

Two, and sometimes three, attacks were delivered by formations of 27 to 54 enemy bombers escorted by fighters. The main targets were our aerodromes, but a number of attacks were delivered against Singapore harbour, the naval base and other military objectives. Raids were made in perfect formation despite A.A. fire, and the accuracy of bombing from heights over 20,000 feet was marked.

341. This continual pounding made it difficult to keep aerodrome surfaces serviceable. Kallang was built on reclaimed salt marsh, which oozed up through the bomb craters. The drainage at Tengah had never been satisfactory. Effective repairs were thus difficult. Rainfall at the time was exceptionally heavy, which in itself was a further handicap to repair work.

342. To complicate matters further, practically all native labour, which had many disabilities to face under air bombardment, disappeared. On the 7th January the Director General of Civil Defence had appointed a Director of Labour who was to organise and control all labour, allotting it to the services in accordance with an arranged priority programme.

There was also an acute shortage of M.T., without which labour, and the material for labour to use, could not be transported to the places where it was needed. The collection and allocation of M.T. was also placed under the Director General of Civil Defence.

Both these measures had become acutely necessary—to provide and organise labour in the face of repeated air raids, and in order to make the best use of limited supplies of motor transport.

343. First priority for what labour there was, was given to the repair of aerodromes. The G.O.C. Malaya diverted some of his reserves, at the expense of the construction of defence work, to reinforce R.A.F. labour parties. Later, parties of 100 sailors, survivors from H.M.S. "Prince of Wales" and "Repulse", were stationed at each of the 4 airfields in the Island.

344. Heavy attacks on our aerodromes on the Island had been anticipated some weeks beforehand by A.H.Q. In order to augment the number of airfields on the Island, six sites for landing strips had been selected, and work on them was put in hand on various dates during the latter half of December. Labour difficulties slowed up their construction, and, as will be narrated later, they had all to be demolished before they could be brought into use.

345. A considerable number of aircraft was destroyed, or rendered unserviceable on the ground largely because dispersal points had not been widely enough scattered in the first instance, whereas, time and labour had not been sufficient afterwards to rectify this shortcoming.

#### *Operations by Fighters in the defence of Singapore*

346. During the second half of January our depleted fighter squadrons did their utmost to ward off the enemy's attacks. No. 21 (F) Squadron R.A.A.F. and 453 (F) Squadron were mainly employed in operations in support of the army (paras. 323-330), leaving Nos. 243 and 488 (F) Squadron in a defensive role. To their assistance now came the newly arrived Squadron of Hurricanes (paras. 314-316).

347. The Hurricanes' first day, 20th January, was most successful. Twenty-seven bombers came over unescorted and 8 were shot down without loss. It appeared as if confidence in their decisive influence was to be justified. This was the last occasion, however, on which Japanese bombers came over unescorted. The following day 5 Hurricanes were shot down, including the C.O., S. L. Landells and a Flight Commander, against no loss to the Japanese.

348. From then on the Hurricanes were constantly airborne, carrying out 3 to 5 "scrambles" daily. Owing to their being constantly outnumbered by the escorting fighters, which were well handled, bombers could seldom be attacked. But with the realisation that "dog-fighting" did not pay, the revised "in and out" tactics adopted gradually gave increasing success.

349. The Hurricane pilots had been informed of the characteristics of the Navy "Os" and particularly warned of the inadvisability of getting involved in "dog-fighting" owing to the Navy "O's" small turning circle. Despite this, some of them had become involved in "dog-fights", which led to casualties.

350. The limitations of the warning system for Singapore have already been described (para. 302). Some help was obtained at this stage from Army G.L. sets; but the short time of warning, 10-15 minutes, remained a great handicap to efficient fighter defence. Operational control remained restricted owing to the lack of V.H.F. and to the unreliability of R/T.

351. These new aircraft were Hurricane IIs. They were fitted with desert oil filters because their original destination had been the Middle East. These deprived them of some 30 m.p.h. They were not quite so fast as the Navy "O" near the ground, but as height increased the Hurricane gradually overhauled the Navy "O" until at 20,000 feet it had an appreciable advantage in speed and climb. The Hurricane could always dive at higher speeds, but at all heights the Navy "O" was the more manoeuvrable.

352. It must be admitted here that too much had been expected of this handful of Hurricanes. Civilians and the armed forces alike had anticipated that these modern aircraft would carry all before them. That this was not achieved was no fault of the pilots, who under S/L. R. E. P. Brooker, D.F.C., achieved, in the face of overwhelming numbers, results which stand greatly to their credit. Nevertheless the false hopes which had been placed in them reacted keenly when they were not realised.

353. The average daily serviceability of Hurricanes from the 21st January to 28th January was 16, and by the latter date the position as regards the 51 crated aircraft was:—

- 17 destroyed (some of them at their bases).
- 2 repairable at Unit.
- 7 repairable at Depot.
- 21 available + 4 more in 24 hours.

On the 29th and 30th January, 20 were available.

354. During this period the Buffaloes of Nos. 21 R.A.A.F. and 453 (F) Squadrons were employed mainly on operations in support of the Army. Nos. 243 and 488 (F) Squadrons had continued in their role, in co-operation