

## CHAPTER 20

### ON SUMATRA

FAR East Command had withdrawn to Sumatra to gain "elbow room" for the reinforcement and re-forming of its depleted squadrons. However, the rapidity with which the airfields on Singapore Island had come under Japanese air and artillery attack had left little doubt in the commanders' minds that their basic weakness remained: while there was now ample physical space, there was not nearly enough time for recovery. The Japanese, with their great numerical superiority in men, weapons, material and mobility, were proving masters of the military art of maintaining pressure. The British and Dutch forces, on the other hand, were still facing the same grim disabilities that had beset them from the outset; the truth was that Sumatran bases were as weak and as unprepared as the Malayan bases had been.

Another factor that whetted the Japanese appetite for quick victory in Sumatra and added to the burden of the defenders was oil. Close to Palembang, capital of this great island which stretched for 1,000 miles across the south-westerly front of the Malayan Peninsula, were oilfields, regarded as the foremost in South-East Asia, which supplied two refineries adjacent to the town.<sup>1</sup> The Musi (or Palembang) River forked just below the town to flow delta-wise for about 50 miles until it ran out into Banka Strait. Its main channel was navigable by ocean-going ships.

By contrast with the congestion experienced on Singapore Island, the new territory was a vast area of jungle and swamp land which flanked a mountain range running the entire length of the island on the western side. There were few roads, the railways (single line) did not connect, and the radio-telephone system that linked the principal towns and connected Sumatra with Java was open and very insecure—Malayan problems over again.

While the Malayan campaign was in progress priority in aerodrome construction in Sumatra had been given to sites in the north suitable for the refuelling of reinforcement aircraft flying to Singapore by the trans-India route—sites that had become vulnerable from the day the Japanese gained aerodromes on the Malay Peninsula. By mid-January small refuelling and rearming parties, varying in strength but at most 50 men, had been placed at Sabang Island off the northern tip of Sumatra, at Lhonga on the main island across the Malacca Passage from Sabang, at Medan civil aerodrome where the Dutch were constructing a military aerodrome, at Pakanbaru in the centre of the island, at Padang midway down the south-western coastline, at P.1 and P.2. An airstrip had also been made at Lahat about 70 miles to the south-west of P.2 and the

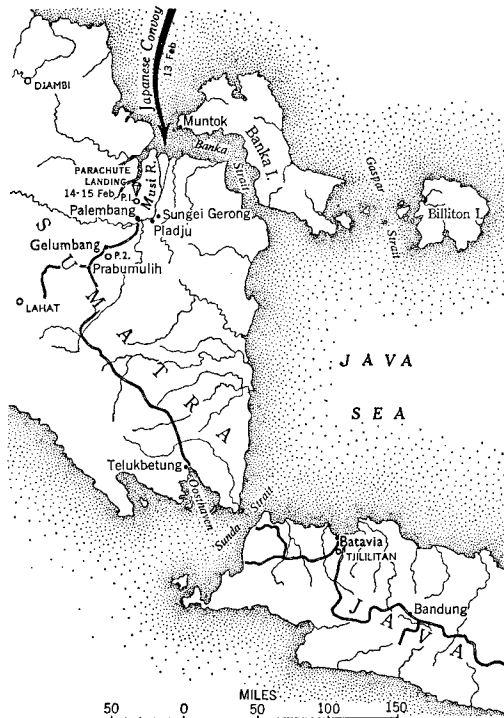
<sup>1</sup> In 1940 Japan derived 65.1 per cent of her oil supplies from the N.E.I., and the Sumatran contribution (which included high octane petrol) in that total was 40 per cent. In the same year the N.E.I. contributed 41 per cent of the world's total production in rubber and 9 per cent of the tin.

Dutch were building an aerodrome near Oosthaven on Sunda Strait in the extreme south.

Group Captain Bishop, who had arrived at Palembang on 18th January, had orders "to accelerate to the maximum arrangements for the operation of bomber units from Sumatra". These arrangements were intended to provide for all bomber aircraft then based on Singapore, for two Blenheim IV squadrons (Nos. 84 and 211) then on their way from the Middle East, for Hudson III aircraft arriving from Britain to re-equip No. 62 Bomber Squadron R.A.F. and the two Australian reconnaissance squadrons (Nos. 1 and 8).

Even as late as the middle of January the command had been confident that the situation in Malaya would be stabilised, that a bridgehead of sufficient area for the deployment of reinforcements would be held, and a counter-offensive undertaken. Air Vice-Marshal Maltby, in his despatch, refers to the transfer of fighter squadrons from Singapore Island as "not on the cards" at this time.

P.1 aerodrome was L-shaped with two hard-surface runways. Aircraft dispersal areas were being developed by Dutch engineers, but there were no living quarters and all ranks had to travel to and from Palembang town, eight miles away. P.2, a huge natural field with a perimeter measuring about 10 miles, was concealed from the road and, as events proved, concealed too from the Japanese. Previously it had been used only as an emergency landing ground. It had excellent natural cover for aircraft and similar clearings in the neighbourhood made it extremely difficult to detect from the air—even aircrews briefed on its location had trouble in finding it. Palembang town and P.1 were both on the north side of the Musi River. P.2 was on the south side and there was no bridge. A ferry with capacity for from four to six vehicles provided the only means for crossing



The invasion of southern Sumatra

—a serious “bottleneck” which the Dutch sought to minimise by undertaking the construction of living huts on P.2.

Though a single-line telephone linked the two airfields with group headquarters, neither wire nor instruments were available for the installation of internal aerodrome telephone systems. A point-to-point wireless-telegraph system was improvised so that Air Headquarters was linked with Sabang and Lhonga on the air reinforcement route, and a Dutch civil observer warning system established at Palembang provided two concentric circles of posts, one at a radius of 30 and the other at a radius of 60 miles. Several additional and more distant posts were established, one at the north of Banka Island, one at the mouth of the Musi River and one at Tanjong Pinang on Bintan Island, to the south-east of Singapore, but, as the outer posts were necessarily more widely spaced, most of the warnings of the approach of enemy aircraft came from the 30-mile circle. Communication from the posts was by wireless or telephone. Without radar and without experience in aircraft recognition to supplement their undoubted enthusiasm the warnings from these volunteer observers were erratic.

At first the Sumatran airfields were entirely without anti-aircraft guns. The Dutch, unable to obtain guns either from America or Europe, had already lost aircraft on the ground at Medan and Pekanbaru as a result of Japanese fighter attacks. By the end of January ABDA Command had provided six heavy and six Bofors anti-aircraft guns each for P.1 and P.2 and four of each type for each oil refinery. But ships carrying ammunition for the guns were sunk by enemy action and little was available at any stage of the campaign.

