THE UNITED STATES ARMY
ADVANCED AIRBORNE SCHOOL
82D AIRBORNE DIVISION

JUMPMASTER
STUDENT STUDY GUIDE

JULY 2004

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***** THE SKY MORE THAN THE SEA, IS TERRIBLY UNFORGIVING OF EVEN THE SLIGHTEST MISTAKE. *****

To check the status of soldiers attending the course, dates for upcoming AMO Courses, Jumpmaster Courses, Jumpmaster Refresher Courses, or BAR go to www.Bragg.army.mil\AAS

E-mail questions, comments, or concerns to the Instructors at: 82djumpmtrinst.Bragg.army.mil

The United States Army Advanced Airborne School is located at building A1917 on the corner of Taylor St and Spooner St for the Jumpmaster Course, Jumpmaster Refresher Course, and BAR. The phone numbers are 396-9023, 6581, or 2420. The AMO Course is located on Pope Air Force Base building W1335. Utilizing the Reilly Rd. gate turn left on Hurst Dr. then turn right when you see the Major General Strom Thurmond Strategic Deployment Facility. The phone numbers are 432-5601 or 5605.

SUBJECT: JUMPMASTER COURSE TEST STANDARDS

1. **GENERAL**: The course examinations are designed to assess your comprehension of Jumpmaster doctrine and your ability to apply the principles taught to you through classroom instruction and practical exercise. This course will require strict attention to detail and additional hours of home study. The standards of the Jumpmaster course are high, as they should be, for being a Jumpmaster is a business of life and death. Only through hard work, extra effort and commitment to excellence will you master the course material. The training objectives listed below will aid you in your preparation towards successful completion of this course.

2. **TESTED AREAS**:

A. **NOMENCLATURE EXAMINATION**:

TASK – Correctly identify 18 of 25 items of nomenclature equipment.

CONDITIONS – In a classroom environment, given an answer sheet, pencil and a primary instructor.

STANDARD – Each student must be able to properly identify 18 of 25 random items of equipment, using proper nomenclature, to obtain a minimum score of 70%.

B. **PRE-JUMP EXAMINATION**:

TASK - Conduct pre-jump training.

CONDITIONS – In a controlled environment, given a pre-jump checklist and an instructor in a one - on - one situation.

STANDARD – In 30 minutes or less, each student must be able to give pre-jump training to an instructor by reciting the titles of the five points of performance, verbatim, recovery and turn-in of equipment, malfunctions, activation of the reserve parachute, towed parachutist procedures, entanglements, emergency landings, B-7 life preserver, night jumps, AWADS jumps and parachute landing falls without failing to discuss any major area. Students must also demonstrate all slips and turns and the two methods of recovery from the drag to obtain a minimum score of 70%.

C. **WRITTEN EXAMINATION**:

TASK – Obtain a 70% on the written examination.

CONDITIONS – In a classroom environment, given an answer sheet, a pencil and a test booklet.

STANDARD – Each student must be able to correctly answer 70% of the questions pertaining to all phases of an airborne operation and duties conducted by select personnel that support the mission.

D. **PRACTICAL WORK IN THE AIRCRAFT**:

TASK – Conduct practical work in the aircraft.

CONDITIONS – In a controlled environment, given an S-3 air briefing, sustained airborne training, student station time, an Air Force aircraft and a pre-designated drop zone.

STANDARD – Each student must perform all phases of duties of the Jumpmaster, to include location of reference points and safely conduct an Airborne Operation in accordance with the 82D Airborne Division ASOP. Students must obtain a minimum score of 70%.

E. **JMPI EXAMINATION**:

TASK – Conduct JMPI on 3 jumpers.

CONDITIONS – In a controlled environment, given 3 jumpers wearing the following equipment: (Depending on the exam the jumpers will be placed in a different order.)

1) T-10D Main Parachute and the Modified Improved Reserve Parachute System and a Ballistic Helmet.
2) T-10D Main Parachute and the Modified Improved Reserve Parachute System and a Ballistic Helmet.
3) T-10D Main Parachute and the Modified Improved Reserve Parachute System, Ballistic Helmet, M1950 Weapons Case, ALICE pack rigged with a Harness Single Point Release and a Hook Pile Tape Lowering Line, rigged to be jumped and lowered as a tandem load.

STANDARD – Each student must inspect all 3 jumpers utilizing the proper sequence, identifying and calling off any deficiencies they may find, or create, using proper nomenclature, within 5 minutes to obtain a minimum score of 70%.

SUBJECT: Sustained Airborne Training

REFERENCE: 82D ABN DIV ASOP, Edition VI, Chapter 13

1. **The Five Points of Performance**:

a. The first thing I'll discuss are the five points of performance. The first point of performance is "**PROPER EXIT, CHECK BODY POSITION, AND COUNT**." Keep your eyes open, chin on your chest, elbows tight into your sides, hands over the ends of your reserve parachute with your fingers spread. Bend slightly forward at the waist. Keep your feet and knees together with your knees locked to the rear. Count to four thousand. At the end of your four thousand count, if you feel no opening shock, immediately activate your reserve parachute.

b. The second point of performance is "**CHECK CANOPY AND IMMEDIATELY GAIN CANOPY CONTROL**." To gain canopy control of the MC1-1D parachute, you will reach up and secure both toggles and pull them down to eye level, simultaneously making a 360-degree check of your canopy. To gain canopy control of the T-10D parachute, reach up and secure all four risers and simultaneously make a 360 degree check of your canopy.

c. You will then go into the third point of performance, which is, "**KEEP A SHARP LOOKOUT FOR ALL JUMPERS DURING YOUR ENTIRE DESCENT**." Remember the three rules of the air: **Always look before you turn, always turn right to avoid collisions, and the lower jumper has the right of way**. Avoid all jumpers all the way to the ground. Maintain at least a fifty-foot separation. At the end of your third point of performance, release all appropriate equipment tie downs.

d. The fourth point of performance is "**SLIP/TURN INTO THE WIND AND PREPARE TO LAND**." At approximately 200 feet above ground level you will look below you to ensure there are no fellow jumpers and then lower your equipment. When jumping the MC1-1D parachute, you will turn into the wind at approximately 200 feet above ground level. If the wind is blowing from your right to your left, you will pull down on your right toggle and lock your elbow. Once you are facing into the wind let up slowly to prevent oscillation. If the wind is blowing from your left to your right, you will pull down on your left toggle and lock your elbow. Once you are facing into the wind let up slowly to prevent oscillation. If the wind is blowing from your rear to your front, you will pull down on either toggle and lock your elbow. Once you are facing into the wind let up slowly to prevent oscillation. If the wind is blowing from your front to your rear, you will make minor corrections to remain facing into the wind. When jumping the T-10D parachute, you will slip into the wind at approximately 100 feet above ground level. If the wind is blowing from your left to your right, you will reach up high on your left risers and pull them down into your chest and hold them until you land. If the wind is blowing from your right to your left, you will reach up high on your right risers and pull them down into your chest and hold them until you land. If the wind is blowing from your rear to your front, you will reach up high on your rear risers and pull them down into your chest and hold them until you land. If the wind is blowing from your front to your rear, you will reach up high on your front risers and pull them down into your chest and hold them until you land. After you have slipped or turned into the wind, you will assume a prepare to land attitude by keeping your feet and knees together, knees slightly bent, elbows tight into your sides, chin on your chest and your eyes open.

e. The fifth point of performance is "**LAND**." Make a parachute-landing fall by hitting all five points of contact: balls of feet, calf, thigh, buttocks, and the push-up muscle. Never make a standing landing. Remain on the ground and activate one of the canopy release assemblies by using one of the **two methods of recovery from the drag**. They are the **"Hand to Shoulder Method"** and the **"Hand Assist Method."** The "Hand Assist Method" being the most preferred. With the thumb and index finger of one hand, pull out and down on the safety clip. Form a fist with the thumb exposed and then insert your thumb into the cable loop. Turn your head in the opposite direction. Then assisting with the other hand, pull out and down on the cable loop, simultaneously sounding off with "Riser." At this time you will place your weapon into operation and remove the parachute harness.

2. **Recovery and Turn-in of Equipment**. Once you are out of the parachute harness, remove all air items from the D-rings. Unsnap and unzip the aviator's kit bag and roll it two thirds of the way down. Place the parachute harness inside the aviator's kit bag, with the smooth side facing up, leaving the waistband exposed. Recover the riser you just released and place it under the parachute harness. Elongate the suspension lines and canopy, removing all debris. Once you reach the apex of the canopy, insert your thumb into the bridle loop and figure eight roll your canopy and suspension lines all the way to the aviator's kit bag. Place the canopy and suspension lines in the aviator's kit bag leaving 6 to 8 inches of canopy exposed, to include the bridle loop. Route the waistband through the bridle loop; then snap, do not zip, the aviator's kit bag. You will then secure all equipment, conduct a 360-degree check of your area, locate the nearest turn-in point, and move out to it.

3. **Malfunctions**. There are two types of malfunctions, a **complete malfunction** and a **partial malfunction**. A complete malfunction provides you no lift capability; therefore you must activate your reserve parachute. There are several types of partial malfunctions and actions for each. If you have a semi-inversion, squid, cigarette roll or a complete inversion with damage to the canopy or suspension lines, you must activate your reserve parachute. If you have a complete inversion with no damage to the canopy or suspension lines, do not activate your reserve parachute. If you have damaged suspension lines, blown section or gore, you must compare your rate of descent with your fellow jumpers. If you are falling faster than your fellow jumpers, you will activate your reserve parachute. If you are not falling faster, maintain what you have.

4. **Activation of the Reserve Parachute**.

a. When jumping the soft loop center pull MIRPS you will activate the SLCP MIRPS utilizing the pull drop method. Maintain a good tight body position. With either hand grasp the ripcord grip. Turn your head in either direction. Pull up on the ripcord grip and drop it. Your reserve parachute will active. Ensure neither hand is in front of the reserve parachute as it deploys.

b. To activate your reserve parachute for a malfunction, you will utilize the "**Pull Drop Method**." Maintain a good tight body position. Grasp the left carrying handle with your left hand; with your right hand, grasp the ripcord grip. Turn your head in either direction. Pull out on the ripcord grip and drop it. Your reserve parachute will activate.

c. In the event your Reserve Parachute does not activate, maintain a good tight body position, grasp the left carrying handle with your left hand, with your right hand sweep the Rip Cord Protector Flap up and away ensuring your hand does not stay in front of the Reserve Parachute.

5. **Towed Parachutist**.

a. If you become a towed parachutist, and you are being towed by your universal static line, and you are unconscious, you will be retrieved back inside the aircraft. If you are conscious, maintain a good tight body position. Place your right hand over the ripcord protector flap with your right forearm protecting the ripcord grip. When jumping the soft loop center pull MIRPS you will place either hand on the ripcord protector flap fingers pointed downward. An attempt will be made to retrieve you. If you cannot be retrieved, your universal static line will be cut. As soon as you feel yourself falling free from the aircraft, activate your reserve parachute utilizing the **Pull Drop Method**.

b. If you become a towed parachutist and you are being towed by any item of equipment, whether you are conscious or unconscious, that item of equipment will be cut immediately and your main parachute will deploy.

6. **Entanglements**. There are two types of entanglements: **High altitude and Mid altitude.**

a. If you see you are going to become entangled with another jumper, immediately slip or turn away. If you cannot slip or turn away, immediately assume a spread eagle position and try to bounce off the fellow jumper's canopy or suspension lines. If you do become entangled, snap into a modified position of attention. Place your right hand over the ripcord protector flap, with your right forearm protecting the ripcord grip. With your left hand, attempt to weave your way out of the suspension lines the same way you entered. When jumping the soft loop center pull MIRPS you will place either hand on the ripcord protector flap fingers pointed downward. With the opposite hand attempt to weave your way out of the suspension lines the same way you entered.

b. If you become hopelessly entangled, and you are jumping the T-10D main parachute, the higher jumper will use the hand under hand method to climb down to the lower jumper. Once they are even, both jumpers will grasp each other's main lift web and decide what type of parachute landing fall they will make. Both jumpers will fall in the same direction. You will not do a front parachute-landing fall. Both jumpers will observe both canopies. If one canopy collapses, both jumpers will ride the one good canopy to the ground. One T-10D parachute can sustain both jumpers. If both canopies collapse, both jumpers will immediately push or turn away, creating a clear unobstructed path, and then activate their reserve parachute utilizing the Pull **Drop Method.**

c. If you are jumping the MC1-1D parachute, and you become hopelessly entangled, both jumpers will stay where they are, ensure they have a clear unobstructed path, then immediately activate their reserve parachute utilizing the **Pull Drop Method.**

7. **Emergency Landings**.

There are three types of emergency landings: **Tree Landing, Wire Landing and Water Landing.** The first one I'll discuss is:

a. **Tree Landing.** If you see yourself drifting towards a body of trees, immediately try to slip or turn away. If you cannot slip or turn away and your equipment has already been lowered, look below you to ensure there are no fellow jumpers below you and jettison your equipment, making a mental note of where it lands. If your equipment has not already been lowered, keep it on you to provide additional protection as you pass through the trees. Assume a good prepare to land attitude by keeping your feet and knees together, knees slightly bent, chin on your chest, eyes open, and your hands in front of your face with your elbows high. Be prepared to do a PLF in the event you pass through the trees. If you get hung up in the trees and you do not feel you can safely lower yourself to the ground, stay where you are and wait for assistance. If you decide to

climb down, jettison all unneeded equipment. Ensure that you maintain your ballistic helmet. Activate the quick release in the waistband then activate the chest strap ejector snap. Place your left hand over the ripcord protector flap and apply slight pressure. Ensure you have a clear and unobstructed path then activate the reserve parachute and lower it to the ground. Undo the left connector snap and rotate the reserve parachute to the right. Seat yourself well into the saddle. Activate the leg strap ejector snaps and climb down the outside of the reserve parachute. When in doubt, stay where you are and wait for assistance.

b. **Wire Landing**. If you are drifting towards wires, immediately try to slip or turn away. If you cannot slip or turn away, look below you to ensure there are no fellow jumpers below you and jettison your equipment, making a mental note of where it lands. Assume a prepare to land attitude by keeping your feet and knees together, exaggerating the bend in your knees, eyes open, chin on chest, and arch your back. Place the palms of your hands high on the inside of the front set of risers. When you make contact with the wires, begin a hard rocking motion and attempt to pass through the wires. Be prepared to do a PLF in the event you pass through the wires. If you get hung up in the wires, do not attempt to lower yourself to the ground. Stay where you are and wait for assistance.

c. **Water Landing**. If you are drifting towards a body of water, immediately try to slip or turn away. If you cannot slip or turn away, look below you to ensure there are no fellow jumpers below you, and lower your equipment. You will also jettison your ballistic helmet, making a mental note of where it lands. Activate the quick release in your waistband, unsnap the left connector snap and rotate the reserve parachute to the right. Activate the chest strap ejector snap and immediately regain canopy control. Prior to entering the water, assume a prepare to land attitude by keeping your feet and knees together, knees slightly bent, eyes open, chin on your chest, and both hands on the leg strap ejector snaps. Upon making contact with the water, activate the leg strap ejector snaps, then throw your arms up and attempt to slide out of the parachute harness. Once in the water, you will swim upstream or upwind away from the canopy. Be prepared to do a PLF in the event the water is shallow.

8. **B-7 Life Preserver**. When jumping the B-7 life preserver, you will activate the B-7 life preserver while still in the air. You will not jettison any of your equipment. Look below you to ensure there are no fellow jumpers below you and lower your equipment. Assume a prepare to land attitude and be prepared to do a PLF in the event the water is shallow. Once in the water, activate one canopy release assembly by using one of the two methods of recovery from the drag previously described.

9. **Night Jump**. When jumping at night, always give your canopy an extra look. Maintain noise discipline and a good interval between fellow jumpers. Be prepared to do a PLF because you will hit the ground approximately 5 to 10 seconds before you think you will.

10. **AWADS**. When jumping under AWADS conditions, do not lower your equipment until you have cleared through the clouds. Do not slip or turn unless you have to do so to avoid a collision. If you have any kind of malfunction, immediately activate your reserve parachute because you cannot compare your rate of descent with that of fellow jumpers.

11. **Parachute Landing Falls**. At this time we will move to the parachute landing fall platform and execute one satisfactory parachute-landing fall in each of the four directions. Remember to expose the lower three points of contact for the modified parachute-landing fall.

SUBJECT: Duties of the Jumpmaster Team

REFERENCE: 82D ABN DIV ASOP, Edition VI, Chapters 4, 12, 13, 14, and 18.

A. **Jumpmaster Team Qualifications.**

1. Primary Jumpmaster:

   a. Graduate of the 82D ABN DIV Jumpmaster Course.
   b. Graduate of another recognized Jumpmaster Course and successful completion of the 82D ABN DIV Jumpmaster Refresher Course.
   c. SGT or above. If a SGT, must be advanced rated.

2. Assistant Jumpmaster:

   a. Same as the Primary Jumpmaster.
   b. CPL or above.
   c. Must safety once before performing Assistant Jumpmaster duties.

3. Safety:

   a. Graduate of the 82D ABN DIV Jumpmaster Course.
   b. Graduate of another recognized Jumpmaster Course and successful completion of the 82D ABN DIV Jumpmaster Refresher Course.
   c. CPL or above.

4. Currency:

   a. **New graduates** from the 82D ABN DIV Jumpmaster Course must safety once and assist once. To perform as the Primary Jumpmaster new graduates must safety twice and assist twice regardless of their rating. **Jumpmaster Refresher graduates** must safety once and assists once within 180 days to become current. To perform as the Primary Jumpmaster you must assists twice and safety twice regardless of their rating.

*****Duties of the Jumpmaster Team begin Immediately Upon Notification*****

B. **Jumpmaster Team Duties.**

Jumpmaster Duties (3 Areas)
1. Unit Area
2. Departure Airfield
3. During Flight

Safety Duties (4 Areas)
1. Unit Area
2. Departure Airfield
3. During Flight
4. After Flight

*****The Jumpmaster can delegate AUTHORITY but not RESPONSIBILITY*****

C. **Duties in the Unit Area**

1. S-3 Air Briefing:

   a. Must be attended by the entire JM Team and the Airborne Commander or their representative and any involved commanders.
   b. The JM Team should receive a JM Packet at the briefing. The JM Packet is a unit expansion of the air letter.
   c. All critical times, equipment, JM Team and all support taskings must be verified.
   d. Manifest personnel under the guidance of the Airborne Commander. The Airborne Commander is responsible for the Tactical Cross Load Plan.

2. JM Team Rehearsal: **(NLT ST – 3:15)**

   A rehearsal with the JM Team will be conducted prior to manifest call. This allows you to verify competence of everyone on the team and rehearse your actions inside the aircraft. (Discuss Towed Jumper, Red / Amber Light Exits, A – Series Containers, etc.)

3. Manifest Call: **(NLT ST – 3:00)**

   a. Jumpmaster
      1. Verify manifest
      2. Align personnel in chalk order (IAW Airborne Commander tactical crossload)
      3. Number jumpers for easy identification
      4. Mark the following personnel with colored tape on the upper right arm:

JM Team	Red
Key Leaders	Green
Current JMs	Yellow
Bump Personnel **(Will not Jump)**	White
Medics	Red Cross Brassard

   b. Safety:
      1. Inspect jumper's ballistic helmets / advanced combat helmets, I.D. cards, and I. D. tags
      2. Assist the JMs

4. Sustained Airborne Training/Prejump: **(NLT ST – 2:45)**

   a. Jumpmaster:

      1. Conduct sustained airborne training IAW the 82D ABN DIV ASOP, Chapter 13.
      2. Mock door training can be conducted in the unit area as long as proper training aids are available.

b. Safety:

1. Inspect all equipment for proper rigging IAW the 82D ABN DIV ASOP, Chapters 9 and 10.
2. Make 7 complete copies of the manifest.
3. Assist the JMs.

D. **Duties at the Departure Airfield**

1. Mock door training: **(NLT ST – 1:30)**

a. Jumpmaster:

1. Rehearse proper loading of aircraft.
2. Ensure ALL personnel are present to include safties and key leaders.
3. Discuss **SARJE**: **S**tatic line control, **A**ctivation of reserve parachute inside the aircraft, **R**ed / Amber light procedures, **J**ump refusal, **E**xiting procedures.
4. Discuss order of exit for multiple passes.
5. Ensure jumper adherence to airborne procedures. (Securing the appropriate adjustable leg strap(s), Passing of universal static lines, proper exit, etc.)
6. Rehearse exiting A-Series Containers / Special Items of equipment. (When applicable)

b. Safety:

1. Aggressively Enforce Standards.
2. Make on the spot corrections during mock door training.
3. Assist the JMs.

c. A member of the JM Team will report to the DACO, to verify information pertaining to the airborne operation, i.e. serious incident brief and sign roster, parking of aircraft, weather, policing of area, parachute issue, etc.

d. The seven copies of the manifest are distributed to the following personnel:

Primary Jumpmaster
NCOIC of Parachute issue
Unit File (S-3 Air)
A/DACG
DACO
Airforce guide
Loadmaster

The JM must ensure that 4 of the 7 copies of the manifest get turned into the A/DACG. The A/DACG will distribute these 4 copies of the manifest to the following personnel:
A/DACG
DACO
Airforce guide
Loadmaster

2. Parachute Issue: **(NLT ST – 1:15)**

   a. Jumpmasters will ensure they draw 2 Rip Cord Grip Inserts 1 for the Primary Jumpmaster and 1 for the Assistant Jumpmaster regardless of type of aircraft. (If exiting A – series containers the # 1 jumper will also have a Rip Cord Grip Insert.)

   b. Jumpmaster:

      1. Supervise issuing of the parachutes.

   c. Safety:

      1. Ensure adequate expendable items are available.
      2. At a minimum, draw 2 extra reserve parachutes per aircraft, and 1 aviator's kit bag, for every 15 jumpers, for deployment bags.
      3. Assist the JMs.

   d. Parachute Issue is conducted in one of the following 3 areas:

      Pax Shed Issue
      Ramp Side
      Plane Side

3. Donning of Parachutes: **(NLT ST – 1:00)**

   a. Jumpmaster:

      1. Supervise all rigging.
      2. Ensure that jumpers are utilizing the Buddy System IAW the 82D ABN DIV ASOP, Chapter 13. **(Do not pre-route the LCE)**
      3. Ensure that the Riggers are on site.

   b. Safety:

      1. The aircraft may be available for inspection at this time. If it is, conduct inspection of the aircraft IAW the 82D ABN DIV ASOP, Chapter 13 and/ or the GTA Card.
      2. Assist the JMs.

4. JMPI: **(NLT ST -: 50)**

   a. Jumpmaster:

      1. PJM should supervise all JMs conducting JMPI. The PJM should conduct JMPI only if necessary to meet Station time.
      2. Establish a minimum of 4 JMPI stations and 1 correction station.
      3. The JM at the correction station must be JM qualified, but does not have to be current.
      4. Ensure everyone is JMPI'd prior to Station time, to include the JMs.

   b. Safety:

      1. Assist in JMPI.
      2. Assist the JMs.

5. Load Time: **(NLT ST -: 15)**

   a. Jumpmaster:

      1. During loading, a member of the JM Team will be positioned at the ramp and observe every jumper to ensure their appropriate adjustable leg straps have been properly routed. Left door left leg free M1950 weapons case only, right door right leg free left leg only.
      2. Conduct JM/Pilot brief IAW the 82D ABN DIV ASOP, Chapter 13 and / or the GTA Card.
      3. Ensure loading is conducted properly, with the tactical cross load plan intact.
      4. Ensure the Loadmaster conducts a safety briefing discussing emergency procedures.

   b. Safety:

      1. This is the latest time the aircraft inspection can be conducted.
      3. Load and seat each jumper ensuring the appropriate adjustable leg straps are secured. Left door left leg free M1950 weapons case only, right door right leg free left leg only.
      4. Assist the JMs.

6. Station Time: **(Normally 35 minutes prior to take off)**

   a. Jumpmaster and Safety:

      1. All jumpers have been JMPI'd to include the JM Team.
      2. Jumpers seated and secured with seat belts.
      3. Jumpers sleeves rolled down.
      5. All jumpers are awake and alert.
      6. Remove all armbands, ballistic helmet / advanced combat helmet markings as required by the mission.

Note: The Jumpmaster can allow the jumpers to leave their ballistic helmets / advanced combat helmets off until 5 minutes prior to take off.

E. **Duties During Flight**

3. Take off:

   a. Jumpmaster and Safety:

      1. All jumpers must have their ballistic helmets / advanced combat helmets properly secured.
      2. All jumpers are awake and alert.
      3. Remain oriented at all times. (Receive the Air Route Diagram from the Air Force navigator during the Pilot / JM Briefing.)

3. 30 Minute Update: **(Tactical Operations Only)**

   a. Safety:

      1. Brief updated information for the mission on the Aircraft intercom system.
      2. Pass out the information board if the Aircraft intercom system is not working or as required.

3. 20 Minute Time Warning:

   a. Jumpmaster:

      1. Issue the 20 Minute Time Warning to the jumpers.
      2. Ensure everyone is awake and alert with ballistic helmets / advanced combat helmets secured.
      3. Supervise the Safety.

   b. Safety:

      1. Attach and inspect all special items of equipment.
      2. Don your BA-18 parachute prior to the 10 Minute Time Warning.
      3 Assist the JMs.
      4. If exiting A-series containers:
         Move the load near the paratroop door.
         Inspect the load.
         Remove the Load Data Card.
         Hook up the universal static line to the outboard anchor line cable.

NOTE: Key Leaders can remain on the CECOMPS communications headset until the 10min time warning; RTO's will remain on them until the 3 min slowdown.

4. 10 Minute Time Warning:

    a. Jumpmaster:

        1. Hook up to the Inboard anchor line cable.
        2. Issue jump commands.

    b. Safety:

        1. Assist the JM in hooking up if required.
        2. Move to the forward portion of the aircraft to ensure all jumpers comply with jump commands.
        3. Correct any unsafe conditions.

5. 3 Minute Slowdown: (Paratroop doors open at 6 minutes out for the C-17 Globemaster III Only.)

    a. Jumpmaster and Safety:

        1. Ensure all jumpers are either hooked up or seated.
        2. No unsafe conditions inside or outside the aircraft.
        3. JMs conduct proper jump platform and paratroop door check, conduct initial clear to the rear prior to 1 minute time warning.

6. 1 Minute Time Warning:

    a. Jumpmaster:

        1. Identify 1 Minute reference point.
        2. Issue "1 Minute" to the jumpers.

    b. Safety:

        1. Watching JM and jumpers for any unsafe conditions.
        2. Maintain control of JM's universal static line.

7. 30 Second Reference Point:

    a. Jumpmaster:

        1. Identify 30-second reference point.
        2. Conduct final clear to the rear.
        3. Issue and receive "Thumbs up" to opposite paratroop door JM.
        4. Issue "Stand-by" to the jumpers.
        5. Bisect the lead edge of the paratroop door and regain universal static line control; ensure you do not block the paratroop door.

NOTE: Insure that the "AMBER JUMP CAUTION LIGHT" is illuminated prior to issuing the command of "STAND BY". (C-17 Globemaster III only)

b. Safety:

1. Return the universal static line to the JM.
2. Bisect the trail edge of the paratroop door.

8. Green light:

a. Jumpmaster:

1. PJM's #1 jumper exits on the command of "Go".
2. AJM will issue the command of "Go" and tap the #1 jumper, ½ second after the #1 jumper on the PJM's paratroop door has exited the aircraft.
3. When exiting mixed parachutes, there will be a 2 second interval in between all MC1-1D main parachute there will also be a 2 second interval between the last MC1-1D and the first T10-D main parachutes.
4. The PJM / AJM will maintain control of the interval of jumpers to the paratroop door.
5. AJM exits after the last jumper on their pass, or the last jumper on that paratroop door and check the jump caution light before exiting.
6. PJM will exit after all jumpers, to include the AJM and check the jump caution light before exiting.

*****Jumpmaster Duties End Upon Exit from the Aircraft*****

b. Safety:

1. Control all universal static lines.
2. Watch for any unsafe conditions.
3. After the JM, or the last jumper of that pass exits, conduct a towed jumper check.
4. Issue "Thumbs up" to the Safety on the opposite paratroop door, then turn the paratroop door over to the Loadmaster.
5. Assist the Loadmaster in retrieving the deployment bags and recovery of the Aircraft.

F. **Duties After Flight:**

The Safety will perform the following duties:

a. Roll deployment bags and place in aviator's kit bag.
b. Recover all Army equipment and turn into the DACO or parent unit.
c. Police the aircraft and return the seats to their normal configuration.
d. Take all jump refusals, and non-jumpers, to the DACO.
e. Note any violations or unsafe acts that occurred and relay them to the DACO.
f. Report all alibi jumpers, short filled aircraft, activation of reserve parachutes and red / amber light exits, towed jumpers by Universal Static Line injury on a serious incident report to the DACO.

***** ALWAYS review the ASOP prior to assuming duties on the JM Team *****

SUBJECT: Nomenclature, Packing Procedures, and the Deployment Stages of the T-10D Main Parachute and the Modified Improved Reserve Parachute System

REFERENCE: 82D ABN DIV ASOP, Edition VI, Chapter 13 and Appendix E.

A. T-10D Main Parachute:

1. Description: Troop back, static line deployed.

    - Average rate of descent: Approximately 18 feet per second for a suspended weight of 250lbs.
    - Average deployment time: Approximately 3.2 seconds
    - Minimum safe drop speed: 50 knots
    - Maximum safe drop speed: 150 knots

2. Five Major Components:

    - Deployment Bag
    - Canopy Assembly
    - Riser Assembly
    - Harness Assembly
    - Pack Tray

B. Modified Improved Reserve Parachute System:

1. Description: Troop chest, emergency type parachute, which has been designed to be manually activated in the event the main parachute malfunctions.

2. Four Major Components:

    - Pilot Parachute with Deployment Assistance Device
    - Canopy Assembly
    - Pack Assembly
    - Rip Cord Assembly

C. Rip Cord Grip Insert:

1. Description: Constructed of hard plastic with a smooth side, a raised side, and slotted edges.

    - When exiting A-series containers ensure the number one jumper is Jumpmaster qualified, but not necessarily current, they also have a Rip Cord Grip Insert.

