

## Pulldog Wood and Hardware List

2-5-16

*Note 1: Does not include balsa and plywood used in the laser-cut short kit from Marcs Laser Shop*

*Note 2: Medium density balsa unless other wise specified*

### Stabilizer

#### Balsa:

D-tube sheeting & elevator sheeting	4 ea.	1/16 x 3 x 36	
center sheeting & webs, TE sheeting, cap strips	2 ea.	1/16 x 3 x 36	
webs	1 ea.	3/32 x 3 x 24	medium-hard
LE	1 ea.	3/16 x 3/8 x 36	medium-hard
false LE	1 ea.	1/8 x 3/8 x 36	
TE	1 ea.	1/4 x 3/4 x 36	medium-hard
elevator LE	1 ea.	3/8 x 1/2 x 36	
control horn block	1 ea.	1/2 x 1/2 x 2	medium-hard
mounting bolt block	1 ea.	3/4 x 3 x 3	medium-hard

#### Spruce:

spar caps	2 ea.	1/8 x 1/4 x 36	
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#### Hardware:

hinges	8 ea.	Sig Easy Hinges	
control horn	1 ea.	Great Planes GPMQ3901 large control horn	
stabilizer mounting bolt	1 ea.	10-32 x 1.5 flat head nylon screw (McMaster-Carr P/N 90241A589)	
stabilizer mounting pins		3/32 dia x 1.5 music wire	

### Fin & Rudder

#### Balsa:

LE & fin base	1 ea.	1/2 x 3/4 x 24	medium-hard
fin & rudder tip; rudder base; rudder LE	1 ea.	1/2 x 1/2 x 24	medium-hard
inner fin post	1 ea.	1/4 x 1/2 x 24	
ribs & diagonals	2 ea.	1/4 x 1/2 x 36	
rudder TE	1 ea.	1/4 x 3/4 x 24	hard

#### Spruce:

outer fin post	1 ea.	1/8 x 1/2 x 36	
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#### Hardware:

hinges	4 ea.	Sig Easy Hinges	
control horn	1 ea.	Great Planes GPMQ3901 large control horn	

### Wings

#### Balsa:

D-tube sheeting	4 ea.	3/32 x 4 x 48	
D-tube sheeting	1 ea.	3/32 x 3 x 48	
center section sheeting	2 ea.	3/32 x 4 x 36	
TE sheeting	2 ea.	3/32 x 3 x 48	
TE cap	1 ea.	3/32 x 4 x 48	medium-hard

aileron sheeting	2 ea.	3/32 x 4 x 48	
cap strips	1 ea.	3/32 x 4 x 36	
aileron servo bay sheeting	1 ea.	3/32 x 3 x 9	
webs	1 ea.	3/32 x 4 x 24	medium-hard
webs	1 ea.	1/8 x 4 x 24	medium-hard
webs	1 ea.	3/16 x 4 x 24	medium-hard
LE	2 ea.	1/4 x 1 x 48	medium-hard
false LE	1 ea.	1/8 x 7/8 x 36	
TE spar caps	4 ea.	3/16 x 3/8 x 48	medium-hard
aileron LE	2 ea.	1/4 x 1 x 48	
spoiler bay aft frame	1 ea.	5/16 x 5/16 x 24	medium-hard
spoiler servo hatch border			use left over web mat'l
gussets			use left over aileron LE mat'l
rear wing tube supports			use left over web mat'l

#### **Spruce:**

spar caps	4 ea.	1/4 x 1/2 x 48
aileron & spoiler servo rails	1 ea.	1/4 x 1/2 x 36
spoiler servo rail	1 ea.	1/4 x 1/4 x 24

#### **Hardware:**

hinges	14 ea.	Sig Easy Hinges
spoiler hatch screws	8 ea.	#2 x 1/2 sheet metal screw
wing hold-on - 1/4-20 x 4 threaded nylon rod	(1 ea.	McMaster-Carr P/N 98831A360)
wing hold-on nuts - 1/4-20 nylon wing nuts	(1 ea.	McMaster-Carr P/N 94924A600)
aileron control horns	2 ea.	Du-bro #105 (one left & one right)
rear wing tube	1 ea.	3/16 O.D. x 12 brass tube
rear wing rod		5/32 dia x 14 music wire
wing rod & socket	1 ea.	TNT Landing Gear Products 1 x .049 x 24 aluminum tube and socket
aileron pushrod clevises	2 ea.	Du-Bro 4-40 Kwik-Link #304
	2 ea.	Du-Bro 4-40 Solder Link #305
aileron pushrods	2 ea.	Du-Bro 4-40 Threaded Rod #144
spoiler pushrods		1/16 dia x 3 music wire
spoiler linkage	2 ea.	Du-Bro 2-56 Solder Link #112
	2 ea.	Great Planes Screw-Lock Pushrod Connector GPMQ3870
spoiler horns	2 ea.	Du-Bro #105 control horn set
spoiler servo tape		1 inch wide by 6 inches
servo wires connector	2 ea.	Molex connector shell (Digi-Key P/N WM2124-ND)
	8 ea.	Molex connector contacts (Digi-Key P/N WM2305-ND)

