

of co-operation between gunners and pilots which had been steadily built up in the past.

81. I came to the conclusion that the only solution was to give guns and fighters freedom each in their own sphere. On the 10th July, therefore, I decided to prohibit fighters from entering the gun-belt, whatever the circumstances, after the 17th July. At a conference held to discuss this change, General Pile pointed out that an obvious corollary to it was to move all the guns inside the belt, so as to have them all in one place and provide both guns and fighters with clearly-defined spheres of operation. The logic of this argument was irrefutable; and I agreed to examine detailed proposals for moving all the guns into the belt except a few which would remain on the coast to act as "markers".

82. The great advantage of the principle of separate spheres of operation for guns and fighters was that it would lessen the chances of misunderstanding by creating a clear-cut situation. It would also ease the task of the gunners by giving them a free hand in their own territory. Not the least important point was that when not in action they would always be free to train, whereas under the existing arrangements when gunfire was restricted and fighters were operating they were condemned by the presence of our aircraft to an enervating inaction. At the same time the change would reduce the field of action open to the fighters. In order that the necessity for making this sacrifice might be clear to pilots, I instructed my Deputy Senior Air Staff Officer, Air Commodore G. H. Ambler, C.B.E., A.F.C., to prepare an explanation which could be circulated to lower formations. At this stage no question of changing the geographical position of the gun-belt had been raised.

*(d) The Re-deployment of the Guns (mid-July).*

83. Nevertheless, there were strong arguments in favour of such a move. Originally we had deployed the guns on the North Downs largely because the "Overlord/Diver" Plan had been drawn up at a time when jamming of our radar by the Germans was a threat which could not be neglected. The desire to reduce this threat or minimise its effects if carried out had done much to dictate this choice of situation. Now, as we have seen, by D-Day successful bombing of German wireless and radar stations had virtually removed the possibility of jamming. This fact and its significance had not become fully apparent until after deployment had begun.\* Consequently we had carried out the deployment as planned, though shortly afterwards, as already related, General Pile had taken advantage of the absence of jamming to move some of the heavy-gun radar sets to better and more exposed positions within the original deployment area.

84. By the middle of July what had been a reasonable hope a month before had become a practical certainty. Clearly, little danger from jamming need be feared. Consequently

there was no need to hide the guns and their radar sets away in folds of the Downs if a better position could be found for them. Was there such a better position, and where was it?

85. These questions were far from simple. The guns could not really be considered in isolation; they were part of a defensive system which also included fighters, searchlights, and balloons. If, nevertheless, the subject was approached from the sole viewpoint of the operational effectiveness of the guns, there was much to be said for moving the gun-belt away from the Downs and putting it on the coast. In this position the gunners would get a better view of their targets; the hampering effect of ground echoes on their radar sets would be reduced to a minimum; and they would be able to use shells fitted with "proximity fuses", which were potentially more effective than normally-fused shells, but could not be used inland because they were dangerous to life and property. Added to this was the important point that if the guns were on the coast the majority of the bombs that they brought down would fall harmlessly into the sea.

86. From a more general aspect there was one weighty argument against moving the guns to the coast. To do so would split the operational area of the fighters into two, and thus, to all appearances, infringe the principle of separate and clear-cut spheres of operation for guns and fighters which I was anxious to establish. Up till then the fighters had been by far the most successful weapon against flying-bombs; out of 1,192 bombs which had been destroyed or brought down up to sunrise on the 13th July, they had accounted for 883. No move which threatened to impair their effectiveness was to be undertaken lightly. Still, to a great extent interception over the sea and interception over the land were already separate problems. Hence in practice the disadvantage of having three spheres of operation for guns and fighters instead of two would not be so great as it looked at first sight.

87. These considerations struck Air Commodore Ambler with great force when he sat down to write the explanation of the new rules for engagement which I had instructed him to prepare. The correctness of the decision to banish fighters from the gun-belt was not in question; nor did he dissent from the proposal to put all the guns in one place. But he felt that to bring this about by moving the guns already on the coast to the North Downs was only going half-way. What was wanted was to put all the guns together in the place where they could function best. In his considered view this meant adopting the opposite course, and sending forward the guns already on the Downs to join those on the coast. The disadvantage of splitting the operational area of the fighters would, he thought, be more than outweighed by the increase in effectiveness of the guns in the latter position.

88. To clarify his mind, Air Commodore Ambler incorporated his arguments in a formal appreciation. Armed with this document, he came to see me on the morning of the 13th July and put his views before me.

89. His arguments convinced me that unless discounted by some faulty technical assumption, the tactical theory behind the case for

\* It is true that by D-Day at the latest we knew that heavy damage had been done to the German transmitters. But until experience had shown that in consequence the Germans were manifestly unable to jam, General Pile and I would not have been justified in departing from the plan on that account.