This instruction implements Department of Defense Instruction (DoDI) 4160.28, DoD Demilitarization (DEMIL) Program, Department of Defense Manual (DoDM) 4160.21V1, Defense Materiel Disposition: Disposal Guidance and Procedures, DoDM 4160.28V3, Defense Demilitarization: Procedural Guidance, and Air Force Instruction (AFI) 23-101, Air Force Materiel Management. This publication provides guidance for the demilitarization of Government property determined to be excess to government requirements and must be rendered incapable of performing a military utility or capability deemed to be unauthorized for commercial or civilian use. It applies to all AF personnel (military, civilian, and contractor) working within the Air Force Materiel Command (AFMC). Additionally, it applies to Air Force Reserve Command (AFRC) and Air National Guard (ANG) Units. Refer recommended changes and questions about this publication to the Office of Primary Responsibility (OPR) using AF Form 847, Recommendation for Change of Publication; route AF Forms 847 from the field through the appropriate functional chain of command. All AFMC units will process AF Forms 847 for all HQ AFMC/A4R publications IAW the MANDATORY process in paragraph 1.1.5. (T-2) This publication may not be supplemented or further implemented/extended. The authorities to waive wing/unit level requirements in this publication are identified with a Tier (“T-0, T-1, T-2, T-3”) number following the compliance statement. Submit requests for waivers, using AF Form 679, Air Force Publication Compliance Item Waiver Request/Approval, through the chain of command to the appropriate Tier waiver approval authority, or alternately, to the Publication OPR (HQ AFMC/A4RX) for non-tiered compliance items. Requests for waivers for all compliance items must be approved by HQ AFMC/A4/10 prior to implementation. (T-2) Ensure that all records created as a result of
processes prescribed in this publication are maintained IAW Air Force Manual (AFMAN) 33-363, Management of Records, and disposed of IAW Air Force Records Information Management System (AFRIMS) Records Disposition Schedule (RDS). The use of the name or mark of any specific manufacturer, commercial product, commodity, or service in this publication does not imply endorsement by the Air Force.

Chapter 1— GUIDING PRINCIPLES

1.1. Purpose, Scope and Policy................................. 3

Chapter 2— ROLES AND RESPONSIBILITIES

2.2. Air Force DEMIL Program Administrator (HQ AFMC/A4R) ......................... 5
2.3. Program Offices will ........................................... 5
2.4. Aerospace Maintenance and Regeneration Group (AMARG) ......................... 6

Chapter 3— MUSEUMS, FIELD UNITS AND SPARES/SUBSYSTEMS

3.1. Asset Transfer to the National Museum of the United States Air Force ........ 8
3.2. Demilitarization/Destruction of Weapon Systems by Organizations other than AMARG ......................................................... 8
3.3. Demilitarization/Destruction of Spares/Subsystems .................................. 9

Chapter 4— TRAINING

4.1. DEMIL Initial and annual refresher training .............................................. 12
4.2. DEMIL codes are assigned IAW DoD/DLA policy .................................... 12
4.3. DEMIL code challenges and changes ...................................................... 12

Attachment 1— GLOSSARY OF REFERENCES AND SUPPORTING INFORMATION 13
Attachment 2— DEMILITARIZATION PLANNING GUIDANCE 16
Attachment 3— DEMIL OF HAZARDOUS MATERIAL 24
Chapter 1

GUIDING PRINCIPLES

1.1. Purpose, Scope and Policy.

1.1.1. Overview. This instruction outlines the purpose, responsibilities, actions required and necessary training regarding the Air Force Demilitarization (DEMIL) process.

1.1.2. Purpose. The purpose of this instruction is to implement direction from the Department of Defense (DoD) and Secretary of the Air Force (SECAF) as outlined in those publications implemented by this policy. This policy provides direction to the Program Offices, the Aerospace Maintenance and Regeneration Group (AMARG) and procedures for transfer of weapon systems to museums and other organizations. These references will be specifically enumerated where applicable.

1.1.3. Policy.

1.1.3.1. DoDM 4160.28V3 establishes the procedures and identifies the categories of property and key elements which define the requirement for demilitarization. It also provides guidance as to the method and degree of demilitarization required for weapon systems/end items.

1.1.3.2. DoD implementation was accomplished by Integrated Materiel Manager (IMM) assignment of demilitarization codes to each National Stock Number (NSN) item. The demilitarization code assigned is a part of the Federal Cataloging System and is published in the Management List-Consolidated, commonly known as the ML-C. Refer to DoDM 4160.28 V2, Defense Demilitarization: Demilitarization Coding, for a description of each DEMIL code.

1.1.3.3. The system, components, or items installed on aircraft, missiles and major end items that are not identified by individual NSNs cannot use DEMIL Codes but must still be demilitarized prior to release to the general public. To ensure compliance with DoDM 4160.21V1 criteria, the AF has alternate methods to identify and accomplish the required demilitarization/destruction of installed items as the weapon system is processed for disposal.

1.1.3.4. Funding for demilitarization is dependent on the type of item demilitarized, and the particular scenario involved. Funding guidance can be found in AFI 65-605V1, Budget Guidance and Technical Procedures. General guidance for various DEMIL and disposal scenarios can be found in Table A2.2 of this publication.

1.1.4. Delegation of Authority: Air Force (AF). AF/A4 Logistics, Engineering & Force Protection directs HQ AFMC/A4R will act as the Air Force DEMIL Program Administrator according to AFI 23-101, para 6.3.2.1.

