

CHAPTER 23

MALAYAN CAMPAIGN

THOSE areas of the Far East running east from Malaya through the Indies to the South-West Pacific were recognised to be of prime importance in the defence of Australia. After a defence conference at Singapore and discussions held with the British authorities, the Australian War Cabinet decided to send forces to certain strategic points in the Far East. Of these the most significant was Malaya.

Accordingly in January 1941, part of the recently raised 8th Division of the A.I.F. was assigned to Malaya. A force of 6,000 known as "Elbow" Force, with thinly veiled security, left Sydney by the *Queen Mary* on 4th February 1941. Immediately after this preliminary move the War Cabinet decided to move one A.I.F. pioneer battalion, and one A.I.F. infantry brigade less one battalion to the Darwin-Alice Springs area. We have previously seen that this provided for a brigade group at Darwin and small forces for Timor and Ambon. It was also decided to call up the remainder of a militia battalion for Port Moresby and Thursday Island, and to send an A.I.F. battalion to Rabaul. Thus early in 1941 Australia had a slender chain of military forces from Singapore to New Britain.

In sending troops to Malaya the War Cabinet pursued the policy of not submerging the individuality of expeditionary forces in British commands. Therefore the party proceeding overseas to Malaya had the nucleus of a divisional headquarters under command of Major-General Gordon Bennett, though for the time being the force comprised little more than a brigade. The medical units of the force included the 2/9th Field Ambulance, the 2/4th Casualty Clearing Station, a transport section of the 2/2nd Motor Ambulance Convoy without a medical wing, the 2/10th General Hospital, the 2/2nd Mobile Bacteriological Laboratory, the 17th Dental Unit, the 2/5th Field Hygiene Section and a detachment of an advanced depot medical stores. Major J. G. Glyn White, D.A.D.M.S. of the 8th Australian Division, A.I.F., deputy to Colonel A. P. Derham, who was A.D.M.S. of the Division, became D.A.D.M.S. of A.I.F. in Malaya.

The headquarters divisional staff preceded the main body of troops, which arrived in Malaya on 18th February. The divisional headquarters and attached units were placed at Kuala Lumpur, the 2/9th Field Ambulance was with the brigade in the Seremban-Port Dickson coastal area, the casualty clearing station and motor ambulance convoy were stationed at Kajang fifteen miles to the south, and the 2/10th Australian General Hospital was sited at Malacca. The 2/3rd Motor Ambulance Convoy was recruited in Australia for the Malaya Command Medical Service but was trained and administered by the A.I.F. The transport wing arrived first and was trained under the command of the 2/4th Casualty Clearing Station. The medical wing arrived later with the com-

mander, Major Robert Dick. The 2/3rd Advanced Depot Medical Stores arrived in April 1941 under Captain A. W. Rogers, and was at first attached to the 2/10th A.G.H. at Malacca.

Additional medical units arrived later in the year. The 2/2nd Convalescent Depot and 2/3rd Motor Ambulance Convoy arrived on 24th April, the medical wing of the 2/2nd M.A.C. in June. Colonel Derham arrived by air from Sydney early in April. Friendly relations were established with Brigadier C. H. Stringer, in charge of medical arrangements for Malaya Force, and full mutual cooperation was maintained between the British and Australian medical services. On 15th August the 2/10th Australian Field Ambulance reached Singapore, and on 15th September the 2/13th A.G.H. arrived in response to a request cabled to the headquarters in Australia for another general hospital. By this time the 27th Brigade had also arrived, and the 8th Division was constituted with two brigades and other troops. The siting of the Australian medical units did not follow a definite strategic pattern, partly because the 8th Division was being held in reserve for the time being, without a definite individual role, and partly because of the advantage of using areas free of malaria.

THE COUNTRY

Derham had prepared in advance notes on Malaya, and also an appreciation of the situation during the period of training which the A.I.F. now entered. These notes gave details of the Federated and Unfederated Malay States, with their large population, chiefly Malays and Chinese. The country in which the Australians seemed likely to be committed to military action presented a great contrast with its highly developed and civilised areas and its dominating jungle. Singapore Island, linked with the mainland by the narrow Johore Causeway, which carried its traffic as well as most of its water supply, gave little idea of the dense jungle which covers a great proportion of the peninsula. An important feature of the terrain of the peninsula was the mountain range which runs up its centre, falling away on each side to coastal plains, with many swamps on the western aspect. Large rubber plantations flourished in extensive areas of the dense jungle growth, reached by good roads and there was rail communication with the more important centres; elsewhere there were only primitive paths and tracks. Rivers and their tributaries fed by the tropical downpours of rain threaded the fantastically rich vegetation and provided another ready means of travel.

The climate was constantly hot and humid, with a monotony enhanced by its discouragement of all needless exertion and its lack of seasonal variety. The difficulties of military operations and even of training were great in such surroundings, where the climatic discomforts of heat and heavy rainfall interfered with rest.

Prevailing diseases were malaria, dysentery, hookworm, and in addition, among natives, leprosy and the common infectious epidemics. Mite-borne typhus occurred but was not common. Malaria was well controlled in the settled areas, where mosquito control had been energetically applied,

and this and other local diseases had been the subjects of vigorous research in Malaya by workers of international repute. Here, as in other parts of the world where battles were fought in highly malarious areas, constant struggling was necessary to maintain high standards of malaria control once troops passed from places already made safe to others where the risk of infection was great.

ORGANISATION

The A.I.F. headquarters was built up to the full strength required by a complete division, and by the middle of August, on the arrival of the 27th Brigade Group the organisation was adequate for the control of the A.I.F. in Malaya. Colonel Derham acted both as A.D.M.S. 8th Division and A.D.M.S., A.I.F. Malaya. It was realised that in the event of action the divisional medical staff would have a sufficiently absorbing task in handling the units in the field; therefore an administrative medical headquarters was formed to control the base organisation. Lieut-Colonel Glyn White became D.A.D.M.S. administrative headquarters, A.I.F., and Major Bruce H. Anderson was appointed D.A.D.M.S. on the divisional staff on 14th September 1941. By this time the strategic role of the A.I.F. in Malaya was altered, largely through the urging of Bennett for a definite territorial responsibility for the division. Therefore on 29th August the 8th Australian Division was assigned the duty of defending an area which included Johore and Malacca. Following this change more purposive training was undertaken based on the areas in the northern part of Johore. In other respects the medical units carried out their usual functions. The field ambulances worked each with a brigade.

The 22nd Australian Infantry Brigade took up positions at Mersing, a settlement on the east coast of Johore. Mersing was considered a crucial point in a possible attack from the sea, and here the brigade dug in and spent several months in preparing for possible attack. The attached field ambulance, the 2/9th, under Lieut-Colonel Hedley Summons, constructed an advanced dressing station capable of accommodating 600 stretcher patients for a week or more in blast-proof shelters. A blast-proof dressing post and operating room were also provided for safe working during action. This work, including the provision of a good road of access, was carried out by the staff of the unit under technical supervision.

By the end of the year the 2/10th Field Ambulance under command of Lieut-Colonel E. MacA. Sheppard was settled at Kahang, and there was busily engaged in digging in a main dressing station and slit trenches. An orderly room, dressing room, ward and room for a surgical team were prepared in tents with walls buttressed with timber and galvanised iron.

The 2/4th Casualty Clearing Station commanded by Lieut-Colonel T. Hamilton had been doing routine work at Kajang, and in addition housed a section for venereal diseases staffed by the 2/10th A.G.H. In September the unit moved to Johore Bahru, where it acted as a small hospital with 150 to 200 beds. The arrival of the 2/13th Australian General Hospital freed the casualty clearing station, which in November moved



Australians train for jungle warfare Malaya.

(Sydney Morning Herald)



Attending wounded in action in Malaya.

(Sydney Morning Herald)

to Kluang. This site was chosen largely on the advice of Brigadier Stringer, D.D.M.S. Malaya Command.

When the A.I.F. dispositions covered the defence of Johore the original battle plan placed the C.C.S. at Segamat, largely because this was a malaria-controlled area. The D.D.M.S. however, pointed out that the assumption that an advancing enemy might come from the east was not necessarily justified, and a casualty clearing station at Kluang could receive casualties from all quarters as the map shows. This decision proved wise as casualties could be brought from Segamat, Mersing, Muar and Batu Pahat, and could be sent on to the 2/13th A.G.H. at Johore Bahru by road or rail. The 2/13th A.G.H. after its establishment expanded its capacity to 1,200.

The 2/10th A.G.H. originally equipped for 400 beds had expanded to 600 soon after its establishment in Malacca. It was sited in excellent buildings which formed part of the civil hospital in Malacca, where full facilities for all medical and surgical work were available. Major Maynard was able to carry out routine pathological work in the state laboratories, and the mobile bacteriological laboratory under Major Burnside in addition to diagnostic routines paid special attention to malarial diagnosis and the investigation of dysentery. Amoebiasis, known to be endemic, received careful attention. Though this hospital was sited on the coast sea transport of the sick was not practicable, since the port did not permit ocean going ships to approach within several miles of the shore. However, good road transport was available.

The 2/13th Australian General Hospital was raised somewhat hurriedly in Australia, but had the advantage of having its senior officers appointed from other units already in Malaya. Colonel D. C. Pigdon came from the 2/2nd Convalescent Depot to take command. Lieut-Colonels C. H. Osborn, senior surgeon, and W. A. Bye, senior physician, came from the 2/10th A.G.H., and Matron Drummond came from the 2/4th C.C.S. First assembled at St. Patrick's School, the unit dispersed some of its staff to the Singapore General Hospital, to the 2/10th A.G.H. and to other service units for local experience, and on 21st-23rd November took over a site at Tampoi, seven miles from Johore Bahru, in an unfinished mental hospital. By 8th December, 1,183 beds were equipped, and a new loop road was completed by staff and work gangs of hospital inmates. The installation of theatre equipment such as a shadowless lamp was also done by the staff of the hospital. The Sultan of Johore visited the hospital and gave for its use a portable X-ray and a diathermy apparatus. In January arrangements were made for the carrying out of facio-maxillary surgery in the hospital under direction of Lieut-Colonel Osborn: it was proposed that this should act as a centre for this work on British, Australian and Indian soldiers.

