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SECRETARY OF THE AIR FORCE**

AIR FORCE INSTRUCTION 13-527

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**NUCLEAR, SPACE, MISSILE, OR
COMMAND AND CONTROL
OPERATIONS**

**NUCLEAR WEAPONS AIRLIFT
OPERATIONS TRAINING**

COMPLIANCE WITH THIS PUBLICATION IS MANDATORY

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This publication implements Air Force Policy Directive (AFPD) 13-5, *Air Force Nuclear Mission* and is consistent with AFPD 11-2, *Aircrew Operations*. It provides guidance and procedures on the training program for mobility aircrews to safely accomplish Prime Nuclear Airlift Force (PNAF), PNAF support, and Emergency Nuclear Airlift Operations (ENAO) missions and establishes an associated command and control execution cell exercise requirement. This publication applies to all civilian employees and uniformed members of the Regular Air Force and Air Force Reserve C-17 aircrew members. This publication does not apply to the United States Space Force. This instruction does not apply to foreign exchange officers and Air National Guard assigned and/or attached to airlift squadrons operating C-17 aircraft. This Air Force Instruction (AFI) may be supplemented at any level but all supplements to this regulation must be coordinated and approved by the office of primary responsibility (OPR) listed above for coordination prior to certification and approval. Refer recommended changes and questions about this publication to the OPR using the Department of the Air Force (DAF) Forms 847, *Recommendation for Change of Publication*; route DAF Forms 847 from the field through the appropriate functional chain of command to AF.A10-C.Workflow@us.af.mil. The authorities to waive wing or unit level requirements in this publication are identified with a Tier (“**T-0, T-1, T-2, T-3**”) number following the compliance statement. See Department of the Air Force Manual (DAFMAN) 90-161, *Publishing Processes and Procedures*, for a description of the authorities associated with the tier numbers. Submit requests for waivers through the chain of command to the appropriate tier waiver approval authority or alternately to the requestor’s commander for non-tiered compliance items.

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SUMMARY OF CHANGES

Key changes include updated ARMS/Currency IDs and Copilot SAAM Sortie currency. Multiple tiered waiver additions were also added along with updated references throughout. Removed C-130 aircraft and aircrew references.

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Chapter 1

GENERAL

1.1. Training Objectives.

1.1.1. This instruction prescribes basic policy and guidance for training PNAF crewmembers and associated mission support agencies for the execution of nuclear airlift operations. This instruction also prescribes basic training guidance for Regular Air Force and Air Force Reserve C-17 crewmembers to conduct ENAO.

1.1.2. In accordance with (IAW) AFI 11-200, *Aircrew Training, Standardization/Evaluation, and General Operations Structure*, this instruction consolidates PNAF training requirements into a single-source document. Although this publication governs nuclear weapons airlift operations training, it refers to training requirements directed in other referenced source documents. If there is a conflict concerning a specific training requirement, units will comply with the source document which establishes the specific training requirement.

1.1.3. Aircrew training directed in this instruction will be conducted by the applicable Aircrew Training System or airlift units operating C-17 aircraft. **(T-1)**

1.1.4. Only personnel who have successfully completed training outlined in this instruction will handle nuclear cargo. **(T-0)**

1.2. Roles and Responsibilities.

1.2.1. Major Commands (MAJCOM)

1.2.1.1. Headquarters (HQ) Air Mobility Command (AMC) Nuclear Operations Division (AMC/A10N) will develop and maintain initial and continuation training requirements to include: crew qualification/certification training guides, academic computer based training, a master question file, and course outlines. **(T-2)**

1.2.2. Wing/Unit

1.2.2.1. PNAF wings will review their nuclear weapons airlift operations training program annually to ensure all requirements set forth in the basic instruction are satisfied. **(T-2)** Deficiency reports will be submitted to the wing commander (Wg/CC). **(T-2)**

1.2.2.1.1. PNAF wings will review locally developed training material annually to ensure compliance with nuclear surety directives and established requirements (*e.g.*, academic training, training guides, nuclear surety training, Personnel Reliability Program (PRP) training, etc.). **(T-1)**

1.2.2.1.2. Document observations and provide training update requests to AMC/A10NA and/or the AMC Weapons Safety Division (AMC/SEW). **(T-2)**

1.2.2.2. To ensure serviceability, the responsible agency at PNAF units will inspect, maintain, and account for Type 3E trainers, Bomb Dummy Units, Munitions Materiel Handling Equipment, and containers IAW DAFMAN 21-201, *Munitions Management*, and AFMAN 21-203, *Nuclear Accountability Procedures*, and applicable Air Force Technical Orders (T.O.). Utilize *Allowance Standards List 733* to identify munitions maintenance

handling Equipment and maintenance equipment required to support training and maintenance. **(T-2)**

1.2.2.3. Units will refer to the Master Nuclear Certification List for verification of certified equipment. **(T-2)**

1.2.2.4. Wing supplements, memorandums of understanding or letters of agreement will specify and emphasize the storage and maintenance of Type 3E trainers, Bomb Dummy Units, munitions maintenance handling equipment, containers, and other support equipment. **(T-2)**

1.2.2.5. Unit custodians will ensure maintenance requirements are documented and brought to the attention of the responsible organization. **(T-2)**

1.2.2.6. Depot assistance under provisions of T.O. 00-25-107, *Maintenance Assistance*, will be coordinated on an exception basis and only after it is determined required maintenance exceeds the local capability. **(T-2)** When depot assistance is required, the owning organization will forward necessary maintenance requests to the appropriate agencies. **(T-2)**

1.2.2.7. Unit custodians and munitions specialists should assist the Aerospace Ground Equipment Flight when Type 3E trainers and Bomb Dummy Unit sub-assemblies must be loaded to/from munitions maintenance handling equipment in order to perform maintenance. **(T-3)**

1.2.2.8. If nuclear certified munitions maintenance handling equipment is not used, aircrew training equipment will be marked, For Training Use Only. **(T-3)** Upon turn-in, munitions maintenance handling equipment will be condition-tagged to require complete inspection and functional testing IAW applicable T.O.s prior to use for actual weapons handling. **(T-0)**

Chapter 2

PRIME NUCLEAR AIRLIFT FORCE TRAINING

2.1. PNAF Training Policy.

2.1.1. IAW AFPD 13-5, MAJCOMs should enhance and reinforce nuclear partnerships to ensure training, security, credibility and viability of the Air Force Nuclear Enterprise. Successful PNAF training is dependent on MAJCOM partnerships due to the intensive planning, coordination, and support requirements associated with executing nuclear airlift logistics operations. MAJCOMs and subordinate units should place a high priority on all efforts to support PNAF training.

2.1.2. PNAF training should emphasize nuclear surety standards and compliance IAW appropriate directives. AFMAN 13-526, *Nuclear Airlift Operations*, establishes guidance for nuclear airlift operations used by PNAF aircrews and associated units for the logistic movement of nuclear cargo and components. Refer to [Table 2.1](#) for ancillary PNAF training requirements.

2.2. Planning, Execution and Support.

2.2.1. To the maximum extent possible, PNAF training missions should mirror the processes and procedures outlined in AFMAN 13-526.

