

# **Good Practices Guide to Secure Air Transport of Civilian Nuclear Material**

## ***Nuclear Security Summit Transport Gift Basket***

*Lessons Learned from Air Tabletop Exercise and Sharing the Experiences  
based on INFCIRC/225/Revision 5 and its Implementing Guide*

By United States of America, Republic of Korea,  
Hungary, France, and Canada

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# 1. Introduction

## 1.1 Background

Each nation bears an obligation and responsibility to protect and secure nuclear material. The International Atomic Energy Agency (IAEA) outlined principles and recommendations to protect this material in its Nuclear Security Recommendations on Physical Protection of Nuclear Materials and Nuclear Facilities (INFCIRC/225/Revision 5). The Nuclear Security Summit (NSS) Transport Security Working Group, led by Japan, held four tabletop exercises (TTX) designed to assist nations in implementing INFCIRC/225/Revision 5 recommendations on the transport of nuclear material. These exercises were based on Section 6 of INFCIRC/225/Revision 5 and the 30 September 2014 draft of the Security of Nuclear Material in Transport: Implementing Guide. Each exercise covered one mode of transportation and was led by a mode lead: air (U.S.), road (Japan), rail (Kazakhstan), and maritime (UK). These exercises were designed to highlight practical applications for the protection of category I and II non irradiated civil nuclear materials while in transit. Due to the sensitive nature of operations involving nuclear materials, the participants to this NSS transport gift basket agreed that materials produced in support of and resulting from the exercises contain only non-sensitive information.

## 1.2 Contents

This practical guide offers general advice to safely and securely plan air transport category I and II non irradiated civil nuclear materials and reflects information discussed during the U.S.-led air TTX. The guide's structure follows the TTX:

- Pre-operational planning, coordination, and logistics which includes (1) Security planning (e.g., route selection, information security); (2) Transport time considerations; (3) Physical protection measures; (4) Personnel; and (5) final pre-departure actions.
- Execution of transport, including (1) disruption of transport; and (2) route security
- Emergency response, including (1) security force response to an incident; and (2) communications
- Post mission analysis

## 1.3 Regulation Framework

As INFCIRC/225/Revision 5 states, it is important to have legislative and regulatory frameworks in place governing the physical protection of nuclear material. The U.S. has laws and regulations to do so. At the implementation level, the U.S. Air Force, which is responsible for most U.S.-led air transport missions involving Category I & II nuclear materials

(INFCIRC/225/Revision 5, Table 1, Categorization of Nuclear Materials), has published rules for these missions in Air Force Instruction (AFI) 13-526, Volume 2, DOE/NNSA Category I & II Special Nuclear Material (SNM) Cargo Airlift Operations. This manual outlines the requirements for U.S. air transport missions.

The final version of the air TTX is provided in Appendix I. The Air Force Instruction (AFI) 13-526, Volume 2 is provided in Appendix II.

## **2. Pre-operational planning, coordination and logistics**

### **2.1 Planning**

A number of recommended capabilities and actions can better ensure the safe and successful execution of a nuclear cargo mission. First, addressing shipment procedures in the manner of a “centralized control but decentralized execution” strategy has proven highly effective. For example, before a planned mission is executed, a central command and control authority should be responsible for the decision to proceed with a shipment. However, if an emergency occurs during mission execution, the aircraft commander/pilot should be responsible for making safety of flight decisions. Robust and specific communications plans are also recommended to synchronize planning, command and control, and operations procedures. During mission execution, redundant communications systems should be in place (e.g., aircraft satellite phones, secure two-way messaging and tracking equipment) to maintain communications between command and control entities and the aircrew.

### **2.2 Threat assessment**

Threat analysis informs both the strategic security posture and tactical decisions for shipments, making intelligence and/or law enforcement support key to an air transport mission and major factors in deciding to proceed with mission execution. In the case of the U.S. Air Force, the intelligence community and law enforcement provide inputs on potential threats at all locations the aircraft might transit; typically both primary and secondary divert airfields will be reviewed. Threat analysis pertains to direct threats to the shipment or general unrelated threats in the area (e.g, local crime reports). Designated authorities at each transit location should contact command and control if it is determined that the local threat situation has become too dangerous for a shipment. Factors such as weather, natural disasters, and civil unrest are considered in determining the flight route and whether to proceed with a shipment. The threat assessment and risk management assessment are the main factors that should inform the

senior decision-maker on whether to proceed with an air shipment. Prior to take-off, the intended destination and pre-coordinated divert locations along the flight route must acknowledge their readiness to accept the cargo at their facility. Only after all locations confirm their capability to provide required support should the transport mission be authorized to execute.

### 2.3 Decision authority

It is important to identify the entity or person who has overall decision authority in the execution of nuclear logistic movements. Identifying appropriate levels of command authority is important during normal operations and critical in the event of an accident or contingency. Before shipping nuclear material via air, the United States regularly conducts both TTXs and field training exercises (FTX), particularly with the involvement of security forces personnel. Consideration is given to the use of an “independent set of eyes,” such as a third party (e.g., inspectors, functional experts), to validate exercises in order to identify weaknesses or gaps in support capabilities. Exercises address two questions: (a) are procedures being followed? and (b) do the procedures work? Inspections of the processes and people involved in activities related to the transportation of nuclear materials are also conducted frequently on a no-notice or short notice basis, if possible.

### 2.4 Aircraft

Nuclear airlift missions are scheduled as far in advance as reasonably possible to provide ample time for mission planning, coordination, and aircraft preparation processes. Mission planners, aircrew, and shipper and receiver personnel review and coordinate on all scheduled operations and the sequence of events. In order to increase the reliability of aircraft used for nuclear airlift operations, the United States imposes enhanced maintenance and aircraft inspection requirements as compared to typical mission aircraft. In order to increase reliability and minimize the chances of aircraft maintenance issues during mission execution, it is recommended that nuclear airlift-designated mission aircraft be pre-selected and undergo rigorous aircraft maintenance inspection processes by specially selected and trained maintenance personnel. Additional consideration is given to further constraining accepted maintenance tolerances used to determine an aircraft’s airworthiness to conduct nuclear airlift operations. Due to the extensive time, planning, and prior coordination associated with executing nuclear airlift movements, a primary and a backup aircraft is prepared for home-station departure to minimize the chances a mission is cancelled or delayed. If available, a backup aircrew may be considered to minimize the chances of last minute mission cancellations.

If tasked, the backup aircrew should have the same level of prior planning and mission awareness as the primary aircrew.

## 2.5 Information sharing

A recommended practice is to establish a mission communication process that synchronizes planning and execution requirements among geographically separate entities involved in the mission. Such a process could include classified or sensitive information concerning mission itinerary, cargo types and quantity, security, identified divers and support requirements for locations involved in the mission. It is advisable to make changes to the mission communication process only when absolutely necessary. If critical mission information is publicized and/or compromised, it may be necessary to reschedule or cancel the mission.

## 2.6 Airfields

Because of security concerns associated with transporting nuclear cargo, it is essential that airfields used in loading operations meet basic security protocols to mitigate threat conditions and manage risk. Military airbases are the preferred takeoff and landing locations due to their inherent security posture and dedicated mission resources. Dual-use airports used by both military and civilian aircraft are an alternative option if they have security capabilities appropriate for protection of a nuclear transport mission. If a military or dual-use airfield is not available, a civilian airport may be an acceptable alternative depending on mission requirements. Convoy times and security vulnerabilities from storage facilities to designated airfields will impact which airports are used in the operation. Additional security will likely be required to bolster organic airfield capabilities. National and local laws may impact the ability of a particular airport to accommodate nuclear cargo. Planners should be aware of all applicable laws and ensure plans are compliant.

## 2.7 Security personnel

In order to promote aircraft security, the number of personnel authorized on nuclear transport aircraft should be kept to a minimum. With this in mind, it is recommended that the air transport group (i.e., aircrew with specialized training) assume custody of the nuclear material after it is loaded onto the aircraft by the ground transport group. Some nuclear cargo may require specialized monitoring in flight which may require additional personnel to accompany the material. Ground security personnel are responsible for securing the area around the aircraft from the time the cargo leaves its storage facility until it is airborne. Security personnel

should remain in place for at least 30-minutes before being released in the event the aircraft must immediately return to the point of origin.

## 2.8 Securing aircraft

Before nuclear cargo is loaded, U.S. military regulations require designated mission aircraft to be “sanitized.” Sanitization is a physical inspection of the entire mission aircraft and crew baggage, and may include an inspection by a certified explosives detection dog. It is intended to locate potential portable explosive devices and paraphernalia that could be hazardous to the aircraft or cargo. If sanitization is accomplished prior to the day of mission execution, it can only be maintained if the aircraft is secured by qualified guards. Aircraft doors and other points for aircraft access must be sealed and marked to identify unauthorized aircraft access while the aircrew is away. If security lapses at any time, aircraft sanitization must be re-accomplished. Therefore, it is preferable to begin the mission shortly after the aircraft is sanitized to minimize the need for additional aircraft security requirements prior to mission execution. There is a significant amount of planning involved to ensure close coordination and cooperation between the aircrew, security, and cargo handling personnel. Loading and offloading of the aircraft is vested with the aircraft commander, who personally monitors the operation.

## 3. Execution of transport

### 3.1 Limiting travel time

Minimizing the total time nuclear material remains outside secure storage facilities is of the utmost importance. Reducing nuclear cargo transport time as well as the number and duration of nuclear material transfers is a critical safety and security measure. When nuclear material is transported via air, U.S. policy, for example, requires use of the most efficient air routes possible with the shortest transit times and least number of stops to minimize the risk (preference is given to direct flights).

### 3.2 Overflight Clearance

Diplomatic overflight clearances and other agreements may significantly constrain the airspace over which nuclear material may be flown, as well as when and where an aircraft’s authorized overflight is permitted. Although stipulations in diplomatic overflight clearance are unique to each country, the U.S. stipulations are routinely found in the Foreign Clearance Guide. Of note, many stipulations for diplomatic overflight clearance require advance notification of any

hazardous cargo on board and the International Civil Aviation Organization (ICAO) nomenclature of the cargo.

### 3.3 Crew Duty Day

In addition, the U.S. requires nuclear airlift flights shipments be completed within a specified period of time defined in the U.S. as a Crew Duty Day (i.e., the amount of time one crew is on duty). Shortened Crew Duty Days ensure the aircrew is fully alert to safely execute assigned missions.

### 3.4 Refueling

Air refueling is another key component to nuclear air transport which extends aircraft endurance and minimizes unnecessary landings at intermediate locations. In compliance with international agreements, air refueling operations are usually conducted over water. In the United States, air shipments are scheduled to favor departing and arriving during daylight hours and routed to avoid overflight of heavily populated areas.

### 3.5 Routes

Air transport plans should avoid the use of predictable movement schedules by varying times and routes and limiting the advance knowledge of transport information. The routes and schedules of a nuclear shipment are not advertised outside official coordinating agencies, such as the receiver, or alternate landing sites.

## **4. Security**

### 4.1 Layered approach

It is recommended to employ a layered security strategy during transport. Physical security mechanisms (for example, cargo locks and tamper-proof tags) should be present. In the case of the U.S. Air Force, the aircrew is responsible for the security of the cargo in flight. Other than the aircrew, additional personnel traveling with the cargo should be kept to a minimum and only include personnel responsible for maintaining cargo custody or monitoring cargo safety. Limiting the number of personnel authorized on board the aircraft minimizes the potential for an “insider threat.” To ensure the physical and emotional status of the aircrew, each crewmember is subject to specific overall health and medical readiness requirements. A

personnel reliability program is in place to monitor personnel directly associated with nuclear operations. Crewmembers engaged in nuclear airlift operations must also observe the two-person concept (TPC) which prohibits a lone individual from having unsupervised access to nuclear cargo. The TPC is critical for the detection of incorrect procedures, intentional or accidental, or unauthorized acts and adds an additional layer of cargo security.

## 4.2 International policies

Nuclear airlift operations must comply with international rules, regulations and associated agreements of states directly and indirectly involved in the shipment. Special agreements concerning diplomatic, cargo, and overflight clearances must be coordinated prior to planned nuclear airlift movements. Countries planning nuclear airlift operations should initiate planning coordination as far in advance as necessary to accommodate any delays in clearance processing. It is also advisable to have clearances with multiple countries in case one clearance is not obtained. Finally, aircrew operating nuclear airlift missions must have full knowledge of all agreements and comply with coordinated guidance to avoid international incidents.

During flight operations with nuclear cargo on board, the aircraft must comply with international law applicable to state aircraft and all conditions of applicable clearances. Unintended crossings into national airspace without prior clearance must be avoided. If an aircraft is delayed while enroute, the aircrew should inform command and control authorities who will in-turn update affected agencies.

## 4.3 Tracking

Furthermore, the aircrew should avoid landing early at designated destinations to ensure the receiver and required security is fully ready to meet and secure the aircraft and accept the nuclear cargo. Command and control centers maintain real-time aircraft positional awareness using any technical means available. High-fidelity and secure global-positioning monitoring devices are used for all air shipments. Secure two-way voice communications between command and control authorities, the aircrew and security forces are employed.

# 5. Emergency Response

## 5.1 Planning

Pre-coordinated primary and secondary alternative landing sites should acknowledge their ability to accept mission aircraft. In the U.S., if an emergency occurs that requires a safety or security-related response, the military facility closest to the aircraft would normally respond. In an emergency scenario away from a military installation, civil agencies would provide the initial response. Additionally, civil agencies would provide security if the emergency is beyond the immediate reach of military security. In the event of an emergency that precludes landing at the primary or secondary airfield, the crew also has information for alternative airfields that could accommodate the aircraft and cargo. City, state, and local law enforcement may be used to provide necessary support. If necessary for safety or security purposes, shipment information can be shared with these emergency responders but should be kept to a minimum.

## 5.2 Communications

If an incident forces an unplanned landing, the aircrew's first response should be to coordinate with Command and Control and communicate the location of the divert and the reason for the divert. If a divert is the result of an aircraft malfunction, it may be preferable to repair the aircraft with the cargo on board, thereby minimizing the need for additional cargo handling or exposure. If Command and Control determines the aircraft cannot be repaired quickly, steps should be taken to move the cargo to a secure storage facility or crossload to another aircraft for onward movement. Cargo crossload operations to replacement aircraft require extensive coordination between the aircrew, security forces, ground support agencies, Command and Control, and local authorities. Appropriate force protection measures should be continually assessed by the on-scene and central Command and Control authorities.

## 6. Post Mission Analysis

Upon completion of each nuclear mission, the aircrew and each location, including the host airfield, provide official feedback to Command and Control to communicate any issues associated with the mission. If problems are identified, the information should be passed to an appropriate office (e.g., safety, security) to review and initiate required corrective actions. Additionally, once the aircrew returns to home station, they provide a verbal report to designated authorities summarizing the mission and any issues associated with it. The mission is formally complete with final notification to the Command and Control agency.

APPENDIX I: 2016 Nuclear Security Summit Transport Security Gift Basket Air TTX

APPENDIX II: Air Force Instruction (AFI) 13-526, Volume 2, DOE/NNSA Category I & II Special Nuclear Material (SNM) Cargo Airlift Operations

# Appendix I

2016

# Nuclear Security Summit



## Transport Security Gift Basket

Mode//Air

Mode Lead//United States

# Introductions

## Department of Energy

- Office of Counterterrorism Policy and Cooperation



## Air Force

- Players/Participants
- Others



## Nuclear Security Summit (April 2016)

- White House Initiative 2010
- World summit aimed at preventing nuclear terrorism
- About 50 countries in attendance



## Nuclear Security Summit Gift Baskets

- Countries can offer a “gift basket” based on specific security topic at the Summit
- An extra initiative lead by one country but in collaboration with others
- Leaders of the basket serve as role models on the topic

## Transport Security

- Japan (road)
- UK (maritime)
- Kazakhstan (rail)
- **US (air)**

# Exercise

- Exercise questions and scenario built around an IAEA document
  - Nuclear Security Recommendations on Physical Protection of Nuclear Material and Nuclear Facilities (INFCIRC/225/Revision 5)
- Series of recommendations for the international community
  - IAEA implementing guide to be published later

- Today's exercise is designed to capture **unclassified** best practices for the transport of Category I/II nuclear materials via air transport
  - Guide created based on notes from today
  - Completed by August 8<sup>th</sup>
  - Sent to participants for final approval
- Target audience for the guide
  - Participants of the Nuclear Security Summit
  - Other countries interested in air transport of nuclear material (France, ROK, Russia, etc.)

