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OPERATIONS IN THE INDO-BURMA THEATRE BASED ON INDIA
FROM 21 JUNE 1943 TO 15 NOVEMBER 1943.

The following Despatch was submitted to the Secretary of State for War on the 22nd November, 1945, by FIELD MARSHAL SIR CLAUDE J. E. AUCHINLECK, G.C.B., G.C.I.E., C.S.I., D.S.O., O.B.E., A.D.C., Commander-in-Chief, India.

INTRODUCTION.

This Despatch covers the period between my appointment as Commander-in-Chief of the India Command on the 20th June, 1943, in succession to Field Marshal Viscount Wavell and the 15th November, 1943, the date on which I handed over responsibility for the conduct of operations against the Japanese in the Indo-Burma Theatre to Admiral Lord Louis Mountbatten on his appointment as Supreme Allied Commander of the newly created South East Asia Command.

In his Despatch covering the operations in the India Command from January to June, 1943, Field Marshal Viscount Wavell describes how he planned to capture Akyab and establish our forces on the line of the Chindwin River between Kalewa and Sittaung with the Eastern Army under General Irwin. He goes on to show how the Eastern Army failed in its objects owing to lack of resources, the inexperience of the troops engaged, and the fact that the Japanese were able to bring up substantial reinforcements. At the beginning of the monsoon our forces in Arakan and the Japanese forces opposing them were generally speaking back in the positions they had held at the start of the operations.

As Field Marshal Wavell says, the greatest gain from the campaign was experience; the serious loss was prestige and morale. It became my most urgent task to rectify defects in training and equipment, and to restore the morale and prestige of the Army which had no

doubt suffered a severe shock, so much so that commanders and men were apt to place the need to protect themselves against the Japanese before the need to seek him out and destroy him. There had been neither time nor opportunity to give the troops that specialised training in fighting in the jungle in which the Japanese were adept, having trained their troops to this end before they entered the war. The disastrous campaigns in Malaya and Burma had invested the Japanese Army with a reputation for skill and invincibility, far removed from reality, and this had to be destroyed before the offensive spirit could be fully re-established throughout our own Army.

Internally India had remained quiet after the disturbances of August, 1942. The Congress Party, which had been responsible for this outbreak, was made powerless for the time being by the internment of its leaders and by other measures, and unrest subsided. There were, however, other causes giving rise to anxiety. Various factors, including the unfavourable course of the war against Japan, had shaken public confidence and caused a sharp rise in the prices of food, cloth and other basic commodities towards the end of 1942. The impracticability of setting up any satisfactory system of rationing of essential articles in a country so administratively undeveloped as India led to widespread hoarding, and an economic crisis ensued. This persisted throughout the period covered by this Despatch, hampering the war effort, embarrassing the internal administration and giving rise to famine conditions in Bengal and parts of Southern India.

Nevertheless in spite of an almost unrelieved tale of failure in the Indian Theatre, the turn in Allied fortunes in Europe and Africa at the end of 1942 and the entirely changed aspect

of the war against Germany by the commencement of the period of this Despatch had a tonic effect on India. No less heartening had been the Allied recovery in the South West Pacific, where the Japanese were being driven back, had lost heavily in aircraft and shipping and were clearly finding it difficult to maintain and protect the widely dispersed commitments they had undertaken.

These events had not failed to have their effect on our fighting forces; they were reflected in their high morale and general desire to get at the enemy. Many difficulties, however, had hindered the development of our resources and communications in India and particularly in the north-east. Delays in the provision of stores and materials, shortage of labour, limited transportation capacity, natural obstacles to constructional work due to the forests and climate in Assam and Burma, and disease—all had handicapped progress. During the winter and spring of 1942-43 a succession of major projects had in fact accumulated and competed for the limited engineer and transport resources available, and though progress was made, completion forecasts were seldom realised. At the onset of the monsoon in June, 1943, much still remained to be done of what had been planned in the previous year. Such then was the situation in June, 1943.

Part I of this Despatch deals with plans that have been prepared and examined during the period.

Part II describes such operations as have taken place on land, sea and in the air. For various reasons which were unavoidable, those on land and sea were insignificant. In the air, however, there were operations on an important scale throughout the period.

Part III contains an account of progress in organisation, training and administration, both in regard to land forces and those preparing for amphibious operations, also in regard to the air forces and the building up of their widespread ground organisations. So much effort was expended in these directions during the period, and the range of activities was so wide, that I have in this part of the Despatch gone into considerable detail. The importance of building a firm foundation on which to base future operations was so great as to justify the inclusion of a full record of the work done. The new South East Asia Command was to depend almost entirely on India as its base for the prosecution of future operations against the Japanese.

PART I—PLANS FOR FUTURE OPERATIONS.

1. *The Basis of Planning during the Period June—November 1943.*

Coincident with my appointment as Commander-in-Chief in India, the intention to set up a new South East Asia Command was announced. This Command was to relieve the India Command of responsibility for the conduct of operations against the Japanese in this theatre. Later, in August, Admiral the Lord Louis Mountbatten was appointed Supreme Allied Commander.

Although this would relieve me in due course of the planning and execution of future operations against the Japanese, there was much to

be done during the intervening months, if continuity of effort was to be preserved until the new Command started to function and thereafter. During this time, therefore, at my Headquarters much work was done in the framing and examination of plans. These plans conformed with the decisions of the Washington and Quebec Conferences, and while at work on them I was in close touch with the Allied Chiefs of Staff.

Meanwhile, intensive training and preparation for the future continued in India. On the eastern frontier and along the lines of communication leading to it development proceeded so far as monsoon conditions would allow. The progress of these preparations and of work on the lines of communication is recorded in Part III of this Despatch. Before describing the progress of planning it is necessary, however, to explain the overriding effect of the meagre resources of India and of the severely limited capacity of the lines of communication on any military operations undertaken on the eastern frontier.

Although these conditions may apply to any theatre of war they exerted a particularly serious influence in this theatre for the following reasons:—

Firstly, the original conception of the load to be placed on the lines of communications, though based on sound reasoning at the time, had proved to be too small.

Secondly, in addition to securing the purely military needs of the land and air forces engaged with the enemy, including the large demands of the air transport route to China, the lines of communication had to cope with heavy civilian requirements, such as those of the tea and jute industries, indispensable to the war effort of the Allied Nations.

Thirdly, the normal economic life of Assam and Eastern Bengal had also to be sustained and this entailed the transportation of large quantities of commodities over the railways, rivers and roads which constituted the lines of communication serving the China-Burma-India theatre of war.

This was the maintenance situation, and on the 7th August I issued an instruction to my Long Term Administrative Planning Committee to examine the problem. Any feasible short term measures for expansion were also to be examined, and an account of these as well as the results of the examination by the Long Term Planning Committee will be found in Part III. On the 17th August, my Quarter Master General's Staff (Transportation Directorate) produced two documents on the provision of Transportation Stores in India for 1944-45. The first of these documents described the foundations on which our administrative preparations for the operations of the South East Asia Command were built, whilst the second afforded some idea of the magnitude of the transportation problem involved.

In reading, therefore, the account of operational planning which follows and the record of administrative progress and development set out in Part III of this Despatch, the above facts require to be remembered as their influence affects all plans for operations based on India against the Japanese whether on the land, the sea or in the air.

2. Plans considered as the Result of the Washington Conference.

When I took over command, planning was proceeding on the lines laid down by the Washington Conference of May, 1943.

It had been decided at this Conference that priority should be given to increasing the air transportation route to China to a monthly capacity of 10,000 tons by the early autumn of 1943. Bracketed with this as a first priority was the development of air facilities in Assam with a view:—

(a) To intensifying air operations against the Japanese in Burma.

(b) To maintaining increased American air forces in China.

(c) To keeping up the flow of airborne supplies in China.

Examination of this problem had been proceeding at India Command Headquarters, and on the 2nd July I came to the conclusion that, since priority was to be given to the air lift for China, the limitations of the Assam line of communications would not permit intensive land operations to be carried out. I considered the implications of this conclusion also in relation to the prospect of amphibious operations against Akyab, because I felt that the successful accomplishment of the latter was important for many reasons, including the need to raise the morale of the Army in India to the highest pitch. A summary of my recommendations was sent to the Chiefs of Staff on the 2nd July, 1943.

At this time it became clear that the capacity of the air transport route to China was already falling short of the target, and during July only 3,451 tons (as against a target figure of 7,000 tons) were actually delivered to China. The reason was the lack, as yet, of a comprehensive maintenance organisation and servicing facilities. The effect on our airfields of monsoon conditions was not a factor in the failure to reach the required tonnage.

On the 18th July, ill fortune beset the line of communications to the Eastern Army in the form of a serious breach on the main line of the East Indian Railway and on the Grand Trunk Road, north-west of Calcutta. This breach was caused by widespread floods resulting from the river Damodar bursting its banks and changing its course, and it came at a time when transportation on the line of communication was already in arrears owing to various unforeseen causes and also when demands on its capacity were already increasing. It now began to be seen (as already recorded) that the long term development of the line of communications so far planned (which in any case could not be fully effective till the autumn of 1944) was going to be inadequate; and various measures for short term improvement were urgently considered. The situation in regard to communications in North East India at this time and its relation to the various projected operations, was communicated to the Chiefs of Staff on the 13th August 1943.

3. Plans reconsidered as the Result of the Quebec Conference.

On the 25th August I received the decisions of the Quebec Conference in so far as they affected the India Command. In these the

previous decision of the Washington Conference was modified in so far as it was now resolved to give first priority in our war effort in this theatre to the land and air operations which would be necessary to establish land communication with China. It was also decided to continue to build up and increase the air routes and air supplies to China, and to develop the resources of that country in order:—

(a) To enable her to continue her struggle against Japan.

(b) To intensify operations against the Japanese.

(c) To maintain increased U.S. armed forces in China.

Furthermore, while the possibilities of developing the air route to China to enable us to deploy all the heavy bomber and transport aircraft likely to be available for the South East Asia theatre and China in 1944-45, were to be studied, a directive to the Supreme Allied Commander, South East Asia Command mentioned an eventual monthly lift of 20,000 tons as a target for the air ferry to China. No specific date, however, was fixed for this.

I now examined the operational programme for the future, so far as this had been planned, in the light of the Quebec decisions. The paragraphs which follow deal consecutively, and under their appropriate headings, with the various projects examined. In each case the narrative embraces broadly the conclusions reached up to the time I handed over to the Supreme Allied Commander, South East Asia Command.

4. Plans for Land and Air Operations in Upper Burma.

Plans for operations in Upper Burma had been under examination for some time, and, as soon as the decisions of the Quebec Conference were known, these plans received priority of attention over other projects.

The resolve was to conduct vigorous and aggressive land and air operations at the end of the 1943 monsoon, from Assam into Burma *via* Ledo and Imphal, and this was to be in step with an advance by Chinese Forces from Yunnan. The object was to contain as many Japanese Forces as possible and to cover the air ferry route. It was to be an essential step towards the reopening of land communications with China by means of a road from Ledo *via* Myitkyina. The new road would connect with the existing road north of Lashio.

Here again it is necessary not to lose sight of the over riding factor of the extremely limited capacity of the Assam L. of C. It was only possible to plan operations for a force within the maintenance capacity of that artery. If the forces or scope of operations were to be increased, it could only be done at the expense of other demands on the L. of C., and in particular that of the air lift to China.

By the 7th September, I was able to give the Chiefs of Staff a summary of suggested plans for land and air operations in Upper Burma in 1943-44. Chinese operations should take place as already planned from Yunnan and Ledo. It was only in respect of the plan for the British Forces that alternatives existed,

and in this, physical considerations limited the plans for an advance into Burma from the Imphal-Tiddim area to two possibilities:—

An advance to the area Kalewa-Kalemyo, and thence to Ye-U.

An operation for the capture of the Indaw area (with its airfields) by airborne assault, followed by an advance overland to consolidate the capture. This force would depend on air supply until the Chinese advance from the north opened a route for maintenance by land.

In both plans the use of long range penetration forces was included; but more particularly did they figure in the second as a means to distract the enemy and disrupt his communications—thus reducing the hazards of the temporarily isolated force at Indaw.

Initially I favoured the first alternative, but the Chiefs of Staff inclined to the latter plan, stressing the following considerations:—

(a) The importance of the early seizure of a locality directly enabling us to join hands with the Chinese advances from Ledo and Yunnan.

(b) The element of surprise and the greater scope for employment of long range penetration groups.

(c) Greater economy in lift on the Assam L. of C.

Further and more detailed examination was therefore made, and as a result, and in view of the weight attached to (a) above, I agreed that the second plan was preferable.

On the 27th September, I cabled to the Chiefs of Staff a report on the progress made to date, and the conclusions reached.

The chief features of the plan at this stage were as follows. The Indaw airfields were to be seized by parachute troops, and thereafter a division (less one brigade) was to be flown in in seven days. A third brigade group with mules and jeeps was to advance overland from Imphal to Indaw. This was to be coupled with a limited offensive/defensive operation southwards from Tamu, as well as with the Chinese advances from Ledo and Yunnan on Myitkyina, Bhamo, and Lashio. Offensive operations in Arakan were also to be timed to take place so as to have the maximum distracting effect on the enemy. Finally (and of great importance) the advance of the main forces towards their objectives was to be preceded and assisted by long range penetration forces.

The plan involved the use of transport aircraft on a very large scale. It was thought that this would amount to between 18 and 23 squadrons, depending on the treatment found necessary for the surface of the Indaw airfields. The Chiefs of Staff, however, cabled on the 7th October that provision of aircraft on this scale was quite out of the question, and that a total of 151 transport aircraft (six squadrons) was all that were likely to be available.

Accordingly, the matter was further examined, and on the 13th October I sent the Chiefs of Staff a modified plan, which, while not so satisfactory as the original, nevertheless appeared to be feasible.

The main modifications were:—

(a) Fighter squadrons would be located at Indaw during the dry weather only.

(b) The original air landing force of one division, less one brigade, would be flown in over a fortnight instead of a week.

(c) The parachute force would be retained, in order to strengthen the garrison, until the operational situation permitted it to be flown out.

(d) The delivery of engineer stores would be spread over a longer period by commencing delivery earlier.

Even with these modifications, however, the requirements of transport aircraft, while much less than they were in the original plan, were still greatly in excess of 151. In fact, 290 would be required in the worst case, and 263 in the best case—i.e., 12 and 11 squadrons respectively, as against 23 (maximum) in the old plan.

I continued to look for means to make further reductions in the requirement of troop aircraft, but any such reductions could only be small unless the plan was still further radically altered. It became clear that, unless the additional aircraft could be provided, the capture of Indaw should not be attempted, and I suggested as a means to augment the supply that some aircraft might be made available from the ferry route.

As regards the enemy forces that might be disposed to meet our offensive operations in the Burma Theatre, a summary in regard to the situation in November, 1943, is given in Part II "Operations and Intelligence".

Briefly, there were five Japanese Divisions. The bulk of one (55th) was in Arakan; one (33rd) was in the Chin Hills; one held the Mawlaik Homalin area; and two (18th and 56th) covered the area of North Burma to the Salween.

5. *Plans for Operations on the Arakan Coast.*

At the Washington Conference of 12th to 25th May, 1943, it was resolved to capture Akyab and Ramree Island by an amphibious operation; also, possibly, to exploit any success gained. This was part of the general pattern of offensive operations in the South-East Asia Theatre, and plans were being formulated accordingly. It will be remembered, however, that at this time first priority on our resources was still allocated to the air ferry to China.

In my view the success of the attack on Akyab was of great importance both from the point of view of the Army and public in India, and of public opinion in Europe, America and China. The island was already strongly fortified and formidable. I considered two assault brigades would be necessary in the first flight, and a third, loaded with its own assault shipping and craft, as a follow-up. Three to four (land based) fighter squadrons would be required over Akyab during daylight, and convoys would be protected by carrier-borne aircraft.

Additional to the above plan, I considered that to ensure success we should operate offensively by land down the Arakan coast with up to two divisions. One long range penetration group would operate in the Kaladan River area.

A further important reason for this land advance was the capture of the Maungdaw airfield. With this in our hands shore-based fighter support could be given to the amphibious attack on Akyab.

As regards Ramree Island, unless separate shipping for an assault on this locality was to be allotted, this would either have to be taken by a surprise attack immediately after the capture of Akyab, or the attack would have to be postponed to a date three to four months later and then carried out by two assault brigade groups and one built-up division.

Fuller details of these plans including estimates of possible Japanese strength in Akyab and Arakan were cabled to the Chiefs of Staff on the 2nd July, 1943.

In the meantime, however, further and more detailed examination of the project for operations on this coast was taking place, and I found it necessary to amend my views. On the 22nd July, therefore, I cabled to the Chiefs of Staff a revised plan. The salient points of this were as follows:—

(a) In view of the special difficulties of an assault on Akyab, the following would be required:—

Three assault brigades.

One follow-up brigade.

One floating reserve brigade.

The following shipping and craft would be required in addition to that allotted or already asked for:—

Three Landing Ships Infantry, each with twelve Landing Craft Assault and crews.

Six Landing Craft Infantry (Large), complete with crews.

Twenty-one Landing Craft Tank (Support), complete with crews.

(b) It was clear from the above that we should not have sufficient resources to assault both Akyab and Ramree simultaneously.

