

# UNITED STATES ARMY JUMPMASTER SCHOOL



## STUDENT STUDY GUIDE

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Fort Benning, Georgia

Headquarters & Headquarters Company, 1<sup>ST</sup> Battalion, 507<sup>TH</sup> Parachute Infantry Regiment

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# Duties and Responsibilities of the Jumpmaster and Safety

## TC 3-21.220 Chapters 7-10

### KEY PERSONNEL PREREQUISITES

The initial training and follow-on refresher training of key personnel are of major concern to commanders. The proper training and supervision of key personnel ensure that correct procedures and operational safety measures are followed during airborne operations.

#### PRIMARY JUMPMASTER

- Be a commissioned officer, warrant officer, or NCO (E5 or above), USMC Cpl, or USAF SRA
- Be JM qualified. The JM must be a graduate from an authorized JM course at Fort Benning, GA or Fort Bragg, NC, a JM MTT, or, from a SOC JM course. (JMs qualified through SOC JM course must undergo JM refresher training prior to assuming JM duties outside SOC units.)
- Be a current jumper and JM current. The JM must have performed JM duties within the past 180 days on a USAF aircraft; or, if a senior- or master-rated parachutist, performed safety duties on a USAF aircraft within the past 180 days; or completed a JM refresher course within the past 180 days. (JM or safety duties performed on Army rotary-wing aircraft do not apply for JM currency)
- Perform AJM duties twice and safety duties twice

#### ASSISTANT JUMPMASTER

- Be a commissioned officer, warrant officer, or NCO (E5 or above), USMC Cpl, or USAF SRA
- Be JM qualified and current
- Perform safety duties twice

#### SAFETY PERSONNEL

- Be a commissioned officer, warrant officer, or NCO (E5 or above), USMC Cpl, or USAF SRA
- Be JM qualified and current

#### JUMPMASTER DUTIES AT THE UNIT AREA

The success of airborne operations depends mainly on how well the PJM executes their duties. They must receive mission briefings, conduct pre-jump training, supervise rigging of equipment, and move to the departure airfield, all within a rigid time schedule. A key factor in the JM duties is the mission briefing. H hour (time on target [TOT]) is established at this time and the backward planning process begins.

Upon notification of designation as PJM, the individual obtains or is provided the following information:

- Mission and ground tactical plan
- Air movement plan to include time of flight, formations, route, direction of flight over drop zone, drop altitude, location and design of code letters, racetracks, and emergency call signs/frequencies
- Names of AJM(s) and safety personnel, and time and place to brief them
- Transportation (movement to marshaling area, and departure airfield plan and times)
- Tactical cross load plan
- Weather decision time(s)

- Type of aircraft for the operation and special items of equipment being worn by jumpers, aerial delivery system (AIRPAC), AT4 jump pack (AT4JP), Stinger missile jump pack (SMJP), or A-series containers aboard aircraft (door bundles or wedge)
- Aircraft tail numbers, chalk numbers, and parking spots
- Landing plan to include drop zones, drop times, delivery sequence, number/type of loads (PP, CDS and free drop), and types of drops (CARP, GMRS, WSV, VIRS or JSJR)
- Air item turn in plan
- Medical support plan
- Time and place of initial manifest call
- Time and place of final manifest call
- Time and place to conduct operations briefing
- Time and place to conduct prejump training
- Time and place to check and inspect parachutists' uniforms and equipment
- Time and place of parachute issue, including types of parachutes
- Time and place of troop safety briefing
- Load time (Time agreed upon by jumping unit and air wing commanders.)
- Time and place of aircrew/JM briefing
- Station time (Critical time: all jumpers must be seated onboard of aircraft.)
- Takeoff time
- Time on target

#### **OPERATIONS BRIEF**

Immediately following final manifest call, the PJM briefs personnel on the details of the operation. Pre-jump training, along with mock door training, is performed after the operations briefing and is conducted at the unit area or the departure airfield. The training should be scheduled no sooner than 48 hours before takeoff and include the following:

- Drop zone
- Type of aircraft
- Chalk number(s)
- Type of parachute(s)
- Briefing on serial numbers, container delivery system, heavy drop, and type of aircraft, if a part of a larger airborne operation
- Weather decision time (for GO, NO GO decision)
- Type of individual equipment and separate equipment with which troops will be jumping (AIRPAC, PDB, parachutist jump pack (PJP), all-purpose, lightweight, individual, carrying equipment (ALICE) pack or Modular Lightweight Load-carrying Equipment (MOLLE) Rucksack, SMJP, AT4JP, M1950 weapons case)
- Time and place of parachute issue
- Load time
- Station time
- Takeoff time
- Length of flight
- In-flight emergencies
- Time on target
- Direction of flight over DZ

- Drop altitude
- Predicted winds on the DZ and direction
- Route checkpoints
- Drop zone assembly aids and area
- Parachute turn in point(s)
- Time and place of final manifest call
- Medical support plan
- Obstacles on or near the DZ

### **JUMPMASTER AND SAFETY DUTIES AT THE DEPARTURE AIRFIELD**

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

- Departure Airfield Control Officer (DACO)/PJM update briefing
- JM aircraft inspection and coordination with aircrew
- Control of parachute issue by AJM/safeties
- Rigging/inspection of parachutists
- Loading of aircraft

The PJM usually turns control of the chalk(s) over to the AJM and safeties while accomplishing update briefings and aircrew coordination. The AJM and safeties control parachute issue and prepare for rigging/inspection of the chalk.

### **PJM/DACO BRIEFING**

Upon arrival at the airfield, the PJM reports to the DACO for an update briefing to include:

- Change in the station time
- Change in the overall operations plan
- Current weather and winds
- Parking plan of aircraft (location and tail number of the assigned aircraft)
- Coordination with the USAF guide if wheeled vehicles are used for transport to aircraft
- Action for incident on aircraft or drop zone, such as jump refusal, towed parachutist, or *any* parachute malfunction

### **MANIFEST DISTRIBUTION**

Normally, there are six (6) copies of the manifest (DA Form 1306, Statement of Jump and Loading Manifest) which are distributed as follows:

- Departure Airfield Control Officer—two copies (original plus one copy)
- Primary Jumpmaster—one copy
- Pilot or his representative—one copy
- Parachute issue facility—one copy
- Unit suspense file—one copy

### **PJM/AIRCREW INITIAL COORDINATION**

After DACO coordination, the PJM should proceed to the aircraft for initial coordination. Normally, the aircraft is open with a crew member on board one hour before station time. The first item to discuss is aircraft configuration in accordance with the unit mission. If the aircraft is incorrectly configured, the requesting unit has the option to accept or reject it. Other items to be discussed, verified, or agreed upon include:

- Control of the jump doors
- Drop altitude, speed, and heading
- Racetracks

- Towed parachutist procedures (in detail)
- Emergency actions onboard
- Time warnings and checkpoints
- Type of drop, for example, CARP, GMRS, and VIRS
- Type of parachute being used for the operation
- Load time
- Station time
- Takeoff time
- Initial contact time with combat control team or drop zone support team (DZST) for update on DZ conditions (if communications are being used)
- Drop time
- Additional details:
  - If a ground abort occurs, designate which key personnel onboard must be advised
  - If the PJM is not the last parachutist, designate who is in command of the troops on board in an emergency
  - Emphasize to the aircrew the importance of accurate direction and velocity of DZ winds (before the one-minute time warning) and accurate time warnings

### **AIRCRAFT INSPECTION**

The PJM, accompanied by a crew member, usually a USAF loadmaster, inspects the aircraft and coordinates any activities related to the airborne operation. The PJM must check the exterior and interior portions of the aircraft directly related to the airborne operation. The inspection of the aircraft is the PJM's responsibility; however, it is normally delegated down to a safety.

While the aircraft is being inspected, a member of the JM team controls the chalk, making sure personnel remain in assigned sticks and are accounted for at all times.

### **PARACHUTE ISSUE**

AJM/safety personnel supervise the chalk during parachute and air item issue. AJM/safety personnel ensure that all parachutists use the buddy system when donning parachutes and equipment. Personnel should not start donning parachutes and equipment earlier than one hour before load time to avoid unnecessary time in the harness.

The AJM/safety will draw:

- Extra aviator's kit bags (1 per 15 jumpers)
  - The extra aviator's kit bags are used to store the static lines and deployment bags after the jump. The extra aviator's kit bags are placed in or with the safety kit.
- At least two extra reserve parachutes

### **FINAL DACO COORDINATION**

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

### **JMPI**

AJM/safety personnel assist in rigging, inspecting, and correcting deficiencies as directed by the PJM. The PJM's role during JMPI is to observe and supervise. The PJM should only perform JMPI to facilitate meeting station time.

*Note:* All current and qualified JMs assist during JMPI.

## **MOVEMENT ON THE AIRFIELD**

After personnel inspection, safety personnel load the parachutists aboard the aircraft. Load time is the time agreed on by the Army and Air Force for loading the aircraft. Station time is the time the aircrew, parachutists, and equipment are inside the aircraft and are prepared for takeoff, with everyone seat-belted and ballistic/advanced combat helmets on.

## **LOADING THE AIRCRAFT**

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

## **PILOT/ LOADMASTER/ JUMPMaster BRIEFING**

- INTRODUCE THE JUMPMaster TEAM
- CONFIRM CRITICAL INFORMATION:
  - Station time
  - Take-off time
  - Drop time
  - Number and length of race tracks
  - Type of exit: Mass exit, ADEPT Option 1, or ADEPT Option 2  
Type parachute
- DZ INFORMATION:
  - Name of DZ
  - DZ identification
  - Current weather on DZ
  - Location of CARP
  - Drop heading
  - Drop altitude
  - Drop speed
  - Seconds of green light
  - Method of control (CCT/DZST)
  - Parachutists (Total and number per pass)
  - View air route plan
  
- EMERGENCY PROCEDURES:
  - Ground (All commands from loadmaster)
  - Emergency landing signals
  - Emergency exit signals
  - Towed parachutist procedures:
    - Static line/equipment
    - Identify cutter (loadmaster for static line/jumpmaster for equipment)
  - Time warnings:
    - 20 minutes, 10 minutes, 1 minute
    - Request a 30-second *time advisory*, if desired
  - Control of paratroop doors between passes and red light procedures
  - Raising of seats
  - Retrieval of deployment bags
  - Remind loadmaster to keep jumpmaster informed of any changes
  - Insist Loadmaster give troop safety briefing and include the following:

- Load jettison
- Fuselage fire
- Abandon aircraft
- Emergency bail out
- Crash landing
- Ditching
- Rapid depressurization procedures
- Towed parachutist procedures
- Malfunctions
- IN-FLIGHT EMERGENCY PROCEDURES
  - Brief jumpers in accordance with FM 3-21.220 page 9-25 table 9-1
  - CRASH LANDING ON TAKE OFF
    - Continuous ringing of alarm or oral warning
    - USAF Aircraft: remain seated until aircraft stops then exit
    - Army Aircraft: remain inside aircraft, pull legs up and cover head
  - CRASH LANDING DURING FLIGHT
    - Six short rings or oral warning
    - USAF Aircraft: Time permitted jump, if not brace for impact on continuous ring then exit
    - Army Aircraft: As direct by pilot
  - EMERGENCY BAILOUT
    - Three short rings or oral warning
    - USAF Aircraft: Stand up, hook up, exit under direction of PJM
    - Army Aircraft: Exit aircraft under direction of PJM
  - DITCHING OVER WATER WITH INSUFFICIENT DROP ALTITUDE
    - Six short rings and oral warning
    - USAF Aircraft: Use available padding, remain seated and brace for impact
    - Army Aircraft: Remain inside aircraft, pull legs in and cover head
  - LIGHTEN LOAD
    - Oral warning
    - USAF Aircraft: Assist PJM/ Loadmaster in jettisoning equipment
    - Army Aircraft: As directed by pilot
  - FIRE IN FLIGHT
    - Oral warning
    - USAF Aircraft: Move from area, extinguish fire
    - Army Aircraft: As directed by pilot

### **JUMPMaster AND SAFETY DUTIES IN FLIGHT**

After takeoff, the PJM must remain oriented at all times and keep the paratroopers informed of any deviations from the flight plan. He may coordinate with the navigator or use strip maps and checkpoints. He also remains in communication with the pilot. This is done by relaying through the loadmaster, over the interphone. On Army aircraft, the JM/safety should wear a flight helmet or headset for direct communication with the pilot and to monitor the ground control element. If the JM/safety cannot wear a flight helmet or headset, communication can be made through the crew chief.

### **JUMPMaster DUTIES IN FLIGHT**

- Enforce flight rules and regulations
- Issue time warnings
- Issue jump commands
- Perform door safety checks
- Perform outside air safety checks
- Perform in-flight rigging mission
- Control exit of all parachutists

- Maintain visual on jump caution lights
- Observe for any unsafe conditions that may occur
- Eject door bundles

#### **GENERAL RULES TO STRESS:**

- DO NOT sacrifice safety for any reason
- Rehearse jumpmaster procedures on the ground
- Hook up before opening jump doors or ramp
- Face open jump door or tailgate when in flight
- Maintain firm handhold on aircraft when working in/near open jump door or ramp
- Do not allow anyone in/near open jump door without advanced combat helmet, or equivalent, and safety harness or parachute

#### **SAFETY PERSONNEL**

- During flight, safety personnel constantly monitor the condition of all paratroopers and distribute air sickness bags where needed
- They also assist the PJM in relocating personnel who are too sick to jump or jump refusals. Jump refusals are given a direct order not to touch their equipment. Safety personnel then move the parachutist forward in the cargo compartment to be seated
- During in-flight rigging missions, safety personnel assist in parachute issue. They also operate rigging, JMPI, and correction stations, as directed by the PJM
- **The safety controls or stows the jumpmaster's universal static line modified during jump commands**
- **After paratroopers are standing, safety personnel inspect the following items on each parachutist while moving forward (toward the cockpit) in the aircraft:**
  - **Waistband for proper quick release.**
  - **Ejector snap on the HPT lowering line for proper attachment.**
  - **Quick-release snap on the weapons case for proper attachment.**
  - **Adjustable leg straps on harness, single-point release**
- Safeties must be alert for and correct any excess webbing or loose hook pile tape lowering lines
- Once they have checked the last paratrooper, and after the command HOOK UP, safeties return to the aft end of the aircraft. While moving to the aft end, safeties check each jumper's universal static line for proper routing from its point of attachment, at the anchor line cable, to the first stow
- Safeties position themselves near the trail edge of the jump door and control the static line for the JM as he performs the door safety check and outside air safety check
- Safeties take static lines while the JM controls the flow of paratroopers
- Safeties take static lines with the lead hand, pass them to the trail hand ensuring the static line is firmly seated against the intermediate anchor line cable support, and controls them until the parachutists exit
- After all paratroopers have exited the aircraft, the PJM and AJM hand off their static lines to the safeties and exit the aircraft
- After all paratroopers have exited, including PJM and AJM, the safety visually clears to the rear of the jump door, then gives the USAF loadmaster a thumbs-up signal and an oral "YOUR DOOR, AIR FORCE." This indicates that all paratroopers are free and clear of the aircraft
- Safety personnel and the loadmaster retrieve the deployment bags
- Once the deployment bags are inside the aircraft, safety personnel detach the static lines and store them in the extra aviator's kit bags
- On return to the departure airfield, safety personnel turn in all air items left on board the aircraft to the storage facility (obtain a receipt). They also turn over any unit or personal equipment left aboard the aircraft to the DACO, as well as all personnel who did not jump

# Army Aircraft

## TC 3-21.220 Chapter 17

### UH-60A BLACKHAWK

#### CHARACTERISTICS

- Medium speed, single main rotor Helicopter
- Maximum of 8 combat equipped jumpers
- Powered by a twin turbine engine
- Drop speed - 65 to 75 knots (70 knot-opt.)
- Drop altitude - 1500 ft AGL (minimum)
- 6000 count for MC-6 and 8000 count for T-11\*\*

\*\*T-11 parachute should not be jumped above 1250 feet AGL. Due to the characteristics of the parachute, the jumper may drift off of the surveyed drop zone.

#### PREPARATION

- Lock both cargo doors in the open position
- Remove seat belts in the cargo compartment (except as required by aircraft crew)
- Tape cargo floor troop seat and tie-down fitting wells in front of the cargo doors
- Tape sharp edges and tie-down fitting wells on the cargo floor and door jambs that could cut or fray static lines or snag parachutists' equipment
- Tape the weather stripping on cargo doors below the door catch
- Tape up 18 to 24 inches from the cargo compartment
- Install floor mounted modified anchor line system and safety belts

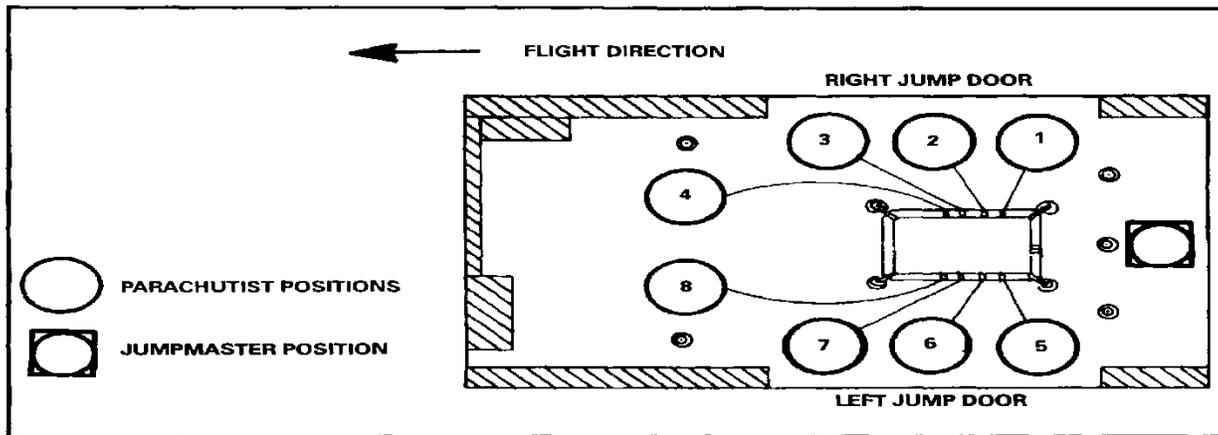
#### INSPECTION

- All protruding & sharp objects are padded and taped
- Lower leading edges of both doors padded and taped and locked in open position
- Anchor line system is complete, serviceable, and properly installed
- 3 modified safety belts are installed; 2 seat belts 112" to 86" long and 1 seat belt 86" to 60" long
- Headset/helmet intercom cable secured over- head
- The intercom extension cord secured overhead
- All loose objects in the cargo compartment are removed or secured forward
- Safety harnesses and backpack type emergency parachutes are available for the JM and the crew chief, as required

#### LOADING PROCEDURES

- Load in reverse order starting with #8
- Jumpers #1-4 load through right door
- Jumpers #5-8 load through left door
- Jumper #4 reverse bight with right hand
- Jumper #8 reverse bight with left hand
- Jumpmaster stows excess static line from bottom to top
- Snap hook faces front of aircraft

#### SEATING ARRANGEMENT



### LOADING PROCEDURES (CONT.)

- Jumpmaster sounds off with "fasten safety belts"
- #4 & #8 pass their running ends to the center and secure the safety belt
- #5 & #7 pass to #6, who secures the safety belt
- #1 & #3 pass to #2, who secures the safety belt

### JUMP COMMANDS

- GET READY
  - Issued 4 minutes or less from drop time with the aircraft level and on final approach. All seat belts are removed and pushed to the rear. The jumpmaster visually checks to insure they are clear from jumpers and equipment
- CHECK STATIC LINES
  - The jumpmaster checks the routing of each static line from the pack tray to anchor point.
- CHECK EQUIPMENT
  - Each jumper checks his own equipment.
- SOUND OFF FOR EQUIPMENT CHECK
  - Jumpers 1-8 (in order) give a verbal "okay" and a thumbs up to the jumpmaster.
- SIT IN THE DOOR
  - The jumpmaster will issue this command 30 seconds from the drop time. (This command is omitted if the jumpers are already sitting in the door on short flights) #4 and 8 remain in place.
- STAND BY
  - Issued 8-10 seconds before the command "GO". #4 and 8 remain in place.
- GO
  - This command is oral along with an individual tap out. Jumpers exit in numerical sequence. As soon as #3 clears the door, #4 moves into the door and waits for his tap out. The same procedure is repeated for the other side. The jumpmaster controls the exit of each jumper maintaining a one second interval.

### SAFETY CONSIDERATIONS

- Jumpmaster wears headset for communication with pilot/crew chief
- Approach the A/C when instructed to do so by the Crew Chief
- Load the A/C when instructed to do so by the Jumpmaster
- Always protect ripcord handle
- Special items of equipment that must be jumped from a standing position are not authorized
- Retrieve static lines inside the aircraft and place them inside an aviators kit bag; Do not unhook them from the modified anchor line until the A/C has landed unless the doors have been closed
- Jumpmaster does not jump

## **CH-47 CHINOOK**

### **CHARACTERISTICS**

- Tandem rotor, medium transport helicopter
- Maximum of 28 combat equipped jumpers
- Drop speed - 80 to 110 knots, 90 knots optimum
- Drop altitude – minimum of 1,500 feet AGL (or 1,250 feet AGL if drop speed is 90 knots or greater)
- 6000 count for MC-6 and 8000 count for T-11\*\*

\*\*T-11 parachute should not be jumped above 1250 feet AGL. Due to the characteristics of the parachute, the jumper may drift off of the surveyed drop zone.

### **PREPARATION AND INSPECTION**

- Safety belts available for each jumper
- Seats are securely fastened in the down position and can easily be lifted and secured
- Ramp is clean and free of oil & water
- Head phones available and function properly
- Anchor line cable - secured & serviceable

### **JUMP COMMANDS**

- GET READY
  - Issued after the six minute time warning. All seat belts are removed.
- PORT SIDE PERSONNEL, STAND UP
  - Jumpers on the port side of the aircraft stand up and secure their seats in the “up” position (if required)
- STARBOARD SIDE PERSONNEL, STAND UP
  - Jumpers on the starboard side of the aircraft stand up and secure their seats in the “up” position (if required)
- HOOK UP
  - On this command, odd-numbered personnel hook up, followed by even- numbered personnel, who hook up between the odd-numbered personnel to form one continuous stick of 28 jumpers. The opening gate of the static line snap hook faces the starboard side of the aircraft
  - After hooking up, the static line is controlled by each jumper in a reverse bight at waist level in the left hand
- CHECK STATIC LINES
  - Same procedures as USAF aircraft
- CHECK EQUIPMENT
  - Each jumper checks his own equipment
- SOUND OFF FOR EQUIPMENT CHECK
  - Same procedures as USAF aircraft
- STAND BY:
  - Issued 8-10 seconds before the command “GO”. Jumper #1 assumes a standing position at the ramp hinge (near center) of the aircraft
- GO:
  - Jumper #1 walks off the port side corner of the ramp. The jumpmaster controls the flow from his location on the port side near the ramp hinge maintaining a one second interval between jumpers

### **SAFETY CONSIDERATIONS**

- Best ramp angle is 3 degrees below horizontal
- Ramp is not opened until all paratroopers have hooked up to the anchor line cable
- Jumpmaster wears a safety harness, a BA-22 parachute or an Advanced Emergency Bailout Parachute (AEPB)
- It is recommended that the JM not jump
- One non-jumping safety is required
- Always protect ripcord handle
- Retrieve static lines and place them in an aviators kit bag

# Individual Equipment Containers

## TC 3-21.220 Chapter 2 & 12

### ADVANCED COMBAT HELMET

The advanced combat helmet is available in 4 sizes: S, M, L and XL.

The advanced combat helmet consists of 3 major components:

- Helmet shell
- Suspension pad system
- Modified chinstrap assembly
- If you cannot wear a small Advanced Combat Helmet, you must wear an extra small ballistic helmet

### HELMET SHELL

The outer rim of the helmet shell must be free of any sharp or protruding edges.

### SUSPENSION PADS

All 7 suspension pads must be present for all airborne operations.

The 7 suspension pads located inside the helmet shell consist of:

- 4 oval pads
- 1 crown pad
- 2 trapezoid pads

The 2 authorized suspension pads sizes are:

- Size 6 which are  $\frac{3}{4}$  of an inch thick
- Size 8 which are 1 inch thick

### MODIFIED CHINSTRAP ASSEMBLY

The modified chinstrap assembly consists of:

- Four adjustable buckles
- Four adjustable straps
- Chinstrap fastener; must be worn on jumper's left side
- Long portion chinstrap
- Short portion chinstrap
- Nape pad

### M1950 WEAPONS CASE

The M1950 weapons case is designed to allow the individual parachutist to jump their individual weapon or crew served weapon. With modifications this weapons case can accommodate the M240B, M249 SAW, and the 60 mm Mortar.

#### MATERIAL

- Heavy nylon duct material or heavy cotton duck material with  $\frac{1}{4}$  inch felt padding permanently sewn inside

#### DIMENSIONS

- 10 inches wide
- Maximum length of 50  $\frac{1}{2}$  inches
- Minimum length of 33  $\frac{1}{2}$  inches

The M1950 weapons case consists of the following items:

- Upper tie down tape
- Lower tie down strap
- Female portion lift fastener
- Male portion lift fastener

- Closing flap
- Adjusting strap
- Adjusting strap connectors (top and bottom)
- Lowering line stow pocket with securing tab
- Slide fastener
- Slide fastener and tab thong
- Quick release assembly consisting of:
  - Quick release snap with opening gate
  - Rotating claw
  - Activating arm
  - Female portion quick release snap
- Quick release link
- "V" ring

When packing the M1950 weapons case with the M16 rifle you must insert the weapon muzzle down, forward assist up.

The M1950 weapons case has two safety features incorporated.

- First safety feature:
  - If the lift fastener is unserviceable route the upper tie down tape through the slide fastener and tab thong
- Second safety feature:
  - Route the adjusting strap through the appropriate set of adjusting strap connectors and secure it with a half hitch

## **HARNES SINGLE POINT REALEASE**

### **MATERIAL**

- Type VIII nylon webbing

### **TENSILE STRENGTH**

- 3600 lbs.

The harness single point release consists of the following items:

- 2 adjustable D-ring attaching straps
  - one end terminates in a triangle link
  - one end terminates in a snap hook
- Release handle cable assembly
  - release handle
  - release handle cable
  - release handle lanyard
- Release handle cross strap
- Attaching loops: white, green and red
- Adjustable Cross Strap
- Female portion leg strap release assembly
  - cable loop retainer (only item that must be serviceable on the female portion leg strap release assembly)
  - webbing retainer
  - grommet
- Male portion leg strap release assembly
- Equipment retainer straps with corresponding friction adapters

## **MOLLE RUCKSACK**

The MOLLE Rucksack comes in 1 size.

Cannot jump the MOLLE Rucksack with a width over 30". At a minimum, you must have an Intrenching Tool Carrier or a Sustainment Pouch centered and low on the front of the MOLLE Rucksack.

The MOLLE Rucksack consists of the following items:

- MOLLE Rucksack Frame
- MOLLE Rucksack Pack
- 2 adjustable shoulder carrying straps
- Molded Waist Belt
- MOLLE Intrenching Tool Carrier
- MOLLE Sustainment Pouch

## **HOOK PILE TAPE LOWERING LINE**

The hook pile tape lowering line allows the jumper to lower their combat equipment during their fourth point of performance.

### **MATERIAL**

- 1 inch wide tubular nylon webbing

### **TENSILE STRENGTH**

- 4000 lbs

### **LENGTH**

- 15 feet

The hook pile tape lowering line consists of the following items:

- Looped end hook pile tape lowering line
- Ejector snap with attached yellow safety lanyard
- Retainer flap
- 2 hook and pile tabs on either end of the retainer flap

When jumping special items of equipment it may be necessary to utilize a modified hook pile tape lowering line.

The modified hook pile tape lowering line differs from the hook pile tape lowering line in that

- The first set of hook and pile tabs are 46 to 48 inches from the ejector snap
- The blue strata mark is 16 to 18 inches from the ejector snap

# Air Force Aircraft

## TC 3-21.220 Chapter 16

### C-130 “HERCULES”

#### CHARACTERISTICS

- Medium range high-wing transport aircraft that comes in several models
- Powered by four turbo prop engines
- Drop speeds are between 125-135 knots (130 knots being optimum)

#### FOR AIRBORNE OPERATIONS IT COMES EQUIPPED WITH

- Two paratroop doors
- Four anchor line cables - each can accommodate a maximum of 20 jumpers
- Seven sets of jump caution lights
- Towed Parachutist Retrieval System – 1 per door
- Over the Ramp operations are possible

#### THREE BASIC SEATING ARRANGEMENTS

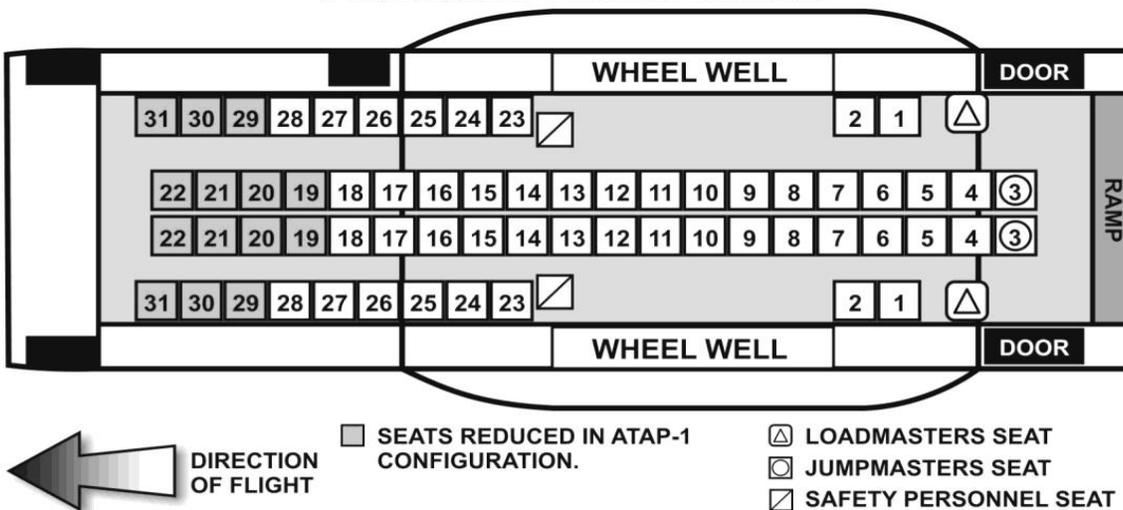
- Peacetime training mission (Mass Drop)
- In-Flight rigging mission
- Combat concentrated load

#### PEACETIME TRAINING MISSION

##### C-130E/H/J

- Accommodates 64 combat equipped jumpers
- 66 seats required
- 6 Supervisory Personnel
  - 1 Primary JM
  - 1 Assistant JM
  - 2 Non Jumping Safeties
  - 2 USAF Loadmasters

C-130 E/H/J ATAP-1 MASS OPERATIONS

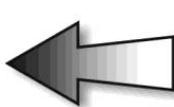
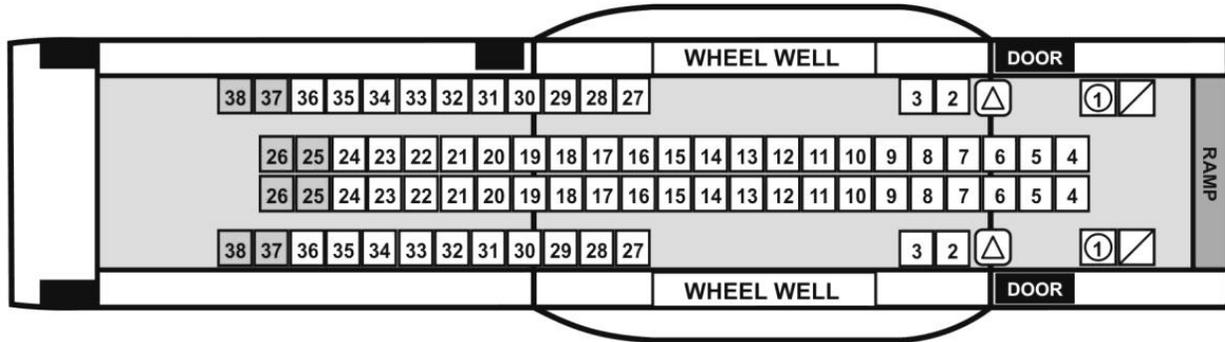


1. TAP-1 - 62 TROOP SEATS AND 2 SAFETY PERSONNEL SEATS - SEAT BELTS IN 24-INCH CONFIGURATION EXCEPT FOR OUTBOARD SEATS 1 & 2 AFT OF THE WHEEL WELL WILL BE IN 20-INCH CONFIGURATION.
2. ATAP-1 - 48 TROOP SEATS AND 2 SAFETY PERSONNEL SEATS - SEAT BELTS IN 24-INCH CONFIGURATION EXCEPT FOR OUTBOARD SEATS 1 & 2 AFT OF THE WHEEL WELL WILL BE IN 20-INCH CONFIGURATION.

