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TECHNICAL REPORT RD-77-7

AN EXPLORATORY INVESTIGATION ON REDUCING SUPERSONIC MISSILE DRAG BY FLUID INJECTION INTO A TURBULENT BOUNDARY LAYER

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To determine general effects of fluid injection into a turbulent boundary layer on missile drag and stabilizing forces at angle of attack, an exploratory investigation was made at Mach 1.63 and 2.2. The test model was a body of revolution 10-cal long with a 3-cal tangent ogive nose and stabilizing fins. The mass injection was simulated by nitrogen and injected into the boundary layer from a porous section just aft of the nose body junction. The porous section was varied in length from 0.5 to 1.5 cal. Angle of attack range varied from -3.5° to +19°.

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CONTENTS

I. INTRODUCTION

To determine general effects of fluid injection into a turbulent boundary layer on missile drag and stabilizing forces at angle of attack, an exploratory investigation was made at Mach 1.63 and 2.2. The test model was a body of revolution 10-cal long with a 3-cal tangent ogive nose and stabilizing fins. The mass injection was simulated by nitrogen and injected into the boundary layer from a porous section just aft of the nose body junction. The porous section was varied in length from 0.5 to 1.5 cal. Angle of attack range varied from -3.5° to +19°.

II. APPARATUS AND PROCEDURE

The tests were conducted in the Jet Propulsion Laboratory (JPL) 20-in. supersonic wind tunnel. The tunnel was run at Mach 1.63 and 2.2, with a wind-off total pressure of 14 psi.

A diagram of the model as installed for testing is shown in Figure 1. The model is a body of revolution 1.375-in. in diameter with a 3-cal tangent ogive nose and a 7-cal cylindrical afterbody. Three changeable centerbodies with 0.5, 1.0, and 1.5 cal cutouts with stainless steel mesh of 0.36 porosity were used for mass injection sections. Nitrogen was supplied through the sting and channeled through the center of the balance around an air deflector and through the stainless steel mesh. Mass injection rates varied from 1.68×10^{-5} lb/sec to 67.2×10^{-5} lb/sec. Turbulent flow was obtained by a boundary layer trip at the model nose. Reynolds numbers varied from 2.5×10^{5} to 3.0×10^{5}. The model had four rectangular tail surfaces, 1-cal long and 0.5-cal high, with the leading edge located at station 12.375 in. from the nose. The model was tested in the X fin configuration.

Base pressure data from one base pressure tap was obtained at M = 1.63. Force data were obtained by a six component strain gage balance. Effects of bleed on the model C_N, C_M, C_Y, C_n, C_ℓ, and C_A were investigated by varying the mass injection rates F. The mass flow injection data were also compared to a solid body model. Model angle of attack varied from -3.5° to +19°.

III. RESULTS AND DISCUSSION

Figure 2 shows that the effectiveness of mass injection on reducing missile axial force is dependent on the mass injection flow rate, size of the porous section, Mach number, and angle of attack. For the specific set of conditions, M = 2.2, 0.5-cal long, porous

cross section, the flow rate F = 0.004 reduced the axial force coefficient the maximum amount. This was approximately 4% of the total. The mass injection is effective over an angle of attack range of up to 6°.

All other porous sections did not reduce the axial force coefficient. The larger injection sections caused a higher C_A because of bleed into the cavity. At the lower Mach number (M = 1.63), there was no reductions in C_A for any of the injection rates. The effects of the mass injection on the other missile force coefficients at low angle of attack $\alpha < 6°$ are negligible as shown in Figure 3 for F = 0.004.

A plot of C_A versus F (Figure 4a) at M = 2.2, for configuration 705, shows that as the mass injection into the boundary layer is increased there is an initial decrease in the axial force coefficient. The C_A increases as more mass is injected into the boundary layer until the C_A approaches values for the mass injection-off conditions. Each line represents a constant α and values at the left indicate solid body conditions. The data indicated that at approximately F = 0.004 the maximum reduction of axial force coefficient occurs for specific set of conditions. For the lower Mach number, M = 1.63 (Figure 4b), the axial force coefficient is not decreased.

Schlieren's photograph (Figure 5) of the 705-configuration at M = 2.2 and $\alpha = 0$, indicates for mass injections rates of F = 0, 0.004, the boundary layer has not expanded, and that for mass injection of F = 0.02, the boundary layer is thickened. Also, there is indication that the mass injection is escaping from the boundary layer. A set of Schlieren photos are also presented for $\alpha = 18$. For the $\alpha = 18°$ case, it is not clear that there is less separation of the boundary layer when there is mass injection in the boundary layer.

A limited comparison of base drag data indicates the mass injection may have and effect on the base drag coefficient. An example of this is shown in Figure 6 for M = 1.63, $\alpha = 0$, and $\alpha = 6°$. For the small length grids, there is a reduction in the base drag coefficient at $\alpha = 0°$. This may or may not be a good indication of influence of the mass flow on the base drag because of the tolerances of accuracy in the base pressure measurement.

Figure 7 shows the component parts of the theoretical axial force coefficient. The bleed effects on longer bodies of revolution can be estimated by using the theoretical body friction drag.

A complete set of tabulated data is presented in the Appendix.

IV. CONCLUSIONS AND RECOMMENDATION

Feasibility —

a) Insensitive over a mass injection rate from 1 to 8×10^3. This enables the mass injection mechanism operational tolerance.

b) Axial force coefficient reduced by 4%, probably would be greater for longer bodies of revolution

c) Bleed mechanism is dependent on Mach number, bleed chamber size, and bleed rate.

d) Mass bleed injection effects are not sensitive to small angles of attack of less than 6°.

Recommendation — Mass injection should be investigated further as a possible means of reducing missile drag.

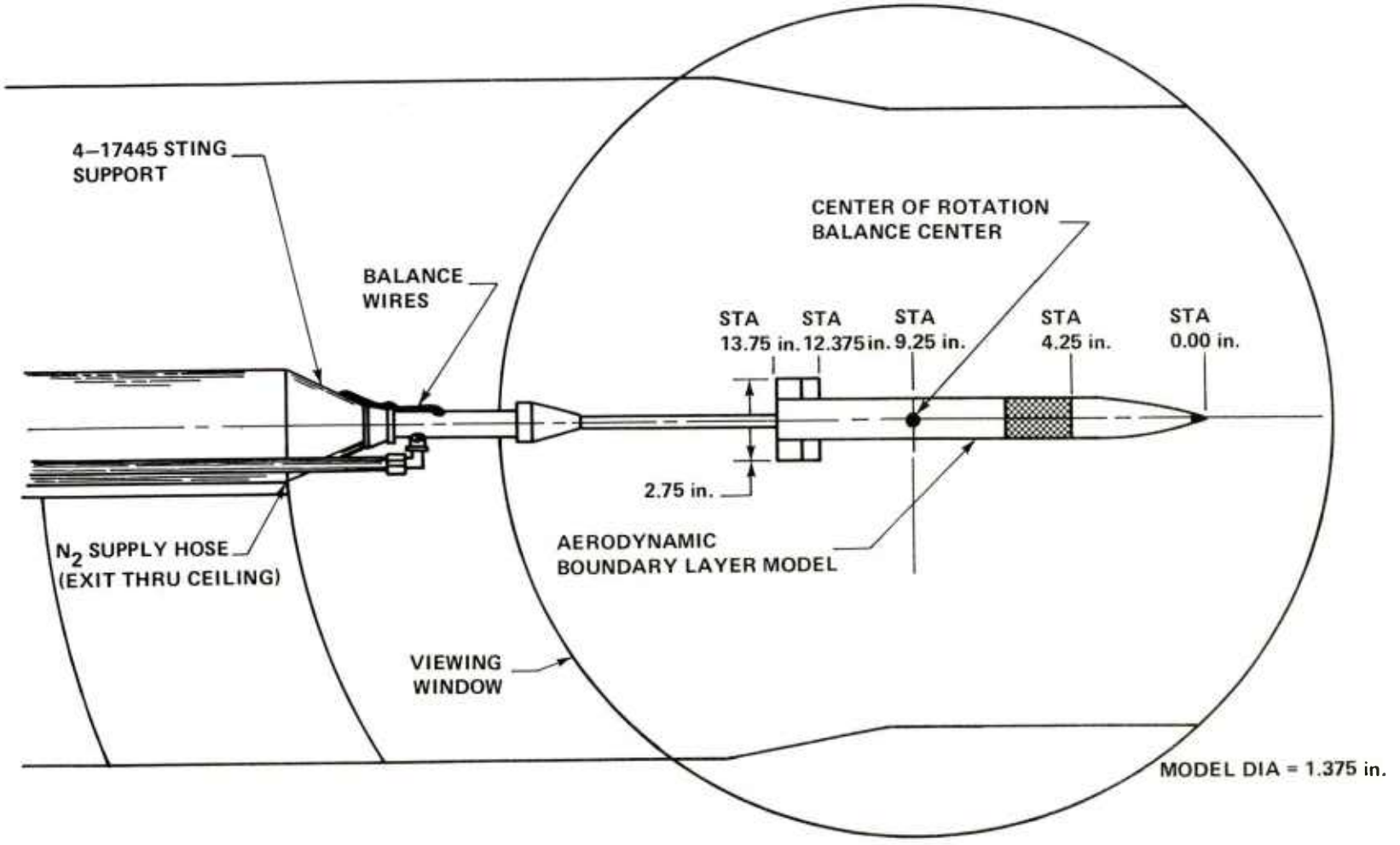


Figure 1. Model installation and dimensions.

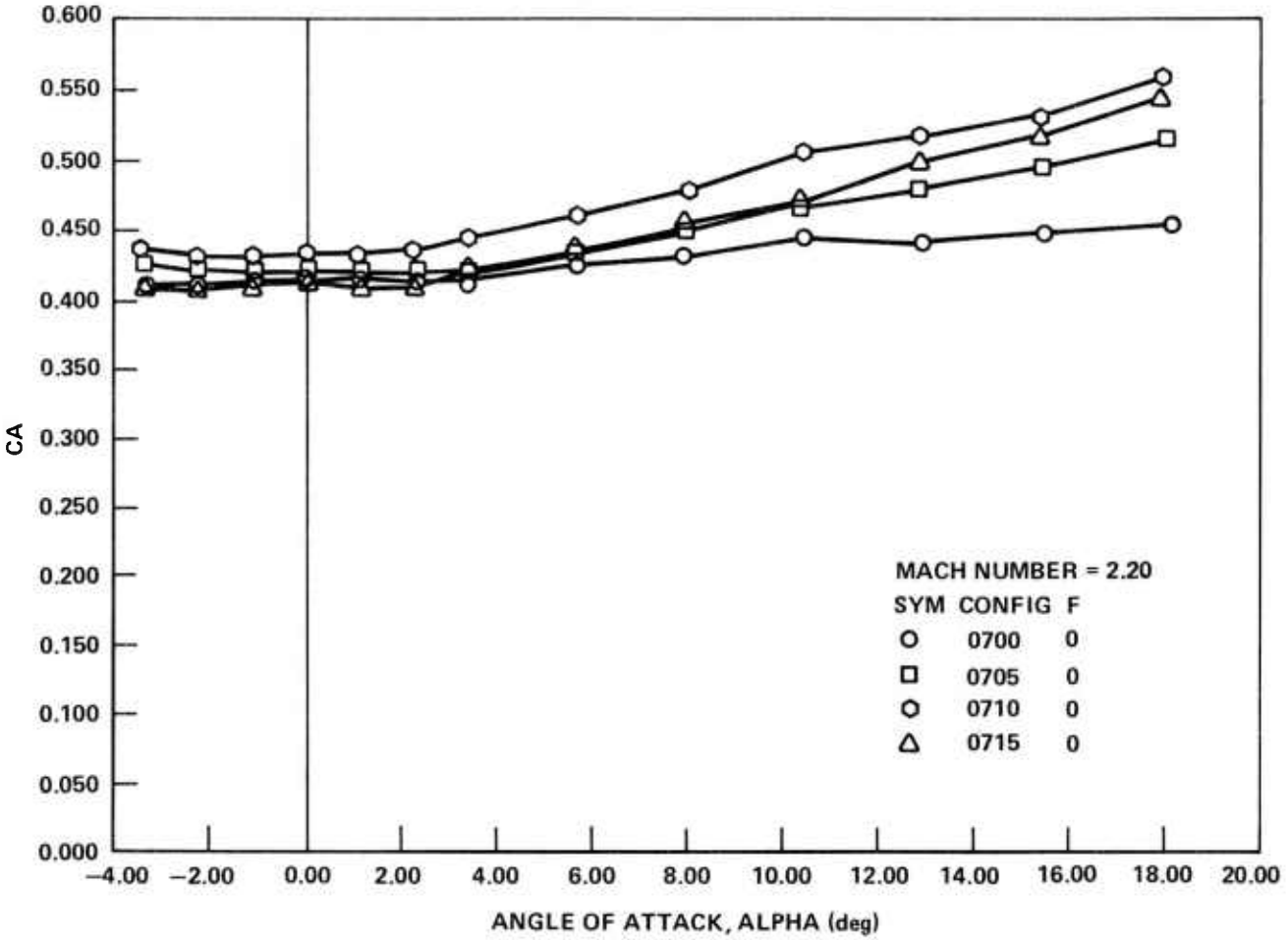
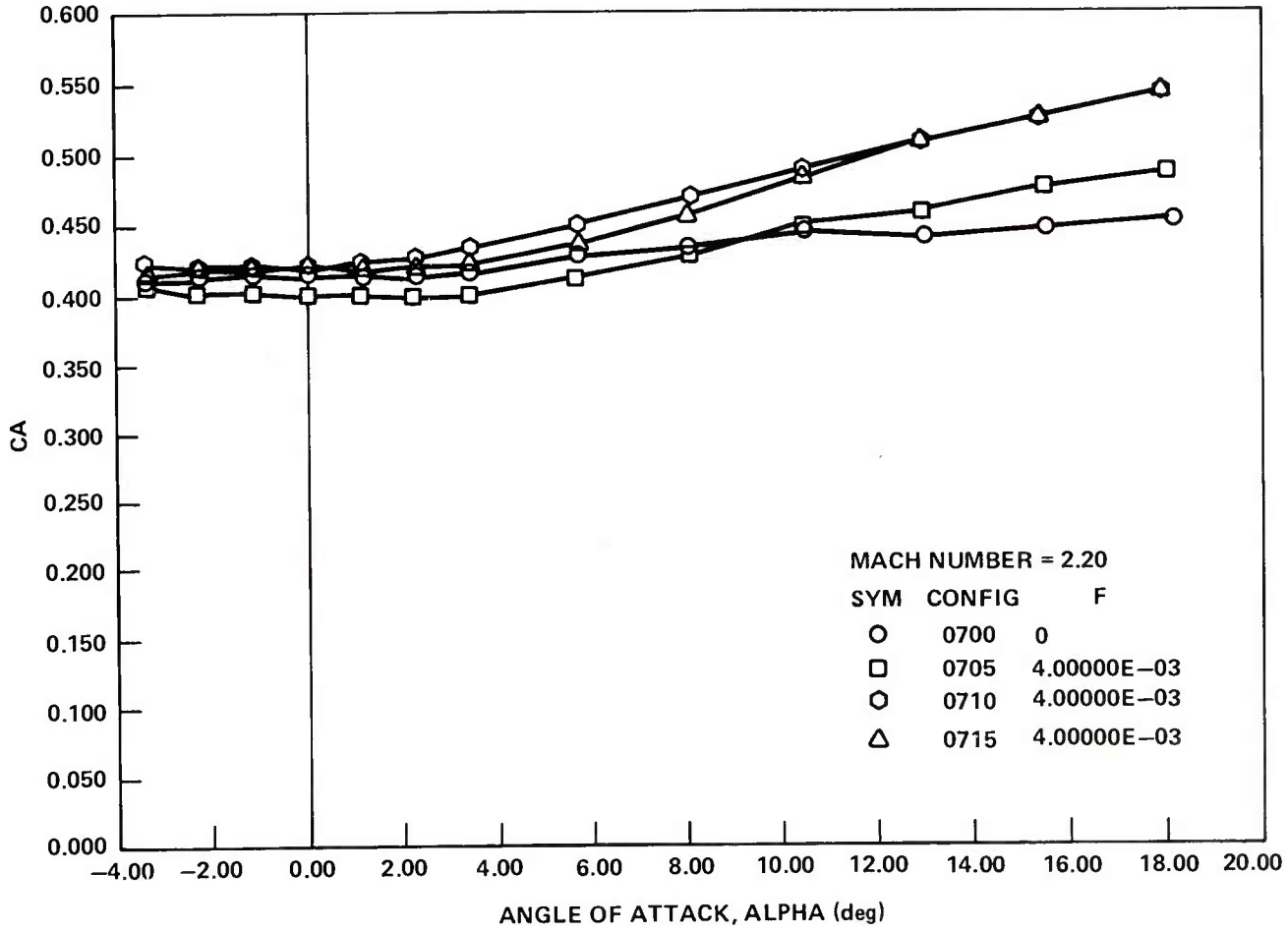


Figure 2. Missile total axial force coefficient versus angle of attack.



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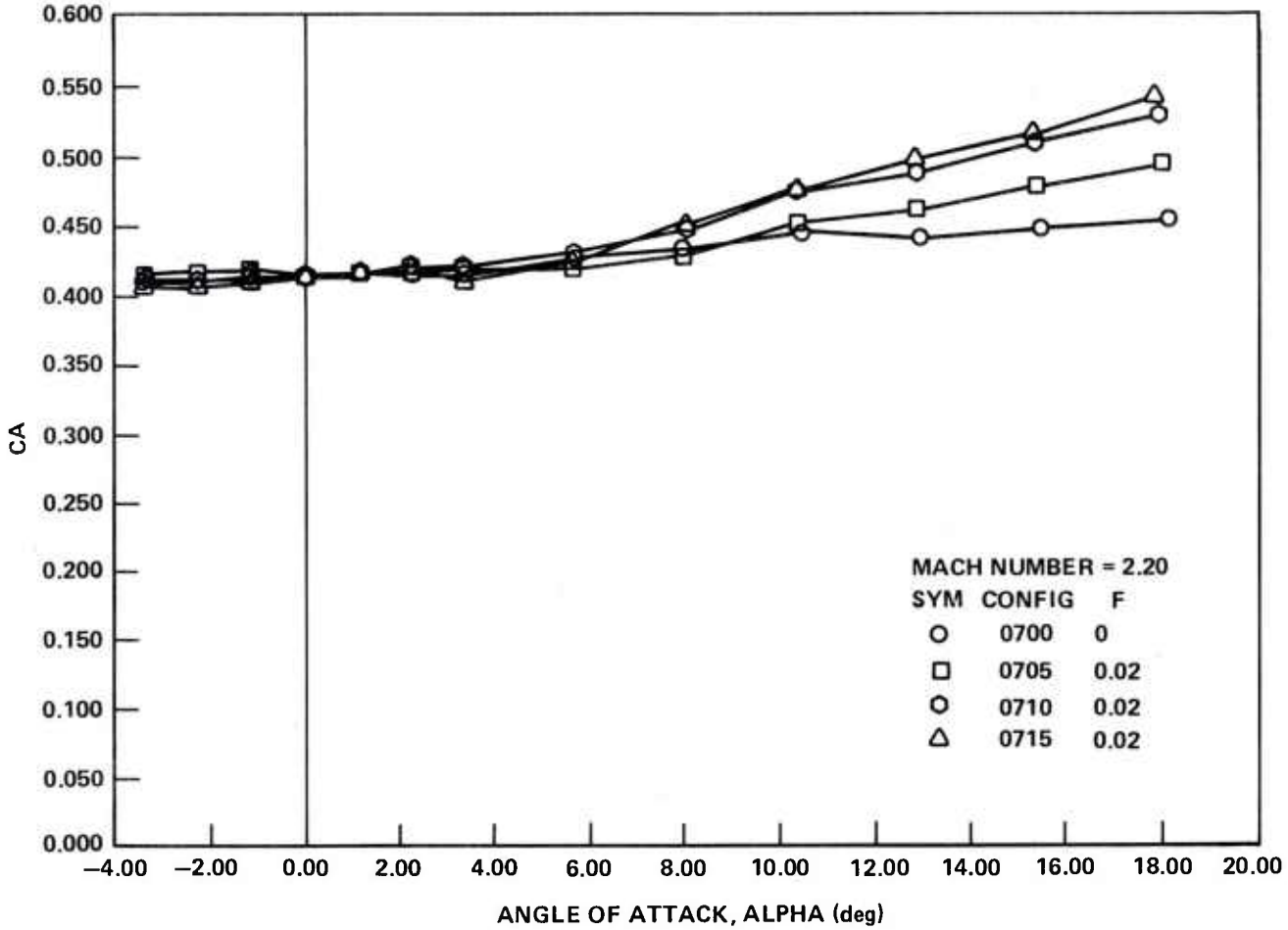

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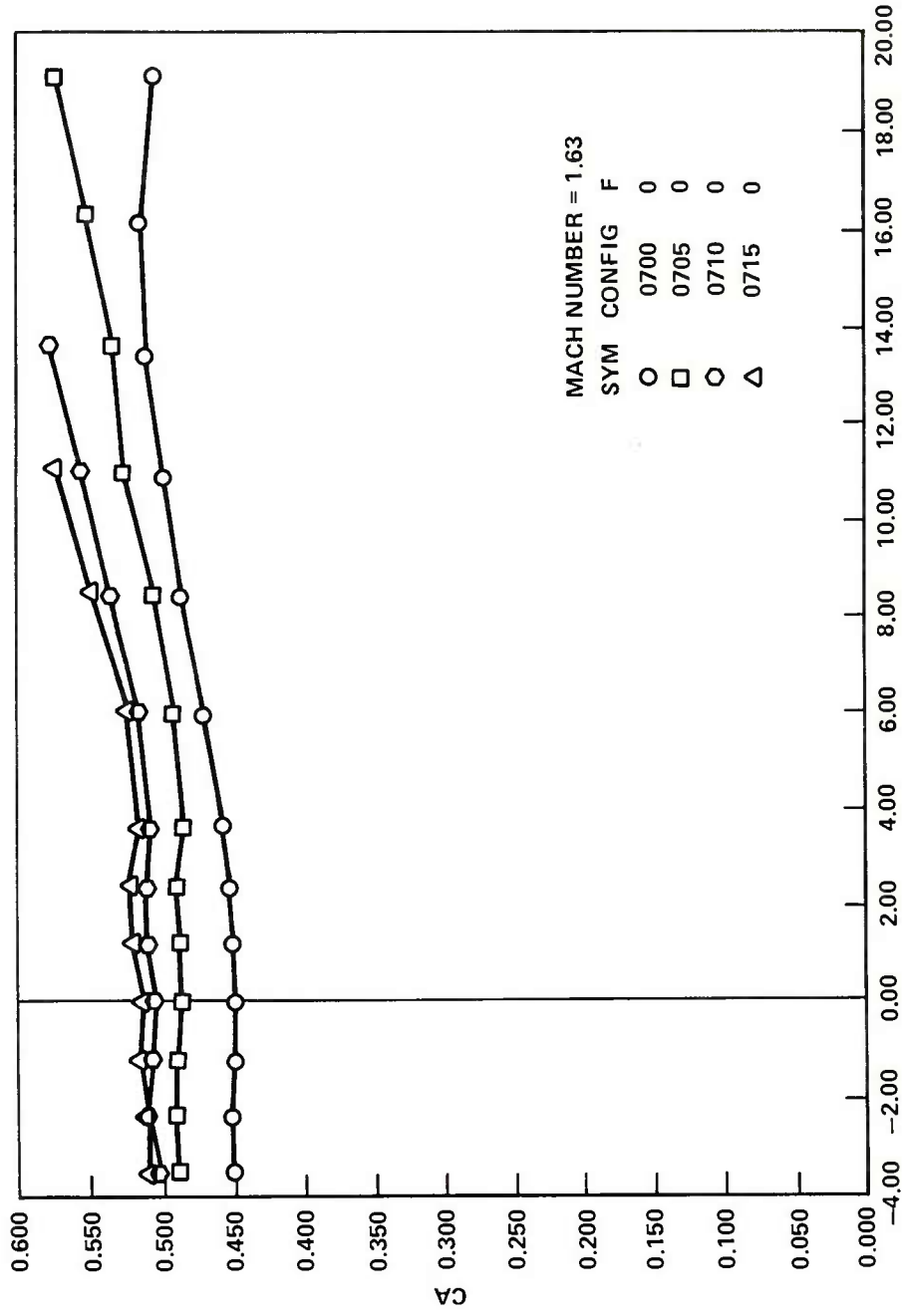

