

FLYING INSTRUCTIONS:

The model has been designed for PAA load flying with the 48" wing and as a contest free-flight with the 36" wing.
 For PAA-load flying a dummy is required, plus cargo load. The exact position of the cargo load is determined during preliminary gliding tests, while it is temporarily secured to the outside of the fuselage. Once the cargo position has been determined satisfactorily the model is ready for preliminary power tests. Cargo and dummy should be made removable for weight checking.
 As yet, do not cut out the cargo hatch as preliminary flights tests might warrant a change in the angular setting of the flying surfaces, thus causing the best position of the cargo to be moved forward or rearward slightly. Once the model has undergone preliminary flight tests, and all the essential power and glide adjustments have been made, we can then cut out the cargo hatch as illustrated at the most desired position.
 Before testing, check the wing and horizontal tail carefully for warps. Any warps may be removed by holding the subject surface over a steam kettle, and gently twisting against the warp.
 Shim the horizontal tail platform so that when the model is viewed from the rear, the horizontal tail is approximately parallel to the left and inboard wing panel. With the rudder tab straight, the ship should glide in a left hand circle of about 40 to 50 foot diameter. If the circle is too tight, decrease the stabilizer tilt, and vice versa. If the model dives, raise the trailing edge of the stabilizer, and vice versa. When the glide is satisfactory, install propeller backwards, and adjust the timer for about 5 seconds motor run. The ship should climb somewhat sluggishly in a left hand circle. If the circle is too tight under power, bend the rudder tab to the right and increase the stabilizer tilt to maintain the glide turn.

