

Come with us to the days of yesteryear when a great silver bird plied the airways . . . join us now as with a hearty roar of its engines, the Ford Trimotor flies again!



By Stu Richmond

Wow! A head-on mid air collision --- whattamess! It happened at a normal Sunday flying session --- right in the middle of the field. I lost my Sport Scale Curtiss Robin, Bob Snyder lost his fine Bridi Kaos 60 --- pieces fluttered down for an eternity --- everybody had plenty of time to see it. I salvaged the wonderful Saito .45 4-stroker and the pair of wheels; luckily the Saito was in a Kraft KM-40R long engine mount (one of those black ones) and the mount absorbed and crushed under the violent impact. Bob Snyder salvaged less!

The following night at our regular monthly meeting, our membership chairman, Bruce Wedlund, who is a law enforcement officer, called Bob and me to the front of the room and gave us written official citations for littering the field --- the laughter roared --- Bob and I still felt punk about the previous day's mid-air.

My Curtiss Robin (from a World Engines' kit) had flown a lot, and it

had been an entrant in Sport Scale at the Tangerine International R/C contest in Orlando the prior two years. I had my fun with it and if it had to "go," it sure went in exploding style. Besides, the next Tangerine contest was ten months away so I could go on to other building projects. The Tangerine contest, by way of explanation, is the **largest** independent contest for R/C held in the world. For three days after Thanksgiving, the R/C glider competition is held by one Orlando club (The Buzzards) and attracts about 75 entrants. Then in the time between Christmas and New Years the power competition is held, and it is made up of five semi-concurrent contests (hosted by the Remote Control Association of Central Florida) and draws about 200 entrants with many hundreds more modelers who come to spectate and catch rays --- or be in the warm winter sun. The Tangerine draws some of the best R/C competitors, and always has foreign entrants who add international flavor.

Since spectating is a drag, right after summer I started thinking what new model I could build for the Tangerine Sport Scale. Tangerine prizes are the greatest. This year there



ABOUT THE AUTHOR

Stu Richmond, 57, started his modeling career at the age of 7. He would purchase a 1¢ balsa glider and cut it up to make two smaller gliders . . . neither of which flew! The photo shows Stu holding 2nd Place Sportsman Tangerine plaque and Eastern Airlines letter for two free tickets. Trophy was presented to Stu by Eastern Airlines in 1950 when he won the Southeastern Model Meet 37 years ago.

He's a Georgia Tech graduate (same class as Astronaut John Young) and is retired from the photo processing industry. Two of his three sons are active in R/C pylon racing. His R/C construction articles have appeared in RCM and he writes regular columns for model publications, one of which is R/C Model World (published in Great Britain).

Stu and his wife Lynn live in Central Florida where R/Cing is enjoyed year round.

were beautiful plaques in different categories made by a modeler, Dave Davison of Plaques International. There was also the Noel \$100.00 cash prize for the best scoring 4-stroke powered Scale score. There were special awards for best in Vintage, Military, Civilian and Jet models. Airtronics had donated a fine Championship Series R/C system to be awarded to the last scale entrant's name drawn from the hat. Similarly, Futaba Corporation of America gave a new Conquest system in sponsorship of the pylon racing contest.

Additionally, Eastern Airlines had offered (for the best score achieved by a replica Eastern Flagship), round trip tickets for two to fly free anywhere on their system, USA or the Caribbean --- whatta prize to win!

So starting from scratch gave a fine perspective --- ideally I should build a 4-stroke powered vintage or jet model of an aircraft that had flown in the

Enya .40 4-stroke.

Additionally, I was presented an Eastern Airlines envelope with a letter inside that said: *Congratulations! You have won a round trip ticket for two anywhere on Eastern Airlines system in the U.S. and the Caribbean. We are pleased to have you as our guest, and look forward with pleasure to serving you. Sincerely, Alexander M. Houston, Manager Passenger Sales, Orlando.*

In 1986 I celebrated 50 years of model building --- what a wonderful golden age prize to enjoy with my wife --- through modeling.

And now I can also enjoy Sunday sport flying with the Trimotor which flies just great and is lots of fun --- it was continually simplified in my mind before each building session (you might enjoy reading "Simplify and Add Lightness" in the February '86 issue of RCM). The model took about 125 concentrated hours of work from

You may find the following bits of background of interest. The model is scaled up from a 3-view that was in a portfolio of drawings of aircraft that Eastern had flown. The portfolio was reportedly given as a commemorative gift to some first class passengers in the mid-1970s. The drawings are collector's items now --- some are found in Eastern's offices, in Orlando. New Signs and Graphics, Inc. in Orlando allowed me to use their overhead projector system for plans enlargement. They also provided me with tips on the application of graphics --- like mix a few drops of dishwashing detergent in warm water and wet the MonoKote with the mix before putting on the graphics --- that allows sliding your "cut outs" into perfect position. Great technique that worked perfectly.

There are lots of .40-.49 4-stroke engines around and any have more than adequate power for this model. A

TRIMOTOR

Eastern Airlines fleet. Since 4-strokes haven't yet worked well in jets, the focus was further narrowed to the Pitcairn Mailwing flown from 1928 to 1935 (a biplane), the Ford Trimotor flown 1930 to 1932 (three engines --- ugh!), the Curtiss Condor flown from 1930 to 1934 (biplane with two engines --- ugh, ugh!), and the Douglas DC-3 (would need special made retracts --- awful). Others like the Lockheed Electras, DC-7, and the Lockheed Constellation were ruled out as being too complicated for me.

It looked like the three engines was the way to go --- I could run a 4-stroke for primary power up front and two Cox .049s in the outboard nacelles would add extra noise. The Ford Trimotor was the choice --- it would qualify for five possible awards and, best of all, if the Ford Trimotor was finished in the trade dress of Eastern Airlines, I'd have a chance for the two round trip Eastern tickets.

