



SKYOTE AEROMARINE LTD
BOX 808
CLARK, COLORADO 80428

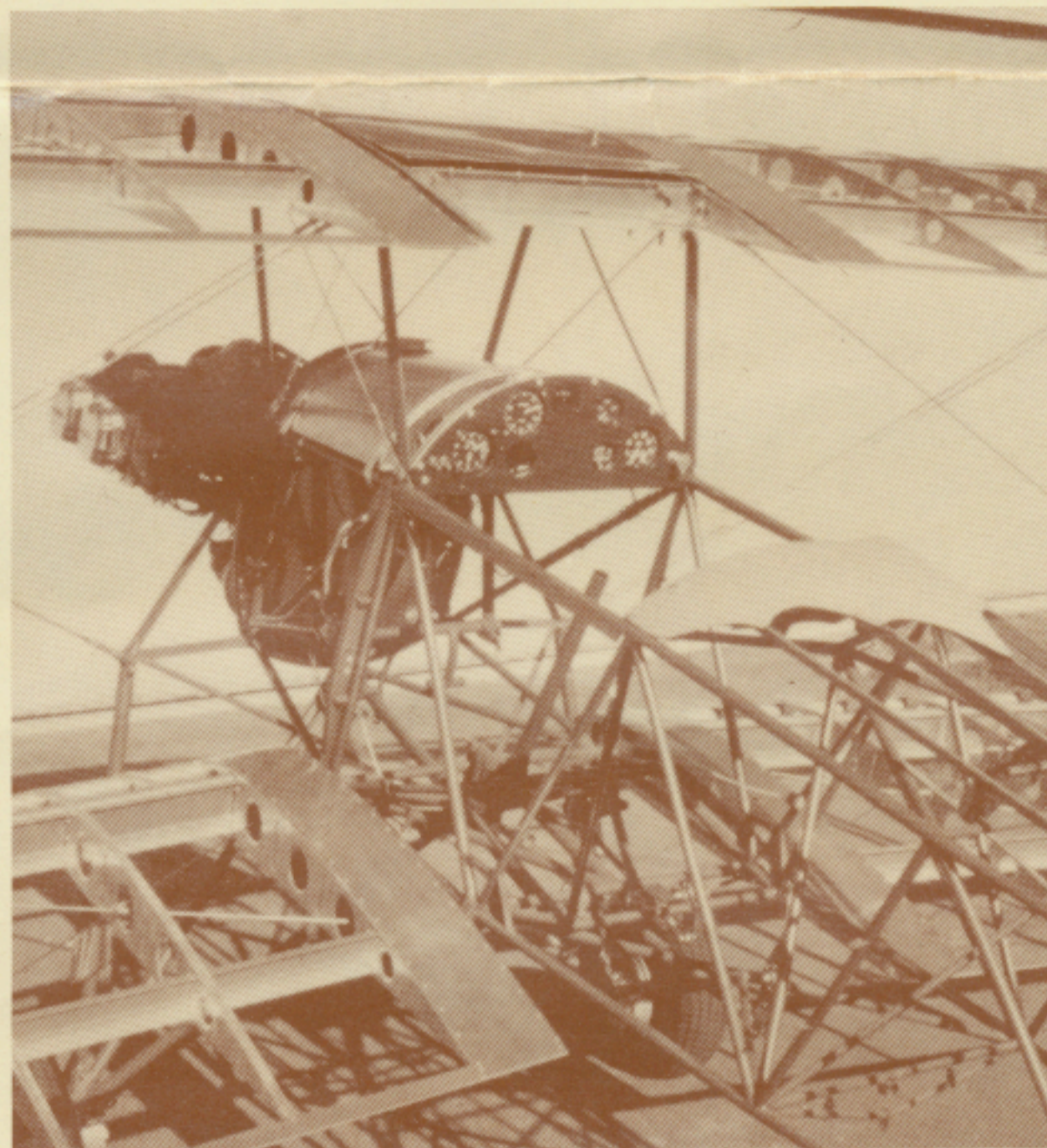
The *SKYOTE* was designed to have the superb control response and the high structural strength of the Bucker Jungmeister while maintaining the slow flight and short field capabilities of a Rose Parakeet. The *SKYOTE* will get off as quickly as a Super Cub and will fly, power on, down to about 33 knots (38 mph). Rate of climb with the Continental C-90 engine is 1,500 ft./min. with a service ceiling of 16,500 ft. To get this kind of performance with 90 hp. requires careful professional design so as to insure adequate strength with minimum weight. The *SKYOTE* is a pure fun airplane, easy for low time pilots to fly yet fully capable of square loops, 16 point rolls, and all of the classic aerobatic maneuvers.