- This exercise is designed to be a structured discussion in order to gather learning points for real world practical applications with which players have had experience
- Extract best practices for the intended international audience
  - Unclassified
  - Basic concepts
  - Real world applications

# Objectives

## Players

- You are the experts; not designed to exercise your internal mechanisms
- Understood that US plans meet or exceed INFCIRC/225 Rev 5 recommendations
- Facilitators role to guide discussion

## Level of Discussion

- This tabletop exercise will primarily stress plans, policies, and procedures
- Geared towards creating a guide that highlights specific unclassified best practices for a broad audience



Move 1//Pre-operational planning,  
coordination, and logistics

# Inject 1

- A shipment of Category I nuclear materials is scheduled to depart by plane from one military base to another military base, both located within the US
- Logistical arrangements are made and a security plan is developed to cover the transfer of materials

# Security Plan

- Who is in charge of developing the security plan?
  - What is considered
- What elements of the physical protection measures are examined?
  - Shipment routes
  - Stopping places
  - Delivery arrangements
  - Personnel identification
  - Accident procedures
  - Reporting Procedures
  - Contingency Plans

# Security Plan 2

- How are these determined?
- How do you confirm that these measures are appropriate?
- Describe the process for the security plan's approval
  - Has a competent authority approved the security plan
  - Who is the competent authority

# Transport Time

- Is minimizing transport time a consideration?
  - Why or why not
- Who will provide final authorization immediately prior to beginning transport?
- Which conditional factors may determine this authorization?
  - Threat assessment
  - Intelligence reporting
  - Route surveillance
- Does this authorization include any specific limitations or conditions?

# Physical Protection Measures

- Will the carrier provide the receiver an advance notification of shipment?
  - How
  - Who
- What will this notification include?
  - Mode
  - ETA
  - Point of handover
- Does the receiver have enough time to make arrangements for adequate physical protection measures?
- What needs to be agreed upon before shipment?
  - Time
  - Place
  - Procedures to transfer responsibility for materials

# Physical Protection Measures 2

- Prior to transport, will the receiver confirm readiness to accept delivery?
  - How
  - Who
- Do physical protection measures comply with approved transport security plan?
  - Who verifies this
  - How
- What measures are in place to address security concerns included in the threat assessment?
- How does the security plan address unauthorized removal?
  - Delay measures

# Physical Security

- What physical security mechanisms (locks, etc.) are in place?
- Is the physical integrity of these mechanisms checked?
  - When
  - Who
  - How frequently
  - Delay times verified
- How are the keys to these mechanisms secured?
  - Who has access
  - Who is authorized to use them

# Physical Security 2

- How does the weight of the material being transported dictate the level of physical protection measures?
  - Why or why not
- What would constitute enhanced measures?
  - Additional security forces
  - Tie downs with multiple locking mechanisms
  - Additional requirements for key security

# Personnel

- Who will be tasked with providing security forces?
  - Military, law enforcement, private security
- What requirements are there for vetting these personnel?
  - Background checks, security clearances
- How do you determine the sufficient number of personnel required?
  - Does this number meet the requirements necessary in the event of a security incident or unauthorized removal
  - How is this determined prior to transport

# Personnel 2

- What duties are expected of the security forces?
  - Accompanying shipment before and during loading/unloading operations
  - Route surveillance
  - Surveillance of materials during all phases of transport
  - Incident response
- Do security forces have written instructions detailing their responsibilities during transport?
  - If so, who detailed/approved these instructions

# Route Security

- Does the approved security plan indicate the transport route and include planned stopping places?
- What considerations are taken into account when planning the route?
  - Natural disaster areas
  - Civil disorder
  - Known threats
- Are contingency plans in place?
  - Route change in response to changes in physical environment
  - Route change in response to changes in threat assessment
  - Route change in response to changes in operating conditions

# Route Security 2

- What direction is given regarding leaving the transport unattended (at any time)?
- What direction is given regarding marking the transport?

# International Shipments

- Do all plans, arrangements and procedures comply with the regulations of all states involved with the transport of materials?
- How will differences be reconciled?
- How is this verified?
- Who is responsible for verification?

# International Shipments 2

- How does the Convention on the Physical Protection of Nuclear Material impact any potential international shipments?
  - Responsibilities
  - Security Plan
  - Logistics
  - Notifications between all nations
  - Cooperation between all nations during potential incident response

# Compartmentalization of Planning

- Is limiting access to the advance planning an important consideration?
  - Why or why not
- If so, what measures are taken to limit advance knowledge of material transport, schedule and route?
- Who is responsible for this?
- Who needs to know?
  - How is this determined

# Pre-departure Actions

- What needs to occur prior to the loading of materials?
  - Securing of area
  - Search and securing of conveyance
  - Who is responsible
- What needs to occur prior to departure?
  - Checking on status of materials
  - Who is responsible
- Are you concerned about tampering?
  - Why or why not
  - Are security forces/others trained to identify tampering
  - What are signs of tampering
  - If tampering is detected, what are your actions?



Move 2//Execution of transport

# Inject 2

- While airborne a “land as soon as possible” emergency impacts the transport plane’s ability to stay operational
- The transport plane will be unable to continue the mission to the established destination

# Disruption of Transport

- Does an advance surveillance team reconnoiter the planned route?
- What is done in the event of an unexpected or extended stop?
- Are notifications made?
  - To who
  - Who is responsible
  - What will this include
- Any additional procedures during this time?

# Route Security 3

- Is the plane being exclusively used to transport the material?
  - Why or why not
- What physical security measures are in place on the plane
- What guidance is given to security forces regarding keeping the material in sight?

# Route Security 4

- Are contingency plans activated?
  - Why or why not
  - If so, which plan
  - What needs to be done, who is responsible
- What is the process for reporting/verifying changes necessitating contingency plan activation
  - Who has the authority to initiate contingency plans
  - How is this accomplished
  - Who else needs to be notified
  - What else needs to be done

# Inject 3

- The transport plane is able to successfully land
- The transport plane's communications systems were damaged in the same incident that forced the emergency landing
- Crewmembers are able to transmit their location and the status of the materials

# Personnel 3

- How long will it take security forces to respond to an incident
  - Has the response been exercised
  - Are there protocols in place to receive assistance, if necessary, from local law enforcement
- Will security forces be armed?
  - Does this comply with local law
  - Is this justified by threat assessment
  - What are the use of force guidelines
  - If security forces are not armed, what compensating measures are in place

# Communications

- What requirements are in the security plan regarding communications?
  - Regarding secure frequencies
  - Regarding redundancies
- What requirements are in the security plan regarding continuous, two-way communications between all parties in the transfer?
  - Security forces on the plane
  - Response forces
  - The responsible shipping entity
  - The responsible receiving entity

# Communications 2

- Does the approved security plan include reporting procedures?
  - What are they
  - If not, why
- Are there requirements for testing the interoperability of communications between all parties?
- Do all parties have a common operating vocabulary?

# Communications 3

- What requirements are in the security plan regarding utilization of a transport control center?
  - Where is it?
- What requirements are there for security measures to ensure operability of communications at all times?
- Who is responsible for staffing the control center?
- What is the control center responsible for?
  - Tracking location of shipment
  - Security status of shipment
  - Alerts in event of incident
  - Maintaining communications between parties

# Communications 4

- What are the security forces' requirements for reporting to the control center?
  - How frequently
  - What will they report
- Can the plane communicate its location?
  - GPS/other method
  - Secure
- What measures are taken to track the materials itself?
  - GPS/other method
  - Secure

# Inject 4

- The response force arrives
- All sensitive material is accounted for

# Post Mission Analysis

- The shipment is now complete
- Does a post-mission analysis need to be conducted?
- If so:
  - Who is in charge of the analysis?
  - Who is notified of the results?
  - Do follow up actions need to be taken?

# Hotwash

- Review key highlights of exercise
- Outstanding issues or additional discussion points
  - Were you aware of INFCIRC/225 REV 5? Has it effected your security plans?
  - Did you identify any gaps or oversights with INFCIRC/225 REV 5 reccomendations?
- Air transport guide
  - Will be sent to players for review before dissemination at the Nuclear Security Summit 2016

Thank you for your participation!

# Appendix II

**BY ORDER OF THE  
SECRETARY OF THE AIR FORCE**

**AIR FORCE INSTRUCTION 13-526,  
VOLUME 2**



**14 JUNE 2013**

***Nuclear, Space, Missile, Command and Control***

***DOE/NNSA CATEGORY I & II SPECIAL  
NUCLEAR MATERIAL (SNM) CARGO  
AIRLIFT OPERATIONS***

**COMPLIANCE WITH THIS PUBLICATION IS MANDATORY**

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**ACCESSIBILITY:** Publications and forms are available on the e-Publishing website at [www.e-Publishing.af.mil](http://www.e-Publishing.af.mil) for downloading or ordering.

**RELEASABILITY:** There are no releasability restrictions on this publication

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OPR: AMC/A3N

Certified by: AF/A3O  
(Maj Gen James J. Jones)

Pages: 54

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This instruction replaces the AMC Concept Of Operations (CONOPS) For Aircrew/Ground Handling Procedures For Transporting Category I & II Special Nuclear Materials (SNM) Associated With The Department Of Energy (DOE), and implements AAFP 13-5, *Air Force Nuclear Enterprise*, and is consistent with AAFP 11-2, *Aircrew Operations*, and portions of AFJI 11-204, *Operational Procedures for Aircraft Carrying Hazardous Materials*, and T.O. 11N-45-51 series, *Transportation of Nuclear Weapons Materiel*. This AFI may be supplemented at any level, but all supplements that directly implement this publication must be routed to AMC/A3N for coordination prior to certification and approval. It establishes the requirements and guidance for wartime and peacetime logistic airlift of DOE/NNSA Cat I & II SNM cargo. It applies to all personnel, especially planners, aircrews, controllers, security forces and maintenance personnel, involved in DOE/NNSA SNM movements.

Submit suggested improvements to this instruction on AF Form 847, *Recommendation for Change of Publication*, through MAJCOM channels to AMC/A3N, 402 Scott Drive, Unit 3A1, Scott AFB, IL, 62225-5302 or by email to [AMC.A3N@amc.af.mil](mailto:AMC.A3N@amc.af.mil).

This publication requires the collection and or maintenance of information protected by the Privacy Act (PA) of 1974. The authorities to collect and or maintain the records prescribed in this publication are Title 37 *United States Code*, Section 301a and Executive Order 9397, *Numbering System for Federal Accounts Relating T.O. Individual Persons*, November 22, 1943 and *E.O. 9397 (SSN)* as amended by Executive Order 13478, *Amendments to Executive Order 9397 Relating to Federal Agency Use of Social Security Numbers*, November 18, 2008. Forms

affected by the PA have an appropriate PA statement. System of records notice F011 AF XO Aviation Resource Management System (ARMS) applies.

Ensure that all records created as a result of processes prescribed in this publication are maintained in accordance with Air Force Manual (AFMAN) 33-363, *Management of Records*, and disposed of in accordance with the Air Force Records Disposition Schedule (RDS) located in the Air Force Records Information Management System (AFRIMS).

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## Chapter 1

### GENERAL

**1.1. Objective.** Guidance contained in Volume 1, 3, and 4 of this instruction series is written exclusive of each other based upon the mission that is to be executed. Specifically, guidance from one of these Volumes does not apply to any of the other Volumes. This Volume prescribes the basic guidance and approved procedures for planning, scheduling, controlling, executing, and supporting airlift missions transporting Department of Energy (DOE)/National Nuclear Security Administration (NNSA) category I and II Special Nuclear Material (SNM). The AF may be tasked to move this material in support of a United States nonproliferation policy designed to reduce its worldwide commerce.

#### 1.2. Key Words Explained

- 1.2.1. "Will" and "shall" indicate a mandatory requirement.
- 1.2.2. "Should" is normally used to indicate a preferred, but not mandatory, method of accomplishment.
- 1.2.3. "May" indicates an acceptable or suggested means of accomplishment.
- 1.2.4. "Note" indicates operating procedures, techniques, etc., which are considered essential to emphasize.

**1.3. Responsibilities.** AMC, Nuclear Operations Division (AMC/A3N), is the Office of Primary Responsibility (OPR) for this instruction. Unless otherwise specified in cited source references, AMC/A3 is the waiver authority for the procedures unique to this publication and 18 AF/CC is the authority for specified mission planning and execution waivers.

**1.4. Distribution.** The following individuals and agencies associated with supporting or executing DOE SNM airlift operations will maintain a copy of this instruction:

- 1.4.1. Operations, logistics, and safety staff agencies.
- 1.4.2. Security Forces units.
- 1.4.3. Prime Nuclear Airlift Force (PNAF) airlift squadron(s)/units.
- 1.4.4. Each individual PNAF aircrew member.
- 1.4.5. Custodial unit Civil Engineering, Readiness and Emergency Management, and Explosive Ordnance Disposal (EOD) units.

#### 1.5. Protecting Classified Information.

- 1.5.1. Use caution at all times to avoid compromising classified information. Adhere to all available classification guidance.
- 1.5.2. The Air Force Nuclear Weapons Security Classification Policy, CG-W-5, *Joint DOE/DoD Nuclear Weapon Classification Policy Guide*, TCG-WPMU-2, *Joint DOE/DoD Topical Classification Guide for Weapon Production and Military Use*, Economy Act, and Mission Setup Message govern the classification of nuclear mission information. Restricted data and formerly restricted data are not normally releasable to foreign nationals (NOFORN).

Do not send this type of information to any agency (civilian or military) of a foreign government unless directed to do so by an authoritative publication.

1.5.3. Do not use terms in unclassified text that reveals DOE SNM or classified cargo is aboard a specific aircraft or mission or at a specific location.

1.5.4. Do not talk around classified information. Use only the SAAM number, aircraft tail number, or Aircraft Commander's name when discussing a particular mission in unclassified media or via open lines. Do not use the term "DOE SNM" in conjunction with the SAAM number, aircraft tail number, or Aircraft Commander's name. Do not discuss shipping information that reveals actual nuclear cargo data (e.g., nuclear cargo or package name) via unclassified means.

1.5.5. Do not talk about any aspect of a DOE SNM SAAM unless the other person has an appropriate security clearance and a definite need-to-know. This applies even after a mission is complete.

1.5.6. For specific guidance on classification of Special Nuclear Material, refer to DoDI O-5210.67, *Special Nuclear Material Information, Security Classification Guidance*.

**1.6. Releasing Information.** Only appropriate commanders and public affairs officers may release information about nuclear mishaps to the public or news media. Public Affairs will ensure timely and uniform implementation of DoD approved policies as referenced in DoDI 5400.13, *Public Affairs Operations*, and AFI 35-104, *Media Operations*, to establish and conduct efficient and effective procedures for the release of nuclear activity information to the public, including news media (domestic, international), to include nuclear operations, accidents, IND incidents, or nuclear weapon significant incidents.

### **1.7. Nuclear Transportation Working Group**

1.7.1. Nuclear Transportation Working Group (NTWG).

1.7.1.1. IAW DoDI 4540.05, *DoD Transportation of U.S. Nuclear Weapons* and AFPD 21-2, *Munitions*, the NTWG provides a forum to resolve issues pertaining to efficient, safe, and secure transportation of nuclear cargo.

1.7.1.2. AF/A10 is the service lead to this meeting in order to present the Air Force position on NTWG agenda items as well as discuss current topics involving Air Force nuclear transportation issues.

1.7.1.3. AF/A10 will limit participation from MAJCOM, Air and Space Operations Center (AOC), and Unit personnel to the minimum deemed necessary to support discussions on specific issues. Agencies will be invited by AF/A10 as necessary.

### **1.8. Background.**

1.8.1. The DOE/NNSA Human Reliability Program (HRP) performs the same function as the DoD's Personnel Reliability Program (PRP). The Code of Federal Regulations (CFR) establishes procedures for the HRP at 10 CFR PART 712. It also highlights the requirement for PRP qualified aircrews to transport DOE/NNSA SNM. The DOE/NNSA will ensure that anyone involved in the movement of Cat I quantities of SNM is supervised under HRP.

1.8.2. One material the DOE/NNSA may ask the AF to transport is Highly Enriched Uranium (HEU). HEU is a very desirable material that in many cases is the missing link in a

nuclear weapon. Under DOE/NNSA custody, this material receives security and protection commensurate with DoD nuclear assets. During transport of Cat I quantities of SNM, DOE/NNSA provides the equivalent of Type I security offered to all DoD nuclear weapons and warheads.

### 1.9. Assumptions.

1.9.1. Aircrews will not deviate from governing AFI 11-2C-17, Vol 3, *C-17 Operations Procedures*, guidance without AMC/A3 approval.

1.9.2. DOE/NNSA SNM is properly prepared and certified for air shipment aboard AF aircraft in accordance with AFMAN 24-204(I)/TM 38-250/NAVSUP PUB 505/MCO P4030.19I/ DLAI 4145.3, 1 September 2009, *Preparing Hazardous Materials for Military Air Shipments*.

1.9.3. DOE/NNSA SNM will be accompanied by DOE/NNSA technical escorts to monitor cargo and provide technical assistance to aircrew pertaining to overall safety of shipment.

1.9.4. DOE/NNSA SNM will be assigned JCS priority 1A3 as determined CJCSI 4120.02C, *Assignment of Movement and Mobility Priority*.

1.9.5. DoD nuclear or nuclear-related cargo and DOE/NNSA SNM will not be combined on the same mission.

### 1.10. Aircrew Complement.

1.10.1. Missions transporting DOE/NNSA Category I or II SNM must be conducted with a PRP certified crew.

**Table 1.1. Aircrew Complement.**

Crew Position <sup>1</sup>	C-17
Aircraft Commander	1
Courier <sup>2</sup>	1
Co-Pilot	1
Loadmaster	2
Additional Certified Crewmember <sup>3</sup>	1

**Notes:**

**Note 1.** Squadron/unit commanders will ensure the appropriate crew complement is assigned to meet mission requirements IAW applicable portions of this instruction and AFI 11-2C-17, Vol 3.

