

THE AVRO "TUDOR"

by John W.R. Taylor



Avro "Tudor" II.

FEW aircraft have been the subject of so much controversy as the Avro "Tudor." When the first details of this new British air liner were released, it was heralded by the press as the last word in fast, luxurious post-war air transports. As a result, when B.O.A.C. announced after a series of proving trials that the "Tudor" I had several deficiencies, there was a great deal of disappointment, and many people who should have known better forecast that the "Tudor" was no good and that we should have to buy more American air liners to operate our long-distance airline services.

The truth is that all aircraft have "teething troubles" in the early months of their life. Sometimes these are serious, but more usually they can be cured by such methods as adding a dorsal fin, cleaning up the general design, strengthening some part of the structure or fitting different engines. In the case of the "Tudor" I, Avro have made a number of small modifications and now announce that the type is likely to exceed handsomely its original specification, which is quite a good answer to the pessimists. The "Tudor" is, in fact, what it was designed to be—a fast, comfortable and reliable air liner, planned during the final stages of the war to hold the fort on B.O.A.C. *Speedbird* routes until a new generation of post-war air liners becomes available.

During the war our aircraft industry had to devote all its tremendous energy and skill to producing at first sufficient of the world's finest fighters to prevent our losing the war, and then sufficient of the world's finest bombers to enable us to win it. Production of transport aircraft for the Allied air forces was left to the United States; as a result American

manufacturers were able to establish a lead in the design of new air liners. But an idea of the ability of our own designers can be gained from the fact that the Americans themselves predict that, by 1948, we shall not only have eliminated that lead but shall have outpaced them. This is largely due to the fact that Britain leads the world in the design and application of jet and "propjet" aero engines. It is significant that a modified Avro "Lancastrian" was the first air liner to fly with jet engines; that an Avro "Lincoln" has carried out a highly successful flight test programme fitted with two "Theseus" propjets in place of its outboard "Merlins," and that a "Tudor" VIII will soon be flying, powered with four Rolls-Royce "Nene" jets.

Eight different versions of the "Tudor" are now being built, but they are all variants of the basic Marks I and II designed for B.O.A.C. An important point to remember is that, although they incorporate many features combat-tested in the "Lancaster," and make use of a number of "Lincoln" components, the "Tudors" are in no way converted or developed from a bomber design. In this respect they differ from the "Yorks" and "Lancastrians" which have put in such fine service as interim transports on our airlines. The "Lancaster" was, without doubt, the finest bomber used by any air force in World War II, but the same space that will accommodate the concentrated weight of a 10-ton bomb will not accommodate 10 tons of assorted passengers and their luggage. So Avro started from scratch with the "Tudor" design, using orthodox all-metal construction, but including all the latest ideas to improve safety and comfort.

Throughout all the stages of design and