### C-130J-30

- Accommodates 78 combat equipped jumpers
- 80 seats required
- 6 Supervisory Personnel
  - 1 Primary JM
  - 1 Assistant JM
  - 2 Non Jumping Safeties
  - 2 USAF Loadmasters

### C-130 J-30 TAP-1/ATAP-1 MASS OPERATIONS



DIRECTION OF FLIGHT

■ SEATS REDUCED IN ATAP-1 CONFIGURATION.

△ LOADMASTERS SEAT

⊙ JUMPMASTERS SEAT

▣ SAFETY PERSONNEL SEAT

1. TAP-1 - 76 TROOP SEATS AND 2 SAFETY PERSONNEL SEATS - SEAT BELTS IN 24-INCH CONFIGURATION EXCEPT FOR OUTBOARD SEATS 2 & 3 AFT OF THE WHEEL WELL WILL BE IN 20-INCH CONFIGURATION.
2. ATAP-1 - 68 TROOP SEATS AND 2 SAFETY PERSONNEL SEATS - SEAT BELTS IN 24-INCH CONFIGURATION EXCEPT FOR OUTBOARD SEATS 2 & 3 AFT OF THE WHEEL WELL WILL BE IN 20-INCH CONFIGURATION.

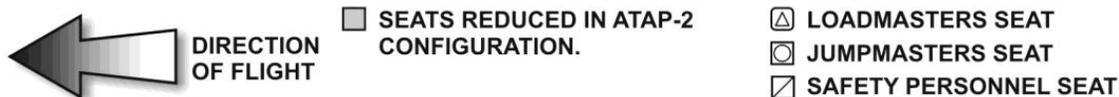
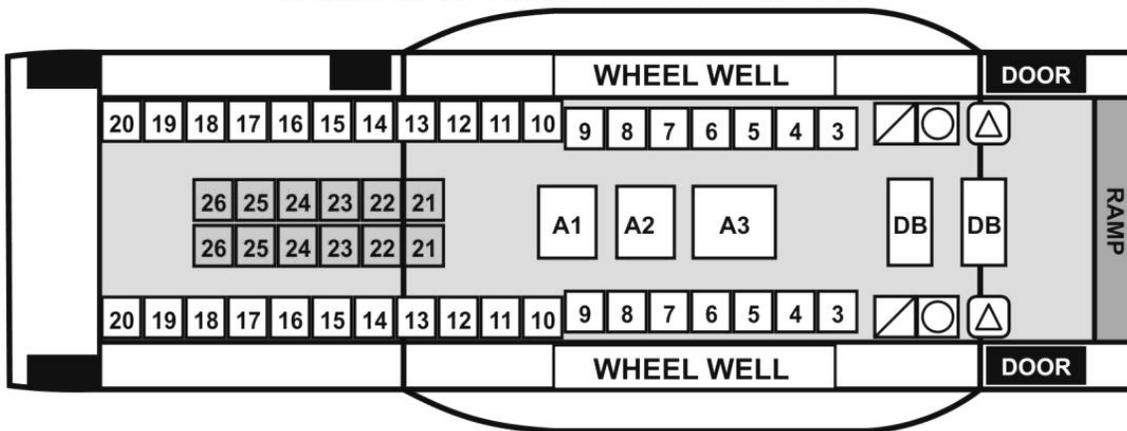
### IN-FLIGHT RIGGING MISSION

#### C-130E/H/J

These procedures should be used on all flights of 4 hours or more in duration. In-flight rigging conserves the energy of the jumpers, and maximizes comfort for as long as possible.

- Accommodates 52 combat equipped jumpers
- 54 seats required
- 7 Supervisory Personnel
  - 1 Primary JM
  - 2 Assistant JM
    - One from chalk
  - 2 Non Jumping Safeties
  - 2 USAF Loadmasters

**C-130 E/H/J TAP-2/ATAP-2 IN-FLIGHT RIGGING**

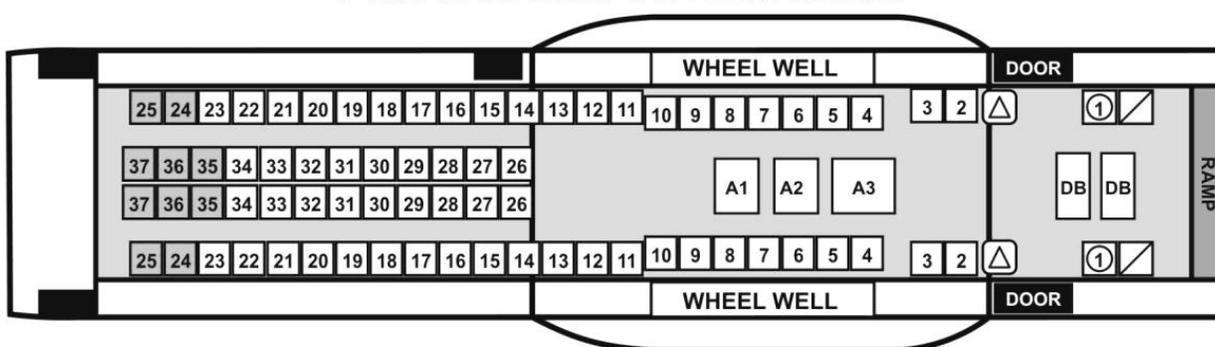


1. TAP-2 - 50 TROOP SEATS AND 2 SAFETY PERSONNEL SEATS - SEAT BELTS IN 20-INCH CONFIGURATION.
2. ATAP-2 - 40 TROOP SEATS AND 2 SAFETY PERSONNEL SEATS - SEAT BELTS IN 20-INCH CONFIGURATION.
3. A1 IS MAIN AND RESERVE CHUTES IN KIT BAGS. A2 IS M-1590 WEAPONS CASES FOR TROOPS IN THE WHEEL WELL SEATS (3-9). A3 IS WEAPONS IN EQUIPMENT CONTAINERS STACKED. DB ARE DOOR BUNDLES.

**C-130J-30**

- o Accommodates 76 combat equipped jumpers
- o 78 seats required
- o 7 Supervisory Personnel
  - 1 Primary JM
  - 2 Assistant JM
    - One from chalk
  - 2 Non Jumping Safeties
  - 2 USAF Loadmasters

**C-130 J-30 TAP-2/ATAP-2 IN-FLIGHT RIGGING**



1. TAP-2 - 74 TROOP SEATS AND 2 SAFETY PERSONNEL SEATS - SEAT BELTS IN 20-INCH CONFIGURATION.
2. ATAP-2 - 64 TROOP SEATS AND 2 SAFETY PERSONNEL SEATS - SEAT BELTS IN 20-INCH CONFIGURATION.
3. A1 IS MAIN AND RESERVE CHUTES IN KIT BAGS. A2 IS M-1590 WEAPONS CASES FOR TROOPS IN THE WHEEL WELL SEATS (4-10). A3 IS WEAPONS IN EQUIPMENT CONTAINERS STACKED. DB ARE DOOR BUNDLES.

**TWO TYPES OF IN-FLIGHT RIGGING**

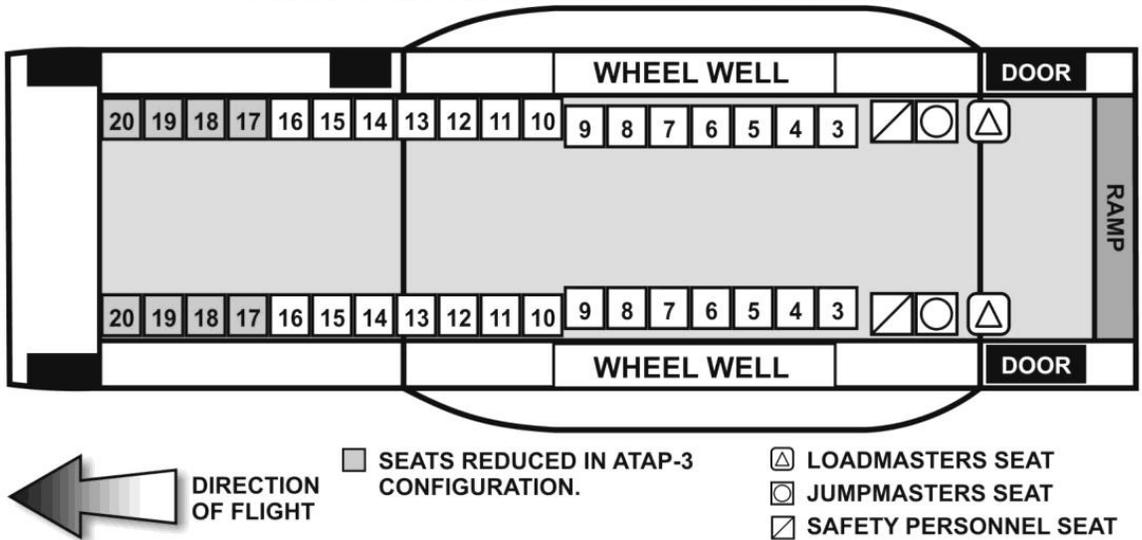
- o Station rigging
- o Buddy rigging (preferred method)

**OVER THE RAMP**

**C-130E/H/J**

- o Accommodates 42 combat - equipped personnel
- o 44 seats required
- o 6 Supervisory Personnel
  - 1 Primary JM
  - 1 Assistant JM
  - 2 Non Jumping Safeties
  - 2 USAF Loadmasters
- o The anchor line cables (only two are used—one on each side) are rigged from the forward outboard anchor line cable attachments to the aft inboard anchor line cable attachments. The anchor line cable stop (a small clevis, padded and taped) must be installed on the anchor line cable 20 inches forward of the aft anchor line cable attachment bracket.
- o Maximum 20 jumpers per cable
- o Static line is controlled by each jumper in a reverse bight
- o Exit the tail gate at a 30 degree angle

**C-130 E/H/J TAP-3/ATAP-3 HALO/RAMP OPERATIONS**



1. TAP-3 - 50 TROOP SEATS AND 2 SAFETY PERSONNEL SEATS - SEAT BELTS IN 20-INCH CONFIGURATION.
2. ATAP-2 - 40 TROOP SEATS AND 2 SAFETY PERSONNEL SEATS - SEAT BELTS IN 20-INCH CONFIGURATION.

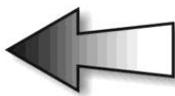
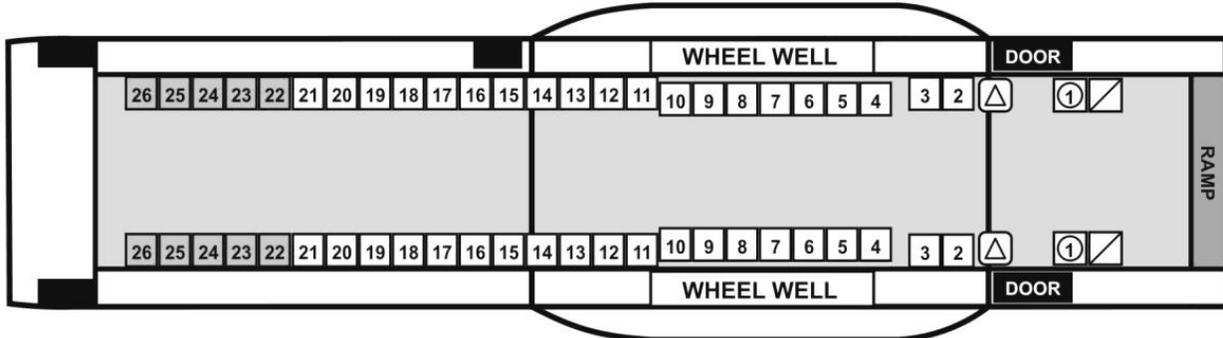
**C-130J-30**

- o Accommodates 56 combat - equipped personnel
- o 58 seats required
- o 6 Supervisory Personnel
  - 1 Primary JM
  - 1 Assistant JM
  - 2 Non Jumping Safeties
  - 2 USAF Loadmasters
- o The anchor line cables (only two are used—one on each side) are rigged from the forward outboard anchor line cable attachments to the aft inboard anchor line cable attachments. The anchor line cable

stop (a small clevis, padded and taped) must be installed on the anchor line cable 20 inches forward of the aft anchor line cable attachment bracket.

- o Maximum 20 jumpers per cable
- o Static line is controlled by each jumper in a reverse bight
- o Exit the tail gate at a 30 degree angle

**C-130 J-30 TAP-3/ATAP-3 HALO/RAMP OPERATIONS**



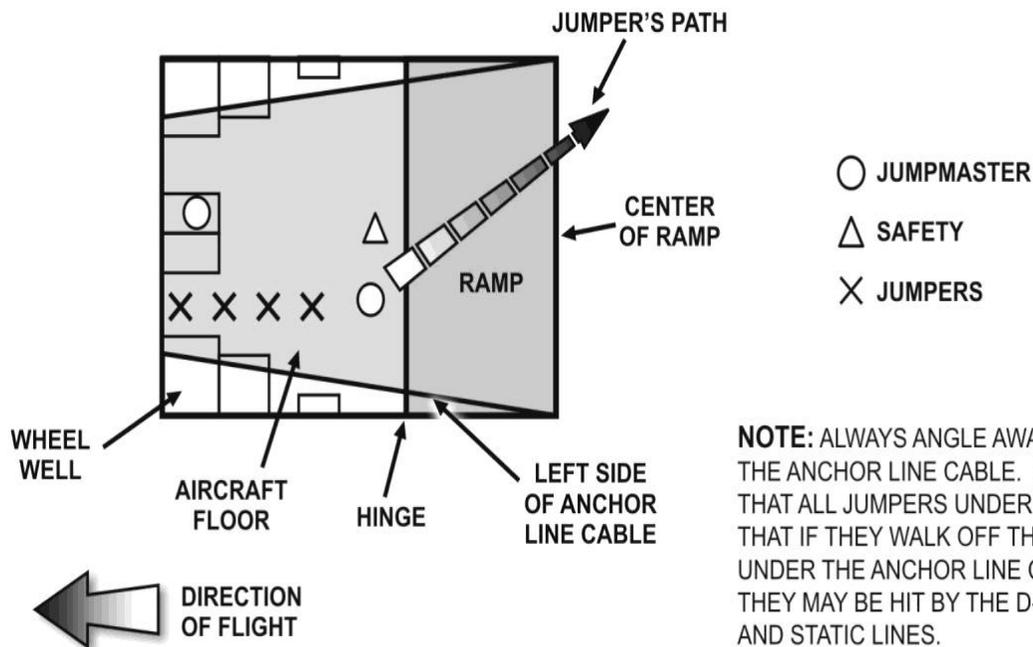
DIRECTION OF FLIGHT

SEATS REDUCED IN ATAP-3 CONFIGURATION.

- △ LOADMASTERS SEAT
- JUMPMASERS SEAT
- ▣ SAFETY PERSONNEL SEAT

1. TAP-3 - 52 TROOP SEATS AND 2 SAFETY PERSONNEL SEATS - SEAT BELTS IN 20-INCH CONFIGURATION.
2. ATAP-2 - 52 TROOP SEATS AND 2 SAFETY PERSONNEL SEATS - SEAT BELTS IN 20-INCH CONFIGURATION.

**EXIT PROCEDURES**



**NOTE:** ALWAYS ANGLE AWAY FROM THE ANCHOR LINE CABLE. ENSURE THAT ALL JUMPERS UNDERSTAND THAT IF THEY WALK OFF THE RAMP UNDER THE ANCHOR LINE CABLE, THEY MAY BE HIT BY THE D-BAGS AND STATIC LINES.

## **COMBAT CONCENTRATED LOAD**

- All personnel will jump, including the Safeties.
- This applies to both In-Flight Rigging and Over the Ramp operations.

## **C-17 GLOBEMASTER**

### **CHARACTERISTICS**

- Swept wing, four engine, turbofan aircraft
- Can carry large payloads inter-continental distances without refueling

### **FOR AIRBORNE OPERATIONS IT COMES EQUIPPED WITH**

- Drop speed of 130 Knots +/- 3 Knots
- 13 sets of jump caution lights
- 6 Minute slow down
- Four anchor line cables
  - 27 Outboard
  - 24 Inboard
- 2 Paratroop Retrieval Systems (Canadian retrieval systems)
- Dedicated antenna for TAC-SAT
- 1 USAF Loadmaster
- A/C must have a deck angle of 6-7 degrees below horizontal

### **THREE BASIC SEATING ARRANGEMENTS (102 Combat Equipped Jumpers)**

- Peacetime training mission
- In-Flight rigging mission
- Combat concentrated load

### **PEACETIME TRAINING MISSION**

- 5 Supervisory Personnel
  - 1 Primary JM
  - 1 Assistant JM
  - 2 Non Jumping safeties
  - 1 USAF Loadmaster

### **IN-FLIGHT RIGGING MISSION**

- 12 Supervisory Personnel
  - 1 Primary JM
  - 8 Assistant JM'S (7 from chalk)
  - 2 Non Jumping Safeties
  - 1 USAF Loadmaster

### **COMBAT CONCENTRATED LOAD**

- 5 Supervisory Personnel
  - 1 Primary JM
  - 1 Assistant JM
  - 2 JUMPING Safeties
  - 1 USAF Loadmaster

## **AIRCRAFT INSPECTION**

- Exterior serviceable
- Floors serviceable
- Adequate seats/ seat belts, proper mission configuration
- Excess equipment stored out of way

- Emergency exits outlined in yellow
- Anchor line cables
- Towed parachutist retrieval system (have loadmaster operate)
- Paratroop doors have no sharp edges or protruding objects nearby
- Pip-pin (C-130) OR Troop door up-lock (C-17)
- Manual lever for ramp secured (left door)
- Jump platforms
  - No cracks or bends
  - Non-skid material present
  - Down locks seat properly
  - Secured to the floor
- Air deflectors (have loadmaster operate)
- Jump caution lights
- Interior lighting (normal/tactical)
- Emergency bell/ horn (have loadmaster operate)
- Emergency equipment
  - First aid kit
  - Fire extinguishers
  - Oxygen masks (EPOS)
- Public address system operational
- Air sickness bags and ear plugs

## **BA-22**

### **CHARACTERISTICS**

- C-9 Canopy
- Weighs approximately 35 lbs.
- Rate of decent is 18-20 feet per second
- 28' flat circular canopy
- Can be OD green, brown, white and orange in color
- 2 Methods of release
  - Automatic release
  - Manual ripcord grip assembly

### **INSPECTION**

- Harness assembly
- Ejector snaps
- Quick fit "V" rings
- Canopy release assemblies
- Automatic opening device lanyard
- Locking pins and cable
- Personnel lowering device
- Rear locking pins and loops
- Overall inspection of parachute
- Electronic tracking device

## **ADVANCED EMERGENCY BAILOUT PARACHUTE (AEBP)**

### **CHARACTERISTICS**

- 26 foot extended skirt canopy
- Canopy constructed of low-porosity material that is vacuum sealed
- Canopy consists of:
  - Main canopy

- Cross connector straps
  - Slider
  - Diaper
  - Steering handles
  - Upper risers
  - Suspension lines made of Spectra material
- Container is constructed of durable canvas weave material and is used to store the sealed canopy assembly and pilot chute.

## **INSPECTION**

- Lift outer top cover flap. Check that the top closing flap tackings are present. Tuck flaps are not exposed and the color of the tape, lacing and tying, is white.
- Check the rip cord pin. Ensure the pin is straight and fully seated but not shouldered. Confirm the secure tie is present. If the secure tie is not present or is broken, remove system from service for inspection. Reseat outer top cover flap.
- Inspect the right links by opening the right shoulder flap and right link protector flap. Visually inspect soft links for holes, cuts, fraying, loose or broken stitching, and burns. Inspect the No. 4 connector link for burrs, cracks, sharp edges, corrosion, broken sealant, and exposed threads. Ensure torque sealant is on the nut and no threads are exposed. Close right link protector flap and right shoulder flap, ensuring the hook and pile tape is secure.
- Check the front rip cord housing tacking is in place and the color of the tape, lacing and tying, is white. Check that the rip cord handle and rip cord cable are stowed in the pocket and not routed through the chest strap. Ensure large portion of rip cord handle is seated in the pocket. Ensure the swage ball is located at the end of the rip cord cable and is free from burrs, sharp edges, and cracks. After inspection, ensure that swage ball is stowed in rip cord pocket.
- Inspect the left links by opening the left shoulder flap and left link protector flap. Visually inspect soft links for holes, cuts, fraying, loose or broken stitching, and burns. Inspect the No. 4 connector link for burrs, cracks, sharp edges, corrosion, broken sealant, and exposed threads. Ensure torque sealant is on nut and no threads are exposed. Visually inspect rip cord housing for burrs, cracks, corrosion, and sharp edges. Check for the presence of the rear rip cord housing tacking. Close left link protector flap and left shoulder flap ensuring hook and pile secure flap tape is secure.
- Check for the presence of the four quick ejector snap tackings securing the comfort pad to the chest strap quick ejector snap. Inspect the chest strap for loose or broken stitching, holes, burns, contamination, cuts, tears, and fraying. Inspect the quick ejector snap and quick fit V-ring on the chest strap for proper operation, rust, corrosion, burrs, sharp edges and cracks. Check if retainer webbing is present at the chest strap. Inspect retainer webbing for loose or broken stitching, loss of elasticity, cuts and fraying. If retainer webbing is not present or is not serviceable, replace with heavy duty retainer bands.
- Inspect the main lift webs for loose or broken stitching, holes, burns, contamination, cuts, tears, and fraying. Check the main lift web adjusters for burrs, cracks, sharp edges, and corrosion. Check if retainer webbings are present at the main lift webs. Inspect retainer webbings for loose or broken stitching, loss of elasticity, cuts and fraying. If retainer webbing is not present or is not serviceable, replace with heavy duty retainer bands.
- Check for the presence of the two quick ejector snap tackings securing the comfort pads to each leg strap quick ejector snaps. Inspect the leg straps and saddle for loose or broken stitching, holes, burns, contamination, cuts, tears, and fraying. Inspect the quick ejector snaps and quick fit V-rings on both leg straps for proper operation, rust, corrosion, burrs, sharp edges, and cracks. Check if retainer webbings are present at the leg straps. Inspect retainer webbings for loose or broken stitching, loss of elasticity, cuts and fraying. If retainer webbing is not present or is not serviceable, replace with heavy duty retainer bands.
- Check the sealed canopy assembly for firmness. A soft (pillowed) AEBP indicates the sealed canopy assembly has lost its vacuum.

**Note.** If vacuum loss occurs, the AEBP is still serviceable for the mission. After the completion of the mission, the AEBP must be repacked.

- Conduct an overall visual inspection of the container for seam separation, holes, cuts, tears, frays, burns, and presence of Army Parachute Log record.

# T-11 PERSONNEL PARACHUTES

## TC 3-21.220 Chapter 2

### T-11 MAIN PARACHUTE

The T-11 series parachute is used during static line airborne operations. The T-11 series is a non-steerable canopy.

#### WEIGHT

- Approx. 38 lbs.

#### DIAMETER

- Nominal: 28.6 feet

#### SAFE DROP SPEEDS

- 150 knots Maximum
- 50 knots Minimum

#### AVG. DEPLOYMENT TIME

- 6.5 seconds

#### RATE OF DESCENT

- 18.5 feet per second

The main parachute consists of ten major components:

- 1) Universal static line modified
- 2) Deployment bag
- 3) Drogue parachute
- 4) Bridle assembly
- 5) Deployment sleeve
- 6) Canopy assembly
- 7) Slider
- 8) Riser assembly
- 9) Harness assembly
- 10) Pack tray

### UNIVERSAL STATIC LINE MODIFIED

#### UNIVERSAL STATIC LINE MODIFIED

##### LENGTH

- Approx. 15 feet

##### MATERIAL

- 3/4 inch, tube edge, type 6.6 nylon webbing

##### TENSILE STRENGTH

- 4,000 lbs

#### UNIVERSAL STATIC LINE SNAP HOOK

Universal static lines point of attachment to the aircraft's anchor line cable. It consists of a dual locking spring opening gate with a Rivet pin located center mass.

##### DIMENSIONS

- Approx. 6 inches in length and approx. 2 inches wide

##### MATERIAL

- Cadmium plated Chrome-Molybdenum

##### RATED CAPACITY

- 1,750 lbs.

### **MAIN CURVED PIN**

The main curved pin is located approximately 12 feet from the universal static line snap hook.

#### **LENGTH**

- Approx. 1.3 inches

#### **MATERIAL**

- Stainless steel

### **MAIN CURVED PIN ATTACHING LOOP**

The main curved pin attaching loop secures the main curved pin to the universal static line modified.

#### **MATERIAL**

- 3/8 inch wide Type I preshrunk nylon webbing

#### **TENSILE STRENGTH**

- 200 lbs.

### **MAIN CURVED PIN COVER**

The main curved pin cover protects the main curved pin and main curved pin attaching loop.

#### **LENGTH**

- Approx. 6 inches

#### **MATERIAL**

- Cotton duck material

### **STATIC LINE SLEEVE**

The static line sleeve prevents nylon-to-nylon contact between the universal static line modified and the pack tray.

#### **LENGTH**

- Approx. 27 inches

#### **MATERIAL**

- Cotton duck material

## **RISER ASSEMBLY**

### **RISER ASSEMBLY**

When attached to the canopy, the riser assemblies provide four individual risers.

### **RISERS**

#### **LENGTH**

- Approx. 28 inches

#### **MATERIAL**

- Type VII nylon webbing

#### **TENSILE STRENGTH**

- 5500 lbs.

### **SLIP ASSIST LOOP**

The slip assist loops are formed into the risers and sewn with reinforced stitching. They provide the jumper a means of securing a hand hold when executing slips.

#### **MATERIAL**

- Type VII nylon webbing

## **SLIP ASSIST TAB**

There are 3 slip assist tabs sewn to the front of each riser. They aid the jumper in executing slips.

### **MATERIAL**

- Type XVII nylon webbing

## **ARMY PARACHUTE LOG RECORD STOW POCKET**

The Army parachute log record stow pocket is sewn to the rear risers. It is utilized to store the DA 3912, Army Parachute Log Record.

## **MALE FITTING CANOPY RELEASE ASSEMBLY**

### **MATERIAL**

- Cadmium plated forged steel alloy

### **RATED CAPACITY**

- 2500 lbs.

## **HARNESS ASSEMBLY**

### **HARNESS ASSEMBLY**

The harness assembly consists of a right and left upper main lift web assemblies and the lower saddle assembly.

### **MATERIAL**

- Type VII nylon webbing

### **TENSILE STRENGTH**

- 5500 lbs.

The harness assembly consists of the following items:

- 1) Canopy release assembly
- 2) "D" Rings
- 3) Main lift web
- 4) Tuck pocket
- 5) Chest strap
- 6) Chest strap friction adapter
- 7) Webbing retainer
- 8) Equipment ring
- 9) Ejector snap
- 10) "L" shaped ejector snap pad
- 11) Triangle link
- 12) Saddle
- 13) Leg straps
- 14) Quick fit "V" ring
- 15) Diagonal back strap
- 16) Sizing channels
- 17) Diagonal back strap pad
- 18) Back strap adjuster
- 19) Horizontal back strap

### **CANOPY RELEASE ASSEMBLY**

When completely assembled the rated capacity is 5000 lbs.

## **FEMALE FITTING CANOPY RELEASE ASSEMBLY**

The grove heel of the male fitting canopy release assembly sits on the groove of the female fitting canopy release assembly.

### **MATERIAL**

- Cadmium plated forged steel alloy

### **RATED CAPACITY**

- 2500 lbs.

## **LATCH**

The latch is utilized to secure the male fitting canopy release assembly to the female fitting canopy release assembly.

## **CABLE LOOP**

The cable loop is what the jumper places his or her thumb threw to recover from the drag.

### **MATERIAL**

- Flexible stainless steel aircraft cable

### **RATED CAPACITY**

- 920 lbs.

## **SAFETY CLIP**

The safety clip serves 2 purposes, to secure the cable loop inside the canopy release assembly and to prevent foreign material from entering the canopy release assembly.

## **“D” RINGS**

The D-rings serve as points of attachment for the reserve parachute.

### **MATERIAL**

- Cadmium plated forged steel alloy

### **RATED CAPACITY**

- 5000 lbs

## **MAIN LIFT WEB**

The main lift web is adjustable and serves as 2 points of adjustment on the harness. The main lift web consists of the main lift web tuck tab assembly, the main lift web adjustment strap and the main lift web adjuster.

### **LENGTH**

- Approx. 25 inches

### **MATERIAL**

- Type VII nylon webbing

### **TENSILE STRENGTH**

- 6000 lbs.

## **MAIN LIFT WEB TUCK TAB ASSEMBLY**

The main lift web tuck tab assembly consists of a snap fastener and tuck tab.

## **MAIN LIFT WEB ADJUSTMENT STRAP**

### **MATERIAL**

- 1 ply of Type VII nylon webbing and 1 ply Type VIII nylon webbing

### **TENSILE STRENGTH**

- 5500 lbs.

## **MAIN LIFT WEB ADJUSTER**

### **MATERIAL**

- Cadmium plated forged steel alloy

### **RATED CAPACITY**

- 2500 lbs.

## **TUCK POCKET**

The main lift web is adjusted to 2 of the 3 sizes by inserting the tuck tab into the tuck pocket.