Moreover, if Ramree was strongly held, this would require two assault brigades, and the interval between the assaults could not be less than 3 months; e.g., if Akyab was assaulted on the 1st January, the assault on Ramree could not be before the 1st April, and probably later. This would be very near the monsoon, and the practicability of the operation was doubtful.

(c) A surprise attack consisting of a quick follow through by one brigade group from Akyab could not be done. The only possibility, therefore, if opposition at Ramree was expected to be slight, would be to use the shipping again of the Akyab assault-troops to embark one fresh brigade group from east coast ports of India for an assault about a month after the Akyab assault. With the resources available, this brigade group could not be fully trained, but it would be possible to have it ready trained and waiting, if the additional craft and shipping demanded could be made available.

(d) The garrison of Ramree would have to be one division during the monsoon, plus a large force of naval craft to watch the approaches to the island. It was unlikely that we would be able to construct an all weather airfield before the monsoon broke.

The possession of Ramree island would:—

(i) Give depth to air defence.

(ii) Help air operations against Burma, Malaya and Sumatra.

(iii) Constitute a threat to Taungup which might contain enemy forces.

At this stage of planning the flood breach on the main East Indian Railway line upset our calculations. It was seen that, as a result of this calamity, land operations in Arakan were likely to be delayed, and the assault on Akyab might therefore have to be postponed to mid-February. On the 13th August I considered a suggestion that had been submitted to me by my Force Commanders that the plan for the attack on Akyab should be by means of "staggered assaults". I directed that an alternative plan should be framed embodying this principle.

The decisions of the Quebec Conference were now received on the 26th August. In so far as operations on the Arakan coast were concerned, preparations were to continue for an amphibious operation in the spring of 1944. Pending a decision on the particular operation to be carried out, the scale of these preparations was to be of the order of those contemplated at Washington for the capture of Akyab and Ramree. This and other operations in the South East Asia Theatre were to be considered in their relation to one another. In the meantime I had come to the conclusion that the capture of Ramree Island was not essential in connection with the other operations contemplated for the coming dry season of 1943-44. The reasons for this (which did not apply to Akyab) were cabled to the Chiefs of Staff on the 29th August, 1943.

They were as follows:—

(a) Ramree Island was not considered essential for other operations in 1943-44. It was only valuable in conjunction with other movements further down the coast.

(b) There was no time to complete an airstrip to all weather standard.

(c) The above was not applicable to Akyab which would be of greater assistance to obtain air superiority.

(d) In view of the decision to break up the 70th Division to form long range penetration forces, there would only be five assault brigades in India (i.e., the 2nd and 36th Divisions). All these were required for Akyab.

On the other-hand the military advantages of the capture of Akyab alone (and contrasted with Ramree) were definite. I cabled them to the Chiefs of Staff on the 4th September. They were:—

(a) The removal of the Japanese threat to Chittagong.

(b) The number of troops required for the North of Akyab would be reduced, as also the maintenance tonnages.

(c) We would gain advanced airfields for attacks on enemy communications in Burma.

(d) The air warning system would be improved.

(e) An attack on Akyab would force the Japanese Air Force to fight.

Further examination of the Akyab and Arakan operations by my staff and force commanders continued. It was established that the personnel lift would not be less than 50,000, and the Chiefs of Staff were advised accordingly. They agreed to make personnel ships available for 50,000; but asked that efforts be made to confine the lift to this figure; as shipping for more could only be provided at the expense of other operations.

6. *Plans for the Recapture of the Andaman Islands.*

The principal value of these islands to us would be in connection with operations further south towards Sumatra and Malaya. In particular, the facilities their possession would afford for photographic reconnaissance and intelligence was a factor that might even make their capture an essential preliminary to other operations, either in this direction or towards the Burma coast. A summary of the situation regarding intelligence and photographic reconnaissance, and the influence thereon of being able to use the Andamans, was cabled to the Chiefs of Staff on the 11th October, 1943.

A further important consideration was the denial of the Andamans to the enemy as a useful forward base for refuelling submarines. At the same time, the fact that operations against the Andamans involved certain risks was not lost sight of, and it was fully realised that their possession might prove a liability as well as an asset. Lying within a semi-circle of enemy air centres, the airfield in the Andamans might be difficult to operate in the face of enemy bombing, and there was thus a risk of our troops being left without air support. Moreover, though the islands might not be difficult to capture, the reinforcement of isolated forces there might be a constant drain on our resources.

On the 13th August, I suggested to the Chiefs of Staff that if an assault on Malaya was definitely decided on for 1944-45, it would be desirable to divert resources from the capture of Akyab to the capture of the Andamans in the spring of 1944. By the 4th September an outline plan had been prepared which showed that the operation could be undertaken, subject to certain modifications, with the forces needed for the assault on Akyab.

This proposal, however, being inter-related with plans for other amphibious operations was still undecided when responsibility passed to the South East Asia Command.

7. *Plans for Operations against Sumatra and Malaya.*

After the Washington Conference in May, 1943, an outline plan was prepared for the capture of North Sumatra. This was to be immediately followed by a landing near Penang, with the object of reconquering the Malay Peninsula. The Chiefs of Staff accepted this as a basis for more detailed staff study, which commenced at my Headquarters accordingly. In the meantime the Quebec Conference called for a study of:—

(a) Operations against Northern Sumatra for the spring of 1944

(b) Operations through the Malacca Straits and Malaya for the direct capture of Singapore.

With regard to the first, the conclusions reached were that the forces would be far in excess of those required for the capture of Akyab; and that isolated long range penetration operations, without the support of main forces could not achieve the capture of Sumatra. Regarding the second, this was at first scheduled for as early a date as might be practicable, but was subsequently deferred to the end of 1944 or early in 1945. Both these projects now

took priority in consideration over the dual operation that was earlier being examined and was still under examination in November.

8. *Moulmein and the Isthmus of Kra.*

A study of possible operations through the Moulmein area or Kra Isthmus in the direction of Bangkok, was commenced as a result of the decisions of the Quebec Conference. A target date for the late spring of 1944 was given. Preliminary examination however was not very favourable.

9. *A Bomber Offensive on Japan from China (American Plan).*

Early in September, I received information from Washington of an air plan for a bomber offensive to accelerate the defeat of Japan, which had been prepared at Quebec by the American Air Planning Staff.

The general idea was to bomb Japan itself with a bomber force built up at Changsha. This force was to be maintained by a fleet of transport aircraft based on Calcutta, with a staging area at Kunming.

I cabled to Washington on the 8th September my comments on this plan, making clear the obstacles to it. The scheme postulated an increase in capacity of the port of Calcutta that was more extensive than anything previously envisaged. There were no administrative or constructional plans in existence for any such major port development. The idea also demanded the development of 45 airfields in the Calcutta area, for which suitable sites (near existing communications) could not be found in the time, and the petrol lift was beyond the capacity of existing transportation facilities.

Later in September, I received from American H.Q. in New Delhi their reactions to the above Quebec Air Plan. They agreed with me that the original plan was administratively unsound, and put forward an alternative scheme for bombing Japan with aircraft based partly on Calcutta and partly in China. The effect of this would be that India would have to prepare seven airfields by August, 1944.

On examining this alternative plan, the conclusion was reached that it also could not be achieved by the date given. Moreover, a special P.O.L. port on the Hooghly would be required, and the port capacity of Calcutta itself would have to be increased. I ordered a reconnaissance of the various possibilities of this plan to see how much could be done.

10. *Future Operations Southwards from North Burma for the Reconquest of the Country.*

The Quebec Conference decisions received on the 26th August included instructions to study future plans for these operations. The possible date was to be November, 1944, and examination was put in hand on the following assumptions:—

(a) That land and air operations for the capture of Upper Burma would be launched in mid-February, 1944.

(b) That offensive operations would be carried out on the Arakan coast in the spring of 1944.

(c) That we capture either Akyab or North Sumatra in the spring of 1944.

(d) That an airborne and other forms of attack on Rangoon would be included.

Plans for this major enterprise were still in process of being examined when operational planning was taken over by the South East Asia Command.

II. Summary in regard to Operational Planning.

In the period covered by this Despatch, much of the planning commenced under my direction could not be completed and was passed on in a fluid state to the Supreme Allied Commander, South East Asia Command. This was indeed only to be expected, and the changes of policy that resulted from the Quebec Conference also had a retarding effect on the progress made.

Although many of the conclusions reached during the period were in fact negative in character, much valuable work was nevertheless done. Schemes were explored which may well prove to be of use in the future. Clearly the main conclusion that emerged was the inadequacy of previous long term planning of base, transportation, and administrative resources. This is no reflection on work and preparation that had gone before. Developments in a theatre of war, and requirements in resources that follow as a result, are impossible to foresee.

We now look to the future in the hope that our long term planning in these directions undertaken during the period, is based on a sufficiently comprehensive scale to meet all needs. These things remain the responsibility of the India Command.

With the establishment of the South East Asia Command, my planning staff were transferred in a body to that H.Q. and continuity of work and effort was thus ensured in the operational planning room.

PART II—OPERATIONS AND INTELLIGENCE.

1. Land Operations.

In June, 1943, we were in contact with the Japanese on four fronts:—in Arakan; on the Chindwin; in the Chin Hills; and in North Burma.

2. The Arakan Front.

In Arakan, after the evacuation of Buthidaung and Maungdaw (in the final stages of our retirement from the Mayu Peninsula in the early part of the year) the 26th Indian Division took up positions covering Cox's Bazar. Our forward areas extended in the coastal region from the Teknaf Nhila to Bawli Bazar (held by one infantry brigade group), while inland across the Mayu ridge another brigade group held the area Taung Bazar—Goppe Bazar.

After following up our retirement in the first instance, the enemy had himself withdrawn to positions covering the Maungdaw—Buthidaung road, and both sides had settled into the above positions for the monsoon period.

Generally speaking, other than patrol activity, nothing of any significance occurred on this front during the period of this Despatch. Patrols, however, were used by us not only to get information and keep touch with the enemy, but also to build up the confidence of our troops in the forward areas. This, it must be admitted, had been somewhat shaken by the

experiences of the previous Arakan campaign, and it was hoped by constant and energetic patrolling to accustom the troops in the forward areas to work in the jungle, and gradually to acquire a moral ascendancy over the enemy.

To this end the troops worked splendidly under difficult conditions, and much success was achieved. In numerous brushes and encounters during this period of static warfare our patrols inflicted many more casualties on the enemy than they suffered themselves, and in spite of depressing monsoon conditions there was a general rise in morale.

Noteworthy among such minor affairs on the Arakan was a raid on Maungdaw (to obtain identifications) carried out between the 5th and 7th July. Two companies of a British battalion (1st Battalion The Lincolnshire Regiment) with a M.G. section and a 3" mortar detachment penetrated to Maungdaw and completely occupied it.

The main raiding party of one company landed by sampans from a river steamer in the Pyinbu Chaung (four miles N.N.W. of Maungdaw). Stiff enemy opposition was encountered and overcome, an enemy M.G. post being stormed and six Japanese killed. Our troops withdrew according to plan after the raid, having killed twenty-one Japanese and wounded at least seven. Our casualties were seven killed (including one Viceroy's commissioned officer) and eight wounded. The capture of a mail bag in Maungdaw secured the required identifications. The total enemy strength engaged was estimated to be two companies. A further raid by another British battalion (1st Battalion The North Staffordshire Regiment) ten days later to establish road blocks on the Maungdaw—Buthidaung road resulted in one Japanese officer and twenty other ranks being killed and forty others (estimated) killed or wounded, at a cost to ourselves of one British officer wounded and missing, and two British other ranks killed.

The 26th Indian Division held the forward area in Arakan throughout the monsoon, until at the beginning of October, the 7th Indian Division relieved it, the 5th Indian Division also moving into the area. H.Q. 15 Corps (Lt.-Gen. W. J. Slim), moved to Chittagong and became responsible for operations south of (exclusive) Chittagong from the 1st November, 1943.

The enemy forces in Arakan opposing us during the period were the 55th Japanese Division with H.Q. at Akyab. This Division had only two regiments in this area, the third having gone to New Guinea. Possibly a battalion of the 33rd Regiment was also in Arakan at the end of October, 1943.

Such then was the position in Arakan when operational responsibility was assumed by the South East Asia Command.

3. 4th Corps Front.

The 4th Corps (Lt.-Gen. G. A. P. Scoones) has been responsible for the front east and south of Manipur since 1942. Its Headquarters were at Imphal and its front which extended from the Chindwin east of the Kabaw Valley to the Chin Hills south of Tiddim, was held by the 17th Indian Light Division and the 23rd

Indian Division. The 4th Corps was in fact responsible for the whole front up to the Chinese Yunnan frontier, excluding the portion held by the Chinese American Task Force.

When the Army in Burma withdrew in June, 1942, it passed through rearguard positions on the high ground about Shenam between Palel and Tamu. The enemy did not pursue across the Chindwin, and we moved forward again later to our present positions. During the monsoon, in order to avoid malaria, our forces were held back on the high ground about Shenam.

In the dry season 1942-43, the 23rd Indian Division with Headquarters at Tamu patrolled across the Chindwin to the east, and the 17th Indian Light Division was fifty miles down the Tiddim road. The latter was watching the enemy in the Kalemio area, and maintaining contact with our levies in the Chin Hills. This Division, during the summer, had one brigade forward in the Tiddim area. The rest of the Division was kept at Shillong carrying out training.

The course of events on this front was similar up to early November to that in Arakan, *i.e.*, nothing of importance was attempted by either side beyond patrol activity. In early November, however, the enemy showed signs of moving, and there was evidence of Japanese reinforcements reaching this area.

On the 5th November the enemy advanced into the Chin Hills with between five and nine companies of infantry. Our Irregulars after a gallant resistance were driven out of Falam, and the Japanese occupied that place and Haka, twelve miles south of it. A week later the enemy advanced from the Dollyang area, and on the 13th November drove back our weak detachments on the road to the north of Fort White, thereby isolating the latter post. The enemy strength in this area was two to three battalions with some field artillery. Our forces consisted of one Indian battalion, much below strength, with one company of a Gurkha battalion under its command; also one section of a mountain battery (3.7" howitzers).

They were holding very extended positions, and the enemy attack came from the north-west after an encircling movement successfully hidden from us. It was clear that the Japanese had detailed knowledge of our positions, and so were able to advance from a direction least exposed to the fire of our troops.

During the fighting which ensued the enemy suffered heavily while our losses were light. We evacuated the Fort, which lying in the valley bottom was of little tactical or strategic value, and retired to positions on Kennedy Peak.

4. *The Chin Hills.*

Between the 4th Corps front and Arakan, lie the Chin Hills. This area was very thinly held by the Chin Hills Battalion and the Chin Levies. The Chin Hills Battalion was a part of the Burma Army and stayed in the Chin Hills after we evacuated Burma. Its officers were British, and it had one company of Chins and three companies of Gurkhas or Kumaonis. The Chin Levies were irregular troops with a small number of British officers, and one of

the reasons for keeping regular troops as far south as Tiddim was the desirability of providing support and backing for these irregulars.

The strategic value of the Chin Hills area was that it covered tracks leading through Lungleh to Chittagong and to Aijal. It also lay on the flank of the enemy line of communications through Gangaw to Kalemio. Communications, however, in the area were bad. Except for the road south from Imphal, which was being built and was often blocked during the monsoon, there was only a porter track leading into the area from the west. Supply of troops in the area had therefore to be carried out to a great extent by air.*

Except patrol activities and the Japanese advance to Falam and Haka in early November there were no operations of importance in this area.

5. *Chinese Forces and the U.S.A. Task Force in India.*

Earlier Despatches from the India Command have described how Chinese Forces first came to India in 1942. Their training was carried out here by the United States Army. A road from Ledo in Assam to connect eventually with the Burma-China Road, was also commenced by us and carried on by the U.S. Forces.

The two enterprises have since become closely allied, since two of the Chinese Divisions (22nd and 38th) moved to Ledo, and the construction of the road has been protected by the 38th Chinese Division. Part of one regiment of this Division was located in advance of roadhead and was maintained by air. The 22nd Chinese Division completed its move from Ramgarh to Ledo in October, and was available to support the 38th Chinese Division if required. A third Division (30th) was in process of arriving from China by air in November.

During the monsoon progress on the Ledo Road was slow. Nearly all the engineering effort was absorbed in repairing washouts and adding extra shingling to the surface of the road already built. By the 15th November the road had been surveyed up to 99 miles from Ledo, bull-dozers were working at the 79th mile, and 48 miles of metalling had been completed.

As soon as more rapid progress at roadhead became possible, the Chinese 38th Division advanced southwards towards the upper reaches of the Chindwin. Some minor clashes occurred with weak Japanese detachments in the Hukawng Valley, but up to the 15th November no serious opposition had been offered to the advance. By then the advanced elements of the 38th Chinese Division had reached the Tarung Hka about Ningbyen and the Tanai Hka south and south-east of Shinwiyang. There were signs that the enemy was strengthening his forces in this area.

6. *North Burma.*

On the left flank of the Chinese American Task Force, based on Ledo, we held the country up to the Salween River with a very small number of troops based on Fort Hertz. This area was not controlled by the U.S. Forces.

* See also paragraph 20 below which gives details supply dropping carried out by the R A F

Two companies of the Burma Army were based on Fort Hertz, and were supplied by air. In addition, there were some seven hundred and fifty Kachin Levies—irregulars with a few British officers. The Kachins were loyal and hated the Japanese intensely. They had much success in patrols and in laying traps for Japanese troops.