Each of the Palembang airfields had been allotted a defence force of 150 Indonesian troops with two rather ancient armoured cars. These troops were reinforced by R.A.F. aerodrome defence parties. For general defence a single Indonesian regiment was responsible for the whole area and the river approach to the town from the sea—a most vulnerable sector—was entirely undefended. Pleas to the Dutch naval and military commands and to ABDA Command had been in vain; no troops could be spared.

Though ABDA Command could not promise any strong naval support on the vulnerable South China Sea front to the Palembang area, Intelligence reports warning of a probable seaborne movement by the enemy against Sumatra were not ignored. H.M.A.S. *Hobart* and two destroyers were detached from convoy duty and ordered out from Batavia to join H.M.S. *Exeter* in a sweep to the north of Banka Island. The warships were met by waves of enemy bombers which fortunately failed to harm any of them seriously. They returned to Batavia without sighting any enemy shipping.

Into this defensively weak and uncertain setting Far East Command's air units had been forced by enemy pressure on the “eve” of the fall

of Singapore; all of them were based on P.1 and P.2 aerodromes.<sup>2</sup> Movement of the aircraft themselves was comparatively simple; what was most difficult and very hazardous was the attempt to transfer sufficient stores, equipment, bombs and ammunition to make the striking force effective. The Japanese held the power of denial. Maltby's despatch on the campaign contains these sentences:

... plans largely frustrated by the speed of the Japanese advance ... dislocation caused at the docks in Singapore by air attack ... plans further frustrated by Japanese action against shipping at sea ... many ships sunk and others re-routed at sea to other ports ... cumulative effect was disastrous ... practically all equipment destined for Sumatra went astray ... no MT except some light motor cars and a few bomb trailers ... only three refuellers available ... no tentage and field equipment. ...

Using what did arrive and what they obtained locally through their cooperative Dutch military and civil partners, No. 225 Group Headquarters worked their hardest. Shortage of aircraft spares was serious, particularly for the Blenheim Mark IVs, and this was the type of aircraft with which the two reinforcement squadrons (Nos. 84 and 211) were equipped. Petrol, oil and lubricants had been provided at each of the Palembang aerodromes on the basis of anticipated needs for three months. Bombs were delivered from Singapore in limited quantities. An organisation for the local purchase of supplies was formed and contracts for the provision of domestic equipment, of which the force had little, were hastened and expanded. While, by the first week in February, aircrews and ground staff were reasonably fed and accommodated, the main withdrawal of air force units from Singapore, which reached its peak soon after that date, completely upset the balance. Where provision had been made for 250 officers and men at P.2, 1,500 were now "accommodated", and 2,500 more were housed in schools and cinemas in Palembang town. Food was scarce but R.A.A.F. men arriving from Singapore fared rather better than most because they had been issued with six weeks' rations before they left.

The members of No. 21 Squadron, who had reached Palembang by sea on 1st February, were quartered in reasonably comfortable native buildings in the town. Next day group headquarters produced a plan for the disintegration of the unit and the use of its members as a labour pool when and where required and they were given miscellaneous duties at P.1 aerodrome and on the wharves. There was resentment in the squadron at this threat to their identity and Group Captain McCauley became the intercessor. His plea succeeded and arrangements were made to move the squadron to Batavia as the first stage of its return voyage to Australia. On 7th February they entrained for Oosthaven. The next move was to Batavia where they performed miscellaneous aerodrome duties as at Palembang until, after continued submissions to Air Headquarters,

---

<sup>2</sup> One bomber squadron was moved to Lahat on 10th February with Group Captain Noble as station commander but the tide of the campaign was running too fast: there was not time to make it operational.

they embarked on the 1,000-ton steamer *Giang Ann* and, on 17th February, sailed for Australia, reaching Fremantle 15 days later.

At P.2, where McCauley had taken up duties as station commander on 29th January, conditions generally were very difficult. Distances between the living quarters, the operations room and the aircraft dispersal area were considerable and orders from group headquarters were issued often without allowing for the added time required for the crews to walk between these points. The transport situation was so bad that McCauley sent one of his officers scouring the country in search of vehicles. He returned with a variety of transport including two large refuelling units contributed by the Shell Company, but much of the refuelling still had to be done from small cans, and bombs had to be manhandled into the aircraft bomb bays. The burden of work was increased by the need to supplement the 150 troops who formed the aerodrome defence force; the R.A.A.F. squadrons alone had to withdraw more than 67 technical staff from aircraft maintenance for this purpose.

In the beginning of February No. 225 Group, which had established its headquarters in what formerly had been a hotel in Palembang town, controlled seven nominal squadrons. Of the two Australian Hudson units No. 1, which had 16 airworthy planes, resumed operations on 31st January with an attack by five aircraft on Alor Star in northern Malaya. Refuelling at Medan, they flew through violent storms, had the satisfaction of seeing their bombs find the target, and returned safely next day. Two aircraft from the same squadron piloted by Flight Lieutenants Emerton and Lockwood flew to Kallang on 5th February with instructions to bring back Air Vice-Marshal Pulford and his senior staff officers. Kallang was heavily raided by enemy aircraft while the two Hudsons were on the airfield but they escaped damage. Pulford, as already noted, decided not to leave Singapore at that stage. The Hudsons, carrying a number of passengers, and the four remaining Buffaloes of No. 453 Squadron, returned safely to P.2.<sup>3</sup>

No. 8 Squadron, as mentioned, was to have been re-equipped with Mark III Hudsons from Britain. Only six of these were eventually allotted, most of them needing overhaul, and the squadron was inactive until 6th February. That day a conference was held at group headquarters to consider the problem of congestion at P.2. It was proposed that No. 8 Squadron should hand over its few aircraft to No. 62 Squadron which

---

<sup>3</sup> No. 1 Squadron records contain a further reference to endeavours to bring AVM Pulford to Palembang. "On Feb 10 two aircraft . . . captains, F-Lts K. R. Smith and C. C. Verco, took off at 3.30 a.m. to bring out the AOC from Singapore. This was a particularly dangerous period to attempt to land there since the air was filled with enemy fighters and dive bombers and the shelling of the three northern aerodromes was intense. However, under cover of a dense pall of smoke from the burning oil tanks at the Naval Base, the aircraft reached Kallang just before dawn. The AOC was not prepared to leave Singapore, but Air Cmdre Staton and other senior RAF officers were carried to P.2. On arrival . . . Staton requested that another aircraft be sent to Singapore for the AOC, even though the chance of getting through in daylight hours was slight. F-Lt Smith, with the same crew, took off on their second trip at 1030 hours and this time returned with AVM Maltby and others, though the AOC . . . still chose to remain in Singapore. On the following day one further attempt was made to get through to Singapore but Group HQ preferred to cancel the order because of the inordinate risk involved."



