> of it which would have provided no protection if a load shifted or someone had stepped on it. Upon examination in Embalming, the [fetal remains] is well embalmed, but the incision site (femoral) was not closed.

Between May 17 and May 19, 2010, Mr. Keel and [Army Mortuary Officer 2] at USAMAA-E emailed back and forth a total of five times with the above email from Ms. Spera being the original message on the chain. The email exchange between Mr. Keel and [Army Mortuary Officer 2], however, focused exclusively on paperwork and payment issues and did not specifically mention any concerns about the packaging or shipment.

Despite the fact that no mention of shipping concerns appeared in the email traffic between Mr. Keel and [Army Mortuary Officer 2], there was verbal communication between the two on the subject. [Army Mortuary Officer 2] stated that after he saw Ms. Spera's email dated May 17, 2010, he spoke with Mr. Keel by telephone about Ms. Spera's packaging concerns. According to [Army Mortuary Officer 2], Mr. Keel replied to the effect of "[d]id you hear about the concern from me? Then there was not a problem."[78] Despite that reply from Mr. Keel, [Army Mortuary Officer 2] stated that from that point forward, USAMAA-E stopped shipping fetal remains in cardboard boxes. They reached out to the material shop on post, and material workers then began creating rigid, wooden shipping containers to use in lieu of cardboard boxes for fetal remains.

[Mortuary Specialist 1] testified that Mr. Keel told him that he addressed the shipping issues with USAMAA-E. Mr. Keel stated that he worked closely with the people at USAMAA-E, contacting them by telephone about every two weeks. With regard to the fetal remains packing and shipping issue, Mr. Keel stated "I've tried to work closely with the Landstuhl Mortuary to try to improve that process." He stated that he specifically suggested to USAMAA-E that they ship fetal remains in "some type of sturdier, hardwood container to transport them in versus an entire transfer case." Further, Mr. Keel stated USAMAA-E has "been receptive to the input, recommendations, and they have continually tried to improve their process as well."

[Mortuary Specialist 1] stated that after Mr. Keel told him he addressed the issues with USAMAA-E, [Mortuary Specialist 1] witnessed that incoming fetal remains shipments from USAMAA-E to the Port Mortuary were done so in adequate shipping containers. Specifically, fetal remains began arriving from USAMAA-E in rigid, hardwood boxes. Being satisfied the shipping problems were resolved, [Mortuary Specialist 1] stated he destroyed the photographs he had taken of what he considered the undignified packaging of the remains associated with Dover Case Nos. D10-0472 and D10-0473.

[78] In an addendum to their report, the Army IG stated "[a]t least three trained and practiced mortuary officers, [Army Mortuary Officer 1], [Army Mortuary Officer 2], and Mr. Keel saw no issue with the way the fetal remains in question were processed and transported. None reported any other mortuary activity with similar mission requirements, so they were pioneering the way for future shipments."

When questioned by the Army IG on September 8, 2010, [Army Mortuary Officer 1],[79] the Mortuary Affairs Director at USAMAA-E, and [Army Mortuary Officer 2] stated that it had been their practice at USAMAA-E to ship fetal remains using on-hand cardboard boxes. They both stated they believed this practice was adequate until another source of container supply could be found. They stated USAMAA-E had tried to order different containers but they were never received.

[Army Mortuary Officer 2] clarified that the boxes used were the used outer shipping boxes of purchased infant caskets that USAMAA-E had on hand. He stated that when the crematory first opened at the Port Mortuary, USAMAA-E placed an order for high quality shipping boxes from a manufacturer. Documentation in the file indicates that this order was placed on January 22, 2010. He stated the boxes ordered were advertised as being strong enough to withhold 200 pounds of external force. However, he stated the shipment never came in, and after months of waiting the order was cancelled. [Army Mortuary Officer 2] stated the delay and eventual cancellation of this order left USAMAA-E with a decision on what to use to ship fetal remains, and they decided to use the cardboard shipping boxes on hand. Upon being re-interviewed, [Army Mortuary Officer 2] stated "the project of shipping fetal remains to Dover was a project in the works."

[Army Mortuary Officer 2] also explained his understanding of the civilian cremation industry in the United States. Human remains slated for cremation are normally transported in a "cremation box," which is generally just a cardboard box. He stated the cremation box goes into the crematory and is consumed with the body in the cremation process. [Army Mortuary Officer 2] explained that this cremation box normally does not need to be very strong, as most human remains are transported by hearse to the crematory within or near the home town of the deceased. However, in the event human remains scheduled for cremation are shipped by airline in the United States, a "combination box" is used. He stated the combination box consists of the normal cardboard cremation box as well as a rigid, wooden frame. The rigid, wooden frame protects the cardboard box from damage in shipment.

According to the Army IG inquiry, the employees at USAMAA-E stated that the cardboard boxes originally used to ship fetal remains to the Port Mortuary were wrapped and clearly labeled, identifying the contents. The USAMAA-E mortuary affairs officers stated the fetal remains were packaged using the same materials used for packaging adult remains, specifically that the pillows used were taken out of adult caskets. They also stated the boxes holding fetal remains were separated on the plane from other cargo.

When questioned on this subject, [Army Mortuary Officer 2] explained that special handling procedures were always used with these boxes. He stated that the boxes were wrapped in brown paper so there were no extraneous marks on the outside. In addition, the boxes had special handling labels on both sides of the boxes. According to [Army Mortuary Officer 2], the accompanying documentation made it clear what was inside the boxes and that the boxes should be treated with dignity. Further, he stated that the boxes were shipped specially, that they were stowed in the nose of the plane, that the labels instructed that nothing could be placed on top of

[79] [Army Mortuary Officer 1] is the Mortuary Affairs Director at USAMAA-E. He has been a licensed embalmer in California since 1983 and obtained a funeral director's license from California in 1997.

the boxes, and that the head of the boxes had to be oriented to the front of the plane. He opined that anyone seeing the boxes would understand that they should be handled with respect, and that if someone stepped on a box or otherwise failed to treat a box with proper respect, it would be due to the negligence of that person.

When asked about fetal remains arriving at the Port Mortuary in a pail, the USAMAA-E mortuary affairs officers stated that they believed a specimen pail from the hospital was most likely used. They stated the hospital uses a specimen pail when the fetal body structure is not substantially developed or when other medical procedures renders the fetal remains into a soft tissue state.

According to the Army IG report, all of the USAMAA-E employees interviewed denied receiving any negative communication from the Port Mortuary regarding the condition of fetal remains or the method of processing fetal remains for shipment. Upon being re-interviewed, both [Army Mortuary Officer 1] and [Army Mortuary Officer 2] were asked the question "[d]id the Port Mortuary Affairs at Dover inform you of these problems?" The summarized answer from both was a "qualified yes" in that they received communication from the Port Mortuary about the missing paperwork and the condition of the remains, but neither individual classified them as "problems" nor viewed them from a negative perspective. [Army Mortuary Officer 2] conveyed that at no time did his conversations or communications with Mr. Keel give him the impression of an existing problem; but only the necessary steps in completing the mortuary affairs actions between USAMAA-E and the Port Mortuary. [Army Mortuary Officer 1] noted the primary communication on this issue was between [Army Mortuary Officer 1] and [Army Mortuary Officer 2]. [Army Mortuary Officer 1] also characterized his involvement as follow-up but not for discrepancies or problems involving documentation or shipment of fetal remains, but working out the implementation of new processes and procedures.

On September 3, 2010, [Army Mortuary Officer 1] prepared an information paper on the cremation procedures in Europe for the Commander of the 21st Theater Sustainment Command. The information paper indicated, among other things, that, "[o]n 14 May 2010, a statement was made that a container of an infant cremation received at Dover did not meet standards. This was addressed by the senior staff and the Mortuary Director at Dover and it was found to be un-true and did not have an impact on completing the cremation."

[Army Mortuary Officer 2] stated that the employees at USAMAA-E did not know of a problem with the shipping containers until Ms. Spera's email from May 17, 2010 was distributed around the unit. It was at that time that he began speaking with Mr. Keel, and USAMAA-E began using wood boxes rather than cardboard boxes. It is unclear whether the May 14th statement cited by [Army Mortuary Officer 1] is the same as the May 17th email from Ms. Spera, or if there were two independent concerns sent to USAMAA-E in that timeframe.

In the Army IG inquiry, the Vice President of the Advocacy Division of the National Funeral Directors Association was consulted as to the industry standard for shipment of human remains from overseas to the United States. He stated that there were no existing industry standards, but individual airlines each have their own rules for shipping human remains and other countries may have laws on the matter. Further, he stated the State Department has general

guidelines on shipping human remains from overseas to the United States, but nothing in those guidelines is specific to the allegations at issue.

Documentation

As part of the AFOSI investigation, copies of the Dover case files were obtained on the five case files at issue. As set forth below, each Dover case numbered file had extensive documentation on their respective cases.

D10-0257

The fetal remains associated with Dover Case No. D10-0257 arrived at the Port Mortuary from USAMAA-E on February 19, 2010. Ms. Spera voiced her concerns about the fetal remains associated with Dover Case No. D10-0257 to Mr. Keel and ten others[80] at AFMAO via email on February 21, 2010. Ms. Spera's email stated:

> Please find attached all the paperwork sent from USAMAA-E to us concerning [Dover Case No. D10-0257]. The original paperwork and check was placed in the C3 safe. I also attached a copy of the Criteria for Disposition of Infant Remains which references Army Europe Reg 40-400 & [Landstuhl Regional Medical Center] Memo 40-45. According to the DD565, this fetus was 24 weeks gestation and should have a death certificate.[81] Also, since this is a current death (not an AFME case) which medical authority will grant permission to cremate[?] I anticipate this scenario cropping up more often now that we have our own crematory and would like to get a procedure in place.

On February 22, 2010, Mr. Keel emailed a response simply stating "not applicable." This email traffic was obtained by AFOSI in their investigation, but did not appear in the file of Dover Case No. D10-0257.

The file of Dover Case No. D10-0257 included the following documents:

- a memorandum for record dated February 22, 2010, from the Landstuhl Regional Medical Center authorizing the release of the fetal remains to USAMAA-E but not certifying a cause of death;

---

[80] These 10 people included permanent party members assigned to AFMAO. The only management level employees emailed were Mr. Keel, Director of the Port Mortuary Division, and [Mortuary Affairs Division Director], Director of the Mortuary Affairs Division at AFMAO.

[81] The record reflects that the fetal remains were received by the Port Mortuary on February 19, 2010 without a DD Form 2064 (*Certificate of Death*). However, the investigation found a DD Form 2064 in the case file, dated February 22, 2010. From the documentation, it appears that the remains were sent without the DD Form 2064 which was issued three days later. It is unclear whether the Port Mortuary received the DD Form 2064 prior to cremation on February 23, 2010; nonetheless, the remains did have an associated DD Form 2064, signed by an Army doctor, in the appropriate file.

- the DD Form 2064 (*Certificate of Death*) signed by an Army medical officer on February 22, 2010 stating that the cause of death was unknown;
- a memorandum for record dated February 23, 2010 from Mr. Keel granting an exception to the policy that requires authorization to cremate from the OAFME;[82]
- a cremation authorization signed by the PADD on February 16, 2010;
- the DD Form 2065 (*Disposition of Remains – Reimbursable Basis*) signed by the PADD on February 18, 2010;
- the DD Form 565 (*Statement of Recognition of Deceased*) signed by the military sponsor and a witness on February 16, 2010;
- payment documents indicating a check dated February 18, 2010; and
- a Certificate of Cremation signed by [Logistics Supervisor 1][83] and Mr. Keel indicating the remains was cremated on February 23, 2010.

However, the following five documents were missing from the case file: (1) Ms. Spera's email addressing concerns over the shipment, (2) the DD Form 2062 (*Record of Preparation and Disposition of Remains (OUTSIDE CONUS)*), (3) authorization to cremate from a medical authority certifying a cause of death, (4) disposition instructions from the casualty or mortuary officer assisting the family, and (5) a burial transit permit.

D10-0406

The remains associated with Dover Case No. D10-0406 arrived at the Port Mortuary on April 4, 2010. On the same date, Ms. Spera sent an email regarding Dover Case No. D10-0406 to 16 people[84] in AFMAO, including Mr. Keel, stating that the DD Form 2062 (*Record of Preparation and Disposition of Remains (OUTSIDE CONUS)*) was missing.

The file of Dover Case No. D10-0406 included the following documents:

- a memorandum for record dated March 5, 2010, from the Landstuhl Regional Medical Center authorizing the release of the fetal remains to USAMAA-E but not certifying a cause of death;
- the DD Form 2064 (*Certificate of Death*) signed by an Army medical officer on March 7, 2010, stating that the cause of death is unknown;
- a memorandum for record dated April 5, 2010 from Mr. Keel granting an exception to the policy that requires authorization to cremate from the OAFME;[85]
- a cremation authorization signed by the PADD on March 17, 2010;
- the DD Form 2065 (*Disposition of Remains – Reimbursable Basis*) signed by the PADD on March 17, 2010;

[82] The memo states that Mr. Keel granted an exception to the Port Mortuary policy (found in the Crematory Section SOP) that requires authorization from the OAFME prior to cremation. In the memo, Mr. Keel also states that the respective case did not fall under the jurisdiction of the Armed Forces Medical Examiner.
[83] [Logistics Supervisor 1] is the logistics supervisor at the Port Mortuary. He also serves as the Crematory Operator.
[84] These 16 people included permanent party and deployed members. The only management level employees emailed were Mr. Keel and [Mortuary Affairs Division Director].
[85] See Footnote 82.

- payment documents dated March 22, 2010;
- the email from Ms. Spera dated April 4, 2010;
- an April 5, 2010 email from Mr. Keel to [Logistics Supervisor 1] requesting that the cremation be scheduled on April 7, 2010; and
- a Certificate of Cremation signed by [Logistics Supervisor 1] and Mr. Keel indicating the remains were cremated on April 7, 2010.

However, the following five documents were missing from the case file: (1) the DD Form 2062 (*Record of Preparation and Disposition of Remains (OUTSIDE CONUS)*), (2) the DD Form 565 (*Statement of Recognition of Deceased*), (3) authorization to cremate from a medical authority certifying a cause of death, (4) disposition instructions from the casualty or mortuary officer assisting the family, and (5) a burial transit permit.

D10-0472 and D10-0473

The remains associated with Dover Case Nos. D10-0472 and D10-0473 arrived at the Port Mortuary on April 29, 2010.

The file of Dover Case No. D10-0472 included the following documents:

- the DD Form 2064 (*Certificate of Death*) signed by an Army medical officer on April 22, 2010;
- a letter dated April 22, 2010 approving an exception to policy allowing the issuance of a death certificate;
- a cremation authorization signed by the PADD on April 21, 2010;
- the DD Form 2065 (*Disposition of Remains – Reimbursable Basis*) signed by the PADD on April 21, 2010; and
- a Certificate of Cremation signed by [Logistics Supervisor 1] and Mr. Keel indicating the remains were cremated on May 4, 2010.

However, the following seven documents were missing from the case file: (1) the DD Form 565 (*Statement of Recognition of Deceased*), (2) the DD Form 2062 (*Record of Preparation and Disposition of Remains (OUTSIDE CONUS)*), (3) payment documentation,[86] (4) a release of remains from a medical authority certifying the cause of death, (5) authorization to cremate from a medical authority certifying a cause of death, (6) disposition instructions from the casualty or mortuary officer assisting the family, and (7) a burial transit permit.

The file of Dover Case No. D10-0473 included the following documents:

[86] The record reflects that three cases did not have payment documentation included in their respective case files. While the documentation was not present, the record indicates that payment was received for each of the five fetal remains cases. As there is no express requirement for such documentation to be present in the Port Mortuary's files, the fact that it was missing was not a violation of law, rule, or regulation.

- a memorandum for record dated April 19, 2010, from the Landstuhl Regional Medical Center authorizing the release of the fetal remains to USAMAA-E but not certifying a cause of death;
- the DD Form 2064 (*Certificate of Death*) signed by an Army medical officer on April 27, 2010 ;
- the DD Form 2065 (*Disposition of Remains – Reimbursable Basis*) signed by the PADD on April 22, 2010;
- a cremation authorization signed by the PADD on April 22, 2010;
- the DD Form 565 (*Statement of Recognition of Deceased*) dated April 18, 2010; and
- a Certificate of Cremation signed by [Logistics Supervisor 1] and Mr. Keel indicating the remains were cremated on May 4, 2010.

However, the following five documents were missing from the case file: (1) the DD Form 2062 (*Record of Preparation and Disposition of Remains (OUTSIDE CONUS)*), (2) payment documentation, (3) authorization to cremate from a medical authority certifying a cause of death, (4) disposition instructions from the casualty or mortuary officer assisting the family, and (5) a burial transit permit.

D10-0564

The remains associated with Dover Case No. D10-0564 arrived at the Port Mortuary on May 15, 2010. On May 17, 2010, Ms. Spera sent an email regarding Dover Case No. D10-0564 to 20 people[87] in AFMAO, including Mr. Keel, stating that there was "no paperwork" received with the remains other than a death certificate and a cremation authorization. The file of Dover Case No. D10-0564 included the following documents:

- a memorandum dated May 8, 2010 for the State of Delaware from the Office of the Armed Forces Regional Medical Examiner authorizing the cremation of the fetal remains but not certifying a cause of death;
- the DD Form 2064 (*Certificate of Death*) signed by an Army medical officer on May 14, 2010;
- a cremation authorization signed by the PADD on May 10, 2010;
- the DD Form 2065 (*Disposition of Remains – Reimbursable Basis*) signed by the PADD on May 12, 2010;
- a memorandum for record dated May 19, 2010 signed by Mr. Keel authorizing the cremation to proceed based upon confirmation of receipt of payment to the United States Government from USAMAA-E;
- email traffic between workers at AFMAO and USAMAA-E originating with Ms. Spera's message of May 17, 2010 expressing concerns over improper packaging and missing paperwork; and
- a Certificate of Cremation signed by [Logistics Supervisor 1] and Mr. Keel indicating the remains were cremated on May 19, 2010.

[87] These 20 people included permanent party and deployed members. The only management level employee emailed was Mr. Keel.

However, the following six documents were missing from the case file: (1) the DD Form 565 (*Statement of Recognition of Deceased*), (2) the DD Form 2062 (*Record of Preparation and Disposition of Remains (OUTSIDE CONUS)*), (3) payment documentation, (4) a release of remains from a medical authority certifying the cause of death, (5) disposition instructions from the casualty or mortuary officer assisting the family, and (6) a burial transit permit.

On May 17, 2010, Mr. Keel forwarded Ms. Spera's email from the same date to [Army Mortuary Officer 2], asking "[c]an you obtain a witness signature on the Cremation Authorization and follow-up on the other required documents and the check?" In his email response to Mr. Keel the same date, [Army Mortuary Officer 2] replied in the affirmative. Two days later, on May 19, 2010, Mr. Keel sent [Army Mortuary Officer 2] another email in the chain, asking "[a]ny word on the check? Looking to schedule the cremation." On the same date, [Army Mortuary Officer 2] answered that he would look into the check issue. In response, again on the same date, Mr. Keel sent an email stating that he was directing the cremation to take place that day because the check was in the custody of USAMAA-E, but also mentioned that there was a discrepancy on the correct address to send the cremains. In the email he "introduced" [Major 1][88] to [Army Mortuary Officer 2], indicating that she "is deployed here to stand up, develop, and run my newest branch of the Port Mortuary. She will oversee the Departures Branch which includes the section formerly known as 'Shipping,' Crematory Operations, Outbound Dignified Transfers, Departure Quality Assurance Management, and a host of other significant duties."

On May 19, 2010, the Port Mortuary cremated the fetal remains associated with Dover Case No. D10-0564. When asked about the fetal cremation of case file D10-0564, [Major 1] indicated that she had not fully assumed the duties of the Chief of Departures Branch and was still receiving on-the-job training from Mr. Keel.[89] She confirmed that she reviewed the paperwork for the May 19, 2010 cremation, but stated that she was not the final review authority at the time the cremation occurred. According to [Major 1], Mr. Keel had actually reviewed the paperwork prior to [Logistics Supervisor 1] conducting the actual cremation.[90]

Mr. Keel confirmed that [Major 1] was deployed to AFMAO and assigned as the Cremation Officer. As such, she was charged with reviewing cremation file paperwork, scheduling cremations with the family, and coordinating cremations with the Crematory

[REMAINDER OF THIS PAGE INTENTIONALLY LEFT BLANK]

[88] [Major 1] was deployed to AFMAO from May to August 2010, serving as the Chief of the Departure Branch. She served as a Cremation Officer and was responsible for coordinating all cremations conducted at AFMAO. She is a personnel officer in the United States Air Force. She is not a licensed funeral director, embalmer, or technician.
[89] [Redacted].
[90] According to the documentation provided in the AFOSI investigation, Mr. Keel, [Embalmer 3] and [Logistics Supervisor 1] were the only AFMAO employees trained as AFMAO Crematory Operators between February and May 2010 and that [Logistics Supervisor 1] performed most if not all of the cremations at AFMAO. The record from the AFOSI investigation indicates that [Logistics Supervisor 1] was properly trained and that he had conducted all cremations in an appropriate manner.

Operator[91] (at the time [Logistics Supervisor 1]). Mr. Keel indicated that [Major 1] was not trained to conduct cremations, nor had she ever conducted a cremation. According to MOMS, Mr. Keel was listed as being the Cremation Officer for all five fetal remains at issue.

In his interview, Mr. Keel explained that Ms. Spera had no part in the cremation process at the time of these allegations and that she was employed in the shipping department. He indicated that Ms. Spera's responsibilities entailed embalming and restoration of remains prior to shipment and the shipment of remains.

Ms. Spera indicated that she had been employed at AFMAO since November 2007 and that between January 2008 and May 2010, she was assigned as the Chief of the Departures Branch. She advised that she was relieved of her duties as Chief of Departures Branch on or about May 20, 2010 and was replaced by [Major 1].

Mr. Keel stated that at no time during his tenure at the Port Mortuary had he ever observed or had complaints regarding fetal remains being cremated without authorization. Regarding the alleged missing documentation, Mr. Keel explained that if something was identified as missing, the paperwork or any other issue was rectified prior to a cremation being performed. Mr. Keel stated that he could not recall Ms. Spera notifying him that any specific fetal remains were missing paperwork. Further, he stated that he had no knowledge of missing paperwork from the cremation files of the remains of any fetus. He stated, however, that if he was notified, the issue was addressed and corrected.

When questioned about the cremation approval process within the Port Mortuary, Mr. Keel stated that despite what was required under the written SOPs, the only documentary requirements were first, a medical approval from a medical examiner or attending physician, and second, an approval for cremation from the decedent's family. Mr. Keel stated that a death certificate was not required prior to cremation because, in some circumstances, a death certificate may not be accomplished for months after the date of death. However, he explained if a death certificate existed, it would satisfy the requirement for a release and approval from a medical examiner or attending physician to cremate the remains.

When questioned on the same subject, [Army Mortuary Officer 2] explained that it could be inferred from the fact that a death certificate was signed that the medical examiner released the remains. He stated that for every death, the medical examiner is consulted and the medical examiner makes the decision about whether to investigate the death or not. He stated that after consultation, if the medical examiner declines to investigate, then the doctor will complete the death certificate. He stated that therefore, one can assume the medical examiner released the remains if a death certificate exists. [Army Mortuary Officer 2] also believed a signed death certificate implied the medical examiner also authorized cremation.

Burial Transit Permits were not found in any of the Dover case files. AFOSI obtained from Mr. Keel a blank copy of a burial transit permit. The document appears to be a State of

[91] The Crematory Operator is certified to perform cremation and works with the Cremation Officer in conducting the actual cremation of remains, segregating the non-biological unconsumed material, processing the cremated remains, inputting data into the crematory log, and coordinating the routine maintenance schedule for the crematory.

Delaware form from the Delaware Department of Health and Social Services, Division of Public Health. The permit is entitled "Authorization to Re-Route Decedents under Military Jurisdiction." The permit provides authorization for Dover AFB to transport a named decedent to a funeral director. Mr. Keel explained that the Burial Transit Permit was not required for shipment of cremains via the U.S. Postal System or Military Aircraft. He also explained it was not required by the State of Delaware. According to Mr. Keel, the Burial Transit Permit was only required for shipment of remains upon commercial airlines. He stated that a Burial Transit Permit would be issued for every remains that was processed through the Port Mortuary, whether it was required or not, in order to maintain the consistency of day-to-day operations and business practices. When questioned about the missing permits, Mr. Keel could not explain their absence in the Dover case files and stated it must have been a "clerical error" by AFMAO's Records Administration Section.

In the MOMS system, under the case information program, one of the tabs has entry blocks for "ME Release Date," "ME Release Received," "ID Made By," and "How ID made."

- For Dover Case No. D10-0257, the "ME Release Date" and "ME Release Received" are both marked "2/22/10" in MOMS. The "ID Made By" is marked "TDEAN" and the "How ID made" is marked "Presumptive."[92]
- For Dover Case No. D10-0406, the "ME Release Date" and "ME Release Received" are both marked "4/5/10" in MOMS. The "ID Made By" is marked "QKEEL" and the "How ID made" is marked "Presumptive" despite there being no DD Form 565 (*Statement of Recognition of Decedent*) for the file.
- For Dover Case No. D10-0472, the "ME Release Date" and "ME Release Received" are both marked "5/3/10" in MOMS. The "ID Made By" is marked "QKEEL" and the "How ID made" is marked "Presumptive" despite there being no DD Form 565 for the file.
- For Dover Case No. D10-0473, the "ME Release Date" and "ME Release Received" are both marked "5/3/10" in MOMS. The "ID Made By" is marked "QKEEL" and the "How ID made" is marked "Presumptive."
- For Dover Case No. D10-0564, the "ME Release Date" and "ME Release Received" are both marked "5/16/10". The "ID Made By" is marked "QKEEL" and the "How ID made" is marked "Presumptive" in MOMS.

In the files of Dover Case Nos. D10-0257 and D10-0406, there is a memorandum in each signed by Mr. Keel granting an exception to the Port Mortuary policy (found in the Crematory Section SOP) that requires authorization from the OAFME prior to cremation. Each memorandum also states that the exception was based on the fact that the respective case did not fall under the jurisdiction of the OAFME.

In MOMS, under the cremation program, one of the tabs has entry blocks for "ME Authorization Required?" followed by "ME Authorization Received?" Those fields can either be checked or unchecked, with a check indicating an affirmative response to the respective question and no check indicating a negative response. Below those blocks are fields to enter the person who received the authorization and the date received. Below that are fields for "ME

[92] The identification entries here do not allow the person inputting information to type in a name. Apparently, there is a drop down list of AFMAO names to choose from including Mr. Keel and Mr. Dean.

Cremation Authorization Scanned By" and "ME Cremation Authorization Verified By." Each of those two have a field for the date the respective action was taken.

- For Dover Case No. D10-0257, both the "ME Authorization Required?" and the "ME Authorization Received?" are checked, indicating affirmative responses. It indicates "QKEEL" received the ME authorization on "2/23/10." The name next to "ME Cremation Authorization Scanned By" is "QKEEL" and the date is "2/23/10." The name next to "ME Cremation Authorization Verified By" is also "QKEEL" and also dated "2/23/10."
- For Dover Case No. D10-0406, both the "ME Authorization Required?" and the "ME Authorization Received?" are checked, indicating affirmative responses. It indicates "QKEEL" received the ME authorization on "4/5/10." The name next to "ME Cremation Authorization Scanned By" is "QKEEL" and the date is "4/5/10." The name next to "ME Cremation Authorization Verified By" is also "QKEEL" and also dated "4/5/10."
- For Dover Case No. D10-0472, both the "ME Authorization Required?" and the "ME Authorization Received?" are checked, indicating affirmative responses. It indicates "QKEEL" received the ME authorization on "5/4/10." The name next to "ME Cremation Authorization Scanned By" is "QKEEL" and the date is "5/4/10." The name next to "ME Cremation Authorization Verified By" is also "QKEEL" and also dated "5/4/10."
- For Dover Case No. D10-0473, both the "ME Authorization Required?" and the "ME Authorization Received?" are checked, indicating affirmative responses. It indicates "QKEEL" received the ME authorization on "5/4/10." The name next to "ME Cremation Authorization Scanned By" is "QKEEL" and the date is "5/4/10." The name next to "ME Cremation Authorization Verified By" is also "QKEEL" and also dated "5/4/10."
- For Dover Case No. D10-0564, both the "ME Authorization Required?" and the "ME Authorization Received?" are checked, indicating affirmative responses. It indicates "QKEEL" received the ME authorization on "5/19/10." The name next to "ME Cremation Authorization Scanned By" is "QKEEL" and the date is "5/19/10." The name next to "ME Cremation Authorization Verified By" is also "QKEEL" and also dated "5/19/10."

As part of the Army IG investigative inquiry, copies of USAMAA-E's case files were obtained on the five case files at issue. Each USAMAA-E case file had extensive documentation on their respective cases. Included in all five case files were the respective DD Forms 2062 (*Record of Preparation and Disposition of Remains (OUTSIDE CONUS)*) and the respective DD Forms 565 (*Statement of Recognition of Deceased*) signed by the military sponsor or the medical provider, as well as a witness.

CMAOC Approval

[Major 1] stated that she had a disagreement with Ms. Spera over whether they needed prior approval from the Army's Casualty and Mortuary Affairs Operations Center (CMAOC) before cremating the remains of a dependent of an Army military member. [Major 1] stated that Ms. Spera believed the Port Mortuary needed the Army CMAOC's authorization prior to cremating the remains of an Army member's dependent. However, [Major 1] stated she consulted with the Army CMAOC who clarified that the Port Mortuary could not cremate the remains of an Army active duty member without CMAOC approval, but no such approval was necessary for the remains of a dependent.

When Ms. Spera was questioned on the subject, Ms. Spera stated that she could not recall an official policy or regulation that required prior approval from the CMAOC before the Port Mortuary was allowed to cremate the remains of an Army member's dependent. She stated she based her complaints on her own working experience at civilian funeral homes and her knowledge of industry standards, rather than specific rules or regulations.

[Army Mortuary Officer 2] was questioned on this subject as part of the investigation. He stated that there was no requirement for CMAOC approval before an Army dependent was cremated at the Port Mortuary. He stated he knew Army policy was not to use the Port Mortuary crematory for active duty members, and therefore CMAOC would have to approve any exceptions to that policy. However, he stated there was no such policy for dependents and therefore there should be no requirement for CMAOC to authorize dependent cremations at the Port Mortuary.

Email traffic between Army personnel at USAMAA-E indicated it was their understanding that, as of December 24, 2009, SECDEF had in place a moratorium on cremations at the Port Mortuary. However, no other evidence was found that suggested there was ever actually a moratorium on cremations at the Port Mortuary. When asked, none of the employees at the Port Mortuary had heard of a cremation moratorium. According to personnel at CMAOC, the Army began prohibiting contracting with a particular civilian crematory in the Dover area after it was discovered that human and animal remains were cremated at the same facility.

Embalming

Ms. Spera stated that she believed the fetal remains associated with Dover Case Nos. D10-0472 and D10-0473 arrived at the Port Mortuary from USAMAA-E unembalmed. Personnel at USAMAA-E prepared DD Forms 2062 (*Record of Preparation and Disposition of Remains (OUTSIDE CONUS)*) for these two cases. However, these forms were not found in the Port Mortuary records, and Ms. Spera stated that she did not see the forms when these two fetal remains arrived.

The DD Form 2062 on Dover Case No. D10-0472 lists under block 13 that the embalming for the fetal remains began on April 10, 2010 at 1500 hours. In block 15 (entitled "explain any delay in recovery, autopsy, preparation, inspection or shipment of remains"), it states that "pathology lab placed in phenol after gross." Phenol is a chemical that can be used for embalming. However, block 14 (entitled "embalming complete") is blank, and blocks 17 through 20 (all of which are used to indicate the specifics of the embalming procedure) are either not filled out or an "N/A" appears.

The DD Form 2062 on Dover Case No. D10-0473 has an embalming start date and time filled in, as well as an embalming end date and time filled in. In block 19 (entitled "parts receiving poor circulation and how treated"), it states "infant soaked in formalin." Formalin is also known as formaldehyde, which is also a chemical that can be used for embalming. However, blocks 17 through 18 and block 20 are blank. Also, on the second page of the DD

Form 2062 in block 43, it states "*** EVERY ATTEMPT WAS MADE TO PRESERVE THE REMAINS AND TO PREVENT POSSIBLE ODOR AND LEAKAGE."

Ms. Spera was shown the DD Forms 2062 and maintained her belief that these two fetal remains were not embalmed. [Army Mortuary Officer 2] was asked about the significance of the embalming entries on the DD Forms 2062 for the remains associated with Dover Case Nos. D10-0472 and D10-0473. He stated that the entries indicate the fetal remains were both embalmed. The fact that both fetal remains were relatively young, 18 weeks and 20 weeks respectively, meant that they were both fairly small. He stated that embalming a small fetus is different from embalming a full term infant or an adult because it might not be possible to access arteries and veins. He stated that small fetal remains are often embalmed by submerging them in embalming fluid, which is what both the DD Forms 2062 indicated.

ANALYSIS

Prior to addressing whether the fetal remains at issue were shipped to the Port Mortuary for cremation in an unsafe and disrespectful manner, and whether they lacked requisite paperwork for disposition, it is important to note that no fetal remains were actually damaged in transit. Although there were discrepancies in the enforcement of some of the Port Mortuary's internal local operating procedures, there were no violations of any higher authority. As such, all cremations were carried out fully in accordance with the law. Further, all fetal remains sent to the Port Mortuary for cremation were identified correctly and all cremations of fetal remains were completed in accordance with the wishes and directions of the respective families.

Packaging and Shipping

Based on the investigations, the evidence adduced shows that the fetal remains associated with all five Dover cases were in fact individually shipped from USAMAA-E to the Port Mortuary inside plastic pails, packaged inside normal, non-reinforced cardboard shipping boxes, and cushioned by cotton and pillows. The boxes had previously been used as shipping containers for infant caskets purchased by USAMAA-E.

No specific guidance was found explaining how to properly package and ship fetal remains. Under AFI 34-242, *Mortuary Affairs Program*, paragraph 2.27.1.2, remains being transported by government aircraft from a mortuary facility in Europe to the Port Mortuary "should be uncasketed and placed in an aluminum transfer case." Likewise, Table 4.2 of the same AFI states "[i]f a government mortuary prepares the remains and Dover Port Mortuary reprocesses" then "[r]emains will be returned to Dover Port Mortuary in a transfer case." However, AFI 34-242 was written in 2008, prior to the establishment of the crematory in Dover. This is significant because the industry standard for shipping remains for cremation is a cardboard box or combination box, which is different than for shipping remains for processing or restoration for a funeral or other service. Further, the guidance from the AFI does not contemplate the obvious differences in shipping fetal remains compared to adult remains. In light of this, the better interpretation of AFI 34-242 in this circumstance is that it does not require the use of a transfer case when fetal remains are shipped to the Port Mortuary for cremation.

Such an interpretation is supported by Army Regulation 638-2, *Care and Disposition of Remains and Disposition of Personal Effects*, paragraph 6-5, where it states that "[a] transfer case may be used to ship remains of an eligible dependent infant or child to the port mortuary in the United States; this is provided if a suitable casket (infant- or child-type) is not available." While a transfer case could be used to ship fetal remains, doing so is not a required method of transport. Therefore, the decision not to use transfer cases to ship fetal remains was not in violation of AFI 34-242 or AR 638-2.

The families of these five fetal remains requested that the remains be treated as the remains of human beings, and the military agreed to do so. Accordingly, the fetal remains came under the purview of Joint Publication 4-06, DoD Directive 1300.22 and DoD Instruction 1300.18, which generally require that the remains be treated with the reverence, care, and dignity befitting them and the circumstances. Based upon the preponderance of the evidence, these regulations were not violated.

None of these regulations elaborate on what constitutes the requisite "reverence, care and dignity" due a decedent's remains. Moreover, there are no regulations or rules from any of the military service components which define these terms. The record disclosed no clear generally accepted practice for packaging and shipping fetal remains of military dependents to be cremated.

The preponderance of the evidence shows that the five fetal remains were wrapped in cotton and packaged in plastic medical pails, which in turn were shipped in boxes. The reality of dealing with fetal remains necessitated the use of some type of sealed container. These fetal remains all weighed less than 500 grams, which meant that by regulation they were considered the remains of a miscarriage, as opposed to a stillbirth. The evidence indicates that the plastic pails used were most likely specimen pails, which the hospital provided when the fetal body structure was not substantially developed or when other medical procedures were performed rendering the fetal remains into a soft tissue state. The documentation indicated that at least three of the fetal remains underwent a "gross examination" by the pathology office. While the military honored the wishes of their respective families by treating the remains as that of a person, the remains of each were still those of a substantially underdeveloped fetus. Using sealed hospital specimen pails was not an unreasonable or inappropriate option for shipping such fetal remains. The specimen pails were placed inside boxes and cushioned with casket pillows. According to the Army IG report, the size of the pillows in the infant sized box appeared sufficient to stabilize the fetal remains in transit.

