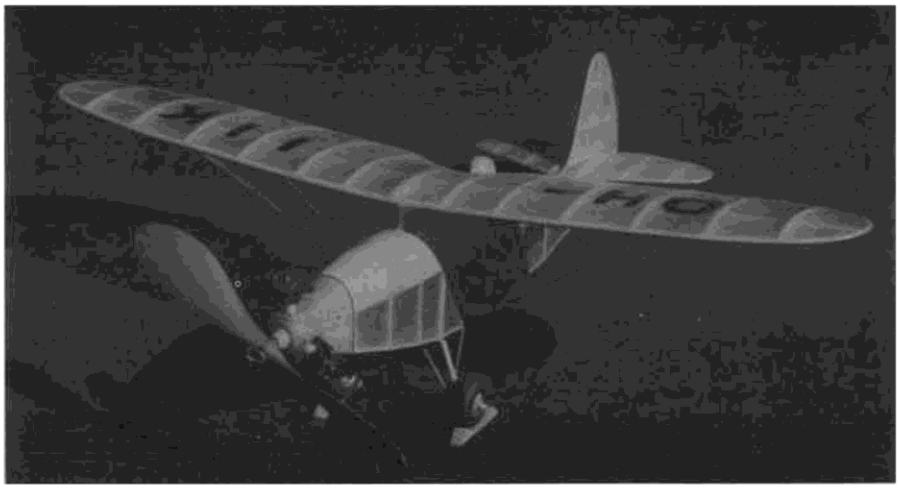
• One of the unexpected and delightful aspects of these Peanut scale model articles has been the number of friendly letters that have come from all over the world. One of the correspondents is a Finnair DC-9 Captain, Kari Heikkala, with an interest in all types of aeromodelling. As part of our correspondence, he sent me the three-views for "VIRI." This little aeroplane was built in the late thirties and is somewhat similar in concept to the more familiar British "Comper Swift." The following several paragraphs are Captain Heikkala's translation of the story of VIRI, published in the Finnish aviation magazine *Ilmailu* in 1961.

In the afternoon of New Year's Day in 1938 a wild rumor was spread in Turku, Finland: an aircraft had crashed on the roof of a building right in the middle of town. The people who rushed to the scene found that it was not a rumor, but a fact. On the roof of a small wooden house were the remnants of a small aircraft with the broken fuselage hanging partly over the street. More rumors were told until the newspapers told the full story the next day. Mr. A. Neiminen, an engineer of the State Aircraft Factory, had arrived in Turku from Tampere the day before to pay a visit to his parents. On New Year's Day, at two o'clock in the afternoon, he took off from Artukainen airfield for his return trip. The takeoff and the initial flight were uneventful, but when the plane reached the town area its engine began to sputter. Suitable places for a forced landing were not available, so the flight ended on the roof of a house. In this house lived the parents of the pilot! Thus ended the story of VIRI, the representative of Finnish prewar sport aviation. It undoubtedly could have had possibilities for wider use.

In the middle of the 1930's, when the main part of the very modest fleet of sport planes consisted of worn-out Moth and Saaski planes, the Aviation Engineer's club raised the idea of building a small plane to be used mainly in aviation clubs. The plane should be suitable for Airbatisa, easy to build, and cheap to maintain. The technical chief of the State Aircraft Factory assumed the responsibility of the main designer.



Ain't she a cutie? With a bit of re-engineering, the full-size aircraft could be a popular subject with today's ultralight crowd.

FINNISH VIRI

By WALT MOONEY . . . The Peanut Professor comes through again, this time with a quaint little single-seater fom the 1930s. Hmmm . . . how about a scaled-up version for Jumbo Rubber Scale?

A 1/10 scale model was then built and tested in the laboratories of the Czechoslovakia State Aircraft Factory. The results showed that the plane could be expected to meet the designer's goals. Choosing an engine for VIRI was not an easy task, as we Finns did not have much experience with sport plane engines at that time. Already then the price was an important factor. Finally, an American engine was chosen, a Szekely Jr., three-cylinder, aircooled radial engine, developing 40 hp. Construction began in the first half of 1936, and on September 15 the plane was rolled out. Test flights were begun and the aircraft was registered on May 12, 1937, as OH-IIK, where India-India-Kilo stands for the owner, **I**lmailu**i**nginoorien **K**erho, *or Aviation Engineer's Club. The test flights gave mainly satisfactory results and the 20-odd civilian and military pilots who flew it mainly praised it as an aerobatic trainer, but it was not as stable as it could have been. However, VIRI became known as an aerobatic performer in the hands of Mr. Nieminen who flew it at several airshows around Finland.*

It was of wooden construction throughout, with the fuselage and tailplane and fin covered with plywood and the rest covered with canvas. The instrument panel had rpm, oil pressure, speed, and altitude indicators, as well as a compass.

P.S. It had flown a total of 93 hours when it crashed. Its color was a brownish orange.

