caused me some anxiety. Although the defences were doing so well, the air-launched flying bomb was still a dangerous weapon because of its mobility. We could not deploy guns everywhere at once; and the bomb might be used against other targets besides London. At that time the country was being bombarded with rockets as well as flying bombs: a simultaneous increase in the scale of attack by both weapons was a contingency against which I felt bound to provide.

133. On the transfer of the Air Commander-in-Chief's main headquarters to the Continent in the autumn of 1944 I had acquired at least a nominal responsibility for directing and co-ordinating offensive as well as defensive counter-measures against flying bombs and long-range rockets. So many authorities whose interests alternately coincided and conflicted were concerned in this matter that my responsibilities were inevitably somewhat indeterminate. Moreover, I was in an even less favourable position than the Air Commander-in-Chief had been to discharge such a responsibility. Like him, I could not help knowing that our striking forces had many tasks to perform besides that of attacking "crossbow" targets. Unlike him, I could not call at my discretion on the tactical, let alone the strategic, air forces for this work. The area from which rockets were being fired against London was within fighter range, and I was able to send fighters and later fighter-bombers to intervene. But the bases of the flying-bomb air-launching unit in north-west Germany were beyond the reach of all my aircraft except those used for long-range "Intruder" work.

134. Thus, so far as offensive counter-measures to the flying bomb were concerned the only thing I could do in practice was to make representations. My staff kept a close watch on the activities of the air-launching unit, and as soon as it was plainly seen to be expanding I urged that its bases be attacked. That the response was not more active was perhaps an inevitable consequence of the multiplicity of calls upon the strategic and tactical air forces, and of the very success which the defences had achieved against the flying bomb up to that time. Even so, a number of attacks on the bases were made by our own Bomber Command and the American Eighth Bomber Command.

135. As a further precaution against a possible extension of the flying bomb campaign General Pile and I took steps to counter any attempt that the Germans might make to turn the northern flank of the defences. A scheme was worked out whereby 59½ batteries of guns could be rapidly deployed between Skegness and Whitby if an attack should develop in that area.

136. This eventuality was realised, without any specific warning on Christmas Eve, 1944. Early on that day about 50 He. 111s—almost the entire operational strength of the air-launching unit—launched bombs in the direction of Manchester from a position off the coast between Skegness and Bridlington. Thirty bombs came within range of the reporting system, and all thirty crossed the coast. Only one of them reached Manchester, but six came down within ten miles of the centre of the city and eleven within fifteen miles. Thirty-seven people were killed and 67 seriously injured.

137. This was one of the few occasions on which the Germans showed resource in exploiting the capacity of the air-launched flying bomb to outflank the defences. Happily for us they were seldom so enterprising; for however carefully our plans were laid, we could not deploy the defences on every part of the East Coast at once, and if more such attacks from novel directions had been tried, they would inevitably have achieved at least a fleeting success, as on this occasion.

138. Immediately after this attack I ordered that deployment north of the Wash should begin. Shortly afterwards I secured the approval of the Chiefs of Staff to a more comprehensive scheme for the defence of the coast as far north as Flamborough Head. I also arranged that plans should be worked out for the defence of the areas Tees-Tyne and Forth-Clyde. But here again, as in the case of Manchester, I could not afford to order deployment in these areas, at the expense of others, merely on the ground that the enemy might attack them at some future date. Consequently, if he had followed up his attack on Manchester with a series of carefully-spaced attacks at other points north and south of the Wash on succeeding nights, he would undoubtedly have scored some success and set us something of a problem.

139. However, either this did not occur to the Germans, or such an enterprise was beyond the capabilities of an organisation whose spirit was shaken and which was running short of fuel. No more bombs came from north of the Wash; and three weeks later the air-launching unit ceased operations. The last air-launched flying-bomb to reach this country came down at Hornsey at 0213 hours on the 14th January, 1945.

(h) *Attacks from Ramps in Holland* (*3rd to 29th March*, 1945).

140. This was not the last of the flying bomb. In the meantime the Germans had been working on the problem of increasing the range of the weapon. Fragments of some of the bombs fired from Germany into Belgium in February showed that they were adopting methods of construction which might solve this problem and enable them to attack London from ramps in south-west Holland. Reconnaissance photographs of that area were taken, and showed that two launching sites were being constructed, one at Ypenburg, near the Hague, the other at Vlaardingen, six miles west of Rotterdam. In addition the German built a third site near the Delftsche Canal; but of this we were not aware till later.

141. To meet this new threat General Pile and I decided to reinforce the gun defences between the Isle of Sheppey and Orfordness by transferring 96 heavy guns from the northerly part of the "strip" and adding a number of batteries then under training to the remaining defences in the latter area. Instructions for the move to begin were given on the 27th February and by the 6th March nine batteries out of twelve had taken up their new positions.