2.2.2. In the event there are no tasked Special Assignment Airlift Missions within a calendar year, the 618th Air Operations Center (618 AOC) will coordinate with the PNAF unit to plan and execute an overseas training mission. **(T-2)**

2.3. PNAF Crewmember Prerequisites.

2.3.1. Prior to PNAF training, members are required to have a security clearance. The minimum security clearance required will be in accordance with DoD Manual (DoDM) 5210.42_AFMAN 13-501, *Nuclear Weapons Personnel Reliability Program*. Additionally, all PNAF personnel must have access to Restricted Data/Formerly Restricted Data. **(T-0)**

2.3.2. Prior to entering PNAF certification/qualification training, all personnel must complete an initial aircraft qualification course in the major weapon system they will perform the PNAF mission. **(T-1)** Additionally, all PNAF personnel will be current and qualified in their respective major weapon system crew position IAW AFMAN 11-2C-17, Volume 1, *C-17 Aircrew Training*.

2.3.3. All PNAF candidates will complete Nuclear Surety and PNAF Academic Training prior to participating in training flight operations. **(T-1)**

2.3.4. Initial weapon type familiarization training is required for each weapon type prior to copilot certification. **(T-2)** Copilot weapon type training will consist of a general hands-on overview focused on inspection criteria listed in T.O. 11N-45-51, *Transportation of Nuclear Materiel*. **(T-2)** Do not conduct weapon type training on tasked PNAF missions. Document training under event identifier W076 A-E as defined in [Chapter 3](#). **(T-2)**

2.3.5. Prior to the first training flight, prospective PNAF crew members will meet Personnel Reliability Program certification requirements in DoD Manual (DoDM) 5210.42_AFMAN 13-501, Appendix 2 to Enclosure 3. **(T-3)**

2.4. PNAF Aircrew Training.

2.4.1. HQ AMC-approved PNAF crew qualification/certification training guides will stipulate the appropriate level of supervision necessary to conduct initial upgrade or re-qualification training. **(T-1)**

Table 2.1. Ancillary PNAF Training Requirements.

Source Publication/Instruction	Training Requirement
AFI 20-110 , <i>Nuclear Weapons-Related Materiel Management</i>	Nuclear Weapons-Related Materiel Training
AFI 21-205-S (SECRET//FRD) , <i>Command Disable System (CDS)</i>	Command Disable System Procedural Training
DAFI 91-101 , <i>Air Force Nuclear Weapons Surety Program</i>	Nuclear Weapons Surety Training
AFI 91-108 , <i>Air Force Nuclear Weapons Intrinsic Radiation Safety Program and 91(B) Radioactive Material Safety Program</i>	Intrinsic Radiation Training
AFI 91-115 , <i>Safety Rules for Nuclear Airlift Operations</i>	PNAF Aircrew Training
AFMAN 13-526 , <i>Nuclear Airlift Operations</i>	PNAF Aircrew Training
AFMAN 11-2C-17, Volume 3 , <i>C-17 Operations Procedures</i>	PNAF Aircrew Training
DoDM S-5210.41_AFMAN 31-108, Volume 2 , <i>Nuclear Weapon Security Manual: General Nuclear Weapon Security Procedures</i>	Escort Official Training
DoDM 5210.42_AFMAN 13-501 , <i>Nuclear Weapons Personnel Reliability Program</i>	Personnel Reliability Program Training

2.4.2. PNAF qualified units will utilize AMC/A10NA-developed training guides for initial qualification or certification training per crew position. **(T-1)** Required training outlined in AMC/A10NA-approved training guides must be satisfied prior to the student proceeding to an evaluation and/or certification ride for the respective crew position. **(T-1)**

2.4.3. Requalification training requirements will be developed and approved by the PNAF squadron commander (SQ/CC) on a case-by-case basis. **(T-1)** SQ/CCs will develop requalification training programs based on individual proficiency, prior PNAF experience, and time since most recent qualification. **(T-1)** The PNAF SQ/CC will comply with requirements listed in AFMAN 11-202, Volume 1, *Aircrew Training* and AFMAN 11-2C-17, Volume 1, when developing requalification training. **(T-2)** Except for PNAF Copilots, all requalification programs will culminate in an individual flight evaluation for the designated crew position. **(T-1)**

2.4.4. PNAF crewmembers will receive training on weapon types approved for airlift identified in AFI 91-115. **(T-1)** Refer to [paragraph 3.1.11](#) for specific duty position training

requirements. Weapon type training does not pertain to W78 warheads until a higher headquarters transportation request is received from an authority specified in AFI 91-115.

2.5. Training and Nuclear Cargo Handling Restrictions.

2.5.1. Adhere to training restrictions or limitations specified in AFI 91-115. **(T-0)**

2.5.2. Students or PNAF crewmembers may not perform an act or procedure directly involving nuclear weapons in which they are not qualified/certified to perform. **(T-0)**

2.5.3. Crewmembers in Courier or Aircraft Commander Upgrade may accomplish qualification training on tasked PNAF missions but will comply with additional guidance specified in AFMAN 13-526. **(T-0)** **Note:** PNAF Courier and Aircraft Commander Qualification training does not constitute “training with nuclear cargo” as PNAF certification is a prerequisite for either crew position. See [paragraph 2.11.3](#) for Copilot certification information.

2.5.4. Copilot certification or loadmaster qualification training may be accomplished on tasked PNAF missions but only for the sole purpose of observing certified personnel perform required tasks. **(T-0)** Students may only handle training devices on inactive legs of tasked Type-I nuclear missions (*e.g.*, no nuclear weapon being handled/transported on that leg). **(T-0)**

2.5.5. PNAF crewmembers must be current in their respective crew position when handling nuclear cargo. **(T-1)**

2.6. Recurring Training Requirements.

2.6.1. Recurring training is the responsibility of the individual crewmember. Crewmembers must actively work with unit schedulers and training offices to ensure training is accomplished and documented appropriately. **(T-1)** PNAF units will develop procedures to track and monitor individual crewmember currency identified in [Table 3.1](#). **(T-1)**

2.6.2. **Table 3.1** lists PNAF continuation training requirements. Recurring currency items may be accomplished on tasked nuclear airlift missions, continuation training missions that simulate the transportation of nuclear weapons or locally generated ground trainers (when applicable). IAW AFMAN 13-526, non-current crewmembers may only participate in an observation role on mission segments transporting nuclear cargo.