1.1.5. AF Form 847 Process. All Centers will assign two Points of Contact (POCs), primary and alternate, who are authorized to upload e-AF Forms 847 to the HQ AFMC e-AF Form 847 SharePoint. POCs will ensure all e-AF Forms 847 are loaded on the HQ AFMC E-SCM SharePoint within 30 days of receipt, but must de-conflict any internal issues and only provide the Center’s overall viewpoint. The POCs must also appoint Subject Matter Experts (SMEs) below the Center level who will review/coordinate on all AF Forms 847 submitted from other
Centers. Additionally, the SMEs will review draft publications, update comment resolution matrices, and advocate for their AF Forms 847 during the adjudication processes. The Center POCs will also access the HQ AFMC E-SCM SharePoint in order to obtain current status of submitted e-AFForms 847, and keep their respective Centers informed of status. HQ AFMC/A4RX will facilitate this process by publishing a timeline and Rules of Engagement prior to updating AFMC publications, adjudicate all comments and provide status on the SharePoint, resolving all disputes IAW AFI 33-360. Once all steps have been completed, the affected publication will be submitted for formal review, coordination and signatures. All non-AFMC organizations will refer recommended changes and questions concerning this publication to the OPR (HQ AFMC/A4RX), via e-mail, using AF Form 847.
Chapter 2

ROLES AND RESPONSIBILITIES

2.1. Demilitarization/Destruction of Air Force Weapon Systems. The program office is responsible for identifying procedures and techniques to ensure that all "lethal" as well as "key points" are properly identified for demilitarization on all configurations of each Mission Design Series (MDS) of aircraft, munitions item/AUR, and/or major end item.

2.1.1. Any entries on paper/handwritten forms must be typed or neatly printed in blue or black ink. The PO shall be responsible to ensure all form information is maintained in an official repository system.

2.2. Air Force DEMIL Program Administrator (HQ AFMC/A4R) will:

2.2.1. Keep DEMIL training current.
2.2.2. Provide oversight of the Air Force DEMIL program.
2.2.3. Analyze quarterly coding accuracy statistics and training metrics.
2.2.4. Coordinate with each Inventory Control Point for corrective action on coding inaccuracies and training requirements.
2.2.5. Coordinate and approve all DEMIL plans on an annual basis.
2.2.6. Post all DEMIL plans to the HQ AFMC/A4R DEMIL SharePoint site at: https://cs2.eis.af.mil/sites/12151/AF%20Demilitarization%20DEMIL/Forms/AllItems.aspx.

2.3. Program Offices will: (T-2)

2.3.1. Demilitarization/destruction instructions are to include instruction on how to prepare the A/C for final destruction with specific references to locations of hazardous and radioactive materials. Demilitarization/destruction instructions are intended to make the A/C safe for final demilitarization/destruction.

2.3.1.1. Instructions must meet one of the following criteria:

2.3.1.1.1. Be Technical Orders (TOs) for aircraft.
2.3.1.1.2. Be a detailed set of procedures for an individual asset.
2.3.1.1.3. Be a formal plan with specialized instructions for demilitarization of hazardous items see Table A2.1 for specific guidance.

2.3.1.2. Demilitarization instructions are documented as a DEMIL plan/TO identified for each MDS aircraft (and configuration/block if differences exist), munitions item/AUR, and major end item. Instructions will be retained for use as long as the AF has possession of any of these items.

2.3.1.3. Instructions are required whether the Air Force or a contractor is responsible for the demilitarization of the weapon system. Ownership includes assets in possession of the National Museum of the United States Air Force (NMUSAF).
2.3.2. Include in the DEMIL plan how to completely destroy the system in the event the level of demilitarization required changes or the weapon system and munitions item/AUR is deemed as unsafe and must be destroyed to prevent reuse or harm to the public.

2.3.3. Develop specific demilitarization instructions for assets being transferred to the NMUSAF.

2.3.4. Develop a plan for equipment that belongs to the Air Force. This is to meet DoD requirements, and to allow for prompt processing of a weapon system in the event a system suffers failure due to an accident long before its planned retirement.

2.3.5. Provide a copy of the DEMIL plans developed for Air Force generated aircraft to the Aerospace Maintenance and Regeneration Group (AMARG) and/or the NMUSAF. Note: Plans developed for Army, Navy, and Coast Guard generated aircraft are sent to the generating service or agency as specified in the Inter-service Support Agreement (ISA).

2.3.6. Review plans biennially to update requirements due to modification, change in DoD policy, environmental protection requirements, etc. Certifying that the DEMIL Plans/TOs are current and up to date must be made by the Program manager.

2.3.7. Certify completion of the DEMIL plans to meet the requirements listed in paragraph 2.2.

2.3.8. Ensure DEMIL plans include a list of all materials embedded in the weapon system to provide visibility of items that may become identified as requiring special processing in the future.

2.3.9. Support all DoD activity requests for copies of specific DEMIL plans to be used in accomplishing demilitarization of a weapon system or major end item locally when the system is not to be sent to AMARG.

2.3.10. Develop instructions to render an asset incapable of performing the function (offensive/defensive capability) for which it was developed. (For example, combat aircraft must be rendered unable to fly or be returned to flyable condition.) Key point demilitarization of weapons is required. The instructions should include how to ‘safe’ the system as well as the demilitarization.

2.3.11. Refer to the DoD DEMIL Program Website at https://demil.osd.mil/documents/tmq41demilplan.pdf for a suggested format for a demilitarization plan as well as a sample plan.

2.4. Aerospace Maintenance and Regeneration Group (AMARG) will: (T-2)

2.4.1. Ensure only technically qualified personnel conduct demilitarization of systems on end items when the end items are ready to move to the Defense Logistics Agency Disposition Services (DLADS).