With regard to the use of boxes for shipping containers, the views of employees from the Port Mortuary and Landstuhl differed. Mr. Keel, Ms. Spera and [Mortuary Specialist 1] were of the view that the boxes did not accord the requisite reverence, care and dignity due the fetal remains. [Army Mortuary Officer 1], [Army Mortuary Officer 2] and the other mortuary specialists at Landstuhl believed the packaging was appropriate. Contrary to the testimony of [Mortuary Specialist 1], there is no requirement that the fetal remains be placed in a casket for transport to the Port Mortuary. AFI 34-242 paragraph 2.27.1.2 clearly states that remains transported from a mortuary facility in Europe to the Port Mortuary "should be uncasketed."

The record indicates that cremation of fetal remains was a new procedure and the cardboard shipping boxes were an interim measure. The evidence indicated that the Army attempted to procure sturdier shipping containers in January 2010 but that the requested containers were never delivered. In the interim, the Army used the cardboard boxes at issue here. When apprised of concerns by the Port Mortuary, the Army sought alternatives to the cardboard boxes. In July 2010, USAMAA-E began using locally fabricated wooden boxes to transport fetal remains for cremation at the Port Mortuary.[93]

In addition, the record shows that special handling procedures were used with these boxes. Many appropriate steps were taken to ensure the boxes were handled with reverence, care, and dignity, including covering the boxes with clean outside wrapping, clearly labeling the boxes as containing human remains, and stowing the boxes only in the nose of the airplane with the head oriented towards the front of the airplane. In addition, the procedures required that nothing be placed on top of the boxes.

The packaging and shipping of these five fetal remains for cremation were not in violation of DoD Directive 1300.22 DoD Instruction 1300.18, or Joint Publication 4-06.

Embalming

Ms. Spera also alleged that two of the fetal remains (Dover Case Nos. D10-0472 and D10-0473) received at the Port Mortuary were not embalmed. The evidence in the record shows a conflict between what Ms. Spera has stated and what the DD Forms 2062 indicate. Based on the documentation which indicated the remains had been soaked in an embalming chemical and the statements of [Army Mortuary Officer 2] regarding procedures used to embalm undeveloped fetal remains, the preponderance of the evidence shows that these two fetal remains were embalmed, consistent with the requirements of the Armed Services Public Health guidelines.

Army CMAOC approval

Ms. Spera has alleged that the Port Mortuary needed prior written approval from CMAOC before cremating the Army dependent. No Army rule or regulation requiring such written approval was found. However, AFMAO Port Mortuary Division SOP 34-242-02, Section 2, *Outbound Transportation and Medical Disposal*, effective July 19, 2009, stated at paragraph 5C1.1, that "[a]ll US Army cremations performed at Dover require prior written approval from Commander, Casualty and Mortuary Affairs Operations Center (CMAOC)." Under paragraph 5F.4, it was stated, "[a]ll US Army cremations performed at Dover require prior written approval from Commander, (CMAOC). Cremation MUST not occur until authorization is granted in writing" (emphasis appears in the SOP). This SOP speaks only to Army cremations, and not to dependents. Therefore, we find that it is inapplicable.

[93] First Lieutenant [First Lieutenant 2] was deployed to AFMAO in September 2010 and assigned as the Chief of the Departures Branch. She indicated that since she has been at AFMAO the remains have always arrived in a wooden crate with a sealed biohazard bag utilized as the inner packaging.

Furthermore, four of the five fetal remains at issue here were Air Force dependents. The fifth fetal remains was an Army dependent, which was shipped on May 16, 2010. The evidence indicates that SOP 34-242-02, which contained the CMAOC approval requirement, was superseded on April 1, 2010 when a new AFMAO Port Mortuary Division SOP 34-242-02, *Administration Branch*, became effective. This new SOP did not include the prior SOP's requirement for written authorization from CMAOC prior to an Army cremation. Thus, on May 16, 2010, when the Port Mortuary received the fetal remains of an Army dependent and thereafter cremated them, there was no requirement in any AFMAO Port Mortuary Division SOP requiring CMAOC approval for Army cremations. Consequently, there is no violation of law, rule or regulation.

Port Mortuary Required Documentation

Paragraph 1.2 of Port Mortuary SOP 34-242-04 requires the following five documents: (1) a release of remains from medical authority certifying cause of death, (2) an authorization to cremate from medical authority certifying cause of death, (3) disposition instruction from service Casualty or Mortuary officer assisting the family, (4) a completed AFMAO cremation authorization form, and (5) a burial transit permit. Pursuant to this internal administrative SOP, the Cremation Officer is required to have these five documents before remains can be cremated. As discussed below, only one of the documents, the completed AFMAO cremation authorization form, was present in each of the five fetal remains case files. As discussed below, the absence of these required documents from the case files supports a finding of multiple violations of the Port Mortuary internal Crematory Section SOP.[94]

Release of Remains from Medical Authority Certifying Cause of Death

The Port Mortuary is required under SOP 34-242-04, paragraph 1.2.1, to have a "Release of remains from AFME, State ME, or other cognizant medical authority certifying cause of death" prior to cremation. None of the five Port Mortuary case files at issue here have such a release certifying the cause of death.

Three of the five case files, D10-0257, D10-0406, and D10-0473 have a Memorandum for Record from the Landstuhl Regional Medical Center signed by a pathologist. Each of these memoranda indicates that a "gross examination" was conducted by the pathologist and that the remains are released to mortuary affairs. However, none of the memoranda certify the cause of death. In each of these three cases, the file also contains the DD Form 2064 (*Certificate of Death*), signed by a medical doctor (not the pathologist who signed the memorandum) from the Landstuhl Regional Medical Hospital.

[94] The requirements set forth in the administrative Crematory Section SOP are not necessarily required by law but represent the policy of the Port Mortuary. While established policy requirements must be followed, the policy is, in many regards, discretionary and can be changed. The Port Mortuary had the necessary authorization from the PADD for each fetal remain cremated. The violations found herein are violations of those discretionary policy requirements. As part of the corrective action taken, the Port Mortuary has reviewed these requirements and reworked its policy to more accurately reflect what is actually needed.

While the phrase "other cognizant medical authority" is undefined, it is reasonable to assume that a pathologist or physician would qualify with respect to the five cases at issue. That assumption is supported by guidance from Army in Europe Regulation 40-400, which states that the physician should complete the DD Form 2064 when the cause of death was of a known clinical diagnosis and the medical examiner only gets involved for forensic cases. The assumption is also supported by statements made by Mr. Keel and [Army Mortuary Officer 2] who both stated a signed death certificate implies a medical examiner release. Arguably, the memorandum of release and the death certificate certifying the cause of death considered together might serve to satisfy the underlying requirement of paragraph 1.2.1. However, because the memoranda do not certify a cause of death, the clear written requirements of paragraph 1.2.1 are not technically met.

The files for Dover Case Nos. D10-0472 and D10-0564 do not have similar memoranda from the Landstuhl Regional Medical Center. Further, such memoranda were not obtained in the Army IG investigation. As such, based on the evidence, the required release letters were never done, and the SOP requirement to have a "Release of remains from AFME, State ME, or other cognizant medical authority certifying cause of death" prior to cremation was not met. Accordingly, the failure to meet this requirement results in a violation of the rule under SOP 34-242-04, paragraph 1.2.1.

When questioned, Mr. Keel stated that if a death certificate existed, it would satisfy the requirement for a release from a medical examiner or attending physician. That answer is not sufficient because SOP 34-242-04 indicates otherwise. Further, in practice, the Port Mortuary and USAMAA-E were completing and collecting release letters for some of the cases, including Dover Case Nos. D10-0257, D10-0406, and D10-0473. That practice indicates the Port Mortuary and USAMAA-E were not simply using a death certificate in lieu of a release from an appropriate medical authority. While Mr. Keel may be correct that a death certificate could be used as a substitute for a release of the remains from the hospital, no such exception or substitute is permitted in the SOP. Rather, the requirement for a release is emphasized. The paperwork was required to be in all the files, and it was not. Moreover, no official, written waiver of this SOP requirement was made by Mr. Keel.

Authorization to Cremate from Medical Authority

The Port Mortuary is required under SOP 34-242-04, paragraph 1.2.2 to have an "Authorization to cremate from AFME, State ME, or other cognizant medical authority certifying cause of death." Although not subject to Delaware law, this requirement is in line with the law in Delaware, which requires medical examiner approval prior to the cremation of human remains.

In four of the five cases at issue here, the authorization did not exist. The file for Dover Case No. D10-0564 had an authorization document, but the documentation did not certify a cause of death. For Dover Case Nos. D10-0257 and D10-0406, there was no authorization documentation; however, Mr. Keel created an exception to policy memorandum for each file. In those memoranda, Mr. Keel stated that he granted an exception or waiver to the policy that requires authorization from the OAFME. In the files for Dover Case Nos. D10-0472 and D10-

0473, no authorization was found; nor did the files contain an exception to policy memorandum, waiving the need to have a certified cause of death within the cremation authorization.

In his exception to policy memoranda for Dover Case Nos. D10-0257 and D10-0406, Mr. Keel based the exception for the respective cases on his belief that they did not fall under the jurisdiction of the Armed Forces Medical Examiner. The assertion that these cases did not fall under the jurisdiction of the Armed Forces Medical Examiner is incorrect. In both cases, the deaths were of civilian dependents on a military installation, and both DD Forms 2064 (*Certificate of Death*) stated that the cause of death was unknown. Under 10 U.S.C. § 1471, the AFME could have investigated these cases and thus, both cases fell within the jurisdiction of AFME. As such, the exception to policy was of no effect because it was based on an incorrect premise.[95] The SOP by its own terms states that the requirements in the SOP are *mandatory*. Moreover, no such exception or substitute is indicated in the Crematory Section SOP. Rather, the requirement for a release is emphasized.

The evidence shows that Mr. Keel only prepared and signed an exception to policy memoranda in the first two fetal remain cases—proving that he knew of the issue and the importance of documentation. With regard to two of the three subsequent fetal remains cases at issue, Mr. Keel did not complete any such documentation. As to the fifth fetal remains case, Dover Case No. D10-0564, USAMAA-E completed and the Port Mortuary collected the authorization, albeit without the necessary cause of death certification.

When questioned on this point by AFOSI, Mr. Keel stated that if a death certificate existed, it would satisfy the requirement for a cremation authorization from a medical examiner or attending physician. His opinion had been the same earlier when Ms. Spera raised the same question by email, and Mr. Keel responded simply by saying "not applicable." His response is disingenuous because SOP 34-242-04 (which he signed and certified just months prior to these incidents) specifically requires such documentation and knowing this, Mr. Keel did not take affirmative steps to change the SOP to conform to his belief that this requirement did not apply to the actual practice at AFMAO. Again, what this chain of events shows is that Mr. Keel knew what was and was not needed to comply with the SOPs he wrote, but took no steps to either comply with his own SOPs, properly waive the SOPs, or re-write the SOPs when he came to realize they were deficient for dealing with fetal remains.

With regard to Dover Case No. D10-0564, arguably, the medical examiner's cremation authorization found in this file and the death certificate considered together might serve to satisfy the underlying requirement of paragraph 1.2.2. However, because the medical examiner's memorandum did not certify a cause of death, the specific written requirement of paragraph 1.2.2 was not technically met for Dover Case No. D10-0564.

The failure to obtain the requisite documentation prior to the cremation constitutes a violation of SOP 34-242-04. The SOP requirements constitute rules or policy which must be followed by AFMAO personnel, unless properly waived. Because the paperwork was not in the

[95] While AFMAO/PM is noted in the SOP as OPR, Colonel Edmondson (the AFMAO Commander) indicated in his testimony that Mr. Dean (Deputy Director of AFMAO) was the approval authority for all AFMAO SOPs. Arguably, any waiver of the Port Mortuary SOPs would have to be accomplished by Mr. Dean or a higher authority.

file, under the Port Mortuary's local SOPs the Cremation Officer should not have proceeded with the cremation until the paperwork was gathered and verified. The record supports that Mr. Keel was responsible for the SOP violations, as the record indicates he was the Cremation Officer for all five cases.

There is a discrepancy between what is required under the Crematory Section SOP, what is reflected in MOMS and what was found in the investigation of these matters. For all five cases at issue, MOMS reflected that a medical examiner's authorization for cremation existed. That is not true for four of the five cases (the exception being D10-0564).

The procedure with regard to medical examiner's authorization to cremate is set forth in the Crematory Section SOP. Paragraph 9.3 requires the Cremation Officer to scan and upload those authorizations to MOMS and paragraph 9.4 requires a second person to verify the authorizations were successfully uploaded. In all five cases, MOMS reflects that Mr. Keel both scanned and uploaded the authorizations and verified the authorizations were successfully uploaded. As there were no medical examiner authorizations for four of the five cases, these entries cannot be true. Not only did the Port Mortuary fail to follow the procedures outlined in the SOP, resulting in violations of paragraph 9.4, the record indicates that in four of the five cases the entries in MOMS misrepresented the existence of medical examiner releases that in fact did not exist. This, at minimum, is a violation of paragraphs 9.2 and 9.3. The MOMS entries attributed the misrepresentations to Mr. Keel. The evidence is not clear as to who made the entries in MOMS, Mr. Keel or someone working for him. It is possible that he entered this incorrect data himself, but it is also possible someone else attributed it to him inappropriately. Regardless of which is the underlying truth, as the Cremation Officer, he was ultimately responsible for reviewing the entries by whomever made and ensuring all documents were in order and were accurate. In either respect, the evidence showed a violation of the SOPs and more importantly, that his certification that the documents were present, when he knew they were not, was a misrepresentation of fact causing the MOMS system to inaccurately reflect absent documents.

Disposition Instruction from Service Casualty or Mortuary Officer

None of the five Port Mortuary case files have express disposition instructions from a casualty or mortuary officer. Based on the fact that multiple forms were filled out – notably the DD Form 2065 (*Disposition of Remains – Reimbursable Basis*) and the PADD's authorization to cremate the fetal remains – and the fact that USAMAA-E had case files on all five of these cases, it can be reasonably inferred that USAMAA-E did in fact meet with the families, discuss family options, and assist families with decision making. Thus, through the actions taken in each case, it can be discerned that USAMAA-E's implicit disposition instruction for each of these cases was that the fetal remains should be cremated, and there is no evidence to suggest differently.

However, because SOP 34-242-04 specifically requires "[d]isposition instruction from service Casualty or Mortuary officer assisting the family" the Port Mortuary was required to have disposition instructions from USAMAA-E prior to cremating the remains. The Port Mortuary did not have such instructions in any of the five case files. The failure to do so in each of the cases at issue amounts to a violation of SOP 34-242-04.

Burial Transit Permit

The burial transit permit is a State of Delaware document and is entitled "Authorization to Re-Route Decedents under Military Jurisdiction." The permit allows Dover AFB to transport a decedent to a funeral director. These permits were not found in any of the case files at issue. When questioned about their absence, Mr. Keel stated that he could not explain their absence and stated it must have been a clerical error by AFMAO's Records Administration Section.

The purpose of a burial transit permit for cremation cases is unclear, especially when it purports to be a Delaware State document and the cremains are sent to a family member rather than a funeral home. Nonetheless, paragraph 1.2.5 of SOP 34-242-04 requires the burial permit in every case and Mr. Keel indicated they should have been used. As such, paragraph 1.2.5 of SOP 34-242-04 was violated in each of these cases.

CONCLUSION

It is important to reemphasize that no fetal remains were actually damaged in transit. Although there were discrepancies in the enforcement of some of the Port Mortuary's internal administrative operating procedures, the cremations were carried out fully in accordance with the law. Further, all fetal remains sent to the Port Mortuary for cremation were correctly identified. In addition, the cremations of fetal remains were completed with PADD authorization and in accordance with the wishes and directions of the respective families.

As set forth above and based upon the record, the evidence does not support the following allegations: (1) that the USAMAA-E improperly packaged and shipped the remains of military dependants; (2) that Port Mortuary officials failed to address recurring incidents in which the fetal remains of dependents of military personnel have been shipped to the Port Mortuary for cremation in an unsafe and disrespectful manner; (3) that two of the fetal remains were not embalmed; and (4) that CMAOC approval was required before cremating the Army dependent. Accordingly, with regard to these allegations, no violation of law, rule or regulation was found.

However, as set forth above, the evidence supports Ms. Spera's allegations that cremations were conducted with regard to the five fetal remains cases without the required administrative paperwork. Specifically, the following violations were found:

- violations of SOP 34-242-04, paragraph 1.2.1 regarding all five cases at issue, as there was no written release of remains from AFME, State ME, or other cognizant medical authority certifying cause of death;
- violations of SOP 34-242-04, paragraph 1.2.2 regarding all five cases at issue, as there was no written authorization to cremate from AFME, State ME, or other cognizant medical authority certifying cause of death nor proper written waivers of such requirement;

- violations of SOP 34-242-04 paragraph 1.2.3 regarding all five cases at issue as there was no written disposition instruction from the Service Casualty or Mortuary officer assisting the family;
- violations of SOP 34-242-04 paragraph 1.2.5 regarding all five cases at issue as there was no burial transit permit;
- violations of SOP 34-242-04, paragraph 1.3 for all five cases at issue as there was no Medical Examiner authorization to cremate in the following four cases D10-0257, D10-0406, D10-0472 and D10-0473, and the authorization in D10-0564 did not meet the requirements of the SOP for certifying the cause of death nor were there any proper written waivers of such requirement;
- violations of SOP 34-242-04 paragraphs 9.2, 9.3 and 9.4 for Dover Case Nos. D10-0257, D10-0406, D10-0472 and D10-0473 because the Cremation Officer for each respective case did not receive, upload, or verify such authorization in accordance with SOP procedures and allowed the cremation to occur despite the missing medical examiner's authorization to cremate; and
- violations of SOP 34-242-04 paragraphs 9.2 and 9.4 for Dover Case No. D10-0564 because the Cremation Officer did not receive and verify such authorization in accordance with SOP procedures and allowed the cremation to occur without a fully compliant medical examiner's authorization to cremate.

Mr. Dean, Deputy for AFMAO, stated that Mr. Keel had responsibility for noting deficiencies and reporting them to USAMAA-E. In addition, during the relevant timeframe for these allegations, Mr. Keel served as both the Port Mortuary Director and the acting Branch Chief for the Port Mortuary Branch. As such, he was the management official charged with direct oversight of all Port Mortuary cremations and the direct supervisor of the Cremation Officers. The record also reflects that he was the Cremation Officer for each of the five fetal remains cases at issue herein and had specific responsibility for the cremations of each of the five cases. Further, he was aware of the requirements of the Port Mortuary SOPs, as he signed and certified them. Based upon the above and the evidence in the record, Mr. Keel is found to be responsible for the violations set forth above.

Other Conclusions

Table A3.3 of AFI 34-242 provides guidance on which tab to place certain documents in a mortuary case file but does not expressly require the entry of those documents in a mortuary case file. However, it would be prudent for the Port Mortuary to at minimum include DD Forms 565 (*Statement of Recognition of Deceased*) and DD Forms 2062 (*Record of Preparation and Disposition of Remains (OUTSIDE CONUS)*) in each file. However, failure to include these forms was not a violation of any law, rule or regulation.

The DD Form 565 is the fundamental identification document that initially confirms the identity of the deceased. On that form, a person who knows the deceased signs off after making proper visual identification and a witness signs off confirming the visual identification took place. DD Forms 565 were found in the Port Mortuary case files of Dover Case Nos. D10-0257 and D10-0473. While they were not found in the remainder of the Port Mortuary case files, they

were found in all USAMAA-E case files. The Army properly got positive identification for all five cases, but the DD Form 565 did not make its way to the Port Mortuary files consistently.

For the three case files that did not have a DD Form 565 present, MOMS reflected that there was a "positive identification" made by Mr. Keel. Presumably this "identification" was made based upon the paperwork accompanying the fetal remains which indicated the name of the fetus. For the two files that did have a DD Form 565 present, Mr. Keel was listed as having made the identification in one and Mr. Dean was listed as having made the identification in the other.

In all of these cases, the name of a person from the Port Mortuary (without firsthand knowledge of the deceased) was entered into the "ID Made By" field in MOMS. On its face, that seems to defy common sense, as the identification is normally made (as it was with these cases) by someone with firsthand knowledge of the deceased. It is unclear from the record what is supposed to be entered into this data field in MOMS. At best this entry would allow someone at the Port Mortuary to verify that identification was accomplished at Landstuhl. However, MOMS does not allow the user to type in the name of the person who made the actual identification.

The importance of the DD Form 565 cannot be understated, as it is the source document of actual visual identification of the remains by a person with knowledge. No other identification procedures are used in these types of "presumptive" cases, such as DNA testing, fingerprinting, or dental comparisons. Requiring a copy of the DD Form 565 or similar document prior to cremation would be prudent on the part of the Port Mortuary. However, there is no express requirement to have this document. Therefore, the absence of the DD Form 565 in the case files for Dover Case Nos. D10-0406, D10-0472, and D10-0564 was not a violation of law, rule, or regulation.

None of the five Port Mortuary case files had copies of the DD Forms 2062 (*Record of Preparation and Disposition of Remains (OUTSIDE CONUS)*). However, the DD Forms 2062 were prepared in each case by the Army and were found in each of the five USAMAA-E case files. Inclusion of the DD Form 2062 with the documentation accompanying the remains would be useful for Port Mortuary personnel, as the document explains what was done in preparing the remains. It would make sense for the Port Mortuary to require a copy of the DD Form 2062 with every case.

SECTION 5 – IMPROPER HANDLING OF CASES OF MISSING PORTIONS

OSC SUMMARY OF DISCLOSURE INFORMATION

According to the July OSC Referral Letter, Mr. Zwicharowski and Ms. Spera provided the following information to OSC concerning the handling of cases of missing portions. According to OSC, Mr. Zwicharowski and Ms. Spera have alleged the following:

(1) Mr. Zwicharowski and Ms. Spera both disclosed allegations concerning two incidents in which the Port Mortuary lost body parts, referred to as "portions" of deceased service members and failed to properly resolve those cases.

(2) Specifically, they alleged that on April 21, 2009, Ms. Spera reported to Mr. Zwicharowski, who was her supervisor, that a portion of the remains of an Army soldier was missing. Mr. Zwicharowski and Ms. Spera, in turn, reported the matter to then-Port Mortuary Director, Trevor Dean. Port Mortuary Commander Robert Edmondson ordered an Internal Commander Directed Investigation (CDI), which was carried out by one of his direct subordinates. Despite an extensive search, the portion was never found. Mr. Zwicharowski noted that, to his knowledge, this was the first instance in which a portion of a service member had been lost by the Port Mortuary.

(3) According to OSC, Ms. Spera, who at that time was responsible for the intake of all remains, provided recommendations for the development of SOPs for handling portions and improving the oversight of tracking remains. Mr. Zwicharowski and Ms. Spera alleged that the report from the CDI was not provided to them, and no meaningful changes were implemented to prevent similar incidents from occurring in the future.

(4) They further alleged that Port Mortuary officials failed to notify the Army or the Army soldier's family that this portion was lost. They note that the family, in providing disposition instructions, previously requested that the identified portion be destroyed. They contend, however, that the Port Mortuary was nevertheless obligated to apprise the Army and the family of this significant event that potentially altered the disposition of the remains.

(5) According to Mr. Zwicharowski and Ms. Spera, a second incident involving a lost portion occurred on July [ ], 2009, during the processing of remains of two Air Force service members. Because the portion was lost before an autopsy could be performed, positive identification was not achieved and only an assumption could be made that it belonged to one of the two individuals.

(6) According to OSC, the whistleblowers stated that a formal investigation was never conducted and, again, Port Mortuary officials did not notify the families of this incident. Mr. Zwicharowski noted that the service members were buried in November 2009, however, as of June 2010, the portion that was lost (D09-0693) was still reflected in the

internal mortuary operations management system as being in the autopsy section of the Port Mortuary.

(7) According to OSC, the Department of Defense Mortuary Affairs Policy, set forth in DoD Directive 1300.22, requires that the remains of all military members "will be provided permanent disposition to the extent authorized in their appropriate Service regulations or by Federal statutes." This policy further mandates that the remains of all service members "will be handled with the reverence, care, and dignity befitting them and the circumstances." DoD Directive 1300.22, section 4.

(8) According to OSC, Port Mortuary personnel must also comply with AR 638-2, *Care and Disposition of Remains and Disposition of Personnel Effects.* AR 638-2 establishes procedures for communicating with the family, specifically the person authorized to direct disposition of remains (PADD), and the liaisons for the applicable military branch to ensure the desired disposition of the service member's remains is achieved. The whistleblowers contend that the actions of Port Mortuary leadership did not comport with the requirements of these policies and regulations and did not afford the requisite dignity and respect owed to these service members.

LAW, RULE OR REGULATION

As set forth below, applicable rules and regulations reviewed included DoD and Service component rules and regulations, and the Port Mortuary administrative rules.

DoD and Service Component Rules and Regulations

DoD Directive 1300.22, *Mortuary Affairs Policy*, February 3, 2000 (certified current as of November 21, 2003), paragraph 4.2, requires that "[r]emains will be handled with the reverence, care, and dignity befitting them and the circumstances." The Directive does not elaborate on what constitutes the requisite "reverence, care, and dignity befitting them and the circumstances." Joint Publication 4-06, *Mortuary Affairs in Joint Operations*, June 5, 2006, Chapter I, paragraph 2 also states that "[h]uman remains will be handled with the [sic] reverence, care, and dignity," but does not further define the terms. Moreover, there are no regulations or rules from any of the Military Service components which define these terms.[96] DoD Instruction 1300.18, *Department of Defense (DoD) Personnel Casualty Matters, Policies, and Procedures*, January 8, 2008 (Incorporating Change 1, August 14, 2009), paragraph 4.3 states "[t]he remains of deceased personnel will be recovered, identified, and returned to their families as expeditiously as possible while maintaining the dignity, respect, and care of the deceased as well as protecting the safety of the living."

---

[96] *See* Air Force Instruction (AFI) 34-242, *Mortuary Affairs Program,* April 2, 2008 (Incorporating Change 1, April 30, 2008); Navy Medical Command Instruction (NAVMEDCOMINST) 5360.1, *Decedent Affairs Manual*, September 17, 1987; Army Regulation (AR) 638-2, *Care and Disposition of Remains and Disposition of Personal Effects,* effective January 22, 2001; and Department of the Army (DA) Pamphlet 638-2, *Procedures for the Care and Disposition of Remains and Disposition of Personal Effects*, December 22, 2000.

Without definition of these terms, the standards which arguably govern the Port Mortuary are those generally accepted practices established in the embalming and mortuary industry for the handling of human remains. *See e.g.* Florida Department of Financial Services v. Watts, DOAH Case No. 09-2065PL (February 4, 2010). This conclusion is consistent with the rules and regulations promulgated by the Air Force, and the Army which set forth policy and guidance for the care and disposition of remains of deceased personnel for which the service concerned is responsible.

According to AFI 34-242, paragraph 12.12.5, personnel at the Port Mortuary will "[p]repare and casket the remains, complying with disposition instructions from the PADD." Paragraphs 2.8 and 10.2.8 provide that, "[g]overnment morticians will follow the Armed Services Public Health Guidelines," and "[p]repare unembalmed remains or reprocess remains already embalmed to meet or exceed the Armed Services Public Health Guidelines." According to the Armed Services Public Health Guidelines, paragraph 1.8.1.3, morticians are to prepare remains "in a manner reflecting the highest standards of the funeral service profession."

Under AR 638-2, paragraph 2-17d, "[p]reparation [of remains] will be done under standards outlined in the Armed Services Specification for Mortuary Services." Appendix C to AR 638-2, *Armed Services Specification for Mortuary Services* (App C), states that, "[t]he military services require that all remains be processed or reprocessed in a manner reflecting the highest standards of the funeral service profession."

DoD Directive 1300.22, paragraph 4.4 states, "[e]very effort will be made to identify remains and account for unrecovered remains of U.S. military personnel ... who die in military operations, training accidents, and other multiple fatality incidents." DoD Instruction 1300.18, paragraph 4.5 states "DoD Components shall record and report, to the extent possible, a full and accurate accounting of deceased or missing personnel and all reportable ill or injured personnel."

In the event a Service member dies, the military will recognize someone as being the person authorized to direct disposition of human remains (PADD). DoD Instruction 1300.18, paragraph E2.42 defines the PADD as "[a] person, usually the [primary next of kin], who is authorized to direct disposition of human remains ... Service members shall identify a PADD on their DD Form 93." DoD Instruction 1300.18, paragraph 6.1.4.4 also states that "[o]nly one person at a time can be the PADD."

AFI 34-242, paragraph 7.1 states, "[i]t is the policy of the Air Force to individually segregate and identify remains of all deceased personnel to the fullest extent possible and to use all available means and scientific resources to accomplish this. No information concerning identification will be released until final conclusions are established on all remains." Paragraph 7.3 states:

> If remains are not recognizable, scientific means must be used to establish a positive ID. Scientific identification may include the use of dental, finger or footprint, deoxyribonucleic acid (DNA), or other scientific means as directed by AFME or the agency with local jurisdiction ... The mortuary officer will not brief the PADD

on mortuary entitlements until the remains have been positively identified. In the interim, the PADD should be kept informed daily on the status of identification.

7.3.1. Remains will be officially designated as individually identified when it is concluded, with medical certainty using all identification media available, that the identification findings are in scientific agreement with an individual by name.

7.3.2. Remains will be officially designated as unidentified when it is concluded the scientific identification process does not associate those remains with any individual by name. Remains will be placed under refrigeration pending arrival of an Air Force mortuary specialist.

AR 638-2, paragraph 8-3 states, "all resources and capabilities immediately available will be used" to "search for, recover, and identify eligible deceased personnel." Paragraph 8-14a states, "[t]he importance of good identification processing documentation cannot be overemphasized." DA Pamphlet 638-2 paragraph 3-1 states, "[i]dentification of remains is a critical element in the disposition of remains process."

Port Mortuary Standard Operating Procedures

The incidents involving the missing portions occurred in 2008 and 2009. The standard operating procedures (SOPs) in existence for the Port Mortuary at that time were established, for the most part, in 2003.[97] Several significant changes occurred in the interim. In 2003, the Port Mortuary moved to a new facility, the Charles C. Carson Center for Mortuary Affairs, which replaced the 48 year old facility that had been in use since 1955. The present facility has refrigeration units or "reefers"[98] inside the building. Further, the Port Mortuary began using MOMS in 2004, which substantially affected the processing procedures.

Port Mortuary Division SOP 34-242-01, Section 4, *Lessons Learned,* April 2003 required all supervisors and section leaders to complete a "Dover Port Mortuary Lessons Learned" form for any "problem areas" discovered during operations at the Port Mortuary. The purpose of this SOP was "[t]o provide instructions and a unified method of preparing and maintaining documented Lessons Learned after each event."

Port Mortuary Division SOP 34-242-02, *Operation Overview*, August 2003 stated in its introductory paragraph that "designated personnel will maintain a physical inventory of all remains to include those stored in refrigerator trucks pending identification. Inventory will be fully reconciled by barcode number with remains shown to be in the building or refrigerator trucks." Under paragraph 1, it states:

---

[97] Most, if not all, of the Port Mortuary SOPs set forth herein were superseded by SOP 34-242-01, *Mortuary Branch*, 25 April 2010 and/or SOP 34-242-03, *Operations Branch*, 1 April 2010.

[98] "Reefer" is the common term for the refrigerated unit where remains and portions are stored at the Port Mortuary. Ms. Spera testified that the Port Mortuary has four reefers within the facility.

Operation:

...

e. Transferring human remains (HR) accountability to designated AFME/AFIP officials (autopsy) and port mortuary personnel (embalmers).

...

h. Maintaining through close observation, computer scan in/scan out and periodic physical daily inventories, accountability for HRs during each stage of the processing.

Port Mortuary Division SOP 34-501-02, Section 4, *Accountability Section*, August 2003 outlined the responsibilities and procedures for tracking the location of human remains in all processing stages throughout the Port Mortuary. Under paragraph 4, "[t]he basic intent is to retrieve key data of current operational, historical importance and/or to track the present location of each remains within the control of the mortuary operation." According to the SOP, the procedures "can be modified depending upon the type of mass fatality situation, especially if receipt, processing and storage will be accomplished in separate facilities."

Port Mortuary Division SOP 34-501-10, *Bar Coding Operations*, August 2003 outlined the mortuary operations division's responsibilities and procedures for tracking the location of remains in all processing stages through the Port Mortuary during mass fatality situations. The SOP provided that these procedures "were developed to account for hundreds of remains in the Dover Mortuary system. The basic intent is to account for every portion/torso that come[s] in through this facility."

SOP 34-501-10 stated at paragraph 4(a)(2) that "[i]t is **VERY** important to understand that every single human remain that comes through the door will receive a unique bar-code number. It is extremely important because when separate portions are being processed they will eventually need to be re-associated[99] with the original torso, or significant portion, when the identification comes from the medical examiners" (emphasis appears in the SOP). Paragraph 4(b)(3) stated "[a] physical inventory will be accomplished on a daily basis unless no shipping, re-association, or any movement of remains has been done."

Paragraph c of SOP 34-501-10 stated, "[r]e-associating remains is why it's so important to keep a very accurate and up to date inventory. This is where an inventory individual and a licensed mortician will physically re-associate remains (portions) and sign a medical release. Not[h]ing will be re-associated until a signed release from the medical examiners' office is given to the mortuary staff. This process is very critical and must be overlooked [sic] by more than

[99] The term "re-associate" is used at the Port Mortuary where a portion is identified through scientific means (*i.e.* DNA, fingerprints, dental) to a parent case number for the remains of an individual Service member. The portion could be physically re-associated with the remains (Mr. Dean testified that can happen where a tooth is placed back into the mandible or maxilla of the individual). More likely, as Dr. [Medical Examiner 3] testified, the portion would remain in the portion bag and the re-association would be reflected in the medical examiner's report rather than physically re-associating the portion with the remains. Articulation is another means of re-associating portions to a remains. Articulation is where the bone from the portion is perfectly matched or fit to a bone in the torso (or other portion).

one person." The SOP further provided that after the portions have been physically re-associated, the remains can be wrapped and placed in the casket for shipment. "Once a release has been given it is important to update the inventory system" so that it reflects that the portion belongs to someone. In a final note at the very bottom of the SOP, it stated, "***IT IS THE INVENTORY/BAR-CODING SECTIONS*** [sic] ***RESPONSIBILITY TO HAVE THE CAPABILITY TO ACCOUNT FOR EVERY SINGLE REMAINS THAT HAS BEEN PROCESSED AT ANY GIVEN TIME!***" (Emphasis appears in the SOP.)

Operating guidelines prescribing the responsibilities and procedures for the Port Mortuary Shipping Section were found in the *Logistical Support* SOP 34-501-8, Section 4, 19 May 2008. Paragraph 1.3.7 of that SOP required employees of the shipping section to "[v]erif[y] monthly inventory of portions in storage."

Port Mortuary Division SOP 34-242-2, Section 2, *Processing Operations*, July 19, 2009 stated at paragraph 6(A) that "body handlers will comply with MOMS procedures to include...[w]hen [human remains] are transferred to reefers for temporary storage, the handlers will ensure each gurney bears a barcode number laminated tag or tags matching the tag(s) of the [human remains] by the gurney and each [human remains] is scanned to a specific storage location."

Commander Directed Investigation

According to the Commander Directed Investigation (CDI) Guide, there are no Air Force Instructions prescribing an investigative process for fact finding as part of a CDI. The Guide also indicates that "SAF/IGQ and the Air Force/JAA developed" the Commander Directed Investigation Guide to provide procedures "commanders and their investigative teams can use to conduct prompt, fair and objective investigations." Paragraph 7.3 of the CDI Guide provides that "[f]inal notification of CDI results is exclusively the commander's prerogative."

SUMMARY OF EVIDENCE

Background

Handling and Preparation of Remains and Portions

The preparation of remains at the Port Mortuary begins with their arrival at Dover AFB with the Dignified Transfer. During the Dignified Transfer, transfer cases, in which the remains and portions are transported, are unloaded from the aircraft and escorted to the Port Mortuary. The transfer cases are given a container number that is entered into MOMS and secured in refrigerated units outside the main facility[100] until the following morning when the preparation begins.

[100] For safety reasons, the transfer cases are stored outside the facility until they can be scanned for any unexploded ordnances.

The following morning, the transfer case is moved to the receiving dock of the facility by an "Ops Processing Team" from the Port Mortuary. Once the medical examiner is present, the top of the transfer case is opened. According to [Major 2],[101] former Director of Operations, Port Mortuary Division,

> [u]nderneath the top of the transfer case is typically where all the paperwork is [for] all the HRs [human remains] that come back from the Mortuary Affairs Collection Point and the Theater Mortuary Evacuation Points in theater and it's got personal effects, inventories and other mortuary forms that the Medical Examiners require. The Medical Examiner will take all that paperwork, then at that point there's a member from our IT staff that is running the computer station there. The Medical Examiners will assign a Medical Examiner Number, which is different from a Dover Number.[102]

The required paperwork is printed and placed on a clipboard which is then placed in a plastic bag. The remains at this time are still in the bottom of the transfer case, still in the human remains pouch that they arrived in. The transfer case is placed on rollers and sent through an x-ray machine and scanned for any unexploded ordnance by Explosive Ordnance Disposal (EOD) personnel. The paperwork is provided to the EOD personnel who scan it into the system.