The 2/2nd Convalescent Depot was first established at the end of April by Lieut-Colonel Pigdon, at Tanjong Bruas, and, although the unit started without previous experience in this type of work, a sound foundation was laid at Tanjong Bruas, accommodation was provided for 600

men, with facilities for recreational and occupational activities. On the transfer of Pigdon to command the 2/13th A.G.H. Lieut-Colonel R. M. W. Webster took over command. For general convenience patients were received from a wide area, not solely from general hospitals. Men were classified according to condition and reclassified weekly, and as much training was given as climatic conditions permitted. On 29th December 1941 the unit was moved to Batu Pahat on the west coast of Johore. Great assistance was given by the Australian Red Cross Society in providing and equipping reading and writing rooms for patients, and in supplying material for games and recreation.

Derham in a special report to General Maguire, D.G.M.S. in July 1941, pointed out that the sick wastage rate for the A.I.F. troops in Malaya was excessive, though his own original estimate was even higher. The daily average varied from 5.9 per 1,000 soon after disembarkation to 2.0 a little later, and was eventually stabilised at 3.5 per 1,000. Comparisons of figures with hospital admissions of British and Indian troops were fallacious, as certain types of cases such as skin conditions were often treated at the aid posts. Bennett made special representations to Australia to ensure that a high standard of fitness of recruits was maintained. Major-General Downes, I.G.M.S., visited Malaya in September 1941 and found the state of general health and of medical training satisfactory. He was specially interested in the provision of stretchers suitable for jungle operations.

MEDICAL CONDITIONS

Among the Australians skin lesions caused a high proportion of the sick wastage, though few men with these troubles were returned to Australia. Downes, during his official visit promised to ask for an experienced dermatologist to be sent to Malaya from Australia.

The skin conditions troublesome in Malaya were those related to anomalies of sweat secretion and to infections. *Miliaria rubra*, or prickly heat, which later aroused interest in other tropical areas, was rife, and caused much discomfort. Control of sweating and simple applications such as talc powder gave some relief. Septic abrasions and ulcers seen in other tropical theatres were also common; as in the Middle East prompt treatment was found valuable such as epilation with an occlusive dressing or an anti-bacterial preparation such as sulphanilamide. Fungus infections also appeared, though the diagnosis was often not confirmed, and strong fungicides when incautiously used were found to prolong the condition, which in reality was very often due to bacterial invasion. *Otitis externa*, known in Malaya as "Singapore ear" was a painful and troublesome lesion. The prohibition of swimming in places where the incidence was high did little to prevent it, and ear plugs were not found of value. Spirit boric drops were found of some prophylactic value, so too was the avoidance of introduction of match sticks or similar swabbing devices into the canal.

Malaria was well controlled on Singapore Island up to the time of capitulation, but outside the controlled areas in Malaya the chances of

infection were great. Malaria prevention did not play a significant part during the later operations, as the procedures were not an integral part of the military life, but quinine was at first, at least, adopted as a suppressive drug in situations where it was indicated.

Medical examination of men returned as unfit to Australia revealed that a high percentage had disabilities at the time of enlistment which would have been disclosed by a more accurate or true statement by the recruit or by more searching examination. There was no doubt that age was sometimes incorrectly stated, and these older men did not always stand up to strain.

Some confusion arose in the matter of medical supplies. For the first three months the A.I.F. in Malaya was very short of medical supplies. This was due chiefly to a belief in Malaya Command that Australia would supply all medical stores and replacements in Malaya. The A.I.F. units presented indents to Command Medical Stores, but these were not filled. Personal approach to the D.D.M.S. Malaya Command immediately rectified the situation, but it appeared that difficulty would arise in ensuring full supply of all Australian medical requirements in Malaya by the British without at least some supplies being sent from Australia. It will be noted that a similar position on a larger scale occurred in the Middle East.

DISPOSITIONS IN MALAYA

Towards the end of 1941 there was conscious increase in international tension.

Lieut-General A. E. Percival, the army commander, had received reinforcements to the Malayan garrison since he had taken over the command in 1941, though these were much below the agreed requirements. In 1937 he had made recommendations concerning the defence of Malaya which had been accepted in principle by the Chiefs of General Staff. At the close of 1940 in addition to the Singapore garrison troops two British battalions were transferred from Shanghai, and during 1941 reinforcements arrived from India and Australia. The III Indian Corps under Lieut-General Sir Lewis Heath included incomplete 9th and 11th Indian Divisions, and there were also two additional British field regiments, and an anti-tank regiment, and an Indian field company and Indian mechanised cavalry. The Australian 8th Division lacked a third brigade but was otherwise complete. However the army strength fell far short of agreed requirements; there were no tanks or armoured cars, and there was a shortage of anti-tank rifles and mobile anti-aircraft guns. No more field forces could be supplied from the United Kingdom. The position in the air was even worse, instead of an estimated 582 aircraft there were 158 obsolescent types, inadequate for attack on sea-borne invaders. The Indian corps was responsible for defence north of Johore and Malacca, the A.I.F. for the defence of Johore and the fortress troops for Singapore Island.

The A.I.F. medical units were disposed as follows:

Divisional Units.

2/9th Australian Field Ambulance (Lieut-Colonel H. F. Summons) H.Q., M.D.S. at Kota Tinggi, "A" Company in reserve, "B" Company at Mersing.

2/5th Australian Field Hygiene Section (Captain R. W. Greville) attached to the M.D.S.

2/10th Australian Field Ambulance (Lieut-Colonel E. MacA. Sheppard) in reserve with 27th Infantry Brigade at Jasin II Camp Malacca, Segamat Road.

Non-Divisional Units.

2/4th Australian C.C.S. (Lieut-Colonel T. Hamilton) Kluang area; in temporary site in civil hospital Kluang, detachments at Segamat with 2/29th Battalion (Major W. E. Fisher, S.M.O. of area of H.Q. 27th Brigade) and at Batu Pahat (Major S. Krantz) 2/30th Battalion.

2/2nd Australian M.A.C. (Lieutenant Robertson) H.Q. at 2/13th A.G.H. Tampoi Hill, Johore Bahru.

2/3rd Australian M.A.C. (Major R. Dick) attached 2/10th Australian Field Ambulance.

2/2nd Australian Mobile Bacteriological Laboratory (Major K. Burnside) attached to M.D.S. 2/9th Field Ambulance serving 22nd Infantry Brigade.

2/10th A.G.H. (C.O. Colonel E. R. White) Civil General Hospital Malacca. (Physician, Lieut-Colonel W. Cotter Harvey, Surgeon, Lieut-Colonel A. E. Coates).

2/13th A.G.H. (C.O. Colonel D. C. Pigdon) Tampoi (Johore Bahru) (Physician, Lieut-Colonel W. A. Bye, Surgeon, Lieut-Colonel C. H. Osborn), detachments running camp hospitals.

2/2nd Australian Convalescent Depot (Lieut-Colonel R. M. Webster) Tanjong Bruas 8 miles north of Malacca on coast.

2/3rd Advanced Medical Stores (Captain A. W. Rogers) Johore Bahru.

On 6th December a warning was given to A.I.F. troops to begin movement to deployment areas. Arrangements had been made for rapid extension of malaria control of areas to be occupied by troops in the event of hostilities. The regular administration of suppressive quinine was at once begun in deployment areas in a dose of 8 grains daily. An experience showed that difficulties might arise with signals, as duplication of vital messages through alternative channels was not readily practicable. Detachments of the C.C.S. were at once recalled, and the 2/10th Field Ambulance moved from reserve with the 27th Brigade to establish an M.D.S. a mile and a half from Kluang on the Rengam road and an A.D.S. at Kahang. With the C.C.S. working at Kluang the 2/10th Field Ambulance moved its M.D.S. to Kahang. While the M.D.S. of the 2/10th Ambulance was at Kahang an underground dressing station was conducted with a blast-proof operating theatre for the use of the mobile surgical team from the 2/4th C.C.S. comprising Major S. Krantz and Captain T.

Brereton and six other ranks. Arrangements were made for mobile surgical teams to be detached from the C.C.S. and the general hospitals, complete with transport, staff and equipment, but only the C.C.S. team was used. Rickshaws were obtained and converted by the unit into mobile stretchers for use in quick transport of wounded from the 2/29th Battalion at the Kahang aerodrome should that have been necessary. At this time the unit also had an A.D.S. stationed near the Jemaluang cross-roads ("B" Company) and a small medical establishment at a Japanese tin mine near Endau. They planned to evacuate wounded down the Kahang River, boats and engines being obtained for that purpose.

The reality of danger of air attacks on the Kluang aerodrome induced Hamilton to seek a better site for the 2/4th C.C.S. This was found at the Mengkibol Estate and approved by Colonel Derham. On 8th December tents and marquees were erected in rubber plantations, and within a few days cement floors were supplied for operating and X-ray marquees, and water was piped from wells. Brassards were now worn under order from headquarters. Several days after the transfer the old site was bombed. The 2/10th A.G.H. had been taking patients with less urgent conditions from the C.C.S. and the 2/13th A.G.H., but these transfers were now stopped, and movement of such patients was now to the 2/13th A.G.H., since the 2/10th Hospital was in a potentially more forward area. A medical evacuation plan was made for the Australian forces. The 2/9th Field Ambulance served the 22nd Infantry Brigade and arranged to collect casualties from the 2/20th and 2/18th Battalions and the 2/10th Field Regiment at A.D.Ss. in the perimeter, and move them by ambulance to the M.D.S. on the Kota Tinggi road, where accommodation was ready for 100 cases, readily expanding to 200 or 300 if necessary. Thence the 2/2nd M.A.C. could take them to the 2/13th A.G.H. at Tampoi. Casualties from Sidili boom could be moved by Red Cross launch to a point where an ambulance car was available.

