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 USAF STABILITY AND CONTROL DIGITAL DATCOM
      PROGRAM REV. JAN 96 DIRECT INOUIRIES TO:
      WRIGHT LABORATORY (WL/FIGC) ATTN: W. BLAKE *
       WRIGHT PATTERSON AFB, OHIO 45433
      PHONE (513) 255-6764, FAX (513) 258-4054
 *************
Preparing to start the big loop
At 1000
                       CONERR - INPUT ERROR CHECKING
0 ERROR CODES - N* DENOTES THE NUMBER OF OCCURENCES OF EACH ERROR
0 A - UNKNOWN VARIABLE NAME
0 B - MISSING EOUAL SIGN FOLLOWING VARIABLE NAME
0 C - NON-ARRAY VARIABLE HAS AN ARRAY ELEMENT DESIGNATION - (N)
0 D - NON-ARRAY VARIABLE HAS MULTIPLE VALUES ASSIGNED
0 E - ASSIGNED VALUES EXCEED ARRAY DIMENSION
0 F - SYNTAX ERROR
BUILD
 $FLTCON NMACH=2.0, MACH(1)=0.6,0.8,
  NALPHA=9.0, ALSCHD(1)=-2.0,0.0,2.0,4.0,8.0,12.0,16.0,20.0,24.0,
  RNNUB(1)=2.28E6,3.04E6$
 $FLTCON NMACH=3.0, MACH(1)=0.6,0.8,1.5,
  RNNUB(1)=4.26E6, 6.4E6,9.96E6$
 SOPTINS SREF=2.25, CBARR=0.822, BLREF=3.00$
 $SYNTHS XCG=2.60, ZCG=0.0, XW=1.70, ZW=0.0, ALIW=0.0, XH=3.93,
   ZH=0.0, ALIH=0.0, XV=3.34, VERTUP=.TRUE.$
 $BODY NX=10.0, BNOSE=2.0, BTAIL=1.0, BLN=1.46, BLA=1.97,
   X(1)=0.0, .175, .322, .530, .850, 1.46, 2.5, 3.43, 3.97, 4.57,
```

```
S(1) = 0.0, .00547, .022, .0491, .0872, .136, .136, .136, .0993, .0598,
   P(1)=0.0,.262,.523,.785,1.04,1.305,1.305,1.305,1.12,.866,
   R(1)=0.0,.0417,.0833,.125,.1665,.208,.208,.208,.178,.138$
 SWGPLNF CHRDTP=0.346, SSPNE=1.29, SSPN=1.5, CHRDR=1.16,
   SAVSI=45.0, CHSTAT=0.25, SWAFP=0.0, TWISTA=0.0, SSPNDD=0.0,
   DHDADI=0.0, DHDADO=0.0, TYPE=1.0$
 SWGSCHR TOVC=.06, DELTAY=1.3, XOVC=0.4, CLI=0.0, ALPHAI=0.0,
   CLALPA(1)=0.131, CLMAX(1)=.82, CMO=0.0, LERI=.0025, CLAMO=.105$
 $VTPLNF CHRDTP=.42, SSPNE=.63, SSPN=0.849, CHRDR=1.02, SAVSI=28.1,
   CHSTAT=.25, SWAFP=0.0, TWISTA=0.0, TYPE=0.0$
 $VTSCHR TOVC=0.09, XOVC=0.4, CLALPA(1)=0.141, LERI=0.0075$
 $WGSCHR CLMAXL=0.78$
 SHTPLNF CHRDTP=0.253, SSPNE=0.52, SSPN=0.67, CHRDR=0.42,
   SAVSI=45.0, CHSTAT=0.25, SWAFP=0.0, TWISTA=0.0, SSPNDD=0.0,
   DHDADI=0.0, DHDADO=0.0, TYPE=1.0$
 $HTSCHR TOVC=0.06, DELTAY=1.3, XOVC=0.4, CLI=0.0, ALPHAI=0.0,
  CLALPA(1)=.131, CLMAX(1)=0.82, CMO=0.0, LERI=.0025, CLAMO=.105$
CASEID CONFIGURATION BUILDUP, EXAMPLE PROBLEM 3, CASE 1
SAVE
NEXT CASE
 $EXPR01 CLAWB(1) = 0.0575, CMAWB(1) = -0.0050,
  CDWB(1) = .015, .014, .015, .019, .064, .141, .216, .302, .410,
  CLWB(1) = -.115, 0.0, .115, .23, .47, .65, .76, .81, .90,
  CMWB(1) = .010, 0.0, -.010, -.020, -.038, -.002, -.013, -.013, -.020,
  CLAB(1) = .002, CMAB(1) = .0039,
  CDB(1) = .012,.010,.012,.013,.014,.016,.020,.030,.047,
  CLB(1) = -.004, 0.0, .004, .008, .012, .020, .060, .085, .1,
  CMB(1) = -.0078,.0078,.020,.038,.060,.083,.110,.140,.165
 SEXPR02 CLAWB(1) = .06, CLAB(1) = .002, CMAB(1) = .0039,
 ALPOW=0.0, ALPLW=8.0, ACLMW=12.01, CLMW=1.39,
 ALPOH=0.0, ALPLH=6.2, ACLMH=10.10, CLMH=1.02$
CASEID INCLUDES BODY AND WING-BODY EXPERIMENTAL DATA, EX.PROB. 3, CASE 2
SAVE
NEXT CASE
 $TVTPAN BVP=0.4, BV=0.6, BDV=0.36, BH=1.10,
  SV=0.360, VPHITE=20.0, VLP=1.04, ZP=0.0$
CASEID INCLUDES BODY AND WING-BODY EXPERIMENTAL DATA, EX.PROB. 3, CASE 3
SAVE
NEXT CASE
 $FLTCON NMACH=1.0, MACH(1)=0.6, RNNUB(1)=2.28E6$
 $PROPWR AIETLP=2.0, NENGSP=1.0, THSTCP=0.15,
  PHALOC=0.0, PHVLOC=0.0, PRPRAD=0.4,
  ENGFCT=70.0, NOPBPE=4.0, BAPR75=18.0, YP=0.0, CROT=.FALSE.$
CASEID INCLUDES BODY AND WING-BODY EXPERIMENTAL DATA, EX.PROB. 3, CASE 4
```

```
SAVE
NEXT CASE
 $FLTCON NMACH=1.0, MACH(1)=0.6, RNNUB(1)=2.28E6$
 SJETPWR AIETLJ=2.0, NENGSJ=1.0, THSTCJ=0.35, JIALOC=0.0,
  JEVLOC=0.0, JEALOC=0.5, JINLTA=3.0, JEANGL=15.0, JEVELO=4000.0,
  AMBTMP=500.0, JESTMP=2000.0, JELLOC=0.0,
  JETOTP=5000.0, AMBSTP=500.0, JERAD=2.0$
CASEID INCLUDES BODY AND WING-BODY EXPERIMENTAL DATA, EX.PROB. 3, CASE 5
NEXT CASE
          THE FOLLOWING IS A LIST OF ALL INPUT CARDS FOR THIS CASE.
BUILD
 $FLTCON NMACH=2.0, MACH(1)=0.6,0.8,
  NALPHA=9.0, ALSCHD(1)=-2.0,0.0,2.0,4.0,8.0,12.0,16.0,20.0,24.0,
  RNNUB(1)=2.28E6,3.04E6$
 $FLTCON NMACH=3.0, MACH(1)=0.6,0.8,1.5,
  RNNUB(1)=4.26E6, 6.4E6,9.96E6$
 $OPTINS SREF=2.25, CBARR=0.822, BLREF=3.00$
 $SYNTHS XCG=2.60, ZCG=0.0, XW=1.70, ZW=0.0, ALIW=0.0, XH=3.93,
    ZH=0.0, ALIH=0.0, XV=3.34, VERTUP=.TRUE.$
 $BODY NX=10.0, BNOSE=2.0, BTAIL=1.0, BLN=1.46, BLA=1.97,
   X(1)=0.0, .175, .322, .530, .850, 1.46, 2.5, 3.43, 3.97, 4.57,
   S(1)=0.0,.00547,.022,.0491,.0872,.136,.136,.136,.0993,.0598,
   P(1)=0.0,.262,.523,.785,1.04,1.305,1.305,1.305,1.12,.866,
   R(1)=0.0,.0417,.0833,.125,.1665,.208,.208,.208,.178,.138$
  $WGPLNF CHRDTP=0.346, SSPNE=1.29, SSPN=1.5, CHRDR=1.16,
   SAVSI=45.0, CHSTAT=0.25, SWAFP=0.0, TWISTA=0.0, SSPNDD=0.0,
   DHDADI=0.0, DHDADO=0.0, TYPE=1.0$
  SWGSCHR TOVC=.06, DELTAY=1.3, XOVC=0.4, CLI=0.0, ALPHAI=0.0,
    CLALPA(1)=0.131, CLMAX(1)=.82, CMO=0.0, LERI=.0025, CLAMO=.105$
 $VTPLNF CHRDTP=.42, SSPNE=.63, SSPN=0.849, CHRDR=1.02, SAVSI=28.1,
    CHSTAT=.25, SWAFP=0.0, TWISTA=0.0, TYPE=0.0$
  $VTSCHR TOVC=0.09, XOVC=0.4, CLALPA(1)=0.141, LERI=0.0075$
 $WGSCHR CLMAXL=0.78$
 $HTPLNF CHRDTP=0.253, SSPNE=0.52, SSPN=0.67, CHRDR=0.42,
   SAVSI=45.0, CHSTAT=0.25, SWAFP=0.0, TWISTA=0.0, SSPNDD=0.0,
   DHDADI=0.0, DHDADO=0.0, TYPE=1.0$
 $HTSCHR TOVC=0.06, DELTAY=1.3, XOVC=0.4, CLI=0.0, ALPHAI=0.0,
  CLALPA(1)=.131, CLMAX(1)=0.82, CMO=0.0, LERI=.0025, CLAMO=.105$
CASEID CONFIGURATION BUILDUP, EXAMPLE PROBLEM 3, CASE 1
SAVE
NEXT CASE
0 INPUT DIMENSIONS ARE IN FT, SCALE FACTOR IS 1.0000
```

Return to main program from M01001 0*** WARNING *** V.T. NOT STRAIGHT TAPERED. UNIFORM SECTION ASSUMED. Return to main program from M50062 Return to main program from M02002 Return to main program from M51063

CHARACTERISTICS AT ANGLE OF ATTACK AND IN SIDESLIP DATCOM BODY ALONE CONFIGURATION CONFIGURATION BUILDUP, EXAMPLE PROBLEM 3, CASE 1

		F	LIGHT CON	DITIONS					REFER	ENCE DIME	NSIONS	
MACH	ALTITUDE	VELOCI	TY PRE	SSURE	TEMPERATU	JRE RE	YNOLDS	REF.	REFERENCE	LENGTH	MOMENT	REF. CENTER
NUMBER						N	UMBER	AREA	LONG.	LAT.	HORIZ	VERT
	FT	FT/SE	C LB/	FT**2	DEG R	1	/FT	FT**2	FT	FT	FT	FT
0 0.600						4.26	00E+06	2.250	0.822	3.000	2.600	0.000
0								DERIVA	ATIVE (PER DE	GREE)		
0 ALPHA	CD	CL	CM	CN	CA	XCP	CLA	CMA	CYB	CNB		CLB
0												
-2.0	0.008	-0.003	-0.0099	-0.004	0.008	2.746	1.610E-03	5.050E-03	-1.610E-03	-1.384E	-03 0	.000E+00
0.0	0.008	0.000	0.0000	0.000	0.008	****	1.663E-03	4.947E-03	-1.663E-03	-1.355E	-03 0	.000E+00
2.0	0.008	0.003	0.0099	0.004	0.008	2.746	1.717E-03	4.844E-03	-1.717E-03	-1.327E	-03 0	.000E+00
4.0	0.008	0.007	0.0194	0.007	0.008	2.607	1.823E-03	4.640E-03	-1.823E-03	-1.271E	-03 0	.000E+00
8.0	0.010	0.015	0.0371	0.016	0.008	2.347	2.032E-03	4.238E-03	-2.032E-03	-1.161E	-03 0	.000E+00
12.0	0.013	0.023	0.0533	0.025	0.008	2.110	2.234E-03	3.852E-03	-2.234E-03	-1.055E	-03 0	.000E+00
16.0	0.017	0.032	0.0679	0.036	0.007	1.896	2.423E-03	3.488E-03	-2.423E-03	-9.556E	-04 0	.000E+00
20.0	0.022	0.043	0.0812	0.048	0.007	1.705	2.602E-03	3.143E-03	-2.602E-03	-8.613E	-04 0	.000E+00
24.0	0.030	0.053	0.0931	0.061	0.005	1.534	2.778E-03	2.806E-03	-2.778E-03	-7.689E	-04 0	.000E+00
1												

CHARACTERISTICS AT ANGLE OF ATTACK AND IN SIDESLIP WING ALONE CONFIGURATION CONFIGURATION BUILDUP, EXAMPLE PROBLEM 3, CASE 1

		I	LIGHT CON	DITIONS					REFER	ENCE DIMEN	ISIONS	
MACH	ALTITUDE	VELOC:	TY PRE	SSURE	TEMPERATU	JRE RI	EYNOLDS	REF.	REFERENCE	LENGTH	MOMENT RE	F. CENTER
NUMBER						1	NUMBER	AREA	LONG.	LAT.	HORIZ	VERT
	FT	FT/SE	C LB/	FT**2	DEG R	-	1/FT	FT**2	FT	FT	FT	FT
0 0.600						4.26	500E+06	2.250	0.822	3.000	2.600	0.000
0								DERIVA	TIVE (PER DE	GREE)		
0 ALPHA	CD	\mathtt{CL}	CM	CN	CA	XCP	CLA	CMA	CYB	CNB		CLB
0												
-2.0	0.008	-0.093	0.0150	-0.094	0.005	-0.161	4.643E-02	-7.732E-03	7.482E-06	1.178E-	05 4.4	150E-04
0.0	0.006	0.000	0.0000	0.000	0.006	*****	4.664E-02	-7.744E-03	0.000E+00	0.000E	-00 0.0	000E+00
2.0	0.008	0.093	-0.0159	0.094	0.005	-0.171	4.672E-02	-8.358E-03	7.483E-06	1.180E-	-05 -4.4	150E-04
4.0	0.015	0.187	-0.0334	0.187	0.002	-0.178	4.660E-02	-9.097E-03	3.013E-05	4.744E-	-05 -8.9	915E-04
8.0	0.039	0.372	-0.0727	0.374	-0.013	-0.194	4.519E-02	-9.536E-03	1.200E-04	1.884E-	-04 -1.7	774E-03
12.0	0.078	0.548	-0.1097	0.553	-0.038	-0.199	3.824E-02	-7.841E-03	2.624E-04	4.103E-	-04 -2.6	516E-03
16.0	0.115	0.678	-0.1354	0.683	-0.076	-0.198	2.442E-02	-5.730E-03	4.073E-04	6.265E-	-04 -3.2	233E-03
20.0	0.138	0.744	-0.1556	0.746	-0.125	-0.209	7.068E-03	-3.694E-03	5.029E-04	7.562E-	-04 -3.5	548E-03
24.0	0.134	0.734	-0.1649	0.725	-0.176	-0.227	-1.181E-02	-9.999E-04	5.102E-04	7.400E-	-04 -3.5	503E-03
1												

CHARACTERISTICS AT ANGLE OF ATTACK AND IN SIDESLIP HORIZONTAL TAIL CONFIGURATION CONFIGURATION BUILDUP, EXAMPLE PROBLEM 3, CASE 1

		I	FLIGHT CON	DITIONS					REFER	ENCE DIMEN	ISIONS	
MACH	ALTITUDE	VELOC:	TY PRE	SSURE	TEMPERATU	JRE RE	YNOLDS	REF.	REFERENCE	LENGTH	MOMENT REF	F. CENTER
NUMBER						N	IUMBER	AREA	LONG.	LAT.	HORIZ	VERT
	FT	FT/SI	EC LB/	FT**2	DEG R	1	./FT	FT**2	FT	FT	FT	FT
0 0.600						4.26	00E+06	2.250	0.822	3.000	2.600	0.000
0								DERIVA	TIVE (PER DE	GREE)		
0 ALPHA	CD	CL	CM	CN	CA	XCP	CLA	CMA	CYB	CNB	(CLB
0												
-2.0	0.002	-0.016	0.0358	-0.016	0.001	-2.232	8.000E-03	-1.797E-02	2.227E-07	1.217E-	-06 4.19	93E-05
0.0	0.001	0.000	0.0000	0.000	0.001	*****	8.000E-03	-1.786E-02	0.000E+00	0.000E+	-00 0.00	00E+00
