APPENDIX A

MC-3 MILITARY FREE-FALL SYSTEM

Although the MC-3 MFF system is still available in the procurement system, user units should make the transition to the RAPS to ensure joint interoperbility and a lower injury rate in airborne operations. This appendix covers this system. Some Reserve and National Guard elements still use it.

Main Parachute Assembly

The main parachute assembly consists of an MC-3 canopy assembly with a personnel parachute canopy sleeve assembly and 40-inch spiral vane pilot parachute, an MC-3 backpack assembly a manual rip cord assembly, a harness assembly, and an FF-2 automatic rip cord release assembly. The following paragraphs describe these components.

Canopy Assembly

The MC-3 canopy assembly (Figure A-1) is a 24-foot MFF back-type parachute that deploys manually or automatically. The canopy is aerodynamically designed with 17 vents in the rear and 4 turn slots on each side. The turn slots are louvers of the canopy material and protrude above the normal canopy curvature. Control lines, ending in toggles located on the rear of the front risers, are attached to the turn slots. Manipulation of these toggles controls the volume and direction of airflow through the turn slots, allowing variation in the direction, forward speed, and rate of descent of the canopy.

The canopy skirt's (the lower lateral band) design is such that the front will ride higher than the rear of the canopy. A center line attached to the apex pulls the apex down below the canopy curvature. Five stabilizer panels attached to each side of the canopy skirt and extending below the skirt contribute to the overall spread and stability of the MC-3 canopy. The canopy, when deployed, takes on an elliptical shape, developing a built-in thrust, or forward speed, of 13 mph. The MC-3 canopy assembly is packed inside a personnel parachute canopy sleeve and is deployed by a pilot parachute.

Backpack Assembly

The MC-3 backpack assembly container is semi-permanently attached to the harness assembly with horizontal and diagonal back strap retainers (Figure A-2). The four locking pins on the manual rip cord pass through four locking cones on the backpack to close the pack. Four pack opening bands routed behind the backpack and attached to eyelets on the side flaps of the backpack provide the tension.

Manual Rip Cord Assembly

When the parachutist has fallen to the predesignated deployment altitude, he removes the manual rip cord handle from the rip cord pocket and extends his arm. This action pulls the rip cord cable through the cable housing and removes the locking pins from the cones in the backpack. With the locking pins removed, the pack opening bands pull the backpack assembly's side flaps to the side, allowing the pilot parachute to inflate.

The pilot parachute lifts the parachute canopy sleeve (with the canopy and suspension lines packed inside) from the backpack and extends the sleeve. When the sleeve is fully extended, the suspension lines deploy from the storage panel and free the locking flap. The canopy then deploys from the sleeve and inflates, completing the deployment sequence (Figure A-3).

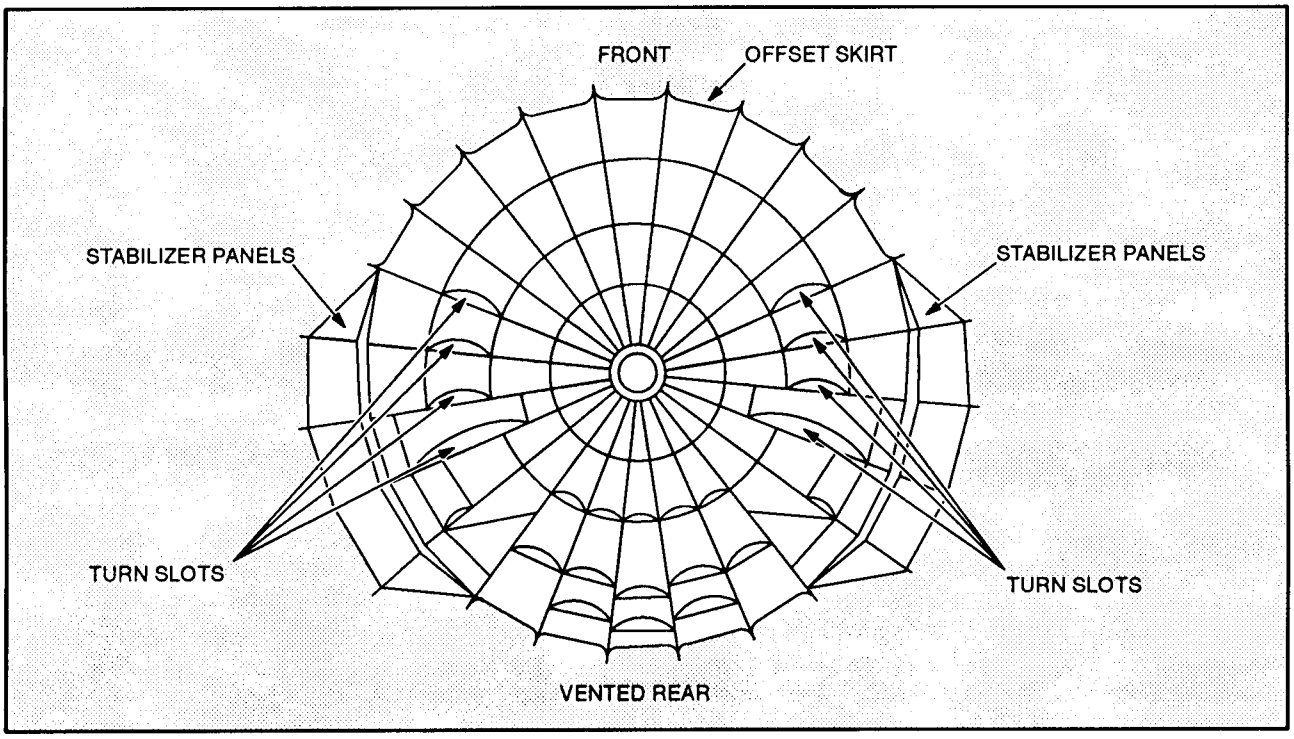


Figure A-1. MC-3 canopy assembly.