## **CHEST STRAP**

The chest strap is sewn to the left main lift web. It is one of the points of adjustment on the parachute harness. There is a tabbed portion formed at the end of the chest strap.

### **LENGTH**

- Approx. 23 inches

### **MATERIAL**

- Type VII nylon webbing

### **TENSILE STRENGTH**

- 5500 lbs.

## **CHEST STRAP FRICTION ADAPTER**

The chest strap is secured to the chest strap friction adapter located on the right main lift web.

### **LENGTH**

- Approx. 2 inches

### **MATERIAL**

- Cadmium plated forged steel alloy

### **RATED CAPACITY**

- 500 lbs.

## **WEBBING RETAINER**

There are a total of 6 webbing retainers on the parachute harness. They can be replaced by a retainer band if they are not present or serviceable.

### **MATERIAL**

- Type I elastic webbing

## **EQUIPMENT RING**

The equipment rings are located just below the chest strap on the main lift web. They are used to secure items of combat equipment.

### **MATERIAL**

- Cadmium plated forged steel alloy

### **RATED CAPACITY**

- 2500 lbs.

## **EJECTOR SNAP**

The ejector snaps for the leg straps are located on the main lift web below the equipment rings.

### **MATERIAL**

- Cadmium plated forged steel alloy

### **RATED CAPACITY**

- 2500 lbs.

The ejector snap consists of three sub components, they are:

- 1) ACTIVATING LEVER
- 2) BALL DETENT
- 3) OPENING GATE

### **“L” SHAPED EJECTOR SNAP PAD**

Located just below each ejector snap is the “L” shaped ejector snap pad. This is an added comfort feature and does not have to be present for the parachute harness to be serviceable.

#### **MATERIAL**

- Nylon duck cloth filled with ¼ inch thick cellular urethane foam

### **TRIANGLE LINK**

The triangle links are located just below the ejector snap. They serve as points of attachment for the ejector snap on the hook pile tape lower line.

#### **MATERIAL**

- Cadmium plated forged steel alloy

#### **RATED CAPACITY**

- 500 lbs.

### **SADDLE**

Continuation of the main lift web and routed under the jumpers buttocks.

#### **MATERIAL**

- Type VII nylon webbing

#### **TENSILE STRENGTH**

- 5500 lbs.

### **LEG STRAPS**

The leg straps are sewn midway through the saddle. They serve as 2 more points of adjustment on the parachute harness.

#### **LENGTH**

- Approx. 28 inches

#### **MATERIAL**

- Type VII nylon webbing

#### **TENSILE STRENGTH**

- 5500 lbs.

### **QUICK FIT V-RING**

One quick fit V-ring is located at the end of each leg strap. They are attached to the appropriate ejector snap.

#### **MATERIAL**

- Cadmium plated forged steel alloy

#### **RATED CAPACITY**

- 2500 lbs.

### **DIAGONAL BACK STRAP**

The diagonal back straps form an “X” across the jumpers back. They can be sized in five sizes and serve as 2 more points of adjustment on the parachute harness.

#### **LENGTH**

- Approx. 20 inches

#### **MATERIAL**

- Two plies of Type VII nylon webbing

#### **TENSILE STRENGTH**

- 5500 lbs.

### **SIZING CHANNELS**

The sizing channels are numbered 1-5.

## **DIAGONAL BACK STRAP PAD**

The diagonal back strap pad is an added comfort feature and does not have to be present for the parachute harness to be serviceable.

### **DIMENSIONS**

- Approx. 12 ¼ inches at the longest point and approx. 3 ½ inches at the widest point.

### **MATERIAL**

- Nylon duck cloth filled with ¼ inch thick cellular urethane foam

## **BACK STRAP ADJUSTERS**

The back strap adjusters are located at the end of each diagonal back strap.

### **MATERIAL**

- Cadmium plated forged steel alloy

### **RATED CAPACITY**

- 2500 lbs.

## **HORIZONTAL BACK STRAP**

The horizontal back strap is routed through the lower portion of the back strap adjuster, through the main lift web, across the small of the jumpers back, through the opposite main lift web and terminates at the opposite back strap adjuster. It serves as 2 more points of adjustment on the parachute harness.

### **LENGTH**

- Approx. 105 inches

### **MATERIAL**

- Type VII nylon webbing

### **TENSILE STRENGTH**

- 5500 lbs.

## **PACK TRAY ASSEMBLY**

### **PACK TRAY ASSEMBLY**

#### **DIMENSIONS**

- Approx. 20 inches long by 16 inches wide by 14 inches deep

#### **MATERIAL**

- Duck textured nylon fabric

The pack tray assembly consists of the following items:

- 1) Diagonal back strap retainer
- 2) Diagonal back strap keeper
- 3) Directional snap fastener
- 4) Horizontal back strap retainer
- 5) Horizontal back strap keeper
- 6) Waistband
- 7) Waistband adjuster panel
- 8) Metal adjuster
- 9) Pack closing flaps
- 10) Grommets
- 11) Main closing loop

### **DIAGONAL BACK STRAP RETAINER**

The diagonal back strap retainers are sewn to the upper portion of the pack tray.

#### **LENGTH**

- Approx. 5 ½ inches

#### **MATERIAL**

- Type VIII nylon webbing

#### **TENSILE STRENGTH**

- 2500 lbs.

### **DIAGONAL BACK STRAP KEEPER**

The diagonal back strap keepers are sewn to the upper portion of the pack tray.

#### **LENGTH**

- Approx. 13 inches

#### **MATERIAL**

- Type XVII nylon webbing

#### **TENSILE STRENGTH**

- 2500 lbs.

### **DIRECTIONAL SNAP FASTENER**

The directional snap fasteners are used to secure the diagonal back strap retainers and horizontal back strap retainers back onto themselves to secure the diagonal back straps and horizontal back strap to the pack tray.

### **HORIZONTAL BACK STRAP RETAINERS**

The horizontal back strap retainers are sewn to the lower portion of the pack tray.

#### **LENGTH**

- Approx. 5 ½ inches

#### **MATERIAL**

- Type VIII nylon webbing

#### **TENSILE STRENGTH**

- 2500 lbs.

### **HORIZONTAL BACK STRAP KEEPER**

The horizontal back strap keeper is sewn to the lower portion of the pack tray.

#### **LENGTH**

- Approx. 12 inches

#### **MATERIAL**

- Type XVII nylon webbing

#### **TENSILE STRENGTH**

- 2500 lbs.

### **WAISTBAND**

The waist band is sewn to the bottom right corner of the pack tray. During inspection you must insure that at least 50% of the stitching is present securing the waistband to the pack tray for the pack tray to be serviceable.

#### **LENGTH**

- Approx. 43 inches

#### **MATERIAL**

- Type VIII nylon webbing

#### **TENSILE STRENGTH**

- 4000 lbs.

## **WAISTBAND ADJUSTER PANEL**

The waistband adjuster panel is sewn to the bottom left corner of the pack tray. It consists of a nylon portion and the metal adjuster. During inspection you must insure that at least 50% of the stitching is present securing the waistband adjuster panel to the pack tray for the pack tray to be serviceable.

### **NYLON PORTION**

#### **LENGTH**

- Approx. 7 inches

#### **MATERIAL**

- Type VII nylon webbing

#### **TENSILE STRENGTH**

- 6000 lbs.

## **METAL ADJUSTER**

#### **LENGTH**

- Approx. 2 ¼ inches long by 2 inches wide

#### **MATERIAL**

- Cadmium plated forged steel alloy

#### **RATED CAPACITY**

- 1000 lbs.

## **PACK CLOSING FLAPS**

The pack closing flaps form the top, bottom, left and right portions of the pack tray.

#### **MATERIAL**

- Nylon duck cloth

#### **WEIGHT**

- Approx. 12 ounces per square yard

## **GROMMETS**

Attached to all four pack closing flaps is a grommet. The grommets cannot be bent, cracked or corroded to be serviceable.

#### **MATERIAL**

- Chrome plated hard brass

## **STATIC LINE SLACK RETAINER LOOP**

The static line slack retainer loop is sewn to the top pack closing flap.

#### **MATERIAL**

- 9/16 of an inch wide Type I nylon webbing

#### **TENSILE STRENGTH**

- 500 lbs.

## **STATIC LINE SLACK RETAINER BAND**

The static line slack retainer band is attached to the static line slack retainer loop.

#### **MATERIAL**

- 1 ¼ inch long by 3/8 inch wide rubber retainer band

## **MAIN CURVED PIN PROTECTR FLAP**

The main curved pin protector flap is present to protect the main curved pin from damage and premature activation. The main curved pin protector flap is attached to the top pack closing flap.

## **TUCK FLAP**

This tuck flap is the storage location for the main curved pin protector flap. It is also attached to the top pack closing flap.

## **OUTER STATIC LINE STOW BARS**

The outer static line stow bars are sewn to the left and right pack closing flaps.

### **LENGTH**

- Approx. 4 inches

### **MATERIAL**

- 9/16 of an inch wide Type I nylon webbing

### **TENSILE STRENGTH**

- 500 lbs.

## **INNER STATIC LINE STOW BARS**

The inner static line stow bars are sewn to the left and right pack closing flaps.

### **LENGTH**

- Approx. 5 ½ inches

### **MATERIAL**

- 9/16 of an inch wide Type I nylon webbing

### **TENSILE STRENGTH**

- 500 lbs.

## **T-11 RESERVE PARACHUTE**

The T-11 reserve parachute is a troop chest mounted, ripcord center pull, emergency type parachute that has been designed for manual activation in the event of a malfunction of the main parachute.

### **WEIGHT**

- Approx. 14.8 lbs.

### **DIAMETER**

- Nominal: Approx. 29 feet
- Aeroconical in design

The T-11 reserve parachute consists of six major components:

- 1) Extractor parachute
- 2) Ejector spring with protection cap
- 3) Canopy assembly
- 4) Reserve riser assembly
- 5) Reserve pack tray
- 6) Ripcord assembly
- 7) Reserve Closing Loop

## **RESERVE RISER ASSEMBLY**

Each reserve riser has a connector snap attached.

## **CONNECTOR SNAP**

### **MATERIAL**

- Cadmium plated forged steel alloy

### **RATED CAPACITY**

- 4200 lbs.

## **CONNECTOR SNAP RETAINING TIE**

Each connector snap is secured to the reserve pack tray by a connector snap retaining tie.

### **LENGTH**

- Approx. 24 inches

### **MATERIAL**

- Tying tape "super tack"

### **TENSILE STRENGTH**

- 50 lbs.

## **RESERVE PACK TRAY ASSEMBLY**

### **RESERVE PACK TRAY**

#### **MATERIAL**

- Duck textured nylon fabric

#### **WEIGHT**

- Approx. 12 ounces per square yard

### **PACK CLOSING FLAP**

The reserve pack tray consists of a top, bottom, left and right pack closing flap. The top and bottom pack closing flaps have one grommet each while the left and right pack closing flaps have two each.

### **TUCK POCKET**

One tuck pocket is sewn to each of the four pack closing flaps. The tuck pockets are used to secure the rip cord assembly to the reserve parachute.

### **CARRYING HANDLE**

The carrying handle aids the jumper in carrying the reserve parachute around the departure air field.

#### **LENGTH**

- Approx. 19 ¼ inches

#### **MATERIAL**

- Type VIII nylon webbing

#### **TENSILE STRENGTH**

- 4000 lbs.

### **SPREADER BAR TIES**

The spreader bar ties are routed around the internal spreader bar, through the grommets, secured by a surgeons knot with overhand knots with its ends trimmed to 1 inch.

#### **LENGTH**

- Approx. 10 inches

#### **MATERIAL**

- Guttled red Type III tubular nylon cord

### **ARMY PARACHUTE LOG RECORD STOW POCKET**

The army parachute log record stow pocket is utilized to store the DA 3912, Army Parachute Log Record.

## **WAISTBAND RETAINER**

The waistband retainers are sewn to the rear of the reserve pack tray. The waistband is routed behind both waistband retainers keeping the reserve snug to the jumper's body.

### **LENGTH**

- Approx. 4 ½ inches

### **MATERIAL**

- Type VIII nylon webbing

### **TENSILE STRENGTH**

- 4000 lbs.

## **RIPCORDER ASSEMBLY**

### **RIPCORDER ASSEMBLY**

The ripcord assembly requires 14-22 lbs. to pull in order to activate the reserve parachute.

The ripcord assembly includes the following:

- 1) Tuck tab
- 2) Directional arrow
- 3) Ripcord handle
- 4) Curved pin lanyard
- 5) Curved pin

### **TUCK TAB**

The rip cord assembly has a top, bottom and 2 side tuck tabs.

### **DIRECTIONAL ARROW**

The top tuck tab is identified by the directional arrow. It must be pointing skyward when the reserve parachute is worn.

### **RIPCORDER HANDLE**

The ripcord handle is red in color.

### **CURVED PIN LANYARD**

The curved pin lanyard is sewn by re-enforced stitching to the back of the ripcord assembly.

### **MATERIAL**

- White spectra cord

### **TENSILE STRENGTH**

- 700 lbs.

### **CURVED PIN**

There is a curved pin attached to each end of the curved pin lanyard. They are sewn in opposite directions and cannot be bent, cracked or corroded to be serviceable.

### **MATERIAL**

- Stainless steel

## **RESERVE CLOSING LOOP**

The Reserve Closing Loop is a prefabricated loop that is fitted to the base of the Ejector Spring Assembly. Its length is regulated to control the pull force on the ripcord assembly curved pins.

### **LENGTH**

- Between 11 ¾" long and 12 ¼" long

### **MATERIAL**

- White Spectra cord

### **TENSILE STRENGTH**

- 700 lbs.

# Duties and Responsibilities of the DZSO and the DZSTL

## TC 3-21.220 Chapter 7, 20-23 & 25

### DZSO

The DZSO is a key member of what we refer to as a Drop Zone Support Team. The difference in the required duties of the DZSO as opposed to the DZSTL is tied to whether or not the mission is supported by an Air Force Combat Control Team. As a result of a signed Memorandum of Agreement (MOA) we are training you to perform duties for select Computed Air Release Point (CARP) operations without the presence of CCT: therefore, your designation for those operations will become Drop Zone Support Team Leader (DZSTL).

### DZSO PREREQUISITES

Must be an officer, warrant officer, or NCO (USAF must be SRA and USMC must be CPL)

- Must be a qualified and current jumpmaster
- Must have observed DZSO duties on a personnel or heavy equipment drop at least once
- Performed duties as ASST DZSO once

### DZSTL

When acting as the DZSTL you are the direct representative of the ground forces commander and the air lift commander.

### DZSTL PREREQUISITES

- Must be an Officer, Warrant Officer, NCO
- Must have received training on conducting airdrop operations without the support of a CCT
- For personnel and heavy equipment drops, must be a qualified and current jumpmaster

### DUTIES AND RESPONSIBILITIES OF THE DZSO AND DZSTL

The DZSO and DZSTL have specific duties and responsibilities they must perform before, during and after the airborne operation.

- Attends pre-mission briefings
- Coordinates with CCT if required
- Opens the DZ through range control and closes it when accountability of all personnel, air items, and equipment is completed
- Has the DZ fully operational one hour prior to drop time
- Ensures that any water obstacle is covered by a boat detail. A boat detail is required if the water obstacle is more than four feet deep and 40 feet wide and is within 1000 meters from any portion of the surveyed DZ
- Conduct ground or aerial recon of DZ prior to drop time for obstacles or safety hazards
- Establishes communications with the DACO NLT one hour prior to drop time
- Co-locates with USAF CCT one hour prior to drop time and take initial wind readings
- Monitor surface winds from the PI
- Assistant DZSO/DZSTL monitors surface winds from the highest point of elevation or trail edge of DZ
- Establish 10 minute window 12 MINUTES prior to drop time
  - Give a GO or NO GO 2 minutes prior to drop time
- Relays No Drop Signal:
  - Surface winds exceed 13 knots within 10 minutes of the actual drop
  - An unsafe act is observed on ground or in the air
- DZSO/DZSTL will have positive communication with the ADZSO/ADZSTL, if needed, and the senior medic
- Controls all medical evacuations
- Correctly marks the drop zone
- Operates all visual acquisition aids
- Submits post mission reports properly
- Ensure that no unauthorized vehicles are on the DZ
- All antennas will be tied down

- No vehicular movement on the DZ from the time the aircraft is in sight until the last jumper has landed
- Ensure all helicopters operating in the vicinity keep at least 1 km from the DZ NLT 10 min prior to TOT
- Be familiar with the duties of the Malfunctions Officer/NCO IAW AR 59-4.
- Assist the airborne commander in the development of a written risk assessment for high and extremely high risk events

The DZSO has operational responsibility for the drop zone. In addition to the DZSO's duties for drop zones, the DZSO must also:

- Be positioned at the point of impact (for personnel drops) 15 minutes before drop time. The assistant DZSO is at the highest point of the drop zone or at the opposite end. For combination airdrop operations, the DZSO/DZSTL must follow the procedures for heavy drop operations, but observe the jumpers as they exit the aircraft
- Relay a ground weather decision and CLEAR TO DROP or NO DROP signal to the lead aircraft two minutes before the drop for each pass
- During night drops, ensure all lights that are on or next to the drop zone and are not a part of the Drop Zone Marking System are turned off five minutes before drop time and remain off during the drop (except those lights that mark obstacles)
- Contact the pilot of the aircraft immediately after the drop and ask if any personnel or equipment did not drop. He relays this information to the airborne commander on the drop zone

#### **PERSONNEL AND SUPPORT REQUIREMENTS**

The Drop Zone Support Team will consist of at least two personnel. The senior person meeting the prerequisites outlined in TC 3-21.220, Ch 7 will be designated as the Drop Zone Support Team Leader. Additional support personnel and equipment may be required.

#### **PERSONNEL AIRDROPS-MULTIPLE AIRCRAFT OR SINGLE AIRCRAFT OPERATIONS ON A DZ OF 2100 METERS OR MORE IN LENGTH**

- 1 DZSO or DZSTL and 1 Assistant DZSO or DZSTL
- 2 medical personnel with 2 FLAs
- Malfunctions officer with camera
- Parachute recovery detail (with saw and tree climbing equipment)
- Parachute turn in detail (with vehicles)
- 2 radios – 1 for DZSO, 1 for ADZSO (minimum)
- 3 Wind measuring devices
  1. Anemometers—Services should only use approved anemometers to measure surface winds during all personnel and cargo parachute operations. **THE APPROVED ANEMOMETERS ARE THE DIC3, TURBOMETER, AND AN/PMQ 3A.** The DIC3, and Turbometer cannot be calibrated; they must be given an expedient check just before use
  2. Ensure fresh batteries are installed in the anemometer
  3. Check the anemometer in a no wind condition such as in a vehicle cab or a building. Turn on the anemometer and, if any reading other than zero registers, the anemometer is not fit for use and must be discarded
  4. Use a three anemometer check by comparing the reading on three anemometers in identical conditions. Discard the one anemometer that doesn't read the same as the other two
  5. The Turbometer must be held within 20 degrees of wind line with the wind entering the rear of the meter to ensure accurate readings
  6. Calibration requirements for the AN/PMQ 3A will be conducted in accordance with appropriate TMs. Other anemometers not tested and recommended for use should be employed only after a command initiated risk assessment is completed. Regardless of the method or device used to

measure DZ winds, the airborne commander is responsible for ensuring winds on the DZ do not exceed 13 knots during static line personnel airdrops

- 2 Compasses
- 2 sets of Night Vision Goggles
- VS-17 Panels/Lights
- Binoculars, strobe light, signal mirror
- Smoke Grenades (as required)
- Vehicles (as required)
- Road Guards (as required)
- Piball equipment with helium source (If applicable)
- Military Police (If Applicable)
- Boat Detail (If Applicable)

#### **PERSONNEL AIRDROPS-SINGLE AIRCRAFT OPERATIONS ON A DZ LESS THAN 2100 METERS IN LENGTH**

- 1 DZSO or DZSTL
- 1 Radio
- 1 Compass
- 3 Wind measuring devices (above guidance concerning anemometers applies here as well)
- 1 Medic with 1 FLA
- All other requirements remain unchanged

#### **DZSTL ADDITIONAL SUPPORT REQUIREMENTS**

- Minimum of 11 omni-directional white lights
- 1 white air traffic control light and/or flares
- 1 red lens for air traffic control light and/or flares

#### **PUBLICATIONS**

- INSTALLATION RANGE REGULATION
- MOST RECENT MAP SHEET OF THE AREA
- COPY OF UNIT ASOP
- ANY OTHER LOCALLY REQ. REGULATIONS
- COPY OF DROP ZONE SURVEY
- AR 59-4 JOINT AIRDROP RECORDS, MALFUNCTIONS INVESTIGATIONS AND ACTIVITY REPORTING
- BLANK FORMS (FLASH REPORT, etc)

#### **PRE-MISSION BRIEFING**

Prior to the airborne operation the DZSO/DZSTL must attend a detailed pre-mission briefing. If possible this should be done directly with the aircrew. If it is not possible, the units S3 Air should provide the minimum essential information.

The following checklist should be used as a guide to insure all the pertinent information has been provided:

- JA/ATT (Joint Airborne/Air Transportability Training) Mission sequence number
- Type and number of aircraft
- Type of drop-PE, CDS, HE
- Type of release-CARP, GMRS, VIRS
- Type of parachutes
- Verify DZ name and location
- Verify current DZ Survey Data
- TOT(s) or Block time
- No Drop Procedures
- Number of jumpers or bundles
- DZ Markings
  - RAM
  - Panels/ lights

- Smoke/ flares
- Emergency no drop procedures
- Mission cancellation indication
- DZ support
  - Communications available
  - Frequencies/ call signs
  - Visual acquisition aids
  - NAV AIDS
- Aircraft/ Mission commanders name, rank, unit and telephone number
- DZSO/DZSTL name, rank, unit and telephone number
- Post mission reports

## DROP ZONE SURVEYS

There are 2 types of drop zone surveys

- Tactical Assessment of Drop Zone
- AF form 3823

### AF 3823

All information we need concerning the drop zone is on the AF form 3823.

The Air Force has a listing of all available drop zones that were approved for use. The list is called the Assault Zone Availability Report (AZAR). This list is attainable through the Air Force.

AZAR is compiled from inputs provided by 21<sup>st</sup> AF, McGuire AFB, NJ and 22<sup>nd</sup> AF, Travis AFB, CA. It identifies drop zones, landing zones, and extraction zones available in CONUS for use by the Air Mobility Command.

- Instructions for filling out AF Form 3823 can be found in the Pathfinder FM
- All obstacles must be identified within a 1000 meters of DZ
  - An aerial recon must be conducted to identify the hazards
- Once AF Form has been completed it must be verified by the first O-6 of the supported unit
- Completed AF form 3823 is good for 5 years from date of approval signature

The columns of the AF form 3823 are explained below and all blocks require an entry including "N/A" if applicable.

- 1a. DZ name
- 1b. ZAR index number (AF drop zone website reference number)
- 2a. Country
- 2b. State
3. Map sheet and series information
- 4a1. Date DZ was surveyed
- 4a2. Name and rank of surveyor
- 4a3. Contact phone number
- 4a4. Surveyor's name
- 4b. DZ approval or disapproval by mission type and day use
- 4c. Date approved for ground operations
- 4d. Date of safety of flight review
- 4e. Date of MAJCOM approval – DZ survey is good for five years from this date
- 5a. Controlling unit or agency
- 5b. Memorandum of understanding / land use agreement
- 5c. Contact phone number
- 5d. Range control frequencies (FM/ UHF)
- 5e. Contact phone number
- 6a-c. Dimensional data (length, width, radius)
- 6d-f. PI distances from the lead edge of the DZ
- 7a-d. DZ axis data (direction of flight)
- 8a-d. Ground point elevations

9a-f. DZ coordinates

9g. Point of origin data (prominent terrain feature used to help find PI)

9h. DZ center point and PI grid locations

9i. DZ corners (grid coordinates for the corners of the DZ)

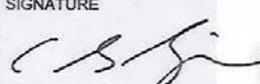
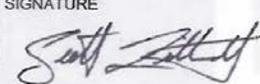
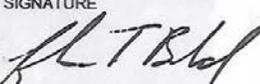
10. DZ diagram or digital photographic

11. Remarks (all hazards/ restrictions and pertinent information about the DZ)

12. Photograph available

13. Low level routes available

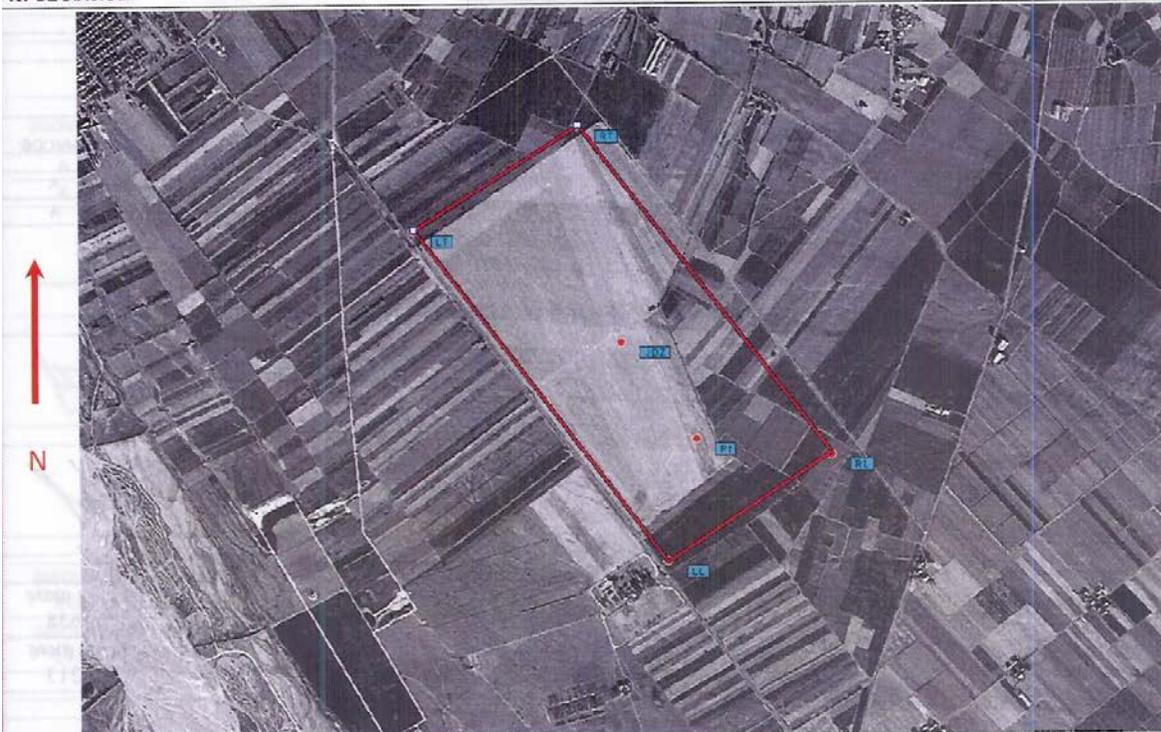
Note: When performing a safety of flight review on a foreign DZ, as much information as possible should be filled in on the AF form 3823. At a minimum, the following items must be filled in: items 4d, 6a, 6b, 7, 9a-f, and 9h. A copy of the foreign DZ should be attached to the safety of flight review.

AIRBORNE UNIT ASSUMES RESPONSIBILITY FOR PERSONNEL INJURY AND EQUIPMENT DAMAGE ON DZ									
<b>DROP ZONE SURVEY</b>	1A. DZ NAME Juliet North DZ			1B. ZAR INDEX NO. 1506		2A. COUNTRY Italy		2B. STATE	
	3. MAP SERIES/SHEET NUMBER/ EDITION/ DATE OF MAP M 792 Maniago NL 33 4 A3 ED1 19680101								
	<b>4. SURVEY APPROVAL/DISAPPROVAL DATA</b>								
4A1. DATE SURVEYED 20110115		4A2. TYPED NAME AND GRADE OF SURVEYOR Walter J. Mettler, Capt USAF			4A3. PHONE NUMBER (DSN) (314) 634-6940		4A4. UNIT 8 ASOS		
4B. DROP ZONE APPROVAL/DISAPPROVAL A = APPROVED D = DISAPPROVED	FOR	CDS/CRL/CRS	PER	HE	MFF	SATB	CRRC	HSLPADS	HVCDS
	DAY	A	A	D	A	A	D	A	A
	NIGHT	A	A	D	A	A	D	A	A
4C. DATE APPROVED FOR GROUND OPERATIONS 20110121		NAME, GRADE AND SERVICE OF APPROVAL AUTHORITY Andrew S. Zieseniss, Maj, US Army			PHONE NUMBER (DSN) (314) 634-6003		SIGNATURE 		
4D. DATE SAFETY OF FLIGHT REVIEW APPROVED 20110202		NAME AND GRADE OF REVIEWING OFFICER Scott R. Lichtwardt, 1Lt, USAF			PHONE NUMBER (DSN) (314) 480-2822		SIGNATURE 		
4E. DATE OF MAJCOM APPROVAL 20110204		NAME AND GRADE OF APPROVING AUTHORITY John T. Budd, Col, USAF			PHONE NUMBER (DSN) (314) 480-8600		SIGNATURE 		
<b>5. COORDINATING ACTIVITIES</b>									
A. DZ CONTROLLING AGENCY OR UNIT 173d ABCT S3 Air Office, Vicenza				B. MEMORANDUM OF UNDERSTANDING/LAND USE YES <input checked="" type="checkbox"/> NO <input type="checkbox"/> ATTACHED <input type="checkbox"/>				C. PHONE NUMBER (DSN) (314) 634-7638	
D. RANGE CONTROL No Range Control, contact Italian Air Force Liaison Officer for coordination							E. PHONE NUMBER (DSN) (314) 634-8213		
<b>6. DZ DIMENSIONS (YDS/MTRS) (FOR CIRCULAR DZ, ENTER RADIUS ONLY)</b>									
A. LENGTH 2185 yards / 1998 meters			B. WIDTH 1000 yards / 915 meters			C. RADIUS N/A			
POINT OF IMPACT DISTANCES FROM DZ LEADING EDGE			D. CDS PI 450 yards / 411 meters		E. PE PI 450 yards / 411 meters		F. HE PI N/A		
<b>7. DZ AXIS DATA (OPTIONAL FOR CIRCULAR DZ)</b>									
A. MAGNETIC 323 degrees		B. GRID (MGRS) 326.5 degrees			C. TRUE 325 degrees		D. SOURCE/DATE OF VARIATION DATA 20110105		
8. GROUND POINT ELEVATION		A. CDS PI 796 feet / 243 meters		B. HE PI N/A		C. PE PI 796 feet / 243 meters		D. HIGHEST 852 feet / 260 meters	
<b>9. DZ COORDINATES</b>									
A. SPHEROID WGS 84		B. DATUM WGS 84		C. GRID ZONE 33T UM		D. EASTING 3		E. NORTHING 51	
F. GPS DERIVED COORDINATES YES <input checked="" type="checkbox"/> NO <input type="checkbox"/>			G. POINT OF ORIGIN From DZ gate: 32 degrees for 555 yards						
<b>H. POINT</b>									
MGRS COORDINATES									
WGS84 LATITUDE (D-M.MM)									
WGS84 LONGITUDE (D-M.MM)									
DZ CENTERPOINT		33T UM 24555 11047			N 46 07.83		E 012 43.73		
CDS PI		33T UM 24879 10556			N 46 07.57		E 012 43.99		
PE PI		33T UM 24879 10556			N 46 07.57		E 012 43.99		
HE PI		N/A			N/A		N/A		
<b>I. DZ CORNERS MGRS COORDINATES</b>									
LEFT LEADING EDGE 33T UM 24723 09961 N 46 07.24 E 012 43.89					RIGHT LEADING EDGE 33T UM 25487 10464 N 46 07.53 E 012 44.47				
LEFT TRAILING EDGE 33T UM 23624 11630 N 46 08.13 E 012 43.00					RIGHT TRAILING EDGE 33T UM 24388 12132 N 46 08.41 E 012 43.58				

DZ NAME

Juliet North DZ

10. DZ DIAGRAM



11. REMARKS

HAZARDS:

1. User assumes all responsibility for injury and loss of life or damage to property/equipment.
2. 30ft tall flag pole/windsock located on left edge of DZ approximately 400 yards from leading edge.
3. Mountains located 2.5nm W, NW, N, NE of DZ. Terrain rises rapidly. Potential wind shear.
4. Buildings (70 yds long x 40 yds wide x 30 ft tall) located 10 yards up and 15 yards in from left leading edge corner.
5. Large concrete slab flush with ground located 40 yards up and 25 yards in from left leading edge corner.
6. 8 ft tall Rock pile and small trees located 1000 yds up and 25 yards in from right leading edge corner.
7. Asphalt road 15 yds long from left leading edge towards concrete pad.