5 FOOT UNIVERSAL STATIC LINE EXTENSION

1. 5 FOOT UNIVERSAL STATIC LINE EXTENSION
2. COTTON BUFFER

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DATE OF MFR
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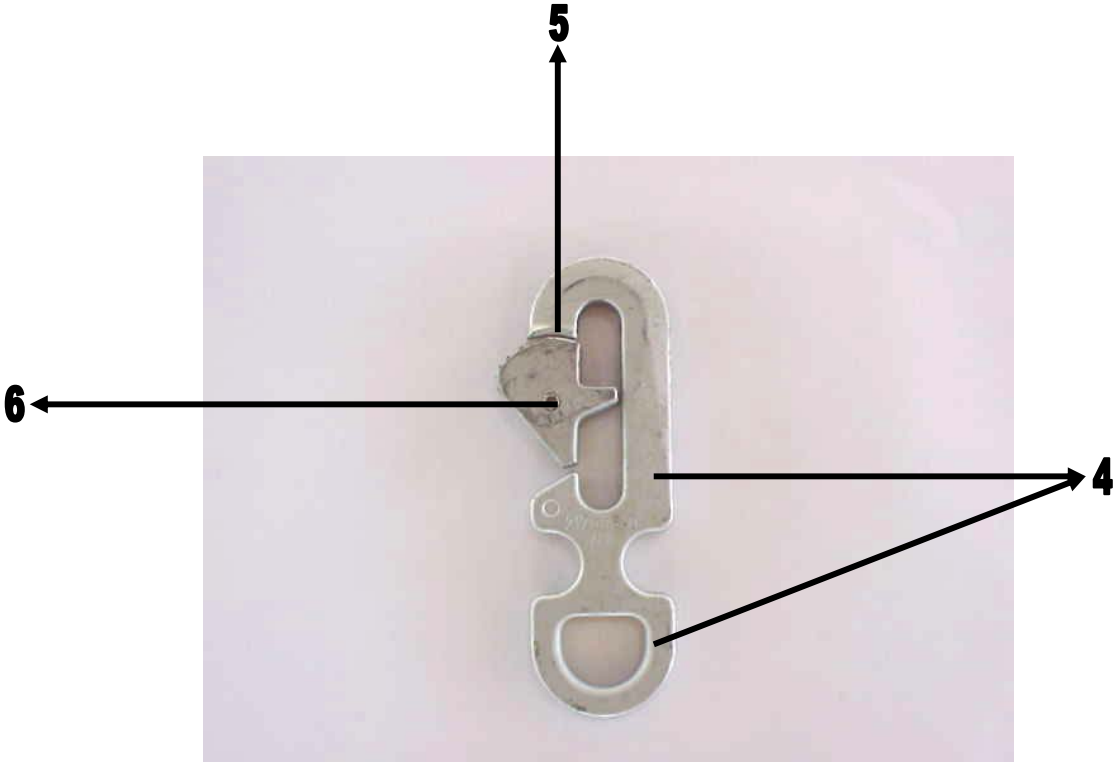
UNIVERSAL STATIC LINE

1. STATIC LINE SLEEVE
2. PACK OPENING LOOP
3. UNIVERSAL STATIC LINE
4. UNIVERSAL STATIC LINE SNAP HOOK
5. SPRING OPENING GATE
6. RIVET PIN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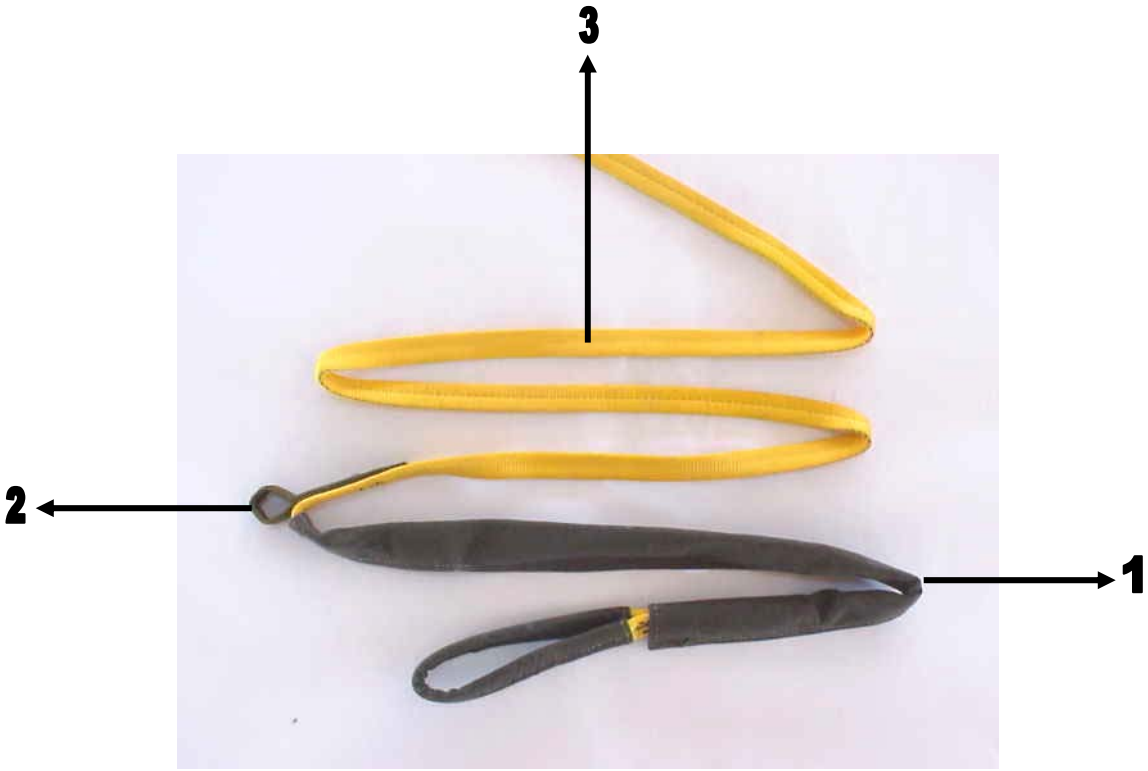
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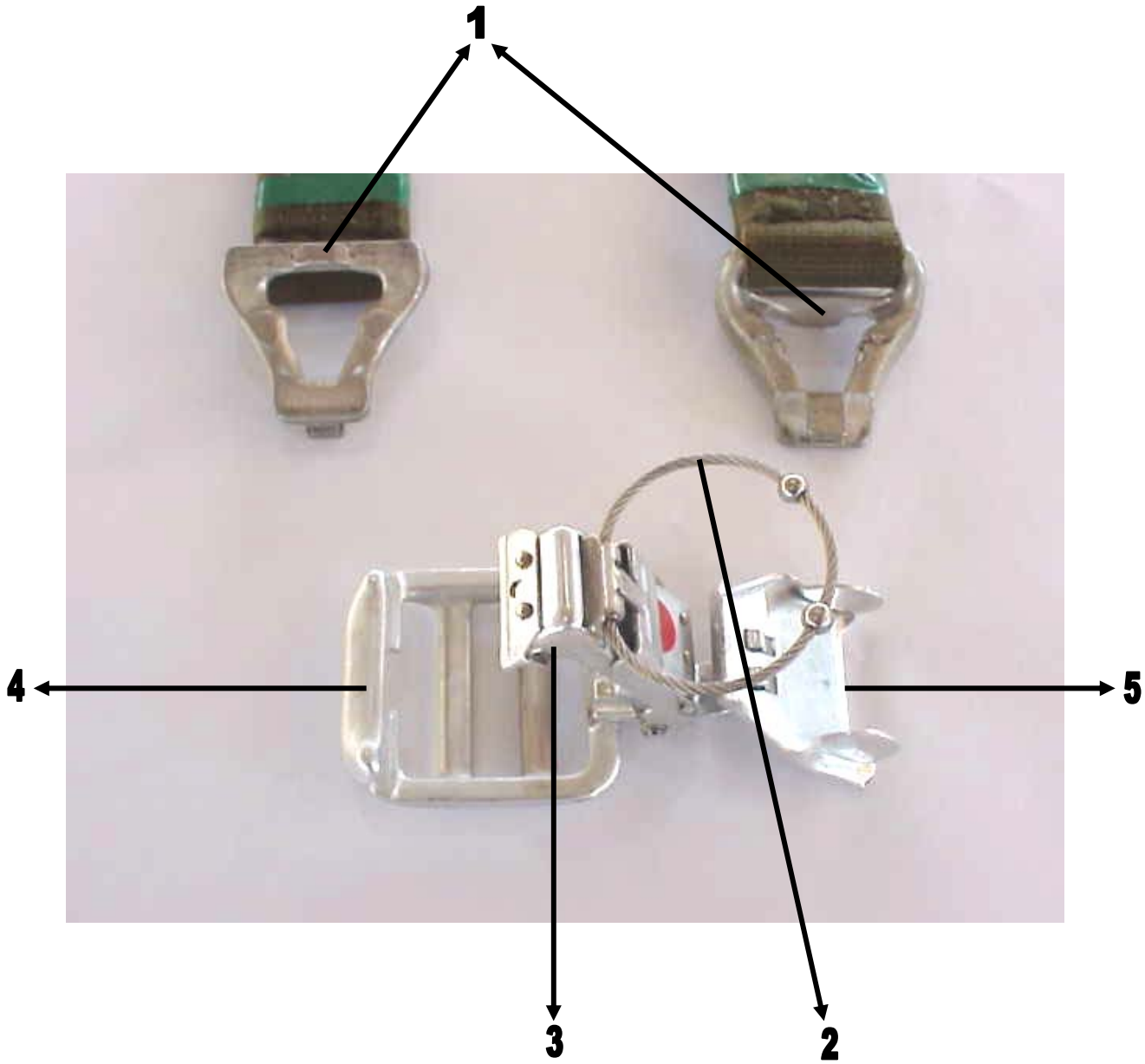
CANOPY RELEASE ASSEMBLY

1. MALE FITTING CANOPY RELEASE ASSEMBLY
2. CABLE LOOP
3. LATCH
4. FEMALE FITTING CANOPY RELEASE ASSEMBLY
5. SAFETY CLIP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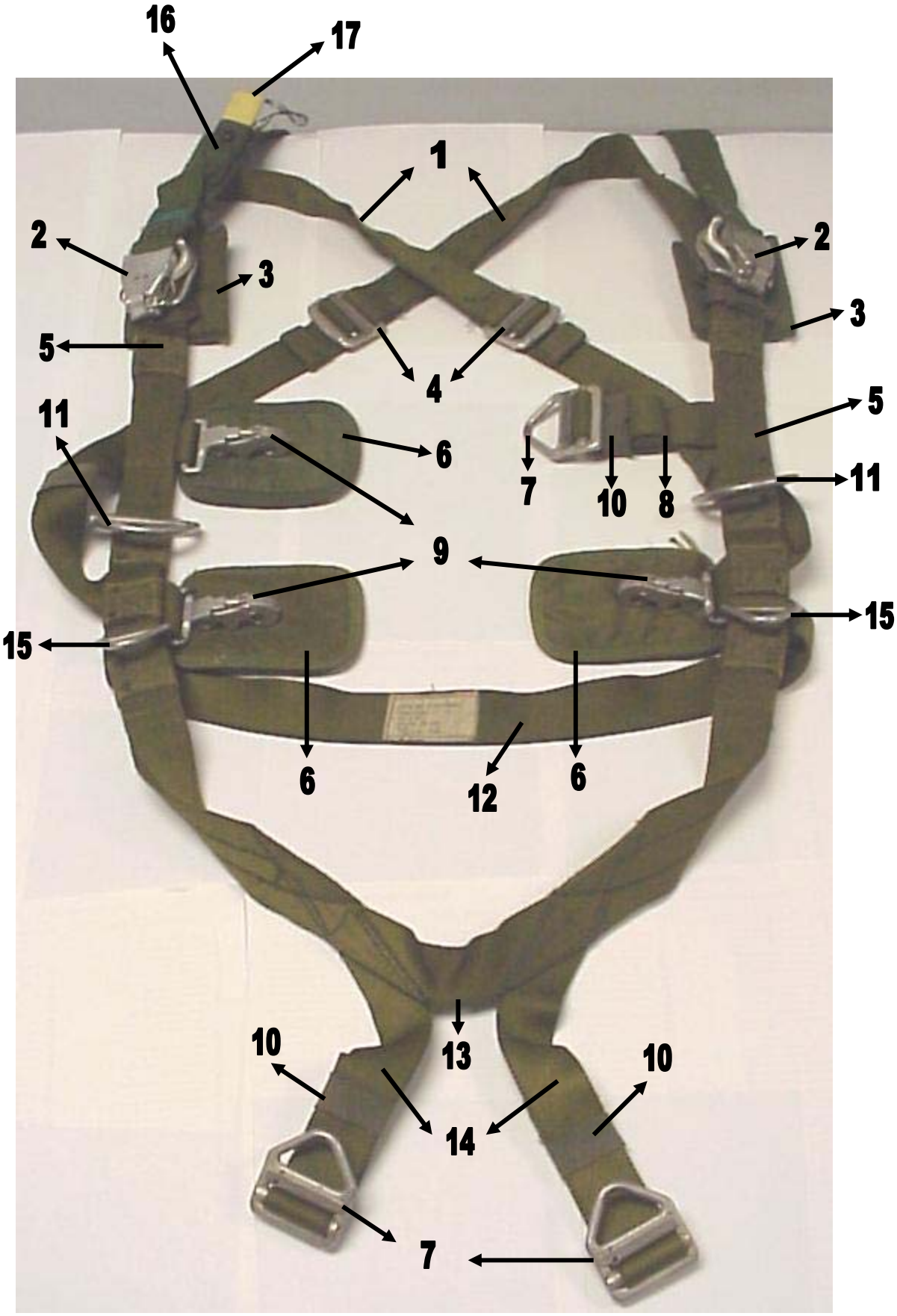
HARNESS ASSEMBLY

1. DIAGONAL BACKSTRAP
2. CANOPY RELEASE ASSEMBLY
3. CANOPY RELEASE ASSEMBLY PAD
4. BACKSTRAP ADJUSTER
5. MAIN LIFT WEB
6. EJECTOR SNAP PAD
7. QUICK FIT "V" RING
8. CHEST STRAP
9. EJECTOR SNAP
10. WEBBING RETAINER
11. D – RING
12. HORIZONTAL BACKSTRAP
13. SADDLE
14. LEG STRAP
15. TRIANGLE LINK
16. LOG RECORD STOW POCKET
17. DA FORM 3912 <u>OR</u> ARMY PARACHUTE LOG RECORD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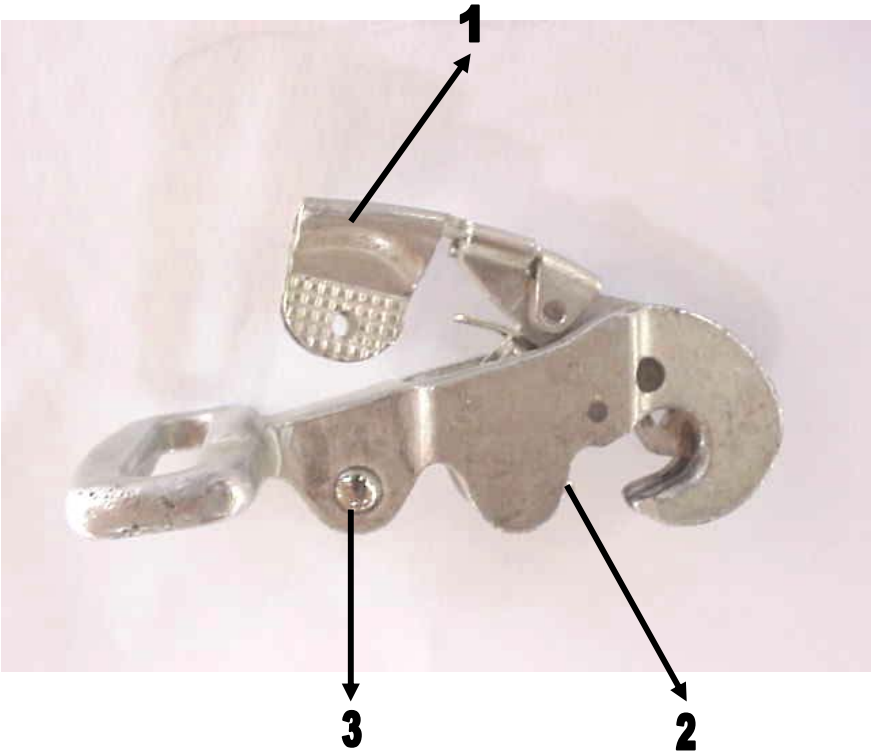
EJECTOR SNAP

1. ACTIVATING LEVER
2. OPENING GATE
3. BALL DETENT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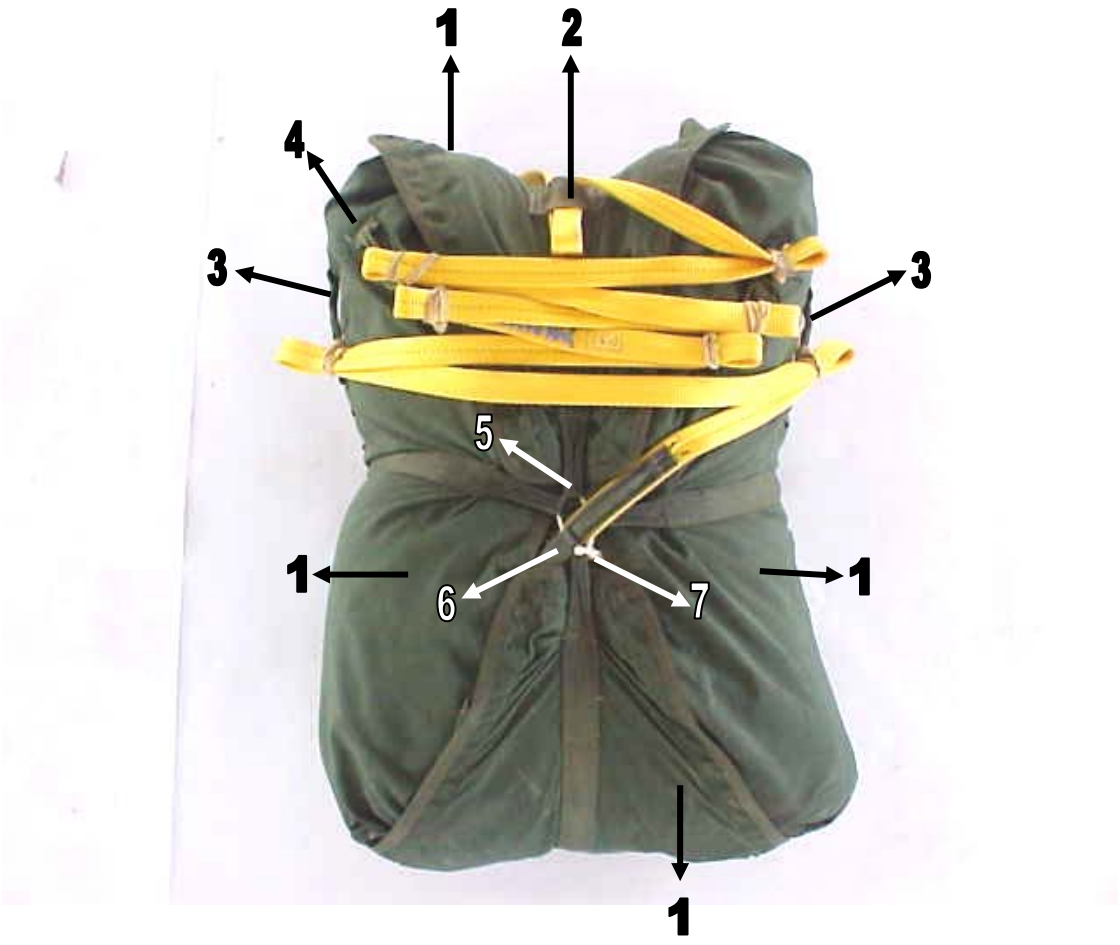
PACK TRAY

1. PACK CLOSING FLAP
2. STATIC LINE SLACK RETAINER
3. OUTER STATIC LINE STOW BAR
4. INNER STATIC LINE STOW BAR
5. PACK CLOSING LOOP
6. PACK OPENING LOOP
7. PACK CLOSING TIE
8. DIAGONAL BACKSTRAP RETAINER
9. PULL THE DOT FASTENER
10. DIAGONAL BACKSTRAP KEEPER
11. HORIZONTAL BACKSTRAP RETAINER
12. HORIZONTAL BACKSTRAP KEEPER
13. WAISTBAND
14. WAISTBAND ADJUSTER PANEL
15. METAL ADJUSTER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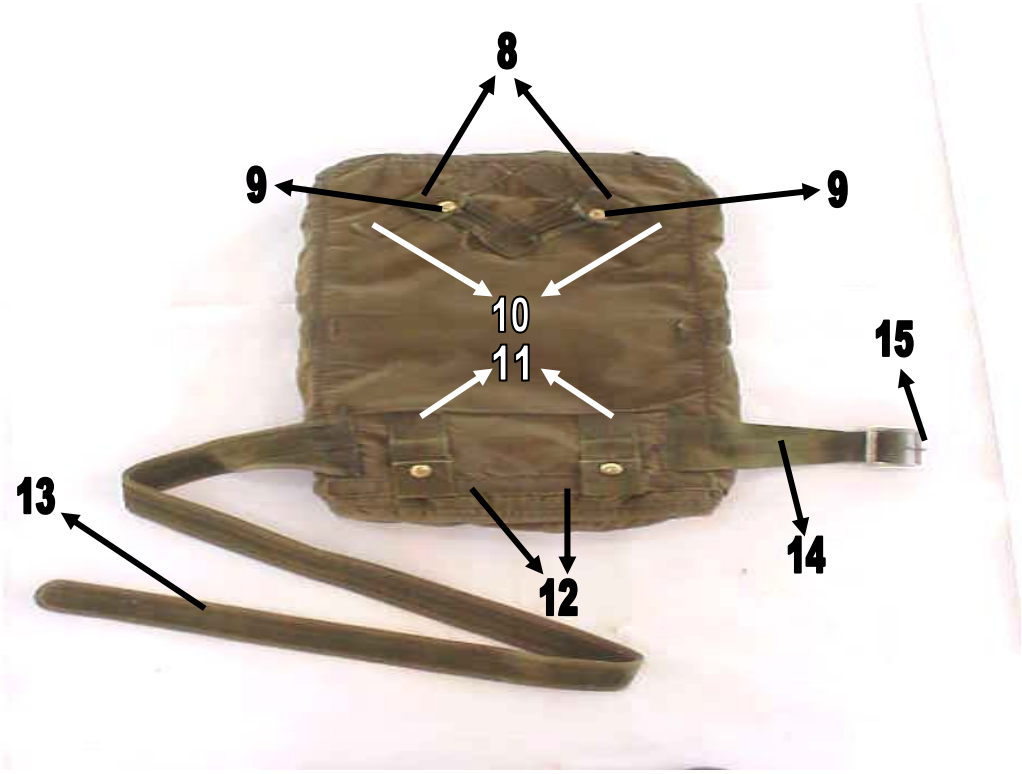
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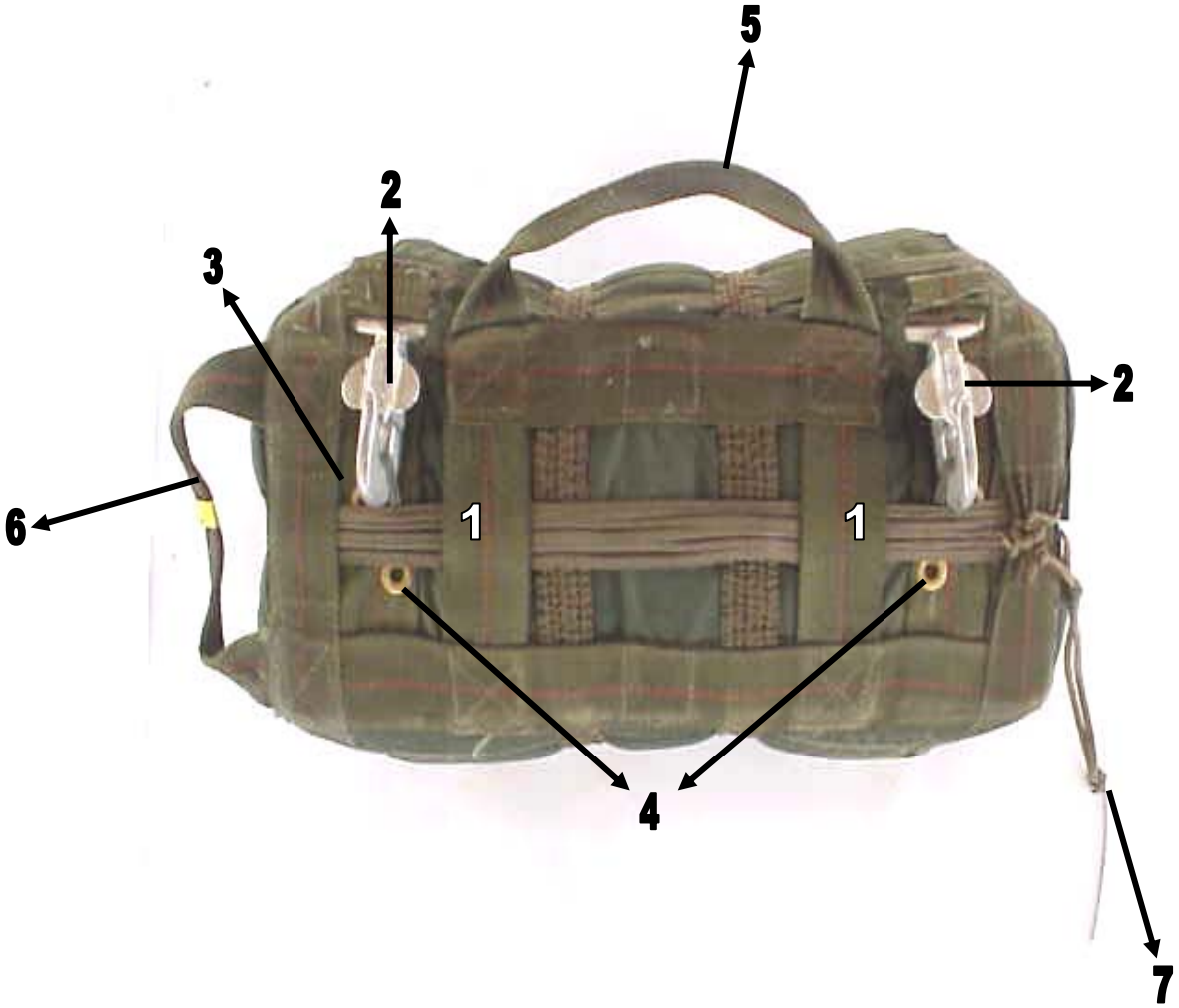
PACK ASSEMBLY (BACK)

1. WAISTBAND RETAINER
2. CONNECTOR SNAP
3. CONNECTOR SNAP TIE
4. CONNECTOR SNAP GROMMET
5. TOP CARRYING HANDLE
6. LEFT CARRYING HANDLE
7. SAFETY WIRE AND LANYARD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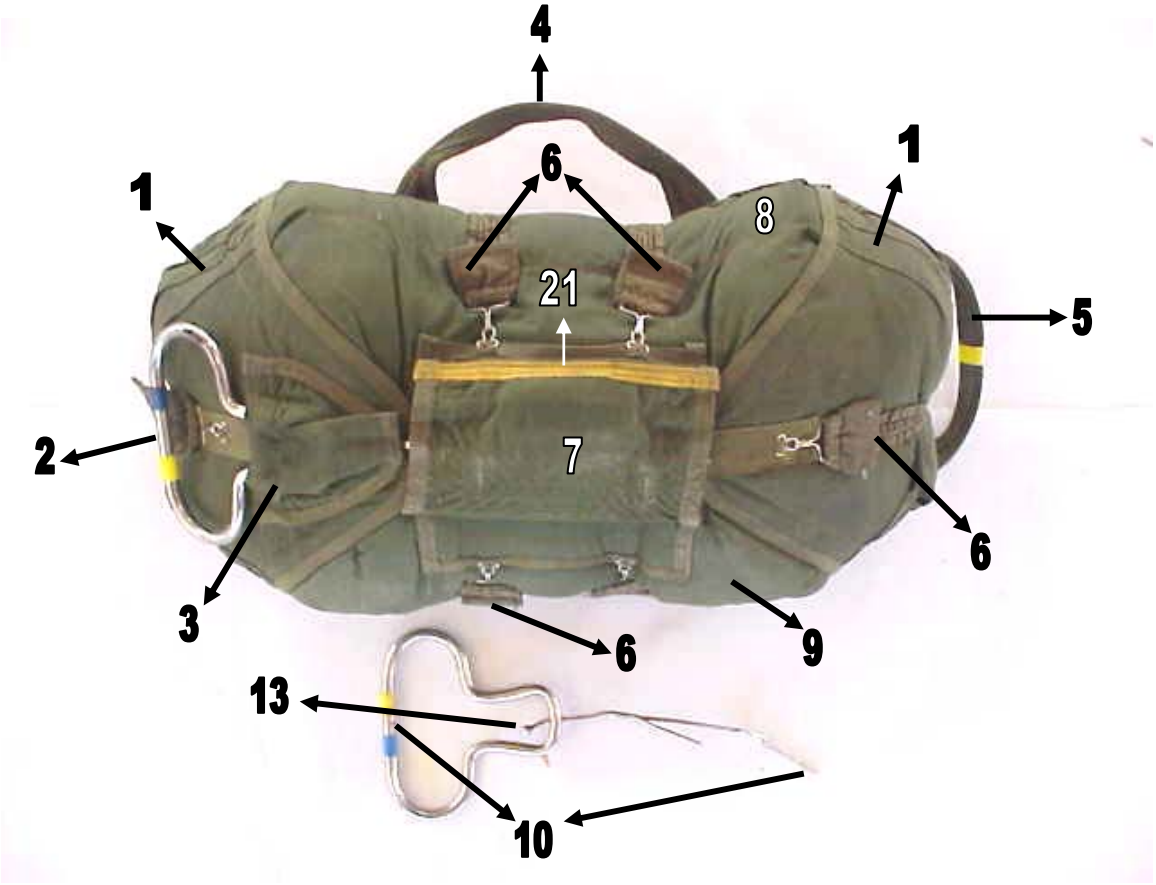
PACK ASSEMBLY (FRONT)

1. END PANEL
2. RIP CORD GRIP
3. RIP CORD GRIP STOW POCKET
4. TOP CARRYING HANDLE
5. LEFT CARRYING HANDLE
6. PACK OPENING SPRING BAND
7. RIP CORD PROTECTOR FLAP
8. TOP PANEL
9. BOTTOM PANEL
10. RIP CORD ASSEMBLY
11. EYELET
12. CABLE
13. STEEL SWAGED BALL
14. PACK FASTENER
15. HOOK TAPE
16. LOCKING PIN
17. PILE TAPE
18. GROMMET
19. CONE
20. HOOK
21. YELLOW BINDING TAPE
22. DA FORM 3912 OR ARMY PARACHUTE LOG RECORD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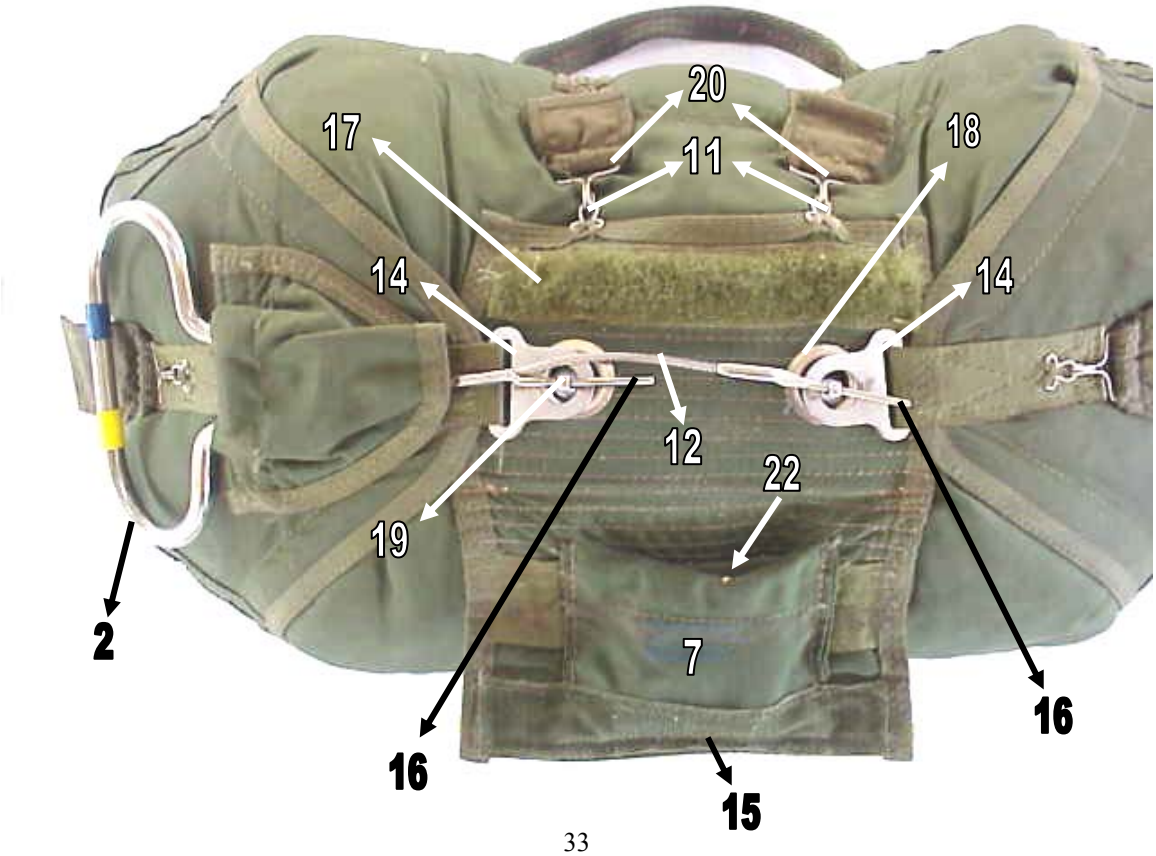
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SUBJECT: Fitting and Wearing of the T-10D Main Parachute, the Modified Improved Reserve Parachute System and Rigging of Individual Items of Combat Equipment and the Buddy System.

REFERENCE: 82D ABN DIV ASOP, Edition VI, Chapters 9, 13

A. Ballistic Helmet:

1. Helmet Shell
2. Suspension Band with Drawstring and Adjustable Tab
3. Headband
4. Chinstrap
5. Parachutist Retention Strap
6. Foam Impact Pad
7. Modified Suspension Band with Drawstring and Adjustable Tab
8. Modified Headband
9. Modified Foam Impact Pad

B. Advanced Combat Helmet:

1. Oval Pad
2. Crown Pad
3. Trapezoid Pad
4. Adjustable Buckle
5. Adjustable Strap
6. Modified Chinstrap Assembly
7. Chin Strap Fastener
8. Long Portion Chin Strap
9. Short Portion Chin Strap
10. Webbing Retainer
11. Nape Pad
12. Hook Disk

C. Aviator's Kit Bag:

1. Cotton or nylon duck material, 2 carrying handles, 2 zippers and 7 snaps.
2. Zippers and snaps serviceable.
3. No large rips or tears.
4. Smooth side towards the jumper with the exposed carrying handle to the jumpers left.

D. M1950 Weapons Case:

1. 10 inches wide. May be adjusted from 50 ½ to 33 ½ inches in length.
2. 2 safety features: Tab thong secured and ½ hitch in adjusting strap.
3. Quick Release Snap
4. Will always be rigged to be jumped and lowered.
5. The M1950 Weapons Case **MUST** be lowered when:
   a. It weighs 35 pounds or more.
   b. It contains a crew served weapon.
   c. It is a modified M1950 weapons case.
   d. The JM deems it too big or bulky to land with safely.