The main design criteria for the *SKYOTE* were:

- (1) Outstanding aerobatic qualities
- (2) Superior slow flight and short field capabilities
- (3) Economical operation based on modern opposed engines in the 100 hp. class
- (4) Absolute structural integrity
- (5) Smooth and light controls

For good snap roll performance and to obtain a small amount of lateral stability either upright or inverted, both wings were swept back and there is no geometric dihedral. Four large ailerons give very powerful lateral control and these are driven by torque tubes for a minimum of friction and play. All the cockpit controls are ball bearing mounted for smooth operation. The rudder pedals are hung from overhead with large toe brakes in "big aeroplane" fashion. The cockpit is adequate for 6 ft. 2 in. pilots up to 200 lbs.

SKYOTE's structure is all metal. The wings have hydroformed heat treated aluminum ribs and built up I-section spars. Wing kits containing all ribs and most



spar pieces are available from *SKYOTE AEROMARINE LTD*. Great care has been taken in the design to assure that load paths are through the appropriate centroids thus avoiding eccentric loading moments. The structure is designed to FAA

part 23 requirements for aerobatic category. Empty weight using the Continental C-90-8F engine is 593 lbs. Wing span is 20 ft. with an area of 123 sq. ft. Gross weight is 895 lbs. giving a wing loading of 7.28 lbs./sq. ft.

Bob Hoover, famous test pilot, flew the *SKYOTE* in June 1976 and his comment after an hours wringing out in NX8XX was "this is the finest airplane ever built". The best write-ups on the flying qualities of the *SKYOTE* are:

