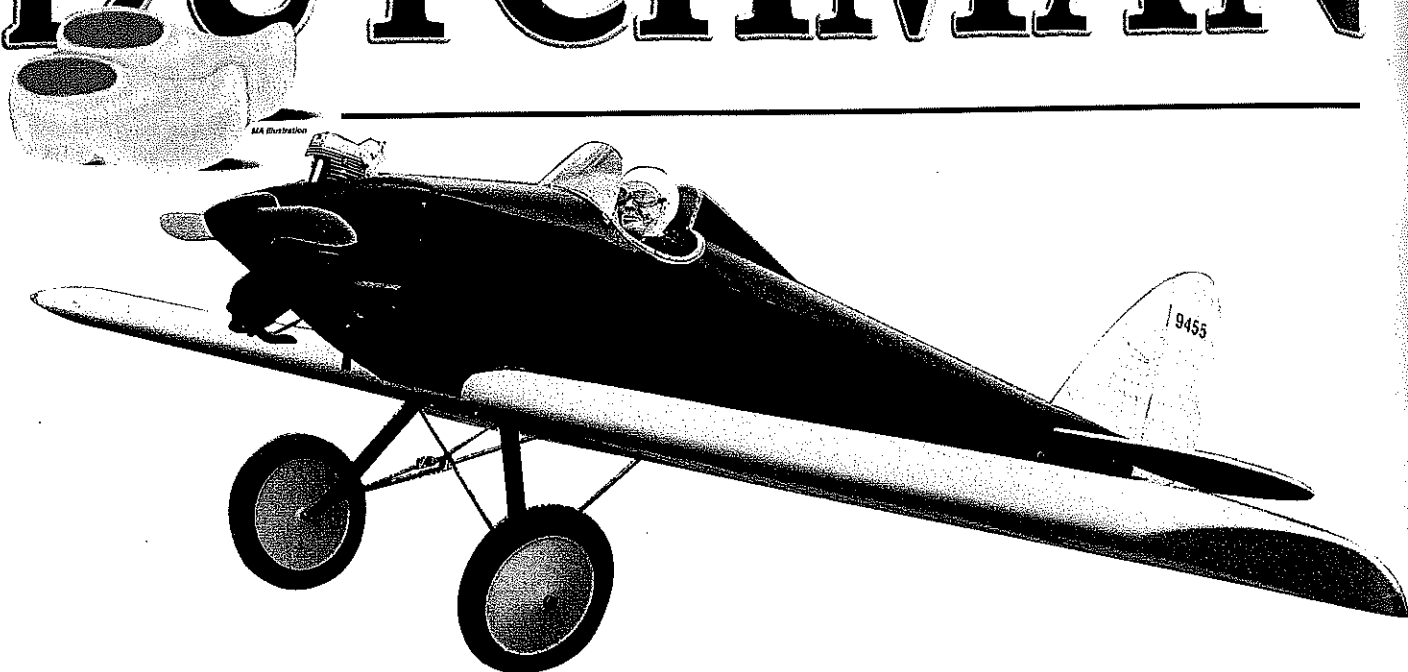
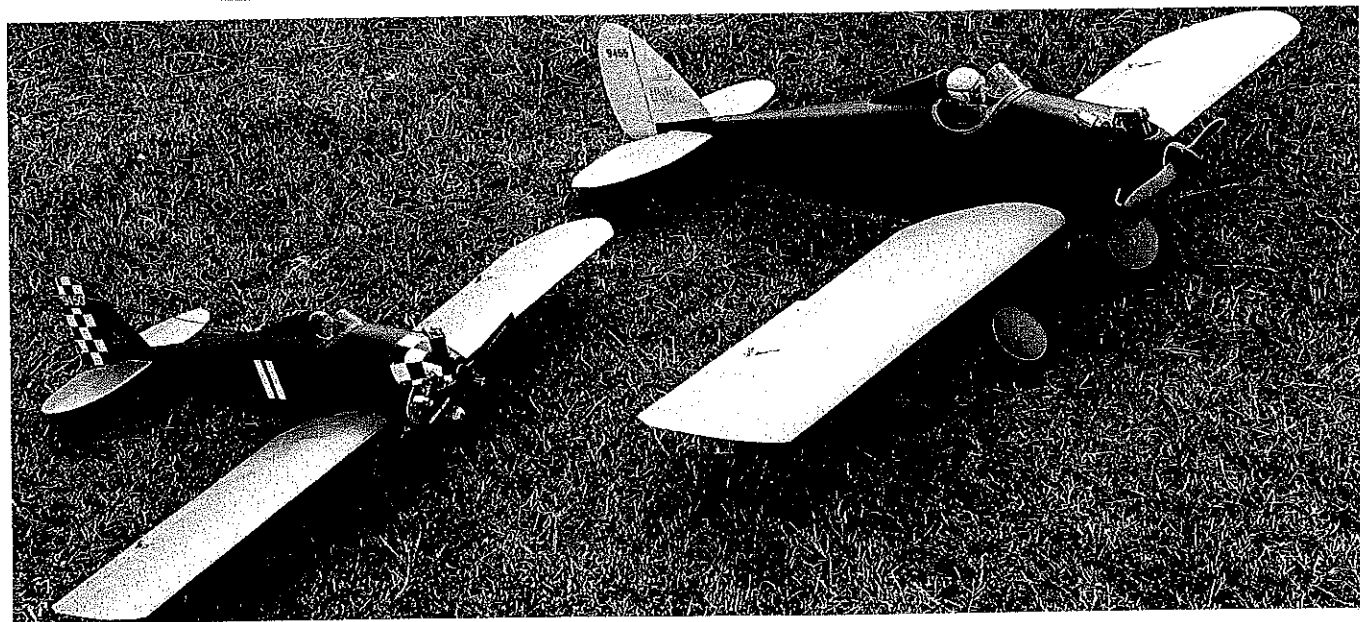


