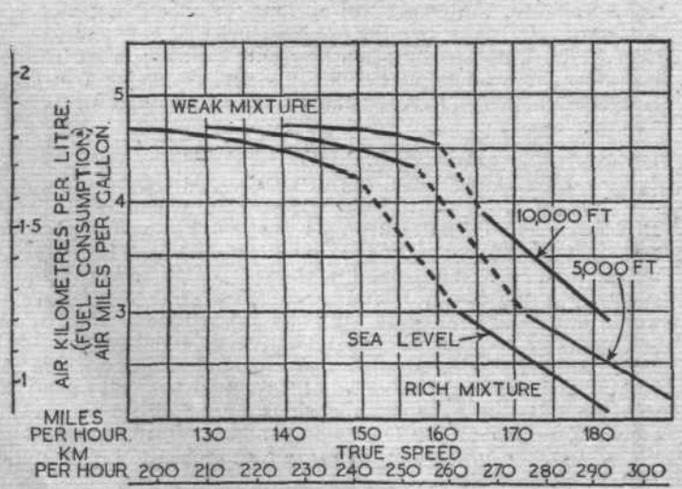
Back Into "Civvies"

The Avro Anson Becomes a Useful Feeder-line Aircraft as the Avro Nineteen

DELIVERY is the key word where post-war commercial aircraft are concerned. After hearing so much about the long delays that must inevitably occur before British civil machines can be on the routes, it is good to learn that at least one firm, A. V. Roe & Co., Ltd., has a type ready for delivery *NOW*. True, it is not a wonderful new design combining all the best features of the helicopter and the stratosphere jet-propelled speed-of-sound beater, but it *is* an aircraft which has proved itself for sturdy reliability in all sorts of weather over tens of thousands of flying hours and millions of air miles flown. It is the Avro Nineteen, which is the civil version of the famous Anson.

The conversion is really a re-conversion, or de-conversion if that be the more descriptive term. Perhaps an outline history may serve to refresh memories. Early in 1935 two Avro 652 monoplanes with Siddeley Cheetah V engines were delivered to Imperial Airways. They were christened *Avatar* and *Avalon* respectively, and were intended chiefly for long-distance charter work. In the same year the Air Ministry ordered a general reconnaissance version, the first unit to receive the Anson, as this type was named, being No. 48 squadron. The Avro works series number of the Anson was the 652A. The prototype had two Cheetah Mark VI engines, developing 290 h.p. each at 6,000ft., but when the machine really got into production (the first order was for 174 machines, a very substantial production for those days!) it was fitted with Cheetah IXs, which ran on 87 octane fuel and developed a maximum power of 340 h.p. at 6,800ft. The most notable external change compared with the civil machine was the mounting of a gun turret in the decking aft of the cabin.



This chart of air miles per gallon plotted against cruising speed shows that at 3,000ft. there is little gain in fuel economy by operating below 140 m.p.h. Above 150 m.p.h. the fuel consumption rises rapidly. These cases correspond to 48 per cent. and 53 per cent. of the take-off b.h.p., so that the engines are running with a comfortable margin, thus contributing to low maintenance cost.

War History

Thus at the outbreak of war in 1939 the Anson was available in large numbers for service with Coastal Command, where it did excellent work on convoy duties and coastal reconnaissance. In 1940 the Anson was chosen as the standard twin-engined trainer for the Empire Air Training Scheme. During 1943 there arose a need for a short-range small transport aircraft for the R.A.F., and the Anson fuselage was redesigned to give greater internal capacity than that of the standard trainer. This type was duly produced, and it is from it that the Avro Nineteen has been developed.

Reliability is one of the first characteristics demanded by an operator. The Avro Nineteen has two Cheetah XVs, a type of engine which has an unexcelled record in this direction, and the period between overhauls of which exceeds 1,200 hours. Moreover, compared with the original Cheetah Mark VI, the power available for take-off is 420 h.p. for each engine (at 2,550 r.p.m. and +4 lb./sq. in. boost).

The maximum permissible loaded weight of the Avro Nineteen is 10,400 lb. The disposable load will obviously vary somewhat with the cabin and other equipment. Alternative seating accommodation is available for six, eight or nine passengers. As a typical case we may take the 8-passenger version. The disposable load is 2,671 lb., made up as follows: Crew (2), 340 lb.; passengers (8), 1,360 lb.;