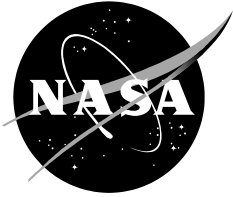


NASA/TM-20260002369



# ROAMX Rotor Geometry

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Analytical Mechanics Associates, Moffett Field, California*

*Michelle Dominguez, Haley V. Cummings  
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**March 2026**

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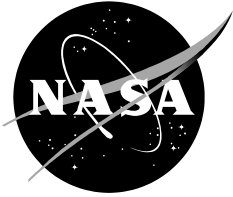
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## NOMENCLATURE

A	=	rotor disk area, m <sup>2</sup>
c	=	chord, m
C <sub>T</sub>	=	rotor thrust coefficient
M	=	blade section Mach number
r	=	rotor radial coordinate, m
R	=	rotor radius, m
Re	=	chord-based Reynolds number, $\rho Vc/\mu$
$\rho$	=	density, kg/m <sup>3</sup>
$\varphi$	=	blade twist, deg
$\sigma$	=	solidity (thrust-weighted)

### *Subscripts*

tip	=	tip-based
OML	=	obtained from OML geometry

### *Abbreviations*

ARC	Ames Research Center
JPL	NASA Jet Propulsion Laboratory
MSH	Mars Science Helicopter
OML	Outer Mold Line
UNS	Unsteady Navier-Stokes

## ABSTRACT

The Rotor Optimization for the Advancement of Mars eXploration (ROAMX) project is part of the efforts at Ames Research Center (ARC) to conduct research in support of future rotorcraft on Mars. ROAMX focuses on key aeromechanical topics facing Mars rotorcraft, including airfoil and rotor aerodynamic computational design and analysis specifically for the compressible, low-Reynolds number aerodynamic regime, and experimental validation of computational predictions. This report documents the geometry, including planform, twist, and airfoils, of the ROAMX rotor, both as-designed and as-built, for use in future research on rotor performance in the Mars atmosphere.

## INTRODUCTION

The Ingenuity Mars Helicopter made history in April 2021 as the first vehicle demonstrating controlled, powered flight on another planet and, in doing so, it has opened a new era of planetary aviation. Future, more capable Mars rotorcraft will be able to fly even further and carry significant science payload. At NASA Ames, through NASA Space Technology Mission Directorate funding, the research necessary to help develop the next generation of Mars rotorcraft has begun with the Rotor Optimization for the Advancement of Mars eXploration (ROAMX) project [1].

The ROAMX project involves computationally and experimentally investigating aerodynamically efficient, compressible, low-Reynolds number airfoils for rotor blades. The primary experimental effort of the ROAMX project is focused on rotor hover performance, but subsequent airfoil and rotor design advances are anticipated to carry over into improvements in forward flight efficiency. ROAMX is a collaboration between NASA Ames, NASA Jet Propulsion Laboratory (JPL), the University of Maryland, AeroVironment, and Tohoku University.

The ROAMX project aims to investigate possible rotor performance improvements for the same rotor radius (and root-cutout) as Ingenuity. A single rotor (instead of coaxial rotor setup) was pursued to facilitate experimental validation in the second phase of the project. The ROAMX rotor optimization is performed for a 6-bladed single rotor with a thrust-weighted solidity of  $\sigma = 0.25$ . The operating conditions are chosen to be Ingenuity's design operating conditions, with a density of  $\rho = 0.017 \text{ kg/m}^3$ , commonly referred to as 'Mars Condition 2' [2]. The airfoil optimization is performed at  $r/R = 0.0908, 0.25, 0.50, 0.75, 0.90, \text{ and } 1.00$ . The inboard two stations were chosen to have roamx3-type [3] optimizations (with variable thickness, see Figure 2), and the outboard stations used a total baseline thickness of  $t/c = 1\%$ . The thin outboard sections allowed for the tip Mach number to be set at  $M_{\text{tip}} = 0.80$ , while still allowing for 30 m/s forward flight speeds, based on early studies investigating drag divergence behavior for these profiles.

The coupled airfoil and rotor optimization was performed using the Evolutionary Algorithm for Iterative Studies of Aeromechanics (ELISA) [3], a Python package developed as part of the ROAMX project. ELISA integrates manufacturing constraints, standardized ROAMX airfoil parameterization for unconventional airfoils, and higher dimensional Pareto-optimal sets. The ROAMX rotor geometry was the lowest rotor power geometry at a design blade loading of  $C_T/\sigma = 0.175$  [3].

The purpose of this report is to document the geometry (planform, twist, and airfoils) of the ROAMX rotor for use in future research on rotor performance in the Martian atmosphere. Ref. [3] presents more details on the ROAMX airfoil and rotor optimization approach, constraints, and results.

## BACKGROUND

Following the success of Ingenuity, efforts were made to explore ways to improve rotor performance and efficiency. This chapter will discuss the background of Mars rotor design and optimization efforts. The low Mars atmospheric density inherently limits thrust; the results of Ref. [4] showed potential to improve efficiency, but efficient airfoil and rotor shapes for this aerodynamic regime were not thoroughly studied. An early study focused on replacing the Ingenuity rotor airfoils [5] with flat and cambered plate airfoils to identify possible improvements in rotor performance [5]. The resulting increases in predicted performance, achieved without any dedicated airfoil or rotor optimization, led to an effort to identify types of unconventional airfoils and hypothesized potential benefits at these conditions [6]. Subsequent efforts included dedicated airfoil optimization efforts [7], and the optimization of the Mars Science Helicopter (MSH) [8] airfoils [9] as used in the MSH rotor designs.

For flows in the compressible low Reynolds number regime found on the MSH rotors, the hypothesis is that while turbulence can exist, it does not contribute meaningfully to the mean forces on the airfoils. This was substantiated by previous work showing satisfactory correlation up to relatively high Reynolds numbers ( $Re < 300,000$ ) for the Eppler 387 airfoil performance solving laminar unsteady Navier-Stokes (UNS) equations at low Reynolds numbers ( $60,000 \leq Re \leq 460,000$ ) to experimental data [10]. The study showed that the mean behavior of unsteady Laminar Separation Bubbles (LSB) can be captured accurately using laminar UNS. Transition was governed by a separated shear layer instability resulting in the shedding of large-scale coherent vortices, resulting in reattachment of the mean flow only [3, 10].

## ROTOR GEOMETRY

The *as-optimized* ROAMX rotor was constrained to using 6 blades and a  $\sigma = 0.25$  solidity. From the Pareto-optimal rotor (see Ref. [3]) set the optimal geometry at a design blade loading of  $C_T/\sigma = 0.175$  was extracted. The basic rotor parameters are described in Table 1, the planform and twist distribution are presented in Figure 1, and the optimized airfoils are shown in Figure 2. Airfoils are only optimized for  $r/R = 0.0908, 0.25, 0.50, 0.75, 0.90,$  and  $1.00$ , and the 3D blade shape is constructed by lofting the airfoils along the span, constraining the leading and trailing edges from the continuous planform and twist data (Figure 1).

For the ROAMX experimental validation, the 3D ROAMX rotor was structurally analyzed, and the root was modified to facilitate hub mounting [11]. While the ROAMX rotor was optimized for an Ingenuity-size radius, the *as-built* ROAMX rotor was scaled up to a  $R = 0.720$  m diameter which resulted in the final Outer Mold Line (OML). The root airfoil and radial location was slightly altered as well to facilitate the mechanical connection to the hub. The *as-built* rotor parameters are described in Table 2, the planform and twist distribution are presented in Figure 1, and the OML

airfoils are shown in Figure 4. The ROAMX rotor airfoils have also been experimentally tested, as documented in Ref. [13].

Table 1. Key ROAMX rotor parameters: ‘*as-optimized*’

Parameter	Value
Rotor radius, R	0.605 m
Rotor root	0.0908 r/R
Number rotors	1
Number blades	6
Disk area, A	1.15 m <sup>2</sup>
Solidity (thrust-weighted), $\sigma$	0.2500

Table 2. Key ROAMX rotor parameters: ‘*as-built*’

Parameter	Value
Rotor radius, R	0.720 m
Rotor root	0.1800 r/R
Number rotors	1
Number blades	4
Disk area, A	1.63 m <sup>2</sup>
Solidity (thrust-weighted), $\sigma$	0.1667

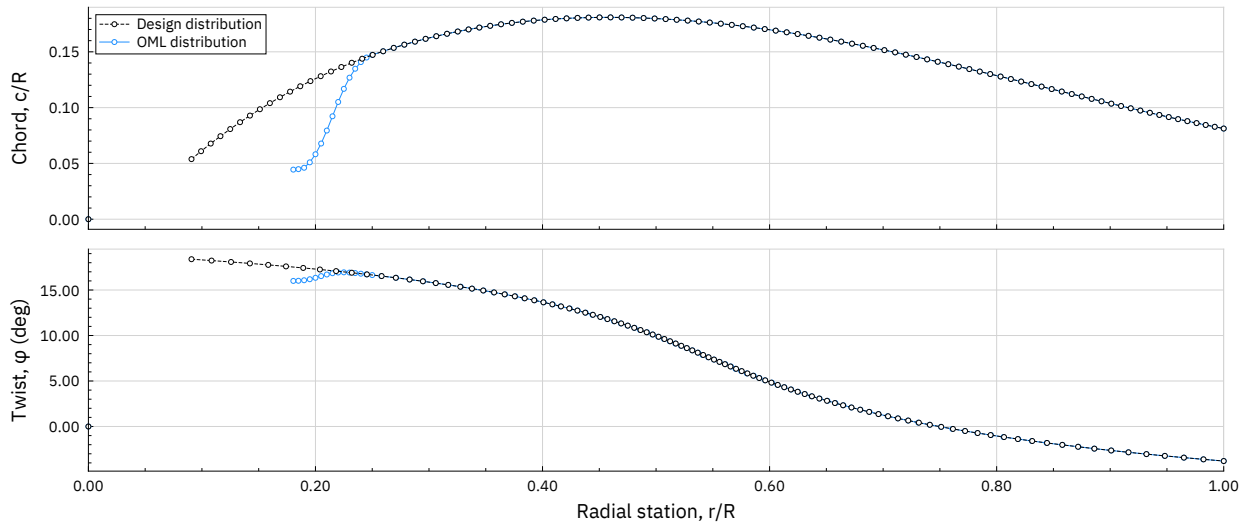


Figure 1. ROAMX Design and OML rotor chord and twist distributions.

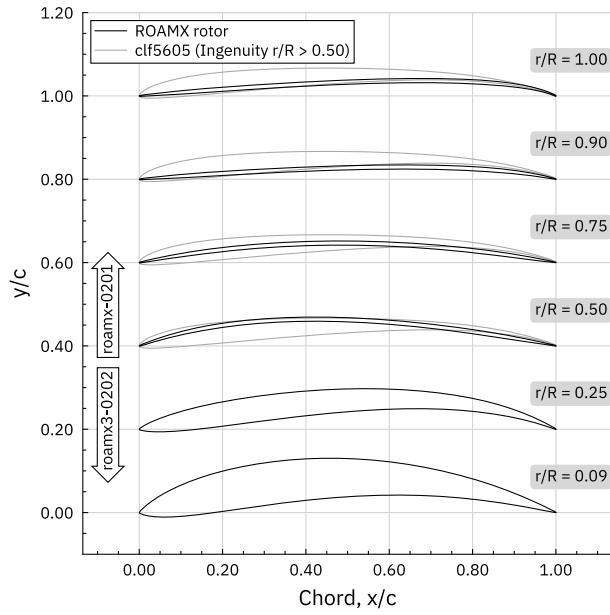


Figure 2. Optimized ROAMX rotor blade.

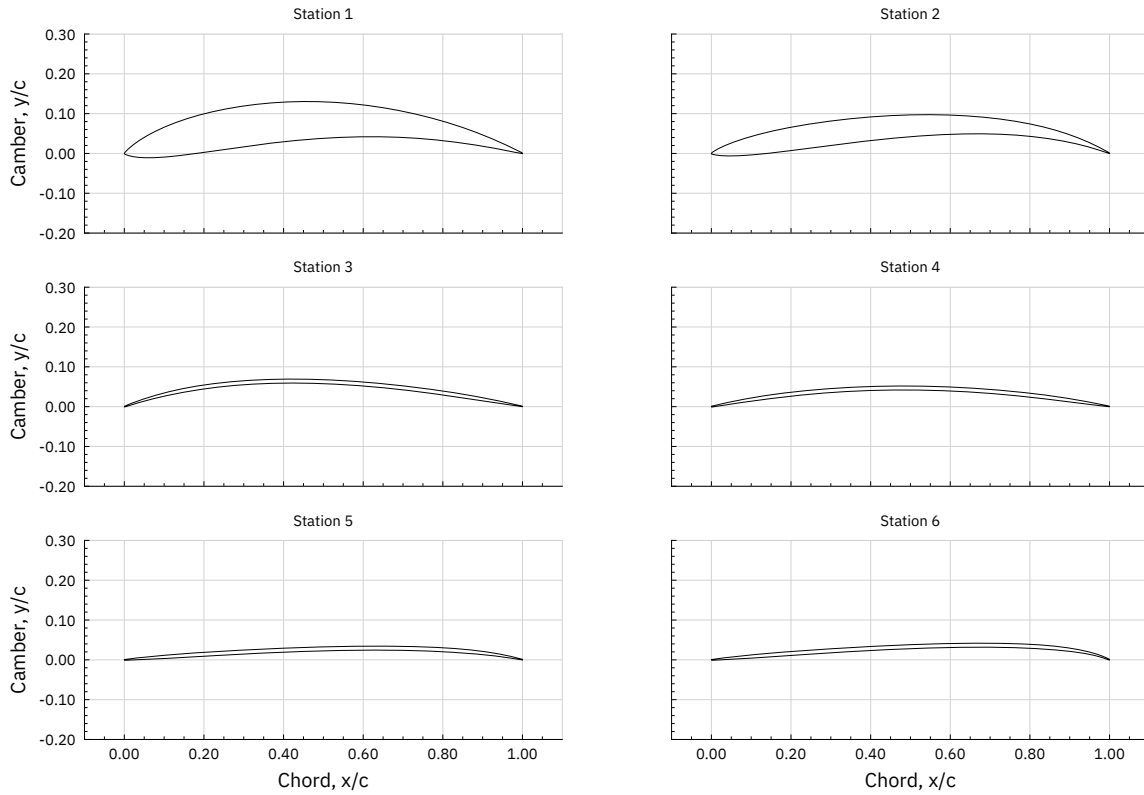


Figure 3. Normalized design airfoil profiles for Stations 1 through 6.

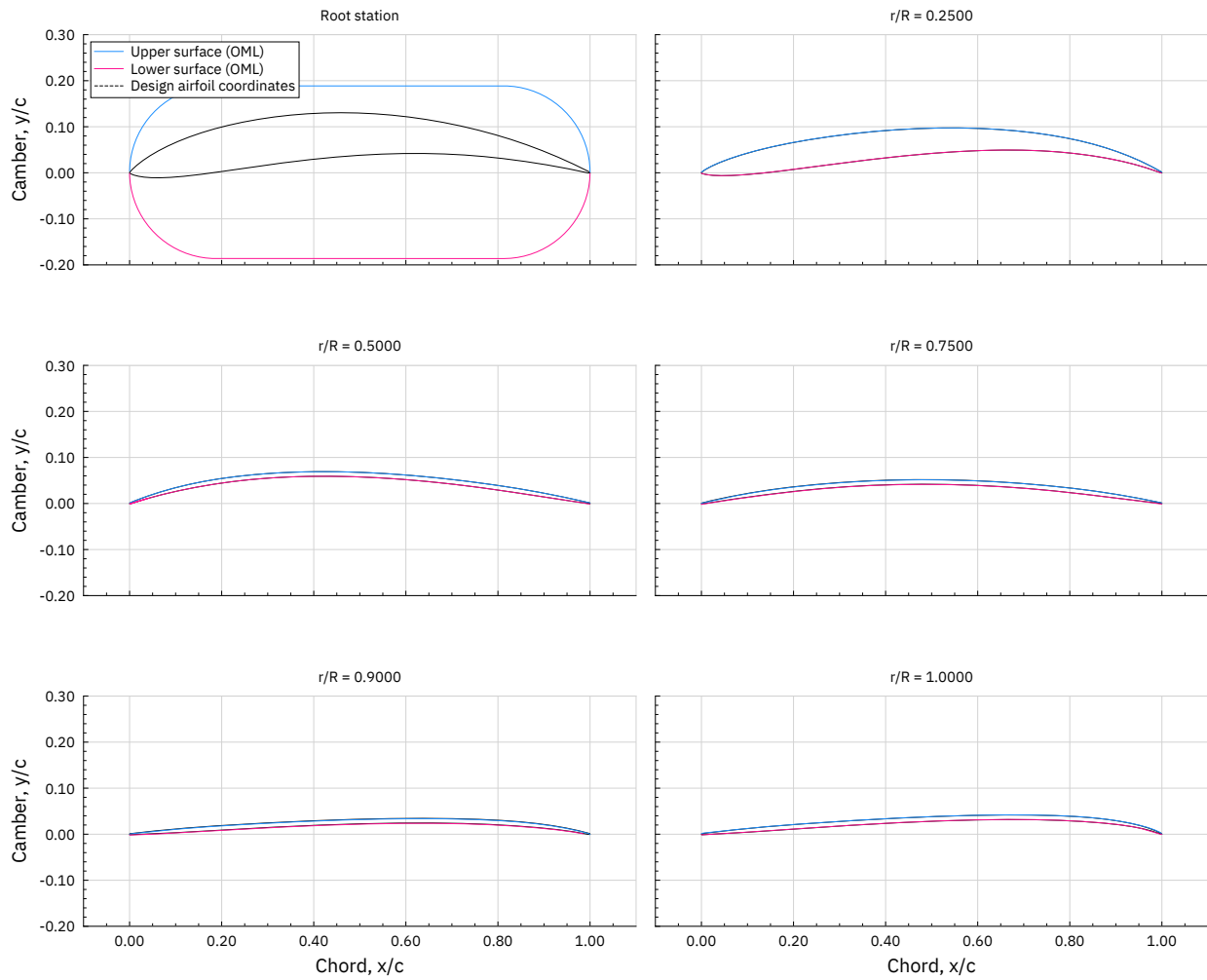


Figure 4. Normalized OML airfoil profiles for 6 representative radial stations.

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## **APPENDIX A**

The design normalized airfoil coordinates for Stations 1 through 6 are presented in Table 3 through Table 14, respectively. Both upper and lower surface coordinates are presented separately, with coincident points at the trailing and leading edges. Around 500 coordinates are distributed along the profile for each airfoil.

Table 3. Station 1 upper surface airfoil coordinates,  $r/R = 0.0908$

$x/c$	$y/c$	$x/c$	$y/c$	$x/c$	$y/c$	$x/c$	$y/c$
1.00000	0.00000	0.98780	0.00734	0.92114	0.03791	0.66848	0.11175
0.99988	0.00060	0.98708	0.00769	0.91747	0.03945	0.65766	0.11363
0.99975	0.00087	0.98633	0.00806	0.91365	0.04104	0.64669	0.11543
0.99961	0.00109	0.98555	0.00845	0.90967	0.04267	0.63555	0.11715
0.99947	0.00127	0.98473	0.00886	0.90554	0.04435	0.62428	0.11878
0.99932	0.00143	0.98387	0.00928	0.90124	0.04608	0.61286	0.12033
0.99916	0.00157	0.98297	0.00972	0.89677	0.04786	0.60133	0.12178
0.99900	0.00170	0.98203	0.01018	0.89214	0.04968	0.58968	0.12313
0.99883	0.00180	0.98104	0.01067	0.88732	0.05154	0.57793	0.12438
0.99864	0.00189	0.98000	0.01117	0.88232	0.05345	0.56609	0.12552
0.99845	0.00199	0.97892	0.01170	0.87714	0.05540	0.55418	0.12655
0.99825	0.00209	0.97779	0.01225	0.87176	0.05739	0.54220	0.12746
0.99805	0.00219	0.97660	0.01282	0.86619	0.05942	0.53018	0.12826
0.99783	0.00231	0.97536	0.01342	0.86043	0.06149	0.51812	0.12893
0.99760	0.00242	0.97406	0.01405	0.85446	0.06359	0.50604	0.12948
0.99736	0.00255	0.97269	0.01470	0.84828	0.06572	0.49396	0.12991
0.99710	0.00267	0.97127	0.01538	0.84189	0.06789	0.48188	0.13021
0.99684	0.00281	0.96978	0.01609	0.83529	0.07008	0.46982	0.13039
0.99656	0.00295	0.96822	0.01683	0.82848	0.07229	0.45780	0.13045
0.99627	0.00310	0.96659	0.01760	0.82145	0.07452	0.44582	0.13038
0.99596	0.00325	0.96489	0.01841	0.81420	0.07676	0.43391	0.13018
0.99564	0.00341	0.96311	0.01924	0.80673	0.07902	0.42207	0.12987
0.99531	0.00358	0.96125	0.02011	0.80000	0.08099	0.41032	0.12943
0.99495	0.00376	0.95930	0.02102	0.79903	0.08128	0.39867	0.12888
0.99458	0.00395	0.95727	0.02196	0.79111	0.08354	0.38714	0.12822
0.99420	0.00414	0.95514	0.02294	0.78297	0.08582	0.37572	0.12744
0.99379	0.00435	0.95292	0.02395	0.77461	0.08809	0.36445	0.12656
0.99337	0.00456	0.95061	0.02501	0.76602	0.09037	0.35331	0.12558
0.99292	0.00478	0.94819	0.02610	0.75721	0.09263	0.34234	0.12450
0.99245	0.00502	0.94566	0.02724	0.74818	0.09489	0.33152	0.12332
0.99196	0.00526	0.94302	0.02842	0.73893	0.09712	0.32088	0.12206
0.99145	0.00552	0.94027	0.02964	0.72947	0.09933	0.31042	0.12071
0.99091	0.00579	0.93741	0.03091	0.71980	0.10152	0.30015	0.11928
0.99034	0.00607	0.93442	0.03222	0.70992	0.10366	0.29008	0.11777
0.98975	0.00637	0.93130	0.03357	0.69985	0.10576	0.28020	0.11620
0.98913	0.00668	0.92805	0.03497	0.68958	0.10782	0.27053	0.11456
0.98848	0.00700	0.92466	0.03642	0.67912	0.10981	0.26107	0.11287

<u>x/c</u>	<u>y/c</u>	<u>x/c</u>	<u>y/c</u>	<u>x/c</u>	<u>y/c</u>	<u>x/c</u>	<u>y/c</u>
0.25182	0.11112	0.04939	0.04005	0.00580	0.00731	0.99783	0.00231
0.24279	0.10933	0.04708	0.03865	0.00542	0.00692	0.99760	0.00242
0.23398	0.10748	0.04486	0.03728	0.00505	0.00656	0.99736	0.00255
0.22539	0.10561	0.04273	0.03594	0.00469	0.00620	0.99710	0.00267
0.21703	0.10369	0.04070	0.03464	0.00436	0.00586	0.99684	0.00281
0.20889	0.10175	0.03875	0.03337	0.00404	0.00553	0.99656	0.00295
0.20097	0.09979	0.03689	0.03213	0.00373	0.00521	0.99627	0.00310
0.20000	0.09954	0.03511	0.03094	0.00344	0.00491	0.99596	0.00325
0.19327	0.09780	0.03341	0.02977	0.00316	0.00462	0.99564	0.00341
0.18580	0.09579	0.03178	0.02864	0.00290	0.00435	0.99531	0.00358
0.17855	0.09375	0.03022	0.02754	0.00264	0.00408	0.99495	0.00376
0.17152	0.09170	0.02873	0.02647	0.00240	0.00382	0.99458	0.00395
0.16471	0.08964	0.02731	0.02543	0.00217	0.00358	0.99420	0.00414
0.15811	0.08757	0.02594	0.02443	0.00195	0.00335	0.99379	0.00435
0.15172	0.08550	0.02464	0.02345	0.00175	0.00312	0.99337	0.00456
0.14554	0.08342	0.02340	0.02251	0.00155	0.00290	0.99292	0.00478
0.13957	0.08135	0.02221	0.02159	0.00136	0.00270	0.99245	0.00502
0.13381	0.07929	0.02108	0.02071	0.00117	0.00250	0.99196	0.00526
0.12824	0.07724	0.02000	0.01985	0.00100	0.00230	0.99145	0.00552
0.12286	0.07521	0.01896	0.01902	0.00084	0.00208	0.99091	0.00579
0.11768	0.07318	0.01797	0.01821	0.00068	0.00184	0.99034	0.00607
0.11268	0.07118	0.01703	0.01744	0.00053	0.00159	0.98975	0.00637
0.10786	0.06920	0.01613	0.01669	0.00039	0.00132	0.98913	0.00668
0.10323	0.06724	0.01527	0.01596	0.00025	0.00103	0.98848	0.00700
0.09876	0.06531	0.01445	0.01526	0.00012	0.00067	0.98780	0.00734
0.09446	0.06340	0.01367	0.01458	0.00000	0.00000	0.98708	0.00769
0.09033	0.06152	0.01292	0.01393	1.00000	0.00000	0.98633	0.00806
0.08635	0.05967	0.01220	0.01330	0.99988	0.00060	0.98555	0.00845
0.08253	0.05785	0.01152	0.01269	0.99975	0.00087	0.98473	0.00886
0.07886	0.05607	0.01087	0.01211	0.99961	0.00109	0.98387	0.00928
0.07534	0.05431	0.01025	0.01154	0.99947	0.00127	0.98297	0.00972
0.07195	0.05259	0.00966	0.01100	0.99932	0.00143	0.98203	0.01018
0.06870	0.05090	0.00909	0.01047	0.99916	0.00157	0.98104	0.01067
0.06558	0.04924	0.00855	0.00997	0.99900	0.00170	0.98000	0.01117
0.06259	0.04762	0.00804	0.00948	0.99883	0.00180	0.97892	0.01170
0.05973	0.04604	0.00755	0.00901	0.99864	0.00189	0.97779	0.01225
0.05698	0.04449	0.00708	0.00856	0.99845	0.00199	0.97660	0.01282
0.05434	0.04298	0.00663	0.00813	0.99825	0.00209	0.97536	0.01342
0.05181	0.04150	0.00621	0.00771	0.99805	0.00219	0.97406	0.01405

<u>x/c</u>	<u>y/c</u>	<u>x/c</u>	<u>y/c</u>	<u>x/c</u>	<u>y/c</u>	<u>x/c</u>	<u>y/c</u>
0.97269	0.01470	0.83529	0.07008	0.44582	0.13038	0.11268	0.07118
0.97127	0.01538	0.82848	0.07229	0.43391	0.13018	0.10786	0.06920
0.96978	0.01609	0.82145	0.07452	0.42207	0.12987	0.10323	0.06724
0.96822	0.01683	0.81420	0.07676	0.41032	0.12943	0.09876	0.06531
0.96659	0.01760	0.80673	0.07902	0.39867	0.12888	0.09446	0.06340
0.96489	0.01841	0.80000	0.08099	0.38714	0.12822	0.09033	0.06152
0.96311	0.01924	0.79903	0.08128	0.37572	0.12744	0.08635	0.05967
0.96125	0.02011	0.79111	0.08354	0.36445	0.12656	0.08253	0.05785
0.95930	0.02102	0.78297	0.08582	0.35331	0.12558	0.07886	0.05607
0.95727	0.02196	0.77461	0.08809	0.34234	0.12450	0.07534	0.05431
0.95514	0.02294	0.76602	0.09037	0.33152	0.12332	0.07195	0.05259
0.95292	0.02395	0.75721	0.09263	0.32088	0.12206	0.06870	0.05090
0.95061	0.02501	0.74818	0.09489	0.31042	0.12071	0.06558	0.04924
0.94819	0.02610	0.73893	0.09712	0.30015	0.11928	0.06259	0.04762
0.94566	0.02724	0.72947	0.09933	0.29008	0.11777	0.05973	0.04604
0.94302	0.02842	0.71980	0.10152	0.28020	0.11620	0.05698	0.04449
0.94027	0.02964	0.70992	0.10366	0.27053	0.11456	0.05434	0.04298
0.93741	0.03091	0.69985	0.10576	0.26107	0.11287	0.05181	0.04150
0.93442	0.03222	0.68958	0.10782	0.25182	0.11112	0.04939	0.04005
0.93130	0.03357	0.67912	0.10981	0.24279	0.10933	0.04708	0.03865
0.92805	0.03497	0.66848	0.11175	0.23398	0.10748	0.04486	0.03728
0.92466	0.03642	0.65766	0.11363	0.22539	0.10561	0.04273	0.03594
0.92114	0.03791	0.64669	0.11543	0.21703	0.10369	0.04070	0.03464
0.91747	0.03945	0.63555	0.11715	0.20889	0.10175	0.03875	0.03337
0.91365	0.04104	0.62428	0.11878	0.20097	0.09979	0.03689	0.03213
0.90967	0.04267	0.61286	0.12033	0.20000	0.09954	0.03511	0.03094
0.90554	0.04435	0.60133	0.12178	0.19327	0.09780	0.03341	0.02977
0.90124	0.04608	0.58968	0.12313	0.18580	0.09579	0.03178	0.02864
0.89677	0.04786	0.57793	0.12438	0.17855	0.09375	0.03022	0.02754
0.89214	0.04968	0.56609	0.12552	0.17152	0.09170	0.02873	0.02647
0.88732	0.05154	0.55418	0.12655	0.16471	0.08964	0.02731	0.02543
0.88232	0.05345	0.54220	0.12746	0.15811	0.08757	0.02594	0.02443
0.87714	0.05540	0.53018	0.12826	0.15172	0.08550	0.02464	0.02345
0.87176	0.05739	0.51812	0.12893	0.14554	0.08342	0.02340	0.02251
0.86619	0.05942	0.50604	0.12948	0.13957	0.08135	0.02221	0.02159
0.86043	0.06149	0.49396	0.12991	0.13381	0.07929	0.02108	0.02071
0.85446	0.06359	0.48188	0.13021	0.12824	0.07724	0.02000	0.01985
0.84828	0.06572	0.46982	0.13039	0.12286	0.07521	0.01896	0.01902
0.84189	0.06789	0.45780	0.13045	0.11768	0.07318	0.01797	0.01821

$x/c$	$y/c$	$x/c$	$y/c$	$x/c$	$y/c$	$x/c$	$y/c$
0.01703	0.01744	0.00909	0.01047	0.00436	0.00586	0.00155	0.00290
0.01613	0.01669	0.00855	0.00997	0.00404	0.00553	0.00136	0.00270
0.01527	0.01596	0.00804	0.00948	0.00373	0.00521	0.00117	0.00250
0.01445	0.01526	0.00755	0.00901	0.00344	0.00491	0.00100	0.00230
0.01367	0.01458	0.00708	0.00856	0.00316	0.00462	0.00084	0.00208
0.01292	0.01393	0.00663	0.00813	0.00290	0.00435	0.00068	0.00184
0.01220	0.01330	0.00621	0.00771	0.00264	0.00408	0.00053	0.00159
0.01152	0.01269	0.00580	0.00731	0.00240	0.00382	0.00039	0.00132
0.01087	0.01211	0.00542	0.00692	0.00217	0.00358	0.00025	0.00103
0.01025	0.01154	0.00505	0.00656	0.00195	0.00335	0.00012	0.00067
0.00966	0.01100	0.00469	0.00620	0.00175	0.00312	0.00000	0.00000

Table 4. Station 1 lower surface airfoil coordinates,  $r/R = 0.0908$

x/c	y/c	x/c	y/c	x/c	y/c	x/c	y/c
0.00000	0.00000	0.01220	-0.00581	0.07886	-0.01048	0.33152	0.02135
0.00012	-0.00060	0.01292	-0.00601	0.08253	-0.01031	0.34234	0.02273
0.00025	-0.00087	0.01367	-0.00621	0.08635	-0.01011	0.35331	0.02410
0.00039	-0.00108	0.01445	-0.00641	0.09033	-0.00987	0.36445	0.02545
0.00053	-0.00126	0.01527	-0.00662	0.09446	-0.00960	0.37572	0.02677
0.00068	-0.00142	0.01613	-0.00682	0.09876	-0.00929	0.38714	0.02807
0.00084	-0.00156	0.01703	-0.00703	0.10323	-0.00894	0.39867	0.02933
0.00100	-0.00168	0.01797	-0.00724	0.10786	-0.00855	0.41032	0.03056
0.00117	-0.00178	0.01896	-0.00745	0.11268	-0.00812	0.42207	0.03174
0.00136	-0.00186	0.02000	-0.00766	0.11768	-0.00765	0.43391	0.03287
0.00155	-0.00195	0.02108	-0.00787	0.12286	-0.00713	0.44582	0.03395
0.00175	-0.00204	0.02221	-0.00808	0.12824	-0.00656	0.45780	0.03498
0.00195	-0.00214	0.02340	-0.00829	0.13381	-0.00595	0.46982	0.03594
0.00217	-0.00224	0.02464	-0.00849	0.13957	-0.00529	0.48188	0.03685
0.00240	-0.00234	0.02594	-0.00870	0.14554	-0.00459	0.49396	0.03768
0.00264	-0.00245	0.02731	-0.00890	0.15172	-0.00383	0.50604	0.03845
0.00290	-0.00256	0.02873	-0.00909	0.15811	-0.00302	0.51812	0.03915
0.00316	-0.00267	0.03022	-0.00928	0.16471	-0.00217	0.53018	0.03977
0.00344	-0.00279	0.03178	-0.00947	0.17152	-0.00126	0.54220	0.04032
0.00373	-0.00291	0.03341	-0.00965	0.17855	-0.00030	0.55418	0.04079
0.00404	-0.00304	0.03511	-0.00982	0.18580	0.00071	0.56609	0.04119
0.00436	-0.00317	0.03689	-0.00998	0.19327	0.00178	0.57793	0.04151
0.00469	-0.00330	0.03875	-0.01014	0.20000	0.00275	0.58968	0.04175
0.00505	-0.00344	0.04070	-0.01028	0.20097	0.00289	0.60133	0.04191
0.00542	-0.00358	0.04273	-0.01041	0.20889	0.00404	0.61286	0.04200
0.00580	-0.00373	0.04486	-0.01053	0.21703	0.00523	0.62428	0.04201
0.00621	-0.00388	0.04708	-0.01063	0.22539	0.00646	0.63555	0.04195
0.00663	-0.00404	0.04939	-0.01072	0.23398	0.00772	0.64669	0.04182
0.00708	-0.00420	0.05181	-0.01080	0.24279	0.00900	0.65766	0.04162
0.00755	-0.00436	0.05434	-0.01085	0.25182	0.01032	0.66848	0.04134
0.00804	-0.00453	0.05698	-0.01089	0.26107	0.01165	0.67912	0.04101
0.00855	-0.00470	0.05973	-0.01090	0.27053	0.01301	0.68958	0.04061
0.00909	-0.00488	0.06259	-0.01090	0.28020	0.01438	0.69985	0.04016
0.00966	-0.00506	0.06558	-0.01087	0.29008	0.01577	0.70992	0.03965
0.01025	-0.00524	0.06870	-0.01081	0.30015	0.01716	0.71980	0.03909
0.01087	-0.00543	0.07195	-0.01073	0.31042	0.01856	0.72947	0.03847
0.01152	-0.00562	0.07534	-0.01062	0.32088	0.01996	0.73893	0.03782

<u>x/c</u>	<u>y/c</u>	<u>x/c</u>	<u>y/c</u>	<u>x/c</u>	<u>y/c</u>	<u>x/c</u>	<u>y/c</u>
0.74818	0.03712	0.95061	0.00914	0.99420	0.00009	0.00217	-0.00224
0.75721	0.03639	0.95292	0.00869	0.99458	0.00000	0.00240	-0.00234
0.76602	0.03562	0.95514	0.00825	0.99495	-0.00008	0.00264	-0.00245
0.77461	0.03482	0.95727	0.00783	0.99531	-0.00016	0.00290	-0.00256
0.78297	0.03399	0.95930	0.00743	0.99564	-0.00023	0.00316	-0.00267
0.79111	0.03314	0.96125	0.00703	0.99596	-0.00030	0.00344	-0.00279
0.79903	0.03227	0.96311	0.00666	0.99627	-0.00037	0.00373	-0.00291
0.80000	0.03216	0.96489	0.00630	0.99656	-0.00043	0.00404	-0.00304
0.80673	0.03139	0.96659	0.00595	0.99684	-0.00050	0.00436	-0.00317
0.81420	0.03051	0.96822	0.00562	0.99710	-0.00056	0.00469	-0.00330
0.82145	0.02962	0.96978	0.00530	0.99736	-0.00061	0.00505	-0.00344
0.82848	0.02874	0.97127	0.00499	0.99760	-0.00067	0.00542	-0.00358
0.83529	0.02786	0.97269	0.00469	0.99783	-0.00072	0.00580	-0.00373
0.84189	0.02698	0.97406	0.00441	0.99805	-0.00077	0.00621	-0.00388
0.84828	0.02611	0.97536	0.00414	0.99825	-0.00081	0.00663	-0.00404
0.85446	0.02525	0.97660	0.00388	0.99845	-0.00086	0.00708	-0.00420
0.86043	0.02439	0.97779	0.00363	0.99864	-0.00090	0.00755	-0.00436
0.86619	0.02355	0.97892	0.00339	0.99883	-0.00094	0.00804	-0.00453
0.87176	0.02272	0.98000	0.00316	0.99900	-0.00096	0.00855	-0.00470
0.87714	0.02191	0.98104	0.00294	0.99916	-0.00096	0.00909	-0.00488
0.88232	0.02110	0.98203	0.00273	0.99932	-0.00094	0.00966	-0.00506
0.88732	0.02032	0.98297	0.00253	0.99947	-0.00088	0.01025	-0.00524
0.89214	0.01955	0.98387	0.00234	0.99961	-0.00080	0.01087	-0.00543
0.89677	0.01879	0.98473	0.00215	0.99975	-0.00069	0.01152	-0.00562
0.90124	0.01805	0.98555	0.00197	0.99988	-0.00051	0.01220	-0.00581
0.90554	0.01733	0.98633	0.00180	1.00000	0.00000	0.01292	-0.00601
0.90967	0.01663	0.98708	0.00164	0.00000	0.00000	0.01367	-0.00621
0.91365	0.01594	0.98780	0.00149	0.00012	-0.00060	0.01445	-0.00641
0.91747	0.01528	0.98848	0.00134	0.00025	-0.00087	0.01527	-0.00662
0.92114	0.01463	0.98913	0.00120	0.00039	-0.00108	0.01613	-0.00682
0.92466	0.01400	0.98975	0.00106	0.00053	-0.00126	0.01703	-0.00703
0.92805	0.01338	0.99034	0.00093	0.00068	-0.00142	0.01797	-0.00724
0.93130	0.01279	0.99091	0.00081	0.00084	-0.00156	0.01896	-0.00745
0.93442	0.01222	0.99145	0.00069	0.00100	-0.00168	0.02000	-0.00766
0.93741	0.01166	0.99196	0.00058	0.00117	-0.00178	0.02108	-0.00787
0.94027	0.01112	0.99245	0.00047	0.00136	-0.00186	0.02221	-0.00808
0.94302	0.01060	0.99292	0.00037	0.00155	-0.00195	0.02340	-0.00829
0.94566	0.01010	0.99337	0.00027	0.00175	-0.00204	0.02464	-0.00849
0.94819	0.00961	0.99379	0.00018	0.00195	-0.00214	0.02594	-0.00870

<u>x/c</u>	<u>y/c</u>	<u>x/c</u>	<u>y/c</u>	<u>x/c</u>	<u>y/c</u>	<u>x/c</u>	<u>y/c</u>
0.02731	-0.00890	0.16471	-0.00217	0.55418	0.04079	0.88732	0.02032
0.02873	-0.00909	0.17152	-0.00126	0.56609	0.04119	0.89214	0.01955
0.03022	-0.00928	0.17855	-0.00030	0.57793	0.04151	0.89677	0.01879
0.03178	-0.00947	0.18580	0.00071	0.58968	0.04175	0.90124	0.01805
0.03341	-0.00965	0.19327	0.00178	0.60133	0.04191	0.90554	0.01733
0.03511	-0.00982	0.20000	0.00275	0.61286	0.04200	0.90967	0.01663
0.03689	-0.00998	0.20097	0.00289	0.62428	0.04201	0.91365	0.01594
0.03875	-0.01014	0.20889	0.00404	0.63555	0.04195	0.91747	0.01528
0.04070	-0.01028	0.21703	0.00523	0.64669	0.04182	0.92114	0.01463
0.04273	-0.01041	0.22539	0.00646	0.65766	0.04162	0.92466	0.01400
0.04486	-0.01053	0.23398	0.00772	0.66848	0.04134	0.92805	0.01338
0.04708	-0.01063	0.24279	0.00900	0.67912	0.04101	0.93130	0.01279
0.04939	-0.01072	0.25182	0.01032	0.68958	0.04061	0.93442	0.01222
0.05181	-0.01080	0.26107	0.01165	0.69985	0.04016	0.93741	0.01166
0.05434	-0.01085	0.27053	0.01301	0.70992	0.03965	0.94027	0.01112
0.05698	-0.01089	0.28020	0.01438	0.71980	0.03909	0.94302	0.01060
0.05973	-0.01090	0.29008	0.01577	0.72947	0.03847	0.94566	0.01010
0.06259	-0.01090	0.30015	0.01716	0.73893	0.03782	0.94819	0.00961
0.06558	-0.01087	0.31042	0.01856	0.74818	0.03712	0.95061	0.00914
0.06870	-0.01081	0.32088	0.01996	0.75721	0.03639	0.95292	0.00869
0.07195	-0.01073	0.33152	0.02135	0.76602	0.03562	0.95514	0.00825
0.07534	-0.01062	0.34234	0.02273	0.77461	0.03482	0.95727	0.00783
0.07886	-0.01048	0.35331	0.02410	0.78297	0.03399	0.95930	0.00743
0.08253	-0.01031	0.36445	0.02545	0.79111	0.03314	0.96125	0.00703
0.08635	-0.01011	0.37572	0.02677	0.79903	0.03227	0.96311	0.00666
0.09033	-0.00987	0.38714	0.02807	0.80000	0.03216	0.96489	0.00630
0.09446	-0.00960	0.39867	0.02933	0.80673	0.03139	0.96659	0.00595
0.09876	-0.00929	0.41032	0.03056	0.81420	0.03051	0.96822	0.00562
0.10323	-0.00894	0.42207	0.03174	0.82145	0.02962	0.96978	0.00530
0.10786	-0.00855	0.43391	0.03287	0.82848	0.02874	0.97127	0.00499
0.11268	-0.00812	0.44582	0.03395	0.83529	0.02786	0.97269	0.00469
0.11768	-0.00765	0.45780	0.03498	0.84189	0.02698	0.97406	0.00441
0.12286	-0.00713	0.46982	0.03594	0.84828	0.02611	0.97536	0.00414
0.12824	-0.00656	0.48188	0.03685	0.85446	0.02525	0.97660	0.00388
0.13381	-0.00595	0.49396	0.03768	0.86043	0.02439	0.97779	0.00363
0.13957	-0.00529	0.50604	0.03845	0.86619	0.02355	0.97892	0.00339
0.14554	-0.00459	0.51812	0.03915	0.87176	0.02272	0.98000	0.00316
0.15172	-0.00383	0.53018	0.03977	0.87714	0.02191	0.98104	0.00294
0.15811	-0.00302	0.54220	0.04032	0.88232	0.02110	0.98203	0.00273

