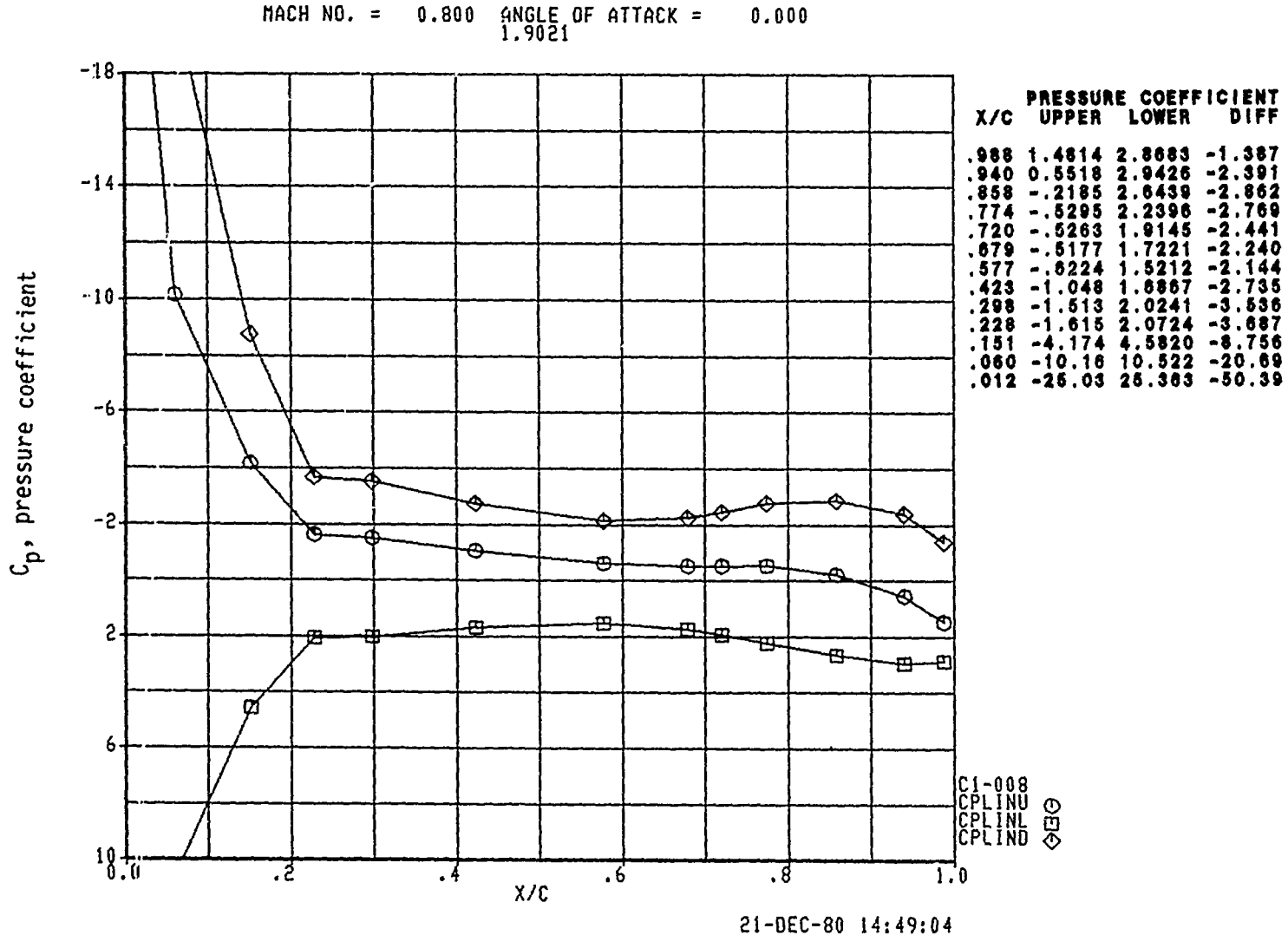


Figure 510, Chordwise Pressure Distribution, Real Configuration 6



X/C	PRESSURE COEFFICIENT UPPER	LOWER	DIFF
.988	1.4614	2.8683	-1.387
.940	0.5518	2.9426	-2.391
.858	-.2185	2.6439	-2.862
.774	-.5295	2.2396	-2.769
.720	-.5263	1.9145	-2.441
.679	-.5177	1.7221	-2.240
.577	-.6224	1.5212	-2.144
.423	-1.048	1.6867	-2.735
.298	-1.513	2.0241	-3.536
.228	-1.615	2.0724	-3.687
.151	-4.174	4.5820	-8.756
.060	-10.16	10.522	-20.69
.012	-25.03	25.363	-50.39

Figure 511, Chordwise Pressure Distribution, Real Configuration 6

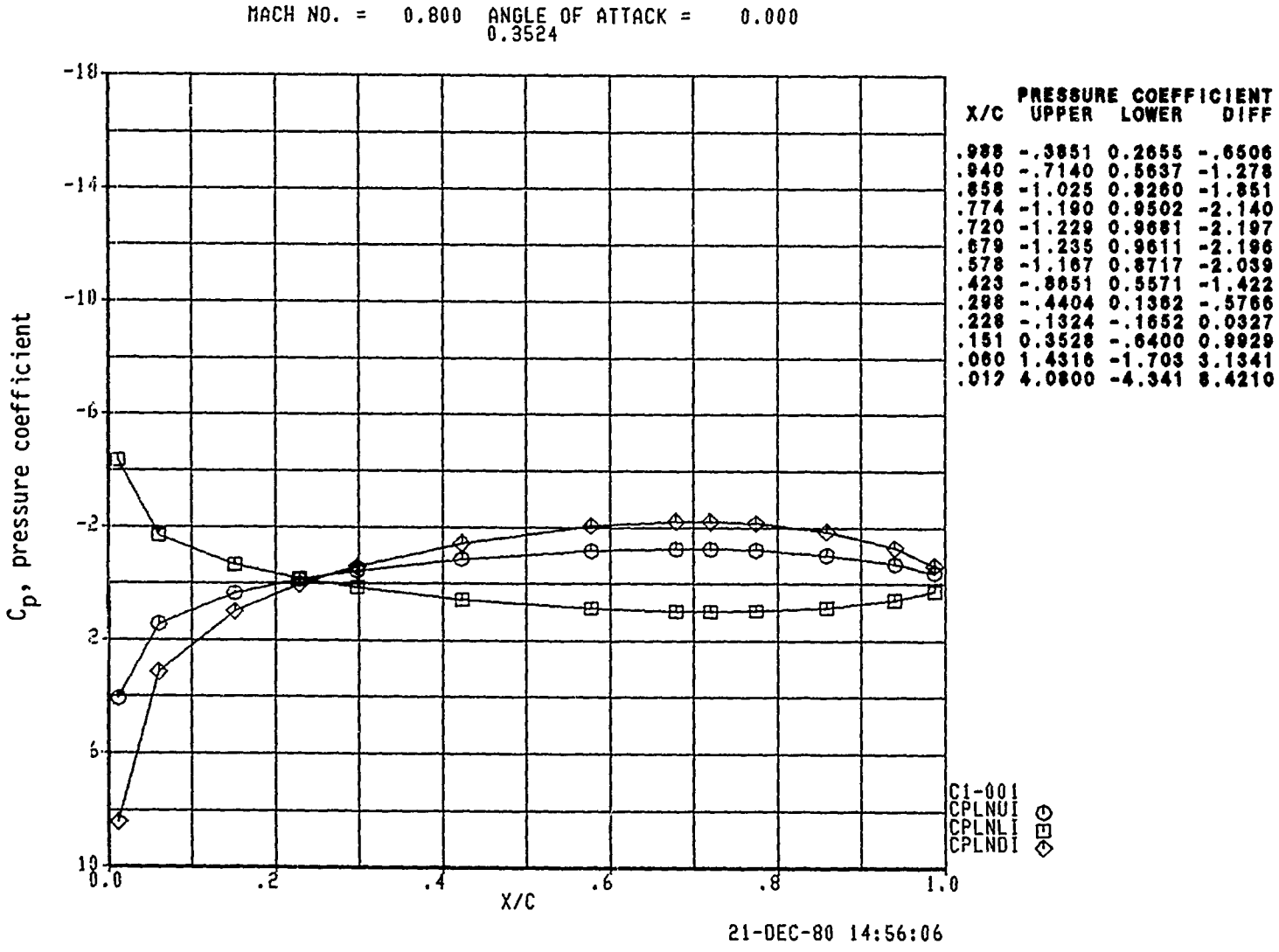
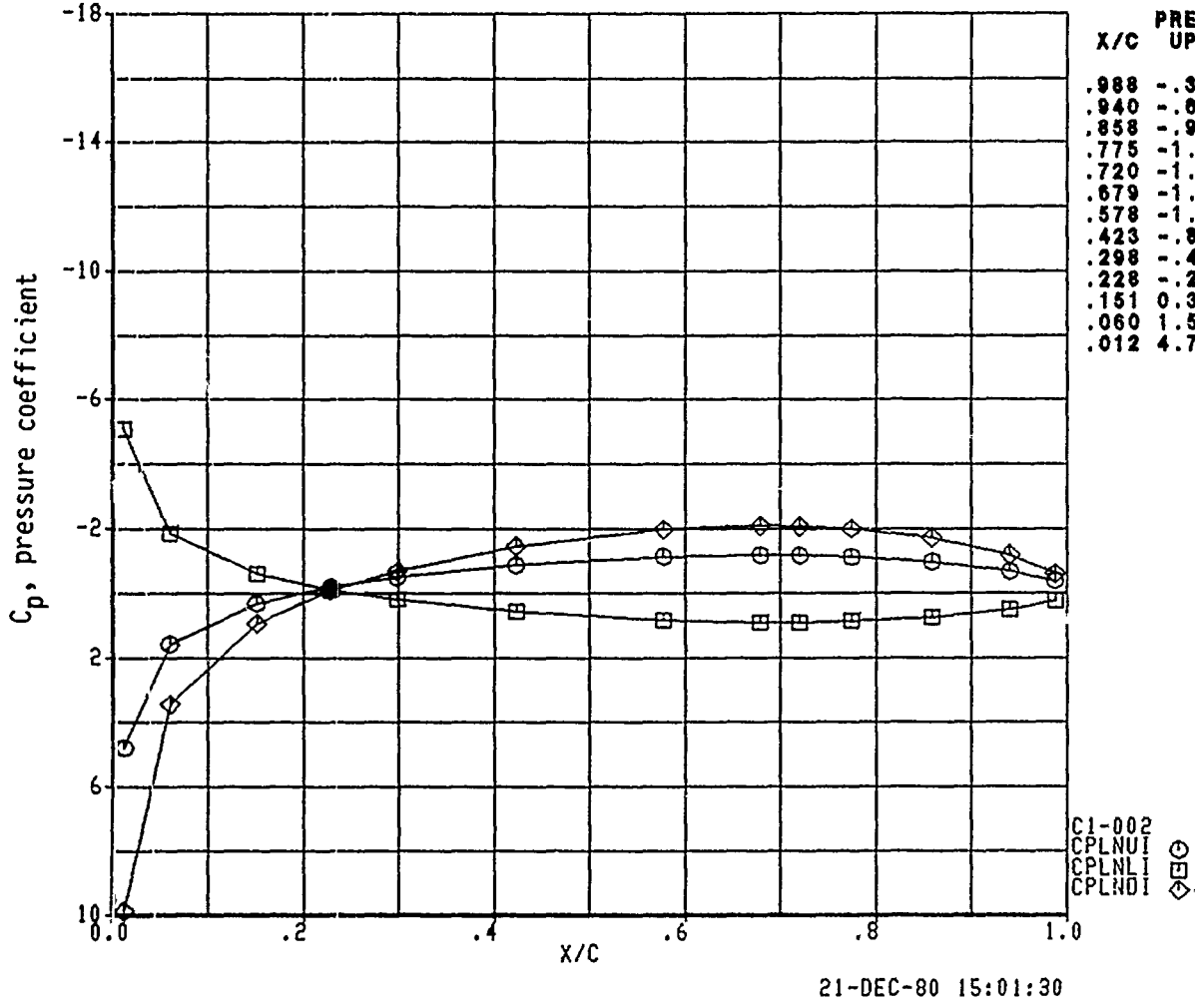


Figure 512, Chordwise Pressure Distribution, Imaginary Configuration 6

MACH NO. = 0.800 ANGLE OF ATTACK = 0.000
0.6853



X/C	PRESSURE COEFFICIENT UPPER	LOWER	DIFF
.988	-.3781	0.2284	-.6065
.940	-.6829	0.5033	-1.186
.858	-.9696	0.7461	-1.716
.775	-1.128	0.8703	-1.998
.720	-1.171	0.8975	-2.069
.679	-1.182	0.8985	-2.081
.578	-1.135	0.8356	-1.971
.423	-.8810	0.5721	-1.453
.298	-.4971	0.1900	-.6871
.228	-.2002	-.1029	-.0973
.151	0.3152	-.6117	0.9269
.060	1.5723	-1.858	3.4306
.012	4.7893	-5.069	9.8579

Figure 513, Chordwise Pressure Distribution, Imaginary Configuration 6

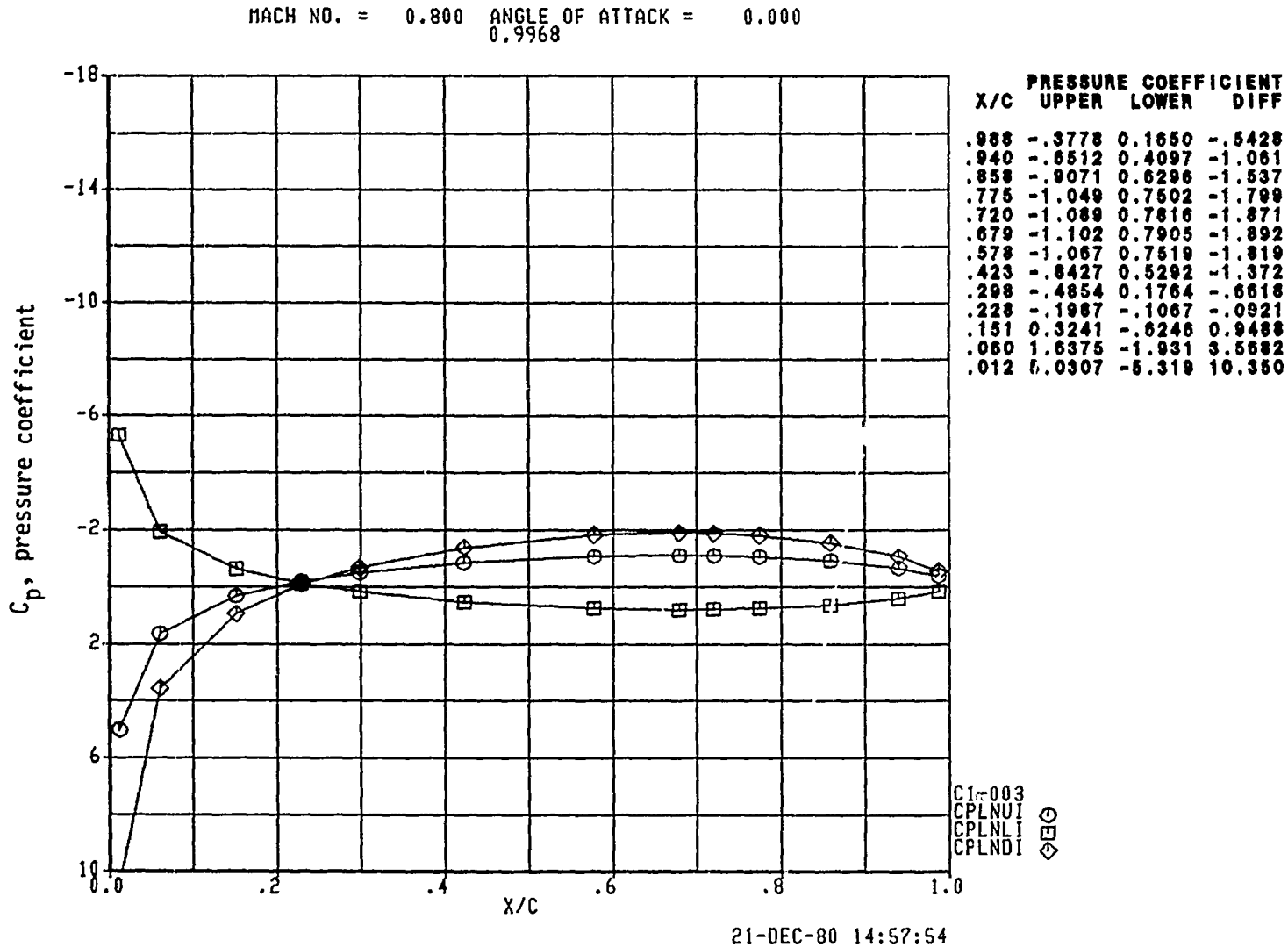
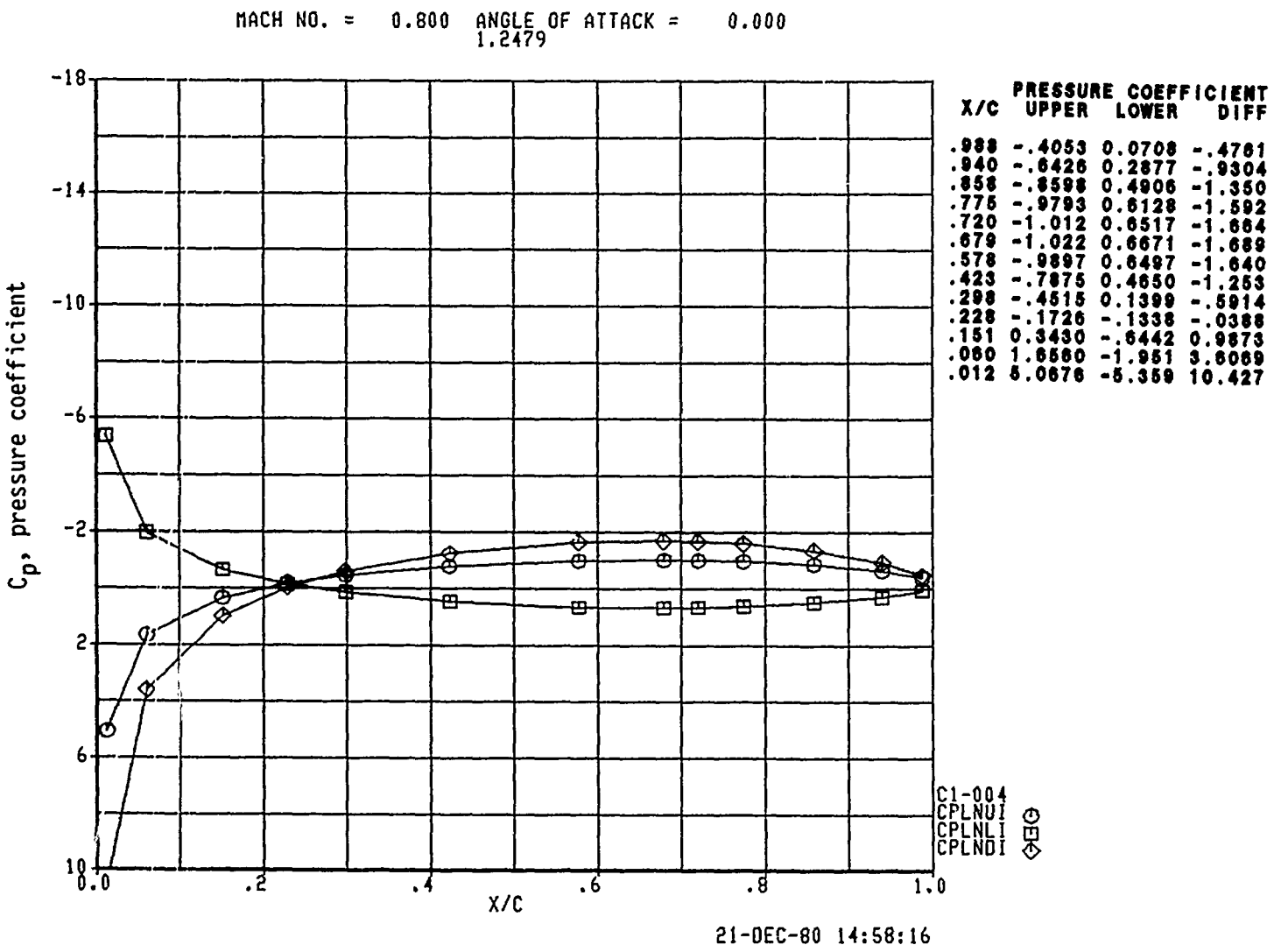
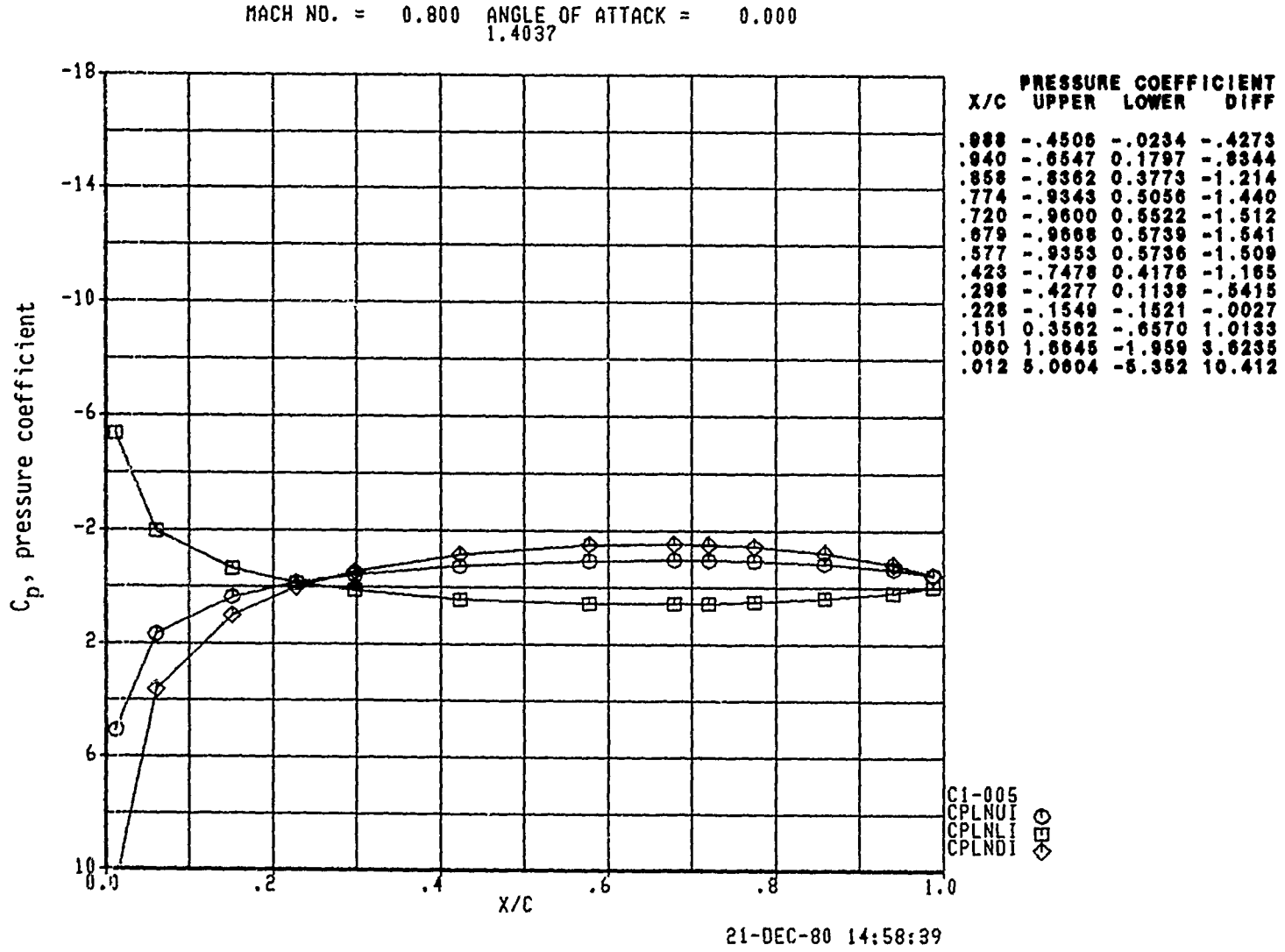


Figure 514, Chordwise Pressure Distribution, Imaginary Configuration 6



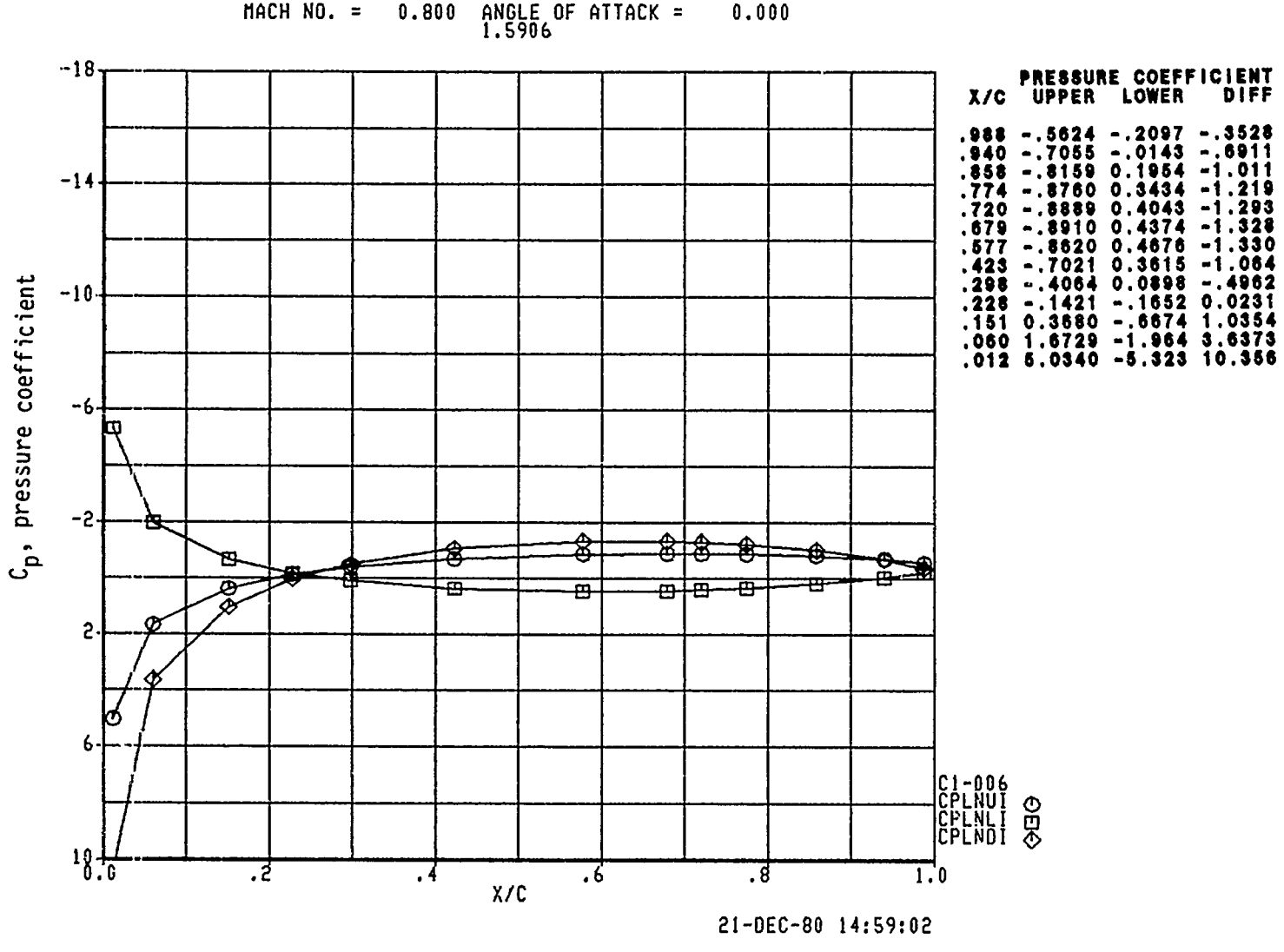
X/C	PRESSURE COEFFICIENT UPPER	LOWER	DIFF
.988	-.4053	0.0708	-.4761
.940	-.6426	0.2877	-.9304
.858	-.8598	0.4906	-1.350
.775	-.9793	0.6128	-1.592
.720	-1.012	0.6517	-1.664
.679	-1.022	0.6671	-1.689
.578	-.9897	0.6497	-1.640
.423	-.7875	0.4650	-1.253
.298	-.4515	0.1399	-.5914
.228	-.1726	-.1338	-.0388
.151	0.3430	-.6442	0.9873
.060	1.8560	-1.951	3.8069
.012	5.0676	-5.359	10.427

Figure 515, Chordwise Pressure Distribution, Imaginary Configuration 6



X/C	PRESSURE COEFFICIENT UPPER	LOWER	DIFF
.988	-.4506	-.0234	-.4273
.940	-.6547	0.1797	-.8344
.858	-.8362	0.3773	-1.214
.774	-.9343	0.5056	-1.440
.720	-.9600	0.5522	-1.512
.679	-.9668	0.5739	-1.541
.577	-.9353	0.5736	-1.509
.423	-.7478	0.4176	-1.165
.298	-.4277	0.1138	-.5415
.226	-.1549	-.1521	-.0027
.151	0.3562	-.6570	1.0133
.060	1.6645	-1.959	3.6235
.012	5.0604	-5.352	10.412

Figure 516, Chordwise Pressure Distribution, Imaginary Configuration 6



X/C	PRESSURE COEFFICIENT UPPER	LOWER	DIFF
.988	-.5624	-.2097	-.3528
.940	-.7055	-.0143	-.6911
.858	-.8159	0.1954	-1.011
.774	-.8760	0.3434	-1.219
.720	-.8889	0.4043	-1.293
.679	-.8910	0.4374	-1.328
.577	-.8620	0.4676	-1.330
.423	-.7021	0.3615	-1.064
.298	-.4064	0.0898	-.4962
.228	-.1421	-.1652	0.0231
.151	0.3680	-.6674	1.0354
.060	1.6729	-1.964	3.6373
.012	5.0340	-5.323	10.356