2.6.3. PNAF currency may only be re-gained while under the supervision of a current and qualified PNAF instructor. **(T-1)**

2.6.4. Do not change the method of loading to accomplish recurring training requirements on missions tasked to transport actual nuclear weapons. **(T-1)**

2.7. Testing.

2.7.1. At the conclusion of PNAF academics, individuals will be presented a multiple-choice closed book examination and must attain passing grade of 85 percent or higher. **(T-3)** If an 85 percent or higher is not achieved, individuals will review missed subject criteria and have one additional attempt to earn a passing score. If a second failure occurs, no further attempts are permitted and the individual must report to the Nuclear Airlift Monitor. **(T-2)** The Nuclear Airlift Monitor will provide remedial training before additional tests are attempted. All re-training will be documented (*e.g.*, Aircrew Training System, Graduate Training Integration

Management System, etc.). (T-2) PNAF crewmembers are prohibited from participating in tasked nuclear airlift missions until achieving a passing score on PNAF academics. (T-3)

2.7.2. Prior to Copilot certification, a locally-produced closed-book test of at least 20 PNAF Master Question File questions will be administered. (T-3) A passing grade of 85 percent or higher must be attained. (T-3) Report all failures to the Nuclear Airlift Monitor prior to retesting. (T-3) The Nuclear Airlift Monitor will conduct remedial training prior to administering Copilot retest. (T-3)

2.8. PNAF Training Records.

2.8.1. All PNAF currency requirements will be documented in the Aviation Resource Management System or locally developed tracking database. (T-2) Crewmember qualification and certification training will be documented in the designated training records program (*e.g.*, Aircrew Training System, Graduate Training Integration Management System, etc.). (T-2)

2.8.2. Crewmember qualification or certification Training Guides will be maintained IAW records disposition schedules located in AFI 33-322.

2.9. PNAF Exercises.

2.9.1. Each calendar year, the 618 AOC will conduct a table-top exercise encompassing a PNAF aircraft divert scenario. (T-2) The table-top exercise should alternate between continental and outside continental United States (U.S.) divert scenarios. Each table-top exercise should be coordinated with AMC/A10NA. A report detailing any internal limiting factors/issues will be submitted to the 618 AOC/CC. (T-2) The 618 AOC/CC is the waiver authority for the completion of this training requirement.

2.9.2. At least once every 24-months, AMC A3/10 Tasked Nuclear Airlift Mission Support bases will conduct a PNAF Divert Exercise supporting a simulated nuclear laden aircraft. (T-2) Responsible units will coordinate divert exercises with AMC/A10NA, supported by the 618 AOC and the PNAF unit. (T-2) Non-nuclear tasked units will submit an exercise After Action Report including any lessons learned to AMC/A10N. (T-2) AMC A3/10 is the waiver authority for this requirement. (T-2) **Note:** 618 AOC involvement in live-fly divert exercises satisfies the training requirement specified in [paragraph 2.9.1](#).

2.10. Training Requirements for Mission Essential Personnel.

2.10.1. This paragraph applies to personnel granted mission essential personnel authorization IAW DAFMAN 11-401 to fly on tasked nuclear airlift mission (*e.g.*, Flying Crew Chiefs, Phoenix Raven Teams, inspectors, etc.).

2.10.2. In addition to requirements directed in AFMAN 13-526, before flying on tasked PNAF missions, mission essential personnel will complete Nuclear Weapons Surety Training IAW DAFI 91-101.

2.11. PNAF Qualifications, Evaluations and Certification.

2.11.1. PNAF Qualifications: Crewmembers occupying a primary PNAF crew position when nuclear cargo is airlifted will be qualified according to IAW AFMAN 11-2C-17, Volume 2, *C-17 Aircrew Evaluation Criteria*, current in both the mission aircraft and recurring PNAF training requirements, and certified as outlined within this manual. (T-1)

2.11.2. Additional crewmembers and aircrew supervisors not meeting PNAF qualification requirements will not occupy a primary crew position with nuclear cargo aboard. **(T-1)**

2.11.3. PNAF Evaluations. Crewmembers who are interim-certified under the Personnel Reliability Program may receive PNAF evaluations. Commanders will ensure initial crewmember evaluations are not accomplished on missions carrying nuclear cargo. **(T-2)**

2.11.4. PNAF Copilot Certification. Officers must be certified in the Copilot position before entering a formal PNAF Courier or PNAF Aircraft Commander Qualification upgrade. **(T-2)**
Exception: Previously qualified PNAF Couriers or PNAF Aircraft Commanders may enter a formal PNAF requalification program (Courier or Aircraft Commander) without being recertified as a PNAF Copilot.

2.11.4.1. Certified Copilots in formal upgrade to Courier or Aircraft Commander may occupy and perform duties in a primary crew position on nuclear missions as long as the individual satisfies the following:

2.11.4.1.1. Current for the weapon type designated for logistics transport. **(T-1)**

2.11.4.1.2. Directly supervised by a qualified Courier or Aircraft Commander Instructor counterpart. **(T-1)**

2.11.5. PNAF Aircrew Certification. PNAF squadron/unit commanders will certify each nuclear airlift qualified crewmember, including themselves, senior-ranking Commanders, and attached crewmembers. **(T-2)** Following Operations Group Commander (OG/CC) review, the Wg/CC will approve all crewmember certifications. **(T-2)** Document all certifications in the Review and Certification Board minutes in accordance with AFMAN 11-202, Volume 2, *Aircrew Standardization/Evaluation Program*, the appropriate MAJCOM supplement, and on the individual crewmember's AF Form 4324, *Aircraft Assignment/Aircrew Qualification Worksheet* in accordance with AFMAN 11-2C-17, Volume 1. Crewmembers will not perform Prime Nuclear Airlift Force duties with nuclear cargo until certification is approved by the Wg/CC. **(T-2)**

Chapter 3

PNAF AVIATION RESOURCE MANAGEMENT SYSTEM/CURRENCY IDENTIFIERS AND EVENT DESCRIPTIONS

3.1. PNAF Training Event Identifiers and Descriptions.

3.1.1. G-CDS – CDS Trng (Powerpoint & hands-on w/Instructor)

3.1.1.1. Purpose: Delineates responsibilities and establishes guidance and procedures for the use of Command Disable codes for U.S. nuclear weapons.

3.1.1.2. Description: Academic training designed to educate individuals with access to nuclear weapons the applicability and use of the Command Disable System. Refer to AFI 21-205 (S//FRD) for additional training information to include additional exercise requirements.

3.1.1.3. Office of Primary Responsibility: Air Force Nuclear Weapons, Missile and Munitions Divisions (AF/A4LW).

3.1.1.4. Training Media: IAW T.O. 11N-45-51 series manuals and AFI 21-205 (S//FRD). Initial and semi-annual training will only be conducted with Type 3E trainers. **(T-1)**

3.1.1.5. Instructor: Certified Command Disable System Instructor.

3.1.1.6. Additional Information: Per AFI 21-205 (S//FRD), Aircrew may request and receive Command Disable System training from munitions personnel during logistics shipments.

3.1.2. G-ESCORT – Escort Official Training

3.1.2.1. Purpose: All personnel who are authorized unescorted entry to limited or exclusion areas must be formally trained and certified on the duties and responsibilities of limited and exclusion area escort official duties. **(T-1)**

3.1.2.2. Description: Use a locally developed lesson plan to conduct training and administer a test for certification. Every 12 months, recertify personnel with unescorted entry authority or when any significant change occurs in escort procedures. Use the appropriate administrative and training procedures found in DAFI 31-101, *Integrated Defense*.

