



Headquarters  
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the Navy,  
the Air Force,  
and the Marine Corps  
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**\*Army Regulation 59–4**  
**OPNAVINST 4630.24E**  
**AFMAN 13–210 Volume 1**  
**MCO 13480.1E Volume 1**

**Effective 9 September 2024**

### **Air Transportation**

## **Joint Airdrop Inspection Records, Malfunction or Incident Investigations, and Activity Reporting**

By Order of the Secretary of the Army, Navy, Air Force, Marine Corps, and Coast Guard:

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**History.** This publication is a major revision. The portions affected by this major revision are listed in the summary of change.

**Authorities.** This regulation implements the Defense Travel Regulation, Parts II and III.

**Applicability.** This regulation applies to the Regular Army, the Army National Guard/Army National Guard of the United States, and the U.S. Army Reserve, unless otherwise stated. This regulation also applies to the U.S. Air Force, the U.S. Navy, and the U.S. Marine Corps and their respective National Guard and Reserve units.

**Proponent and exception authority.** The proponent of this regulation is the Deputy Chief of Staff, G–4. The proponent has the authority to approve exceptions or waivers to this regulation that are consistent with controlling law and regulations. The proponent may delegate this approval authority, in writing, to a division chief within the proponent agency or its direct reporting unit or field operating agency in the grade of colonel or the civilian equivalent. Activities may request a waiver to this regulation by providing justification that includes a full analysis of the expected benefits and must include formal review by the activity's senior legal officer. All waiver requests will be endorsed by the commander or senior leader of the requesting activity and forwarded through their higher headquarters to the policy proponent. Refer to AR 25–30 for specific requirements. The U.S. Marine Corps is waiver authority for U.S. Marine Corps-specific modifications/exceptions to policy, to then liaison with Deputy Chief of Staff, G–4 for approval. Headquarters, Air Mobility Command/A3TW is waiver authority for U.S. Air Force unilateral airdrop training specific modifications/exceptions to policy, to then liaison with Deputy Chief of Staff, G–4 for approval.

**Army internal control process.** This regulation contains internal control provisions in accordance with AR 11–2 and identifies key internal controls that must be evaluated (see appendix B).

**Suggested improvements.** Users are invited to send comments and suggested improvements on DA Form 2028 (Recommended Changes to Publications and Blank Forms) directly to G–4 Publications Team mailbox: [usarmy.pentagon.hqda-dcs-g-4.mbx.publications@army.mil](mailto:usarmy.pentagon.hqda-dcs-g-4.mbx.publications@army.mil). Air Force units will submit recommendations for improvement or revisions to this regulation on AF Form 847 (Recommendation for Change of Publications) through their Group Tactics or Standardization/Evaluation Office to their controlling major command, which will forward any recommendations to Headquarters, Air Mobility Command/A3TW, 402 Scott Drive, Suite 3A1, Scott Air Force Base, IL 62225–5302. Navy will submit recommendations for improvements or revisions to this regulation on NAVMC 10772 (Recommended Changes to Publications and Blank Forms). Marine Corps will submit recommendations for improvements or revisions

\*This regulation supersedes AR 59-4/OPNAVINST 4630.24D/AFJ 13-210(I)/MCO 13480.1D, dated 8 April 2008.

to this regulation using the automated form NAVMC 10772 (Recommended Changes to Publications and Blank Forms) through Technical Data Management (TDM)-Publications at <https://www.marines.mil/news/publications.aspx>.

**Distribution.** This regulation is available in electronic media only and is intended for the Regular Army, the Army National Guard/Army National Guard of the United States, and the U.S. Army Reserve; SNDL for the Navy; F for the Air Force (compliance with this publication is mandatory); and Code A for the Marine Corps.

# ***SUMMARY of CHANGE***

AR 59–4/OPNAVINST 4630.24E/AFMAN 13–210 Volume 1/MCO 13480.1E Volume 1  
Joint Airdrop Inspection Records, Malfunction or Incident Investigations, and Activity Reporting

This major revision, dated 9 August 2024—

- Updates website for submittal of product quality deficiency reports (para 4–2*b*).
- Updates malfunction officer qualifications and duties (para 5–1).
- Moves equipment malfunction and incident reporting requirements to DA Pam 59 –4 (para 5–2).
- Transfers all prescribed DD forms (DD Form 1748-series) to DA Pam 59–4 (app A).
- Moves procedures to DA Pam 59–4 (throughout).

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## **Chapter 1**

### **Introduction**

#### **Section I**

##### **General**

###### **1–1. Purpose**

This regulation provides policies and assigns responsibilities for initial notification, investigation, reporting, and submitting reports of parachute and airdrop load malfunctions and incidents. In addition, it standardizes Joint airdrop inspections, responsibilities, and duties of the malfunction officer (MO), responsibilities and duties of the Joint airdrop inspector (JAI) and activity reporting for Department of Defense (DoD) components engaged in premeditated airdrop operations. DoD component test agencies in authorized testing are exempt from malfunction and incident reporting for the item under test but are not exempt from malfunction and incident reporting for any fielded or type-classified parachute component or event outside the scope of the test.

###### **1–2. References, forms, and explanation of abbreviations**

See appendix A. The abbreviations, brevity codes, and acronyms (ABCAs) used in this electronic publication are defined when you hover over them. All ABCAs are listed in the ABCA directory located at <https://armypubs.army.mil/>.

###### **1–3. Associated publications**

Procedures associated with this regulation are found in DA Pam 59–4.

###### **1–4. Responsibilities**

See Section II of this chapter.

###### **1–5. Records management (recordkeeping) requirements**

The records management requirement for all record numbers, associated forms, and reports required by this publication are addressed in the Records Retention Schedule–Army (RRS–A). Detailed information for all related record numbers, forms, and reports are located in Army Records Information Management System (ARIMS)/RRS–A at <https://www.arims.army.mil>. If any record numbers, forms, and reports are not current, addressed, and/or published correctly in ARIMS/RRS–A, see DA Pam 25–403 for guidance.

#### **Section II**

##### **Responsibilities**

###### **1–6. Deputy Chief of Staff, G–4**

Headquarters (HQ), Department of the Army (DA), Deputy Chief of Staff, G–4, will oversee DA policy concerning the Joint airdrop inspection records, malfunction and incident investigations, and activity reporting.

###### **1–7. Commanding, General, U.S. Army Combat Readiness Center**

The CG, USACRC will maintain a record of malfunctions and incidents that occur during Army airborne operations that result in serious injury or death and are required to be reported as mishaps per AR 385–10. Investigate, report, and record accidents that involve the use of Army aircraft per AR 385–10 and DA Pam 385–40. The CG, USACRC will coordinate with the Commandant, U.S. Army Quartermaster School (USAQMS) to assist in determining the aerial delivery, airdrop systems technician subject matter expert (SME) requirement for fatality and accident investigations.

*Note:* Mishaps involving the use of Army aircraft will be investigated, reported, and recorded in accordance with AR 385–10.

### **1–8. Commanding General, U.S. Army Training and Doctrine Command**

The CG, TRADOC will oversee the CG, U.S. Army Combined Arms Support Command, who will appoint the Commandant, USAQMS, Aerial Delivery and Field Services Department (ADFSD) who will—

a. Establish a Joint safety evaluation team to include SMEs from Navy, Marine Corps, and Air Force that will inspect all aerial delivery units or sites, standardize procedures and correct problems to reduce serious malfunctions while socializing critical lessons learned and make improvements across the total force.

b. Develop, maintain, validate, and publish a training support package covering the duties and responsibilities of the aerial delivery certifications, such as MOs and the JAI.

