

CIVIL AVIATION NEWS

SPRINGBOK SPECULATIONS

THE future of services between London and South Africa is at present the source of some speculation. At present both B.O.A.C. and South African Airways are operating first-class services on the route; the Corporation, of course, uses Comets and the South African company operates Constellation 749s. The introduction of tourist fares, scheduled for October 1st, 1953 (with "C" class fares, ten per cent below tourist level, making the route even more competitive), seems certainly to entail some re-arrangement of plans. Due to its relatively small seating capacity, the Comet is not economically suitable for tourist services. The Corporation's Constellations and Stratocruisers are fully employed on the North Atlantic route, and preliminary plans for the disposal of part of the B.O.A.C. Hermes fleet have recently been announced. Argonauts, modified to carry up to 58 passengers, would be the only suitable aircraft left to operate the London-Johannesburg tourist services. Alternatively, it is believed, B.O.A.C. might enter into an agreement with South African Airways whereby the latter company would operate all the tourist services with Constellations; all passengers who booked first-class tickets would, under the proposed pooling arrangement, be carried by B.O.A.C. Comets.

South African sources suggest that the two airlines have also discussed the possibility of "sharing" a small number of B.O.A.C. Comet Is with S.A.A. In return, the Corporation would operate some S.A.A. Constellations, enabling it to exploit fully the possibilities of the new fares on the South African route. Under this agreement, both the Comet luxury services and the Constellation tourist flights would be operated in pool, involving the "slipping" of British and South African crews. The proposal is reported to have been viewed with disfavour by B.O.A.C. crews and the less drastic arrangement outlined earlier may thus be the basis of present plans.

Sir Miles Thomas, chairman of B.O.A.C., was due to leave London today for a visit to Central and South Africa. It may be assumed that discussions which he will hold with South African airline officials in Johannesburg will include the problems involved in pool agreements concerning this route. Neither B.O.A.C. nor S.A.A. are at present prepared to comment on the subject.

Plans for reducing the Hermes fleet, referred to above, were first revealed on Thursday of last week, when engineering workers at London Airport held a meeting to consider an alleged proposal to sell 10 of the fleet of 19 Hermes IVs. Subsequently, after a meeting with Sir Miles Thomas and leading trade union officials, B.O.A.C. issued a statement welcoming the "lively and intelligent interest taken in the Corporation's forward operational plans." These plans, it was explained, envisaged a 10.7 per cent expansion of capacity ton-miles offered (from 222.5m to 249.7m) during the coming year. This increase in capacity is being made possible by conversion of Argonauts and some Hermes for tourist services, enabling them to carry more passengers, and the introduction of additional Comets.

As these plans take effect, some of the Hermes will gradually become available for disposal, probably towards the end of 1953. No indication was given as to the number of Hermes involved, or whether they would be sold to British or overseas operators. Although the B.O.A.C. announcement indicates that, of all the Corporation's fleet, the Hermes is the type least suited to the route pattern, there would certainly be a ready market in this country for the aircraft. More than one independent operator is believed to be interested in the prospect of obtaining Hermes for troopng.

On first-class services both the Hermes and Argonauts are normally equipped to carry 40 passengers; for high-density work they can be modified to carry, respectively, 56 and 58 passengers.

TWO FORCED LANDINGS

TWO leading airlines suffered accidents last week; happily in neither case were the consequences serious. The first occurred on New Year's Day, when an Aer Lingus Dakota (EI-ACF *St. Kieran*), flying from Dublin to Birmingham, made a forced landing at Sperrall Heath, 14 miles from its destination. According to one report the aircraft was flying at 7,000ft when one engine cut out. It descended to 4,000ft but had to make an emergency landing in open country when the second engine also lost power. Although the aircraft was extensively damaged, none of the 22 passengers was hurt and the pilot, Capt T. J. Handley, and first officer suffered only slight injuries.

The following day a K.L.M. Skymaster (PH-TDL *Groningen*) made a belly-landing in the desert near Dahran, Saudi Arabia, while making a charter flight from London to Karachi.

