



PHOENIX 11
 Intermediate Stick
 Designed & Drawn by
 Larry Coslick
 Projected Wing area 98.7 Sq. In.
 Projected Stab area 40 Sq. In.

UNBRACED INT. STICK. LIST OF WOOD AND DENSITIES

My lightest is .745 and the heaviest .810

M/S					
.010" C-Grain	4.5#	Sheet weight around .24 gm			
Cut	48.5/64"X	12.5"	.110 gram	BOOM	
Glued			.115	3.6# .008 C	.054
With .003 Boron	12:00,3:00,9:00,	.004 Boron 6:00	.148	Cut to 44/64> 28.5/64X12.25"	.058
With .018 C-grain web,	Rear hook glued in place		.170	Glued	.064
With " "	.012 thrust bearing.		.190	Straightened, 2 cuts	.057
With bracing post and	.001 wire.		.200	Adjusted length to 11.2"	.075
With wing posts 6# .032X.062"	mounted with .062"			With .003 Boron ,top and bottom	
facing the front, .003 Boron on	.032 face		.225		
With boom attached.			.300	STAB	
With stab posts on the boom 6# .030X.050"			.312		
V/P PROP					
Prop Shaft	.012X.085		.016	Stab outline. 4#	
CF Driver	.011X.041X.382"		.004	L/E .021X.050>.021X.030X9" 2	.025
Assembled with JB Weld epoxy			.024	T/E .020X.048>.021X.030X7" 2—4	
Prop Spars double tapered	.067X.058>.037X.037X8.15"			Splice tips as shown on plan, then	
				splice at center rib	
Unknown density. Tapered stock from Tim. Deflection				Ribs 4# center rib .018X .040	
.5" at 6" with .27 gram weight. See deflection gauge in				2 outer ribs 4# .015X .030	
hobby shopper article to compare wood stiffness				Dry	
Hub 6# .063X.090X1.2", with soda can Aluminum washers				Covered with paper tubes	
.Hub, tissue hinges and prop spars					
With driver				FIN	
With Actuator arms (2				4.5# .025sq.	
With screw support arm. C/F and balsa				Dry	.008
With 00-90 Nylon screws				Covered	.015
With spring .007X 4 wraps					
With Prop outline 4# .020Sq. Rib 4.5# .018X.020				Model weight, grams	.330
Covered				M/S and Boom, fin	.225
				Wing	.068
				Stab with paper tubes	.166
				Prop	.789
WING SPARS					
L/E, T/E, 4.9# .028x.055>.028.040x8" each	4		.054	One change on wing set up	
Splice and cut each spar 14.130" to account for the overlap.				Depending on how the M/S twists, it	
See drawing. .003 boron on the top and bottom of each spar				may be necessary to wash in the	
L/E tips 4.9# .029X.040>.029X.040X9" 2			.085	outboard wing, center panel, 1/8"	
T/E tips 4# .026X.040>.026X.030X5' 2			.022		
Dihedral ribs 5.1# .022X.055	2		.014		
Inner ribs 5.1# .022X.040	3 total of 5		.040		
Wing dry			.158		
Wing covered with paper tubes			.225		