There are no new structural concepts in this model if you have been following the Peanut articles in **R/C Model Builder.** The pleasing shapes of the flying surfaces make the use of laminated outlines desirable as well as the use of sliced wing ribs to accommodate the elliptical taper. I used three pieces of

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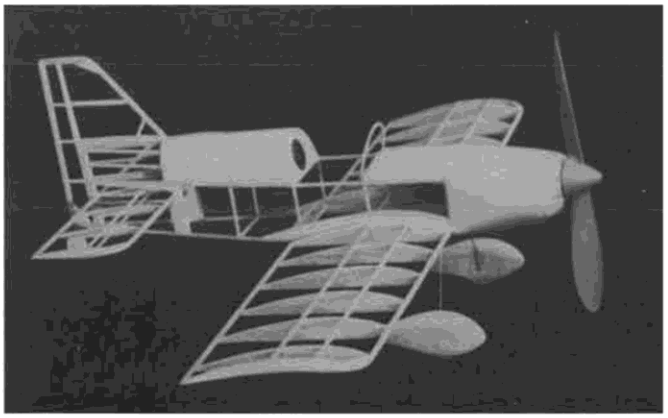
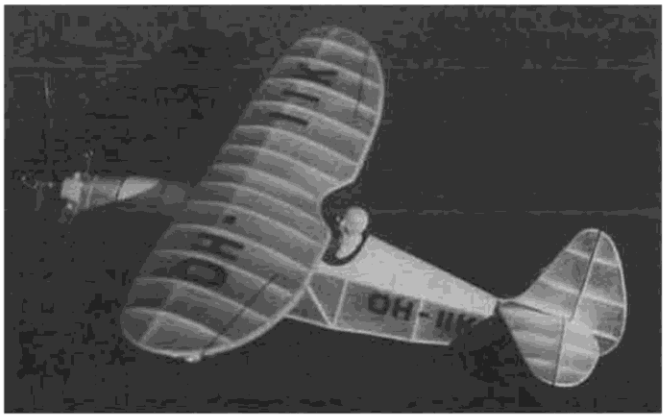


Walt's next Peanut is the BD-8 stunt airplane. Might have some dihedral by the time he's finished. Has mucho wing area.



Nicely curved wing and tail outlines are laminated from basswood strips, using white glue. Original model covered in orange tissue.

1/16x.020 basswood to make the wing tips and trailing edge as a single lamination. Wet the strips and shake off the excess water, then use white glue as a bonding agent between the strips. These can be bent around a cardboard or balsa form cut to the inside shape and size, or you can put a series of pins around the inside of the outline and use the pins as a form. At sharp bends the pins need to be placed no more than 1/8 inch apart to keep from breaking the thin basswood strips as they are bent. Tail surface outlines are made in a similar fashion. Let the outlines dry thoroughly on the forms before using them on an assembly.

The wing spar is cut out as a single piece from 1/16 sheet balsa, but could be spliced with dihedral braces to save wood. The tail spars are full depth and can be made to match the front view. Thick tail surfaces are a rarity on Peanuts, but they are scale for VIRI.

The top of the fuselage is covered with sheet balsa; 1/32 is called out but it is a good idea to sand it somewhat thinner. Four pieces were required to cope with the fuselage shape. These run between formers 1 and 2, 2 and 3, 3 and 6, and 6 and 8 respectively. These pieces are a cut-and-fit proposition. After cementing one piece in place, carefully bevel it where the next piece will be attached. Then the edge of the next piece must be carefully beveled to fit the first. Note that all the top covering butts against the top surface of the fuselage longerons and does not overlap them. The formers are all just a little narrower than the fuselage frame at their station to allow for this.

Use a soft, light piece of balsa for the pylon.

The struts on the model were cut out of 1/64 plywood, after which 1/32 sheet was added top and bottom and then carved and sanded to the streamlined shape. Note the very short stub strut at each side of the fuselage where the main struts attach.

Balsa balloon type wheels for this model, 3/4-inch diameter at $.30 per pair, were obtained from Mike Mulligan's Old Timer Models, P.O. Box 913, Westminster, CA 92683. His 3/4-inch wheels are slightly oversize and, happily, just match our scale diameter.

Williams Bros. plastic cylinders were used as a basis for the dummy engine. The crankcase is block balsa with a plastic thrust button from Peck-Polymers. A plywood front face is built up from several lavers of 1/64 plywood. The valve pushrods and rocker arms are simulated with bent pins. Inlet and exhaust pipes are approximately 5/64-inch diameter insulation taken from some electrical wire. This tubing was slit and used for the cockpit edging also.

AND OF COURSE, our illustrious editor says all models must have a pilot figure* (probably because he was raised before the days of Women's Lib and has always been frustrated because he couldn't play with dolls as a boy), so we carved a pilot figure out of styrofoam, painted it with plastic paints and installed it in the cockpit.

The model in the photos weighs 16 grams with a 14-inch loop of 3/32 rubber installed. It balances at a point about 3/16 of an inch in front of the spar and flies like it is somewhat nose heavy. Recommended balance position would be directly under the wing spar, but the one in the photos has not been flown with the balance point in that position yet. Have fun with your Finnish VIRI.

(*I was never told I couldn't play with dollies until after I got married. Never knew what I was missing until it was too late.) •