2.4.2. AMARG has had an approved waiver (DoD Demilitarization Program Office J-334) from DODM 4160.28-M-V1-3 since June 2007. Current waiver expires July 2021

2.4.2.1. A lockable, securable "control container" will be utilized to stage all items being forwarded to Defense Logistics Agency Disposition Services (DLADS) for demilitarization and disposal.
2.4.2.2. Once hazardous material removal is accomplished, all items being processed for disposal will be secured in the control container.

2.4.2.3. Specific language would be added to the DD Form 1348-1 A to prohibit subsequent redistribution or reuse. Entire contents of container will be shredded in the presence of an authorized verifier and certifier.

2.4.2.4. When a controlled container is full, 309 AMARG will coordinate with DLADS. This secured container will be transported by 309 AMARG to DLADS and then DLADS will transport to designated contractor location. The DLADS verifier will verify DEMIL by the contractor and a DRMS Certifier will certify DEMIL compliance by the contractor.

2.4.3. Ensure any peculiar modifications to an individual end item, not provided for in the DEMIL plan, are reviewed and demilitarization is accomplished when appropriate.

2.4.4. Establish a control system to enable a designated individual to certify, on a timely basis, that all demilitarization actions required on installed items have been accomplished.

2.4.5. Ensure only required demilitarization is accomplished.

2.4.6. Ensure aircraft are not subjected to unnecessary or careless destruction.

2.4.7. Demilitarization of the airframe and components is not accomplished at AMARG, and must be accomplished by DLADS along with the disposal action”. Reasoning is that the aircraft is prepped by AMARG by removing all known hazards/ radioactive materials and the demilitarization is performed by DLADS. Note: Disposal of the airframe itself is coordinated between AMARG/DLADS.
Chapter 3

MUSEUMS, FIELD UNITS AND SPARES/SUBSYSTEMS


3.1.1. Weapon systems/end items may be selected for transfer to the NMUSAF. With the exception of the displays within the NMUSAF itself and the Smithsonian Institution, all assets must be completely demilitarized. Previously, assets on display in military museums were partially demilitarized and assets on display in civilian museums were more completely demilitarized. **Note:** Due to the potential movement of assets from one museum to another, all assets, except NMUSAF/Smithsonian Institution assets, will be demilitarized to the same level.

3.1.2. There are several scenarios with respect to the demilitarization of aircraft selected to be transferred to a museum for display purposes. These scenarios include:

3.1.2.1. Weapon Systems being transferred to the NMUSAF are moved into the museum and demilitarization will be accomplished by the restoration unit at the museum. (T-2)

3.1.2.2. Weapons Systems being transferred to a military installation for display at a base that possesses the base maintenance expertise to perform the demilitarization will be demilitarized at that base by maintenance personnel. (T-2)

3.1.2.3. Weapon Systems being transferred to a military museum at a base that does not possess base maintenance capability must be moved to AMARG to be demilitarized before being transferred to the gaining museum. (T-2)

3.1.2.4. Weapon Systems being transferred to a civilian museum must be moved to AMARG to be demilitarization before being transferred to the civilian museum. (T-2)

3.2. Demilitarization/Destruction of Weapon Systems by Organizations other than AMARG.

3.2.1. Demilitarization is accomplished IAW DoDM 4160.28 criteria and as identified in the DEMIL plan. The program office must ensure that any peculiar modifications to an individual end item are addressed in the DEMIL plan. (T-2) The program office must also confirm the configuration of each specific end item being disposed of, and refine the demilitarization/destruction instructions based on temporary modifications that may have been made to the system. (T-2)

3.2.2. The owning activity is responsible for removing any items that are Classified, Hazardous, Explosive, or possess some characteristics which make it unfeasible to be demilitarized at this site. If the weapon system cannot be demilitarized on site, the owning activity must transfer the weapon system to another activity possessing the capability to perform this task. (T-2)

3.2.3. A DD Form 1348-1A, prepared by the organization performing the demilitarization to transfer accountability to DLADS, must include a signed certification indicating demilitarization of all required items or systems was accomplished. (T-2) **Note:** AFI 20-110, *Nuclear Weapons-Related Materiel (NWRM) Management*, contains instructions for reclamation, demilitarization and disposal of weapon systems that may contain NWRM.

3.2.4. There are some instances in which Weapon Systems can be demilitarized in place, such as Crash/Battle damaged aircraft, or if it is unfeasible or unnecessary to transport to AMARG for demilitarization. In these instances, the owning activity is responsible for all actions necessary to ensure proper demilitarization is accomplished.

3.2.4.1. Ensure organizational processes are in place to address contractual agreements for depot assistance requests to/from contractor based maintenance or engineering functions to include incorporation of this policy where appropriate.

3.2.4.2. LSE/Complex engineers should co-establish documented procedures to communicate and manage the problem resolution process with an emphasis to control unanticipated delays.

3.2.4.3. DE (delegated engineer) disposition for review and reissue, shall reference previous AFMC Form 202, *Nonconforming Technical Assistance Request and Reply* control numbers and ensure reissues of no more than two times (initial and 2 reissues) without initiating a documented engineering review to determine the appropriate TO or drawing changes required.

### 3.3. Demilitarization/Destruction of Spares/Subsystems

3.3.1. All NSNs must have demilitarization/destruction procedures. (T-2)

3.3.1.1. The Item Management (IM) Team, including the Equipment Specialists (ES), must develop technical procedures for demilitarization and destruction of each NSN within one year of the asset being used in the system. (T-2) This information must be included in the DEMIL plan for the whole weapon system. (T-2) The team is also required to demilitarize/destroy failed spares/subsystems. Destruction instructions are required whether the item is cataloged as requiring destruction or not, due to the possibility that it may be unsafe for the public due to failure or change in policy. Specific attention must be paid to the metallurgic content of the assets and the propensity for these metals to become hazardous or develop characteristics which may require demilitarization.