The 27th Brigade casualties from the 2/30th and the 2/19th Battalions and the advanced headquarters and artillery battery were to be moved to the M.D.S. of Sheppard's 2/10th Field Ambulance at Kahang and those from 2/29th Battalion which was guarding the Kluang aerodrome were taken direct to the 2/4th C.C.S. at Kluang. Thus the C.C.S. acted as a medical centre for any detachments in the Kluang area. The Indian 5th C.C.S. was on Singapore Island and only functioning in part as a field ambulance. The 2/3rd M.A.C. moved patients farther on to the 2/10th or 2/13th A.G.H.; the distances were considerable and the roads difficult. Instructions conforming with a "battle plan" had been circulated to all units, and on receipt of the code word "Raffles", battle stations were taken up in accordance with this plan.

ACTION IN NORTH MALAYA

The expected blow from Japan fell with unexpected suddenness with the raiding of Pearl Harbour on 7th December. At the same time Japanese planes bombed Kota Bharu, Singora and Patani. Enemy raiders were

detected thirty-five miles north east of Mersing but through bad liaison warning was not given to Singapore, which presented an illuminated target for a raid in which there were sixty people killed. Warning for movement had been given to the 11th Indian Division in accordance with the plan known as "Matador", which was designed to prevent and intercept enemy landings in Singgora. There were politico-military implications in a plan involving the entry of Thailand, but when movement was made it was too late for the plan to be fully implemented. The Japanese had a large convoy of transports off the east coast, and made landings at Singgora and later at Kota Bharu. The Indian troops encountered unexpected resistance from the Thais, and were unable to reach a position known as the "ledge", inside the Thailand border.

Meanwhile the Japanese bombed airfields on the west coast of Malaya, at Alor Star and Sungei Patani, and by 10th December Japanese ground troops had swiftly advanced and inflicted heavy casualties on the British and Indian troops. The Japanese advance now assumed the form of a three-pronged drive, pressing south along the east coast from Kota Bharu, advancing down the centre of the peninsula, and pouring towards the west coast where they engaged the forces defending Jitra. It was soon evident that the greatest danger was on the west coast in North Kedah. The Indian field ambulances which had been held in readiness for the advance into Thailand were evacuating casualties to the 5th Indian C.C.S. at Bedong, and on the central front where "Krohcol" was operating, the 2/3rd Australian M.A.C. under Major Dick was assisting in transport of wounded, although no Australians were at that time in action. Practically all the transport of wounded both in front of and behind the field ambulances was done by this unit.

On 10th December the battleships *Prince of Wales* and *Repulse*, which had recently arrived, while seeking an invasion flotilla off Kuantan on the east coast of the peninsula, were attacked and sunk by Japanese torpedo bombers. This tragic loss emphasised the lack of air cover and the risk of further enemy landings.

In Kedah the 11th Indian Division, with the Leicesters and East Surreys, was holding the Jitra line, a rather weak position across the main road. The hope that the Japanese could not bring tanks over the bridges in the north proved illusory, and they repaired all damage with surprising speed. By the 11th the Japanese force had reached the Jitra position, and next day heavy attacks forced the defenders back with many casualties.

After raids on the northern airfields Penang was heavily bombed on the 12th and 13th; there were several thousand casualties, mainly among civilians. The outflanking move of the Japanese on the central front necessitated further withdrawals from Kroh, leaving the way open to Ipoh farther south, despite strong resistance from the Argyll and Sutherland Highlanders. On the 16th and 17th Penang was evacuated, but without the destruction of installations important to the enemy. The airfields at Kota Bharu had also been lost after very heavy fighting on 10th December and Heath instructed the force there to withdraw, a movement which

was completed by the 21st. At this stage the invasion front was a little more than 400 miles from the Straits of Johore.

The British and Indian forces of the central and western columns withdrew behind the Perak River on the 22nd. A special independent company "Rose" Force including some members of the Royal Marines and A.I.F., launched attacks to the west of the river on the 24th and 25th. On the 28th December there was still fighting on the Perak River, but the Japanese, by outflanking tactics against the III Indian Corps, were advancing on the Slim River.

At the end of December Major Anderson, D.A.D.M.S. 8th Australian Division, carried out a reconnaissance of a number of areas of importance in the evacuation of wounded. These included Kluang, Yong Peng, Muar, Malacca, Gemas, Segamat and Batu Pahat. His report was timely, as it also shed light on general problems of defence and supply on the Muar-Segamat sector.

On 1st January the Japanese forces landed on the west coast at the mouths of the Perak and Bernam Rivers and attacked Kuantan on the east coast. After four days' fighting the 22nd Indian Brigade of the 9th Indian Division which was protecting the airfield at Kuantan withdrew. The defensive position was now on 4th January centred on the Slim River. Some of the Indian medical units were moved back; the 5th Indian C.C.S. went back to Kajang. The position was very serious. Great civil confusion prevailed at and after the fall of Penang; roads were crowded with civilians hurrying south, and with troops bound for the battle areas. Military retirements made the position still more difficult. The Indian medical units had collected quantities of valuable medical stores and attempted to send these to Singapore: unfortunately they were diverted to Malacca and later fell into enemy hands.

Derham was anxious for the safety of the 2/10th A.G.H. at Malacca, and was faced with the problem of moving their 800 tons of equipment. Colonel E. R. White made a special trip to the divisional headquarters to make the necessary arrangements. The 2/4th C.C.S. sited near Kluang was ready, and was taking sick from the 2/9th and 2/10th Field Ambulances. Already it was notable that despatch riders provided a number of casualties, the most usual injury being compound fracture of the tibia. This unit was instructed to send all sick to the 2/13th A.G.H. at Tampoi, Johore Bahru, and to keep its beds clear. A number of officers and nurses from the 2/10th A.G.H. were quartered there also while the hospital was moving.

In the beginning of January the 22nd Australian Infantry Brigade was at the Endau-Mersing area and the 27th Brigade at Jemaluang-Kluang. A reconnaissance of the north-western area of the State of Johore had been carried out as a foreshadowing of the involvement of the A.I.F. in this sector. On 6th January units of the 27th Brigade including the 2/10th Field Ambulance were placed on short notice for movement towards Tampin should landings occur on the coast of Malacca. Next day the Japanese landing at the mouth of the Selangor River was menacing Kuala

Lumpur, and, as we have seen, the III Indian Corps had withdrawn to the Slim River. Warning notice was given to the A.I.F. that the 27th Brigade was to move to the Segamat-Muar area on the 8th. The 45th Indian Infantry Brigade was now in the Jasin-Muar area for the defence of Malacca, served by the 38th Indian Field Ambulance under Lieut-Colonel Neal and the 5th Indian C.C.S. The 2/10th Field Ambulance was able to take 200 casualties underground, but Sheppard, who had been making reconnaissances in the Kluang area, was prepared to move with the 27th Brigade.

The defenders mustered at the Slim River were heavily attacked on 7th January by Japanese tanks and strong infantry forces, which gained control of a bridge on the main road. This resulted in the loss of British and Indian transport which was on the far side of the river. Losses of men were extremely heavy, and the 11th Indian Division was forced to withdraw, and as a result the exhausted troops lost all cohesion as a fighting force. Their remnants, joined by the 22nd Brigade of the 9th Indian Division from Kuantan, made an attempt to hold the Japanese from Kuala Lumpur.

DEFENCE OF JOHORE

On 7th January General Wavell arrived in Singapore. He had left Delhi on 5th January to take up supreme command of the new "ABDA" area (American, British, Dutch, Australian), and before his headquarters in Java had been established visited the Malayan front on the 8th. He agreed with Generals Percival and Heath that the line must be withdrawn behind Gemas-Muar, and that the tired Indian troops must be rested.

Accordingly a plan was laid down that III Indian Corps after delaying the enemy north of Kuala Lumpur, should retire to Johore, the 8th Australian Division less the brigade in Mersing area should move to the north-western frontier of Johore to engage the enemy on the Segamat-Muar River line. The 8th Division was to relieve the rearguard of the III Indian Corps, thus enabling that formation to take over the responsibility of the east and west coasts of southern Johore. This brought the reconstituted 9th Indian Division under command of Major-General Bennett, while the 22nd Australian Infantry Brigade came under General Heath's command.

The position of the 2/10th A.G.H. was no longer tenable, as it was now virtually in the front line, and the staff were engaged in the heavy task of removing the unit to another site. Some nurses and other members of the staff had been sent to the 2/13th A.G.H. at Tampoi on 6th January, and by the 10th all patients had been removed from Malacca and the remainder of the staff were at Kluang with the 2/4th C.C.S. The day after the unit had left Malacca the site was heavily bombed. Colonel White and Matron Paschke visited Singapore on 13th January and inspected a site at Oldham Hall, a school two miles north of Singapore, where the staff in a remarkably short space of time converted an old school with inadequate sanitation to a military hospital. The



Malaya.

members of the unit were reunited and began work at Oldham Hall on 15th January.

A defensive line was taken up at Segamat, where the force under command of Bennett, consisted of the 27th Australian Brigade Group, the remains of the 9th Indian Division and the partly trained 45th Indian Brigade. To this was added later a brigade of the recently arrived 18th British Division. At a conference with Brigadier Maxwell, Sheppard pointed out that Yong Peng, suggested as the new site for his M.D.S. was not far enough forward, and as Neal's ambulance placed its M.D.S. in the Muar area, he was able to establish his M.D.S. at Genuang Estate, where he obtained some medical supplies from Dr McKay in the local civil hospital. The 2/10th Australian Field Ambulance therefore cleared casualties from the 27th Australian Brigade Group, and the 38th Indian Field Ambulance those from the 45th Indian Infantry Brigade; the 2/3rd M.A.C., now under the control of Westforce, provided transport to the 2/4th C.C.S. at Mengkibol, and the light section of the 5th Indian C.C.S. then at Rengam. Medical services for the 9th Indian Division were provided by the 15th and 275th Indian Field Ambulances. This force, known as "Westforce", which had its advanced headquarters at Yong Peng, and later at Labis, waited on the Segamat line to allow the hard hit 11th Indian Division to pass through on its way to the rear. The medical dispositions of Westforce were controlled by Colonel Derham, who took over the responsibility from the D.D.M.S. III Indian Corps.

