PART II.—THE BATTLE.

122. The Battle may be said to have divided itself broadly into 4 Phases: First, the attack on convoys and Coastal objectives, such as Ports, Coastal Aerodromes and Radio Location Stations. Second, the attack of Inland Fighter Aerodromes. Third, the attack on London. And fourth, the Fighter-Bomber stage, where the target was of importance quite subsidiary to the main object of drawing our Fighters into the air and engaging them in circumstances as disadvantageous to us as possible. These phases indicated only general tendencies; they overlapped and were not mutually exclusive.

123. It has been estimated that the Germans sent over, on an average throughout the Battle, four Fighters to each Bomber or Fighter-Bomber, but any such estimate must be very rough.

124. I must emphasise, throughout, the extreme versatility of the German methods both in the timing and direction of their attacks, and in the tactical formations and methods employed.

125. They enjoyed the great advantage of having a wide front from which attacks could be delivered. First a blow would be delivered from Calais, perhaps against London; then after a carefully-timed interval, when 11 Group Fighters might be expected to be at the end of their petrol endurance, a heavy attack would be made on Southampton and Portland. Other attacks, after being built up to formidable dimensions, would prove to be only feints, and the Bombers would turn away before reaching coast of England, only to return again in half an hour, when the Fighters, sent up to intercept them, were landing.

126. Time-honoured methods of escort were at first employed. A strong Fighter formation would fly a mile or so behind and above the Bombers. When the Germans found that our Fighters could deliver a well-timed attack on the Bombers before the Fighters could intervene, or when our Fighters attacked from ahead or below, each move was met by a counter-move on the part of the Germans, so that, in September, Fighter escorts were flying inside the Bomber formation, others were below, and a series of Fighters stretched upwards to 30,000 feet or more.

127. One Squadron Leader described his impressions of the appearance of one of these raids; he said it was like looking up the escalator at Piccadilly Circus.

128. I must pay a very sincere tribute to the Air Officer Commanding No. 11 Group, Air Vice-Marshal K. R. Park, C.B., M.C., D.F.C., for the way in which he adjusted his tactics and interception methods to meet each new development as it occurred.

129. Tactical control was, as has already been stated, devolved to the Groups; but tactical methods were normally laid down by Command Headquarters. During periods of intense fighting, however, there was no time for consultation, and Air Vice-Marshal Park acted from day to day on his own initiative. We discussed matters as opportunity offered.

130. He has reported on the tactical aspects of the Battle in two very interesting documents, which are, however, too long to reproduce here.

131. A close liaison was kept between Nos. 10 and 11 and 12 Groups. It sometimes happened that, in the heaviest attacks, practically all 11 Group Fighters would be in the air. 11 Group would then ask 12 Group to send a formation from Duxford to patrol over the aerodromes immediately East of London so that these might not be attacked when defenceless.

132. Mutual help was also arranged between Nos. 10 and 11 Groups. When Portsmouth was attacked, for instance, No. 10 would help No. 11 Group, and *vice versa* when the attack was on Portland or some Convoy to the West of the Isle of Wight.

133. The amount of physical damage done to Convoys during the first phase was not excessive. About five ships (I think) were actually sunk by bombing, others were damaged, and Convoys were scattered on occasion. It was, of course, much easier to protect the Convoys if they kept as close as possible to the English Coast, but one Convoy at least was routed so as to pass close to Cherbourg, and suffered accordingly. Later, it was arranged that Convoys should traverse the most dangerous and exposed stretches by night, and Convoys steaming in daylight either had direct protection by Fighter escorts, or else had escorts at "Readiness" prepared to leave the ground directly danger threatened.

134. Three of the Radio Location Stations in the South of England suffered rather severe damage and casualties. No Station was permanently put out of action, and the worst damage was repaired in about a month, though the Station was working at reduced efficiency in about half that time. The operating personnel, and particularly the women, behaved with great courage under threat of attack and actual bombardment.

135. As regards aerodromes, Manston was the worst sufferer at this stage. It, Hawkinge and Lympne were the three advanced grounds on which we relied for filling up tanks when a maximum range was required for operations over France. They were so heavily attacked with bombs and machine guns that they were temporarily abandoned. This is not to say that they could not have been used if the need had been urgent, but, for interception at or about our own coastline, aerodromes and satellites farther inland were quite effective.

136. Heavy damage was done to buildings, but these were mostly non-essential, because aircraft were kept dispersed in the open, and the number of men and women employed was not large in comparison with the number at a Station which was the Headquarters of a Sector.

137. Works personnel, permanent and temporary, and detachments of Royal Engineers were employed in filling up the craters on the aerodromes. Experience at this stage showed that neither the personnel nor the material provided were adequate to effect repairs with the necessary speed, and the strength and mobility of the repair parties was increased. Stocks of "hard-core" rubble had been collected at Fighter aerodromes before the war.

138. It may be convenient here to continue the subject of damage to Fighter Stations other than those attacked in the first Phase.

139. Casualties to personnel were slight, except in cases where a direct hit was made on