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Air Transportation

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

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History. This publication is a new Department of the Army pamphlet.

Applicability. This pamphlet 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 pamphlet 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 pamphlet is the Deputy Chief of Staff, G-4. The proponent has the authority to approve exceptions or waivers to this pamphlet 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 pamphlet 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. 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. 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.

Suggested improvements. Users are invited to send comments and suggested improvements on DA Form 2028 (Recommended Changes to Publications and Blank Forms) directly to usarmy.pentagon.hqda-dcs-g-4.list.g-44s-troop-support@army.mil.

Distribution. This pamphlet 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

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

This new publication, dated 9 August 2024—

- Identifies procedures and forms used in preparing Joint airdrop inspection records, airdrop malfunction investigations, and airdrop activity reports (throughout).
- Transfers all prescribed DD Form 1748-series (Joint Airdrop series) from AR 59–4/OPNAVINST 4630.24E/AFMAN 13–210 Volume 1/MCO 13480.1E Volume 1 (throughout).

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Chapter 1

Introduction

1–1. Purpose

This pamphlet identifies procedures and forms used in preparing Joint airdrop inspection records, airdrop malfunction investigations, and airdrop activity reports. This manual is not complete without AR 59–4/OPNAVINST 4630.24E/AFMAN 13–210 Volume 1/MCO 13480.1E Volume 1.

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

Policy associated with this pamphlet is found in AR 59–4/OPNAVINST 4630.24E/AFMAN 13–210 Volume 1/MCO 13480.1E Volume 1.

1–4. 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. Sister services will follow their individual service's records management procedures. At a minimum, all DD 1748-series forms will be kept until all investigations, including Triannual Airdrop Malfunction and Safety Analysis Review Board, are complete and no further actions are required.

1–5. Aerial delivery review panel

The aerial delivery review panel description, by branch, associated with this pamphlet is found in AR 59–4/OPNAVINST 4630.24E/AFMAN 13–210 Volume 1/MCO 13480.1E Volume 1.

1–6. Use of reported data

a. Accurate and timely DD Form 1748–series (Joint Airdrop series) reports are essential for proper analysis to improve existing procedures and technology as rapidly as possible.

b. The U.S. Army Quartermaster School (USAQMS), Aerial Delivery and Field Services Department (ADFSD), will assign a control number to each DD Form 1748–2 (Airdrop Malfunction Report (Personnel-Cargo)) via the Aerial Delivery Manuals and Malfunction Office (ADM/MO) Dashboard (available at: <https://armyeitaas.sharepoint-mil.us/sites/tr-scoe-qm-adfsd/siteways/adm-mo.aspx> for Army units and <https://usaf.dps.mil/sites/larado> for USAF units). The ADM/MO Dashboard serves as the focal point for all units to submit DD Form 1748–2 and DD Form 1748–3 (Joint Airdrop Summary Report) reports. Units will ensure the submitter inputs the supervisor of the aerial delivery section in accordance with local standard operating procedures (SOP). The submitter and supervisor must approve the DD Form 1748–2. If a malfunction report is inadvertently lost or deleted, ADFSD will reference the control log, contact the appropriate unit point of contact, and request the report be resubmitted.

c. The ADFSD publishes 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.

d. The Army will refer to AR 360–1 for public release of accidents involving military personnel or equipment.

1–7. Triannual Airdrop Malfunction and Safety Analysis Review Board

The USAQMS, ADFSD, hosts the Triannual Airdrop Malfunction and Safety Analysis Review Board. Airdrop units that submitted a report during the period covered should reference AR 59–4/OPNAVINST

4630.24E/AFMAN 13–210 Volume 1/MCO 13480.1E Volume 1 for the policy covering unit representation requirements and supporting malfunction documentation. Other airdrop units throughout the Department of Defense (DoD) are strongly encouraged to send representatives.

Chapter 2

Joint Airdrop Inspections, Procedures, and Records

2–1. Airdrop inspection

a. Representatives from each Service participating in the airdrop mission performs a Joint airdrop inspection to prepare for each cargo airdrop. The USAQMS certifies Joint airdrop inspectors (JAI). Certification requires successful completion of the USAQMS resident, or mobile training team Airdrop Load Inspector Certification Course presented by ADFSD at Fort Gregg-Adams, Virginia. Refer to AR 59–4/OPNAVINST 4630.24E/AFMAN 13–210 Volume 1/MCO 13480.1E Volume 1 for qualification requirements.

b. Qualified riggers for cargo airdrop are listed in AR 59–4/OPNAVINST 4630.24E/AFMAN 13–210 Volume 1/MCO 13480.1E Volume 1 for all branches of service.

2–2. Inspection procedures

a. *Prior.* 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. An airdrop load will only be accepted when 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. Submit waivers for non-standard airdrop loads dropped from Air Force (AF) aircraft to Headquarters (HQ) AMC/A3TW OL–E through the applicable Army command (ACOM), Army service component command (ASCC), direct reporting unit (DRU), or Air Force Major Command (AFMAJCOM). Nonstandard airdrop loads are defined in MIL–STD–1791–1. Rigging units will maintain a copy (paper or digital) of all three inspection forms (local and/or DoD).

b. *Army/Contract air.* Army aircraft and short takeoff and landing contract air inspection require the following: reference AR 59–4/OPNAVINST 4630.24E/AFMAN 13–210 Volume 1/MCO 13480.1E Volume 1.

c. *First inspection.* 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 inspector uses the applicable form in the DD Form 1748–series for this inspection, which will be performed by a rigger other than the one who supervised the rigging of the load.

d. *Second inspection.* 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 conducts 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.

(1) The airlift unit JAI focuses on safety of flight; aircrew safety; dimensions of rigged airdrop loads per applicable rigging publications; extraction or deployment systems; platform or skid condition; lashings and load restraint; emergency aircraft restraint provisions; weight, type, and number of recovery parachutes; hazardous cargo certification; and locks. The airlift unit JAI will not sign the DD Form 1748–series form if the load will jeopardize safety of flight or aircrew safety.

(2) The airlift unit JAI notifies the airdrop support unit JAI of any items found to be incorrect or in question.

(a) Any item that jeopardizes safety of flight or aircrew safety will be corrected, or the load will be rejected.

(b) Correct or annotate items that do not jeopardize safety of flight or aircrew safety as follows:

1. *Training missions.* Items that are incorrect will be corrected, or the load will be rejected. For items that are in question, if the airdrop support unit JAI accepts responsibility for the condition of the item, annotate the item in the Remarks section of the appropriate inspection form; both JAIs will initial each item.

The airdrop support unit JAI's initials indicate acceptance of the condition of the item. The airlift unit JAI's initials indicate the item does not jeopardize safety of flight or aircrew safety.

2. *Operational missions.* To the maximum extent possible, items that are incorrect or in question should be corrected. If the item is not corrected, and if the airdrop support unit JAI accepts responsibility for the condition of the item, annotate the item in the Remarks section of the appropriate inspection form; both JAIs will initial each item. The airdrop support unit JAI's initials indicate acceptance of the condition of the item. The airlift unit JAI's initials indicate the item does not jeopardize safety of flight or aircrew safety.

(c) If the airlift unit JAI rejects the rigged load or any portion of the load, the airlift unit JAI will annotate the reason in the Remarks section of the appropriate inspection form.

e. *Third inspection.* The third inspection is the after-loading inspection. After the aircraft loadmaster or special mission aviator (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 2-2e(4).