Malaria prevention was given serious consideration in these areas. Atebrin was available as a suppressive drug and was held in all A.I.F. medical units for immediate use, but on the urgent request of the D.D.M.S. Malaya, in order to conserve supplies atebtrin was withheld in favour of quinine as a suppressive drug until Bennett intervened, and ordered that atebtrin be used. The dose then recommended was two tablets twice a week.

The question of red cross emblems was also discussed. Practices differed in Malaya. Following reports from the Western Desert that red crosses made ambulances conspicuous, the custom of painting them out was adopted in the A.I.F. in Malaya, though most of the stationary medical units showed red crosses which were conspicuous from the air. Early in December, however, an instruction was given by Malaya Command that no camouflage be adopted by motor ambulances, though no specific instruction was given about red crosses. Only small crosses were used by the 2/3rd Australian M.A.C. while operating with the III Indian Corps. Derham on his own authority after observing hedge-hopping planes and snipers firing on vehicles on narrow jungle roads, ordered conspicuous crosses to be painted on the roofs and sides of motor ambulances. He was certain from personal observation that these emblems were respected, and lives were thus saved.

The weight of the attack was still on the central and western sectors, where the Japanese had elected to make their southward drive, but landings were also expected on the east coast. To counter these landings

defences had been provided in the Mersing area, as has been already told, and here the combined troops under Heath made up Eastforce. The 2/9th Field Ambulance was attached to the 22nd Australian Infantry Brigade which was part of Eastforce, and supplied advanced dressing stations in the perimeters of the 2/18th and 2/20th Battalion positions at Mersing. Farther north on the coast a forward group of troops covered the beaches at Endau, and from here evacuation was arranged by road to Mersing, with an alternative route by motor boat. Preparations were also made for holding casualties in the advanced dressing stations in the event of part of the force being cut off. The main dressing station was at Kota Tinggi, from which point the motor ambulance convoy supplied transport to the 2/13th A.G.H. at its Tampoi site in Johore Bahru. This direct route was not practicable for some days, as the roads were blocked by floods, and an alternative route was used *via* Jemaluang to the 2/4th Casualty Clearing Station at Kluang. This unit was receiving patients from all neighbouring quarters, taking advantage of its central location. Most of the patients suffered from medical ailments and not at this stage from combat injuries.

Lieut-Colonel Hamilton was acting as area commandant for medical units in the Kluang-Mengkibol area, and looked after the 2/3rd M.A.C. The ambulance train at Kluang Station took casualties to Johore Bahru, and Major Dick supplied vehicles for road transport. The 2/4th C.C.S. was under the local administration of the D.D.M.S. of III Indian Corps, while Colonel Derham was responsible for operational movements of A.I.F. medical units and Lieut-Colonel Glyn White was in charge of evacuation to the general hospitals.

The Japanese forces were moving south more rapidly than had been expected. The 9th and 11th Indian Divisions had suffered further losses in the fighting north of Kuala Lumpur, and Wavell who visited the front on 13th January cabled the Chiefs of Staff that the battle of Singapore would be "a close run thing".

GEMAS, MUAR AND SEGAMAT

On 14th January the 2/30th Battalion made contact with the enemy on the Gemas-Segamat line, and ambushed a force of Japanese who were on bicycles. Some hundreds of Japanese were caught in the trap, and though the rear of the ambushing company was attacked by the returning enemy the cost of the engagement was small. General air attacks were suffered over the area, but further success was gained by the 2/30th Battalion at Gemas. The enemy attacked here, twenty miles north of Segamat, but was repulsed with losses much heavier than those of the Australians. The R.M.O. of the 2/30th Battalion, Captain John Taylor, sent wounded back to the forward post of the 2/10th Field Ambulance at Batu Anam, and through an A.D.S. to the M.D.S. at Genuang, five miles south of Segamat, on the direct road to the 2/4th C.C.S. at Kluang. Throughout the battle of Gemas patients reached the C.C.S. over ninety miles of narrow winding road in an average time of six hours. For the

first time the 2/4th C.C.S. received convoys of surgical cases, and though the casualties were lighter than expected, the staff worked all night in the theatre.

The A.I.F. troops were cheered to see friendly planes over this area, but this effort could not be continued, for reinforcements of planes could not be brought in time, and opportunities for ground organisation and maintenance rapidly dwindled. Already serious inroads had been made on the small and inadequate air force, while the Japanese sea forces were able to maintain adequate air cover. A threat was developing also on the east coast where the Japanese air force had bombed Endau. For the first time the 22nd Australian Brigade under Brigadier H. B. Taylor made contact with the enemy north of this point. The 22nd Brigade Group on 14th January included 2/18th, 2/19th and 2/20th Battalions, with the 2/9th Field Ambulance, which had its M.D.S. at Kota Tinggi. When the 2/10th Field Ambulance moved to Segamat an A.D.S. was left on the Kluang-Jemaluang road until this could be taken over by the 2/9th Field Ambulance.

On the south-western end of the defensive line Muar had been subjected to heavy air attack for some days. On the 15th the Japanese had penetrated to the Muar River, and had landed parties between Muar and Batu Pahat. The staff of the 2/2nd Convalescent Depot at Batu Pahat found themselves in the peculiar position of being front line troops and were compelled to move. News that the Japanese were landing on the south-east side of the Kanan River and that they were advancing towards Batu Pahat made Lieut-Colonel Webster take prompt action. Motor transport trucks were commandeered and all available patients were taken to Johore Bahru. Though the Japanese bombed and machine-gunned the area when the troops were being assembled, there were no casualties. The 45th Indian Brigade which was responsible for the defence of the Muar area was faced with a difficult task, especially in view of the comparative inexperience of its troops. The 38th Indian Field Ambulance was sending wounded to the 5th Indian C.C.S. at Rengam. The country was swampy, and intersected by the continually winding Muar River, which was crossed by ferries. The civilians employed on the ferries had disappeared when the attacks began, casting an additional burden on the troops. A powerful Japanese force had outflanked the 27th A.I.F. Brigade, and now faced the 45th Indian Brigade across the river. After sharp fighting the Indians withdrew to Bakri, thirty miles from Yong Peng, where the headquarters of Westforce was established.

Bennett promptly sent the 2/29th Battalion to this front, and Percival moved the newly arrived 53rd Brigade Group to Ayer Hitam, west of Kluang. On the 16th the Japanese landed troops by coastal barge in the vicinity of Batu Pahat. Further Australian forces were brought in by the transfer of the 2/19th Battalion A.I.F. under Lieut-Colonel Anderson from Jemaluang to the Muar area near Bakri. On arrival at Yong Peng Anderson found the position at Muar was obscure; the enemy forces were in fact in greater strength than was suspected at the time.

There was considerable enemy air activity. The 2/19th Battalion arrived three miles east of the Bakri cross-roads on the 18th. There the R.M.O., Captain Lloyd Cahill, made contact with the 38th Indian Field Ambulance which sent a waggon to collect wounded of the 2/29th Battalion, though without success. A little later that evening it was reported that Captain V. Brand, R.M.O. of the 2/29th Battalion had wounded men farther forward but these could not be moved till further contact had been made. Only two sick men were evacuated from Muar.

After their landing at Batu Pahat the enemy cut the communication with Yong Peng. It was now known that a division of the Japanese Imperial Guards and other strong troops were at Muar. The inability of the 45th Indian Brigade to withstand the heavy enemy pressure at Muar resulted in the encirclement of the 2/29th and 2/19th A.I.F. Battalions, which had suffered heavy casualties particularly among officers. Later it was found that the losses exceeded 50 per cent of those troops engaged. There was now a risk that Westforce might be cut off from Singapore Island, for the Japanese on delivering their attacks on the 45th Indian Brigade had been some fifty miles behind the Australian flank. This made further withdrawals from the Segamat line necessary: this sector will be dealt with later. On 18th January the Muar front was brought under command of the III Indian Corps.

Fighting continued all the following day on both flanks of the 2/19th Battalion, and by evening Cahill had fifty wounded to care for. Further casualties from the 2/29th Battalion, the 2/15th Field Regiment, and 45th Indian Brigade brought the total to 100 in the battalion area by evening. No contact could be made with the 38th Indian Field Ambulance. During the heavy fighting this unit had dealt with 210 casualties. Unfortunately one of the severe losses of the 45th Brigade during this withdrawal was the cutting off of one company of the 38th Field Ambulance. Major Dick volunteered to work up to the isolated A.D.S. with the Australian M.A.C. but this was not practicable. The Japanese had complete road blocks to forward areas shortly after the action began. Early on the 20th Anderson decided to take the wounded in trucks and try to return to Yong Peng across the bridge at Parit Sulong. Leaving Bakri the force, known as "Bakri" Force composed of the 2/19th and the 2/29th Battalions and the 45th Indian Brigade, had to break through road blocks against strong enemy resistance and many more casualties occurred. The last road block was passed at dusk and the force with the wounded in trucks in convoy with the ambulance waggon approached Parit Sulong late at night. This was a most difficult journey necessitating deployment through swamps, and the forcing of road blocks, under constant menace from a large hostile force. The next day, the bridge at Parit Sulong was reached, but it was held by the enemy.

Excellent work was done here by the R.M.Os. Cahill and Brand, and stretcher bearers, who rescued many wounded under fire and brought them back to the relative safety of the crowded vehicles. Air attacks added to the casualties, and Cahill estimated the total number at about 400.

