

The liaison with flanking French formations was carried out by the exchange of bilingual liaison officers. I was particularly fortunate in the French officers who were attached for these duties from neighbouring formations.

I would also like to take this opportunity of recording my thanks to Général de Division Voruz and the staff of his Mission with G.H.Q. for their unfailing helpfulness at all times.

#### *Defence in Depth.*

62. Closely allied to the question of the time factor is that of defence in depth. The speed at which armoured units can advance, once they have broken into a position, calls for a more elastic conception of defence than would be necessary were it designed solely to hold up a marching enemy. Consequently, frontages may, in the future, be considerably shorter than those which the French High Command required the B.E.F. to hold in France.

In more rearward areas, schemes must be prepared for the manning, at short notice, of centres of communication and other important defiles. Therefore, all units, even those designed for purely administrative purposes, must be prepared to take their part in the battle, and they must receive the necessary preliminary training.

Anti-tank defence is a science as well as a craft. It is a science in that it is necessary to perfect armour-piercing weapons and anti-tank tactics. It is a craft in that troops must be trained to stalk tanks by day, to keep track of their movements, and to attack them in their harbours at night.

#### *The Employment of Air Forces.*

63. It was clear from the reports of the Spanish war, confirmed by those of the Polish campaign, that the enemy would employ his air forces to further the offensive operations of the army by the use of dive bombers and parachute troops. The latter, though effectively employed in Holland, were less used against the B.E.F.; however, the nuisance value of those which were employed, by their interference with railway, telephone and telegraph communications in rearward zones, was altogether out of proportion to their numbers. There were seldom troops available to isolate and search the areas where they landed, usually at dusk, and no French civil organization existed for the purpose.

The enemy bombers, both high level and low flying, were a more serious menace. Their control by the German command was most efficient, capable of bringing the aircraft to their objective by wireless call at short notice.

Attack by dive bombers was a new experience for British troops. Even those who had grown accustomed to heavy shell fire in France during 1914-18 found that this form of attack, when first encountered, placed a strain on morale. As had been anticipated, it was soon realised that those who were properly entrenched and had perfected the drill of taking cover when on the move, suffered relatively little danger.

Ground anti-aircraft defence, both gun and light automatic, improved in accuracy as time went on and it accounted for the destruction of over 500 aircraft in addition to its effect in

breaking up formations of enemy aircraft. But being purely defensive, it can never prove the complete antidote to enemy bombers and reconnaissance aircraft, even when available in sufficient strength. A commander must have at his call sufficient fighters to intercept and attack the enemy.

The commander must, likewise, dispose of a sufficient bomber force to be able to engage opportunity targets of vital tactical importance. Such targets were the enemy mechanised columns at Maastricht, Sedan and Boulogne. The machinery for their control must be efficient enough to ensure that aircraft can be despatched in time.

#### *River Crossing and Demolitions.*

64. The skill and speed of the enemy in crossing water obstacles was very apparent as was also the excellence of his equipment for the purpose. On the other hand, the paramount importance of demolitions on such obstacles as a means of imposing even a short delay, was established: during the operations the B.E.F. destroyed over 500 bridges, and there were few failures. From the number of demolitions which it was found necessary to carry out, it is clear that every engineer unit, no matter what its normal role, must receive the necessary training to execute such work.

#### *Signal Communications.*

65. During the operations a very heavy strain was thrown upon the Royal Corps of Signals: not least upon those responsible for the communications of G.H.Q. The problem was two-fold: first to provide the normal communications within the force, secondly to provide the long-distance communications required to enable G.H.Q. to remain in constant touch with French G.Q.G., the War Office and the Royal Air Force. The latter considerations made it necessary to follow the buried cable, and thus dominated the moves of G.H.Q. Communications within the B.E.F. demanded mobility and rapidity of construction combined with the need to deal with a heavy volume of traffic. The frequent moves, and the time lag which occurred when cipher had to be used, resulted in a heavy demand on despatch riders.

#### *Traffic Control.*

66. The vital importance of controlling movement by road was emphasised over and over again during the operations.

The movements of mechanised columns depend for their success on the proper reconnaissance and allotment of roads, the avoidance of traffic blocks and the power to divert the flow of traffic quickly and without interruption whenever an obstacle occurs. The danger of interference by enemy bombing is always present, but it can be minimised by the employment of fighter aircraft, by an adequate layout of anti-aircraft guns, by the provision of facilities for clearing breakdowns and the repair of roads, and by the training of troops in a proper drill when attacked from the air.

The movement of refugees, as has been described above, laid a further burden on the Provost service. Though the greatest efforts were made by all ranks to cope with the task, it was evident that our organisation required considerable expansion. Recommendations for the