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 Ocober, 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 programe 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 admnistration'