



Selling Schweinfurt: Targeting, Assessment, and Marketing in the Air Campaign against German Industry by Brian D. Vlaun.

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It is unusual for a serving airman to write an academic monograph on air force history. In *Selling Schweinfurt*, long-time pilot and staff officer Col. Brian Vlaun (US Air Force) brings his experience very effectively to bear on an operation conducted by US Army Air Force (USAAF) intelligence in World War II. It involved twenty-six attacks against the German ball-bearing industry in Schweinfurt. But, at the same time, the book is a meticulous study of military intelligence agencies in operation during a major war.

Vlaun's starting point for his study of wartime A-2 (air intelligence) is the flawed assessment of the value of bombing raids on the German ball-bearing industry. From the beginning of major 8th Air Force attacks from the United Kingdom in early 1943 through the war's end, the ball-bearing industry was a high priority. But, Vlaun makes clear, there was no way accurately to evaluate the effects of the bombing. The very idea that ball-bearings were a critical bottleneck did not come from the air force. An American representative of Swedish SKF¹ (ball bearing factory) suggested the target to a Committee of Operations Analysts (COA) who made it a recommendation for optimum target systems.

The author uses this example to highlight the problems associated with the emerging air intelligence sector set up by Henry H. "Hap" Arnold. There was little air intelligence in place in 1940, but over the next two years civilian experts—economists, businessmen, lawyers, academics—were drafted to fill the gap. The COA was the senior part of the organization because Arnold set it up and backed it. It was augmented by the air force's A-2 organization and, from 1943, the Enemy Objectives Unit (EOU) in London, staffed by prominent economists. Vlaun concentrates on the competition between the different branches and its potentially damaging effects on intelligence briefing and assessment. This, the most original and important element of the book, is based on an impressive range of official and private archival materials.

The COA exerted the most influence on target selection with its narrow conception of what bombing could achieve, based on unrealistic estimates of the scale and accuracy of 8th Air Force operations. Conventional wisdom held that US bombers could defend themselves in daylight operations and achieve a high level of hits in a notional "1,000 feet" circle. This estimation was espoused by the force commander, Gen. Ira Eaker, but grew out of prewar assessments made, notably, at the Air Corps Tactical School. The idea that certain apparently vulnerable industrial targets could be destroyed using existing technology was central to US air force thinking. The EOU thought otherwise: "there is neither precedent nor established methodology for making an evaluation of the effects of bomb damage on complex economic structures" (52). But, Vlaun shows, it was hard to factor that scepticism into target planning. The EOU objected that their economists believed the Germans would be able to overcome temporary shortages, as indeed they

1. Svenska Kullagerfabriken.

did. They highlighted the lack of “depth” in choosing targets like ball-bearings factories rather than objectives that might undermine the entire war effort. This judgment lies at the heart of Vlaun’s critique of air intelligence performance.

Air intelligence shared problems faced by other intelligence operations. Arnold hoped that sound intelligence would yield an ideal target to prove the worth of an independent air force, and perhaps to end the war through strategic bombing. This spurred a hunt for a target that would give Arnold what he wanted and prompted overly optimistic estimations of intelligence analysts’ findings, which were then fed to Washington. Infighting between the various branches, together with personality conflicts and institutional jealousies, made matters worse. Vlaun’s careful reconstruction of this bureaucratic and intellectual wrangling is, as he clearly intends, a warning to current analysts of the potentials of modern air weapons.

One wishes Vlaun had, for the sake of comparison, made more of the British intelligence experience. Air Marshal Arthur “Bomber” Harris, commander in chief of Bomber Command from February 1942, also found it hard to calculate what damage had actually been inflicted by his forces. He resorted to a brutal and standard measure—the number of acres of given cities destroyed by (mostly) incendiary attacks. But there remained the same difficulty faced by US target selectors: how to gauge what x acres of damage meant to the industrial or military performance of the enemy or to his morale. To their credit, the COA and US air intelligence personnel rejected morale as a strategically useful target.

Vlaun might also have explored the sudden change in 8th Air Force capabilities in 1944, when Generals Carl Spaatz, James Doolittle, and William Kepner ran the air war efforts over Germany. Historians (and German wartime contemporaries) agree that the decision to prioritize destroying the German Air Force, the aircraft industry, oil and chemical facilities, and transport networks made all the difference. Some of this reflected the EOU’s (eventual) recognition that systematic targeting was better than hitting bottleneck industries, given the Germans’ talent for overcoming temporary losses. This shift was critical to the achievements of the USAAF as well. Of course, it was easier to evaluate the effect on the enemy war effort *after* the defeat of the German Air Force and destruction of the Reich’s transport and oil facilities. Unfortunately, the intelligence regarding the latter was not passed on to commanders in the Pacific theater, where it might have brought rapid results.

These issues aside, Brian Vlaun provides an excellent account of the travails of building an effective intelligence establishment almost from scratch. It is easy to suggest in hindsight what ought to have been done, but Vlaun wisely stresses what actually occurred. Moreover, *Selling Schweinfurt* has a current resonance. Air force practitioners as well as scholars and students of airpower should read it with care, for “the challenge of understanding airpower and the air intelligence enterprise continues to be complicated by many dynamic factors.... Perhaps no factor is more prescient or insidious than the organizational implications of air intelligence modernization” (211).