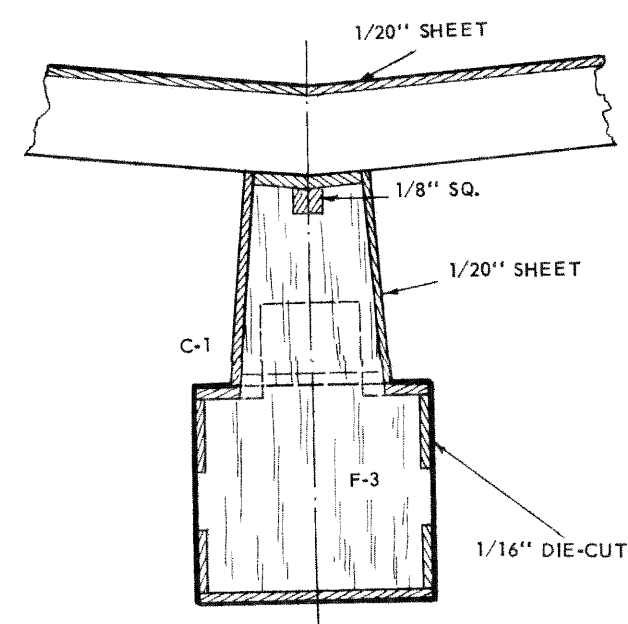
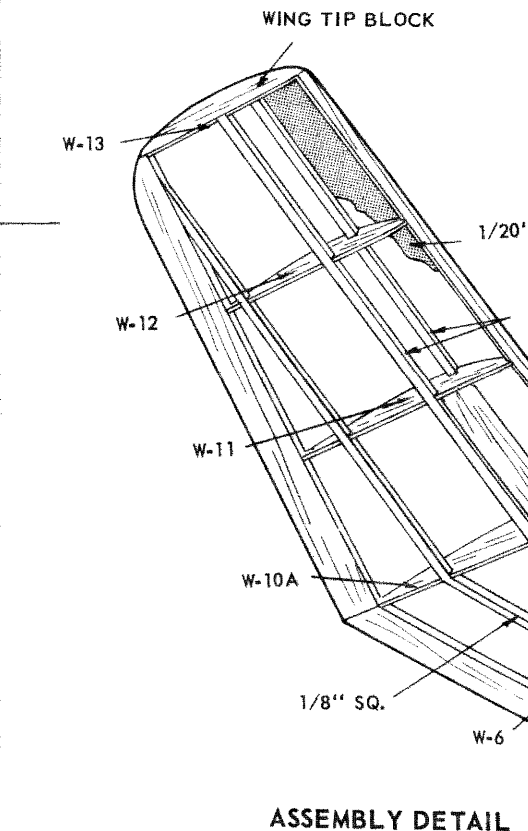
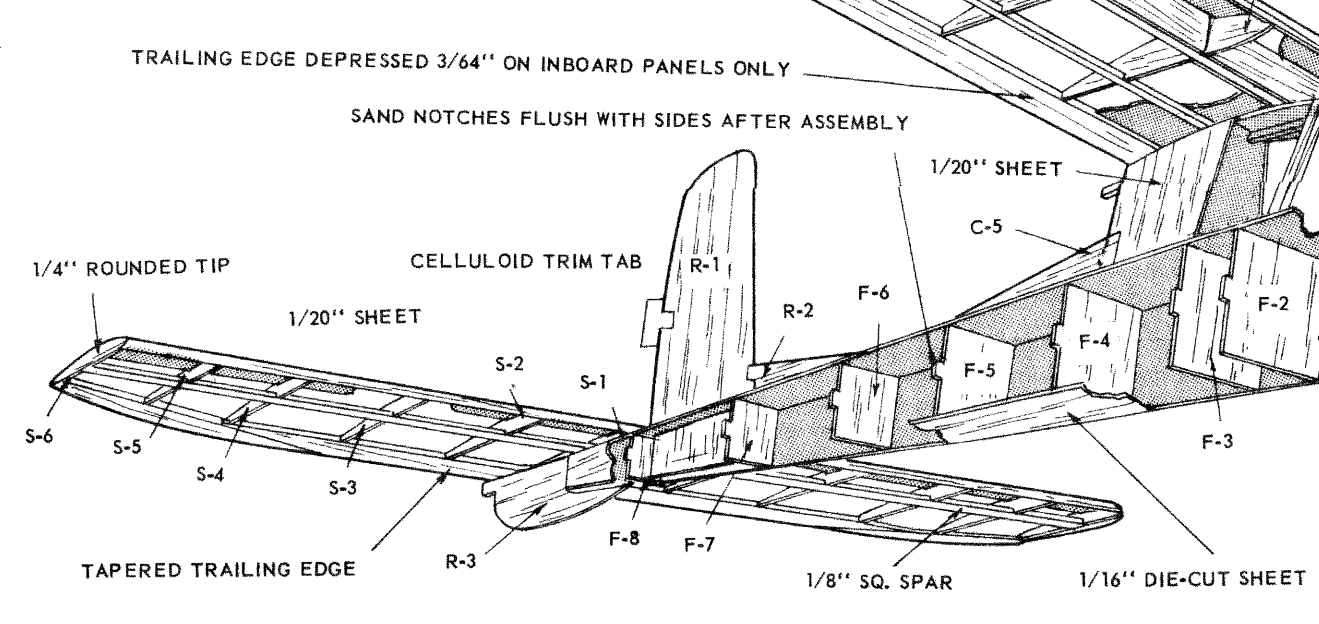