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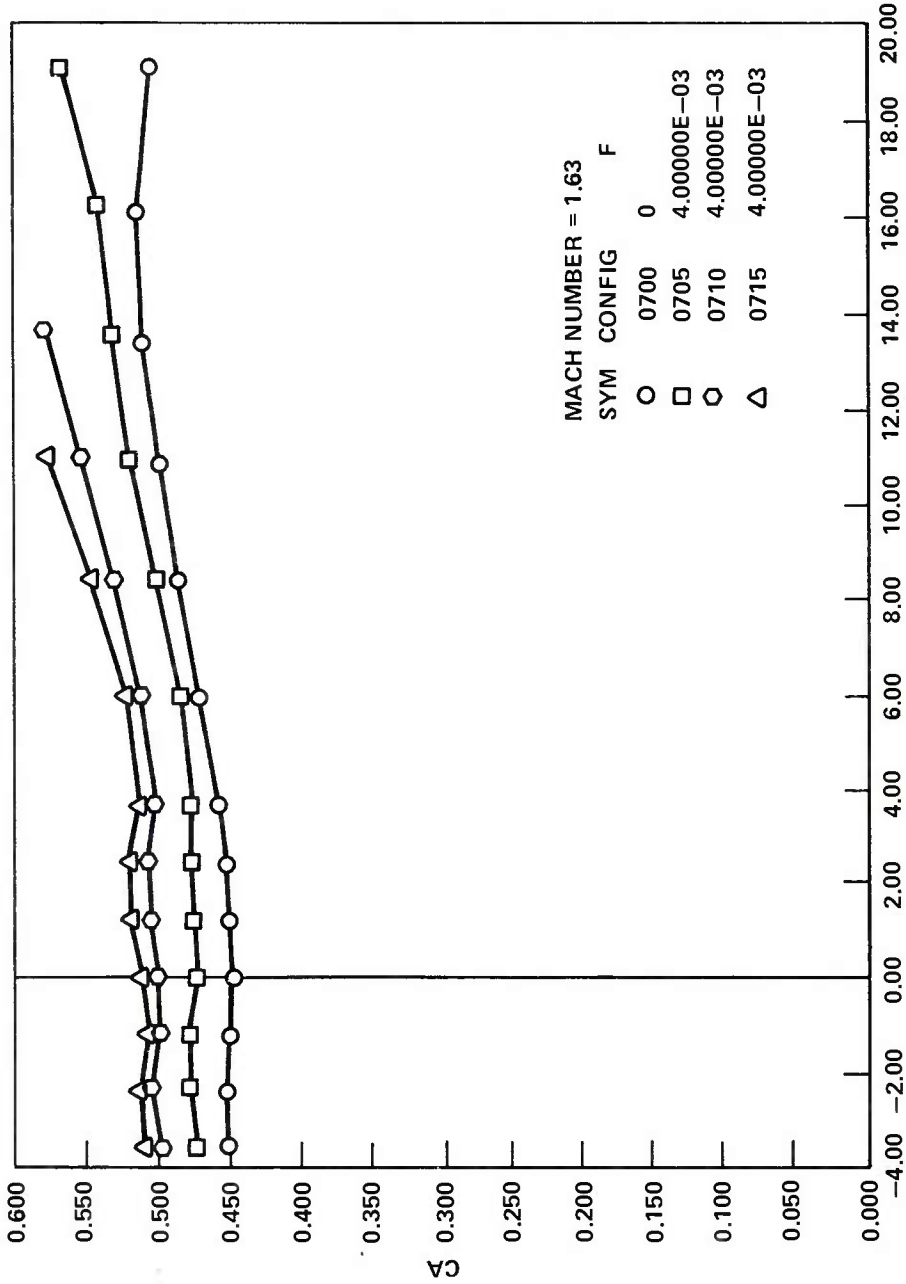

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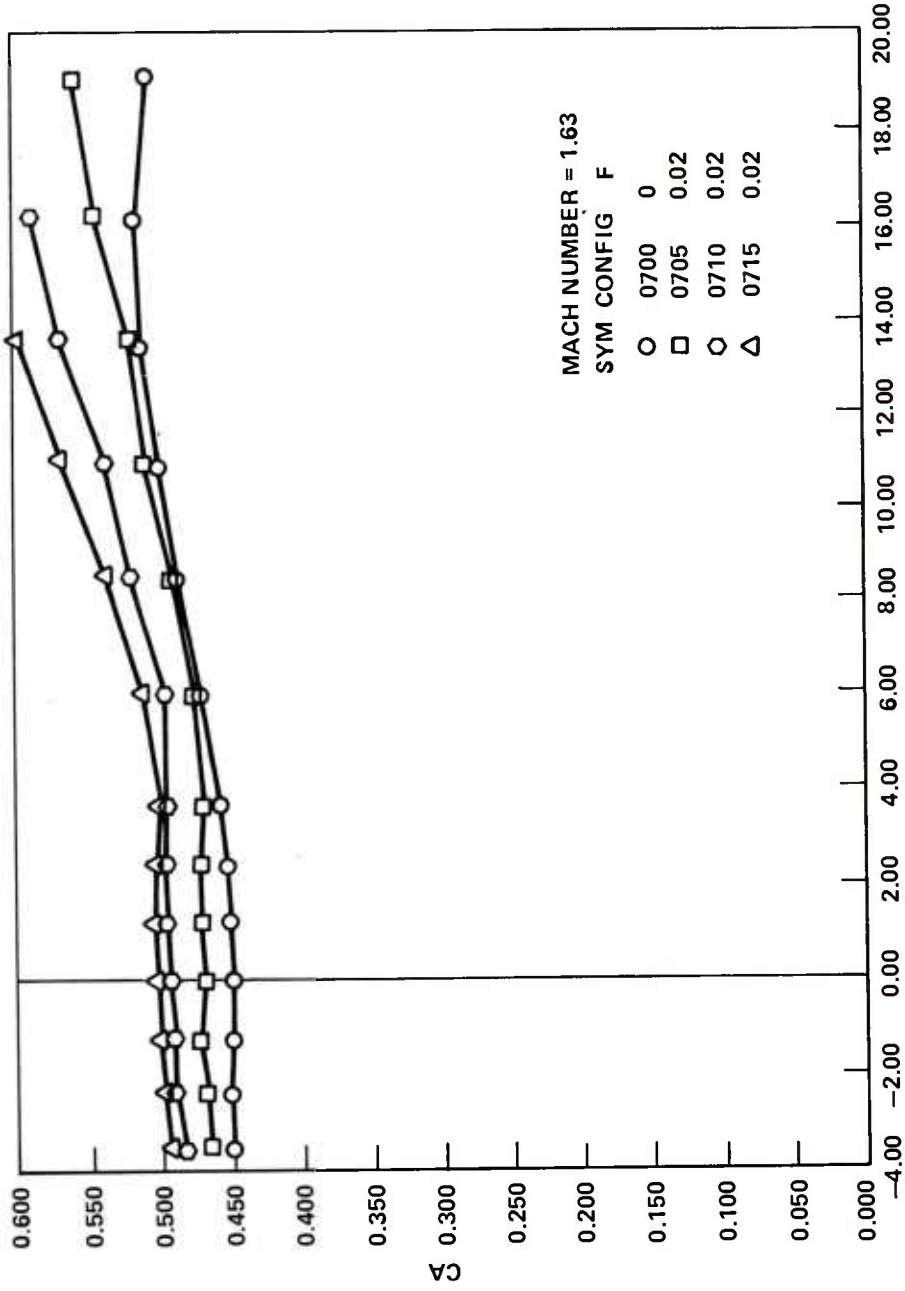

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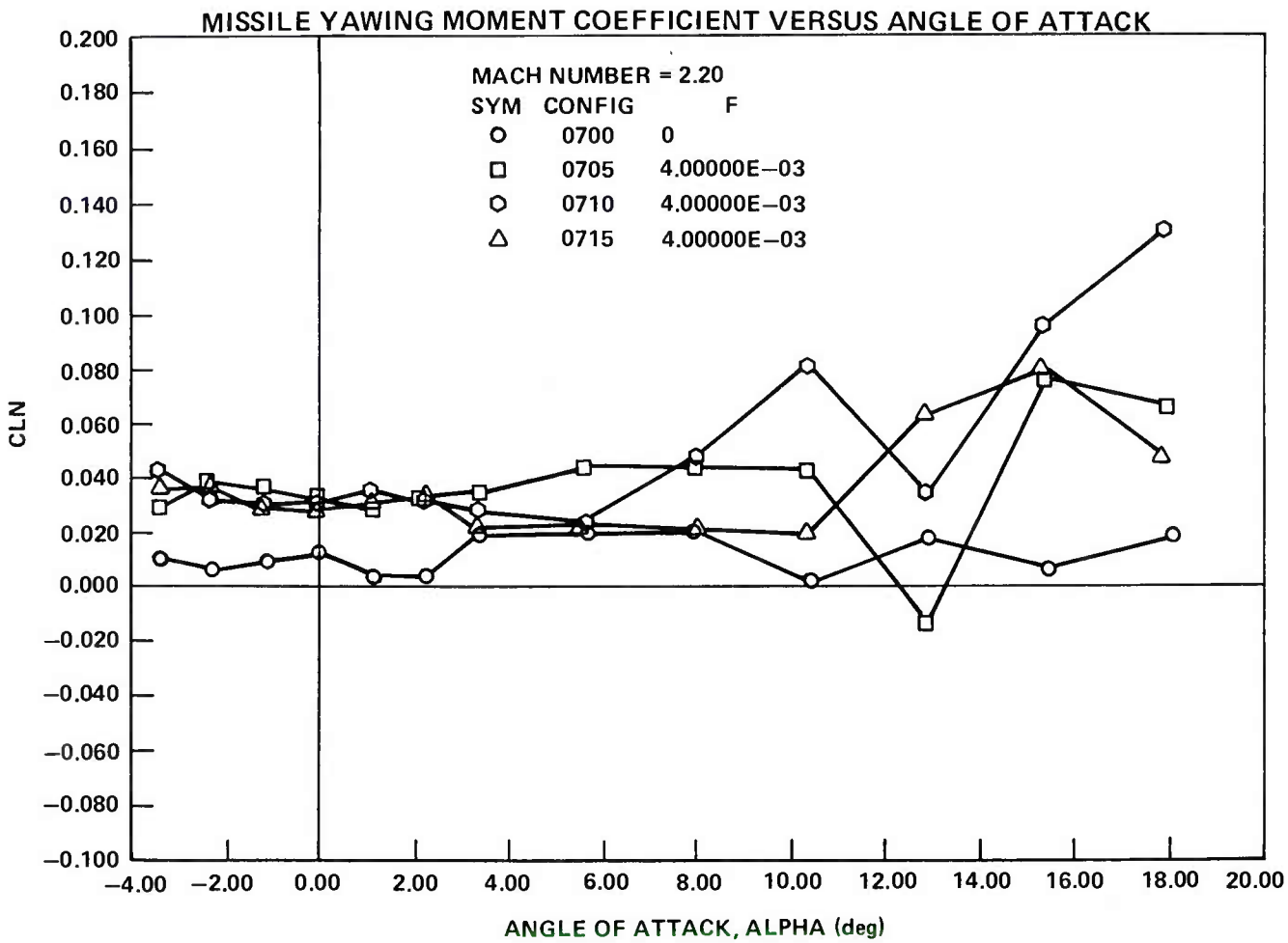
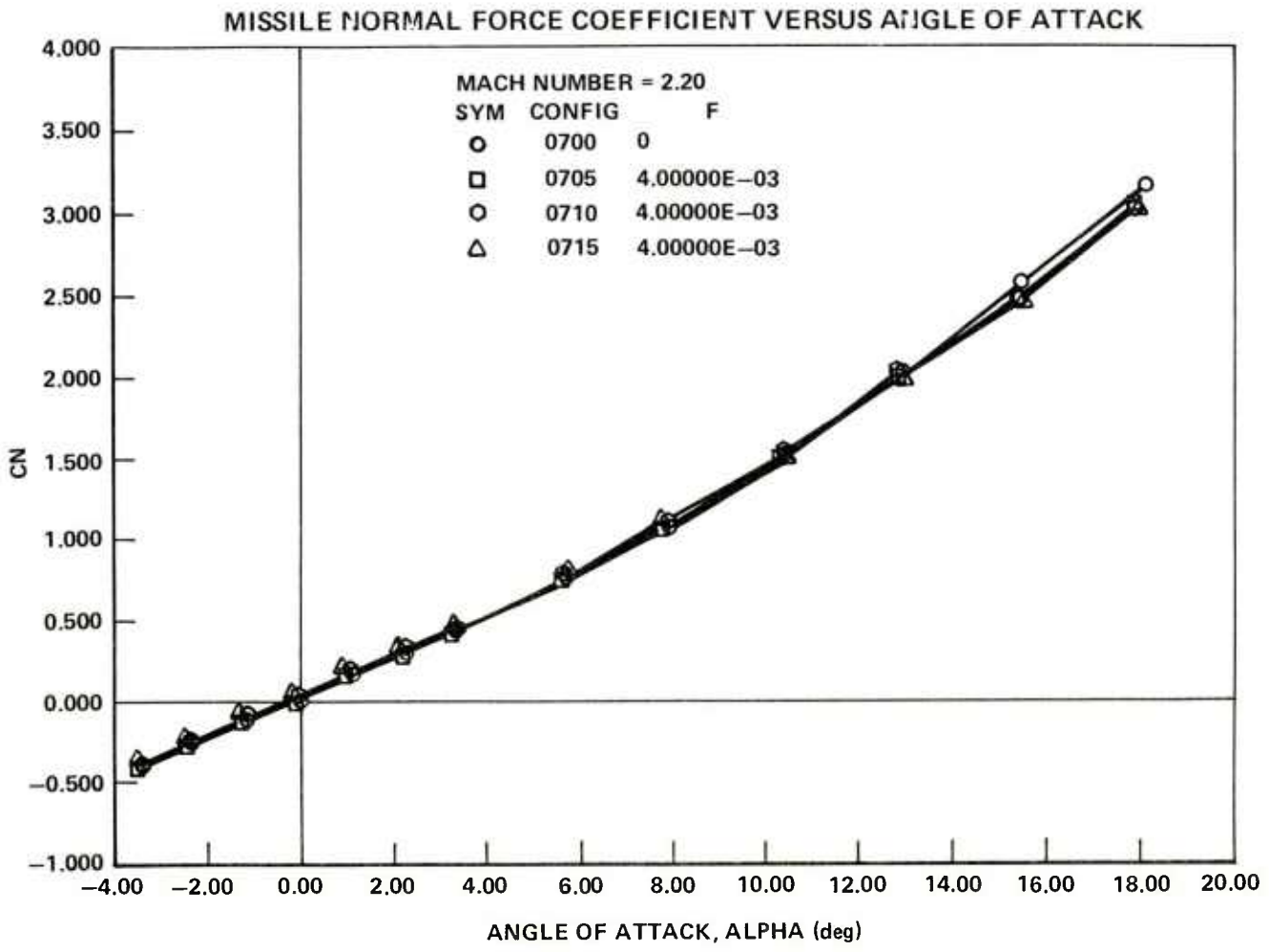


Figure 3. Effects of mass injection on the other missile force coefficients at low angle of attach $\alpha < 6°$ for F = 0.004.



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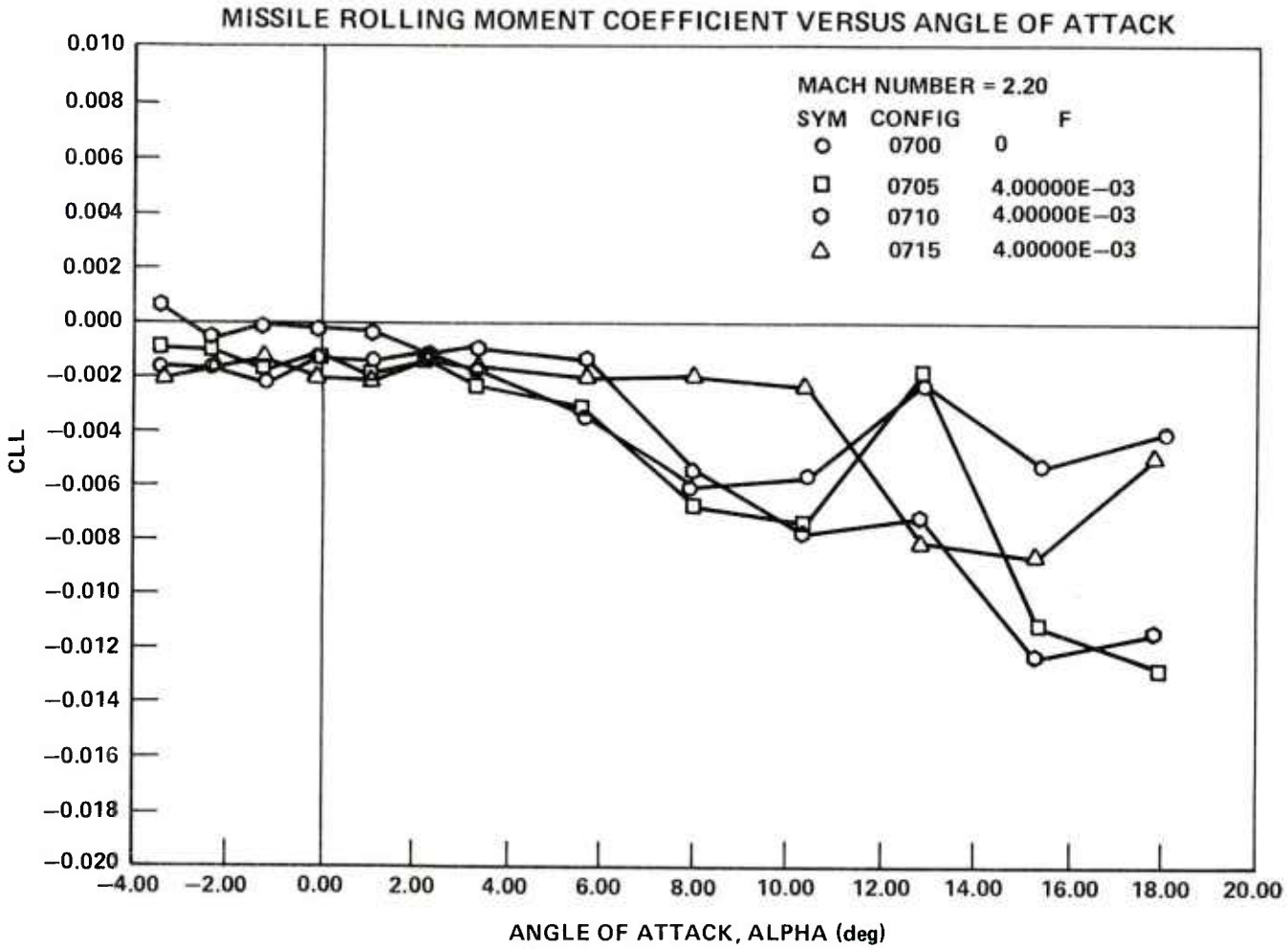

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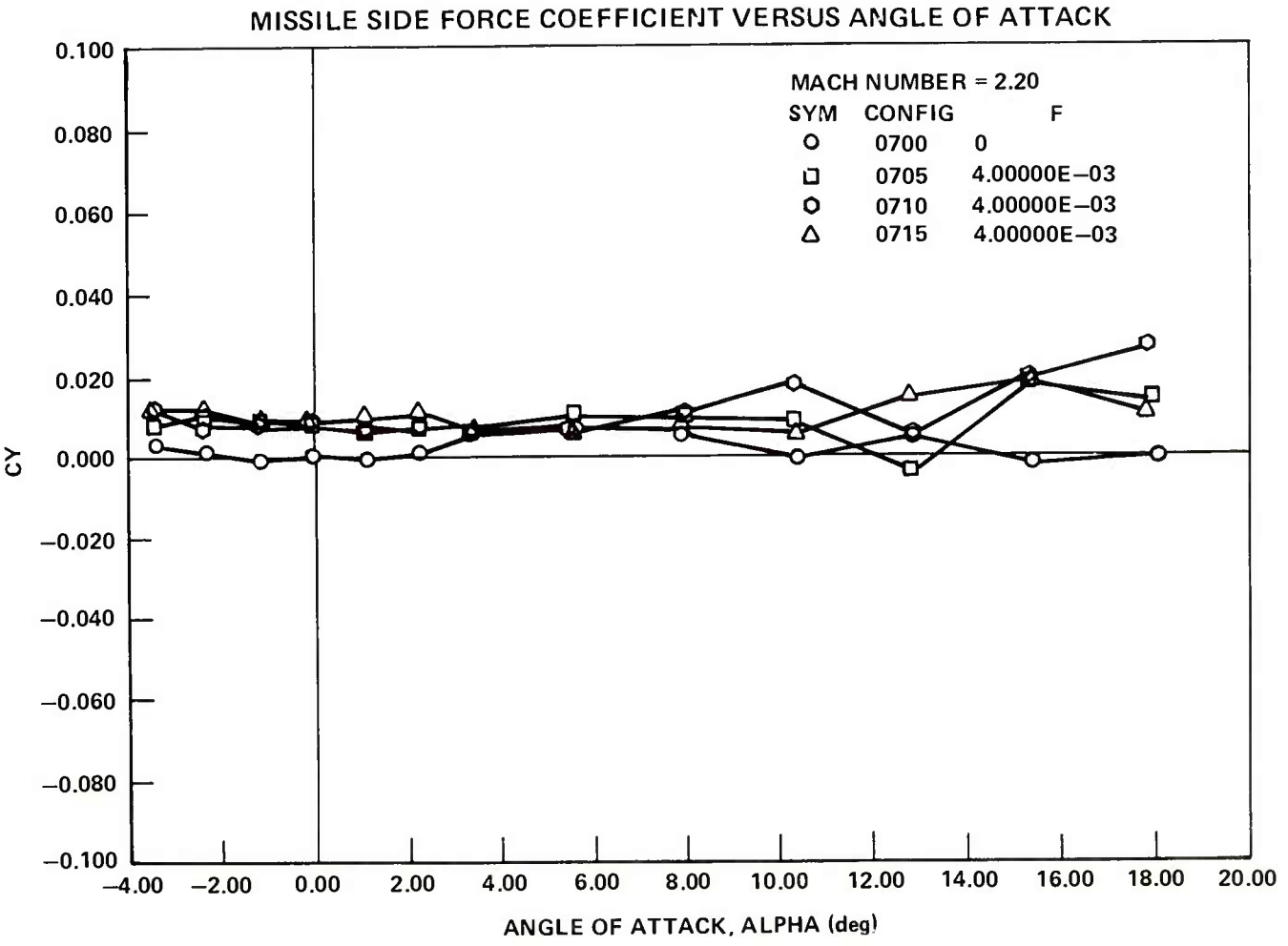

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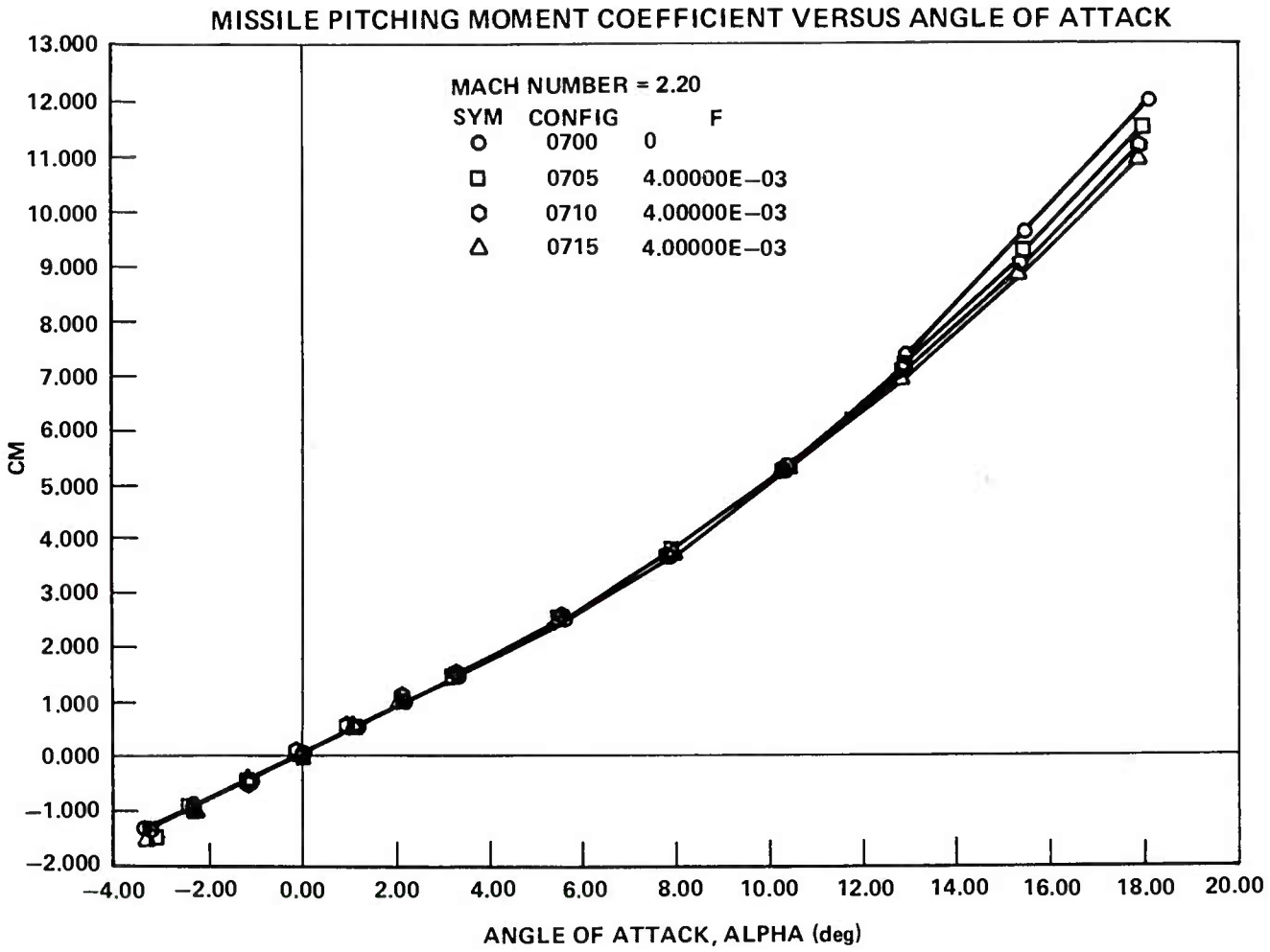

