

## **The Defense POW/MIA Accounting Agency's Ploiești Unknowns Project**

Hello, [ Introduction]

### **[SLIDE 2 – PLOIEȘTI]**

This presentation is about the United States government's current efforts to identify US Service members still unaccounted for from a mission to bomb oil production facilities at Ploiești, Romania, code-named Operation TIDAL WAVE. I will review the history of post war investigations to explain why those still missing were not recovered or identified in the years immediately following World War II. Next, I will describe DPAA's modern efforts to conduct archival research and analysis to support both investigations in the field and the disinterment of remains still buried, until recently, under grave markers labeled "unknown". I will conclude with an update on the current status of our efforts to identify the missing airmen of Operation TIDAL Wave.

To begin, let's answer two basic questions, which are: what was Operation TIDAL WAVE and why was Ploiești so important? Operation TIDAL WAVE was the first large-scale, low-altitude attack by U.S. heavy bomber aircraft upon a well-defended target; the oil refineries at Ploiești, Romania. Crude oil provided two-thirds of the entire Axis oil supply. Romania produced 60% of those crude oil

supplies and an estimated 27% to 35% percent of the refined or synthetic oil supply. The most important refineries were the several facilities that encircled the city of Ploiești, in southeast Romania near the capital, Bucharest. The destruction of the oil refineries at Ploiești was a cornerstone to the Allies' 1943 "Casablanca Directive," a plan for a progressive destruction and dislocation of the German military, industrial, and economic systems. In all, 662 Americans lost their lives over Romania as a result of combat missions throughout the war, many were missions bombing Ploesti.

### [SLIDE 3 – PLOIEȘTI]

Operation TIDAL WAVE's significance to World War II history, however, goes beyond the destruction of the German oil supply. It tested the mettle of the American bomber crews and aircraft; and demonstrated the value of large-scale, offensive bomber raids. The operation proved that the U.S. Army Air Forces could successfully plan and execute a mission to launch five bomber groups consisting of 177 B-24 Liberators, carrying 1,725 Americans from airfields near Benghazi, North Africa – and fly approximately 2,100 miles round trip to attack targets from unprecedented low altitudes of 100-300 feet. Of the 662 Airmen killed over Romania, 225 were killed in Operation TIDAL WAVE alone. Ultimately, 80 American Airmen were not recovered after the operation; this presentation focuses only on those American Airmen killed in Romania during Operation TIDAL

WAVE, whose remains were not identified and the recovered American remains buried as “unknowns” following WWII.

**[SLIDE 4 – PRACTICE AND PREPARATION IN LIBYA]**

In the Libyan desert, the air crews planned extensively, practicing staggered bombing runs on scale models of the city and refineries erected just for this mission. Despite the planning, the units were inexperienced at raids of this scale. Going into the mission, commanders briefed the crews on the importance of success and on the very high level of danger of the mission. Very few expected to survive.

**[SLIDE 5 – THE REFINERIES – TARGETS WHITE, RED, BLUE]**

Early on the morning of 1 August 1943, aircraft from 5 bombardment groups at 5 different airfields at Benghazi, Benina, and Lete, Libya, readied to depart. The B-24 Liberator aircraft were selected because the standard B-17 Flying Fortress bomber did not have the capability to fly the long distance or carry the large bomb loads necessary for this mission.

Their target? A ring of seven refineries, owned and run by private companies, which encircled the city of Ploiesti in about a 2-mile radius. Operation TIDAL WAVE planners gave the refineries code-names of White I (one) through

V (five), Red, and Blue, and the bomb groups were assigned coded targets and positioned in specific formations with staggered departure times.

#### [SLIDE 6 – THE MISSION ]

Each formation of aircraft took the same route through northern Bulgaria and approached Ploiești from the southwest. However, some groups became confused en route and missed the correct rendezvous point while other groups veered too far south. These mix-ups led entire squadrons off-course - delaying the arrival of several formations and causing other formations to redirect their approach to the city.