Once the transfer case has been rendered safe by EOD personnel, the human remains pouch is taken out of the bottom of the transfer case and placed on a gurney and then weighed. The paperwork goes from the EOD personnel and accompanies the remains throughout the process. The medical examiner monitors the opening of the transfer case and the human remains pouch. The human remains pouch has a seal on it which cannot be cut unless the medical examiner is present. A photographer from OAFME photographs the opening the transfer case and the human remains pouch.

After the photographer is finished, the medical examiner will take a look at the remains as they are laying there. According to [Major 2], "sometimes, depending on the incidents, there might have been fragmentation so that a medical examiner if it looks like there's fragmentation, they'll see if anything is not connected to the larger portion or the large piece of the human remains that are there. If there's anything that is not connected … either by tissue or muscle or bone, [the medical examiner will] remove that and they'll put it on a separate gurney for that to

---

[101] [Major 2], a reservist in the United States Air Force Reserves (USAFR), served as the Director of Operations in the Port Mortuary Division from October 2008 through March 2010. He became a civilian for the Air Force on May 24, 2010 and is currently assigned to the Operations Division. [Major 2] had served several assignments to the Port Mortuary Division between 2004 and 2010. His last tour of duty as a reservist was October 2008 to May 2010. His primary duty was to oversee the processing of human remains and portions from the point the transfer cases were opened up until the remains go to the FBI station or the portions go to the X-ray station.

[102] According to [Major 2], Dover case numbers run sequentially every single day. "So once one day is done, the next morning we always check and make sure that we're starting with the very next Dover number." Medical examiners handle cases around the world and their numbers may differ, "depending on if they had to assign a number somewhere else."

be given a[n individual] Dover number later after the processing [of remains] is done." At the Port Mortuary, these fragmented or partial remains are called "portions."

Once the medical examiner is done, the human remains come to the Triage station, which is a small table with a computer and three separate printers, one of which prints plastic tags that will have the Dover case number that is being assigned. The remains are processed first and then portions. The portions, which have been separated by the medical examiner, are individually entered into MOMS, one at a time. A specific bar code for each set of remains or portions is created by the MOMS database, and referred to as either the Dover case number or "bar code" number. Each remains is given a separate bar code number; each individual portion is also given a separate bar code number.

In his interview, [Major 2] explained the triage process:

> [s]o the remains come over to the table. All the paperwork gets taken from the remains, gets brought over to – at the time, either myself or one of my officers that was working the computer at that point. We would scan the container number which was initially given by the IT folks out when they initially took the transfer case off. That calls up all the information so far, the weight and everything is already in there. We hit new item – create new … and that automatically populates the next Dover number with all that information. Step back. Before I scan the container report I do populate new and that creates the Dover number and then at that point I scan the container number and [everything] else comes in and [marries] up with the Dover number … [W]e give them [the remains] the Dover number; we print out their case flow sheet, which lists everything, all the information up on top, the Dover number and everything. We print out the tags. Those are the little 4X6, 3X5 little plastic sheets and then all the labels … each end of the gurney that the remains are on receive a date tag with a zip tie. We put a zip tie on every human remains pouch that's there through the zipper. We put a zip tie on the remains. Typically we go around the left ankle. If there's no left ankle we go to the right ankle and then we go left wrist, right wrist and if not, then we just find some part of the remains that we can attach some sort of documentation to. All the paperwork receives one of those little mailing labels on both sides of the bag that it's in.

The record reflects that, at Triage, each individual portion is placed in a sealable plastic bag (referred to as a portion bag) and labeled with the bar code number on both sides of the bag.[103] The same is done for the documents associated with the remains and portions. The individual portion bag and document bag are then placed in a larger plastic sealable bag.[104] The

[103] The record reflects very large portions may not fit in a plastic bag and are generally tagged directly.
[104] The double bagging was instituted after the portion was found missing in April 2009.

larger bag is also affixed with the bar code labels with the associated Dover case number. According to [Major 2],

> [o]nce all that is accomplished, all the paperwork, all the extra tags and labels there with it get put back into the large Ziploc bag that the clipboard and all the paperwork are on. That goes on the gurney underneath the human remains pouch, underneath the remains. At that point I double-check with everybody I say everyone is good ... We also take one of those mailing labels, little stickies and we have a book that tracks it. So we always put one in there and we've got three or four binders of these labels that go all the way back. Once that's done, everyone's good, everything's been labeled properly, the remains then go from my station typically to FBI, and the reason I say typically is if we have an abundance, a mass casualty of say seven to 10 if not more remains come in, the medical examiners might say okay, but the first three at FBI, the next three will go to dental first, and then ... flip flop them ... At that point, that's pretty much where our involvement as far as the officer corps goes end. I mean we'll continue as the remains continue through the process. We'll walk the line and make sure that everything is going the way that it should go.

After the remains and portions are coded and tagged, they are placed on a gurney and wheeled to the Fingerprint and Dental stations for formal identification, as applicable. The remains/portions then proceed to the X-ray station for x-rays and CAT scans. After x-ray, the remains/portions are brought into the autopsy suite for completion of the autopsy by medical examiners, who also take any necessary DNA samples for identification purposes. At each step of the process, the remains or portion is tracked through the process by scanning the bar code before the portion or remain enters the station and when the remains or portion leaves the station.

Once the autopsy is complete, remains are normally embalmed, and then proceed to the dress and restoration area where any required restoration by embalmers and embalming technicians is accomplished. If the remains have been determined to fall into one of the viewable categories, they are dressed in the appropriate uniform or clothes as provided by the PADD. Otherwise, the remains are placed in a full body wrap with the Service member's uniform placed on top.

Generally, the remains are then placed into a casket and shipped to the civilian funeral home as directed by the PADD. Throughout this process, the status of the location of remains and associated actions are updated at each station in MOMS.

Disposition Instructions

When the remains are incomplete, the PADD communicates their desire for disposition of the incomplete remains of their Service member and any subsequent portions that may be identified in the future using the Central Joint Mortuary Affairs Board (CJMAB) Form 1,

Disposition of Remains Election Statement/Initial Notification of Identified Partial Remains (March 2007, revised April 2009) and Form 3, *Disposition of Remains Election Statement/Notification of Subsequently Identified Partial Remains* (May 2007, revised April 2009). Normally these forms are presented to the PADD by the Service liaison or an AFMAO licensed funeral director at the time of the Dignified Transfer.

The PADD is presented with three elections under CJMAB Form 1. The first section addresses remains that are currently recovered. The PADD may elect to receive the incomplete remains that have been identified to date or temporarily delay receipt of incomplete remains until other remains or portions are recovered and identified. The second section addresses the situation where remains are individually identified some time in the future (also referred to as "subsequently identified remains"). The PADD may elect to be notified of the identification and accept the subsequent portions for final disposition, or elect not be notified and have the military service (the Port Mortuary) make the appropriate disposition. The third section (added in April 2009) involves a future group designation. When portions of two or more military personnel (who died in the same incident) cannot be individually identified, the portions are interred as a group in a government cemetery. If further remains or portions are designated for inclusion in a group burial, the PADD may elect to be notified and provided information on any planned ceremony or may elect not to be notified.

CJMAB Form 3 addresses the disposition of subsequently identified partial remains where the PADD has chosen to be notified and receive the remains. Disposition is accomplished in accordance with the PADD's direction as recorded on the Form 3. Six options for disposition are listed, including transfer of the additional remains/portions to a specified funeral home or cemetery for interment, cremation at either a funeral home or by the government, and an option for the additional remains/portions to be retained for appropriate disposition by the parent Service or by the Armed Forces Medical Examiner System for teaching and research purposes. The PADD is also given the choice to be notified of further subsequent remains/portions (beyond the date the CJMAB Form 3 is signed) when they are identified.

Portions Management

Ms. Spera testified that, between January 2008 through April 2010, she was "responsible for maintaining accountability of the portions, of ensuring disposition was properly handled, liaison with the medical examiner, Army, Air Force, various agencies to keep track of what their – for what disposition was going to be taking effect for those identified portions or those not unidentified [sic] portions."

Portions (or partial remains) are body parts that have been separated from the human remains. Ms. Spera explained that there are "a few different classifications of portions. We have disassociated portions that come into the building, those are the ones that are not physically attached to a remain coming in. We have subsequent portions, which are portions which are identified after the remains leave the building and they subsequently have a separate disposition. We have retained organs which are those organs harvested by the medical examiners for further studies … and then we have what are called group or incident, group burials is what the overall

name is, and those are portions that cannot be identified to a particular person. However, ... [the portion] is identified to a particular incident."

A large number of portions are kept at the Port Mortuary and many of these are kept under refrigeration in reefers, pending identification,[105] final medical examiner release and disposition. For example, according to Dover Port Mortuary In House Reports, on March 1, 2009, there were 489 portions and remains at the Port Mortuary of which 283 were in the reefers; on April 2009, there were 509 portions and remains at the Port Mortuary of which 311 were in the reefers; and on March 3, 2010, there were 863 portions and remains at the Port Mortuary of which 570 were in the reefers.

Portions are kept in reefers 1 and 2, each of which has ten racks that hold portion bags. Ms. Spera described the configuration of these reefers as having three racks on the side walls and two racks along the back wall. Two additional racks are located in the center. The racks are numbered sequentially with rack numbers 1-3 being to the left of the entrance, rack numbers 4-5 along the back wall and rack numbers 6-8, to the right as one enters the reefer. Rack numbers 9 and 10 are in the center of the reefer. Each rack has a top and bottom row of clips. There are 24 numbers available on the top row of clips of each rack (numbered 1-24) and 24 numbers on the bottom row (numbered 25-48), with three trays on the top (under the top row of clips) and three trays under the bottom clip for larger portions that cannot be held up by a clip. The portion bags are hung on the racks by clips (similar to the way hangers are hung in a closet). The portion bags hang perpendicular to the wall while larger portions lie on trays (also referred to in testimony as tubs or bins) beneath the clips.

During the relevant time period at issue, Ms. Spera stated that an in-house report was generated weekly to provide an account of the portions in the custody of the Port Mortuary. The in-house report is generated from data put into the Port Mortuary's computer tracking system – the Mortuary Operations Management System (MOMS).[106] The report consisted of four or five tabs which included summations of identified and unidentified portions as well as portions sent to the AFME DNA lab in Rockville, Maryland. The report was distributed to the Service liaison teams, case management personnel, the Port Mortuary Director, and medical examiners.

In order to provide accountability, Ms. Spera conducted weekly and monthly inventories of all portions at the Port Mortuary. Prior to either inventory, Ms. Spera would print out an inventory sheet from MOMS. The weekly inventories were a physical sight count of the number of portion bags in each reefer matched to the number annotated in MOMS. Ms. Spera stated that she normally conducted the weekly inventory by herself. "I would run a report, find out how many portions were located in an area – in a rack – and then just do a count to verify, yes, that there's that many portions in the rack. Not necessarily that that was the correct portion in the right spot." The weekly inventories only reconciled the number of remains/portions in the reefer and facility with the number recorded in MOMS.

---

[105] Scientific identification is generally accomplished in one of three ways – DNA, dental and fingerprints.

[106] According to Mr. Dean, "MOMS was created and began operating in 2004 to handle large numbers of portions and personal effects and the results of advancements in identification technology and disclosure to families of the nature of the condition of their loved one. Since its inception, almost 14,400 remains (full, fragmented and portions) have been cared for by the AFMES and Port Mortuary staff and logged into MOMS."

The monthly inventory was verification that the assigned Dover tracking number and location as annotated in MOMS matched that of the number and location of the portion bag in the reefer. To assist her during the monthly inventories, she would use one to two additional persons drawn from either permanent party personnel or deployed personnel. During monthly inventories (also referred to as "full" inventories), the actual location of the portion bag in the reefer was verified. Neither the weekly nor the monthly inventories actually verified that a portion was in each of the portion bags, or that the correct portion was in each bag. During both inventories, the results were manually annotated with a checkmark on the printed inventory sheet and maintained in Ms. Spera's cubicle. Following the inventory, Ms. Spera updated MOMS as needed.

First Incident of Missing Portion

Incoming Remains on August [ ], 2008

According to the Casualty Status Report, in August 2008, the vehicle in which an Army soldier was riding "sustained catastrophic damage resultant from insurgent improvised explosive device, with all passengers being killed in action." On August [ ], 2008, remains and portions from this incident arrived at the Port Mortuary for processing. According to case files provided by AFMAO, the Port Mortuary received 10 sets of remains with 55 portions on August [ ], 2008 [the same day].

The non-intact remains of the Army soldier (which had a Medical Examiner's number (ME-08-0592) and a Dover number (D08-0896)) were positively identified on August [ ], 2008 [the day they arrived at the Port Mortuary], via dental records and fingerprints. The medical examiner, in a letter to the Army Casualty Office dated August [ ], 2008 [the same day], described the remains as "incomplete" and "non-intact torso with traumatic amputation of lower extremities and right upper extremity; severe head trauma with loss of cerebral hemispheres." The autopsy was completed by [Medical Examiner 11], a pathologist from the OAFME. In the Record of Preparation and Disposition of Remains, the areas embalmed were described as "neck, shoulders, chest walls & flaps, back, buttocks." From the shipping record, it appears that Ms. Spera embalmed the non-intact remains. The OAFME released the non-intact remains on August [ ], 2008 [the next day] and the remains were shipped to the funeral home designated by the PADD on August [ ], 2008 [three days later].

On August [ ], 2008 [the day the remains arrived at the Port Mortuary], the PADD completed CJMAB Form 1, *Disposition of Remains Election Statement/Initial Notification of Identified Remains* (March 2007). For currently recovered remains, the PADD elected "to receive the incomplete remains that have been identified at this time." With regard to remains identified in the future, the PADD chose option 2 which stated, "[i]n the event that further remains are identified, I do not want to be notified. I authorize the Army, Marine Corps, Navy, Air Force or Coast Guard to make appropriate disposition."

Two subsequent portions of the Army soldier were identified by DNA sample on September 23, 2008. These portions were two of the 55 portions that arrived at the Port

Mortuary on August [ ], 2008 [the day the remains arrived] and were given Dover numbers D08-0913 and D08-0914. During autopsy, photographs of each portion were taken. Dr. [Medical Examiner 6] was the medical examiner who took samples for DNA testing from both of these portions. Based on the ruler laid beside the portion for the photograph taken in autopsy for the medical examiners' office, the portion D08-0914 was approximately 14" long and 9" wide. D08-0913 was slightly smaller. The portions were placed in reefer 2 pending DNA identification and final release by the medical examiner. Specifically, D08-0914 was placed on the seventh rack, bottom row at clip number 37 (RA2 RA7 BCL37) and D08-0913 was also placed on the seventh rack, bottom row at clip number 40 (RA2 RA7 BCL 40).

January 2009 Incident

Ms. Spera testified that as she was doing a weekly inventory count on January 25, 2009, she found two portions lying in two separate trays (bins) which "were unbagged and unlabeled." She said she thought it was a fluke but reported it to her supervisor, Mr. Zwicharowski[107] who asked her to investigate further. [Captain 1][108] was tasked to assist Ms. Spera. They investigated the incident[109] and provided a memorandum of record dated January 26, 2009, documenting the search and recovery of the portions that had been in the bags. According to Ms. Spera, [Captain 1] wrote the memorandum, but she also signed it.

According to the memorandum, Ms. Spera, during her inventory, noticed that "within two separate bins there was a set of DP [disassociated portions] that was unbagged and unlabeled. Beneath these were a set of properly bagged and labeled DP." She and [Captain 1] "pulled the two trays containing the DP from the reefer." He "looked up the case numbers for the properly labeled DP, and the description did not include the unlabeled portions in the tray." Ms. Spera then went back into the reefer to investigate further. She testified that she did not search all the racks in the reefer but did search the racks "that were above" the trays. "I went through each bag. I went through the bottom racks, all the bags that were hanging above the bottom shelf where the portions were located." According to the memorandum, Ms. Spera "noticed two clips that contained empty labeled bags. These bags were located right above the trays where the DP in question were found." The memorandum further stated:

> Upon further inspection, Ms. Spera noticed that the empty bags had been sliced at the bottom, (not at the seam), and that there were slide marks of fluid inside the bags. It was concluded that the

---

[107] When questioned about the two unlabeled portions found in the bins below the portion bags in reefer 2 on January 25, 2009, Mr. Zwicharowski recalled that someone had reported to him "that a bag was slit and a portion was--they searched--an empty bag was found in inventory, and they searched for the portion and found it below the bag, and there was a slit in the bag basically."

[108] [Captain 1] currently serves as an Assistant Professor of Aerospace Science, AFROTC Detachment 400, Michigan Technological University. [Captain 1] was deployed to the Port Mortuary from September 2008 to April 2009. He testified that during this deployment his "primary duty" was as "the officer in charge of the outbound, as far as the outbound dignified transfers for the remains. But I also helped out in the back and kind of oversaw the processing of the remains" on most days during his deployment.

[109] According to Ms. Spera, [Captain 1] was not present when she found the portions in the trays. He did assist her with the investigation and was present when the empty bags were found. [Captain 1] testified that he believed he was present when the portions were found in the trays.

> DP slid out of the bottom of each bag and fell within the storage trays below.
>
> To verify this theory, Ms. Spera and [Captain 1] retrieved the case information for the empty bags. The first, D08-0908, was described to be "soft tissue and bone." The portion located in the tray beneath the empty bag for D08-0908 appeared to be soft tissue with a piece of bone protruding from one side. The second case, D08-0918, was labeled as "soft tissue." The portion in the tray beneath this bag appeared to be soft tissue with no obvious bone fragments located within it.[110] As one final affirmation, Ms. Spera and [Captain 1] reviewed the original photographs taken on [ ] August 2008 [the day the remains arrived at the Port Mortuary], and they seemed to match their findings. Ms. Spera and [Captain 1] rebagged the portions and labeled them accordingly. The original sliced bags were also included in each new bag.

The empty bag for D08-0908 was located in reefer 2, at rack seven, bottom row at clip number 33 (RA2 RA7 BCL 33). The empty bag for D08-0918 was located in reefer 2, at rack seven, bottom row at clip number 41 – about eight clips down from D08-0908. When asked in her interview if it was fair to say that she stopped searching once she found two empty bags, she agreed. The empty portion bag D08-0914 that was later found in April 2009 was located on rack number 7, BCL 37, hanging in between bags D08-0908 (BCL 33) and D08-0918 (BCL 41) on the same rack. The IO noted this in Ms. Spera's (third) interview and she testified that she "should have" had occasion to look at clip 37 where D08-0914 was located, when she went through the bottom rack.

In his interview, [Captain 1] testified that he prepared and signed the memorandum and that Ms. Spera also signed it. He reiterated that he checked the files for the bagged portions in the trays to verify that the unbagged portions did not belong with the bagged and labeled portions in the trays. With regard to finding the two empty portion bags, he testified that with these two bags, "it stuck out because – and I don't mean to be kind of graphic but – portions that have been in there a long time, like these were, there's a lot of fluid, and it kind of builds up; and I remember seeing that there wasn't any fluid in these and that's what kind of 'hey, what's wrong with this one?' I do remember that." He indicated that when parts decompose, "[i]t tends to accumulate kind of a black type fluid, black or brown … [o]n the bottom of the bag … Plus you know how empty bags are more flat than, you know, a bag with something in it. I think that kind of caught our attention as well." With regard to the empty portion bags, [Captain 1] testified that both bags looked like they had been cut. "[I]t was a very straight incision, like with a razor blade." He indicated that the bags were 10 to 12 inches wide and the cut was almost all the way across the bag and "perfectly straight." He stated the cut was only on one side of the bag.

[110] D08-0908 was described as soft tissue and bone approximately 13"x11"x4"; D08-0918 was described as soft tissue approximately 15"x8.5"x3.5."

[Captain 1] testified that he remembers that they spoke with the photographer from the OAFME and that he was the one who pulled up the photographs of the portions. He did not remember whether Ms. Spera spoke with a medical examiner regarding the portions.

Ms. Spera testified that "[t]he medical examiners provided us the photographs, but no, we did not request a second DNA test or anything like that." Ms. Spera stated that they concluded that the two portions found in the trays came from the empty portion bags hanging above the trays. "We came to the conclusion based on where the empty bags were located in conjunction with where the portions were located out of the bags and based on the description that was in MOMS for what should have been in the bags as well as the photographs we received from the AFME."

Ms. Spera testified that after the incident in January 2009, "[w]hen I talked to the medical examiners regarding their procedures for handling portions prior to them being put away in the cooler, I found out that at times, some of the medical examiners were taking DNA samples from portions while the portions were on the plastic bag." That is, the medical examiners would use a scalpel to remove a piece of the portion to be used for DNA testing. Ms. Spera thought that one possible scenario for the slit bags[111] could be the medical examiner slit the bag with the scalpel while removing the DNA piece. She stated that based on her discussions with the medical examiners, "[t]hat is something that they have changed" and that it was her understanding this technique was stopped.

February 2009 Medical Examiner's Release

On February 10, 2009, portions D08-0913 and D08-0914 were formally released by the OAFME for military disposition. Both portions were described in the medical examiner's letter dated February 10, 2009: D08-0913 as a "frag[ment] and incomplete ankle/foot" and D08-0914 as a "frag[ment] and incomplete ankle and talus."

A memorandum for record dated February 12, 2009 was issued by Dr. (then-Major) [Medical Examiner 7], Deputy Chief Forensic Anthropologist, Armed Forces Institute of Pathology/Office of the Armed Forces Medical Examiner (AFIP/OAFME) regarding release of re-associated portions. In the memorandum, Dr. [Medical Examiner 7] indicated that disassociated portions D08-0913 and D08-0914 were identified to the Army soldier, ME08-0592 on September 23, 2008 "via nuclear DNA profile match." She further stated, "[o]riginal notification of identification of the portions did not flow to the Armed Forces Medical Examiner Tracking System (AFMETS) database, nor was the original DNA report uploaded to AFMETS. The discrepancy was discovered on 10 Feb 09 by [Medical Examiner 8] during a review of the 'Addendum Report of Laboratory Examination' detailing the DNA identification confirmation of the decedent's torso. The addendum report was dated 3 Feb 09 and uploaded to AFMETs [sic] on 10 Feb 09. All portions were released on 10 Feb 09 for final disposition. The [PADD] elected no notification of identification of subsequent remains."

[111] Ms. Spera stated that a second possible scenario for the slit in the bag could be "when the box of bags was opened, somebody slit it open with a knife and we didn't, because it wasn't all the way through at that time, we did not see that cut."

The Port Mortuary was directed to dispose of these portions as medical waste "in accordance with procedures outlined in Army Regulation 638-2, Care and Disposition of Remains and Care and Disposition of Personal Effects, and family instructions, CJMAB Form 1, signed [ ] August 2008" by the Officer in Charge, Army Liaison Team, on February 12, 2009.

Missing Portion in April 2009

On April 21, 2009, Ms. Spera testified that, while she was preparing portions for military disposal,[112] she discovered that portion D08-0914 was missing.[113] Ms. Spera stated that she "found the bag that the portion was in. There was a slit at the bottom of the bag and there was evidence inside the bag that a portion had been in there at one time." She indicated that the "portion bag and documents bag were hitched together by a cable tie but the bags were not placed into an outer bag to provide additional protection." She stated that "[w]hen the portion was identified, I brought it immediately to the attention of my supervisor, Mr. Zwicharowski and Mr. Dean, who was the Port Mortuary director … at that time."

She stated she then "commenced a very thorough and complete inventory of everything that was in the reefers, and I submitted that report with my recommendations on April 22d." In her report Ms. Spera stated, "I pulled each portion [out of the reefer] and checked the description in MOMs against the matter in the bag."[114] Ms. Spera testified that "we pulled back computer logins of when the portion was scanned into and out of that position where it was located. We also looked at photographs of the portion to see if something – see if there was something unusual about it so that I could identify it." She further stated that she would have expected to find the portion in the reefer if it had fallen out of the portion bag while hanging in the reefer, as she had done with a similar incident that occurred in January 2009.

Ms. Spera, reading from the client notes in MOMS, testified that "[a]s of COB, 21 April 2009, the actual portion belonging to D08-0914 has not been found. Portion found missing while pulling portions for medical disposition, medical waste burn scheduled 22 April 2009. Document bag and portion bag were found in location Reefer-2, which is short for refrigerated unit, Rack-7, bottom clip -37, but the bottom of the portion bag was slit open. Evidence inside the portion bag was that the portion was at one time in the bag in accordance with MOMS work history, portion was scanned into the location on August [ ], 2008 and had not been moved until April 21st." Ms. Spera could not state with any certainty when was the last time the portion was known to be in the portion bag since there was no validation of the contents during the weekly or monthly inventories.[115]

---

[112] According to Ms. Spera, military disposal, previously called medical waste disposition, "entails co-mingling of portions with unidentified as well as identified portions, cremating them, and then placing them in a sea-salt urn for eventual burial at sea."

[113] Both D08-0913 and D08-0914 were slated to be part of this military (or medical) disposition.

[114] Ms. Spera stated that during this inventory in April 2009, she "did not remove the portions from their packaging."

[115] Monthly inventories were recorded from August 2008 to April 2009 in which portion bag D08-0914 was accounted for as located in reefer 2, rack 7, BCL (clip) 37. On the May 2009 inventory sheet, the portion was shown as having been moved, now stored in reefer 2, rack 1, BP (pan) 4. Ms. Spera stated that she moved portion bags D08-0913 and D08-0914 to the new location on rack 1 after the April 2009 discovery in order to keep them together since they both were identified as belonging to the same person. The IO noted that no update was made at

On April 22, 2009, Ms. Spera reported to Mr. Dean and Mr. Zwicharowski via email. In her email, she stated, "I have completed an extremely through [sic] inventory of the Reefers, and I am unable to account for D08-0914. I pulled each portion and checked the description in MOMS against the matter in the bag ... Part of my inventory procedure involved properly repackaging each portion. I did not find any additional slit bags. Most of the problems encountered were a matter of lack of oversight. DPM and AFME do not have clear delineation of who is responsible for packaging the portions or who provides any quality control ... From discussions with AFME staff, sometimes the ME's put the portions in the bag; sometimes the ME's leave it for our Autopsy team; sometimes it's a combination of both. Many times by the time our Autopsy team is placing DP in the Reefer the ME's are long gone and unavailable to provide answers when questions arise."

Ms. Spera made the following recommendations in her email report:[116]

1. An SOP is established which addresses DP and Retained Organs and is accepted by AFME and DPM. SOP should clearly delineate responsibilities, establish standard[s] on how DP is to be handled and packaged for retention in the Reefer(s), and delegate who is responsible for overall oversight/QC [quality control].
2. A Badge scanner is placed on Reefers 1 & 2 so a record of who is entering the reefers is available.
3. Establish random spot check of 10-20 portions each week with the spot check results recorded in MOMS for each case. Our current method is not spotting problems in a timely manner. Many times by the time a portion is handled again after initially placed in the reefer, the rotation [of deployed personnel] who put the DP in the reefer is long gone.

In her testimony, Ms. Spera also noted that the portions in the January incident and this one "had one thing in common. The portion was not placed in a double bag." Ms. Spera stated that changes were made in the bagging and inventory process immediately following the discovery of the empty portion bag in April 2009. Double bagging of portions was instituted and spot checks were done monthly where random portion numbers were selected and checked to verify that a portion was physically in the portion bag and an accurate description of the portion was annotated in MOMS.

During the relevant time period for the above allegations, Mr. Zwicharowski was the Mortuary Branch Chief responsible for the embalming section, personal effects section, dress

---

that time to MOMS indicating that there was no portion in the bag numbered D08-0914, and MOMS was not promptly updated to reflect the bags had been moved to a different rack.

[116] Ms. Spera provided the IO with a number of documents, one of which was an email dated September 5, 2008 addressed to Mr. Dean, Mr. Zwicharowski and [Technical Operations Officer], wherein she attached proposed changes to procedures regarding retained organs and disassociated parts. In another undated document which follows the email, Ms. Spera stated, "I have submitted suggestions for a Portions SOP but all suggestions have not gone pass [sic] the Port Mortuary (PMD) management. The Portions SOP needs to be coordinated with the Branch of Services, Port Mortuary and Armed Forces Medical Examiner. I have instituted recommendations that were in my control (i.e. inventory spot check)."

and restoration section, and uniforms section. As a branch chief, he was Ms. Spera's direct supervisor. Mr. Zwicharowski stated that Ms. Spera informed him at the time that a portion bag with no portion in it was found in one of the reefers. Mr. Zwicharowski stated that he notified Mr. Dean of the situation and was instructed "to do what we had already done probably to go through and make every effort to find the portion." Mr. Zwicharowski stated that they conducted a thorough inventory of the coolers and mortuary but did not locate the missing portion.

Mr. Dean is currently the Deputy Director, AFMAO. During the relevant period of time for this allegation, Mr. Dean served as the Director, Port Mortuary Division. Mr. Dean recalled that he was notified by Ms. Spera, during a periodic inventory "specific for collecting remains that were scheduled for military disposition," that a portion bag was found without a portion in it and that the bag had a slit at the bottom. Mr. Dean recalled viewing the empty portion bag. "I recall seeing a lot of biological material and what I mean by a lot is that it had coated the inside of the bag; probably was blood material, material from decomposition and then a cut or a slit in the bag at the very bottom of the bag and off to the side a little bit." He estimated the slit to be about five to six inches, about a third of the bag width.

Mr. Dean said that he provided the information to Colonel Edmondson, the AFMAO Commander, who directed Mr. Dean to collect the facts. In response to Colonel Edmondson's direction, Mr. Dean took the following actions. "I had [Technical Operations Officer][117] pull any photographs that would have been associated with that particular set of remains and the other sets of remains that were associated with [the Army soldier] and we pulled all inventories, we ensured that a complete inventory was re-accomplished and then again we found that we had a bag that still ha[s] biological material in it but we discovered that yes, there was this opening in the bag and so those were the facts as we gathered and provided." According to Mr. Dean, he provided these facts to Colonel Edmondson during "a discussion."

Colonel Edmondson was the AFMAO Commander from January 2009 to October 2010. Colonel Edmondson stated that Mr. Dean informed him that an empty portion bag was found in the reefer but he did not recall the date other than it was after normal duty hours. Colonel Edmondson testified that Mr. Dean "was going to direct a complete physical inventory and that he would get back with me and let me know. And so, he did that. He, no kidding, had a crew come in and go through every single storage area in the facility, emptied it out, and did a hands-on physical inventory and could not locate those remains." Based on Mr. Dean's review, Colonel Edmonson initiated a Commander Directed Investigation (CDI).

Colonel Edmondson stated that he is not a licensed embalmer and that he depended on Mr. Dean, the senior Air Force mortician, for advice on the technical aspects of the mortuary. Additionally, he depended on the division directors for advice in their areas of responsibility – Mr. Keel for the "mortuary operation, physically," [Mortuary Affairs Division Director] for "the Mortuary Entitlement shop" and [Lieutenant Colonel 1] for "the Operations Division, which is not mortuary specific."

---

[117] [Technical Operations Officer] is the Technical Operations Officer for AFMAO who handles, among other things, IT issues related to MOMS.

Colonel Edmondson stated that, after Mr. Dean did not locate the portion, he advised his boss, [Director of Services/A1S], the Director of Air Force Services of the incident. "[H]is response back was kind of the same as mine, you know, what do we do? What's the historic precedence? Do we need to let anyone else know, the chain-of-command or other services or anything? And I simply said to him, I said, 'Sir, at this point I don't know what we would tell anyone other than the remains aren't where they are supposed to be. Let's conduct the [CDI]. Let us work through the facts and then we'll know where the facts are going to take us.' And he said that sounds good … keep me posted. So, I advised him and continued through the whole process." Colonel Edmondson also testified that he spoke with the legal office as to how to conduct a CDI as he had never done one before.

Commander Directed Investigation (CDI) [118]

On April 23, 2009, Colonel Edmondson appointed an investigating officer for a CDI to investigate the facts and circumstances surrounding the empty portion bag. Colonel Edmondson stated he wanted an officer who was not working in the Port Mortuary and there were only two officers deployed that met that criteria. Based on their availability, Colonel Edmondson selected [Captain 3] as the investigating officer for the CDI.[119]

During the CDI, the CDI investigating officer (CDI/IO) interviewed fourteen witnesses, including Mr. Dean, Ms. Spera, Mr. Zwicharowski, [Technical Operations Officer], and a number of deployed military members. Two of the witnesses were from the OAFME: Dr. [Medical Examiner 6], Chief Forensic Anthropologist and Chief Deputy Medical Examiner for Medical Investigations and [Medical Examiner 10], Chief, Operation Investigations.

In her CDI interview, Ms. Spera stated that after the empty bag was discovered, she went through reefer 2 bag by bag to make sure the contents of the bag matched the description in MOMS but did not find the missing portion. She indicated that the Port Mortuary does "not have anything in writing as far as a chain of custody" for portions. She explained that, "[i]n the shipping SOP I do have how they are to be processed. Basically, from a shipping standpoint. But we do not have a process of what the Armed Forces Medical Examiners responsibilities are in regards to portions. What is the autopsy team's responsibilities and so forth. We've been making it work but we're finding a lot of kinks." She explained, "I'm repackaging them correctly and I found a lot of paperwork that was not supposed to have been there. Yesterday I got a phone call from the Medical Examiner and she's like, 'Why do you have all these? What's the deal? What's going on?' And come to find out they were never properly processed through

[118] Commanders have the inherent authority to investigate matters under their command, whether it is a systemic or procedural problem or that of individual conduct. The CDI is a commander's tool to gather, analyze, and record relevant information regarding such matters. There is no formal Air Force Instruction prescribing the investigative process for CDIs, but there is a "Commander Directed Investigation Guide" available for commanders to assist them in conducting a CDI. The release of CDI reports and notification of the CDI results to individuals such as complainants is exclusively the commander's prerogative. In other words, there is no requirement that states a commander must share his CDI report or its results with subordinates.

[119] The appointment letter reviewed by the CDI/IO and Colonel Edmondson cites to two attachments. Attachment 1 is a list of "framed allegations" to be investigated. "Attachment 2" is listed as "[a]ny evidence commander has for IO to review." Colonel Edmondson, during his interview, could not recall specifically what attachment 2 referenced, but believed it was an email from Mr. Dean.

autopsy. So, that was about 15 pieces that, because of what I did, we were able to catch that error."

[Staff Sergeant 3] was deployed to the Port Mortuary as a shipping specialist. She was one of two personnel assisting Ms. Spera with the inventory on April 21, 2009, when the empty bag belonging to D08-0914 was found. In her CDI interview, [Staff Sergeant 3] stated that during this inventory (which was her first) she pulled the portions off the rack and placed them on the table where Ms. Spera "did everything else." [Staff Sergeant 3] said that when Ms. Spera found the empty bag "Mel came and asked me was the bag empty when I grabbed it or did I see anything in it when I grabbed it off the rack." With respect to the empty bag associated with D08-0914, [Staff Sergeant 3] testified that she had pulled a couple of bags off of the rack and could not recall if the bag had a portion in it at that particular time. Specifically, she stated "[t]o be honest with you, I didn't even—there's a thing with it, I had my mask on and I didn't even look to see if anything was in the bag. I looked at the tag, the number, and grabbed it" and then took it to Ms. Spera's workstation, where Ms. Spera found the bag empty.

Both [Master Sergeant 4] and [Staff Sergeant 5] were deployed to AFMAO. [Master Sergeant 4], at the time of his interview with the CDI/IO, was an autopsy section supervisor assigned to AFMAO. He testified that he was "responsible for the overall autopsy section." Specifically, [Master Sergeant 4] testified that "[m]y responsibility is: once the Medical Examiner or the doctors clear the remains, to make sure they're properly stored with the assistance of any officer assigned to the AFMAO as far as their location from there in autopsy to get them from there to the storage, the reefer unit." He could not recall when he last saw portion bag D08-0914. [Staff Sergeant 5], at the time of his interview, was an autopsy assistant. He testified that, among his responsibilities, he was "to carefully put away portions in its designated areas by bar code with an officer present." He learned about the missing portion, D08-0914 when "[t]he situation was brought up to me by Mel [Spera] and others that were working that day."

In his CDI interview, Mr. Zwicharowski, at the time the Chief of the Mortuary Branch, indicated that the Port Mortuary did not have a process or written procedure for the chain of custody of remains. "I've always preached that there should be." He was asked about whether the processes and procedures keep remains and personal effects secure. "Personal effects, yes. And it is my belief that, at a minimum, we have a procedure in place for personal effects in which the personal effects are transferred from the investigation officer from AFIP, they're photographed, and signed off by an officer, and secured in personal effects. That process, at a minimum, should be the same for portions. We go to that extreme to ensure the safe keeping and transfer of personal effects and it is my firm belief that we should have [the] same or more, more stringent policy for portions of human beings."

