



In an effort to reduce air crew losses, this B-24-H of the 309th Bomb Group, 8th Air Force received what appears to be a depot modification to the pilots center windshield panel and the sliding window by the addition of bullet proof glass. A slab of armour plate has been bolted on just below the pilots sliding window. Tony North photo.

Europe with only one-third falling on Germany (11.7 percent) and on Austria (24 percent). The largest percent of Fifteenth Air Force bombs fell on Italy (29.4 percent). (25)

Radar Bombing and Accuracy

Another difference between the two air forces is that the Eighth used radar-bombing devices more extensively than did the Fifteenth. Although the AAF bombing doctrine was based on daylight, visual, precision bombing, a host of factors forced the American airmen to adopt non visual bombing techniques. In fact, the Eighth Air Force aimed half of the bombs it dropped with non visual means, while the Fifteenth used the device to deliver just under one-fifth of its total bomb tonnage. (26) The Eighth first employed the device in September 1943, followed in April 1944 by the Fifteenth. During the last eighteen months of the war, the Eighth used non visual aiming techniques more often than visual techniques in twelve months, while the Fifteenth used non visual methods more often in but three months. (27)

The significance of this is the marked decline in accuracy due to the use of non visual bombing. The two air forces achieved about the same accuracy in daylight, visual conditions, claiming that 35 to 40 percent of bombs dropped landed within one thousand feet of the aiming point. (28) (Yes, only 40 percent within one thousand feet) I would stress that accuracy figures, similar to the claims of enemy aircraft destroyed, are at best optimistic, most likely overstated, and

at worst unrealistic. But accuracy, with non visual methods, was measured in miles. An Eighth Air Force study in late 1944 concluded that when using visual techniques the unit was able to put half of its bombs within one-third of a mile of targets, but when using non visual techniques in 10/10s overcast, only half landed within 3.9 miles. (29) As the Fifteenth Air Force employed non visual aiming less often than did the Eighth, the Fifteenth probably delivered its bombs more accurately.

Electronic Countermeasures

Another advantage the Eighth had over the Fifteenth was greater use of electronic countermeasures (ECM). The simplest device, "chaff" (which the British called "window"), consisted of strips of metal foil, similar to Christmas tree "icing," that reflected radar signals and gave operators false readings. This system was first used by the RAF in July 1943 and by the Eighth in December 1943. The Fifteenth did not employ the device until March 1944. Chaff lessened aircraft losses by close to one-third. Another ECM device that jammed radar signals was "carpet," an electronic jammer. It was first used by the Eighth Air Force in October 1943, but it was not until August 1944 that the first unit in the Fifteenth received it. As had chaff, carpet lessened aircraft losses by one-third in 1943. (30)

Comparison in Battle

As already noted, for the most part the Eighth and Fifteenth hit different targets. During one important period (20-25 February 1944), however, the two air forces coordinated efforts for the famous BIG WEEK campaign. Although weather hampered the Anglo-American airmen's efforts, they were able to bombard German fighter factories for five days, including some of the same targets. Both flew four missions but the Eighth logged four times the number of bomber sorties (2,311:618) and was escorted by ten times the number of fighter sorties (4,000:413). This to some degree explains the Fifteenth's much higher loss rate of 14.6 percent of those attacking. The comparable Eighth Air Force percentage was "only" 4.8. (31)

One joint operation is too small an example upon which to base any firm conclusions. Yet total operations also indicate higher losses in the Fifteenth. Overall, they lost a greater percentage of bombers than did the Eighth, 1.85 vs. 1.32 percent of effective sorties, as well as a greater percentage of fighters, 1.08 vs. 0.87 percent loss of sorties. (32)

Conclusions

Although the Eighth and Fifteenth resemble each other more than they do the contemporary RAF strategic bombing of Germany or the B-29 bombing of Japan, they also differ in a number of ways. I believe the most important of these differences are: [1] aircraft employed; [2] amount of visually aimed bombs; [3] amount of ECM; and [4] the location of targets. The Fifteenth did extend the reach of the Allied bombing effort, but did so at a cost. The question as to whether these bombers could have been better employed elsewhere remains unanswered, if not unanswerable. As one airmen who flew with both air forces wrote: "on the surface [these differences] may seem important, but in the long run [they] didn't matter. A bunch of young kids went over there to do a job. No matter what the differences were we got the job done." (33)

Finally, this comparative approach reveals four important aspects of the American bombing campaign against Germany heretofore neglected, ignored, or unknown. [1] The combat record clearly indicates that the B-24 and P-38 were inferior to other American combat aircraft. [2] The AAF sent more of its best equipment to the Eighth Air Force (B-17s and P-51s, as well as ECM