[Slide 2] DPAA's Worldwide Mission

- This agency is dedicated to researching, investigating, recovering, and identifying American service members still missing from World War II, the Korean War, Vietnam War, Cold War, Iraq, and various other operational loss incidents.
- Currently, nearly 82,000 Americans are still unaccounted for from those conflicts.
- Around 72,000 of the missing were lost during World War II
- DPAA recovers and identifies as many as 250 service members each year, so the number of missing continues to decrease each month
- This success comes from a comprehensive, worldwide effort involving approximately 500 military and civilian personnel, as well as countless volunteers and partners, working in the U.S. and dozens of other countries.

[Slide 3] Europe-Mediterranean Directorate

- DPAA has divided its case development efforts (the research, analysis, and investigation aspects of the mission) into two directorates:
 - The Europe-Mediterranean Directorate, based in Washington,
 D.C., which is responsible for all cases of American service
 members missing in Europe, Africa, the Middle East, North
 America (excluding Hawaii), South America, and Russia

- and the Indo-Pacific Directorate, based in Hawaii, which is responsible for all cases of American service members missing in the Pacific region, China-Burma-India, northeast Asia, Southeast Asia, and Hawaii.
- This video will focus on the Europe-Mediterranean Directorate and those cases which fall into its area of operation
- The Europe-Mediterranean Directorate has four color-coded, geographically-focused multi-disciplinary teams (or MDTs)
 - Red which specializes in Western Europe (primarily France, Belgium, Netherlands, Luxembourg), as well as England, and North America
 - Green which focuses on central and eastern Europe (primarily Germany, Austria, and Poland), as well as Scandinavia and Russia
 - Gold centered on Italy and the Mediterranean area, and covering Africa and South America
 - And Blue which works on cases of Americans lost in the Atlantic
 Ocean, English Channel, North Sea, Adriatic Sea, and
 Mediterranean Sea
- Each team consists of a small group of historians, an archaeologist, and an operational planner
- While these teams have specific regional assignments, the research,
 analysis, and investigative methods they use are the same
 - The structure of these teams simply allows Europe-Mediterranean
 Directorate historians and analysts to become case experts within
 their assigned geographical areas

[Slide 4] Objectives

- So how do we do this work? How do we recover and identify Americans missing since World War II?
 - This video will provide a quick background of efforts to recover the fallen immediately after World War II and explain how we continue the research today
 - I will introduce some of the primary files and documents we use every day in our research
 - o I will talk about our techniques for analysis and investigation
 - And I will provide an overview of our current field work efforts

[Slide 5] Military Burials in World War II

- Approximately 360,000 Americans were killed or died overseas during
 World War II
- military forces deployed graves registration units to recover the fallen from recent battlefields and bury them in temporary cemeteries behind American lines
 - Frequently, front line combat troops were tasked to assist in this effort, often on an ad-hoc basis.
 - Overall, these dedicated individuals did a remarkable job recovering and burying many of the soldiers, sailors, marines, killed during World War II

- In 1946, Congress passed a law instructing the Secretary of War to recover and identify the dead of WWII
 - This meant gathering remains from temporary cemeteries and isolated burials, as well as locating those not buried during the war.
 - Process them, identify them, and then permanently burying them according to the family's wishes
- The American Graves Registration Service (AGRS) or Command (AGRC) oversaw this work, for the Quartermaster General of the Army.
 - Between 1946 and 1954, around 13,000 people worked on this project
 - Overall, the US government spent about \$1.3 billion in today's dollars for this work

[Slide 6] American cemeteries in Europe

- By 1954, 280,000 remains had been recovered, identified, and formally buried.
- More than 92,000 of those remains were permanently buried in American Battle Monuments Commission cemeteries overseas
 - Today there are more than a dozen ABMC cemeteries and memorials in Europe
- Roughly 8,000 of the remains recovered by the AGRC could not be identified with the information and technology available in the 1940s
 - These remains were permanently buried as unknowns in ABMC cemeteries