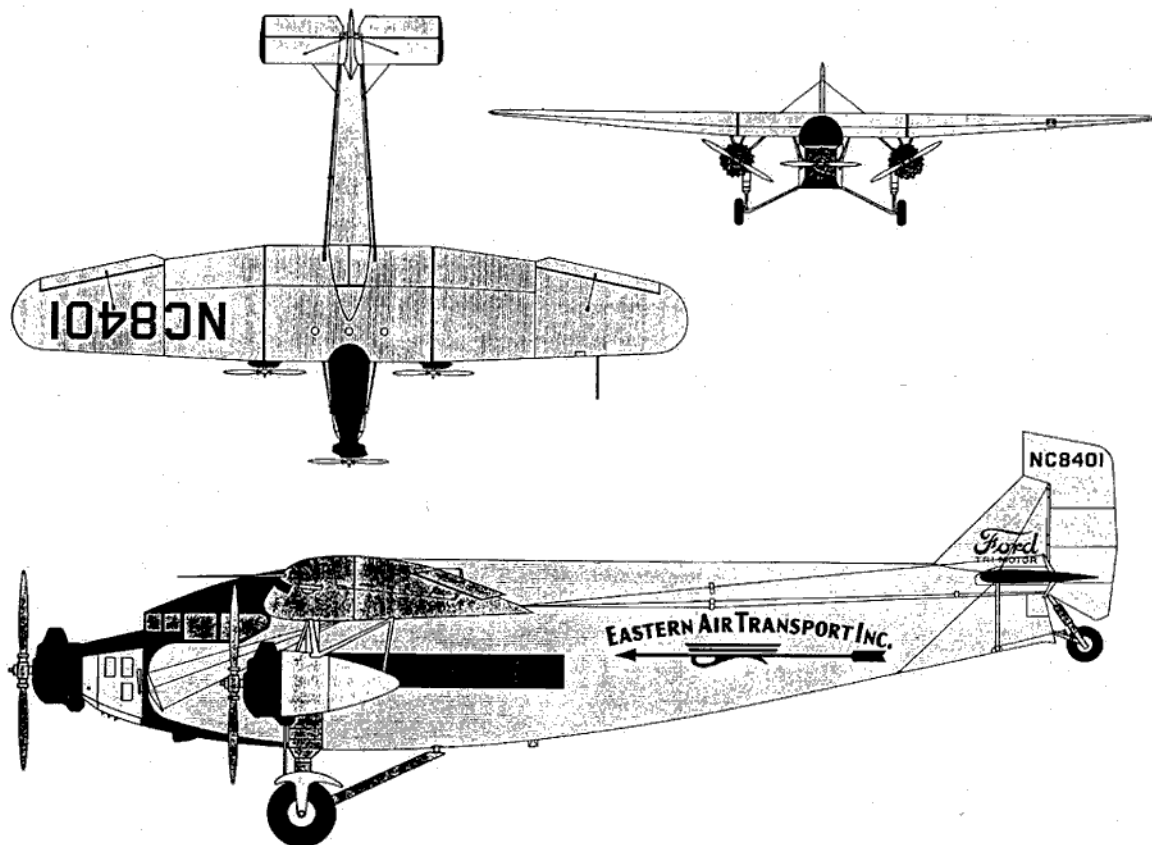
To quickly sum up the outcome of this reasoning, on Sunday December 29, 1985 at the 18th Annual Tangerine contest in Orlando, Florida, I won 2nd place (only 3 points out of first) in Sport Scale with a 1/12 scale Ford Trimotor in Eastern trade dress. It was scratch-built in ten weeks time and powered by a single

the first start at plans drawing to the first flight.

Since this article makes the plans available to you, I suspect you could build the model in 2/3rds the time mine required to finish, since a lot of time was spent in the planning and structural design to make sure the Ford came out under 6½ pounds (it weighs 6¼ pounds ready to fly) so that the wing loading and power loading would be in the most satisfactory range.

12 x 5 prop cut back to 11" diameter proved proper pitch-to-flying speed on my model. I ended up using my Enya .40 4-stroke. The peak airspeed of the last real Fords was around 135 mph with a landing speed of about half that --- a 2:1 speed range. One object in building to a 6½ pound maximum weight was to attain maximum realism in flight by using safe adequate power, a proven force set-up





Material Parts List for R/C Ford Trimotor

- 1 — 1 1/4" or 1 1/2" tail wheel
- 1 — pair 3" wheels for pavement or 3 1/4" wheels for grass runway
- 3 — rolls aluminum #205 MonoKote
- 1 — roll insignia blue #207 MonoKote
- 1 — K & S 1/4" streamline aluminum tubing
- 1 — K & S 1/2" streamline tubing
- 3 — K & S 3/8" streamline tubing
- 2 — 5/32" x 36" music wire (landing gear)
- 1 — 1/16" x 36" music wire (tail wheel, etc.)
- 4 — 1/4" x 1/2" x 48" spruce or bass (wing spars)
- 4 — 3/8" balsa triangular stock (fuselage)
- 1 — 1 ounce bottle CA +
- 2 — 1 ounce bottles CA
- 2 — 1/2" x 3" x 36" (trailing edge and wing tips)
- 2 — 3/4" x 3" x 36" (leading edge of wing & cowling blocks)
- 1 — Kraft KM 40R engine mount #200-066 or equivalent **long** mount
- 2 — 3/32" x 4" x 48" balsa-hard (fuselage sides)
- 2 — 3/32" x 3" x 36" balsa-hard (glues to above to make fuselage sides)
- 1 — sheet plywood 1/16" x 12" x 24" (fuselage doublers, etc.)
- 4 — 1/16" x 3" x 36" balsa (top and bottom of fuselage, etc.)
- 1 — 1/8" x 6" x 12" plywood (landing gear mount, etc.)
- 1 — 3/16" x 6" x 12" plywood (firewall, etc.)
- 3 — 1/16" x 4" x 48" balsa (to cover tail surfaces, etc.)
- 2 — 1/4" x 1/4" x 36" balsa (fin and rudder, etc.)
- 1 — 1/4" x 2" x 36" balsa (misc.)
- 4 — 3/16" x 3/16" x 36" balsa (for frame of stab/elevator)
- 3 — 3/32" x 4" x 36" balsa (for wing ribs, etc.)
- 1 — 3/8" x 3" x 48" balsa (ailerons and wing tips)
- 1 — 3" x 3" x 18" balsa (nose block is 4" long; each nacelle is 7" long)
- 1 — 1/2" balsa triangular stock (to anchor top of nacelle struts inside the wing)
- 1 — 3/4" K & S streamline aluminum tubing (main gear's oleo struts)
- 9 — .047 x 36" music wire (dummy control cables that run on the outside of the fuselage)
- 2 — sheets of tin K & S #254 .008" x 4" x 10" (cowls, louvers, step, etc.)
- 3 — Rev-Up 9 x 7 Series 400 props (two outboards plus one for static judging)

- 1 — 12 x 5 prop for flying (11 x 5 is second choice)
 - 2 — 1/4"-28 bolts 1 1/4" long with four nuts and four nylon washers (mounts for the dummy props on the two outboard nacelles)
 - 2 — 10-24 bolts 1 1/4" long (wing hold-down bolts)
 - 1 — pack 5/32" wheel collars
 - 1 — pack 4-40 bolts and blind nuts 1" long (for mount to firewall)
 - 1 — pack 4-40 bolts 1 1/4" long (for engine mounting)
 - Scraps of black and white MonoKote (windows and people)
 - Miscellaneous small screws
 - 1 — pack aileron bellcranks
 - About a dozen clevises and matching rods
 - 4 — long nylon control horns
 - 1 — Pactra Formula-U Aluminum #20077 4 ounce (you might need 2)
 - 1 — Pactra Formula-U Black #20070 4 ounce
 - 1 — Pactra Formula-U Dark Blue #20074 4 ounce
 - 1 — 1/8" diameter x 36" hardwood dowel (engine's rocker arm covers)
 - 1 — 4 ounce Kraft or Sullivan or Du-Bro fuel tank (better use 6 oz. for a 2-stroke engine)
 - 1 — outer NyRod (glue to bottom inside fuselage corner for radio antenna to slip into)
- Also you'll need miscellaneous items like solder, wrapping wire, fuel tubing and the types of things you normally have around the workshop and in your scrap pile.