3.1.2.3. Office of Primary Responsibility: Air Force Directorate of Security Forces (AF/A4S)

3.1.2.4. Training Media: Unit developed training, approved by the unit Weapons Safety Manager.

3.1.2.5. Instructor: The Nuclear Airlift Monitor or unit-appointed instructor under the control of the unit security manager must administratively track and document the training and certification process. **(T-3)**

3.1.3. G-INRAD – Intrinsic Radiation Training (NSM/2-5305 or 2-5329)

3.1.3.1. Purpose: Training focused on intrinsic radiation hazards associated with applicable unit weapon systems.

3.1.3.2. Description: Training informs individuals of intrinsic radiation hazards and acceptable procedures that follow recommendations of installation Radiation Safety Officer, unit Radiation Safety Officer, and/or supervisor to reduce intrinsic radiation exposures below applicable limits and as low as reasonably achievable.

3.1.3.3. Office of Primary Responsibility: Air Force Safety Center, Weapons Safety Division (AFSEC/SEW).

3.1.3.4. Training Media: IAW AFSEC/SEW training requirements and AFI 91-108.

3.1.3.5. Instructor: Instruction provided IAW AFI 91-108.

3.1.4. G-NWST – Nuclear Weapons Surety Training (NSM/2-5305 or 2-5329)

3.1.4.1. Purpose: Provides standardized training for all personnel who perform nuclear surety related duties IAW DAFI 91-101. Commanders and supervisors at all levels must ensure individuals receive instructor-led initial nuclear surety training and 15-month recurring nuclear surety refresher training before handling nuclear weapons, nuclear weapons systems, certified critical components, perform nuclear-related duties, or control entry into No-Lone Zones. At a minimum, individuals will receive initial nuclear surety training prior to performing nuclear-related duties and recurring training will be accomplished by the end of the 15th month thereafter. **(T-1)**

3.1.4.2. Description: Training and testing will, at a minimum, include the standardized nuclear surety lesson plan and testing materials described in DAFI 91-101. Initial and 15-month recurring nuclear surety training will cover the mandatory topics outlined in DAFI 91-101 and documented. **(T-1)**

3.1.4.3. Office of Primary Responsibility: AFSEC/SEW.

3.1.4.4. Training Media: AF and MAJCOM Nuclear Weapons Surety Training slides. After presentation, a certified nuclear surety instructor will provide a closed book test to individuals requiring a minimum passing score of 80 percent. **(T-1)** A test score of less than 80 percent requires remedial training and retesting with a different test before that person may perform nuclear-related duties. **(T-1)**

3.1.4.5. Instructor: Certified nuclear surety instructor (typically the wing weapons safety representative). **Note:** IAW AFI 91-202, *The US Air Force Mishap Prevention Program*, AMC Nuclear Surety Training incorporates Explosives Safety Training criteria as it relates to PNAF operations. Accomplishment of Nuclear Weapons Surety Training within the prescribed 15-month requirement satisfies recurring training guidance directed in AFI 91-202.

3.1.5. G-NWRM – Nuclear Weapons-Related Materiel Training

3.1.5.1. Purpose: The objective of the training is to familiarize personnel with fundamental NWRM policy, handling and accounting requirements.

3.1.5.2. Description: Training will cover the mandated AFI 20-110 requirements.

3.1.5.3. Office of Primary Responsibility: Nuclear Weapons, Missile and Munitions Division (AF/A4LW).

3.1.5.4. Training Media: NWRM Fundamentals Course hosted on GRIFFIN at <https://367trss.cce.af.mil/Home/Index>.

3.1.5.5. Frequency: At a minimum, these individuals must complete the NWRM Fundamentals Course prior to performing NWRM duties and every 12 months thereafter until no longer performing NWRM duties. **(T-0)**

3.1.6. G-PRP – Personnel Reliability Program Training (AF Portal-PRP Training site)

3.1.6.1. Purpose: This training is specifically intended for personnel assigned to a nuclear unit with nuclear responsibilities identified in DoDM 5210.42_AFMAN 13-501.

3.1.6.2. Description: Training will cover mandated DoDM 5210.42_AFMAN 13-501 guidance and focus on Personnel Reliability Program requirements and individual responsibilities. **(T-0)**

3.1.6.3. Office of Primary Responsibility: Air Force Strategic Deterrence and Nuclear Integration (AF/A10).

3.1.6.4. Training Media: All training will, at a minimum, include the AF Standardized Personnel Reliability Program Training found on the Air Force Personnel Reliability Program website. **(T-0)**

3.1.6.5. Frequency: Personnel Reliability Program Initial Training/Refresher Training, will be completed on a 15-month cycle and documented. **(T-0)**

3.1.7. GD67Y- PNAF Academics (CBTS)

3.1.7.1. Purpose: Initial and continuation academic training for PNAF crewmembers. Training reinforces Air Force policy and guidance associated with the logistic transport and security associated with PNAF operations.

3.1.7.2. Description: Academic training focusing on specific nuclear mission requirements. The information presented trains PNAF crewmembers regarding applicable mission requirements and safety standards necessary for the accomplishment of PNAF operations. See **Attachment 2** for a general course outline.

3.1.7.3. Office of Primary Responsibility: AMC/A10NA.

3.1.7.4. Curriculum Development: Mission Design Series (MDS) Aircrew Training Systems in conjunction with AMC/A10NA.

3.1.7.5. Training Media: Computer Based Training.

3.1.7.6. Instructor: Instructor not required for initial or continuation training.

3.1.8. GM21Y- Small Arms Training

3.1.8.1. Purpose: To train crewmembers in successful engagement of enemy threats within the range and capabilities of their assigned weapon.

3.1.8.2. Description: The course will meet the requirements of AFI 31-117, *Arming and Use of Force by Air Force Personnel*, and AFI 36-2654, *Combat Arms Program*. In addition, crewmembers must ensure they meet Arming and Use of Force training requirements in AFI 31-117.

3.1.8.3. Office of Primary Responsibility: AF/A4S.

3.1.8.4. Training Media: Combat Arms Training and Maintenance.

3.1.8.5. Instructor: Qualified Security Forces Squadron Combat Arms Instructor.

3.1.8.6. Additional Information: Increased training duration (12 vs. 24 months) is intended to support enhanced PNAF mission security requirements and preserve last-line of defense capabilities for the protection of nuclear cargo, especially at unplanned divert locations without pre-coordinated security. IAW AFI 36-2654, the PNAF wing will link arming Group A aircrew firearms qualification training to an aircrew ground training cycle program with a training frequency not to exceed 12 months.

3.1.9. MB43Y- Special Assignment Airlift Mission (SAAM) Sortie (Mission Accomplishment)

3.1.9.1. Purpose: To maintain a high-degree of proficiency and familiarity regarding all aspects of PNAF operations, PNAF crewmembers will fly one tasked or nuclear airlift continuation training mission simulating the transport of nuclear weapons or Class II components within the specified time period. **(T-2)**

3.1.9.2. Description: To credit a Special Assignment Airlift Mission sortie, qualified crewmembers will accomplish one actual or training onload/offload of nuclear weapons or components. **(T-2)** Crewmember participation should include: pre-mission planning, crew and mission briefing, security and loading procedures with host installation personnel utilizing T.O. 1C-17A-16-1, *Loading and Air Transport of Nuclear Weapons Cargo USAF Series, C-17A Aaft* procedures, and transfer of custody procedures. Enforcement of the two-person concept should also be observed during loading and flight operations. Crewmembers may log this event if performing instructor or evaluator duties. See additional crewmember specific requirements.