(1) After completion of the after-loading inspection, the two JAIs and the aircraft loadmaster or SMA signs the DD Form 1748-series form certifying that the load is ready for airdrop. The aircraft loadmaster or SMA, the airlift unit JAI, and the airdrop support unit JAI retains copies and forward a copy to the transported force's appropriate command HQ.

Note. When authorized for contingency operations by the AFMAJCOM's tactics function, an airdrop-qualified loadmaster or SMA (qualified on the specific type of aircraft and associated airdrop system) who is not assigned to the aircrew or performing aircrew duties may conduct the after-loading inspection as the aircraft loadmaster or SMA.

(2) If the aircraft loadmaster or SMA or airlift unit JAI rejects the load for any reason, annotate the reason(s) for rejection in the Remarks section of the appropriate DD Form 1748-series form and retain a copy. The loadmaster or SMA or JAI submits a copy to the wing tactics function the next duty day or on return to home station. The Wing Tactics office forwards a copy to the Group Standardization and Evaluation office. The Wing Tactics office develops a trend or metrics tool to monitor the number and type of rejections as well as the corrective actions taken. When trends are identified, the Wing Tactics office's organization works with the airdrop support unit to rectify the problem.

(3) Annotate items that cannot be inspected during the after-loading inspection in the Remarks section of the appropriate DD Form 1748-series form (for example, multiple airdrop passes from a single aircraft). Place an asterisk in the applicable block(s) of the form. List the inspection items that will be rigged in-flight in the Remarks section. The aircraft loadmaster or SMA and airlift unit JAI initials the Remarks section, indicating that the aircraft loadmaster or SMA is responsible for rigging and inspecting these items in-flight.

(4) With AFMAJCOM tactics function approval for operational mission only, the aircrew secondary loadmaster or SMA and the primary loadmaster or SMA can accomplish the after-loading inspection on rigged alternate method boats, or loads rigged per special operations rigging manuals only. The primary loadmaster or SMA does the loading and in-aircraft rigging. The secondary loadmaster or SMA will sign the airlift unit's inspector block on the applicable DD Form 1748-series form. Only use the secondary loadmaster or SMA as the JAI when absolutely necessary, that is, when there is no certified airlift unit JAI available to conduct the after-loading inspection.

f. *Airdrop support unit requirements.* The before- and after-loading inspections ensure compliance with appropriate rigging instructions, TMs, TOs, NAVAIR or NAVSEA publications, and this pamphlet. The airdrop support unit will furnish an up-to-date copy of the appropriate 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 also makes available the applicable aircraft airdrop loading TO.

g. *U.S. Air Force unilateral airdrop training.* AF unilateral airdrop 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 unilateral airdrop training load is defined as any airdrop load, owned and rigged by USAF personnel, generated to specifically address a unit-training requirement. Unilateral airdrop training 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.

2-3. Inspection records

For policies regarding inspection forms and records, refer to AR 59-4/OPNAVINST 4630.24E/AFMAN 13-210 Volume 1/MCO 13480.1E Volume 1. Complete each form in triplicate (two copies for unilateral training loads); the airdrop support unit JAI retains the first copy, the airlift unit JAI retains the second copy, and the aircraft loadmaster or SMA from the aircraft that performs the airdrop retains the third copy. Some special operations loads may require additional inspection steps not listed on these forms. In these cases, inspectors refer to the appropriate special operations rigging manual for the additional inspection procedures. Annotate any deviations to set procedures in the Remarks section of the appropriate DD Form 1748-series form. The airdrop support unit provides the following forms:

- a. DD Form 1748 (Joint Airdrop Inspection Record (Platforms)). Complete one form for each low-velocity platform load to be airdropped.
- b. DD Form 1748-1 (Joint Airdrop Inspection Record (CDS/CEP/LCLA)). Complete one set of forms for each release gate, regardless of the number of bundles.
- c. DD Form 1748-2 (Airdrop Malfunction Report).
- d. DD Form 1748-2A (Airdrop Malfunction Report-Personnel Supplement).
- e. DD Form 1748-2B (Airdrop Malfunction Report-Cargo Supplement).
- f. DD Form 1748-3 (Monthly Airdrop Summary Report).
- g. DD Form 1748-4 (Joint Airdrop Inspection Record (CRR/MCADS)).
- h. DD Form 1748-5 (Joint Airdrop Inspection Record (JPADS-Gravity)).
- i. DD Form 1748-6 (Joint Airdrop Inspection Record (DRAS)).
- j. DD Form 1748-7 (Joint Airdrop Inspection Record (XCDS/HSCDS)).
- k. DD Form 1748-8 (Joint Airdrop Inspection Record (JPADS-Extracted)).
- l. DD Form 1748-9 (Joint Airdrop Inspection Record (HAARS II)).

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)). 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

Exceptions descriptions are found in AR 59-4/OPNAVINST 4630.24E/AFMAN 13-210 Volume 1/MCO 13480.1E Volume 1.

2-6. Joint airdrop inspection of foreign airdrop equipment loads on U.S. aircraft and U.S. loads on foreign aircraft

Refer to AR 59-4/OPNAVINST 4630.24E/AFMAN 13-210 Volume 1/MCO 13480.1E Volume 1 for foreign load operations requirements.

Chapter 3 Investigations

Section I

General

3-1. Investigations by the malfunction officer

Refer to AR 59-4/OPNAVINST 4630.24E/AFMAN 13-210 Volume 1/MCO 13480.1E Volume 1 for malfunction officer (MO) qualification requirements.

3-2. General guidance on malfunction and incident investigations

The MO will submit a DD Form 1748-2, via the ADM/MO Dashboard no later than 48 hours after the malfunction or incident.

Section II

Checklist for Malfunction Officer Onsite Investigations

3–3. Function

This checklist provides a guide to conduct onsite malfunction investigations.

3–4. Purpose

The purpose of this checklist is to assist MOs in evaluating their key management controls. It is not intended to cover all management controls. A variety of circumstances may surround malfunctions, preventing an all-inclusive checklist.

3–5. Instructions

MOs are expected to use prudent judgment when collecting and analyzing information.

3–6. Investigation procedures

Refer to paragraph 5–2a through 5–2d. for additional instructions.

a. General checklist for investigating a scene.

(1) Approaching and stabilizing.

(a) Observe persons and vehicles near scene.

(b) Note time, location, and weather.

(c) Divide duties or division of labor. Identify principal, lead investigator, and other officials at the scene to establish roles in the investigation.

(d) Establish the scene's safety prior to entry. Protect integrity of the scene from contamination by people, animals, and elements. Remove risks from crowds, collapsing structures, traffic, and environmental threats.

(2) Preserving and interviewing.

(a) Establish perimeters, the command post, a garbage dump, and a media center. Set up boundaries and staging areas by conducting scans, surveys, or walk-throughs without actually walking through anything.

(b) Determine entry and exit point.

(c) Record initial accounts of the incident from witnesses. Engage in briefings with other personnel as needed; keep eyewitnesses separate to prevent contamination of statements.

(3) Processing.

(a) Take videos and photographs. Video and photograph the entire scene (including wide-angle views), tell a story, and video/photograph objects twice, showing scale. Begin to establish a chain of custody by identifying what kind of evidence is at the scene and who will be the custodian of it.

(b) Sketch. Sketch (to scale or not) the scene, according to appropriateness of situation. This becomes part of the written narrative which correlates with photographic documentation and denotes any evidence that has been moved.

1. Coordinate method if there are fixed points.

2. Use the triangulation method there are if reference points.

3. Use computer sketching software.

(c) Search the scene.

