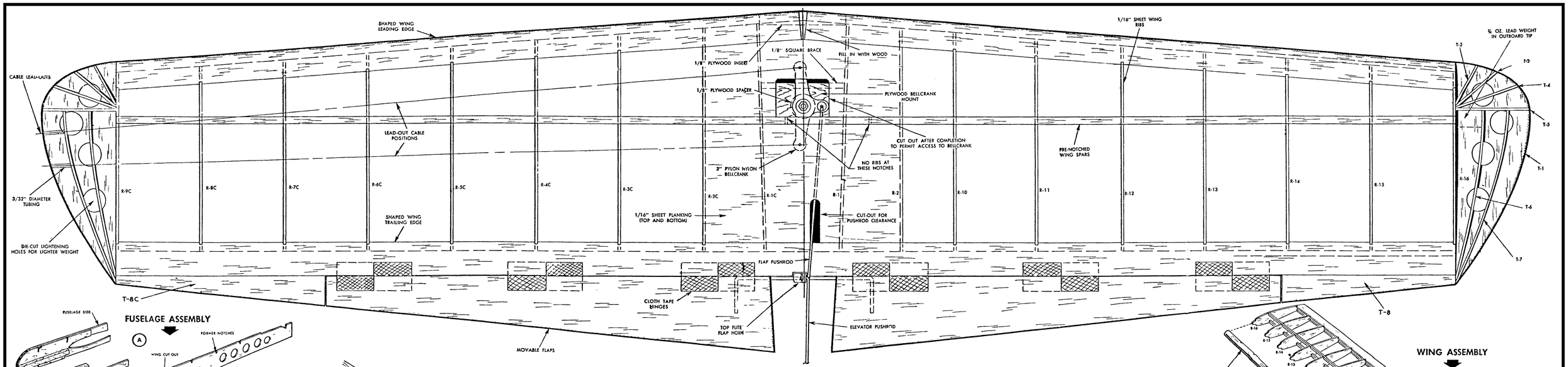
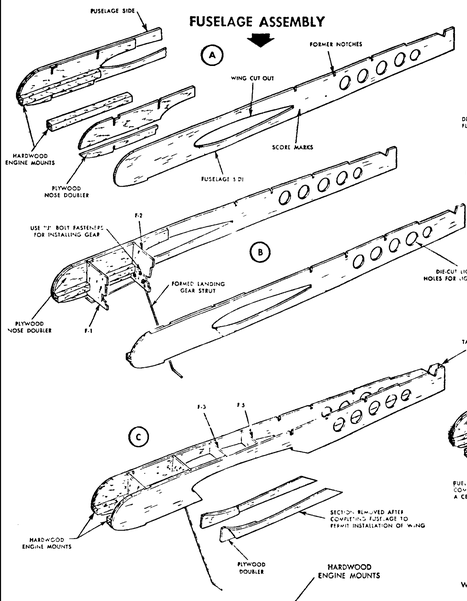
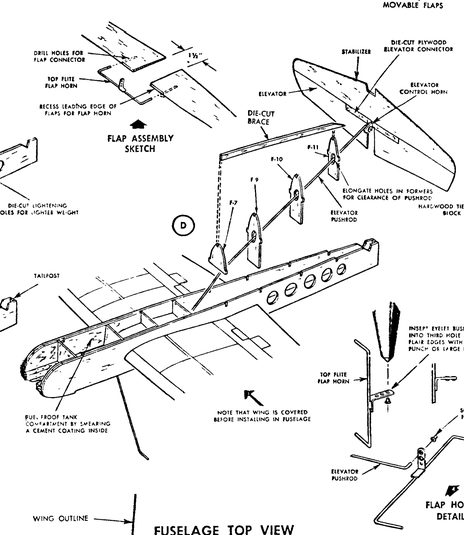
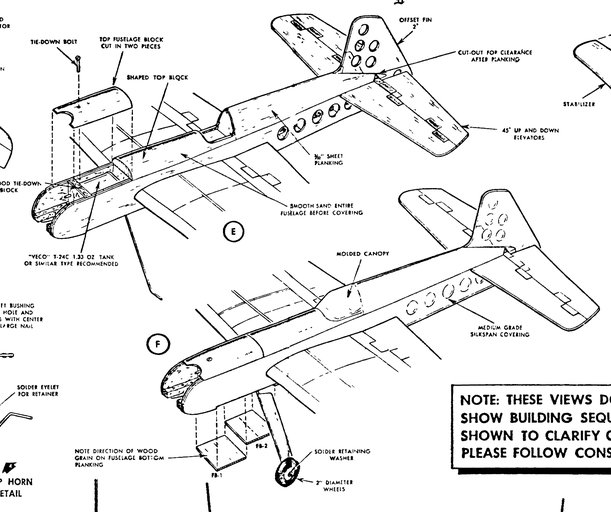


