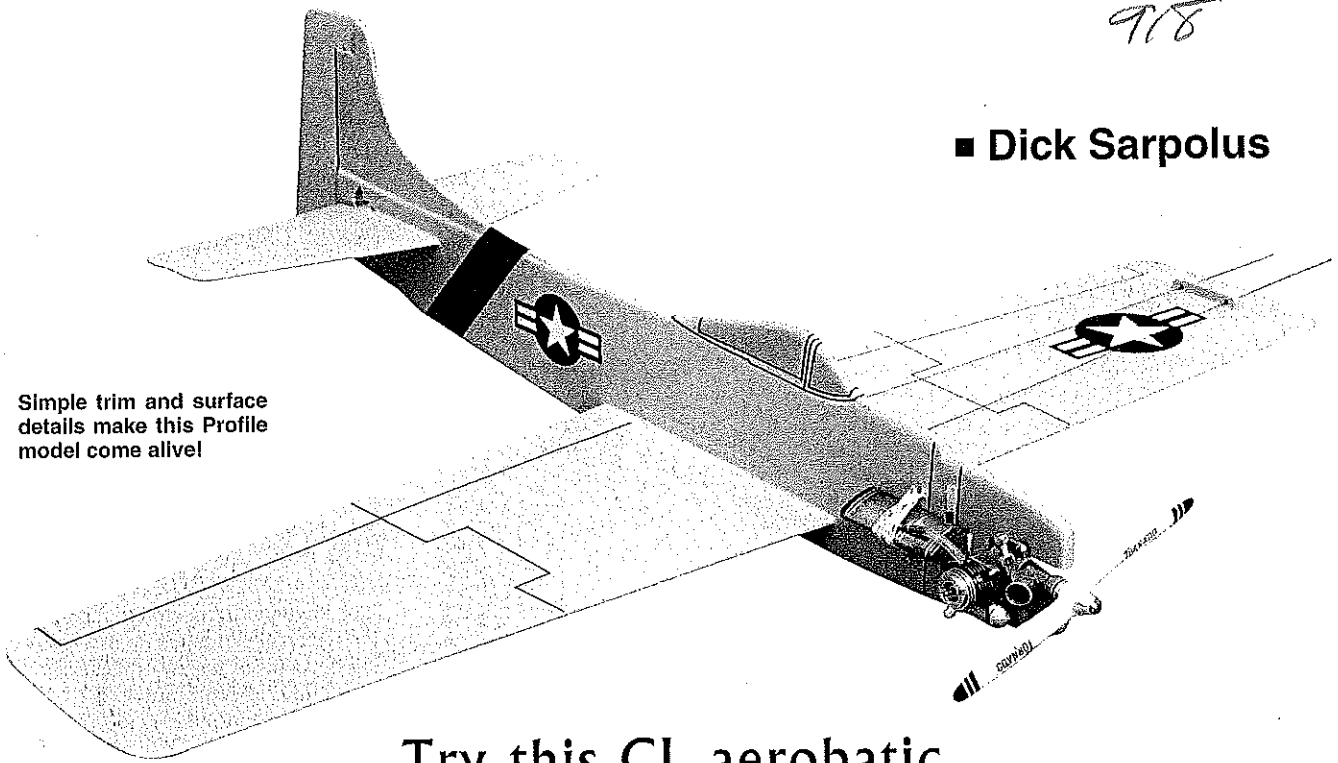


918

■ Dick Sarpolus

Simple trim and surface details make this Profile model come alive!



Try this CL aerobatic all-sheet-balsa warbird

Skyraider



Dick Sarpolus is known for his many outstanding 1/2A CL Profile designs. His latest is well proportioned for Stunt training.

The Douglas Skyraider is an easily recognizable aircraft, with its long fuselage, high fin and rudder, forward canopy location, and large, powerful radial engine.

Flown by the Navy, Air Force, and Marine Corps, the design began in 1944 as a dive bomber for the Navy.

