THE CRASH OF B-17F SN: 42-29563

A CLEARWATER NATIONAL FOREST PASSPORT IN TIME/REGION 1

HERITAGE STEWARDSHIP ENHANCEMENT PROJECT

AFTER ACTION REPORT

FS Report Number R2011010500049

William Bruce Ellis



UNITED STATES ARMY AIR FORCE PHOTOGRAPH

INTRODUCTION

The following is a summary report on the results of two seasons of investigations at 10LT222, the crash site of a World War II Boeing B-17 bomber. Although other types of bomber aircraft may have been produced in greater numbers during the war, the B-17 became the iconic symbol of American strategic air power in the 1940's. The B-17's elegant design, ease of operation, survivability, and crucial role in Allied victory in the European Theater, ensured that it would become a hallmark of aviation history. The 2011 field season marks the second season of excavations and literature research on Boeing built B-17F, Serial Number 42-29563.

On December 3, 1943 the aircraft and its crew of six officers and four enlisted men departed Hobbs Army Air Field, Hobbs, New Mexico on what was supposed to be a 10-hour longdistance navigation training mission to Geiger Field, Spokane, Washington. After flying first to Sacramento, California, the crew encountered deteriorating weather conditions while passing over Medford, Oregon. Although they could not make clear radio contact with Spokane, the pilot-in-command elected to continue to Spokane in instrument flying weather. The nearer they got to Spokane, the worse the weather got and, still not having any success in contacting Spokane by radio, the decision was made to turn back south in an attempt to find a place to let down through the overcast. As they did so the plane began to ice up as well as develop engine problems. The conditions became severe enough that keeping the bomber in the air was going to be a losing battle. The pilot-in-command ordered a bailout and all ten crew members parachuted to safety, albeit in the middle of a snowstorm. The airplane continued flying, on auto-pilot, until it finally and violently came to rest on the National Forest.

THE PROJECT

The project has its origins in an intense interest in aviation history (on the part of the project

leader) and a desire to continue to highlight the historical contributions of the Greatest Generation to the freedoms American's enjoy today. This desire is further driven by the fact that as each day passes, thousands of veterans of World War II and individuals born of that generation pass, leaving behind a legacy that is enduring, but memories that are fading. For example, most know through our primary school learning that that hundreds of thousands of Americans died during the War, as did millions of others around the world. What is often over-looked is the fact that tens of thousands of young men and women gave their lives to the cause without ever having left the continental United States. While our particular story does not end in tragedy, it serves to highlight those that did, many of which occurred fewer than 100 miles distant from 10LT222.

The Passport In Time Crew

The project has been extremely fortunate to have two great crews, consisting of both returnees and new members. Individuals from as far away as Virginia, Michigan and Texas, and as close to home as Potlatch, Idaho spent their own funds and time to bring their passions for history and energy to the project. Individuals representing a wide range of ages and professions, including current anthropology students, computer specialists, an Army reservist, and retired military lent their unique skills and hard labor to the project. In fact, all major branches of the military are represented in the group: U. S. Marine Corps, U. S. Navy, U. S. Army, and last but certainly not least, the U. S. Air Force. Each and every one was enthusiastic and energetic and helped make the project interesting, exciting, and downright fun. The project and the Forest owe them a great debt of gratitude for their contributions. Meanwhile, a number of the volunteers are still involved in the project as we go through our analyses of the recovered materials. The names and hometowns of each are listed in the project Honor Roll included at the end of the report.



2010





Project Objectives

We know much about the particulars of the flight, thanks to the availability of the original crash investigation report. However, our information on exactly how the plane impacted and what happened in the days immediately after the crash are sketchy; relying on the 60+ year-old memories of a single individual, a few poor-quality photographs, several old newspaper articles, and our own observations of conditions on-site today. Thus, one of our major objectives is to determine where the various sections of the airplane are in relation to each other.

