Sud Alouette III

Sud Alouette II

Sud Djinn

Sud Frelon prototype

VTOL INTERNATIONAL SURVEY . . .

FRANCE

Sud Aviation

37 Bd de Montmorency, Paris 16e

Alouette II One of the most successful helicopters yet produced, the Alouette II is powered with a Turboméca Artouste 2 shaft turbine of 400 s.h.p. It is characterized by a glazed cabin and an unfaired steel tube rear fuselage. Typically a five-seater, it accommodates pilot and a passenger side-by-side, and three passengers at the rear. Two stretcher cases can be taken in the ambulance role in addition to two sitting patients and a medical attendant. A notable feature introduced on this aircraft is the automatic engine r.p.m. governing system designed to simplify piloting.

● Rotor diam, 33ft 6in; fuselage length, 31ft 10in; gross weight, 3,300lb; cruising speed, 106 m.p.h.; hovering ceiling (free air), 6,500ft; range, 290 n.m.

Alouette III A derivative of the Alouette II, this version differs from the earlier machine in having a slightly reinforced transmission system and in being powered with an Artouste 3B, a development of the Artouste 2, with more reserve power. Equipment and general layout are improved and the whole airframe has been cleaned up; particularly noticeable is the semi-monocoque tail boom. Two baggage holds are provided in the centre portion, on either side of the welded structure and enclosed by fairings. The cabin seats three at the front and there is a four-place folding seat at the rear. Two stretchers can be accommodated athwartships in the rear cabin. There are four doors.

● Rotor diam, 36ft 1in; overall length (blades folded), 33ft 1in; weight empty, 2,300lb; normal gross weight, 4,190lb; max gross weight, 4,630lb; cruising speed, 111 m.p.h.; hovering ceiling (free air), 13,100ft; range, 300 n.m.

Djinn Powered with a Turboméca Palouste turbine air-generator, the two-seat Djinn continues in production.

● Rotor diam, 36ft; fuselage length, 17ft 5in; gross weight, 1,676lb; cruising speed, 62 m.p.h.; hovering ceiling in ground effect, 3,000ft; service ceiling, 10,000ft; max range, 110 miles.

Frelon A production version of this large helicopter is reported to have a six-blade rotor and flying-boat hull. Like the prototypes it will be powered by three Turboméca Turmos. A full-scale mock-up is expected to be at the Paris Salon.

GERMANY W

Bölkow-Entwicklungen KG

Ottobrunn bei Munchen

Bo 102 Heli-Trainer Of the Heli-Trainer the makers remark: "It is the object of the Heli-Trainer Bo 102 to assure an absolutely safe and pedagogically consistent basic training for helicopter students at low cost. Experienced rotorplane experts have developed and constructed the Heli-Trainer, have subjected it to endurance tests, and have thoroughly tried it out in helicopter training centres. The principal element of the training apparatus is a single-rotor, single-seater helicopter which can both turn and change its altitude when mounted on a revolving ground support. All manœuvres of a flying helicopter can be practised with the float-mounted trainer. Elastic stops prevent any damage, even when the controls are fully and quickly actuated. On the water an air-filled stabilizer ring limits the inclinations by the longitudinal and transverse axes.

ITALY

Aero Lualdi & C

Via Panama 95, Rome

L.59 The L.59 is the latest of a series of Lualdi light helicopters and has a rotor of the type fitted to the Hiller UH-12E, with a Lualdi gyro-stabilizer. Construction is all metal and the engine is a Continental IO-470-D of 260 h.p. The four seats are arranged in two pairs, with dual controls for the front pair. There are car-type doors on each side and provision is made for carrying two stretchers. (Data on next page.)

Bölkow Bo 102

Agusta 104