### **1–9. Commanders at all levels of command will—**

a. Ensure malfunction investigations receive the highest priority, secondary only to medical aid for the injured, which will supersede all other aspects of the operation including ground tactical exercises. Prompt and accurate investigations and reporting can and will save lives and equipment.

b. Ensure qualified personnel are certified, ready, and available to perform the Joint airdrop inspection, conduct malfunction and incident investigations, and provide timely and accurate reporting of airdrop malfunctions and activities.

c. Ensure standards of onsite investigations and chains of custody are strictly enforced as established in this regulation.

d. Appoint, in writing (of units owning airdrop equipment), a unit SME who is a parachute rigger, such as an airdrop systems technician military occupational specialty (MOS) 921A, MOS 92R4P, or other Service-specific rigger personnel. The appointed SME may assist the designated MO in the event of a serious incident, malfunction, or fatality.

e. Ensure aerial delivery units will convene an Aerial Delivery Review Panel (ADRP) as prescribed in paragraph 1–10 of this regulation.

f. Airlift unit commanders will ensure the airlift unit will secure all airdrop loads and personnel in the aircraft, complete rigging the aircraft, and accomplish the extraction or release of personnel, supplies, and equipment from aircraft in flight. A Joint airdrop inspection will be completed for all loads rigged for airdrop from all aircraft per this regulation unless exempted in paragraph 2–5. The loadmaster will make available the specific cargo loading manual for that particular aircraft during the inspection.

g. Rigging unit commanders will ensure the transported force will prepare and deliver supplies and equipment to be airdropped to the airdrop support unit and assist with rigging and transportation. The transported force will request airlift unit JAI support.

h. Commanders of rigging units will ensure members of the airdrop support unit will—

(1) Rig, deliver, and assist with airdrop cargo per applicable Service directives and/or as established in Defense Transportation Regulation (DTR) 4500.9–R, Part II. For Services supporting their own unilateral operations, the aerial delivery unit will assume the responsibilities of the transported force. For personnel airdrops, the jumpmaster's (JM) unit of assignment will assume the responsibilities of the transported force.

(2) Ensure that the JM, drop zone (DZ) safety officer (DZSO), JAI, MO, and safety and medical personnel are appointed as required per Service regulations.

(3) Ensure an MO is present on the DZ during all airborne operations. This MO will maintain constant contact (may be by radio or cell phone) with the DZ control party and the Air Force (AF) combat control team, if present.

(4) Ensure the applicable field manual (FM), technical manual (TM), AF technical order (TO), Naval Air Systems Command (NAVAIR), or Naval Sea Systems Command (NAVSEA) publication is available to all JAIs and MOs.

(5) Provide the DD Form 1748–series (Joint Airdrop series) for all Joint airdrop inspections.

(6) Submit information on all airdrop operations. Ensure the airdrop support unit officer in charge or noncommissioned officer in charge collects this information through any and all means possible (such as strike reports, flash reports, after-action reports, and camera footage). Submit this information on DD Form 1748–3 (Joint Airdrop Summary Report) per the reporting requirements in chapter 4 of this regulation.

*Note.* Under certain circumstances, the transported force and airdrop support unit are the same.

### **1–10. Aerial delivery review panel**

*a. Air Force.* AF operations group commanders or their equivalent will appoint an ADRP to investigate airdrop malfunctions, incidents, and off-DZ airdrops occurring within their command area of responsibility.

(1) The ADRP chairperson will determine ADRP composition based on the situation under review.

(2) ADRP members may include, based off chairperson's discretion, the chief of tactics (chairperson), tactics pilot, tactics navigator or combat systems operator (if applicable), tactics loadmaster or special mission aviator (SMA), standardization and evaluation pilot, standardization and evaluation loadmaster or SMA, JAI loadmaster or SMA, flying safety officer, maintenance representative, aerial port representative, crewmembers from the incident aircraft, the DZSO, and JM. A premeditated parachute unit ADRP will consist of the unit commander, the MO, and the chief of standardization and evaluation.

(3) ADRP members will be airdrop qualified where appropriate.

(4) The ADRP will convene the next duty day after the airdrop if the malfunction or incident occurs at home station. If the incident occurs away from home station, the ADRP will convene within five duty days (10-days for the Air Reserve Component (ARC)) after return to home station. In the event of a class A or B mishap, the aircrew will remain on station until the aircraft has been eliminated as a potential causal factor for the mishap by the MO per this regulation.

(5) Within five days of the completion of the ADRP, send the results to HQ Air Mobility Command (AMC) /A3TW through the parent AF Major Command (AFMAJCOM) and, if applicable, to the command having command and control of that aircraft. Provide an informational copy to Director, Aerial Delivery and Field Services Department (ATSM–ADF), 710 Adams Avenue, Fort Gregg-Adams, Virginia 23801–1502 or email to [usarmy.gregg-adams.tradoc.list.lee-qm-admmo@army.mil](mailto:usarmy.gregg-adams.tradoc.list.lee-qm-admmo@army.mil).

*b. Army.* Army battalion commanders or higher will appoint an ADRP to investigate airdrop malfunctions, incidents, and off-DZ airdrops occurring within their command area of responsibility. The ADRP will convene within 24 hours if the malfunction or incident occurs at home station. If the incident occurs away from home station, the ADRP will convene within five duty days. A field grade officer or senior warrant officer (MOS 921A) will chair the ADRP. The ADRP will include a senior warrant officer (MOS 921A), a parachute rigger (MOS 92R30), the MO, the DZSO, and a recorder. The ADRP should also include a representative from the aviation unit involved. Send results of the ADRP through the Army command (ACOM), Army service component command (ASCC), or direct reporting unit (DRU) to the Army transported force, the Army airdrop support unit, and the Director, Aerial Delivery and Field Services Department (ATSM–ADF), 710 Adams Avenue, Fort Gregg-Adams, Virginia 23801–1502.

*c. Navy and Marine Corps.* Navy and Marine Corps units will convene local review boards at the next higher level in the airdrop support unit chain of command to evaluate malfunctions or other airdrop-related incidents within their commands. The composition of the board will be determined by the severity of the malfunction or incident. At a minimum, include a Marine MOS 0451 or Navy-rated Aircrew Survival Equipment (PR) with a Navy enlisted classification (NEC) 773A parachute rigger and an MO on the board.

### **1–11. Use of reported data**

*a.* Accurate and timely DD Form 1748–series reports are essential for proper analysis to improve existing policies and technology as rapidly as possible.

*b.* The Commandant, USAQMS, ADFSD will publish all reported malfunction or incident activity data for review and analysis during the Triannual Airdrop Malfunction, Safety Analysis, and Review Board. The ADFSD is the proponent activity responsible for receiving, tabulating, and developing airdrop malfunctions or incidents for review and analysis.

*c.* For use of reported data procedures, refer to DA Pam 59–4.

### **1–12. Triannual Airdrop Malfunction and Safety Analysis Review Board**

*a.* The Commandant, USAQMS, ADFSD, will host the Triannual Airdrop Malfunction and Safety Analysis Review Board. Airdrop units that submitted a report during the period covered by the board will send a representative and supporting malfunction documentation. Other airdrop units throughout DoD are strongly encouraged to send representatives. The board will be led by a committee of all Service liaisons and an ADFSD senior warrant officer. The board will be chaired by the USAF liaison.

*b.* The board includes—

(1) Presentations of new systems or policies pertinent to the DoD airdrop community.

(2) Presentations by ACOM, ASCC, DRU, USACRC, and/or subordinate command representatives of the results of previous malfunctions and/or incidents and any corrective measures units adopted since the previous board.

(3) A review and analysis of standard and nonstandard malfunctions and/or incidents.

(4) Report of findings.

c. Representatives from the Army's ACOM, ASCC, or DRU, the Navy, the Marine Corps, and the AFMAJCOMs will provide feedback from the Service or the command oversight of airdrop operations. The representatives will also be responsible to the board to review and analyze incidents for trends concerning Joint airdrop inspection training deficiencies (for example, improper rigging and manual understanding).

d. Interaction with airdrop personnel throughout DoD provides a forum to ensure the highest standards of airdrop operations and safety. Participants are highly encouraged to discuss airdrop issues to benefit the entire board as well as selected participants. Time will be allocated for this interaction.

e. The AFMAJCOM's aircrew, tactics, standardization or evaluation, transportation functional managers, and personnel parachuting program managers will convene at least annually in conjunction with the board to discuss AF matters concerning aerial delivery. The conference will have a standing agenda consisting of standardizing publications and policies; reviewing this regulation, AFI 10-3503, AFMAN 11-301, and the DD Form 1748-series; and reviewing major problem areas.

f. The 921A Senior Warrant Officer Advisory Council will convene at least annually in conjunction with the board to discuss 921A matters concerning aerial delivery. The council will provide minutes of the meeting to the Director, USAQMS, ADFSD.

## **Chapter 2**

### **Joint Airdrop Inspections, Policies, and Records**

#### **2-1. Airdrop Inspection**

a. Representatives from each Service participating in the airdrop mission will perform a Joint airdrop inspection to prepare for each cargo airdrop. The Commandant, USAQMS certifies JAIs. Certification requires successful completion of the USAQMS resident, or mobile training team Airdrop Load Inspector Certification Course (ALICC) presented by ADFSD at Fort Gregg-Adams, Virginia. Refer to chapter 6 for qualification requirements.

b. Qualified riggers for cargo airdrop are—

(1) AF riggers include air transportation specialists, aircraft loadmasters, aircrew flight equipment, contract personnel, or SMAs who have successfully completed the USAQMS aerial delivery phase of the Parachute Rigger Course (PRC), also referred to as the Airdrop Specialist Course or airdrop specialist phase. This includes contracted personnel performing these duties. These personnel are considered qualified AF riggers and may rig any equipment for airdrop per applicable rigging manuals.

