

CHAPTER 9

JUMPMASTER AND SAFETY DUTIES AT THE DEPARTURE AIRFIELD

Time is a critical factor at the departure airfield. The following events occur at the same time to allow the unit to meet station time:

- *DACO/PJM update briefing.*
- *PJM aircraft inspection and coordination with aircrew.*
- *Control of parachute issue by AJW/safeties.*
- *Rigging/inspection of parachutists.*
- *Loading of aircraft.*

The PJM usually turns control of the chalk (planeload) over to the AJM and safeties while he accomplishes update briefings, aircraft inspection, and aircrew coordination. The AJM and safeties control parachute issue and prepare for rigging/inspection of the chalk. All JM team personnel must draw their own parachutes for wear during airdrop operations; the aircrew cannot provide parachutes for the JM team.

Section I KEY PERSONNEL

The commander selects the best-qualified jumpers to perform the JM, AJM, DACO, and DZSO/DZSTL duties for a unit airdrop operation. Those selected key personnel must correctly perform their assigned duties to ensure mission success and jumper safety.

9-1. PRIMARY JUMPMASTER/ASSISTANT JUMPMASTER DUTIES

PJM/AJM duties areas follows:

a. **PJM/DACO Briefing.** Upon arrival at the airfield, the PJM reports to the DACO for an update briefing to include:

- Change in the station time.
- Change in the overall operation plan.

- Current weather and winds.
- Parking plan of aircraft (location and tail number of the assigned aircraft).
- Coordination with the USAF guide if wheeled vehicles are used for transport to aircraft.

b. **Manifest Distribution.** Normally the manifest (DA Form 1306) is distributed as follows:

- DACO—two copies (original plus one copy).
- PJM—one copy.
- Pilot or his representative—one copy.
- Parachute issue facility—one copy.
- Unit suspense file—one copy.

c. **PJM/Aircrew Initial Coordination.** After DACO coordination, the PJM should proceed to the aircraft for initial coordination. Normally, the aircraft is open with a crew member on board 1 hour before station time. Items to be discussed, verified, or agreed to include:

(1) Aircraft configuration IAW the unit mission. If the aircraft is incorrectly configured, the requesting unit has the option to accept or reject it. If the mission request asks for both doors to be open for a mass troop drop but one door is inoperative (in flight or on the ground), the requesting unit has the option to continue the mission using one door or to abort the mission.

(2) Control of the jump doors.

(3) Drop altitude, speed, and heading.

(4) Racetracks.

(5) Towed parachutist procedures (in detail).

(6) Emergency actions on board.

(7) Time warnings and checkpoints.

(8) Type of drop, for example, CARP, GMRS, VIRS.

(9) Load time.

(10) Station time.

(11) Takeoff time.

(12) Initial contact time with CCT or DZST for update on DZ conditions (if communications are being used).

(13) Drop time.

(14) Additional details:

(a) If a ground abort occurs, designate which key personnel on board must be advised.

(b) If the PJM is not the last parachutist, designate who is in command of the troops on board in an emergency.

(c) Emphasize to the aircrew the importance of accurate direction and velocity of DZ winds (before the 1-minute time warning) and accurate time warnings.

(d) Ensure seats are stowed by releasing the support leg from the aircraft floor, rotating the support leg 270 degrees until it rests on the seat, folding the seat up until it is vertical to the aircraft floor, and securing it there by attaching the clip provided on the stowage strap to the upper seat back support.

d. **Aircraft Inspection.** The PJM, accompanied by a crew member (usually the USAF loadmaster) inspects the aircraft and coordinates any activities related to the airborne operation. The PJM must check the exterior and interior portions of the aircraft directly related to the airborne operation.

9-2. SAFETY PERSONNEL

While the PJM inspects the aircraft, safety personnel control the chalk, making sure personnel remain in assigned stick at all times. Personnel must also be accounted for at all times.

a. **Parachute Issue.** AJM/safety personnel supervise the chalk during parachute and air item issue. They draw extra aviator kit bags (1 per 15 jumpers) and at least two extra reserve parachutes. The extra kit bags are used to store the static lines and deployment bags after the jump. (The extra kit bags are placed in or with the JM kit bag.)

b. **Departure Airfield Layout Inspection.** All air items and combat equipment should be displayed for inspection by AJM/safety personnel before donning or loading on the aircraft.

c. **Parachutes and Equipment.** AJM/safety personnel ensure that all parachutists use the buddy system when donning parachutes and equipment. (Personnel should not start donning parachutes and equipment earlier than 1 hour before load time to avoid unnecessary time in the harness.)

d. **Final DACO Coordination.** If directed by the PJM, AJM/safety personnel report to the DACO for any special or last-minute instructions that must be passed to the PJM.

e. **JMPI.** AJM/safety personnel assist in rigging, inspecting, and correcting deficiencies as directed by the PJM.

