

Part A. Getting the Propeller's Blade Activity Factor and Total Activity Factor.

Cells awaiting input are light green.

Cells with Europa data entered are Blue

Data Sheet for Recording Propeller Blade Widths

Initial Input Data

R 32.9 in. Propeller blade radius
 BB 3 Number of blades

Print out A13:H50 with empty columns F and G, then measure and record your blade's width data, finally enter that data below.

Station <u>x = r/R</u>	Distance to Station from Tip of Blade, inches.			Blade Width at Station, inches.			Integrand
	Decimal Inches	Whole Number	16ths	Whole Number	16ths	Decimal Inches	
1.00	0.00	0	0.0 /16 in.			3.02	3.021
0.95	1.65	1	10.3 /16 in.			3.16	2.705
0.90	3.29	3	4.7 /16 in.			3.29	2.401
0.85	4.94	4	15.0 /16 in.			3.40	2.086
0.80	6.58	6	9.3 /16 in.			3.52	1.803
0.75	8.23	8	3.6 /16 in.			3.61	1.523
0.70	9.87	9	14.0 /16 in.			3.66	1.256
0.65	11.52	11	8.3 /16 in.			3.69	1.013
0.60	13.16	13	2.6 /16 in.			3.68	0.796
0.55	14.81	14	13.0 /16 in.			3.66	0.609
0.50	16.46	16	7.3 /16 in.			3.64	0.455
0.45	18.10	18	1.6 /16 in.			3.63	0.331
0.40	19.75	19	11.9 /16 in.			3.59	0.230
0.35	21.39	21	6.3 /16 in.			3.58	0.154
0.30	23.04	23	0.6 /16 in.			3.38	0.091
0.25	24.68	24	10.9 /16 in.			2.64	0.041
0.20	26.33	26	5.2 /16 in.			1.69	0.013

0.849

Results: BAF = 80.63 TAF = 241.9