

October 1941. Nevertheless, pilots were still not confident about their armament when war overtook them.

78. The Buffalo had a disappointing performance. It was heavy and underpowered and had a slow rate of climb. Maintenance was heavy, which meant a low standard of serviceability. Wastage during training was high, and many of the aircraft in Squadrons suffered from rough handling. The Buffalo had no V.H.F. radio, and the maximum range of R.T./W.T. was 9 miles, being frequently less when atmospherics were bad. Intercommunication between aircraft was unreliable.

79. There was one multi-seat fighter squadron in the Command, No. 27, a night fighter squadron equipped with Blenheim I's. Aircraft were old and in poor condition and were thus of limited value in a night-fighting role. Its conversion into a bomber squadron, for which personnel were available, came up for consideration but could not be adopted owing to the need for retaining a night fighter unit.

Observer Corps.

80. In July, 1941, control of an existing Observer Corps system was transferred from the Army to A.H.Q. It had been organised chiefly as part of the civil air raid warning system, and needed a great deal of development for use in an active air defence system. The personnel were enthusiastic, but unfortunately little time was available to train them in their new duties. It was found impossible to establish the necessary Observer Posts in the jungle-clad mountainous country of Central Malaya where there was, therefore, a serious gap in the warning system. Observer Corps Operations Rooms were established at Kuala Lumpur and Singapore, and were linked up to the Dutch system in the Rhio Archipelago to the South, but difficulty was experienced in organising the whole through lack of existing telephone communications in Malaya and to an acute shortage of telephone material and equipment.

Radar Stations.

81. The approved policy of priority for the development of radar facilities was:—

- (a) Singapore Island.
- (b) The East Coast of Malaya.
- (c) Penang and the West Coast.

All Stations were to look seaward with only restricted overland cover behind, the hinterland being covered by the Observer Corps.

82. By December, 1941, four stations were operating—Mersing, Tanah Merah Besar (in East of Singapore Island), Bukit Chunang (S.E. tip of Johore) and Tanjong Kupang (S.W. tip of Johore). A further station, Kota Tingi, in Johore was nearly ready and was being accelerated partly to close the gap down the central portion of Malaya. A sixth, at Kota Bahru, the most northerly point on the East Coast of Malaya, had been built but no radar had yet been installed.

The general position was, therefore, that there was fair cover for Singapore but little elsewhere.

Fighter Operations Room.

83. A Fighter Group Operations Room in Singapore was designed, constructed and occupied by December—almost too late to do more than break the ice of training its staff and

fighter squadrons in the intricate art of fighter defence. It had an operational staff only, no administrative branches; it was in fact an offshoot of the Air Staff of A.H.Q.

Fighter considerations in general.

84. Thus an Air Defence system had been organised by the time war came. Whilst it was by no means as efficient as it would have been if the resources, time and equipment had not been so short, yet it provided Singapore with a scale of defensive effort which was by no means insignificant. Great credit is due to those who achieved this result with so short a time for preparation, outstanding amongst whom was the late Group Captain E. B. Rice.

Bomber and G.R. Land-based Squadrons.

85. There were two light bomber and two landplane G.R. squadrons in Malaya:—

- No. 62 Squadron (Blenheim I)—Alor Star.
- No. 34 Squadron (Blenheim IV)—Tengah.
- No. 1 (R.A.A.F.) Squadron (Hudson II)—Kota Bahru.
- No. 8 (R.A.A.F.) Squadron (Hudson II)—Sembawang.

These two types of squadron, Bomber and G.R., are bracketed together because, owing to the small size of the total force, specialisation was impracticable. Although the Hudson squadrons were the main oversea reconnaissance force, the Blenheims had also to be trained in these duties. Similarly, both types of squadron had to be trained in all types of bombing over the sea and over the land, both by day and by night.

86. From May, 1940, until the Spring of 1941 there had been severe flying restrictions imposed on Blenheim Squadrons owing to the lack of spares in the Command. During this period, flying hours were restricted to 5 hours monthly per I.E. aircraft. In Spring, 1941, selected pilots had to be withdrawn from these squadrons to assist in the formation of the first two fighter squadrons in Malaya.

87. Nos. 1 and 8 (G.R.) Squadrons R.A.A.F. had reached a higher standard of training, but it was necessary for the Australian Air Board to withdraw crews as they became fully trained and to replace them by untrained crews, the former being required for the further expansion of the R.A.A.F. in Australia.

There was, therefore, in both types of squadron a wide variation between crews in the degree of their training, and especially in their efficiency in night flying, in which a high degree of skill was desirable for operating through the violent tropical thunderstorms which prevail over Malaya at night during the monsoons.

Torpedo/Bomber Squadrons.

88. There were two Torpedo/Bomber Squadrons, Nos. 36 and 100, both based on Seletar, the personnel of which were highly trained and of long experience. But their aircraft, Vildebeestes, which had a speed of 90 knots and an action radius of 180 miles, were obsolete. With modern aircraft these highly trained squadrons would have been invaluable, especially in the first days of the war. But their approved rearmament programme, with Beauforts, had been delayed by technical complications in production in Australia. In their training more emphasis was placed on the torpedo than the