Pre-flight notes:

- 1. Be sure model balances at the wing spar.
- 2. Add weight to either wing tip to balance level.
- 3. Wheels should slightly toe in for flying off pavement.
- 4. Rudder should swing (at its trailing edge) 2" right and left of neutral.
- 5. Elevator should move (at its trailing edge) 1" up and down from neutral.
- 6. Ailerons should move (at their trailing edges) up 1/2" up and down from neutral.
- 7. Be sure all control surfaces move in the correct direction.
- 8. Wait for a low wind, low gust day and make first take-off directly into the wind for your first flight.
- 9. Don't fly until your engine is well broken-in and your radio range checks properly and has been test flown in an old airplane first.



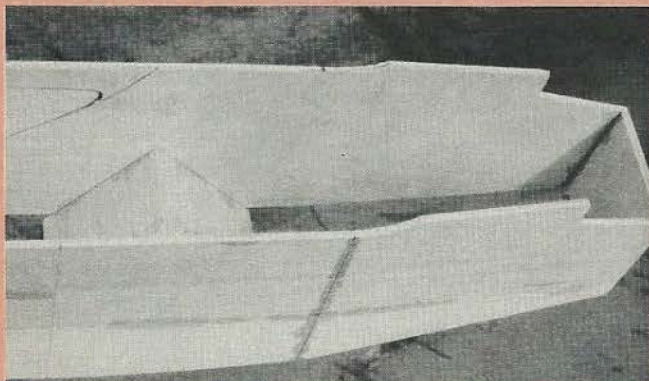
that was used in my P.T. 20 and P.T. 40 designs, and by **not overpowering** this model. One of my official flights netted an average uniform score for **realism in flight** of 9.5 points out of a possible 10!

My history investigation showed that Henry Ford's aircraft designers originally came up with such a poor airliner design that they feared for their jobs --- they knew what they had on paper wouldn't satisfy their demanding boss. Meanwhile, Admiral Richard E. Byrd, the polar explorer,

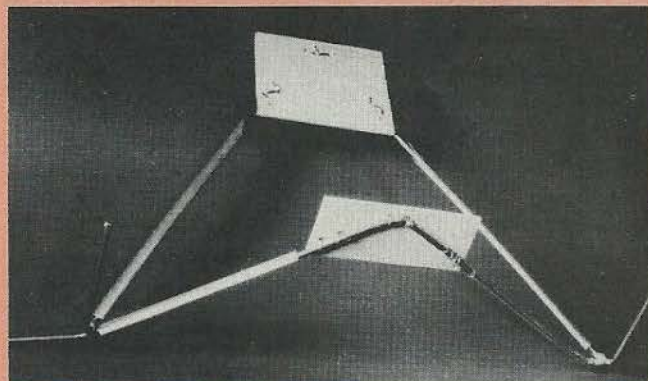
was having great success with a Dutch-built Fokker Trimotor who's wing design was directly traceable to the WW I Fokker D-VIII Flying Razor --- thick in the center and very thin at the tips.

Byrd and Ford were friends, and when the Admiral flew to Dearborn with the Fokker to visit Ford, the aircraft was courteously parked overnight **inside** the Ford hangar. That night the engineering group descended like vultures on the Fokker --- it was a "save yer soul" darkness of

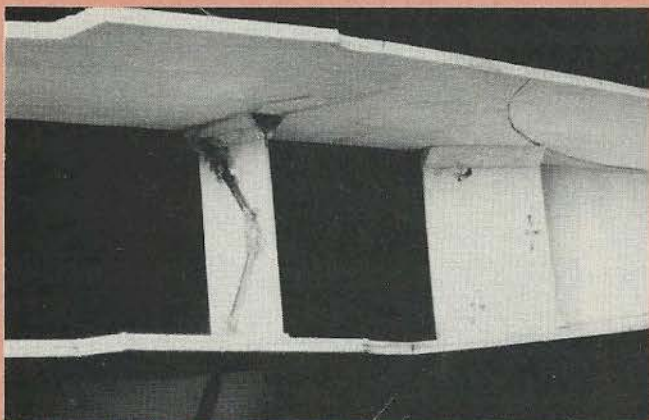
night clandestine rip-off! The group used long lengths of copper tubing and bent them to conform to virtually every surface of the Fokker. Ford was satisfied with the resulting engineering drawings from his group (much later he did learn of the nighttime industrial espionage) and the first of about 200 Ford Trimotors was soon under construction. Later the USA football "great," Knute Rockne of Notre Dame, was killed when the Fokker he was a passenger in had the wooden box-type wing spar



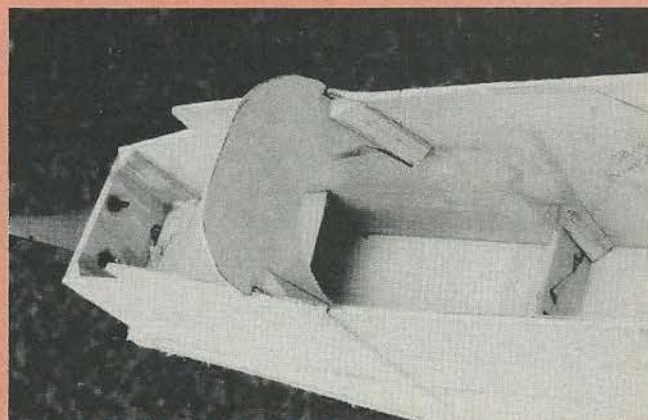
Fuselage sides joined by dummy spacer (which gets removed).



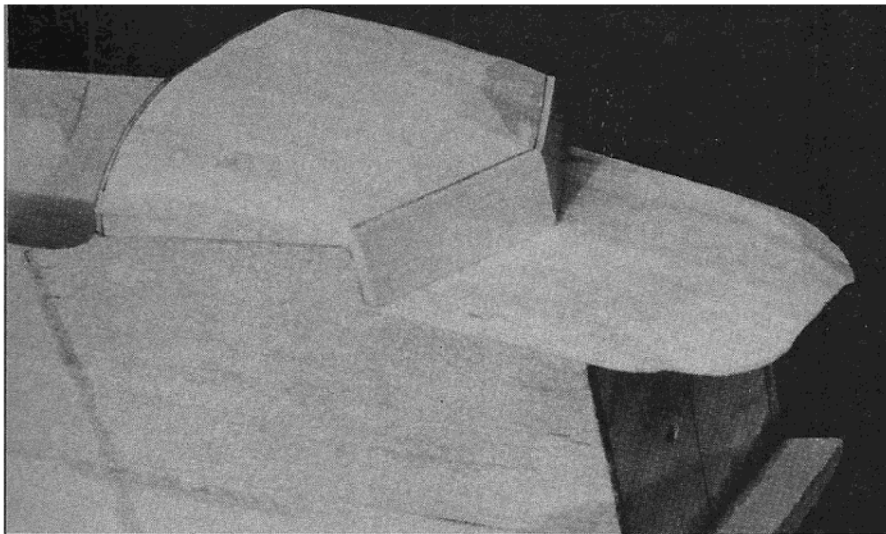
Landing gear ready for installation.