In response to the question of what could be done to improve the accountability of remains, Mr. Zwicharowski stated:

> I think the transfer of remains from the Medical Examiner's custody, which they are in from the identification and autopsy process, need[s] to have a stringent, distinct exchange of chain of

> custody to the Port Mortuary. Be it signatures, as in personal effects. Pictures – strongly recommended – with case number and/or ME numbers. So that we're getting – a picture's worth a thousand words, obviously and we do it with personal effects and it's proven to work very well. Then I'm a firm believer in two signatures, two sets of eyes ...We have a military branch of service signature along with a mortuary specialist. Always two sets of eyes ... In the beginning of the war we had that person, we had that officer, and that officer would on a daily basis, or his/her representative would ensure that that portion was stored properly. That has slipped away. We have autopsy personnel who, at the end of a long day, are storing portions ... we have found, myself and [Technical Operations Officer], walked by the cooler incidentally, and saw in the process of storing remains, empty bags, portions in the wrong bags. We reverted back to pictures/photographs and fortunately were able to reestablish the proper identification. As a result of that, we made a strong recommendation for a policy in writing to ensure that each portion is identified by the bullet proof tag, if you will, the hard copy tag that is issued at barcoding, on the remains we secured to the hand or leg. We secured personal effects and we need to secure it to the portions so that even if the Medical Examiners do separate the bag from the portion, which happens frequently – they have to do it in the case of DNA samples, toxicology – that portion should be physically labeled so if it is removed from the bag it still has its identification tag attached.

When asked about "what could be done to improve any other human element/improvements that could better protect remains," Mr. Zwicharowski reiterated his emphasis on chain of custody.

> One of the problems I have seen and expressed to the Director is that the doctors are leaving prior to the transfer of portions. They're out of the facility and whatever remains or portions are left to be stored are the responsibility [sic] is put on the autopsy employees who are augmented [deployed] personnel who, at the end of a long day, putting the portions away is the only thing between them and going home. And that's the wrong people, too much responsibility and the wrong time of day for those people to be performing such an important process ... I think the inventory in transfer is one part of the operation or the process and storing them is another and both of them require signatures in my opinion. Once they are received from that officer or scanned from that officer, I think I would strongly recommend two sets of eyes and two signatures when stored properly and in the proper location and

in the proper packaging and properly marked.

[Technical Operations Officer] is the Technical Operations Officer for the AFMAO. He testified that he is "the Functional System Administrator for the MOMS system." "And that system is what we use to number one, track all the remains processed in the mortuary from the time they come in to the time they're shipped to final destination. The system also handles all the other administrative tasks: Supply, logistics and any other operations that we deal with in the facility."

[Technical Operations Officer] was asked what could be done to improve the accountability of remains from his experience. He responded, "a better hand off of remains from Medical Examiners to mortuary staff." He also stated that having "somebody with a more permanent position within the mortuary to take control of that function in the autopsy area because I think that's where this problem occurred." He further stated, "[a]s far as anything we can do automating [the process] in the system, I don't think that there is [anything more to do]. I think we're probably doing all that we can do by scanning the case numbers, the remains, and scanning it to a handler's badge, then scanning any station where they've ... gone. I think that's all we can do in the MOMS system but we can manually maybe instead of making one person responsible for putting remains away at the end of the night, that should be a two-person process. One person to do it, and the other to verify it's being done properly."

With regard to human element improvements, [Technical Operations Officer] stated, "if we would probably pursue the same safeguards that we do when dealing with personal effects as we do with the human remains we probably wouldn't have this issue. There's lots of photography. There's a lot of documentation. Two people doing a single task to make sure it's done properly." He recommended that "the management of the AFMAO along with probably at least the lead morticians, Ms. Mary Ellen Spera, myself, and possibly Medical Examiners to analyze the business process and figure out where the weak link is and then try to come up with an idea and ways to fix that."

Dr. [Medical Examiner 6] is a GS-15 employee assigned as the Chief Forensic Anthropologist and Chief Deputy medical examiner for Medical Investigations, Office of the Armed Forces Medical Examiner. At the time of his interview with the CDI/IO in April 2009, he indicated his responsibilities were "overseeing the remains that come in through Dover. Any kind of remains that basically are highly – in a burnt or fragmented state, or those that basically [are] separated or disassociated. I am responsible for examining those remains, make a determination of the anatomical origin of those remains, and then going forward to sample those remains utilizing sample tissue or bone for DNA testing to have those remains reassociated to a known individual." Documentation from the Army soldier's case file shows that Dr. [Medical Examiner 6] was the medical examiner who measured and noted a DNA sample was taken for portion D08-0914 on August [ ], 2008.[120]

[120]According to the Autopsy/Specimen Description Sheets, the DNA samples for portions D08-0908 and D08-0918 (bags found slit in January 2009 with no portions in them) and D08-0914 were taken by the same medical examiner. The chain of custody report from MOMS for these portions showed that all three portions were returned to the reefer at approximately the same time on August [ ], 2008.

When asked about his team's procedure to maintaining accountability and storage of remains after they have been inspected, Dr. [Medical Examiner 6] responded that the Medical Examiners' office "shares no responsibility in the storage of those remains. After I conduct my examination, they are left on the examination table. Afterwards, Dover Port Mortuary personnel are responsible for rebagging them, logging them in, and then transferring them to either Embalming or into the freezer." According to Dr. [Medical Examiner 6], there was no reason that a medical examiner would remove remains from the reefer. If they required the remains or portions for any reason such as taking another DNA sample, he stated that they "would go to Dover personnel, have them locate the remains ... then those remains are turned again back to the Port Mortuary personnel who are responsible for logging them in and placing them back into the freezer container."

With regard to ways to improve the human element that could better protect remains, Dr. [Medical Examiner 6] stated training and "another thing, that would be certainly helpful is that if a bag appears to be torn, worn or defective, that particular bag be disposed of and a new bag retagged with that same tag so that you don't have any case labels where there's maybe a defective bag where you get some tearing that many times is a result of either defective bag material or you may have a specimen that has bone in it and that bone can actually penetrate, many times, that bag, causing a tear that can enlarge over time with handling."

At the time of his interview with the CDI/IO, [Medical Examiner 10] was the Chief of Operation Investigations for the Office of the Armed Forces Medical Examiner. He stated that he is "responsible for daily worldwide operations and operation under the guidance of my investigators." When asked about his team's procedure to maintaining accountability and storage of remains after they have been inspected, [Medical Examiner 10] stated, "[o]nce we complete the medical legal investigation and obtain scientific investigation, the remains are signed over to embalming. At that point that's a mortuary function. That's the same for disassociated portions. Disassociated portions come in, we have Dover – a professional staff [assign] a Dover number. Then we examine it, photograph it, x-ray it and take samples for DNA. Once that's done, they're signed out of [the] autopsy suite into embalming and it becomes a mortuary issue." He indicated that there would be no reason for him or any member of his team to check remains out of storage after they had been processed.

The CDI/IO also reviewed the case file, a number of emails, statements and memoranda as well as relevant standard operating procedures. The CDI report contains a photograph of portion D08-0914 which shows that the portion was approximately 14" long and 9" wide. In a section entitled background, the CDI/IO set forth the following facts (with citations to the record omitted):

> This case involves the discovery by Mary Ellen "Mel" Spera of a missing portion of remains from bag D08-0914 on 21 April 2009 at the Port Mortuary, Dover AFB, DE. This discovery was made

during a monthly inventory of rack 1 from refrigerated storage unit 2.

On [ ] August 2008, the remains of [an Army soldier] were received by the Port Mortuary. The remains were delivered in three portions: D08-0896, a non-intact torso; D08-0913, a fragmented and incomplete ankle/foot; D08-0914, a fragmented and incomplete ankle and talus. On [ ] August 2008 [four days after their arrival at the Port Mortuary], D08-0896 was shipped to the location of final internment while the remaining portions were retained pending final DNA identification.

On [ ] August 2008, the person authorized to direct disposition (PADD) elected not to be notified of positive identification of disassociated portions and authorized the Armed Forces to make appropriate disposition. As a result bag D08-0913 was stored in refrigerator 2, rack 7, BCL [bottom clip] 40 while bag 08-0914 was stored in BCL 37. Between this time and the time of discovery, the bag was moved from rack 7 to rack 1 without being documented.

On 21 April 2009, Ms. Mary Ellen Spera was preparing portions for a medical disposal burn. Before disposal, she discovered bag D08-0914 had a slit in it and was missing its contents. She utilized [Master Sergeant 8] and [Staff Sergeant 3], [Staff Sergeant 9] and [Staff Sergeant 5] for an inventory of all three refrigerated storage units. The remains were unable to be accounted for after the inventory.

Ms. Spera's files show that the last hands-on inventory of refrigerator 2 was conducted on 4 March 2009. This inventory required positive location of each bag and its associated remains, but, as noted above, did not determine a portion was located in each bag.

Procedures for maintaining accountability for portions were established in a SOP dated August 2003. The procedures are currently outdated since they do not take into account the addition of the Mortuary Operations Management System (MOMS) system. An additional associated SOP still makes reference to the demolished Port Mortuary and its resources, naming seven [units] for storage of remains.

In addition, (under the recommendations section), the CDI/IO stated that "[t]he remains in question were of a large size and appeared to have quite a few splintered bone fragments protruding."

The CDI/IO investigated five allegations and concluded the following:

- Allegation #1: Does the Port Mortuary have an established process and written procedures to ensure the chain of custody is maintained?

The CDI/IO substantiated this allegation, finding that "the preponderance of the evidence demonstrates that there is a lack of knowledge of any written procedure. The range of expertise interviewed, from augmentees to the Mortuary Operations Chief and the Port Mortuary Director show that no written policy has been communicated to the AFMAO personnel. Despite this lack of knowledge, there have been written policies since August through November 2003. This demonstrates a lack of continuity in formal instruction but not in a lack of written guidance. The MOMS was identified as the means by which the chain of custody was maintained but personnel were not aware of any written procedures." His conclusion was that "[d]espite witness knowledge, there is an established set of written procedures for maintaining the chain of custody."

- Allegation #2: Do the processes and procedures safeguard human remains and personal effects within the Port Mortuary's span of control?

The CDI/IO unsubstantiated this allegation, finding "[t]he majority of the members agreed that the processes and procedures were effective safeguards. The problem is that these same witnesses did not know of a written policy or procedure. As a result, the opinions of the witnesses have more to do with perception of following a procedure than actually following policy formally set down by the AFMAO. They do, however, follow procedures that have been established through daily practice and handed down in OJT [on the job training] continuity. Therefore, the positive responses are not completely valid." His conclusion was that, "[t]he lack of instruction of a written policy or procedure prevents reliable safeguarding o[f] remains. The reported loss of tracking in the past confirms that there may not be sufficient safeguards."

- Allegation #3: Does the Port Mortuary have an established oversight system that includes chain of command, quality control, checks and balances, and accountability?

The CDI/IO substantiated this allegation finding that, "[w]ith three exceptions, all members are confident that there is oversight of remains. While there is not adherence to a written policy, they do give specific practices for maintaining accountability at multiple points. These points, while multiple, are not mutually exclusive and each one is necessary for accountability. Those dealing with personnel follow a definite chain of command with a supervisor, officer or NCO [non-commissioned officer] working in tandem with another subordinate individual." The CDI/IO concluded that, "[t]he varied descriptions of points of control, chain of command and quality assurance demonstrate there is oversight in the Port Mortuary.

The fact that these witnesses describe oversight from multiple points of responsibility only confirms its presence on a larger scale."

- Allegation #4: Are there adequate physical security measures in place and are they being utilized (Doors, locks, alarms, cameras, etc.)?

The CDI/IO unsubstantiated this allegation finding that, "[t]he lack of physical security in the form of a locking mechanism meant that the contents of all refrigerates storage units [sic] were accessible to all personnel with access to the secured portion of the Port Mortuary. The MOMS system, while an adequate logging and tracking method, does not ensure physical security for portions. The combination of personnel specific swipe card locks and active camera monitoring ensured the security of personal effects." The CDI/IO concluded that, "[t]he shortcomings in regard to physical security of refrigerated units potentially negates the accountability and safeguarding involved in the portions and physical remains."

- Allegation #5: Has there been any misrouting, misplacing, or mishandling of human remains that would constitute criminal negligence, dereliction of duty or other misconduct?

The CDI/IO substantiated this allegation, finding that, "[i]n regards to UCMJ [Uniform Code of Military Justice] Article 92, it is difficult to assign blame to any single individual since there was not adequate dissemination of the written policy for safeguarding remains. Therefore, they could not willfully disobey the order. Almost all witnesses were confident that the procedures being followed ensured security of remains and personal effects. One witness stated that the security for remains needed to be brought up to the standard of that for personal effects. The difficulty in determining a violator of Article 108 is that the access to the refrigerated units was too widespread. Any individual with access to the secure area of the Port Mortuary, including transitory members of the Armed Forces Medical Examiner and FBI, could have entered the refrigerated units and negligently disposed of the remains."[121] The CDI/IO concluded that, "[t]he fact that there had to be an individual who moved the bag from Rack 7 to Rack 1 indicates that there was dereliction of duty in properly annotating the movement in MOMS. It was at the time of this move that the remains likely went missing.[122] The fact that there is no individual to whom this can be attributed does not mean that there was not an act of criminal negligence.

---

[121] There is no evidence in the CDI investigation or this investigation that would suggest that the portions at issue herein were stolen by someone. There is also no evidence the first portion fell out of the portion bag as it was being moved through the preparation line or returned to the reefer, and was somehow disposed of by someone who did not inform Port Mortuary leadership. A portion of this size falling on the floor would stand out against the light colored floor and well lit areas of the Port Mortuary (as noted by the IO during his walk through of the facility). In response to a question regarding the cleanliness of Port Mortuary floors, Ms. Spera stated that the hallway floors between the Triage station and the X-ray station and autopsy suite, and the embalming room are normally cleaned daily by the ops processing team using a "Zamboni" machine. She had never heard of the cleaning personnel finding portions on the floor.

[122] The evidence in this investigation showed that Ms. Spera moved both portions to rack 1 after the inventory on April 21, 2009.

> Compounding this is the fact that both civilians and military members had access to the remains. Only military members are subject to the UCMJ. The failure to follow the procedure for logging remains into MOMS probably contributed directly to the loss of a portion of human remains."

In the CDI report, the CDI/IO made the following recommendations:

- "Update all written policies and procedures for chain of custody of remains, portions, and personal effects." "The three documents that formalize AFMOA's current policy were written from August to November 2003."

- "All AFMAO personnel should receive formalized training and periodically review of written policies and procedures." "Regardless of the age of the SOPs, no one in the facility with the exception of the AFMAO Deputy [Mr. Dean] was aware of their existence. Every incoming permanent party member, deployer, medical examiner and triage agent should be instructed, in a formalized manner, the requirements of the AFMAO's policy once it has been updated."

- "Physical security of remains and portions must be improved." The CDI/IO indicated that

> [m]ultiple suggestions were made by personnel ranging from simple measures, such as locks on the refrigerators, to more complex ones, such as radio tagging every portion. A short term practice has already been put into practice: individuals must sign out a key from 24-hour Ops to gain access to a specific refrigerator.

  Under this recommendation the CDI/IO also suggested the following:

  - establishment of a refrigerator POC [point of contact] for each shift during the day;
  - all escorts should ensure that no edged equipment be allowed into the refrigerated storage;
  - to improve accountability and limit access to the remains, strongly recommended adding magnetic locks to the refrigerated storage, controlled by swipe cards and the MOMS system and like with PE, only key personnel should be allowed in the refrigerators (this would also create an accurate log of access with which to compare chain of custody);
  - Remains should be, at a minimum, double bagged when bone fragments or any other hardened particulates are present. "Historically, bone punctures have been reported to be a problem with storage."
  - "According to SOP 34-501-10, paragraph 4.a.2.b.3., refrigerators receiving traffic should be inventoried daily … Adhering to this practice would have brought the disappearance of bag D-08-0914's contents to the immediate

attention of the AFMAO staff and might have allowed the remains to be located."
    - The addition of an external camera (incorporated into the current digital surveillance system) which could quickly determine the individual checking out a portion.

- "Coordination between medical examiners, anthropologists, and mortuary technicians for the bagging of remains must be improved." The CDI/IO stated,

> [f]rom discussions, I have concerns about the ability for mortuary technicians to account for multiple items needing to be rebagged after [autopsy] examination. Since it is possible that the technician is not as familiar with each portion as the examiner is, it would be advisable to set down a written policy for examiners to transfer each item and its appropriate bag to the technician for reassociation or rebagging.

The CDI/IO concluded that:

> the missing remains could not be located after the investigation. There were multiple difficulties in establishing the reason for the disappearance. First, there were simply too many individuals with access to the refrigerated storage units. All permanent party and rotational members from the past 10 months have had access to the refrigerated section. On top of that, all individuals from AFME, FBI and EOD have also had access to the area. This could easily send the number of potential witnesses/suspects up to 100 people located both at the AFMAO and throughout the country. Second, there was no consistency in the tracking and monitoring of remains. To be more specific, each section was handling the controls as they had been instructed and thought best. There was no common law governing the workers handling remains. This extends form [sic] triage to autopsy, to storage and to shipping. I conclude that while I can find no one individual to hold accountable for the loss, the system itself has been operating for a prolonged period while broken. It will need to be reviewed, modified and disseminated amongst the AFMAO personnel to prevent recurrence of the loss.

The CDI report's table of contents indicates that two "technical reviews" were included in the report – one by the legal office and one by Mr. Keel. In an undated two page document, Mr. Keel provided his review of the findings for each allegation. With regard to the first allegation related to established process and written procedures to ensure chain of custody, Mr. Keel observed that at the time of the incident, "awareness of operating procedures failed to effectively address the chain of custody of remains and possibly placed too much reliance upon [MOMS]." He recommended that "[a]ll standard operating procedures are thoroughly revised to

clearly address chain of custody and safe keeping of remains" and that "pertinent staff" be required "to receive, review and agree to comply with standard operating procedures governing his/her work area" with "signed documentation of compliance" to be maintained.

With regard to the second allegation (relating to processes and procedures to safeguard human remains), Mr. Keel observed that, "[a]lthough all members agreed that the procedures and processes were effective safeguards, I failed to see a human aspect of ownership of his or her aspect of the chain of custody." He recommended that there be an "increase[d] emphasis of individual responsibility when handling human remains ... during initial training ... [and that] members must be trained to verify not only the case numbers but also the contents prior to assuming custody."

As for the third allegation (relating to an established oversight system), Mr. Keel observed that members interviewed were inconsistent as to the degree of oversight provided for human remains and recommended "increased training of the larger scale chain of custody process and quality assurance methodology." For the fourth allegation (adequate physical security measures), Mr. Keel made the following recommendations: maintain the lock system put in place to control access and keep logs of all requests for access; install a surveillance system to document traffic through the refrigeration storage passageway; and maintain the current inventory practice with a comprehensive inventory conducted on a monthly basis or more frequently when requested by the Port Mortuary Director or AFMAO senior leadership.

With regard to the fifth allegation (relating to conduct that would constitute criminal negligence, dereliction of duty or other misconduct), Mr. Keel observed that while no one individual could be held responsible, "[w]hat I see in the information provided is that all of the individuals involved in the process were caught up in a paradigm of believing that someone else was responsible for the overall tracking of remains versus the individual members of each section with actual custody ensuring verification." He recommended "[i]ncreased training of the larger scale chain of custody process and quality assurance methodology ... [and] focus on individual verification and chain of custody procedure prior to acceptance of remains and turnover."

On May 11, 2009, a legal review found the CDI report legally sufficient but recommended the allegations be re-written as allegations instead of questions, which was accomplished. Colonel Edmondson stated that he discussed the CDI with the Wing Staff Judge Advocate (SJA) and the SJA's recommendation was to rely on the technical expertise of Mr. Dean to reach his (Colonel Edmondson's) conclusions.

In an undated memorandum for record following the legal review on May 11, 2009, Colonel Edmondson approved the CDI findings and all its recommendations, noting the CDI/IO "concluded that no one person was responsible for the loss of accountability of remains and that enhancements to remains processing, training of personnel, and security measures were needed." He also referenced "further review of the circumstances associated with this event by the Port Mortuary Director and the AFMAO Deputy [who] concluded that the portions in question were not physically lost and that they were disposed of as instructed by the PADD. Specifically it was concluded that these remains were pulled by a Medical Examiner (ME) for further analysis (this

is evidenced by the sliced bag, which is a common practice for removing remains by MEs), but were not recorded in MOMS, and rather than re-bagging and re-numbering the portion of remains upon completion of analysis, the ME comingled them with other portions being examined but all slated for disposal by cremation and returned them to storage."

In his memorandum, Colonel Edmondson stated that "to prevent reoccurrence, (1) Security measures have been enhanced by adding locks to all remains storage units, controlling keys to storage units, adding security cameras[123] to the storage area, and requiring monthly 100% physical inventory of remains to be accomplished. (2) Standard operating procedures were revised to tighten remains processing, storage, and accountability. (3) Training has been enhanced to ensure all personnel are aware of SOPs with special emphasis on tracking and accountability via MOMs."

Colonel Edmondson's memorandum did not address the last recommendation made by the CDI/IO relating to improved coordination between medical examiners, anthropologists, and mortuary technicians with regard to re-bagging portions in the autopsy suite.

During his interview with the IO, Colonel Edmondson verified the corrective actions taken, with some accomplished immediately before the CDI was completed. These included: locks placed on the reefer doors with keys controlled by the Command and Communication section; access badges reviewed and access to the reefers limited; institution of double bagging of portions; a security camera added at the end of the hallway by the reefers; formalized pre-deployment training for personnel deploying to AFMAO along with an overlap in deployments was scheduled to allow for a transition between individuals;[124] and updating of standard operating procedures.

At the time of the CDI, most if not all of the standard operating procedures for AFMAO were dated prior to the reorganization. Many of the SOPs were dated from 2003. Colonel Edmondson testified after the CDI, the standard operating procedures were updated. He explained that "each division chief was responsible for reviewing and updating all of their standard operating procedures. And so, Mr. Keel would have been the one responsible" for updating the SOPs for the Port Mortuary Division. Colonel Edmondson stated that the SOPs "went to Mr. Dean to review but I believe the signature on the operating instruction would have been the division chief." "Mr. Dean … approves the mortuary AFIs, the mortuary instructions. So if there is a decision that needs to be rendered, he no kidding is the one that does that both by his position, his grade, his experience, and the nature of the organization we're in he's able to

[123] The security cameras were ordered in December 2010 but were not installed and operational until January 2011.
[124] Colonel Edmondson testified that, "we have a Port Mortuary class for people [who deploy]. We robusted that class significantly, made it longer, developed real curriculum, real briefings, and formalized that course so that people would be trained before they got there. Again, a course like that existed, but it was about a day and a half long class and it really consisted of walking around and touring and meeting people and discussions. It was kind of a preexposure briefing more than, 'this is the job you're going to be expected to do and here's how we do it.' And the new process, people were vetted to determine what their appropriate skill is and there's a specific training plan that goes with those jobs that they have to go through. And we extended the – we worked with the AEF Center to extend the overlap so that I believe there's a 5-day overlap for every position now. Versus historically at most there may be a 1 day and very often the position would gapped."

make those policy decisions as the Senior Air Force Mortician." Colonel Edmondson did not recall reviewing or approving the division SOPs.

Colonel Edmondson testified that updating the procedures "was [a] collaborative effort. It wasn't an individual sitting in the office. I mean, different people within each division were task[ed] to work on elements of the operating instructions and updates. When they were done, my recollection is that every employee had to read through those and then sign off acknowledging that they had read them and understood them."[125] He also indicated that "when we had people deployed in, we actually developed training procedures to train them on those which part of that included right up front, read through the operating instructions and signs off again that you understand them."

With regard to the CDI/IO's recommendation for improved coordination between AFMAO and the medical examiners, Colonel Edmondson explained that the medical examiners were an independent organization. He testified that, "early on in my tenure I could see that more often than not, I mean, it was – I hesitate to use the word "as adversarial" but I'm not sure what a better description is. There were times that the Medical Examiners working in the autopsy suite were at odds working against the mortician staff. And again, by engaging in dialog with Doctor [Chief Medical Examiner] and helping … each person to understand the role of the others and how it's so important that we work together to make sure that this is done right and that we, you know, the accountability in particular is correct." Colonel Edmondson believed that new operating instructions better defined the roles and responsibilities of the medical examiners and the Port Mortuary personnel.[126]

On May 26, 2009, Ms. Spera sent an email to Mr. Dean (copying Mr. Zwicharowski) wherein she asked Mr. Dean, "[h]as the CDI addressing the mission [sic] portion belonging to D08-0914 been completed and if so how do I get a copy of the findings?" She also asked, "has any decision been made regarding how you would like me to handle D08-0913? I still have it on hold pending your decision." Mr. Dean responded the same day, stating, "Mel, I have not seen a completed CDI on the issue. When is the next portions meeting? I think we can address it there..." In her interview, Ms. Spera stated that she never received any information about the CDI. As of March 2010, the AFMAO (DPM) In-House Report indicated that D08-0913 was still located in storage "[p]ending PMD Director's authorization." Ms. Spera's supervisor, Mr. Zwicharowski, also stated that he was not informed of the results of the investigation.

Colonel Edmondson stated that he did not provide a copy of the CDI to Port Mortuary personnel and did not receive any requests for a copy. He did brief HAF/A1S, ([Director of Services/A1S]), on the results and conclusions. Colonel Edmondson further stated that the results of the CDI and corrective actions were disseminated in several ways but there was no single meeting addressing the CDI and follow-on actions.

---

[125] The preponderance of the evidence did not support that this written documentation exists. As each rotation in-processes, each new member is provided with in-depth training on their section to include written procedures. The custom has been for each member to verbally acknowledge their training, including the written procedures.

[126] The revised standard operating instructions govern Port Mortuary employees, but are not binding on the Medical Examiners' office.

In his testimony, Mr. Dean stated that he did not inform other personnel of the results of the CDI and is not aware of any requests for the CDI. He testified that while the results of the CDI could be helpful to the folks that handle portions, "it was not my CDI and did not feel that it was my prerogative to inform anyone of the results." He stated that he did not think he discussed that specifically with Colonel Edmondson.

Mr. Dean also did not notify the Army liaison about the empty portion bag "because [he] believe[d] that the appropriate disposition took place." His rationale was that after reviewing the CDI he believed that disposition of the portion occurred by one of two possible methods: "(1) The remains were re-associated by anthropological or other means without each portion of remains being properly accounted for in the Mortuary Operations Management System (MOMS) and interred with the originally identified remains or (2) the remains were included in a military disposition cremation as directed by the Person Authorized to Direct Disposition without proper accounting in MOMS." Under either theory, an empty portion bag would have been placed in the reefer without a portion in it and the MOMS system would not have been appropriately updated.

Colonel Edmondson concurred with Mr. Dean's determination that it was not necessary to notify the Service liaison that there was a missing portion based on the conclusion that the directions of the PADD were carried out.

When questioned as to whether she knew if the Army Liaison was notified that the portion was missing, Ms. Spera stated that she was not aware of whether Mr. Dean officially notified them. Ms. Spera stated that "the branch of service should have been notified and … it [would have] been at their discretion whether to let the family know that this portion was missing and possibly … it was very possible that it was put with the wrong body, we don't know." Ms. Spera testified that she did not believe the Army liaison had been officially notified that the portion was missing, "because that would have been the Port Mortuary director's responsibility to notify the liaison in an official manner."

Ms. Spera stated that the Army liaison was aware that there was a problem with the portion because they received her reports which indicated that there was a problem. She testified that "in my report, there was a notation on the portion that was highlighted in pink, which is Port Mortuary problem and … it says, 'Pending PMD director's authorization. Portion problem ID'd 4/21/09.'" She testified that she did not indicate in the report that the portion was missing "because I don't know, once you put something down and it goes out on the Internet, it never can be retracted, so that's why it was identified as there being a portion problem in this report, because I don't really know how far away this report goes."

Ms. Spera indicated that she informally notified both [Sergeant First Class 6] and [Master Sergeant 2] that the portion was missing on April 21, 2009. [Master Sergeant 2] is the Non-Commissioned Officer in Charge (NCOIC) of the Army Liaison Team; [Sergeant First Class 6] is the "most senior 92 Mike, which is a Mortuary Specialist in the Army." "However, unofficially, since I work closely with the liaisons and the person on the Army liaison team that was helping me with the portions as far as the Army was concerned, I notified him." According

to Ms. Spera, the Army liaisons "were waiting for official notification so they could send it out to CMAOC, which is the Army Casualty and Mortuary Affairs Operations Center."

[Master Sergeant 2] has been the Non-Commissioned Officer in Charge (NCOIC) of the Army liaison team for the Port Mortuary since September 2007. He did not recall an incident involving a missing portion of any Army remains, but stated that he would expect to be notified if a subsequently identified portion of an Army service member's remains was missing or lost in the Port Mortuary. It was his opinion that the family/PADD should also be notified, even if the PADD had elected to not be notified of subsequent identified portions. "I think you have to – you can't keep anything this close from the family when it's their loved ones." He further stated his office does not communicate with the PADD and that he would not make the decision to notify the PADD, but would elevate it to his headquarters. "And at the same time I'd be making my headquarters aware of the fact because you know, we have an obligation to the family, sir. It's not about us; we're here for these families and the fallen soldiers. We have an obligation of course." [Master Sergeant 2] said that he would rely on the casualty assistance officer's (CAO) assessment of the impact on the family in deciding whether the family/PADD should be notified. Personally, he stated that he did not know what he would do if the decision was left to him.

Mr. Zwicharowski stated that in his opinion the PADD should have been notified of the missing portion, even if the PADD had elected not to be notified of the existence of any subsequently identified portions. Mr. Zwicharowski testified that the PADD does not give up "ownership" of the portion; rather, "they dictated what they wanted [the] government to do [with] it." It is his position that because the portion went missing and was not disposed of in accordance with the PADD's direction, the PADD should have been notified that the portion was missing. According to Mr. Zwicharowski, the family's "request was to make it medical waste." So while the family is not expecting the subsequently identified portion to be shipped to them, "the fact that we did not follow [through] with their wishes puts us in a similar boat because now … they're saying, 'make this person medical waste,' and we don't have it, so we're not totally off the hook; it's just that … we don't have this portion and we probably … should make them aware of the fact that we lost it."

> That portion, because we in the Air Force don't know where that portion is, that could be buried with someone else; that could be anywhere in the world and we don't know that, and so if we don't know where it is and we didn't follow through with [the PADD's] instructions to destroy it, we don't have it … if [the family] said destroy the portions of medical waste and we don't have them, we didn't follow through with their wishes. We didn't do what the family asked us to do. Where are the portions? We did not destroy them. We have no record of them being destroyed; we lost them. So there's no – when we destroy them, we have every number accounted for and it goes to that crematory for medical waste but that [portion] wasn't there.

He stated that, in his opinion, it would ultimately be the appropriate Service liaison's decision whether or not to inform the PADD.

Mr. Dean admitted that if a portion was missing (where the PADD has said we do not want to be notified of subsequent identified portions), it would be the liaison's call whether to notify the family. But here he did not need to because his theory "allows [him] to rationalize not notifying them." Mr. Dean admitted that the Army liaison was "not given opportunity to read CDI. Because we – I mean I personally reached that conclusion that the remains must've been reassociated with him. The CDI is not mine and it was not mine to release to the Army."

Periodic Review of CDI Findings

About a year after the CDI was done, Mr. Dean, Deputy Director for AFMAO, conducted a periodic review of the corrective actions that had been taken as of May 6, 2010 and prepared an undated memorandum for record, which "outlines actions taken to correct deficiencies and the closeout of an event that took place in April 2009 that required a CDI."

He indicated by way of background that "a CDI was initiated to investigate the report of the loss of a portion of human remains, D08-0914, identified as belonging to [Army soldier]. The CDI substantiated dereliction of duty, due to the fact that a portion of human remains was not accounted for in [MOMS] nor by any anecdotal evidence from individuals. The results of the CDI could not pin point a single point of failure or a responsible individual. It did, however, uncover areas requiring improvement and procedural weaknesses that have been addressed as a result of the investigation."

Mr. Dean wrote that he initiated "a thorough analysis of practices and procedures within the Port Mortuary division" for handling of fragmented portions of human remains that are stored pending identification and disposition instructions. He stated that this unscheduled internal inspection took place on May 6, 2010, and "satisfies one of the recommendations of the CDI: complete a periodic review of processes and procedures for the handling of human remains portions."

In his memorandum, he set forth the original corrective actions as well as the results of his review:

- All written policies were immediately reviewed and updated upon the discovery of the unaccounted for portion, and have been reviewed and updated periodically.
- Formalized training was reviewed and updated to include training on written procedures and requires acknowledgement of receipt of written procedures from all personnel upon deployment to AFMAO.
- Physical security of remains portions were immediately improved by way of locks on each refrigeration unit, physical control of and a sign out sheet for keys, and a digital video camera system in the refrigeration hallway.
- Training in the handling of human remains portions to include avoiding handling both sharps and re-sealable human remains portions bags, and the conduct of a thorough inspection of all portions bags to ensure they are not compromised before receiving into refrigeration. All human remains portions are double bagged. Remains cannot be turned

over without an Armed Forces Medical Examiner representative and a Port Mortuary representative present during the examination of and turnover of portions.[127]

- Mortuary specialists review weekly inventory reports and conduct a physical inventory monthly which is verified by at least two employees.
- Access to the facility was immediately reviewed and limited, and is periodically reviewed. This review includes the requirement to turn in badges or turn off access badges for inactive personnel. Since the review access badges have been reduced by 50% and active badges have restrictions to certain areas of the facility. Additionally, only specific individuals have access to refrigeration keys and are required to sign for and return the keys upon completion of duties within the refrigeration units.
- Unscheduled, periodic reviews will continue to ensure consistency of this highly sensitive segment of the Port Mortuary mission.

At the end of his memorandum, Mr. Dean provided his views of what happened.

> Although the CDI determined there was an accounting error that cannot be attributed to a specific event we believe the disposition of the remains was one of two possible methods of disposition. (1) The remains were reassociated by anthropological or other means without each portion of remains being properly accounted for in the [MOMS] and interred with the originally identified remains, or (2) the remains were included in a military disposition cremation as directed by the [PADD] without proper accounting in MOMS. After arriving at this conclusion, disposition has occurred for the unaccounted for remains either with the individual or as directed by the PADD. Additionally, the human remains portions bag labeled as D08-0914 that contains a small amount of biological matter will be included in the next military disposition cremation in accordance with the PADD's direction.

Mr. Dean reiterated these views in his interview testimony. "[A]s I look back I feel we did everything that we could possibly do to find a root cause and determine that there's only a couple of things that could've happened with these remains and in my opinion what happened was the remains were articulated to the individual and that they were placed with him and disposed of – disposition and was affected as the family had directed. But with that portion, the accountability of it in that particular bag did not happen because the remains were moved. I believe that the bag was then checked into our system creating a false sense that the remains

[127] Mr. Dean testified that he "had discussions with the medical examiners, DO [Director of Operations], to ensure that we would have a staff member there at the turnover of remains. A very critical – at the end of a long day with hundreds of remains and remains portions in pouches that they'd be there to address those specific concerns if there is a question, that they can get those questions answered and make a determination right away so that when the staff is still present anything may be done immediately to correct those issues before it becomes a problem. And then we immediately began a review of the SOPs and [operating instructions] that governed the turnover of remains and then you know, worked with those staff members on retraining, ensuring they understood that they weren't there to be alone during the turnover, that they specifically had to sign a sheet along with the medical examiner before remains were turned over and placed into the system, and that a physical look at each bag to determine that a portion is located inside it before they're checked in."

were still in our system and in the building." Mr. Dean believes that the bag was checked into the reefers without a portion in it and that the portion ended up "with the original set of remains." Mr. Dean could not point to any evidence in the CDI to support his theory. Mr. Dean stated that, "what I still believe happened is that there was a re-association by articulation, that there were injury patterns that would associate the parent case [Army soldier] with this portion and that that took place at that time."

In his testimony, Mr. Dean recalled an incident during the June 2008 to April 2009 timeframe in which a medical examiner had re-associated a tooth with another portion, but MOMS had not been updated. "I'm aware of another incident where a tooth was reassociated and I was able to talk to the medical examiner specifically about it and he had advised that the tooth had been reassociated and that the bag was not either thrown away or placed in biohazard, that the barcode had not been entered into the system when the tooth was reassociated." By re-association with the remains, Mr. Dean explained, "[i]t would mean that by articulation or by dental record or both, could be that by dental records it shows that this belongs to this individual and so the medical examiner chose to reassociate the tooth at that point. It could've been by articulation or like I said, both." The tooth "could be physically re-associate [sic] that tooth articulated into the mandible or maxilla of the individual." The proper procedure at that juncture would be to address the issue within MOMS and indicate that the portion was re-associated by reassigning the portion number to the parent case number.