1. *Spiral (circular from outside in or inside out).* This is useful if there are limited personnel at a scene and/or there is a wide, open, flat area where one is looking for large objects.

2. *Strip or line.* Divide the area into north-south strips where a team of six or more people will walk parallel to one another. This is useful if teams are available and if there are possibilities of all kinds of evidence. Stakes and twine can be used to keep lanes straight.

3. *Grid.* Divide the area into north-south and east-west strips. This allows a secondary search of each area from a different direction. This is useful if teams are available, if there is a large area, and if the teams are looking for hard-to-find evidence. If stakes, twine, and mapping are used, the search imitates archeological methods.

4. *Zone.* The area is divided into equally sized zones, and each zone is assigned a searcher. This is useful if teams are available and trace evidence is the main concern.

5. *Sector.* A circular area is divided into wedges (like pie slices), and then the same or different search pattern is used in each zone. This is useful if the scene is large and if there are different kinds of evidence that are spread out.

(d) *Collect evidence.* In the presence of a witness, inventory, collect, and safeguard any evidence related to the malfunction. Participate in any scene debriefing to determine post scene responsibilities, share data, and determine the need for specialists.

b. *Onsite actions, no serious injuries.*

(1) Immediately notify the drop zone support team leader (DZSTL) and the subject matter expert (SME), and secure and guard the impact site.

(2) Video/photograph record all equipment and obvious defects, including damage caused by impact.

(3) Obtain the aircraft information and the names and units of any involved personnel and witnesses, and obtain their statements.

(4) Sketch the impact site. Show equipment relationships and the exact location of the impact site on or in relation to the drop zone (DZ).

(5) Gather and secure all clothing, equipment, air items, and personal property involved in the malfunction. Properly identify and tag items, including time, date, and location, type of incident, name, and unit of persons involved. Maintain chain of custody for all items.

(6) Examine equipment component by component; take care to not disrupt the scene as best as possible.

(7) Conduct a TM 10–1670–series, technical, or rigger-type inspection in an appropriate area according to the TM covering the specific air item and/or TO 14D1–2 series/NAVAIR/NAVSEA series.

(8) Ensure all evidence and air items are retained until the investigating authority releases them.

(9) Release equipment not required for further investigations.

(10) Conduct a complete onsite investigation of the malfunction according to this regulation.

c. *Onsite actions, parachutist injury, or death.*

(1) Immediately notify the DZSTL and the SME, and place the impact site off limits. Post a guard, as required, so the site remains undisturbed. Allow medical personnel access to an injured jumper.

(2) Video/photograph the parachutist, impact site, and any obvious defects in the equipment. Include any damage caused by the impact.

(3) Record where the parachute harness or component was cut by medical personnel. Trained medical personnel dictate the method of removal of the parachute harness. If possible, the MO dictates the location of the cut in order to preserve potential evidence. In any event, the MO will closely observe the cutting of the harness if required for removal from the parachutist. If possible, do not cut the harness and try not to disturb any evidence.

(4) Immediately impound the parachute log record book and limit access to this document to only the appointed investigative officers.

(5) Request that medical personnel secure and preserve all clothing and equipment that is removed from the impact site with the parachutist.

(6) Conduct a detailed, component-by-component examination of all equipment after the parachutist has been evacuated; take care to not disrupt the scene as it lies.

(7) Take statements from the preceding parachutist, subsequent parachutists, Jumpmasters (JMs), ground observers, and other parachutists or aircraft personnel able to provide significant facts.

(8) Record the name and unit of any personnel who observed the incident, even if they can provide no new facts to the investigation.

(9) Secure a copy of the jump manifest and reconstruct the jump stick from personnel present, if required. Gather all air items and personal equipment, except weapons, unless the weapon is part of or the possible cause of the malfunction.

(10) Sketch the entire impact site in relation to the DZ and mark the impact point of the parachutist and equipment.

(11) Ensure the aircraft involved is notified as soon as possible. This enables the aircrew to inspect, upon landing, for any defects or damage that may have contributed to or caused the malfunction. Request segregation and identification of parachute deployment bags from those of other aircraft.

(12) Obtain the deployment bag serial number from the parachute log record book. Retrieve and secure the deployment bag with the parachute assembly until the investigation is complete.

(13) Ensure equipment is tagged and the parachutes are loosely rolled and bagged when the onsite investigation is complete. Do not remove any entanglements or debris (if applicable). Secure and release equipment only to the investigating SME.

(14) Evacuate all equipment to an area where it is subjected to a TM 10–1670 series, technical, or rigger-type inspection per AR 59–4/OPNAVINST 4630.24E/AFMAN 13–210 Volume 1/MCO 13480.1E Volume 1 and the TM covering the specific air item and/or TO 14D1–2 series, NAVAIR series, or NAVSEA series.

Note. Do not disturb the evidence; hold and maintain physical evidence and security to provide to the Safety Investigation Review Board (SIRB). The SIRB will conduct the TM 10–1670 series, technical rigger-type inspection per AR 59–4/OPNAVINST 4630.24E/AFMAN 13–210 Volume 1/MCO 13480.1E Volume 1 and may enlist the MO and Unit SME for assistance.

d. Onsite actions, airdrop load malfunction.

(1) Immediately notify the DZSTL and the SME, and move to and secure the impact site as soon as possible.

(2) Determine if the load contained hazardous material, ammunition, explosives, or petroleum, oil, and lubricant. If any are found, direct personnel in the vicinity of the load to evacuate the area (move back at least 500 meters).

(3) Request hazard technical assistance as required, such as qualified explosive ordnance disposal or petroleum, oils, lubricants technicians.

(4) Request aircraft computer drop data in order to assist in the investigation.

3–7. Comments

Help make this a better tool for evaluating management controls. Submit comments to the Director, ADFSD (ATSM–ADF), 710 Adams Avenue, Fort Gregg-Adams, Virginia 23801–1502.

Section III

Checklist for Personnel Parachute Malfunction and Incident Investigations

3–8. Function

This checklist identifies actions required for investigating personnel parachute malfunctions.

3–9. Purpose

The purpose of this checklist is to assist MOs in evaluating their key management controls for personnel parachute malfunctions and incidents. A variety of circumstances may surround malfunctions and prevent an all-inclusive checklist.

3–10. Instructions

MOs investigate malfunctions according to the type of personnel parachute system involved, static line, or military free fall. Investigate all individual equipment and parachutist activities for every malfunction or incident occurrence. MOs are expected to use prudent judgment when collecting and analyzing information.

3–11. Investigation procedures

For all technical rigger inspection procedures, see the appropriate TM.

a. Static line system malfunction and incident investigation. Check for static line system malfunction.

b. Main parachute (static line deployed).

(1) Compare and validate the log record with the canopy and deployment bag serial numbers.

(2) Check the condition of the harness, including the quick-fit ejector snaps, canopy release assemblies, main lift web adjusters, and main lift web tuck tab assemblies for serviceability and proper operation.

(3) Check the condition of the pack tray, including the waistband, waistband adjuster panel, horizontal and diagonal back strap retainers, and horizontal and diagonal back straps keepers.

(4) Check the method and sequence for the attachment of items and equipment on the main lift web D-rings or equipment rings.

