CONSTRUCTION

Westland Giant

Some indication of the trend of helicopter design can be gained from recent information that Westland Aircraft Limited has been holding engineering discussions on a giant helicopter capable of carrying 450 troops and having a gross weight of 206,000 lbs.

Westland's helicopter would have a three blade rotor with a diameter of 196 feet and driven by three Armstrong Siddeley Sapphires, one mounted in each blade tip. Originally it was thought best to mount the engines across the blade chord, but now it is planned to mount them in a spanwise direction, with suitable ducting to eject the exhaust gases from the blade tips.

The fuselage would be 124 feet long by 22 feet 6 inches deep by 21 feet wide. Clamshell doors at the nose would be 12 feet deep and 20 feet wide. The four landing legs would each be fitted with dual wheels. Twin tail rotors are also envisaged in this design, which is unconventional in size only. Fuel tanks would be in the nature of 5,000 gallons.

F-86 Deliveries

Deliveries of Canadair built F-86E Sabres are now in such a satisfactory stage that as of May 30, the RCAF had allowed 60 aircraft to be diverted to the USAF for use in Korea. These were flown down to North American Aviation's Fresno, California, plant for minor modifications to USAF specs, and then shipped to Korea, where they are now in action (flown by the USAF).

Defence Production Minister C. D. Howe stated recently that current production of the F-86E at Canadair is twice the rate originally planned, and it is expected to be doubled again by the end of the year. This would put the current rate at about 40-50 machines per month.

T-34 Contract

Negotiations for the production of the Beech T-34 for the U.S. Government by Canadian Car & Foundry Company Limited are near conclusion, Minister of Defence Production C. D. Howe told Commons on May 30. While Mr. Howe did not state that the aircraft was the T-34, other sources of information indicate that this is the machine. Originally the U.S. Government had intended to order a large quantity of T-6 type trainers from Canadian Car, but evidently revised thinking on the relative merits of one and two stage training has brought about a decision to revert to the use of small, relatively low-power aircraft as ab initio trainers. It is for this purpose that the T-34 will be used.

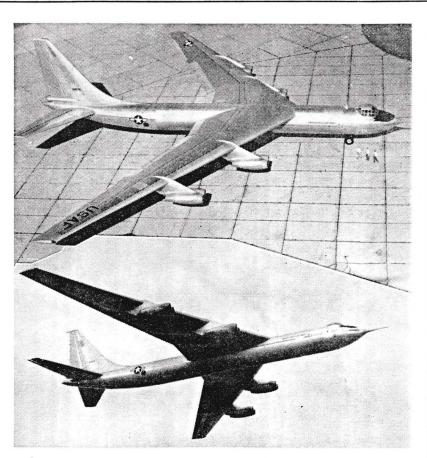
The T-34 first flew in December of 1948 as the Beech 45 Mentor, a private venture on the part of Beech Aircraft Corporation. Although the USAF and USN have shown sporadic interest in this aircraft and similar types, the services' commitment to single stage training and the enormous numbers of T-6 aircraft readily available put the T-34 at a disadvantage. However, with the accelerated training program, the single stage method has not been quite so practical and in addition, the T-6's are beginning to be in short supply. As

a result, the time is opportune to revert to the old two stage system with a modern primary aircraft.

This aircraft, which is at present in production nowhere, has a wing span of 32 feet 10 inches, a length of 25 feet 10 inches, and a height of 9 feet 7 inches. Powered by a Continental E-225, it cruises at 167 mph TAS at 10,000 feet at 60% power. Its design dive speed is 280 mph and it has an all up weight of approximately 2750 pounds. The aircraft is fully aerobatic. Tricycle gear is used, making the trainer closer in ground handling and landing and take-off characteristics to the service aircraft which pilots will fly after attaining wings standard.

The Avro Record

High praise for the achievements of Avro Canada was voiced in Commons on May 30 by Defence Production Minister C. D. Howe. Mr. Howe said that two pre-production CF-100's had been delivered to the RCAF. Three additional pre-production aircraft had



COLOSSUS: These are the first unretouched photographs to be released of the new Consolidated Vultee YB-60 jet powered, swept wing, heavy bomber. Wingspan of the YB-60 is 206 feet compared with 230 feet for the B-36 (the wing sweep cuts down the span); length is 171 feet, nine feet longer than the B-36. With a height of 50 feet, it is 3 ft. 3 in. higher. Power is by eight Pratt & Whitney J-57 turbojets developing approximately 10,000 lbs. th. Note size of men in upper photo, near nose.

been completed and were then in flight test. Three more pre-production aircraft were completely assembled on the final assembly line, in the process of equipment installation. The tenth preproduction aircraft was completed structurally and had been transferred to experimental shops for trial installation of certain airborne equipment.