#### **Fuselage**

##### **Balsa:**

fin base fill-in sheeting			use left over 3/32 stab web mat'l
hatch canopy sheeting	1 ea.	1/8 x 3 x 36	
forward top sheeting	1 ea.	5/16 x 4 x 24	medium-hard

sides	1 ea.	5/16 x 3 x 48	
	2 ea.	5/16 x 3 x 36	
hatch base sheeting	1 ea.	5/16 x 4 x 36	
hatch cross pieces & hatch stiffeners	1 ea.	5/16 x 5/16 x 48	medium-hard
side verticals	2 ea.	5/16 x 5/16 x 36	
side diagonals	3 ea.	5/16 x 5/16 x 36	
cross pieces	2 ea.	5/16 x 5/16 x 36	
top & bottom diagonals	2 ea.	5/16 x 5/16 x 36	
F1 & LG plate reinforcement	1 ea.	3/4 triangular x 24	medium-hard
gussets			use left over hatch base sheeting

#### **Basswood:**

battery plate rails	1 ea.	1/4 x 1/2 x 24	
forward top longerons	1 ea.	5/16 x 5/16 x 36	
forward bottom longerons	1 ea.	5/16 x 5/16 x 24	
top & bottom longerons	4 ea.	5/16 x 5/16 x 36	
tailwheel mount reinforcement	1 ea.	3/16 x 3/16 x 9	
servo rails			use left over wing servo rail mat'l

#### **Hardware:**

motor & LG mounting	8 ea.	10-32 x 5/8 screws	
	8 ea.	#10 washers	
	8 ea.	10-32 blind nuts	
stabilizer mounting	1 ea.	10-32 blind nut	
landing gear	1 ea.	Sig Rascal 110 Landing Gear P/N SIGRPBA284EGVARF	
axles	2 ea.	Du-Bro 2 X 3/16 Axle Shaft #249	
wheel collars	2 ea.	Du-Bro Dura Collars #141	
wheels	2 ea.	Sullivan Skylite 5" S883	
tailwheel assembly	1 ea.	Sig SH729 Large Tailwheel Assy	
tailwheel	1 ea.	Perfect 1.5" balloon wheel	
tailwheel cable guides		8 inches of 1/8 O.D. nylon tube or inner pushrod material	
tailwheel steering cable		7 feet of 45 lb. test plastic coated steel leader (such as AFW Surflon) with 4 swages	
tailwheel steering clevises	2 ea.	Du-Bro 2-56 Kwik-Link #109	
tailwheel steering clevis lock nuts	2 ea.	2-56 hex nuts	
tailwheel steering cable connection	2 ea.	Du-Bro Rigging Couplers #201	
hatch hold-down magnets	4 ea.	K&J Magnetics D42-N52	
pushrods	2 ea.	Dave Brown Products PRDS-5400	
pushrod end hardware	3 ea.	Du-Bro 4-40 Threaded Rod #144	
	3 ea.	Du-bro 4-40 Kwik-Links #304	
	3 ea.	4-40 hex nuts (for locking clevises)	
		5 inches of 1/16 dia music wire	
tow release plate		1/8 x 1 x 1.5 aluminum	
tow release rod assembly		3 inches of 3/32 dia music wire	
		1.5 inches of 1/8 O.D. brass tube	
		1.5 inches of 5/32 O.D. brass tube	

wing servo wire connector

- 1 ea. Du-Bro 2-56 Kwik-Link #109
- 1 ea. Du-Bro 2-56 Solder Link #112
- 1 ea. Du-Bro 2-56 Threaded Rod #172
- 2 ea. Molex connector (Digi-Key P/N WM5004-ND)

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### Consolidated Wood and Hardware List

#### Balsa Sheet

- 4 ea. 1/16 x 3 x 36 A grain preferred; B grain acceptable
- 2 ea. 1/16 x 3 x 36 B grain
- 3 ea. 3/32 x 3 x 48 A grain preferred; B grain acceptable
- 3 ea. 3/32 x 4 x 36 B grain
- 6 ea. 3/32 x 4 x 48 A grain preferred; B grain acceptable
- 1 ea. 3/32 x 4 x 48 medium-hard B grain
- 1 ea. 3/32 x 3 x 24 B grain
- 1 ea. 3/32 x 3 x 24 medium-hard B grain
- 1 ea. 3/32 x 4 x 24 medium-hard B grain
- 1 ea. 1/8 x 3 x 36 B grain
- 1 ea. 1/8 x 4 x 24 medium-hard B grain
- 1 ea. 3/16 x 4 x 24 medium-hard B grain
- 1 ea. 5/16 x 3 x 48 B grain
- 2 ea. 5/16 x 3 x 36 B grain
- 1 ea. 5/16 x 4 x 48 B grain

