MORE STATISTICS.

IN our last issue we published a series of tables of various aero engines, British and French aeroplanes, etc., compiled by the U.S.A. Air Ministry. It was originally intended to include also tables of American aeroplanes, and of machines used in the Italian Air Service. Unfortunately, however, space did not permit inclusion of the last two tables, and these are therefore given in the present issue, pp. 237 and 238. Last week we mentioned that one of these tables was of particular interest, in that it showed differences between the original British machines and the American version thereof. Unfortunately this table, as already mentioned, was not included, and the reference to it in the introductory paragraph, by an oversight, was not deleted. The second table published this week, that of particulars of machines used in the Italian Air Service, is interesting on account of the fact that up till now it has been difficult to obtain reliable data relating to Italian machines. It will be noticed that quite a fair proportion of the machines are of French design, although original Italian designs are well represented.

RECORD OF PERFORMANCE OF AMERICAN PLANES

This Table Serves to Illustrate the Numerous Types of Aeroplanes Built by the U.S. Government Since June, 1917

Type.	No. of Seats.	Engine.	Altitude (Ft.).	Climb Time.	Rate, Ft. per Min.	R.P.M.	Speed.	R.P.M.	Service Ceiling at 100 Ft. per Min.	Weight, Empty (Lbs.).	Military Load (Lbs.).	Fuel and Oil Load (Lbs.).	Total Load (Lbs.).	Endurance at 6500 Ft.	Gas Consumption (Lbs. per Hour).	Oil Consumption (Lbs. per Hour).	Theoretical Ceiling (Ft.).
				m. s.													
Ordnance Engineering Scout	1	80 Le Rhone ..	0	..	..	..	98	1180	13500	835	282	..	1117	..	..	..	..
			6500	9 0	535	1140	94	1175	..	..	..	..	..	..	..	..	..
			10000	17 30	315	1100	84	1175	..	..	..	..	..	..	..	..	..
			15000	55 0	..	1100	70	1100	..	..	..	..	..	..	..	..	..
Bristol Scout		80 Le Rhone.. ..	0	11 45	400	1260	88·3	..	13000	789	286	..	1075	..	..	..	..
			6500	23 26	240	1215	83	..	..	..	..	..	..	..	..	..	..
			10000	..	..	..	75	..	..	..	..	..	..	..	..	..	..
Lepere		Liberty 12	0	..	..	1500	136	1800	20800	..	..	..	..	..	..	..	22000
			6000	5 35	..	1540	132	1740	..	..	..	..	..	..	..	..	..
			10000	10 35	..	1520	127	1680	..	..	..	..	..	..	..	..	..
			15000	19 15	..	1500	118	1620	..	..	..	..	..	..	..	..	..
			20000	41 0	..	1480	102	1550	..	..	..	..	..	..	..	..	..
S.E. 5 (British)		180 Hispano-Suiza ..	0	..	1170	..	123·0	2100	19400	..	..	..	2051	..	..	..	..
			6500	6 50	810	1800	118·5	2080	..	..	..	..	..	..	..	..	..
			10000	11 34	615	1800	115·5	2000	..	..	..	..	..	..	..	..	..
			15000	21 20	340	1800	107·5	1965	..	..	..	..	..	..	..	..	..
			20000	50 17	60	1780	85·0	1820	..	..	..	..	..	..	..	..	..
S.E. 5 (American)		180 Hispano-Suiza ..	0	..	..	..	121·6	2100	20400	..	..	..	2060	..	..	..	..
			6500	8 0	750	1800	120·0	2140	..	..	..	..	..	..	..	..	..
			10000	13 0	590	1800	117·0	2080	..	..	..	..	..	..	..	..	..
			15000	22 10	350	1800	109·0	2000	..	..	..	..	..	..	..	..	..
			20000	50 30	140	1790	92·5	1860	..	..	..	..	..	..	..	..	..
Standard E-1 or M-Defense ..		80 Le Rhone ..	0	..	..	..	99·8	1240	..	828	01	115	1144	..	48	7·5	14800
			6000	10 0	..	1180	..	..	..	..	..	..	..	..	..	..	..
			6500	..	..	..	94·0	1240	..	..	..	..	..	..	..	..	..
			10000	22 20	..	1180	85·0	1220	..	..	..	..	..	..	..	..	..
V.S. B-1 (British Fighter) ..		300 Hispano-Suiza ..	0	..	..	114·5	1760	..	..	..	..	..	..	..	..	..	..
			6500	5 35	1600	113·6	1700	..	..	1842	742	344	2910	..	155	8	25000
			10000	10 45	1600	109·5	1660	..	..	..	..	..	..	..	..	..	..
			15000	19 30	1600	101·0	1600	..	..	..	..	..	..	..	..	..	..
De Havilland 4		Liberty 12	0	..	..	..	124·7	..	19500	2391	1191	..	3582	Full time, 2'12"	..	..	..
			6500	..	..	..	120·0	..	..	..	..	..	..	..	..	..	..
			10000	14 5	..	..	117·0	..	..	..	..	..	..	Half throttle, 3' 3"	..	..	..
			15000	..	..	..	113·0	..	..	..	..	..	..	..	..	..	..
Handley-Page 0-400		2 Liberty 12's ..	0	..	..	..	97·0	..	14000	..	..	..	11270	..	..	..	..
			7000	..	..	..	18·10	..	..	..	..	..	..	..	..	..	..
			10000	..	..	..	29·0	..	..	..	..	..	..	..	..	..	..
V.E. 7		150 or 180 Hispano-Suiza	0	..	..	..	106	1730	17500	1392	545	..	1937	..	..	..	..
			6500	8 50	635	1970	103	1700	..	..	..	..	..	..	..	..	..
			10000	15 15	462	1480	97	1650	..	..	..	..	..	..	..	..	..
			15000	29 0	220	1480	86	1600	..	..	..	..	..	..	..	..	..
De Havilland 9	2	400 Liberty	0	..	..	..	116	..	17000	..	..	..	..	4' 0"	..	..	..
Handley-Page V	to	4-375 h.p.	10000	9 0	..	..	109	..	..	..	..	..	..	..	..	..	..
	11	Eagle VIII	0	17 0	..	..	110	..	13000	..	..	..	..	15' 0"	..	..	..
		Rolls-Royce	10000	..	..	..	98	..	..	..	..	..	..	..	..	..	..
JN-1-D		Curtiss OX5 90 h.p.	0	..	..	..	75	..	..	1920	..	..	..	..	..	..	..
			10000	..	..	..	..	..	..	..	..	..	..	..	..	..	..
JN-6-H		Hispano-Suiza	0	..	..	..	105	..	..	2145	..	..	..	..	..	..	..
		150 h.p.	10000	..	..	..	..	..	..	..	..	..	..	..	..	..	..

