

there was a stationary vertical beam. Round this beam the fighter circled until an enemy bomber entered the "box." Other searchlights were disposed at intervals of $3\frac{1}{2}$ miles near the centre of the box and wider intervals near its borders. As soon as the bomber entered the box the beams of the outlying searchlights (belonging to the "Indicator Zone") began to converge on it, thus indicating its approach to the fighter pilot, who thereupon set a course which would put him in a position to intercept it in the central "Killer Zone."

67. This system was not working with full efficiency by the end of 1941, but ultimately proved very effective and remained substantially unchanged until the end of the war.

(j) *Operation "Intruder"*.

68. The circumstances in which No. 23 Squadron began to fly "Intruder" patrols on 21st December, 1940, have been described above.

69. It was not until the early spring that the squadron had many opportunities of successful action. With better weather and increased enemy activity it was then very successful, claiming the destruction of three enemy aircraft in March, 1941, two in April, and eleven in May. Thereafter, opportunities were again limited. Nevertheless, it was decided that a second "Intruder" Squadron should be added to the Command, and No. 418 (R.C.A.F.) Squadron, equipped with Bostons, began to form in the autumn.

70. No. 23 Squadron, originally equipped with Blenheims, re-armed with Havocs in March and April, 1941, and received a few Bostons later in the year.

71. Between 21st December, 1940, and 31st December, 1941, operation "Intruder" was carried out on 145 nights and 573 sorties were flown, of which 505 were by Blenheims, Havocs and Bostons of No. 23 Squadron, and 68 by Hurricanes and Defiants of Nos. 1, 3, 87, 141, 151, 242, 264, 306 and 601 Squadrons, which were employed on this work occasionally on moonlit nights. The destruction of 21 enemy aircraft was claimed, 290 separate bombing attacks on airfields were reported, and ten of our aircraft were lost.

72. Throughout this period the executive control of this operation was something of a problem. To secure the best results, it was essential that the "Intruder" aircraft should arrive at active enemy bases just as returning bombers reached them. This could only be achieved by a close study of information from intelligence and raid-reporting sources on the part of those responsible for ordering the despatch of the "Intruder" aircraft. In accordance with the normal practice in my Command, control of the operation was delegated at the outset to No. 11 Group, from whose stations No. 23 Squadron was operating. The executive orders were issued by whichever of the Controllers at No. 11 Group's Headquarters happened to be on duty at the time, in consultation with the Officer Commanding No. 23 Squadron. It was a matter for consideration whether these Duty Controllers, with their numerous responsibilities, could be expected to give that constant specialized attention to the changing data provided by the

Intelligence and Raid-Reporting services which was essential for success. The suggestion that control of the operation should be exercised directly from my Headquarters was made more than once and from more than one quarter in 1941. I did not think it desirable to make any change at this stage, but later, when the necessity of co-ordinating the work of the "Intruder" Squadrons closely with the operations of Bomber Command made a more centralised control almost essential, this solution was adopted.

Day Operations

(a) *Defensive*

(i) *Forces Available.*

73. At the end of the Battle of Britain, that is to say at the beginning of November, 1940, the strength of the day fighter force amounted to $55\frac{1}{2}$ squadrons, including three and a half squadrons in the process of formation. On paper this was a substantially larger force than the Command had possessed at the beginning of the battle; but really the force available was weaker. Many of our best pilots had been killed, and quantitatively the casualties had proved greater than the training organisation could make good, so that despite such expedients as the transfer of pilots from other Commands, the squadrons were short of their proper establishment of pilots.

74. The long-term measures taken within the Command to ameliorate this situation are described in Part II. In the meantime the position was such as to give some ground for anxiety. Of the 52 operational day squadrons in the Command at the beginning of November, only 26 were, in the most strict sense, first-line squadrons. Another two squadrons were being kept up to operational strength so that they could act as reliefs in an emergency. The remainder, apart from a half-squadron employed as "spotters," had only a few operational pilots apiece and were suitable only for employment in quiet sectors.

75. The practice of stripping some squadrons of most of their experienced pilots in order to keep others up to strength is clearly indefensible except in a grave emergency, if only because of the invidious distinctions thus created. It had been adopted by my predecessor in the late Summer only because, in the circumstances of that time, it seemed the sole alternative to "telescoping" or disbanding squadrons. As soon as conditions permitted, I abandoned this system, with its categorisation of squadrons as class "A," "B" or "C," and all squadrons in turn were given their chance in the more active Sectors.

76. Although the Battle of Britain is now regarded as having ended on 31st October, 1940, no sharp break was noticeable at the time. Not until some weeks later was it evident that, for the time being, the Germans had abandoned the idea of defeating the Command by a series of mass attacks in daylight. Even then a resumption of these mass attacks in the following Spring or Summer was regarded as inevitable; and in December I asked for a force of 80 day fighter squadrons to meet this situation.

77. The Air Ministry were unable to accept the dislocation of their plan for the expansion of other Commands which the attainment of