$x/c$	$y/c$	$x/c$	$y/c$	$x/c$	$y/c$	$x/c$	$y/c$
0.98297	0.00253	0.99091	0.00081	0.99564	-0.00023	0.99845	-0.00086
0.98387	0.00234	0.99145	0.00069	0.99596	-0.00030	0.99864	-0.00090
0.98473	0.00215	0.99196	0.00058	0.99627	-0.00037	0.99883	-0.00094
0.98555	0.00197	0.99245	0.00047	0.99656	-0.00043	0.99900	-0.00096
0.98633	0.00180	0.99292	0.00037	0.99684	-0.00050	0.99916	-0.00096
0.98708	0.00164	0.99337	0.00027	0.99710	-0.00056	0.99932	-0.00094
0.98780	0.00149	0.99379	0.00018	0.99736	-0.00061	0.99947	-0.00088
0.98848	0.00134	0.99420	0.00009	0.99760	-0.00067	0.99961	-0.00080
0.98913	0.00120	0.99458	0.00000	0.99783	-0.00072	0.99975	-0.00069
0.98975	0.00106	0.99495	-0.00008	0.99805	-0.00077	0.99988	-0.00051
0.99034	0.00093	0.99531	-0.00016	0.99825	-0.00081	1.00000	0.00000

Table 5. Station 2 upper surface airfoil coordinates,  $r/R = 0.2500$

x/c	y/c	x/c	y/c	x/c	y/c	x/c	y/c
1.00000	0.00000	0.98780	0.00809	0.92114	0.03907	0.66848	0.09236
0.99988	0.00061	0.98708	0.00848	0.91747	0.04050	0.65766	0.09322
0.99975	0.00089	0.98633	0.00889	0.91365	0.04195	0.64669	0.09400
0.99961	0.00112	0.98555	0.00931	0.90967	0.04343	0.63555	0.09471
0.99947	0.00131	0.98473	0.00975	0.90554	0.04495	0.62428	0.09533
0.99932	0.00148	0.98387	0.01022	0.90124	0.04648	0.61286	0.09588
0.99916	0.00163	0.98297	0.01070	0.89677	0.04805	0.60133	0.09634
0.99900	0.00177	0.98203	0.01120	0.89214	0.04963	0.58968	0.09672
0.99883	0.00188	0.98104	0.01172	0.88732	0.05124	0.57793	0.09702
0.99864	0.00199	0.98000	0.01227	0.88232	0.05287	0.56609	0.09723
0.99845	0.00210	0.97892	0.01284	0.87714	0.05451	0.55418	0.09735
0.99825	0.00221	0.97779	0.01343	0.87176	0.05616	0.54220	0.09739
0.99805	0.00233	0.97660	0.01404	0.86619	0.05783	0.53018	0.09735
0.99783	0.00246	0.97536	0.01468	0.86043	0.05950	0.51812	0.09722
0.99760	0.00259	0.97406	0.01535	0.85446	0.06118	0.50604	0.09700
0.99736	0.00273	0.97269	0.01604	0.84828	0.06286	0.49396	0.09671
0.99710	0.00288	0.97127	0.01676	0.84189	0.06454	0.48188	0.09633
0.99684	0.00303	0.96978	0.01751	0.83529	0.06621	0.46982	0.09588
0.99656	0.00319	0.96822	0.01828	0.82848	0.06787	0.45780	0.09535
0.99627	0.00335	0.96659	0.01909	0.82145	0.06952	0.44582	0.09475
0.99596	0.00353	0.96489	0.01992	0.81420	0.07115	0.43391	0.09407
0.99564	0.00371	0.96311	0.02079	0.80673	0.07275	0.42207	0.09332
0.99531	0.00390	0.96125	0.02168	0.80000	0.07414	0.41032	0.09251
0.99495	0.00410	0.95930	0.02261	0.79903	0.07433	0.39867	0.09164
0.99458	0.00431	0.95727	0.02357	0.79111	0.07588	0.38714	0.09070
0.99420	0.00453	0.95514	0.02456	0.78297	0.07741	0.37572	0.08971
0.99379	0.00476	0.95292	0.02558	0.77461	0.07891	0.36445	0.08867
0.99337	0.00500	0.95061	0.02664	0.76602	0.08037	0.35331	0.08757
0.99292	0.00525	0.94819	0.02773	0.75721	0.08180	0.34234	0.08643
0.99245	0.00551	0.94566	0.02885	0.74818	0.08319	0.33152	0.08525
0.99196	0.00579	0.94302	0.03001	0.73893	0.08453	0.32088	0.08402
0.99145	0.00607	0.94027	0.03121	0.72947	0.08582	0.31042	0.08277
0.99091	0.00637	0.93741	0.03243	0.71980	0.08706	0.30015	0.08147
0.99034	0.00669	0.93442	0.03370	0.70992	0.08825	0.29008	0.08015
0.98975	0.00702	0.93130	0.03499	0.69985	0.08938	0.28020	0.07881
0.98913	0.00736	0.92805	0.03632	0.68958	0.09044	0.27053	0.07744
0.98848	0.00772	0.92466	0.03768	0.67912	0.09144	0.26107	0.07605

<u>x/c</u>	<u>y/c</u>	<u>x/c</u>	<u>y/c</u>	<u>x/c</u>	<u>y/c</u>	<u>x/c</u>	<u>y/c</u>
0.25182	0.07465	0.04939	0.02602	0.00580	0.00524	0.99783	0.00246
0.24279	0.07323	0.04708	0.02513	0.00542	0.00499	0.99760	0.00259
0.23398	0.07180	0.04486	0.02426	0.00505	0.00475	0.99736	0.00273
0.22539	0.07037	0.04273	0.02341	0.00469	0.00451	0.99710	0.00288
0.21703	0.06893	0.04070	0.02259	0.00436	0.00429	0.99684	0.00303
0.20889	0.06749	0.03875	0.02178	0.00404	0.00408	0.99656	0.00319
0.20097	0.06605	0.03689	0.02100	0.00373	0.00387	0.99627	0.00335
0.20000	0.06587	0.03511	0.02025	0.00344	0.00367	0.99596	0.00353
0.19327	0.06461	0.03341	0.01951	0.00316	0.00348	0.99564	0.00371
0.18580	0.06316	0.03178	0.01879	0.00290	0.00330	0.99531	0.00390
0.17855	0.06171	0.03022	0.01810	0.00264	0.00312	0.99495	0.00410
0.17152	0.06026	0.02873	0.01743	0.00240	0.00295	0.99458	0.00431
0.16471	0.05881	0.02731	0.01677	0.00217	0.00279	0.99420	0.00453
0.15811	0.05737	0.02594	0.01614	0.00195	0.00264	0.99379	0.00476
0.15172	0.05593	0.02464	0.01552	0.00175	0.00249	0.99337	0.00500
0.14554	0.05450	0.02340	0.01492	0.00155	0.00234	0.99292	0.00525
0.13957	0.05309	0.02221	0.01435	0.00136	0.00221	0.99245	0.00551
0.13381	0.05169	0.02108	0.01379	0.00117	0.00207	0.99196	0.00579
0.12824	0.05030	0.02000	0.01324	0.00100	0.00193	0.99145	0.00607
0.12286	0.04892	0.01896	0.01272	0.00084	0.00177	0.99091	0.00637
0.11768	0.04757	0.01797	0.01221	0.00068	0.00160	0.99034	0.00669
0.11268	0.04623	0.01703	0.01172	0.00053	0.00140	0.98975	0.00702
0.10786	0.04491	0.01613	0.01124	0.00039	0.00118	0.98913	0.00736
0.10323	0.04361	0.01527	0.01078	0.00025	0.00093	0.98848	0.00772
0.09876	0.04234	0.01445	0.01034	0.00012	0.00063	0.98780	0.00809
0.09446	0.04108	0.01367	0.00991	0.00000	0.00000	0.98708	0.00848
0.09033	0.03985	0.01292	0.00949	1.00000	0.00000	0.98633	0.00889
0.08635	0.03864	0.01220	0.00909	0.99988	0.00061	0.98555	0.00931
0.08253	0.03746	0.01152	0.00870	0.99975	0.00089	0.98473	0.00975
0.07886	0.03630	0.01087	0.00833	0.99961	0.00112	0.98387	0.01022
0.07534	0.03516	0.01025	0.00796	0.99947	0.00131	0.98297	0.01070
0.07195	0.03405	0.00966	0.00761	0.99932	0.00148	0.98203	0.01120
0.06870	0.03296	0.00909	0.00728	0.99916	0.00163	0.98104	0.01172
0.06558	0.03189	0.00855	0.00695	0.99900	0.00177	0.98000	0.01227
0.06259	0.03085	0.00804	0.00664	0.99883	0.00188	0.97892	0.01284
0.05973	0.02984	0.00755	0.00634	0.99864	0.00199	0.97779	0.01343
0.05698	0.02885	0.00708	0.00605	0.99845	0.00210	0.97660	0.01404
0.05434	0.02788	0.00663	0.00577	0.99825	0.00221	0.97536	0.01468
0.05181	0.02694	0.00621	0.00550	0.99805	0.00233	0.97406	0.01535

<u>x/c</u>	<u>y/c</u>	<u>x/c</u>	<u>y/c</u>	<u>x/c</u>	<u>y/c</u>	<u>x/c</u>	<u>y/c</u>
0.97269	0.01604	0.83529	0.06621	0.44582	0.09475	0.11268	0.04623
0.97127	0.01676	0.82848	0.06787	0.43391	0.09407	0.10786	0.04491
0.96978	0.01751	0.82145	0.06952	0.42207	0.09332	0.10323	0.04361
0.96822	0.01828	0.81420	0.07115	0.41032	0.09251	0.09876	0.04234
0.96659	0.01909	0.80673	0.07275	0.39867	0.09164	0.09446	0.04108
0.96489	0.01992	0.80000	0.07414	0.38714	0.09070	0.09033	0.03985
0.96311	0.02079	0.79903	0.07433	0.37572	0.08971	0.08635	0.03864
0.96125	0.02168	0.79111	0.07588	0.36445	0.08867	0.08253	0.03746
0.95930	0.02261	0.78297	0.07741	0.35331	0.08757	0.07886	0.03630
0.95727	0.02357	0.77461	0.07891	0.34234	0.08643	0.07534	0.03516
0.95514	0.02456	0.76602	0.08037	0.33152	0.08525	0.07195	0.03405
0.95292	0.02558	0.75721	0.08180	0.32088	0.08402	0.06870	0.03296
0.95061	0.02664	0.74818	0.08319	0.31042	0.08277	0.06558	0.03189
0.94819	0.02773	0.73893	0.08453	0.30015	0.08147	0.06259	0.03085
0.94566	0.02885	0.72947	0.08582	0.29008	0.08015	0.05973	0.02984
0.94302	0.03001	0.71980	0.08706	0.28020	0.07881	0.05698	0.02885
0.94027	0.03121	0.70992	0.08825	0.27053	0.07744	0.05434	0.02788
0.93741	0.03243	0.69985	0.08938	0.26107	0.07605	0.05181	0.02694
0.93442	0.03370	0.68958	0.09044	0.25182	0.07465	0.04939	0.02602
0.93130	0.03499	0.67912	0.09144	0.24279	0.07323	0.04708	0.02513
0.92805	0.03632	0.66848	0.09236	0.23398	0.07180	0.04486	0.02426
0.92466	0.03768	0.65766	0.09322	0.22539	0.07037	0.04273	0.02341
0.92114	0.03907	0.64669	0.09400	0.21703	0.06893	0.04070	0.02259
0.91747	0.04050	0.63555	0.09471	0.20889	0.06749	0.03875	0.02178
0.91365	0.04195	0.62428	0.09533	0.20097	0.06605	0.03689	0.02100
0.90967	0.04343	0.61286	0.09588	0.20000	0.06587	0.03511	0.02025
0.90554	0.04495	0.60133	0.09634	0.19327	0.06461	0.03341	0.01951
0.90124	0.04648	0.58968	0.09672	0.18580	0.06316	0.03178	0.01879
0.89677	0.04805	0.57793	0.09702	0.17855	0.06171	0.03022	0.01810
0.89214	0.04963	0.56609	0.09723	0.17152	0.06026	0.02873	0.01743
0.88732	0.05124	0.55418	0.09735	0.16471	0.05881	0.02731	0.01677
0.88232	0.05287	0.54220	0.09739	0.15811	0.05737	0.02594	0.01614
0.87714	0.05451	0.53018	0.09735	0.15172	0.05593	0.02464	0.01552
0.87176	0.05616	0.51812	0.09722	0.14554	0.05450	0.02340	0.01492
0.86619	0.05783	0.50604	0.09700	0.13957	0.05309	0.02221	0.01435
0.86043	0.05950	0.49396	0.09671	0.13381	0.05169	0.02108	0.01379
0.85446	0.06118	0.48188	0.09633	0.12824	0.05030	0.02000	0.01324
0.84828	0.06286	0.46982	0.09588	0.12286	0.04892	0.01896	0.01272
0.84189	0.06454	0.45780	0.09535	0.11768	0.04757	0.01797	0.01221

$x/c$	$y/c$	$x/c$	$y/c$	$x/c$	$y/c$	$x/c$	$y/c$
0.01703	0.01172	0.00909	0.00728	0.00436	0.00429	0.00155	0.00234
0.01613	0.01124	0.00855	0.00695	0.00404	0.00408	0.00136	0.00221
0.01527	0.01078	0.00804	0.00664	0.00373	0.00387	0.00117	0.00207
0.01445	0.01034	0.00755	0.00634	0.00344	0.00367	0.00100	0.00193
0.01367	0.00991	0.00708	0.00605	0.00316	0.00348	0.00084	0.00177
0.01292	0.00949	0.00663	0.00577	0.00290	0.00330	0.00068	0.00160
0.01220	0.00909	0.00621	0.00550	0.00264	0.00312	0.00053	0.00140
0.01152	0.00870	0.00580	0.00524	0.00240	0.00295	0.00039	0.00118
0.01087	0.00833	0.00542	0.00499	0.00217	0.00279	0.00025	0.00093
0.01025	0.00796	0.00505	0.00475	0.00195	0.00264	0.00012	0.00063
0.00966	0.00761	0.00469	0.00451	0.00175	0.00249	0.00000	0.00000

Table 6. Station 2 lower surface airfoil coordinates,  $r/R = 0.2500$

$x/c$	$y/c$	$x/c$	$y/c$	$x/c$	$y/c$	$x/c$	$y/c$
0.00000	0.00000	0.01220	-0.00411	0.07886	-0.00524	0.33152	0.02435
0.00012	-0.00058	0.01292	-0.00422	0.08253	-0.00502	0.34234	0.02568
0.00025	-0.00083	0.01367	-0.00433	0.08635	-0.00478	0.35331	0.02702
0.00039	-0.00102	0.01445	-0.00445	0.09033	-0.00451	0.36445	0.02835
0.00053	-0.00118	0.01527	-0.00456	0.09446	-0.00421	0.37572	0.02967
0.00068	-0.00132	0.01613	-0.00467	0.09876	-0.00389	0.38714	0.03098
0.00084	-0.00143	0.01703	-0.00478	0.10323	-0.00353	0.39867	0.03228
0.00100	-0.00152	0.01797	-0.00490	0.10786	-0.00314	0.41032	0.03355
0.00117	-0.00159	0.01896	-0.00501	0.11268	-0.00272	0.42207	0.03480
0.00136	-0.00165	0.02000	-0.00512	0.11768	-0.00226	0.43391	0.03603
0.00155	-0.00171	0.02108	-0.00522	0.12286	-0.00176	0.44582	0.03722
0.00175	-0.00177	0.02221	-0.00533	0.12824	-0.00123	0.45780	0.03837
0.00195	-0.00184	0.02340	-0.00543	0.13381	-0.00066	0.46982	0.03949
0.00217	-0.00190	0.02464	-0.00553	0.13957	-0.00006	0.48188	0.04056
0.00240	-0.00197	0.02594	-0.00562	0.14554	0.00059	0.49396	0.04158
0.00264	-0.00204	0.02731	-0.00571	0.15172	0.00128	0.50604	0.04255
0.00290	-0.00211	0.02873	-0.00580	0.15811	0.00201	0.51812	0.04347
0.00316	-0.00219	0.03022	-0.00588	0.16471	0.00279	0.53018	0.04433
0.00344	-0.00226	0.03178	-0.00596	0.17152	0.00361	0.54220	0.04513
0.00373	-0.00234	0.03341	-0.00602	0.17855	0.00447	0.55418	0.04586
0.00404	-0.00242	0.03511	-0.00609	0.18580	0.00538	0.56609	0.04653
0.00436	-0.00251	0.03689	-0.00614	0.19327	0.00634	0.57793	0.04714
0.00469	-0.00259	0.03875	-0.00619	0.20000	0.00721	0.58968	0.04767
0.00505	-0.00268	0.04070	-0.00622	0.20097	0.00734	0.60133	0.04813
0.00542	-0.00277	0.04273	-0.00625	0.20889	0.00838	0.61286	0.04853
0.00580	-0.00286	0.04486	-0.00626	0.21703	0.00945	0.62428	0.04884
0.00621	-0.00296	0.04708	-0.00626	0.22539	0.01056	0.63555	0.04909
0.00663	-0.00305	0.04939	-0.00625	0.23398	0.01169	0.64669	0.04926
0.00708	-0.00315	0.05181	-0.00623	0.24279	0.01286	0.65766	0.04936
0.00755	-0.00325	0.05434	-0.00619	0.25182	0.01406	0.66848	0.04939
0.00804	-0.00335	0.05698	-0.00614	0.26107	0.01528	0.67912	0.04935
0.00855	-0.00346	0.05973	-0.00607	0.27053	0.01652	0.68958	0.04923
0.00909	-0.00356	0.06259	-0.00598	0.28020	0.01779	0.69985	0.04905
0.00966	-0.00367	0.06558	-0.00588	0.29008	0.01907	0.70992	0.04880
0.01025	-0.00378	0.06870	-0.00575	0.30015	0.02038	0.71980	0.04848
0.01087	-0.00389	0.07195	-0.00560	0.31042	0.02169	0.72947	0.04810
0.01152	-0.00400	0.07534	-0.00543	0.32088	0.02302	0.73893	0.04766

<u>x/c</u>	<u>y/c</u>	<u>x/c</u>	<u>y/c</u>	<u>x/c</u>	<u>y/c</u>	<u>x/c</u>	<u>y/c</u>
0.74818	0.04716	0.95061	0.01542	0.99420	0.00103	0.00217	-0.00190
0.75721	0.04661	0.95292	0.01475	0.99458	0.00088	0.00240	-0.00197
0.76602	0.04600	0.95514	0.01410	0.99495	0.00074	0.00264	-0.00204
0.77461	0.04534	0.95727	0.01347	0.99531	0.00061	0.00290	-0.00211
0.78297	0.04464	0.95930	0.01285	0.99564	0.00048	0.00316	-0.00219
0.79111	0.04389	0.96125	0.01226	0.99596	0.00036	0.00344	-0.00226
0.79903	0.04310	0.96311	0.01169	0.99627	0.00024	0.00373	-0.00234
0.80000	0.04300	0.96489	0.01113	0.99656	0.00013	0.00404	-0.00242
0.80673	0.04228	0.96659	0.01059	0.99684	0.00002	0.00436	-0.00251
0.81420	0.04144	0.96822	0.01008	0.99710	-0.00008	0.00469	-0.00259
0.82145	0.04058	0.96978	0.00957	0.99736	-0.00017	0.00505	-0.00268
0.82848	0.03969	0.97127	0.00909	0.99760	-0.00027	0.00542	-0.00277
0.83529	0.03879	0.97269	0.00862	0.99783	-0.00036	0.00580	-0.00286
0.84189	0.03788	0.97406	0.00817	0.99805	-0.00044	0.00621	-0.00296
0.84828	0.03696	0.97536	0.00774	0.99825	-0.00052	0.00663	-0.00305
0.85446	0.03603	0.97660	0.00732	0.99845	-0.00060	0.00708	-0.00315
0.86043	0.03509	0.97779	0.00692	0.99864	-0.00067	0.00755	-0.00325
0.86619	0.03414	0.97892	0.00653	0.99883	-0.00075	0.00804	-0.00335
0.87176	0.03320	0.98000	0.00616	0.99900	-0.00080	0.00855	-0.00346
0.87714	0.03225	0.98104	0.00580	0.99916	-0.00082	0.00909	-0.00356
0.88232	0.03131	0.98203	0.00546	0.99932	-0.00082	0.00966	-0.00367
0.88732	0.03036	0.98297	0.00513	0.99947	-0.00080	0.01025	-0.00378
0.89214	0.02943	0.98387	0.00481	0.99961	-0.00074	0.01087	-0.00389
0.89677	0.02849	0.98473	0.00450	0.99975	-0.00065	0.01152	-0.00400
0.90124	0.02757	0.98555	0.00421	0.99988	-0.00049	0.01220	-0.00411
0.90554	0.02666	0.98633	0.00393	1.00000	0.00000	0.01292	-0.00422
0.90967	0.02575	0.98708	0.00366	0.00000	0.00000	0.01367	-0.00433
0.91365	0.02486	0.98780	0.00340	0.00012	-0.00058	0.01445	-0.00445
0.91747	0.02399	0.98848	0.00315	0.00025	-0.00083	0.01527	-0.00456
0.92114	0.02312	0.98913	0.00292	0.00039	-0.00102	0.01613	-0.00467
0.92466	0.02227	0.98975	0.00269	0.00053	-0.00118	0.01703	-0.00478
0.92805	0.02144	0.99034	0.00247	0.00068	-0.00132	0.01797	-0.00490
0.93130	0.02063	0.99091	0.00226	0.00084	-0.00143	0.01896	-0.00501
0.93442	0.01983	0.99145	0.00206	0.00100	-0.00152	0.02000	-0.00512
0.93741	0.01904	0.99196	0.00187	0.00117	-0.00159	0.02108	-0.00522
0.94027	0.01828	0.99245	0.00169	0.00136	-0.00165	0.02221	-0.00533
0.94302	0.01754	0.99292	0.00151	0.00155	-0.00171	0.02340	-0.00543
0.94566	0.01681	0.99337	0.00134	0.00175	-0.00177	0.02464	-0.00553
0.94819	0.01610	0.99379	0.00118	0.00195	-0.00184	0.02594	-0.00562

<u>x/c</u>	<u>y/c</u>	<u>x/c</u>	<u>y/c</u>	<u>x/c</u>	<u>y/c</u>	<u>x/c</u>	<u>y/c</u>
0.02731	-0.00571	0.16471	0.00279	0.55418	0.04586	0.88732	0.03036
0.02873	-0.00580	0.17152	0.00361	0.56609	0.04653	0.89214	0.02943
0.03022	-0.00588	0.17855	0.00447	0.57793	0.04714	0.89677	0.02849
0.03178	-0.00596	0.18580	0.00538	0.58968	0.04767	0.90124	0.02757
0.03341	-0.00602	0.19327	0.00634	0.60133	0.04813	0.90554	0.02666
0.03511	-0.00609	0.20000	0.00721	0.61286	0.04853	0.90967	0.02575
0.03689	-0.00614	0.20097	0.00734	0.62428	0.04884	0.91365	0.02486
0.03875	-0.00619	0.20889	0.00838	0.63555	0.04909	0.91747	0.02399
0.04070	-0.00622	0.21703	0.00945	0.64669	0.04926	0.92114	0.02312
0.04273	-0.00625	0.22539	0.01056	0.65766	0.04936	0.92466	0.02227
0.04486	-0.00626	0.23398	0.01169	0.66848	0.04939	0.92805	0.02144
0.04708	-0.00626	0.24279	0.01286	0.67912	0.04935	0.93130	0.02063
0.04939	-0.00625	0.25182	0.01406	0.68958	0.04923	0.93442	0.01983
0.05181	-0.00623	0.26107	0.01528	0.69985	0.04905	0.93741	0.01904
0.05434	-0.00619	0.27053	0.01652	0.70992	0.04880	0.94027	0.01828
0.05698	-0.00614	0.28020	0.01779	0.71980	0.04848	0.94302	0.01754
0.05973	-0.00607	0.29008	0.01907	0.72947	0.04810	0.94566	0.01681
0.06259	-0.00598	0.30015	0.02038	0.73893	0.04766	0.94819	0.01610
0.06558	-0.00588	0.31042	0.02169	0.74818	0.04716	0.95061	0.01542
0.06870	-0.00575	0.32088	0.02302	0.75721	0.04661	0.95292	0.01475
0.07195	-0.00560	0.33152	0.02435	0.76602	0.04600	0.95514	0.01410
0.07534	-0.00543	0.34234	0.02568	0.77461	0.04534	0.95727	0.01347
0.07886	-0.00524	0.35331	0.02702	0.78297	0.04464	0.95930	0.01285
0.08253	-0.00502	0.36445	0.02835	0.79111	0.04389	0.96125	0.01226
0.08635	-0.00478	0.37572	0.02967	0.79903	0.04310	0.96311	0.01169
0.09033	-0.00451	0.38714	0.03098	0.80000	0.04300	0.96489	0.01113
0.09446	-0.00421	0.39867	0.03228	0.80673	0.04228	0.96659	0.01059
0.09876	-0.00389	0.41032	0.03355	0.81420	0.04144	0.96822	0.01008
0.10323	-0.00353	0.42207	0.03480	0.82145	0.04058	0.96978	0.00957
0.10786	-0.00314	0.43391	0.03603	0.82848	0.03969	0.97127	0.00909
0.11268	-0.00272	0.44582	0.03722	0.83529	0.03879	0.97269	0.00862
0.11768	-0.00226	0.45780	0.03837	0.84189	0.03788	0.97406	0.00817
0.12286	-0.00176	0.46982	0.03949	0.84828	0.03696	0.97536	0.00774
0.12824	-0.00123	0.48188	0.04056	0.85446	0.03603	0.97660	0.00732
0.13381	-0.00066	0.49396	0.04158	0.86043	0.03509	0.97779	0.00692
0.13957	-0.00006	0.50604	0.04255	0.86619	0.03414	0.97892	0.00653
0.14554	0.00059	0.51812	0.04347	0.87176	0.03320	0.98000	0.00616
0.15172	0.00128	0.53018	0.04433	0.87714	0.03225	0.98104	0.00580
0.15811	0.00201	0.54220	0.04513	0.88232	0.03131	0.98203	0.00546

<u>x/c</u>	<u>y/c</u>	<u>x/c</u>	<u>y/c</u>	<u>x/c</u>	<u>y/c</u>	<u>x/c</u>	<u>y/c</u>
0.98297	0.00513	0.99091	0.00226	0.99564	0.00048	0.99845	-0.00060
0.98387	0.00481	0.99145	0.00206	0.99596	0.00036	0.99864	-0.00067
0.98473	0.00450	0.99196	0.00187	0.99627	0.00024	0.99883	-0.00075
0.98555	0.00421	0.99245	0.00169	0.99656	0.00013	0.99900	-0.00080
0.98633	0.00393	0.99292	0.00151	0.99684	0.00002	0.99916	-0.00082
0.98708	0.00366	0.99337	0.00134	0.99710	-0.00008	0.99932	-0.00082
0.98780	0.00340	0.99379	0.00118	0.99736	-0.00017	0.99947	-0.00080
0.98848	0.00315	0.99420	0.00103	0.99760	-0.00027	0.99961	-0.00074
0.98913	0.00292	0.99458	0.00088	0.99783	-0.00036	0.99975	-0.00065
0.98975	0.00269	0.99495	0.00074	0.99805	-0.00044	0.99988	-0.00049
0.99034	0.00247	0.99531	0.00061	0.99825	-0.00052	1.00000	0.00000

Table 7. Station 3 upper surface airfoil coordinates,  $r/R = 0.5000$

$x/c$	$y/c$	$x/c$	$y/c$	$x/c$	$y/c$	$x/c$	$y/c$
1.00000	0.00000	0.98780	0.00403	0.92114	0.01834	0.66848	0.05567
0.99988	0.00057	0.98708	0.00419	0.91747	0.01907	0.65766	0.05677
0.99975	0.00080	0.98633	0.00436	0.91365	0.01983	0.64669	0.05784
0.99961	0.00098	0.98555	0.00454	0.90967	0.02061	0.63555	0.05889
0.99947	0.00113	0.98473	0.00473	0.90554	0.02141	0.62428	0.05990
0.99932	0.00125	0.98387	0.00492	0.90124	0.02223	0.61286	0.06087
0.99916	0.00134	0.98297	0.00513	0.89677	0.02309	0.60133	0.06181
0.99900	0.00142	0.98203	0.00534	0.89214	0.02396	0.58968	0.06271
0.99883	0.00148	0.98104	0.00557	0.88732	0.02486	0.57793	0.06356
0.99864	0.00152	0.98000	0.00580	0.88232	0.02577	0.56609	0.06436
0.99845	0.00156	0.97892	0.00605	0.87714	0.02672	0.55418	0.06511
0.99825	0.00161	0.97779	0.00630	0.87176	0.02768	0.54220	0.06580
0.99805	0.00166	0.97660	0.00657	0.86619	0.02867	0.53018	0.06644
0.99783	0.00171	0.97536	0.00684	0.86043	0.02967	0.51812	0.06702
0.99760	0.00176	0.97406	0.00714	0.85446	0.03069	0.50604	0.06754
0.99736	0.00182	0.97269	0.00744	0.84828	0.03174	0.49396	0.06799
0.99710	0.00188	0.97127	0.00775	0.84189	0.03280	0.48188	0.06837
0.99684	0.00194	0.96978	0.00809	0.83529	0.03387	0.46982	0.06869
0.99656	0.00200	0.96822	0.00843	0.82848	0.03496	0.45780	0.06894
0.99627	0.00207	0.96659	0.00879	0.82145	0.03606	0.44582	0.06911
0.99596	0.00214	0.96489	0.00916	0.81420	0.03717	0.43391	0.06922
0.99564	0.00222	0.96311	0.00955	0.80673	0.03829	0.42207	0.06926
0.99531	0.00230	0.96125	0.00996	0.80000	0.03927	0.41032	0.06922
0.99495	0.00238	0.95930	0.01038	0.79903	0.03941	0.39867	0.06911
0.99458	0.00246	0.95727	0.01082	0.79111	0.04055	0.38714	0.06893
0.99420	0.00255	0.95514	0.01128	0.78297	0.04170	0.37572	0.06869
0.99379	0.00265	0.95292	0.01176	0.77461	0.04286	0.36445	0.06837
0.99337	0.00275	0.95061	0.01225	0.76602	0.04402	0.35331	0.06798
0.99292	0.00285	0.94819	0.01276	0.75721	0.04520	0.34234	0.06753
0.99245	0.00296	0.94566	0.01330	0.74818	0.04638	0.33152	0.06702
0.99196	0.00307	0.94302	0.01385	0.73893	0.04756	0.32088	0.06644
0.99145	0.00319	0.94027	0.01443	0.72947	0.04875	0.31042	0.06580
0.99091	0.00331	0.93741	0.01502	0.71980	0.04992	0.30015	0.06511
0.99034	0.00344	0.93442	0.01564	0.70992	0.05110	0.29008	0.06436
0.98975	0.00358	0.93130	0.01628	0.69985	0.05226	0.28020	0.06356
0.98913	0.00372	0.92805	0.01695	0.68958	0.05342	0.27053	0.06271
0.98848	0.00387	0.92466	0.01763	0.67912	0.05455	0.26107	0.06182

x/c	y/c	x/c	y/c	x/c	y/c	x/c	y/c
0.25182	0.06089	0.04939	0.01949	0.00580	0.00356	0.99783	0.00171
0.24279	0.05991	0.04708	0.01871	0.00542	0.00341	0.99760	0.00176
0.23398	0.05890	0.04486	0.01797	0.00505	0.00326	0.99736	0.00182
0.22539	0.05786	0.04273	0.01725	0.00469	0.00311	0.99710	0.00188
0.21703	0.05679	0.04070	0.01655	0.00436	0.00298	0.99684	0.00194
0.20889	0.05570	0.03875	0.01588	0.00404	0.00285	0.99656	0.00200
0.20097	0.05458	0.03689	0.01523	0.00373	0.00272	0.99627	0.00207
0.20000	0.05444	0.03511	0.01460	0.00344	0.00261	0.99596	0.00214
0.19327	0.05344	0.03341	0.01400	0.00316	0.00249	0.99564	0.00222
0.18580	0.05228	0.03178	0.01342	0.00290	0.00239	0.99531	0.00230
0.17855	0.05109	0.03022	0.01286	0.00264	0.00228	0.99495	0.00238
0.17152	0.04988	0.02873	0.01232	0.00240	0.00219	0.99458	0.00246
0.16471	0.04866	0.02731	0.01180	0.00217	0.00209	0.99420	0.00255
0.15811	0.04744	0.02594	0.01130	0.00195	0.00200	0.99379	0.00265
0.15172	0.04620	0.02464	0.01082	0.00175	0.00192	0.99337	0.00275
0.14554	0.04496	0.02340	0.01036	0.00155	0.00184	0.99292	0.00285
0.13957	0.04372	0.02221	0.00992	0.00136	0.00176	0.99245	0.00296
0.13381	0.04248	0.02108	0.00949	0.00117	0.00168	0.99196	0.00307
0.12824	0.04125	0.02000	0.00909	0.00100	0.00160	0.99145	0.00319
0.12286	0.04002	0.01896	0.00869	0.00084	0.00149	0.99091	0.00331
0.11768	0.03880	0.01797	0.00832	0.00068	0.00137	0.99034	0.00344
0.11268	0.03760	0.01703	0.00796	0.00053	0.00122	0.98975	0.00358
0.10786	0.03641	0.01613	0.00761	0.00039	0.00105	0.98913	0.00372
0.10323	0.03524	0.01527	0.00728	0.00025	0.00085	0.98848	0.00387
0.09876	0.03408	0.01445	0.00697	0.00012	0.00059	0.98780	0.00403
0.09446	0.03294	0.01367	0.00666	0.00000	0.00000	0.98708	0.00419
0.09033	0.03182	0.01292	0.00637	1.00000	0.00000	0.98633	0.00436
0.08635	0.03073	0.01220	0.00609	0.99988	0.00057	0.98555	0.00454
0.08253	0.02966	0.01152	0.00583	0.99975	0.00080	0.98473	0.00473
0.07886	0.02861	0.01087	0.00557	0.99961	0.00098	0.98387	0.00492
0.07534	0.02758	0.01025	0.00533	0.99947	0.00113	0.98297	0.00513
0.07195	0.02658	0.00966	0.00509	0.99932	0.00125	0.98203	0.00534
0.06870	0.02560	0.00909	0.00487	0.99916	0.00134	0.98104	0.00557
0.06558	0.02465	0.00855	0.00466	0.99900	0.00142	0.98000	0.00580
0.06259	0.02373	0.00804	0.00445	0.99883	0.00148	0.97892	0.00605
0.05973	0.02283	0.00755	0.00426	0.99864	0.00152	0.97779	0.00630
0.05698	0.02195	0.00708	0.00407	0.99845	0.00156	0.97660	0.00657
0.05434	0.02111	0.00663	0.00389	0.99825	0.00161	0.97536	0.00684
0.05181	0.02028	0.00621	0.00372	0.99805	0.00166	0.97406	0.00714

<u>x/c</u>	<u>y/c</u>	<u>x/c</u>	<u>y/c</u>	<u>x/c</u>	<u>y/c</u>	<u>x/c</u>	<u>y/c</u>
0.97269	0.00744	0.83529	0.03387	0.44582	0.06911	0.11268	0.03760
0.97127	0.00775	0.82848	0.03496	0.43391	0.06922	0.10786	0.03641
0.96978	0.00809	0.82145	0.03606	0.42207	0.06926	0.10323	0.03524
0.96822	0.00843	0.81420	0.03717	0.41032	0.06922	0.09876	0.03408
0.96659	0.00879	0.80673	0.03829	0.39867	0.06911	0.09446	0.03294
0.96489	0.00916	0.80000	0.03927	0.38714	0.06893	0.09033	0.03182
0.96311	0.00955	0.79903	0.03941	0.37572	0.06869	0.08635	0.03073
0.96125	0.00996	0.79111	0.04055	0.36445	0.06837	0.08253	0.02966
0.95930	0.01038	0.78297	0.04170	0.35331	0.06798	0.07886	0.02861
0.95727	0.01082	0.77461	0.04286	0.34234	0.06753	0.07534	0.02758
0.95514	0.01128	0.76602	0.04402	0.33152	0.06702	0.07195	0.02658
0.95292	0.01176	0.75721	0.04520	0.32088	0.06644	0.06870	0.02560
0.95061	0.01225	0.74818	0.04638	0.31042	0.06580	0.06558	0.02465
0.94819	0.01276	0.73893	0.04756	0.30015	0.06511	0.06259	0.02373
0.94566	0.01330	0.72947	0.04875	0.29008	0.06436	0.05973	0.02283
0.94302	0.01385	0.71980	0.04992	0.28020	0.06356	0.05698	0.02195
0.94027	0.01443	0.70992	0.05110	0.27053	0.06271	0.05434	0.02111
0.93741	0.01502	0.69985	0.05226	0.26107	0.06182	0.05181	0.02028
0.93442	0.01564	0.68958	0.05342	0.25182	0.06089	0.04939	0.01949
0.93130	0.01628	0.67912	0.05455	0.24279	0.05991	0.04708	0.01871
0.92805	0.01695	0.66848	0.05567	0.23398	0.05890	0.04486	0.01797
0.92466	0.01763	0.65766	0.05677	0.22539	0.05786	0.04273	0.01725
0.92114	0.01834	0.64669	0.05784	0.21703	0.05679	0.04070	0.01655
0.91747	0.01907	0.63555	0.05889	0.20889	0.05570	0.03875	0.01588
0.91365	0.01983	0.62428	0.05990	0.20097	0.05458	0.03689	0.01523
0.90967	0.02061	0.61286	0.06087	0.20000	0.05444	0.03511	0.01460
0.90554	0.02141	0.60133	0.06181	0.19327	0.05344	0.03341	0.01400
0.90124	0.02223	0.58968	0.06271	0.18580	0.05228	0.03178	0.01342
0.89677	0.02309	0.57793	0.06356	0.17855	0.05109	0.03022	0.01286
0.89214	0.02396	0.56609	0.06436	0.17152	0.04988	0.02873	0.01232
0.88732	0.02486	0.55418	0.06511	0.16471	0.04866	0.02731	0.01180
0.88232	0.02577	0.54220	0.06580	0.15811	0.04744	0.02594	0.01130
0.87714	0.02672	0.53018	0.06644	0.15172	0.04620	0.02464	0.01082
0.87176	0.02768	0.51812	0.06702	0.14554	0.04496	0.02340	0.01036
0.86619	0.02867	0.50604	0.06754	0.13957	0.04372	0.02221	0.00992
0.86043	0.02967	0.49396	0.06799	0.13381	0.04248	0.02108	0.00949
0.85446	0.03069	0.48188	0.06837	0.12824	0.04125	0.02000	0.00909
0.84828	0.03174	0.46982	0.06869	0.12286	0.04002	0.01896	0.00869
0.84189	0.03280	0.45780	0.06894	0.11768	0.03880	0.01797	0.00832