#### Balsa Sticks

- 1 ea. 1/8 x 3/8 x 36
- 2 ea. 1/8 x 1 x 48
- 1 ea. 3/16 x 3/8 x 36 hard
- 4 ea. 3/16 x 3/8 x 48 medium-hard
- 3 ea. 1/4 x 1/2 x 36
- 1 ea. 1/4 x 3/4 x 24 hard
- 1 ea. 1/4 x 3/4 x 36 medium-hard
- 2 ea. 1/4 x 1 x 48 medium-hard
- 2 ea. 1/4 x 1 x 48 hard
- 1 ea. 5/16 x 5/16 x 24 medium-hard
- 9 ea. 5/16 x 5/16 x 36
- 1 ea. 3/8 x 1/2 x 36 medium-hard
- 1 ea. 1/2 x 1/2 x 24 medium-hard
- 1 ea. 1/2 x 3/4 x 24 medium-hard
- 1 ea. 3/4 triangular x 24 medium-hard

#### Balsa Blocks

- 1 ea. 1/2 x 1/2 x 2
- 1 ea. 3/4 x 3 x 3

#### Basswood

- 1 ea. 1/4 x 1/4 x 24
- 2 ea. 1/4 x 1/2 x 36

1 ea. 5/16 x 5/16 x 24  
5 ea. 5/16 x 5/16 x 36  
1 ea. 3/16 x 3/16 x 24

### **Spruce**

2 ea. 1/8 x 1/4 x 36  
1 ea. 1/8 x 1/2 x 36  
4 ea. 1/4 x 1/2 x 48

### **Hardware**

2 packages Sig Easy Hinges (Sig SH710)  
2 ea. Great Planes GPMQ3901 large control horn  
2 ea. Du-Bro #105 control horn set (left & right per set)  
5 ea. Du-Bro 4-40 Kwik-Link #304  
2 ea. Du-Bro 4-40 Solder Link #305  
5 ea. Du-Bro 4-40 Threaded Rod #144  
3 ea. Du-Bro 2-56 Kwik-Link #109  
3 ea. Du-Bro 2-56 Solder Link #112  
1 ea. Du-Bro 2-56 Threaded Rod #172  
2 ea. Du-Bro Rigging Couplers #201  
2 ea. Great Planes Screw-Lock Pushrod Connector GPMQ3870  
7 feet 45 lb test plastic coated steel leader (AMF Surfion or equivalent)  
4 ea. Swages for 45 lb test steel leader  
8 inches 1/8 O.D. nylon tube (or inner nylon pushrod material)  
1.5 inches 1/8 O.D. brass tube  
1.5 inches 5/32 O.D. brass tube  
1 ea. 3/16 O.D. x 12 brass tube  
8 inches 1/16 dia music wire  
5 inches 3/32 dia music wire  
14 inches 5/32 dia music wire  
1 ea. 1/8 x 1 x 1.5 aluminum  
1 ea. Dave Brown Products PRDS-5400 pushrod set (includes 2 pushrods)  
1 ea. TNT Landing Gear Products 1 x .049 x 24 aluminum tube and socket  
1 ea. Sig Rascal 110 Landing Gear P/N SIGRPBA284EGVARF  
1 ea. Du-bro 2 x 3/16 Axle Shaft set #249  
2 ea. Du-Bro Dura Collars #141  
2 ea. Sullivan Skylite 5" wheel S883  
1 ea. Sig SH729 Large Tailwheel Assy  
1 ea. Perfect 1.5" balloon wheel  
4 ea. K&J Magnetics D42-N52  
2 ea. 2-56 hex nuts  
5 ea. 4-40 hex nuts  
8 ea. 10-32 x 5/8 screws  
8 ea. #10 washers  
9 ea. 10-32 blind nuts  
2 ea. Molex connector (Digi-Key P/N WM5004-ND)  
2 ea. Molex connector shell (Digi-Key P/N WM2124-ND)  
8 ea. Molex connector contacts (Digi-Key P/N WM2305-ND)

- 1 ea. 1 inch x 6 inch servo tape
- 1 ea. 10-32 x 1.5 flat head nylon screw (McMaster-Carr P/N 90241A589)
- 1 ea. 1/4-20 x 4 threaded nylon rod (McMaster-Carr P/N 98831A360)
- 2 ea. 1/4-20 nylon wing nuts (McMaster-Carr P/N 94924A600)
- 8 ea. #2 x 1/2 sheet metal screw