**Note 2.** List authorized Courier officers in the Mission Setup Message. Do not annotate on the flight authorization.

**Note 3.** An additional PRP-certified crewmember will be assigned on missions requiring the Two-Person Concept (TPC).

**1.11. Mission Tasking.** All DOE/NNSA Cat I & II SNM missions will be processed through established DOE to DoD Economy Act Request, USTRANSCOM SAAM requirements, and 618 AOC (TACC) tasking procedures.

1.11.1. In addition to the Economy Act request, DOE/NNSA will provide an Airlift Request message to 618 AOC (TACC)/XOOOD for completion of the Mission Setup Message and include the following information:

1.11.1.1. Cargo loading and offloading location, available delivery dates, weights, item quantity, hazards, size, and detailed description.

1.11.1.2. Security classification and Type security required (Type I, Type II, other).

1.11.1.3. HRP/PRP requirements.

1.11.1.4. Personnel authorized to sign for DOE material list. Include full name, Social Security Number (SSN), security clearance, job title, employer, phone number, HRP status, and on/off load location(s).

1.11.1.5. Specific location/itinerary requirements: chains, nets, pallets, dunnage, hand trucks, drivers, and escort requirements.

1.11.2. Changes to the Airlift Request message for DOE/NNSA Cat I & II SNM missions will be sent as soon as possible to 618 AOC (TACC)/XOOOD.

## Chapter 2

### MISSION MANAGEMENT

**2.1. General.** This Chapter provides guidance in planning and scheduling DOE/NNSA SNM airlift missions. All missions transporting DOE/NNSA SNM will be planned by 618 AOC (TACC)/XOOD IAW established mission-planning procedures for general SAAM missions. OPSEC is essential at all times and in all mission correspondence. DOE/NNSA SNM mission success relies upon reliable, qualified, and prepared aircrews and support personnel during all phases of a mission (from planning through execution).

#### **2.2. Planning Criteria.**

2.2.1. Movements should be tasked early enough to allow 10-days for mission planning, coordination, and aircraft preparation.

2.2.2. Deliver DOE/NNSA SNM cargo by the most efficient route to minimize the number of landings and handling of DOE/NNSA SNM cargo.

2.2.3. Loading operations may be accomplished during hours of daylight or at night.

2.2.4. Mission planners, aircrew, shipper, and receiver personnel will coordinate on all scheduled operations and sequences of events.

2.2.5. Schedulers, planners, and operating crews must also consider the following:

2.2.5.1. DoD Foreign Clearance Guide (FCG), at <https://www.fcg.pentagon.mil> or <http://www.fcg.pentagon.smil.mil>, which also includes a Classified Supplement.

2.2.5.2. Host installation restrictions.

2.2.5.3. Airfield restrictions, operating hours, Prior Permission Required (PPR), etc.

2.2.5.4. Pertinent Letters of Understanding (LOUs)

2.2.5.5. User capability (hours of operation, security, etc.)

2.2.5.6. DoD S-5210.41M\_AFMAN 31-108, *Nuclear Weapons Security Manual*.

2.2.6. Aircrew scheduling requirements/limits in AFI 11-2C-17, Vol 3 and this instruction apply. Due to the critical importance of safely transporting DOE/NNSA SNM cargo, the portion of any mission from the beginning of Crew Duty Day (CDD) until the aircrew is no longer required, is further restricted as follows:

2.2.6.1. When DOE/NNSA SNM cargo is airlifted, all duties will be accomplished within the DOE/NNSA SNM CDD. When duties are complete or the DOE/NNSA SNM CDD has expired, aircrew may only perform non-DOE/NNSA SNM ground/flight duties within the remaining Crew Duty Time (CDT) IAW AFI 11-2C-17, Vol 3.

2.2.6.1.1. Basic DOE/NNSA SNM CDD. Limited to 16+00 hours (regardless of crew composition).

2.2.6.1.2. Augmented DOE/NNSA SNM CDD. Limited to 20+00 hours for missions scheduled for aerial refueling (A/R) or a C17 mission using the extended range tank in lieu of an A/R. If a scheduled A/R is canceled after crew alert and the crew was

alerted for a 20-hour crew duty day, DOE/NNSA SNM CDD will not exceed 20+00 hours.

2.2.6.2. Basic and Augmented DOE/NNSA SNM CDDs include ground time for loading and offloading of DOE/NNSA SNM cargo and terminates when the aircrew is no longer required. Additionally, the operating crew must develop a work-rest plan to mitigate Operational Risk Management (ORM) factors.

2.2.6.3. The 18 AF/CC is the waiver authority for DOE/NNSA SNM scheduling requirements and CDD limits associated with this instruction. Waivers may be requested by either the operating wing or the 618 AOC (TACC).

2.2.6.4. Ensure adequate ground time is available for proper crew rest prior to executing a DOE/NNSA SNM airlift mission segment.

2.2.6.4.1. Before home station departure or crew replacement, stage, or swap, crew duty periods will not exceed 16+00 hours unless crews are afforded a minimum of 24+00 hours ground time prior to alerting for a DOE/NNSA SNM airlift mission.

2.2.6.4.2. During non-nuclear DOE/NNSA SNM mission segments (no DOE/NNSA SNM transported, unloaded, or offloaded), CDT will be IAW AFI 11-2C-17, Vol 3. These segments will not be planned to exceed a basic 16+00 hour CDD unless ground time at the DOE/NNSA SNM loading location is at least 24+00 hours prior to executing a DOE/NNSA SNM mission segment.

2.2.6.5. Ground Operations. Required ground operations vary greatly depending upon the cargo type, quantity, and overall complexity of the operation. Therefore, planners will develop the mission itinerary with detailed input from the DOE/NNSA and operating squadron/unit prior to publishing the Mission Setup Message.

2.2.6.5.1. Remain Over Night (RON). Crew rest locations should be selected not only for mission requirements, but also to provide a suitable atmosphere for crew rest.

2.2.6.5.2. To ensure crew and installation support personnel are focused solely upon the offload operation, DOE/NNSA SNM missions will normally be scheduled to crew rest at the conclusion of a DOE/NNSA SNM airlift segment. **Note:** If custodial installation aircraft support is inadequate for RON conditions between offload and onload operations, a repositioning leg is authorized to a suitable installation.

2.2.6.5.2.1. Normal ground time between arrival and departure is 17+15 hours. If both an offload upon arrival and onload prior to departure are scheduled, ground time should be a minimum of 20+15 hours. Planners may adjust ground time to satisfy known mission requirements, but ground time will never be less than 16+30 hours.

2.2.6.5.2.2. DOE/NNSA SNM missions carrying DOE/NNSA SNM cargo will not be scheduled to RON at an en route location. With the exception of emergency divert situations, DOE/NNSA SNM cargo laden aircraft will only RON at installations with adequate support.

2.2.6.5.2.3. USAFE/A3/10 approval is required to RON with DOE/NNSA SNM cargo aboard (Hot RON) in the USAFE Area of Responsibility (AOR).

2.2.6.5.3. En route Stop (Non-RON). Normal ground time for loading and offloading is 3+15 hours. Planners must adjust this time based on the type and quantity of cargo being transported, ground support available, and anticipated complexity of on/offload procedures. Do not pad ground or flight times to avoid delays or cut times to remain within DOE/NNSA SNM CDD constraints.

### **2.3. Air Refueling (A/R).**

2.3.1. A/R may be planned where feasible to reduce ground exposure to the DOE/NNSA SNM cargo and when necessary to make destinations and suitable alternates with required contingency fuel.

2.3.2. Mission planners will coordinate with 618 AOC (TACC)/XOOKS for tanker support. 618 AOC (TACC)/XOPSA will coordinate altitude reservations with the appropriate altitude reservation facility. Plan a backup 24-hour slip in tanker support and altitude reservations, if applicable.

2.3.2.1. AOC mission planners, flight managers, and tanker units may split planned single primary tanker offload of fuel across multiple tankers. Tanker formations should be kept to two tankers for an air refueling segment.

2.3.2.2. Include the following information in the tanker request and A/R supplement:

2.3.2.2.1. Airborne or manned ground spares for each primary tanker. For purposes of spare tanker requests a single tanker offload planned to be split across multiple tankers is one primary tanker needing one primary spare. To minimize spare tanker requirements with single tanker split offload over multiple tankers each tanker will be able to provide the entire mission required fuel independently.

2.3.2.2.1.1. 618 AOC (TACC)/XOOD mission planners will determine the best option to meet the requirements of that particular mission segment. The mission planners will coordinate the information with 618 AOC (TACC)/XOOKS for planning.

2.3.2.2.1.2. 618 AOC (TACC)/XOOD mission planners will provide the operating tanker crew a briefing concerning mission OPSEC, routing, and other relevant restrictions via secure means.

2.3.3. To prepare for the unlikely event of an unsuccessful A/R when airlifting DOE/NNSA SNM cargo, support bases and pre-coordinated emergency divert locations identified in the Mission Setup Message will stand by to support emergency diverts until released by 618 AOC (TACC)/XOC.

2.3.3.1. Ensure the pre-coordinated emergency divert location is prepared to receive an aircraft in the event of an emergency divert. Should the A/R be aborted, 618 AOC (TACC) will notify the pre-coordinated emergency divert location and confirm host nation notification/coordination.

2.3.4. If the Aircraft Commander determines at any time that the planned A/R is not necessary, they must cancel A/R at the earliest opportunity. The Aircraft Commander's decision is final.

2.3.5. A/R over open ocean areas at least 12 nautical miles (NM) off shore.

2.3.5.1. The A/R must be accomplished as safely, efficiently, and expediently as possible.

2.3.5.1.1. Accomplish only those maneuvers required for transferring the mission required fuel. Example: Receiving the required onload from the primary tanker only, or from multiple tankers if a split onload was planned IAW 2.3.2.1. Additional events during A/R beyond those necessary to onload required fuel, including training by tanker and/or receiver crews, are prohibited at all times.

2.3.5.1.2. Do not conduct A/R upgrade training on missions carrying DOE/NNSA SNM cargo.

2.3.5.1.3. If the Aircraft Commander is a current Instructor or Evaluator in the aircraft, they may refuel from either seat, regardless of who is occupying the other seat.

2.3.5.2. Current and qualified Aircraft Commander certified pilots may perform air refueling on DOE/NNSA SNM cargo-laden missions, provided the designated mission Aircraft Commander is occupying the other seat.

2.3.6. The Aircraft Commander will provide the post-A/R report to the controlling C2 cell via appropriate means within 15 minutes after completing an A/R.

2.3.6.1. Do not attempt to contact the crew in flight to determine successful completion of the A/R unless no message has been received from the crew after 15 minutes past the anticipated completion of the air refueling. Contact the crew if a high priority message or emergency order must immediately be transmitted. 618 AOC (TACC)/XOOOD planners or XOCG will notify the appropriate pre-coordinated emergency divert location and release ground support personnel after the A/R is successfully completed.

#### **2.4. Mission Planning/Coordination.**

2.4.1. Cargo Clearances. The DOE/NNSA will transmit cargo clearance requests as required. A copy of the requests as necessary will be forwarded to the 618 AOC (TACC)/XOOOD planners.

2.4.2. Overflight Clearances. Mission planners will coordinate overflight clearances per country specific Letters of Understanding or otherwise as required.

2.4.3. Diplomatic Clearances. Mission planners will coordinate Diplomatic Clearances as required by the DoD Foreign Clearance Guide.

2.4.4. Plan DOE/NNSA SNM mission itineraries with the utmost care. Consider factors such as weather, routing, overflight rights, suitable alternate/emergency airfields, host base capabilities, anticipated onload/offload times, fuel requirements, CDT, DOE/NNSA CDD, and aircrew fatigue factors.

#### **2.5. Mission Setup Message (Content, Classification, and Distribution).**

2.5.1. 618 AOC (TACC)/XOOOD mission planners will prepare a classified Mission Setup Message for all missions transporting DOE/NNSA SNM cargo. 618 AOC planners will send the Setup Message at least 15-calendar days before home station departure (See Attachment 3 for a sample message). Support requirements will be coordinated by secure means at all times.

2.5.2. The classified Mission Setup Message is the sole source of mission information to users and host bases.

2.5.3. Mission Setup Messages will be classified according to mission destinations and overflight classification.

2.5.3.1. PART I will be unclassified.

2.5.3.2. PART II will be classified. All paragraph classifications will be marked in accordance with DoDM 5200.01, Vol 2, *DoD Information Security Program: Marking of Classified Information*.

2.5.4. At a minimum, the Mission Setup Message will contain the following information:

2.5.4.1. PART I *Unclassified*

2.5.4.1.1. SAAM Number.

2.5.4.1.2. Mission Itinerary.

2.5.4.2. PART II *Classified*

2.5.4.2.1. Hazardous Cargo Information. Include hazardous cargo information required by AFJI 11-204, *Operational Procedures for Aircraft Carrying Hazardous Materials*, to include all cargo weights, size, and detailed description.

2.5.4.2.2. Security Requirements

2.5.4.2.3. Specific station requirements. To preclude misunderstanding by host base support personnel, special requirements will be written in plain language with a clear and detailed description of the sequence of ground operations.

2.5.4.2.4. Courier Officer Listing

2.5.4.3. Information may be added or modified as long as messages are in standard format (Attachment 3).

2.5.5. Distribution of Mission Setup Message

2.5.5.1. Mission Setup Messages will be distributed to the operating unit, all stations (including pre-coordinated emergency divert locations) identified on the mission itinerary, Command and Control entities, participating MAJCOMs and COCOMs, Air Force, Joint Staff, and DTRA and DOE/NNSA Office of Secure Transportation (OST).

2.5.5.2. Requests to receive Mission Setup Messages should be made to AMC/A3N.

2.5.5.2.1. Approved requests will be forwarded to 618 AOC/XOOOD with the correct SIPR organizational and/or individual email addresses.

2.5.5.2.2. Organizations or individuals approved for receipt of the Mission Setup Message will annually validate approval by the end of each fiscal year (FYXX).

2.5.6. Mission Setup Message (Station Support Requirements Acknowledgement and 24-Hour Confirmation):

2.5.6.1. All stations listed on the mission itinerary will send an acknowledgement of ability to support/non-support the mission itinerary and/or the applicable special requirements listed in Part II of the Mission Setup Message. Note: DOE/NNSA will

provide Acknowledgement of Station Support Requirement messages for all locations that do not have ability to send receive classified messages.

2.5.6.1.1. The Acknowledgement of Station Support Requirements message will use a standard format. (AF Form 527D)

2.5.6.1.2. Paragraph 7 of the Mission Setup Message will state when acknowledgement needs to be received by the mission planners, operational unit, and the 618 AOC/XOCG-DDO2. Mission planners will provide three working days for stations to send an acknowledgement to an original Mission Setup Message.

2.5.6.1.3. A station only needs to send acknowledgement for the most current Mission Setup Message, i.e., when a change to a Mission Setup Message is released before a station has sent the acknowledgement for the previous message.

2.5.6.2. A 24-Hour Confirmation of Support Requirements message will be sent by all en route stations and pre-coordinated emergency divert locations as listed in the mission itinerary. A station with multiple itinerary entries on the same day can be combined on one 24-Hour message. A station with a single entry spanning two consecutive days and no additional entries on the second day need only send one 24-Hour message. Note: DOE/NNSA will provide 24-Hour Confirmation of Support Requirements messages for all locations that do not have ability to send receive classified messages.

2.5.6.2.1. The 24-Hour Confirmation of Support Requirements message will use a standard format. (AF Form 527E)

2.5.6.2.2. The 24-Hour Confirmation of Support Requirements message will be sent to the mission planners, operational unit, and 618 AOC/XOCG-DDO2 no later than 24-Hours prior to station arrival. If 24-Hours prior falls on a non-duty day then the message will be sent the first duty day prior. 618 AOC (TACC)/XOCG-DDO2 will make a final voice confirmation of support from the 24-Hour POC listed on the acknowledgement and confirmation messages.

2.5.6.2.3. A station only needs to send a 24-Hour Confirmation of Support message for the most current Mission Setup Message, i.e., when a change to a Mission Setup Message is released before a station has sent the 24-Hour Confirmation for the previous message.

## **2.6. Changes to Mission Setup Message.**

2.6.1. Changes to Mission Setup Messages must be kept to a minimum. Should changes be absolutely necessary the following guidance will apply:

2.6.1.1. All changes will be coordinated and distributed IAW paragraph 2.5.5. and acknowledged IAW para 2.5.6.

2.6.1.2. Separate messages will be used for each change. Change messages will be in the original format with a clear statement advising the reason for change and all changes will clearly identify the information that is changed.

2.6.1.3. Changes will not be generated solely to correct non-critical typographical errors. Write-in changes to Mission Setup Messages are not permitted.

2.6.2. Requesting Changes to the Mission Setup Message.

2.6.2.1. Requests to change a mission setup must come from the requesting unit's Wg/CC or higher and be submitted to the AOC mission planners for coordination. The DOE/NNSA OST can provide this function for missions transporting other DOE/NNSA cargo.