$x/c$	$y/c$	$x/c$	$y/c$	$x/c$	$y/c$	$x/c$	$y/c$
0.01703	0.00796	0.00909	0.00487	0.00436	0.00298	0.00155	0.00184
0.01613	0.00761	0.00855	0.00466	0.00404	0.00285	0.00136	0.00176
0.01527	0.00728	0.00804	0.00445	0.00373	0.00272	0.00117	0.00168
0.01445	0.00697	0.00755	0.00426	0.00344	0.00261	0.00100	0.00160
0.01367	0.00666	0.00708	0.00407	0.00316	0.00249	0.00084	0.00149
0.01292	0.00637	0.00663	0.00389	0.00290	0.00239	0.00068	0.00137
0.01220	0.00609	0.00621	0.00372	0.00264	0.00228	0.00053	0.00122
0.01152	0.00583	0.00580	0.00356	0.00240	0.00219	0.00039	0.00105
0.01087	0.00557	0.00542	0.00341	0.00217	0.00209	0.00025	0.00085
0.01025	0.00533	0.00505	0.00326	0.00195	0.00200	0.00012	0.00059
0.00966	0.00509	0.00469	0.00311	0.00175	0.00192	0.00000	0.00000

Table 8. Station 3 lower surface airfoil coordinates,  $r/R = 0.5000$

$x/c$	$y/c$	$x/c$	$y/c$	$x/c$	$y/c$	$x/c$	$y/c$
0.00000	0.00000	0.01220	0.00278	0.07886	0.02138	0.33152	0.05702
0.00012	-0.00050	0.01292	0.00301	0.08253	0.02226	0.34234	0.05753
0.00025	-0.00066	0.01367	0.00325	0.08635	0.02317	0.35331	0.05798
0.00039	-0.00076	0.01445	0.00350	0.09033	0.02410	0.36445	0.05837
0.00053	-0.00083	0.01527	0.00375	0.09446	0.02504	0.37572	0.05869
0.00068	-0.00086	0.01613	0.00403	0.09876	0.02601	0.38714	0.05893
0.00084	-0.00087	0.01703	0.00431	0.10323	0.02700	0.39867	0.05911
0.00100	-0.00085	0.01797	0.00460	0.10786	0.02801	0.41032	0.05922
0.00117	-0.00081	0.01896	0.00491	0.11268	0.02904	0.42207	0.05926
0.00136	-0.00075	0.02000	0.00523	0.11768	0.03008	0.43391	0.05922
0.00155	-0.00069	0.02108	0.00556	0.12286	0.03114	0.44582	0.05911
0.00175	-0.00062	0.02221	0.00591	0.12824	0.03222	0.45780	0.05894
0.00195	-0.00055	0.02340	0.00627	0.13381	0.03330	0.46982	0.05869
0.00217	-0.00048	0.02464	0.00665	0.13957	0.03440	0.48188	0.05837
0.00240	-0.00040	0.02594	0.00704	0.14554	0.03552	0.49396	0.05799
0.00264	-0.00032	0.02731	0.00745	0.15172	0.03664	0.50604	0.05754
0.00290	-0.00024	0.02873	0.00788	0.15811	0.03777	0.51812	0.05702
0.00316	-0.00015	0.03022	0.00832	0.16471	0.03890	0.53018	0.05644
0.00344	-0.00006	0.03178	0.00878	0.17152	0.04004	0.54220	0.05580
0.00373	0.00004	0.03341	0.00926	0.17855	0.04118	0.55418	0.05511
0.00404	0.00014	0.03511	0.00975	0.18580	0.04231	0.56609	0.05436
0.00436	0.00024	0.03689	0.01027	0.19327	0.04345	0.57793	0.05356
0.00469	0.00035	0.03875	0.01080	0.20000	0.04444	0.58968	0.05271
0.00505	0.00047	0.04070	0.01136	0.20097	0.04458	0.60133	0.05181
0.00542	0.00059	0.04273	0.01193	0.20889	0.04570	0.61286	0.05087
0.00580	0.00072	0.04486	0.01253	0.21703	0.04679	0.62428	0.04990
0.00621	0.00085	0.04708	0.01314	0.22539	0.04786	0.63555	0.04889
0.00663	0.00099	0.04939	0.01378	0.23398	0.04890	0.64669	0.04784
0.00708	0.00113	0.05181	0.01444	0.24279	0.04991	0.65766	0.04677
0.00755	0.00129	0.05434	0.01512	0.25182	0.05089	0.66848	0.04567
0.00804	0.00145	0.05698	0.01582	0.26107	0.05182	0.67912	0.04455
0.00855	0.00161	0.05973	0.01655	0.27053	0.05271	0.68958	0.04342
0.00909	0.00179	0.06259	0.01730	0.28020	0.05356	0.69985	0.04226
0.00966	0.00197	0.06558	0.01807	0.29008	0.05436	0.70992	0.04110
0.01025	0.00216	0.06870	0.01886	0.30015	0.05511	0.71980	0.03992
0.01087	0.00236	0.07195	0.01968	0.31042	0.05580	0.72947	0.03875
0.01152	0.00257	0.07534	0.02052	0.32088	0.05644	0.73893	0.03756

<u>x/c</u>	<u>y/c</u>	<u>x/c</u>	<u>y/c</u>	<u>x/c</u>	<u>y/c</u>	<u>x/c</u>	<u>y/c</u>
0.74818	0.03638	0.95061	0.00654	0.99420	-0.00029	0.00217	-0.00048
0.75721	0.03520	0.95292	0.00618	0.99458	-0.00035	0.00240	-0.00040
0.76602	0.03402	0.95514	0.00584	0.99495	-0.00041	0.00264	-0.00032
0.77461	0.03286	0.95727	0.00550	0.99531	-0.00046	0.00290	-0.00024
0.78297	0.03170	0.95930	0.00519	0.99564	-0.00052	0.00316	-0.00015
0.79111	0.03055	0.96125	0.00488	0.99596	-0.00057	0.00344	-0.00006
0.79903	0.02941	0.96311	0.00459	0.99627	-0.00061	0.00373	0.00004
0.80000	0.02927	0.96489	0.00431	0.99656	-0.00066	0.00404	0.00014
0.80673	0.02830	0.96659	0.00405	0.99684	-0.00070	0.00436	0.00024
0.81420	0.02721	0.96822	0.00379	0.99710	-0.00075	0.00469	0.00035
0.82145	0.02615	0.96978	0.00355	0.99736	-0.00079	0.00505	0.00047
0.82848	0.02511	0.97127	0.00331	0.99760	-0.00082	0.00542	0.00059
0.83529	0.02411	0.97269	0.00309	0.99783	-0.00086	0.00580	0.00072
0.84189	0.02313	0.97406	0.00288	0.99805	-0.00090	0.00621	0.00085
0.84828	0.02218	0.97536	0.00267	0.99825	-0.00093	0.00663	0.00099
0.85446	0.02125	0.97660	0.00248	0.99845	-0.00096	0.00708	0.00113
0.86043	0.02036	0.97779	0.00229	0.99864	-0.00099	0.00755	0.00129
0.86619	0.01949	0.97892	0.00212	0.99883	-0.00102	0.00804	0.00145
0.87176	0.01865	0.98000	0.00194	0.99900	-0.00103	0.00855	0.00161
0.87714	0.01784	0.98104	0.00178	0.99916	-0.00102	0.00909	0.00179
0.88232	0.01705	0.98203	0.00163	0.99932	-0.00098	0.00966	0.00197
0.88732	0.01629	0.98297	0.00148	0.99947	-0.00092	0.01025	0.00216
0.89214	0.01556	0.98387	0.00134	0.99961	-0.00083	0.01087	0.00236
0.89677	0.01485	0.98473	0.00120	0.99975	-0.00070	0.01152	0.00257
0.90124	0.01417	0.98555	0.00107	0.99988	-0.00052	0.01220	0.00278
0.90554	0.01351	0.98633	0.00095	1.00000	0.00000	0.01292	0.00301
0.90967	0.01288	0.98708	0.00083	0.00000	0.00000	0.01367	0.00325
0.91365	0.01227	0.98780	0.00072	0.00012	-0.00050	0.01445	0.00350
0.91747	0.01168	0.98848	0.00061	0.00025	-0.00066	0.01527	0.00375
0.92114	0.01111	0.98913	0.00051	0.00039	-0.00076	0.01613	0.00403
0.92466	0.01057	0.98975	0.00041	0.00053	-0.00083	0.01703	0.00431
0.92805	0.01004	0.99034	0.00032	0.00068	-0.00086	0.01797	0.00460
0.93130	0.00954	0.99091	0.00023	0.00084	-0.00087	0.01896	0.00491
0.93442	0.00906	0.99145	0.00014	0.00100	-0.00085	0.02000	0.00523
0.93741	0.00860	0.99196	0.00006	0.00117	-0.00081	0.02108	0.00556
0.94027	0.00815	0.99245	-0.00001	0.00136	-0.00075	0.02221	0.00591
0.94302	0.00772	0.99292	-0.00009	0.00155	-0.00069	0.02340	0.00627
0.94566	0.00731	0.99337	-0.00016	0.00175	-0.00062	0.02464	0.00665
0.94819	0.00692	0.99379	-0.00022	0.00195	-0.00055	0.02594	0.00704

<u>x/c</u>	<u>y/c</u>	<u>x/c</u>	<u>y/c</u>	<u>x/c</u>	<u>y/c</u>	<u>x/c</u>	<u>y/c</u>
0.02731	0.00745	0.16471	0.03890	0.55418	0.05511	0.88732	0.01629
0.02873	0.00788	0.17152	0.04004	0.56609	0.05436	0.89214	0.01556
0.03022	0.00832	0.17855	0.04118	0.57793	0.05356	0.89677	0.01485
0.03178	0.00878	0.18580	0.04231	0.58968	0.05271	0.90124	0.01417
0.03341	0.00926	0.19327	0.04345	0.60133	0.05181	0.90554	0.01351
0.03511	0.00975	0.20000	0.04444	0.61286	0.05087	0.90967	0.01288
0.03689	0.01027	0.20097	0.04458	0.62428	0.04990	0.91365	0.01227
0.03875	0.01080	0.20889	0.04570	0.63555	0.04889	0.91747	0.01168
0.04070	0.01136	0.21703	0.04679	0.64669	0.04784	0.92114	0.01111
0.04273	0.01193	0.22539	0.04786	0.65766	0.04677	0.92466	0.01057
0.04486	0.01253	0.23398	0.04890	0.66848	0.04567	0.92805	0.01004
0.04708	0.01314	0.24279	0.04991	0.67912	0.04455	0.93130	0.00954
0.04939	0.01378	0.25182	0.05089	0.68958	0.04342	0.93442	0.00906
0.05181	0.01444	0.26107	0.05182	0.69985	0.04226	0.93741	0.00860
0.05434	0.01512	0.27053	0.05271	0.70992	0.04110	0.94027	0.00815
0.05698	0.01582	0.28020	0.05356	0.71980	0.03992	0.94302	0.00772
0.05973	0.01655	0.29008	0.05436	0.72947	0.03875	0.94566	0.00731
0.06259	0.01730	0.30015	0.05511	0.73893	0.03756	0.94819	0.00692
0.06558	0.01807	0.31042	0.05580	0.74818	0.03638	0.95061	0.00654
0.06870	0.01886	0.32088	0.05644	0.75721	0.03520	0.95292	0.00618
0.07195	0.01968	0.33152	0.05702	0.76602	0.03402	0.95514	0.00584
0.07534	0.02052	0.34234	0.05753	0.77461	0.03286	0.95727	0.00550
0.07886	0.02138	0.35331	0.05798	0.78297	0.03170	0.95930	0.00519
0.08253	0.02226	0.36445	0.05837	0.79111	0.03055	0.96125	0.00488
0.08635	0.02317	0.37572	0.05869	0.79903	0.02941	0.96311	0.00459
0.09033	0.02410	0.38714	0.05893	0.80000	0.02927	0.96489	0.00431
0.09446	0.02504	0.39867	0.05911	0.80673	0.02830	0.96659	0.00405
0.09876	0.02601	0.41032	0.05922	0.81420	0.02721	0.96822	0.00379
0.10323	0.02700	0.42207	0.05926	0.82145	0.02615	0.96978	0.00355
0.10786	0.02801	0.43391	0.05922	0.82848	0.02511	0.97127	0.00331
0.11268	0.02904	0.44582	0.05911	0.83529	0.02411	0.97269	0.00309
0.11768	0.03008	0.45780	0.05894	0.84189	0.02313	0.97406	0.00288
0.12286	0.03114	0.46982	0.05869	0.84828	0.02218	0.97536	0.00267
0.12824	0.03222	0.48188	0.05837	0.85446	0.02125	0.97660	0.00248
0.13381	0.03330	0.49396	0.05799	0.86043	0.02036	0.97779	0.00229
0.13957	0.03440	0.50604	0.05754	0.86619	0.01949	0.97892	0.00212
0.14554	0.03552	0.51812	0.05702	0.87176	0.01865	0.98000	0.00194
0.15172	0.03664	0.53018	0.05644	0.87714	0.01784	0.98104	0.00178
0.15811	0.03777	0.54220	0.05580	0.88232	0.01705	0.98203	0.00163

$x/c$	$y/c$	$x/c$	$y/c$	$x/c$	$y/c$	$x/c$	$y/c$
0.98297	0.00148	0.99091	0.00023	0.99564	-0.00052	0.99845	-0.00096
0.98387	0.00134	0.99145	0.00014	0.99596	-0.00057	0.99864	-0.00099
0.98473	0.00120	0.99196	0.00006	0.99627	-0.00061	0.99883	-0.00102
0.98555	0.00107	0.99245	-0.00001	0.99656	-0.00066	0.99900	-0.00103
0.98633	0.00095	0.99292	-0.00009	0.99684	-0.00070	0.99916	-0.00102
0.98708	0.00083	0.99337	-0.00016	0.99710	-0.00075	0.99932	-0.00098
0.98780	0.00072	0.99379	-0.00022	0.99736	-0.00079	0.99947	-0.00092
0.98848	0.00061	0.99420	-0.00029	0.99760	-0.00082	0.99961	-0.00083
0.98913	0.00051	0.99458	-0.00035	0.99783	-0.00086	0.99975	-0.00070
0.98975	0.00041	0.99495	-0.00041	0.99805	-0.00090	0.99988	-0.00052
0.99034	0.00032	0.99531	-0.00046	0.99825	-0.00093	1.00000	0.00000

Table 9. Station 4 upper surface airfoil coordinates,  $r/R = 0.7500$

$x/c$	$y/c$	$x/c$	$y/c$	$x/c$	$y/c$	$x/c$	$y/c$
1.00000	0.00000	0.98780	0.00377	0.92114	0.01649	0.66848	0.04559
0.99988	0.00056	0.98708	0.00392	0.91747	0.01712	0.65766	0.04630
0.99975	0.00080	0.98633	0.00408	0.91365	0.01778	0.64669	0.04697
0.99961	0.00097	0.98555	0.00424	0.90967	0.01845	0.63555	0.04761
0.99947	0.00112	0.98473	0.00441	0.90554	0.01914	0.62428	0.04821
0.99932	0.00123	0.98387	0.00458	0.90124	0.01985	0.61286	0.04878
0.99916	0.00133	0.98297	0.00477	0.89677	0.02057	0.60133	0.04931
0.99900	0.00140	0.98203	0.00496	0.89214	0.02132	0.58968	0.04979
0.99883	0.00145	0.98104	0.00516	0.88732	0.02208	0.57793	0.05022
0.99864	0.00149	0.98000	0.00538	0.88232	0.02286	0.56609	0.05061
0.99845	0.00153	0.97892	0.00560	0.87714	0.02365	0.55418	0.05095
0.99825	0.00157	0.97779	0.00583	0.87176	0.02445	0.54220	0.05124
0.99805	0.00162	0.97660	0.00607	0.86619	0.02527	0.53018	0.05148
0.99783	0.00167	0.97536	0.00632	0.86043	0.02611	0.51812	0.05167
0.99760	0.00171	0.97406	0.00658	0.85446	0.02695	0.50604	0.05180
0.99736	0.00177	0.97269	0.00685	0.84828	0.02780	0.49396	0.05188
0.99710	0.00182	0.97127	0.00713	0.84189	0.02867	0.48188	0.05190
0.99684	0.00188	0.96978	0.00743	0.83529	0.02954	0.46982	0.05187
0.99656	0.00193	0.96822	0.00774	0.82848	0.03041	0.45780	0.05178
0.99627	0.00200	0.96659	0.00806	0.82145	0.03129	0.44582	0.05164
0.99596	0.00206	0.96489	0.00840	0.81420	0.03216	0.43391	0.05145
0.99564	0.00213	0.96311	0.00874	0.80673	0.03304	0.42207	0.05120
0.99531	0.00220	0.96125	0.00911	0.80000	0.03380	0.41032	0.05091
0.99495	0.00227	0.95930	0.00948	0.79903	0.03391	0.39867	0.05056
0.99458	0.00235	0.95727	0.00988	0.79111	0.03478	0.38714	0.05016
0.99420	0.00243	0.95514	0.01028	0.78297	0.03566	0.37572	0.04972
0.99379	0.00252	0.95292	0.01071	0.77461	0.03653	0.36445	0.04923
0.99337	0.00261	0.95061	0.01114	0.76602	0.03741	0.35331	0.04870
0.99292	0.00270	0.94819	0.01160	0.75721	0.03828	0.34234	0.04813
0.99245	0.00280	0.94566	0.01207	0.74818	0.03915	0.33152	0.04752
0.99196	0.00290	0.94302	0.01256	0.73893	0.04001	0.32088	0.04687
0.99145	0.00301	0.94027	0.01307	0.72947	0.04085	0.31042	0.04619
0.99091	0.00312	0.93741	0.01359	0.71980	0.04169	0.30015	0.04548
0.99034	0.00324	0.93442	0.01413	0.70992	0.04251	0.29008	0.04475
0.98975	0.00337	0.93130	0.01470	0.69985	0.04331	0.28020	0.04398
0.98913	0.00350	0.92805	0.01528	0.68958	0.04410	0.27053	0.04320
0.98848	0.00363	0.92466	0.01587	0.67912	0.04486	0.26107	0.04239

<u>x/c</u>	<u>y/c</u>	<u>x/c</u>	<u>y/c</u>	<u>x/c</u>	<u>y/c</u>	<u>x/c</u>	<u>y/c</u>
0.25182	0.04157	0.04939	0.01224	0.00580	0.00258	0.99783	0.00167
0.24279	0.04073	0.04708	0.01176	0.00542	0.00249	0.99760	0.00171
0.23398	0.03988	0.04486	0.01130	0.00505	0.00240	0.99736	0.00177
0.22539	0.03901	0.04273	0.01085	0.00469	0.00232	0.99710	0.00182
0.21703	0.03815	0.04070	0.01042	0.00436	0.00224	0.99684	0.00188
0.20889	0.03727	0.03875	0.01000	0.00404	0.00217	0.99656	0.00193
0.20097	0.03640	0.03689	0.00960	0.00373	0.00209	0.99627	0.00200
0.20000	0.03629	0.03511	0.00921	0.00344	0.00202	0.99596	0.00206
0.19327	0.03552	0.03341	0.00884	0.00316	0.00196	0.99564	0.00213
0.18580	0.03463	0.03178	0.00849	0.00290	0.00189	0.99531	0.00220
0.17855	0.03373	0.03022	0.00815	0.00264	0.00183	0.99495	0.00227
0.17152	0.03283	0.02873	0.00782	0.00240	0.00178	0.99458	0.00235
0.16471	0.03193	0.02731	0.00750	0.00217	0.00172	0.99420	0.00243
0.15811	0.03103	0.02594	0.00720	0.00195	0.00167	0.99379	0.00252
0.15172	0.03013	0.02464	0.00691	0.00175	0.00162	0.99337	0.00261
0.14554	0.02924	0.02340	0.00663	0.00155	0.00157	0.99292	0.00270
0.13957	0.02835	0.02221	0.00637	0.00136	0.00153	0.99245	0.00280
0.13381	0.02747	0.02108	0.00611	0.00117	0.00148	0.99196	0.00290
0.12824	0.02661	0.02000	0.00586	0.00100	0.00143	0.99145	0.00301
0.12286	0.02576	0.01896	0.00563	0.00084	0.00135	0.99091	0.00312
0.11768	0.02491	0.01797	0.00541	0.00068	0.00125	0.99034	0.00324
0.11268	0.02409	0.01703	0.00519	0.00053	0.00113	0.98975	0.00337
0.10786	0.02328	0.01613	0.00498	0.00039	0.00098	0.98913	0.00350
0.10323	0.02248	0.01527	0.00479	0.00025	0.00080	0.98848	0.00363
0.09876	0.02170	0.01445	0.00460	0.00012	0.00057	0.98780	0.00377
0.09446	0.02094	0.01367	0.00442	0.00000	0.00000	0.98708	0.00392
0.09033	0.02020	0.01292	0.00424	1.00000	0.00000	0.98633	0.00408
0.08635	0.01947	0.01220	0.00408	0.99988	0.00056	0.98555	0.00424
0.08253	0.01877	0.01152	0.00392	0.99975	0.00080	0.98473	0.00441
0.07886	0.01808	0.01087	0.00377	0.99961	0.00097	0.98387	0.00458
0.07534	0.01741	0.01025	0.00363	0.99947	0.00112	0.98297	0.00477
0.07195	0.01676	0.00966	0.00349	0.99932	0.00123	0.98203	0.00496
0.06870	0.01613	0.00909	0.00336	0.99916	0.00133	0.98104	0.00516
0.06558	0.01552	0.00855	0.00323	0.99900	0.00140	0.98000	0.00538
0.06259	0.01493	0.00804	0.00311	0.99883	0.00145	0.97892	0.00560
0.05973	0.01435	0.00755	0.00299	0.99864	0.00149	0.97779	0.00583
0.05698	0.01380	0.00708	0.00288	0.99845	0.00153	0.97660	0.00607
0.05434	0.01326	0.00663	0.00278	0.99825	0.00157	0.97536	0.00632
0.05181	0.01274	0.00621	0.00268	0.99805	0.00162	0.97406	0.00658

<u>x/c</u>	<u>y/c</u>	<u>x/c</u>	<u>y/c</u>	<u>x/c</u>	<u>y/c</u>	<u>x/c</u>	<u>y/c</u>
0.97269	0.00685	0.83529	0.02954	0.44582	0.05164	0.11268	0.02409
0.97127	0.00713	0.82848	0.03041	0.43391	0.05145	0.10786	0.02328
0.96978	0.00743	0.82145	0.03129	0.42207	0.05120	0.10323	0.02248
0.96822	0.00774	0.81420	0.03216	0.41032	0.05091	0.09876	0.02170
0.96659	0.00806	0.80673	0.03304	0.39867	0.05056	0.09446	0.02094
0.96489	0.00840	0.80000	0.03380	0.38714	0.05016	0.09033	0.02020
0.96311	0.00874	0.79903	0.03391	0.37572	0.04972	0.08635	0.01947
0.96125	0.00911	0.79111	0.03478	0.36445	0.04923	0.08253	0.01877
0.95930	0.00948	0.78297	0.03566	0.35331	0.04870	0.07886	0.01808
0.95727	0.00988	0.77461	0.03653	0.34234	0.04813	0.07534	0.01741
0.95514	0.01028	0.76602	0.03741	0.33152	0.04752	0.07195	0.01676
0.95292	0.01071	0.75721	0.03828	0.32088	0.04687	0.06870	0.01613
0.95061	0.01114	0.74818	0.03915	0.31042	0.04619	0.06558	0.01552
0.94819	0.01160	0.73893	0.04001	0.30015	0.04548	0.06259	0.01493
0.94566	0.01207	0.72947	0.04085	0.29008	0.04475	0.05973	0.01435
0.94302	0.01256	0.71980	0.04169	0.28020	0.04398	0.05698	0.01380
0.94027	0.01307	0.70992	0.04251	0.27053	0.04320	0.05434	0.01326
0.93741	0.01359	0.69985	0.04331	0.26107	0.04239	0.05181	0.01274
0.93442	0.01413	0.68958	0.04410	0.25182	0.04157	0.04939	0.01224
0.93130	0.01470	0.67912	0.04486	0.24279	0.04073	0.04708	0.01176
0.92805	0.01528	0.66848	0.04559	0.23398	0.03988	0.04486	0.01130
0.92466	0.01587	0.65766	0.04630	0.22539	0.03901	0.04273	0.01085
0.92114	0.01649	0.64669	0.04697	0.21703	0.03815	0.04070	0.01042
0.91747	0.01712	0.63555	0.04761	0.20889	0.03727	0.03875	0.01000
0.91365	0.01778	0.62428	0.04821	0.20097	0.03640	0.03689	0.00960
0.90967	0.01845	0.61286	0.04878	0.20000	0.03629	0.03511	0.00921
0.90554	0.01914	0.60133	0.04931	0.19327	0.03552	0.03341	0.00884
0.90124	0.01985	0.58968	0.04979	0.18580	0.03463	0.03178	0.00849
0.89677	0.02057	0.57793	0.05022	0.17855	0.03373	0.03022	0.00815
0.89214	0.02132	0.56609	0.05061	0.17152	0.03283	0.02873	0.00782
0.88732	0.02208	0.55418	0.05095	0.16471	0.03193	0.02731	0.00750
0.88232	0.02286	0.54220	0.05124	0.15811	0.03103	0.02594	0.00720
0.87714	0.02365	0.53018	0.05148	0.15172	0.03013	0.02464	0.00691
0.87176	0.02445	0.51812	0.05167	0.14554	0.02924	0.02340	0.00663
0.86619	0.02527	0.50604	0.05180	0.13957	0.02835	0.02221	0.00637
0.86043	0.02611	0.49396	0.05188	0.13381	0.02747	0.02108	0.00611
0.85446	0.02695	0.48188	0.05190	0.12824	0.02661	0.02000	0.00586
0.84828	0.02780	0.46982	0.05187	0.12286	0.02576	0.01896	0.00563
0.84189	0.02867	0.45780	0.05178	0.11768	0.02491	0.01797	0.00541

$x/c$	$y/c$	$x/c$	$y/c$	$x/c$	$y/c$	$x/c$	$y/c$
0.01703	0.00519	0.00909	0.00336	0.00436	0.00224	0.00155	0.00157
0.01613	0.00498	0.00855	0.00323	0.00404	0.00217	0.00136	0.00153
0.01527	0.00479	0.00804	0.00311	0.00373	0.00209	0.00117	0.00148
0.01445	0.00460	0.00755	0.00299	0.00344	0.00202	0.00100	0.00143
0.01367	0.00442	0.00708	0.00288	0.00316	0.00196	0.00084	0.00135
0.01292	0.00424	0.00663	0.00278	0.00290	0.00189	0.00068	0.00125
0.01220	0.00408	0.00621	0.00268	0.00264	0.00183	0.00053	0.00113
0.01152	0.00392	0.00580	0.00258	0.00240	0.00178	0.00039	0.00098
0.01087	0.00377	0.00542	0.00249	0.00217	0.00172	0.00025	0.00080
0.01025	0.00363	0.00505	0.00240	0.00195	0.00167	0.00012	0.00057
0.00966	0.00349	0.00469	0.00232	0.00175	0.00162	0.00000	0.00000

Table 10. Station 4 lower surface airfoil coordinates,  $r/R = 0.7500$

$x/c$	$y/c$	$x/c$	$y/c$	$x/c$	$y/c$	$x/c$	$y/c$
0.00000	0.00000	0.01220	0.00077	0.07886	0.01085	0.33152	0.03752
0.00012	-0.00052	0.01292	0.00088	0.08253	0.01137	0.34234	0.03813
0.00025	-0.00070	0.01367	0.00100	0.08635	0.01191	0.35331	0.03870
0.00039	-0.00083	0.01445	0.00113	0.09033	0.01247	0.36445	0.03923
0.00053	-0.00092	0.01527	0.00126	0.09446	0.01304	0.37572	0.03972
0.00068	-0.00098	0.01613	0.00140	0.09876	0.01364	0.38714	0.04016
0.00084	-0.00101	0.01703	0.00154	0.10323	0.01425	0.39867	0.04056
0.00100	-0.00102	0.01797	0.00169	0.10786	0.01488	0.41032	0.04091
0.00117	-0.00101	0.01896	0.00185	0.11268	0.01553	0.42207	0.04120
0.00136	-0.00098	0.02000	0.00201	0.11768	0.01619	0.43391	0.04145
0.00155	-0.00095	0.02108	0.00218	0.12286	0.01688	0.44582	0.04164
0.00175	-0.00092	0.02221	0.00236	0.12824	0.01758	0.45780	0.04178
0.00195	-0.00089	0.02340	0.00254	0.13381	0.01830	0.46982	0.04187
0.00217	-0.00085	0.02464	0.00274	0.13957	0.01904	0.48188	0.04190
0.00240	-0.00081	0.02594	0.00294	0.14554	0.01979	0.49396	0.04188
0.00264	-0.00077	0.02731	0.00316	0.15172	0.02057	0.50604	0.04180
0.00290	-0.00073	0.02873	0.00338	0.15811	0.02136	0.51812	0.04167
0.00316	-0.00069	0.03022	0.00361	0.16471	0.02216	0.53018	0.04148
0.00344	-0.00064	0.03178	0.00385	0.17152	0.02298	0.54220	0.04124
0.00373	-0.00060	0.03341	0.00410	0.17855	0.02382	0.55418	0.04095
0.00404	-0.00055	0.03511	0.00436	0.18580	0.02466	0.56609	0.04061
0.00436	-0.00049	0.03689	0.00464	0.19327	0.02552	0.57793	0.04022
0.00469	-0.00044	0.03875	0.00492	0.20000	0.02629	0.58968	0.03979
0.00505	-0.00038	0.04070	0.00522	0.20097	0.02640	0.60133	0.03931
0.00542	-0.00032	0.04273	0.00553	0.20889	0.02727	0.61286	0.03878
0.00580	-0.00026	0.04486	0.00585	0.21703	0.02815	0.62428	0.03821
0.00621	-0.00020	0.04708	0.00619	0.22539	0.02901	0.63555	0.03761
0.00663	-0.00013	0.04939	0.00654	0.23398	0.02988	0.64669	0.03697
0.00708	-0.00005	0.05181	0.00690	0.24279	0.03073	0.65766	0.03630
0.00755	0.00002	0.05434	0.00728	0.25182	0.03157	0.66848	0.03559
0.00804	0.00010	0.05698	0.00767	0.26107	0.03239	0.67912	0.03486
0.00855	0.00018	0.05973	0.00807	0.27053	0.03320	0.68958	0.03410
0.00909	0.00027	0.06259	0.00850	0.28020	0.03398	0.69985	0.03331
0.00966	0.00036	0.06558	0.00893	0.29008	0.03475	0.70992	0.03251
0.01025	0.00046	0.06870	0.00939	0.30015	0.03548	0.71980	0.03169
0.01087	0.00056	0.07195	0.00986	0.31042	0.03619	0.72947	0.03085
0.01152	0.00066	0.07534	0.01035	0.32088	0.03687	0.73893	0.03001

<u>x/c</u>	<u>y/c</u>	<u>x/c</u>	<u>y/c</u>	<u>x/c</u>	<u>y/c</u>	<u>x/c</u>	<u>y/c</u>
0.74818	0.02915	0.95061	0.00544	0.99420	-0.00041	0.00217	-0.00085
0.75721	0.02828	0.95292	0.00513	0.99458	-0.00046	0.00240	-0.00081
0.76602	0.02741	0.95514	0.00484	0.99495	-0.00051	0.00264	-0.00077
0.77461	0.02653	0.95727	0.00456	0.99531	-0.00056	0.00290	-0.00073
0.78297	0.02566	0.95930	0.00429	0.99564	-0.00061	0.00316	-0.00069
0.79111	0.02478	0.96125	0.00403	0.99596	-0.00065	0.00344	-0.00064
0.79903	0.02391	0.96311	0.00378	0.99627	-0.00069	0.00373	-0.00060
0.80000	0.02380	0.96489	0.00355	0.99656	-0.00073	0.00404	-0.00055
0.80673	0.02305	0.96659	0.00332	0.99684	-0.00077	0.00436	-0.00049
0.81420	0.02220	0.96822	0.00310	0.99710	-0.00081	0.00469	-0.00044
0.82145	0.02137	0.96978	0.00289	0.99736	-0.00084	0.00505	-0.00038
0.82848	0.02056	0.97127	0.00269	0.99760	-0.00087	0.00542	-0.00032
0.83529	0.01977	0.97269	0.00250	0.99783	-0.00091	0.00580	-0.00026
0.84189	0.01900	0.97406	0.00232	0.99805	-0.00094	0.00621	-0.00020
0.84828	0.01824	0.97536	0.00215	0.99825	-0.00096	0.00663	-0.00013
0.85446	0.01751	0.97660	0.00198	0.99845	-0.00099	0.00708	-0.00005
0.86043	0.01679	0.97779	0.00182	0.99864	-0.00102	0.00755	0.00002
0.86619	0.01610	0.97892	0.00167	0.99883	-0.00104	0.00804	0.00010
0.87176	0.01542	0.98000	0.00152	0.99900	-0.00105	0.00855	0.00018
0.87714	0.01477	0.98104	0.00138	0.99916	-0.00103	0.00909	0.00027
0.88232	0.01413	0.98203	0.00125	0.99932	-0.00099	0.00966	0.00036
0.88732	0.01352	0.98297	0.00112	0.99947	-0.00093	0.01025	0.00046
0.89214	0.01292	0.98387	0.00100	0.99961	-0.00084	0.01087	0.00056
0.89677	0.01234	0.98473	0.00088	0.99975	-0.00071	0.01152	0.00066
0.90124	0.01178	0.98555	0.00077	0.99988	-0.00052	0.01220	0.00077
0.90554	0.01124	0.98633	0.00066	1.00000	0.00000	0.01292	0.00088
0.90967	0.01072	0.98708	0.00056	0.00000	0.00000	0.01367	0.00100
0.91365	0.01022	0.98780	0.00046	0.00012	-0.00052	0.01445	0.00113
0.91747	0.00973	0.98848	0.00037	0.00025	-0.00070	0.01527	0.00126
0.92114	0.00926	0.98913	0.00028	0.00039	-0.00083	0.01613	0.00140
0.92466	0.00881	0.98975	0.00020	0.00053	-0.00092	0.01703	0.00154
0.92805	0.00837	0.99034	0.00012	0.00068	-0.00098	0.01797	0.00169
0.93130	0.00796	0.99091	0.00004	0.00084	-0.00101	0.01896	0.00185
0.93442	0.00755	0.99145	-0.00003	0.00100	-0.00102	0.02000	0.00201
0.93741	0.00716	0.99196	-0.00010	0.00117	-0.00101	0.02108	0.00218
0.94027	0.00679	0.99245	-0.00017	0.00136	-0.00098	0.02221	0.00236
0.94302	0.00643	0.99292	-0.00023	0.00155	-0.00095	0.02340	0.00254
0.94566	0.00609	0.99337	-0.00030	0.00175	-0.00092	0.02464	0.00274
0.94819	0.00576	0.99379	-0.00035	0.00195	-0.00089	0.02594	0.00294

<u>x/c</u>	<u>y/c</u>	<u>x/c</u>	<u>y/c</u>	<u>x/c</u>	<u>y/c</u>	<u>x/c</u>	<u>y/c</u>
0.02731	0.00316	0.16471	0.02216	0.55418	0.04095	0.88732	0.01352
0.02873	0.00338	0.17152	0.02298	0.56609	0.04061	0.89214	0.01292
0.03022	0.00361	0.17855	0.02382	0.57793	0.04022	0.89677	0.01234
0.03178	0.00385	0.18580	0.02466	0.58968	0.03979	0.90124	0.01178
0.03341	0.00410	0.19327	0.02552	0.60133	0.03931	0.90554	0.01124
0.03511	0.00436	0.20000	0.02629	0.61286	0.03878	0.90967	0.01072
0.03689	0.00464	0.20097	0.02640	0.62428	0.03821	0.91365	0.01022
0.03875	0.00492	0.20889	0.02727	0.63555	0.03761	0.91747	0.00973
0.04070	0.00522	0.21703	0.02815	0.64669	0.03697	0.92114	0.00926
0.04273	0.00553	0.22539	0.02901	0.65766	0.03630	0.92466	0.00881
0.04486	0.00585	0.23398	0.02988	0.66848	0.03559	0.92805	0.00837
0.04708	0.00619	0.24279	0.03073	0.67912	0.03486	0.93130	0.00796
0.04939	0.00654	0.25182	0.03157	0.68958	0.03410	0.93442	0.00755
0.05181	0.00690	0.26107	0.03239	0.69985	0.03331	0.93741	0.00716
0.05434	0.00728	0.27053	0.03320	0.70992	0.03251	0.94027	0.00679
0.05698	0.00767	0.28020	0.03398	0.71980	0.03169	0.94302	0.00643
0.05973	0.00807	0.29008	0.03475	0.72947	0.03085	0.94566	0.00609
0.06259	0.00850	0.30015	0.03548	0.73893	0.03001	0.94819	0.00576
0.06558	0.00893	0.31042	0.03619	0.74818	0.02915	0.95061	0.00544
0.06870	0.00939	0.32088	0.03687	0.75721	0.02828	0.95292	0.00513
0.07195	0.00986	0.33152	0.03752	0.76602	0.02741	0.95514	0.00484
0.07534	0.01035	0.34234	0.03813	0.77461	0.02653	0.95727	0.00456
0.07886	0.01085	0.35331	0.03870	0.78297	0.02566	0.95930	0.00429
0.08253	0.01137	0.36445	0.03923	0.79111	0.02478	0.96125	0.00403
0.08635	0.01191	0.37572	0.03972	0.79903	0.02391	0.96311	0.00378
0.09033	0.01247	0.38714	0.04016	0.80000	0.02380	0.96489	0.00355
0.09446	0.01304	0.39867	0.04056	0.80673	0.02305	0.96659	0.00332
0.09876	0.01364	0.41032	0.04091	0.81420	0.02220	0.96822	0.00310
0.10323	0.01425	0.42207	0.04120	0.82145	0.02137	0.96978	0.00289
0.10786	0.01488	0.43391	0.04145	0.82848	0.02056	0.97127	0.00269
0.11268	0.01553	0.44582	0.04164	0.83529	0.01977	0.97269	0.00250
0.11768	0.01619	0.45780	0.04178	0.84189	0.01900	0.97406	0.00232
0.12286	0.01688	0.46982	0.04187	0.84828	0.01824	0.97536	0.00215
0.12824	0.01758	0.48188	0.04190	0.85446	0.01751	0.97660	0.00198
0.13381	0.01830	0.49396	0.04188	0.86043	0.01679	0.97779	0.00182
0.13957	0.01904	0.50604	0.04180	0.86619	0.01610	0.97892	0.00167
0.14554	0.01979	0.51812	0.04167	0.87176	0.01542	0.98000	0.00152
0.15172	0.02057	0.53018	0.04148	0.87714	0.01477	0.98104	0.00138
0.15811	0.02136	0.54220	0.04124	0.88232	0.01413	0.98203	0.00125

$x/c$	$y/c$	$x/c$	$y/c$	$x/c$	$y/c$	$x/c$	$y/c$
0.98297	0.00112	0.99091	0.00004	0.99564	-0.00061	0.99845	-0.00099
0.98387	0.00100	0.99145	-0.00003	0.99596	-0.00065	0.99864	-0.00102
0.98473	0.00088	0.99196	-0.00010	0.99627	-0.00069	0.99883	-0.00104
0.98555	0.00077	0.99245	-0.00017	0.99656	-0.00073	0.99900	-0.00105
0.98633	0.00066	0.99292	-0.00023	0.99684	-0.00077	0.99916	-0.00103
0.98708	0.00056	0.99337	-0.00030	0.99710	-0.00081	0.99932	-0.00099
0.98780	0.00046	0.99379	-0.00035	0.99736	-0.00084	0.99947	-0.00093
0.98848	0.00037	0.99420	-0.00041	0.99760	-0.00087	0.99961	-0.00084
0.98913	0.00028	0.99458	-0.00046	0.99783	-0.00091	0.99975	-0.00071
0.98975	0.00020	0.99495	-0.00051	0.99805	-0.00094	0.99988	-0.00052
0.99034	0.00012	0.99531	-0.00056	0.99825	-0.00096	1.00000	0.00000