#### [SLIDE 7 –GERMAN ANTI-AIRCRAFT TACTICS]

To the surprise of the American pilots, the German forces anticipated their arrival. Large barrage balloons tethered with metal cables hovered over Ploiești, designed to impede the flight of the American bombers. German forces opened smoke pots in the surrounding fields and set oil tanks around the refineries aflame, sending up dense clouds of black smoke and blinding the pilots. The German army placed anti-aircraft guns along the railroad tracks, among the oil tanks, and in the fields outside of town. As the Liberators approached Ploiești, German ground defenses unleashed an intense hail of 37mm anti-aircraft and machine gun fire at

the low-flying aircraft. As a consequence of all these tactics, some crewmembers were injured or killed by anti-aircraft fire; Pilots, navigators, and bombardiers were disoriented; and the targeted refineries were often obscured.

### [SLIDE 8– CONFUSION - THE LOSSES - THE CASUALTIES]

Flight path errors also resulted in formations bombing wrong targets and disrupted the timing of the flight waves – contributing to the chaos and leaving later waves of aircraft to fly through a dangerous, smoke-filled air space.

This chaotic and smoky scenario also obscured eyewitness views of which aircraft crashed where and when. All the errors and confusion of the mission contributed to the difficulties that post-war investigators encountered during their efforts to recover and identify the deceased.

Fifty-one of 177 aircraft failed to return from Operation TIDAL WAVE. This current effort focuses on the twenty-two aircraft that crashed in or near the Ploiești refineries with casualties believed to be buried as Unknowns. Of the remaining twenty-nine aircraft that failed to return, three aircraft crashed in Romania without casualties where the crewmembers became prisoners of war, and another twenty-six aircraft were lost outside of Romanian borders. Future efforts and field work will focus on the unaccounted-for from the other twenty-nine aircraft that failed to return.

[SLIDE 9 – BURIALS ]

So, what happened to the hundreds of Airmen killed during the bombing raid of Operation TIDAL WAVE? Well, while we know that local efforts were made to recover and inter the dead in the immediate aftermath of the Operation, few details about those efforts have survived. DPAA historians believe the job of recovering the dead primarily fell to Romanian citizens. After the raid, local residents who were unprepared for the extensive casualties, endeavored to recover and bury the deceased Americans over three days. Casualties recovered near Ploiești were placed in caskets and interred into the existing Hero Section of the Civilian and Military Cemetery of Bolovan in Ploiești. Romanian authorities could only identify 27 American remains at the time of initial burial. The other remains were interred as Unknown US Service members. American casualties from aircraft crashes outside of the city were interred in ten small cemeteries in the surrounding villages. Each of the red dots represents a cemetery where American soldiers were buried.

It is important for us to understand the circumstances of recovery and what factors contributed to the high number of American remains buried as unidentified. Not the least was the condition of the remains – badly burned and often fragmented. It is likely the Romanian citizens collected remains with personal

vehicles such trucks and farm wagons as they discovered crash sites and isolated remains. In some cases, this may have led to a mixing – or commingling – of the fragmented and partial remains. For reasons, unknown, civilians often interred more than a single set of remains in a single casket, sometimes as many as three individuals were included in one casket. The men rested where local Romanians had buried them until the end of the war.

#### [SLIDE 10 – CEMETERIES]

In 1946, the War Department tasked the American Graves Registration Command (AGRC), part of the U.S. Army Quartermaster Corps, to formally investigate, search for, recover, and identify fallen American personnel in the European Theater, including Romania. This included processing remains from temporary American military cemeteries, as well as recovering thousands of remains from plane crashes, isolated graves, and battlefields across Europe. In the case of those buried after Operation TIDAL WAVE, graves registration personnel would need to travel to Ploesti to disinter the remains from the cemeteries depicted here.

#### [SLIDE 11 – HERO SECTION OF THE CIVILIAN AND MILITARY CEMETERY OF BOLOVAN]

In late 1946 and early 1947, a graves registration team, in coordination with the Romanian government and under the direction of the Romanian Gendarmerie, or military police, began the work of exhuming Operation TIDAL WAVE remains from Bolovan Cemetery. This graves registration team did not include a physical anthropologist – or the tools to extensively analyze and identify remains as they were collected. Unlike in other countries, the dead were not first processed by Americans at the gravesite, but in the processing centers in France and Belgium weeks or months later. The team also realized that the Romanian Gendarmerie had removed all the identification tags and personal possessions. The Romanians sent these items to the International Committee of the Red Cross in Geneva as evidence of their casualty status, but this action made subsequent identification extremely difficult.