- (5) Check the condition of the risers, slip-assist loops, slip-assist tabs, steering-line guide channels, guide rings, and toggles on the steerable parachute.
- (6) Check the parachute connector links for missing or loose screws or knurl nuts.
- (7) Check all suspension and control lines, including control line bridles and cascade lines, for breaks, frays, or burned areas.
- (8) Check the slider for proper operation and serviceability, if applicable.
- (9) Check the anti-inversion net for damage, if applicable.
- (10) Check the main canopy for holes, tears, broken stitches, or burned areas.
- (11) Check the bridle loop for tears, burns, or broken stitches.
- (12) Check the bridle assembly for proper installation and serviceability.
- (13) Check the condition of the deployment bag, including the static line, snap hook, main curved pin and main curved pin cover.

c. Reserve parachute, not activated.

- (1) Check to see if the log record book is present.
- (2) Check the connector snaps for serviceability, proper installation, and operation.
- (3) Check the pack tray for holes, damage, or tears.
- (4) Check the rip cord grip pocket or tuck flaps, cones, and grommets for damage.
- (5) Check the soft loop(s) for frays, burns, or worn areas.
- (6) Check the curve pins for bends, dents, rough spots, rust, corrosion, or deformation.
- (7) Check the curve pin lanyard for serviceability and attachment to the rip cord handle.
- (8) Conduct the rip cord pull test and the rip cord test per the appropriate TM.
- (9) Activate the reserve parachute.
- (10) Check the parachute log record and compare and validate it with the canopy serial number.

d. Reserve parachute, activated.

- (1) Check the parachute log record and compare and validate it with the canopy serial number.
- (2) Check the connector snaps for damage and proper operation.
- (3) Check the pack tray for holes, damage, or tears.
- (4) Check the rip cord grip pocket or tuck flaps, cones, and grommets for damage.
- (5) Check the soft loop(s) for frays, burns, or worn areas.
- (6) Check the suspension lines for breaks, frays, or burned areas.
- (7) Check to see if skirt-assist ties are present. If present, ensure ties are quarter-inch cotton webbing and were installed correctly.
- (8) Check the canopy for holes, tears, or burned areas.
- (9) Check to see if scoop ties are present. If present, ensure ties are ticket 8/4 cotton thread and were installed correctly.
- (10) Check to see if the apex loops tie is present. If present, ensure the tie is ticket 8/4 cotton thread and was installed correctly.
- (11) Check the pilot parachute or extractor for proper attachment and serviceability.
- (12) Check line stowage free bag for holes, tears, or burned areas, if applicable.
- (13) Check curve pins for damage, if applicable.
- (14) Check bridle line for tears or burned areas.
- (15) Check canopy staging flaps for tears, holes, or burned areas, if applicable.
- (16) Locate, test, and inspect the deployment assistance device or ejector spring and the rip cord grip, if possible.

e. Ram Air Personnel Parachute System malfunction investigation. Check for free fall system malfunction.

f. Main canopy.

- (1) Check the parachute log record book and compare it with the canopy serial number.
- (2) Check the rip cord grip assembly if the canopy did not activate. Verify proper routing and installation, including conditions of pins, and verify that they are not shouldered.
- (3) Check the static line assembly if the canopy did not activate. Verify proper routing and installation, including the conditions of curve pins and closing loop.
- (4) Check the risers if the canopy was activated, including canopy release assemblies and control toggles and guides. Check the proper setting of the brakes.
- (5) Check the parachute connector links for proper installation or for loose or missing components.
- (6) Check all suspension and control lines for breaks, frays, or burned areas.

- (7) Check to see that the eight D lines are secured between the magnets (RA1).
 - (8) Check the condition of the slider.
 - (9) Check the drogue line attached to slider.
 - (10) Check the main canopy for holes, tears, broken stitching, or burned areas.
 - (11) Check the condition of the stabilizer panels.
 - (12) Check the condition of the bridle line, deployment bag, and pilot parachute.
 - (13) Check the condition of the bridle line, inner or outer bags, drogue, and pilot parachute.
- g. Reserve canopy.*
- (1) Check and compare the parachute log record book with the canopy serial number.
 - (2) Check for proper installation or attachment to the main harness.
 - (3) Check the rip cord grip assembly if the canopy did not activate. Verify proper routing and installation. Ensure rip cord pins pass through the reserve static line pull ring and guide ring, including the condition of the pins, and verify that they are not shouldered.
 - (4) Check the automatic activation device (AAD) to determine if it is armed and take note of AAD setting (to compare with military free-fall JM AAD setting).
 - (5) Check the condition of risers if the canopy did not activate. Inspect the control line guides and toggles, if applicable.
 - (6) Check the proper brake setting on the canopy.
 - (7) Check the parachute connector links for proper installation and missing components.
 - (8) Check all suspension and control lines for breaks, frays, or burned areas.
 - (9) Check to see that the eight D lines are secured between the magnets (RA1).
 - (10) Check the condition of the slider.
 - (11) Check the canopy and stabilizers for holes, tears, broken stitching, or burned areas.
 - (12) Check the condition of the bridle line and pilot parachute.
 - (13) Check the condition of the deployment bag or system.
- h. Harness assembly.*
- (1) Checking the AAD: check to see if closing loop is routed through AAD cutter. Check the AAD cables for proper routing.
 - (2) Check the condition of the harness, including the quick ejector snaps, the canopy release assemblies, and the rip cord assemblies.
 - (3) Check the condition of the oxygen system, including the mask, hose, connector, and oxygen bottles. Secure the oxygen bottle and determine the amount of remaining oxygen.
 - (4) Check the type of equipment attached to the harness D-rings.
- i. Individual equipment investigation.* Check individual equipment.
- j. M-1950 weapons container or Modular Airborne Weapons Case.*
- (1) Check to see if the quick-release snap has been properly installed.
 - (2) Check to see if the lowering line (if used) has been properly installed and stowed.
 - (3) Verify that container length is between 33.5 and 50.5 inches.
 - (4) Check to see if the upper tie-down tape or lower tie-down strap has been tied and/or cut. Verify that container weights don't exceed as follows: Modular Airborne Weapons Case (MAWC): 65 pound and Large MAWC: 85 pounds per TC 3-21.220 and TM 10-8465-236-10.
- k. Modified M-1950 weapons containers (squad automatic weapon, 60 millimeter, antitank four-jump pack, Stinger mission jump pack).*
- (1) Verify the items of equipment rigged in the modified M-1950 weapons case are rigged per the applicable FM, TM, or local SOPs.
 - (2) Verify that the parachutist jumping the container meets the prerequisites for the item of equipment jumped (height, weight, and so on) per the applicable FM, TM, or local SOPs.
- l. Parachutist drop bag.*
- (1) Ensure the parachute drop bag was properly rigged and attached per TC 3-21.220/MCWP 3-15.7/Air Force Manual (AFMAN) 11-420/NAVSEA SS400-AF-MMO-010.
 - (2) Ensure the parachute drop bag and all of its component parts are serviceable per TM 10-1670-299-20&P/TO 14D1-2-470-2/NAVAIR 13-1-41.
- m. All-purpose weapons and equipment container system.*
- (1) Ensure the AirPac was properly rigged and attached per TC 3-21.220/MCWP 3-15.7/AFMAN 11-420/NAVSEA SS400-AF-MMO-010.

(2) Ensure the AirPac and all of its component parts are serviceable per TM 10–1670–299–20&P/TO 14D1–2–470–2/NAVAIR 13–1–41.

n. H-harness and airborne light individual container, equipment pack with or without frame.

(1) Check for proper installation of the H-harness and lowering line.

(2) Check for proper routing and installation of the 18-inch attaching straps.