R.A.A.F. Area boundaries

was also equipped with Hudson IIIs, and return to Australia as a complete unit for rearming, but the proposal was rejected.

One of the five R.A.F. squadrons in No. 225 Group, No. 34, was also unable to operate until early February, the aircraft of Nos. 62 and 27 were in a particularly poor state, and the aircraft of the other two units—the reinforcement squadrons (Nos. 84 and 211) each of which had set out from the Middle East with 24 aircraft—had already been seriously depleted.<sup>4</sup> These two squadrons were based on P.1 in company with the Malayan Volunteer Air Force, which, operating a flight of light aircraft, still did invaluable work. Now it was busy maintaining communications between P.1, P.2 and Lahat, making a reconnaissance twice daily over the Musi River approaches, and locating crashed aircraft.

In all, the group now had only 55 serviceable combat aircraft and these were being used to the utmost. Between the nights of 30th-31st January and 12th-13th February enemy concentrations at Ipoh, Alor Star, Penang, Singora docks and Kluang (twice) were all subjected to night attacks. To make these raids the bombers refuelled at Pakanbaru, Medan or Singapore. In addition, daily reconnaissance across the South China Sea to Borneo was maintained by No. 1 Squadron until 6th February.

Quite apart from enemy action, these long flights were extremely exacting. Violent monsoonal storms were in season and the skill and endurance of the crews were severely tested. They flew without VHF (very high frequency radio) and had no radio direction-finding equipment to aid them in homing on their bases, disabilities that made the lot of the fighter pilot particularly hazardous.

No. 226 Fighter Group, the headquarters of which were formed in Palembang by Air Commodore Vincent when he arrived on 1st February, maintained (as planned) a token flight of Hurricanes on Singapore Island until 9th February. The group was based on P.1 where lack of communication facilities caused delays in taking off for interception with enemy aircraft. It included Hurricanes and a few Buffaloes from Singapore but most of its total of about 50 Hurricanes had been flown off H.M.S. *Indomitable* with their guns still protected by anti-corrosive grease.<sup>5</sup> The task of cleaning these guns and making them ready for combat without the usual facilities delayed operations. Except for the commanding officers and flight commanders, the pilots of these aircraft had come direct from operational training units: that they proved capable of spirited combat was greatly to their credit. To improve the climb and manoeuvrability of their Hurricanes the four outside guns were removed; it was considered

<sup>4</sup> The group's order of battle now was:

No. 1	Squadron	RAAF	16 Hudson II
No. 8	"	"	6 Hudson III
No. 34	"	RAF	6 Blenheim IV
No. 62	"	"	10 Hudson III and 5 Blenheim I
No. 27	"	"	3 Blenheim I
No. 84	"	"	10 Blenheim IV
No. 211	"	"	4 Blenheim IV

<sup>5</sup> Of 48 aircraft off *Indomitable*, 33 flew to P.1 where 5 crashed on landing. The other 15 went to Singapore.

that the remaining eight guns would be adequate against the unarmoured Japanese fighter aircraft. All the technical work was performed under difficulties. Tool kits and battery chargers were too few and there were no battery-charging facilities at the aerodrome. Inevitably the standard of serviceability remained low.

Initially the fighters' main task was to escort shipping, but Japanese reconnaissance aircraft had not missed the increasing activity in the Palembang area and formations of enemy bombers delivered four heavy attacks on P.1—on 6th, 7th, 8th and 13th February. The aerodrome had received its first bombing attack on 23rd January from 27 unescorted bombers, but little damage resulted. When raiding was resumed the bombers had fighter escort; clearly the presence of the Hurricanes had been noted. On the 6th the defending fighters had short warning and lost four of their own aircraft while only one Zero was claimed in return. Next day the enemy combined a high-level bombing attack with a low-level attack by fighters. On the ground three Hurricanes were destroyed and eleven damaged; three more were shot down in combat; four unserviceable Blenheims on the ground and one Hudson which landed while the raid was in progress were also destroyed. The defenders claimed only one Zero. More warning was received of the next two raids. On the 8th interception was inconclusive but on the 13th the Hurricane pilots shot down 3 Navy Zeros and 2 Army Type-97 bombers for the loss of only one of their own aircraft.

On 12th February the group was reinforced by 8 Hurricanes—part of a shipment of 39 which, together with a pool of 15 pilots and the ground staff of three squadrons (Nos. 232, 258 and 605) had reached Batavia on the 4th. Nine more Hurricanes were flown in to P.1 next day while the aerodrome was under an air attack. Though short of fuel the incoming Hurricanes inevitably were drawn into the battle and 6 of them either crashed or were shot down.

A shortage of staff at Air Headquarters in Singapore had become serious through the progressive transfer of officers and men to the bomber and fighter groups in Sumatra. This was particularly marked with the cipher staff whose numbers had been depleted to a critical extent by the evacuation of women who had been engaged in that work. Though they worked fantastically long hours, the burden of this vital task became too great for the few who remained, and in the first week in February there was a complete breakdown in communications between Air Headquarters and Palembang. On 7th February therefore Abdair assumed operational control of all air units in Sumatra.

Air Vice-Marshal Maltby had (as already noted) moved from Singapore on the 10th to take up his new appointment as air officer commanding Westgroup which comprised all R.A.F. and R.A.A.F. units of Far East Command in Sumatra and Java. No suitable site was available for the headquarters of the group in south Sumatra and Abdair continued to control all operations until these could be set up in Java.