RESTRICTIONS:

1. DZ located in Restricted Area LIR 49 South (FL155-FL370) approximately 2nm past DZ trailing edge.
2. All racetracks will be to the right (East) to avoid Celina Meduna Firing Range if active.

NOTES:

1. There are approved VFR maneuvering ground tracks to the DZ - contact Italian AF LNO on front page for the most recent routes.
2. File request for activity NLT 60 days prior through ODC (Rome) via the Italian AF LNO.
3. NOTAMS are coordinated NLT 30 days prior to use via the Italian AF LNO.
4. Expect Low-Level briefing and file flight plan with Aviano Base Ops 1 day prior to flight at DSN (314) 632-7222.

12. PHOTOGRAPH AVAILABLE

YES  NO

LOW LEVEL ROUTES

NONE AVAILABLE  
 ROUTE NAME/DESIGNATOR

AF IMT 3823. 20021001. V2 (REVERSE)

## AF FORM 4304 STRIKE REPORT

The AF form 4304 is essentially a score card for the Air Force. Since the release point is computed by the aircrew on a CARP drop zone, the Air Force must have some documentation on the crew's performance.

The clock direction and distance from the PI will be recorded on the AF form 3823 and forwarded to higher headquarters.

Upon completion these should be forwarded through your unit S3.

- PI is given for Strike report if first parachute suspended item lands within **25 yards** of the point of impact
- Success if 90% of parachute items land on surveyed drop zone

The following is a list of the blocks and an explanation of the contents on the AF form 4304:

1. DATE: Enter date and year. Use either calendar or Julian date. When a "time" is required use local or GMT consistent with the date.
2. LOCATION: Enter DZ name
3. CCT AND UNIT: DZSTL name and unit
4. DZ/LZ CONTROL OFFICER AND UNIT
5. DROP ZONE SAFETY OFFICER AND UNIT
6. LINE NO: One line filled out for each pass of each aircraft. No drop passes should use a line number also. The remarks column should reflect the reason for the no drop situation.
7. TYPE ACFT: Mission design series
8. UNIT: Unit of aircraft
9. CALL SIGN: Call sign of lead and, if applicable, formation position number
10. TYPE MISSION; Refer to legend for abbreviations. Your initial appropriate training will dictate what type of drop zone you are qualified to operate
11. ETA: Estimated time of arrival, estimated TOT, or S3 air brief. Keep the unit of time consistent throughout the form
12. ATA/ATD: Actual time of every pass and actual time of departure
13. STRIKE REPORT:
  - a. YDS: Distance first jumper. Container/ pallet lands
  - b. CLOCK: Use direction of flight as the 12 o'clock and its back azimuth as the 6 o'clock, estimate direction from PI to first jumper/ container/ pallet. If item and conditions permit, the actual measurement is preferred
14. LZ: Mark the "S" box if a landing occurred between the beginning of the touchdown zone and the first 500 feet. If the landing was not successful (i.e., go-around), short of the touchdown zone or 500 feet beyond the beginning of the touchdown zone, mark the "U" box and provide comments in the REMARKS box
15. SURF WIND: Surface wind direction in degrees, and velocity in knots
16. SCORE METHOD: Refer to LEGEND for abbreviations
17. MEAN EFFECTIVE WIND: Time taken and at what altitude
  - a. TIME: Self-explanatory
  - b. ALT: Should be drop altitude
  - c. DIR & VEL: Wind direction in degrees and velocity in knots
18. REMARKS: Enter remarks as appropriate

## DROP ZONE/LANDING ZONE CONTROL LOG

DATE

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

### LEGEND

AH-Airland ( <i>Heavy</i> ) 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			STRIKE REPORT		LZ		SURF WIND	SCORE METHOD	MEAN EFFECTIVE WIND			REMARKS
						ATD	YDS	CLOCK	S	U	TIME	ALT			DIR & VEL			
1																		
2																		
3																		
4																		
5																		
6																		
7																		
8																		
9																		
10																		
11																		
12																		
13																		
14																		
15																		

AF IMT 4304, 20020903, V1

REPLACES AMC 168, DEC 92

# Computed Air Release Point (CARP)

## TC 3-21.220 Chapters 7, 20-23 & AFI 13-217

### CARP DROP ZONES

CARP drop zones are used by Air Force fixed wing aircraft. The navigator on board the aircraft determines the release point. The DZSO or the DZSTL has the responsibility of marking the drop zone and ensuring that it is of the proper size to support the mission.

#### OPERATION TYPES

- Personnel Drops
- CDS Drops
- Heavy Equipment Drops

#### DOOR EXITING PROCEDURES FOR PERSONNEL

- ADEPT Option 1 (Alternate Door Exiting Procedures for Training)
  - One door, one pass; half the jumpers minus 1
- ADEPT Option 2
  - One door followed by the other door, one pass; Total jumpers minus 1
- Mass Exit
  - Half the total number. Even number jumpers (first jumper free), use larger number; odd number jumpers, use lower number.

### PLANNING ALTITUDES

- Personnel
  - 1000 feet AGL
- Heavy Equipment
  - 1100 feet AGL

### MINIMUM SIZE REQUIREMENTS FOR ONE JUMPER OR PLATFORM

- Personnel
  - 600 yards x 600 yards
- Heavy Equipment
  - 1000 yards in length x 600 yards in width
- CDS
  - Requirements can be found in AFI 13-217

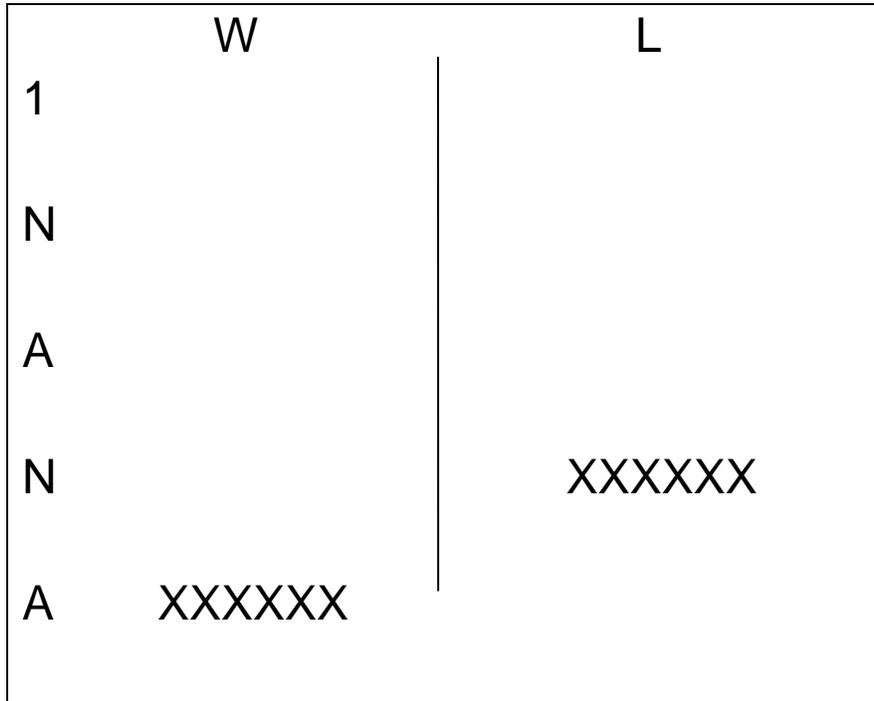
### SIZE ADDITIONS

- Night (1800-0600)
  - Add an additional 100 yards to both the length and the width
  - Altitude Over Planning Minimum
- Altitude
  - Add an additional 30 yards to both the length and width for every 100 feet over the planning altitude
- Not in Trail Formation
  - Add an additional 100 yards to the width for more than one aircraft flying not in trail formation
  - C17's cannot fly "In Trail" with personnel, Add 640 yards when using 2 C17's, Add 1200 yards when using 3 C17's, can't have more than 3 C17's
  - When flying C-17 with HE, only add 50 yards to both sides of the drop zone, and can fly in trail with a maximum of three C-17's
- Additional Jumpers or HE Platforms
  - Add an additional 75 yards to the length for each additional jumper
  - Add an additional 400 yards to the length for each additional HE platform on a C-130
  - Add an additional 500 yards to the length for each additional HE platform on a C-17 or C-5

CARP Chart is found in TC 3-21.220, Chapter 20, page 20-7.

ALTITUDE (AGL)	WIDTH (NOTE 1, OR C-17 NOTE 3)	LENGTH (NOTE 2)	
<b>PERSONNEL (Static Line)</b>			
To 1000 ft	600 yds / 549 m	1 Parachutist	600 yds / 549 m
		Additional Parachutist	<b>Add 75 yds / 69 m to the trail edge for each additional parachutist.</b> (PI for ST/ Pararescue personnel)
Above 1000 ft	<b>Add 30 yds / 28 m to width and length for each 100 ft above 1000 ft.</b> (Add 15 ft / 14 m to each side of DZ, 15 yds / 13 m to each end.)		
<b>HEAVY EQUIPMENT</b>			
To 1100 ft	600 yds / 549 m	1 Platform	1000 yds / 915 m
		Additional Platforms	<b>Add 400 yds / 366 m (C-130), 500 yds / 457 m (C-17/C-5) to the trail edge for each additional platform</b>
Above 1100 ft.	<b>Add 30 yds / 28 m to width and length for each 100 ft above 1100 ft.</b> (Add 15 ft / 14 m to each side of DZ, 15 yds / 13 m to each end.)		
<p>Note: 1 ( N/A for AFSOC assigned / gained, aircraft OPCON to USSOCOM, or theater special operations command ):</p> <ul style="list-style-type: none"> <li>a. For day visual formations increase width by 100 yds / 92 m ( 50 yds / 46 m on each side )</li> <li>b. For C-130 SKE AWADS formation, increase width by 400 yds / 366 m ( 200 yds / 184 m on each side )</li> <li>c. At night increase width by 100 yds / 92 m for single ship visual drops ( 50 yds / 46 m on each side ) or 200 yds / 184 m for visual formations ( 100 yds / 92 m on each side )</li> </ul> <p>Note: 2 ( N/A for AFSOC assigned / gained, aircraft OPCON to USSOCOM, or theater special operations command ):</p> <ul style="list-style-type: none"> <li>a. At night increase width by 100 yds / 92 m for single ship visual drops ( 50 yds / 46 m on each side ) (N?A for C-17 doing GPS drops.)</li> </ul> <p>Note: 3 C-17 DZ width adjustments (more that one may be required)</p> <ul style="list-style-type: none"> <li>a. For visual formations ( day or night ) increase width by 100 yds / 92 m ( 50 yds / 46 m on each side )</li> <li>b. For night pilot directed airdrops, increase width an additional 100 yds / 92 m ( 50 yds / 46 m on each side ) ( Does not apply to aircraft performing GPS Drops. )</li> <li>c. For SKE HE / CDS formations minimum DZ basic width using center PI's is 1240 yds for 2 ship elements and 1800 yds for 3 ship elements. When using offset PI's minimum basic width is 1100 yds for 2 ship elements and 1300 for 3 ship elements.</li> </ul>			

# CARP PROBLEM SETUP

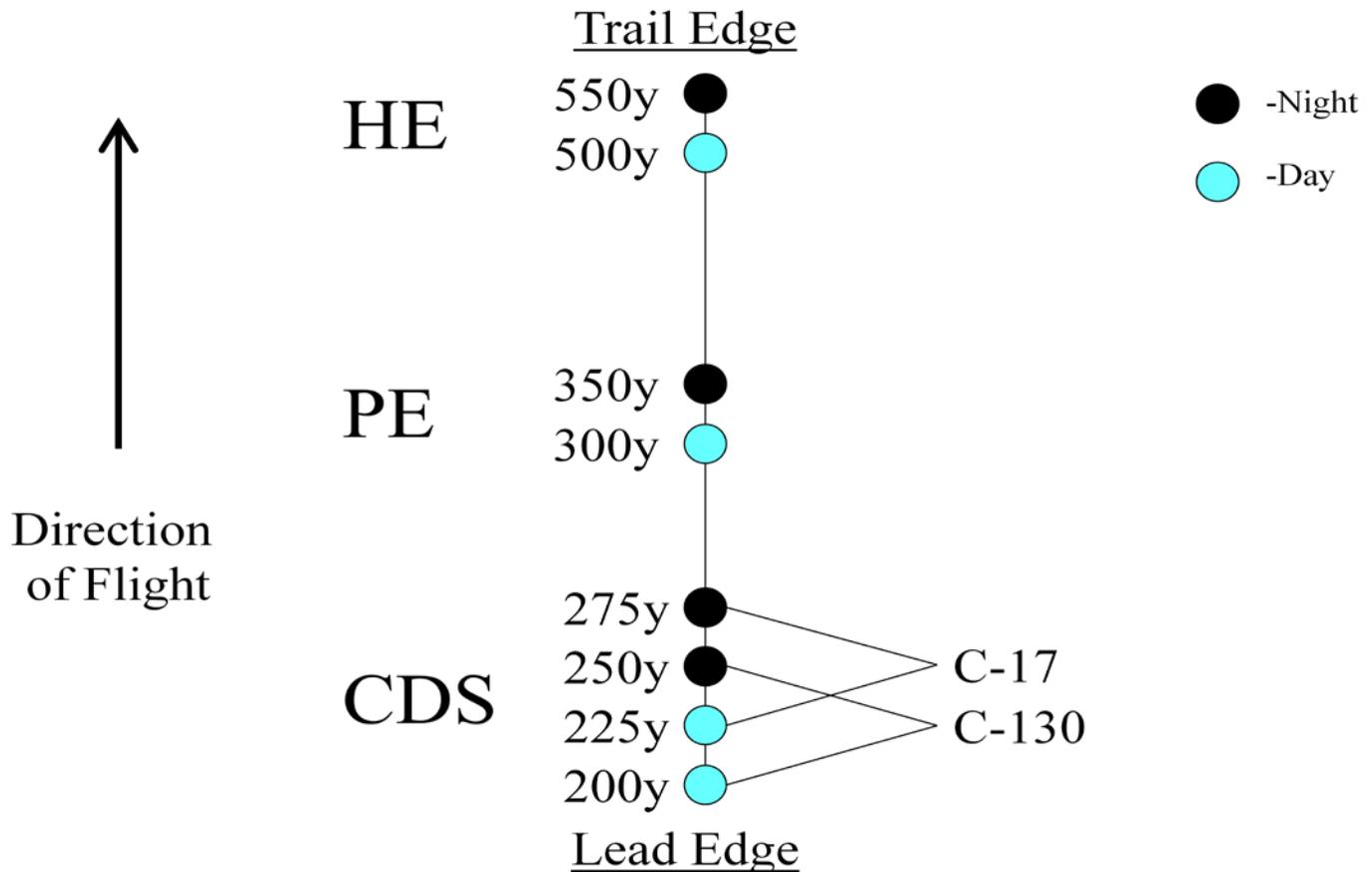


## POINT OF IMPACT (PI) LOCATIONS

The PI is determined by the type of operation being executed. All PI's will be measured from the lead edge of the drop zone and centerline.

- Personnel (C-130 or C-17)
  - Day
    - Minimum of 300 yards
  - Night
    - Minimum of 350 yards
- CDS (C-130)
  - Day
    - Minimum of 200 yards
  - Night
    - Minimum of 250 yards
- CDS (C-17)
  - DAY
    - Minimum of 225 yards
  - NIGHT
    - Minimum of 275 yards
- Heavy Equipment (C-130 or C-17)
  - Day
    - Minimum of 500 yards
  - Night
    - Minimum of 550 yards

## Point of Impact Tree



### **CARP PI MARKINGS**

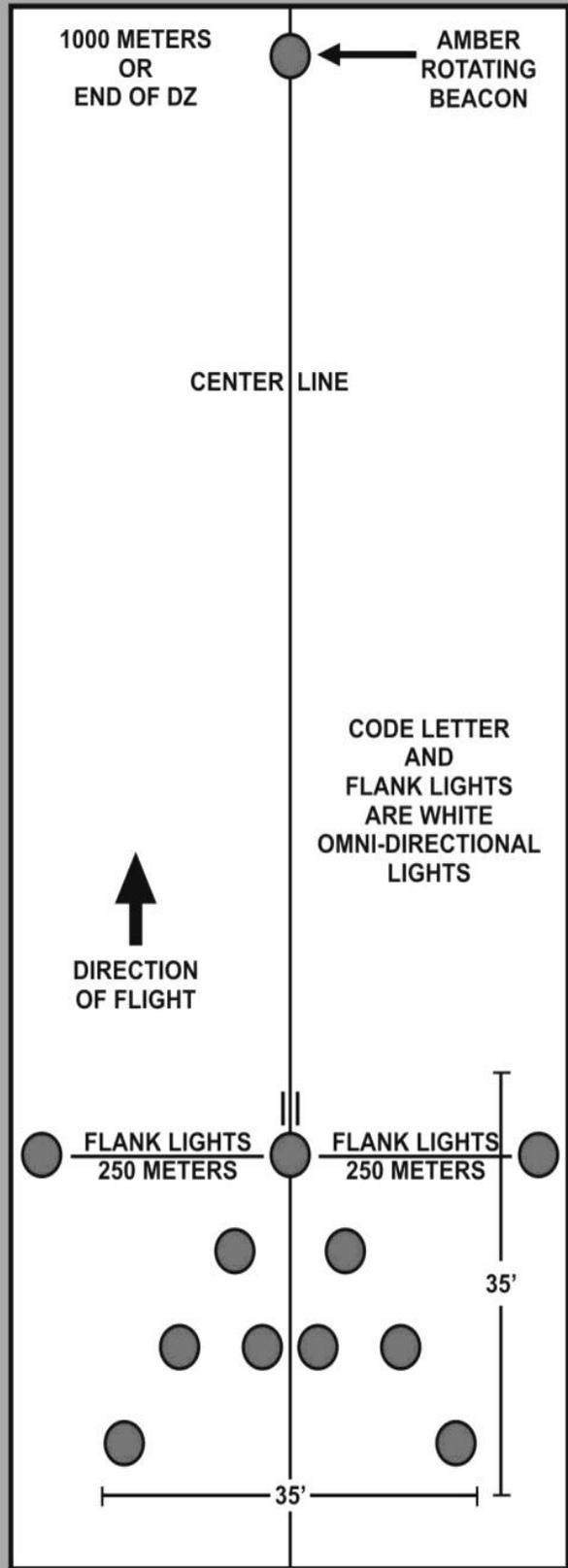
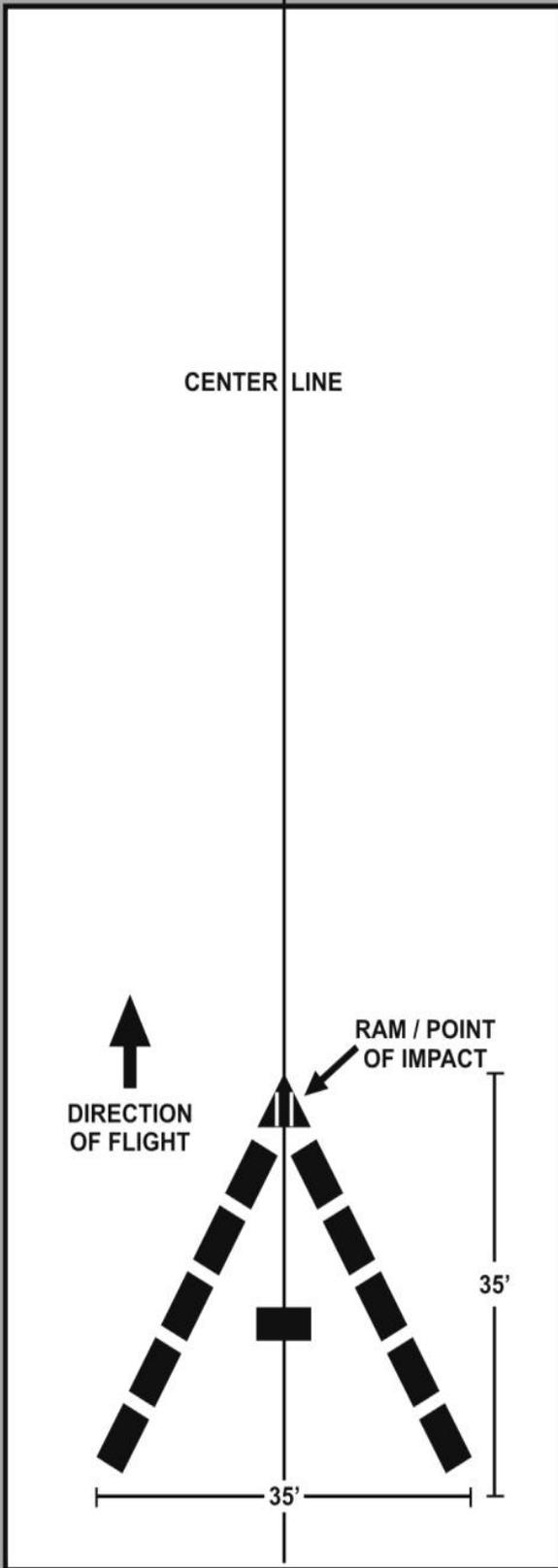
- **PRIMARY MEANS OF MARKING THE DROP ZONE IS A RAISED ANGLE MARKER (RAM).**
- **Coder Letters for Authentication**
  - J, C, A, R & S
- **Circular or Random Approach DZ**
  - H & O

### **DAY TIME MARKINGS**

- Minimum of nine panels for the code letter
- At least 35 feet x 35 feet
- Only the PI Must be Marked
- Center the top of the code letter at the base of the RAM
- Color and code letter will be pre-coordinated and the color will be contrasting with the surrounding area

### **NIGHT TIME MARKINGS**

- Minimum of nine omni-directional white lights for the code letter
- At least 35 feet x 35 feet
- If used, flanker lights will be omni-directional white lights located 250 meters to the left and right abeam of the PI
- Trail edge of the DZ or 1000 meters centerline from the PI, whichever comes first, must be marked with an amber rotating beacon. Beacons are not considered lights





CODE LETTERS

### CONTROL CENTER

The control center is where the DZSO/ DZSTL is located to control and observe the operation. The location is determined by the type of operation.

### PERSONNEL

- At the PI

### CDS

- 200 yards from the PI at the 6 o'clock

### AWADS, HEAVY and FREE DROPS

- Off the DZ at the best vantage point

### NO DROP SITUATIONS

It may become necessary for you as the DZSO/DZSTL to temporarily halt a jump or to declare a no drop or mission cancellation.

- Initiate red smoke, Red Always Means No Drop
- To close DZ temporarily, place two parallel bars made of four VS-17 panels each, perpendicular to the line of flight.
- To cancel the mission, form an X out of eight VS-17 panels on the PI
- Scramble or remove the code letter
- Other means of communicating a no drop could be an air traffic control light, signal mirror, flares or any specific means covered by the crew in the pilot brief.

### AUTHORIZED WIND MEASURING DEVICES

Anemometers—Services should only use approved anemometers to measure surface winds during all personnel and cargo parachute operations. **THE APPROVED ANEMOMETERS ARE THE DIC3, TURBOMETER, AND AN/PMQ 3A.** The DIC3, and Turbometer cannot be calibrated; they must be given an expedient check just before use

Ensure fresh batteries are installed in the anemometer

Check the anemometer in a no wind condition such as in a vehicle cab or a building. Turn on the anemometer and, if any reading other than zero registers, the anemometer is not fit for use and must be discarded

Use a three anemometer check by comparing the reading on three anemometers in identical conditions. Discard the one anemometer that doesn't read the same as the other two. The Turbometer must be held within 20 degrees of wind line with the wind entering the rear of the meter to ensure accurate readings. Calibration requirements for the AN/PMQ 3A will be conducted in accordance with appropriate TMs. Other anemometers not tested and recommended for use should be employed only after a command initiated risk assessment is completed. Regardless of the method or device used to measure DZ winds, the airborne commander is responsible for ensuring winds on the DZ do not exceed 13 knots during static line personnel airdrops.

## DZST EQUIPMENT FAMILIARIZATION

**AN/PMQ-3A (anemometer):** This is a calibrated, hand held wind measuring device, used for measuring ground wind. Oriented correctly, it will give wind direction in degrees, by pressing the trigger. It is capable of reading the wind from 0 to 15 knots on the low scale and from 0 to 60 knots on the high scale. Select High or low using the High/Low selector switch. The anemometer must be calibrated every six months. **NSN:** 6660-00-515-4339

**Turbo Meter:** This is an electronic wind speed indicator. It provides wind speed accurately, and is pocket size for convenience. The turbo meter has four scales which are displayed on a three digit light Emitting Diode display. The scales are knots per hour, feet per second, meters per second, and miles per hour. For best results, keep axis of turbo meter within 20 degrees of the direction of wind. **NSN:** 1670-00-T33-900

**Amber Rotating Beacon:** Electric driven light which provides amber rotating light for trail edge marker on a night CARP drop zone. **NSN:** Local purchase item.

**VS-17 Marker Panel Aerial:** Two sided panel. One side is fluorescent orange, sometimes referred to as international orange. The other side is cerise or commonly referred to as red. The panel is 2 feet wide and 6 feet long. It has six tie down points used to attach the panel to stakes. It also has three snap fasteners on the short ends in the stow pocket. It should be folded up so the olive drab (OD) green is showing. The color of the panel used should best contrast the surrounding area. **NSN:** 8345-00-174-6865

**Light, Marker, Ground Obstruction:** Also known as the beanbag light. It is powered by one BA-200. The color of the light can be changed with the use of interchangeable colored plastic domes. These can be used in light holes or on the surface, secured with tent pegs, or by filling the bottom with sand or rocks. **NSN:** 6230-00-115-9996

**Whelen Light:** Named after the Whelen Corporation which manufactured the light. It is powered by either the BA-4368 or the lithium battery used in the PRC-77 radios. The light is placed on top of the battery and is ready for operation. The color of the light can be changed with different colored domes. **NSN:** Local purchase item

**M-2 Light Baton:** A flashlight powered by 2 BA-30's. The color of the light can be changed with different lenses that are stored in the base compartment of the light. This light is used in light holes or on top of the ground attached to a tent peg. **NSN:** 6230-00-926-4331

**Aerial, Marker, Distress:** An omni-directional flashing (strobe) light. This has a very far range. A directional cover can snap on the top for the stealth operator. Colors can be changed with snap on caps. The strobe light also has infrared (IR) capabilities. **NSN:** 6230-00-67-5209

**Mirror, Emergency signaling, type II:** The signal mirror when used properly, can be used to signal aircraft by reflecting sunlight. There is a set of instructions on the back of the signal mirror for proper use and aiming. The signal mirror can still be used on hazy days. One misconception is that it can only be used when facing the sun. It can be used in all directions and can be seen as far as the horizon will go. **NSN:** 6350-00-105-1252

**SE-11 Light Gun:** A long range directional visual signaling device used to signal aircraft to mark the release point on the drop zone. It is powered by 5 BA-30's and can be set up for remote operations. It has a red cap/lens, normally used as a no drop signal. Light, Traffic Air B-2 replaces SE-11 **NSN:** 6210-00-578-6754

**Pilot Balloon:** the piball is a ten or thirty gram rubber balloon that, when filled with helium to the specified circumference is used to measure the mean effective wind which is the average wind from the ground to drop altitude.

**NSN:** Balloon Meteorological 10 Gram 6660-00-663-7933, Balloon Meteorological 30 Gram 6660-00-663-8159

10 gram 57 inch day, 74 inch night

30 gram 75 inch day, 94 inch night

**Lighting Unit (Piball):** This light is attached to the piball for night operations. The piball is inflated to a greater dimension to compensate for the weight of the light so that the same ascension rate is achieved. The piball light has a wet cell battery that is activated by water, or fluid. When temperatures fall below 50 degrees the piball light activates faster by using warm water. **NSN:** 6660-00-839-4927

**Drift Scale:** Slide type scale that uses a 90 degree angle to measure the ascent of the piball for determining the mean effective wind. **NSN:** Locally produced by TASC (a protractor with a string through the center with a weight can be used). Also for this purpose, the Thedolite, **NSN** 6675-00-861-7939, Pocket Transit (with built in clinometer) **NSN** 6675-00-641-5735, and the Clinometer, **NSN** 6675-00-313-9730

**AN/PRC-119:** Frequency modulation of FM man portable radio used for contacting the aircraft with FM communication capabilities. This radio can also be used for Navaid with aircraft that have FM homing capabilities. It has a range of 4 to 16 kilometers without power increasing accessories.

**PRC-113:** Is a man portable UHF/VHF AM and has quick jam resistant electronic counter-countermeasures (ECCM) transceiver. Designed for short range (5 to 15 miles) tactical ground to ground or ground to air communications.

#### **DZST GUIDE TO REFERENCES**

- AFI 13-217
- AFI 11-231
- AFI 11-2c130 Volume 1
- AFI 11-2c141 Volume 1
- FM 3-21.220
- FM 3-21.38
- TC 31-24
- Memorandum of agreement, Airdrop operations without combat control teams (CCTs), dated 27 June 1987

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# **“A” Series Containers**

## **TC 3-21.220 Chapter 14**

### **A-7A CARGO SLING**

The A-7A cargo sling consists of the following components:

- 1) 1 strap
- 2) Strap fastener, located at the end of each strap
- 3) 1 D-Ring

### **STRAP**

Length

- 188 inches

Material

- Type X cotton or Type VII nylon

### **CHARACTERISTICS**

Weight

- 8 lbs.