E. Harness Single Point Release:

1. Two 102 inch Equipment Retainer Straps joined by the Adjustable Cross Strap and the Release Handle Cross Strap.
2. Three sets of color-coded attaching loops.
3. Three Friction Adapters.
4. Two Adjustable Leg Straps (Male Portion Leg Strap Release Assembly / Female Portion Leg Strap Release Assembly).
5. Two Adjustable D – Ring Attaching Straps (Snap Hook / Triangle Link).

F. All Purpose Lightweight Individual Carrying Equipment (ALICE Pack):

1. Three outer accessory pouches.
2. Two shoulder carrying straps.
3. Two shoulder carrying strap loops. (Medium ALICE Pack only)

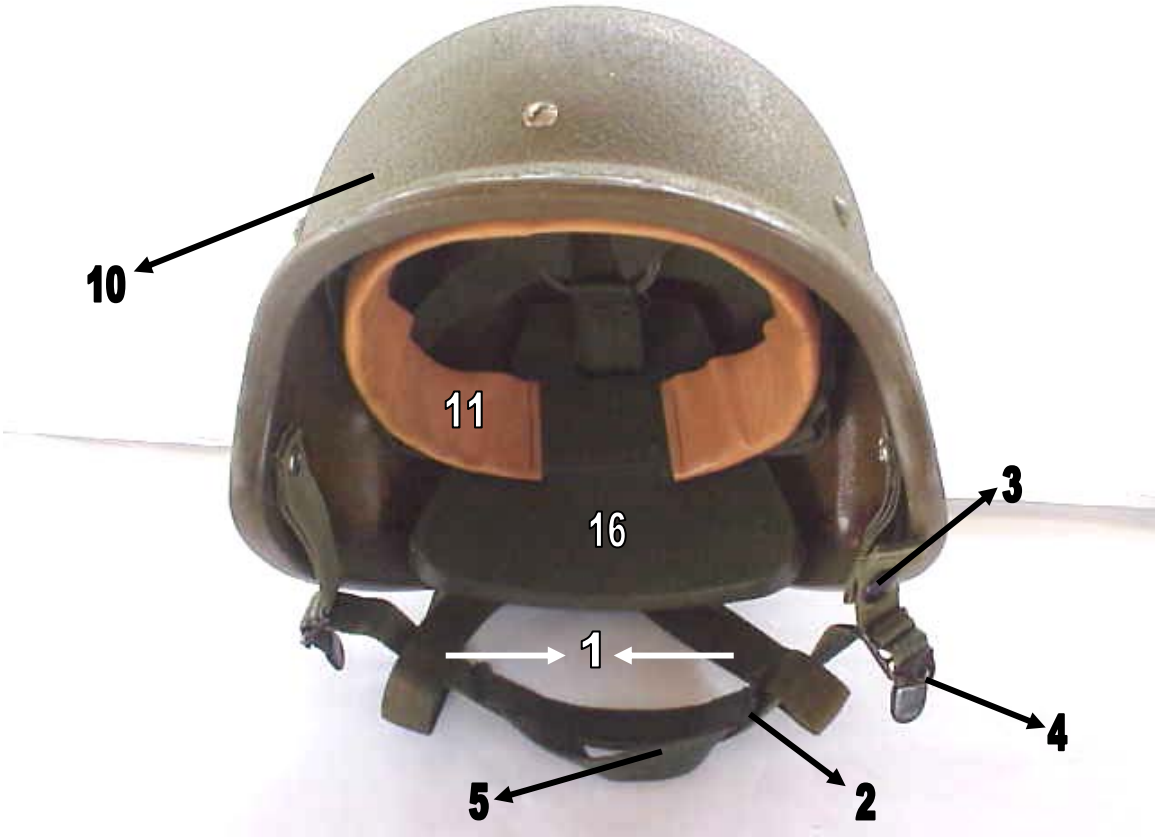
G. Modular Lightweight Load-Carrying Equipment:

1. Main compartment
2. Outer accessory pouch
3. Two side compartments
4. Sleeping bag carrier
5. MOLLE frame
6. Top carrying handle
7. Back pad
8. Butt pack

The ALICE Pack and MOLLE **MUST** always be rigged to be jumped and lowered.

BALLISTIC HELMET

1. PARACHUTIST RETENTION STRAP
2. LONG CONTINUOUS PORTION CHINSTRAP
3. PULL THE DOT FASTENER WITH TAB
4. ADJUSTING BUCKLE
5. SHORT SEWN PORTION CHINSTRAP
6. SUSPENSION BAND WITH DRAWSTRING AND ADJUSTABLE TAB
7. HEADBAND
8. ADJUSTING BUCKLE WITH TAPE
9. ATTACHING CLIP
10. BALLISTIC HELMET
11. MODIFIED HEADBAND
12. SECURING TABS
13. ADJUSTABLE TAB
14. MODIFIED SUSPENSION BAND WITH DRAWSTRING AND ADJUSTABLE TAB
15. FOAM IMPACT PAD
16. MODIFIED FOAM IMPACT PAD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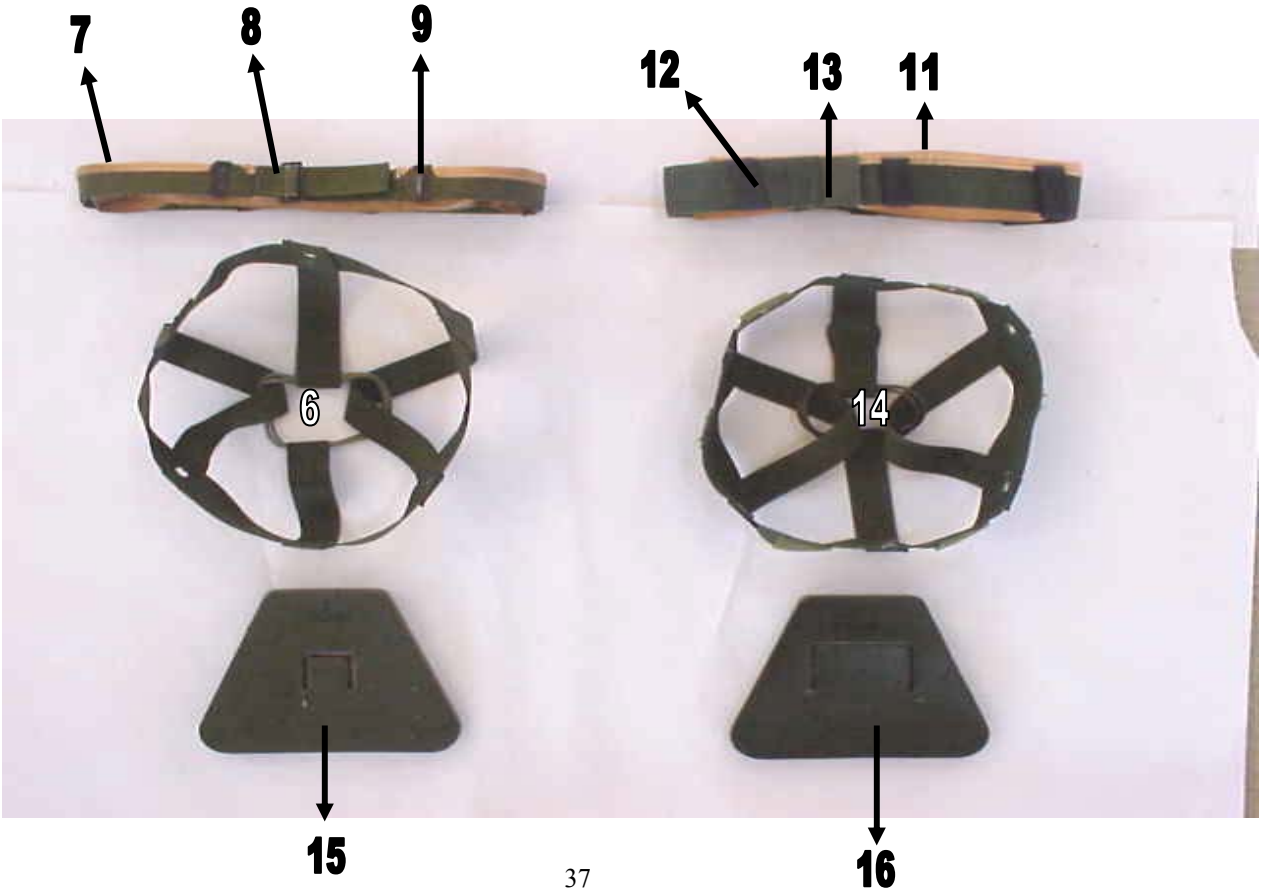
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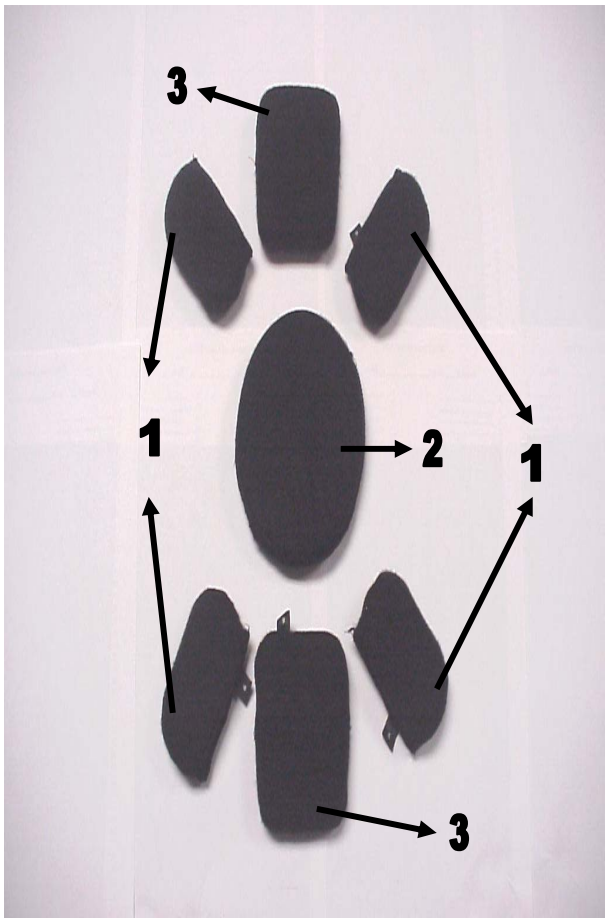
ADVANCED COMBAT HELMET

1. OVAL PAD
2. CROWN PAD
3. TRAPEZOID PAD
4. ADJUSTABLE BUCKLE
5. ADJUSTABLE STRAP
6. MODIFIED CHINSTRAP ASSEMBLY
7. CHIN STRAP FASTENER
8. LONG PORTION CHIN STRAP
9. SHORT PORTION CHIN STRAP
10. WEBBING RETAINER
11. NAPE PAD
12. HOOK DISK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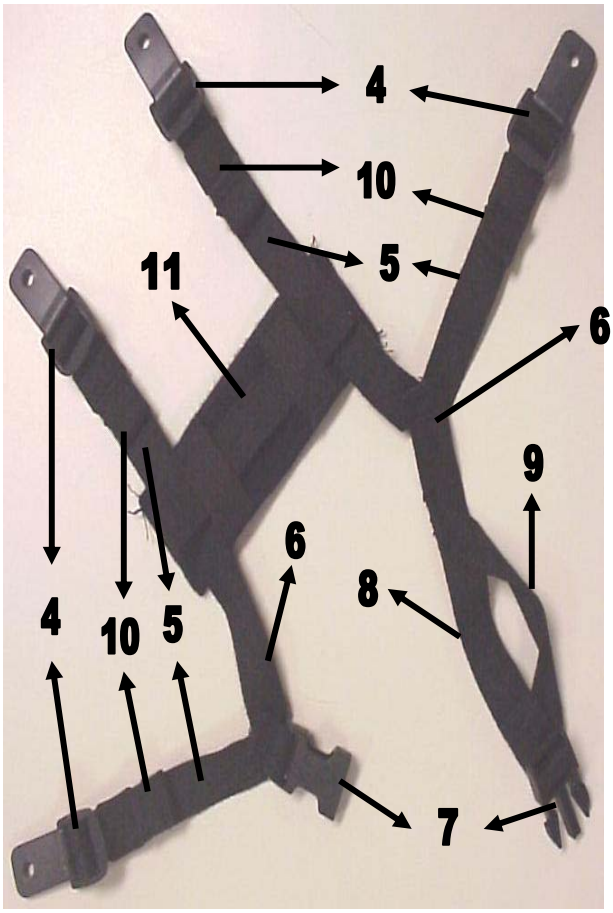
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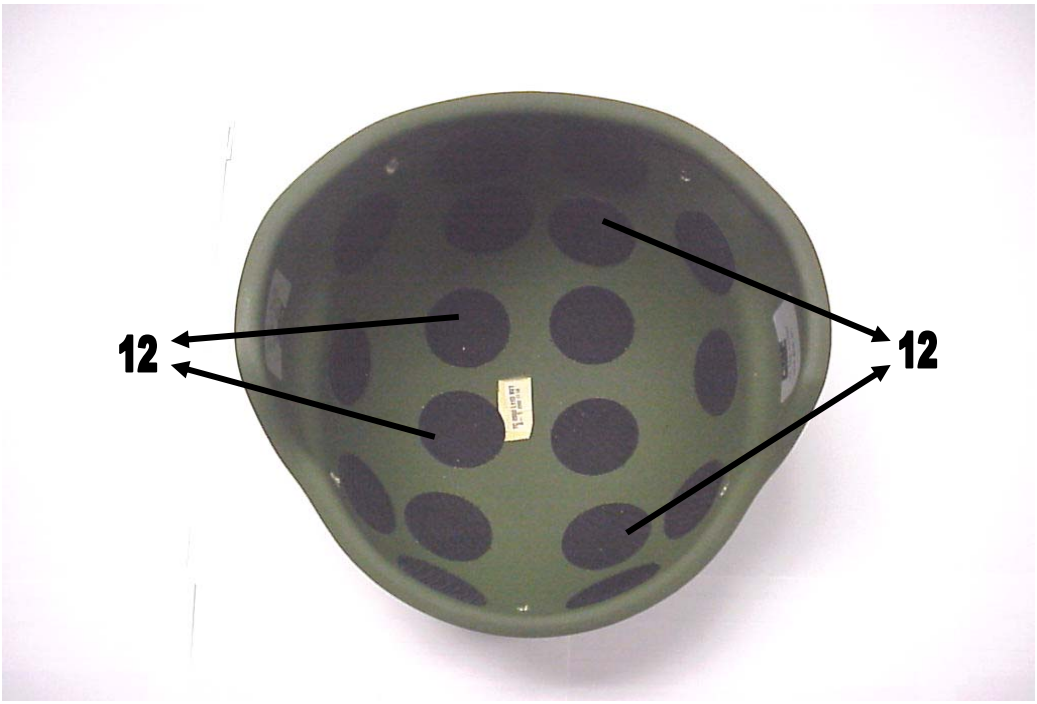
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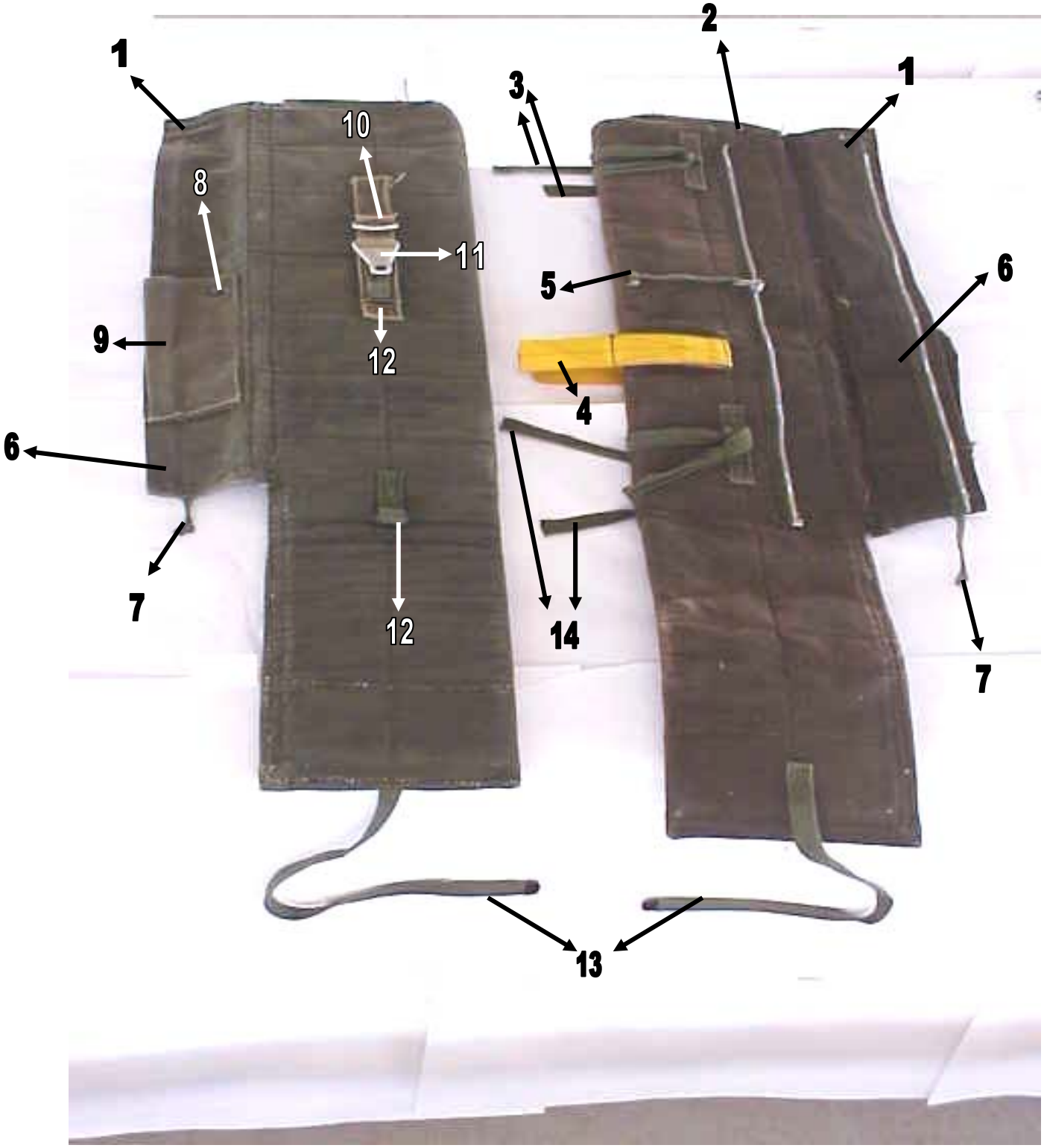
M1950 WEAPONS CASE

1. FEMALE PORTION, LIFT FASTENER
2. MALE PORTION, LIFT FASTENER
3. UPPER TIE DOWN TAPE
4. LOWER TIE DOWN STRAP
5. SLIDE FASTENER AND TAB THONG
6. CLOSING FLAP
7. FLAP THONG
8. LIFT FASTENER
9. LOWERING LINE STOW POCKET
10. “V” RING
11. QUICK RELEASE LINK
12. ADJUSTING STRAP CONNECTOR
13. ADJUSTING STRAP
14. LOWER TIE DOWN TAPE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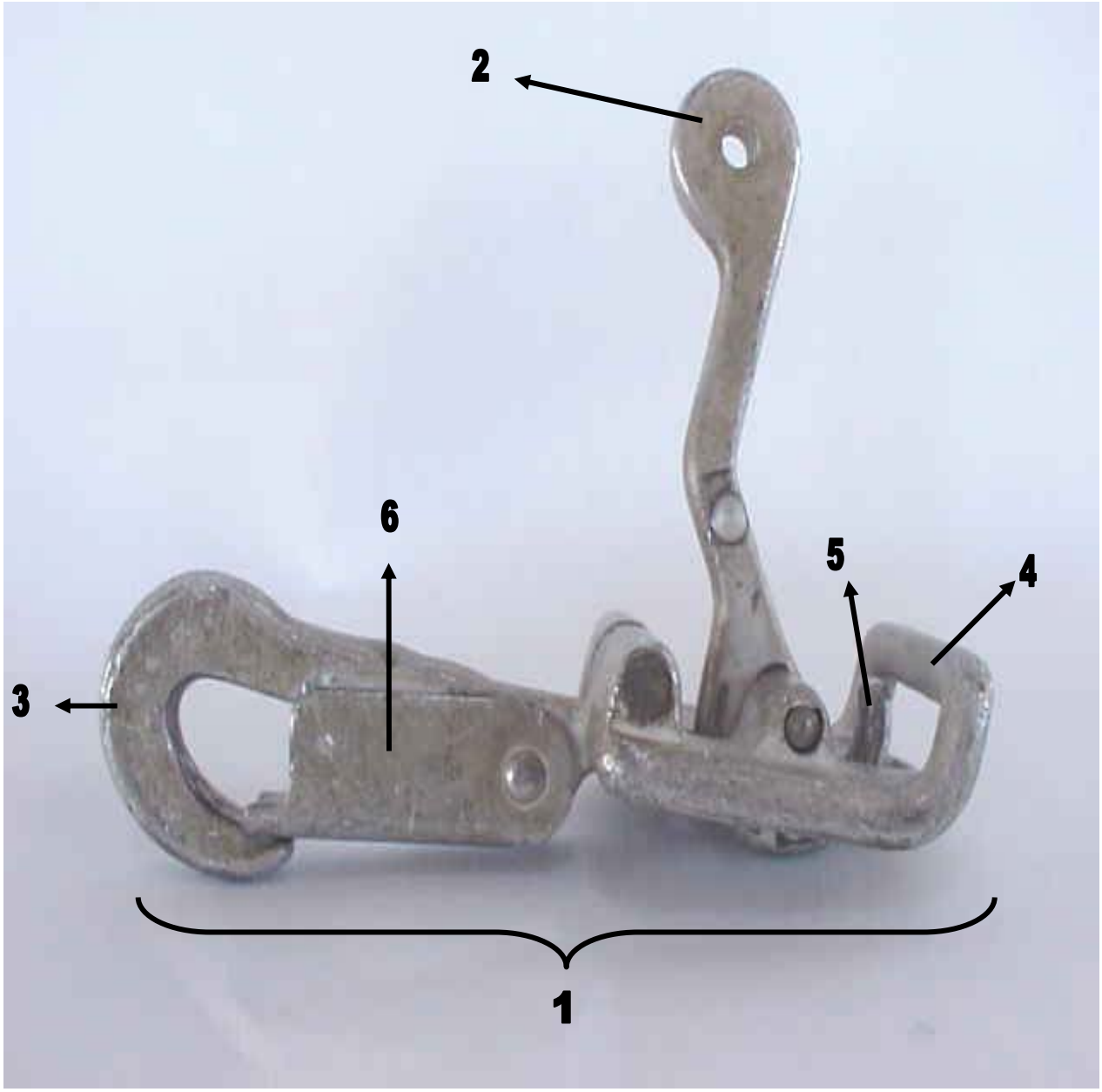
QUICK RELEASE SNAP

1. QUICK RELEASE SNAP
2. ACTIVATING ARM
3. SNAP FASTENER
4. FEMALE PORTION QUICK RELEASE SNAP
5. ROTATING CLAW
6. OPENING GATE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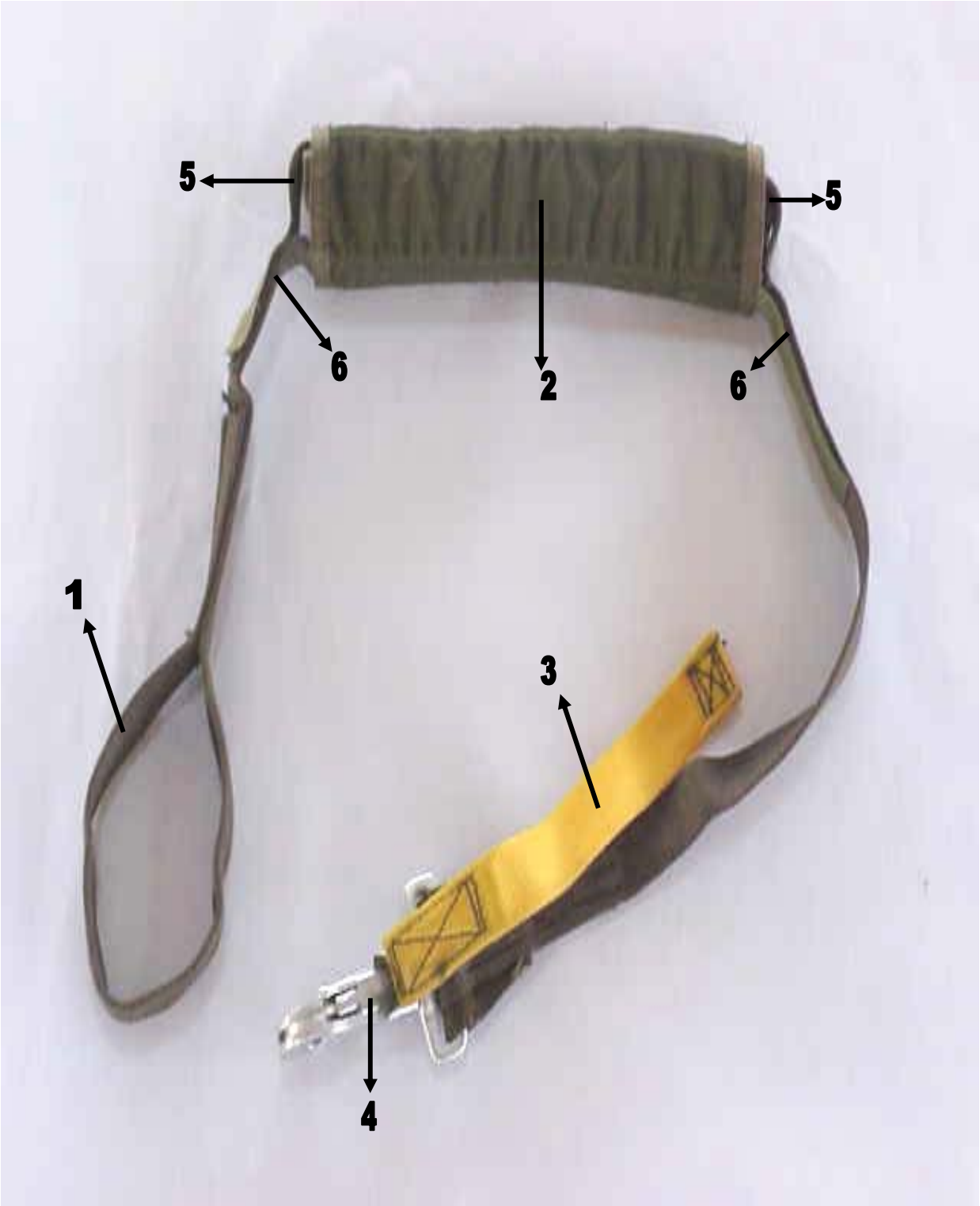
HOOK PILE TAPE LOWERING LINE

1. LOOPED END HOOK PILE TAPE LOWERING LINE
2. RETAINER FLAP
3. YELLOW SAFETY LANYARD
4. EJECTOR SNAP
5. HOOK TAB
6. PILE TAB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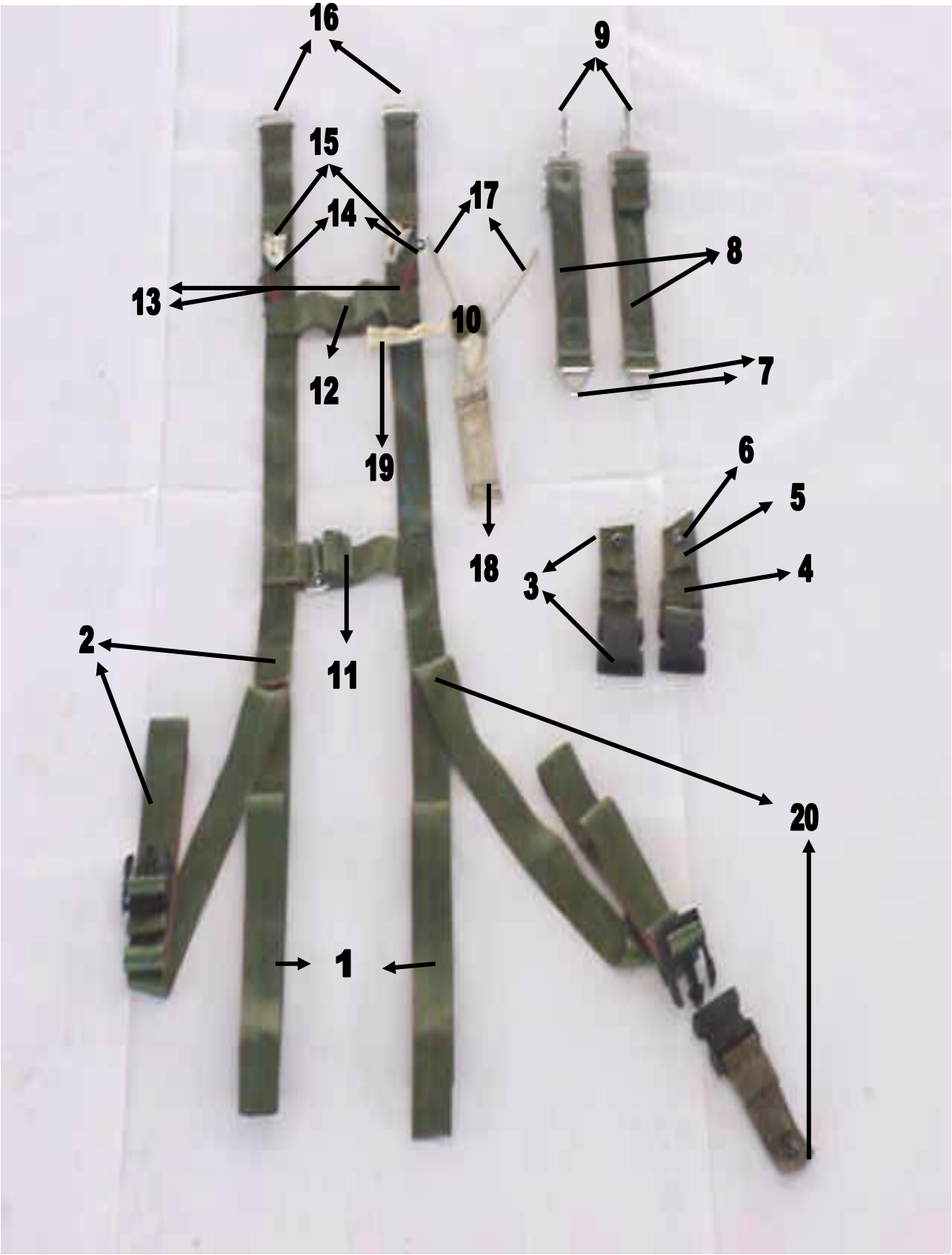
HARNESS SINGLE POINT RELEASE

1. EQUIPMENT RETAINER STRAP
2. MALE PORTION, LEG STRAP RELEASE ASSEMBLY
3. FEMALE PORTION, LEG STRAP RELEASE ASSEMBLY
4. WEBBING RETAINER
5. CABLE LOOP RETAINER
6. GROMMET
7. TRIANGLE LINK
8. ADJUSTABLE D – RING ATTACHING STRAP
9. SNAP HOOK
10. RELEASE HANDLE ASSEMBLY
11. ADJUSTABLE CROSS STRAP
12. RELEASE HANDLE CROSS STRAP
13. RED ATTACHING LOOP
14. GREEN ATTACHING LOOP
15. WHITE ATTACHING LOOP
16. FRICTION ADAPTER
17. RELEASE HANDLE CABLE
18. RELEASE HANDLE
19. RELEASE HANDLE LANYARD
20. ADJUSTABLE LEG STRAP.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SUBJECT: Malfunctions, Entanglements and Emergency Landings

REFERENCE: 82D ABN DIV ASOP, Edition VI, Chapter 13.

A. Malfunctions: A malfunction is any discrepancy in the deployment or inflation of the parachute, which may cause any faulty, irregular or abnormal condition, which may cause the jumpers rate of descent to increase.

1. Two categories of malfunctions:

   - Complete or Partial

   a. Complete malfunctions are caused by failure to deploy or failure to inflate:

      1. Failure to deploy:
         - Broken universal static line
         - Broken anchor line cable
         - Failure to hook up
         - Jumper being cut free from being towed

      2. Failure to inflate:
         - Streamer

   b. Partial malfunctions:

      1. Semi-inversion
      2. Squid
      3. Cigarette roll
      4. Complete inversion
      5. Damaged suspension lines
      6. Blown section or gore

2. Partial malfunctions are caused by:

   a. Excessive aircraft speed
   b. High power setting on aircraft engines
   c. High angle of draft (Crabbing)
   d. Rigger error
   e. Unsatisfactory body position

B. Entanglements:

Two types:
- High altitude: caused by simultaneous exit from the aircraft
- Mid altitude: caused by one or more jumpers failing to observe the third point of performance.

