

151. Towards the end of 1943 a fresh approach to the problem was adopted. In November, responsibility for investigating the nature of the rocket and devising counter-measures was transferred to the Air Ministry. Thereafter, as information from intelligence sources accumulated, a conception of the weapon which was based on reports of what the Germans were doing gradually replaced the earlier conception, which had leaned more towards our own ordnance experts' ideas of a suitable rocket. We shall see that ultimately—although only a week or two before the beginning of the campaign—the intelligence staffs were able to show that the alarms of the previous year had been exaggerated as well as premature, and that the rocket was very much smaller than had been supposed.

152. Meanwhile, by the summer of 1943 the authorities who were then responsible for countermeasures had come to the conclusion that, whatever the dimensions of the missile, radar would probably be able to detect its flight. By the time I took up my appointment in the early winter, five radar stations between Ventnor and Dover had been modified to detect rockets fired from northern France, and operators had been trained to identify the characteristic trace which a rocket was expected to produce. As a further precaution, artillery units in Kent were told to look out for visible signs of ascending rockets and a Survey Regiment of the Royal Artillery was deployed there to take care of audible signs.*

153. These measures had a two-fold object. In the first place, if all went well, the radar, backed up by flash-spotting and sound-ranging troops, would tell us when rockets were fired, and perhaps enable us to give the public a few minutes' warning by firing maroons in London or elsewhere by remote control. Secondly, the information obtained by these means might help us to locate the places from which the rockets were coming, so that we could attack the firing sites and the troops who manned them.

154. To complement these purely defensive countermeasures, an attack, which proved successful, was made by Bomber Command on the experimental station at Peenemünde. Afterwards the Germans transferred part of their activities to Poland. This move somewhat eased the difficult task of our intelligence services in keeping a watch on the rocket trials.

155. During the summer and autumn of 1943 the Germans were observed to be building a number of extraordinary structures in northern France, which we called "large sites".† Agents persistently reported that these sites had something to do with "secret weapons". Their impressive dimensions, taken in conjunction with the exaggerated idea of the rocket which prevailed at the time, led to the notion that the sites were intended for the storage and firing of the missile. Ultimately they proved to have little direct connection with the rocket.

* These activities, which were an extension of those normally conducted in respect of artillery fire, were accordingly known as "flash spotting" and "sound ranging" respectively.

† They were at Watten, Wizernes, Mimoyecques (near Marquise), Siracourt, and Lottinghem in the Pas de Calais, and at Martinvast and Sottevast near Cherbourg. The constructions had few features in common apart from their great size.

156. At this stage Bomber Command and the American Eighth Bomber Command made a number of attacks on one of these "large sites" at Watten. Bomber Command also attacked, as part of their normal programme, several production centres in Germany which were suspected of manufacturing components of the rocket or fuel for it.

(b) *Intelligence and Countermeasures, November, 1943, to August, 1944.*

157. Thus the situation when I assumed control of the air defences in the middle of November, 1943, was that the Germans were known to be experimenting with some kind of long-range rocket.* The intelligence officers on whom the responsibility for establishing the precise nature of this missile would normally have rested had insufficient evidence on which to base any reliable estimate of the date when it might be used against us or the weight of the explosive charge which it would carry. A special investigation had, however, led to much *a priori* speculation about these matters. In consequence the impression had arisen that the Germans were preparing to bombard London with gigantic projectiles each capable of killing hundreds of people and flattening buildings over a wide area. The experimental station at which the weapon was being developed, and where objects some forty feet long which were evidently rockets had been photographed in the summer, had been successfully bombed, as had the first of a series of mysterious constructions in northern France and a number of production centres in Germany. No firm connection between the rocket and the targets in either of these latter classes had, however, been established. Besides taking these offensive countermeasures we had made dispositions which, we hoped, would give us a few minutes' warning of the arrival of individual rockets and also help to tell us where the rockets came from.

158. Soon after I assumed command the discovery of the original flying-bomb launching sites, or "ski sites",† in northern France, taken in conjunction with other evidence, convinced us that the pilotless aircraft or flying bomb was a more imminent threat than the rocket. For the time being, therefore, the latter receded into the background. Early in 1944 I received authority to relax the continuous watch for rockets which had been maintained at certain radar stations since the previous summer. I arranged, however, that the operators who had been trained for this work should remain at the stations and train others, so that the watch could be resumed, if necessary, at short notice. When flying-bomb attacks began next June, I gave orders for the resumption of this watch. Two special radar stations were added to the five whose equipment had been modified.

159. Meanwhile the Allied bomber forces continued to attack the "large sites" as occasion arose and opportunity afforded. At the same time the intelligence staffs at the Air Ministry were gradually piecing together a picture of the enemy's activities at Peenemünde and later also at Blizna, in Poland.

* There were, however, some distinguished disbelievers in the rocket, who continued long after this to argue that the story was a hoax.

† See paragraphs 16-18, above.