Figure 517, Chordwise Pressure Distribution, Imaginary Configuration 6

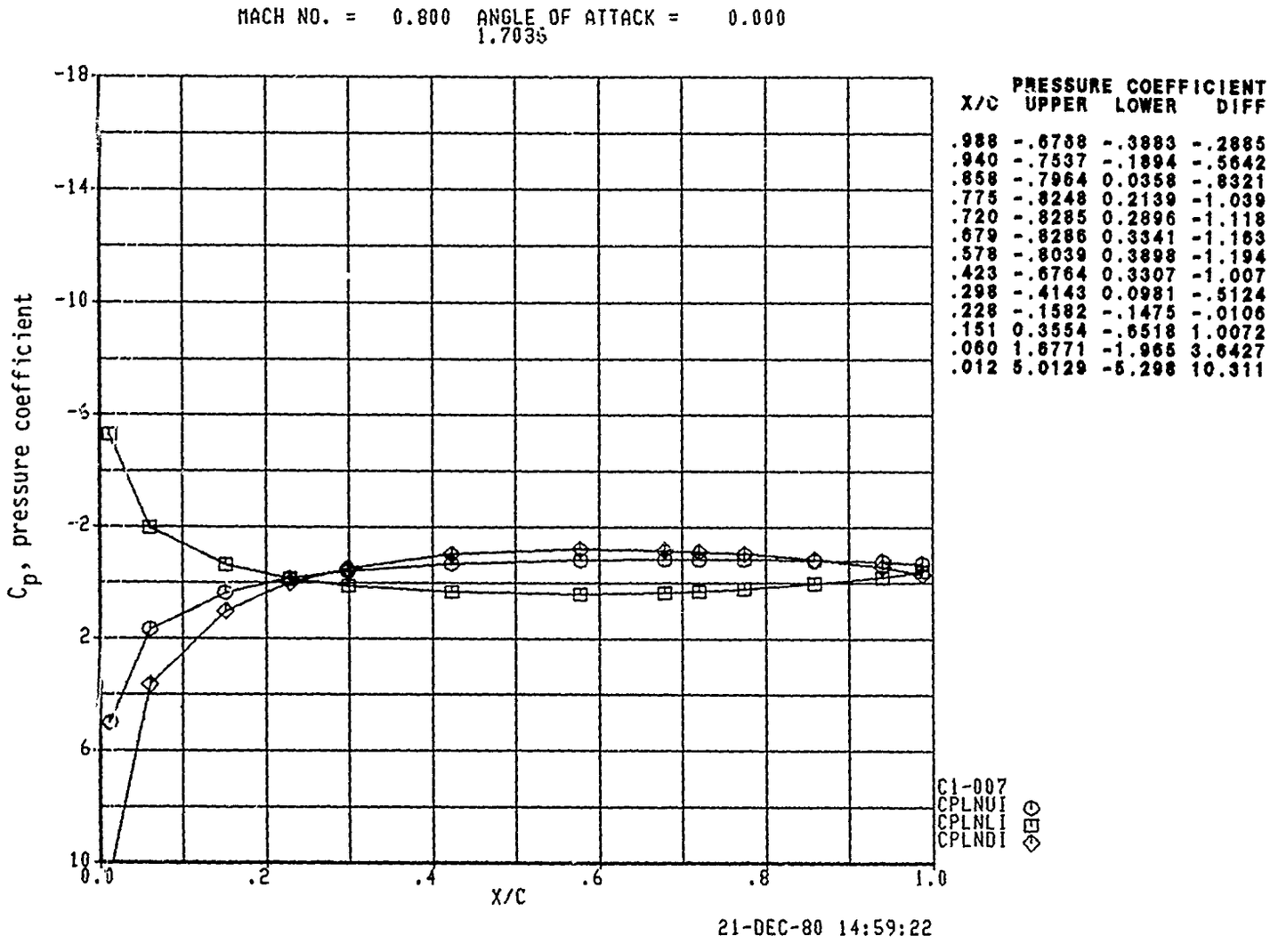


Figure 518, Chordwise Pressure Distribution, Imaginary Configuration 6

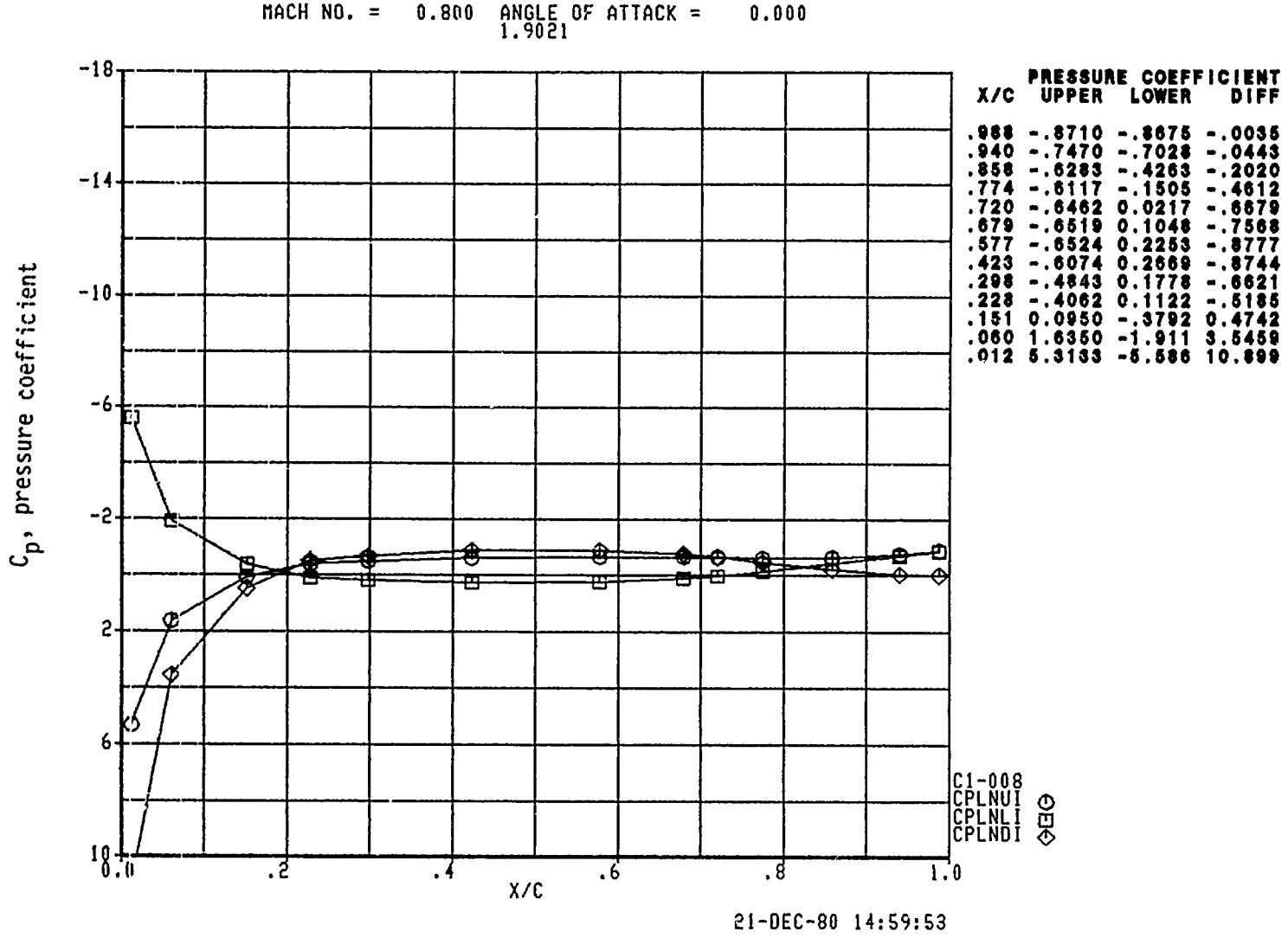


Figure 519, Chordwise Pressure Distribution, Imaginary Configuration 6

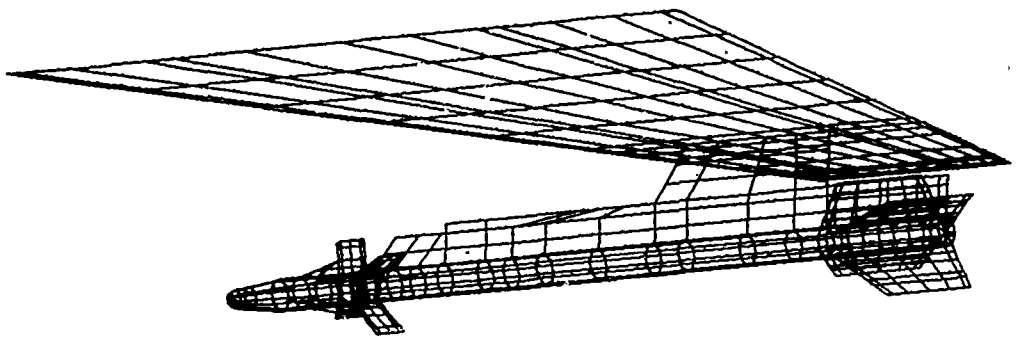


Figure 520, Configuration 7

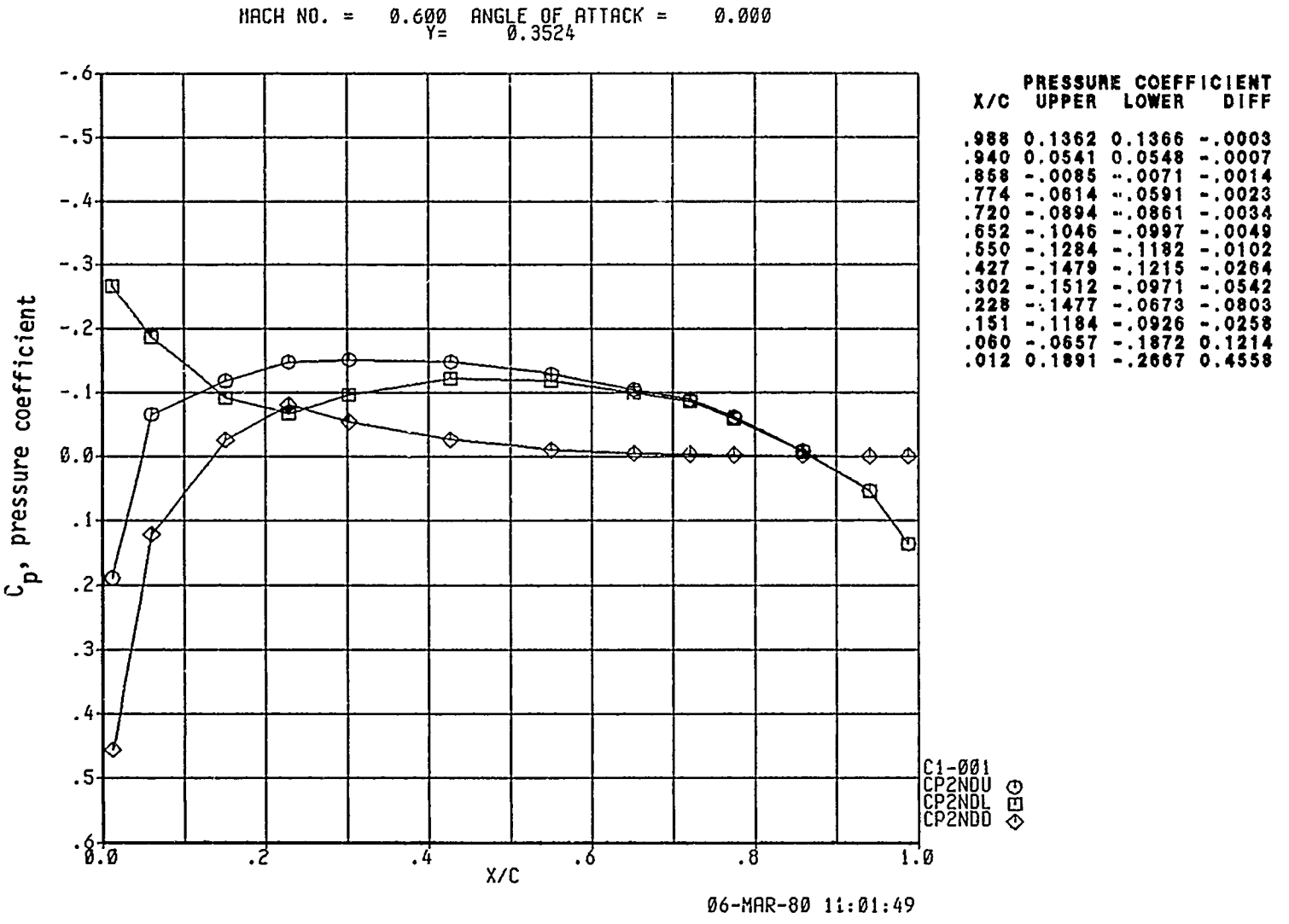


Figure 521, Chordwise Pressure Distribution, Steady, Configuration 7

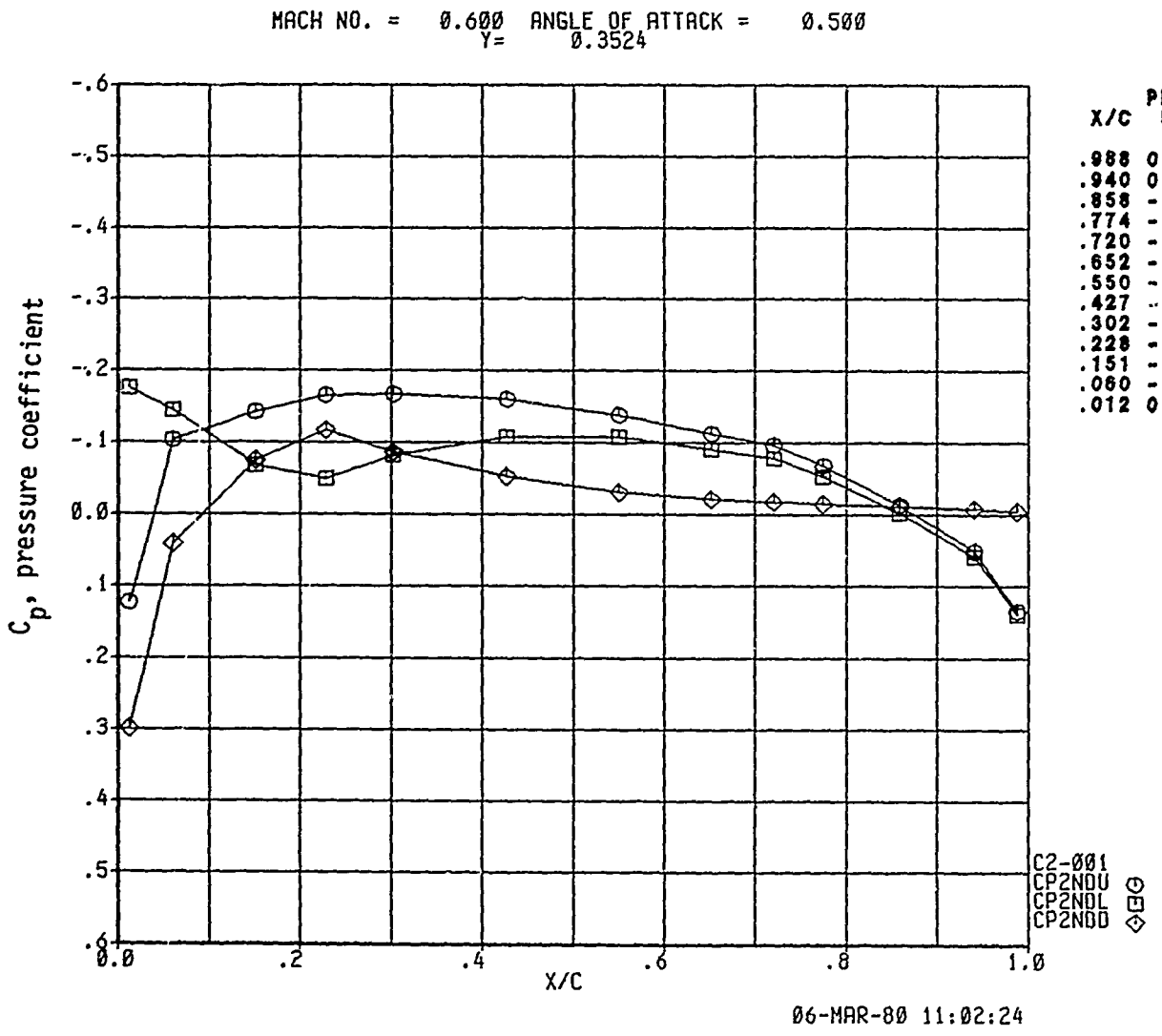


Figure 522, Chordwise Pressure Distribution, Steady, Configuration 7

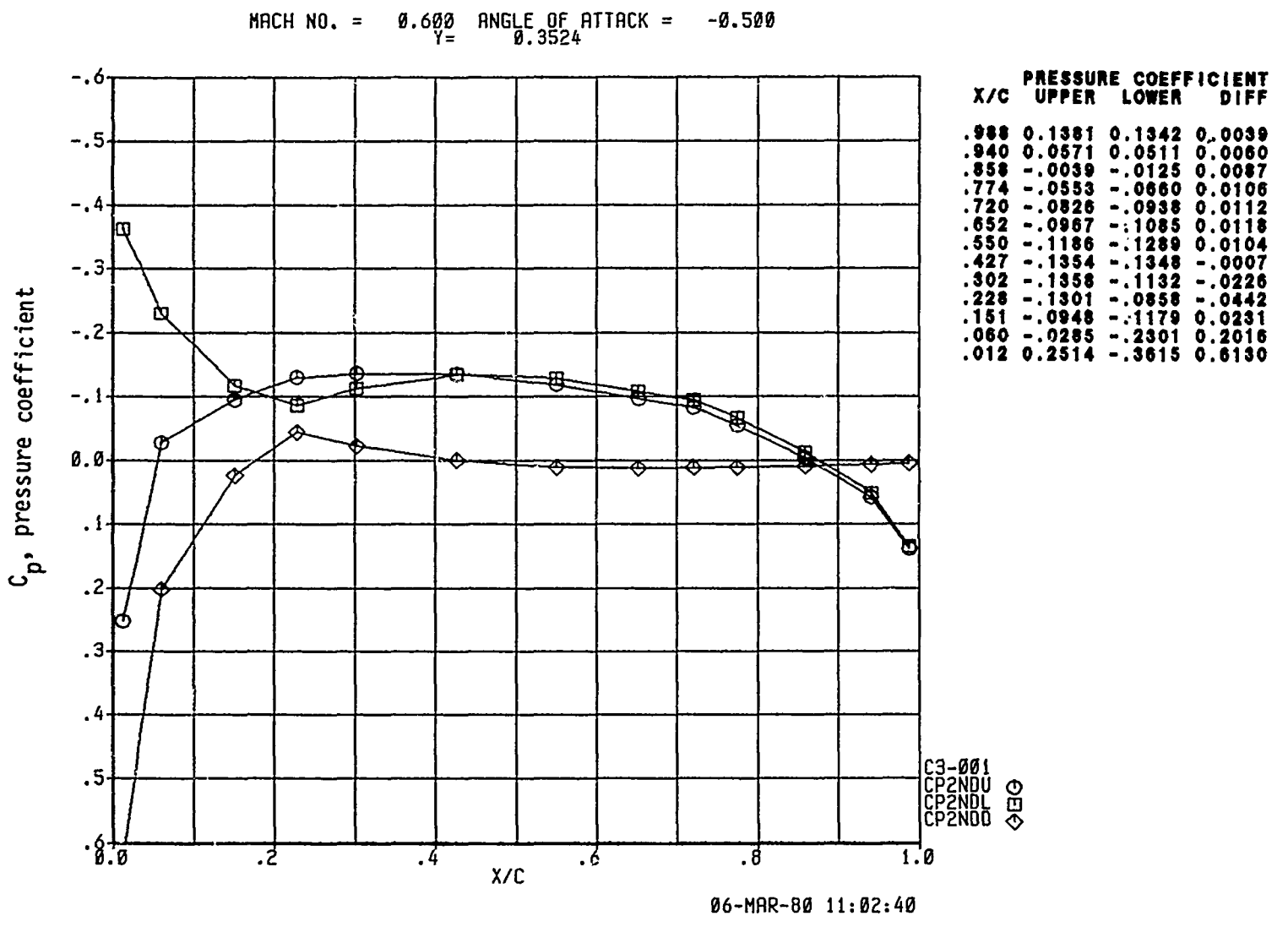


Figure 523, Chordwise Pressure Distribution, Steady, Configuration 7

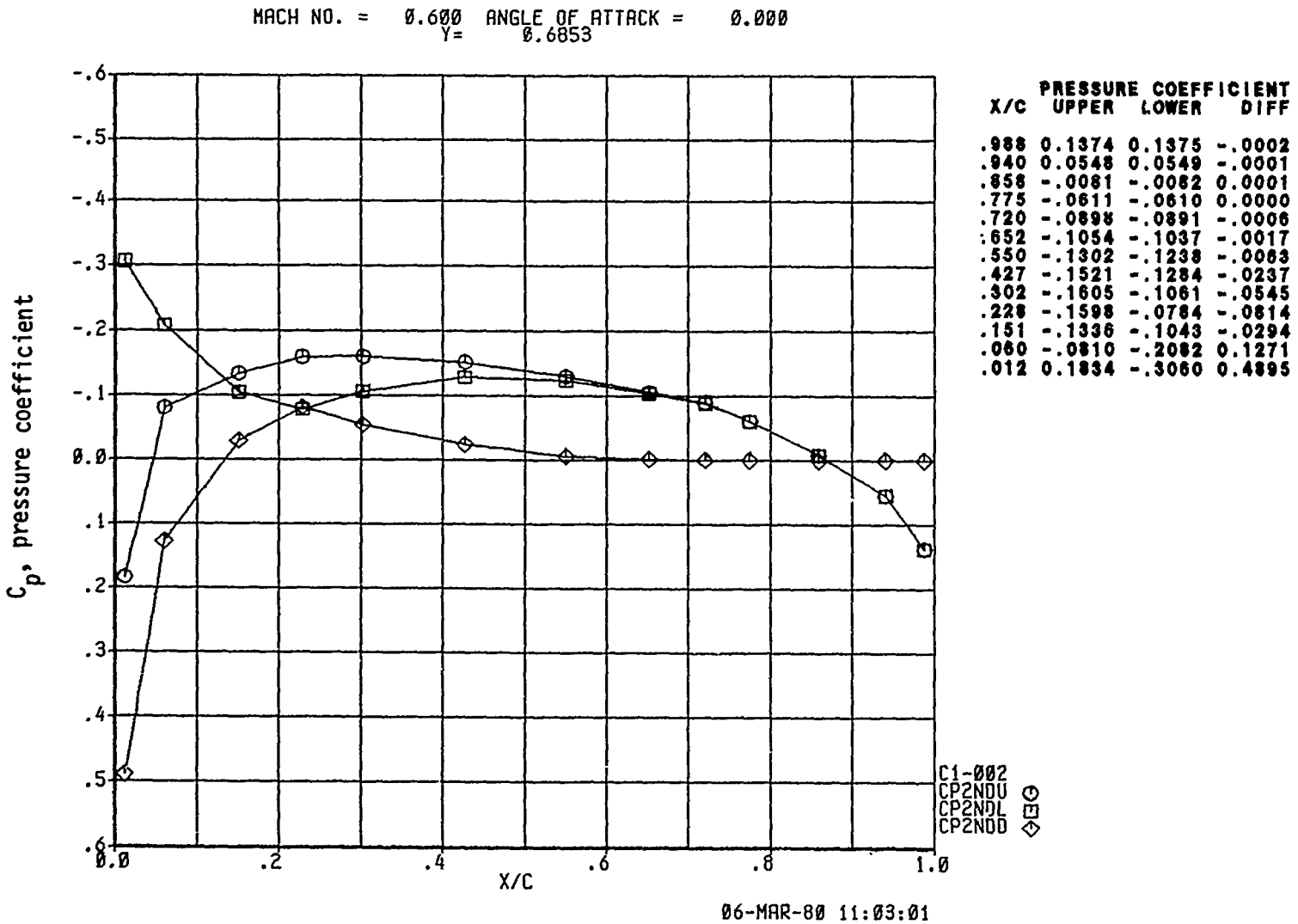
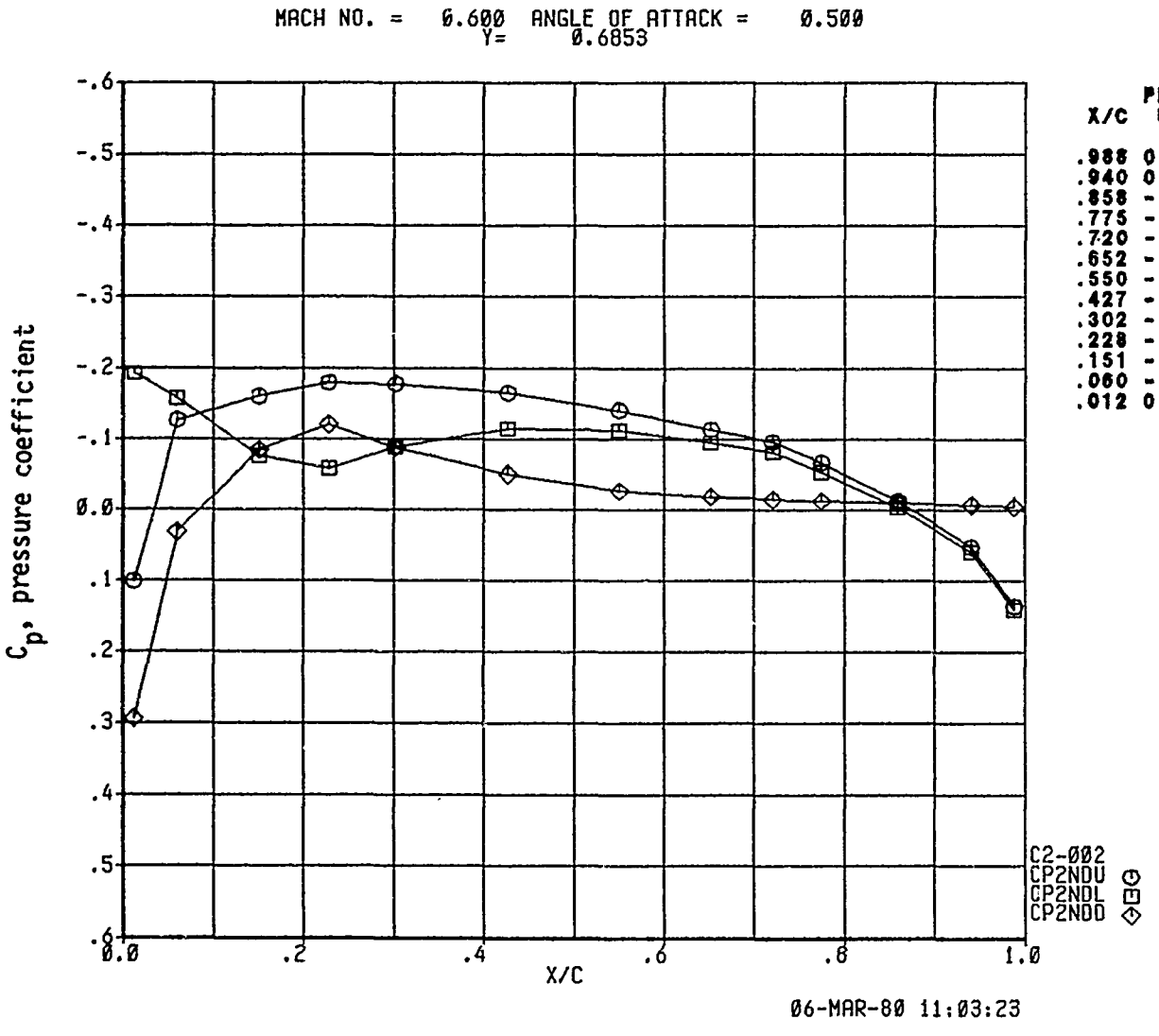


Figure 524, Chordwise Pressure Distribution, Steady, Configuration 7



X/C	PRESSURE COEFFICIENT UPPER	LOWER	DIFF
.988	0.1354	0.1399	-.0045
.940	0.0516	0.0586	-.0070
.858	-.0129	-.0028	-.0101
.775	-.0674	-.0541	-.0132
.720	-.0967	-.0814	-.0153
.652	-.1135	-.0947	-.0188
.550	-.1402	-.1129	-.0274
.427	-.1651	-.1146	-.0505
.302	-.1771	-.0891	-.0879
.228	-.1792	-.0586	-.1206
.151	-.1607	-.0761	-.0846
.060	-.1267	-.1578	0.0312
.012	0.1008	-.1925	0.2932

Figure 525, Chordwise Pressure Distribution, Steady, Configuration 7

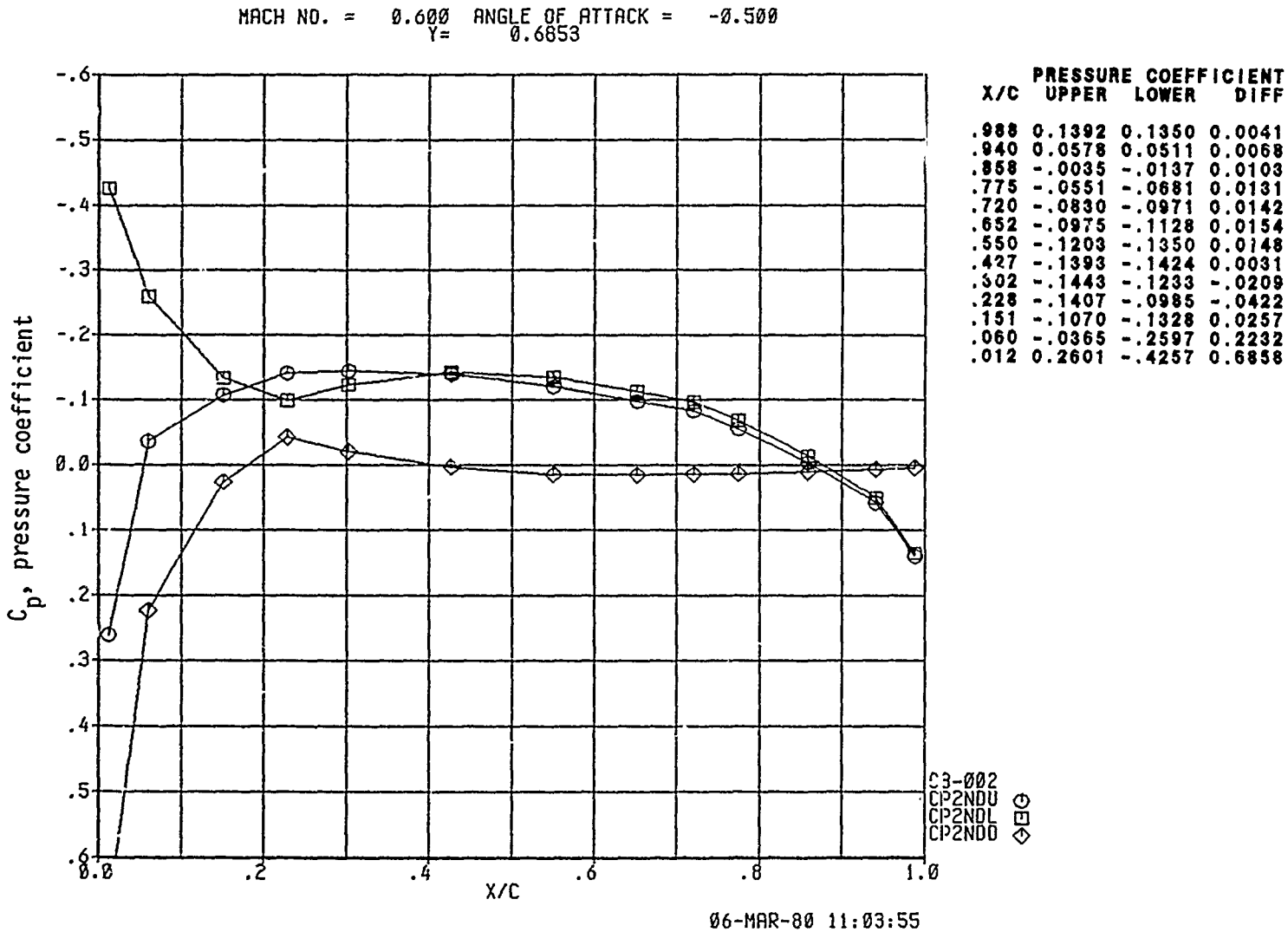
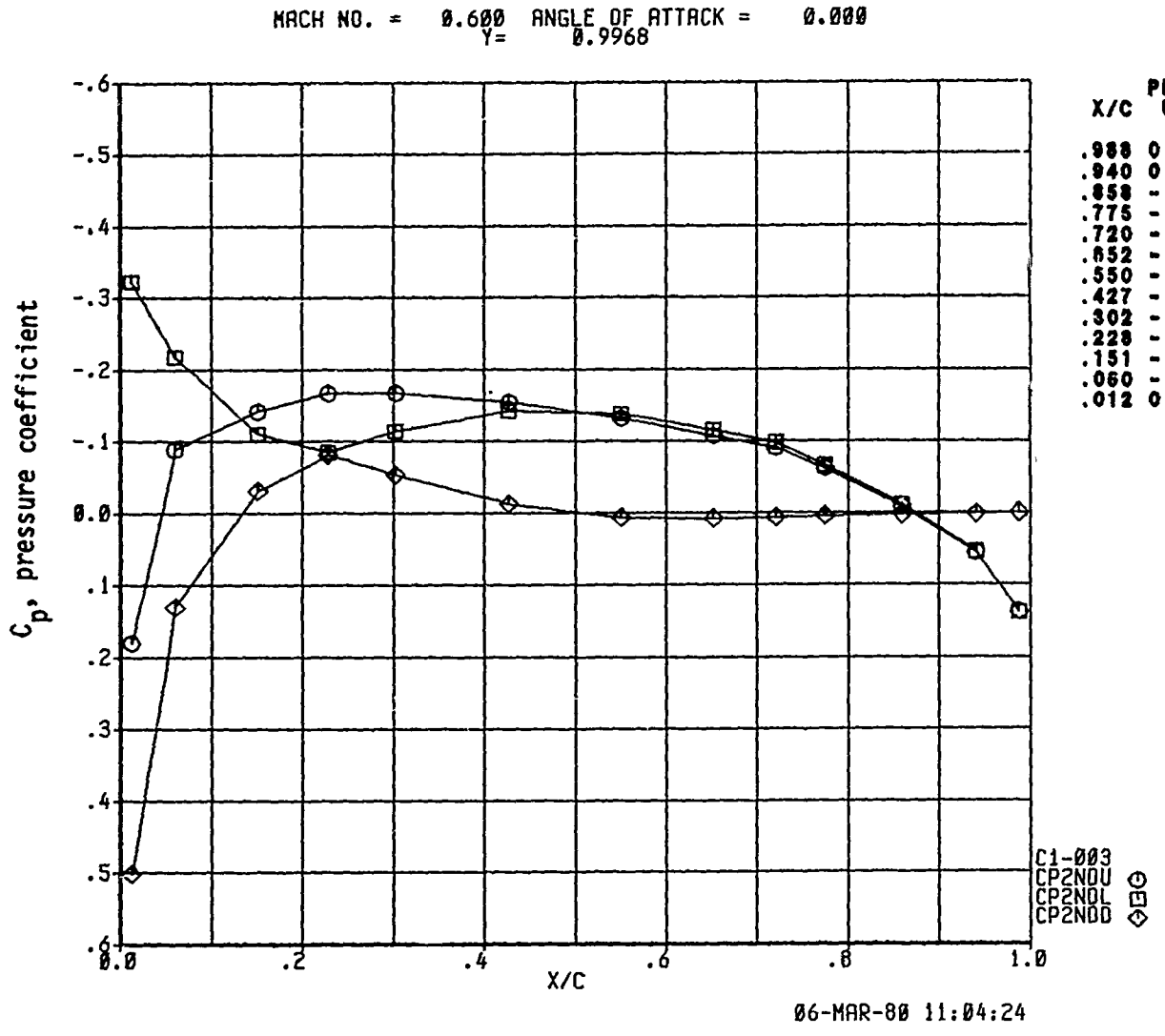


Figure 526, Chordwise Pressure Distribution, Steady, Configuration 7



X/C	PRESSURE COEFFICIENT UPPER	LOWER	DIFF
.988	0.1376	0.1374	0.0002
.940	0.0549	0.0535	0.0015
.858	-.0087	-.0111	0.0024
.775	-.0824	-.0865	0.0042
.720	-.0909	-.0975	0.0067
.652	-.1072	-.1149	0.0078
.550	-.1320	-.1386	0.0066
.427	-.1547	-.1418	-.0129
.302	-.1670	-.1136	-.0534
.228	-.1670	-.0854	-.0815
.151	-.1421	-.1108	-.0313
.060	-.0882	-.2186	0.1305
.012	0.1798	-.3219	0.5017

Figure 527, Chordwise Pressure Distribution, Steady, Configuration 7

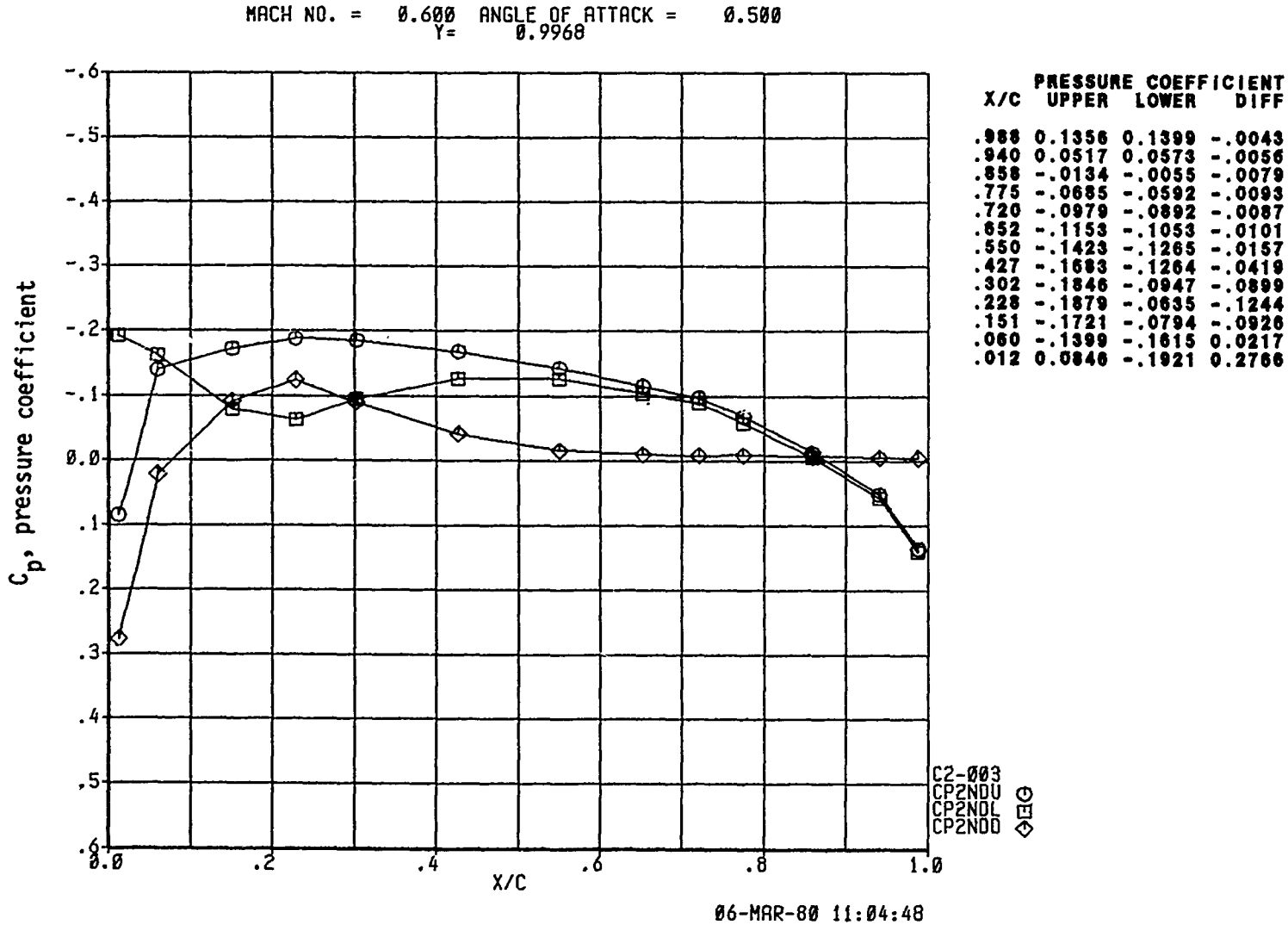
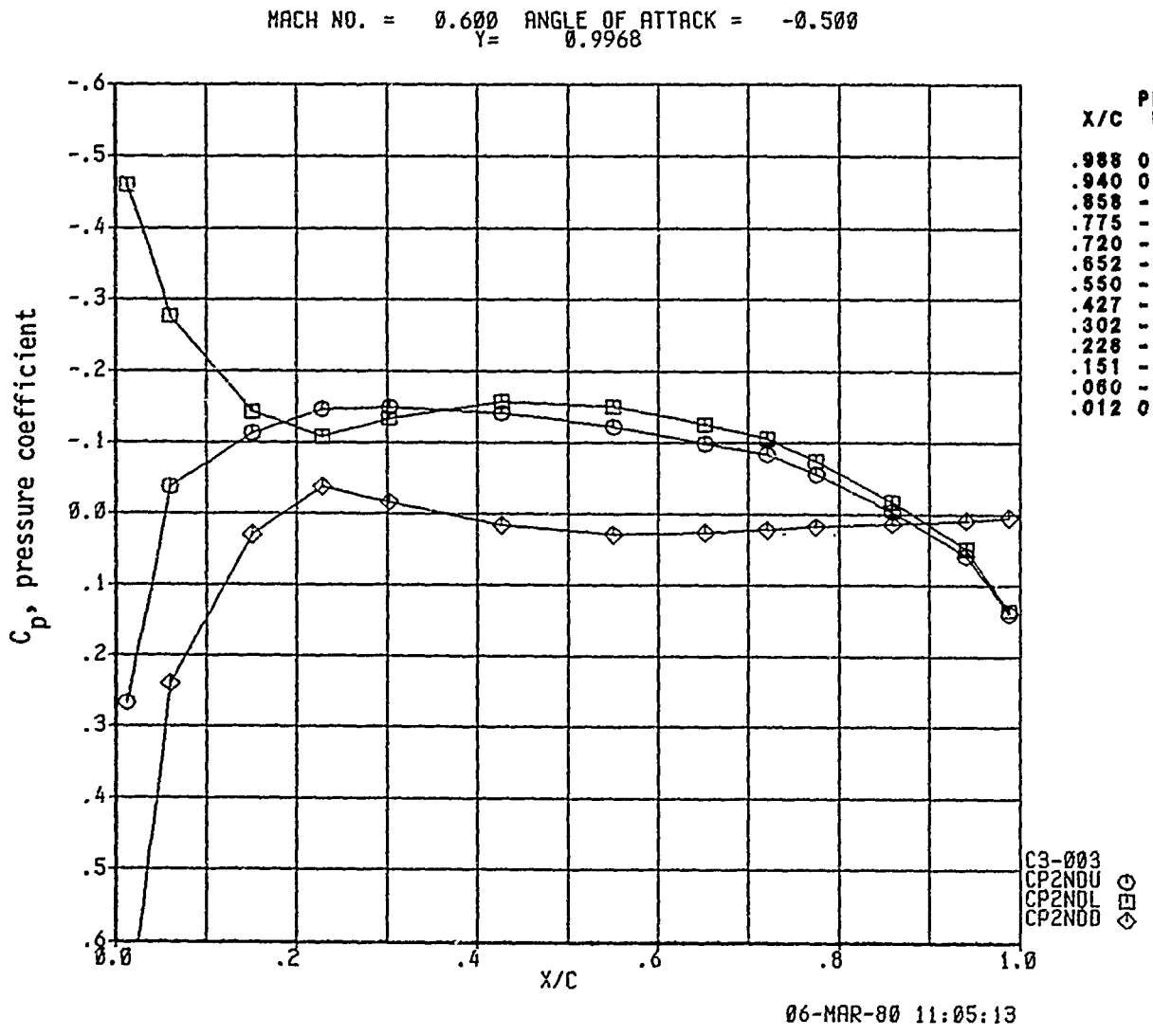
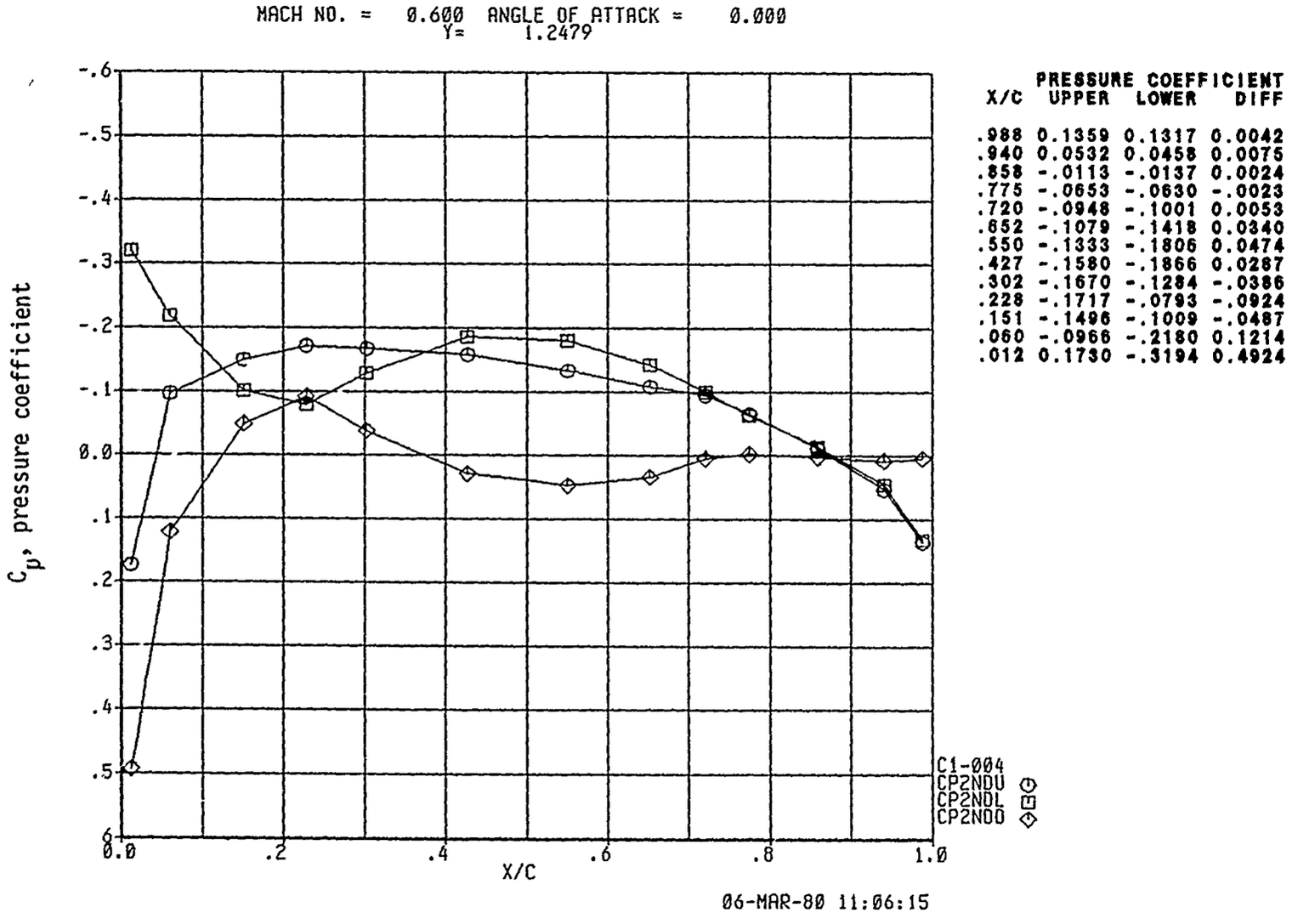