2.0	0.002	0.016	-0.0356	0.016	0.001	-2.219	8.075E-03	-1.802E-02	2.227E-07	1.215E-	-06 -4.19	93E-05
4.0	0.003	0.032	-0.0721	0.032	0.001	-2.222	8.176E-03	-1.841E-02	9.122E-07	4.952E-	-06 -8.46	3E-05
8.0	0.009	0.065	-0.1471	0.066	0.000	-2.233	7.953E-03	-1.820E-02	3.758E-06	2.023E-	-05 -1.70)9E-04
12.0	0.018	0.096	-0.2177	0.098	-0.002	-2.230	6.713E-03	-1.580E-02	8.279E-06	4.373E-	-05 -2.51	4E-04
16.0	0.027	0.119	-0.2735	0.122	-0.006	-2.244	4.508E-03	-1.162E-02	1.307E-05	6.736E-	-05 -3.13	L6E-04
20.0	0.033	0.132	-0.3107	0.135	-0.014	-2.294	2.598E-03	-8.319E-03	1.672E-05	8.359E-	-05 -3.45	58E-04
24.0	0.037	0.140	-0.3400	0.143	-0.023	-2.382	1.263E-03	-6.345E-03	1.881E-05	9.487E-	-05 -3.66	51E-04
1												

CHARACTERISTICS AT ANGLE OF ATTACK AND IN SIDESLIP VERTICAL TAIL CONFIGURATION CONFIGURATION BUILDUP, EXAMPLE PROBLEM 3, CASE 1

		FI	LIGHT CON	DITIONS					REFER	ENCE DIME	NSIONS -	
MACH	ALTITUDE	VELOCI	TY PRE	SSURE	TEMPERAT	URE RE	YNOLDS	REF.	REFERENCE	LENGTH	MOMENT F	REF. CENTER
NUMBER						N	IUMBER	AREA	LONG.	LAT.	HORIZ	VERT
	FT	FT/SEC	C LB/	FT**2	DEG R	1	./FT	FT**2	FT	FT	FT	FT
0 0.600						4.26	500E+06	2.250	0.822	3.000	2.600	0.000
0								DERIVA	ATIVE (PER DE	GREE)		
0 ALPHA	CD	CL	CM	CN	CA	XCP	CLA	CMA	CYB	CNB		CLB
0												
-2.0	0.002	0.000	0.0000	0.000	NDM	****	0.000E+00	0.000E+00	-1.440E-02	5.713E	-03 -1.	953E-03
0.0											-1.	755E-03
2.0											-1.	554E-03
4.0											-1.	352E-03
8.0											-9.	424E-04
12.0											-5.	285E-04
16.0											-1.	119E-04
20.0											3.	051E-04
24.0											7.	207E-04
0*** NDM	PRINTED WE	EN NO DAT	COM METH	ODS EXIS	ST							

CHARACTERISTICS AT ANGLE OF ATTACK AND IN SIDESLIP WING-BODY CONFIGURATION CONFIGURATION BUILDUP, EXAMPLE PROBLEM 3, CASE 1

		F	LIGHT CON	DITIONS					REFER	ENCE DIME	NSIONS -	
MACH	ALTITUDE	VELOCI	TY PRE	SSURE	TEMPERATU	JRE RE	YNOLDS	REF.	REFERENCE	LENGTH	MOMENT R	EF. CENTER
NUMBER						N	IUMBER	AREA	LONG.	LAT.	HORIZ	VERT
	FT	FT/SE	C LB/	FT**2	DEG R	1	./FT	FT**2	FT	FT	FT	FT
0 0.600						4.26	00E+06	2.250	0.822	3.000	2.600	0.000
0								DERIVA	TIVE (PER DE	GREE)		
0 ALPHA	CD	\mathtt{CL}	CM	CN	CA	XCP	CLA	CMA	CYB	CNE	3	CLB
0												
-2.0	0.016	-0.125	0.0032	-0.126	0.012	-0.025	6.258E-02	-1.344E-03	-1.610E-03	-1.845E	5.	509E-04
0.0	0.014	0.000	0.0000	0.000	0.014	****	6.258E-02	-1.856E-03			-5.	244E-12
2.0	0.016	0.125	-0.0042	0.126	0.012	-0.034	6.273E-02	-2.638E-03			-5.	509E-04
4.0	0.024	0.251	-0.0106	0.252	0.006	-0.042	6.269E-02	-3.666E-03			-1.	104E-03
8.0	0.067	0.500	-0.0292	0.505	-0.003	-0.058	6.082E-02	-4.557E-03			-2.	201E-03
12.0	0.149	0.738	-0.0470	0.752	-0.007	-0.062	5.089E-02	-3.117E-03			-3.	246E-03
16.0	0.236	0.907	-0.0542	0.937	-0.023	-0.058	3.176E-02	-1.415E-03			-3.	993E-03
20.0		0.992	-0.0583				9.200E-03	-1.248E-04			-4.	364E-03
24.0		0.981	31 -0.0552				-1.458E-02	1.706E-03			-4.	317E-03
1												

CHARACTERISTICS AT ANGLE OF ATTACK AND IN SIDESLIP BODY-HORIZONTAL TAIL CONFIGURATION CONFIGURATION BUILDUP, EXAMPLE PROBLEM 3, CASE 1

		F	FLIGHT CON	DITIONS					REFER	ENCE DIMEN	ISIONS -	
MACH	ALTITUDE	VELOC:	ITY PRE	SSURE	TEMPERATU	JRE RE	YNOLDS	REF.	REFERENCE	LENGTH	MOMENT R	EF. CENTER
NUMBER						N	UMBER	AREA	LONG.	LAT.	HORIZ	VERT
	FT	FT/SE	EC LB/	FT**2	DEG R	1	/FT	FT**2	FT	FT	FT	FT
0 0.600						4.26	00E+06	2.250	0.822	3.000	2.600	0.000
0								DERIVA	ATIVE (PER DE	GREE)		
0 ALPHA	CD	\mathtt{CL}	CM	CN	CA	XCP	CLA	CMA	CYB	CNB		CLB
0												
-2.0	0.010	-0.028	0.0435	-0.028	0.009	-1.560	1.376E-02	-2.179E-02	-1.610E-03	-1.845E-	-03 2.	573E-05
0.0	0.009	0.000	0.0000	0.000	0.009	****	1.376E-02	-2.166E-02			-2.	037E-12
2.0	0.010	0.028	-0.0432	0.028	0.009	-1.551	1.393E-02	-2.201E-02			-2.	573E-05
4.0	0.012	0.056	-0.0880	0.056	0.008	-1.561	1.413E-02	-2.263E-02			-5.	208E-05
8.0	0.019	0.112	-0.1802	0.114	0.003	-1.580	1.355E-02	-2.171E-02			-1.	052E-04
12.0	0.031	0.164	-0.2618	0.167	-0.004	-1.568	1.144E-02	-1.748E-02			-1.	534E-04
16.0	0.044	0.204	-0.3201	0.208	-0.014	-1.537	8.048E-03	-1.072E-02			-1.	907E-04
20.0	0.056	0.228	-0.3475	0.234	-0.026	-1.486	5.167E-03	-5.093E-03			-2.	136E-04
24.0	0.067	0.245	-0.3608	0.251	-0.039	-1.436	3.261E-03	-1.568E-03			-2.	293E-04
1												

CHARACTERISTICS AT ANGLE OF ATTACK AND IN SIDESLIP BODY-VERTICAL TAIL CONFIGURATION CONFIGURATION BUILDUP, EXAMPLE PROBLEM 3, CASE 1

		I	FLIGHT CON	DITIONS					REFER	ENCE DIME	NSIONS	
MACH	ALTITUDE	VELOC:	TTY PRE	SSURE	TEMPERATU	JRE RE	YNOLDS	REF.	REFERENCE	LENGTH	MOMENT RI	EF. CENTER
NUMBER						N	UMBER	AREA	LONG.	LAT.	HORIZ	VERT
	FT	FT/SI	EC LB/	FT**2	DEG R	1	/FT	FT**2	FT	FT	FT	FT
0 0.600						4.26	00E+06	2.250	0.822	3.000	2.600	0.000
0								DERIVA	ATIVE (PER DE	GREE)		
0 ALPHA	CD	\mathtt{CL}	CM	CN	CA	XCP	CLA	CMA	CYB	CNB		CLB
0												
-2.0	0.010	-0.003	-0.0099	-0.004	0.009	2.704	1.610E-03	5.050E-03	-1.601E-02	4.329E	-03 -1.9	953E-03
0.0	0.009	0.000	0.0000	0.000	0.009	****	1.663E-03	4.947E-03			-1.	755E-03
2.0	0.010	0.003	0.0099	0.004	0.009	2.704	1.717E-03	4.844E-03			-1.5	554E-03
4.0	0.010	0.007	0.0194	0.008	0.009	2.568	1.823E-03	4.640E-03			-1.3	352E-03
8.0	0.012	0.015	0.0371	0.016	0.009	2.313	2.032E-03	4.238E-03			-9.4	124E-04
12.0	0.014	0.023	0.0533	0.026	0.009	2.082	2.234E-03	3.852E-03			-5.2	285E-04
16.0	0.018	0.032	0.0679	0.036	0.009	1.873	2.423E-03	3.488E-03			-1.3	19E-04
20.0	0.024	0.043	0.0812	0.048	0.008	1.686	2.602E-03	3.143E-03			3.0)51E-04
24.0	0.031	0.053	0.0931	0.061	0.007	1.518	2.778E-03	2.806E-03			7.2	207E-04
1												

CHARACTERISTICS AT ANGLE OF ATTACK AND IN SIDESLIP WING-BODY-HORIZONTAL TAIL CONFIGURATION CONFIGURATION BUILDUP, EXAMPLE PROBLEM 3, CASE 1

		I	FLIGHT CON	DITIONS					REFER	ENCE DIMEN	ISIONS	
MACH	ALTITUDE	VELOC:	ITY PRE	SSURE	TEMPERATU	RE REY	YNOLDS	REF.	REFERENCE	LENGTH	MOMENT REF	. CENTER
NUMBER						NU	JMBER	AREA	LONG.	LAT.	HORIZ	VERT
	FT	FT/SI	EC LB/	FT**2	DEG R	1,	FT	FT**2	FT	FT	FT	FT
0 0.600						4.260	00E+06	2.250	0.822	3.000	2.600	0.000
0								DERIV	ATIVE (PER DE	GREE)		
0 ALPHA	CD	\mathtt{CL}	CM	CN	CA	XCP	CLA	CMA	CYB	CNB	C	LB
0												
-2.0	0.018	-0.134	0.0228	-0.134	0.013	-0.170	6.695E-02	-1.114E-02	-1.609E-03	-1.844E-	03 5.92	8E-04
0.0	0.016	0.000	0.0000	0.000	0.016	*****	6.695E-02	-1.168E-02			-5.24	4E-12
2.0	0.018	0.134	-0.0239	0.134	0.013	-0.177	6.751E-02	-1.337E-02			-5.92	8E-04
4.0	0.026	0.270	-0.0535	0.271	0.007	-0.197	6.801E-02	-1.565E-02			-1.18	9E-03
8.0	0.073	0.542	-0.1228	0.546	-0.004	-0.225	6.676E-02	-1.813E-02			-2.37	
12.0	0.160	0.804	-0.1985	0.820	-0.011	-0.242	5.806E-02	-1.973E-02			-3.49	7E-03
16.0	0.255	1.006	-0.2806	1.037	-0.032	-0.270	4.049E-02	-2.182E-02			-4.30	5E-03
20.0		1.128	-0.3731				1.762E-02	-1.977E-02			-4.71	0E-03
24.0		1.147	-0.4388				-8.122E-03	-1.307E-02			-4.68	3E-03
0				ALPHA	Q/QINF	EPSLON	D(EPSLON)/I	O(ALPHA)				
0												
				-2.0	0.944	-1.234	0.61	7				
				0.0	0.909	0.000	0.61	7				
				2.0	0.944	1.234	0.603	3				
				4.0	0.995	2.413	0.572	2				
				8.0	1.000	4.565	0.493	3				
				12.0	1.000	6.358	0.363					
				16.0	1.000	7.452	0.162	2				
				20.0	1.000	7.650	-0.06	5				
				24.0	1.000	6.929	-0.180)				
1				2.0 4.0 8.0 12.0 16.0 20.0	0.944 0.995 1.000 1.000 1.000	1.234 2.413 4.565 6.358 7.452 7.650	0.603 0.577 0.493 0.363 0.162	3 2 3 1 2 5				

CHARACTERISTICS AT ANGLE OF ATTACK AND IN SIDESLIP WING-BODY-VERTICAL TAIL CONFIGURATION CONFIGURATION BUILDUP, EXAMPLE PROBLEM 3, CASE 1

		I	FLIGHT CON	DITIONS					REFER	ENCE DIME	NSIONS -	
MACH	ALTITUDE	VELOCI	ITY PRE	SSURE	TEMPERATU	JRE RI	EYNOLDS	REF.	REFERENCE	LENGTH	MOMENT 1	REF. CENTER
NUMBER						1	NUMBER	AREA	LONG.	LAT.	HORIZ	VERT
	FT	FT/SE	EC LB/	FT**2	DEG R	-	1/FT	FT**2	FT	FT	FT	FT
0 0.600						4.26	500E+06	2.250	0.822	3.000	2.600	0.000
0								DERIV	ATIVE (PER DE	GREE)		
0 ALPHA	CD	\mathtt{CL}	CM	CN	CA	XCP	CLA	CMA	CYB	CNB		CLB
0												
-2.0	0.018	-0.125	0.0032	-0.126	0.013	-0.025	6.258E-02	-1.344E-03	-1.601E-02	3.868E	-03 -1	.402E-03
0.0	0.016	0.000	0.0000	0.000	0.016	****	6.258E-02	-1.856E-03			-1	.755E-03
2.0	0.018	0.125	-0.0042	0.126	0.013	-0.034	6.273E-02	-2.638E-03			-2	.105E-03
4.0	0.026	0.251	-0.0106	0.252	0.008	-0.042	6.269E-02	-3.666E-03			-2	.456E-03
8.0	0.069	0.500	-0.0292	0.505	-0.001	-0.058	6.082E-02	-4.557E-03			-3	.144E-03
12.0	0.151	0.738	-0.0470	0.753	-0.006	-0.062	5.089E-02	-3.117E-03			-3	.775E-03
16.0	0.238	0.907	-0.0542	0.938	-0.022	-0.058	3.176E-02	-1.415E-03			-4	.105E-03
20.0		0.992	-0.0583				9.200E-03	-1.248E-04			-4	.059E-03
24.0		0.981	-0.0552				-1.458E-02	1.706E-03			-3	.596E-03
1												

CHARACTERISTICS AT ANGLE OF ATTACK AND IN SIDESLIP WING-BODY-VERTICAL TAIL-HORIZONTAL TAIL CONFIGURATION CONFIGURATION BUILDUP, EXAMPLE PROBLEM 3, CASE 1

		I	FLIGHT CON	DITIONS					REFER	ENCE DIME	NSIONS	
MACH	ALTITUDE	VELOC:	ITY PRE	SSURE	TEMPERATU	RE REY	YNOLDS	REF.	REFERENCE	LENGTH	MOMENT REF	. CENTER
NUMBER						NU	JMBER	AREA	LONG.	LAT.	HORIZ	VERT
	FT	FT/SI	EC LB/	FT**2	DEG R	1/	/FT	FT**2	FT	FT	FT	FT
0 0.600						4.260	00E+06	2.250	0.822	3.000	2.600	0.000
0								DERIV	ATIVE (PER DE	GREE)		
0 ALPHA	CD	CL	CM	CN	CA	XCP	CLA	CMA	CYB	CNB	C	LB
0												
-2.0	0.019	-0.134	0.0228	-0.135	0.015	-0.170	6.695E-02	-1.114E-02	-1.601E-02	3.869E-	-03 -1.36	0E-03
0.0	0.017	0.000	0.0000	0.000	0.017	****	6.695E-02	-1.168E-02			-1.75	5E-03
2.0	0.019	0.134	-0.0239	0.134	0.015	-0.177	6.751E-02	-1.337E-02			-2.14	7E-03