Maximum weight (Cargo parachute not included)

- G-14 cargo parachute
  - 500 lbs.
- T-10 cargo parachute
  - 500 lbs.

Minimum weight

- G-14 cargo parachute
  - 200 lbs.
- T-10 cargo parachute
  - 90 lbs.

Maximum dimensions

- 30 inches wide
- 48 inches long
- 66 inches high to include the cargo parachute

Minimum dimensions

- Must be large enough to stabilize the cargo parachute

### **LOAD CONFIGURATIONS**

- 2 Strap load
  - 200-300 lbs.
- 3 Strap load
  - 300-400 lbs.
- 4 Strap load
  - 400-500 lbs.

**When rigging the A-7A cargo sling as a 3 strap load the following applies:**

- 1) 1 strap is laid out as the main strap, thick lip portion of the friction bar facing down and away from the load
- 2) 2 straps will be laid out parallel to each other over the main strap approximately 14 to 16 inches apart, thick lip portion of the friction bar facing down and away from the load
- 3) Center the load on the straps, rough side toward the strap fasteners
- 4) Route free running end of main strap through all appropriate handles on the load
- 5) Route free running end of main strap through both D-rings

- 6) Secure the main strap tightly
- 7) Roll all excess webbing hand over hand toward the load
  - a. Secure with ¼ inch cotton webbing using a surgeon's knot locking knot
- 8) Parallel straps are routed from inside to outside through the D-rings
- 9) Secure the 2 parallel straps tightly
- 10) Roll all excess webbing hand over hand toward the load
  - a. Secure with ¼ inch cotton webbing using a surgeon's knot locking knot
- 11) Excess webbing should not protrude above the top of the load
- 12) Load will have a rough side and a smooth side

When attaching the G-14 cargo parachute you must ensure:

- 1) Risers go directly to their attaching points the D-rings
- 2) 4 tie downs are attached to the load and tied in a bow knot
- 3) Static line is free to deploy
- 4) Risers are not routed around or under any part of the container

### **DROGUE DEVICE**

The drogue device is used when jumpers are to follow bundles. There are attached to the break cord-attaching loop with a girth hitch.

- o 1 drogue device for a C-130
- o 2 drogue devices for a C-17
- o 3 drogue devices for a C-5

### **NON-BREAKAWAY STATIC LINE**

- o Remains with the aircraft after the parachute deploys
- o Clevis is routed through upper looped portion of static line
- o Break cord tie is constructed of Type II or Type III nylon cord gutted
- o Must have drogue device attached if parachutists are to follow load
- o Cannot be used from a rotary wing aircraft

### **BREAKAWAY STATIC LINE**

- o Remains attached to the apex of the parachute after it deploys
- o Clevis is attached to the upper looped portion of the static line by Type II or Type III nylon cord gutted
- o Break cord tie is constructed with a minimum of ½ inch tubular nylon
- o Can be used on either fixed or rotary wing aircraft

### **A-21 CARGO BAG**

The A-21 cargo bag consists of the following components:

- 1) Canvas cover
- 2) Sling assembly with scuff pad
- 3) Quick release assembly
- 4) 2- ring straps

### **CANVAS COVER**

Material

- o Cotton duck material

Dimensions

- o 97 inches by 115 inches

### **SLING ASSEMBLY WITH SCUFF PAD**

Consists of:

- 1) 1 main strap, 188 inches in length
- 2) 2 side straps, 144 inches in length

- 3) 4 carrying handles

Scuff pad dimensions

- o 30 inches by 48 inches

### **QUICK RELEASE ASSEMBLY**

Consists of:

- 1) Quick release device with safety clip
- 2) 1 fixed strap
- 3) 3 quick release straps

### **RING STRAPS**

Consists of:

- 1) 4 inch steel rod ring
- 2) 1- 9 inch strap terminating at a strap fastener
- 3) 1-7 inch strap terminating at a D-ring

### **CHARACTERISTICS**

Weight

- o 18 lbs.

Maximum weight (Cargo parachute not included)

- o G-14 cargo parachute
  - 500 lbs.
- o T-10 cargo parachute
  - 500 lbs.

Minimum weight

- o G-14 cargo parachute
  - 200 lbs.
- o T-10 cargo parachute
  - 90 lbs.

Maximum dimensions

- o 30 inches wide
- o 48 inches long
- o 66 inches high to include the cargo parachute
  - Can be extend to 69 inches for the 2 stinger missiles or a 90mm recoilless rifle

### **When rigging the A-21 cargo bag the following applies:**

- 1) Spread the canvas cover out with the strap keepers facing up
- 2) Sling assembly with scuff pad is centered on the canvas cover with the carrying handles facing down
  - a. Thread the straps through the strap keepers
- 3) Flip the canvas cover and sling assembly with scuff pad over
- 4) Center the load
- 5) Wrap the load, side flaps first
- 6) Neatly fold the excess material of the end flaps
- 7) Attach the quick release straps to the quick release assembly with the thick lip portion of the floating metal bar facing down
- 8) Center the quick release assembly on the top of the load with the rotating disk facing up
- 9) Route the free running ends of the main strap through the strap fasteners on the ring straps
  - a. Do not tighten
- 10) Route the quick release straps over the top of the steel rod ring
- 11) Place a half turn in the quick release straps so they come underneath the steel rod ring to the side of the load

- 12) Route the free running ends of the side straps through the strap fasteners of the quick release straps
- 13) Alternately tighten the main strap and the side straps , keeping the quick release assembly centered on the load
- 14) Fold excess webbing hand under hand toward the load
  - a. Secure with ¼ inch cotton webbing using a surgeon's knot locking knot
  - b. Ensure the excess does not protrude below the bottom of the load

# Practical Work in the Aircraft

## TC 3-21.220 Chapters 5, 10 & 16

### PWAC

#### THREE TIME WARNINGS

- 20 minute
- 10 minute
  - a. 10 and 20 minute time warnings begin and end at shoulder level in closed fists. As the jumpmaster issues the verbal command "TEN MINUTES" extend hands and arms forward while spreading the fingers and thumbs, then return to shoulder level in closed fists.
- 1 minute
  - a. The jumpmaster will issue the one minute time warning by extending the lead arm toward the jumpers and raising the index finger, sounding off with "ONE MINUTE."

#### ONE TIME ADVISORY

- 30 seconds

#### NINE JUMP COMMANDS

- "Get Ready"
  - a. It begins at shoulder level, all fingers and thumbs extended and joined, palms facing the jumpers. As the jumpmaster issues the verbal command "GET READY", extend both arms straightforward until the elbows lock, ensuring that the palms remain facing the jumpers.
- "Outboard Personnel, Stand Up"
  - a. This jump command is executed in two parts. The first part begins at shoulder level, index and middle fingers extended and joined, remaining fingers and thumbs curled to the palm. As the jumpmaster issues the verbal command "OUTBOARD PERSONNEL" the arms are extended down to the sides at a 45-degree angle. As the jumpmaster issues the verbal command "STAND UP", first extend and join all fingers and thumbs, rotate the hands so the palms face up, and then raise the arms straight overhead keeping the elbows locked.
- "Inboard Personnel, Stand up"
  - a. This jump command is also executed in two parts. The first part begins at shoulder level, centered on the chest, once again, index and middle fingers extended and joined, all remaining fingers and thumbs curled to the palm. As the jumpmaster issues the verbal command "INBOARD PERSONNEL", the arms are extended towards the inboard seats until the elbows lock. As the jumpmaster issues the verbal command "STAND UP" the arms are first moved back to the sides and down, all fingers and thumbs are extended and joined, the hands are rotated so the palms face up, and then raise the arms straight overhead keeping the elbows locked.
- "Hook Up"
  - a. This jump command may begin in two different ways. It may begin at shoulder level or it may begin with the arms extended straight overhead. A hook will be formed in the index finger of each hand. All remaining fingers and thumbs form fists. As the jumpmaster issues the verbal command "HOOK UP", move the arms in a pumping motion, up and down, or down and up. This motion must be repeated a minimum of three times.
- "Check Static Lines"
  - a. This is a plural command since there will normally be more than one static line attached to the anchor line cable. This jump command begins at eye level, index fingers and thumbs forming an "O", remaining fingers extended and joined, palms facing each other and the knife edge of the hands facing the jumpers. As the jumpmaster issues the verbal command "CHECK STATIC LINES", extend the arms straight forward to a near elbow locked position,

insuring the knife-edge of the hands remain facing the jumpers. This motion must be repeated a minimum of three times.

- b. After this command is given, it will be followed by a secondary command of; "Last two jumpers turn and face the skin of the aircraft. Second to last jumper trace the last jumper's static line.
- o "Check Equipment"
  - a. This jump command may begin in two different ways. It may begin with the fingertips centered on the chest, all fingers and thumbs extended and joined, palms facing the chest or it may begin with the arms extended to the sides at shoulder level, all fingers and thumbs extended and joined, palms facing the jumpers. As the jumpmaster issues the verbal command "CHECK EQUIPMENT", extend the arms to the sides at shoulder level, or bend the arms at the elbow, bringing the fingertips to the center of the chest. This motion must be repeated a minimum of three times.
  - b. After issuing this command, the jumpmaster will observe their stick of jumpers as they check their equipment by leaning to the left and then to the right. Once the jumpmaster sees that all movement has ceased, they will give their fellow jumpmaster a thumbs up. However, for testing purposes, they will issue this thumbs up to the safety. At this time the jumpmaster is free to check their equipment. They will check at a minimum, the front rim of the advanced combat helmet, their chinstrap, the ejector snap of the chest strap, both leg straps, and the ejector snap for the hook pile tape lowering line.
- o "Sound off for Equipment Check"
  - a. The jumpmaster will form their hands into cups and place the thumbs behind the ears, with the remainder of the hands cupped alongside the outer rim of the helmet. As the jumpmaster issues the verbal command "SOUND OFF FOR EQUIPMENT CHECK" and drop the hands and wait until they receives "ALL OKAY JUMPMASTER" from the number one jumper.
- o "Stand By"
  - a. The hand and arm signal is the same as the first part of the second jump command. It begins at shoulder level, index and middle fingers extended and joined, remaining fingers and thumbs curled to the palm. As the jumpmaster issues the verbal command "STAND BY" the arms are extended down to the sides at a 45-degree angle.
- o "GO"
  - a. The jumpmaster will give the first jumper a sharp tap on the buttocks while sounding off with the command "GO".

#### **ONLY PLURAL JUMP COMMAND**

- o Check Static Lines

#### **TWO COMMANDS THAT MAY BEGIN IN DIFFERENT POSITIONS**

- o Hook Up
- o Check Equipment

#### **AT THE 10 MINUTE TIME WARNING**

- o The Jumpmaster hooks up, faces his stick of jumpers and begins jump commands

#### **AT THE 20 MINUTE TIME WARNING**

- o The Jumpmaster positions door bundle
- o Hooks up door bundle to outboard anchor line
- o Inspects door bundle
- o Safety personnel hook up special items of equipment to their respective jumpers

## SEQUENCE OF EVENTS

**Load Master:** "Jumpmaster, you have 10 minutes"

**Jumpmaster stands up, hooks up, moves to the aft end of the AC and turns and faces their stick of jumpers**

**Jumpmaster:**

"Safety, control my static line"

"10 minutes"

1<sup>st</sup> jump command: "Get Ready"

2<sup>nd</sup> jump command: "Out board personnel, stand up"

3<sup>rd</sup> jump command: "Inboard personnel, stand up"

4<sup>th</sup> jump command: "Hook up" signals 3x

- Safety "stows and goes", checks static lines from point of attachment, 4" in hand, 2" below, Never on the double sewn portion, trace back to the 1<sup>st</sup> stow. Ensures jumpers know to make eye to eye contact with him and hand the static line to him, also ensures jumpers elbows are raised to keep the static line from becoming misrouted under their arm.

5<sup>th</sup> jump command: "Check static lines" signals 3 times; after command and hand signals are given, JM will say: "Last two jumpers turn and face the skin of the aircraft, second to last jumper check the last jumper's static line."

6<sup>th</sup> jump command: "Check equipment" signals 3times

- Look left/right; once all movement has ceased issue thumbs up to other JM and then checks their own equipment.

7<sup>th</sup> jump command: "Sound off for equipment check"

- drop hands and wait for the #1 jumper to announce "ALL OK, JUMPMASTER" Acknowledge the #1 jumper by slapping his hand, re-grasp static line from safety and take #1 jumper position. Ensure you have 3 points of contact

**Load Master:** "Army, Your Door"

## DOOR CHECK PROCEDURE (C-130)

Grasp lead edge of jump doors, make eye to eye contact with safety and say "Safety, control my static line", rotate into the door centering your body without any portion of the feet touching the jump platform.

Safety controls the JM's static line and observes their stick of jumpers for any emergencies; he also stays aware of the JM and Load Master

- 1) Ensure PIP pin is in place, re-grasp lead edge
- 2) Kick lead down lock with lead foot , place foot back in starting position
- 3) Kick trail down lock with trail foot, place trail foot on center of platform without touching any part of the yellow painted portion. Shift weight to trail foot and ensure the jump platform will hold the jumper's weight. This is the "Door Relaxed Position" from which you will perform the remainder of your duties up to the time of placing door bundles or jumpers in the door.
- 4) Trace trail edge of the door, Start at the top, trace down to the trail down lock, then back to top, re-grasp trail edge
- 5) Wind deflector: Lean head towards trail edge, look in direction of flight and nod their head three times
- 6) Clear to the rear: Bend forward at the waist to an elbow locked position, keeping both heels flat, visually check **direction of flight, overhead, to the rear, straight down, straight to the front and back toward the direction of flight**, JM will then return back to the Door Relaxed Position and observe for check points

1<sup>st</sup> check point: Face stick of jumpers, lock out elbow and sound off with "1 Minute"

2<sup>nd</sup> check point: Face stick of jumpers, lock out elbow and sound off with "30 Seconds"

7) Final Clear to the rear, bend forward at the waist to an elbow locked position keeping both heels flat on the floor and conduct a 360 degree check, return back to the Door Relaxed Position, bob your head and count to 10 thousand.

8) Maintain a firm handhold on the trail edge of the door, step off the jump platform and rotate in towards the center of the cargo compartment, make eye to eye contact with other JM and issue a thumbs up

8<sup>th</sup> jump command: "Stand By",

- Move towards the center of the AC , bisect the lead edge of the door with your chest, and issue “Stand by” and regain control of your static line from the safety

Safety personnel will grasp the #1 jumper’s static line with the lead hand and pass it to the trail hand and control it until the jumper exits

9<sup>th</sup> jump command: “GO”

- PJ will continue to observe the jump caution lights, AJ will observe the PJ by looking over his non static line shoulder. Once the jump caution lights turn green, PJ will issue the command “GO” to his #1, the AJ after seeing the PJ issue the command will turn, point at the light, and then issue “GO” to his #1

Once the AJ’s last jumper has cleared the door, the AJ will transfer control of his static line to the safety, center himself in the jump door, recheck jump caution lights (point at it) and exit.

The PJ, after seeing the AJ clear their door, will turn, transfer control of his static line to the safety, center himself in the jump door, recheck jump caution lights (point at it) and exit.

Safety personnel will perform a clear to the rear by placing their trail foot on the center of the jump platform and bending forward at the waist to an elbow locked position keeping both heels flat on the floor and check to the rear of the AC, then maintaining a firm handhold on the trail edge both safeties will rotate out of the jump door stepping off the platform, make eye to eye contact with each other and give each other the thumbs up signal, then with the help of the Load Master and or Static line retrieval system pull in all static lines and deployment bags.

### DOOR CHECK PROCEDURE (C-17)

Grasp lead of the jump doors, make eye to eye contact with safety and say “Safety, control my static line”, rotate into the door centering your body inside the door.

- 1) Troop Door: JM will release his/her grasp with the lead hand and grasp the Troop Door Lifting Bar. Attempt to lift the door up, and attempt to pull the door down. A visual inspection of the Troop Door Up-lock will confirm it is in the “Locked” position.
- 2) Trail Edge: With the same lead hand, the JM will then trace the trail edge of the door. Start at the top, trace down to the jump platform, then retrace back to the top. JM will then grasp the lead edge of the door or the “million dollar handle” with their lead hand.
- 3) Wind Deflector: JM will lean his head toward the trail edge of the door and insure the wind deflector is deployed
- 4) Clear to the Rear, JM will bend forward at the waist to an elbow locked position, keeping both heels flat, visually check **direction of flight, overhead, to the rear, straight down, straight to the front and back toward the direction of flight**, JM will then return back to the Door Relaxed Position and observe for check points. All other procedures mimic C-130.

### DOOR BUNDLE INSPECTION

- 1) Point of attachment to AC- Clevis: ensuring it has a clevis, clevis pin, safety wire and lanyard or cotter pin bent around and has metal to metal contact.
- 2) Static line: ensuring it is not burned cut or frayed and is not misrouted through any stow bar, proper pack opening loop, proper pack closing tie.
- 3) Drogue Device: reach under pack opening flap and locate drogue device 1 for C130, 2 for C17 and 3 for C5, satisfied its present and secure replace it back under pack closing flap.
- 4) Point of Attachment of the Cargo Parachute to the Door Bundle- Risers: ensuring they are properly secured with clevis, clevis pin, safety wire and lanyard or cotter pin firmly seated and bent around so it has metal to metal contact.
- 5) 4 tie downs of the pack tray: ensure they are properly secured and tied off with a bow knot
- 6) Overall inspection of the Door Bundle: ensure no loose or excess webbing
- 7) Finally, smack the smooth side of the Door Bundle ensuring it faces the trail edge of the door.

Once the Door Bundle has been jettisoned and the static line of the cargo parachute is riding high, the JM will count aloud to 3 thousand, move towards the center of the AC , bisect the lead edge and issue the 8<sup>th</sup> jump command “Stand By”, recheck jump caution lights and if still green, issue the 9<sup>th</sup> jump command “GO”

# T-11 Hollywood JMPI Sequence

## TC 3-21.220 Chapter 9

### **NOTE: PREPARE THE JUMPER FOR INSPECTION**

Prior to inspecting the Jumper, the Jumpmaster will prepare the Jumper for inspection. Move behind the Jumper and open the Main Curved Pin Protector Flap. Next, disconnect the Universal Static Line Snap Hook from the right Outer Static Line Stow Bar; ensure the Spring Opening Gate has spring tension. Remove all excess Universal Static Line Modified from the Static Line Slack Retainer Band on the Static Line Slack Retainer Loop, remove all twists and route the Universal Static Line Modified over the shoulder corresponding with the door the Jumper is to exit. Secure the Universal Static Line Snap Hook to the Carrying Handle of the T-11 Reserve Parachute, with the Spring Opening Gate facing the Jumper. Look at the riser assemblies to ensure that the type of parachute being inspected either has or does not have blue confluence wrap. Look at the canopy release assemblies to ensure they are seated in the hollows of the jumper's shoulders, just below the collar bones. Finally, you will remove the top and bottom Tuck Tabs, taking care to ensure that both side Tuck Tabs remain secure. If the Side Tuck Tabs become unsecure the Jumpmaster will notify a Rigger. You may now begin your inspection. After completing this Jumpmaster Personnel Inspection, you will place the Jumper into the jump configuration.

### **ADVANCED COMBAT HELMET (FRONT):**

Place both hands, fingers and thumbs extended and joined, pointing skyward, palms facing the Jumper on the right side of the Advance Combat Helmet. The left hand is the control hand; the right hand is the working hand. With the working hand trace across the rim of the Advance Combat Helmet feeling for any sharp or protruding edges that may cut or damage the Jumper's Universal Static Line Modified upon exiting the aircraft. Once the hands are parallel place the thumbs on the rim of the Advance Combat Helmet and tilt the Jumper's head to the rear. Conduct a visual inspection to ensure the three suspension pads are present, are flush with the outer rim, and the oval pads are covering the bolt ends. Place the right index finger on the front left adjustable buckle, to ensure it is free of all cracked components, is serviceable, the front left Adjustable Strap is properly routed through it and the free running end is secured in the Webbing Retainer. Trace the front left Adjustable Strap down. Ensure it is not twisted, cut or frayed to the chinstrap fastener, ensure it is free of all cracked components and properly secured. Trace the long portion chinstrap, under the Jumper's chin to ensure it is not twisted, cut or frayed, to where it is sewn into the front right Adjustable Strap. Trace the front right Adjustable Strap up, ensure it is not twisted, cut or frayed, to the front right adjustable buckle. Ensure it is free of all cracked components, it is serviceable, the front right Adjustable Strap is properly routed through it, and the free running end is secured in the Webbing Retainer. Place the right index finger on the right side of the short portion chinstrap, trace it across the front of the Jumper's chin, ensure it is not twisted, cut or frayed and drop both hands.

### **CANOPY RELEASE ASSEMBLY:**

We begin with the Canopy Release Assembly opposite the Universal Static Line Modified. Since the Universal Static Line Modified is routed over the jumper's right shoulder, the inspection begins with the jumper's left Canopy Release Assembly. Look at the left Canopy Release Assembly; tap it with the knuckles of the right hand one time to ensure that it sounds solid. **(Jumpers, this is your key to place both hands on your Advanced Combat Helmet).** With your right hand form a knife cutting edge, fingers extended and joined, palm facing towards you, and insert it behind the Main Lift Web just below the Canopy Release Assembly. Place your right thumb on the outside corner of the Canopy Release Assembly, and rotate it ¼ turn to the outside. With your head and eyes approximately six to eight inches away conduct a visual inspection to ensure the Male Fitting Canopy Release Assembly is properly secured by the Female Fitting Canopy Release Assembly, and properly secured by the Latch. Ensure the Cable Loop is properly secured by the Safety Clip and the Canopy Release Assembly is free of all dirt or foreign material that will keep it from seating completely. Now let the Canopy Release Assembly return back to its normal position. Keep your right hand in place. With your left hand secure the Universal Static Line Modified and rotate it over to your right thumb and secure it in place. Look at the right Canopy Release Assembly; tap it with the knuckles of the left hand one time to ensure that it sounds solid. With your left hand form a knife cutting edge, fingers extended and joined palm facing towards you the jumpmaster

and insert it behind the Main Lift Web just below the Canopy Release Assemblies. Place your left thumb on the outside corner of the Canopy Release Assembly and rotate it ¼ turn to the outside, and conduct the same inspection. Now let the Canopy Release Assembly return back to its normal position.

### **MAIN LIFT WEB:**

Leave the right hand in place. Look at the left hand and the right Main Lift Web. First make note of which of the three sizes the Main Lift Web is configured. Keep this in mind and ensure the Main Lift Web Tuck Tab Assembly is properly assembled and the Snap Fastener is secure. With the left hand trace down the Main Lift Web, ensure it is not twisted, cut, or frayed, until you make contact with the Main Lift Web Adjuster. Leave the left hand in place. Look at the right hand and conduct the same inspection. Ensure the left Main Lift Web Tuck Tab Assembly is in the same location as the right Main Lift Web Tuck Tab Assembly. Leave the right hand in place.

### **CHEST STRAP:**

Look at the Chest Strap to ensure that it is not misrouted around the left Main Lift Web. With the left hand palm facing the Reserve Parachute, grasp the Carrying Handle and lift up and out. Insert the right hand, fingers and thumb extended and joined, fingers pointing down, palm facing the Jumpmaster from top to bottom behind the Chest Strap, next to where it is sewn into the left Main Lift Web. Trace the Chest Strap, ensure that it is not twisted, cut or frayed, until you make contact with the Chest Strap Friction Adapter. Visually inspect to ensure it has a two to three finger quick release that is secured in its Webbing Retainer, the free running end has been "S" folded or accordion folded, not rolled, and secured in its Webbing Retainer with the tab portion towards the Chest Strap Friction Adapter. Continue to trace the Chest Strap, ensure it is not twisted, cut or frayed, next to where it is sewn into the right Main Lift Web. Leave the right hand in place.

### **WAIST BAND:**

Remove the left hand, move to the right side. Insert the left hand, fingers and thumb extended and joined, fingers pointing skyward, palm facing the jumpmaster, from bottom to the top behind the Waistband next to where it is sewn to the Pack Tray. Look at the Waistband where it is sewn to the Pack Tray to ensure it is secured to the Pack Tray by a Box "X" stitch, with at least 50 percent of the stitching present. Trace the Waistband forward, ensure it is not twisted, cut, frayed; been misrouted behind the Horizontal Backstrap or right Main Lift Web. Continue tracing the Waistband forward until the right Waistband Retainer rests in the palm. Leave the left hand in place. Remove the right hand from behind the Chest Strap and insert it fingers and thumb extended and joined, fingers pointing skyward, palm facing the Jumpmaster, from bottom to top behind the Reserve Parachute so the left Waistband Retainer rests in the palm of the right hand. Make finger tip to finger tip contact, and conduct a physical inspection to ensure the Waistband is not twisted and has been routed through both Waistband retainers. Leave the left hand in place. And with the right hand continue to trace the Waistband back. Ensure it is not twisted, cut, frayed and has not been misrouted behind the left Main Lift Web, until the Metal Adjuster rests in the palm of the right hand. Remove the left hand from behind the Reserve Parachute and insert the index and middle fingers from top to bottom into the quick release formed by the Waistband. Ensure it is no more than three fingers, no less than two, and it is not a false quick release. Remove the index and middle fingers from the quick release and with the index finger and thumb pinch off the free running end of the Waistband where it emerges from the Metal Adjuster. Trace the free running end of the Waistband to ensure it is not cut, torn, or frayed and is easily accessible to the Jumper until the fingers fall off the end. With the left hand palm facing the Reserve Parachute grasps the Carrying Handle, and Look at the right hand and the Waistband Adjuster Panel. With the right hand trace the Waistband Adjuster Panel back, ensure it is not twisted, cut, or frayed, and has not been misrouted behind the Horizontal Backstrap to where it is sewn to the Pack Tray. Ensure it is properly secured to the Pack Tray by a Box "X" stitch, with at least 50 percent of the stitching present.

### **T-11 RESERVE:**

Remove the right hand and move in front of the Jumper. Look at the left Connector Snap. With the index finger of the right hand, finger the Opening Gate one time to ensure it is properly secured to the left D-ring, has spring tension, has not been safetied, and the Opening Gate is facing the Jumper with the butterfly portion to the outside. With the left hand, lift up and out on the Carrying Handle. Conduct a visual inspection of the Connector Snap Retaining Tie to ensure it

is serviceable then visually inspect the left Spreader Bar Tie to ensure it is properly routed through both grommets, and is secured with a Surgeon's Knot Locking Knot with Overhand Knots. With the right index finger conduct a physical and visual inspection to ensure an Army Parachute Log Record is present. Remove the left hand. With the right hand palm facing the Reserve Parachute, grasp the Carrying Handle and lift up and out. Conduct the same inspection of the right Connector Snap Retaining Tie, right Spreader Bar Tie and the right Connector Snap. Remove the right hand. With the left hand, form a knife cutting edge, palm facing the Jumpmaster, and sweep the Carrying Handle and Universal Static Line Snap Hook towards the Jumper. Place the left thumb on the top right corner of the Rip Cord Assembly and apply inward pressure. Conduct a visual inspection of the top Tuck Tab to ensure a Directional Arrow is present and pointing skyward. With the thumb and index finger of the right hand, pinch off the Top Tuck Tab. Gently pull it down. Take care to ensure the side Tuck Tabs remain secure. Expose the Curved Pin and Reserve Closing Loop. Place the left thumb on top of the Top Tuck Tab and apply inward pressure. Place the right index finger on the upper portion of the Curved Pin and trace it down ensuring it is not bent, cracked or corroded and is properly routed through the Reserve Closing Loop, to its point of attachment the Curved Pin Lanyard. Leave the right index finger in place. Conduct a visual inspection of the Reserve Closing Loop to ensure it is not cut, frayed or burned and the Curved Pin is not puncturing it in any manner. Conduct a visual inspection of the Grommet to ensure it is not bent, cracked or corroded. Insert the index finger of the right hand from top to bottom behind the Rip Cord Assembly and trace down the Curved Pin Lanyard to ensure is not twisted, cut, or frayed and it is properly attached to the Rip Cord Assembly by Reinforced Stitching. Withdraw the right index finger. With the thumb and index finger of the right hand, pinch off the bottom Tuck Tab and gently lift it up. Take care to ensure the side Tuck Tabs remains secure. Expose the Curved Pin and Reserve Closing Loop. Place the left thumb on top of the bottom Tuck Tab, apply inward pressure. Place the right index finger on the lower portion of the Curved Pin and trace it up ensure it is not bent, cracked or corroded and is properly routed through the Reserve Closing Loop, to its point of attachment the Curved Pin Lanyard. Leave the right index finger in place. Conduct a visual inspection of the Reserve Closing Loop to ensure it is not cut, frayed or burned and the Curved Pin is not puncturing it in any manner. Conduct a visual inspection of the Grommet to ensure it is not bent, cracked or corroded. Insert the index finger of the right hand from bottom to top behind the Rip Cord Assembly and trace up the Curved Pin Lanyard to ensure it is not twisted, cut or frayed, and it is properly attached to the Rip Cord Assembly by Reinforced Stitching. Withdraw the right index finger. An overall inspection of the Reserve Parachute must be conducted to ensure it is free of grease, oil, dirt, mud, tears and exposed canopy. Place both hands fingers and thumbs extended and joined palms facing the Reserve Parachute on the top right corner. The left hand is the control hand and the right hand is the working hand. With the head and eyes 6 to 8 inches from the working hand trace across the top Pack Closing Flap, down the left Pack Closing Flap, across the bottom Pack Closing Flap, turn the working hand over and trace up the right Pack Closing Flap until skin-to-skin contact is made with the control hand. Raise the control hand up out of the way and trace where the control hand had been. Raise the Reserve Parachute to the Jumper and issue the command of **"HOLD SQUAT"**.