Figure 528, Chordwise Pressure Distribution, Steady, Configuration 7



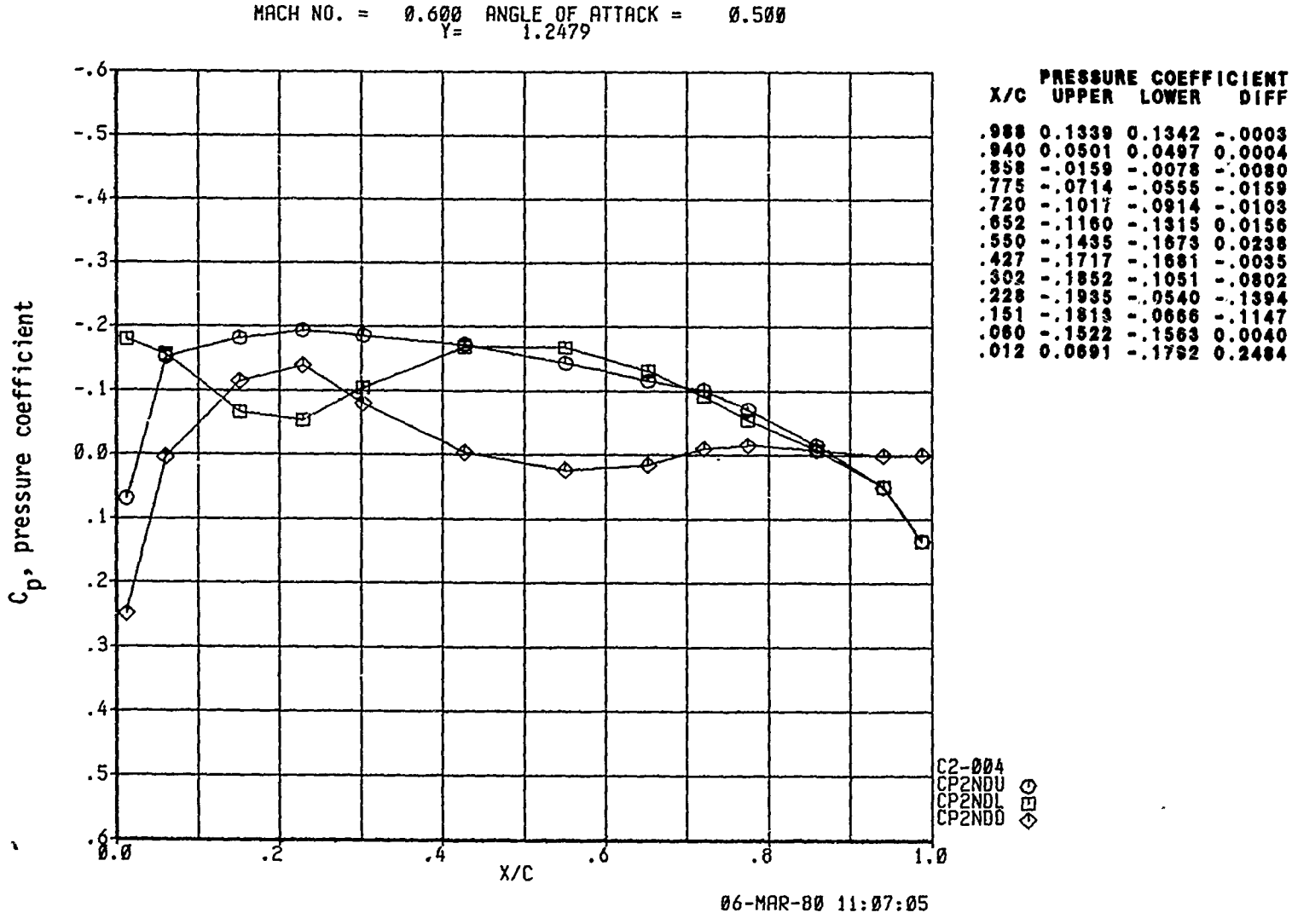
X/C	PRESSURE COEFFICIENT UPPER	LOWER	DIFF
.988	0.1394	0.1347	0.0047
.940	0.0579	0.0495	0.0084
.858	-.0041	-.0170	0.0129
.775	-.0563	-.0740	0.0177
.720	-.0841	-.1060	0.0220
.652	-.0992	-.1248	0.0256
.550	-.1219	-.1509	0.0290
.427	-.1414	-.1574	0.0160
.302	-.1497	-.1328	-.0168
.228	-.1464	-.1079	-.0385
.151	-.1128	-.1428	0.0300
.060	-.0379	-.2773	0.2394
.012	0.2672	-.4598	0.7259

Figure 529, Chordwise Pressure Distribution, Steady, Configuration 7



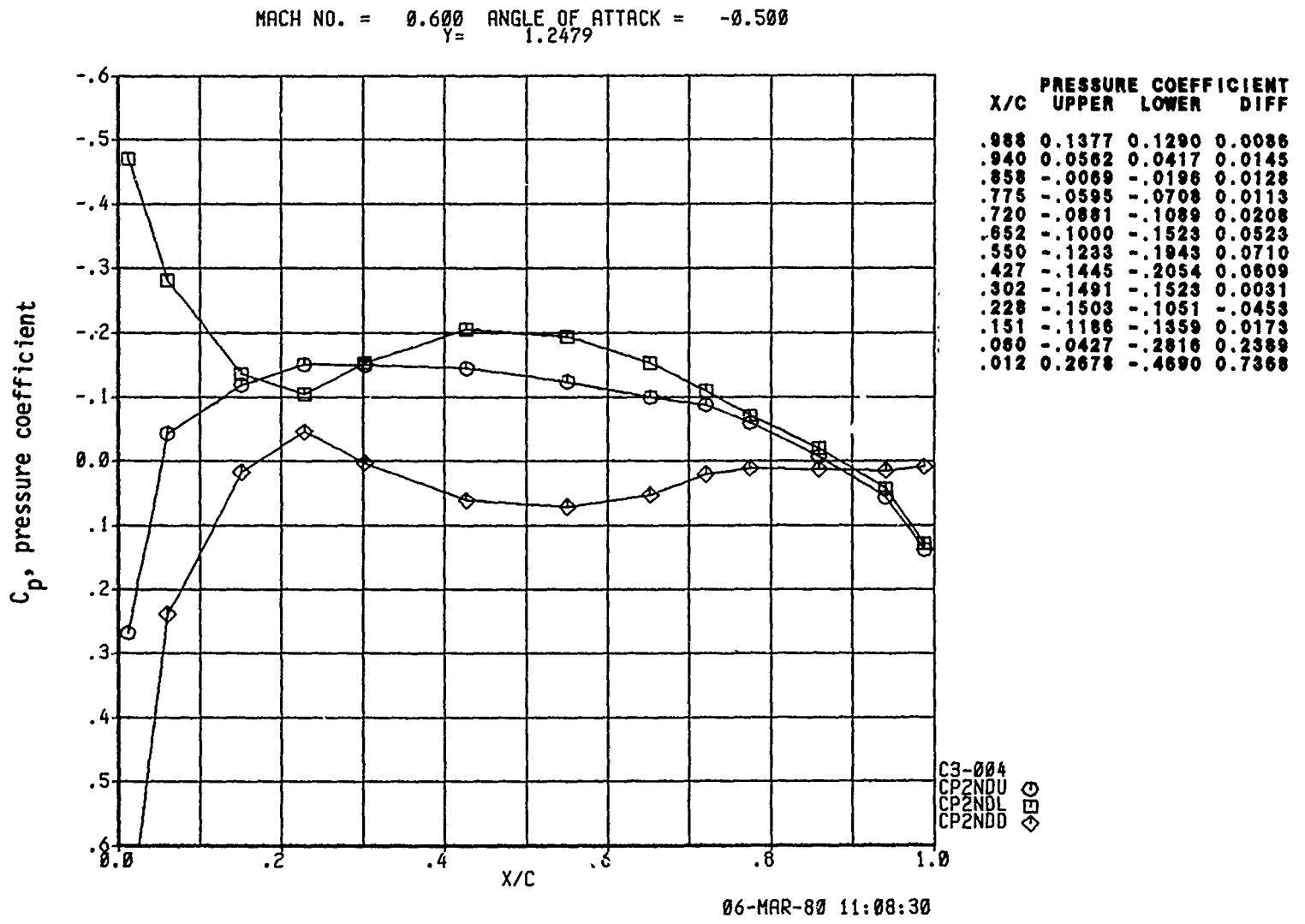
X/C	PRESSURE COEFFICIENT UPPER	LOWER	DIFF
.988	0.1359	0.1317	0.0042
.940	0.0532	0.0458	0.0075
.858	-.0113	-.0137	0.0024
.775	-.0653	-.0630	-.0023
.720	-.0948	-.1001	0.0053
.652	-.1079	-.1418	0.0340
.550	-.1333	-.1806	0.0474
.427	-.1580	-.1866	0.0287
.302	-.1670	-.1284	-.0386
.228	-.1717	-.0793	-.0924
.151	-.1496	-.1009	-.0487
.060	-.0966	-.2180	0.1214
.012	0.1730	-.3194	0.4924

Figure 530, Chordwise Pressure Distribution, Steady, Configuration 7



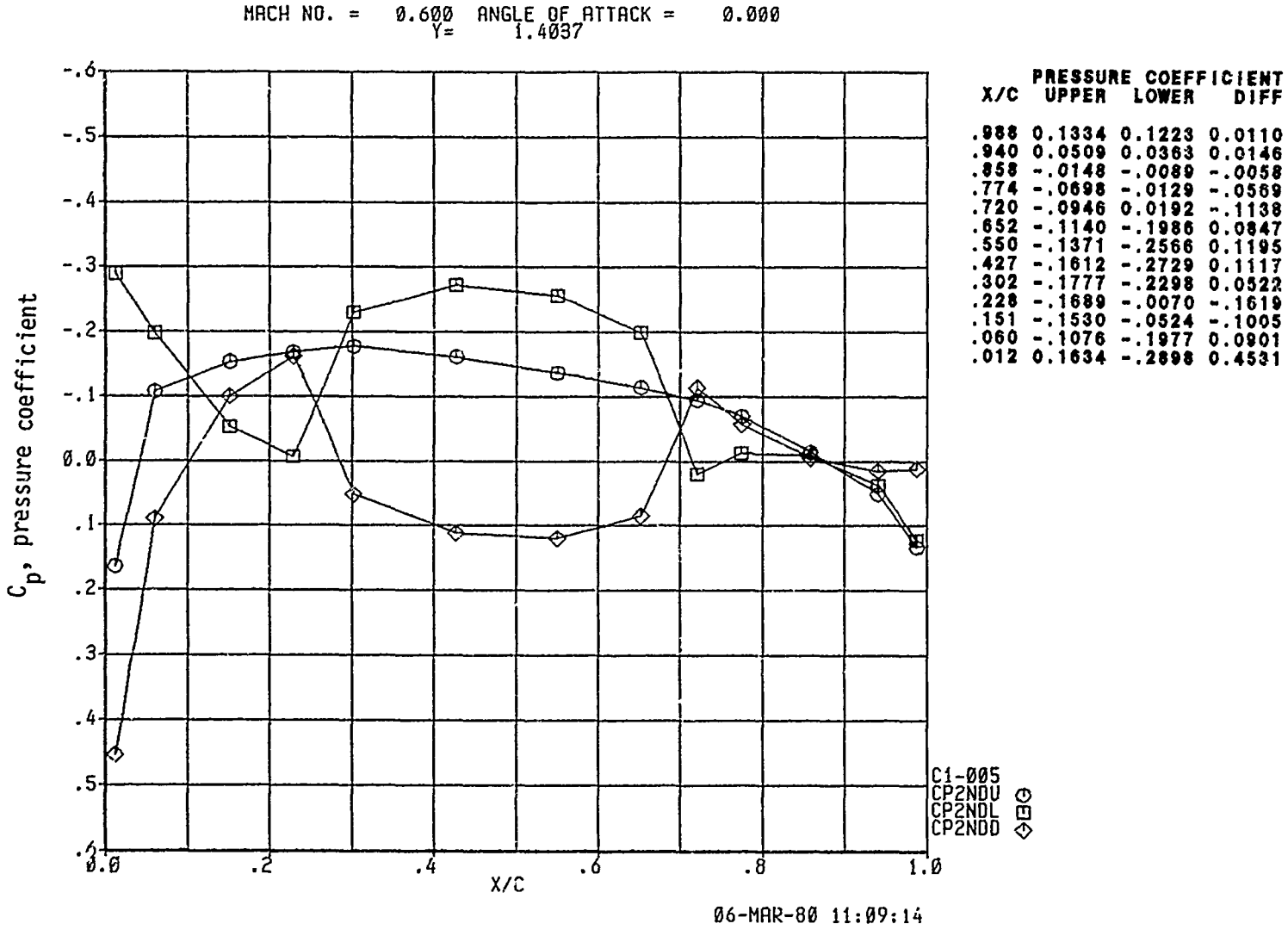
X/C	PRESSURE COEFFICIENT UPPER	LOWER	DIFF
.988	0.1339	0.1342	-.0003
.940	0.0501	0.0497	0.0004
.858	-.0159	-.0078	-.0080
.775	-.0714	-.0555	-.0159
.720	-.1017	-.0914	-.0103
.652	-.1160	-.1315	0.0156
.550	-.1435	-.1673	0.0238
.427	-.1717	-.1681	-.0035
.302	-.1852	-.1051	-.0802
.228	-.1935	-.0540	-.1394
.151	-.1813	-.0666	-.1147
.060	-.1522	-.1563	0.0040
.012	0.0691	-.1792	0.2484

Figure 531, Chordwise Pressure Distribution, Steady, Configuration 7



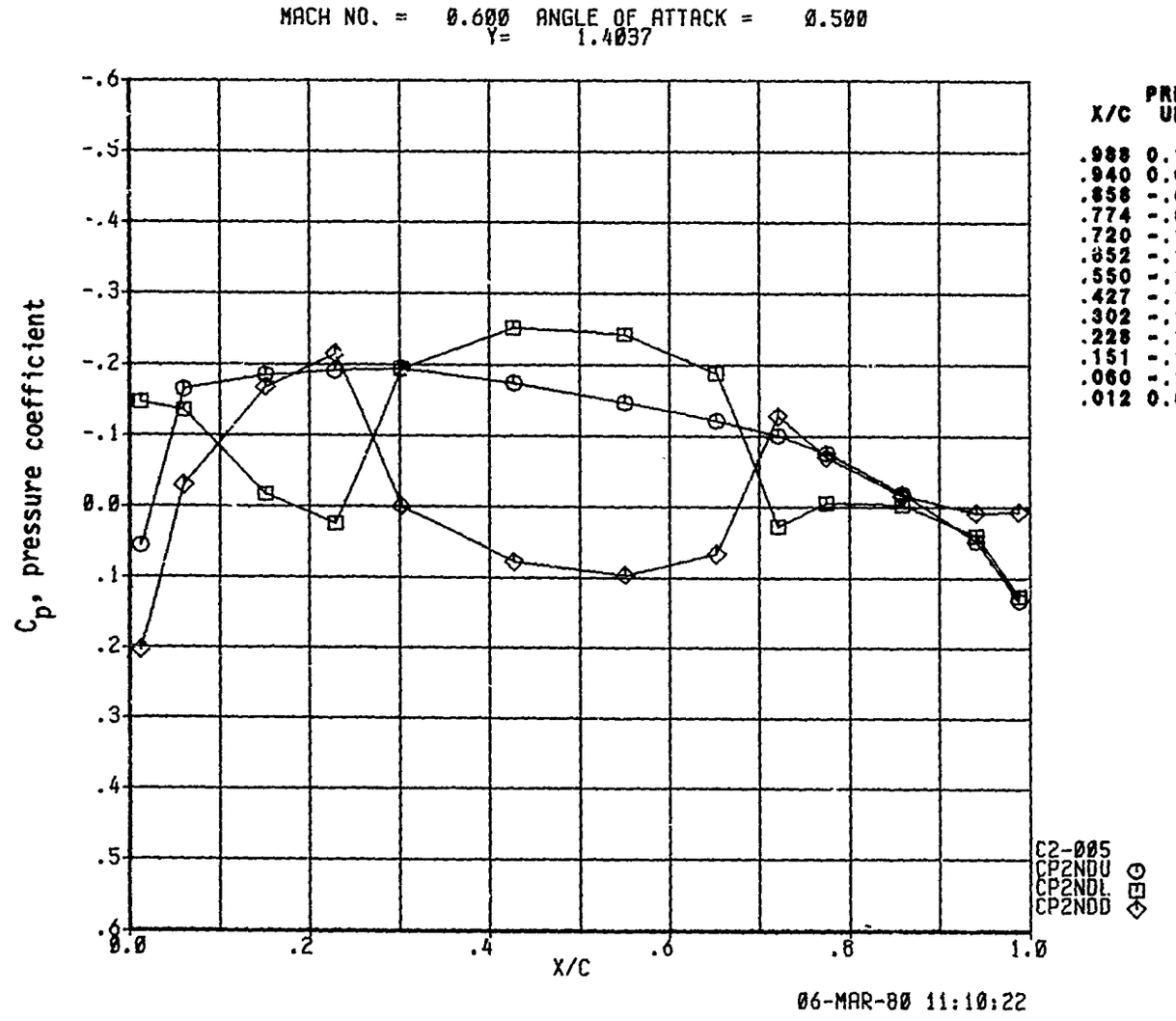
X/C	PRESSURE COEFFICIENT UPPER	LOWER	DIFF
.988	0.1377	0.1290	0.0086
.940	0.0562	0.0417	0.0145
.858	-.0069	-.0196	0.0128
.775	-.0595	-.0708	0.0113
.720	-.0881	-.1089	0.0208
.652	-.1000	-.1523	0.0523
.550	-.1233	-.1943	0.0710
.427	-.1445	-.2054	0.0609
.302	-.1491	-.1523	0.0031
.228	-.1503	-.1051	-.0453
.151	-.1186	-.1359	0.0173
.060	-.0427	-.2816	0.2389
.012	0.2678	-.4690	0.7368

Figure 532, Chordwise Pressure Distribution, Steady, Configuration 7



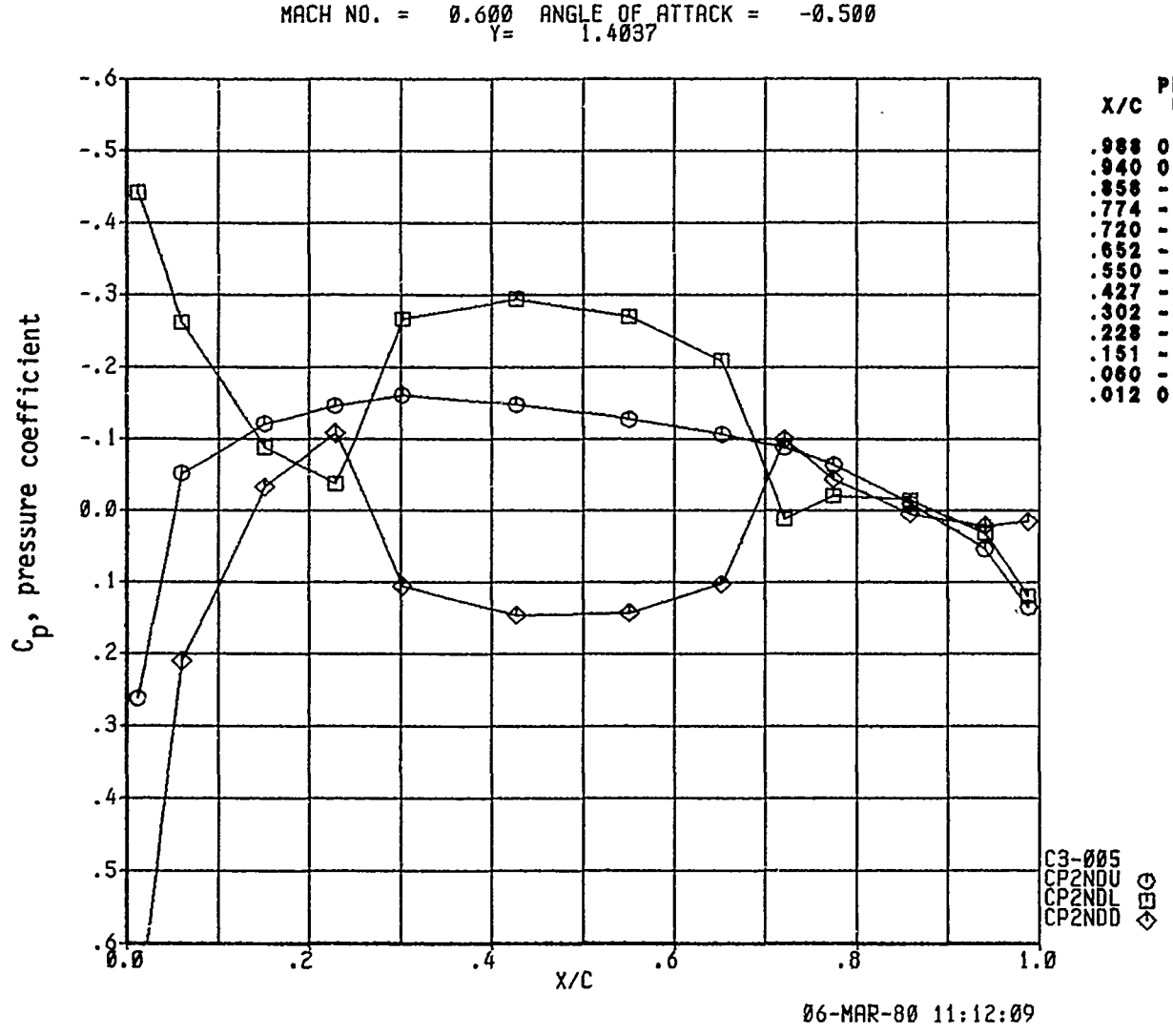
X/C	PRESSURE COEFFICIENT UPPER	LOWER	DIFF
.988	0.1334	0.1223	0.0110
.940	0.0509	0.0363	0.0146
.858	-.0148	-.0089	-.0058
.774	-.0698	-.0129	-.0569
.720	-.0946	0.0192	-.1138
.652	-.1140	-.1986	0.0847
.550	-.1371	-.2566	0.1195
.427	-.1612	-.2729	0.1117
.302	-.1777	-.2298	0.0522
.228	-.1689	-.0070	-.1619
.151	-.1530	-.0524	-.1005
.060	-.1076	-.1977	0.0901
.012	0.1634	-.2898	0.4531

Figure 533, Chordwise Pressure Distribution, Steady, Configuration 7



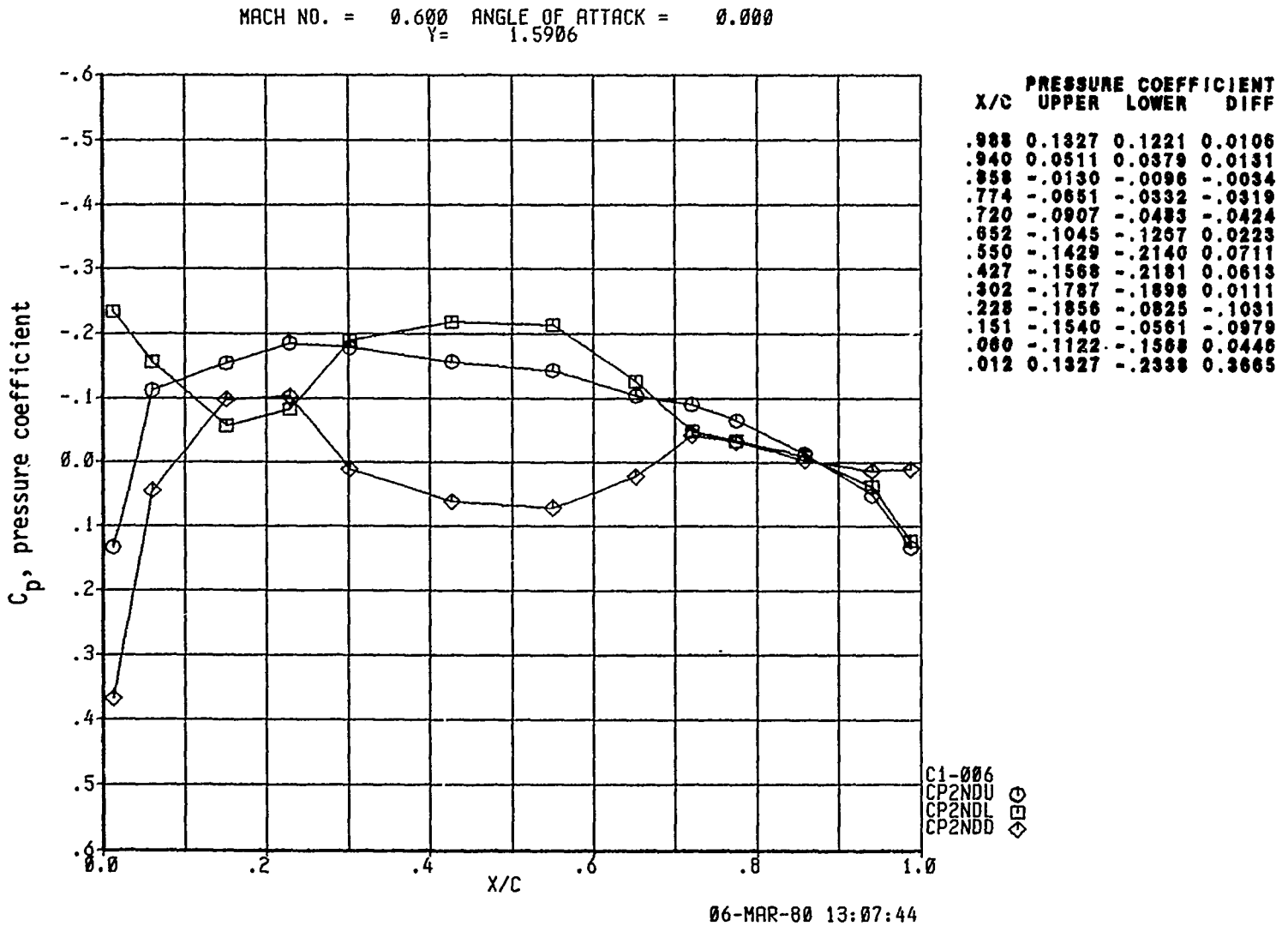
X/C	PRESSURE COEFFICIENT UPPER	LOWER	DIFF
.988	0.1314	0.1248	0.0066
.940	0.0478	0.0400	0.0077
.858	-.0193	-.0035	-.0158
.774	-.0758	-.0059	-.0699
.720	-.1012	0.0271	-.1282
.652	-.1217	-.1885	0.0669
.550	-.1471	-.2430	0.0959
.427	-.1749	-.2520	0.0771
.302	-.1946	-.1938	-.0007
.228	-.1916	0.0237	-.2152
.151	-.1656	-.0176	-.1680
.060	-.1649	-.1352	-.0299
.012	0.0552	-.1476	0.2028

Figure 534, Chordwise Pressure Distribution, Steady, Configuration 7



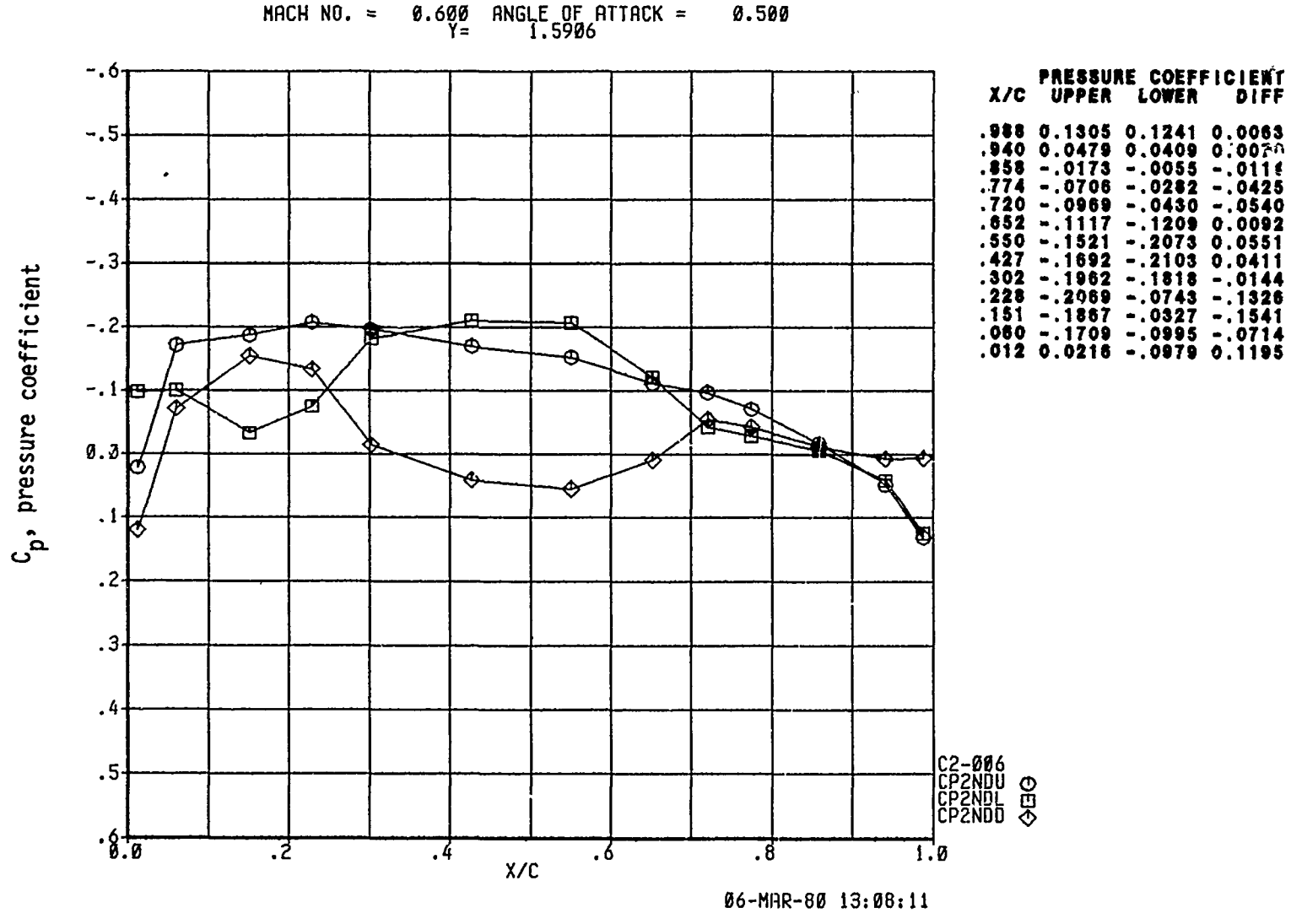
X/C	PRESSURE COEFFICIENT UPPER	LOWER	DIFF
.988	0.1352	0.1198	0.0154
.940	0.0538	0.0324	0.0214
.856	-.0104	-.0145	0.0042
.774	-.0642	-.0200	-.0441
.720	-.0882	0.0112	-.0994
.652	-.1064	-.2089	0.1025
.550	-.1274	-.2704	0.1431
.427	-.1478	-.2941	0.1463
.302	-.1610	-.2664	0.1054
.228	-.1466	-.0385	-.1080
.151	-.1211	-.0882	-.0329
.060	-.0520	-.2623	0.2102
.012	0.2619	-.4419	0.7039

Figure 535, Chordwise Pressure Distribution, Steady, Configuration 7



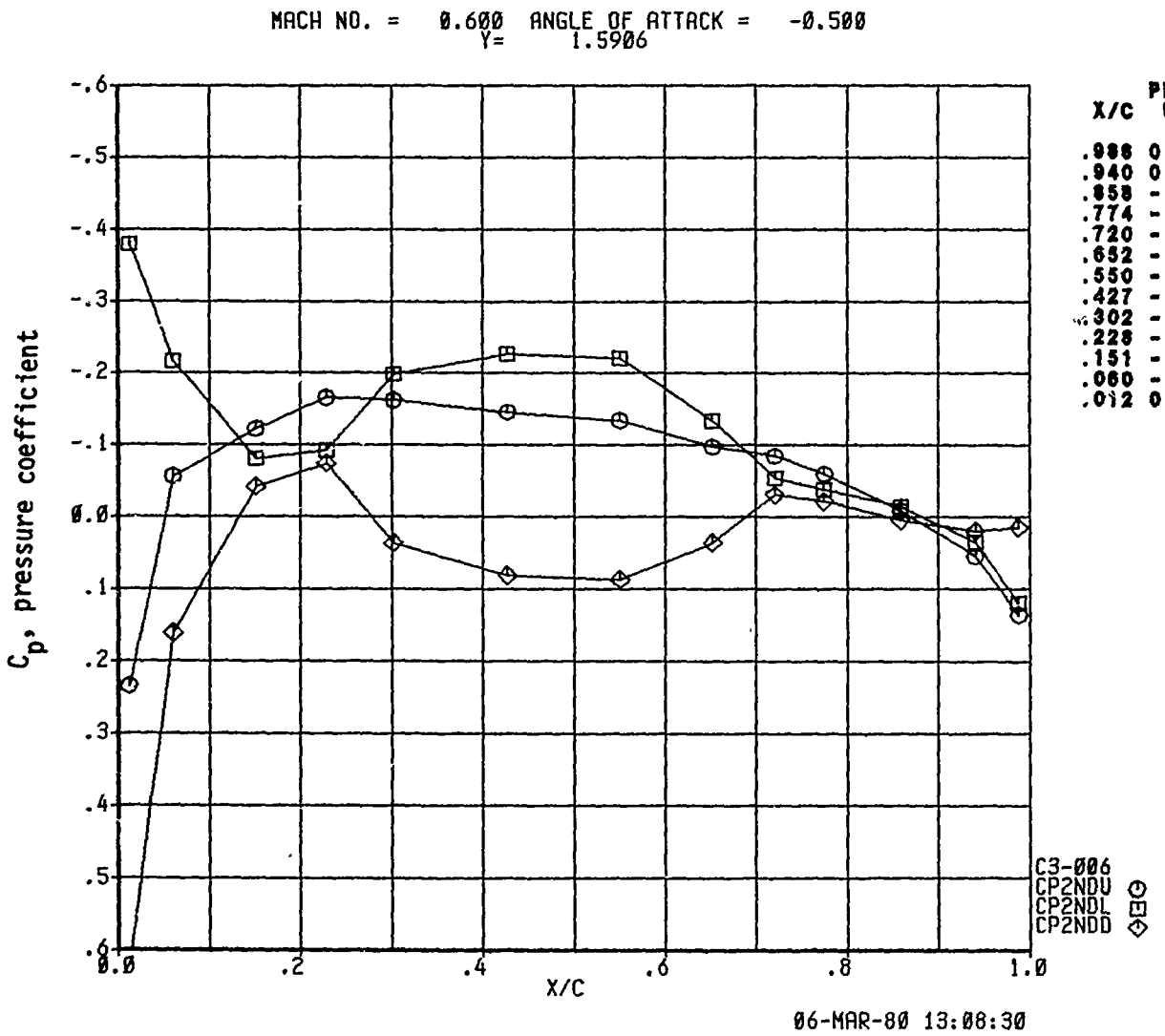
X/C	PRESSURE COEFFICIENT UPPER	LOWER	DIFF
.988	0.1327	0.1221	0.0106
.940	0.0511	0.0379	0.0131
.858	-.0130	-.0096	-.0034
.774	-.0651	-.0332	-.0319
.720	-.0907	-.0483	-.0424
.652	-.1045	-.1267	0.0223
.550	-.1429	-.2140	0.0711
.427	-.1568	-.2181	0.0613
.302	-.1787	-.1898	0.0111
.228	-.1856	-.0825	-.1031
.151	-.1540	-.0561	-.0979
.060	-.1122	-.1568	0.0446
.012	0.1327	-.2338	0.3665

Figure 536, Chordwise Pressure Distribution, Steady, Configuration 7



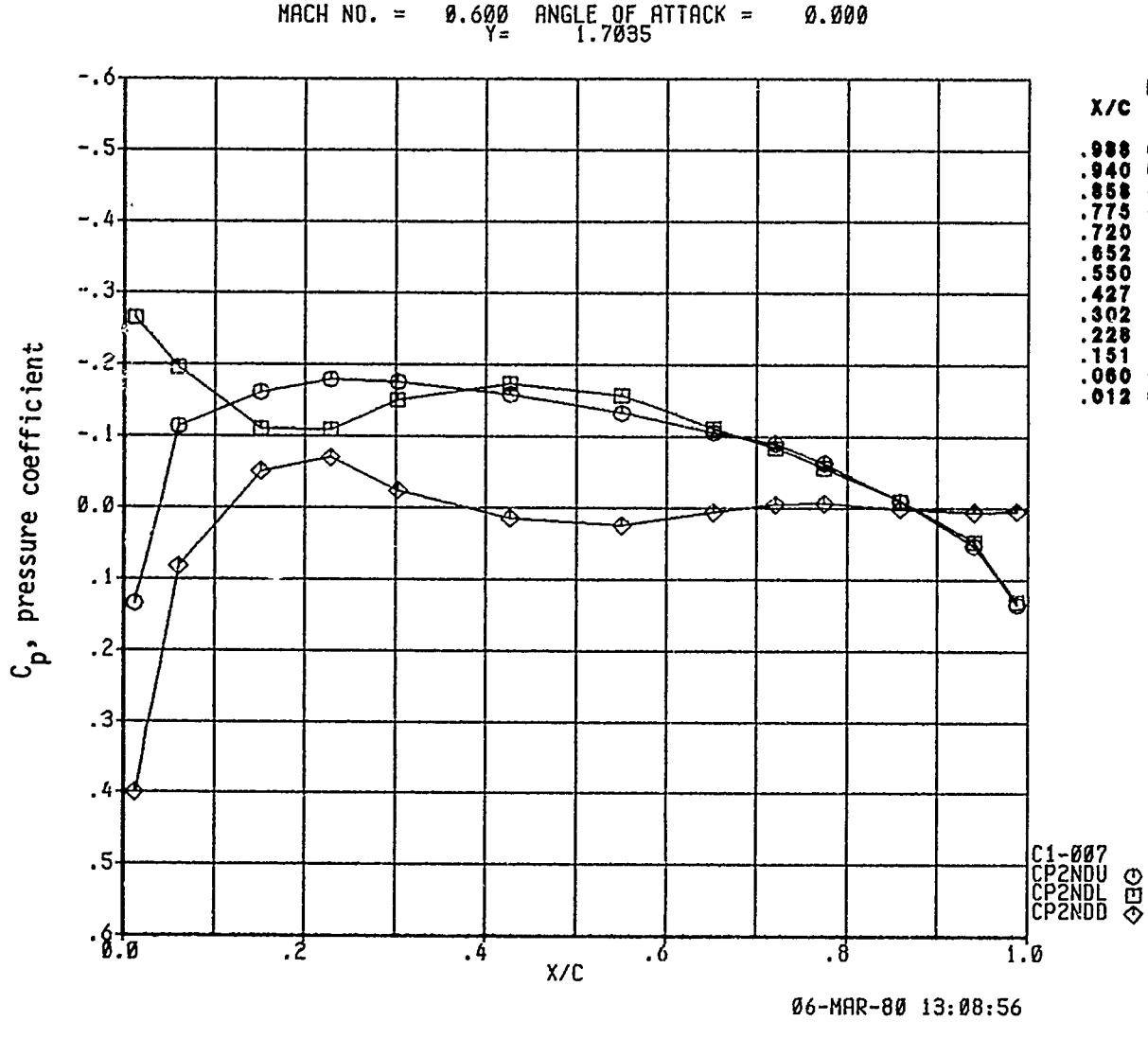
X/C	PRESSURE COEFFICIENT UPPER	LOWER	DIFF
.988	0.1305	0.1241	0.0063
.940	0.0479	0.0409	0.007[illegible]
.858	-.0173	-.0055	-.011[illegible]
.774	-.0706	-.0282	-.0425
.720	-.0969	-.0430	-.0540
.652	-.1117	-.1209	0.0092
.550	-.1521	-.2073	0.0551
.427	-.1692	-.2103	0.0411
.302	-.1962	-.1818	-.0144
.228	-.2069	-.0743	-.1326
.151	-.1867	-.0327	-.1541
.060	-.1709	-.0995	-.0714
.012	0.0216	-.0979	0.1195