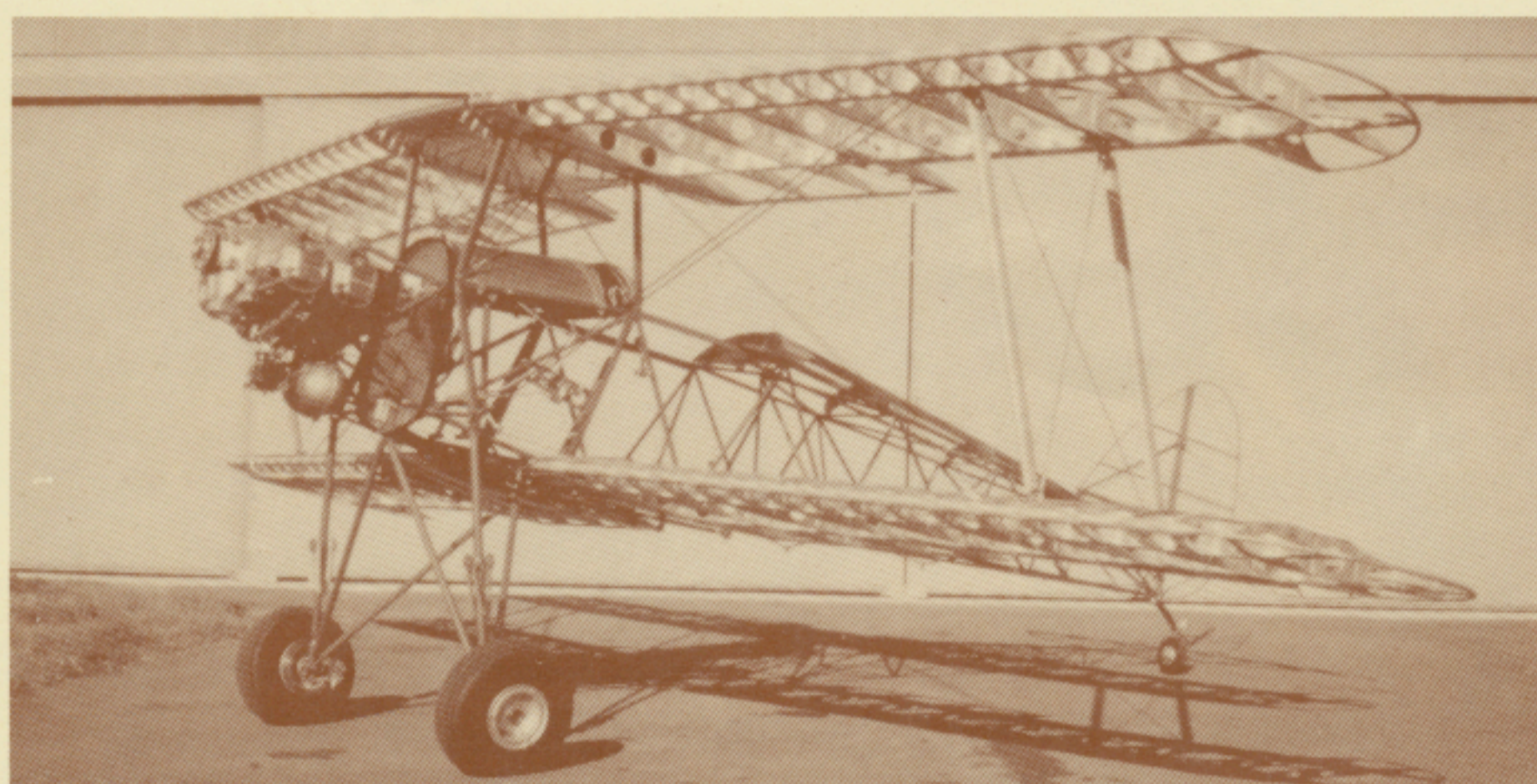