3.3.1.2. The IM team must forward updates or new demilitarization/destruction procedures to each program office for all NSNs it manages that are used on the weapon system. (T-2) New instructions/updates are due three months prior to the one year mark as determined in paragraph 3.3.1.1.

3.3.1.3. The information forwarded must include a list of all materials embedded in the NSN to provide visibility of items that may be identified as requiring special processing in the future. (T-2)

3.3.1.4. Due to the new requirement for demilitarization/destruction procedures for each NSN, the IM team may not be able to provide the procedures and list of materials used within one year. If there is a backlog, the IM team must interface with the program offices to identify the backlog and the program office must document in the Life Cycle Sustainment Plan (LCSP) how and when the backlog will be eliminated. (T-2)
3.3.1.5. For major modifications (designated as acquisition programs), the program office must acquire the data required for the NSN level as well as the weapon system level. (T-2)

3.3.2. Air Force Owned, Contractor Managed NSNs.

3.3.2.1. Demilitarization instructions are required for all DoD owned assets per DoD policy. In the event that a contractor is selected to perform supply chain management functions, the requirement to be able to perform demilitarization/destruction still exists. The program office must add a Contract Line Item (CLIN) to the contract containing the data/instructions necessary to demilitarize the weapon system, and instructions for all its NSNs must be delivered to the program office. (T-2) This CLIN does not have to be activated unless the contractor will no longer provide these services or the contract is coming to an end. A list of materials used is critical and must also be purchased due to the AF’s history of keeping items in service after the commercial users stop using the asset. If demilitarization is not to be performed by the contractor, but by the DoD, the cost to obtain this data must be cited in the LCSP.

3.3.2.2. In the event that excess items will be disposed of by the government instead of the contractor, the program office must identify the cost to reclaim it in the LCSP. (T-2) The program office must also demilitarize and dispose of the assets. (T-2) Work should include the preparation of the demilitarization certificate, preparation of AFMC Form 202, or DD Form 1348-1A for turn in of assets to DLADS. Demilitarization considerations should include work performed by the three Air Logistics Complexes (ALCs) as well as AMARG. In the event that the government identifies excess dormant items being stored in government owned facilities, the using system program office shall provide DEMIL/disposition guidance to the requesting organization within 30 days of notification.

3.3.2.3. The DoD DEMIL Program Website at https://demil.osd.mil, under Policy Procedures & Guidance, DEMIL, and Contractor Inventory, contains the requirements for the demilitarization and disposal of assets under Contractor management and control.

3.3.3. Technical Requirements for Demilitarization/Disposal.

3.3.3.1. The demilitarization plan should include demilitarization code determination, procedures for demilitarizing the items, and procedures for execution of the demilitarization plan. This should be performed as soon as material designs are documented (Milestone Decision Authority C).

3.3.3.1.1. The Program Manager shall ensure demilitarization and disposal of end items are addressed in the program budget. (T-2)

3.3.3.1.2. The demilitarization plan shall be documented in the Life Cycle Management Plan and periodically reviewed; specifically when the weapons system is approaching retirement. (T-2)

3.3.3.2. The comprehensiveness of the Demilitarization Plan depends on the complexity and military capabilities of the item/system in question. However, the plan must address the following areas: (T-2)

3.3.3.2.1. A brief description of the item/system in question. This should include a physical as well as a functional description of the item so as to provide a clear picture
of the demilitarization that will be required to render it safe for whatever disposal method is selected.

3.3.3.2.2. A safety summary of the item to ensure any hazardous material is properly identified to preclude any accidental injury during the demilitarization process.

3.3.3.2.3. A general statement of the environmental significance of the item, to include the identification of any recyclable material, and any special instructions relative to disposing of possible waste material resulting from the demilitarization process.

3.3.3.2.4. Any special handling instructions that are required, to include any special tools or equipment based on the size/weight of the item, or the general characteristics of the item.

3.3.3.2.5. Specific disassembly instructions/procedures required, to include any personal protective equipment.

3.3.3.2.6. Any reference documents such as federal law or regulatory requirements that are applicable to the item.

3.3.3.2.7. Any terms and definitions that would assist the activity performing the demilitarization.

3.3.3.3. DEMIL Planning Guidance can be found on the DoD DEMIL Program Website at https://demil.osd.mil.
Chapter 4

TRAINING

4.1. DEMIL Initial and annual refresher training. IAW DoDM 4160.28V1, *Defense Demilitarization: Program Administration*, is required for all personnel involved with DEMIL coding, DEMIL code challenges and/or changes, DEMIL execution, and DEMIL management. (T-0) DEMIL coding and performance responsibilities apply to AF organic Weapon Systems and AF Contractor Supported Weapon Systems (CSWS) throughout the Weapon System lifecycle. PMs must ensure that AF ES (or CSWS ES equivalent personnel) who are responsible for DEMIL code assignment (per AFI 23-101, Section 6C), and other personnel with DEMIL performance or management responsibilities, accomplish annual and refresher DEMIL training, and that training records are maintained by the Program Office. (T-2)

4.2. DEMIL codes are assigned IAW DoD/DLA policy. DEMIL coding shall be accomplished IAW DoDM 4160.28 and applicable guidance on the DoD DEMIL Web Site ([https://demil.osd.mil/](https://demil.osd.mil/)). (T-0) DEMIL codes are managed and maintained by the DoD Demilitarization Coding Management Office in the Federal Logistics Information System (FLIS). DEMIL codes shall also be managed and maintained in AF inventory management systems of record (e.g. D043/D035 or CSWS equivalent systems). (T-2) Air Force is responsible for DEMIL execution of all AF assets that are classified (DEMIL Code P) or ammunition/explosive (DEMIL code G). DLA Disposition Services is responsible for DEMIL execution of all unclassified, non-explosive assets (DEMIL codes B, C, D, F, Q).