On 6th February one of the most notable reconnaissance flights of the campaign was made over the South China Sea. Already there had been indications that an enemy attack was imminent. Intelligence reports warned of the departure from Saigon of an enemy convoy which was to rendezvous in the shelter of the Anambas Islands. These reports were given credibility by the increase in enemy air activity over Banka and Billiton Islands. No. 1 Squadron's records attribute the reconnaissance on the 6th to the interception of a Japanese cipher message, which revealed that an enemy convoy was in fact assembling in the Anambas. The records describe the take-off from P.2 at 6.20 a.m. of a Hudson captained by Flying Officer Gibbes. There was no cloud cover for the aircraft on the long outward flight but, climbing to 15,000 feet as he approached the Anambas, Gibbes found cloud cover with "seven-tenths" density. When over Metak Island, the Hudson's crew saw 7 enemy fighters climbing towards them from 5,000 feet and 3 more coming in on their port quarter at 12,000 feet. Gibbes put the aircraft into a dive through cumulus cloud 5,000 feet below but not before he and his crew had sighted a cruiser, 4 destroyers and 4 merchant ships lying at anchor. Gibbes' second pilot, Flying Officer Jay,<sup>6</sup> was able to sketch the harbour and mark in the ships in their various positions. Enemy fighters still strove to attack the Hudson but Gibbes evaded them. With insufficient fuel to return to Palembang, Gibbes flew to Singapore Island, landed at Kallang, and reported to Air Vice-Marshal Pulford.

An attack on the enemy ships on the night of the 8th-9th by 9 Blenheims failed because the target was shrouded in low cloud. On the night of the 11th-12th 10 Blenheims again endeavoured to strike the enemy force but again failed for the same reason. By this time ABDA Command had received Intelligence information that the enemy force had been ordered to a position immediately north of Banka and Billiton Islands by the 13th. Wavell therefore ordered all shipping to be cleared from the Musi River, directed No. 225 Group Headquarters to plan a strike against the enemy force, and ordered a naval striking force, which had at last been assembled under Admiral Doorman, to move into the western waters of the Java Sea in readiness to attack the convoy. No. 1 Squadron records give the air striking force finally decided on as 23 Blenheims for an assault on the ships and 11 Hudsons (4 from No. 1, 2 from No. 8 and 5 from No. 62) for an attack on the enemy's southernmost air base at Kluang. When taking off soon after midnight 3 of the Blenheims crashed, 2 of them among trees close to the dispersal bays of No. 1 Squadron, and the third into a building when the pilot attempted to land again after taking off.<sup>7</sup> As the fires and exploding bombs from the crashed aircraft were endangering some of the Hudsons, the commander of No. 1 Squadron, Wing Commander Davis, led 4 of them down the aerodrome

<sup>6</sup> Sqn Ldr A. B. Jay, AFC, 407061. 1, 7 and 100 Sqns; CFI 1 OTU 1944-45. Clerk; of Burnside, SA; b. Kensington Gardens, SA, 2 Sep 1915.

<sup>7</sup> Many of the crew members of these Blenheim aircraft were Australians.

to a position near the point of take-off. The Hudsons were then sent off on their strike on Kluang.

The remaining Blenheims took off soon afterwards, but fortune was still unkind: the way to the target, itself covered by low cloud, was barred by heavy tropical thunderstorms and only five aircraft got through, one of these being forced to jettison its bomb-load. The Hudsons had fared rather better. All reached the target and the crews had the satisfaction of seeing their bombs hit the aerodrome, some hangars, and several other buildings. Anti-aircraft fire was intense and night fighters were encountered.<sup>8</sup> All the Hudsons returned safely to base. Each aircraft carried four 250-lb general purpose bombs with "stick" extensions. When one aircraft had flown for three-quarters of an hour on its return flight the crew discovered that three of the bombs were still "hung up" in the bomb bay. The captain, Flight Lieutenant Lockwood, turned back to the target and, as dawn was breaking, the three bombs were released and made direct hits on a hangar. An air reconnaissance on the 13th revealed that the enemy force had moved out from the Anambas; a large number of enemy transports with strong naval escort were sighted at sea to the north of Banka Island and on course for the entrance to the strait.

Abdair ordered No. 225 Group to discontinue all regular reconnaissance flights from the 7th so that the striking force in Sumatra could be increased; Reconnaissance Group in Java accepted all responsibility for such operations as from that date. Confusion followed. Reports received by the group through Abdair showed that Japanese naval forces were in strength to the south of Singapore Island, but poor communications had delayed these reports for from 5 to 7 hours and by then the position of the convoy had changed completely.<sup>9</sup> To add to the confusion there was a stream of shipping moving from Singapore to Java and friend and foe were not easily distinguishable from the air. By the 13th No. 225 Group Headquarters felt that despite orders to the contrary a reconnaissance from Palembang must be made to determine whether or not Sumatra was under immediate threat. One Hudson from No. 1 Squadron was therefore sent out that afternoon, and reported a concentration of Japanese ships north of Banka Island, which seemed to confirm that a landing in the Palembang area was imminent. The force (as reported in the squadron's records) "appeared to consist of one battleship, three or four cruisers and between twenty-five and thirty transports".<sup>1</sup> In fact (as

<sup>8</sup> From available records it appears that this was the first time the enemy used night fighters in this campaign.

<sup>9</sup> Though available references differ in stating the period for which this reconnaissance restraint was placed on 225 Group, and to the number of sorties, the restraint in itself serves to explain the perplexity expressed in the records of No. 1 Squadron which contain this passage: "For some reason best known to themselves Group HQ did not order for this day [13th February] the usual reconnaissance of 4 or 5 Hudsons to sweep the South China Sea which might have avoided the confusion and lack of appreciation which arose later in the day. A definite report from a properly planned search would have revealed the true situation and have been of enormous value to aircraft which proceeded on bombing missions on the following day."

<sup>1</sup> Of this sighting No. 1 Squadron diarist comments: "This detailed information was not known in the operations room at the time of briefing and in consequence aircraft from the various squadrons departed in search of different objectives."

enemy documents have since shown) it comprised 2 light cruisers and 8 destroyers, escorting 22 transports, with cover from 4 heavy cruisers, one light cruiser, 8 destroyers and a light aircraft carrier.

Maltby's despatch records that all available Blenheims were immediately sent to attack the enemy force, "but results were difficult to assess owing to darkness and rainstorms". The aircraft of Nos. 1 and 8 Squadrons were ordered to "bomb up" and stand by, but no orders to attack were issued that day. Every available bomber was prepared for action and just before dawn next day they began taking off. Five Hudsons from No. 8 Squadron were the first to leave. One of these touched the ground after take-off but became airborne again with several inches shorn from its propeller tips and the pilot kept it flying until there was sufficient light for a safe landing at P.1. The attack grew in intensity. Blenheims and Hudsons, diving through heavy anti-aircraft fire, chose the best targets offering. In attacking ships approaching the mouth of the Musi River several Hudsons from No. 8 Squadron were intercepted by fighters about 10 miles from their target, but cloud cover favoured them and they completed their bombing runs. The captain of one Hudson, Flight Lieutenant Douglas, after leading his flight to the target through cloud, dived "down sun" in an attack and then climbed again, apparently to repeat the manoeuvre. The aircraft, however, appeared to go out of control and was seen to crash into the sea; there were no survivors. Flight Lieutenant O'Brien and his crew scored direct hits on a transport that was seen later to be listing and on fire, and three other Hudsons, captained by Flight Lieutenants Diamond, Williams<sup>2</sup> and Brydon,<sup>3</sup> all recorded hits on ships.