#### **LEG STRAPS:**

Insert the index and middle finger of each hand from outside to inside, behind the Leg Straps, below the Aviator's Kit Bag where the natural pocket is formed. Simultaneously slide both hands back towards the Saddle, to ensure the Leg Straps are not crossed. Leave the right hand in place. With the left hand trace the right Leg Strap up, ensure it is not twisted, cut, or frayed, and the free running end is secured in the webbing retainer, until contact is made with the Quick Fit "V" Ring. With the thumb press in on the Activating Lever of the Ejector Snap to ensure it is properly seated over the Ball Detent and is free of foreign matter. Leave the left hand in place and look at the left Leg Strap. With the right hand trace the left Leg Strap up ensure it is not twisted, cut, or frayed, the free running end is secured in the webbing retainer, and it is properly routed through the exposed Carrying Handle of the Aviator's Kit Bag, over the bottom and under the top, until contact is made with the Quick Fit "V" Ring. With the thumb of the right hand press in on the Activating Lever of the Ejector Snap to ensure it is properly seated over the Ball Detent, and is free of foreign matter. Conduct a visual inspection to ensure the Aviator's Kit Bag is present, has not been reversed and the re-enforced sewn portion is facing away from the Jumper. Once satisfied with the inspection, stand up in front of your jumper. **(Hollywood jumpers will automatically recover.)**

#### **UNIVERSAL STATIC LINE MODIFIED:**

With the right hand grasp the Universal Static Line Snap Hook. Pull up on the Universal Static Line Snap Hook to ensure it is secured to the Carrying Handle. Open the right hand and let the Universal Static Line Snap Hook rest in the

palm. Place the index finger of the left hand on the Girth Hitch of the Universal Static Line Modified. Ensure the Girth Hitch has not been reversed. Place the index finger of the left hand in the vicinity of the Rivet Pin, to ensure it is present, free of rust and corrosion. With the right hand, re-grasp the Universal Static Line Snap Hook and hold it perpendicular to the Reserve Parachute with the Spring Opening Gate facing towards the Jumper. With the left hand, palm facing the Jumper, thumb pointing downward, grasp the Universal Static Line Modified just above the Universal Static Line Snap Hook. Rotate the Universal Static Line Modified down and to the Jumper's right and push it toward the Universal Static Line Snap Hook. Visually inspect inside the Girth Hitch to ensure it is free of all cuts, frays and burns. With the index finger or thumb of the right hand push the Girth Hitch back towards the Universal Static Line Snap Hook and again visually inspect inside the Girth Hitch for any cuts, frays or burns. Redress the Girth Hitch down around the narrow portion of the Universal Static Line Snap Hook and release the Universal Static Line Modified with the left hand. Since the Universal Static Line Modified is routed over the right shoulder; with the index finger and thumb of the right hand, form an "O" around the Universal Static Line Modified just above the Universal Static Line Snap Hook. You should still see metal. Raise the right hand up simultaneously inspecting the Universal Static Line Modified as it passes through the "O" to ensure it is free of all cuts, frays, or burns. Raise the right hand as high as it can go, or until you feel resistance and issue the Jumper the command "**TURN**". Once the Jumper has completed the turn, the right hand should have been raised high enough so as to keep the Universal Static Line Modified tight between the control hand and the first stow. Place the index finger, or index and middle finger of the left hand behind the Universal Static Line Modified below the right hand making skin-to-skin contact. Trace the Universal Static Line Modified down ensure it is free of all cuts, frays, burns and it has not been misrouted under or through either Riser Assembly, to the first stow. With either hand, form a bite in the Universal Static Line Modified and look at the Static Line Slack Retainer Loop. Ensure it is present, serviceable and a Static Line Slack Retainer Band is attached. Place the bite on top of the Pack Tray and control it with either hand. This hand becomes the control hand. The opposite hand becomes the working hand. With the index finger and thumb of the working hand pinch off the first stow and pull it one to two inches toward the center of the Pack Tray. Look behind the first stow, and ensure the Universal Static Line Modified is free of cuts, frays, or burns and has not been misrouted around the static line stow bar. Release the first stow and let it pop back into place. Note: When tracing the Universal Static Line Modified towards you, only the index finger will be used. When tracing away from you, the index finger or thumb may be used. Insert the index finger or thumb of the working hand from bottom to top behind the first strand of Universal Static Line Modified as close as possible to the first stow. Trace the first strand of Universal Static Line Modified, ensure that it is free of all cuts, frays, or burns to the second stow. With the index finger and thumb of the working hand pinch it off and pull one to two inches towards the center of the Pack Tray and conduct the same inspection. Continue to inspect the Universal Static Line Modified in the same manner to the Main Curved Pin Cover. Ensure the last strand of Universal Static Line Modified is routed from the right Outer Static Line Stow Bar and inspected with the index finger only. With the index finger of the working hand gently lift up on the Main Curved Pin Cover. Inspect the Main Curved Pin Attaching Loop to ensure that it is properly attached to both the Universal Static Line Modified and the Main Curved Pin. With the index finger of the working hand trace the Main Curved Pin from its point of attachment to ensure it is not bent, cracked or corroded and is properly routed from left to right through the Main Closing Loop, to the end of the Main Curved Pin. Leave the index finger in place. Visually inspect the Main Closing Loop to ensure it is not, cut, frayed, or burned and the Main Curved Pin is not puncturing it in any manner. Conduct a visual inspection of the Grommet to ensure it is not bent, cracked, or corroded. With the index finger and thumb of the working hand gently lift up on the Main Curved Pin Protector Flap, and conduct a visual inspection of the Main Closing Loop, ensure it is not cut, frayed, or burned and the Grommet is not bent, cracked, or corroded. Stand up behind the Jumper.

#### **ADVANCED COMBAT HELMET (REAR):**

Place both hands fingers and thumbs extended and joined pointing skyward, palms facing the Jumper on the left side of the Advance Combat Helmet. The left hand is the control hand and the right hand is the working hand. With the working hand trace across the rim of the Advance Combat Helmet feeling for any sharp or protruding edges that may cut or damage the Jumper's Universal Static Line Modified upon exiting the aircraft. Once the hands are parallel place the thumbs on the rim of the Advance Combat Helmet and tilt the Jumper's head forward. Conduct a visual inspection to ensure the oval pads are covering the bolt ends, they are flush with the rim of the Advanced Combat Helmet and the rear trapezoid pad is flush or protruding slightly past the rim of the Advanced Combat Helmet, no more than ½ inch. Place the right index finger on the rear right adjustable buckle. Ensure it is free of all cracked components and is serviceable and the rear right Adjustable Strap is properly routed through it and the free running end is secured in the Webbing

Retainer. Trace the rear right Adjustable Strap down, ensure it is not twisted, cut or frayed until contact is made with the long portion Chin Strap. Leave the right index finger in place. Place the left index finger on the rear left adjustable buckle and conduct the same inspection. Leave the left index finger in place.

Conduct a visual inspection of the Nape Pad to ensure it is present, secure, serviceable, and has not been reversed.

### **RISER ASSEMBLIES:**

Reach over the Jumper's shoulders and grasp a Riser Assembly in each hand just above the Canopy Release Assemblies. Since these are like items of equipment either Riser Assembly can be inspected first. However for this talk through we will begin the inspection with the left Riser Assembly. Give the left Riser Assembly a sharp **TUG** to the rear. **OPEN** the left hand to form an "L". Apply upward pressure with the left thumb and **TRACE** the Riser Assembly rearward to where it disappears into the main Pack Tray, ensuring it is not twisted, cut, or frayed. Leave the left hand in place. With the right hand conduct the same inspection on the right Riser Assembly. You must ensure an Army Parachute Log Record is present in either Riser Assembly.

### **PACKTRAY:**

An overall inspection of the Pack Tray must be conducted to ensure the Pack Tray is free of grease, oil, dirt, mud or tears. Place both hands fingers and thumbs extended and joined palms facing the Pack Tray on the top left corner of the Pack Tray. The left hand is the control hand and the right hand is the working hand. With the head and eyes 6 to 8 inches away from the working hand trace across the top Pack Closing Flap, down the right Pack Closing Flap, across the bottom Pack Closing Flap. Turn the working hand over and trace up the left Pack Closing Flap until skin to skin contact is made with the control hand. Raise the control hand up out of the way and trace where the control hand had been. Form knife-edges with both hands, palms facing the Jumpmaster and issue the command "**ARCH YOUR BACK**".

### **DIAGONAL/HORIZONTAL BACKSTRAPS:**

Insert both hands under the "X" formed by the Diagonal Back straps. Look at the Diagonal Back straps to ensure they are properly routed over the appropriate shoulder, and the top Diagonal Backstrap has one more row of exposed stitching than the bottom. Look at the Diagonal Backstrap Retainers to ensure they are routed through the Sizing Channels on the Diagonal Backstraps. The Diagonal Backstrap Retainers are routed around the Diagonal Backstrap Keeper and the Directional Snap Fasteners are secure. To further ensure the Directional Snap Fasteners are secure, with both thumbs, **PLUCK** the tab portion on the Diagonal Backstrap Retainers upward. With the left hand, trace down the Diagonal Backstrap to ensure it is not twisted, cut or frayed to the Backstrap Adjuster. Grasp the Backstrap Adjuster with the left hand and Look at your right hand and the right side of the Jumper. With the right hand trace down the Diagonal Backstrap, ensure it is not twisted, cut or frayed. Bypass the Backstrap Adjuster and pick up the inspection of the Horizontal Backstrap. Trace down, ensure it is not twisted, cut, or frayed, until it disappears into the right Main Lift Web. Withdraw the right hand from under the Horizontal Backstrap, and reinsert it, fingers and thumb extended and joined, fingers pointing skyward, palm facing the Jumpmaster, from bottom to top behind the Horizontal Backstrap where it reemerges from the right Main Lift Web. Issue the Jumper the command of, "**BEND.**" Place your left shoulder on the bottom Pack Closing Flap and push up on the bottom of the Pack Tray. Simultaneously, with your left hand pull down on the Backstrap Adjuster. With your head and eyes approximately six to eight inches away trace the Horizontal Backstrap across the small of the jumper's back, until your right pinkie finger makes contact with the Main Lift Web on the jumpers left side.

You are inspecting the Horizontal Backstrap to ensure that Horizontal Backstrap is not twisted, cut or frayed, that the Horizontal Backstrap retainers are routed under and over the Horizontal Backstrap keeper and secured to themselves with Directional Snap Fasteners and that nothing is misrouted behind the Horizontal Backstrap. Withdraw the right hand from behind the Horizontal Backstrap, and reinsert it, from top to bottom behind the Horizontal Backstrap above the waistband Adjustor Panel. Trace the Horizontal Backstrap down to where it reemerges from behind the left Main Lift Web. Trace up until you make skin-to-skin contact with the left hand ensuring it is not twisted, cut, frayed, the excess webbing is secured in its webbing retainer, and nothing has been misrouted behind it. Remove the right hand and get left hip to head with your jumper.

## **SADDLE:**

Place the fingertips of the right hand, fingers and thumb extended and joined, palm facing the Jumper, on the lower portion of the Jumper's left Main Lift Web Adjuster. Trace down the lower portion of the Main Lift Web transitioning to the Jumper's Saddle ensure it is not twisted, cut, frayed or been inverted, and neither Leg Strap has been misrouted around the Saddle. Continue to trace until you make contact with the lower portion of the right Main Lift Web Adjuster. Reach back and get a hand full of air and issue the Jumper that good seal of approval by tapping the Jumper on the buttocks and issuing the command "**RECOVER**".

## **NOTE: PLACE THE JUMPER INTO JUMP CONFIGURATION**

After the Jumpmaster has completed his Jumpmaster Personnel Inspection, the Jumpmaster will place the jumper into jump configuration. The Jumpmaster will trace the Universal Static Line Modified from the Universal Static Line Snap Hook to ensure that the Universal Static Line Modified is routed over the shoulder corresponding with the door the jumper is to exit. Once behind the jumper the Jumpmaster will remove all slack from the Universal Static Line Modified and stow it in the Static Line Slack Retainer Band. The Jumpmaster will manipulate the Main Curved Pin from left to right ensuring that the Main Curved Pin's end is in the 3 O'clock position. The Jumpmaster will reinsert the Main Curved Pin Protector Flap into the Tuck Flap. You will move to the front of the jumper and secure the top and bottom Tuck Tabs, taking care to ensure that both side Tuck Tabs remain secure. If the side Tuck Tabs become unsecure the Jumpmaster will notify a Rigger.

# T-11 Combat Equipment JMPI Sequence

## TC 3-21.220 Chapter 9

**TRANSITION:** Now that you are familiar with the inspection sequence for a Hollywood jumper, the sequence for a combat equipped jumper will be discussed.

The inspection sequence for a combat equipped jumper is the same as for a Hollywood equipped jumper down to the Canopy Release Assemblies.

### **INSPECTION OF COMBAT EQUIPMENT:**

#### **CANOPY RELEASE ASSEMBLY:**

We begin with the Canopy Release Assembly opposite the Universal Static Line Modified. Since the Universal Static Line Modified is routed over the jumper's left shoulder, the inspection begins with the jumper's right Canopy Release Assembly. Look at the right Canopy Release Assembly; tap it with the knuckles of the left hand one time to ensure that it sounds solid. **(Jumpers, this is your key to place both hands on your Advanced Combat Helmet).** With your left hand form a knife cutting edge, fingers extended and joined, palm facing towards you the jumpmaster, and insert it behind the Main Lift Web just below the Canopy Release Assembly. Place your left thumb on the outside corner of the Canopy Release Assembly, and rotate it ¼ turn to the outside. With your head and eyes approximately six to eight inches away conduct a visual inspection to ensure the Male Fitting Canopy Release Assembly is properly secured by the Female Fitting Canopy Release Assembly, and properly secured by the Latch. Ensure the Cable Loop is properly secured by the Safety Clip and the Canopy Release Assembly is free of all dirt or foreign material that will keep it from seating completely. Now let the Canopy Release Assembly return back to its normal position. Keep your left hand in place. As you can see jumpmasters, the Universal Static Line Modified is routed over the jumper's left shoulder. With your right hand secure the Universal Static Line Modified and rotate it over to your left thumb and secure it in place. Look at the left Canopy Release Assembly; tap it with the knuckles of the right hand one time to ensure that it sounds solid. With your right hand form a knife cutting edge, fingers extended and joined palm facing towards you the jumpmaster and reach around the M1950 Weapons Case, from outside to inside and insert it behind the Main Lift Web just below the Canopy Release Assembly. Place your right thumb on the outside corner of the Canopy Release Assembly and rotate it ¼ turn to the outside, and conduct the same inspection. Now let the Canopy Release Assembly return back to its normal position.

#### **MAIN LIFT WEB:**

Leave the right hand in place. Look at the left hand and the right Main Lift Web. First make note of which of the three sizes the Main Lift Web is configured. Keep this in mind and ensure the Main Lift Web Tuck Tab Assembly is properly assembled and the Snap Fastener is secure. With the left hand trace down the Main Lift Web, ensure it is not twisted, cut, or frayed, until you make contact with the Main Lift Web Adjuster. Leave the left hand in place. Look at the right hand and conduct the same inspection. Ensure the left Main Lift Web Tuck Tab Assembly is in the same location as the right Main Lift Web Tuck Tab Assembly. Leave the right hand in place.

#### **CHEST STRAP:**

Look at the Chest Strap to ensure that it is not misrouted around the left Main Lift Web. With the left hand palm facing the Reserve Parachute, grasp the Carrying Handle and lift up and out. Insert the right hand, fingers and thumb extended and joined, fingers pointing down, palm facing the Jumpmaster from top to bottom behind the Chest Strap, next to where it is sewn into the left Main Lift Web. Trace the Chest Strap, ensure that it is not twisted, cut or frayed, until you make contact with the Chest Strap Friction Adapter. Visually inspect to ensure it has a two to three finger quick release that is secured in its Webbing Retainer, the free running end has been "S" folded or accordion folded, not rolled, and secured in its Webbing Retainer with the tab portion towards the Chest Strap Friction Adapter. Continue to trace the Chest

Strap, ensure it is not twisted, cut or frayed, next to where it is sewn into the right Main Lift Web. Leave the right hand in place.

### **WAIST BAND:**

Remove the left hand, move to the right side. Insert the left hand, fingers and thumb extended and joined, fingers pointing skyward, palm facing you the Jumpmaster, from bottom to the top behind the Waistband next to where it is sewn to the Pack Tray. Look at the Waistband where it is sewn to the Pack Tray to ensure it is secured to the Pack Tray by a Box "X" stitch, with at least 50 percent of the stitching present. Trace the Waistband forward, ensure it is not twisted, cut, frayed, or been misrouted behind the Horizontal Backstrap or right Main Lift Web until the right Waistband Retainer rests in the palm ensuring the waistband is routed under the Equipment Rings. Leave the left hand in place. Remove the right hand from behind the Chest Strap and insert it fingers and thumb extended and joined, fingers pointing skyward, palm facing the Jumpmaster, from bottom to top behind the Reserve Parachute outside of the left Adjustable "D" Ring Attaching Strap so the left Waistband Retainer rests in the palm of the right hand. Make finger tip to finger tip contact, and conduct a physical inspection to ensure the Waistband is not twisted and has been routed through both Waistband Retainers. Leave the right hand in place, and rotate the left hand over the right forearm and grasp the left Pack Closing Flap of the Reserve Parachute, palm facing the Reserve Parachute. Remove the right hand from behind the Waistband Retainer and with the right forearm push out on the lead edge of the M1950 weapons case for the first time. Look at the Waistband to ensure it is not twisted, cut, or frayed, and has not been misrouted behind the left Main Lift Web and under left equipment ring. With the right hand, grasp the trail edge of the M1950 weapons case and pull it forward. Insert the right hand, fingers and thumb extended and joined, fingers pointed skyward, palm facing the jumpmaster, from bottom to top behind the metal adjuster. Remove the left hand from the left Pack Closing Flap of the Reserve Parachute and insert the index finger and middle finger of the left hand from top to bottom into the quick release formed by the Waistband. Ensure that it is no more than three fingers, no less than two and it is not a false quick release. Remove the index finger and middle finger from the quick release and with the index finger and thumb of the left hand pinch off the free running end of the Waistband where it re-emerges from the Metal Adjuster. Trace the free running end of the Waistband, ensure it is not cut, torn, or frayed and is easily accessible to the Jumper until the fingers fall off the end. Place the left hand on the left Pack Closing Flap of the Reserve Parachute, palm facing the Reserve Parachute and look at the right hand and the Waistband Adjuster Panel. Trace the Waistband Adjuster Panel back. Ensure that it is not twisted, cut, or frayed, and has not been misrouted behind the Horizontal Backstrap to where it is sewn to the Pack Tray. Ensure it is properly secured to the Pack Tray by a Box "X" stitch, with at least 50 percent of the stitching present. Remove the right hand and move in front of the jumper. With the right forearm, push out on the lead edge of the M1950 weapons case for the second time.

### **M1950 WEAPONS CASE:**

The M1950 weapons case will be inspected in its entirety prior to inspecting the Reserve Parachute. The inspection of the M1950 weapons case begins with its point of attachment the Quick Release Snap. Look at the Quick Release Snap to ensure it is the outermost item of equipment on the left Equipment Ring, and the Opening Gate is facing the Jumper. With the right index finger, finger the Opening Gate one time to ensure that it is properly attached to the left Equipment Ring, it has spring tension and it has not been safetied. With the heel of the right hand press up on the Activating Arm of the Quick Release Snap to ensure that it is seated between the Ball Detents. With the index finger of the right hand, trace down until contact is made with the V-ring. Ensure the Quick Release Link is routed through the "V"-ring, and the Quick Release Link is secured by the Rotating Claw. Continue to trace down the inside of the M1950 weapons case until contact is made with the Adjusting Strap. Ensure the Adjusting Strap is routed through the appropriate set of Adjusting Strap Connectors, secured by means of a half hitch and is not twisted, cut or frayed. Continue tracing down the inside of the M1950 weapons case until the finger falls off the bottom. Form a knife-edge with the right hand, palm facing skyward and trace from front to rear along the bottom of the M1950 weapons case to ensure the muzzle of the weapon is not protruding. Place the index finger of the right hand on the Slide Fastener at the bottom of the Closing Flap. Trace up the Slide Fastener to ensure it is secure, bypass the Lower Tie Down Strap and continue to trace up the Slide Fastener in the vicinity of the Lift Fastener ensuring all teeth are engaged. With the index finger of the right hand, form a hook around the Slide Fastener Tab Thong and pull down to ensure the Slide Fastener Tab Thong is secured by either the Upper Tie Down Tape or been separated over the Lift Fastener, never both. **(However, while here**

**it will always be secured by the Upper tie down tape)** Drop the right hand down 10 to 12 inches from the top of the M1950 weapons case and give it a sharp slap, feeling for the forward assist of the M4/M16 series rifle or the charging handle of the M249 SAW. With the index finger and thumb of the right hand, pinch off the bowknot of the Upper Tie Down Tape on the lead edge of the M1950 weapons case. Visually inspect the Upper Tie Down Tape to ensure it is properly routed behind the M1950 weapons case, through the D-ring from bottom to top, to the outside of the connector snap, and secured by a single or double loop bowknot. With the left hand, secure the Carrying Handle of the reserve parachute, palm facing the reserve with knuckles skyward. This concludes the inspection of the M1950 weapons case. Inspect the Reserve Parachute in the same manner as if it were on a Hollywood jumper all the way to the command **“Hold”**.

### **MOLLE RUCKSACK:**

Now you will begin the inspection of the Harness Single Point Release beginning with the adjustable D-ring attaching straps. These are like items of equipment so either one can be inspected first, however for the purpose of this talk through you will begin with the right adjustable D-ring attaching strap. 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 ensure that the snap hook is not bent, cracked, corroded or distorted out of shape and that the opening gate is facing towards the jumper. With the index finger of the left hand, finger the opening gate one time to ensure that it is properly secured to the right equipment ring, and it has spring tension. With the left thumb flip the free running end of the right adjustable D-ring attaching strap out of the way. Place the index finger of the left hand on the front of the right adjustable D-ring attaching strap just below the snap hook. Trace down the right adjustable D-ring attaching strap until contact is made with the triangle link, ensuring that the right adjustable D-ring attaching strap is not twisted cut, or frayed. Bypass the triangle link and pick up the inspection of the white attaching loop in front of the triangle link. With the left index finger, trace down the attaching loops to ensure that the white attaching loop is routed from bottom to top through the triangle link, the green attaching loop has been 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, and routed from bottom to top through the grommet in the female portion leg strap release assembly. Place the index finger of the left hand on the single box “X” stitch on the release handle cross strap. Look at the release handle cable where it emerges from the release handle cross strap. Ensure the release handle cable is properly routed through the red attaching loop and secured by the cable loop retainer. Leave the left index finger in place and with your right hand; conduct the same inspection on the left adjustable D-ring attaching strap until your right index finger rests on the single box “X” stitch. Now focus your attention on the release handle. With the right index finger and thumb, index finger on top, thumb on the bottom lift up gently on the release handle. Ensure the release handle is properly routed between the two plies of the release handle cross strap and secured by the hook pile tabs. Now form a hook with your right index finger and lift up on the release handle lanyard, to ensure it is not twisted or misrouted around the equipment retainer strap. Place your right index finger back on the single “X” boxed stitch. Trace the equipment retainer straps down the outside of the pouch of the MOLLE Rucksack until you make contact with the adjustable cross strap. Leave your left index finger in place and with the index finger and thumb of the right hand grasp the free running end of the adjustable cross strap and give it a tug to the jumper’s left, insuring that all the slack has been removed from the adjustable cross strap. Now place your right index finger back on the single box “X” stitch and continue to trace the equipment retainer straps down until your fingers fall off. Now secure the sides of the MOLLE Rucksack and raise it to eye level and look at the equipment retainer straps to ensure they are routed through the slots at the top corners of the MOLLE Rucksack frame and have not been twisted. Raise the MOLLE Rucksack to the jumper and issue the command **“HOLD”**.

**(Jumpers you will secure the top of the MOLLE Rucksack, and hold it up high.)** You will continue your inspection of the equipment retainer straps as they route through the Adjustable Shoulder Carrying Straps. Ensure the equipment retainer straps are routed over the comfort pad and form an “X” configuration on the rear of the MOLLE Rucksack and are not twisted, cut or frayed. 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 ensure it is routed north to south, south to north, never east to west. 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 ensure 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 ensure they are routed through the oval cutouts at the base of the MOLLE Rucksack frame. With the

index finger of each hand, lightly tap them to ensure the S-folds are secure. Now with the thumb and index fingers of each hand, form an “O” around the base of the adjustable shoulder carrying straps ensuring the free running ends are on top of your hand. Simultaneously pull out to ensure they are properly secured to the MOLLE Rucksack frame. Visually inspect the free running ends of the adjustable shoulder carrying straps to ensure 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 adjustable shoulder carrying straps to ensure the S-folds are secure.

### **HOOK, PILE, TAPE LOWERING LINE:**

With the index finger of your right hand place it on the Hook Pile Tape Lowering line just to the right of the girth hitch. You will visually inspect to ensure the girth hitch is vertical. With your right index finger trace the Hook Pile Tape Lowering line ensuring that the Hook Pile Tape Lowering line is properly routed over the left adjustable shoulder carrying strap until you make contact with the first hook pile tabs. Visually inspect to ensure the hook pile tabs are present and secured and there are no S-folds protruding from the end of the retainer flap. Continue to inspect down the retainer flap ensuring that it is secured to the MOLLE Rucksack frame by two sets of girth hitched retainer bands on either end of the retainer flap. Continue to trace down until you make contact with the second set of hook pile tabs, once again ensure they are present and secured and there are no S-folds protruding from the end of the retainer flap. Continue to trace the Hook Pile Tape Lowering line until your hand disappears behind the M1950 Weapons case. Visually inspect to ensure the Hook Pile Tape Lowering line is properly routed between the main body of the M1950 Weapons Case and the 1<sup>st</sup> ply of reinforced nylon webbing. Route your left hand over your right forearm and secure the trail edge of the M1950 Weapons case. Remove your right index finger place it back on the Hook Pile Tape Lowering line where it reemerges from the M1950 Weapons Case. Continue to trace up until you make contact with the ejector snap. With the right thumb press in on the activating lever to ensure that it is properly seated over the ball detent and free of all foreign matter and the opening gate is facing the jumper and is secured to the triangle link. Turn the ejector snap ¼ turn out to ensure the small tooth is present. Visually inspect the yellow safety lanyard to ensure that it is serviceable and it has not been wired, tied, or taped down. Drop both hands and move back to the front of the jumper and issue the command “**SQUAT**”.

### **LEG STRAPS:**

Insert the index and middle fingers of both hands behind the leg straps just under the aviator's kit bag where the natural pocket is formed and simultaneously trace both legs straps rearward all the way back to the saddle ensuring the leg straps are not crossed. Leave your right hand in place and begin tracing the right leg strap forward, ensuring that it is not twisted, cut or frayed, the excess webbing is secured in its webbing retainer until you have skin to metal contact with the quick-fit V ring. Rotate your left thumb up and press down on activating lever to ensure it is properly seated over the ball detent and that it is free of any foreign material that will keep it from seating completely. Keep your left thumb in place. Focus your attention to your right hand. Begin tracing the left leg strap forward, ensuring that it is not twisted, cut or frayed, the excess webbing is secured in its webbing retainer, it is properly routed through the exposed carrying handle of the aviator's kit bag, over the bottom, under the top until you have skin to metal contact with the quick-fit V ring. Once you have skin to metal contact, you may remove your right hand, and use your right forearm to lift up and out on the M1950 Weapons Case. With your right index finger or thumb, press down on activating lever to ensure it is properly seated over the ball detent and that it is free of any foreign material that will keep it from seating completely. Rock back on your heels in front of your jumper and conduct a visual inspection of the aviator's kit bag ensuring it is present, has not been reversed and the reinforced sewn portion is facing away from the jumper. Secure the sides of the MOLLE Rucksack and issue the command of “**RECOVER**”. (Jumpers pick up on the reserve parachute and jumpmasters simply allow the MOLLE Rucksack to rotate between your body and the jumper's body.)

### **UNIVERSAL STATIC LINE MODIFIED:**

With the right hand grasp the Universal Static Line Snap Hook. Pull up on the Universal Static Line Snap Hook to ensure it is secured to the Carrying Handle. Open the right hand and let the Universal Static Line Snap Hook rest in the palm. Place the index finger of the left hand on the Girth Hitch of the Universal Static Line Modified. Ensure the Girth Hitch has not been reversed and the green ID marking thread is present. Place the index finger of the left hand in the vicinity of the Rivet Pin, to ensure it is present and free of rust and corrosion. With the right hand, re-grasp the Universal Static Line Snap Hook and hold it perpendicular to the Reserve Parachute with the Spring Opening Gate facing towards

the Jumper. With the left hand, palm facing the Jumper, thumb pointing downward, grasp the Universal Static Line Modified just above the Universal Static Line Snap Hook. Rotate the Universal Static Line Modified down and to the Jumper's right and push it toward the Universal Static Line Snap Hook. Visually inspect inside the Girth Hitch to ensure it is free of all cuts, frays and burns. With the index finger or thumb of the right hand push the Girth Hitch back towards the Universal Static Line Snap Hook and again visually inspect inside the Girth Hitch for any cuts, frays or burns. Redress the Girth Hitch down around the narrow portion of the Universal Static Line Snap Hook and release the Universal Static Line Modified with the left hand. Since the Universal Static Line Modified is routed over the left shoulder; with the index finger and thumb of the left hand, form an "O" around the Universal Static Line Modified just above the Universal Static Line Snap Hook. You should still see metal. Raise the left hand up simultaneously inspecting the Universal Static Line Modified as it passes through the "O" to ensure it is free of all cuts, frays, or burns. Raise the left hand as high as it can go, or until you feel resistance and issue the Jumper the command "**TURN**". Once the Jumper has completed the turn, the left hand should have been raised high enough so as to keep the Universal Static Line Modified tight between the hand and the first stow. Place the index finger, or index and middle finger of the right hand behind the Universal Static Line Modified below the left hand making skin-to-skin contact.

Inspection continues in the same manner as a Hollywood jumper all the way to the command of "**Recover**".

# Pre-Jump Training

## TC 3-21.220 Chapters 3 & 8

Prior to Pre-jump Training, place the jumpers into a formation that allows the jumpmaster to easily control them and make on the spot corrections. The extended rectangular formation and the horseshoe formation are the two preferred formations.

Prior to placing the jumpers into formation, ensure the jumpmaster team inspects the advanced combat helmets, ID tags and ID cards. The jumpmasters or the safeties can accomplish this inspection.

Although Pre-jump can be given by anyone on the jumpmaster team, the primary jumpmaster can delegate authority but not responsibility.

Holding, running, one riser slips, and other information can be inserted into Pre-jump as the Airborne Commander sees fit. Discussing the use of slip assist loops, slip assist tabs, or control lines are recommended when covering the fourth point of performance.

Although Pre-jump training should be tailored to fit the mission, emergency landings will always be covered due to the many variables involved with emergency situations; i.e. if jumpers have to conduct an emergency bailout over unfamiliar terrain.

Pre-jump training is performance-oriented training and the jumpmaster team must ensure that the jumpers are performing the actions as they are being covered. During Pre-jump training, use the "HIT IT" exercise as often as needed to keep the jumpers actively involved. Jumpmasters will refer to their unit **ASOPs** for additional guidance.

When jumping the MC-6 series parachute from rotary wing aircraft, jumpers will extend their count from a 4000 count to a 6000 count.

**Due to the drift characteristics, the T-11 should not be jumped from a rotary winged A/C; however, if a justified, mature risk assessment is approved, the jumper would count to 8000.**

## PRE- JUMP TRAINING (T-11 Heavy)

### MODULE 1

#### THE FIVE POINTS OF PERFORMANCE:

The first point of performance is **PROPER EXIT, CHECK BODY POSITION, AND COUNT**. “**JUMPERS HIT IT.**” Upon exiting the aircraft, snap into a good tight body position. Keep your eyes open, chin on your chest, elbows tight into your sides, hands on the end of the reserve, with your fingers spread. Bend forward at the waist keeping your feet and knees together, knees locked to the rear, and count to **6000**, when jumping the MC-6 series parachute, count to **4000**.