*Note:* Air transportation specialists and their contract locations may only rig unilateral aircrew training loads in accordance with AFI 24-605V3.

(2) Army MOSs 92R and 921A, Navy NEC 773A, and Marine Corps MOS 0451 parachute riggers are considered fully qualified riggers and may rig any equipment for airdrop per applicable rigging manuals.

#### **2-2. Inspection policies**

a. Prior to airdrop, inspect loads or containers rigged for airdrop three times separately. The first inspection is the shop final, the second inspection is the before-loading, and the third inspection is the after-loading. Rigging units will maintain a copy (paper or digital) of all three inspection forms (local and/or DoD). An airdrop load will not be accepted unless it is rigged per specific TMs, TOs, or NAVAIR and/or NAVSEA publications distributed by USAQMS, ADFSD, Naval Air Warfare Center Weapons Division at China Lake, or the Joint Special Operations Command. Rig and inspect nonstandard and free-drop door bundles per the appropriate TM, TO, and/or manufacturer instructions. Loads rigged in accordance with Joint Special Operations Command Manual 350-series manuals follow the same requirements as outlined in this manual. All malfunctions/incidents will be reported per this manual and an informational copy will be sent to the Special Operations Aerial Delivery Element within 5 days. Submit waivers for nonstandard



airdrop loads dropped from AF aircraft to HQ AMC/A3TW OL-E through the applicable Army ACOM, ASCC, DRU, or AFMAJCOM. Nonstandard airdrop loads are defined in MIL-STD-1791-1.

b. Army, USAF, or short takeoff and landing contracted aircraft require the following to be inspected:

(1) All precision airdrop loads require an inspection by JAI personnel.

(2) All loads exceeding 501 pounds require an inspection by JAI personnel.

(3) All low-cost, low-altitude (LCLA) loads under 500 pounds require an inspection by a Sling Load Inspector Certification graduate (with LCLA qualification) or a certified JAI per TM 4-48.03.

c. The first inspection is the shop-final inspection, which is conducted when the rigging is complete. This inspection is per the TM, TO, or a NAVAIR or NAVSEA publication for the specific piece of equipment or load. The rigger will use the applicable form in the DD Form 1748-series for this inspection, which will be performed by a rigger other than the one who directly supervised the rigging of the load. For first inspection procedures, see DA Pam 59-4.

d. The second inspection is the before-loading inspection. An airdrop support unit JAI other than the rigger who supervised the rigging of the load, and an airlift unit JAI will conduct it jointly. Both inspectors must be JAI qualified and current. Both inspectors will complete the applicable form in the DD Form 1748-series, and both will sign the appropriate blocks to certify correct rigging of the load. Both the airdrop support unit JAI's signature and the airlift unit JAI's signature indicate the load is rigged per the applicable rigging manual (except as noted in the remarks section). The airlift unit JAI's signature also indicates the load does not jeopardize safety of flight or aircrew safety. The before-loading inspection satisfies the requirements of the Joint inspection specified in DTR 4500.9-R, Part III. For second inspection procedures, see DA Pam 59-4.

e. The third inspection is the after-loading inspection. After the aircraft loadmaster or SMA completes the loading and in-aircraft rigging, the airlift unit JAI, an airdrop support unit JAI other than the rigger who supervised the rigging of the load, and the aircraft loadmaster or SMA will accomplish this inspection together. When possible, the JAIs should be different from the ones that performed the before-loading inspection. The aircraft loadmaster or SMA does not need to be JAI qualified. Under no circumstances will AF loadmasters or SMAs perform as the airlift unit JAI on their own airdrop load, except as identified in paragraph 2-5. For third inspection procedures, see DA Pam 59-4.

*Note:* Riggers involved in the packing of parachutes or rigging of cargo loads will not act as the JAI for the airdrop.

f. The before- and after-loading inspections ensure compliance with appropriate rigging instructions, FMs, TMs, TOs, NAVAIR or NAVSEA publications, and this regulation. The airdrop support unit will furnish an up-to-date copy of the appropriate FM, TM, TO, or a NAVAIR or NAVSEA publication (in either digital or hard copy format) to the inspectors during the inspection. The aircraft loadmaster or SMA will also make available the applicable aircraft airdrop loading TO.

g. AF unilateral training operations augment the Joint airborne or air transportability training program and are essential to maintaining mission-ready, airdrop-qualified, aircrew members. A unilateral airdrop training (UAT) load is defined as any airdrop load, owned and rigged by USAF personnel, generated to specifically address a unit-training requirement. UAT loads will adhere to current rigging instructions, however rigging procedures requiring exception(s)/waiver(s) will be submitted to the USAF Liaison, HQ AMC/A3TW, ADFSD, Fort Gregg-Adams, VA. Airdrop load-inspection procedures are essentially the same as Joint operations, with the following exceptions:

(1) Individuals listed in paragraph 2-1b(1) may perform the shop-final inspection.

(2) The transported force or aerial delivery unit does not need to be present during the before- and after-loading inspections. If items are found to be incorrect or questionable, the airlift unit JAI notifies the transported force or aerial delivery unit. The transported force or aerial delivery unit either corrects or accepts responsibility for the condition of the items per the before- and after-loading inspection paragraphs 2-2d and 2-2e. A signature in the transported force signature block of the appropriate DD Form 1748-series form is not required.

(3) Air National Guard (ANG) and AF Reserve command units, air transportation specialists, aircraft loadmasters, and SMAs who are rigger qualified by completing the aerial delivery phase of the PRC, and JAI qualified by completing the ALICC, may perform the before-loading inspection as the airlift unit JAI and sign the before-loading inspection airlift unit's inspector block of the appropriate DD Form 1748-series form. A certified airlift unit JAI loadmaster or SMA accomplishes the after-loading inspection and signs the after-loading airlift unit's inspector block of the appropriate DD Form 1748-series form.

(4) USAF aircrews conducting training missions with AF special warfare units will consider all loads as UAT unless identified as a real-world mission or conducting operations in a forward-deployed location.

(5) Rescue units dropping guardian angel loads during training follows the procedures for airdrop inspection in paragraphs 2–2a through 2–2g.

### **2–3. Inspection records**

Use the DD forms listed in DA Pam 59–4 as an inspection checklist for Joint airdrop inspections. For completion instructions, form numbers, titles, and procedures, refer to DA Pam 59–4/AFMAN 13–210 Volume 2.

### **2–4. Disposition instructions**

a. If a malfunction or incident occurs, retain the inspection form for use during the investigation or analysis. Submit a copy of the inspection form with DD Form 1748–2 (Airdrop Malfunction Report (Personnel-Cargo)) to ADFSD. Dispose of investigative documents per appropriate Service directives.

b. If there are no malfunctions or incidents, dispose of the form per appropriate Service directives.

### **2–5. Exceptions**

a. Door bundle loads rigged for paratroop doors or the aircraft ramp using A7A straps or A21 containers (weighing 500 pounds or less) and manually ejected from the aircraft do not require a before-loading or after-loading inspection if used during a combination airdrop with parachutists. A manually ejected bundle is physically slid or thrown from the aircraft by personnel onboard the aircraft. The JM of the airdrop unit and the aircraft loadmaster or SMA will perform an inspection to ensure that the bundle is properly rigged for either breakaway or non-breakaway (per TM 4–48.03 and TC 3–21.220/MCWP 3–15.7/AFMAN 11–420/NAVSEA SS400–AF–MMO–010), that the parachute is connected to aircraft equipment properly, and that there is a clear exit route. Parabundle and freefall bundles also do not require before-loading or after-loading inspections. The aircraft loadmaster or SMA will inspect the bundle per established procedures by the MAJCOM.

b. All Joint Precision Aerial Delivery System (JPADS), guided systems, and High Altitude Aerial Resupply System (HAARS) II bundles require a JAI, regardless of weight, prior to being airdropped from USAF aircraft.

c. All door bundles rigged for aircraft ramp exit without accompanying parachutists or JM require a before- and after-loading inspection regardless of weight. Units dropping LCLA bundles from AF aircraft require Joint airdrop inspections regardless of weight. The AFMAJCOM Tactics Function Office is the waiver authority for this requirement.

d. Loadmasters/SMAs assigned to a special operations/rescue unit, actively engaged in recovery of personnel, may also rig, inspect, and drop A7A containers without any additional inspections. Accomplish rigging per procedures in TM 4–48.03/TO 13C7–1–11. Units dropping these loads as rescue drops require the aircraft loadmaster to inspect that the bundle is properly rigged for either breakaway or non-breakaway, that the parachute connection is secure to equipment, and that there is a clear exit route before being dropped. AFMAJCOMs will develop guidance for training to this exception for UAT.

e. AF standard airdrop training bundles (sandbags) do not require a Joint airdrop inspection. Aircraft loadmasters or SMAs will inspect the standard airdrop training bundles per established procedures in the applicable aircraft publications.