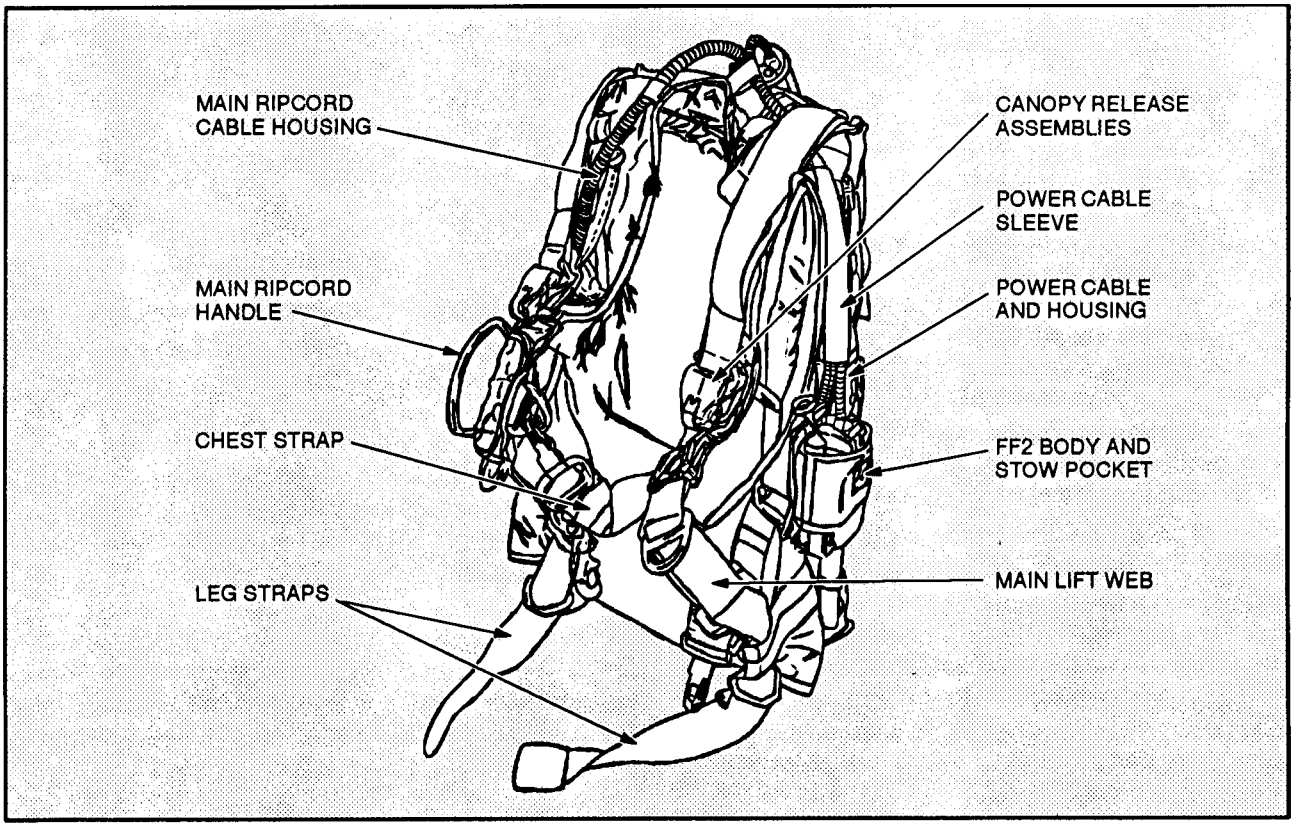


Figure A-2. MC-3 backpack assembly.

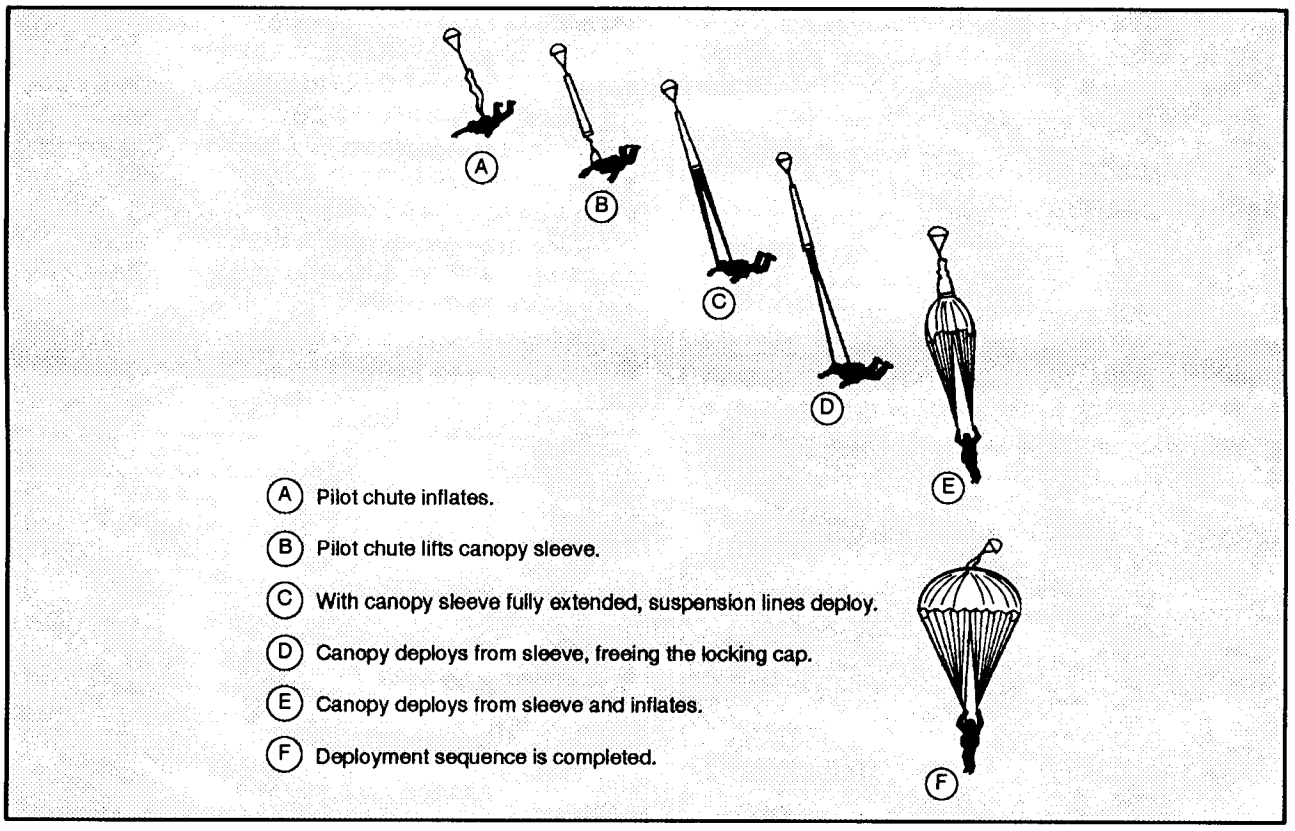


Figure A-3. Deployment sequence.

A sleeve retainer line attached to the sleeve bridle loop and the pilot parachute bridle passes through the sleeve and connects, on the other end, to the canopy bridle loop to prevent losing the sleeve. The entire deployment sequence, from locking pin removal to canopy inflation, normally occurs within two and a half seconds.

Harness Assembly

The troop back and chest personnel parachute harness assembly is mounted on a short-girth vest for easy donning and includes a sponge rubber backpad for comfort. The harness components consist of the two main lift webs with canopy quick-release fittings and canopy release pads, elastic webbing retainers, two pack attaching slide fasteners, and two pack attaching webs. Three ejector-type snap fasteners allow quick removal of the harness. The harness has five points of adjustment the chest strap, the two adjustable "V" rings on the leg straps, and the two friction adapters on the running ends of the diagonal backstraps. The parachutist adjusts the harness to fit snugly, but it should not restrict body movement. He adjusts the harness as follows:

- He dons the harness, checks for body size, and removes the harness.
- He adjusts the two main lift webs to body size and ensures the lift webs are even.
- He dons the harness and fastens the chest and leg straps.
- He adjusts the chest and leg straps, ensuring he can arch his back properly.
- He folds the excess webbing and secures it under the retainers provided on each strap.

The CRU 60/P oxygen connector plate is attached to the left main lift web above the chest strap. The manual rip cord handle pocket is affixed to the right main lift web, with the end of the rip cord cable housing tacked above it. Two "D" rings, integral parts of both main lift webs, are located below the chest strap and serve as the reserve parachute's suspension points. The two equipment

rings, integral parts of the saddle portion of the main lift webbing, are used to attach the equipment lowering line. The FF-2 ARR attaches to the left diagonal backstrap of the harness.

FF-2 Automatic Rip Cord Release Assembly

The FF-2 ARR assembly (Figure A-4), commonly called the Hite Finder, is designed to automatically open a free-fall personnel parachute at a safe altitude should the parachutist fail to pull the manual rip cord. The ARRs response depends upon presetting the instrument for the barometric pressure at the desired activation altitude, computed in millibars, above the intended DZ. The ARR is in an alloy case, at the bottom of which is a cylindrical housing that contains the main spring, a plunger, and a barrel cap. On one side of the ARRs case is a millibar dial knob used to set the activation altitude. On the opposite side is an access hole, covered by a threaded plug, used to reset the time-delay mechanism. The arming pin assembly used to manually activate the ARRs time-delay mechanism is located on the top. Also located and fitted on top of the release case is the power cable and housing assembly that pulls the parachute rip cord pins in the instrument's operational sequence.