Figure 537, Chordwise Pressure Distribution, Steady, Configuration 7



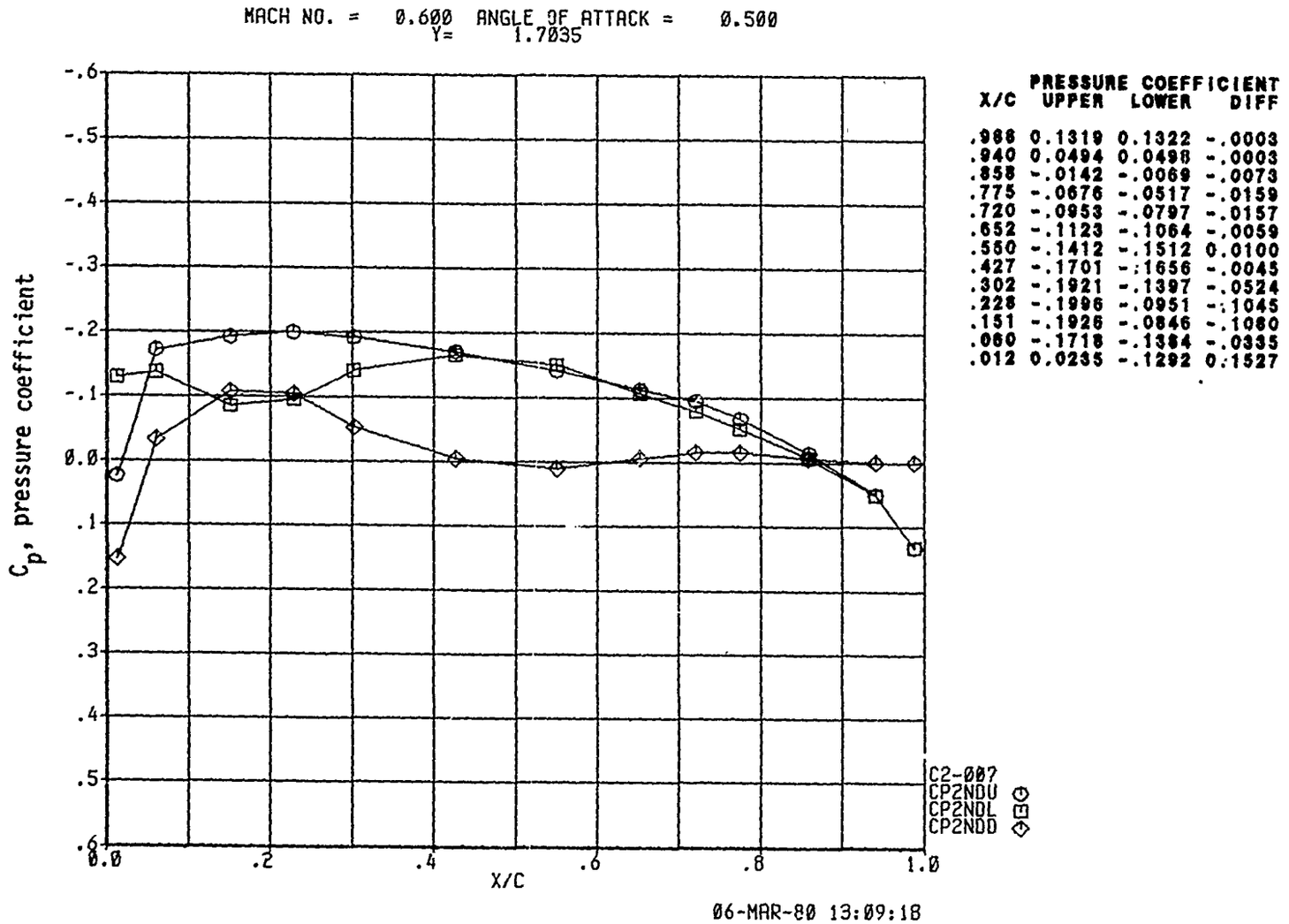
X/C	PRESSURE COEFFICIENT UPPER	LOWER	DIFF
.988	0.1346	0.1199	0.0148
.940	0.0540	0.0349	0.0190
.858	-.0088	-.0136	0.0049
.774	-.0598	-.0383	-.0215
.720	-.0846	-.0539	-.0309
.652	-.0976	-.1328	0.0352
.550	-.1340	-.2209	0.0869
.427	-.1448	-.2261	0.0813
.302	-.1617	-.1981	0.0364
.228	-.1649	-.0912	-.0738
.151	-.1219	-.0801	-.0418
.060	-.0555	-.2160	0.1605
.012	0.2340	-.3793	0.6133

Figure 538, Chordwise Pressure Distribution, Steady, Configuration 7



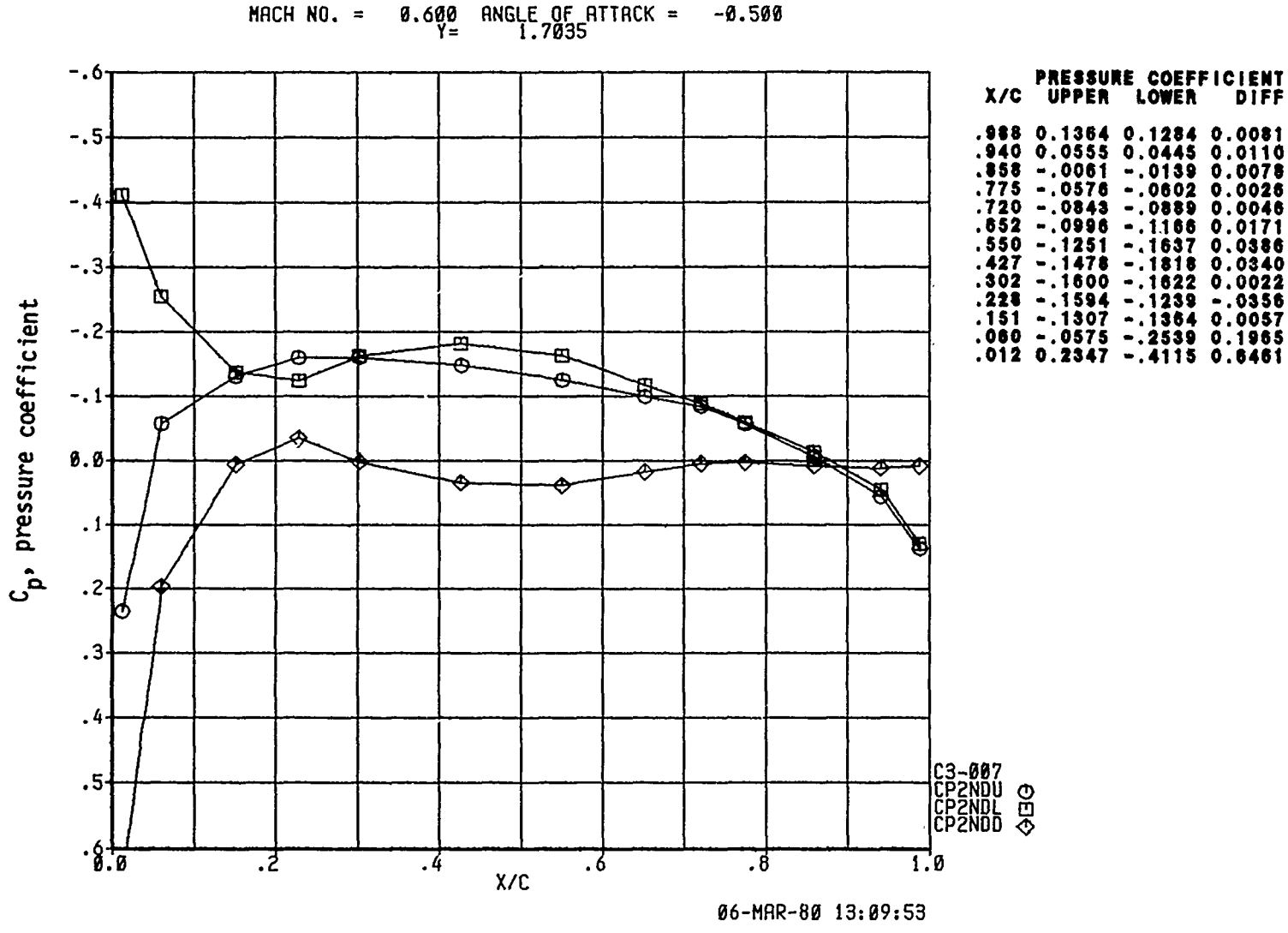
X/C	PRESSURE COEFFICIENT UPPER	LOWER	DIFF
.988	0.1343	0.1304	0.0040
.940	0.0526	0.0472	0.0054
.858	-.0100	-.0103	0.0004
.775	-.0625	-.0559	-.0066
.720	-.0897	-.0841	-.0055
.652	-.1057	-.1114	0.0057
.550	-.1330	-.1573	0.0243
.427	-.1588	-.1735	0.0147
.302	-.1758	-.1508	-.0250
.228	-.1793	-.1094	-.0699
.151	-.1612	-.1102	-.0510
.060	-.1137	-.1953	0.0816
.012	0.1340	-.2657	0.3996

Figure 539, Chordwise Pressure Distribution, Steady, Configuration 7



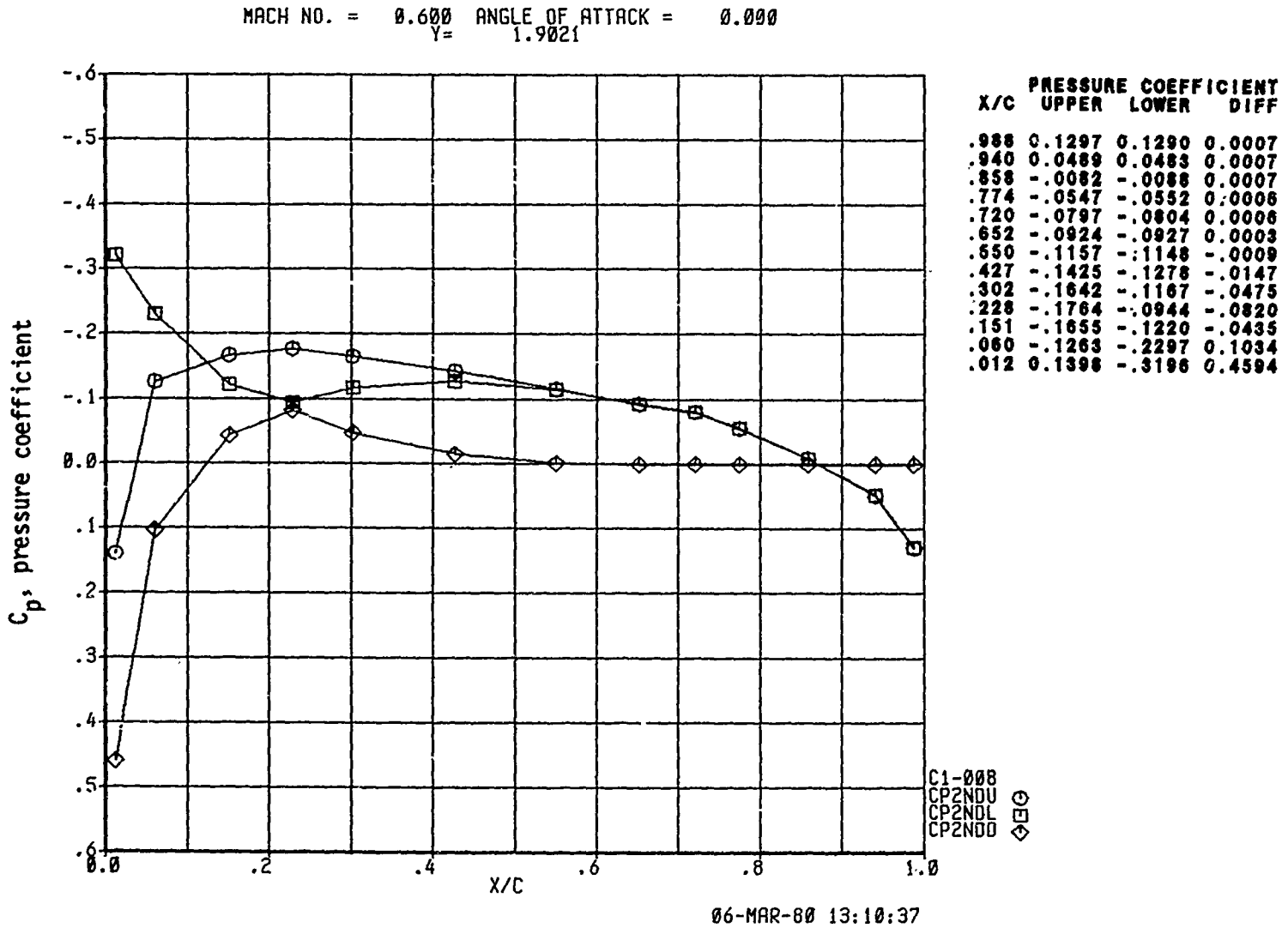
X/C	PRESSURE COEFFICIENT UPPER	LOWER	DIFF
.988	0.1319	0.1322	-.0003
.940	0.0494	0.0498	-.0003
.858	-.0142	-.0069	-.0073
.775	-.0676	-.0517	-.0159
.720	-.0953	-.0797	-.0157
.652	-.1123	-.1064	-.0059
.550	-.1412	-.1512	0.0100
.427	-.1701	-.1656	-.0045
.302	-.1921	-.1397	-.0524
.228	-.1996	-.0951	-.1045
.151	-.1926	-.0846	-.1080
.060	-.1718	-.1384	-.0335
.012	0.0235	-.1292	0.1527

Figure 540, Chordwise Pressure Distribution, Steady, Configuration 7



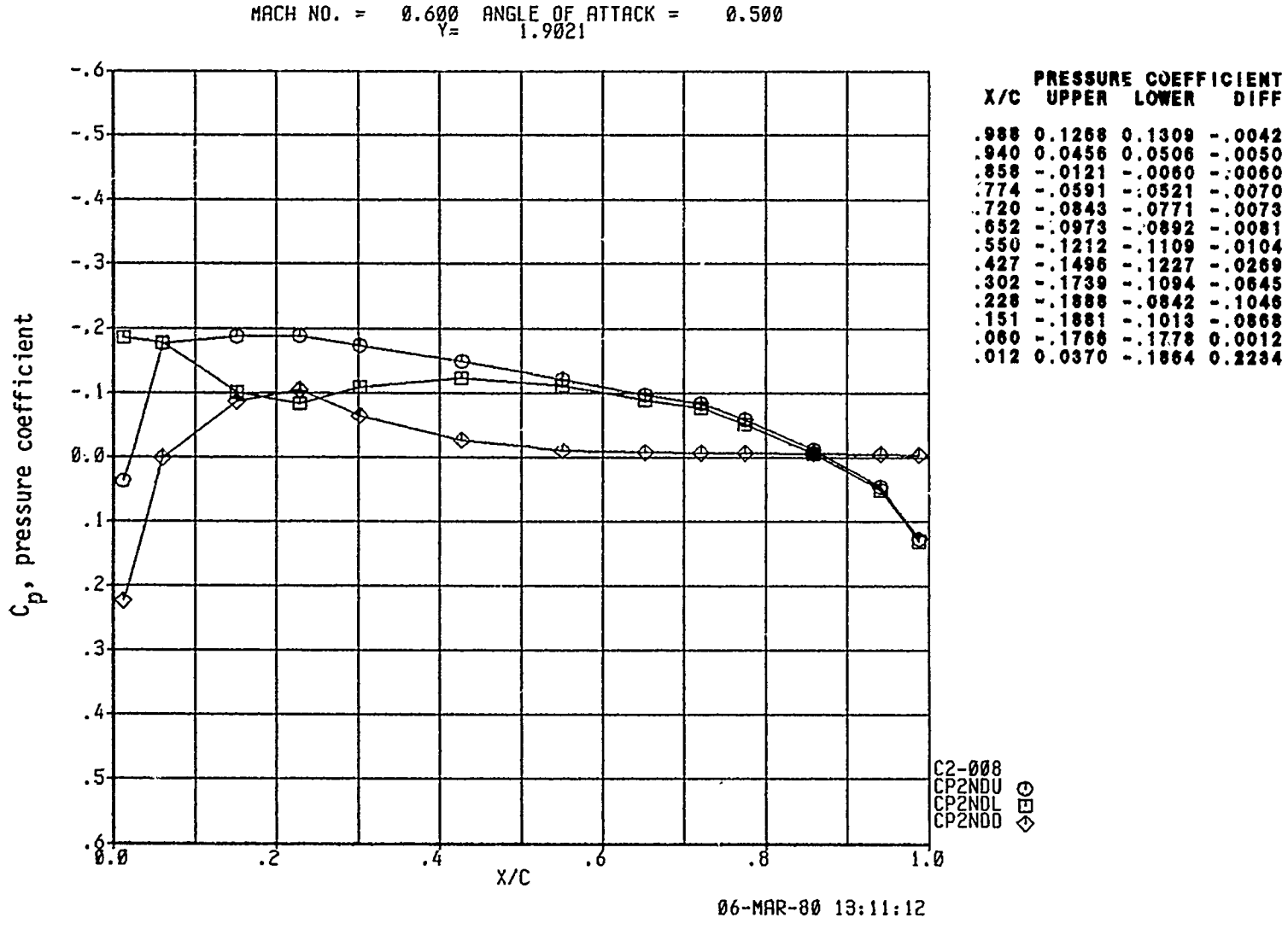
X/C	PRESSURE COEFFICIENT UPPER	LOWER	DIFF
.988	0.1364	0.1284	0.0081
.940	0.0555	0.0445	0.0110
.858	-.0061	-.0139	0.0078
.775	-.0576	-.0602	0.0026
.720	-.0843	-.0889	0.0046
.652	-.0996	-.1166	0.0171
.550	-.1251	-.1637	0.0386
.427	-.1478	-.1818	0.0340
.302	-.1600	-.1622	0.0022
.228	-.1594	-.1239	-.0356
.151	-.1307	-.1364	0.0057
.060	-.0575	-.2539	0.1965
.012	0.2347	-.4115	0.6461

Figure 541, Chordwise Pressure Distribution, Steady, Configuration 7



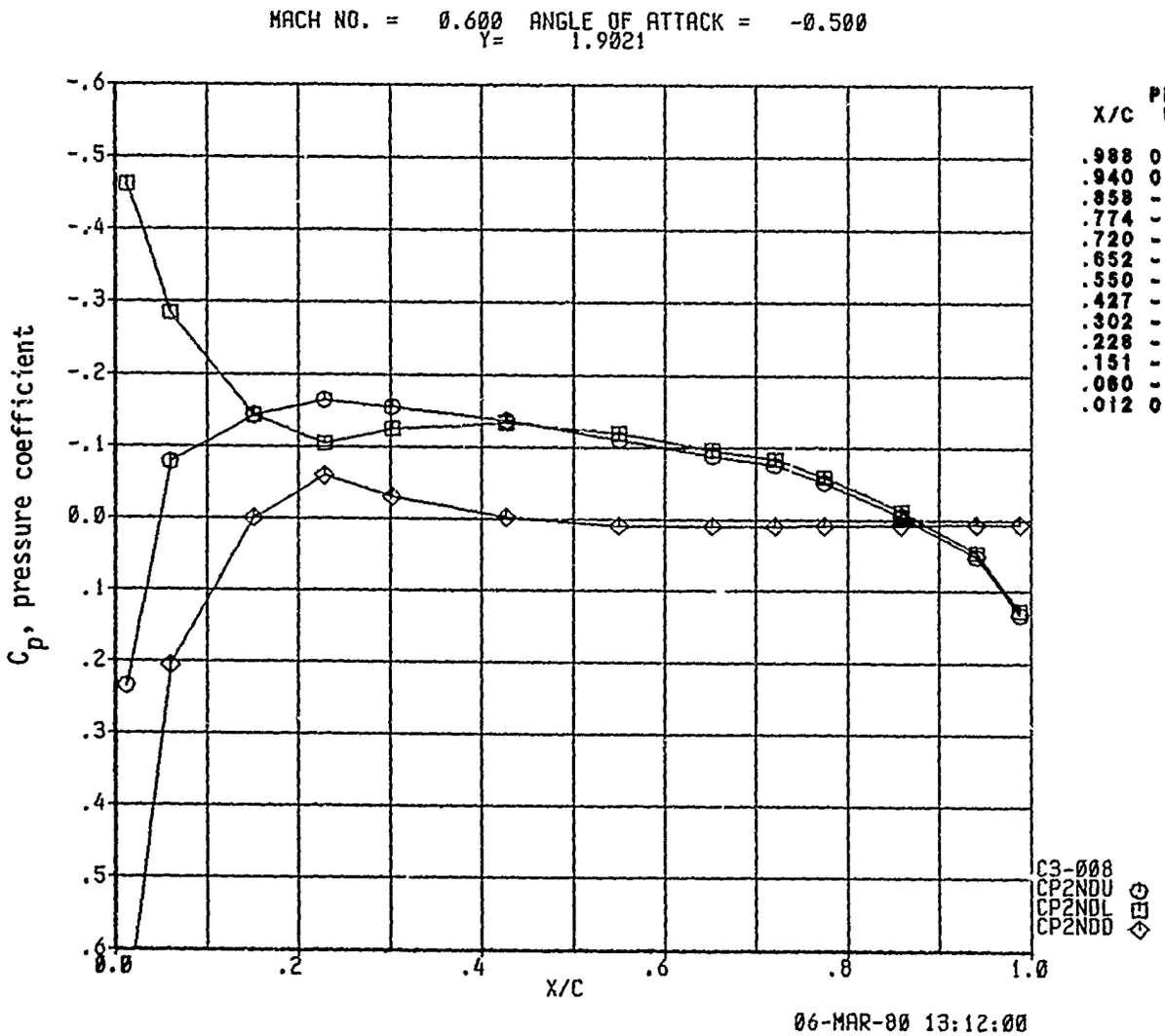
X/C	PRESSURE COEFFICIENT UPPER	LOWER	DIFF
.988	0.1297	0.1290	0.0007
.940	0.0489	0.0483	0.0007
.858	-.0082	-.0088	0.0007
.774	-.0547	-.0552	0.0006
.720	-.0797	-.0804	0.0006
.652	-.0924	-.0927	0.0003
.550	-.1157	-.1148	-.0009
.427	-.1425	-.1278	-.0147
.302	-.1642	-.1167	-.0475
.228	-.1764	-.0944	-.0820
.151	-.1655	-.1220	-.0435
.060	-.1263	-.2297	0.1034
.012	0.1398	-.3196	0.4594

Figure 542, Chordwise Pressure Distribution, Steady, Configuration 7



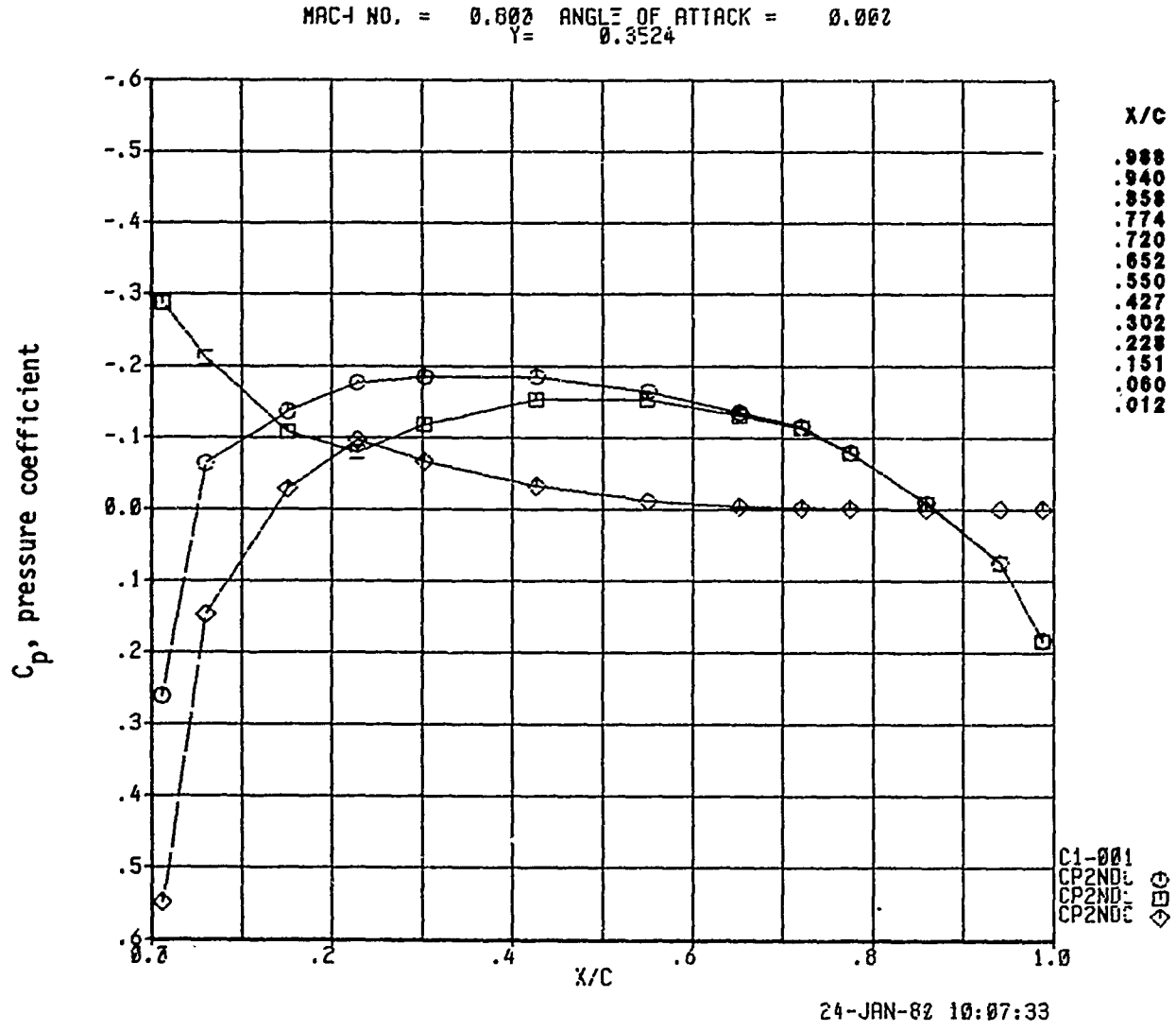
X/C	PRESSURE COEFFICIENT UPPER	LOWER	DIFF
.988	0.1268	0.1309	-.0042
.940	0.0456	0.0506	-.0050
.858	-.0121	-.0060	-.0060
.774	-.0591	-.0521	-.0070
.720	-.0843	-.0771	-.0073
.652	-.0973	-.0892	-.0081
.550	-.1212	-.1109	-.0104
.427	-.1496	-.1227	-.0269
.302	-.1739	-.1094	-.0645
.228	-.1888	-.0842	-.1046
.151	-.1881	-.1013	-.0868
.060	-.1766	-.1778	0.0012
.012	0.0370	-.1864	0.2234

Figure 543, Chordwise Pressure Distribution, Steady, Configuration 7



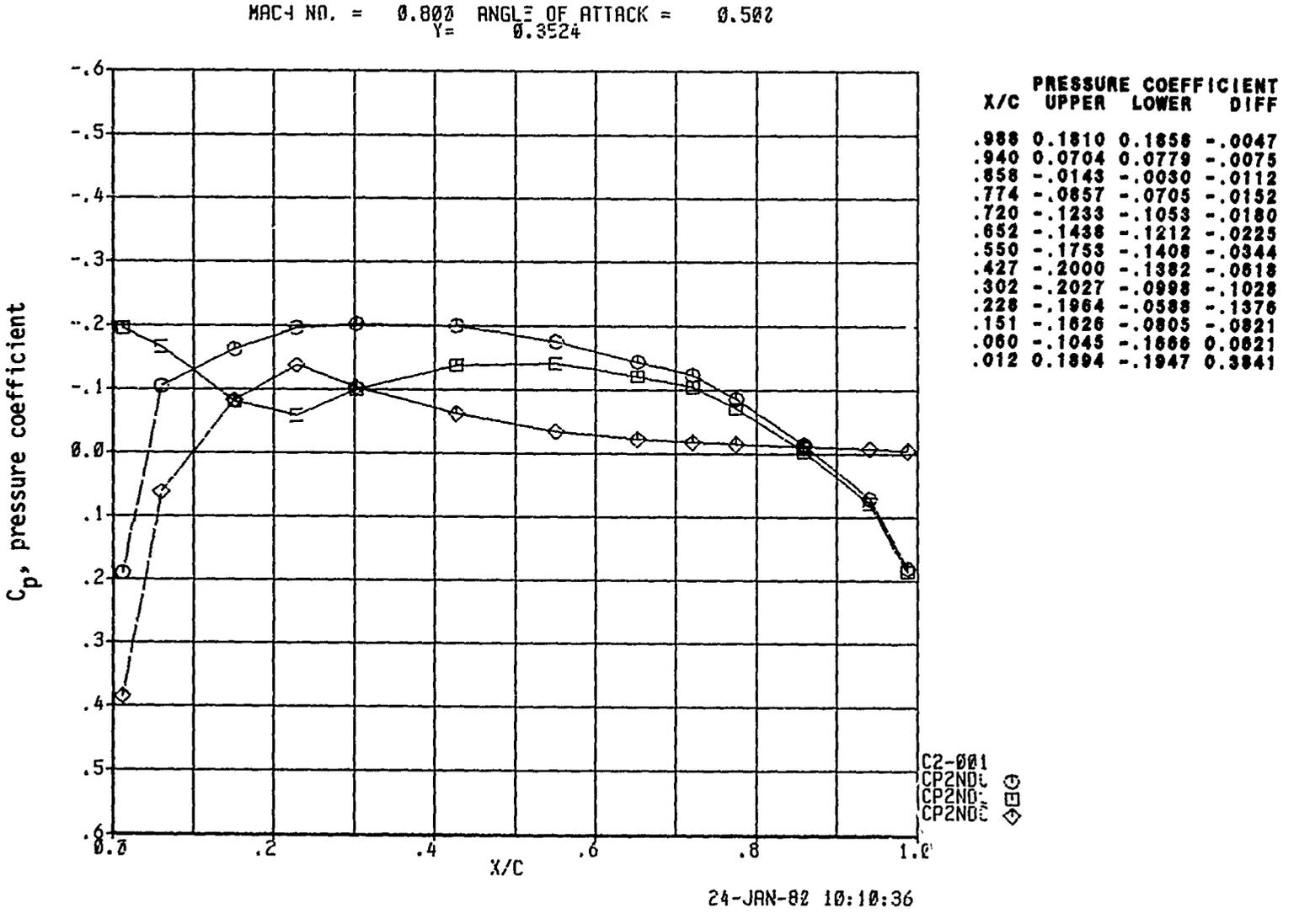
X/C	PRESSURE COEFFICIENT UPPER	LOWER	DIFF
.988	0.1318	0.1264	0.0054
.940	0.0515	0.0453	0.0063
.858	-.0050	-.0122	0.0073
.774	-.0510	-.0590	0.0080
.720	-.0757	-.0842	0.0085
.652	-.0882	-.0967	0.0084
.550	-.1108	-.1193	0.0084
.427	-.1362	-.1335	-.0027
.302	-.1553	-.1246	-.0307
.228	-.1646	-.1050	-.0596
.151	-.1438	-.1433	-.0005
.080	-.0778	-.2831	0.2054
.012	0.2336	-.4614	0.6950

Figure 544, Chordwise Pressure Distribution, Steady, Configuration 7



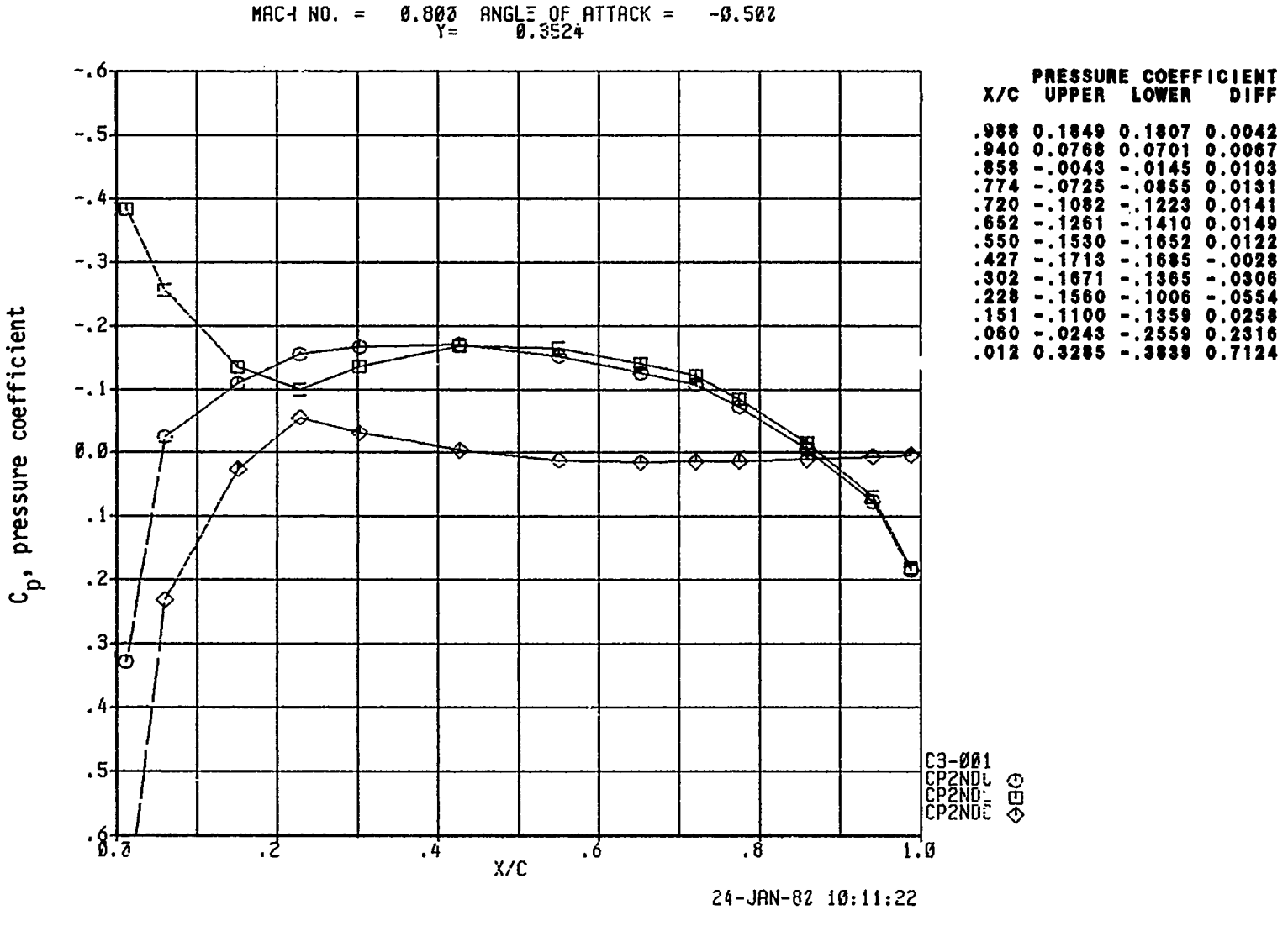
X/C	PRESSURE COEFFICIENT UPPER	LOWER	DIFF
.988	0.1831	0.1833	-.0003
.940	0.0737	0.0740	-.0004
.858	-.0092	-.0087	-.0005
.774	-.0790	-.0779	-.0011
.720	-.1156	-.1137	-.0020
.652	-.1349	-.1311	-.0038
.550	-.1640	-.1530	-.0111
.427	-.1855	-.1532	-.0323
.302	-.1847	-.1181	-.0667
.228	-.1761	-.0797	-.0965
.151	-.1362	-.1080	-.0282
.060	-.0641	-.2109	0.1469
.012	0.2605	-.2877	0.5483

Figure 545, Chordwise Pressure Distribution, Steady, Configuration 7



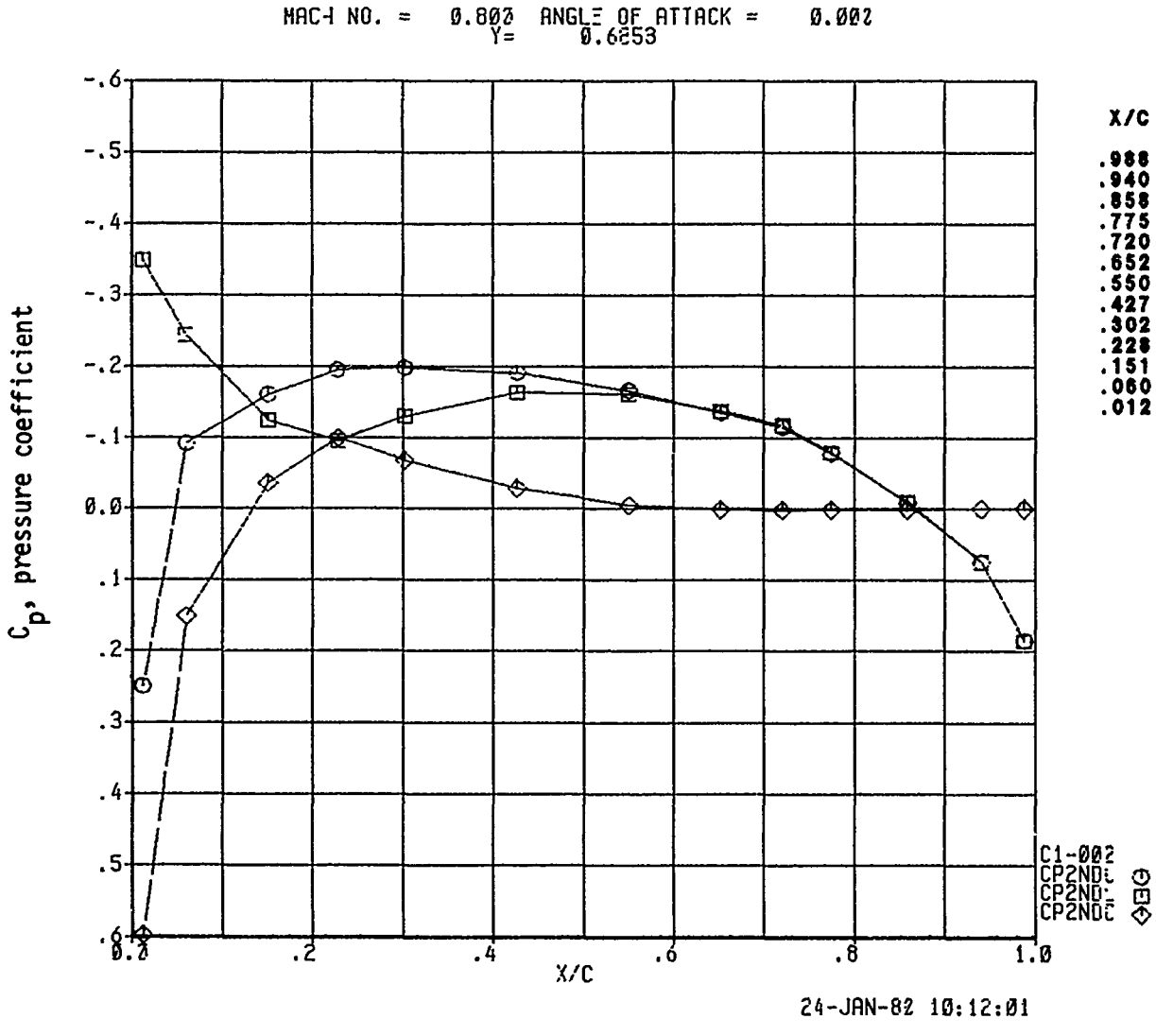
X/C	PRESSURE COEFFICIENT UPPER	LOWER	DIFF
.988	0.1810	0.1858	-.0047
.940	0.0704	0.0779	-.0075
.858	-.0143	-.0030	-.0112
.774	-.0857	-.0705	-.0152
.720	-.1233	-.1053	-.0180
.652	-.1438	-.1212	-.0225
.550	-.1753	-.1408	-.0344
.427	-.2000	-.1382	-.0618
.302	-.2027	-.0998	-.1028
.228	-.1964	-.0588	-.1376
.151	-.1626	-.0805	-.0821
.060	-.1045	-.1666	0.0621
.012	0.1894	-.1947	0.3841