NOTE: All current and qualified JMs assist during the JMPI.

Section II JUMPMaster PERSONNEL INSPECTION

The PJM is responsible for the inspection of his parachutists before an airborne operation. Only by a complete and systematic equipment inspection of each parachutist can the PJM ensure that personnel aboard his aircraft are safe to jump.

9-3. HANDS-ON INSPECTION

During JMPI, the JM uses a control hand and a working hand. During the course of the inspection, the control hand and working hand may change. The control hand remains stationary, while the eyes follow the working hand. The principle is to look at what is touched by the working hand. When locations are described in this sequence (top, right, left), it is in relation to the parachutist-not the JM. The word “trace” describes the working hand moving along the item being inspected to ensure that it is not twisted, cut, frayed, or misrouted. When tracing metal items, the JM inspects for sharp edges and proper assembly. The inspection sequence described in this section is followed for a typical combat parachutist rigged with LBE (exposed), combat pack (ALICE pack/FPLIF), M 1950 weapons case, and main and reserve parachutes. (Other items and combinations of equipment are prescribed elsewhere in this manual.) When performing JMPI on these items, the JM starts at the point of attachment to the parachute harness and completely inspects that item before proceeding with the remainder of the inspection sequence.

9-4. PASGT HELMET (FRONT)

The jumper moves to the JM and the JM tells him, “Place your hands on your head and tilt your head to the rear.” The JM then proceeds as follows:

a. Place both hands on the rim of the helmet, on the extreme right side, fingers extended and joined, palms facing the parachutist. Using the right hand as the working hand and the left hand as the control hand, trace across the rim of the helmet with the working hand to the opposite side of the helmet, inspecting for any sharp or protruding edges that may damage or cut the static line during aircraft exit. Once the hands are parallel, insert the thumb of each hand under the rim and feel for the locking nuts to ensure they are present and secured.

b. Gently tilt the parachutist’s head back and look at the headband. Ensure that the smooth leather portion is toward the parachutist’s head and the openings of the attaching clips are down, visible, and secured. Place the right index finger on the pull-the-dot fastener with tab. Ensure that it is a serviceable pull-the-dot fastener in that there are four plies of nylon, three of which must run through the snap portion, and it is secured.

c. Bypass the pull-the-dot fastener with tab and trace down to the point of attachment for the chin strap. Ensure the chin strap is properly routed through the adjusting buckle and that the parachutist retention strap is routed around the long continuous portion of the chin strap and under the adjusting buckle, and the pile portion of the parachutist retention strap is away from the jumper’s face.

d. Continue to trace the long continuous portion of the chin strap down under the parachutist’s chin and back up to the point of attachment on the opposite side, and conduct the same inspection.

e. Finally, trace the inside of the nylon portion of the adjusting buckle until you make contact with the left thumb, which is still on the locking nut. Trace the short, sewn portion of the chin strap across the front of the parachutist's chin. Drop both hands.

9-5. CANOPY RELEASE ASSEMBLIES

The JM inspects the right canopy release assembly.

a. Tap the canopy release assembly with the knuckles of the left hand and ensure that it sounds solid. Turn the right canopy release assembly one-quarter turn out and look at it closely. Ensure that it is properly assembled and has no cracked components and is free of all foreign matter. If the static line is resting against either canopy release assembly, move it so that it does not obstruct the view of the assembly.

b. Using the right hand, repeat this same procedure for the left canopy release assembly.

9-6. CHEST STRAP

The JM inspects the chest strap next.

a. Trace down both sides of the main lift web to the chest strap until the little fingers make contact with either the D-rings or the L-bar connector link.

b. Look at the chest strap and ensure that it is not misrouted around the main lift web.

c. Place the right hand (palm toward JM, fingers extended and joined, and pointing up) behind the chest strap, from bottom to top, next to where it is sewn into the main lift web.

d. Trace the chest strap until the right hand is behind the ejector snap, ensuring it is not twisted, cut, or frayed. The ejector snap pad will not come between the right hand and the ejector snap.

e. With the thumb of the right hand, press in on the activating lever for the chest strap to ensure that it is properly seated over the ball detents. Leave the right hand in place behind the ejector snap.

