



NAVSEA

WARFARE CENTERS

Indian Head EOD Technology Division

NAVAL SURFACE WARFARE CENTER

INDIAN HEAD EXPLOSIVE ORDNANCE DISPOSAL TECHNOLOGY DIVISION

Retiring Aircraft

26 June 2018



Purpose



- Purpose
 - Discuss considerations and requirements that need to be accomplished during the CAD/PAD logistics aircraft strike planning process
 - Identify unintended outcomes if the plan is not executed
- The logistical elements addressed are sentencing, packaging and transportation

Note: Sentencing is the assigning of the proper condition code in terms of readiness for issue and use and/or to identify the action required to determine or to change that readiness.

Routine Disposition Process



- Process for routine (automated) CAD/PAD dispositions
 - Disposition procedures are contained in NAVSUP P-724
 - Navy Ordnance Information System (OIS) computer issues disposition release orders (DROs) on the 15th of the month.
 - DROs direct weapons departments to ship material to Army for demil
 - For Marine Corps, the Indian Head Consolidated Stock Point in conjunction with NAVSUP Ammo Logistics Center (NALC) inventory managers pre-sentence before expiring devices are removed. Return paperwork for Fleet Returns accompanies the replacement devices with shipping labels for return for demil, rework or ordnance assessment (OA)
- Condition code assignments
 - Return for demil is assigned Condition Code H
 - Return for rework is assigned Condition Code F
 - Return for OA is assigned Condition Code J

Routine Disposition Process - Cont.



- OA samples are selected and pulled from aircraft at opportune availabilities considering appropriate installed times and lot numbers to measure reliability
- Other services have similar demil processes
 - Air Force uses Condition Code P = similar result to Condition Code H = unserviceable = dispose
- Ordnance is shipped from all services to the Army for demil
 - Army has been designated as the Single Manager for Conventional Ammunition
 - Most demil processes employ “closed technologies” = no release of toxins – Environmental Protection Agency approved

Non-routine Disposition Process



- Non-routine disposition transactions require human intervention to accomplish due to unique circumstances. Examples include devices that are not identifiable, not cataloged or at an activity that is not an OIS reporter
- Indian Head logistics personnel, as subject matter experts, assist the NALC to find solutions and resolve issues by engaging with the Packaging, Handling, Storage and Transportation (PHST) Center, Designated Disposition Authority, NOSSA and others to provide technical guidance and direction as the circumstance dictates

Aircraft Strike Logistics Problem



Some striking activities may not have adequately planned for logistical support for disposition, packaging or transportation after material is removed from the aircraft

Impacts from Inadequate Planning



- Explosive Safety Issues
 - Devices may end up not being stored in sited facilities or transported in performance oriented packaging (POP) approved boxes
- Cost driver: nongovernmental agencies pay expenses for logistics support to remove, pack and ship assets
- Accountability
 - Unauthorized disposals by local EOD
- Since NALC and Indian Head are not included in initial decisions, disposition instructions are not in place for final destination of CAD/PAD
 - Inventory inaccuracies occur
 - Material in ready-service lockers are frustrated
- Packaging solutions are not established up front to enable immediate relocation of the material

Poor Planning Case Study



- In 2011, devices from an EA-6B were left behind on a New York museum floor after the aircraft was stricken and removed
- Weapons Station Earle had to assist
 - Wood boxes needed to be built
 - Safety caps, shorting devices had to be procured
 - 3 trucks were required to go to different locations
 - Permits, escorts and lead times required thru NYC
- Due to poor planning, the process took twice as long and costs more than doubled



Good Planning Case Study



- V-22, stricken in January 2018
- Airframe to be used for fire/crash/rescue training
- Results of proper planning were:
 - Items not deemed flight safety critical for the one-time last flight could be removed (JL03 internal initiators for passenger escape – no passengers were on board)
 - Pre-sentencing for disposition occurred early in planning
 - All devices were returned to Indian Head for either restocking or ordnance assessment in a timely fashion
 - Some packaging materials were onboard the aircraft and available for packaging after removal from the aircraft
 - Arrangements were made with Air Force ammo for courtesy storage and shipping back to Indian Head



Bone Yard



- Most stricken aircraft from all services go the 309th Aircraft Maintenance and Regeneration Group at Davis-Monthan Air Force Base aka the “Bone Yard”
 - CAD/PAD are removed within 90 days of arrival
 - Transfer lines (SMDC) remain installed until aircraft are taken apart to be demilled
 - Defers labor costs
- Bone Yard is operated by Air Force
- Navy NAVSUP Detachment onboard coordinates strike actions
 - Communicates with CAD/PAD inventory managers at NALC Mechanicsburg to obtain DROs



Indian Head Initiatives



- Engaged the Navy/MC strike process
 - Interfaced with the Bone Yard
 - We now receive Navy induction schedules every two weeks
 - Logistics management specialists can identify needed assets by reviewing BUNO logbooks and work with NALC to pre-sentence
- Not all aircraft go the Bone Yard some go to museums or nongovernmental agencies
 - Working to engage with platform class desks to know what BUNOs will go to places other than the Bone Yard
- Researching to know and receive invite to annual strike board meetings to insert CAD/PAD logistics planning into the strike process

The Power of CAD/PAD



- As previously stated, after being removed from the aircraft, the devices must be managed in accordance with munitions rules to maintain explosives safety
- For appreciation, the next slide shows how much power can be released when functioned as designed within the appropriate environment. Imagine if a device fired in a museum in the public domain.

The Power of Energetics – Cont.



Bottom Line



- Our goals are to:
 - Establish a routine process for CAD/PAD dispositions from stricken aircraft
 - Maintain strong explosives safety practices for accountability, storage and packaging
 - Reduce frustration and cost
 - Reutilize CAD/PAD by:
 - Restocking
 - Reworking
 - Conducting OAs