Figure 546, Chordwise Pressure Distribution, Steady, Configuration 7



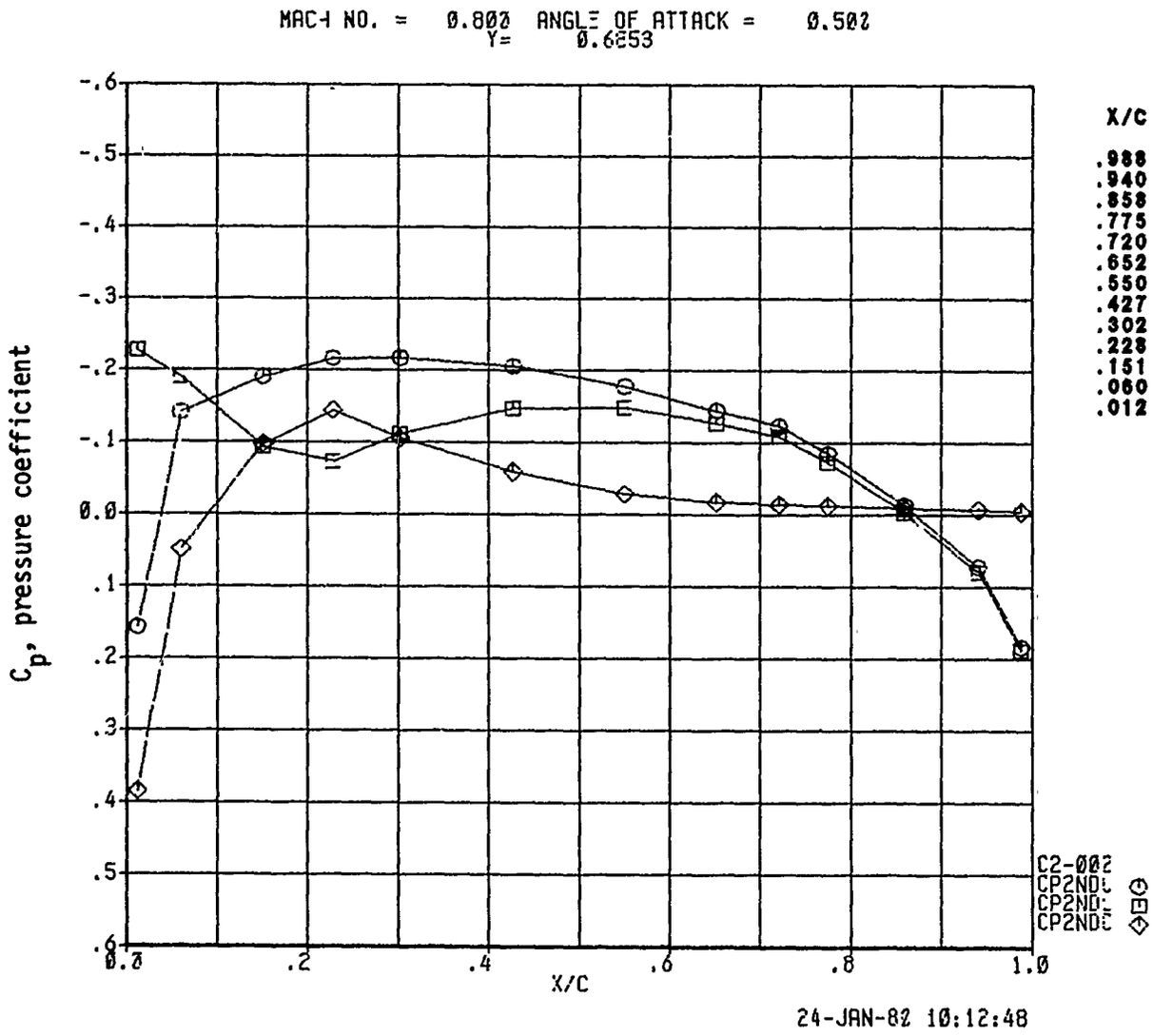
X/C	PRESSURE COEFFICIENT UPPER	LOWER	DIFF
.988	0.1649	0.1807	0.0042
.940	0.0768	0.0701	0.0067
.858	-.0043	-.0145	0.0103
.774	-.0725	-.0855	0.0131
.720	-.1082	-.1223	0.0141
.652	-.1261	-.1410	0.0149
.550	-.1530	-.1652	0.0122
.427	-.1713	-.1685	-.0028
.302	-.1671	-.1365	-.0306
.228	-.1560	-.1006	-.0554
.151	-.1100	-.1359	0.0258
.060	-.0243	-.2559	0.2316
.012	0.3285	-.3839	0.7124

Figure 547, Chordwise Pressure Distribution, Steady, Configuration 7



X/C	PRESSURE COEFFICIENT UPPER	LOWER	DIFF
.988	0.1851	0.1853	-.0002
.940	0.0749	0.0747	0.0002
.858	-.0082	-.0092	0.0009
.775	-.0780	-.0797	0.0017
.720	-.1154	-.1174	0.0020
.652	-.1350	-.1366	0.0016
.550	-.1658	-.1611	-.0047
.427	-.1910	-.1629	-.0282
.302	-.1985	-.1305	-.0678
.228	-.1947	-.0950	-.0997
.151	-.1600	-.1243	-.0358
.060	-.0916	-.2438	0.1522
.012	0.2490	-.3485	0.5974

Figure 548, Chordwise Pressure Distribution, Steady, Configuration 7



X/C	PRESSURE COEFFICIENT UPPER	LOWER	DIFF
.988	0.1831	0.1879	-.0047
.940	0.0716	0.0787	-.0070
.858	-.0132	-.0034	-.0098
.775	-.0846	-.0722	-.0124
.720	-.1228	-.1088	-.0140
.652	-.1437	-.1266	-.0171
.550	-.1769	-.1487	-.0282
.427	-.2056	-.1471	-.0584
.302	-.2170	-.1113	-.1057
.228	-.2164	-.0726	-.1438
.151	-.1899	-.0932	-.0968
.060	-.1412	-.1895	0.0484
.012	0.1568	-.2273	0.3841

Figure 549, Chordwise Pressure Distribution, Steady, Configuration 7

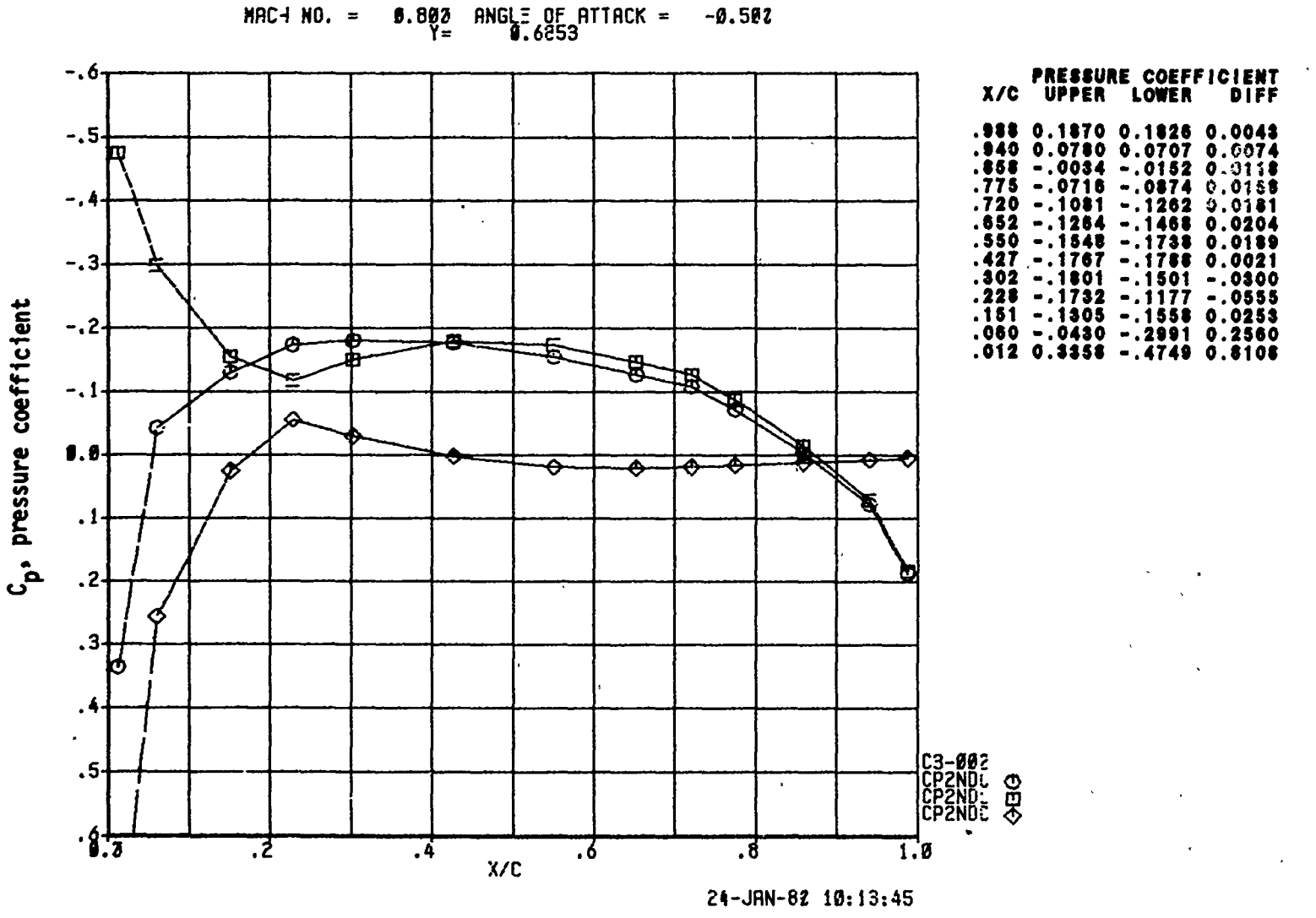
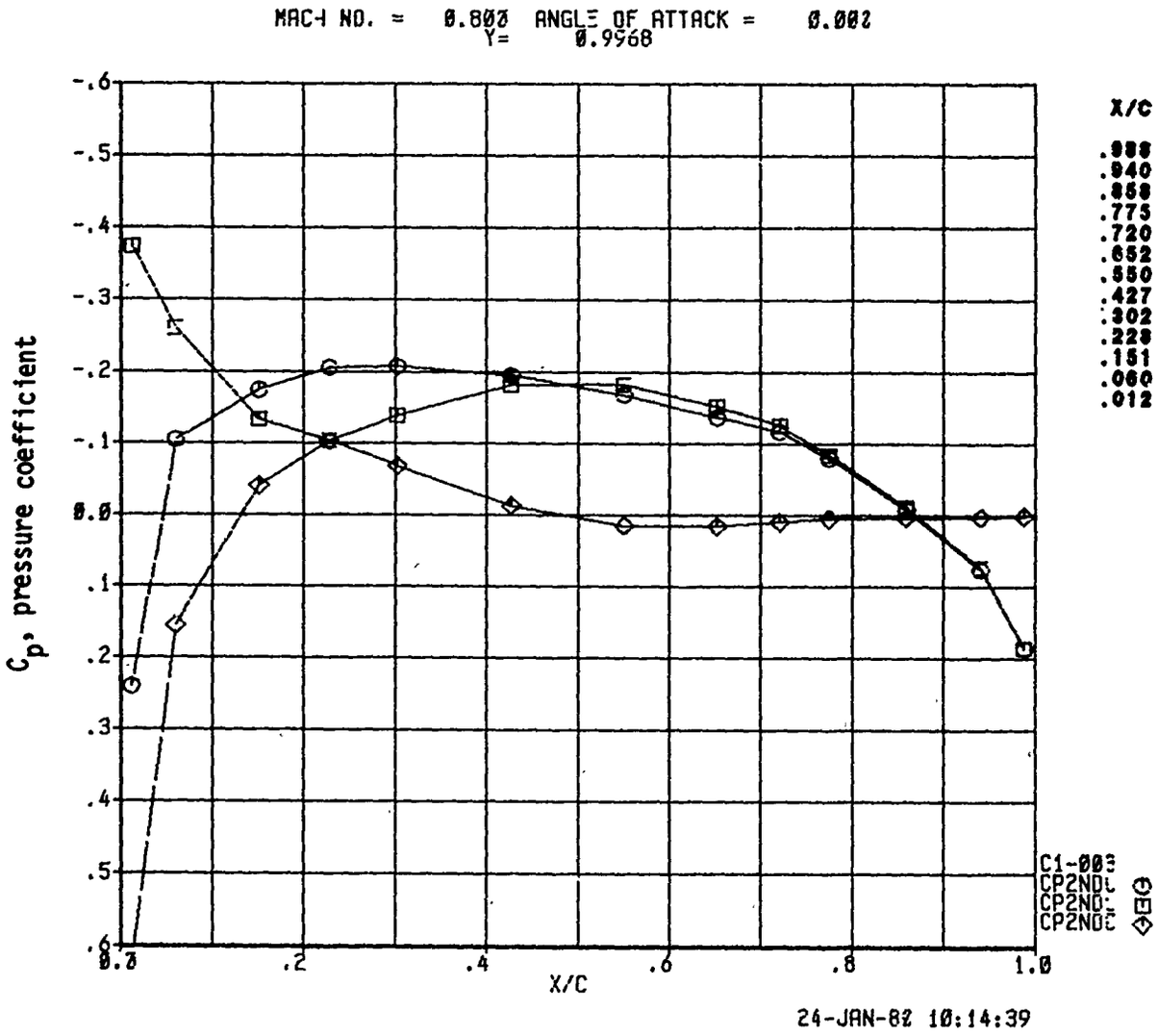
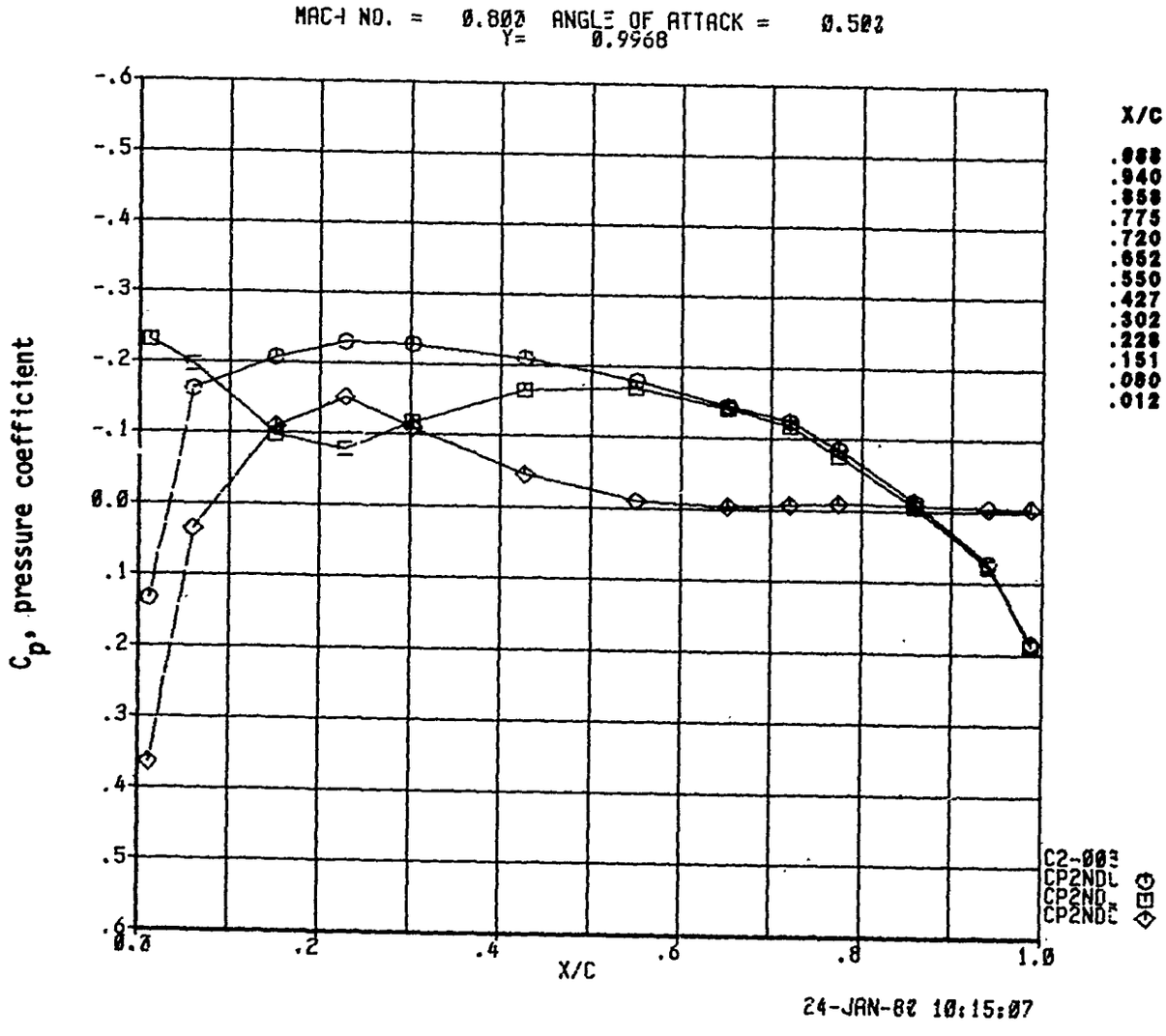


Figure 550, Chordwise Pressure Distribution, Steady, Configuration 7



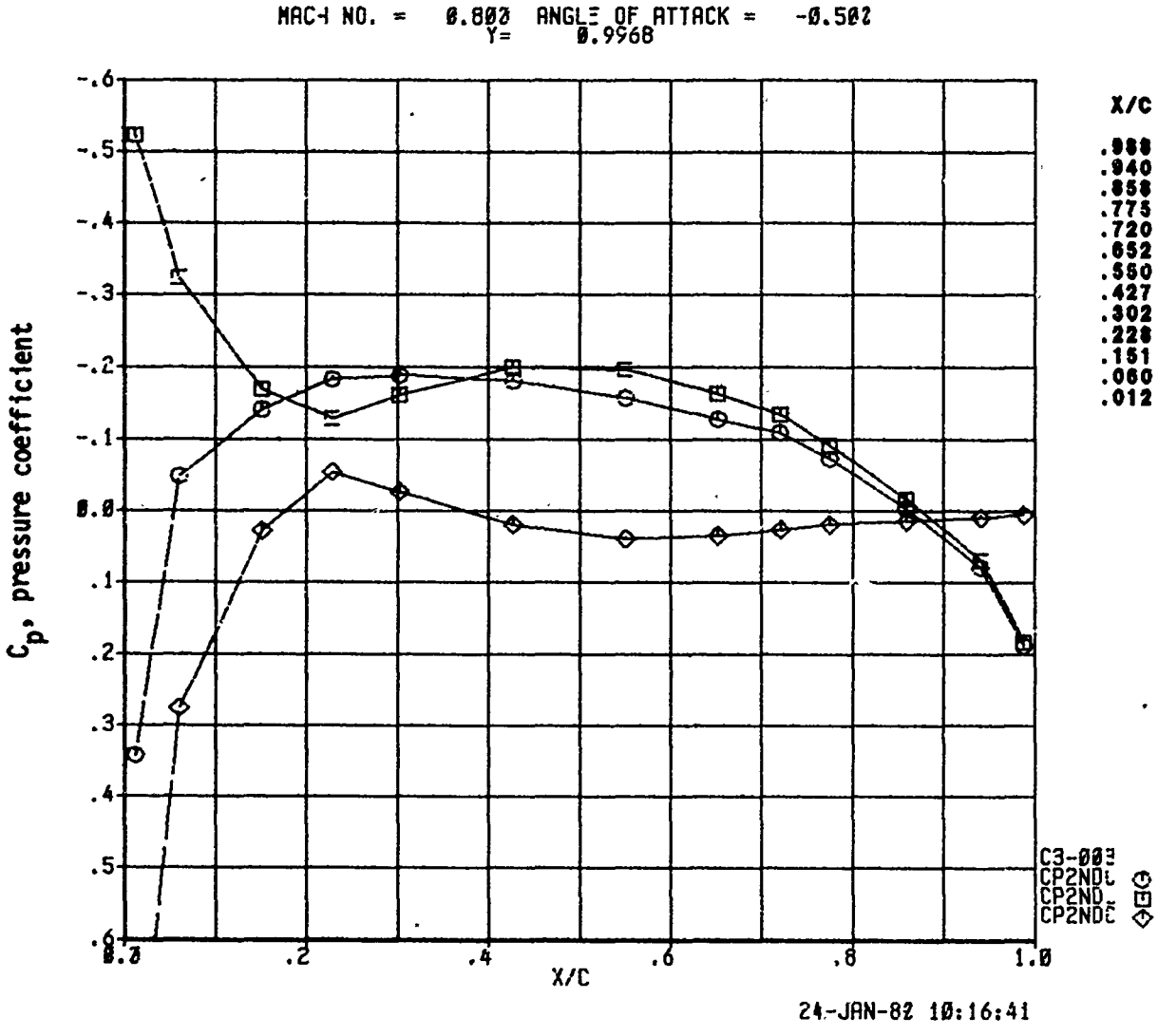
X/C	PRESSURE COEFFICIENT UPPER	LOWER	DIFF
.988	0.1861	0.1856	0.0004
.940	0.0756	0.0731	0.0025
.858	-.0085	-.0115	0.0030
.775	-.0792	-.0836	0.0044
.720	-.1165	-.1260	0.0094
.652	-.1364	-.1518	0.0153
.550	-.1682	-.1827	0.0144
.427	-.1949	-.1819	-.0130
.302	-.2075	-.1393	-.0682
.228	-.2060	-.1032	-.1028
.151	-.1740	-.1333	-.0407
.060	-.1044	-.2597	0.1552
.012	0.2406	-.3730	0.6136

Figure 551, Chordwise Pressure Distribution, Steady, Configuration 7



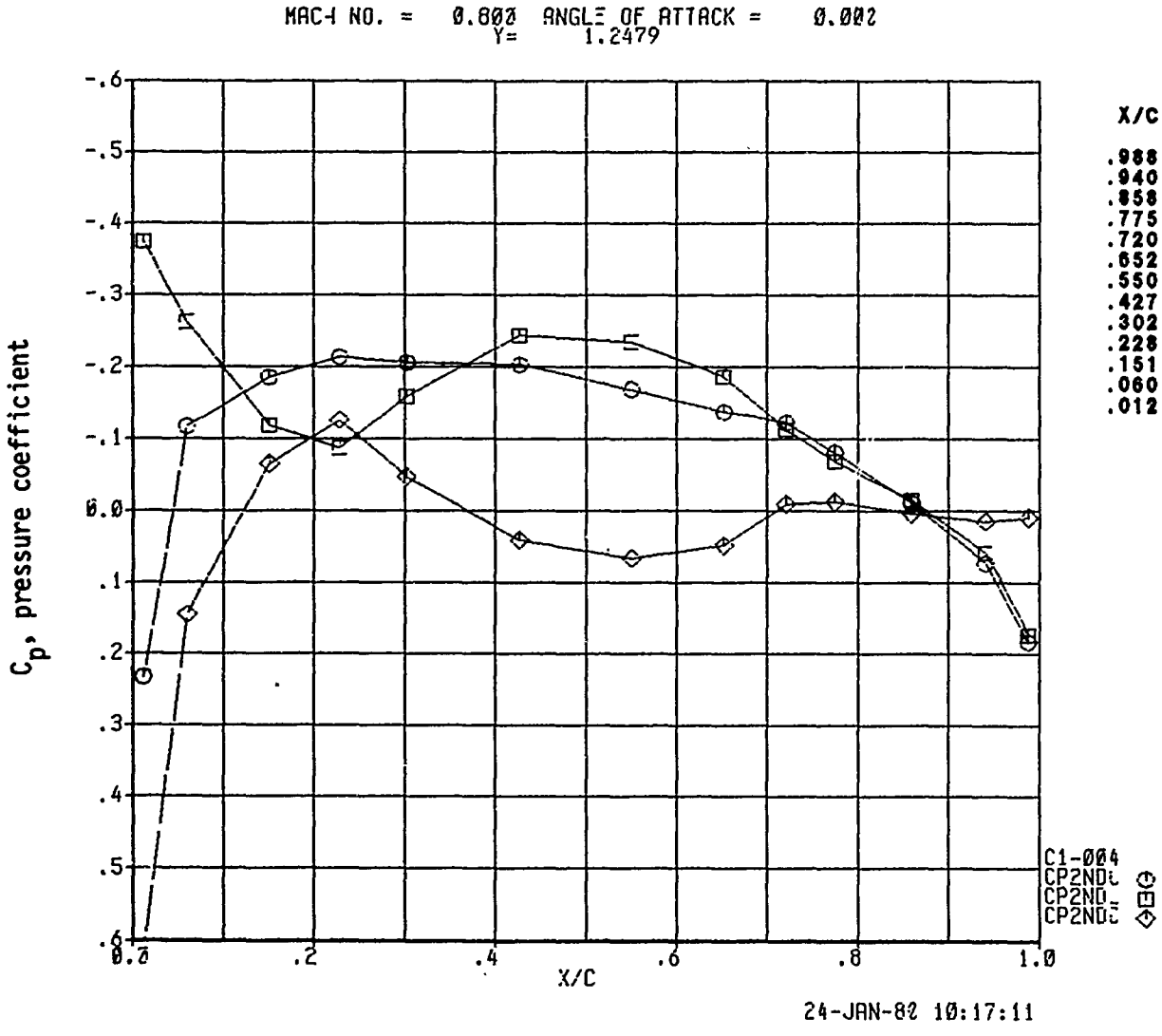
X/C	PRESSURE COEFFICIENT UPPER	LOWER	DIFF
.988	0.1841	0.1883	-.0042
.940	0.0724	0.0771	-.0047
.858	-.0133	-.0054	-.0079
.775	-.0856	-.0758	-.0098
.720	-.1238	-.1170	-.0068
.652	-.1451	-.1413	-.0038
.550	-.1793	-.1692	-.0101
.427	-.2097	-.1644	-.0455
.302	-.2271	-.1177	-.1093
.228	-.2294	-.0783	-.1511
.151	-.2073	-.0982	-.1091
.080	-.1617	-.1970	0.0353
.012	0.1322	-.2310	0.3631

Figure 552, Chordwise Pressure Distribution, Steady, Configuration 7



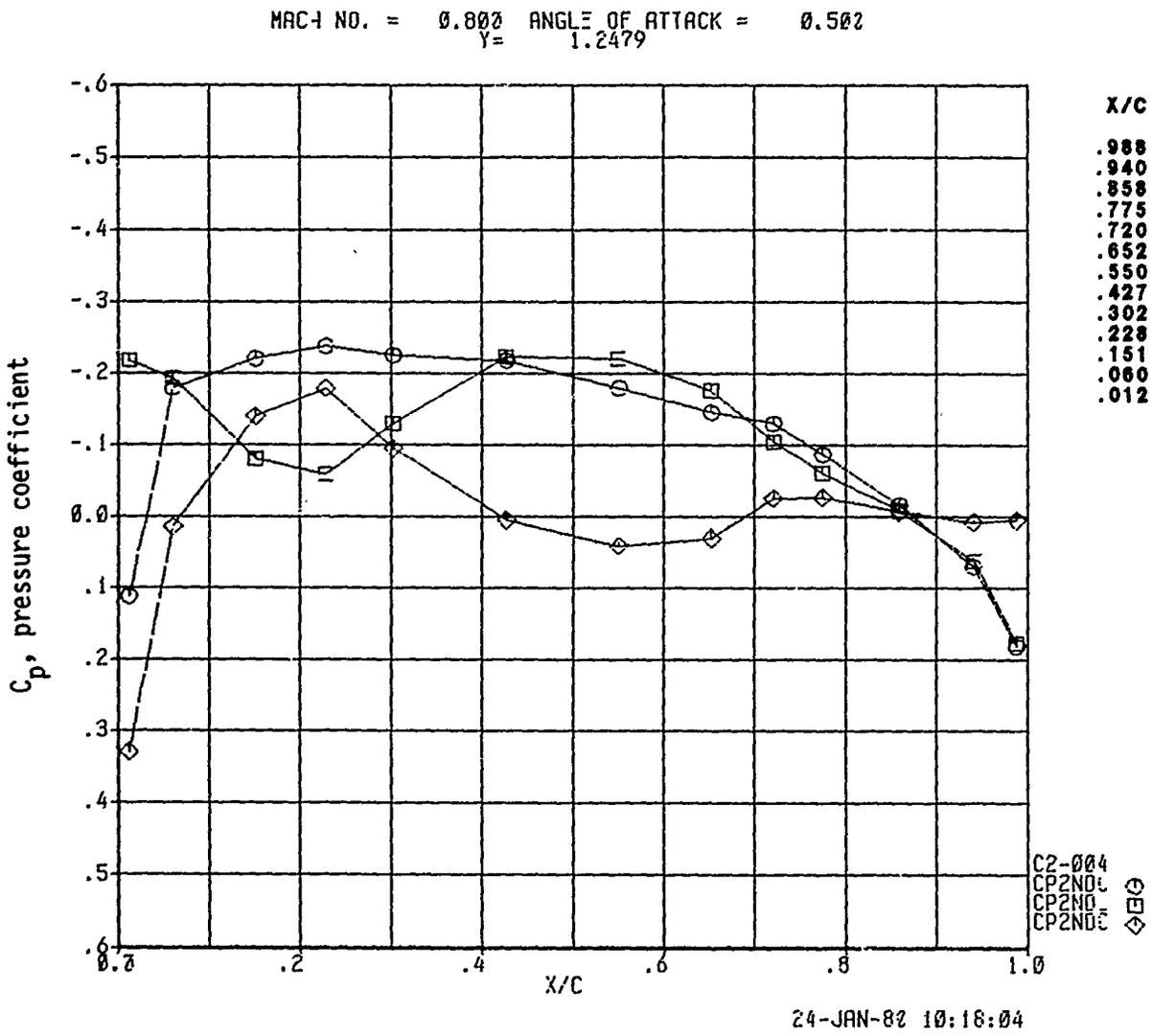
X/C	PRESSURE COEFFICIENT UPPER	LOWER	DIFF
.988	0.1879	0.1829	0.0050
.940	0.0787	0.0689	0.0098
.858	-.0036	-.0176	0.0139
.775	-.0730	-.0917	0.0187
.720	-.1094	-.1351	0.0257
.652	-.1280	-.1625	0.0345
.550	-.1573	-.1963	0.0389
.427	-.1803	-.1997	0.0194
.302	-.1881	-.1611	-.0270
.228	-.1829	-.1284	-.0545
.151	-.1412	-.1688	0.0276
.060	-.0485	-.3237	0.2751
.012	0.3421	-.5222	0.8643

Figure 553, Chordwise Pressure Distribution, Steady, Configuration 7



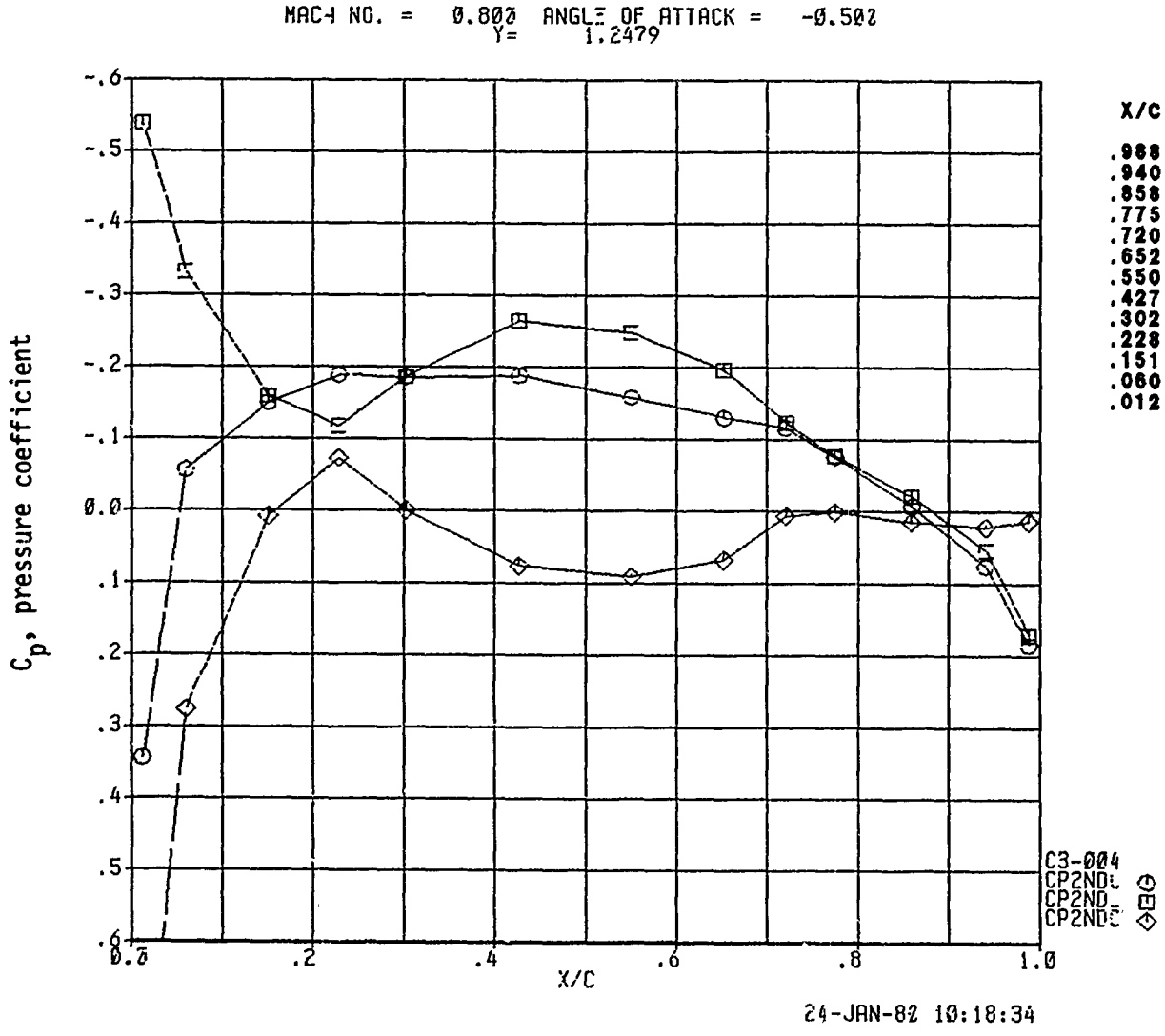
X/C	PRESSURE COEFFICIENT UPPER	LOWER	DIFF
.988	0.1832	0.1738	0.0093
.940	0.0726	0.0580	0.0146
.858	-.0113	-.0149	0.0036
.775	-.0809	-.0685	-.0125
.720	-.1228	-.1133	-.0095
.652	-.1373	-.1861	0.0487
.550	-.1682	-.2343	0.0661
.427	-.2029	-.2436	0.0407
.302	-.2054	-.1579	-.0474
.228	-.2130	-.0874	-.1256
.151	-.1846	-.1188	-.0657
.060	-.1167	-.2616	0.1449
.012	0.2316	-.3737	0.6053

Figure 554, Chordwise Pressure Distribution, Steady, Configuration 7



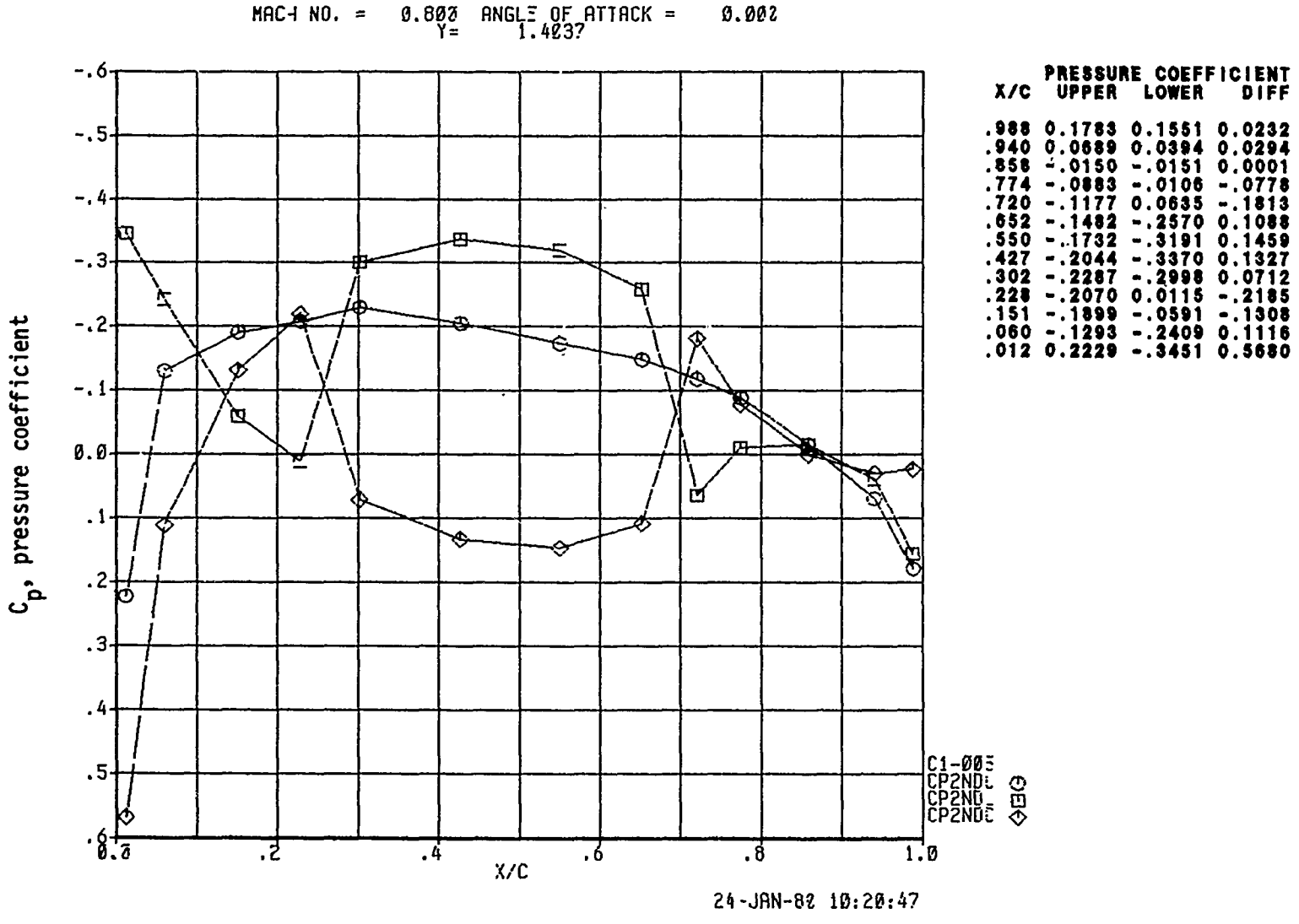
X/C	PRESSURE COEFFICIENT UPPER	LOWER	DIFF
.988	0.1812	0.1765	0.0048
.940	0.0695	0.0621	0.0074
.858	-.0160	-.0088	-.0072
.775	-.0870	-.0604	-.0266
.720	-.1298	-.1042	-.0257
.652	-.1456	-.1753	0.0297
.550	-.1791	-.2202	0.0411
.427	-.2177	-.2229	0.0051
.302	-.2255	-.1305	-.0950
.228	-.2373	-.0588	-.1785
.151	-.2200	-.0804	-.1397
.060	-.1791	-.1931	0.0139
.012	0.1115	-.2177	0.3292