In conjunction with this, we are seeking to derive a more detailed data set on the airplane's identification as well as its home base and crew. We would like to know what this airplane's full H- number was: in the hope of ultimately finding a picture of it before it ended up on an Idaho mountain. Beyond having the serial number, each 1930s - 40s era U.S. Army Air Force training command had locally specific means of keeping track of their aircraft. That is, the Hobbs Field ships were identified in part by an alpha-numeric designation that was likely kept in local records on base. These designations varied from one base to another and in general were not consistent among the various commands service-wide.

It is not unusual to find discrepancies between historical documentation and oral accounts of a particular event in history. For example, the direction and attitude of the aircraft as it hit the ground has been a source of mystery. Our information derived from oral interviews (our informant is no longer with us) suggested that the plane hit the ground at a relatively flat angle and perpendicular to the ridge on which it impacted. This seemed to be at least somewhat supported by one of the photographs included in the original crash investigation report. In contrast, several trees (now dead, but still standing) that are thought to be associated with the period and appear to have been sheared off by the plane's wings, suggest a much steeper angle of decent and a direction that is more-orless parallel to the ridge. The latter scenario could also be supported by the above mentioned photograph.

Our oral history information also provides a few details regarding the final disposition of the aircraft's remains after the military finished removing sensitive equipment (surviving engines, guns and other items). This information suggested that a significant portion of the fuselage remained intact and was buried in that condition as part of the clean-up. The informant, a retired bulldozer operator for Potlatch Timber Corporation, was hired by the Army at the time to try to compact the largest intact sections of the airplane as much as possible. To a certain extent he was successful. However, he indicated that repeated attempts to drive his bulldozer over some portions of the fuselage were only partly accomplished and ultimately he was only able to fold the wings back and over the remains of the fuselage. According to his recollection, after folding the wings he then pushed the remaining mass just over the edge of the ridge and then buried the entire lot, pushing dirt over it rather than digging what would have been a very large excavation.

2010 Field Season

The first field season was primarily one of general exploration and assessment. The site has been known to the local community for many years and has been visited in the past by curio seekers, by members of a major war plane restoration organization, and individuals attempting to salvage parts. Several old looters' trenches were present on site, but these do not appear to have damaged the site significantly. Thus, the decision was made to survey the area around the crash site first while assessing what had been exposed by the looters.

The project began with the surface inspection of the area around the site, both along the ridge and down-slope on both sides of the ridge. A number of parts of the aircraft were found scattered about along a nearby forest trail and across the ridge as a result of probable scavengers who decided the parts were too heavy to carry out to the nearest road roughly two miles away. Additionally, several large pieces associated with the wings of the plane were found down-slope of the burial site. Although the site is now overgrown with smaller trees, the crew was also able to identify and map the limits of the scar and approximate depth of the area in which the bulldozer operator collected earth and pushed it to cover the wreckage.

For the excavation portion of the project, the decision was made to start with the existing looter trenches by cleaning them and incorporating them into the grid the crew set up over the site. Once this was done, new excavations began in a manner that facilitated squaring the looter-trenches-turned-formal units up in accordance with the grid. Over the course of the investigation, this effort allowed us to derive a very speculative picture of where the various sections of the airplane lay. Given that the airplane crashed, scattering its various parts and pieces, and then was moved around and buried by a bulldozer, we were surprised to find that we could very loosely determine where portions of the flight deck, nose, and the bomb bay might be. The materials encountered included the remains of instruments associated with the flight deck, bombardier's position, navigator's position, and the radioman's station. All of these were compressed into an area suggestive of the specific point of impact.



Picture 1. Telegraph key from Radioman's Station and engine cylinder head temperature gauge from the cockpit.

One of the biggest surprises of the 2010 project was the recovery of two personal items. These

included the brass eagle devices from officers' crusher-style caps. This indicated that at least two of the officers were wearing their caps when they boarded the plane in Hobbs, removing them and replacing them with their leather flying helmets before flight. Obviously, they did not stop to grab their caps before exiting the airplane at 9,000 feet.



Picture 2. Brass Officer's Cap device.