- Approximately 2,500 of those unknown soldiers were buried in Europe, the remainder were in the Pacific area
- Currently, there are still approximately 72,000 missing or unresolved
 Americans from World War II

[Slide 7] American Graves Registration Service/Command Records

- To find and identify a missing American, as DPAA researchers, we must learn what our predecessors did or did not do. This informs future research and investigations.
- We must learn where a person was last seen, or where their remains were last placed, and determine why postwar efforts failed to bring them home
 - We study search and recovery reports and reports of investigation which describe where previous Army officials went, who they spoke to, and what they found
 - Mortuary and cemetery records that may help us track who was buried in a cemetery—both foreign cemeteries and temporary American burial grounds—and where their remains may have been moved during or after the war
 - And we study AGRC documents related to unidentified remains (the unknown soldiers). These are known as "X-files" since unknown remains, absent a name, were labeled with an "X-number"

- A separate video will explain more about the X-files in a bit, but these files contain documents that describe where an unknown soldier was recovered and the efforts by the AGRC to identify him

[Slide 8] Individual Deceased Personnel File

- While we have talked about overall numbers of missing Americans, ultimately, our effort is to recover and identify them as individuals
 - This effort is not simply about collecting America's fallen from the field of battle, but the recovery and *identification* of your individual loved ones
- As such, our most important collection of records is the Individual
 Deceased Personnel File (or IDPF)
- The IDPF is the foundation for each missing casualty we research
- The Army created an IDPF for every American service member,
 regardless of branch, who died during World War II
 - It is specific to the service member to your relative
 - They exist for all individuals—missing and resolved
- IDPFs vary greatly in composition, often based on the service branch (Navy and Marine Corps casualties usually have less information).
 - They generally contain:
 - Various documents that provide info about place, date, and circumstances of loss
 - Brief medical information such as height, weight, scars, healed bones, etc.
 - dental records

- letters between your family and the War Department or the AGRC
- and personal effects information—the personal items sent to the family after the loss
- IDPFs are still property of the US Army
- They are currently housed at the National Personnel Records Center in St. Louis, MO.
- IDPFs are not immediately available to the public
 - We can provide them to next of kin
 - The public can access IDPFs through a Freedom of Information Act
 (FOIA) request, an often lengthy process.

[Slide 9] Official Military Personnel File

- We also use the Official Military personnel File (OMPF)
 - o The OMPF provides information about a soldier's military career
 - Enlistment information (time and place)
 - Assignments
 - Award, medals, etc.
 - And military health records

[Slide 10] Military records

- The IDPF and OMPF are records specific to your relative.
- To construct a broader picture of a loss, we search for information that help us understand what your relative's unit (squadron, ship, division, regiment, company, etc.) was doing in a certain area at a certain time.

- We spend a great deal of time looking at records of specific military units:
 - Unit journals a record of troop movement, orders, and positions
 provided in a timeline as they happened
 - Morning reports brief lists of personnel present and location
 - War diaries -- which are narratives of action, written by participants after a battle
 - Mission reports, reports completed by returning air crews or unit officials after a particular operation.

[Slide 11] Missing Air Crew Reports

- A particularly important document for many of our cases is the Missing
 Air Crew Report (or MACR)
 - These were standardized reports usually completed within 2 days
 of a US plane reported missing
 - Only used by the US Army Air Force
 - Navy and Marines did not have MACRs
 - War Department required units to complete these, beginning in mid-1943. Loss that occurred earlier may not have MACRs, or they were filled out retroactively, perhaps years after the loss.
- MACRs include vital information for researching a case:
 - Type of aircraft
 - Serial number of aircraft
 - Equipment numbers (engines and machine guns)
 - Helpful for identifying wreckage

- Number and names of crew members/passengers
- Sketch maps of loss provided by eyewitnesses
- Statements from eyewitness/other members of the units about loss

[Slide 12] Challenges of Archival Research

- Many of the records we use are housed at the National Archives in the Washington, D.C. area, or kept at government storage facilities across the country
- We also conduct research at university collections, various libraries, and foreign archives
- Unfortunately, some of the records we seek—especially the OMPFs have been lost over time
 - In particular, a fire at the National Personnel Records Center in 1973 destroyed 80% of the records of Army personnel who served between 1912-1960
 - That includes Army Air Forces.
 - No duplicates exist
 - However, specialists are trying to reconstruct these files, but much information is missing
 - o Records of USN/USMC personnel relatively undamaged.
 - o The fire did not damage IDPFs, these were moved there recently.