C. Emergency Landings:

1. Tree landing
2. Wire landing
3. Water landing

D. Towed Parachutist:

1. If you are being towed by your universal static line, and you are unconscious, you will be retrieved back inside the aircraft.
2. If you are conscious, maintain a good tight body position. Place your right hand over the ripcord protector flap with your right forearm protecting the ripcord grip. An attempt will be made to retrieve you. If you cannot be retrieved, your universal static line will be cut. Once you feel yourself falling free from the aircraft, activate your reserve parachute utilizing the Pull Drop Method.

E. The Jumpmaster's or Safeties actions upon identifying a towed parachutist are:

The first thing is to identify if there is a towed jumper and notify the loadmaster as you turn the paratroop door over to the loadmaster. The loadmaster will identify if the jumper is being towed by the Universal Static Line or by an item of equipment. If the jumper is being towed by an item of equipment the loadmaster will let the Jumpmaster or the Safety cut that item of equipment. If the Universal Static Line is towing the jumper the loadmaster will identify whether the jumper is conscious or unconscious. When the jumper is unconscious the loadmaster will notify the pilot and begin to retrieve the jumper with the assistance of the Jumpmaster or the Safety. When the jumper is conscious the loadmaster will notify the pilot and then make the determination whether to cut or retrieve the jumper. When the determination has been made to cut the Universal Static Line the loadmaster will cut on the command of the pilot.

SUBJECT: Introduction to Army Aircraft

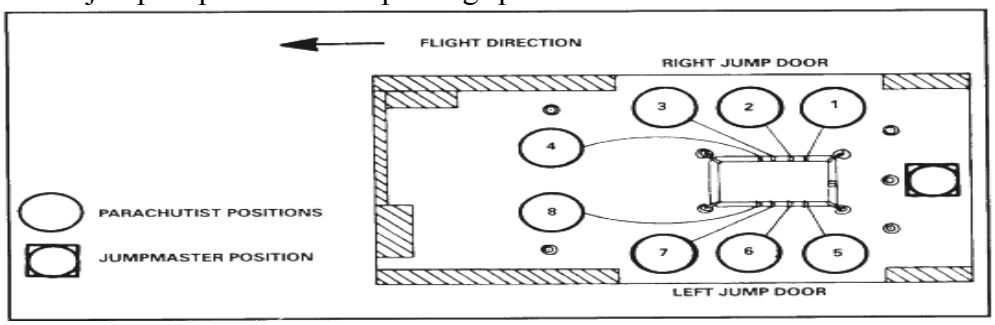
REFERENCE: 82D ABN DIV ASOP, Edition VI, Chapters 4 & 18.

A. General Information:

1. Authorization from the Division Commander. All other units require Corps Commander approval. Request for exception to policy should be forwarded to the Corps Chief of Staff.
2. JM/Pilot brief will be conducted 24 hours prior to manifest call.
3. A minimum of two Wind Drift Indicators (WDI) are required.
4. Drop altitudes:
   Maximum: 2,999 feet above ground level
   Minimum: 1,500 feet above ground level (1200 feet if AC speed is above 90 knots).
5. JM duties on Army Aircraft **DO NOT** count for currency.

B. UH-60 Blackhawk:

1. 8 combat equipped jumpers.
2. Jumper's 1 – 3 Starboard side (right); jumper's 4 - 6 Port side (left).
3. Jumper's 1 – 3 and 4 Starboard side (right); jumper's 5 - 7 and 8 Port side (left) when jumping 8 total.
4. Drop speed: Maximum – 75 knots, Minimum – 65 knots.
5. After JMPI, the JM will route the universal static line from bottom to top through the static line slack retainer
6. JM will hook up each jumper's universal static line to the modified anchor line cable.
7. Two-time warnings given in conjunction with jump commands.
8. Jump Commands:
   a. "GET READY" (4 Minutes)
   b. "CHECK STATIC LINES"(JM will inspect each jumpers universal static line)
   c. "CHECK EQUIPMENT"
   d. "SOUND OFF FOR EQUIPMENT CHECK"
   e. "SIT IN THE DOOR" (30 Seconds)
   f. "STAND BY" (8 – 10 Seconds) this is not a time warning
   g. "GO"
9. JM will observe universal static line as the jumper's exit the aircraft.
10. Ensure jumpers protect their ripcord grip.



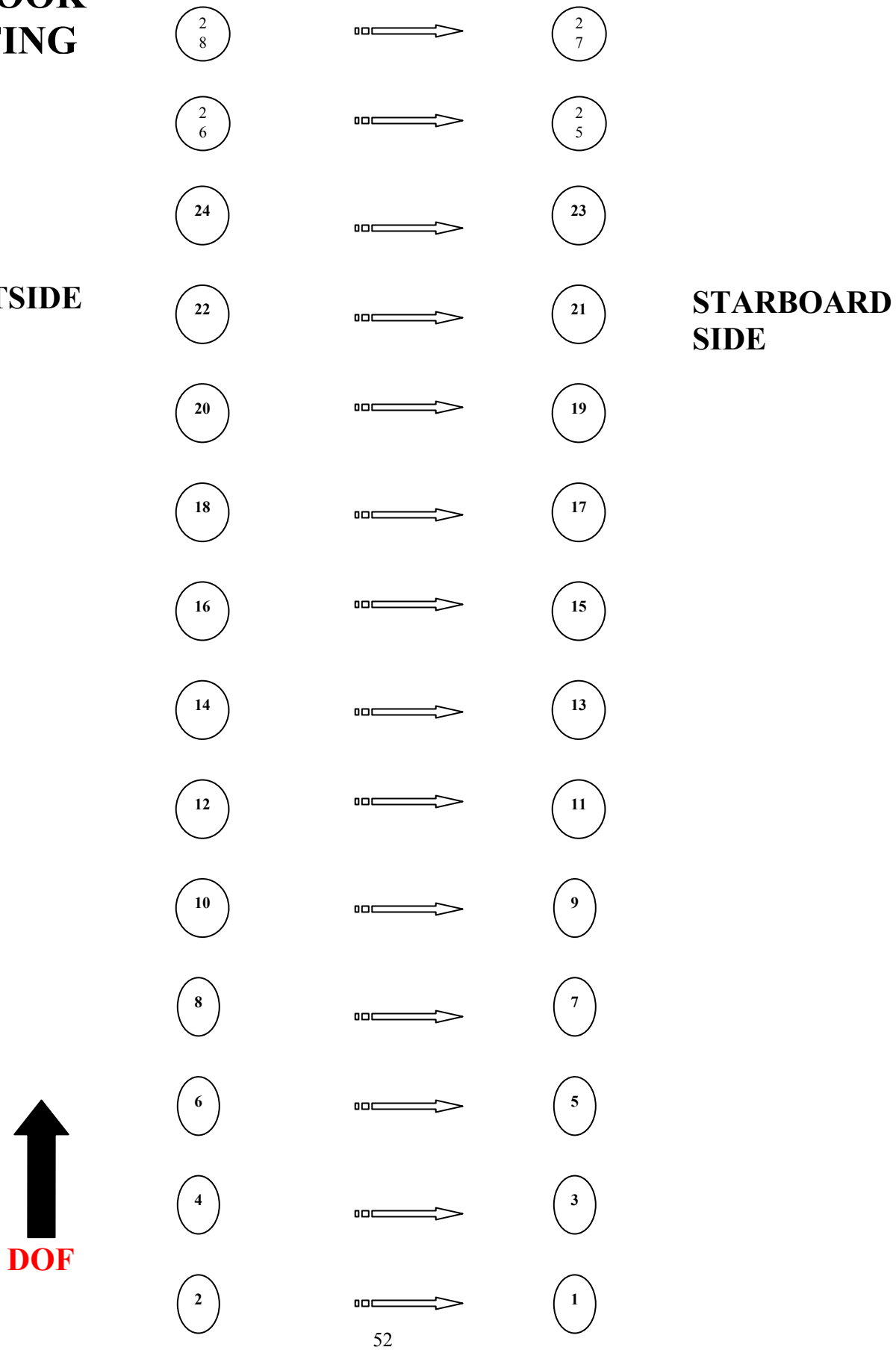
C. CH-47 Chinook:

1. 28 total jumpers.
2. Odd numbered personnel – Starboard side; Even numbered personnel – Port side
3. Drop speed: Maximum – 110 knots, Minimum – 80 knots.
4. Two-time warnings given in conjunction with jump commands.
5. Jump Commands:
   a. "GET READY" (6 Minutes)
   b. "PORT SIDE PERSONNEL STAND UP"
   c. "STARBOARD SIDE PERSONNEL STAND UP" (Jumper's merge to make one stick)
   d. "HOOK UP"
   e. "CHECK STATIC LINES"
   f. "CHECK EQUIPMENT"
   g. "SOUND OFF FOR EQUIPMENT CHECK" (1 Minute)
   h. "STAND BY" (8 – 10 Seconds)
   i. "GO"
6. Jumpers will secure the universal static line utilizing a reverse bite.
7. Prior to exit, the ramp must be lowered 3 degrees below horizontal.
8. Jumpers will exit from the Starboard side of the aircraft, at a 45-degree angle, off the Port side of the ramp.
9. The JM may be a static JM. If the JM is exiting, then the JM will be the #1 jumper and a Safety is required.

D. Safety:

1. Jumper's MUST protect the ripcord grip at all times.
2. Approach aircraft at the proper angle.
3. Jumpers must be seat belted in prior to take off.
4. Jumper's seat belts stay secured until "Get Ready".
5. Jumpers must wear their ballistic helmets / advanced combat helmets at all times. For an extended flight on a CH-47 Chinook, jumper's may remove their ballistic helmets / advanced combat helmets after take off; however, they must put them back on prior to "Get Ready".

CH-47 CHINOOK SEATING



SUBJECT: Drop Zone Safety Officer (DZSO)

REFERENCE: 82D ABN DIV ASOP, Edition VI, Chapter 15.

A. General Information: The DZSO is the Airborne Commander's representative on the drop zone. The DZSO is solely responsible for the safe and efficient operation of the drop zone.

B. DZSO Qualifications:

1. SSG or above. For operations involving 4 or more aircraft, the DZSO must be SFC or above.
2. Current and qualified Jumpmaster.
3. Must be advanced rated parachutist. This is waiverable for field grade officers.

C. DZSO Currency:

1. Receive hands on training with a wind speed indicator.
2. Must assist a current and qualified DZSO at least twice / perform duties at least every 180 days.

D. Assistant DZSO Qualifications:

1. CPL or above.
2. Current and qualified Jumpmaster.
3. Receive hands on training with a wind speed indicator.
4. Familiarized with proper RTO procedures on a DZ.

E. DZSO Party:

Consists of the following:

1. Malfunctions Officer – Must be CPL or above and a current and qualified rigger.
2. Medical Coverage Team – Senior Medic must be a SGT or above, or a SPC if EMT qualified. For an airborne operation involving 500 or more jumpers, or 241 jumpers or more on one pass, a Surgeon, or Physicians Assistant, is required.
3. Ladder Detail – Required for all Fort Bragg or Camp Mackall airborne operations.
4. Boat Detail – Needed only if water obstacle is 4 feet deep or deeper and is within 1,000 meters of the drop zone. (Specific requirements are based upon ABN CDR'S risk analysis of the obstacle (i.e. ocean, river, and lake ECT).
5. Road Guards - For all high-speed avenues of approach to the drop zone.

F. Co-ordination Requirements:

1. Coordination with all Airborne Commanders for airborne operations that the DZSO is responsible for.
2. All units providing DZSO Party Support.
3. Medical Coverage Team IAW 82D ABN DIV ASOP, Edition VI, Chapter 7.
4. Range control safety briefing; no earlier than 24 hours prior to the airborne operation.
5. Procure necessary equipment.

G. Duties and Responsibilities:

1. Prior to moving to the drop zone, receive a briefing from the GLO.
2. Link up with all personnel in the DZSO party. Inspect all equipment, then convoy to the drop zone.
3. Open the drop zone with Range Control NLT 1 hour prior to drop time. (For airborne operations on Camp Mackall, contact Mackall Tower, during duty hours, to open the drop zone. After duty hours, contact Range Control.)
4. Must be present at the drop zone, with the DZSO Party, NLT 1 hour prior to drop time. If the airborne operation is a mass tactical operation then the DZSO party must be on the DZ by weather decision.
5. The first action at the drop zone is to locate the STS/DZSTL and discuss the airborne operation.
6. Conduct reconnaissance of the drop zone for any safety hazards.
7. Brief and position the DZSO Party.
8. Co-locate with the STS/DZSTL NLT 15 minutes prior to drop time. If the STS is located at the highest point on the drop zone, position the Assistant DZSO anywhere on the drop zone to get good wind readings.
9. Establish a 10 minutes window at 12 minutes out. Final decision is made 2 minutes out. Take wind readings until the last jumper has landed.
10. Ensure all rotary wing aircraft are parked off the drop zone, with the rotor blades tied down, 10 minute prior to drop time.
11. Contact Range Control 5 minutes prior to drop time for final clearance.
12. If it is a night airborne operation, ensure all lights are out NLT 5 minutes prior to drop time.
13. Control vehicles on the drop zone.
14. Unless authorized by the CG, ADCO, or The Chief of Staff, only the DZSO and STS/DZST vehicles will be located at the code letter.
15. Ensure all antennas are tied down.
16. Ensure no vehicles are moving while the aircraft approaches or while jumpers are in the air.
17. All vehicles on the drop zone have the engines running with the drivers behind the wheel, ballistic helmets / advanced combat helmets secured, during the entire airborne operation.

18. Close the drop zone to traffic:

    Place Road Guards:
    - 5 minutes prior to drop time for proficiency operations.
    - 30 minutes prior to and after drop time for tactical operations.

19. No assembly aids lit until the last pass is complete.
20. After each pass authorize senior medic to sweep DZ.
21. After final pass have STS contact A/C for number of jumpers and / or equipment left on board.

H. Wind and Weather Data:

1. Wind readings will be taken from a minimum of two locations. One location MUST be the highest point on the drop zone.
2. Surface wind speed will not exceed:
    a. Personnel – 13 knots, to include gusts.
    b. Equipment – 17 knots, to include gusts.
3. There are no limitations on winds at altitude.
4. Airborne operations can be conducted in the rain, if it is coordinated with the DIV G-3 Air.
5. AWADS operations will not be conducted if the ceiling is less than 200 feet above ground level. The ceiling will be determined by the STS.

I. Medevac:

For Medevac aircraft to be called in, the airborne commander or their representative must be notified by the DZSO, the injury to the jumper, must be classified as URGENT by the Senior Medical personnel.

J. Flash Report:

Submit Flash Report to the DACO, immediately after the airborne operation. Submit Checklist Format for Incident Reporting to the DACO, if utilized.

K. Closing the Drop Zone:

Close the drop zone only after the entire airborne operation is complete. Ensure that all injured jumpers have been treated and released or evacuated. Ensure the Flash Report has been submitted. Once this has been accomplished, the Airborne Commander will release the DZSO from the drop zone. The DZSO will be released from all duties and responsibilities by the DACO.

L. Review Chapter 5 of the 82D ABN DIV ASOP for smoke requirements for MC1-1D parachute operations.

SUBJECT: Departure Airfield Control Officer

REFERENCE: 82D ABN DIV ASOP, Edition VI, Chapter 16.

A. General Information: The DACO is the Airborne Commander's representative at the departure airfield. The DACO is responsible for the safe and efficient outload of personnel and equipment.

B. DACO Qualifications:
   1. SGT or above for proficiency operations.
   2. SSG or above for tactical operations.
   3. Current and qualified Jumpmaster.
   4. Assist a fully qualified DACO at least once.

C. Assistant DACO Qualifications:
   1. SGT or above.
   2. Does not have to be Jumpmaster qualified.

D. Duties and Responsibilities:
   1. Report to the GLO, at Building S – 900, NLT 20 minutes prior to the first weather decision time on the air letter.
   2. Be present for all joint weather decisions, unless otherwise directed by the GLO.
   3. Ensure the results of the weather decision are reported to the DZSO, Airborne Commander or Division SDO, as well as all units concerned.
   4. Establish and maintain radio or telephone communications with the DZSO NLT 1 hour prior to drop time.
   5. Brief the JM Team and Safeties on the serious incident brief and have them sign the roster, also any changes to the air letter or the Air Movement Table.
   6. Receive all jumpers and equipment left on board the aircraft, especially towed parachutist or jump refusal. If there is a jump refusal, the DACO will conduct JMPI on the jumper. Additionally, a current and qualified Rigger will conduct a technical inspection of the jumper's equipment. A statement must be written identifying any discrepancies in the jumper's equipment. A statement must be done by Safeties, Riggers and the Jump Refusal
   7. Turn in a complete and accurate: Strike report, Flash Report, Red / Amber Light Exit Report and a Serious Incident report and then give a copy to the SDO or the Division G-3 Air representative.
   8. For operations involving 5 or more aircraft, report aircraft departures to the G-3 Air and DZSO.
   9. Ensure entire DZSO Party is present on the drop zone, NLT 1 hour prior to drop time.
   10. Ensure safeties police the aircraft and the departure airfield.
   11. DACO is released from duties by the GLO.
   12. Ensure the DRF7 unit provides a medic with CLS/Aid Bag and vehicle.
   13. DACO will notify the G-3 Air and GLO if the CLS/Aid Bag and vehicle is not present.

SUBJECT: AT – 4 Jump Pack (AT – 4 JP)

REFERENCE: 82D ABN DIV ASOP, Edition VI, Chapter 10.

AT – 4 Jump Pack (AT – 4 JP)

A. Qualifications:

1. The jumper must be at least 5 feet 6 inches in height.
2. The jumper must have at least 12 static line jumps from Air Force aircraft.
3. The jumper must make 2 perfect exits from the right door of the 34-foot tower, with the AT – 4 JP.
4. The jumper must be talked through the 5 points of performance, and lowering procedures, with the AT – 4 JP, while in the suspended harness.

B. Currency:

The jumper must jump once every 180 days, from Air Force aircraft, with the AT – 4 JP. If not, the jumper must go back through tower training.

C. Limitations:

1. The AT – 4 JP cannot be jumped from the left paratroop door of Air Force aircraft.
2. The AT – 4 JP cannot be jumped from any aircraft, which requires the jumper to exit from the seated position.
3. When exiting A – Series containers, the #1 jumper will never be rigged with the AT – 4 JP.
4. The AT – 4 JP and the M1950 weapons case cannot be jumped at the same time.
5. The only weapons authorized to be jumped inside the AT – 4 JP are: The M16A1/A2 Rifle or the M4 Carbine.
6. Only 12 AT – 4 JP's can be exited from the right paratroop door, per pass. (One AT - 4 JP will be removed from the pass, for each additional special item of equipment that is added on).

D. General Information:

1. The AT – 4 JP can be jumped anywhere in the stick to best support the tactical cross load.
2. The AT – 4 JP is authorized to be jumped and lowered as a single item of equipment. An HPT lowering line and lowering line attachment strap must be utilized.
3. The AT – 4 JP is a special item of equipment; therefore, it **SHOULD** be rigged 24 hours prior to manifest call; but it **MUST** be rigged **NLT** 1 hour prior to manifest call.
4. At the 20 minute time warning, the safety will attach the AT – 4 JP to the jumper and route the modified HPT lowering line through the D-Rings. The safety will then conduct a final technical inspection of the combat equipment and the AT – 4 JP.
5. When exiting a CH-47 Chinook, all 28 jumpers can exit with the AT-4JP.

AT – 4 Jump Pack (AT – 4 JP)

SUBJECT: Dragon Missile Jump Pack (DMJP)

REFERENCE: 82D ABN DIV ASOP, Edition VI, Chapter 10.

Dragon Missile Jump Pack (DMJP)

A. Qualifications:

1. The jumper must be at least 5 feet 6 inches in height.
2. The jumper must have at least 12 static line jumps from Air Force aircraft.
3. The jumper must make 2 perfect exits from the right door of the 34-foot tower with the DMJP.
4. The jumper must be talked through the 5 points of performance and lowering procedures, with the DMJP, while in the suspended harness.
5. If you are qualified to jump the DMJP, then you are also qualified to jump the AT – 4 JP; however, you must attend quarterly rigging classes.

B. Currency:

The jumper must jump once every 180 days, from Air Force aircraft, with the DMJP. If not, the jumper must go back through tower training.

C. Limitations:

1. The DMJP cannot be jumped from the left paratroop door of Air Force aircraft.
2. The DMJP cannot be jumped from any aircraft that requires the jumper to exit from the seated position.
3. When exiting A – Series containers, the #1 jumper will never be rigged with the DMJP.
4. The DMJP and the M1950 weapons case cannot be jumped at the same time.
5. The only weapons authorized to be jumped inside the DMJP are: the M16A1/A2 Rifle, the M4 Carbine or the M203 Dual Purpose Weapon.
6. Only 6 DMJP's can be jumped, from the right paratroop door, per pass.
7. Only the Modified Hook Pile Tape Lowering Line is authorized for use on the DMJP. (Unless the DMJP contains a SKEDCO litter)
8. If jumping a Dragon missile in the DMJP, it is not authorized to be jumped and lowered as a single item of equipment.

D. General Information:

1. The DMJP can be jumped anywhere in the stick to best support the tactical cross load.
2. The DMJP is a special item of equipment; therefore, it **SHOULD** be rigged 24 hours prior to manifest call; but it **MUST** be rigged **NLT** 1 hour prior to manifest call.
3. At the 20-minute time warning, the safety will attach the DMJP and the ALICE packs to the jumper. However if the jumper is jumping a Modified DMJP the jumper will be JMPI'D with the ALICE pack / MOLLE attached and at the 20-minute time warning the safety will attach the Modified DMJP. The safety will then conduct a final technical inspection of the combat equipment and the DMJP.
4. The DMJP is also utilized to deliver the SKEDCO litter to the drop zone and it can be jumped as a single item of equipment, however a HPT lowering line will be utilized instead of the modified HPT lowering line. It will be configured with the looped end and the ejector snap protruding from the same end of the retainer flap.
5. When exiting a Ch-47 Chinook, all 28 jumpers can exit with the DMJP.

Dragon Missile Jump Pack (DMJP)

SUBJECT: Stinger Missile Jump Pack (SMJP)

REFERENCE: 82D ABN DIV ASOP, Edition VI, Chapter 10.

Stinger Missile Jump Pack (SMJP)

(An M4 Carbine padded and taped to be jumped exposed.)

A. Qualifications:

1. The jumper must be at least 5 feet 8 inches in height.
2. The jumper must have at least 12 static line jumps from Air Force aircraft.
3. The jumper must make 2 perfect exits from the right door of the 34-foot tower, with the SMJP.
4. The jumper must be talked through the 5 points of performance, and lowering procedures, with the SMJP, while in the suspended harness.
5. Before you can jump the SMJP, from 800 feet above ground level, you must make 2 daylight jumps from 1250 feet above ground level.

B. Currency:

The jumper must jump once every 180 days, from Air Force aircraft, with the SMJP. If not, the jumper must go back through tower training.

C. Limitations:

1. The SMJP cannot be jumped from the left paratroop door of Air Force aircraft.
2. The SMJP cannot be jumped from Army aircraft.
3. When exiting A – Series containers, from the right paratroop door, no SMJP will be exited that pass.
4. The SMJP and the M1950 weapons case cannot be jumped at the same time. The jumpers M16A1/A2 or M-4 Carbine Rifle will be jumped exposed.
5. The SMJP must be jumped from the #1 jumper or #1 and #2 jumper positions.
6. Only 2 SMJPs can be jumped, from the right paratroop door, per pass.
7. During proficiency jumps, up to 6 SMJP may be jumped from the right paratroop door, with a 2 second interval between jumpers.
8. The SMJP must be rigged as a tandem load with the Alice pack / MOLLE.

D. General Information:

1. The SMJP is a special item of equipment; therefore, it **SHOULD** be rigged 24 hours prior to manifest call; but it **MUST** be rigged **NLT** 1 hour prior to manifest call.
2. At the 20-minute time warning, the safety will attach the SMJP to the jumper. The safety will then conduct a final technical inspection of the combat equipment and the SMJP.
3. The left adjustable leg strap will not be utilized with the SMJP.

SUBJECT: A – Series Containers for Air Force Aircraft

REFERENCE: 82D ABN DIV ASOP, Edition VI, Chapters 11 & 13.

A-21 Cargo Bag

A-7A Cargo Sling

A. Restrictions:

1. One per paratroop door, first pass only, from the first three aircraft in an offset trail formation.
2. A – Series containers are not authorized to be exited under AWADS conditions. (This is a peacetime restriction only.)

B. Weights and Dimensions:

1. Maximum weight: 350 pounds, **EXCLUDING** the T – 10 modified cargo parachute.
2. Minimum weight: 90 pounds, **EXCLUDING** the T – 10 modified cargo parachute.

3. Maximum dimensions: 30 inches wide, 66 inches high and 48 inches deep, to **INCLUDE** the cargo parachute. Dimensions are measured in relation to how the load sits in the paratroop door.
4. Minimum dimensions: There are no minimum dimensions; however, the load must meet weight criteria and be large enough to attach the cargo parachute.

C. General Information:

1. When exiting A – Series containers, the #1 jumper must be jumpmaster qualified, but does not have to be current and the #1 jumper must also place a Rip Cord Grip Insert into their MIRPS.
2. If hazardous materials are present, then a Shippers Declaration For Dangerous Goods (SDDG) must be attached to the personnel manifest.
3. A completely rigged A – Series container, must have a Load Data Card, with the following information:
    - Unit
    - Chalk
    - Contents
    - Gross Weight (Includes cargo parachutes)

D. A-21 Cargo Bag:

Four major components: (Weighs approximately 18 pounds)

1. Canvas cover
2. Sling assembly with scuff pad attached
3. Ring strap group
4. Quick release assembly: (3 safety features)
    a. Safety fork and lanyard
    b. Turn to unlock
    c. Press or strike to release

E. A – 7A Cargo Sling:

Two major components: (Weighs approximately 6 pounds)

1. A – 7A Straps: 4 A – 7A straps approximately 188 inches in length with a permanently sewn quick fit adapter with thick lipped floating metal bar.
2. D – Rings: 4 each

Weight limitations for A – 7A Cargo Sling:

<u>T – 10 Modified Cargo Parachute</u>:
90 – 250 pounds: 2 strap load
251 – 350 pounds: 3 or 4-strap load

F. T – 10 Modified Cargo Parachute: (Weighs approximately 21 pounds):

Dimensions: 18 inches long, 12 inches wide and 5 inches deep.

1. Used for both the A – 21 Cargo Bag and the A – 7A Cargo sling.

A-7A Cargo Sling with T-10 Modified Cargo Parachute

G. Exiting Procedures for Air Force Aircraft:

1. At the 20-minute time warning: Move the load into the vicinity of the paratroop door. Remove the load data card. Hook up the load to the outboard anchor line cable. Conduct a final inspection of the load. For night airborne operations, the Jumpmaster will activate the chemlights at the 20-minute time warning.
2. When paratroop doors are opened: Move the load to the trail edge of the paratroop door. Ensure the Jumpmaster still has enough room to conduct jump platform checks.
3. At "Stand By": The Jumpmaster will bisect the lead edge of the paratroop door and receive their universal static line, with the trail hand, from the Safety. The #1 jumper will pass control of their universal static line to the Jumpmaster. The Jumpmaster will control the #1 jumper's universal static line with their hand. On the green light the Jumpmasters will issue the command of **"GO"**, the #1 jumper and the Safety will exit the load by pushing on the bottom two thirds of the load. The #1 jumper will then assume the #1 jumper position. The Jumpmaster will pass control of the #1 jumper's universal static line to the Safety. The PJM will then receive a thumb up from the AJM. The PJM will then issue the command **"GO"**, and continue exiting jumpers as normal.

SUBJECT: Rigging of Crew Served Weapons and the M249 Squad Automatic Weapon

REFERENCE: 82D ABN DIV ASOP, Edition VI, Chapters 9 & 10.

A. General:

1. Crew Served Weapons MUST always be lowered.
2. M249 SAW MUST always be lowered. It is too big or bulky to land with safely.

B. Rigging:

1. 60MM Mortar Weapons System:
   The 60MM Mortar Weapons System has 6 component parts that are jumped by 3 personnel: The Gunner, Assistant Gunner and the Ammunition Bearer.
   a. Gunner: M225 Cannon, M8 Small Base Plate, M64 Sight Assembly and M9 Beretta.
   b. Assistant Gunner: M170 Bipod Assembly and individual weapon.
   c. Ammunition Bearer: M7 Large Base Plate, Aiming Stakes with Case, Ammunition and M16A1/A2 Rifle or M4 Carbine.
   d. 6 rounds of 60mm mortars in Alice pack / MOLLE.

2. M64 Sight Assembly: If it is in its carrying case, pad with one turn cellulose wadding and place inside the main compartment of the ALICE pack / MOLLE. If the carrying case is not present, pad with two turns of cellulose wadding.

Aiming Stakes with Case

3. M8 Small Base Plate: Wrap with two turns of cellulose wadding and place inside the main compartment of the ALICE pack / MOLLE.

4. Ammunition: Place inside the main compartment of the ALICE pack / MOLLE. If the packaging tubes are present, it does not have to be padded and taped. If the packaging tubes are missing; each round of ammunition **MUST** be individually padded with two turns of cellulose wadding.

***** Ammunition is not authorized to be jumped under the closing flap of the ALICE pack / MOLLE. *****

5. Aiming Stakes with Case:

    a. Ensure the carrying case is free of rips, tears or holes. Ensure the lift fastener is serviceable. If it is unserviceable, then it will be secured with two turns tape, pressure sensitive, adhesive olive cloth.
    b. Girth hitch 2 sufficient lengths of ¼ inch cotton webbing to the compression straps or around the carrying case.
    c. Place under the closing flap of the ALICE pack / MOLLE in either direction.
    d. Secure the ¼ inch cotton webbing to the vertical equipment hangers of the ALICE pack / MOLLE with a single or double looped bowknot.

6. M7 Large Base Plate with ALICE pack:

    a. Place the base plate on the outer accessory pouches of the ALICE pack, with the legs facing skyward, aligned with the corners of the ALICE pack frame.
    b. Secure 4 sufficient lengths of ½ inch to 1 inch wide tubular nylon webbing.
    c. Route the top securing ties through the outer cutaway portions of the base plate, behind the legs, around the tubular portion of the ALICE pack frame, to the inside of the shoulder carrying strap loops. Then secure with a single or double looped bowknot.
    d. Route the lower securing ties through the center cutaway portions of the base plate, behind the legs, through the "V" notch, at the base of the ALICE pack frame, and secure with a single or double looped bow knot.

M-7 Large Base Plate

e. Place a prepared Harness Single Point Release on top of the base plate. Route the equipment retainer straps through the top cutaway portion of the base plate, under the top securing ties, to the outside of the shoulder carrying strap loops, then continue to rig in the normal manner.
f. Tighten and re-secure the securing ties with a square knot and half hitch in each free running end. Trim excess to 2 inches.

7. M7 Large Base Plate with MOLLE:

a. Place the base plate on the MOLLE so that the legs are facing skyward, align the base plate with the four corners of the MOLLE frame.
b. Secure 4 sufficient lengths of ½ inch to 1 inch wide tubular nylon webbing.
c. Route the top securing ties through the outer cutaway portions of the base plate, behind the legs, through the cutaway portions on the top of the MOLLE frame. Then secure with a single or double loopped bow knot.
d. Route the lower securing ties through the small cutaway portions on the bottom corners of the MOLLE frame. Then secure with a single or double loopped bow knot.
e. Place a prepared Harness Single Point Release on top of the base plate. Route the equipment retainer straps through the top cutaway portion of the base plate, under the securing ties, under the MOLLE carrying handle, through the small cutaway portion of the MOLLE frame and over the back pad. Make sure they are crossed as normal and routed to their appropriate friction adaptors that were brought up through the large cutaway portion of the MOLLE frame.
f. Tighten and re-secure the securing ties with a square knot and half hitch in each free running end. Trim excess to 2 inches.

M-7 Large Base Plate

8. M225 Cannon:

    a. M225 Cannon is rigged in the SAW Modified M1950 weapons case.
    b. DO NOT place ammunition or the M8 Small Base Plate inside the SAW Modified M1950 weapons case.
    c. Place the M225 Cannon in muzzle end first, with the trigger mechanism facing the closing flap.

M225 Cannon

9. M170 Bipod Assembly:

    a. M170 Bipod Assembly is rigged in the 60MM Modified M1950 weapons case.
    b. Traverse the yoke all the way to the right to place it in its smallest configuration.
    c. The 60MM Modified M1950 weapons case will not adjust snugly; however, the weight of the M170 Bipod Assembly will keep the adjusting strap secure.
    d. Ensure that enough slack is left in the adjusting strap to incorporate a half hitch.
    e. Tuck the remainder of the adjusting strap behind the fold of the 60MM Modified M1950 weapons case. Ensure the jumper checks it during "Check Equipment."