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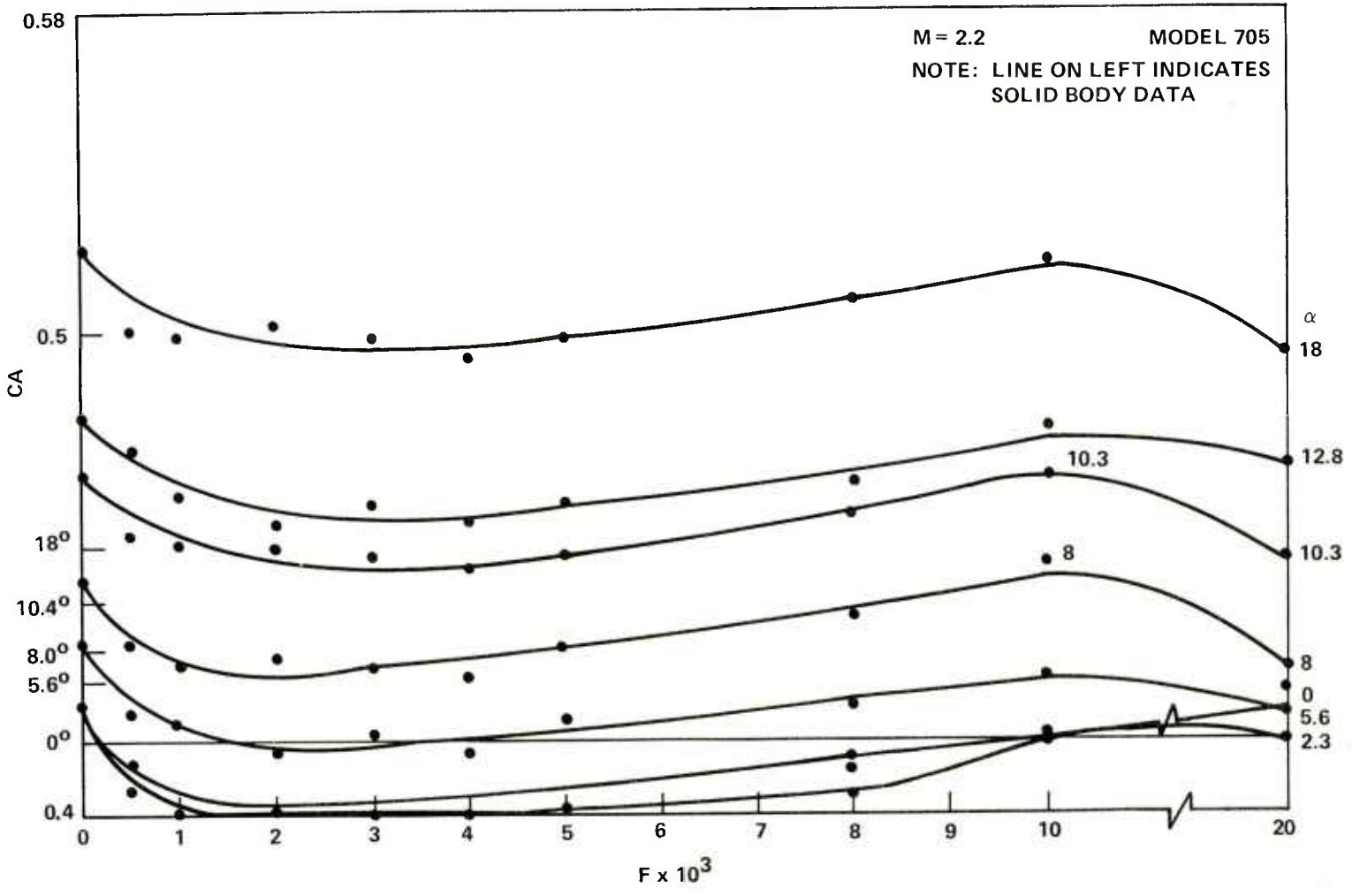
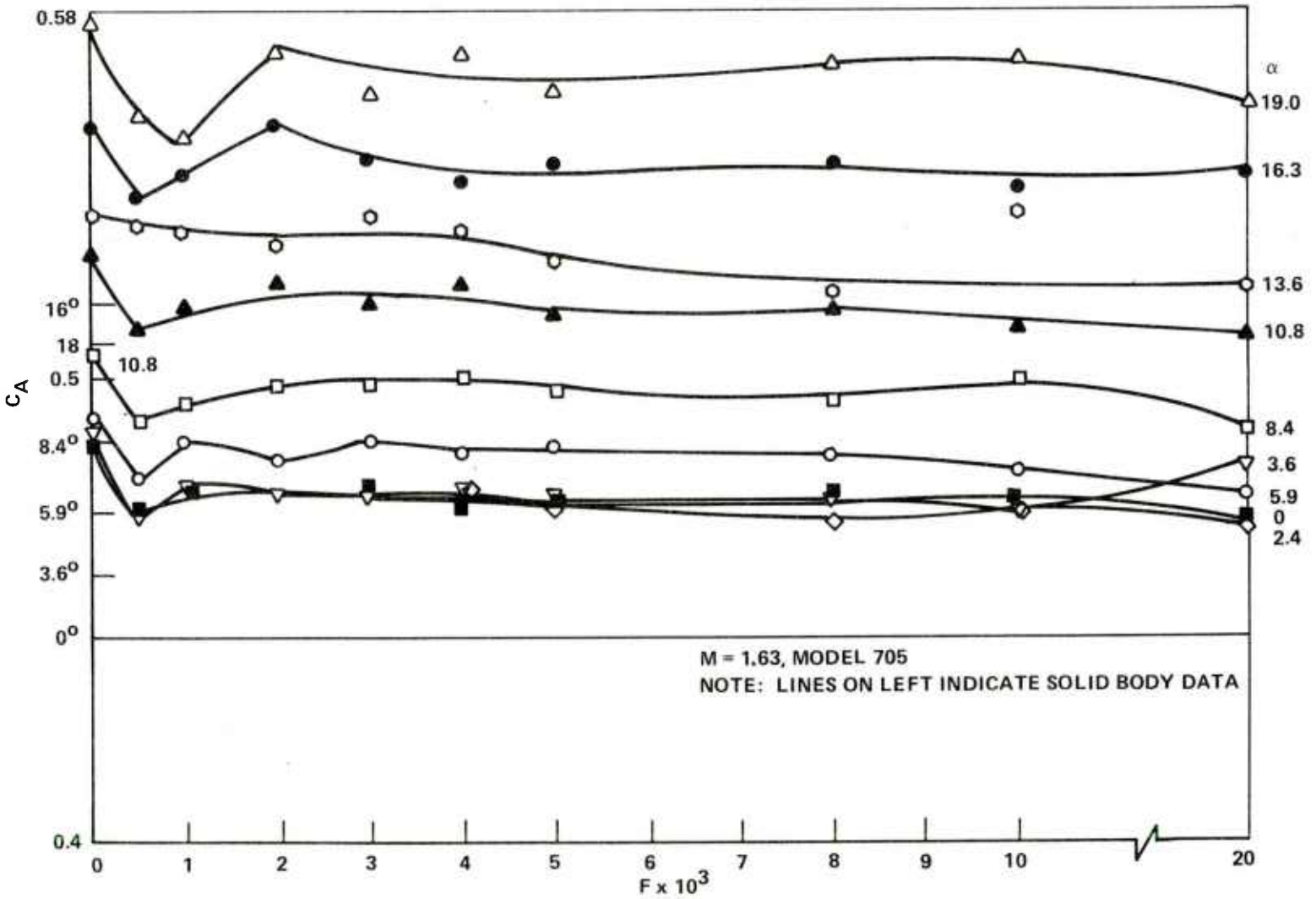


(a)

Figure 4. Missile total axial force coefficient versus mass flow rate.



(b)

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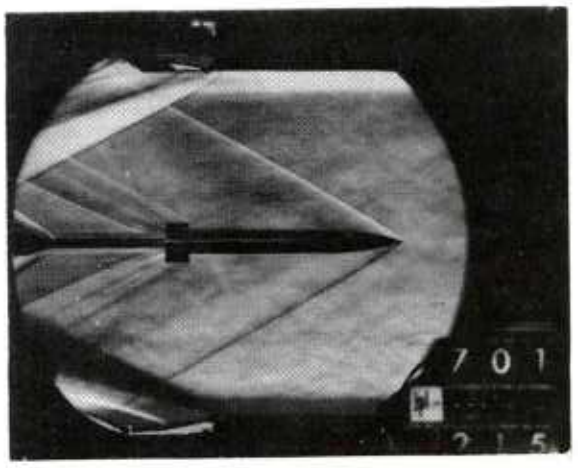
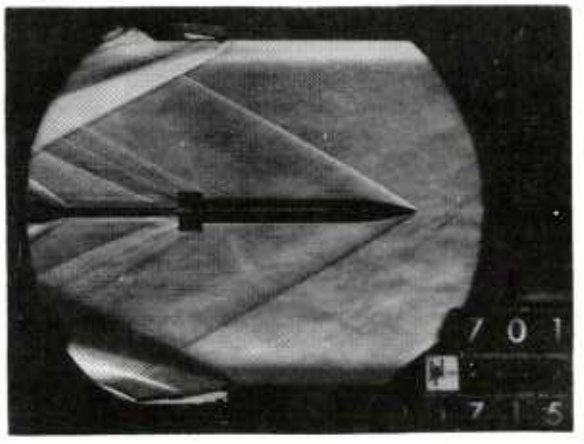
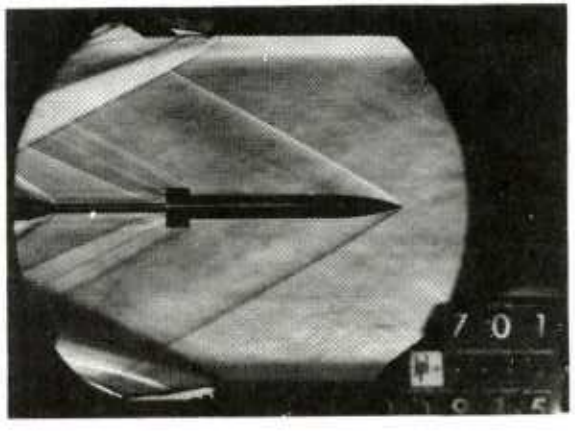


F = 0.0000

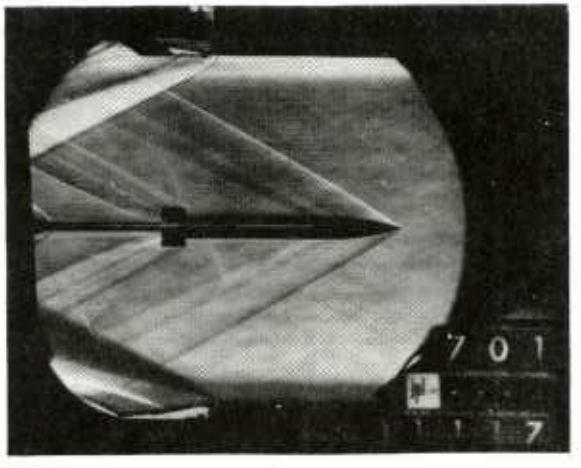


F = 0.0004

$\alpha = 0^{o}$



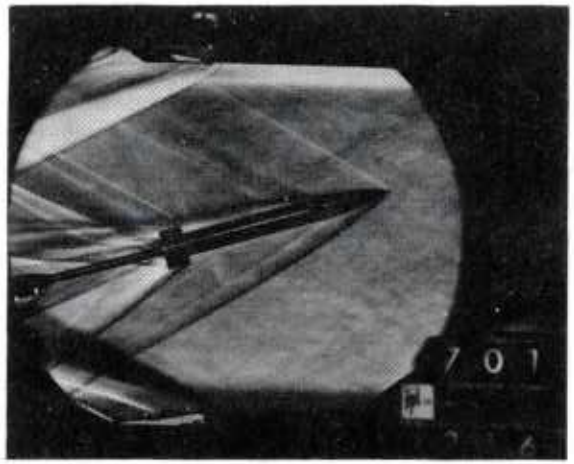
F = 0.008



F = 0.02

(a)

Figure 5. Schlieren photographs, configuration 705.



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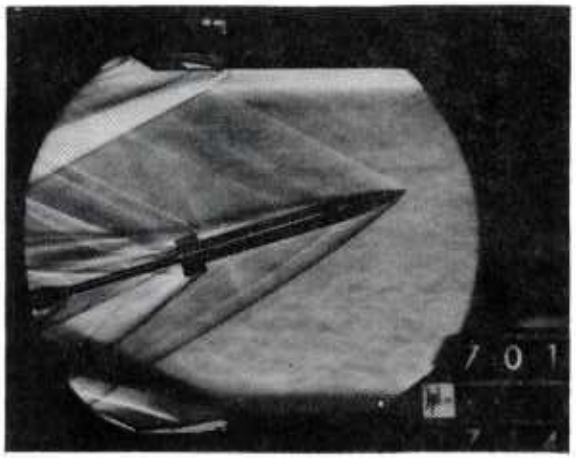
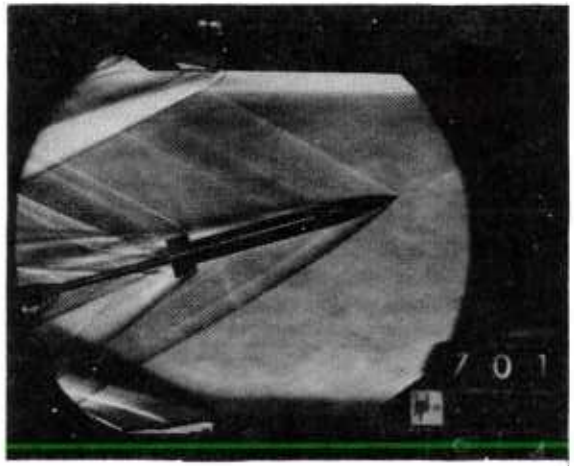


F = 0.0004

$\alpha = 18^{o}$



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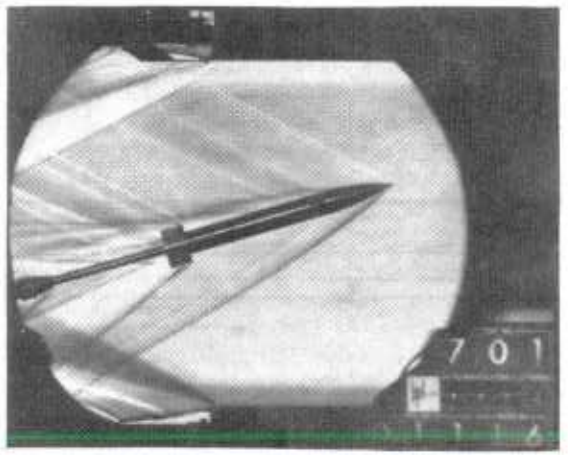

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(b)

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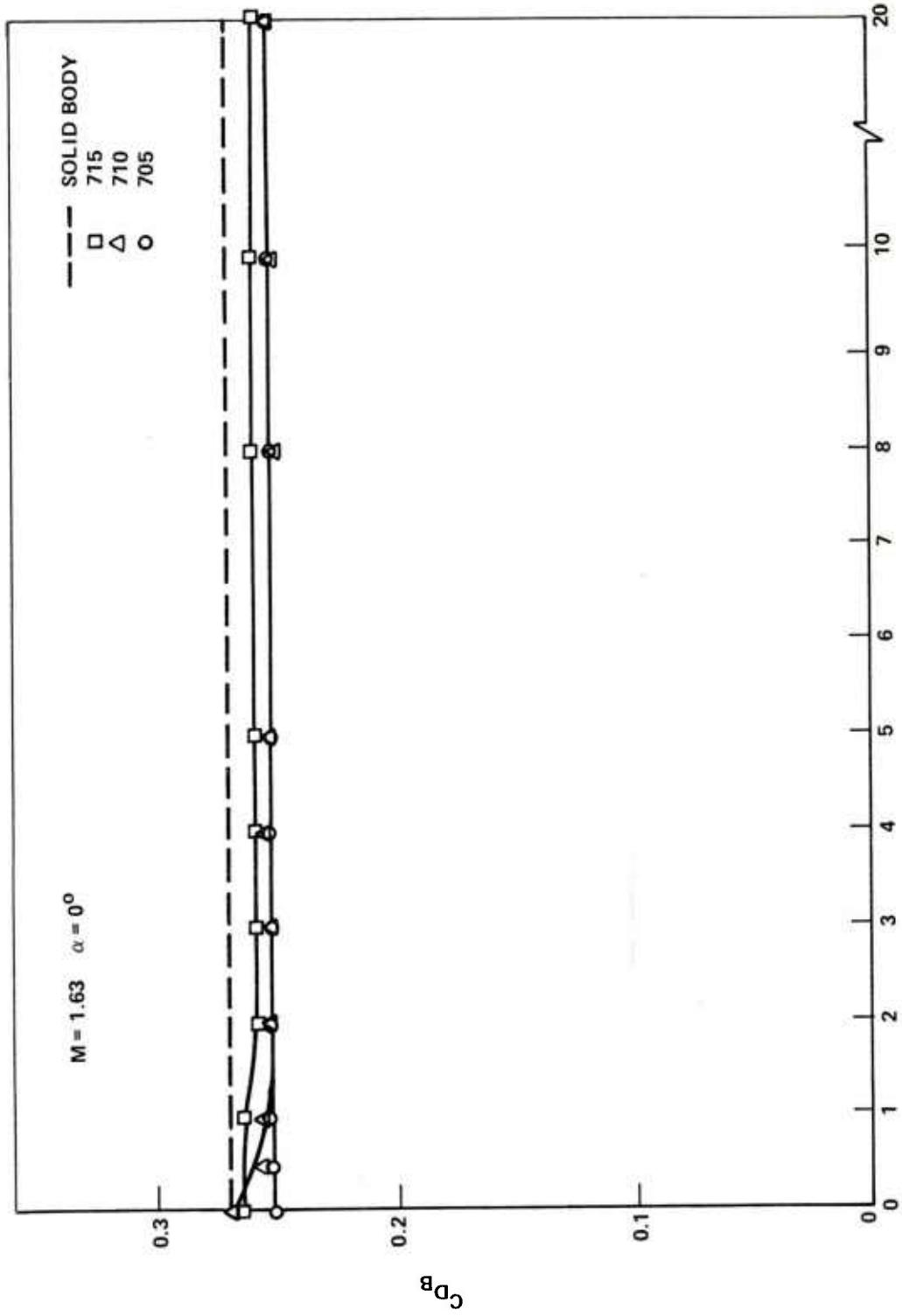
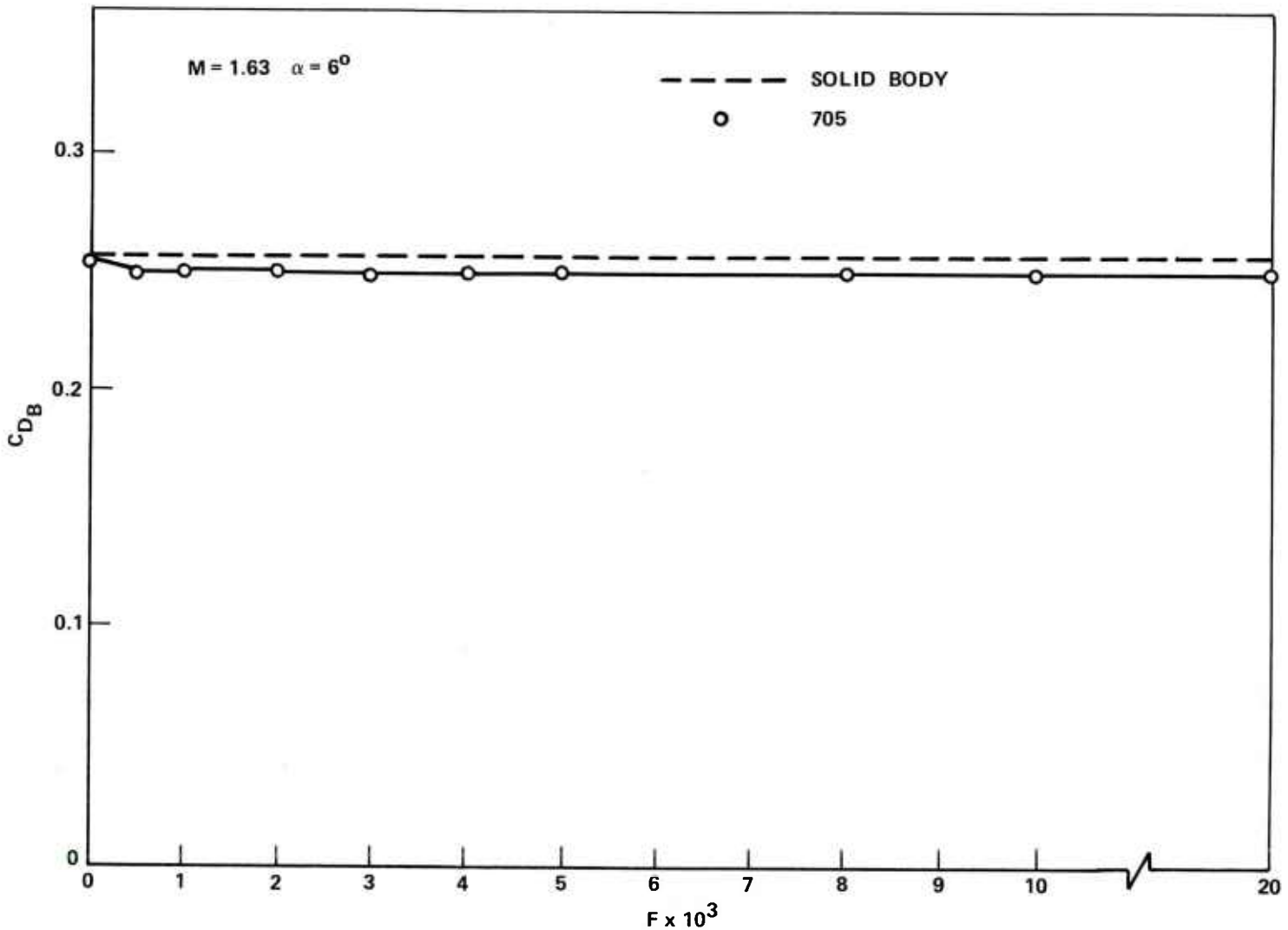


(a)

Figure 6. Base drag coefficient versus mass flow rate M = 1.63 α = 0°.