4.3. DEMIL code challenges and changes. Shall only be accomplished through D143C (AF system of record), or contractor equivalent Financial Improvement Audit Remediation (FIAR) compliant system, through the DoD Demilitarization Coding Management Office. (T-2) DEMIL codes shall be validated at the end of AF item useful life (e.g. AAC code Y), even if no stock is thought to remain. (T-2)

SARA V. KELLER, SES, USAF
Director of Logistics, Civil Engineering,
Force Protection and Nuclear Integration
Attachment 1

GLOSSARY OF REFERENCES AND SUPPORTING INFORMATION

References
DoDI 4160.28, DoD Demilitarization (DEMIL) Program, 7 April 2011
DoDI 5000.02, Operation of the Defense Acquisition System, 7 January 2015
DoDI 5160.68, Single Manager for Conventional Ammunition (SMCA): Responsibilities of the SMCA, the Military Services, and the United States Special Operations Command (USSOCOM), 29 Dec 2008
DoDM 4160.21V1, Defense Materiel Disposition: Disposal Guidance and Procedures, 22 October 2015
DoDM 4160.28V1, Defense Demilitarization: Program Administration, 9 August 2017
DoDM 4160.28V2, Defense Demilitarization: Demilitarization Coding, 9 March 2017
DoDM 4160.28V3, Defense Demilitarization: Procedural Guidance, 7 June 2011
AFI 20-110, Nuclear Weapons-Related Materiel Management, 04 June 2018
AFMAN 65-605, Volume 1, Budget Guidance and Technical Procedures, 24 October 2018
AFMAN 33-363, Management of Records, 01 March 2008

Prescribed Forms
None

Adopted Forms
DD Form 1348-1A, Issue Release/Receipt Document,
AF Form 679, Air Force Publication Compliance Item Waiver Request/Approval
AF Form 847, Recommendation for Change of Publication
AFMC Form 202, Nonconforming Technical Assistance Request and Reply

Abbreviations and Acronyms
AE—Ammunition and Explosives
AMARG—Aerospace Maintenance and Regeneration Group
CLIN—Contract Line Item
CSWS—Contractor Supported Weapon System
DEMIL—Demilitarization
DLA—Defense Logistics Agency
Terms

Demilitarization — The act of destroying the military offensive or defensive advantage in equipment. This process may be applied to serviceable, unserviceable, used or unused items, which are excess, obsolete, or uneconomically repairable, as well as, items determined to be hazardous for continued storage. Examples of demilitarization methods are disassembly, washout, melt-out, incineration, deactivation, mutilation, chemical neutralization, or open burning. The environmentally and safety-approved methods will render the item inert and no longer usable for military applications.

Disposal — End of life Tasks and/or Actions for residual materials resulting from demilitarization or disposition operations.

Demilitarization/Disposition Plan — A written document that describes the item and identifies processes, procedures and equipment necessary to effect the safe and environmentally acceptable demilitarization or disposition, and disposal of the new or modified ammunition item. See Attachment 2 for instructions and an example of a Demilitarization/Disposition Plan.

key points for DEMIL — The parts, components, alignment points, attachment fittings, or features of a next higher assembly which require DEMIL

Lethal — Are man-portable weapons made or modified to military specifications
for use as lethal instruments of war that expel a shot, bullet or projectile by action of an explosive.
Attachment 2

DEMITILIZATION PLANNING GUIDANCE

A2.1. Introduction.

A2.1.1. DEMIL planning early in the development of military systems is required by DoDI 5000.02, Operation of the Defense Acquisition System, and is an important activity to reduce the risks of inadvertent release of DoD property. The earlier in the development cycle that materiel is released, the greater the potential for replication and countermeasures to be developed. DEMIL planning is not independent of other programmatic planning activities and as such must leverage from, as well as contribute to, other activities.

A2.1.2. DEMIL plans will vary depending on the operational, logistical, and technical aspects of the system being addressed. Program Managers must tailor their plans based on the phase of the program and their strategies for DoD property disposition processing. (T-2)

A2.1.3. The DEMIL plan is intended to address the challenges that can arise when personnel who do not have detailed knowledge of a system and its materiel content, hazards, and specific DEMIL and TSC requirements, must process the materiel for DEMIL, TSC, and disposal. This is especially important when older systems, for which program managers may no longer be assigned and personnel with system knowledge are no longer available, are declared excess.

A2.1.4. A DEMIL plan shall be generated for all defense acquisition programs prior to Developmental Test and Evaluation, and before release of any new system or item to a non-military activity. (T-0) Additionally, a DEMIL plan shall be generated when any major modification or upgrade to an existing defense system or item is made. (T-0)

A2.1.5. Specialized knowledge and expertise is required when developing DEMIL plans for Ammunition and Explosives (AE). For conventional AE, DoDI 5160.68, Single Manager for Conventional Ammunition (SMCA): Responsibilities of the SMCA, the Military Services, and the United States Special Operations Command (USSOCOM), identifies responsibilities of the Army as the SMCA, and of the other Military Services. Additionally, each individual Military Service has specific requirements for conventional AE DEMIL plans.