(3) Check the weight of the airborne light individual container and that the equipment pack was within prescribed limits.

o. Harness single-point release and airborne light individual container, equipment pack with or without frame.

(1) Check the serviceability, proper routing, and installation of the harness's single-point release and hook pile tape (HPT) lowering line.

(2) Check that the release handle assembly secured in place with the HPT.

(3) Check for proper routing and installation of the adjustable D-ring straps.

(4) Check for proper routing and attachment of the adjustable leg straps (male or female portion).

(5) Check for proper installation and use of the lowering line adapter web.

(6) Check the serviceability and modification of the HPT lowering line.

p. Container, weapons, and individual equipment.

(1) Check to see if the bag and the lowering strap were properly rigged and installed.

(2) Check to see if the leg strap was secured or cut.

(3) Check the push-pull actuator assembly to ensure it functions properly.

(4) Verify that the container is not heavier than 95 pounds.

(5) Verify that the container is not rigged oversize (more than 12 inches by 12 inches by 36 inches).

q. Dragon missile jump pack.

(1) Check to see if the missile and individual weapon are properly rigged in or on the pack.

(2) Check the HPT lowering line for serviceability and proper routing or attachment.

(3) Verify that the attaching adapter was properly rigged on the parachutist.

(4) Verify whether the leg straps were secured or cut.

(5) Inquire whether the parachutist was within height limitations and if he or she had experience in jumping the dragon missile jump pack.

r. Flotation devices (life preservers).

(1) Verify whether they were properly worn.

(2) Check for proper functioning.

(3) Check whether there was corrosion or worn areas on the carbon dioxide inflation valve or if the activator cord was unserviceable.

(4) Check the flotation devices to ensure the proper maintenance intervals are maintained per the applicable publication.

(5) Verify whether the combat equipment was worn per TC 3–21.220/MCWP 3–15.7/ AFMAN 11–420/NAVSEA SS400–AF–MMO–010.

s. All-purpose lightweight individual carrying equipment pack.

(1) Check the routing of the attaching loops.

(2) Verify the proper routing of the release handle cable.

(3) Verify that the handle retainer lanyard is not misrouted.

(4) Verify proper routing and attachment of the HPT lowering line.

(5) Verify that the leg straps are attached.

t. Parachutist activities.

(1) Determine the parachutist's mental attitude in the aircraft (relaxed or tense).

(2) Determine if the parachutist's actions were sure and coordinated.

(3) Determine if all JM commands were performed in a sure and positive manner.

(4) Determine if the clothing and equipment used was authorized and properly secured to the parachutist during their exit.

(5) Determine if the parachutist made a satisfactory exit.

(6) Determine if the parachutist was stable and in control (free fall).

(7) Determine how the parachutist reacted to the malfunction.

(8) Reconstruct or determine the jumper's total rigged weight.

3-12. Comments

Help make this a better tool for evaluating management controls. Submit comments to the Director, ADFSD (ATSM-ADF), 710 Adams Avenue, Fort Gregg-Adams, Virginia 23801-1502.

Section IV

Checklist for Airdrop Load Malfunction Investigations

3-13. Function

This checklist identifies actions required for investigating airdrop malfunctions and incidents during Joint and unilateral operations.

3-14. Purpose

The purpose of this checklist is to assist MOs in evaluating their key management controls for airdrop load malfunctions and incidents. A variety of circumstances may surround malfunctions and prevent an all-inclusive checklist. MOs are expected to use prudent judgment when collecting and analyzing information.

3-15. Instructions

MOs investigate malfunctions according to the type of airdrop method or system involved—low-velocity airdrop, high-velocity airdrop (door or ramp) platform, or CDS—for every malfunction or incident. Investigating officers are expected to use prudent judgment when collecting and analyzing information. Some loads have hazardous material rigged on or in the load. Derig other airdrop loads in the danger area. Use minimum essential personnel after a 30-minute cool-off period with approval of the explosive ordnance disposal and petroleum, oil, lubricants technicians before approaching these types of loads. Inform the DZ control party of the malfunction and incident. If the malfunction or incident occurs during the extraction phase, notify the aircraft for inspection.

3-16. Investigation questions and procedures

- a. *Low-velocity airdrop load malfunction investigation.* Check for low-velocity airdrop loads.
- b. *Extraction phase.* Check all extraction procedures.
- c. *Failure of the extraction parachute to deploy or inflate.*
 - (1) Verify proper functioning of the aircraft extraction parachute release mechanism.
 - (2) Verify the bag closing ties were correct and the pendulum line was properly installed.
 - (3) Verify the parachute safety loop was free from the bent V-ring.
- d. *Failure or delay in the load extraction.*
 - (1) Verify the extraction parachute was fully inflated.
 - (2) Verify the positive aft restraint was removed.
 - (3) Verify the correct number of detents and restraint settings were used for the load.
 - (4) Verify the correct extraction line with the appropriate length was used and properly connected.
 - (5) Verify the platform was not damaged (only when a load did not exit).
- e. *Failure to transfer the extraction force to deployment.* Check extraction force deployment procedures.
- f. *Extraction force transfer coupling extraction systems.*
 - (1) Verify actuators were installed in the correct platform rail position (check the arm and foot to indent clearances).
 - (2) Verify the actuator arm safety pins were removed and correctly stowed.
 - (3) Verify the extraction force transfer coupling cable was secured and attached to the actuator and latch assembly with cable clevis pins installed.
 - (4) Verify the extraction force transfer coupling cable was the correct length and properly routed.
- g. *Deployment-recovery phase.* Check deployment recovery procedures.
- h. *Failure of recovery parachutes to deploy.*
 - (1) Verify the deployment line was attached to the extraction system and the parachutes.
 - (2) Verify the deployment line with the appropriate length was properly routed.
 - (3) Verify the parachute restraint and release straps were properly attached.
 - (4) Verify the condition and serviceability of the release knives.

i. Static and/or release line systems (dual row airdrop system, enhanced container delivery system, low-cost low-altitude, and door bundles).

- (1) Verify the static line was properly rigged and connected to the anchor cable.
- (2) Verify the static line was properly rigged and connected to the parachute.
- (3) Verify the release line was rigged and connected correctly.

j. Failure of the suspension system.

- (1) Verify the load suspension points did not fail.
- (2) Verify the suspension slings or attaching hardware did not fail.
- (3) Verify the correct slings were used.
- (4) Verify the slings were correctly attached to the parachute release and to the load or platform.
- (5) Verify the slings were correctly routed to the suspension points.
- (6) Verify protective padding was used where it was needed.

k. Failure of recovery parachute(s) to fully inflate.

- (1) Verify the reefing line cutters were armed and cotter pins removed.
- (2) Verify the cutters fired.
- (3) Verify the cutters cut the reefing line.
- (4) Verify the reefing line was the proper length.
- (5) Verify the reefing line was not entangled in the reefing rings or suspension lines.
- (6) Verify the canopy, suspension lines, and connector link ties were correctly made.

l. Release phase. Check release procedures.

m. Midair release (check hydraulic releases per TM 4-48.02).

- (1) Check at what point the midair separation occurred.
- (2) Check if the release activated prior to the load stabilizing.
- (3) Verify the release was attached to the parachutes and the load.
- (4) Verify the release was properly rigged.
- (5) Check timer serviceability after the drop. Note all deficiencies (specify part, M-1 or M-2 release).

n. Failure to disconnect. For M-1 or M-2 parachute releases—

- (1) Check for a no-load condition on impact.
- (2) Verify the release upper-suspension link rotated to the release position.
- (3) Verify the approved type arming wire lanyard was the correct length and the arming wire was pulled from the timer.
- (4) Verify the timer keys retracted and the timer fell in the guide block.
- (5) Check the timer serviceability after the drop. Note all deficiencies (specify part, M-1 or M-2 release).

o. Container delivery system malfunction investigation.