Aerial Mails and a Standing Air Force

"THE future of commercial aviation lay not in short distance passenger flights, but in vast distances, in opening up undeveloped countries, and in forming an even stronger link with our oversea dominions," said Maj.-Genl. Sir W. S. Brancker at a luncheon given by the Lord Mayor of Newcastle in connection with the opening of the Aircraft Exhibition in the city. Genl. Brancker went on to say that the future would see mails carried by 300-mile stages to Cape Town, Calcutta, and probably Australia, but as far as crossing the Atlantic was concerned, the airship would probably be used. The Government were alive to the future of aviation, but were limited to what the Treasury, now pledged to retrenchment, would give. The country would have to depend on individual enterprise. The League of Nations involved, to a certain extent, disarmament, but England was the one nation that would have to keep up an appreciable standing Air Force if we were to be safe in the future. Probably the future safety of the country depended on the air, and we therefore depended on our warlike strength in the air. Other countries were more self-contained, and, on the declaration of war, would have large air fleets at their immediate disposal.

The Exhibition, which was opened by Brig.-Genl. Becke, includes a large number of modern British machines, as well as a dozen captured German aeroplanes, and a collection of engines, bombs, etc.

The Largest British Rigid Airship.

SOME particulars are now available of the R. 33, claimed to be the largest British rigid airship, built by Messrs. Sir W. G. Armstrong, Whitworth and Co., at Barlow, near Selby, which may shortly attempt a cruise to New York and back. The stream-lined envelope is 670 ft. long, and the greatest diameter is 80 ft., the capacity working out at 2,000,000 cubic feet. There are four cars, two amidships, one forward and one aft. The power plant consists of five Sunbeam engines, giving a total horse-power of 1,250, and the speed is expected to range between 80 and 90 m.p.h. Accommodation for the crew of 23 is provided amidships. The designers believe that the airship will be able to make a non-stop run from England to New York and back, and it is stated that in case of fog the airship could remain aloft for three weeks.

Flying in South Africa

A COMPANY is being formed at Johannesburg to import four aeroplanes for inaugurating air services between Johannesburg and Cape Town and Johannesburg and Durban.