9-7. WAISTBAND

The JM begins the inspection by moving to the right side of the parachutist.

a. Place the left hand (palm away from the parachutist, fingers extended and joined, and pointing up) behind the waistband, from bottom to top, next to the pack tray. Look at the stitching where the waistband is sewn to the pack tray. Ensure that it is not frayed or torn more than halfway.

b. With the left hand, trace the waistband forward, ensuring it is not twisted, cut, frayed, or misrouted under the horizontal back strap. Trace the waistband forward until the left hand makes contact with the right D-ring. Look at the

waistband to ensure that it is routed over the main lift web and under the D-ring. Rotate the right hand down and grasp the top carrying handle of the reserve, palm facing the reserve. Move to the front of the parachutist.

c. At the same time, place the left hand (palm facing the jumper) on the parachutist's chest and, with the right hand, pull the reserve away from the parachutist and look at the waistband where it passes in back of the reserve. Ensure that it is routed through both waistband retainers on the reserve and that it is not twisted, cut, or frayed.

d. Withdraw the left hand from the parachutist's chest and, reaching under the right forearm, grasp the left carrying handle of the T- 10 reserve with the left hand (palm facing away from the reserve, fingers spread). Release the top carrying handle of the reserve with the right hand and move to the left side of the parachutist. Place the right hand (fingers extended and joined, pointing up, and the palm facing away from the parachutist) under the waistband, from bottom to top, as close to the left D-ring as possible. Look at the waistband to ensure that it is routed over the left main lift web and under the left D-ring. Trace it back to the metal adjuster, ensuring the waistband is not twisted, cut, or frayed.

e. Leave the right hand in place behind the metal adjuster, remove the left hand from the left carrying handle, and insert the index and middle fingers of the left hand into the quick release of the waistband, ensuring that it is a two- to three-finger quick release, and not a false quick release. Remove the index and middle fingers from the quick release and, with the index finger and thumb of the left hand, pinch off the free-running end of the waistband where it comes out of the metal adjuster and trace it until the fingers fall off the end. Ensure the free-running end is not cut or frayed and that it is easily accessible to the jumper.

f. Reinsert the left hand into the left carrying handle of the reserve, with the palm facing away from the reserve and the fingers spread. Look at the right hand and trace the waistband adjuster panel back to the pack tray, ensuring it is not twisted, cut, frayed, or misrouted under the horizontal back strap. Also, ensure that it is not frayed or torn (more than halfway) where it is sewn to the pack tray. Drop both hands and move to the jumper's front.

9-8. RESERVE PARACHUTE

The JM begins by grasping the top carrying handle with the left hand (with the palm facing the reserve) and pulling up and out slightly. He looks at the left connector snap and, with the index finger or thumb of the right hand, checks the left connector snap to ensure that it is secured to the left D-ring, that it has spring tension spring-loaded, and is not safetied.

a. Grasp the top carrying handle of the reserve with the right hand, palm facing the reserve, and pull up and out slightly. Look at the right connector snap and, with the index finger or thumb of the left hand, check the right connector snap to

ensure that it is properly secured to the right D-ring and it does not have spring tension. Pull on the safety wire to ensure that it is routed through the drilled hole in the right connector snap, and that the safety wire is attached to the reserve by a nylon lanyard. Insert the left index finger from top to bottom on the inside of the right connector snap to ensure the safety wire is bent down toward the ground.

b. Place the right hand on the left end panel of the reserve. Form a knife edge with the left hand and sweep from top to bottom between the reserve pack tray and the rip cord grip to ensure that the rip cord grip is not winterized (unless the mission calls for it) and that the right pack opening spring band is not misrouted over the rip cord grip. Insert the index finger of the left hand into the rip cord grip stow pocket to ensure that the steel swaged ball is present. Remove the left index finger from the rip cord grip stow pocket and, with the left index finger and thumb, pinch off the first locking pin where it comes out of the rip cord stow pocket. Apply inward pressure on the left end panel with the right hand and seat the first locking pin through the cone. Trace the first locking pin until the index finger and thumb fall off the locking pin, then pick up the cable and trace it to the second locking pin. Pinch it off and seat the locking pin through the cone. Continue to trace the locking pin until the index finger and thumb fall off the locking pin. Ensure that the cables are not frayed and the pins are not bent or corroded.

c. Grasp the right end panel of the reserve with the left hand, look at the cones, grommets, and pack fasteners, and rotate the reserve 360 degrees for each locking pin, cone, and grommet to ensure that there is no exposed canopy or suspension lines and no corrosion, and that the locking pins are properly assembled. Close the rip cord protector flap and check the pack opening spring bands to ensure there is no exposed metal, there is spring tension, and the bands are properly routed.

d. Place the left hand on the top right corner of the reserve. The left hand is the control hand and stays in place. With the index finger and thumb of the working hand (right hand), grasp the tab portion of the top right pack opening spring band and pull it toward the rip cord protector flap. Look at the pack opening spring band to ensure that it is routed through the reinforced nylon webbing at the back of the reserve and that there is no exposed metal on the pack opening spring band. When the tab portion of the pack opening spring band is released, the pack opening spring band should snap back into place. Repeat the same inspection of the top left and left pack opening spring bands. Place the control hand on the bottom right corner, lifting the reserve, so that the bottom left and bottom right pack opening spring bands can be inspected. Lower the reserve, leaving the control hand on the bottom right corner of the reserve, and inspect the right pack opening spring band.

