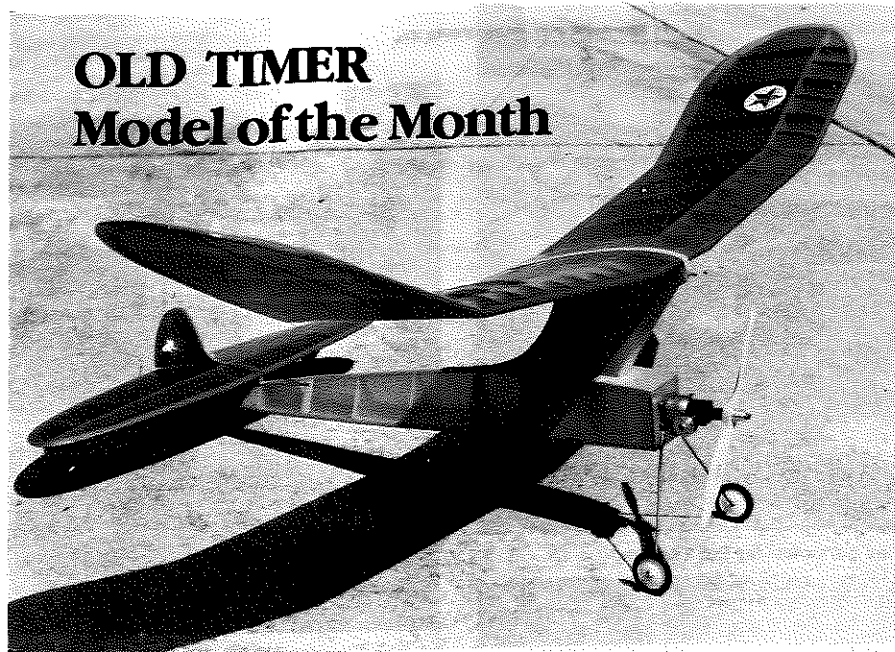


OLD TIMER Model of the Month



COMET INTERCEPTOR

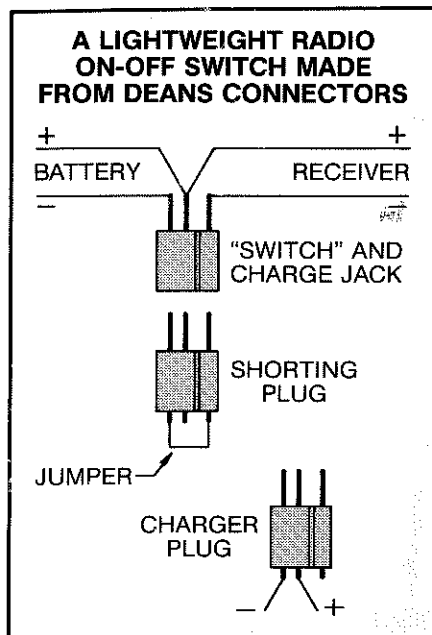
Carl Goldberg's famous 1942 pylon gas model, equipped with a two-channel radio and built light, is a hot contender in R/C 1/2A Texaco events. This one took first place at the 1986 SAM Champs.

• The 1942 Comet Interceptor makes a very competitive R/C 1/2A Texaco model. For the past five years several members of SAM 82, Houston, Texas, have been flying and winning with them. Their success with the Interceptor convinced me to build one, too. The model is slightly more complicated to build than some others, but the extra performance is worth the effort. With the Interceptor, I was lucky enough to take first place in 1/2A Texaco at the 1986 SAM Champs.

The original 1942 plans that were used to build the model show a class A and a class B version. Both use the same basic fuselage. However, there is a different size wing, horizontal stabilizer and rudder for each class. The class A size was just perfect for 1/2A Texaco. According to the plans, the projected wing area was 288 square inches. SAM R/C rules require the use of planform wing area to compute the minimum weight. The planform wing area figured out to be 296 square inches and the minimum weight to be 16.4 ounces. (By the way, the easy way to figure out the SAM minimum weight of eight ounces per square foot for 1/2A Texaco models is to divide the planform wing area by 18.)