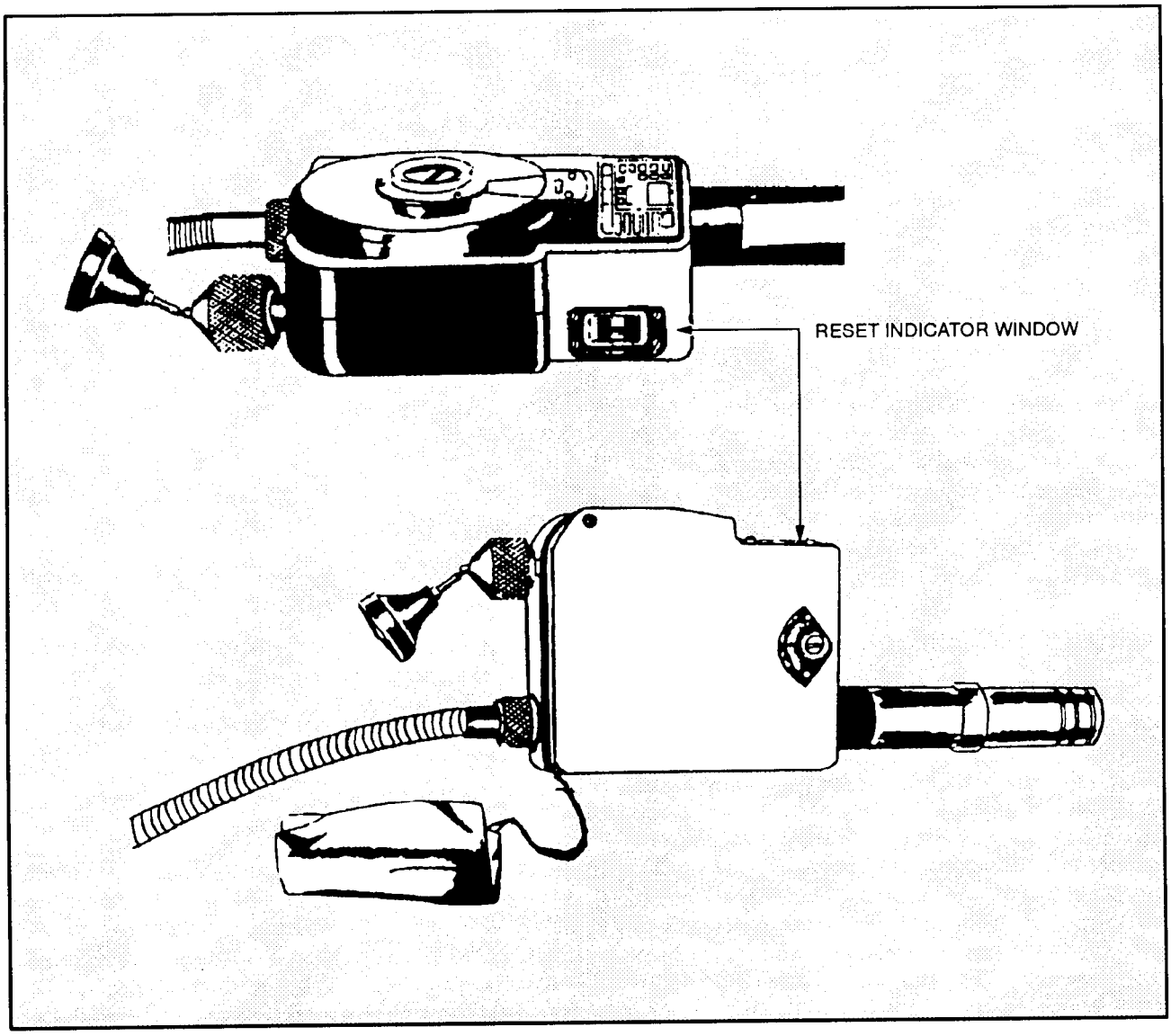


Figure A-4. FF-2 ARR assembly.

WARNING

Before and after the installation of an FF-2 automatic rip cord release assembly on a free-fall back parachute assembly, the parachutist checks the reset indicator to ensure that a partial rundown of the timing mechanism has not occurred due to any inadvertent momentary withdrawal of the arming pin.

The parachutist can check the reset operation using the "RESET INDICATOR" window (Figure A-4) located immediately below the ARR case's rounded face. He visually checks the window and observes the location of the two white marks. If the ARR's time-delay mechanism has been reset, the two marks will be aligned. If the lower, movable mark is offset more than one-half the width of the indicator, the time-delay mechanism may not have been reset properly. The parachutist replaces an ARR that has not been reset with another that has been reset, or he has the support rigger reset the time-delay mechanism as required.

In most cases the FF-2 ARR has been installed when the parachute is issued. The FF-2 ARR fits into a stowage pocket specifically designed to contain it. Should the parachutist have to install the release, he follows the procedures in Figure A-5.

WARNING

Due to the exposed mounting location of the FF-2 ARR, take extreme care when handling, storing, and transporting an MC-3 back steerable parachute.

Should the parachutist have to remove the FF-2 ARR from the parachute, he slips the rip cord locking pin out of the hook without unscrewing the knurled locking nut. He never unscrews the knurled locking nut from an uncocked release. He reverses the other steps in Figure A-5, unlocking the cable housing from its plate and slipping the power cable and housing through the loop and sleeve.

Reserve Parachute Assembly

The reserve parachute used with the MC-3 system is a standard 24-foot diameter troop chest reserve personnel parachute. It is deployed by means of a 30-inch diameter vane-type pilot parachute with an ejector disk (kicker plate). A reserve parachute attaching strap and reserve parachute connector strap secure it around the parachutist's body. It suspends from the two D-rings on the harness assembly's main lift webs.

The reserve parachute attaching strap has a triangular link on each end and, when installed on the main back parachute, forms half of the reserve parachute restraint strap assembly. Usually, the attaching strap is already installed when the main MC-3 parachute is issued. If, however, the parachutist has to install the attaching strap, he-

- Positions the back parachute with the harness facing up.
- Raises the pack back cushion and opens the horizontal backstrap retainers.
- Centers the attaching strap over the pack between the horizontal backstrap retainers.
- Passes each triangular link end of the attaching strap through the fourth pack opening band slot located at each side of the backpack assembly.
- Passes the loose end of each horizontal backstrap retainer down through the adjacent loop formed in the attaching strap and reattaches each retainer in the original location.
- Resecures the pack cushion to the pack.

The reserve parachute connector strap has a quick-ejector s-nap on each end, It is installed on a packed chest reserve personnel parachute bypassing one end of the strap through each of the four waistband retainer webs on the back of the reserve packtray and centering the strap length on the packtray. The quick-ejector snaps fasten to the triangular links on the attaching strap to encircle the parachutist's waist snugly.

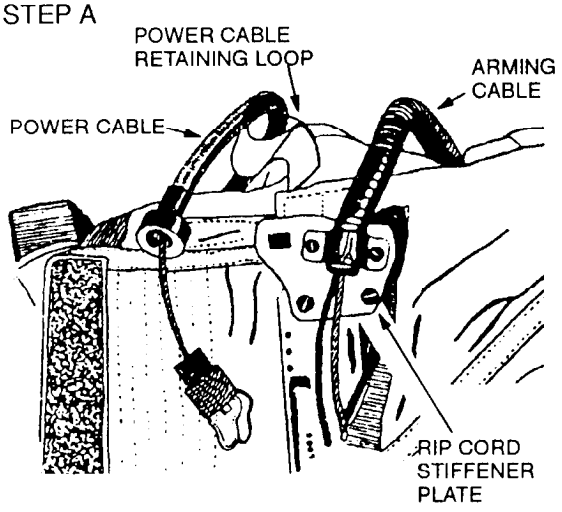
Slip the FF-2 into the stowage pocket attached to the parachute harness, making sure that the adjustment crew, millibar window, and reset indicator can be seen through the openings provided. Stow the individual release log record inside the pocket between the release casing and the side of the pocket with the attaching webs (the side next to the parachute).

Extend the cylindrical housing through a hole designed for it in the bottom of the pocket. Secure the release by passing the release retaining web across the center of the casing top and closing the pocket closing flap over it so that the affixed hook and pile (Velcro) fastenersmate.