# Flying

# DUTCHMAN



*This 79-inch-span model is a good way to get started in RC Scale*



Red-white-silver version was built by Ernie Harwood of Texas. It is 36 inches in span and is based on aircraft #9450.

**DURING THE WAVE** of aeronautical prosperity that resulted from the Lindbergh transatlantic flight in 1927, a large number of new aircraft companies were set up. Many of these companies did not last a long time; the Depression developed in the early 1930s, and after building only a few aircraft, the companies disappeared.

The Szekeley company was unusual in that it built aircraft and engines. It is better known for the engines that it produced; these were much more successful than were the aeroplanes.

In 1928 a three-cylinder engine, the SR 3, was put into production. It developed 40hp at 1,800 rpm, with a weight of 148 pounds. A version of this engine, the SR-3-45, eventually powered several well-known designs that included the Curtiss-Wright Junior, Buhl Bull Pup, American Eaglet, Spartan, Rearwin Junior, Prest Baby Pursuit, Nicholas Beazley NB-8, and Corben Baby Ace.

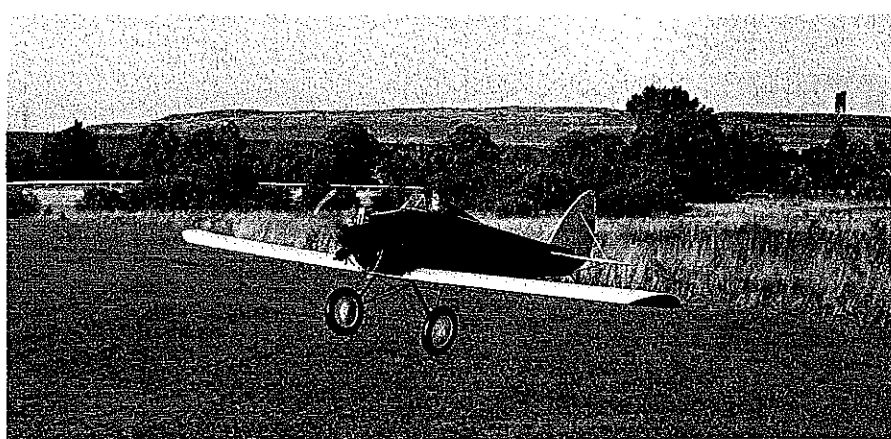
In 1929 the Szekeley company announced the Flying Dutchman—a single-seat low-wing monoplane powered by the SR-3 engine. The aircraft was designed to fill the need for a small, light single-seater that had a good standard of construction with modest cost and economy of operation. Construction of the fuselage and tail surfaces was welded-steel tubing, fabric-covered.

The cantilever wooden wing was unusual in that it had no dihedral. It was claimed that the shape of the tips would allow the aircraft to maintain lateral stability without dihedral.

The undercarriage was of the split-axle type with rubber ring shock-absorbers. Because of the high-lift airfoil, it was claimed that the aircraft could take off in 75 feet. The top speed was 80 mph, with a landing speed of 25 mph. The advertised price was \$2,200.

A production run of two aircraft per week was planned, but this never materialized because of the stock-market crash.

At least three aircraft are known to have been produced, the earliest being ID number