4.0	0.028	0.270	-0.0535	0.271	0.009	-0.197	6.801E-02	-1.565E-02			-2.54	1E-03
8.0	0.074	0.542		0.547	-0.002	-0.225	6.676E-02	-1.813E-02			-3.31	
12.0	0.162	0.804	-0.1985	0.820	-0.009	-0.242	5.806E-02	-1.973E-02			-4.02	6E-03
16.0	0.257	1.006	-0.2806	1.038	-0.030	-0.270	4.049E-02	-2.182E-02			-4.41	7E-03
20.0		1.128	-0.3731				1.762E-02	-1.977E-02			-4.40	5E-03
24.0		1.147	-0.4388				-8.122E-03	-1.307E-02			-3.96	2E-03
0				ALPHA	Q/QINF	EPSLON	D(EPSLON)/I	O(ALPHA)				
0												
				-2.0	0.944	-1.234	0.61	7				
				0.0	0.909	0.000	0.61	7				
				2.0	0.944		0.603					
				4.0	0.995	2.413	0.572	2				
				8.0	1.000	4.565	0.493	3				
				12.0	1.000	6.358	0.361					
				16.0	1.000	7.452	0.162	2				
		20.0		20.0	1.000	7.650	-0.065	5				
				24.0	1.000	6.929	-0.180)				
8.0 12.0 16.0 20.0 24.0	0.074 0.162	0.542 0.804 1.006 1.128	-0.1228 -0.1985 -0.2806 -0.3731	0.547 0.820 1.038 ALPHA -2.0 0.0 2.0 4.0 8.0 12.0 16.0 20.0	-0.002 -0.009 -0.030 Q/QINF 0.944 0.909 0.944 0.995 1.000 1.000 1.000	-0.225 -0.242 -0.270 EPSLON -1.234 0.000 1.234 2.413 4.565 6.358 7.452 7.650	6.676E-02 5.806E-02 4.049E-02 1.762E-02 -8.122E-03 D(EPSLON)/I 0.61 0.61 0.60 0.572 0.493 0.363 0.162 -0.069	-1.813E-02 -1.973E-02 -2.182E-02 -1.977E-02 -1.307E-02 O(ALPHA)			-3.31 -4.02 -4.41 -4.40	5E-03 6E-03 7E-03 5E-03

CHARACTERISTICS AT ANGLE OF ATTACK AND IN SIDESLIP DATCOM BODY ALONE CONFIGURATION CONFIGURATION BUILDUP, EXAMPLE PROBLEM 3, CASE 1

		FLI	GHT CO	NDITIONS					REFER	ENCE DIME	NSIONS	
MACH	ALTITUDE	VELOCITY	PR	ESSURE	TEMPERATU	RE RE	YNOLDS	REF.	REFERENCE	LENGTH	MOMENT	REF. CENTER
NUMBER						N	UMBER	AREA	LONG.	LAT.	HORIZ	VERT
	FT	FT/SEC	LB	/FT**2	DEG R	1	/FT	FT**2	FT	FT	FT	FT
0 0.800						6.40	00E+06	2.250	0.822	3.000	2.60	0.000
0								DERIVA	ATIVE (PER DE	GREE)		
0 ALPHA	CD	CL	CM	CN	CA	XCP	CLA	CMA	CYB	CNB		CLB
0												
-2.0	0.008	NDM	NDM	NDM	NDM	2.892	1.599E-03	4.625E-03	-1.599E-03	-1.267E	-03	0.000E+00
0.0	0.008											0.000E+00
2.0	0.008											0.000E+00
4.0	0.008											0.000E+00
8.0	0.008											0.000E+00
12.0	0.009											0.000E+00
16.0	0.010											0.000E+00
20.0	0.011											0.000E+00
24.0	0.012											0.000E+00
0*** NDM	PRINTED WE	IEN NO DATO	OM MET	HODS EXTS	'T'							

0*** NDM PRINTED WHEN NO DATCOM METHODS EXIST

CHARACTERISTICS AT ANGLE OF ATTACK AND IN SIDESLIP WING ALONE CONFIGURATION

		FL	IGHT CO	NDITIONS					REFE	RENCE DIME	NSIONS	
MACH	ALTITUDE	VELOCIT.	Y PR	ESSURE	TEMPERAT	URE RE	YNOLDS	REF.	REFERENC	E LENGTH	MOMENT REF	. CENTER
NUMBER						N	IUMBER	AREA	LONG.	LAT.	HORIZ	VERT
	FT	FT/SEC	LB	/FT**2	DEG R	1	./FT	FT**2	FT	FT	FT	FT
0 0.800						6.40	00E+06	2.250	0.822	3.000	2.600	0.000
0								DERIVAT	CIVE (PER D	EGREE)		
0 ALPHA	CD	CL	CM	CN	CA	XCP	CLA	CMA	CYB	CNB	C	LB
0												
-2.0	0.006	NDM	NDM	NDM	NDM	-0.239	5.044E-02	-1.206E-02	NDM	NDM	NI	M
0.0											NI	M
2.0											NI	M
4.0											NI	M
8.0											NI	M
12.0											NI	M
16.0											NI	M
20.0											NI	M
24.0											NI	M
0*** NDM	PRINTED WH	EN NO DAT	COM MET	HODS EXIS	T							

CHARACTERISTICS AT ANGLE OF ATTACK AND IN SIDESLIP HORIZONTAL TAIL CONFIGURATION

FLIGHT CONDITION									REFE	RENCE DIME	NSIONS	
MACH	ALTITUDE	VELOCIT	Y PR	ESSURE	TEMPERAT	JRE RE	YNOLDS	REF.	REFERENC	E LENGTH	MOMENT REF	CENTER
NUMBER						N	UMBER	AREA	LONG.	LAT.	HORIZ	VERT
	FT	FT/SEC	LB	/FT**2	DEG R	1	/FT	FT**2	FT	FT	FT	FT
0 0.800						6.40	00E+06	2.250	0.822	3.000	2.600	0.000
0								DERIVAT	CIVE (PER D	EGREE)		
0 ALPHA	CD	CL	CM	CN	CA	XCP	CLA	CMA	CYB	CNB	C	LB
0												
-2.0	0.001	NDM	NDM	NDM	NDM	-2.232	8.485E-03	-1.894E-02	NDM	NDM	NI	M
0.0											NI	M
2.0											NI	M
4.0											NI	M
8.0											NI	M
12.0											NI	M
16.0											NI	M
20.0											NI	M
24.0											NI	M
0*** NDM	PRINTED WH	EN NO DAT	COM MET	HODS EXIS	T							

CHARACTERISTICS AT ANGLE OF ATTACK AND IN SIDESLIP VERTICAL TAIL CONFIGURATION

		FI	LIGHT CON	DITIONS					REFE	RENCE DIME	NSIONS	
MACH	ALTITUDE	VELOCIT	ry pre	SSURE	TEMPERATU	RE RE	YNOLDS	REF.	REFERENC	E LENGTH	MOMENT REF	. CENTER
NUMBER						N	UMBER	AREA	LONG.	LAT.	HORIZ	VERT
	FT	FT/SEC	C LB/	FT**2	DEG R	1	/FT	FT**2	FT	FT	FT	FT
0 0.800						6.40	00E+06	2.250	0.822	3.000	2.600	0.000
0								DERIVAT	CIVE (PER D	EGREE)		
0 ALPHA	CD	CL	CM	CN	CA	XCP	CLA	CMA	CYB	CNB	C	LB
0												
-2.0	0.003	0.000	0.0000	0.000	NDM	*****	0.000E+00	0.000E+00	NDM	NDM	ND	M
0.0											ND	M
2.0											ND	M
4.0											ND	M
8.0											ND	M
12.0											ND	M
16.0											ND	M
20.0											ND	M
24.0											ND	M
0*** NDM	PRINTED WE	IEN NO DAT	COM METH	ODS EXIS	T							

CHARACTERISTICS AT ANGLE OF ATTACK AND IN SIDESLIP WING-BODY CONFIGURATION CONFIGURATION BUILDUP, EXAMPLE PROBLEM 3, CASE 1

FLIGHT CONDITIONS				DITIONS					REFER	ENCE DIME	NSIONS	
MACH	ALTITUDE	VELOCIT	Y PRE	SSURE	TEMPERATU	JRE RE	YNOLDS	REF.	REFERENCE	LENGTH	MOMENT RE	F. CENTER
NUMBER						N	IUMBER	AREA	LONG.	LAT.	HORIZ	VERT
	FT	FT/SEC	LB/	FT**2	DEG R	1	./FT	FT**2	FT	FT	FT	FT
0 0.800						6.40	00E+06	2.250	0.822	3.000	2.600	0.000
0								DERIVA	ATIVE (PER DE	GREE)		
0 ALPHA	CD	CL	CM	CN	CA	XCP	CLA	CMA	CYB	CNB	,	CLB
0												
-2.0	0.017	-0.130	0.0077	-0.131	0.012	-0.059	6.513E-02	-7.869E-03	-1.599E-03	-1.941E	-03 9.4	41E-04
0.0	0.013	0.000		0.000	0.013		6.513E-02				0.0	00E+00
2.0	0.017	0.130		0.131	0.012		6.513E-02				-9.4	41E-04
4.0	0.026	0.261		0.262	0.008		6.513E-02				-1.8	88E-03
8.0	0.082	0.521		0.527	0.009		6.513E-02				-3.7	76E-03
12.0	0.158	0.782		0.797	-0.008		6.513E-02				-5.6	64E-03
16.0	0.246	1.042		1.070	-0.050		6.513E-02				-7.5	53E-03
20.0		1.303					6.513E-02				-9.4	41E-03
24.0		1.563					6.513E-02				-1.1	33E-02
1												

CHARACTERISTICS AT ANGLE OF ATTACK AND IN SIDESLIP BODY-HORIZONTAL TAIL CONFIGURATION CONFIGURATION BUILDUP, EXAMPLE PROBLEM 3, CASE 1

	FLIGHT CONDITIONS								REFER	ENCE DIMEN	SIONS	
MACH	ALTITUDE	VELOCITY	r PR	ESSURE	TEMPERATU	JRE RE	YNOLDS	REF.	REFERENCE	LENGTH	MOMENT REF	. CENTER
NUMBER						N	UMBER	AREA	LONG.	LAT.	HORIZ	VERT
	FT	FT/SEC	LB	/FT**2	DEG R	1	/FT	FT**2	FT	FT	FT	FT
0 0.800						6.40	00E+06	2.250	0.822	3.000	2.600	0.000
0								DERIVA	ATIVE (PER DE	GREE)		
0 ALPHA	CD	CL	CM	CN	CA	XCP	CLA	CMA	CYB	CNB	C	LB
0												
-2.0	0.009	-0.027	NDM	-0.027	0.008	-1.623	1.342E-02	-2.178E-02	-1.599E-03	-1.941E-	-03 6.75	5E-05
0.0		0.000	NDM -U.U2/				1.342E-02				0.00	0E+00
2.0		0.027					1.342E-02				-6.75	5E-05
4.0		0.054					1.342E-02				-1.35	1E-04
8.0		0.107					1.342E-02				-2.70	2E-04
12.0		0.161					1.342E-02				-4.05	3E-04
16.0		0.215					1.342E-02				-5.40	4E-04
20.0		0.268					1.342E-02				-6.75	5E-04
24.0		0.322					1.342E-02				-8.10	6E-04

0*** NDM PRINTED WHEN NO DATCOM METHODS EXIST

1

CHARACTERISTICS AT ANGLE OF ATTACK AND IN SIDESLIP BODY-VERTICAL TAIL CONFIGURATION CONFIGURATION BUILDUP, EXAMPLE PROBLEM 3, CASE 1

		FL	IGHT CO	NDITIONS		REFE	RENCE DIME	NSIONS				
MACH	ALTITUDE	VELOCITY	Y PR	ESSURE	TEMPERAT	JRE RE	YNOLDS	REF.	REFERENC	E LENGTH	MOMENT REF	. CENTER
NUMBER						N	IUMBER	AREA	LONG.	LAT.	HORIZ	VERT
	FT	FT/SEC	LB	/FT**2	DEG R	1	./FT	FT**2	FT	FT	FT	FT
0 0.800						6.40	00E+06	2.250	0.822	3.000	2.600	0.000
0								DERIVA	CIVE (PER D	EGREE)		
0 ALPHA	CD	CL	CM	CN	CA	XCP	CLA	CMA	CYB	CNB	C	LB
0												
-2.0	0.010	NDM	NDM	NDM	NDM	2.892	1.599E-03	4.625E-03	NDM	NDM	ND	M
0.0	0.010										ND	M
2.0	0.010										ND	M
4.0	0.011										ND	M
											ND	M
12.0	0.012										ND	M
16.0	0.012										ND	M
20.0	0.014										ND	M
24.0	0.015										ND	M
0.0 2.0 4.0 8.0 12.0 16.0 20.0 24.0	0.010 0.010 0.011 0.011 0.012 0.012 0.014					2.892	1.599E-U3	4.025E-U3	MUM	NDM	ND ND ND ND ND ND	M M M M M M M

0*** NDM PRINTED WHEN NO DATCOM METHODS EXIST

CHARACTERISTICS AT ANGLE OF ATTACK AND IN SIDESLIP WING-BODY-HORIZONTAL TAIL CONFIGURATION CONFIGURATION BUILDUP, EXAMPLE PROBLEM 3, CASE 1

		FL]	IGHT CC	NDITIONS					REFE	RENCE DIME	NSIONS	
MACH	ALTITUDE	VELOCITY	Y PR	RESSURE	TEMPERATURI	E REY	NOLDS	REF.	REFERENC	E LENGTH	MOMENT REF.	CENTER
NUMBER						NU	MBER	AREA	LONG.	LAT.	HORIZ	VERT
	FT	FT/SEC	LE	3/FT**2	DEG R		FT	FT**2	FT	FT	FT	FT
0 0.800						6.400	0E+06	2.250	0.822	3.000	2.600	0.000
0					-				TIVE (PER D			
0 ALPHA	CD	CL	CM	CN	CA	XCP	CLA	CMA	CYB	CNB	CI	ıΒ
0 -2.0 0.0	0.014	NDM	NDM	NDM	NDM	0.028	6.903E-02	1.943E-03	NDM	NDM	NDM NDM	
2.0											NDM	
4.0											NDM	
8.0											NDM	I
12.0											NDM	I
16.0											NDM	
20.0											NDM	
24.0 0				ALPHA	Q/QINF	EDCI OM	D(EPSLON)/D	/ 7.1. DIJ 7.)			NDM	1
0				ALPHA	Q/QINF	EPSLON	D(EPSLON)/D	(ALPHA)				
· ·				-2.0	0.914	0.000	0.639					
				0.0								
				2.0								
				4.0								
				8.0								
				12.0								
				16.0 20.0								
				24.0								
0*** NDM	PRINTED WE	HEN NO DATO	COM MET		T							

CHARACTERISTICS AT ANGLE OF ATTACK AND IN SIDESLIP WING-BODY-VERTICAL TAIL CONFIGURATION CONFIGURATION BUILDUP, EXAMPLE PROBLEM 3, CASE 1

		FLI	GHT CO	ONDITIONS					REFER	ENCE DIME	NSIONS	
MACH	ALTITUDE	VELOCITY	PF	RESSURE	TEMPERATU	JRE RE	YNOLDS	REF.	REFERENCE	LENGTH	MOMENT	REF. CENTER
NUMBER						N	IUMBER	AREA	LONG.	LAT.	HORIZ	VERT
	FT	FT/SEC	LE	3/FT**2	DEG R	1	/FT	FT**2	FT	FT	FT	FT
0 0.800						6.40	000E+06	2.250	0.822	3.000	2.600	0.000
0								DERIVA	ATIVE (PER DE	GREE)		
0 ALPHA	CD	CL	CM	CN	CA	XCP	CLA	CMA	CYB	CNB		CLB
0												
-2.0	0.020	-0.130	NDM	-0.131	0.015	-0.121	6.513E-02	-7.869E-03	-1.599E-03	-1.941E	-03	NDM
