

CIVIL AVIATION . . .

AMERICA'S AIRLINE SAFETY

THE National Safety Council of America reports that last year saw the best safety record in the history of the U.S. airline industry. The 1950 figure for domestic operations was 1.1 fatalities per 100,000,000 passenger-miles. Forty-two companies received awards from the Council for having completed their passenger operations without a single fatality.

T.W.A. were particularly congratulated on having operated 4,420,434,000 passenger-miles with a perfect record between March 11th, 1947 and August 31st, 1950—only the second airline ever to exceed the 4,000,000,000 passenger-mile mark. The first operator to complete this number of passenger-miles without an accident was American Airlines.

United also had a perfect record throughout 1950, as did Colonial Airlines who had achieved an unblemished record of 367 million passenger-miles dating back to April 18th, 1930. At the end of 1950, also, Continental Airlines had logged some 473,250,000 passenger-miles without a fatality since May 1st, 1935. In addition, Hawaiian Airlines completed 21 years of operation without a single fatality; seven other companies were also mentioned by the Council as having flown for more than five years without incident.

SPAIN FOR THE I.C.A.O. COUNCIL

SPAIN was, on June 18th, elected to fill the remaining vacancy on the 21-nation Council of I.C.A.O. Having been ousted from the organization in May, 1947, because of a United Nations' proviso that she could not remain a member of I.C.A.O. once she had been blackballed by the General Assembly, Spain was permitted to re-join I.C.A.O. last November when the United Nations lifted its boycott. She was then the only candidate for the vacant seat on the council. At last week's meeting in Montreal 29 votes were cast in favour of Spain's election to the council and none against. There were three abstentions and two blank voting papers were returned. Representatives of the remaining 22 member-nations were not present at the assembly. Señor Mariano de Turrallde, the Spanish representative, has declared that his country "will now do everything possible to collaborate with I.C.A.O."

At its closing meeting, incidentally, the Assembly adopted a resolution pledging assistance to the United Nations on all matters directly affecting world security.

V.H.F. AND BROADCAST HARMONICS

FOLLOWING the request made some months ago by the Ministry of Civil Aviation for reports from airline radio operators and others that would assist them in tracing and remedying interference caused by broadcast transmitters, M.C.A. Information Circular No.77/1951, has been issued, thanking all those who gave information.

It is stated that the appropriate authority is now installing additional apparatus to deal with harmonics—the cause of the interference—and that the first phase of this work should be completed by about the middle of August.

Although existing harmonic-rejection equipment used in United

Kingdom broadcasting transmitters fulfils international requirements, the new measures should reduce interference to small areas in the immediate vicinity of the stations. The fields existing in such areas, says the *Circular*, are so powerful that aircrews flying through them must still expect some interference.

U.S. JET TRANSPORT PROJECTS

DETAILS have been released of the Lockheed L-193 and Boeing Model 473 jet-propelled transports. These, as *Aviation Week* emphasises, are only "paper" aircraft, but it would appear that chances of military sponsorship have improved during the past few months.

In configuration the L-193 is almost a scaled-up F-90 penetration fighter. Four turbojets, each of 12,200 lb thrust, are installed in a "battery" or "cluster" well aft, as indicated in the drawing on this page; this arrangement is claimed to effect a marked reduction in cabin noise level. Leading particulars of the L-193 are: span, 104ft; length, 112ft 2in; wing area, 1,615 sq ft; height, 36ft 8in; number of passengers, 48-64; gross weight, 148,000 lb; max. landing weight, 113,000 lb; max. cruising speed at 20,600ft, 618 m.p.h.; max. cruising speed at 35,000ft, 564 m.p.h.; rate of climb at sea level, 5,500ft/min; C.A.R. take-off field length, 5,050ft; C.A.R. landing field length, 4,980ft; landing speed at max. landing weight, 120 m.p.h.

It will be judged from the drawing that the Boeing 473 embodies features of the Stratojet bomber and Stratocruiser airliner. Four turbojets of 8,250 lb static thrust are envisaged. Other data are: span, 140ft 2in; length, 111ft 11in; wing area, 2,300 sq ft; gross weight, 135,000 lb; gross landing weight, 120,000 lb; passengers, 60-97; max. speed at normal rated power at 40,000ft, 580 m.p.h.; cruising speed at 40,000ft, 500 m.p.h.; rate of climb at sea level, 3,600ft/min (rated power); C.A.R. take-off-field length (without liquid injection), 3,950 ft; C.A.R. take-off-field length (with water injection), 2,850ft; C.A.R. landing-field length at 112,000 lb (brakes only), 6,150ft; C.A.R. landing-field length at 112,000 lb (brakes and tail parachute), 5,050ft; stalling speed at 112,000 lb, 95 m.p.h.