A2.2. Relationships With Other Program Planning Activities.

A2.2.1. DEMIL analyses (e.g. coding, implementation strategy and planning) shall leverage other program activities to the maximum extent possible. Specific activities that may contribute to the DEMIL analysis include:

A2.2.1.1. Program Protection Plans.
A2.2.1.2. Program Security Guidelines.
A2.2.1.3. Environmental Safety and Health Analyses.
A2.2.1.4. Logistics Support Plans.

A2.2.2. DEMIL procedural development shall maximize use of existing data to include:

A2.2.2.1. Technical and Operating Manuals.
A2.2.2.2. Material Safety Data Sheets.
A2.2.2.3. Technical Drawings.
A2.2.2.4. Specifications.

A2.3. DEMIL Plan Types.

A2.3.1. There are two general types of DEMIL plans: the programmatic plan and the procedural plan.

A2.3.1.1. Programmatic DEMIL Plans. The programmatic plan is tailored to each acquisition program and may be addressed as a standalone or integrated with other plans. The programmatic plan answers the following questions and must be developed early in an acquisition program:

A2.3.1.1.1. What tasks need to be performed?
A2.3.1.1.2. Who performs those tasks?
A2.3.1.1.3. How are those tasks performed?
A2.3.1.1.4. How are DEMIL tasks integrated with other disciplines?
A2.3.1.1.5. How is DEMIL information made available to users?

A2.3.1.2. Procedural DEMIL Plans. The procedural plan provides information to support the performance of physical DEMIL and is needed as soon as material will be subject to a disposal requirement but no later than initial fielding. Procedural plans are generally intended to provide a DEMIL activity, regardless of item familiarity, with adequate procedures and guidance to accomplish the safe and environmentally acceptable DEMIL of any item. They must be tailored based on program-specific DEMIL performance strategies, available equipment and techniques, and the nature of the material. Procedural plans may address:

A2.3.1.2.1. Special tools and equipment.
A2.3.1.2.2. Personnel technical qualifications.

A2.3.2. Technical procedures for:

A2.3.2.1. Disassembly.
A2.3.2.2. DEMIL code “G”, “P”, and “F” special requirements.
A2.3.2.3. DEMIL code “C” key point identification.
A2.3.2.4. Safety requirements.
A2.3.2.5. Certification and verification.

A2.3.3. Data tables with:

A2.3.3.1. DEMIL codes for LSN and National Stock Number (NSN) items.
A2.3.3.2. Related logistics information.
A2.3.3.3. Hazardous materials.

A2.3.4. Processes for disposition of DEMIL residue as well as non-DEMIL-required materiel.

A2.4. Principles for Procedural DEMIL Plan Development.
A2.4.1. Procedural DEMIL Plans shall encompass the highest assembled portions of the system that will be dispositioned. Use of existing maintenance related disassembly procedures will naturally guide the structure of the plan. In some cases the system is partially disassembled before disposition, so the plan shall, at a minimum, start at the level of the assembled items and proceed in a “top down” fashion. (T-2)

A2.4.1.1. Disassembly must be to the lowest level where a DEMIL-required component exists. (T-2)

A2.4.1.2. The plan shall be written to allow entry at the point of an individual subassembly or component to address DEMIL of spare and repair parts. (T-2)

A2.4.1.3. Safety requirements related to the item and to the DEMIL processes for the item must be addressed. (T-2)

A2.4.1.4. The environmental considerations and liabilities associated with the disassembly and/or DEMIL processes must be addressed. (T-2)

A2.4.2. The use of existing reference documents, including technical manuals, to satisfy portions of plan requirements is encouraged. However, a means for the DEMIL Plan review, approval, and implementing activities to access these reference documents shall be provided.

A2.4.3. DEMIL and disposal plans must be updated throughout the defense program life cycle to include major program changes such as technology insertion, block upgrades, ordnance alterations, and approved engineering changes. (T-0)

A2.4.4. The DEMIL plan shall encourage prompt DEMIL of all surplus and excess DoD property throughout the acquisition life cycle including, but not limited to, advanced concept technology demonstration materiel, advanced development models, engineering development models, defective items and components, non-repairable items and components, and any other Acquisition Program materiel.

A2.4.5. No attempt shall be made to adapt or use a DEMIL plan to demilitarize an item that is potentially hazardous, or more hazardous, due to damaged and/or deteriorated condition. Such items are the responsibility of appropriate environmental (in case of non-explosive) or explosive ordnance disposal (EOD) (in case of explosive) teams who shall develop their own particular DEMIL procedures.

A2.4.6. A DEMIL plan shall include alternative methods, if possible, to allow for variations in equipment, tools, and skills that may be expected at organizations performing DEMIL.

A2.5. Suggested Format and Content Guidance. See the DoD DEMIL Program Website at https://demil.osd.mil for samples and formats.

A2.6. Review and Distribution.

A2.6.1. DEMIL plans shall be approved within an acquisition program and are subject to any DoD Component-specific review and approval requirements. (T-0) Existing fielded programs shall comply with these guidelines to the maximum extent practical. (T-0)

A2.6.2. Approved plans will be distributed to the DDPO for posting to the DoD DEMIL Program Website. (T-0) Exceptions to the posting requirement include those plans for which material has distribution restrictions because of its security classification and proprietary information.
A2.6.3. Support with guidelines and reviews of plans can be obtained through the Demilitarization Life-cycle Planning Center (DLPC). Contact the DLPC through the DoD DEMIL Program Website.