0.0	0.016	0.000	NDM	0.000	0.016		6.513E-02					NDM
2.0	0.020	0.130	NDM	0.131	0.015		6.513E-02					NDM
4.0	0.029	0.261	NDM	0.262	0.011		6.513E-02					NDM
8.0	0.085	0.521	NDM	0.528	0.012		6.513E-02					NDM
12.0	0.161	0.782	NDM	0.798	-0.005		6.513E-02					NDM
16.0	0.249	1.042	NDM	1.070	-0.048		6.513E-02					NDM
20.0		1.303	NDM				6.513E-02					NDM
24.0		1.563	NDM				6.513E-02					NDM

0*** NDM PRINTED WHEN NO DATCOM METHODS EXIST

1

CHARACTERISTICS AT ANGLE OF ATTACK AND IN SIDESLIP WING-BODY-VERTICAL TAIL-HORIZONTAL TAIL CONFIGURATION CONFIGURATION BUILDUP, EXAMPLE PROBLEM 3, CASE 1

		FL	IGHT CO	NDITIONS					REFE	RENCE DIME	NSIONS	
MACH	ALTITUDE	VELOCIT	Y PR	ESSURE	TEMPERATUR	E REY	NOLDS	REF.	REFERENC!	E LENGTH	MOMENT REF.	CENTER
NUMBER							MBER	AREA	LONG.	LAT.	HORIZ	VERT
	FT	FT/SEC	LB	/FT**2	DEG R	1/		FT**2	FT	FT	FT	FT
0 0.800						6.400	0E+06	2.250	0.822	3.000	2.600	0.000
0								DERIVA				
0 ALPHA	CD	CL	CM	CN	CA	XCP	CLA	CMA	CYB	CNB	CI	∟B
0 -2.0 0.0	0.017	NDM	NDM	NDM	NDM	0.028	6.903E-02	1.943E-03	NDM	NDM	NDN NDN	
2.0											NDN	
4.0											NDN	ľ
8.0											NDN	I
12.0											NDN	
16.0											NDN	
20.0 24.0											NDN NDN	
0				ALPHA	Q/QINF	EDSLON	D(EPSLON)/D	(AT.DHA)			INDI	1
0				11111	Q/ Q1111	LIBLON	2(218281778	(11111)				
				-2.0	0.914	0.000	0.639					
				0.0								
				2.0								
				4.0								
				8.0								
				12.0 16.0								
				20.0								
				24.0								
0*** NDM	PRINTED WH	IEN NO DATO	COM MET		T							

CONFIGURATION AUXILIARY AND PARTIAL OUTPUT WING-BODY-VERTICAL TAIL-HORIZONTAL TAIL CONFIGURATION CONFIGURATION BUILDUP, EXAMPLE PROBLEM 3, CASE 1

		FLIGH	T CONDITIONS				REFER	ENCE DIME	ENSIONS	
MACH	ALTITUDE	VELOCITY	PRESSURE	TEMPERATURE	REYNOLDS	REF.	REFERENCE	LENGTH	MOMENT REF.	. CENTER
NUMBER					NUMBER	AREA	LONG.	LAT.	HORIZ	VERT
	FT	FT/SEC	LB/FT**2	DEG R	1/FT	FT**2	FT	FT	FT	FT
0 0.800					6.4000E+06	2.250	0.822	3.000	2.600	0.000

BASIC BODY PROPERTIES

WETTED AREA XCG ZCG BASE AREA ZERO LIFT DRAG BASE DRAG FRICTION DRAG PRESSURE DRAG 0.5035E+01 2.60 0.00 0.0598 0.7576E-02 0.1690E-02 0.5487E-02 0.3992E-03

XCG RELATIVE TO THEORETICAL LEADING EDGE MAC= 0.20

BASIC PLANFORM PROPERTIES

			TAPER	ASPECT QU	ARTER CHORD)	QUARTER CHORI)	ZERO LIFT	FRICTION
		AREA	RATIO	RATIO	SWEEP	MAC	X(MAC)	Y(MAC)	DRAG	COEFFICIENT
0	WING									
	TOTAL THEORITICAL									
+		0.2259E+01	0.298	0.3984E+01	45.000	0.826E+00	0.260E+01	0.615E+00		
	TOTAL EXPOSED	0 17065.01	0 221	0 27077.01	45 000	0 7555.00	0 0745.01	0 7475.00	0 5725 00	0 2255 00
+ 0	HORIZONTAL TAIL	0.1796E+01	0.331	0.3707E+01	45.000	0.755E+00	0.274E+01	0.747E+00	0.573E-02	0.335E-02
U	TOTAL THEORITICAL									
+	TOTAL THEORETICAL	0.4509E+00	0.602	0.3982E+01	45.000	0.343E+00	0.434E+01	0.307E+00		
·	TOTAL EXPOSED	0.13071.00	0.002	0.37022:01	13.000	0.3132.00	0.1312.01	0.3071.00		
+		0.3305E+00	0.661	0.3272E+01	45.000	0.322E+00	0.443E+01	0.392E+00	0.123E-02	0.391E-02
0	VERTICAL TAIL									
T	HEORITICAL INBOARD									
+		0.1223E+01	0.412	0.2358E+01	28.100	0.762E+00	0.379E+01	0.366E+00		
	EXPOSED INBOARD									
+		0.4048E+00	0.485	0.9804E+00	28.100	0.668E+00	0.386E+01	0.498E+00		NA
	OUTBOARD	0 4000= 00	1 000	0 50005 00	0.000	0 400= 00	0 244= 01	0 600= 00		
+		0.4200E-30	1.000	0.5000E+00	0.000	0.420E+00	0.344E+01	0.630E+00		NA
_	TOTAL THEORITICAL	0.6113E+00	0.412	0.1179E+01	66.960	0.762E+00	0.379E+01	0.366E+00		
т		0.01136700	0.412	0.11/96701	00.900	0./0ZET00	0.3/36+01	0.3006700		

TOTAL EXPOSED

+ 0.4048E+00 0.485 0.9804E+00 28.100 0.668E+00 0.386E+01 0.498E+00 NA NA 0*** NA PRINTED WHEN METHOD NOT APPLICABLE

1

CONFIGURATION AUXILIARY AND PARTIAL OUTPUT WING-BODY-VERTICAL TAIL-HORIZONTAL TAIL CONFIGURATION CONFIGURATION BUILDUP, EXAMPLE PROBLEM 3, CASE 1

		FLIGHT	T CONDITIONS				REFER	ENCE DIME	ENSIONS	
MACH	ALTITUDE	VELOCITY	PRESSURE	TEMPERATURE	REYNOLDS	REF.	REFERENCE	LENGTH	MOMENT REF	. CENTER
NUMBER					NUMBER	AREA	LONG.	LAT.	HORIZ	VERT
	FT	FT/SEC	LB/FT**2	DEG R	1/FT	FT**2	FT	FT	FT	FT
0 0.800					6.4000E+06	2.250	0.822	3.000	2.600	0.000
0	CLA-B(W)=	7.443E-03	CLA-W(B) =	5.609E-02	K-B(W) = 1.476E-01	K-W(B)=1	l.112E+00	XAC/C-E	8(W) = 6.820E	-01
0	CLA-B(H)=	= 1.777E-03	CLA-H(B) =	1.005E-02	K-B(H) = 2.094E-01	K-H(B)=1	l.184E+00	XAC/C-E	3(H) = 4.272E	-01
1										

CONFIGURATION AUXILIARY AND PARTIAL OUTPUT WING-BODY-VERTICAL TAIL-HORIZONTAL TAIL CONFIGURATION

CONFIGURATION BUILDUP, EXAMPLE PROBLEM 3, CASE 1

		FLIGH	T CONDITIONS				REFER	ENCE DIME	ENSIONS	
MACH	ALTITUDE	VELOCITY	PRESSURE	TEMPERATURE	REYNOLDS	REF.	REFERENCE	LENGTH	MOMENT RI	EF. CENTER
NUMBER					NUMBER	AREA	LONG.	LAT.	HORIZ	VERT
	FT	FT/SEC	LB/FT**2	DEG R	1/FT	FT**2	FT	FT	FT	FT
0 0.800					6.4000E+06	2.250	0.822	3.000	2.600	0.000

*** WING DATA FAIRING ***

CDL/CL**2 = 0.1977E+00 CLB/CL = -0.5165E-02

FORCE BREAK MACH NUMBER (ZERO SWEEP) = 0.9321E+00 FORCE BREAK MACH NUMBER (WITH SWEEP) = 0.9552E+00

MACH(A) = 1.025 CLA(A) = 0.5384E-01 MACH(B) = 1.095 CLA(B) = 0.4967E-01

(CLB/CL)M=0.6 = -0.4771E-02 (CLB/CL)M=1.4 = -0.2642E-02

LIFT-CURVE-SLOPE INTERPOLATION TABLE

MACH	CL-ALPHA
0.750	0.4868E-01
0.955	0.5710E-01
1.025	0.5384E-01
1.095	0.4967E-01
1.400	0.4200E-01

*** WING-BODY DATA FAIRING ***

CLB/CL = -0.7247E - 02 (CLB/CL)MFB = -0.4718E - 02 (CLB/CL)M=1.4 = -0.2043E - 02 (CNA)M=1.4 = 0.5406E - 01

*** HORIZONTAL TAIL DATA FAIRING ***

CDL/CL**2 = 0.2357E+00 CLB/CL = -0.2349E-02

FORCE BREAK MACH NUMBER (ZERO SWEEP) = 0.9738E+00 FORCE BREAK MACH NUMBER (WITH SWEEP) = 0.9838E+00

MACH(A) = 1.054 CLA(A) = 0.9185E-02 MACH(B) = 1.124 CLA(B) = 0.8436E-02

(CLB/CL)M=0.6 = -0.2620E-02 (CLB/CL)M=1.4 = -0.2496E-03

LIFT-CURVE-SLOPE INTERPOLATION TABLE

MACH	CL-ALPHA
0.750	0.8234E-02
0.984	0.9696E-02
1.054	0.9185E-02

1.124 0.8436E-02 1.400 0.7109E-02

*** HORIZONTAL TAIL-BODY DATA FAIRING ***

CLB/CL = -0.2516E - 02 (CLB/CL)MFB = -0.9533E - 03 (CLB/CL)M=1.4 = -0.1640E - 03 (CNA)M=1.4 = 0.1058E - 01

*** BODY-WING-HORIZONTAL TAIL DATA FAIRING ***

DRAG DIVERGENCE MACH NUMBER = 0.931

MACH	CDO
0.600	0.1702E-01
0.700	0.1701E-01
1.100	0.2324E-01
1.400	0.2262E-01

CHARACTERISTICS AT ANGLE OF ATTACK AND IN SIDESLIP DATCOM BODY ALONE CONFIGURATION CONFIGURATION BUILDUP, EXAMPLE PROBLEM 3, CASE 1

		I	FLIGHT CON	DITIONS					REFER	ENCE DIMEN	ISIONS -	
MACH	ALTITUDE	VELOC:	ITY PRE	SSURE	TEMPERATURE REYNO		YNOLDS	REF.	REFERENCE	LENGTH	MOMENT R	EF. CENTER
NUMBER						N	UMBER	AREA	LONG.	LAT.	HORIZ	VERT
	FT	FT/SI	C LB/FT**2		DEG R	1	1/FT		FT	FT	FT	FT
0 1.500						9.96	9.9600E+06		0.822	3.000	2.600	0.000
0								DERIVA	ATIVE (PER DE	GREE)		
0 ALPHA	CD	\mathtt{CL}	CM	CN	CA	XCP	CLA	CMA	CYB	CNB		CLB
0												
-2.0	0.014	-0.004	-0.0085	-0.004	0.014	1.960	1.916E-03	4.242E-03	-1.916E-03	-1.162E-	0.0	000E+00
0.0	0.014	0.000	0.0000	0.000	0.014	****	1.916E-03	4.242E-03	-1.916E-03	-1.162E-	0.03	000E+00
2.0	0.014	0.004	0.0085	0.004	0.014	1.960	2.429E-03	4.326E-03	-2.429E-03	-1.185E-	0.0	000E+00
4.0	0.015	0.010	0.0173	0.011	0.014	1.614	3.430E-03	4.479E-03	-3.430E-03	-1.227E-	0.0	000E+00
8.0	0.018	0.027	0.0358	0.030	0.014	1.210	5.371E-03	4.720E-03	-5.371E-03	-1.293E-	0.0	000E+00
12.0	0.025	0.053	0.0551	0.057	0.014	0.971	7.439E-03	4.934E-03	-7.439E-03	-1.352E-	0.0	000E+00
16.0	0.038	0.087	0.0752	0.094	0.013	0.800	9.918E-03	5.192E-03	-9.918E-03	-1.423E-	0.0	000E+00
20.0	0.061	0.132	0.0966	0.145	0.012	0.666	1.294E-02	5.552E-03	-1.294E-02	-1.521E-	0.0	000E+00
24.0	0.098	0.190	0.1197	0.214	0.012	0.560	1.623E-02	5.973E-03	-1.623E-02	-1.637E-	0.0	000E+00
1												

CHARACTERISTICS AT ANGLE OF ATTACK AND IN SIDESLIP WING ALONE CONFIGURATION CONFIGURATION BUILDUP, EXAMPLE PROBLEM 3, CASE 1

		F	LIGHT CON	DITIONS					REFERENCE DIMENSIONS					
MACH	ALTITUDE	VELOCI	TY PRE	Y PRESSURE		TEMPERATURE RE		REF.	REFERENCE LENGTH		MOMENT REF	. CENTER		
NUMBER						N	UMBER	AREA	LONG.	LAT.	HORIZ	VERT		
	FT	FT/SE	T/SEC LB/FT**2		DEG R	EG R 1/FT		FT**2	FT	FT	FT	FT		
0 1.500						9.96	00E+06	2.250	0.822	3.000	2.600	0.000		
0								DERIVAT	TIVE (PER D	EGREE)				
0 ALPHA	CD	CL	CM	CN	CA	XCP	CLA	CMA	CYB	CNB	C	LB		
0														
-2.0	0.008	-0.077	0.0298	-0.077	0.005	-0.386	3.832E-02	-1.492E-02	NDM	NDM	1.75	8E-04		
0.0	0.006	0.000	0.0000	0.000	0.006	****	3.856E-02				0.00	0E+00		
2.0	0.008	0.077	-0.0298	0.077	0.005	-0.386	3.867E-02				-1.75	8E-04		
4.0	0.015	0.155	-0.0597	0.155	0.004	-0.384	3.859E-02				-3.53	0E-04		
8.0	0.041	0.308	-0.1193	0.310	-0.002	-0.385	3.719E-02				-7.05	4E-04		
12.0	0.082	0.452	NDM	0.459	-0.014		3.437E-02				-1.04	4E-03		
16.0	0.133	0.583	NDM	0.597	-0.033		3.018E-02				-1.35	6E-03		
20.0	0.186	0.694	NDM	0.715	-0.063		2.484E-02				-1.62	6E-03		
24.0	0.234	0.781	NDM	0.809	-0.104		1.898E-02				-1.83	9E-03		

0*** NDM PRINTED WHEN NO DATCOM METHODS EXIST

CHARACTERISTICS AT ANGLE OF ATTACK AND IN SIDESLIP HORIZONTAL TAIL CONFIGURATION CONFIGURATION BUILDUP, EXAMPLE PROBLEM 3, CASE 1

		F	FLIGHT CON	DITIONS					REFERENCE DIMENSIONS					
MACH	ALTITUDE	VELOCI	TY PRE	SSURE	TEMPERATU	JRE RE	YNOLDS	REF.	REFERENC	E LENGTH	MOMENT REF	. CENTER		
NUMBER						N	UMBER	AREA	LONG.	LAT.	HORIZ	VERT		
	FT	FT/SE	EC LB/FT**2		DEG R	1	/FT	FT**2	FT	FT	FT	FT		
0 1.500					9.9600E+06		00E+06	2.250	0.822	3.000	2.600	0.000		
0								DERIVAT	IVE (PER D	EGREE)				
0 ALPHA	CD	\mathtt{CL}	CM	CN	CA	XCP	CLA	CMA	CYB	CNB	C	LB		
0														