2011 Field Season

The 2011 field season focused on further exploration of our general notion of where certain sections of the airplane are located. The majority of our efforts, based on assumptions derived from the previous season's results, were invested in the area we believe is essentially the point of impact. Here we continued to find materials associated with the forward part of the airplane. The majority of the materials recovered here are associated with the radio room (located just aft of the bomb bay in an intact B-17) and the bomb bay itself. Although some of the parts recovered here appear to have been from the cockpit and nose (for example, what is left of the navigator's seat, astrograph and pieces of Perspex from the clear nose bubble), the overwhelming majority are from the middle



Picture 3 . Astrograph USAAF Type A-1, navigator's station.

section of the aircraft: the bomb bay (bomb arming switches and fasteners), pieces of the main landing gear and a considerable amount of radio room debris (vacuum tube fragments, radio cases, and fuses). These circumstances force us to revise our original estimate of where the remains of the flight deck may be. It may be that the majority of these materials have yet to be encountered and that they may lie slightly farther east than the current excavation units.

We also continued to explore the area around the wing and national insignia discovered in 2010. Here we were hoping to find the rearmost portion of the fuselage as our oral history source and one of the original crash investigation photographs suggested that some portion of this section was covered intact. Although confirmation/refutation of this bit of information continues to elude us, we did manage to completely uncover the national insignia (star and bars) as well as fragmentary portions of fuselage and larger wing sections. In the case of the latter, we found hand-written inspection notes on various interior portions of wing structure. One of the major items recovered in this area is a piece of aluminum skin from the waist (aft of the wings' trailing edges) section of the airplane. This piece



Picture 4. Tail section of B-17F SN 42-29563 from original crash investigation. USAAF.

displays a portion of the aircraft's Hobbs Field identification number; "H-5" (Figure 1). This number most likely possessed another numeral, but what that might have been has not yet been determined and may be discovered either through excavation or continued archival research.

CONCLUSION

The Clearwater National Forest has conducted two seasons of field work at site 10LT222 under the auspices of the Passport In Time program. Both seasons have been highly successful in terms of contributing to the objectives of the project and extremely popular with the participants. The project also enjoys the ongoing support of the Palouse District Ranger.

We have been able to address some of our questions concerning the aircraft through preliminary analyses, but much remains to be done in terms of analysis and archival research before the next field season. As part of our ongoing efforts our intent is to add external partners (there have been several expressions of interest) to the project to aid us in developing quality interpretive products based on our findings as well as an in-depth final report. The interpretive potential of the project is significant, as B-17F SN 42-29563 has many stories to tell: about its crew; its design and construction; the dangers of learning to operate combat aircraft of World War II; the Boeing factory workers who assembled it; and the base from which it originated, to name a few.



Subject of the Field Sketch. This piece could be from either the left or right side of the fuselage--it is indeterminate.

Figure 1. Reconstruction of the SN 42-29563 Hobbs A. A. F. Identification Number. Copyright Donald D. Hinton.

HONOR ROLL

Lt. Colonel Gordon L. Moog, USAF, retired, Nine Mile Falls, WA Beverly J. Moog, Nine Mile Falls, WA Major Donald D. Hinton, US Army and USAF, retired, Spokane, WA Commander Stephen F. Waylett, retired, USN, Moscow, ID Eric Werner, USMC (and current Forest Service Employee), Potlatch, ID Sarah A. Werner, Potlatch, ID Major Paul N. Hubble, US Army Reserves, Leesberg, VA Jennifer A. Filipowski, Sandpoint, ID Jeffrey J. Benya, Ypsilanti, MI Sue K. Shuman, Fairfax, VA Alyson R. Kral, Moscow, ID Timothy J. McCormick, Moscow, ID Jerry Byrum, Fort Worth, TX Alana Byrum, Fort Worth, TX David E. Evans, Washington, UT Vicki L. Evans, Washington, UT Alan Greenwalt, Steilacoom, WA Steve Stephenson, St. George, UT Sally Stephenson, St. George, UT Pat Bower, Zone Archaeologist, Moscow, ID Josh Allen, Moscow, ID Mallory Triplett, Moscow, ID

Note: These individuals represent those who have participated in the project. Several others were accepted into the project, but were ultimately unable to participate.