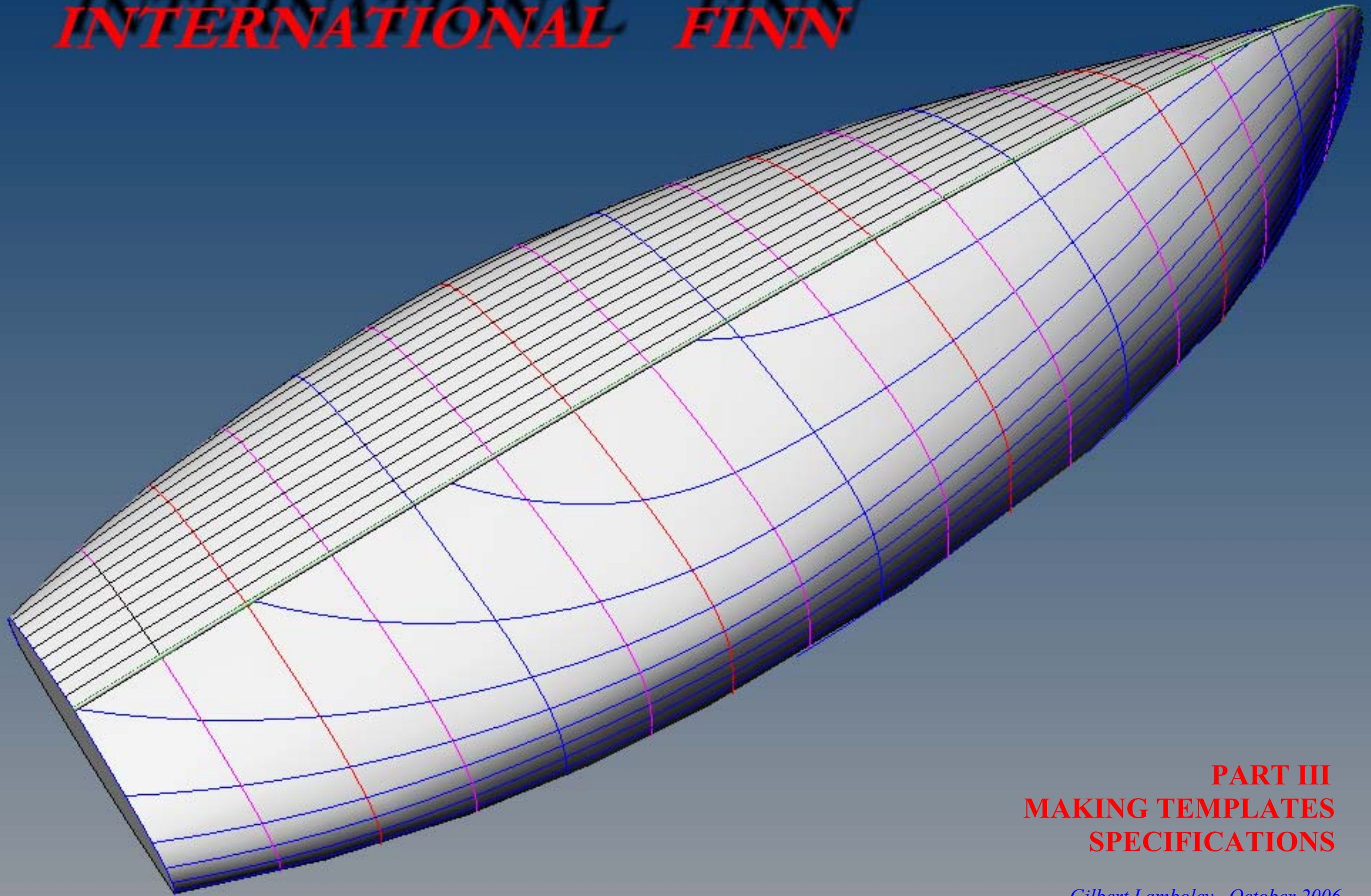


INTERNATIONAL FINN



PART III MAKING TEMPLATES SPECIFICATIONS

Gilbert Lamboley October 2006

III,1 General

Templates shall be cut and engraved using digitally controlled tools (CNC) according to attached AutoCAD files which are delivered with two "autocad" extensions.