FUSELAGE ASSEMBLY

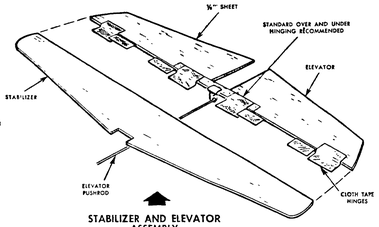




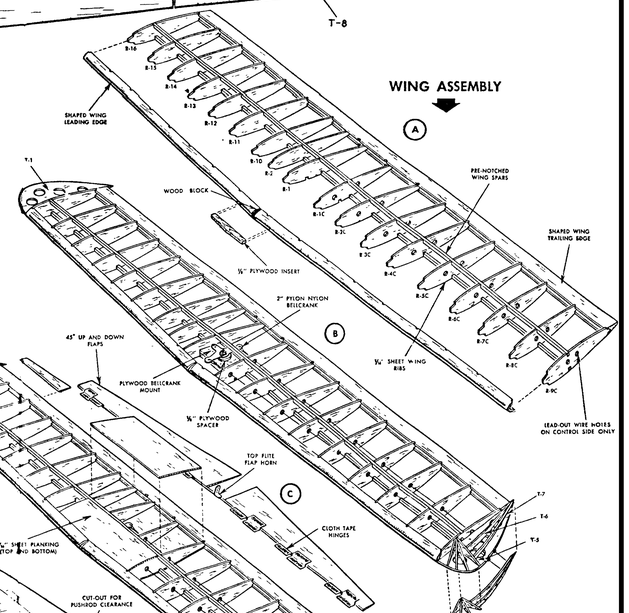


NOTE: THESE VIEWS DO NOT NECESSARILY SHOW BUILDING SEQUENCE, THEY ARE. SHOWN TO CLARIFY CONSTRUCTION. PLEASE FOLLOW CONSTRUCTION SEQUENCE

STABILIZER AND ELEVATOR ASSEMBLY



WING ASSEMBLY



RECOMMENDED CONSTRUCTION OF CONTROL LINES

Snaps are recommended to be of the safety lock type and constructed from music wire of 20 lead .032 inch diameter or 2 inches the re quired normal line diameters, whichever size applies.

See Fig. 1 for illustrations of recommended types.

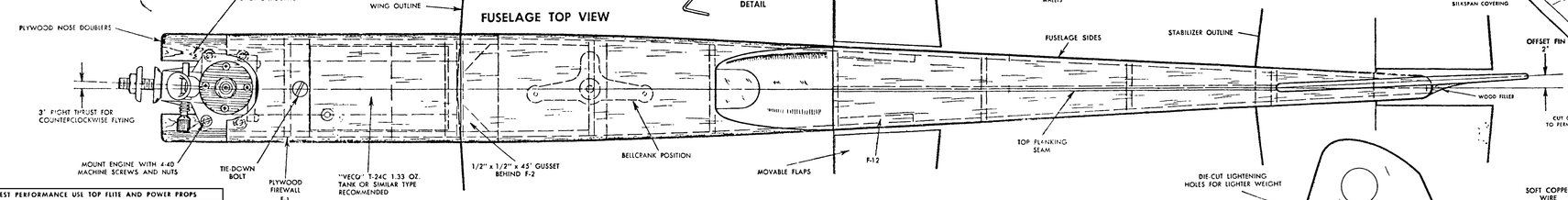
Eyelets or thimbles are recommended for fas pening the control lines to a bracing where they pass through the fuselage or wing. Fig 2 illustrates a typical method for fabricating an eyelet.