2.6.2.2. Stations that submit a non-support acknowledgement message will also send a request for change to the Setup Message.

2.6.2.3. Requests to change the mission itinerary by greater than 2 hours will not be accepted within 10 days of mission execution.

2.6.2.4. Missions enter execution 24-Hours prior to scheduled home station departure and are complete after the last active leg of the mission itinerary. Changes to the mission setup will be issued automatically for the following:

2.6.2.4.1. Mission is delayed more than 2 hours by maintenance, weather, or other factors.

2.6.2.4.2. Change to cargo information that does not impact the itinerary or timing beyond 2 hours.

2.6.2.4.3. Aircraft Divert

2.6.2.4.4. A change will not be issued solely to cancel an A/R.

2.6.3. Waiver authority for requests made within 10 days prior to execution will be the 618 AOC (TACC)/CC. **Note:** Waiver requests that do not contain the following information below will be denied:

2.6.3.1. Name, grade, unit and title of requester.

2.6.3.2. Date of request.

2.6.3.3. Mission number of affected mission.

2.6.3.4. Detailed reason the change is necessary.

2.6.3.5. Date and time the required change was discovered.

2.6.4. When changes to the itinerary are necessary after a mission has started, 618 AOC/XOCG-DDO2 will coordinate with 618 AOC mission planners to publish changes to the Mission Setup Message and forward to the aircrew with an information copy to the operating wing. To avoid delay of a mission, voice confirmation of changes between 618 AOC/XOCG-DDO2 and the aircrew are acceptable but should be used as a last resort only. Changes to the Mission Setup Message will be forwarded to all stations and the operating wing using the format in Attachment 3.

## **2.7. Additional Airlift Requirements.**

2.7.1. If changes to DOE/NNSA SNM cargo are approved before the mission starts, the Mission Setup Message will be changed through normal channels via procedures listed in paragraph 2.6.

2.7.2. Attachment 2 lists the types of DOE/NNSA materials and associated handling requirements. Any changes to the Economy Act must be coordinated between 618 AOC

(TACC)/XOOOD and the DOE/NNSA. Coordination must be accomplished as soon as additional cargo is identified.

2.7.3. Only DOE/NNSA SNM cargo identified in the Mission Setup Message and Airlift Request may be accepted.

2.7.3.1. If a discrepancy is identified between the DOE/NNSA SNM cargo or the Economy Act, contact the AOC mission planners through the Consolidated Control Center (CCC). The AOC will immediately contact the DOE/NNSA POC to resolve any discrepancies. The DOE/NNSA POC will identify to the AOC acceptable actions, e.g. serial number of cargo transposed. The DOE/NNSA POC will recommend if the DOE/NNSA SNM cargo should be accepted by AMC Courier or should remain at the shipping unit and transported on a future mission. The Courier retains the ultimate authority to accept or deny DOE/NNSA SNM cargo.

2.7.3.2. If DOE/NNSA POC, AOC, and the aircrew resolve the discrepancy and the decision is made to move the DOE/NNSA SNM cargo, the DOE/NNSA POC will issue a new Economy Act and the AOC will issue a new SAAM Setup Message. The aircrew will attempt to attain a hard copy of the Airlift Request/Economy Act and Setup Message before departure. If unable to attain a hard copy due to operational restrictions (i.e. at a foreign installation), the aircrew may continue the mission after receiving an unclassified email confirmation. Use a voice confirmation as a last resort.

2.7.3.3. If a discrepancy is identified at the arrival/offload location, it will be resolved prior to offloading DOE/NNSA SNM cargo.

2.7.4. Cargo:

2.7.4.1. Opportune cargo may be carried on unsanitized positioning legs, but do not change the route of flight to solely accommodate the movement of cargo.

2.7.4.2. Unused space aboard DOE/NNSA SNM cargo missions may be used for general cargo if:

2.7.4.2.1. The DOE/NNSA user authorizes the cargo to be aboard.

2.7.4.2.2. Extra landings will not be required.

2.7.4.2.3. The added weight will not cause problems with required fuel, aircraft center of gravity (CG), etc.

2.7.4.2.4. It is compatible and packaged IAW AFJAM 24-204.

2.7.4.2.5. It will not cause additional handling and movement of DOE/NNSA SNM cargo. General cargo (if jettisonable) must be loaded so it may be jettisoned, if necessary, without disturbing the DOE/NNSA SNM cargo. **Note:** Time permitting aircrews should jettison general cargo before jettisoning DOE/NNSA SNM cargo, and unclassified cargo before classified cargo.

2.7.4.2.6. It will not cause security problems, including aerial port onloading and offloading.

2.7.4.2.7. Cargo is thoroughly searched and sanitized before loading aboard the aircraft.

2.7.4.2.8. After search and sanitization, it is stored in a secure manner.

## **2.8. Passengers, Mission Essential Personnel, and Flying Crew Chief.**

2.8.1. Passengers may only be carried on mission segments in which the aircraft is empty or only carrying general cargo. Do not carry passengers while DOE/NNSA SNM is aboard. This does not include DOE/NNSA personnel who are manifested as duty passengers. The crew will manifest all passengers. The Aircraft Commander will file copy of passenger manifest with most responsible on-scene agency.

2.8.1.1. DOE/NNSA personnel who fly on DOE/NNSA SNM movements will be manifested as duty passengers. These individuals will accompany the aircrew to/from onload/offload locations. In-flight duties will include, but are not limited to, ensuring the cargo remains at safe radiation levels during transport. When transporting DOE/NNSA SNM cargo requiring radiation monitoring, DOE/NNSA will ensure appropriate personnel accompany the mission to perform this function.

2.8.1.2. DOE/NNSA personnel requiring airlift on DOE/NNSA SNM missions will be identified by the DOE/NNSA NLT ten days prior to mission execution. The Field Operations Officer or designee from the Office of Secure Transportation (OST) will provide a listing with individual information. For questions contact: Office: (505) 845-4180/4448/5071 or STE: (505) 845-4180/6262/4867.

### **2.8.2. Mission Essential Personnel (MEP)**

2.8.2.1. MEPs must meet the basic requirements of AFI 11-2C-17 Vol 3, MCI 11208, *Tanker/Airlift Operations*, and AFI 11-401, *Aviation Management*. Commanders at all levels must rigidly minimize the number of extra people on DOE/NNSA SNM missions and inside DOE/NNSA SNM mission exclusion areas.

2.8.2.1.1. Individuals requesting MEP authorization will provide the approving authority their SSN, security clearance, PRP status, specific mission for which MEP is requested, and reason for participating in the mission. This information must be provided to the operating wing a minimum of ten days prior to home station departure.

2.8.2.1.2. MEP procedures and approval will be IAW AFI 11-401. MEP authority is granted for specific individuals on particular missions. MEP authority will not be used as blanket approval on all DOE/NNSA SNM airlift missions nor will it constitute personnel travel clearance required by the DoD Foreign Clearance Guide.

2.8.2.1.3. Classify requests appropriately if a specific mission or location is included. Approve requests for MEP based on security clearance, need-to-know, space available on the aircraft, and valid in-flight or ground duty to perform.

2.8.2.1.4. Without a specific inflight duty, individuals requesting MEP to observe onload and offload operations will not be approved if any other transportation is available.

2.8.2.1.5. Commanders of tasked operating wings and NAFs may authorize MEP status for people under their command. All others must be approved by AMC/A3.

2.8.2.1.6. AMC/A3 validated MEP letters will be transmitted via message from AMC/A3N, and approved by the owning Operations Group Commander.

2.8.2.2. IAW AFI 11-401, the Operations Group Commander is the final authority of MEP status on DOE/NNSA SNM airlift missions operated by their wing. MEPs must be on official orders, and fall into the following categories:

2.8.2.2.1. Commanders, supervisors of aircrews and related programs: Vice commanders, operations group commanders, deputy operations group commanders, and squadron/unit commanders and operations officers.

2.8.2.2.2. Certified aircrew flight examiners from the operating parent wing or MAJCOM.

2.8.2.2.3. Chiefs of Safety and Nuclear Surety Managers (NSM) from the parent wing and MAJCOM performing Nuclear Surety Staff Assistance Visits (NSSAV) or augmenting Functional Expert Visits (FEV).

2.8.2.2.4. AMC nuclear operations staff personnel performing FEVs, augmenting NSSAVs, or escorting authorized DVs. Crewmembers and guests are either part of the crew or on MEP status, but not both for any given mission day.

2.8.2.2.5. MAJCOM inspector general, Air Force Inspection Agency (AFIA), Air Force Safety Center (AFSEC), Defense Threat Reduction Agency (DTRA), and AMC Nuclear Surety office inspectors and augmentees conducting inspections/observations. **Note:** AFIA, AMC/IGP, DTRA, and AMC/SEW offices are responsible for distributing and maintaining current authorization letters. Updated letters will be sent via email which have been digitally signed to AMC/A3N, 618 AOC (TACC)/XOOD, 618 AOC (TACC)/XOCG and 4 AS/DOOMS offices as soon as changes occur to ensure authenticity.

2.8.2.3. MEP authorization (individual orders or MAJCOM/NAF message) will have the approval authority, security clearance, SSN, mission number, and reason for participating in the mission. Orders will not specify a particular mission number. Classified mission details will be transmitted via classified means (i.e. SIPRnet, Secure Fax, etc.).

2.8.2.4. Persons traveling as MEP will be briefed by the operating squadron/unit (or Aircraft Commander when joining the mission en route) on specific mission information needed to accomplish their assigned task. Briefing will include familiarization on applicable security and safety standards and emergency procedures.

2.8.2.5. MEPs must be positively identified by a service or agency official identification card.

2.8.2.6. The aircrew Courier must verify the MEP's PRP or HRP status prior to executing the tasked mission. Certified individuals must have an appropriate annotation in their MEP authorization.

2.8.2.6.1. A valid Two-Person Concept (TPC) team must escort individuals not certified under PRP or HRP. Required non-HRP DOE/NNSA personnel may be escorted by DoD or DOE personnel, or a combination of both. The DOE/NNSA will supply a minimum of two escorts for all required non-HRP individuals.

- 2.8.2.6.2. MEP's requiring escort by the aircrew must provide the operating wing a minimum of ten days notice prior to mission execution to ensure escort officials are scheduled for the mission.
- 2.8.2.7. Travel orders for MEPs will cite the MEP authority and be presented to aircrew before mission operation.
- 2.8.2.8. MEP authority provides direct access to the mission aircraft without processing through passenger service section; therefore, the aircrew is responsible for manifest and anti-hijacking procedures for MEPs. The Loadmaster will annotate all MEPs on a DD Form 2131, *Passenger Manifest*.
- 2.8.2.9. MEPs on PRP status and designated by the aircrew Courier may be authorized unescorted entry into the restricted area around the aircraft. MEPs certified under PRP and knowledgeable in the task to be performed may be used as part of a two-person team.
- 2.8.2.10. MEP verification. Aircraft commanders will not allow anyone to fly on a DOE/NNSA SNM mission unless they are convinced of the person's identity and the legality of their authorization.
- 2.8.2.10.1. If there is any doubt or suspicion, regardless of rank or position, diplomatically but firmly deny access to the aircraft and cargo.
- 2.8.2.10.2. Unless an MEP is personally known, do not accept just a set of orders as authorization. Verify and confirm the orders through other channels. For example, MAJCOM IG, AFIA, AFSEC, DTRA, and AMC Nuclear Surety inspectors are identified on a master inspector's list/letter that is carried in the aircraft mission kit. If required the Aircraft Commander will call outside offices for verification.
- 2.8.3. Flying Crew Chiefs (FCC). Flying crew chiefs are not normally required on DOE/NNSA SNM missions. FCCs may be scheduled on DOE/NNSA SNM missions at the discretion of the operating wing commander.
- 2.8.3.1. FCCs need not be PRP certified, but must possess a final Secret security clearance. Ensure PRP status is noted on the aircrew entry authority list (EAL).
- 2.8.3.2. FCCs will attend the squadron/unit's DOE/NNSA SNM mission briefing. The FCC will be briefed individually by the nuclear airlift monitor or designated representative before attending the nuclear mission briefing. This briefing must cover security precautions and no-lone zone procedures in sufficient detail to prevent inadvertent violations by the FCC. Stress safety precautions to include specific precautions in Chapter 8.
- 2.8.3.3. FCCs will not seal mission aircraft, nor will they be allowed unescorted access to aircraft containing DOE/NNSA SNM cargo. Do not leave the FCC in sole custody of the aircrew mission kit or aircrew sidearms. **Exception:** When servicing and maintenance are required, the FCC may seal empty SNM mission aircraft. Aircraft will be sanitized before subsequent loading of DOE/NNSA SNM cargo.
- 2.8.3.4. Flying Crew Chiefs (FCC) will be granted access to DOE/NNSA movements at the discretion of the supporting wing.

## Chapter 3

### PREDEPARTURE REQUIREMENTS

**3.1. Aircrew Mission Planning.** The Aircraft Commander, Courier officer, primary Loadmaster, and trainees in each respective crew position shall begin a mission information review and inter-organizational coordination NLT three duty days prior to crew entering Pre-Mission Crew Rest for home station departure. At a minimum, ensure the following have been completed prior to the departure brief:

- 3.1.1. Review the DOE/NNSA Economy Act.
- 3.1.2. Review the Mission Setup Message and current changes as necessary.
- 3.1.3. Review onload and offload methods to be used at each station. (Coordinate with unit and 618 AOC (TACC)/XOOOD)
- 3.1.4. Prepare a list using AMC Form 292, *C-17A Special Loading Equipment Receipt*, of required equipment and coordinate this information to an APS representative and place a copy in the Mission book. Specific items to consider:
  - 3.1.4.1. Shoring required for primary and alternate loading methods to be used.
  - 3.1.4.2. Additional tie down chains and devices.
  - 3.1.4.3. Empty 463L pallets.
  - 3.1.4.4. Bridge plates or truck loading ramps.
  - 3.1.4.5. Wheeled prybars.
- 3.1.5. Review all mission requirements at each station to determine locations/situations where security will be provided by the aircrew.

**3.2. Predeparture Briefing.** Aircrew shall accomplish a pre-departure briefing prior to operating DOE/NNSA SNM missions.

- 3.2.1. A detailed threat assessment pertaining to all applicable locations will be presented to the aircrew prior to home station departure.

**3.3. Publications, Forms, and Letters.** The following lists the minimum pubs, forms, and letters required to be carried on DOE/NNSA SNM airlift missions.

- 3.3.1. Publications:
  - 3.3.1.1. DoD S-5210.41-M\_AFMAN 31-108, Vol 3.
- 3.3.2. Forms:
  - 3.3.2.1. Economy Act
  - 3.3.2.2. Mission Setup Message and any changes.
  - 3.3.2.3. DOE/NNSA Authorized Recipient/Certification List.
  - 3.3.2.4. Entry Authority List.
  - 3.3.2.5. AF Form 1109, *Visitor Register Log*.

3.3.2.6. DD Form 2825, *Individual Receipt*, AF Form 1297, *Temporary Issue Receipt*, or other official receipt form.

3.3.2.7. DD Form 1911, *Materiel Courier Receipt*.

3.3.2.8. DD Form 2131, *Passenger Manifest* (not required if item is included in the normal mission kit).

3.3.2.9. SF 312, *Classified Information Nondisclosure Agreement*.

3.3.2.10. Blank cargo manifests.

3.3.2.11. AF Form 310, *Document Receipt and Destruction Certificate*.

### 3.3.3. Letters:

3.3.3.1. Lists of persons authorized to receive cargo (include lists for certified alternate airfields).

3.3.3.2. U.K. Letter of Understanding.

3.3.3.3. Official Courier identification letters.

3.3.3.4. Request for waiver to customs and agriculture boarding requirements.

3.3.3.5. Security acknowledgment letters.

3.3.3.6. Current MEP authorization letters of AMC/IG, AFIA, DTRA, MAJCOM Nuclear Surety, and MAJCOM Nuclear Operations (i.e. AMC/A3N) personnel.

3.3.3.7. Sequence of Events letters.

3.3.4. Serialized security seals and tamper tape (not required if items are included in the normal aircraft mission kit).

3.3.5. The kit will meet the requirements of AFI 31-401, *Information Security Program Management*, for protecting classified material aboard the aircraft. Attach a clear plastic shield with the prescribed DoDM 5200.01, Vol 3, *DoD Information Security Program: Protection of Classified Information*/AFI 31-401 certification for Courier material inserted.

3.3.6. The Courier officer will conduct an inventory of the kit, accept custody of the classified material, and sign an AF Form 310, prior to home station departure. Account for all classified material after the mission.

3.3.7. At en route crew rest stations, store the mission kit in a suitable document storage facility (command post, communications center, security forces classified holding area, base ops, etc.). Obtain a receipt (DD Form 2825, AF Form 1297, or other official receipt) for the kit when released to any agency. When transferring kits between stage or replacement Couriers, the Couriers will conduct an inventory of the kit. Use an AF Form 310 to transfer custody of classified documents.

### 3.4. Aircrew Arming. All aircrew members shall arm.

3.4.1. Aircrew will wear the sidearm exposed when directly involved in protecting DOE/NNSA SNM, except when prohibited by host country policy listed in the DoD Foreign Clearance Guide. Conceal sidearm at all other times.