Pass the upper end of the arming cable and housing assembly through the power cable sleeve on the inside of the left upper end of the pack. Attach the release pocket to the pocket attaching strap at the center of the left side of the pack by using the elasticized attaching webs. Refer to Figure A-2.

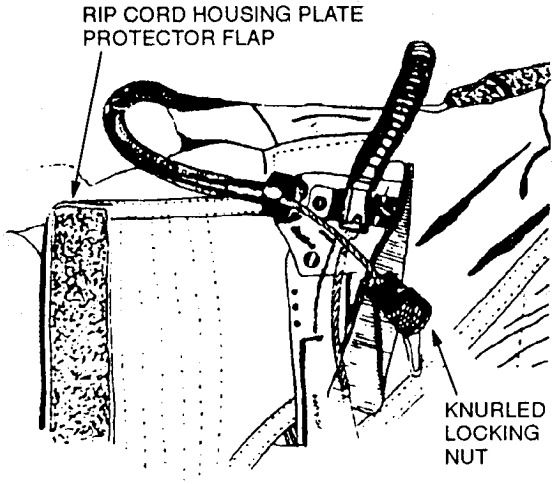
Follow Steps A through D and then close and secure the rip cord housing plate protector flap and the rip cord protector flap.

STEP A



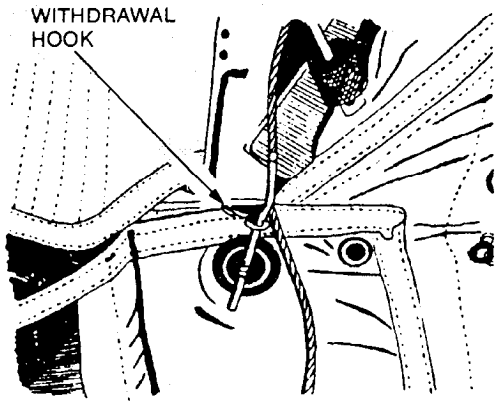
Pass the upper end of the arming cable and housing through the power cable retaining loop at the upper end of the pack, and route it toward the rip cord stiffener plate.

STEP B



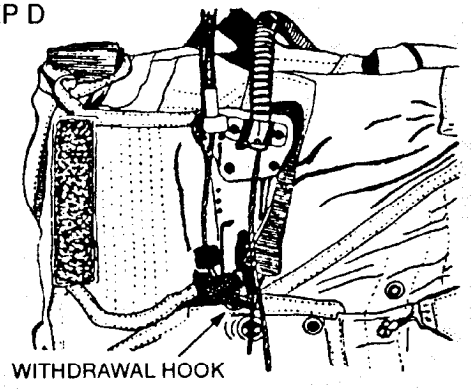
Rotate the power cable housing end 90 degrees clockwise to lock the key in the slot and secure the housing to the plate.

STEP C



Unscrew the knurled locking nut on the upper end of the power cable and remove the withdrawal hook from the slotted retainers.

STEP D



Install the withdrawal hook on the first rip cord locking pin above the first locking cone with the closed, rounded end of the hook under the rip cord cable and against the upper end of the pin. Ensure that the hook does not go around the cable. Reinstall the open end of the hook in the hook retainer slot and secure it to the retainer by screwing the knurled locking nut back across the retainer.

Figure A-5. Installing the FF-2 ARR.

The parachutist positions the reserve parachute at the center of his body so that the air will flow evenly over the upper and lower portions of his body. He secures it firmly with the reserve restraint strap (located at the bottom of the main backpack) to prevent shifting during free-fall.

Altimeter

The altimeter (Figure A-6), contained in a metal bracket assembly, is normally mounted on the top of the reserve parachute when it is issued. There are several types of altimeters in use, some simple and some complicated, but their purpose is the same--to indicate altitude above the ground.

The nonsensitive-type altimeter used for free-fall is marked in increments of 250 feet, numbered every 1,000 feet, O being zero feet and the 10,000-foot indicator representing 10,000 feet. It has only one needle that moves across its face. A small red light with a protective cover lights the dial for night operations. Its ON/OFF light switch is located on the side of the metal mounting bracket.

The nonsensitive altimeter is a reliable piece of equipment that should not be handled roughly. If accidentally dropped or after a hard landing, run it through the test chamber again. Before placing it in service, put it through a test chamber IAW TM 10-1670-264-13&P.

Although the altimeter usually is installed on the reserve parachute when the reserve is issued, the parachutist may sometimes have to install it himself. He unsnaps and opens the rip cord protector flap on the packed reserve to expose the pack-opening spring bands. He unhooks each of the pack-opening spring bands from the top. He passes the loose end of each band through the appropriate accommodating slots in the base of the altimeter bracket. He centers the altimeter bracket on top of the reserve parachute pack and rehooks the bands in the original hooking location.

Helmet Assembly

The MC-3 flying helmet is used for free-fall. It should have a bayonet fastener receptacle on each side of the helmet to attach the oxygen mask. The jumpmaster's hehnet has earphones and a boom microphone for communication with the aircrew. Helmets and masks for personnel other than jumpmasters should not have communications equipment.

Goggles are installed on the helmet by securing the headstrap to the two headstrap retainers on the back of the helmet. The headstrap should also be tacked to the helmet.

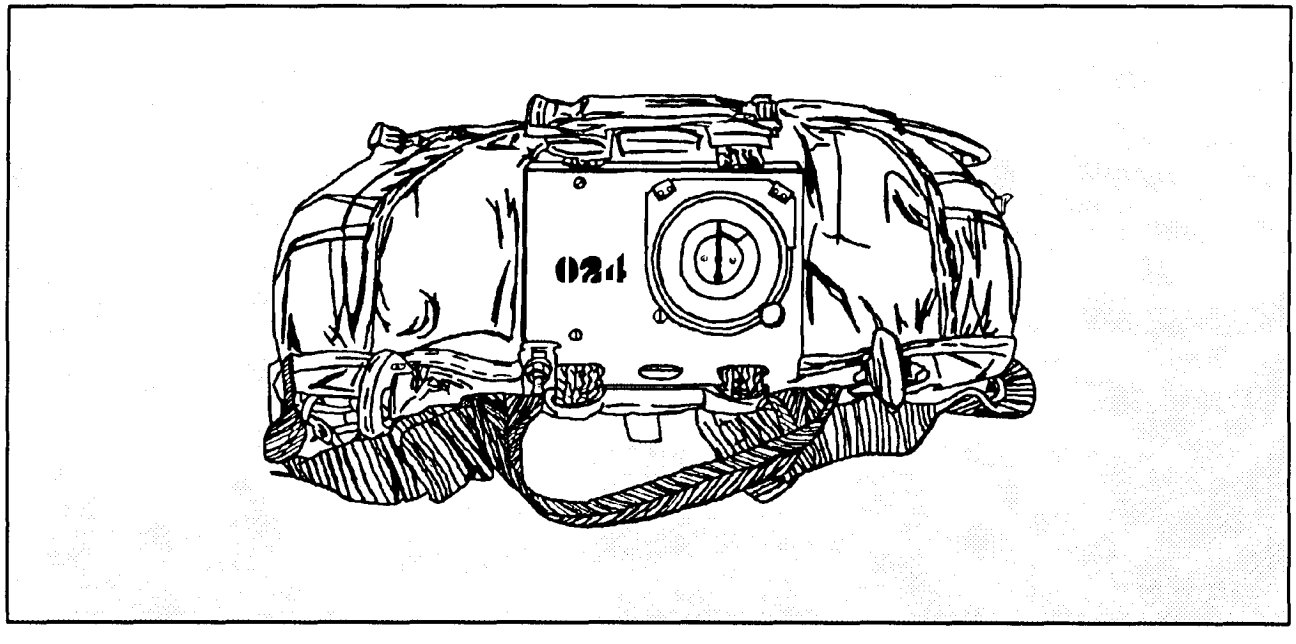


Figure A-6. Altimeter.