e. Conduct an overall inspection of the reserve pack tray to ensure that there is no exposed canopy, oil, excessive dirt, or tears in the pack tray. Also, when checking the right side, ensure that there is no right carrying handle.

f. Place both hands on the top right corner of the reserve, palms facing the reserve. The left hand is the control hand and the right hand is the working hand. With the head and eyes 6 to 8 inches away from the working hand, trace across the top panel and down the left end panel. Move the control hand down to the bottom right corner of the reserve and lift the reserve, exposing the bottom panel. Trace the bottom panel until contact is made with the control hand. Lower the reserve to its normal position, returning the control hand to the top right corner. Flip the right hand over and trace up the right end panel until contact is made with the control hand. Raise the control hand up and trace across the top right corner where the control hand has been. Raise the reserve up toward the jumper and command HOLD, SQUAT.

9-9. LEG STRAPS

Insert the index and middle fingers of both hands, from outside to inside, under the leg straps right below the aviator's kit bag where the natural pocket is formed. Place the thumbs on the leg straps and simultaneously trace both leg straps back to the saddle. Ensure that the leg straps are not crossed or misrouted around the saddle.

a. With the left hand, trace the right leg strap forward to the quick-fit V-ring. Ensure that the leg strap is not twisted, cut, or frayed. With the thumb, push in on the activating lever of the ejector snap to ensure it is properly seated over the ball detents.

b. Leave the left hand in place and trace the left leg strap with the right hand the same way, ensuring that the left leg strap is not twisted, cut, or frayed, and is routed through the exposed aviator kit bag handle over the bottom and under the top. Continue to trace to the quick-fit V-ring. With the thumb, push in on the locking lever of the ejector snap to ensure it is properly seated over the ball detents. Look at the aviator kit bag and ensure that the sewn, reinforced portion of the aviator kit bag is toward the JM and the smooth portion is facing the parachutist. Before standing up, tap the parachutist on the thigh and command RECOVER.

9-10. STATIC LINE

If the static line has not been routed over the parachutist's shoulder, the JM routes it at this time. The following explanation is for the static line when routed over the right shoulder. For the left shoulder, the hands are reversed.

a. With the right hand, secure the static line snap hook. Pull up on the static line snap hook and ensure that it is attached to the top carrying handle of the reserve parachute. Open the palm and look at the static line snap hook. Place the index finger of the left hand on the static line snap hook next to the drilled hole and ensure the hole for the safety wire is present and free of all obstructions.

b. Regrasp the static line snap hook and, with the left thumb and index finger, pinch the safety wire and lanyard at its point of attachment and look at the safety wire and lanyard. Ensure that the lanyard is attached to the looped portion of the static line and not to the cut-away portion of the static line snap hook. Trace the safety wire and lanyard to ensure it is not too long, too short, or excessively bent. Drop the safety wire and lanyard.

c. Grasp the static line above the snap hook with the left hand just above the looped portion. Rotate it to the parachutist's right and push it toward the static line snap hook, exposing the inside of the looped portion of the static line. Look inside the looped portion of the static line to ensure that it is not cut, frayed, or burned. Rotate the static line snap hook 180 degrees and inspect it again in the same manner for cuts or frays. Drop the left hand.

d. With the index finger and thumb of the right hand, form an "O" around the static line just above the snap hook. Raise the right hand to inspect the static line and ensure it is free of cuts, frays, or burns. When the hand has been raised as high as it will go, give the parachutist the command TURN. When the parachutist has completed his turn, the hand should be high enough to have pulled all the slack from the static line slack retainer. Keep the static line taut between the right hand and the first stow.

e. Place either the index finger or index and middle fingers of the left hand behind the static line below the control hand so there is skin-to-skin contact. Trace the static line down to the first stow to ensure the static line is properly routed and is not cut, frayed, or burned. Then, form a bight in the static line and restow it into the static line slack retainer. Ensure the slack retainer is not cut more than halfway. Pull all the slack through the static line slack retainer, from top to bottom. Flip the slack on top of the main parachute and control it with either hand. The hand that controls the bight becomes the control hand.

f. With the index finger and thumb of the working hand, pinch the first stow and pull it 1 to 2 inches toward the center of the main pack tray. Look behind the stow to ensure that the static line has not been misrouted around the static line stow bar and is free of cuts, frays, or burns on the back side of the stow. Release the first stow and let it pop back into place. Place the index finger, or index and middle fingers, behind the static line (from bottom to top, fingers pointing up) and trace over to the other stow. Pull out on this stow and inspect it in the same manner as on the other side. Repeat this procedure until the entire length of static line has been inspected. Ensure that the last strand of static line is routed from the right static line stow bar. Ensure the pack opening loop is positioned between the 6 o'clock and 9 o'clock positions.

