BA and A Construction

From A to E

All the immediate future models of the North American Sabre to be built by Canadair Limited at its Montreal plant will be the F-86E, instead of the F-86A. Differences in the two aircraft are confined principally to the substitution of electrics for hydraulics in certain places, and other comparatively minor modifications.

Production of these aircraft is now beginning to accelerate at Canadair and the second machine should be rolled from final assembly at any time. After that, there will undoubtedly be a steadily increasing output. During a recent visit to Canadair, it was noted that there were about a score of the Sabres in the assembly state, with about half of these at an advanced stage. Practically all the assembly work (which, interestingly enough, begins with the air intake as the basic component) is being done at Canadair Plant No. 2 (the old Noorduyn factory).

The main Plant No. 1 is being devoted almost exclusively to the fabrication of parts for the Sabres (and, of course, spares for C-47s, and North Stars). The addition to this plant is now completed and its size must be seen to be appreciated. The entire machine shop, including drop hammers, presses, brakes, stretch presses, etc., has been, or is being moved into this new section. Canadair claims that its machine shop, when the move has been completed, will be the equal of the finest on the continent. There is much new machinery in evidence, in fact Canadair reports that about two thirds of its machinery comes under this classification. A large proportion of this equipment, however, bears the inscription "Crown Property".

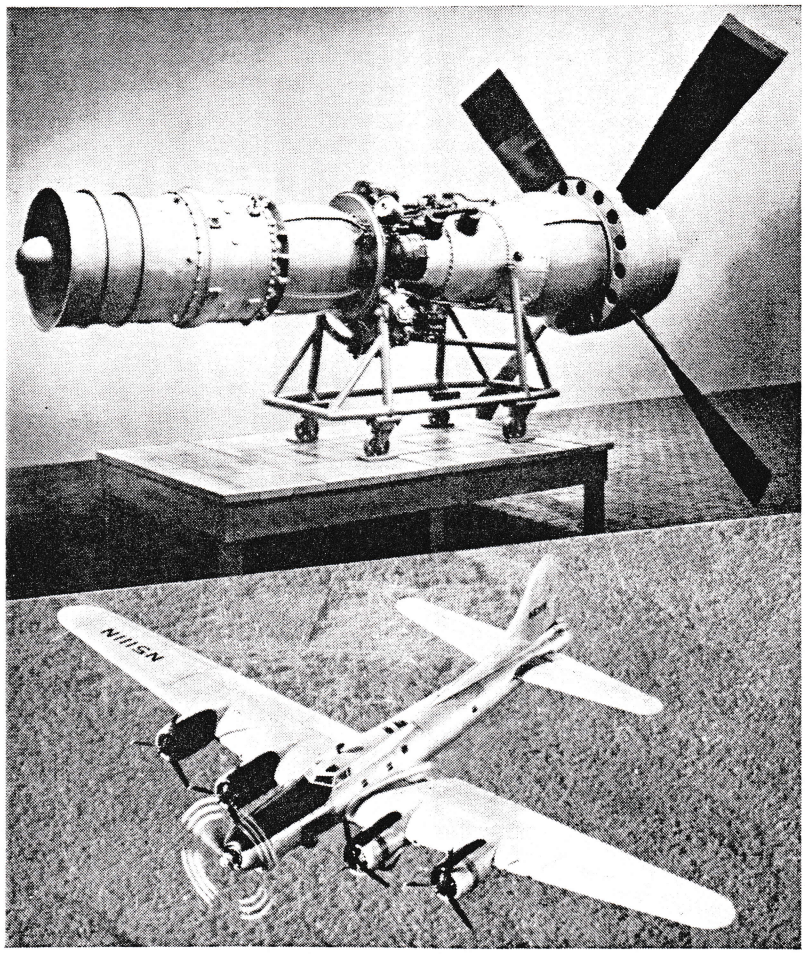
In spite of its vast commitments involving the F-86E, Canadair is actually using only about half of the factory space which it has at its command. Even the presence of four RCAF North Stars which were in the main plant for 5,000 hour checks (one bearing the United Nations insignia) did little to alleviate an impression of a great deal of empty space. With this in mind, it is interesting to note that a British Cabinet Minister was recently quoted as saying that Britain was considering turning over some of the production of the English Electric Canberra to Canadair. Meanwhile, the Northrop Raider, a tri-motor transport aircraft, for which Canadair is licensee for all countries beyond the continental U.S., seems to have gone by the boards, for the present at least.