M170 Bipod Assembly

10. M240B Machine Gun with Tripod and Spare Barrel Bag:

    a. The M240B Machine Gun can be jumped fully assembled or broken down in the Saw Modified M1950 weapons case.
    b. If the M240B machine gun is broken down, it must be padded and taped to prevent metal-to-metal contact.
    c. The upper tie down tape MUST secure the tab thong portion of the slide fastener and tab thong.
    d. Two jumpers are required to jump the M240B Machine Gun with Tripod and Spare Barrel Bag.
    e. The Spare Barrel Bag can be jumped in two ways:
    - Under the closing flap of the ALICE pack / MOLLE with the outer pockets facing the closing flap.
    - In the SAW Modified M1950 weapons case with the jumpers individual weapon. It will be placed under the jumpers individual weapon with the large end first and the outer pockets facing skyward. No padding is required.
    f. The Tripod can be jumped in two ways:
    - Under the closing flap of the ALICE pack / MOLLE. The short leg of the tripod will be secured with a sufficient length of ¼ inch cotton webbing. Ensure the short leg faces into the main compartment of the ALICE pack / MOLLE. (The flex mount will not be attached).
    - In the SAW Modified M1950 weapons case with the jumpers individual weapon. It will be placed under the jumpers' individual weapon with the long legs in first and the short leg facing skyward. The Tripod must be padded when it is jumped inside the SAW Modified M1950 weapons case.

11. M249 Squad Automatic Weapon:

    a. It can be rigged in either the M1950 weapons case or the SAW Modified M1950 weapons case. If it is rigged in the M1950 weapons case it must have a collapsible carrying handle.
    b. It will always be lowered because it is too big or bulky to land with safely.
    c. A 30 round magazine can be taped to the left side of the butt stock; however, no ammunition belts or drums can be placed inside.

12. SAW Modified M1950 Weapons Case, Jumped and Lowered as a Single Item of Equipment:

    a. Remove the quick release link from the V – ring.
    b. Secure a hook pile tape lowering line folded in its normal configuration.
    c. Girth hitch the looped end hook pile tape lowering line, from top to bottom, through the V – ring.

Secure the hook pile tape lowering line to the trail edge of the SAW Modified M1950 weapons case, with two turns of masking tape, in two locations: just below the quick release link and just above the upper set of adjusting strap connectors. Ensure the ejector snap is routed towards the upper portion of the SAW Modified M1950 weapons case.

SUBJECT: Assembly, Reorganization, Air Route Diagram and Introduction to the Computed Air Release Point (CARP)

REFERENCE: 82D ABN DIV ASOP, Edition VI, Chapters 4, 13, 15, & 18.

A. Four Phases of an Airborne Operation:

1. Ground Tactical Plan
2. Landing Plan
3. Air Movement Plan
4. Marshalling Plan

B. Assembly Factors:

1. Dispersion: Formation of aircraft, aircraft altitude and aircraft speed.
2. Mission: Day or night operation, equipment, type of operation and terrain.
3. Weather: Wind, Rain, Fog or Snow.
   AWADS: Adverse Weather Aerial Delivery System (C – 130)
   SKE: Station Keeping Equipment (C – 141B/C-17 Globemaster)
   INS: Inertial Navigation System (C – 141B/C-17 Globemaster)
4. State of Training: Jumpmaster has the most control of this factor.

C. Assembly Aids:

1. Natural
2. Mechanical

D. Air Route Diagram:

The Air Route Diagram or Flight Route can be obtained from the aircraft Navigator.

E. Computed Air Release Point (CARP):

1. The CARP is obtained from the aircraft Navigator during the JM/Pilot Crew briefing.
2. The CARP is an imaginary point in the air where the first parachute suspended object must exit the aircraft in order to strike the Personnel Point of Impact (PPI) or the Heavy Equipment Point of Impact (HEPI).

F. Determining Reference Points:

1. The 1-minute reference point is measured 4,000 meters, opposite the direction of flight, from the lead edge of the drop zone.
2. The 30-second reference point is measured 2,000 meters, opposite the direction of flight, from the lead edge of the drop zone.
3. A C – 130 Hercules, traveling at 130 knots (Planning drop speed), travels at 75 yards per second.

   a. To determine the 1 minute and 30 second reference points:

      1 minute

      75 yards per second
      X 60 seconds
      4,500 yards

   b. The Air Force uses yards and the Army uses meters; therefore, we must convert yards to meters.

      1 minute

      4,500 yards
      X .9144111
      4114.8499 meters

   Round these off to the nearest thousand: 4,000 meters (1 Minute) and 2,000 meters (30 seconds)

SUBJECT: Duties and Responsibilities of the Drop Zone Support Team Leader (DZSTL)

REFERENCES:

- 82D ABN DIV ASOP, Edition VI, Chapter 4, and 17
- AFI 13-217 (Appendix G)
- Fort Bragg MOA (Appendix F)
- Joint Service MOA (Appendix F)

The Drop Zone Support Team Leader is exclusively responsible for the delivery of personnel, heavy equipment and Container Delivery System (CDS) to the drop zone, under Visual Meteorological Conditions (VMC), for operations involving one to four aircraft, without the use of the Special Tactics Squadron (STS). In the 82D Airborne Division, the duties of the DZSTL and the DZSO can be combined.

A. General Information:

1. Peace Time:

   a. The primary mission of the DZSTL is to provide VMC airdrop coverage for one to four aircraft.
   b. The secondary mission is to provide VMC coverage for more than 4 aircraft.
   c. The secondary mission is also to provide Adverse Weather Aerial Delivery System (AWADS) airdrop coverage for one to three C – 130 Hercules aircraft.

2. War Time:

   a. The primary mission of the DZSTL is to provide CDS air drop coverage for Battalion size or smaller.
   b. The secondary mission of the DZSTL is to provide CDS air drop coverage for Brigade size or larger.

B. Qualifications:

1. SGT or above.
2. Current and qualified Jumpmaster.
3. Current and qualified DZSTL.
4. Graduate of a recognized DZSTL course.

C. Currency:

1. Must assist a current and qualified DZSTL on a successful airborne operation at least twice.
2. A successful airborne operation is defined, as one parachute suspended object at a minimum must land on the drop zone.
3. Must perform the duties of the DZSTL once every 6 months to remain current.

D. Certifying Agencies:

1. 82D ABN DIV Jumpmaster Course
2. USAIS Pathfinder Course
3. USAIS DZSTL Course
4. 1st SOCOM Jumpmaster Course
5. STS school

E. Mission Responsibilities:

1. The DZSTL must turn in a completed DZST/Aircrew Mission Briefing Checklist to the GLO, Bldg. 900, and NLT 3 hours prior to load time.
2. The DZSTL must ensure that the following references are present on the drop zone:
   - 82D ABN DIV ASOP, Edition VI, Chapter 17 (At a minimum)
   - Fort Bragg MOA (Appendix F)
   - AF Form 3823 (Chapter 4)
   - AMC Form 168 (Chapter 4)
   - AFI 13-217 (Appendix G)
   - DZST/Aircrew Mission Briefing Checklist
   - Checklist format for incident reporting (Chapter 4)

3. Required Equipment:

   - 9 VS – 17 Panels (Day)
   - 1 Raised Angle Marker (RAM) (Day)
   - 1 red smoke grenade per pass (DAY)
   - 11 Omni-directional white lights (Night)
   - 1 red star cluster per pass (Night)
   - 1 Amber rotating beacon (Night)
   - Night vision goggles (2 sets at a minimum for night time)
   - 2 FM radios. 1 MUST be vehicular mounted
   - Military vehicle
   - Wind speed indicator
   - Required pyrotechnics
   - Transition frequency from your unit's SOI
   - Lensatic compass
   - Military map of the area and protractor
   - Acquisition aids: Strobe light, signal mirror, etc. (Must be pre-briefed)
   - GPS

4. Contact Range Control NLT 1 hour prior to drop time to tell them that you are on station.
5. Continuously monitor Range Control and the transition frequency.
6. Conduct a reconnaissance of the drop zone for any unsafe conditions.
7. Find the PI and set up the code letter and RAM IAW the DZST/Aircrew Mission Briefing Checklist.
8. Ensure the DZSO co-locates with the DZSTL NLT 15 minutes prior to the first time on target.
9. 10 minutes prior to drop time contact Range Control and tell them "You are set up correctly," and "Ready to accept the mission."

F. All rotary wing aircraft within 1,000 meters of the drop zone must be transitioned away from the drop zone, using the appropriate flight corridor. 5 minutes prior to drop time DZSTL will display any pre-briefed acquisition aids.

G. Contact Range Control in the event of an emergency situation.

H. The DZSTL must complete AMC Form 168, Strike Report and the Checklist Format for Incident Reporting, if needed, and turn them into the GLO at the end of their duty.

1. The first parachute suspended object per aircraft, per pass, MUST land within 25 yards of the PPI or HEPI, for it to be considered a "PI" strike.
2. 90% of the personnel on a mass tactical operation must land on the surveyed drop zone for it to be considered a satisfactory airborne operation.

CHECKLIST FORMAT FOR INCIDENT REPORTING

A. GENERAL

(1) JA/ATT Sequence Number: _____
(2) Date of operation: _____
(3) TOT (Local): _____
(4) Type Mission: _____
    (a) Number of A/C: _____
    (b) Type of A/C: _____
    (c) Type assault zone: _____

B. PERSONNEL INVOLVED

(1) Flying Unit: _____
(2) Unit Supported: _____
(3) DZSTL (Name/Rank/Unit): _____
(4) Medics (In place): _____
(5) POC for further information: _____

C. ASSAULT ZONE

(1) Name/Type: _____
(2) Location: _____
(3) Any deviation from survey: _____
(4) Marked IAW the survey: _____

D. COMMUNICATIONS WITH AIRCRAFT

(1) Type Radios: _____
(2) Frequency used: _____
(3) Problems: _____

E. WEATHER PASSED TO AIRCRAFT

(1) Time of observation: _____
(2) Time weather was passed to A/C or Range Control: _____
(3) MEW (For Army Aircraft Only) Mean Effective Wind: _____
(4) Surface wind: _____
(5) Remarks: _____

F. POST INCIDENT WEATHER OBSERVATION

G. NARRATIVE

_____
_____
_____
_____

DZST/AIRCREW MISSION BRIEFING CHECKLIST

1. DZ NAME/LOCATION AND JA/JATT MISSION SEQUENCE NUMBER: _____

2. TOT/BLOCK TIME AND NUMBER OF PASSES REQUESTED: _____

3. DATE DROP ZONE APPROVED FOR USE: _____

4. TYPE DROP (HE, PE, CDS): _____

5. TYPE OF RELEASE: VIRS CARP GMRS VISUAL AWADS ZONE MARKER

   a. TYPE PARACHUTE/ALTITUDE: _____

   b. GROUND QUICK DISCONNECTS: _____

   c. NUMBER OF JUMPERS/BUNDLES/PLATFORMS: _____

6. NUMBER AND TYPE OF AIRCRAFT: _____

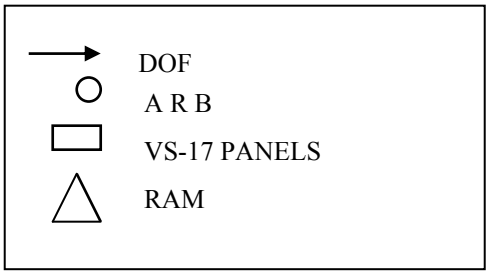
7. DZ INFORMATION: _____

   a. MARKINGS/SIGNALS: (SKETCH MARKINGS IN BOX)

      1. PANEL/LIGHTS: _____

      2. SHAPE DESIGNATOR/CODE LETTER: _____

      3. SMOKE/FLARES: _____



      4. EMERGENCY ROCEDURES: _____

   b. DZ SUPPORT CAPABILITIES: _____

      1. RADIO AVAILABLE/FREQUENCIES: _____

      2. VISUAL ACQUISITION AIDS: _____

      3. NAVAIDS AVAILABLE: _____

      4. MEW EQUIPMENT: _____

      5. VERIFY AIRSPACE COORDINATION: _____

8. AIRBORNE COMMANDER (ARMY) NAME, RANK, UNIT, CONTACT PHONE UMBER: _____
_____

9. AIRMISSION COMMANDER (USAF) NAME, RANK, UNIT, CONTACT PHONE UMBER: _____
_____

10. DZSTL NAME, RANK, UNIT, CONTACT PHONE NUMBER: _____
_____

11. DROP SCORE/INCIDENT/ACCIDENT REPORTING PROCEDURES: _____

DZST/AIRCREW MISSION BRIEFING CHECKLIST

LINE 1. List the name of the Drop Zone (Sicily, George Tree, Taylor Creek, etc.), its location (Ft. Bragg, NC, Camp Mackall, NC, Ft. Stewart, GA.), and the JA/ATT sequence number from the AMT.

LINE 2. DTG of drop (18 Apr 2200 – 2230)

LINE 3. Must be current survey. Current surveys can be obtained by call in the AZAR Fax on demand system at DSN 576-2899 and request document No. 1001.

LINE 4. Write in the type of drop.

LINE 5. Circle the type of release.
LINE 5a. List the type of parachutes being used. If more than one type of parachute is being use, the drop altitude (AGL) for each type of parachute must be listed.
LINE 5b. Applies to heavy equipment and CDS drops.
LINE 5c. List the total number of personnel, door bundles, or platforms scheduled to exit.

LINE 6. Use the format (# of Aircraft) X (Aircraft type).

LINE 7. (Length) X (Width) in yards.
LINE 7a (1) Number, type and color of panels and/or lights
LINE 7a (2) Describe shape designator and draw a sketch in the box w/direction of flight from left to right
LINE 7a (3) List type and color that you have available for use.
LINE 7a (4) Clearly specify a single primary no-drop signal. This signal should be immediately recognizable by the aircrew. Suggested signals DAY: Deploy RED smoke. NIGHT: Turn off lights.
LINE 7b (1) List type of radio (FM, UHF, VHF) and the operating frequencies.
LINE 7b (2) List type of aid (RAM, Amber Rotating Beacon, Signal Mirror, Visible Strobe) and location of aid (Amber Rotating Beacon PI + 1,000 yards).
LINE 7b (3) List any devices that will assist the aircraft in locating the IP (Zone Marker).
LINE 7b (4) List the equipment used to determine the Mean Effective Wind (Anemometer, PI BAL).
LINE 7b (5) When dropping Rhine Luzon, George Tree, or Mackall Airfield, Monday through Friday, airspace coordination will be made with Mackall Tower. When dropping Sicily, Normandy, Holland, Salerno, Nijmegen or St. Mere Eglise, airspace coordination will be made through Range Control. Weekend airspace coordination for the Camp Mackall drop zones will be made with Range Control.

LINE 8. Name, rank, unit and contact phone number for the Airborne Commander.

LINE 9. Name, rank, unit and contact phone number for the Air Mission Commander (If known).

LINE 10. Name, rank, unit and contact phone number for the DZSTL.

LINE 11. Drop scores are reported on AMC Form 168, Strike Report. Incidents and accidents are reported on the Flash Report.

DROP ZONE/LANDING ZONE CONTROL LOG

LOCATION	CCT AND UNIT	DZ/LZ CONTROL OFFICER AND UNIT	DATE
			DROP ZONE SAFETY OFFICER AND UNIT

LEGEND

AH-Airland *(Heavy)*
AL-Airland
CD-CDS/CRL/CRS
GM-GMRS

HE - Heavy Equipment
HO - HALO/HAHO
IL - Inverted "L"

LS-Instrument Landing System
PE-Personnel
RB-Radar Beacon Drop

SCORE METHOD
M - Measured
P - Paced
E - Estimated

LINE NO	TYPE ACFT	UNIT	CALL SIGN	TYPE MSN	ETA	ATA / ATD	STRIKE REPORT YDS	STRIKE REPORT CLOCK	LZ S	LZ U	SURF WIND	SCORE METHOD	MEAN EFFECTIVE WIND TIME	MEAN EFFECTIVE WIND ALT	MEAN EFFECTIVE WIND DIR & VEL	REMARKS *(Continue on Reverse)*
1																
2																
3																
4																
5																
6																
7																
8																
9																
10																
11																
12																
13																
14																
15																

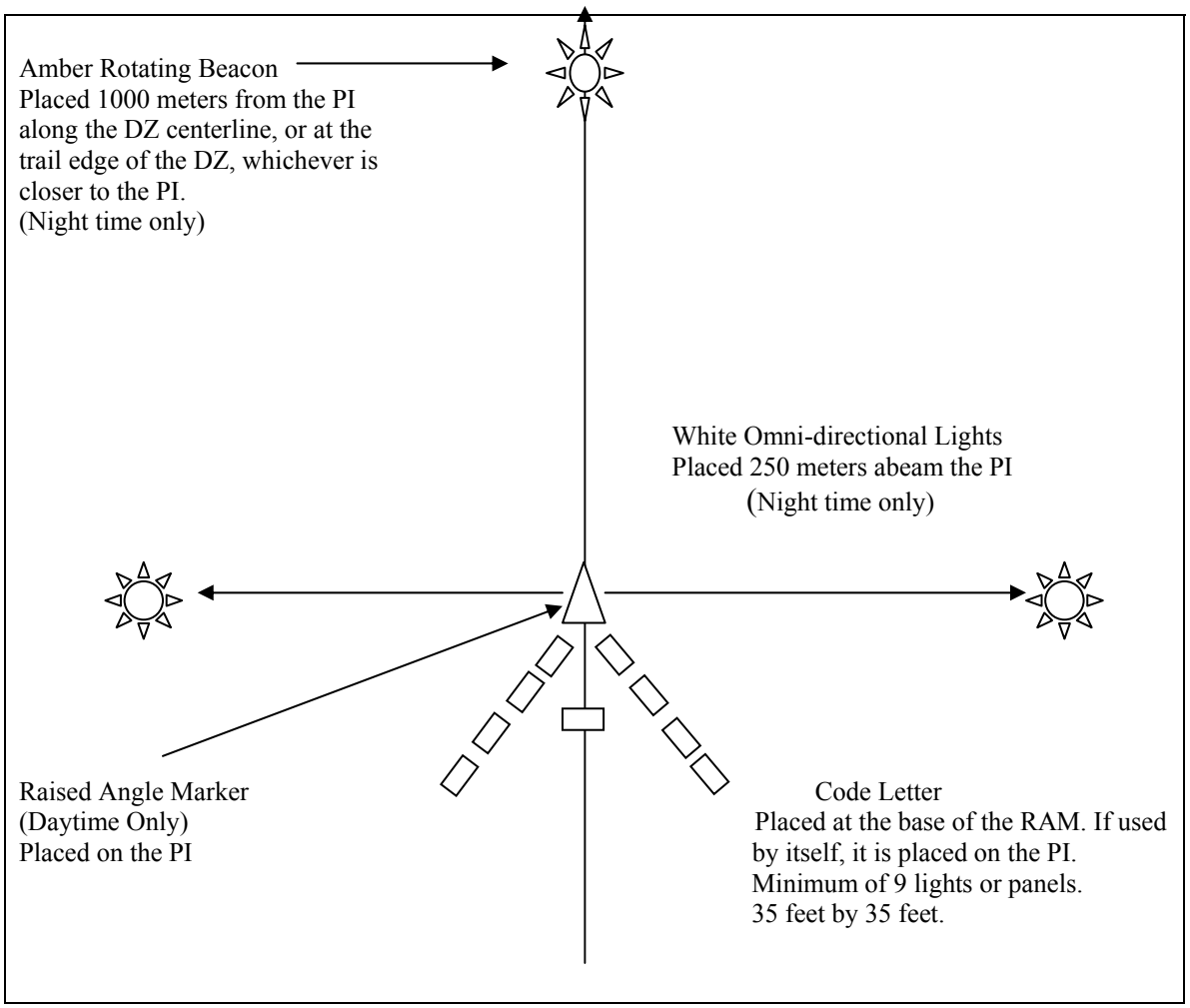
AF FORM 4304,20020903*(EF-V1)* REPLACES AMC FORM 168,DEC 92

SUBJECT: Standard Drop Zones for CARP Operations

REFERENCES: 82D ABN DIV ASOP, Edition VI Chapters 4 & 17 and Appendix G.

A. For daylight personnel drops, the Personnel Point of Impact (PPI) will be marked with a Code Letter, constructed of 9 VS – 17 panels and 1Raised Angle Marker (RAM). See Figure 1.

Figure 1



B. For night personnel drops, the PPI will be marked with a code letter constructed of 9 white omni-directional lights. There will be 1 white flanker light placed 250 meters to the left and right of the PPI. Additionally, there will be an amber rotating beacon placed at the trail edge of the drop zone or 1,000 meters from the PPI, whichever is closer to the PI.

C. For drop zone authentication, 1 of the omni-directional lights may be covered with a green or blue filter. The particular color and position of the light will be the drop zone authentication. This authentication must be agreed upon by the planning staff, briefed to the aircrew and annotated on the DZSTL/Aircrew Mission Briefing Checklist.

D. For daylight CDS/Heavy Equipment drops, the Heavy Equipment Point of Impact (HEPI) will be marked with a code letter constructed of 9 VS – 17 panels and a Raised Angle Marker (RAM).

E. For night CDS/Heavy Equipment drops, the drop zone will be marked with a code letter constructed of 9 white omni-directional lights. There will be one white flanker light placed 250 meters to the left and right of the HEPI, and an amber rotating beacon placed on the trail edge of the drop zone or 1,000 meters from the HEPI, whichever is closer. For drop zone authentication, 1 of the omni-directional lights may be covered with a green or blue filter. The particular color and position of the light will be the drop zone authentication. This authentication must be agreed upon by the planning staff, briefed to the aircrew and annotated on the DZST/Aircrew Mission Briefing Checklist.

F. The lack of a RAM, code letter, red smoke, and red flares or any other pre-coordinated signal on the drop zone, indicates a "NO DROP" condition.

G. To avoid miscommunication between the aircraft and the drop zone, the following must occur:

1. The DZST/Aircrew mission-briefing checklist is filled out accurately.
2. The Aircrew is briefed completely during the Pilot/JM briefing.
3. The drop zone is marked IAW the DZST/Aircrew mission-briefing checklist.

H. Random and Circular Drop Zones:

1. Aircraft can approach from any heading, the drop zone radius (From the PI to the outer edge), must be at least the distance from the PI to the trail edge corner of a minimum sized rectangular drop zone for the same type of drop. The entire rectangular drop zone must fit within the circular drop zone.
2. These drop zones will be marked with the Code Letter H or O at a minimum size of 35 feet by 35 feet. See Figure 2.

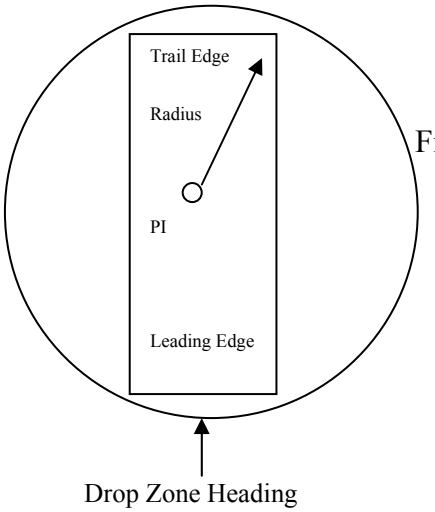


Figure 2.

I. Drop Zone Markings for Fort Bragg and Camp Mackall

1. For daylight operations, the RAM will be placed on the PI with the Code Letter. The code letter assigned to that drop zone will measure 35 feet by 35 feet and be placed at the base of the RAM. Authorized Code Letters are: J, A, C, R, and S for rectangular drop zones. Code Letters H and O will be utilized for circular drop zones. For night operations, the apex of the Code Letter will be placed at the PI. The flanker lights will be used and placed 250 meters to the left and right of the PI, in the 3 and 9 o'clock positions. The amber rotating beacon will be placed 1,000 meters from the PI or at the trail edge of the drop zone, whichever is closer. The following Code Letters are assigned to the Fort Bragg and Camp Mackall drop zones:

DROP ZONE	PPI	HE/CDS	CIRCULAR
Holland	J	C	H
Netherlands	J	C	H
Luzon	A	R	O
Rhine	A	R	O
Nijmegen	A	J	
Normandy	R	R	H
Cotentin	R	C	
Salerno	J	S	O
Volturno	J	S	
Sicily	A	C	H
Gela	A	C	
St. Mere Eglise	S	S	

Personnel

Altitude AGL	Width (See Note 1)	Length 1 Parachutist (See Note 2)	Additional Parachutists
To 1000 feet	600 yds/549 m	600 yds/549 m	Add 75 yds/69m for each additional parachutist to the trailing edge of the Drop Zone
Above 1000 feet	Add 30 yds/27 m to width and length for each 100 feet above 1000 feet. (Add 15 yds/14 m to each side of DZ).		

Heavy Equipment

Altitude AGL	Width (See Note 1)	Length 1 Platform (See Note 2)	Additional Platforms
To 1100 feet	600 yds/549 m	1000 yds/915 m	Add 400 yds/366 m (C-130) or 500-yds/457 m (C-141, C-5A or C-17) to trailing edge for each additional platform.
Above 1100 ft	Add 30 yds/27 m to the width and length for each 100 feet above 1100 feet. (Add 15 yds/14 m) feet to each side of the DZ		

CDS (C –130) (Single Aircraft Operation Only)

Altitude AGL	Width	# Of Containers Single/Double	Length (See Note 2)
To 600 ft	400 yds/366m	1 1 – 2 2 3 - 4 3 5 – 6 4 7 – 8 5 8 - 9	400 yds/366 m 450 yds/412 m 500 yds/457 m 550 yds/503 m 700 yds/640 m
Above 600 ft	Add 40 yds/37 m to DZ width and length for each 100 feet above 600 feet. (20 yds/18 m added to each side of DZ)		

CDS (C-141) (Single Aircraft Operation Only)

Altitude AGL	Width	# Of Containers Single/Double	Length (See Note 2)
Too 600 feet	450 yds/412 m	1 1 – 2 2 3 – 4 3 5 – 6 4 – 8 7 – 16 9 – 14 17 – 28 15 – 20 30 - 40	590 yds/540 m 615 yds/562 m 665 yds/608 m 765 yds/700 m 915 yds/837 m 1106 yds/974 m
Above 600 feet	Add 40 yds/37 m to DZ width and length for each 100 feet. (20 yds/18 m added to each side of DZ).		

NOTE 1:

a. For day visual formations, increase width by 100-yds/91 m (50 yds/46 m to each side).
b. For Station Keeping Equipment (SKE) formation, increase width by 400-yds/366 m (200 yds/183 m to each side).
c. Official sunset to sunrise increase width by 100 yds/91 m for single aircraft visual drops (50 yds/46 m to each side) or 200 yds/183 m for visual formations (100 yds/91 m each side).

NOTE 2: Official sunset to sunrise increase length by 100 yds/91 m for visual drops (50 yds/46 m each end)

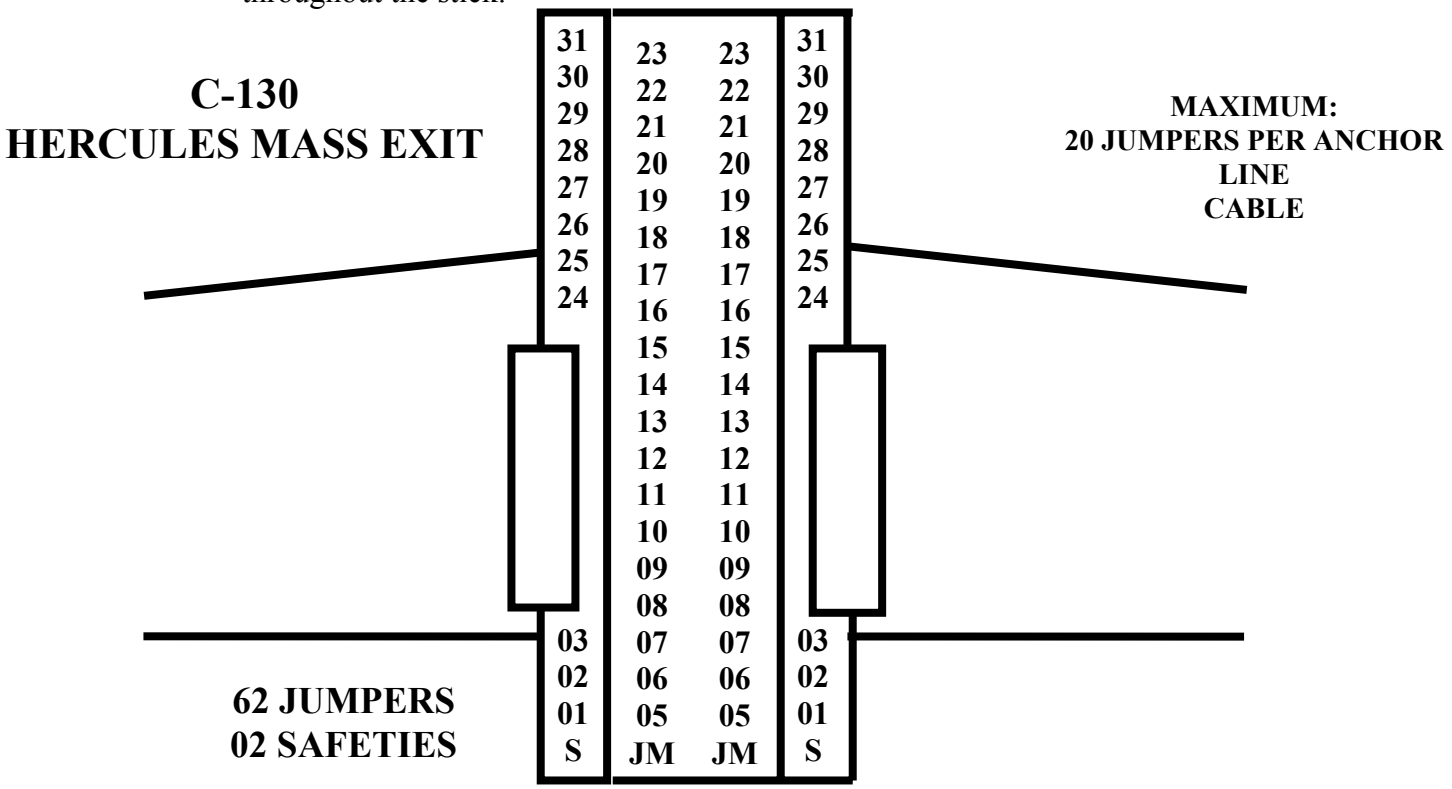
NOTE 3: For STS/Para-rescue unilateral operations, see Para 12.5. Controlled Exit (CAPES) and Alternating Door (ADEPT) procedures do no apply to STS/Para-rescue operations. Figure 1. Tactical Airlift DZ. Size Criteria.

SUBJECT: Air Force Aircraft and Jump Commands

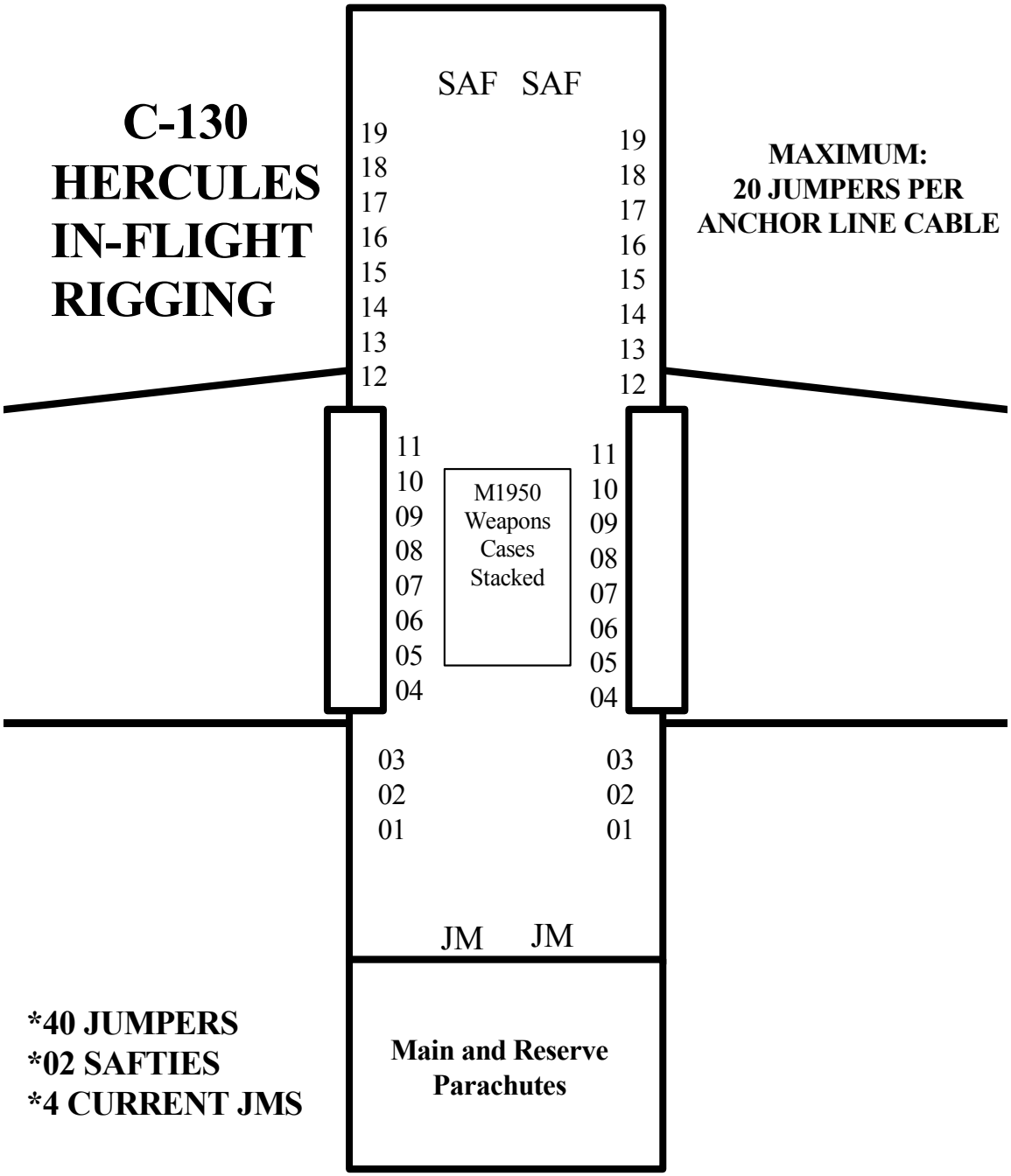
REFERENCE: 82D ABN DIV ASOP, Edition VI, Chapters 4, 12, 13.