### **2–6. Joint airdrop inspection of foreign airdrop equipment loads on U.S. aircraft and U.S. loads on foreign aircraft**

a. U.S. rigged loads airdropped from foreign aircraft will be inspected by a qualified U.S. airdrop support unit JAI. Airdrop support unit JAIs should attempt to become familiar with unique aircraft aerial delivery systems or dissimilar rigging procedures. Special consideration should be exercised when requesting to inspect a foreign aircraft as some foreign aircrew may be sensitive to these requests. If the foreign aircrew denies inspection of the load on the aircraft, the transported force will contact their higher HQ command or AFMAJCOM tactics office.

b. Foreign rigged loads dropped from U.S. aircraft will meet all U.S. doctrine rigging procedures and will be inspected by qualified airlift unit JAI. Exceptions: Foreign loads rigged per an AIR STD or STANAG approved by North Atlantic Treaty Organization or Air Forces Interoperability Council meet the U.S. doctrine requirement.

## Chapter 3 Investigations

### 3–1. Investigations by the malfunction officer

- a. Refer to chapter 5 of this AR for MO qualification requirements.
- b. Malfunction investigations cover two areas—
  - (1) Personnel parachute malfunctions and/or incidents.
  - (2) Airdrop load malfunctions and/or incidents. The depth of any investigation will vary according to the severity of the malfunction and/or incident and resulting injuries and/or loss.
- c. In cases involving deliberate misconduct; involving serious incident, injury, or death; or meeting the requirements of a class A or B accident or mishap, appoint an SME to assist in the conduct of the follow-on investigation according to Service directives and this regulation until one is appointed by the investigative agency. The investigations may include, but are not limited to, those listed in AR 15–6; AR 385–10; AR 735–5; the Uniform Code of Military Justice, Judge Advocate General (JAG) Instruction 5800.7F; Naval Criminal Investigative Service, Criminal Investigation Division, AF Office of Special Investigations (AFOSI) publications; and the Safety Investigation Review Board (SIRB) reports. The MO will make investigative notes, insights, reports, and physical evidence available to these investigations. The MO will exercise care to avoid compromising the rights of personnel involved. During the investigation, the MO gathers information, evidence, and items that are sensitive in nature. When the equipment is not able to remain at the malfunction or incident site and the SIRB is not present, the MO will conduct a component-by-component investigation on site. The MO will ensure that, after the component-by-component examination is completed, the equipment involved in the malfunction and/or incident is secured and accessible to only the investigating SME. The MO will turn over all evidence to the SME and the SIRB. The O–6 or designated representative in the airdrop support unit chain of command can authorize the release of information on a need-to-know basis to authorized personnel other than the SME and SIRB. For Navy and Marine Corps, the Naval Safety Command is the authority for privileged safety investigation information.

*Note.* The component-by-component investigation is an examination of the parachute and surrounding area as it lies and is not a 100% technical rigger inspection (TRI). Care will be taken throughout this process and documentation will be accurate and captured with video and photo evidence to present to the SIRB.

- d. In cases apparently not involving deliberate misconduct or not meeting the safety review board definitions for class A or B mishaps or for incidents not involving serious injury, the MO will conduct the onsite investigation solely to determine the cause of the malfunction or incident and the actions required to prevent future occurrences. Submit findings through the ACOM, ASCC, DRU, or parent unit to the USAQMS, ADFSD, for further analysis or action.

- e. For all Services, during malfunctions or incidents that meet the definition of an on-duty class A or B mishap, the MO will preserve the mishap scene—medical treatment has priority—and ensure all evidence is secured until the appointed SIRB arrives. The Naval Safety Command for Navy and Marine Corps will appoint an SME. The MO will photograph the mishap scene and all angles of components using a still or digital camera and/or a video recorder. The MO will not disturb the evidence by taking out inversions, turns, tangles, or twists or by taking any of the components apart. In the event of inclement weather or a delayed arrival of the SIRB, the MO may place the involved equipment into plastic bags once the site has been photographed and otherwise documented. The MO must ensure minimal disturbance of the equipment's condition and must secure the equipment until it can be viewed by the SIRB. The SME assigned to the SIRB will conduct the component-by-component technical or rigger-type inspection and analysis.

- f. Regarding the priority of malfunction and incident investigations, the investigation of personnel parachute and equipment malfunctions and/or incidents will receive the highest priority, second only to medical aid for the injured. It will supersede all other aspects of the operation, including any tactical exercise planned in conjunction with the airborne operation. A prompt and accurate investigation and reporting could save lives and equipment. Data gathered can help determine whether a system change is necessary to prevent future occurrences. The MO should enlist as many personnel as needed to investigate possible causes of the malfunctions. These personnel will identify any unusual occurrences to the MO, who will take actions as directed in this regulation.

### **3–2. General guidance on malfunction and incident investigations**

a. The MO will investigate and report all airdrop malfunctions through the appropriate DoD component to the USAQMS and will conduct the investigation as expeditiously as possible after the malfunction or incident to preclude confusion of facts and loss of data. The MO (who is on location at the time of the malfunction) plays a key role in the overall investigation as a direct source of information. The MO provides onsite and follow-on investigation reports to the investigating agency. See checklists in DA Pam 59–4 for guidance on both onsite and follow-on investigations; these checklists are not all inclusive, and a specific investigation can disclose other items that should be checked.

b. All Service units involved in class A or B mishaps, aircraft airdrop system malfunctions, or aircraft damage will notify the appropriate Service military airfield. The aviation unit will not derig the aircraft or reprogram navigation aids used in determining the load release point unless safety of flight is compromised. The aircraft will immediately return to base following the mishap. After landing, the appropriate tactics and maintenance representatives will inspect the aircraft before it is released for subsequent flights. For missions away from home station, notify the command and control center having operational control of the mission to determine the recovery airfield where the aircraft can be inspected. If operational requirements prevent recovery and inspection by an appropriate AF, Marine Corps, or Navy unit, then the aircrew will submit a detailed report to their unit of assignment to help in analysis of the malfunction or incident. If applicable, notify the owning AFMAJCOM, nearest command post, or the command and control center.

c. Navy and Marine Corps units will stand up their mishap investigation board in accordance with the OPNAVINST 5102.1/MCO P5102.1. In addition, Naval Safety Command will appoint the Parachute Safety Analyst (Code 40) to all Safety Investigation Boards to function as an outside independent SME for all class A and B airdrop mishap investigations.

### **3–3. Checklist for malfunction officer onsite investigations**

For the full checklist for MO onsite investigations, including purpose, instructions, and Investigation procedures, see DA Pam 59–4.

### **3–4. Checklist for personnel parachute malfunction and incident investigations**

For the full checklist for personnel parachute malfunction and incident investigations, including purpose, instructions, and investigation procedures, see DA Pam 59–4. For all TRI procedures, see the appropriate TM.

### **3–5. Checklist for airdrop load malfunction investigations**

For the full checklist for airdrop load malfunction investigations, including purpose, instructions, investigation questions and procedures, see DA Pam 59–4.

### **3–6. Malfunction and incident categories**

a. A malfunction is defined as the failure of an airdrop item to function as it was intended or designed. Some examples of malfunctions include but are not limited to failure of a main canopy to properly deploy, static line breaking, parachute panel or gore blowout, cargo parachute release failure, and a JPADS that lands off the DZ for reasons other than improperly loaded data.

b. An incident is defined as any action or event preventing an airdrop item from functioning as it was intended or designed. Some examples of incidents include, but are not limited to: improperly setting the automatic activation device that resulted in a dual canopy deployment; inadvertent or premature activations; entanglements resulting in reserve parachute deployment; high flair of the canopy resulting in jumper injury; parachutist loss of consciousness during jump sequence; failure to hook up static line to anchor line cable for container delivery system; improper rigging procedures before, during, or after the airdrop equipment was loaded in the aircraft; JPADS with improperly loaded data; misrouted static lines that resulted in a towed jumper (cutaway or retrieved); and improper lock setting resulting in a loose platform, or no-drop of equipment.