At the end of your six thousand count, immediately go into your second point of performance, **CHECK CANOPY AND GAIN CANOPY CONTROL**. When jumping the T-11 series parachute, reach up to the elbow locked position and secure the front set of risers in each hand, simultaneously conducting a 360 degree check of your canopy. Your slider should be fully extended and begin to slide down the suspension lines. When jumping the MC-6 series parachute, secure a toggle in each hand, and pull them down to eye level, simultaneously conducting a 360 degree check of your canopy. If, during your second point of performance, you find that you have twists, you must compare your rate of descent with your fellow jumpers. If you are falling faster than your fellow jumpers or you cannot compare your rate of descent with fellow jumpers, immediately activate your reserve parachute using the **PULL-DROP METHOD**. If, you are not falling faster than fellow jumpers then reach up and grasp a set of risers in each hand, thumbs down, knuckles to the rear. Pull the risers apart, and begin a vigorous bicycling motion. When the last twist comes out, immediately check canopy and gain canopy control.

Your third point of performance is **KEEP A SHARP LOOKOUT DURING YOUR ENTIRE DESCENT**. Remember the three rules of the air and repeat them after me. **Always look before you slip/turn, always slip/turn in the opposite direction to avoid collision, and the lower jump always has the right of way**. Avoid fellow jumpers all the way to the ground by maintaining a 25 foot separation when jumping the T-11 series parachute, and a 50 foot separation when jumping the MC-6 series parachute. At the end of your third point of performance, release all appropriate equipment tie downs when jumping the T-11 series parachute.

This brings you to your fourth point of performance, which is **PREPARE TO LAND**. At approximately 200 feet AGL, look below you to ensure there are no fellow jumpers and lower your equipment. When jumping the T-11 series parachute you will slip into the wind at approximately 200 feet AGL. If the wind is blowing from your left, reach up with both hands and grasp the left set of risers and pull them deep into your chest. If the wind is blowing from your front, reach up with both hands and grasp the front set of risers and pull them deep into your chest. If the wind is blowing from your right, reach up with both hands and grasp the right set of risers and pull them deep into your chest. If the wind is blowing from your rear, reach up with both hands and grasp the rear set of risers, and pull them deep into your chest. When jumping the MC-6 series parachute at approximately 250 feet AGL, determine your direction of drift. If the wind is blowing from your left, pull your left toggle down to the elbow locked position. Once you are facing into the wind, let up slowly to prevent oscillation. If the wind is blowing from your right, pull your right toggle down to the elbow locked position. Once you are facing into the wind, let up slowly to prevent oscillation. If the wind is blowing from your rear, pull either toggle down to the elbow locked position. Once you are facing into the wind, let up slowly to prevent oscillation. If the wind is blowing from your front, make minor corrections to remain facing into the wind. Look below you to ensure there are no fellow jumpers. Transfer control of one toggle to the opposite hand, so that the other hand is controlling both toggles. With the free hand, release all appropriate equipment tie downs, and lower your combat equipment. Now regain canopy control with both hands. Assume a proper prepare to land attitude by pulling the toggles to the appropriate brake position. After you have slipped/ turned into the wind, you will assume a landing attitude by keeping your feet and knees together, knees slightly bent, elbows tight into your sides, with your head and eyes on the horizon.

**NOTE: To aid the execution of slips, secure a firm hand hold by inserting your hand or hands into the slip assist loop(s). If you are unable to secure the slip assist loop, slip assist tabs are sewn to each riser to aid in gripping the risers.**

The fifth point of performance is **“LAND”**. You will make a proper parachute landing fall (PLF) by hitting all five points of contact. Touch them, and repeat them after me. 1) **BALLS OF FEET**, 2) **CALF**, 3) **THIGH**, 4) **BUTTOCKS** and 5) **PULL UP MUSCLE**. You will never attempt to make a standing landing.

Remain on your back, and activate one of your canopy release assemblies using either the **“hand to shoulder”** method, or the **“hand assist”** method. To activate your canopy release assembly using the **“hand to shoulder”** method, reach up with either hand and grasp the corresponding safety clip. Pull out and down on the safety clip, exposing the cable loop. Insert the thumb, from bottom to top, through the cable loop. Turn your head in the opposite direction, and pull out and down on the cable loop. To activate your canopy release assembly using the **“hand assist”** method, reach up and grasp the corresponding safety clip. Pull out and down on the safety clip, exposing the cable loop. Insert the thumb, from bottom to top, through the cable loop. Reinforce that hand with the other. Turn your head in the opposite direction, and pull out and down on the cable loop. If your canopy fails to deflate when jumping the MC-6 series parachute, activate the other canopy release assembly. When jumping the T-11 series parachute, you will activate BOTH canopy release assemblies. Place your weapon into operation, remain on your back, and remove the parachute harness.

## **MODULE 2**

The next item I will cover is **RECOVERY OF EQUIPMENT**.

Once you are out of the parachute harness, remove all air items from the equipment 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. When jumping the MC-6 series parachute, leave the waistband exposed. Secure the risers, and place them under the parachute harness inside the aviator's kit bag. Remain on a knee, and begin pulling the suspension lines and canopy towards the aviator's kit bag, stuffing them in as you go. When jumping the T-11 series parachute, place the drogue parachute, deployment sleeve and bridle assembly on top of the main canopy. When jumping the MC-6 series parachute, route the waistband through the bridle loop; leaving six to eight inches of the waistband exposed. Snap, do not zip, the aviator's kit bag. Secure the reserve parachute to the aviator's kit bag, and place it over your head. Conduct a 360 degree check of your area, and move out to your assembly area.

The next item I will cover is **TOWED JUMPER PROCEDURES**

**“JUMPERS HIT IT”** If you become a towed jumper, and are being towed by your universal static line modified and are unconscious; you will be retrieved back inside the aircraft. If you are conscious, maintain a good tight body position with both hands covering your ripcord handle and an attempt will be made to retrieve you inside the aircraft. As you near the paratroop door, **DO NOT REACH FOR US**, continue to protect your ripcord handle. If you cannot be retrieved, your universal static line modified will be cut. Once you feel yourself falling free from the aircraft, immediately activate your reserve parachute using the pull drop method.

If you are being towed by your equipment, regardless of whether you are conscious or unconscious, that item of equipment will be cut or jogged free, and your main canopy will deploy.

**NOTE: If you are being towed from a rotary wing aircraft, maintain a good tight body position and protect your ripcord handle. The aircraft will slowly descend to the DZ, come to a hover and the jumpmaster will free you from the aircraft.**

The next item I will cover is **MALFUNCTIONS**

There are two types of malfunctions, a total malfunction and a partial malfunction. A total malfunction provides no lift capability whatsoever; therefore you must activate your reserve parachute using the **PULL DROP METHOD**. There are several types of partial malfunctions and actions for each. If you have a semi-inversion, squid, cigarette roll or complete inversion with damage to the canopy or suspension lines, or a sleeve corner vent entanglement you must activate your reserve parachute for a partial malfunction. If you have a complete inversion with no damage to canopy or suspension lines, do not activate your reserve parachute.

If you have damaged suspension lines, blown sections or gores, compare your rate of descent with your fellow jumpers. If you are falling faster than your fellow jumpers, you will activate your reserve parachute using the pull drop method. If you are not falling faster, maintain what you have.

I will now cover **ACTIVATION OF THE T-11 RESERVE PARACHUTE SYSTEM.**

To activate the **T-11 reserve parachute**, you will use the **“PULL DROP METHOD.” “JUMPERS HIT IT.”** Maintain a good tight body position. Grasp the rip cord handle with either hand. Throw your head back and to the rear, pull out on the ripcord handle, and drop it. Your reserve will activate. Ensure neither hand is in front of the reserve parachute as it deploys.

**NOTE: If you activate your T-11 reserve parachute for a partial malfunction, any attempt to control either canopy will be useless as one canopy acts as a brake for the other. When activating your T-11 reserve for a total malfunction, let up on the reserve risers. Pull a good two riser slip, opposite your direction of drift, during your fourth point of performance.**

The next item I will cover is **COLLISIONS AND ENTANGLEMENTS.**

**“JUMPERS HIT IT. CHECK CANOPY AND GAIN CANOPY CONTROL.”** If you see another jumper approaching, immediately look, and then slip/turn away. If you cannot avoid the collision, assume a spread eagle body position and attempt to bounce off the jumper's canopy and or suspension lines and immediately look, and then slip/turn away. If you pass through the suspension lines and you do become entangled, snap into a modified position of attention. With either hand protect your ripcord handle. With the opposite hand attempt to weave your way out of the suspension lines the same way you entered, once clear immediately look then slip/turn away. If you become entangled, and are jumping the T-11 parachute, the higher jumper will make every attempt to climb down to the lower jumper using the hand under hand method. Once both jumpers are even, they will face each other, and grasp each other's left main lift web. Both jumpers will discuss which PLF they will execute. Both jumpers will conduct the same PLF. Neither jumper will execute a front PLF. If the higher jumper is unable to climb down to the lower jumper, they will stay where they are and be prepared to execute a proper PLF. Both jumpers will continue to observe their canopies all the way to the ground. If one canopy collapses, neither jumper will activate their reserve parachute as one T-11 series parachute can safely deliver two combat equipped jumpers to the ground. If both canopies collapse, both jumpers will immediately turn away, in order to create a clear path and activate their reserve parachute using the pull drop method. If you should find yourself on another jumper's canopy, double time off avoiding the bridle line and the four corner vents, look, and then slip away. Should you fall through a corner vent stay where you are, and be prepared to execute a proper PLF. If you cannot double time off the canopy, create a clear path and activate your reserve parachute using the pull drop method.

If you are jumping the MC-6 series parachute, both jumpers will remain where they are, obtain a clear path, and immediately activate their reserve parachutes using the **PULL DROP METHOD.**

### **MODULE 3**

The next item I will cover is **EMERGENCY LANDINGS.**

The first emergency landing I will cover is the **TREE LANDING.** If you are drifting towards the trees, immediately look then slip/turn away. If you cannot avoid the trees, and have lowered your equipment, look below you to ensure there are no fellow jumpers, and jettison your equipment making a mental note of where it lands. If you have not lowered your equipment, keep it on you to provide extra protection while passing through the trees. At approximately 200 feet AGL, assume a good landing attitude by keeping your feet and knees together, knees slightly bent, and head and eyes on the horizon. When the balls of your feet make contact with the trees, rotate your hands in front of your face with your elbows high. Be prepared to execute a proper PLF if 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 advanced combat helmet/ ballistic helmet. Activate the quick release in your waistband. With either hand, apply inward pressure on the ripcord assembly. With the opposite hand remove the top tuck tab. Maintain steady inward pressure and with the opposite hand insert it behind the ripcord assembly and apply inward pressure. Grasp the ripcord handle with the opposite hand, pull it and drop it. With both hands, control the activation of the reserve parachute to the ground ensuring that all suspension lines are completely deployed. Disconnect the left connector snap and rotate the reserve to the right. Attach the left connector snap to the triangle link on your right side. Seat yourself well into the saddle. Activate the quick release in the chest strap and completely remove the chest strap from the chest strap friction adapter. Grasp the main lift web with either hand below the canopy release assembly and with the other hand activate the leg strap ejector snaps and climb down the outside of the reserve parachute. **NOTE: Caution must be taken when climbing down the T-11R suspension lines because of the slippery coating applied to the suspension lines.** Remember, when in doubt, stay where you are and wait for assistance.

The next emergency landing I will cover is the **WIRE LANDING**. If you are drifting towards wires, immediately look and try to slip/turn away. If you cannot avoid the wires, look below you to ensure there are no fellow jumpers and jettison your equipment, making a mental note of where it lands. Ensure that you maintain your advanced combat helmet/ ballistic helmet. Assume a landing attitude by keeping your feet and knees together, exaggerating the bend in your knees, your eyes open, and your chin on your chest. Place the palms of your hands high on the inside of the front set of risers with the elbows locked. When the balls of your feet make contact with the wires, begin a vigorous rocking motion in an attempt to pass through the wires. Be prepared to execute a proper 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.

The next emergency landing I will cover is the **WATER LANDING**. If you are drifting towards a body of water, immediately look then slip/turn away. If you cannot avoid the water, look below you to ensure there are no fellow jumpers and lower your equipment. Next, jettison your advanced combat helmet/ ballistic helmet, making a mental note of where it lands. Activate the quick release in the waistband. Disconnect the left connector snap and rotate the reserve parachute to the right. Seat yourself well into the saddle and activate the quick release in the chest strap completely removing the chest strap from the chest strap friction adapter. Regain canopy control. Prior to entering the water, assume a landing attitude by keeping your feet and knees together, knees slightly bent and place your hands on both leg strap ejector snaps. When the balls of your feet make contact with the water, activate both leg strap ejector snaps, arch your back, throw your arms above your head and slide out of the parachute harness. Be prepared to execute a proper PLF if the water is shallow. Swim upwind, or upstream, away from the canopy. If the canopy comes down on top of you, locate a radial tape, and follow it to the skirt of the canopy.

The next items to be discussed are **MISSION ORIENTED** items.

**B-7 Life Preserver:** When jumping the B-7 life preserver, activate it in the air. Lower but do not jettison combat equipment.

**NIGHT JUMPS:** When conducting night jumps, be sure to give your canopy an extra look, and maintain noise and light discipline all the way to the ground.

**AWADS:** When jumping under AWADS conditions, do not lower your equipment until you have passed through the clouds. Do not slip/turn unless you have to avoid a collision. If you have any type of malfunction, you must immediately activate your reserve using the pull drop method because you cannot compare your rate of descent with fellow jumpers. Ensure you recheck your canopy once you pass through the clouds.

**PARACHUTE LANDING FALLS:** We will now move to the PLF platform and conduct one satisfactory PLF in each of the four directions.

## **ITEMS TO BE COVERED DURING PRE-JUMP TRAINING**

### **MODULE 1**

FIVE POINTS OF PERFORMANCE

### **MODULE 2**

RECOVERY OF EQUIPMENT

TOWED JUMPERS PROCEDURES

MALFUNCTIONS

ACTIVATION OF RESERVE

COLLISIONS AND ENTANGLEMENTS

### **MODULE 3**

EMERGENCY LANDINGS:

- a. TREE LANDING
- b. WIRE LANDING
- c. WATER LANDING

MISSION ORIENTED ITEMS

- a. B-7 LIFE PRESERVER
- b. NIGHT JUMPS
- c. AWADS

PARACHUTE LANDING FALLS

## PWAC TEST STANDARDS

<b>Improper Hook Up</b>	<b>-35</b>
<b>FAIL TO ENSURE SAFETY HAS USL / TURNS INTO SL</b>	<b>-35</b>
Improper Time Warning	-3
Improper Jump Command (-3 per command, total 21)	-3
Failed to look left/right (-3), Failed to give thumbs up (-3), Failed to Check Equipment (-3 ea. ITEM, total 21)	-3
<b>FAIL TO GRASP LEAD EDGE OF DOOR</b>	<b>-35</b>
<b>FAIL TO ENSURE SAFETY HAS USL</b>	<b>-35</b>
<b>IMPROPER DOOR CHECK (1,2,3,4, trace door - TD, air deflector - AD, clear to the rear - CR) (C-17 - Troop Door, Trail Edge, Air Deflector, Clear to the Rear)</b>	<b>-35</b>
Any foot touching yellow on platform	-5
Heels Up / Elbows Not Locked (-3 per, total 12)	-3
<b>ISSUES ONE MINUTE/ 30 Seconds WRONG HAND</b>	<b>-35</b>
1st Check Point Improper Time Warning	-3
2nd Check Point Improper Time Warning	-3
<b>FAIL TO CLEAR THE REAR</b>	<b>-35</b>
Heels Up / Elbows Not Locked (-3 per, total 12)	-3
Fail to Count to 10 thousand	-10
<b>FAIL TO REMOVE TRAIL FOOT FROM PLATFORM</b>	<b>-35</b>
<b>FAIL TO GIVE THUMBS UP / LETS GO OF TRAIL EDG</b>	<b>-35</b>
Fail to bisect lead edge of door	-10
Improper Command "Stand By"	-3
PJ Fails to Check Jump Caution Light, issues 9th Jump Command / AJ Fails to observe actions in PJ Door, Fails to Check Jump Caution Light, issues 9th jump command	-25
<b>Improper Exit (PJ exits before AJ)</b>	<b>-35</b>
Improper/weak exit or hits door upon exit	-10
Fail to Follow Instructions	-5
<b>CAUSE AN UNSAFE ACT (Exit on Red Light, Throws SL)</b>	<b>-35</b>
<b>LACK OF CONFIDENCE</b>	<b>-35</b>
<b>Fall Out of Aircraft</b>	<b>DROP</b>

## GRADING

# DEFICIENCIES

## TYPES OF DEFICIENCIES

- **MAJOR DEFICIENCY:** Could cause loss of life, limb, eyesight or military equipment OR questions the integrity of how the parachute was packed.

(-35 points)

EX) TABBED PORTION CHEST STRAP NOT FACING CHEST STRAP FRICTION ADAPTER

- **MINOR DEFICIENCY:** Could cause possible injury to jumper, damage to equipment, or discomfort when worn.

(-11 points)

EX) MAIN LIFT WEB TUCK TAB ASSEMBLY NOT PROPERLY ASSEMBLED

## CATEGORIES OF DEFICIENCIES

- **CARDS WILL HAVE 2 CATEGORIES OF RIGS:**

### 1. JUMPER RIGGED DEFICIENCIES:

NORMAL DONNING DEFICIENCIES THAT THE JUMPER WILL PUT IN WHEN DONNING THE PARACHUTE

EX) LEG STRAPS TWISTED

### 2. PRE-RIGGED DEFICIENCIES: DEFICIENCIES THAT THE INSTRUCTORS HAVE ALREADY PLACED IN THE PARACHUTE RIGS

EX) FOREIGN MATTER IN LEFT CANOPY RELEASE ASSEMBLY

## TELL US THREE THINGS.....

### 1. WHAT IS IT? Item of equipment

(USE PROPER NOMENCLATURE!!)

### 2. WHERE IS IT? In relation to the jumper (left / right)

### 3. WHAT'S WRONG WITH IT?

Improperly assembled / foreign matter / reversed etc.

- **IT CAN BE IN ANY ORDER! HOWEVER, IF YOU SAY EXACTLY WHAT IS ON THE CARDS THERE IS NO ROOM FOR THE INSTRUCTOR TO MISINTERPET WHAT IT IS YOU ARE SAYING.**

## NOTES:

- **MASKING THE STATIC LINE**
  1. **FISH HOOKING**
  2. **PINCHING**
  3. **OVERLAPPING OF STATIC LINE STRANDS**
  4. **CAN NOT RAKE STATIC LINE**
- **LIKE ITEMS-** If the JM sees “Foreign matter in right canopy release assembly”, it can also be in the left canopy release assembly, Hollywood or Combat equipped jumper. This goes for all “Like Items”
- **USE PROPER SEQUENCE EVEN WHEN THERE IS A DEFICIENCY:**
  - **WAISTBAND / WAISTBAND ADJUSTOR PANEL MISROUTED BEHIND HORIZONTAL BACKSTRAP**
  - **NO QUICK RELEASE IN WAISTBAND**
  - **LEFT / RIGHT CONNECTOR SNAP SAFETIED**
  - **GIRTH HITCH USLM REVERSED**
  - **LAST STRAND OF USLM MISROUTED FROM LEFT OUTER SL STOW BAR**
- **NO ABBREVIATING! HPT LOWERING LINE MISROUTED...**
- **NO CASTING SPELLS! ADVANCED COMBAT HELMET, HOOK PILE TAPE LOWERING LINE**
- **CAN NOT call deficiencies early,**
  - **EX) calling “saddle inverted” when inspecting the leg straps**
  - **Left / Right Leg Strap misrouted around Saddle**
  - **calling Aviator Kit Bag missing before tracing leg straps**
- **Must call all deficiencies prior to giving the “seal of approval” for the corresponding jumper to get credit for that deficiency.**
- **GHOST JUMPERS – Builds muscle memory, Visualization**
- **TRANSITIONS - Don’t think “I have to move faster”, think “I have to move SMOOTHER”**
- **STUDY NOMENCLATURE**
- **KNOWING SIDES (WRITING A “L” ON YOUR RIGHT HAND DOESN’T WORK)**

- DEFICIENCIES THAT YOU SEE IN THE COURSE ARE THE ONLY ONES WE WILL TEST YOU ON THAT DOESN'T MEAN OTHERS DO NOT EXIST  
EX. STATIC LINE MISROUTED THROUGH CHINSTRAP
- WEAR EQUIPMENT LIKE YOU SHOULD : Rigs are very snug on test day
- REHAB the parachutes: quick releases, static line, excess webbing in leg straps and horizontal back straps, ETC...
  - If you don't REHAB, you're setting your Buddy up for failure!
- Do not sacrifice sequence for speed. The time gained may very well jeopardize the jumper's safety.

### JMPI TEST

- 3 JUMPERS (0-5 Deficiencies per Jumper)
  - a) T-11 / MC-6 CBT
  - b) T-11 / MC-6 HWD
  - c) T-11 / MC-6 HWD
- Call all deficiencies
- 5 Minutes for all three jumpers
- Proper Sequence

### GRADING

- IMPROPER SEQUENCE -35 POINTS
- MISSED MINOR DEFICIENCY -11 POINTS
- MISSED MAJOR DEFICIENCY -35 POINTS
- IMPROPER HAND PLACEMENT -35 POINTS
- IMPROPER NOMENCLATURE -? POINTS
- FAILURE TO INSPECT -35 POINTS
- OVER ON TIME -35 POINTS
- MASKING STATIC LINE -35 POINTS
- IMPROPER COMMAND OR NOT CALLING A COMMAND -35 POINTS

## JMPI Deficiencies

The deficiencies below are some of the more common deficiencies that a Jumpmaster will come across. This is not to say that other deficiencies don't exist. Also, this list may or may not contain all the deficiencies a student will encounter while at the U.S. Army Jumpmaster School. Some of the verbiage or point values below may also differ from what is printed on the deficiency cards used during training.

### FRONT ADVANCED COMBAT HELMET

FRONT RIGHT/LEFT BOLT END EXPOSED	-35
FRONT TRAPEZOID PAD MISSING	-35
EXCESS WEBBING FRONT RIGHT / LEFT ADJUSTABLE STRAP NOT SECURED	-11
CHINSTRAP TWISTED	-11

### CANOPY RELEASE ASSEMBLIES

RIGHT / LEFT CANOPY RELEASE ASSEMBLY NOT PROPERLY ASSEMBLED	-35
FOREIGN MATTER RIGHT / LEFT CANOPY RELEASE ASSEMBLY	-35

### T-11 PARACHUTE HARNESS

CHEST STRAP MISROUTED AROUND MAIN LIFT WEB	-11
CHEST STRAP TWISTED	-11
EXCESS WEBBING CHEST STRAP NOT SECURED	-11
NO QUICK RELEASE IN CHEST STRAP	-35
FREE RUNNING END CHEST STRAP NOT S ROLLED OR ACCORDIAN FOLDED	-11
TABBED PORTION CHEST STRAP NOT FACING CHEST STRAP FRICTION ADAPTER	-35
WAISTBAND MISROUTED UNDER HORIZONTAL BACKSTRAP	-11
WAISTBAND MISROUTED UNDER RIGHT / LEFT MAIN LIFT WEB	-11
WAISTBAND MISROUTED OVER RIGHT / LEFT EQUIPMENT RING	-11
WAISTBAND NOT ROUTED THROUGH RIGHT / LEFT WAISTBAND RETAINER	-11
WAISTBAND TWISTED	-11
NO QUICK RELEASE IN WAISTBAND	-35
IMPROPER QUICK RELEASE IN WAISTBAND (CPT'S BARS / DEAD MAN'S HITCH)	-35
WAISTBAND ADJUSTER PANEL TWISTED	-11
WAISTBAND ADJUSTER PANEL MISROUTED UNDER HORIZONTAL BACKSTRAP	-11
MAIN LIFT WEB MISSIZED	-11
RIGHT / LEFT MAIN LIFT WEB TUCK TAB ASSEMBLY NOT PROPERLY ASSEMBLED	-11
RIGHT / LEFT MAIN LIFT WEB TUCK TAB ASSEMBLY SNAP FASTENER NOT SECURED	-11
STATIC LINE SLACK RETAINER BAND MISSING FROM STATIC LINE SLACK RETAINER LOOP	-35

**T-11 RESERVE**

RIGHT / LEFT CONNECTOR SNAP SAFETIED	-35
ARMY PARACHUTE LOG RECORD MISSING FROM RESERVE	-35
RESERVE CONNECTED TO EQUIPMENT RINGS	-35
PARACHUTE LOG RECORD MISSING FROM RESERVE	-35
DIRECTIONAL ARROW UPSIDE DOWN	-35
CURVED PIN LANYARD TWISTED	-35
LEFT / RIGHT SIDE TUCK TAB NOT SECURED	-35
CURVED PIN LANYARD NOT SECURED TO RIPCORDER ASSEMBLY	-35
CONNECTOR SNAP RETAINING TIE MISSING	-35
EXPOSED CANOPY RESERVE	-35

**LEGSTRAPS / AVIATOR KIT BAG**

LEGSTRAPS CROSSED	-11
RIGHT / LEFT LEGSTRAP TWISTED	-11
RIGHT / LEFT LEGSTRAP EXCESS WEBBING NOT SECURED	-11
RIGHT / LEFT LEGSTRAP EJECTOR SNAP WILL NOT SEAT	-35
LEFT LEGSTRAP MISROUTED THROUGH EXPOSED CARRYING HANDLE OF AVIATOR KIT BAG	-11
LEFT LEGSTRAP NOT ROUTED THROUGH EXPOSED CARRYING HANDLE OF AVIATOR KIT BAG	-11
AVIATOR KIT BAG REVERSED	-11
AVIATOR KIT BAG MISSING	-11

**UNIVERSAL STATIC LINE MODIFIED**

GIRTH HITCH UNIVERSAL STATIC LINE REVERSED	-35
UNIVERSAL STATIC LINE CUT	-35
UNIVERSAL STATIC LINE MODIFIED MISROUTED THROUGH RIGHT / LEFT RISER ASSEMBLY	-35
UNIVERSAL STATIC LINE MODIFIED MISROUTED UNDER RIGHT / LEFT RISER ASSEMBLY	-35
UNIVERSAL STATIC LINE MODIFIED MISROUTED AROUND RIGHT / LEFT INNER STATIC LINE STOW BAR	-35
UNIVERSAL STATIC LINE MODIFIED MISROUTED AROUND RIGHT / LEFT OUTER STATIC LINE STOW BAR	-35
LAST STRAND UNIVERSAL STATIC LINE MODIFIED MISROUTED FROM LEFT OUTER STATIC LINE STOW BAR	-35

**REAR OF ADVANCED COMBAT HELMET**

REAR LEFT / RIGHT BOLT END EXPOSED	-35
REAR TRAPEZOID PAD MISSING	-35
EXCESS WEBBING REAR LEFT / RIGHT ADJUSTABLE STRAP NOT SECURED	-11
NAPE PAD MISSING	-35
NAPE PAD REVERSED	-11

**RISER ASSEMBLIES**

LEFT / RIGHT RISER ASSEMBLY TWISTED	-35
ARMY PARACHUTE LOG RECORD MISSING FROM RISER ASSEMBLY	-35

**MAIN PACK TRAY**

DIAGONAL BACK STRAPS MISSIZED	-11
LEFT / RIGHT DIAGONAL BACK STRAP RETAINER NOT ROUTED THROUGH SIZING CHANNEL	-11
LEFT / RIGHT DIAGONAL BACK STRAP RETAINER NOT ROUTED THROUGH DIGONAL BACK STRAP KEEPER	-11
EXCESS WEBBING RIGHT / LEFT HORIZONTAL BACK STRAP NOT SECURED`	-11
HORIZONTAL BACK STRAP NOT ROUTED THROUGH HORIZONTAL BACK STRAP RETAINER	-11
HORIZONTAL BACK STRAP RETAINER NOT ROUTED THROUGH HORIZONTAL BACK STRAP KEEPER	-11

**SADDLE**

LEFT / RIGHT LEGSTRAP MISROUTED AROUND SADDLE	-11
SADDLE INVERTED	-11

**M1950 WEAPONS CASE**

ADJUSTING STRAP MISROUTED THRU BOTH SET OF CONNECTORS	-11
ADJUSTING STRAP TWISTED	-11
NO HALF HITCH IN ADJUSTING STRAP	-11
SLIDE FASTENER AND TABBED THONG NOT SECURED	-11
QUICK RELEASE LINK NOT ROUTED THROUGH V-RING	-11
UPPER TIE DOWN TAPE MISROUTED UNDER CHEST STRAP	-11
UPPER TIE DOWN TAPE MISROUTED THROUGH D RING	-35

**MOLLE RUCKSACK AND HOOK PILE TAPE LOWERING LINE**

FREE RUNNING END ADJUSTABLE SHOULDER CARRYING STRAP NOT SECURED PROPERLY	-11
HOOK PILE TAPE LOWERING LINE MISROUTED THROUGH NYLON CHAFE PORTION M1950 WEAPONS CASE	-11
EJECTOR SNAP HOOK PILE TAPE LOWERING LINE REVERSED	-35
HOOK PILE TAPE LOWERING LINE MISROUTED UNDER LEFT ADJUSTABLE SHOULDER CARRYING STRAP	-11
EJECTOR SNAP HOOK PILE TAPE LOWERING LINE WILL NOT SEAT	-35
HOOK PILE TAPE LOWERING LINE MISROUTED BEHIND QUICK RELEASE LINK	-35
FREE RUNNING END EQUIPMENT RETAINER STRAPS ROLLED	-11
GIRTH HITCH HOOK PILE TAPE LOWERING LINE ROUTED EAST / WEST	-11
NO QUICK RELEASE IN EQUIPMENT RETAINER STRAPS	-11
RELEASE HANDLE LANYARD TWISTED	-11
RIGHT / LEFT ADJUSTABLE D-RING ATTACHING STRAP REVERSED	-11
RIGHT / LEFT ADJUSTABLE D RING ATTACHING STRAP TWISTED	-11
EQUPMENT RETAINER STRAP TWISTED	-11
GREEN ATTACHING LOOP ROUTED OVER GROMMET	-11
GREEN ATTACHING LOOP MISROUTED THRU GROMMET	-11
RELEASE HANDLE CABLE NOT ROUTED THROUGH RELEASE HANDLE CROSS STRAP	-11
RELEASE HANDLE LANYARD MISROUTED AROUND RELEASE HANDLE CROSS STRAP	-11

# Legacy System Information

## T-10 PERSONNEL PARACHUTES

### TC 3-21.220 Chapter 2

#### T10-D MAIN PARACHUTE

The T-10 series parachute is used during static line airborne operations. The T-10 series is a non-steerable canopy.

##### WEIGHT

- Approximately 28-31 lbs.

##### DIAMETER

- Nominal: 35 feet
- Skirt: 30 feet
- Parabolic in shape

##### SAFE DROP SPEEDS

- 150 knots Maximum
- 50 knots Minimum

##### AVERAGE DEPLOYMENT TIME

- 3.2 seconds with an aircraft traveling at approximately 130 knots

##### RATE OF DESCENT

- 18-22 feet per second

The main parachute consists of five major components:

- 1) Deployment bag
- 2) Canopy assembly
- 3) Riser assembly
- 4) Harness assembly
- 5) Pack tray

#### DEPLOYMENT BAG

##### DEPLOYMENT BAG

###### MATERIAL

- Cotton sateen cloth

###### WEIGHT

- 8.5 ounces per square yard

###### DIMENSIONS WHEN PACKED

- 18 inches long
- 12 inches wide
- 5 inches deep

##### UNIVERSAL STATIC LINE SNAP HOOK

Universal static line's point of attachment to the aircraft's anchor line cable. It consists of a dual locking spring opening gate with a Rivet Pin located approximately center mass.