[Slide 13] Maps – Operational Records

- Although written records are the foundation of our research, maps are vital to our work.
 - After all, our mission is to locate physical remains for identification
- We use a wide variety of maps: modern and historical, as well as wartime sketches, and overlays
 - All are useful to help us understand the area and terrain related to a missing American
- The middle image here is a wartime overlay, one of the most useful primary sources for our work
 - Many ground units drew map overlays for commanders to track
 American positions and movements during the course of a battle
 - These were usually pencil drawings on thin blank paper,
 transparent enough to show unit locations when placed—
 or "overlayed"—on top of an Army grid map
 - These are sometimes the best, most precise sources for determining a soldier's location of loss
 - We must have the same grid map used by the troops in the field in order to decipher these overlays
 - The overlays are to a specific scale and coordinate system found only on that particular reference map
- in this example, we find an overlay of from the 16th Infantry Regiment,
 showing its battalions positions and objectives in Germany on 18
 November 1944

- to the right is an excerpt of the corresponding U.S. Army grid map of that part of Germany
- We use computer programs, such as Geospatial Information Systems, or GIS, to transpose maps and overlays onto modern satellite imagery

[Slide 14] Maps – An Investigative Clue

- The result looks something like this:
 - the image on the left shows the overlay properly oriented on the grid reference map
 - the image on the right shows that orientation then transposed onto modern satellite imagery
- this type of computer work is especially vital for those cases involving ground combat in forested areas
- with these images, we may be able to narrow down the last known location of a missing soldier from an area several miles in diameter to an area only a few hundred yards in diameter

[Slide 15] Photographs – Historical Imagery

- We also use GIS for assisting our investigations of aircraft losses
- by transposing historical aerial imagery from the National Archives on top of modern satellite imagery, we can look for bomb craters or potential airplane crash sites

Here is a real example from our agency's work in Italy

in February 1944, an American P-38 aircraft crashed during a dive
 bombing mission near Monteretondo, Italy

- Here, you see a photograph taken during reconnaissance of Italy in August of 1943. This picture shows cultivated fields near Monterotondo before the P-38 went missing in the area
 - Notice the farmland just to the left of the river bend

[Slide 16] Photographs – An Investigative Clue

- Here is the same area taken a few months later, in May of 1944.
- This image shows what appears to be a crash crater.
- Alone, this image might not be enough to tell us anything. But when we combine this information with unit records, witness reports, and information give in the MACR, this image becomes extremely useful.
 The crater on this image is approximately 1.5 km from the last-known location of the aircraft reported in the MACR.
- With this imagery, DPAA analysts planned an investigation of the site
 - But they had to see what the area looks like today
 - To see if the feature still exists.

[Slide 17] Modern Imagery – Investigation Planning

- This is what the area looks like now
- The site is still open farmland, but that 1944 feature is gone
 - With this imagery, DPAA analysts traveled to the exact location of the apparent crash crater and conducted a site survey

- They found no indication of a crash on the surface they used
 GPS coordinates to take them to the exact spot from the 1944
 image
- a metal detector sweep indicated a large amount of metal debris underground
- o The investigation is ongoing with this site as the top prospect
- Without the imagery and GIS overlays, our investigators would probably not have found this location

[Slide 18] Photographs – Investigation Planning

- There is something else useful about photographic and imagery analysis for our case work
- Look to the right of the 1943 image, the area highlighted by the red circle
- Let's imagine that we wanted to investigate one of the features within that circle
- Before traveling to Italy, we would analyze current satellite imagery of the same area to determine what we would expect at the site
- And this is what we would find