- **Extension .DWG**

[station-0](#) [station-2](#) [station-4](#) [station-6](#) [station-8](#) [stem](#) [rudder](#)

- **Extension .DXF**

[station-0](#) [station-2](#) [station-4](#) [station-6](#) [station-8](#) [stem](#) [rudder](#)

Those files may get corrupted through Internet ; if so, they may be delivered on CD-Rom.
Other formats may also be provided.

Below are to be found :

- coordinates of the contours which have been drawn 5 mm wider than Finn body lines according to Finn Class Rules.
- dimensioned sketches of each template

Templates are to be cut from 3mm Aluminium Alloy sheets, at a temperature close to 20 Celsius degrees.

Alloy shall be 5083 and shall be heat treated so as to eliminate internal stresses due to laminating.

Accuracy of shearing shall be 0.01 mm, as well as for 10 mm holes (apexes of control triangles).

Accuracy of engraving shall be 0.01 mm:

- along 5mm inside Control Lines,
- along Sheer control lines.

No work likely to introduce stresses and strains into metal shall be admitted. (Laser cut is thence prohibited)

All writings to be engraved; stamping shall not be allowed.

Templates shall be checked:

- to conform to polyester drawings issued from same CNC files.
- by any sort of precise measurements.

Templates are to be used nearby sea. Although 5083 alloy is not likely to be corroded, a thin protection coating shall be proposed by manufacturer.

Templates shall be delivered inside strong enough boxes so as to ensure their protection against any transport injury.

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III, 2 Templates Lines coordinates related to Measurement Frame of Reference

Bold template coordinates were measured from carved layout; others were "splined".

TEMPLATE LINE STATION 0 x = 0.000 m											
n°	y	z	n°	y	z	n°	y	z	n°	y	z
1	0,000	195,384	24	264,000	245,274	47	408,711	308,530	70	461,510	389,543
2	6,673	196,042	25	271,592	247,438	48	412,612	311,705	71	462,150	393,234
3	13,340	196,750	26	283,450	250,911	49	416,424	314,991	72	462,671	396,695
4	25,200	198,134	27	293,688	254,043	50	420,150	318,384	73	463,103	400,163
5	32,922	199,136	28	302,909	257,008	51	424,193	322,251	74	463,540	404,678
6	40,636	200,207	29	311,392	259,886	52	428,010	326,090	75	463,844	409,205
7	50,200	201,584	30	319,306	262,723	53	431,445	329,750	76	464,027	413,740
8	58,990	202,882	31	326,752	265,550	54	434,566	333,290	77	464,100	418,284
9	67,773	204,224	32	333,800	268,384	55	437,412	336,743	78	464,052	423,415
10	83,746	206,770	33	340,031	270,989	56	440,016	340,136	79	463,858	428,535
11	99,700	209,434	34	346,239	273,644	57	442,400	343,484	80	463,515	433,563
12	116,344	212,330	35	354,340	277,233	58	444,494	346,622	81	463,028	438,439
13	132,966	215,355	36	361,654	280,624	59	446,508	349,804	82	462,400	443,184
14	149,350	218,484	37	368,387	283,905	60	448,809	353,689	83	461,754	447,106
15	160,485	220,691	38	374,657	287,122	61	450,871	357,467	84	460,997	451,002
16	171,607	222,957	39	380,546	290,309	62	452,712	361,153	85	460,024	455,371
17	186,438	226,097	40	386,100	293,484	63	454,351	364,772	86	458,939	459,713
18	200,100	229,134	41	389,314	295,378	64	455,800	368,334	87	457,759	464,033
19	211,189	231,689	42	392,515	297,295	65	456,999	371,652	88	456,500	468,334
20	222,262	234,310	43	396,683	299,894	66	458,074	375,001	89	455,389	471,902
21	234,742	237,383	44	400,200	302,234	67	459,092	378,596	90	454,216	475,448
22	246,001	240,297	45	402,474	303,834	68	459,995	382,221	91	452,282	480,869
23	256,400	243,134	46	404,718	305,472	69	460,796	385,871	92	450,200	486,234