Deliveries of the CF-100 under the main production contract are scheduled to commence in August, 1952, according to the Minister, who added that he had every reason to believe that Avro Canada would meet production schedules, provided "certain electronic equipment can be secured from the U.S."

With regard to the Orenda, he said that 20 development engines had been produced, and ten sets of spare parts for development engines. Twelve preproduction engines were fabricated for use in the pre-production CF-100's together with 25 sets of spares for these engines. In addition, 16 engines on the main production contracts had been produced, and a further 35 engine sets completed and in process of assembly.

The Last Anson

The last Avro Anson to be manufactured was handed over to the RAF on May 27 by A. V. Roe Limited of Manchester, England. The Anson, 11,020 of which were produced, has been in continuous production since 1935.

Originally intended as a coastal reconnaissance aircraft, the Anson has during its 17 years of existence been used in every conceivable manner by both military and civil operators. A standard twin-engine trainer for the BCATP (together with the Cessna Crane), it became as familiar as a wife to most of Canada's active airmen, who regarded it with mixed feelings of horror and affection.

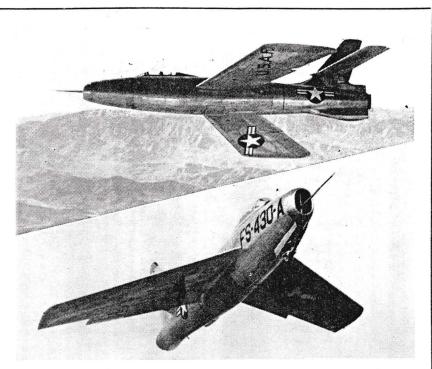
Not so well known is the fact that during the early days of the War, Ansons were credited with destroying several enemy aircraft.

Metals Freed

Now effective, Order NFM-11 has removed controls on lead, zinc, and cadmium. Controls were placed on these metals last July when they became in short supply.

T-36 Tailplanes

Enamel & Heating Products Limited of Sackville, N.B., has been awarded a contract to build T-36 tailplanes by Canadair Limited.



THERE ARE STRANGE THINGS DONE: At top is shown the Republic XF-91, a strictly experimental turbojet powered fighter type fitted with afterburner and auxiliary rocket motors. It has a swept, inverse-taper, variable incidence wing. The lower picture shows the F-84F Thunderjet, swept wing successor to the F-84E, which it is said to outperform in both speed and weight carrying ability. The E can fly over 600 mph and carry up to 32 five inch rockets. The F is now going into production.

Thompson Plant

In a mid-May ceremony, the sod was turned for the new \$6,000,000 Thompson Products Limited jet aircraft engine parts plant in Grantham Township, adjacent to the company's present St. Catharines, Ontario, plant. The schedule calls for the plant to begin initial production late in 1952.

More Power

A 135 hp Lycoming engine is now standard equipment on the Piper Pacer, Tri-Pacer, Super Cub, and PA-18-A agricultural airplane manufactured by Piper Aircraft Corporation of Lock Haven, Pennsylvania. The increase of 10 hp over the previously used 125 hp Lycoming has resulted in correspondingly increased performance for all models.

Other news from this company is that the Piper Twin-Stinson is now well over the 100 hour mark in its flight test program. Powered by two 135 hp Lycomings it is not slated for production until 1953. Meantime, two additional prototypes are being constructed.

F-86 Output Ahead

Canadair Limited is now scheduled to turn out more F-86E Sabres than

North American Aviation, according to reports from American sources. North American is gradually shifting its emphasis to other models of the F-86 (mainly the F and the D). so that it appears that Canadair will in the near future be the main source of supply of the E model for the USAF and the RAF, as well as the RCAF.

Supermarine 508

The first deck landing trials of the newest British naval fighter, the Vickers Supermarine 508, were carried out late in May on the HMS Eagle. The 508 is an interceptor fighter with two Rolls-Royce Avons and a butterfly tail.

Forging Plant

Recently announced was the formation of Hayes-Durham Forgings, Ltd., which produces forgings for aircraft as one of its specialties. Offices of the new company are located at 1435 Island Street, Montreal.

Contracts Awarded

Contractors awarded business in excess of \$10,000 by the Department of Defence Production during the period March 1 to April 15, include the following. The list does not include orders placed by the Department outside Can-