Eyelets as illustrated may be made of soft.

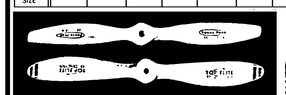
heavy walled aluminum tubing around 3/16 to 1/4 inch O.D. or from any preferred sanitary source.

The following figures illustrate one recommended method of arranging control lines

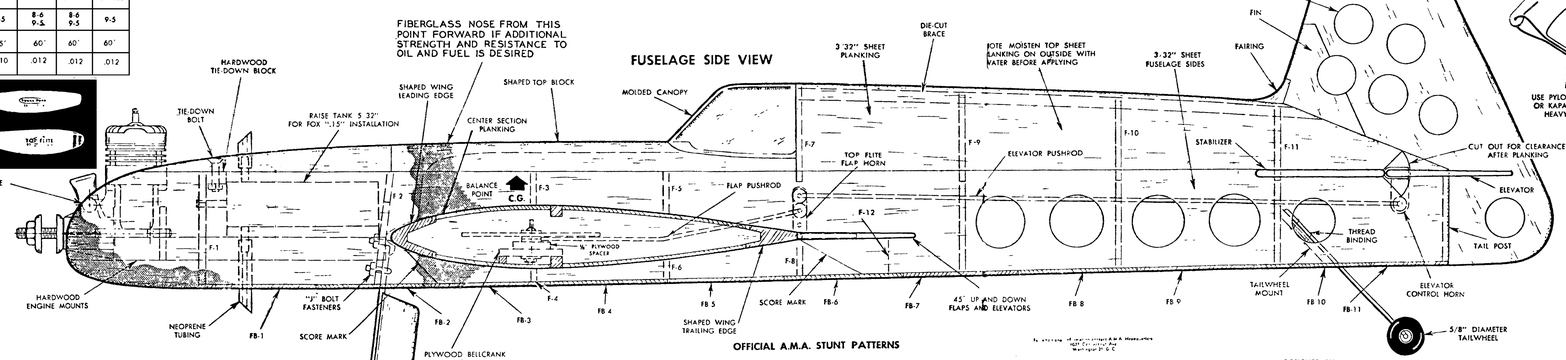
FUSELAGE TOP VIEW



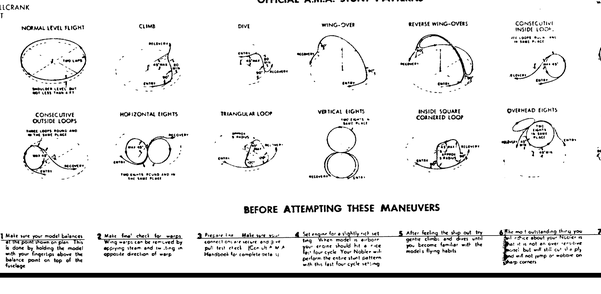
FOR BEST PERFORMANCE USE TOP FLITE AND POWER PROPS								
ENGINE	FOX .15	COX .15	O.S MAX .15	TOPP .15	VECO .19	TOPP .19	FOX .25	
T.F. PROP	7-6 8-5	8-5 8-6	8-5	8-5	8-6 9-5	8-6 9-5	9-5	
LINE LENGTH	45'	52'-6"	52'-6	45'	60'	60'	60'	
LINE SIZE	.010	.012	.012	.010	.012	.012	.012	