-2.0	0.002	-0.014	0.0308	-0.014	0.001	-2.269	6.699E-03	-1.539E-02	NDM	NDM	3.02	3E-06		
0.0	0.001	0.000	0.0000	0.000	0.001	****	6.757E-03				0.00	0E+00		
2.0	0.002	0.014	-0.0308	0.014	0.001	-2.269	6.787E-03				-3.02	3E-06		
4.0	0.003	0.027	-0.0615	0.027	0.001	-2.257	6.789E-03				-6.08	0E-06		
8.0	0.007	0.054	-0.1231	0.055	0.000	-2.255	6.568E-03				-1.21	7E-05		
12.0	0.014	0.080	NDM	0.081	-0.002		6.094E-03				-1.80	5E-05		
16.0	0.023	0.103	NDM	0.105	-0.006		5.396E-03				-2.34	7E-05		
20.0	0.033	0.123	NDM	0.127	-0.011		4.516E-03				-2.82	4E-05		
24.0	0.042	0.139	NDM	0.144	-0.019		3.536E-03				-3.20	7E-05		
O+++ ATDM	DDTMMHD W	TITAL NO D7	MOOM MEET	ODG EXTG	m									

0*** NDM PRINTED WHEN NO DATCOM METHODS EXIST

CHARACTERISTICS AT ANGLE OF ATTACK AND IN SIDESLIP VERTICAL TAIL CONFIGURATION

		FL	IGHT CON	DITIONS					REFERENCE DIMENSIONS					
MACH	ALTITUDE	VELOCIT	Y PRE	SSURE	TEMPERATU	RATURE REYNOLDS		REF.	REFERENCE	LENGTH	MOMENT R	EF. CENTER		
NUMBER						NUMBER		AREA	LONG.	LAT.	HORIZ	VERT		
	FT	FT/SEC	LB/I	FT**2	DEG R	1	/FT	FT**2	FT	FT	FT	FT		
0 1.500						9.9600E+06		2.250	0.822	3.000	2.600	0.000		
0								DERIVA	ATIVE (PER DE	GREE)				
0 ALPHA	CD	\mathtt{CL}	CM	CN	CA	XCP	CLA	CMA	CYB	CNB		CLB		
0														
-2.0	0.001	0.000	0.0000	0.000	0.001	****	0.000E+00	0.000E+00	-6.103E-02	2.905E	-02 -1.	113E-02		
0.0											-1.	012E-02		
2.0											-9.	103E-03		
4.0											-8.	073E-03		
8.0											-5.	982E-03		
12.0											-3.	863E-03		
16.0											-1.	725E-03		
20.0											4.	214E-04		
24.0											2.	566E-03		
1														

CHARACTERISTICS AT ANGLE OF ATTACK AND IN SIDESLIP WING-BODY CONFIGURATION CONFIGURATION BUILDUP, EXAMPLE PROBLEM 3, CASE 1

		I	FLIGHT CON	DITIONS					REFERENCE DIMENSIONS						
MACH	ALTITUDE	VELOC:	ITY PRE	SSURE	TEMPERATURE REY		YNOLDS	REF.	REFERENCE	LENGTH	MOMENT R	EF. CENTER			
NUMBER						N	UMBER	AREA	LONG.	LAT.	HORIZ	VERT			
	FT	FT/SI	EC LB/FT**2		DEG R	1	/FT	FT**2	FT	FT	FT	FT			
0 1.500					9.9600E+06		2.250	0.822	3.000	2.600	0.000				
0								DERIVA	ATIVE (PER DE	GREE)					
0 ALPHA	CD	\mathtt{CL}	CM	CN	CA	XCP	CLA	CMA	CYB	CNB	;	CLB			
0															
-2.0	0.022	-0.100	-0.0180	-0.101	0.019	0.178	4.961E-02	-1.384E-02	-1.643E-03	-2.045E	1.	758E-04			
0.0	0.020	0.000	0.0000	0.000	0.020	****	5.019E-02				0.	000E+00			
2.0	0.022	0.100	-0.0265	0.101	0.019	-0.262	5.083E-02				-1.	758E-04			
4.0	0.029	0.203	-0.0530	0.205	0.015	-0.259	5.173E-02				-3.	530E-04			
8.0	0.059	0.412	-0.1047	0.416	0.001	-0.251	5.174E-02				-7.	054E-04			
12.0	0.107	0.617	-0.1528	0.626	-0.024	-0.244	4.940E-02				-1.	044E-03			
16.0	0.171	0.808	-0.1947	0.823	-0.058	-0.236	4.558E-02				-1.	356E-03			
20.0	0.247	0.982	-0.2270	1.007	-0.104	-0.225	4.185E-02				-1.	626E-03			
24.0	0.332	1.142	-0.2463	1.178	-0.162	-0.209	3.839E-02				-1.	839E-03			
1															

CHARACTERISTICS AT ANGLE OF ATTACK AND IN SIDESLIP BODY-HORIZONTAL TAIL CONFIGURATION CONFIGURATION BUILDUP, EXAMPLE PROBLEM 3, CASE 1

		I	FLIGHT CON	DITIONS					REFER	ENCE DIME	NSIONS	
MACH	ALTITUDE	VELOCI	TTY PRE	SSURE	TEMPERATURE I		YNOLDS	REF.	REFERENCE	LENGTH	MOMENT	REF. CENTER
NUMBER						N	IUMBER	AREA	LONG.	LAT.	HORIZ	VERT
	FT	FT/SI	EC LB/	C LB/FT**2		1	./FT	FT**2	FT	FT	FT	FT
0 1.500						9.96	9.9600E+06		0.822	3.000	2.600	0.000
0								DERIV	ATIVE (PER DE	GREE)		
0 ALPHA	CD	\mathtt{CL}	CM	CN	CA	XCP	CLA	CMA	CYB	CNB		CLB
0												
-2.0	0.016	-0.021	0.0421	-0.021	0.015	-1.972	1.005E-02	-1.587E-02	-1.643E-03	-2.045E	-03 3	.023E-06
0.0	0.015	0.000	0.0000	0.000	0.015	****	1.040E-02				0	.000E+00
2.0	0.016	0.021	-0.0421	0.021	0.015	-1.972	1.094E-02				-3	.023E-06
4.0	0.017	0.044	-0.0843	0.045	0.014	-1.879	1.190E-02				-6	.080E-06
8.0	0.025	0.095	-0.1677	0.097	0.012	-1.725	1.318E-02				-1	.217E-05
12.0	0.039	0.149	-0.2451	0.154	0.008	-1.590	1.429E-02				-1	.805E-05
16.0	0.062	0.209	-0.3080	0.218	0.002	-1.414	1.569E-02				-2	.347E-05
20.0	0.094	0.275	-0.3557	0.290	-0.006	-1.225	1.746E-02				-2	.824E-05
24.0	0.139	0.349	-0.3887	0.375	-0.015	-1.036	1.947E-02				-3	.207E-05
1												

1

CHARACTERISTICS AT ANGLE OF ATTACK AND IN SIDESLIP BODY-VERTICAL TAIL CONFIGURATION CONFIGURATION BUILDUP, EXAMPLE PROBLEM 3, CASE 1

		I	FLIGHT CON	DITIONS		REFER	ENCE DIME	NSIONS				
MACH	ALTITUDE	VELOC:	ITY PRE	ΓY PRESSURE		JRE RE	YNOLDS	REF.	REFERENCE	LENGTH	MOMENT	REF. CENTER
NUMBER						N	NUMBER		LONG.	LAT.	HORIZ	VERT
	FT	FT/SE	EC LB/	C LB/FT**2		1	1/FT		FT	FT	FT	FT
0 1.500					9.9600E+06		2.250	0.822	3.000	2.600	0.000	
0								DERIVA	ATIVE (PER DE	GREE)		
0 ALPHA	CD	CL	CM	CN	CA	XCP	CLA	CMA	CYB	CNE	3	CLB
0												
-2.0	0.015	-0.004	-0.0085	-0.004	0.014	1.960	1.916E-03	4.242E-03	-6.295E-02	2.788E	I-02 -1	.113E-02
0.0	0.015	0.000	0.0000	0.000	0.014	*****	1.916E-03	4.242E-03			-1	.012E-02
2.0	0.015	0.004	0.0085	0.004	0.014	1.960	2.429E-03	4.326E-03			_9	0.103E-03
4.0	0.016	0.010	0.0173	0.011	0.014	1.614	3.430E-03	4.479E-03			-8	3.073E-03
8.0	0.019	0.027	0.0358	0.030	0.014	1.210	5.371E-03	4.720E-03			- 5	5.982E-03
12.0	0.026	0.053	0.0551	0.057	0.014	0.971	7.439E-03	4.934E-03			-3	3.863E-03
16.0	0.039	0.087	0.0752	0.094	0.013	0.800	9.918E-03	5.192E-03			-1	.725E-03
20.0	0.062	0.132	0.0966	0.145	0.012	0.666	1.294E-02	5.552E-03			4	1.214E-04
24.0	0.099	0.190	0.1197	0.214	0.012	0.560	1.623E-02	5.973E-03			2	2.566E-03

CHARACTERISTICS AT ANGLE OF ATTACK AND IN SIDESLIP WING-BODY-HORIZONTAL TAIL CONFIGURATION CONFIGURATION BUILDUP, EXAMPLE PROBLEM 3, CASE 1

	FLIGHT CONDITIONS				REFI					RENCE DIMENSIONS			
MACH	ALTITUDE	VELOC:	ITY PRE	SSURE	TEMPERATU	RE REY	NOLDS	REF.	REFERENCE	LENGTH	MOMENT	REF. CENTER	
NUMBER						NU	MBER	AREA	LONG.	LAT.	HORIZ	VERT	
	FT	FT/SI	EC LB/	FT**2	DEG R	1/	FT	FT**2	FT	FT	FT	FT	
0 1.500						9.960	0E+06	2.250	0.822	3.000	2.600	0.000	
0								DERIVA	ATIVE (PER DE	GREE)			
0 ALPHA	CD	\mathtt{CL}	CM	CN	CA	XCP	CLA	CMA	CYB	CNB		CLB	
0													
-2.0	0.024	-0.111	0.0491	-0.112	0.020	-0.440	5.481E-02	-2.457E-02	-1.643E-03	-2.045E	-03 1	.758E-04	
0.0	0.021	0.000	0.0000	0.000	0.021	****	5.454E-02	-2.402E-02			0	.000E+00	
2.0	0.024	0.111	-0.0491	0.112	0.020	-0.440	5.480E-02	-2.455E-02				.758E-04	
4.0	0.032	0.225	-0.1000	0.227	0.016	-0.441	5.500E-02	-2.500E-02				.530E-04	
8.0	0.065	0.456	-0.2021	0.460	0.001	-0.439	5.505E-02	-2.526E-02			-7	.054E-04	
0				ALPHA	Q/QINF	EPSLON	D(EPSLON)/I	O(ALPHA)					
0													
				-2.0	0.964	-0.717	0.358						
				0.0	0.915	0.000	0.358						
				2.0	0.964	0.717	0.359						
				4.0	1.000	1.437	0.359	9					
				8.0	0.999	2.858	0.352	2					

OANALYSIS TERMINATED AT ALPHA= 8.0 BECAUSE LEADING EDGE SHOCK IS DETACHED.

CHARACTERISTICS AT ANGLE OF ATTACK AND IN SIDESLIP WING-BODY-VERTICAL TAIL CONFIGURATION CONFIGURATION BUILDUP, EXAMPLE PROBLEM 3, CASE 1

		I	FLIGHT CON	DITIONS					REFERENCE DIMENSIONS				
MACH	ALTITUDE	VELOC	ITY PRE	SSURE	TEMPERATU	JRE RE	YNOLDS	REF.	REFERENCE	LENGTH	MOMENT I	REF. CENTER	
NUMBER						N	IUMBER	AREA	LONG.	LAT.	HORIZ	VERT	
	FT	FT/SI	EC LB/	FT**2	DEG R	1	./FT	FT**2	FT	FT	FT	FT	
0 1.500						9.96	00E+06	2.250	0.822	3.000	2.600	0.000	
0								DERIV	ATIVE (PER DE	GREE)			
0 ALPHA	CD	\mathtt{CL}	CM	CN	CA	XCP	CLA	CMA	CYB	CNE	;	CLB	
0													
-2.0	0.022	-0.100	-0.0180	-0.101	0.019	0.178	4.961E-02	-1.384E-02	-6.262E-02	2.698E	-02 -1	.095E-02	
0.0	0.020	0.000	0.0000	0.000	0.020	****	5.019E-02				-1	.011E-02	
2.0	0.022	0.100	-0.0265	0.101	0.019	-0.262	5.083E-02				-9	.272E-03	
4.0	0.029	0.203	-0.0530	0.205	0.015	-0.259	5.173E-02				-8	.419E-03	
8.0	0.059	0.412	-0.1047	0.416	0.001	-0.251	5.174E-02				-6	.683E-03	
12.0	0.107	0.617	-0.1528	0.626	-0.024	-0.244	4.940E-02				-4	.904E-03	
16.0	0.171	0.808	-0.1947	0.823	-0.058	-0.236	4.558E-02				-3	.080E-03	
20.0	0.247	0.982	-0.2270	1.007	-0.104	-0.225	4.185E-02				-1	.205E-03	
24.0	0.332	1.142	-0.2463	1.178	-0.162	-0.209	3.839E-02				7	.249E-04	
1													

CHARACTERISTICS AT ANGLE OF ATTACK AND IN SIDESLIP WING-BODY-VERTICAL TAIL-HORIZONTAL TAIL CONFIGURATION CONFIGURATION BUILDUP, EXAMPLE PROBLEM 3, CASE 1

		I	FLIGHT CON	DITIONS				REFERENCE DIMENSIONS				
MACH	ALTITUDE	VELOC	ITY PRE	SSURE	TEMPERATU	RE REY	NOLDS	REF.	REFERENCE	LENGTH	MOMENT R	EF. CENTER
NUMBER						NU	MBER	AREA	LONG.	LAT.	HORIZ	VERT
	FT	FT/SI	EC LB/	FT**2	DEG R	1/	FT	FT**2	FT	FT	FT	FT
0 1.500						9.960	0E+06	2.250	0.822	3.000	2.600	0.000
0								DERIV	ATIVE (PER DE	GREE)		
0 ALPHA	CD	CL	CM	CN	CA	XCP	CLA	CMA	CYB	CNE	3	CLB
0												
-2.0	0.025	-0.111	0.0491	-0.112	0.021	-0.440	5.481E-02	-2.457E-02	-6.267E-02	2.700E	i-02 −1.	095E-02
0.0	0.022	0.000	0.0000	0.000	0.022	****	5.454E-02	-2.402E-02			-1.	012E-02
2.0	0.025	0.111	-0.0491	0.112	0.021	-0.440	5.480E-02	-2.455E-02			-9.	279E-03
4.0	0.033	0.225	-0.1000	0.227	0.017	-0.441	5.500E-02	-2.500E-02			-8.	426E-03
8.0	0.066	0.456	-0.2021	0.460	0.002	-0.439	5.505E-02	-2.526E-02			-6.	688E-03
0				ALPHA	Q/QINF	EPSLON	D(EPSLON)/I	O(ALPHA)				
0												
				-2.0	0.964	-0.717	0.358	3				
				0.0	0.915	0.000	0.358	3				
				2.0	0.964	0.717	0.359	9				
				4.0	1.000	1.437	0.359	9				
				8.0	0.999	2.858	0.352	2				
0ANALYSI	S TERMINATI	ED AT ALI	PHA= 8.0	BECAUSE	LEADING ED	GE SHOCK I	S DETACHED.					
Return	to main pro	ogram fro	om M57071									
1	THE FOLI	OWING IS	S A LIST C	F ALL IN	IPIIT CARDS	FOR THIS C	'ASE					

THE FOLLOWING IS A LIST OF ALL INPUT CARDS FOR THIS CASE.