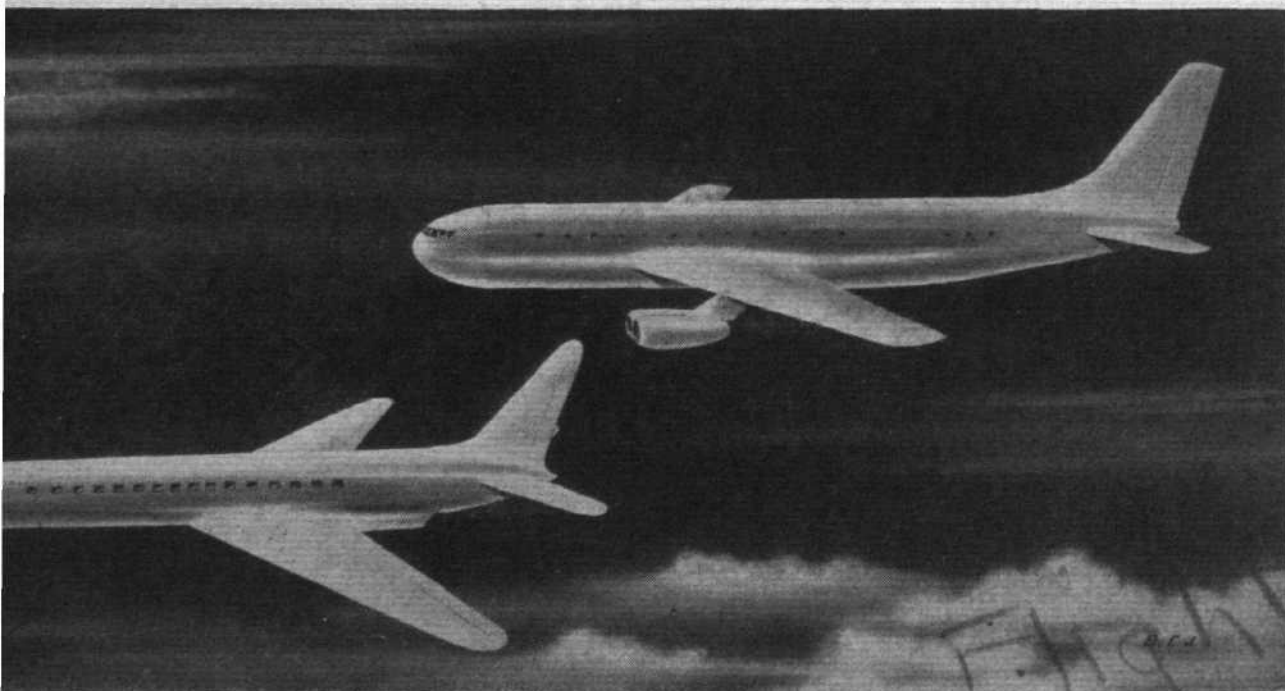
THREE-CLASS TRAVEL FOR K.L.M.

IT would seem that K.L.M. will be the first European airline to introduce three distinct classes of passenger accommodation for air travel. The Super Constellations and DC-6Bs now on order and which, world conditions permitting, will be delivered in 1952, are to have seats mounted on rails to facilitate variations in the spacing arrangements for the different standards of comfort selected by passengers.

The DC-6B will accommodate 37 first-class passengers, 50 second-class or 73 third-class; the larger capacity of the L-1049A will permit it to carry 48 first-class, 64 second-class or 84 third-class passengers. In addition, all the seats will be easily removable for conversion of the aircraft to freighter duties.

K.L.M. state that, in the light of their past experience, the accommodation space on these aircraft will not be wasted on non-essential luxuries such as cocktail bars; rather, the company will concentrate on providing extra toilet and powder-room facilities, which are considered more necessary for passengers flying over long stage-lengths.

The nine Super-Constellations which K.L.M. have ordered will be used on the North Atlantic routes via Prestwick and Shannon.



REDUCING THE GAP: Under the threat of British competition, American manufacturers and operators—according to a recent report—are now achieving some success in their efforts to advance the priority of jet transport construction in the United States. The two design-projects shown here (and described above) are expected to be included in a military development programme now under consideration. The design of the Lockheed L-193 (left) is broadly based on that of the F-90 fighter by the same constructor; similarly, the Boeing 473 (right) bears more than a trace of the lines of the B-47 bomber.