(b)

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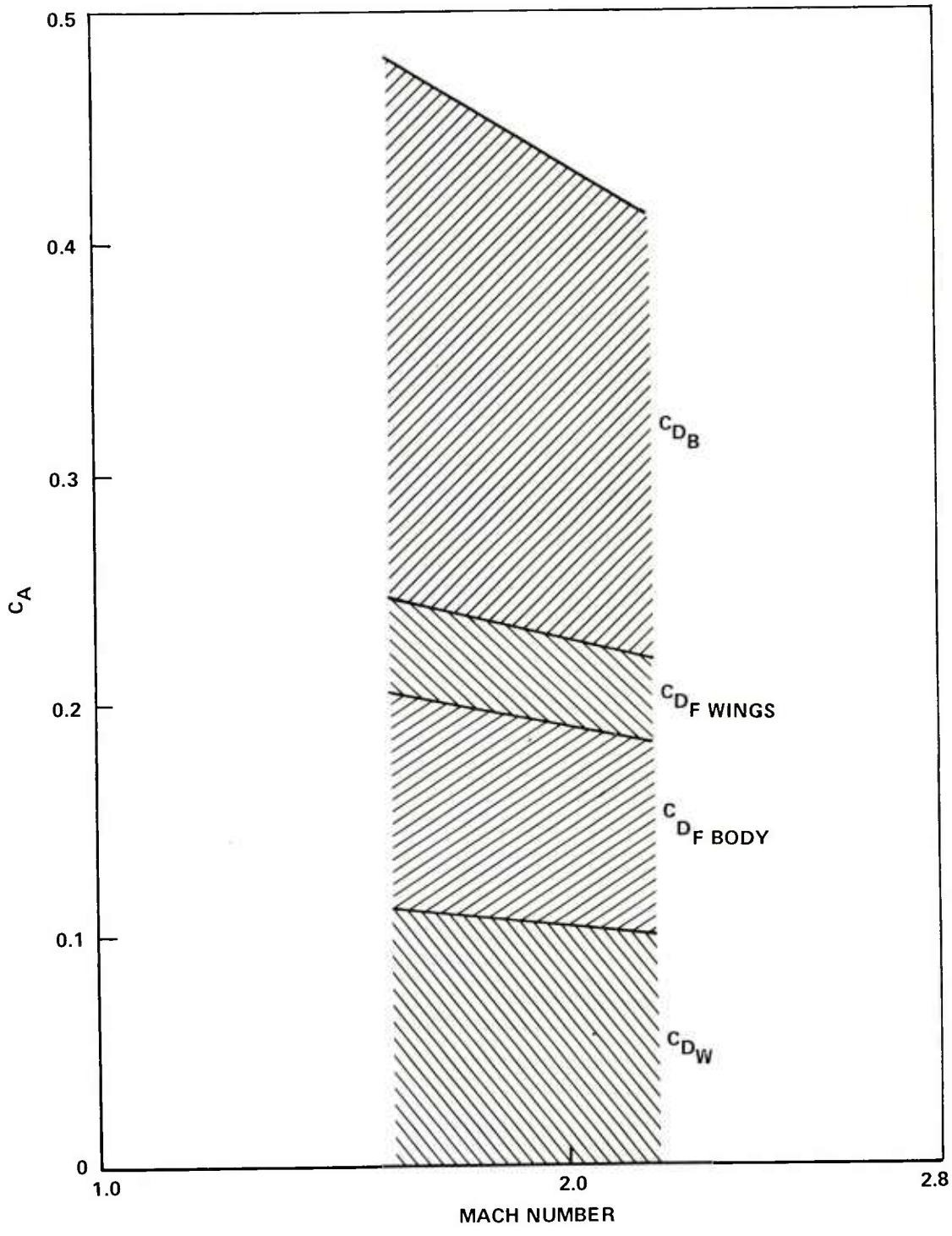

Figure 7. Theoretical C_A estimates for mach 1.63 and 2.2.

Appendix. TABULATED DATA

CONFIG =0700
RUN NO. = 1
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DYN PRESS.= 4.46
REYNOLDS NO. = 257006
REFERENCE AREA = 1.4849

ALPHA	CN	CY	CA	CM	CLN	CLL	F
0.0240	0.0172	0.0006	0.4178	0.0481	0.0121	-0.0002	0.0000
-3.3352	-0.3886	0.0030	0.4106	-1.3416	0.0105	-0.0016	0.0000
-2.2030	-0.2543	0.0012	0.4115	-0.8776	0.0061	-0.0017	0.0000
-1.0772	-0.1170	-0.0006	0.4146	-0.4060	0.0097	-0.0022	0.0000
0.0305	0.0135	0.0007	0.4138	0.0350	0.0123	-0.0013	0.0000
1.1862	0.1625	-0.0005	0.4158	0.5458	0.0043	-0.0014	0.0000
2.3111	0.3010	0.0012	0.4127	1.0136	0.0039	-0.0011	0.0000
3.4063	0.4393	0.0056	0.4166	1.4838	0.0195	-0.0018	0.0000
5.7028	0.7423	0.0070	0.4280	2.5269	0.0197	-0.0034	0.0000
7.9638	1.0789	0.0055	0.4341	3.7103	0.0209	-0.0060	0.0000
10.4597	1.5238	-0.0002	0.4463	5.3707	0.0016	-0.0056	0.0000
12.9363	2.0323	0.0050	0.4428	7.3945	0.0179	-0.0022	0.0000
15.4581	2.5919	-0.0011	0.4501	9.6500	0.0069	-0.0052	0.0000
18.0993	3.1815	0.0007	0.4564	12.0316	0.0186	-0.0040	0.0000
0.0436	0.0277	-0.0010	0.4155	0.0841	0.0053	-0.0018	0.0000

CONFIG =0705
RUN NO. = 2
MACH NO. = 2.2
DYN PRESS = 4.45
REYNOLDS NO. = 257841
REFERENCE AREA = 1.4849

ALPHA	CN	CY	CA	CM	CLN	CLL	F
0.0250	0.0147	0.0066	0.4208	0.0604	0.0331	-0.0010	0.0000
-3.3466	-0.3969	0.0073	0.4270	-1.3246	0.0325	-0.0011	0.0000
-2.2459	-0.2636	0.0078	0.4210	-0.8780	0.0367	-0.0007	0.0000
-1.0873	-0.1202	0.0068	0.4196	-0.3986	0.0340	-0.0003	0.0000
0.0351	0.0163	0.0066	0.4192	0.0574	0.0332	-0.0017	0.0000
1.1883	0.1651	0.0072	0.4186	0.5547	0.0357	-0.0019	0.0000
2.2897	0.3013	0.0049	0.4182	1.0088	0.0303	-0.0032	0.0000
3.4124	0.4388	0.0041	0.4224	1.4668	0.0313	-0.0018	0.0000
5.6945	0.7497	0.0033	0.4345	2.5203	0.0267	-0.0041	0.0000
7.9798	1.1059	0.0048	0.4489	3.7657	0.0326	-0.0068	0.0000
10.4092	1.5290	0.0048	0.4711	5.3030	0.0332	-0.0104	0.0000
12.8482	2.0008	-0.0066	0.4811	7.0980	-0.0127	-0.0039	0.0000
15.3968	2.5357	0.0059	0.4969	9.1998	0.0280	-0.0062	0.0000
18.0109	3.1293	0.0143	0.5172	11.5159	0.0667	-0.0121	0.0000
0.0079	0.0209	0.0066	0.4211	0.0641	0.0316	-0.0007	0.0000

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REYNOLDS NO. = 256992
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-3.3445	-0.3902	0.0090	0.4116	-1.3339	0.0332	-0.0014	0.0005
-2.2451	-0.2585	0.0087	0.4076	-0.8828	0.0338	-0.0015	0.0005
-1.1314	-0.1223	0.0062	0.4032	-0.4195	0.0247	-0.0022	0.0005
0.0136	0.0156	0.0074	0.4067	0.0493	0.0301	-0.0017	0.0005
1.1113	0.1566	0.0073	0.4047	0.5294	0.0310	-0.0019	0.0005
2.2926	0.3020	0.0064	0.4056	1.0207	0.0300	-0.0014	0.0005
3.4009	0.4330	0.0051	0.4093	1.4642	0.0253	-0.0024	0.0005
5.6871	0.7462	0.0077	0.4215	2.5450	0.0358	-0.0031	0.0005
7.9770	1.1015	0.0113	0.4355	3.8053	0.0477	-0.0062	0.0005
10.3969	1.5222	0.0134	0.4582	5.3564	0.0512	-0.0068	0.0005
12.9023	2.0092	-0.0005	0.4762	7.2322	-0.0022	-0.0028	0.0005
15.3754	2.5260	0.0144	0.4830	9.2781	0.0634	-0.0105	0.0005
17.9717	3.1105	0.0272	0.5004	11.5664	0.1154	-0.0158	0.0005
0.0191	0.0209	0.0058	0.4110	0.0722	0.0234	-0.0023	0.0005

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MACH NO. = 2.2
DYN PRESS.= 4.46
REYNOLDS NO. = 256713
REFERENCE AREA = 1.4849

ALPHA	CN	CY	CA	CM	CLN	CLL	F
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-3.3946	-0.3902	0.0097	0.4096	-1.3339	0.0348	-0.0009	0.0010
-2.2572	-0.2608	0.0102	0.4023	-0.8910	0.0388	-0.0015	0.0010
-1.0998	-0.1208	0.0077	0.4030	-0.4130	0.0295	-0.0016	0.0010
0.0130	0.0141	0.0074	0.4034	0.0492	0.0301	-0.0017	0.0010
1.1337	0.1586	0.0088	0.4063	0.5384	0.0373	-0.0018	0.0010
2.2933	0.3011	0.0064	0.3999	1.0227	0.0298	-0.0019	0.0010
3.3743	0.4353	0.0058	0.4067	1.4767	0.0283	-0.0018	0.0010
5.6786	0.7459	0.0076	0.4194	2.5495	0.0356	-0.0031	0.0010
7.9688	1.1029	0.0105	0.4310	3.8134	0.0443	-0.0062	0.0010
10.3862	1.5216	0.0059	0.4566	5.3535	0.0363	-0.0061	0.0010
12.8744	2.0002	-0.0027	0.4663	7.2031	-0.0086	-0.0028	0.0010
15.3685	2.5289	0.0136	0.4763	9.2911	0.0568	-0.0116	0.0010
17.9621	3.1099	0.0182	0.4966	11.5701	0.0776	-0.0136	0.0010
0.0067	0.0186	0.0081	0.4075	0.0623	0.0316	-0.0006	0.0010

CONFIG =0705
RUN NO. = 5
MACH NO. = 2.2
DYN PRESS.= 4.46
REYNOLDS NO. = 256323
REFERENCE AREA = 1.4849

ALPHA	CN	CY	CA	CM	CLN	CLL	F
0.0051	0.0171	0.0066	0.4019	0.0559	0.0285	-0.0028	0.0020
-3.3435	-0.3877	0.0097	0.4051	-1.3270	0.0348	-0.0026	0.0020
-2.2429	-0.2555	0.0095	0.4023	-0.8762	0.0355	-0.0021	0.0020
-1.1182	-0.1186	0.0077	0.4024	-0.4081	0.0328	-0.0021	0.0020
0.0009	0.0126	0.0074	0.4035	0.0395	0.0319	-0.0028	0.0020
1.1038	0.1596	0.0065	0.4002	0.5377	0.0293	-0.0018	0.0020
2.2839	0.3035	0.0064	0.3995	1.0257	0.0300	-0.0014	0.0020
3.4226	0.4457	0.0035	0.3986	1.5083	0.0216	-0.0023	0.0020
5.6534	0.7418	0.0062	0.4133	2.5321	0.0294	-0.0031	0.0020
8.0181	1.1135	0.0082	0.4330	3.8476	0.0375	-0.0062	0.0020
10.3713	1.5172	0.0037	0.4537	5.3327	0.0219	-0.0068	0.0020
12.8714	1.9988	-0.0018	0.4610	7.1872	-0.0050	-0.0029	0.0020
15.3527	2.5246	0.0160	0.4763	9.2640	0.0686	-0.0094	0.0020
17.9581	3.1076	0.0288	0.5027	11.5503	0.1238	-0.0158	0.0020
0.0316	0.0247	0.0051	0.4048	0.0791	0.0217	-0.0006	0.0020

CONFIG =0705
RUN NO = 6
MACH NO. = 2.2
DYN PRESS.= 4.46
REYNOLDS NO. = 256325
REFERENCE AREA = 1.4849

ALPHA	CN	CY	CA	CM	CLN	CLL	F
0.0200	0.0232	0.0081	0.4019	0.0723	0.0349	-0.0028	0.0030
-3.3329	-0.3871	0.0082	0.4039	-1.3304	0.0317	-0.0026	0.0030
-2.2436	-0.2551	0.0087	0.3972	-0.8796	0.0339	-0.0010	0.0030
-1.1418	-0.1214	0.0085	0.4012	-0.4238	0.0347	-0.0028	0.0030
0.0134	0.0164	0.0067	0.3991	0.0462	0.0286	-0.0023	0.0030
1.1352	0.1619	0.0066	0.4008	0.5411	0.0293	-0.0019	0.0030
2.2486	0.2982	0.0042	0.3975	1.0045	0.0221	-0.0031	0.0030
3.4434	0.4466	0.0050	0.4025	1.5079	0.0281	-0.0023	0.0030
5.6540	0.7423	0.0077	0.4165	2.5287	0.0359	-0.0032	0.0030
7.9890	1.1046	0.0076	0.4308	3.8106	0.0346	-0.0051	0.0030
10.3829	1.5194	0.0097	0.4536	5.3374	0.0464	-0.0062	0.0030
12.8468	1.9945	-0.0078	0.4642	7.1681	-0.0245	-0.0024	0.0030
15.3535	2.5130	0.0191	0.4756	9.2124	0.0789	-0.0107	0.0030
17.9723	3.1045	0.0212	0.4983	11.5325	0.0907	-0.0125	0.0030
0.0213	0.0247	0.0066	0.4065	0.0773	0.0283	-0.0023	0.0030

CONFIG =0705
RUN NO. = 7
MACH NO. = 2.2
DYN PRESS. = 4.46
REYNOLDS NO. = 255981
REFERENCE AREA = 1.4849

ALPHA	CN	CY	CA	CM	CLN	CLL	F
0.0190	0.0225	0.0089	0.4041	0.0675	0.0366	-0.0006	0.0040
-3.3423	-0.3864	0.0082	0.4062	-1.3287	0.0300	-0.0009	0.0040
-2.2758	-0.2581	0.0103	0.4023	-0.8903	0.0390	-0.0010	0.0040
-1.1165	-0.1155	0.0092	0.4024	-0.4047	0.0361	-0.0017	0.0040
0.0142	0.0172	0.0074	0.4003	0.0496	0.0319	-0.0012	0.0040
1.1252	0.1621	0.0066	0.4006	0.5419	0.0310	-0.0019	0.0040
2.2508	0.3001	0.0072	0.3992	1.0113	0.0334	-0.0014	0.0040
3.4118	0.4458	0.0073	0.4002	1.5034	0.0348	-0.0023	0.0040
5.6319	0.7411	0.0100	0.4134	2.5240	0.0443	-0.0031	0.0040
8.0274	1.1135	0.0098	0.4291	3.8428	0.0442	-0.0067	0.0040
10.3611	1.5159	0.0090	0.4516	5.3221	0.0433	-0.0074	0.0040
12.8694	1.9974	-0.0033	0.4611	7.1777	-0.0130	-0.0018	0.0040
15.3987	2.5313	0.0182	0.4791	9.2864	0.0767	-0.0111	0.0040
17.9456	3.1065	0.0146	0.4899	11.5370	0.0667	-0.0127	0.0040
0.0405	0.0240	0.0066	0.4025	0.0741	0.0284	-0.0023	0.0040

CONFIG =0705
RUN NO. = 8
MACH NO. = 2.2
DYN PRESS. = 4.46
REYNOLDS NO. = 256027
REFERENCE AREA = 1.4849

ALPHA	CN	CY	CA	CM	CLN	CLL	F
0.0305	0.0240	0.0074	0.4048	0.0741	0.0333	-0.0017	0.0050
-3.3744	-0.3886	0.0090	0.4034	-1.3369	0.0350	-0.0015	0.0050
-2.2523	-0.2543	0.0102	0.4029	-0.8772	0.0388	-0.0005	0.0050
-1.1278	-0.1170	0.0084	0.4040	-0.4095	0.0345	-0.0011	0.0050
0.0042	0.0172	0.0074	0.4050	0.0495	0.0319	-0.0012	0.0050
1.1252	0.1614	0.0080	0.4021	0.5396	0.0341	-0.0013	0.0050
2.2513	0.3008	0.0072	0.4007	1.0129	0.0350	-0.0014	0.0050
3.3865	0.4397	0.0058	0.4080	1.4838	0.0285	-0.0030	0.0050
5.6788	0.7485	0.0069	0.4201	2.5501	0.0326	-0.0032	0.0050
8.0272	1.1135	0.0083	0.4353	3.8413	0.0377	-0.0074	0.0050
10.3655	1.5132	0.0090	0.4543	5.3171	0.0402	-0.0069	0.0050
12.8675	1.9951	-0.0018	0.4648	7.1710	-0.0048	-0.0029	0.0050
15.3809	2.5239	0.0175	0.4799	9.2542	0.0738	-0.0107	0.0050
17.9556	3.1062	0.0258	0.4981	11.5377	0.1142	-0.0170	0.0050
0.0453	0.0292	0.0073	0.4073	0.0920	0.0314	-0.0012	0.0050

CONFIG =0705
RUN NO. = 9
MACH NO. = 2.2
DYN PRESS. = 4.46
REYNOLDS NO. = 255988
REFERENCE AREA = 1.4849

ALPHA	CN	CY	CA	CM	CLN	CLL	F
0.0311	0.0247	0.0074	0.4117	0.0757	0.0300	-0.0012	0.0080
-3.3865	-0.3909	0.0090	0.4126	-1.3451	0.0350	-0.0004	0.0080
-2.2433	-0.2550	0.0072	0.4074	-0.8819	0.0307	-0.0005	0.0080
-1.1191	-0.1185	0.0092	0.4100	-0.4145	0.0362	-0.0006	0.0080
0.0026	0.0157	0.0067	0.4096	0.0429	0.0287	-0.0024	0.0080
1.1004	0.1566	0.0058	0.4094	0.5231	0.0278	-0.0019	0.0080
2.2196	0.2884	0.0050	0.4044	0.9701	0.0256	-0.0021	0.0080
3.4326	0.4459	0.0065	0.4102	1.5045	0.0315	-0.0030	0.0080
5.6887	0.7485	0.0084	0.4230	2.5500	0.0375	-0.0026	0.0080
8.0272	1.1135	0.0082	0.4421	3.8413	0.0377	-0.0063	0.0080
10.4055	1.5224	0.0082	0.4627	5.3472	0.0366	-0.0063	0.0080
12.8689	1.9947	-0.0018	0.4696	7.1647	-0.0080	-0.0019	0.0080
15.4240	2.5338	0.0151	0.4890	9.2931	0.0650	-0.0117	0.0080
17.9441	3.1055	0.0296	0.5066	11.5296	0.1275	-0.0165	0.0080
0.0234	0.0269	0.0066	0.4186	0.0855	0.0282	-0.0012	0.0080

CONFIG =0705
RUN NO. = 10
MACH NO. = 2.2
DYN PRESS.= 4.45
REYNOLDS NO. = 255501
REFERENCE AREA = 1.4849

ALPHA	CN	CY	CA	CM	CLN	CLL	F
0.0100	0.0232	0.0066	0.4149	0.0723	0.0300	-0.0023	0.0100
-3.3417	-0.3856	0.0097	0.4153	-1.3270	0.0381	0.0002	0.0100
-2.2639	-0.2558	0.0072	0.4167	-0.8837	0.0307	-0.0011	0.0100
-1.1171	-0.1163	0.0092	0.4192	-0.4064	0.0377	-0.0017	0.0100
0.0141	0.0171	0.0074	0.4164	0.0494	0.0319	-0.0024	0.0100
1.1467	0.1634	0.0058	0.4145	0.5476	0.0276	-0.0019	0.0100
2.2184	0.2869	0.0065	0.4166	0.9666	0.0322	-0.0032	0.0100
3.4222	0.4456	0.0080	0.4230	1.5063	0.0380	-0.0035	0.0100
5.6782	0.7478	0.0069	0.4284	2.5483	0.0342	-0.0037	0.0100
8.0403	1.1172	0.0075	0.4520	3.8525	0.0360	-0.0086	0.0100
10.3792	1.5177	0.0060	0.4711	5.3301	0.0319	-0.0075	0.0100
12.8919	2.0003	-0.0026	0.4754	7.1872	-0.0082	-0.0036	0.0100
15.4343	2.5381	0.0144	0.4881	9.3060	0.0618	-0.0106	0.0100
17.9644	3.1063	0.0289	0.5141	11.5296	0.1242	-0.0160	0.0100
0.0326	0.0262	0.0066	0.4232	0.0821	0.0283	-0.0024	0.0100

CONFIG =0705
RUN NO. = 11
MACH NO. = 2.2
DYN PRESS.= 4.46
REYNOLDS NO. = 256816
REFERENCE AREA = 1.4849

ALPHA	CN	CY	CA	CM	CLN	CLL	F
0.0004	0.0111	0.0036	0.4219	0.0397	0.0186	0.0010	0.0200
-3.3243	-0.3921	0.0066	0.4139	-1.3244	0.0294	0.0026	0.0200
-2.2503	-0.2665	0.0049	0.4166	-0.8990	0.0223	0.0019	0.0200
-1.1252	-0.1275	0.0047	0.4179	-0.4306	0.0245	0.0012	0.0200
0.0172	0.0081	0.0029	0.4160	0.0266	0.0170	0.0015	0.0200
1.1383	0.1537	0.0028	0.4184	0.5168	0.0163	0.0003	0.0200
2.2396	0.2773	0.0028	0.4166	0.9329	0.0160	0.0000	0.0200
3.4221	0.4357	0.0021	0.4180	1.4618	0.0139	-0.0004	0.0200
5.6647	0.7372	0.0034	0.4203	2.4871	0.0187	-0.0007	0.0200
8.0073	1.0989	0.0034	0.4302	3.7489	0.0161	-0.0017	0.0200
10.3760	1.5103	0.0034	0.4532	5.2508	0.0186	-0.0041	0.0200
12.8574	1.9838	0.0039	0.4628	7.0698	0.0200	-0.0051	0.0200
15.3642	2.5046	0.0030	0.4804	9.1091	0.0170	-0.0053	0.0200
17.9533	3.0780	0.0032	0.4963	11.3467	0.0249	-0.0051	0.0200
0.0326	0.0149	0.0029	0.4247	0.0447	0.0186	0.0004	0.0200

CONFIG =0705
RUN NO. = 12
MACH NO. = 2.2
DYN PRESS.= 4.46
REYNOLDS NO. = 256291
REFERENCE AREA = 1.4849

ALPHA	CN	CY	CA	CM	CLN	CLL	F
0.0344	0.0172	0.0043	0.4318	0.0511	0.0251	0.0004	0.0000
-3.3912	-0.3958	0.0052	0.4342	-1.3600	0.0251	0.0022	0.0000
-2.2455	-0.2581	0.0049	0.4304	-0.8888	0.0241	0.0011	0.0000
-1.1418	-0.1216	0.0054	0.4331	-0.4244	0.0263	0.0010	0.0000
-0.0009	0.0119	0.0052	0.4341	0.0299	0.0270	0.0003	0.0000
1.1226	0.1589	0.0050	0.4338	0.5315	0.0276	0.0008	0.0000
2.2418	0.2904	0.0042	0.4359	0.9773	0.0253	0.0006	0.0000
3.3972	0.4407	0.0035	0.4370	1.4862	0.0233	0.0003	0.0000
5.6759	0.7458	0.0054	0.4560	2.5381	0.0293	-0.0011	0.0000
8.0229	1.1095	0.0060	0.4659	3.8235	0.0312	-0.0030	0.0000
10.3755	1.5125	0.0090	0.4858	5.3069	0.0500	-0.0057	0.0000
12.8704	1.9967	0.0072	0.4941	7.1697	0.0411	-0.0066	0.0000
15.3986	2.5296	0.0166	0.5137	9.2693	0.0783	-0.0099	0.0000
17.9416	3.1037	0.0251	0.5266	11.5179	0.1179	-0.0173	0.0000
0.0055	0.0187	0.0036	0.4371	0.0546	0.0218	0.0014	0.0000