TEMPLATE LINE STATION 2 x = 1.000 m											
n°	y	z	n°	y	z	n°	y	z	n°	y	z
1	0,000	103,616	31	400,000	144,616	61	605,563	214,095	91	700,438	323,671
2	12,403	104,320	32	407,803	146,060	62	609,400	216,471	92	702,276	328,957
3	24,800	105,116	33	415,603	147,512	63	613,200	218,916	93	704,156	334,827
4	36,514	105,973	34	423,400	148,986	64	617,767	221,951	94	705,504	339,313
5	50,000	107,016	35	431,186	150,494	65	622,290	225,044	95	706,800	343,816
6	62,501	107,957	36	438,964	152,048	66	626,762	228,206	96	708,456	349,952
7	75,000	108,916	37	446,728	153,659	67	631,174	231,446	97	710,109	356,660
8	87,351	109,907	38	454,475	155,339	68	635,519	234,777	98	711,468	362,629
9	99,700	110,916	39	462,204	157,102	69	639,788	238,208	99	712,750	368,616
10	118,483	112,431	40	469,911	158,958	70	643,021	240,926	100	714,339	376,619
11	134,244	113,717	41	477,594	160,920	71	646,200	243,716	101	715,797	384,774
12	150,000	115,066	42	485,249	163,001	72	649,710	246,909	102	716,520	389,191
13	171,690	117,063	43	492,874	165,211	73	653,167	250,154	103	717,200	393,616
14	185,846	118,426	44	498,296	166,875	74	656,559	253,461	104	718,234	401,087
15	200,000	119,816	45	503,700	168,616	75	659,879	256,839	105	719,223	409,346
16	217,314	121,526	46	511,519	171,248	76	663,115	260,296	106	720,200	418,716
17	234,627	123,254	47	519,300	173,976	77	666,257	263,842	107	720,867	425,858
18	251,935	125,029	48	527,040	176,806	78	668,252	266,207	108	721,452	433,006
19	269,234	126,883	49	534,736	179,747	79	670,200	268,616	109	721,813	438,307
20	284,623	128,621	50	542,386	182,804	80	673,261	272,611	110	722,100	443,616
21	300,000	130,466	51	549,987	185,987	81	676,278	276,806	111	722,361	450,908
22	310,910	131,812	52	557,526	189,297	82	679,255	281,215	112	722,497	458,942
23	321,819	133,159	53	562,299	191,477	83	682,202	285,862	113	722,517	463,779
24	332,726	134,526	54	567,050	193,716	84	684,541	289,762	114	722,500	468,616
25	343,627	135,933	55	572,662	196,426	85	686,800	293,716	115	722,357	478,019
26	354,519	137,399	56	578,249	199,182	86	689,358	298,461	116	722,204	483,368
27	365,400	138,943	57	583,804	201,996	87	691,845	303,406	117	722,000	488,716
28	376,269	140,585	58	589,320	204,882	88	694,265	308,568			
29	387,120	142,344	59	594,789	207,852	89	696,493	313,663			
30	393,563	143,454	60	600,206	210,919	90	698,600	318,816			