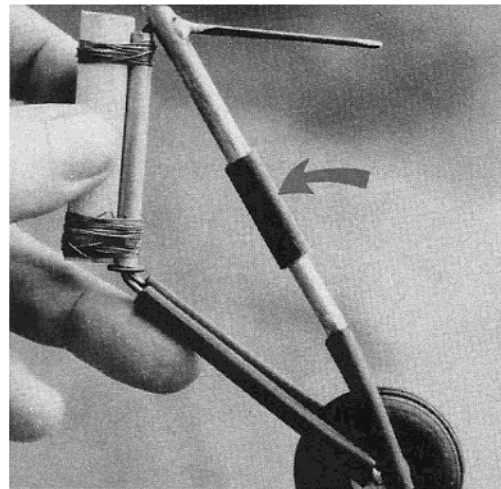
Gear installed with 3/8" triangle stock.



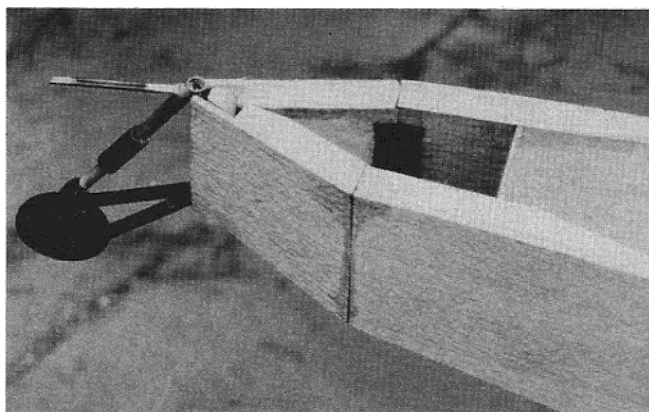
Ply bulkhead for front wing hold-down in place w/triangle stock. Tank platform is forward and below bulkhead.



Windshield in place.



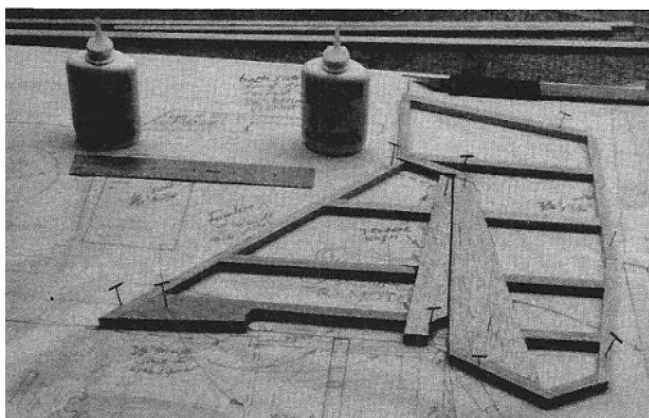
Tailwheel assembly in 1/16" wire, telescopes at arrow. Tailwheel swivels in tubing which is bound and glued to hardwood mounting post.



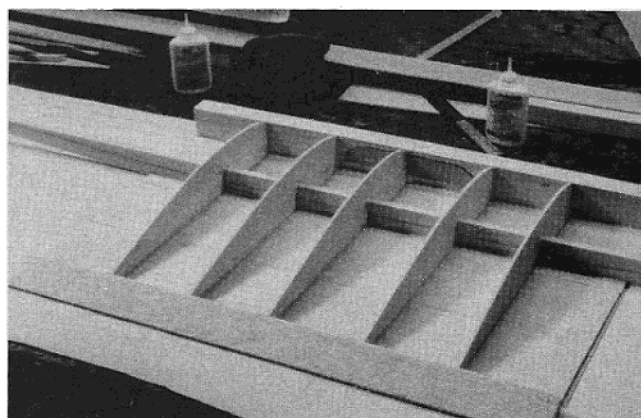
Tiller arm for tailwheel sticks into rudder.



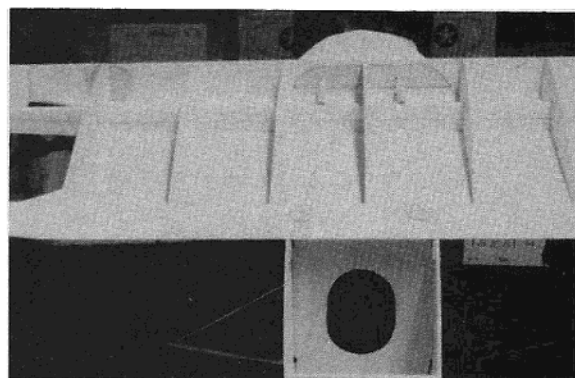
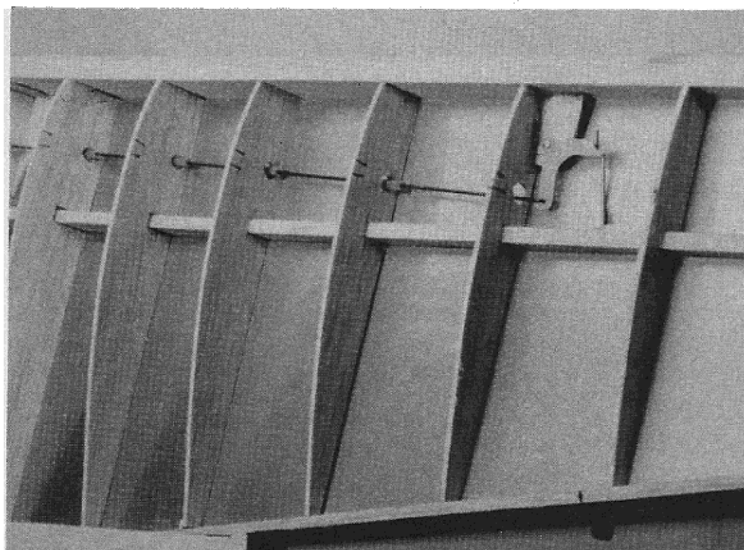
Stabilizer under construction. Ply elevator joiner in position.



