

remained predominantly Indian in character and organization when its command was transferred to General Headquarters Middle East. As the force increased in size and administrative units of the British Army arrived, it soon became apparent that both organizations could not work efficiently side by side. After careful consideration I came to the conclusion that the British Army establishments were more suited to the requirements of this Command; and with the concurrence of the Commander-in-Chief in India I therefore carried out a reorganization of the R.I.A.S.C. and I.A.C.C. elements of the Base and L. of C. troops.

19. Extremes of climate and distance, lack of transport, materials and skilled personnel have greatly hampered the administrative preparation of this theatre. This preparation is still incomplete; but credit is due to the staffs and administrative services in Persia and Iraq both before and during the period of my command for the great deal that has been accomplished. In particular, credit is due to the works services of the Royal Engineers. Their task has been both difficult and heavy, and great resource and ingenuity have been shown in improvising methods of using local resources to speed up construction and reduce demands on shipping for the import of materials of all kinds.

#### AID TO RUSSIA

20. Development of communications to facilitate supply to Russia through Persia began in the autumn of 1941. As I have already indicated, this development involved a heavy programme of port construction and railway and road extension and improvement; the collection from places as far afield as the United Kingdom, North America, India and Australia of locomotives and rolling stock; and the organization of whatever civil transport could be obtained, and the importation of Lease Lend vehicles to build up a road transport service.

The whole of this effort has been carried out in the face of great difficulties. The extremes of climate met with in Persia have reacted strongly on the mechanical efficiency and smooth working of the railway. Mechanical setbacks have been frequent; locomotives designed for temperate climates and easy grades have developed mechanical failures due to excessive heat and the heavy grades of a mountain railway; resources sufficient for the mechanical upkeep of the small pre-war fleet of locomotives, though supplemented by British personnel, have proved inadequate to deal with these unexpected failures; large numbers of new railway wagons have arrived with couplings too weak to stand the strains imposed on a mountain railway, and new couplings have had to be manufactured in India to replace them and have not yet arrived. The Persian railway had been in operation only five years when this new demand had to be met; its staff of operating personnel was small and had not yet reached the standards of efficiency to be expected in a long established railway, and this in turn has increased the strain on already deficient workshop capacity. Although plans were made to deal with these various difficulties, delay in the arrival of locomotives, wagons, plant and stores has postponed the achievement of the railway targets and has made reliable planning difficult.

The situation in the ports has been equally difficult. Construction has been delayed through the late arrival of stores from India which could not be replaced by local improvisation. It has been necessary to operate the ports to the maximum capacity possible whilst they were still under construction, and this is always difficult. Acute shortage of cranes of all types has been a serious limiting factor, and supplies from overseas have been slow in arriving.

The number of personnel available to organize, control and operate the transportation facilities has been very small—only enough to provide a thin British veneer over the Persian organization.

It will be realised that of the total tonnage landed at the ports, a considerable proportion has been required for purposes other than direct delivery to the Russians; in particular, the necessity to increase the numbers of locomotives and rolling stock for the railway to more than three times the initial figures has absorbed a great deal of the port capacity available. Another serious difficulty has been the high proportion of heavy and difficult stores included in the cargoes; such items as locomotives, railway wagons, heavy steel rails and pipes, sheet steel and so on, have proved difficult and slow to handle with the limited lifting appliances available. These are the main reasons why, prior to and during my tenure of command, the volume of goods moved forward from the Persian Gulf ports to Russia has consistently fallen short of expectation.

21. The organization of the road transport service to supplement the railway has also presented considerable difficulties. Units and personnel from the British and Indian armies were available to provide a nucleus for improving the ports and railway, but none were available for road transport. This responsibility was therefore undertaken by the United Kingdom Commercial Corporation, who were also the consignees in Persia of all "Aid to Russia" stores. A beginning was made by organizing a road transport service from Persian civil motor lorries obtained by contract. This was subsequently increased by the arrival from North America of Lease Lend vehicles, which again have been operated by the United Kingdom Commercial Corporation through civil agencies.

The whole road transport effort has been handicapped throughout by lack of sufficient personnel to supervise the working of Persian civilian employees and contractors, by the low standard of commercial morality prevalent in Persia (which has led employees of the Corporation to exploit the absence of supervision), and by lack of resources for the mechanical upkeep of the fleet of vehicles.

At the time I assumed command, the shortage of personnel to check malpractices in the road transport service had become acute, and the United Kingdom Commercial Corporation was attempting to obtain additional personnel by release from military service. The whole position seemed to me to be so unsatisfactory that a conference was held early in November at my Headquarters, attended by senior officials of the United Kingdom Commercial Corporation and of the Minister of State's Office, the Commanding General United States Persian Gulf Service Command, and others concerned. At this conference decisions were reached that