C – 130 Hercules

1. Capabilities:
    a. Maximum number of jumpers for training: 62
    c. In-flight rigging: 40 jumpers to include PJM and AJM.
    d. A – Series containers: 1 per door, 1st pass only, 1st three aircraft in an offset trail formation.
2. Description:
    a. 2 paratroop doors
    b. 4 anchor line cables. Maximum number of jumpers per anchor line cable is 20.
    c. 7 sets of jump caution lights.
    d. 2 static line retrieval systems.
    e. 2 towed parachutist retrieval systems.
    f. Drop speed: 125 – 130 knots.
3. Jump Procedures:
    a. Time Warnings: 20 minutes, 10 minutes and 1 minute
    b. Jump Commands: 9
4. In-flight Rigging:
    In-flight rigging commences 2 hours and 20 minutes prior to green light; and must be completed by the 20-minute time warning. 4 additional Jumpmasters required throughout the stick.



C-130 HERCULES IN-FLIGHT RIGGING



MAXIMUM:
20 JUMPERS PER ANCHOR LINE CABLE

***40 JUMPERS**
***02 SAFTIES**
***4 CURRENT JMS**

***JUMPERS # 12 and 13**
CURRENT JUMPMASTERS

C – 141B Starlifter

1. Capabilities:

    a. Maximum number of jumpers for combat: 155
    b. Maximum number of jumpers for training: 133
    c. In-flight rigging: 100 jumpers to include the PJM and AJM.
    d. A – Series containers: 1 per door, 1st pass only, 1st three aircraft in an offset trail formation.
    e. No aft end capabilities for paratroopers.

2. Description:

    a. 2 paratroop doors
    b. 4 anchor line cables. Maximum number of jumpers per anchor line cable is 45.
    c. 7 sets of jump caution lights. Only five are visible when the pressure door is down.
    d. 2 static line retrieval cables.
    e. Drop speed: 130 – 135 knots.

3. Jump procedures:

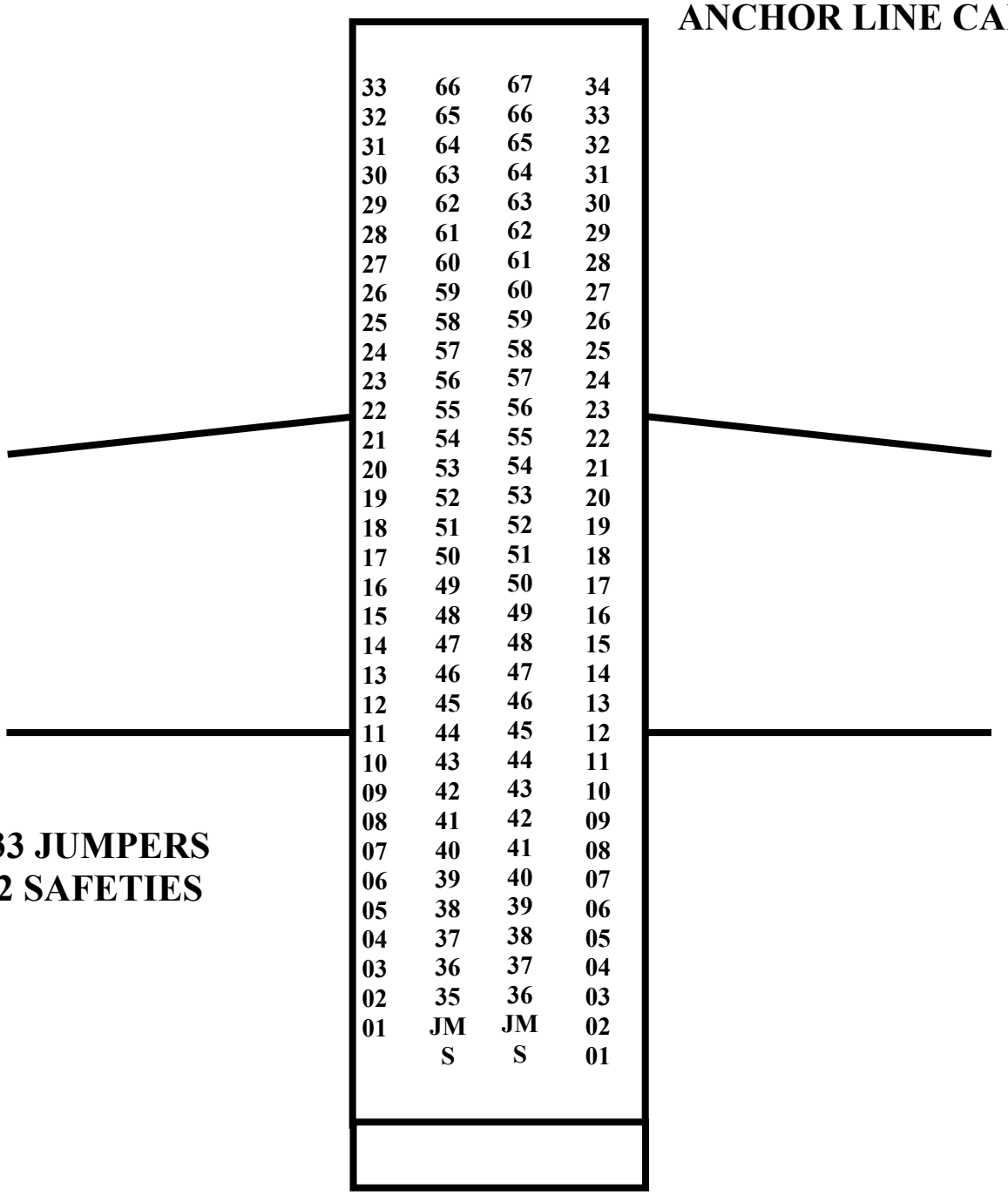
    1. Time warnings: 20 minutes, 10 minutes and 1 minute.
    2. Jump commands: 9
    3. 2 towed jumper bars

4. In- flight rigging:

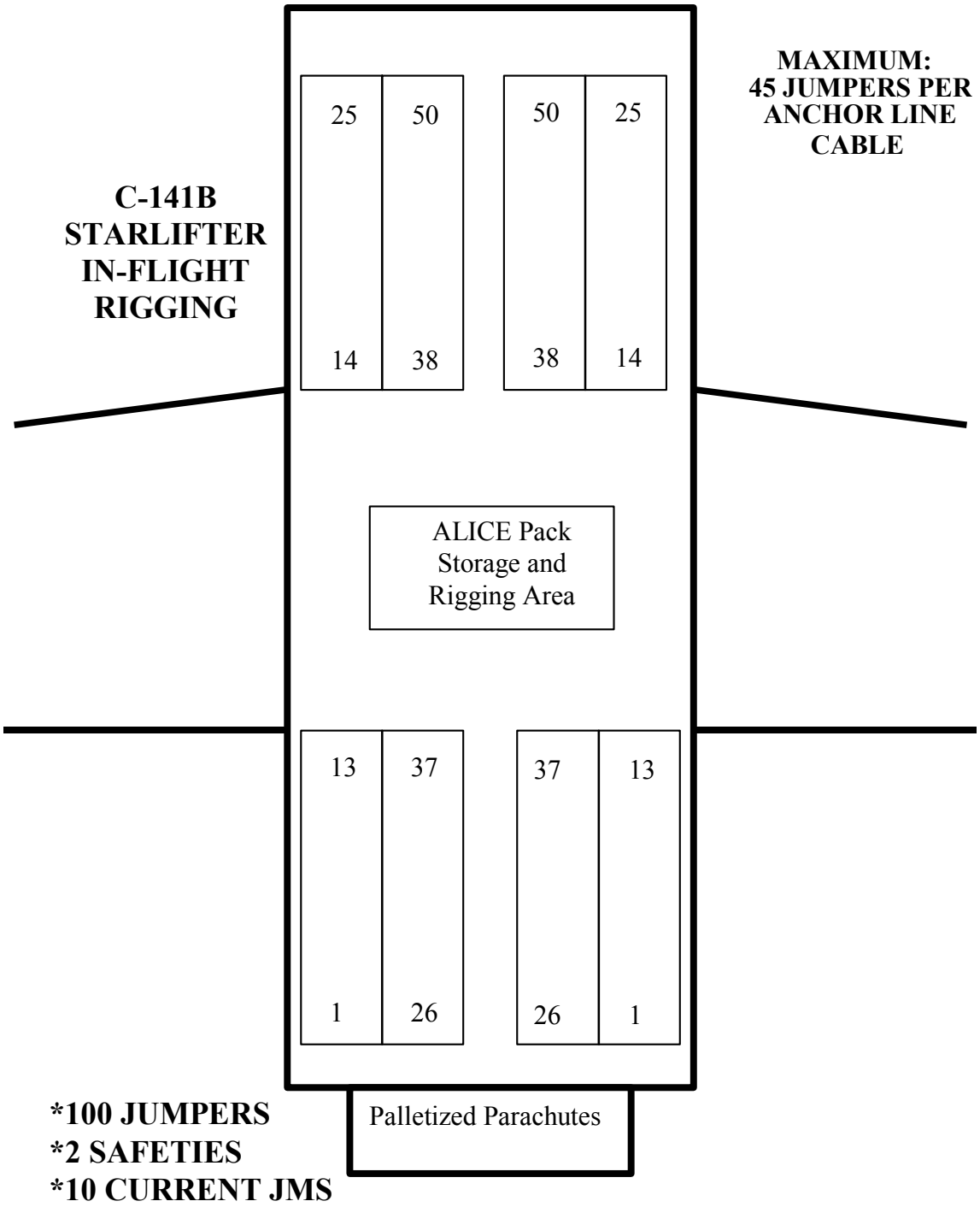
    In-flight rigging will commence 2 hours and 20 minutes prior to green light, and **MUST** be completed by the 20-minute time warning. 10 additional Jumpmasters are required throughout the stick.

C-141B
STARLIFTER MASS EXIT

MAXIMUM:
45 JUMPERS PER
ANCHOR LINE CABLE



133 JUMPERS
02 SAFETIES



***100 JUMPERS**
***2 SAFETIES**
***10 CURRENT JMS**

***JUMPERS # 7,12,23,32,44**
CURRENT JUMPMASTERS

***NOTE:**
AIRCRAFT CONFIGURATIONS WILL VARY DEPENDING ON THE FLYING UNIT'S MISSION AND AIR FORCE REQUIREMENTS

C – 17 Globemaster III

1. Capabilities:

    a. Maximum number of jumpers for training: 100
    b. In-flight rigging: 100 jumpers to include the PJM and the AJM.
    c. A – Series containers: 1 per door, 1st pass only, 1st three aircraft in an offset trail formation.
    d. No aft end jump capabilities.

2. Description:

    a. 2 paratroop doors.
    b. 4 anchor line cables. Maximum number of jumpers on the outboard anchor line cable is 27. Maximum number of jumpers on the inboard anchor line cable is 24.
    c. 10 sets of jump caution lights. Each set of jump caution lights will have 1 red, amber and green jump caution light. The amber jump caution light will illuminate 30 seconds prior to green light.
    d. 2 static line retrieval systems.
    e. 2 towed parachutist retrieval systems.
    f. Drop speed: 130 knot +/- 5 knots.

3. Jump procedures:

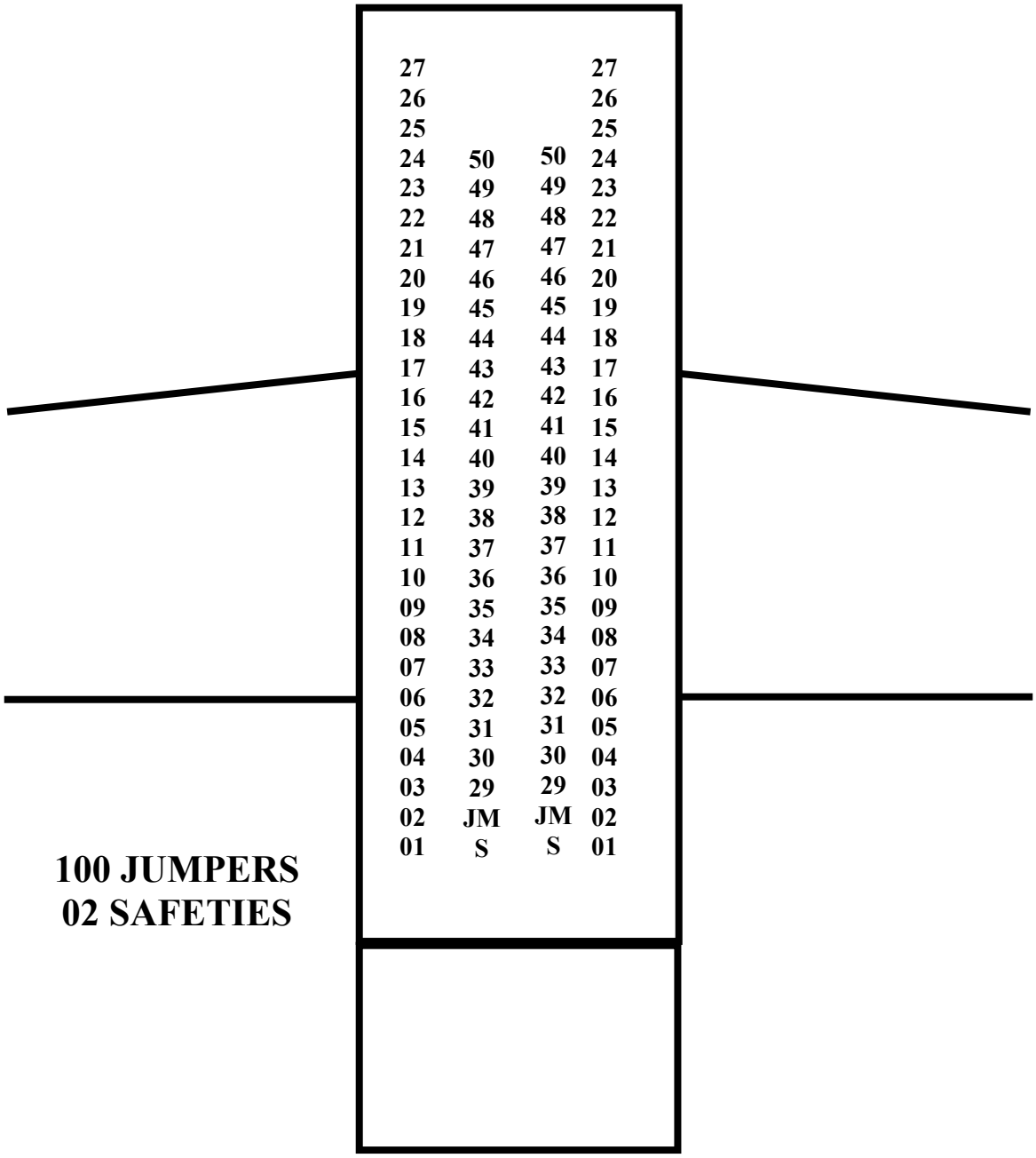
    a. Time warnings: 20 minutes, 10 minutes and 1 minute.
    b. 6 minute slow down and paratroop doors open.
    c. Jump commands: 9.

4. In-flight Rigging:

    In-flight rigging commences 2 hours and 20 minutes prior to green light; and must be completed by the 20-minute time warning. 8 additional Jumpmasters are required throughout the stick.

C-17 III
GLOBEMASTER

MAXIMUM:
27 JUMPERS PER
ANCHOR LINE CABLE



100 JUMPERS
02 SAFETIES

C - 17 GLOBEMASTER III IN-FLIGHT RIGGING

MAXIMUM:
27 JUMPERS PER OUTBOARD ANCHOR LINE CABLE

24 JUMPERS PER INBOARD ANCHOR LINE CABLE

27			27
26			26
25			25
24			24
23	50	50	23
22	49	49	22
21	48	48	21
20	47	47	20
19	46	46	19
18	45	45	18
17	44	44	17
16	43	43	16
15	42	42	15
14	41	41	14
13	40	40	13
12	39	39	12
11	38	38	11
10	37	37	10
09	36	36	09
08	35	35	08
07	34	34	07
06	32	32	06
05	31	31	05
04	30	30	04
03	29	29	03
02	JMS	JMS	02
01			01

Palletized Parachutes & Alice Packs & Weapons Cases

*** 100 JUMPERS**
*** 02 SAFETIES**
*** 08 ADDITIONAL CURRENT JMS # 7,14,32,41**

*** NOTE: AIRCRAFT CONFIGURATIONS WILL VARY DEPENDING ON THE FLYING UNIT'S MISION AND AIR FORCE REQUIREMENTS**

SUBJECT: Practical Work in the Aircraft (PWAC)

REFERENCE: 82D ABN DIV ASOP, Edition VI, Chapters 4 and 13.

1. Actions at the 10 Minute Time Warning:

   a. The JM Evaluator will issue the JM student a 10 Minute Time Warning. At this time you will release your seatbelt, placing it behind you, ensuring that it does not become routed around any item of equipment. You will then stand up and face the AFT end portion of the aircraft and tighten down on the appropriate adjustable leg strap. You will then remove the universal static line snap hook from the top carrying handle of the reserve parachute and hook up on the inboard anchor line cable ensuring the opening gate. You will then form a bite in the universal static line, extend your arm, release the universal static line, slap your thigh and turn towards the skin of the aircraft.

   b. Issue "10 Minutes".

10- Minutes

c. “Get Ready”.

Get Ready

d. “Outboard Personnel Stand Up”.

Outboard Personnel Position

“Outboard Personnel Stand Up”.

Stand Position

Up Position

e. “Inboard Personnel Stand Up”.

In Board Position

Stand Position

“Inboard Personnel Stand Up”.

Up Position

f. “Hook Up”

Keep in mind you must extend your arms above your head a minimum of 3 times, and where you start you must finish.

Hook Position

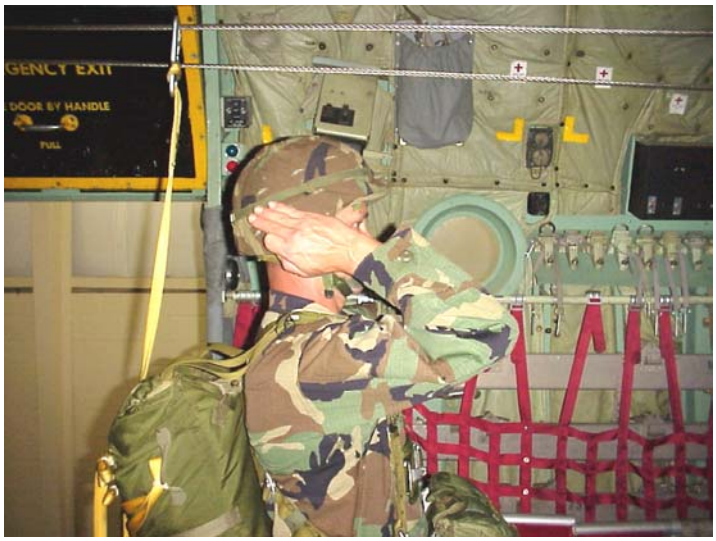
"Hook Up".

Up Position

g. "Check Static Lines".

Keep in mind you must extend your arms a minimum of 3 times, and where you start you must finish.

"Check Static Lines"



Start Position for Check Static Lines

“Check Static Lines”

Lock Out Position for Check Static Lines

Stop Position for Check Static Lines

Supplementary command: “Last two jumpers turn towards the skin of the aircraft, second to the last jumper check the last jumpers’ static line”.

h. “Check Equipment”. Once all movement has ceased, the JM student will turn to the JM evaluator and give a thumb up sounding off with, “All Movement Has Ceased, Jumpmaster”. You will then check your own equipment to include: The entire outer rim of the ballistic helmet, parachutist retention strap, foam impact pad, pull the dot fastener with tab, chinstrap, canopy release assemblies, chest strap ejector snap, upper tie down tape, connector snaps, snap hooks, leg strap ejector snaps, quick release snap, quick release in waistband, ejector snap HPT lowering line, appropriate adjustable leg strap, release handle and the rip cord rip insert.

“Check Equipment”.

Keep in mind you must extend your arms a minimum of 3 times and where you start you must finish.

Start Position for Check Equipment

“Check Equipment”.

Lock Out Position for Check Equipment

"Check Equipment".

Stop Position for Check Equipment

i. "Sound Off For Equipment Check". Once you issue "Sound off for Equipment Check", you will turn to your JM Evaluator giving a thumb up sounding off with **"All Okay Jumpmaster"**.

"Sound Off For Equipment Check".

Position for Sound Equipment Check

j. Place the hand closest to the skin of the aircraft over the inboard anchor line cable and back up until you make contact with the universal static line snap hook. Form a bite in the universal static line using both hands. Turn towards the skin of the aircraft, open your hand to remove the twist in the universal static line, and then reform the proper bite. Inspect your universal static line from the universal static line snap hook down to the bite, open your hand and inspect the bite, place two fingers in the bite below your hand, then trace the universal static line until it disappears over your shoulder. You will leave your hand in place then sound off with "Number One Jumper Check My Static Line".

k. The JM Evaluator will then inspect your universal static line from the universal static line snap hook to the pack closing tie and tell you to hand your static line to the safety.

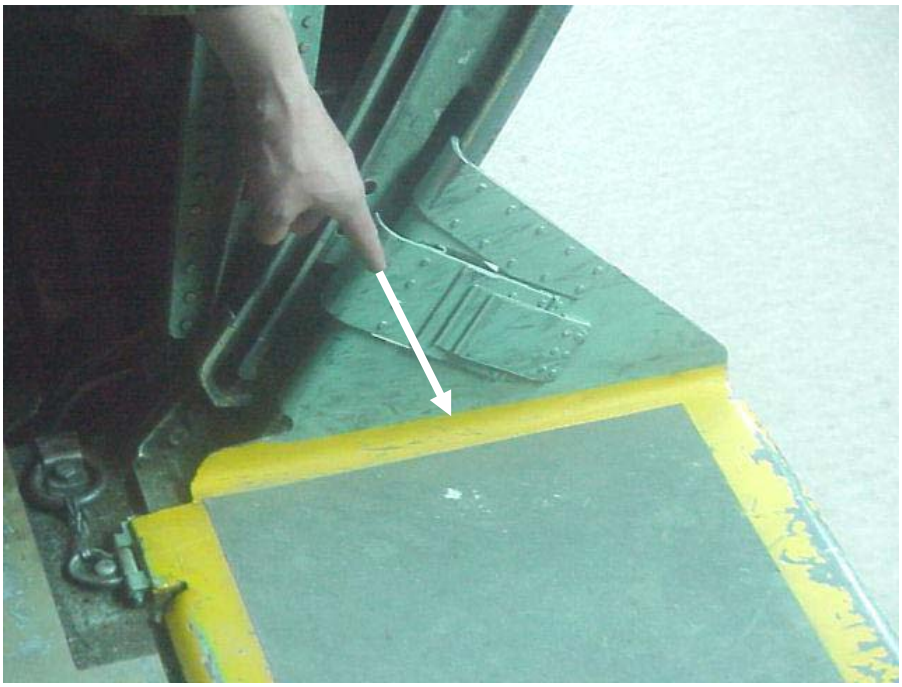
2. Actions at the Paratroop Door.

a. The JM Evaluator will say, "You Watch Me", and will perform a proper paratroop door check. Upon completion of the paratroop door check, the JM Evaluator will turn to the JM Student and say, "Army Your Door".

b. Extend your arm and sound off with, "Safety Control My Static Line". **DO NOT MOVE YOUR FEET!!!** Once the safety has control of your universal static line.

c. Secure the lead edge of the paratroop door with the hand closest to the skin of the aircraft. Rotate into the paratroop door and secure the trail edge of the paratroop door with your trail hand. Either place is correct.

d. Ensure your feet do not touch any portion of the yellow or white line on the jump platform.



e. With your lead hand you will release your grasp of the support bracket on the lead edge of the paratroop door and point at the PIP pin while visually inspecting to insure that it is secured in place in the forward hole. Then re grasp the support bracket on the lead edge of the paratroop door.

f. The JM Student will now perform a paratroop door and jump platform check utilizing the letters **LTCT**. You will then kick the **LEAD** down lock with the lead foot, and then place it back inside the aircraft, behind the yellow line.

g. Kick the **TRAIL** down lock with the trail foot, and then place it on the **CENTER** of the jump platform.

h. You will now place your trail foot in the center of the jump platform.

i. Form a knife cutting edge with the trail hand, and **TRACE** the trail edge of the paratroop door. While tracing the edge of the paratroop door your hand cannot break contact, if your hand does break contact you must start your inspection from the top and trace the entire edge again.

From top to bottom.

Then bottom to top.

Upon completion of this inspection, immediately regain control of the trail edge of the paratroop door.

j. The JM Student will then make the first clear to the rear. You will lean straight outside the aircraft, locking of your elbows is not required, **<u>however; you must lean far enough outside</u>** so that you can check down and to the rear of the aircraft for any unsafe conditions. While coming straight back inside the aircraft to take up the rest position JM students **<u>will not</u>** collapse their right elbow while the left arm is locked, and on the left paratroop door, the JM Student **<u>will not</u>** collapse their elbow while the right arm is locked.

k. Come back inside the aircraft and look at your jumpers.

l. Then look at your safety.

m. You will then take up a rest position and wait for the 1 Minute Reference Point.

n. Once the 1 Minute Reference Point is identified, the JM Student will issue a **SILENT** 1 Minute Time Warning to the jumpers, **<u>with the lead hand.</u>**

o. You will then re-secure the lead edge of the paratroop door. You will then take up a rest position and wait for the 30 Second Reference Point.

p. Once the 30 Second Reference Point is identified, the JM Student will **IMMEDIATELY** make the final clear to the rear. **<u>There is not a 30 second hand and arm signal.</u>** This is your last opportunity to ensure there are **NO** unsafe conditions outside the aircraft.

q. You will then take one step back with the trail foot that is on the jump platform placing it back inside the aircraft next to your lead foot, now with your lead foot you will rotate around with your body facing towards your jumpers, ensure that you let go of the trail edge of the paratroop door, and issue a thumbs up to the JM Student on the opposite paratroop door. You can receive a thumbs up from one of the following: the JM Student, the JM Evaluator on the opposite paratroop door or your JM Evaluator.

r. Once you receive thumbs up, you will immediately issue the jump command, "Stand By".

s. You will then take a step forward with the inboard foot and rotate your body so that you are facing the skin of the aircraft, with your body bisecting the lead edge of the paratroop door. Ensure you are back far enough so you will not block jumpers from exiting the aircraft.

t. You will then reach out with your trail hand, and your JM Evaluator will place your universal static line back in your hand. **DO NOT MOVE YOUR FEET.**

u. If you are the JM Student on the right paratroop door, you will look over your shoulder and ensure that you can see the JM Student on the left paratroop door, prior to getting your universal static line from the JM Evaluator. Once you have regained control of your universal static line, **DO NOT MOVE YOUR FEET!**

3. Actions at the Green Light:

   a. Primary JM (Left Paratroop Door): The PJM will observe the jump caution lights on the lead edge of the paratroop door. Once the green light illuminates, you will issue a verbal command of "GO". **DO NOT** tap your number one jumper. Once all of your jumpers have exited the aircraft, you will hand your universal static line to the JM Evaluator. **DO NOT MOVE YOUR FEET** until the JM Evaluator has positive control of your universal static line. You will then take one-step or half step to the left or right centering yourself on the paratroop door. Then place both hands on the ends of the reserve parachute. You will then look over either shoulder to ensure that all jumpers, to include the AJM, have exited from the opposite side of the aircraft. You will then check the jump caution lights on either edge of the paratroop door. If the jump caution light is still green, you will exit the aircraft.

   b. Assistant JM (Right Paratroop Door): The AJM will observe the PJM over their shoulder and wait for the PJM to issue "GO". Once the number one jumper has exited the aircraft, the AJM will issue a tap and a verbal command of "GO" to their number one jumper. Once all of your jumpers have exited the aircraft, you will hand your universal static line to the JM Evaluator. **DO NOT MOVE YOUR FEET** until the JM Evaluator has positive control of your universal static line. You will then take one step or half step to the left or right, centering yourself on the paratroop door, place both hands on the ends of the reserve parachute and check the jump caution lights on either edge of the paratroop door. If the jump caution light is still green, you will exit the aircraft.

4. Actions at the paratroop door: (C-17 Globemaster III)

   a. The JM Evaluator will say, “You, Watch Me”, and will perform a proper paratroop door check. Upon completion of the paratroop door check, the JM Evaluator will turn to the JM Student and say, “Army Your Door”.

   b. Extend your arm and sound off with, “Safety Control My Static Line”. **DO NOT MOVE YOUR FEET!!!** Once the safety has control of your universal static line, secure the lead edge of the paratroop door with the hand closest to the skin of the aircraft. Rotate into the paratroop door and secure the trail edge of the paratroop door with your trail hand.

   c. The jumpmaster student will then secure the paratroop door lifting bar with the trail hand and then pull down on the paratroop door while looking at the paratroop door up-lock to insure that the paratroop door is locked in the up position. Then replace the trail hand on the trail edge of the paratroop door.

Paratroop Door Up - Lock

d. With the lead hand, reach across to trace the trail edge of the paratroop door, inspecting for any sharp or protruding edges that could cut or frey a universal static line.

e. Trace from the top corner to the bottom corner of the trail edge of the paratroop door, then to the middle of the jump platform.

f. Then back to the top corner of the paratroop door, insuring that your hand does not break contact at any time. It may be necessary to turn slightly in the paratroop door to accomplish this. **DO NOT TURN SO MUCH AS TO EXPOSE YOUR BACK TO THE OPEN PARATROOP DOOR.**

g. There is a handle located in the fuselage of the aircraft, on the lead edge of the paratroop door. **YOU MUST PLACE THE LEAD HAND DIRECTLY INTO THE HANDLE**

h. Walk out onto the jump platform, with both feet on the jump platform, and lean straight outside the aircraft, locking your elbows is not required, **<u>however; you must lean far enough outside</u>** so that you can check down and to the rear of the aircraft for any unsafe conditions. JM students **<u>will not</u>** collapse their right elbow while the left arm is locked, and on the left paratroop door, the JM Student **<u>will not</u>** collapse their left elbow while the right arm is locked.

i. You will then come straight back inside the aircraft and look at your jumpers.

j. Then look at your safety.

k. You will then take up a rest position and wait for the 1 Minute Reference Point.

l. Once the 1 Minute Reference Point is identified, the JM Student will issue a **SILENT** 1 Minute Time Warning to the jumpers, with the lead hand.

m. You will then take up a rest position and wait for the 30 Second Reference Point.

n. Once the 30 Second Reference point is identified, the JM Student will **IMMEDIATELY** make the final clear to the rear. **<u>There is not a 30 second hand and arm signal.</u>** This is your last opportunity to ensure there are **NO** unsafe conditions outside the aircraft.

o. You will then rotate into the aircraft, facing towards your jumpers, and issue a thumbs up to the JM Student on the opposite paratroop door. You can receive a thumbs up from one of the following: the JM Student, the JM Evaluator on the opposite paratroop door or your JM evaluator.

p. Once you receive the thumbs up, you will look at the jump caution lights and wait untill the amber jump caution light illuminates, **THEN AND ONLY THEN**, you will issue the jump command.

"Stand By" **DO NOT ISSUE THE JUMP COMMAND "STAND BY" UNTIL THE AMBER JUMP CAUTION LIGHT IS ON!!!**

q. You will then take a step forward with the inboard foot and rotate your body so that you are facing the skin of the aircraft, with your body bisecting the lead edge of the paratroop door. Ensure you are back far enough so you will not block jumpers from exiting the aircraft.

r. You will then reach out with your trail hand, and your JM Evaluator will place your universal static line back in your hand.

s. If you are the JM Student on the right paratroop door, you will look over your trail shoulder and ensure that you can see the JM Student on the left paratroop door, prior to getting your universal static line from the JM Evaluator. Once you have regained control of your universal static line, **DO NOT MOVE YOUR FEET!!!**

SUBJECT: Jumpmaster Personnel Inspection (JMPI)

REFERENCE: 82D ABN DIV ASOP, Edition VI, Chapter 13.