CONFIG =0710
RUN NO. = 13
MACH NO. = 2.2
DYN PRESS.= 4.47
REYNOLDS NO. = 255040
REFERENCE AREA = 1.4849

ALPHA	CN	CY	CA	CM	CLN	CLL	F
0.0075	0.0193	0.0073	0.4352	0.0654	0.0298	-0.0002	0.0000
-3.3840	-0.3886	0.0103	0.4370	-1.3252	0.0394	-0.0004	0.0000
-2.2450	-0.2582	0.0071	0.4324	-0.8815	0.0304	-0.0011	0.0000
-1.1087	-0.1190	0.0068	0.4319	-0.4087	0.0293	-0.0012	0.0000
0.0362	0.0185	0.0088	0.4335	0.0589	0.0364	-0.0002	0.0000
1.1485	0.1643	0.0072	0.4339	0.5540	0.0322	-0.0014	0.0000
2.2450	0.2928	0.0056	0.4366	0.9899	0.0284	-0.0016	0.0000
3.4263	0.4489	0.0064	0.4453	1.5170	0.0279	0.0002	0.0000
5.7082	0.7585	0.0046	0.4612	2.5744	0.0160	-0.0013	0.0000
8.0510	1.1286	0.0074	0.4792	3.8756	0.0357	-0.0054	0.0000
10.4171	1.5336	0.0148	0.5065	5.3573	0.0739	-0.0086	0.0000
12.8686	2.0033	0.0089	0.5183	7.1255	0.0486	-0.0057	0.0000
15.3681	2.5169	0.0189	0.5333	9.0837	0.0898	-0.0114	0.0000
17.9157	3.0815	0.0290	0.5605	11.2640	0.1359	-0.0109	0.0000
0.0081	0.0209	0.0058	0.4336	0.0657	0.0281	0.0015	0.0000

CONFIG =0710
RUN NO. = 14
MACH NO. = 2.2
DYN PRESS.= 4.46
REYNOLDS NO. = 254808
REFERENCE AREA = 1.4849

ALPHA	CN	CY	CA	CM	CLN	CLL	F
0.0071	0.0209	0.0059	0.4259	0.0594	0.0267	0.0003	0.0005
-3.3077	-0.3813	0.0081	0.4257	-1.3087	0.0345	-0.0004	0.0005
-2.2746	-0.2558	0.0072	0.4227	-0.8844	0.0322	0.0000	0.0005
-1.1488	-0.1174	0.0069	0.4230	-0.4132	0.0311	-0.0007	0.0005
0.0282	0.0224	0.0073	0.4275	0.0625	0.0332	-0.0002	0.0005
1.1400	0.1677	0.0080	0.4270	0.5567	0.0356	-0.0003	0.0005
2.2452	0.2944	0.0072	0.4267	0.9870	0.0335	-0.0005	0.0005
3.4051	0.4497	0.0057	0.4362	1.5113	0.0265	-0.0004	0.0005
5.6862	0.7582	0.0046	0.4566	2.5685	0.0194	-0.0013	0.0005
8.0367	1.1250	0.0105	0.4717	3.8566	0.0473	-0.0021	0.0005
10.3882	1.5298	0.0105	0.4950	5.3339	0.0582	-0.0066	0.0005
12.8491	1.9953	0.0091	0.5048	7.0841	0.0412	-0.0054	0.0005
15.3278	2.5081	0.0235	0.5228	9.0388	0.1100	-0.0110	0.0005
17.9168	3.0835	0.0277	0.5475	11.2534	0.1337	-0.0106	0.0005
0.0092	0.0231	0.0073	0.4261	0.0673	0.0332	-0.0007	0.0005

CONFIG =0710
RUN NO. = 15
MACH NO. = 2.2
DYN PRESS.= 4.47
REYNOLDS NO. = 254992
REFERENCE AREA = 1.4849

ALPHA	CN	CY	CA	CM	CLN	CLL	F
0.0071	0.0209	0.0081	0.4215	0.0592	0.0349	-0.0002	0.0010
-3.3187	-0.3815	0.0066	0.4251	-1.3117	0.0297	-0.0004	0.0010
-2.2293	-0.2498	0.0079	0.4202	-0.8647	0.0353	-0.0005	0.0010
-1.1370	-0.1152	0.0069	0.4214	-0.4067	0.0311	-0.0018	0.0010
0.0045	0.0187	0.0074	0.4268	0.0479	0.0334	-0.0003	0.0010
1.1400	0.1674	0.0072	0.4264	0.5559	0.0323	-0.0009	0.0010
2.2510	0.3004	0.0064	0.4229	1.0098	0.0300	-0.0010	0.0010
3.3758	0.4385	0.0058	0.4357	1.4751	0.0267	-0.0009	0.0010
5.6873	0.7587	0.0039	0.4476	2.5684	0.0161	-0.0002	0.0010
8.0379	1.1265	0.0112	0.4702	3.8612	0.0506	-0.0054	0.0010
10.3882	1.5277	0.0120	0.4959	5.3265	0.0582	-0.0077	0.0010
12.8378	1.9946	0.0061	0.5087	7.0778	0.0331	-0.0060	0.0010
15.3292	2.5000	0.0214	0.5243	9.0033	0.1007	-0.0122	0.0010
17.8913	3.0742	0.0308	0.5469	11.2156	0.1403	-0.0090	0.0010
17.8945	3.0779	0.0300	0.5461	11.2270	0.1402	-0.0090	0.0010
0.0090	0.0232	0.0073	0.4260	0.0658	0.0332	0.0003	0.0010

CONFIG =0710
RUN NO. = 16
MACH NO. = 2.2
DYN PRESS.= 4.47
REYNOLDS NO. = 254924
REFERENCE AREA = 1.4849

ALPHA	CN	CY	CA	CM	CLN	CLL	F
0.0056	0.0194	0.0074	0.4200	0.0527	0.0333	-0.0002	0.0020
-3.3646	-0.3883	0.0089	0.4216	-1.3330	0.0364	0.0001	0.0020
-2.2859	-0.2576	0.0065	0.4204	-0.8905	0.0291	-0.0011	0.0020
-1.1383	-0.1167	0.0084	0.4199	-0.4116	0.0360	-0.0007	0.0020
0.0048	0.0187	0.0074	0.4246	0.0495	0.0317	0.0003	0.0020
1.1365	0.1639	0.0073	0.4239	0.5436	0.0309	-0.0009	0.0020
2.2900	0.2996	0.0064	0.4235	1.0050	0.0301	-0.0005	0.0020
3.4277	0.4520	0.0057	0.4385	1.5189	0.0264	-0.0009	0.0020
5.6855	0.7572	0.0054	0.4491	2.5604	0.0194	0.0003	0.0020
8.0359	1.1250	0.0105	0.4687	3.8517	0.0459	-0.0054	0.0020
10.3888	1.5293	0.0150	0.4945	5.3266	0.0649	-0.0067	0.0020
12.8135	1.9910	0.0054	0.5111	7.0586	0.0317	-0.0061	0.0020
15.3049	2.4972	0.0222	0.5245	8.9828	0.1010	-0.0113	0.0020
17.8897	3.0751	0.0278	0.5500	11.2032	0.1309	-0.0108	0.0020
0.0583	0.0329	0.0065	0.4273	0.1017	0.0296	-0.0002	0.0020

CONFIG =0710
RUN NO. = 17
MACH NO. = 2.2
DYN PRESS.= 4.47
REYNOLDS NO. = 254737
REFERENCE AREA = 1.4849

ALPHA	CN	CY	CA	CM	CLN	CLL	F
0.0440	0.0284	0.0073	0.4265	0.0854	0.0331	-0.0013	0.0030
-3.3420	-0.3852	0.0082	0.4253	-1.3232	0.0314	0.0001	0.0030
-2.2873	-0.2588	0.0095	0.4213	-0.8943	0.0389	-0.0006	0.0030
-1.1402	-0.1191	0.0084	0.4228	-0.4188	0.0345	-0.0007	0.0030
0.0036	0.0171	0.0081	0.4223	0.0461	0.0351	-0.0013	0.0030
1.1147	0.1614	0.0065	0.4227	0.5363	0.0292	-0.0009	0.0030
2.2805	0.3012	0.0049	0.4285	1.0094	0.0236	-0.0011	0.0030
3.4258	0.4497	0.0065	0.4370	1.5123	0.0281	-0.0015	0.0030
5.6636	0.7549	0.0047	0.4538	2.5538	0.0162	-0.0008	0.0030
8.0038	1.1228	0.0105	0.4673	3.8437	0.0460	-0.0054	0.0030
10.3861	1.5263	0.0120	0.4944	5.3169	0.0584	-0.0078	0.0030
12.8858	2.0064	0.0015	0.5130	7.1168	0.0182	-0.0066	0.0030
15.3808	2.5134	0.0258	0.5242	9.0454	0.1151	-0.0122	0.0030
17.8882	3.0736	0.0279	0.5470	11.1967	0.1310	-0.0114	0.0030
0.0082	0.0224	0.0081	0.4246	0.0625	0.0333	-0.0008	0.0030

CONFIG =0710
RUN NO. = 18
MACH NO. = 2.2
DYN PRESS.= 4.47
REYNOLDS NO. = 254674
REFERENCE AREA = 1.4849

ALPHA	CN	CY	CA	CM	CLN	CLL	F
0.0071	0.0209	0.0074	0.4221	0.0592	0.0333	-0.0013	0.0040
-3.3762	-0.3898	0.0112	0.4224	-1.3396	0.0430	0.0006	0.0040
-2.2873	-0.2588	0.0080	0.4205	-0.8942	0.0323	-0.0006	0.0040
-1.1394	-0.1182	0.0077	0.4214	-0.4149	0.0311	-0.0001	0.0040
0.0034	0.0172	0.0074	0.4192	0.0446	0.0318	-0.0002	0.0040
1.1268	0.1637	0.0080	0.4234	0.5444	0.0357	-0.0003	0.0040
2.2894	0.2989	0.0072	0.4258	1.0032	0.0317	-0.0011	0.0040
3.4258	0.4498	0.0065	0.4347	1.5124	0.0281	-0.0009	0.0040
5.6836	0.7549	0.0069	0.4507	2.5536	0.0244	-0.0013	0.0040
8.0456	1.1242	0.0112	0.4701	3.8515	0.0475	-0.0054	0.0040
10.3834	1.5233	0.0180	0.4898	5.3069	0.0813	-0.0077	0.0040
12.8618	1.9999	0.0061	0.5101	7.0908	0.0347	-0.0071	0.0040
15.3428	2.5053	0.0199	0.5281	9.0134	0.0958	-0.0123	0.0040
17.8911	3.0766	0.0278	0.5462	11.2080	0.1308	-0.0114	0.0040
0.0090	0.0232	0.0066	0.4246	0.0658	0.0283	-0.0002	0.0040

CONFIG =0710
RUN NO. = 19
MACH NO. = 2.2
DYN PRESS.= 4.47
REYNOLDS NO. = 254534
REFERENCE AREA = 1.4849

ALPHA	CN	CY	CA	CM	CLN	CLL	F
0.0082	0.0224	0.0089	0.4185	0.0625	0.0365	-0.0002	0.0050
-3.3432	-0.3860	0.0089	0.4207	-1.3296	0.0364	0.0001	0.0050
-2.2408	-0.2513	0.0094	0.4180	-0.8712	0.0387	0.0005	0.0050
-1.1377	-0.1159	0.0084	0.4184	-0.4099	0.0344	0.0004	0.0050
0.0048	0.0187	0.0066	0.4177	0.0495	0.0301	-0.0002	0.0050
1.1265	0.1637	0.0080	0.4188	0.5429	0.0341	0.0002	0.0050
2.2679	0.2978	0.0072	0.4211	0.9982	0.0318	-0.0005	0.0050
3.3695	0.4430	0.0080	0.4312	1.4881	0.0316	-0.0009	0.0050
5.7210	0.7632	0.0054	0.4429	2.5814	0.0177	-0.0008	0.0050
8.0717	1.1325	0.0135	0.4676	3.8795	0.0555	-0.0043	0.0050
10.3711	1.5315	0.0150	0.4900	5.3363	0.0680	-0.0077	0.0050
12.8353	1.9828	0.0055	0.5017	7.0262	0.0417	-0.0060	0.0050
15.3575	2.5001	0.0230	0.5258	8.9922	0.1042	-0.0124	0.0050
17.9048	3.0699	0.0287	0.5377	11.1838	0.1327	-0.0092	0.0050
0.0082	0.0224	0.0081	0.4193	0.0625	0.0333	-0.0013	0.0050

CONFIG =0710
RUN NO = 20
MACH NO. = 2.2
DYN PRESS.= 4.46
REYNOLDS NO. = 254321
REFERENCE AREA = 1.4849

ALPHA	CN	CY	CA	CM	CLN	CLL	F
0.0074	0.0217	0.0081	0.4177	0.0593	0.0350	-0.0008	0.0080
-3.3541	-0.3867	0.0097	0.4208	-1.3330	0.0381	-0.0005	0.0080
-2.2403	-0.2505	0.0102	0.4157	-0.8696	0.0403	0.0000	0.0080
-1.1393	-0.1175	0.0084	0.4159	-0.4170	0.0362	-0.0012	0.0080
-0.0076	0.0164	0.0059	0.4170	0.0398	0.0270	-0.0003	0.0080
1.1484	0.1660	0.0080	0.4188	0.5494	0.0324	-0.0009	0.0080
2.2897	0.2996	0.0087	0.4159	1.0033	0.0367	-0.0010	0.0080
3.3948	0.4378	0.0081	0.4265	1.4702	0.0317	-0.0009	0.0080
5.7310	0.7642	0.0039	0.4450	2.5850	0.0144	-0.0007	0.0080
8.0609	1.1318	0.0097	0.4646	3.8764	0.0441	-0.0054	0.0080
10.3577	1.5299	0.0150	0.4892	5.3306	0.0683	-0.0083	0.0080
12.8130	1.9860	0.0055	0.5093	7.0358	0.0355	-0.0072	0.0080
15.3709	2.5038	0.0222	0.5242	9.0052	0.1041	-0.0118	0.0080
17.8727	3.0719	0.0279	0.5462	11.1911	0.1313	-0.0103	0.0080
0.0082	0.0224	0.0074	0.4200	0.0625	0.0300	-0.0008	0.0080

CONFIG =0710
RUN NO. = 21
MACH NO. = 2.2
DYN PRESS.= 4.46
REYNOLDS NO. = 254259
REFERENCE AREA = 1.4849

ALPHA	CN	CY	CA	CM	CLN	CLL	F
-0.0055	0.0179	0.0066	0.4183	0.0495	0.0302	-0.0013	0.0100
-3.3984	-0.3920	0.0090	0.4240	-1.3478	0.0365	-0.0005	0.0100
-2.2754	-0.2566	0.0095	0.4144	-0.8877	0.0389	-0.0011	0.0100
-1.1488	-0.1177	0.0084	0.4196	-0.4144	0.0345	-0.0007	0.0100
0.0055	0.0194	0.0081	0.4238	0.0526	0.0350	-0.0008	0.0100
1.1060	0.1632	0.0058	0.4211	0.5420	0.0260	-0.0009	0.0100
2.2915	0.3011	0.0064	0.4189	1.0114	0.0284	-0.0021	0.0100
3.3739	0.4369	0.0073	0.4318	1.4704	0.0301	-0.0020	0.0100
5.7094	0.7619	0.0039	0.4466	2.5800	0.0144	-0.0013	0.0100
8.0732	1.1324	0.0112	0.4662	3.8807	0.0489	-0.0054	0.0100
10.3558	1.5297	0.0158	0.4868	5.3314	0.0716	-0.0077	0.0100
12.8092	1.9865	0.0062	0.5080	7.0424	0.0400	-0.0066	0.0100
15.3948	2.5075	0.0222	0.5172	9.0213	0.1007	-0.0123	0.0100
17.8874	3.0729	0.0279	0.5401	11.1936	0.1294	-0.0108	0.0100
0.0077	0.0216	0.0058	0.4238	0.0609	0.0268	-0.0013	0.0100

CONFIG =0710
RUN NO. = 22
MACH NO. = 2.2
DYN PRESS.= 4.47
REYNOLDS NO. = 254417
REFERENCE AREA = 1.4849

ALPHA	CN	CY	CA	CM	CLN	CLL	F
0.0050	0.0187	0.0074	0.4147	0.0511	0 0301	-0 0008	0 0200
-3.3631	-0.3875	0.0089	0.4117	-1.3249	0.0362	0.0002	0.0200
-2.2283	-0.2498	0.0109	0.4118	-0.8584	0.0433	0 0007	0.0200
-1.1610	-0.1205	0.0077	0.4154	-0.4199	0.0328	-0.0017	0.0200
0.0026	0.0156	0.0082	0.4139	0.0428	0.0334	-0.0007	0.0200
1.1673	0.1644	0.0073	0.4164	0.5461	0.0308	-0 0014	0.0200
2.2836	0.2929	0.0065	0.4175	0.9805	0.0271	-0 0016	0.0200
3.3479	0.4304	0.0059	0.4191	1.4444	0.0222	-0.0021	0.0200
5.7234	0.7582	0.0063	0.4307	2.5448	0.0264	-0 0008	0.0200
8.0332	1.1179	0.0153	0.4480	3.7962	0.0698	-0.0061	0.0200
10.3787	1.5230	0.0145	0.4747	5.2776	0.0641	-0.0058	0.0200
12.8469	1.9735	0.0014	0.4894	6.9470	0.0236	-0.0032	0.0200
15.3294	2.4811	0.0056	0.5115	8.8584	0.0262	-0.0035	0.0200
17.8917	3.0464	0.0060	0.5318	11.0287	0.0404	-0.0064	0.0200
0.0049	0.0179	0.0073	0.4260	0.0526	0.0333	-0.0002	0.0200

CONFIG =0715
RUN NO. = 23
MACH NO. = 2.2
DYN PRESS.= 4.46
REYNOLDS NO. = 255018
REFERENCE AREA = 1.4849

ALPHA	CN	CY	CA	CM	CLN	CLL	F
0.0036	0.0172	0.0089	0.4130	0.0462	0.0287	-0.0019	0.0000
-3.3916	-0.3993	0.0112	0.4111	-1.3569	0.0333	-0.0015	0.0000
-2.2440	-0.2574	0.0087	0.4081	-0.8805	0.0274	-0.0016	0.0000
-1.1734	-0.1237	0.0092	0.4110	-0.4287	0.0297	-0.0012	0.0000
0.0039	0.0179	0.0097	0.4145	0.0462	0.0320	-0.0020	0.0000
1.1817	0.1705	0.0096	0.4096	0.5593	0.0310	-0.0016	0.0000
2.2656	0.2976	0.0088	0.4104	0.9865	0.0307	-0.0018	0.0000
3.4023	0.4489	0.0089	0.4193	1.4988	0.0286	-0.0016	0.0000
5.6661	0.7606	0.0100	0.4337	2.5620	0.0329	-0.0008	0.0000
7.9932	1.1276	0.0085	0.4539	3.8462	0.0235	-0.0008	0.0000
10.3638	1.5348	0.0072	0.4704	5.3062	0.0235	-0.0023	0.0000
12.8435	1.9855	0.0210	0.5002	6.9761	0.0832	-0.0085	0.0000
15.3510	2.4910	0.0162	0.5180	8.8850	0.0695	-0.0085	0.0000
17.8538	3.0409	0.0079	0.5454	10.9775	0.0388	-0.0044	0.0000
0.0055	0.0194	0.0097	0.4111	0.0527	0.0302	-0.0008	0.0000

CONFIG =0715
RUN NO. = 24
MACH NO. = 2.2
DYN PRESS.= 4.46
REYNOLDS NO. = 254803
REFERENCE AREA = 1.4849

ALPHA	CN	CY	CA	CM	CLN	CLL	F
-0.0074	0.0156	0.0089	0.4161	0.0428	0.0304	-0.0019	0 0005
-3.4005	-0.3973	0.0097	0.4113	-1.3517	0.0283	-0.0010	0.0005
-2.2440	-0.2574	0.0087	0.4111	-0.8806	0.0274	-0.0016	0.0005
-1.1629	-0.1229	0.0092	0.4117	-0.4271	0.0297	-0.0012	0.0005
0.0134	0.0172	0.0112	0.4139	0.0445	0.0369	-0.0008	0.0005
1.1698	0.1687	0.0096	0.4161	0.5541	0.0327	-0.0021	0.0005
2.2887	0.2997	0.0103	0.4137	0.9967	0.0337	-0.0018	0.0005
3.4075	0.4430	0.0089	0.4202	1.4789	0.0304	-0.0016	0.0005
5.6634	0.7587	0.0078	0.4328	2.5558	0.0248	-0.0020	0.0005
7.9821	1.1261	0.0100	0.4585	3.8428	0.0284	-0.0008	0.0005
10.3904	1.5415	0.0048	0.4825	5.3321	0.0167	-0.0023	0.0005
12.8235	1.9855	0.0157	0.5125	6.9764	0.0668	-0.0085	0.0005
15.3241	2.4835	0.0147	0.5211	8.8592	0.0663	-0.0075	0.0005
17.8426	3.0394	0.0132	0.5424	10.9740	0.0536	-0.0049	0.0005
0.0050	0.0187	0.0097	0.4153	0.0511	0.0319	-0.0014	0.0005

CONFIG =0715
RUN NO. = 25
MACH NO. = 2.2
DYN PRESS.= 4.46
REYNOLDS NO. = 254722
REFERENCE AREA = 1.4849

ALPHA	CN	CY	CA	CM	CLN	CLL	F
0.0017	0.0149	0.0105	0.4153	0.0395	0.0353	-0.0019	0.0010
-3.3725	-0.3882	0.0127	0.4135	-1.3223	0.0395	-0.0009	0.0010
-2.2656	-0.2585	0.0110	0.4107	-0.8859	0.0339	-0.0011	0.0010
-1.1397	-0.1193	0.0092	0.4160	-0.4162	0.0297	-0.0024	0.0010
0.0039	0.0179	0.0097	0.4160	0.0462	0.0320	-0.0014	0.0010
1.1590	0.1680	0.0088	0.4177	0.5509	0.0295	-0.0022	0.0010
2.2580	0.2998	0.0080	0.4150	0.9963	0.0273	-0.0018	0.0010
3.3778	0.4444	0.0074	0.4217	1.4810	0.0256	-0.0028	0.0010
5.6527	0.7579	0.0086	0.4305	2.5525	0.0282	-0.0019	0.0010
8.0290	1.1336	0.0069	0.4583	3.8688	0.0184	-0.0013	0.0010
10.4106	1.5422	0.0086	0.4862	5.3319	0.0282	-0.0029	0.0010
12.8209	1.9825	0.0165	0.5064	6.9666	0.0685	-0.0085	0.0010
15.3356	2.4850	0.0185	0.5211	8.8654	0.0778	-0.0086	0.0010
17.8826	3.0456	0.0146	0.5476	10.9976	0.0581	-0.0049	0.0010
0.0058	0.0194	0.0104	0.4172	0.0541	0.0335	-0.0014	0.0010

CONFIG =0715
RUN NO. = 26
MACH NO. = 2.2
DYN PRESS.= 4.46
REYNOLDS NO. = 254640
REFERENCE AREA = 1.4849

ALPHA	CN	CY	CA	CM	CLN	CLL	F
0.0036	0.0171	0.0104	0.4191	0.0461	0.0337	-0.0020	0.0020
-3.4242	-0.4016	0.0105	0.4143	-1.3684	0.0319	-0.0021	0.0020
-2.2656	-0.2589	0.0110	0.4151	-0.8872	0.0340	-0.0017	0.0020
-1.1403	-0.1201	0.0084	0.4168	-0.4179	0.0264	-0.0024	0.0020
0.0021	0.0157	0.0090	0.4168	0.0396	0.0288	-0.0025	0.0020
1.1590	0.1677	0.0096	0.4194	0.5501	0.0311	-0.0022	0.0020
2.2664	0.2979	0.0088	0.4190	0.9884	0.0290	-0.0018	0.0020
3.3725	0.4384	0.0089	0.4240	1.4614	0.0290	-0.0017	0.0020
5.6308	0.7557	0.0071	0.4360	2.5460	0.0216	-0.0020	0.0020
8.0295	1.1343	0.0069	0.4568	3.8704	0.0201	-0.0024	0.0020
10.3896	1.5407	0.0033	0.4794	5.3289	0.0102	-0.0040	0.0020
12.8542	1.9862	0.0179	0.5108	6.9794	0.0766	-0.0085	0.0020
15.3352	2.4817	0.0094	0.5264	8.8505	0.0579	-0.0074	0.0020
17.8510	3.0378	0.0117	0.5485	10.9674	0.0488	-0.0072	0.0020
0.0036	0.0171	0.0097	0.4185	0.0461	0.0303	-0.0014	0.0020