It happened that fairly early in the battle the fighter strength of both Far East Command and the enemy were diverted from action over the Japanese convoy for a very significant reason. Early on the morning of the 14th all available Hurricanes were airborne as escort for the bombers setting out to attack the enemy ships. About 8 a.m. the observer corps warned of the approach of "a large hostile formation of enemy aircraft". By this time the Hurricane pilots were beyond range of radio telephone communication and could not be diverted for interception. The Japanese target was P.1. Bombers first drenched the aerodrome with light bombs and then their large escort of fighters swept it with gunfire. Almost immediately troop carriers droned over to drop two groups of parachutists totalling about 260 men. The paratroops landed in scrub at two points between 400 and 800 yards to the south and the west of the aerodrome. About the same time about 100 enemy paratroops descended over the oil refinery area several miles west from the aerodrome. One of the troop-carriers was shot down by anti-aircraft fire and another was forced to make an emergency landing. An attempt by the enemy troops to rush the aero-

<sup>2</sup> Sqn Ldr A. J. L. Williams, 260538. 1 and 6 Sqns. Public servant; of Strathfield, NSW; b. Ballarat, Vic, 12 Jan 1915.

<sup>3</sup> Sqn Ldr A. H. Brydon, DFC, 578. 1 and 107 Sqns; comd 78 Sqn 1944. Regular air force offr; of Armidale, NSW; b. Armidale, 14 Apr 1921.

drome was checked by the crews of the British anti-aircraft guns, now with 8 3.7-inch guns and 8 Bofors, the Dutch infantry force with its two aged armoured cars, and about 60 R.A.F. ground defence gunners from Nos. 258 and 605 Fighter Squadrons. There were casualties on both sides.

Meanwhile the returning Hurricane pilots, with their fuel and ammunition practically exhausted, were ordered to divert to P.2. Some did not receive the order and landed at P.1 where, in spite of the paratroop attack, they were refuelled before being sent on to P.2, whence they promptly went into action again against the main enemy invasion movement towards the river mouth.

With their ammunition spent the anti-aircraft guns were now withdrawn to Palembang town as were unarmed members of the air force. To deny the aerodrome to the enemy paratroops the 60 R.A.F. officers and men remained with some of the Dutch infantrymen. Anticipating efforts to reinforce the aerodrome defences the enemy paratroops formed an ambush on the road to the town. This the Japanese later turned into a road-block by overturning vehicles and so prevented two attempts by the defenders to get support directly to their aerodrome force, though some of their troops succeeded in making a detour through the scrub and reaching P.1 where they assisted in evacuating wounded and unarmed men.

To the station commander, Wing Commander Maguire,<sup>4</sup> an attack in force that night seemed almost certain. As his men were now without food or water and their ammunition supply was very low, he decided to attempt a withdrawal after destroying material of any value to the enemy, including unserviceable aircraft. This done he led his party through the jungle towards the west coast of the island and, after a gruelling journey lasting seven days on which they destroyed stores of petrol and some rubber factories, they were able to make their way south and eventually rejoin their units in Java.

Enemy paratroops that landed in the refinery area had succeeded in entrenching themselves at Pladju. They were dislodged after fierce combat but the fires started during the fighting prevented effective demolition of the refinery. At Sungei Gerong the enemy had been held in check long enough to enable the defenders to complete their demolition work.

P.1 aerodrome had received no aid from the aircraft at P.2 for the imperative reason that the force under McCauley's command was desperately engaged in countering the major threat to Sumatra—the attempts of the invasion forces to reach and pass up the Musi River. McCauley had been instructed by the air officer commanding No. 225 Group (Air Commodore Hunter) to continue the attacks on the convoy from first light on the 15th. His force now consisted of 22 Hurricanes, 35 Blenheim Is and IVs (many of them unserviceable) and only 3 Hudsons. The cost of the battle over Banka Strait had been extremely severe to all squadrons

<sup>4</sup> Air Cmdre H. J. Maguire, DSO, OBE, RAF. 229 Sqn and 226 Wing; comd RAF Stn Palembang 1942. Regular air force offr; b. Derra Kilkishen, Co. Clare, Eire, 12 Apr 1912.

engaged and the two Australian squadrons, apart from their losses, had been temporarily reduced to a mere token force. An outstanding example of the determination and initiative with which the Hudson crews fought was provided by the crew captained by Diamond. Attacked by two Japanese Navy Zeros, their aircraft had its starboard engine put out of action, its starboard landing wheel shot away and its tail plane seriously damaged. But, with full throttle on the one serviceable engine, Diamond flew the Hudson up the Musi River at a height of only 100 feet and succeeded in reaching P.1 where he made a crash landing without injury to his crew or himself. Finding the aerodrome invested by Japanese paratroops, he led his crew to a Hudson standing on the runway—the No. 8 Squadron aircraft that had been landed with the tips missing from its propeller blades. Diamond tried but failed to get this aircraft off the ground; with its damaged propellers the best speed he could get was only 40 knots. A quick inspection showed all the other aircraft on the aerodrome to be unserviceable and so Diamond led his crew into adjacent paddy fields where, crawling over the leech-infested ground, they succeeded in evading a party of the enemy who pursued them with hand grenades. For 10 hours the crew kept on until they met a party of Allied troops with whom they made their way to Palembang town, returning to P.2 next day.

