

Transports Steal SBAC Show

By G. F. WEBB

Although most types exhibited had appeared at the SBAC Show in previous years, visitors of all nationalities found this year's display at Farnborough remarkable for the real evidence of progress in the production of British civil aircraft. The cloudy skies over Hampshire shook and boomed with the sudden passage of Swift, Hunter, Javelin, and the great Vulcan delta bomber, yet to most on-lookers the military marvels (except for the new Folland Midge light fighter) hid shyly behind dense vapor trails of "security." But the transports were mostly demonstrated in production form with the emphasis on economics, flexibility in operation and passenger appeal.

Most sedate of all was the smooth and silent Porteus-turbo-prop powered Bristol Britannia, which looks every inch a winner. Interior design allows complete convertibility from passengers to freight, with no fixed bulkheads. When fully developed the Britannia will be able to cross the Atlantic non-stop in either direction. Maximum passenger capacity is over 100.

The Viscount has already established itself through its service on the routes of British European Airways and Air France and will soon be flying in Canada. The fact that the total ordered now exceeds 150 was well illustrated. Twenty-odd models, each in different operator's colors (including T.C.A.), were displayed on Vickers' stand at the exhibition. The Viscount, too, is being developed to seat up to 70 passengers by Vickers and B.E.A. The British airline is due for 12 of this new Type 802, starting in 1956.

Most impressive in the transport demonstrations were the new and bigger Comets. Though the findings of the investigation into the Comet I's misfortunes had not been released at the time of the Show, it was good to hear that development continues on the Marks II and III. The Comet II, as ordered by C.P.A., weighs 120,000 lb. and has Rolls Avon 503's of 7,000 lb. thrust. Range is about 2,200 miles; the B.O.A.C version demonstrated had 44 seats. Due to its fine propor-

tions it does not seem unusually large in the air, but it looks smooth and sleek indeed.

The Comet III is basically similar to the II but is 15 feet longer. Flying, it seems much bigger because most of the cabin volume is placed ahead of the wing. The one on show had 54 luxury seats; tourist capacity is 76. Range of the Comet III is 2,700 miles, and it weighs 150,000 lb. of which 18,000 lb. is payload. Each of the Avons fitted gives 10,000 lb. of thrust—and at 50 yards the noise at take-off really hurts!

De Havilland's also exhibited again the Beaver II, which has the British Alvis Leonides engine and a payload of over half a ton. Over 700 of the earlier series, the rugged, Canadian-designed Beaver I's (with Wasp engine), are in service in 30 countries. De Havilland's four-engined Heron now has a retractable undercarriage, and a Heron is soon to be attached to the Queen's Flight for use by the Duke of Edinburgh.

Of the new projects, the DC-3 replacements are at last getting ahead. The Handley Page Herald, scheduled for 1957 delivery, was on show in mock-up form. It seats up to 44 passengers or carries the equivalent weight of freight, with four Leonides engines on a high wing.

A promising future awaits the Rolls Dart-engined Aviation Traders Accountant, a shapely twin seating up to 36, for wherever the Viscounts go the Dart know-how and spares will follow. This plane is designed with a hinged quickly detachable nose to allow loading of vehicles and to ease maintenance. It will incorporate a new principle of construction wherein the skin is tensioned whilst it is bent to shape, for increased strength/weight ratio.

Scotland was well represented by the Scottish Aviation Twin Pioneer, a 14-16 seater with twin Leonides and a high, slotted-and-flapped wing. Safety is paramount in the design, which incorporates aft-facing seats and a very low minimum speed. The prototype should be flying soon.

The many other types at the Display included, among

the helicopters, the Bristol single- and twin-rotor types, and the miniature Cierva Skeeter. Brand new engines announced, with obvious potentialities, were the Rolls Royce Soar of 1,800 lb. thrust in a 16 in. diameter (275 lb. dry weight), and the Napier Oryx turbo-gas generator. The Oryx gives 750 gas horsepower and is scheduled for installation in a future tip-driven helicopter. Another new engine is the Napier Eland, of 2,700 horsepower, which was flown in a Vickers Varsity "test-bed."

But most fun of all was the cheeky little Auster Aiglet, looped, rolled and spun by Randal Porteous with his usual skill. Long after it had side-slipped to land almost in its own length, it was hopping down the vast runway, first on one wheel, then on the other, at crazy angles. Bouncing airborne again, it finally settled, only to career and ground-loop several times among the parked prototypes until it was eventually caught and spanked by its mechanic. It was under perfect control, of course — but the little kites are so much more human than jets!

W/C K. R. Greenaway To Work With USAF

One of the RCAF's top navigation specialists W/C Keith R. Greenaway, of Ottawa, has left Canada for a two-year exchange posting with the USAF. W/C Greenaway, who has been serving on the scientific staff of the Defence Research Board in Ottawa, will join the USAF's Strategic Air Command, and is to be stationed at MacDill Air Force Base in Tampa, Florida. He was recently promoted from the rank of squadron leader.

W/C Greenaway has become an internationally recognized authority on aerial navigation, with particular reference to high-altitude flying. He was honored last year when he was named winner of the McKee Trans-Canada Trophy for 1952. This trophy is awarded annually for meritorious service in advancement of Canadian aviation.

In 1952 W/C Greenaway was presented with the Thurlow Award, presented each year by the United States Institute of Navigation to the person selected as having made the outstanding scientific and practical contribution to navigation during the year.

New Test Pilot For Avro Canada

Glen Lynes, former RAF and Canadair test pilot, has joined A. V. Roe Canada Ltd., Malton, Ontario, where he is working on CF-100 experimental and production flight testing.

Lynes has been flying since he was 15. Born at Windsor, Ont., he went to Britain to join the RAF shortly before World War II. He had two enemy aircraft to his credit when he himself was shot down by flak near Tunis and taken prisoner.

He later escaped from Germany and test flew several early jets while still with the RAF. His log includes over 2,000 hours on various types of jet aircraft.

RCAF May Use Pilotless Jets

The RCAF is considering the possibility of using pilotless jet aircraft as test targets for guided missiles. If this is done, the experiments would be carried out at the air force's new weapons range at Cold Lake, Alberta. The RCAF did not say whether it has produced or intends to produce its own pilotless jet plane but it has been working for the last few years to perfect an air-to-air guided missile. The missile itself could eventually be converted into a pilotless plane.

Chemical Research Aids Aerial Spraying

Aerial spraying in Canada has become a million dollar business. This year it is expected to equal the \$1,400,000 operating revenue which was achieved by the whole non-scheduled carrier industry only eight years ago.

Expansion of aerial spraying owes much to the efforts of research chemists in developing new sprays and to the agriculturists and entomologists for advice on their application. This analysis and research has increased effectiveness of spraying greatly.

The spray operators themselves have done a lot to put the industry on a firm footing. Their excellent safety record brought a drop in insurance rates which reflects a growing confidence in their type of operation. Now they are taking steps to ensure that pilots be given a course of instruction in spraying techniques before undertaking commercial work.