A. Deficiencies:

1. A minor deficiency is described as any discrepancy in the rigging or donning of the jumper's equipment that could cause injury to the jumper or, a violation of standard rigging procedures outlined in the ASOP.

2. A major deficiency is described as any deficiency that could cause loss of life or serious injury to the jumper. Additionally, it is defined as any deficiency in the rigging of the main or reserve parachutes that would question the manner in which it was packed.

B. Sequence:

1. A sequence violation is described as any deviation, performed by the Jumpmaster, with either the eyes or the hands, from the sequence prescribed in the ASOP.

2. When describing locations in the sequence, (i.e. top right corner, left side, etc.) they will be in relation to the jumper, not the Jumpmaster.

3. When the word trace is used in the sequence, it describes the working hand moving along the item being inspected and the eyes following the hand.

C. Correcting Deficiencies:

1. If a rigging deficiency is found, the Jumpmaster should attempt to correct the deficiency. If the deficiency cannot be corrected within 30 seconds, the jumper should be sent to the correction station to have the deficiency corrected. The correction should be made, and the Jumpmaster can continue the sequence of inspection.

2. Once the Jumpmaster has completed the correction of a deficiency, the sequence can then be continued from the point at which the Jumpmaster stopped. If the deficiency was corrected at the correction station or by a rigger, then the Jumpmaster must start the sequence from the beginning. If the Jumpmaster rigs a jumper, it is acceptable for the Jumpmaster to JMPI that jumper. The rigging procedures and the JMPI sequence are two different systematic checks.

JMPI Sequence

1. **Ballistic Helmet**: At this time both hands should be on the right side of the jumpers' ballistic helmet, fingers extended and joined, palms facing the ballistic helmet. Your left hand is your control hand and your right hand is your working hand. Keep your left hand in place. With your right hand trace the outer rim of the ballistic helmet. You are inspecting for any sharp or protruding edges, which may cut, or fray the jumpers' universal static line upon exiting from the aircraft. Once your hands are parallel, you will insert both thumbs inside the ballistic helmet and place them on the locking nuts. You are inspecting to insure the locking nuts are present and they are tightened down. You will now tilt the jumpers head to the rear and with your head and eyes approximately six inches away, conduct a visual inspection to insure that the headband is present and that it is the proper headband for the ballistic helmet; the smooth leather side is against the jumpers skin, the opening gates of the attaching clips are facing the jumpers feet, and the opening gates are secured. If it is a modified headband, ensure that the securing tabs are properly secured. Now place your right index finger on the pull the dot fastener of the pull the dot fastener with tab. With your head and eyes four to six inches away, you will conduct a visual inspection to insure it is a serviceable pull the dot fastener with tab, and that it is constructed of four plies of nylon webbing with three plies routed through the pull the dot fastener and two bar tack stitches one located at each end of the tab. Trace down until your right index finger comes into contact with the metallic portion of the adjusting buckle. Conduct a visual inspection to insure that it is not bent, or distorted out of shape rusted cracked or corroded and that the long continuous portion chinstrap is properly routed through the adjusting buckle. That the parachutist retention strap is properly routed around the long continuous portion chinstrap and secured below the adjusting buckle, with the smooth side against the jumpers skin and the hook pile tape side facing away. With your right index finger trace the long continuous portion chinstrap as it routes under the jumpers chin to the opposite adjusting buckle. You are insuring the long continuous portion chinstrap is not twisted, cut, torn, frayed or reversed. Once your index finger comes into contact with the adjusting buckle on the opposite side, conduct a visual inspection to insure it is not bent, or distorted out of shape, rusted, cracked, or corroded. That the long continuous portion chinstrap is properly routed through the adjusting buckle, and the parachutist retention strap is properly routed around the long continuous portion chinstrap and that it is secured just below the adjusting buckle, with the smooth side against the jumpers skin and the hook pile tape side facing away. With your right index finger, trace up the nylon portion of the adjusting buckle until your index finger makes contact with your left thumb which should still be in place on the locking nut. You are inspecting the nylon portion of the adjusting buckle to insure that it is free of any twists, cuts, or frays. Keeping your left hand in place, place your right index finger on the short sewn portion chinstrap where it is sewn to the long, continuous portion chinstrap on the jumpers' right side. Trace the short sewn portion chinstrap across the front of the jumpers' chin, to where it is sewn to the long continuous portion chin strap on the jumpers left side insuring it is not twisted, cut, torn, frayed, reversed or dry rotted. You have just completed the frontal inspection of the ballistic helmet, drop both hands.

2. **Canopy Release Assemblies**: These are like items of equipment so either one can be inspected first, with your right hand form a fist. With the knuckles of your right hand lightly tap the canopy release assembly; you should hear a solid metallic sound. Jumpers, this is your key to place both hands on your ballistic helmet. With your right hand form a knife cutting edge, palm facing towards you, fingers extended and joined and insert it behind the main lift web in the vicinity of the chest strap. Trace up until your right index finger makes contact with the canopy release assembly pad. Place your right thumb on the outside corner of the canopy release assembly and rotate it to the outside 1/4 turn. With your head and eyes approximately four to six inches away conduct a visual inspection to insure that the male fitting canopy release assembly is properly secured in the female fitting canopy release assembly by the latch. Insure the cable loop is secured by the safety clip and the canopy release assembly is free of any dirt or foreign material. Let the canopy release assembly return to its normal position and keep your hand in place. As you can see jumpmasters, the universal static line is routed over the jumpers' right shoulder; therefore it is in your line of sight to inspect the right canopy release assembly. With your left hand secure the universal static line and rotate it over to your right thumb and hold it in place. With your left hand form a fist. With the knuckles of your left hand lightly tap the canopy release assembly; you should hear a solid metallic sound. With your left hand form a knife cutting edge, palm facing towards you, fingers extended and joined and insert it behind the main lift web in the vicinity of the chest strap ejector snap. Trace up until your left index finger makes contact with the canopy release assembly pad. Place your left thumb on the outside corner of the canopy release assembly and rotate it to the outside 1/4 turn. With your head and eyes approximately four to six inches away conduct a visual inspection to insure that the male fitting canopy release assembly is properly secured in the female fitting canopy release assembly properly by the latch. Insure the cable loop is secured by the safety clip and the canopy release assembly is free of any dirt or foreign material. Let the canopy release assembly return to its normal position.

3. **Main Lift Web**: Now with both hands simultaneously trace down the main lift web insure that it is not twisted, cut, torn, or frayed and nothing is routed behind it until your pinkie fingers come into contact with the D-rings.

4. **Replacement D–Rings**: Now with both hands simultaneously trace down the main lift web insure that it is not twisted, cut torn, or frayed and nothing is routed behind it until your pinkie fingers into contact with the Replacement D–Rings. Visually inspect to insure that the D-rings are tied off with type II or type III nylon cord gutted. Inspect to insure the replacement D-ring ties are not cut, torn, or frayed.

5. **Chest Strap**: Keep your left hand in place. With your right hand form a knife cutting edge, fingers extended and joined, palm facing towards you. Insert it from bottom to top behind the chest strap so your right index finger makes contact with the main lift web. Inspect the chest strap to insure is not misrouted around the main lift web. With your head and eyes approximately four to six inches away trace across the chest strap until the palm of your right hand is between the quick fit V-ring and the ejector snap pad and not the ejector snap pad and the jumpers' body. You are inspecting to insure the chest strap is not twisted, cut, or frayed and that the excess webbing is secured in the webbing retainer. Rotate your right thumb over and seat the activating lever.

With your head and eyes approximately four to six inches away conduct a visual inspection to insure it is free of any foreign material that would keep it from seating properly. Leaving your right hand in place, drop your left hand and take a half step to the jumpers' right side.

6. **Waistband**: With your left hand form a knife cutting edge, fingers extended and joined, palm facing toward you and insert it from bottom to top under the waistband so your left index finger makes contact with the pack tray. With your head and eyes approximately four to six inches away conduct a visual inspection to insure that at least 50% of one row of stitching is securing the waistband to the pack tray. Now you will inspect the waistband as far forward as possible behind the reserve parachute. Your left hand should come into contact with the waistband retainer on the right rear of the reserve parachute. You are inspecting to insure the waistband is not misrouted behind the horizontal back strap, behind the main lift web, or over the right D-ring, and it is free of any twists, cuts, or frays. With your right hand secure the top carrying handle of the reserve parachute and lift up and out. Insure that the back of your hand is facing skyward. Simultaneously, place your left hand, palm facing the jumper, into the jumpers' chest and apply equal pressure. With your head and eyes approximately four to six inches away conduct a visual inspection to insure the waistband is not twisted, cut, or frayed and that it is routed thru both waistband retainers on the rear of the reserve parachute. Leaving your right hand in place, route your left hand under your right forearm and place it in the left carrying handle of the reserve parachute with your fingers spread. With your right hand form a knife cutting edge, fingers extended and joined, palm facing toward you. Now insert it behind the waistband from bottom to top as far forward as you can reach behind the reserve parachute. On a jumper rigged with hollywood equipment you should be able to touch the waistband retainer on the left rear of the reserve parachute. Continue your inspection of the waistband until the metal adjuster of the waistband adjuster panel rests in the palm of your right hand. Insure the waistband is not misrouted over the left D-ring, behind the main lift web, horizontal backstrap, and that it is not twisted, cut, or frayed. Now remove your left hand from the left carrying handle of the reserve parachute. Insert the middle and index finger of your left hand from top to bottom in the 2-3 finger quick release. This is the only quick release you will inspect in this manner. Insure the quick release is no less than 2 fingers and no more than 3 fingers and no metal is felt. If you feel metal then an improper quick release has been incorporated and it must be removed, you will also conduct a visual inspection of the free running end of the waistband to insure that it is not routed through both vertical bars of the metal adjuster. If it has been, it is incorrect and it must be removed. Remove your left hand and place it back in the left carrying handle of the reserve parachute with your fingers spread. With your right hand inspect the waistband adjuster panel until your right index finger makes contact with the pack tray. Insure the waistband adjuster panel is not misrouted under the horizontal back strap, or the main lift web, and is not twisted, cut, or frayed, and at least 50% of one row of stitching is securing the waistband adjuster panel to the pack tray. Drop both hands and move to the front of the jumper.

7. **M1950 Weapons Case**: With your right forearm, push out on the lead edge of the M1950 weapons case. Place your right index finger on the snap fastener of the quick release snap. Insure it is not bent, cracked, corroded or distorted out of shape, the opening gate is facing the jumper, and it is the outermost item of equipment on the left D-ring. Rotate your index finger around and pluck the opening gate for spring tension.

Now place your right index finger on the top of the activating arm and trace down to the base of the activating arm. Visually inspect to insure there is no safety tie. With the palm of your right hand, push up on the activating arm to insure it is fully seated. With your right index finger continue to trace down to the base of the quick release snap to insure the quick release link is routed through the V-ring and it is secured in the female portion quick release snap by means of the rotating claw. As you pass the HPT lowering line, make a mental note to insure it is properly routed between the main body of the M1950 weapons case and the 2 plies of reinforced cotton webbing on the cotton duct M1950 weapons case or the 1 ply of nylon webbing on the nylon duct M1950 weapons case. Trace down to the upper set of adjusting strap connectors. Insure the adjusting strap is properly routed through the upper set of adjusting strap connectors, and that there is a half hitch present, and it is tight against the upper set of adjusting strap connectors. Trace down the adjusting strap to the point where it is sewn to the M1950 weapons case. Inspect to insure it is not twisted, cut, or frayed. With your right hand form a knife cutting edge, palm facing skyward and fingers pointed towards the jumper, and make one sweeping motion from front to rear or rear to front, along the bottom of the M1950 weapons case. You are insuring the muzzle of the weapon is not protruding and that there are no large rips, holes, or tears. Place your right index finger on the base of the slide fastener and tab thong. Trace up the slide fastener and tab thong to insure that all the teeth are engaged. As you bypass the lower tie down strap, make a visual inspection to insure it is constructed of type VIII nylon webbing and it is yellow in color. Continue to trace until you reach the tab thong portion of the slide fastener and tab thong. With your right index finger, secure the tab thong portion and insure it is secured by either the lift fastener or the upper tie down tape. Always one, never both. Form a knife cutting edge with your right hand and measure down approximately 11 inches. Smack the side of the M1950 weapons case. You are feeling for the forward assist. With the index finger and thumb of your right hand, secure the single or double looped bow knot of the upper tie down tape on the lead edge of the M1950 weapons case. With your index finger on top and your thumb on the bottom visually inspect to insure it is routed around the main body of the M1950 weapons case, behind the main lift web, above the chest strap, and it is secured to the lead edge of the M1950 weapons case with a single or double looped bow knot and leave your hand in place.

If there is an L-bar connector link you will inspect it in this manner. With your left hand secure the top carrying handle of the reserve parachute and lift up and out. Place your right index finger on the inner mounting screw of the L-bar connector link. Rotate it around to insure it is present and tightened down. Place your right index finger on the outer mounting screw of the L-bar connector link and conduct the same inspection. Now rotate your right index finger behind the L-bar connector link. You should feel metal, if no metal is felt, then the L-bar connector link has been misrouted through the main lift web and is unserviceable.

8. **Replacement D–Rings**: You will now begin your inspection of the D-rings. With your left hand secure the top carrying handle of the reserve parachute, insure that the back of your hand is facing skyward and pull up and out. Place your right index finger next to the screw pin on the left replacement D-ring. With your head and eyes 4 to 6 inches away, visually inspect to insure that the dimple is present between the screw pinhead and the body of the D-ring. Continue with your normal sequence of inspection of the connector snap.

Switch hands on the top-carrying handle and with your left hand form a fist with the index finger exposed. Place your left index finger next to the screw pin on the right replacement D-ring. With your head and eyes 4 to 6 inches away, visually inspect to insure that the dimple is present between the screw pin head and the body of the D-ring. Continue with the inspection of the outer guard of the right connector snap and complete your normal sequence of inspection.

9. **Reserve Parachute**: You will now begin your inspection of the reserve parachute. With your left hand secure the top carrying handle of the reserve parachute, insure that the back of your hand is facing skyward and pull up and out. Place your right index finger on the outer guard of the left connector snap. With your head and eyes approximately four to six inches away conduct a visual inspection to insure that the connector snap is not bent, distorted out of shape, rusted, cracked or corroded. That it has not been safetied by means of a safety wire or safety wire and lanyard. Now pluck it for spring tension. Jumpers this is your key to drop both hands. Now switch hands on the top carrying handle, once again insuring the back of your right hand is facing skyward. Pull up and out with your right hand. Wit your left hand form a fist, with your index finger exposed. Place your left index finger on the outer guard of the right connector snap. With your head and eyes approximately four to six inches away, conduct a visual inspection to insure that the connector snap is not bent, distorted out of shape, rusted, cracked or corroded. Now pluck it to ensure that there is no spring tension and that it is safetied with a safety wire and lanyard. You will now inspect the safety wire and lanyard using the letters **PLF**, pull, look, feel. With the left index finger, form a hook around the lanyard. **Pull** on the lanyard to insure it is secured to the reinforced nylon webbing on the rear of the reserve parachute and to the coiled portion of the safety wire. **Look** to insure the lanyard is constructed of type II or type III nylon cord gutted and the safety wire is routed from outside to inside through the small hole in the right connector snap. With your left index finger **Feel** the safety wire from top to bottom on the inside of the connector snap, insure it is bent down at a 90 degree angle and it is routed between the reserve parachute and the waistband and not the waistband and the jumpers body. Keep your left hand in place and place your right hand on the left end panel of the reserve parachute and apply pressure. With your left hand form a knife cutting edge, fingers extended and joined, palm facing towards you. Now with one sweeping motion sweep from top to bottom behind the ripcord grip. You are inspecting to insure that the ripcord grip has not been winterized and that the right pack opening spring band is not misrouted over the ripcord grip. Now insert your left index finger into the ripcord grip stow pocket. You are inspecting for the steel swaged ball, which should be near the opening of the ripcord grip stow pocket. Now, this is one of the items of equipment that we cannot see you inspect, so if you feel the steel swaged ball, you will sound off loudly with **JUMPMASTER**. Now remove your index finger. With the index finger and thumb of your left hand you will inspect the cable and locking pins. Place your left index finger and thumb on the locking pins and cable where it re-emerges from the ripcord grip stow pocket. Insure your index finger is on top. You will inspect the cable to insure it is not kinked, frayed, or corroded. You will insure the locking pins are not bent, cracked or corroded as you inspect, you will also seat the locking pins to the jumpers' left. You will trace until your fingers fall off the furthest locking pin exaggerating your trace. If the steel swaged ball is against the ripcord grip and the locking pins won't seat, it is an improper ripcord assembly and the reserve parachute is unserviceable and must be replaced.

10. **Soft Loop Center Pull Reserve Parachute:** Once your right hand is on the left end panel the jumpmaster will remove the left hand and form a knife cutting edge, fingers extended and joined, palm facing toward you fingers pointed downward and sweep one time from the jumper's left to right behind the ripcord grip. Ensure the top left and right pack opening spring bands have not been misrouted over the ripcord grip. Form a fist with either hand index finger exposed and inserts it into the ripcord grip retainer. Ensure the ripcord grip is routed between the top panel and the ripcord grip retainer and not the ripcord grip retainer and pile tape remove the index finger and place the left index finger on the right steel swaged ball. Inspect to ensure the steel swaged ball is present against the ripcord grip and not cracked or corroded. Form a pincher with the left index finger and thumb and trace the cable and locking pin from top to bottom ensuring the cable is routed over the pile tape and that the cable is not kinked, frayed or corroded, seating the locking pin as you trace. Inspect to ensure that the locking pin is not bent, cracked, or corroded and that it has been routed completely through the closing loop and not puncturing it. Conduct a visual inspection of the closing loop to ensure it is not burned, cut or frayed, and that no canopy, suspension lines, or marquisette netting are visible. Remove the right hand and form a fist with the index finger exposed and place it on the steel swaged ball is present against the ripcord grip and not cracked or corroded. Form a pincher with the left index finger and thumb and trace the cable and locking pin from top to bottom ensuring the cable is routed over the pile tape and that the cable is not kinked, frayed or corroded, seating the locking pin as you trace. Inspect to ensure that the locking pin is not bent, cracked, or corroded and that it has been routed completely through the closing loop and not puncturing it. Conduct a visual inspection of the closing loop to ensure it is not burned, cut or frayed, and that no canopy, suspension lines, or marquisette netting are visible. Remove both hands and place either hand on an end panel and with the other hand inspect the ripcord protector flap for the DA Form 3912 Army Parachute Log Record. Ensure that the fingers are on top and thumb on bottom as you inspect for the deployment assistance device. Inspect it to insure it is at least 50% centered behind the ripcord protector flap.

11. **Reserve Parachute**: You will now secure both end panels of the reserve parachute. With your head and eyes approximately four to six inches away, you will rotate the reserve parachute 360 degrees as you inspect one set of locking pins, cones, and grommets insuring there is no exposed canopy, suspension lines or marquisette netting. Now focus your attention to the next set of locking pins, cones and grommets and conduct the same inspection. Now stand up, with either hand, thumb on the bottom fingers on top, pinch the log record stow pocket. You are inspecting to ensure that the DA Form 3912 Army Parachute Log Record is present inside the log record stow pocket. If it is not, the reserve parachute is unserviceable and must be replaced. Now close the ripcord protector flap. Conduct a visual inspection of the yellow binding tape on the ripcord protector flap, identifying it as a MIRPS. With either hand, thumb on bottom, index finger on top locate the deployment assistance device. Inspect it to insure it is at least 50% centered behind the ripcord protector flap. The next items to be inspected are the pack opening spring bands. You will begin with the top right pack opening spring band. With your left hand form a knife cutting edge, fingers extended and joined, palm facing toward you. Sweep the top carrying handle and the universal static line snap hook from front to rear out of your way ensuring the back of your hand is facing the jumper and you can see the reinforced nylon webbing on the rear of the reserve parachute. Secure the tab portion on the pack opening spring band so that your thumb is pointed in the same

direction as the pack opening spring band. Curl your fingers under and use them as a lever. Pull the top right pack opening spring band at least one inch from the reserve parachute, then inspect to insure there is no exposed metal at the tab portion, none of the five coiled springs are broken, the pack opening spring band is routed through the reinforced nylon webbing, and not routed over the top of the reserve parachute or over the top carrying handle. Pluck it for spring tension. Keep your left hand in place. Pull the top left pack opening spring band at least one inch from the reserve parachute then inspect to insure there is no exposed metal at the tab portion, none of the five coiled springs are broken, the pack opening spring band is routed through the reinforced nylon webbing, and not routed over the top of the reserve parachute or over the top carrying handle. Pluck it for spring tension. Sweep the left carrying handle out of your way with your left hand. Pull the left pack opening spring band at lease one inch from the reserve parachute and conduct the same inspection. Insure it is not misrouted over the left carrying handle. Now secure the bottom corners of the reserve parachute and lift it up high so that it is parallel to the ground. On a jumper rigged with hollywood equipment you should be able to see the waistband. Hold the reserve parachute parallel to the ground with your left hand on the bottom right corner of the reserve parachute. Pull the bottom left pack opening spring band at least one inch from the reserve parachute and conduct the same inspection. Pluck it for spring tension. Pull the bottom right pack opening spring band at least one inch from the reserve parachute and conduct the same inspection. Pluck it for spring tension. Let the reserve parachute return in its normal position. Sweep the lanyard of the safety wire and lanyard out of your way with your left hand. Pull the right pack opening spring band at least one inch from the reserve parachute and conduct the same inspection. Insure it is not misrouted over the ripcord grip. Pluck it for spring tension. Now place both hands on the top right corner of the reserve parachute, with your palms facing the reserve parachute and your fingers extended and joined, with your head and eyes approximately four to six inches away. You will now conduct an overall inspection of the reserve parachute. Your left hand is your control hand and your right hand is your working hand. Keep your left hand in place. With your right hand, trace the top panel. You are inspecting for any exposed canopy, suspension lines, excess dirt, oil, water or grease.

Trace down the left end panel and conduct the same inspection. When you reach the bottom left corner, drop your control hand to the bottom right corner, and lift up high on the reserve parachute. Hold the reserve parachute up with your control hand so it is parallel to the ground. With your working hand, trace the bottom panel inspecting for exposed canopy, suspension lines, excess dirt, oil, water or grease. Ensure that you do not cover the seam with your left hand. When your working hand meets your control hand, drop the reserve parachute back to its normal position. Place your control hand back on the top right corner of the reserve parachute. With your working hand, traces up the right end panel, conducting the same inspection, until your working hand meets your control hand. Lift up your control hand and sweep under it with your working hand to insure you have not covered up a deficiency. Now secure both bottom corners of the reserve parachute. Lift it up high and issue the command of **HOLD**. Now-issue the command of **SQUAT**.

12. **ALICE Pack rigged with the Harness Single Point Release**: Simultaneously, with both hands form fists with your index fingers exposed. Place your index fingers on the snap hooks of the adjustable D-ring attaching straps. Now focus your attention to your left hand. Conduct a visual inspection to insure that the snap hook is not bent,

cracked, corroded or distorted out of shape and that the opening gate is facing towards the jumper, and it is located to the outside of the connector snap. Rotate your index finger around and pluck the opening gate for spring tension. With your thumb, rotate the free running end of the adjustable D-ring attaching strap out of the way. Place your index finger on the black interwoven stitch of the nylon portion of the adjustable D-ring attaching strap and trace it down until you make contact with the triangle link. Insure that the nylon portion is not twisted, cut, frayed or misrouted behind the ALICE pack frame. Insure the white attaching loop is routed from bottom to top through the triangle link, the green attaching loop is routed from bottom to top through the white attaching loop, insure the red attaching loop is routed from bottom to top through the green attaching loop, through the grommet in the female portion leg strap release assembly, and the release handle cable is routed through the red attaching loop and secured in the cable loop retainer. Place your left index finger on the single X box stitch just below the female portion leg strap release assembly. Keep your left hand in place. Now focus your attention to your right index finger, which should still be on the snap hook of the adjustable D-ring attaching strap on the jumpers left side. Inspect to insure it is not bent, cracked, corroded or distorted out of shape and that the opening gate is facing toward the jumper, and it is positioned between the connector snap and the snap fastener of the quick release snap. Rotate your right index finger around and pluck the opening gate for spring tension. With your thumb, rotate the free running end of the adjustable D-ring attaching strap out of the way. Place your index finger on the nylon portion of the adjustable D-ring attaching strap and trace it down until you make contact with the triangle link. Insure that the nylon portion is not twisted, cut, frayed or misrouted behind the ALICE pack frame.

Insure the white attaching loop is routed from bottom to top through the triangle link, and the green attaching loop is routed from bottom to top through the white attaching loop, insure the red attaching loop is routed from bottom to top through the green attaching loop, through the grommet in the female portion leg strap release assembly, and the release handle cable is routed through the red attaching loop and secured in the cable loop retainer. Place your index finger on the single X box stitch just below the female portion leg strap release assembly. With your right thumb and index finger, index finger on top, lift up on the release handle.

Inspect to insure the release handle is properly routed through the release handle cross strap and secured with the hook pile tape and that the release handle is not reversed or upside down. With your right index finger, form a hook and lift up on the release handle lanyard to insure that it is not twisted or misrouted around the equipment retainer strap. Place your right index finger back on the single X box stitch. Simultaneously, trace down the equipment retainer straps, until your fingers make contact with the second set of single X box stitches. As you bypass the outer accessory pouches, make a mental note to insure they are properly filled with non-fragile items of equipment. You are inspecting the equipment retainer straps to insure they are not twisted, cut, or frayed. With your right hand, secure the adjustable cross strap and tug it one time to your right. Place your right index finger back on the single X box stitch and continue to inspect the equipment retainer straps until your fingers fall off the ends of the ALICE pack. Now secure the sides of the ALICE pack and raise it up to approximately eye level. Visually inspect to insure that the equipment retainer straps, on the medium ALICE pack only, are routed to the outside of the shoulder carrying strap loops, under the envelope cushion portion of the ALICE pack and under the tubular portion of the ALICE pack frame. Lift out and up on the ALICE pack; and issue the command of “HOLD”. You will now continue your inspection of the equipment retainer straps as they route under the envelope cushion

portion of the ALICE pack. Insure the equipment retainer straps form an X configuration on the rear of the ALICE pack. Continue your inspection until your fingers rest behind the 2-3 finger quick releases in the equipment retainer straps. As you bypass the girth hitch, make a mental note to insure it is routed vertical. Simultaneously, you will inspect the 2-3 finger quick release by placing the index and middle finger of each hand, palm facing you, on the outside of the quick release. Now visually inspect the free running ends of the equipment retainer straps to insure they are S-folded and secured with either masking tape or retainer bands, one or the other, never both and not secured to the quick releases. With the index fingers of each hand, lightly tap them to insure the S-folds are secure. With the thumb and index finger of each hand form an "O" around the base of the shoulder carrying straps. Give them a tug to insure they are properly secured to the ALICE pack frame. Visually inspect the free running ends of the shoulder carrying straps to insure they are S-folded and secured with masking tape or retainer bands, one or the other, never both. With the index fingers of each hand, lightly tap the free running ends of the shoulder carrying straps to insure the S-folds are secure. With the index finger and thumb of your right hand, back of your hand facing you, form an O around the HPT lowering line, just to the right of the girth hitch**.** With the index finger on top you will visually inspect to insure the girth hitch is vertical. With your right hand trace the HPT lowering line until you make contact with the first hook pile tab modification. Insure it is present and that it is secured. Visually inspect to insure there are no S-folds protruding from the end of the retainer flap. Continue to inspect down the retainer flap to insure there are no large rips or tears, and at least 50% of the hook tape and pile tape is securing the retainer flap, and the HPT lowering line is secured to the ALICE pack frame by two retainer bands, one above and one below the horizontal frame support. Continue to trace down until you make contact with the second hook pile tab modification. Once again, visually inspect to insure it is present and secured and there are no S-folds protruding from the end of the retainer flap. Continue to trace the HPT lowering line until your hand disappears behind the M1950 weapons case. Visually inspect to insure the HPT lowering line is properly routed between the main body of the M1950 weapons case and the 2 plies of reinforced cotton webbing on the cotton duct M1950 weapons case, or 1 ply of reinforced nylon on the nylon duct M1950 weapons case.

Route your left hand over your right forearm and secure the trail edge of the M1950 weapons case. Release your right hand and secure the HPT lowering line where it routes out of the M1950 weapons case. Continue to trace the HPT lowering line until you make contact with the ejector snap. Visually inspect to insure the yellow safety lanyard is present and it is constructed of 1 inch tubular nylon webbing and is yellow in color. Form a fist around the ejector snap of the HPT lowering line. Rotate your thumb up and seat the activating lever to insure that it properly seats. Tug it to insure that it is properly secured to the parachute harness. Rotate the ejector snap 1/4 turn to the outside and inspect to insure the small tooth is present on the opening gate and that the opening gate is facing towards the jumper. Move to the front of your jumper and issue the command of "SQUAT". Now insert the index and middle fingers of both hands beneath the legstraps and trace both hands all the way back to the saddle. Begin tracing the right leg strap forward, insuring that it is not misrouted around the saddle, that it is free from any twists, cuts or frays. Insure that the excess webbing is secured in the webbing retainer. Continue tracing until you reach the quick-fit V ring. Conduct a visual inspection to insure that it isn't bent, cracked, corroded, rusted, dented or distorted out of shape. Rotate your left thumb up and seat the activating lever and conduct a visual inspection to insure that there is not any foreign material present that will keep it from properly seating. Keep your left

thumb in place. Now focus your attention to your right hand, which still should be all the way back to the saddle. Begin tracing the left leg strap forward insuring that it is not misrouted around the saddle, that it is free from any twists, cuts or frays. Insure that the excess webbing is secured in the webbing retainer, and that it is routed over the lower portion and under the upper portion of the exposed carrying handle of the aviator's kit bag. Continue tracing up until you make finger tip to metal contact with the quick-fit V ring. If you have a hard time making fingertip to metal, rotate your fingers skyward and push up until you do make finger tip to metal contact. Conduct a visual inspection to insure that it isn't bent, cracked, corroded, rusted, dented or distorted out of shape. Once you have fingertip to metal contact, remove your right hand, and utilize your right forearm, lift up and out on the M1950 weapons case. Now place your right index finger or thumb on the activating lever of the left leg strap and seat it. Conduct a visual inspection to insure that there is not any foreign material present that will keep it from seating properly. Now rotate back in front of your jumper and conduct a visual inspection of the aviator's kit bag. Secure the bottom of the ALICE pack and issue the command of "RECOVER". Jumpers pick up on the reserve parachute and jumpmasters simply allow the ALICE pack to rotate between your body and the jumpers' body.

13. **Leg Straps**: Now, form that good hand and arm signal of STAND BY. Simultaneously insert both hands, from outside to inside, behind the leg straps, just below the aviators kit bag. Simultaneously trace both hands back to the saddle. This is your starting point for your inspection of the leg straps. Keep your right hand in place. With your head and eyes approximately four to six inches away, with your left hand trace the right leg strap forward until your hand is between the quick fit V-ring and the ejector snap pad. You are insuring the leg strap is not misrouted around the saddle and it is not twisted, cut or frayed and the excess webbing is secured in the webbing retainer. Rotate your left thumb up and fully seat the activating lever while you visually inspect to insure there is no foreign material in the ejector snap that would keep it from completely seating. Keep your left hand in place. Now focus your head and eyes approximately four to six inches away from your right hand. With your right hand, trace the left leg strap forward until your hand is between the quick fit V-ring and the ejector snap pad.

You are insuring the left leg strap is not misrouted around the saddle and that it is not twisted, cut or frayed. That it is properly routed over the bottom portion and under the top portion of the exposed carrying handle of the aviators' kit bag, and that the excess webbing is secured in the webbing retainer. Rotate your right thumb up or place your index finger on the activating lever to insure it is fully seated while you visually inspect to insure there is no foreign material in the ejector snap that would keep it from completely seating. While keeping your hands on the leg strap ejector snaps visually inspect to insure the aviators kit bag is horizontal across the jumpers lap and the sewn reinforced side is facing out and the exposed carrying handle is to the jumpers left. Now stand up, hollywood jumpers will automatically recover.

14. **Universal Static Line Snap Hook:** To attach the universal static line snap hook to the top carrying handle of the reserve parachute: If the static line is the 15-foot universal static line with the 5-foot universal static line extension, prior to detaching the static line from the right outer static line stow bar, Push in on both girth hitches and inspect the girth hitch that joins the 5-foot universal static line extension with the 15-foot universal static line. Visually inspect the upper loop portion universal static line girth hitch for burns, cuts, or frays and inspect the cotton buffer on the 5-foot universal static line extension for

burns, cuts, or excessive frays. Ensure that the girth hitches is centered between the first stow on the left and right inner static line stow bars or the 9th and 10th stows. Remove the universal static line snap hook from the right outer static line stow bar and remove all twists and turns in the universal static line. "DO NOT BREAK THE FIRST STOW WHEN USING THE 5-FOOT UNIVERSAL STATIC LINE EXTENSION WITH THE 15-FOOT UNIVERSAL STATIC LINE". The first stow to be inspected will be the left inner static line stow bar. If the universal static line is the 15-foot universal static line without the 5-foot universal static line extension, break the first stow on the left inner static line stow bar. Route the universal static line and the universal static line snap hook over the jumper's appropriate shoulder and secure the universal static line snap hook to the top carrying handle on the reserve parachute ensuring that the top carrying handle of the reserve parachute passes through the first and second gate on the universal static line snap hook. Pull up on the universal static line snap hook to ensure that the top carrying handle is secured. Ensuring that the opening gate of the universal static line snap hook is facing toward the jumper.