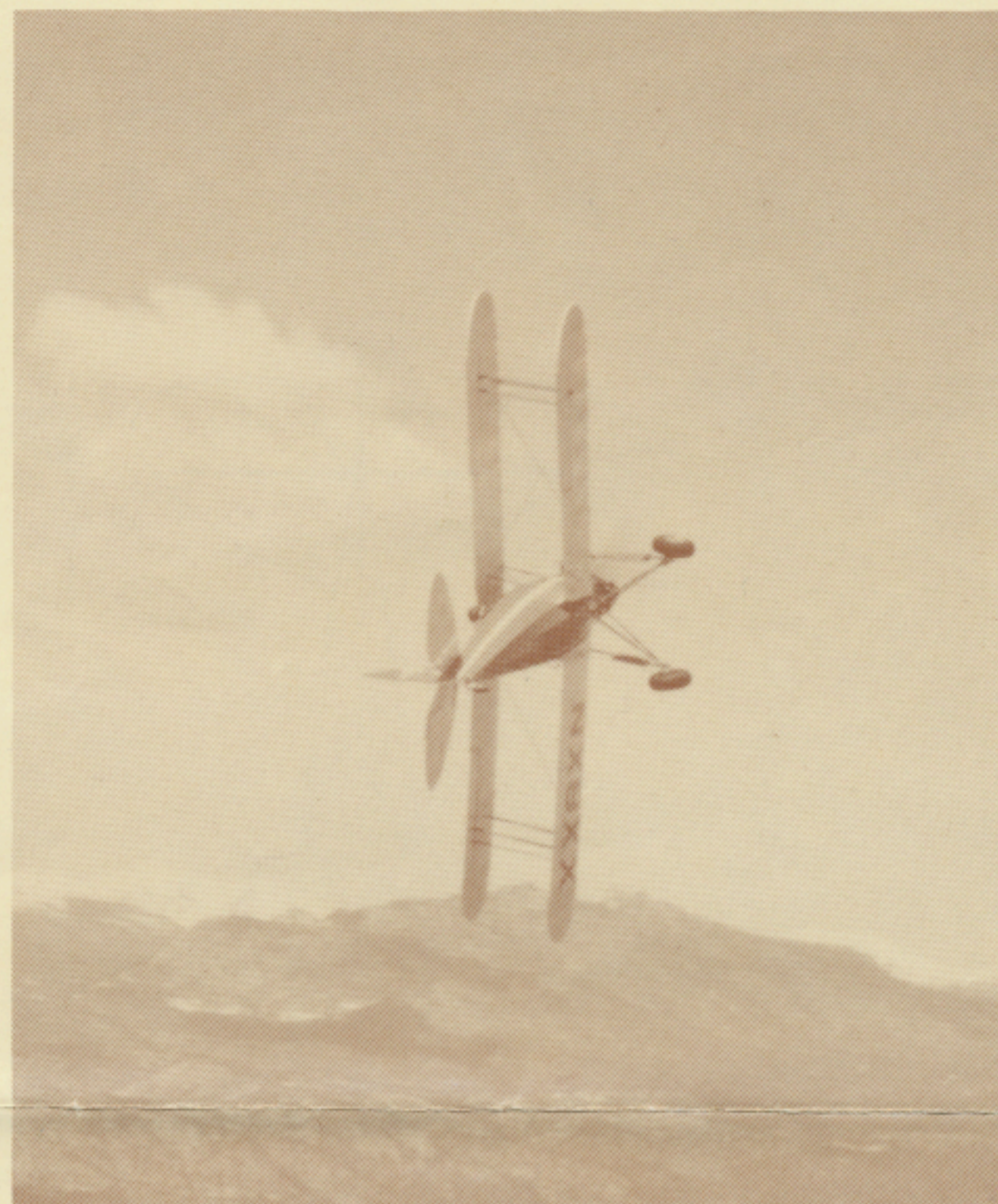
SPORT AVIATION Dec. 1976 by Bob Hoover