Anderson instructed that no wounded should be left on the perimeter at night; fortunately, many of them were able to walk. A request was made by radio for medical supplies to be dropped from the air, and on the 22nd an old Vildebeeste plane accurately dropped food and supplies of morphine, released a stick of bombs on the enemy and miraculously escaped safely. Anderson, who had succeeded to command of the force when Brigadier Duncan of 45th Brigade was killed, tried to arrange for the Japanese to allow wounded in the encircled Australian lines to pass through, but without success. A number of seriously wounded men from the 2/19th Battalion were sent in a truck showing a red cross with a volunteer driver to the hump-backed bridge over the river till checked by a guard. An officer in the village to whom the driver was taken, refused permission to pass unless the force surrendered. This condition was rejected. The truck was not allowed to return but was incorporated in the road block. After nightfall Lieutenant Austin, one of the wounded, contrived to release the brakes of the truck, allowing it to slip back off the bridge till the engine could be started under veil of the noise of battle. The wounded were then returned near the perimeter for the night. An attack on the bridge was not successful. Next day a general order to withdraw was circulated. The walking wounded made the best of their own escape, and Cahill and some of the more severely wounded contrived to cross the river and escape the Japanese. Only the walking wounded returned, excepting those who were carried by their comrades including Cahill. Some enemy tanks were destroyed, though at the cost of casualties, and the Japanese ahead were attacked and dispersed. Unsuccessful attempts were made to rescue the force through a cross road to Yong Peng. All guns and vehicles were destroyed, and unfortunately no lying wounded could be taken. Only those who could walk made their way back to Yong Peng by jungle paths; some took days to regain the Australian lines. Trucks containing severely wounded men were fired on by the Japanese; some were blown up and set on fire, and most of the wounded were massacred by their captors. Some of the men who reached Yong Peng arrived there before divisional headquarters had left, others arrived later, and were taken prisoner by the Japanese. Of these latter some were taken back to Kuala Lumpur, and eventually rejoined their fellows in captivity on Singapore Island. Despite the tragic losses this episode was an epic which probably prevented the encirclement of a much larger force at Segamat, and the bravery of the commander of "Bakri" Force and his men was equalled by their consideration of the wounded. On 25th January Wavell signalled his appreciation of this determined stand.

WITHDRAWAL FROM SEGAMAT

It is necessary now to return to the Gemas-Segamat sector where fighting had been going on since the early repulse of the Japanese by the 2/30th Battalion under Lieut-Colonel Galleghan. On 15th January the enemy had a force of about three battalions with tanks and were digging

in on part of the battalion front. Australian attacks were launched and were met by intense fire and dive-bombing. Owing to lack of numbers the objectives could not be reached, and the battalion was forced to withdraw. Heavy rain added to the difficulties. There was a lull in the fighting, with the Japanese very active in restoring destroyed bridges, but the brigade commander, in view of the position on the whole line, ordered the 2/26th Battalion to relieve the 2/30th Battalion and under increased pressure from the Japanese on the ground and in the air a withdrawal behind Segamat began.

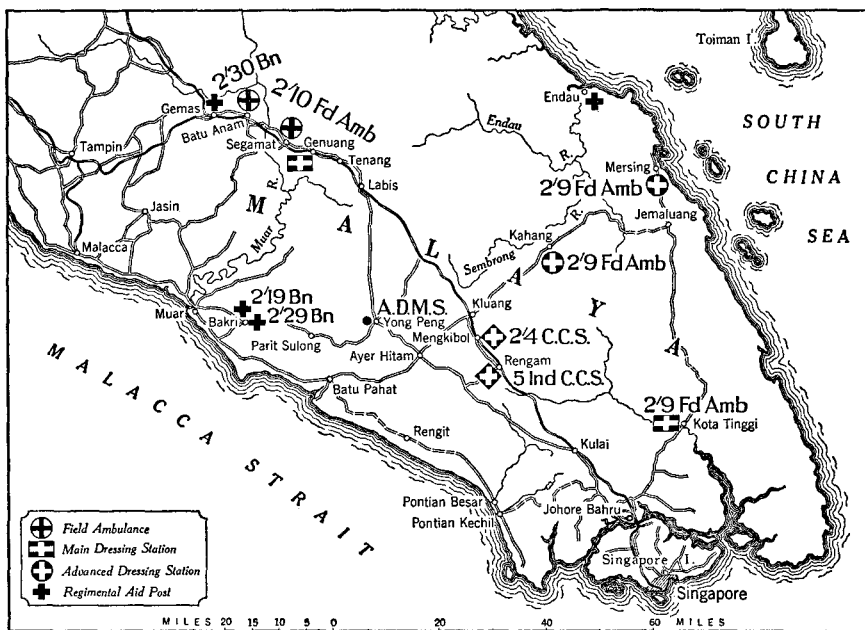
The 2/10th Australian Field Ambulance which was serving the 27th Brigade, and had its M.D.S. at Genuang received its first casualties on 15th January mainly bullet and bayonet wounds. All arrangements for treatment and transport to the C.C.S. were carried out with speed and efficiency. Captain R. M. Mills was sent out at midnight on the 18th from the field ambulance with three motor ambulances and two utility trucks bearing red crosses to pick up casualties expected from the 2/26th Battalion. No casualties were found, though the party waited till dawn, but the Japanese troops had penetrated so far that their rifle-fire was within some two hundred yards. On 18th January Derham, realising the threat to communications with Johore, recommended to the G.O.C. and H.Q., A.I.F. that all nursing sisters and masseuses should be evacuated from Malaya. Bennett refused because of the bad effect on civilian morale. Derham was anxious for the safety of the nurses, and asked for news from the 2/4th C.C.S. twice a day while he was at Yong Peng, to which the advanced headquarters had now retired from Labis.

The 2/10th Field Ambulance moved to a site one mile north of Labis, owing to the move of a field battery into Genuang, and to the general retirement. A mobile A.D.S. was in the vicinity of Tenang, under Captain Crabbe, who next day moved the A.D.S. back with the 2/26th and 2/29th Battalions. The 15th Indian Field Ambulance was then near Labis, and the 38th Indian Field Ambulance still near the Yong Peng-Muar road junction. On 20th January Sheppard chose a site for his M.D.S. at Socfin Estate, with the relay post of the 2/3rd M.A.C. However, further penetration by the Japanese on the west flank caused the 2/26th and 2/29th Battalions to withdraw near the Yong Peng cross-roads, and the M.D.S. of the 2/10th Field Ambulance was accordingly drawn back to the Mengkibol Estate near Kluang. The 198th British Field Ambulance placed at Yong Peng was able to deal with the casualties of the 53rd British Infantry Brigade. Rearguards from both Muar and Segamat sectors were passing through Yong Peng.

Hamilton had been informed by Derham on the 17th that the Japanese had penetrated the area round Yong Peng, and that there were snipers in the vicinity. Road traffic was being bombed at this time, but there was still a reasonably safe exit for the 2/4th C.C.S. through Rengam. Derham sent this message on the 19th to the C.C.S. commander

There are now none of our troops between you and the enemy. Send nursing sisters to 2/13th A.G.H. immediately, and move south to selected position as soon as possible.

It was reassuring to know that the thirty miles between the unit and the Japanese was swampy country. The Fraser Estate near Kulai, twenty-two miles north of Johore Bahru, was chosen for the site, the 2/3rd M.A.C. cleared the wounded with all available ambulances, and the C.C.S. moved forthwith, and arrived at the site on the night of the 19th/20th. During the move Hamilton acted in cooperation with Lieut-Colonel Pearson of the 5th Indian C.C.S. at Rengam. While at Kulai, the 2/4th C.C.S. admitted wounded from the Muar-Yong Peng area, and also handled a large number of Indian wounded and sick. The 1st Malayan C.C.S. under Lieut-Colonel R. Malcolm R.A.M.C. assisted in the medical attention on Indian patients and shared the operating theatre. The 5th Indian C.C.S. then retired to Singapore. The 2/4th C.C.S. left a light section at Kluang, with its surgical team, and worked in conjunction with the 2/10th Field Ambulance at the Mengkibol Estate. Kluang was now virtually a battle area.



Southern Malaya, 16th January 1942.

ACTION IN THE EAST

Meanwhile on the east coast tension was rising. Though there was little enemy pressure on land heavy air attacks were made on Endau and Mersing. The 2/9th Field Ambulance received an increasing number of casualties, but these were still preponderantly due to illness and not to combat. On 17th January Summons established a post at Kahang, on the Kluang-Jemaluang road on the site previously occupied by the A.D.S. of the 2/10th Field Ambulance. The M.D.S. of the unit was at Kota

Tinggi. The Mersing area was again bombed and the following day bombs fell near the A.D.S. at Mersing, but it was believed that the Japanese had respected the red cross emblems shown there by order of the brigade commander. The 2/19th Battalion was preparing to move in reinforcement of troops engaged at Muar, and expected at that time to be replaced by the 5th Norfolks. General Heath began the removal of stores from Mersing on the 18th, since attacks from the air were increasing. With the 2/4th C.C.S. at Kluang, on the eve of moving south, the retreating troops were left with only the field ambulance within easy reach, and movement into the central parts of South Johore was becoming more difficult owing to the great flow of traffic.

On 20th January General Wavell again visited Singapore and discussed the situation with Generals Percival, Heath and Simmons (fortress commander). On the following day in the central western sector conferences were held at Yong Peng, and two days later at Rengam.

The seriousness of the position was emphasised by a further landing by the Japanese on the east coast at Endau on 21st January. Eastforce now included all troops on the east coast and was commanded by Taylor of the 22nd Brigade. Its task was to hold Jemaluang and Kahang and to maintain detachments in the Mersing area. The Japanese invading the east coast were making their way down south. The task of checking them was of course much more difficult by reason of the necessity for part of the 22nd Brigade to be sent to the aid of Westforce, and also the complete disappearance of the last aircraft which could hold their own with the enemy. The 2/18th Battalion ambushed a force of 400 Japanese on the night of 26th/27th January, but as will be seen Eastforce was then required to join in a withdrawal to Singapore Island.