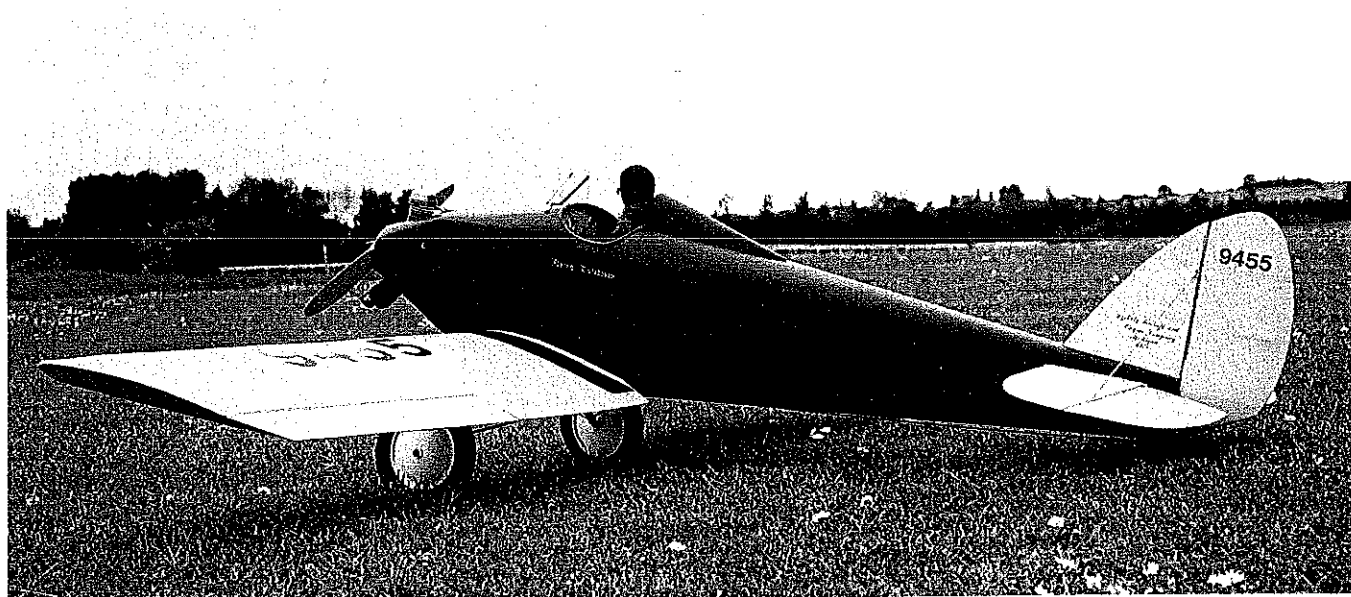


Model has proven to be very easy to fly—ideal for a first Scale model.

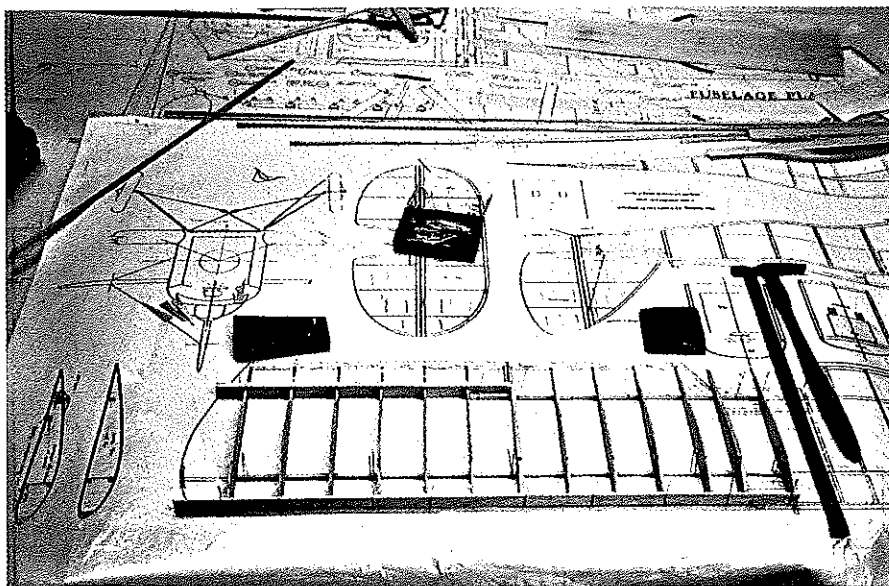
photos courtesy the author Graphic design by Carla Kunz



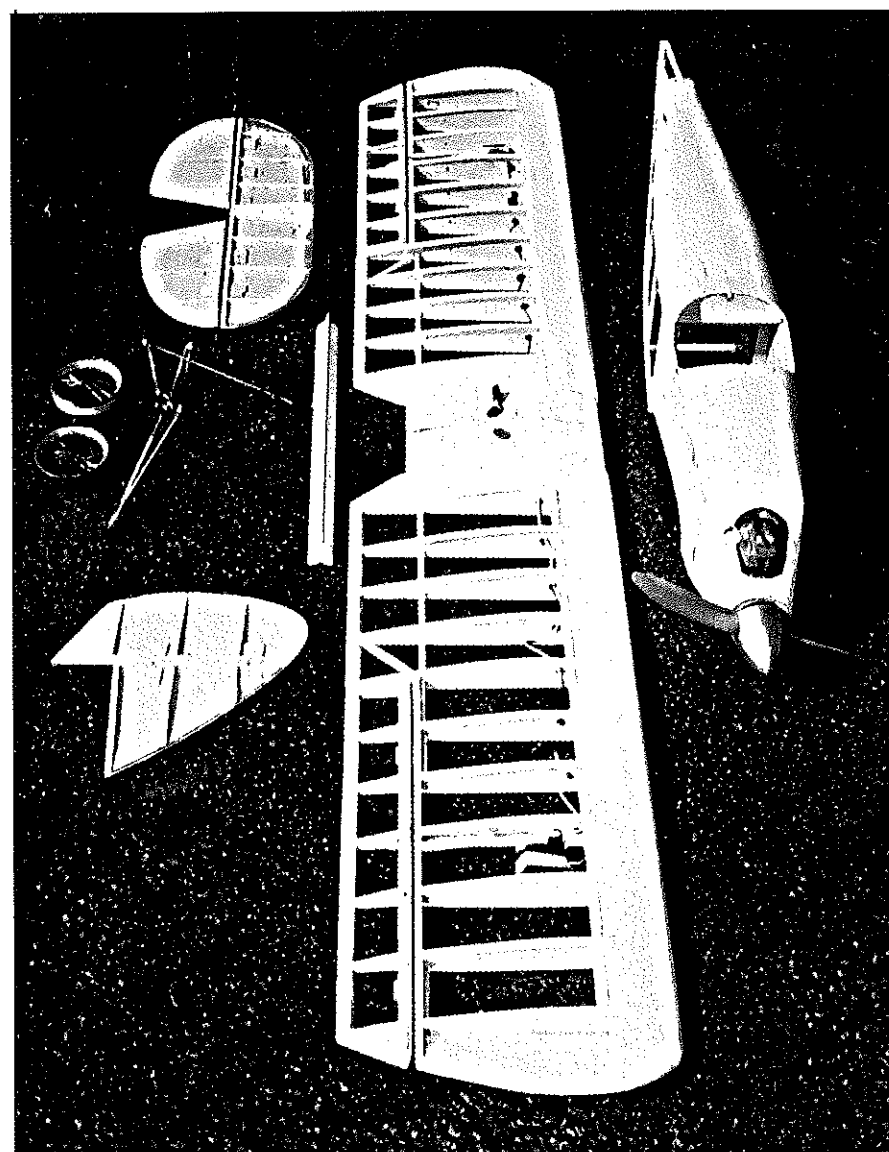
Fred Keegan of Pontefract club built the 1/4-scale Dutchman presented here.