*Note.* Do not report injuries related to parachute landing falls via DD Form 1748–2 (Airdrop Malfunction Report (Personnel-Cargo)) to the USAQMS. Services will follow procedures in their appropriate AFI, AR, MCO, or NAVAIR or NAVSEA publications. For USAF personnel, a blown drogue or extraction parachute requires a DD Form 1748–2 whether local procedures require an Aerial Delivery Review Board. USAF:

For off DZ airdrops, do not submit via DD Form 1748–2 to the USAQMS. Aircrews will report off-DZ airdrops to their AFMAJCOM and submit a copy to AMC/A3TW for tracking purposes.

### **3–7. Airdrop load malfunction phase categories**

The MO will categorize malfunctions by the phase in which they occur and also restrict the investigations to factors that could have caused or contributed to the malfunction or incident to conserve time and effort. Observing the malfunction and/or incident can normally determine the phase of the occurrence. Phases are defined as follows:

*a. Extraction phase.* The period of time that begins with the activation of the aerial delivery system and continues until the extraction force transfers to recovery parachute deployment.

*b. Deployment phase.* The period of time that begins with the transfer of force from extraction to recovery parachute deployment and continues until load impact.

*c. Release phase.* The period of time after load impact when the parachute release should occur.

### **3–8. Safety investigations**

Safety investigations may be initiated per the Joint safety memorandum of understanding among the Army, AF, Marine Corps, and Navy. Report and investigate all mishaps in accordance with the appropriate Service mishap reporting guidance. See the applicable Service regulations and unit safety office for reporting investigation requirements and instructions for all classes of mishaps (A, B, C, D, and so forth).

### **3–9. Disposition of air items**

Maintain all items of equipment (personnel and cargo) involved in a malfunction until after review at the Triannual Airdrop Malfunction and Safety Analysis Review Board. Secure all air items involved in a fatality until released by the JAG after completion of the investigation and upon submission of all reports required by this regulation. For procedures on the disposition of air items, see DA Pam 59–4.

## **Chapter 4**

### **Report Requirements**

#### **4–1. General reporting requirements**

Report all malfunctions, incidents, or damage to airdropped equipment and/or aircraft through the command channels of the owning unit immediately.

*a.* AF units will immediately report all airdrop malfunctions or incidents involving injury or death, damage to equipment and off-DZ drops to the command having operational control of the aircraft. Augmented crews from a separate command will notify their respective commands in addition to the initial report that will be submitted to the controlling command. AF aircraft participating in an operation without an AF chain of command will notify their respective command HQ of the incident, with follow-up reports, as required.

*b.* For Army and AF, report all parachute and aerial delivery-operation malfunctions and/or incidents for all standard and nonstandard equipment per this regulation. Use web-based reporting to report all malfunctions and incidents at: <https://armyeitaas.sharepoint-mil.us/sites/tr-scoe-qm-adfsd/sitepages/admmo.aspx> for Army units and <https://usaf.dps.mil/sites/larado> for USAF units. When the web-based reporting system cannot be used, fax paper copies of DD Form 1748–2 to Defense Switched Network (DSN) 687–3084 or (804) 734–3084. Send all reports to the Aerial Delivery Manuals and Malfunctions Office, USAQMS, ADFSD, 710 Adams Avenue, Fort Gregg-Adams, Virginia 23801–1502 or email to [usarmy.gregg-adams.tradoc.list.lee-qm-admmo@army.mil](mailto:usarmy.gregg-adams.tradoc.list.lee-qm-admmo@army.mil).

*c.* All parachute malfunctions and incidents involving Navy and Marine Corps personnel and equipment conducted during airborne operations will be reported in accordance with the OPNAVINST 5102.1/MCO P5102.1 via the Risk Management Information (RMI) system (<https://afsas.safety.af.mil>). This reporting is a three-step process. Step one is a comprehensive MO investigation that includes causal and contributing factors as well as risk mitigation efforts and recommendations. Step two is a comprehensive review of the findings and implementation of any recommendations conducted by the unit's safety officer who will then enter the report into RMI within thirty calendar days. Step three is the quality assurance review by the Naval Safety Command's parachute analyst (code 40) who will then forward the report to the Aerial Delivery Manuals and Malfunctions Office, USAQMS, ADFSD, 710 Adams Avenue, Fort Gregg-Adams, Virginia 23801–1502. In addition, the Naval Safety Command will notify the following activities of any malfunction

or incident: Chief of Naval Operations (N95), Naval Sea Systems Command, Program Management Ships, Naval Special Warfare (PMS-340 NSW), and Commander, Naval Air Warfare Center Weapons Division at China Lake (code 466200D).

d. The aircrew will initiate the report for malfunctions and/or incidents occurring during the extraction phase of any airdrop or during the exit phase for jumpers where aircrew procedures or aircraft aerial delivery equipment are contributing factors.

e. The MO will initiate the report for malfunctions and/or incidents occurring during the deployment or recovery phase of any airdrop load or jumper. For malfunctions and/or accidents believed to have been caused by aircrew procedures, such as low altitudes or DZ offset, the MO or DZSO will coordinate with the aircrew for the most accurate information.

*Note:* Any misuse or unauthorized disclosure of personally identifiable information (PII) may result in both civil and criminal penalties. The DoD recognizes that the privacy of an individual is a personal and fundamental right that will be respected and protected. The DoD's need to collect, use, maintain, or disseminate PII about individuals for purposes of discharging its statutory responsibilities will be balanced against the individual's right to be protected against unwarranted invasion of privacy. All collection, use, maintenance, or dissemination of PII will be in accordance with the Privacy Act of 1974, as amended (5 USC 552a) and implemented per DoDI 5400.11.

#### **4-2. Product quality deficiency reports**

a. The airdrop support unit commander providing the air items that malfunctioned will prepare a product quality deficiency report (PQDR) using SF 368 (Product Quality Deficiency Report) if it is determined that the equipment failed because of a manufacturer defect.

b. Army units submit PQDRs at <https://www.pdrep.csd.disa.mil/>. Once the form is completed, route all A12 items to the point of contact for the Army at Tank-Automotive and Armament Command in Natick, Massachusetts, W58HZ1, to start the investigation process.

c. Navy units are to complete SF 368 and forward it to Naval Air Warfare Center Weapons Division, Human Systems Department, Code 466200D, 1 Administration Circle, Stop 1118, China Lake, California 93555-6100 and the Naval Safety Command's parachute safety analyst for further tracking and validation.

d. Marine Corps units are to complete the PQDR in accordance with NAVMC 4855.1 and send an email to Marine Corps Systems Command, Parachute Project Officer, (PMM 141.3) and the Naval Safety Command for further tracking and validation.

e. AF reports PQDRs using the Acceptance Inspection Deficiency Report, Material Deficiency, per TO 00-35D-54. Once the form is completed, route all A12 items to the point of contact for the Army at Tank-Automotive and Armament Command in Natick, Massachusetts, W58HZ1, to start the investigation process. For all other aerial delivery items, users will route PQDRs to the Defense Logistics Agency.

#### **4-3. Electronic or telephone reports**

a. *Army.* If a serious injury or death results from a malfunction and/or incident that is a class A or B mishap, notify the Director, ADFSD, by telephone via DSN 687-3176/3178/4794/3074/5370 or commercial (804) 734-3176/3178/4794/3074/5370, within 12 hours of the malfunction or incident. An initial report will be sent to the email address provided by the Director, ADFSD, or mailed to Director, ADFSD (ATSM-ADF), 710 Adams Avenue, Fort Gregg-Adams, Virginia 23801-1502. The initial report will include sufficient facts, insights, and tentative ideas on the cause and mechanics of the malfunction for the Commandant, USAQMS, to request the affected equipment be grounded, if required. Send a final report to the Air Delivery Manuals and Malfunctions Office, USAQMS, ADFSD, 710 Adams Avenue, Fort Gregg-Adams, Virginia 23801-1502 on completion of all investigations.

b. *Navy and Marine Corps.* If a serious injury or death results from a malfunction and/or incident (that is, a class A or B mishap), the Navy and Marine Corps will report and notify the Naval Safety Command via telephone via DSN 564-3520, or commercial (757) 444-3520, within eight hours of the malfunction and/or incident. The Naval Safety Command will report the malfunction and/or incident to the USAQMS, ADFSD. A final report will be sent to the Aerial Delivery Manuals and Malfunctions Office, USAQMS, ADFSD, 710 Adams Avenue, Fort Gregg-Adams, Virginia 23801-1502 on completion of all investigations.

c. *Air Force.* The AF will submit reports according to AFMAN 10-206—

(1) At a home station (within the local area), notify the unit command post or ANG operations center. The unit command post will prepare the appropriate report and forward copies through AFMAJCOM A3 function and HQ AMC/A3TW.