FIG. F-3



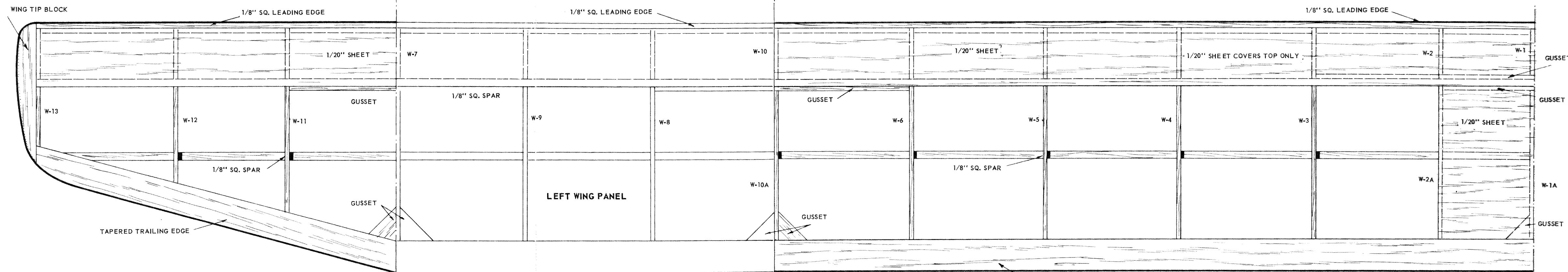
ASSEMBLY DETAIL



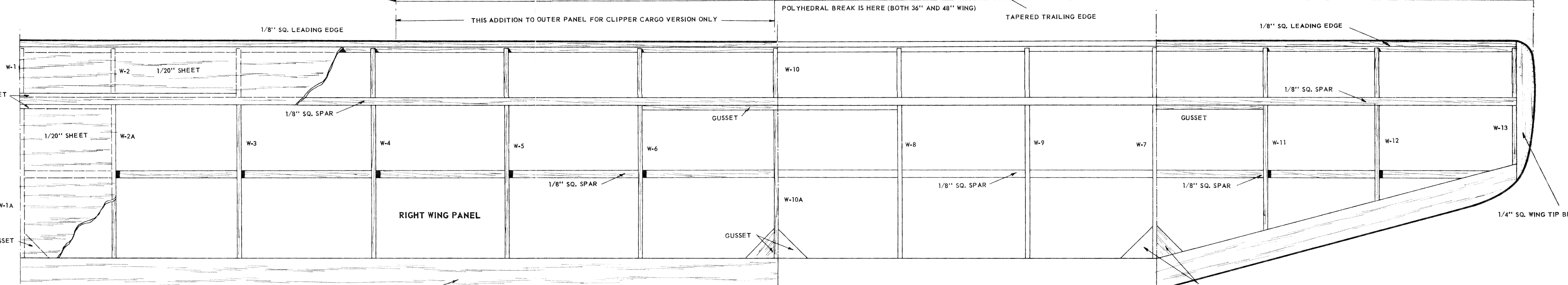
PILOT

BALLAST BOX DETAIL

BALLAST & DUMMY WEIGHTS IN ACCORD WITH CURRENT PAA-LOAD RULES



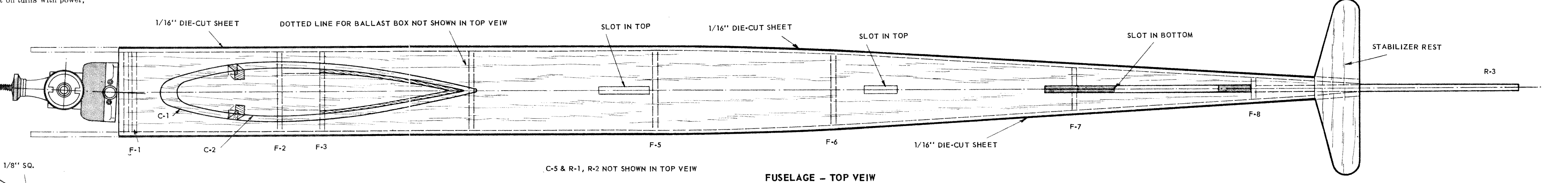
LEFT WING PANEL



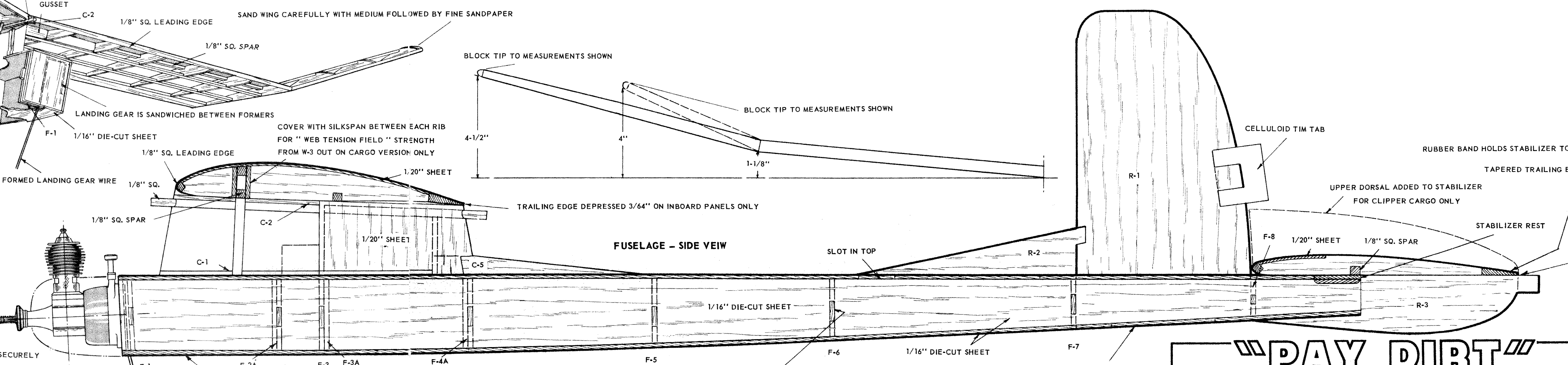
RIGHT WING PANEL

FLYING INSTRUCTIONS (continued)

When the glide and low-powered flight paths are satisfactory, put the propeller on in the proper direction, and make a full-power test with a short 5 second motor run. The ship should climb very fast and steep in a moderate left turn with very little bank. Transition from power to glide should be very smooth.
 When properly trimmed, and assuming your engine is in good running condition, this ship will turn in excellent flight time in calm air.
 Any combination of climb-and-glide turn may be achieved by keeping in mind these two items:
 1. Stabilizer tilt has a large effect on glide turn, and negligible effect on power flight.
 2. Rudder tab deflection has a large effect on turns with power, and small effect on gliding flight.



FUSELAGE - TOP VIEW



FUSELAGE - SIDE VIEW

BUILDING INSTRUCTIONS:

- 1 - Study the plans and kit contents carefully.
- 2 - Decide on whether you wish to build as a free-flight or PAA-Load type model.
- 3 - Remove all die-cut parts from the sheets. Die-cut sheets may be pre-doped to prevent splitting. This is optional.
- 4 - Group parts for use in wing, stabilizer, fuselage etc.
- 5 - Cut 1/8" sq. spars to length, pin to plan.
- 6 - Position wing ribs, cementing to spars. In center panels, the deflected trailing edge makes it necessary to shim rib ends up 1/20", and spars should be pulled up into rib notches accordingly till flush.
- 7 - Install leading and trailing edges, deflected as shown on center-section trailing edge portions only.