At rest at the Pontefract Rac Course site in England. Original O.S. .90, mounted upright, was too much power.



The wing is supposed to be flat, but author suggests using a bit of dihedral: "It does improve the looks!" Rear spar incorporates aileron spar.



The Dutchman's "bones." Model has been successful in three sizes for our British author and American friends Ernie Harwood and Vic Larsen.

3088 (Ser. No. 7, manufactured in 1929). This machine had a long tapered fairing forward of the windshield. The most-photographed aircraft was ID 9450 (Ser. No. 12, manufactured in 1929), which had checkerboard decorations and a conventional windscreen. The aircraft was featured on the cover of *Aviation* magazine of August 19, 1929, as well as in several advertisements.

A third aeroplane, ID 9455 (Ser. No. 17, manufactured in 1929), was shown in flight in a photo in the *Aircraft Yearbook of 1930*.

Although the company had some success with its engines, the Szekely Company went into receivership in 1932 and was taken over by the Aviation Holding Company. In 1937 the factory was purchased by the Crampton Manufacturing Company, which supplied parts for the earlier engines.

I had known of the Szekely three-cylinder engines since building a Free Flight Buhl Pup from a Berkeley kit many years ago. The Flying Dutchman was brought to my attention by my good friend Vic Larsen from Texas. Vic had included a small three-view drawing with one of his letters, along with a brief description of the aircraft.

I didn't think anything more about the aircraft until I started looking around for a simple Scale model that would be suitable for a beginner to Scale. The Flying Dutchman looked like a good subject; in fact, it looked more like a model than a full-scale aircraft in some respects.

I was short of photographs for a competition-type model, but since this model was intended to get people flying a scale model, that didn't matter too much. There is always a demand for a model that will fit into the car conveniently and one that does not take too much time to build.

I therefore decided to design the model around one of my favorite small engines, the OS 26 Surpass. At 1/4 scale, the model has a wingspan of 52 inches—just right for the engine.

I drew the model up and had the drawing reduced in size and sent the copy off to Vic. Imagine my surprise when, a few weeks later, a letter arrived with photographs of two models under construction. The models were in two sizes—36 and 52 inches in span.

Back home in England I had supplied another friend, Fred Keegan of the Pontefract club, with an enlarged drawing so that he could build a 1/4-scale version. This is the model featured in this article.

### CONSTRUCTION

The fuselage is a basic box with a rounded decking and block balsa cowl. The wings use a D-box leading edge. The tail unit uses the well-tried sheet-core construction with ribs and spars on each side.

You can build the model in any sequence; I like to start with the fuselage.

**Fuselage:** Pin down the longerons and the 1/4 sheet pieces that form the wing cutout and cockpit strengthening. Cut and fit the 1/4

square uprights and any sheet parts. Do not fit the 1/4 sheet infills until the box is complete.

Trace the former shapes and transfer the shapes by pricking through onto the balsa sheet and plywood. The engine bearers are not spaced for any specific engine; check the one you intend to use and space accordingly.

Remove the sides from the board and fit the former F5. Pull in the rear fuselage and join at the stern post. To enable the fuselage to take up the curvature around the cockpit, it might be necessary to make some cuts into the fuselage sides with a razor saw. Add formers F2, F3, and F4.

Fit the beech engine bearers and the fuel tank box; the spacing for the bearers should have been determined earlier. Fill in the 1/4 sheet areas and then add the top formers.

The front top of the fuselage is planked with 1/8 balsa back to the headrest. The rest of the fuselage is covered with .4mm plywood. Make sure that all control runs and the tailskid plywood mount are fitted before completing the fuselage covering. The

turtledecking is from .4mm plywood, and this is rolled over the formers in one piece after the sides are covered.

If saw cuts were needed, add a 1/32 plywood doubler at the wing opening before fitting the 3/16 plywood plate for the wing-mounting bolts. It will be best to fabric-cover the fuselage before adding the black balsa headrest.