First identified as the XBT2D-1 Dauntless II, Douglas's design won a Navy production contract against aircraft built by Martin, Curtiss, Kaiser, and Boeing. The name and identification were quickly changed to Skyraider and AD-1.

The airplane remained in production until 1957 and proved its ruggedness in the Korean and Vietnam conflicts; more than 3,000 Skyraiders had been produced.

Control Line (CL) enthusiasts know that almost any aircraft design can be adapted for their use. Profile models—called that because of their “slab” fuselages—are quick and easy to build, and they can fly very well.

As modelers, we forgive their less-than-realistic appearance in favor of building ease; scale authenticity is given up to get the aircraft proportions needed for good CL Stunt performance.

The nose length is usually stretched for balance, the tail length is shortened for performance, and the wing and stabilizer areas are “fudged” to get the proportions for our aerobatic flying.

Military warbirds have always been in favor with most modelers, and I thought the Skyraider would be a good, not-often-seen subject for a small sport project.

$\frac{1}{2}$ A-powered all-sheet-balsa Profiles, which have been popular for years, are a

bargain way to enjoy CL flying. They're low cost, easy to build, and have plenty of aerobatic capability.

Often underestimated, a properly designed all-wood airframe with a good engine, flown on 42-foot or longer wire lines, can be navigated through just about all of the aerobatic pattern well enough for plenty of flying fun and/or actually learning the pattern maneuvers.

These things are light and strong enough to bounce back from most crashes when flown over grass fields, so they're suitable for beginners. Good fliers can use their flying ability for relaxed fun-flying.

There are new small engines on the market today; the Norvel BigMig .061 CL engine is a pleasure to operate and is ideal for this type of aircraft. It features plenty of power; easy starting; and steady, reliable running.

The .061 displacement pushes the $\frac{1}{2}$ A size designation—not that it matters—and rather

than the 35-foot control lines I had been using for years, it handles 42-foot lines with ease.

CONSTRUCTION

The Skyraider's construction is standard and easy; it can be framed up in a few evenings' work. A jigsaw or band saw makes cutting the parts simple.

Cut the plans to use as templates or trace the part outlines if you want to save the plans.

The fuselage is $\frac{1}{4}$ sheet balsa, with $\frac{1}{32}$ plywood doublers over the nose section and $\frac{1}{4}$ square hardwood engine mounts inserted into the fuselage. Wing and tail surfaces are $\frac{1}{8}$ sheet balsa.

Edge-glue the balsa from whatever widths you have available to get the sizes needed.

Don't worry too much about wood selection; try for medium weight and firmness. Really hard balsa is rugged,

