


*Piper Apache (two Lycoming O-320). Above, right, Apache cabin.*

## Business and Touring Aircraft . . .

instruments are grouped in a panel in front of the pilot, radio equipment (including Narco Superhomer, V.H.F. receiver and V.O.R.) and engine instruments are positioned centrally and space is provided for extra equipment to starboard. Standard fuel capacity is 30 Imp. gal, and this can be extended with an optional 6.6 gal auxiliary tank under the rear seat to give a range in excess of 600 miles. Total production of the Tri-Pacer is now 6,000.

**Super Cub** Bearing the company designation PA-18, the Super Cub is a tandem two-seater directly descended from the L-4 Grasshopper and the famous J-3 Cub, production of which totalled 19,798 aircraft. Most important of this family at present is the PA-18-A agricultural duster and sprayer, of which more than 1,500 are in world-wide service. The fuselage has been modified to accommodate an 18 cu ft aluminium tank housing 500 to 1,000 lb of solid or 92 Imp. gal of liquid insecticide. As an accompanying photograph shows, this load is discharged either through a central non-clogging hopper or from underwing spray booms under the pressure of a pump driven by a ram-air fan beneath the engine. This aircraft was described in our issue of January 11, 1952.

**PA-25** Under this designation Piper are developing a single-seat multi-purpose agricultural aircraft. It is believed to be a low-wing, all-metal design, powered by a single piston engine.

*Piper Aircraft Corporation, Lock Haven, Pennsylvania.*

## Potter

**YC-97** Early examples of the Boeing C-97 Stratofreighter are becoming available for purchase (for prices reported to be as low as $36,000) from the Air Materiel Command of the U.S. Air Force. Two of the first YC-97s have been converted for spraying operations by Potter Aircraft, the big Boeings being owned by DeLong Aircraft and used by the U.S. Department of Agriculture.

Undoubtedly the largest agricultural machines in the world, they are each equipped with nine B-25 ferry tanks each with a capacity of 500 Imp. gal. Insecticide is fed at a maximum rate of more than 400 Imp. gal/min to 40ft spray booms beneath the wings. Flying at 200 m.p.h., some 200ft above the treetops, the YC-97s have been spraying D.D.T. against gipsy moths, covering approximately 12,000 acres per hour each (including time taken in ground operations). "Wet"-operation charter rate is $450 per hour.

*Potter Aircraft Co., Burbank, California.*

## Sikorsky

**S-55** Well over 1,000 of these familiar helicopters have been delivered by the parent Sikorsky company, and many are used by airlines and business operators; in particular a large number are used by American oil companies, and the work of these aircraft has frequently been illustrated in our pages. Most S-55s in commercial service have the 600 h.p. Pratt and Whitney R-1340 Wasp engine and carry a gross useful load of 2,405 lb. Various interior arrangements provide for up to ten seats and the helicopter is available with pontoons for water or amphibious operation. A typical price is $147,500.

**S-58** More than 400 military deliveries have been made of this large single-engined helicopter, and it is now also operated by a number of airlines and other commercial concerns. Powered by a 1,525 h.p. Wright R-1820 engine, it normally seats up to twelve or fourteen (including the crew of two) and can lift a useful load of 5,140 lb. In spite of its price of $248,000, sixteen orders were placed as soon as it went on to the commercial market at the end of 1956, and deliveries are likely to continue for a considerable time.

*Sikorsky Aircraft Division of the United Aircraft Corporation, Bridgeport, Connecticut.*

## Taylorcraft

**Zephyr** Although Taylorcraft's current production is but a fraction of what it was in the 1930s, manufacture of conventional high-wing monoplanes continues in two major versions. Both are powered by the Continental O-470 flat-six, driving either a constant-speed or fixed-pitch propeller. The airframes of the two versions are almost identical, and a point of particular interest is that the airframes incorporate moulded glass-fibre skinning over much of the wings, fuselage and tail.

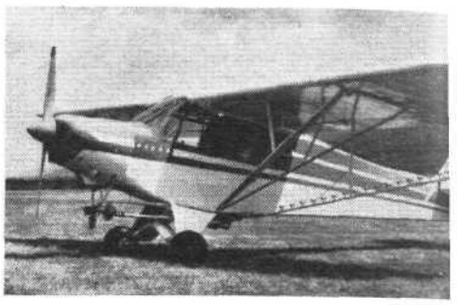
The basic Zephyr type 400 is a four-seater with a spatted undercarriage. Dual controls are provided in front and a large baggage compartment is situated behind the rear pair of seats. The Model 20AG Topper is the agricultural variant, in which provision is made for either a dust hopper or spraying tank together with an engine-driven pump for supplying liquid insecticide to spray booms under the wings.

*Taylorcraft Inc., Conway, Pennsylvania.*

## Temco

**Riley Twin** The history of this light twin is complex, and starts with the single-engined Navion (by North American Aviation) of the immediate post-war period. This design was later taken over and mass-produced by Ryan, and in April 1952 the Riley Aircraft Company completed the prototype of a twin-engined version which received a type certificate the following year. Temco began limited production of this aircraft in April 1953; in December the Texas company purchased full rights to the design, and early in 1955 they introduced an improved version a few of which are still available from the company's plant at Greenville, Texas.

*Below, Piper PA-18-A (Lycoming O-320).*



Powered by two Lycoming flat-fours, driving constant-speed feathering propellers, the Temco Riley Twin is a low-wing all-metal machine with a retractable nosewheel-type undercarriage. The conventional four-seat cabin is enclosed by a large canopy which slides to the rear in the manner of many fighters; with wing-tip tanks, giving a gross fuel capacity of 120 Imp. gal, the Twin can fly 1,200 miles, cruising at 170 m.p.h. at 7,000ft.

*Temco Aircraft Corporation, Dallas, Texas.*

## Transland

**Ag-2** Five years of steady development preceded the manufacture of the Ag-2, which first flew in October last year. It culminates the design philosophy reflected in the experimental Ag-1 built at the Texas A. and M. college. The airframe is built entirely of metal. The wing, which has an area of 319 sq ft, has an extraordinarily thick high-lift section (N.A.C.A. 64021) and is provided with full-span slotted flats, the outer sections having slot lips serving as ailerons. When flying light this flap system can be depressed (with synchronized automatic tailplane trim) to keep the aircraft controllable down to below 50 m.p.h. The fuselage is completely skinned, and is protected over its inter-

*Piper Tri-Pacer (Lycoming O-320). Right, Tri-Pacer interior.*