Table A2.1. Energetic and Hazardous Material.

<table>
<thead>
<tr>
<th>Hazard</th>
<th>Removable Item</th>
<th>Item Location (Aircraft IPB Ref)</th>
<th>Removal Procedure (Aircraft Job Guide Ref)</th>
<th>Equip Required</th>
<th>Removable Sub Assembly (Nomenclature / Part # / NSN)</th>
<th>Sub Assembly Location (Nomenclature / Part # / NSN)</th>
<th>SRU Removal Procedure (Commodity TO Removal Ref)</th>
<th>Equip Required</th>
</tr>
</thead>
<tbody>
<tr>
<td>Asbestos</td>
<td>T56-7 Engine / 370023-1 / 2840-01-549-1623</td>
<td>1C-130B-10, F. 6-1, I. 5</td>
<td>1C-130H-71JG-00-2</td>
<td></td>
<td>Turbine Vane Air Seal / 6808071 / 5330-00-715-7400</td>
<td>2J-T56-54, F.23, I. 14</td>
<td>2J-T56-56</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Fire Loop Grommet / MS35489-318 / 5325-00-174-9336</td>
<td>1F-4G-4-5, F. 5-28A, I. 5</td>
<td>1F-4G-2-13</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PCBs</td>
<td>Navigational Computer / 662433 / 6605-00-994-0194</td>
<td>1F-4C-4-4, F. 98, I. 77</td>
<td>1F-4G-2.39.2</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Radar Antenna / 750R400G0-1 / 5985-01-146-4630</td>
<td>1F-16A-4-94, F. 29, I. 9</td>
<td>1F-16C-2-94JG-70-3</td>
<td></td>
<td>Tube Assembly / 646R336G0-1 / 5710-01-085-2763</td>
<td>11F5-29-4</td>
<td>11F5-29-2</td>
<td></td>
</tr>
<tr>
<td>Radiation</td>
<td>Landing Light Switch / 8905K766 / 5930-00-258-4707</td>
<td>1T-37B-4, F. 106, I. 20/1</td>
<td>1T-37B-2-6</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ignition</td>
<td>Ignition Exciter / 6812810 / 2925-00-608-0856</td>
<td>2J-156-54, F. 9, I. 15</td>
<td>1C-130H-2-80JG-00-1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>12P2-2APQ180-122.2</td>
</tr>
</tbody>
</table>
Table A2.2. Funding Matrix for DEMIL and Disposal Scenarios.