As a reserve in case of emergency one Indian battalion was kept in North East Assam at call. The need for it did not arise, which perhaps was fortunate because it could only have been taken to Fort Hertz by air, and then only if the necessary aircraft could have been spared from other operations.

Dispositions of the levies have varied somewhat from time to time, but generally speaking they held as far south as Sumprabum, and a few detachments were east of the Mali Hka.

A complication in North East Burma was the presence there of certain Chinese whose arrival was first reported early in July. They appeared to be weak irregular armed forces, who were apparently expected to live on the country. The Kachin country however is extremely poor, and can barely produce enough for the Kachins themselves to live on. The presence of the Chinese was embarrassing. Indeed, the Kachins were nearly as hostile to them as they were to the Japanese. Urgent steps were therefore taken to secure their withdrawal by representation to Generalissimo Chiang Kai Shek through H.B.M.'s Ambassador in Chungking. Eventually, except for a few small detachments, they left the area and went back across the Salween to China early in September.

Subsequently, at the request of General Cheng Po, the Commander of Chinese Guerilla Forces, an operational boundary was fixed between the British and Chinese Forces in North East Burma. This was done in order to define the area in which the British and Chinese were respectively responsible for preventing Japanese infiltration. The boundary runs roughly in a north and south direction near the Burma-Yunnan border, and the arrangement made was that our Forces would be responsible to the west, and the Chinese to the east of this line.

7. Ceylon Army Command.

There were no active land operations in the Ceylon Army Command during the period under review. The Japanese, however, carried out several air reconnaissances, and two of their aircraft were destroyed.

The arrival of the 11th East African Division was completed, and intensive training was carried out by this formation.

In August a new defence scheme for Ceylon was approved as a result of a re-appreciation of the rôle of the Army in that Command. It included the reorganisation of the garrison on the arrival of the East African Troops.

On the 10th September the Italian warship Eritrea, acting on the orders of Admiral Sir Andrew Cunningham, put into Colombo.

On the 1st September the shore organisation of the Eastern Fleet arrived in Colombo, and on the same date also, the Rear Admiral, Naval

Air Stations, Indian Ocean, set up his Headquarters there.

In the Maldivé Islands, a new flying boat base was established during the period at Kalai. Intensive constructional work at Addu Atoll continued.

The Japanese about once a month made air reconnaissances of Cocos Island.

8. Operations of the Royal Indian Navy.

H.M.I. Ships "Jumna" and "Sutlej" operated in the Mediterranean with the Royal Navy during the period. Otherwise, normal escorts were provided for convoys to and from Aden, the Persian Gulf, Colombo and along the coasts of India. In the course of these escort duties a number of depth charge attacks were made on enemy submarines with unknown results.

THE AIR.

9. General.

The monsoon inevitably curtailed operations in the air, but not to the same extent as on land. From time to time all-weather runways were flooded, and throughout the period fair-weather strips were unusable. Administration was also hampered by breaking of rail and road communications and the rupture of signal channels.

Nevertheless, unlike the Japanese who practically discontinued air operations during the rainy season, we continued to be active in the air as far as conditions allowed, and we prepared for the dry weather by training and equipping squadrons, and building up reserves of supplies.

An important development was the improvement in meteorological services. It was found possible to establish what can and cannot be done from the air over North East India and Burma during the monsoon. In particular, monsoon conditions were found not so very bad over central Burma, and it was generally possible to locate targets on enemy lines of communications. Moreover, given reliable route forecasts of weather over enemy territory, night bombing was practicable over a wide area. In fact, unless all-weather airfields are actually flooded, large scale air operations can be undertaken safely even at the height of the monsoon.

The extent of our air effort during the period under review is given under the appropriate headings in the paragraphs which follow, and the training and administrative side of it is dealt with in Part III of this Despatch.

10. Aircraft Flow and its Effect on Operations.

There was a great increase of aircraft held in the Command, and obsolescent types were largely replaced by modern aircraft. In all there were in India the following aircraft of all types, 2,453 on 25th June, and 3,699 on 17th November, 1943.

The most important development, however, was the extensive modernisation of our fighter defence. Hurricanes rose from 677 to 1,088. Spitfires increased from 13 to 153. They had a most decisive effect on operations, though this did not fully develop till later. Spitfires went into action in November for the first time, and not being supplied with long range tanks

could only operate over our own territory thus having no chance to meet large enemy air forces. Prior to this the enemy had been able to carry out reconnaissance flights with impunity by flying at great heights and out-distancing the Hurricanes. The first three reconnaissance aircraft the enemy sent over after the Spitfires arrived were all destroyed, and the enemy did not again attempt a reconnaissance or a raid in the area where the Spitfires were located.

So important was the success of the Spitfires that my Air Officer Commanding-in-Chief asked the Chief of Air Staff urgently for the flow to be increased as far as possible, and the great successes later against large enemy formations fully justified the request.

11. *Expansion of Squadrons and their Distribution on the 15th November, 1943.*

Although a considerable inflow of aircraft had occurred, our actual front line air strength had not increased very greatly by November.

The target for the end of 1943 was 76 squadrons. In detailed planning, however, targets agreed on from time to time with the Air Ministry have been substituted. Forward administrative planning and organisation was finally based on the 146 squadron target, which is what has been promised on conclusion of the war with Germany.

12. *The 10th U.S.A.A.F.*

While dealing with the developing strength of air power in this theatre, it is appropriate to mention the 'American Air Forces. My R.A.F. Headquarters have been in constant touch with the U.S. Air Force, and there has

been perfect co-ordination of air operations between the two. In general, the 10th U.S.A.A.F. attacked distant objectives over Burma by day; R.A.F. medium and heavy bombers operated by night; and R.A.F. fighters and light bombers attacked by day objectives within 250 miles of the forward airfields. The introduction of Mustangs (A.36's and 51's) to augment our attacks on enemy communications in forward areas was notable, and the American fighter strength was employed to protect their airfields in Assam and sometimes to escort day bombers and supply dropping aircraft.

The air ferry to Kunming carried an increasing tonnage to China. In June the total was 3,100 tons, and in October 8,632 tons.

13. *Enemy Air Effort.*

I have already remarked that the enemy practically ceased operations in the air during the monsoon period. A few intercept sorties in Burma and some reconnaissance flights were all that were undertaken. Presumably the bulk of enemy squadrons were withdrawn for rest or training.

There was, however, an increase in October and November and raids were carried out on Chittagong, Agartala, Fenny, Palel, Imphal, Khumbhirgram, and Tiddim.

Reconnaissance aircraft appeared a few times also over the Madras coast and Ceylon. Two of these were shot down in October and November by our Beaufighters. The enemy fighter defences and warning system in the Andamans, Nicobars and over Northern Sumatra were fairly efficient, and in each of these areas we lost Liberators shot down while engaged in photographic reconnaissances.

AIR OPERATIONS.

14. *The Bengal Command.*

In June, 1943, dispositions of squadrons were as follows:—

In forward airfields	...	...	..	5 Hurricane Squadrons.
				1 Beaufighter Squadron
				1 Blenheim Squadron.
				1 Bisley Squadron.
At Cox's Bazar	...	...	...	1 Hurricane Squadron (detachment).
In Assam	...	...	...	1 Bisley Squadron.
				1 Mohawk Squadron.
In second line airfields (in Jessore and round Calcutta)	...	...	...	3 Bomber Squadrons.
				5 Fighter Squadrons.
				1 Photo Reconnaissance Squadron.
				1 Transport Aircraft Squadron.
Training at Digri and Salbani	..	..	..	3 Vengeance Squadrons.

Until the weather improved at the end of September this distribution remained substantially unchanged.

The policy regarding the employment of these forces during the monsoon had been laid down as follows:—

To maintain a forward fighter offensive policy.

To ensure the continuance of local air superiority.

To protect our costal shipping southwards from Chittagong.

To attack enemy occupied airfields wherever possible.

To attack enemy lines of communications and shipping in the enemy forward areas.

Actually, while the maintenance of air superiority remained a primary task, medium and heavy bomber effort was concentrated on attacking L. of C. targets.

15. *Strategic Bombing.*

In June/July heavy and medium bomber operations were much handicapped by bad weather and shortage of spares. Nevertheless, the high percentage of successful sorties under difficult weather conditions during this period reflects great credit on the crews concerned.

Between June and August the 10th U.S.A.A.F., operating by day inflicted considerable damage on the Thilawa and Syriam oil installations and took toll of railway rolling stock. The Myitnge Bridge was cut and the Gotteik Viaduct damaged. Enemy vessels off

the coast of Burma or near the Andaman and Nicobar Islands were also attacked with success.

As a result of continued reconnaissance and attacks on shipping, enemy use of the port of Rangoon practically ceased during the period.

During the whole period U.S.A.A.F. bombers shot down twenty-four enemy aircraft, probably destroyed eighteen and damaged thirty-one.

16. *Tactical Bombing.*

The 4th Corps was effectively supported by attacks on the Japanese bases at Kalewa, Kalemyo and on other similar targets. In August light bombers co-operated with land forces in raiding operations, thereby obtaining useful experience of co-operation in jungle country. In this it was found that our existing ground to air radio telephony control arrangements were inadequate, and methods such as the use of smoke mortar bombs to indicate enemy targets close to our own troops and positions were developed.

By the middle of September, Vengeances almost entirely replaced Blenheims for day tactical bombing, and the pilots of these machines rapidly became skilled in the identification and bombing of small camouflaged targets.

17. *Fighters and Fighter Bombers employed offensively.*

Aircraft were deployed to support both the 4th Corps front from Assam to the Southern Chin Hills, and the 15th Corps front in the Arakan. Weather conditions, however, restricted land activity; and fighters were confined to answering calls for support from our land patrols, and to attacking enemy forward positions and their lines of communication immediately in rear.

On the 15th Corps front our offensive air operations made the enemy progressively more cautious in the siting of his monsoon quarters. Our attacks also considerably reduced his freedom of movement, and often he was only able to move by night or in bad weather.

The enemy reacted strongly to our attacks by placing light anti-aircraft defences at or near all likely targets, and thereafter this type of attack proved more expensive for our own aircraft. The damage inflicted upon the enemy, however, fully justified such losses as we incurred.

18. *Maintenance of Air Superiority.*

We were ready for the enemy when towards the end of the period he resumed operations in the air. The results, however, of our efforts to intercept his raids were disappointing because of advantages the enemy aircraft had over the Hurricanes which formed the bulk of our defensive force. Whenever contact was made, however, attacks were carried out with vigour, and losses as high as could be expected were inflicted by the Hurricanes. However, as already mentioned, the first appearance of our Spitfires altered this.

During the whole period our air superiority was definitely unchallenged, and with the expansion and re-equipment that has been carried out it should remain so.

19. *Fighter Reconnaissance.*

Hurricanes accomplished a particularly satisfactory task in their reconnaissances in support of the 4th and 15th Corps. Their assignments included photographic, reconnaissance of the enemy's forward positions, tactical reconnaissance in tracing enemy movements in the immediate rear of their forward positions, and continual survey of the rearward lines of communication. Bengal Command was also responsible for seaward reconnaissance to a depth of twenty-five miles from the coast along the whole Sunderbans and Arakan coastline, from Calcutta to Pagoda Point. This work, done as it was in the worst part of the monsoon weather, was of great merit.

20. *Air Supply.*

Isolated radar and Observer Corps posts cut off by the monsoon rains were supplied by air. Also the almost daily service to and from the forward areas transported essential spare parts, the lack of which was keeping operational aircraft on the ground.

The main tasks however, of the squadron engaged on this work were for the Army. It followed up its successful work in supplying the Long Range Penetration Brigade in its raid during the spring of 1943 by supply dropping in inaccessible country where, without its aid, land detachments could not have been maintained. It carried out 1,100 sorties, and almost 1,200 tons of supplies were dropped.

21. *Air Operations for the Defence of India's Coastline and Ceylon.*

Two groups comprising twelve squadrons were allocated to this duty. Operational control of all general reconnaissance in this sphere was vested in the headquarters of one of these groups under the strategical direction of the Air Officer Commanding-in-Chief, modified from time to time by mutual agreement with the Commander-in-Chief, Eastern Fleet.

Control of operations in the Arabian Sea was also strengthened, and a Naval Air Operations Room established at Bombay.

The threat of seaborne attack against India and Ceylon receded, and we should get at least two or three months warning of any such enterprise. We relied therefore on our existing strength in coastal areas for immediate air defence, while taking all necessary measures for expansion and reinforcement that did not actually involve the holding of aircraft, e.g., organisation of fighter control, installation of communications, etc.

22. *General and Photographic Reconnaissances.*

The strengthening of our island bases at Addu Atoll and Diego Garcia and the retention of Cocos Island, extended the range of our general reconnaissances.

Considerable development of photographic reconnaissances also took place. Strategical photographic reconnaissances of enemy occupied territory in Burma, China, Assam and the Andamans were carried out.

The main task, however, was greatly increased intelligence cover of Sumatra, Malaya, the Andamans and Nicobar Islands.* Mosquitos were only able to cover the Northern Andamans, and it was therefore necessary to use Liberators also, based in Ceylon and on the East coast of India.

* See Part I, paragraph 6

23. *Air Operations on the North West Frontier.*

Modern high speed aircraft were used on the North West Frontier of India for the first time. There were however, no tasks of any importance to carry out.

North West Frontier operations are now purely an Indian Air Force commitment, and the Frontier area has served as a useful training ground for its squadrons. Intelligence and photographic facilities have been developed, the Kohat runway extended, and organisation undertaken to modernise what has hitherto been a most backward area from the point of view of the air forces.

24. *Balloon Barrages.*

Subject to weather conditions, balloons were flown continuously at Calcutta for the protection of the Docks area and Howrah Bridge, also at Jamshedpur to defend the Tata Iron and Steel Works, and at Colombo to protect the harbour and dock installations and certain parts of the city. The barrage at Trincomalee, originally intended for the protection of the oil tanks and consisting of some seventeen balloons only, was extended to include in its scope the whole Naval anchorage at Trincomalee—China Bay. Additional commitments undertaken in November included the defence of the harbour and docks at Chittagong, and balloon protection for merchant shipping and Fleet auxiliaries.

Subsidiary operations have included the flying of balloons at 1,000 feet on patrol ships which go out daily at dawn to guide friendly submarines into harbour. Captains of these submarines speak highly of the assistance in locating the patrol ship provided by the flying of these balloons. Submarines are frequently well off course, and time is saved and danger averted by this method of homing. Moreover, balloons have been flown for anti-aircraft calibration, radar calibration and meteorological purposes.

In no cases have the areas provided with balloon protection been subjected to low level air attacks. During the monsoon period one new squadron and nine ancillary units were formed.

25. *Air Sea Rescue.*

Owing to the shortage of Air Sea Rescue aircraft and marine craft, few units had been brought into operation as yet, and the important work of rescuing the survivors of shipwrecked vessels or "ditched" aircraft had devolved on operational squadrons. Twenty-one incidents were recorded, ten of which occurred in the Bay of Bengal, two in the Arabian Sea and eight off Ceylon, involving in all one hundred and eleven persons, of whom sixty-nine were rescued. The credit for most of this work is due to General Reconnaissance Squadrons, but one of the Chittagong Air Sea Rescue units, in its first operational sortie, succeeded in rescuing three out of five members of a Wellington. On a further occasion Lindholme dinghy gear, which has now been distributed, was successfully dropped to a distressed U.S.A.A.F. aircrew.

26. *Estimates of Results.*

The decision to operate during the monsoon season has been more than justified by the results achieved.

Attacks on shipping by the U.S.A.A.F. and on the port of Rangoon by both U.S.A.A.F. and R.A.F. aircraft more or less prohibited the use of this port to the enemy. Similarly, Akyab was consistently bombed.

The new Burma Siam railway was under construction during the period by the enemy (who used prisoners of war labour for it under conditions of bestial cruelty) and has since been completed. This probably eliminated the port of Rangoon as a link in the enemy line of communication, and reduced its importance as a target for our bombers. At the same time it remained to be seen how far this new railway was itself vulnerable to air attack, in spite of the enemy's duplication of bridges and other measures to preserve it from interruption.

An estimate of the damage to transportation facilities can be gathered from the following table of claims for the period made by the Bengal Air Command:—

Sampans destroyed	...	160
Sampans damaged	...	2,624
Power driven water craft and barges destroyed	... ..	12
Power driven water craft and barges damaged	... ..	193
Locomotives destroyed	...	9
Locomotives damaged	...	143
Rolling stock destroyed	...	27
Rolling stock damaged	...	464
M.T. destroyed	.. .	42
M.T. damaged	... ..	142

Much of the material enumerated above cannot easily be renewed.

As regards casualties inflicted on the enemy, intelligence reports showed that attacks from the air had great effect. In Arakan where most of such attacks were made, enemy losses were conservatively put at 500 killed and many more wounded from June to September.

Our losses during the period under review were thirty-one aircraft, including four destroyed on the ground at the beginning of November.

27. *Morale of Air Personnel.*

The strain of maintaining a continuous effort and carrying out operations in very trying heat and humidity undoubtedly had its effect at times on the morale of the men. This was remedied by maintaining a high standard of training, with the result that the fighting spirit of all was high when the period ended.

