



Though showing the Bell XV-3 convertiplane in something approaching plan view, the picture above—by virtue of the cast shadow—also illustrates features of the side elevation. On the right is a de Havilland Canada Otter, one of the first of 90 being supplied to the U.S. Army under the designation U-1. This particular aircraft is painted in Arctic colours, i.e., with red wing tips and tail, for identification against snow.



AIRCRAFT INTELLIGENCE

Great Britain

Vickers-Armstrongs Valiant. If serial numbers are any guide, at least a dozen Vickers Valiant B.1 bombers have already been completed. These aircraft are flown "light" out of Brooklands to the maker's main airfield at Wisley.

U.S.A.

Boeing B-52. It is officially announced by the U.S.A.F. that the sole armament of the Boeing B-52 eight-jet bomber is four 0.5in guns (not 20 mm guns, as has been stated). These are mounted in a barbette in the extreme tail and, although having provision for automatic ranging and firing, are "monitored" by a gunner seated in a self-contained compartment immediately behind the rudder. The entire installation is appropriately described by Arma—which company is primarily responsible—as a "defence system."

Sikorsky Transport Helicopter. A design-study has been made by Sikorsky for a 50-passenger civil-transport helicopter, powered with two turboprops, carrying a payload of 11,000 lb and having a gross weight of 33,950 lb. Cruising speed is estimated to be 160 m.p.h. and range 185 miles. A drawing shows the machine to resemble the S-56 in general layout but to have a longer fuselage; a "conservatory" nose, with the pilots' cockpit above; and wheels retracting into fairings beneath the nacelles. There are two tail rotors, set one on each end of the high-set tailplane. The single main rotor has five blades.

Ryan V.T.O. Fighter. Possibly designated XF-109, but known also by the maker's type number 69, a vertical take-off fighter, now under construction by the Ryan Aeronautical Co., will be powered by a single Rolls-Royce Avon RA.28 of 10,000 lb thrust. The Avon was selected

because of its high thrust/weight ratio. Gross weight should be about 8,000 lb.

France

S.N.C.A.S.E. Alouette II. This new five-seater helicopter (illustrated on this page last week) made its first flight on March 12th at Buc, with, it is said, entirely satisfactory results. A production version of the Alouette I, it is powered by a Turboméca Artouste II gas turbine of 360 h.p., driving a single rotor. All-up weight is 2,980 lb and estimated performance figures are: ceiling 14,760ft, rate of climb 1,970ft/min, cruising speed 106 m.p.h., range 323 miles. The first five Alouette IIs of a production order from the French Government are due for delivery between October and December this year.

Dassault Super Mystère. After fifteen hours' test-flying by the manufacturers, this notable French interceptor—a new view of which appears on this page—should now have been handed over to the French Flight Test Centre. While awaiting official confirmation of a production order, Dassault have been making provision for building the type in series for the French Air Force. The version concerned will probably be the IVB2, powered with a S.N.E.C.M.A. Atar 101G turbojet with afterburner. The possibility nevertheless

exists that the order will also entail production of the IVB1, fitted with a Hispano-Suiza-built Rolls-Royce Avon, likewise having an afterburner.

A.C.13 Helicopter. Under the designation A.C.13, but also known by the type number N.1750, a new helicopter is being built by the French S.N.C.A.N. concern under licence from Aerotechnica Cantinieau, of Spain. Though equipped with a Turboméca Artouste I, of 280 h.p., it employs less than 200 h.p. "owing to the diameter of the rotor." The jet-pipe is articulated and by means of a pedal control the jet is used to compensate torque and give directional control. Numerous test flights have been made since January. Single-seat and three-seat versions are planned, the former having a gross weight of 1,540 lb and the latter weighing 1,900 lb. Maximum speed is 93 m.p.h. and hovering ceiling 14,000ft.

Spain

HA-200 (XE-14). Designed by Willy Messerschmitt for La Hispano Aviación S.A., of Seville, the HA-200 (military designation XE-14) is a tandem two-seater powered with two Turboméca Marboré turbojets in the lower fuselage. A nose intake, wing-tip tanks and a single fin and rudder are features. Span is 34.16ft, weight empty 3,196 lb, gross weight 7,050 lb, maximum speed 440 m.p.h., service ceiling 29,500ft, and range 1,050 miles.



In common with the North American Super Sabre, France's Marcel Dassault Super Mystère (otherwise known as Mystère IVB1) has a "flattened" intake.