As in the Aer Lingus accident, the aircraft was damaged but the 54 passengers escaped injury; the crew were also unhurt.

American paratroops and a helicopter of the military air rescue service at Dahran arrived promptly on the scene to give medical assistance, but this was not required. The Skymaster, which left London on December 31st, was chartered by the Government of Pakistan to carry personnel appointed to one of the two schools set up for the R.P.A.F. by Air Service Training, Ltd. Several British employees of A.S.T. were among the passengers and the aircraft had a British pilot, Capt. McKenzie.

In both accidents tribute was paid to the composure and presence of mind of the women cabin attendants, who played an invaluable part in preventing alarm or distress among passengers.

T.C.A. LAST YEAR

IN a review of the company's operations last year, Mr. G. R. McGregor, president of Trans-Canada Air Lines, states that T.C.A.'s results reflect Canada's steadily expanding economy. Approximately 1,125,000 passengers flew on the airline's domestic and international services, 20 per cent more than in 1951. The passenger load-factor was 71 per cent. Freight and mail carried by the airline increased, respectively, by 27 per cent and 9 per cent to a total of 11.7m ton-miles. At the end of the year the company's fleet consisted of 23 North Stars (most of which have been modified to carry 48 passengers instead of 40) and 27 DC-3s. Average daily utilization of the four-engined machines during peak traffic periods was over 10 hr.

THE DANGERS OF CO

THE fact that carbon monoxide can constitute an unseen danger is once more brought home, this time by the findings of the report on a fatal flying accident which occurred last summer. More particularly, it is made clear that a quite small and apparently irrelevant modification to a light aircraft with enclosed cabin or cockpit may cause exhaust fumes to enter the fuselage and result in a dangerous concentration of the gas.

The circumstances referred to in *Civil Accident Report No. C. 600* are as follows: An experienced pilot, Mr. J. R. B. Hartnoll, took off from Elstree, flying solo in an Auster 5 with Lycoming engine, to obtain aerial photographs in Wiltshire. When returning to Elstree about 2½ hours later, the aircraft dived into the ground from low altitude, fire broke out, and the pilot was killed. All documentation was in order, the airframe, built in 1945, had flown a total of 905 hours and the engine, built by Pobjoy Air Motors and Aircraft, Ltd., at Barnstaple, in 1944, had run for 704 hours. Examination of the wreckage, observations regarding the flight and data on the weather conditions all failed to reveal anything particularly significant. At take-off both main and belly tanks were full, the contents being respectively 15 and 13 gallons, giving a cruising endurance of 4½ hours.

According to the report, "there seems little doubt that the aircraft finally stalled from a low altitude after a sudden reduction of engine power." In an endeavour to explain the lack of effective action on the part of an experienced pilot, consideration was given to the possibility that he had been affected by carbon monoxide. "It was known that the pilot was in the habit of placing a breeze block on top of the vertical-camera aperture blanking-plate to hold it in position." It was thought possible that a landing made at Bradford-on-Avon might have displaced the block and plate and that exhaust gases may have entered the cabin through the aperture (the 7in-diameter aperture in the floor was positioned 33in behind the pilot's seat and 81in behind the engine exhaust stubs).

To test the theory, trial flights were carried out in a similar type of aircraft with cabin window open and blanking-plate removed, and with cabin window closed and camera in position. In the first case the carbon-monoxide contamination varied from a maximum of 23 to a minimum of 7.5 parts per hundred thousand of air, and in the second case from 31 down to 7 per hundred thousand. British Civil Airworthiness Requirements lay down that the concentration shall not exceed one part in twenty thousand parts of air. Thus, according to the R.A.F. Institute of Aviation Medicine at Farnborough (to whom the results of the trials were submitted), "from the tests simulating the circumstances of the flight, there is definite evidence that in most conditions there would have been undue concentration of carbon monoxide in the cabin air." Apparently, the maximum blood-saturation of carbon monoxide could have been at least 20 per cent, and 10 per cent may lead to errors of judgment in flight.

The report also adds that "it is significant that, had the main fuel tank been selected throughout the flight from Elstree, its contents would have been exhausted at about the time of the accident."