Direct Air Support.

The joint army and air forces organisation for direct air support becomes a complicated machinery in major amphibious operations. Special arrangements were necessary to cover the period before the army and air force head-quarters and control staffs were set up on the far shore and the air formations arrived overseas.

For the assault, the problem was complicated by the location of Headquarters Allied Tactical Air Forces at Uxbridge, while the Navy and Army Group Headquarters were at Portsmouth during the assault phase. It thus became necessary to set up the army component of Air Support Control at Uxbridge, together with a special intelligence staff which was charged with supplying the air staff with information concerning the progress of operations. The Anglo-American army staff at Uxbridge was controlled from my main headquarters at Portsmouth, and worked in matters of immediate air support on general directives, which defined the military plan and priorities for the application of the available direct air support. Under the conditions of the initial stage of amphibious operations it was necessary to move the focus of control of army/air operations back to Army Group level, because of the necessary centralisation imposed on the Air Forces and because the normal point of control (Army Headquarters) had no Air Force counterpart with it and no air formations within reach or communication.

Special assault tentacles were allotted to all assaulting brigades and were to provide the initial means for requesting air support, pending the landing of the normal detachments. These tentacles worked to Uxbridge, while on the same network were included Divisional and Corps headquarters ships as well as Army and Army Group headquarters. Army headquarters were to monitor calls for support, but the responsibility for their submission to the Tactical Air Forces rested with the Army Group detachment at Uxbridge.

In order to provide means of immediate response to calls for air assistance during the assault, some squadrons were airborne within wireless range of divisional headquarters ships in anticipation of requests for direct support.

Requests for pre-arranged air support during the assault phase were co-ordinated at main Army Group headquarters, and submitted to the air forces through the Uxbridge staff. The latter also co-ordinated the bomblines and ensured that all concerned were kept informed.

The Build-up.

The general principles upon which the buildup of our forces and material were planned, were, first, the provision of the maximum number of fighting formations on the Continent in the first few days and, secondly, the introduction into the build-up system as quickly as possible of the maximum degree of flexibility; so that changes in priority of troops, administrative, echelons, transport and stores could be made as the situation demanded.

By the end of D Day it was planned that, including airborne forces, the Allies would have eight divisions ashore together with Commandos, Ranger battalions and some fourteen tank regiments. By D + 6 the total forces would rise to some thirteen divisions, exclusive of airborne formations, with five British

armoured brigades and a proportionate number of American tank units. Between twenty-three and twenty-four basic divisions were due in Normandy by D + 20. Comparison with the estimated enemy strength was difficult to make; some types of enemy divisions, were organised on a considerably smaller establishment than our own; some were under conversion from training organisations and were known to be deficient of equipment. Our own build-up, moreover, included a considerable proportion of fighting units classed as corps and army troops and which, therefore, were not apparent in the divisional figures of the build-up table.

Planned build-up tables are inevitably suspect; it was impossible to estimate the delaying effect on the enemy build-up of our air action. In our estimates, the effect of weather on cross-channel movement and beach working

was a major imponderable.

In order to make our build-up flexible, a special inter-Service staff was organised called "Build-up Control" (BUCO). This body was formed, as a result of Mediterranean experience, to organise the loading and despatch of craft and ships from home ports, and was the agency by which changes in priority were effected.

It is of interest to record that in order to fit the assault force into the available craft and shipping, British divisions were limited to 1,450 vehicles in the initial lift, the corresponding figure for armoured brigades being 320. No formation was to be made up in excess of 75 per cent. of its War Establishment in transport until after D + 14. Similar limitations were imposed on the American units.

Planned Development of Operations.

Once the troops were ashore it was necessary for them to "crack about"; the need for sustained energy and drive was paramount, as it was necessary to link our beachheads and penetrate quickly inland before the enemy opposition crystallized. I gave orders that the leading formations should by-pass major enemy centres of resistance in order to "peg-out claims" inland. I emphasised to commanders on all levels that determined leadership would be necessary to withstand the strain of the first few days, to retain the initiative, and to make sure that there would be no setbacks.

In the planning stages of a major operation it is customary to issue for the guidance of subordinate commanders and staffs, an estimate of the progress of operations. Such an estimate normally takes the form of a series of "phase lines "drawn on an operational map to indicate the positions to be reached by leading troops at intervals of a few days. I was not altogether happy about the phase lines given, because imponderable factors in an operation of the magnitude of OVERLORD make such forecasting so very academic. While I had in my mind the necessity to reach the Seine and the Loire by D + 90, the interim estimates of progress could not, I felt, have any degree of reality. The predictions were particularly complicated by two major divergent requirements. On the one hand the general strategic plan was to make the break-out on the western flank pivoting the front on the Caen area, where the bulk of enemy reserves were to be engaged; on the other hand the Air Forces insisted on the importance of capturing quickly the good airfield country south-east of Caen. Though I have