(2) At a U.S. military installation other than the home station, notify the command post at the installation.

(3) At a non-U.S. military installation, contact AFMAJCOM and the control agency.

(4) For operational reporting -3 BEELINE (see AFMAN 10–206), report equipment or personnel air-drops or dropped objects from an AF aircraft that result in—

(a) Injury or death to personnel, damage to private or public property, or significant damage to military equipment.

(b) Impact off a DZ and on or off a reservation.

(c) Public media attention.

(5) BEELINE reports will include, at a minimum, the following information:

(a) Date and time (local and Zulu) of malfunction or incident.

(b) Name, location, and axis of DZ.

(c) AF mission number.

(d) Organization of the airlift unit and transported force.

(e) Telephone number (cell and office) of individuals who may have detailed information.

(f) Mission commander and unit of assignment.

(g) Type of aircraft and formation position (if applicable).

(h) Estimated distance and clock position from the point of impact.

(i) Estimated distance and clock position outside the DZ limits.

(j) Weather at the time of the airdrop.

(k) Altitude, mean effective, and surface winds.

(l) Narrative description of occurrences (describe type and amount of equipment or number of personnel extracted or dropped).

(m) Description of damage to equipment or property and to injuries to personnel.

(n) Statement describing the disposition of dropped cargo or personnel.

(o) Statement describing whether AF aircraft equipment or procedures are suspected as a factor.

(p) Statement describing AF personnel questioned or asked to participate in the investigation.

(q) Name, rank, duty title (or position), and telephone number of person submitting the report.

(6) Report malfunctions and/or incidents, including malfunctions and/or incidents not resulting in serious injury or death using AFMAJCOM commanders critical information requirements procedures.

*Note.* The majority of DZs are located within large designated restricted areas often termed “reservations.” However, there are some DZs that are not located within or associated with a reservation.

#### **4–4. Lost time report**

a. Preparing a Service particular-injury or lost-time report is the parachutist’s parent unit’s responsibility. Upon request, the MO will provide information for the description of the accident.

b. The Navy and Marine Corps will also submit reports, per OPNAVINST 5102.01D/MCO P5102.1B via the unit’s safety officer.

#### **4–5. DD Form 1748–2**

Use DD Form 1748–2 to report all airdrop malfunctions and incidents. The MO or aircrew initiates this report, per paragraphs 4–1d and 4–1e of this regulation. For DD Form 1748–2 procedures, refer to DA Pam 59–4.

#### **4–6. DD Form 1748–3**

For DD Form 1748–3 reporting procedures, refer to DA Pam 59–4.

## Chapter 5

### Malfunction Officer

#### 5-1. Malfunction officer qualifications and duties

MOs will be trained and certified per the online training support package provided by USAQMS. The training is located on <https://jkodirect.jten.mil/>, course number A-US1400. Individuals will complete the required training found on this website and unit-specific training conducted by the unit's designated MO trainer. Individuals will be retrained and recertified annually. Maintain training or certification records at the unit level. For procedures refer to DA Pam 59-4. MO requirements are as follows:

*a. Army.* An MO will be a commissioned officer, warrant officer, or noncommissioned officer with a minimum grade of E-5. The MO will be a USAQMS-trained parachute rigger (MOSs 92R, 921A, 92AR9) who occupies an authorized position and is current and technically proficient with airdrop, parachute recovery, and both personnel and cargo parachute systems. Depending on the type of airdrop, the MO must be qualified, at a minimum, for the following operations:

- (1) Static line personnel parachutes, not including Ram Air Personnel Parachute Systems (RAPPS)—
  - (a) Pack-in-process, inspector-certified, current, and qualified.
  - (b) MO certified and unit standard operating procedure (SOP) trained, current, and qualified.
  - (c) Units must have multiple camera operators for multiple aircraft operations on the same DZ.
- (2) RAPPS, including static line deployed RAPPS, if applicable—
  - (a) USAQMS Ram Air Course graduate.
  - (b) Pack-in-process inspector certified.
  - (c) MO certified and unit SOP trained, current, and qualified.
  - (d) Military free fall (W8/4X) qualified and current.

*Note.* Units may choose to place a second MO at the planned parachute opening point for high altitude, release point (HARP) operations.

- (3) Ram air cargo airdrop (precision airdrop)—
  - (a) Pack-in-process inspector-certified.
  - (b) MO certified and unit SOP trained, current, and qualified.
  - (c) JPADS/JAI trained and certified.

*Note.* Units may choose to place a second MO at the planned parachute opening point for HARP operations.

- (4) Cargo airdrop—
  - (a) JAI trained and certified (not required for door bundles).
  - (b) MO certified and unit SOP trained, current, and qualified.

*Note.* The MO qualifications may be waived to an MOS 92R1P (E-4 only) when recommended by the Airdrop Systems Technician (MOS 921A) in charge of that organization per AR 750-32 and approved by the first O-5 in the chain of command. Qualified and authorized E-4 MOs will be limited to single-ship missions only. Army National Guard and U.S. Army Reserve personnel meeting the above requirements are considered qualified MOs as civilian technicians.

*b. Air Force.* AF MOs will be a minimum grade of E-4. AF MOs will be designated in writing by the applicable group commander or equivalent. Depending on the type of airdrop, the MO must be qualified at a minimum for the following operations:

- (1) Static line personnel parachutes, not including RAPPS—
  - (a) Pack-in-process, inspector-certified.
  - (b) MO certified and unit SOP trained, current, and qualified.
- (2) RAPPS, including static-line deployed RAPPS, if applicable—
  - (a) Pack-in-process, inspector-certified.
  - (b) MO certified and unit SOP trained, current, and qualified.

*Note.* Units may choose to place a second MO at the planned parachute opening point for HARP operations.

- (3) Ram air cargo airdrop (precision airdrop)—



- (a) JAI trained and certified or JPADS trained and certified.
- (b) MO certified and unit SOP trained, current, and qualified.

*Note.* Units may choose to place a second MO at the planned parachute opening point for HARP operations.

- (4) Cargo airdrop—
  - (a) JAI trained and certified or Phase 1 PRC trained and certified.
  - (b) MO certified and unit SOP trained, current, and qualified.

*Note.* For USAF premeditated personnel parachuting training operations and sandbag airdrops, the DZSO, DZ controller, or an experienced parachutist who is qualified for the airdrop operation being conducted may be designated by the group commander as the MO if personnel meeting the requirements in paragraph 5–1*b* are not available. The individual performing MO duties must be MO trained and certified. DoD Civilians (general schedule or wage grade) meeting the qualifications listed in paragraph 5–1*b* for the type of airdrop being conducted may perform MO duties if appointed by the group commander in writing.

*c. Navy.* A Navy MO will be a commissioned officer, warrant officer, or petty officer with a minimum grade of E–5. The MO will be a rated Aircrew Survival Equipment man, PR, holding (NEC 773A) who occupies an authorized position and is current and technically proficient with airdrop, parachute recovery, and both personnel and cargo parachute systems. The MO must be appointed in writing by the commanding officer, and must receive refresher training annually. The MO does not have to be from the organization that provides the parachutes.

(1) Depending on the type of airdrop, the MO must be qualified, at a minimum, for the following operations:

(a) Static line personnel parachutes, not including RAPPs: 1) quality assurance inspector (QAI) pack-in-process, inspector-certified, current, and qualified; 2) MO certified and unit SOP trained, current, and qualified; and 3) static line qualified and current.

(b) RAPPs, including static line deployed RAPPs, if applicable: 1) Ram Air Course graduate for the parachutes being used; 2) QAI pack-in-process inspector certified; 3) MO certified and unit SOP trained, current, and qualified; and 4) military free fall qualified and current.

*Note.* Units may choose to place a second MO at the planned parachute opening point for HARP operations. Units must have multiple camera operators for multiple aircraft operations on the same DZ.

- (2) Ram air cargo airdrop (precision airdrop)—
  - (a) QAI pack-in-process inspector-certified.
  - (b) MO certified and unit SOP trained, current, and qualified.
  - (c) JPADS trained and certified.

*Note.* Units may choose to place a second MO at the planned parachute opening point for HARP operations.

- (3) Cargo airdrop—
  - (a) JAI trained and certified (not required for door bundles).
  - (b) MO certified and unit SOP trained, current, and qualified.