The model was built like the original

except for the changes required for radio control and a few to accommodate my idiosyncrasies. The original main wing spar was replaced with an upper and lower spar



By JIM REYNOLDS

with 1/16-inch balsa vertical sheet webbing in between. Also, to save weight (which turned out not to be necessary), the rear spar and a few wing ribs were left out. That was a mistake because the airfoil is very thin, and my wing tends to warp. To cure that problem the plans show a rear spar and all the wing ribs. No, the minor weight increase is not a problem because two

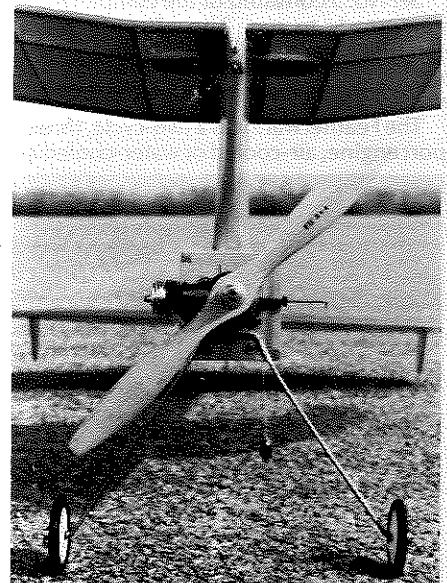
Left: Our author's model is the same size as the original Class A (short wing) Interceptor. Span is 44 inches, planform wing area is 296 square inches, and the minimum weight required for SAM competition is 16.4 ounces. Covering is silk and dope, but lightweight silkspan or even a heat-shrink plastic will work just as well.

ounces had to be added to my original model to bring it up to weight.

The space for the R/C equipment is very limited in the Interceptor. Maybe you can figure out a better way, but it was difficult to find enough room for two micro servos, a normal size receiver and a 250 mA battery pack. There wasn't any space left for a conventional switch and charging jack. So, they were replaced with a three-pin Deans connector and a shorting plug. If you use this method, remember to tie the shorting plug to the aircraft, so that it cannot get lost. The radio antenna runs through the fuselage in a tube made with cocktail straws. The fuselage is too short to contain the antenna, so it exits out the bottom below the tail.

The fuselage has solid formers. This makes installing a control system a bit of a problem. Sullivan's Very Flexible Cable

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Front view shows the side-mounted Cox Black Widow (the new Cox Texaco .049 would also be a fine choice for this model) with the needle valve positioned opposite to the cylinder—makes needle valve adjustments much safer because the pylon doesn't get in the way. Seen hanging below the fuselage is a shorting plug, which replaces the normal on-off radio switch; see sketch at left for details.

Control Rod kit, stock number 507, was used. The .032-inch diameter flexible steel cable that comes with the kit was replaced with the same size music wire. Now, what you have is a 1/32-inch diameter piece of music wire running inside a very small plastic tube. It works just like any other pushrod system. The location of the holes for the control system are shown on each former.

The rudder may seem to be too small to control the model, but it can be made to do the job by using lots of rudder throw. Three-quarters of an inch each side of center is about right. You have also probably noticed that the model only has an elevator on one half of the stabilizer. It is an idea that was borrowed from the Planesmen of Ft. Worth, Texas. Sure, it works. It also saves weight and building time.

The Cox .049 reed valve engine is mounted horizontally. It does not have to be done that way, but it may be the safest way to mount the engine. It has been my observation that many of the people wearing Band-Aids on their fingers at SAM contests are 1/2A Texaco fliers. It appeared to me that trying to adjust the needle valve and remove the glow plug connector located so close to the pylon was going to be a sure-fire finger slicer. The horizontal mount puts the needle valve on the side where it is easy to adjust. Also, it is easy to prime the engine because you can see the exhaust port even while wearing bifocals. Note: you have to decide which way you are going to mount the engine, horizontal or vertical, when you make the motor mount holes in the firewall because the engine backplate bolt pattern is not square.

The original Interceptor had a single wheel landing gear. SAM rules require that 1/2A Texaco models ROG. The rules also allow a single wheel landing gear to be converted to two wheels. We have considerable wind here in Texas, therefore, I went with two wheels. A tail skid was added to get the now unneeded sub-fins up off the ground.

When you are ready to fly your Interceptor, take someone with you who has great eyesight. It is the best insurance that you won't lose it, or any other 1/2A Texaco model for that matter. Above all, stay out of the clouds! ●