**Wing:** Pin down the front and rear spars on 1/16 balsa packing pieces; note that the rear spar incorporates the aileron spar. The wing is supposed to be flat (without dihedral) but on one of the photographs there does appear to be a slight amount. It is suggested that approximately 3/8 inch under each tip is used; it does improve the looks!

The trailing edge is 1/16 plywood. Pin to the building board, and the ribs can now be added. The top front 1/4 square spar should be fitted next, followed by the 1/8 sheet false leading edge.

When dry, the wing can be removed from the board and the leading edge sanded to

accept the sheet covering. Pin the wing back down on the board and fit the 1/16 sheet top covering. Use white PVA (polyvinyl acetate) glue for the sheeting, with lots of pins supplemented with masking tape to hold it in place. It is important to hold the sheeting down tight onto the ribs and spars, so do not skimp the fastenings, pins, or masking tape.

Add the balsa trailing edge capping and rib capstrips when the sheeting adhesive has dried and the fastenings have been removed.

The ailerons can be built separately, or at the same time as the wing. When finished, shape the leading edge as shown for the movement clearance. The horns can be made from printed circuit board scrap, and should be epoxied in place.

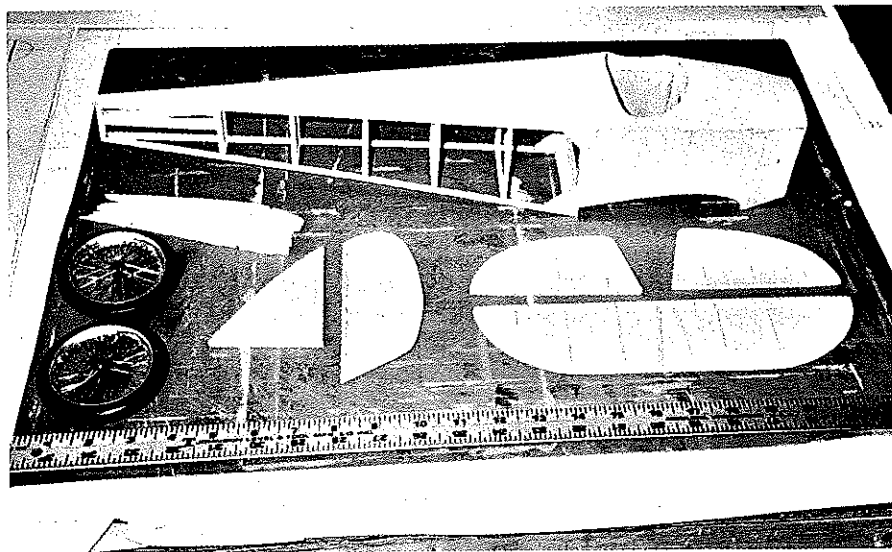
The center section has tile undercarriage mounting blocks and bolt-retaining blocks built in. These blocks can be fitted after removing the wing from the building board.

Repeat the sheeting operation on the underside of the wing and the capping of the ribs. The sheet tips should be fitted now, before the leading edge capping piece. Sand the leading edge capping to the correct section and fit the servos and pushrods to complete the work on the wings.

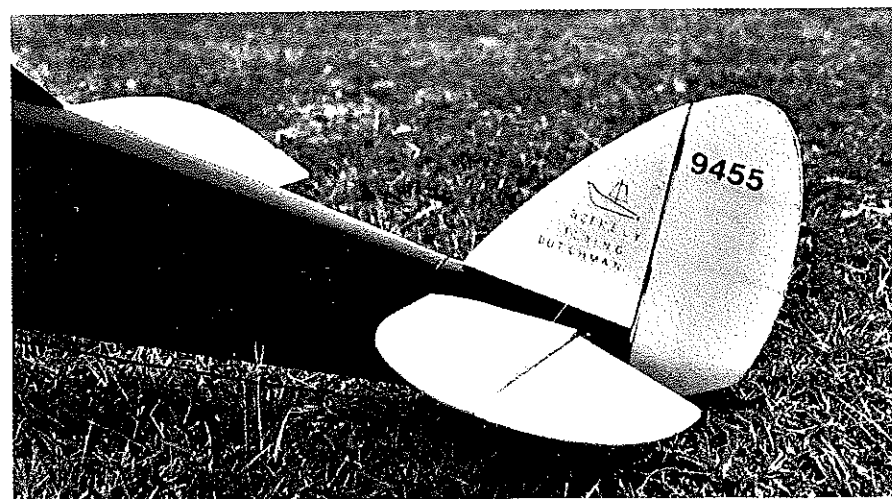
**Stabilizer and Rudder:** The tail unit uses 1/16 sheet balsa cores. These should be cut to shape and the spars and ribs glued to each side; sand the ribs to the section shown on the drawing. Do not forget to fit the plywood inserts for the rigging wires—these are working wires and should not be omitted. They can be made from fishing leader or 1/2 piano wire. A commercial elevator joiner should be used if you do not feel capable of silver-soldering your own from piano wire and brass sheet.

**Landing Gear:** The undercarriage is a simple unit that should be bent to the drawing. Bind with copper wire and soft-solder the parts together. Small rubber bands give a degree of springing. The unit can be fitted in place using metal plates or a full plywood plate.

A tailskid is fitted, and this should be made from 1/16 spring steel. An aluminum



Stab and rudder use ribs-over-balsa-core construction long favored by author.



