

in May, 1941, when the greater part of the German air forces were transferred to the Russian front. After May there were a few major raids (e.g., on Birmingham on 4-5th June, Southampton on 21-22nd June, and Hull on 17-18th July). The scale of attack, however, gradually decreased, and for the rest of the year, apart from occasional attacks on other targets, the remaining German forces in the West were thrown mainly into the Battle of the Atlantic by attacks on ports and shipping and by heavy minelaying. The position in the Atlantic was still most precarious and the attacks made were designed to increase our shipping difficulties.

33. Attacks on convoys continued, and activity was most intense on the East Coast, Hull being frequently subjected to attacks by aircraft which were either on navigational and operational training or which failed to locate the shipping they had come to attack. The Thames Estuary, St. George's Channel and the Mersey were also continually mined.

34. The fact that much of this activity never came overland and that the defences were not therefore able to do much to hinder it caused us much concern and I therefore proposed that anti-aircraft forts might be situated out in the various estuaries to hamper these attacks.

35. Mr. G. A. Maunsell, a well-known consulting engineer, produced a design for a spider-like tower which, in its fully developed form, would carry 4 3.7-inch guns, 2 40-mm. Bofors, 1 searchlight and a radar set. Work began on these towers at once but the first was not ready until October, 1942, when much of the minelaying effort had subsided.

Although it had originally been intended to place them in a number of different estuaries, tidal and other difficulties finally caused the project to be limited to the Thames and the Mersey. In the former, in particular, the Maunsell Forts covered an approach which had always been a serious gap in the defence system and they played an important part in the defence of London when heavier raiding began again later.

36. Overland night raiding began again suddenly in April, 1942, and was apparently stimulated largely by a desire for revenge for Bomber Command's attacks on German cities. The main stream of German raiders kept clear of Gun Defended Areas and in these so-called "Baedeker" raids attacked open towns and cathedral cities; where any of the raiders strayed into range of the gun and rocket defences of a Gun Defended Area, the defences went into action with success. Exeter was particularly a target for the enemy in the first phase of these attacks.

Within 72 hours the defence of 28 towns from Penzance to York which had hitherto been undefended was put in hand. A total of 252 guns were withdrawn chiefly from Gun Defended Areas in the North and West. Success was almost immediate and in the last two raids of the April full moon period the defences destroyed 4 enemy aircraft and probably destroyed or damaged 4 more. With the May full moon raiding began again and Canterbury was subjected to severe attacks, but this form of attack also petered out in the following months.

37. A less spectacular move, of 120 Heavy guns, was made at the same time as the "Baedeker" deployment to augment the defences of ten South Coast anchorages in which was assembling a fleet for the invasion of North Africa in the late Autumn. I was still much concerned at this time with the shortage of equipment, for almost all new production was being diverted to the Far East and the defences of the west coast ports were dangerously weak. As large American forces were at the time disembarking there, an attack on that area might have had serious consequences. Moreover, there was a distinct possibility that we would have to yield a large number of guns to the field forces under a plan, which did not actually mature, for the invasion of North Europe in 1943.

38. Meanwhile on 27th March, 1942, a day battle had begun. This was in answer to our own fighter sweeps across the channel and consisted of tip-and-run low level raids on coastal towns by fast fighter-bombers. There appeared to be no military significance in these attacks nor were they on a scale to do much harm.

It would appear that one of the most striking lessons from these raids was the very great value of A.A. guns and balloons in minimising civilian casualties and damage, quite apart from the infliction of casualties on the attacking aircraft. Objectives with no balloons and few guns (e.g., Exeter) suffered badly in these raids, whereas those with adequate static defences came off comparatively lightly.

39. The weapon with which to counter the low-flying raider was the Light gun but the supply of these was seriously limited. Not only had I yielded up some for the Far East but new production was also fully absorbed by that theatre of war. When 189 guns were needed to help defend the anchorages on the south coast I was able only to provide 76, and many of those were withdrawn from the defence of vital industrial plants. Further, no less than 57 different coastal towns between St. Ives and Aldeburgh had been attacked by September, 1942, and the problem of defending all of these and also others which might be subject to attack would have required a number of guns far in excess of those available. As it was, in June, 1942, when guns from production began to come forward once more, we allotted 104 of these to what were termed the Fringe Target towns.

40. Towards the end of September, 1942, it was clear that the attacks, however unimportant from a military point of view, must be stopped and it was at that time that the equipment situation had eased sufficiently to allow steps to be taken. Production had improved and Anti-Aircraft Command was receiving a greater share of it; inland industrial targets had had their defences replaced and these could be denuded once again, and the Admiralty were steadily returning the guns lent them a year previously. My intention was now to join the battle with all the forces I could muster with a view to inflicting such losses on the enemy that he would have to give up this form of attack. No half-measures could be successful. By the end of September, 1942, 267 40-mm. Bofors guns had been deployed on the coast, another 110 could be withdrawn from factories and I was informed that I could expect 142 from production in October, 1942.