SPORT AVIATION Sept. 1979 by Duane Burnett

AIR PROGRESS May 1979 by Budd Davisson

The handling and aerobatic qualities of the *SKYOTE* are superb and with the 100 hp. engines the *SKYOTE* will hold its own up through intermediate category. For serious competition in the advanced and unlimited categories it is necessary to join the high horsepower, high cost club and to enter the equipment rat race. The *SKYOTE* is not suitable for this type of flying and cannot be made so without extensive design changes.

The best engines for the *SKYOTE* are the Continental C-85, C-90, 0200 and the Lycoming 0235. The Continental

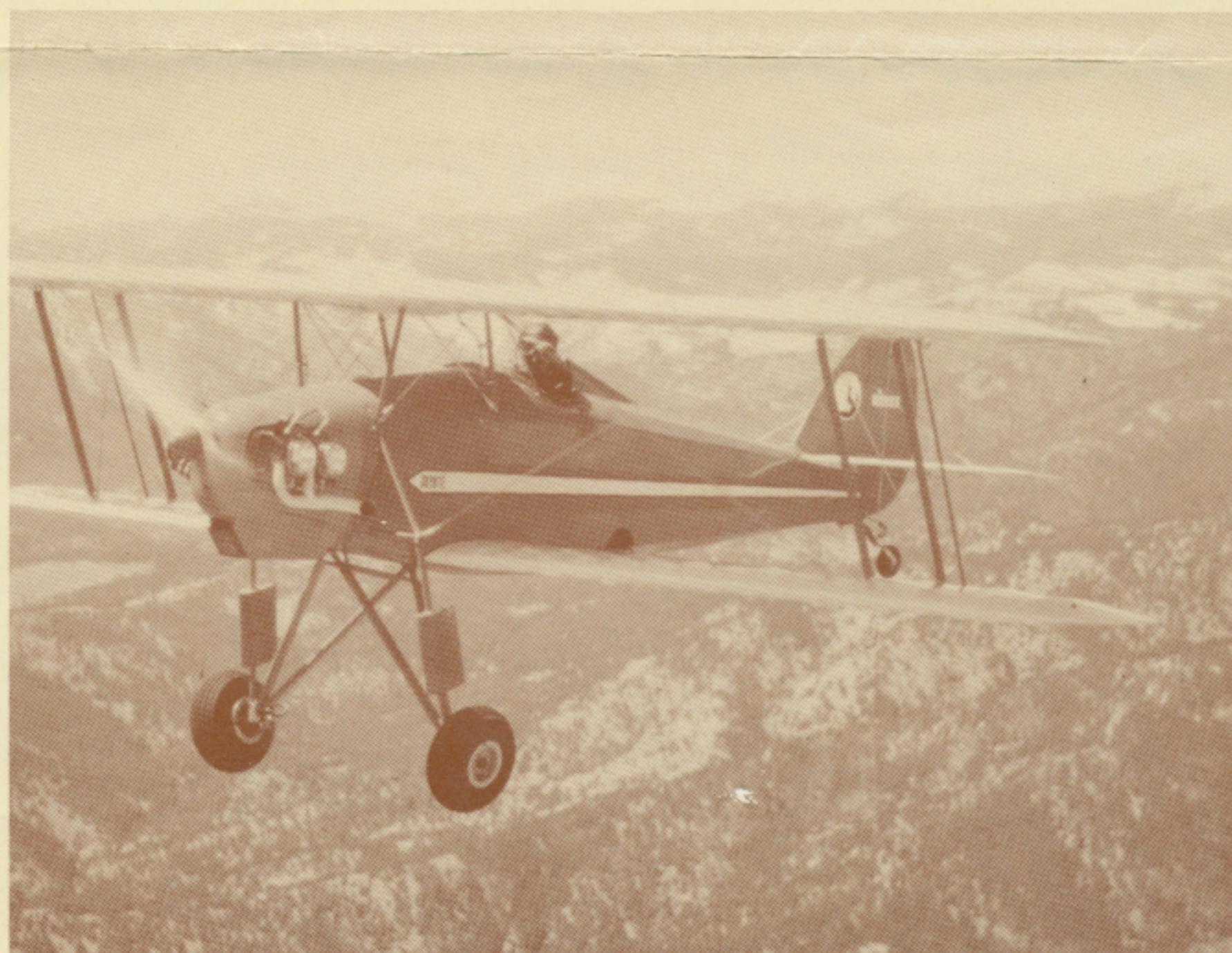


0240 now available in the U.S. is also an excellent choice.

The *SKYOTE* was designed for maximum performance on 100 hp rather than for ease of homebuilt construction. The use of ball bearing mounted controls, four ailerons, stepped longerons, boxed in wing fittings etc. all increase the building work a little compared with the simplest of designs. However by the use of the *SKYOTE* wing kit the overall job remains in the 3,000 hr. class and the result is a superior, great flying airplane.

The long stroke landing gear and the big 600-6 tires make easy work out of rough fields. When you are flying a *SKYOTE* you know that you can get into any field that is usable to other airplanes, even the STOL types.

It's also nice to know that in the event of engine failure you can glide and land without the feeling of flying a guided brick. Cruise speed is about 90 to 100 knots (103-115 mph) depending on propeller pitch. Endurance is about 2.5 hours. using the Continental C-90-8F burning 5. gals./hr.



**SKYOTE
SPECIFICATIONS**

EMPTY WEIGHT	595 LBS.
GROSS WEIGHT	895 LBS.
ENGINE CONTINENTAL	C-90 90 HP.
POWER LOADING	9.9 LBS./HP.
WING LOADING	7.28 LBS./HP.
FUEL	13 GAL. (U.S.)
STRESSED PER FAA PART 23	AEROBATIC
RUDDER AREA	3.28 SQ. FT.
FIN AREA	2.11 6.95 SQ. FT.
STABILIZER AREA	6.95 SQ. FT.
ELEVATOR AREA	6.70 SQ. FT.
STAGGER	19.0 INCH
GAP	40.0 INCH
AILERON AREA	3.55 SQ. FT. EACH
NEVER EXCEED VELOCITY	137 KNOTS
MANEUVERING SPEED	93 KNOTS
STRUCTURAL CRUISE SPEED	97 KNOTS
STALLING SPEED	38 KNOTS
RATE OF CLIMB	1,500 FT./MIN.
SERVICE CEILING	16,500 FT.