I cannot commend too highly the manner in which the men of ground organisations carried out their duties during very bad monsoon conditions. If any are to be singled out, I would mention the maintenance personnel who never failed to keep the serviceability of operational aircraft at a high standard, and I would also pay particular tribute to the ranks employed at radar units and wireless observer posts. Many of these detachments were completely isolated for long periods, and had to be maintained by air alone.

INFORMATION OF THE ENEMY.

28. *Enemy Situation in Burma on the 15th November, 1943.*

Throughout the monsoon Burma was held by the Japanese with four divisions. By the 15th November a fifth Japanese division had arrived in Burma, and the dispositions of Japanese forces in the country were believed to be:

Arakan	55th Division less one regiment in the South West Pacific.
	213th Regiment of 33rd Division.
	2nd Battalion 214th Regiment (less one company) of 33rd Division.
Chin Hills and Atwin Yomas ...	33rd Division less detachments in Arakan.
Mawlaik exclusive to Homalin inclusive.	New Division less one regiment.
Hukawng	} 18th Division
Myitkyina	
Laukhaung	
Htawgaw	
Salween	
	56th Division.

29. Up to the 15th November the general picture on the enemy side appeared to be as follows:—

Arakan.—The Japanese were generally on the defensive, but had reacted somewhat to our advance down the main Mayu range and were attempting with no success to oust us from our forward positions there.

Chin Hills.—The Japanese had advanced. As already described, they occupied Falam on the 7th November, Haka on the 11th November, and Fort White on the 15th November, but their offensives in Manipur and Arakan were not to develop till later.

Chindwin.—The Japanese were moving forward to their pre-monsoon locations, and there were indications that the new Division was taking over more front than had originally been held by the 18th Division. There were then no indications that the Japanese intended to cross the Chindwin in force.

Hukawng Valley.—After a slow start (probably owing to being upset by the Chinese advance) Japanese reinforcements began to arrive in the Hukawng Valley about the 7th November.

Sumprabum Area.—Sumprabum was reinforced by the enemy to a strength of two companies about the 10th November, and at the same time the Japanese strength at Ninchangyang in the South Triangle was increased to five hundred.

Salween.—The likelihood of any large scale Japanese operation across the Salween seemed to have receded by the 1st November. It appeared, however, that contrary to their former practice, the Japanese now intended to hold the area which they had occupied North-East of Tengchung.

30. *The Civil Affairs Organisation in re-occupied Territories of Burma.*

This service has functioned satisfactorily throughout the period, in those parts of Burma under our control.

The only area where any notable advance and re-occupation by our forces of Burmese territory took place, was in that of the Chinese-American Task Force (C.A.T.F.) described above—i.e., towards the Hukawng Valley. As this became in fact an American zone, the question arose as to how the administration of civil affairs in these re-occupied territories should be organised. A small civil affairs organisation had been functioning in the American zone for some time, but it became necessary to expand this and put it on a proper basis. A conference

therefore was held (before the advance began) between the General Officer Commanding-in-Chief, Eastern Army, the (American) Commanding General of the C.A.T.F. and the (British) Chief Civil Affairs Officer, as a result of which a satisfactory solution was reached.

It was decided that a senior Civil Affairs Officer should be attached to the Headquarters of the C.A.T.F. as a political adviser, co-ordinator, and liaison officer with junior Civil Affairs officers and the local population. The Civil Affairs Section, which also had been started with the Rear Echelon at Delhi of the headquarters of the American Forces, was also to maintain close touch with my General Headquarters. These arrangements, and the fact that there is little difference between American and British ideas on the functions of Civil Affairs services, rendered the position of our Civil Affairs officers working under the C.A.T.F. perfectly satisfactory, and the work proceeded smoothly as the advance progressed.

31. *Internal Conditions in India.*

Peaceful conditions have continued throughout India, and there was no renewal during the period of any outbreaks like those of August, 1942. The possibility of disturbances occurring on the anniversary of these outbreaks was however guarded against in those areas where they were thought likely. On the approach of the 9th August, the anniversary of Mr. Gandhi's arrest last year, additional troops were placed at the disposal of the commanders concerned.

In addition, protective measures were taken on all the more important railways in the Central Command from the 7th to the 17th August.

32. *The Economic Emergency and Famine in Bengal.*

A far more serious internal problem, and one which may become dangerously acute if India's resources are still further taxed, was the economic one.

The causes of this, and the manner in which the problem is linked with military expansion and the support of the forces based on India, has been indicated elsewhere in the paragraphs dealing with long term administrative planning. Other factors in the civil sphere, such as the results of harvests, the loss of the rice imports from Burma, the hoarding of food grains and other commodities, difficulties of civil transportation, etc., have undoubtedly affected the situation in one way or another.

The outcome has been famine in certain parts of the country, notably those where the staple food is rice. In particular, Bengal

suffered acutely, and here, at the request of His Excellency the Viceroy for military aid in relief of famine distress in Bengal, I approved, on the 1st November, the following plan for the employment of military resources:—

(a) An organisation under command Maj.-General A. V. T. Wakely, in the appointment of Director of Movements Civil Supplies, working under the Bengal Government.

(b) A second organisation under command Maj.-General D. Stuart, Commander 303 L of C Area, reinforced by additional troops to be drafted into the area.

Lt.-General A. G. O. M. Mayne, General Officer Commanding-in-Chief, Eastern Command, was appointed Supreme Military Liaison Officer between the Bengal Government and the military authorities.

The duty of Maj.-General Wakely's organisation was to transport food-grains and other supplies from Calcutta and other outside sources to main distribution centres in the distressed areas by the maximum use of all available transportation methods.

Maj.-General Stuart's command reinforced by—

- One Indian motorised brigade.
- Five Indian Infantry battalions.
- One Indian General Hospital.
- Two field ambulances.
- One Casualty Clearing Station.

and certain engineer and supply units assisted the civil organisation in the transportation and distribution of foodstuffs forward of main distribution centres and in medical relief.

By the night of the 15/16th November reinforcements were already operating in the Dacca area, and more were due to arrive on the 19th November and subsequent days. Advanced parties were already on the ground carrying out detailed reconnaissances.

Prior to the arrival of these additional troops, the transportation of food-grains commenced under Maj.-General Stuart's organisation using transport and internal security troops already available in Bengal.

In addition to the provision of units, medical assistance was provided in the form of 101 medical officers, of whom 11 were specialists in hygiene. These officers commenced to arrive on the 15th November and they were sent immediately to distressed areas.

On the 15th November, within a fortnight of the inception of the project, military aid had already achieved very satisfactory and promising results. The output of relief supplies from Calcutta to the districts had been doubled, public confidence in the efficacy of relief measures had been partially restored and, in consequence, the price of food-grains in the districts had been substantially lowered.

This relief work, both economic and medical, was still in progress at the end of the period, for the emergency in Bengal had by no means ended by then.

33. *The North West Frontier of India*

The tribal areas of the North West Frontier continued quiet, and except for occasional acts of kidnapping, sniping, etc., by gangs of bad characters, there was no hostile activity on our side of the international frontier.

As regards the general outlook across the frontier, with the removal of the threat (from the Caucasus) to Persia and the North West Frontier, and the turn in the Allied fortunes in Europe, our policy underwent a change. The role of the land and air forces in North West India was restricted to exercising tribal control. The forces available for this were those normally allocated to Frontier Defence and Frontier Defence Reserve; but at the same time I warned the Commander of the North Western Army that it might be necessary to draw on them for commitments in the East of India.

With this reservation therefore, I directed that the general policy was to maintain our existing position in the tribal areas, and that action taken in pursuance of it should as far as possible be designed to avoid the creation of situations demanding the employment of forces additional to those at the disposal of the Commander of the North Western Army.

PART III—ORGANISATION, TRAINING AND ADMINISTRATION ORGANISATION.

I. *General.*

During the period covered by this Despatch much attention was given to the organisation of the Army in India. Many of the changes and innovations were the result of experience gained during the fighting of the previous dry season, and some were far-reaching in character.

In the re-organisation of the composition of divisions the following principles were observed—

The existing composition was to be disturbed as little as possible.

Vehicles with less mobility than the 15 cwt. four-wheel-drive truck were generally to be eliminated.

The number of vehicles was to be reduced to the absolute minimum, and those kept were to be for the carriage of essential fighting equipment only.

A Divisional Headquarters battalion was introduced. This had the same War Establishment as other infantry battalions, and replaced divisional defence and employment platoons and brigade defence platoons.

The need for the closest possible support of infantry by artillery in country where the normal 25 pounder artillery regiment could not operate was met by providing 3.7" howitzers and 3" mortars.

In light divisions the brigade light reconnaissance battalions were to be replaced by one divisional light reconnaissance battalion.

The most far-reaching and revolutionary of the innovations however, was that initiated by my predecessor in the form of long range penetration (L.R.P.) groups. These are dealt with separately in the paragraphs which follow, and their expansion formed a major feature of the re-organisation that took place.

In the lower formations and units various changes affecting the artillery, motor battalions, infantry (both British and Indian), Indian machine gun battalions and Royal Indian Army Service Corps were introduced. These affected types and weight of equipment as well as the number and grouping of personnel and the ranks of junior commanders.

2. *Changes in Order of Battle of the Forces in India.*

The Supreme Allied Commander South East Asia Command began to function from midnight of the 15/16th November. From this date the Fourteenth Army and the Ceylon Command (including the anchorages of Addu Atoll, Diego Garcia and Cocos) came under his command, except for certain administrative and training matters which my headquarters continued to handle until the newly formed 11th Army Group headquarters staff was in a position to take them over.

Earlier, various important changes took place of which the most important were:—

(a) The splitting of the Eastern Army on the 15th October into the Eastern Command (under Lt.-General A. G. O. M. Mayne) and the Fourteenth Army under General Sir George Giffard).

(b) The disappearance of the Indian Expeditionary Force and its redesignation as the 33rd Indian Corps.

With regard to (a) the boundary between the two was the River Meghna from its mouth to the north as far as its junction with the Assam-Bengal boundary at Lakhai, and thence the Assam - Bengal boundary. The Fourteenth Army was an operational headquarters under the new organisation of the South East Asia Command, while the Eastern Command was a static formation under the India Command.

As regards (b) the Indian Expeditionary Force Headquarters (I.E.F.) had been formed in February 1943 under the orders of the Governor General in Council, and was designed to take charge of all overseas operations launched against the Japanese from India. Its original Commander was A/Maj.-Gen. T. J. W. Winterton, but General Sir George Giffard, was appointed to succeed him on the 31st March, 1943.

Early in September the I.E.F. was redesignated the 33rd Indian Corps.

3. *Long Range Penetration Groups (L. R. P. Groups)—Their Expansion and Organisation into a "Special Force."*

Lord Wavell's last Despatch gave an account of the experiment in long range penetration carried out in the spring of 1943 by the 77th Indian Infantry Brigade under Brigadier (later Maj.-Gen.) O. C. Wingate.

The success of this Brigade in traversing North Burma (being maintained entirely by air supply and what they could purchase locally), and the inability of the Japanese to obliterate it, opened up new possibilities.

One of the features of this operation had been that the Brigade had adopted an entirely new organisation for its raid, and had undergone much special training with particular equipment prior to embarking on it.

Briefly, under this new organisation, the battalions of the Brigade had been broken up and re-organised into a number of columns. The Brigade itself had been termed a "Long Range Penetration Brigade" and there were seven columns, each about half a battalion strong, in it. Each of these columns was a self-contained unit under its own commander, with its own facilities for receiving supplies by air, and for intercommunication. Each was more-organised and trained to fight as a highly

mobile tactical unit in the jungle. The Brigade had no artillery or motor transport, but units had medium machine guns and mortars. It moved on foot through the jungle with the minimum of pack transport, and aimed at disrupting the rearward organisation of the enemy. To effect this it relied on its great mobility and its complete independence of any fixed line of supply.

When the detachments of 77th Brigade came out of Burma it was collected at Imphal and officers and men were sent on leave. Major-General Wingate came to New Delhi and, after discussing with me and my staff the lessons to be drawn from his recent operations in Burma, went to England where he was again able to explain his ideas. These were examined prior to, and at the Quebec Conference, and it was finally decided to make a greatly extended use of long range penetration forces. My views on the employment of these forces were sent to the Chiefs of Staffs on the 9th August.

I considered that the timings and areas of employment of L.R.P. Groups, are governed by the activities of the main forces. Without exploitation by the main forces concerned, operations by L.R.P. Groups are unjustifiably costly against a first class enemy and achieve no strategic object. These Groups are not capable of achieving decisive results against organised forces of all arms. Their rôle is not to fight, but to evade the enemy and by guerilla tactics to harass him. I emphasised that unless the main forces can take advantage of the situations created by these Groups, the latter's efforts are wasted. In addition subsequent Japanese retaliation against Burmese who have helped these Groups, only made them less willing to help in the future.

4. It was now decided to form a L.R.P. force of six brigades in the first instance for Burma operations and to increase these to eight later on. Each brigade was to be organised in two "wings" and to consist of eight columns, each three hundred and forty strong—a total in all of some 1,000 officers and 25,000 men. There was to be a Force Headquarters whose functions were in the first instance to deal with policy and to organise and train the "L.R.P." or "Special Force" as it was now called.

By the time these decisions were taken the leave of the original 77th (L.R.P.) Brigade was over, and it was reformed near Jhansi in August.

Meanwhile, a second long range penetration brigade (111th Indian Infantry Brigade) had been forming in the same area.

5. It was now decided to transform the 70th British Division, which was in Bangalore at the time, into the Special Force, and it was moved to Nowgong early in October for this purpose.

The 77th and 111th Indian Infantry Brigades were increased from six to eight columns each, by the addition to each of an extra British infantry battalion. The 3rd West African Infantry Brigade, which arrived at Bombay on the 4th November, joined the Special Force in mid-November.

An American L.R.P. Brigade (5307 Provisional Regiment) arrived in India and moved to Deogarh near Lalitpur early in November for training, but was not incorporated in the Special Force.

The 70th British Division completed its special training as L.R.P. brigades in the Nowgong area by the end of October. Two extra British Infantry battalions were added to the Division to enable the requisite number of columns to be formed.

Troops other than infantry which were absorbed in the Special Force, included two field artillery regiments, an anti-tank regiment, a reconnaissance regiment, and two regiments of the Royal Armoured Corps. On joining the Special Force, the men of these units severed for the time being their connection with their original arm of the service.

6. The Special Force Headquarters opened at Gwalior on the 25th October, for the training, organisation and administration under H.Q. Central Command of all L.R.P. forces and later as required by South East Asia Command for their operational control. This headquarters was formed from resources made available from the 70th Division and from personnel from the United Kingdom. Its more important appointments were duplicated to allow of training and planning to proceed concurrently, and it provided staffs where necessary for wings of the L.R.P. brigades.

This was the general position of the Special Force in November, and while the training of it continued under me, it operated later in strength against the enemy communications in North Central Burma under the direction of the Supreme Allied Commander South East Asia Command. The untimely death of Maj.-Gen. Wingate at the outset of these operations was a tragic loss to the Force which had been his conception from the start.

7. *Airfield Defences.*

Another extensive development was in the land defence of airfields and airforce installations. The existing policy held good whereby general and local land defence was the task of the Army; but the R.A.F. were now to assist to the limit of their own available resources.

Extensive camouflage measures were undertaken to conceal airfields in the vulnerable area of the Provinces of Assam, Bengal, Bihar, the southern districts of Orissa, and in a coastal belt of twenty-five miles from Orissa to Cape Comorin.

To obliterate the traces of recent construction constituted a major difficulty, and a vast campaign of grass and creeper growing had been undertaken. The camouflage of the strips themselves remained, however, the main problem owing to lack of materials, transport and labour. Nevertheless progress was made. Dummy aircraft of various designs were manufactured and put in use, and thirty decoy sites in Bengal had been projected as a defensive measure against night attack.

8. *Chemical Warfare and Special Weapons.*

The use of gas by the Japanese seemed unlikely, particularly so in view of the strategical conditions on the Burma front.

In order to lighten the load on the individual fighting soldier, I decided, with certain exceptions, to withdraw respirators and anti-gas equipment from formations and units joining the field army. Exceptions were the crews of tanks and carriers. The equipment withdrawn was, however, stored in forward ordnance depots under special arrangements to admit of its

being rapidly issued in emergency. Anti-gas training also continued, and a high standard was maintained, and for security reasons Commanders were directed to exercise discretion in promulgating this policy.

9. *Flame Weapons and Coloured Smokes.*

A number of flame weapons, both man-pack and carrier-borne, were ordered from England for 1943 and 1944, but their tactical use, the arm of the service that will use them, and the scales and method of maintenance in the field remain to be decided after trials and demonstrations have been carried out.

While it was decided to use coloured smokes with mortars and certain smaller calibre guns, none were yet available for these weapons. Two thousand coloured smoke generators only were provided from England, and small quantities of grenades, filled with red and yellow smoke only, were available from indigenous production in India.

TRAINING

10. The experience gained in recent operations and in Arakan exposed various shortcomings in our training, and this gave rise to many of the measures carried out during the period under review. Indeed, some of the measures introduced constituted fundamental changes in our policy and practice in regard to military training as a whole. In addition to the expansion of our training framework in various directions, much reorganisation and improvement of existing training formations, and installations was effected. The most important of these developments are summarised below.