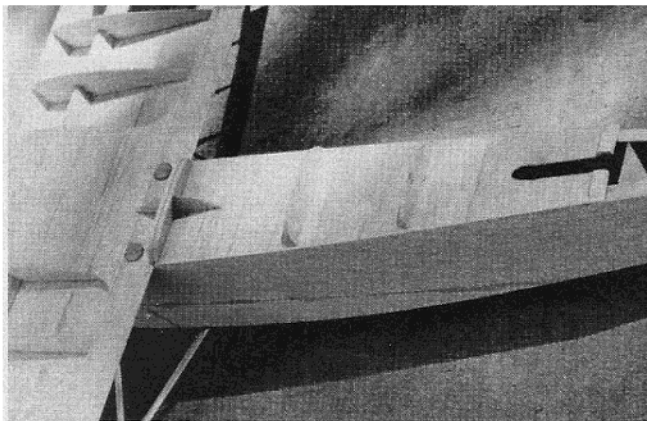
Fin and rudder. Waxpaper keeps CA from sticking to plan.



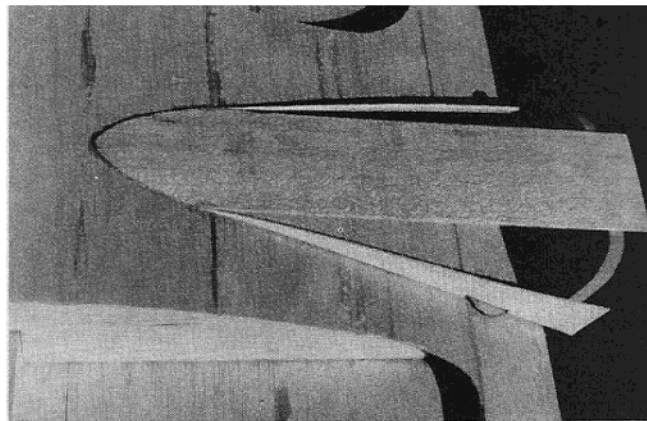
Wing spar is pre-built of four parts. Wing's center is built first.



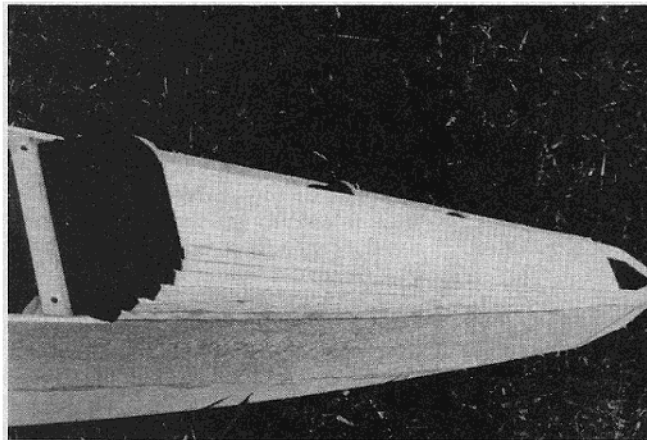
LEFT: Carl Goldberg aileron crank in place with linkage. Actuating 1/16" wire rides in bushings cut from NyRod. ABOVE: Two dowels and two bolts hold wing in place.



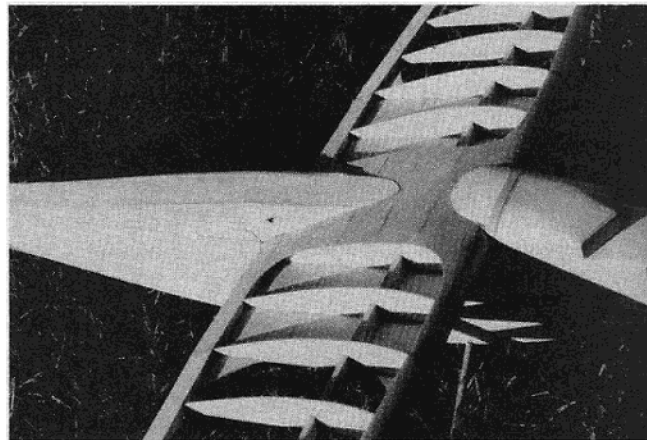
Bulkheads are cut and positioned to support turtledeck.



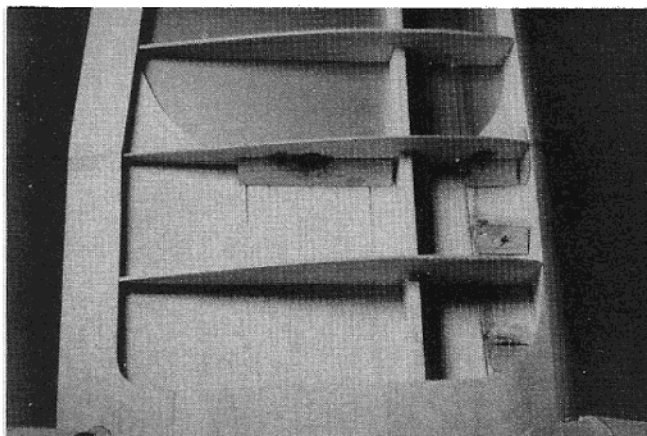
Turtledeck over wing is started.



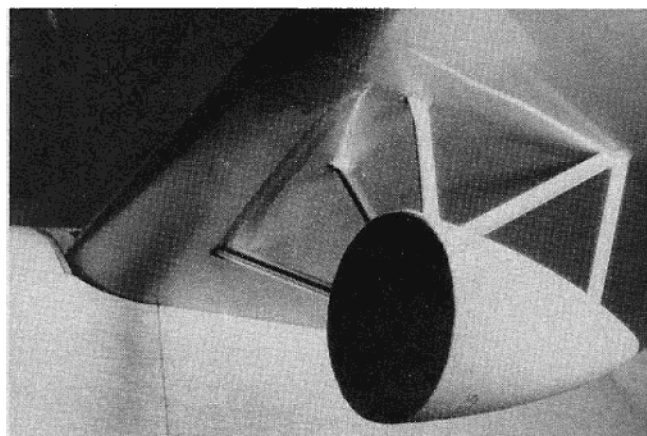
Turtledeck over aft fuselage is started.



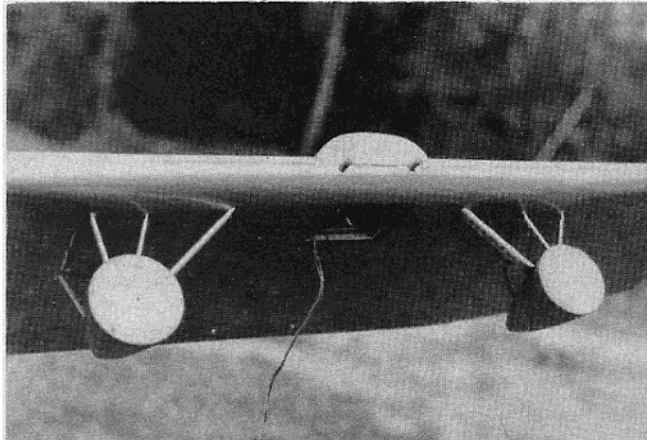
Turtledeck ready for block sanding.