Table 11. Station 5 upper surface airfoil coordinates,  $r/R = 0.9000$

x/c	y/c	x/c	y/c	x/c	y/c	x/c	y/c
1.00000	0.00000	0.98780	0.00456	0.92114	0.01819	0.66848	0.03430
0.99988	0.00057	0.98708	0.00475	0.91747	0.01876	0.65766	0.03438
0.99975	0.00082	0.98633	0.00494	0.91365	0.01933	0.64669	0.03443
0.99961	0.00100	0.98555	0.00514	0.90967	0.01992	0.63555	0.03445
0.99947	0.00116	0.98473	0.00535	0.90554	0.02051	0.62428	0.03444
0.99932	0.00128	0.98387	0.00557	0.90124	0.02110	0.61286	0.03441
0.99916	0.00139	0.98297	0.00580	0.89677	0.02170	0.60133	0.03434
0.99900	0.00148	0.98203	0.00604	0.89214	0.02229	0.58968	0.03424
0.99883	0.00154	0.98104	0.00628	0.88732	0.02289	0.57793	0.03412
0.99864	0.00159	0.98000	0.00654	0.88232	0.02349	0.56609	0.03396
0.99845	0.00165	0.97892	0.00680	0.87714	0.02409	0.55418	0.03378
0.99825	0.00170	0.97779	0.00708	0.87176	0.02468	0.54220	0.03357
0.99805	0.00176	0.97660	0.00736	0.86619	0.02527	0.53018	0.03333
0.99783	0.00183	0.97536	0.00766	0.86043	0.02585	0.51812	0.03306
0.99760	0.00189	0.97406	0.00797	0.85446	0.02642	0.50604	0.03278
0.99736	0.00196	0.97269	0.00828	0.84828	0.02698	0.49396	0.03246
0.99710	0.00203	0.97127	0.00861	0.84189	0.02753	0.48188	0.03213
0.99684	0.00211	0.96978	0.00895	0.83529	0.02806	0.46982	0.03177
0.99656	0.00218	0.96822	0.00930	0.82848	0.02858	0.45780	0.03139
0.99627	0.00227	0.96659	0.00966	0.82145	0.02908	0.44582	0.03099
0.99596	0.00235	0.96489	0.01004	0.81420	0.02956	0.43391	0.03057
0.99564	0.00244	0.96311	0.01043	0.80673	0.03002	0.42207	0.03014
0.99531	0.00253	0.96125	0.01082	0.80000	0.03040	0.41032	0.02969
0.99495	0.00263	0.95930	0.01124	0.79903	0.03046	0.39867	0.02923
0.99458	0.00274	0.95727	0.01166	0.79111	0.03087	0.38714	0.02875
0.99420	0.00284	0.95514	0.01209	0.78297	0.03126	0.37572	0.02826
0.99379	0.00295	0.95292	0.01254	0.77461	0.03164	0.36445	0.02776
0.99337	0.00307	0.95061	0.01300	0.76602	0.03200	0.35331	0.02726
0.99292	0.00319	0.94819	0.01347	0.75721	0.03234	0.34234	0.02674
0.99245	0.00332	0.94566	0.01395	0.74818	0.03266	0.33152	0.02623
0.99196	0.00345	0.94302	0.01444	0.73893	0.03295	0.32088	0.02570
0.99145	0.00359	0.94027	0.01495	0.72947	0.03322	0.31042	0.02518
0.99091	0.00374	0.93741	0.01546	0.71980	0.03347	0.30015	0.02465
0.99034	0.00389	0.93442	0.01599	0.70992	0.03369	0.29008	0.02412
0.98975	0.00405	0.93130	0.01652	0.69985	0.03388	0.28020	0.02359
0.98913	0.00421	0.92805	0.01707	0.68958	0.03405	0.27053	0.02306
0.98848	0.00438	0.92466	0.01762	0.67912	0.03419	0.26107	0.02253

x/c	y/c	x/c	y/c	x/c	y/c	x/c	y/c
0.25182	0.02201	0.04939	0.00657	0.00580	0.00187	0.99783	0.00183
0.24279	0.02150	0.04708	0.00633	0.00542	0.00182	0.99760	0.00189
0.23398	0.02098	0.04486	0.00610	0.00505	0.00178	0.99736	0.00196
0.22539	0.02048	0.04273	0.00588	0.00469	0.00174	0.99710	0.00203
0.21703	0.01998	0.04070	0.00567	0.00436	0.00170	0.99684	0.00211
0.20889	0.01948	0.03875	0.00547	0.00404	0.00167	0.99656	0.00218
0.20097	0.01900	0.03689	0.00527	0.00373	0.00163	0.99627	0.00227
0.20000	0.01894	0.03511	0.00508	0.00344	0.00160	0.99596	0.00235
0.19327	0.01852	0.03341	0.00490	0.00316	0.00157	0.99564	0.00244
0.18580	0.01803	0.03178	0.00473	0.00290	0.00154	0.99531	0.00253
0.17855	0.01755	0.03022	0.00456	0.00264	0.00151	0.99495	0.00263
0.17152	0.01707	0.02873	0.00440	0.00240	0.00148	0.99458	0.00274
0.16471	0.01659	0.02731	0.00425	0.00217	0.00145	0.99420	0.00284
0.15811	0.01611	0.02594	0.00410	0.00195	0.00143	0.99379	0.00295
0.15172	0.01564	0.02464	0.00396	0.00175	0.00140	0.99337	0.00307
0.14554	0.01517	0.02340	0.00383	0.00155	0.00138	0.99292	0.00319
0.13957	0.01471	0.02221	0.00370	0.00136	0.00136	0.99245	0.00332
0.13381	0.01425	0.02108	0.00357	0.00117	0.00134	0.99196	0.00345
0.12824	0.01381	0.02000	0.00345	0.00100	0.00130	0.99145	0.00359
0.12286	0.01337	0.01896	0.00334	0.00084	0.00124	0.99091	0.00374
0.11768	0.01293	0.01797	0.00323	0.00068	0.00117	0.99034	0.00389
0.11268	0.01251	0.01703	0.00313	0.00053	0.00106	0.98975	0.00405
0.10786	0.01210	0.01613	0.00303	0.00039	0.00094	0.98913	0.00421
0.10323	0.01169	0.01527	0.00293	0.00025	0.00077	0.98848	0.00438
0.09876	0.01129	0.01445	0.00284	0.00012	0.00055	0.98780	0.00456
0.09446	0.01091	0.01367	0.00275	0.00000	0.00000	0.98708	0.00475
0.09033	0.01053	0.01292	0.00267	1.00000	0.00000	0.98633	0.00494
0.08635	0.01017	0.01220	0.00259	0.99988	0.00057	0.98555	0.00514
0.08253	0.00981	0.01152	0.00251	0.99975	0.00082	0.98473	0.00535
0.07886	0.00947	0.01087	0.00244	0.99961	0.00100	0.98387	0.00557
0.07534	0.00913	0.01025	0.00237	0.99947	0.00116	0.98297	0.00580
0.07195	0.00881	0.00966	0.00230	0.99932	0.00128	0.98203	0.00604
0.06870	0.00850	0.00909	0.00224	0.99916	0.00139	0.98104	0.00628
0.06558	0.00819	0.00855	0.00218	0.99900	0.00148	0.98000	0.00654
0.06259	0.00790	0.00804	0.00212	0.99883	0.00154	0.97892	0.00680
0.05973	0.00761	0.00755	0.00206	0.99864	0.00159	0.97779	0.00708
0.05698	0.00734	0.00708	0.00201	0.99845	0.00165	0.97660	0.00736
0.05434	0.00707	0.00663	0.00196	0.99825	0.00170	0.97536	0.00766
0.05181	0.00682	0.00621	0.00191	0.99805	0.00176	0.97406	0.00797

<u>x/c</u>	<u>y/c</u>	<u>x/c</u>	<u>y/c</u>	<u>x/c</u>	<u>y/c</u>	<u>x/c</u>	<u>y/c</u>
0.97269	0.00828	0.83529	0.02806	0.44582	0.03099	0.11268	0.01251
0.97127	0.00861	0.82848	0.02858	0.43391	0.03057	0.10786	0.01210
0.96978	0.00895	0.82145	0.02908	0.42207	0.03014	0.10323	0.01169
0.96822	0.00930	0.81420	0.02956	0.41032	0.02969	0.09876	0.01129
0.96659	0.00966	0.80673	0.03002	0.39867	0.02923	0.09446	0.01091
0.96489	0.01004	0.80000	0.03040	0.38714	0.02875	0.09033	0.01053
0.96311	0.01043	0.79903	0.03046	0.37572	0.02826	0.08635	0.01017
0.96125	0.01082	0.79111	0.03087	0.36445	0.02776	0.08253	0.00981
0.95930	0.01124	0.78297	0.03126	0.35331	0.02726	0.07886	0.00947
0.95727	0.01166	0.77461	0.03164	0.34234	0.02674	0.07534	0.00913
0.95514	0.01209	0.76602	0.03200	0.33152	0.02623	0.07195	0.00881
0.95292	0.01254	0.75721	0.03234	0.32088	0.02570	0.06870	0.00850
0.95061	0.01300	0.74818	0.03266	0.31042	0.02518	0.06558	0.00819
0.94819	0.01347	0.73893	0.03295	0.30015	0.02465	0.06259	0.00790
0.94566	0.01395	0.72947	0.03322	0.29008	0.02412	0.05973	0.00761
0.94302	0.01444	0.71980	0.03347	0.28020	0.02359	0.05698	0.00734
0.94027	0.01495	0.70992	0.03369	0.27053	0.02306	0.05434	0.00707
0.93741	0.01546	0.69985	0.03388	0.26107	0.02253	0.05181	0.00682
0.93442	0.01599	0.68958	0.03405	0.25182	0.02201	0.04939	0.00657
0.93130	0.01652	0.67912	0.03419	0.24279	0.02150	0.04708	0.00633
0.92805	0.01707	0.66848	0.03430	0.23398	0.02098	0.04486	0.00610
0.92466	0.01762	0.65766	0.03438	0.22539	0.02048	0.04273	0.00588
0.92114	0.01819	0.64669	0.03443	0.21703	0.01998	0.04070	0.00567
0.91747	0.01876	0.63555	0.03445	0.20889	0.01948	0.03875	0.00547
0.91365	0.01933	0.62428	0.03444	0.20097	0.01900	0.03689	0.00527
0.90967	0.01992	0.61286	0.03441	0.20000	0.01894	0.03511	0.00508
0.90554	0.02051	0.60133	0.03434	0.19327	0.01852	0.03341	0.00490
0.90124	0.02110	0.58968	0.03424	0.18580	0.01803	0.03178	0.00473
0.89677	0.02170	0.57793	0.03412	0.17855	0.01755	0.03022	0.00456
0.89214	0.02229	0.56609	0.03396	0.17152	0.01707	0.02873	0.00440
0.88732	0.02289	0.55418	0.03378	0.16471	0.01659	0.02731	0.00425
0.88232	0.02349	0.54220	0.03357	0.15811	0.01611	0.02594	0.00410
0.87714	0.02409	0.53018	0.03333	0.15172	0.01564	0.02464	0.00396
0.87176	0.02468	0.51812	0.03306	0.14554	0.01517	0.02340	0.00383
0.86619	0.02527	0.50604	0.03278	0.13957	0.01471	0.02221	0.00370
0.86043	0.02585	0.49396	0.03246	0.13381	0.01425	0.02108	0.00357
0.85446	0.02642	0.48188	0.03213	0.12824	0.01381	0.02000	0.00345
0.84828	0.02698	0.46982	0.03177	0.12286	0.01337	0.01896	0.00334
0.84189	0.02753	0.45780	0.03139	0.11768	0.01293	0.01797	0.00323

$x/c$	$y/c$	$x/c$	$y/c$	$x/c$	$y/c$	$x/c$	$y/c$
0.01703	0.00313	0.00909	0.00224	0.00436	0.00170	0.00155	0.00138
0.01613	0.00303	0.00855	0.00218	0.00404	0.00167	0.00136	0.00136
0.01527	0.00293	0.00804	0.00212	0.00373	0.00163	0.00117	0.00134
0.01445	0.00284	0.00755	0.00206	0.00344	0.00160	0.00100	0.00130
0.01367	0.00275	0.00708	0.00201	0.00316	0.00157	0.00084	0.00124
0.01292	0.00267	0.00663	0.00196	0.00290	0.00154	0.00068	0.00117
0.01220	0.00259	0.00621	0.00191	0.00264	0.00151	0.00053	0.00106
0.01152	0.00251	0.00580	0.00187	0.00240	0.00148	0.00039	0.00094
0.01087	0.00244	0.00542	0.00182	0.00217	0.00145	0.00025	0.00077
0.01025	0.00237	0.00505	0.00178	0.00195	0.00143	0.00012	0.00055
0.00966	0.00230	0.00469	0.00174	0.00175	0.00140	0.00000	0.00000

Table 12. Station 5 lower surface airfoil coordinates,  $r/R = 0.9000$

$x/c$	$y/c$	$x/c$	$y/c$	$x/c$	$y/c$	$x/c$	$y/c$
0.00000	0.00000	0.01220	-0.00072	0.07886	0.00224	0.33152	0.01623
0.00012	-0.00053	0.01292	-0.00069	0.08253	0.00242	0.34234	0.01674
0.00025	-0.00073	0.01367	-0.00066	0.08635	0.00261	0.35331	0.01726
0.00039	-0.00088	0.01445	-0.00063	0.09033	0.00280	0.36445	0.01776
0.00053	-0.00098	0.01527	-0.00060	0.09446	0.00301	0.37572	0.01826
0.00068	-0.00106	0.01613	-0.00056	0.09876	0.00323	0.38714	0.01875
0.00084	-0.00112	0.01703	-0.00053	0.10323	0.00346	0.39867	0.01923
0.00100	-0.00115	0.01797	-0.00049	0.10786	0.00370	0.41032	0.01969
0.00117	-0.00116	0.01896	-0.00045	0.11268	0.00395	0.42207	0.02014
0.00136	-0.00115	0.02000	-0.00040	0.11768	0.00421	0.43391	0.02057
0.00155	-0.00114	0.02108	-0.00036	0.12286	0.00449	0.44582	0.02099
0.00175	-0.00114	0.02221	-0.00031	0.12824	0.00478	0.45780	0.02139
0.00195	-0.00113	0.02340	-0.00026	0.13381	0.00508	0.46982	0.02177
0.00217	-0.00112	0.02464	-0.00021	0.13957	0.00540	0.48188	0.02213
0.00240	-0.00111	0.02594	-0.00016	0.14554	0.00573	0.49396	0.02246
0.00264	-0.00110	0.02731	-0.00010	0.15172	0.00608	0.50604	0.02278
0.00290	-0.00109	0.02873	-0.00004	0.15811	0.00644	0.51812	0.02306
0.00316	-0.00108	0.03022	0.00003	0.16471	0.00682	0.53018	0.02333
0.00344	-0.00107	0.03178	0.00009	0.17152	0.00722	0.54220	0.02357
0.00373	-0.00106	0.03341	0.00016	0.17855	0.00764	0.55418	0.02378
0.00404	-0.00105	0.03511	0.00023	0.18580	0.00807	0.56609	0.02396
0.00436	-0.00103	0.03689	0.00031	0.19327	0.00853	0.57793	0.02412
0.00469	-0.00102	0.03875	0.00039	0.20000	0.00894	0.58968	0.02424
0.00505	-0.00101	0.04070	0.00048	0.20097	0.00900	0.60133	0.02434
0.00542	-0.00099	0.04273	0.00057	0.20889	0.00948	0.61286	0.02441
0.00580	-0.00098	0.04486	0.00066	0.21703	0.00998	0.62428	0.02444
0.00621	-0.00096	0.04708	0.00076	0.22539	0.01048	0.63555	0.02445
0.00663	-0.00094	0.04939	0.00086	0.23398	0.01098	0.64669	0.02443
0.00708	-0.00093	0.05181	0.00097	0.24279	0.01150	0.65766	0.02438
0.00755	-0.00091	0.05434	0.00109	0.25182	0.01201	0.66848	0.02430
0.00804	-0.00089	0.05698	0.00121	0.26107	0.01253	0.67912	0.02419
0.00855	-0.00087	0.05973	0.00133	0.27053	0.01306	0.68958	0.02405
0.00909	-0.00085	0.06259	0.00147	0.28020	0.01359	0.69985	0.02388
0.00966	-0.00082	0.06558	0.00161	0.29008	0.01412	0.70992	0.02369
0.01025	-0.00080	0.06870	0.00175	0.30015	0.01465	0.71980	0.02347
0.01087	-0.00077	0.07195	0.00191	0.31042	0.01518	0.72947	0.02322
0.01152	-0.00075	0.07534	0.00207	0.32088	0.01570	0.73893	0.02295

x/c	y/c	x/c	y/c	x/c	y/c	x/c	y/c
0.74818	0.02266	0.95061	0.00729	0.99420	0.00000	0.00217	-0.00112
0.75721	0.02234	0.95292	0.00697	0.99458	-0.00008	0.00240	-0.00111
0.76602	0.02200	0.95514	0.00665	0.99495	-0.00015	0.00264	-0.00110
0.77461	0.02164	0.95727	0.00634	0.99531	-0.00023	0.00290	-0.00109
0.78297	0.02126	0.95930	0.00604	0.99564	-0.00029	0.00316	-0.00108
0.79111	0.02087	0.96125	0.00575	0.99596	-0.00036	0.00344	-0.00107
0.79903	0.02046	0.96311	0.00547	0.99627	-0.00042	0.00373	-0.00106
0.80000	0.02040	0.96489	0.00519	0.99656	-0.00048	0.00404	-0.00105
0.80673	0.02003	0.96659	0.00492	0.99684	-0.00054	0.00436	-0.00103
0.81420	0.01960	0.96822	0.00466	0.99710	-0.00059	0.00469	-0.00102
0.82145	0.01917	0.96978	0.00441	0.99736	-0.00065	0.00505	-0.00101
0.82848	0.01874	0.97127	0.00417	0.99760	-0.00070	0.00542	-0.00099
0.83529	0.01830	0.97269	0.00394	0.99783	-0.00074	0.00580	-0.00098
0.84189	0.01786	0.97406	0.00371	0.99805	-0.00079	0.00621	-0.00096
0.84828	0.01742	0.97536	0.00349	0.99825	-0.00083	0.00663	-0.00094
0.85446	0.01698	0.97660	0.00328	0.99845	-0.00088	0.00708	-0.00093
0.86043	0.01653	0.97779	0.00307	0.99864	-0.00092	0.00755	-0.00091
0.86619	0.01609	0.97892	0.00287	0.99883	-0.00095	0.00804	-0.00089
0.87176	0.01565	0.98000	0.00268	0.99900	-0.00098	0.00855	-0.00087
0.87714	0.01521	0.98104	0.00250	0.99916	-0.00097	0.00909	-0.00085
0.88232	0.01477	0.98203	0.00232	0.99932	-0.00094	0.00966	-0.00082
0.88732	0.01433	0.98297	0.00215	0.99947	-0.00089	0.01025	-0.00080
0.89214	0.01389	0.98387	0.00198	0.99961	-0.00081	0.01087	-0.00077
0.89677	0.01346	0.98473	0.00183	0.99975	-0.00069	0.01152	-0.00075
0.90124	0.01303	0.98555	0.00167	0.99988	-0.00051	0.01220	-0.00072
0.90554	0.01261	0.98633	0.00153	1.00000	0.00000	0.01292	-0.00069
0.90967	0.01219	0.98708	0.00139	0.00000	0.00000	0.01367	-0.00066
0.91365	0.01177	0.98780	0.00125	0.00012	-0.00053	0.01445	-0.00063
0.91747	0.01136	0.98848	0.00112	0.00025	-0.00073	0.01527	-0.00060
0.92114	0.01096	0.98913	0.00100	0.00039	-0.00088	0.01613	-0.00056
0.92466	0.01056	0.98975	0.00088	0.00053	-0.00098	0.01703	-0.00053
0.92805	0.01017	0.99034	0.00076	0.00068	-0.00106	0.01797	-0.00049
0.93130	0.00978	0.99091	0.00065	0.00084	-0.00112	0.01896	-0.00045
0.93442	0.00940	0.99145	0.00055	0.00100	-0.00115	0.02000	-0.00040
0.93741	0.00903	0.99196	0.00045	0.00117	-0.00116	0.02108	-0.00036
0.94027	0.00867	0.99245	0.00035	0.00136	-0.00115	0.02221	-0.00031
0.94302	0.00831	0.99292	0.00026	0.00155	-0.00114	0.02340	-0.00026
0.94566	0.00796	0.99337	0.00017	0.00175	-0.00114	0.02464	-0.00021
0.94819	0.00762	0.99379	0.00008	0.00195	-0.00113	0.02594	-0.00016

<u>x/c</u>	<u>y/c</u>	<u>x/c</u>	<u>y/c</u>	<u>x/c</u>	<u>y/c</u>	<u>x/c</u>	<u>y/c</u>
0.02731	-0.00010	0.16471	0.00682	0.55418	0.02378	0.88732	0.01433
0.02873	-0.00004	0.17152	0.00722	0.56609	0.02396	0.89214	0.01389
0.03022	0.00003	0.17855	0.00764	0.57793	0.02412	0.89677	0.01346
0.03178	0.00009	0.18580	0.00807	0.58968	0.02424	0.90124	0.01303
0.03341	0.00016	0.19327	0.00853	0.60133	0.02434	0.90554	0.01261
0.03511	0.00023	0.20000	0.00894	0.61286	0.02441	0.90967	0.01219
0.03689	0.00031	0.20097	0.00900	0.62428	0.02444	0.91365	0.01177
0.03875	0.00039	0.20889	0.00948	0.63555	0.02445	0.91747	0.01136
0.04070	0.00048	0.21703	0.00998	0.64669	0.02443	0.92114	0.01096
0.04273	0.00057	0.22539	0.01048	0.65766	0.02438	0.92466	0.01056
0.04486	0.00066	0.23398	0.01098	0.66848	0.02430	0.92805	0.01017
0.04708	0.00076	0.24279	0.01150	0.67912	0.02419	0.93130	0.00978
0.04939	0.00086	0.25182	0.01201	0.68958	0.02405	0.93442	0.00940
0.05181	0.00097	0.26107	0.01253	0.69985	0.02388	0.93741	0.00903
0.05434	0.00109	0.27053	0.01306	0.70992	0.02369	0.94027	0.00867
0.05698	0.00121	0.28020	0.01359	0.71980	0.02347	0.94302	0.00831
0.05973	0.00133	0.29008	0.01412	0.72947	0.02322	0.94566	0.00796
0.06259	0.00147	0.30015	0.01465	0.73893	0.02295	0.94819	0.00762
0.06558	0.00161	0.31042	0.01518	0.74818	0.02266	0.95061	0.00729
0.06870	0.00175	0.32088	0.01570	0.75721	0.02234	0.95292	0.00697
0.07195	0.00191	0.33152	0.01623	0.76602	0.02200	0.95514	0.00665
0.07534	0.00207	0.34234	0.01674	0.77461	0.02164	0.95727	0.00634
0.07886	0.00224	0.35331	0.01726	0.78297	0.02126	0.95930	0.00604
0.08253	0.00242	0.36445	0.01776	0.79111	0.02087	0.96125	0.00575
0.08635	0.00261	0.37572	0.01826	0.79903	0.02046	0.96311	0.00547
0.09033	0.00280	0.38714	0.01875	0.80000	0.02040	0.96489	0.00519
0.09446	0.00301	0.39867	0.01923	0.80673	0.02003	0.96659	0.00492
0.09876	0.00323	0.41032	0.01969	0.81420	0.01960	0.96822	0.00466
0.10323	0.00346	0.42207	0.02014	0.82145	0.01917	0.96978	0.00441
0.10786	0.00370	0.43391	0.02057	0.82848	0.01874	0.97127	0.00417
0.11268	0.00395	0.44582	0.02099	0.83529	0.01830	0.97269	0.00394
0.11768	0.00421	0.45780	0.02139	0.84189	0.01786	0.97406	0.00371
0.12286	0.00449	0.46982	0.02177	0.84828	0.01742	0.97536	0.00349
0.12824	0.00478	0.48188	0.02213	0.85446	0.01698	0.97660	0.00328
0.13381	0.00508	0.49396	0.02246	0.86043	0.01653	0.97779	0.00307
0.13957	0.00540	0.50604	0.02278	0.86619	0.01609	0.97892	0.00287
0.14554	0.00573	0.51812	0.02306	0.87176	0.01565	0.98000	0.00268
0.15172	0.00608	0.53018	0.02333	0.87714	0.01521	0.98104	0.00250
0.15811	0.00644	0.54220	0.02357	0.88232	0.01477	0.98203	0.00232

<u>x/c</u>	<u>y/c</u>	<u>x/c</u>	<u>y/c</u>	<u>x/c</u>	<u>y/c</u>	<u>x/c</u>	<u>y/c</u>
0.98297	0.00215	0.99091	0.00065	0.99564	-0.00029	0.99845	-0.00088
0.98387	0.00198	0.99145	0.00055	0.99596	-0.00036	0.99864	-0.00092
0.98473	0.00183	0.99196	0.00045	0.99627	-0.00042	0.99883	-0.00095
0.98555	0.00167	0.99245	0.00035	0.99656	-0.00048	0.99900	-0.00098
0.98633	0.00153	0.99292	0.00026	0.99684	-0.00054	0.99916	-0.00097
0.98708	0.00139	0.99337	0.00017	0.99710	-0.00059	0.99932	-0.00094
0.98780	0.00125	0.99379	0.00008	0.99736	-0.00065	0.99947	-0.00089
0.98848	0.00112	0.99420	0.00000	0.99760	-0.00070	0.99961	-0.00081
0.98913	0.00100	0.99458	-0.00008	0.99783	-0.00074	0.99975	-0.00069
0.98975	0.00088	0.99495	-0.00015	0.99805	-0.00079	0.99988	-0.00051
0.99034	0.00076	0.99531	-0.00023	0.99825	-0.00083	1.00000	0.00000

Table 13. Station 6 upper surface airfoil coordinates,  $r/R = 1.0000$

$x/c$	$y/c$	$x/c$	$y/c$	$x/c$	$y/c$	$x/c$	$y/c$
1.00000	0.00000	0.98780	0.00703	0.92114	0.02586	0.66848	0.04182
0.99988	0.00060	0.98708	0.00734	0.91747	0.02655	0.65766	0.04178
0.99975	0.00088	0.98633	0.00765	0.91365	0.02723	0.64669	0.04171
0.99961	0.00110	0.98555	0.00798	0.90967	0.02792	0.63555	0.04160
0.99947	0.00129	0.98473	0.00831	0.90554	0.02860	0.62428	0.04146
0.99932	0.00145	0.98387	0.00866	0.90124	0.02929	0.61286	0.04129
0.99916	0.00159	0.98297	0.00902	0.89677	0.02997	0.60133	0.04108
0.99900	0.00172	0.98203	0.00938	0.89214	0.03064	0.58968	0.04084
0.99883	0.00183	0.98104	0.00977	0.88732	0.03131	0.57793	0.04058
0.99864	0.00192	0.98000	0.01016	0.88232	0.03198	0.56609	0.04028
0.99845	0.00202	0.97892	0.01057	0.87714	0.03263	0.55418	0.03995
0.99825	0.00212	0.97779	0.01098	0.87176	0.03328	0.54220	0.03959
0.99805	0.00223	0.97660	0.01141	0.86619	0.03391	0.53018	0.03920
0.99783	0.00234	0.97536	0.01186	0.86043	0.03452	0.51812	0.03879
0.99760	0.00246	0.97406	0.01231	0.85446	0.03512	0.50604	0.03836
0.99736	0.00259	0.97269	0.01278	0.84828	0.03571	0.49396	0.03789
0.99710	0.00271	0.97127	0.01326	0.84189	0.03627	0.48188	0.03741
0.99684	0.00285	0.96978	0.01375	0.83529	0.03681	0.46982	0.03690
0.99656	0.00299	0.96822	0.01425	0.82848	0.03733	0.45780	0.03638
0.99627	0.00313	0.96659	0.01477	0.82145	0.03782	0.44582	0.03583
0.99596	0.00328	0.96489	0.01530	0.81420	0.03829	0.43391	0.03527
0.99564	0.00344	0.96311	0.01584	0.80673	0.03872	0.42207	0.03470
0.99531	0.00361	0.96125	0.01639	0.80000	0.03907	0.41032	0.03411
0.99495	0.00378	0.95930	0.01696	0.79903	0.03912	0.39867	0.03350
0.99458	0.00396	0.95727	0.01753	0.79111	0.03950	0.38714	0.03289
0.99420	0.00414	0.95514	0.01812	0.78297	0.03984	0.37572	0.03227
0.99379	0.00434	0.95292	0.01872	0.77461	0.04017	0.36445	0.03164
0.99337	0.00454	0.95061	0.01933	0.76602	0.04047	0.35331	0.03100
0.99292	0.00475	0.94819	0.01994	0.75721	0.04074	0.34234	0.03036
0.99245	0.00497	0.94566	0.02057	0.74818	0.04098	0.33152	0.02971
0.99196	0.00519	0.94302	0.02121	0.73893	0.04120	0.32088	0.02907
0.99145	0.00543	0.94027	0.02185	0.72947	0.04138	0.31042	0.02842
0.99091	0.00567	0.93741	0.02251	0.71980	0.04154	0.30015	0.02778
0.99034	0.00592	0.93442	0.02317	0.70992	0.04166	0.29008	0.02713
0.98975	0.00619	0.93130	0.02383	0.69985	0.04175	0.28020	0.02649
0.98913	0.00646	0.92805	0.02451	0.68958	0.04181	0.27053	0.02586
0.98848	0.00674	0.92466	0.02518	0.67912	0.04183	0.26107	0.02522

<u>x/c</u>	<u>y/c</u>	<u>x/c</u>	<u>y/c</u>	<u>x/c</u>	<u>y/c</u>	<u>x/c</u>	<u>y/c</u>
0.25182	0.02460	0.04939	0.00705	0.00580	0.00192	0.99783	0.00234
0.24279	0.02398	0.04708	0.00679	0.00542	0.00187	0.99760	0.00246
0.23398	0.02337	0.04486	0.00654	0.00505	0.00183	0.99736	0.00259
0.22539	0.02277	0.04273	0.00629	0.00469	0.00178	0.99710	0.00271
0.21703	0.02218	0.04070	0.00606	0.00436	0.00174	0.99684	0.00285
0.20889	0.02160	0.03875	0.00584	0.00404	0.00170	0.99656	0.00299
0.20097	0.02103	0.03689	0.00563	0.00373	0.00167	0.99627	0.00313
0.20000	0.02096	0.03511	0.00542	0.00344	0.00163	0.99596	0.00328
0.19327	0.02047	0.03341	0.00522	0.00316	0.00160	0.99564	0.00344
0.18580	0.01990	0.03178	0.00503	0.00290	0.00156	0.99531	0.00361
0.17855	0.01934	0.03022	0.00485	0.00264	0.00153	0.99495	0.00378
0.17152	0.01879	0.02873	0.00468	0.00240	0.00150	0.99458	0.00396
0.16471	0.01824	0.02731	0.00451	0.00217	0.00147	0.99420	0.00414
0.15811	0.01769	0.02594	0.00435	0.00195	0.00145	0.99379	0.00434
0.15172	0.01715	0.02464	0.00420	0.00175	0.00142	0.99337	0.00454
0.14554	0.01662	0.02340	0.00405	0.00155	0.00140	0.99292	0.00475
0.13957	0.01609	0.02221	0.00391	0.00136	0.00137	0.99245	0.00497
0.13381	0.01558	0.02108	0.00377	0.00117	0.00135	0.99196	0.00519
0.12824	0.01507	0.02000	0.00364	0.00100	0.00131	0.99145	0.00543
0.12286	0.01458	0.01896	0.00352	0.00084	0.00125	0.99091	0.00567
0.11768	0.01409	0.01797	0.00340	0.00068	0.00117	0.99034	0.00592
0.11268	0.01362	0.01703	0.00329	0.00053	0.00107	0.98975	0.00619
0.10786	0.01315	0.01613	0.00318	0.00039	0.00094	0.98913	0.00646
0.10323	0.01270	0.01527	0.00308	0.00025	0.00078	0.98848	0.00674
0.09876	0.01226	0.01445	0.00298	0.00012	0.00055	0.98780	0.00703
0.09446	0.01183	0.01367	0.00288	0.00000	0.00000	0.98708	0.00734
0.09033	0.01141	0.01292	0.00279	1.00000	0.00000	0.98633	0.00765
0.08635	0.01101	0.01220	0.00270	0.99988	0.00060	0.98555	0.00798
0.08253	0.01062	0.01152	0.00262	0.99975	0.00088	0.98473	0.00831
0.07886	0.01023	0.01087	0.00254	0.99961	0.00110	0.98387	0.00866
0.07534	0.00987	0.01025	0.00247	0.99947	0.00129	0.98297	0.00902
0.07195	0.00951	0.00966	0.00239	0.99932	0.00145	0.98203	0.00938
0.06870	0.00916	0.00909	0.00233	0.99916	0.00159	0.98104	0.00977
0.06558	0.00883	0.00855	0.00226	0.99900	0.00172	0.98000	0.01016
0.06259	0.00850	0.00804	0.00220	0.99883	0.00183	0.97892	0.01057
0.05973	0.00819	0.00755	0.00214	0.99864	0.00192	0.97779	0.01098
0.05698	0.00789	0.00708	0.00208	0.99845	0.00202	0.97660	0.01141
0.05434	0.00760	0.00663	0.00202	0.99825	0.00212	0.97536	0.01186
0.05181	0.00732	0.00621	0.00197	0.99805	0.00223	0.97406	0.01231

<u>x/c</u>	<u>y/c</u>	<u>x/c</u>	<u>y/c</u>	<u>x/c</u>	<u>y/c</u>	<u>x/c</u>	<u>y/c</u>
0.97269	0.01278	0.83529	0.03681	0.44582	0.03583	0.11268	0.01362
0.97127	0.01326	0.82848	0.03733	0.43391	0.03527	0.10786	0.01315
0.96978	0.01375	0.82145	0.03782	0.42207	0.03470	0.10323	0.01270
0.96822	0.01425	0.81420	0.03829	0.41032	0.03411	0.09876	0.01226
0.96659	0.01477	0.80673	0.03872	0.39867	0.03350	0.09446	0.01183
0.96489	0.01530	0.80000	0.03907	0.38714	0.03289	0.09033	0.01141
0.96311	0.01584	0.79903	0.03912	0.37572	0.03227	0.08635	0.01101
0.96125	0.01639	0.79111	0.03950	0.36445	0.03164	0.08253	0.01062
0.95930	0.01696	0.78297	0.03984	0.35331	0.03100	0.07886	0.01023
0.95727	0.01753	0.77461	0.04017	0.34234	0.03036	0.07534	0.00987
0.95514	0.01812	0.76602	0.04047	0.33152	0.02971	0.07195	0.00951
0.95292	0.01872	0.75721	0.04074	0.32088	0.02907	0.06870	0.00916
0.95061	0.01933	0.74818	0.04098	0.31042	0.02842	0.06558	0.00883
0.94819	0.01994	0.73893	0.04120	0.30015	0.02778	0.06259	0.00850
0.94566	0.02057	0.72947	0.04138	0.29008	0.02713	0.05973	0.00819
0.94302	0.02121	0.71980	0.04154	0.28020	0.02649	0.05698	0.00789
0.94027	0.02185	0.70992	0.04166	0.27053	0.02586	0.05434	0.00760
0.93741	0.02251	0.69985	0.04175	0.26107	0.02522	0.05181	0.00732
0.93442	0.02317	0.68958	0.04181	0.25182	0.02460	0.04939	0.00705
0.93130	0.02383	0.67912	0.04183	0.24279	0.02398	0.04708	0.00679
0.92805	0.02451	0.66848	0.04182	0.23398	0.02337	0.04486	0.00654
0.92466	0.02518	0.65766	0.04178	0.22539	0.02277	0.04273	0.00629
0.92114	0.02586	0.64669	0.04171	0.21703	0.02218	0.04070	0.00606
0.91747	0.02655	0.63555	0.04160	0.20889	0.02160	0.03875	0.00584
0.91365	0.02723	0.62428	0.04146	0.20097	0.02103	0.03689	0.00563
0.90967	0.02792	0.61286	0.04129	0.20000	0.02096	0.03511	0.00542
0.90554	0.02860	0.60133	0.04108	0.19327	0.02047	0.03341	0.00522
0.90124	0.02929	0.58968	0.04084	0.18580	0.01990	0.03178	0.00503
0.89677	0.02997	0.57793	0.04058	0.17855	0.01934	0.03022	0.00485
0.89214	0.03064	0.56609	0.04028	0.17152	0.01879	0.02873	0.00468
0.88732	0.03131	0.55418	0.03995	0.16471	0.01824	0.02731	0.00451
0.88232	0.03198	0.54220	0.03959	0.15811	0.01769	0.02594	0.00435
0.87714	0.03263	0.53018	0.03920	0.15172	0.01715	0.02464	0.00420
0.87176	0.03328	0.51812	0.03879	0.14554	0.01662	0.02340	0.00405
0.86619	0.03391	0.50604	0.03836	0.13957	0.01609	0.02221	0.00391
0.86043	0.03452	0.49396	0.03789	0.13381	0.01558	0.02108	0.00377
0.85446	0.03512	0.48188	0.03741	0.12824	0.01507	0.02000	0.00364
0.84828	0.03571	0.46982	0.03690	0.12286	0.01458	0.01896	0.00352
0.84189	0.03627	0.45780	0.03638	0.11768	0.01409	0.01797	0.00340

$x/c$	$y/c$	$x/c$	$y/c$	$x/c$	$y/c$	$x/c$	$y/c$
0.01703	0.00329	0.00909	0.00233	0.00436	0.00174	0.00155	0.00140
0.01613	0.00318	0.00855	0.00226	0.00404	0.00170	0.00136	0.00137
0.01527	0.00308	0.00804	0.00220	0.00373	0.00167	0.00117	0.00135
0.01445	0.00298	0.00755	0.00214	0.00344	0.00163	0.00100	0.00131
0.01367	0.00288	0.00708	0.00208	0.00316	0.00160	0.00084	0.00125
0.01292	0.00279	0.00663	0.00202	0.00290	0.00156	0.00068	0.00117
0.01220	0.00270	0.00621	0.00197	0.00264	0.00153	0.00053	0.00107
0.01152	0.00262	0.00580	0.00192	0.00240	0.00150	0.00039	0.00094
0.01087	0.00254	0.00542	0.00187	0.00217	0.00147	0.00025	0.00078
0.01025	0.00247	0.00505	0.00183	0.00195	0.00145	0.00012	0.00055
0.00966	0.00239	0.00469	0.00178	0.00175	0.00142	0.00000	0.00000

Table 14. Station 6 lower surface airfoil coordinates,  $r/R = 1.0000$

$x/c$	$y/c$	$x/c$	$y/c$	$x/c$	$y/c$	$x/c$	$y/c$
0.00000	0.00000	0.01220	-0.00061	0.07886	0.00301	0.33152	0.01971
0.00012	-0.00053	0.01292	-0.00057	0.08253	0.00322	0.34234	0.02036
0.00025	-0.00073	0.01367	-0.00053	0.08635	0.00345	0.35331	0.02100
0.00039	-0.00087	0.01445	-0.00049	0.09033	0.00369	0.36445	0.02164
0.00053	-0.00098	0.01527	-0.00045	0.09446	0.00393	0.37572	0.02227
0.00068	-0.00105	0.01613	-0.00041	0.09876	0.00419	0.38714	0.02289
0.00084	-0.00111	0.01703	-0.00036	0.10323	0.00447	0.39867	0.02350
0.00100	-0.00114	0.01797	-0.00032	0.10786	0.00475	0.41032	0.02411
0.00117	-0.00115	0.01896	-0.00027	0.11268	0.00505	0.42207	0.02470
0.00136	-0.00114	0.02000	-0.00021	0.11768	0.00537	0.43391	0.02527
0.00155	-0.00113	0.02108	-0.00016	0.12286	0.00570	0.44582	0.02583
0.00175	-0.00112	0.02221	-0.00010	0.12824	0.00604	0.45780	0.02638
0.00195	-0.00111	0.02340	-0.00004	0.13381	0.00640	0.46982	0.02690
0.00217	-0.00110	0.02464	0.00002	0.13957	0.00678	0.48188	0.02741
0.00240	-0.00109	0.02594	0.00009	0.14554	0.00718	0.49396	0.02789
0.00264	-0.00108	0.02731	0.00016	0.15172	0.00759	0.50604	0.02836
0.00290	-0.00106	0.02873	0.00024	0.15811	0.00802	0.51812	0.02879
0.00316	-0.00105	0.03022	0.00031	0.16471	0.00847	0.53018	0.02920
0.00344	-0.00104	0.03178	0.00040	0.17152	0.00894	0.54220	0.02959
0.00373	-0.00102	0.03341	0.00048	0.17855	0.00943	0.55418	0.02995
0.00404	-0.00101	0.03511	0.00057	0.18580	0.00994	0.56609	0.03028
0.00436	-0.00099	0.03689	0.00067	0.19327	0.01047	0.57793	0.03058
0.00469	-0.00098	0.03875	0.00076	0.20000	0.01096	0.58968	0.03084
0.00505	-0.00096	0.04070	0.00087	0.20097	0.01103	0.60133	0.03108
0.00542	-0.00094	0.04273	0.00098	0.20889	0.01160	0.61286	0.03129
0.00580	-0.00092	0.04486	0.00109	0.21703	0.01218	0.62428	0.03146
0.00621	-0.00090	0.04708	0.00121	0.22539	0.01277	0.63555	0.03160
0.00663	-0.00088	0.04939	0.00134	0.23398	0.01337	0.64669	0.03171
0.00708	-0.00086	0.05181	0.00147	0.24279	0.01398	0.65766	0.03178
0.00755	-0.00084	0.05434	0.00161	0.25182	0.01460	0.66848	0.03182
0.00804	-0.00081	0.05698	0.00176	0.26107	0.01522	0.67912	0.03183
0.00855	-0.00079	0.05973	0.00191	0.27053	0.01586	0.68958	0.03181
0.00909	-0.00076	0.06259	0.00207	0.28020	0.01649	0.69985	0.03175
0.00966	-0.00073	0.06558	0.00224	0.29008	0.01713	0.70992	0.03166
0.01025	-0.00070	0.06870	0.00242	0.30015	0.01778	0.71980	0.03154
0.01087	-0.00067	0.07195	0.00261	0.31042	0.01842	0.72947	0.03138
0.01152	-0.00064	0.07534	0.00280	0.32088	0.01907	0.73893	0.03120

x/c	y/c	x/c	y/c	x/c	y/c	x/c	y/c
0.74818	0.03098	0.95061	0.01362	0.99420	0.00130	0.00217	-0.00110
0.75721	0.03074	0.95292	0.01314	0.99458	0.00114	0.00240	-0.00109
0.76602	0.03047	0.95514	0.01268	0.99495	0.00099	0.00264	-0.00108
0.77461	0.03017	0.95727	0.01222	0.99531	0.00085	0.00290	-0.00106
0.78297	0.02984	0.95930	0.01176	0.99564	0.00071	0.00316	-0.00105
0.79111	0.02950	0.96125	0.01132	0.99596	0.00057	0.00344	-0.00104
0.79903	0.02912	0.96311	0.01088	0.99627	0.00045	0.00373	-0.00102
0.80000	0.02907	0.96489	0.01045	0.99656	0.00032	0.00404	-0.00101
0.80673	0.02873	0.96659	0.01003	0.99684	0.00020	0.00436	-0.00099
0.81420	0.02832	0.96822	0.00962	0.99710	0.00009	0.00469	-0.00098
0.82145	0.02791	0.96978	0.00921	0.99736	-0.00002	0.00505	-0.00096
0.82848	0.02748	0.97127	0.00882	0.99760	-0.00012	0.00542	-0.00094
0.83529	0.02705	0.97269	0.00843	0.99783	-0.00023	0.00580	-0.00092
0.84189	0.02660	0.97406	0.00805	0.99805	-0.00032	0.00621	-0.00090
0.84828	0.02615	0.97536	0.00769	0.99825	-0.00042	0.00663	-0.00088
0.85446	0.02568	0.97660	0.00733	0.99845	-0.00050	0.00708	-0.00086
0.86043	0.02521	0.97779	0.00698	0.99864	-0.00059	0.00755	-0.00084
0.86619	0.02473	0.97892	0.00664	0.99883	-0.00067	0.00804	-0.00081
0.87176	0.02425	0.98000	0.00630	0.99900	-0.00073	0.00855	-0.00079
0.87714	0.02375	0.98104	0.00598	0.99916	-0.00077	0.00909	-0.00076
0.88232	0.02325	0.98203	0.00567	0.99932	-0.00078	0.00966	-0.00073
0.88732	0.02275	0.98297	0.00537	0.99947	-0.00076	0.01025	-0.00070
0.89214	0.02224	0.98387	0.00507	0.99961	-0.00071	0.01087	-0.00067
0.89677	0.02173	0.98473	0.00478	0.99975	-0.00063	0.01152	-0.00064
0.90124	0.02122	0.98555	0.00451	0.99988	-0.00048	0.01220	-0.00061
0.90554	0.02071	0.98633	0.00424	1.00000	0.00000	0.01292	-0.00057
0.90967	0.02019	0.98708	0.00398	0.00000	0.00000	0.01367	-0.00053
0.91365	0.01967	0.98780	0.00372	0.00012	-0.00053	0.01445	-0.00049
0.91747	0.01915	0.98848	0.00348	0.00025	-0.00073	0.01527	-0.00045
0.92114	0.01863	0.98913	0.00325	0.00039	-0.00087	0.01613	-0.00041
0.92466	0.01812	0.98975	0.00302	0.00053	-0.00098	0.01703	-0.00036
0.92805	0.01760	0.99034	0.00280	0.00068	-0.00105	0.01797	-0.00032
0.93130	0.01709	0.99091	0.00259	0.00084	-0.00111	0.01896	-0.00027
0.93442	0.01658	0.99145	0.00238	0.00100	-0.00114	0.02000	-0.00021
0.93741	0.01608	0.99196	0.00218	0.00117	-0.00115	0.02108	-0.00016
0.94027	0.01557	0.99245	0.00200	0.00136	-0.00114	0.02221	-0.00010
0.94302	0.01508	0.99292	0.00181	0.00155	-0.00113	0.02340	-0.00004
0.94566	0.01459	0.99337	0.00163	0.00175	-0.00112	0.02464	0.00002
0.94819	0.01410	0.99379	0.00147	0.00195	-0.00111	0.02594	0.00009

