

program for defeating Germany.

The Island Air Base The location of England provided the key. England lay within flying distance of enemy country. It had lived through one invasion threat during the Battle of Britain and could probably resist others. It was planned to convert it into a vast air base, and to launch streams of bombers from it against German industry until they had so weakened the enemy's ability to equip and maintain her armies that a direct ground invasion would have some chance of success. It sounds easy, but this decision was reached at a time when the German failure to bomb England out of the war had convinced many military minds that bombing could never be conclusive. The British themselves did not believe that daylight bombing could be carried out without prohibitive losses, and as a result the planes of the RAF Bomber Command were modified to fly at night. Inasmuch as it is very difficult to pick up pinpoint targets at night with conventional visual sighting equipment, they evolved a doctrine calling for saturation attacks against large cities, which can be located in darkness by various methods. By attacking such areas they hoped, through the laws of chance, to damage or destroy many of the industrial installations which are crowded into all large cities. Further, they hoped so to interfere with the normal life of the German workman that his value as a producer of war equipment would go way down. This was expected to occur when houses and local transportation systems were destroyed, when cooking and food distribution ran into snags, when lighting, water and sewage facilities were crippled, when sleep was interfered with night after night, and, finally, when part of the labor force was itself killed by bombing. This is not the most economical way to expend a given quantity of bombs, but under the limitations mentioned above, it was the only way the British could

hit back at their enemies. It was not long before they had become wondrously efficient at blotting out large targets. To supplement this work, the Americans undertook to fly against Germany by day. Their bombers would be heavily armed and armored to defend themselves against the Luftwaffe, their range would be greater, and as a result they would not be able to carry as heavy loads as the planes of the RAF. But the Americans were confident that they could compensate for this by aiming every bomb at a selected industrial pinpoint. The real virtue of the American method was that if the proper targets were chosen it might be possible to cripple German industrial and military power through the destruction of only one or two key industries (such as oil or transportation) without which the military economy as a whole would be unable to operate. It was seriously doubted in many quarters that the Americans could fulfill their half of the commitment.

Nevertheless, the Combined Bomber Offensive was laid on. In concept it was something more than mere day and night operations. Each air force was expected to do something that the other could not do as well. American heavies would destroy the major industries on the fringes of a city, and the RAF would destroy the city itself, together with a substantial number of smaller factories situated in it. As

the two bomber forces grew in size, this is exactly what happened. The combined effort resulted in the virtual elimination of place after place as producing centers. At Magdeburg, for example, the 8th went after the top-priority synthetic gasoline plant at Rothensee, the Junkers aircraft engine plant, the Krupp armament works at Buckau, and an ordnance depot at Friedrichstadt where the weapons produced at Buckau were collected for distribution to the 6th Panzer Army and other combat units on both the Western and Eastern fronts. The RAF followed this up by destruction of the urban core. This final phase not only destroyed the houses of the factory workmen and snarled up transport, but, more important still, leveled a very large part of the remaining factories in this highly developed industrial center. In an armament city of this kind, most of the industries are interdependent, one upon the other, using common sources of power, raw materials and transport, with many smaller plants making parts for final assembly of weapons in the larger ones. It takes a joint pinpoint-saturation technique to knock out such a place.

It is interesting to observe that these two great air forces, which started out with such entirely different ideas as to how they should operate, became more and more alike as each began to recognize its own shortcomings and the virtues of the other's methods. By the use

of flares dropped by a master bombardier, special sighting equipment, and individual bomb release, the RAF gradually developed a bombing technique which no longer could correctly be called area bombing. Many rail centers, canals, and the shattered hearts of city after city bear eloquent testimony to this. In fact, after the threat of the Luftwaffe had been eliminated, permitting the lightly armed Lancasters and Halifaxes to operate



in safety during daylight, the RAF flew some enormously damaging pinpoint missions against the German synthetic oil plants. Its practice of having each plane fly separately and bomb separately multiplied the problems of enemy flak gunners. As a result, losses from flak were very low, considering the rugged defenses around oil targets. On the other hand, in the days when the Luftwaffe was still strong, RAF Bomber Command losses to enemy aircraft ran higher than the AAF, even though they were flying at night expressly for the purpose of avoiding such losses. This merely proves the old rule that in all wars weapons automatically breed their antidotes, in this case the night fighter. Germany's night fighter organization was at one time so potent that there was grave concern in the RAF as to whether or not night operations could continue. They had become more dangerous than the daylight attacks which, at the start of the war, were regarded as suicidal.

The Campaign Opens But, to get back to the story, the island air base mentioned above had geographical disadvantages as well as advantages. Every bomb we proposed to use there, every soldier, every drop of gas, every replacement part, everything but the bombers themselves, which could be flown had to be shipped over 3,000 miles