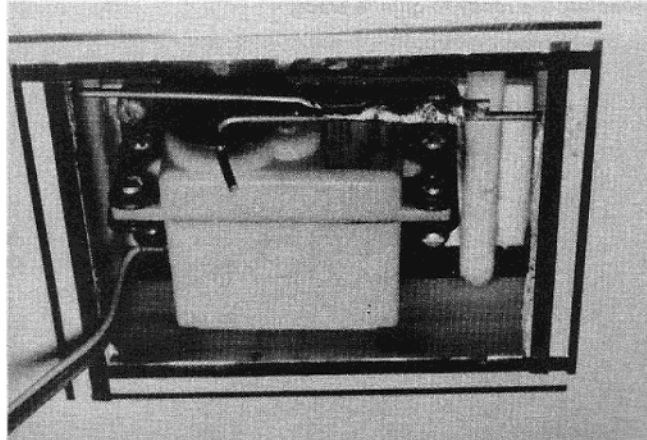
Bottom of wing is covered BEFORE the struts and nacelles mount in place. 1/2" triangle stock anchors the top of the struts.



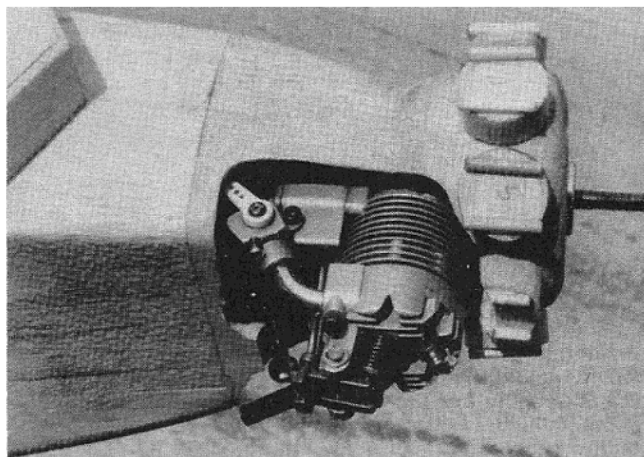
Here's the left nacelle mounted ... looks tough ... is simple to do!



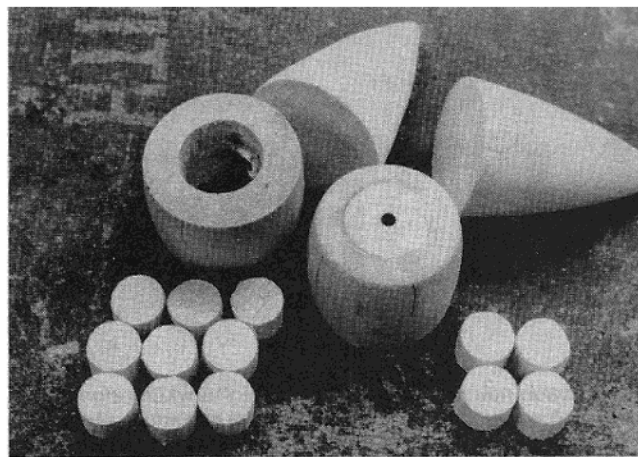
Both nacelles are mounted and aileron servo is in place.



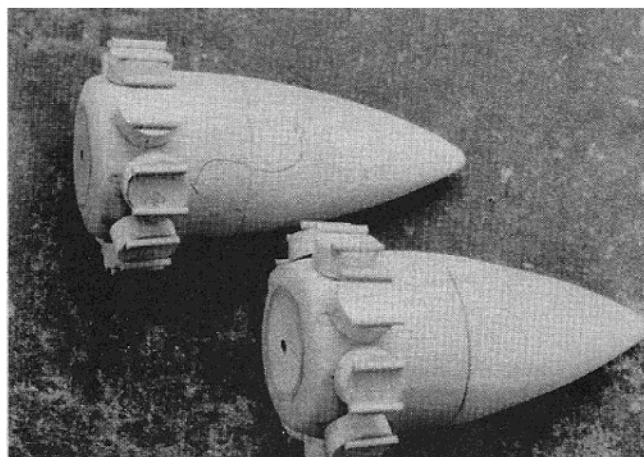
Close-up shot shows Kraft KPS-25 in place on nylon tray between the two front hold-down dowels.



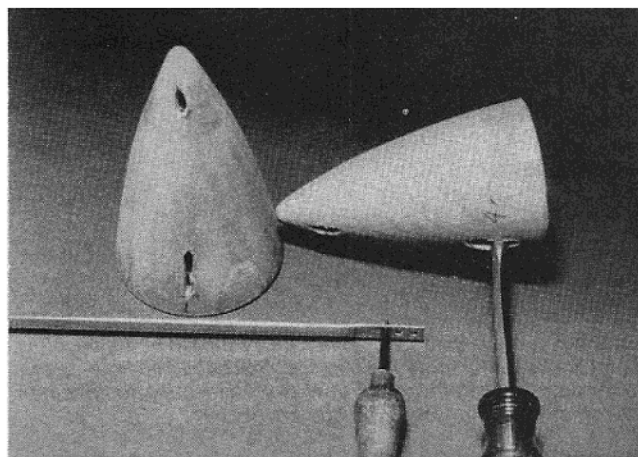
Dremel tool with coarse sanding disc or cylinder quickly opens the cowl to clear the engine.



1/8" plywood disc closes the front of outboard nacelles.



Outboard dummy engines and nacelles.



Ice pick or awl used to punch holes in mounting strut ends per plans ... screwdriver makes strut openings in nacelles ... see text.

4. Straight Flight Out
5. Procedure Turn
6. Straight Flight Back
7. Stall and Recovery
8. Flight in Triangular Circuit
9. Landing
10. Realism

If you're just an average fun-loving Sunday flier, these simple maneuvers are all easy. If you're a dead-serious scale builder, you can get plenty of scale documentation (try the Smithsonian Air and Space Museum

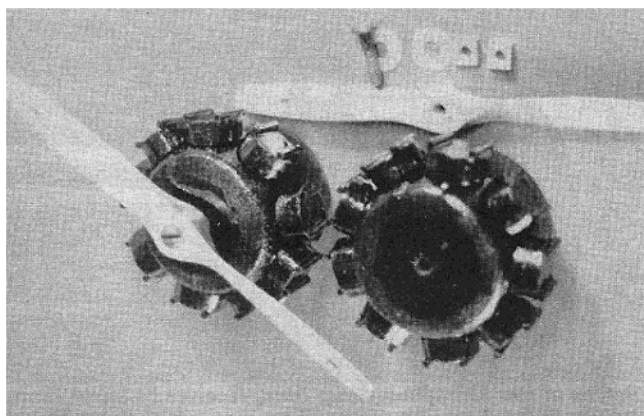
in Washington, D.C., or try Ford Motor Company, Dearborn, Michigan, or your local library).

