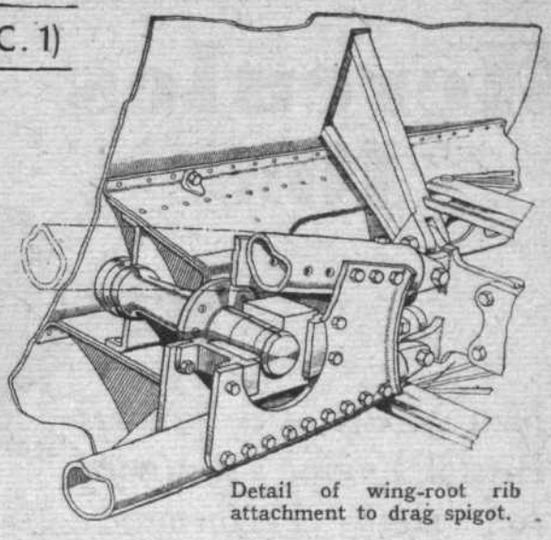
VICKERS VIKING (V.C.1)

RANGE TABLE

Range miles	Speed m.p.h.	Altitude feet	Power b.h.p.	Fuel Imp. gals.	A.M.P.G.	Pay load lb.	All-up weight lb.
1,000	210	10,000	2 × 900	500	2.0	6,955	33,000
1,500	210	10,000	2 × 900	750	2.0	5,085	33,000
1,250	160	10,000	2 × 560	500	2.5	6,955	33,000
1,875	160	10,000	2 × 560	750	2.5	5,085	33,000

FLIGHT CONDITIONS

	B.H.P.	R.P.M.	Boost	Altitude
Take-off at sea level	1,675	2,800	+ 7	—
Maximum climb (M.E.T.O.)	1,550	2,400	+ 6	4,750
Max. W.M. Cruising	1,280	2,400	+ 3	8,500
Recommended W.M. Cruising	900	2,000	0	10,000



Detail of wing-root rib attachment to drag spigot.

emphasises the standard of flight operation which can be expected in the future. In the case of this particular aircraft, flights are likely to be of not more than 600 to 700 miles in single hops—this corresponding to a still-air range of 1,000 miles, which allows a higher pay load than the maximum s.a. range of 1,500 miles.

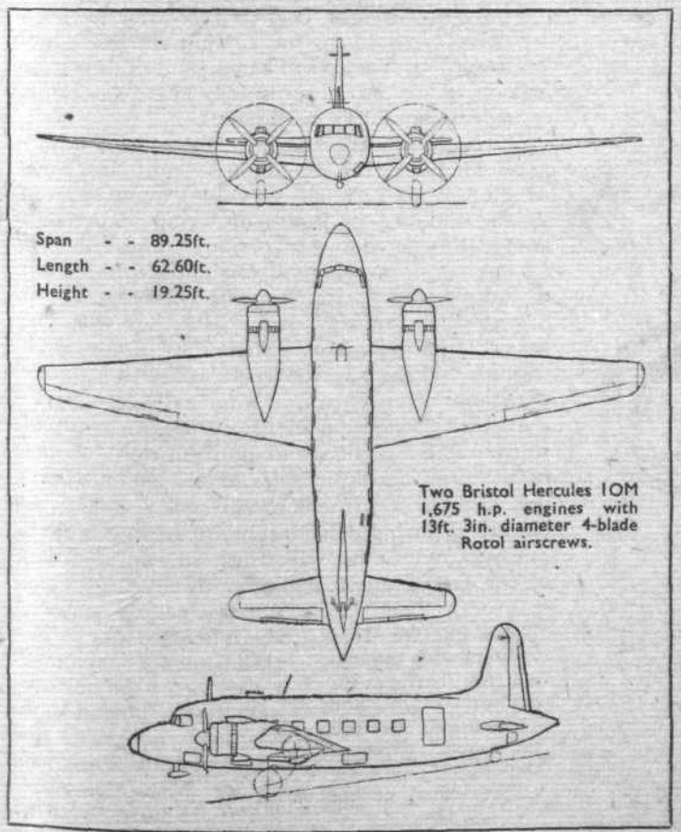
Furnishing of the cabin is carried out in a pale fawn woollen fabric with blue leather piping, which covers roof and walls down to the base line of the windows. Between the windows the cloth is ribbed horizontally and forms an effective break to the uniformity. A dado of heather-brown woven pattern cloth is fitted beneath the windows, and a dark carpet will cover the floor. The whole of the fuselage wall and roof surface in the cabin is insulated for sound absorption with a covering of kapok quilting. Seats are upholstered in a similar fabric to the wall covering and the edges are piped with sky blue.

Windows are quite generous in area and are pitched one at each seat for the 21-seat version. They are 20in. long by 18in. high and are formed by two layers of Perspex with an hermetically sealed space of dry air between. Immediately over each window is a unit panel containing a reading light, steward call-button and adjustable punka louvre for individual cool-air supply.

Cabin atmosphere is automatically controlled for temperature and for ventilation. Vitiated air is extracted through a central roof duct—in which the normal cabin lighting is arranged—and is vented externally. Fresh air supply is entrained through ram heads in the inboard wing leading edges and delivered into a mixing chamber. In each nacelle exhaust gases supply a heat exchanger which feeds warm air to the mixing chamber. Throttles in the cold and warm air ducts are controlled by a thermostat to regulate the proportion of hot and cold air supplied, and as the control is differential, any degree between all-hot or all-cold air can be delivered to the ducts which run beneath the cabin floor. Two mushroom vents at each seat station diffuse the air supplied to the cabin.

At the after end of the cabin the steward's or stewardess's pantry is arranged on the starboard side. So far this is fitted only with shelves and a comfortable folding seat, as the actual equipment to be included has yet to be decided by the operators. To port, opposite the pantry, is the main entrance door, which is of ample width and sufficiently high to allow a six-foot man to pass with only a bending of the head. Aft of the pantry is the toilet room furnished with an Elsan flushing closet and a wash basin.

Generally speaking, the new Vickers Viking is an aircraft of which we are likely to see a great deal on the Continental air routes in the coming years of peace. Certainly it is a good aircraft and one that would appear to be admirably suitable for its duties, and although I have mentioned one or two points that seem worthy of adverse criticism, they are small ones and likely to be remedied. In all truth one can say that the novel features of the flexible wing mounting and the luggage floor already place the aircraft in a class of its own without reference to its likely success in operation.



LOADINGS

All up weight	33,000 lb.
Wing area	882 sq. ft.
Aspect ratio	9
Standard mean chord	9.88 ft.
Wing loading	37.4 lb./sq. ft.
T.O. Power loading	9.85 lb./b.h.p.

Weights	Totals	Per cent. of All-up weight
Structure weight	10,480	31.8
Power units and tanks	7,345	22.2
Operating equipment	1,560	4.75
Passenger equipment	2,240	6.8
Empty weight	21,625 lb.	65.55