With regard to the slit in the portion bag, Mr. Dean stated that "[i]n my opinion the slit could have occurred most probably in the autopsy suite if a medical examiner wanted to look at the remains again. It could have happened in the refrigeration unit, but most likely in the autopsy suite." Mr. Dean believes medical examiners slit the bag to get the portion out versus opening it up. Mr. Dean opined that it is easier for medical examiners to take a knife to a plastic bag than to open it. "When you have those gloves on and when you have blood on your hands it's very, very difficult to open a Ziploc bag to get into that mechanism and open it up, it's much easier to just open it" by slicing it. Mr. Dean stated that this "didn't happen regularly" but that he was aware of it from observation, but he couldn't recall when or who -- which medical examiners did this. He also stated that "there's not anyone specifically that I can recall a conversation about it with." When asked about the frequency of this happening, Mr. Dean indicated that he had seen it happen maybe twice sometime in July or August of 2008. Mr. Dean admitted there was no evidence in the CDI regarding medical examiner's cutting open bags to remove portions.

Mr. Keel testified that medical examiners will slice open the portion bag with a scalpel to remove the portion. "That's a common practice for them [medical examiners]. Instead of opening it [the sealable bag] up, to take a scalpel and cut it." He indicated he has been told of this practice by deployed personnel but not by any medical examiner or any of the permanent personnel. He could not recall the names of any of the deployed personnel who had told him of this practice. He further indicated that he had not personally questioned the medical examiners about this "common practice." Nor had he done anything to correct it. "It's never been an issue." When asked why it was not an issue when the medical examiners were destroying numbered portion bags his staff had created which would have to be recreated, Mr. Keel indicated that the medical examiners only slice the portion bag when they know it is not going to

be reused. "The assumed procedure is that the incision, cutting the bag, would destroy the integrity of the bag when they are going to reassociate that, so that the bag couldn't be used."

Photographs of the portion bag were reviewed by the IO. The slit is approximately seven inches long and made slightly less than ¾" from the bottom of the bag. According to the IO, the cut appeared to be a clean cut, as if made by a knife or scalpel rather than a puncture as would be made by a jagged bone fragment, and penetrates one layer of the bag.

Three medical examiners -- Dr. (Captain USN) [Chief Medical Examiner], Dr. (Commander, USN) [Medical Examiner 3] and Dr. (Major, USAF) [Medical Examiner 2][128] -- who worked at the Port Mortuary in the Spring of 2009 were interviewed and all testified that the cutting of a portion bag to remove a portion as described by Mr. Dean and Mr. Keel was not a practice they used nor had they ever observed another medical examiner slice open a portion bag to remove a portion. In his interview, Dr. [Chief Medical Examiner] repeatedly said he has never seen it done and "I've never done it." Dr. [Medical Examiner 3], when asked whether she has observed a medical examiner (or whether it is a common practice for medical examiners to) slice open the bottom of the bag and remove the portion, stated:

> I've never seen anybody slit open a bag. I have seen people open a bag and look at a portion, but you want to be very careful about doing that, because number one, you want to make sure that you keep integrity, *i.e.*, the portion that came out of the bag is what goes in the bag. You don't want to contaminate it as best as possible, because you haven't taken specimens. You haven't done DNA analysis or anything. So you don't want to cross contaminate things. But I've never seen anybody slit open a bag.

Port Mortuary personnel who worked at the Triage station were also asked whether medical examiners had a practice of slicing open the bottom of bags to remove portions. [First Lieutenant 1] stated that she had observed medical examiners remove portions from bags and that when they did so, they opened the bag at the top and removed the portion. She testified that she had not seen a medical examiner slice the bottom of the bag to remove a portion. She also stated that when she would assist in autopsy putting the portions back in bags, she did not recall seeing any bags that had been slit open or cut. [Captain 2] was questioned regarding the difficulty with handling portions in latex gloves. He indicated it could be difficult but it was the portion not the glove that made it so.

[Major 2] indicated he had not heard of medical examiners slicing open bags. He was skeptical of such a practice "knowing the medical examiners and their professionalism. And, if they were to do that, they've got to get that bag back to us and we would question why did you do it this way." He indicated that to his knowledge he was not aware of that being done by the medical examiners. He added that, "I recall an incident where it looked like that happen[ed], but actually someone doing that – pardon my casualness, but they would have to be an idiot."

---

[128] Dr. [Medical Examiner 2] also testified that DNA specimens are cut on the gurney with a blue sheet on it, but not on top of the bag.

Mr. Dean stated that he talked with [Medical Examiner 8] [identified as Director of AFME Operations] about it after the Army soldier incident. "I did have a discussion with him about it though and said that it's creating a problem and that we need to ensure that that doesn't happen and we also need to ensure that a medical examiner staff member is present when we do the turnover." Other than the discussion that Mr. Dean related he had with [Medical Examiner 8] and the conversation Ms. Spera stated she had with the OAFME after the January 2009 incident, the IO determined that no other action was taken to address the slit bag issues with the medical examiners.

Mr. Dean testified that "I can't answer why we didn't talk to [the medical examiner who handled the Army soldier's remains]." He explained that he did not talk with the medical examiner because "I felt my theory was solid" and when the CDI started, "that was not within my purview."

In his interview with the IO, Colonel Edmondson concurred in Mr. Dean's conclusion that the slit in the portion bag was caused by the medical examiners and the portion was re-associated and comingled without updating MOMS.

> You know, Mr. Dean and Mr. Keel looked into this thoroughly and ultimately that is the conclusion that they have. They walked me through their logic in terms of when the slit in the bag happened. I mean, it is a surgical slit, it's not just an accidental rip. It's not a tear in the bag, it's a cut in the bag and then going through the procedures of when that might have happened, when it most probably happened, and then what might have happened with those remains, Mr. Dean reached two conclusions, two possible scenarios, and only two possible scenarios. One is that the remains – the bag was slit in the autopsy suite and the portion was reassociated with the remains in the autopsy suite and hence interned, with the fallen soldier. The second possibility is that the remains [sic] were slit in the autopsy room, analyzed, and then comingled with other disassociated portions rather than remaining segregated. Those disassociated portions would have been medically disposed of per the family's instruction. So those are the only two possibilities that both of them conclude could have happened in this case and is logical. It certainly made sense to me when they walked me through the process and I, you know, trust them implicitly and they are very adamant that that is in fact what happened.

Mr. Dean submitted additional information in a memorandum for record for the investigating officer dated August 6, 2010. In that statement, Mr. Dean reiterated points in his testimony in which he stated that the portions were provided permanent disposition as directed by the PADD and he had been correct in not notifying the Army liaison about the issue. He also stated that once remains are turned over and released for disposition, they become the responsibility of the Port Mortuary.

Mr. Dean was re-interviewed in order to clarify the logic he used to conclude that the portion alleged to be missing was articulated with the Army soldier's remains or otherwise disposed of in accordance with the PADD's directions. In his testimony, he explained that by re-association/articulation he meant that "it may have been in this particular case that the remains, you know, could possibly be articulated to the individual and--and then was placed on the gurney with the--with the torso, the rest of the remains, and then left on the gurney throughout the rest of the process to include preparation then wrapping and then returned home to the family. So, it--it could have taken place in--in the autopsy room and associated to that individual by, you know, a number of anthropological means." By "anthropological means" he further clarified "Well, there could have been an association by physical articulation -- if it articulated with another portion of that individual." When asked by the IO, "[a]re you trying to say if it, like, fit perfectly," Mr. Dean responded, "[r]ight."

Mr. Dean, when questioned by the IO, did not dispute the fact that in order for the portion to have been articulated to the Army soldier's non-intact remains and shipped with those remains to the PADD on August [ ], 2008, as he believed, a number of errors would have had to occur. In the interview, the IO listed the following "errors:" (1) the empty portion bag was subsequently placed and left in the reefer and not destroyed; (2) MOMS and the case file were not properly updated to reflect that the portion was articulated with the torso and shipped on August [ ], 2008; (3) the portion was shipped with the remains despite the lack of a release letter from the medical examiner authorizing release and shipment in August 2008; and (4) the medical examiner would have physically [*i.e.,* by sight] articulated the portion to the remains on the same day as the remains was processed, yet also have taken a DNA sample of the portion in order to scientifically match the portion to the remains. The scientific evidence did not come back until after the remains would have been shipped to the PADD.

Articulation as used by Mr. Dean is a term of art and is defined as the "place of union between two or more bones." This definition is found in two well known textbooks -- Restorative Art by J. Sheridan Mayer and Embalming: History, Theory and Practice by Robert G. Mayer. The IO noted that to the lay person, it does not appear possible to have identified the portion in question through visual articulation. The portion D08-0914 was described as soft tissue and bone associated with an ankle. The remains of the Army soldier consisted of a non-intact torso with no legs/lower body.

Other than the incident on January 25, 2009, Mr. Zwicharowski stated that he was not aware of any portion being found outside its portion bag in the reefer or on the floor of the Port Mortuary. He did relate a situation where a tooth or portion might have been found on the floor of the embalming room during embalming of remains. In that case, Mr. Zwicharowski stated that the proper procedure was to have the medical examiners verify the identity of the portion.

Mr. Zwicharowski also stated that portions are not embalmed until they have been positively identified and released for disposition. He stated that, generally speaking, when a portion is shipped to the PADD, it is shipped in its original portion bag: "When the body is being shipped, and that is either one bag or two bags, the body or the portion or tissue will be treated, and it will be either in the interior bag or the exterior bag—one of the two or both. But

the tissue will be in a bag with a bar coded number." He continued, "they're going to use the bag that already has a bar code on it." He also testified that a portion could be shipped with the remains outside of its portion bag if it were an extremity and had been separately tagged[129] with the appropriate Dover number: "I guess my answer is that, again, if it's an extremity, it's going to have a tag on it. If it doesn't have a tag on it, it's going to be in a bag with a bar coded number on it." Mr. Zwicharowski also stated that portions are kept in their original portion bag when they are prepared for medical disposition.

Ms. Spera also stated that a subsequently identified portion is not embalmed until it has been positively identified and the Port Mortuary receives disposition instructions from the family and a shipping date has been established. Once the portion is released for shipping and embalmed, the portion would be included with the remains or otherwise disposed of as directed by the PADD. Ms. Spera further testified that if the portion was shipped with the remains, the portion could be shipped in its original portion bag. If the portion was not shipped in its portion bag with the remains, the tags and labels would stay with the portion. In the latter case, the original portion bag would be destroyed.

The IO conducted a review of certain case files, including the OAFME's case file and the Port Mortuary case file on the Army soldier. According to the IO, the OAFME's file contains no information as to final disposition of portion D08-0914 other than documentation showing release of the portion by the OAFME's office in February 2009, as previously noted. The Port Mortuary case file shows that the non-intact remains were released and shipped in August 2008 but no portions were released or shipped at that time with the remains.

Cases files from the Port Mortuary were also reviewed to determine the possibility of the missing portion being associated with and shipped with another individual's remains. The case files reflect that on August [ ], 2008 [the day the remains arrived at the Port Mortuary], the Port Mortuary issued 65 Dover numbers to 10 remains and 55 portions. The review indicated that five sets of remains were non-intact torsos missing lower portions of the body. Of these five, three had portions shipped to the PADD. The ten remains were shipped to the respective PADDs for final disposition between August [ ] and August [ ], 2008.

Twenty-seven of the portions were described as "Jaw bone and teeth." None of these were identified to an individual and all of these portions were shipped on June 26, 2009 for final disposition in a group burial. Eleven of the portions were described as being part of a skull, bone fragments or multiple bones. Again, none of these portions were identified to an individual and each was shipped on June 26, 2009 for disposition in a group burial. None of these 38 portions is similar in description or size to the portion that is the subject of this case. In addition, the inventory conducted in April 2009 after the discovery of the empty portion bag would have confirmed (because of the differences in size and description) that the missing portion was not

[129]As noted in Ms. Spera's memorandum of January 2009, the two portions found in the reefer (D08-0908 and D08-018) did not have tags on them. The IO noted that portion D08-0913, the second portion associated with the remains of the Army soldier, also did not have tags on it. However, as of August 2008, it was not the practice of the Port Mortuary to tag all portions.

contained within the portion bags holding these portions. Another portion was a retained organ which was shipped to a DNA lab. As such, it was not similar in description or size to the portion that is the subject of this case.

Fifteen of the portions were identified to an individual. One of the portions, a left hand identified by fingerprints was identified prior to shipment and re-associated with the remains in August, 2008. Eight of the fourteen portions were slated for medical disposition by the respective PADD. These portions were described as follows: a left foot, soft tissue and bone, right foot, soft tissue and bone, lower left leg and foot, right foot, soft tissue, soft tissue and bone. Another portion was described as bone and had "waste" as its disposition. It was not identified to an individual. All nine of these portions were shipped for medical disposition on April 21, 2009 and cremated on April 22, 2009. The inventory conducted immediately after the discovery of the empty portion bag on April 21, 2009 should have discerned whether the missing portion was contained within the portion bags holding these nine portions. It was not found.[130]

Of the remaining six identified portions, one portion was identified to an individual who was not involved in the incident in which the Army soldier died. That portion, described as brain and bone fragments, was shipped to the PADD on February 28, 2009. Two portions (D08-0911and D08-0918)[131] were both identified to a soldier involved in the incident with the Army soldier and were shipped to the PADD on February 24, 2009. D08-0911 was described as a lower left leg and foot; D08-0918 was described as soft tissue. Another portion, described as "fragment and incomplete distal upper leg and knee complex," was shipped to the Theater Mortuary Evacuation Point in Afghanistan on December 20, 2008. The remaining two portions were identified to the Army soldier at issue here. D08-0913 is in storage and D08-0914 is missing.

In her interview, Ms. Spera stated that the "current status [of the portion] is that it is still missing." She testified that "since the portion had been missing, the block [in MOMS] hadn't been updated because there had been no change. The Port Mortuary director never told me to do anything with the missing portion or with the identified portion. There were two portions identified to [the Army soldier]. One of them was missing, one of them we have." Ms. Spera stated "I can't think of what happened to the portion other than I know the portion was missing, I have no idea how or why."

Second Missing Portion

According to information from the Port Mortuary case files, 47 portions from two [Air Force] members were recovered from [a military mishap] and received at the Port Mortuary on July [ ], 2009.[132] On the CJMAB Form 1, the PADDs for both deceased members requested to

---

[130] However, due to decomposition of portions and the fact that scientific identification such as DNA testing was not re-done, there is always the possibility, however slight, that the portion could have been missed during inventory.

[131] D08-0918 was one of the portions involved in the January incident where the portions fell out of their portion bags and were found by Ms. Spera.

[132] According to the case files, an additional 19 portions from the [military mishap] were processed at the Port Mortuary on July [ ], 2009.

be notified should further remains be identified.[133] While the remains were being processed at the Port Mortuary, a portion bag that had been labeled and tagged with Dover No. D09-0693,[134] and associated with a particular portion, was found empty at the X-ray station. The portion assigned to this Dover number was described in the MOMS system as "soft tissue." At this point in the process, the portion had not yet been identified as belonging to either Service member.

On July [ ], 2009, when the remains of [the Airmen] arrived at the Port Mortuary, [First Lieutenant 1],[135] [Captain 2],[136] and [Senior Airman (SrA) 1],[137] were working at the Triage station with [Major 2]. During his interview, [Major 2] provided a very detailed description of the processing of human remains and portions. *See* Background section at pages 10-11. [SrA 1] and [First Lieutenant 1] also described the process at the Triage station.[138]

According to [Major 2], "my main mission as the Director of Operations was to make sure that the remains were received properly when they came in. I was in charge of processing the line which is the point from when the transfer cases are opened, when the Medical Examiner is there, up through EOD, into Triage and photography and personal effects where we initially give them their Dover number, which is a number that allows us to track them while they're within the facility up until they get to basically up to FBI, because from that point forward the medical examiners are in control of the remains until it gets back to [the] embalmers."

[SrA 1] stated, "we bag each one, each portion separately." "Each portion has its own tag, its own ID tag and has its own paperwork. We lay the portion inside the bag with the tag and then we place that bag inside another bag with its own paperwork, so they each have their own separate paperwork so we know what is what." She indicated that each bag is labeled. The labels are individually produced and "are printed out as stickers" which are then placed on the

---

[133] Both PADDs also requested that, in the event that further remains are designated for inclusion within a group, they be notified and provided information on any planned ceremony in honor of deceased Service members in the group. The case file for one of the deceased airmen indicates that the PADD "desire[d] to view remains" and "want[ed] full reports of DNA testing and condition of remains report."

[134] On July [ ], 2009, Dover numbers D09-0686 through D09-0732 were issued. D09-0693 was the eighth number issued that day.

[135] At the time of her interview, [First Lieutenant 1] was assigned as the Chief, Military Personnel Section, Fairchild AFB. From May to September, 2009, she had been deployed to AFMAO as a Dignified Transfer officer and operations officer for the Port Mortuary. Her duties for the Port Mortuary usually involved working at the Triage station entering data into the MOMS database as well as tagging and labeling portions and portion bags.

[136] [Captain 2] is currently assigned to the University of Georgia AFROTC detachment as an Assistant Professor of Aerospace Studies. He was deployed to the Port Mortuary Division from May 7 to September 15, 2009 as the Assistant Officer in Charge for Operations. His duties included participating in the Dignified Transfer for incoming remains, and identifying and tagging the remains and portions as they arrived at the Triage station.

[137] [SrA 1] was deployed to the Port Mortuary Division in the Dress and Restoration Section, from May 2009 to September 2009. She indicated that when she worked in the Triage station, she generally handled "full bod[ies]" or "anything that had to do with fingers because we would help the FBI fingerprint." [SrA 1] indicated that "portions weren't really a part of my job," but that she did work in the area where the portions were processed in triage. She stated that, "I generally stuck to the duty that I was assigned to do, but there were times where we had a lot of portions and there were only two people working to place them in the bag and to tag them ... [so] I would step in – maybe I stepped in about maybe once or twice to help with that process."

[138] In her interview, Ms. Spera detailed the actions that take place during the processing of human remains portions from scanning upon arrival by Explosives Ordnance Disposal (EOD) through the Triage station where each remains/portion is assigned a unique Dover number. At the Triage station she stated that each portion is individually entered into MOMS and Dover barcode labels are generated for each portion individually.

bags. She indicated that portion bags are tagged and labeled one at a time, and then the portion was placed in the portion bag. Portion bags were not "pre" tagged and labeled based on an estimated number of portions to be prepared.

In her testimony, [First Lieutenant 1] explained the steps in the process from the time remains arrived at the Port Mortuary until they were passed to the x-ray technician. As part of this process, [First Lieutenant 1] explained that the labels generated at the Triage station were individually generated for each portion and their description individually entered into MOMS. "If it were a human remain, we would type in how many labels we wanted for that human remain which was a specific number and then how many labels we wanted for that specific remains so all the numbers on the labels that printed out were the same. And if it was a portion, which sometimes we would have a gurney and there would be up to 10 portions on the gurney. That would be divided out by the medical examiners. We would give each individual one [portion] just one number."

[First Lieutenant 1] recalled that on the day they received the remains from [a military mishap] only portions were received – there were no intact remains such as a torso. "The remains that came to us were basically it was not even a body, they were just – they were divided out into many portions, over 40. I don't even remember exactly [how many] we did that day but there were a lot of different portions, a lot of different gurneys. So it took us a long time to get through each one, labeling, bagging, and then moving on to the next one … Everything that we did was fine." She stated that she and [Captain 2] were working the Triage station that day labeling and tagging portions. "[W]e would put the portion into its own bag, label both sides, and then tag the bag. And then we would put the documents because we also had to print documents off and it would be like a quick description whatever we put into the MOMS. We would put that into a separate bag, label both sides of that bag and tag it, then both of those bags would go into a larger bag and then that larger bag which would have everything with that one portion was labeled on both sides and tagged also. So it would have been either one of us putting the portions in the first initial bag."

[Captain 2] stated that on the day they received the remains of the two [Airmen], he worked in the Triage section with [First Lieutenant 1] and, he believes, [Major 2]. He explained that the medical examiner would determine how many portions there would be. "[T]he Medical Examiner would be there, and the Medical Examiner would go through and say, 'Okay, we need to separate this. This looks like its one thing. We don't know what this is. This looks like it's something else.' And they would make that determination on how many particular portions that we had." The medical examiner "would determine what it [the portion] was or they would give us a particular description. It would either be fleshy skin or bone or a foot or a hand or something like that. So they would give us a description." [Captain 2] stated that "[o]nce the ME determines how many portions there were, then we had to input it into the system." [Captain 2] estimated that on the day of the [military mishap] there were "probably maybe four – three or four – gurneys of portions. So I'm almost going to gather that there were probably 50-60 portions." [Captain 2] stated that when they tagged, labeled and bagged the portions, the portions were handled individually, "one at a time."

[SrA 1] recalled that July [ ], 2009 was a busier day than usual because of the large number of portions received from the [military mishap]. "[W]hat I do remember, it was myself

and two other service members and we – this was a day that we were really busy and a lot of portions came in and there weren't that many people there to help out so I stepped in and we were placing portions in a bag and they were being taken away. We were sending them down to the doctor and when they would identify what was what, if they needed them to be separated, they would send them back to us, and we would rebag them and retag them." [SrA 1] stated that to her recollection the medical examiners returned to her station with the entire bag with a portion in it. She also stated that one of the Service members she worked with was [Major 2] and the other was a female service member.

[SrA 1] indicated that what they were dealing with was "a full body but in portions." She explained that at Triage we "were trying to ... identify what was what, so if we had portions that – some stuff is, you know, hard to identify, so we would put it in a bag. But when we would send it down to the medical examiners, they would find out – say we have something that doesn't belong here, they will bring [the whole bag] back to us and we would then place the portion that did not belong in a separate – in its own bag." "So what we think is one portion, [the medical examiners] might find three out of what we think is one." [SrA 1] testified that the medical examiners "would separate it [the portion] and then bring it [the whole bag] back to us and we would rebag the portion." She stated that "we were back there for about maybe two or three hours trying to separate and place portions inside of bags. That was the only time that that ever happened."

The chain of custody maintained within MOMS shows that [Captain 2] created and approved the case number for the portion D09-0693. From the Triage station, a "handler" moves the gurney with portions down the hall to the X-ray station. It is unclear from the record who physically moved the portion D09-0693 to X-ray. According to MOMS, the case number was scanned into the X-ray station directly – without first being scanned onto a handler's badge.[139] MOMS indicated that [Senior Airman (SrA) 3][140] was logged into the X-ray station's computer when the portion was logged into the X-ray station.

On July [ ], 2009, [SrA 3] was working at the X-ray station (which is the station the portion bags arrive at after starting at the Triage station). She testified that portions are transferred from one station to the next on gurneys. "So what we do, we put the code that it comes, because [the portion] comes with a little tag and on the tag, they have a code that is pertaining to that portion or to that remains. So we'll put that code in the [MOMS] system by scanning or put it in by hand and it will come as information, the date, and especially a scan also

[139] According to MOMS, on July [ ], 2009, between 9:48 and 11:05 a.m., there was no scan to a handler's ID badge reflected in the chain of custody. The version of MOMS that was in use at the time this case number was created permitted the scanning of a Dover number from one station to another station without forcing a scan to a handler's ID badge. The scanning protocol in effect at this time was to scan cases from station to handler to station. (This protocol was enforced through user training and spot checks of case workflow or chain of custody histories.) Apparently, it became evident that scans to handler ID badges were still being omitted, despite best efforts to train users on proper scanning protocol. To remedy the problem, scanning to handler ID badges between station scans was forced in MOMS version 3.1 which was released on November 5, 2009. Since that time, if a user tries to scan a case number from a station location to another station location without scanning the case number to his ID badge first, it will result in an error message to the user, and will not allow the scan to take place.

[140] [SrA 3] is an Air Force Reservist who serves with the 12th Mortuary Affairs Squadron, Dover AFB. In July 2009, she served as an autopsy technician at the Port Mortuary Division. Her duties were to assist the medical examiners that performed the autopsies and input data into MOMS when they were done.

our code, which at this stage was the x-ray section, so they can have a time frame when the remains was in that section." After the portions are scanned to the X-ray station, [SrA 3] explained that she left the portions on the gurney and "wait[ed] for the x-ray technicians to get ready to take the whole gurney inside of the x-ray room." She testified that she "never" received portions on the gurney that were not in the bag. "If that was the case, we're supposed to send them [the bags] back. We're not able to actually get them."

[SrA 3] stated that on July [ ], 2009, while she was entering data into MOMS prior to the portions being x-rayed, she saw a medical examiner (Dr. [Medical Examiner 3])[141] remove a portion bag from the gurney, stating, "I'll be right back because I need to check something on this." She responded in the affirmative when asked whether Dr. [Medical Examiner 3] took the portion out of the big bag and the little portion bag. [SrA 3] later clarified in her testimony that Dr. [Medical Examiner 3] had taken "the whole portion with the bag and she said 'I'll be right back, I need to check something on it.'" She also indicated that it was "very unusual [for the medical examiner to come out and take a portion] because usually they just wait for us to bring the whole gurney with the portions and then they'll do whatever they have to do inside [the autopsy suite]."

[SrA 3] stated that when the x-ray technician took the first gurney into x-ray, the technician told her, "Hey, this bag is empty, there is nothing in here." [SrA 3] replied that "[Medical Examiner 3] just took the portion inside of the autopsy room. Can you go please and find out with her if she can put the portion back or are they going to need it or anything else." She further stated, "[a]nd that's when she [the x-ray technician] took the bag into the autopsy room. But after that, I don't know if she actually talked to the doctor or what happened to it [the portion bag]."

[SrA 3] stated that "when we used to get the portions in the gurneys, they come in a specific order and I used to scan every portion in the same order so I didn't ever remove them or touch them, how they come from the section before us. So when she Dr. [Medical Examiner 3] removed the bag, it was one of the first bags in the corner so when the x-ray technician came out of the room, he said, 'hey, this bag is empty.' It was the same bag." [SrA 3] testified that she had already scanned the portion into MOMS by the time Dr. [Medical Examiner 3] came and took the bag and when she scanned it in she saw a portion. "Yes, it was a portion there, definitely." She recalled seeing the portion in the bag and "it was like a pinkish soft tissue."

At the time of the incident, [Autopsy/Embalming Technician 1][142] was also assigned to the X-ray station. [SrA 3] testified that [Autopsy/Embalming Technician 1] was a couple steps away from her on the next computer, where he was also scanning in bags to X-ray. In his

---

[141] Dr. (Commander, USN) [Medical Examiner 3] is currently assigned at Gulfport Mississippi as the Regimental Surgeon for the 25th Naval Construction Regiment. Previously, she was stationed as an Armed Forces Medical Examiner, Rockville, Maryland, and performed autopsies at AFMAO "off and on from 2005 through ... 4 December 2009."

[142] [Autopsy/Embalming Technician 1] is a civilian autopsy/embalming technician currently assigned to the Port Mortuary Division. He was hired as a civilian employee on January 19, 2010. Prior to that, [Autopsy/Embalming Technician 1] was deployed for 120 day rotations to AFMAO as a Staff Sergeant, U.S. Air Force Reserves, approximately 5-6 times. The latest deployment was in the summer of 2009.

interview, [Autopsy/Embalming Technician 1] recalled scanning the portion bags (the portions are not removed from the bags in order to be x-rayed) into MOMS at the X-ray station as they arrived, and that each bag had a portion associated with it. [Autopsy/Embalming Technician 1] stated that he was not involved in the actual x-ray of the portions. After the x-ray was completed, he scanned the portion bags out of X-ray, where the gurney with the x-rayed portion bags was then brought into the autopsy room.

After the portions on the gurney in question had been brought into the autopsy room, [Autopsy/Embalming Technician 1] was made aware of the empty portion bag and had an opportunity to view the empty portion bag. He described the bag: "[y]ou could say there was blood – I mean there was blood, you know, in the bag, as well. So, you know, you could tell that something was in it. It wasn't just—it was well notified that it -- there was something in it. It wasn't just a bag, and you know, maybe someone made a mistake and just put the barcode on the bag. You could tell there – well, I could tell that there was something in—contained in [the] bag, at some point." He described the bag as having "smears."

[SrA 2] is an x-ray technician who was deployed to the Port Mortuary Division from July 2009 to January 2010. During the interview, [SrA 2] explained her role in preparing portions normally involved working at the X-ray station. She stated that the portions came to X-ray in bags that were zip-locked and tagged and placed in a row on a gurney. "I would sign off on the paperwork, after I x-rayed it. I was to take the portion out of the big bag, and leave it in the small bag, and then I'd put that on the x-ray table and I would take an x-ray of it, unless the radiologist wanted a CT scan of it, as well, and then I would do that, as well." She indicated that she x-rayed one portion at a time and "we never remove the portion from the [small] bag." After x-raying the portion, she would then return the small bag containing the portion to the big bag. Once all the portions on the gurney had been x-rayed, the portions would be scanned out of X-ray and moved to the autopsy suite.

The incident on July [ ], 2009 occurred shortly after [SrA 2] had arrived for her deployment to the Port Mortuary. She indicated that on that day she worked with [Technical Sergeant 1] who was training her at the X-ray station. She testified that, "I do vaguely remember seeing something in that bag. And that day was really hectic because we had a lot of portions come in that day, and so the MEs were kind of back and forth grabbing things and putting them [referring to the portion bags] back, and then grabbing things and putting them back, so it was kind of hard to keep track of everything, but I do remember that day very well." In her opinion, she thought the medical examiners "were trying to piece things together and so, so maybe – I mean that's the only thing I can think of. But they did come back and they were kind of messing with the bags a lot … It was a really hectic day." When asked what she meant by messing with the bags, [SrA 2] stated that "[t]hey would examine the portions." She indicated that the medical examiners would take the small portion bag out of the large bag but did not know if they walked away with the bag or just looked at it there.

[SrA 2] became aware of the empty portion bag when a medical examiner or technician from the autopsy area brought it to her stating there had been no x-ray of the portion. She recalled seeing a drop of what looked like a mixture of blood and water about one half inch in size on the inside of the bag, as if something had been in the bag. She stated that the technicians

assumed the medical examiners had removed the portion from the bag, but did not know what specifically happened to the portion.

[Technical Sergeant 1] is the assistant Non-Commissioned Officer in Charge (NCOIC) of Data Imaging, 436th Medical Support Squadron, Dover AFB. [Technical Sergeant 1] has also served as the NCOIC of Data Imaging, Port Mortuary Division since 2006. His primary duties with the Port Mortuary are as an x-ray technician. [Technical Sergeant 1] also trains the x-ray technicians who rotate into the Port Mortuary. He indicated that on the day the remains from the [Airmen] were processed, he was working with and training [SrA 2].

[Technical Sergeant 1] indicated that portions arrive at the X-ray station on a gurney after they have been bagged and tagged at Triage. The autopsy technician will scan the portions into the x-ray section and the gurney will sit in the hall outside the x-ray room until the x-ray technician brings it in. [Technical Sergeant 1] stated that, "we walk out to the hallway, and I will take out all the paper from the outer bag and place them on top of each bag, and I go along each one and sign 'x-rayed.'... So I sign them all, and then we put the paper back in the bag and x-ray the whole thing." He explained that the x-ray process takes two technicians, one to handle and position the human remain (or portion) and the other to run the console. He indicated that he usually ran the console. He also explained that the x-ray technicians do not remove the portions from the bag. "We place the whole bag on top of our [x]-ray unit and x-ray [the portion] through the bag."

[Technical Sergeant 1] recalled that on July [ ], 2009, he found an empty portion bag on the gurney. "I know this from my notes, there was nothing in the bag 'cause I took it [the documents] all out in the hallway and put them out, and I got to the last one, I looked at [it] and said, you know, there's nothing in here." [Technical Sergeant 1] stated he did not remember seeing a portion in the bag. He described the empty bag as having a "tiny bit" of "clear bloody fluid" smeared on the inside of the bag, "[s]o it wasn't a clean bag." After asking the personnel in autopsy if they had the portion, he wrote "Not x-rayed" and "No portion" on the form accompanying the bag. At that point, he went back and continued x-raying portions.

[Technical Sergeant 1] stated that he did not recall seeing anyone around the gurney that may have taken the portion. He explained that "once we're in the x-ray room, I have no view of the ones [gurneys with portions lined up in the hall] – cause the doors are all – it's lead –lined doors. I have no way of seeing what's going on outside, though." [Technical Sergeant 1] indicated that he had previously seen the medical examiners look through the portion bags and open the bags to look at the portion while the portions were on the gurney outside the X-ray station. He stated this practice "doesn't happen a lot but it has happened before." He testified that he has "never seen them [medical examiners] actually move it [portion] to another room."

Dr. [Medical Examiner 7] (Lieutenant Colonel, USAF) is the Deputy Chief Forensic Anthropologist, OAFME and was assisting with the processing of the human remains from the [military mishap] on July [ ], 2009. On July [ ], 2009 [three days later], Dr. [Medical Examiner 7] emailed [Major 2], stating that she had spoken with Dr. [Medical Examiner 3] "concerning the missing portion from Monday." Dr. [Medical Examiner 7] indicated that Dr. [Medical Examiner 3] said "she only handled material at intake prior to the numbers being assigned and within the

autopsy suite. She also noticed there was no human material associated with that number when it was sitting on the gurney outside of x-ray." Dr. [Medical Examiner 7] informed [Major 2] that she had copied Dr. [Medical Examiner 3] on the email and gave him Dr. [Medical Examiner 3]'s telephone number.

On July [ ], 2009 [three days later], after she had spoken to Dr. [Medical Examiner 7], Dr. [Medical Examiner 3] prepared a memorandum for the record "pertaining to portions of human remains associated with ME09-0455 and ME09-0456." In her memorandum, Dr. [Medical Examiner 3] stated she "was involved in sorting human remains in the intake area once the transfer cases were opened and accessioning completed." After the Dover numbers were assigned and the gurney was placed outside of the X-ray suite, Dr. [Medical Examiner 3] stated, she "viewed the gurney with numerous remains outside the x-ray suite looking for another portion of interest and noticed the empty bag in question. I did not handle the empty bag until it was logged into the autopsy suite." She further indicated that she and "LTC [Medical Examiner 7] ... discussed the case once the gurney arrived in the autopsy suite as we were concerned with the fact that it was empty and that it had been noted as empty by the x-ray technician."

In response to a July [ ], 2009 email request made by Mr. Keel to Dr. [Chief Medical Examiner], AFME, Dr. [Medical Examiner 3] provided an email to Mr. Keel dated July [ ], 2009, providing her recollection about the empty portion bag found on July [ ], 2009.

> Thank you for requesting our input on this case. On [ ] July 2009, I was involved in sorting human remains associated with ME09-0455 and ME09-0456. The sorting of portions was accomplished after the transfer cases were opened. Subsequently, Dover numbers were assigned to the sorted portions, the bagged portions placed on a gurney and the gurney placed outside the x-ray suite. In viewing the gurney containing the bag labeled with D09-0693 for another portion of interest, I noticed that the bag (D09-0693) was empty. I did not handle this bag until it had been logged into the autopsy suite. LTC [Lieutenant Colonel] [Medical Examiner 7] and I discussed the empty bag once it had been logged into autopsy and noted that the X-ray technician had indicated that no human remains were present in the bag. LTC [Medical Examiner 7] and MAJ [Major] [Medical Examiner 9] signed the ADS (Autopsy Description Sheet) indicating that there was no tissue in the bag upon receipt. Under the direct supervision of LTC [Medical Examiner 7] and myself MAJ [Medical Examiner 9] signed the flow sheet. Please feel free to contact me should you have any additional questions.

The Autopsy/Specimen Description Sheet states, "No specimen accompanied paperwork." Mr. Keel followed up in a telephone conversation with Dr. [Medical Examiner 3] on July [ ], 2009 and prepared a memorandum for record which states: "[a]t 1000, [ ] July 2009, I spoke with Dr. [Medical Examiner 3] over the telephone regarding D09-0693. Dr. [Medical Examiner 3] said that the morning of [ ] July 2009 was very busy and that they were

processing a large number of portions. She recalled sorting the portions during the initial processing after the transfer cases were opened. She said that she did not see the empty portion bag until she went back to X-ray regarding a different portion. I thanked her for her time and clarification on the matter."

Dr. [Medical Examiner 3] confirmed in her testimony that medical examiners and the anthropologist are sometimes brought in to sort and "separate out the portions." Dr. [Medical Examiner 3] indicated that it was "not usually" the practice of medical examiners to take a bagged portion from the gurney outside the X-ray station and take it into the autopsy ahead of the x-ray "because you want to have [the] x-ray done." She did indicate that the medical examiner may take a portion where "a finding" requires something to be "re-x-rayed" or where the portion was not correctly separated. Dr. [Medical Examiner 3] testified that she has "seen people go back and re-sort them [portions]." She indicated that resorting was "usually probably separating things," rather than combining portions. Dr. [Medical Examiner 3] stated that "theoretically" it was possible that separate portions could be co-mingled, but she did not recall "if I had ever done that." She stated upon further reflection that, "[y]ou would leave them [the portions] separate; examine them separate; because they're physically separate portions." If the portions were re-associated, it would be more "expeditious" to reflect the re-association in the medical examiner's report rather than physically combining the portions.

