

J109 Deep Keel Offsets (Ref. J109 Deep Keel Drawing)
R.A.Johnstone
23-Mar-01
Offsets in Millimeters

	Top of Lead Sec 2	Sec 3	Sec 4	Sec 5	Sec 6	Sec 7	Sec 8	Sec 9	Sec 10	Offsets Below Tip
Chord Length	1238	1166.6	1092.4	1015.4	935.6	1183	1374	1500	1598	1598
Distance Below Sec 2	0	263	526	789	1052	1134	1215	1297	1379	*****
LE Radius	10.4	9.6	8.7	7.8	7.0	17.2	27.3	37.5	47.7	*****
Yc half widths at Xc Stations										
0.005 x	10.8	10.0	9.2	8.5	7.7	12.4	17.0	21.6	26.1	3.1
0.0075 x	13.0	12.1	11.1	10.2	9.2	14.9	20.4	25.9	31.2	3.7
0.0125 x	16.5	15.3	14.1	13.0	11.8	18.9	25.8	32.7	39.5	4.7
0.025 x	22.9	21.3	19.6	18.0	16.3	26.0	35.3	44.5	53.6	6.4
0.050 x	31.8	29.6	27.3	25.0	22.7	35.6	48.1	60.5	72.6	8.7
0.075 x	38.5	35.8	33.0	30.2	27.4	42.9	57.9	72.7	87.3	10.4
0.10 x	43.9	40.8	37.6	34.4	31.2	48.9	65.8	82.7	99.2	11.8
0.15 x	52.1	48.4	44.6	40.9	37.1	58.2	78.4	98.5	118.2	14.1
0.20 x	58.1	53.9	49.7	45.6	41.4	65.1	87.9	110.7	132.9	15.8
0.25 x	62.2	57.8	53.3	48.8	44.3	70.2	95.2	120.1	144.4	17.2
0.30 x	64.9	60.2	55.5	50.9	46.2	73.9	100.7	127.3	153.3	18.3
0.35 x	65.9	61.2	56.4	51.7	47.0	76.2	104.5	132.6	160.1	19.1
0.40 x	65.6	60.9	56.1	51.5	46.7	77.2	106.7	135.9	164.6	19.6
0.45 x	63.8	59.3	54.7	50.1	45.5	76.9	107.4	137.6	167.2	19.9
0.50 x	60.9	56.6	52.1	47.8	43.4	75.4	106.5	137.4	167.7	20.0
0.55 x	56.9	52.9	48.7	44.7	40.5	72.8	104.2	135.4	166.0	19.8
0.60 x	52.0	48.3	44.6	40.8	37.1	69.1	100.4	131.4	161.8	19.3
0.65 x	46.4	43.1	39.7	36.4	33.1	64.2	94.7	124.9	154.5	18.4
0.70 x	40.2	37.3	34.4	31.5	28.6	58.0	86.7	115.2	143.2	17.1
0.75 x	33.8	31.4	28.9	26.5	24.1	50.1	75.6	100.9	125.8	15.0
0.80 x	27.2	25.3	23.3	21.4	19.4	40.6	61.3	81.9	102.1	12.2
0.85 x	20.7	19.2	17.7	16.2	14.7	30.7	46.4	61.9	77.2	9.2
0.90 x	14.1	13.1	12.1	11.1	10.0	20.5	30.8	40.9	50.9	6.1
0.95 x	7.5	7.0	6.5	5.9	5.4	10.5	15.5	20.5	25.4	3.0
1.00 x	1.0	0.9	0.8	0.7	0.7	0.5	0.3	0.2	0.0	0.0

Notes:

- 1) Leading edge sweep-back is 17.0 degrees.
- 2) Leading edge profile is straight line.
- 3) Tip sections below Section 10 are in the shape of an arc with maximum depth determined by offsets below tip and half-widths @ Section 10.
- 4) 50 mm fillet radius @ fin/bulb intersect.
- 5) Due to the addition of the 50 mm fillet radius in note 4, Sec. 6 offsets should not be used for keel surface fairing purposes.