g. Insert the index finger of the working hand into the pack opening loop from bottom to top and pull out and down on it. Ensure that the pack closing tie is routed through the pack opening loop and that the pack opening loop is not torn

or frayed. Let the pack opening loop pop back into place and place the index finger of the working hand on the pack closing loop in the 6 o'clock position. Look at the pack closing loop to ensure the pack closing tie is routed through the pack closing loop and that the pack closing loop is not torn or frayed.

h. In a clockwise motion, conduct the same inspection on the remaining pack closing loops. After completing the inspection of the pack closing loop in the 3 o'clock position, insert the index finger of the working hand from bottom to top under the surgeon's knot and locking knot to ensure that they are properly secured with one turn of 1/4-inch cotton webbing and located between the 3 and 6 o'clock positions. Stand directly behind the jumper and command **TILT YOUR HEAD FORWARD**.

9-11. PASGT HELMET (BACK)

The JM places both hands on the rim of the helmet on the extreme left-hand side, fingers extended and joined, palms facing the rear of the parachutist.

a. Using the right hand as the working hand and the left hand as the control hand, trace the outer edge of the helmet with the working hand, checking for sharp or protruding edges that could cut or fray the static line, until the working hand reaches the opposite side.

b. With the hands on opposite sides of the helmet, tilt the parachutist's head forward and look at the parachutist's retention straps. Ensure that they are properly routed (between the helmet shell and the foam impact pad), not twisted, and securely fastened.

c. Using the index finger and thumb of either hand, pull down on the foam impact pad to ensure that it is properly secured to the shell of the helmet.

9-12. RISER ASSEMBLIES

Standing directly behind the parachutist, the JM places the thumb of each hand under the riser assemblies (from outside to inside).

a. Move both hands as far forward as possible. Firmly grasp each riser assembly.

b. Look at the left riser assembly. Give the left riser assembly a sharp tug. Open the hand to an L-shape and trace the riser assembly back to the pack tray, ensuring that it is not twisted, cut, or frayed. Leave your left hand in place and repeat the same procedure for the right riser assembly.

9-13. MAIN PACK TRAY

The JM performs an overall inspection by placing both hands on the top left corner of the pack tray (palms facing down). The left hand is the control hand and the right hand is the working hand.

- a. With the eyes 6 to 8 inches away from the working hand, trace across the top, down the right side, across the bottom, and up the left side.
- b. Lift the control hand and, with the working hand, sweep across the top left corner where the control hand has been. Ensure that there is no oil, mud, dirt, grease, or tear(s) in the pack tray. Form knife edges with both hands, palms facing the JM, and command ARCH YOUR BACK.

9-14. DIAGONAL BACK STRAPS

The JM places both hands (fingers extended and joined, palms facing in) behind the pack tray under the X formed by the diagonal back strap.

- a. Grasp the diagonal back straps. Look at one, then the other. Ensure that they are both routed over the appropriate shoulder and that the top one has one more set of stitching visible than the lower one.
- b. Look at the diagonal back strap retainers. Ensure that they are routed through the sizing channels in the diagonal back straps and around the diagonal back strap keepers on the pack tray.
- c. With both thumbs, apply upward pressure to the pull-the-dot fasteners, ensuring that they are secure. Focus attention on the left side of the jumper's body.
- d. With the left hand, trace the right diagonal back strap down to the back strap adjuster, ensuring it is not twisted, cut, or frayed. Grasp the back strap adjuster with the left hand and focus attention on the jumper's right side.
- e. With the right hand, trace the left diagonal back strap, ensuring that it is not twisted, cut, or frayed.

9-15. HORIZONTAL BACK STRAP

The JM bypasses the back strap adjuster and picks up the horizontal back strap.

- a. Trace the horizontal back strap down until it disappears into the main lift web. Withdraw the right hand from under the horizontal back strap and reinsert the right hand (fingers and thumb extended and joined, fingers pointed skyward, palms facing the JM) under the horizontal back strap where it comes back out of the main lift web. Issue the jumper the command, BEND FORWARD AT THE WAIST.
- b. Release the back strap adjuster and, with the left hand, reach across the pack tray and grasp the pack tray with the left hand, fingers pointed down, palm facing the pack tray. With the head and eyes 6 to 8 inches from the right hand, trace the horizontal back strap across the jumper's back, ensuring that it is not twisted, cut, or frayed. Ensure that the horizontal back strap is routed through the horizontal back strap retainers, the horizontal back strap retainers are routed through the horizontal back strap keepers, and the pull-the-dot fasteners are secured.

c. Trace the horizontal back strap until it disappears into the main lift web on the left side of the jumper's body. Regrasp the back strap adjuster on the left side of the jumper's body with the left hand, palm facing skyward.

d. Withdraw the right hand from under the horizontal back strap and reinsert the right hand, fingers and thumb extended and joined, palm facing the JM, from top to bottom or bottom to top, under the horizontal back strap where it comes out of the main lift web. Trace up the remainder of the horizontal back strap until contact is made with the control hand. Withdraw the right hand from under the horizontal back strap and get left hip to left hip with the jumper.