Lack of available documentation for the Dutchman makes color scheme/detail somewhat problematical, but "this is a fun machine—enjoy it for what it is."

## Flying DUTCHMAN

**Type:** RC Scale

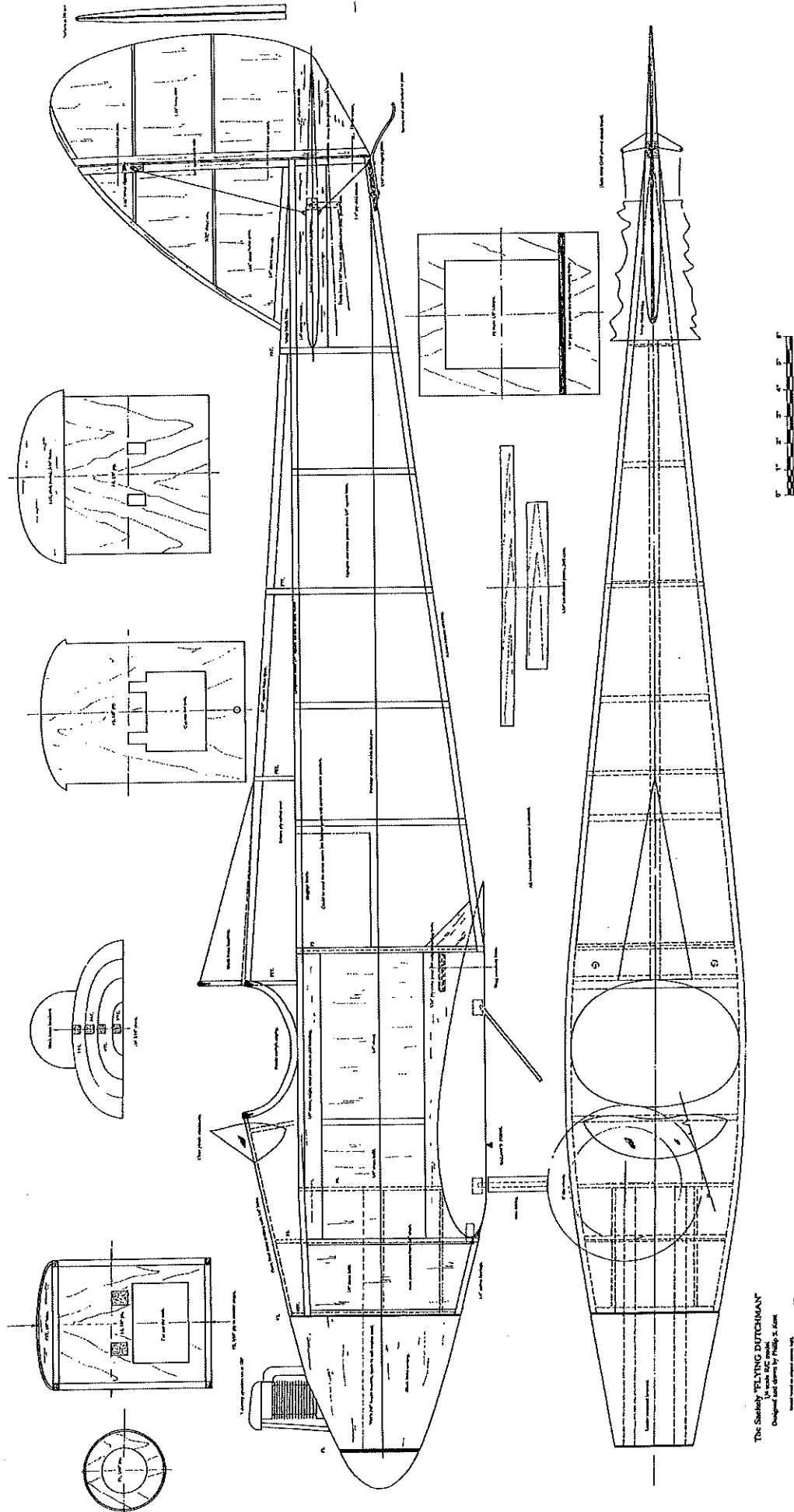
**Wingspan:** 79 inches

**Engine:** 60-75 four-stroke

**Functions:** Throttle, elevator,  
rudder, aileron

**Construction:** Built-up

**Covering/finish:** Koverall and dope



The Siskieely "FELTING DUTCHMAN"  
To make RC model  
Original line drawn by Philip S. Kent  
© 1988

dowel was used for the front wing fixing. It was fitted into the wing leading edge and a matching hole was made in the plywood former to ensure a snug fit of the wing when it is bolted in place.

A pilot should be fitted in the cockpit, along with a simple instrument panel. The cockpit edging can be from rubber or plastic tubing or commercial cockpit edging.

**Covering/Finish:** The model should be covered in one of the heat-shrink fabrics. I like to use Sig Koverall, but the choice is yours. Koverall is ideal for the plywood-covered fuselage, since it can be doped into place.

If you want to add details like rib stitching and rib tapes, now is the time to do it. Tissue tapes will be ideal on a model of this size, with small blobs of PVA glue to simulate the stitching. A coat of clear shrinking dope sometimes helps with other heat-shrink fabrics, and I always give my models a coat before final painting.