Of 5 Hudsons (2 from No. 1 Squadron and 3 from No. 62 Squadron) one, piloted by Gibbes, was the only aircraft to return. The other No. 1 Squadron Hudson, piloted by Lockwood, was last seen losing height with smoke pouring from one engine and two Zeros following it down in close pursuit. Gibbes and his crew, who scored a direct hit on a merchant ship, saw nothing more of the three No. 62 Squadron Hudsons and presumed that they too had been shot down.<sup>5</sup>

About 11.15 a.m. on the 14th, McCauley learned of the paratroop landings at P.1 from Hunter, who told him that that aerodrome was being evacuated and that preparations should be made for the evacuation of P.2. Some time later the actual order confirming this was received, together with instructions that all serviceable aircraft were to be flown to Batavia. In consequence all secret documents were destroyed, equipment, stores and rations collected for disposal, and about 20 Hudsons (7 of which were from No. 1 Squadron and 4 from No. 8) were laden with men and equipment and dispatched to Batavia. At McCauley's instructions the disposal of bombs, fuel and ammunition was deferred for last-minute demolition. No. 225 Group Headquarters, having destroyed everything of value to the enemy at their Palembang office, then moved across to P.2. But apparently the defending ground troops had been gaining the upper hand and reports coming in to P.2 stated that the Japanese paratroops had now been dealt with. Hunter therefore decided

<sup>5</sup> No precise record of aircraft losses in this battle was preserved. The RAF assessment is "six to eight of our aircraft were shot down or destroyed on landing in a damaged condition". Few of the bombers were undamaged when the battle ended. Japanese records show that their invasion force claimed to have shot down 9 "enemy" aircraft.

to recall the aircraft that had been flown to Batavia and to resume control of his headquarters from Palembang town. Because of a breakdown in the communications system, his message recalling the aircraft was never delivered.

The work of the ground staffs at P.2 was excellent. When they were ordered to prepare for the demolition of all unserviceable aircraft, a servicing party from No. 1 Squadron, led by Flight Sergeant Musicka, using improvised tools, including some taken from a steam roller, and a bayonet, fitted a new aileron to one Hudson and replaced an engine in another so that both were ready for service again.

When a fierce electrical storm disrupted the only communication (telephone) he had with No. 225 Group Headquarters in Palembang that night, McCauley was left with sole operational responsibility. The night was spent preparing the remaining bombers and the Hurricanes for resumption of the battle at dawn. A reconnaissance at first light showed that about 20 warships, transports and barges were steaming through Banka Strait, while other transports and landing barges were swarming round the Musi estuary. Heavy fog delayed the take-off for the attack but at 6.30 a.m. three Hudsons (one from No. 1 Squadron and two from No. 8) which had been retained for servicing when the others had been sent to Batavia became airborne just ahead of three Blenheims. Flying just above the fog the Hudsons were met over Palembang by enemy fighters but, diving into the fog again, they evaded attack. The aircraft from No. 1 Squadron made three attempts to leave the fog but each time enemy fighters were waiting for it and so, still using the fog as cover, it returned to P.2.

The two No. 8 Squadron Hudsons, captained by Flight Lieutenant Widmer and Flying Officer Lower,<sup>6</sup> evaded the Zeros and, coming out of the fog, saw 23 enemy ships. They attacked one vessel and scored near misses. One of the three Blenheims also got through the enemy fighter screen and it too scored near misses on a transport. The other two Blenheims diverted their attack to landing barges and sank five or six, all laden with troops. Five more bomber strikes were made on ships and barges during the day.

After the early stages of the battle enemy fighter interception ceased and the Hurricane pilots were able to devote their attention to gunnery sweeps over the troop-laden barges that were now proceeding in three groups up separate channels of the river. Hudson and Blenheim crews, when they had made their bombing runs, joined in the attacks on the barges, at least 20 of which were sunk. Direct bomb hits were scored on three transports, one of which was sunk and several others damaged. The bomber crews and Hurricane pilots between them claimed to have shot down at least three enemy fighters and to have damaged five more. Among the pilots of Hudson aircraft credited with either direct bomb

---

<sup>6</sup> Sqn Ldr J. Lower, 280654. 14, 8 and 6 Sqn; Controller 71 Wing 1943. Manufacturing chemist; of Aldgate, SA; b. Adelaide, 17 Feb 1919.

hits or near misses were Flying Officer Stumm of No. 8 Squadron and a R.A.F. pilot, Flying Officer Richards, temporarily serving with the same unit. On their last strike for the day the Hurricane pilots were given an opportunity to avenge their own losses. They were sent out to attack enemy aircraft sighted on a beach on the south-west coast of Banka Island. These were believed to be Zeros, stranded without fuel and unable to return to their carrier. The R.A.F. pilots believed (incorrectly, it proved) that the carrier had been sunk. Whatever their origin the Zeros made an easy and profitable target, and the Hurricane pilots, without opposition, destroyed most if not all of them.

On the morning of the 15th another force of enemy paratroops, about 100 strong, was dropped over P.1 aerodrome. This reinforcement and reports that the main enemy invasion force was on its way up the Musi caused the commander of the Dutch ground forces to withdraw to the south-west.<sup>7</sup> That day ABDA Command, aware of the fall of Singapore and conscious of the weight of the enemy's assault on the Palembang area, ordered all British units in Sumatra to withdraw to Java.

There was no way of estimating the cost of the air attack to the enemy in terms of casualties. Aircrew returning from their strikes were moved to make such comparisons as likening the river where the barges had been strafed and bombed to "a bowl of water into which a box of matches had been emptied". They spoke of horrifying scenes on the river banks which were littered with enemy dead.

Important among the reasons for the success of these air attacks was the direct briefing of the crews. Since communications with group headquarters had broken down McCauley was left to act on his own initiative. This he did promptly in response to reconnaissance sightings and combat crew reports. The crews received verbal orders only. This eliminated the delay inevitable when action depended on written briefs. The withdrawal of aircraft and the demolition work completed on the previous day had created difficulties, but enthusiasm stimulated by effective action made up for much of the disability. It was dramatically evident too that had McCauley not deferred the demolition of bombs, fuel and ammunition the assault could not have been made and the enemy would have escaped severe casualties.

Air action (Maltby wrote later) thus brought the landing to a standstill. The Japanese were punished heavily for their failure to locate P.2 aerodrome. Unfortunately there were no troops or light naval craft available in the area to take advantage of the situation.

Wavell had in fact been very actively striving to obtain both troops and naval forces for this purpose but the time factor placed both just beyond the Supreme Commander's reach. His subordinates in the field in Sumatra knew comparatively little of this though they did receive some hints that raised their hopes temporarily. In the meantime they were assess-

---

<sup>7</sup> The main Japanese force actually reached Palembang town about midnight on 15th-16th February.

ing the situation as best they could. Air Commodores Hunter and Vincent in Palembang had learned from the local Dutch territorial commander on the night of the 14th that the situation was well under control and had gained the impression that his forces were to make a drive that night to clear the Palembang area. But the Dutch Command must have issued very different orders, for the destruction of oil and rubber stocks in the town and in the refinery area began that same night, and next morning the air officers commanding found that the Dutch headquarters in the town had been closed and that the local commander himself, now believing it was too late to restore the position, was about to leave for Lahat. To embarrass the southward advance of the Japanese he proposed that "in one hour's time" the ferries across the river and all railhead facilities would be blown up. Therefore Hunter had no choice but to order the immediate evacuation from the town of all under his command. This was made possible by the determined action of the general manager of the Sumatra Railways who, despite contrary orders, delayed demolition and maintained the rail service to Oosthaven until the evacuation had been completed.

