equipment), sooner, than to the Fifteenth, which ended up with a greater proportion of less-capable aircraft (B-24s and P-38s) and less ECM. In this way the AAF clearly differentiated between its bombing forces. [3] Despite prewar AAF doctrine, wartime publicity, and postwar boasts, 40 percent of the bombs dropped by the AAF in the strategic air war were aimed by non visual means. As non visual accuracy was measured in miles, and visual bombing accuracy at best averaged one-quarter of a mile, U.S. strategic bombing resulted more in area, than in precision, bombing. [4] Only a portion of the bomb load, perhaps 54 percent, fell on, or at least was aimed at, strategic targets. Combining these two aspects, the amount of visual bombing and the amount of bombs aimed at strategic targets, the overall portion of the bombs dropped effectively on strategic targets was certainly less than 50 percent, perhaps half that. In conclusion, I believe that a comparative approach reveals much about the bombing and points out both what we do and do not know. It is for others to press forward from here.

1. An earlier version of this paper was presented at the Missouri Valley History Conference, Omaha, Nebraska, in March 1991.


5. The average flying time of crew members completing their mission quota in the 301st Bomb Group (15AF) in early 1944 was about seven hours per mission, those finishing late in 1944 was about eight hours. "Who Fears?": The 301st in War and Peace," is scheduled for publication in the summer of 1991. One airmen who flew with both air forces averaged six hours (on 25 missions) with the Eighth between April 1943 and February 1944 and eight hours (on 33 missions) with the Fifteenth between July and December 1944. Lawrence Pierson to author, June 1990.

6. The B-24 was less weather worthy, more affected by weather, than the B-17, as it could not fly as high and was more susceptible to icing. While Eighth Air Force B-17s suffered 9.2 percent weather aborts during the period January 1943 through April 1945, its B-24s suffered 12.8 percent. The figures for the Fifteenth between November 1943 and April 1945 were 11.6 percent and 13.5 percent. USBS, Weather Factors in Combat Bombardment Operations in the European Theater, 1945, 10, 20, 21, 23, appendixes IXc and Xe.


9. Diary, John Comer, 46; Fitzpatrick interview; interview, Vance Heavlin, 5 April 1990; Lyman Whitney to author, 1 April 1990; Mellor to author; Biggs to author.


13. The B-17 had the lowest static side accident rate of all U.S. bombers and fighters. Army Air Forces Statistical Digest, World War 11, 1945, 308, 310. In England, the B-17 also had a lower accident rate than the B-24. 8AF SS, 57. B-24 accidents were also more serious. Headquarters First Central Medical Establishment, Aircraft Accidents, 8 September 1944.

14. In addition, the B-17 performed better under adverse runway conditions and required less time to rearm and perform average maintenance. In the Fifteenth, the Forts had a higher in commission rate and lower abort rate than the Libs. "Combat Comparative Analysis"; 15AF SS, 12, 14, 23; 15AF Statistical Summary, March 1945, 32.

15. Perhaps 11 percent of the Eighth Air Force's bombers lost went into the sea; the Fifteenth's sea losses may have been somewhat less. 8AF SS, 54, 65. My research of one Fifteenth Air Force B-17 unit (301BG) revealed a 9 percent ditching rate. In a survey of six months of bomber ditching in both the ETO and MTO, 22 percent of the B-17s broke up, compared with 62 percent of the B-24s; 6 percent of the B-17 crews drowned, while 24 percent of the B-24 crews drowned. Overall, 38 percent of Eighth Air Force B-17 crew members who ditched survived, compared with 27 percent of B-24 crew members. 8AF SS, 54; "Ditching of the B-24 and B-17," 1.

16. In the Fifteenth, the B-17's advantage was quite clear as 1.49 B-17s were lost per one hundred effective sorties compared with 2.02 B-24s on a like basis. 15AF SS, 12; "Combat Comparative Analysis"; Alan Palmer, "Directional Density of Flak Fragments and Burst Patterns at High Altitudes," chap. in James Beyer, ed., *Wound Ballistics* (Washington: Office of the Surgeon General, 1962), 639. Also see A. H. Peterson, R. E. Tuck, and D. P. Wilkinson, "Aircraft Vulnerability in World War 11," Rand memorandum RM-402, rev. July 1950, fig. 11.