CONFIG =0715
RUN NO. = 27
MACH NO. = 2.2
DYN PRESS.= 4.46
REYNOLDS NO. = 254658
REFERENCE AREA = 1.4849

ALPHA	CN	CY	CA	CM	CLN	CLL	F
0.0031	0.0164	0.0104	0.4200	0.0444	0.0336	-0.0014	0.0030
-3.3385	-0.3837	0.0119	0.4149	-1.3076	0.0362	-0.0020	0.0030
-2.2429	-0.2559	0.0095	0.4142	-0.8773	0.0306	-0.0017	0.0030
-1.1265	-0.1152	0.0114	0.4148	-0.4037	0.0361	-0.0013	0.0030
0.0032	0.0172	0.0097	0.4178	0.0429	0.0304	-0.0015	0.0030
1.1490	0.1680	0.0088	0.4193	0.5509	0.0295	-0.0022	0.0030
2.2772	0.2991	0.0065	0.4202	0.9931	0.0208	-0.0013	0.0030
3.3739	0.4400	0.0067	0.4224	1.4664	0.0224	-0.0017	0.0030
5.6208	0.7556	0.0086	0.4360	2.5460	0.0282	-0.0025	0.0030
8.0309	1.1343	0.0076	0.4584	3.8700	0.0200	-0.0013	0.0030
10.3911	1.5401	0.0070	0.4910	5.3278	0.0215	-0.0029	0.0030
12.8440	1.9835	0.0179	0.5041	6.9684	0.0733	-0.0085	0.0030
15.3147	2.4843	0.0155	0.5274	8.8608	0.0631	-0.0076	0.0030
17.8590	3.0427	0.0116	0.5492	10.9818	0.0485	-0.0061	0.0030
-0.0152	0.0187	0.0082	0.4177	0.0496	0.0254	-0.0009	0.0030

CONFIG =0715
RUN NO. = 28
MACH NO. = 2.2
DYN PRESS. = 4.46
REYNOLDS NO. = 254487
REFERENCE AREA = 1.4849

ALPHA	CN	CY	CA	CM	CLN	CLL	F
-0.0148	0.0187	0.0097	0.4177	0.0527	0.0319	-0.0014	0.0040
-3.2977	-0.3835	0.0119	0.4144	-1.3061	0.0362	-0.0020	0.0040
-2.2421	-0.2548	0.0117	0.4167	-0.8730	0.0371	-0.0017	0.0040
-1.1389	-0.1184	0.0092	0.4169	-0.4124	0.0296	-0.0013	0.0040
-0.0174	0.0164	0.0089	0.4179	0.0412	0.0288	-0.0020	0.0040
1.1706	0.1694	0.0096	0.4177	0.5574	0.0310	-0.0021	0.0040
2.2900	0.3016	0.0103	0.4204	1.0030	0.0337	-0.0012	0.0040
3.3968	0.4429	0.0066	0.4223	1.4778	0.0223	-0.0016	0.0040
5.7014	0.7676	0.0077	0.4365	2.5850	0.0230	-0.0020	0.0040
8.0067	1.1314	0.0077	0.4569	3.8591	0.0218	-0.0019	0.0040
10.3896	1.5386	0.0063	0.4849	5.3215	0.0199	-0.0023	0.0040
12.8327	1.9848	0.0150	0.5094	6.9732	0.0635	-0.0080	0.0040
15.3136	2.4835	0.0192	0.5288	8.8558	0.0812	-0.0086	0.0040
17.8495	3.0469	0.0116	0.5470	11.0001	0.0484	-0.0049	0.0040
0.0071	0.0209	0.0089	0.4198	0.0593	0.0286	-0.0014	0.0040

CONFIG =0715
RUN NO. = 29
MACH NO. = 2.2
DYN PRESS. = 4.46
REYNOLDS NO. = 254471
REFERENCE AREA = 1.4849

ALPHA	CN	CY	CA	CM	CLN	CLL	F
0.0052	0.0187	0.0097	0.4206	0.0526	0.0319	-0.0014	0.0050
-3.3667	-0.3927	0.0097	0.4203	-1.3386	0.0283	-0.0016	0.0050
-2.2627	-0.2552	0.0117	0.4162	-0.8734	0.0371	-0.0017	0.0050
-1.1376	-0.1170	0.0099	0.4175	-0.4080	0.0312	-0.0013	0.0050
0.0034	0.0172	0.0097	0.4206	0.0445	0.0320	-0.0014	0.0050
1.1703	0.1695	0.0081	0.4207	0.5559	0.0261	-0.0016	0.0050
2.2698	0.3020	0.0095	0.4249	1.0028	0.0305	-0.0018	0.0050
3.3746	0.4400	0.0104	0.4256	1.4674	0.0354	-0.0016	0.0050
5.6888	0.7647	0.0063	0.4357	2.5754	0.0198	-0.0020	0.0050
8.0295	1.1328	0.0084	0.4577	3.8652	0.0232	-0.0008	0.0050
10.3903	1.5414	0.0078	0.4878	5.3320	0.0265	-0.0023	0.0050
12.8433	1.9855	0.0142	0.5108	6.9748	0.0619	-0.0086	0.0050
15.3141	2.4835	0.0125	0.5274	8.8592	0.0549	-0.0087	0.0050
17.8710	3.0483	0.0124	0.5552	11.0063	0.0517	-0.0060	0.0050
0.0090	0.0232	0.0089	0.4216	0.0657	0.0269	-0.0020	0.0050

CONFIG =0715
RUN NO. = 30
MACH NO. = 2.2
DYN PRESS. = 4.46
REYNOLDS NO. = 254662
REFERENCE AREA = 1.4849

ALPHA	CN	CY	CA	CM	CLN	CLL	F
0.0073	0.0209	0.0096	0.4252	0.0607	0.0319	-0.0025	0.0080
-3.3952	-0.3918	0.0097	0.4195	-1.3340	0.0282	-0.0021	0.0080
-2.2429	-0.2552	0.0109	0.4191	-0.8750	0.0338	-0.0017	0.0080
-1.1295	-0.1190	0.0122	0.4209	-0.4136	0.0394	-0.0013	0.0080
-0.0082	0.0157	0.0090	0.4199	0.0380	0.0289	-0.0026	0.0080
1.1471	0.1657	0.0096	0.4231	0.5443	0.0327	-0.0010	0.0080
2.2585	0.3006	0.0088	0.4211	0.9980	0.0306	-0.0012	0.0080
3.3946	0.4401	0.0081	0.4263	1.4675	0.0272	-0.0017	0.0080
5.6882	0.7628	0.0092	0.4397	2.5700	0.0296	-0.0025	0.0080
8.0174	1.1321	0.0062	0.4568	3.8623	0.0169	-0.0030	0.0080
10.3640	1.5347	0.0064	0.4871	5.3077	0.0218	-0.0023	0.0080
12.8214	1.9806	0.0157	0.5133	6.9588	0.0684	-0.0074	0.0080
15.3257	2.4824	0.0162	0.5297	8.8519	0.0630	-0.0082	0.0080
17.8684	3.0419	0.0131	0.5568	10.9799	0.0550	-0.0061	0.0080
0.0065	0.0201	0.0096	0.4238	0.0575	0.0318	-0.0008	0.0080

CONFIG =0715
RUN NO. = 31
MACH NO. = 2.2
DYN PRESS.= 4.46
REYNOLDS NO. = 254429
REFERENCE AREA = 1.4849

ALPHA	CN	CY	CA	CM	CLN	CLL	F
-0.0069	0.0164	0.0089	0.4262	0.0444	0.0287	-0.0020	0.0100
-3.3673	-0.3935	0.0119	0.4203	-1.3404	0.0365	-0.0026	0.0100
-2.2424	-0.2559	0.0109	0.4233	-0.8742	0.0338	-0.0011	0.0100
-1.1279	-0.1177	0.0106	0.4245	-0.4076	0.0344	-0.0007	0.0100
-0.0071	0.0164	0.0074	0.4268	0.0429	0.0238	-0.0015	0.0100
1.1706	0.1694	0.0080	0.4253	0.5574	0.0261	-0.0022	0.0100
2.2453	0.2968	0.0073	0.4242	0.9865	0.0257	-0.0018	0.0100
3.3736	0.4391	0.0074	0.4316	1.4662	0.0240	-0.0017	0.0100
5.6997	0.7654	0.0070	0.4456	2.5800	0.0213	-0.0020	0.0100
8.0048	1.1275	0.0076	0.4684	3.8472	0.0218	-0.0019	0.0100
10.3880	1.5392	0.0071	0.4901	5.3223	0.0233	-0.0023	0.0100
12.8419	1.9840	0.0165	0.5169	6.9698	0.0718	-0.0085	0.0100
15.3223	2.4820	0.0155	0.5380	8.8510	0.0649	-0.0082	0.0100
17.8490	3.0364	0.0102	0.5530	10.9579	0.0424	-0.0062	0.0100
0.0052	0.0186	0.0096	0.4261	0.0525	0.0319	-0.0025	0.0100

CONFIG =0715
RUN NO. = 32
MACH NO. = 2.2
DYN PRESS.= 4.46
REYNOLDS NO. = 254564
REFERENCE AREA = 1.4849

ALPHA	CN	CY	CA	CM	CLN	CLL	F
0.0009	0.0134	0.0112	0.4086	0.0378	0.0352	-0.0008	0.0200
-3.3838	-0.3929	0.0119	0.4074	-1.3195	0.0376	-0.0007	0.0200
-2.2339	-0.2594	0.0117	0.4089	-0.8733	0.0385	-0.0014	0.0200
-1.1657	-0.1277	0.0092	0.4123	-0.4345	0.0298	-0.0023	0.0200
-0.0333	0.0088	0.0090	0.4147	0.0214	0.0306	-0.0025	0.0200
1.1879	0.1662	0.0096	0.4162	0.5469	0.0310	-0.0010	0.0200
2.2648	0.2964	0.0096	0.4152	0.9819	0.0307	-0.0013	0.0200
3.3901	0.4371	0.0067	0.4132	1.4489	0.0210	-0.0012	0.0200
5.7003	0.7606	0.0072	0.4266	2.5310	0.0206	-0.0006	0.0200
8.0103	1.1177	0.0035	0.4504	3.7694	-0.0015	0.0003	0.0200
10.3481	1.5212	0.0014	0.4760	5.2258	-0.0016	-0.0017	0.0200
12.8238	1.9676	0.0175	0.4981	6.8773	0.0696	-0.0067	0.0200
15.2832	2.4596	0.0130	0.5168	8.7185	0.0521	-0.0071	0.0200
17.8200	3.0106	0.0047	0.5441	10.8091	0.0182	-0.0058	0.0200
-0.0091	0.0126	0.0089	0.4198	0.0394	0.0303	-0.0008	0.0200

CONFIG =0715
RUN NO. = 33
MACH NO. = 1.63
DYN PRESS.= 5.89
REYNOLDS NO. = 308533
REFERENCE AREA = 1.4849

ALPHA	CN	CY	CA	CM	CLN	CLL	F
0.0432	0.0640	-0.0025	0.5148	0.1054	0.0285	-0.0008	0.0000
0.0495	0.0589	-0.0025	0.5061	0.0982	0.0283	-0.0016	0.0000
0.0487	0.0578	-0.0008	0.5108	0.0969	0.0345	-0.0015	0.0000
-3.5220	-0.4629	0.0014	0.5105	-1.3711	0.0385	0.0001	0.0000
-2.3250	-0.2799	0.0000	0.5098	-0.8553	0.0365	-0.0008	0.0000
-1.1753	-0.1234	-0.0019	0.5150	-0.4085	0.0273	-0.0009	0.0000
-0.0014	0.0395	-0.0053	0.5132	0.0435	0.0211	-0.0011	0.0000
1.2549	0.2309	-0.0035	0.5205	0.5845	0.0306	-0.0017	0.0000
2.4403	0.4034	-0.0011	0.5228	1.0692	0.0381	-0.0028	0.0000
3.6088	0.5775	-0.0038	0.5160	1.5650	0.0255	-0.0025	0.0000
6.0674	0.9564	-0.0048	0.5243	2.6781	0.0146	-0.0016	0.0000
8.5087	1.3588	-0.0111	0.5502	3.9456	-0.0214	0.0001	0.0000
11.0750	1.8295	0.0028	0.5751	5.5093	0.0495	-0.0077	0.0000
13.6826	2.3287	-0.0070	0.6140	7.2050	0.0194	-0.0101	0.0000
16.3238	2.8564	-0.0138	0.6306	9.0649	-0.0006	-0.0089	0.0000
19.0807	3.4580	-0.0224	0.6496	11.2912	-0.0181	-0.0127	0.0000
0.0443	0.0531	0.0004	0.5105	0.0866	0.0368	-0.0011	0.0000
0.0314	0.0503	-0.0013	0.5090	0.0793	0.0283	-0.0011	0.0000

CONFIG =0715
RUN NO. = 34
MACH NO. = 1.63
DYN PRESS.= 5.89
REYNOLDS NO. = 307660
REFERENCE AREA = 1.4849

ALPHA	CN	CY	CA	CM	CLN	CLL	F
0.0300	0.0486	-0.0059	0.5141	0.0769	0.0256	-0.0010	0.0005
0.0410	0.0496	-0.0002	0.5128	0.0790	0.0356	-0.0015	0.0005
-3.4710	-0.4531	0.0019	0.5131	-1.3382	0.0394	0.0006	0.0005
-2.3451	-0.2803	-0.0017	0.5154	-0.8505	0.0288	0.0004	0.0005
-1.1754	-0.1246	-0.0019	0.5126	-0.4062	0.0285	-0.0013	0.0005
0.0254	0.0445	-0.0013	0.5170	0.0642	0.0296	-0.0019	0.0005
1.2459	0.2306	-0.0030	0.5244	0.5884	0.0305	-0.0030	0.0005
2.4445	0.4056	-0.0057	0.5262	1.0840	0.0254	-0.0027	0.0005
3.6367	0.5838	-0.0056	0.5194	1.5885	0.0191	-0.0038	0.0005
6.0430	0.9530	-0.0043	0.5262	2.6717	0.0196	-0.0024	0.0005
8.4774	1.3583	-0.0112	0.5499	3.9507	-0.0191	-0.0002	0.0005
11.0514	1.8280	-0.0035	0.5823	5.5094	0.0284	-0.0090	0.0005
13.6805	2.3258	-0.0030	0.6111	7.2020	0.0331	-0.0117	0.0005
16.3012	2.8534	-0.0127	0.6312	9.0596	0.0044	-0.0114	0.0005
19.0942	3.4601	-0.0190	0.6582	11.3031	-0.0070	-0.0131	0.0005
0.0189	0.0480	-0.0019	0.5124	0.0730	0.0308	-0.0019	0.0005
0.0291	0.0479	-0.0002	0.5076	0.0741	0.0381	-0.0014	0.0005
0.0286	0.0474	-0.0013	0.5105	0.0729	0.0307	-0.0015	0.0005

CONFIG =0715
RUN NO. = 35
MACH NO. = 1.63
DYN PRESS.= 5.87
REYNOLDS NO. = 305807
REFERENCE AREA = 1.4849

ALPHA	CN	CY	CA	CM	CLN	CLL	F
0.0373	0.0520	0.0014	0.5191	0.1050	0.0403	-0.0021	0.0010
0.0370	0.0514	-0.0027	0.5248	0.1051	0.0278	-0.0017	0.0010
-3.5092	-0.4581	0.0058	0.5164	-1.3271	0.0539	0.0017	0.0010
-2.3248	-0.2769	-0.0008	0.5193	-0.8173	0.0333	-0.0010	0.0010
-1.1681	-0.1222	-0.0021	0.5162	-0.3779	0.0329	-0.0001	0.0010
0.0330	0.0480	-0.0015	0.5213	0.0938	0.0353	-0.0021	0.0010
1.2430	0.2348	-0.0043	0.5312	0.6178	0.0276	-0.0028	0.0010
2.4387	0.4077	-0.0013	0.5282	1.1051	0.0363	-0.0026	0.0010
3.6555	0.5910	0.0028	0.5207	1.6221	0.0449	-0.0028	0.0010
6.0502	0.9601	-0.0072	0.5294	2.7035	0.0068	-0.0019	0.0010
8.4905	1.3642	-0.0066	0.5571	3.9712	-0.0043	-0.0002	0.0010
11.0416	1.8330	0.0011	0.5828	5.5257	0.0458	-0.0077	0.0010
13.6569	2.3320	-0.0053	0.6136	7.2220	0.0294	-0.0108	0.0010
16.2965	2.8528	-0.0116	0.6390	9.0597	0.0081	-0.0080	0.0010
19.0770	3.4628	-0.0202	0.6525	11.3156	-0.0107	-0.0126	0.0010
0.0265	0.0508	-0.0009	0.5166	0.1038	0.0302	-0.0004	0.0010
0.0365	0.0509	-0.0015	0.5161	0.1038	0.0327	-0.0012	0.0010

CONFIG =0715
RUN NO. = 36
MACH NO. = 1.63
DYN PRESS.= 5.87
REYNOLDS NO. = 305742
REFERENCE AREA = 1.4849

ALPHA	CN	CY	CA	CM	CLN	CLL	F
0.0154	0.0497	-0.0021	0.5121	0.1013	0.0315	-0.0016	0.0020
0.0343	0.0486	-0.0038	0.5120	0.0989	0.0302	-0.0016	0.0020
-3.4627	-0.4523	0.0035	0.5116	-1.3096	0.0463	0.0005	0.0020
-2.3594	-0.2815	-0.0025	0.5136	-0.8285	0.0296	-0.0001	0.0020
-1.1571	-0.1217	0.0014	0.5104	-0.3744	0.0404	-0.0006	0.0020
0.0327	0.0474	-0.0004	0.5167	0.0937	0.0402	-0.0025	0.0020
1.2430	0.2342	-0.0020	0.5230	0.6189	0.0350	-0.0027	0.0020
2.4532	0.4118	-0.0024	0.5236	1.1176	0.0325	-0.0038	0.0020
3.6147	0.5800	-0.0012	0.5156	1.5959	0.0337	-0.0027	0.0020
6.0116	0.9534	-0.0055	0.5239	2.6847	0.0144	-0.0022	0.0020
8.4665	1.3603	-0.0066	0.5491	3.9612	-0.0043	0.0003	0.0020
11.0433	1.8317	-0.0069	0.5803	5.5233	0.0159	-0.0086	0.0020
13.6293	2.3257	-0.0058	0.6085	7.1999	0.0247	-0.0109	0.0020
16.2704	2.8477	-0.0115	0.6287	9.0424	0.0095	-0.0101	0.0020
19.0504	3.4571	-0.0242	0.6515	11.2972	-0.0230	-0.0143	0.0020
0.0270	0.0508	-0.0027	0.5133	0.1062	0.0302	-0.0025	0.0020
0.0362	0.0503	-0.0009	0.5098	0.1037	0.0340	-0.0025	0.0020

CONFIG =0715
RUN NO. = 37
MACH NO. = 1.63
DYN PRESS.= 5.87
REYNOLDS NO. = 305113
REFERENCE AREA = 1.4849

ALPHA	CN	CY	CA	CM	CLN	CLL	F
0.0343	0.0486	-0.0009	0.5109	0.0988	0.0315	-0.0021	0.0030
0.0353	0.0491	-0.0015	0.5161	0.1024	0.0327	-0.0025	0.0030
-3.5200	-0.4500	-0.0005	0.5154	-1.3020	0.0338	0.0005	0.0030
-2.3265	-0.2782	0.0021	0.5116	-0.8200	0.0432	-0.0005	0.0030
0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0.0111	0.0457	-0.0026	0.5180	0.0900	0.0278	-0.0025	0.0030
1.2427	0.2336	-0.0014	0.5207	0.6189	0.0375	-0.0027	0.0030
2.4545	0.4123	-0.0025	0.5236	1.1225	0.0324	-0.0029	0.0030
3.5834	0.5789	-0.0011	0.5151	1.5922	0.0350	-0.0027	0.0030
6.0013	0.9515	-0.0038	0.5243	2.6810	0.0218	-0.0013	0.0030
8.4657	1.3591	-0.0118	0.5462	3.9601	-0.0193	0.0004	0.0030
11.0237	1.8256	-0.0081	0.5886	5.5048	0.0160	-0.0077	0.0030
13.6252	2.3217	-0.0012	0.6091	7.1897	0.0409	-0.0099	0.0030
16.2690	2.8499	-0.0133	0.6318	9.0523	0.0033	-0.0097	0.0030
19.0193	3.4480	-0.0213	0.6527	11.2651	-0.0153	-0.0131	0.0030
0.0162	0.0503	-0.0009	0.5156	0.1038	0.0327	-0.0017	0.0030
0.0259	0.0496	0.0014	0.5132	0.1035	0.0365	-0.0021	0.0030

CONFIG =0715
RUN NO. = 38
MACH NO. = 1.63
DYN PRESS.= 5.87
REYNOLDS NO. = 305092
REFERENCE AREA = 1.4849

ALPHA	CN	CY	CA	CM	CLN	CLL	F
0.0121	0.0462	0.0008	0.5116	0.0936	0.0402	-0.0024	0.0040
0.0121	0.0463	-0.0021	0.5109	0.0937	0.0352	-0.0020	0.0040
-3.5227	-0.4523	0.0023	0.5101	-1.3096	0.0438	0.0005	0.0040
-2.3475	-0.2798	-0.0007	0.5124	-0.8236	0.0309	-0.0010	0.0040
-1.1687	-0.1234	0.0014	0.5070	-0.3782	0.0404	-0.0018	0.0040
0.0111	0.0457	-0.0032	0.5110	0.0901	0.0303	-0.0020	0.0040
1.2446	0.2350	-0.0049	0.5188	0.6231	0.0360	-0.0030	0.0040
2.4527	0.4106	-0.0042	0.5195	1.1176	0.0262	-0.0034	0.0040
3.6155	0.5806	-0.0017	0.5138	1.5984	0.0324	-0.0031	0.0040
6.0126	0.9526	-0.0026	0.5220	2.6846	0.0219	-0.0026	0.0040
8.4425	1.3562	-0.0112	0.5469	3.9513	-0.0191	-0.0013	0.0040
11.0077	1.8230	-0.0063	0.5779	5.4951	0.0175	-0.0078	0.0040
13.6297	2.3225	-0.0041	0.6054	7.1923	0.0308	-0.0104	0.0040
16.2476	2.8487	-0.0093	0.6261	9.0486	0.0170	-0.0097	0.0040
19.0270	3.4543	-0.0196	0.6481	11.2874	-0.0105	-0.0122	0.0040
19.0383	3.4554	-0.0219	0.6509	11.2911	-0.0168	-0.0126	0.0040
0.0170	0.0508	-0.0015	0.5126	0.1061	0.0327	-0.0025	0.0040
0.0375	0.0514	-0.0015	0.5086	0.1075	0.0327	-0.0025	0.0040

CONFIG =0715
RUN NO. = 39
MACH NO. = 1.63
DYN PRESS.= 5.87
REYNOLDS NO. = 305110
REFERENCE AREA = 1.4849

ALPHA	CN	CY	CA	CM	CLN	CLL	F
0.0259	0.0497	-0.0004	0.5110	0.1037	0.0352	-0.0020	0.0050
0.0131	0.0468	0.0013	0.5145	0.0973	0.0414	-0.0020	0.0050
-3.4691	-0.4506	0.0012	0.5116	-1.3009	0.0375	0.0005	0.0050
-2.3373	-0.2794	0.0010	0.5116	-0.8213	0.0382	-0.0001	0.0050
-1.1901	-0.1252	0.0037	0.5105	-0.3809	0.0479	-0.0013	0.0050
0.0370	0.0509	-0.0021	0.5202	0.1063	0.0302	-0.0012	0.0050
1.2313	0.2319	-0.0032	0.5219	0.6163	0.0325	-0.0031	0.0050
2.4529	0.4106	-0.0047	0.5230	1.1188	0.0249	-0.0034	0.0050
3.5952	0.5800	-0.0018	0.5209	1.5983	0.0324	-0.0031	0.0050
5.9878	0.9480	-0.0061	0.5255	2.6722	0.0144	-0.0026	0.0050
8.4325	1.3563	-0.0101	0.5515	3.9514	-0.0155	0.0003	0.0050
10.9779	1.8205	-0.0012	0.5737	5.4887	0.0361	-0.0077	0.0050
13.6439	2.3227	-0.0058	0.6091	7.1948	0.0244	-0.0104	0.0050
16.2563	2.8437	-0.0070	0.6298	9.0323	0.0244	-0.0088	0.0050
19.0210	3.4492	-0.0253	0.6515	11.2702	-0.0291	-0.0122	0.0050
0.0289	0.0525	-0.0015	0.5143	0.1111	0.0326	-0.0016	0.0050
0.0377	0.0513	0.0053	0.5103	0.1083	0.0501	-0.0021	0.0050