3.4.2. During onload and offload operations, weapons may be worn, secured in the aircraft weapons storage box, or left in the custody and positive control of the crewmember monitoring the radios in the crew compartment.

## Chapter 4

### EN ROUTE OPERATIONS

**4.1. General.** This Chapter outlines en route operational procedures to be used by aircrews and command and control centers (CCC). Included are procedures for communications, cargo loading and offloading, and aircraft emergency divers.

**4.2. Special Considerations When Transporting DOE/NNSA SNM Cargo.**

4.2.1. Aircrew members shall not consume alcoholic beverages within 12 hours of crew show time on active legs carrying DOE/NNSA SNM cargo.

4.2.2. Keep to a minimum the time DOE/NNSA SNM is outside secure storage. Coordinate fully with support agencies, shippers, and receivers. Keep them informed of mission progress and intentions.

4.2.3. When DOE/NNSA SNM is aboard, every effort will be made to land on time. It is best to arrive at the specified time to ensure all agencies, especially at foreign airfields, support arrival.

4.2.4. Security Alternate Fuel. Include 10,000 pounds security fuel when fuel planning for DOE/NNSA SNM movements. Security alternate fuel is designed for all missions to allow the Aircraft Commander the option of departure from an immature or deteriorating security situation. This is in addition to all other required fuel. Do not offload DOE/NNSA SNM to allow for security alternate fuel. General cargo will be offloaded to allow for security alternate fuel.

4.2.5. Flight Planning. Enter "hazardous cargo," "inert devices," or both if applicable and the mission number in the "remarks" section of the DD Form 175, *Military Flight Plan*, or in the "other information" section of the DD Form 1801, *DoD International Flight Plan*. **Note:** LLCs with line numbers and certain Type 3 trainers and JTAs are hazardous cargo.

4.2.6. On air refueled mission segments, use the pre-coordinated emergency divert location designated in the Mission Setup Message if at all possible. If a different emergency divert location is necessary, inform the controlling CCC as soon as possible so the duty controller can advise the new emergency divert location. Before takeoff, the Aircraft Commander must ensure the new emergency divert location confirms security is available.

**4.3. Firefighting Requirements.**

4.3.1. When possible, have firefighting support immediately available during loading, engine starts, and servicing (oxygen and fuel).

4.3.2. Do not concurrently service when loading/offloading DOE/NNSA SNM material.

**4.4. Two-Person Concept (TPC).** See AFI 91-104, *Nuclear Surety Tamper Control and Detection Program*, for TPC and no-lone zone guidance and DoD S-5210.41-M\_AFMAN 31-108, Volume 3, Enclosure 9 for exclusion area guidance. In some instances host nation security procedures may prevent the Courier from establishing a restricted area around the aircraft and cargo. At a minimum, enforce TPC once the aircrew has possession of the DOE/NNSA SNM.

4.4.1. The aircrew will request the DOE/NNSA representative to provide a brief prior to cargo onload on what would constitute an incorrect act or unauthorized procedure on DOE/NNSA SNM cargo. While security and TPC are the Courier's primary responsibility, compliance and enforcement are everyone's concern regardless of who has physical possession of DOE/NNSA SNM cargo.

4.4.2. If in a no-lone zone and a person has the opportunity to tamper with or damage DOE/NNSA SNM, then at least two authorized persons (called a TPC team) must be present. Use careful judgment in permitting a lone team member to be temporarily unobserved while performing a specific task when it is unsafe or physically impossible to maintain constant visual contact by the other team members. Consider the nature of the task and the time and tools required. **Note:** An individual may enter a lavatory within an exclusion area without continuous direct observation by the remaining TPC team.

4.4.3. Individual Two-Person Concept (TPC) team members must be certified under their respective service directed PRP, or DOE/NNSA HRP, program and thoroughly briefed on the location of the no-lone zone. They must be familiar with the safety and security requirements of the task to be performed. The two person concept team may be a minimum of two aircrew members, shippers or receivers, MEPs, DOE/NNSA personnel, Courier or guards, or any combination of the above suitable to the task to be performed. Two interim certified individuals will not form a Two-Person Concept (TPC) team. A two person concept team will escort persons not certified under PRP/HRP. It is the Courier's responsibility to ensure anyone who has access, understands and complies with the rules in the restricted area. DOE/NNSA personnel who are on HRP may form their own two-person team when accompanying DOE/NNSA SNM during transport status.

4.4.4. The aircrew is responsible for compliance with the two-person policy.

4.4.5. The Two-Person Concept (TPC) applies:

4.4.5.1. When an exclusion area has been established around the aircraft: The aircrew/Courier are responsible for enforcing TPC once DOE/NNSA SNM is inside the exclusion area. When possible, control entry into the exclusion area with an Entry Control Point (ECP) and an Entry Authority List (EAL). The Courier or designated vouching authority will designate who may act as an escort official for anyone not on the EALs.

4.4.5.2. RON (DOE/NNSA SNM aboard). If an aircrew Two-Person Concept (TPC) team is not inside the area to control access to the DOE/NNSA SNM, the entire restricted area, including aircraft interior, is a no-lone zone. In this case, two full-time US Guards, military or government civilian will control access to the restricted area and DOE/NNSA SNM for the aircrew Courier. When the aircrew re-enters the restricted area and is able to control access to DOE/NNSA SNM, the no-lone zone reverts to the entire interior of aircraft.

#### **4.5. Cargo Acceptance and Transfer.**

4.5.1. The Courier will accept and transfer custody of DOE/NNSA SNM cargo in accordance with T.O. 11N-45-51 and Chapter 6. Only DOE/NNSA SNM cargo identified in the Mission Setup Message and Economy Act may be accepted and handled. If cargo differs from the Mission Setup Message and Economy Act, follow procedures IAW paragraph 2.7.3.

4.5.2. Custody and Physical Possession. Custody of DOE/NNSA SNM cargo is transferred upon signing the DD Form 1911 regardless of physical possession. The Courier is responsible for the safety and security of each item in their physical possession regardless of custody, and conversely, the Courier still has custody of items regardless of physical possession.

#### **4.6. Loading and Offloading Procedures.**

4.6.1. The overall responsibility for loading aircraft is vested in the Aircraft Commander who will personally monitor all loading operations of DOE/NNSA SNM.

4.6.2. The aircrew will conduct a preload safety briefing with all parties involved in the loading of the DOE/NNSA SNM, to include load team, security forces, and accompanying technical escorts.

4.6.3. The primary mission Loadmaster, in coordination with the Aircraft Commander, will direct loading, tie-down, and load distribution of DOE/NNSA SNM.

4.6.4. Before each onload and offload, the Aircraft Commander and primary mission Loadmaster will ensure everyone understands their duties. Shippers or receivers may be asked to help, but will be thoroughly briefed and must comply with AMC aircrew procedures while cargo is in the crew's custody or physical possession.

4.6.5. Aircrew may touch DOE/NNSA SNM cargo as necessary to facilitate onload, offload, and inflight duties IAW applicable 1C-17-9. Avoid excessive handling of DOE/NNSA SNM cargo. Handle only one item or package of DOE/NNSA SNM cargo at a time. When hand-carrying, use both hands if practical.

4.6.6. Do not load DOE/NNSA SNM when an electrical storm is within 5 miles unless cargo would be safer inside the aircraft.

4.6.7. Loadmaster will determine what cargo is jettisonable. This is a physical determination with reference to limitations of AFMAN 24-204(I) or 1C-17-9. Loadmaster will ensure crew is aware of all cargo that is non-jettisonable.

#### **4.7. Ground Emergencies.**

4.7.1. If a DOE/NNSA SNM container is dropped during handling and the shipping container remains intact, check with the DOE/NNSA representative to ensure item can still be shipped.

4.7.2. If a DOE/NNSA SNM container is dropped or otherwise damaged during handling and the shipping container ruptures, take the following steps:

4.7.2.1. Notify tower or ground control. Direct them to contact the fire department and declare a ground emergency.

4.7.2.2. Evacuate nonessential persons upwind a minimum of 2,500 feet, or more if required, or as briefed by DOE/NNSA personnel.

4.7.3. Security Emergencies:

4.7.3.1. If confronted with a hostile force, use of deadly force is authorized to protect DOE/NNSA SNM.

4.7.3.1.1. Consider any attack on aircraft loaded with DOE/NNSA SNM cargo, including a hijacking attempt, as an attack against DOE/NNSA SNM cargo.

4.7.3.1.2. Should hostages be used to gain access to, as cover for removal, or to thwart recovery of DOE/NNSA SNM cargo, the welfare and safety of hostages should be considered in determining actions to be taken. However, the presence of hostages shall not deter taking decisive, prompt, and effective action that includes using deadly force to recover DOE/NNSA SNM cargo and to prevent unauthorized access to or removal of DOE/NNSA SNM cargo.

4.7.3.2. If attacked, take the following actions:

4.7.3.2.1. Make an immediate takeoff with the cargo if possible.

4.7.3.2.2. If attack occurs during onload or offload, execute the plan as briefed between crew and DOE/NNSA representatives. If the decision is made to load, then load the cargo as fast and as safely as possible.

4.7.3.2.3. If the Aircraft Commander determines the aircraft is airworthy and the taxi and departure routes are safer than remaining in place, attempt to make an immediate takeoff with the cargo IAW predetermined courses of action.

**4.8. Engine Running Onload/Offload (ERO).** ERO procedures will not be used on missions transporting DOE/NNSA SNM.

#### **4.9. Departure Procedures.**

4.9.1. Destination Support Confirmation. Aircraft with any DOE/NNSA SNM cargo aboard must not take off until all destinations and pre-coordinated emergency divert locations acknowledge that they are capable of meeting security requirements. Before beginning each day's operation, check with the MAJCOM CCC and/or the DOE/NNSA Field Operations Officer or designee from the Office of Secure Transportation (OST) for the status of stations to be transited that day. CCC will review the mission folder to ensure all stations on the day's itinerary have confirmed security and support requirements. CCC will use all other sources available, e.g., airfield threat security evaluations file, etc., to evaluate the security status of en route stations. CCC must be prepared to rapidly appraise security for a DOE/NNSA mission and provide any changes to the crew immediately. If security is questionable or an acknowledgment message has not been received, CCC will immediately attempt to confirm security, holding departure to the suspect station until security is confirmed. If the 24-Hour confirmation of support message is not available, call the DOE/NNSA Field Operations Officer or designee from the Office of Secure Transportation (OST) directly. The AOC can help provide base contacts and telephone numbers.

4.9.2. Engine-Start Notification. Before engine-start, give the controlling agency (ground or tower) the parking location, approximate engine-start time, and announce there is hazardous cargo aboard the aircraft. Ensure a fire truck is standing by the aircraft for engine start when possible.

4.9.3. Departure Message:

4.9.3.1. Once airborne, the aircrew will contact the CCC directly via aircraft radio or phone patch with their departure time and estimated time of arrival (ETA).

4.9.3.2. For missions with short en route times or several quick stops that would make departure calls to destinations impractical, CCC may phone destinations before aircraft is airborne.

4.9.3.3. If the mission will not arrive on time (+/- 15 mins) at the offload station as a result of a late departure, contact 618 AOC (TACC)/XOOOD and have them contact one of the following: Senior Aviation Official for DOE/NNSA, Office: (202) 586-6177, Cell: (301) 602-3139; The Office of Secure Transportation (OST) Transportation and Emergency Control Center (TECC): 1-800-428-0496 (For CONUS arrivals, the OST TECC will contact the convoy personnel so they are ready to provide security and receive the cargo upon arrival); or other installation/agency POCs as necessary.

#### **4.10. CCC Coordination.**

4.10.1. The aircrew transporting DOE/NNSA SNM cargo must keep 618 AOC (TACC)/XOCG advised of mission progress. If ETA changes by more than 15 minutes, the arrival destination must be informed as soon as possible.

4.10.2. Releasing Pre-coordinated Emergency Divert Locations.

4.10.2.1. 618 AOC (TACC)/XOOOD will develop Mission Setup Message support requirements for applicable pre-coordinated emergency divert locations. Bases will be tasked to support the unlikely event of an emergency divert for any reason (ex: Weather, A/R, maintenance, etc.). 618 AOC (TACC)/XOOOD will coordinate with the operating unit during mission planning to establish standby posture requirements and key time points/related mission milestones (completion of A/R, ETP passage, etc.).

4.10.2.2. The Aircraft Commander will contact the 618 AOC (TACC)/XOCG-DDO2 when passed the key time points/related mission milestones. Upon concurrence with the Aircraft Commander, 618 AOC (TACC)/XOCG-DDO2 will contact the pre-coordinated emergency divert location command post to release the installation's standby requirements.

4.10.3. Aircraft Divert. The Aircraft Commander will inform 618 AOC (TACC)/XOCG as soon as possible after coordinating any divert with air traffic control agencies. 618 AOC (TACC)/XOCG will notify the pre-coordinated emergency divert location, appropriate en route agencies, host nation authorities, and the original destination to advise them the aircraft is diverting.

#### **4.11. Arrival Procedures.**

4.11.1. If there is a U.S. presence, contact the destination with ETA when 30-minutes from the airfield.

4.11.2. Security. Immediately upon block-in, the Courier designated aircrew members will deplane. Keep doors closed and delay preparation for DOE/NNSA SNM transfer until adequate security is established.

4.11.2.1. The Courier designated aircrew members may wear weapons off the aircraft if the host nation permits. If weapons are worn off the aircraft, ensure they are exposed unless the host nation objects. Otherwise, deploy the Courier team unarmed.

4.11.2.2. When the Courier designated aircrew members deplane unarmed, those crewmembers not occupying primary crew positions (P, CP, LM) shall arm and remain in the aircraft. Crew duties permitting, personnel inside the aircraft should attempt to maintain visual contact with the Courier team so they are aware of any unsafe condition.

#### **4.12. Divert to Alternate Airfield.**

4.12.1. If pre-coordinated emergency divert locations cannot be used, alternate locations may be considered according to the following:

4.12.1.1. Be under US military control.

4.12.1.2. Have adequate security.

4.12.1.3. Have a nuclear storage capability. Consider the type of cargo to be handled. Alternative is to leave DOE/NNSA SNM aboard aircraft during entire ground time, which might be unacceptable from a security, maintenance, or host base or theater point of view.

4.12.2. If aircraft maintenance is a problem, consider maintenance capability at the alternate location. Security support and nuclear storage capability, however, are the most important factors.

4.12.3. If the divert location is in CONUS or a US military base in a foreign country, use the following guidance:

4.12.3.1. Have controlling CCC relay hazardous cargo information and coordinate arrangements for security, storage, etc. Give 30-minute in-flight notification.

4.12.3.2. If unable to contact CCC or if CCC cannot contact alternate base, request security forces meet the aircraft in the 30-minute notification call.

4.12.3.3. Use of bases should be considered to best meet mission needs, e.g., security, maintenance problems, etc.

4.12.4. If the airfield is in a foreign country, but not under US military control, contact controlling CCC and relay the aircraft call sign, mission number, aircraft type, airport of intended landing, ETA, and reason for the emergency divert. Request assistance from nearest Air Force base, American Embassy, or consulate. Also contact the Office of Secure Transportation (OST) Transportation and Emergency Control Center (TECC): 1-800-428-0496. Landing in any foreign country is extremely sensitive and will be handled as quietly as possible with the agency controlling the field. Keep mission as inconspicuous as possible while still protecting DOE/NNSA SNM. Use procedures in the DoD Foreign Clearance Guide (FCG) to protect the sensitivity of the mission, which states, "US military aircraft are sovereign instrumentalities." When cleared to overfly or land in foreign territory, it is US policy to assert that military aircraft are entitled to privileges and immunities, which customarily are accorded warships. These privileges and immunities include, in the absence of stipulations to the contrary, exemption from duties and taxation; immunity from search, seizure, and inspections (including customs and safety inspections); or other exercise of jurisdiction by the host nation over aircraft, personnel, equipment, or cargo aboard. Air Force Aircraft Commanders will not authorize search, seizure, inspection, or similar exercises of jurisdiction enumerated above by foreign authorities except by direction of Air Force headquarters or the American Embassy in the country concerned. Diplomatically, but

firmly, deny any access to aircraft by foreign officials and attempt to have US officials in the country resolve the problem.

**4.13. Emergency Procedures.** During any emergency, aircrew must take every precaution to protect lives and property. The following emergency procedures apply:

4.13.1. Pass the following information to appropriate ATC agency with request it be passed to the divert location:

4.13.1.1. The nature of the emergency and landing intentions.

4.13.1.2. Aircraft position and ETA to destination.

4.13.1.3. Number of personnel aboard and their location.

4.13.1.4. Fuel aboard.

4.13.1.5. Hazardous cargo is aboard.

4.13.2. Make a 30-minute prior-to-arrival radio call to the destination base to include:

4.13.2.1. A description of the physical appearance and location in the aircraft of the DOE/NNSA SNM.

4.13.3. If an emergency requires an immediate landing and the Aircraft Commander must choose between communication security and flight safety, then safety will take precedence. Classified information may be disclosed only to the extent necessary for safety of flight.

