

Commercial Aviation

little Junkers Junior bearing South African registration. [See page 320.—Ed.] Actually this Junkers type was built in some numbers, with Armstrong Genet motors, about eight years ago, and I always have a soft spot for it, as my own aerial baptism was effected therein by the late Major "Nobby" Clarke—in those days associated with the late Col. Henderson, and later with Bill Ledlie, if I

remember rightly. Anyway, for all its years, this little plane looks and performs just as though it had come straight out of the factory—sparkling new, which doubtless accounts for some of the younger generation here suspecting it to be a new type from this famous maker of "giant airliners."

T. A. R. Mac.

Trans-Canada Commencement

CANADA'S Government-owned air service, Trans-Canada Air Lines, began actual scheduled flying operations when, on September 1, it took over the Vancouver-Seattle air mail and passenger service operated by Canadian Airways. A daily service will be run with a Lockheed Electra.

Bristol's Radio

WHILE dealing with some aspects of the present and future developments at Whitchurch in the issue of September 9, we mentioned that the new Adcock D/F system was now in action. This, we learn, was installed by Standard Telephones and Cables, who, of course, have developed their own D/F equipment under the Adcock licence.

India Route Survey

THE Imperial boat *Centaurus* left Alexandria during the week-end on the second survey flight to India; the first was made by *Ceres* a fortnight ago. Needless to say, these flights are being made to test the new flying-boat bases—such as that on Lake Habbanyeh (fifty miles from Baghdad) and that at Sharjah on the Persian Gulf—and both the new and the old D/F equipment on the route.

Manx Co-operation

IT has now been officially announced by the L.M.S. that an agreement has been reached between this company, the I.O.M. Steam Packet Company and Olley Air Service for a fusion of their interests in the operations radiating from the Isle of Man.

These operations will be conducted in future by Isle of Man Air Services, which has the lease of the airport at Ronaldsway, and owns the offices and hangars there. The L.M.S. and the I.O.M.S.P. Co., will each take up a substantial share-holding in Isle of Man Air Services, whose capital is being increased to £75,000.

At the time when we remarked on this fusion of interests in last week's issue, no statement had been forthcoming and Olleys themselves had necessarily denied all official knowledge of the scheme. Once again the Maybury Committee appears to have spoken.

Incidentally, Blackpool and West Coast Air Services provide an example of another company which is really trying to put aviation over with the often indifferent general public. They have recently produced a little booklet giving the history of their services, details of the men and machines, and a fair amount of information about flying in general. The booklet has been quite well supported by the Manx hotel people and others who should be interested but who, unfortunately enough, so rarely are.

Rand Extensions

A CONSIDERABLE programme of development is at present under way at the Rand Airport, Germiston. Additional buildings consisting of stores, engine shops, mess rooms, hangars, offices and so forth are being erected for South African Airways, with new hangars for the Witwatersrand Technical College, Air Service (Pty), and Union Aviation on the north side. The latter will be steel-framed and will comprise one long building. A further hangar is being erected as an overflow. Additions are being made to the old Imperial Airways offices in order to convert these into an up-to-date clubhouse for the use of the Rand Flying Club.

An additional 9kW. floodlight is shortly to be installed on the south side of the control tower to act as an auxiliary to the permanent floodlighting scheme, and tenders have been called for an electric smoke wind indicator in the centre of the field.

Amongst future plans, it is intended to remove the beacon and the radio masts on the east side of the landing area in order to clear the approach from that direction.

The works in hand on the present programme involve an expenditure of £165,000 and at the completion of this programme the capital invested at the Rand Airport will have reached the impressive total of £400,000.

The "Hindenburg" Disaster

IT was almost inevitable that the findings of the American enquiry into the reasons for the *Hindenburg* disaster should be inconclusive. A tremendous amount of evidence was sifted during the investigation, all of which is given in the August 15 number of the *Air Commerce Bulletin*, and the conclusions were as follows:

"The cause of the accident was the ignition of a mixture of free hydrogen and air. Based upon the evidence, a leak at or in the vicinity, of cells 4 and 5 caused a combustible mixture to form in the upper part of the stern of the ship, in considerable quantity; the first appearance of an open flame was on the top of the ship and a relatively short distance forward of the upper vertical fin. The theory that a brush discharge [or St. Elmo's fire.—Ed.] ignited such mixture appears to be most probable."

The possibility of sabotage was rejected since there was no evidence to support it. Neither is it likely that there was structural failure (with consequent frictional sparks) or that the fire was caused by exhaust gases or by electrical short circuit.

Another Atlantic Week

ON Tuesday, September 14, *Caledonia* made her third westerly Atlantic flight, again in the command of Capt. A. S. Wilcockson. Her time was 15 hr. 33 min. between Foynes and Botwood.

Following the reception of meteorological information to the effect that lighter adverse winds would be found if a more southerly route were followed, Capt. Wilcockson flew to a point about 300 miles south of the Great Circle track and thence flew a rhumb line course to Botwood. The average speed for the direct crossing works out at 128.5 m.p.h., though *Caledonia's* ground speed over the longer route was, of course, a good deal higher and did not drop below 140 m.p.h. after the first 700 miles had been covered and the area of stronger winds had been crossed.

Cambria, meanwhile, has been waiting near Toronto for parts necessary for the repairs to the damaged or lost outboard float, and Capt. Powell should by now have been able to make a test flight from Lake Ontario.

Two days after *Caledonia's* trip the D.L.H. seaplane *Nordwind* put down at Port Washington after covering the 2,400 miles from the Azores (where she left the aircraft-carrier *Friesenland*) in 14 hr. 35 min. The average speed works out at 165 m.p.h. or thereabouts.

Nineteen Empire Boats

THOSE who take a private or professional interest in the "C" class flying boats probably like to keep their list up to date. Nineteen had been delivered by September 12 and eight more remain to be put into service. Below is a list of their ingenious names with the dates of their first flights in actual service:—

Canopus (Oct. 31, 1936); *Centaurus* (Dec. 12, 1936); *Caledonia* (Dec. 18, 1936); *Castor* (Jan. 4, 1937); *Cassiopeia* (Jan. 26); *Cambria* (Feb. 21); *Capella* (Feb. 27); *Cygnus* (Mar. 8); *Capricornus* (Mar. 24, crashed); *Corsair* (Apr. 9); *Courtier* (Apr. 28); *Challenger* (May 15); *Cavalier* (May 25); *Centurion* (June 5); *Coriolanus* (June 20); *Calpurnia* (July 1); *Ceres* (July 20); *Clio* (Aug. 1); *Cince* (Sept. 1); *Calypto* (Sept. 4).

An average of two a month must be considered as pretty good going by Short Bros. That they are kept busy is shown by the following table of the various flights made by *Cygnus* between June 3 and August 26:—

June 3	...	Alexandria to Southampton	...	2,270
" 9	...	Southampton to Durban	...	7,163
" 20	...	Durban to Southampton	...	7,163
July 1	...	Southampton to Alexandria	...	2,270
" 3	...	Alexandria to Southampton	...	2,270
" 8	...	Southampton to Alexandria	...	2,270
" 10	...	Alexandria to Southampton	...	2,270
" 16	...	Southampton to Kisumu	...	4,645
" 23	...	Kisumu to Southampton	...	4,645
" 31	...	Southampton to Durban	...	7,163
Aug. 11	...	Durban to Southampton	...	7,163
" 26	...	Southampton to Alexandria	...	2,270
TOTAL				51,562