(4) Navy MOs will meet qualification, training, currency, and equipment familiarity requirements per this document. The MO does not have to be from the organization providing the air items but must be maintenance or operationally qualified on all equipment used during the operation.

*d. Marine Corps.* A Marine Corps MO will be a parachute rigger (MOS 0451, E–4 or above) or JM qualified (E–5 or above), be appointed in writing by the commanding officer, and receive unit-level refresher training annually. The training will include the review of this regulation and MCO 3120.11 (series). The MO will be from the organization providing the air items.

*Note.* Exception—Refer to MCO 3120.11 (series) for exception to policy requirements for U.S. Marine Corps (USMC) operations.

*e. Malfunction officer responsibilities.* The MO will be present on the DZ during all airdrops and will be knowledgeable of regulations and requirements. The organization that provides the parachutes will provide an MO. At a minimum, the MO will possess the following equipment while performing MO duties:

- (1) A communication capability provided by the DZ control party.
- (2) Pictures of malfunctions are required to assist investigations and are essential for the proper performance of MO duties. Use a high-quality video camera during all routine operations to record airdrop activity. A high-quality video camera (resolution at least 1920 by 1080; 3840 by 2160 is preferable) with a 12 millimeter to 200 millimeter zoom lens and with up to 60 frames-per-second capability is required to video record malfunctions or incidents. When conducting night operations, use a night-vision camera or compatible device. A high-quality, still, digital camera with at least 24 megapixels is required. Wi-Fi connectivity is preferred so photographs can be electronically transmitted to the USAQMS, ADFSD for the Triannual Airdrop Malfunction and Safety Analysis Review Board to use in malfunction/incident analysis. All other vantage points of video (for example, aircraft or aerial) greatly enhance the training reinforcement value and aid with malfunction and/or mishap investigation. Electronically transmit photographs to the USAQMS for the board to use in malfunction analysis. Cite this regulation as the authority to requisition all equipment for unit MOs.
- (3) The forms and clerical supplies necessary to tag equipment and initiate reports.
- (4) Binoculars and/or night-vision devices, as applicable. The DZ control party will supply night-vision devices.
- (5) A wind meter.
- (6) A dedicated, four-wheel-drive-capable vehicle to move around the DZ.
- (7) A global positioning system capable of storing way points.
- (8) The DZ survey.
- (9) A logbook to maintain a chronological record of events.

## **5-2. Investigating malfunctions and incidents**

For investigating malfunctions and incidents procedures, refer to DA Pam 59-4.

## **5-3. Requirements for revalidation**

At a minimum, active MOs must accomplish annual revalidation training annually using the requirements listed in paragraph 5-1. Units will train with additional specific equipment, as required. JAI and MO refresher training may be conducted concurrently.

# **Chapter 6**

## **Joint Airdrop Inspector Qualifications and Duties**

### **6-1. Airdrop Load Inspector Certification Course prerequisites**

- a. *Army.* Qualified parachute rigger (MOS 92R), E-4 or higher, with at least one year of airdrop experience.
- b. *Air Force.*
  - (1) The airdrop qualified loadmaster or SMA must be an E-4 or higher with at least one year of airdrop experience. Prior experience with airdrop as an air transportation specialist 1 may count toward the one year of experience. Completion of the aerial delivery phase of the PRC is highly encouraged prior to attending the ALICC.
  - (2) The aircrew flight equipment specialist must have completed the aerial delivery phase of the PRC and be an E-4 or higher with at least one year of airdrop experience.
- c. *Navy and Marine Corps.* The qualified parachute rigger (NEC 773A or MOS 0451) must be an E-4 or higher with at least one year of parachute rigger experience.
- d. *Prerequisite exceptions.* Exceptions to the prerequisites listed in paragraphs 6-1a through 6-1c may be granted on a case-by-case basis. Units will submit exception (waiver) requests through appropriate channels to the Director, ADFSD (ATSM-ADF), 710 Adams Avenue, Fort Gregg-Adams, Virginia 23801-1502 via the USAF Liaison, AMC/A3TW.

### **6-2. Transported force or airdrop support unit Joint airdrop inspectors prerequisites**

- a. *Army.* The Army transported force or airdrop support unit JAI must be a qualified airdrop systems technician or parachute rigger (MOS 921A or 92R), E-4 or higher. Individuals must have completed the ALICC.

*b. Air Force.* The AF transported force or airdrop support unit JAI must be an airdrop qualified loadmaster, SMA, or aircrew flight equipment, E-4 or higher. Individuals must have completed the ALICC and be designated in writing by the operational support squadron (OSS) or aerial delivery support branch (ADSB) commander. DoD Civilians (general schedule or wage grade) that have completed the ALICC and are designated in writing by the OSS or ADSB commander may also perform transported force or airdrop support unit JAI duties.

*c. Navy and Marine Corps.* The Navy or Marine Corps transported force or airdrop support unit JAI must be a qualified parachute rigger, E-4 or higher. Individuals must have completed the ALICC.

### **6-3. Airlift unit Joint airdrop inspector prerequisites**

*a. Air Force.* The airlift unit JAI must be an airdrop qualified loadmaster or SMA, E-4 or higher. Individuals must have completed the ALICC and be designated in writing by the OSS or ADSB commander. Exceptions are listed in paragraphs 6-3a(3) and 6-3a(4).

(1) Airlift unit JAI qualification is not aircraft specific. Individuals who have successfully completed the ALICC are authorized to perform airlift unit JAI duties (before- and after-loading) on any aircraft. Individuals tasked to perform airlift unit JAI duties on unfamiliar aircraft should make every attempt to familiarize themselves with the aircraft aerial delivery system or unique rigging procedures. This information is found in the specific aircraft cargo loading or airdrop specialty manuals and in applicable FMs, TMs, TOs, or other specific rigging manuals.

(2) Loadmasters or SMAs who are not currently qualified in their respective model aircraft because of extended duties (not including flying), professional schools, or other circumstances beyond their control may continue to perform JAI functions with concurrence of group commander or equivalent for up to six months from the time of disqualification or non-currency. Extensions beyond six months and up to one year total, require AFMAJCOM approval. Submit waiver requests along with detailed circumstance to the following:

- (a) For Air Combat Command (ACC), send requests to HQ ACC/A3J.
- (b) For Air Education and Training Command, send requests to HQ 19AF/A3V.
- (c) For the AF Special Operations Command, send requests to HQ AFSOC/A3TW.
- (d) For AMC, send requests to HQ AMC/A3TW.
- (e) For Pacific Air Forces, send requests to HQ PACAF/DOTV.
- (f) For U.S. Air Forces in Europe, send requests to HQ USAFE-AFAFRICA/A3AV.
- (g) For AF Reserve Command send to HQ AFRC/A3VS.
- (h) For ANG, send requests to NGB/A3M.

(3) Loadmasters assigned to nonflying duty positions where JAI duties are still required are exempt from being qualified in their respective model aircraft with AFMAJCOM/A3 concurrence. The positions include HQ AMC/A3TW, OL-E, AF liaison, ADFSD, Fort Gregg-Adams, Virginia; HQ AMC, Test and Evaluation Command Loadmasters, Worldwide Positions; and 345<sup>th</sup> AF Training Squadron, ALICC Instructor, Fort Gregg-Adams, Virginia.

(4) Active duty airlift unit JAIs are mobility resources susceptible to worldwide tasking to support DoD-sponsored airdrop operations. Therefore, active duty airlift unit JAIs must be assigned to a unit separate from an active duty flying unit. They are normally assigned to an aerial delivery support flight or OSS. Airlift unit JAIs at mobility locations without an OSS will be designated in writing by the home station operations group commander and may be assigned to a flying squadron at the mobility location. Individuals assigned to special support units may perform before- and after-loading inspections to meet their specific missions. The waiver authority is the individual's AFMAJCOM tactics function. Individuals assigned to the functions listed below are authorized to perform these inspections provided they meet all certification requirements or are exempt by paragraph 6-3a(3):

- (a) The AF liaison and the ALICC instructor loadmaster assigned to the USAQMS, ADFSD, Fort Gregg-Adams, Virginia.
- (b) The AF liaison assigned to Army Combat Capabilities and Development Command Soldier Center, Natick, Massachusetts.
- (c) Loadmasters assigned to a formal school, certified and designated per paragraph 6-3a; they may perform airlift unit JAI duties for loads generated in support of the formal school.
- (d) Loadmasters assigned to AMC Test and Evaluation Squadron.
- (e) Loadmasters or SMAs assigned to HQ AFSOC/A3V and 18th Special Operations Test and Evaluations Squadron.