Skyraider

Type: CL $\frac{1}{2}$ A Profile

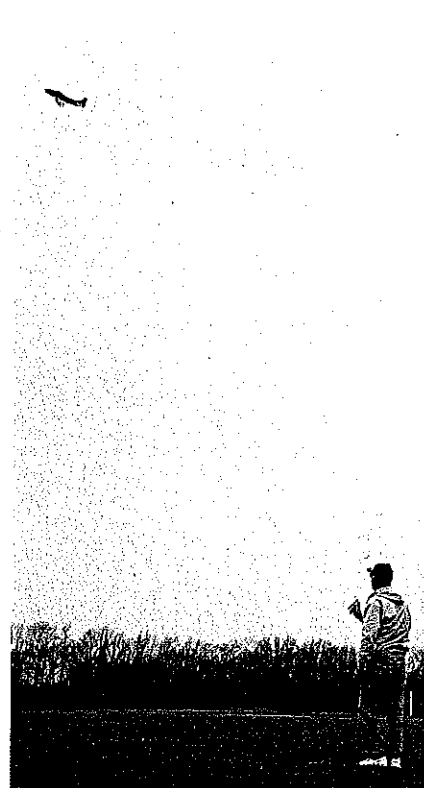
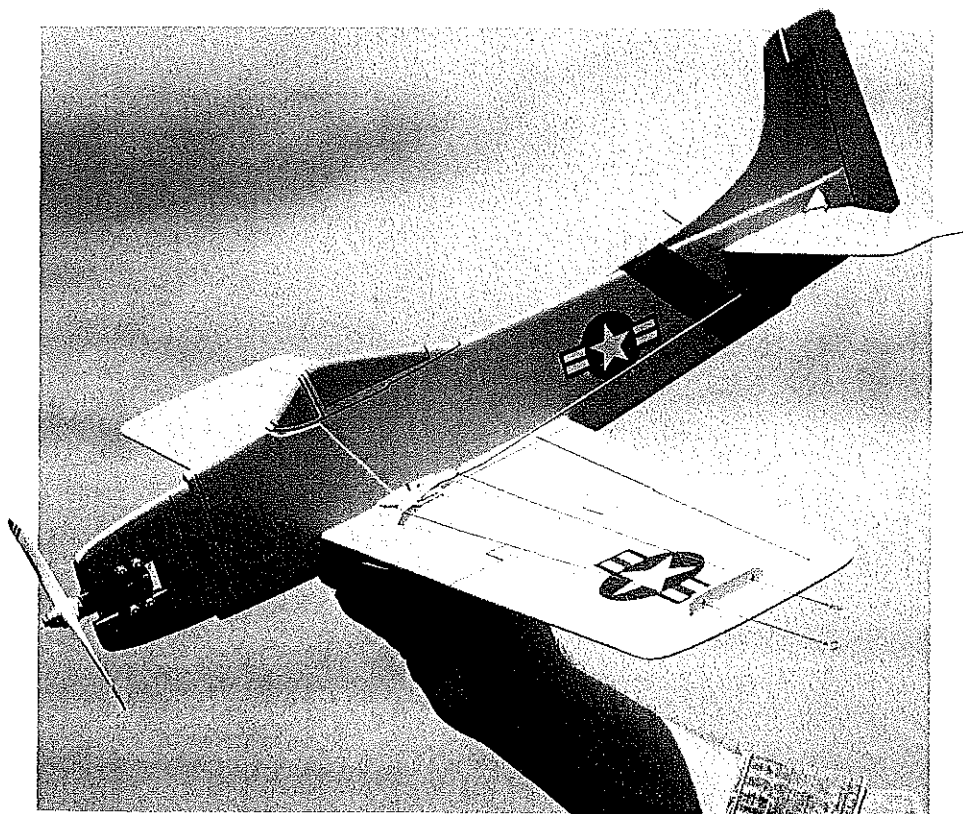
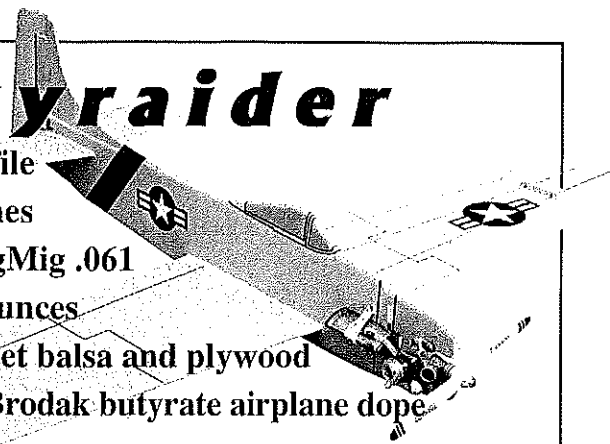
Wingspan: 29 inches

Engine: Norvel BigMig .061

Flying weight: 7 ounces

Construction: Sheet balsa and plywood

Covering/finish: Brodak butyrate airplane dope



Notice the Skyraider's externally mounted control system. Its components are easily mounted after all finishing is complete.