\$EXPR01 CLAWB(1)=0.0575, CMAWB(1)=-0.0050,

CDWB(1) = .015, .014, .015, .019, .064, .141, .216, .302, .410,

CLWB(1) = -.115, 0.0, .115, .23, .47, .65, .76, .81, .90,

CMWB(1) = .010, 0.0, -.010, -.020, -.038, -.002, -.013, -.013, -.020,

CLAB(1) = .002, CMAB(1) = .0039,

CDB(1) = .012, .010, .012, .013, .014, .016, .020, .030, .047,

CLB(1) = -.004, 0.0, .004, .008, .012, .020, .060, .085, .1,

CMB(1) = -.0078,.0078,.020,.038,.060,.083,.110,.140,.165

\$EXPR02 CLAWB(1) = .06, CLAB(1) = .002, CMAB(1) = .0039,

ALPOW=0.0, ALPLW=8.0, ACLMW=12.01, CLMW=1.39,

ALPOH=0.0, ALPLH=6.2, ACLMH=10.10, CLMH=1.02\$

CASEID INCLUDES BODY AND WING-BODY EXPERIMENTAL DATA, EX.PROB. 3, CASE 2

SAVE

NEXT CASE

0 INPUT DIMENSIONS ARE IN FT, SCALE FACTOR IS 1.0000

Return to main program from M01001

0*** WARNING *** V.T. NOT STRAIGHT TAPERED. UNIFORM SECTION ASSUMED.

Return to main program from M50062

Return to main program from M01001

Return to main program from M02002

Return to main program from M51063

CHARACTERISTICS AT ANGLE OF ATTACK AND IN SIDESLIP WING-BODY-VERTICAL TAIL-HORIZONTAL TAIL CONFIGURATION INCLUDES BODY AND WING-BODY EXPERIMENTAL DATA, EX.PROB. 3, CASE 2

		I	FLIGHT CON	DITIONS					REFER	ENCE DIME	NSIONS	
MACH	ALTITUDE	VELOCI	ITY PRE	SSURE	TEMPERATU	RE REY	NOLDS	REF.	REFERENCE	LENGTH	MOMENT REF	. CENTER
NUMBER						NU	MBER	AREA	LONG.	LAT.	HORIZ	VERT
	FT	FT/SE	EC LB/	FT**2	DEG R	1/	FT	FT**2	FT	FT	FT	FT
0 0.600						4.260	0E+06	2.250	0.822	3.000	2.600	0.000
0								DERIVA	ATIVE (PER DE	GREE)		
0 ALPHA	CD	CL	CM	CN	CA	XCP	CLA	CMA	CYB	CNB	Cl	ĽΒ
0												
-2.0	0.018	-0.124	0.0296	-0.124	0.014	-0.238	6.188E-02	-1.480E-02	-1.640E-02	3.869E		
0.0	0.017	0.000	0.0000	0.000	0.017	****	6.187E-02	-1.482E-02			-1.75	
2.0	0.018	0.124	-0.0296	0.124	0.014	-0.238	6.228E-02	-1.573E-02			-2.10	
4.0	0.023	0.249	-0.0629	0.250	0.005	-0.252	6.365E-02	-1.682E-02			-2.449	
8.0	0.071	0.511	-0.1315	0.516	-0.001	-0.255	5.844E-02	-1.132E-02			-3.182	
12.0	0.153	0.717	-0.1535	0.733	0.001	-0.209	4.342E-02	-1.349E-02			-3.64	
16.0	0.237	0.859	-0.2394	0.891	-0.009	-0.269	2.873E-02	-2.178E-02			-3.769	
20.0	0.336	0.946	-0.3278	1.004	-0.008	-0.326	2.592E-02	-2.052E-02			-3.60	
24.0	0.455	1.066	-0.4036	1.159	-0.018	-0.348	3.396E-02	-1.740E-02			-3.60	7E-03
0				ALPHA	Q/QINF	EPSLON	D(EPSLON)/I	O(ALPHA)				
0								_				
				-2.0	0.944	-1.234	0.617					
				0.0	0.909	0.000	0.617					
				2.0	0.944	1.234	0.603					
				4.0	0.995	2.413	0.572					
				8.0	1.000	4.565	0.493					
				12.0	1.000	6.358	0.361					
				16.0	1.000	7.452	0.162					
				20.0	1.000	7.650	-0.065					
0.4270				24.0	1.000	6.929	-0.180	J				

0*NOTE* OUTPUT REFLECTS EXPERIMENTAL DATA INPUTS

CHARACTERISTICS AT ANGLE OF ATTACK AND IN SIDESLIP WING-BODY-VERTICAL TAIL-HORIZONTAL TAIL CONFIGURATION INCLUDES BODY AND WING-BODY EXPERIMENTAL DATA, EX.PROB. 3, CASE 2

	FLI	GHT CC	NDITIONS					REFER	ENCE DIME	NSIONS	
ALTITUDE	VELOCITY	PR	RESSURE	TEMPERATURE	REY	NOLDS	REF.	REFERENCE	LENGTH	MOMENT REF	CENTER
					NU	MBER	AREA	LONG.	LAT.	HORIZ	VERT
FT	FT/SEC	LB	3/FT**2	DEG R	•		FT**2				FT
					6.400						0.000
								•	· ·		
CD	CL	CM	CN	CA	XCP	CLA	CMA	CAB	CNB	CI	ъВ
0.021	-0.153	NDM	-0.153	0.016	0.038	6.390E-02	2.441E-03	NDM	NDM	NDI NDI NDI NDI NDI	1 1 1 1 1
			дт.рид	O/OTNE	FDSI.ON	D(EDSI.ON)/D	(AT.DHA)			NDN	I
			ALLIA	Q/QIM	EFOLON	D(EFSHON)/D	(ALFIIA)				
			-2.0 0.0 2.0 4.0 8.0 12.0 16.0 20.0 24.0	0.914	0.000	0.639					
	FT CD 0.021	FT FT/SEC CD CL 0.021 -0.153	ALTITUDE VELOCITY PR FT FT/SEC LE CD CL CM 0.021 -0.153 NDM	FT FT/SEC LB/FT**2 CD CL CM CN 0.021 -0.153 NDM -0.153 ALPHA -2.0 0.0 2.0 4.0 8.0 12.0 16.0 20.0 24.0	ALTITUDE VELOCITY PRESSURE TEMPERATURE FT FT/SEC LB/FT**2 DEG R CD CL CM CN CA 0.021 -0.153 NDM -0.153 0.016 ALPHA Q/QINF -2.0 0.914 0.0 2.0 4.0 8.0 12.0 16.0 20.0	ALTITUDE VELOCITY PRESSURE TEMPERATURE REYNULFT FT/SEC LB/FT**2 DEG R 1/6.400 CD CL CM CN CA XCP 0.021 -0.153 NDM -0.153 0.016 0.038 ALPHA Q/QINF EPSLON -2.0 0.914 0.000 0.0 2.0 4.0 8.0 8.0 12.0 16.0 20.0 24.0	ALTITUDE VELOCITY PRESSURE TEMPERATURE REYNOLDS NUMBER FT FT/SEC LB/FT**2 DEG R 1/FT 6.4000E+06	ALTITUDE VELOCITY PRESSURE TEMPERATURE REYNOLDS REF. FT FT/SEC LB/FT**2 DEG R 1/FT FT**2 6.4000E+06 2.250	ALTITUDE VELOCITY PRESSURE TEMPERATURE REYNOLDS REF. REFERENCE NUMBER AREA LONG. FT FT/SEC LB/FT*2 DEG R 1/FT FT*2 FT	ALTITUDE VELOCITY PRESSURE TEMPERATURE REYNOLDS REF. REFERENCE LENGTH NUMBER AREA LONG. LAT. FT FT/SEC LB/FT*2 DEG R 1/FT FT*2 FT FT 6.4000E+06 2.250 0.822 3.000	ALTITUDE VELOCITY PRESSURE TEMPERATURE REYNOLDS REF. REFERENCE LENGTH MOMENT REF. FT FT/SEC LB/FT**2 DEG R 1/FT FT**2 FT FT FT FT C.

0*** NDM PRINTED WHEN NO DATCOM METHODS EXIST 0*NOTE* OUTPUT REFLECTS EXPERIMENTAL DATA INPUTS

WING-BODY-VERTICAL TAIL-HORIZONTAL TAIL CONFIGURATION

INCLUDES BODY AND WING-BODY EXPERIMENTAL DATA, EX.PROB. 3, CASE 2

		FLIGH	T CONDITIONS				REFER	ENCE DIME	ENSIONS	
MACH	ALTITUDE	VELOCITY	PRESSURE	TEMPERATURE	REYNOLDS	REF.	REFERENCE	LENGTH	MOMENT REF.	CENTER
NUMBER					NUMBER	AREA	LONG.	LAT.	HORIZ	VERT
	FT	FT/SEC	LB/FT**2	DEG R	1/FT	FT**2	FT	FT	FT	FT
0 0.800					6.4000E+06	2.250	0.822	3.000	2.600	0.000
				BA	SIC BODY PROPERTIE	S				

WETTED AREA XCG ZCG BASE AREA ZERO LIFT DRAG BASE DRAG FRICTION DRAG PRESSURE DRAG 0.5035E+01 2.60 0.00 0.0598 0.7576E-02 0.1690E-02 0.5487E-02 0.3992E-03

XCG RELATIVE TO THEORETICAL LEADING EDGE MAC= 0.20

BASIC PLANFORM PROPERTIES

	λ.	TAPER REA RATIO		QUARTER CHC	DRD MAC	QUARTER CHO	RD Y(MAC)	ZERO LIFT DRAG	FRICTION COEFFICIENT
0 WING	A.	KEA KAIIO	RATIO	SMEEL	MAC	X (MAC)	I (MAC)	DRAG	COEFFICIENT
TOTAL THEOR	RITICAL								
+	0.22	59E+01 0.298	0.3984E+0	1 45.000	0.826E+00	0.260E+01	0.615E+00		
TOTAL E	CXPOSED								
+	0.17	96E+01 0.331	0.3707E+0	1 45.000	0.755E+00	0.274E+01	0.747E+00	0.774E-02	0.335E-02
0 HORIZONTAL									
TOTAL THEOR									
+)9E+00 0.602	0.3982E+0	1 45.000	0.343E+00	0.434E+01	0.307E+00		
TOTAL E		05- 00 0 661	0 2050- 0	45 000	0 200- 00	0 442= 01	0 200- 00	0 100- 00	0 201- 00
+)5E+00 0.661	0.3272E+0	1 45.000	0.322E+00	0.443E+01	0.392E+00	0.130E-02	0.391E-02
0 VERTICAL I									
THEORITICAL I		23E+01 0.412	0.2358E+0	28.100	0.762E+00	0.379E+01	0.366E+00		
EXPOSED I		236+01 0.412	U.Z356E+U	71 20.100	0.762E+00	0.3/9E+01	0.300E+00		
+ EVEORED I		18E+00 0.485	0.9804E+0	00 28.100	0.668E+00	0.386E+01	0.498E+00		NA
OI.	JTBOARD	0.103	0.0001110	20.100	0.0001.00	0.3001.01	0.1501.00		1411
+	_	00E-30 1.000	0.5000E+0	0.000	0.420E+00	0.344E+01	0.630E+00		NA
TOTAL THEOR									
+	0.61	L3E+00 0.412	0.1179E+0	66.960	0.762E+00	0.379E+01	0.366E+00		

TOTAL EXPOSED

+ 0.4048E+00 0.485 0.9804E+00 28.100 0.668E+00 0.386E+01 0.498E+00 NA NA 0*** NA PRINTED WHEN METHOD NOT APPLICABLE

1

WING-BODY-VERTICAL TAIL-HORIZONTAL TAIL CONFIGURATION

INCLUDES BODY AND WING-BODY EXPERIMENTAL DATA, EX.PROB. 3, CASE 2

			INCLUDED DO	DI IIID WIIIC D	ODI DIII DICEI IDICII DI DI III,	HIIIIIOD. 3	, 01101 1			
		FLIGHT	CONDITIONS				REFER	ENCE DIME	INSIONS	
MACH	ALTITUDE	VELOCITY	PRESSURE	TEMPERATURE	REYNOLDS	REF.	REFERENCE	LENGTH	MOMENT REF	. CENTER
NUMBER					NUMBER	AREA	LONG.	LAT.	HORIZ	VERT
	FT	FT/SEC	LB/FT**2	DEG R	1/FT	FT**2	FT	FT	FT	FT
0 0.800					6.4000E+06	2.250	0.822	3.000	2.600	0.000
0	CLA-B(W) =	7.443E-03	CLA-W(B) =	5.609E-02	K-B(W) = 1.476E-01	K-W(B)=1	.112E+00	XAC/C-E	8(W) = 6.820E	-01
0	CLA-B(H) =	1.777E-03	CLA-H(B)=	1.005E-02	K-B(H) = 2.094E-01	K-H(B)=1	.184E+00	XAC/C-E	8(H) = 4.272E	-01
1										

WING-BODY-VERTICAL TAIL-HORIZONTAL TAIL CONFIGURATION

INCLUDES BODY AND WING-BODY EXPERIMENTAL DATA, EX.PROB. 3, CASE 2

		FLIGH	T CONDITIONS				REFER	RENCE DIME	ENSIONS -	
MACH	ALTITUDE	VELOCITY	PRESSURE	TEMPERATURE	REYNOLDS	REF.	REFERENCE	LENGTH	MOMENT R	EF. CENTER
NUMBER					NUMBER	AREA	LONG.	LAT.	HORIZ	VERT
	FT	FT/SEC	LB/FT**2	DEG R	1/FT	FT**2	FT	FT	FT	FT
0 0.800					6.4000E+06	2.250	0.822	3.000	2.600	0.000

*** WING DATA FAIRING ***

CDL/CL**2 = 0.1977E+00 CLB/CL = -0.5165E-02

FORCE BREAK MACH NUMBER (ZERO SWEEP) = 0.9321E+00 FORCE BREAK MACH NUMBER (WITH SWEEP) = 0.9552E+00

MACH(A) = 1.025 CLA(A) = 0.5384E-01 MACH(B) = 1.095 CLA(B) = 0.4967E-01

(CLB/CL)M=0.6 = -0.4771E-02 (CLB/CL)M=1.4 = -0.2642E-02

LIFT-CURVE-SLOPE INTERPOLATION TABLE

MACH	CL-ALPHA
0.750	0.4868E-01
0.955	0.5710E-01
1.025	0.5384E-01
1.095	0.4967E-01
1.400	0.4200E-01

*** WING-BODY DATA FAIRING ***

CLB/CL = -0.6150E - 02 (CLB/CL)MFB = -0.4718E - 02 (CLB/CL)M=1.4 = -0.2043E - 02 (CNA)M=1.4 = 0.5406E - 01

*** HORIZONTAL TAIL DATA FAIRING ***

CDL/CL**2 = 0.2357E+00 CLB/CL = -0.2349E-02

FORCE BREAK MACH NUMBER (ZERO SWEEP) = 0.9738E+00 FORCE BREAK MACH NUMBER (WITH SWEEP) = 0.9838E+00

MACH(A) = 1.054 CLA(A) = 0.9185E-02 MACH(B) = 1.124 CLA(B) = 0.8436E-02

(CLB/CL)M=0.6 = -0.2620E-02 (CLB/CL)M=1.4 = -0.2496E-03

LIFT-CURVE-SLOPE INTERPOLATION TABLE

MACH	CL-ALPHA
0.750	0.8234E-02
0.984	0.9696E-02
1.054	0.9185E-02

1.124 0.8436E-02 1.400 0.7109E-02

*** HORIZONTAL TAIL-BODY DATA FAIRING ***

CLB/CL = -0.2669E - 02 (CLB/CL)MFB = -0.9533E - 03 (CLB/CL)M=1.4 = -0.1640E - 03 (CNA)M=1.4 = 0.1058E - 01

*** BODY-WING-HORIZONTAL TAIL DATA FAIRING ***

DRAG DIVERGENCE MACH NUMBER = 0.931

CDO
0.1702E-01
0.1701E-01
0.2324E-01
0.2262E-01

CHARACTERISTICS AT ANGLE OF ATTACK AND IN SIDESLIP WING-BODY-VERTICAL TAIL-HORIZONTAL TAIL CONFIGURATION INCLUDES BODY AND WING-BODY EXPERIMENTAL DATA, EX.PROB. 3, CASE 2

		I	FLIGHT CON	DITIONS				REFERENCE DIMENSIONS				
MACH	ALTITUDE	VELOC:	ITY PRE	SSURE	TEMPERATU	RE REY	NOLDS	REF.	REFERENCE	LENGTH	MOMENT	REF. CENTER
NUMBER					NU		MBER	AREA	LONG.	LAT.	HORIZ	VERT
	FT	FT/SE	EC LB/	FT**2	DEG R 1/FT		FT	FT**2	FT	FT	FT	FT
0 1.500						9.9600E+06		2.250	0.822	3.000	2.600	0.000
0								DERIV	ATIVE (PER DE	GREE)		
0 ALPHA	CD	CL	CM	CN	CA	XCP	CLA	CMA	CYB	CNB		CLB
0												
-2.0	0.025	-0.111	0.0491	-0.112	0.021	-0.440	5.481E-02	-2.457E-02	-6.267E-02	2.700E	-02 -1	095E-02
0.0	0.022	0.000	0.0000	0.000	0.022	*****	5.454E-02	-2.402E-02			-1	.012E-02
2.0	0.025	0.111	-0.0491	0.112	0.021	-0.440	5.480E-02	-2.455E-02			<u> </u>).279E-03
4.0	0.033	0.225	-0.1000	0.227	0.017	-0.441	5.500E-02	-2.500E-02			-8	3.426E-03
8.0	0.066	0.456	-0.2021	0.460	0.002	-0.439	5.505E-02	-2.526E-02			-6	5.688E-03
0				ALPHA	Q/QINF	EPSLON	D(EPSLON)/I	O(ALPHA)				
0												
				-2.0	0.964	-0.717	0.358	3				
				0.0	0.915	0.000	0.358	3				
				2.0	0.964	0.717	0.359	9				
				4.0	1.000	1.437	0.359	9				
				8.0	0.999	2.858	0.352	2				
ΛΔΜΔΙ.ΥΩΤΟ	TERMINATE	דוע הע ענ	0 8 <u>-</u> 4HC	BECAHER	TEADING FO	CF SHOCK T	C DETACHED					

OANALYSIS TERMINATED AT ALPHA= 8.0 BECAUSE LEADING EDGE SHOCK IS DETACHED. Return to main program from M57071