**[SLIDE 12 – AGRC REPORTS]** Graves registration teams were trained to record information about their recoveries to help with identification. The forms they used, a few examples of which you see here, included entries for the individual's name (if known), military organization and unit, rank, and service number. They also recorded, when known, the date of the initial recovery, the town name and coordinates where the remains were located, names of other individuals found in the area, an estimated date of death, and information about the burial (if one



occurred) including other Americans interred nearby. Operation TIDAL WAVE deceased were already buried as unidentified so the graves registration team relied on documentation and burial information gathered and provided by Romanian officials instead of investigating and recording details of the recovery and burial independently.

Remains that had no means of identification were issued an X-number designation (the X indicating unknown), such as X-123. The X-number became the file name for that unknown remains. Today these files are referred to as “X-Files.” The X-file for each unknown held a compilation of the records and documents gathered and created during the investigation and identification process. .

#### [SLIDE 13 – AGRC PROCESSING]

Once the remains were exhumed, AGRC teams transported them to processing points in Belgium and France. There, anthropologists and identification technicians analyzed the bones to estimate the individual’s height, weight, and age (if possible) and completed skeletal charts to show which bones were missing or damaged.

[SLIDE 14 – SKELETAL] Tooth charts, such as the one you see in the center of this slide, were and still are vital to identification efforts. Dental technicians

examined the teeth of remains and recorded which teeth were present, previously extracted, posthumously missing, and had cavities or contained fillings. Examiners also combed through the material evidence for any clues for identification, including names or numbers written on clothing and personal effects. Using the charted information from the forensic analysis and other clues of the recovery, technicians compared the details of each remains to similar records compiled in the Individual Deceased Personnel File – or IDPF - of those lost in the 1 August 1943 raid. During this process, the AGRC successfully identified 140 Operation TIDAL WAVE American airmen.

**[SLIDE 15 – AGRC EFFORTS – REBURIALS - UNRESOLVED]**

Despite the AGRC’s best efforts, a significant number of the deceased military personnel from WWII could not be identified with the technology of the 1940s.

By 1951, the US Government formally ended it’s global initiative to recover WWII missing – known as The Return of the Dead program. After multiple investigations and forensic reviews, 80 Airmen from Operation TIDAL WAVE were still missing. Without any new leads for recovery or identification, and after a final review of each Airmen’s case, the missing were determined to be “Non-recoverable.”

At the same time, 89 sets of remains recovered from Bolovan Cemetery in Ploesti were still unidentified. And though graves registration investigators remained convinced that the remains were those of Army Air Forces personnel still missing from the 1 August 1943 raid, the evidence and tools available could not associate them with any particular Airman. The War Department declared these unknown remains “unidentifiable and permanently interred them at the US Military Cemetery at Neuville-en-Condroz Cemetery (today, Ardennes American Cemetery), and Henri-Chapelle American Cemetery, both in Belgium.

From the close of the “Return of the World War II Dead Program” until 1998, no field investigations into Romania losses took place. In 1998, and then again from 2005 - 2007, predecessor agencies to the Defense POW/MIA Accounting Agency or DPAA investigated five incidents of aircraft lost during 1944 missions to Romania. In 2014, historians and anthropologists at the Joint POW/MIA Accounting Command (JPAC), another predecessor of DPAA, initiated a project to research and disinter all unknowns recovered from Romania, resulting in the effort I am speaking to you about today.

In 2015, the Department of Defense reorganized various parts of the POW/MIA accounting community into DPAA, creating a single defense agency responsible for researching, investigating, recovering, and identifying the remains of U.S.

personnel still missing from past conflicts including World War II. As part of that reorganization, the Office of the Secretary of Defense authorized DPAA to pursue disinterment of Unknown remains for identification.

Within the new agency, the Ploiești Unknowns Project became a high priority due to aspects of the Operation TIDAL WAVE losses I discussed above. Specifically, the ability to associate a set of buried unknowns with a group of still missing individuals from a single Operation in a confined geographic area raised the potential for the 80 Airmen still missing from the raids to be identified and returned to their families for honored burial. Consequently, the Ploiești Unknowns Project became one of the Europe-Mediterranean Directorate's dedicated disinterment efforts.

The Ploiești Unknowns Project pursued two main objectives. First, historians and analysts strove to research and write a historical summary for every American service member missing from Operation TIDAL WAVE. Second, they recommended disinterment for every set of unknown remains recovered in Romania.