Does it fly? You bet it does! This little aircraft can perform all the maneuvers in the AMA Stunt pattern.

but too heavy, and soft, light balsa breaks too easily.

As mentioned before, models like this bounce back from most crashes when flown over a soft grass field. When they do break, five-minute epoxy or CyA quick glue can get them back in the air quickly.

The hardware is the usual stuff: molded nylon two-inch bellcrank, bolt-on small nylon control horn, 1/16 wire pushrod, .025 wire leadouts, and a small metal fuel tank.

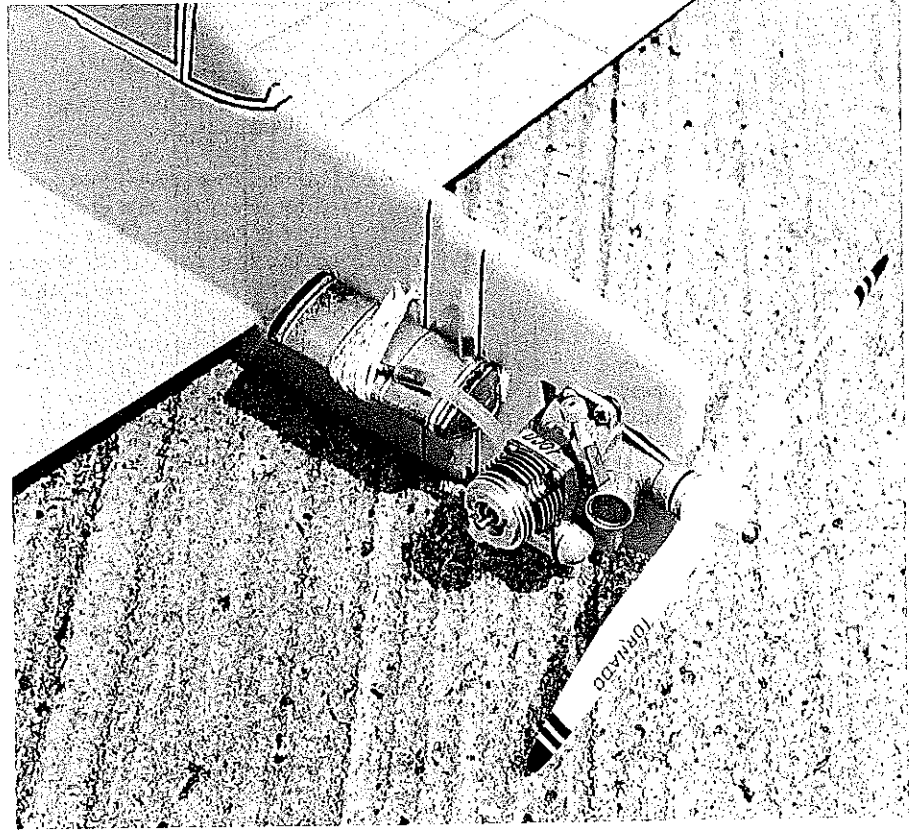
If you have trouble locating CL supplies, get a product catalog from Brodak or Sig—strong companies that fully support this phase of the hobby.

Fuselage: Work on the fuselage first. Glue the engine mounts in place at the proper spacing to suit the engine you're using. I recommend the Norvel line of small engines.