1 THE FOLLOWING IS A LIST OF ALL INPUT CARDS FOR THIS CASE.

\$TVTPAN BVP=0.4, BV=0.6, BDV=0.36, BH=1.10, SV=0.360, VPHITE=20.0, VLP=1.04, ZP=0.0\$

CASEID INCLUDES BODY AND WING-BODY EXPERIMENTAL DATA, EX.PROB. 3, CASE 3 SAVE

NEXT CASE

O INPUT DIMENSIONS ARE IN FT, SCALE FACTOR IS 1.0000

Return to main program from M01001

0*** WARNING *** V.T. NOT STRAIGHT TAPERED. UNIFORM SECTION ASSUMED.

Return to main program from M50062

Return to main program from M01001

Return to main program from M02002

Return to main program from M51063

1

CHARACTERISTICS AT ANGLE OF ATTACK AND IN SIDESLIP WING-BODY-HORIZONTAL TAIL-VERTICAL TAIL-TWIN VERTICAL PANEL CONFIGURATION INCLUDES BODY AND WING-BODY EXPERIMENTAL DATA, EX.PROB. 3, CASE 3

		I	FLIGHT CON	DITIONS				REFERENCE DIMENSIONS					
MACH	ALTITUDE	VELOC:	ITY PRE	SSURE	TEMPERATU	RE REY	NOLDS	REF.	REFERENCE	LENGTH	MOMENT REF	CENTER	
NUMBER						NU	MBER	AREA	LONG.	LAT.	HORIZ	VERT	
	FT	FT/SE	EC LB/	FT**2	DEG R	1/	FT	FT**2	FT	FT	FT	FT	
0 0.600						4.260	0E+06	2.250	0.822	3.000	2.600	0.000	
0								DERIV	ATIVE (PER DE	GREE)			
0 ALPHA	CD	\mathtt{CL}	CM	CN	CA	XCP	CLA	CMA	CYB	CNE	3	LB	
0													
-2.0	0.018	-0.124	0.0296	-0.124	0.014	-0.238	6.188E-02	-1.480E-02	-2.237E-02	5.940E	2-03 -1.47	7E-03	
0.0	0.017	0.000	0.0000	0.000	0.017	*****	6.187E-02	-1.482E-02			-1.75	5E-03	
2.0	0.018	0.124	-0.0296	0.124	0.014	-0.238	6.228E-02	-1.573E-02			-2.03	0E-03	
4.0	0.023	0.249	-0.0629	0.250	0.005	-0.252	6.365E-02	-1.682E-02			-2.30	4E-03	
8.0	0.071	0.511	-0.1315	0.516	-0.001	-0.255	5.844E-02	-1.132E-02			-2.89	4E-03	
12.0	0.153	0.717	-0.1535	0.733	0.001	-0.209	4.342E-02	-1.349E-02			-3.21	.0E-03	
16.0	0.237	0.859	-0.2394	0.891	-0.009	-0.269	2.873E-02	-2.178E-02			-3.19	8E-03	
20.0	0.336	0.946	-0.3278	1.004	-0.008	-0.326	2.592E-02	-2.052E-02			-2.89	7E-03	
24.0	0.455	1.066	-0.4036	1.159	-0.018	-0.348	3.396E-02	-1.740E-02			-2.76	4E-03	
0				ALPHA	Q/QINF	EPSLON	D(EPSLON)/I	O(ALPHA)					
0													
				-2.0	0.944	-1.234	0.617						
				0.0	0.909	0.000	0.617						
				2.0	0.944	1.234	0.603						
				4.0	0.995	2.413	0.572						
				8.0	1.000	4.565	0.493						
				12.0	1.000	6.358	0.361						
				16.0	1.000	7.452	0.162						
				20.0	1.000	7.650	-0.065						
				24.0	1.000	6.929	-0.180)					

0*NOTE* OUTPUT REFLECTS EXPERIMENTAL DATA INPUTS

CHARACTERISTICS AT ANGLE OF ATTACK AND IN SIDESLIP WING-BODY-HORIZONTAL TAIL-VERTICAL TAIL-TWIN VERTICAL PANEL CONFIGURATION INCLUDES BODY AND WING-BODY EXPERIMENTAL DATA, EX.PROB. 3, CASE 3

		FLI	GHT CC	ONDITIONS				REFERENCE DIMENSIONS					
MACH	ALTITUDE	VELOCITY	PR	RESSURE	TEMPERATURE	REY	NOLDS	REF.	REFERENCE	LENGTH	MOMENT REF.	CENTER	
NUMBER						NU	MBER	AREA	LONG.	LAT.	HORIZ	VERT	
	FT	FT/SEC	LE	3/FT**2	DEG R		FT	FT**2	FT	FT	FT	FT	
0 0.800						6.400	0E+06	2.250	0.822	3.000	2.600	0.000	
0								DERIVAT	•	•			
0 ALPHA	CD	CL	CM	CN	CA	XCP	CLA	CMA	CYB	CNB	CI	ıΒ	
0	0 001	0 152	MIDM	0 152	0.016	0 020	C 200m 00	2 441 11 02	ATIONA	NDM	MON	•	
-2.0 0.0	0.021	-0.153	NDM	-0.153	0.016	0.038	6.390E-02	2.441E-03	NDM	MUM	NDM NDM		
2.0											NDM		
4.0											NDM		
8.0											NDM		
12.0											NDM		
16.0											NDM	I	
20.0											NDM	I	
24.0											NDM	I	
0				ALPHA	Q/QINF	EPSLON	D(EPSLON)/D	(ALPHA)					
0													
				-2.0	0.914	0.000	0.639						
				0.0									
				2.0									
				4.0 8.0									
				12.0									
				16.0									
				20.0									
				24.0									
0*** NDM	PRINTED W	HEN NO DATC	OM MET		Γ								

0*** NDM PRINTED WHEN NO DATCOM METHODS EXIST 0*NOTE* OUTPUT REFLECTS EXPERIMENTAL DATA INPUTS

WING-BODY-VERTICAL TAIL-HORIZONTAL TAIL CONFIGURATION

INCLUDES BODY AND WING-BODY EXPERIMENTAL DATA, EX.PROB. 3, CASE 3

		FLIGH	T CONDITIONS			REFERENCE DIMENSIONS					
MACH	ALTITUDE	VELOCITY	PRESSURE	TEMPERATURE	REYNOLDS	REF.	REFERENCE	LENGTH	MOMENT REF	. CENTER	
NUMBER					NUMBER	AREA	LONG.	LAT.	HORIZ	VERT	
	FT	FT/SEC	LB/FT**2	DEG R	1/FT	FT**2	FT	FT	FT	FT	
0 0.800					6.4000E+06	2.250	0.822	3.000	2.600	0.000	

BASIC BODY PROPERTIES

WETTED AREA	XCG	ZCG	BASE AREA	ZERO LIFT DRAG	BASE DRAG	FRICTION DRAG	PRESSURE DRAG
0.5035E+01	2.60	0.00	0.0598	0.7576E-02	0.1690E-02	0.5487E-02	0.3992E-03

XCG RELATIVE TO THEORETICAL LEADING EDGE MAC= 0.20

BASIC PLANFORM PROPERTIES

			TAPER	-	JARTER CHORI		QUARTER CHOR		ZERO LIFT	FRICTION
		AREA	RATIO	RATIO	SWEEP	MAC	X(MAC)	Y(MAC)	DRAG	COEFFICIENT
0	WING									
	TOTAL THEORITICAL									
+		0.2259E+01	0.298	0.3984E+01	45.000	0.826E+00	0.260E+01	0.615E+00		
	TOTAL EXPOSED									
+		0.1796E+01	0.331	0.3707E+01	45.000	0.755E+00	0.274E+01	0.747E+00	0.774E-02	0.335E-02
0	HORIZONTAL TAIL									
	TOTAL THEORITICAL									
+		0.4509E+00	0.602	0.3982E+01	45.000	0.343E+00	0.434E+01	0.307E+00		
	TOTAL EXPOSED									
+		0.3305E+00	0.661	0.3272E+01	45.000	0.322E+00	0.443E+01	0.392E+00	0.130E-02	0.391E-02
0	VERTICAL TAIL									
Т	HEORITICAL INBOARD									
+		0.1223E+01	0.412	0.2358E+01	28.100	0.762E+00	0.379E+01	0.366E+00		
	EXPOSED INBOARD	0.111101.01	0.111	0.2002.02	201200	0.7022100	0.07,72.02	0.0002.00		
+		0.4048E+00	0.485	0.9804E+00	28.100	0.668E+00	0.386E+01	0.498E+00		NA
	OUTBOARD	0.10101.00	0.103	0.90011.00	20.100	0.0001.00	0.3001.01	0.1901.00		1411
_	OOTBOARD	0.4200E-30	1.000	0.5000E+00	0.000	0.420E+00	0.344E+01	0.630E+00		NA
т	TOTAL THEORITICAL	0.4200E-30	1.000	0.5000E+00	0.000	0.4206+00	0.5446401	0.0306+00		INT
	TOTAL INEURITICAL	0 61125.00	0 410	0 11700.01	CC 0C0	0.7620.00	0 270 01	0.2661.00		
+		0.6113E+00	0.412	0.1179E+01	66.960	0.762E+00	0.379E+01	0.366E+00		

TOTAL EXPOSED

+ 0.4048E+00 0.485 0.9804E+00 28.100 0.668E+00 0.386E+01 0.498E+00 NA NA 0*** NA PRINTED WHEN METHOD NOT APPLICABLE

1

WING-BODY-VERTICAL TAIL-HORIZONTAL TAIL CONFIGURATION

INCLUDES BODY AND WING-BODY EXPERIMENTAL DATA, EX.PROB. 3, CASE 3

		FLIGH	T CONDITIONS	REFERENCE DIMENSIONS								
MACH	ALTITUDE	VELOCITY	PRESSURE	TEMPERATURE	REYNOLDS	REF.	REFERENCE	LENGTH	MOMENT REE	F. CENTER		
NUMBER					NUMBER	AREA	LONG.	LAT.	HORIZ	VERT		
	FT	FT/SEC	LB/FT**2	DEG R	1/FT	FT**2	FT	FT	FT	FT		
0 0.800					6.4000E+06	2.250	0.822	3.000	2.600	0.000		
0	CLA-B(W)=	= 7.443E-03	CLA-W(B)=	5.609E-02	K-B(W) = 1.476E-01	K-W(B)=0	1.112E+00	XAC/C-I	3(W) = 6.820E	1-01		
0	CLA-B(H)=	= 1.777E-03	CLA-H(B)=	= 1.005E-02	K-B(H) = 2.094E-01	K-H(B)=0	1.184E+00	XAC/C-I	B(H) = 4.272H	1-01		
1												

WING-BODY-VERTICAL TAIL-HORIZONTAL TAIL CONFIGURATION

INCLUDES BODY AND WING-BODY EXPERIMENTAL DATA, EX.PROB. 3, CASE 3

		FLIGH	T CONDITIONS			REFERENCE DIMENSIONS					
MACH	ALTITUDE	VELOCITY	PRESSURE	TEMPERATURE	REYNOLDS	REF.	REFERENCE	LENGTH	MOMENT RE	F. CENTER	
NUMBER					NUMBER	AREA	LONG.	LAT.	HORIZ	VERT	
	FT	FT/SEC	LB/FT**2	DEG R	1/FT	FT**2	FT	FT	FT	FT	
0 0.800					6.4000E+06	2.250	0.822	3.000	2.600	0.000	

*** WING DATA FAIRING ***

CDL/CL**2 = 0.1977E+00 CLB/CL = -0.5165E-02

FORCE BREAK MACH NUMBER (ZERO SWEEP) = 0.9321E+00 FORCE BREAK MACH NUMBER (WITH SWEEP) = 0.9552E+00

MACH(A) = 1.025 CLA(A) = 0.5384E-01 MACH(B) = 1.095 CLA(B) = 0.4967E-01

(CLB/CL)M=0.6 = -0.4771E-02 (CLB/CL)M=1.4 = -0.2642E-02

LIFT-CURVE-SLOPE INTERPOLATION TABLE

MACH	CL-ALPHA
0.750	0.4868E-01
0.955	0.5710E-01
1.025	0.5384E-01
1.095	0.4967E-01
1.400	0.4200E-01

*** WING-BODY DATA FAIRING ***

CLB/CL = -0.6150E - 02 (CLB/CL)MFB = -0.4718E - 02 (CLB/CL)M=1.4 = -0.2043E - 02 (CNA)M=1.4 = 0.5406E - 01

*** HORIZONTAL TAIL DATA FAIRING ***

CDL/CL**2 = 0.2357E+00 CLB/CL = -0.2349E-02

FORCE BREAK MACH NUMBER (ZERO SWEEP) = 0.9738E+00 FORCE BREAK MACH NUMBER (WITH SWEEP) = 0.9838E+00

MACH(A) = 1.054 CLA(A) = 0.9185E-02 MACH(B) = 1.124 CLA(B) = 0.8436E-02

(CLB/CL)M=0.6 = -0.2620E-02 (CLB/CL)M=1.4 = -0.2496E-03

LIFT-CURVE-SLOPE INTERPOLATION TABLE

MACH	CL-ALPHA
0.750	0.8234E-02
0.984	0.9696E-02
1.054	0.9185E-02

1.124 0.8436E-02 1.400 0.7109E-02

*** HORIZONTAL TAIL-BODY DATA FAIRING ***

CLB/CL = -0.2669E - 02 (CLB/CL)MFB = -0.9533E - 03 (CLB/CL)M=1.4 = -0.1640E - 03 (CNA)M=1.4 = 0.1058E - 01

*** BODY-WING-HORIZONTAL TAIL DATA FAIRING ***

DRAG DIVERGENCE MACH NUMBER = 0.931

CDO
0.1702E-01
0.1701E-01
0.2324E-01
0.2262E-01

CHARACTERISTICS AT ANGLE OF ATTACK AND IN SIDESLIP WING-BODY-HORIZONTAL TAIL-VERTICAL TAIL-TWIN VERTICAL PANEL CONFIGURATION INCLUDES BODY AND WING-BODY EXPERIMENTAL DATA, EX.PROB. 3, CASE 3

	I	FLIGHT CON	DITIONS				REFERENCE DIMENSIONS				
ALTITUDE	VELOC:	ITY PRE	SSURE	TEMPERATU	RE REY	NOLDS	REF.	REFERENCE	LENGTH	LENGTH MOMENT REF	
				N		MBER	AREA	LONG.	LAT.	HORIZ	VERT
FT	FT/SI	C LB/FT**2		DEG R	G R 1/FT		FT**2	FT	FT	FT	FT
					9.960	0E+06	2.250	0.822	3.000	2.600	0.000
							DERIV	ATIVE (PER DE	GREE)		
CD	\mathtt{CL}	CM	CN	CA	XCP	CLA	CMA	CYB	CNB		CLB
0.025	-0.111	0.0491	-0.112	0.021	-0.440	5.481E-02	-2.457E-02	-6.267E-02	2.700E	-02 -1.	095E-02
0.022	0.000	0.0000	0.000	0.022	****	5.454E-02	-2.402E-02			-1.	012E-02
0.025	0.111	-0.0491	0.112	0.021	-0.440	5.480E-02	-2.455E-02			-9.	279E-03
0.033	0.225	-0.1000	0.227	0.017	-0.441	5.500E-02	-2.500E-02			-8.	426E-03