The first objective—the writing of individual case summaries—is the backbone of the DPAA's family outreach. If you are the family of a missing American from World War II and attend a DPAA Family Member Update, or write

to your service casualty office for information, you will receive a case summary.

We construct these case summaries by researching and analyzing unit records, personnel files, and documents from foreign archives. These narrative documents describe what we know today about the circumstances and location of loss, previous efforts by Army investigators to find that person, and what our next steps are for research and investigation.

#### [SLIDE 16 – PLOIEȘTI MISSING & UNKNOWNNS]

The second goal required more detail-oriented research and data collection. Historians at DPAA compiled data on all the known physical characteristics, circumstances of loss, survivor statements, recovery, and burial locations of identified soldiers, as well as previous AGRC investigation reports.

Once the files and information of all the unresolved losses were reviewed and analyzed, the DPAA historian then reviewed the files of unidentified remains (or X-files) recovered from the Bolovan Cemetery.

Using the X-files, historians compiled recovery and temporary burial details and the physical characteristics recorded by AGRC technicians such as the estimated height, weight, and age, available dental remains, and what portions of the skeleton were recovered.

Through this research and data collection effort, researchers compared the compiled data of the individual losses with that of the unknowns. For the Ploiești Unknowns Project, this detailed work did not produce “one-to-one” historical evidence connecting individual unknowns to individual missing service members, but did establish that it is “more likely than not” that most of the Unknowns can be identified through disinterment and renewed forensic testing.

Upon completion of that historical research and analysis, the project progressed to the next stage: a forensic science-based effort, led by modern physical anthropology and DNA analysis.

**[SLIDE 17 – DISINTERMENT]** It is important to note, the exhumation of the unknowns is not a simple process. These remains were honorably and permanently buried in the 1940s and 1950s. The Department of Defense policy, released in 2015, allows DPAA to disinter **individual** unknown remains if historians and scientists can establish **there is a likelihood of an identification**. This effort is typically done on a case-by-case basis. However, once historical research established the disinterment and analysis of the Ploesti Unknowns should be pursued as a set, DPAA requested approval from the Department of Defense to disinter all unknowns recovered in Romania. While some Ploesti Unknowns were approved for disinterment in 2017 as part of a pilot project, the overall Ploesti

Project group was approved for disinterment in 2019. For all disinterments, once approved, the remains are exhumed from an American Battle Monuments Commission cemetery and transferred to the DPAA laboratory for full anthropological analysis and, hopefully, identification.

Since the commencement of Ploiești Unknowns Project, DPAA has disinterred associated Unknowns and the DPAA laboratory has begun making identifications; to stay informed of the progress of that effort, please visit the DPAA website for identification announcements.

**[SLIDE 18 – FIELD INVESTIGATION]** At the time you view this presentation, the remains of most—or even all—of the missing from Operation TIDAL WAVE may already be in the DPAA laboratory. DPAA is not planning field investigations for personnel killed during Operation TIDAL WAVE until all of the Romania unknowns are processed and analysts have determined who is still unaccounted-for and from which aircraft.

In all cases, preparation for potential field work begins with research. For Operation TIDAL WAVE, DPAA historians conducted initial research in Romanian archives and continue to work closely with the local Romanian government officials, academics, and individuals who have expertise in the WWII history of the region, all of whom are extremely supportive of our efforts. If

future field investigations for unrecovered Airmen killed in Operation TIDAL WAVE is necessary, DPAA historians are prepared.

**[SLIDE 19 – ID PHOTOS]**

It is our sincere hope that, through the efforts outlined in this video we can recover and identify all of the missing from Operation TIDAL WAVE in Ploiești, Romania.

Finally, while we talk about the numbers of missing soldiers, each one is a person, whose loss devastated a family. Each recovery and identification allows us to celebrate that service member's life, service, and sacrifice, and hopefully offers some measure of closure. Here are the faces of most of the Ploiești casualties DPAA has identified since 2017. They are missing no more.

If you are the family of a missing American from Operation TIDAL WAVE in Romania, and you have not already done so, please contact the US Army's Service Casualty Office to learn how your family's DNA information may help in identifying the unknown remains we currently have under analysis in the DPAA laboratory.

Thank you for your time, and for your support in this noble mission.