Personnel Oxygen System Assembly

The personnel oxygen system consists of an MBU-3/P oxygen mask and an oxygen bottle assembly with a CRU 60/P oxygen connector. The MBU-3/P is a pressure-type mask that comes in small, medium, and large sizes. It should fit snugly and must be airtight. The mask has four points of adjustment located on the front for a snug fit. The jumpmaster's oxygen mask incorporates a microphone for communication with the aircrew.

Oxygen bottle assembly (Figure A-7) (or bailout bottle assembly) consists of two oxygen cylinders secured together with a double-bottle clamp and a manifold assembly. The manifold assembly has an ON/OFF control switch, a standard pressure gauge, a refill valve, and a valve-to-connector hose assembly. When assembled for use, the cylinders must be secured with the double-bottle clamp.

The two steel cylinders of the oxygen bottle assembly are of shatterproof, high-pressure design. When attached to the manifold assembly, the connected cylinders have an operating range of between 1,800 and 2,200 psi. These cylinders will provide a parachutist oxygen for about 15 minutes. Once activated, the bottles can be turned off if necessary.

The pressure gauge located at the center of the manifold assembly shows the oxygen pressure of the cylinder assembly. The gauge has a movable indicator and a scale divided into red and black segments. Although the scale has only two marked psi indication points (1,800 and 2,500), other pressure indication points may be approximated; for example, when the indicator on the gauge cuts the second "L" of "FULL", the pressure is about 2,000 psi.

The ON/OFF control switch located on one end of the manifold is spring-loaded for positive lock in either the ON or OFF position. To activate the assembly, the parachutist pulls the control switch outward to clear the OFF position, moves it to ON, and releases it so that it locks into the notch, The assembly may be turned off in the same manner.

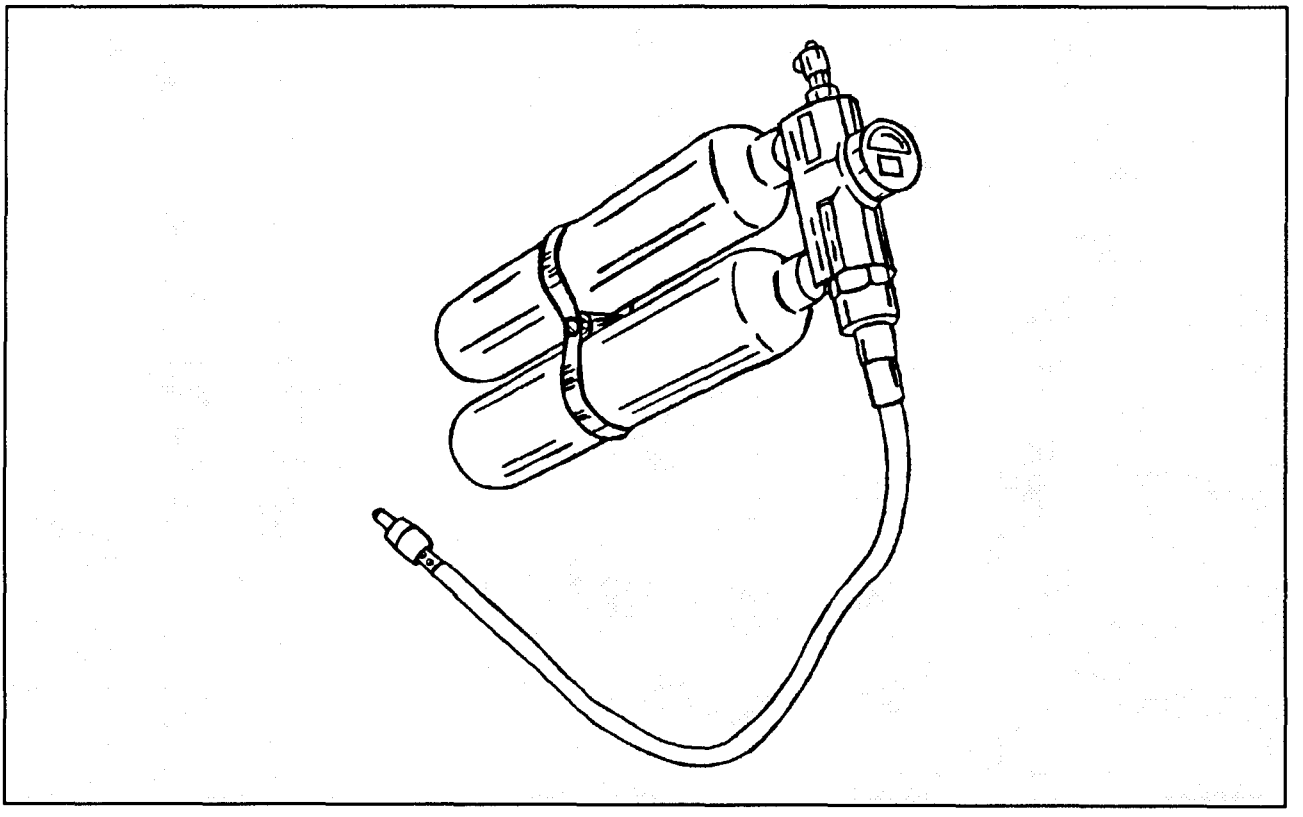


Figure A-7. Oxygen bottle assembly.

WARNING

To prevent moisture and contaminants from entering the system, the parachutist ensures the ON/OFF switch on a double-bottle oxygen assembly is in the OFF position when the assembly is not in use.

The valve-to-connector hose assembly consists of a length of noncollapsible high-pressure hose with a bayonet connector that attaches the hose to the CRU 60/P oxygen connector mounted on the parachute main lift web. The parachutist clamps the other end of the hose to the manifold outlet.

The refill valve with dust cover is on one end of the manifold and permits servicing (filling) the cylinders.

Whenever issued a bailout bottle, the parachutist ensures that the—

- Bayonet connector is spring loaded.
- Rubber hose is free of cuts or deterioration.
- ON/OFF control is operational and in the OFF position.
- Gauge reads between 1,800 and 2,200 psi.

WARNING

Any deficiency is cause for replacement of the bottle.

Double-bottle oxygen cylinders are installed in a pocket attached to the chest reserve parachute packtray (Figure A-8). Normally they are already installed when the reserve parachute is issued. Should the parachutist have to do it himself, he first checks that the pressure gauge indicates between 1,800 and 2,200 psi. If the pressure is below 1,800 psi, he replaces the cylinders. If the cylinder assembly shows a pressure over 2,200 psi, he activates the cylinder and "bleeds" the pressure down to 2,2oo psi.

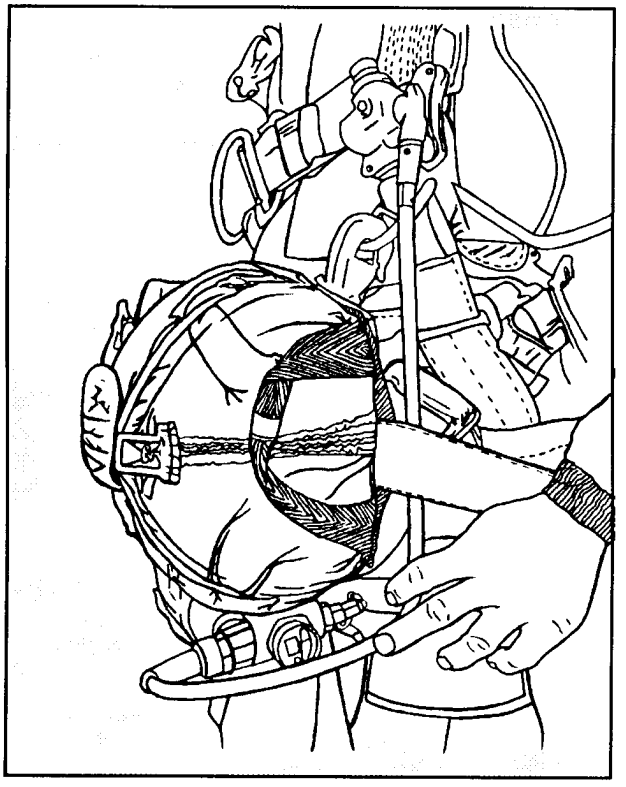


Figure A-8. Double-bottle oxygen cylinder installed.