While Dr. [Medical Examiner 2] was not present during the processing of the [military mishap] incident, he agreed with Dr. [Medical Examiner 3]'s testimony. In his interview, he stated that the medical examiners "will instruct them [Dover Port Mortuary personnel] how many numbers we needed, but they generate the number." Even where there are separate portions like with a skull which can be fracture matched, Dr. [Medical Examiner 2] indicated the portions would be x-rayed but not commingled physically. "So it still retains its separate Dover number, but on that sheet that AS [autopsy sheet], it's saying positive identification by fracture match." He was asked if he could think of any scenario as to why the medical examiners would go back to the gurneys, in a situation where there were just portions, to be looking at portions prior to going to x-ray. Dr. [Medical Examiner 2] replied, "[n]o, not when it gets to that point, because we've already separated at the initial at the instance … so, you know, usually, and the way I—I've only seen it is, you know, you separate, initially. So if you have that with [a military mishap]—unfortunately, I've been involved in a couple that's like that … You're going to try to look to find, at least, something, if you can, and … The rest is all going to get a Dover number. And so they've – you've had that initial look at it, and then you're waiting to, basically, 'til it gets back to the autopsy suite."

Dr. [Medical Examiner 7] prepared a memorandum for record dated July [ ] 2009 with regard to the "[m]issing Dover Specimen (D09-0693)." The memorandum provides:

> At approximately 0830 on [ ] Jul 09, I was contacted by CDR [Medical Examiner 3] requesting my assistance with the processing of human remains recovered in association with [a military] mishap. I arrived to the Dover Port Mortuary at approximately 1045. Upon arrival, the remains had already been triaged and were in the final stages of initial portion number

allocation. At this time various portions were located at intake, in X-ray, and in the autopsy suite. At autopsy, MAJ [Medical Examiner 9] (Forensic Fellow) and I further segregated commingled material requiring the issuing of additional tracking numbers. Portions were processed by Dr. [Medical Examiner 3], Dr. [Medical Examiner 9] and this investigator.

At some point in the process I noticed that there was no specimen associated with D09-0693. The case flow sheet indicated that no specimen was received by X-ray. I spoke with the lead X-ray technician who stated that when he went to radiograph the portion, there was no specimen present. At the conclusion of this conversation I was under the erroneous impression that the situation had been reported to the Port Mortuary staff. Dr. [Medical Examiner 3] stated she also noticed that a specimen was missing from a table outside of X-ray. I should have followed-up to ensure the Port Mortuary was aware that there was no specimen associated with D09-0693. In the future, should a similar situation arise, upon discovery of any similar anomaly, we will halt all medical examiner processing until the situation is resolved.

The bulk of the portions analysis was performed by Dr. [Medical Examiner 9] and me. We examined each specimen and completed the paperwork together, one specimen at a time. I authorized Dr. [Medical Examiner 9] to sign the case flow sheets and he and I co-signed the autopsy description sheet for each portion. In the case of D09-0693, I failed to instruct Dr. [Medical Examiner 9] to annotate that no specimen was present to examine on the case flow sheet. Both he and I did annotate, "No tissue received" and "No specimen accompanied paperwork," respectively, on the ADS for D09-0693.

As we were processing the portions, D09-0693 was placed to the side on one of the side tables at the anthropology station in the autopsy suite. I overlooked this specimen at the end of the day (as well as the Dover staff policing the autopsy suite) and it was not placed back upon the gurney with the rest of the completed specimens for transport to storage. I believe it was discovered the next day.

[Medical Examiner 9] was an Associate Medical Examiner, OAFME, and a forensic pathology fellow working in autopsy on July [ ], 2009. He prepared a memorandum for record dated July [ ], 2009 regarding the "[p]rocessing of D09-0693 on [ ] Jul 2009." In his memorandum, he indicated that

> No specimen accompanied the paperwork for D09-0693. LTC [Medical Examiner 7] and I completed the ADS form [Autopsy Description Sheets] for D09-0693. In the description block, I annotated "No tissue received." In the remains summary, LTC [Medical Examiner 7] annotated "No specimen accompanied paperwork." Both I and LTC [Medical Examiner 7] signed the ADS form ... I signed the flow sheet for D09-0693, even though there was no tissue available for autopsy or embalming, as an acknowledgement that we had completed our description and processing of this specimen. There is currently no procedure for the proper processing and completion of paperwork (flow sheet or ADS) for an accessioned specimen number with no accompanying tissue ... Since receiving an accessioned specimen with no tissue is an abnormal event, LTC [Medical Examiner 7] and I separated the paperwork for D09-0693 from the processing of the remaining DP specimens. The flow sheet was inadvertently left out overnight ... The reason for a specimen being accessioned with no tissue is unknown.[143]

Special Agent [SA 2] was a Criminal Investigation Division (CID) agent detailed to the OAFME as a medico legal death investigator. He prepared a memorandum for record dated July [ ], 2009 regarding "missing portion from DN09-0693 bag." He stated that he was unaware of the missing portion "until a Dover staff member had mentioned it and showed [him] the bag." He indicated that he "coordinated with Dr. (LTC) [Medical Examiner 7] about the matter and she related she had never received the portion with the bag. Dr. [Medical Examiner 7] also mentioned the radiology section had not received the portion either and it was noted on the flow sheet." He stated that he "looked at the flow sheet and saw the note by radiology that no portion was included with the bag." His "guess" was that "the portion may have been mixed with another portion as there were many/numerous portions/portion numbers dealt with that day."

[SrA 3] came to work the following morning, July [ ], 2009, at approximately 6:00 a.m. with [Staff Sergeant 7] to clean-up the autopsy room and restock the supplies. She stated that they found a bag with a tag on it lying on top of one of the gurneys. [SrA 3] stated that the bag they found in the autopsy room that morning was the larger bag that a smaller portion bag and associated documents are placed into at the Triage station.

---

[143] In a cover letter to the IO dated January 20, 2011, Dr. [Medical Examiner 7] indicated that the medical examiners made changes to the process based on this incident. All portions are now photographed in their bags prior to leaving the Triage area to confirm that remains are present in each bag associated with a Dover number. "If anyone at anytime discovers something they have a question with or are concerned about, they may stop the processing line until the situation is resolved or at a minimum, has been investigated." Dr. [Medical Examiner 7] stated that these changes were briefed to the Port Mortuary staff and AFME personnel "as well as the need for improved communication between organizations relaying any anomalies in normal processing." In addition, she indicated that case flow sheets are annotated at every applicable station where remains were not present, not just at the initial point where the remains are either purposefully removed for further forensic examination or noted to be missing. The Port Mortuary included some of these changes in the Port Mortuary SOP 34-242-03, *Operations Branch*, 1 April 2010 (*i.e.* "Once portions are bagged, the photographer takes a photo. The portions are then moved to Radiology for x-rays.").

In his interview, [Major 2] testified that the missing portion "was discovered when it was down in x-ray getting ready to go into autopsy." He stated that he was not physically at the Triage station on July [ ], 2009 when [Captain 2] and [First Lieutenant 1] notified him that one of the medical examiners, Dr. [Medical Examiner 3], brought to their attention that there was a portion bag with no portion in it. [Major 2] went back to the line and viewed the empty bag with stickers, which was the bag the portion should have been in. "I looked at it and if I remember it had like a red mark on it, almost like a blood stain. But it didn't – it wasn't large enough where it – if there was something in it, it was obviously something very small because of the [mark] that was left." [Major 2] indicated that the small red mark was about the size of a tooth.

[Major 2] was shown the two bags that were provided to the IO by Colonel Edmondson, the AFMAO Commander, as the bags in question -- a large plastic bag and a smaller portion bag that is the subject of this allegation. [Major 2] identified the small specks on the smaller bag that he saw on July [ ], 2009. He stated that the original spots were more pronounced and thicker.

After being notified of the discovery of the empty portion bag and examining it, [Major 2] asked the individuals working that day (*i.e.* [First Lieutenant 1], [Captain 2], Dr. [Medical Examiner 3], and [SrA 3]) to provide statements. He provided the statements to Mr. Keel and, he believes, to [Lieutenant Colonel 1], Director of the Operations Division. [Major 2] testified that a thorough search of the gurney and Triage area was conducted as well as a double check of the other portion bags "but that we couldn't find it [the portion]."

[Major 2] stated that while it "was possible" that a bag could have been generated without a portion in it, particularly given the large number of portions that came in that day, he found it "highly unlikely" based on the normal procedures that occurred at the Triage station and his knowledge of [Captain 2] who was running Triage at the time. "The one thing personally that tells me that that did not happen is knowing [Captain 2] and how meticulous he was. He would not move on to another portion until he knew that the portion that they were currently working on was done." [Major 2] stated that with the process used, it was "almost impossible" to have a bag without a portion. He explained that staff had to "physically walk to the gurney with whatever size bag they need," and put the portion in the bag. While one staff member is putting the portion in the bag, two feet away, the documents bag and the larger bag are being prepared by another staff member and "then they all get combined." [Major 2] went on to say, "if people are walking in and out of the triage area and they interrupt whoever's putting the portion in the bag and they get confused. Human nature, that's all I'm saying. But, again, knowing [Captain 2] and knowing – watching him work, there's no way that happened." He also stated that [First Lieutenant 1] who was assisting [Captain 2] was "phenomenal."

[First Lieutenant 1] explained that after triage the gurneys with portions, that had been bagged, labeled and tagged, were moved to the X-ray station. "We moved it down to x-ray… The x-ray technician came to us and said that there was nothing in one of the bags, and at that point, I mean, once we push it down to them and there were probably two gurneys sitting to wait for x-ray, we don't [know] if the medical examiners had touched it [at] that time. That was the best we can assume in my opinion that's what I thought they did is they were going through some of the things on the table and something got put into the wrong portion." She indicated

that the x-ray technician who brought the bag to them was [SrA 2]. [First Lieutenant 1] stated that, in her opinion, it would be "very, very unlikely" that an empty bag would make it from the Triage station to X-ray without being noted.

[First Lieutenant 1] did not recall seeing a portion in the portion bag in question, but did recall seeing liquid in the empty portion bag when it was brought to her attention. "Every one that we sent down had a portion in it but there were so many that day that I can't recall in that specific number, yes, I saw something ... When they brought it back down to us and said—when the x-ray technician brought it down to us and said, 'there's nothing in this bag.' And I said, 'Well, we obviously put something in there. You can see there's, you know, drippings on the bag,' so I don't know where it went." [First Lieutenant 1] stated there were three or four raindrop size splotches that were obvious.

At that point, [First Lieutenant 1] stated, "[w]e went and grabbed a medical examiner that was on site that day to go over because the x-ray technician couldn't say whether or not the medical examiners were messing with stuff on the table. She was in the x-ray room so she couldn't say yes. There were people out there moving around the portions, looking at them, whatever. We grabbed a medical examiner and then we grabbed [Major 2] who was at the time was basically over our operation and just made them aware of what happened and that was all that I really remember from there." She also stated that they "searched all our areas, but we didn't find anything on the floor, nothing on any other gurneys, any other tables."

She stated that the following day, [Staff Sergeant 7] brought her an empty bag she had found in the autopsy room when she was cleaning. [First Lieutenant 1] did not recall whether this empty bag was the one she had seen the day before.

[First Lieutenant 1] wrote a memorandum for record dated July [ ], 2009 describing the events of the previous day:

1. [ ] Jul 09, we started triage at 0800 with two body bags of HRs. The ME separated some portions right on the spot. At the time, triage ([Capt 2], [Major 2] and I) had given two Dover numbers with the ME number and container number, saving the portions separated for after HR processing. The HRs were pushed forward; the first x-ray of the day was at 0913 (ME09-0455). Then, we started doing the portion processing. Before we got through the portions the ME pushed back gurneys of more portions. Half way through the portion processing, at approximately 1130 (11am was the first scanning of the portions – D09-0688), Radiology ([SrA 2] and [Technical Sergeant 1]) identified to us there was no portion with one of the labeled bags. [Captain 2], [SrA 1], and I informed Radiology to check with autopsy and the MEs for content.
2. [ ] Jul 09 [the next day], [Staff Sergeant 7] brought me a portions bag she had found in Autopsy while cleaning. I looked at the case flow sheet in the document bag. It was signed by [Technical Sergeant 1] and next to the signature was written, "not x-rayed no tissue." I went to get the reefer key and [Staff Sergeant 7], [Major 2] and myself looked in all the portion bags

from the day before to see if the missing portion had got put into another portion bag. We did not find the missing portion. I called in [SrA 2] to see the x-rays she had taken. There was no unlabelled xray or number for the particular portion. I instructed [SrA 2] to type up a MFR [memorandum for record] for what happened when she discovered the missing portion.

[Captain 2] testified that [Major 2] asked him to prepare a memorandum "of what I recalled about the portions that day." In an undated memorandum for record, [Captain 2] stated:

> On [ ] Jul 2009 at 0930L, as [First Lieutenant 1], [SrA 1] and I started tagging portions we were told by the investigator that once the doctor came in and viewed the portions we might have more portions that will need numbers.
>
> At 1130L the three of us in triage started tagging, identifying and labeling a second batch of portions coming back from the AFME doctor in autopsy. After placing all portions on a gurneys [sic] they were transported to x-ray and then to autopsy. While completing a third batch of portions, the X-ray team came to triage and stated that one of the bags on a gurney didn't have any portions inside. I stated they should check with the AFME doctor in autopsy and ask if the portion had been re-associated with the HR. The x-ray techs walked away.
>
> On [ ] July 2009 at 1245L I received a call from [Major 2] stating there was a [sic] issue with the portions from yesterday and that [First Lieutenant 1] was going through each portion bag trying to find a missing portion. I returned to the office at 1340L and went to triage and spoke with [First Lieutenant 1]. [First Lieutenant 1] stated that she and [Staff Sergeant 7] had looked through all portions bags processed yesterday and found nothing. I noticed that on the empty portion bag paperwork that an x-ray tech and an AFME had signed for the portion, we called in the x-ray tech and upon review no x-ray had been taken of that portion. I then went to the investigators office and spoke with [SA 2] about the missing portion. [SA 2] stated he would call the doctor to inquire about the portion.

In response to a question whether, during his work in the Triage section, there was any time, to his recollection, that a bag went forward from Triage that was empty, [Captain 2] stated "Not to my knowledge." [Captain 2] opined that he could see the following situation: "If a Medical Examiner came back and said, 'Hey, we re-looked at, we looked at the portions, and there is – we lumped all of this portion.' The ME may have lumped a whole bunch of portions together and said, 'This was one,' and when [they] got it [the portion] back ... into the autopsy room and, you know, determined that, hey, we need another bag or something like that. That's the only way any tags or anything is being made."

When asked whether, based on his practice, he saw any scenario of an empty portion bag going forward from Triage that day, [Captain 2] said, "No." "Not on that day, because that was – that's why it was so odd; because everybody was very vigilant, because this, you know—it was that every day. Everybody had to be on their game every day, but this w[as] two Air Force members. So, you know, it resonated and it hit home for everybody. Not for me. Not on that day." [Captain 2] testified that "[t]o the best of my knowledge," he recalled seeing portions in each portion bag that he prepared that day.

[Captain 2] stated that he was not "interviewed" after giving his statement but that he did have a discussion with [Major 2] and Mr. Keel, the Port Mortuary Director. "They were explaining to me that the Medical Examiners were making their own statement and looking into their particular processes."

During her interview, [SrA 1] indicated that she did not recall "the exact moment that anyone realized" the portion was missing from the bag. She did recall that she was asked to write up a summary of what happened. In her summary, dated July [ ], 2009, she stated, "An x-ray tech came to [Captain 2], [First Lieutenant 1] with empty Ziploc bag and asked the three of us what happened to the portions that where [sic] in the bag. [Captain 2] told the x-ray tech that there was a portion in the bag when we sent it back to x-ray, then the x-ray tech said okay and walked back to x-ray and nothing else was said about it."

When asked to opine what may have happened to the contents of the empty portion bag, [SrA 1] stated, "I just believe that the whole situation wasn't as organized as it could have been. With the medical examiners coming back and forth and trying to separate portions, I just believe that there was a mix up with, you know, different bags and everything. I just think it was unorganized. I don't think – in my opinion—I don't think that any portion went "missing." I believe that everything has been accounted for, but I have no idea on what to even think about the empty bag." She did not believe that an empty portion bag was sent up from Triage to the next station, stating the chances of that happening were pretty much zero. "[E]very bag that we sent forward had a portion inside of it." [SrA 1] did not recall being interviewed by anyone after the incident.

[SrA 3] stated that the Port Mortuary Director, Mr. Keel approached her the next day and asked her to tell him what happened. After she had done so, he asked her to put it in writing. She prepared a memorandum for record dated July [ ], 2009, in response to Mr. Keel's request. She testified that after preparing the memorandum for the record, she was not interviewed after that and "[n]obody mentioned anything else to me on anything at all."

In her memorandum for the record, she wrote that the portion she recalled seeing in the bag (before it was found to be empty) was "3-1/2 to 4 inches long with [a] pinkish/gray color that looked like soft tissue."[144] [SrA 3] related that the portion "was properly scan[ned] into moms (sic) x-ray section." In the memorandum, she stated that "[t]he portions were taken out of the bags and [sorted] [on] the gurney by the Medical Examiners, since they wanted the portions to be

[144] In her testimony, [SrA 3] described the portion that she observed in the bag that was later found empty as pinkish soft tissue about an inch or inch and a half in size.

x-ray[ed] without the bags." She then indicated that, a few minutes later, "Dr. [Medical Examiner 3] approach[ed with] a little haste and took [a] portion from the gurney into the autopsy room, while she was walking away she mention[ed] that she wanted to 'check on something' and the bag was left [o]n the gurney." She wrote that when the x-ray technician was ready to x-ray portion D09-0693, he "noticed the bag was empty" and asked her what happened to it. [SrA 3] stated, "let him know that Dr. [Medical Examiner 3] had tak[en] it [the portion] inside the autopsy room and to please ask her, so he walked with the empty bag into the autopsy room to ask Dr. [Medical Examiner 3] about it." [SrA 3] wrote in her memorandum that the next day, [Staff Sergeant 7] and she found an empty bag on top of the station where the doctors had been working with the portions the day before.

[SrA 2] wrote a memorandum for record to [First Lieutenant 1] dated July [ ], 2009 in which she stated:

> On [ ] Jul 2009 at approximately 1100 hrs a table with DP's was taken to the x-ray room. This table sat outside of the x-ray room and we were instructed not to x-ray the parts until the ME's had reassembled them. We were then later instructed by the ME that the parts were to be x-rayed as they were without being reassembled. When we started to sign the papers we realized that there was a small empty bag on the table. This was brought to the attention of [First Lieutenant 1] and [Captain 2]. They told us to check in the autopsy department. There was clearly something in the bag when they initially scanned the part in considering there were drops of blood in the bag. When [Technical Sergeant 1] and I checked with the ME's in autopsy they stated that they did not know anything about the missing part. We notated on the paper that came with the bag that there was no part to be x-rayed and we continued to x-ray all the other parts. Nothing was brought to us without a bag later.

She testified that they reviewed all the portions that had been x-rayed that day and the missing portion had not been x-rayed. She also indicated that after preparing her statement, she did not recall anyone interviewing her about the missing portion. She was not aware if the portion was ever found.

Mr. Keel recalled that [Major 2] notified him about the empty portion bag the day after it was found. He understood that [Major 2] "and his team did a thorough search,[145] talking with medical examiners, x-ray technicians, anybody that had potentially been involved to try to get information as to its disposition." Mr. Keel testified that, "I asked [Major 2] to give me the information about what had happened and to obtain statements from all the individuals involved.

[145] Mr. Keel initially testified that, "we did a thorough search of the entire area where the portion would have been and found no evidence of it ... But I did do a thorough search even with the reefers, autopsy, and other areas that it could have coincidently gone off on a gurney and so forth. We found no evidence of the portion whatsoever." He later clarified that the search for the portion occurred the day before he was notified and that he was not involved in searching for the portion.

I reviewed the statements from all the individuals involved, … then I discussed – I met with each one of those individuals to walk me through the entire process of what happened. Additionally, I talked to the medical examiners that were involved in the process, as well, to get their feedback on what happened." However, Mr. Keel did not document (through notes or memoranda for the record) with whom he spoke or the substance of the interviews.[146]

In addition to the statements he received, Mr. Keel indicated that he had viewed the portion bag in question and concluded that there had never been any portion in the bag. "The bag looked like it had been prepared and never used, and somehow got mixed in with the other portions." Mr. Keel prepared a one page memorandum[147] dated July [ ], 2009 for the AFMAO commander:

1. On [ ] July 2009 [Major 2] brought to my attention that a clean empty portions bag with a case flow sheet concerning D09-0693 verified by Dr. [Medical Examiner 3], OAFME was found in the autopsy suite. [Major 2] asked the OAFME Investigator working that day, Dr. [Medical Examiner 7], as to the disposition of the portion. She inquired with Dr. [Medical Examiner 3] who recalled only handling remains during the sorting process prior to assignment of case numbers and then again when she noticed the empty bag outside of X-ray. [Major 2] and his staff performed a thorough search through all operational areas, portion refrigeration units, and waste stations and found no evidence of any portion which could potentially be D09-0693. I requested that [Major 2] have all staff involved prepare written statements concerning the matter.
2. During my interviews with staff members, [Captain 2] believed he did see remains in the bag labeled D09-0693 at the time it was delivered to X-ray on [ ] July 2009. [First Lieutenant 1] could not confirm this. [SrA 3] remembered seeing portions in the bag Dr. [Medical Examiner 3] transfered [sic] to the autopsy suite stating that she said she "needed to check on something". During our discussion, [SrA 3] could not confirm seeing the number on the bag but recalled the proximal location on the table from the distance she was standing. Dr. [Medical Examiner 3] recalled seeing the empty bag on the gurney outside of X-Ray when she was retrieved [sic] a different portion for transfer to the autopsy suite. Since there was no material in the bag during X-Ray procedures, no X-Rays were conducted on D09-0693. After completion of X-Ray, all portions on the gurney were transferred and scanned into autopsy which is where the empty bag was later discovered.
3. From all of the information I have obtained through written and oral interviews, I can find no evidence of mishandling of human remains. After a review of statements and interviews with those involved and preponderance of all the evidence available, it is my belief that no portion was ever assigned to

[146] When asked if Mr. Keel asked him any questions about the missing portion, [Technical Sergeant 1] stated, "I don't think I even know who that is."

[147] Mr. Keel attached the statements of Dr. [Medical Examiner 3], Dr. [Medical Examiner 7], [Captain 2], [First Lieutenant 1], [SrA 2], [SrA 3] and [SrA 1]. He also attached a Memorandum for Record regarding a telephone conversation with Dr. [Medical Examiner 3].

> D09-0693 and the empty bag went directly to X-Ray. There are several factors that support this conclusion. Due to the high volume of portions received on [ ] July 2009 complicated with the fact that the total number of portions initially received had been underestimated, it is plausible that in the effort to create additional case numbers and bags an extra one could have been created that was not utilized. If the error had not been identified in triage, the empty bag with attached bar code would have been transferred directly to X-Ray unseen among all the other portions bags. The information gathered during the oral and written statements support that this is what happened and that no X-Rays were taken due to the fact that nothing was in the bag. Additionally, we have no photographic evidence of a portion attached to D09-0693 during triage. The lack of any biological material or odor inside the bag when it was brought to [Major 2] further indicates the bag was never used.

Mr. Keel stated that he "gathered all the information and presented it to the commander [Colonel Edmondson]" who "determined that the evidence didn't support the need for a commander directed investigation."

In his interview, Mr. Keel testified that "no one [he talked to] could verify one way or the other" whether there was a portion in the bag. He did admit that a couple of individuals either said they saw a portion or they saw fluid in the bag, but no one said, to the contrary, that there was never a portion in the bag.

During his interview, Mr. Keel was shown the empty portion bag and asked whether he "recalled seeing dots like that on the bag when you looked at it?" Mr. Keel stated that he did not notice the dots at the time he initially looked at the empty portion bag.

Mr. Keel stated that the medical examiners indicated "that additional bags may need to be created, because they underestimated the amount of portions that were available." Mr. Keel also stated, "[w]e tried to refine that and improve the communications with the medical examiner to make sure we get a more accurate estimate of the number of bags that need to be created." Mr. Keel indicated that it was his understanding that the portion bags were created en masse rather than one at a time, "It would be done previously en masse, depending upon how many they would be looking at. They would get recommendations from the medical examiners as to how many they should prepare." He admitted, however, that he has never worked in Triage, placing portions in bags. He also indicated that it would be "outside my scope" to respond to a question regarding what information (identifying or describing what's in the portion bag) would be entered into the system when the labels were created.

Mr. Keel also testified to circumstances where he would or would not provide notice.

> IO2: …I understand what you're saying, in those situation where the portion has been identified, and the family -- the PADD has said, "We want to be notified,"
> W: Correct.

IO2: Had that identified portion … gone missing, you definitely would expect the PADD to be told?
W: Oh, absolutely.
IO2: In the situation where the PADD has those same disposition instructions –
W: I want to be notified.
IO2: -- but a portion has … gone missing, but has not yet been identified as belonging to the PADD's deceased remains, you would not necessarily feel the need to inform the PADD?
W: That's correct.

He further stated that, as in the case of the missing portion in April 2009, where the portion had been identified as belonging to a deceased member but the PADD's disposition instructions indicated that they did not want to be notified of subsequently identified portions, the PADD would not be notified of the missing portion.

IO: What notification to who would have been made if there was a missing portion that was unidentified, but most likely one of the two crew members, as far as who identified and both PADDs had … requested to be notified of a subsequent identified portion?
W: In the event that we determined there was a portion issue, where there was credible evidence that it actually had been lost, I would have notified the case manager at Air Force Mortuary Affairs.

Mr. Dean, AFMAO Deputy Director, stated that he understood that a bar-code number had inadvertently been placed on an empty portion bag, and that Mr. Keel had conducted an inquiry. Mr. Dean never saw the empty portion bag, nor did he review the statements that were attached to the inquiry. Mr. Dean provided his opinion that the only plausible explanation as to what happened was that an empty portion bag had been tagged and labeled but a portion had never been placed in it.

Colonel Edmondson stated that Mr. Keel advised him of the missing portion a couple hours after it was discovered missing. He then directed Mr. Keel to get everyone together and go through what had occurred. Colonel Edmondson said that Mr. Keel returned the next morning "or so" and said there was no missing portion but rather a situation where an extra portion bag was generated. Colonel Edmondson directed Mr. Keel to gather statements from everybody and retain them as a matter of record. He did not recall whether he reviewed the statements.

Colonel Edmondson did not see a need for a commander directed investigation because there was nothing to investigate based on the conclusion Mr. Keel derived from his inquiry. He said that he did not view the portion bag in question until a year after the incident. At that time he recalled that it was "clearly an unused bag" that was double bagged as it should have been. He did not recall anything that would indicate there had been anything in the bag. Colonel Edmondson did not see a need to contact the Service liaison since it had been determined that there was no missing portion.

Colonel Edmondson provided the bags related to this allegation to the IO and legal advisor during an office call on May 31, 2010, the first day the investigation team arrived at AFMAO. As previously noted, [Major 2] was shown these bags during his interview and confirmed they were the same bags that were found in July 2009. During his interview, [Major 2] pointed out the small stains that he attributed to remnants of the fluid in the small portion bag that he had seen on July [ ], 2009.

With regard to the July [ ], 2009 incident, Ms. Spera recalled she was on leave from July [ ]-[ ], 2009 and, therefore, not at work the day of the incident. She found out about the empty portion bag on July [ ], 2009 from her supervisor, Mr. Zwicharowski, and "documentation that was provided by witnesses to me." She indicated that because she was "responsible for portions" she received a report which would list any problems. According to Ms. Spera, MOMS shows this portion as still being in autopsy.

Mr. Zwicharowski stated that on July [ ], 2009, he was in the embalming room when he was notified that a labeled portion bag was discovered with no portion. He stated, "I do believe I saw the bag eventually." He stated he saw a trace of blood in the bag and that "[t]here had been a portion in it." Mr. Zwicharowski stated he then assisted [Major 2] in searching for the missing portion. [Major 2] collected statements from the personnel working and provided the statements to Mr. Keel. Mr. Zwicharowski was not aware of any follow-up actions that were taken as a result of the inquiry. He stated that he does not know what happened to the bag but that "the portion is still electronically showing to be in autopsy." Mr. Zwicharowski stated, "[o]ne of the potential or possible scenarios is that it was mixed in with other remains." Mr. Zwicharowski stated, "[i]n the 55-year history of the Port Mortuary that I'm aware of, I can't recall anyone ever speaking of or mentioning a portion that was ever lost of a human being."

ANALYSIS

Mr. Zwicharowski and Ms. Spera contend that the Port Mortuary "lost body parts" on two separate occasions, and failed to properly resolve those cases. They contend that AFMAO did not ensure that the dispositions desired by the respective families were achieved. They further contend that the CDI with regard to the first missing portion was not provided to them, and no meaningful changes were implemented to prevent similar incidents from occurring in the future. They contend that because AFMAO failed to account for the portions, positive identification of those portions could not be achieved and therefore there can only be an assumption that the missing portion belonged to one or the other of the [Airmen's] remains. They contend that Port Mortuary personnel failed to notify the Army liaison or the Army soldier's family that the portion was lost. In addition, they contend that no formal investigation was conducted with regard to the second missing portion and that the Port Mortuary officials failed to notify the families of these incidents. Finally, they contend that the actions of Port Mortuary leadership in failing to meet standards regarding disposition of these portions did not comport with the requisite dignity and respect owed to the Service members.

First Missing Portion

The record reflects that on April 21, 2009, in the course of preparing portions for military disposal, a portion bag was found in a reefer without a portion in it. That portion, D08-0914 has not been found; nor has the Port Mortuary accounted for it. The CDI concluded that "the missing remains could not be located after the investigation."

Mr. Dean, however, believed that proper disposition occurred based upon two possible scenarios: (1) the remains were re-associated by anthropological or other means without each portion of remains being properly accounted for in MOMS; or (2) the remains were included in a military disposition cremation as directed by the PADD and not accounted for in MOMS. Mr. Keel agreed with Mr. Dean's view as to what happened. Both Mr. Dean and Mr. Keel advised Colonel Edmondson regarding their analysis and he accepted their conclusions without examination of the facts or further inquiry. As discussed below, neither of these scenarios is supported by the evidence in the CDI or the IG record.

The remains of the Army soldier arrived at the Port Mortuary on August [ ], 2008. As described by the medical examiners, the remains consisted of a non-intact torso with, among other things, "traumatic amputation of lower extremities." Of the 55 portions that arrived at the Port Mortuary on the same day, two portions (D08-0914 and D08-0913) were later identified to the Army soldier through DNA testing. The missing portion, D08-0914, was a large portion, approximately 14" long and 9" wide, and described as a fragment and incomplete ankle and talus.

In no less than four statements contained in the record, Mr. Dean stated that in his view, portion D08-0914 was likely "re-associated" or "articulated" with the torso. However, there is no indication in the record that the medical examiners' office accomplished such an articulation. Moreover, in order to "articulate" the portion to the remains, there would need to be a perfect fit between a bone in the portion and a bone in the remains. It is simply not physically possible to articulate an incomplete ankle portion with a non-intact torso that is missing both legs.

In advocating this scenario, Mr. Dean and Mr. Keel ignored information readily available to them. Both the case file as well as the evidence contained within the CDI indicated that the portion was an incomplete ankle and the non-intact torso was missing both legs. Mr. Dean's statements and testimony in this regard are not supported by the facts. The preponderance of evidence in the record supports a conclusion that the missing portion was not (nor could have been) articulated with the non-intact torso.

Mr. Dean's second hypothesis is that the portion was included in a military disposition (also known as medical disposition). This cannot be substantiated by a preponderance of the evidence.

The two portions arrived at the Port Mortuary on August [ ], 2008, and were identified through DNA testing to the Army soldier in September 2008. The medical examiners' office did not authorize release of these two portions for final disposition until February 10, 2009. According to CJMAB Form 1, the PADD chose not to be notified in the event that further

remains are identified and authorized the military (the Port Mortuary) "to make appropriate disposition." Therefore, the missing portion, D08-0914 and the accompanying D08-0913 portions were slated for military disposition by the Port Mortuary.

The empty portion bag for D08-0914 was found on April 21, 2009 while Ms. Spera was preparing for a military disposition. Although the weekly and monthly inventories prior to April 20, 2009 did not verify that a portion was actually contained in the portion bags hanging on the racks in the reefer, there is some probative evidence that portion D08-0914 was in the reefer in January 2009. Ms. Spera described the incident that occurred in January 2009 where two portions fell out of their portion bags into the trays below the bags. Ms. Spera stated that she searched the portion bags above the trays and "went through each bag." The portion bags above the trays were located on the bottom row of rack 7. She and [Captain 1] found two empty bags (D08-0908 and D08-0918). D08-0908 was located at clip 33; D08-0918 was located at clip 41. According to Port Mortuary inventory records, D08-0914 was hanging in between the two empty bags at clip 37. Ms. Spera testified that she "should have" had occasion to look at clip 37 when she went through the bottom rack. It is likely that if the portion bag for D08-0914 was empty at that time, Ms. Spera and [Captain 1] would have found it. The IO found insufficient evidence to determine how the slit was made in the portion bag.[148]

The records indicate that the Port Mortuary did not conduct a military disposition of portions between August [ ], 2008, the date the portions arrived at the Port Mortuary and April 21, 2009, the date the portion was found missing. The evidence in the record shows that upon finding the empty portion bag, the Port Mortuary staff conducted an immediate and thorough search, including a search of other portion bags at the Port Mortuary, but did not find the missing portion. The documentation from military disposition indicates that, although a military disposition did occur on April 22, 2009, neither D08-0914 nor D08-0913 was included in that disposition. There is no other evidence that would specifically support military disposition, therefore it cannot be established by a preponderance of the evidence that the missing portion D08-0914 was disposed of by military disposition.

Further, it cannot be established by a preponderance of the evidence that portion D08-0914 was part of a group burial. The documentation of the group burial for the incident in which the Army soldier was killed did not include this portion. Further, portions included in a group burial are those which have not been identified through scientific means to an individual but have been identified to an incident. Finally, the portions that were included in the group burial were jaw bones with teeth and skull bones. These portions were different in size and composition than the missing portion (which was approximately 14" by 9" and made up of soft tissue and bone).

---

[148] The most likely methods were either an accidental slicing of the bag when the box of bags was opened or an accidental slicing of the bag when a medical examiner removed a portion for DNA testing while the portion rested on top of its bag. These alternative causations are suggested by the fact that the three portion bags (the two from the January 2009 incident and the first empty portion bag) were processed on the same day, the bags likely came from the same box, and the portions were handled by the same medical examiner. The descriptions of the slits for the three bags were similar.

While the IO concludes that it is more plausible that the portion was disposed of by some means generally authorized for disposition of portions, the IO could not determine by a preponderance of the evidence how the portion became missing from its portion bag, the individual(s) responsible for its disappearance, or the means for its ultimate disposition.

Dissemination of CDI Results

With regard to the allegation that the CDI report was not provided to Ms. Spera and Mr. Zwicharowski, the evidence shows that Colonel Edmondson did not provide either complainants with a copy of the CDI or its findings. There is no evidence in the record that Colonel Edmondson received a request for the CDI, from the complainants or anyone else. Ms. Spera, however, did send an inquiry via email to Mr. Dean on May 26, 2009, asking whether the CDI was completed and how she could obtain a copy of the findings. Mr. Dean testified that he was not aware of any requests for the CDI and did not inform personnel of the results of the CDI because it was "not my CDI and [he] did not feel that it was [his] prerogative to inform anyone of the results." There is no evidence that Mr. Dean discussed Ms. Spera's request with Colonel Edmondson.

Colonel Edmondson testified that while there was no briefing on the findings of the CDI, the results and corrective actions were disseminated in several ways. He did not elaborate on how the dissemination occurred. Mr. Zwicharowski and Ms. Spera stated that they were not informed of the results of the CDI. From the record, it appears that communication between senior level managers – Colonel Edmondson, Mr. Dean and Mr. Keel – and lower level managers – Mr. Zwicharowski – on this issue was not effective.

The IO found no law, rule or regulation which requires the commander to release findings of a CDI to the complainant, whether or not the findings had been requested or not. The CDI Guide states that the release of CDI reports and notification of the CDI results to complainants is exclusively the commander's prerogative. As there was no requirement to release the CDI or its findings, there is no violation of law, rule or regulation.

Notification Regarding Loss of the First Portion

The complainants contend that Port Mortuary officials were obligated to notify the Army liaison and the family of the Army soldier regarding the first missing portion, but failed to do so. Testimony from various AFMAO personnel indicated that Port Mortuary officials will not normally communicate directly with the PADD about additional issues that may arise during the processing and preparation of remains once the Dignified Transfer is completed. If information needs to be provided to the PADD on the preparation process, or information requested from the PADD about preparing the remains (such as whether or not to shave a beard), communication occurs through the appropriate Service liaison.

The IO found that there were no directives or other written guidance or standards on what actions were to be taken in the event a portion is thought to be lost or misplaced prior to identification or, for that matter, after identification occurs. The IO also did not find any policy as to when the Service liaisons and/or PADDs should be notified when unidentified portions

from a multiple casualty incident are found to be missing. As stated by one of the medical examiners, it is an abnormal situation where a portion has been given a Dover number and then lost. The DoD and military component rules and regulations do not address notification to the PADD or the Service liaison under such circumstances.