During the 15th seven unserviceable Hudsons were flown to Bandung. One of them carried Hunter to ABDA Command Headquarters to make his report on the situation. Abdair had already ordered that as many as possible of the Hudsons flown out on the previous day should return to assist in the Palembang evacuation. Surplus gear was stripped from these aircraft—in some instances even the guns were removed—and they were each able to carry from 12 to 14 passengers. The last Hudson left at dusk, its passengers including Wing Commander Davis.

Withdrawal from P.2 by road began about 10.30 a.m. on the 15th. The aerodrome was 25 miles from Prabumulih, the nearest railway station, where the troops were to entrain for Oosthaven. In spite of lack of transport the whole procedure was orderly and well directed. Successive parties were marched out, each man carrying a "swag" and one day's rations. All available vehicles were used to operate a shuttle service, picking up parties that had walked part of the way and driving them to within a few miles of the station then returning to pick up other parties. About 1,200 officers and men were moved in this way without confusion. Armed parties remained on the aerodrome until about 6 p.m. when a "withdrawal in depth" was ordered. Except for a small technical and defence detachment which remained for final aircraft servicing efforts, the whole evacuation operation ended about 6.30 p.m. when, led by McCauley, the last party marched out. After they had covered about five miles they were picked up by motor vehicles.

The detachment that had remained laboured through the night on several Blenheim bombers they had not been able to make serviceable that day. By first light on the 16th all but three were ready for take-off. The station armament officer and a small party of armed men stayed behind and, when the last of the serviceable Blenheims had taken off,



they destroyed all the remaining aircraft and joined the Dutch garrison in completing the denial plan. Then they too left for Oosthaven.

On the night of 16th-17th February, in response to an order from Abdair, Gibbes and his crew from No. 1 Squadron made a risky flight to Lahat with evacuation orders for Wing Commander Noble. Gibbes had also been instructed to fly on to Djambi aerodrome in the oilfield area to the north-west of Palembang for the same purpose. Noble reported that Djambi was already in Japanese hands. Gibbes therefore refuelled at Lahat in preparation for his return flight to Bandung. But the facilities were meagre and his crew had to use cans without even the benefit of a chamois leather filter. The result of this was that when the aircraft was approaching the coast of Java both engines stopped almost simultaneously because there was water in the fuel. Gibbes prepared to make a crash landing and at the same time switched the fuel feed over to a tank that had not been "topped up" at Lahat. As the Hudson was about to come down both engines picked up enough to enable the aircraft to climb again and continue flying. After a forced landing at Tjililitan, south of Batavia, the fuel system was drained and replenished before flying on to Bandung to end a journey that had occupied 15 hours' flying time.

Air Vice-Marshal Maltby's comment on the lack of troops to take advantage of the success achieved against the Japanese convoy by air attack took no account of action that had in fact been taken to provide a supporting force for the defenders—action that, in the event, was to be largely dissipated by the time factor. This was the hurried formation on 15th February of the equivalent of a brigade group including troops from the Middle East then on board the transport *Orcades* which had reached Oosthaven that day. This was placed under the command of Brigadier Steele,<sup>8</sup> an officer from the headquarters of I Australian Corps, two divisions of which were then destined for the Netherlands East Indies. Steele had accompanied the corps commander, Lieut-General Lavarack,<sup>9</sup> when, preceding his troops, he flew to Bandung to confer with the Supreme Commander. Had there been time, and an over-all command for the Dutch and British forces in the Palembang area, this force could have been moved north and might have added sufficient strength to the defence to deny the invaders until more substantial reinforcements arrived. In the circumstances this was deemed impossible; and by the 16th Wavell had ordered the evacuation of Sumatra.

In the wider scheme of things there had been a definite plan for very material army support for the defence of southern Sumatra. General Lavarack had visited Palembang before reporting to General Wavell at

<sup>8</sup> Maj-Gen Sir Clive Steele, KBE, DSO, MC, VD. (1st AIF: Lt 5 and 6 Fd Coys.) CRE 6 Div 1939-40; CE I Corps 1940-42; E-in-C LHQ 1942-45. Consulting engineer; of Melbourne; b. Canterbury, Vic, 30 Sep 1892. Died 5 Aug 1955.

<sup>9</sup> Lt-Gen Sir John Lavarack, KCMG, KCVO, KBE, CB, DSO. (1st AIF: GSO1 4 Div 1917-19.) CGS Aust 1935-39; GOC Southern Cd 1939-40, 7 Div 1940-41, I Aust Corps 1941-42, First Aust Army 1942-44. Governor of Queensland 1946-57. Regular soldier; of Melbourne; b. Brisbane, 19 Dec 1885. Died 4 Dec 1957.

his headquarters at Bandung on 26th January. The Supreme Commander, determined to do his utmost to hold the line Burma-southern Sumatra-Java-Timor-Darwin until reinforcements in sufficient strength could be assembled to enable him to take the offensive, planned to use the 7th Australian Division in southern Sumatra. Lavarack, however, was convinced that the deployment of I Australian Corps in the Netherlands East Indies would be a grave error. His reasons were clearly stated in an appreciation dated 2nd February which influenced the Australian Government's policy on the issue.

This (time has since proved) accurately forecast not only the intentions of the Japanese but the timing of their achievement of them. It contended that the Australian divisions could not be established as an effective fighting force in time to save the islands; that it would be impossible to evacuate them and their equipment if, as appeared most probable, the Japanese succeeded in their assault on Sumatra and Java; and that, in this last event, Australia's safety would be jeopardised. After further conferences at Bandung and an exchange of communications between Lavarack and the Australian Prime Minister, Mr Curtin, Wavell countermanded his plan to use the Australian divisions in the East Indies.