TEMPLATE LINE STATION 4 x = 2.000 m											
n°	y	z	n°	y	z	n°	y	z	n°	y	z
1	0,000	39,506	30	424,132	99,259	59	625,002	182,319	88	726,081	326,330
2	28,646	41,828	31	435,156	102,181	60	629,976	186,019	89	728,675	334,048
3	57,280	44,311	32	446,150	105,213	61	634,831	189,803	90	730,216	338,868
4	78,594	46,264	33	457,110	108,363	62	639,600	193,706	91	731,700	343,706
5	99,900	48,306	34	468,034	111,640	63	644,245	197,687	92	733,812	350,960
6	116,913	49,980	35	478,761	115,003	64	648,803	201,759	93	735,800	358,246
7	133,924	51,686	36	489,450	118,506	65	653,268	205,927	94	737,111	363,367
8	150,928	53,449	37	496,884	121,010	66	657,638	210,196	95	738,350	368,506
9	167,923	55,296	38	504,308	123,543	67	661,742	214,400	96	739,970	375,744
10	183,968	57,141	39	511,715	126,121	68	665,750	218,706	97	741,454	383,009
11	200,000	59,106	40	519,100	128,758	69	669,694	223,147	98	742,442	388,300
12	216,520	61,242	41	526,457	131,470	70	673,534	227,670	99	743,350	393,606
13	233,027	63,466	42	533,779	134,271	71	677,266	232,281	100	744,278	399,756
14	249,520	65,791	43	541,062	137,178	72	680,884	236,981	101	745,208	406,891
15	265,996	68,232	44	548,301	140,204	73	683,269	240,222	102	745,894	412,747
16	282,453	70,803	45	552,057	141,836	74	685,600	243,506	103	746,550	418,606
17	291,229	72,233	46	555,800	143,506	75	688,599	247,950	104	747,510	427,898
18	300,000	73,706	47	561,471	146,091	76	691,692	252,807	105	748,228	435,700
19	311,304	75,644	48	567,124	148,713	77	694,949	258,203	106	748,900	443,506
20	322,603	77,611	49	572,751	151,385	78	697,909	263,333	107	749,855	455,486
21	333,892	79,622	50	578,345	154,121	79	700,800	268,506	108	750,323	461,995
22	345,170	81,695	51	583,898	156,935	80	704,147	274,717	109	750,750	468,506
23	356,433	83,844	52	589,405	159,840	81	707,368	280,991	110	751,189	475,718
24	367,678	86,086	53	594,858	162,850	82	710,426	287,265	111	751,537	482,160
25	378,901	88,437	54	599,655	165,627	83	713,350	293,606	112	751,800	488,606
26	390,100	90,913	55	604,400	168,506	84	715,890	299,467	113	752,004	497,517
27	396,054	92,289	56	609,645	171,827	85	718,520	305,918	114	752,052	504,561
28	402,000	93,706	57	614,831	175,231	86	720,977	312,270	115	752,000	511,606
29	413,079	96,437	58	619,952	178,726	87	723,350	318,656			