- (1) For failure of the containers to exit the aircraft—
 - (a) Verify the release gate was properly rigged.
 - (b) Verify the knife was sharp and properly attached.
 - (c) Verify the aircraft release system functioned properly.
 - (d) Verify the condition of the rollers and skid board if the containers were jammed in the aircraft.
- (2) For failure of the recovery parachutes to deploy and inflate—
 - (a) Verify the parachute static lines were attached to the anchor cables and the anchor cable stops were installed at the prescribed location and cutter pins were bent.

- (b) Verify the anti-oscillation ties were present.
- (c) Verify the parachutes were attached to the containers.
- (d) Verify the pilot chutes were attached to the cargo parachutes.
- (e) Verify the bag-closing ties were made with prescribed materials.
- (f) Verify the canopy and suspension-line ties were properly installed with prescribed material.

p. Joint Precision Airdrop System (JPADS 2K and JPADS 10K).

- (1) Compare the log record books with the canopy serial number.
- (2) Check the condition of the CDS for proper installation and serviceability.
- (3) Check the condition of the JPADS harness for proper installation and serviceability.
- (4) Check all modified autonomous guidance unit (MAGU) attachment points for proper installation and serviceability.
- (5) Check the condition of the risers for proper installation and serviceability.
- (6) Check the parachute connector links for missing or loose knurl nuts.

- (7) Check all suspension and control lines for proper installation and serviceability.
- (8) Check the slider for proper installation and serviceability.
- (9) If present, verify the slider and suspension-line ties were properly installed with appropriate material.
- (10) Check the main canopy for holes, tears, broken stitches, or burned areas.
- (11) Check the bridle assembly for proper installation and serviceability.
- (12) Check the condition of the deployment bag, including the release-away static line.
- (13) Verify the six-inch connector strap was properly rigged and connected to the anchor line cable.
- (14) Verify the release-away static line was properly rigged and connected to the six-inch connector strap.
- (15) Verify the release-away static line assembly was rigged and connected correctly.
- (16) Verify the pilot parachute was attached to the recovery parachute.
- (17) Verify the parachute release knife was in the correct position and the parachute restraint ties were routed properly through the knife.
- (18) Verify the recovery parachute was attached to the MAGU.
- (19) Verify the bag-closing ties were made with the appropriate materials.
- (20) Verify the MAGU was attached to the JPADS harness properly.
- (21) Verify the JPADS harness was properly installed, attached to the container, and serviceable.
- (22) Verify the release gate was properly rigged.
- (23) Verify the MAGU stated "ready to fly" prior to release.
- (24) Download and review drop files from MAGU.
- (25) Request drop files from aircraft pads operator. Review when received.
- q. Air Force standard airdrop training bundle airdrops.*
 - (1) Conduct a technical or rigger-type inspection of the bundle.
 - (2) Recover and release equipment not required for further investigations.
 - (3) Remove or roll and isolate equipment requiring further investigation and return to the home unit for additional analysis as necessary.
 - (4) Notify AFMAJCOM and the AF liaison at the USAQMS if, during the investigation, the malfunction warrants immediate attention to the entire AF airdrop community.
 - (5) Submit a follow-up report.

3–17. Comments

Help make this a better tool for evaluating management controls. Submit comments to the Director, ADFSD (ATSM–ADF), 710 Adams Avenue, Fort Gregg-Adams, Virginia 23801–1502.

3–18. Malfunction and incident categories

For malfunction and incident category definitions refer to AR 59–4/OPNAVINST 4630.24E/AFMAN 13–210 Volume 1/MCO 13480.1E Volume 1.

Note. Do not report injuries related to parachute landing falls via DD Form 1748–2 to the USAQMS. Services will follow procedures in their appropriate AFI, AR, Marine Corps order (MCO), or NAVAIR or NAVSEA publications. 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.

3–19. Airdrop load malfunction phase categories

For Airdrop load malfunction phase category definitions refer to AR 59–4/OPNAVINST 4630.24E/AFMAN 13–210 Volume 1/MCO 13480.1E Volume 1.

3–20. 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 that meet the Class A, B, C, and D mishap criteria per DoDI 6055.07. For definitions of Class A, B, C, and D mishaps refer to AR 59–4/OPNAVINST 4630.24E/AFMAN 13–210 Volume 1/MCO 13480.1E Volume 1.

Note. See the applicable Service regulations and unit safety office for reporting investigation requirements and instructions for all classes (A, B, C, D, and so forth) of mishaps.

3–21. Disposition of air items

For disposition of air items policy refer to AR 59–4/OPNAVINST 4630.24E/AFMAN 13–210 Volume 1/MCO 13480.1E Volume 1. The appropriate supply officer will prepare supply documentation to remove these items from accountability. The supply officer attaches an unsigned certificate of destruction. This certificate will list the date, time, method of destruction, and witnesses present. Allow 30 days for processing the supply documents before setting the destruction date. When the documentation is approved and the equipment is released from all Judge Advocate General and safety center investigations, the supply officer, with the hand receipt holder present (paraloft chief for Navy and Marine Corps, company commander for Army) will destroy the air items. TM 4–48.02 and applicable NAVAIR, NAVSEA, or Marine Corps publications may state that the items should be burned. Other methods may be used but only those that guarantee total destruction. After completing the destruction, the designated destruction officer signs the certificate of destruction and furnishes copies to the appropriate supply activities and to the investigation file.

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. Refer to AR 59–4/OPNAVINST 4630.24E/AFMAN 13–210 Volume 1/MCO 13480.1E Volume 1 for general reporting requirements.

4–2. Product quality deficiency reports

Refer to AR 59–4/OPNAVINST 4630.24E/AFMAN 13–210 Volume 1/MCO 13480.1E Volume 1 for product quality deficiency report reporting requirements.

4–3. Electronic or telephone reports

Refer to AR 59–4/OPNAVINST 4630.24E/AFMAN 13–210 Volume 1/MCO 13480.1E Volume 1 for electronic or telephonic reporting requirements.

4–4. Lost time report

Refer to AR 59–4/OPNAVINST 4630.24E/AFMAN 13–210 Volume 1/MCO 13480.1E Volume 1 for lost time reporting requirements.

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 AR 59–4/OPNAVINST 4630.24E/AFMAN 13–210 Volume 1/MCO 13480.1E Volume 1.

a. Malfunction or incident reporting.

(1) All DoD components involved in the airdrop of personnel, supplies, and equipment report, using DD Form 1748–2 on the ADM/MO Dashboard, all malfunctions or incidents of personnel parachutes and airdrop loads rigged by their assigned units and dropped or extracted from aircraft. Whenever the airdrop process does not achieve the planned objective, it can be considered a malfunction or incident. The airdrop process consists of four separate areas: aircrew procedures, aircraft aerial delivery equipment, airdrop equipment, and other substantiating areas. When a planned airdrop is not completed, identification of the appropriate area is essential to develop trend analysis and corrective action.

(2) For the AF, report through control channels to HQ AMC/A3TW all Joint airdrop missions, including Joint airborne or air transportability training programs, not completed due to one of the areas listed in paragraph 4–5a(1).

b. Exemptions. There are no exemptions to reporting requirements when using DD Form 1748–2.

c. Disposition instructions.