3.1.9.3. Office of Primary Responsibility: AMC/A10NA.

3.1.9.4. Training Media: Aircraft.

3.1.9.5. Instructor: Not required for continuation training. PNAF qualified instructors may log training supervised.

3.1.9.6. Aircraft Commander: May credit a sortie after satisfying general description criteria and Aircraft Commander specific responsibilities. Aircraft Commanders should review T.O. 1C-17A-16-1 loading procedures if they are not accomplished during the execution of a tasked or training mission. **Note:** Due to the differences in roles and responsibilities between PNAF Aircraft Commanders and Couriers, PNAF Aircraft Commanders should attempt to perform at least one PNAF sortie as a primary Courier or Courier Instructor before entering their evaluation eligibility window.

3.1.9.7. Courier: Individuals should perform primary courier duties on at least one mission leg. Areas performed should include: interaction with the On-Scene Coordinator and Senior Security Representative, Sole-Vouching Authority duties, Entry Authorization List procedures, exclusion area enforcement (if applicable), and transfer of custody and associated paperwork.

3.1.9.8. Copilot: In addition to general description criteria, PNAF copilots should perform or review Pilot Monitoring duties during simulated or actual Type-1 arrival and departure. The copilot should also perform required duties during loading operations.

3.1.9.9. Loadmaster: May credit a sortie after satisfying general description criteria and loadmaster specific mission responsibilities.

3.1.10. GU41Y- PNAF Load to/from Ground (Mission/Gnd Trng)

3.1.10.1. Purpose: Continuation training for PNAF qualified loadmasters only.

3.1.10.2. Description: Proficiency training to load Type I or simulated nuclear weapons IAW T.O. 1C-17A-16-1, "Ground Loading/Offloading – Wheeled Carrier, Internal Winch."

3.1.10.3. Office of Primary Responsibility: AMC/A10NA.

3.1.10.4. Training Media: Aircraft.

3.1.10.5. Instructor: Not required for continuation training. PNAF qualified instructors may log training supervised.

3.1.10.6. Additional Information: The currency requirement may be satisfied on tasked or off-station training missions or during locally generated ground training exercises utilizing T.O. 1C-17A-16-1 procedures. Reference [paragraph 2.6.4](#).

3.1.11. GU43Y- Forklift Loading (Mission/Gnd Trng)

3.1.11.1. Purpose: Continuation training for PNAF qualified loadmasters only.

3.1.11.2. Description: Proficiency training for loading B61 nuclear weapons IAW T.O. 1C-17A-16-1, "Alternate Onload/Offload – Forklift Loading with Ramp Toes Not Installed – Wheeled Carriers."

3.1.11.3. Office of Primary Responsibility: AMC/A10NA.

3.1.11.4. Training Media: Aircraft.

3.1.11.5. Instructor: Not required for continuation training. PNAF qualified instructors may log training supervised.

3.1.11.6. Additional Information: Aircraft Commanders will receive initial Forklift Load Training during upgrade to PNAF Aircraft Commander. **(T-2)**

3.1.11.7. Additional Information: Currency may be satisfied on tasked or training missions to include ground loading exercises utilizing T.O. 1C-17A-16-1 procedures. **Note:** PNAF Loadmasters may be non-current for G403 and still fly tasked PNAF missions if the cargo designated for transport does not include B61 weapons.

3.1.12. W076A-E – Weapon Type Crewmember Hands-On Training

3.1.12.1. Purpose: To establish training and frequency requirements for each weapon type capable of being transported by PNAF crewmembers IAW AFI 91-115. These requirements ensure crewmembers are familiar with each weapon type and loading characteristics before conducting PNAF operations.

3.1.12.2. Description: Commensurate with qualification and duty position, crewmembers will receive training on weapon types identified in AFI 91-115. **(T-2)** Crewmembers should focus on the inherent differences in nuclear weapons type, inspection and loading procedures. Per specified crew position requirements, crewmembers may log W076A-E after conducting weapon specific inspection and loading operations IAW T.O. 1C-17A-16-

1 and/or T.O. 11N-45-51 on a Special Assignment Airlift Mission sortie, off-station training mission or local training event.

3.1.12.3. Office of Primary Responsibility: AMC/A10NA.

3.1.12.4. Training Media: Weapon or training device.

3.1.12.5. Instructor: Not required for continuation training. Regaining currency will be accomplished with an Instructor-certified crewmember. **(T-2)** PNAF qualified instructors may log training supervised.

3.1.12.6. Additional Information: For Operations Security purposes, PNAF squadrons will develop internal procedures to track W076A-E individual currency events. **(T-1)** W076A-E currency is established based upon the crewmember's initial evaluation (Aircraft Commander, Courier, and Loadmaster) or certification (Copilot) date.

3.1.12.7. The following hands-on training is required for each aircrew position:

3.1.12.7.1. Aircraft Commanders: Currency satisfied by accomplishment or observation of any T.O. 1C-17A-16-1 loading procedure for each weapon type. **(T-1)**

3.1.12.7.2. Couriers: Currency is satisfied by the accomplishment of weapon specific inspection procedures IAW T.O. 11N-45-51 and T.O. 1C-17A-16-1. **(T-1)**

3.1.12.7.3. Copilots: A one-time event accomplished during Initial Copilot Certification Training. Recurring training is not required. Copilot training will consist of a general hands-on weapon overview utilizing inspection criteria in T.O. 11N-45-51. **(T-1)** Observation of ground loading per weapon type is not required.

3.1.12.7.4. Loadmasters: Currency satisfied by the accomplishment of any T.O. 1C-17A-16-1 loading procedure with each weapon type. **(T-1)**

Table 3.1. PNAF Aviation Resource Management System/Currency Identifiers and Recurring Training Frequencies.

<u>ARMS/ Currency ID</u>	<u>Event</u>	<u>Aircraft Commander</u>	<u>Courier</u>	<u>Copilot</u>	<u>Loadmaster</u>	<u>Notes</u>
GCDSYM	Command Disable System	6 Months	6 Months	6 Months	6 Months	1, 4 (T-1)
GESCTM	Escort Official	12 Months	12 Months	12 Months	12 Months	1 (T-1)
GNRADM	Intrinsic Radiation	15 Months	15 Months	15 Months	15 Months	1 (T-1)
GNWSTM	Nuclear Weapons Surety Training	15 Months	15 Months	15 Months	15 Months	1 (T-0)
GNWRM M	Nuclear Weapons Related Materiel	12 Months	12 Months	12 Months	12 Months	1, 6 (T-1)
GPRPYM	Personnel Reliability Program	15 Months	15 Months	15 Months	15 Months	1 (T-0)
GD67YM	PNAF Academics	12 Months	12 Months	12 Months	12 Months	(T-1)
GM21YM	Small Arms	12 Months	12 Months	12 Months	12 Months	(T-1)
MB43YM	Special Assignment Airlift Mission	6 Months	6 Months	12 Months	6 Months	(T-1)
GU41YM	PNAF Loading to/from Ground	N/A	N/A	N/A	12 Months	4 (T-2)
GU43YM	Forklift Loading	N/A	N/A	N/A	12 Months	4 (T-2)
W076A	B61	12 Months	12 Months	One-Time	12 Months	2, 3, 4 (T-2)
W076B	B83	12 Months	12 Months	One-Time	12 Months	2, 3, 4 (T-2)
W076C	W80	12 Months	12 Months	One-Time	12 Months	2, 3, 4 (T-2)
W076D	W78	12 Months	12 Months	One-Time	12 Months	2, 3, 4, 5 (T-2)
W076E	W87	12 Months	12 Months	One-Time	12 Months	2, 3, 4 (T-2)