CONFIG =0715
RUN NO. = 40
MACH NO. = 1.63
DYN PRESS. = 5.87
REYNOLDS NO. = 304918
REFERENCE AREA = 1.4849

ALPHA	CN	CY	CA	CM	CLN	CLL	F
0.0359	0.0497	-0.0021	0.5150	0.1037	0.0314	-0.0025	0.0080
0.0348	0.0485	0.0008	0.5115	0.1011	0.0402	-0.0020	0.0080
-3.5055	-0.4558	0.0046	0.5095	-1.3148	0.0500	0.0006	0.0080
-2.3349	-0.2775	0.0021	0.5124	-0.8163	0.0432	-0.0009	0.0080
-1.1655	-0.1211	0.0002	0.5099	-0.3682	0.0353	-0.0014	0.0080
0.0375	0.0514	-0.0027	0.5144	0.1075	0.0277	-0.0021	0.0080
1.2208	0.2313	-0.0032	0.5231	0.6151	0.0300	-0.0027	0.0080
2.4638	0.4123	0.0010	0.5143	1.1188	0.0425	-0.0029	0.0080
3.5818	0.5766	-0.0080	0.5163	1.5898	0.0137	-0.0035	0.0080
5.9857	0.9458	-0.0055	0.5220	2.6672	0.0156	-0.0021	0.0080
8.4577	1.3608	-0.0067	0.5491	3.9661	-0.0043	-0.0001	0.0080
11.0347	1.8236	-0.0018	0.5750	5.5007	0.0334	-0.0081	0.0080
13.6183	2.3240	-0.0070	0.6068	7.1997	0.0221	-0.0112	0.0080
16.2458	2.8470	-0.0110	0.6250	9.0437	0.0108	-0.0092	0.0080
19.0315	3.4535	-0.0213	0.6483	11.2843	-0.0156	-0.0118	0.0080
0.0410	0.0549	-0.0009	0.5109	0.1163	0.0327	-0.0025	0.0080
0.0526	0.0559	-0.0032	0.5094	0.1210	0.0300	-0.0020	0.0080

CONFIG =0715
RUN NO. = 41
MACH NO. = 1.63
DYN PRESS. = 5.87
REYNOLDS NO. = 304556
REFERENCE AREA = 1.4849

ALPHA	CN	CY	CA	CM	CLN	CLL	F
0.0508	0.0542	-0.0038	0.5113	0.1162	0.0276	-0.0020	0.0100
0.0391	0.0526	-0.0015	0.5109	0.1125	0.0326	-0.0020	0.0100
-3.4469	-0.4478	0.0029	0.5139	-1.2922	0.0437	0.0005	0.0100
-2.3482	-0.2810	0.0021	0.5124	-0.8238	0.0432	-0.0009	0.0100
-1.1434	-0.1186	0.0002	0.5120	-0.3627	0.0352	-0.0006	0.0100
0.0375	0.0514	-0.0027	0.5161	0.1076	0.0277	-0.0017	0.0100
1.2210	0.2313	-0.0077	0.5219	0.6164	0.0224	-0.0030	0.0100
2.4535	0.4118	-0.0013	0.5166	1.1188	0.0350	-0.0034	0.0100
3.5850	0.5787	-0.0052	0.5202	1.5963	0.0199	-0.0027	0.0100
5.9794	0.9492	-0.0055	0.5267	2.6771	0.0132	-0.0030	0.0100
8.4962	1.3676	-0.0078	0.5502	3.9907	-0.0071	-0.0004	0.0100
11.0369	1.8279	-0.0086	0.5793	5.5147	0.0098	-0.0086	0.0100
13.6025	2.3194	-0.0035	0.6121	7.1824	0.0335	-0.0108	0.0100
16.2482	2.8493	-0.0115	0.6325	9.0499	0.0083	-0.0089	0.0100
18.9976	3.4469	-0.0195	0.6557	11.2591	-0.0102	-0.0123	0.0100
0.0828	0.0652	-0.0021	0.5166	0.1487	0.0312	-0.0025	0.0100
0.0913	0.0639	-0.0061	0.5110	0.1435	0.0273	-0.0011	0.0100

CONFIG =0715
RUN NO. = 42
MACH NO. = 1.63
DYN PRESS. = 5.87
REYNOLDS NO. = 304757
REFERENCE AREA = 1.4849

ALPHA	CN	CY	CA	CM	CLN	CLL	F
0.0907	0.0633	-0.0038	0.5105	0.1422	0.0250	-0.0025	0.0200
0.0881	0.0612	-0.0072	0.5020	0.1351	0.0151	-0.0020	0.0200
-3.4593	-0.4506	0.0006	0.4943	-1.2972	0.0338	-0.0007	0.0200
-2.3128	-0.2763	-0.0025	0.4973	-0.8086	0.0233	-0.0013	0.0200
-1.1780	-0.1222	-0.0020	0.5002	-0.3779	0.0243	-0.0014	0.0200
0.0233	0.0474	-0.0015	0.5010	0.0962	0.0302	-0.0016	0.0200
1.2188	0.2308	-0.0019	0.5024	0.6067	0.0266	-0.0032	0.0200
2.4254	0.4050	-0.0063	0.5017	1.0956	0.0128	-0.0026	0.0200
3.6127	0.5782	-0.0005	0.4993	1.5865	0.0326	-0.0027	0.0200
6.0012	0.9490	-0.0066	0.5114	2.6727	0.0045	-0.0010	0.0200
8.4938	1.3642	-0.0180	0.5368	3.9775	-0.0591	0.0048	0.0200
11.0391	1.8241	-0.0143	0.5680	5.5073	-0.0177	-0.0065	0.0200
13.6042	2.3175	-0.0075	0.5974	7.1778	0.0098	-0.0092	0.0200
16.2162	2.8410	-0.0188	0.6194	9.0113	-0.0260	-0.0091	0.0200
18.9957	3.4436	-0.0239	0.6359	11.2311	-0.0345	-0.0125	0.0200
0.0905	0.0635	-0.0015	0.4997	0.1412	0.0276	-0.0021	0.0200
0.0873	0.0606	-0.0021	0.5003	0.1325	0.0251	-0.0017	0.0200

CONFIG •0715
RUN NO. • 43
MACH NO. • 1.63
DYN PRESS.• 5.87
REYNOLDS NO. • 305072
REFERENCE AREA • 1.4849

ALPHA	CN	CY	CA	CM	CLN	CLL	F
0.0883	0.0610	-0.0056	0.5255	0.1359	0 0249	-0.0021	0.0000
-9.5794	-1.4150	0.0123	0.5507	-4.2332	0.0709	0.0045	0.0000
-4.7178	-0.6315	0.0026	0.5212	-1.8231	0.0385	0.0009	0.0000
-2.3296	-0.2809	-0.0007	0.5186	-0.8309	0.0358	0.0007	0.0000
0.0449	0.0497	0.0008	0.5201	0.0988	0.0403	-0.0013	0.0000
2.4500	0.4078	-0.0001	0.5245	1.1057	0.0399	-0.0030	0.0000
4.7659	0.7475	-0.0054	0.5224	2.0745	0.0180	-0.0026	0.0000
9.7963	1.6037	-0.0091	0.5649	4.7624	-0.0005	-0 0048	0.0000
0.0362	0.0502	0.0008	0.5188	0.1035	0.0426	-0.0012	0.0000

CONFIG •0710
RUN NO. • 44
MACH NO. • 1.63
DYN PRESS.• 5.88
REYNOLDS NO. • 306281
REFERENCE AREA • 1.4849

ALPHA	CN	CY	CA	CM	CLN	CLL	F
0.0345	0.0509	-0.0043	0.5086	0.0940	0.0364	-0 0016	0.0000
0.0453	0.0514	0.0002	0.5068	0.0963	0.0439	-0.0004	0.0000
-3.4975	-0.4548	-0.0028	0.5045	-1.3201	0.0386	0.0031	0.0000
-2.3489	-0.2788	-0.0019	0.5110	-0.8283	0.0369	0.0008	0.0000
-1.1581	-0.1194	0.0003	0.5074	-0.3828	0.0465	-0.0002	0.0000
0.0308	0.0474	-0.0015	0.5050	0.0839	0.0427	-0.0012	0.0000
1.2149	0.2285	-0.0071	0.5109	0.5904	0.0313	-0.0010	0.0000
2.3772	0.3993	-0.0063	0.5117	1.0641	0.0266	-0.0022	0.0000
3.5922	0.5822	-0.0033	0.5090	1.5744	0.0366	-0.0037	0.0000
6.0219	0.9537	-0.0064	0.5173	2.6296	0.0243	-0.0048	0.0000
8.4228	1.3498	-0.0068	0.5369	3.8613	0.0185	-0.0060	0.0000
10.9983	1.8122	-0.0002	0.5578	5.3864	0.0489	-0.0083	0.0000
13.6089	2.3091	-0.0106	0.5794	7.1060	0.0119	-0.0073	0.0000
16.2333	2.8303	-0.0211	0.6104	8.9798	-0.0287	-0.0068	0.0000
18.9723	3.4331	-0.0118	0.6185	11.2665	0.0175	-0.0144	0.0000
0.0806	0.0651	-0.0038	0.5073	0.1375	0.0336	-0.0017	0.0000
0.0793	0.0640	-0.0015	0.5032	0.1337	0.0411	-0.0016	0.0000

CONFIG •0710
RUN NO. • 45
MACH NO. • 1.63
DYN PRESS.• 5.88
REYNOLDS NO. • 306290
REFERENCE AREA • 1.4849

ALPHA	CN	CY	CA	CM	CLN	CLL	F
0.0782	0.0628	-0.0021	0.5026	0.1312	0.0386	-0.0012	0.0005
0.0782	0.0628	-0.0044	0.5032	0.1312	0.0337	-0.0020	0.0005
-3.5530	-0.4607	0.0012	0.4984	-1.3330	0.0474	0.0011	0.0005
-2.3379	-0.2783	0.0015	0.5087	-0.8247	0.0480	0.0012	0.0005
-1.1689	-0.1206	-0.0003	0.5022	-0.3840	0.0440	-0.0001	0.0005
0.0350	0.0508	0.0002	0.5016	0.0963	0.0426	-0.0012	0.0005
1.2297	0.2325	-0.0019	0.5052	0.6038	0.0388	-0.0023	0.0005
2.4622	0.4125	-0.0058	0.5080	1.1051	0.0239	-0.0014	0.0005
3.6168	0.5849	-0.0056	0.5071	1.5860	0.0289	-0.0024	0.0005
6.0365	0.9544	-0.0052	0.5158	2.6370	0.0266	-0.0047	0.0005
8.4459	1.3502	-0.0080	0.5332	3.8659	0.0135	-0.0060	0.0005
11.0084	1.8116	-0.0008	0.5630	5.3885	0.0464	-0.0096	0.0005
13.5856	2.3056	-0.0089	0.5784	7.0984	0.0157	-0.0077	0.0005
16.2184	2.8251	-0.0148	0.6075	8.9683	-0.0075	-0.0071	0.0005
19.0054	3.4339	-0.0084	0.6109	11.2748	0.0294	-0.0130	0.0005
0.0500	0.0645	-0.0010	0.5057	0.1361	0.0411	-0.0012	0.0005
0.0392	0.0639	-0.0010	0.5034	0.1336	0.0449	-0.0025	0.0005

CONFIG =0710
RUN NO. = 46
MACH NO. = 1.63
DYN PRESS.= 5.88
REYNOLDS NO. = 306126
REFERENCE AREA = 1.4849

ALPHA	CN	CY	CA	CM	CLN	CLL	F
0.0393	0.0640	-0.0021	0.5023	0.1337	0.0387	-0.0021	0.0010
0.0376	0.0622	-0.0032	0.5034	0.1299	0.0362	-0.0025	0.0010
-3.5098	-0.4572	0.0001	0.5006	-1.3254	0.0425	0.0002	0.0010
-2.3392	-0.2794	0.0010	0.5058	-0.8284	0.0431	0.0003	0.0010
-1.1893	-0.1212	0.0014	0.5029	-0.3842	0.0515	-0.0009	0.0010
0.0363	0.0519	0.0025	0.5028	0.0998	0.0513	-0.0020	0.0010
1.2191	0.2319	-0.0025	0.5052	0.6025	0.0388	-0.0027	0.0010
2.4614	0.4119	-0.0052	0.5080	1.1025	0.0265	-0.0031	0.0010
3.5921	0.5802	-0.0022	0.5049	1.5745	0.0390	-0.0040	0.0010
5.9902	0.9488	-0.0024	0.5102	2.6197	0.0366	-0.0043	0.0010
8.4502	1.3536	-0.0114	0.5327	3.8782	0.0034	-0.0068	0.0010
11.0093	1.8122	-0.0059	0.5566	5.3913	0.0265	-0.0087	0.0010
13.5727	2.3028	-0.0089	0.5773	7.0910	0.0145	-0.0073	0.0010
16.2364	2.8320	-0.0194	0.6017	8.9907	-0.0226	-0.0063	0.0010
19.0101	3.4372	-0.0113	0.6133	11.2895	0.0156	-0.0143	0.0010
0.0538	0.0679	0.0002	0.5045	0.1460	0.0485	-0.0016	0.0010
0.0530	0.0674	0.0013	0.5011	0.1435	0.0486	-0.0021	0.0010

CONFIG =0710
RUN NO. = 47
MACH NO. = 1.63
DYN PRESS.= 5.88
REYNOLDS NO. = 305836
REFERENCE AREA = 1.4849

ALPHA	CN	CY	CA	CM	CLN	CLL	F
0.0619	0.0662	-0.0004	0.5010	0.1411	0.0460	-0.0016	0.0020
0.0519	0.0663	-0.0032	0.5010	0.1412	0.0361	-0.0016	0.0020
-3.5085	-0.4469	0.0023	0.4994	-1.2956	0.0522	0.0010	0.0020
-2.3028	-0.2737	-0.0031	0.5033	-0.8109	0.0380	-0.0004	0.0020
-1.1894	-0.1212	-0.0049	0.5017	-0.3852	0.0365	-0.0005	0.0020
0.0359	0.0519	-0.0032	0.5021	0.0976	0.0425	-0.0015	0.0020
1.2191	0.2319	-0.0019	0.5052	0.6026	0.0388	-0.0019	0.0020
2.4397	0.4101	-0.0052	0.5070	1.0988	0.0265	-0.0030	0.0020
3.6069	0.5848	-0.0028	0.5065	1.5870	0.0376	-0.0036	0.0020
6.0101	0.9487	-0.0035	0.5124	2.6196	0.0329	-0.0051	0.0020
8.4702	1.3536	-0.0114	0.5332	3.8782	0.0034	-0.0068	0.0020
11.0111	1.8139	-0.0053	0.5503	5.3962	0.0290	-0.0100	0.0020
13.6380	2.3164	-0.0055	0.5817	7.1328	0.0266	-0.0073	0.0020
16.2327	2.8292	-0.0177	0.6005	8.9796	-0.0151	-0.0058	0.0020
18.9951	3.4339	-0.0095	0.6197	11.2735	0.0257	-0.0152	0.0020
0.0582	0.0628	-0.0021	0.5045	0.1312	0.0387	-0.0016	0.0020
0.0544	0.0595	-0.0021	0.5040	0.1214	0.0412	-0.0016	0.0020

CONFIG =0710
RUN NO. = 48
MACH NO. = 1.63
DYN PRESS.= 5.88
REYNOLDS NO. = 305537
REFERENCE AREA = 1.4849

ALPHA	CN	CY	CA	CM	CLN	CLL	F
0.0544	0.0594	-0.0026	0.5027	0.1212	0.0362	-0.0016	0.0030
0.0539	0.0588	-0.0038	0.5033	0.1200	0.0350	-0.0016	0.0030
-3.5290	-0.4573	0.0018	0.4990	-1.3248	0.0499	0.0011	0.0030
-2.3012	-0.2726	0.0026	0.5057	-0.8062	0.0492	-0.0001	0.0030
-1.1663	-0.1185	-0.0015	0.5012	-0.3771	0.0416	-0.0018	0.0030
0.0350	0.0508	-0.0009	0.5033	0.0963	0.0414	-0.0016	0.0030
1.2075	0.2302	-0.0025	0.5052	0.5988	0.0388	-0.0023	0.0030
2.4494	0.4095	-0.0046	0.5057	1.0987	0.0313	-0.0025	0.0030
3.6672	0.5959	0.0001	0.5042	1.6141	0.0464	-0.0041	0.0030
5.9850	0.9462	-0.0075	0.5133	2.6144	0.0193	-0.0051	0.0030
8.4369	1.3507	-0.0029	0.5287	3.8693	0.0308	-0.0068	0.0030
10.9996	1.8128	-0.0121	0.5584	5.3916	0.0066	-0.0096	0.0030
13.6506	2.3207	-0.0176	0.5871	7.1526	-0.0146	-0.0081	0.0030
16.2190	2.8335	-0.0183	0.5982	8.9944	-0.0151	-0.0067	0.0030
19.0073	3.4403	-0.0147	0.6211	11.2954	0.0046	-0.0144	0.0030
0.0444	0.0594	-0.0049	0.5034	0.1213	0.0288	-0.0021	0.0030
0.0439	0.0589	-0.0066	0.5021	0.1202	0.0274	-0.0007	0.0030

CONFIG =0710
RUN NO. = 49
MACH NO. = 1.63
DYN PRESS. = 5.88
REYNOLDS NO. = 305706
REFERENCE AREA = 1.4849

ALPHA	CN	CY	CA	CM	CLN	CLL	F
0.0406	0.0559	-0.0004	0.4987	0.1112	0.0462	-0.0016	0.0040
0.0414	0.0565	-0.0010	0.5021	0.1136	0.0474	-0.0024	0.0040
-3.5325	-0.4601	0.0035	0.4989	-1.3318	0.0549	0.0015	0.0040
-2.3039	-0.2749	0.0015	0.5051	-0.8136	0.0455	-0.0005	0.0040
-1.1454	-0.1177	-0.0020	0.4999	-0.3740	0.0365	-0.0006	0.0040
0.0343	0.0502	-0.0038	0.5010	0.0939	0.0339	-0.0016	0.0040
1.2215	0.2336	0.0009	0.5052	0.6099	0.0474	-0.0018	0.0040
2.4617	0.4124	-0.0052	0.5069	1.1025	0.0302	-0.0034	0.0040
3.6731	0.5905	-0.0016	0.5028	1.6032	0.0425	-0.0028	0.0040
5.9985	0.9470	-0.0047	0.5136	2.6160	0.0316	-0.0038	0.0040
8.4258	1.3496	-0.0051	0.5316	3.8669	0.0209	-0.0064	0.0040
11.0003	1.8133	-0.0030	0.5549	5.3937	0.0389	-0.0091	0.0040
13.6522	2.3192	-0.0113	0.5799	7.1464	0.0078	-0.0072	0.0040
16.2332	2.8297	-0.0171	0.6029	8.9808	-0.0150	-0.0067	0.0040
19.0205	3.4343	-0.0112	0.6205	11.2719	0.0157	-0.0136	0.0040
0.0577	0.0623	-0.0027	0.5044	0.1300	0.0386	-0.0003	0.0040
0.0547	0.0593	-0.0010	0.5049	0.1222	0.0435	-0.0007	0.0040

CONFIG =0710
RUN NO. = 50
MACH NO. = 1.63
DYN PRESS. = 5.88
REYNOLDS NO. = 305403
REFERENCE AREA = 1.4849

ALPHA	CN	CY	CA	CM	CLN	CLL	F
0.0534	0.0583	-0.0044	0.4998	0.1188	0.0374	-0.0011	0.0050
0.0541	0.0588	-0.0004	0.5021	0.1211	0.0461	-0.0016	0.0050
-3.4585	-0.4469	0.0006	0.4992	-1.2954	0.0459	0.0019	0.0050
-2.2674	-0.2691	-0.0019	0.5032	-0.7960	0.0379	0.0000	0.0050
-1.1792	-0.1212	-0.0015	0.5005	-0.3841	0.0415	-0.0009	0.0050
0.0359	0.0514	-0.0061	0.5044	0.0989	0.0288	-0.0016	0.0050
1.2318	0.2336	-0.0054	0.5069	0.6113	0.0312	-0.0022	0.0050
2.4622	0.4136	-0.0058	0.5064	1.1054	0.0302	-0.0030	0.0050
3.6407	0.5883	-0.0039	0.5047	1.5971	0.0338	-0.0032	0.0050
5.9853	0.9442	-0.0058	0.5125	2.6073	0.0255	-0.0047	0.0050
8.4764	1.3592	-0.0029	0.5314	3.8952	0.0331	-0.0068	0.0050
10.9859	1.8094	-0.0093	0.5573	5.3816	0.0166	-0.0096	0.0050
13.6506	2.3206	-0.0124	0.5807	7.1524	0.0041	-0.0089	0.0050
16.2346	2.8308	-0.0177	0.6006	8.9845	-0.0163	-0.0071	0.0050
19.0036	3.4333	-0.0112	0.6249	11.2675	0.0172	-0.0161	0.0050
0.0571	0.0617	-0.0055	0.5062	0.1287	0.0287	-0.0020	0.0050
0.0682	0.0628	-0.0009	0.5021	0.1311	0.0424	-0.0016	0.0050

CONFIG =0710
RUN NO. = 51
MACH NO. = 1.63
DYN PRESS. = 5.88
REYNOLDS NO. = 305208
REFERENCE AREA = 1.4849

ALPHA	CN	CY	CA	CM	CLN	CLL	F
0.0544	0.0594	-0.0021	0.5010	0.1212	0.0412	-0.0016	0.0080
0.0658	0.0606	-0.0124	0.5008	0.1252	0.0223	-0.0014	0.0080
-3.4721	-0.4412	0.0057	0.4988	-1.2782	0.0595	0.0010	0.0080
-2.3026	-0.2737	0.0026	0.5057	-0.8099	0.0492	-0.0005	0.0080
-1.1559	-0.1177	-0.0032	0.5010	-0.3765	0.0390	-0.0014	0.0080
0.0123	0.0485	-0.0009	0.5034	0.0888	0.0439	-0.0020	0.0080
1.2175	0.2301	-0.0008	0.5058	0.5986	0.0450	-0.0031	0.0080
2.4392	0.4101	-0.0035	0.5058	1.0963	0.0339	-0.0026	0.0080
3.6769	0.5946	-0.0045	0.5029	1.6120	0.0338	-0.0045	0.0080
5.9753	0.9442	-0.0046	0.5119	2.6072	0.0292	-0.0051	0.0080
8.4865	1.3592	-0.0063	0.5325	3.8953	0.0207	-0.0068	0.0080
10.9950	1.8088	-0.0024	0.5503	5.3789	0.0415	-0.0087	0.0080
13.6206	2.3095	-0.0095	0.5777	7.1130	0.0131	-0.0089	0.0080
16.2196	2.8269	-0.0205	0.6069	8.9699	-0.0249	-0.0068	0.0080
18.9891	3.4294	-0.0129	0.6214	11.2553	0.0111	-0.0153	0.0080
0.0471	0.0617	-0.0010	0.5033	0.1286	0.0436	-0.0016	0.0080
0.0439	0.0588	-0.0027	0.5045	0.1200	0.0362	-0.0016	0.0080

CONFIG =0710
RUN NO. = 52
MACH NO. = 1.63
DYN PRESS.= 5.89
REYNOLDS NO. = 305201
REFERENCE AREA = 1.4849

ALPHA	CN	CY	CA	CM	CLN	CLL	F
0.0544	0.0594	-0.0009	0.5022	0.1212	0.0412	-0.0016	0.0100
0.0426	0.0577	-0.0044	0.5022	0.1163	0.0313	-0.0016	0.0100
-3.5290	-0.4566	0.0017	0.4999	-1.3200	0.0485	0.0011	0.0100
-2.3255	-0.2766	0.0032	0.5035	-0.8174	0.0505	0.0004	0.0100
-1.1652	-0.1178	-0.0009	0.5011	-0.3729	0.0439	-0.0005	0.0100
0.0345	0.0502	-0.0061	0.5033	0.0952	0.0289	-0.0016	0.0100
1.2196	0.2319	-0.0002	0.5069	0.6049	0.0462	-0.0022	0.0100
2.4519	0.4124	-0.0058	0.5063	1.1038	0.0301	-0.0030	0.0100
3.6637	0.5903	-0.0050	0.5022	1.6024	0.0264	-0.0037	0.0100
5.9635	0.9425	-0.0052	0.5079	2.6024	0.0268	-0.0047	0.0100
8.4738	1.3570	-0.0046	0.5314	3.8879	0.0245	-0.0068	0.0100
10.9869	1.8105	-0.0053	0.5585	5.3839	0.0291	-0.0096	0.0100
13.6370	2.3153	-0.0130	0.5805	7.1305	0.0042	-0.0081	0.0100
16.2225	2.8298	-0.0182	0.6052	8.9773	-0.0175	-0.0072	0.0100
19.0081	3.4373	-0.0084	0.6237	11.2798	0.0246	-0.0153	0.0100
0.0582	0.0627	-0.0010	0.5043	0.1309	0.0436	-0.0016	0.0100
0.0439	0.0588	-0.0044	0.5022	0.1200	0.0313	-0.0025	0.0100