In Scale Masters static judging I lost points because I had no fenders over the tires which showed in one of the 3-views. Points were lost because the rear wing hold-down holes (through which the bolts pass) weren't closed before judging. More points were lost because a seam was visible behind the wing where it comes off the fuselage. One judge later told me it cost me two

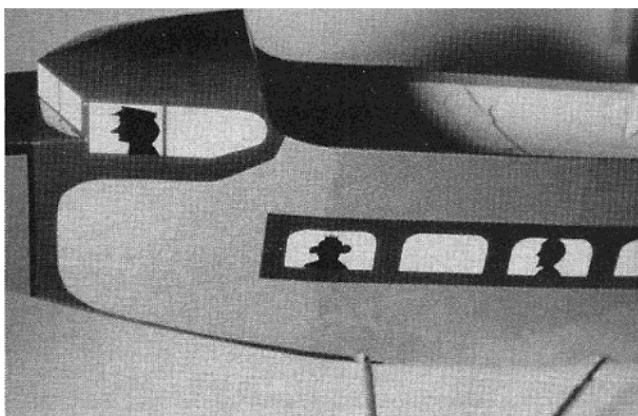
points because the aluminum MonoKote wasn't corrugated as the real airplane was. I told him I'd cover the next model with corrugated aluminum MonoKote --- Hawwww.

Building Your Ford Trimotor

It seems foolish to write on and on for pages about how to build a decorated simple box that holds an R/C system and is pulled by a single engine. Since Confucious say "One picture is worth ten thousand words" (he's usually quoted wrong), I thought



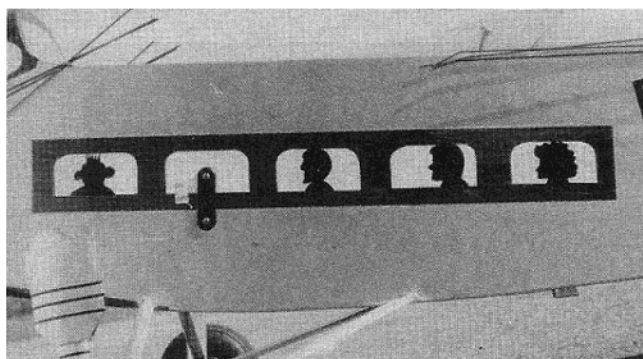
After a coat of K & B resin and two coats of Formula-U black, we have our dummy engines. Props spinning on the dummy engines give a fine illusion in flight.



AMA rulebook says pilot(s) must be visible in flight. Cut with scissors and imagination.



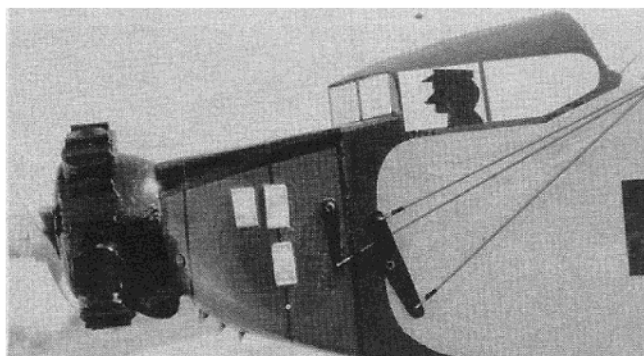
Registration numbers are cut from sticky vinyl like sign shops use. Dish washing detergent with water is rubbed on MonoKote first . . . then the numbers are slid in place easily and all moisture is squeezed out.



Landing gear's upper oleo hides nicely inboard of the nacelles. Front .047 dummy wires fit up into leatherette-lined hole . . . rear .047 dummy control wires fit down into a leatherette-lined hole on top of the wing, per scale documentation.

it best to take a series of construction photos that can be your ready reference in building the Ford. I would like to carefully guide you with words about weight though. The **only** hard pieces of balsa wood are in the two fuselage sides. The structure has been very carefully thought out to require a piece count similar to some high-winged R/C trainer models. Wood is sized to take the stress loads, and the built-up wing spar of spruce easily withstands loops, rolls, spins and even snap rolls. Except for the fuselage sides, I urge you to buy and build with the **lightest** and

straightest balsa you can find! I purchased Sig's Contest Grade of balsa from the three Orlando hobby shops, and my finished weight came out 1/4 pounds **below** target. If you can't find real light balsa, you'll only weigh about 6 to 8 ounces more with your finished model, but you will have gone through sheer agony carving and cutting the blocks and planks to shape. It's much smarter to pay the few extra pennies for the lighter wood that's quite soft and easy to carve. There is **no** piece of balsa in the Trimotor that carries much stress except for each of the two fuselage



Brass tubing drain pipes from engine compartment in place, louvres as shown in scale documentation drawing in place, thin D & D Graphite used for outside rudder horns and elevator horns, .047 wires in place stick into a leatherette-lined hole in the bottom of the wing.



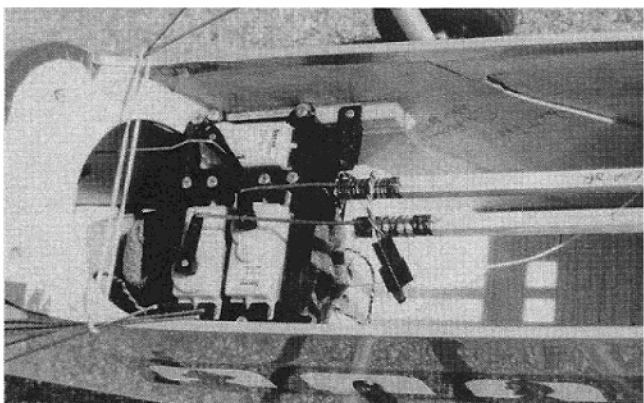
"FORD" is hand cut from red sticky vinyl . . . other vinyl letters are by Dennison.

sides.

However, the real advantage of lightness is that any of the .40-.49 4-stroke engines will have plenty of power if you're near the 6½ pound target weight. And the scale-like slow flight speed will add to the realism and enjoyment of flying your Ford. If you go to 2-stroke power, I'd suggest **nothing bigger** than a K & B .40 sport engine (#4011) with a 12 x 5 prop to keep the revs down and give you a nice, steady, slow, dependable idle. Enya .29s and .35s would supply plenty of smooth power. Avoid any engine that you know is a vibrator ---



Ailerons are driven from standard nylon horns . . . top surface has dummy horn CA'd in place and actuates a dummy .047 wire that goes into leatherette-lined hole on top surface of wing.



Servos in plastic tray mount up front, receiver below in foam. Battery is alongside the fuel tank, on the tank platform. Model required no adjustments or control changes . . . flew fine the first flight!

ask around at the field. The vibrators are "radio ruiners."

In place of a lot of "glue stick A to stick B" verbiage, I've included a material parts list that those of you who buy by mail will find **very** helpful in placing your order --- and some of the wood cutters who advertise in the model magazines will cut the light stuff for you upon request for only a few additional pennies per piece. If you can't get spruce for the wing spars, you'll be just as comfortable with bass wood.