NOTES:

- 1) Non-AMC controlled training requirement. Consult identified source document to verify validity/duration of training requirement. In all instances, default to the source document and specified training timeline.
- 2) Exceeding currency requirements for handling a specific weapon type only affects currency for that particular weapon. For example: Crewmembers non-current for W076B (B83) may still transport a B61 if they are current and qualified for W076A.
- 3) Non-Aviation Resource Management System tracked PNAF currency event.
- 4) Currency for the respective crew position may be regained while participating on a training mission or ground training exercise while under the supervision of a current and qualified PNAF instructor. (T-1)
- 5) W78 training is not required until a mission tasking is received IAW AFI 91-115.
- 6) AMC Aircrew personnel are not required to maintain continuous NWRM training currency due to infrequent mission need. Individuals will complete just-in-time training prior to missions involving NWRM if it has been greater than 12 months since completion of last training. (T-1)

Chapter 4

EMERGENCY NUCLEAR AIRLIFT OPERATIONS TRAINING

4.1. ENAO Training Policy.

4.1.1. To prepare Regular Air Force and Air Force Reserve C-17 aircrew members for the successful accomplishment of emergency nuclear weapons airlift missions.

4.1.2. Emphasis should be placed on safe and efficient operations and provide C-17 aircrew members familiarity in weapon handling procedures and security requirements necessary for the logistics air movement of nuclear weapons during contingency operations.

4.1.3. All personnel must be qualified or enrolled in a formal C-17 aircraft qualification training course. **(T-1)**

4.2. ENAO Aircrew Training.

4.2.1. All C-17 Regular Air Force aircrew members will be trained to execute and support ENAO. **(T-1)**

4.2.2. Operational ENAO guidance is located in AFMAN 13-526.

4.2.3. Personnel may complete ENAO training before having a final SECRET security clearance; however, all personnel must have a SECRET clearance prior to participating in an ENAO mission. **(T-0)**

4.2.4. ENAO training is a one-time requirement accomplished during the course of a MDS initial formal training program. **(T-1)** ENAO training should emphasize weapons handling, nuclear surety, and Intrinsic Radiation (reference [Attachment 3](#) for outline). Aircrew members should expect to receive enhanced refresher training before executing an actual ENAO mission. Enhanced training will focus on loading, tie-down, and off-loading operations using applicable aircraft loading manual procedures and guidance contained in the appropriate AFMAN 11-2C-17, Volume 3, *C-17 Operations Procedures*. **(T-1)** Training should familiarize crewmembers with provisions specified in T.O. 1C-17A-16-1.

4.3. Testing.

4.3.1. A multiple-choice closed-book computer-based training examination will be administered after the academic presentation. **(T-2)** Personnel will achieve an examination grade of 100 percent. **(T-2)** Personnel attaining an examination grade of less than 100 percent will review course content for all missed questions and correct to 100 percent on subsequent examinations. **(T-2)**

4.3.2. Record completion date of ENAO training in the Aviation Resource Management System and/or as specified in the formal training program.

JAMES C. DAWKINS, JR., Lt Gen, USAF
DCS, Strategic Deterrence & Nuclear Integration

Attachment 1**GLOSSARY OF REFERENCES AND SUPPORTING INFORMATION*****References***

- DoDD 3150.02, *DoD Nuclear Weapons Surety Program*, 24 April 2013
- DoDM S-5210.41_AFMAN31-108, Volume 2, *Nuclear Weapons Security Manual: General Nuclear Weapons Security Procedures*, 20 May 2019
- DoDM S-5210.41_AFMAN 31-108, Volume 3, *Nuclear Weapons Security Manual: Nuclear Weapon Environment-Specific Requirements*, 20 May 2019
- DoD Foreign Clearance Guide, *Special Weapons Overflight Guide (SWOG) Supplement*, 22 July 2021
- DoDM 5210.42_AFMAN 13-501, *Nuclear Weapons Personnel Reliability Program*, 18 September 2018
- AFI 11-200, *Aircrew Training, Standardization/Evaluation, and General Operations Structure*, 2 May 2022
- DAFMAN 11-401, *Aviation Management*, 27 October 2020
- AFI 20-110, *Nuclear Weapons-Related Materiel Management*, 4 June 2018
- DAFMAN 21-201, *Munitions Management*, 02 May 2022
- AFI 21-205-S, *(S) Command Disable System (CDS) (U)*, 21 May 2019
- DAFI 31-101, *Integrated Defense*, 24 May 2020
- AFI 31-117, *Arming and Use of Force by Air Force Personnel*, 06 August 2020
- DAFMAN 90-161, *Publishing Processes and Procedures*, 15 April 2022
- AFI 36-2654, *Combat Arms Program*, 16 April 2020
- AFI 38-101, *Manpower and Organization*, 29 August 2019
- AFI 63-125, *Nuclear Certification Program*, 16 January 2020
- AFI 65-503, *US Air Force Cost and Planning Factors*, 13 July 2018
- DAFI 91-101, *Air Force Nuclear Weapons Surety Program*, 26 March 2020
- AFI 91-202, *The US Air Force Mishap Prevention Program*, 12 March 2020
- AFI 91-108, *Air Force Nuclear Weapons Intrinsic Radiation and 91(B) Radioactive Material Safety Program*, 14 May 2020
- AFI 91-115, *Safety Rules for Nuclear Airlift Operations*, 28 July 2021
- AFMAN 11-2C-17, Volume 1, *C-17 Aircrew Training*, 12 February 2020
- AFMAN 11-2C-17, Volume 2, *C-17 Aircrew Evaluation Criteria*, 04 August 2021
- AFMAN 11-2C-17, Volume 3, *C-17 Operations Procedures*, 29 July 2019
- AFMAN 11-202, Volume 1, *Aircrew Training*, 27 September 2019

AFMAN 11-202, Volume 2, *Aircrew Standardization and Evaluation Program*, 30 August 2021

AFMAN 13-526, *Nuclear Airlift Operations*, 30 November 2022

AFMAN 21-203, *Nuclear Accountability Procedures*, 29 September 2021

AFI 33-322, *Records Management and Information Governance Program*, 23 March 2020

AFFPD 11-2, *Aircrew Operations*, 31 January 2019

AFFPD 13-5, *Air Force Nuclear Mission*, 17 July 2018

T.O. 00-25-107, *Maintenance Assistance*, 01 October 2015

T.O. 1C-17A-16-1, *Loading and Air Transport of Nuclear Weapon Cargo*, 20 July 2020