9-16. SADDLE

Leaving the left hand in place on the back strap adjuster, the JM places the right hand on the single box-X stitching or the accessory attaching ring on the lowering line adapter web on the parachutist's left side (palm facing the parachutist, fingertips pointing down).

a. Trace the saddle across the parachutist's buttocks to the single box-X stitching on the parachutist's right side, ensuring that the saddle is not inverted, twisted, cut, or frayed.

b. Give the parachutist the signal to recover by lightly tapping him on the buttocks.

9-17. WEAPONS CASE, M1950

The JM begins the inspection of the weapons case at its point of attachment on the left D-ring.

a. Push out on the weapons case with the right forearm. Look at the quick-release snap on the M1 950 weapons case to ensure it is attached to the left D-ring (to the outside of the adjustable D-ring attaching strap for the ALICE pack). With the index finger of the right hand, push in and release the opening gate (safety gate) to ensure that it is spring-loaded, facing the parachutist's body, and not safetied. Push on the activating arm to ensure that it is properly seated between the ball detents. Trace down to the V-ring to ensure the quick-release link has been routed through the V-ring. Continue to trace down the inside of the M1 950 weapons case to the adjusting strap. Ensure the adjusting strap has been properly routed through the appropriate set of adjusting strap connectors and that a half hitch has been placed in the adjusting strap.

b. Next, check the lower tie-down on the M1 950 weapons case (if jumping the standard H-harness), ensuring that it is routed around the M 1950 weapons case and the parachutist's leg, routed around the ALICE pack frame, and tied off in a bowknot on the front leading edge of the M1 950 weapons case. Sweep across the bottom of the weapons case with the right hand to ensure the rifle muzzle does not protrude. Place the index finger of the right hand on the slide fastener.

Check it to ensure it is properly secured by tracing it all the way up to the lift fastener. With the thumb and index finger of the right hand, pinch the slide fastener and tab thong to ensure that the slide fastener tab thong is stopped approximately 1 to 3 inches from its uppermost position and that the tab thong has been separated over the lift fastener. If the lift fastener is unserviceable, the upper tie-down may be routed through the slide fastener tab thong.

c. With the right hand, slap the M1950 weapons case about 12 inches down from the top. The forward assist of the M16 rifle, or the carrying handle of the M249 SAW, should be felt. This ensures that the weapon has been properly inserted into the weapons case.

d. Finally, with the thumb and index finger of the right hand, pinch off the single or double loop bowknot of the upper tie-down and ensure it is not tied in a hard knot. Visually trace the upper tie-down, ensuring that it is routed around the M1950 weapons case and the main lift web, above the chest strap, and tied off in a bowknot on the front leading edge of the M1950 weapons case. This completes the inspection of the weapons case. With the left hand, grasp the top carrying handle of the reserve and lift up and out. Place the index finger of the right hand on the inner mounting screw and ensure it is present and secure. Rotate the finger around, place it on the outer mounting screw, then place it on the back of the main lift web and feel for exposed metal.

9-18. WEAPONS CASE, M1950 (RIGGED FOR LOWERING)

The M1 950 weapons case can be rigged for lowering of a single item or a tandem load.

a. **Rigged for Lowering a Single Item of Equipment.** The inspection of the M1950 weapons case begins the same: left hand in the left carrying handle of the reserve, fingers spread, and the right index finger on the snap fastener.

(1) Ensure that the quick-release snap is positioned to the outside of the snap hook on the adjustable D-ring attaching strap with the opening gate facing the parachutist. Rotate your index finger around to the opening gate and pluck it to ensure it has spring tension. Focus on the activating arm of the quick-release snap. Ensure that the safety tie is not present and that the quick-release link is not routed through the V-ring.

(2) Place your index finger on the girth hitch of the HPT lowering line, ensuring it is tight around the metal V-ring. Continue to inspect the M1950 weapons case from the adjusting strap connector, feeling for the forward assist. After slapping the main body of the M1950 weapons case, focus on the lowering line stow pocket. Ensure that both the looped-end HPT lowering line and the lowering line ejector snap are protruding from the top of the lowering line stow pocket. The HPT lowering line must be stored with the entire retainer flap in the lowering line stow pocket, and the lift fastener must be present and secured.

(3) Trace the HPT lowering lineup to the lowering line ejector snap, pulling the M1950 weapons case toward the front of the parachutist. The lowering line ejector snap is attached to the lowering line adapter web if present. If not, it is the outermost item on the left D-ring of the parachute harness. The opening gate must be facing the parachutist and the yellow safety lanyard must be present. Trace downward on the yellow safety lanyard to ensure it is secured properly and has not been tied or taped down. Then move to the upper tie-down and ensure it is routed and secured properly. After inspecting the yellow safety lanyard, insert the index finger of the working hand into the accessory attaching ring and tug down once. Place the index finger on the nylon portion and trace up until it disappears under the waistband.

