

inspection and replacement. All controls operate to their full movement without tightening or slackening of cables. The ailerons and elevators are operated by a throw-over wheel. The rudder pedals are of the automobile type, presenting a neat appearance and reducing the opening in the floor or fire wall to small round holes instead of slots. The brake pedals are on the left-hand side. The right-hand pedals are easily removable by taking out two bolts. A feature of the control system is that the control of each aileron is separately connected to the wheel, thus providing control of either aileron in the event of the other becoming inoperative.

The double pilots' cockpit is unusually roomy, with seats adjustable fore and aft by means of individual cranks. The cockpit may be entered through the cabin or through a full-sized door on either side. A window is provided in each of these doors, which can be raised or lowered by means of automobile-type cranks. Almost ideal visibility, both ahead and downward, is provided through the unusually large amount of window area. A sheet steel fire-wall separates the cockpit from the motor section. Heat for the cockpit is provided by means of a heater outlet under each pilot's seat.

The cabin interior of the "Airbus" is neat and comfortable. The passenger seats on each side of the cabin are on a platform 12 in. high. This leaves a sunken aisle down the middle, permitting a tall man to stand erect. The baggage is stored beneath the platforms on which these seats rest. The seats are deeply and comfortably upholstered over steel tube frames, and are provided with spring cushions. Individual adjustable ventilators and heater outlets are provided for each seat. Four individual seats are placed on each of the

longitudinal platforms, and two more passengers sit on a built-in automobile-type seat at the rear wall. A completely-equipped lavatory is entered through a door opening from the rear of the cabin by the side of this built-in seat.

In the air the "Airbus" is very stable laterally, longitudinally, and directionally. At the same time the general excellence of design permits instant manoeuvrability and adequate control surfaces provide complete control at speeds even below stalling.

The "Airbus" shows no spinning tendencies whatever, and is practically non-stalling. Recovery from any abnormal position in the air is automatic.

The principal characteristics of the Bellanca "Airbus" are:—

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| Wing span .. | .. 65 ft. 0 in. |
| Wing area .. | .. 651 sq. ft. |
| Length overall .. | .. 40 ft. 8 in. |
| Height .. | .. 11 ft. 6½ in. |
| Weight empty .. | .. 4,950 lb. |
| Useful load .. | .. 4,000-4,500 lb., according to equipment and power plant. |
| Payload .. | .. 10 passengers and 250 lb. of baggage plus 500-1,000 lb. of mail, according to cruising range required by operator. |
| High speed .. | .. 147 m.p.h. |
| Cruising speed (¾ full power) .. | .. 125 m.p.h. |
| Service ceiling .. | .. 18,000 ft. |
| Climb .. | .. 750 ft. per minute. |
| Range with 200 galls. | 840 miles. |

Cairo-Cape Town Air Service

THE Under-Secretary of State for Air, Mr. Montague, replying to a question in the House regarding the Cairo-Cape Town Air Service, stated that the negotiations had been completed and the agreement signed. The ground organisation was being developed with all possible speed, and it was expected that the northern section of the route, as far as Mwanza in Tanganyika territory, would be in operation at the end of February, and the through service to Cape Town as soon as possible thereafter.

French Air Service to the East

COMMENCING January 1, the French Compagnie Air Asie (Air-Orient) is operating an air service from Marseilles to Saigon, French Indo-China. The section as far as Karachi has already been in operation, and for the present, until final arrangements have been completed, the journey between Karachi and Calcutta will be made by train. From Calcutta, however, the service will be maintained by seaplanes. When in full operation the route followed will be—Marseilles, Rome, Corfu, Athens, Castlerosso, Beyrouth, Damascus, Baghdad,

Basra, Jask, Karachi, Jodhpur, Allahabad, Calcutta, Akyab, Rangoon, Bangkok, Saigon. Passengers travel by L car between Beyrouth and Damascus.

Spanish Air Services

As from January 1 the daily air services between Madrid, Seville, Barcelona and the Canary Islands will be resumed—the three lines having been closed down, or curtailed, since last October owing to lack of funds. The Canary Islands service will later be made twice weekly.

A New N.A.T. Passenger Service

AN air passenger service between Chicago and Kansas City will be inaugurated by National Air Transport to-day, January 2, and a few weeks later the service will be extended to Tulsa, Ft. Worth, and Dallas. Tri-motored Ford passenger and mail planes of a new type, which have a high speed of 152 miles an hour, will be flown by N.A.T. over the South-western route. These are the same type 'planes that are used by N.A.T. on its Chicago-New York passenger line, inaugurated December 1.



DIESEL-ENGINED : A Ford type 4-AT, fitted with three Packard Diesel engines of 225 b.h.p. each. With these engines the machine has a cruising speed of 100 m.p.h. It carries two pilots and 11 passengers.