As a result of the conferences at Yong Peng and Rengam orders were given for withdrawal from Yong Peng, and for the regrouping of all forces in Southern Johore. As a corollary a decision was made that Mersing was not to be held.

Wavell thought it probable that the forces would be driven from Johore to Singapore Island, and had already cabled Mr Churchill that if Johore were lost the island defences might not be able to hold out for long. He reiterated a warning as to the weakness of the northern defences of Singapore.

MOVEMENTS OF MEDICAL UNITS

The position in Northern Johore was reflected in the movement of the forward medical units. Major Krantz and Captain Brereton, the surgical team from the C.C.S., returned from Mengkibol on 23rd January; it took them all night to travel the forty-eight miles to Kulai. The 2/10th Field Ambulance at Mengkibol was also retiring; combatant units were crowding even the site of the field ambulance as the enemy advanced. Brigadier D. K. Seaver, D.D.M.S. of III Indian Corps, calling at the 2/4th C.C.S. at Kulai, was uncertain of the whereabouts of some of the medical units then under corps control. The ambulance train on its way south was attacked from the air. Neal managed to withdraw the remainder of his

38th Indian Field Ambulance under enemy pressure. The 2/9th Field Ambulance began an orderly retirement with the forces on the east coast, performing "leap frog" manoeuvres, and, like the other units, moving at night. The roads were under continuous air attacks by bombing and machine-gunning, though individual motor ambulances carried out by day urgent missions in which their red cross emblems were respected.

The 2/4th C.C.S. continued working busily at Kulai, and in conjunction with the 1st Malayan C.C.S. handled many Indian soldiers, who were noticeably young and inexperienced. Both the main part of the C.C.S. and its Indian annexe were full, and the staff were glad of the protection of the rubber trees. The 2/3rd M.A.C. transported casualties from the western sector through the C.C.S. at Kulai to Johore Bahru and Singapore Island, and from the Mersing and Jemaluang areas direct to the 2/13th A.G.H. at Johore Bahru and the 2/10th A.G.H. at Oldham Hall.

The base medical units were both committed to the vast task of moving a general hospital. The 2/10th A.G.H. as we have seen, left Malacca on 10th January. Some of the staff had been attached to the 2/4th C.C.S. at Kluang for several days, and others were there till 13th January while Colonel E. R. White concluded arrangements for the re-opening of the unit at Oldham Hall on Singapore Island. A few days after Oldham Hall was occupied Manor House, a large boarding house half a mile away, was also taken over for the housing of surgical cases, and thereafter continued extensions were made by using a number of private houses and erecting tents in the grounds of the two main hospital buildings. Battle casualties from the Mersing and Jemaluang areas were being sent to the 2/10th A.G.H. which had settled into its new site and by the 26th January was accommodating 538 patients. The hospital was now re-assembling all officers and nurses who had been detached to other units.

The 2/13th A.G.H. which had been working at Tampoi Hill, four miles from Johore Bahru since the end of November 1941, now had to leave this site for one on Singapore Island. When the 2/10th A.G.H. left Malacca, and until this unit was re-established at Oldham Hall, the 2/13th A.G.H. had to expand from 600 to 1,200 beds at very short notice, as it was temporarily the only A.I.F. hospital in full tide of work. In the remarkably short time of thirty-eight hours the patients and equipment were transferred to the new site in St. Patrick's School twenty-five miles away on the south side of Singapore Island. These moves of the hospitals, accomplished under emergency conditions, could not have been so successfully carried out without the joint efforts and cooperation of Lieut-Colonel Glyn White and Captain Vincent, the commanders, matrons and members of staff.

Following on the move of the 2/13th A.G.H. from Johore Bahru the 2/4th C.C.S. having been previously warned that movement was imminent, transferred to the old mental hospital at Johore Bahru on the night of 25th/26th January. It was obvious that the C.C.S. could not remain there, but had to seek a site on Singapore Island.

During the actions north of Johore Bahru precautions had been taken to remove large quantities of medical stores from Singapore Island to ensure that medical supplies would be available in the field in case communications were cut. These stores had been augmented by salvaging supplies from civil hospitals in the north, and even a Japanese dispensary at Mersing. Unfortunately some of these were lost in the confusion of traffic incident on the retirement, but some were saved for future use.

The 27th Australian Infantry Brigade was engaged in action at Ayer Hitam on the 25th, and the 2/20th Battalion A.I.F. withdrew from Mersing. The inevitable loss of the triangular area between Yong Peng, Kluang and Ayer Hitam made further withdrawal necessary.

WITHDRAWAL TO SINGAPORE ISLAND

On 27th January Wavell gave Percival permission to withdraw the whole force to Singapore Island if he considered it necessary. Arrangements were now made to effect this withdrawal, and to defend Singapore Island with such means and improvisations as could be devised. It was necessary to evacuate as many patients as practicable along assured though crowded routes, but the withdrawal of the field forces was perforce a last minute performance on the selected withdrawal lines; it was necessary to leave parts of the field ambulances with the retreating troops as long as possible. Thus it happened that advanced dressing stations moved back only as the last defenders withdrew. Aid posts proved their claim to be called mobile, though this made it difficult for roving ambulance cars to find them. The sections of the field ambulances were more or less independent, but the light section of the C.C.S. which was still working in the central sector, had no transport vehicles of its own and was compelled to resort to any useful expedient. By relays the patients were moved, and fortunately none of these were injured, nor any of the staff of the medical units. On 26th January Hamilton inspected possible sites for the 2/4th C.C.S. on Singapore Island. The suggested site at Singapore dairy farm was quite unsuitable, but a good position was found in the Bukit Panjang English School, which was relinquished by the R.A.F. after negotiation. It had the drawback of being in a target area, but there was little choice. The main body of the unit moved in on the next day, leaving, by request of Brigadier Seaver, a light surgical section for a few days. The nurses rejoined the unit on 29th January. On the same day the III Corps headquarters on an exposed hill in Johore Bahru was bombed, an ominous sign for the future.

The 2/9th Field Ambulance was still receiving up to eighty wounded a day from the 2/18th Battalion, but the headquarters moved the same day, the 27th, to Singapore and there set up a 200 bed hospital at Hill 80. The M.D.S. of the 2/10th Field Ambulance moved the following day to a site under trees at Bukit Panjang, opposite the 2/4th C.C.S. A light mobile section maintained an A.D.S. at the former site of the 2/4th C.C.S. at Johore Bahru while withdrawal was proceeding. A detachment moved with the 27th Australian Brigade.

The D.D.M.S. III Indian Corps made arrangements for medical attention of troops crossing the causeway from Johore. These consisted of an M.D.S. of the 38th Indian Field Ambulance, reinforced by a resuscitation team from the 2/10th Australian Field Ambulance. During the retreat from the mainland Red Cross units were in daily contact with all field medical units, and by using mobile stores and a mobile headquarters additional comfort was given to the sick and wounded. Major Dick's motor ambulance convoy which had been in action from the 8th December 1941 was the last to give medical service to units on the mainland.

Eastforce ensured the safety of the roads to the island, and by the night of 30th/31st January all British and Australian forces had crossed the Johore Causeway and reached Singapore Island. Difficulties of movement and of traffic congestion made impossible the salvage of valuable equipment and fighting material, which was left on the mainland. It is ironic that on this same day, 30th January 1942, the movement known as "Step-sister" began, by which the 6th and 7th A.I.F. Divisions embarked from the Middle East with the original purpose of bringing Australian reinforcements to Malaya.

DEFENCE OF SINGAPORE ISLAND

The utmost confusion prevailed on the overcrowded island after the causeway was passed. The location of units was not always suitable; fixed defences were not duly planned, and artillery and other defence forces were sometimes in close proximity to medical units. The 18th British Division had arrived as a reinforcement on the day the withdrawal began, but like other reinforcing units was not adequately trained or armed. For purposes of defence the island was divided into three sections, northern, southern and western. In the western area, which the Australians were defending with the 44th Indian Brigade under command, were the 2/9th and 2/10th Field Ambulances, attached to the 22nd and 27th Infantry Brigades respectively. After crossing the causeway the 2/9th Field Ambulance opened their M.D.S. on the road running west from Bukit Panjang, with an A.D.S. on the cross road from Bukit Timah. The 2/10th Field Ambulance as we have seen, occupied a site under rubber trees near the 2/4th C.C.S. at Bukit Panjang, close by also was Dick's headquarters of the M.A.C. The British and Indian field medical units serviced the troops in the other sectors.

The medical units were strained to capacity. Owing to the shortage of beds in hospitals field ambulances were instructed to hold minor cases, each ambulance to expand to provide accommodation for 150 to 200 patients. All the field medical units were busy with matters of hygiene and defence, and making blast-proof shelters and slit trenches. Owing to the danger of interruption of the piped water supply the water of all wells was checked. Malaria had been appearing in increasing frequency, and more was expected in men exposed to infection in the later periods. At a joint conference it was emphasised that certain areas, such as those occupied by the 2/30th Australian Infantry Battalion and the 44th Indian

Infantry Brigade were potentially or actually malarious. All oiling had ceased, and quinine taken as a suppressive had not proved very effective; in the light of more recent knowledge this is not surprising.

The field medical units treated many men for exhaustion states at this stage. Some of these men were affected by the tiring retreat and by all the psychological stress that such a movement implies, others in addition had made long and hazardous journeys from the areas now infiltrated by the Japanese. One party of thirty-three from the 4th Norfolk Regiment, cut off from Yong Peng after the fighting at Parit Sulong, arrived at the 2/4th C.C.S. utterly worn out by a dangerous journey in stolen sampans. The patients in medical units as well as the defenders of the island were under increasing stresses from the ever intensifying air attacks. On 1st February the medical units at Bukit Panjang were alarmingly reminded of their position when planes attacking the oil tanks dropped bombs in their vicinity.