AR 638-2 states in paragraph 4.3 that, "[c]ommunication [with the PADD] necessary for proper disposition of deceased personnel covered by this regulation is authorized." However, the regulation does not require notification to the PADD or the Army liaison when a portion is found missing, even where the Port Mortuary does not provide proper disposition of the portion. Neither AFI 34-242 nor the Port Mortuary SOPs address the circumstance of a missing portion.

Because there is no law, rule or regulation requiring notification to the Service liaison or the PADD in these circumstances, there is no violation.

Meaningful Changes Following Discovery of the First Missing Portion

The July OSC Referral Letter does not elaborate on complainants' allegation that "no meaningful changes" were implemented after the CDI to prevent similar incidents from occurring in the future. However, with regard to the first missing portion, both complainants recommended (Mr. Zwicharowski in his CDI testimony and Ms. Spera in her email inventory report) that there be improved tracking and chain of custody of portions, especially between the medical examiners and the Port Mortuary staff to include the establishment of a written process or standard operating procedure for chain of custody of portions. According to Ms. Spera, the SOP should be accepted by AFME and the Port Mortuary.

In the CDI, the CDI/IO made four broad recommendations. These recommendations called for (1) updating all written policies and procedures for chain of custody of remains, portions and personal effects; (2) formalized training for all AFMAO personnel with periodic review of written policies and procedures; (3) improving physical security of remains and portions; and (4) improving coordination between medical examiners, anthropologists, and mortuary technicians for the rebagging of remains.

The Complainants' recommendation falls within the scope of the CDI/IO's fourth recommendation. The evidence in the record indicates that AFMAO leadership did not adequately address this recommendation with the medical examiners. Specifically, Colonel Edmondson, Mr. Dean and Mr. Keel did not discuss with the medical examiners the need for agreed upon written guidance establishing the roles and responsibilities of medical examiners and Port Mortuary personnel with respect to properly accounting for portions at all times. Had this recommendation been implemented, it may have precluded the incident with the second missing portion. *See* Section 6 "Gross Mismanagement."

While the specific changes advocated by the complainants (*see* complainants' recommendations set forth above) were not made, the preponderance of the evidence shows that some appropriate changes were made to help preclude further instances from occurring and to give more timely notification should an empty portion bag be found in a reefer. Many of the changes that were implemented or initiated were done so either immediately after the portion bag

was found empty, or as a result of one of the first three CDI recommendations. Many of the changes involved improving physical security of remains and portions. The changes included the institution of double bagging of portions; installation of locks on the reefer doors; and better accounting of individuals allowed access to the reefers (both in terms of access to keys to the reefers and security badges allowing individuals into the secured area where the reefers are located). With regard to the training recommendation, the record does support that training was enhanced for personnel deployed to AFMAO. The recommendation for training, however, also included the permanent personnel employed at AFMAO as well as the medical examiners. The preponderance of the evidence does not support a finding that this recommended training for medical examiners or permanent personnel occurred.

With regard to the first recommendation, there is also evidence in the record to support a finding that written policies and procedures were updated. Between November 2009 and April 25, 2010, Mr. Keel, as the Port Mortuary Director, issued several standard operating procedures for the Port Mortuary Division. These included: Port Mortuary Standard Operating Instructions, 27 March 2010; SOP 34-242-01, *Mortuary Branch*, 25 April 2010; SOP 34-242-02, *Administration Branch*, 1 April 2010; SOP 34-242-03, *Operations Branch*, 1 April 2010; and SOP 34-242-04, *Crematory Branch*, 1 November 2009. Both the *Mortuary Branch* and *Operations Branch* SOPs include provisions related to processing portions and portions management.

Second Missing Portion

The evidence shows that a second portion was discovered to be missing on July [ ], 2009 during the processing of remains from [a military mishap]. The record indicates that the portion was placed in a portion bag during triage. It was described by a witness as "3-1/2 to 4 inches long with [a] pinkish/gray color that looked like soft tissue."[149] However, at the next step in processing, x-ray, after the portion bag had been initially received with a portion inside it, it was later discovered that the portion was no longer in the portion bag. Although its bar code was subsequently scanned into the autopsy suite, and MOMS still reflects that as its location, the portion, D09-0693 was not found, nor has the Port Mortuary accounted for it.

Mr. Keel determined, after an informal inquiry and contrary to the evidence, that no portion had been placed into the (empty) portion bag in question. Without evidence, he concluded that during triage, the medical examiners estimated the number of portions to process and the triage staff mass produced a set of labeled portion bags in advance. According to Mr. Keel, during such a [non-existent] mass production process, an extra portion bag had been labeled without a corresponding portion to place in it. Relying partly on his purported observation that the labeled bag showed no sign that a portion had been present in it, he stated a conclusion that the empty portion bag was then placed on the gurney, and pushed to x-ray where it was found empty. Mr. Keel advised both Mr. Dean and Colonel Edmondson of these erroneous conclusions. Neither Mr. Dean or Colonel Edmondson examined the available evidence nor did they investigate further.

---

[149] *See* the description by [SrA 3] at page 164, and the footnote relating that during testimony at a later time she described it as pinkish soft tissue about an inch or inch and a half in size.

Mr. Keel's conclusions are neither supported by the preponderance of the evidence provided to Mr. Keel at the time of his inquiry nor by the testimony and other evidence that was later obtained during the IO's investigation for this report. Most if not all of the personnel who worked on the day the empty portion bag was found either recalled seeing a portion in the bag or saw a residue of blood/liquid in the bag. They concluded that a portion had at one time been in the bag. During his interview, Mr. Keel was shown the portion bag in question. He testified that he did not notice the dots in the bag [dots that were apparently consistent with the earlier observations by others that there had been residue in the bag] at the time he initially looked at the empty portion bag.

All personnel who worked at the Triage station that day testified that they tagged and labeled the portion bags, tagged the portions, and placed the portions in the assigned portion bag one portion and one bag at a time. No one who worked in Triage testified that they had estimated the number of portions to process or mass produced a set of labeled portion bags in advance. Further, none of these witnesses believed that an extra portion bag had been labeled, as Mr. Keel related likely happened. In light of the overwhelming testimony indicating that a portion had been placed in the portion bag and the fact that Mr. Keel, during his interview, admitted that he had not worked at the Triage station, placing portions in bags, his stated conclusion that there was no portion in the bag is simply not credible. The preponderance of the evidence supports a finding that a portion was placed in the portion bag at Triage.

After the portion bag was found empty, a search for the missing portion was immediately conducted throughout the area. However, the missing portion was not found. The IO determined that it was highly unlikely that the portion that had been in the bag, dropped to the floor and was overlooked during the search. The IO noted during his visit to the Port Mortuary that the area between the Triage station, the X-ray station, and the autopsy room was light colored and well lit. The area was not cluttered and the floors were especially clean. Given these conditions, a dropped portion would be very easy to spot. Further, Ms. Spera, who has worked in the Port Mortuary for several years, stated that she had never heard of a portion being found on the floor.

Several witnesses recalled that processing on July [ ], 2009 was very hectic and the medical examiners were back and forth handling the portion bags and examining the portions. One witness specifically testified that she saw one of the medical examiners, Dr. [Medical Examiner 3], handling the portion bag at issue at the X-ray station and taking it away with her to the autopsy area. Other witnesses, including medical examiners, surmised that the portion was co-mingled at some point with another portion.

While it was not positively determined how the portion became missing from its portion bag, or the individual(s) responsible for its disappearance, the preponderance of evidence indicates that it is likely that the missing portion was disposed of in one of three ways. The remains/portions that arrived at the Port Mortuary on July [ ], 2009 were disposed of as follows: sixteen portions were identified to one of the airman and shipped to his PADD; seventeen portions were identified to the second airman and shipped to his PADD; and the remaining thirteen portions were not identified to either airman and were part of a group burial. It is highly likely that the missing portion was disposed of with one of these three dispositions.

The record contains probative evidence that Dr. [Medical Examiner 3] took the portion from the gurney outside the X-ray station. A witness related that Dr. [Medical Examiner 3] came to the X-ray station, found the specific portion and took it with her back to the autopsy area, prior to the portion being x-rayed. Based upon this evidence, the IO concluded that it is more likely than not that the missing portion D09-0693 was removed from its labeled bag by Dr. [Medical Examiner 3]. While the evidence is not clear as to the disposition of the portion, it was likely comingled with another portion and its disposition occurred via one of the three means discussed above.

The medical examiners who testified, including Dr. [Medical Examiner 3], noted that their role in the autopsy area upon receipt of remains is normally to separate remains. Further, the procedures of the medical examiners and AFMAO provide that re-association will only occur by positive identification, generally by re-articulation (an exact fit of parts, normally not possible with tissue), or a DNA match (which could not have occurred at this stage). However, while Dr. [Medical Examiner 3] testified that "theoretically" it was possible that separate portions could be comingled, she said she did not recall "if I had ever done that." The IO determined that her testimony regarding a lack of recall was not credible, and that the testimony of the technician who observed her remove the portion from the gurney was credible. Of particular note are the unusual circumstances (including Dr. [Medical Examiner 3] approaching the X-ray station "[with] a little haste" and taking a portion saying words to the effect she wanted to "check on something," the absence of any routine reason for her to remove a portion bag of tissue from the processing line at that point, and the later discovery that the portion was missing after it had been in her control. The circumstances were sufficiently unusual that the IO concluded that it was not credible that that she would have forgotten the events, particularly when a search for the part had begun immediately upon discovery that the tissue was missing.

Regardless of the final disposition of the portion, the IO concluded, based on a preponderance of evidence, that Port Mortuary personnel did not comply with guidance for maintaining accountability for portion D09-0693. The Port Mortuary cannot account for its location or disposition.

DoD Directive1300.22, paragraph 4.4 states, "[e]very effort will be made to identify remains and account for unrecovered remains of U.S. military personnel ... who die in military operations, training accidents, and other multiple fatality incidents." DoD Instruction 1300.18 paragraph 4.5 states, "DoD Components shall record and report, to the extent possible, a full and accurate accounting of deceased or missing personnel and all reportable ill or injured personnel." DoD Instruction 1300.18 further requires that "[t]he remains of deceased personnel will be recovered, identified, and returned to their families as expeditiously as possible ...." Pursuant to AFI 34-242, paragraph 7.1, the Port Mortuary was required to "identify remains of all deceased personnel to the fullest extent possible and to use all available means and scientific resources to accomplish this."

By a preponderance of the evidence, the failure of the Port Mortuary to maintain accountability for portion D09-0693 caused a failure to comply with the obligation to identify this portion.

Notification Regarding Loss of the Second Portion

The complainants contend that Port Mortuary officials failed to notify the respective families regarding the second missing portion. Testimony from various AFMAO personnel indicated that Port Mortuary officials will not normally communicate directly with the PADD about additional issues that may arise during the processing and preparation of remains once the Dignified Transfer is completed. If information needs to be provided to the PADD on the preparation process, or information requested from the PADD about preparing the remains (such as whether or not to shave a beard), communication occurs through the appropriate Service liaison. The IO found that there were no directives or other written guidance or standards on what actions were to be taken in the event a portion is thought to be lost or misplaced prior to identification or, for that matter, after identification occurs. The IO also did not find any policy as to when the Service liaisons and/or PADDs should be notified when unidentified portions from a multiple casualty incident are found to be missing. As stated by one of the medical examiners, it is an abnormal situation where a portion has been given a Dover number and then lost.

The DoD and military component rules and regulations do not address notification to the PADD or the Service liaison under such circumstances. AR 638-2 states in paragraph 4.3 that, "[c]ommunication [with the PADD] necessary for proper disposition of deceased personnel covered by this regulation is authorized." However, the regulation does not require notification to the PADD or the Army liaison when a portion is found missing, especially where, as here, the PADD had already elected to not be informed of the discovery of any subsequently identified portion. AFI 34-242, paragraph 7.3 addresses communication with the PADD in the context of identification of remains. It states, "[t]he mortuary officer will not brief the PADD on mortuary entitlements until the remains have been positively identified. In the interim, the PADD should be kept informed daily on the status of identification." This provision is not directly on point and does not require notification to the PADD when the Port Mortuary loses track of an unidentified portion.

Because there is no law, rule or regulation requiring notification to the Service liaison or the PADD in these circumstances, there is no violation.

Reverence, Care and Dignity Analysis Considering Both Missing Portions

Complainants contend that the actions of Port Mortuary leadership did not afford "the requisite dignity and respect" owed to these Service members.[150]

Pursuant to DoD Directvie1300.22, *Mortuary Affairs Policy,* the Port Mortuary was required to handle the remains and portions of deceased Service members "with the reverence, care, and dignity *befitting them and the circumstances*." (Emphasis added.) DoD Instruction 1300.18 requires that "[t]he remains of deceased personnel will be recovered, identified, and

[150] AFMAO's mission is to ensure dignity, honor and respect to our fallen and care, service, and support to their families. Both the DoD Directive 1300.22 and Joint Publication 4-06 use the terms "reverence, care and dignity." DoD Instruction 1300.18 uses the terms "dignity, respect and care."

returned to their families as expeditiously as possible while maintaining the dignity, respect, and care of the deceased as well as protecting the safety of the living." Joint Publication 4-06, *Mortuary Affairs in Joint Operations*, Chapter I, paragraph 2 also states that "[h]uman remains will be handled with the [sic] reverence, care, and dignity."

None of the DoD regulations -- the DoD Directive, the DoD Instruction and the Joint Publication -- elaborate on what constitutes the requisite "reverence, care and dignity" due a decedent's remains. Moreover, there are no regulations or rules from any of the military Service components which define these terms. Without such definition, the standards which arguably govern Port Mortuary are those generally accepted practices established in the embalming and mortuary industry for the handling of human remains. *See e.g.* Florida Department of Financial Services v. Watts, DOAH Case No. 09-2065PL (February 4, 2010). As previously stated, this conclusion is consistent with the rules and regulations promulgated by the Air Force and the Army (as well as the Armed Services Public Health Guidelines).

It should be noted that the IO found no evidence during this investigation that any person assigned to the Port Mortuary intentionally, or by willful negligence, mishandled any remains or portions. In the course of interviewing almost 50 individuals during the investigation, the IO found that the Port Mortuary personnel (both permanent and deployed) took their responsibilities for processing and preparing the remains and portions of fallen Service members very seriously. The preponderance of the evidence does not support a finding that these remains were handled with a lack of reverence, respect or dignity.

What is clear is that there is a duty on the part of the Port Mortuary to exercise due "care" in handling the remains that are processed through its facility. The failure to use ordinary or reasonable care in the handling of remains constitutes negligence. Negligence is the doing of something which a reasonably prudent person would not do, or the failure to do something which a reasonably prudent person would do under like circumstances, or a departure from what an ordinary reasonable member of the community would do in the same community. Under the DoD regulations cited above, negligence in the accountability of remains results in a deviation from the standard of care required by the Port Mortuary. The mission of AFMAO demands high standards of performance in an environment that is unparalleled in the civilian world with respect to the scope and magnitude of the operation. The driver of these standards is the expectations of families, the public, and leadership that there will be great care taken in the preparation of remains. While perfection may not be always attainable in the challenging environment that exists at AFMAO and the Port Mortuary, an ordinary reasonable member of the mortuary profession would take steps necessary to ensure accountability, given both these high expectations and the inherent importance in the accountability for all portions of remains.

In light of this standard of care, the loss of accountability for these two portions under the circumstances described above constitutes negligence by a preponderance of the evidence. This is because there are few, if any, scenarios in which accountability of these two portions could have been lost had the standard of care for the handling of remains been satisfied. The evidence, however, does not allow any conclusions with regard to individual responsibility for this negligence. Rather, the evidence indicates a systemic weakness in the process of handling portions (*see* Section 6 on Gross Mismanagement). Based upon the evidence in the record, the

preponderance of the evidence supports a finding that the lack of accountability for the two missing portions, D08-0914 and D09-0693, resulted in violations of DoD Directive 1300.22, DoD Instruction 1300.18, and Joint Publication 4-06.

The investigation also focused on management's response to each instance of lost accountability. The response of AFMAO leadership to the two circumstances where there was a loss of accountability of a portion were very different; and we conclude that while their response to the loss of accountability for the first portion was consistent with the obligation to handle the remains and portions of deceased Service members with care befitting them and the circumstances, we conclude that their response to the loss of accountability of the second portion was not consistent with their duty of care for that portion. In analyzing these circumstances, we note that there is an aspect of response that is best analyzed as "management", and we have addressed that aspect in Section 6. However, in assessing the question of handling remains with due care, we conclude that it necessarily includes the proximate response to the loss of accountability – what actions are taken to re-establish accountability (*i.e.*, finding a missing portion or determining with certainty, if possible, what disposition occurred.)

In the first instance, the Port Mortuary responded with an initial search and examination of the circumstances, concluded that the portion could not be found and Colonel Edmondson, the Commander, consistent with the views of Mr. Dean, the Deputy Director of AFMAO and the Director of the Port Mortuary Division, instituted a formal investigation to find out what happened and to inform potential corrective measures. The CDI report demonstrated areas needing improvement, and some meaningful (although imperfect) changes were made in an attempt to prevent another loss of accountability. Although Mr. Dean's later response to the CDI was not consistent in significant respects with the facts, we conclude that not only was a formal inquiry a reasonable response to the loss of a portion, it essentially established the minimum standard of care when accountability is lost.

However, when accountability of a portion was again lost within months of the first loss, this same care was not provided. The second loss was not only a serious matter regarding the portion itself, but substantially changed the cause for concern from what may have appeared the first time to be an isolated matter, to what was now at a level of systemic concern. Rather than provide the same standard of care as that provided in the first instance, they provided substantially less, significantly reducing the chances of locating the missing portion, identifying it to a particular Service member, determining its disposition with certainty, and identifying the root cause of the problem.

Not only was the institutional response to the loss of accountability not consistent with the seriousness of the loss, the actions of these specific leaders, individually, were inappropriate. Mr. Keel precluded a more diligent search and investigation by reporting conclusions that were wholly inconsistent with the facts, and he either deliberately or carelessly remained ignorant of the facts that should have informed leadership decisions. Mr. Dean uncritically accepted the patently erroneous account of Mr. Keel without examining the available evidence, and Colonel Edmondson did less. Colonel Edmondson did not question the inconsistency in the level of response to this second loss of accountability of a portion for which he had ultimate responsibility – when, if anything, it should have increased concern about the adequacy of

AFMAO's processes to protect the remains of fallen warriors -- well above that from the first instance. Mr. Dean did not recommend a formal inquiry and Colonel Edmondson did not order one. At the very least, even Mr. Keel's erroneous account should have caused all three leaders to recognize that either there was a deficiency in the processes in place to protect remains, or a failure to follow those processes. Essentially, there was either a missing portion, or a defective process that could allow erroneous creation of a portion number and bag; either should have caused substantial concern. While it has not been established that Mr. Keel's account was intentionally misleading, it was sufficiently "convenient" in its avoidance of responsibility, and the need for a second report to higher headquarters of loss of a portion, that any supervisor would have been wise to inquire further. It was so manifestly inconsistent with the reports of "hands on" members of the processing team that precipitated the informal inquiry that it should have, at the least, generated further examination. Finally, the facts as now adduced by formal investigation suggest that a likely scenario may be that the missing portion was, in fact, re-associated with appropriate remains, but the officer responsible for the original separation and then re-association was less than candid about the circumstances. Regardless of the accuracy of this scenario, a formal inquiry close in time to the events may have been able to resolve these concerns. Due care regarding the loss of accountability for this portion necessarily required resolution of these issues.

While it has not been established that Mr. Keel's account was intentionally misleading, it not only precluded further investigation to either locate the portion or determine its disposition, it precluded a second report to higher headquarters of the loss of a portion that would likely have precipitated higher headquarters' inquiry into the matter. Either inquiry conducted at the time of the loss, and the rigor of formality and objectivity, would have been able to consider fresh evidence and recent recollections, effectively confront witnesses where there were inconsistencies in testimony, and increased the chances of locating the portion or establishing actual disposition.

We conclude, based on a preponderance of the evidence, that the actions and inactions of AFMAO leadership regarding loss of accountability of the second portion did not afford the remains appropriate care and resulted in violations of DoD Directive 1300.22, DoD Instruction 1300.18, and Joint Publication 4-06.

Additional Matters

Following discovery that portion D08-0914 was missing, MOMS was not properly updated to reflect the fact that the portion was missing (and that the portion bag in the reefer was empty). MOMS was also not updated when the empty portion bag D08-0914 was later moved to a different rack.

Following discovery that portion D09-0693 was missing, MOMS was not properly updated to reflect the fact that the portion was missing (and that the portion bag was empty). MOMS still indicates that the portion was located in autopsy. Specifically, Port Mortuary SOP 34-501-02, *Accountability Section* and SOP 34-501-10, *Bar Coding Operations*, require the Port Mortuary to track and account for all remains and portions that are processed at the Port

Mortuary. The failure to locate and account for portions D08-0914 and D09-0693 results in violations of both SOPs.

With regard to complainants' allegation that no formal investigation was conducted with regard to the second missing portion, that allegation is supported by a preponderance of the evidence. While an informal fact finding inquiry did occur, it was not a formal investigation conducted by an impartial investigator. Statements were prepared by most (but not all) key witnesses and those statements were reviewed by Mr. Keel. Mr. Keel indicated that he met with those witnesses and talked with the medical examiners. However, he did not document his interviews, either through notes or memoranda for the record. While some of the witnesses indicated that they spoke with Mr. Keel (*i.e.* [Captain 2], [SrA 3] and Dr. [Medical Examiner 3]), several indicated that they did not recall talking with anyone after the incident (*i.e.* [SrA 1] and [SrA 2]). While there was no requirement of law, rule or regulation, *per se* we conclude that, under the circumstances, the failure to conduct a formal investigation in this matter failed to meet a reasonable standard of care (*see* discussion above, regarding reverence, care and dignity).

Pursuant to AFI 34-242 paragraph 12.12.5, personnel at the Port Mortuary are required to prepare the remains in compliance with disposition instructions from the PADD. With regard to the [military mishap], both PADDs had elected on the CJMAB Form 1 to be notified in the event further remains of their respective Service member were subsequently identified. However, at the time accountability for the portion D09-0693 was lost, it had not yet been identified to either airman, and the loss of opportunity to identify the portion precluded any requirement to notify the PADD upon subsequent identification taking effect. Accordingly, it cannot be established by a preponderance of the evidence that Port Mortuary violated paragraph 12.12.5 of AFI 34-242.

CONCLUSION

By a preponderance of the evidence, the Port Mortuary failed to account for portions of remains on two separate occasions. In both instances, because of this loss of accountability it cannot be established by a preponderance of the evidence that the dispositions of these portions were consistent with the desires of the respective families. Although the complainants were not provided with the report of the Commander Directed Investigation relating to the first missing portion there was no requirement of law, rule or regulation for it to be provided to them. Some meaningful changes were implemented to prevent similar incidents from occurring and to give more timely notification should an empty portion bag be found in a reefer, after the first loss of a portion. The failure to account for the second portion did prevent positive identification of that portion from being achieved and therefore there can only be an assumption that the missing portion belonged to one or the other of the pilots' remains. Although neither the Army liaison nor the Army soldier's family was notified of the loss of accountability of the first portion, there was no requirement of law, rule or regulation requiring such notification. No formal investigation was conducted with regard to the second missing portion and the absence of such a formal investigation constituted a failure of leadership to meet a reasonable standard of care. Notification to the families of the loss of accountability for the portions was not accomplished but, under the circumstances, was not required by law, rule or regulation. The loss of accountability for portions D08-0914 and D09-0693 resulted in a negligent failure to meet the

requisite standard of care, thereby violating DoD Directive 1300.22, DoD Instruction 1300.18 and Joint Publication 4-06. It was also established by a preponderance of the evidence that the failure of the three senior officials to adequately attempt to re-establish accountability for the second missing portion or to determine its disposition did constitute a failure by them to meet the obligation of care in handling remains. Consequently, the allegations were substantiated in part and not substantiated in part.

Regarding both portions, while it is established that AFMAO lost accountability of both portions, and it cannot be determined by a preponderance of the evidence that the disposition of those portions was consistent with the specific instructions of the family, there is no evidence that their disposition was accomplished by any disposition method inconsistent with generally accepted mortuary practices.

The following violations of rules or regulations were found:

- The Port Mortuary failed to comply with guidance for maintaining accountability of portion D08-0914, resulting in violations of DoD Instruction 1300.18, and Port Mortuary SOPs 34-501-02 and 34-501-10.
- The Port Mortuary failed to comply with disposition instructions from the PADD with regard to the portion D08-0914, resulting in a violation of AFI 34-242, paragraph 12.12.5.
- The Port Mortuary failed to comply with guidance for maintaining accountability of portion D09-0693, resulting in violations of DoD Instruction 1300.18, and Port Mortuary SOPs 34-501-02 and 34-501-10.
- The Port Mortuary failed to comply with the obligation to identify portion D09-0693 in violation of DoD Directive 1300.22, DoD Instruction 1300.18 and AFI 34-242.
- The loss of accountability for portions D08-0914 and D09-0693 resulted in a negligent failure to meet the requisite standard of care, thereby violating DoD Directive1300.22, DoD Instruction 1300.18 and Joint Publication 4-06. AFMAO senior leadership's response failed to ensure the requisite care was provided for handling partial remains D09-0693, resulting in violations of DoD Directive 1300.22, Joint Publication 4-06, and DoD Instruction 1300.18.

SECTION 6 – GROSS MISMANAGEMENT

In the July OSC Referral Letter, OSC concluded that there is a substantial likelihood that the information provided by Mr. Zwicharowski and Ms. Spera disclosed gross mismanagement. The three sets of allegations OSC considered at issue with respect to gross mismanagement are (1) improper handling and transport of remains with possible contagious disease; (2) improper transport and processing of remains of military dependents; and (3) improper handling of cases of missing portions. The cumulative result of the evidence for these allegations was considered to determine whether, taken together, the preponderance of the evidence indicated gross mismanagement by leadership[151] within AFMAO and the Port Mortuary Division. Each of these allegations is previously addressed in this report. As set forth below, we conclude that the improper handling of the cases of missing portions and management's subsequent failures to act to redress the problems when they surfaced, including blatant indifference to known chain of custody failures, constituted gross mismanagement. With respect to the other allegations, management deficiencies are noted, but do not rise to the level of the gross mismanagement standard. These deficiencies and the corrective actions taken are discussed in the corrective action section of this report.

The Federal Circuit Court of Appeals and Merit Systems Protection Board (MSPB) have held that gross mismanagement "does not include management decisions which are merely debatable, nor does it mean action or inaction which constitutes simple negligence or wrongdoing. Gross mismanagement means a management action or inaction which creates a substantial risk of significant adverse impact upon the agency's ability to accomplish its mission."[152] The actions of the agency must be so serious "that a conclusion the agency erred is not debatable among reasonable people." Under MSPB case law, in order to qualify as gross mismanagement, the agency's decision cannot be a debatable difference of opinion. The agency's ability to accomplish its mission must be implicated.

The mission of AFMAO demands high standards of performance in an environment that is unparalleled in the civilian world with respect to the scope and magnitude of the operation. The driver of these standards is the inherent expectations of families, the public, and leadership in the preparation of remains. The expectation is 100% success in each case. While perfection may not be always attainable in the type of environment that exists at AFMAO and the Port Mortuary where each case is unique and demands individual attention no matter the tempo of day-to-day operations, perfection is the baseline that Port Mortuary operations must be measured against in order to guide the response of leadership to any deviations. Individual or isolated

---

[151] Unless otherwise stated, the term "leadership" refers to Colonel Edmondson, the AFMAO Commander, Mr. Dean, the AFMAO Deputy Director and Mr. Keel, the Port Mortuary Division Director.

[152] The IO cited to AFI 90-301, *Inspector General Complaints Resolution,* 15 May 2008, which similarly defines gross mismanagement as follows:

> **Gross Mismanagement.** A management action or inaction that creates a substantial risk or significant adverse impact on the agency's ability to accomplish its mission. It is more than mere trivial wrongdoing or negligence. It does not include management decisions that are merely debatable, nor does it mean action or inaction that constitutes simple negligence or wrongdoing. There must be an element of blatancy.

errors and mistakes do not automatically equate to mission failure, but in this environment, they do demand immediate attention by leadership.

With regard to the accountability of portions, AFMAO had the solemn obligation to know where every single portion was located at all times and to be able to prove it when challenged. The importance of properly accounting for the remains of our fallen simply cannot be understated. This is the mission of AFMAO, and there is no doubt everyone who works there fully understood and fully internalized that concept. The inherent duty of the leadership was to ensure their process of accounting for portions was absolutely sound. They did not.

The preponderance of the evidence showed that there was a major flaw in the integrity of the accountability process. That flaw existed because the members from the OAFME (the medical examiners) were able to handle portions without being accountable in MOMS. According to the evidence, this flawed chain of custody for portions allowed medical examiners to handle portions and portion bags without documenting such handling in MOMS or AFMETS. In the instance with the [military mishap], the evidence showed that medical examiners were looking at portion bags and portions on the gurneys outside the X-ray station. The testimonial evidence further shows that Dr. [Medical Examiner 3] took a portion from a bag on the gurney at the X-ray station, for some unknown purpose. Allowing this action without proper documentation was a critical failure in keeping control over the accountability (and in the identification) of each portion.

Further, with regard to this flawed process, the leadership knew or should have known of the problem. When cuts were found in two portion bags in January 2009, which had the troubling outcome of portions falling out of a portion bag (assigned to a specific location on the rack), and into a tub, AFMAO leadership determined that the most likely cause of the problem was the careless handling of these portions by a medical examiner. However, after having been put on notice of a potential issue of negligent handling of portions by medical examiners, which would have required leadership to take affirmative steps to ascertain the validity and extent of such a problem and fix it, the evidence showed that AFMAO leadership did nothing.

Further, in April 2009, when a third portion bag was found cut open, the problem became even more obvious. Again, leadership was put on notice of the issue of accountability for portions and that the lack of accountability arose from the alleged negligent handling of portions by the medical examiners. While Colonel Edmondson did initiate a CDI, the IO of that CDI specifically recommended improving the process, and particularly the chain of custody of portions, between AFMAO and the medical examiners. However, once again, and despite the finding, the issue with the medical examiners was ignored by AFMAO leadership. The system, which leadership should have realized was fatally flawed before these problems started occurring, was allowed to continue. Then, in July 2009, the evidence indicates that a portion, after being bagged and given a Dover number, was removed from its numbered bag by a medical examiner. That portion was not returned to its bag, and the Port Mortuary cannot account for it. While the evidence shows that this portion was likely comingled with another portion by the medical examiner in the autopsy suite, the integrity of the accountability system at AFMAO was

again called into question.[153] Certainly by this time, the flaw in the system was obvious, and the mismanagement was blatant.

The preponderance of the evidence showed that leadership actions avoided dealing with the problem. The Port Mortuary leadership's conclusion that the portion discovered unaccounted for in April 2009 was "articulated" with the remains of the Army soldier was not supported by any evidence. Regarding the July 2009 incident, the Port Mortuary Division Director concluded that the empty portion bag never had a portion in it despite overwhelming evidence and testimony to the contrary. The preponderance of the evidence indicated that the Port Mortuary Division Director and the AFMAO Deputy Director tended repeatedly to adopt explanations for incidents or created *ad hoc* procedures that avoided the necessity of reporting "bad news" to higher headquarters. This in turn led to their failure to make significant institutional changes to improve this one problematic AFMAO process. The Director's disregard of evidence was followed by reporting his unsupportable conclusion back to his supervisors.

The mismanagement here was not debatable among reasonable people. The supervisors, first the Deputy Director who failed to critically examine the circumstances, and then the Commander who took no follow-up actions similarly failed to manage processes and Mr. Keel effectively or appropriately. By a preponderance of the evidence, the failures of the three leaders to acknowledge there was an issue regarding control of portions, own it and then, importantly fail to begin to even review processes to come to a corrective action until further incidents occurred is gross mismanagement by all three.

With regards to the other allegations that there was gross mismanagement (with respect to the care of the fetal remains and the improper handling of the foreign national), the evidence shows that certain management decisions were questionable, but those decisions did not rise to the level of gross mismanagement.[154]

Based on a preponderance of the evidence as applied to the elements of gross mismanagement, we find that the failure to see the problematic portion accountability process

---

[153] Witness testimony indicated that the medical examiner took the portion back into the autopsy suite. MOMS indicates it is still there. While it is likely the portion was combined with another portion by the medical examiner in autopsy, we do not know, however, because her testimony is that she does not recall.

[154] For instance, there was no AFMAO Exposure Control Plan (ECP) at the time the potentially contagious remains arrived at the Port Mortuary. Leadership drafted an ECP after that event, but the plan did not address in any way airborne pathogens. Leadership did not advise personnel to check with a doctor to assess any possibility of infection after being in the proximity of possibly contagious remains. Port Mortuary personnel did not adequately train the deployed officer who was assigned to run the section that dealt with the shipment of remains. In particular, testimony in the report indicates that the predecessor in this position refused to provide adequate training to the officer, despite requests from the officer for such training. Further, Port Mortuary leadership failed to follow-up to ensure that the officer received the training required for her duties. The preponderance of the evidence also showed that leadership often failed to follow Port Mortuary SOPs, specifically with respect to contacting the servicing foreign embassy to ensure requirements involving the shipment of remains overseas were current and in handling the cremations of fetal remains from USAMAA-E. Further, the preponderance of the evidence showed that with respect to the cremations, the Port Mortuary Division Director was fully aware that the SOPs were not consistent with his actual practices but he did nothing to correct it. Instead, he chose to ignore almost all the SOP requirements on almost every case despite it being well within his power to simply re-write the SOP.

before incidents occurred, the failure to fully address the problems after three separate incidents became known, and the affirmative steps taken to minimize or hide the problem results in a finding of gross mismanagement by Mr. Keel, Mr. Dean and Colonel Edmondson.

SECTION 7 – A SUBSTANTIAL AND SPECIFIC DANGER TO PUBLIC HEALTH

In the July OSC Referral Letter, OSC concluded that there is a substantial likelihood that the information provided by Mr. Zwicharowski and Ms. Spera disclosed a substantial and specific danger to public health. The July OSC Referral Letter included three sets of allegations but did not identify which of the allegations were implicated in this issue.

Under MSPB case law, which is precedential, a danger to public health must be substantial and specific in order for the report to fall under the whistleblower provisions. A variety of factors may determine when a disclosed danger is sufficiently substantial and specific. Two of these are (1) the likelihood of harm resulting from the danger and (2) when the alleged harm may occur. If the disclosed danger could only result in harm under speculative or improbable conditions, it is less likely to be found specific. If the harm is likely to occur in the immediate or near future as opposed to manifesting only in the distant future it is more likely to qualify as a specific danger. Both of these factors affect the specificity of the alleged danger, while the nature of the harm—the potential consequences—affects the substantiality of the danger.

Based upon the MSPB guidance, two of the three allegations set forth in the July OSC Referral Letter do not allege a substantial and specific danger to public health. Specifically, as set forth below, the allegations relating to improper transport and processing of remains of military dependents and improper handling of cases of missing portions do not include an allegation of danger to public health. Even if one could argue that such an assertion was presented, there is nothing in the record relating to those two sets of allegations suggesting a danger to public health.

With respect to the allegation of improper packaging and shipping of military dependents (fetal remains) to the Port Mortuary from USAMAA-E, there was nothing found in the record to support a finding that the actions posed a substantial and specific danger to public health. All the remains were embalmed and stored in a sealed medical container. While the shipping boxes for these fetal remains may have been sub-standard, they were still clearly labeled and treated with care. The remains were cushioned inside the boxes, and the boxes were stored in the nose of the plane without anything on top of them. Because of the special handling, it is doubtful the boxes would be damaged in shipment, and the record indicates that none were damaged. Further, even if a shipping box was compromised, there is no evidence to suggest that this would result in a health risk to anyone. Likewise, with respect to the allegation of improper handling of portions at the Port Mortuary, there is no indication in the record that the circumstances surrounding the missing portions posed a substantial and specific danger to public health.

The third allegation relating to the improper handling and transport of remains with possible contagious disease does present an allegation of danger to public health. According to OSC, Ms. Spera's allegations relating to a danger to public health include the following: (1) Port Mortuary officials failed to take precautionary measures or provide adequate warnings in response to a determination that remains received by the Port Mortuary were possibly infected

with a contagious disease; (2) human remains containing active tuberculosis pose a potential health risk because infectious spores can be released into the air when the lungs aspirate during movement and when the lungs are exposed and manipulated during autopsy; (3) the TB spores can remain in the air for a few days and may contaminate the heating ventilation and air conditioning (HVAC) system; and (4) Mr. Keel's and [Major 1]'s actions were not consistent with the Armed Services Public Health Guidelines and unnecessarily exposed personnel to potential infection. As previously discussed, these allegations of a public health danger were not substantiated.