II. *The selection of candidates for commissions.*

Since the war expansion of the Indian Army began, selection has been by means of interview boards. These boards consisted originally of certain senior civil and military officers, and were district and provincial in character. Though this system had met with considerable success, there was a high subsequent wastage at Officers' training schools. During the period, these boards were centralised in General Headquarters, and scientifically organised on the system already evolved in the United Kingdom. By these means it was hoped to save time and effort, as well as to select the embryo officer at the outset for the work to which he was most suited.

Similarly selection of officers for the Women's Auxiliary Corps (India) was commenced by means of interview boards on the same lines.

12. *The Training of Officers.*

In order to provide the large number of staff officers that were required for static formation headquarters, it was decided in August to start at the Staff College a series of short courses, each of 60 students. The students for these short courses were primarily selected from those who were over age for the ordinary Staff College course, and physically incapable of carrying out staff duties in active formations.

The syllabus for instruction at the Tactical School was completely revised to cover jungle warfare and warfare in Eastern countries rather than desert warfare on which its efforts had primarily been concentrated.

It was found necessary to start at Ahmednagar a new special Officer Cadre Training Unit (O.C.T.U) for the Indian Armoured Corps.

A further officer cadet training unit was also started at Dagshai for the training of cadet officers for the Women's Auxiliary Corps (India).

An effort was made to improve the training in University Officers Training Corps (U.O.T.C.) and thereby attract more candidates through that channel for commissions in the army. Cadets of U.O.T.Cs. can now obtain Certificates "A" and "B" for which syllabi have been laid down by General Headquarters. Those who qualified for these certificates gained certain advantages, if and when they were selected, and went to Officers Training Schools.

In order to give as many officers as possible practical experience in the more modern methods of fighting the Japanese in jungle country, fifty officers from the India Command were sent to Australia and New Guinea, where they were to be attached to fighting units of the Australian Army for about three months.

In order to train and bring up to date senior officers of the Army and the Royal Air Force in problems of air support in eastern theatres, two courses were held in Simla in July which the majority of Brigadiers General Staff and General Staff Officers 1st Grade of divisions and a large number of Group Captains and Wing Commanders R.A.F. attended. Considerable value was gained from these inter-service discussions.

13. *Initial training of the soldier.*

It was apparent that the basic training period for infantry recruits was too short and it was decided to increase the total period of training to eleven months, nine of which to be spent in basic training at regimental centres, and two in special jungle training divisions.

Similarly it became necessary to increase the period of mechanical transport training for recruits from fourteen to twenty weeks. This again was likely to be increased to twenty-four weeks, and would ensure that the recruits obtained at least 120 hours' driving training before being posted to an active unit.

The training carried out in reinforcement camps on the lines of communication was also much improved with the help of the active divisions which depended on these camps for reinforcements. These divisions have been able to provide instructors, and a considerable increase in equipment has also been made available.

14. *Training in Jungle fighting.*

A second jungle warfare school was opened at Shimoga in Mysore State, to train instructors both British and Indian in the technique of living and fighting in the jungle.

The Jungle Warfare Training Centre at Raiwala, which was originally designed to give recruits training in jungle fighting, was not now needed for this purpose, since the jungle training divisions had come into being. It was used, therefore, for training complete units, and all three battalions of the 50th Indian Parachute Brigade were trained at this centre.

In order to inculcate the higher degree of accuracy and better ammunition control that has been found necessary in jungle fighting, greater stress was laid on quick and accurate snap shooting and less on rapid fire. Psychologically this was having encouraging results.

15. *Collective Training.*

In order to carry training for fighting in the jungle a step further, the 14th Indian Division at Chhindwara and the 39th Indian Division at Saharanpur were converted into jungle training divisions.

Each Indian infantry regiment had its training battalion in one or other of these divisions. Similarly in the case of British reinforcements, it was necessary not only to give basic training to many of the infantry reinforcements who lacked it on arrival from the United Kingdom, but also to give them training in jungle fighting methods. For the first task the 13th Bn. The Sherwood Foresters was temporarily converted into a basic training unit and stationed at Jubbulpore.

For jungle training of British Troops the 52nd Infantry Brigade was formed at Budni in Bhopal State. It consisted of the 20th Bn. The Royal Fusiliers, 7th Bn. The South Lancashire Regt. and 12th Bn. The Sherwood Foresters. Here British infantry reinforcements did two months' training in the forest before going to active battalions.

Collective training in jungle fighting was also necessary for those formations being trained for combined operations.* In order to meet this need, both for those units already under training in India in an amphibious rôle, and for others that would arrive in India in the future, a training headquarters was created. Each of the two wings of this headquarters was designed to organise the collective training of one division at a time in combined operation and jungle warfare.

16. *Engineer Training.*

The need in this Command for a school of military engineering had been felt for some time, to relieve existing engineer training centres of special training commitments for which they were not designed. A school was accordingly planned during the period, which when in being, would give technical post-graduate training to selected young officers, deal with the training of M.E.S. personnel, and generally standardise engineer instruction to a greater degree than hitherto.

Additionally the school of military engineering would centralise all engineer officer cadet training in India.

Another engineering training establishment started was the Obstacle Assault Centre. This contained both engineer and armoured corps elements, and dealt with problems of the assault against Japanese defences and other obstacles.

17. *Combined Operations—Organisation and Training.*

On the 20th June, 1943, the Combined Operations Directorate at G.H.Q. consisted of a Group Captain R.A.F. (Director), a Military Member (Lt.-Col.), and a Naval Member (Lt.-Commander). These were assisted by a small inter-service staff.

* See also paragraphs 18 and 19 below under 'Combined Operations, India.'

The Director also acted as a member of the Air Staff dealing with combined operations questions, while the Military Member was an integral part of the Staff Duties Directorate at G.H.Q.

The responsibility for all training for combined operations passed to the Headquarters Indian Expeditionary Force (I.E.F.) on its formation in April 1943, but it soon became apparent that this was not satisfactory. Force commanders were only charged with training of forces allotted to them for a specific operation, whilst at G.H.Q. it was necessary that the future policy governing combined operations should be formulated and preparations made to carry it out. Moreover advice was constantly being sought by my planning staff on combined operations questions in connection with the many plans under consideration.

An immediate re-organisation of the Combined Operations Directorate was therefore essential so that it could resume its proper functions. I took the first opportunity of discussing this with the Commander-in-Chief, Eastern Fleet, and early in August the Chiefs of Staff approved of a Rear Admiral as Director, and a Captain R.N., a Brigadier, and an Air Commodore as Deputy Directors of a reconstituted Directorate of Combined Operations at G.H.Q. of the India Command.

The responsibilities of the Directorate were laid down as follows:—

(a) In all matters of combined operations to advise the Supreme Commander, South-East Asia Command and Commander-in-Chief, India, and to give direct counsel to such other authorities as might be authorised from time to time.

(b) To maintain close liaison with the Chief of Combined Operations and other D.C.O.'s and to disseminate doctrine regarding combined operations.

(c) To guide all preliminary training in combined operations. To control basic training for the assault, for all three services at combined training centres and landing craft wings of the R.I.N., including the training headquarters and staffs in planning and preparation of operations.

(d) To advise on the organisation and equipment of all forces detailed for the assault in a combined operation. This included direct contact with the Senior Officer Assault Ships and Craft.

(e) To advise on any special training required by troops to be landed over beaches.

(f) To arrange for the trial and development of landing crafts and specialised equipment for combined operations; to make recommendations for their provision; and to develop special technique in combined assault. These matters were to be treated with particular reference to the waters and terrain likely to be encountered in operations in South-East Asia.

(g) To advise the Joint Intelligence Committee of any special type of information required, or action to be taken in connection with combined operations.

(h) On the appointment of Force Commanders for a combined operation, to render them assistance in every way possible.

18. Training for Combined Operations.

The provision of landing craft and stores for combined operations, and the maintenance of equipment were made the responsibility of the Supreme Allied Commander, South-East Asia Command.

The question as to whether the Director of Combined Operations (India) should remain under the Commander-in-Chief India or should transfer to the South-East Asia Command was also discussed at length, and it was agreed that it was better that he should remain under the Commander-in-Chief India, at any rate for the time being.

Rear Admiral E. H. Maund was appointed by the Admiralty as Director on the 25th August, and arrived in India on the 16th October.

In the meantime future training policy had not stood still.

The question of giving basic and refresher training to amphibious divisions with their naval and air components was investigated in detail. There were two main problems. The basic and refresher training for those divisions in India, and the refresher training for those divisions who must come to India from other places before operations could be mounted. Two overriding factors affected these problems, the monsoon and the difficulty of moving large bodies of troops over great distances on the already overstrained railways of India.

We already had one combined training centre on the West coast near Bombay. As training had to be complete by early December of 1944, a second centre was clearly necessary, and Cocanada on the East coast, though by no means ideal, was selected as the only practical site available.

The Cocanada Training Centre was developed to provide wet-shod training for an assault brigade group and a beach group, together with their quota of divisional, corps and army troops, and their R.N. and R.A.F. components.

These two centres represented the limit of India's capacity in the matter of combined operational training facilities. Even for the second centre it was not possible to find in India the requisite officers for the instructional staff.*

19. Manpower and Craft for Combined Operations.

As regards actual hands for the special formations required, large numbers of Royal Navy personnel entered the country during the period of this Despatch. In addition the Royal Indian Navy continued to train crews for landing-craft.

Originally the R.I.N. were to train sufficient personnel for three assault brigade groups, but it was found that landing craft crews for two brigade groups was the most that could efficiently be produced from India at the present time.

Two afloat exercises took place during October and November whilst large "wetshod" exercises were prepared for December.

In the past our training had suffered from lack of sufficient landing craft, but during the period of this Despatch they came into the country in good number. There was still however

* See under the general head of 'Training' above regarding collective training of amphibious formations in both combined operations and jungle warfare.

a shortage of assault ships for training purposes, and this was particularly felt in the case of "Landing Ships Infantry."

ADMINISTRATION.

Transportation and Supply.

20. *The General Situation and Future Plans.*

It has been recorded in Part I that early in the period covered by this Despatch it was necessary to recast our long term administrative plans, and that a directive giving data for preparing fresh plans for the future was issued to my Long Term Administrative Planning Committee on the 7th August; also that certain short term improvements on the Assam L of C were urgently considered.

With regard to long term planning, the Committee were able to furnish an administrative review in September 1943 covering the ground indicated to them in my above mentioned directive for plans for 1944-45.

Their general conclusions were disquieting. They showed that limiting factors in India as a whole were likely to exist under all the main headings of movement and transportation, construction of accommodation for stores and personnel, and provision of Indian manpower. They also found that the number and capacity of India's ports (and the railways and roads serving those ports) together with the need to maintain the level of imports and exports so as to meet the requirements of India's production of war material and to maintain India as a secure base for operations, restricted at the present time India's capacity to launch amphibious operations.

They remarked that it would be essential for three and probably four of the divisions, likely to be needed for future operations, to by-pass India. It would also be desirable for subsequent maintenance to be partly by direct shipments from bases outside India.

Action to improve the transportation capacity of ports and roads leading thereto was a matter of urgent and major importance, and the following steps were suggested:—

(a) The provision of additional broad gauge locomotives and wagons.

(b) Development of rail and road approaches to the ports, and action to improve capacity, remove congestion and speed up the turn-round at and in the vicinity of ports.

(c) Improvements designed to increase port capacity—such as provision of additional moorings, port craft and other facilities, these measures to be put on a war time basis so as to give early results, as opposed to long term improvements of permanent post-war value.

(d) The development of small ports likely to be suitable for smaller assault shipping, etc. Also the use of the smaller ports for coastal traffic in order to ease the load on the railways.

(e) An increased use of these smaller ports for civil imports and exports.

Though this last named expedient might not be very desirable from a civil point of view, it would enable the larger ports to deal with a greater flow of military stores and traffic. To achieve results, however, diversion of civil traffic would have to take place well beforehand, as a permanent war-time measure.

21. These conclusions were so far-reaching that an examination of India's capacity to act as a

base for the operations contemplated was necessary. For this an operational background was required with estimates of the forces. I therefore asked for this in a telegram to the Chiefs of Staff on the 14th September and received the required information on the 27th September. It conformed generally to my own estimates.

In the meantime examination of India's potential as a base for the operations of the South East Asia Command was taken in hand on broad lines by the War Projects Co-ordination and Administrative Committee of the Government of India. Here I should mention that although this Committee comprised representatives of all civil as well as military organisations having to do with transportation and supply, it has been my constant concern to keep civil officials of the Government of India, including the Railways, informed and alive as to how their various spheres might be affected by developments. Accordingly, I held meetings with high civil officials from time to time with this end in view.

The War Projects Co-ordination and Administrative Committee, as a result of their examination, advised the Government that, in their view, demands likely to be placed on India in the normal course in order to carry out these long-term plans were probably not only beyond her capacity in the time available, but that the continuance of the strain on India's economy even at the existing level, for another two years, was likely to lead to most serious consequences. They advised certain measures to meet this dangerous situation, and classified them under two headings.

22. Firstly, there were measures designed to counter the menace of inflation and restrict or absorb surplus purchasing power in the country. These were as follows:—

(a) Enough silver should be imported to meet the pay and allowances of the additional United Nations Forces involved.

(b) The amount of pay which personnel of the United States Forces could draw in India, should be restricted as it is for Dominion troops.

(c) Enough canteen stores should be imported to absorb at least 50 per cent. of the purchasing power of the additional Allied troops required.

(d) Importation of certain specifically detailed consumer goods for the civil population—these, as in North Africa, to be demanded as essential on military grounds.

(e) Foodstuffs should be imported for the civil population.

23. The second series of measures recommended were designed to restrict to safety limits further demands on India for services and supplies for war purposes. They were as follows:—

(a) The volume of war production to which India is already committed should not be exceeded.

(b) New products for manufacture, or the expansion of existing production for war purposes, should only be undertaken if production could be achieved by June, 1944.

(c) As regards 1945, His Majesty's Government should be pressed to accept a drastic curtailment of demands on India for war supplies.

(d) Where necessary, military demands on indigenous production of articles essential to the civil population, of which there was a shortage, should be diverted elsewhere

(e) The fullest possible use should be made of the Central Provision Office's stocks as well as of the productive capacity in Eastern Group countries in order to relieve India.

(f) Sufficient transportation facilities whether by rail, road, inland water, or coastal shipping, should be reserved in order to maintain India's internal economy and productive capacity at suitable levels.

The above recommendations were accepted and telegraphed with observations in greater detail, by the Governor-General to H.M. Government (India Office) on 21st October, 1943.

24. The following short-term improvements on the Assam L. of C. were immediately considered:—

(a) Increasing the number of train paths in Assam by various improvements in operation. One of these was supervision by military personnel* and, another, the relaxation of certain running precaution involving abnormal risks.

(b) The immediate increase of locomotive and rolling stock on the Bengal and Assam Railway by transfers from other parts of India—the latter to be replaced by fresh stock from the U.S.A. on arrival.

(c) The speeding up of river transportation by installation of navigational lights and by night running.

(d) The despatch by air from Calcutta to Assam airfields of stores destined for China.

	I.A.	R.I.N.	I.A.F.	Total
June	50,713	594	2,750	54,057
July	50,161	630	2,574	53,365
August	41,354	544	1,936	43,834
September	39,705	604	1,609	41,918
October	33,879	627	1,367	35,873
November	35,597	582	1,564	37,743
TOTAL	251,409	3,581	11,800	266,790

The causes of decline are thought to be several. Clearly, the manpower of the races and tribes which furnished the bulk of recruits before the war had been heavily tapped since 1940, and the increasing opportunities for well-paid employment in civil labour conflicted with the attractions of service in the fighting forces.

Another complication was the ever-increasing demand for educated recruits to be trained as technicians. All services have required them, but priority was accorded to the Indian Air Force for the dilution scheme designed to conserve British manpower. Though the scheme helped the Air Forces (and their need was paramount) it tended to restrict the flow to the Indian Army of much-wanted educated personnel especially clerks.

Similarly the Royal Indian Navy suffered in the recruitment for its more highly educated categories. It obtained, however, the men it needed for its lower grades, and was able to take a higher proportion of these from Southern India.

* See also paragraph 27 below under 'Transportation Road and Rail.'

25. Progress in Manpower and Recruiting.

I now come to the actual progress that has been achieved in pursuance of existing plans or policy.

It has been remarked above that one of the main headings under which limitations existed in regard to the total war effort of this country is manpower.

The problem became more complicated as the drain on the United Kingdom and India increased.

The shortage of officers in the United Kingdom coincided with heavily increased commitments due to the setting up of the South East Asia Command, and the formation of the Headquarters of the 11th Army Group and the Fourteenth Army. At the same time there was a decline in the intake to our officers' training schools in this country. As a result, when the period ended there was an acute shortage of officers for both the British and Indian Armies. (The officer situation in the Air Forces is dealt with separately in that portion of this Despatch relating to Air Force Administration.)

With regard to British other ranks, the supply from the United Kingdom was up to expectations apart from technicians. We were thus able to build up strength in the majority of arms, and in some cases even to increase their reserve.

As regards Indian other ranks, there was a decline in recruiting particularly during October and November.

The following are the figures:—

	I.A.	R.I.N.	I.A.F.	Total
June	50,713	594	2,750	54,057
July	50,161	630	2,574	53,365
August	41,354	544	1,936	43,834
September	39,705	604	1,609	41,918
October	33,879	627	1,367	35,873
November	35,597	582	1,564	37,743
TOTAL	251,409	3,581	11,800	266,790

Recruitment for the Women's Auxiliary Corps (India) averaged 400 per month in the first half of the period but fell to about 300 per month later. Here accommodation difficulties entailed the cessation of the publicity campaign and the intake fell as a result.