(4) Continue the inspection beginning with the reserve parachute.

b. Rigged for Lowering as a Tandem Load. Inspection of the M1950 weapons case begins the same as in paragraph 9-18a. Ensure the safety tie is not present, and the quick-release link is routed through the V-ring.

(1) Continue the inspection up to the retainer flap of the HPT lowering line. Trace the HPT lowering line up to the M1950 weapons case. Ensure the HPT lowering line has been routed from front to rear behind the Type VIII reinforced cotton chafe material of the M 1950 weapons case to the parachutist's front.

(2) Continue tracing the HPT lowering line to the lowering line ejector snap, then continue the sequence beginning with the leg straps as already described.

9-19. ALICE PACK WITH H-HARNESS AND HOOK-PILE TAPE LOWERING LINE

After the JM has completed the overall inspection of the reserve parachute, he lifts up on the reserve and issues the command HOLD. He then inspects the ALICE pack as follows:

a. Place the index finger of the left hand on the snap hook of the right D-ring attaching strap. Ensure the snap hook is to the outside of the right connector snap of the reserve. Check the opening gate to ensure it has spring tension. Trace the right D-ring attaching strap down to where it is attached to the friction adapter. Check to ensure that there is a two- to three-finger quick release and that the quick release is on the front side of the left D-ring attaching strap and the free-running end is hanging freely on the ALICE pack.

b. Using the right hand, repeat the process for the left D-ring attaching strap. With both hands (fingers and thumbs extended and joined, palms facing), trace the H-harness down to where it disappears under the frame of the ALICE pack. Raise the ALICE pack and give the command, HOLD. Continue to trace the H-harness down to the quick release, ensuring that they are adjusted two to three

fingers, and all excess webbing is rolled and secured with retainer bands/masking tape. Ensure the quick releases are not secured to the free-running ends of the H-harness.

c. Secure the girth hitch of the HPT lowering line with the left hand. Ensure that it has been attached to the X formed by the H-harness from top to bottom, or bottom to top, and around both equipment retainer straps. With the right hand, trace the HPT lowering line to the left side of the ALICE pack frame, ensuring that it is routed over the left adjustable shoulder carrying strap.

d. Look at the retainer flaps. Ensure that no portion of the folds extends beyond the retainer flaps, and that both hook tabs are present and secured. Continue to trace the lowering line, ensuring that the ejector snap has been routed behind the cotton chafe on the M1950 weapons case and properly attached to the lowering line adapter web. If the lowering line adapter web is not present, it may be attached as the outermost item on the left D-ring.

e. Check to ensure that the additional leg tie-down is present on the right side of the ALICE pack frame, if jumping the left door; if jumping the right door, a lower tie-down is also needed if not jumping the M1950 weapons case. The ALICE pack lower tie-down, either right or left, is secured after completion of the inspection of the entire parachutist.

9-20. ALICE PACK WITH HARNESS, SINGLE-POINT RELEASE AND HOOK-PILE TAPE LOWERING LINE

After the JM has completed the overall inspection of the reserve parachute, he lifts up on the reserve and issues the command, HOLD. He then inspects the ALICE pack.

a. Place the index finger of the left hand on the snap hook of the right adjustable D-ring attaching strap. Ensure the snap hook is to the outside of the right connector snap of the reserve. Check the opening gate to ensure it has spring tension. Flip the excess out of the way with the thumb and, using the index and middle fingers, trace the adjustable D-ring attaching strap down to the triangle link.

b. Individually check the proper routing of the attaching loops, ensuring the white loop is routed through the triangle link on the adjustable D-ring attaching strap. The OD loop is routed through the white loop and the red loop through the OD loop and the grommet on the female portion, leg strap release assembly. Ensure the release handle cable is routed through the red loop and the cable loop retainer.

c. Using the right hand, repeat the same procedure for the left adjustable D-ring attaching strap. Check the release handle assembly, ensuring it is properly attached to the release handle cross strap and that the release handle lanyard is not misrouted.

d. With both hands (fingers and thumbs extended adjoined, palms facing each other), trace down the equipment retainer straps between the cargo pouches on the ALICE pack to the adjustable cross strap, ensuring it is below the center cargo pouch. Pull on the free-running end of the adjustable cross strap with the right hand to ensure all slack has been removed. Lift up on the ALICE pack and command HOLD.

e. Ensure the free-running ends of the equipment retainer straps are routed under the top of the frame and envelope portion of the ALICE pack. Inspect the adjustable shoulder carrying straps to ensure they are snug tight and that free-running ends are taped or tied off so no slack is hanging free. Trace the free-running ends of the equipment retainer straps, ensuring they cross (forming an X) down to the friction adapters. Ensure they are properly routed through the friction adapters and a two- to three-finger quick release is present. Ensure the excess free-running ends of the equipment retainer straps are S-folded and secured with retainer bands or tape, and not secured to the two-to three-finger quick release.

f. Route the adjustable leg straps in the most direct route around the ALICE pack and attach the male portion of the leg strap release assembly to the female portion of the leg strap release assembly. Roll the excess and secure it in the webbing retainer.