<u>x/c</u>	<u>y/c</u>	<u>x/c</u>	<u>y/c</u>	<u>x/c</u>	<u>y/c</u>	<u>x/c</u>	<u>y/c</u>
0.02731	0.00016	0.16471	0.00847	0.55418	0.02995	0.88732	0.02275
0.02873	0.00024	0.17152	0.00894	0.56609	0.03028	0.89214	0.02224
0.03022	0.00031	0.17855	0.00943	0.57793	0.03058	0.89677	0.02173
0.03178	0.00040	0.18580	0.00994	0.58968	0.03084	0.90124	0.02122
0.03341	0.00048	0.19327	0.01047	0.60133	0.03108	0.90554	0.02071
0.03511	0.00057	0.20000	0.01096	0.61286	0.03129	0.90967	0.02019
0.03689	0.00067	0.20097	0.01103	0.62428	0.03146	0.91365	0.01967
0.03875	0.00076	0.20889	0.01160	0.63555	0.03160	0.91747	0.01915
0.04070	0.00087	0.21703	0.01218	0.64669	0.03171	0.92114	0.01863
0.04273	0.00098	0.22539	0.01277	0.65766	0.03178	0.92466	0.01812
0.04486	0.00109	0.23398	0.01337	0.66848	0.03182	0.92805	0.01760
0.04708	0.00121	0.24279	0.01398	0.67912	0.03183	0.93130	0.01709
0.04939	0.00134	0.25182	0.01460	0.68958	0.03181	0.93442	0.01658
0.05181	0.00147	0.26107	0.01522	0.69985	0.03175	0.93741	0.01608
0.05434	0.00161	0.27053	0.01586	0.70992	0.03166	0.94027	0.01557
0.05698	0.00176	0.28020	0.01649	0.71980	0.03154	0.94302	0.01508
0.05973	0.00191	0.29008	0.01713	0.72947	0.03138	0.94566	0.01459
0.06259	0.00207	0.30015	0.01778	0.73893	0.03120	0.94819	0.01410
0.06558	0.00224	0.31042	0.01842	0.74818	0.03098	0.95061	0.01362
0.06870	0.00242	0.32088	0.01907	0.75721	0.03074	0.95292	0.01314
0.07195	0.00261	0.33152	0.01971	0.76602	0.03047	0.95514	0.01268
0.07534	0.00280	0.34234	0.02036	0.77461	0.03017	0.95727	0.01222
0.07886	0.00301	0.35331	0.02100	0.78297	0.02984	0.95930	0.01176
0.08253	0.00322	0.36445	0.02164	0.79111	0.02950	0.96125	0.01132
0.08635	0.00345	0.37572	0.02227	0.79903	0.02912	0.96311	0.01088
0.09033	0.00369	0.38714	0.02289	0.80000	0.02907	0.96489	0.01045
0.09446	0.00393	0.39867	0.02350	0.80673	0.02873	0.96659	0.01003
0.09876	0.00419	0.41032	0.02411	0.81420	0.02832	0.96822	0.00962
0.10323	0.00447	0.42207	0.02470	0.82145	0.02791	0.96978	0.00921
0.10786	0.00475	0.43391	0.02527	0.82848	0.02748	0.97127	0.00882
0.11268	0.00505	0.44582	0.02583	0.83529	0.02705	0.97269	0.00843
0.11768	0.00537	0.45780	0.02638	0.84189	0.02660	0.97406	0.00805
0.12286	0.00570	0.46982	0.02690	0.84828	0.02615	0.97536	0.00769
0.12824	0.00604	0.48188	0.02741	0.85446	0.02568	0.97660	0.00733
0.13381	0.00640	0.49396	0.02789	0.86043	0.02521	0.97779	0.00698
0.13957	0.00678	0.50604	0.02836	0.86619	0.02473	0.97892	0.00664
0.14554	0.00718	0.51812	0.02879	0.87176	0.02425	0.98000	0.00630
0.15172	0.00759	0.53018	0.02920	0.87714	0.02375	0.98104	0.00598
0.15811	0.00802	0.54220	0.02959	0.88232	0.02325	0.98203	0.00567

$x/c$	$y/c$	$x/c$	$y/c$	$x/c$	$y/c$	$x/c$	$y/c$
0.98297	0.00537	0.99091	0.00259	0.99564	0.00071	0.99845	-0.00050
0.98387	0.00507	0.99145	0.00238	0.99596	0.00057	0.99864	-0.00059
0.98473	0.00478	0.99196	0.00218	0.99627	0.00045	0.99883	-0.00067
0.98555	0.00451	0.99245	0.00200	0.99656	0.00032	0.99900	-0.00073
0.98633	0.00424	0.99292	0.00181	0.99684	0.00020	0.99916	-0.00077
0.98708	0.00398	0.99337	0.00163	0.99710	0.00009	0.99932	-0.00078
0.98780	0.00372	0.99379	0.00147	0.99736	-0.00002	0.99947	-0.00076
0.98848	0.00348	0.99420	0.00130	0.99760	-0.00012	0.99961	-0.00071
0.98913	0.00325	0.99458	0.00114	0.99783	-0.00023	0.99975	-0.00063
0.98975	0.00302	0.99495	0.00099	0.99805	-0.00032	0.99988	-0.00048
0.99034	0.00280	0.99531	0.00085	0.99825	-0.00042	1.00000	0.00000

## APPENDIX B

The OML ('as-built') normalized airfoil coordinates for various radial stations are plotted in Table 15 through Table 26. Both upper and lower surface coordinates are presented separately. Around 1,000 coordinates are distributed along the profile for each airfoil.

Table 15. OML Station 1 upper surface airfoil coordinates,  $r/R = 0.1180$

x/c	y/c	x/c	y/c	x/c	y/c	x/c	y/c
1.00000	0.00121	0.97775	0.08980	0.91830	0.15601	0.83502	0.18736
0.99998	0.00364	0.97659	0.09194	0.91629	0.15737	0.83261	0.18764
0.99994	0.00607	0.97540	0.09405	0.91426	0.15870	0.83019	0.18788
0.99986	0.00850	0.97419	0.09616	0.91221	0.16001	0.82777	0.18809
0.99975	0.01092	0.97294	0.09824	0.91014	0.16128	0.82535	0.18828
0.99961	0.01335	0.97167	0.10031	0.90806	0.16254	0.82293	0.18843
0.99943	0.01577	0.97038	0.10236	0.90597	0.16376	0.82050	0.18855
0.99923	0.01819	0.96905	0.10440	0.90385	0.16496	0.81808	0.18863
0.99899	0.02060	0.96770	0.10642	0.90172	0.16613	0.81565	0.18869
0.99873	0.02302	0.96633	0.10842	0.89958	0.16727	0.81322	0.18872
0.99843	0.02543	0.96493	0.11040	0.89742	0.16838	0.81079	0.18872
0.99810	0.02783	0.96350	0.11237	0.89525	0.16947	0.80837	0.18872
0.99774	0.03023	0.96205	0.11431	0.89307	0.17052	0.80594	0.18872
0.99735	0.03263	0.96057	0.11624	0.89087	0.17155	0.80351	0.18872
0.99693	0.03502	0.95907	0.11815	0.88866	0.17255	0.80108	0.18872
0.99647	0.03741	0.95754	0.12004	0.88643	0.17353	0.79865	0.18872
0.99599	0.03979	0.95599	0.12191	0.88419	0.17447	0.79622	0.18872
0.99493	0.04453	0.95442	0.12375	0.88194	0.17538	0.79380	0.18872
0.99435	0.04688	0.95282	0.12558	0.87968	0.17627	0.79137	0.18872
0.99375	0.04924	0.95120	0.12739	0.87741	0.17712	0.78894	0.18872
0.99311	0.05158	0.94955	0.12917	0.87513	0.17795	0.78651	0.18872
0.99244	0.05391	0.94788	0.13094	0.87283	0.17874	0.78408	0.18872
0.99174	0.05624	0.94619	0.13268	0.87053	0.17951	0.78166	0.18872
0.99102	0.05856	0.94448	0.13440	0.86821	0.18025	0.77923	0.18872
0.99026	0.06086	0.94274	0.13610	0.86589	0.18095	0.77680	0.18872
0.98947	0.06316	0.94098	0.13777	0.86356	0.18163	0.77437	0.18872
0.98865	0.06545	0.93921	0.13943	0.86122	0.18228	0.77194	0.18872
0.98781	0.06772	0.93741	0.14105	0.85887	0.18289	0.76952	0.18872
0.98693	0.06999	0.93558	0.14266	0.85651	0.18348	0.76709	0.18872
0.98603	0.07224	0.93374	0.14424	0.85415	0.18403	0.76466	0.18872
0.98509	0.07448	0.93188	0.14580	0.85178	0.18456	0.76223	0.18872
0.98413	0.07671	0.93000	0.14733	0.84940	0.18505	0.75980	0.18872
0.98314	0.07893	0.92810	0.14884	0.84702	0.18551	0.75737	0.18872
0.98212	0.08113	0.92617	0.15033	0.84463	0.18594	0.75495	0.18872
0.98107	0.08332	0.92423	0.15179	0.84223	0.18634	0.75252	0.18872
0.97999	0.08549	0.92227	0.15322	0.83983	0.18671	0.75009	0.18872
0.97889	0.08766	0.92030	0.15463	0.83743	0.18705	0.74766	0.18872

x/c	y/c	x/c	y/c	x/c	y/c	x/c	y/c
0.74523	0.18872	0.65054	0.18872	0.55584	0.18872	0.46114	0.18872
0.74281	0.18872	0.64811	0.18872	0.55341	0.18872	0.45871	0.18872
0.74038	0.18872	0.64568	0.18872	0.55098	0.18872	0.45629	0.18872
0.73795	0.18872	0.64325	0.18872	0.54855	0.18872	0.45386	0.18872
0.73552	0.18872	0.64082	0.18872	0.54613	0.18872	0.45143	0.18872
0.73309	0.18872	0.63840	0.18872	0.54370	0.18872	0.44900	0.18872
0.73067	0.18872	0.63597	0.18872	0.54127	0.18872	0.44657	0.18872
0.72824	0.18872	0.63354	0.18872	0.53884	0.18872	0.44415	0.18872
0.72581	0.18872	0.63111	0.18872	0.53641	0.18872	0.44172	0.18872
0.72338	0.18872	0.62868	0.18872	0.53399	0.18872	0.43929	0.18872
0.72095	0.18872	0.62626	0.18872	0.53156	0.18872	0.43686	0.18872
0.71852	0.18872	0.62383	0.18872	0.52913	0.18872	0.43443	0.18872
0.71610	0.18872	0.62140	0.18872	0.52670	0.18872	0.43200	0.18872
0.71367	0.18872	0.61897	0.18872	0.52427	0.18872	0.42958	0.18872
0.71124	0.18872	0.61654	0.18872	0.52185	0.18872	0.42715	0.18872
0.70881	0.18872	0.61411	0.18872	0.51942	0.18872	0.42472	0.18872
0.70638	0.18872	0.61169	0.18872	0.51699	0.18872	0.42229	0.18872
0.70396	0.18872	0.60926	0.18872	0.51456	0.18872	0.41986	0.18872
0.70153	0.18872	0.60683	0.18872	0.51213	0.18872	0.41744	0.18872
0.69910	0.18872	0.60440	0.18872	0.50970	0.18872	0.41501	0.18872
0.69667	0.18872	0.60197	0.18872	0.50728	0.18872	0.41258	0.18872
0.69424	0.18872	0.59955	0.18872	0.50485	0.18872	0.41015	0.18872
0.69181	0.18872	0.59712	0.18872	0.50242	0.18872	0.40772	0.18872
0.68939	0.18872	0.59469	0.18872	0.49999	0.18872	0.40529	0.18872
0.68696	0.18872	0.59226	0.18872	0.49756	0.18872	0.40287	0.18872
0.68453	0.18872	0.58983	0.18872	0.49514	0.18872	0.40044	0.18872
0.68210	0.18872	0.58741	0.18872	0.49271	0.18872	0.39801	0.18872
0.67967	0.18872	0.58498	0.18872	0.49028	0.18872	0.39558	0.18872
0.67725	0.18872	0.58255	0.18872	0.48785	0.18872	0.39315	0.18872
0.67482	0.18872	0.58012	0.18872	0.48542	0.18872	0.39073	0.18872
0.67239	0.18872	0.57769	0.18872	0.48300	0.18872	0.38830	0.18872
0.66996	0.18872	0.57526	0.18872	0.48057	0.18872	0.38587	0.18872
0.66753	0.18872	0.57284	0.18872	0.47814	0.18872	0.38344	0.18872
0.66511	0.18872	0.57041	0.18872	0.47571	0.18872	0.38101	0.18872
0.66268	0.18872	0.56798	0.18872	0.47328	0.18872	0.37859	0.18872
0.66025	0.18872	0.56555	0.18872	0.47085	0.18872	0.37616	0.18872
0.65782	0.18872	0.56312	0.18872	0.46843	0.18872	0.37373	0.18872
0.65539	0.18872	0.56070	0.18872	0.46600	0.18872	0.37130	0.18872
0.65296	0.18872	0.55827	0.18872	0.46357	0.18872	0.36887	0.18872

x/c	y/c	x/c	y/c	x/c	y/c	x/c	y/c
0.36644	0.18872	0.27175	0.18872	0.17706	0.18843	0.08778	0.16001
0.36402	0.18872	0.26932	0.18872	0.17463	0.18828	0.08573	0.15870
0.36159	0.18872	0.26689	0.18872	0.17221	0.18809	0.08370	0.15737
0.35916	0.18872	0.26446	0.18872	0.16979	0.18788	0.08168	0.15601
0.35673	0.18872	0.26203	0.18872	0.16738	0.18764	0.07969	0.15463
0.35430	0.18872	0.25961	0.18872	0.16496	0.18736	0.07771	0.15322
0.35188	0.18872	0.25718	0.18872	0.16256	0.18705	0.07575	0.15179
0.34945	0.18872	0.25475	0.18872	0.16015	0.18671	0.07381	0.15033
0.34702	0.18872	0.25232	0.18872	0.15775	0.18634	0.07189	0.14884
0.34459	0.18872	0.24989	0.18872	0.15536	0.18594	0.06999	0.14733
0.34216	0.18872	0.24747	0.18872	0.15297	0.18551	0.06810	0.14580
0.33974	0.18872	0.24504	0.18872	0.15058	0.18505	0.06624	0.14424
0.33731	0.18872	0.24261	0.18872	0.14821	0.18456	0.06440	0.14266
0.33488	0.18872	0.24018	0.18872	0.14583	0.18403	0.06258	0.14105
0.33245	0.18872	0.23775	0.18872	0.14347	0.18348	0.06078	0.13943
0.33002	0.18872	0.23533	0.18872	0.14111	0.18289	0.05900	0.13777
0.32759	0.18872	0.23290	0.18872	0.13877	0.18228	0.05724	0.13610
0.32517	0.18872	0.23047	0.18872	0.13643	0.18163	0.05551	0.13440
0.32274	0.18872	0.22804	0.18872	0.13409	0.18095	0.05379	0.13268
0.32031	0.18872	0.22561	0.18872	0.13177	0.18025	0.05210	0.13094
0.31788	0.18872	0.22318	0.18872	0.12946	0.17951	0.05043	0.12917
0.31545	0.18872	0.22076	0.18872	0.12715	0.17874	0.04879	0.12739
0.31303	0.18872	0.21833	0.18872	0.12486	0.17795	0.04717	0.12558
0.31060	0.18872	0.21590	0.18872	0.12257	0.17712	0.04557	0.12375
0.30817	0.18872	0.21347	0.18872	0.12030	0.17627	0.04399	0.12191
0.30574	0.18872	0.21104	0.18872	0.11804	0.17538	0.04244	0.12004
0.30331	0.18872	0.20862	0.18872	0.11579	0.17447	0.04091	0.11815
0.30089	0.18872	0.20619	0.18872	0.11355	0.17353	0.03941	0.11624
0.29846	0.18872	0.20376	0.18872	0.11133	0.17255	0.03794	0.11431
0.29603	0.18872	0.20133	0.18872	0.10912	0.17155	0.03648	0.11237
0.29360	0.18872	0.19890	0.18872	0.10692	0.17052	0.03506	0.11040
0.29117	0.18872	0.19648	0.18872	0.10473	0.16947	0.03366	0.10842
0.28874	0.18872	0.19405	0.18872	0.10256	0.16838	0.03228	0.10642
0.28632	0.18872	0.19162	0.18872	0.10040	0.16727	0.03093	0.10440
0.28389	0.18872	0.18919	0.18872	0.09826	0.16613	0.02961	0.10236
0.28146	0.18872	0.18676	0.18872	0.09613	0.16496	0.02831	0.10031
0.27903	0.18872	0.18433	0.18869	0.09402	0.16376	0.02704	0.09824
0.27660	0.18872	0.18191	0.18863	0.09192	0.16254	0.02580	0.09616
0.27418	0.18872	0.17948	0.18855	0.08984	0.16128	0.02458	0.09405

x/c	y/c
0.02339	0.09194
0.02223	0.08980
0.02110	0.08766
0.01999	0.08549
0.01892	0.08332
0.01787	0.08113
0.01685	0.07893
0.01585	0.07671
0.01489	0.07448
0.01396	0.07224

x/c	y/c
0.01305	0.06999
0.01218	0.06772
0.01133	0.06545
0.01051	0.06316
0.00972	0.06086
0.00897	0.05856
0.00824	0.05624
0.00754	0.05391
0.00688	0.05158
0.00624	0.04924

x/c	y/c
0.00563	0.04688
0.00506	0.04453
0.00451	0.04216
0.00399	0.03979
0.00351	0.03741
0.00306	0.03502
0.00264	0.03263
0.00224	0.03023
0.00188	0.02783
0.00155	0.02543

x/c	y/c
0.00126	0.02302
0.00099	0.02060
0.00075	0.01819
0.00055	0.01577
0.00038	0.01335
0.00024	0.01092
0.00013	0.00850
0.00005	0.00607
0.00000	0.00364

Table 16. OML Station 1 lower surface airfoil coordinates,  $r/R = 0.1180$

$x/c$	$y/c$	$x/c$	$y/c$	$x/c$	$y/c$	$x/c$	$y/c$
0.00000	-0.00121	0.02223	-0.08738	0.08168	-0.15359	0.16496	-0.18493
0.00005	-0.00364	0.02339	-0.08951	0.08370	-0.15494	0.16738	-0.18521
0.00013	-0.00607	0.02458	-0.09163	0.08573	-0.15627	0.16979	-0.18545
0.00024	-0.00849	0.02580	-0.09373	0.08778	-0.15758	0.17221	-0.18567
0.00038	-0.01092	0.02704	-0.09581	0.08984	-0.15886	0.17463	-0.18585
0.00055	-0.01334	0.02831	-0.09788	0.09192	-0.16011	0.17706	-0.18600
0.00075	-0.01576	0.02961	-0.09994	0.09402	-0.16133	0.17948	-0.18612
0.00099	-0.01818	0.03093	-0.10197	0.09613	-0.16253	0.18191	-0.18621
0.00126	-0.02059	0.03228	-0.10399	0.09826	-0.16370	0.18433	-0.18626
0.00155	-0.02300	0.03366	-0.10599	0.10040	-0.16484	0.18676	-0.18629
0.00188	-0.02541	0.03506	-0.10797	0.10256	-0.16595	0.18919	-0.18629
0.00224	-0.02781	0.03648	-0.10994	0.10473	-0.16704	0.19162	-0.18629
0.00264	-0.03020	0.03794	-0.11189	0.10692	-0.16810	0.19405	-0.18629
0.00306	-0.03259	0.03941	-0.11381	0.10912	-0.16913	0.19648	-0.18629
0.00351	-0.03498	0.04091	-0.11572	0.11133	-0.17013	0.19890	-0.18629
0.00399	-0.03736	0.04244	-0.11761	0.11355	-0.17110	0.20133	-0.18629
0.00451	-0.03973	0.04399	-0.11948	0.11579	-0.17204	0.20376	-0.18629
0.00506	-0.04210	0.04557	-0.12133	0.11804	-0.17295	0.20619	-0.18629
0.00563	-0.04446	0.04717	-0.12315	0.12030	-0.17384	0.20862	-0.18629
0.00624	-0.04681	0.04879	-0.12496	0.12257	-0.17469	0.21104	-0.18629
0.00688	-0.04915	0.05043	-0.12674	0.12486	-0.17552	0.21347	-0.18629
0.00754	-0.05149	0.05210	-0.12851	0.12715	-0.17632	0.21590	-0.18629
0.00824	-0.05381	0.05379	-0.13025	0.12946	-0.17708	0.21833	-0.18629
0.00897	-0.05613	0.05551	-0.13197	0.13177	-0.17782	0.22076	-0.18629
0.00972	-0.05843	0.05724	-0.13367	0.13409	-0.17853	0.22318	-0.18629
0.01051	-0.06073	0.05900	-0.13534	0.13643	-0.17920	0.22561	-0.18629
0.01133	-0.06302	0.06078	-0.13700	0.13877	-0.17985	0.22804	-0.18629
0.01218	-0.06529	0.06258	-0.13863	0.14111	-0.18046	0.23047	-0.18629
0.01305	-0.06756	0.06440	-0.14023	0.14347	-0.18105	0.23290	-0.18629
0.01396	-0.06981	0.06624	-0.14181	0.14583	-0.18160	0.23533	-0.18629
0.01489	-0.07205	0.06810	-0.14337	0.14821	-0.18213	0.23775	-0.18629
0.01585	-0.07428	0.06999	-0.14491	0.15058	-0.18262	0.24018	-0.18629
0.01685	-0.07650	0.07189	-0.14642	0.15297	-0.18308	0.24261	-0.18629
0.01787	-0.07870	0.07381	-0.14790	0.15536	-0.18352	0.24504	-0.18629
0.01892	-0.08089	0.07575	-0.14936	0.15775	-0.18392	0.24747	-0.18629
0.01999	-0.08307	0.07771	-0.15079	0.16015	-0.18429	0.24989	-0.18629
0.02110	-0.08523	0.07969	-0.15220	0.16256	-0.18462	0.25232	-0.18629

<u>x/c</u>	<u>y/c</u>	<u>x/c</u>	<u>y/c</u>	<u>x/c</u>	<u>y/c</u>	<u>x/c</u>	<u>y/c</u>
0.25475	-0.18629	0.34945	-0.18629	0.44415	-0.18629	0.53884	-0.18629
0.25718	-0.18629	0.35188	-0.18629	0.44657	-0.18629	0.54127	-0.18629
0.25961	-0.18629	0.35430	-0.18629	0.44900	-0.18629	0.54370	-0.18629
0.26203	-0.18629	0.35673	-0.18629	0.45143	-0.18629	0.54613	-0.18629
0.26446	-0.18629	0.35916	-0.18629	0.45386	-0.18629	0.54855	-0.18629
0.26689	-0.18629	0.36159	-0.18629	0.45629	-0.18629	0.55098	-0.18629
0.26932	-0.18629	0.36402	-0.18629	0.45871	-0.18629	0.55341	-0.18629
0.27175	-0.18629	0.36644	-0.18629	0.46114	-0.18629	0.55584	-0.18629
0.27418	-0.18629	0.36887	-0.18629	0.46357	-0.18629	0.55827	-0.18629
0.27660	-0.18629	0.37130	-0.18629	0.46600	-0.18629	0.56070	-0.18629
0.27903	-0.18629	0.37373	-0.18629	0.46843	-0.18629	0.56312	-0.18629
0.28146	-0.18629	0.37616	-0.18629	0.47085	-0.18629	0.56555	-0.18629
0.28389	-0.18629	0.37859	-0.18629	0.47328	-0.18629	0.56798	-0.18629
0.28632	-0.18629	0.38101	-0.18629	0.47571	-0.18629	0.57041	-0.18629
0.28874	-0.18629	0.38344	-0.18629	0.47814	-0.18629	0.57284	-0.18629
0.29117	-0.18629	0.38587	-0.18629	0.48057	-0.18629	0.57526	-0.18629
0.29360	-0.18629	0.38830	-0.18629	0.48300	-0.18629	0.57769	-0.18629
0.29603	-0.18629	0.39073	-0.18629	0.48542	-0.18629	0.58012	-0.18629
0.29846	-0.18629	0.39315	-0.18629	0.48785	-0.18629	0.58255	-0.18629
0.30089	-0.18629	0.39558	-0.18629	0.49028	-0.18629	0.58498	-0.18629
0.30331	-0.18629	0.39801	-0.18629	0.49271	-0.18629	0.58741	-0.18629
0.30574	-0.18629	0.40044	-0.18629	0.49514	-0.18629	0.58983	-0.18629
0.30817	-0.18629	0.40287	-0.18629	0.49756	-0.18629	0.59226	-0.18629
0.31060	-0.18629	0.40529	-0.18629	0.49999	-0.18629	0.59469	-0.18629
0.31303	-0.18629	0.40772	-0.18629	0.50242	-0.18629	0.59712	-0.18629
0.31545	-0.18629	0.41015	-0.18629	0.50485	-0.18629	0.59955	-0.18629
0.31788	-0.18629	0.41258	-0.18629	0.50728	-0.18629	0.60197	-0.18629
0.32031	-0.18629	0.41501	-0.18629	0.50970	-0.18629	0.60440	-0.18629
0.32274	-0.18629	0.41744	-0.18629	0.51213	-0.18629	0.60683	-0.18629
0.32517	-0.18629	0.41986	-0.18629	0.51456	-0.18629	0.60926	-0.18629
0.32759	-0.18629	0.42229	-0.18629	0.51699	-0.18629	0.61169	-0.18629
0.33002	-0.18629	0.42472	-0.18629	0.51942	-0.18629	0.61411	-0.18629
0.33245	-0.18629	0.42715	-0.18629	0.52185	-0.18629	0.61654	-0.18629
0.33488	-0.18629	0.42958	-0.18629	0.52427	-0.18629	0.61897	-0.18629
0.33731	-0.18629	0.43200	-0.18629	0.52670	-0.18629	0.62140	-0.18629
0.33974	-0.18629	0.43443	-0.18629	0.52913	-0.18629	0.62383	-0.18629
0.34216	-0.18629	0.43686	-0.18629	0.53156	-0.18629	0.62626	-0.18629
0.34459	-0.18629	0.43929	-0.18629	0.53399	-0.18629	0.62868	-0.18629
0.34702	-0.18629	0.44172	-0.18629	0.53641	-0.18629	0.63111	-0.18629

<u>x/c</u>	<u>y/c</u>	<u>x/c</u>	<u>y/c</u>	<u>x/c</u>	<u>y/c</u>	<u>x/c</u>	<u>y/c</u>
0.63354	-0.18629	0.72824	-0.18629	0.82293	-0.18600	0.91221	-0.15758
0.63597	-0.18629	0.73067	-0.18629	0.82535	-0.18585	0.91426	-0.15627
0.63840	-0.18629	0.73309	-0.18629	0.82777	-0.18567	0.91629	-0.15494
0.64082	-0.18629	0.73552	-0.18629	0.83019	-0.18545	0.91830	-0.15359
0.64325	-0.18629	0.73795	-0.18629	0.83261	-0.18521	0.92030	-0.15220
0.64568	-0.18629	0.74038	-0.18629	0.83502	-0.18493	0.92227	-0.15079
0.64811	-0.18629	0.74281	-0.18629	0.83743	-0.18462	0.92423	-0.14936
0.65054	-0.18629	0.74523	-0.18629	0.83983	-0.18429	0.92617	-0.14790
0.65296	-0.18629	0.74766	-0.18629	0.84223	-0.18392	0.92810	-0.14642
0.65539	-0.18629	0.75009	-0.18629	0.84463	-0.18352	0.93000	-0.14491
0.65782	-0.18629	0.75252	-0.18629	0.84702	-0.18308	0.93188	-0.14337
0.66025	-0.18629	0.75495	-0.18629	0.84940	-0.18262	0.93374	-0.14181
0.66268	-0.18629	0.75737	-0.18629	0.85178	-0.18213	0.93558	-0.14023
0.66511	-0.18629	0.75980	-0.18629	0.85415	-0.18160	0.93741	-0.13863
0.66753	-0.18629	0.76223	-0.18629	0.85651	-0.18105	0.93921	-0.13700
0.66996	-0.18629	0.76466	-0.18629	0.85887	-0.18046	0.94098	-0.13534
0.67239	-0.18629	0.76709	-0.18629	0.86122	-0.17985	0.94274	-0.13367
0.67482	-0.18629	0.76952	-0.18629	0.86356	-0.17920	0.94448	-0.13197
0.67725	-0.18629	0.77194	-0.18629	0.86589	-0.17853	0.94619	-0.13025
0.67967	-0.18629	0.77437	-0.18629	0.86821	-0.17782	0.94788	-0.12851
0.68210	-0.18629	0.77680	-0.18629	0.87053	-0.17708	0.94955	-0.12674
0.68453	-0.18629	0.77923	-0.18629	0.87283	-0.17632	0.95120	-0.12496
0.68696	-0.18629	0.78166	-0.18629	0.87513	-0.17552	0.95282	-0.12315
0.68939	-0.18629	0.78408	-0.18629	0.87741	-0.17469	0.95442	-0.12133
0.69181	-0.18629	0.78651	-0.18629	0.87968	-0.17384	0.95599	-0.11948
0.69424	-0.18629	0.78894	-0.18629	0.88194	-0.17295	0.95754	-0.11761
0.69667	-0.18629	0.79137	-0.18629	0.88419	-0.17204	0.95907	-0.11572
0.69910	-0.18629	0.79380	-0.18629	0.88643	-0.17110	0.96057	-0.11381
0.70153	-0.18629	0.79622	-0.18629	0.88866	-0.17013	0.96205	-0.11189
0.70396	-0.18629	0.79865	-0.18629	0.89087	-0.16913	0.96350	-0.10994
0.70638	-0.18629	0.80108	-0.18629	0.89307	-0.16810	0.96493	-0.10797
0.70881	-0.18629	0.80351	-0.18629	0.89525	-0.16704	0.96633	-0.10599
0.71124	-0.18629	0.80594	-0.18629	0.89742	-0.16595	0.96770	-0.10399
0.71367	-0.18629	0.80837	-0.18629	0.89958	-0.16484	0.96905	-0.10197
0.71610	-0.18629	0.81079	-0.18629	0.90172	-0.16370	0.97038	-0.09994
0.71852	-0.18629	0.81322	-0.18629	0.90385	-0.16253	0.97167	-0.09788
0.72095	-0.18629	0.81565	-0.18626	0.90597	-0.16133	0.97294	-0.09581
0.72338	-0.18629	0.81808	-0.18621	0.90806	-0.16011	0.97419	-0.09373
0.72581	-0.18629	0.82050	-0.18612	0.91014	-0.15886	0.97540	-0.09163

$x/c$	$y/c$	$x/c$	$y/c$	$x/c$	$y/c$	$x/c$	$y/c$
0.97659	-0.08951	0.98693	-0.06756	0.99435	-0.04446	0.99873	-0.02059
0.97775	-0.08738	0.98781	-0.06529	0.99493	-0.04210	0.99899	-0.01818
0.97889	-0.08523	0.98865	-0.06302	0.99547	-0.03973	0.99923	-0.01576
0.97999	-0.08307	0.98947	-0.06073	0.99599	-0.03736	0.99943	-0.01334
0.98107	-0.08089	0.99026	-0.05843	0.99647	-0.03498	0.99961	-0.01092
0.98212	-0.07870	0.99102	-0.05613	0.99693	-0.03259	0.99975	-0.00849
0.98314	-0.07650	0.99174	-0.05381	0.99735	-0.03020	0.99986	-0.00607
0.98413	-0.07428	0.99244	-0.05149	0.99774	-0.02781	0.99994	-0.00364
0.98509	-0.07205	0.99311	-0.04915	0.99810	-0.02541	0.99998	-0.00121
0.98603	-0.06981	0.99375	-0.04681	0.99843	-0.02300		

Table 17. OML Station 2 upper surface airfoil coordinates,  $r/R = 0.2500$

x/c	y/c	x/c	y/c	x/c	y/c	x/c	y/c
1.00000	0.00073	0.93270	0.03458	0.86137	0.05939	0.78785	0.07666
0.99864	0.00219	0.93081	0.03536	0.85941	0.05995	0.78584	0.07703
0.99686	0.00320	0.92892	0.03613	0.85745	0.06050	0.78383	0.07740
0.99509	0.00422	0.92703	0.03690	0.85548	0.06105	0.78182	0.07777
0.99331	0.00522	0.92513	0.03766	0.85351	0.06160	0.77981	0.07813
0.99153	0.00622	0.92324	0.03841	0.85154	0.06214	0.77780	0.07850
0.98975	0.00721	0.92134	0.03916	0.84957	0.06267	0.77579	0.07885
0.98795	0.00819	0.91943	0.03990	0.84760	0.06320	0.77378	0.07920
0.98616	0.00917	0.91753	0.04064	0.84562	0.06372	0.77177	0.07955
0.98436	0.01014	0.91562	0.04137	0.84365	0.06424	0.76976	0.07989
0.98256	0.01110	0.91371	0.04209	0.84167	0.06475	0.76774	0.08024
0.98076	0.01206	0.91180	0.04281	0.83969	0.06526	0.76573	0.08057
0.97895	0.01301	0.90988	0.04352	0.83771	0.06576	0.76371	0.08090
0.97714	0.01395	0.90797	0.04422	0.83573	0.06626	0.76170	0.08123
0.97532	0.01489	0.90605	0.04492	0.83375	0.06675	0.75968	0.08156
0.97350	0.01581	0.90413	0.04562	0.83177	0.06723	0.75767	0.08188
0.97168	0.01674	0.90221	0.04630	0.82978	0.06772	0.75565	0.08220
0.96986	0.01765	0.90028	0.04698	0.82780	0.06819	0.75363	0.08251
0.96803	0.01856	0.89835	0.04766	0.82581	0.06866	0.75161	0.08282
0.96620	0.01946	0.89642	0.04833	0.82382	0.06913	0.74959	0.08313
0.96436	0.02036	0.89449	0.04899	0.82183	0.06959	0.74757	0.08343
0.96252	0.02125	0.89256	0.04965	0.81984	0.07004	0.74555	0.08373
0.96068	0.02213	0.89062	0.05030	0.81785	0.07049	0.74353	0.08403
0.95884	0.02300	0.88869	0.05095	0.81586	0.07093	0.74151	0.08432
0.95699	0.02387	0.88675	0.05159	0.81386	0.07137	0.73949	0.08461
0.95514	0.02474	0.88481	0.05222	0.81187	0.07181	0.73747	0.08489
0.95328	0.02559	0.88286	0.05285	0.80987	0.07224	0.73545	0.08517
0.95143	0.02644	0.88092	0.05347	0.80787	0.07266	0.73342	0.08545
0.94957	0.02728	0.87897	0.05409	0.80587	0.07308	0.73140	0.08572
0.94770	0.02812	0.87702	0.05470	0.80388	0.07350	0.72938	0.08599
0.94584	0.02895	0.87507	0.05531	0.80188	0.07391	0.72735	0.08626
0.94397	0.02977	0.87312	0.05591	0.79987	0.07431	0.72533	0.08652
0.94210	0.03059	0.87117	0.05650	0.79787	0.07471	0.72330	0.08678
0.94022	0.03140	0.86921	0.05709	0.79587	0.07511	0.72128	0.08704
0.93835	0.03221	0.86726	0.05767	0.79386	0.07550	0.71925	0.08729
0.93647	0.03300	0.86530	0.05825	0.79186	0.07589	0.71722	0.08754
0.93458	0.03379	0.86334	0.05882	0.78985	0.07628	0.71519	0.08779

x/c	y/c	x/c	y/c	x/c	y/c	x/c	y/c
0.71317	0.08803	0.63384	0.09497	0.55425	0.09752	0.47463	0.09624
0.71114	0.08827	0.63180	0.09509	0.55221	0.09753	0.47259	0.09617
0.70911	0.08851	0.62976	0.09520	0.55017	0.09754	0.47055	0.09608
0.70708	0.08874	0.62773	0.09531	0.54813	0.09755	0.46851	0.09600
0.70505	0.08897	0.62569	0.09542	0.54608	0.09755	0.46647	0.09592
0.70302	0.08919	0.62365	0.09553	0.54404	0.09756	0.46443	0.09583
0.70099	0.08941	0.62161	0.09563	0.54200	0.09756	0.46239	0.09574
0.69896	0.08963	0.61957	0.09573	0.53996	0.09756	0.46035	0.09565
0.69693	0.08985	0.61753	0.09583	0.53791	0.09755	0.45831	0.09555
0.69490	0.09006	0.61549	0.09592	0.53587	0.09754	0.45627	0.09546
0.69287	0.09027	0.61345	0.09601	0.53383	0.09753	0.45423	0.09536
0.69084	0.09048	0.61141	0.09610	0.53179	0.09752	0.45219	0.09526
0.68881	0.09068	0.60937	0.09619	0.52975	0.09751	0.45015	0.09515
0.68677	0.09088	0.60733	0.09627	0.52770	0.09749	0.44811	0.09505
0.68474	0.09107	0.60529	0.09636	0.52566	0.09747	0.44607	0.09494
0.68271	0.09127	0.60325	0.09643	0.52362	0.09745	0.44403	0.09483
0.68068	0.09146	0.60121	0.09651	0.52158	0.09743	0.44199	0.09472
0.67864	0.09164	0.59917	0.09658	0.51954	0.09740	0.43995	0.09460
0.67661	0.09183	0.59712	0.09665	0.51750	0.09737	0.43791	0.09449
0.67457	0.09201	0.59508	0.09672	0.51545	0.09734	0.43587	0.09437
0.67254	0.09218	0.59304	0.09678	0.51341	0.09731	0.43384	0.09425
0.67050	0.09236	0.59100	0.09685	0.51137	0.09727	0.43180	0.09413
0.66847	0.09253	0.58896	0.09691	0.50933	0.09724	0.42976	0.09400
0.66643	0.09269	0.58692	0.09696	0.50729	0.09720	0.42772	0.09387
0.66440	0.09286	0.58488	0.09702	0.50524	0.09715	0.42568	0.09374
0.66236	0.09302	0.58284	0.09707	0.50320	0.09711	0.42365	0.09361
0.66033	0.09318	0.58079	0.09712	0.50116	0.09706	0.42161	0.09348
0.65829	0.09333	0.57875	0.09716	0.49912	0.09701	0.41957	0.09334
0.65626	0.09349	0.57671	0.09721	0.49708	0.09696	0.41753	0.09321
0.65422	0.09364	0.57467	0.09725	0.49504	0.09691	0.41550	0.09307
0.65218	0.09378	0.57263	0.09729	0.49300	0.09685	0.41346	0.09292
0.65014	0.09393	0.57059	0.09732	0.49095	0.09679	0.41142	0.09278
0.64811	0.09407	0.56854	0.09736	0.48891	0.09673	0.40939	0.09263
0.64607	0.09420	0.56650	0.09739	0.48687	0.09667	0.40735	0.09248
0.64403	0.09434	0.56446	0.09741	0.48483	0.09660	0.40531	0.09233
0.64199	0.09447	0.56242	0.09744	0.48279	0.09654	0.40328	0.09218
0.63996	0.09460	0.56038	0.09746	0.48075	0.09647	0.40124	0.09202
0.63792	0.09472	0.55834	0.09748	0.47871	0.09639	0.39920	0.09187
0.63588	0.09485	0.55629	0.09750	0.47667	0.09632	0.39717	0.09171