15. **Universal Static Line:** Secure the universal static line snap hook with the right hand and right hand only from the girth hitch. Form a fist around the universal static line snap hook and hold it perpendicular to the reserve parachute. Open up your right hand and lay the back of your hand on the top of the reserve parachute. Place the index finger of your left hand next to the upper loop portion universal static line where it is girth hitched to the cut away portion, universal static line snap hook. Ensure that the girth hitch is facing towards the jumpers' right and the jumpermaster left and that it is free from all cuts, tears, excessive frays, or burns. Trace down the universal static line snap hook until your index finger makes contact with the rivet pin, ensure that it is present and is not rusted, cracked, corroded. Trace down the universal static line snap hook to ensure it is not rusted, cracked, corroded or bent out of shape and the opening gate is facing toward the jumper. With your right hand, hold the universal static line snap hook perpendicular to the reserve parachute and form a fist around it just below the girth hitch. With the left hand, secure the upper loop portion, universal static line at the 4-inch stitch.

Visually inspect the universal static line as it routes through the universal static line snap hook for burns, cut, or frays. Then push in on the universal static line exposing the inside portion of the universal static line that is girth hitched to the universal static line snap hook. Visually inspect to ensure the inside portion, universal static line is not burned, cut or excessively frayed. If the universal static line is routed over the jumper's left shoulder, with the thumb and index finger of your left hand form an "O" around the universal static line just above the universal static line snap hook. If the universal static line is routed over the jumper's right shoulder, with the thumb and index finger of your right hand form and "O" around the universal static line just above the universal static line snap hook. Raise your working hand to the elbow locked position, issue the command of "TURN". Once the jumper has stopped moving, insert the index finger or index finger and middle finger of your working hand under the universal static line, so your index finger makes contact with the thumb on your control hand. Trace the universal static line from your control hand to the first stow of universal static line, which should be on the right inner static line stow bar when, using a 15-foot universal static line. When using the 20-foot universal static line trace the universal static line from your control hand to the first stow of the static line, which should be on the left inner static line stow bar. Using both hands, form a bite in the universal static line and route it from top to bottom in the static line slack retainer. Visually inspect the static line slack retainer to

ensure it is not torn or frayed more than 50%. Rotate the excess universal static line on top of the pack tray and control it with your control hand. If you are right handed, your left hand is now your control hand. If you are left handed, your right hand is now your control hand. With your working hand, pull out on the first stow of universal static line, and then release it. Insert your index finger, index finger and middle finger or thumb under the first piece of universal static line. If your are right handed, you will pull towards you with your index finger or index finger and middle finger and push away from you with your thumb. If you are left handed, you will push away from you with your thumb and pull toward you with your index finger or index finger and middle finger. Trace the entire universal static line ensuring you pull out on each stow as you reach them, ensure that the universal static line is not cut, burned or excessively frayed and ensure the universal static line is not misrouted around the static line stow bar. When inspecting the universal static line on a 20-foot universal static line you will by-pass the girth hitch joining the 5-foot universal static line extension to the 15-foot universal static line. The upper looped portion of the universal static line and the cotton buffer of the 5 foot universal static line extension will be inspected prior to detaching the universal static line snap hook from the right outer static line stow bar. Visually inspect for burns, cuts, or frays. When you reach the final stow of the universal static line, ensure it is routed from the right outer static line stow bar down to the pack closing tie. Insert the index finger of your working hand through the pack-opening loop, from bottom to top. Ensure it is not torn or frayed at all, the pack closing tie is routed through it and it is in the 6 to 9 o' clock position. Place the index finger of your working hand on the 6 o' clock pack closing loop to ensure the pack closing tie is routed through it and it is not torn or frayed no more than 50% at the looped portion, then go to the 9 o'clock pack closing loop and conduct the same inspection, then go to the 12 o'clock pack closing loop and conduct the same inspection, then go to the 3 o'clock pack closing loop and conduct the same inspection. Insert the index finger of your working hand under the surgeon's knot/locking knot of the pack-closing tie. Ensure it is in the 3 to 6 o' clock position and it is constructed of one turn of ¼ cotton webbing. Pluck the pack-closing tie.

16. **Ballistic Helmet**: Form knife cutting edges with both hands, fingers extended and joined, palms facing the jumper, and place them on the left side of the jumpers' ballistic helmet. Your left hand is your control hand and your right hand is your working hand. With your right hand trace the outer rim of the ballistic helmet. You are inspecting for any sharp or protruding edges, which may cut, or fray the jumpers' universal static line upon exiting from the aircraft. Once your hands are parallel place both thumbs on the rim of the ballistic helmet and tilt the jumpers head forward. Visually inspect the parachutists' retention strap to insure it is not twisted, cut, or frayed and it is not misrouted in front of the foam impact pad / modified foam impact pad. With the thumb and index finger of either hand, secure the foam impact pad / modified foam impact pad and give it a slight tug to insure it is properly secured inside the ballistic helmet.

17. **Riser Assembly**: Form the get ready hand and arm signal over the jumpers' shoulders. Rotate your thumbs down and insert them under the risers as far forward as possible. You should be able to touch the canopy release assemblies. You will use the letters TOT, to inspect the riser assembly, **Tug, Open, Trace.** You can inspect either one first. Form a fist around each riser set, give it a slight **Tug**, **Open** your hand all the way, then **Trace** all the way back to the pack tray. You are inspecting to insure the riser assembly is not twisted, and the DA Form 3912 Army Parachute Log Record is present in

one of the log record stow pockets located on either riser set. Continue to trace until your hand comes into contact with the pack tray.

18. **Pack Tray**: Now from knife cutting edges with both hands, fingers extended and joined palms facing the jumper. Place both hands on the top left corner of the pack tray palms facing the pack tray. Your left hand is your control hand, and your right hand is your working hand. Keep your left hand in place. With your working hand trace the top pack-closing flap. You are inspecting for any excess dirt, water, oil, grease, exposed canopy, or suspension lines. Trace down the right pack-closing flap and conduct the same inspection. To inspect the bottom pack-closing flap you have to bend over well enough to see it. Trace the bottom pack-closing flap and conduct the same inspection. Trace up the left pack-closing flap and conduct the same inspection. When your working hand meets your control hand, lift up your control hand and sweep under it with your working hand to insure you have not covered any deficiencies.

19. **Diagonal Backstraps** Form a knife cutting edge with both hands, palms facing towards you, and issue the command, **ARCH YOUR BACK**. Place both hands under the diagonal back strap in the vicinity of the back strap adjusters. Simultaneously trace both hands up until your index fingers make contact with the diagonal back strap retainers. You will insure the parachute harness is properly sized by counting the rows of stitching on the diagonal backstrap. There should be one more row of stitching on the diagonal back strap closest to you than there is on the diagonal back strap closest to the jumper. Visually inspect the diagonal back strap retainers to insure they are routed through the appropriate sizing channel in the diagonal back strap, and it is routed under and over the diagonal back strap keeper, and secured to itself with a pull the dot fastener. With each thumb, simultaneously pluck up on the outside corner of the diagonal back strap retainer to ensure that the pull the dot fasteners are properly secured. Look over to your left hand. Inspect down until you reach the back strap adjuster. Insure the diagonal back strap is not twisted, cut or frayed, and is not routed over the jumpers shoulder. Form a fist around the back strap adjuster on the jumpers left side.

This is where your left hand will stay for the remainder of the inspection. Now focus your attention to your right hand and trace down to the back strap adjuster and conduct the same inspection. Now bypass it and continue until you reach the main lift web. Ensure the excess webbing is secured in its' webbing retainer, and the horizontal back strap is not twisted, cut, or frayed. Remove your right hand and form a knife cutting edge, fingers extended and joined, palms facing towards you. Insert it under the horizontal back strap where it reemerges from the main lift web from bottom to top. Ensure that your right index finger makes contact with the main lift web. Issue the jumper the command of **BEND.** With your left shoulder push up on the bottom of-the pack tray, and with your left hand simultaneously pull down on the back strap adjuster. With your right hand, trace the horizontal back strap across the small of the jumpers back. When you reach the right horizontal back strap retainer, insure it is routed over the horizontal back strap, under and over the horizontal back strap keeper and secured with a pull the dot fastener and that it is not twisted, cut, or frayed. Continue to trace to the left horizontal back strap retainer and conduct the same inspection. Trace the horizontal back strap until your little finger makes contact with the main lift web once again inspecting to insure it is not twisted, cut, or frayed. Remove your hand and insert it under the last piece of horizontal back strap, palm facing towards you, from top to bottom or bottom to top, either way, so long as you make contact with the main lift web. Trace up until your working hand meets your control

hand. Insure the horizontal back strap has not been twisted, cut, or frayed and the excess webbing is secured in the webbing retainer.

20. **Saddle**: With your right hand form a knife cutting edge, fingers extended and joined, palm facing the jumper and fingers pointed towards the jumpers' buttocks, and place it on the single X box stitch located just below the lowering line adapter web or the triangle link. Trace the saddle under the jumpers' buttocks insuring it is not twisted. As you bypass the leg straps, insure they are not misrouted around the saddle. Continue to trace until you make contact with the single X box stitch on the jumpers right side.

Raise your right hand high in the air and issue the seal of approval.

Rigging the Modular Lightweight Load-Carrying Equipment (MOLLE)

Prior to rigging the Modular Lightweight Load-Carrying Equipment, **MOLLE**, all excess webbing will be secured with either masking tape or retainer bands. To properly secure the harness single point release to the MOLLE, you will first lay it out on a flat surface insuring that the three color coded attaching loops are facing skyward and all twists are removed from the equipment retainer straps. Place the adjustable D-ring attaching straps next to the Harness Single Point release, insuring that the opening gates of the snap hooks are facing down. Place the female portion leg strap release assembly next to the adjustable D-ring attaching strap ensuring the three component parts are facing skyward. Route the release handle assembly from bottom to top through both plies of the release handle cross strap insuring that you do not incorporate any twists in the release handle lanyard and secure it in place utilizing the hook pile tape. Then route the white attaching loop from bottom to top through the triangle link, the green attaching loop from bottom to top through the white attaching loop, the red attaching loop from bottom to top through the green attaching loop and through the grommet in the female portion leg strap release assembly. Route the release handle cable through the red attaching loop and into the cable loop retainer. Once again route the white attaching loop from bottom to top through the triangle link, the green attaching loop from bottom to top through the white attaching loop, the red attaching loop from bottom to top through the green attaching loop and through the grommet in the female portion leg strap release assembly. Route the release handle cable through the red attaching loop and into the cable loop retainer for the other side. You will then rotate the harness single point release over so that the opening gates of the snap hooks are facing skyward, and remove all twists from the equipment retainer straps. It is now ready to accommodate the combat load. The MOLLE should maintain a square configuration as much as possible to insure that the harness single point release will remain tightly secured to it.

FIGURE 1

The outer accessory pouch and side compartments must be filled with non-fragile items of equipment for every Airborne Operation.

With the frame side up, place the MOLLE on the harness single point release so that the nylon of the MOLLE is facing the HSPR and the bottom of the frame is toward the adjustable D-ring attaching straps.

FIGURE 2

You will now route the equipment retainer straps under the carrying strap on the top of the MOLLE pack (**Figure 2-A**), under the top horizontal support of the frame (**Figure 2-B)**, between the shoulder carrying straps and over the back pad (**Figure 2-C**). Cross the equipment retainer straps and form an "X" configuration on the back of the MOLLE.

FIGURE 3

From the bottom of the MOLLE, route the two friction adapters through the large cutaway portion of the MOLLE frame at the bottom center **(Figure 3-A)**. Then secure one equipment retainer strap to its appropriate friction adapter insuring that you do not incorporate any twists. Do this by routing it under the floating metal bar, back over the floating metal bar, and then back onto it self-forming a quick release.

Now secure the other equipment retainer strap, once again routing it under the floating metal bar, back over the floating metal bar, and then back onto it self-forming a quick release. Then secure the lower portions of the quick releases and tighten the harness single point release as tight as possible to the MOLLE. Once the harness single point release has been tightened down to the MOLLE, the white attaching loops should be approximately centered and on line at the bottom of the MOLLE. Then reduce the length of the quick releases to a 2 to 3 finger quick release. The equipment retainer straps will then be S-folded and S-folded only and secured with masking tape or retainer bands, one of the two, never both and there is no preferred method. Ensure that the S-folds are not secured to the quick releases. All slack in the shoulder carrying straps will be removed and the excess webbing will then be S-folded and S-folded only and secured with masking tape or retainer bands, one of the two, never both and there is no preferred method. Then secure the hook pile tape lowering line in its normal configuration to the X configuration by routing the looped end hook pile tape lowering line from top to bottom or bottom to top under the X configuration and then route the entire hook pile tape lowering line through the looped end hook pile tape lowering line, forming a girth hitch.

Route the hook pile tape lowering line over the left shoulder carrying strap and secure it to the cut away portion of the MOLLE frame **(Figure 4-A)** utilizing two retainer bands in two different slots on the MOLLE frame as close to the bottom as possible. Finally, route the male portion leg strap release assembly from the point where it is sewn to the equipment retainer strap by its most direct route along the side of the MOLLE and attach it to the female portion leg strap release assembly. Remove the slack and S-fold or roll the excess webbing and secure it in the webbing retainer. The opposite adjustable leg strap will then be secured in the same manner.

(FIGURE 4)

Modular Lightweight Load-Carrying Equipment JMPI

You will now begin the inspection of the HSPR beginning with the adjustable D-ring attaching straps. These are like items of equipment and either one can be inspected first. With both hands form fists with your index fingers exposed. Place your index fingers on the snap hooks of the adjustable D-ring attaching straps. Now focus your attention on the snap hook of either hand. Conduct a visual inspection to insure that the snap hook is not bent, cracked, corroded, distorted out of shape, that the opening gate is facing towards the jumper, and it is located to the outside of the connector snap. Rotate your index finger around and pluck the opening gate for spring tension. With your thumb, rotate the free running end of the adjustable D-ring attaching strap out of the way. Place your index finger on the black interwoven stitch of the nylon portion of the adjustable D-ring attaching strap and trace it down until you make contact with the triangle link. Insure that the nylon portion is not twisted, cut, frayed or misrouted behind the MOLLE frame. Insure the white attaching loop is routed from bottom to top through the triangle link, the green attaching loop is routed from bottom to top through the white attaching loop, the red attaching loop is routed from bottom to top through the green attaching loop, through the grommet in the female portion leg strap release assembly, and the release handle cable is routed through the red attaching loop and secured in the cable loop retainer. Place your index finger on the single X box stitch just below the female portion leg strap release assembly. Keep that hand in place. Now focus your attention on you other hand, which should still be on the snap hook of the adjustable D-ring attaching strap. Inspect to insure it is not bent, cracked, corroded, distorted out of shape, that the opening gate is facing toward the jumper, and it is positioned between the connector snap and the snap fastener of the quick release snap. Rotate your index finger around and pluck the opening gate for spring tension. With your thumb, rotate the free running end of the adjustable D-

ring attaching strap out of the way. Place your index finger on the nylon portion of the adjustable D-ring attaching strap and trace it down until you make contact with the triangle link. Insure that the nylon portion is not twisted, cut, frayed or misrouted behind the MOLLE frame. Insure the white attaching loop is routed from bottom to top through the triangle link, and the green attaching loop is routed from bottom to top through the white attaching loop, the red attaching loop is routed from bottom to top through the green attaching loop, through the grommet in the female portion leg strap release assembly, and the release handle cable is routed through the red attaching loop and secured in the cable loop retainer. Place your index finger on the single X box stitch just below the female portion leg strap release assembly. With your right thumb and index finger lift up on the release handle. Inspect to insure the release handle assembly is properly routed through the release handle cross strap and secured with the hook pile tape and that the release handle is not reversed or upside down. With your right index finger, form a hook and lift up on the release handle lanyard to insure that it is not twisted or misrouted around the equipment retainer strap. Place your right index finger back on the single X box stitch.

Simultaneously, trace down the equipment retainer straps until your fingers make contact with the second set of single X box stitches. As you bypass the outer accessory pouches, make a mental note to insure they are properly filled with non-fragile items of equipment. You are inspecting the equipment retainer straps to insure they are not twisted, cut, or frayed. With your right hand, secure the adjustable cross strap and tug it one time to your right. Place your right index finger back on the single X box stitch and continue to inspect the equipment retainer straps until your fingers fall off the ends of the MOLLE. Now secure the sides of the MOLLE and raise it up to approximately eye level. Visually inspect to insure that the equipment retainer straps are routed under the carrying handle, to the outside of the shoulder carrying strap loops, and under the MOLLE frame. Lift out and up on the MOLLE; and issue the command of “HOLD”. Jumpers will secure the MOLLE by the adjustable cross strap and hold it up high. You will now continue your inspection of the equipment retainer straps as they route from under the MOLLE frame. Insure the equipment retainer straps are routed over the back pad and form an X configuration on the rear of the MOLLE. Continue your inspection until your fingers rest behind the 2-3 finger quick releases in the equipment retainer straps. As you bypass the girth hitch, make a mental note to insure it is routed top to bottom, bottom to top, or vertical. Simultaneously, you will inspect the 2-3 finger quick release by placing the index and middle finger of each hand, palm facing you, on the outside of the quick release. Now visually inspect the free running ends of the equipment retainer straps to insure they are S-folded and secured with either masking tape or retainer bands, one or the other, never both and not secured to the quick releases. Conduct a visual inspection of the friction adapters to insure that they are routed through the small cutaway portion of the MOLLE frame. With the index fingers of each hand, lightly tap the excess webbing of the equipment retainer straps to insure the S-folds are secure. With the thumb and index finger of each hand form an “O” around the base of the shoulder carrying straps. Give them a couple of tugs to insure they are properly secured to the MOLLE frame. Visually inspect the free running ends of the shoulder carrying straps to insure they are S-folded and secured with masking tape or retainer bands, one or the other, never both. With the index fingers of each hand, lightly tap the free running ends of the shoulder carrying straps to insure the S-folds are secure. With the index finger and thumb of your right hand, back of your hand facing you, form an O around the HPT lowering line, just

to the right of the girth hitch. You will visually inspect to insure the girth hitch is vertical. With your right hand trace the HPT lowering line until you make contact with the first hook pile tab modification. Insure it is present and that it is secured. Visually inspect to insure there are no S-folds protruding from the end of the retainer flap. Continue to inspect down the retainer flap to insure there are no large rips or tears, and at least 50% of the hook tape and pile tape is securing the retainer flap, and the HPT lowering line is secured to the MOLLE frame by two retainer bands. Continue to trace down until you make contact with the second hook pile tab modification. Once again, visually inspect to insure it is present and secured and there are no s-folds protruding from the end of the retainer flap. Continue to trace the HPT lowering line until your hand disappears behind the M1950 weapons case. Visually inspect to insure the HPT lowering line is properly routed between the main body of the M1950 weapons case and the 2 plies of reinforced cotton webbing on the cotton duct M1950 weapons case or the 1 ply of nylon on the nylon duct M1950 weapons case.

Route your left hand over your right forearm and secure the trail edge of the M1950 weapons case. Release your right hand and secure the HPT lowering line where it routes out of the M1950 weapons case. Continue to trace the HPT lowering line until you make contact with the ejector snap. Visually inspect to insure the yellow safety lanyard is present, it is constructed of 1 inch tubular nylon webbing and is yellow in color. Form a fist around the ejector snap of the HPT lowering line. Rotate your thumb up and seat the activating lever to insure that it properly seats. Tug it to insure that it is properly secured to the parachute harness. Rotate the ejector snap 1/4 turn to the outside and inspect to insure the small tooth is present on the opening gate and that the opening gate is facing towards the jumper.

Configuring the Advanced Combat Helmet (ACH)

When issued, leaders must ensure the ACH is properly fitted. When properly worn the helmet shell should not sit too high (i.e. the crown pad does not contact the head or too much of the forehead is exposed) or too low (i.e. too low on the brow or not compatible with eye wear) and is not too tight or too loose.

To ensure proper fit it will be necessary to make measurements of the soldier's head length, width, and circumference. The maximum head measurements for the medium ACH are 8" in length, 6" in width, and 23" in circumference. If any one measurement exceeds these maximums, a large ACH should be utilized. The ACH is issued with two different size **suspension pad systems**, (**size 6 or size 8**) which are used to further adjust the fit of the ACH. When first trying on the ACH for fit, all 7-suspension pads will be worn **(Figure 1 & 2)**, and the pads should be size 6. If the ACH is too small, a larger ACH may be needed. If it is still too big, try size 8 pads. The suspension pads may be turned horizontally to seal around the soldiers' head for cold weather conditions.

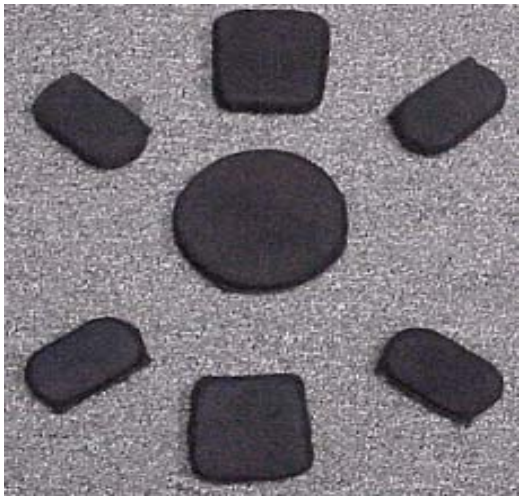


Figure 1

Figure 2

Once the ACH has been properly fitted, leaders must ensure it is properly configured. During airborne operations all 7-suspension pads must be worn and should be worn during all other high-risk operations where impact head injuries may occur. The 4 **oval pads** must cover all 4 ballistic mounting screws inside the advanced combat helmet. The oval pads must be flush with the outer rim of the advanced combat helmet to provide maximum impact protection. **(Figure 3)** The **trapezoid pad** should be flush with the outer rim of the advanced combat helmet or may extend ½" beyond the outer rim for further protection. **(Figure 4)**

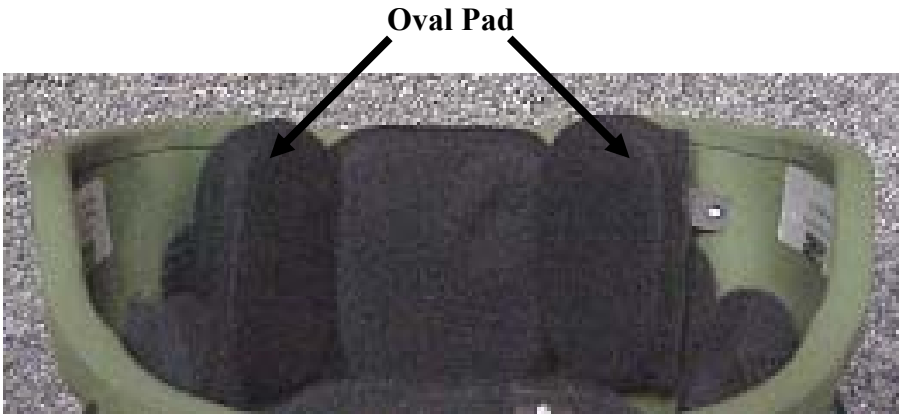


Figure 3

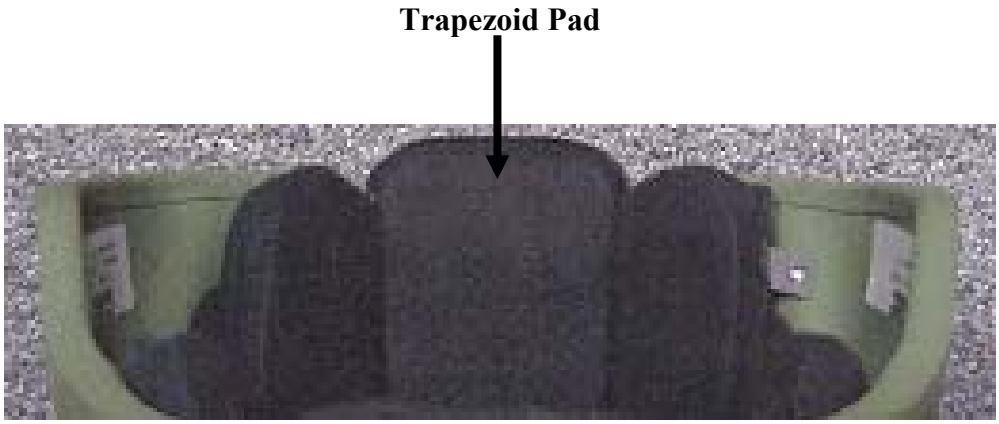
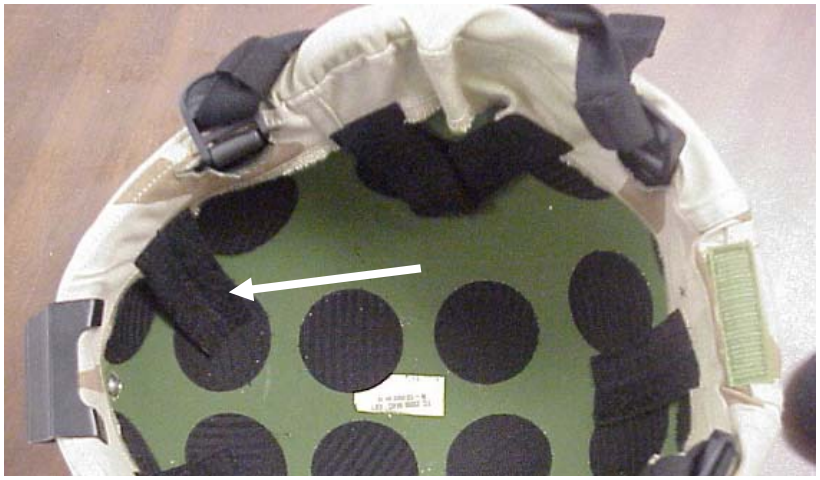


Figure 4

To properly attach the camouflage cover to the ACH, first remove all the suspension pads from the advanced combat helmet and remove the **modified chinstrap assembly**. Align the label on the rear of the camouflage cover with the rear of the advanced combat helmet. Pull the cover over the front and sides of the advanced combat helmet. Thread the **adjustable buckle** through the holes provided in the camouflage cover. Pull the **retaining tabs** down and attach the pile tabs to the **hook disk** ensuring a tight fit. Place the suspension pads back into the advanced combat helmet and replace the modified chinstrap assembly.



To attach the PVS-7/14 head harness, ensure the camouflage cover is attached, then place the head harness over the camouflage cover. Ensure the hole in the plate, the hole in the camouflage cover, and the hole in the advanced combat helmet are in line. Insert the mounting screw (the mounting screw and locking nut are issued with the head harness) through the plate and into the advanced combat helmet. **DO NOT OVER TIGHTEN THE MOUNTING SCREW OR THE FRONT BRACKET ASSEMBLY MAY BREAK.** Insert the locking nut from inside the advanced combat helmet and tighten the mounting screw. Before completely tightening the mounting screw ensure the plate is snug up against the advanced combat helmet by pushing up on the plate. It is imperative that you supervise your soldiers when configuring their ACH. Not only will this keep them safe during airborne operations but it will also prevent any delays at departure airfield.

Advanced Combat Helmet JMPI

At this time both hands should be on the right side of the jumpers' advanced combat helmet, fingers extended and joined, palms facing the advanced combat helmet.

Your left hand is your control hand and your right hand is your working hand. Keep your left hand in place. With your right hand trace the outer rim of the advanced combat helmet. You are inspecting for any sharp or protruding edges, which may cut, or fray the jumpers' universal static line upon exiting from the aircraft.

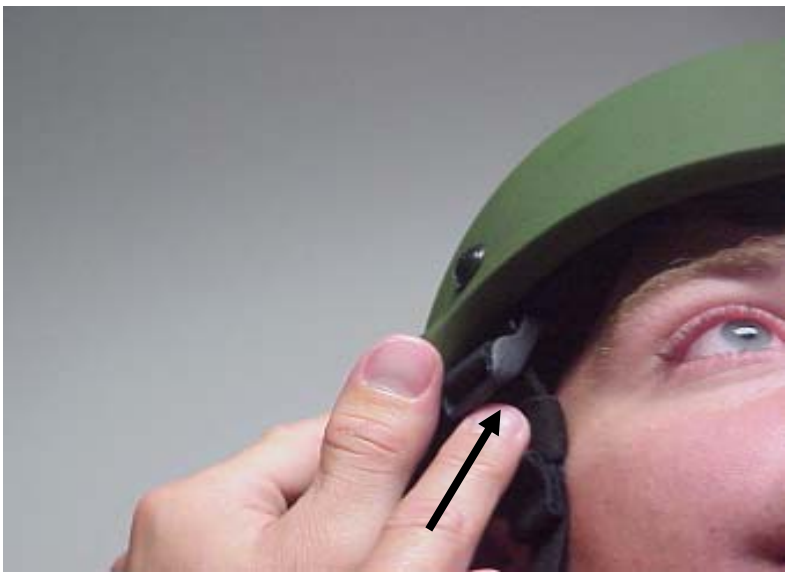
Once your hands are parallel, you will place both thumbs on the rim of the advanced combat helmet. You will now tilt the jumpers' head to the rear and with your head and eyes approximately six inches away, conduct a visual inspection to insure that all three Suspension pads are present and are properly installed.

Leave your left hand in place. Now we must begin the inspection of the **Modified Chinstrap Assembly**. Place your right index finger on the **adjustable buckle** on the left side of the jumper. With your head and eyes approximately four to six inches away, inspect the **adjustable buckle** to ensure that it is not cracked or broken and that the **adjustable strap** is properly routed thru the **adjustable buckle** with the free running end secured in the webbing retainer.

Trace down to the **chinstrap fastener**. Ensure that it is not cracked or broken and that it is properly secured. Place your right index finger on the **long portion chinstrap** where it is secured to the **chinstrap fastener** on the jumper's left side.

Trace the **long portion chinstrap**, as it routes under the jumpers chin to the point where it is sewn to the **adjustable strap** on the jumper's right side. You are inspecting to ensure that the **long portion chinstrap** is not cut, torn, frayed, reversed, or dry rotted.

Continue to trace up to the **adjustable buckle** on the right side of the jumper. Inspect the **adjustable buckle** to ensure that it is not cracked or broken and that the **adjustable strap** is properly routed thru the **adjustable buckle** with the free running end secured in the webbing retainer.



Now place your right index finger on the **short portion chinstrap** where it is sewn to the **long portion chinstrap** on the jumper's right side.

Trace the **short portion chinstrap** as it routes over the jumper's chin to the point where it is sewn to the **long portion chinstrap** on the jumper's left side. You are inspecting the **short portion chinstrap** to ensure that it is not cut, torn, frayed, reversed, or dry rotted. You have just completed the frontal inspection of the advanced combat helmet. Now drop both hands.

After transitioning from the front of the jumper to the rear of the jumper by means of the universal static line you must start at the top of the jumper and work your way down. Form knife cutting edges with both hands, fingers extended and joined, palms facing the jumper, and place them on the left side of the jumpers advanced combat helmet.

Your left hand is your control hand and your right hand is your working hand. Keep your left hand in place. With your right hand trace the outer rim of the advanced combat helmet. You are inspecting for any sharp or protruding edges, which may cut or fray the jumper's Universal Static Line upon exiting the aircraft. Once your hands are parallel, place both thumbs on the outer rim of the advanced combat helmet and tilt the jumpers' head forward. Conduct a visual inspection to insure that all three **Suspension pads** are present and properly installed. Conduct a visual inspection of the **nape pad** to ensure that it is present, free of any cuts or tears, and is not reversed.

Now place your right index finger on the **adjustable buckle** on the right rear of the jumper.

Inspect the **adjustable buckle** to ensure that it is not cracked or broken and that the **adjustable strap** is properly routed through the **adjustable buckle** with the free running end secured in the webbing retainer. Trace down the **adjustable strap** to the point where the **long portion chinstrap** is sewn to the **adjustable strap** on the jumper's right side. Stop when your index finger comes into contact with the **long portion chinstrap**. You are inspecting to ensure that it is not cut, twisted, torn, frayed, or dry rotted. Leave your index finger in place. This is a control point.

Now place your left index finger on the **adjustable buckle** on the left rear of the jumper and inspect the **adjustable buckle** to ensure that it is not cracked or broken and that the **adjustable strap** is properly routed thru the **adjustable buckle** with the free running end secured in the webbing retainer.

Trace down the **adjustable strap** to the point where the **long portion chinstrap** is sewn to the **adjustable strap** on the jumper's left side. You are inspecting to ensure that it is not cut, twisted, torn, frayed, or dry rotted.

You have just completed the inspection for the rear of the advanced combat helmet. The next items of equipment to be inspected are the riser assemblies, drop both hands down over the jumpers' shoulders and continue with your normal sequence of inspection until you issue the jumper the seal of approval.