



A Dassault Etendard IV surrounded by stores, including the two 30 mm cannon and the rocket pack which can be accommodated alternatively in a fuselage bay. The Marine Etendard does not have the low-pressure tyres shown here

The views below show, from top to bottom, the Nord 3400 army observation aircraft, the Nord 3200 army training machine and the Sud SE.116 Voltigeur prototype with Wright engines. The large perforated air-brakes allow extremely steep, slow approaches and very short landings

MS.760 Paris is also well under way and 26 sets of components have been shipped to the Argentine for assembly there. Two complete Paris have been delivered to the U.S.A., one to the Shah of Persia and another to this country, for the College of Aeronautics at Cranfield. A third was due to be delivered to the U.S. this month. Fifty Paris have been ordered for the French forces and seven should by now have been delivered.

Potez Air Fouga. A series of 320 Magisters is now being completed and a pre-production batch of carrier-borne Esquifs is being built. A first batch of 30 of the latter has been ordered. Future developments include a single-seat attack version and a four-seat transport version of the Magister. Licence production is in hand in Germany and Israel.

Sud Aviation. Airline orders for Caravelles have been detailed from time to time in *Flight*. Of Djinnns and Alouettes 150 and 320 respectively have been built. A few more Djinnns are to be produced for both civil and military customers and a total of 400 Alouettes is planned. The Sud 3200 transport helicopter, powered by three turbines, is to make its first flight next month. Only the prototype has been provided for in this year's budget. The original order for 360 Vautours of all three versions was cut to 180 and these should be completed by the end of the year.

Two SE.116 Voltigeur prototypes have so far flown, one powered by Wright R-1300s and the other with two Turboméca Bastans. The latter was destroyed during a test flight recently. Projected production versions are the SE.117 Voltigeur for tactical use and the SE.118 Diplomate for liaison. Although the Voltigeur's original competitor, the Sipa 1100, fell by the wayside some months ago, the Voltigeur now has a very potent challenger in the Dassault Spirale.

Nord. Production of 230 Noratlas is virtually complete, but production under licence in Germany is now well under way. A small batch of the 2502 civil variant with tip-mounted Marboré boosters is in hand and the 2504 crew-trainer for the French Navy is being built. The 2506 assault transport (with Marboré boosters, adjustable and locking undercarriage, high-lift flaps and many other refinements) was to succeed the 2501, but has not been ordered. A few of the more powerful, Pratt & Whitney-powered 2508s with Marborés are being built.

An order has been placed for 100 Nord 3200 tandem, two-seat trainers for the Aviation Légère d'Artillerie de l'Armée de Terre (ALAT). The same number of Nord 3400 high-wing observation aircraft is being built for the French army.

The Gerfaut delta-winged research aircraft is now being used for flight-testing the GAMD Super Aida fire-control radar. Tests with both the Griffon I and II turbo-ramjet research deltas are continuing with good results. The design of a Super Griffon, capable of Mach 3 or 4, is complete but funds for its construction are still awaited.

SNECMA. Tethered tests of the C.450 Coléoptère are almost complete and translation from tail-sitting to horizontal flight should begin during the next two months. It is hoped that the full sequence of take-off, translation and return to vertical landing will be publicly demonstrated during the Paris Show in June.

SFERMA. Flight tests of the Bastan-powered Twin Beech are continuing satisfactorily. A considerable number of surplus Twin Beech fuselages in the United States may well be converted to take these engines.

Société Aéronautique Normande. Production of the very

successful two-seat D.117 has recently been handed over to Alpvavia to allow concentration on the four-seat D.140 Mousquetaire and the three-seat DR.100 Ambassadeur. There are, of course, no government orders for these machines, but subsidies are given to purchasers or to those who build their own aircraft.

Wassmer. Equally supported only indirectly by the government, this company is producing the two-seat D.120 Jodel variant and has designed a completely new, all-metal three-seater similar in external appearance to the Piper Comanche. Javelot single-seat and Bijav two-seat gliders are being produced in kits or complete.