TEMPLATE LINE STATION 6 x = 3.000 m

n°	y	z	n°	y	z	n°	y	z	n°	y	z
1	0,000	9,537	28	290,271	98,283	55	475,169	209,808	82	578,629	364,016
2	12,712	12,384	29	300,360	102,555	56	480,023	214,481	83	580,600	369,037
3	25,400	15,337	30	310,408	106,917	57	484,800	219,237	84	583,270	375,958
4	37,450	18,239	31	320,410	111,386	58	490,373	224,996	85	585,874	382,903
5	43,829	19,820	32	328,575	115,142	59	495,894	230,929	86	587,876	388,456
6	50,200	21,437	33	336,700	118,987	60	501,369	237,047	87	589,800	394,037
7	59,881	23,997	34	344,732	122,877	61	504,327	240,452	88	592,358	401,907
8	67,490	26,066	35	352,735	126,826	62	507,250	243,887	89	594,859	410,108
9	75,100	28,137	36	360,699	130,850	63	512,136	249,811	90	596,175	414,641
10	87,254	31,419	37	368,615	134,965	64	517,173	256,162	91	597,450	419,187
11	99,400	34,737	38	376,475	139,189	65	522,034	262,513	92	599,317	426,231
12	115,538	39,263	39	380,823	141,593	66	526,800	268,937	93	601,393	434,626
13	131,650	43,887	40	385,150	144,037	67	530,674	274,281	94	603,600	443,937
14	142,404	47,002	41	391,296	147,575	68	534,488	279,665	95	606,245	455,471
15	153,156	50,123	42	397,413	151,159	69	538,224	285,104	96	607,722	462,199
16	163,899	53,274	43	403,491	154,805	70	541,200	289,594	97	609,150	468,937
17	174,626	56,476	44	409,521	158,529	71	544,100	294,137	98	611,565	480,956
18	185,330	59,752	45	415,493	162,348	72	547,818	300,235	99	613,822	493,000
19	196,006	63,123	46	420,397	165,600	73	551,551	306,657	100	615,922	505,069
20	204,616	65,936	47	425,250	168,937	74	555,029	312,916	101	617,863	517,162
21	213,200	68,837	48	431,747	173,590	75	558,400	319,237	102	619,647	529,279
22	226,445	73,482	49	436,258	178,447	76	561,758	325,827	103	621,271	541,410
23	239,647	78,282	50	444,789	183,517	77	565,194	332,909	104	622,379	550,467
24	252,811	83,239	51	451,265	188,742	78	567,779	338,457	105	623,400	559,537
25	265,939	88,354	52	457,650	194,087	79	570,300	344,037			
26	273,053	91,199	53	463,582	199,228	80	573,348	351,067			
27	280,150	94,087	54	469,423	204,467	81	576,626	359,007			

TEMPLATE LINE STATION 8 x = 4.000 m

n°	y	z	n°	y	z	n°	y	z	n°	y	z
1	0,000	46,701	20	127,800	167,551	39	206,773	284,237	58	257,778	435,240
2	9,521	54,414	21	132,723	173,178	40	210,850	292,551	59	259,300	442,551
3	17,295	60,866	22	137,601	178,843	41	214,531	300,359	60	261,793	455,063
4	25,000	67,401	23	142,410	184,566	42	218,094	308,219	61	264,150	467,601
5	32,783	74,175	24	145,579	188,439	43	220,121	312,850	62	266,090	478,658
6	41,607	82,049	25	148,700	192,351	44	222,100	317,501	63	268,136	491,182
7	47,362	87,265	26	153,588	198,692	45	225,219	325,141	64	270,174	504,387
8	53,100	92,501	27	158,691	205,564	46	228,471	333,511	65	272,150	517,601
9	61,393	100,124	28	163,005	211,557	47	231,850	342,601	66	273,958	530,022
10	69,635	107,803	29	167,250	217,601	48	235,047	351,574	67	275,700	542,451
11	74,685	112,583	30	171,924	224,417	49	237,754	359,519	68	277,378	554,923
12	79,699	117,401	31	176,506	231,294	50	240,350	367,501	69	279,000	567,401
13	87,410	124,938	32	180,015	236,723	51	243,230	376,850	70	280,438	578,621
14	95,044	132,550	33	183,450	242,201	52	245,518	384,685	71	281,315	585,658
15	99,868	137,455	34	187,806	249,412	53	247,700	392,551	72	282,150	592,701
16	104,650	142,401	35	192,245	257,062	54	249,882	400,910	73	283,703	606,982
17	111,838	149,990	36	195,199	262,316	55	251,932	409,246	74	284,474	614,690
18	118,934	157,663	37	198,100	267,601	56	253,900	417,601	75	285,200	622,401
19	123,389	162,587	38	202,561	275,991	57	256,211	427,899			