The provision of a naval force with which the defenders of Sumatra might have followed up the temporary advantage gained through the air attacks was no less difficult than the provision of ground forces. Admiral Doorman's striking force, which had been ordered to move towards Banka Strait in the hope of intercepting the enemy seaborne force, had earlier been ordered by the Allied naval commander, Admiral Hart, to move out of range of air attack and was then south of Bali and about 800 miles from Banka Island. Some of the ships had been on convoy escort duty and required refuelling. This meant delay, but by the 14th the Dutch admiral had three of his own cruisers (*De Ruyter*, *Java* and *Tromp*) with H.M.A.S. *Hobart* and H.M.S. *Exeter*, in rendezvous, screened by 4 Dutch and 6 American destroyers. Banka Strait, which offered the shortest route to where the enemy force was likely to be found, was too narrow for manoeuvring under air attack and held the added danger of mines. Doorman was ordered to take the longer route through Gaspar Strait, the intention being that he should attack from the north in the hope of striking the enemy from the rear. The force, which moved at dusk on the 14th, met misfortune early—one of the Dutch destroyers struck a reef and was lost. As the squadron steamed round the north of Banka Island next day it was attacked by waves of bombers. The assault was made from high altitude and so without torpedoes and Doorman's force escaped damage except for that done to two of the American destroyers as a result of near bomb misses. But the enemy achieved their main purpose; Doorman, conscious of the risks of proceeding without cover against even heavier air attacks, and of the vital need to preserve his limited force, withdrew it again through Gaspar Strait leaving the enemy a seaway undisputed, at least by seaborne craft.

Consciousness of the vulnerability of southern Sumatra, and the grim experience of the enemy's capacity to follow each advantage gained as swiftly as possible, undoubtedly and perhaps understandably led the withdrawing forces to expect a quick Japanese drive to Oosthaven, and lack of a strong unified command in the field produced inevitable confusion. The staff at Oosthaven had been ordered to clear all troops from the port by midnight on the 16th and the evacuation had therefore to be completed without any further attempt to save the great quantity of vitally needed stores and equipment lying in the dock area. The truth that, as a result of the severity of the resistance to their landing operations, the Japanese had been forced to pause to lick their wounds became apparent after all the British forces had withdrawn to Java. This awareness of over-hasty evacuation and of the great value of the material left behind prompted Group Captain Nicholetts, who had been the R.A.F. base control officer, to organise a party of 50 volunteers from No. 605 Squadron R.A.F. to return to Oosthaven in the corvette H.M.A.S. *Ballarat*. On the 20th this party spent most of the day loading R.A.F. equipment and Bofors ammunition into the *Ballarat* and accomplishing further demolition. That this expedition, which promised to be hazardous, was carried out in safety emphasised still further that the Japanese had, in fact, received a serious check at Palembang and needed time to regain their momentum.

Invasion of the entire Netherlands East Indies was included in phase 1 of the Japanese operations plan. By mid-February "neutralisation" of the Philippines and Malaya had been achieved. This, in effect, had been the signal for the assault on Palembang.

The Japanese Command greatly feared the reinforcement of the Allied air forces; this fear underlined their urgent need to capture the East Indian bases as quickly as possible and at the same time prevent, if they could, Allied demolition of the islands' resources, particularly in oil. In keeping with this urgency they were pressing their three-pronged drive southward. The eastern and central naval forces having taken Menado in northern Celebes and Tarakan on the east coast of Borneo, the next move lay with the western force which, under the command of Admiral Ozawa, had been assigned the investment of Banka Island and the Palembang area.

The advanced elements of this force—part of the 229th Infantry Regiment in 8 transports escorted by the cruiser *Sendai* and 4 destroyers—set out from Camranh Bay on 9th February. The main force—the major part of the 229th Regiment and one battalion of the 230th Regiment, in 14 transports escorted by a cruiser and 4 destroyers—left the same port on the 11th. Admiral Ozawa, in the cruiser *Chokai*, led the covering force—the 7th Cruiser Squadron of 4 8-inch gun ships, one 5.5-inch gun cruiser, the carrier *Ryujo*, and 3 destroyers.

As the convoys and their escorts steamed towards the entrance to Banka Strait, Ozawa fanned out his naval forces to screen the operations and in doing so placed his ships right across the escape route from Singapore. The result was little short of massacre: British craft of almost every kind, crowded with troops and refugees were blasted by naval gunfire, air bombing and strafing. Few who made the exodus from Singapore after 12th February survived.

The advanced Japanese force was under orders to invade Banka Island while the main force was charged with the invasion of the Palembang area. The air support for the invasion was provided by the planes carried in *Ryujo*, by land-based naval air units, and by the army's 3rd Air Division.

The paratroops who landed on the morning of the 14th had been from the *1st Airborne Raiding Group*, the first echelon of which took off from Kahang for P.1 aerodrome and the second from Kluang for the refinery area. The day was fine and smoke from the burning oil fires at Singapore drifted south over Sumatra so that pilots of the aircraft, flying at 9,000 feet, had difficulty in seeing the ground. Then, as they approached the Musi River, they encountered dense fog which forced them to turn back and come in at a lower altitude. Having picked up the river they followed its course to their target. Japanese aircrew later described the anti-aircraft fire from the aerodrome and the refinery area as "furious, but so inaccurate that it revealed the enemy's condition of unpreparedness". The paratroops were dropped from about 600 feet. After engaging in skirmishes and "throwing the enemy into confusion" Allied reinforcements which "rushed the highway connecting the aerodrome and the town were attacked and routed". At the refinery the paratroops met stiff resistance and were forced to use air raid shelters as trenches. The refinery at Pladju had been only slightly damaged and the paratroops had occupied it next day, permitting "immediate use with ease". The other refinery had been damaged by fire but could still be used.

When reinforced on the afternoon of the 15th the airborne force had left a guard at the aerodrome and moved on Palembang in combat formation. Late that afternoon the town was occupied, the advanced force disembarking at Palembang that night. About a week later the airborne force returned to its base.

A Japanese account of the approach of the invasion force records that the convoy with the advanced force was frequently attacked by aircraft, 9 of which, it was claimed, had been shot down. On the night of the 14th this force had moved into Muntok Harbour and disembarked without opposition (Banka Island was virtually undefended). An army amphibious element with the main force had begun to move up the Musi at 8.30 a.m. on the 15th. About 10 a.m. a reconnaissance aircraft had reported "three enemy cruisers and four destroyers sailing northward through Gaspar Strait" (Admiral Doorman's force). The first part of the convoy which had arrived at the mouth of the river had therefore been moved into the stream and the main convoy had been diverted northward, while the main Japanese naval force and all available air forces were prepared for action. In the afternoon aircraft from *Ryujo* and land-based planes attacked Doorman's squadron. When the Allied squadron turned south again the main Japanese convoy altered course for the Musi and, reaching the mouth of the river on the evening of the 16th, began moving up-stream. When, on the 24th, Japanese land forces had taken Gelumbang, about 30 miles south-west of Palembang, the *22nd Air Flotilla* was deployed at this base in strength.