Figure 555, Chordwise Pressure Distribution, Steady, Configuration 7



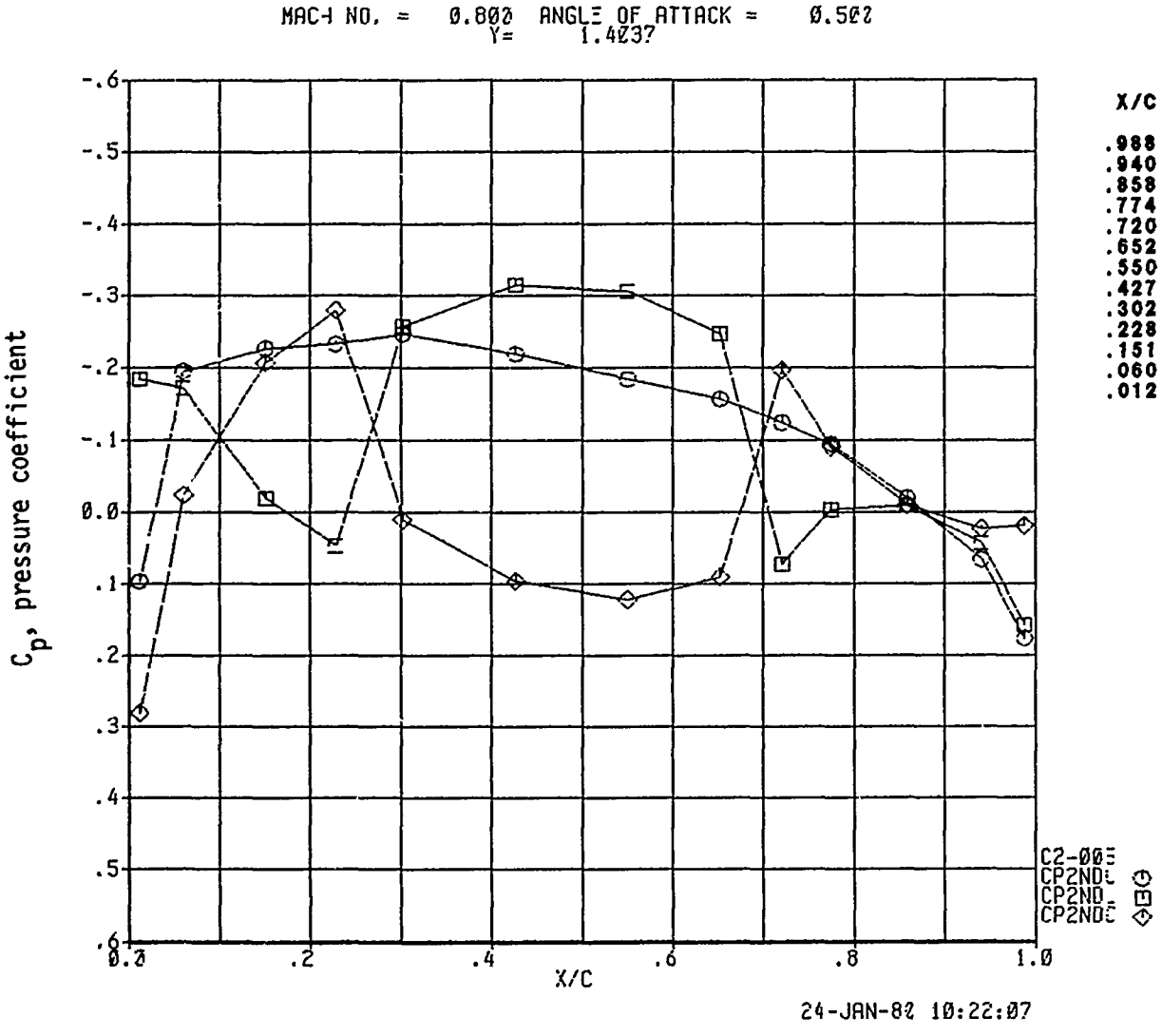
X/C	PRESSURE COEFFICIENT UPPER	LOWER	DIFF
.988	0.1849	0.1710	0.0138
.940	0.0756	0.0537	0.0219
.858	-.0069	-.0212	0.0144
.775	-.0750	-.0767	0.0016
.720	-.1160	-.1226	0.0066
.652	-.1292	-.1969	0.0677
.550	-.1576	-.2487	0.0911
.427	-.1883	-.2646	0.0763
.302	-.1855	-.1857	0.0002
.228	-.1891	-.1166	-.0725
.151	-.1496	-.1579	0.0083
.060	-.0560	-.3319	0.2759
.012	0.3434	-.5384	0.8819

Figure 556, Chordwise Pressure Distribution, Steady, Configuration 7



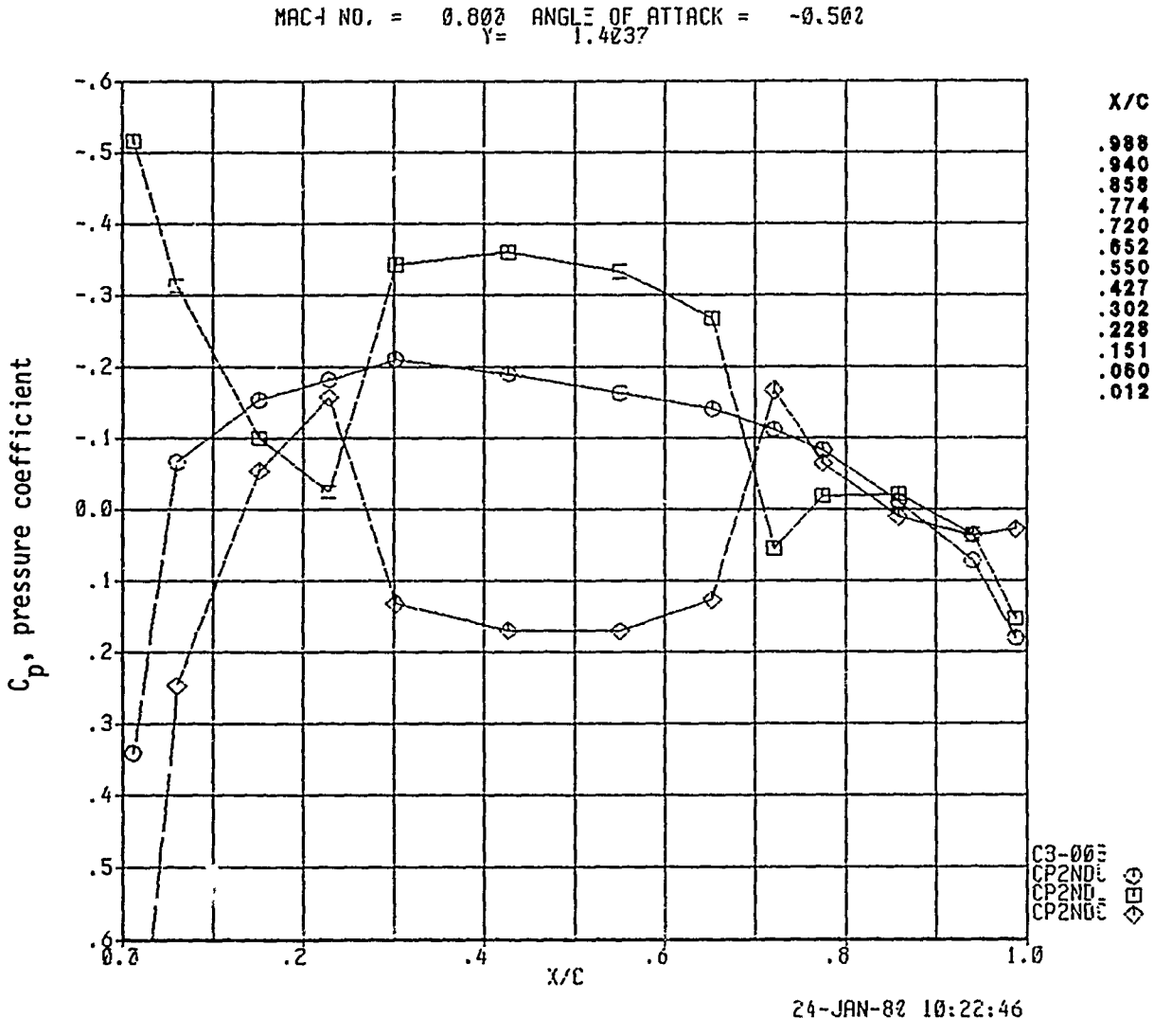
X/C	PRESSURE COEFFICIENT UPPER	LOWER	DIFF
.988	0.1783	0.1551	0.0232
.940	0.0689	0.0394	0.0294
.858	-.0150	-.0151	0.0001
.774	-.0883	-.0106	-.0778
.720	-.1177	0.0635	-.1813
.652	-.1482	-.2570	0.1088
.550	-.1732	-.3191	0.1459
.427	-.2044	-.3370	0.1327
.302	-.2287	-.2998	0.0712
.228	-.2070	0.0115	-.2185
.151	-.1899	-.0591	-.1308
.060	-.1293	-.2409	0.1116
.012	0.2229	-.3451	0.5680

Figure 557, Chordwise Pressure Distribution, Steady, Configuration 7



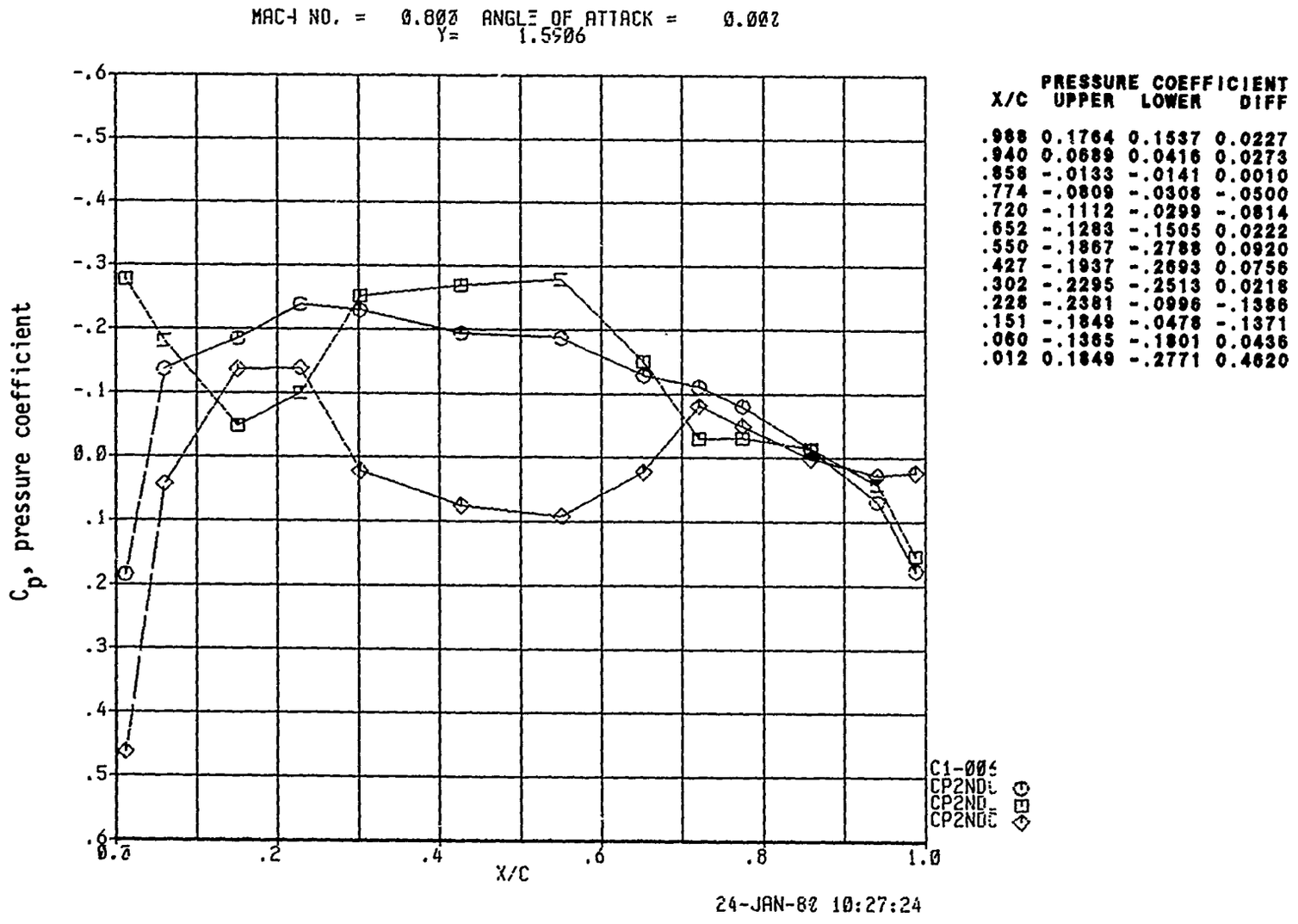
X/C	PRESSURE COEFFICIENT UPPER	LOWER	DIFF
.988	0.1762	0.1575	0.0187
.940	0.0657	0.0432	0.0225
.858	-.0196	-.0094	-.0102
.774	-.0942	-.0031	-.0910
.720	-.1243	0.0718	-.1961
.652	-.1559	-.2466	0.0906
.550	-.1836	-.3053	0.1218
.427	-.2190	-.3148	0.0958
.302	-.2470	-.2576	0.0105
.228	-.2326	0.0468	-.2794
.151	-.2267	-.0198	-.2070
.060	-.1942	-.1706	-.0236
.012	0.0967	-.1844	0.2810

Figure 558, Chordwise Pressure Distribution, Steady, Configuration 7



X/C	PRESSURE COEFFICIENT UPPER	LOWER	DIFF
.988	0.1801	0.1524	0.0276
.940	0.0717	0.0354	0.0363
.858	-.0108	-.0210	0.0102
.774	-.0827	-.0181	-.0646
.720	-.1114	0.0551	-.1665
.652	-.1407	-.2675	0.1269
.550	-.1631	-.3332	0.1700
.427	-.1900	-.3596	0.1696
.302	-.2106	-.3426	0.1320
.228	-.1817	-.0247	-.1571
.151	-.1536	-.0993	-.0543
.060	-.0661	-.3132	0.2471
.012	0.3402	-.5152	0.8555

Figure 559, Chordwise Pressure Distribution, Steady, Configuration 7



X/C	PRESSURE COEFFICIENT UPPER	LOWER	DIFF
.988	0.1764	0.1537	0.0227
.940	0.0689	0.0416	0.0273
.858	-.0133	-.0141	0.0010
.774	-.0809	-.0308	-.0500
.720	-.1112	-.0299	-.0814
.652	-.1283	-.1505	0.0222
.550	-.1867	-.2788	0.0920
.427	-.1937	-.2693	0.0756
.302	-.2295	-.2513	0.0218
.228	-.2381	-.0996	-.1386
.151	-.1849	-.0478	-.1371
.060	-.1365	-.1801	0.0436
.012	0.1849	-.2771	0.4620

Figure 560, Chordwise Pressure Distribution, Steady, Configuration 7

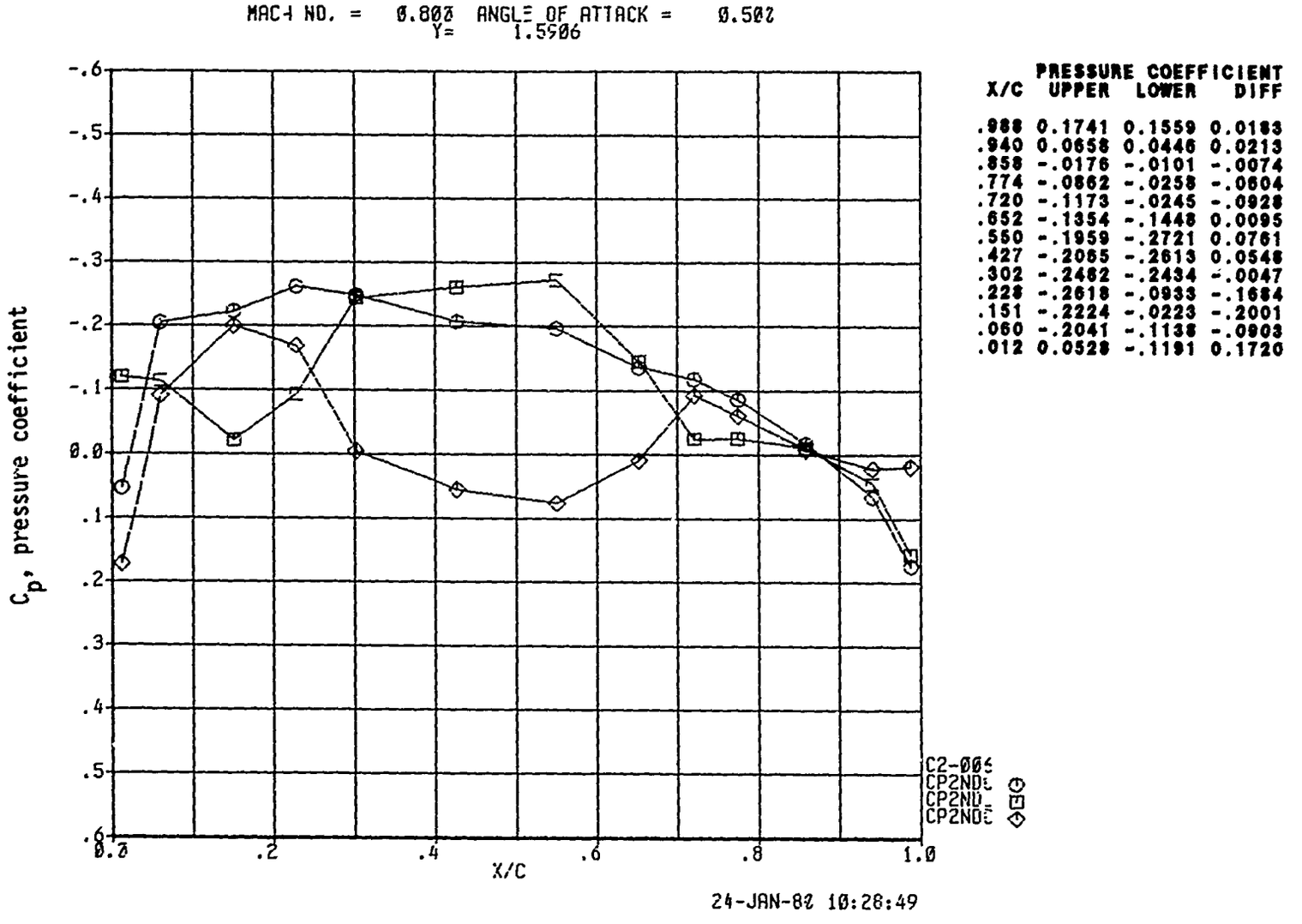
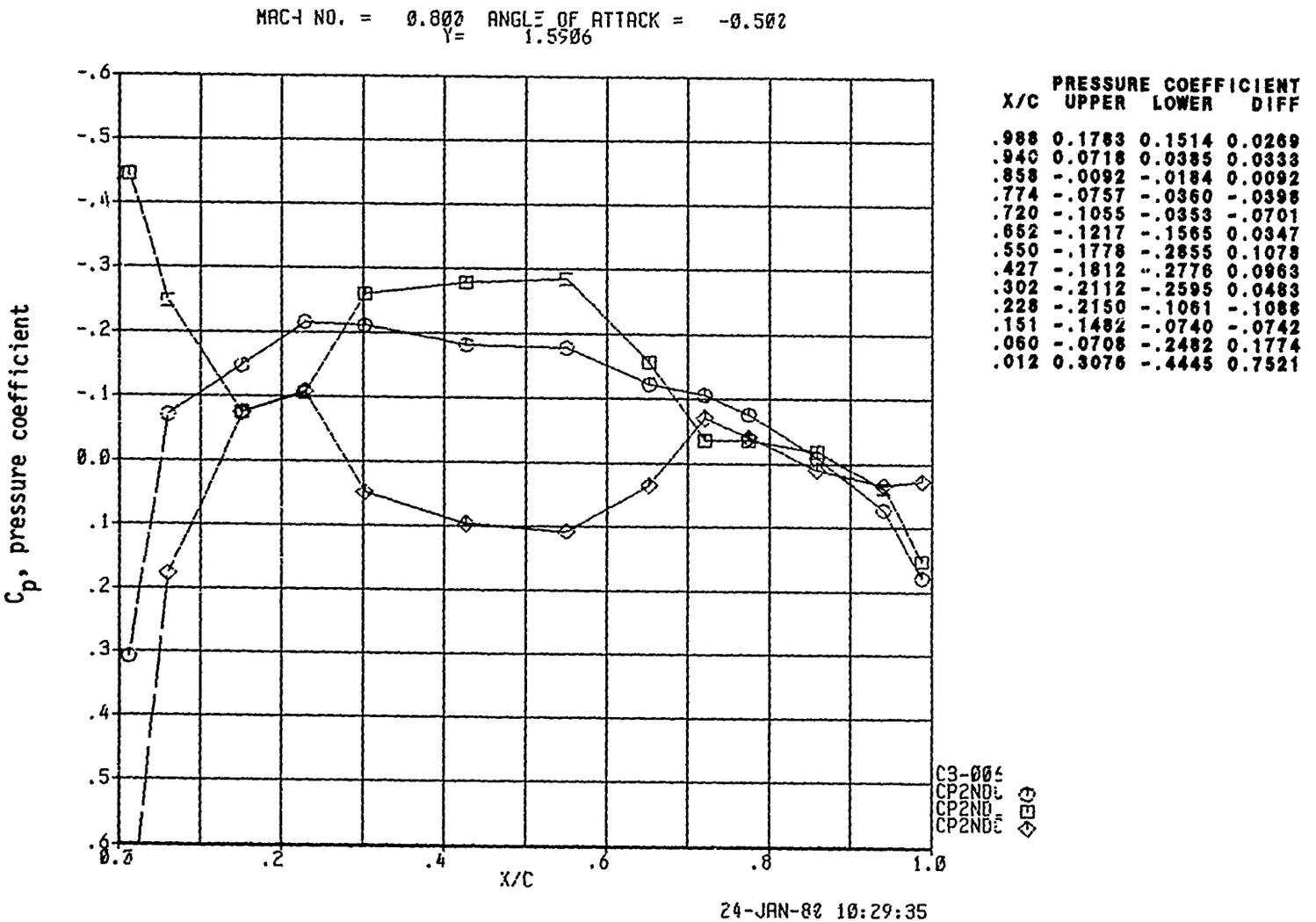
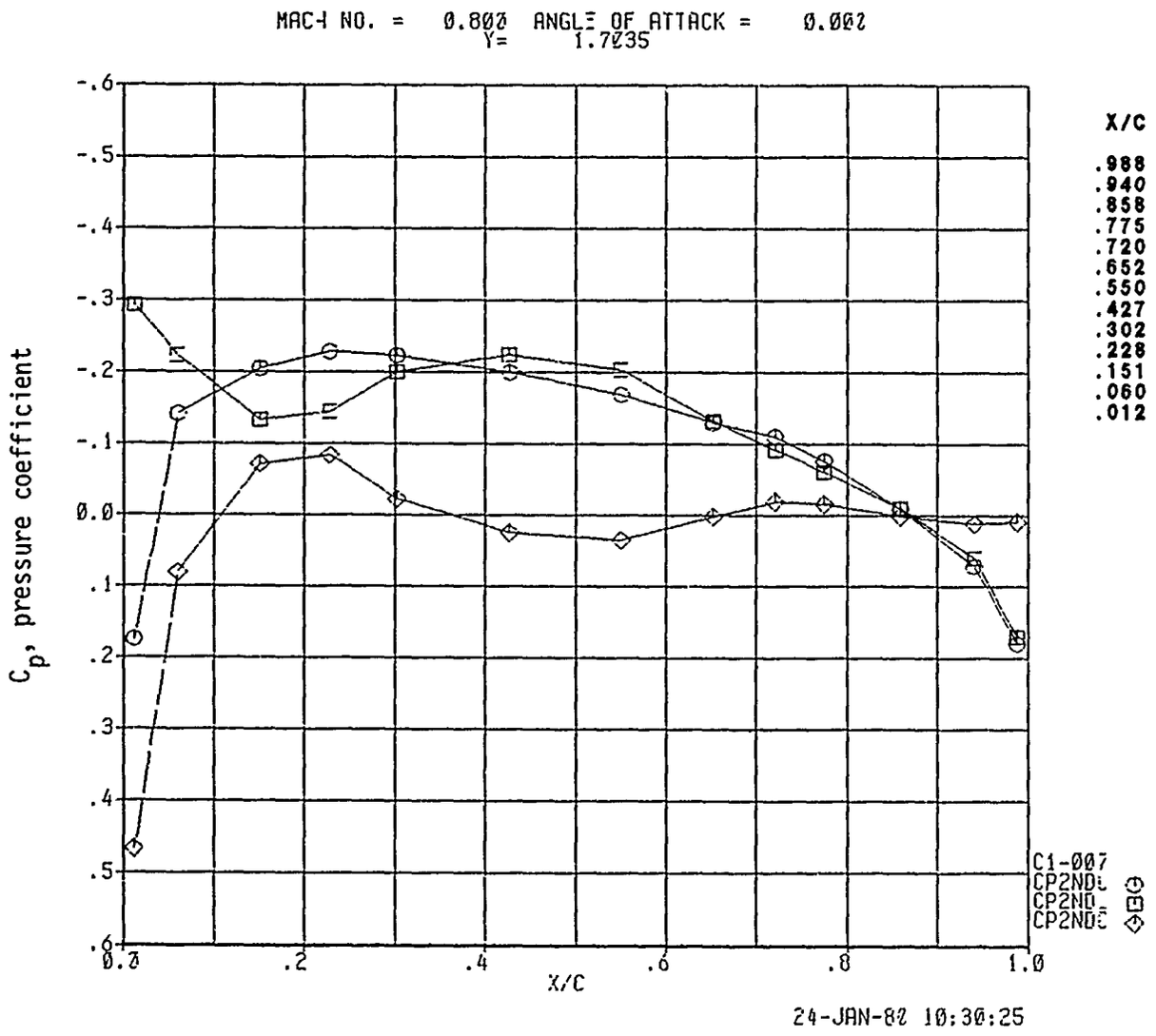


Figure 561, Chordwise Pressure Distribution, Steady, Configuration 7



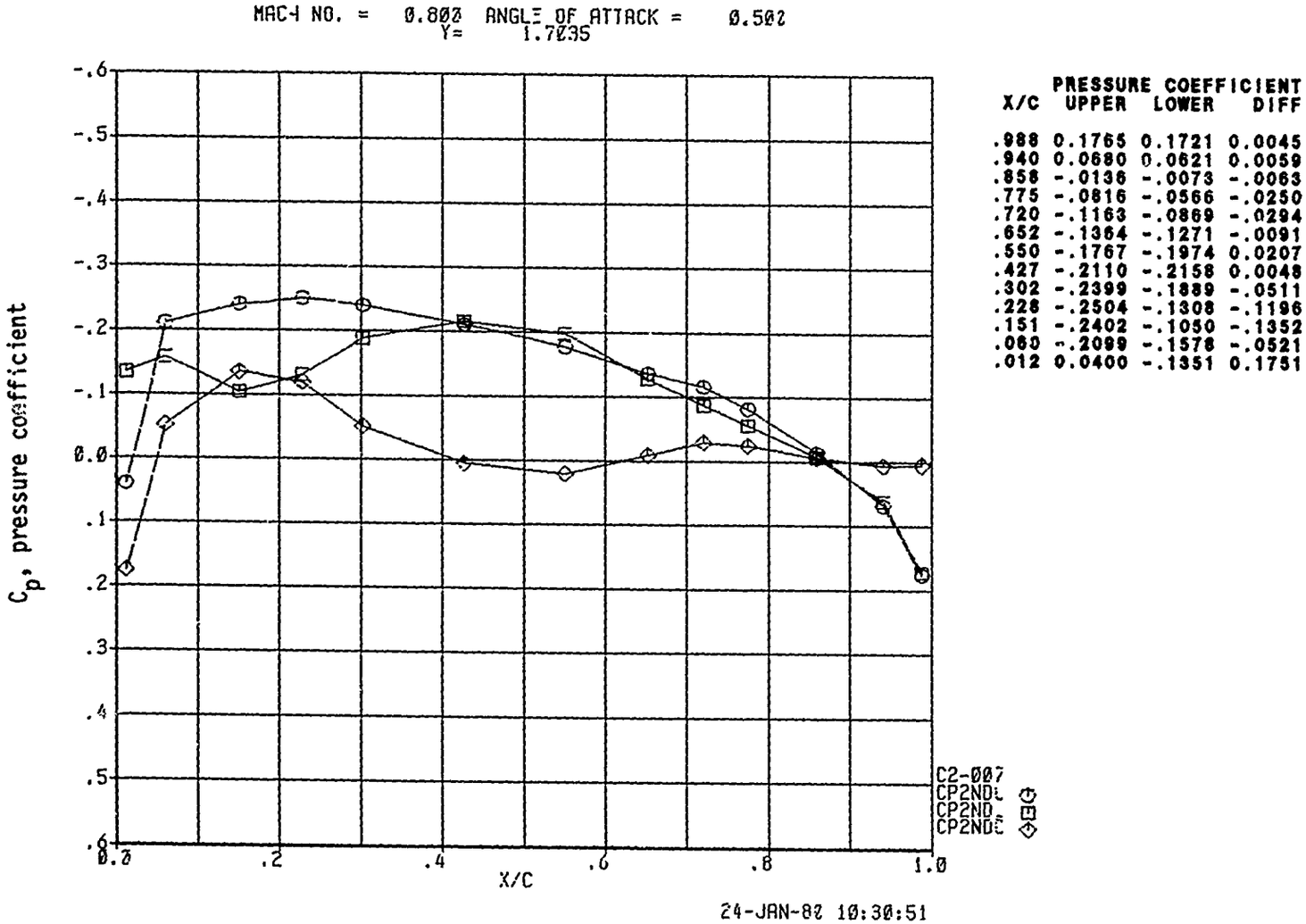
X/C	PRESSURE COEFFICIENT UPPER	LOWER	DIFF
.988	0.1783	0.1514	0.0269
.940	0.0718	0.0385	0.0333
.858	-.0092	-.0184	0.0092
.774	-.0757	-.0360	-.0398
.720	-.1055	-.0353	-.0701
.652	-.1217	-.1565	0.0347
.550	-.1778	-.2855	0.1078
.427	-.1812	-.2776	0.0963
.302	-.2112	-.2595	0.0483
.228	-.2150	-.1061	-.1088
.151	-.1482	-.0740	-.0742
.060	-.0708	-.2482	0.1774
.012	0.3076	-.4445	0.7521

Figure 562, Chordwise Pressure Distribution, Steady, Configuration 7



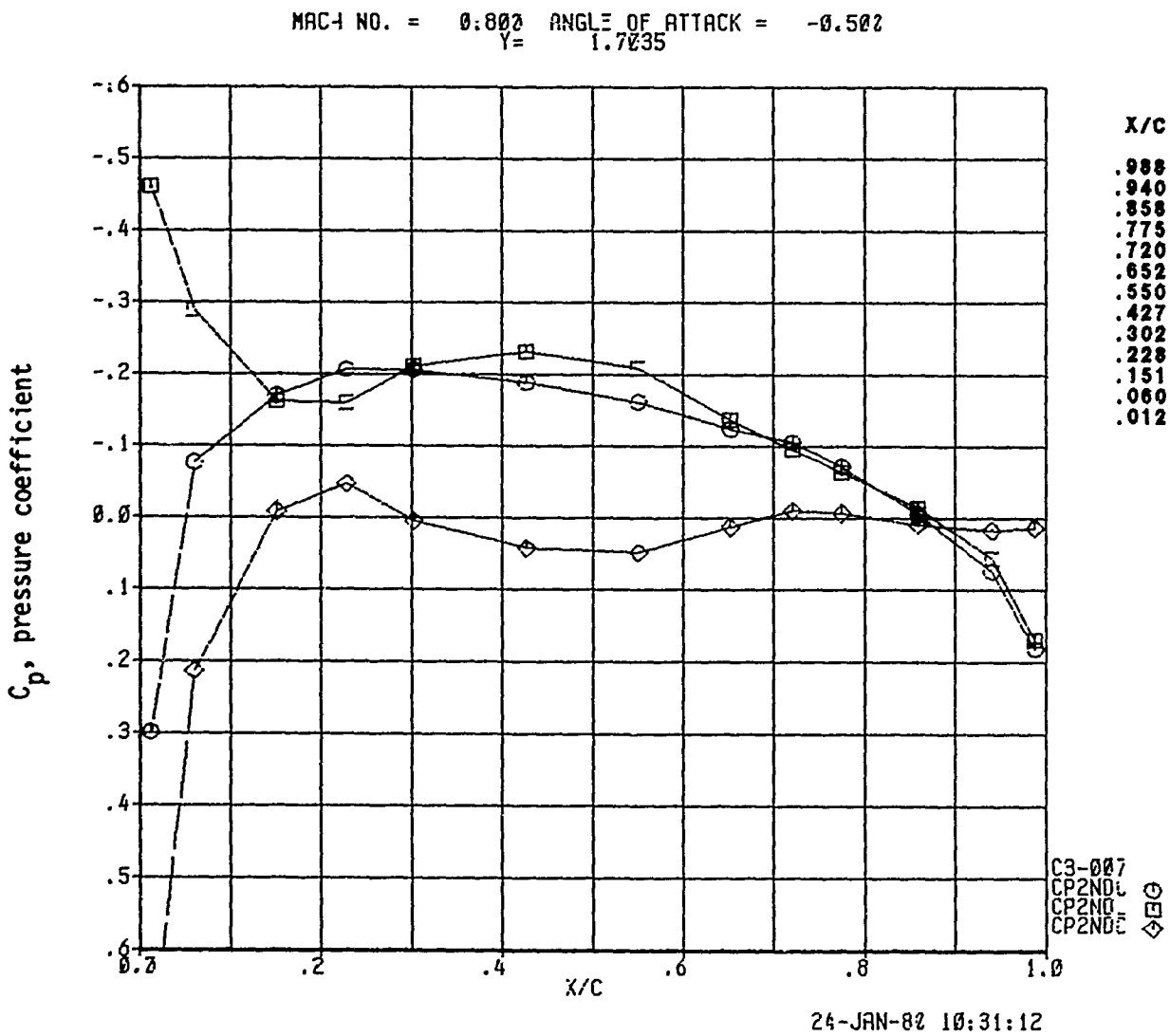
X/C	PRESSURE COEFFICIENT UPPER	LOWER	DIFF
.988	0.1791	0.1702	0.0089
.940	0.0712	0.0596	0.0116
.858	-.0095	-.0106	0.0012
.775	-.0765	-.0605	-.0160
.720	-.1108	-.0912	-.0196
.652	-.1300	-.1319	0.0019
.550	-.1686	-.2032	0.0346
.427	-.1996	-.2236	0.0240
.302	-.2229	-.2000	-.0229
.228	-.2283	-.1450	-.0832
.151	-.2045	-.1330	-.0715
.060	-.1421	-.2228	0.0807
.012	0.1740	-.2929	0.4669

Figure 563, Chordwise Pressure Distribution, Steady, Configuration 7



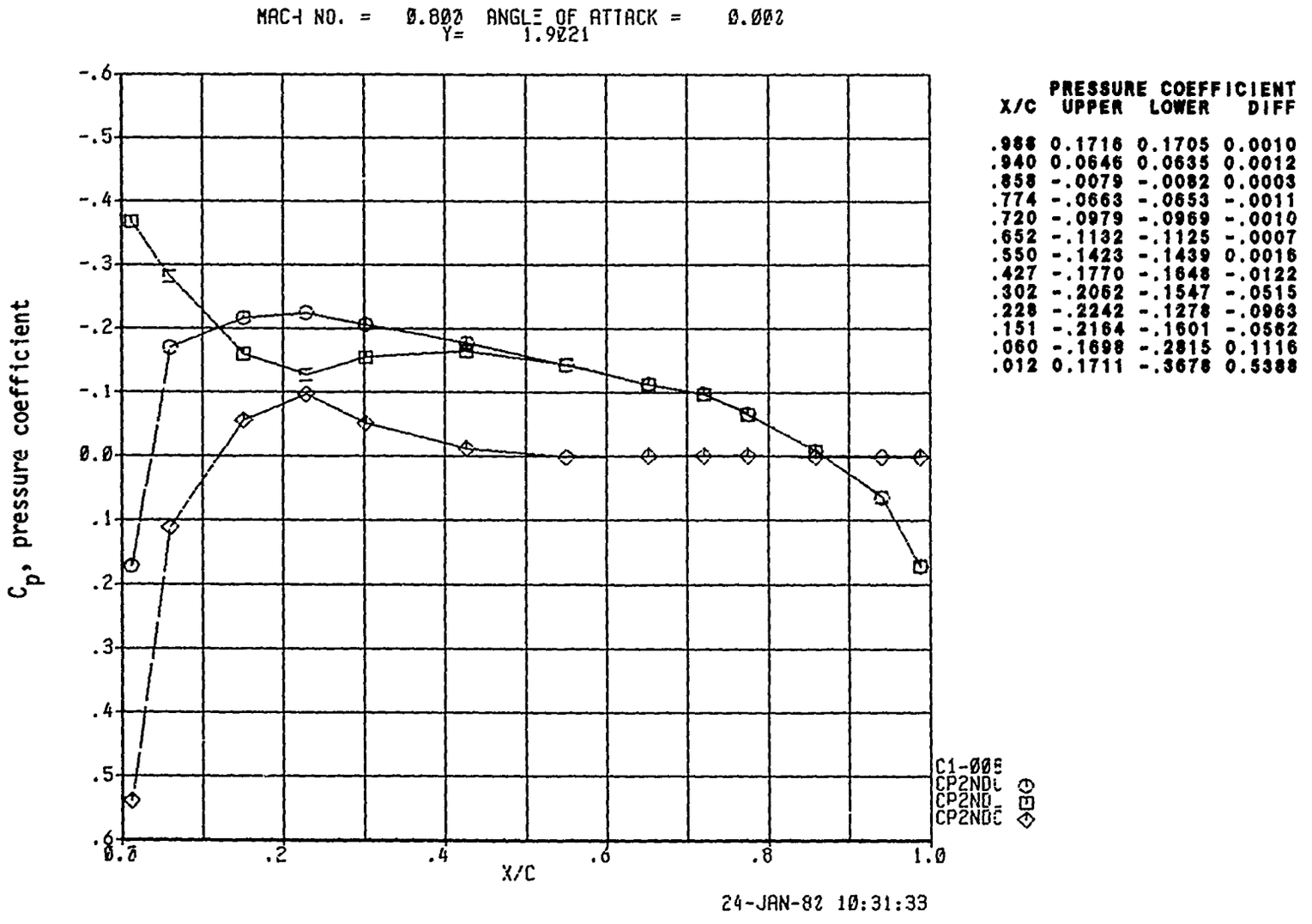
X/C	PRESSURE COEFFICIENT UPPER	LOWER	DIFF
.988	0.1765	0.1721	0.0045
.940	0.0680	0.0621	0.0059
.858	-.0136	-.0073	-.0063
.775	-.0816	-.0566	-.0250
.720	-.1163	-.0869	-.0294
.652	-.1364	-.1271	-.0091
.550	-.1767	-.1974	0.0207
.427	-.2110	-.2158	0.0048
.302	-.2399	-.1889	-.0511
.228	-.2504	-.1308	-.1196
.151	-.2402	-.1050	-.1352
.060	-.2099	-.1578	-.0521
.012	0.0400	-.1351	0.1751