(1) Forward a copy of the completed report, along with a copy of the DD Form 1748-series form (if applicable) through appropriate channels to the Director, ADFSD (ATSM–ADF), 710 Adams Avenue, Fort Gregg-Adams, Virginia 23801–1502, within five workdays after the malfunction or incident occurs via the ADM/MO Dashboard.

(2) Final investigation reports follow these instructions:

(a) If a fatality occurs as a result of a malfunction or incident, forward one copy of the final investigation report and DD Form 1748–2 to Director, ADFSD (ATSM–ADF), 710 Adams Avenue, Fort Gregg-Adams, Virginia 23801–1502, within 10 calendar days after completion of the investigation by the SIRB. This copy is in addition to the requirements in AR 59–4/OPNAVINST 4630.24E/AFMAN 13–210 Volume 1/MCO 13480.1E Volume 1. Army units will forward a copy of DD Form 1748–2 to the unit's ACOM, ASCC, or DRU.

(b) For Navy and Marine Corps, maintain and archive the final investigation report with all endorsements at the Naval Safety Command. Submit requests for information via the appropriate chain of command to the Naval Safety Command.

(3) AF units submit the report to the appropriate AFMAJCOM tactics office with an informational copy to the numbered AF, if applicable, or to their respective command authority. The AFMAJCOM tactics office reviews submitted malfunction or incident reports and complete the required final reporting to Fort Gregg-Adams, Virginia, as outlined in AR 59–4/OPNAVINST 4630.24E/AFMAN 13–210 Volume 1/MCO 13480.1E Volume 1. For malfunctions or incidents involving two or more separate commands, send a copy to each command.

(4) AF units having a malfunction or incident involving aircraft equipment submit a copy of the malfunction report to the wing or operations and logistics group function and to the AFMAJCOM responsible for that particular model design series. AFMAJCOM representatives coordinate with their respective HQ A4 or logistics group to resolve recurring equipment problems. Report malfunctions or incidents that involve the systems listed in paragraphs 4–5c(4)(a) through 4–5c(4)(e). These reports are critical for trend analysis:

(a) Restraint rail system, including locks.

(b) Ramp and door system, troop doors, air deflector door, and logic failure resulting in no-drop.

(c) Extraction parachute release mechanism, extraction parachute jettison system, parachute deployment mechanism, and tow-plate release mechanism.

(d) Containerized delivery system components, including static line retrievers.

(e) JPADS mission support equipment including Ultra High Frequency Dropsonde Receiver Subsystem, Global Positioning System—Retransmit Subsystem, mission planning laptops, and dropsondes.

(5) 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 Malfunctions Officer investigation that includes causal and contributing factors as well 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).

(6) The Naval Safety Command, coordinating with the Navy and Marine Corps Commands in paragraph 4–5c(5), analyzes all submitted reports. The Naval Safety Command immediately notifies, via naval message, all Navy and Marine premeditated personnel parachute and cargo airdrop equipment commands of potential safety hazards and identified trends.

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.F

4–6. DD Form 1748–3

a. Reporting. All DoD components owning aerial delivery equipment (for example, parachutes, platforms, and containers) report all monthly airdrop activities via the ADM/MO Dashboard or USAF LARADO site. Consolidate reports of subordinate units before submission.

b. Army. Army units furnish an informational copy of DD Form 1748–3 to the unit's ACOM, ASCC, or DRU.

c. Air Force rigging shops. Consolidate the number of actual unilateral training loads rigged and dropped, as well as those downloaded after completion of the inspection, and they submit them by the 10th day of the following month. Submit copies of the reports to the AFMAJCOM tactics office.

d. Air Force units. AF units develop a metric on all scheduled Joint airborne or air transportability training, special assignment airdrop mission, or any scheduled airdrop mission other than unilateral training. The metric includes all successfully completed missions with the number of uncompleted airdrops due to, but not exclusively, maintenance, weather, and mission aborts.

e. Navy and Marine Corps. For Navy and Marine Corps personnel, report all parachute operations to the Naval Safety Command by accessing the Dive Jump Reporting System via the RMI website (<https://afsas.safety.af.mil>) within thirty (30) calendar days of the operation. The Naval Safety Command parachute safety analysts (Code 40) will submit a monthly airdrop summary report, for each service, as final reporting to USAQMS, ADFSD, in Fort Gregg-Adams, Virginia, as outlined in paragraph 4–6a.

f. Disposition instructions. Forward one copy of the completed reports through appropriate channels to the Director, ADFSD (ATSM–ADF), 710 Adams Avenue, Fort Gregg-Adams, Virginia 23801–1502. Submit reports by the 10th day of the following month via the ADM/MO Dashboard. Negative reports are required.

Chapter 5 Malfunction Officer

5–1. Malfunction officer qualifications and duties

For MO qualifications and duties, refer to AR 59–4/OPNAVINST 4630.24E/AFMAN 13–210 Volume 1/MCO 13480.1E Volume 1. MOs are trained and certified per the online training support package provided by USAQMS. The online training is located at <https://jkodirect.jten.mil/atlas2/page/login/login.jsf>, course number A–US1400. Individuals complete the required training found on the website and unit specific training conducted by the unit's designated MO trainer. Individuals are retrained and recertified annually. Maintain training or certification records at the unit level. MO requirements for each branch refer to AR 59–4/OPNAVINST 4630.24E/AFMAN 13–210 Volume 1/MCO 13480.1E Volume 1.

Note: For USAF Only: Supplemental MO training is required and is located on the LARADO SharePoint page at <https://usaf.dps.mil/sites/LARADO>.

a. Units may choose to place a second MO at the planned parachute opening point for high altitude, release point operations. Units provide multiple camera operators for multiple aircraft operations on the same DZ.

b. The MO qualifications may be waived to an MOS 92R1P (E–4 only) when recommended by the parachute rigger warrant officer (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 are 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.

c. For AF unilateral training operations using only sandbags/standard airdrop training bundles or for AF premeditated personnel parachuting unilateral operations, the drop zone safety officer (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 AR 59–4/OPNAVINST 4630.24E/AFMAN 13–210 Volume 1/MCO 13480.1E Volume 1 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 AR 59–4/OPNAVINST 4630.24E/AFMAN 13–210 Volume 1/MCO 13480.1E Volume 1 for the type of airdrop being conducted may perform MO duties.

d. For MO equipment requirements refer to AR 59–4/OPNAVINST 4630.24E/AFMAN 13–210 Volume 1/MCO 13480.1E Volume 1. For USMC, MOs are not required for operational missions.

5-2. Investigating malfunctions and incidents

a. The onsite investigation of personnel parachutes and equipment malfunctions and/or incidents receives the highest priority, second only to medical aid for the injured. In the event of a malfunction and/or incident, any field-training mission exercise stops until the class of accident is determined. If a class A or class B accident is determined, the exercise or field training mission may proceed; however, the accident investigation will take precedence over any exercise or field training mission activities. Prompt and accurate investigation and reporting assist in saving lives and equipment. Efficient and effective measures are taken without delay to document the malfunction and/or incident and to complete the onsite investigation. At no time does the onsite investigation interfere with any medical support required.

b. For partial or total malfunctions and/or incidents during personnel parachute jumps where there are serious injuries or death resulting from a parachute jump, the MO completes the following:

(1) Immediately notify the DZSTL and/or DZSO and the unit-appointed SME. Ensure the DZSTL and/or DZSO notifies military police and the criminal investigation organization (CID, NCIS, and AFOSI) in the event of death.