- (f) Loadmasters assigned to AF Test Center/412<sup>th</sup> Test Wing, Edwards Air Force Base.
  - (g) Loadmasters assigned to Joint Special Operations Command.
  - (h) Combat Aviation Advisory Forces, Hurlburt Field, Florida, in support of combat aviation advisory forces missions.
  - (i) 34<sup>th</sup> Combat Training Squadron, Little Rock Air Force Base, Arkansas, in support of Joint Readiness Training Center missions.
  - (j) Loadmasters assigned to 88<sup>th</sup> Test and Evaluation Squadron, ACC.
- (5) ARC unit commanders will determine the required number of airlift unit JAI-qualified loadmasters or SMAs. Draw ANG and AF Reserve Command airlift unit JAIs from the most experienced, highly qualified, airdrop loadmasters or SMAs within the unit.

*Note.* With the operations group commander's approval, JAI-qualified loadmasters or SMAs may be scheduled to perform aircrew and JAI duties simultaneously on separate aircraft. This does not apply to units that have dedicated airlift unit JAI support. Under no circumstances will loadmasters or SMAs inspect their own airdrop load, except as identified in paragraphs 2–2 and 2–5.

(6) Active duty units who fall under an ARC in an active associate unit will follow paragraph 6–3a(5) when designating JAIs. Exception: If an active duty unit has an aerial delivery support flight or operations support squadron, they will follow paragraph 6–3a, and all active JAIs will be assigned outside of the flying unit.

*b. Marine Corps.* Marine Corps Aviation units conducting airdrop operations will adhere to service specific JAI procedures for the supported non USMC units. If a Marine Corps specific load, the minimum inspections will be the shop final and before loading with follow on inspection by the crew and not the ALICC trained individual performing the before loading inspection. The Airdrop Load Inspection can be performed by the same unit if there is not an organic ALICC trained member from supporting aviation unit and only after the load has been accepted as airworthy by the aircraft commander and in accordance with the respective DD Form 1748. USMC Aircrew personnel should make every effort to have qualified personnel attend the ALICC certification whenever feasible.

#### **6–4. Requirements for revalidation**

At a minimum, active JAIs must accomplish annual revalidation training each calendar year using the training support package provided by the USAQMS. Locate the training on ADFSD's website at <https://armyeitaas.sharepoint-mil.us/sites/tr-scoe-qm-adfsd/sitepages/adm-mo.aspx> for Army units and <https://usaf.dps.mil/sites/larado> for all other services. Individuals will complete the required training on these websites as well as unit-specific training conducted by the unit's designated JAI trainer. Retrain and recertify individuals annually. Maintain training or certification records at the unit level. JAI and MO refresher training may be conducted concurrently.

## **Appendix A**

### **References**

#### **Section I**

##### **Required Publications**

Unless otherwise stated, Department of the Army publications are available on the Army Publishing Directorate website at <https://armypubs.army.mil/>.

##### **AR 385–10**

The Army Safety and Occupational Health Program (Cited in para 1–7.)

##### **DA Pam 59–4/OPNAVINST 4630.24E/AFMAN 13–210 Volume 2/MCO 13480.1E Volume 2**

Joint Airdrop Inspection Records, Malfunction or Incident Investigations, and Activity Reporting Procedures (Cited in para 1–3.)

##### **DA Pam 385–40**

Army Mishap Investigations and Reporting (Cited in para 1–7.)

##### **DTR 4500.9–R, Part II**

Defense Transportation Regulation (DTR) 4500.9–R, Cargo Movement (Cited in para 1–9*h*(1).) (Available at <https://www.ustranscom.mil/>.)

##### **DTR 4500.9–R, Part III**

Defense Transportation Regulation (DTR) 4500.9–R, Mobility (Cited in para 2–2*d*.) (Available at <https://www.ustranscom.mil/>.)

#### **Section II**

##### **Prescribed Forms**

This section contains no entries.

## **Appendix B**

### **Internal Control Evaluation**

#### **B–1. Function**

The function covered by this evaluation is the Joint airdrop inspection records, malfunction or incident investigations, and reporting activities for Joint airdrop operations.

#### **B–2. Purpose**

The purpose of this evaluation is to assist organizations conducting airdrop operations in evaluating the key internal controls listed below. It is intended as a guide and does not cover all controls.

#### **B–3. Instructions**

Answers must be based on the actual testing of controls (for example, document analysis, direct observation, interviewing, sampling, and simulation). Answers that indicate deficiencies must be explained and corrective action indicated in supporting documentation. Evaluate these internal controls at least every five years. Certify that this evaluation has been conducted using DA Form 11–2 (Internal Control Evaluation Certification).

#### **B–4. Test questions**

- a. Is a system in place to ensure that proper investigative procedures are conducted in the event of malfunctions during Joint airdrop operations?
- b. Are the applicable references articulated when reporting incidents per the appropriate regulation in the conduct of investigations, as required?
- c. Is a system in place to ensure the proper flow of malfunction incident reports through the appropriate change of command during the investigative process?
- d. Are the proper regulations and documents readily accessible to personnel required to participate in Joint airdrop malfunction investigations?
- e. If paper copies of malfunction incident investigations are used, are they filed and maintained per this regulation?

#### **B–5. Supersession**

This evaluation replaces the evaluation previously published in AR 59–4/OPNAVINST 4630.24D/AFJ 13–210(I)/MCO 13480.1D, dated 8 April 2008.

#### **B–6. Comments**

Help make this a better tool for evaluating internal controls. Submit comments to Headquarters, Department of the Army, Deputy Chief of Staff, G–4 (DALO–SUF) via email at [usarmy.pentagon.hqda-dcs-g-4.mbx.publications@army.mil](mailto:usarmy.pentagon.hqda-dcs-g-4.mbx.publications@army.mil).

## **Glossary of Terms**

### **Air item**

Special items of equipment, such as parachutes, airdrop containers, platforms, slings, tie downs, and other related air items, to use for the airdrop of personnel, supplies, and equipment.

### **Airdrop equipment**

Same as air item.

### **Airdrop malfunction**

See malfunction.

### **Airdrop support unit**

The activity that prepares the transported force for airdrop.

### **Airdrop system**

A system designed to facilitate the premeditated airdrop of personnel, supplies, and equipment from an aircraft in flight. It consists of parachutes, airdrop containers, platforms, and related air items.

### **Airlift unit**

An airlift unit is organized, equipped, and trained to airdrop personnel, supplies, and equipment.

### **Airlift unit Joint airdrop inspector**

A loadmaster, an SMA (for the AF), or a rigger (for the Marine Corps) that has successfully completed the ALICC conducted by the USAQMS at Fort Gregg-Adams, Virginia, and is qualified to inspect an airdrop load during the before-load and after-load inspection. This term is used when conducting inspection of loads on an aircraft. This is a separate term for requesting support for mission operations.

### **Follow-on investigation**

The part of the investigation conducted after the initial onsite investigation, which may include a board appointed under the appropriate regulation of the Service involved.

### **Incident**

Any action or event that prevented the successful completion of a planned airdrop operation.

### **Joint airdrop inspection**

The inspection activity of two or more Services working together. This inspection is conducted prior to aircraft loading and after loading and rigging is completed. Inspectors must be certified according to chapter 6 of this regulation.

### **Malfunction**

The failure of an airdrop item to function as it was intended or designed.

### **Malfunction officer**

Designated by the commander of the airdrop support unit to observe airdrop operations and investigate airdrop malfunctions.

### **Onsite investigation**

Performed by the MO to collect data used to determine the cause of the malfunction.

### **Parachute rigger**

For the purpose of this regulation, an all-inclusive term for Army, AF, Navy, and Marine Corps personnel whose primary MOSs are that of a parachute rigger as outlined by Service-specific criteria.

### **Serious injury**

When a jumper is unconscious or when conscious and complaining of torso, back, neck, or head injuries or having mutilated limbs, compound fractures, or lacerations with excessive bleeding as determined by medical personnel.

### **Tactics function**

The AF activity responsible for planning, review, coordination, and execution of AF air assets and JAIs used in airdrop employment operations.

**Technical or rigger-type inspection**

A complete and thorough inspection of an airdrop item that includes associated parts and components. This inspection is conducted per the TM 10–1670 series covering the specific air item and TO 14D1–2 series, NAVAIR 13–1–38, and TM 04296D–23&P/2.

**Transported force**

The activity the airlift unit is moving.

**Unit subject matter expert**

The appointed unit airdrop systems technician (MOS 921A) or another authorized supervisor (MOS 92R) per AR 750–32. May assist the MO throughout the investigation process.



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