x/c	y/c	x/c	y/c	x/c	y/c	x/c	y/c
0.39513	0.09155	0.31589	0.08363	0.23704	0.07251	0.15879	0.05775
0.39310	0.09138	0.31386	0.08338	0.23502	0.07218	0.15679	0.05731
0.39106	0.09122	0.31184	0.08314	0.23301	0.07185	0.15480	0.05686
0.38903	0.09105	0.30981	0.08289	0.23099	0.07151	0.15281	0.05641
0.38699	0.09088	0.30778	0.08264	0.22898	0.07118	0.15082	0.05596
0.38496	0.09071	0.30576	0.08238	0.22696	0.07084	0.14883	0.05550
0.38292	0.09053	0.30373	0.08213	0.22495	0.07050	0.14684	0.05504
0.38089	0.09036	0.30171	0.08187	0.22294	0.07016	0.14485	0.05458
0.37885	0.09018	0.29968	0.08161	0.22093	0.06981	0.14286	0.05411
0.37682	0.09000	0.29766	0.08135	0.21891	0.06947	0.14088	0.05364
0.37478	0.08982	0.29563	0.08109	0.21690	0.06912	0.13889	0.05316
0.37275	0.08963	0.29361	0.08082	0.21489	0.06877	0.13690	0.05268
0.37072	0.08945	0.29158	0.08055	0.21288	0.06842	0.13492	0.05220
0.36868	0.08926	0.28956	0.08028	0.21087	0.06806	0.13294	0.05171
0.36665	0.08907	0.28753	0.08001	0.20886	0.06770	0.13096	0.05122
0.36462	0.08887	0.28551	0.07974	0.20685	0.06734	0.12897	0.05072
0.36259	0.08868	0.28349	0.07946	0.20484	0.06698	0.12699	0.05022
0.36055	0.08848	0.28146	0.07918	0.20283	0.06661	0.12502	0.04972
0.35852	0.08828	0.27944	0.07890	0.20082	0.06624	0.12304	0.04921
0.35649	0.08808	0.27742	0.07862	0.19881	0.06587	0.12106	0.04870
0.35446	0.08788	0.27540	0.07833	0.19680	0.06549	0.11909	0.04819
0.35242	0.08768	0.27337	0.07805	0.19480	0.06511	0.11711	0.04766
0.35039	0.08747	0.27135	0.07776	0.19279	0.06473	0.11514	0.04714
0.34836	0.08726	0.26933	0.07746	0.19079	0.06435	0.11316	0.04661
0.34633	0.08705	0.26731	0.07717	0.18878	0.06396	0.11119	0.04608
0.34430	0.08683	0.26529	0.07687	0.18678	0.06357	0.10922	0.04554
0.34227	0.08662	0.26327	0.07658	0.18477	0.06318	0.10726	0.04500
0.34024	0.08640	0.26125	0.07628	0.18277	0.06278	0.10529	0.04445
0.33821	0.08618	0.25923	0.07597	0.18077	0.06238	0.10332	0.04390
0.33618	0.08596	0.25721	0.07567	0.17877	0.06198	0.10136	0.04334
0.33415	0.08574	0.25519	0.07536	0.17676	0.06157	0.09939	0.04278
0.33212	0.08551	0.25317	0.07505	0.17476	0.06116	0.09743	0.04221
0.33009	0.08528	0.25116	0.07474	0.17276	0.06074	0.09547	0.04164
0.32806	0.08505	0.24914	0.07443	0.17077	0.06033	0.09351	0.04106
0.32603	0.08482	0.24712	0.07412	0.16877	0.05991	0.09155	0.04048
0.32400	0.08459	0.24510	0.07380	0.16677	0.05948	0.08960	0.03990
0.32198	0.08435	0.24309	0.07348	0.16477	0.05905	0.08764	0.03930
0.31995	0.08411	0.24107	0.07316	0.16278	0.05862	0.08569	0.03871
0.31792	0.08387	0.23905	0.07283	0.16078	0.05819	0.08374	0.03810

x/c	y/c
0.08179	0.03749
0.07984	0.03688
0.07790	0.03626
0.07595	0.03563
0.07401	0.03500
0.07207	0.03436
0.07014	0.03372
0.06820	0.03307
0.06627	0.03241
0.06434	0.03175
0.06241	0.03107
0.06048	0.03040

x/c	y/c
0.05856	0.02971
0.05664	0.02902
0.05472	0.02832
0.05280	0.02761
0.05089	0.02689
0.04898	0.02617
0.04708	0.02543
0.04518	0.02469
0.04328	0.02394
0.04138	0.02317
0.03949	0.02240
0.03761	0.02162

x/c	y/c
0.03572	0.02083
0.03385	0.02002
0.03197	0.01921
0.03011	0.01838
0.02825	0.01754
0.02639	0.01668
0.02454	0.01581
0.02270	0.01493
0.02087	0.01403
0.01904	0.01312
0.01723	0.01218
0.01542	0.01123

x/c	y/c
0.01363	0.01026
0.01184	0.00926
0.01007	0.00825
0.00832	0.00721
0.00658	0.00613
0.00485	0.00504
0.00316	0.00390
0.00147	0.00275
0.00000	0.00135

Table 18. OML Station 2 lower surface airfoil coordinates,  $r/R = 0.2500$

$x/c$	$y/c$	$x/c$	$y/c$	$x/c$	$y/c$	$x/c$	$y/c$
-0.00023	-0.00058	0.07455	-0.00534	0.14981	0.00123	0.22477	0.01064
0.00141	-0.00170	0.07659	-0.00523	0.15184	0.00146	0.22680	0.01091
0.00338	-0.00224	0.07863	-0.00512	0.15387	0.00169	0.22882	0.01118
0.00536	-0.00274	0.08066	-0.00500	0.15589	0.00192	0.23085	0.01145
0.00735	-0.00318	0.08270	-0.00487	0.15792	0.00216	0.23287	0.01172
0.00935	-0.00358	0.08474	-0.00474	0.15995	0.00239	0.23489	0.01199
0.01137	-0.00393	0.08678	-0.00461	0.16198	0.00263	0.23692	0.01226
0.01338	-0.00424	0.08882	-0.00447	0.16401	0.00287	0.23894	0.01252
0.01541	-0.00452	0.09085	-0.00433	0.16603	0.00311	0.24097	0.01279
0.01743	-0.00477	0.09289	-0.00418	0.16806	0.00336	0.24299	0.01306
0.01946	-0.00499	0.09493	-0.00403	0.17009	0.00360	0.24502	0.01333
0.02150	-0.00519	0.09696	-0.00388	0.17212	0.00385	0.24704	0.01360
0.02353	-0.00536	0.09900	-0.00372	0.17414	0.00409	0.24906	0.01387
0.02557	-0.00551	0.10103	-0.00356	0.17617	0.00434	0.25109	0.01413
0.02761	-0.00564	0.10307	-0.00339	0.17820	0.00460	0.25311	0.01440
0.02964	-0.00576	0.10510	-0.00322	0.18022	0.00485	0.25514	0.01467
0.03168	-0.00586	0.10714	-0.00305	0.18225	0.00510	0.25716	0.01494
0.03372	-0.00594	0.10917	-0.00287	0.18428	0.00536	0.25919	0.01520
0.03577	-0.00601	0.11121	-0.00269	0.18630	0.00561	0.26121	0.01547
0.03781	-0.00606	0.11324	-0.00251	0.18833	0.00587	0.26324	0.01574
0.03985	-0.00610	0.11528	-0.00232	0.19035	0.00613	0.26526	0.01600
0.04189	-0.00613	0.11731	-0.00214	0.19238	0.00639	0.26729	0.01627
0.04393	-0.00614	0.11934	-0.00194	0.19440	0.00665	0.26931	0.01653
0.04597	-0.00615	0.12137	-0.00175	0.19643	0.00691	0.27134	0.01680
0.04802	-0.00614	0.12341	-0.00155	0.19845	0.00718	0.27336	0.01707
0.05006	-0.00613	0.12544	-0.00135	0.20048	0.00744	0.27538	0.01733
0.05210	-0.00611	0.12747	-0.00115	0.20250	0.00770	0.27741	0.01759
0.05414	-0.00607	0.12950	-0.00095	0.20453	0.00797	0.27943	0.01786
0.05618	-0.00603	0.13153	-0.00074	0.20655	0.00823	0.28146	0.01812
0.05823	-0.00598	0.13357	-0.00053	0.20858	0.00850	0.28348	0.01839
0.06027	-0.00593	0.13560	-0.00032	0.21060	0.00877	0.28551	0.01865
0.06231	-0.00586	0.13763	-0.00010	0.21263	0.00903	0.28753	0.01891
0.06435	-0.00579	0.13966	0.00011	0.21465	0.00930	0.28956	0.01918
0.06639	-0.00571	0.14169	0.00033	0.21668	0.00957	0.29158	0.01944
0.06843	-0.00563	0.14372	0.00055	0.21870	0.00984	0.29361	0.01970
0.07047	-0.00554	0.14575	0.00078	0.22072	0.01011	0.29564	0.01996
0.07251	-0.00544	0.14778	0.00100	0.22275	0.01037	0.29766	0.02022

<u>x/c</u>	<u>y/c</u>	<u>x/c</u>	<u>y/c</u>	<u>x/c</u>	<u>y/c</u>	<u>x/c</u>	<u>y/c</u>
0.29969	0.02048	0.37873	0.03018	0.45793	0.03854	0.53731	0.04496
0.30171	0.02074	0.38076	0.03041	0.45996	0.03873	0.53935	0.04509
0.30374	0.02100	0.38279	0.03064	0.46200	0.03892	0.54139	0.04522
0.30576	0.02126	0.38482	0.03087	0.46403	0.03911	0.54342	0.04535
0.30779	0.02152	0.38685	0.03111	0.46606	0.03929	0.54546	0.04548
0.30981	0.02178	0.38888	0.03134	0.46810	0.03948	0.54750	0.04561
0.31184	0.02203	0.39091	0.03156	0.47013	0.03966	0.54954	0.04573
0.31387	0.02229	0.39294	0.03179	0.47217	0.03985	0.55158	0.04585
0.31589	0.02255	0.39497	0.03202	0.47420	0.04003	0.55361	0.04597
0.31792	0.02280	0.39699	0.03225	0.47623	0.04021	0.55565	0.04609
0.31994	0.02306	0.39902	0.03247	0.47827	0.04039	0.55769	0.04621
0.32197	0.02331	0.40105	0.03270	0.48030	0.04057	0.55973	0.04633
0.32400	0.02357	0.40308	0.03292	0.48234	0.04075	0.56177	0.04644
0.32602	0.02382	0.40511	0.03314	0.48437	0.04092	0.56381	0.04655
0.32805	0.02408	0.40714	0.03336	0.48641	0.04110	0.56585	0.04666
0.33007	0.02433	0.40917	0.03358	0.48844	0.04127	0.56789	0.04677
0.33210	0.02458	0.41120	0.03380	0.49048	0.04144	0.56993	0.04688
0.33413	0.02483	0.41323	0.03402	0.49251	0.04161	0.57197	0.04698
0.33615	0.02508	0.41526	0.03424	0.49455	0.04178	0.57400	0.04709
0.33818	0.02533	0.41730	0.03445	0.49658	0.04194	0.57604	0.04719
0.34021	0.02558	0.41933	0.03467	0.49862	0.04211	0.57808	0.04729
0.34223	0.02583	0.42136	0.03488	0.50065	0.04227	0.58012	0.04738
0.34426	0.02608	0.42339	0.03509	0.50269	0.04244	0.58216	0.04748
0.34629	0.02632	0.42542	0.03531	0.50472	0.04260	0.58420	0.04757
0.34832	0.02657	0.42745	0.03552	0.50676	0.04275	0.58624	0.04766
0.35034	0.02682	0.42948	0.03573	0.50879	0.04291	0.58828	0.04775
0.35237	0.02706	0.43151	0.03593	0.51083	0.04307	0.59032	0.04784
0.35440	0.02731	0.43354	0.03614	0.51287	0.04322	0.59236	0.04792
0.35642	0.02755	0.43558	0.03635	0.51490	0.04338	0.59440	0.04801
0.35845	0.02779	0.43761	0.03655	0.51694	0.04353	0.59645	0.04809
0.36048	0.02803	0.43964	0.03676	0.51898	0.04368	0.59849	0.04816
0.36251	0.02828	0.44167	0.03696	0.52101	0.04383	0.60053	0.04824
0.36454	0.02852	0.44370	0.03716	0.52305	0.04397	0.60257	0.04832
0.36656	0.02876	0.44574	0.03736	0.52509	0.04412	0.60461	0.04839
0.36859	0.02899	0.44777	0.03756	0.52712	0.04426	0.60665	0.04846
0.37062	0.02923	0.44980	0.03776	0.52916	0.04440	0.60869	0.04853
0.37265	0.02947	0.45183	0.03795	0.53120	0.04454	0.61073	0.04859
0.37468	0.02971	0.45387	0.03815	0.53324	0.04468	0.61277	0.04866
0.37670	0.02994	0.45590	0.03834	0.53527	0.04482	0.61481	0.04872

<u>x/c</u>	<u>y/c</u>	<u>x/c</u>	<u>y/c</u>	<u>x/c</u>	<u>y/c</u>	<u>x/c</u>	<u>y/c</u>
0.61685	0.04878	0.69649	0.04925	0.77602	0.04536	0.85510	0.03606
0.61890	0.04884	0.69853	0.04921	0.77805	0.04519	0.85711	0.03574
0.62094	0.04889	0.70057	0.04917	0.78009	0.04502	0.85913	0.03543
0.62298	0.04895	0.70261	0.04912	0.78212	0.04484	0.86115	0.03510
0.62502	0.04900	0.70465	0.04908	0.78416	0.04466	0.86316	0.03478
0.62706	0.04904	0.70669	0.04902	0.78619	0.04448	0.86518	0.03444
0.62910	0.04909	0.70873	0.04897	0.78822	0.04429	0.86719	0.03411
0.63114	0.04914	0.71078	0.04891	0.79026	0.04410	0.86920	0.03377
0.63319	0.04918	0.71282	0.04885	0.79229	0.04391	0.87122	0.03342
0.63523	0.04922	0.71486	0.04879	0.79432	0.04371	0.87323	0.03307
0.63727	0.04925	0.71690	0.04872	0.79635	0.04351	0.87524	0.03272
0.63931	0.04929	0.71894	0.04865	0.79838	0.04330	0.87725	0.03236
0.64135	0.04932	0.72098	0.04858	0.80042	0.04309	0.87926	0.03200
0.64339	0.04935	0.72302	0.04850	0.80245	0.04288	0.88127	0.03163
0.64544	0.04938	0.72506	0.04842	0.80448	0.04266	0.88328	0.03126
0.64748	0.04941	0.72710	0.04834	0.80651	0.04244	0.88528	0.03088
0.64952	0.04943	0.72914	0.04825	0.80854	0.04222	0.88729	0.03050
0.65156	0.04945	0.73118	0.04816	0.81057	0.04199	0.88929	0.03011
0.65360	0.04947	0.73322	0.04807	0.81260	0.04176	0.89130	0.02892
0.65565	0.04948	0.73526	0.04797	0.81462	0.04152	0.89130	0.02972
0.65769	0.04950	0.73730	0.04788	0.81665	0.04129	0.89330	0.02932
0.65973	0.04951	0.73934	0.04777	0.81868	0.04104	0.89731	0.02852
0.66177	0.04952	0.74138	0.04767	0.82071	0.04080	0.89931	0.02810
0.66381	0.04952	0.74342	0.04756	0.82273	0.04055	0.90130	0.02769
0.66586	0.04953	0.74546	0.04745	0.82476	0.04030	0.90330	0.02727
0.66790	0.04953	0.74750	0.04733	0.82679	0.04004	0.90530	0.02684
0.66994	0.04952	0.74954	0.04722	0.82881	0.03978	0.90730	0.02641
0.67198	0.04952	0.75157	0.04709	0.83084	0.03952	0.90929	0.02597
0.67402	0.04951	0.75361	0.04697	0.83286	0.03925	0.91128	0.02553
0.67607	0.04950	0.75565	0.04684	0.83489	0.03898	0.91328	0.02508
0.67811	0.04949	0.75769	0.04671	0.83691	0.03870	0.91527	0.02462
0.68015	0.04947	0.75973	0.04657	0.83893	0.03843	0.91726	0.02416
0.68219	0.04946	0.76176	0.04643	0.84095	0.03814	0.91925	0.02370
0.68423	0.04944	0.76380	0.04629	0.84298	0.03786	0.92123	0.02323
0.68628	0.04941	0.76584	0.04614	0.84500	0.03757	0.92322	0.02275
0.68832	0.04939	0.76787	0.04599	0.84702	0.03727	0.92520	0.02227
0.69036	0.04936	0.76991	0.04584	0.84904	0.03698	0.92719	0.02178
0.69240	0.04933	0.77195	0.04569	0.85106	0.03668	0.92917	0.02129
0.69444	0.04929	0.77398	0.04553	0.85308	0.03637	0.93115	0.02079

<u>x/c</u>	<u>y/c</u>	<u>x/c</u>	<u>y/c</u>	<u>x/c</u>	<u>y/c</u>	<u>x/c</u>	<u>y/c</u>
0.93313	0.02029	0.95086	0.01547	0.96845	0.01013	0.98585	0.00423
0.93510	0.01978	0.95282	0.01490	0.97039	0.00951	0.98777	0.00354
0.93708	0.01926	0.95478	0.01433	0.97233	0.00887	0.98969	0.00285
0.93905	0.01874	0.95674	0.01375	0.97427	0.00823	0.99160	0.00213
0.94103	0.01821	0.95870	0.01317	0.97621	0.00758	0.99352	0.00143
0.94300	0.01767	0.96065	0.01257	0.97814	0.00693	0.99542	0.00068
0.94497	0.01713	0.96260	0.01197	0.98007	0.00627	0.99734	-0.00001
0.94693	0.01659	0.96455	0.01137	0.98200	0.00560	0.99924	-0.00073
0.94890	0.01603	0.96650	0.01075	0.98393	0.00492		

Table 19. OML Station 3 upper surface airfoil coordinates,  $r/R = 0.5000$

x/c	y/c	x/c	y/c	x/c	y/c	x/c	y/c
1.00000	0.00123	0.92660	0.01723	0.85273	0.03093	0.77846	0.04224
0.99803	0.00170	0.92461	0.01764	0.85073	0.03126	0.77645	0.04252
0.99605	0.00217	0.92262	0.01803	0.84873	0.03160	0.77444	0.04279
0.99407	0.00262	0.92063	0.01843	0.84672	0.03193	0.77242	0.04307
0.99210	0.00309	0.91864	0.01883	0.84472	0.03226	0.77041	0.04334
0.99012	0.00355	0.91664	0.01922	0.84271	0.03259	0.76840	0.04361
0.98814	0.00399	0.91465	0.01962	0.84071	0.03291	0.76639	0.04389
0.98616	0.00444	0.91266	0.02001	0.83871	0.03324	0.76438	0.04416
0.98418	0.00489	0.91067	0.02040	0.83670	0.03356	0.76236	0.04443
0.98220	0.00534	0.90867	0.02078	0.83470	0.03388	0.76035	0.04470
0.98021	0.00578	0.90668	0.02117	0.83269	0.03420	0.75834	0.04496
0.97823	0.00623	0.90469	0.02155	0.83069	0.03452	0.75632	0.04523
0.97625	0.00667	0.90269	0.02194	0.82868	0.03483	0.75431	0.04549
0.97427	0.00711	0.90070	0.02232	0.82667	0.03515	0.75230	0.04576
0.97229	0.00755	0.89870	0.02270	0.82467	0.03546	0.75028	0.04602
0.97031	0.00799	0.89671	0.02307	0.82266	0.03577	0.74827	0.04628
0.96832	0.00843	0.89471	0.02345	0.82065	0.03608	0.74626	0.04654
0.96634	0.00887	0.89272	0.02382	0.81865	0.03639	0.74424	0.04680
0.96436	0.00930	0.89072	0.02420	0.81664	0.03670	0.74223	0.04706
0.96237	0.00974	0.88872	0.02457	0.81463	0.03700	0.74021	0.04732
0.96039	0.01017	0.88673	0.02494	0.81262	0.03730	0.73820	0.04757
0.95840	0.01060	0.88473	0.02530	0.81062	0.03761	0.73619	0.04783
0.95642	0.01102	0.88273	0.02567	0.80861	0.03791	0.73417	0.04808
0.95443	0.01145	0.88073	0.02603	0.80660	0.03820	0.73216	0.04833
0.95245	0.01187	0.87874	0.02640	0.80459	0.03850	0.73014	0.04858
0.95046	0.01229	0.87674	0.02676	0.80258	0.03880	0.72813	0.04883
0.94847	0.01271	0.87474	0.02711	0.80057	0.03909	0.72611	0.04908
0.94649	0.01313	0.87274	0.02747	0.79856	0.03938	0.72409	0.04932
0.94450	0.01355	0.87074	0.02782	0.79655	0.03968	0.72208	0.04957
0.94251	0.01397	0.86874	0.02818	0.79454	0.03997	0.72006	0.04981
0.94052	0.01438	0.86674	0.02853	0.79253	0.04025	0.71805	0.05006
0.93854	0.01479	0.86474	0.02888	0.79052	0.04054	0.71603	0.05030
0.93655	0.01520	0.86274	0.02922	0.78851	0.04083	0.71402	0.05054
0.93456	0.01561	0.86074	0.02957	0.78650	0.04111	0.71200	0.05078
0.93257	0.01602	0.85874	0.02991	0.78449	0.04140	0.70998	0.05101
0.93058	0.01643	0.85674	0.03025	0.78248	0.04168	0.70797	0.05125
0.92859	0.01683	0.85473	0.03059	0.78047	0.04196	0.70595	0.05148

x/c	y/c	x/c	y/c	x/c	y/c	x/c	y/c
0.70393	0.05172	0.62515	0.05974	0.54617	0.06548	0.46704	0.06864
0.70191	0.05195	0.62313	0.05992	0.54414	0.06559	0.46501	0.06868
0.69990	0.05218	0.62110	0.06010	0.54211	0.06570	0.46298	0.06873
0.69788	0.05241	0.61908	0.06027	0.54009	0.06581	0.46095	0.06877
0.69586	0.05264	0.61706	0.06044	0.53806	0.06592	0.45892	0.06881
0.69384	0.05287	0.61503	0.06061	0.53603	0.06603	0.45689	0.06884
0.69183	0.05309	0.61301	0.06078	0.53400	0.06614	0.45486	0.06888
0.68981	0.05331	0.61099	0.06095	0.53198	0.06624	0.45283	0.06891
0.68779	0.05354	0.60896	0.06112	0.52995	0.06634	0.45080	0.06894
0.68577	0.05376	0.60694	0.06128	0.52792	0.06645	0.44877	0.06897
0.68375	0.05398	0.60492	0.06144	0.52589	0.06654	0.44674	0.06900
0.68173	0.05420	0.60289	0.06160	0.52386	0.06664	0.44471	0.06902
0.67971	0.05441	0.60087	0.06176	0.52183	0.06674	0.44268	0.06904
0.67770	0.05463	0.59884	0.06192	0.51981	0.06683	0.44065	0.06907
0.67568	0.05485	0.59682	0.06208	0.51778	0.06692	0.43862	0.06908
0.67366	0.05506	0.59479	0.06224	0.51575	0.06701	0.43659	0.06910
0.67164	0.05527	0.59277	0.06239	0.51372	0.06710	0.43456	0.06911
0.66962	0.05548	0.59074	0.06254	0.51169	0.06719	0.43253	0.06913
0.66760	0.05569	0.58872	0.06269	0.50966	0.06727	0.43050	0.06914
0.66558	0.05590	0.58669	0.06284	0.50763	0.06736	0.42847	0.06915
0.66356	0.05610	0.58467	0.06299	0.50561	0.06744	0.42644	0.06915
0.66154	0.05631	0.58264	0.06313	0.50358	0.06752	0.42441	0.06916
0.65952	0.05651	0.58062	0.06328	0.50155	0.06760	0.42238	0.06916
0.65750	0.05671	0.57859	0.06342	0.49952	0.06767	0.42035	0.06916
0.65548	0.05691	0.57657	0.06356	0.49749	0.06775	0.41831	0.06916
0.65346	0.05711	0.57454	0.06370	0.49546	0.06782	0.41628	0.06915
0.65143	0.05731	0.57252	0.06384	0.49343	0.06789	0.41425	0.06914
0.64941	0.05751	0.57049	0.06397	0.49140	0.06796	0.41222	0.06914
0.64739	0.05770	0.56846	0.06411	0.48937	0.06802	0.41019	0.06913
0.64537	0.05789	0.56644	0.06424	0.48734	0.06809	0.40816	0.06911
0.64335	0.05809	0.56441	0.06437	0.48531	0.06815	0.40613	0.06910
0.64133	0.05828	0.56238	0.06450	0.48328	0.06821	0.40410	0.06908
0.63931	0.05846	0.56036	0.06463	0.48125	0.06827	0.40207	0.06906
0.63728	0.05865	0.55833	0.06476	0.47922	0.06833	0.40004	0.06904
0.63526	0.05884	0.55630	0.06488	0.47719	0.06839	0.39801	0.06901
0.63324	0.05902	0.55428	0.06500	0.47516	0.06844	0.39598	0.06899
0.63122	0.05920	0.55225	0.06512	0.47313	0.06849	0.39395	0.06896
0.62920	0.05939	0.55022	0.06524	0.47110	0.06854	0.39192	0.06893
0.62717	0.05957	0.54820	0.06536	0.46907	0.06859	0.38989	0.06889

x/c	y/c	x/c	y/c	x/c	y/c	x/c	y/c
0.38786	0.06886	0.30874	0.06560	0.22989	0.05832	0.15166	0.04613
0.38583	0.06882	0.30671	0.06547	0.22788	0.05808	0.14967	0.04574
0.38380	0.06878	0.30469	0.06533	0.22586	0.05783	0.14768	0.04535
0.38177	0.06874	0.30266	0.06519	0.22385	0.05758	0.14569	0.04495
0.37974	0.06869	0.30064	0.06505	0.22183	0.05733	0.14370	0.04454
0.37771	0.06865	0.29861	0.06491	0.21982	0.05707	0.14171	0.04413
0.37568	0.06860	0.29659	0.06476	0.21781	0.05681	0.13972	0.04372
0.37365	0.06855	0.29456	0.06461	0.21579	0.05654	0.13774	0.04330
0.37162	0.06849	0.29254	0.06445	0.21378	0.05627	0.13575	0.04288
0.36959	0.06844	0.29051	0.06430	0.21177	0.05600	0.13376	0.04245
0.36756	0.06838	0.28849	0.06414	0.20976	0.05573	0.13178	0.04202
0.36553	0.06832	0.28646	0.06398	0.20774	0.05545	0.12980	0.04158
0.36350	0.06825	0.28444	0.06382	0.20573	0.05517	0.12782	0.04114
0.36147	0.06819	0.28242	0.06365	0.20372	0.05488	0.12583	0.04069
0.35944	0.06812	0.28039	0.06348	0.20171	0.05460	0.12385	0.04024
0.35741	0.06805	0.27837	0.06331	0.19970	0.05430	0.12188	0.03979
0.35538	0.06797	0.27635	0.06313	0.19769	0.05401	0.11990	0.03933
0.35335	0.06790	0.27432	0.06296	0.19569	0.05371	0.11792	0.03886
0.35132	0.06782	0.27230	0.06278	0.19368	0.05340	0.11595	0.03839
0.34929	0.06774	0.27028	0.06259	0.19167	0.05310	0.11397	0.03792
0.34727	0.06766	0.26826	0.06241	0.18966	0.05279	0.11200	0.03744
0.34524	0.06757	0.26624	0.06222	0.18766	0.05247	0.11003	0.03696
0.34321	0.06748	0.26421	0.06203	0.18565	0.05215	0.10805	0.03647
0.34118	0.06739	0.26219	0.06183	0.18365	0.05183	0.10609	0.03598
0.33915	0.06730	0.26017	0.06163	0.18164	0.05151	0.10412	0.03548
0.33712	0.06721	0.25815	0.06143	0.17964	0.05118	0.10215	0.03498
0.33510	0.06711	0.25613	0.06123	0.17764	0.05084	0.10018	0.03447
0.33307	0.06701	0.25411	0.06103	0.17564	0.05050	0.09822	0.03396
0.33104	0.06690	0.25209	0.06082	0.17363	0.05016	0.09625	0.03344
0.32901	0.06680	0.25007	0.06060	0.17163	0.04982	0.09429	0.03292
0.32698	0.06669	0.24805	0.06039	0.16963	0.04947	0.09233	0.03240
0.32496	0.06658	0.24603	0.06017	0.16763	0.04911	0.09037	0.03187
0.32293	0.06647	0.24401	0.05995	0.16563	0.04876	0.08841	0.03133
0.32090	0.06635	0.24200	0.05973	0.16364	0.04839	0.08645	0.03080
0.31887	0.06623	0.23998	0.05950	0.16164	0.04803	0.08450	0.03025
0.31685	0.06611	0.23796	0.05927	0.15964	0.04766	0.08254	0.02970
0.31482	0.06599	0.23594	0.05904	0.15765	0.04728	0.08059	0.02915
0.31279	0.06586	0.23393	0.05881	0.15565	0.04690	0.07864	0.02859
0.31077	0.06573	0.23191	0.05857	0.15366	0.04652	0.07668	0.02803

<u>x/c</u>	<u>y/c</u>
0.07474	0.02746
0.07279	0.02688
0.07084	0.02631
0.06890	0.02572
0.06695	0.02514
0.06501	0.02454
0.06307	0.02395
0.06113	0.02334
0.05919	0.02274
0.05726	0.02212

<u>x/c</u>	<u>y/c</u>
0.05532	0.02151
0.05339	0.02088
0.05146	0.02026
0.04953	0.01962
0.04760	0.01899
0.04567	0.01834
0.04375	0.01770
0.04183	0.01704
0.03991	0.01639
0.03799	0.01572

<u>x/c</u>	<u>y/c</u>
0.03607	0.01506
0.03415	0.01438
0.03224	0.01371
0.03033	0.01302
0.02842	0.01233
0.02651	0.01164
0.02460	0.01094
0.02270	0.01024
0.02079	0.00953
0.01889	0.00882

<u>x/c</u>	<u>y/c</u>
0.01699	0.00810
0.01510	0.00737
0.01320	0.00664
0.01131	0.00591
0.00942	0.00516
0.00753	0.00442
0.00564	0.00367
0.00376	0.00291
0.00188	0.00215
0.00000	0.00138

Table 20. OML Station 3 lower surface airfoil coordinates,  $r/R = 0.5000$

$x/c$	$y/c$	$x/c$	$y/c$	$x/c$	$y/c$	$x/c$	$y/c$
0.00213	-0.00045	0.07236	0.01977	0.14581	0.03553	0.22003	0.04715
0.00792	0.00145	0.07434	0.02026	0.14781	0.03590	0.22204	0.04741
0.01760	0.00452	0.07631	0.02074	0.14980	0.03627	0.22406	0.04766
0.01954	0.00512	0.07828	0.02122	0.15180	0.03663	0.22607	0.04791
0.03121	0.00863	0.08025	0.02170	0.15380	0.03699	0.22809	0.04816
0.03315	0.00920	0.08223	0.02217	0.15580	0.03734	0.23010	0.04840
0.03510	0.00977	0.08420	0.02264	0.15780	0.03769	0.23212	0.04864
0.03706	0.01033	0.08618	0.02311	0.15980	0.03804	0.23414	0.04888
0.03901	0.01089	0.08816	0.02357	0.16180	0.03839	0.23615	0.04911
0.00020	-0.00108	0.09014	0.02403	0.16380	0.03874	0.23817	0.04934
0.00406	0.00019	0.09211	0.02448	0.16580	0.03908	0.24019	0.04957
0.00599	0.00082	0.09409	0.02493	0.16781	0.03942	0.24221	0.04979
0.00985	0.00207	0.09607	0.02538	0.16981	0.03975	0.24423	0.05001
0.01179	0.00269	0.09806	0.02583	0.17181	0.04008	0.24624	0.05023
0.01372	0.00331	0.10004	0.02627	0.17382	0.04041	0.24826	0.05045
0.01566	0.00392	0.10202	0.02671	0.17582	0.04074	0.25028	0.05066
0.02148	0.00572	0.10400	0.02714	0.17782	0.04106	0.25230	0.05087
0.02342	0.00631	0.10599	0.02757	0.17983	0.04138	0.25432	0.05107
0.02537	0.00689	0.10797	0.02800	0.18184	0.04170	0.25634	0.05128
0.02731	0.00748	0.10996	0.02842	0.18384	0.04201	0.25836	0.05148
0.02926	0.00806	0.11195	0.02884	0.18585	0.04232	0.26038	0.05167
0.04096	0.01144	0.11393	0.02926	0.18785	0.04263	0.26241	0.05187
0.04292	0.01199	0.11592	0.02968	0.18986	0.04294	0.26443	0.05206
0.04487	0.01254	0.11791	0.03009	0.19187	0.04324	0.26645	0.05225
0.04683	0.01308	0.11990	0.03050	0.19388	0.04354	0.26847	0.05244
0.04879	0.01362	0.12189	0.03090	0.19589	0.04384	0.27049	0.05262
0.05075	0.01415	0.12388	0.03130	0.19790	0.04413	0.27252	0.05280
0.05271	0.01468	0.12587	0.03170	0.19991	0.04442	0.27454	0.05298
0.05467	0.01521	0.12786	0.03210	0.20192	0.04471	0.27656	0.05316
0.05663	0.01573	0.12985	0.03249	0.20393	0.04499	0.27858	0.05333
0.05859	0.01625	0.13185	0.03288	0.20594	0.04527	0.28061	0.05350
0.06056	0.01676	0.13384	0.03327	0.20795	0.04555	0.28263	0.05367
0.06252	0.01727	0.13583	0.03365	0.20996	0.04582	0.28465	0.05383
0.06449	0.01778	0.13783	0.03404	0.21197	0.04610	0.28668	0.05399
0.06646	0.01828	0.13982	0.03441	0.21399	0.04636	0.28870	0.05415
0.06842	0.01878	0.14182	0.03479	0.21600	0.04663	0.29073	0.05431
0.07039	0.01928	0.14381	0.03516	0.21801	0.04689	0.29275	0.05446

<u>x/c</u>	<u>y/c</u>	<u>x/c</u>	<u>y/c</u>	<u>x/c</u>	<u>y/c</u>	<u>x/c</u>	<u>y/c</u>
0.29478	0.05461	0.37386	0.05852	0.45305	0.05890	0.53219	0.05623
0.29680	0.05476	0.37589	0.05858	0.45508	0.05886	0.53422	0.05612
0.29883	0.05491	0.37792	0.05863	0.45711	0.05883	0.53625	0.05602
0.30085	0.05505	0.37995	0.05867	0.45914	0.05879	0.53828	0.05591
0.30288	0.05519	0.38198	0.05872	0.46117	0.05875	0.54030	0.05580
0.30490	0.05533	0.38401	0.05876	0.46320	0.05871	0.54233	0.05569
0.30693	0.05547	0.38605	0.05880	0.46523	0.05867	0.54436	0.05557
0.30896	0.05560	0.38808	0.05884	0.46726	0.05863	0.54639	0.05546
0.31098	0.05573	0.39011	0.05887	0.46929	0.05858	0.54841	0.05534
0.31301	0.05586	0.39214	0.05891	0.47132	0.05853	0.55044	0.05522
0.31504	0.05598	0.39417	0.05894	0.47335	0.05848	0.55247	0.05510
0.31706	0.05610	0.39620	0.05897	0.47538	0.05843	0.55449	0.05498
0.31909	0.05622	0.39823	0.05899	0.47741	0.05838	0.55652	0.05486
0.32112	0.05634	0.40026	0.05902	0.47944	0.05832	0.55855	0.05474
0.32315	0.05646	0.40229	0.05904	0.48147	0.05826	0.56057	0.05461
0.32517	0.05657	0.40432	0.05906	0.48350	0.05820	0.56260	0.05448
0.32720	0.05668	0.40635	0.05908	0.48553	0.05814	0.56463	0.05435
0.32923	0.05679	0.40838	0.05909	0.48756	0.05808	0.56665	0.05422
0.33126	0.05689	0.41041	0.05911	0.48959	0.05801	0.56868	0.05409
0.33328	0.05699	0.41244	0.05912	0.49162	0.05795	0.57071	0.05395
0.33531	0.05709	0.41447	0.05913	0.49365	0.05788	0.57273	0.05382
0.33734	0.05719	0.41650	0.05913	0.49568	0.05781	0.57476	0.05368
0.33937	0.05728	0.41853	0.05914	0.49771	0.05773	0.57678	0.05354
0.34140	0.05738	0.42056	0.05914	0.49974	0.05766	0.57881	0.05340
0.34343	0.05747	0.42259	0.05914	0.50176	0.05758	0.58083	0.05325
0.34545	0.05755	0.42462	0.05914	0.50379	0.05751	0.58286	0.05311
0.34748	0.05764	0.42665	0.05913	0.50582	0.05743	0.58489	0.05296
0.34951	0.05772	0.42868	0.05913	0.50785	0.05734	0.58691	0.05282
0.35154	0.05780	0.43072	0.05912	0.50988	0.05726	0.58894	0.05267
0.35357	0.05788	0.43275	0.05911	0.51191	0.05718	0.59096	0.05252
0.35560	0.05795	0.43478	0.05910	0.51394	0.05709	0.59299	0.05236
0.35763	0.05803	0.43681	0.05908	0.51597	0.05700	0.59501	0.05221
0.35966	0.05810	0.43884	0.05907	0.51800	0.05691	0.59703	0.05205
0.36169	0.05817	0.44087	0.05905	0.52002	0.05682	0.59906	0.05190
0.36372	0.05823	0.44290	0.05903	0.52205	0.05672	0.60108	0.05174
0.36575	0.05830	0.44493	0.05901	0.52408	0.05663	0.60311	0.05158
0.36778	0.05836	0.44696	0.05898	0.52611	0.05653	0.60513	0.05142
0.36981	0.05841	0.44899	0.05896	0.52814	0.05643	0.60716	0.05125
0.37184	0.05847	0.45102	0.05893	0.53016	0.05633	0.60918	0.05109