4.13.4. Jettisoning DOE/NNSA SNM. The Loadmaster will identify which cargo is and is not jettisonable. In an emergency, the Aircraft Commander bears moral obligation to jettison cargo or crash-land where the least amount of damage will result. Record coordinates of each jettisoned item.

**4.14. Border Procedures.**

4.14.1. Purpose. To give aircrews border clearance procedures when carrying DOE/NNSA SNM.

4.14.2. Policy and Procedures. Border clearance is the responsibility of the Aircraft Commander.

4.14.2.1. Use general border clearance procedures in governing AFI 11-2C-17, Vol 3.

4.14.2.2. Prepare cargo manifests (DD Form 1385, Cargo Manifest) for customs officials on all cargo. The shipper will supply manifests for unclassified non-nuclear cargo. Loadmasters will prepare manifests for DOE/NNSA SNM cargo and other classified cargo. List this cargo as classified material, classified cargo, hazardous material, classified test equipment, or similar wording which best describes it. Descriptions must not associate cargo with nuclear material. These manifests must include number of units, weight, and cubic displacement in feet.

4.14.2.3. Waivers of Customs and Quarantine Boarding. A letter will be prepared and reproduced in the format depicted in Attachment 4.2. with appropriate organizational letterhead.

4.14.3. The Aircraft Commander will tactfully request US customs and agriculture quarantine inspectors accept a waiver for boarding and examination of aircraft because of the classified cargo aboard.

4.14.3.1. If waiver is denied and the aircraft is at an enroute location, the Aircraft Commander will request a "permit to proceed" to the final destination.

4.14.3.2. If the waiver or "permit to proceed" is denied, the inspectors will be escorted using a TPC team.

4.14.4. When filing a flight plan into a base that does not have customs or agriculture quarantine inspectors readily available, request customs and/or agriculture inspectors meet the aircraft by contacting the arrival base command post/AMCC. Determine hours of operations of customs facilities and comply with any requirements for advance notification. In a divert situation, give as much lead-time as possible to arrange for customs and agriculture inspectors.

**4.15. Crew Rest Procedures.** Before entering crew rest at an en route station, the Aircraft Commander will ensure the aircraft is sealed (as required). Provide command post and AOC contact information during crew rest in the case of an emergency.

**4.16. Itinerary Deviation.**

4.16.1. As soon as it is apparent a mission will deviate from published itinerary, notify the appropriate CCC of ETA for remaining en route stations on that day's itinerary. CCC will immediately notify destination or DOE/NNSA points of contact and appropriate diplomatic clearance authorities by telephone. Passing timely and accurate information to destination is extremely important.

4.16.2. If a mission deviates by two or more hours from last published itinerary, the CCC will coordinate with the Aircraft Commander and XOOOD mission planning to send a mission change message (Attachment 3). Points of contact at bases scheduled to be transited, the pre-coordinated emergency divert location, and tanker unit (if applicable), and appropriate en route agencies will also be advised by secure means of new times. Do not launch until CCC and/or DOE/NNSA has determined subsequent stations for that day can accept the mission in accordance with the revised plan. If the aircrew coordinates directly with the shipper or receiver, advise CCC.

4.16.3. Mission Change Message:

4.16.3.1. The mission planning section will coordinate mission change message with the Aircraft Commander. Attempt to return mission to its original itinerary by adjusting ground times if possible. Do not sacrifice proper crew rest to return to the original schedule; however, do not perpetuate small delays by using originally planned ground times if less time will provide adequate crew rest.

4.16.3.2. The Aircraft Commander will relay revised information to CCC. CCC is responsible for checking times for conflicts with other missions, notifying the pre-coordinated divert location, tanker unit (if applicable), appropriate en route agencies, and remaining bases. The mission planning section will draft and send any message traffic required. Take care to ensure classified information is not compromised.

4.16.3.3. Use Attachment 3, format, and classify the mission change message the same as original Mission Setup Message. Include hazardous cargo information if changed from the Setup Message.

4.16.3.4. Include all addressees in the Mission Setup Message including the aircrew's current location, divert locations, and remaining bases. Omit stations already transited.

4.16.4. Unscheduled Hot RON. Mission delays may force the aircrew into an unscheduled Hot RON. If it becomes apparent to an Aircraft Commander the crew will not be able to proceed to the next destination and complete the offload within remaining CDT, he or she will immediately contact AMC CCC and request authority for either:

4.16.4.1. An extension to crew duty day.

4.16.4.2. Permission to offload cargo and attempt the mission at a later time.

4.16.4.3. Permission to Hot RON at current location, emergency divert location, or destination airfield. Do not proceed to destination if the mission will arrive without sufficient time to complete offload (if one is planned) unless destination base has confirmed through CCC they can support the Hot RON. At USAFE bases, USAFE/A3/10 approval is required for a Hot RON. CCC will coordinate Hot RON requests through USAFE/A3/10NM.

## Chapter 5

### SECURITY

**5.1. General.** This Chapter describes the security standards for DOE/NNSA SNM cargo, aircraft sanitization, EALs, and emergency security actions IAW DoD S-5210.41-M\_AFMAN 31-108.

**5.2. Types of Security.** The degree of security protection will vary according to the cargo. DoD security requirements are broken into two categories, Type I security and Type II security. Refer to DoD S-5210.41-M\_AFMAN 31-108 for a full description of Type I and Type II security. **Note:** When discussing security requirements with another service, a detailed description may be necessary.

**5.3. Protection Standards.** During transport of Cat I quantities of SNM, DOE/NNSA provides the equivalent of Type I security offered to all DoD nuclear weapons and warheads. Aircrew will ensure security meets DoD and Air Force standards when transporting DOE/NNSA SNM cargo.

**5.4. Security Procedures.** DOE/NNSA SNM shall be provided the following security while it is in DoD custody:

5.4.1. If possible, control access to the aircraft by establishing a secure area using temporary physical barriers. Where temporary physical barriers are not available, try to use additional guards, patrols, or other security measures.

5.4.2. When possible, control entry into the restricted area with an Entry Control Point (ECP) and an Entry Authority List (EAL). The Courier or designated vouching authority will designate who may act as an escort official for anyone not on the EALs.

5.4.3. Realize security provided by foreign agencies will not look like security provided by the USAF or DOE/NNSA. Foreign shipping and receiving agencies are required by International Atomic Energy Agency (IAEA) regulation to provide the appropriate level of security to DOE/NNSA SNM.

5.4.4. Provide lights, when available, to discourage unauthorized entry and to aid in the detection of intruders approaching or attempting to gain entry into the secure area. Position lighting to prevent glare from blinding guards and to avoid silhouetting or highlighting guards and aircraft. Where this lighting is not practical, compensate with additional guards, posts, patrols, controls, or other security measures to be determined by the security forces.

5.4.5. Communications. Aircraft guards should have at least two means of alerting a communications control center, or controlling ground agency at civilian airfields.

5.4.6. Contraband is defined in DoD S-5210.41-M\_AFMAN 31-108. Aircrews transporting DOE/NNSA SNM are authorized government issued and personal cell phones, computers, other electronics devices, and other general cargo. Aircrew should minimize the number of devices used to accomplish the mission and will comply with AFMAN 91-201 or specific Nuclear Certification Impact Statement requirements. The aircrew Courier remains the ultimate authority for all equipment allowed to be in the exclusion area. Government and personal electronic devices must meet the following conditions:

5.4.6.1. Government issued cell phones, computers, and other electronic devices assigned to C-17 aircrew are authorized to be used aboard the aircraft if the systems perform a unique, mission-essential function. However, if a system performs a backup or redundant function, it will not be used unless the primary system(s) are not functioning. If not required for mission execution as previously stated, the equipment will be turned off, battery removed (if possible), and remain stowed on the aircraft when nuclear cargo is aboard.

5.4.6.2. Personal cell phones, computers, and other electronic devices carried by C-17 aircrew are authorized to be used aboard the aircraft if the government issued electronic equipment is not functioning. If not required for mission execution as previously stated, the equipment will be turned off, battery removed (if possible), and remain stowed on the aircraft when nuclear cargo is aboard. If the battery cannot be removed, the item will be placed in an approved Radio Frequency Shielded Bag and stowed.

5.4.7. Sealing Aircraft. Normally, seal DOE/NNSA SNM mission aircraft during crew rests and extended en route delays. During RONs at normal AMC maintenance airfields, sealing is at the discretion of the Aircraft Commander. If sealing for maintenance or non-security purposes, make every effort to comply with host base security procedures, but as a minimum have two aircrew members verify all seals and record the seal number.

5.4.7.1. If sealing for security purposes, and security forces are available to provide security, have the senior security force representative verify seals during sealing and opening the aircraft. Each time aircrew or other authorized persons enter the aircraft, the aircraft will be resealed by aircrew or other authorized persons when they depart.

5.4.7.2. Tape emergency escape hatches, paratroop doors, maintenance/ditching hatches, etc., on the interior to show evidence of forced or unauthorized entry. The crew entrance door(s) and any under floor access will be closed and sealed by a serialized security seal.

5.4.7.3. After the crew door has been sealed, wipe the area clean around the seal and provide the seal number to security forces and command post, as required.

5.4.7.4. Upon return, verify seal numbers with security forces, if able, and inspect seals inside the aircraft with one other aircrew member.

5.4.7.5. In the event of forced entry or evidence that seals on aircraft have been tampered with:

5.4.7.5.1. Ensure all evidence remains untouched.

5.4.7.5.2. If on a U.S. installation, report the incident to base command post, security forces, and the Office of Special Investigations (OSI). Request immediate investigation. Otherwise, contact the Office of Secure Transportation (OST) Transportation and Emergency Control Center (TECC): 1-800-428-0496, for guidance.

5.4.7.5.3. When DOE/NNSA SNM is aboard ensure HAZMAT team (when available) and DOE/NNSA personnel make appropriate inspections. If inspections cannot be made, notify C2 and the ultimate receiver.

5.4.7.5.4. After investigation is complete and aircraft is released by HAZMAT team, DOE/NNSA, and security forces (when available) perform a thorough preflight and depart.

**5.5. Sanitized Aircraft.** Sanitize aircraft before carrying DOE/NNSA SNM cargo. Sanitization is a thorough check for unauthorized explosives or stowaways and should be done at the most logical station, normally at the first onload location. It can also be accomplished at an en route station when several stops are made before unloading DOE/NNSA SNM cargo. When approved by the Aircraft Commander and Courier officer and coordinated with host base, Type II security may be dropped for an empty aircraft during RON. Aircraft will be provided random checks by security forces as a PL3 resource. Before loading DOE/NNSA SNM cargo, aircraft will be sanitized, a restricted area re-established, and security provided.

5.5.1. Sanitization Procedures. Aircrews will conduct a thorough visual inspection and appropriate aircraft dash-1 preflight or through-flight inspection to search for explosives, suspicious devices or packages, or unauthorized persons. When available, an explosive detection dog (EDD) or portable explosive detection devices will be used to sanitize the aircraft and crew baggage. Do not delay the mission if an EDD is not available. If a suspicious device or explosives are found during the aircrew search, cordon off the area and request response of a certified EOD team. During periods of inclement weather, crew bags may be sanitized inside the aircraft.

5.5.2. If an aircraft is changed during the mission the new aircraft must be sanitized.

5.5.3. Providing Type II security on a sanitized aircraft maintains the sanitization, and precludes the need to re-sanitize before loading DOE/NNSA SNM cargo. **Note:** Consider removing Type II security if extended servicing or maintenance is required. Resanitize before unloading DOE/NNSA SNM cargo if Type II requirements are removed.

5.5.3.1. The aircraft will be sealed.

5.5.3.2. Type II security will be maintained (not required if aircraft is parked in a designated "PL1" restricted area, e.g., an AFGSC alert area).

5.5.3.3. Only the aircrew (not including the crew chief) are authorized unescorted access to the aircraft.

5.5.3.4. Security personnel are informed that Type II security material is aboard. **Note:** Do not request security support merely to guard the Aircrew Mission Kit (security forces do not guard classified material unless associated with the required priority level).

## Chapter 6

### CUSTODY TRANSFER PROCEDURES

**6.1. General.** The Courier is final authority for cargo security, except during airborne emergencies when the Aircraft Commander rules that safety-of-flight is paramount. The Courier retains the ultimate authority to accept or deny DOE/NNSA SNM cargo.

**6.2. Courier Designation and Certification.** Identify Couriers to shippers in writing. Identification will include the Courier's name, rank, and security clearance. Normally, this identification is in the Mission Setup Message; however, it may be a separate message sent by AOC mission planners via email after they validate the information. This may occur when Couriers are replaced during mission execution. Verify the Courier's identification by using the Common Access Card (CAC). **Note:** "Identification of an Official Courier Letter" (Attachment 4.1) is for use during border clearance and does not satisfy any of the above requirements.

**6.3. Persons Authorized to Sign for DOE/NNSA SNM.** The DOE/NNSA publishes a list of people who are qualified to sign for DOE/NNSA SNM. This list is called the "DOE/NNSA Authorized Recipient/Certification List." This list of federal agents will be used to authenticate the DOE/NNSA convoy personnel. The Courier will have the list NLT ten days prior to mission execution. **Note:** The Field Operations Officer or designee from the Office of Secure Transportation (OST) will provide a listing with individual information. For questions contact: Office: (505) 845-4180/4448/5071 or STE: (505) 845-4180/6262/4867.

**6.4. Cargo Inspection.** Before accepting and loading DOE/NNSA SNM, the Courier, DOE/NNSA representative, and primary Loadmaster will inspect cargo. Inspect containers, container numbers, and any seals or seal numbers that may exist. Air Force Courier will make note of any obvious damage to DOE/NNSA SNM cargo. Deficiencies affecting safety must be corrected before accepting cargo. The Courier retains the ultimate authority to accept or deny DOE/NNSA SNM cargo.

**6.5. Custody Transfer.** The custody transfer of all DOE/NNSA SNM will be as follows:

6.5.1. CONUS departure with U.S. delivering material to foreign nation:

DOE/NNSA Federal Agent/Representative → Aircrew → DOE/NNSA Federal Agent/Representative → Receiving Agency

6.5.2. OCONUS departure with U.S. recovering material from foreign nation:

Shipping Agency → DOE/NNSA Federal Agent/Representative → Aircrew → DOE/NNSA Federal Agent/Representative

6.5.3. The DD Form 1911 will be used for all custody transfers between the DOE/NNSA and the DoD.

**6.6. Courier Responsibilities.** The Courier is responsible for receipt, custody, security, safety, and delivery of DOE/NNSA SNM cargo to authorized receivers. Specific responsibilities include:

6.6.1. Have written instructions that specify DOE/NNSA SNM cargo to be shipped (Mission Setup Message/Economy Act).

6.6.2. Have a list of authorized receivers.

6.6.3. Document minor damage, e.g. scratches, scrapes, small dents, etc., in the remarks section of the DD Form 1911. Have the shipper initial entry.

6.6.4. Inspect all containers to verify condition of seals. Request the shipper replace any broken or missing seals. Have the shipper verify the condition of the seals for palletized LLCs. If broken or missing seals cannot be replaced and the integrity of the container is suspect, reject the container. If the container is accepted with broken or missing seals and the integrity is not suspect, annotate the exact condition on DD Form 1911.

6.6.5. DOE/NNSA SNM cargo presented for shipment must be exactly as described by the Mission Setup Message and Airlift Request. If cargo differs from the Mission Setup Message and Airlift Request, follow procedures IAW paragraph 2.7.3.

6.6.6. Accept custody of DOE/NNSA SNM cargo by signing DD Form 1911 and release custody only on signature of positively identified authorized receivers or a replacement Courier. Do not sign for cargo that the Courier cannot maintain custody of and/or inspect.

**6.7. Documentation.** Shippers are required to provide properly completed DD Forms 1911. Instructions for the forms are in T.O. 11N-45-51. On mission termination at home station, return completed DD Forms 1911 to the squadron/unit and maintain on file for 6 months.

## Chapter 7

### SPECIAL NUCLEAR MATERIAL AIRLIFT MISSION SUPPORT

**7.1. Command and Control.** DOE/NNSA SNM airlift missions place demands on the command and control system over and above normal operations. 618 AOC (TACC)/XOOOD mission planners will ensure a "Y" is in the CLOSE WATCH block. 618 AOC (TACC)/XOCG will monitor the exact status of each mission. Specific responsibilities are:

7.1.1. 618 AOC (TACC)/XOOOD mission planners will maintain ready access to the DoD FCG, understand overflight procedures and restrictions, and in coordination with tanker planning section, coordinate tanker support, and obtain altitude reservation (ALTRV) approvals. Flight planning branch will validate computer flight plans (CFP) for compliance with the DoD FCG restrictions, EURO Control Route Availability Document (RAD), ALTRV routings, and avoid heavily populated areas then transmit to the current C2 system. Mission planning section confirms diplomatic clearances and ensures alternates on CFPs are capable of supporting DOE/NNSA SNM cargo missions.

7.1.2. 618 AOC (TACC)/XOCG will assist Aircraft Commanders in determining the best divert location for a DOE/NNSA SNM mission. In accordance with the Mission Setup Message and this instruction, notify the selected divert location of all required support needed to meet the aircraft when it lands. When the Aircraft Commander informs the 618 AOC (TACC)/XOCG that he or she has selected a different divert location from the one pre-coordinated in the Mission Setup Message, the duty controller must then coordinate with the new divert location and advise the pre-coordinated divert location it is no longer under consideration as a divert option. When time permits, use guidance for mission change message in paragraph 2.6.