Figure 564, Chordwise Pressure Distribution, Steady, Configuration 7



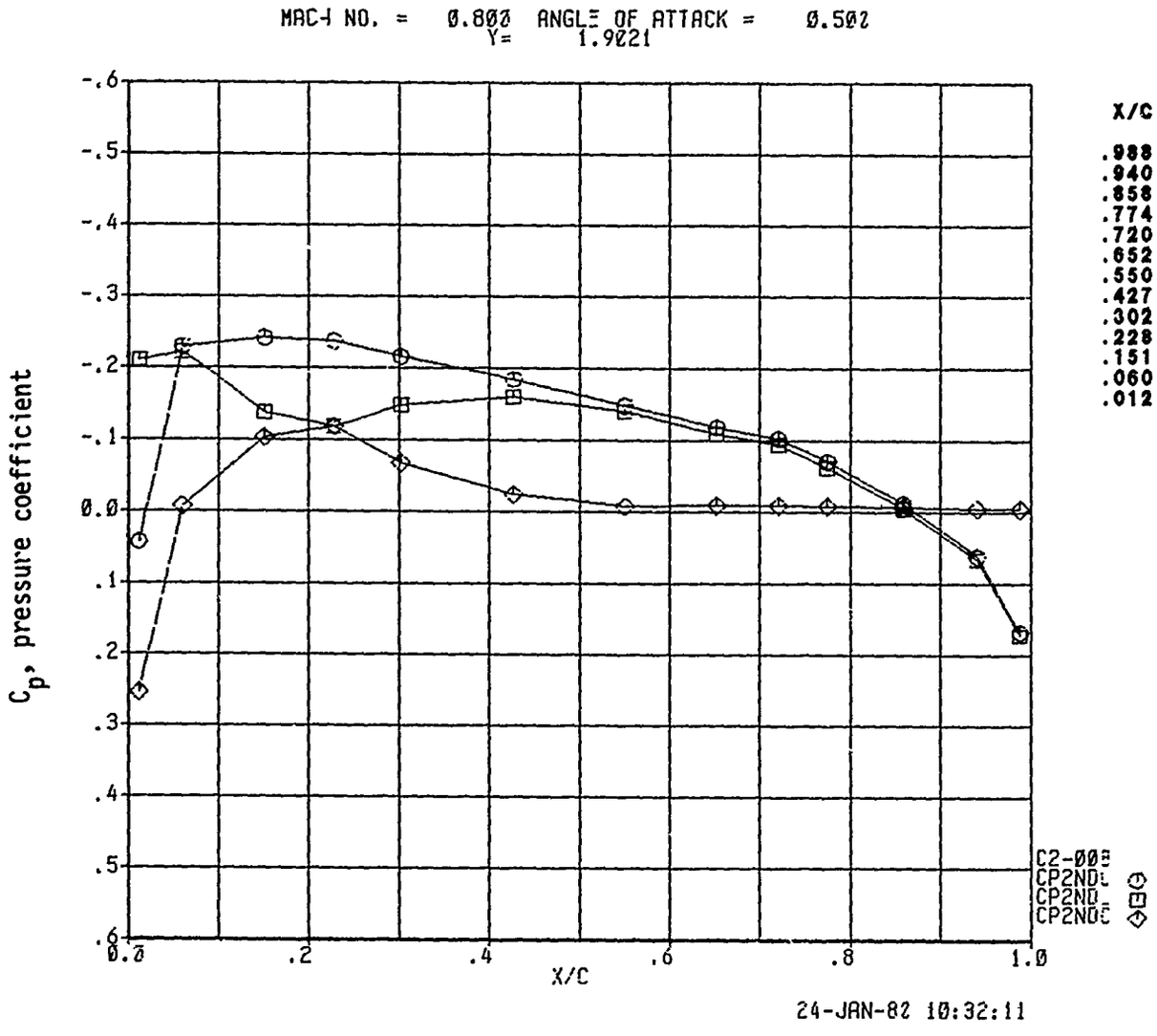
X/C	PRESSURE COEFFICIENT UPPER	LOWER	DIFF
.988	0.1812	0.1680	0.0132
.940	0.0740	0.0568	0.0171
.858	-.0056	-.0141	0.0084
.775	-.0718	-.0647	-.0072
.720	-.1056	-.0957	-.0100
.652	-.1242	-.1368	0.0127
.550	-.1609	-.2092	0.0483
.427	-.1886	-.2317	0.0431
.302	-.2062	-.2113	0.0051
.228	-.2066	-.1595	-.0470
.151	-.1695	-.1614	-.0081
.060	-.0762	-.2895	0.2133
.012	0.2981	-.4602	0.7583

Figure 565, Chordwise Pressure Distribution, Steady, Configuration 7



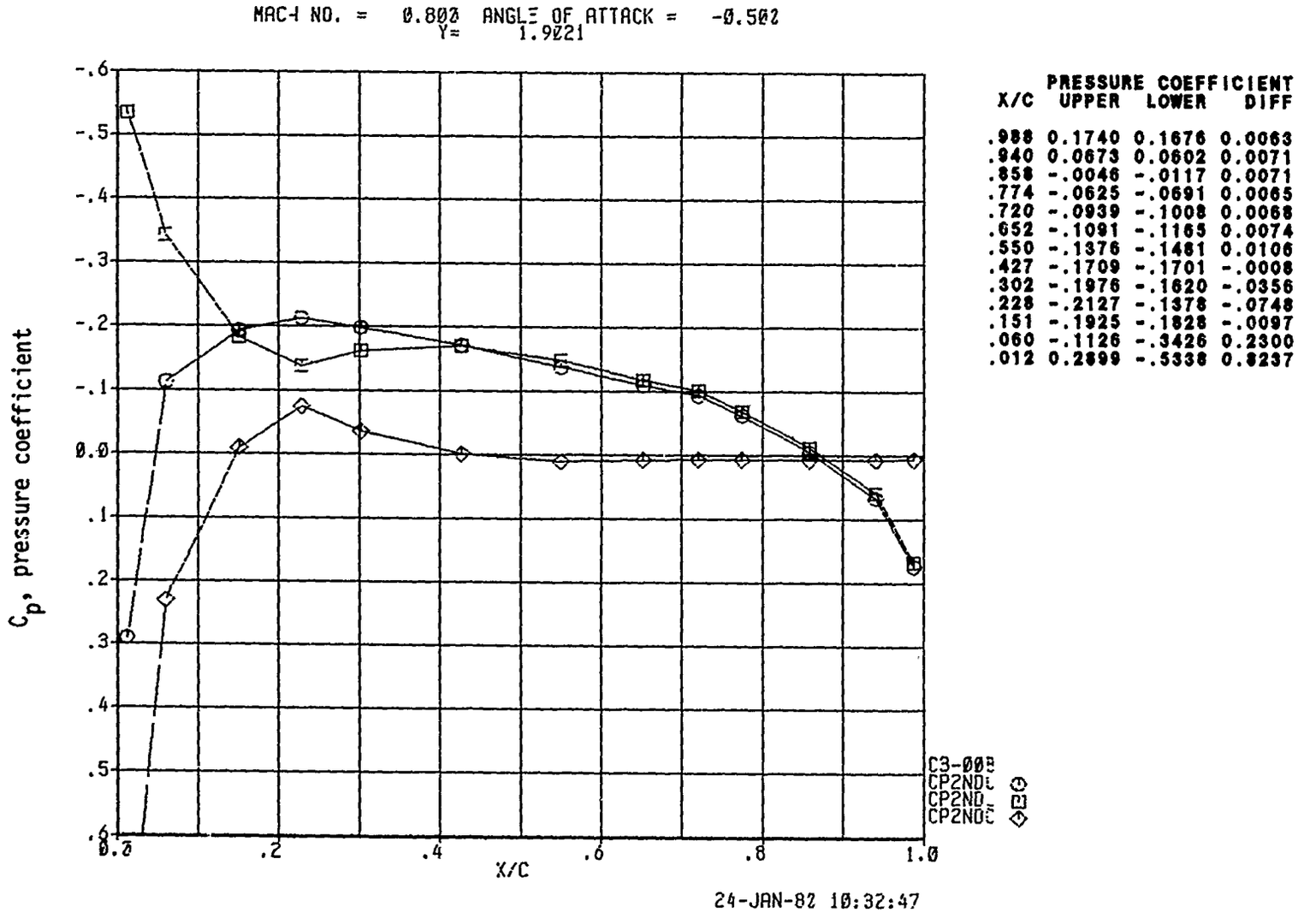
X/C	PRESSURE COEFFICIENT UPPER	LOWER	DIFF
.988	0.1716	0.1705	0.0010
.940	0.0646	0.0635	0.0012
.858	-.0079	-.0082	0.0003
.774	-.0663	-.0653	-.0011
.720	-.0979	-.0969	-.0010
.652	-.1132	-.1125	-.0007
.550	-.1423	-.1439	0.0016
.427	-.1770	-.1648	-.0122
.302	-.2062	-.1547	-.0515
.228	-.2242	-.1278	-.0963
.151	-.2164	-.1601	-.0562
.060	-.1698	-.2815	0.1116
.012	0.1711	-.3678	0.5388

Figure 566, Chordwise Pressure Distribution, Steady, Configuration 7



X/C	PRESSURE COEFFICIENT UPPER	LOWER	DIFF
.988	0.1683	0.1727	-.0044
.940	0.0609	0.0659	-.0050
.858	-.0122	-.0053	-.0069
.774	-.0709	-.0621	-.0088
.720	-.1027	-.0937	-.0091
.652	-.1182	-.1093	-.0089
.550	-.1478	-.1402	-.0076
.427	-.1839	-.1602	-.0237
.302	-.2156	-.1480	-.0675
.228	-.2365	-.1185	-.1181
.151	-.2409	-.1381	-.1029
.060	-.2289	-.2219	-.0070
.012	0.0428	-.2107	0.2535

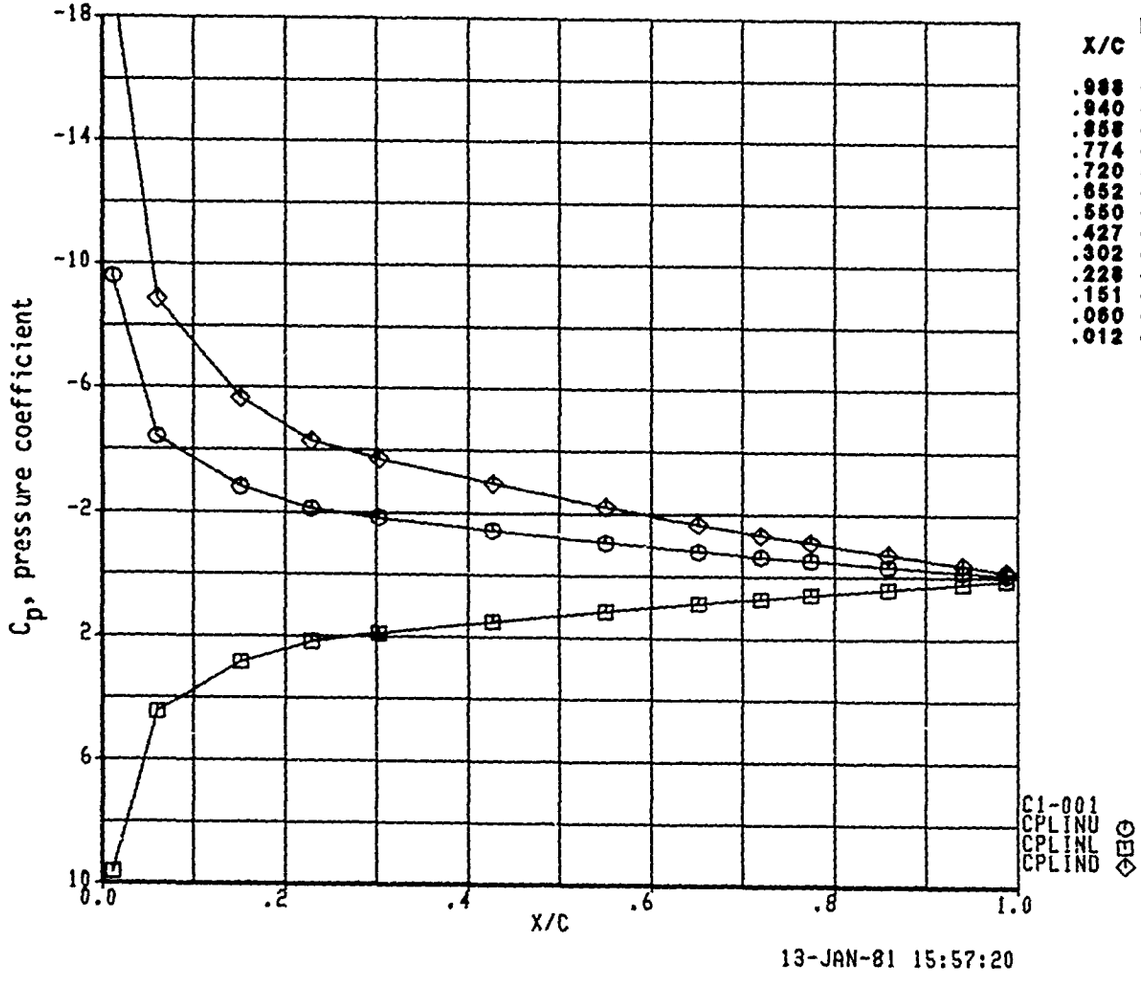
Figure 567, Chordwise Pressure Distribution, Steady, Configuration 7



X/C	PRESSURE COEFFICIENT UPPER	LOWER	DIFF
.988	0.1740	0.1676	0.0063
.940	0.0673	0.0602	0.0071
.858	-.0046	-.0117	0.0071
.774	-.0625	-.0691	0.0065
.720	-.0939	-.1008	0.0068
.652	-.1091	-.1165	0.0074
.550	-.1376	-.1481	0.0106
.427	-.1709	-.1701	-.0008
.302	-.1976	-.1620	-.0356
.228	-.2127	-.1378	-.0748
.151	-.1925	-.1828	-.0097
.060	-.1126	-.3426	0.2300
.012	0.2899	-.5338	0.8237

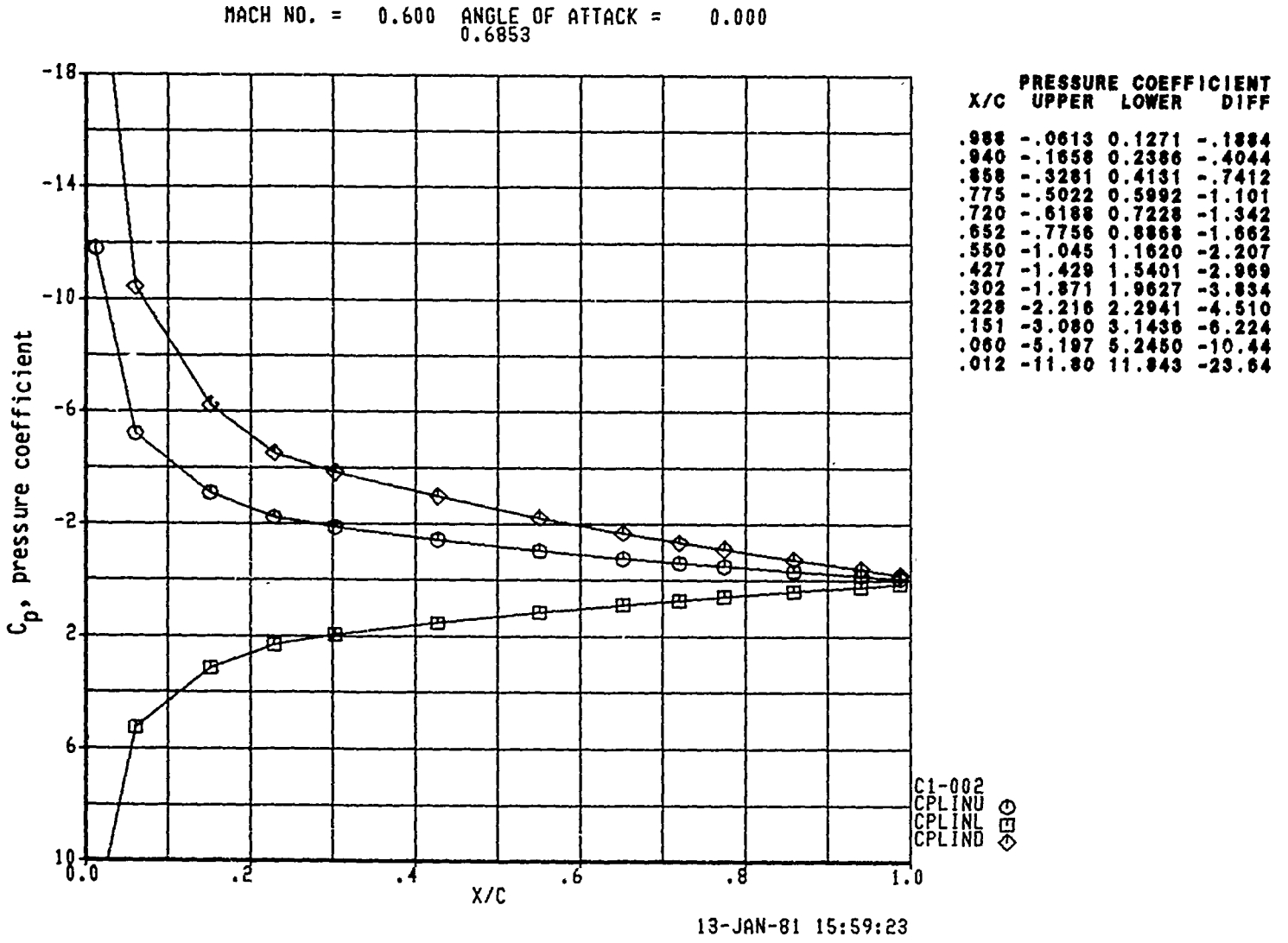
Figure 568, Chordwise Pressure Distribution, Steady, Configuration 7

MACH NO. = 0.600 ANGLE OF ATTACK = 0.000
0.3524



X/C	PRESSURE COEFFICIENT UPPER	LOWER	DIFF
.988	-.0591	0.1140	-.1729
.940	-.1595	0.2190	-.3785
.858	-.3258	0.3931	-.7188
.774	-.5098	0.5839	-1.094
.720	-.6323	0.7098	-1.342
.652	-.7941	0.8742	-1.668
.550	-1.067	1.1465	-2.213
.427	-1.436	1.5090	-2.945
.302	-1.831	1.8919	-3.723
.228	-2.115	2.1671	-4.282
.151	-2.806	2.8496	-5.655
.060	-4.405	4.4402	-8.846
.012	-9.578	9.6085	-19.19

Figure [illegible]. Cp vs x/c Pressure Distribution, Peal Configuration 7



X/C	PRESSURE COEFFICIENT UPPER	LOWER	DIFF
.988	-.0613	0.1271	-.1884
.940	-.1658	0.2386	-.4044
.858	-.3281	0.4131	-.7412
.775	-.5022	0.5992	-1.101
.720	-.6188	0.7228	-1.342
.652	-.7756	0.8868	-1.662
.550	-1.045	1.1620	-2.207
.427	-1.429	1.5401	-2.969
.302	-1.871	1.9627	-3.834
.228	-2.216	2.2941	-4.510
.151	-3.080	3.1436	-6.224
.060	-5.197	5.2450	-10.44
.012	-11.80	11.843	-23.64

Figure 570, Chordwise Pressure Distribution, Real Configuration 7

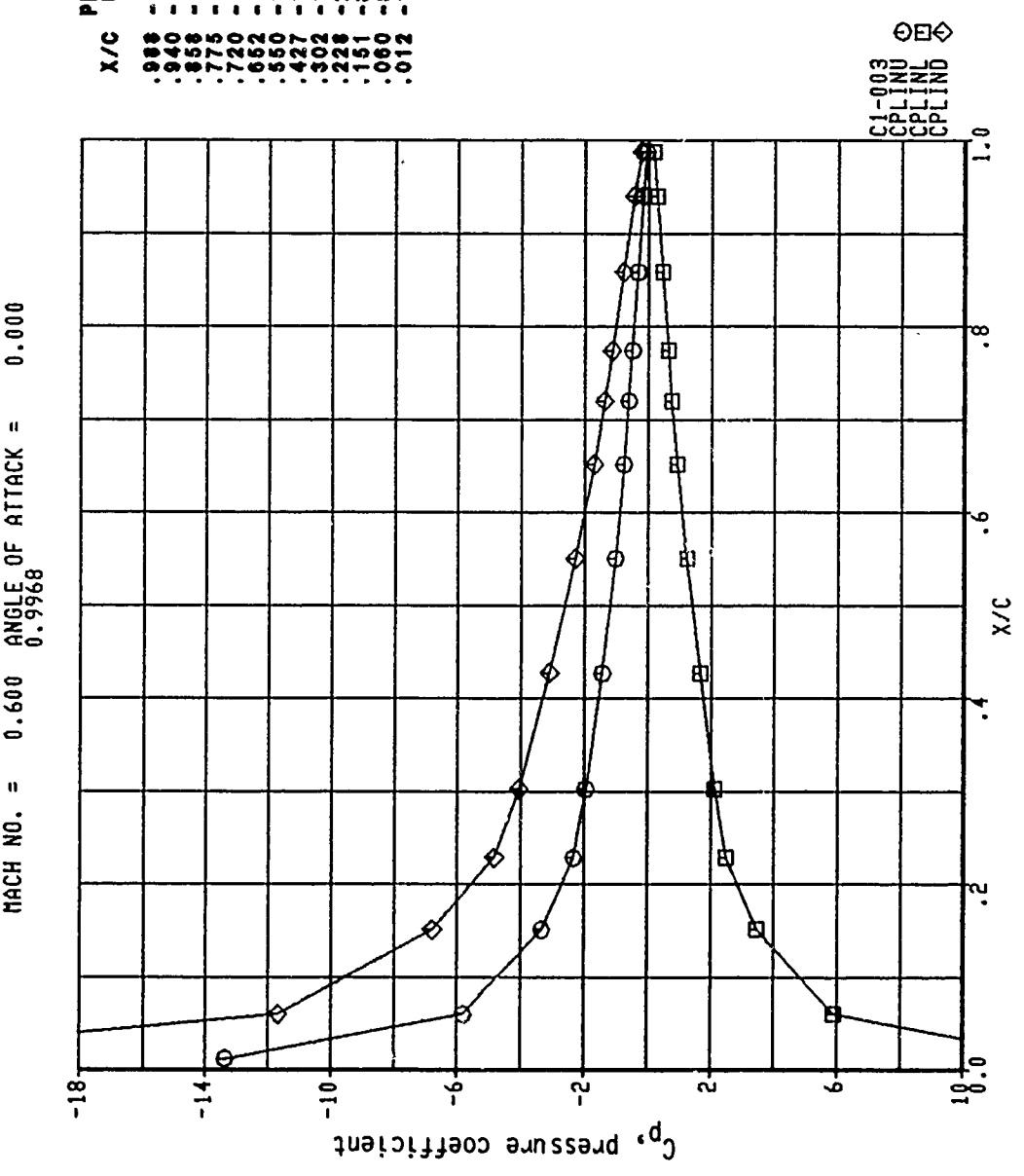
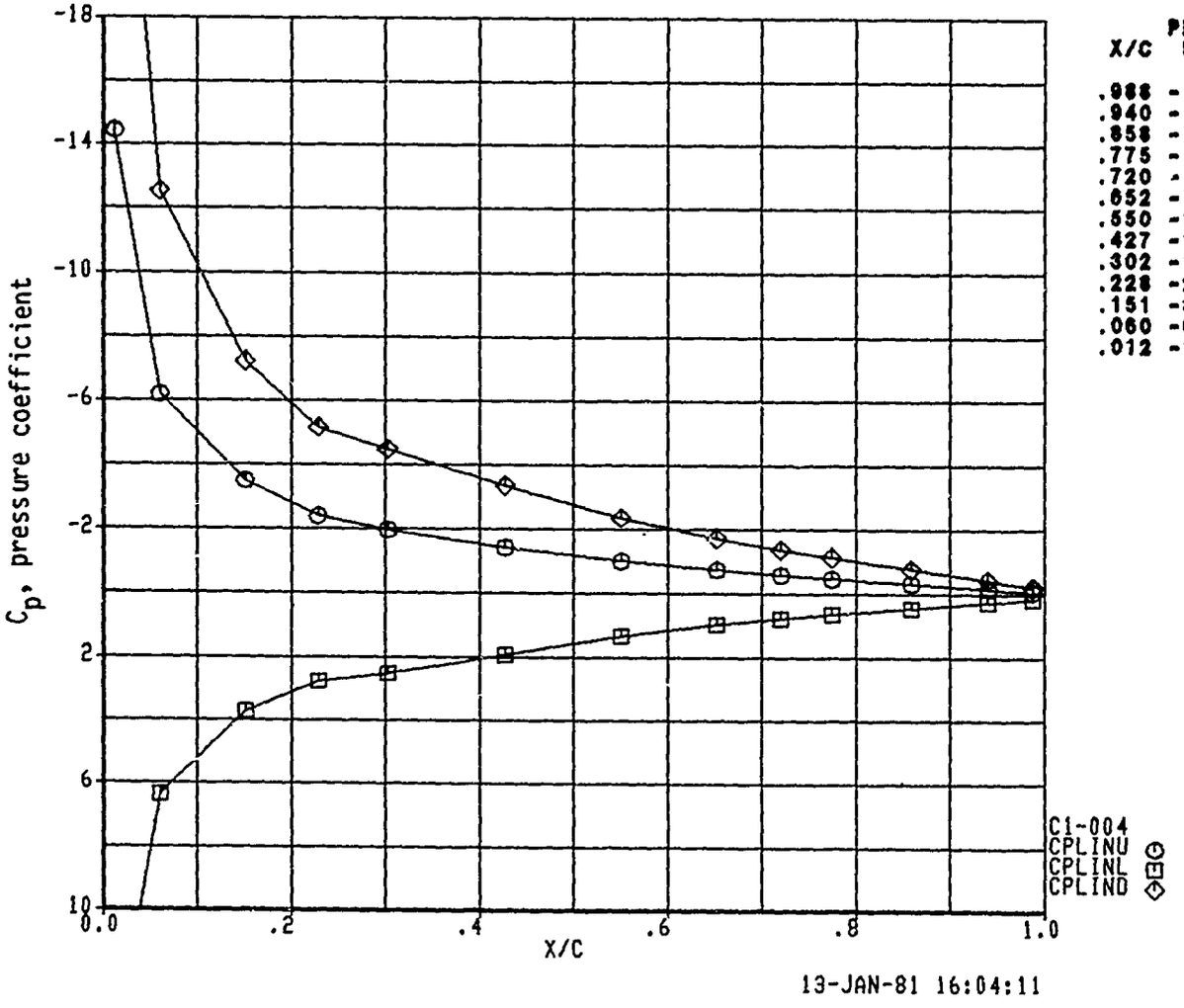


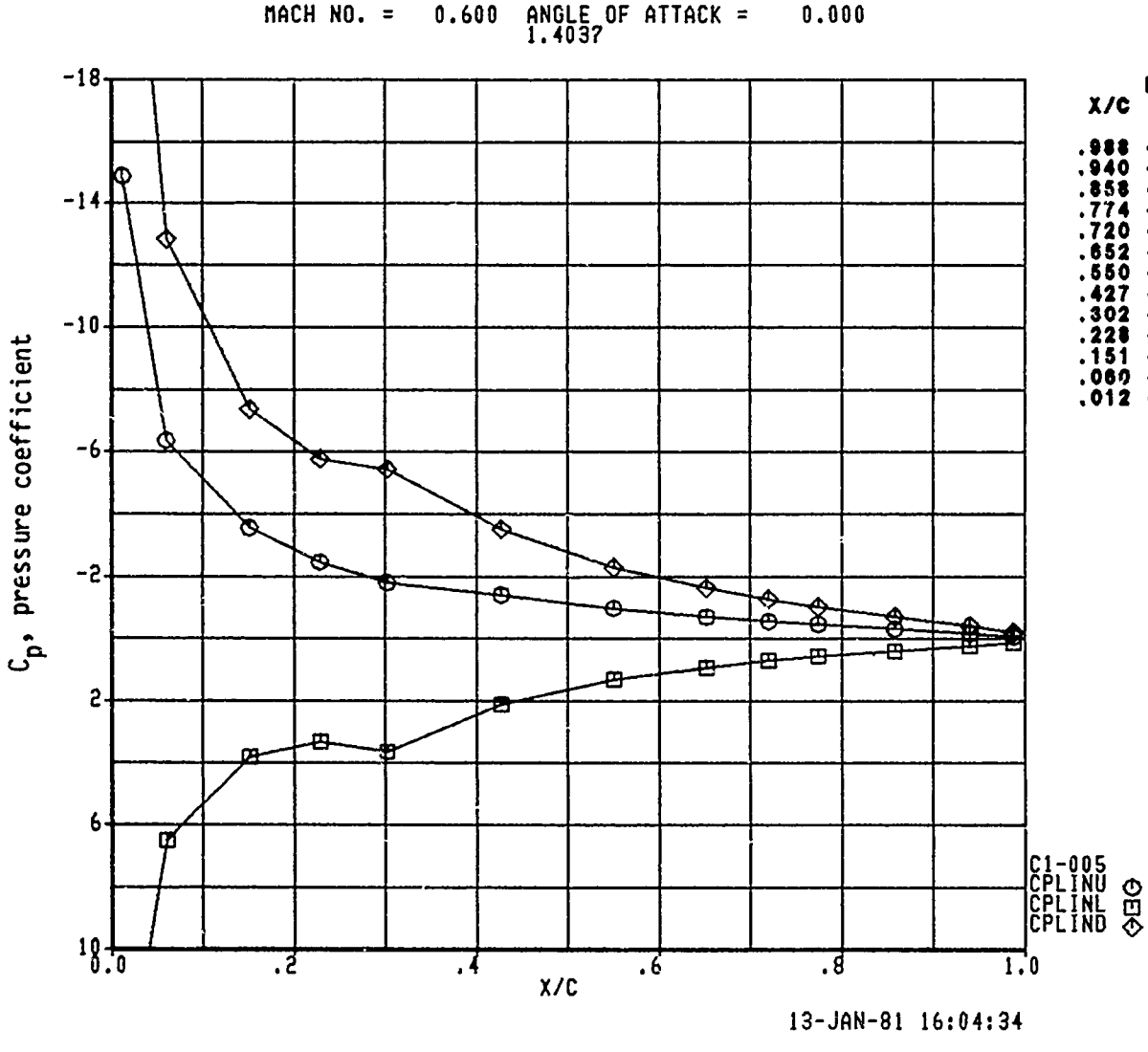
Figure 571, Chordwise Pressure Distribution, Real Configuration 7

MACH NO. = 0.600 ANGLE OF ATTACK = 0.000
1.2479



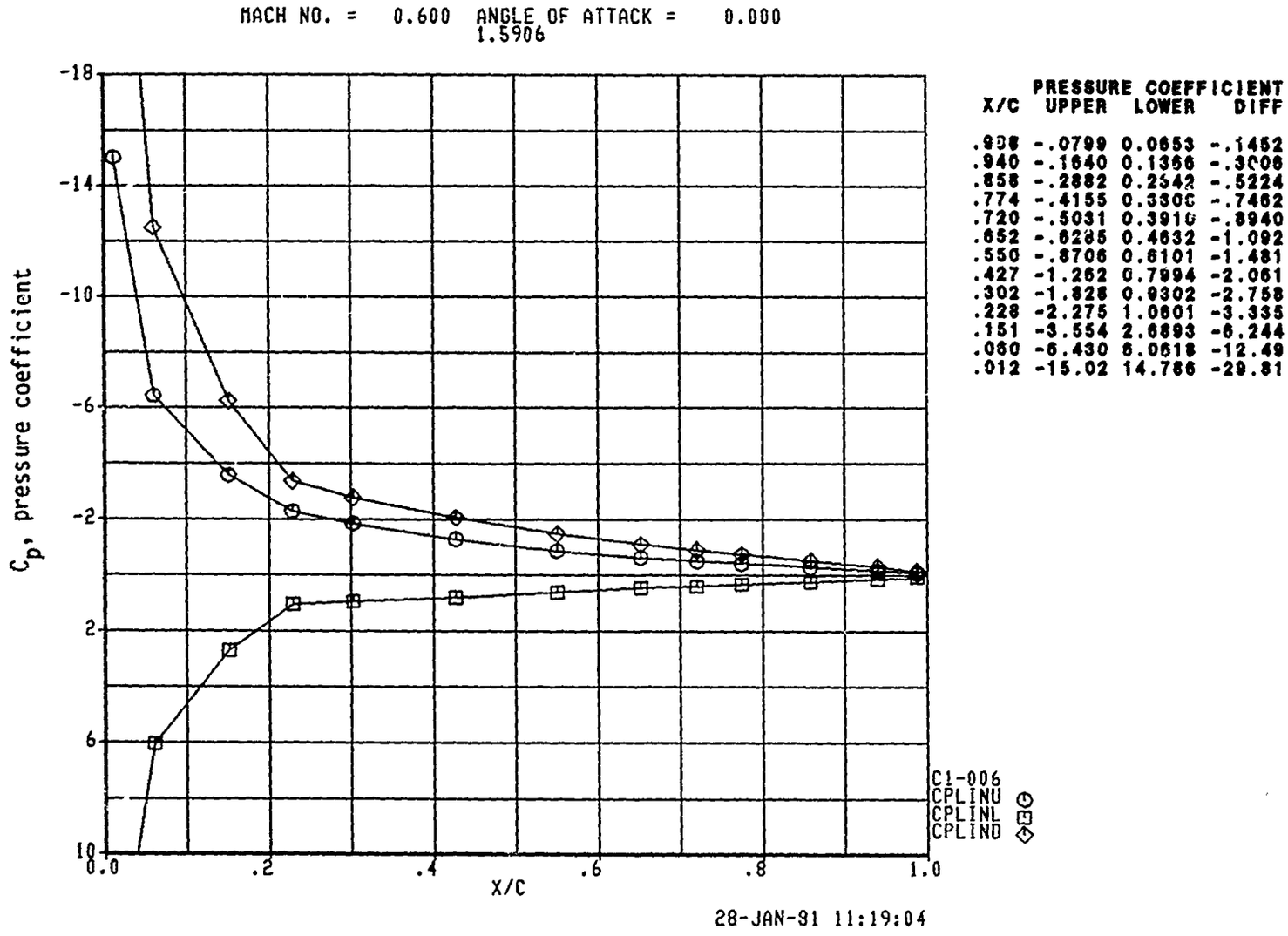
X/C	PRESSURE COEFFICIENT UPPER	LOWER	DIFF
.988	-.0625	0.1537	-.2162
.940	-.1669	0.2731	-.4420
.858	-.3180	0.4476	-.7655
.775	-.4769	0.6414	-1.120
.720	-.5920	0.7816	-1.374
.652	-.7424	0.9739	-1.716
.550	-1.009	1.3341	-2.343
.427	-1.422	1.9283	-3.351
.302	-1.967	2.5195	-4.486
.228	-2.380	2.7731	-5.153
.151	-3.477	3.7229	-7.200
.060	-6.195	6.3444	-12.54
.012	-14.45	14.569	-29.02

Figure 572, Chordwise Pressure Distribution, Real Configuration 7



X/C	PRESSURE COEFFICIENT UPPER	LOWER	DIFF
.988	-.0656	0.1326	-.1982
.940	-.1668	0.2388	-.4056
.858	-.3096	0.3928	-.7024
.774	-.4600	0.5634	-1.023
.720	-.5629	0.6979	-1.261
.652	-.7047	0.9225	-1.627
.550	-.9731	1.3105	-2.284
.427	-1.407	2.1122	-3.520
.302	-1.798	3.6491	-5.447
.228	-2.441	3.3224	-5.763
.151	-3.553	3.8158	-7.368
.060	-6.359	6.4870	-12.85
.012	-14.89	14.991	-29.88

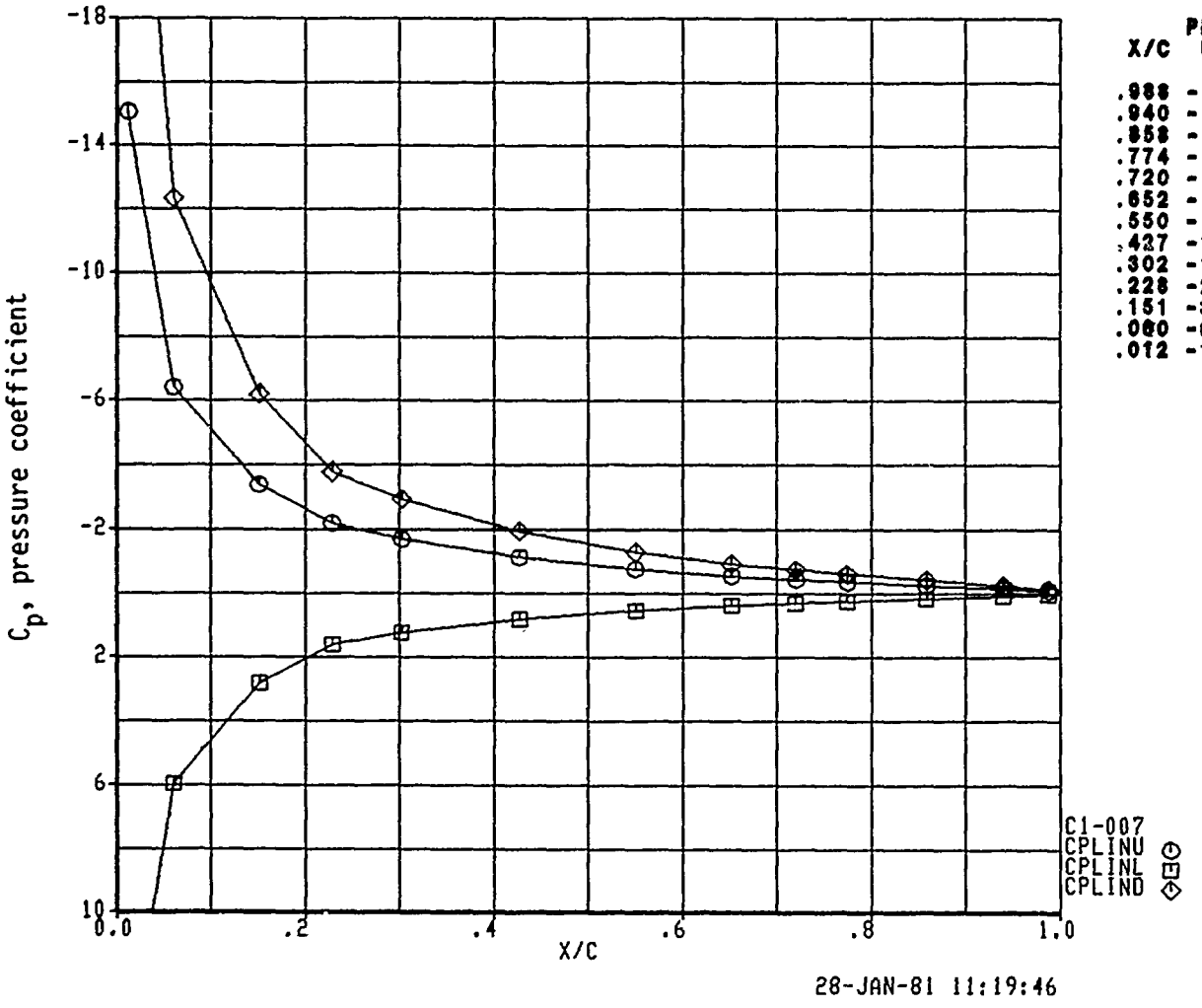
Figure 573, Chordwise Pressure Distribution, Real Configuration 7



X/C	PRESSURE COEFFICIENT UPPER	LOWER	DIFF
.938	-.0799	0.0653	-.1452
.940	-.1640	0.1366	-.3006
.858	-.2882	0.2342	-.5224
.774	-.4155	0.3308	-.7462
.720	-.5031	0.3910	-.8940
.652	-.6285	0.4632	-1.092
.550	-.8706	0.6101	-1.481
.427	-1.262	0.7994	-2.061
.302	-1.828	0.9302	-2.758
.228	-2.275	1.0601	-3.335
.151	-3.554	2.6893	-6.244
.060	-6.430	6.0618	-12.49
.012	-15.02	14.786	-29.81