<u>x/c</u>	<u>y/c</u>	<u>x/c</u>	<u>y/c</u>	<u>x/c</u>	<u>y/c</u>	<u>x/c</u>	<u>y/c</u>
0.61120	0.05092	0.69002	0.04329	0.76862	0.03364	0.84701	0.02237
0.61323	0.05075	0.69204	0.04306	0.77064	0.03337	0.84902	0.02206
0.61525	0.05058	0.69406	0.04284	0.77265	0.03309	0.85102	0.02176
0.61727	0.05041	0.69608	0.04261	0.77466	0.03282	0.85303	0.02146
0.61930	0.05024	0.69810	0.04238	0.77667	0.03254	0.85504	0.02115
0.62132	0.05007	0.70011	0.04215	0.77868	0.03227	0.85705	0.02085
0.62334	0.04989	0.70213	0.04192	0.78069	0.03199	0.85905	0.02055
0.62537	0.04971	0.70415	0.04169	0.78271	0.03171	0.86106	0.02024
0.62739	0.04954	0.70616	0.04146	0.78472	0.03143	0.86307	0.01994
0.62941	0.04936	0.70818	0.04123	0.78673	0.03115	0.86508	0.01964
0.63143	0.04917	0.71020	0.04099	0.78874	0.03087	0.86709	0.01933
0.63346	0.04899	0.71222	0.04075	0.79075	0.03059	0.86909	0.01903
0.63548	0.04881	0.71423	0.04052	0.79276	0.03031	0.87110	0.01872
0.63750	0.04862	0.71625	0.04028	0.79477	0.03002	0.87311	0.01842
0.63952	0.04843	0.71826	0.04004	0.79678	0.02974	0.87512	0.01812
0.64154	0.04824	0.72028	0.03980	0.79879	0.02945	0.87712	0.01781
0.64357	0.04805	0.72230	0.03955	0.80080	0.02916	0.87913	0.01751
0.64559	0.04786	0.72431	0.03931	0.80281	0.02888	0.88114	0.01720
0.64761	0.04767	0.72633	0.03906	0.80482	0.02859	0.88315	0.01690
0.64963	0.04747	0.72834	0.03882	0.80683	0.02830	0.88515	0.01659
0.65165	0.04728	0.73036	0.03857	0.80884	0.02801	0.88716	0.01629
0.65367	0.04708	0.73237	0.03832	0.81085	0.02772	0.88917	0.01598
0.65569	0.04688	0.73439	0.03807	0.81286	0.02743	0.89118	0.01567
0.65771	0.04668	0.73640	0.03782	0.81487	0.02713	0.89318	0.01537
0.65973	0.04648	0.73842	0.03757	0.81688	0.02684	0.89519	0.01506
0.66175	0.04628	0.74043	0.03731	0.81889	0.02655	0.89720	0.01475
0.66377	0.04607	0.74245	0.03706	0.82090	0.02625	0.89920	0.01445
0.66579	0.04587	0.74446	0.03680	0.82291	0.02596	0.90121	0.01414
0.66781	0.04566	0.74648	0.03655	0.82492	0.02566	0.90322	0.01383
0.66983	0.04545	0.74849	0.03629	0.82692	0.02536	0.90523	0.01352
0.67185	0.04524	0.75051	0.03603	0.82893	0.02507	0.90723	0.01321
0.67387	0.04503	0.75252	0.03577	0.83094	0.02477	0.90924	0.01291
0.67589	0.04481	0.75453	0.03551	0.83295	0.02447	0.91125	0.01260
0.67791	0.04460	0.75655	0.03524	0.83496	0.02417	0.91325	0.01229
0.67993	0.04438	0.75856	0.03498	0.83697	0.02387	0.91526	0.01198
0.68195	0.04417	0.76057	0.03471	0.83898	0.02357	0.91727	0.01167
0.68397	0.04395	0.76259	0.03445	0.84098	0.02327	0.91927	0.01136
0.68599	0.04373	0.76460	0.03418	0.84299	0.02297	0.92128	0.01105
0.68800	0.04351	0.76661	0.03391	0.84500	0.02267	0.92329	0.01074

<u>x/c</u>	<u>y/c</u>	<u>x/c</u>	<u>y/c</u>	<u>x/c</u>	<u>y/c</u>	<u>x/c</u>	<u>y/c</u>
0.92529	0.01043	0.94536	0.00731	0.96542	0.00417	0.98548	0.00101
0.92730	0.01012	0.94737	0.00700	0.96743	0.00386	0.98748	0.00069
0.92931	0.00981	0.94937	0.00668	0.96943	0.00354	0.98949	0.00036
0.93131	0.00949	0.95138	0.00637	0.97144	0.00323	0.99149	0.00004
0.93332	0.00918	0.95338	0.00606	0.97344	0.00291	0.99350	-0.00025
0.93533	0.00887	0.95539	0.00574	0.97545	0.00260	0.99551	-0.00058
0.93733	0.00856	0.95740	0.00543	0.97746	0.00228	0.99751	-0.00090
0.93934	0.00825	0.95940	0.00512	0.97946	0.00196	0.99951	-0.00123
0.94135	0.00793	0.96141	0.00480	0.98147	0.00165		
0.94335	0.00762	0.96341	0.00449	0.98347	0.00133		

Table 21. OML Station 4 upper surface airfoil coordinates,  $r/R = 0.7500$

x/c	y/c	x/c	y/c	x/c	y/c	x/c	y/c
1.00000	0.00091	0.92683	0.01543	0.85305	0.02700	0.77890	0.03587
0.99817	0.00162	0.92484	0.01578	0.85105	0.02727	0.77689	0.03608
0.99619	0.00203	0.92285	0.01613	0.84905	0.02754	0.77488	0.03629
0.99422	0.00244	0.92086	0.01647	0.84705	0.02781	0.77287	0.03649
0.99224	0.00287	0.91888	0.01681	0.84505	0.02808	0.77086	0.03670
0.99027	0.00328	0.91689	0.01715	0.84305	0.02834	0.76886	0.03690
0.98829	0.00369	0.91490	0.01749	0.84105	0.02861	0.76685	0.03710
0.98631	0.00410	0.91291	0.01783	0.83904	0.02887	0.76484	0.03731
0.98434	0.00450	0.91092	0.01816	0.83704	0.02913	0.76283	0.03750
0.98236	0.00490	0.90892	0.01850	0.83504	0.02938	0.76082	0.03770
0.98038	0.00531	0.90693	0.01883	0.83304	0.02964	0.75881	0.03790
0.97840	0.00570	0.90494	0.01916	0.83104	0.02989	0.75680	0.03809
0.97642	0.00610	0.90295	0.01948	0.82903	0.03014	0.75479	0.03829
0.97444	0.00650	0.90096	0.01981	0.82703	0.03039	0.75278	0.03848
0.97246	0.00689	0.89896	0.02013	0.82503	0.03064	0.75077	0.03867
0.97048	0.00728	0.89697	0.02045	0.82302	0.03089	0.74877	0.03886
0.96850	0.00768	0.89498	0.02077	0.82102	0.03113	0.74676	0.03905
0.96652	0.00807	0.89299	0.02109	0.81901	0.03137	0.74475	0.03924
0.96454	0.00845	0.89099	0.02140	0.81701	0.03162	0.74274	0.03943
0.96256	0.00884	0.88900	0.02172	0.81501	0.03185	0.74073	0.03961
0.96058	0.00922	0.88700	0.02203	0.81300	0.03209	0.73872	0.03979
0.95860	0.00960	0.88501	0.02234	0.81100	0.03233	0.73671	0.03998
0.95661	0.00998	0.88301	0.02264	0.80899	0.03256	0.73469	0.04016
0.95463	0.01036	0.88102	0.02295	0.80699	0.03279	0.73268	0.04034
0.95265	0.01073	0.87902	0.02325	0.80498	0.03302	0.73067	0.04051
0.95066	0.01110	0.87703	0.02355	0.80298	0.03325	0.72866	0.04069
0.94868	0.01147	0.87503	0.02385	0.80097	0.03348	0.72665	0.04086
0.94669	0.01184	0.87303	0.02415	0.79896	0.03370	0.72464	0.04104
0.94471	0.01221	0.87104	0.02444	0.79696	0.03393	0.72263	0.04121
0.94272	0.01258	0.86904	0.02474	0.79495	0.03415	0.72062	0.04138
0.94074	0.01294	0.86704	0.02503	0.79295	0.03437	0.71861	0.04155
0.93875	0.01330	0.86504	0.02531	0.79094	0.03459	0.71660	0.04172
0.93677	0.01366	0.86305	0.02560	0.78893	0.03481	0.71458	0.04189
0.93478	0.01402	0.86105	0.02588	0.78692	0.03502	0.71257	0.04205
0.93279	0.01438	0.85905	0.02617	0.78492	0.03524	0.71056	0.04222
0.93081	0.01473	0.85705	0.02644	0.78291	0.03545	0.70855	0.04238
0.92882	0.01508	0.85505	0.02672	0.78090	0.03566	0.70654	0.04254

x/c	y/c	x/c	y/c	x/c	y/c	x/c	y/c
0.70452	0.04270	0.62597	0.04783	0.54730	0.05078	0.46859	0.05146
0.70251	0.04286	0.62395	0.04794	0.54529	0.05082	0.46657	0.05145
0.70050	0.04301	0.62194	0.04804	0.54327	0.05087	0.46455	0.05144
0.69849	0.04317	0.61992	0.04814	0.54125	0.05091	0.46253	0.05142
0.69647	0.04332	0.61791	0.04824	0.53923	0.05095	0.46051	0.05140
0.69446	0.04348	0.61589	0.04833	0.53721	0.05099	0.45849	0.05138
0.69245	0.04363	0.61387	0.04843	0.53520	0.05103	0.45647	0.05136
0.69043	0.04378	0.61186	0.04852	0.53318	0.05107	0.45446	0.05134
0.68842	0.04393	0.60984	0.04862	0.53116	0.05110	0.45244	0.05132
0.68641	0.04407	0.60782	0.04871	0.52914	0.05114	0.45042	0.05129
0.68440	0.04422	0.60581	0.04880	0.52712	0.05117	0.44840	0.05127
0.68238	0.04436	0.60379	0.04889	0.52510	0.05120	0.44638	0.05124
0.68037	0.04451	0.60177	0.04897	0.52309	0.05123	0.44436	0.05121
0.67835	0.04465	0.59976	0.04906	0.52107	0.05126	0.44235	0.05118
0.67634	0.04479	0.59774	0.04914	0.51905	0.05129	0.44033	0.05114
0.67433	0.04493	0.59572	0.04923	0.51703	0.05131	0.43831	0.05111
0.67231	0.04507	0.59371	0.04931	0.51501	0.05133	0.43629	0.05107
0.67030	0.04520	0.59169	0.04939	0.51299	0.05136	0.43427	0.05104
0.66829	0.04534	0.58967	0.04947	0.51097	0.05138	0.43226	0.05100
0.66627	0.04547	0.58766	0.04954	0.50896	0.05140	0.43024	0.05096
0.66426	0.04560	0.58564	0.04962	0.50694	0.05141	0.42822	0.05092
0.66224	0.04573	0.58362	0.04969	0.50492	0.05143	0.42620	0.05087
0.66023	0.04586	0.58160	0.04977	0.50290	0.05145	0.42418	0.05083
0.65821	0.04599	0.57959	0.04984	0.50088	0.05146	0.42216	0.05078
0.65620	0.04611	0.57757	0.04991	0.49886	0.05147	0.42015	0.05073
0.65418	0.04624	0.57555	0.04997	0.49685	0.05148	0.41813	0.05068
0.65217	0.04636	0.57353	0.05004	0.49483	0.05149	0.41611	0.05063
0.65015	0.04648	0.57152	0.05011	0.49281	0.05150	0.41409	0.05058
0.64814	0.04660	0.56950	0.05017	0.49079	0.05150	0.41208	0.05052
0.64612	0.04672	0.56748	0.05023	0.48877	0.05151	0.41006	0.05047
0.64411	0.04684	0.56546	0.05029	0.48675	0.05151	0.40804	0.05041
0.64209	0.04696	0.56345	0.05035	0.48473	0.05151	0.40602	0.05035
0.64008	0.04707	0.56143	0.05041	0.48272	0.05151	0.40400	0.05029
0.63806	0.04718	0.55941	0.05047	0.48070	0.05151	0.40199	0.05023
0.63605	0.04729	0.55739	0.05052	0.47868	0.05150	0.39997	0.05016
0.63403	0.04741	0.55538	0.05058	0.47666	0.05150	0.39795	0.05010
0.63202	0.04751	0.55336	0.05063	0.47464	0.05149	0.39593	0.05003
0.63000	0.04762	0.55134	0.05068	0.47262	0.05148	0.39392	0.04996
0.62799	0.04773	0.54932	0.05073	0.47060	0.05147	0.39190	0.04989

x/c	y/c	x/c	y/c	x/c	y/c	x/c	y/c
0.38988	0.04982	0.31127	0.04576	0.23282	0.03923	0.15464	0.02999
0.38787	0.04974	0.30925	0.04563	0.23081	0.03903	0.15264	0.02971
0.38585	0.04967	0.30724	0.04549	0.22880	0.03883	0.15065	0.02943
0.38383	0.04959	0.30522	0.04535	0.22679	0.03863	0.14865	0.02914
0.38181	0.04951	0.30321	0.04521	0.22478	0.03842	0.14665	0.02885
0.37980	0.04943	0.30120	0.04507	0.22278	0.03822	0.14465	0.02856
0.37778	0.04935	0.29918	0.04492	0.22077	0.03801	0.14265	0.02827
0.37576	0.04927	0.29717	0.04478	0.21876	0.03780	0.14066	0.02797
0.37375	0.04918	0.29516	0.04463	0.21675	0.03758	0.13866	0.02768
0.37173	0.04910	0.29314	0.04448	0.21475	0.03737	0.13667	0.02738
0.36971	0.04901	0.29113	0.04433	0.21274	0.03715	0.13467	0.02707
0.36770	0.04892	0.28912	0.04417	0.21073	0.03693	0.13267	0.02677
0.36568	0.04883	0.28711	0.04402	0.20873	0.03671	0.13068	0.02646
0.36366	0.04874	0.28509	0.04386	0.20672	0.03649	0.12868	0.02615
0.36165	0.04864	0.28308	0.04371	0.20471	0.03627	0.12669	0.02584
0.35963	0.04855	0.28107	0.04355	0.20271	0.03604	0.12470	0.02552
0.35761	0.04845	0.27906	0.04339	0.20070	0.03581	0.12270	0.02520
0.35560	0.04835	0.27704	0.04323	0.19870	0.03558	0.12071	0.02488
0.35358	0.04825	0.27503	0.04306	0.19669	0.03535	0.11872	0.02456
0.35157	0.04815	0.27302	0.04290	0.19469	0.03512	0.11673	0.02423
0.34955	0.04804	0.27101	0.04273	0.19268	0.03488	0.11473	0.02390
0.34753	0.04794	0.26900	0.04256	0.19068	0.03464	0.11274	0.02357
0.34552	0.04783	0.26699	0.04239	0.18867	0.03440	0.11075	0.02324
0.34350	0.04772	0.26498	0.04222	0.18667	0.03416	0.10876	0.02290
0.34149	0.04761	0.26296	0.04204	0.18467	0.03392	0.10677	0.02256
0.33947	0.04750	0.26095	0.04187	0.18266	0.03367	0.10478	0.02222
0.33746	0.04739	0.25894	0.04169	0.18066	0.03342	0.10279	0.02188
0.33544	0.04727	0.25693	0.04151	0.17866	0.03317	0.10080	0.02153
0.33343	0.04715	0.25492	0.04133	0.17665	0.03292	0.09882	0.02119
0.33141	0.04704	0.25291	0.04115	0.17465	0.03266	0.09683	0.02084
0.32940	0.04692	0.25090	0.04096	0.17265	0.03241	0.09484	0.02048
0.32738	0.04679	0.24889	0.04078	0.17065	0.03215	0.09285	0.02013
0.32537	0.04667	0.24688	0.04059	0.16865	0.03189	0.09087	0.01977
0.32335	0.04655	0.24487	0.04040	0.16664	0.03162	0.08888	0.01941
0.32134	0.04642	0.24286	0.04021	0.16464	0.03136	0.08690	0.01905
0.31932	0.04629	0.24085	0.04002	0.16264	0.03109	0.08491	0.01868
0.31731	0.04616	0.23884	0.03983	0.16064	0.03082	0.08293	0.01831
0.31529	0.04603	0.23683	0.03963	0.15864	0.03054	0.08094	0.01794
0.31328	0.04590	0.23483	0.03943	0.15664	0.03027	0.07896	0.01757

x/c	y/c
0.07697	0.01720
0.07499	0.01682
0.07301	0.01644
0.07103	0.01606
0.06904	0.01567
0.06706	0.01529
0.06508	0.01490
0.06310	0.01451
0.06112	0.01411
0.05914	0.01372

x/c	y/c
0.05716	0.01332
0.05519	0.01292
0.05321	0.01251
0.05123	0.01211
0.04925	0.01170
0.04728	0.01129
0.04530	0.01087
0.04333	0.01046
0.04135	0.01004
0.03938	0.00962

x/c	y/c
0.03740	0.00920
0.03543	0.00877
0.03346	0.00834
0.03149	0.00791
0.02951	0.00748
0.02754	0.00704
0.02557	0.00661
0.02360	0.00617
0.02163	0.00573
0.01966	0.00528

x/c	y/c
0.01770	0.00484
0.01573	0.00439
0.01376	0.00393
0.01179	0.00348
0.00983	0.00302
0.00786	0.00256
0.00590	0.00210
0.00393	0.00163
0.00197	0.00116
0.00000	0.00073

Table 22. OML Station 4 lower surface airfoil coordinates,  $r/R = 0.7500$

$x/c$	$y/c$	$x/c$	$y/c$	$x/c$	$y/c$	$x/c$	$y/c$
-0.00050	-0.00193	0.07331	0.00943	0.14732	0.01945	0.22150	0.02808
0.00149	-0.00162	0.07531	0.00972	0.14932	0.01971	0.22351	0.02829
0.00348	-0.00130	0.07730	0.01001	0.15132	0.01996	0.22552	0.02850
0.00547	-0.00098	0.07930	0.01030	0.15333	0.02021	0.22753	0.02871
0.00747	-0.00065	0.08130	0.01058	0.15533	0.02046	0.22954	0.02891
0.00946	-0.00033	0.08330	0.01087	0.15733	0.02071	0.23154	0.02911
0.01145	-0.00001	0.08530	0.01115	0.15934	0.02096	0.23355	0.02931
0.01344	0.00031	0.08730	0.01143	0.16134	0.02121	0.23556	0.02951
0.01544	0.00063	0.08930	0.01171	0.16334	0.02145	0.23757	0.02971
0.01743	0.00095	0.09129	0.01199	0.16535	0.02170	0.23958	0.02991
0.01942	0.00126	0.09329	0.01227	0.16735	0.02194	0.24159	0.03010
0.02142	0.00158	0.09529	0.01255	0.16935	0.02219	0.24360	0.03029
0.02341	0.00189	0.09729	0.01283	0.17136	0.02243	0.24561	0.03049
0.02541	0.00221	0.09929	0.01310	0.17336	0.02267	0.24762	0.03067
0.02740	0.00252	0.10129	0.01338	0.17537	0.02291	0.24963	0.03086
0.02939	0.00283	0.10329	0.01365	0.17737	0.02315	0.25164	0.03105
0.03139	0.00314	0.10529	0.01393	0.17938	0.02339	0.25365	0.03123
0.03338	0.00345	0.10729	0.01420	0.18138	0.02362	0.25566	0.03142
0.03538	0.00376	0.10929	0.01447	0.18339	0.02386	0.25767	0.03160
0.03737	0.00407	0.11129	0.01474	0.18539	0.02409	0.25968	0.03178
0.03937	0.00438	0.11329	0.01501	0.18740	0.02433	0.26169	0.03195
0.04136	0.00468	0.11529	0.01528	0.18940	0.02456	0.26370	0.03213
0.04336	0.00499	0.11729	0.01555	0.19141	0.02479	0.26571	0.03230
0.04535	0.00529	0.11930	0.01581	0.19341	0.02502	0.26772	0.03248
0.04735	0.00559	0.12130	0.01608	0.19542	0.02524	0.26973	0.03265
0.04935	0.00589	0.12330	0.01634	0.19742	0.02547	0.27174	0.03282
0.05134	0.00620	0.12530	0.01661	0.19943	0.02570	0.27376	0.03298
0.05334	0.00649	0.12730	0.01687	0.20143	0.02592	0.27577	0.03315
0.05533	0.00679	0.12930	0.01713	0.20344	0.02614	0.27778	0.03331
0.05733	0.00709	0.13130	0.01739	0.20545	0.02636	0.27979	0.03348
0.05933	0.00739	0.13330	0.01765	0.20745	0.02658	0.28180	0.03364
0.06132	0.00768	0.13531	0.01791	0.20946	0.02680	0.28382	0.03380
0.06332	0.00798	0.13731	0.01817	0.21147	0.02702	0.28583	0.03395
0.06532	0.00827	0.13931	0.01843	0.21347	0.02724	0.28784	0.03411
0.06732	0.00856	0.14131	0.01869	0.21548	0.02745	0.28985	0.03426
0.06931	0.00885	0.14331	0.01894	0.21749	0.02766	0.29187	0.03442
0.07131	0.00914	0.14532	0.01920	0.21950	0.02787	0.29388	0.03457

<u>x/c</u>	<u>y/c</u>	<u>x/c</u>	<u>y/c</u>	<u>x/c</u>	<u>y/c</u>	<u>x/c</u>	<u>y/c</u>
0.29589	0.03471	0.37448	0.03923	0.45318	0.04131	0.53190	0.04106
0.29791	0.03486	0.37650	0.03931	0.45520	0.04133	0.53392	0.04103
0.29992	0.03501	0.37852	0.03940	0.45721	0.04135	0.53593	0.04099
0.30193	0.03515	0.38053	0.03948	0.45923	0.04137	0.53795	0.04095
0.30395	0.03529	0.38255	0.03955	0.46125	0.04139	0.53997	0.04091
0.30596	0.03543	0.38457	0.03963	0.46327	0.04141	0.54199	0.04087
0.30797	0.03557	0.38659	0.03971	0.46529	0.04142	0.54401	0.04082
0.30999	0.03571	0.38860	0.03978	0.46731	0.04144	0.54602	0.04078
0.31200	0.03585	0.39062	0.03985	0.46932	0.04145	0.54804	0.04073
0.31402	0.03598	0.39264	0.03992	0.47134	0.04146	0.55006	0.04068
0.31603	0.03611	0.39465	0.03999	0.47336	0.04147	0.55208	0.04063
0.31804	0.03624	0.39667	0.04006	0.47538	0.04147	0.55410	0.04058
0.32006	0.03637	0.39869	0.04013	0.47740	0.04148	0.55611	0.04053
0.32207	0.03650	0.40071	0.04019	0.47942	0.04148	0.55813	0.04047
0.32409	0.03662	0.40272	0.04025	0.48144	0.04149	0.56015	0.04042
0.32610	0.03675	0.40474	0.04031	0.48345	0.04149	0.56217	0.04036
0.32812	0.03687	0.40676	0.04037	0.48547	0.04149	0.56419	0.04030
0.33013	0.03699	0.40878	0.04043	0.48749	0.04149	0.56620	0.04024
0.33215	0.03711	0.41080	0.04049	0.48951	0.04148	0.56822	0.04018
0.33416	0.03723	0.41281	0.04054	0.49153	0.04148	0.57024	0.04011
0.33618	0.03734	0.41483	0.04060	0.49355	0.04147	0.57226	0.04005
0.33819	0.03746	0.41685	0.04065	0.49557	0.04146	0.57427	0.03998
0.34021	0.03757	0.41887	0.04070	0.49758	0.04145	0.57629	0.03992
0.34222	0.03768	0.42089	0.04075	0.49960	0.04144	0.57831	0.03985
0.34424	0.03779	0.42290	0.04079	0.50162	0.04143	0.58032	0.03978
0.34626	0.03790	0.42492	0.04084	0.50364	0.04142	0.58234	0.03970
0.34827	0.03800	0.42694	0.04088	0.50566	0.04140	0.58436	0.03963
0.35029	0.03811	0.42896	0.04092	0.50768	0.04138	0.58638	0.03956
0.35230	0.03821	0.43098	0.04096	0.50970	0.04137	0.58839	0.03948
0.35432	0.03831	0.43299	0.04100	0.51171	0.04135	0.59041	0.03940
0.35634	0.03841	0.43501	0.04104	0.51373	0.04132	0.59243	0.03932
0.35835	0.03851	0.43703	0.04108	0.51575	0.04130	0.59444	0.03924
0.36037	0.03860	0.43905	0.04111	0.51777	0.04128	0.59646	0.03916
0.36238	0.03870	0.44107	0.04115	0.51979	0.04125	0.59848	0.03908
0.36440	0.03879	0.44308	0.04118	0.52181	0.04122	0.60050	0.03899
0.36642	0.03888	0.44510	0.04121	0.52382	0.04119	0.60251	0.03890
0.36843	0.03897	0.44712	0.04124	0.52584	0.04116	0.60453	0.03882
0.37045	0.03906	0.44914	0.04126	0.52786	0.04113	0.60655	0.03873
0.37247	0.03915	0.45116	0.04129	0.52988	0.04110	0.60856	0.03864

<u>x/c</u>	<u>y/c</u>	<u>x/c</u>	<u>y/c</u>	<u>x/c</u>	<u>y/c</u>	<u>x/c</u>	<u>y/c</u>
0.61058	0.03854	0.68916	0.03384	0.76759	0.02704	0.84583	0.01839
0.61259	0.03845	0.69117	0.03369	0.76959	0.02684	0.84784	0.01815
0.61461	0.03835	0.69318	0.03354	0.77160	0.02664	0.84984	0.01791
0.61663	0.03826	0.69520	0.03339	0.77361	0.02643	0.85185	0.01768
0.61864	0.03816	0.69721	0.03324	0.77562	0.02623	0.85385	0.01744
0.62066	0.03806	0.69922	0.03308	0.77763	0.02602	0.85585	0.01720
0.62268	0.03796	0.70124	0.03293	0.77963	0.02581	0.85786	0.01696
0.62469	0.03786	0.70325	0.03277	0.78164	0.02560	0.85986	0.01672
0.62671	0.03775	0.70526	0.03261	0.78365	0.02539	0.86187	0.01648
0.62872	0.03765	0.70727	0.03245	0.78566	0.02518	0.86387	0.01623
0.63074	0.03754	0.70928	0.03229	0.78766	0.02497	0.86587	0.01599
0.63275	0.03743	0.71130	0.03213	0.78967	0.02475	0.86788	0.01575
0.63477	0.03732	0.71331	0.03197	0.79168	0.02454	0.86988	0.01551
0.63679	0.03721	0.71532	0.03180	0.79369	0.02432	0.87189	0.01527
0.63880	0.03710	0.71733	0.03163	0.79569	0.02411	0.87389	0.01502
0.64082	0.03699	0.71934	0.03147	0.79770	0.02389	0.87589	0.01478
0.64283	0.03687	0.72136	0.03130	0.79971	0.02367	0.87790	0.01454
0.64485	0.03675	0.72337	0.03113	0.80171	0.02345	0.87990	0.01429
0.64686	0.03664	0.72538	0.03096	0.80372	0.02323	0.88191	0.01405
0.64888	0.03652	0.72739	0.03078	0.80573	0.02301	0.88391	0.01380
0.65089	0.03640	0.72940	0.03061	0.80773	0.02278	0.88591	0.01356
0.65291	0.03627	0.73141	0.03043	0.80974	0.02256	0.88792	0.01331
0.65492	0.03615	0.73342	0.03026	0.81174	0.02233	0.88992	0.01306
0.65694	0.03603	0.73543	0.03008	0.81375	0.02211	0.89192	0.01282
0.65895	0.03590	0.73744	0.02990	0.81576	0.02188	0.89393	0.01257
0.66097	0.03577	0.73945	0.02972	0.81776	0.02165	0.89593	0.01232
0.66298	0.03564	0.74146	0.02954	0.81977	0.02143	0.89793	0.01207
0.66499	0.03551	0.74347	0.02935	0.82177	0.02120	0.89994	0.01182
0.66701	0.03538	0.74548	0.02917	0.82378	0.02097	0.90194	0.01157
0.66902	0.03525	0.74749	0.02898	0.82578	0.02074	0.90394	0.01132
0.67104	0.03511	0.74950	0.02879	0.82779	0.02050	0.90594	0.01107
0.67305	0.03498	0.75151	0.02860	0.82979	0.02027	0.90795	0.01082
0.67506	0.03484	0.75352	0.02841	0.83180	0.02004	0.90995	0.01057
0.67708	0.03470	0.75553	0.02822	0.83380	0.01981	0.91195	0.01032
0.67909	0.03456	0.75754	0.02803	0.83581	0.01957	0.91396	0.01007
0.68111	0.03442	0.75955	0.02783	0.83781	0.01934	0.91596	0.00981
0.68312	0.03427	0.76156	0.02764	0.83982	0.01910	0.91796	0.00956
0.68513	0.03413	0.76357	0.02744	0.84182	0.01886	0.91996	0.00930
0.68715	0.03398	0.76558	0.02724	0.84383	0.01863	0.92197	0.00905

<u>x/c</u>	<u>y/c</u>	<u>x/c</u>	<u>y/c</u>	<u>x/c</u>	<u>y/c</u>	<u>x/c</u>	<u>y/c</u>
0.92397	0.00879	0.94399	0.00622	0.96400	0.00359	0.98401	0.00092
0.92597	0.00854	0.94599	0.00596	0.96600	0.00333	0.98601	0.00064
0.92797	0.00828	0.94799	0.00570	0.96801	0.00306	0.98801	0.00036
0.92998	0.00803	0.94999	0.00544	0.97001	0.00280	0.99001	0.00009
0.93198	0.00777	0.95200	0.00517	0.97201	0.00253	0.99201	-0.00017
0.93398	0.00751	0.95400	0.00491	0.97401	0.00226	0.99401	-0.00044
0.93598	0.00725	0.95600	0.00465	0.97601	0.00200	0.99601	-0.00074
0.93798	0.00700	0.95800	0.00439	0.97801	0.00173	0.99801	-0.00096
0.93999	0.00674	0.96000	0.00412	0.98001	0.00146	0.99998	-0.00091
<u>0.94199</u>	<u>0.00648</u>	<u>0.96200</u>	<u>0.00386</u>	<u>0.98201</u>	<u>0.00119</u>		

Table 23. OML Station 5 upper surface airfoil coordinates,  $r/R = 0.9000$

$x/c$	$y/c$	$x/c$	$y/c$	$x/c$	$y/c$	$x/c$	$y/c$
1.00000	-0.00088	0.92894	0.01623	0.85516	0.02564	0.78093	0.03064
0.99934	0.00009	0.92696	0.01655	0.85316	0.02582	0.77893	0.03073
0.99762	0.00111	0.92497	0.01688	0.85115	0.02601	0.77692	0.03082
0.99575	0.00185	0.92299	0.01720	0.84915	0.02619	0.77491	0.03091
0.99382	0.00242	0.92100	0.01751	0.84715	0.02636	0.77290	0.03100
0.99187	0.00292	0.91902	0.01782	0.84514	0.02653	0.77089	0.03108
0.98993	0.00343	0.91703	0.01813	0.84314	0.02670	0.76888	0.03117
0.98798	0.00392	0.91504	0.01843	0.84114	0.02687	0.76687	0.03125
0.98603	0.00442	0.91305	0.01873	0.83913	0.02703	0.76486	0.03133
0.98408	0.00490	0.91106	0.01902	0.83713	0.02719	0.76285	0.03141
0.98213	0.00538	0.90907	0.01931	0.83512	0.02735	0.76084	0.03148
0.98017	0.00585	0.90708	0.01959	0.83312	0.02751	0.75883	0.03156
0.97822	0.00632	0.90509	0.01987	0.83111	0.02766	0.75683	0.03163
0.97626	0.00678	0.90310	0.02015	0.82911	0.02781	0.75482	0.03171
0.97430	0.00724	0.90111	0.02042	0.82710	0.02795	0.75281	0.03178
0.97234	0.00769	0.89911	0.02069	0.82510	0.02810	0.75080	0.03185
0.97038	0.00813	0.89712	0.02095	0.82309	0.02824	0.74879	0.03192
0.96842	0.00857	0.89513	0.02121	0.82108	0.02837	0.74678	0.03198
0.96646	0.00901	0.89313	0.02147	0.81908	0.02851	0.74477	0.03205
0.96449	0.00944	0.89114	0.02172	0.81707	0.02864	0.74276	0.03211
0.96253	0.00986	0.88914	0.02197	0.81507	0.02877	0.74075	0.03218
0.96056	0.01028	0.88715	0.02221	0.81306	0.02890	0.73874	0.03224
0.95859	0.01069	0.88515	0.02246	0.81105	0.02902	0.73673	0.03230
0.95662	0.01110	0.88315	0.02269	0.80905	0.02915	0.73472	0.03236
0.95465	0.01150	0.88116	0.02293	0.80704	0.02927	0.73271	0.03242
0.95268	0.01189	0.87916	0.02316	0.80503	0.02939	0.73070	0.03248
0.95071	0.01228	0.87716	0.02338	0.80302	0.02950	0.72869	0.03253
0.94873	0.01267	0.87516	0.02360	0.80102	0.02962	0.72668	0.03259
0.94676	0.01305	0.87316	0.02382	0.79901	0.02973	0.72467	0.03264
0.94478	0.01342	0.87116	0.02404	0.79700	0.02984	0.72266	0.03269
0.94281	0.01379	0.86916	0.02425	0.79499	0.02995	0.72065	0.03274
0.94083	0.01415	0.86716	0.02446	0.79298	0.03005	0.71864	0.03279
0.93885	0.01451	0.86516	0.02466	0.79098	0.03015	0.71663	0.03284
0.93687	0.01486	0.86316	0.02486	0.78897	0.03026	0.71462	0.03288
0.93489	0.01521	0.86116	0.02506	0.78696	0.03036	0.71261	0.03293
0.93291	0.01555	0.85916	0.02526	0.78495	0.03045	0.71060	0.03297
0.93093	0.01589	0.85716	0.02545	0.78294	0.03055	0.70859	0.03301

<u>x/c</u>	<u>y/c</u>	<u>x/c</u>	<u>y/c</u>	<u>x/c</u>	<u>y/c</u>	<u>x/c</u>	<u>y/c</u>
0.70658	0.03306	0.62816	0.03376	0.54975	0.03297	0.47135	0.03106
0.70457	0.03310	0.62615	0.03376	0.54773	0.03294	0.46934	0.03100
0.70256	0.03313	0.62414	0.03376	0.54572	0.03290	0.46733	0.03094
0.70055	0.03317	0.62213	0.03375	0.54371	0.03286	0.46532	0.03087
0.69853	0.03321	0.62012	0.03374	0.54170	0.03282	0.46331	0.03081
0.69652	0.03324	0.61811	0.03374	0.53969	0.03278	0.46130	0.03075
0.69451	0.03328	0.61610	0.03373	0.53768	0.03274	0.45929	0.03068
0.69250	0.03331	0.61409	0.03372	0.53567	0.03270	0.45728	0.03062
0.69049	0.03334	0.61207	0.03371	0.53366	0.03266	0.45527	0.03055
0.68848	0.03337	0.61006	0.03370	0.53165	0.03262	0.45326	0.03049
0.68647	0.03340	0.60805	0.03369	0.52964	0.03257	0.45125	0.03042
0.68446	0.03343	0.60604	0.03367	0.52763	0.03253	0.44924	0.03035
0.68245	0.03346	0.60403	0.03366	0.52562	0.03249	0.44723	0.03029
0.68044	0.03348	0.60202	0.03365	0.52361	0.03244	0.44522	0.03022
0.67843	0.03351	0.60001	0.03363	0.52160	0.03240	0.44321	0.03015
0.67642	0.03353	0.59800	0.03361	0.51959	0.03235	0.44120	0.03008
0.67441	0.03355	0.59599	0.03360	0.51758	0.03230	0.43919	0.03001
0.67240	0.03358	0.59398	0.03358	0.51557	0.03226	0.43718	0.02994
0.67039	0.03360	0.59197	0.03356	0.51356	0.03221	0.43517	0.02987
0.66838	0.03361	0.58996	0.03354	0.51155	0.03216	0.43316	0.02979
0.66637	0.03363	0.58795	0.03352	0.50954	0.03211	0.43116	0.02972
0.66435	0.03365	0.58594	0.03350	0.50753	0.03206	0.42915	0.02965
0.66234	0.03366	0.58392	0.03348	0.50552	0.03201	0.42714	0.02958
0.66033	0.03368	0.58191	0.03345	0.50351	0.03196	0.42513	0.02950
0.65832	0.03369	0.57990	0.03343	0.50150	0.03191	0.42312	0.02943
0.65631	0.03370	0.57789	0.03340	0.49949	0.03186	0.42111	0.02935
0.65430	0.03372	0.57588	0.03338	0.49748	0.03180	0.41910	0.02928
0.65229	0.03373	0.57387	0.03335	0.49547	0.03175	0.41709	0.02920
0.65028	0.03373	0.57186	0.03332	0.49346	0.03169	0.41508	0.02912
0.64827	0.03374	0.56985	0.03330	0.49145	0.03164	0.41307	0.02905
0.64626	0.03375	0.56784	0.03327	0.48944	0.03158	0.41106	0.02897
0.64425	0.03375	0.56583	0.03324	0.48743	0.03153	0.40905	0.02889
0.64224	0.03376	0.56382	0.03321	0.48542	0.03147	0.40704	0.02881
0.64023	0.03376	0.56181	0.03318	0.48341	0.03142	0.40503	0.02873
0.63821	0.03377	0.55980	0.03314	0.48140	0.03136	0.40302	0.02865
0.63620	0.03377	0.55779	0.03311	0.47939	0.03130	0.40102	0.02857
0.63419	0.03377	0.55578	0.03308	0.47738	0.03124	0.39901	0.02849
0.63218	0.03377	0.55377	0.03304	0.47537	0.03118	0.39700	0.02841
0.63017	0.03377	0.55176	0.03301	0.47336	0.03112	0.39499	0.02833

x/c	y/c	x/c	y/c	x/c	y/c	x/c	y/c
0.39298	0.02824	0.31464	0.02464	0.23634	0.02036	0.15808	0.01533
0.39097	0.02816	0.31263	0.02453	0.23433	0.02024	0.15607	0.01518
0.38896	0.02808	0.31063	0.02443	0.23232	0.02012	0.15407	0.01503
0.38695	0.02799	0.30862	0.02433	0.23032	0.02000	0.15206	0.01489
0.38494	0.02791	0.30661	0.02423	0.22831	0.01988	0.15006	0.01474
0.38293	0.02782	0.30460	0.02412	0.22630	0.01976	0.14805	0.01459
0.38092	0.02774	0.30259	0.02402	0.22429	0.01964	0.14605	0.01444
0.37892	0.02765	0.30058	0.02391	0.22229	0.01952	0.14404	0.01429
0.37691	0.02756	0.29858	0.02381	0.22028	0.01940	0.14204	0.01413
0.37490	0.02748	0.29657	0.02370	0.21827	0.01928	0.14003	0.01398
0.37289	0.02739	0.29456	0.02360	0.21627	0.01916	0.13803	0.01382
0.37088	0.02730	0.29255	0.02349	0.21426	0.01904	0.13602	0.01367
0.36887	0.02721	0.29054	0.02339	0.21225	0.01892	0.13402	0.01351
0.36686	0.02712	0.28854	0.02328	0.21025	0.01879	0.13201	0.01335
0.36485	0.02703	0.28653	0.02317	0.20824	0.01867	0.13001	0.01319
0.36285	0.02694	0.28452	0.02306	0.20623	0.01854	0.12801	0.01303
0.36084	0.02685	0.28251	0.02295	0.20422	0.01842	0.12600	0.01287
0.35883	0.02676	0.28051	0.02285	0.20222	0.01829	0.12400	0.01270
0.35682	0.02667	0.27850	0.02274	0.20021	0.01817	0.12199	0.01254
0.35481	0.02658	0.27649	0.02263	0.19820	0.01804	0.11999	0.01237
0.35280	0.02649	0.27448	0.02252	0.19620	0.01791	0.11799	0.01220
0.35079	0.02639	0.27247	0.02241	0.19419	0.01778	0.11598	0.01204
0.34878	0.02630	0.27047	0.02230	0.19218	0.01765	0.11398	0.01187
0.34678	0.02620	0.26846	0.02219	0.19018	0.01752	0.11198	0.01170
0.34477	0.02611	0.26645	0.02207	0.18817	0.01739	0.10997	0.01152
0.34276	0.02602	0.26444	0.02196	0.18616	0.01726	0.10797	0.01135
0.34075	0.02592	0.26244	0.02185	0.18416	0.01713	0.10597	0.01118
0.33874	0.02582	0.26043	0.02174	0.18215	0.01699	0.10396	0.01100
0.33673	0.02573	0.25842	0.02162	0.18015	0.01686	0.10196	0.01083
0.33473	0.02563	0.25641	0.02151	0.17814	0.01673	0.09996	0.01065
0.33272	0.02553	0.25441	0.02140	0.17613	0.01659	0.09795	0.01047
0.33071	0.02544	0.25240	0.02128	0.17413	0.01645	0.09595	0.01029
0.32870	0.02534	0.25039	0.02117	0.17212	0.01632	0.09395	0.01011
0.32669	0.02524	0.24838	0.02105	0.17011	0.01618	0.09194	0.00993
0.32468	0.02514	0.24638	0.02094	0.16811	0.01604	0.08994	0.00975
0.32267	0.02504	0.24437	0.02082	0.16610	0.01590	0.08794	0.00957
0.32067	0.02494	0.24236	0.02071	0.16410	0.01576	0.08594	0.00938
0.31866	0.02484	0.24035	0.02059	0.16209	0.01561	0.08394	0.00920
0.31665	0.02474	0.23835	0.02047	0.16009	0.01547	0.08193	0.00901

<u>x/c</u>	<u>y/c</u>	<u>x/c</u>	<u>y/c</u>	<u>x/c</u>	<u>y/c</u>	<u>x/c</u>	<u>y/c</u>
0.07993	0.00882	0.05792	0.00669	0.03591	0.00444	0.01392	0.00211
0.07793	0.00864	0.05591	0.00649	0.03391	0.00422	0.01192	0.00190
0.07593	0.00845	0.05391	0.00629	0.03191	0.00401	0.00992	0.00168
0.07393	0.00826	0.05191	0.00609	0.02991	0.00380	0.00792	0.00147
0.07192	0.00806	0.04991	0.00589	0.02791	0.00359	0.00592	0.00127
0.06992	0.00787	0.04791	0.00568	0.02591	0.00338	0.00392	0.00105
0.06792	0.00768	0.04591	0.00548	0.02391	0.00317	0.00193	0.00074
0.06592	0.00748	0.04391	0.00527	0.02191	0.00296	<u>0.00000</u>	<u>0.00019</u>
0.06392	0.00729	0.04191	0.00506	0.01992	0.00274		
0.06192	0.00709	0.03991	0.00485	0.01792	0.00253		
<u>0.05992</u>	<u>0.00689</u>	<u>0.03791</u>	<u>0.00464</u>	<u>0.01592</u>	<u>0.00232</u>		