26. Line of Communication Development.

The last two Despatches from the India Command give details of the efforts made since early 1942 to build up our lines of communication in the extremely difficult zone comprising Assam and North Eastern India generally. During the period under review, progress was severely handicapped by the monsoon. This was only to be expected, but nevertheless much was done under adverse conditions. The post of Inspector of Transportation, Assam, was created to supervise the working of the Assam line of communications. Also a Joint Transportation Committee, representing all branches and departments of the Government of India concerned, was set up to initiate, supervise and progress transportation projects of all kinds arising from the needs of the South East Asia Command. The rail

and road facilities of the ports of Calcutta and Bombay were the first matters to receive their attention.

27. *Transportation by Rail and Road.*

Arrangements were made to increase the capacity of the Assam line of communication railways to 7,300 tons of military stores daily by the 1st January, 1946. This included doubling the line between Parbatipur and Ledo, building a bridge over the Brahmaputra between Amingaon and Pandu, and constructing a chord line between Namrup and Margherita.

The development of rail service to steamer landings on the Brahmaputra continued, but was subject to special hindrance by the monsoon. In particular, the bridging of the Kakila River (three 60 foot and two 20 foot spans) on the access line to the new river port Nearnati (North of Jorhat on the Brahmaputra) suffered from monsoon floods.

Severe flooding prevented the completion of the Dohazari railhead by the target date of the 1st September. It has, however, now been completed. The works to increase the capacity of the railway between Dohazari and Chittagong were finished.

The bursting of the banks of the Damodar River on the 18th July and the consequent cutting of the main rail and road communications North-West of Calcutta have already been mentioned. As a result of these breaches, diversions of traffic had to be made. Two-thirds of the total Assam stores lift, and all traffic for East Bengal and Chittagong (with the exception of fifteen metre gauge wagon loads daily) was sent via Bombay and the sea routes to Calcutta or Chittagong, as long as the interruption lasted.

Among other short term means to improve the rail capacity of the Assam line of communication were the improvement in efficiency of operation by United States military personnel running the railway. This comprised some 4,600 U.S. army transportation troops who assisted in operating the Bengal and Assam Railway, and the view was expressed that an increase of as much as fifty per cent. was obtained by improved operation. A request for these railway troops was sent to the U.S.A.

Another handicap has been the shortage of locomotives in India, deliveries of which from overseas were awaited. During the period under review thirteen broad gauge "Eagle" and ninety-two metre gauge "Mikado" locomotives arrived. A number of the latter were taken into use on the Bengal and Assam Railway.

To increase the capacity of mechanical road transport, experiments and trials were successfully carried out with trailers, and it was decided to introduce these at the rate of 25 per general purpose transport company equipped with 15 cwt. trucks.

28. *Docks.*

The development of Chittagong port to meet operational needs has gone ahead. Additional moorings for deep sea ships were got from Calcutta, and most of the cranes taken from Chittagong under the denial scheme in 1942 have been replaced.

Dock labour as a whole gave little cause for anxiety, although the position at Vizagapatnam for a time was not good.

A special joint investigation was held into the congestion in the Port of Calcutta. Relief measures included the provision of mobile cranes for heavy lifts, the improvement of rail facilities in depots, and the provision of tank transporters and additional motor transport for port operation.

29. *Inland Water Transport (I.W.T.).*

This service also has been handicapped by floods. Rapid erosion at several of the landing places on the Brahmaputra caused anxiety, but preventive measures succeeded in averting serious trouble.

In regard to river craft, India had requested the return from Iraq of certain river steamers which had been sent there from India earlier in the war. In addition to the arrival of these, ten paddlers, three screw steamers, and ten dumb craft were released from Iraq for use on the Brahmaputra. These craft began to reach India at the rate of two a month, the first pair arriving in October. Higgins barges also were brought into use on an increasing scale with good results.

For the transportation of oil in bulk by river, seventeen flats were converted for use as carriers on the Brahmaputra, to supplement the one solitary flat previously available.

Successful trials were carried out with "Airbags" for lifting sunken craft. An I.W.T. salvage unit was organised during the period and was equipped with a number of these bags.

30. *Supplies.*

The food scarcity in India* affected the supply to the Army of indigenous foodstuffs, and it was not possible to maintain reserves up to the normal level.

Early in November the situation was serious, especially in the Fourteenth Army area. Rice in particular was short, and the ration scale of rice was reduced by four ounces. This reduction was, however, replaced by an equivalent amount of other grain products. Stocks also of milk, ghee, atta, tinned vegetables and fruits, and fodder were very low. The shortage of tinned supplies was due to the difficulties in obtaining fresh supplies in the forward areas, so that more tinned substitutes had to be consumed than those for which provision had been made. The shortages of atta and ghee were due to the Food Department of the Government of India being unable to meet the Army's requirements; and that of fodder to the coal shortage, since coal is needed for baling purposes.

The supply situation in the Fourteenth Army improved latterly, but the stock position cannot return to normal until the Food Department can meet the Army's needs of atta and ghee, and until demands made to the United Kingdom for tinned supplies have been met.

Attempts to obtain by indigenous production, foodstuffs that are usually imported—e.g., cheese, dehydrated vegetables, jam, etc., have not proved as successful as had been hoped.

* See also [Part II, paragraph 32 The Economic Emergency.

Among the causes were insufficient experience in processing, climatic conditions, lack of suitable machinery and packing material, and the difficulty of getting really suitable hygienic conditions in Indian factories.

The absence of suitable packing material in India also handicapped production of the light scale and composite rations. I therefore asked the War Office if the U.S.A. Forces "K" and "Mountain" rations could be provided for the India Command. These are extremely well packed, and are suitable for British Troops in a tropical climate. They are also suitable for air supply dropping.

In the meantime the existing special pack rations produced in India were found for various reasons to be unsatisfactory, and were revised.

The following are now prepared in this country:—

A 24 hour ration designed for assault troops and issuable up to 48 hours. Each day's ration is self-contained, in a carton, wrapped and sealed in wax proof paper.

A light scale ration designed for L.R.P. troops and long distance patrols. These also are put up in daily self-contained packs.

A complete non-cooking ration with separate scales for British and Indian Troops.

31. Remounts and Veterinary.

A great increase in animal reinforcements was required in the cold season 1942-43 for the Eastern Army, and a heavy toll was taken by disease, especially surra.

In the period now under review, the extensive conversion of the Army in India to a mixed animal and mechanical transport basis caused a further large demand for animals. In fact by the end of the period, the number of animals in the Army in India exceeded any previously recorded figure even before mechanisation began, and it was expected during 1944-45 to amount to some 125,000 animals. My Director of Remounts visited South Africa to contact Union Defence Force officials and the Remount Purchasing Officer there, since that country is now our main source of supply.

Imports from South Africa during the period came to 2,415 mules and 850 donkeys, while over 4,000 animals were bought in India. Arrangements were also made to import 1,500 mountain artillery mules from the U.S.A. under Lease-Lend arrangements.

During a period of twelve months in Assam and nine months in Arakan a total of 9,418 animal casualties occurred. Of these 34 per cent. returned to remount depots after treatment. The above total casualties exceeded our total purchases of mules and donkeys, etc., in South Africa for a corresponding period by 996.

The Chinese Forces in India received 422 horses, ponies and mules during the period. This made the total of animals issued to these forces 6,526, against their combined demand for 8,690.

Surra has continued in forward areas and during the period of this Despatch, in the 4th Corps area, 828 horses and mules were cured while 375 died of the disease. About a thousand were usually under treatment at any one time. Surra was also detected in

Arakan in the middle of August, but only sixteen deaths occurred, while some 200 cases were generally under treatment.

32. Ordnance Services.

Advanced ordnance and ammunition depots were established at Gauhati and Kanglatongbi (near Imphal) and an advanced ammunition depot at Palel. These were in addition to the base and advanced depots already at Manipur Road. In Arakan, the existing ordnance field depot at Chittagong was expanded into advanced depots for ordnance and ammunition. Two new ordnance field depots were formed for divisions operating forward of Chittagong, and a further one at Comilla for air supply.

Ammunition laboratories and mobile ammunition inspection units were provided for both the Fourteenth Army and the Eastern Command.

Manpower in the ordnance services still remained a difficulty, and recruitment of educated types as N.C.O. clerks for office and store duties continued to be unsatisfactory.* Reinforcements, however, were steadily despatched to the Fourteenth Army for ordnance field units, and the strain was then eased.

33. The Electrical and Mechanical Engineers (E. & M.E.).

Generally speaking, the 1st and 2nd Echelon units of the service proved satisfactory, except the recovery company in the Light Division. For this a heavier vehicle for jeep recovery was found necessary and was provided. As regards actual 1st and 2nd Echelon repair of vehicles, this was satisfactory in so far as the supply of spare parts allowed.

A lack of 2nd Echelon wireless repair facilities was felt. This was remedied by the addition of wireless sections to each mobile workshop company in an operational formation, but in the meantime wireless repair suffered. There were no 2nd Echelon wireless repair facilities available at all; and wireless sets which could have been repaired in the field, had to be evacuated to base or command workshops for the purpose. This resulted in overloading these shops, and heavy delays in repairs. The lack of up-to-date wireless workshop sections has been due to a continued shortage of special test equipment and artificers from England.

With a view to providing some of these units from India, wireless mechanics were under training in this country and the raising of nine workshop sections was commenced.

The great expansion of lines of communication continued to make heavy demands on E. & M.E. resources, principally in lines of communication recovery companies. In order to economise in mobile workshops on the lines of communication, sixteen station workshops were installed, thus releasing mobile units for the forward areas.

Road transport on the lines of communication, and in particular between Manipur Road and Imphal, continued to absorb a large amount of E. & M.E. maintenance. The thousand vehicles employed there were plying on a terrain in exacting conditions, and to a continuous "round the clock" running routine. The water-proofing of vehicles and equipment also required constant attention.

* See also paragraph 25 above under 'Manpower'

The first semi-mobile 3rd Echelon workshop to be raised in India moved to Imphal early in July. It was seriously delayed by the floods, and was not completely installed till three months later.

When the two training Divisions (14th and 39th) moved to Central Command to assume their functions,* the full complement of E. & M.E. divisional units accompanied them. These E. & M.E. units now take reinforcements from training centres up to fifty per cent. of their own war establishment for two months' operational training before sending them forward.

ENGINEERING WORKS AND PROGRESS.

34. Roads.

As I have already remarked, the monsoon caused road work in certain forward areas to be limited to the repair of washouts and landslides. Very little new construction was possible while it lasted, but progress increased with the return of dry weather. When the Damodar floods seriously damaged the Grand Trunk Road, North West of Calcutta, engineer field units had to be used for the repairs, and the road was not in full service again till October. As regards the actual flood breaches on the river bank, work on these continued throughout the period and was only approaching completion at the end of it. Further projects to prevent a recurrence of the breaches were still being planned.

Efforts were made to accelerate completion of the access road from broad gauge railhead at Siliguri to the Brahmaputra ferry at Goalpara. Work on the Manipur Road base continued satisfactorily, and by October the base could be considered reasonably well provided with roads.

Satisfactory progress, however, with the roads of Nos. 3 and 4 Reserve Bases (both expanding 100 per cent.) at Panagarh and Avadi (near Madras) could not be made till the monsoon was over.

35. Engineering Projects connected with Airfields †

As in the case of roads, airfield construction was much hampered by heavy rains, and by the Damodar flood breach on the E.I. Railway. In spite of this, however, it is hoped that the bulk of the original airfield construction programme (details of which are given later under Air Administration) will be complete by the end of the year.

The prior importance early in the period of the air lift to China called for special measures to expedite the construction of the North East Assam airfields. Considerable engineer resources were accordingly sent to this area so as to accelerate work on runways, taxi tracks and accommodation. In addition, a number of airfields had to be raised to heavy bomber standard.

Bulk petrol storage requirements at airfields also increased rapidly, and over sixty airfields required bulk storage capacity varying from 40,000 gallons to 300,000 gallons per airfield.

36. Oil Projects.

Most of the projects recommended by the Elderton Committee to deal with the supply of petrol, oil and lubricants (P.O.L.) in North East India, were started in the period, and by the end of it many were approaching completion.

At first, progress was poor because most of the stores which came from abroad were late in arriving, and difficulties were also experienced due to the monsoon. In particular, work was held up by the late arrival from the U.S.A. of certain essentials—particularly valves, victaulic fittings and pumping stations. These were originally promised in May, but first shipments were not received till September and October. Indeed fifty per cent. of valves and pumping stations had still not arrived by the 15th November.

Delivery of tankage to high priority airfields was however generally completed by the end of the period.

The expansion scheme of the Assam Company's oilfields at Digboi unfortunately had a series of setbacks. Instead of the hoped for increase on the previous production figure of 200,000 gallons of crude oil a day, there has been a drop to 160,000 gallons a day, and no improvement on this figure can be expected for the remainder of 1943. The reason for this was partly that existing oilwells have unexpectedly run dry, and partly that new drillings that gave promise of prolific production have, after all, proved disappointing.

A new thirty million gallon storage depot was planned near Budge Budge, and indents were placed for the necessary stores for this. It was to be the terminal for a pipe line project from Budge Budge to Dibrugarh planned by the Americans, and to be executed by them.

The production in India of containers for petrol remained disappointing throughout the period, in spite of strenuous efforts to develop local resources of this and petrol handling equipment generally. It had been estimated that production of 4 gallon drums would reach 180,000 in October, but in fact actual production was just under 44,000. Two Jerrican manufacturing plants however commenced to arrive in India and they were installed at Madras.

37. Administrative Development in the Ceylon Army Command.

The strength of the Ceylon Force increased slightly by some one thousand all ranks during the period under review. This increase was distributed evenly among all arms.

A new Ceylon Signal Corps was constituted in November. Its first personnel were found by transfers of signalmen of the Ceylon Engineers.

The Ceylon Engineers were increased by the addition of a mechanical excavating company, and a motor boat company.

An extensive programme of war construction for coast defence, camps (for East African Troops and Royal Marines), installations and communications, was put in hand. A vegetable garden on a large scale was started on the uplands of Nuwara Eliya which was expected to supply most of the needs of the island.

As regards communications, it was decided to relay some sixty miles of railway line with heavier rails. When completed this was expected to relieve the shortage of light-axle load locomotives.

* See also paragraph 15 above under 'Training'

† See also paragraph 38 below under 'Air Organisation and Administration'

AIR ORGANISATION AND ADMINISTRATION.

38. *Airfields**.

Up to June, 1943, the progress of airfield construction was behind schedule, and many airfields were still incomplete.

Actually, at the beginning of 1943 the main airfield construction programme in India included the building of 215 standard all-weather airfields. Some were to be "operational," *i.e.*, built to full scale with two runways and accommodation for two squadrons. Of this programme, which had initially been drawn up in March, 1942, five operational airfields were complete in all respects, and 88 had one all-weather runway ready (over 1,600 yards in length) by the end of 1942. In addition, sixty fair-weather strips or landing areas had been completed.

The increasing scale of offensive operations throughout 1943 entailed far more construction in the east than under the original plan. A number of fair-weather airfields had to be prepared in forward areas, with limited shelter type accommodation and tentage, and the decision to operate throughout the monsoon made it necessary to develop some of these as all-weather airfields with increased accommodation and accessories. A number of airfields was also completed in North East Assam to handle supplies to China, or on the supply route from the West for the same purpose. Moreover, in the same area certain airfields were developed from which the U.S. Air Forces could operate heavy bombers or defensive fighters.

In addition, the maintenance and reinforcing of the U.S. Army Air Force squadrons in Assam involved further construction in the southern, western and central areas. By November, 1943, a total of 34 all-weather airfields, and 11 fair-weather strips had been handed over to the U.S.A.A.F. Facilities were also given to them in certain other R.A.F. airfields.

In March, 1942, there were only 16 airfields possessing all-weather runways, of which four only were operational by modern standards. There were also twenty fair-weather strips. By November, 1943, there were 285 airfields completed and 15 under construction. Of this total, no less than 140 were complete in all respects, while 64 airfields had one all-weather runway ready, and a further 71 had fair-weather strips or landing areas, and were equipped in varying degrees with dispersal facilities and domestic and technical accommodation.

There have been great difficulties in the execution of this programme which has cost about fifteen million pounds. There has been a shortage of suitable constructional equipment and supervisory staff. Much of the work carried out by civilian contractors has not been satisfactory, and in all areas there has been delay due to bad communications or inadequate control. In the Punjab and United Provinces the Provincial Governments have given great assistance. In Eastern India, where the need was greatest, there has been less enterprise and efficiency. The fact remains, however, that the Air Forces in India can now expand rapidly with the sure confidence that there are suitable bases from which to operate. A tribute is due to the many military

and civil engineers whose devoted work has made this possible.

39. *Manpower in the Royal Air Force.*

Perhaps the greatest problem in the expansion of the Air Forces in this Command has been caused by the acute shortage of suitable manpower. Other theatres of war, whose more imperative needs have quite rightly been given priority, appear to have exhausted the available manpower in the United Kingdom, with the result that this Command has often seemed to be situated at the end of a badly leaking pipe-line. To combat this difficulty, the substitution scheme, whereby local manpower is recruited and trained to fill existing vacancies in R.A.F. non-operational units, was decided upon at the end of 1942, and put into practice during the first half of 1943.

