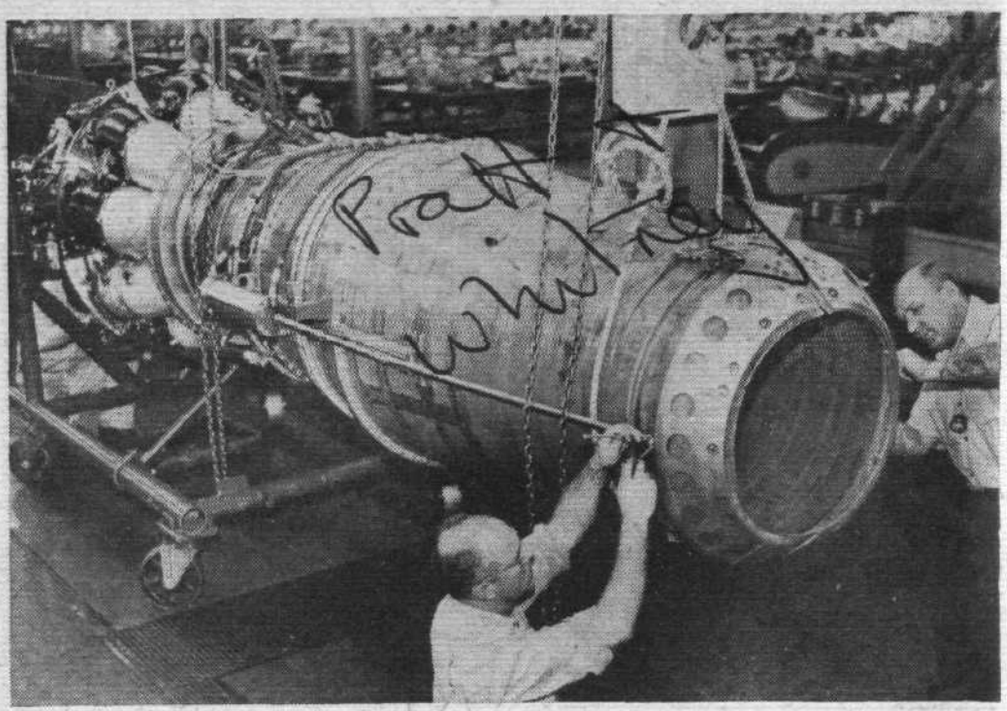
ROLLS-ROYCE TURBOJETS ABROAD

Hispano-Suiza Company to Build the Tay



Pratt and Whitney have happily married their production and development knowledge with Rolls-Royce original design skill to produce this powerful reheated J-48 Turbo-Wasp (née Tay). The maximum thrust is as high as 8,000 lb.

BEFORE Christmas, news was received from French sources that the Hispano-Suiza company was to build the Rolls-Royce Tay under licence in addition to the Nene, and this is now officially confirmed by the parent company at Derby. These new units are, no doubt, required in France for such aircraft as the Mystère, swept-wing development of the Ouragan, perhaps for late-production versions of the Ouragan itself, and for various land-based and carrier-based fighter prototypes as well as twin-engined medium bombers. The continental power rating quoted for the Tay is 2,850 kg thrust; at home and in America the figure is 6,250 lb. The specific consumption of the Nene and the Tay are about the same, and the Hispano Company state that they hope to develop the Tay to give up to 3,000 kg thrust (6,600 lb).