CONFIG =0710
RUN NO. = 53
MACH NO. = 1.63
DYN PRESS.= 5.88
REYNOLDS NO. = 305079
REFERENCE AREA = 1.4849

ALPHA	CN	CY	CA	CM	CLN	CLL	F
0.0432	0.0565	-0.0038	0.4883	0.1223	0.0287	-0.0023	0.0200
0.0422	0.0559	-0.0032	0.4895	0.1186	0.0312	-0.0019	0.0200
0.0346	0.0490	-0.0021	0.4883	0.0986	0.0339	-0.0023	0.0200
-3.5278	-0.4584	-0.0017	0.4856	-1.3132	0.0371	0.0017	0.0200
-2.3119	-0.2749	-0.0008	0.4913	-0.8037	0.0366	-0.0003	0.0200
-1.1677	-0.1212	0.0008	0.4913	-0.3768	0.0415	-0.0013	0.0200
0.0325	0.0473	-0.0038	0.4941	0.0925	0.0302	-0.0024	0.0200
1.1935	0.2262	-0.0036	0.4956	0.5889	0.0266	-0.0031	0.0200
2.4246	0.4050	-0.0063	0.4966	1.0864	0.0191	-0.0034	0.0200
3.6381	0.5860	-0.0056	0.4961	1.5897	0.0265	-0.0036	0.0200
5.9837	0.9419	-0.0046	0.4958	2.6048	0.0230	-0.0042	0.0200
8.4658	1.3521	-0.0091	0.5195	3.8702	-0.0025	-0.0048	0.0200
10.9680	1.8027	-0.0097	0.5378	5.3597	0.0057	-0.0079	0.0200
13.6181	2.3054	-0.0106	0.5695	7.0940	0.0046	-0.0065	0.0200
16.1971	2.8141	-0.0175	0.5889	8.9187	-0.0194	-0.0064	0.0200
18.9645	3.4215	-0.0286	0.6123	11.2034	-0.0565	-0.0064	0.0200
0.0802	0.0634	-0.0027	0.4963	0.1398	0.0323	-0.0016	0.0200
0.0775	0.0611	-0.0004	0.4957	0.1322	0.0386	-0.0020	0.0200

CONFIG =0705
RUN NO. = 54
MACH NO. = 1.63
DYN PRESS.= 5.9
REYNOLDS NO. = 308614
REFERENCE AREA = 1.4849

ALPHA	CN	CY	CA	CM	CLN	CLL	F
0.0059	0.0445	-0.0042	0.4915	0.0668	0.0269	-0.0017	0.0000
-0.0046	0.0440	-0.0042	0.4881	0.0656	0.0268	-0.0004	0.0000
-3.4644	-0.4519	-0.0022	0.4894	-1.3054	0.0274	0.0014	0.0000
-2.3191	-0.2786	-0.0047	0.4907	-0.8257	0.0245	0.0004	0.0000
-1.1844	-0.1248	-0.0031	0.4903	-0.3988	0.0318	-0.0006	0.0000
0.0149	0.0434	-0.0013	0.4868	0.0643	0.0330	0.0000	0.0000
1.2471	0.2320	-0.0075	0.4874	0.5893	0.0168	-0.0007	0.0000
2.4283	0.4023	-0.0027	0.4899	1.0565	0.0332	-0.0023	0.0000
3.6660	0.5862	-0.0060	0.4853	1.5709	0.0232	-0.0022	0.0000
5.9946	0.9373	-0.0056	0.4926	2.5588	0.0274	-0.0045	0.0000
8.4656	1.3389	-0.0070	0.5060	3.7749	0.0175	-0.0065	0.0000
10.9893	1.7862	-0.0081	0.5278	5.2337	0.0176	-0.0065	0.0000
13.6120	2.2883	-0.0068	0.5556	6.9913	0.0321	-0.0130	0.0000
16.2764	2.8300	-0.0041	0.5835	9.0004	0.0452	-0.0158	0.0000
19.0706	3.4533	0.0063	0.5775	11.4422	0.0832	-0.0179	0.0000
0.0417	0.0577	-0.0083	0.4873	0.1115	0.0201	0.0001	0.0000
0.0377	0.0542	-0.0025	0.4787	0.1003	0.0339	0.0005	0.0000

CONFIG =0705
RUN NO. = 55
MACH NO. = 1.63
DYN PRESS. = 5.9
REYNOLDS NO. = 307775
REFERENCE AREA = 1.4849

ALPHA	CN	CY	CA	CM	CLN	CLL	F
0.0376	0.0541	-0.0019	0.4729	0.1000	0.0340	-0.0016	0.0005
0.0371	0.0537	-0.0037	0.4712	0.0991	0.0290	-0.0007	0.0005
-3.4626	-0.4513	-0.0005	0.4703	-1.2980	0.0347	0.0016	0.0005
-2.3171	-0.2778	0.0033	0.4718	-0.8197	0.0468	0.0001	0.0005
-1.1596	-0.1212	-0.0019	0.4717	-0.3834	0.0340	0.0000	0.0005
0.0296	0.0468	-0.0025	0.4724	0.0792	0.0328	-0.0003	0.0005
1.2257	0.2303	-0.0069	0.4715	0.5867	0.0144	-0.0020	0.0005
2.4460	0.4080	-0.0102	0.4708	1.0802	0.0167	-0.0025	0.0005
3.6524	0.5816	-0.0066	0.4716	1.5645	0.0182	-0.0042	0.0005
5.9828	0.9337	-0.0056	0.4794	2.5583	0.0273	-0.0055	0.0005
8.4310	1.3325	-0.0042	0.4917	3.7682	0.0273	-0.0075	0.0005
10.9764	1.7894	-0.0093	0.5112	5.2602	0.0135	-0.0083	0.0005
13.6631	2.3021	-0.0047	0.5343	7.0602	0.0399	-0.0144	0.0005
16.2832	2.8281	0.0014	0.5403	9.0165	0.0656	-0.0171	0.0005
19.0704	3.4581	0.0090	0.5579	11.4782	0.0950	-0.0196	0.0005
0.0538	0.0593	-0.0037	0.4798	0.1176	0.0289	-0.0008	0.0005
0.0617	0.0577	-0.0065	0.4769	0.1115	0.0215	-0.0008	0.0005

CONFIG =0705
RUN NO. = 56
MACH NO. = 1.63
DYN PRESS. = 5.88
REYNOLDS NO. = 306031
REFERENCE AREA = 1.4849

ALPHA	CN	CY	CA	CM	CLN	CLL	F
0.0517	0.0578	-0.0037	0.4742	0.1117	0.0290	-0.0007	0.0010
0.0514	0.0569	-0.0037	0.4756	0.1111	0.0300	-0.0007	0.0010
-3.5307	-0.4601	0.0052	0.4713	-1.3230	0.0548	0.0021	0.0010
-2.3144	-0.2767	0.0004	0.4766	-0.8155	0.0394	0.0005	0.0010
-1.1715	-0.1240	-0.0025	0.4754	-0.3887	0.0329	0.0004	0.0010
0.0312	0.0481	-0.0008	0.4766	0.0843	0.0391	-0.0003	0.0010
1.2377	0.2323	-0.0012	0.4751	0.5963	0.0330	-0.0019	0.0010
2.4306	0.4039	-0.0125	0.4787	1.0748	0.0019	-0.0021	0.0010
3.6501	0.5805	-0.0038	0.4746	1.5682	0.0293	-0.0024	0.0010
5.9910	0.9353	-0.0074	0.4878	2.5720	0.0210	-0.0046	0.0010
8.4393	1.3320	-0.0054	0.4958	3.7804	0.0245	-0.0065	0.0010
10.9680	1.7845	-0.0043	0.5160	5.2578	0.0283	-0.0074	0.0010
13.5470	2.2828	-0.0035	0.5323	7.0001	0.0457	-0.0136	0.0010
16.2627	2.8359	0.0037	0.5504	9.0554	0.0784	-0.0187	0.0010
19.0545	3.4521	0.0130	0.5628	11.4696	0.1128	-0.0195	0.0010
0.0422	0.0579	-0.0020	0.4813	0.1144	0.0340	-0.0003	0.0010
0.0392	0.0551	-0.0060	0.4808	0.1070	0.0191	-0.0008	0.0010

CONFIG =0705
RUN NO. = 57
MACH NO. = 1.63
DYN PRESS. = 5.88
REYNOLDS NO. = 305913
REFERENCE AREA = 1.4849

ALPHA	CN	CY	CA	CM	CLN	CLL	F
0.0484	0.0543	-0.0031	0.4771	0.1042	0.0290	-0.0007	0.0020
0.0382	0.0544	-0.0020	0.4778	0.1031	0.0328	-0.0003	0.0020
-3.5342	-0.4629	0.0030	0.4719	-1.3330	0.0475	0.0008	0.0020
-2.3052	-0.2769	-0.0001	0.4771	-0.8169	0.0369	0.0001	0.0020
-1.1713	-0.1236	-0.0031	0.4789	-0.3893	0.0318	-0.0009	0.0020
0.0309	0.0474	-0.0025	0.4777	0.0842	0.0341	-0.0011	0.0020
1.2474	0.2318	-0.0041	0.4756	0.5963	0.0267	-0.0027	0.0020
2.4431	0.4050	0.0012	0.4762	1.0788	0.0466	-0.0029	0.0020
3.6498	0.5807	-0.0049	0.4758	1.5703	0.0244	-0.0032	0.0020
5.9658	0.9301	-0.0051	0.4843	2.5594	0.0297	-0.0050	0.0020
8.4667	1.3382	-0.0043	0.4992	3.8013	0.0268	-0.0065	0.0020
10.9809	1.7892	-0.0071	0.5213	5.2737	0.0207	-0.0078	0.0020
13.5732	2.2836	-0.0035	0.5292	7.0111	0.0430	-0.0143	0.0020
16.2648	2.8332	-0.0026	0.5554	9.0505	0.0546	-0.0183	0.0020
19.0460	3.4532	0.0107	0.5721	11.4744	0.1028	-0.0213	0.0020
0.0521	0.0572	-0.0049	0.4811	0.1154	0.0239	0.0001	0.0020
0.0381	0.0538	-0.0071	0.4790	0.1043	0.0154	-0.0020	0.0020

CONFIG =0705
RUN NO. = 58
MACH NO. = 1.63.
DYN PRESS.= 5.88
REYNOLDS NO. = 305605
REFERENCE AREA = 1.4849

ALPHA	CN	CY	CA	CM	CLN	CLL	F
0.0384	0.0545	-0.0026	0.4784	0.1044	0.0316	-0.0012	0.0030
0.0381	0.0538	-0.0043	0.4748	0.1041	0.0302	-0.0011	0.0030
-3.4850	-0.4543	-0.0005	0.4723	-1.3091	0.0349	0.0007	0.0030
-2.2928	-0.2748	0.0027	0.4758	-0.8085	0.0492	0.0001	0.0030
-1.1702	-0.1224	-0.0020	0.4743	-0.3868	0.0367	-0.0008	0.0030
0.0071	0.0441	-0.0025	0.4774	0.0744	0.0318	-0.0016	0.0030
1.2588	0.2326	-0.0058	0.4743	0.5993	0.0192	-0.0023	0.0030
2.4321	0.4039	-0.0079	0.4756	1.0766	0.0168	-0.0025	0.0030
3.6511	0.5819	-0.0067	0.4764	1.5741	0.0181	-0.0032	0.0030
5.9774	0.9300	-0.0102	0.4871	2.5609	0.0122	-0.0054	0.0030
8.4524	1.3379	-0.0015	0.4994	3.8004	0.0394	-0.0069	0.0030
10.9722	1.7897	-0.0083	0.5167	5.2785	0.0157	-0.0086	0.0030
13.5787	2.2918	-0.0013	0.5363	7.0355	0.0529	-0.0148	0.0030
16.2780	2.8321	0.0002	0.5482	9.0466	0.0657	-0.0191	0.0030
19.0937	3.4661	0.0105	0.5639	11.5293	0.1035	-0.0215	0.0030
0.0413	0.0568	-0.0037	0.4808	0.1131	0.0278	-0.0012	0.0030
0.0386	0.0545	-0.0043	0.4831	0.1056	0.0266	-0.0020	0.0030

CONFIG =0705
RUN NO. = 59
MACH NO. = 1.63
DYN PRESS.= 5.88
REYNOLDS NO. = 305389
REFERENCE AREA = 1.4849

ALPHA	CN	CY	CA	CM	CLN	CLL	F
0.0365	0.0527	-0.0037	0.4743	0.0993	0.0291	-0.0011	0.0040
0.0381	0.0537	0.0009	0.4760	0.1040	0.0439	-0.0007	0.0040
-3.5177	-0.4578	0.0018	0.4731	-1.3173	0.0424	0.0003	0.0040
-2.2690	-0.2717	-0.0002	0.4781	-0.7995	0.0368	0.0001	0.0040
-1.1924	-0.1247	-0.0025	0.4779	-0.3918	0.0330	-0.0004	0.0040
0.0068	0.0434	-0.0014	0.4738	0.0741	0.0342	-0.0015	0.0040
1.2242	0.2283	-0.0030	0.4751	0.5887	0.0268	-0.0031	0.0040
2.4566	0.4079	-0.0068	0.4773	1.0889	0.0217	-0.0038	0.0040
3.6345	0.5839	-0.0027	0.4770	1.5816	0.0317	-0.0045	0.0040
5.9671	0.9281	-0.0057	0.4842	2.5572	0.0271	-0.0050	0.0040
8.4534	1.3384	-0.0026	0.5018	3.8041	0.0295	-0.0074	0.0040
10.9563	1.7846	-0.0060	0.5213	5.2624	0.0257	-0.0077	0.0040
13.5686	2.2875	-0.0053	0.5333	7.0283	0.0390	-0.0143	0.0040
16.2384	2.8236	0.0025	0.5437	9.0207	0.0733	-0.0186	0.0040
19.0901	3.4727	0.0077	0.5701	11.5499	0.0939	-0.0229	0.0040
0.0545	0.0596	-0.0037	0.4824	0.1217	0.0264	-0.0008	0.0040
0.0508	0.0562	-0.0037	0.4784	0.1119	0.0265	-0.0012	0.0040

CONFIG =0705
RUN NO. = 60
MACH NO. = 1.63
DYN PRESS.= 5.88
REYNOLDS NO. = 305627
REFERENCE AREA = 1.4849

ALPHA	CN	CY	CA	CM	CLN	CLL	F
0.0618	0.0572	-0.0026	0.4765	0.1142	0.0315	-0.0016	0.0050
0.0600	0.0555	-0.0025	0.4731	0.1092	0.0266	-0.0020	0.0050
-3.5299	-0.4595	0.0001	0.4708	-1.3204	0.0337	0.0007	0.0050
-2.3155	-0.2771	0.0010	0.4759	-0.8159	0.0418	0.0001	0.0050
-1.1813	-0.1236	-0.0031	0.4721	-0.3893	0.0293	-0.0013	0.0050
0.0206	0.0469	-0.0054	0.4748	0.0842	0.0241	-0.0015	0.0050
1.2603	0.2337	-0.0024	0.4714	0.6041	0.0291	-0.0027	0.0050
2.4221	0.4039	-0.0068	0.4751	1.0765	0.0218	-0.0038	0.0050
3.6545	0.5831	0.0013	0.4722	1.5793	0.0441	-0.0036	0.0050
5.9576	0.9287	-0.0057	0.4860	2.5584	0.0272	-0.0067	0.0050
8.4427	1.3361	-0.0083	0.4988	3.7966	0.0145	-0.0073	0.0050
10.9528	1.7903	-0.0100	0.5145	5.2799	0.0107	-0.0082	0.0050
13.5582	2.2876	-0.0064	0.5270	7.0260	0.0341	-0.0147	0.0050
16.2421	2.8275	0.0082	0.5478	9.0292	0.0931	-0.0186	0.0050
19.0945	3.4672	0.0140	0.5628	11.5304	0.1148	-0.0237	0.0050
0.0657	0.0607	-0.0077	0.4788	0.1244	0.0201	-0.0007	0.0050
0.0746	0.0595	-0.0060	0.4758	0.1216	0.0238	-0.0007	0.0050

CONFIG =0705
RUN NO. = 61
MACH NO. = 1.63
DYN PRESS.= 5.88
REYNOLDS NO. = 305508
REFERENCE AREA = 1.4849

ALPHA	CN	CY	CA	CM	CLN	CLL	F
0.0732	0.0584	-0.0014	0.4747	0.1179	0.0364	-0.0011	0.0080
0.0732	0.0584	-0.0077	0.4730	0.1181	0.0177	-0.0020	0.0080
-3.5188	-0.4590	-0.0011	0.4720	-1.3197	0.0313	0.0003	0.0080
-2.3363	-0.2784	0.0004	0.4785	-0.8206	0.0383	-0.0012	0.0080
-1.1465	-0.1194	0.0014	0.4759	-0.3753	0.0416	-0.0013	0.0080
0.0189	0.0451	-0.0002	0.4755	0.0803	0.0366	-0.0011	0.0080
1.2587	0.2320	-0.0018	0.4726	0.6003	0.0304	-0.0027	0.0080
2.4561	0.4074	-0.0148	0.4743	1.0880	-0.0008	-0.0037	0.0080
3.6181	0.5782	-0.0026	0.4695	1.5642	0.0331	-0.0044	0.0080
5.9659	0.9269	-0.0045	0.4842	2.5546	0.0296	-0.0058	0.0080
8.4207	1.3343	0.0008	0.4966	3.7913	0.0468	-0.0073	0.0080
10.9716	1.7891	-0.0083	0.5167	5.2772	0.0157	-0.0090	0.0080
13.5641	2.2804	-0.0052	0.5199	7.0064	0.0366	-0.0147	0.0080
16.2321	2.8270	0.0008	0.5479	9.0306	0.0658	-0.0195	0.0080
19.0774	3.4705	0.0112	0.5689	11.5425	0.1052	-0.0225	0.0080
0.0657	0.0607	-0.0095	0.4800	0.1244	0.0139	-0.0011	0.0080
0.0753	0.0600	-0.0032	0.4747	0.1240	0.0288	-0.0007	0.0080

CONFIG =0705
RUN NO. = 62
MACH NO. = 1.63
DYN PRESS.= 5.88
REYNOLDS NO. = 305390
REFERENCE AREA = 1.4849

ALPHA	CN	CY	CA	CM	CLN	CLL	F
0.0739	0.0589	-0.0020	0.4759	0.1203	0.0339	-0.0024	0.0100
0.0632	0.0584	-0.0094	0.4730	0.1179	0.0140	-0.0024	0.0100
-3.4469	-0.4481	0.0012	0.4718	-1.2915	0.0386	0.0003	0.0100
-2.2928	-0.2748	-0.0019	0.4734	-0.8083	0.0367	0.0002	0.0100
-1.1808	-0.1234	-0.0042	0.4743	-0.3862	0.0255	-0.0004	0.0100
0.0313	0.0475	-0.0003	0.4749	0.0866	0.0391	-0.0019	0.0100
1.2363	0.2297	-0.0024	0.4720	0.5941	0.0340	-0.0022	0.0100
2.4331	0.4062	-0.0051	0.4729	1.0820	0.0292	-0.0029	0.0100
3.6307	0.5796	0.0036	0.4729	1.5693	0.0540	-0.0031	0.0100
5.9411	0.9236	-0.0028	0.4814	2.5457	0.0371	-0.0049	0.0100
8.4695	1.3417	-0.0049	0.5016	3.8162	0.0267	-0.0065	0.0100
10.9758	1.7901	-0.0049	0.5120	5.2823	0.0280	-0.0077	0.0100
13.5700	2.2861	-0.0030	0.5372	7.0211	0.0464	-0.0147	0.0100
16.2497	2.8319	0.0019	0.5423	9.0503	0.0721	-0.0178	0.0100
19.0617	3.4570	0.0118	0.5698	11.4925	0.1076	-0.0233	0.0100
0.0719	0.0572	-0.0037	0.4758	0.1141	0.0289	-0.0007	0.0100
0.0626	0.0577	-0.0037	0.4793	0.1165	0.0313	-0.0007	0.0100

CONFIG =0705
RUN NO. = 63
MACH NO. = 1.63
DYN PRESS.= 5.88
REYNOLDS NO. = 305251
REFERENCE AREA = 1.4849

ALPHA	CN	CY	CA	CM	CLN	CLL	F
0.0492	0.0550	-0.0048	0.4714	0.1068	0.0217	-0.0024	0.0200
0.0476	0.0539	-0.0025	0.4715	0.1019	0.0292	-0.0020	0.0200
-3.4356	-0.4456	-0.0039	0.4666	-1.2909	0.0176	0.0014	0.0200
-2.3174	-0.2785	-0.0029	0.4685	-0.8240	0.0258	0.0009	0.0200
-1.1942	-0.1251	0.0021	0.4733	-0.3987	0.0419	-0.0005	0.0200
0.0164	0.0435	-0.0036	0.4698	0.0719	0.0268	-0.0020	0.0200
1.2237	0.2283	-0.0035	0.4716	0.5863	0.0305	-0.0031	0.0200
2.4432	0.4062	-0.0068	0.4718	1.0821	0.0144	-0.0026	0.0200
3.6268	0.5773	-0.0072	0.4690	1.5641	0.0144	-0.0023	0.0200
5.9522	0.9236	-0.0091	0.4751	2.5508	0.0122	-0.0045	0.0200
8.4579	1.3359	-0.0152	0.4900	3.8125	-0.0244	-0.0027	0.0200
10.9521	1.7831	-0.0141	0.5097	5.2809	-0.0096	-0.0050	0.0200
13.6023	2.2835	-0.0031	0.5208	7.0386	0.0447	-0.0148	0.0200
16.2440	2.8228	0.0014	0.5450	9.0230	0.0672	-0.0186	0.0200
19.0491	3.4440	0.0030	0.5600	11.4145	0.0715	-0.0183	0.0200
0.0474	0.0532	-0.0065	0.4771	0.1018	0.0190	-0.0003	0.0200
0.0361	0.0521	-0.0094	0.4748	0.0982	0.0116	-0.0003	0.0200

CONFIG =0700
RUN NO. = 64
MACH NO. = 1.63
DYN PRESS.= 5.91
REYNOLDS NO. = 308533
REFERENCE AREA = 1.4849

ALPHA	CN	CY	CA	CM	CLN	CLL	F
0.0245	0.0435	-0.0088	0.4503	0.0623	0.0142	-0.0007	0.0000
-3.4912	-0.4583	-0.0010	0.4518	-1.3165	0.0323	0.0021	0.0000
-2.3464	-0.2875	-0.0046	0.4522	-0.8378	0.0243	0.0012	0.0000
-1.2009	-0.1314	-0.0013	0.4502	-0.4132	0.0355	0.0009	0.0000
0.0112	0.0405	-0.0054	0.4498	0.0534	0.0230	-0.0011	0.0000
1.2374	0.2248	-0.0085	0.4513	0.5599	0.0135	-0.0019	0.0000
2.3954	0.3916	-0.0054	0.4529	1.0197	0.0249	-0.0022	0.0000
3.6543	0.5774	-0.0052	0.4581	1.5276	0.0225	-0.0006	0.0000
5.9610	0.9315	-0.0112	0.4714	2.5068	0.0091	-0.0037	0.0000
8.4081	1.3145	-0.0090	0.4872	3.5855	0.0132	-0.0063	0.0000
10.8704	1.7364	-0.0020	0.5001	4.8622	0.0351	-0.0108	0.0000
13.4127	2.1955	-0.0033	0.5125	6.3791	0.0345	-0.0118	0.0000
16.1117	2.7545	-0.0114	0.5173	8.5302	0.0020	-0.0146	0.0000
19.1132	3.4679	-0.0085	0.5087	11.5106	0.0153	-0.0108	0.0000
0.0316	0.0490	-0.0037	0.4508	0.0829	0.0264	-0.0002	0.0000

LIST OF SYMBOLS

Alpha, α	Angle of attack (deg)
CN, C_N	Normal force
CY, C_Y	Side force
CA, C_A	Axial force coefficient
CM, C_M	Pitching moment coefficient measured from the base
CLN, C_n	Yawing moment
CLL, C_ℓ	Rolling moment
F	Dimensionless mass flow rate normal to surface, $\frac{\rho_w V_w}{\rho_\infty U_\infty}$

Referense area $\frac{\pi D^2}{4} = 1.4849$ in.^{2}

Configuration No.	700	Solid model
	705	0.5 caliber porous cylinder 0.36 porosity
	710	1 caliber porous cylinder 0.36 porosity
	715	1.5 caliber porous cylinder 0.36 porosity

U	Velocity component parallel to surface ft/sec.
V	Velocity component normal to surface ft/sec.
w	Wall
∞	Freestream

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