The output of trained manpower under this scheme was not adequate, however, to meet the demand caused by the expansion of the Air Command. As a result we had to subsist mainly on whatever drafts became available from time to time from the United Kingdom or other Commands.

An important and complicating factor in this situation was the increased variety of aircraft operating from India, and the consequent multiplication of requirements of the different categories of aircrew trained for each type. As advanced aircrew training facilities were strictly limited in the Command, the main solution to this problem consisted in placing more accurate and detailed demands on the Air Ministry for the personnel required. At the same time training facilities were developed and utilised to the maximum extent for converting surplus aircrews from one type of aircraft to another.

Ultimately, as a result of the manpower shortage throughout the R.A.F., an establishment ceiling was imposed on the Air Command in India. This ceiling limited the personnel expansion of the Command to a total of approximately 90,000 R.A.F. and 10,000 I.A.F. personnel to meet a target of 73 squadrons. Any personnel recruited into the I.A.F. however, under the substitution scheme would not be counted against this ceiling. A target of 140 squadrons will become operative after Germany has been defeated and personnel become available again from the west.

Actually the figures of air manpower for July and November, 1943, were as follows, but these contained deficiencies among some classes of personnel and surpluses among others which could not be adjusted by interchange, without training afresh:—

	July November	
	1943	1943
R.A.F. Officers aircrew	1,718	1,851
R.A.F. Officers ground	3,250	4,314
I.A.F. Officers aircrew ..	320	432
I.A.F. Officers ground ...	453	694
B.O.Rs. aircrew ..	2,290	3,621
B.O.Rs. ground ..	61,005	74,929
I.O.Rs. ground ...	4,894	8,072
Enrolled followers ...	9,142	10,338
Temporary followers ...	7,202	11,410
Non - Combatant Service personnel	1,266	1,345
W.A.C.(I)s	1,060	1,346
Civilians	1,142	1,600

Total ... 93,742 119,952

* See paragraph 35 above under 'Engineering'

The position now is that the manpower ceiling has almost been reached as regards R.A.F. personnel, and the provision for future expansion in this Command, the necessity for which no one can doubt, is a problem still to be solved.

That the W.A.A.F. should be brought to the rescue was an idea that did not come to fruition within the period of this Despatch.

40. *The Indian Air Force (I.A.F.).*

Previous Despatches from the India Command have not so far dealt specifically with developments in this Service, and a stage has now been reached when a review of it is opportune.

The Indian Air Force has now almost reached the peace time strength of the Royal Air Force ten or eleven years ago. Numerous facilities for technical and flying training have been thrown open to the youth of the country who, as regards technical training, have realised the value of what was being offered to them and responded accordingly.

The process of expansion, however, has been so rapid that many difficulties have arisen. The Indian Air Force is at the moment completely Indian, with the exception of a limited number of R.A.F. N.C.Os. No European can hold a commission in the Indian Air Force, which differs in this respect from the Royal Indian Navy and the Indian Army. Up till the beginning of 1942, R.A.F. officers did in fact command I.A.F. units without, however, being specifically commissioned in the I.A.F. After the success of No. 1 Squadron in the Burma campaign, policy was changed and since that date only one Royal Air Force officer (for a brief period of two or three months) has commanded an I.A.F. Squadron. It will be seen then, that as far as possible, the Indian Air Force as a service has been kept Indian.

In regard to efficiency, however, the I.A.F. up to November, 1943, had hardly succeeded as well as its first Squadron did in Burma. Owing to the rapid expansion of the Service since the outbreak of the War there is a definite lack of officers suitable for important commands. At the moment it depends almost entirely for its leadership on the limited number of officers who in pre-war days were trained at Cranwell. The intake of officers since war broke out has been large, and their training necessarily has been far less thorough than that given at Cranwell.

It is early yet to form any idea as to whether and to what extent the I.A.F. should be assisted by a cadre of R.A.F. personnel. Several completely Indian Squadrons will shortly go into action. If these acquit themselves well, their success will obviously reduce the number of R.A.F. personnel necessary to give assistance. It may, however, be necessary later to increase the R.A.F. element in I.A.F. Squadrons.

With regard to the recruiting of Indian manpower for the I.A.F. the rate of intake of the previous six months was maintained.

The rate of intake, although it only amounted to 60 per cent. of the target, was still six times greater than the 1942 average, and recruiting in fact has been successful beyond what was expected.

The recruitment of airmen with the ultimate object of finding suitable material as officers, presented some difficulty. Those few I.A.T.C. cadets who were keen to become pilots were

not willing to enter the ranks and take their chance of being subsequently selected for pilot training, when they could probably obtain direct commissions in the Army or the Royal Indian Navy. The policy of commissioning from the ranks was vigorously pursued, but few of the men selected were good officer material, and fewer succeeded in completing their training as pilots. After the success of the campaign for technicians, however, an aircrew publicity campaign was launched, stressing the adventurous aspects of flying. Experienced officers were detailed to tour India, with the result that a list of over 400 candidates was obtained for interviews by the Officers' Selection Board.

Moreover the Air Training Corps, which is already functioning in six universities and is due to begin shortly in two others, has now been converted to an organisation for the production of general duties officers. On the other hand the number of recruits required to keep up the ten I.A.F. squadrons has increased, and there has also been an increase in training wastage. It is not, therefore, certain as yet that an adequate flow of recruits will be maintained.

With the above manpower difficulties and complications it was not surprising that the original target of ten squadrons for the I.A.F. had not been achieved by the end of 1943. Eight were ready and two were forming. All ten should be operational by the end of 1944.

Future policy regarding the I.A.F. is not clear-cut though it has been laid down in principle.

Since pilots are scarce, and R.A.F. crews are already employed in I.A.F. squadrons, it is not intended to form further I.A.F. squadrons for some time. The future in peace time of the I.A.F. will best be served by making these squadrons as efficient as possible, and for this purpose the pilots trained under the Empire Training Scheme, many of whom will gain operational experience in Fighter Command at home, and certain I.A.F. officers who will have gained similar experience by posting on an 'exchange' basis to Royal Air Force fighter squadrons in India, will prove extremely useful.

The next stage in the I.A.F. expansion desired by the Indian Government is the building of I.A.F. maintenance, training and administrative units appropriate to the firstline strength. It would be possible to work in this direction by increasing the Indian element in certain agreed units suitable to the purpose, but no final commitments have been entered into as yet.

41. *I.A.F. Training.*

The actual training of officers and airmen of the I.A.F. has presented difficulties owing to the almost complete absence of R.A.F. officers with a knowledge of India, the general shortage of instructional staff, and inevitable delays over building projects. Elementary and service training for I.A.F. pilots have indeed been carried out, but the wastage rate was alarmingly high, often amounting to over sixty per cent. During the period under review, thirty-seven pilots left for Canada under the Empire Air Training Scheme after completion of their elementary training, and thirty-two successfully passed out of the Service Flying Training School.

Another problem has been the expansion of the ground training establishments. A second recruits training centre for these has been opened in South India, and six new schools of technical training began to function during the period. In addition a third signals school and a second radar school have been opened, and the non-technical training centre at Secunderabad has been expanded.

When the South East Asia Command came into being in November, 1943, and with it the Air Command South East Asia, a separate India Command for the Air (Air H.Q. India) was formed. Into this was merged the Inspectorate General of the I.A.F., a staff that had previously functioned in an advisory capacity in regard to the Indian Air Force.

With the above reorganisation, Air Headquarters, India will be responsible for the control and development of the I.A.F. generally, and for all operations on the North West Frontier. Since 1941, these have in fact been purely I.A.F. commitments. The formation of this new Command will undoubtedly contribute much to the development and efficiency of an Integrated Indian Air Force.

42. Aircraft Maintenance, Repair and Supply

In the process of building up an organisation for these services, the handicaps imposed by India's limited capacity in certain directions must be understood before the nature of the task can be appreciated.

Elsewhere in this Despatch India's shortcomings as a potential base for large scale military operations has been mentioned*. The picture from the point of view of aircraft maintenance, repair and supply is as follows.

India is not highly industrialised but has immense natural resources which are only on the threshold of development. Unskilled civilian labour is almost unlimited; there are a few semi-skilled, but practically no skilled, industrial technicians. The use of the available civilian manpower is thus limited, and a heavy load is thrown on service personnel. Even these latter, who form the backbone of the repair organisation, are not skilled technicians as the term is understood in England. The small nucleus of highly trained R.A.F. personnel from which the service has expanded during this war were never accustomed to mass production methods, even on the minor scale which has so far been brought into use in this country. The custom in the United Kingdom that major repairs are undertaken by the makers' working party or returned to the factory cannot apply to this Command. Geographical factors have also complicated the building-up of an efficient repair and supply system. The position in the country of the limited industrial facilities has largely dictated the location of base repair units both civilian and R.A.F., and inevitably long distances separate such units from the squadrons they serve. The over-burdened road, rail and water transport services of India impose heavy delays in transit. Thus, while in a country with good lines of communication a major repair may average a month to six weeks to complete, quite frequently this period elapses in India before the damaged aircraft even arrives at its base repair unit. Climatic conditions affect both material and men, the former by deterioration and corrosion, and the latter by exhaustion.

The "man-hour" depreciates in value some 25 per cent during the hot weather and the monsoon period. Moreover the actual work has frequently been held up for lack of spares and tools. The sinking of one or two ships can, and has, seriously upset the even flow of repair. In November there did not exist in the whole Air Command a single complete base repair kit. Shortage of spares has also led to cannibalisation† which, though wasteful, is inevitable.

These difficulties have necessitated an organisation of repair and maintenance units in depth, of which the base units comprise the R.A.F. and I.A.F. maintenance units at Karachi, Ambala, Lahore and Cawnpore, and the civilian maintenance units at Kanchnrapara, Trichinopoly, Cawnpore, Barrackpore, Dum Dum, Calcutta and Poona.

The civilian units were organised under the Aeronautical Division of the Department of Supply, which came into being early in 1943, and developed in October into the Directorate General of Aircraft.

During the year, the field maintenance capacity was approximately doubled. The base repair load increased from 42 squadrons and 400 non-operational aircraft to over 60 squadrons and 500 non-operational aircraft. In June 1943, the remarkable totals of 314 airframes and 210 engines were repaired. This June peak figure was the joint result of a swift expansion of repair capacity, and the culmination of a strenuous campaign for spares carried on both with the United Kingdom and U.S.A. It proved impossible to sustain this level of repair output when the spares position once more deteriorated. The figure fell in October to some 130 airframes and 210 engines. Nevertheless, the outlook is hopeful, for the three T.A.C. civilian maintenance units at Barrackpore, Dum Dum and Poona, and the enormous R.A.F. depot at Cawnpore, have barely commenced production.

43. Aircraft erection and storage, and the provision of spares

Of the 1,750 aircraft erected in India during the year, 1,120 were assembled between June and November, in a steadily increasing flow. Two units were responsible for the work which was carried on with admirable success in spite of many difficulties. Among these latter may be mentioned aircraft arriving in a badly corroded state through lying for months on wharves, etc.; irregular inflow, the result of shipping vagaries (e.g., when the change from the Cape route to the Mediterranean took place two consignments sent at different times arrived together); and climatic handicaps owing to the unavoidable parking of aircraft in the open. In this connection temperatures up to 170° F. were recorded in the cockpits of aircraft being serviced. Under such conditions the handling of metal parts became a matter of some difficulty.

The aircraft storage programme fluctuated considerably. At the beginning of the year reserves were scarce and the flow through the erection units was rapid. During the monsoon, the aircraft storage units began to build up a larger holding. The total output for the (previous) seven months from December 1942 to June 1943 amounted to 650 aircraft. For

† Breaking up of aircraft to provide spares for other aircraft.

* See above Part III, paragraph 20 *et seq.*

the five months from July to November 1943, the total output was 810 aircraft, the monthly figure jumping from 116 aircraft during August to 265 aircraft in October. This total did not merely entail normal routine upkeep services in respect of aircraft held; a very large number of modifications were also continually being carried out.

Almost throughout the first four years of war, the India Command's priority for equipment has been low. Inadequate stocks over most of the ranges of equipment have had a direct bearing on the output from repair units. Tools, certain types of engine spares, dopes, American spares and ground equipment, marine craft spares and practically all items of ordnance supply were short. M.T. spares and domestic and barrack equipment were practically unobtainable. Thus in November there were over 160,000 demands which had not been met.

Although after August a slight improvement appeared, the situation continued poor owing to the demand for spares continuing to increase.

44. *Maintenance and Repair of M.T. Vehicles and Marine Craft of the R.A.F. and I.A.F.*

The administrative difficulties peculiar to the maintenance and repair of aircraft in this Command apply equally in the case of M.T. and marine craft of the Air Forces but in general the problems have not proved so formidable. West of Calcutta (by using the available civilian capacity), it has been possible to decentralise the repair of M.T. to the main towns. East of Calcutta, mobile repair units, known as M.T. Light Repair Depots have been formed and operate as a part of the field maintenance organisation.

The formation of this completely new organisation has been necessary now that the second and third line maintenance of Air Force vehicles has become too large a responsibility for the Army who formerly undertook this task.

As regards marine craft, prior to this period no arrangements existed to deal with their maintenance and repair. Since then, however, contact has been established with the Directorate General of Shipbuilding and Repair, and the naval authorities, and satisfactory arrangements have been made.

45. *Research and Development Work for the Air Forces.*

Research and development work for the Air Forces is now carried out in Air Headquarters, India Command; at the Scientific Industrial Research Laboratories, Delhi, and at the ordnance laboratories, Cawnpore. These bodies deal also with the problem of indigenous manufacture. In addition, research work is carried out at Bangalore for electrical and radar development, at Chaklala for airborne forces, and again at Cawnpore for armament modifications.

Among the achievements of the Research and Development Section of the Air Forces in this Command are:—

The development of new parachute material which has eased the production problem and improved the performance of the supply-dropping parachute.

The production of a new type of supply-dropping container.

A roller conveyor for use in supply-dropping operations.

An enlarger for microgram negatives.

Substitute proofing lacquer for carburettor floats.

A substitute for duplicator stencils.

Satisfactory aircraft dopes which can be manufactured indigenously.

The manufacture of petrol-resisting tubing in this country which has now been developed to a point where the product is little inferior to that produced in the United Kingdom.

The production of various types of jettison tanks, including one design which utilises locally produced jute and shellac.

In addition the more important India Command Modifications which have been proto-typed are:—

Self-sealing long-range tanks inside the wings of Hurricanes Mark IID and IV.

The redesigning of the fuel system on the Vengeance aircraft, and provision for them of jettison tanks.

A bomb-cum-jettison tank modification for Hurricane aircraft.

Compregnated wooden blades for fitting to a propellor.

Certain modifications to Dakota aircraft.

Modifications to the Spitfire VIII pressurised fuel system.

46. *Administrative Development in various Ancillary Services of the Air Forces.*

The Balloon Branch, the Air Sea Rescue, the Meteorological Service and the Flying Control Organisation have all expanded and made important progress. The operational work of the first three has already been referred to above.*

All were handicapped in their development by lack of equipment, shortage of personnel and absence of training facilities, while in the Meteorological Service the issue was complicated by the existence already of separate Civil and U.S.A.A.F. organisations working in the same sphere.

THE PROBLEM OF THE MEDICAL SERVICES IN NORTH-EAST INDIA.

47. *General.*

The period covers the annual malarial season, and was therefore one of anxiety.

The sick rates as a whole were consistently high. They varied from a maximum of fifty per thousand per week from all causes for British troops in July, to twenty-five per thousand per week for Indian troops—the lowest figure recorded for fighting personnel during the period.

There was no remarkable rise in the autumn rates—indeed for a time in August, when sickness is usually expected to increase, a general fall in the sick rate took place. This was probably due to the widespread and thorough anti-malarial measures that had been in progress since the previous year. At the same time active operations during the period were on a small scale. The worst exposure to infection therefore (i.e., that occasioned by lack of opportunity to take precautions against malaria and other diseases), affected very few.

* See Part II paragraphs 14 to 25

On balance, taking into account both the encouraging aspects of the problem, and the absence of land operations, sickness remained high, and it must be expected to be high in the future in the operational areas of North-East India and Burma.

48. *Food in relation to Health*

Elsewhere in this Despatch under the heading of "Supplies" I have mentioned* the shortages in India of various foodstuffs. This had a medical aspect at times, in relation to the health of the troops.

Fresh meat was not available in forward areas for Indian Troops, and dehydrated meat could not be provided in any quantity.

For the British Troops in Assam fresh meat could only be issued approximately on one day in each week. Fresh fruit and vegetables were not available for troops in Assam or forward troops in Arakan. Tinned milk (the only logical substitute for meat for Indian troops) was short. Certain important items of diet could not be supplied to hospitals—e.g., chickens or eggs.

The position however, was improving, particularly as regards hospitals, at the end of the period.

49. *Malaria and anti-malarial Measures.*

Our measures achieved over all a great deal of success.