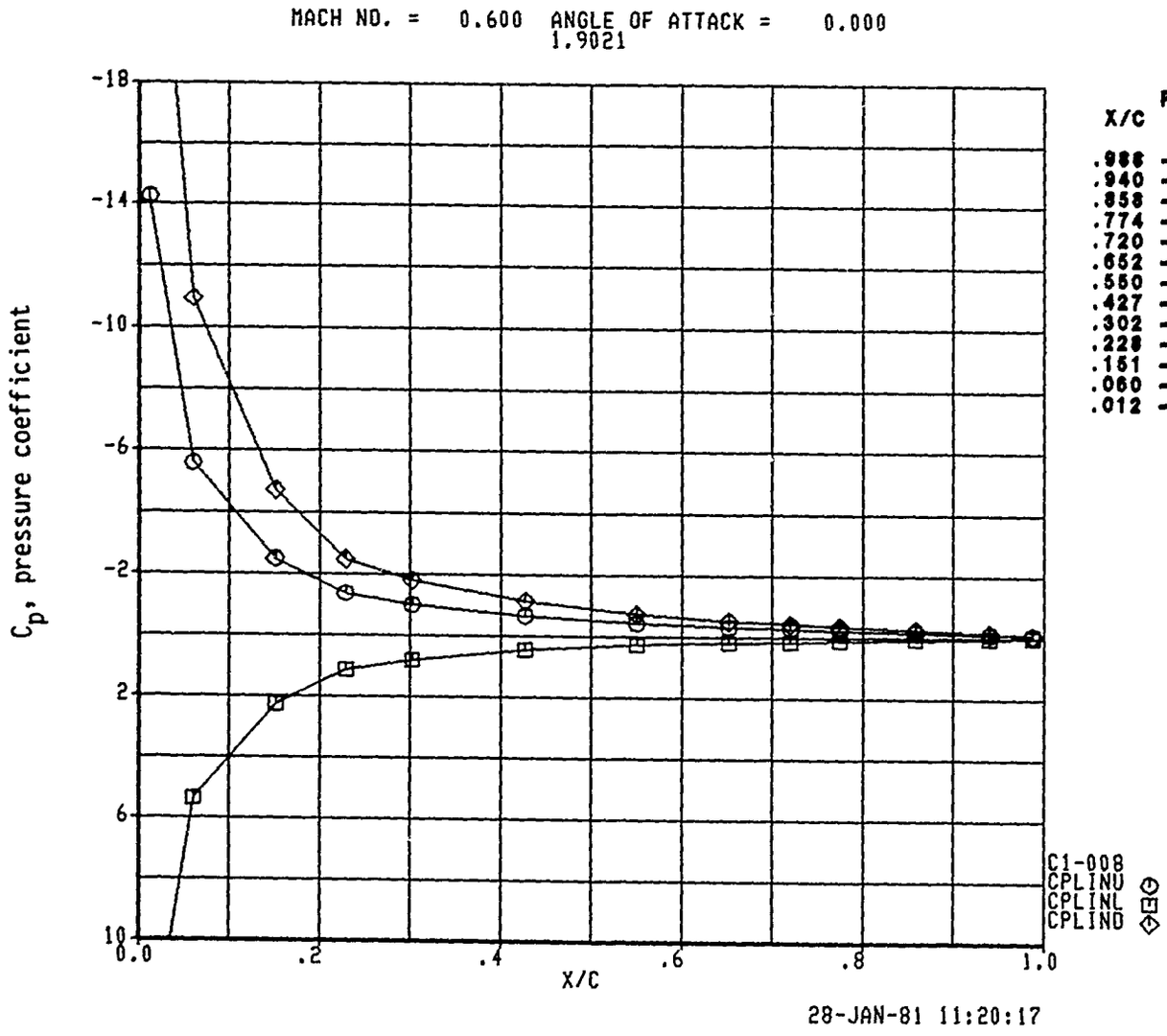
Figure 57c, Chordwise Pressure Distribution, Real Configuration 7

MACH NO. = 0.600 ANGLE OF ATTACK = 0.000
1.7035



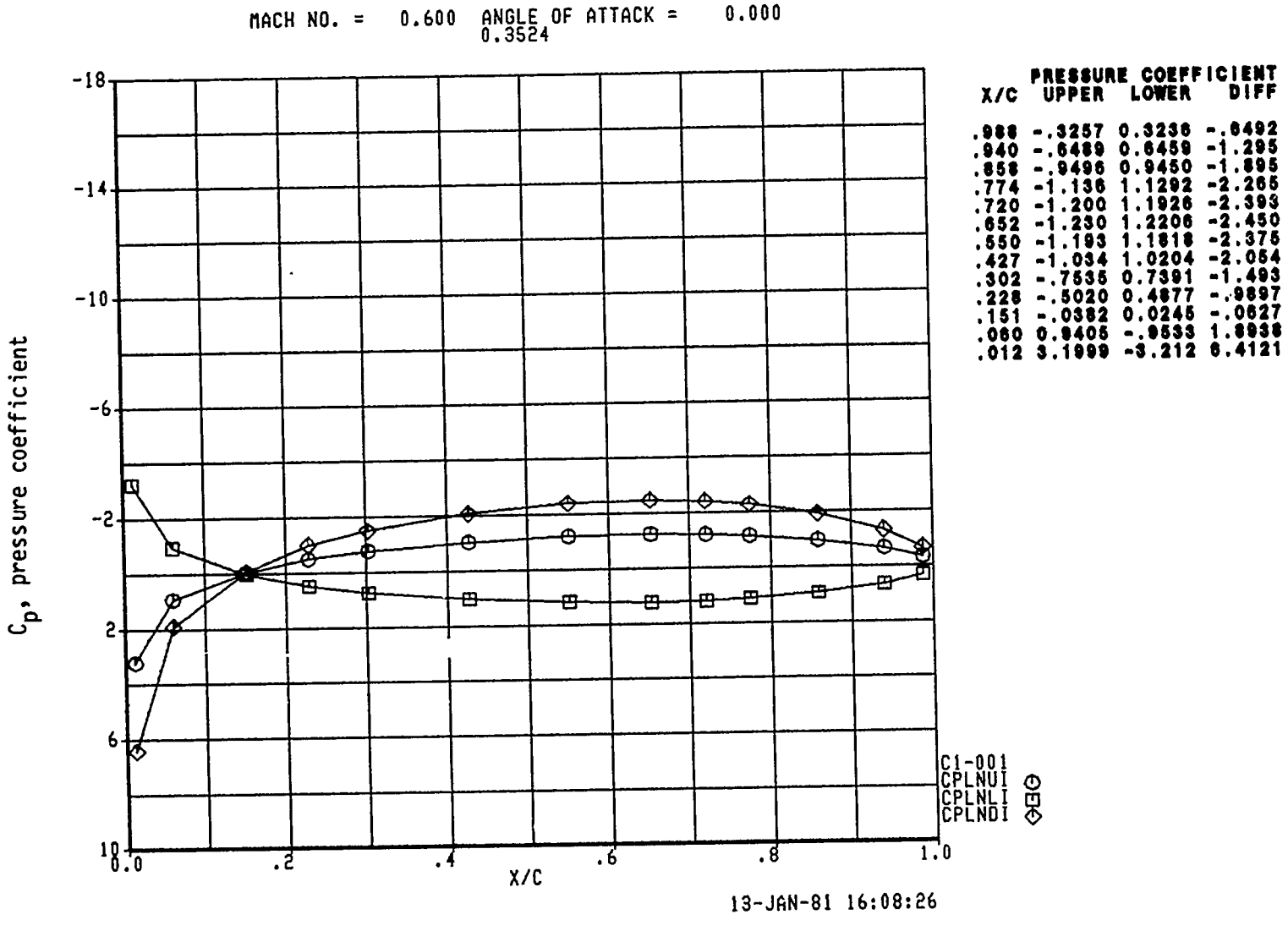
X/C	PRESSURE COEFFICIENT UPPER	LOWER	DIFF
.988	-.0853	0.0301	-.1154
.940	-.1550	0.0862	-.2413
.858	-.2577	0.1630	-.4207
.774	-.3650	0.2423	-.6073
.720	-.4421	0.2998	-.7419
.652	-.5467	0.3759	-.9226
.550	-.7571	0.5351	-1.292
.427	-1.125	0.8099	-1.935
.302	-1.694	1.2283	-2.922
.228	-2.168	1.6061	-3.774
.151	-3.380	2.8254	-6.206
.080	-6.400	5.9585	-12.36
.012	-15.07	14.692	-29.76

Figure 575, Chordwise Pressure Distribution, Real Configuration 7



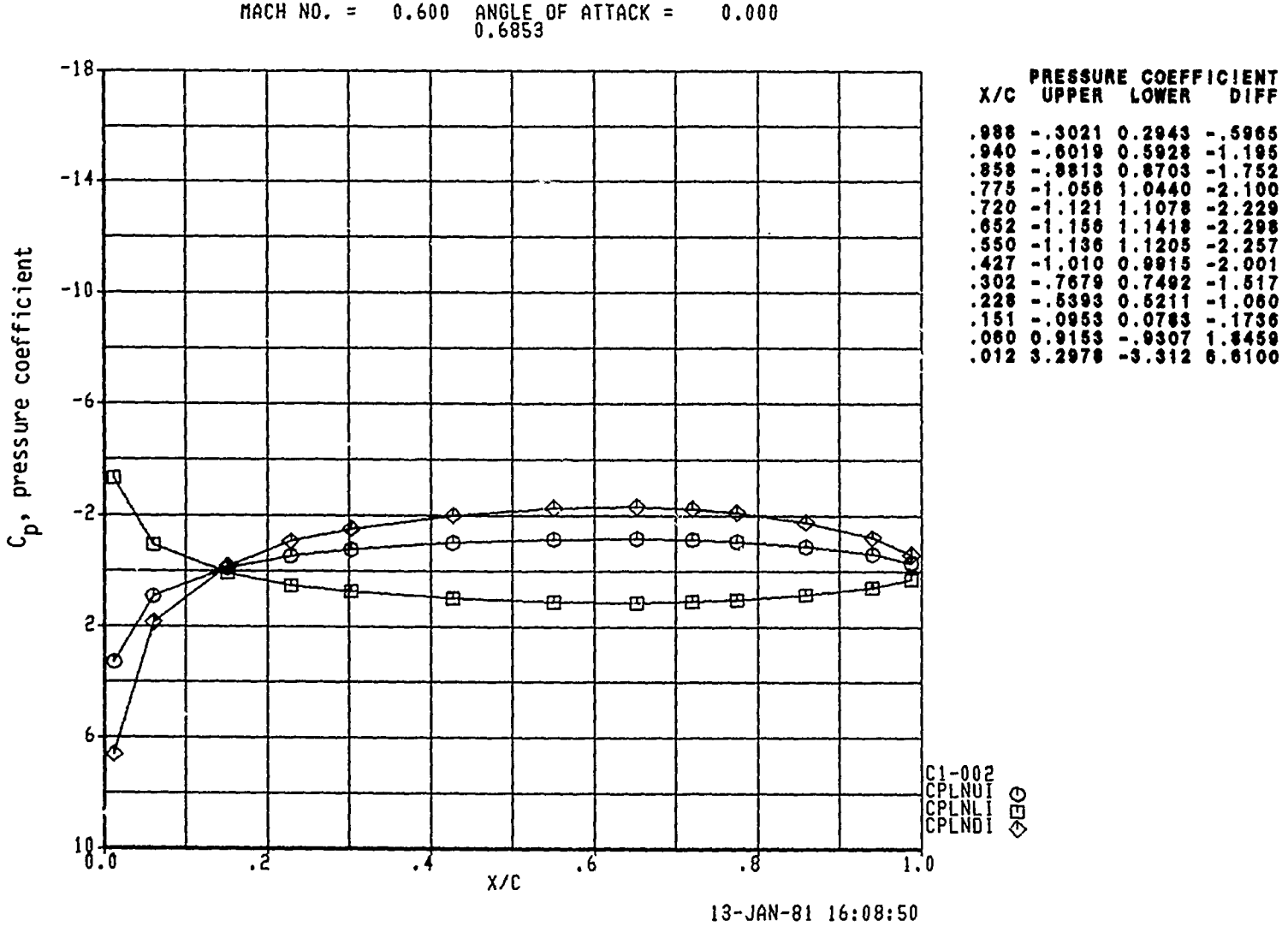
X/C	PRESSURE COEFFICIENT UPPER	LOWER	DIFF
.988	-.0741	-.0007	-.0735
.940	-.1140	0.0311	-.1451
.858	-.1685	0.0713	-.2397
.774	-.2271	0.1151	-.3422
.720	-.2713	0.1498	-.4212
.652	-.3207	0.1872	-.5079
.550	-.4316	0.2796	-.7113
.427	-.6486	0.4722	-1.121
.302	-.9936	0.7905	-1.784
.228	-1.348	1.1274	-2.474
.151	-2.476	2.2439	-4.720
.060	-5.588	5.3487	-10.94
.012	-14.27	14.031	-28.30

Figure 576, Chordwise Pressure Distribution, Real Configuration 7



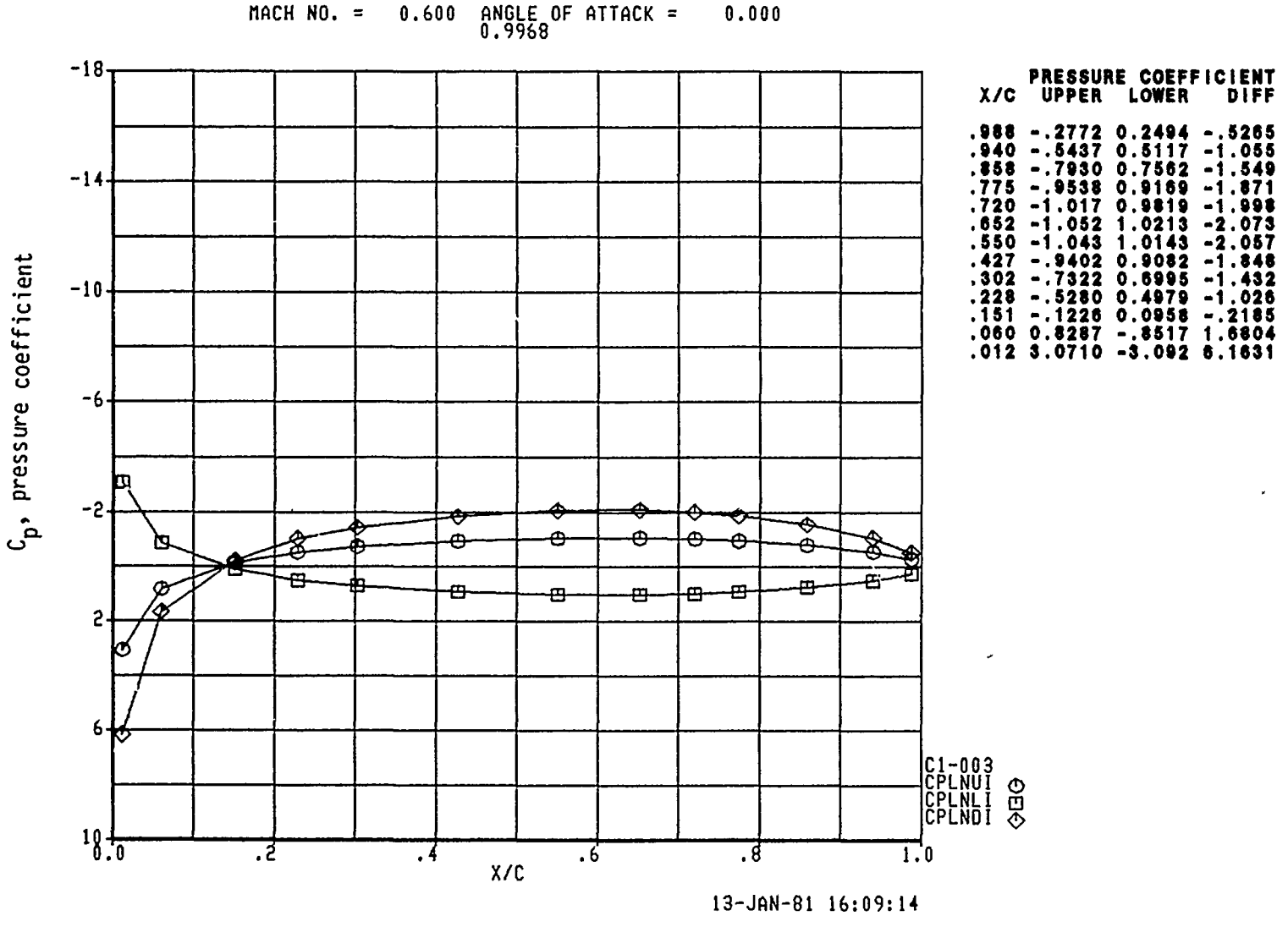
X/C	PRESSURE COEFFICIENT UPPER	LOWER	DIFF
.988	-.3257	0.3236	-.6492
.940	-.6489	0.6459	-1.295
.858	-.9496	0.9450	-1.895
.774	-1.136	1.1292	-2.265
.720	-1.200	1.1926	-2.393
.652	-1.230	1.2206	-2.450
.550	-1.193	1.1818	-2.375
.427	-1.034	1.0204	-2.054
.302	-.7535	0.7391	-1.493
.228	-.5020	0.4877	-.9897
.151	-.0382	0.0245	-.0627
.060	0.9405	-.9533	1.8938
.012	3.1999	-3.212	6.4121

Figure 577, Chordwise Pressure Distribution, Imaginary Configuration 7



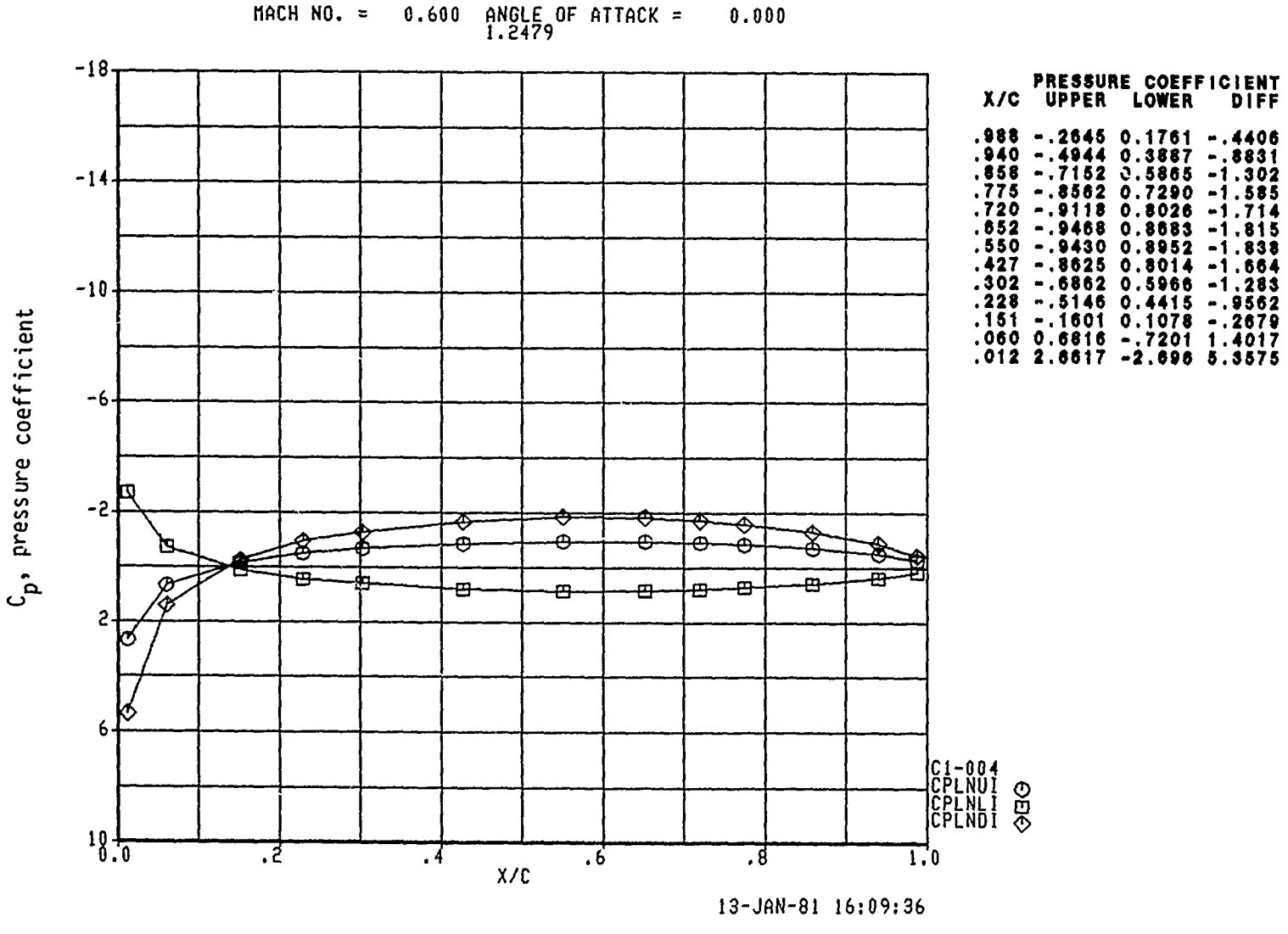
X/C	PRESSURE COEFFICIENT UPPER	LOWER	DIFF
.988	-.3021	0.2943	-.5965
.940	-.6019	0.5928	-1.195
.858	-.8813	0.8703	-1.752
.775	-1.056	1.0440	-2.100
.720	-1.121	1.1078	-2.229
.652	-1.156	1.1418	-2.298
.550	-1.136	1.1205	-2.257
.427	-1.010	0.9915	-2.001
.302	-.7679	0.7492	-1.517
.228	-.5393	0.5211	-1.060
.151	-.0953	0.0783	-.1736
.060	0.9153	-.9307	1.8459
.012	3.2978	-3.312	6.6100

Figure 578, Chordwise Pressure Distribution, Imaginary Configuration 7



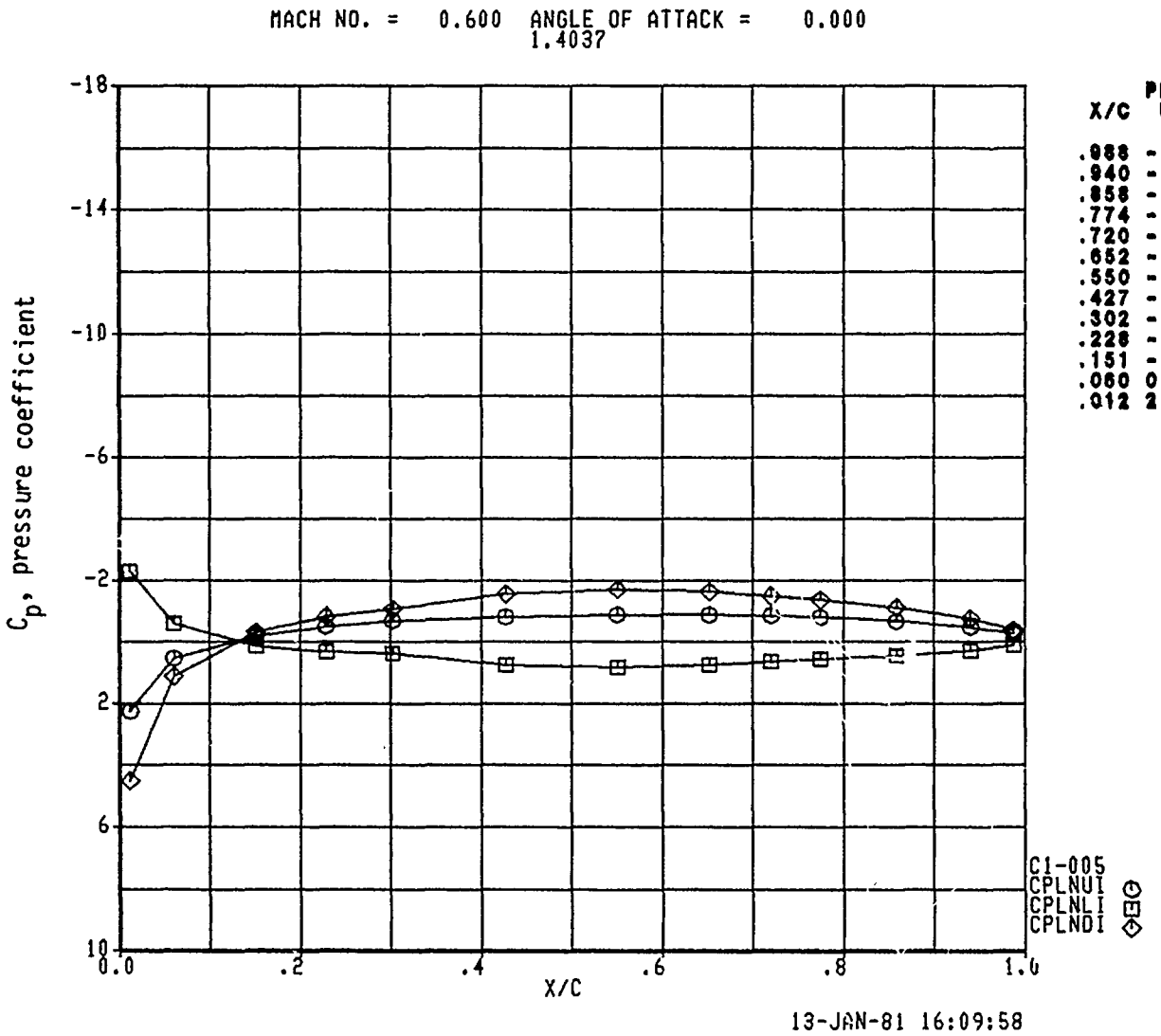
X/C	PRESSURE COEFFICIENT UPPER	LOWER	DIFF
.988	-.2772	0.2494	-.5265
.940	-.5437	0.5117	-1.055
.858	-.7930	0.7562	-1.549
.775	-.9538	0.9169	-1.871
.720	-1.017	0.9819	-1.998
.652	-1.052	1.0213	-2.073
.550	-1.043	1.0143	-2.057
.427	-.9402	0.9082	-1.848
.302	-.7322	0.6995	-1.432
.228	-.5280	0.4979	-1.026
.151	-.1226	0.0958	-.2185
.060	0.8287	-.8517	1.6804
.012	3.0710	-3.092	6.1631

Figure 579, Chordwise Pressure Distribution, Imaginary Configuration 7



X/C	PRESSURE COEFFICIENT UPPER	LOWER	DIFF
.988	-.2645	0.1761	-.4406
.940	-.4944	0.3887	-.8831
.858	-.7152	0.5865	-1.302
.775	-.8562	0.7290	-1.585
.720	-.9118	0.8026	-1.714
.652	-.9468	0.8683	-1.815
.550	-.9430	0.8952	-1.838
.427	-.8625	0.8014	-1.664
.302	-.6862	0.5966	-1.283
.228	-.5146	0.4415	-.9562
.151	-.1601	0.1078	-.2679
.060	0.6816	-.7201	1.4017
.012	2.6617	-2.696	5.3575

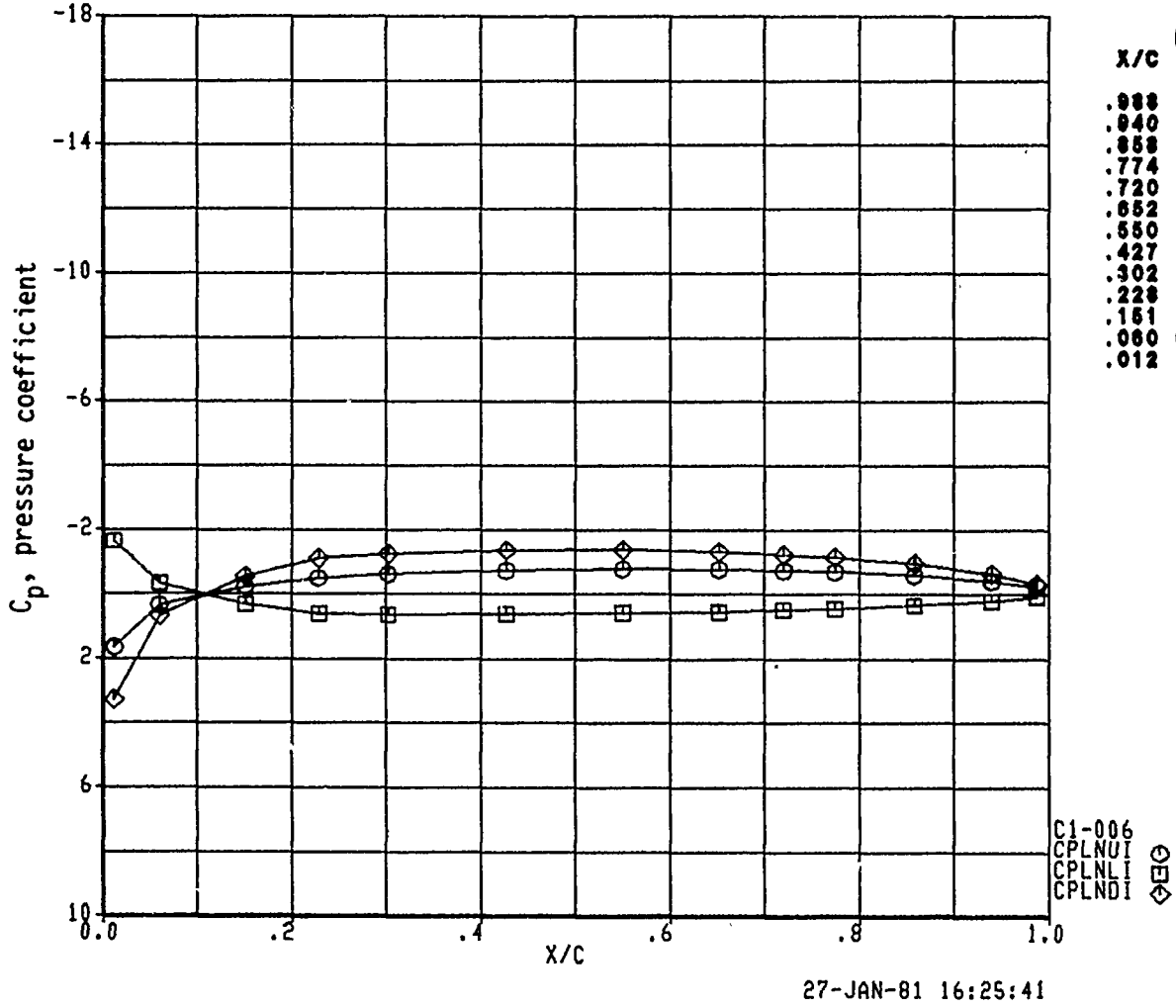
Figure 580, Chordwise Pressure Distribution, Imaginary Configuration 7



X/C	PRESSURE COEFFICIENT UPPER	LOWER	DIFF
.988	-.2593	0.1139	-.3732
.940	-.4619	0.2872	-.7491
.858	-.6630	0.4456	-1.109
.774	-.7896	0.5676	-1.357
.720	-.8364	0.6466	-1.483
.652	-.8717	0.7560	-1.628
.550	-.8707	0.8280	-1.699
.427	-.8023	0.7448	-1.547
.302	-.6817	0.3863	-1.068
.228	-.4931	0.3202	-.8133
.151	-.1872	0.1219	-.3091
.060	0.5402	-.5824	1.1226
.012	2.2416	-2.279	4.5207

Figure 581, Chordwise Pressure Distribution, Imaginary Configuration 7

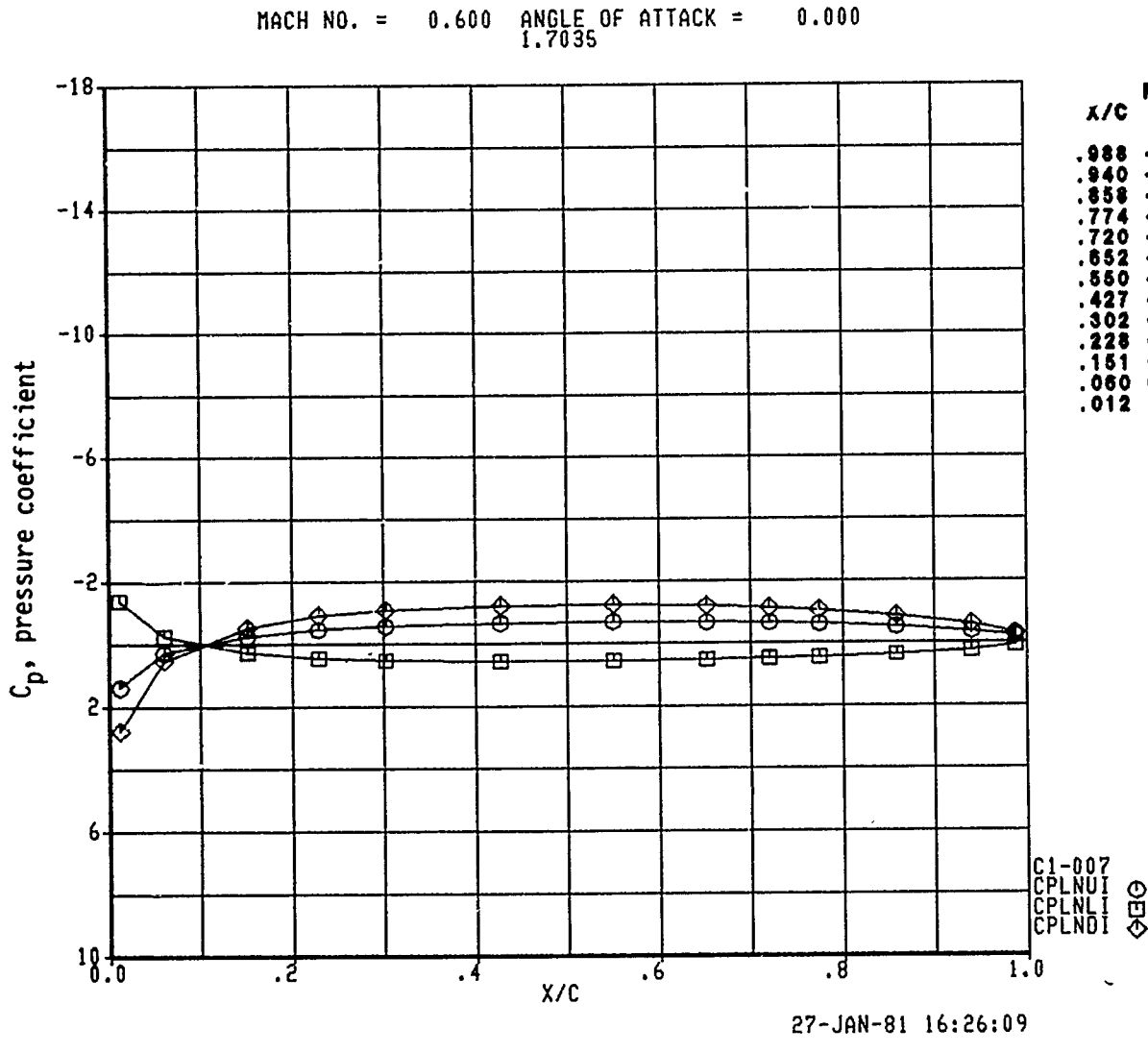
MACH NO. = 0.600 ANGLE OF ATTACK = 0.000
1.5906



X/C	PRESSURE COEFFICIENT UPPER	LOWER	DIFF
.988	-.2371	0.0771	-.3142
.940	-.4091	0.2223	-.6314
.858	-.5790	0.3537	-.9326
.774	-.6857	0.4461	-1.132
.720	-.7258	0.4936	-1.219
.652	-.7563	0.5453	-1.304
.550	-.7674	0.5975	-1.365
.427	-.7248	0.6225	-1.347
.302	-.6084	0.6257	-1.234
.228	-.4898	0.6070	-1.097
.151	-.2234	0.3195	-.5429
.060	0.3513	-.3246	0.6760
.012	1.6435	-1.637	3.2806

27-JAN-81 16:25:41

Figure 582, Chordwise Pressure Distribution, Imaginary Configuration 7



X/C	PRESSURE COEFFICIENT UPPER	LOWER	DIFF
.988	-.2033	0.0864	-.2896
.940	-.3601	0.2297	-.5898
.858	-.5095	0.3606	-.8700
.774	-.6031	0.4461	-1.049
.720	-.6392	0.4846	-1.124
.652	-.6676	0.5224	-1.190
.550	-.6820	0.5602	-1.242
.427	-.6530	0.5685	-1.221
.302	-.5575	0.5242	-1.082
.228	-.4577	0.4604	-.9180
.151	-.2428	0.2661	-.5090
.060	0.2722	-.2483	0.5205
.012	1.3987	-1.379	2.7779

Figure 583, Chordwise Pressure Distribution, Imaginary Configuration 7

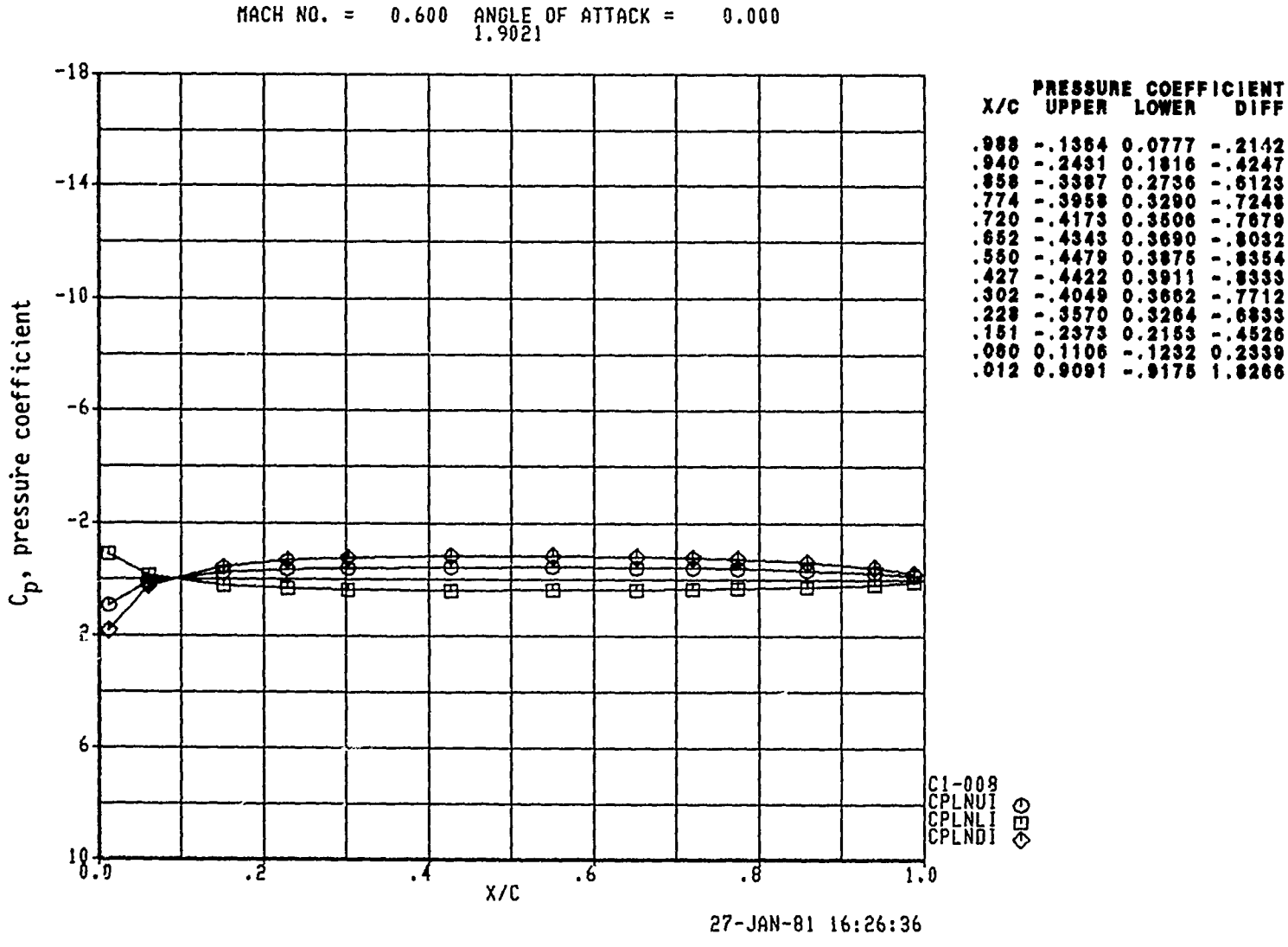


Figure 584, Chordwise Pressure Distribution, Imaginary Configuration 7

*U.S.Government Printing Office: 1981 — 757-002/499