7.1.3. AMC/A7S and 618 AOC (TACC)/XOCG will actively monitor security status of bases that nuclear airlift missions are scheduled to transit. 618 AOC (TACC)/XOOOD will be prepared to confirm each day's itinerary with Aircraft Commanders when they check in. Mission Setup Message will request a support confirmation message be sent from each base on the itinerary to appropriate CCC 24-hours before arrival at each base. Use this message to confirm security before allowing aircraft to proceed. Only attempt contact with the destination base to confirm support via non-secure means if the 24-Hour confirmation of support message has not been received.

7.1.4. 618 AOC (TACC)/XOOOD will prepare and send mission change messages IAW paragraph 2.6. and 4.16.3 after coordination with the Aircraft Commander. Check for conflicts with other missions and include hazardous cargo information if load is changed.

7.1.5. 618 AOC (TACC)/XOOOD will act as the point of contact between shippers or receivers and aircrew during the mission. Pass updates to down line bases as requested by the Aircraft Commander.

7.1.6. 618 AOC (TACC)/XOCG will ensure DOE/NNSA SNM cargo airlift missions delayed for maintenance problems get immediate and priority support.

**7.2. Intelligence Support.** Intelligence support is an essential element of the mission. It requires constant attention and procedures to successfully ensure cargo safety and security. To

ensure DOE/NNSA SNM cargo missions and aircrews receive timely threat intelligence information, these procedures will be followed.

7.2.1. Home Station OSS/IN will:

7.2.1.1. Monitor planned DOE/NNSA SNM cargo missions for pre-mission intelligence briefing requirements and remain aware of off-station missions that could require en route Intelligence support.

7.2.1.2. Provide pre-mission intelligence briefings IAW AFI 14-2C-17, Vol 3, *C-17 Unit Intelligence Procedures*.

7.2.1.2.1. Intelligence pre-mission briefings will be IAW AFI 14-2C-17, Vol 3, and must include the following:

7.2.1.2.2. Airborne threat from potential hostile countries.

7.2.1.2.3. Terrorist and sabotage threats.

7.2.1.2.4. Other activity along route that might impact mission.

7.2.1.2.5. All source Foreign intelligence collection and criminal threats.

7.2.1.3. Debrief aircrews on their return as required and send report mission results IAW the Mobility Intelligence Reporting Directive (MIRD).

7.2.2. AMC/A2 will provide support IAW AFI 14-2C-17, Vol 3 and DoD S-5210.41-M\_AFMAN 31-108. AMC/A2 will:

7.2.2.1. In coordination with AFOSI 3 FIR, disseminate a DOE/NNSA SNM mission threat summary message for each DOE/NNSA SNM mission using the Mission Setup Message addressee list. This message will assess the threat levels for each scheduled stop. This message will be disseminated no later than 24-hours prior to scheduled mission departure. Lead for Intelligence support (OSI or A2) will vary depending on mission itinerary.

7.2.2.2. Monitor DOE/NNSA SNM cargo missions worldwide and provide intelligence updates and threat warnings to 618 AOC (TACC)/XOZ and home station OSS/IN as necessary.

7.2.2.3. As needed, provide intelligence threat updates and terrorist advisories to Setup Message addresses during mission execution.

7.2.3. Where AMC intelligence personnel are not available, host base intelligence unit or theater air command intelligence staff will provide threat data to an en route mission.

## Chapter 8

### LOGISTICS SUPPORT

**8.1. General.** This guidance references AFMAN 91-201. It outlines maintenance procedures for aircraft used to carry DOE/NNSA SNM cargo. Although these regulations establish guidelines for the movement of nuclear weapons, the same maintenance standards will be met for aircraft transporting DOE/NNSA SNM. Therefore, the following guidance applies to all maintenance and operations personnel who support or conduct DOE/NNSA SNM airlift missions.

**8.2. Aircraft Selection and Preparation.** Aircraft selected to fly these missions must not have any uncorrected history of repeat or recurring malfunctions on systems identified as mission capable in accordance with the Minimum Essential Subsystem Listing (MESL) Air Refueling Conventional (ARC) and be the most reliable aircraft available for DOE/NNSA SNM. Aircraft selected for DOE/NNSA SNM must meet the stringent criteria in this paragraph. The criteria are essential to preclude potential mission delays while the aircraft is in the mobility system. Missions are extensively coordinated and delays have serious political effects.

8.2.1. Maintenance Operations Officer/Superintendent has the overall responsibility for aircraft selection, aircraft preparation, and maintenance team selection and will:

8.2.1.1. Coordinate with MOS Plans, Scheduling and Documentation Section to schedule aircraft for DOE/NNSA SNM missions.

8.2.1.2. Oversee aircraft selection process.

8.2.1.3. Select Senior Maintenance Representative (SMR) highly experienced on the C-17 to oversee and execute aircraft preparation function. The SMR must be an appropriately qualified maintenance officer, senior NCO, or civilian equivalent IAW AFI 21-101, *Aircraft and Equipment Maintenance Management*, as supplemented.

8.2.2. Aircraft Selection: Aircraft will be selected by the unit not later than 48-hours before aircraft departure to accomplish inspections, servicing, maintenance, cleaning, and configuration. Select aircraft for DOE/NNSA SNM missions based on the following:

8.2.2.1. All aircraft systems that will be used during DOE/NNSA SNM missions must be classified mission capable in accordance with aircraft Mission Essential Subsystem Listing, Home Station Departure Air Refueling Conventional (MESL, HSD/ARC). DOE/NNSA SNM aircraft will not have any restrictions on systems and subsystems identified in the MESL, HSD/ARC that will be used during DOE/NNSA SNM missions.

8.2.2.2. If a time change item is projected to come due during a DOE/NNSA SNM Mission, replace it before departure as prescribed in T.O. 00-20-1, *Aerospace Equipment Maintenance Inspection, Documentation, Policies, and Procedures*.

8.2.2.3. All urgent action or interim routine safety time compliance technical orders (TCTOs)/one-time inspections will be accomplished before departure according to T.O. 00-5-15, *Air Force TCTO System*.

8.2.2.4. Tires with cuts deeper than 1/2 of the embossed tire cut limit, cuts that exceed 4/32-inch deeper than the wear mark and tread groove without an embossed cut limit, or

cuts of more than 1/2-inch in length will be replaced before DOE/NNSA SNM missions. All cuts will be measured from the bottom of the nearest groove at the immediate vicinity of the cut. If a cut extends into the cord body, the tire will be replaced as prescribed in T.O. 4T-1-3, *Inspection, Maintenance Instructions, Storage, And Disposition Of Aircraft Tires And Inner Tubes*.

8.2.2.5. Aircraft selected will not have fuel leaks or seepage limits greater than 1/2 of the allowable limit in T.O. 1-1-3, *Inspection and Repair of Aircraft Integral Tanks, and Fuel Cells*.

8.2.2.6. If an aircraft has evidence of a fuel tank fire, the aircraft will not be scheduled for or continue on a DOE/NNSA SNM mission.

8.2.2.7. Aircraft selected will not have hydraulic and oil leakage limits greater than 1/2 of the allowable limits in mission design series (MDS) specific technical orders.

8.2.2.8. Consider all available safety and structural enhancements when selecting an aircraft.

8.2.2.9. AFTO Form 781 series forms must be reviewed to ensure no discrepancy exists that would keep aircraft from being used on a DOE/NNSA SNM airlift mission, e.g. discrepancies with winch, tie-down equipment, rails, etc.

8.2.2.10. Aircraft engine time changes may be exceeded by 10 percent or 100 hours, whichever is greater, as prescribed in T.O. 2-1-18, *Aircraft Engine Operating Limits And Factors Operating Limits And Pipeline Times*.

8.2.3. Senior Maintenance Representative (SMR). The DOE/NNSA SNM SMR will:

8.2.3.1. Ensure aircraft are prepared for DOE/NNSA SNM missions.

8.2.3.2. Review and validate accuracy of aircraft documentation (e.g., aircraft forms, GO81 histories, time change items, special inspections, scheduled/unscheduled delayed discrepancies, outstanding time compliance technical orders, and engine data trend analysis). **NOTE:** Ensure aircraft documentation is cleared correctly IAW T.O. 00-20-1 and the MAJCOM supplement.

8.2.3.3. Check GO81 aircraft histories for completed repeat/recurring maintenance actions and required operational checks. Re-verify repeat/recurring discrepancies with questionable, incomplete actions or operational checks.

8.2.3.4. Evaluate appearance, cleanliness, and mechanical condition of the aircraft.

8.2.3.5. Ensure DOE/NNSA SNM aircraft has a current preflight inspection.

8.2.3.6. A senior maintenance representative will personally inspect aircraft for cleanliness (especially in tie down fitting recesses), proper configuration, and mechanical condition.

8.2.3.7. After aircraft has been prepared and inspected, a SMR will clear the aircraft forms by entering the following in the AFTO Form 781A, Maintenance Discrepancy And Work Document Corrective Action Block: "Aircraft prepared in accordance with appropriate directives." Until this is done, the aircraft is not mission ready.

8.2.4. DOE/NNSA SNM Maintenance Team. The DOE/NNSA SNM Aircraft Preparation Maintenance Team will:

8.2.4.1. Accomplish all inspections, maintenance, and servicing with the most highly qualified technicians available. For those aircraft with flying crew chiefs, they must be involved in the overall aircraft preparation, to ensure maintenance continuity during DOE/NNSA SNM missions.

8.2.4.2. Perform a preflight as prescribed in 00-20-1 no later than 24-hours before mission departure.

8.2.4.3. Ensure all systems that will be used during the mission are operational in accordance with the command weapon system MESL, HSD/ARC.

8.2.4.4. Check C-17/stabilizing struts for proper operation, servicing, and leaks.

8.2.4.5. Ensure tie-down fitting receptacles are free of dirt or contaminants allowing placement of the 10,000-pound tie-down fitting. Replace any unserviceable receptacles/seat tracks that cannot be repaired in accordance with appropriate technical data.

8.2.4.6. Service winches in accordance with appropriate T.O. guidance.

8.2.4.7. Aircraft will be properly configured, and all equipment specified by the wing operations directives will be aboard, including serviceable engine/inlet covers.

8.2.4.8. Verify cargo tie down equipment has been inspected in accordance with T.O. 13C2-1-1, *Operation, Maintenance, and Test Instructions for Cargo Tie-Down Equipment*.

8.2.5. Required Equipment for aircraft departing home station. The wing supporting DOE/NNSA SNM airlift will establish local procedures for ensuring the equipment and shoring specified by the aircrew is delivered to the aircraft in sufficient time to allow for inventory and receipt before departure, to include but not limited to:

8.2.5.1. Two grounding wires, each 100 feet long.

8.2.5.2. Three sets of aircraft chocks (six total) for C-17.

8.2.5.3. C-17 aircraft will have two cases each of hydraulic fluid and engine oil.

8.2.5.4. All liquid/gaseous oxygen/nitrogen will be serviced to capacity as prescribed in C-17-specific technical orders.

### **8.3. General Maintenance and Servicing.**

8.3.1. Preflight validity period will be in accordance with T.O. 00-20-1.

8.3.2. When possible, fuel DOE/NNSA SNM aircraft with low-volatility fuel, compatible with aircraft engine operation. Use the best fuel available in this order of precedence:

8.3.2.1. JP-8.

8.3.2.2. JP-5.

8.3.2.3. Commercial Jet A-1 with appropriate anti-ice additives.

8.3.2.4. JP-4.

8.3.3. Fuel servicing guidance for explosive loaded aircraft is contained in T.O. 00-25-172, *Ground Servicing of Aircraft and Static Grounding/Bonding*. During initial generation, an aircraft shall be refueled before being loaded with DOE/NNSA SNM to reduce the severity of a mishap. Cargo aircraft loaded with transportation-configured DOE/NNSA SNM may be refueled at aircraft explosive cargo parking areas, commonly called hot cargo pads. If fuel servicing is necessary with DOE/NNSA SNM aboard, one Halon 1211 (or local equivalent) fire extinguisher is required in the fuel servicing safety zone. When possible, position a major fire-fighting vehicle at the aircraft.

8.3.4. Aircrew will oversee all maintenance activities on aircraft with DOE/NNSA SNM.

8.3.5. Do not perform maintenance that increases the probability of fire on an aircraft with DOE/NNSA SNM aboard. This prohibition includes: using flame-producing or uncontrolled heat-producing items; repairing the fuel system, fuel cell, or fuel tanks; performing other maintenance where significant fuel spills are likely.

8.3.6. Complete fuel or oxygen servicing, and any loading of external chaff or flares before loading DOE/NNSA SNM.

8.3.7. Do not load flares or chaff unless required for the DOE/NNSA SNM mission.

8.3.8. Do not transport replenishment chaff or flares.

8.3.9. Do not service aircraft during loading or unloading.

#### **8.4. En-route Maintenance.**

8.4.1. Close coordination between MAJCOM CCC, 618 AOC (TACC), maintenance, 618 AOC (TACC)/XOCL and Aircraft Commander is required at all times, especially when DOE/NNSA SNM aircraft have a maintenance problem. The effect on safety and security of DOE/NNSA SNM cargo must be considered when coordinating maintenance support. The Aircraft Commander's decision is final. Use weapon system MESL to determine status of DOE/NNSA DOE/NNSA SNM aircraft. A MOCC senior controller will personally monitor maintenance support for DOE/NNSA SNM missions while on their station. Maintenance support of DOE/NNSA SNM missions will take precedence over missions with lesser priorities.

8.4.2. When a replacement aircraft is required in the en route system, every effort must be made to meet the criteria in paragraph 8.2. An aircraft that best meets the criteria in paragraph 8.2 will be selected. Open discrepancies must not adversely affect or delay a DOE/NNSA SNM mission. Special aircraft preparation entries in the AFTO Form 781A are not required.

8.4.3. If a fuel tank fire occurs during a DOE/NNSA SNM mission, a replacement aircraft will be generated to continue the mission.

#### **8.5. Safety Precautions and Personnel Requirements.**

8.5.1. Perform maintenance only in the presence of the aircrew (or flying crew chief accompanying the mission), who will ensure proper safety precautions are used. Take the following safety precautions, as well as any others deemed necessary:

8.5.1.1. Use only equipment, procedures, and checklists that are consistent with U.S. Air Force-approved publications for any operation directly associated with DOE/NNSA SNM.

8.5.1.2. Ground aircraft in accordance with C-17 specific technical orders and T.O. 00-25-172.

8.5.1.3. Aircraft parking areas must satisfy explosive quantity-distance criteria. Consult the local explosive safety officer when in doubt.

8.5.1.4. If cargo compartment access is required, the aircrew must cover the classified seals on the DOE/NNSA SNM containers.