In regard to the anti-malarial engineering projects at such hyperendemic localities as the Manipur Road base and the camp sites on the Tamu and Tiddim roads, an anti-malarially controlled or protected area was set out. In this area the daily sick rate was reduced frequently to two per thousand per day. In certain units partially protected, but outside the controlled area, it has been seven per thousand per day. Outside the controlled area, the sick have been twelve to fifteen per thousand per day. Another major anti-malarial measure which has proved effective was the establishment of controlled malaria harbours along lines of communications at distances suitable to troops movements. In addition, all main routes on the lines of communication in Assam and East Bengal were surveyed, and route maps giving details of malarial incidence were prepared.

Two anti-malarial engineering units were raised; one for the 4th Corps Area and one for Arakan. They are field companies of engineers specially trained in anti-malarial measures, and suitable for undertaking the whole of a large sector of line of communication, or any other comprehensive block of work.

Anti-malarial units of the normal type increased during the period, till the whole Eastern Army Area was adequately served.

Labour for these units was however a difficulty and anti-malarial works had to compete with other demands for labour, of which there was never sufficient for all needs on the lines of communication.

Suppressive treatment for malaria with mepacrine continued to be very effective, but the quantities of the drug involved have been enormous, and at times there was an anxiety as to the supply.

50. *Other Diseases.*

Dysentery, though not extensive, increased during June and July but abated later. The 4th Corps area produced a markedly greater number of cases than Arakan, and the rate among British Troops was much higher than among Indians (treble).

Venereal disease constituted a serious problem. The main sources of infection were in the larger towns, but there was also widespread risk of infection in Assam and Manipur. The Adviser in Venereal Disease instituted a comprehensive campaign against the evil in Calcutta and elsewhere.

Cholera and small-pox have been epidemic in some localities and mass inoculations and vaccinations were carried out. The danger was increased by the widespread famine in Bengal; and in Calcutta an epidemic of cholera has raged among the civilian population throughout the period of this Despatch.

Some sporadic cases of tropical typhus also occurred, causing a number of casualties in one British infantry battalion. This became the subject of investigation and research.

51. *Hospital Development.*

There has been a steady improvement in the condition of all hospitals in North East India.

This improvement has been very greatly assisted by the reduction in the number of admissions; so that hospitals have been able to receive, hold and treat patients. Moreover, two-thirds of the hospitals and other medical installations in North East India have been moved east of the Brahmaputra, and this has facilitated the early return of recovered personnel to forward reinforcement camps.

52. *Medical Commitments outside the Military Sphere.*

The influx of large bodies of labourers into very malarious areas inaccessible to ordinary transport necessitated sending additional medical units (including hygiene and anti-malarial sections) to look after them.

Although technically medical arrangements for civil labour are a civil responsibility, in practice especially in forward operational zones, military medical resources had to take over. Indeed, with the great increases in Civil Transport Corps and road-making labour, the problem became serious, and a military medical supervisory chain of officers had to be provided for each of the areas where large numbers of civil labourers were employed.

53. *Evacuation.*

The reduction in evacuations, resulting from the forward-holding policy, greatly eased this problem. An improvement in the accommodation in river hospital steamers also occurred with the provision of suitable fittings.

In Arakan, however, under monsoon conditions the difficulties were great, and caused some unavoidable suffering to patients. The road was closed in the Ramu-Dohazari sector for nearly two months, and the Tambru-Ramu Road, though open, became so bad that serious cases could hardly be sent along it at all.

Conditions for evacuation by sea from Cox's Bazar were also bad. Returning mail and transport vessels were used, but had no accommodation for stretcher cases. Ultimately, one vessel "Nalchera" was allotted entirely for

* See Part II, paragraph 32 under 'Economic Emergency and Famine in Bengal'

medical use, and was converted into a coastal hospital carrier for fifty lying and seventy sitting cases.

Two other hospital ships in use were the "Wu Sueh" and "Melchior Trueb". The former was unsatisfactory in river evacuation, and had to be fitted with improved cooling plants. The latter was converted during the period into a satisfactory ocean-going hospital carrier with accommodation for two hundred and ninety-four patients.

54. *Training of Medical Personnel.*

This has progressed in spite of difficulties such as low standard of recruits, differences of language, lack of trained instructors, and little time for training.

A medical school of jungle warfare was started in the 26th Division Area (Arakan) in July, which was attended by selected officers from all Divisions in North East India.

55. *Medical Stores.*

During the period, the situation as regards medical stores improved, but there have been temporary shortages at times, of supplies of Mepacrine and Pamoquin (for malaria). Except for this there were no difficulties other than those connected with certain known items of which there is a world shortage.

56. *Incidental Medical Matters.*

Pathology assumes importance when the bulk of sick are suffering from malaria, dysentery or venereal disease, and progress was made in the provision of laboratories and clinical slide-rooms.

Dental facilities improved in all areas, and men were no longer evacuated unnecessarily for dental treatment.

A Facio-Maxillary unit was opened in Calcutta where cases of grave head injuries can receive adequate treatment.

Arrangements for dealing with mental cases also were developed by the formation of a definite network of centres and subsidiary centres in North East India. This will prevent temporary cases being evacuated.

Diversional therapy also received attention, and a Red Cross Diversional Therapy Service has been formed which will extend over the whole of North East India. It should be particularly welcome in forward hospitals where amenities are scarce. In this as in other directions where the Red Cross has extended its invaluable help, our indebtedness to this organisation has continued to be great. I wish to record my gratitude for the assistance it has given.

57. *Welfare among Troops and Families in the India Command.*

With the great increase in the numbers of British personnel in India that took place since the beginning of 1943 their welfare became a matter of increasing concern. It has an obvious bearing on morale, and in this is linked with the soldier's outlook for the future.

Living in a tropical climate under conditions devoid of most ordinary comforts and unable to buy in the ordinary market many of the commodities that make up the every day needs of the civilised mortal, large numbers of British soldiers have had to work under lonely or

depressing surroundings in back areas, and without the stimulus of contact with the enemy. It is for these, just as much as for the men in forward zones, that welfare work is of importance, and it has been carried on ceaselessly in spite of many and varied difficulties and handicaps.

One of the difficulties has always been a lack of buildings suitable for welfare activities, and welfare funds were very largely expended in providing them.

A great deal has been done by enthusiastic officers in the field, particularly in the forward areas of Eastern India. The work of the army welfare officers has been supplemented by the efforts of Toc H, the Y.M.C.A., and the Women's Voluntary Services, which have opened many new institutes and canteens in spite of difficulties in obtaining sufficient staff to serve the troops on as wide a scale as is necessary in a country of such vast distances and such difficult climatic conditions, and so undeveloped according to western standards.

In August, 1943, it was possible to appoint welfare officers to all the major areas of the Eastern Army, thus relieving the strain on the few officers who had hitherto borne the whole burden.

Funds were provided for welfare on a per capita basis, but how best to use these funds is ultimately a problem for the unit to decide—a problem which has never been easy in the jungle areas and under the monsoon conditions in which the Eastern Army had to live and fight. In response to requests from units, however, large quantities of books, games, sports gear, gramophones, etc., for both British and Indian Troops were sent out from the Eastern Army amenities depot in Calcutta. As the volume of the supplies increased it was found necessary to establish two sub-depots to facilitate distribution further forward, and these were accordingly set up at Gauhati and Chittagong.

Supplies of such things as those mentioned above have been generally plentiful, with one major exception. There have never been enough mobile cinema units available in India, and despite persistent efforts to obtain more of them, there are still far too few to cope with the numbers of troops they have to serve. Eastern Army was allotted the major share of those available, but the fact remains that the provision of more projectors and more up-to-date films is a matter of paramount importance and urgency. Entertainment was provided by touring British and Indian concert parties, some organised by G.H.Q. and the rest by the Bengal Entertainment for the Services Association (B.E.S.A.).

Officers were not forgotten, and H.E. the Viceroy generously contributed large sums of money from his War Purposes Fund for the equipping of leave hostels and the subsidization of hotels and the foundation of clubs in Chittagong, Comilla and Gauhati.

The important subject of family welfare, on the British side, was dealt with by the S.S.A.F.A. sub-office set up in Calcutta, and this was followed in July, 1943, by the establishment of a Legal Aid Section which by the end of October had already dealt with 160 applications for legal advice and assistance.

On the Indian side the concern of the fighting man has been the welfare of his family. As the economic situation in India deteriorated and the cost of living rose, the allotments made by serving Indians to their families began to lose their value. At the same time the rise in prices made the cultivator comparatively affluent by comparison with the fighting man. The problem which arose as a result of these conditions was under consideration at the close of the period, and revised rates of pay and allowances were subsequently announced for the Indian soldier.

As regards the personal welfare of the serving Indian, this presents perhaps a lesser problem in that the conditions of life were mainly those to which he is to a great extent accustomed. He benefited, however, in due proportion in the allotment of funds and in the amenities provided in war areas. The welfare of the Indian fighting man will present an ever-growing problem as he becomes accustomed to a higher standard of living.

58. *Welfare in the Air Forces.*

The welfare of Air Force personnel was organised separately, and presented many difficulties in view of the dispersion of detachments and their location in so many inaccessible places. The problem, however, was energetically tackled, and much was done to improve the lot of officers and men. In this work the R.A.F. chaplains of the various denominations gave much assistance, and toured their enormous parishes indefatigably.

In one direction the Air Forces had a great advantage over the other services, and that was in having its own postal service. This more than any other item had a beneficial effect on morale. It dealt with all R.A.F. mails, official and private, inland and foreign, and handled upwards of a million items weekly.

By comparison, the postal communications with the United Kingdom available to the other services, particularly the restricted issue of air letter cards, were a continual source of complaint. Some improvement was made later.

59. *The Canteen Services.*

Apart from the service that they render in areas where actual operations are in progress, the canteens now fill a vital need for military personnel all over the country.

The N.A.A.F.I. does not function in the India Command and the whole weight of the burden has fallen on the Canteen Services (India). This body has built up an organisation to undertake the importation into or purchase, and even in some cases the manufacture in India, of the commodities required. They have also organised storage accommodation, and they carry out the retail work to the troops through the medium of Indian contractors.

Previous Despatches have not so far referred to the work of the canteens. Indeed, it was not till the period now under report that for the reasons indicated above, their activities began to bulk largely. The following review is therefore opportune, and gives some indication of what has been achieved.

In order to appreciate the activities and expansion of the canteens, it is necessary to trace their progress from the inception of the Canteen Services (India) in July, 1942.

Prior to this there was a small body known as the Canteen Contractors Syndicate, who, working under the Q.M.G., organised an approved number of contractors to serve units and formations. The syndicate also had a small organisation for importing commodities which were otherwise unobtainable; or where to import them was profitable by comparison with purchasing in the country. This was, however, only on a limited scale sufficient for the needs of British Troops and Airmen in India at that time.

The following figures give some idea of the expansion that has been necessary:—

The sales for August, 1942 [the first month of working by the Canteen Services (India)], were Rs. 1,421,696. For June, 1943, they were Rs. 7,100,000, and for November, 1943, at the end of the period of this Despatch, they mounted to Rs. 11,500,000 or about £800,000.

Similarly in regard to warehouses. When the Canteen Services (India) came into existence, there were wholesale warehouses at five large centres including the chief ports. By November, 1943, double this number had been established.

Moreover great development occurred in subsidiary organisations under the Canteen Services (India), and the following came into being during the same period, none of which existed when the Canteen Services (India) were started:—

Canteen Services Personnel	
Depot, Baroda	1
Base Canteen Depots	4
Advance Base Canteen Depots	7
Canteen Bulk Issue Depots ...	38
Independent Retail Shops ...	78
Transshipment Sections	3
Mobile Canteens	17
Tea and Supper Bars ..	40
Mineral Water Sections	20

It was decided, in agreement with the Secretary of State for India, that the Canteen Services (India) should place its orders direct on all sources of supply with the exception of North America. Indents on the latter would be sent to the Secretary of State for India, who would arrange to procure the supplies required.

As this arrangement was, however, not found wholly satisfactory, an officer representative of the Canteen Services (India) was sent to join the India Supply Mission at Washington, and thereafter indents were sent direct to that body. The latter procured the goods, keeping in touch with the Secretary of State for India, and (in the case of Lease-Lend articles) with the British Ministry of Food also. This system has been working smoothly.

As regards the manufacturing enterprise that has been undertaken by the Canteen Services (India), the following goods have been produced from a factory organised in India:—

Mango Chutney, Cornflour, Custard Powder, Flavoured Essences, Jelly Crystals, Black and White Pepper, Squashes and Cordials, Minolene, Egg Substitute, and Baking Powder.

In addition efforts have been made to augment the supply of alcoholic beverages by indigenous

production. This applied in particular to beer, of which the supply in India during the present war has always been very much less than the demand.

CONCLUSION.

60. This Despatch has carried the narrative of events in the India Command up to the point when this ceased to be an operational headquarters for the purpose of conducting the war against Japan in this theatre.

The Despatches of my predecessor coupled with this record have told the story of an uphill struggle. That struggle has been not only against an enemy who attacked us with the advantages of long preparation and special training, but against all the difficulties of staging a campaign on the Eastern Frontier of India.

It has also involved the commencement of the gigantic work of converting India itself into a base, adequate for such a campaign. It is perhaps fitting therefore that this concluding narrative of a series dealing with a somewhat bleak period, should have more to say about the building up of our resources and making our preparation in this theatre, than about actual fighting against the enemy.

We have learnt enough about fighting the Japanese to realise that intense preparation not only in resources and paraphernalia of war on land, sea and in the air, but in training our men to counter Japanese methods of warfare, are necessary if success is to be assured. Indeed, in this theatre our men have to acquire an almost entirely fresh technique in the tactics and stratagems of jungle warfare. Only thus can they gain complete confidence of being able to beat the Japanese at his own game, and so gain the moral ascendancy over him essential to final success.

Our efforts to organise, equip and train ourselves to this end, with a full realisation of the magnitude of the task ahead, have been indicated in the above review of the monsoon period of 1943. Much remains to be done, but the extent of the progress made and the success already achieved are promising for the future.

The continuance of peaceful conditions both internally and on the North-West Frontier, and the failure of Japanese efforts, to incite subversive elements, and to cause unrest in India by propaganda or through agents, are satisfactory features of the period. The continued flow of recruits for the Indian Services, though slightly reduced in volume, is also reassuring, and indeed remarkable, when it is remembered that every man who joins the fighting forces is a volunteer.

In one direction the period has shown a marked change in our favour. That is in the air. The details recorded of the build-up not only of strength and efficiency of aircraft and aircrews, but of the great and varied supporting organisations behind them, constitute an achievement of the first magnitude. Little less noteworthy was continued successful pursuance of our air offensive over Burma in spite of the monsoon, while the Japanese air effort practically ceased during that period.

Yet another feature of major significance and a milestone in the progress of the air

effort in this theatre has been, the integration (brought about with the inception of the South-East Asia Command) of the British and American Air Forces in India. With the successful model of the combined Air Forces in the North African and subsequent campaigns, plans are being laid to make the integration in this theatre so effective that it will become a single striking force under unified control. Similar unified subordinate commands will operate the various branches, *viz.*—strategical airforces, tactical airforces, supply dropping and airborne forces, and photographic reconnaissance.

This re-organisation will be no longer my responsibility; but in so far as I can assist with the development of resources and installations in back areas, and the provision and maintenance of efficient communications and supplies, these matters will be my constant concern.

The Indian Air Force which remains my responsibility (except for those squadrons actually operating against the Japanese) is still in its childhood. It is too early yet to try to foretell on what lines it will be organised, or how it will be officered; but it can only be to its advantage that in its early years its growth was amid the storms of war, rather than in the sheltered atmosphere of peace.

61. I have already submitted a list of the names of those officers and men whom I consider deserving of mention and reward for the services they have rendered during the period covered by this Despatch.

I wish, however, to record my special appreciation of and gratitude for the work done by the following officers:—

Air Chief Marshal Sir Richard Peirse, K.C.B., D.S.O., A.F.C., Air Officer Commanding-in-Chief.

Vice-Admiral Sir Herbert FitzHerbert, K.C.I.E., C.B., C.M.G., Flag Officer Commanding Royal Indian Navy.

General Sir George J. Giffard, K.C.B., D.S.O., G.O.C.-in-C., 11th Army Group (later ALFSEA).

General H. Finnis, C.B., M.C., G.O.C.-in-C., North-Western Army.

Lieut.-General A. G. O. M. Mayne, C.B., C.B.E., D.S.O., G.O.C.-in-C., Eastern Command.

Lieut.-General Sir Noel M. de la P. Beresford Peirse, K.B.E., C.B., D.S.O., G.O.C.-in-C., Southern Army.

Lieut.-General W. J. Slim, C.B., C.B.E., D.S.O., M.C., G.O.C.-in-C., Fourteenth Army.

Lieut.-General H. B. D. Willcox, C.B., D.S.O., M.C., G.O.C.-in-C., Central Command.

Lieut.-General E. L. Morris, C.B., O.B.E., M.C., Chief of the General Staff.

Lieut.-General Sir C. A. Bird, K.C.I.E., C.B., D.S.O., Master General of Ordnance in India.

Lieut.-General G. Wilson, C.B.E., M.C., M.B., Director of Medical Services in India.

62. I also wish to acknowledge the debt I owe to H.E. The Marquess of Linlithgow, Viceroy and Governor-General of India, for the unfailing support which I have had from him on all occasions of doubt or difficulty.

His wise counsel based on his unrivalled knowledge of the strategy and politics of Asia has been invaluable to me.