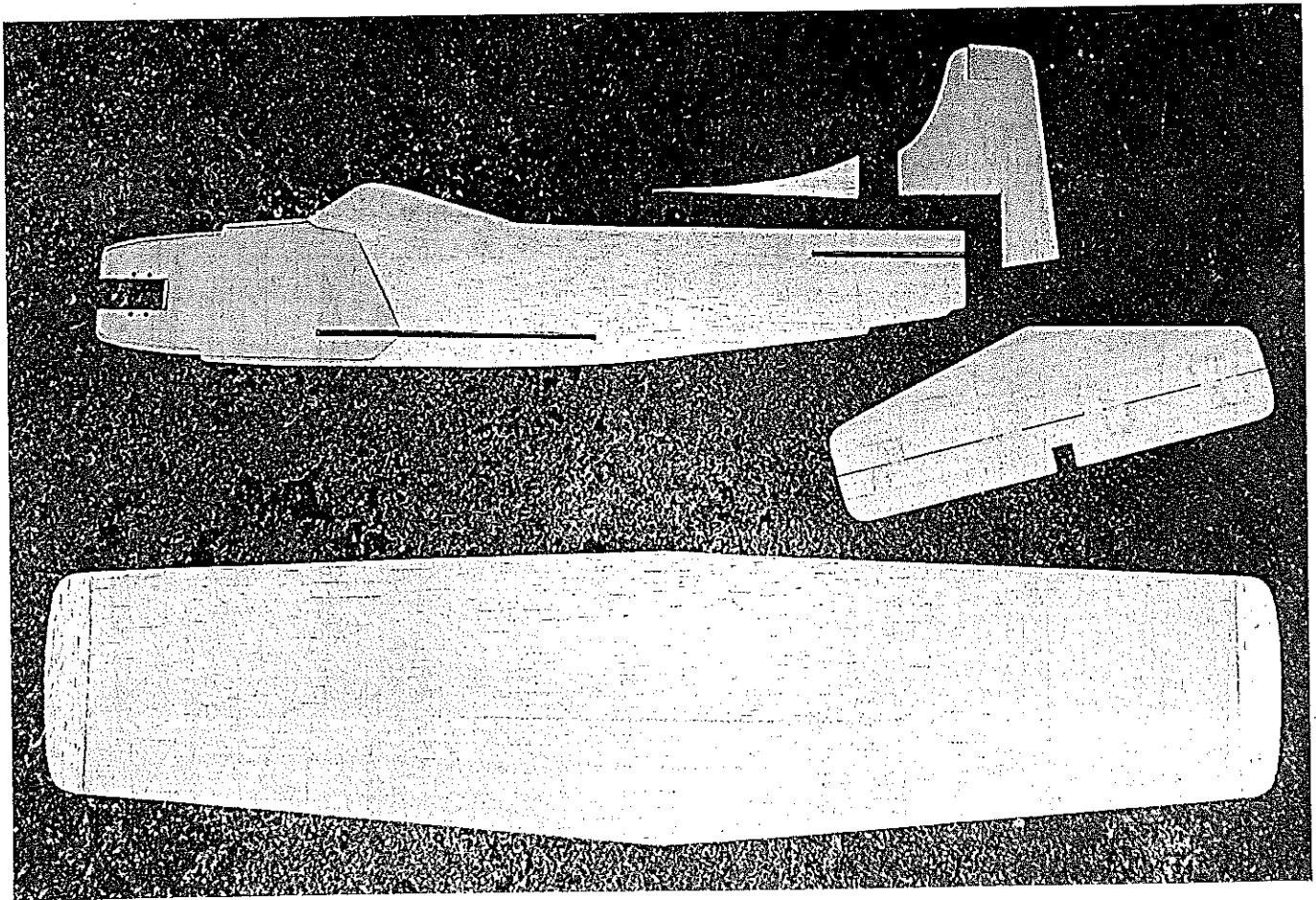
I prefer epoxy for gluing the plywood doublers in place on the fuselage. Mark and drill the engine-mounting holes through the plywood and hardwood engine mounts.

For the wire hook that retains the fuel tank, cut a slot in the outboard side of the fuselage and epoxy the hook into the fuselage with a small plywood filler piece in the slot.

Wing: The separate tip sections glued in place will help it resist warps. These thin-



A Norvel BigMig .061 engine fed from a Perfect one-ounce wedge tank provides plenty of power for the Skyraider. This installation is nice and clean.



There are only a few sheet-balsa parts and a couple of 1/32 plywood doublers to fabricate. This model builds up quickly!