STEM BAND TEMPLATE LINE $y = 0.000$ m											
n°	x	z	n°	x	z	n°	x	z	n°	x	z
100	4500,000	669,088	75	4462,487	326,215	50	4409,683	185,444	25	4300,623	109,580
99	4499,143	651,788	74	4461,000	318,189	49	4406,975	181,699	24	4293,115	106,744
98	4498,149	634,884	73	4459,728	311,634	48	4404,183	178,017	23	4285,044	103,861
97	4497,000	617,989	72	4458,410	305,089	47	4401,297	174,406	22	4276,255	100,885
96	4496,039	605,385	71	4457,154	299,229	46	4398,597	171,211	21	4266,464	97,731
95	4495,000	592,789	70	4455,800	293,389	45	4395,800	168,088	20	4259,241	95,487
94	4493,899	580,336	69	4453,831	285,598	44	4392,535	164,664	19	4252,000	93,289
93	4492,750	567,889	68	4451,710	277,849	43	4389,051	161,236	18	4243,614	90,846
92	4490,400	542,989	67	4450,286	272,960	42	4385,334	157,797	17	4234,689	88,408
91	4489,217	530,687	66	4448,800	268,088	41	4381,355	154,331	16	4225,100	85,949
90	4488,000	518,389	65	4446,601	261,228	40	4377,088	150,822	15	4214,641	83,425
89	4486,304	501,928	64	4444,283	254,409	39	4372,488	147,244	14	4202,909	80,750
88	4484,525	485,477	63	4442,241	248,732	38	4369,611	145,097	13	4192,562	78,490
87	4483,533	476,731	62	4440,100	243,088	37	4366,700	142,989	12	4182,200	76,289
86	4482,500	467,989	61	4438,056	237,920	36	4362,819	140,308	11	4170,162	73,832
85	4480,945	455,511	60	4435,947	232,780	35	4358,652	137,617	10	4157,108	71,326
84	4479,350	443,039	59	4433,751	227,678	34	4354,164	134,904	9	4147,560	69,578
83	4476,200	418,389	58	4431,582	222,909	33	4349,295	132,142	8	4138,000	67,889
82	4474,574	405,835	57	4429,300	218,189	32	4343,932	129,277	7	4126,643	65,982
81	4472,900	393,289	56	4426,649	213,019	31	4337,892	126,222	6	4113,324	63,868
80	4471,140	380,683	55	4423,886	207,915	30	4330,771	122,786	5	4100,000	61,789
79	4469,300	368,088	54	4421,004	202,878	29	4325,741	120,427	4	4068,331	56,889
78	4467,399	355,681	53	4418,017	197,946	28	4320,700	118,088	3	4036,638	52,154
77	4465,400	343,289	52	4414,900	193,088	27	4314,358	115,236	2	4018,323	49,494
76	4463,887	334,257	51	4412,322	189,244	26	4307,681	112,404	1	4000,000	46,889

RUDDER $y = 0.000$ m , ξ , ζ coordinates being related to local axes
(see drawing)