There is no definite color scheme available for the aircraft, but I suggest a red fuselage with silver wings and tail, or black fuselage with cream, white, or silver for the wings and tail. I use car cellulose for my models—it easy to obtain and easy to spray on—but use your own favorite paint.

The model needs to be fuelproofed if cellulose has been used; use any of the two-part proofers that are on the market.

Don't forget to fit the three dummy engine cylinders—it makes all the difference in the appearance of the model. Depending on the fin/rudder shape chosen, the registration numbers were 9450, small fin and rudder; 9455, rounded de Havilland style.

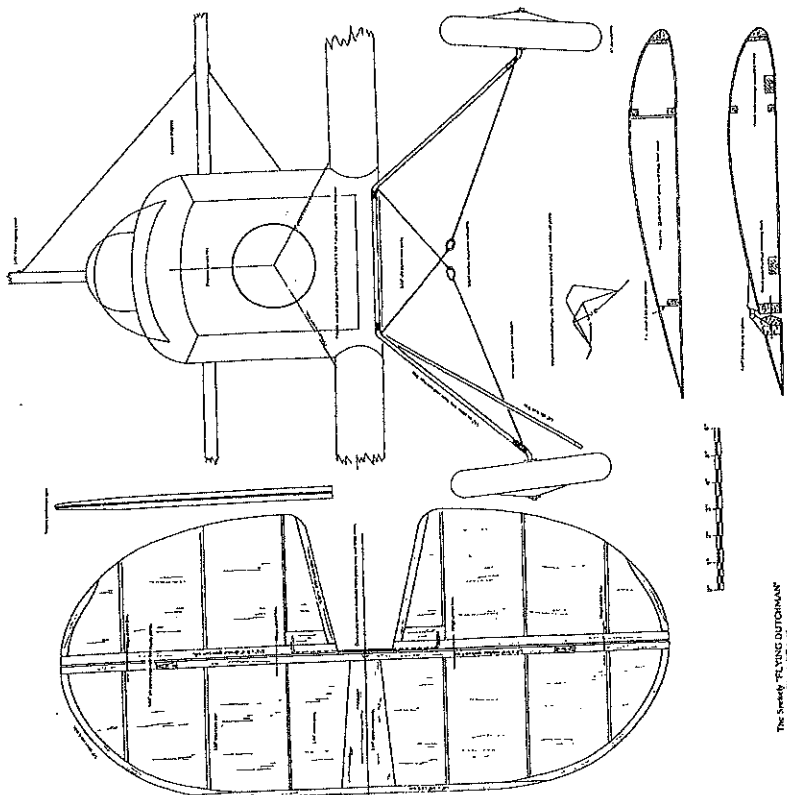
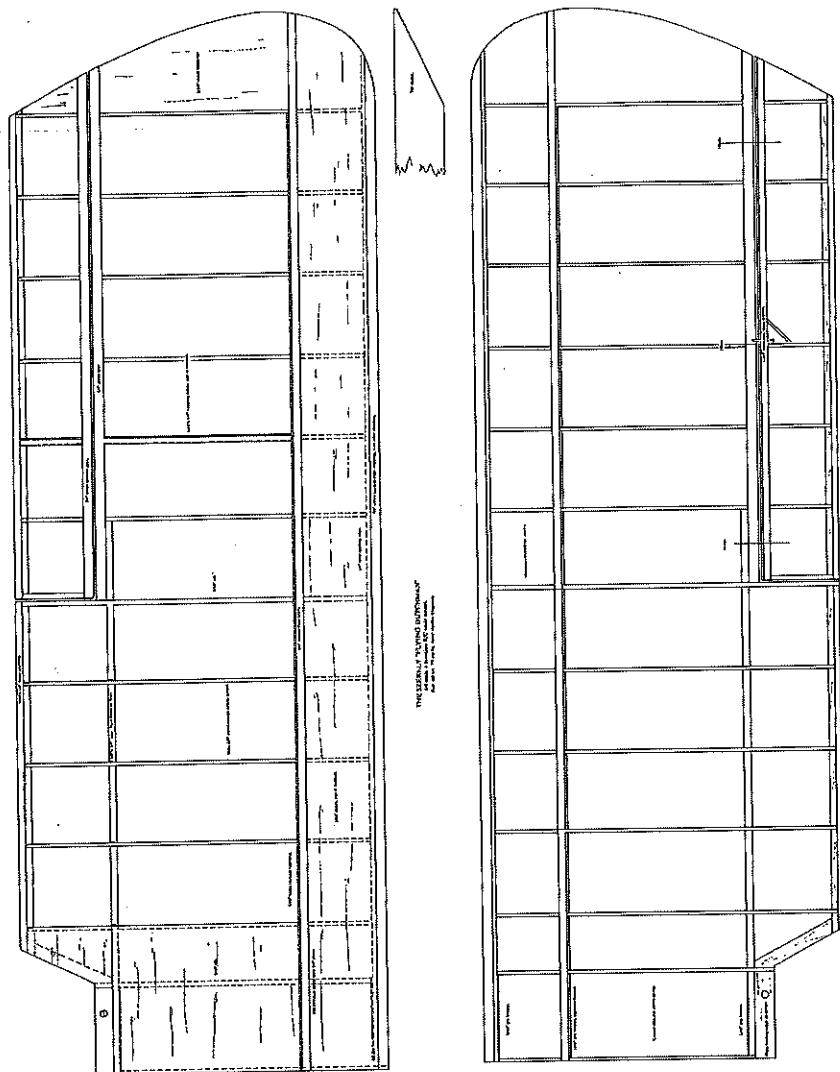
**Flying:** The three different-sized models have flown without any problems at all. The 1/4-scale version is very easy to fly, and would make an excellent aileron trainer as well as a first Scale model.