WILLIAM A. CHAMBERS  
Major General, USAF  
ACS, Strategic Deterrence & Nuclear Integration

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

- CJCSI 4120.02C, *Assignment of Movement and Mobility Priority*, 22 December 2011
- DoDI 4540.05, *DoD Transportation of U.S. Nuclear Weapons*, 23 June 2011
- DoDI 5400.13, *Public Affairs Operations*, 15 October 2008
- DoDI O-5210.67, *Special Nuclear Material Information, Security Classification Guidance*, 23 May 2011
- DoDM 5200.01, Volume 2, *DoD Information Security Program: Marking of Classified Information*, 24 February 2012
- DoDM 5200.01, Vol 3, *DoD Information Security Program: Protection of Classified Information*, 24 February 2012
- DoD S-5210.41-M, *Nuclear Weapons Security Manual*, 13 July 2009
- DoD Foreign Clearance Guide (DoD FCG) (authorized by DoDD 4500.54E, only available at <https://www.fcg.pentagon.mil> and <http://www.fcg.pentagon.smil.mil>).
- AFJI 11-204, *Operational Procedures for Aircraft Carrying Hazardous Materials*, 11 November 1994
- AFJI 48-104, *Quarantine Regulations of Armed Forces*, 24 January 1992
- AFMAN 24-204(I), *Preparing Hazardous Materials for Military Air Shipments*, 1 September 2009
- AFMAN 31-108, *Air Force Nuclear Weapon Security Manual*, 1 February 2010
- AFMAN 91-201, *Explosives Safety Standards*, 12 January 2011
- AFPD 11-2, *Aircrew Operations*, 19 January 2012
- AFPD 13-5, *Air Force Nuclear Enterprise*, 6 July 2011
- AFPD 21-2, *Munitions*, 20 September 2005
- AFI 11-401, *Aviation Management*, 10 December 2010
- AFI 11-2C-17, Vol 3, *C-17 Operations Procedures*, 16 November 2011
- AFI 21-101, *Aircraft and Equipment Maintenance Management*, 26 July 2010
- AFI 31-401, *Information Security Program Management*, 1 November 2005
- AFI 35-104, *Media Operations*, 22 January 2010
- AFI 91-104, *Nuclear Surety Tamper Control and Detection Programs*, 10 September 2010
- T.O. 00-20-1, *Aerospace Equipment Maintenance Inspection, Documentation, Policies and Procedures*, 15 June 2011
- T.O. 00-25-172, *Ground Servicing of Aircraft and Static Grounding/Bonding*, 15 July 2002

T.O. 1-1-3, *Inspection and Repair of Aircraft Integral Tanks, and Fuel Cells*, 15 November 2008

T.O. 2-1-18, *Aircraft Engine Operating Limits and Factors Operating Limits and Pipeline Times*, 01 January 2003

T.O. 4T-1-3, *Inspection, Maintenance Instructions, Storage, and Disposition of Aircraft Tires and Inner Tubes*, 28 February 2007

T.O. 11N-20-11 (C-RD), *General Guidance and Material Hazard Information for Nuclear Weapons, Components, and Nonnuclear Weapon Designations*, 17 August 2011

T.O. 11N-45-51A (S-RD), 51B, 51, *Transportation of Nuclear Weapons Material*, 10 December 2010

T.O. 13C2-1-1, *Operation, Maintenance, and Test Instructions for Cargo Tie-Down Equipment*, 8 December 2009

### ***Prescribed Forms***

None

### ***Adopted Forms***

AF Form 310, *Document Receipt and Destruction Certificate*

AF Form 527D, *Acknowledgment of Station Support Requirements*

AF Form 527E, *24-Hour Confirmation of Station Support Requirements*

AF Form 847, *Recommendation for Change of Publication*

AF Form 1297, *Temporary Issue Receipt*

DD Form 175, *Flight Plan, Military*

DD Form 1385, *Cargo Manifest*

DD Form 1387, *Shipment Label, Military*

DD Form 1387-2, *Special Handling Data/Certification*

DD Form 1801, *International Flight Plan, DoD*

DD Form 1911, *Material Courier Receipt*

DD Form 2131, *Passenger Manifest*

DD Form 2825, *Internal Receipt*

SF 312, *Classified Information Nondisclosure Agreement*

AMC Form 292, *C17A Special Loading Equipment Receipt*

AFTO Form 781A, *Maintenance Discrepancy and Work Document*

AFTO Form 781, *ARMS Aircrew/Mission Flight Data Document*

### ***Abbreviations and Acronyms***

**A/R**—Air Refueling

**AFI**—Air Force Instruction

**AFJI**—Air Force Joint Instruction  
**AFMAN**—Air Force Manual  
**AFPD**—Air Force Policy Directive  
**AFSEC**—Air Force Safety Center  
**ALTRV**—Altitude Reservation  
**AMC**—Air Mobility Command  
**AOC**—Air Operations Center  
**AOR**—Area of Responsibility  
**ARC**—Air Refueling Conventional  
**ATC**—Air Traffic Control  
**CAC**—Common Access Card  
**CC**—Commander  
**CCC**—Consolidated Control Center (618 AOC (TACC)/XOC)  
**CDD**—Crew Duty Day  
**CDT**—Crew Duty Time  
**CFP**—Computer Flight Plans  
**CFR**—Code of Federal Regulations  
**CG**—Center of Gravity  
**CONOPS**—Concept of Operations  
**CONUS**—Continental United States  
**C-RD**—Confidential Restricted Data  
**DoD**—Department of Defense  
**DOE**—Department of Energy  
**DTRA**—Defense Threat Reduction Agency  
**EAL**—Entry Authority List  
**ECP**—Entry Control Point  
**EDD**—Explosive Detector Dog  
**EOD**—Explosive Ordnance Disposal  
**ERO**—Engine Running Onload or Offload  
**ETA**—Estimated Time of Arrival  
**FCC**—Flying Crew Chief  
**FCG**—Foreign Clearance Guide

**FCP**—Foreign Clearance Program  
**FEV**—Functional Expert Visit  
**GDSS**—Global Decision Support System  
**HEU**—Highly Enriched Uranium  
**HRP**—Human Reliability Program  
**HSD**—Home Station Departure  
**IAEA**—International Atomic Energy Agency  
**ICAO**—International Civil Aeronautical Organization  
**JCS**—Joint Chiefs of Staff  
**MAJCOM**—Major Command  
**MASO**—Munitions Accountable Systems Officer  
**MDS**—Mission Design Series (e.g., C-17)  
**MEP**—Mission Essential Personnel  
**MESL**—Mission Essential Subsystem Listing  
**MHE**—Materials Handling Equipment  
**MIRD**—Mobility Intelligence Reporting Directive  
**NAF**—Numbered Air Force  
**NEW**—Net Explosive Weight  
**NLT**—No Later Than  
**NM**—Nautical Miles  
**NNSA**—National Nuclear Security Administration  
**NOFORN**—Not Releasable to Foreign Nationals  
**NSM**—Nuclear Surety Manager  
**NSSAV**—Nuclear Surety Staff Assistance Visit  
**NTWG**—Nuclear Transportation Working Group  
**OCONUS**—Outside the Continental US  
**OPR**—Office of Primary Responsibility  
**ORM**—Operational Risk Management  
**OSI**—Office of Special Investigations  
**OST**—Office of Secure Transportation  
**PNAF**—Prime Nuclear Airlift Force  
**PPR**—Prior Permission Required

**PRP**—Personnel Reliability Program  
**RD**—Restricted Data  
**RON**—Remain Over Night  
**SAAM**—Special Assignment Airlift Mission  
**SMR**—Senior Maintenance Representative  
**SSN**—Social Security Number  
**SWOG**—Special Weapons Overflight Guide  
**S-RD**—Secret Restricted Data  
**S-FRD**—Secret Formerly Restricted Data  
**TACC**—Tanker Airlift Control Center  
**TECC**—Transportation and Emergency Control Center  
**TCTO**—Time Compliance Technical Order  
**TPC**—Two Person Concept  
**USAFE**—United States Air Force in Europe

### *Terms*

**Class II Components.**—Weapon components composed of fissionable or fusionable materials that contribute substantially to nuclear released during detonation.

**Custody.**—The responsibility for the control of, transfer and movement of, and access to, weapons and their components. Custody also includes maintaining accountability for weapons and their components.

**Handling.**—Physically maneuvering weapons either directly or indirectly by people.

**Inert Devices.**—Devices not containing hazardous materials, but closely resembling nuclear item or explosive items that are classified as hazardous.

**Logistics Movement.**—The transport of nuclear weapons in connection with supply or maintenance operations. Under certain specified conditions, combat aircraft may be used for such movements.

**Nuclear Airlift Mission. A SAAM tasked to transport Nuclear or DoD Nuclear**—Related cargo.

**Nuclear Cargo.**—Nuclear weapons, nuclear warheads, and Class II nuclear components prepared for logistics movement.

**Nuclear—Related Cargo.** Nuclear training and test weapons, non-nuclear components of nuclear weapons, limited life components (LLC), and equipment associated with the logistics movement of nuclear weapons.

**Prime Nuclear Airlift Force.**—Those aircrews, aircraft, and other functions that provide for peacetime support of logistical airlift of nuclear weapons and nuclear components.

**Special Assignment Airlift Mission (SAAM).**—All domestic requirements and those requiring special or delivery at points other than those within the established channel airlift route patterns and those that require special handling due to weight or size of the cargo, the urgency or sensitivity of movement, or other special factors.

## Attachment 2

## NUCLEAR AIRLIFT RESTRICTIONS &amp; REQUIREMENTS

Table A2.1. Cargo Requirements

Type of Cargo	Load by Dash 16	Comply w/ SWOG	Two-Person Concept <sup>1</sup>	Cargo Classification	Security Required <sup>1</sup>	Remote Parking Required	PNAF Required	SAAM Required
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*DOE / NNSA SNM AND OTHER DOE / NNSA CARGO*

<b>DOE / NNSA Cat I &amp; II SNM</b>	No	No	Yes	S-RD	Type I <sup>2</sup>	Yes	Yes	Yes
<b>Other DOE / NNSA Cargo</b>	No	See Note 2	See Note 2	Unclassified - S-RD	See Note 2	See Note 2	See Note 2	Yes

**Notes:**

**Note 1.** In accordance with this table or as required by the user, whichever is more restrictive.

**Note 2.** Specifics will be identified in Economy Act Request when possible or the Airlift Request message prior to planning and coordination with tasked unit(s). Routing requirements will vary depending on cargo and users. Security requirements and capabilities will vary depending upon Host Nation capabilities and security agreements established during mission coordination and planning. As a minimum, all DOE/NNSA cargo requires Type II security.

**Attachment 3**

**MISSION SETUP MESSAGE**

This attachment depicts an example Mission Setup Message. Planners may deviate from this format as necessary to accommodate mission-specific requirements and ensure proper information is thoroughly coordinated between all agencies executing or supporting the tasked mission.

**Figure A3.1 – Sample Setup Message**

----- [START OF SAMPLE SETUP MESSAGE] -----

**\*\*618 AOC (TACC)/XOOON MISSION: ONLY USE SECURE MEANS (STE or SIPR) WHEN DISCUSSING ANY ASPECT OF THIS MISSION. PRIOR TO MISSION EXECUTION REFER ALL QUESTIONS TO 618 AOC (TACC)/XOOON DSN 779-4584. AFTER DUTY HOURS, CONTACT 618 AOC (TACC)/XOCG AT DSN 779-3366/3367 TO REACH THE ON-CALL PLANNER. 24-HourS PRIOR TO MISSION EXECUTION CONTACT 618 AOC (TACC)/XOCG STE 779-0324-3366/3367. \*\***

**(U) MMM SAAM: 0000-00 // DTG: DD0000Z MMM YY // Call Sign: REACH 0000**

**(U) Part I is UNCLASSIFIED, Part II is classified (*Identify classification*)**

**PART I (*Use this section to describe the unclassified / releasable mission data*)**

**(U) Close Watch SAAM 0000-00 operated by C-17; itinerary follows (all dates calendar MMM YY; all times ZULU):**

*(Indicate information for all installations transited or tasked for support and any aerial refueling tracks in the provided blocks. Arrival/Departure info will be depicted in DD/hhmm format, Ground Time / Event Duration will be in hh+mm format. Indicate key Unclassified information in the Remarks blocks)*

Station / Event	ICAO	Arrival/ Start Time	Ground Time/Event Duration	Departure/ End Time	Remarks

**Notes:** (*Add notes as necessary for clarity, examples provided below*)

**Note 1.** The air refueling track is not a published track and has no specific identifier. This is the GDSS identifier used for non-published air refueling tracks.

**Note 2.** The active portion of the mission is complete at this station. The remaining itinerary may change without need to create a Setup Message change.

**PART II (*Use this section to describe the classified support and cargo requirements*)**

- 1. (U) Indicate mission priority here. For example “JCS Priority is 1A3.”**
- 2. (U) Indicate type of cargo being transported IAW the appropriate parts of this instruction. For example “This mission transports Nuclear (and/or Nuclear Related) cargo.” Furthermore, indicate the following: “Priority support is required by AFJI 11-204, A/R 95-**

27. Specific requirements are identified by station in paragraph (*indicate appropriate paragraph*).”

3. Use this section to describe the cargo hazards for each location tasked to support. (U)  
Hazardous cargo on-board for arrival at station:

STATION	T.O. 11N-20-11 LINE NUMBER <sup>1</sup>
<p><b>Notes:</b> : (<i>Add notes as necessary for clarity, examples provided below</i>)</p>	
<p><b>Note 1. Shippers:</b> DD Form 1387-2, Special Handling Data/Certification, are required on all hazardous cargo not identifiable by a T.O. 11N-20-11 line number.</p>	
<p><b>Note 2.</b> Not a scheduled landing. Hazardous cargo information only for divert situation.</p>	

4. (U) **Types of Security** (*List only the Security references*)

- 4.1. (U) **Type I** -- Security IAW to DoDD 5210.41; Enclosure 9, DoDM S-5210.41M-Vol 3; (AFMAN 31-108Vol 3\_AFGM1)
- 4.2. (U) **Type II** -- Security IAW DoDD 5210.41; Enclosure 9, DoDM S-5210.41M-Vol 3; (AFMAN 31-108Vol 3\_AFGM1)

5. (*Identify Classification*) **Special Requirements for Each Station** (*Indicate requirements for all installations transited or tasked for support in separate paragraphs with sub-paragraphs detailing the following if appropriate for each installation:*

- 1) Fuel, MHE, or equipment requirements
- 2) Clarify if specific waivers or command authorizations are granted/approved at each installation
- 3) Crew requirements for billeting or vehicles
- 4) Requirements for security by location [Type I, Type II, standby/divert support, etc.]
- 5) EDD requirements when necessary
- 6) Fireguard requirements where necessary
- 7) Support / SF release coordination
- 8) PPR requirements, to include a suspense for receiving the PPR
- 9) Message acknowledgment expectations

(*Separately identify de-positioning itinerary installation information after the following statement*)

**\*\*THE ACTIVE PORTION OF THIS MISSION IS NOW COMPLETE. THE REMAINING PORTION OF THIS PARAGRAPH IS INFORMATIONAL ONLY AND MAY CHANGE WITHOUT CREATING A SETUP MESSAGE CHANGE.\*\***

6. (U) **Courier Officer will be one of the following** (*these individuals are authorized to sign and receipt for nuclear weapons/DOE/NNSA specified cargo*):

<u>NAME</u>	<u>RANK</u>	<u>CLEARANCE</u>

**7. (U) Acknowledgement and Confirmation Messages**

**7.1. (U)** Send acknowledgement of the station support requirements listed in this classified message *NLT DD MMM/0000Z*. Send to the following SIPR addresses 618 TACC/XOC-DD02 (TACC.XOC.DD2@AMC.AF.SMIL.MIL); 618 TACC/XOOON SAAM MISSIONS (TACC.XOOON@AMC.AF.SMIL.MIL); tasked unit organizational account (e.g. 4AS.DOOMS.MCCHORD@AMC.AF.SMIL.MIL). Blank acknowledgement and 24-Hour confirmation forms were included with this message. Please complete the appropriate form for Acknowledgement or confirmation.

**7.2. (U)** Send acknowledgement messages for any subsequent changes to the Setup using the proper form in para. 7.1., except use “**Acknowledge Change X to Setup MMM SAAM PJM 0000-00 DTG: 000000Z MMM YY**” in the subject line of the email and/or AMHS message. Fill in the Change Number block of the form with appropriate number.

**7.3. (U)** Send a confirmation message 24-Hours (or last duty day) prior to the aircraft scheduled arrival at your location. Use the proper form listed in para. 7.1, except use “**24-Hour Confirmation MMM SAM PJM 0000-00 DTG: 000000Z MMM YY (CHANGE X)**” in the subject line of the email and/or AMHS message. **Your station may be required to send multiple 24-Hour confirmations if the mission will transit your base on different days.**

**8. (U)** Send required briefings to tasked unit NLT COB DD MMM YY.

**9. (U)** 618 AOC (TACC)/XOOON POC's are [NAME], [NAME], and [NAME].

**\*\*ONLY USE SECURE MEANS (STE or SIPR) WHEN DISCUSSING ANY ASPECT OF THIS MISSION. REFER ALL QUESTIONS TO 618 AOC (TACC)/XOOON STE DSN 312-779-4584\*\***

**DERIVED FROM: TCG-WPMU-2, 09/2004 & SPECIAL WEAPONS OVERFLIGHT GUIDE, 08/2006**

**CLASSIFIED BY: [NAME]**

**Exempt from Automatic Declassification - FRD**

----- **[END OF SAMPLE SETUP MESSAGE]** -----

**Attachment 4**  
**FORMS**

**Figure A4.1. Identification of an Official Courier Letter.**

<p>MEMORANDUM FOR WHOM IT MAY CONCERN</p> <p>FROM: (Appropriate Wing/CC)</p> <p>SUBJECT: Identification of an Official Courier</p> <p>1. (Rank) (Name), (SSN), USAF, is acting in an official capacity as Courier for (organization) and is carrying one mission kit in support of this assigned mission. Documents in this kit will be used during temporary duty in conjunction with this mission and returned to (organization) when the mission terminates.</p> <p>2. The inscriptions on the cover, "OFFICIAL UNITED STATES AIR FORCE COMMUNICATION, EXEMPT FROM EXAMINATION," and the signature of the Courier's commander further identify this kit.</p> <p style="text-align: center; margin-top: 20px;">Wing Commander Signature Official Signature Block</p>
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**Figure A4.2. Request for Waiver of Customs and Quarantine Boarding and Examination.**

<p>MEMORANDUM FOR CUSTOMS AND QUARANTINE</p> <p style="text-align: right;">(Date)</p> <p>FROM: (Aircraft Commander)</p> <p>SUBJECT: Request for Waiver of Customs and Quarantine Boarding and Examination</p> <p>Office (base name—port of entry)—I hereby certify that aircraft (type and number), based at (name and location of base), is carrying classified cargo, and I request a waiver of customs and quarantine boarding and examination. I further certify that all baggage (crew and passenger) has or will be offloaded and made available for customs examination, and that the aircraft has been sprayed in accordance with AFJI 48-104, Quarantine Regulations of Armed Forces, or as requested by the quarantine inspector.</p> <p style="text-align: center; margin-top: 20px;">(Signature of Aircraft Commander) (Rank)</p>
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**Note:** Use official stationary header