RUDDER TRAILING EDGE											
n°	ξ	ζ	n°	ξ	ζ	n°	ξ	ζ	n°	ξ	ζ
1	134,300	0,000	26	364,240	511,900	51	429,980	769,530	76	402,870	883,690
2	155,000	42,749	27	369,790	527,300	52	430,300	775,910	77	400,460	886,900
3	171,740	77,380	28	375,200	542,750	53	430,450	781,840	78	398,200	889,910
4	188,430	112,030	29	378,660	552,900	54	430,450	787,440	79	395,500	892,750
5	203,100	142,750	30	382,060	563,080	55	430,300	792,750	80	392,740	895,700
6	213,040	163,700	31	386,880	577,900	56	430,090	797,150	81	389,910	898,570
7	222,940	184,670	32	391,600	592,750	57	429,830	801,550	82	386,930	901,400
8	237,390	215,510	33	396,120	607,210	58	429,350	807,770	83	384,110	903,890
9	250,000	242,750	34	400,270	620,800	59	428,770	813,440	84	381,370	906,100
10	261,790	268,480	35	403,680	632,360	60	428,080	818,710	85	378,700	908,070
11	273,500	294,250	36	406,600	642,750	61	427,300	823,640	86	376,070	909,830
12	284,840	319,530	37	409,500	653,480	62	426,400	828,310	87	373,470	911,380
13	295,100	342,750	38	412,320	664,240	63	425,400	832,750	88	370,900	912,750
14	302,410	359,460	39	414,890	674,570	64	424,330	836,980	89	369,050	913,640
15	309,650	376,200	40	417,090	683,980	65	423,160	841,190	90	367,190	914,480
16	316,700	392,750	41	419,000	692,750	66	421,680	846,040	91	364,330	915,630
17	320,200	401,110	42	420,830	701,710	67	420,140	850,580	92	361,410	916,670
18	323,660	409,470	43	422,570	710,680	68	418,540	854,860	93	358,410	917,590
19	330,460	426,100	44	424,180	719,630	69	416,860	858,910	94	355,370	918,380
20	337,200	442,750	45	425,510	727,840	70	415,100	862,750	95	352,290	919,040
21	342,060	454,760	46	426,610	735,500	71	413,660	865,680	96	349,190	919,580
22	346,910	466,770	47	427,500	742,750	72	412,170	868,570	97	346,060	919,980
23	352,490	480,820	48	428,150	748,690	73	409,880	872,750	98	342,900	920,270
24	357,100	492,750	49	428,770	754,630	74	407,580	876,640	99	339,710	920,440
25	360,700	502,320	50	429,480	762,540	75	405,240	880,280	100	336,500	920,500

RUDDER LEADING EDGE											
n°	ξ	ζ	n°	ξ	ζ	n°	ξ	ζ	n°	ξ	ζ
101	0,000	0,000	125	22,800	592,800	149	104,610	760,650	173	242,220	885,590
102	0,000	343,000	126	24,050	597,310	150	109,820	767,800	174	248,460	889,230
103	0,064	361,880	127	25,343	601,800	151	114,910	774,520	175	254,500	892,600
104	0,138	379,450	128	27,891	610,220	152	119,900	780,870	176	261,170	896,210
105	0,300	393,100	129	30,570	618,520	153	124,820	786,880	177	267,860	899,750
106	0,534	406,290	130	33,384	626,720	154	129,700	792,600	178	273,770	902,750
107	0,830	419,470	131	36,325	634,810	155	134,740	798,290	179	279,030	905,280
108	1,222	431,980	132	39,400	642,800	156	139,880	803,890	180	283,890	907,450
109	1,700	443,000	133	42,226	649,760	157	145,610	809,910	181	288,460	909,340
110	2,151	451,580	134	45,173	656,660	158	151,430	815,790	182	292,820	910,980
111	2,655	460,160	135	48,440	663,970	159	157,330	821,530	183	297,000	912,400
112	3,463	472,020	136	51,825	671,230	160	163,320	827,130	184	300,610	913,550
113	4,340	482,840	137	55,320	678,430	161	169,400	832,600	185	304,220	914,670
114	5,300	492,900	138	58,914	685,590	162	173,610	836,260	186	309,620	916,250
115	6,444	503,470	139	62,600	692,700	163	177,870	839,850	187	314,320	917,490
116	7,711	514,030	140	65,197	697,590	164	183,680	844,580	188	318,580	918,470
117	9,073	524,200	141	67,839	702,450	165	189,560	849,210	189	322,540	919,230
118	10,499	533,750	142	72,502	710,760	166	195,510	853,750	190	326,280	919,800
119	12,000	542,800	143	77,274	718,940	167	201,530	858,210	191	329,830	920,200
120	13,505	551,190	144	82,145	726,970	168	207,600	862,600	192	333,240	920,430
121	15,103	559,550	145	87,119	734,880	169	214,650	867,590	193	336,500	920,500
122	16,979	568,680	146	92,200	742,650	170	221,760	872,480			
123	18,875	577,190	147	95,686	747,840	171	228,960	877,270			
124	20,811	585,200	148	99,217	752,990	172	235,750	881,620			