The parachutist inserts the lower end of the oxygen cylinder assembly into the pocket and passes the long end of the closing flap over the manifold, with the pressure gauge extending through the slot in the flap. He passes the lower side closing flap up over the side of the cylinder. He secures the end closing flap with the hook and pile (Velcro) fastener. He brings the other side closing flap tightly up over the cylinders and secures the three flaps together with the flap hook and pile fastener.

Emergency Procedures

Emergencies may occur at opening altitude when there is a complete malfunction of the parachute, a partial malfunction, or a minor deployment problem. Each of these emergencies and the emergency procedures used to correct the conditions are described in detail in the following paragraphs.

Complete Malfunction

A complete malfunction occurs when the canopy remains in the packtray after pulling the rip cord. If the parachutist has a complete malfunction, he does not waste valuable time trying to cut away the main canopy before activating the reserve. He

looks down at the reserve rip cord handle and pulls it with the right hand immediately. He does not waste time trying to assume a specific body position. He checks his canopy. If his main canopy should come out of the pack as a result of the opening shock of the reserve, he grasps the main canopy's risers and pulls the main canopy in as rapidly as possible, gathering it in his arms or between his legs. He prepares to land. He grasps the reserve's suspension lines with both hands and pulls himself upright, as in doing a pull-up, to assume a better landing position. He lands, executing a PLF.

Partial Malfunction

A partial malfunction occurs when the pack opens but the canopy does not fully or properly deploy. Because of its design, the MC-3 can have unusual malfunctions. Partial malfunctions may include streamers, semi-inversions, severe control line entanglements, and stabilizer hang-up. The procedures to correct partial malfunctions are the cutaway and the controlled method of reserve deployment.

A wad or canopy ball indicates a severe control line or other internal entanglement. A stabilizer hang-up occurs when a set of stabilizer panels do not fully deploy and results in rapid spinning and an increased rate of descent. In either case or if the parachutist has a major deployment problem, he must decide whether or not to execute a cutaway if he is in a rapid spin he cannot correct or if his rate of descent is more than it would be with a T-10 reserve.

After the parachutist checks his canopy and attempts, if feasible, to clear his malfunction, he checks his altimeter. He must decide to cut away or not to cut away no lower than 1,800 feet AGL.

Beeause the MC-3 is a sensitive and precision-type canopy, and because a serious malfunction creates a high degree of spinning and an increased rate of descent, the parachutist must cutaway above 2,000 feet AGL before activating the reserve parachute to avoid the chance of serious injury or death.

Minor Deployment Problems

If the parachutist has minor deployment problems, he does not activate his reserve parachute. He takes the corrective action described in each of the following situations.

Sleeve and/or Pilot Chute Through Modification, Control Line, or Turn Slot. Should the sleeve and/or pilot chute slip through a turn slot or loop around a control line, the parachutist compensates for the resulting canopy turn by pulling on the opposite control knob or line until the turn is corrected and the canopy flies straight.

Broken Control Line or Minor Control Line Entanglement. Should one of the control lines be broken or inoperable, the parachutist steers with the opposite control line and by pulling the rear riser on the same side as the broken line. This action will have essentially the same effect as pulling the control line, but will not be as positive.

Frontal Closure. Occasionally the front of the canopy skirt will tuck under the rear during deployment. Although this condition should clear itself in a second or two, the parachutist pulls down on one or both control knobs and the font will open.

Pilot Chute Hesitation. If the parachutist is in a nearly flat and stable body position, the airflow around him may be so uniform as to create a partial vacuum that prevents the pilot chute's inflation. If he pulls his rip cord and feels his pack open but does not experience opening shock within 2 seconds, he looks over his shoulder to see if he has a pilot chute hesitation. Generally, just turning to look will break the vacuum and remedy the hesitation. The parachutist also considers any other irregularity and initiates proper emergency procedures immediately.

Entanglement

A midair entanglement invoking high-performance canopies requires immediate action. First, the parachutist checks his altitude. If he is above 2,000 feet AGL, he tries to free himself from the other canopy. He may find, upon freeing himself, that his main canopy has lost some or all of its lift, and he may feel as if he is baek in free-fall. His canopy may require several hundred feet to reinflate. If it does not reinflate, he initiates the proper

partial malfunction procedures immediately. If he is unable to free himself from the other canopy and is above 2,000 feet, one parachutist must execute a cutaway. The parachutist whose canopy is giving the least support or is higher should execute a cutaway. Both parachutists make a decision and agree on their decision immediately. If still entangled and below 1,600 feet both parachutists must make an immediate joint decision as to which one will hand deploy his reserve by the controlled method of reserve deployment.

Cutaway Procedures

Figure A-9 shows cutaway procedures. The parachutist begins the cutaway no lower than 2,000 feet AGL. He does not waste valuable time with repetitious efforts to clear a malfunction. To initiate the cutaway, the parachutist—

- Throws away his main rip cord. If he cannot pull it through the cable housing, he tucks the handle securely behind his right main lift web to avoid the chance of the reserve or pilot chutes becoming entangled with the loose handle.
- Places his legs and feet together and opens both safety covers of the canopy release assemblies simultaneously with both hands (Figure A-9, Step A).
- Locks his thumbs in the lanyard cable releases (Figure A-9, Step B).
- Keeping his eyes on the reserve rip cord handle, pulls vigorously forward and downward on the cable releases (Figure A-9, Step C).
- Does not try to restabilize in free-fall. He protects the open canopy release assemblies by placing his left arm across the releases and immediately pulls the reserve rip cord vigorously with his right hand and throws it away.
- Checks his canopy and canopy drift.
- Prepares to land. He pulls himself upright by the suspension lines for a better landing attitude and lands, executing a good PLF.

WARNING

The parachutist does not try to deploy a reserve under a partial malfunction of the MC-3 without first trying a cutaway, unless he is below 2,000 feet AGL.

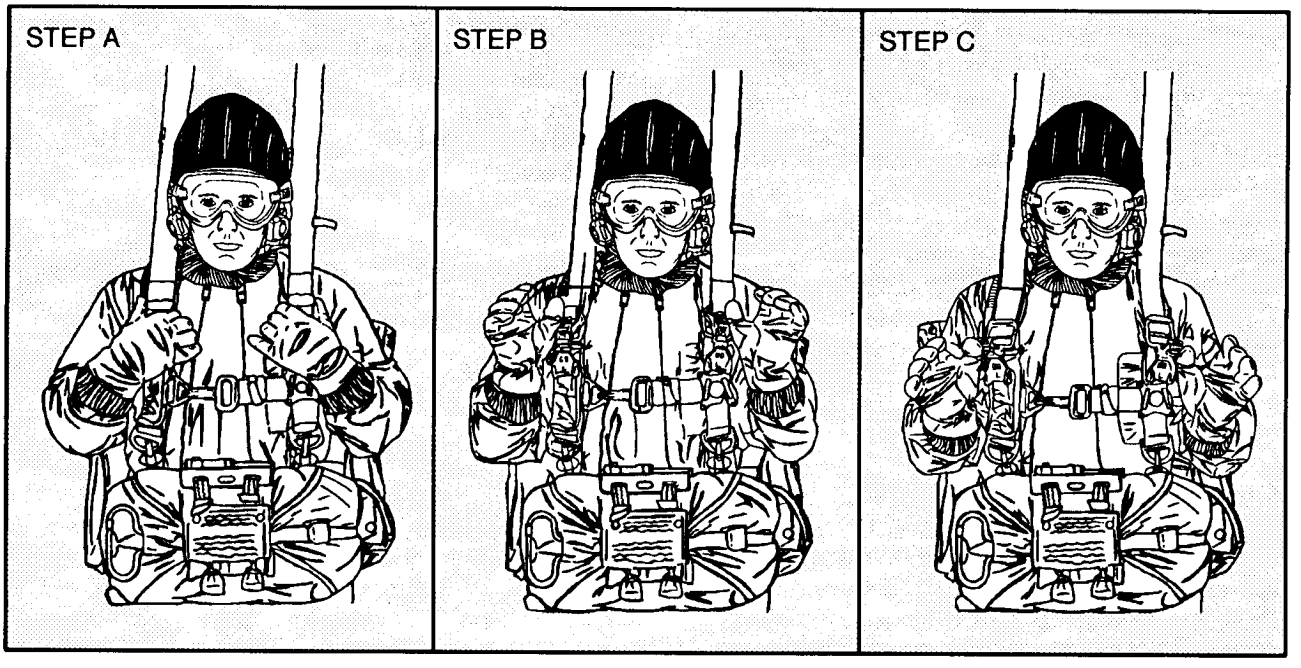


Figure A-9. Cutaway procedures.