- 8 - Install upper 1/8" sq. wing spars.
- 9 - Remove panels from plan, join with gussets.
- 10 - Add sheeting as shown.
- 11 - Sand entire wing structure smooth.
- 12 - Assemble in the same manner as the wing. No trailing edge deflection.
- 13 - Remove from plan, sheet and sand smooth.
- 14 - Rudder parts are die-cut. Join, trim and sand to airfoil. Note at Clipper-Cargo dorsal.
- 15 - All fuselage parts are die-cut and assemble rapidly.
- 16 - Join fuselage sides with F-1 through F-5.
- 17 - Cement to fuselage top sheeting, with F-3 projecting through to form cabin.
- 18 - Pull sides together, installing F-6, F-7 and F-8.
- 19 - Install F-2A, F-3A and F-4A.
- 20 - Install double mahogany veneer at F-1 for motor mount.
- 21 - Recess veneer for gear wire, and sandwich between.
- 22 - Install engine timer if desired.
- 23 - Bottom die-cut sheeting may now be installed on free-flight versions. On PAA-Load models, you must build access hatch for dummy and cargo removal.
- 24 - Assemble cabin area. Notch C-1 to receive F-3.
- 25 - C-2 is die-cut in two parts for dihedral angle.
- 26 - Apply celluloid strip for windshield.
- 27 - Laminate stabilizer mount and position.
- 28 - Cement rudder in place.
- 29 - Cover with material supplied wet or dry. If applied dry, moisten afterwards to shrink. Apply several coats of fuel-proof dope.
- 30 - Fuselage and rudder may be given a couple of coats of wood grain filler. Sand with fine grit paper.

"PAY DIRT"
PAA-Load Sport Free-Flight

DESIGNED & ENGINEERED BY: BILL EFFINGER
 DRAWN BY: DON Mc GOVERN

FOR .020 ENGINES
 KIT NO. 18-3
 48" WINGSPAN
 21 1/4" LENGTH

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 KIT NO. 18-3
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 WEST HEMPSTEAD, NEW YORK, U.S.A.