Once I got the 5/32" wire landing gear bent, bound, soldered, and installed, I was past the hard part. It was tough but my heavy vise helped.

Since the nose block wood and matching nacelle wood was soft, I was all set to carve them to shape by hand until I was offered the use of a wood turning lathe. I've seen the **real** sheet metal cowl behind the Trimotor's engines, and it's not perfect! Don't be afraid to hand carve the nacelles to shape.

The only other hard part of the model was positioning the two outboard nacelles; it was hard to think of and simple to do. I shoved a blunt screwdriver into the nacelles where the K & S aluminum struts fitted. The struts are shown full size on the plans and they also show holes punched with an ice pick to help in anchoring the strut ends. Then the matching holes were made with the same screwdriver into the bottom of the wing's sheeting after the bottom of the wing was covered. The struts were shoved into the nacelles, poked up through the bottom wing sheeting, lined up with care and then a drop of Zap was flowed into the contact points. Then, using K & B micro-balloons, the holes were filled around the struts and thin CA glue was flowed into the filler. Half inch triangular stock anchors the top of the struts after they're carefully bent to 90° from the bottom wing planking. I have a bunch of flying time on my Ford and nothing has cracked anywhere yet.

When I settled on using a single 4-stroker for power, and dummies for the two outboard nacelles, the entire power picture became simple. Rev-Up 9 x 7 Series 400 pylon racing props (they're scale-like in shape with no extra work) painted with Poly-U Pactra aluminum paint took care of the outboard props.

On building the fuselage, I found it convenient to put a temporary spacer between the fuselage sides in the area where the landing gear assembly fits and it helped a lot in getting the two sides aligned. Once the gear and its two plywood plates were installed, the temporary stuff was knocked out. The fuselage was given a coat of K & B

resin for the front one third just to seal against fuel. The nose and nacelles were fuelproofed the same way anywhere raw fuel could be blown. Making the tail wheel was fun --- it looks a bit crude up close, but this is Sport Scale and from 15 feet it's neat! Mine shock absorbs by having one brass tube telescope inside a smaller one. Neoprene fuel line adds a touch of class. I skipped the wheel spats over the main tires and got zapped by a judge because they showed in one of the 3-views --- so what!

Tail:

Tail construction is very simple. The plywood connector for the elevators is sized so that you can put your control horn on either side.

Wing:

The wing spar is built first. Center section 3/32" sheeting is put down over the wing plan, then the finished spar is glued in place and the center section is completed. Pins are removed and first one end of the spar is pushed down in place and that wing section is built; then the other end of the spar is pushed down flat to the plan and that section or side is built. Due to the extreme triple taper of the wing, it tends to come out with aerodynamic washout already built in to the top surfaces --- good. Be prepared to carve the trailing edge of the ailerons to add about 1/8" more washout --- it won't hurt. The real Trimotors are quite unstable about the roll axis due to the extreme thick-to-thin airfoil from the center of the wing to the tip. Washout helps minimize this "rolling tendency" nicely in the model. The pilot of the full-scale Island Airways aircraft says once he rolls past 45-50 degrees, the real one wants to keep right on rolling over towards the vertical. He says he just pulls back the throttle on the "high" engine and the high wing tip settles back down. He says aileron control is lousy --- my ailerons are fudged oversize a bit, as are the rudder and elevator surfaces.

Follow the building sequence photos and you'll find it's really a fun job of building for Sport Scale.

I make no attempt to use small special servos or battery packs, as I like super reliability. There are four Kraft KPS-25s in use and the 500 mAh battery pack sits up next to the fuel tank packed in thin 1/16" foam that my wife buys at her craft store. My model balances right under the wing spar --- perfect. I did have to add a small amount of weight to the left wing tip --- probably, because the engine's mass is off center.

The force arrangement of the wing at +2° and the stab at +1° (the plans are **right**, looks are deceiving) along with 5° of downthrust are just right. The angular difference of 7° between downthrust and the wing yields a

right thrust component of force that comes out just right --- please take my word for it; or, the right thrust force comes from the ascending prop blade being at a higher angle of attack than the descending blade, which is called "P" factor by the engineers.

Dead stick landings are a "snap" --- no, they are a **pleasure**! When the engine stops, the Trimotor will assume a 10° to 12° angle of descent, which is plenty steep to keep the two outboard dummies spinning. Just steer to the runway and flare for a landing.

Landings. I've flown with the Island Airways Trimotor twice now. Theirs is a 1928 model. Mine is the 1930 model which I found advertised in The American Boy Magazine in the November 1930 issue. The 1928 real thing is lightly powered, has three Wright Whirlwind J6 engines of 235 horsepower each, carries a max fuel load of 233 gallons, and cruises at only 85 miles an hour. It lifts off at 70 usually, and it lands between 65 and 70 miles an hour --- higher if in a cross wind. They fly it right onto the ground at near full speed --- whatta way to land! I've found my model lands better faster than slower. Be prepared to almost fly onto the ground. After all, if it's scale, you can almost expect it to fly like the real thing, can't you? The plans show the landing gear in the scale position, which is fine for a grass runway. Since I'm normally flying off a paved runway I've put the gear back one inch and "wheelie" take-offs and landings are a lot of fun! The whole model was fun to build and has been fun to fly. □

**From
RCModeler
May 1987**

FORD TRIMOTOR

Designed By:

Stu Richmond

TYPE AIRCRAFT

1/12 Sport Scale

WINGSPAN

84 Inches

WING CHORD

11 Inches (Avg.)

TOTAL WING AREA

900 Sq. In.

WING LOCATION

High Wing

AIRFOIL

Flat Bottom

WING PLANFORM

Double Taper

DIHEDRAL EACH TIP

Flat on Top

O.A. FUSELAGE LENGTH

45 Inches

RADIO COMPARTMENT SIZE

(L) 12" x (W) 4 1/4" x (H) 6"

STABILIZER SPAN

25 Inches

STABILIZER CHORD (incl. elev.)

6 3/4 Inches

STABILIZER AREA

165 Sq. In.

STAB. AIRFOIL SECTION

Flat

STABILIZER LOCATION

Top of Fuselage

VERTICAL FIN HEIGHT

10 Inches

VERTICAL FIN WIDTH (incl. rud.)

11 Inches

REC. ENGINE SIZE

.40-.49 4-stroke

.29-.40 2-stroke

FUEL TANK SIZE

6 Oz.

LANDING GEAR

Conventional

REC. NO. OF CHANNELS

4

CONTROL FUNCTIONS

Rud., Elev., Ail., Throt.

BASIC MATERIALS USED IN CONSTRUCTION

Fuselage Balsa & Ply

Wing Balsa, Ply, & Spruce

Empennage Balsa

Wt. Ready To Fly 100-104 Oz.

(6 1/4-6 1/2 Lbs.)

Wing Loading 16-17 Oz./Sq. Ft.