Controlled Method of Reserve Deployment

The parachutist deals with a malfunction resulting in a high rate of descent without spins, or one encountered below 2,000 feet, using the controlled method of reserve deployment (Figure A-10). To perform these procedures, he—

- Places his left hand over the rip cord protector flap.
- Pulls the reserve rip cord and discards it.
- Assists the opening of the pack flaps and gains control of the reserve parachute.
- Lifts the entire reserve canopy overhead at full arm's length and throws it down and directly away from his body as vigorously as possible.
- If the main and reserve parachutes entangle, tries to inflate the reserve by pulling on the reserve suspension lines.

Parachute Recovery

There are two accepted methods of recovering the MC-3 parachute assembly. The preferred method requires the use of an aviator's kit bag; however, the parachutist may use the alternate method when a kit bag is not available. In either case, he attaches his rip cord handle to his harness chest strap before he removes the harness. This action prevents the loss of the rip cord handle. He removes the harness and, before allowing it to touch the ground, reinserts the arming pin into the FF-2 ARR to preclude misplacing the pin and introducing dirt or debris into the release.

Preferred Recovery Method

To recover the MC-3 parachute assembly using the preferred method, the parachutist stretches the entire assembly, from the pilot chute to and including the pack and harness, out on the ground. He moves to the pilot chute end of the canopy sleeve and pulls the sleeve retainer line through the sleeve until the bridle loop is even with the top of the sleeve. He fastens the bridle loop to a handy object or has someone hold it while he pulls the canopy sleeve down over the canopy. Taking care not to damage the canopy sleeve by trying to push too much material into the opening, he pulls the sleeve down to the point where no canopy material is exposed. He moves back to the bridle and drapes the pilot chute over his shoulder. He places his thumb through the bridle loop and makes S-folds with the canopy and suspension lines until he arrives at the risers. He places the folded canopy and suspension lines into the kit bag and the pilot chute on the ground next to the bag. He removes the FF-2 ARR from the harness, if required to do so. He places the packtray and harness assembly into the kit bag on top of the canopy and suspension lines with the comfort pad facing up to protect the FF-2 ARR. He places the pilot parachute into the kit bag and snaps the kit bag's fasteners. He does not use the slide fastener (zipper), since the teeth can damage any protruding fabric.

Alternate Recovery Method

To recover the MC-3 parachute using the alternate method, the parachutist follows the same steps as for the preferred method through drawing the sleeve over the canopy. Then he drapes the pilot parachute and the sleeved canopy over his shoulder and coils the suspension lines into one of his hands, making about a 2-foot coil. He folds the risers intn the open packtray and places the coiled suspension lines on top of them. He makes S-folds about the same length as the packtray with the sleeved canopy. He places these S-folds into the packtray and allows the pilot parachute to extend beyond the top of the tray. He closes the side closing flaps over the entire contents and secures the flaps in place with the pack opening bands.

Jumpmaster Personnel Inspection (MC-3)

Prior to each jump, the jumpmaster conducts a systematic inspection of each parachutist to ensure that all equipment is properly worn and attached. The jumpmaster uses the steps described in the following paragraphs when performing the personnel inspection for the MC-3 parachute.

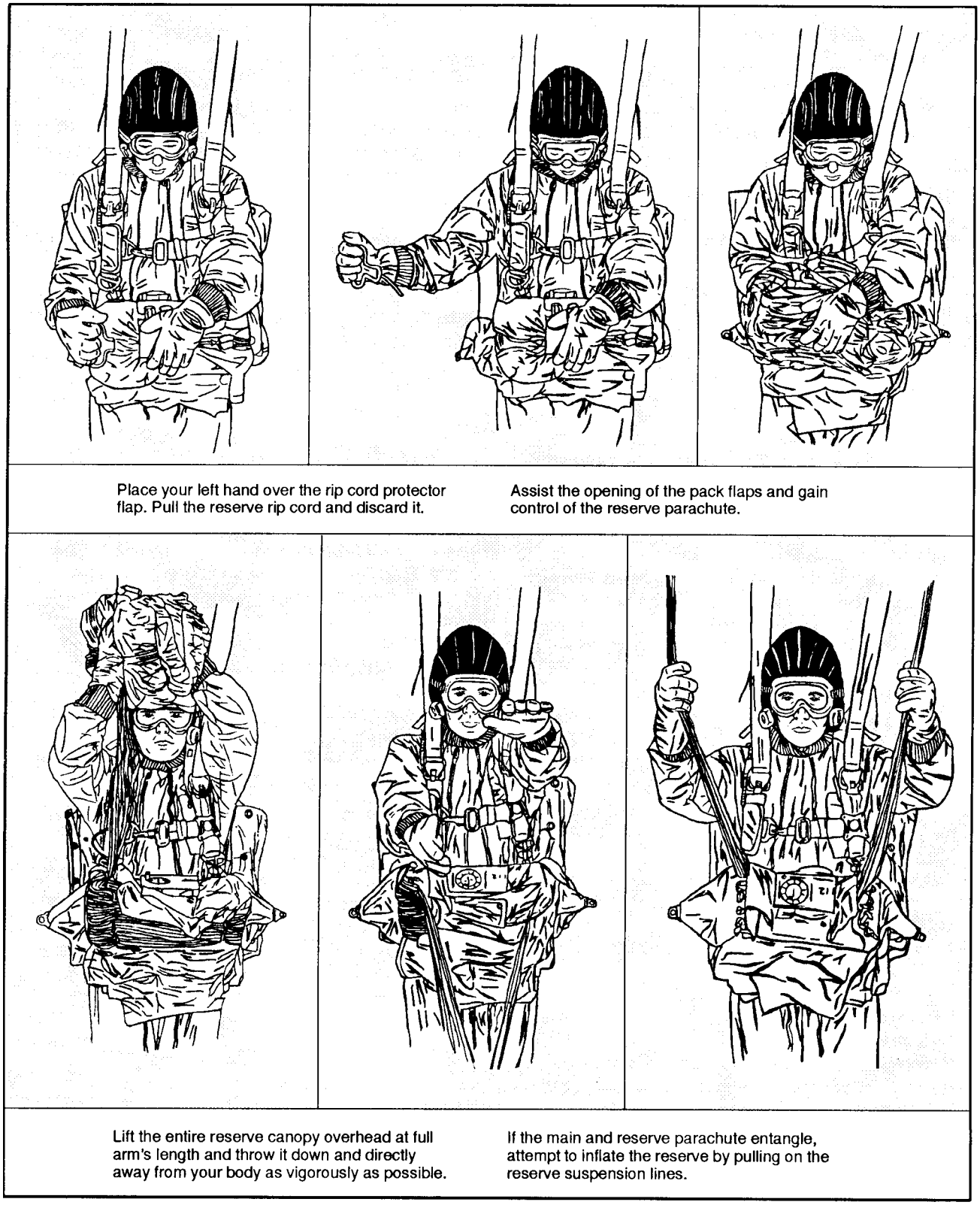


Figure A-10. Controlled method of reserve deployment.