A new peril was added on the following day, when Japanese guns mounted on the mainland shelled Singapore. On this day, 2nd February 1942, the naval base was abandoned and the floating dock demolished. One result of this increase in the tempo of the attack was a rising incidence of exhaustion states and neuroses, including some probably self-inflicted wounds.

Bombs also fell near the M.D.S. of the 2/9th Field Ambulance. This unit was busy during the first week in February digging in and treating patients, mainly sick, whose numbers rose to 100, owing in part to the increasing strain on the hospitals. From 28th January to 8th February the 2/10th Field Ambulance treated 667 A.I.F., 15 British and 25 Indian casualties. Also approximately 250 natives mainly women and children, were treated as a result of the bombing and shelling of native villages. On 5th February the 2/4th C.C.S. was within the range of enemy artillery; this made a move necessary, which was carried out on the following day. Suitable sites were now becoming more difficult to find, and as the movement was steadily towards the city area congestion increased. The presence of a large number of civilians on Singapore Island was an embarrassment, particularly with regard to accommodation. After viewing a site in a quarry with disfavour, Hamilton managed to transfer his unit to the Swiss Rifle Club.

Both the 2/10th and 2/13th A.G.Hs. were overcrowded. The 2/10th A.G.H. after taking over additional houses and erecting tents had accommodation for 745 patients and on 5th February had 709 beds filled. Bennett was troubled by the cramped space in the wards but this was unavoidable. The 2/13th A.G.H. at St. Patrick's School on the south coast had 522 beds occupied at this time, and accommodation for 825 patients. All available space was used, including the gymnasium and chapel. As the work increased the surgical wards were concentrated in the main building, for the sake of efficiency, and the medical staff were accommodated near to hand. The rising number of serious wounds, especially of the head, thorax and abdomen imposed an increasing strain

on the surgeons. On 7th February Bennett pointed out the risk to the 2/13th A.G.H. in being sited in a building on the coast, but the risk of units well within the perimeter was also very real, as was seen the same day in the shelling of the 2/10th A.G.H. at Manor House when two members of the staff were killed and other men wounded.

The damage done was not great, but the moral effect on patients was bad. The 2/2nd Convalescent Depot had difficulty in carrying out its work on the island, particularly as it moved four times in a few weeks: at this time the unit was working at the Island Golf Club.

On the morning of the 8th a sporadic enemy barrage began; this intensified during the afternoon and evening, and throughout the night the Japanese landed. They used all sorts of craft; some even swam the straits. On the same day the A.D.Ss. of the 2/9th and 2/10th Field Ambulances with the battalions were heavily shelled. The dental utility truck of the 2/10th Field Ambulance received a direct hit and was destroyed: up till then dental work had been carried on.

High level and dive-bombing continued to be intense, though temporarily discouraged by the appearance of Hurricanes. However, the air force strength was so attenuated and hopelessly outnumbered that as many of the personnel as possible were evacuated. Following the Japanese landings bitter fighting continued. Though there was seldom a defined front and conditions were confused, the pressure of superior numbers of fresh enemy troops was strongly resisted. Nevertheless, the defence perimeter was perforce being further contracted, and these actions imposed still more difficult conditions on the medical units. The proximity of artillery units forced the 2/4th C.C.S. to leave the Swiss Club. Temporarily this unit settled in Gilstead Road, leaving a surgical team behind to work with the 2/9th and 2/10th Field Ambulances which had moved to this site and were running a combined casualty reception hospital.

Summons suggested that a Red Cross area be formed which could be notified to the Japanese, thereby ensuring greater safety to the patients. At A.I.F. headquarters this plan was not approved, but Derham continued to do all he could to clear combatant units away from medical areas. Australian units, when acquainted of the position readily moved away, but this good example was not always followed. The heavy fighting produced many casualties; the hospitals were even busier, with operating theatres working night and day. Movement added to the difficulty of caring for patients. The 5th Indian C.C.S., the 1st Malayan C.C.S., the 2/4th C.C.S., and the 2/10th A.G.H. all had to move on or about 9th February, as well as other field units. The sanitary service failed, and civil labour virtually disappeared.

On 10th February Wavell visited Singapore and conferred with Percival and Bennett. Low flying Japanese bombers attacked the bungalow where the headquarters was situated, fortunately without serious results. In view of the rapid progress of the enemy Wavell ordered a counter-attack by all troops possible, and issued an "order of the day". In this he pointed out that other national forces had held out against greater odds, and that

neither troops nor civilians should be spared in the coming actions. There could be no thought of surrender, and senior officers must lead their troops, and if necessary, die with them.

On 11th February this order of the day was promulgated with a rider by Percival. This stated that

in some units the troops have not shown the fighting spirit which is to be expected of men of the British Empire—the spirit of aggression and determination to stick it out must be inculcated in all ranks. There must be no more withdrawals without orders.

When this order with the rider was given to Colonel Derham by a senior staff officer for promulgation to the A.A.M.C. units he read it and tore it up in the officer's presence. He felt that his medical units had not run away from anything, had usually been the last to retreat when retirement was ordered, and had done outstanding work, particularly the ambulance drivers and the regimental medical officers. He therefore refused to promulgate so uninspiring an order.

Stringer and Derham conferred on the medical position on the morning of the 11th immediately before the Supreme Commander's final conference. Stringer stated that conditions in the City of Singapore were rapidly deteriorating; civilian casualties were mounting and hygiene was ceasing to exist. He had advised Percival that from the medical point of view the force should capitulate before the position became uncontrolled. Derham agreed with this, and with the approval of Colonel J. R. Broadbent (A.A. & Q.M.G., A.I.F. Malaya) advised Bennett accordingly. It should be clearly understood that this advice was based on purely medical considerations; it was not part of the function of a medical adviser to give a military opinion on the wastage of life by the operations of war except where questions of preventive medicine were involved.

The Japanese were now infiltrating areas closer to the city. Early in the morning of the 11th the divisional headquarters and the Swiss Club had to be evacuated, as enemy were attacking with small arms fire. The 2/9th and 2/10th Field Ambulances and the 2/2nd M.A.C. were promptly transferred to Barker Road, and the headquarters to Tanglin Barracks. The 2/4th C.C.S. supplied medical staff for a newly formed ordnance battalion; one medical officer and fourteen O.Rs. were attached to the 2/10th A.G.H. and the balance of C.C.S. staff and equipment after staying overnight at Gilstead Road moved to the 2/13th A.G.H. Some members of the staffs of the field ambulances were also assisting in the hospitals, and these units continued to evacuate sick and wounded direct to hospital. Derham found the 2/10th A.G.H. working under very difficult conditions. Air raids were continuous, and occasionally shells fell in and around the hospital area. All the travelling on roads was hazardous, owing to shelling, dive-bombing and machine-gunning. The 2/13th A.G.H. had wards crowded with sick men, many lying close packed on mattresses on the floor. The municipal water supply was cut off but an emergency supply was obtained from an old well in the grounds.

Throughout the period of strain the nurses had been indispensable in their work and admirable in their courage and coolness. Six nurses were sent away with forty-seven patients who had been embarked on a transport for Australia on 10th February, and after concentrated air attack arrived at Batavia. On the following day sixty more nurses from the A.I.F. hospitals were embarked on the *Empire Star*. On this ship, normally for cargo with accommodation for only sixteen passengers, were civilians, troops, mostly R.A.F., British, Australian and Indian nurses, 2,154 persons in all. After the harassing experience of persistent air attacks on a crowded ship they arrived at Batavia on 14th February, and two days later sailed for Fremantle arriving without further incident. On 12th February the remainder of the nurses on Singapore Island were embarked on the *Vyner Brooke*. Unfortunately after suffering repeated air attacks this ship sank off Banka Island; only twenty-four survived.¹

THE FINAL PHASE

Meanwhile the fighting was coming closer and closer to the city area. Though the A.I.F. field ambulances were still taking casualties from the brigades, such arrangements as collecting posts for wounded could no longer be established. Shelling of the areas adjacent to Oldham Hall and the siting of guns in the neighbourhood made further movement of the 2/10th A.G.H. necessary. In six hours and with only two hours' notice 870 patients were moved with the requisite equipment at night along congested roads, subject to much shell-fire without casualty or loss. On 14th February a successful expedition was sent back to Oldham Hall to collect valuable equipment and material after the main body of the unit had settled in the Cathay building.

One hundred of the most seriously ill surgical patients with Lieut-Colonel Coates, Captains Woodruff and Puflett and nursing orderlies were transferred to the Singapore General Hospital. Another three hundred were sent to St. Joseph's Institute; about half of these were seriously ill and were under the care of Lieut-Colonel Cotter Harvey and Majors Phillips and Furner. About five hundred patients with the balance of officers and other ranks were housed in the Cathay building. The hospital occupied the lower floors of this twelve-storey building. The III Indian Corps headquarters troops occupied some of the flats in higher floors of the building, and despite urgent requests from Colonel E. R. White, refused to move. As a result the red cross could not be flown from the building, which was consequently under frequent shell-fire and bombing, adding greatly to the strain and discomfort of attending the sick and wounded. The building was often hit, and many flats were wrecked, but the lower floors fortunately escaped damage. Members of the Red Cross unit, including recent reinforcements were divided between the two hospitals, where they worked in the wards, and gave useful assistance to medical officers in the keeping of records. Unfortunately the area com-

¹ A further account of the experiences and fate of the nurses is given in Chapter 27.

missioner Mr Basil Burdett had been killed in an aircraft accident in Java, where he had flown to establish a Red Cross depot.