The prototype 1/4-scale model was used in a recent Scale flying-only competition in the UK and placed fifth behind the likes of Pete McDermott and Mick Reeves, so the potential is there. The two American models, flown by Vic Larsen and Ernie Harwood, caused quite a stir at their first fly-in the Dallas Small Steps Rally.

The full-scale aircraft were not intended as aerobatic mounts—the 40hp engine would see to that—but with a dive to build up speed, the models will do most of the things the average pilot will require of them; in fact, it's a great fun machine.

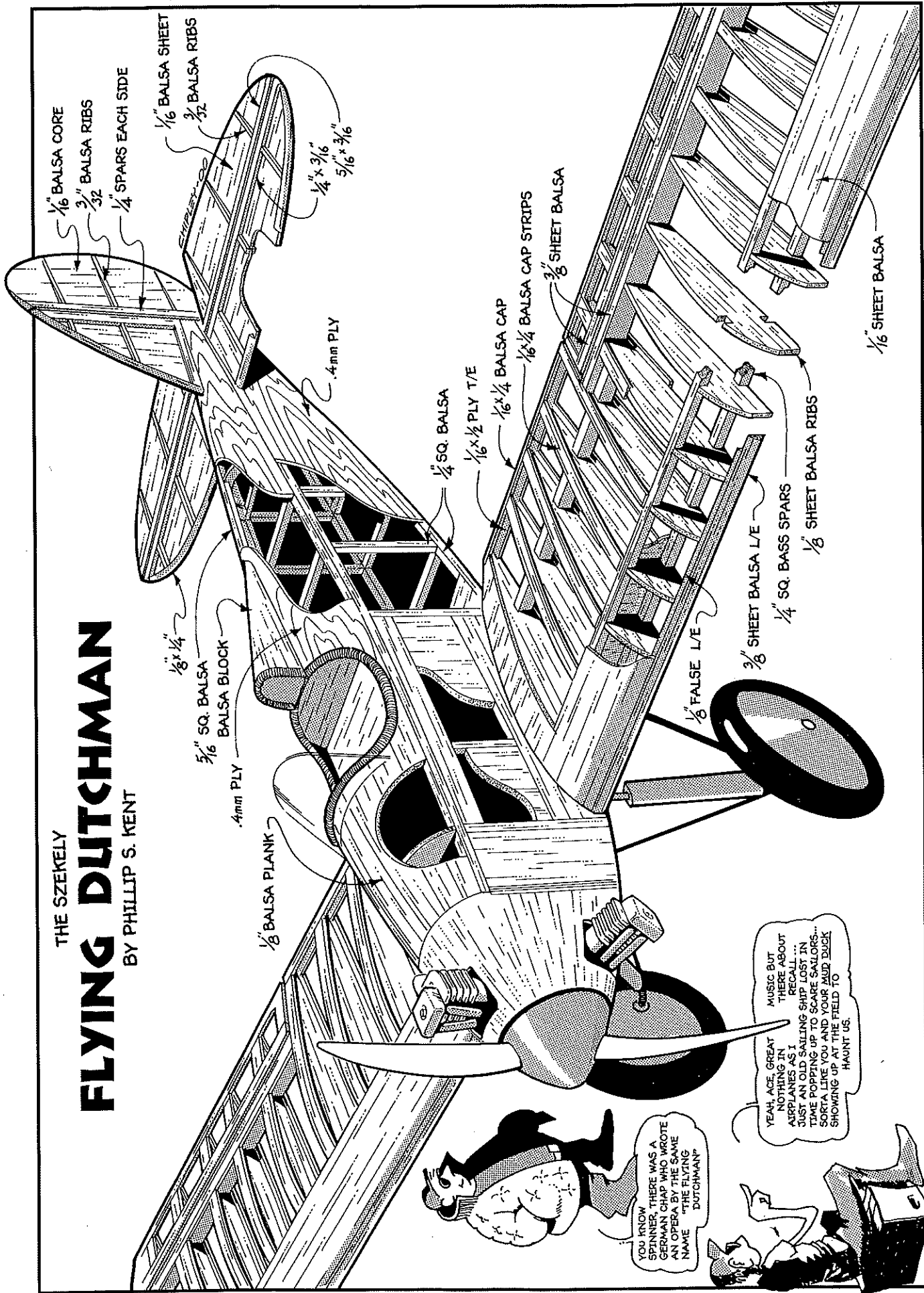
If you are looking for a small, simple Scale model, look no further—the Szekely Flying Dutchman will fill the bill. There could be problems if you want to use the model in competitions, though. The information that is available about the full-scale aircraft is very sparse, but this is a fun machine—enjoy it for what it is. **MA**

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# THE SZEKELY FLYING DUTCHMAN

BY PHILLIP S. KENT



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