FUSELAGE SIDE VIEW

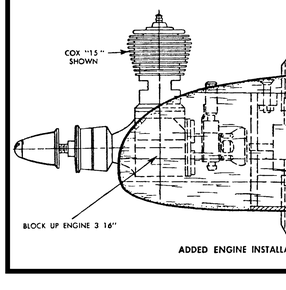


OFFICIAL A.M.A. STUNT PATTERNS

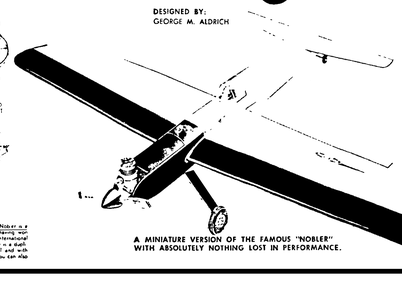


BEFORE ATTEMPTING THESE MANEUVERS

1. Make sure your model balances at the point shown on plan. This is done by holding the model with your fingertips above the balance point on top of the fuselage.
2. Make final check for warps. Wing warps can be removed by applying steam and bending in opposite direction of warp.
3. Prepare for take-off. Make sure all connections are secure and that all fuel lines are free of kinks. (Can of R/C Manifold for complete info.)
4. Set engine for a slightly rich run ning. Never model is airborne your engine should run at a rich four-cycle. Your Nobler will perform the entire stunt pattern with this fast four-cycle setting.
5. After fueling the ship out by gently climb and down until you become familiar with the model's flying habits.
6. Fly only outstanding thing you don't like about your Nobler is that it is not aerobatic. It's a joy to fly, and it will jump at caution on sharp corners.
7. The success of the Nobler as a contest ship has been proven in many all-out and international events. Your Nobler in a duplicate of the wing and with plenty of practice you can also become a winner.

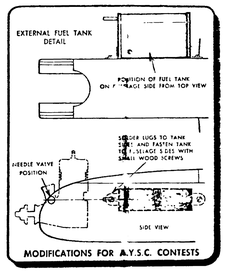


ADDED ENGINE INSTALLATION DATA



A MINIATURE VERSION OF THE FAMOUS "NOBLER" WITH ABSOLUTELY NOTHING LOST IN PERFORMANCE.

WING SPAN: 40"
WING AREA: 276 SQ. IN.
LENGTH: 30"
ENGINE SIZES: .15 TO .25
PROP DISP.



the TOP FLITE JR. NOBLER

DESIGNED BY: GEORGE M. ALDRICH
DRAWN BY: PAUL DEL GATTO
KIT ENGINEERED BY: SID AXELROD

N-6 CONSTRUCTION SEQUENCE

STUDY PLANS CAREFULLY AND BECOME COMPLETELY FAMILIAR WITH CONSTRUCTION BEFORE STARTING.