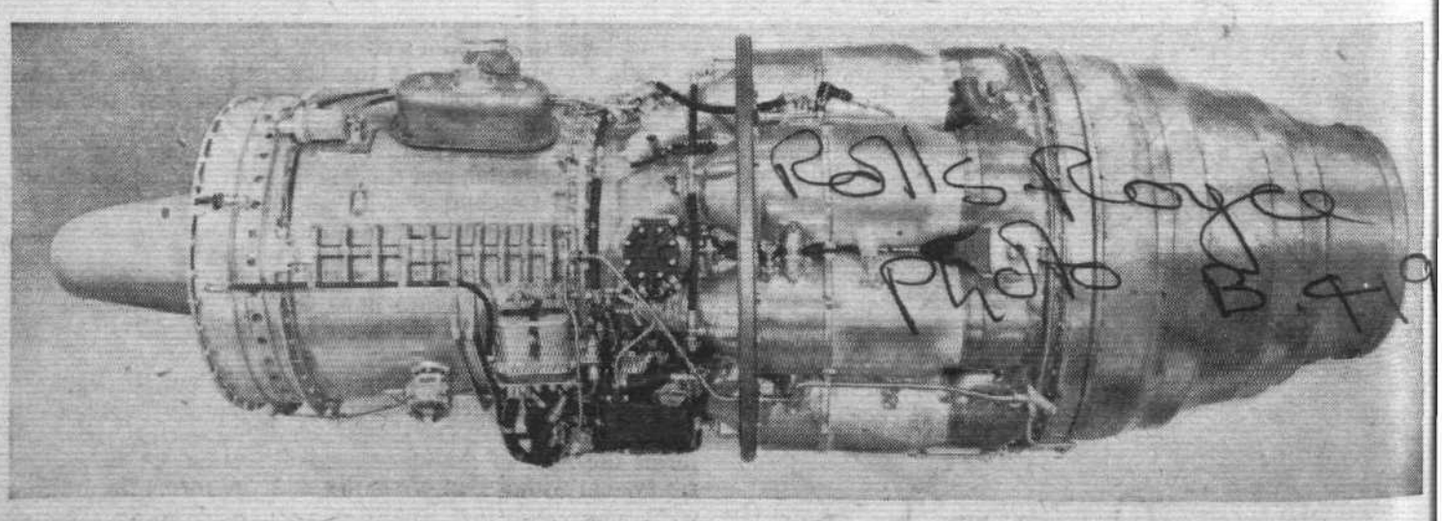
No mention is made in the announcements of after-burning or production technique, but the Hispano-Suiza company could profitably consult Pratt and Whitney, who have Tays in large-scale production for the American Services under the name J-48 Turbo-Wasp. Though Rolls-Royce would be able to provide the latest knowledge concerning after-burning, they do not have the Tay in production; it must be added, however, that the Tay closely resembles the later marks of Nene, of which unit a large number have now been built.

Several licensing agreements have been concluded for Rolls-Royce gas turbines, particularly with the French company as mentioned above, with Pratt and Whitney (Nene and Tay), with Australia for Nenes and Avons, and with the Belgian F.N. company for Derwents. Argentina also holds a licence to build the Derwent but has not so far, it is believed, taken it up.

Australia, it will be noted, holds licences to built both Nenes and Avons, the former for her Vampires and the latter for Canberras and any fighter which may be selected at a later date, for example, the Commonwealth all-weather design. It is learned that production arrangements for the Avon in Australia are well advanced. There is no longer any intention to build the Hawker P.1081 fighter under licence, so it may be presumed that an even more advanced type in this class is being awaited.

Rolls-Royce's own production effort is now concentrated on the Avon, which is to be the R.A.F.'s mainstay, and recently the firm's Glasgow factory has been reorganized in order to turn over to Avon manufacture. Large numbers of these units are already being produced to meet the demands of the Canberra production line. Under sub-contract agreements, Bristol, Napier and the Gloster "prefab" off-shoot, A. W. Hawksley, are to build more Avons as soon as possible.

In some ways it is perhaps a good thing that only one licence has been granted—to a Commonwealth country—for the manufacture abroad of the immensely important Avon. In countries where ideas of security accord with our own—Canada and America, for example—no harm would be likely to result, but in the past British knowledge and experience with turbojets has been handed around all too freely, and with the minimum of appreciation or compensation from most of the recipients.



The extreme importance of the Rolls-Royce axial Avon in the R.A.F.'s re-equipment plans has resulted in almost all details being withheld on security grounds. This is one of only two photographs to be released, and it depicts an early mark of Avon which is rated at rather more than 6,000 lb thrust.