With the parachutist facing him, the jumpmaster places both hands on each side of the parachutist's helmet. He then checks the—

- Retainer strap on the goggles to ensure its serviceability and attachment to the sides or rear of the helmet.
- Lens to ensure that it is the clear type and has no cracks or severe scratches to obscure the vision.
- Helmet's adjustable chin strap for serviceability and that its snaps are fictional.
- Oxygen mask's attachment to the helmet and ensures that it releases properly, allowing for rapid removal should there be an oxygen malfunction.
- Oxygen mask for proper fit and cleanliness. He ensures both inhalation valves point down and the exhalation valve is attached properly. He checks the oxygen hose's secure attachment to the oxygen mask with a clamp. He traces the hose to ensure it is not misrouted, it has no cracks, and the mask connector is properly inserted and seated in the connection block assembly mounting plate.
- Mounting plate's attachment to the left main lift web. He ensures the male connecting portion for the bailout bottle assembly hose is on the parachutist's left side. He ensures there is an O-ring on the male connecting portion of the oxygen mask-to-regulator comector. He checks the MC-1 oxygen cylinder assembly's bayonet connector for proper seating, ensuring it is in the "locked" position.

The jumpmaster moves to the risers. He places both hands, palms up, as close to the packtray as possible. He grasps the risers with his thumbs on top of the risers. Applying pressure upward and moving one hand at a time toward the canopy release assembly, he checks for twisted or misrouted risers. He ensures the fitting of the male-to-female portion of the canopy release assembly is secure.

With his right hand on the last item inspected, the jumpmaster places his left hand on the parachutist's right canopy release assembly. He grasps the canopy release cover and checks for spring tension. With his left hand on the canopy release cover, he inspects the left canopy release cover using the same procedures. He grasps the entire right canopy release assembly with his left hand, rotates it one-quarter turn outward, and visually inspects the seating of the male and female portions of the assembly. He repeats the same procedures with the parachutist's left canopy release assembly.

The jumpmaster grasps the rip cord handle with his left hand. He places his right hand firmly around the rip cord handle pocket and applies pressure to ensure its proper seating. He checks the tacking and routing of the rip cord cable housing with his left hand.

The jumpmaster inspects the chest strap's routing and attachment. He places his left hand on the short chest strap V-ring attached to the right main lift web. With his right hand, he traces the chest strap from the attaching point on the left main lift web to the quick-ejector snap fastener. He ensures the strap is attached to the V-ring of the short chest strap. He applies pressure on the release lever of the quick-ejector snap fastener to ensure it is locked.

The jumpmaster moves to the reserve parachute assembly and places his hands on each end of the reserve, palms facing toward the center of the reserve. Starting on the parachutist's right side, he ensures the right carrying handle is secure and a safety wire attached. Looking to the right he uses his right hand to check the left carrying handle to ensure it is secure.

Next thejumpmaster grasps the reserve assembly with both hands and raises it upward and away from the parachutist to relieve tension from the snap fastener guard. He places the index fingers of each hand on the outer edge of the snap fastener guard. He visually inspects to make sure the snap fasteners are attached to the harness assembly D-rings. He checks the snap fastener guards for spring tension.

With his left hand, he traces the reserve tie-down strap on the parachutist-k right side to ensure it is properly secured to the backpack retainer strap. With his right hand, he checks the left side reserve retainer strap for proper routing and secure attachment.

He moves his left hand (fingers closed and pahn facing toward the reserve) to the front of the reserve parachute. He inserts his fingers with a downward motion between the packtray and rip cord handle to ensure the pack opening band is not over the rip cord handle. He inserts the index finger of his left hand into the rip cord handle pocket to ensure no foreign material is present and the rip cord swage ball is intact. He inserts both index fingers under the rip cord protector flap and applies pressure away horn the container to release the snap fasteners.

Starting on the parachutist's right side of the rip cord cable, he visually and with his left hand ensures the right end flap's grommet is on top of the pack-releasing cone. He checks the first and second pins in sequence to ensure they are not bent, are filly seated, and the holes of the pack-releasing cones are free of foreign matter. He checks the left end flap's grommet to ensure it is on top of the pack-releasing cone. He secures the flap back in the closed position. He checks the proper routing and attachment of the pack opening bands. He grasps the pull tab of the right end pack opening band with his left hand and applies pressure to the pull tab to ensure it is attached. He grasps the lefl pull tab with his right hand and checks it in the same manner. He moves both hands to the bottom pull tabs and checks them one at a time.

The pack opening bands on the bottom of the reserve packtray secure the oxygen cylinder bag. The jumpmaster checks the proper routing of the pack opening bands. He opens the bag flap with his right hand and checks the oxygen cylinder gauge for an 1,800 to 2,200 psi reading. He traces and inspects the hose from its connection on the bailout bottle assembly to its attachment on the connection. He moves both hands to the top of the reserve and ensures the routing of both tip pack opening bands secure the altimeter mount. He pulls on the tabs to ensure they are secure.

Next, the jumpmaster checks the altimeter for proper setting, adjustment operation, and attachment to the altimeter mount.

The jumpmaster raises the reserve and instructs the parachutist to "hold the reserve and squat."

The jumpmaster places both hands on the leg straps as far back toward the saddle as possible. With his fingers facing down, he traces the leg straps back toward the V-ring. He ensures there are no twists or misrouting and that the quick-ejector snap fastener is properly locked. He always ensures the kit bag is under both leg straps and that one leg strap, either left or right, passes through at least one of its carrying handles.

The jumpmaster moves to the parachutist's left side and starts at the top. He ensures that the weapon, if carried, is slung over the parachutist% left shoulder, muzzle down and pistol grip to the rear. He ensures the weapon rides as low as possible with its butt as close to shoulder level as possible. He ensures the sling is routed over the left shoulder and under the left main lift web. He checks the chest strap's routing through the sling. The reserve restraint strap should go over the sling and upper handguard and be secured to the backstrap V-ring.

The jumpmaster moves to the ARR. He ensures the arming pin is properly inserted into the body of the ARR. He visually inspects the reset indicator to check for proper alignment of the white reset indicators. He checks for the correct millibar setting through the access hole on the side of the pocket. He traces the power cable housing to the mounting plate and ensures its proper attachment. He inspects the power cable and withdrawal hook for proper routing and attachment to the top locking pin.

The jumpmaster then moves to the rear of the parachutist where he checks the goggles' retainer strap on the helmet for proper attachment.

The jumpmaster places both hands, fingers up, under the risers as close to the canopy release assembly as possible. He traces their routing, one riser at a time, back toward the packtray assembly, to ensure proper mounting and that they do not contain twists. He inspects the rip cord housing cable to ensure it is properly secured to the rip cord housing clamp. He raises the rip cord protector flap and inspects the rip cord cable for hys and ensures there are no bent pins. Starting from the top pin, he physically checks the routing and the pins, then closes and snaps the rip cord protector flap. He inspects the pack opening bands on each

side, one at a time, to ensure they are secured to the packtray.

Next, the jumpmaster checks the left side packtray slide fastener to ensure that it is secured. He inspects the right packtray slide fastener in the same manner. He instructs the parachutist to lean forward so that he can check the saddle for twists.

After completing the JMPI, the jumpmaster has the parachutists don any equipment with which they will jump. He inspects the equipment container starting from the front of the parachutist

The jumpmaster sees the equipment lowering line between the parachutist's legs. He checks its attachment to the equipment container harness. He checks the container harness leg straps for routing through the keepers and ensures they are not twisted. He continues checking the routing up to the quick-release adjustable buckle attached to the harness D-ring. He ensures a safety wire is inserted in the snap hook on the right side.

Then the jumpmaster moves to the right side of the parachutist and checks the attachment of the quick-release snap fastener on the lowering line to the equipment ring on the right side of the main lift web. He moves to the rear of the parachutist and checks the proper stowing and routing of the lowering line on the equipment container. He ensures all loose straps are properly stowed.