(2) Immediately place the impact site off limits and post guards to ensure the integrity of the accident scene. Limit access to the scene to the MO, the unit SME assisting the MO, the responding criminal investigating organization, the SIRB, and medical personnel. Ensure the security of the scene does not interfere with medical support or delay lifesaving measures.

(3) Immediately initiate an investigation using the checklists in Chapter 3 of this pamphlet prior to the investigating organization's arrival and ensure that the scene is not altered. If failure to immediately collect items of evidence would result in degradation or destruction, properly document and secure that evidence. If possible, do not disturb the evidence until the appropriate SIRB is on the scene.

(4) Ensure the scene is thoroughly documented using video, photographs, and sketches at a minimum.

(5) Upon arrival of the investigating organization, brief the status of the investigation on actions taken and whether the MO believes that suspected or intentional acts of tampering or sabotage exists. If the criminal investigator accepts a recommendation of no tampering or sabotage, the MO retains the evidence for the SIRB. Terminate the examination and investigation if tampering or sabotage is suspected or determined. Then, release the physical evidence—along with all copies of reports, findings, and statements, including videos, photographs, and sketches—to the criminal investigator. If it's been decided that the physical evidence will remain with the MO, the personnel responsible for the chain of custody (MO and SME appointed by the investigating safety board) maintains physical evidence and security.

c. For partial or total malfunctions or incidents during personnel parachute jumps where there are no serious injuries, the MO completes the following—

(1) Immediately notify the DZSTL and/or DZSO and the unit appointed SME.

(2) Immediately place the impact area off limits, post guards, and initiate an onsite investigation to determine, if possible, the causes of the malfunction and/or incident using the checklists in Chapter 3 of this pamphlet.

(3) Ensure the scene is thoroughly documented using videos, photographs, and sketches at a minimum.

(4) Ensure collected items of physical evidence are released only to the appropriate SME appointed to assist in the investigation and members of an appointed SIRB, if applicable.

(5) Ensure the chain of custody (MO and SME) is established and the appropriate security measures for all equipment involved in the parachute malfunction are maintained per AR 195-5 (or Service-specific security regulations).

(6) Carry out any subsequent investigations as required and limit access (MO and designated SME) to the evidence and equipment. Determine if the preliminary investigation reveals suspected or intentional acts of tampering or sabotage; if it does, ensure the DZSTL and/or DZSO immediately notifies the military police and the criminal investigation organization (CID, NCIS, AFOSI). Terminate the examination and investigation if tampering or sabotage is suspected or determined. Then, release the evidence—along with all copies of reports, findings, inventories, witness lists, and statements, including videos, photographs, and sketches—to the criminal investigator. If it's been decided that the physical evidence will remain with the MO, the personnel responsible for the chain of custody (MO and SME appointed by the investigating safety board) maintains physical evidence and security. If no tampering or sabotage is suspected continue the investigation in accordance with Chapter 3 of this pamphlet.

(7) The investigative activity will interfere as little as possible with the post jump; however, the criminal investigation will take priority, if applicable.

d. Airdrop load malfunctions and/or incidents require the MO to complete the following—

- (1) Immediately notify the DZSTL and/or DZSO and the unit-appointed SME.
- (2) Immediately place the impact area off limits, post guards, and initiate an onsite investigation to determine, if possible, the causes of the malfunction and/or incident using the checklists in Chapter 3 of this pamphlet.
- (3) Ensure the scene is thoroughly documented using videos, photographs, and sketches at a minimum.
- (4) Ensure collected items of physical evidence (for example, copies of reports, findings, inventories, witness lists, statements videos, photographs, and sketches) are released to only the appropriate SME appointed to assist in the investigation and to only members of an appointed SIRB, if applicable.
- (5) Ensure the chain of custody (MO and SME) is established and the appropriate security measures for all equipment involved in the malfunction are maintained per AR 195–5 (or Service-specific security regulations).
- (6) Carry out any subsequent investigations, as required, and limit access to the evidence and equipment (MO and designated SME). Determine if the preliminary investigation reveals suspected or intentional acts of tampering or sabotage; if it does, ensure the DZSTL and/or DZSO immediately notifies the military police and the criminal investigation organization (CID, NCIS, AFOSI). Terminate the examination and investigation if tampering or sabotage is suspected or determined. Then, release the evidence—along with all copies of reports, findings, and statements, including videos, photographs, and sketches—to the criminal investigator. If it's been decided that the physical evidence will remain with the MO, the personnel responsible for the chain of custody (MO and SME appointed by the investigating safety board) maintains physical evidence and security. If no tampering or sabotage is suspected continue the investigation in accordance with Chapter 3 of this pamphlet.
- (7) The investigative activity will interfere as little as possible with the post jump; however, the criminal investigation will take priority, if applicable.

Note. The MO and/or unit SME conducts or assists with any subsequent investigation as required.

5–3. Requirements for revalidation

Requirements for revalidation for MOs refer to AR 59–4/OPNAVINST 4630.24E/AFMAN 13–210 Volume 1/MCO 13480.1E Volume 1.

Chapter 6

Joint Airdrop Inspector

6–1. Joint airdrop inspector qualifications and duties

For JAI qualifications and duties refer to AR 59–4/OPNAVINST 4630.24E/AFMAN 13–210 Volume 1/MCO 13480.1E Volume 1.

6–2. Requirements for revalidation

For requirements for revalidation refer to AR 59–4/OPNAVINST 4630.24E/AFMAN 13–210 Volume 1/MCO 13480.1E Volume 1.

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 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 (Cited in para 1–1.)

AR 195–5

Evidence Procedures (Cited in para 5–2c(5).)

Section II

Prescribed Forms

Unless otherwise stated, DD forms are available at <https://www.esd.whs.mil/>.

DD Form 1748

Joint Airdrop Inspection Record (Platforms) (Prescribed in para 2–3a.)

DD Form 1748–1

Joint Airdrop Inspection Record (CDS/CEP/LCLA) (Prescribed in para 2–3b.)

DD Form 1748–2

Airdrop Malfunction Report (Personnel-Cargo) (Prescribed in para 1–6b.)

DD Form 1748–2A

Airdrop Malfunction Report-Personnel Supplement (Prescribed in para 2–3d.)

DD Form 1748–2B

Airdrop Malfunction Report-Cargo Supplement (Prescribed in para 2–3e.)

DD Form 1748–3

Joint Airdrop Summary Report (Prescribed in para 1–6b.)

DD Form 1748–4

Joint Airdrop Inspection Record (CRRC/MCADS) (Prescribed in para 2–3g.)

DD Form 1748–5

Joint Airdrop Inspection Record (JPADS–Gravity) (Prescribed in para 2–3h.)

DD Form 1748–6

Joint Airdrop Inspection Record (DRAS) (Prescribed in para 2–3i.)

DD Form 1748–7

Joint Airdrop Inspection Record (XCDS/HSCDS) (Prescribed in para 2–3j.)

DD Form 1748–8

Joint Airdrop Inspection Record (JPADS–Extracted) (Prescribed in para 2–3k.)

DD Form 1748–9

Joint Airdrop Inspection Record (HAARS II) (Prescribed in para 2–3l.)

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.

AIRPAC

Type of aircraft for operation and special items of equipment being worn by jumpers, aerial delivery system.

Chain of custody

A chronological written record of people who have had custody of evidence from the initial acquisition until final disposition.

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.

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.

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