



SAS test-run the Pratt & Whitney JT4 engines of their DC-8s at Bromma Airport, Stockholm, in these sound-proof cells produced by the Metal Products division of Koppers Company of Baltimore

AIR COMMERCE . . .

visit of the Queen to Gibraltar in early 1954 put an end to operations in Spain, and the Rapides were disposed of, services then being flown by a BEA Pionair which returned to London once a month for overhaul, carrying soldiers at a specially low bargain fare.

In 1958 BEA Viscounts began to operate a through service from London to Tangier, landing at Gibraltar and changing the flight number. A year later, Royal Air Maroc took up its reciprocal rights, and now flies the Tangier - Gibraltar service four days a week.

As at present constituted, Gibraltar Airways enters its fourth decade with the same chairman, Sir George Gaggero. Deputy chairman is the Earl Amherst, while the remaining board consists of: Mr W. A. Caro (manager for BEA in Spain); Mr A. C. Ping; Mr J. L. Cabedo (director of Bland Line in Tangier and nephew of the chairman); Mr Joseph Gaggero (elder son of Sir George); and, as an alternate director, Mr John Gaggero, younger son of Sir George.

OVERSEAS AVIATION'S AMBASSADORS

EARLIER this week Overseas Aviation were due to take delivery of the first of the four Ambassadors that they have purchased from BEA (*Flight*, October 7, page 563). Overseas now join BKS, Dan-Air and Shell as operators of these well-liked passenger aircraft. Overseas Aviation's tentative plans to resell two of these aircraft are not at the moment being proceeded with. This is due, it is understood, to the large volume of business the company has in hand.

A note about Overseas' Ambassadors on page 758 of this issue ("The Independents 1959-1960") is based on information published by the ARB in the October 1960 edition of the *British Register of Civil Aircraft*, the latest issue available when that article went to press.

LAST WORDS ON MUNICH?

ON February 6 it will be three years since the BEA Elizabethan accident at Munich Airport. Last week, following the Fay Commission report to the Minister of Aviation (see "New Literature on Slush," *Flight*, October 21), the commander of the aircraft, Capt James Thain, was dismissed from BEA on three months' notice. The Commission decided that Capt Thain was at fault in not making a personal inspection of the wings before reaffirming his decision neither to sweep them nor to de-ice before he took off.

Since the accident Capt Thain has been suspended on full pay of £2,200 a year, and when he leaves the corporation on February 8 he will qualify for a pension of £450 a year.

Previously notified by the Ministry of Aviation that his licence could now be renewed, Capt Thain said after receiving his dismissal notice that he would appeal. Last week he was asking,

"I wonder whether BEA are going to help me get my licence back? I need flying practice. And as a pilot who served them for so many years I think the least they can do is to see that I am qualified again when I leave them."



Here is Aerad Flight Guide in its new "easy-to-read" format, with approach and landing charts now on single sheets. An open-flat plastic binder is used so that amendments can more easily be made

JAL GOES GLOBAL

WITHOUT doubt the most significant feature of the latest annual report for Japan Air Lines is the outline route map on the inside front cover. In contrast with the continuous lines showing existing JAL international routes to California and to South East Asia, dotted lines depict projected routes which will transform JAL from an oriental into a global organization.

Particularly striking are three planned routes from Tokyo to Paris—one an extension of their S.E. Asia route through the Middle East, another an extension of their California services to New York and on through London, and a third over the North Pole and on across Scandinavia. Other projected routes are Tokyo - Peking and Tokyo - Manila (an illustration, incidentally, of Japan's studied neutralism); an extension of the Los Angeles service to Brazil; and a dog-leg between Paris and Moscow. This meteoric programme, which will involve at least a doubling of JAL's route mileage, can best be seen in perspective when it is remembered that it follows on the heels of a 50 per cent increase in mileage in 1959-60, as compared with 1958-59, to 27,000 unduplicated route miles.

JAL's operations in the year ended March 31, 1960, divided into three neat sections: trans-Pacific services, almost entirely operated by the company's four DC-7Cs, accounted for just over half JAL's entire business; services to S.E. Asia, which use most of the capacity of five DC-6Bs, represented an eighth of total traffic; while domestic services within Japan, most of which are flown by a fleet of ten DC-4s, accounted for the remaining third. All services are operated at the high average load factor of 67 per cent (64 per cent international, 77 per cent domestic), and this, coupled with low unit costs (equivalent to 34 pence per c.t.m.), allows the airline to show a profit margin of two per cent on revenue after all financial charges are taken into account.

The financial year 1959-60 was, however, only the second profitable year in the company's short history, the dead hand of earlier losses being apparent from the large amount of money that has been poured into the airline in relation to the volume of turnover. In 1959-60, for instance, JAL capital stood at high as £19 million, some 50 per cent greater than the annual revenue figure of £13 million.

Although the bulk of JAL's present business is with the United States—and this is apparent from the Americanized appearance of the annual report—the future is likely to be closely tied up with France, for JAL has now concluded a revenue pool with Air France to cover the Japan - Europe services. Already Air France aircraft are flying between Tokyo and Paris with JAL insignia. Next year will see JAL's own DC-8s on the Polar route, while Convair 880s will follow on later on the route via S.E. Asia. Unless the American trust-busters intervene, it seems likely that JAL's future annual reports will owe more to the Eiffel Tower than to the Empire State Building.

CARTER BKS

FOR the carriage of freight to and from Northern Ireland, the Irish firm of Air Freight Containers and BKS have co-operated to produce lightweight containers which will be used on a new twice-daily scheduled freight service between Leeds/Bradford and Belfast. BKS hope to start operating before the end of the year. Later, services from Belfast will be extended to include Newcastle, Edinburgh and Luton—all routes on which BKS hold freight licences. An application has also been made recently to operate freight services between Belfast and Prestwick.

Part of the service will include door-to-door collection and delivery to connect with flights leaving at fixed times each day. A despatch-delivery time of less than 24hr is envisaged, and between some points morning despatch and evening delivery should be achieved. All routes will be operated with BKS Bristol 170s, for which several sizes of glass-fibre containers have now been developed. It is claimed that loading and unloading and securing problems—both of the freight within the container and of the container itself—have now been overcome.

SCOTLAND'S TROUBLED AIRPORTS

NEXT April, when Turnhouse Airport, Edinburgh, is closed for four months for runway strengthening, a temporary airfield must be found to take its place. Originally it was planned to strengthen Edinburgh's runway by night, but this idea had to be abandoned when it was found that the load-bearing strength was lower than had been thought; 1,700ft of the centre of the runway will have to be dug up.

None of the three airports suggested as temporary alternatives provides a fully satisfactory solution. Leuchars, the RAF fighter airfield in Fife, is too inaccessible from south of the Firth of Forth; Renfrew is already over-congested and proposals for its replace-