Good Deal

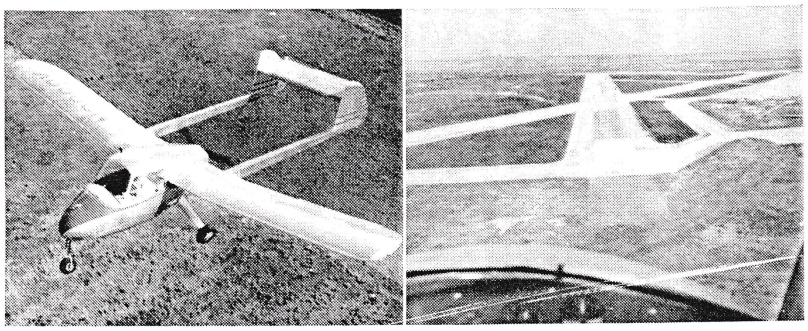
With a good deal of obvious glee, the Curtiss-Wright Corporation and Armstrong Siddeley Motors Limited during October announced that they had concluded an agreement whereby Curtiss-Wright gained manufacturing rights to not only the powerful Sapphire turbo-jet, but also to Armstrong-Siddeley's Python and Double-Mamba turbo-props. There is, in addition, to be a complete exchange of research and technical information.

And then a short two weeks later, another deal was announced, this time between The Bristol Aeroplane Company and Curtiss-Wright. This latest agreement covers long term engineering and technical collaboration in engine development, and production rights to "a Bristol engine". This is thought to be either the Bristol Proteus turbo-prop, or a yet unannounced turbo-jet known as the Olympus and developing some 9,000 pounds of thrust.

The Armstrong Siddeley Sapphire which is considered the plum of Curtiss-Wright's deal with the Coventry firm, was developed by Armstrong Siddeley from a basic design



ONE EQUALS FOUR: The new Pratt & Whitney T-34 Turbo-Wasp is powerful enough to fly a B-17 with the normal four piston engines shut down. The T-34 completed its 50-hour preliminary flight rating test at 5,700 hp, thus making it what P & W claims is the "most powerful turbo-prop engine now flying." Basic engine weight of the T-34 is 2,550 pounds. Stainless steel is used almost exclusively in the construction.



APPROVED TYPE: Anderson, Greenwood & Co., Houston, Texas, was recently granted a CAA Approved Type Certificate on its new lightplane, the AG-14, the production version of which is pictured above (see also AIRCRAFT, June and January, 1949). Picture at right shows excellent pilot visibility for landings. Cruises at over 110 mph with two people, plus fuel and 80 pounds baggage. Range is over 400 miles.

which was originally evolved by Metropolitan-Vickers. It has successfully completed the 150 hour service type test at 7,200 pounds thrust. It has been stated that the Sapphire goes a long way towards countering the high fuel consumption problem which so far has limited the range and endurance of jet aircraft.

Both agreements have actually been made with Wright Aeronautical Corporation, which is the engine division of Curtiss-Wright.

Lots of Push

The Avro Orenda and the CF-100 Canuck have been much in the news in past weeks. The Orenda has been flown for the first time in an F-86 Sabre at the Muroc Lake base of the USAF; the CF-100 is now being flown by RCAF pilots and early in November an Air Force crew took the aircraft to Wright Field, at Dayton, Ohio, where it was demonstrated to the USAF. The visit was described as a "courtesy" one.

USAF pilots were checked out in the machine by Squadron Leader E. L. (Shan) Baudoux, DSO, DFC, commanding officer of the RCAF's Experimental & Proving Establishment at Rockcliffe, who was the first RCAF pilot to fly the CF-100 and who flew it from Malton to Wright Field and return. Navigator for the trip was Flying Officer J. W. Whalen, also of the Experimental & Proving Establishment. In addition to S/L Baudoux, the aircraft has been flown by RCAF pilot S/L Paul Hartman, DFC, AFC, officer in charge of flying at the Establishment. In charge of the RCAF ground party which went to Wright Field was Flight Lieutenant J. W. Stewart, who is stationed at AFHQ and has been closely associated with the development of the fighter.

No details have yet been announced about the results of the flights to date of the Orenda-powered F-86. The test installation was made by North American Aviation and full reports of the tests will be made available to the RCAF and to Avro Canada.

Goodyear Demonstrator

A new experimental four-place amphibian was demonstrated recently by Goodyear Aircraft Corporation to representatives of the U.S. Armed Services.

The model GA-22 is an all-metal flying boat type amphibian with a single 186 hp engine mounted in a pusher nacelle above the hull. The airplane used as a demonstrator was a prototype which was completed early this summer and has been undergoing flight tests since that time. This model was developed from the earlier three-place GA-2.

The aircraft incorporates many features contributing to the all-round utility of the amphibian, the planing tail type hull, fully retractable landing gear, partial span leading edge slots and slotted flaps, reversible variable pitch propeller, and cross-wind landing wheels.

Labor Shortage

Lack of skilled workers may prove to be the greatest brake to the rapid expansion of the Canadian aircraft industry. Avro Canada now employs about 5,000, for instance, and aims to build this up in the immediate future to about 8,000 and by 1952 to between 10,000 and 12,000. The de Havilland Aircraft is building up from about 800