What do you want in a combat model? Simple construction? Tight turns? Strength? Speed? The "Pirate" fills the bill on all of these points—and more! The original has placed first or second in every contest entered—winding up with its streamer intact!

Want a contest-winning combat ship? Then hunt no further—here it is!

![Image of a model airplane with text: "Pirate" by Riley Wooten]

"PIRATE"
by Riley Wooten

Full-size plans are included for the ribs, formers, rudder, skids, and other key parts—along with drawings showing the bellcrank installation, the nose assembly, and the controls for the wing flaps and stab.

- A good combat plane should be simple to build, light yet strong, fast, and able to turn tight without loss of speed. While it is hard to get a plane to meet all of these qualifications, we believe the "Pirate" will come as close as any.

The model has a thin airfoil and small wing area to give it speed. Wing flaps are used for tighter turning without loss of speed. And, by selecting the wood carefully and putting it where it is needed, we have a light plane which is also strong. One "Pirate" was flown an entire season, was in numerous crack-ups, but always came out with only minor damage.

The wing area of this plane is a little over 300 square inches, and the weight of the four models we have built has ranged from 15 to 17 ounces, which gives it a very light wing loading. With a Fox .35 up front, it does over 80 m.p.h., and it will do loops about ten feet in diameter with very little loss of speed.

A box fuselage is used because it gives better wing support, is easier to repair, and is stronger and lighter. The controls are put on the outside, to make them easier to adjust and hook up.

Many combat ships are good, except that the flyer must watch his plane all of the time. The "Pirate," however, is very stable—you'll be able to watch what the other flyer is doing.

Wing construction is a little unusual. Instead of being square, the leading edge is 1/4" x 1/2", lying horizontally. It is also covered 1" back with 1/16" sheet. This arrangement gives a very strong wing with a minimum of weight.

The fuselage is built up first, then the wing is built around it. If the wing is badly broken in a crash, all you have to do is to cut the spar and trailing edge out of the fuselage, and build another wing around it. Part of the fuselage top may have to be removed for access to the spars, but this is much cheaper and easier than building an entire plane.

The "Pirate" has placed first or second in every contest in which it has competed, and to date has never had its streamer cut in combat flying. This enviable record has made the "Pirate" design very popular with our friends.

FUSELAGE: Before beginning construction, scale up the fuselage side view four times, to full size. Then, cut the two fuselage sides out of medium-hard 3/8" balsa, including the slots for the main spar, trailing edge and stab. The black area on the fuselage side-view indicates the location of the wing—don't cut this area out. Next, cement the hardwood motor mounts to the fuse-lage sides.

While this is drying, make sheet-metal templates of the ribs (shown full size on Plate 2). Cut the ribs out from soft 3/32" sheet and 1/8" sheet as indicated. Then cut out the formers and cement the two plywood formers, and the first balsa former in position. When dry, pull the fuselage ends together and cement the other two formers in place.

(Please turn to Page 34)
PIRATE
Plate 2

ALL PARTS ON THIS PAGE SHOWN FULL-SIZE

FLAP AND ELEVATOR
HORN: .040" BRASS

RUDDER:
1/8 SHEET BALSA

BELLCRANK FLOOR
1/8 PLYWOOD

F-1 AND F-2
1/8 PLYWOOD

REAR SKID: 1/16 PLYWOOD

FRONT SKID: 1/16 PLYWOOD

RIB A: MAKE 8 FROM 3/32 SHEET

RIB B: MAKE 9 FROM 3/32 SHEET

RIB C: MAKE 2 FROM 1/2 SHEET

SPAR CUT-OUT TEMPLATE