Section III

MOVEMENT ON THE AIRFIELD

After personnel inspection, safety personnel load the parachutists aboard the aircraft. Load time is the time agreed on by the Army and Air Force for loading the aircraft. Station time is the time the aircrew, parachutists, and equipment are inside the aircraft and are prepared for takeoff (everyone seated with seat belts fastened and helmets on). (See Table 9-1, page 9-18.)

9-21. AIRFIELD MOVEMENT PROCEDURES

These procedures must be followed when moving parachutists on or across an active airfield:

- a. Coordinate with DACO for permission to cross the airfield.
- b. Keep parachutists in closed formation.
- c. Cross active runways at authorized crossing points.
- d. Cross only on light signals from airfield control tower.
 - Green (GO).
 - Red (STOP, DO NOT PROCEED).

- Flashing red (CLEAR TAXI STRIPS AND RUNWAYS).
 - Flashing red and green (EMERGENCY WARNING, BE ALERT).
 - Flashing white (RETURN TO STARTING POINT).
- e. Display checkered flags on the first and last escort vehicles.
 - f. Keep vehicles in low gear while crossing runways.
 - g. Do not raise radio antennas within 50 feet of any aircraft.
 - h. Do not smoke in the vicinity of any aircraft.
 - i. Avoid aircraft propellers.
 - j. Avoid jet engine intakes/exhausts. Stay about 50 feet from intakes and 200 feet from exhausts.

9-22. LOADING AIRCRAFT

Parachutists are loaded in the aircraft in reverse order. During loading, safety personnel move forward in the aircraft ahead of the chalk and supervise seating of the chalk to ensure that all seats are filled, seat belts are fastened, and that personnel are in proper stick order. They also assist in loading equipment aboard the aircraft. The aircrew briefing may be given before or after loading the aircraft but must be completed before takeoff.

NOTE: The actions taken are according to type of aircraft used during the airdrop.

9-23. IN-FLIGHT EMERGENCY PROCEDURES

Jumpers must be briefed on in-flight emergency procedures described in Table 9-1.

NOTE: Rotary-wing aircraft in-flight emergency procedures are different from those shown in Table 9-1. They are explained by either the PJM or pilot before boarding the aircraft.

SITUATION	SIGNAL	ACTIONS IN USAF AIRCRAFT	ACTIONS IN ARMY AIRCRAFT
CRASH LANDING DURING TAKEOFF.	CONTINUOUS RINGING OF ALARM BELL OR ORAL WARNING.	REMAIN SEATED UNTIL AIRCRAFT STOPS, THEN EXIT.	PULL LEGS INSIDE AIRCRAFT, REMAIN IN POSITION, COVER HEAD WITH ARMS.
CRASH LANDING DURING FLIGHT.	SIX SHORT RINGS OF ALARM BELL OR ORAL WARNING.	TIME PERMITTING, JUMP. IF NOT, SECURE SEAT BELTS, BRACE FOR IMPACT ON CONTINUOUS RING, REMAIN SEATED UNTIL AIRCRAFT HAS STOPPED.	AS DIRECTED BY PILOT.
EMERGENCY BAILOUT.	THREE SHORT RINGS OF ALARM BELL OR ORAL WARNING.	STAND UP AND HOOK UP ON CONTINUOUS RING; EXIT AIRCRAFT UNDER DIRECTION OF PJM.	EXIT AIRCRAFT UNDER DIRECTION OF PJM.
DITCHING OVER WATER WITH INSUFFICIENT DROP ALTITUDE.	SIX SHORT RINGS AND ORAL WARNING.	USE AVAILABLE PADDING, REMAIN SEATED, AND SECURE SEAT BELTS.	PULL LEGS INSIDE AIRCRAFT, REMAIN IN POSITION, AND COVER HEAD WITH ARMS.
LIGHTEN LOAD.	ORAL WARNING.	DESIGNATED PARACHUTIST MAY ASSIST PJM OR LOADMASTER IN JETTISONING CARGO.	AS DIRECTED BY PILOT.
FIRE IN FLIGHT.	ORAL WARNING.	REMOVE PARACHUTISTS FROM FIRE AREA AND EXTINGUISH FIRE.	AS DIRECTED BY PILOT.

Table 9-1. In-flight emergency procedures.