

TYPES IN PREPARATION

Type	Power Units	Span ft.	All-up weight lb.	Max. Wing loading lb./sq.ft.	Max. speed m.p.h.*	Cruising speed m.p.h.	Per cent. Max. power	Height ft.	Total Payload lb.	Range mi.	Speed m.p.h.	No. passengers	Remarks
Airspeed AS-57 Ambassador	Two Bristol Centaurus 57	115	45,000	37.5	* 300 (18,000)	175 to 285	25 to 50	10,000 to 20,000	6,000 to 11,000	2,000 to 600	240 to 240	24 to 40	"Brabazon" type 2a
Avro 21 Tudor II ...	Four Rolls-Royce Merlin 102A	120	77,000	54.2	319 (18,500)	221 to 273	MWM MWM MWM	s.l. 13,500 23,000	8,480 9,800 14,200 13,480	2,625 2,475 1,850 1,925	230 to 230	34 to 60	Provisional figures only in last four columns
Bristol 167 ...	Eight Bristol Centaurus	230	250,000	47.0	300+ (25,000)	250 to 215	50 to 40	25,000 to 25,000	Approx. 20,000	4,500	215-250	72	Engines arranged in pairs, each driving six-bladed contra-airscrews. Second prototype likely to have jet-turbines. "Brabazon" type I.
Cunliffe-Owen Concordia	Two Alvis Leonides	57	11,000	25.4	—	212 to 190	78 to 60	8,000 to 7,000	1,700 to 2,100	1,000 to 750	190 to 190	8 to 10	Tankage available for 1,200 miles
Handley Page Hermes	Four Bristol Hercules 120	113	75,000	53.27	337 (22,700)	284 to 194	MWM Econ. Econ.	22,700 25,000 10,000	15,950 12,000 8,760 6,270	1,500 to 3,080	254 to 254	34 to 34	—
Miles M. 60 Marathon	Four D.H. Gipsy Queen 71	65	15,900	31.8	—	210 to 175	—	7,000 to 7,000	3,600 to 4,540	500 to 500	175 to 175	18	Maximum still air range 1,000 miles with 13 passengers
Percival Merganser	Two D.H. Gipsy Queen 51	47.8	6,532	20.5	194 (5,000)	152 to 170	—	s.l. 8,000	1,150	830	170	5	—
Portsmouth Aviation Aerocar Major	Two Cirrus Major III or D.H. Gipsy Major 31	42	3,950	15.5	167 (s.l.)	153 to 141	79 to 65	s.l. s.l.	972 to 416	223 to 1,003	136 to 136	5 to 2	Minor and Junior models also to be available

* Height (ft.) in brackets.

of cruising speed, none of our present civil aircraft is as homely as all that. The York's economical cruising speed is 200 m.p.h.—quite a deal faster than most people imagine—while its maximum operational cruising is as high as 275 m.p.h.

The figures in the table above and opposite are the latest available, and have been chosen so that a maximum amount of information can be given. They will be useful for guidance, information and comparison. The table itself is intended, too, as a record of achievement so far—and as a reminder of the work still to be done.

There is not nearly enough "talent" yet to be found amongst the newcomers in the second section of the table. Next time we hope that this section will include, for instance, turbine-powered aircraft types for which definite orders have been placed. Pious hopes cannot be tabulated.

Starting at the beginning of the table we have three Avro types which have been well tested in service—the 19, Lancastrian and York, and the Tudor I, the first production example of which has now been handed over to B.O.A.C. for development testing. A new type cannot, unfortunately, be put straight into service, and it will be many months before the first of the Tudors can be put on the regular Atlantic run. Furthermore, pressurisation and air conditioning are not quite the straightforwardly devised luxuries often so casually expected.

The prototype Bristol 170 has almost completed its development tests and the first passenger version will soon be in the air. This aircraft was designed solely as a freighter and its secondary appearance in passenger form has been dictated largely by demand.

First of the genuine "Brabazon" types to appear, the D.H. Dove is also well advanced in its tests and should be as useful a feeder-line and service-try-out aircraft as the Rapide has been. Though the last is described above as a "civil version of the Dominie," it would be just as true to reverse the sentence, since, after the early days of the Dragon, the Rapide has done, and is still doing, more to make a paying proposition of short-haul airline work than any other aircraft.

In much the same category, though, like the Bristol 170, designed in the first place for freighter work, is the Miles Aerovan.

Although the Short Sandringham and Solents are usually described as "civil versions" of the Sunderland, the latter was originally a military version of the Empire or "C" class boats which made history in pre-war days—so their genealogy is truly civil. Fortunately, the Government is taking a renewed interest in civil flying-boat development, so we may yet see Shetlands and still larger boats on the Empire routes.

Before the end of this year the Vickers Viking will have become the "standard" type for British, European and internal services.

On the Way

Three more "Brabazon" types are among the aircraft on which work is proceeding—the Bristol 167 (familarly known as the "Brabazon I"), the Airspeed AS-57, and the Miles Marathon. The 167 is something very unusual and interesting both in size and layout, and is intended for the direct London-New York service. It will have an all-up weight of 110 tons and is expected to cruise at 250 m.p.h. while carrying 72 passengers on this crossing. The Ambassador prototype is due out some time during the winter months and is a very modernised version of the twin-engined transport formula.

The Tudor II, the prototype of which should be flying at any moment, is really a shorter-range heavier-load version of the Tudor I, and is intended for the Empire routes. The Handley-Page Hermes is another "interim" type which should soon be flying.

In the table we should have preferred, when giving power percentages for different cruising speeds, to have used the more modern "Maximum Except Take-off," or METO, figures as a basis, but there was a certain lack of standardisation in the figures available. Except where MWM (maximum weak mixture power), RM (rich mixture power), or Econ. (best economical weak mixture power) have been used, the take-off figure has been used as a basis for the percentages.