evidence to show that, because the Allied fighters kept the G.A.F. reconnaissance down to a negligible effort, the German High Command was fighting completely in the dark, unaware of the Allied intentions or of the strength and direction of each thrust.

263. In the period D-Day to 30th September, 1944, the reconnaissance units of A.E.A.F. flew 4,808 sorties on photographic and 14,140 sorties on visual reconnaissances, a total of 18,948 sorties.

Close Support Operations

264. In addition to the contribution made to the success of the land battle by attacks on the enemy's communications, the air forces gave direct support to the Allied armies. These operations were laid on in three ways:—

(a) armed reconnaissance(b) pre-arranged support

(c) immediate tactical support.

265. The armed reconnaissances were made by fighter bomber aircraft, which with bombs, R.P. and cannon fire, attacked a variety of targets, particularly movement seen on roads or railways. The pre-arranged support was of two kinds—attacks made according to plans prepared some time in advance and which included heavy and medium bombers; and secondly, the more normal form of attacks laid on as a result of conferences between Army and Air staff in the field, when tactical targets for the ensuing day were decided upon. For these attacks, the Army usually undertook to assist the bombers by marking the target by means of smoke signals. Immediate support was provided in the usual way by strike aircraft held in readiness to attack targets requested direct by Army forward positions, or reported by reconnaissance aircraft.

266. Much of the work of the squadrons engaged on armed reconnaissance I have described in the preceding paragraphs dealing with attacks on communications. In addition to the pre-arranged support by medium and fighter bombers (dealt with later in paragraph 284 et seq.), there were six large scale attacks by heavy bombers during the period D-Day to 30th September, apart from certain other attacks on the enemy garrisons left in the Channel ports.

267. Pre-arranged support using heavy bombers. The use of heavy bombers in close support to ground forces was an important development in air warfare. A word on the situation prior to the employment of heavy bombers in such a role will not, therefore, be out of place.

268. The initial impetus of the Allied assault had secured a bridgehead extending from the Cotentin Peninsula to Caen, but the enemy had been able to concentrate against this relatively short front. He held strong, well sited defence positions in depth. By stealth, ingenuity and taking advantage of frequent periods of bad weather which made air policing of road and rail in the tactical area impossible, he managed to muster just sufficient reinforcements and war-like supplies to maintain his position.

269. Concentrations of artillery had not succeeded in cracking his defences sufficiently to enable a successful breakthrough to be made without, it was considered, a prohibitive cost in both men and material. A stalemate appeared to have arisen.

270. Neither could an air bombardment sufficiently heavy and concentrated to produce a situation ripe for a successful ground attack be provided by medium, light and fighter bombers.

271. I had already submitted to you a study of the situation in which I had made suggestions as to how the air forces could help the land forces to break out of the Normandy bridgehead. After consideration of this study by the various Commands (both land and air) concerned, it was decided to use heavy bombers in the virtually novel role of army co-operation.

272. The detailed plans for these attacks were worked out at an inter-service level, being finally co-ordinated at your headquarters. The co-ordination of the actual operations of the Air Forces involved in the attacks, however, was exercised by me.

273. The first of the large scale attacks, using heavy bombers in close support took place at 0430 hours on 8th July. R.A.F. Bomber Command employed 467 bombers to drop 2,562 tons of bombs on positions North of Caen. The British and Canadian troops, held up to the North of the town for so long by the enemy, followed up the bombing with a frontal attack. By nightfall they had entered the streets of Caen. The bombing had therefore succeeded in its object and had opened a way for a break through by the ground forces.

274. The second, and largest, of these operations (Operation Goodwood) took place on 18th July, when the combined weight of the United States Eighth Air Force, Royal Air Force Bomber Command and the Allied Expeditionary Air Force supported an advance by elements of the Second British Army in the Caen area.

275. This attack was the heaviest and most concentrated air attack in support of ground forces ever attempted. No less than 1,676 heavy bombers and 343 medium and light bombers were committed to the attack and the total tonnage of bombs dropped reached 7,700 U.S. tons.

276. In view of its interest I set out the plan for this large attack in some detail. The plan provided for the destruction of enemy installations and forces to allow the ground troops to advance along the axis Escoville—Cagny. The ground forces prior to the jump-off, were generally along an east/west line through Herouvillette. R.A.F. Bomber Command were employed to destroy the installations and forces in the areas marked A, H and M on the map* facing. Cratering was acceptable in these areas to prevent the possibility of the enemy making flanking attacks over this ground. Heavy bombers of the United States Eighth Air Force were concentrated on the installations and forces in the areas marked I, P and Q. Cratering was acceptable in the first of these areas, but not in the other two, as our own forces were to pass over this ground. The medium and light bombers of the tactical air forces were detailed to neutralise the enemy forces in the areas marked C, D, E, F and G. Pinpoint targets were given in areas, C, F and G, while the whole areas marked D and E were to be swept with an even pattern of fragmentation bombs. The laying-on of this attack, involving more than 2,000 bombers, meant very careful timing.

^{*} Maps not reproduced.