

a Lockheed 10 being used on the Brisbane-Darwin route, while the Lodestars were put into service on the Brisbane-Townsville-Moresby courier run for which they had originally been intended. The two remaining Qantas boats—*Camilla* and *Coriolanus*—were making daily return services from Townsville to Moresby and Milne Bay, occasionally flying to Sydney for overhaul.

Vital though these internal flights were at the time, however, Qantas' prime objective was still to re-establish the severed Empire route. Considerable governmental opposition was encountered before permission was finally given in May, 1943, for the operation of a weekly Catalina service on the 3,513-mile non-stop haul across the Indian Ocean. It was flown between Ceylon and Perth and was intended for the carriage of diplomatic mail, airgraphs and V.I.P. passengers. Survey flights were carried out by Catalina squadrons of 222 Group of R.A.F. Ceylon, before the first scheduled crossing was made on July 10th, 1943.

The operation was an extremely hazardous one, which could be undertaken only by the experienced Qantas crews, using knowledge gained on long-range ocean flying during the Pacific deliveries of Catalinas. It involved the world's longest regular non-stop flight, which, although often passing through the elusive inter-tropical front, had to be made in radio silence and with scanty meteorological data.

Although designed for a normal all-up weight of 27,000 lb, to accommodate the heavy fuel load required for the long overseas crossing the Catalinas had to be operated at 35,150 lb, of which only 1,000 lb represented payload. Eight extra tanks were installed to accommodate the extra fuel which, at take-off, weighed nearly seven tons; it took ten hours of flying to reduce weight to normal. Captains had to develop a special technique to get off the water in the shortest possible time, for whereas at normal weight the boat would take off in 37 sec, periods of up to 115 sec were recorded in glassy water conditions on Koggala Lake at Ceylon.

The flights themselves entailed using a special engine-operating plan, in which power was reduced periodically to maintain an air speed which gave ever-increasing economy. Cruising at an average of 130 m.p.h., Q.E.A. captains obtained an extreme range of 4,650 miles—nearly 36 hours' duration. The flight time for services between Koggala and Perth was usually about 27 hr, although one flight took almost 32 hr. Crews consisted of three pilots, a navigator, a radio officer and a flight engineer; a rigid duty roster system was used. Navigation was carried out solely by dead reckoning and astro observations.

Passengers on these long aerial treks—among whom on one occasion was Lord Knollys, then chairman of B.O.A.C.—were presented on arrival with souvenir certificates, admitting them to membership of "The Rare and Secret Order of the Double Sunrise."

Ten months after the inaugural crossing the Catalinas made the 100th Indian Ocean flight. In the entire period in which these boats were used they made some 270 crossings and recorded over 1,000,000 aircraft-miles.

Great interest centred on Guildford airport at Perth when, in June of 1944, the first of two converted Liberators arrived under the command of the renowned Capt. O. P. Jones, B.O.A.C.'s veteran skipper. These aircraft were to supplement the Catalina fleet and would fly on a slightly shorter route (3,077 miles) made possible by operating from Learmonth (the nearest Australian point to Ceylon) to a landing strip some 100 miles north-east of Colombo. In the beginning take-offs were made at 56,000 lb, but as the crews gained experience this figure was increased to 60,000 lb. The machines carried 5,500 lb of payload,



Typical of war-time loads is this group of wounded, evacuated from New Guinea by D.H.86s and Lodestars in 1942.

including 15 passengers, and made the crossing in 17 hr. It was this operation which was originally known as the "Kangaroo Service" and this time a certificate elevating passengers to "The Order of the Longest Hop" was presented at the end of each flight.

The value of the 824 Indian Ocean crossings made by Q.E.A.'s Catalinas and Liberators was, of course, inestimable, but as the end of war drew near in 1945, it became obvious that the capacity of these services would have to be augmented far beyond the point where they catered exclusively for war traffic. To this end Lancastrians were introduced on the England-Australia route in June of that year, operating a 63-hr schedule from Hurn to Sydney; Q.E.A. were responsible for the Sydney-Karachi section. The faithful old Empire boat *Coriolanus*—sole survivor of the pre-war fleet—was commissioned for a charter service to Noumea and Suva. In addition, the "Bird of Paradise" flights to New Guinea were begun as weekly DC-3 courier services for the military forces. Subsequently they played a large part in returning civil refugees to New Guinea.

The year 1946 was one of transition which, although many wartime expedients were still seen overlapping, marked the beginning of Qantas' rapidly growing part in catering for Australia's sensational post-war awakening to the benefits of air travel. (According to statistics she can now be claimed to be "the world's most air-minded nation").

The route through Singapore was re-opened by Liberators and Lancastrians in April, and Hythe flying-boats were added to the Kangaroo Service in May, Q.E.A. being responsible for the Sydney-Singapore section. In October orders were placed for four Lockheed Constellations.

At the end of the year came the important Government decision that the Commonwealth was to purchase B.O.A.C.'s half interest in Qantas and that the company was in future to be regarded as Australia's "chosen instrument" for the new overseas services. Previously Q.E.A. had been jointly owned by the old Q.A.N.T.A.S. and B.O.A.C. On March 21st, 1947, B.O.A.C.'s shareholding passed to the Commonwealth of Australia and, on July 3rd, the Government also purchased the Q.A.N.T.A.S. shareholding; the company thus became entirely State-owned, but without any change in its policy. It remained in parallel partnership with B.O.A.C. on the Sydney-London Kangaroo Service.

It was in this year also that Sir Fergus McMaster (knighted in 1941 for his services to aviation) was forced by ill-health to retire from his position as chairman.

Following extensive training in California, Q.E.A. crews brought back the four Constellations in October and, on

1938 : Short Empire flying-boat.

1942 : D.H.90 (Dragonfly).

1943 : Consolidated Catalina.