[Slide 19] Modern Imagery – Investigation Planning

- As you can see, the whole area has been changed by postwar construction
- This would significantly affect how we would conduct an investigation, and what our options are for site analysis and potential excavation

- These are the types of steps we take before going into the field
 - We want to know as much about an incident and the area before traveling there

[Slide 20] People as Sources

- It is important to emphasize that no single person or office can do this work
 - It requires coordination with various individuals and agencies, in the US and around the world
 - We speak with witnesses, other researchers, and foreign officials for leads
- family members can provide information that DPAA personnel may never find or access otherwise
- this includes
 - Letters
 - Photos
 - We are particularly interested in photos showing distinctive physical features that may be useful for identification purposes
 - For instance—smiling photos that show teeth
 - Health information
 - o DNA
 - Reference samples from family members of missing
 Americans are vital to our work

[Slide 21] Field Investigations

- So far I have quickly reviewed DPAA's research and analysis work
 - Let's turn briefly to field work
- DPAA investigation teams conduct missions all across Europe, the
 Mediterranean area, and even recently in Central America
- These investigation teams consist of historians and analysts, a DPAA archaeologist, military linguists, and frequently medics and explosive ordnance disposal experts
- They travel to the last known locations of missing Americans to
 - collect records from local archives
 - interview local residents and witnesses, and sometimes veterans
 who fought at the site
 - survey airplane crash sites or battle areas, often through metal detecting or other technical means and then draw detailed maps of the site for potential excavation
 - and we document all information about material evidence to further determine whether we are at the correct site and whether the individual's remains may still be there
- After each investigation, we complete our analysis and determine whether we believe there is a good chance of finding remains at a particular site
- Cases that are approved for recovery work are added to our master
 excavation list for logistical planning

[Slide 22] Field Excavations

- Each year, DPAA sends out several recovery teams into the Europe-Mediterranean Directorate area to excavate previously investigated sites
- these teams consist of:
 - o an archaeologist
 - military team leader
 - o medic and an EOD
 - o linguist
 - several DPAA or active duty US military service members to help excavate the site.
- recovery missions generally last about five weeks
 - o site excavations can take from 1 week to several months
 - if a site is finished quickly (such as one or two weeks), the
 recovery team may begin excavation on another site
 - The more difficult sites that are not finished during a single excavation period are left in an open status for further excavation on a subsequent mission
 - all remains and important material evidence is collected and transferred to the lab for analysis
- DPAA also conducts underwater missions
 - Most of our underwater cases involve aircraft wreckage
 - most sunken ships from WWII are considered maritime graves,
 and so while we collect information on their locations, we do not
 pursue recoveries

- due to logistical challenges, underwater investigations and recoveries do not happen as often as our regular field work
- but we have been successful in recovering remains from plane wreckage at several locations
- our missions—which often rely upon support from Navy and Army dive teams—generally work on cases less than 150 feet deep
- so our underwater cases are often along coastlines, and not in the open ocean

This has been a quick review of how DPAA historians and analysts research and investigate cases of Americans from missing World War II. Another vital part of our case development and accounting process is the disinterment of unknown remains buried at American military cemeteries for scientific testing and identification. That topic will be covered in a separate video.

- Finally, Europe-Mediterranean Directorate historians are developing area projects for research and recovery work. These projects cover some of the most important WWII battles and campaigns in Europe, and so far include the Ploesti Project (which involves a large number of missing American airmen lost during bombing campaigns over Ploesti, Romania) and the Huertgen Forest Project (a project focusing on more

than 150 American soldiers still missing from combat in Germany's

Huertgen Forest). Additional projects are being developed and refined.

These efforts involve comprehensive research and analysis for all cases of missing Americans in those campaign areas, and involve investigations, recoveries, and disinterments. Information about these projects will be explained in individual 'project videos,' which will be available on our DPAA website as they develop.

Thank you for taking the time to learn about how we look for missing Americans from WWII.