0.066	0.456	-0.2021	0.460	0.002	-0.439	5.505E-02	-2.526E-02			-6.	688E-03
			ALPHA	Q/QINF	EPSLON	D(EPSLON)/I	O(ALPHA)				
			-2.0	0.964	-0.717	0.358	3				
			0.0	0.915	0.000	0.358	3				
			2.0	0.964	0.717	0.359	9				
			4.0	1.000	1.437	0.359	9				
			8.0	0.999	2.858	0.352	2				
	FT CD 0.025 0.022 0.025 0.033 0.066	ALTITUDE VELOCI FT FT/SH CD CL 0.025 -0.111 0.022 0.000 0.025 0.111 0.033 0.225 0.066 0.456	ALTITUDE VELOCITY PRE FT FT/SEC LB/ CD CL CM 0.025 -0.111 0.0491 0.022 0.000 0.0000 0.025 0.111 -0.0491 0.033 0.225 -0.1000 0.066 0.456 -0.2021	ALTITUDE VELOCITY PRESSURE FT FT/SEC LB/FT**2 CD CL CM CN 0.025 -0.111 0.0491 -0.112 0.022 0.000 0.0000 0.000 0.025 0.111 -0.0491 0.112 0.033 0.225 -0.1000 0.227 0.066 0.456 -0.2021 0.460 ALPHA -2.0 0.0 2.0 4.0 8.0	ALTITUDE VELOCITY PRESSURE TEMPERATURE FT FT/SEC LB/FT**2 DEG R CD CL CM CN CA 0.025 -0.111 0.0491 -0.112 0.021 0.022 0.000 0.0000 0.000 0.022 0.025 0.111 -0.0491 0.112 0.021 0.033 0.225 -0.1000 0.227 0.017 0.066 0.456 -0.2021 0.460 0.002 ALPHA Q/QINF -2.0 0.964 0.0 0.915 2.0 0.964 4.0 1.000 8.0 0.999	ALTITUDE VELOCITY PRESSURE TEMPERATURE REYNUTE FT FT/SEC LB/FT**2 DEG R 1/9.960 CD CL CM CN CA XCP 0.025 -0.111 0.0491 -0.112 0.021 -0.440 0.022 0.000 0.0000 0.000 0.022 ****** 0.025 0.111 -0.0491 0.112 0.021 -0.440 0.033 0.225 -0.1000 0.227 0.017 -0.441 0.066 0.456 -0.2021 0.460 0.002 -0.439 ALPHA Q/QINF EPSLON -2.0 0.964 -0.717 0.0 0.915 0.000 2.0 0.964 0.717 4.0 1.000 1.437 8.0 0.999 2.858	ALTITUDE VELOCITY PRESSURE TEMPERATURE REYNOLDS NUMBER FT FT/SEC LB/FT**2 DEG R 1/FT 9.9600E+06 CD CL CM CN CA XCP CLA 0.025 -0.111 0.0491 -0.112 0.021 -0.440 5.481E-02 0.022 0.000 0.0000 0.000 0.022 ***** 5.454E-02 0.025 0.111 -0.0491 0.112 0.021 -0.440 5.480E-02 0.033 0.225 -0.1000 0.227 0.017 -0.441 5.500E-02 0.066 0.456 -0.2021 0.460 0.002 -0.439 5.505E-02 ALPHA Q/QINF EPSLON D(EPSLON)/I -2.0 0.964 -0.717 0.358 0.0 0.999 2.858 0.355	ALTITUDE VELOCITY PRESURE TEMPERATURE REYNOLDS REF. NUMBER AREA FT FT/SEC LB/FT**2 DEG R 1/FT FT**2 9.9600E+06 2.250	ALTITUDE VELOCITY PRESSURE TEMPERATURE REYNOLDS REF. REFERENCE NUMBER AREA LONG. FT FT/SEC LB/FT*2 DEG R 1/FT FT*2 FT FT*2 FT P.9600E+06 2.250 0.822 FT P.9600E+06 P.260 P.2	ALTITUDE VELOCITY PRESSURE TEMPERATURE REYNOLDS REF. REFERENCE LENGTH NUMBER AREA LONG. LAT. FT FT/SEC LB/FT*2 DEG R 1/FT FT*2 FT FT 9.9600E+06 2.250 0.822 3.000 CD CL CM CN CA XCP CLA CMA CYB CNB 0.025 -0.111 0.0491 -0.112 0.021 -0.440 5.481E-02 -2.457E-02 -6.267E-02 2.700E 0.022 0.000 0.0000 0.000 0.022 ****** 5.454E-02 -2.402E-02 0.025 0.111 -0.0491 0.112 0.021 -0.440 5.480E-02 -2.455E-02 0.025 0.111 -0.0491 0.112 0.021 -0.440 5.480E-02 -2.455E-02 0.033 0.225 -0.1000 0.227 0.017 -0.441 5.500E-02 -2.550E-02 0.066 0.456 -0.2021 0.460 0.002 -0.439 5.505E-02 -2.526E-02 ALPHA Q/QINF EPSLON D(EPSLON)/D(ALPHA) -2.0 0.964 -0.717 0.358 0.0 0.915 0.000 0.358 2.0 0.964 0.717 0.359 4.0 1.000 1.437 0.359 4.0 1.000 1.437 0.359 8.0 0.999 2.858 0.352	ALTITUDE VELOCITY PRESSURE TEMPERATURE REYNOLDS REF. REFERENCE LENGTH HORIZ FT FT/SEC LB/FT*2 DEG R 1/FT FT*2 FT FT FT 9.9600E+06 2.250 0.822 3.000 2.600 CD CL CM CN CA XCP CLA CMA CYB CSTEEL 0.025 -0.111 0.0491 -0.112 0.021 -0.440 5.481E-02 -2.457E-02 -6.267E-02 2.700E-02 -1. 0.022 0.000 0.0000 0.000 0.002 ****** 5.454E-02 -2.402E-02 -6.267E-02 2.700E-02 -1. 0.025 0.111 -0.0491 0.112 0.021 -0.440 5.480E-02 -2.455E-02 -2.455E-02 -9. 0.033 0.225 -0.1000 0.227 0.017 -0.441 5.500E-02 -2.500E-02 -8. 0.066 0.456 -0.2021 0.460 0.002 -0.439 5.505E-02 -2.526E-02 -9. 0.066 0.456 -0.2021 0.460 0.002 -0.439 5.505E-02 -2.526E-02 -6.267E-02 -

OANALYSIS TERMINATED AT ALPHA= 8.0 BECAUSE LEADING EDGE SHOCK IS DETACHED.

0**NOTE*LATERAL STABILITY DERIVATIVES DO NOT INCLUDE THE EFFECTS OF TWIN VERTICAL PANELS. (NO DATCOM METHODS)
Return to main program from M57071

1 THE FOLLOWING IS A LIST OF ALL INPUT CARDS FOR THIS CASE.

\$FLTCON NMACH=1.0, MACH(1)=0.6, RNNUB(1)=2.28E6\$

\$PROPWR AIETLP=2.0, NENGSP=1.0, THSTCP=0.15,

PHALOC=0.0, PHVLOC=0.0, PRPRAD=0.4,

ENGFCT=70.0, NOPBPE=4.0, BAPR75=18.0, YP=0.0, CROT=.FALSE.\$

CASEID INCLUDES BODY AND WING-BODY EXPERIMENTAL DATA, EX.PROB. 3, CASE 4 SAVE

NEXT CASE

O INPUT DIMENSIONS ARE IN FT, SCALE FACTOR IS 1.0000

Return to main program from M01001

0*** WARNING *** V.T. NOT STRAIGHT TAPERED. UNIFORM SECTION ASSUMED.

Return to main program from M50062

Return to main program from M01001

Return to main program from M02002 Return to main program from M51063

CHARACTERISTICS AT ANGLE OF ATTACK AND IN SIDESLIP WING-BODY-HORIZONTAL TAIL-VERTICAL TAIL-TWIN VERTICAL PANEL CONFIGURATION PROPELLER POWER EFFECTS INCLUDED IN THE LONGITUDINAL STABILITY RESULTS INCLUDES BODY AND WING-BODY EXPERIMENTAL DATA, EX.PROB. 3, CASE 4

	FLIGHT CONDITIONS								REFERENCE DIMENSIONS					
MACH	ALTITUDE	VELOCITY PRESSURE		TEMPERATURE REYNOLDS			REF.	REFERENCE	LENGTH	MOMENT REF	. CENTER			
NUMBER				NUMBER			AREA	LONG.	LAT.	HORIZ	VERT			
	FT	FT/SI	EC LB/	FT**2	DEG R	1/	FT	FT**2	FT	FT	FT	FT		
0 0.600						2.2800E+06		2.250	0.822	3.000	2.600	0.000		
0								DERIVATIVE (PER DEGREE)						
0 ALPHA	CD	CL	CM	CN	CA	XCP	CLA	CMA	CYB	CNB	C	LB		
0														
-2.0	0.024	-0.137	0.0355	-0.138	0.020	-0.258	6.185E-02	-1.474E-02	-2.237E-02	6.088E-				
0.0	0.023	0.001	0.0072	0.001	0.023	7.658	6.184E-02	-1.476E-02			-1.75			
2.0	0.027	0.138	-0.0203	0.139	0.023	-0.146	6.226E-02	-1.570E-02			-2.03			
4.0	0.038	0.275	-0.0503	0.277	0.018	-0.182	6.365E-02	-1.683E-02			-2.30			
8.0	0.099	0.548	-0.1066	0.556	0.022	-0.192	5.845E-02	-1.138E-02			-2.89			
12.0	0.200	0.749	-0.0974	0.774	0.040	-0.126	4.345E-02	-1.365E-02			-3.21			
16.0	0.309	0.891	-0.1494	0.941	0.051	-0.159	2.880E-02	-2.217E-02			-3.19			
20.0	0.436	0.975	-0.1980	1.065	0.077	-0.186	2.597E-02	-2.099E-02			-2.89			
24.0	0.587	1.091	-0.2354	1.236	0.092	-0.191	3.393E-02	-1.777E-02			-2.76	4E-03		
0				ALPHA	Q/QINF	EPSLON	D(EPSLON)/I	O(ALPHA)						
0							0	_						
				-2.0	0.937	-1.234	0.61							
				0.0	0.904	0.000	0.617							
				2.0	0.937	1.234	0.603							
				4.0	0.991	2.413	0.572							
				8.0	1.000	4.565	0.493							
				12.0	1.000	6.358	0.359							
				16.0	1.000	7.435	0.152							
				20.0	1.000	7.576	-0.084							
				24.0	1.000	6.766	-0.202	4						

0*NOTE* OUTPUT REFLECTS EXPERIMENTAL DATA INPUTS

Return to main program from M57071

\$FLTCON NMACH=1.0, MACH(1)=0.6, RNNUB(1)=2.28E6\$
\$JETPWR AIETLJ=2.0, NENGSJ=1.0, THSTCJ=0.35, JIALOC=0.0,
JEVLOC=0.0, JEALOC=0.5, JINLTA=3.0, JEANGL=15.0, JEVELO=4000.0,
AMBTMP=500.0, JESTMP=2000.0, JELLOC=0.0,
JETOTP=5000.0, AMBSTP=500.0, JERAD=2.0\$

¹ THE FOLLOWING IS A LIST OF ALL INPUT CARDS FOR THIS CASE.

CASEID INCLUDES BODY AND WING-BODY EXPERIMENTAL DATA, EX.PROB. 3, CASE 5 NEXT CASE

0 INPUT DIMENSIONS ARE IN FT, SCALE FACTOR IS 1.0000

Return to main program from M01001 0*** WARNING *** V.T. NOT STRAIGHT TAPERED. UNIFORM SECTION ASSUMED.

Return to main program from M50062

Return to main program from M01001

Return to main program from M02002

Return to main program from M51063

CHARACTERISTICS AT ANGLE OF ATTACK AND IN SIDESLIP WING-BODY-HORIZONTAL TAIL-VERTICAL TAIL-TWIN VERTICAL PANEL CONFIGURATION JET POWER EFFECTS INCLUDED IN THE LONGITUDINAL STABILITY RESULTS INCLUDES BODY AND WING-BODY EXPERIMENTAL DATA, EX.PROB. 3, CASE 5

	FLIGHT CONDITIONS								REFERENCE DIMENSIONS					
MACH	ALTITUDE	VELOCITY PRESSURE		TEMPERATURE REYN		NOLDS	REF.	REFERENCE	LENGTH I	MOMENT REF	. CENTER			
NUMBER						NU	MBER	AREA	LONG.	LAT.	HORIZ	VERT		
	FT	FT/SEC		FT**2	DEG R	1/	FT	FT**2	FT	FT	FT	FT		
0 0.600						2.280	0E+06	2.250	0.822	3.000	2.600	0.000		
0						DERIVATIVE (PER DEGREE)								
0 ALPHA	CD	CL	CM	CN	CA	XCP	CLA	CMA	CYB	CNB	CI	LΒ		
0														
-2.0	0.019	-0.119	0.0252	-0.120	0.014	-0.210	6.185E-02	-1.474E-02	-2.237E-02	6.088E-				
0.0	0.017	0.114	0.3066	0.114	0.017	2.684	6.184E-02	-1.476E-02			-1.755			
2.0	0.019	0.348	0.5862	0.349	0.006	1.680	6.226E-02	-1.570E-02			-2.030			
4.0	0.023	0.584	0.8608	0.584	-0.018	1.473	6.365E-02	-1.683E-02			-2.304	4E-03		
8.0	0.071	1.065	1.4056	1.064	-0.078	1.320	5.845E-02	-1.138E-02			-2.894	4E-03		
12.0	0.154	1.485	1.9890	1.485	-0.158	1.339	4.345E-02	-1.365E-02			-3.210	DE-03		
16.0	0.239	1.839	2.4962	1.834	-0.277	1.361	2.880E-02	-2.217E-02			-3.198	3E-03		
20.0	0.339	2.133	2.9851	2.120	-0.411	1.408	2.597E-02	-2.099E-02			-2.897	7E-03		
24.0	0.460	2.453	3.4690	2.428	-0.578	1.429	3.393E-02	-1.777E-02			-2.764	1E-03		
0				ALPHA	Q/QINF	EPSLON	D(EPSLON)/I	O(ALPHA)						
0														
				-2.0	0.937	-1.234	0.61							
				0.0	0.904	0.000	0.61	7						
				2.0	0.937	1.234	0.603	3						
				4.0	0.991	2.413	0.572	2						
				8.0	1.000	4.565	0.493	3						
				12.0	1.000	6.358	0.359	9						
				16.0	1.000	7.435	0.15	2						
				20.0	1.000	7.576	-0.084	4						
				24.0	1.000	6.766	-0.202	2						

0*NOTE* OUTPUT REFLECTS EXPERIMENTAL DATA INPUTS

Return to main program from M57071

1 END OF JOB.

THE FOLLOWING IS A LIST OF ALL INPUT CARDS FOR THIS CASE.