Table 24. OML Station 5 lower surface airfoil coordinates,  $r/R = 0.9000$

$x/c$	$y/c$	$x/c$	$y/c$	$x/c$	$y/c$	$x/c$	$y/c$
-0.00005	-0.00180	0.07427	0.00118	0.14856	0.00511	0.22283	0.00955
0.00195	-0.00202	0.07627	0.00128	0.15057	0.00523	0.22483	0.00967
0.00396	-0.00203	0.07828	0.00138	0.15258	0.00534	0.22684	0.00979
0.00597	-0.00195	0.08029	0.00147	0.15458	0.00546	0.22885	0.00991
0.00798	-0.00186	0.08230	0.00157	0.15659	0.00558	0.23086	0.01003
0.00999	-0.00177	0.08431	0.00167	0.15860	0.00570	0.23286	0.01015
0.01200	-0.00168	0.08632	0.00177	0.16060	0.00581	0.23487	0.01026
0.01401	-0.00159	0.08832	0.00187	0.16261	0.00593	0.23688	0.01038
0.01601	-0.00149	0.09033	0.00197	0.16462	0.00605	0.23889	0.01050
0.01802	-0.00140	0.09234	0.00207	0.16663	0.00617	0.24089	0.01062
0.02003	-0.00131	0.09435	0.00218	0.16863	0.00629	0.24290	0.01073
0.02204	-0.00122	0.09636	0.00228	0.17064	0.00641	0.24491	0.01085
0.02405	-0.00113	0.09837	0.00238	0.17265	0.00653	0.24692	0.01096
0.02606	-0.00104	0.10037	0.00248	0.17466	0.00665	0.24892	0.01108
0.02807	-0.00095	0.10238	0.00259	0.17666	0.00677	0.25093	0.01119
0.03008	-0.00086	0.10439	0.00269	0.17867	0.00689	0.25294	0.01131
0.03208	-0.00077	0.10640	0.00280	0.18068	0.00701	0.25495	0.01142
0.03409	-0.00068	0.10841	0.00290	0.18268	0.00713	0.25695	0.01153
0.03610	-0.00058	0.11041	0.00301	0.18469	0.00725	0.25896	0.01165
0.03811	-0.00049	0.11242	0.00311	0.18670	0.00738	0.26097	0.01176
0.04012	-0.00040	0.11443	0.00322	0.18871	0.00750	0.26298	0.01187
0.04213	-0.00031	0.11644	0.00332	0.19071	0.00762	0.26498	0.01198
0.04414	-0.00022	0.11845	0.00343	0.19272	0.00774	0.26699	0.01210
0.04615	-0.00013	0.12045	0.00354	0.19473	0.00786	0.26900	0.01221
0.04815	-0.00004	0.12246	0.00365	0.19673	0.00798	0.27101	0.01232
0.05016	0.00005	0.12447	0.00376	0.19874	0.00810	0.27301	0.01243
0.05217	0.00014	0.12648	0.00387	0.20075	0.00823	0.27502	0.01254
0.05418	0.00023	0.12849	0.00398	0.20276	0.00835	0.27703	0.01265
0.05619	0.00032	0.13049	0.00409	0.20476	0.00847	0.27904	0.01275
0.05820	0.00042	0.13250	0.00420	0.20677	0.00859	0.28105	0.01286
0.06021	0.00051	0.13451	0.00431	0.20878	0.00871	0.28305	0.01297
0.06222	0.00061	0.13652	0.00442	0.21078	0.00883	0.28506	0.01308
0.06422	0.00070	0.13852	0.00454	0.21279	0.00895	0.28707	0.01319
0.06623	0.00080	0.14053	0.00465	0.21480	0.00907	0.28908	0.01329
0.06824	0.00089	0.14254	0.00476	0.21681	0.00919	0.29108	0.01340
0.07025	0.00099	0.14455	0.00488	0.21881	0.00931	0.29309	0.01351
0.07226	0.00108	0.14655	0.00499	0.22082	0.00943	0.29510	0.01361

x/c	y/c	x/c	y/c	x/c	y/c	x/c	y/c
0.29711	0.01372	0.37544	0.01749	0.45380	0.02049	0.53219	0.02261
0.29912	0.01382	0.37745	0.01757	0.45581	0.02056	0.53420	0.02265
0.30113	0.01393	0.37946	0.01766	0.45782	0.02062	0.53621	0.02269
0.30313	0.01403	0.38147	0.01775	0.45983	0.02069	0.53822	0.02273
0.30514	0.01414	0.38347	0.01783	0.46184	0.02075	0.54023	0.02277
0.30715	0.01424	0.38548	0.01792	0.46385	0.02082	0.54224	0.02281
0.30916	0.01434	0.38749	0.01800	0.46586	0.02088	0.54425	0.02285
0.31117	0.01445	0.38950	0.01808	0.46787	0.02094	0.54627	0.02288
0.31317	0.01455	0.39151	0.01817	0.46988	0.02100	0.54828	0.02292
0.31518	0.01465	0.39352	0.01825	0.47189	0.02106	0.55029	0.02296
0.31719	0.01475	0.39553	0.01833	0.47390	0.02112	0.55230	0.02299
0.31920	0.01485	0.39754	0.01842	0.47591	0.02118	0.55431	0.02303
0.32121	0.01495	0.39955	0.01850	0.47792	0.02124	0.55632	0.02306
0.32322	0.01505	0.40156	0.01858	0.47993	0.02130	0.55833	0.02309
0.32522	0.01515	0.40357	0.01866	0.48194	0.02136	0.56034	0.02312
0.32723	0.01525	0.40557	0.01874	0.48395	0.02142	0.56235	0.02316
0.32924	0.01535	0.40758	0.01882	0.48596	0.02148	0.56436	0.02319
0.33125	0.01545	0.40959	0.01890	0.48797	0.02153	0.56637	0.02321
0.33326	0.01554	0.41160	0.01898	0.48998	0.02159	0.56838	0.02324
0.33527	0.01564	0.41361	0.01905	0.49199	0.02164	0.57039	0.02327
0.33727	0.01574	0.41562	0.01913	0.49400	0.02170	0.57240	0.02330
0.33928	0.01583	0.41763	0.01921	0.49601	0.02175	0.57441	0.02333
0.34129	0.01593	0.41964	0.01928	0.49802	0.02180	0.57642	0.02335
0.34330	0.01602	0.42165	0.01936	0.50003	0.02186	0.57843	0.02338
0.34531	0.01612	0.42366	0.01943	0.50204	0.02191	0.58044	0.02340
0.34732	0.01621	0.42567	0.01951	0.50405	0.02196	0.58246	0.02342
0.34933	0.01631	0.42768	0.01958	0.50606	0.02201	0.58447	0.02344
0.35133	0.01640	0.42969	0.01966	0.50807	0.02206	0.58648	0.02347
0.35334	0.01649	0.43170	0.01973	0.51008	0.02211	0.58849	0.02349
0.35535	0.01659	0.43371	0.01980	0.51209	0.02216	0.59050	0.02351
0.35736	0.01668	0.43571	0.01987	0.51410	0.02221	0.59251	0.02352
0.35937	0.01677	0.43772	0.01994	0.51611	0.02225	0.59452	0.02354
0.36138	0.01686	0.43973	0.02001	0.51812	0.02230	0.59653	0.02356
0.36339	0.01695	0.44174	0.02008	0.52013	0.02235	0.59854	0.02358
0.36539	0.01704	0.44375	0.02015	0.52214	0.02239	0.60055	0.02359
0.36740	0.01713	0.44576	0.02022	0.52415	0.02244	0.60256	0.02361
0.36941	0.01722	0.44777	0.02029	0.52616	0.02248	0.60457	0.02362
0.37142	0.01731	0.44978	0.02036	0.52817	0.02253	0.60658	0.02363
0.37343	0.01740	0.45179	0.02043	0.53018	0.02257	0.60859	0.02364

<u>x/c</u>	<u>y/c</u>	<u>x/c</u>	<u>y/c</u>	<u>x/c</u>	<u>y/c</u>	<u>x/c</u>	<u>y/c</u>
0.61061	0.02365	0.68902	0.02331	0.76742	0.02125	0.84571	0.01692
0.61262	0.02366	0.69103	0.02328	0.76942	0.02117	0.84772	0.01677
0.61463	0.02367	0.69304	0.02325	0.77143	0.02109	0.84972	0.01663
0.61664	0.02368	0.69506	0.02322	0.77344	0.02101	0.85173	0.01648
0.61865	0.02369	0.69707	0.02319	0.77545	0.02092	0.85373	0.01633
0.62066	0.02370	0.69908	0.02315	0.77746	0.02083	0.85574	0.01618
0.62267	0.02370	0.70109	0.02312	0.77947	0.02074	0.85774	0.01603
0.62468	0.02371	0.70310	0.02308	0.78148	0.02065	0.85975	0.01588
0.62669	0.02371	0.70511	0.02304	0.78349	0.02056	0.86175	0.01573
0.62870	0.02371	0.70712	0.02300	0.78550	0.02047	0.86376	0.01557
0.63071	0.02371	0.70913	0.02296	0.78750	0.02037	0.86576	0.01541
0.63272	0.02371	0.71114	0.02292	0.78951	0.02028	0.86777	0.01526
0.63473	0.02371	0.71315	0.02288	0.79152	0.02018	0.86977	0.01510
0.63675	0.02371	0.71516	0.02284	0.79353	0.02008	0.87178	0.01493
0.63876	0.02371	0.71717	0.02279	0.79554	0.01998	0.87378	0.01477
0.64077	0.02371	0.71918	0.02275	0.79755	0.01987	0.87579	0.01460
0.64278	0.02370	0.72119	0.02270	0.79955	0.01977	0.87779	0.01444
0.64479	0.02370	0.72320	0.02265	0.80156	0.01966	0.87979	0.01427
0.64680	0.02369	0.72521	0.02260	0.80357	0.01955	0.88180	0.01410
0.64881	0.02368	0.72722	0.02255	0.80558	0.01944	0.88380	0.01392
0.65082	0.02367	0.72923	0.02250	0.80758	0.01933	0.88580	0.01375
0.65283	0.02366	0.73124	0.02244	0.80959	0.01922	0.88781	0.01357
0.65484	0.02365	0.73325	0.02239	0.81160	0.01911	0.88981	0.01339
0.65685	0.02364	0.73526	0.02233	0.81361	0.01899	0.89181	0.01321
0.65886	0.02363	0.73727	0.02228	0.81561	0.01887	0.89381	0.01303
0.66087	0.02362	0.73928	0.02222	0.81762	0.01875	0.89582	0.01284
0.66289	0.02360	0.74129	0.02216	0.81963	0.01863	0.89782	0.01265
0.66490	0.02359	0.74330	0.02210	0.82164	0.01851	0.89982	0.01246
0.66691	0.02357	0.74531	0.02203	0.82364	0.01839	0.90182	0.01227
0.66892	0.02355	0.74732	0.02197	0.82565	0.01826	0.90382	0.01207
0.67093	0.02353	0.74933	0.02191	0.82766	0.01813	0.90582	0.01187
0.67294	0.02351	0.75134	0.02184	0.82966	0.01800	0.90782	0.01167
0.67495	0.02349	0.75335	0.02177	0.83167	0.01787	0.90982	0.01146
0.67696	0.02347	0.75536	0.02170	0.83368	0.01774	0.91182	0.01125
0.67897	0.02345	0.75737	0.02163	0.83568	0.01761	0.91382	0.01104
0.68098	0.02342	0.75938	0.02156	0.83769	0.01747	0.91582	0.01083
0.68299	0.02340	0.76139	0.02148	0.83969	0.01734	0.91782	0.01061
0.68500	0.02337	0.76340	0.02141	0.84170	0.01720	0.91982	0.01039
0.68701	0.02334	0.76541	0.02133	0.84371	0.01706	0.92182	0.01017

$x/c$	$y/c$	$x/c$	$y/c$	$x/c$	$y/c$	$x/c$	$y/c$
0.92382	0.00994	0.93979	0.00802	0.95573	0.00586	0.97162	0.00338
0.92581	0.00972	0.94178	0.00776	0.95772	0.00557	0.97360	0.00304
0.92781	0.00948	0.94378	0.00750	0.95971	0.00527	0.97558	0.00269
0.92981	0.00925	0.94577	0.00724	0.96169	0.00497	0.97756	0.00234
0.93180	0.00901	0.94776	0.00697	0.96368	0.00466	0.97954	0.00199
0.93380	0.00877	0.94975	0.00670	0.96567	0.00435	0.98152	0.00162
0.93580	0.00852	0.95175	0.00642	0.96765	0.00403	0.98350	0.00125
0.93779	0.00827	0.95374	0.00614	0.96964	0.00371	0.98547	0.00088

Table 25. OML Station 6 upper surface airfoil coordinates,  $r/R = 1.0000$

x/c	y/c	x/c	y/c	x/c	y/c	x/c	y/c
1.00000	0.00011	0.93071	0.02420	0.85696	0.03512	0.78255	0.04010
0.99917	0.00153	0.92874	0.02461	0.85495	0.03532	0.78053	0.04018
0.99764	0.00284	0.92676	0.02501	0.85295	0.03551	0.77852	0.04025
0.99598	0.00399	0.92478	0.02540	0.85094	0.03570	0.77650	0.04033
0.99422	0.00497	0.92281	0.02579	0.84893	0.03589	0.77449	0.04040
0.99240	0.00583	0.92083	0.02616	0.84692	0.03607	0.77247	0.04048
0.99057	0.00668	0.91884	0.02654	0.84492	0.03625	0.77046	0.04055
0.98873	0.00749	0.91686	0.02690	0.84291	0.03642	0.76844	0.04061
0.98688	0.00829	0.91488	0.02726	0.84090	0.03659	0.76643	0.04068
0.98501	0.00906	0.91289	0.02761	0.83889	0.03676	0.76441	0.04075
0.98314	0.00981	0.91091	0.02795	0.83688	0.03692	0.76240	0.04081
0.98126	0.01054	0.90892	0.02829	0.83487	0.03708	0.76038	0.04087
0.97937	0.01125	0.90693	0.02862	0.83286	0.03724	0.75837	0.04093
0.97748	0.01193	0.90494	0.02894	0.83085	0.03739	0.75635	0.04099
0.97557	0.01260	0.90295	0.02926	0.82884	0.03754	0.75434	0.04105
0.97366	0.01324	0.90096	0.02957	0.82683	0.03769	0.75232	0.04110
0.97175	0.01387	0.89896	0.02988	0.82482	0.03783	0.75031	0.04116
0.96983	0.01448	0.89697	0.03018	0.82281	0.03797	0.74829	0.04121
0.96790	0.01507	0.89498	0.03047	0.82080	0.03810	0.74628	0.04126
0.96597	0.01564	0.89298	0.03076	0.81878	0.03824	0.74426	0.04131
0.96403	0.01620	0.89099	0.03105	0.81677	0.03836	0.74225	0.04136
0.96209	0.01675	0.88899	0.03133	0.81476	0.03849	0.74023	0.04140
0.96015	0.01728	0.88699	0.03160	0.81275	0.03861	0.73822	0.04145
0.95820	0.01780	0.88499	0.03187	0.81074	0.03873	0.73620	0.04149
0.95625	0.01831	0.88300	0.03213	0.80872	0.03885	0.73418	0.04153
0.95429	0.01881	0.88100	0.03239	0.80671	0.03896	0.73217	0.04157
0.95234	0.01930	0.87900	0.03264	0.80470	0.03907	0.73015	0.04161
0.95038	0.01978	0.87700	0.03289	0.80268	0.03917	0.72814	0.04164
0.94842	0.02025	0.87499	0.03313	0.80067	0.03928	0.72612	0.04168
0.94646	0.02071	0.87299	0.03337	0.79866	0.03938	0.72411	0.04171
0.94449	0.02117	0.87099	0.03360	0.79664	0.03948	0.72209	0.04174
0.94253	0.02162	0.86899	0.03383	0.79463	0.03957	0.72008	0.04177
0.94056	0.02206	0.86698	0.03406	0.79262	0.03967	0.71806	0.04180
0.93859	0.02250	0.86498	0.03428	0.79060	0.03976	0.71604	0.04182
0.93663	0.02293	0.86297	0.03449	0.78859	0.03984	0.71403	0.04185
0.93466	0.02336	0.86097	0.03471	0.78657	0.03993	0.71201	0.04187
0.93268	0.02378	0.85896	0.03491	0.78456	0.04001	0.71000	0.04190

x/c	y/c	x/c	y/c	x/c	y/c	x/c	y/c
0.70798	0.04192	0.62936	0.04176	0.55076	0.04007	0.47218	0.03722
0.70596	0.04194	0.62734	0.04174	0.54874	0.04001	0.47017	0.03713
0.70395	0.04195	0.62533	0.04171	0.54673	0.03995	0.46816	0.03705
0.70193	0.04197	0.62331	0.04168	0.54471	0.03989	0.46614	0.03696
0.69992	0.04199	0.62130	0.04165	0.54270	0.03983	0.46413	0.03687
0.69790	0.04200	0.61928	0.04162	0.54068	0.03976	0.46211	0.03678
0.69588	0.04201	0.61726	0.04159	0.53867	0.03970	0.46010	0.03669
0.69387	0.04203	0.61525	0.04156	0.53665	0.03964	0.45809	0.03661
0.69185	0.04204	0.61323	0.04153	0.53464	0.03957	0.45607	0.03652
0.68984	0.04205	0.61122	0.04149	0.53262	0.03950	0.45406	0.03642
0.68782	0.04205	0.60920	0.04146	0.53061	0.03944	0.45204	0.03633
0.68581	0.04206	0.60719	0.04142	0.52859	0.03937	0.45003	0.03624
0.68379	0.04206	0.60517	0.04139	0.52658	0.03930	0.44802	0.03615
0.68177	0.04207	0.60315	0.04135	0.52456	0.03923	0.44600	0.03606
0.67976	0.04207	0.60114	0.04131	0.52255	0.03917	0.44399	0.03596
0.67774	0.04207	0.59912	0.04127	0.52053	0.03910	0.44198	0.03587
0.67573	0.04207	0.59711	0.04123	0.51852	0.03902	0.43996	0.03577
0.67371	0.04207	0.59509	0.04119	0.51650	0.03895	0.43795	0.03568
0.67169	0.04207	0.59308	0.04115	0.51449	0.03888	0.43593	0.03558
0.66968	0.04207	0.59106	0.04110	0.51247	0.03881	0.43392	0.03549
0.66766	0.04206	0.58905	0.04106	0.51046	0.03874	0.43191	0.03539
0.66565	0.04206	0.58703	0.04102	0.50844	0.03866	0.42989	0.03529
0.66363	0.04205	0.58502	0.04097	0.50643	0.03859	0.42788	0.03520
0.66161	0.04204	0.58300	0.04092	0.50441	0.03851	0.42587	0.03510
0.65960	0.04203	0.58098	0.04088	0.50240	0.03844	0.42385	0.03500
0.65758	0.04202	0.57897	0.04083	0.50039	0.03836	0.42184	0.03490
0.65557	0.04201	0.57695	0.04078	0.49837	0.03828	0.41983	0.03480
0.65355	0.04200	0.57494	0.04073	0.49636	0.03820	0.41781	0.03470
0.65153	0.04198	0.57292	0.04068	0.49434	0.03812	0.41580	0.03460
0.64952	0.04197	0.57091	0.04063	0.49233	0.03805	0.41379	0.03450
0.64750	0.04195	0.56889	0.04058	0.49031	0.03797	0.41177	0.03439
0.64549	0.04194	0.56688	0.04052	0.48830	0.03789	0.40976	0.03429
0.64347	0.04192	0.56486	0.04047	0.48628	0.03780	0.40775	0.03419
0.64145	0.04190	0.56285	0.04041	0.48427	0.03772	0.40573	0.03408
0.63944	0.04188	0.56083	0.04036	0.48226	0.03764	0.40372	0.03398
0.63742	0.04186	0.55882	0.04030	0.48024	0.03756	0.40171	0.03387
0.63541	0.04184	0.55680	0.04025	0.47823	0.03747	0.39969	0.03377
0.63339	0.04181	0.55479	0.04019	0.47621	0.03739	0.39768	0.03366
0.63138	0.04179	0.55277	0.04013	0.47420	0.03730	0.39567	0.03356

x/c	y/c	x/c	y/c	x/c	y/c	x/c	y/c
0.39365	0.03345	0.31516	0.02892	0.23671	0.02375	0.15830	0.01790
0.39164	0.03334	0.31315	0.02880	0.23470	0.02361	0.15630	0.01773
0.38963	0.03324	0.31114	0.02867	0.23269	0.02347	0.15429	0.01756
0.38761	0.03313	0.30912	0.02854	0.23068	0.02333	0.15228	0.01739
0.38560	0.03302	0.30711	0.02842	0.22866	0.02319	0.15027	0.01722
0.38359	0.03291	0.30510	0.02829	0.22665	0.02305	0.14826	0.01705
0.38158	0.03280	0.30309	0.02816	0.22464	0.02291	0.14625	0.01687
0.37956	0.03269	0.30108	0.02804	0.22263	0.02277	0.14424	0.01670
0.37755	0.03258	0.29907	0.02791	0.22062	0.02263	0.14224	0.01652
0.37554	0.03247	0.29705	0.02778	0.21861	0.02248	0.14023	0.01635
0.37352	0.03236	0.29504	0.02765	0.21660	0.02234	0.13822	0.01617
0.37151	0.03225	0.29303	0.02752	0.21459	0.02220	0.13621	0.01599
0.36950	0.03213	0.29102	0.02739	0.21258	0.02206	0.13420	0.01581
0.36748	0.03202	0.28901	0.02726	0.21057	0.02191	0.13220	0.01563
0.36547	0.03191	0.28699	0.02713	0.20855	0.02177	0.13019	0.01545
0.36346	0.03179	0.28498	0.02700	0.20654	0.02162	0.12818	0.01527
0.36145	0.03168	0.28297	0.02687	0.20453	0.02148	0.12617	0.01508
0.35943	0.03156	0.28096	0.02674	0.20252	0.02133	0.12416	0.01490
0.35742	0.03145	0.27895	0.02661	0.20051	0.02119	0.12216	0.01471
0.35541	0.03133	0.27694	0.02647	0.19850	0.02104	0.12015	0.01452
0.35340	0.03122	0.27492	0.02634	0.19649	0.02089	0.11814	0.01434
0.35138	0.03110	0.27291	0.02621	0.19448	0.02074	0.11614	0.01415
0.34937	0.03098	0.27090	0.02607	0.19247	0.02059	0.11413	0.01396
0.34736	0.03086	0.26889	0.02594	0.19046	0.02044	0.11212	0.01377
0.34535	0.03075	0.26688	0.02581	0.18845	0.02029	0.11012	0.01357
0.34333	0.03063	0.26487	0.02567	0.18644	0.02014	0.10811	0.01338
0.34132	0.03051	0.26286	0.02554	0.18443	0.01999	0.10610	0.01319
0.33931	0.03039	0.26084	0.02540	0.18242	0.01983	0.10410	0.01299
0.33730	0.03027	0.25883	0.02526	0.18041	0.01968	0.10209	0.01280
0.33528	0.03015	0.25682	0.02513	0.17840	0.01952	0.10008	0.01260
0.33327	0.03003	0.25481	0.02499	0.17639	0.01936	0.09808	0.01240
0.33126	0.02991	0.25280	0.02485	0.17438	0.01921	0.09607	0.01220
0.32925	0.02978	0.25079	0.02472	0.17237	0.01905	0.09406	0.01200
0.32723	0.02966	0.24878	0.02458	0.17036	0.01889	0.09206	0.01180
0.32522	0.02954	0.24676	0.02444	0.16835	0.01872	0.09005	0.01160
0.32321	0.02942	0.24475	0.02430	0.16634	0.01856	0.08805	0.01139
0.32120	0.02929	0.24274	0.02416	0.16433	0.01840	0.08604	0.01119
0.31919	0.02917	0.24073	0.02403	0.16232	0.01823	0.08404	0.01098
0.31717	0.02905	0.23872	0.02389	0.16031	0.01807	0.08203	0.01078

x/c	y/c
0.08003	0.01057
0.07802	0.01036
0.07602	0.01015
0.07401	0.00994
0.07201	0.00973
0.07000	0.00952
0.06800	0.00931
0.06599	0.00910
0.06399	0.00889
0.06198	0.00868
0.05998	0.00847

x/c	y/c
0.05797	0.00825
0.05597	0.00804
0.05396	0.00783
0.05196	0.00762
0.04995	0.00740
0.04795	0.00719
0.04594	0.00698
0.04394	0.00676
0.04193	0.00655
0.03993	0.00633
0.03792	0.00612

x/c	y/c
0.03592	0.00590
0.03392	0.00569
0.03191	0.00547
0.02991	0.00526
0.02790	0.00504
0.02590	0.00482
0.02389	0.00461
0.02189	0.00439
0.01989	0.00417
0.01788	0.00396
0.01588	0.00374

x/c	y/c
0.01387	0.00352
0.01187	0.00330
0.00986	0.00308
0.00786	0.00286
0.00586	0.00265
0.00385	0.00242
0.00190	0.00193
0.00000	0.00125

Table 26. OML Station 6 lower surface airfoil coordinates,  $r/R = 1.0000$

$x/c$	$y/c$	$x/c$	$y/c$	$x/c$	$y/c$	$x/c$	$y/c$
-0.00014	-0.00097	0.07429	0.00285	0.14873	0.00754	0.22314	0.01279
0.00185	-0.00129	0.07630	0.00297	0.15074	0.00767	0.22515	0.01293
0.00386	-0.00141	0.07831	0.00309	0.15276	0.00781	0.22716	0.01307
0.00587	-0.00133	0.08033	0.00321	0.15477	0.00795	0.22917	0.01321
0.00789	-0.00120	0.08234	0.00333	0.15678	0.00808	0.23118	0.01336
0.00990	-0.00107	0.08435	0.00345	0.15879	0.00822	0.23319	0.01350
0.01191	-0.00095	0.08636	0.00357	0.16080	0.00836	0.23520	0.01364
0.01392	-0.00082	0.08838	0.00369	0.16281	0.00850	0.23722	0.01378
0.01593	-0.00069	0.09039	0.00381	0.16482	0.00863	0.23923	0.01392
0.01795	-0.00057	0.09240	0.00393	0.16683	0.00877	0.24124	0.01406
0.01996	-0.00044	0.09441	0.00406	0.16885	0.00891	0.24325	0.01420
0.02197	-0.00032	0.09643	0.00418	0.17086	0.00905	0.24526	0.01433
0.02398	-0.00019	0.09844	0.00430	0.17287	0.00919	0.24727	0.01447
0.02599	-0.00007	0.10045	0.00443	0.17488	0.00933	0.24928	0.01461
0.02801	0.00005	0.10246	0.00455	0.17689	0.00948	0.25129	0.01475
0.03002	0.00018	0.10447	0.00467	0.17890	0.00962	0.25331	0.01488
0.03203	0.00030	0.10649	0.00480	0.18091	0.00976	0.25532	0.01502
0.03404	0.00043	0.10850	0.00493	0.18292	0.00990	0.25733	0.01515
0.03606	0.00055	0.11051	0.00505	0.18493	0.01005	0.25934	0.01529
0.03807	0.00067	0.11252	0.00518	0.18694	0.01019	0.26135	0.01542
0.04008	0.00080	0.11453	0.00531	0.18896	0.01033	0.26336	0.01556
0.04209	0.00092	0.11655	0.00543	0.19097	0.01048	0.26537	0.01569
0.04410	0.00104	0.11856	0.00556	0.19298	0.01062	0.26739	0.01583
0.04612	0.00116	0.12057	0.00569	0.19499	0.01077	0.26940	0.01596
0.04813	0.00129	0.12258	0.00582	0.19700	0.01091	0.27141	0.01609
0.05014	0.00141	0.12459	0.00595	0.19901	0.01106	0.27342	0.01623
0.05215	0.00153	0.12661	0.00608	0.20102	0.01120	0.27543	0.01636
0.05417	0.00165	0.12862	0.00621	0.20303	0.01135	0.27744	0.01649
0.05618	0.00177	0.13063	0.00634	0.20504	0.01149	0.27946	0.01662
0.05819	0.00189	0.13264	0.00647	0.20705	0.01164	0.28147	0.01676
0.06020	0.00201	0.13465	0.00660	0.20906	0.01178	0.28348	0.01689
0.06221	0.00213	0.13666	0.00673	0.21107	0.01192	0.28549	0.01702
0.06423	0.00225	0.13868	0.00687	0.21308	0.01207	0.28750	0.01715
0.06624	0.00237	0.14069	0.00700	0.21510	0.01221	0.28951	0.01728
0.06825	0.00249	0.14270	0.00713	0.21711	0.01236	0.29153	0.01741
0.07026	0.00261	0.14471	0.00727	0.21912	0.01250	0.29354	0.01754
0.07228	0.00273	0.14672	0.00740	0.22113	0.01264	0.29555	0.01767

<u>x/c</u>	<u>y/c</u>	<u>x/c</u>	<u>y/c</u>	<u>x/c</u>	<u>y/c</u>	<u>x/c</u>	<u>y/c</u>
0.29756	0.01779	0.37604	0.02248	0.45457	0.02643	0.53313	0.02950
0.29957	0.01792	0.37806	0.02259	0.45658	0.02652	0.53514	0.02956
0.30158	0.01805	0.38007	0.02270	0.45860	0.02661	0.53716	0.02963
0.30360	0.01818	0.38208	0.02281	0.46061	0.02670	0.53917	0.02969
0.30561	0.01831	0.38410	0.02292	0.46262	0.02678	0.54119	0.02976
0.30762	0.01843	0.38611	0.02303	0.46464	0.02687	0.54320	0.02982
0.30963	0.01856	0.38812	0.02314	0.46665	0.02696	0.54522	0.02988
0.31164	0.01868	0.39014	0.02324	0.46867	0.02705	0.54723	0.02994
0.31366	0.01881	0.39215	0.02335	0.47068	0.02713	0.54925	0.03000
0.31567	0.01893	0.39416	0.02346	0.47269	0.02722	0.55126	0.03006
0.31768	0.01906	0.39617	0.02356	0.47471	0.02730	0.55328	0.03012
0.31969	0.01918	0.39819	0.02367	0.47672	0.02739	0.55529	0.03018
0.32171	0.01931	0.40020	0.02378	0.47874	0.02747	0.55731	0.03024
0.32372	0.01943	0.40221	0.02388	0.48075	0.02756	0.55932	0.03030
0.32573	0.01955	0.40423	0.02399	0.48276	0.02764	0.56134	0.03035
0.32774	0.01967	0.40624	0.02409	0.48478	0.02772	0.56336	0.03041
0.32975	0.01980	0.40825	0.02419	0.48679	0.02780	0.56537	0.03046
0.33177	0.01992	0.41027	0.02430	0.48881	0.02788	0.56739	0.03051
0.33378	0.02004	0.41228	0.02440	0.49082	0.02796	0.56940	0.03057
0.33579	0.02016	0.41429	0.02450	0.49284	0.02804	0.57142	0.03062
0.33780	0.02028	0.41631	0.02460	0.49485	0.02812	0.57343	0.03067
0.33982	0.02040	0.41832	0.02470	0.49687	0.02820	0.57545	0.03072
0.34183	0.02052	0.42033	0.02480	0.49888	0.02828	0.57746	0.03077
0.34384	0.02064	0.42235	0.02490	0.50089	0.02836	0.57948	0.03082
0.34585	0.02076	0.42436	0.02500	0.50291	0.02843	0.58149	0.03087
0.34787	0.02087	0.42637	0.02510	0.50492	0.02851	0.58351	0.03091
0.34988	0.02099	0.42839	0.02520	0.50694	0.02858	0.58552	0.03096
0.35189	0.02111	0.43040	0.02530	0.50895	0.02866	0.58754	0.03100
0.35390	0.02123	0.43242	0.02539	0.51097	0.02873	0.58956	0.03105
0.35592	0.02134	0.43443	0.02549	0.51298	0.02881	0.59157	0.03109
0.35793	0.02146	0.43644	0.02559	0.51500	0.02888	0.59359	0.03114
0.35994	0.02157	0.43846	0.02568	0.51701	0.02895	0.59560	0.03118
0.36195	0.02169	0.44047	0.02578	0.51903	0.02902	0.59762	0.03122
0.36397	0.02180	0.44248	0.02587	0.52104	0.02909	0.59963	0.03126
0.36598	0.02191	0.44450	0.02597	0.52306	0.02916	0.60165	0.03130
0.36799	0.02203	0.44651	0.02606	0.52507	0.02923	0.60366	0.03134
0.37001	0.02214	0.44853	0.02615	0.52709	0.02930	0.60568	0.03137
0.37202	0.02225	0.45054	0.02624	0.52910	0.02937	0.60770	0.03141
0.37403	0.02237	0.45255	0.02633	0.53111	0.02943	0.60971	0.03145

<u>x/c</u>	<u>y/c</u>	<u>x/c</u>	<u>y/c</u>	<u>x/c</u>	<u>y/c</u>	<u>x/c</u>	<u>y/c</u>
0.61173	0.03148	0.69035	0.03202	0.76895	0.03060	0.84746	0.02643
0.61374	0.03151	0.69236	0.03201	0.77097	0.03053	0.84947	0.02628
0.61576	0.03155	0.69438	0.03200	0.77298	0.03046	0.85148	0.02613
0.61777	0.03158	0.69639	0.03199	0.77500	0.03038	0.85349	0.02598
0.61979	0.03161	0.69841	0.03198	0.77701	0.03031	0.85550	0.02583
0.62181	0.03164	0.70043	0.03196	0.77903	0.03023	0.85751	0.02567
0.62382	0.03167	0.70244	0.03195	0.78104	0.03015	0.85952	0.02551
0.62584	0.03170	0.70446	0.03193	0.78305	0.03007	0.86153	0.02535
0.62785	0.03172	0.70647	0.03191	0.78507	0.02998	0.86354	0.02518
0.62987	0.03175	0.70849	0.03189	0.78708	0.02990	0.86555	0.02501
0.63188	0.03177	0.71051	0.03187	0.78910	0.02981	0.86756	0.02484
0.63390	0.03180	0.71252	0.03185	0.79111	0.02972	0.86957	0.02466
0.63592	0.03182	0.71454	0.03183	0.79313	0.02962	0.87157	0.02449
0.63793	0.03184	0.71655	0.03180	0.79514	0.02953	0.87358	0.02431
0.63995	0.03186	0.71857	0.03177	0.79715	0.02943	0.87559	0.02412
0.64196	0.03188	0.72058	0.03174	0.79917	0.02934	0.87760	0.02393
0.64398	0.03190	0.72260	0.03171	0.80118	0.02923	0.87960	0.02374
0.64600	0.03192	0.72462	0.03168	0.80319	0.02913	0.88161	0.02355
0.64801	0.03194	0.72663	0.03165	0.80521	0.02903	0.88362	0.02335
0.65003	0.03195	0.72865	0.03162	0.80722	0.02892	0.88562	0.02315
0.65204	0.03197	0.73066	0.03158	0.80923	0.02882	0.88763	0.02295
0.65406	0.03198	0.73268	0.03154	0.81125	0.02871	0.88963	0.02274
0.65607	0.03199	0.73469	0.03151	0.81326	0.02860	0.89164	0.02252
0.65809	0.03200	0.73671	0.03147	0.81527	0.02849	0.89364	0.02231
0.66011	0.03201	0.73873	0.03143	0.81728	0.02837	0.89565	0.02209
0.66212	0.03202	0.74074	0.03138	0.81930	0.02826	0.89765	0.02186
0.66414	0.03203	0.74276	0.03134	0.82131	0.02814	0.89965	0.02163
0.66615	0.03204	0.74477	0.03129	0.82332	0.02802	0.90165	0.02140
0.66817	0.03204	0.74679	0.03124	0.82533	0.02790	0.90366	0.02116
0.67019	0.03205	0.74880	0.03119	0.82735	0.02778	0.90566	0.02091
0.67220	0.03205	0.75082	0.03114	0.82936	0.02765	0.90766	0.02067
0.67422	0.03205	0.75283	0.03109	0.83137	0.02752	0.90966	0.02041
0.67623	0.03205	0.75485	0.03104	0.83338	0.02739	0.91166	0.02016
0.67825	0.03205	0.75686	0.03098	0.83539	0.02726	0.91366	0.01989
0.68027	0.03205	0.75888	0.03092	0.83741	0.02713	0.91565	0.01962
0.68228	0.03205	0.76089	0.03086	0.83942	0.02699	0.91765	0.01935
0.68430	0.03204	0.76291	0.03080	0.84143	0.02686	0.91965	0.01907
0.68631	0.03204	0.76492	0.03074	0.84344	0.02672	0.92164	0.01878
0.68833	0.03203	0.76694	0.03067	0.84545	0.02657	0.92364	0.01849

<u>x/c</u>	<u>y/c</u>	<u>x/c</u>	<u>y/c</u>	<u>x/c</u>	<u>y/c</u>	<u>x/c</u>	<u>y/c</u>
0.92563	0.01820	0.94549	0.01473	0.96510	0.01009	0.98440	0.00427
0.92763	0.01789	0.94746	0.01432	0.96705	0.00956	0.98631	0.00363
0.92962	0.01758	0.94943	0.01390	0.96899	0.00902	0.98822	0.00297
0.93161	0.01726	0.95140	0.01346	0.97093	0.00847	0.99012	0.0023
0.93360	0.01694	0.95337	0.01302	0.97287	0.00790	0.99202	0.00162
0.93558	0.01660	0.95533	0.01256	0.97480	0.00733	0.99392	0.00094
0.93757	0.01625	0.95729	0.01209	0.97673	0.00674	0.99584	0.00034
0.93955	0.01589	0.95925	0.01161	0.97865	0.00614	0.99781	-0.0001
0.94153	0.01551	0.96120	0.01111	0.98057	0.00553	0.9998	-0.00011
<u>0.94351</u>	<u>0.01513</u>	<u>0.96316</u>	<u>0.01061</u>	<u>0.98249</u>	<u>0.00490</u>		

## APPENDIX C

Descriptions and original filenames of tabulated data presented in this report are listed in Table 27.

Table 27. Source files for data presented in this report

Description	Creation Date	Reference	Filename
ROAMX Design rotor chord and twist distributions ‘as-optimized’	10/09/21	Figure 1	‘1.2.2_chord.csv’, ‘1.2.2_twist.csv’
ROAMX Design rotor chord and twist distributions ‘as-manufactured’	04/20/22	Figure 1	‘1.2.2_chord_EXP.csv’, ‘1.2.2_twist_EXP.csv’
Station 1 airfoil coordinates, $r/R = 0.0908$	05/18/21	Table 3, Table 4	‘009roamx3-0202gen141chr16.csv’
Station 2 airfoil coordinates, $r/R = 0.2500$	05/02/21	Table 5, Table 6	‘025roamx3-0202gen132chr12.csv’
Station 3 airfoil coordinates, $r/R = 0.5000$	05/28/21	Table 7, Table 8	‘050roamx-0201gen176chr9.csv’
Station 4 airfoil coordinates, $r/R = 0.7500$	04/17/21	Table 9, Table 10	‘075roamx-0201gen72chr7.csv’
Station 5 airfoil coordinates, $r/R = 0.9000$	05/08/21	Table 11, Table 12	‘090roamx-0201gen144chr9.csv’
Station 6 airfoil coordinates, $r/R = 1.0000$	04/21/21	Table 13, Table 14	‘100roamx-0201gen76chr14.csv’
OML Station 1 upper surface airfoil coordinates, $r/R = 0.1180$	04/07/25	Table 15	‘roamx-oml-rhino-rr0.1180-stl_US.xlsx’
OML Station 1 lower surface airfoil coordinates, $r/R = 0.1180$	04/07/25	Table 16	‘roamx-oml-rhino-rr0.1180-stl_LS.xlsx’
OML Station 2 upper surface airfoil coordinates, $r/R = 0.2500$	04/07/25	Table 17	‘roamx-oml-rhino-rr0.2500-stl_US.xlsx’
OML Station 2 lower surface airfoil coordinates, $r/R = 0.2500$	04/07/25	Table 18	‘roamx-oml-rhino-rr0.2500-stl_LS.xlsx’
OML Station 3 upper surface airfoil coordinates, $r/R = 0.5000$	04/07/25	Table 19	‘roamx-oml-rhino-rr0.5000-stl_US.xlsx’
OML Station 3 lower surface airfoil coordinates, $r/R = 0.5000$	04/07/25	Table 20	‘roamx-oml-rhino-rr0.5000-stl_LS.xlsx’
OML Station 4 upper surface airfoil coordinates, $r/R = 0.7500$	04/07/25	Table 21	‘roamx-oml-rhino-rr0.7500-stl_US.xlsx’
OML Station 4 lower surface airfoil coordinates, $r/R = 0.7500$	04/07/25	Table 22	‘roamx-oml-rhino-rr0.7500-stl_LS.xlsx’
OML Station 5 upper surface airfoil coordinates, $r/R = 0.9000$	04/07/25	Table 23	‘roamx-oml-rhino-rr0.9000-stl_US.xlsx’
OML Station 5 lower surface airfoil coordinates, $r/R = 0.9000$	04/07/25	Table 24	‘roamx-oml-rhino-rr0.9000-stl_LS.xlsx’
OML Station 6 upper surface airfoil coordinates, $r/R = 1.0000$	04/07/25	Table 25	‘roamx-oml-rhino-rr1.0000-stl_US.xlsx’
OML Station 6 lower surface airfoil coordinates, $r/R = 1.0000$	04/07/25	Table 26	‘roamx-oml-rhino-rr1.0000-stl_LS.xlsx’