T.O. 11N-4-1, *Glossary of Nuclear Weapons Materiel and Related Terms*, 30 July 2016

T.O. 11N-20-11 (C-RD), *General Guidance and Hazard Information for Nuclear Weapons, Components, and Nonnuclear Weapon Designations*, 21 May 2021

T.O. 11N-45-51 (U), *Transportation of Nuclear Weapons Materiel, General Shipping and Limited-Life Component (LLC) Data*, 09 September 2021

T.O. 11N-45-51A (S-RD), *Transportation of Nuclear Weapons Materiel, (Supplement) Shipping and Identification Data for Stockpile Major Assemblies (U)*, 08 May 2019

T.O. 11N-45-51B (U), *Transportation of Nuclear Weapons Materiel, (Supplement) Loading and Unloading Flatbed Truck or Tractor Trailer, Safeguards Transporter (SGT), Limited-Life Component (LLC) Truck, Military Air Shipment, and Palletized Cargo*, 04 March 2015

Prescribed Forms

None

Adopted Forms

AF Form 4324, *Aircraft Assignment/Aircrew Qualification Worksheet*

DAF Form 847, *Recommendation for Change of Publication*

AF Form 527F, *Checklist for Nuclear Mission Support*

DD Form 1801, *International Flight Plan, DoD*

Abbreviations and Acronyms

AF—Air Force

AFI—Air Force Instruction

AFFPD—Air Force Policy Directive

AFMAN—Air Force Manual

618 AOC/CC—Commander, 618 Air Operations Center

AF/A4LW—Air Force Nuclear Weapons, Missiles, Munitions Division

AF/A4S—Air Force Security Forces Directorate

AF/A10—Air Force for Strategic Deterrence and Nuclear Integration

AFSEC/SEW—Weapons Safety, Air Force Safety Center

AMC/A10N—Air Mobility Command Nuclear Operations Division

AMC/A10NA—Air Mobility Command Nuclear Airlift Operations Branch

AMC/A3/10—Air Mobility Command Director of Operations, Strategic Deterrence & Nuclear Integration

AMC/SEW—Weapons Safety, Air Mobility Command

AMC—Air Mobility Command

AOC—Air Operations Center

ARMS—Aviation Resource Management System

CBT—Computer-based Training

CC—Commander

CDS—Command Disablement System

COMSEC—Communications Security

DoD—Department of Defense

DoDM—Department of Defense Manual

ENAO—Emergency Nuclear Airlift Operations

HQ—Headquarters

IAW—In Accordance With

MDS—Mission Design Series

NWRM—Nuclear Weapons Related Material

OPSEC—Operations Security

PL—Public Law

PNAF—Prime Nuclear Airlift Force

PRP—Personnel Reliability Program

SAAM—Special Assignment Airlift Mission

SORN—System of Record Notice

T.O.—Technical Order

U.S.—United States

USC—United States Code

Terms

Aircrew—The total complement of rated (pilots, navigators, air battle managers, and flight surgeons), career enlisted aviators (1AXXX Air Force Specialty Codes), and nonrated aircrew (K-, Q-, or X-prefixed Air Force Specialty Code) personnel responsible for the safe ground and flight operation of the aircraft and onboard systems, or for airborne duties essential to accomplishment of the aircraft's mission. Includes members in initial formal training for immediate assignment to an authorized position according to AFI 65-503, *US Air Force Cost and Planning Factors*, or nonrated aircrew not in an aircraft's basic crew complement, but required for the mission. Aircrew members perform their principal duties inflight and their presence is required for the aircraft to accomplish its primary tasked mission. Duties must be essential to operating the aircraft or mission systems and equipment used for completing a mission, or other duties essential to the aircraft's mission.

Custody—The responsibility for the control, transfer, and movement of, and access to weapons and their components. Custody also includes maintaining accountability for weapons and their components. (T.O. 11N-4-1)

Loading Exercise—A training exercise evaluating weapon handling proficiency using a Bomb Dummy Unit or nuclear container with a static aircraft in which all required steps in the loading, tie-down, and off-loading of the Bomb Dummy Unit or nuclear container are performed.

Nuclear Certified Equipment—System-specific common, specialized, or non-specialized support equipment whose design meets applicable design criteria and is nuclear certified IAW the nuclear certification process outlined in this document and identified on the Master Nuclear Certification Listing. (AFI 63-125)

Nuclear Cargo—Nuclear weapons, and Class II components containing active materiel prepared for logistics movement. (T.O. 11N-4-1)

Nuclear Weapon—A complete assembly (*e.g.*, implosion type, gun type, or thermonuclear type), in its intended ultimate configuration that, upon completion of the prescribed arming, fusing, and firing sequence, is capable of producing the intended nuclear reaction and release of energy. (T.O. 11N-4-1)

PNAF—Those aircrews, aircraft, and other functions that provide for peacetime support of logistical airlift of nuclear weapons and nuclear components.

PNAF Instructor—A PNAF crewmember, current and qualified as a C-17 instructor in any crew position. Example: A C-17 Instructor Pilot qualified as a PNAF Aircraft Commander will be considered as PNAF Instructor for the PNAF Aircraft Commander position.

PNAF Wing—A wing with a PNAF mission. Not wings that support the PNAF mission.

Unit—A military organization constituted by Headquarters Air Force or designated by a MAJCOM, Field Operating Agencies or Direct Reporting Unit (AFI 38-101)

Attachment 2

PRIME NUCLEAR AIRLIFT FORCE (PNAF) AIRCREW ACADEMIC TRAINING

A2.1. Purpose. To prepare aircrew members for successful completion of nuclear weapons airlift missions. Emphasis should be placed on safe and efficient operation and compliance with required safety directives. AFMAN 13-526 establishes guidance for nuclear airlift missions and standard procedures to be used by PNAF aircrews, as well as any unit associated with the logistical movements of nuclear weapons and related components.

A2.2. Contents. As a minimum, PNAF aircrew academic training will cover the subjects below. Additional items may be added, as required.

A2.2.1. Administration

A2.2.1.1. Protecting Classified Information

A2.2.1.2. Releasing Information

A2.2.1.3. Nuclear Airlift Monitor

A2.2.1.4. PNAF Safety Rules

A2.2.1.5. Logistics Movement and Handling of Nuclear Cargo

A2.2.1.6. Mission Tasking

A2.2.2. Mission Management

A2.2.2.1. Planning and Scheduling Criteria

A2.2.2.2. Air Refueling

A2.2.2.3. Mission Planning/Coordination

A2.2.2.4. Mission Setup Message (Content, Classification, and Distribution)