The 2/2nd Convalescent Depot after two moves into sites at Tanjong Katong on 11th February again moved on the 13th, this time into the Cathay cinema building adjacent to the Cathay flats. This unit combined its usual functions with those of a rest camp and a general base depot. Late on 12th February the 2/9th and 2/10th Field Ambulances moved into Oldham Hall just vacated by the 2/10th A.G.H. Derham, after consultation with Broadbent and the ambulance commanders decided that these units should take over the hospital area and remain there even if the enemy overran it. However, an hour later Malaya Command ordered that the area was to be defended, and in spite of protests guns were mounted in the hospital grounds. The two field ambulances then moved to St. Andrew's Cathedral, and there functioned as a combined unit in the Cathedral buildings and grounds, caring for the constant stream of sick and wounded. Both troops and civilians were treated; many of the troops were very exhausted.

On 13th February a combined A.D.S. was set up at Tanglin in a house on Tanglin Hill Road, by Major Hazelton, Captains Crabbe, Mills and Juttner. Shelling and bombing by the enemy continued; drivers of vehicles faced constant danger, several were wounded, and one died after injury in the Cathedral grounds. The water supply of the Tanglin area had been partly interrupted on the previous day; wells were surveyed, and the swimming pool was filled and placed under guard. On the 13th the supply was completely cut off. This danger was part of the general water shortage now threatening Singapore.

The same day Malaya Command authorised the assembling and sending of a party of 1,000 to Java by coastal vessels. It was thought that a representative body of specialists drawn from all arms and services would be of great value to the ABDA headquarters in Java, where it was hoped that successful counter-attacks against the Japanese might be made. Unfortunately this hope remained unrealised. Only about one-half of the total number of officers and other ranks who were to assemble at the docks were taken off, and the main A.I.F. party of signallers and engineers were left. Included in the party were Colonel Broadbent and Lieut-Colonel Coates. Coates following instructions from General Bennett through the A.D.M.S. embarked on the *Sui Kwong*, a small steamer which after surviving mortar-fire, sailed at dawn through the minefield for Java. Other medical officers on board were Brigadier Seaver, Colonel Percival, Lieut-Colonel Hurd-Wood, and Lieut-Colonel Hennessy, each representing a clinical or administrative specialty. Coates was the only Australian medical officer and the only surgeon. His odyssey in the Netherlands East Indies and captivity is described in the section dealing with the Burma-Thailand railway. Broadbent eventually reached Australia safely.

Rumours of the imminent visit of a hospital ship to Singapore had been current for some days, but it was now realised by those caring for the sick and wounded that this hope was not to materialise, in spite of the



Singapore Island.

Harper W. Groser

repeated requests made that a ship should be sent. As mentioned in Chapter 20, the last visit to Singapore of an Australian hospital ship was that of the *Wanganella* on 17th September, and the *Manunda* sailed for Darwin from Sydney on 7th January, and remained there until 20th February.

On 13th February Pigdon, commander of the 2/13th A.G.H., conferred with his officers as to the position, for they were in an unprotected site outside the perimeter where the Japanese were expected to appear at any time. The pressure of the Japanese had concentrated the force to some extent, and some of the more outlying positions were now unsafe. Though protection of medical units by the enemy could usually be expected, the Japanese were unpredictable. When their advancing forces entered the British hospital at Alexandra on the island, they declared that the area had been used for artillery and massacred numbers of patients and members of the staff. Two weeks earlier an aircraft had attacked the hospital on a clear night, and though the Kallang aerodrome was near it appeared that this attack at least was not accidental. Pigdon was anxious that his hospital area should be respected as such. Since 11th February repeated requests had been made to various troops for the removal of machine-guns and other weapons close to and even inside the hospital area. Such actions were made with greater persistence as the military situation grew more tense, and on the 13th troops established a road block on the eastern boundary of the hospital whose flank was thus in the firing line. Pigdon was informed that this step was taken by order of Malaya Command, but he produced his orders in writing from Brigadier Stringer and Lieut-Colonel Glyn White that the hospital was not to move regardless of changes in the defence perimeter. No further attempts were made to use the area for combatant purposes, and red crosses were displayed prominently and illuminated at night. The 2/13th A.G.H. at this time held over 900 patients: suggestions made for the transfer of the hospital to an area within the perimeter were completely impracticable, for there was no area within that rapidly contracting line to which it could go. The 2/10th A.G.H. with sections already accommodated away from the main body of the unit, was full to capacity at the Cathay building.

On 14th February the 2/9th and 2/10th Field Ambulances set up a theatre with a combined operating team at the Adelphi Hotel. The risk to transport on the roads to the M.D.S. at St. Andrew's Cathedral was extreme owing to shell-fire, therefore the A.D.M.S. decided to restrict movement to the M.D.S. Water supply in all areas was now very limited; in some places there was no piped supply at all. At the Cathay buildings all the demands for water and sewerage supply for the 2/10th A.G.H. had to be met by hand carriage in buckets. Sanitation was now practically non-existent. The risks of a serious breakdown of all hygiene were clear to the combatant as to the medical officers. In the A.I.F. Brigadier Maxwell commander of the 27th Brigade, was himself a doctor.

The morning of the 15th found the position still deteriorating. Artillery had taken up positions all along the water front in close proximity to the

Cathedral. Shells continued to fall even in the grounds, where another driver was killed. The building and other accommodation were full of patients: so too was the A.D.S. at Tanglin. In all at least 960 military and 300 civilian casualties were recorded as having been treated in the Cathedral: the actual number was much higher. All the morning the Cathay building was heavily shelled. One shell penetrated the roof of the cinema occupied by the 2/2nd Convalescent Depot, killing sixteen and wounding over thirty of the patients. At this time the depot had over 1,000 patients. The lives of many of these wounded were saved by the immediate proximity of the hospital.

On 15th February during a conference of all senior commanders and the Civil Governor, Sir Shenton Thomas at the headquarters of Malaya Command it was decided that in the interests of humanity no good purpose could be served by continuing the struggle.

A representative of the forces, Brigadier Newbigging, was sent out with a flag of truce to Johore Bahru to arrange terms, but the Japanese would only treat with the commander. Accordingly General Percival met the enemy representatives, and at 1800 hours a message was sent to all formations that the forces had capitulated. At 2030 hours the "Cease Fire" order took effect. Singapore had surrendered.

During the fighting on Singapore Island the A.A.M.C. had lost four officers, Captain G. L. Lindon, Captain K. C. Madden, Captain D. J. Shale, and Captain J. F. Park.

At the time of the "Cease Fire", A.I.F. medical units still feeling keenly the absence of nurses, were functionally intact, and the staffs were carrying on with routine medical and surgical work as well as circumstances permitted. During the period 8th December to 15th February the casualties as known to the A.I.F. command at the time of capitulation are shown in the appendix.

With the fall of Singapore, about 15,000 Australians became prisoners of war. Naturally the troops were depressed by having to yield to a force which they counted as less than their equals. The civil and military conditions prevailing in Malaya are not *per se* the concern of a medical history, but certain generalisations may be made. It seems fair to comment that there was a wide degree of unawareness at least among civilians in Malaya, and those aware of the dangers did not succeed in remedying weakness and defects before the avalanche began. Everything was tragically late in this campaign, and it is not strange that from the early action periods inevitability seemed to pervade the general cast of thought. It cannot be denied, moreover, that coordination and harmony were not always outstanding features of a situation which demanded the highest degree of unity. Certain of the personalities in Malaya were mutually incompatible under prevailing conditions. Perhaps the feeling of frustration which was evident in Malaya begot aggression as it is so prone to do. Even during the months of training minor issues tended to become major, bias crept in, and spirits whose common aspirations should have united

them tasted bitterness. Yet it cannot be said that these feelings penetrated to all ranks as a definite state of mind. Where service units were given sufficient time and opportunity to acquire the technique vitally necessary to attaining mastery in the jungle, to learn the new, and still more difficult, to forget the old, they attained a high degree of success. The A.I.F. battalions in their greatest moments rose to heights of endurance and endeavour, even in retreat. Within the higher medical command harmony was not disturbed. Characteristically the A.I.F. could present at times a few thorns of independence, but relations with Brigadier Stringer, D.D.M.S. of Malaya Command, were always those of respect and genuine personal regard. With a background of capable administration Colonel Derham, A.D.M.S., and Lieut-Colonel Glyn White emerged from the trying weeks of the campaign with the full confidence of the medical corps. In the medical units commands were happy and staffs cooperative and keen to maintain high standards. The field medical units were undaunted in those times of stress, stimulated by the spirit of the men they served. The base units produced the maximum of result from the minimum of resources, and in the dark days on Singapore Island, their members, and particularly the nurses, were undeterred by the grim risks at hand and ahead.

If any lowering of general morale was discernible in the forces it was not due to medical causes. Relations of the medical services with the command were not always unstrained, but difficulties were those of temperament. When the night of 15th February closed in with almost unnatural calm, though none among the British forces on the island could foretell what the future might bring, the members of the medical services had their own absorbing work at hand, then and tomorrow.

APPENDIX

A.I.F. CASUALTIES MALAYA¹

8th December 1941—15th February 1942

Killed in Action	405
Died of Wounds	111
Wounded in Action	1,364 approx.
Missing	1,919 (33 A.A.N.S.)
Illness (Deaths)	8
Illness (Admissions)	6,000 approx.
Accidents (Deaths)	25
Strength of A.I.F. . . .	15,000 approx.

¹ This table gives the figures as known to the medical command at the time of the movement of the force, after capitulation, to the Changi prisoner-of-war camp.

MIDDLE EAST AND FAR EAST
 AUSTRALIAN MILITARY FORCES
 CASUALTIES—WAR WITH JAPAN—PRISONERS OF WAR²

	Malaya	Java	Timor	Ambon	New Britain and New Ireland
Killed in action and missing presumed dead	2,178	237	234	344	1,092
Died of wounds	111	2	2	1	5
Died of wounds whilst P.O.W. Died of sickness, disease and injury whilst P.O.W. . . .	25	1	12	—	2
Total deaths	4,250	512	131	443	25
P.O.W. escaped, recovered or repatriated	6,564	752	379	788	1,124
	10,618	2,020	842	303	65

² This table gives final figures as supplied by the Central Army Records Office for this theatre of war.