Based upon the evidence in the record, the IO found that adequate precautionary measures were taken and adequate warnings were given. The record reflects that the risk of infection to Port Mortuary personnel working in triage was very minimal and that personnel who came in contact with the remains during this time wore appropriate protective gear in accordance with the Armed Services Public Health Guidelines and standard operating procedures. Once the potential TB was discovered during autopsy, the medical examiners took immediate precautions and warned personnel working at the Port Mortuary as to the presence of remains with possible TB. The evidence also shows that [Autopsy/Embalming Technician 3] took precautionary measures in preparing the remains after autopsy. Thereafter, the remains were isolated and stored in two or three body bags with signage on the body bags that the remains were positive for TB. The preponderance of evidence supports a finding that Port Mortuary employees who handled the third country national were aware of its possible potentially contagious condition and took proper precautionary measures.

While the evidence supported Ms. Spera's allegation that the HVAC system was not shut down during this incident, the record also indicates that shutting the HVAC system down would have resulted in the more dangerous situation of leaving potential contagions present in the working areas. Thus, the IO determined it was more reasonable to leave the HVAC system on in the autopsy and embalming areas and there was no need to shut the HVAC system in the remaining parts of the Port Mortuary facility.

With regard to transporting the remains back to Kuwait, the record shows that the shipped remains were placed in two or three body bags and then placed in the transfer case. There was no requirement for the remains to be removed from the human remains pouches after leaving the Port Mortuary prior to arrival in Kuwait as the re-icing was accomplished without opening the body bags. The outside bag was adequately labeled and a very clear warning email was sent to those receiving the remains overseas.

The medical opinions obtained in the investigation clearly indicated the likelihood of harm resulting from the danger of the potentially contagious remains was extremely low after the autopsy was completed and the remains were stored in multiple body bags. Based on the testimony from the medical examiners, there was minimal risk to personnel handling the shipped remains as long as only the transfer case is opened, and the body bags were undisturbed so nothing is aerosolized. In order for someone to be exposed to infection, the warning sign on the body bag and the warning email sent by [Major 1] would have had to be ignored, in addition to the body bags being opened and the lungs manipulated in such a way to aerosolize the TB

spores. Such a speculative danger is far below the substantial and specific standard for reporting potential dangers to public health.

While there is an intrinsic danger to the health of the personnel who work in mortuaries and with transporting remains, these potential health risks are guarded against through adequate precautions and warnings. The record disclosed that adequate precautionary measures were taken and warnings were provided to minimize any danger that may have existed in processing the remains at the Port Mortuary and sending the human remains overseas for final disposition. Accordingly, the preponderance of the evidence supports a conclusion that the actions of the Port Mortuary officials did not present a specific or substantial danger to public health.

SECTION 8 – REVERENCE, CARE AND DIGNITY

DoD Directive 1300.22 requires that "remains will be handled with the reverence, care and dignity befitting them and the circumstances." DoD Instruction 1300.18 refers to "dignity, respect, and care." The mission of AFMAO refers to "dignity, honor and respect."

As previously discussed, while there were failures to comply with the standard of care, the overwhelming weight of the evidence showed that the employees at AFMAO treat their work as sacred. The IG found that the words of AFMAO's mission were the foundation of the professionalism that the personnel exhibited daily as they prepared the remains of Soldiers, Sailors, Marines, Airmen, and other eligible personnel for their final destination. The IG found that AFMAO personnel maintained this professionalism with little recognition other than the personal satisfaction of fulfilling a mission. Further, the evidence showed the focus of AFMAO, as an institution, was single-mindedly on providing service to the families and affording dignity, honor and respect to the fallen.

By a preponderance of the evidence, we find that with the exception of the two missing portions reported herein, out of thousands, the institution has met those standards and that remains have been handled with the reverence, care and dignity befitting them and the circumstances.

SECTION 9 – CORRECTIVE ACTION

Based upon the evidence in the file and the determinations made in the ROI above, the Air Force, the AFME and the Army have undertaken corrective actions, including both administrative and disciplinary in nature. The corrective actions are set forth below by OSC case number and allegation.

OSC File No. DI-10-2151 -- Preparation of the remains of a Deceased Marine

Administrative Corrective Actions

The ROI found a violation of AFI 34-242, paragraph 3.31 which requires a letter of instruction be sent to the receiving funeral director informing him of, among other things, the condition of the body. The Port Mortuary did not send this letter in the case of the deceased Marine. On March 24, 2011, the current AFMAO Commander issued a written memorandum (March 2011 Directive) to the Port Mortuary Director, directing that the requisite letter of instruction be sent to receiving funeral homes for all remains prepared by the Port Mortuary, consistent with paragraph 3.31 of the AFI. The March 2011 Directive also instructs the Port Mortuary Director to ensure his staff communicates with the Service liaison regarding the conditions of the remains upon receipt from autopsy (the initial assessment) and prior to final departure to the receiving funeral home.

While no violation was found with regard to the actual preparation of the deceased Marine, the Air Force has taken steps to improve its processes related to embalming, restorative art procedures and notification to and approval from the PADD in difficult cases such as this one. Guidance was issued in the March 2011 Directive setting forth circumstances where notification to the PADD and PADD approval are needed for a major restorative art procedure and how such notification and approval is accomplished. The Guidance provides that, in "those cases where restoration of the remains is beyond those viewable areas where consent to restore to a natural state is implied," the mortuary specialist assigned to prepare those remains will work with the appropriate Service liaison to make a request in writing to obtain the family's consent to restore and present the remains in a more viewable condition, if appropriate to the circumstances.

In addition, the March 2011 Directive sets forth a process for conflict resolution when embalmers disagree on issues (on ethical or other grounds) related to viewability classifications and embalming and/or restorative art procedures. Specifically, it states:

> In those cases where the mortuary branch chief disagrees with a mortuary specialist's recommendation concerning restoration and/or viewability, be it on ethical or other grounds, the branch chief will reassign the case to another mortuary specialist or assume responsibility for the case himself. Accordingly, if the [P]ort [M]ortuary director or AFMAO deputy commander disagree with the mortuary branch chief, he may reassign or assume

> responsibility for the case. In all cases, a memorandum for record will be written and signed by the individual taking responsibility or reassigning the case explaining their rationale for such action. The final authority in all such matters rests with the AFMAO deputy commander.

The March 2011 Directive also instructs the Port Mortuary Director to include the guidance contained therein in the Port Mortuary Division standard operating procedures and to review compliance with the guidance in the Port Mortuary Division's self-inspection program.

Disciplinary Actions:

No disciplinary action is being taken with regard to allegations relating to the preparation of the Marine.

OSC File Nos. DI-10-2538 and DI-10-2734

Improper Handling and Transport of Remains with Possible Contagious Disease

Administrative Corrective Actions

There was no violation of any law, rule or regulation with regard to the warnings given and the precautions taken. However, the Air Force has taken action to improve its procedures and guidance in this area. Specifically, on May 6, 2011, the Deputy Director of AFMAO issued a revised Exposure Control Plan which includes respiratory pathogens and precautionary measures necessary when respiratory pathogens such as TB may be present in the Port Mortuary. The guidance sets forth necessary precautionary measures as well as recommended communications with AFMAO staff and other employees who may have work in the building.

In addition, the current AFMAO commander, in an effort to improve safety at AFMAO, has issued a Commander's Safety Policy (dated November 15, 2010) and appointed representatives to serve as unit safety representatives. He has also appointed nine members of his unit to serve as a unit safety working group.

There were violations of AFI 34-242, the Armed Services Public Health Guidelines, and SOP 34-242-02 for not contacting the receiving foreign country prior to shipping the remains of the third country national and a violation of SOP 34-242-02 for not notarizing or submitting documentation to the embassy and consulate for shipping approval of the third country national. The guidance in SOP 34-242-02, *Administration Branch*, April 1, 2010 on shipping remains overseas was reviewed and has been modified to include the direction of "[i]f death was caused or suspected to be caused by a contagious disease, follow all specific country requirements for transportation of remains."

Disciplinary Actions:

Disciplinary action has been proposed against Mr. Keel for the resulting violations set forth above. *See* segment on Disciplinary Action below.

Transport and Processing of Remains of Military Dependents

The ROI did not find a violation of law, rule or regulation with regard to the packaging and shipping of fetal remains from Landstuhl to the Port Mortuary. However, improvements have been made to both. In May 2010, USAMAA-E personnel explored other means to ship the fetal remains and in conjunction with the material shop on base created wooden boxes for shipping fetal remains. Since then, USAMAA-E has replaced the cardboard boxes they had been using with the handmade wooden boxes to ship fetal remains to the Port Mortuary. In addition, USAMAA-E has stopped using medical specimen pails to contain the remains in shipping. Fetal remains are now being sealed in biohazard bags.

On August 1, 2010, USAMAA-E instituted new SOPs establishing proper procedures for shipping remains, including fetal remains, to the Port Mortuary for cremation. That SOP provides guidance on what documentation USAMAA-E will send to the Port Mortuary, which includes the DD Form 2065, the DD Form 2064, the cremation authorization from the family, a release and cremation authorization from the medical examiner or the command of the Landstuhl Regional Medical Center, and reimbursement documentation. It also includes instructions on how to embalm remains in preparation for cremation, as well as how to package and ship the remains to the Port Mortuary.

AFMAO and USAMAA-E are in the final stages of executing a signed letter of agreement dated May 6, 2011 which outlines AFMAO cremation procedures for reimbursable civilian cases (including cremation of fetal remains). The Port Mortuary Director signed the letter of agreement on May 6, 2011 and it has been forwarded to USAMAA-E for signature. The letter of agreement sets forth the documents required with a request to cremate fetal remains:

(1) Completed AFMAO Cremation Authorization Form signed by the PADD or Authorized Agent and witnessed by a responsible third party;
(2) Release letter for cremation from the certifying medical authority (e.g. Office of the Armed Forces Medical Examiner, Landstuhl Regional Medical Center, host nation pronouncing physician, etc.) or signed non-pending certificate of death such as DD Form 2064 or host nation certificate of death;
(3) Payment in the amount of $25.00 for cremation services, an additional $200.00 for a cremation container (when applicable) and any other payment required by law (e.g., transportation costs under 10 U.S.C. § 1486) in the form of a personal check or money order made payable to the U.S. Treasury; and
(4) Disposition instructions and means of identification which may include DD Form 2065, AF IMT 970, message traffic from the branch of service or USAMAA-E, and DD Form 565.

The Letter of Agreement requires, among other things, that the fetal remains be embalmed in accordance with USAMAA-E standard operating procedures and transported in appropriate containers. "The cremation container will be a suitable combustible wood container of no less than 0.5 inches/ (1.27 cm) width in construction material, rigid enough for handling with ease, free of jagged or sharp edges assuring protection to the health and safety of personnel handling the container and provide proper enclosure for protection of remains."

There were multiple violations of the Port Mortuary Crematory Section SOP with respect to missing documentation in case files. AFMAO has reviewed the applicable provisions in the Crematory Section SOP. On May 6, 2011, the Deputy Director of AFMAO signed a memorandum addressed to the Port Mortuary Director, effective immediately, instructing him to rescind certain sections of the SOP (*i.e.* those addressing documents required for cremation) and setting forth the interim documentation requirements for fetal remains (as well as other categories of deceased). The documentation requirements mirror the requirements set forth in the Letter Agreement with USAMAA-E, set out above. Once the Letter of Agreement is signed by USAMAA-E, the Port Mortuary will incorporate the changes into a revised new crematory section SOP.

Disciplinary Actions

Disciplinary action has been proposed against Mr. Keel for the resulting violations set forth above. *See* segment on Disciplinary Action below.

Improper Handling of Cases of Missing Portions

There was a violation of DoD Instruction 1300.18, SOP 34-501-02, SOP 34-501-10 for failing to comply with guidance for maintaining accountability of portions D08-0914 and D09-0693, and AFI 34-242 for failing to comply with disposition instructions from the PADD. In addition, there was also a violation of DoD Directive 1300.22, Joint Publication 4-06, and DoD Instruction 1300.18 for failing to afford the requisite care to two partial remains, D08-0914 and D09-0693. Based upon the evidence, there was a finding that the improper handling of the cases of missing portions and management's subsequent failures to act to redress the problems when they surfaced, including deliberate indifference to known chain of custody failures, constituted gross mismanagement.

The Air Force (both HAF/A1S and AFMAO) and AFME have taken corrective actions as set forth below.

The AFMAO Commander reports to the Director of Services, HAF/A1S. As part of the Air Force's corrective action, the Director of Services issued a Memorandum to the AFMAO Commander directing the AFMAO Commander or Deputy Director of AFMAO to contact HAF/A1S within four hours should one of the following occur: (1) potential loss of full accountability of remains or a remains portion; (2) potentially contaminated or contagious remains; (3) potentially serious hazard (*i.e.* medical or safety) to personnel; (4) potentially explosive device; and (5) any other serious anomaly not in keeping with the mission of providing mortuary services with reverence, care, dignity, honor and respect, for our fallen heroes and their

families. AFMAO is required to provide follow up information regarding resolution of these issues, where the issue has been resolved without the need for a formal inquiry or investigation. Unless there is a resolution of such a matter that quickly and thoroughly demonstrates that these concerns were without a valid basis, a formal inquiry or investigation will be initiated and conclude with a written record to HAF/A1S. Such inquiry will include a root cause analysis and recommendations for corrective actions when appropriate.

AFMAO and the AFME have executed a Memorandum of Understanding dated April 26, 2011 (MOU), which outlines responsibilities and relationships between AFMAO and AFME as they relate to operations within the Port Mortuary facility. In particular, the MOU provides guidance and documents agreement on certain aspects of operations with the Port Mortuary as they relate to the continuous accountability for human remains within the Port Mortuary. According to the MOU, it is "intended to establish agreement that although AFMES and AFMAO are responsible for distinct functions and exercise different authorities over the processing of human remains, both entities agree to the parameters set forth [in paragraph 6 of the MOU] in order to account for the precise location of human remains at any given time while in the custody of AFMES and/or AFMAO, to account for changes in those remains that may occur while in such custody, and to maintain the investigative integrity of all remains and materials." Under paragraph 6 of the MOU, AFMAO and AFME "agree to be bound by established joint standard operating procedures (JSOP) concerning, but not limited to, remains processing, portion management, retained organs, evidence handling, personal effects, facilities management, exposure control, and other functional areas of mutual interest." Paragraph 6 provides

a. AFMES is responsible for accountability of all remains, portions and evidence (to include personal effects) from the time that an AFMES authority authorizes opening of a transfer case (or equivalent container) until the time that Triage is complete and all remains and evidence (to include personal effects) have been entered into the MOMS system, and such authority will remain in a position to assure such accountability until these events are complete, or until relieved by an AFMES successor in authority. Triage is the first visual examination of the received remains where the portions are separated, re-associated, and catalogued as necessary.
b. During the Triage process, every portion of remains designated as such by AFMES personnel will be assigned a unique MOMS number and that number will be either affixed to the portion or the portion will be placed in a unique bag marked with that number. The medical examiners and anthropologists responsible for the Triage of the remains will direct this process and an AFMES representative will stay with the remains to ensure the process is correct and complete until all portions are appropriately marked and bagged. All individuals handling such bags or markings will ensure that the physical integrity of the bags and markings is preserved from intentional or accidental damage; if such damage should occur, the individual first becoming aware of the damage will ensure that it is appropriately corrected and such event is documented in MOMS.
c. No one from either AFMES or AFMAO will handle a marked portion without his or her identity being scanned into MOMS to show their participation in the transaction, and no change will occur to the portion without that change being immediately and

accurately entered into MOMS, including the identity of person who accomplished the change.

d. All persons who will participate in these processes will, before beginning participation, sign an acknowledgement of these requirements certifying that any deviation from them that may become known to them, whether the deviation is by themselves or another person, will be immediately brought to the attention of the senior AFMES and AFMAO person on duty at that time, and that a permanent record will be entered into MOMS of the matter at that time.

In addition, both parties agree to joint and ongoing training to implement the JSOPs prior to personnel from either organization carrying out any JSOPs function.

AFME and AFMAO have drafted a Joint SOP 01, *Remains Processing*, which provides comprehensive operational guidance for all assigned personnel handling portions and outlines the procedures routinely encountered during daily operations. The JSOP by its terms is applicable to both AFMAO and AFME personnel. The JSOP was reviewed and coordinated through all levels of the Port Mortuary and the AFME to gain maximum input from relevant personnel. The JSOP has been drafted and is in the final stages of execution.

Further the AFMAO and AFME agreed to test the draft JSOP procedures in a "portions exercise" to assess its effectiveness. This joint AFMAO/AFME training exercise was held on May 4, 2011. The goal was to simulate as closely as possible a real world scenario involving a large number of portions of human remains using jointly developed standard operating procedures in order to identify any areas for improvement and solidify procedures to minimize possibilities for human error. The end of day MOMS report was verified with a physical inventory and confirmed a full physical and electronic accountability for all 59 simulated portions processed. Minor process improvements were noted. This joint training exercise will be conducted at the beginning of each rotation of deployed personnel when a significant number of temporary duty personnel rotate in.

The JSOP includes corrective action changes taken by both AFME and AFMAO. These changes related to the processing and storage of portions and are set forth below:

- To reduce the possibility of a portion falling out of its portion bag due to a cut in the bag, the Port Mortuary created a "three bag rule." Every portion is now tagged and bagged in one bag with a Dover Number. Its accompanying documents are then tagged and bagged in another bag with the Dover Number, and both of these bags are placed in a third bag with a Dover Number affixed.
- The Port Mortuary has placed a limit specifying only one portion to one bar-coded location in storage, with the goal of eliminating the possibility of accidentally swapping or confusing portions. AFMAO has also instituted a rule to have daily contact with Service liaisons regarding portions and portion disposition.
- AFMAO has also placed locks on the Port Mortuary refrigerated storage units. The locks are controlled by the operations desk and anyone needing access to the reefers must be approved and sign out a key. AFMAO has also added surveillance cameras to the hallway where the refrigerated storage units are located.

- AFMAO considers Information Technology to be critical to portions management. AFMAO has recently added upgrades to MOMS. For example, when a case number is created, the operator must select whether the case is a body, portion or harvested organ. This allows the staff to query the database for these specific fields. AFME now provides information on harvested organs for all cases (whether an autopsy was accomplished at the Port Mortuary or elsewhere), and that is entered into MOMS to ensure proper tracking of all organs brought to the Port Mortuary. Another recent upgrade in MOMS provides a cross-reference capability in the "Case Information" application to the "Group Disposition" application. A simple search can easily determine if the case was part of a group transaction such as a Group Burial, Retirement at Sea, or medical waste disposition.
- With regard to chain of custody for portions, AFMAO made modifications to MOMS which require handlers to scan portions to their IDs. Prior to this, a portion could be transferred from one station to another without being scanned into MOMS or otherwise leaving a trace in MOMS to the handler involved. The current system forces the handler to reflect the change in custody in MOMS, and all actions can be traced to an individual. Forcing a scan to a handler's ID badge between station scans significantly improves the chain of custody audit trail in MOMS and forces greater responsibility over the portions in any person's possession.
- AFMAO is also pushing through significant training in MOMS. MOMS training is accomplished in one of three ways. Training is initially provided to users in their mission areas within the MOMS system by the Informational Technology staff for permanent party personnel, and by outgoing deployed rotation crews to new deployed personnel. Training is provided one-on-one as needed with users to address specific functions and tasks within the system. Training is provided to users and groups following new MOMS releases with focus on those areas that are new or have changed from the previous release. The new AFMAO Commander has established a MOMS Training Working Group which is, among other things, developing a training checklist to document certification training on the MOMS system.
- AFME has made several changes as well. Once accessioned, AFME photographers now photograph all portions within their bags prior to leaving the Triage area to confirm remains are present in each bag associated with a Dover number. Case flow sheets will be annotated at every applicable station if remains are not present, not just at the initial point the remains are either purposefully removed for further forensic examination or noted to be missing. AFME also receives a sheet of all portion numbers created each day for quality assurance checks at the end of each shift.
- If anyone at any time discovers something about which they have a question or are concerned about, they may stop the processing line until the situation is resolved or at a minimum has been investigated. This issue has been briefed to the Dover Port Mortuary staff and Armed Forces Medical Examiner personnel as well as the need for improved communication between organizations relaying any anomalies in normal processing.
- AFMAO has instituted three different portions' inventories: weekly, monthly and random spot check inventories.
    - A weekly inventory is conducted by the Port Mortuary Operations Processing Officer (OPSO) and an autopsy/embalming technician to ensure accurate accountability and tracking. The OPSO pulls an electronic inventory of all new cases from MOMS, which gives the physical location of all portions and lists each by Dover Number. Portions within the reefers are listed by specific refrigeration unit, rack, and clip or

pan location. The OPSO and an autopsy/embalming technician compare the printed MOMS inventory sheet with the physical portions stored at each location.
    - Any discrepancies between the MOMS inventory and the physical inventory are resolved on the spot, if possible. If immediate resolution is not possible, the discrepancy is reported to the Operations Director and the Port Mortuary Director, who is to report it to the AFMAO commander or deputy commander.
    - After the inventory is complete, the OPSO and technician print their name, and then sign and date the first page of the printed inventory, and initial and date each subsequent page. The printed inventory is provided to and then stored by the Portions Control Manager.
- Upon completion of the last weekly inventory of the month, the Portions Control Manager will complete a monthly inventory report. The monthly inventory is an accountability scrub performed by the Portions Control Manager that brings together the weekly inventories into a synthesized monthly report.
    - Utilizing the end of month weekly inventory, the Portions Control Manager compares this report with the last monthly inventory report for updates and verifies disposition according to MOMS entries. The Portions Control Manager will also document Dover Number per medical examiner releases, name of decedent if identified, branch of service, physical description, storage location, incident, and comments regarding efforts made to obtain final disposition instructions if the portion has been positively identified.
    - Upon completion of the Monthly Inventory Report, it is distributed to the Director, Port Mortuary Branch Chief and personnel, Operations Branch Chief, OPSO, pertinent AFME personnel, and Service liaison personnel.
    - The Monthly Inventory Report gets filed on the AFMAO shared drive and is addressed during routine portion management meetings attended by the Port Mortuary Portion Management Team, Service liaisons, informational technology staff, and AFME staff.
- Using the reports from weekly inventories, the OPSO or Portions Control Manager will designate case numbers to be spot checked on a monthly basis and in a random manner, not to be less than two cases per rack. The OPSO or technician will specifically check whether the random portion is as described in MOMS, whether it is properly packaged in accordance the three bag rule, and whether it is located in the location specified by MOMS. After the spot check has been completed, an entry will be made in MOMS.

AFMAO Management and Staff Training:

AFMAO has also increased training in all areas, including exposure control training, use of MOMS, continued professional embalming education, and sending key personnel to classes on teamwork, leadership and management. Supervisors, including those involved in the allegations herein have completed supervisory training through the Human Resource Management School at Maxwell AFB and the Office of Personnel Management.

To foster greater community learning, AFMAO has also invited nationally-recognized professionals to provide technical expertise and training. For example, a workshop was conducted on April 12, 2011 conducted by Mr. Robert Mayer and Mr. Kurt Wenzel, both

respected technical experts in the funeral service profession. An embalmer is scheduled to attend a course on advanced facial reconstruction at the University of Oklahoma. AFMAO continues to look for value-added specialized training opportunities to further the professional development of the entire AFMAO team.

Historically, training at AFMAO has been focused on deployed personnel who stay about 120 days in their positions at AFMAO. Further, there was some evidence suggesting that even with the permanent employees, there was a disconnection between AFMAO policies and procedures as written and as applied. To address this, training is being refocused on permanent AFMAO employees. Such training will include getting proficient on the MOMS IT system and understanding AFMAO policies and procedures, as well as learning communication skills. All permanent employees will also acknowledge receipt of a copy of their respective SOPs and acknowledge having read them. Deployed personnel will still receive training, but the focus will be on the job training. Training for deployed military is also undergoing changes. AFMAO recently adopted a system to track training of inbound deployed military. During a recent spot check, AFMAO found that deployed military members have received and acknowledged receipt of their respective section's SOPs. Each deployed military member is also going through training in their section which will lead to certification by a section lead.

Disciplinary Actions

Disciplinary action has been proposed against Colonel Edmondson, Mr. Dean and Mr. Keel for the resulting violations set forth above. *See* segment on Disciplinary Action below.

Disciplinary Action

The Air Force has appointed a new Commander at AFMAO who is making great strides in improving communication with employees, internal controls, re-establishment of more precise rules and regulations, better training, and enforced chain of custody provisions, including agreements with other relevant Commands. Notwithstanding those affirmative steps, the Commander has also reviewed the IG Report of Investigation. Overall, he has decided that action against two civilian employees for the manner in which they conducted themselves in these matters to be in order. Both individuals have been proposed for disciplinary action. On May 10, 2011, Mr. Dean was issued a notice of proposed 14 day suspension for "gross mismanagement" and "lack of candor." On May 10, 2011, Mr. Keel was issued a notice of proposed downgrade to a GS-13 position for "gross mismanagement," "lack of candor," "misrepresentation in government IT system (MOMS) (regarding documentation required with cremation of fetal remains)," and "violations of other Port Mortuary standard operating procedures including the Crematory section SOP and Administration SOP.

With respect to the former military commander, Colonel Edmondson was served a Letter of Reprimand for "fail[ure] in the leadership of AFMAO in one significant area of his former responsibilities." Specifically, the Letter of Reprimand stated that Colonel Edmondson "did not properly respond to the loss of accountability of a portion of remains in two instances, and that failure rose to the level of gross mismanagement."

A Letter of Reprimand for military personnel is significantly different than a Letter of Reprimand for civilian personnel. A military Letter of Reprimand is the most severe form of administrative action (short of non-judicial punishment action under the Uniform Code of Military Justice), indicating a strong degree of official censure. For officers, a Letter of Reprimand must be filed in an Unfavorable Information File. For officers in the rank of Colonel and above, a Letter of Reprimand will be reviewed by SECAF or his delegate to determine whether the Letter of Reprimand will be provided to a board considering the Colonel for further promotion. Generally, a promotion board would be provided such information.

SECTION 10 – CONCLUSION

Upon review of the evidence and testimony adduced during the investigation, the following violations or apparent violations of law, rule, or regulation are based upon a preponderance of the evidence:

- With regards to the "Preparation of the Remains of a Deceased Marine" allegation, there was a violation of AFI 34-242 for failing to send an instruction letter to the receiving funeral director;
- With regards to the allegation of "Improper Handling and Transport of Remains with Possible Contagious Disease," there were administrative violations of AFI 34-242, the Armed Services Public Health Guidelines, and SOP 34-242-02 for not contacting the receiving foreign country prior to shipping the remains of the third country national and a violation of SOP 34-242-02 for not notarizing or submitting documentation to the embassy and consulate for shipping approval of the third country national;
- With regards to the allegation of "Improper Transport and Processing of Remains of Military Dependents," there was a violation of SOP 34-242-04 for failing to have a release of remains from AFME, State ME, or other cognizant medical authority certifying cause of death regarding all five fetal remains at issue; for failing to have authorization to cremate from AFME, State ME, or other cognizant medical authority certifying cause of death regarding all five fetal remains at issue; for failing to have disposition instructions from the Service casualty or mortuary officer assisting the family regarding all five fetal remains at issue; and for failing to have burial transit permits regarding all five fetal remains at issue;
- With regards to the allegation of "Improper Transport and Processing of Remains of Military Dependents," there was also a violation of SOP 34-242-04 because the Cremation Officer for each respective case did not follow the SOP procedures for receiving, uploading, or verifying SOP-required medical examiner authorizations.
- With regards to the allegation of "Improper Handling of Cases of Missing Portions," the Port Mortuary failed to comply with guidance for maintaining accountability of portion D08-0914, resulting in violations of DoD Instruction 1300.18, and Port Mortuary SOPs 34-501-02 and 34-501-10; failed to comply with disposition instructions from the PADD with regard to the portion D08-0914, resulting in a violation of AFI 34-242, paragraph 12.12.5; failed to comply with guidance for maintaining accountability of portion D09-0693, resulting in violations of DoD Instruction 1300.18, and Port Mortuary SOPs 34-501-02 and 34-501-10; failed to comply with the obligation to identify portion D09-0693 in violation of DoD Directive 1300.22, DoD Instruction 1300.18 and AFI 34-242; and failed to ensure the requisite care was provided for handling partial remains D09-0693 and D08-0914, resulting in violations of DoD Directive 1300.22, Joint Publication 4-06, and DoD Instruction 1300.18.

This is a summary list of violation determinations. They are listed in more detail in the conclusion section for each allegation and are analyzed fully under each allegation.

OSC's July Referral Letter to SEDEF determined that there was a likelihood of "gross mismanagement" on the part of the officials at AFMAO and "a substantial and specific danger to public health." Based upon the documentary evidence and sworn testimony adduced in the investigation, the allegation of gross mismanagement was substantiated regarding three supervisors, as it pertains to the allegations of improper handling of missing portions. The allegation of a substantial and specific danger to public health was not substantiated.

The investigation did not reveal a criminal violation. Therefore, referral to the Attorney General, pursuant to 5 U.S.C. Sections 1213(c) and (d) is not appropriate.

This Report is submitted in satisfaction of my responsibilities under 5 U.S.C. Sections 1213(c) and (d).

APPENDIX

STATE LICENSING STATUTES AND RULES

State	Law/Regulation	Provision
Texas	22 TAC § 203.24(b)(4)	Unprofessional conduct shall include but not be limited to "failing to practice funeral directing or embalming in a manner consistent with the public health or welfare."
Illinois	225 ILCS 41/15-75	A license can be revoked for, among other things, "incompetence, gross malpractice, or untrustworthiness in the practice of funeral directing and embalming or funeral directing" and "engaging in unethical or unprofessional conduct of a character likely to deceive, defraud or harm the public."
Delaware	24 Del. C. § 3112	A practitioner shall be subject to disciplinary actions if, after a hearing, the Board finds that the funeral director has "[i]llegally, incompetently or negligently practiced funeral services"
Pennsylvania	63 P.S. § 479.11	The board may suspend or revoke license for "[g]ross incompetency, negligence or misconduct in the carrying on of the profession" or "[g]ross immorality."
Pennsylvania	49 Pa. Code § 13.202	Unprofessional conduct includes "demonstrating disrespect toward or mutilating the remains of the deceased person."
Virginia	VA Code Ann. § 54.1-2806	The Board may take disciplinary action for [k]nowingly disposing of parts of human remains in a manner different from that used for final disposition of the body without authorized written permission
Kansas	K.S.A. 65-1751	The State Board may suspend or revoke license, or censure or fine an embalmer who "has committed an act of unprofessional or dishonorable conduct or professional incompetency."
Ohio	Ohio Revised Code § 4717.14	The board of embalmers and funeral directors may suspend or revoke any license issued where the licensee has committed immoral or unprofessional conduct.
Oklahoma	Rules and regulations of the Oklahoma Funeral Board Rule 235: 10-7-2	"The following prohibited acts shall constitute grounds for suspension or revocation of any license or registration issued by the Board … (10) Desecration. Damage, abuse, desecration or the unauthorized removal of tissue, bones, or organs of any human remains in the custody of a licensed [mortuary], funeral director, embalmer, or apprentice. Desecration shall not include the removal of blood, body fluids, body tissue, or other body parts in the normal course of embalming or restoration requested by authorizing agent …" An authorizing agent is defined as the person legally entitled to order the cremation or final disposition of particular human remains

WITNESSES INTERVIEWED

(Alphabetical Order)

[Senior Airman 1 or SrA 1], U.S. Air Force, deployed at AFMAO, Dress and Restoration Section
[Army Mortuary Officer 1], Mortuary Affairs Director at USAMAA-E
[Port Mortuary Clerk 1], Port Mortuary Clerk, AFMAO
[Army Mortuary Officer 2], Mortuary Affairs Officer, USAMAA-E
[Captain 1], U.S. Air Force, deployed at AFMAO
[Mortuary Inspector], Mortuary Inspector, AFMAO
[Autopsy/Embalming Technician 1], Autopsy/Embalming Technician, AFMAO
Trevor T. Dean, Deputy Director, AFMAO
[Port Mortuary Clerk 2], Port Mortuary Clerk, AFMAO
[USMC CACO], U.S. Marines, Casualty Assistant Call Officer
Colonel Robert Edmondson, U.S. Air Force, Commander, AFMAO
[Embalmer 1], Mortuary Inspector, AFMAO
[SrA 2], U.S. Air Force, deployed at AFMAO as X-Ray Technician
[Army Mortuary Affairs Officer 2], Mortuary Affairs Officer, USAMAA-E
[First Lieutenant 1], U.S. Air Force, deployed at AFMAO as Dignified Transfer Officer and Operations Officer
[Technical Sergeant 1], U.S. Air Force, Assistant NCOIC of Data Imaging at the Port Mortuary
[Major 1], U.S. Air Force, Chief, Departures Branch, deployed at AFMAO
[Embalmer 2], Mortuary Inspector, AFMAO
Quinton "Randy" Keel, Director of the Port Mortuary, AFMAO
[USMC Corporal/Liaison], U.S. Marine Corps, Marine Corps Liaison at Dover Port Mortuary
[Major 2], Operations Branch
Captain (Dr.) [Chief Medical Examiner], U.S. Navy, Armed Forces Medical Examiner
[Navy Embalmer], U.S. Navy, Mortuary Liaison
Major (Dr.) [Medical Examiner 2], U.S. Air Force, Deputy Medical Examiner, Armed Forces Medical Examiner
[Army Mortuary Affairs Officer 1], Mortuary Affair Officer, USAMAA-E
[Senior Navy Mortician], U.S. Navy, Navy Senior Mortician
[Port Mortuary Clerk 3], Port Mortuary Clerk, AFMAO
[Mortuary Specialist 1], Chief, Entitlements Branch, AFMAO
James G. Parsons, Sr., Autopsy/Embalming Technician, AFMAO
[Logistics Supervisor 1], Logistics Supervisor, AFMAO
[Master Sergeant 2], U.S. Army, NCOIC of Army Liaison Team
[Mortuary Affairs Division Director], Director of the Mortuary Affairs Division, AFMAO
[Rabbi], Reserve Jewish Chaplain
[USCM Senior Liaison], Navy and Marine Corps Liaison at Dover Port Mortuary
[Captain 2], U.S. Air Force, deployed at Port Mortuary Division as Assistant OIC of Operations
[Records Administrator 1], Records Administrator, AFMAO
[Autopsy/Embalming Technician 2], Autopsy/Embalming Technician, AFMAO
[First Lieutenant 2], U.S. Air Force, Chief of Departures Branch, deployed at AFMAO
Commander (Dr.) [Medical Examiner 3], U.S. Navy, served as Assistant Operations Officer for the Medical Examiners

[Civilian Chaplain], Civilian Chaplain
Mary Ellen Spera, Mortuary Inspector, AFMAO
[SrA 3], Autopsy Technician, deployed at AFMAO
[Embalmer 3], Mortuary Inspector, AFMAO
[Autopsy/Embalming Technician 3], Autopsy/Embalming Technician, AFMAO
[Records Administrator 2], Records Administrator, AFMAO
William D. Zwicharowski, Port Mortuary Branch Chief, AFMAO

ABBREVIATIONS USED

AFB – Air Force Base
AFI – Air Force Instruction
AFMAO – Air Force Mortuary Affairs Operations
AFME – Armed Forces Medical Examiner
AFOSI – Air Force Office of Special Investigations
AR – Army Regulation
CACO – Casualty Assistance Call Officers
CANA – Cremations Association of North America
CDI – Commander Directed Investigation
CID – Criminal Investigation Division
CJMAB – Central Joint Mortuary Affairs Board
CMAOC – Casualty and Mortuary Affairs Operations Center
CONUS – Continental United States
DA – Department of the Army
DoD – Department of Defense
ECP – Exposure Control Plan
EOD – Explosive Ordnance Disposal
FBI – Federal Bureau of Investigation
HAF/A1M – Manpower Requirements, Organization, and Resources, Headquarters Air Force
HAF/A1S – Directorate of Services, Manpower and Personnel, Headquarters Air Force
HVAC – Heating Ventilation and Air Conditioning
HM1 – Hospital Corpsman First Class
HR – Human Remains
HQ AF – Headquarters Air Force
IED – Improved Explosive Device
IG – Inspector General
IO – Investigating Officer
LRMC – Landstuhl Regional Medical Center
ME – Medical Examiner
MOMS – Mortuary Operations Management System
MSPB – Merit Systems Protection Board
NAVMEDCOMINST – Naval Medical Command Instruction
OAFME – Office of the Armed Forces Medical Examiner
OCO – Overseas Contingency Operations
OPR – Office of Primary Responsibility

OPSO – Operations Processing Officer
OSC – Office of Special Counsel
OSD – Office of the Secretary of Defense
PADD – Person Authorized to Direct Disposition of Human Remains
PPE – Personal Protective Equipment
ROI – Report of Investigation
SA – Special Agent
SAF/IG – Air Force Inspector General
SAF/IGQ – Air Force Inspector General's Directorate for Complaints Resolution
SECAF – Secretary of the Air Force
SECDEF – Secretary of Defense
SOP – Standard Operating Procedure
SrA – Senior Airman
TB – Tuberculosis
TIG – The Inspector General
TMEP – Theater Mortuary Evacuation Point
USAF – United States Air Force
USAMAA-E – U.S. Army Mortuary Affairs Activity-Europe
USMC – United States Marine Corps
USN – United States Navy