A2.2.2.5. Changes to Mission Setup Message

A2.2.2.6. Additional Airlift Requirements

A2.2.2.7. Passengers, Mission Essential Personnel, and Flying Crew Chief

A2.2.2.8. PNAF Structure

A2.2.2.9. PNAF Aircrew Qualification and Certification

A2.2.2.10. Aircrew Compliment

A2.2.2.11. Aircrew Replacement, Staging, and Crew Swap

A2.2.3. Pre-departure Requirements

A2.2.3.1. Aircrew Mission Planning

A2.2.3.2. Predeparture Briefing

A2.2.3.3. PNAF Aircrew Nuclear Mission Kits

A2.2.3.4. Aircrew/Security Team Arming

A2.2.4. Enroute Operations

- A2.2.4.1. Special Considerations when Transporting Nuclear Cargo
- A2.2.4.2. Aircraft Preparation
- A2.2.4.3. Two-Person Concept
- A2.2.4.4. Cargo Acceptance and Transfer
- A2.2.4.5. Loading and Offloading Procedures
- A2.2.4.6. Ground Emergencies
- A2.2.4.7. Procedures for Cross-load Transfer of Nuclear Cargo
- A2.2.4.8. Departure Procedures
- A2.2.4.9. Command and Control Center Coordination
- A2.2.4.10. Arrival Procedures
- A2.2.4.11. Divert to Alternate Airfield
- A2.2.4.12. Emergency Procedures
- A2.2.4.13. Border Clearance Procedures
- A2.2.4.14. Crew Rest Procedures
- A2.2.4.15. Itinerary Deviation
- A2.2.4.16. Aircrew Complement
- A2.2.4.17. Aircrew Replacement and Staging
- A2.2.5. Security
 - A2.2.5.1. Threat and Vulnerability
 - A2.2.5.2. Types of Security
 - A2.2.5.3. Protection Standards
 - A2.2.5.4. Type I Aircraft Security Requirements
 - A2.2.5.5. Type II Aircraft Security Requirements
 - A2.2.5.6. Sanitized Aircraft
 - A2.2.5.7. Emergency Diversions of Nuclear-Laden Aircraft
 - A2.2.5.8. Sealing Aircraft
- A2.2.6. Custody Transfer Procedures
 - A2.2.6.1. Courier Designation and Certification
 - A2.2.6.2. Persons Authorized to Sign for Nuclear and DoD Nuclear-Related Cargo
 - A2.2.6.3. Courier Responsibilities
 - A2.2.6.4. Documentation
 - A2.2.6.5. Replacement Courier

A2.2.7. Nuclear Airlift Mission Support

A2.2.7.1. Nuclear Airlift Support

A2.2.7.1.1. Responsibilities

A2.2.7.1.2. Command and Control

A2.2.7.1.3. Intelligence Support

A2.2.8. Logistics Support

A2.2.8.1. Aircraft Selection and Preparation

A2.2.8.2. General Maintenance and Servicing

A2.2.8.3. Enroute Maintenance

A2.2.8.4. Safety Precautions and Personnel Requirements

A2.2.9. Post Mission Requirements

A2.2.9.1. Special Assignment Airlift Mission Report

A2.2.9.2. AF Form 527F, *Checklist for Nuclear Mission Support*

A2.2.10. Reporting Nuclear Mishaps

A2.2.10.1. Nuclear Aircraft Accidents, Incidents, or Deficiencies

A2.2.10.1.1. Flag Words

Attachment 3

EMERGENCY NUCLEAR AIRLIFT OPERATIONS (ENAO) COURSE OUTLINE

A3.1. Purpose. To prepare aircrew members for the successful accomplishment of emergency nuclear weapons airlift missions. Emphasis should be placed on safe and efficient operation. Training guidance will conform to procedures outlined in AFMAN 13-526.

A3.2. Contents. The emergency nuclear weapons airlift aircrew training course will include, as a minimum, the subjects listed below. **(T-2)** Additional items may be added, as required.

A3.2.1. Introduction: Airlift of Nuclear Weapons/ENAO

A3.2.2. ENAO Fundamentals and Mission Description

A3.2.2.1. Key ENAO Planning Publications

A3.2.2.2. ENAO's Relevance to the U.S. Nuclear Enterprise

A3.2.2.3. DoD Nuclear Weapon System Safety Standards (DoD Directive 3150.02, *DoD Nuclear Weapons Surety Program*)

A3.2.2.4. Nuclear Weapons System Safety Rules

A3.2.2.5. Mishap and Hazard Reporting

A3.2.2.6. Mishap and Hazard Reports Types

A3.2.3. Key ENAO Concepts

A3.2.3.1. Nuclear Surety

A3.2.3.2. Two-Person Concept

A3.2.3.3. As Low As Reasonably Achievable Standards

A3.2.3.4. Custody Procedures

A3.2.3.5. Command Disablement System Procedures

A3.2.4. Crew Selection and Mission Preparation

A3.2.4.1. Crew Complement

A3.2.4.2. Mission Planning Considerations

A3.2.4.2.1. Purpose of the Mission

A3.2.4.2.2. Classification of the Mission, Cargo, and Locations

A3.2.4.2.3. Itinerary and Location Support Requirements

A3.2.4.2.4. T.O. 11N-20-11 Overview

A3.2.4.2.5. Restrictions on Transporting General Cargo or Passengers

A3.2.4.2.6. Exclusion Area, Two Person Concept, and Security Requirements

A3.2.4.2.7. Personnel Authorized to Sign for Nuclear Cargo

A3.2.4.2.8. Intelligence and Threat Analysis Considerations

- A3.2.4.2.9. *DoD Foreign Clearance Guide, Special Weapons Overflight Guide Supplement* Overview
- A3.2.4.2.10. Airborne Intercept Procedures
- A3.2.4.2.11. Cargo Jettison Considerations
- A3.2.5. ENAO Operations Security (OPSEC) and Communications Security (COMSEC) Procedures
 - A3.2.5.1. Mission Compromise Considerations
 - A3.2.5.2. OPSEC/COMSEC Mitigation Measures
 - A3.2.5.2.1. ENAO Mission “Need to Know” Criteria
 - A3.2.5.2.2. ENAO Mission Compromise Procedures
- A3.2.6. ENAO Flight Planning Requirements
 - A3.2.6.1. Route of Flight
 - A3.2.6.2. DD Form 1801, *DoD International Flight Plan*
- A3.2.7. ENAO Security Requirements
 - A3.2.7.1. Nuclear Security Fundamentals Introduction
 - A3.2.7.2. Types of Nuclear Security
 - A3.2.7.3. Aircraft Sanitization Requirements and Procedures
 - A3.2.7.4. Exclusion Area and Entry Control Point Procedures
- A3.2.8. ENAO Cargo Loading Requirements
 - A3.2.8.1. Shipper’s Briefing
 - A3.2.8.2. Fire Fighting Requirements
 - A3.2.8.3. Cargo Loading Procedures
 - A3.2.8.4. Custody Transfer
 - A3.2.8.5. Hot Departure
- A3.2.9. En route Procedures
 - A3.2.9.1. Special Weapons Overflight Guide Route of Flight
 - A3.2.9.2. 30-Minute-Out Call
- A3.2.10. Hot Arrival and Download Procedures
 - A3.2.10.1. Courier Team Deployment
 - A3.2.10.2. Offload Procedures
- A3.2.11. Emergency Procedures
 - A3.2.11.1. Divert Procedures
 - A3.2.11.2. Jettison

A3.2.11.3. Hostile Force

A3.2.11.4. Fire/Dropped Item

A3.2.12. Maintenance and Servicing

A3.2.12.1. Aircraft Jacking

A3.2.12.2. Refueling and Servicing Oxygen