GRAYPEA

THE ELECTRONIC COUNTERMEASURES MOSQUITOES OF THE USAAF'S 25TH BG

By late 1944 the USAAF's UK-based Eighth Air Force — tasked with taking the Allied bombing campaign to the enemy by day — was embroiled in a rapidly evolving electronic arms race, from which arose the need for a fast, agile aircraft capable of creating a screen of radar-confusing "chaff". Enter the 25th Bomb Group's Mosquitoes, relates BILL CAHILL

MAIN PICTURE *Hatfield-built de Havilland Mosquito PR.XVI NS748 of the USAAF's 25th Bomb Group (BG) has its starboard Merlin engine run up at RAF Kimbolton in Cambridgeshire, as part of a check flight from its base at RAF Watton in Norfolk.*
NATIONAL MUSEUM OF THE MIGHTY EIGHTH AIR FORCE

TOP *Lt Warren Borges flew weather reconnaissance missions with the 25th BG's 653rd BS and two "Graypea" missions with the 654th BS in late March 1945.*
EIGHTH AIR FORCE ARCHIVE, PENN STATE UNIVERSITY

THE HARDEST PART of the mission was over. A rendezvous with trigger-happy bombers had engendered no friendly fire and the chaff dispersal had started on time and on target. But, just as the mission seemed to be wrapping up, the radio crackled and Lt Roger Gilbert received warning of Luftwaffe jets in the area. His navigator, Lt Raymond Spoerl, immediately unbuckled his lap-belt to turn around and poked his head into the observation bubble in the canopy to scan for the new threat. Almost immediately, Spoerl shouted into the intercom that a Messerschmitt Me 262 was converging on them from six o'clock high. Seconds later he warned Gilbert that the jet was firing and directed him to break left. Gilbert racked Mosquito PR.XVI RF992 into a hard bank; midway through the turn 30mm shells shattered the Perspex canopy and thudded into the instrument panel and radio. Another burst from the enemy jet tore off 3ft (1m) of the Mosquito's port outer wing. Perversely, the damaged wing enabled Gilbert to turn even more tightly and the German jet flashed by to starboard. After a drop of 6,000ft (2,000m), Gilbert recovered and limped back to his home base at RAF Watton in Norfolk. During the return, he began to wish his job was anything other than piloting an unarmed fighter ten miles out in front of a stream of USAAF bombers.

THE THREAT

The US Eighth Air Force confronted an inherently different German integrated air-defence system from that faced by the RAF's Bomber Command. The daytime operating environment of the Eighth's bombers of VIII Bomber Command allowed their adversaries — either fighters or anti-aircraft (AA) artillery — to acquire their targets visually when weather was good. By the middle of the war, the Luftwaffe had a centralised control system in place for its day fighter aircraft. A national-level air picture was built based on a myriad of inputs, ranging from passive detection systems that tracked USAAF radio traffic to a large assortment of radars. Luftwaffe day fighters were scrambled by their Fighter Division *Zentral Gefechtsstände* (Central Command Post) and given directions to the incoming mass of USAAF bombers. Once in the vicinity of the latter, it was relatively easy for the fighters to acquire the bomber formations visually and start their attacks.

By 1944 Luftwaffe AA batteries were organised into *Gross-Batterie* of up to three Flak batteries of four guns all firing on one designated target. *Kommando-geräte* optical trackers enabled the gun batteries to track and engage high-flying bombers on clear days — but clear days were a rarity over central Europe for many months of the year. For less-than-clear weather conditions *Würzburg* AA fire-control radars provided altitude and pointing data to the guns, allowing accurate engagement through clouds.