<table>
<thead>
<tr>
<th>Scenario</th>
<th>Requirements (Funds Owner)</th>
<th>Decision Authority</th>
<th>Type of Funds</th>
</tr>
</thead>
<tbody>
<tr>
<td>Induction of Weapon Systems into AMARG (active duty owned weapon systems)</td>
<td>Program Manager</td>
<td>Program Manager</td>
<td>DPEM (CAM)</td>
</tr>
<tr>
<td>Induction of Weapon Systems into AMARG (active duty owned test weapon systems)</td>
<td>Program Manager</td>
<td>Program Manager</td>
<td>Owning MAJCOM 3600</td>
</tr>
<tr>
<td>Induction of Weapon Systems into AMARG (ANG / AFRC owned weapon system)</td>
<td>Program Manager</td>
<td>Program Manager</td>
<td>ANG / AFRC</td>
</tr>
<tr>
<td>Induction of tooling, engines and other into AMARG (active duty owned)</td>
<td>Program Manager</td>
<td>Program Manager</td>
<td>DPEM (CAM)</td>
</tr>
<tr>
<td>Induction of tooling, engines and other into AMARG (active duty owned test)</td>
<td>Program Manager</td>
<td>Program Manager</td>
<td>Owning MAJCOM 3600</td>
</tr>
<tr>
<td>Induction of engines and other into AMARG (ANG / AFRC owned)</td>
<td>Program Manager</td>
<td>Program Manager</td>
<td>ANG / AFRC</td>
</tr>
<tr>
<td>Demilitarization at AMARG (disposal)</td>
<td>AMARG/Program Manager</td>
<td>Program Manager</td>
<td>DPEM (CAM)</td>
</tr>
<tr>
<td>Demilitarization in place</td>
<td>Owning Command</td>
<td>Program Manager</td>
<td>O &amp; M (if organic capability is not available)</td>
</tr>
<tr>
<td>Disposal/Demil of Crash/Battle Damaged W/S</td>
<td>Owning Command</td>
<td>Program Manager</td>
<td>O &amp; M Owning Command</td>
</tr>
<tr>
<td>Stock Funded Items (wholesale) ; not associated with drawdown of weapon system (includes Excess or Failure)</td>
<td>Item Manager</td>
<td>Item Manager</td>
<td>Service Level billing</td>
</tr>
<tr>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td>Air Force Managed (to DRMS – not demil codes P or G)</td>
<td>Item Manager</td>
<td>Item Manager</td>
<td>Budget Code of Item drives funding source</td>
</tr>
<tr>
<td>Depot Level Classified (CSAG-M) - Demil done by Depot Maintenance</td>
<td>Item Manager</td>
<td>Item Manager</td>
<td>Budget Code of Item drives funding source</td>
</tr>
<tr>
<td>Depot Level Classified - Demil done by Contractor</td>
<td>Item Manager</td>
<td>Item Manager</td>
<td>No funds required</td>
</tr>
<tr>
<td>Org Level Classified - Demil done by AF Personnel (SBSS driven)</td>
<td>Item Manager</td>
<td>Item Manager</td>
<td>Service Level billing; except hazardous bill is paid by activity turning in item</td>
</tr>
<tr>
<td>Hazardous (to DRMS) at Depot Level</td>
<td>Item Manager</td>
<td>Item Manager</td>
<td>Service Level billing; CE pays for hazardous</td>
</tr>
<tr>
<td>Hazardous (to DRMS) at Org-Level</td>
<td>Item Manager</td>
<td>Item Manager</td>
<td>Service Level Billing, Army Joint Munitions Command</td>
</tr>
<tr>
<td>Ammunition (safing / demil)</td>
<td>Item Manager</td>
<td>Item Manager</td>
<td>Service Level Billing, Army Joint Munitions Command</td>
</tr>
<tr>
<td>Explosives (safing / demil)</td>
<td>Item Manager</td>
<td>Item Manager</td>
<td>Service Level Billing, Army Joint Munitions Command</td>
</tr>
<tr>
<td>Dangerous Articles (safing / demil)</td>
<td>Item Manager</td>
<td>Item Manager</td>
<td>Service Level Billing, Army Joint Munitions Command</td>
</tr>
<tr>
<td>Non-Stock Funded Items - in accountable system</td>
<td>Program Manager</td>
<td>Program Manager</td>
<td>DRMO - Service Level billing</td>
</tr>
<tr>
<td>-----------------------------------------------</td>
<td>-----------------</td>
<td>----------------</td>
<td>-----------------------------</td>
</tr>
<tr>
<td>Non-Stock Funded Items (i.e. PK/MM/SR71) - not in accountable system, no longer cataloged</td>
<td>Program Manager</td>
<td>Acquisition Center that managed the program or AFMC if no AQ Center</td>
<td>O &amp; M (Not CAM) Out of cycle funding</td>
</tr>
<tr>
<td>Demilitarization due to deactivation or drawdown of Weapon System (MSD spares Decapitalization)</td>
<td>Program Manager</td>
<td>Program Manager</td>
<td>DPEM (CAM)</td>
</tr>
<tr>
<td>Items in stock tied to drawdown (common and unique items affected by drawdown)</td>
<td>Program Manager</td>
<td>Item Manager</td>
<td>DPEM (CAM)</td>
</tr>
<tr>
<td>Nuclear Weapon Related Material</td>
<td>Program Manager</td>
<td>Item Manager</td>
<td>Same as non NWRM (see scenarios above)</td>
</tr>
<tr>
<td>Transfer to USAF Museum</td>
<td>Losing Organization uses organic capability to deactivate, if requirement exceeds organic capabilities museum funds</td>
<td>USAF Museum</td>
<td>Museum O &amp; M Funds if required</td>
</tr>
<tr>
<td>Transfer to Civilian Museum</td>
<td>Program Manager will pay for demil or safing of W/S; Gaining Organization be in accordance with AF Museum Policy (transportation, upkeep, etc…)</td>
<td>USAF Museum</td>
<td>O &amp; M Funds</td>
</tr>
<tr>
<td>Weapon Systems not on an accountable system</td>
<td>AFMC/A3</td>
<td>AFMC/A3</td>
<td>O &amp; M (Not CAM) Out of cycle funding</td>
</tr>
<tr>
<td><strong>Plant Clearance</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Open Contract</td>
<td>Contract Program Office</td>
<td>Item Manager/Equipment Specialist</td>
<td>Funds on the contract</td>
</tr>
<tr>
<td>------------------------</td>
<td>-------------------------</td>
<td>-----------------------------------</td>
<td>-----------------------</td>
</tr>
<tr>
<td>Closed Contract</td>
<td>Contract Program Office or Activity that would have that responsibility today</td>
<td>Item Manager/Equipment Specialist if identifiable (if not contract program office)</td>
<td>O &amp; M</td>
</tr>
<tr>
<td>CLS Weapon Systems</td>
<td>Program Manager</td>
<td>Item Manager/Equipment Specialist</td>
<td>CLS (CAM) / Depends on Contract Funding</td>
</tr>
</tbody>
</table>
Attachment 3

DEMIL OF HAZARDOUS MATERIAL


A3.1.1. Removal procedures are not required for lubricants, greases, anti-seize compounds, and primers/paints.

A3.1.2. In addition to items identified as hazardous materials, include compressed gases or pressurized items (e.g. Emergency Escape Slides, Portable Oxygen Bottles, Engine/APU Fire Extinguishers, Portable Fire Extinguishers, accumulators, etc.) Provide the processing facility for halon containers.

A3.1.3. When identifying hazardous fluids such as fuel, oil, hydraulic fluid, the location/quantity should be identified by a qualified technician.

A3.1.4. When identifying fuel cells, presence of fuel foam should be identified. (This is often only applicable to certain tail numbers.)

A3.1.5. Extremely toxic substances such as Skydrol should be identified clearly using a “Warning” type call out.

A3.1.6. Refrigerants should be clearly identified.

A3.1.7. All asbestos should be identified. (e.g. Bleed Air Gaskets, Insulation Blankets, Fire Detection Grommets. There is no allowable limit.)

A3.1.8. All batteries should be identified. (e.g. Aircraft batteries, D-cell batteries in emergency exit lights & some LRU’s.)

A3.1.9. Fluorescent lights are a commonly overlooked hazardous item installed on some cargo aircraft.

A3.1.10. Electronic waste often lists the potential for “copper, beryllium, lead, tin, mercury, nickel, cadmium, chromium, selenium, present such as, but not limited to: gold, silver, platinum, palladium, iridium, rhodium, osmium and ruthenium.” However, it does not identify which specific components contain them.

A3.1.11. Beryllium copper components and other hazardous mechanical components should be identified.