WING ASSEMBLY

1. Lay out the ribs and sheet planking as shown. Do not cement yet.
2. Push rods into the wing trailing edge notches and start checking the wing for warps at this time, keeping a common bottom throughout construction. A straight wing is the heart of a good stunt model. It is impossible to keep all the pre-cut stock for the leading edge and trailing edge straight. Inner stresses that build up in the balsa log while it is growing, show up when it is cut and planed to shape. When these stress stresses are released, it may be that the wing leading edge or trailing edge may have such a warp. These warps are easily removed by wetting the wood and holding the piece over a gas flame, while bending the piece back in the direction opposite the warp.
3. Pin trailing edge to flat surface, and glue ribs to trailing edge. Notice that left wing is longer than right wing. Cut leading edges to size over wing plan and glue to rib. Check again for warps. Notice spars are not cemented on plans.
4. Install the bellcrank mount using cement in several thin coats when the plywood meets the "" square supports spars and ribs.
5. Install bellcrank and wires. Cover the bellcrank so that it doesn't hang up.
6. Cement wingtips and braces in place.
7. Cement "a" tubing in place for lead-out guides.
8. Is your wing straight? If not, twist and "work" it until it is. Then cement.
9. Cement "a" construction planking in place.
10. Sand wing completely with 4/0 sandpaper on a block. Finish with 320 w/d sandpaper.
11. Shape flaps and sand smooth.
12. Connect bent flaps to wing trailing edge.
13. Install control horn in the flaps being careful to maintain proper alignment.
14. Connect pushrod tape hinges to flaps and then install entire flap assembly on wing being careful to locate the flaps properly on the wing trailing edge.
15. Sand centered flap hinges lightly and give structure one coat of clear dope. When dry, sand with 400 w/d sandpaper and cover the entire wing and flaps with wet medium grade silkspan.
16. When the silkspan is dry, give the wing six to seven coats of clear dope, sanding lightly and carefully with 400 w/d sandpaper. WATCH FOR WARPS WHILE DOPING!
17. Cut holes in wing to allow for installation of the pushrod.

FUSELAGE ASSEMBLY

1. Mount landing gear onto 3/4" plywood landing gear formers by drilling three holes as marked on former. Secure with "J" bolts, cementing nuts. Note: Wire gear is recommended for best ease of service.
2. Cement plywood fuselage doublers and hardwood engine mounts to fuselage sides. Hot-melt-proof cement is recommended. Allow to dry thoroughly.
3. Cement F-1 and F-2 into the fuselage doubler slots, joining the two fuselage halves. Caution: Do not glue until dry.
4. Cement 1/4" x 1/4" tailpost strip to rear of fuselage side. Pull the rear together and cement securely. Be certain that fuselage sides remain in proper alignment.
5. Using a double edge razor blade, slice the fuselage sides where indicated, to admit wing. Fit wing into place, align carefully and cement securely. When dry replace removed portions of fuselage sides and install formers F-4, F-6, and F-8.
6. Carve and sand stabilizer and elevators to shape and install the horn. Install the hinges on the elevators and cement to the stabilizer.
7. Fit stabilizer to fuselage, and install the pushrod at the same time. Be careful to get the proper elevation at 0°-0°. Both the flaps and elevators should have 45° maximum movement. Cement the stabilizer in place.
8. Cement formers F-5, F-7, F-9, F-10, F-11 and remove fuselage brace in slot.
9. Cut and fit the 1/16" sheet bending stock for the rear of the fuselage, and cement in place. Be careful to fit the sheeting at the fin junction in order to make a good joint.
10. Carve and sand the fin to shape and cement in position.
11. Fit the pre-carved top blocks to the fuselage and cement the permanent block in place. Add the tie-down block and nut at the rear of F-1 only after sand and refinish is in place. Install the tail wheel at T-6.
12. Cover the bottom of the fuselage with the 1/16" die-cut planking, with the grain running crosswise with the fuselage.
13. Using your fingers, smear several coats of fuel-proof cement inside the tank compartment to sea- at all
14. Sand the entire fuselage assembly with 2/0 sandpaper on a block and finish first with 4/0 and then with 320 w/d sandpaper.
15. Pre the 3/4" sheet fairings to the landing gear and cement in place by covering with rubber bands, silk or fiberglass.
16. Drill the engine mount holes and the hole to admit the pick-up tube from the tank.
17. Cover the fin and fuselage with light weight wet silkspan. Give the entire fuselage, fin and stabilizer two coats of clear dope sanding after each coat with 320 w/d sandpaper. Apply two coats of balsa filler, sanding after each coat with 320 w/d sandpaper. Then apply colors and added trim
18. Install canopy, wheels and tail-down block.
19. Mount your engine with 4-40 machine screws and nuts.
20. Select a calm day for you flying your Jr. Nobler. Check the chart on the plan for the proper line length and the recommended "Top Flite" or "Power Prop" for your engine