###### MATERIAL

- Chromium Molybdenum

###### RATED CAPACITY

- 1,750 lbs.

## **UNIVERSAL STATIC LINE**

The universal static line is girth hitched to the deployment bag and girth hitched to the narrow portion of the universal static line snap hook.

### **LENGTH**

- Approximately 15 feet

### **MATERIAL**

- ¾ inch, tube edge, type 6.6 nylon webbing

### **TENSILE STRENGTH**

- 4,000 lbs.

## **PACK OPENING LOOP**

The pack opening loop is located approximately 12 feet from the upper portion of the universal static line. The pack opening loop breaks the pack closing tie during the parachutes deployment phase. The pack opening loop cannot be cut, torn, frayed or burned at all in order for the parachute to be serviceable. The pack opening loop is located between the pack closing loops at the 6 to 9 o'clock position.

### **MATERIAL**

- Type XII nylon webbing

### **TENSILE STRENGTH**

- 1,200 lbs.

## **STATIC LINE SLEEVE**

The static line sleeve prevents nylon-to-nylon contact between the universal static line and the pack tray. There is a 4 inch slit to expose the blue mark.

### **LENGTH**

- Approximately 27 inches

### **MATERIAL**

- Cotton duck material

## **BUFFER LOOP**

The buffer loop is sewn into the lower portion of the universal static line. It prevents nylon to nylon contact between the universal static line and the deployment bag.

### **MATERIAL**

- Cotton duck material

## **BREAK CORD TIE**

The break cord tie serves as the point of attachment between the deployment bag and the canopy assembly.

### **LENGTH**

- Approximately 36 inches and one turn doubled

### **MATERIAL**

- ¼ inch cotton webbing

## **SUSPENSION LINE PROTECTIVE FLAP**

The suspension line protective flap prevents nylon to nylon contact between the suspension lines and the pack tray.

## **CONNECTOR LINK TIES**

The deployment bags point of attachment to the L-bar connector links on the riser assemblies.

### **LENGTH**

- Approximately 14 inches

### **MATERIAL**

- ¼ inch cotton webbing

## CANOPY ASSEMBLY

### BRIDLE LOOP

The bridle loop is located at the uppermost portion of the canopy assembly. It is held center of mass by the apex centering lines.

#### LENGTH

- Approximately 3 inches in diameter

#### MATERIAL

- Type VIII nylon webbing

#### TENSILE STRENGTH

- 3,600 lbs.

### APEX CENTERING LINES

There are 2 apex centering lines. They hold the bridle loop center of mass on the canopy and are sewn to 2 of the vent lines.

#### LENGTH

- Approximately 9 inches

#### MATERIAL

- Type II nylon cord

#### TENSILE STRENGTH

- 400 lbs.

### VENT LINES

There are 15 vent lines.

#### LENGTH

- Approximately 27 inches

#### MATERIAL

- Type II nylon cord

#### TENSILE STRENGTH

- 400 lbs.

### UPPER LATERAL BAND

The upper lateral band is the strongest component on the canopy assembly.

#### MATERIAL

- 1 inch wide tubular nylon webbing

#### TENSILE STRENGTH

- 4000 lbs.

### MAIN CANOPY

#### MATERIAL

- Type I rip stop nylon

#### WEIGHT

- Approximately 1.1 ounces per square yard

### RADIAL TAPES

There are 30 radial tapes which form the frame work and separate the wedge shape gores. There are 30 wedge shape gores, which are further subdivided into 4 to 5 diagonally stitched sections.

#### MATERIAL

- 9/16<sup>th</sup> inch nylon tape

#### TENSILE STRENGTH

- 500 lbs.

## **LOWER LATERAL BAND**

The lower lateral band is located approximately 17 ½ feet from the upper lateral band.

### **MATERIAL**

- 1 inch wide tubular nylon tape

### **TENSILE STRENGTH**

- 525 lbs.

## **POCKET BANDS**

There are 15 pocket bands which are attached to the lower lateral band.

### **MATERIAL**

- 1 inch wide tubular nylon tape

### **TENSILE STRENGTH**

- 525 lbs.

## **ANTI-INVERSION NET**

The anti-inversion is attached to the lower lateral band and extends approximately 18 inches below. It reduces the chances of a complete or semi- inversion of the canopy.

### **MATERIAL**

- Knotless braided nylon cord

## **SUSPENSION LINES**

### **LENGTH**

- Approximately 27 feet

### **MATERIAL**

- Type II nylon cord

### **TENSILE STRENGTH**

- 400 lbs.

## **RISER ASSEMBLY**

### **L-BAR CONNECTOR LINKS**

There are 2 L-bar connector links on the right riser set and 2 on the left riser set. There are 7 suspension lines on each front L-bar connector link and 8 on each rear L-bar connector link.

### **MATERIAL**

- Cadmium plated forged steel alloy

### **RATED CAPACITY**

- 3000 lbs.

### **RISERS**

#### **LENGTH**

- Approximately 30 inches

#### **MATERIAL**

- Type XIII nylon webbing

#### **TENSILE STRENGTH**

- 6500 lbs.

### **MALE FITTING CANOPY RELEASE ASSEMBLY**

#### **MATERIAL**

- Cadmium plated forged steel alloy

#### **RATED CAPACITY**

- 2500 lbs

## **HARNES ASSEMBLY**

### **FEMALE FITTING CANOPY RELEASE ASSEMBLY**

The heel of the male fitting canopy release assembly sits in the groove of the female fitting canopy release assembly.

#### **MATERIAL**

- Cadmium plated forged steel alloy

#### **RATED CAPACITY**

- 2500 lbs.

### **LATCH**

The latch is utilized to secure the male fitting canopy release assembly to the female fitting canopy release assembly.

### **CABLE LOOP**

The cable loop is what the jumper places his or her thumb through to recover from the drag.

#### **MATERIAL**

- Flexible stainless steel aircraft cable

#### **RATED CAPACITY**

- 920 lbs.

### **SAFETY CLIP**

The safety clip serves 2 purposes, to secure the cable loop inside the canopy release assembly and to prevent foreign material from entering the canopy release assembly.

### **CANOPY RELEASE ASSEMBLY**

When completely assembled the rated capacity is 5000 lbs.

### **CANOPY RELEASE ASSEMBLY PAD**

The canopy release assembly pad is an added comfort feature and does not have to be present for the parachute harness to be serviceable. It is located under the canopy release assembly and the main lift web.

### **MAIN LIFT WEB**

Starting approximately 5 inches above the canopy release assembly and extending approximately 6 inches below the D-ring.

#### **MATERIAL**

- 2 plies of Type XIII nylon webbing

#### **TENSILE STRENGTH**

- 6500 lbs.

### **CHEST STRAP**

The chest strap is sewn to the left main lift web. It is one of the five points of adjustment on the parachute harness.

#### **LENGTH**

- Approximately 13 inches

#### **MATERIAL**

- Type XIII nylon webbing

#### **TENSILE STRENGTH**

- 6500 lbs.

### **WEBBING RETAINER**

One webbing retainer is attached to the chest strap. It can be replaced by a retainer band if it is not present or serviceable.

#### **MATERIAL**

- Type I elastic webbing

### **QUICK FIT V-RING**

One quick fit V-ring is located at the end of the chest strap. Attaches to the ejector snap located on the right main lift web.

#### **MATERIAL**

- Cadmium plated forged steel alloy

#### **RATED CAPACITY**

- 2500 lbs.

### **EJECTOR SNAP**

#### **MATERIAL**

- Cadmium plated forged steel alloy

#### **RATED CAPACITY**

- 2500 lbs.

The ejector snap consists of three sub components, they are:

- 4) ACTIVATING LEVER
- 5) BALL DETENT
- 6) OPENING GATE

### **EJECTOR SNAP PAD**

One ejector snap pad is located under the chest strap ejector snap. This is an added comfort feature and does not have to be present for the parachute harness to be serviceable.

### **D-RINGS**

The D-rings serve as points of attachment for the reserve parachute and any other items of combat equipment.

#### **MATERIAL**

- Cadmium plated forged steel alloy

#### **RATED CAPACITY**

- 5000 lbs.

### **TRIANGLE LINKS**

The triangle links serve as points of attachment for the ejector snap of the hook pile tape lower line. They are located just below the D-rings on the harness assembly.

#### **MATERIAL**

- Cadmium plated forged steel alloy

#### **RATED CAPACITY**

- 1000 lbs.

### **SADDLE**

Continuation of the main lift web and routed under the jumpers buttocks.

#### **MATERIAL**

- Type XIII nylon webbing

#### **TENSILE STRENGTH**

- 6500 lbs.

### **LEG STRAPS**

The leg straps are sewn midway through the saddle. They serve as 2 more points of adjustment on the parachute harness.

#### **LENGTH**

- Approx. 27 inches

#### **MATERIAL**

- Type XIII nylon webbing

#### **TENSILE STRENGTH**

- 6500 lbs.

### **WEBBING RETAINER**

One webbing retainer is attached to each leg strap. They can be replaced by a retainer band if they are not present or serviceable.

#### **MATERIAL**

- Type I elastic webbing

### **QUICK FIT V-RING**

One quick fit V-ring is located at the end of each leg strap. They are attached to the appropriate ejector snap located on the harness assembly just below the triangle links.

#### **MATERIAL**

- Cadmium plated forged steel alloy

#### **RATED CAPACITY**

- 2500 lbs.

### **EJECTOR SNAP PAD**

One ejector snap pad is located under each leg strap ejector snap. These are an added comfort feature and do not have to be present for the parachute harness to be serviceable.

### **DIAGONAL BACK STRAPS**

The diagonal back straps form an "X" across the jumpers back. They can be sized in six sizes: small, 1 through 4 and large.

#### **MATERIAL**

- Two plies of Type XIII nylon webbing

#### **TENSILE STRENGTH**

- 6500 lbs.

### **BACK STRAP ADJUSTERS**

The back strap adjusters are located at the end of each diagonal back strap.

#### **MATERIAL**

- Cadmium plated forged steel alloy

#### **RATED CAPACITY**

- 2500 lbs.

### **HORIZONTAL BACK STRAP**

The horizontal back strap is routed through the lower portion of the back strap adjuster, through the main lift web, across the small of the jumpers back, through the opposite main lift web and terminates at the opposite back strap adjuster. It serves as 2 more points of adjustment on the parachute harness.

#### **LENGTH**

- Approx. 75 inches

#### **MATERIAL**

- Type XIII nylon webbing

#### **TENSILE STRENGTH**

- 6500 lbs.

## **PACK TRAY ASSEMBLY**

### **DIAGONAL BACK STRAP RETAINERS**

The diagonal back strap retainers are sewn to the upper portion of the pack tray.

#### **LENGTH**

- Approx. 5 ½ inches

#### **MATERIAL**

- Type VI nylon webbing

#### **TENSILE STRENGTH**

- 2500 lbs.

### **DIAGONAL BACK STRAP KEEPERS**

The diagonal back strap keepers are sewn to the upper portion of the pack tray.

#### **LENGTH**

- Approx. 6 inches

#### **MATERIAL**

- Type XVII nylon webbing

#### **TENSILE STRENGTH**

- 2500 lbs.

## **HORIZONTAL BACK STRAP RETAINERS**

The horizontal back strap retainers are sewn to the lower portion of the pack tray.

### **LENGTH**

- Approx. 5 ½ inches

### **MATERIAL**

- Type VI nylon webbing

### **TENSILE STRENGTH**

- 2500 lbs.

## **HORIZONTAL BACK STRAP KEEPER**

The horizontal back strap keeper is sewn to the lower portion of the pack tray.

### **LENGTH**

- Approx. 12 inches

### **MATERIAL**

- Type XVII nylon webbing

### **TENSILE STRENGTH**

- 2500 lbs.

## **WAISTBAND**

The waist band is sewn to the bottom right corner of the pack tray. During inspection you must insure that at least 50% of one row of stitching is present securing the waistband to the pack tray or the parachute harness is unserviceable.

### **LENGTH**

- Approx. 43 inches

### **MATERIAL**

- Type VIII nylon webbing

### **TENSILE STRENGTH**

- 3600 lbs.

## **WAISTBAND ADJUSTER PANEL**

The waistband adjuster panel is sewn to the bottom left corner of the pack tray. It consists of a nylon portion and the metal adjuster. During inspection you must insure that at least 50% of one row of stitching is present securing the waistband adjuster panel to the pack tray or the parachute harness is unserviceable.

### **NYLON PORTION**

#### **MATERIAL**

- Type VIII nylon webbing

#### **TENSILE STRENGTH**

- 3600 lbs.

## **METAL ADJUSTER**

### **MATERIAL**

- Cadmium plated forged steel alloy

### **RATED CAPACITY**

- 1000 lbs.

## **PACK CLOSING FLAPS**

The pack closing flaps form the top, bottom, left and right portions of the pack tray.

### **MATERIAL**

- Nylon duck material

### **WEIGHT**

- Approx. 7.25 ounces per square yard

### **STATIC LINE SLACK RETAINER**

The static line slack retainer is sewn to the top pack closing flap. It cannot be cut, torn or frayed more than 50% or the entire parachute is unserviceable.

#### **MATERIAL**

- Type I elastic webbing

### **OUTER STATIC LINE STOW BARS**

The outer static line stow bars are sewn to the left and right pack closing flaps.

#### **MATERIAL**

- Type IV nylon webbing

#### **TENSILE STRENGTH**

- 1000 lbs.

### **INNER STATIC LINE STOW BARS**

The inner static line stow bars are sewn to the left and right pack closing flaps.

#### **MATERIAL**

- Type III nylon webbing

#### **TENSILE STRENGTH**

- 800 lbs.

### **PACK CLOSING LOOPS**

The pack closing loops are sewn to all four pack closing flaps. They cannot be cut, torn or frayed more than 50% at the looped portion or the entire parachute is unserviceable.

#### **MATERIAL**

- Type IV nylon webbing

#### **TENSILE STRENGTH**

- 1000 lbs.

### **PACK CLOSING TIE**

The pack closing tie is routed through all four pack closing loops and the pack opening loop. It must be located between the pack closing loops at the 3 to 6 o'clock position.

#### **LENGTH**

- A sufficient amount

#### **MATERIAL**

- ¼ inch cotton webbing

## **MODIFIED IMPROVED RESERVE PARACHUTE SYSTEM SOFT LOOP CENTER PULL (MIRPS SLCP)**

The MIRPS SLCP is a troop chest, emergency type parachute. It has been designed for manual activation in the event of a malfunction of the main parachute.

#### **WEIGHT**

- Approx. 12 – 15 lbs.

#### **SKIRT DIAMETER**

- Approx. 24 feet
- Flat circular in shape

The MIRPS SLCP consists of four major components:

- 1) Pilot parachute with Deployment Assistance Device
- 2) Canopy Assembly
- 3) Pack Assembly
- 4) Ripcord Assembly

## **PILOT PARACHUTE WITH DEPLOYMENT ASSISTANCE DEVICE**

### **DEPLOYMENT ASSISTANCE DEVICE**

The deployment assistance device consists of a 30 inch helical spring encased in type I marquisette netting.

#### **MATERIAL**

- Type I marquisette netting

#### **WEIGHT**

- Approx. 1.1 ounces per square yard

### **END CAPS**

The end caps are located at both ends of the deployment assistance device.

#### **MATERIAL**

- Nylon cordura

#### **WEIGHT**

- Approx. 10 ounces per square yard

### **GROMMETS**

There are 4 grommets located on one end cap. They are utilized to hold the deployment assistance device in a compressed position during packing.

#### **MATERIAL**

- Hard brass

### **GROMMET TABS**

The grommet tabs secure the grommets to the end cap.

#### **MATERIAL**

- ¼ inch Type III nylon tape

#### **TENSILE STRENGTH**

- 400 lbs.

### **PILOT PARACHUTE**

#### **MATERIAL**

- Low porosity parachute cloth

#### **WEIGHT**

- Approx. 1.1 ounces per square yard

#### **DIAMETER**

- Approx. 60 inches
- Flat circular in shape

### **MARQUISETTE NETTING**

There is marquisette netting attached to the skirt of the pilot parachute. It helps prevent foreign material from entangling with the pilot parachute.

#### **LENGTH**

- Approx. 27 inches

#### **MATERIAL**

- Type I marquisette netting

#### **WEIGHT**

- Approx. 1.1 ounces per square yard

## **RADIAL TAPES**

The radial tapes are attached to the skirt of the pilot parachute. There are 6 radial tapes or 3 continuous. They serve as point of attachment for the bridle line.

### **MATERIAL**

- ½ inch wide Type III nylon tape

### **TENSILE STRENGTH**

- 250 lbs.

## **BRIDLE LINE**

The bridle line is girth hitched to the radial tapes. It serves as point of attachment between the pilot parachute and the canopy assembly. Located at the end of the bridle line is the bridle loop. The bridle loop is girth hitched to the vent lines.

### **LENGTH**

- Approx. 13 feet

### **MATERIAL**

- 2 inch wide polyester nylon webbing

### **TENSILE STRENGTH**

- 1750 lbs.

## **DEPLOYMENT WEIGHT**

The deployment weight is located at the uppermost portion of the bridle line. It provides positive launch of the pilot parachute.

### **MATERIAL**

- 5 ounces of lead

## **RUBBER SHEATH**

The rubber sheath encases the deployment weight to prevent damage to the pilot parachute during deployment.

## **STAGING FLAP HOOKS**

The staging flap hooks are located approximately 10 feet from the deployment weight. They are utilized to secure the staging flaps inside of the pack assembly.

### **MATERIAL**

- Stainless steel held in place by 3/8 inch wide Type III nylon tape

### **TENSILE STRENGTH**

- 200 lbs

## **APEX SOCK**

The apex sock aids in inflation of the canopy assembly during low speed deployments.

### **MATERIAL**

- Cotton sateen cloth

### **WEIGHT**

- Approx. 8.5 ounces per square yard

## **UPPER LATERAL BAND**

The upper lateral band is the strongest component of the canopy assembly.

### **MATERIAL**

- 1 inch wide tubular nylon webbing

### **TENSILE STRENGTH**

- 4000 lbs.

## **CANOPY ASSEMBLY**

### **UPPER LATERAL BAND**

The upper lateral band is the strongest component of the canopy assembly.

#### **MATERIAL**

- 1 inch wide tubular nylon webbing

#### **TENSILE STRENGTH**

- 4000 lbs.

### **RESERVE CANOPY**

#### **MATERIAL**

- Type I rip stop nylon

#### **WEIGHT**

- Approx. 1.1 ounces per square yard

### **RADIAL SEAMS**

There are 24 radial seams which form the frame work and separate the wedge shape gores. There are 24 wedge shape gores, which are further subdivided by 3 to 4 diagonally stitched sections. The radial seams provide channels for the suspension lines.

### **LOWER LATERAL BAND**

The lower lateral band is located approximately 10 feet from the upper lateral band.

#### **MATERIAL**

- 1 inch wide tubular nylon tape

#### **TENSILE STRENGTH**

- 525 lbs

### **SUSPENSION LINES**

The suspension lines are attached a connector snap on the pack assembly, routed up through the framework of the canopy across the apex (forming the vent lines), through the opposite framework and attach to the opposite connector snap.

#### **LENGTH**

- Approx. 20 feet from the connector snap the lower lateral band

#### **MATERIAL**

- Type III nylon cord

#### **TENSILE STRENGTH**

- 550 lbs

## **PACK ASSEMBLY**

### **CONNECTOR SNAPS**

#### **MATERIAL**

- Cadmium plated forged steel alloy

#### **RATED CAPACITY**

- 5000 lbs.

## CONNECTOR SNAP TIES

The connector snap ties secure the connector snaps to the pack assembly. They are routed through the **connector snap grommets**.

### LENGTH

- Approx. 8 inches

### MATERIAL

- Type II or Type III nylon cord gutted

## TOP CARRYING HANDLE

The top carrying handle aids the jumper in carrying the reserve parachute around the departure air field.

### MATERIAL

- Type VI nylon webbing

### TENSILE STRENGTH

- 2500 lbs.

## WAISTBAND RETAINERS

The waistband retainers are a continuation of the top carrying handle. The waistband is routed behind both waistband retainers keeping the reserve snug to the jumper's body.

### MATERIAL

- Type VI nylon webbing

### TENSILE STRENGTH

- 2500 lbs.

## LEFT CARRYING HANDLE

The left carrying handle aids the jumper in activating the reserve parachute in the event of a malfunction.

### MATERIAL

- Type VI nylon webbing

### TENSILE STRENGTH

- 2500 lbs.

## PACK OPENING SPRING BANDS

The pack opening spring bands aid in the deployment of the reserve parachute. There is one pack opening spring band running horizontal and two running vertically. Each pack opening spring band has a **hook** attached to it. The hook attaches to an **eyelet**.

### LENGTH

- Horizontal: Approx. 18 inches
- Vertical: Approx. 12 inches

### MATERIAL

- Multi-tubular nylon tape

### TENSILE STRENGTH

- 500 lbs.

## SAFETY WIRE AND LANYARD

The safety wire and lanyard is attached to the reinforced nylon webbing at the right rear of the reserve parachute.

### SAFETY WIRE MATERIAL

- Corrosion resistant steel wire

### DIAMETER

- Approx. 8/100 of an inch

### LANYARD MATERIAL

- Type II or Type III nylon cord gutted

## **TOP PANEL**

Forming the top portion of the reserve parachute is the top panel.

### **MATERIAL**

- Nylon duck material

### **WEIGHT**

- Approx. 7.25 ounces per square yard

## **RIPCORD PROTECTOR FLAP**

The ripcord protector flap is sewn to the top panel. It has a ¼ inch strip of yellow binding tape sewn across the top indentifying it as a MIRPS.

## **RIPCORD GRIP RETAINER**

The ripcord grip retainer is sewn to the top panel. It is used to secure the ripcord grip in place.

### **LENGTH**

- Approx. 5 inches

### **MATERIAL**

- Type I elastic webbing

## **GROMMETS**

Two grommets can be found on the top panel. They cannot be bent, cracked or corroded to be serviceable.

### **MATERIAL**

- Stainless steel

## **EYELET**

There are 2 eyelets sewn to the top and bottom panels and 1 on each end panel. The hook from the pack opening spring band is attached to an eyelet.

## **BOTTOM PANEL**

Forming the bottom portion of the reserve parachute is the bottom panel.

### **MATERIAL**

- Nylon duck material

### **WEIGHT**

- Approx. 7.25 ounces per square yard

## **RED SOFT LOOPS**

The red soft loops cannot be twisted, cut or frayed to be serviceable.

### **MATERIAL**

- Type II nylon cord gutted

### **TENSILE STRENGTH**

- 205 lbs.

## **END PANEL**

Forming the left and right portions of the reserve parachute are the end panels.

### **MATERIAL**

- Nylon duck material

### **WEIGHT**

- Approx. 7.25 ounces per square yard

## **GROMMET**

One grommet can be found on each end panel. They cannot be bent, cracked or corroded to be serviceable.

### **MATERIAL**

- Stainless steel

## RIPCORDER ASSEMBLY

### RIPCORDER GRIP

#### MATERIAL

- Seamless stainless steel tubing

#### DIAMETER

- Approx. 5/16 of an inch

### CABLE

There are 2 cables attached to the ripcord grip. They cannot be kinked or frayed to be serviceable.

#### MATERIAL

- Flexible stainless steel aircraft cable

#### RATED CAPACITY

- 920 lbs.

### LOCKING PIN

There is one locking pin attached to each cable. They cannot be bent, cracked or corroded to be serviceable.

#### MATERIAL

- Stainless steel

### STEEL SWAGED BALL

The steel swaged ball secures each cable to the ripcord grip. They cannot be cracked or corroded to be serviceable.

## PRE-JUMP TRAINING (T-10 Heavy)

### MODULE 1

#### POINTS OF PERFORMANCE

The first point of performance is **PROPER EXIT, CHECK BODY POSITION AND COUNT. "JUMPERS HIT IT."** Upon exiting the aircraft, snap into a good tight body position. Keep your eyes open, chin on your chest, elbows tight into your sides, place your hands on the end of the reserve, with your fingers spread. Bend forward at the waist keeping your feet and knees together, knees locked to the rear and count to four thousand.

At the end of your four thousand count immediately go into the second point of performance, **CHECK CANOPY AND GAIN CANOPY CONTROL.** When jumping the T-10 series parachute, reach up to the elbow locked position and secure a set of risers in each hand, simultaneously conduct a 360-degree check of your canopy. When jumping the MC-6 series parachute, secure a toggle in each hand and pull them down to eye level, simultaneously conducting a 360-degree check of your canopy. If, during your second point of performance, you find that you have twists, you must compare your rate of descent with your fellow jumpers. If you are falling faster than your fellow jumpers or you cannot compare your rate of descent with fellow jumpers, immediately activate your reserve parachute using the **PULL-DROP METHOD.** If, you are not falling faster than fellow jumpers then reach up and grasp a set of risers in each hand, thumbs down, knuckles to the rear. Pull the risers apart, and begin a vigorous bicycling motion. When the last twist comes out, immediately check canopy and gain canopy control.

The third point of performance is **KEEP A SHARP LOOKOUT DURING YOUR ENTIRE DESCENT.** Remember the three rules of the air and repeat them after me. **Always look before you slip/turn; always slip/turn in the opposite direction to avoid collisions, and the lower jumper always has the right of way.** Avoid fellow jumpers all the way to the ground and maintain a 25-foot separation when jumping the T-10 series parachute and a 50-foot separation when jumping the MC-6 series parachute. When jumping the T-10, at sometime during your third point of performance, release all appropriate equipment tie downs.

This brings you to your fourth point of performance, which is **PREPARE TO LAND.** At 100-200 feet AGL, look below you to ensure there are no fellow jumpers and lower your equipment. Regain canopy control. At approximately

100 feet AGL, slip/turn into the wind and assume a landing attitude. When jumping the T-10 series parachute and the wind is blowing from your left, reach up on left set of risers and pull them deep into your chest. If the wind is blowing from your front, reach up on the front set of risers and pull them deep into your chest. If the wind is blowing from your right, reach up on your right set of risers and pull them deep into your chest. If the wind is blowing from your rear, reach up on your rear set of risers and pull them deep into your chest. After you have slipped into the wind, you will assume a landing attitude by keeping your feet and knees together, knees slightly bent, with your head and eyes on the horizon.

When jumping the MC-6 series parachute at approximately 250 feet AGL, determine your direction of drift. If the wind is blowing from your left, pull your left toggle down. When you are facing into the wind let up slowly to prevent oscillation. If the wind is blowing from your right, pull your right toggle down. When you are facing into the wind let up slowly to prevent oscillation. If the wind is blowing from your rear, pull either toggle down. When you are facing into the wind let up slowly to prevent oscillation. If the wind is blowing to your front, make minor corrections to remain facing into the wind. Look below you to ensure there are no fellow jumpers. Transfer control of one toggle to the opposite hand, so that one hand is controlling both toggles. With the free hand release all appropriate equipment tie downs and lower your combat equipment. Now regain canopy control with both hands. Assume a proper prepare to land attitude by pulling the toggles to the appropriate brake position. Keep your feet and knees together, knees slightly bent, elbows rotated in toward your side, with your head and eyes on the horizon.

When the balls of your feet make contact with the ground, you will go into your fifth point of performance, **LAND**. You will make a proper PLF by hitting all five points of contact. Touch them and repeat them after me. **1) BALLS OF THE FEET. 2) CALF. 3) THIGH. 4) BUTTOCKS. 5) PULL UP MUSCLE.** You will never attempt to make a stand up landing.

Remain on your back and activate one of your canopy release assemblies using either the hand to shoulder method or the hand assist method. To activate your canopy release assembly using the hand to shoulder method, with either hand reach up and secure a safety clip and pull it out and down exposing the cable loop. Insert the thumb from bottom to top through the cable loop, turn your head in the opposite direction and pull out and down on the cable loop. To activate the canopy release assembly using the hand assist method, with either hand reach up and secure a safety clip and pull it out and down exposing the cable loop. Insert the thumb from bottom to top. Re-enforce that hand with the other hand, turn your head in the opposite direction and pull out and down on the cable loop. If your canopy fails to deflate, activate the other canopy release assembly. Place your weapon into operation and remain on your back to get out of the parachute harness.

## **MODULE 2**

### **RECOVERY OF EQUIPMENT**

Once out of the parachute harness, remove all air items from the parachute harness. Roll the aviator's kit bag two thirds of the way down and place the parachute harness inside the aviator's kit bag with the smooth side facing up, leaving the waistband exposed. Remain on a knee and begin pulling the suspension lines and canopy to the aviator's kit bag, stuffing them in as you go. Route the waistband through the bridal loop leaving six to eight inches of the waistband exposed and snap, do not zip, the aviator's kit bag. Secure the reserve parachute to the aviator's kit bag, place it over your head, conduct a 360-degree police of your area and locate the nearest turn in point and move out to it.

### **TOWED JUMPER PROCEDURES**

**“JUMPERS HIT IT.”** If you become a towed jumper and are being towed by your universal static line and are unconscious, you will be retrieved inside the aircraft. If you are conscious, maintain a good tight body position with your left hand on the end of the reserve and with your right hand cover the ripcord protector flap, with your right forearm on the ripcord grip/ripcord handle, and an attempt will be made to retrieve you inside the aircraft.

As you near the jump door, **DO NOT REACH FOR US**, continue to protect your ripcord grip/ripcord handle. If you cannot be retrieved, you will be cut free. Once you feel yourself falling free from the aircraft, immediately activate your reserve parachute for a total malfunction.

If you are being towed by your equipment, regardless of whether you are conscious or unconscious, we will cut or jog your equipment free and your main parachute will deploy.

**NOTE:** If you are being towed from a rotary wing aircraft, maintain a good tight body position and protect your ripcord grip/rip cord handle. The aircraft will slowly descend to the DZ, come to a hover and the jumpmaster will free you from the aircraft.

## **MALFUNCTIONS**

There are two types of malfunctions, total and partial. A total malfunction provides no lift capability what so ever; therefore, you must activate your reserve using the **PULL DROP METHOD**. While cigarette rolls and streamers are partial malfunctions, they provide no lift capability and you must activate your reserve using the **PULL DROP METHOD**.

There are several types of partial malfunctions and actions for each. If you have a squid, semi-inversion, or a complete inversion with damage to the canopy or suspension lines you must immediately activate your reserve for a partial malfunction. If you have a complete inversion with no damage to the canopy or suspension lines, do not activate your reserve parachute.

If you have broken suspension lines, blown sections or gores, compare your rate of descent with fellow jumpers. If you are falling faster than fellow jumpers, activate your reserve for a partial malfunction.

## **ACTIVATION OF THE MODIFIED IMPROVED RESERVE PARACHUTE SYSTEM SOFT LOOP CENTER PULL**

To activate the **MIRPS SLCP**; you will use the “**PULL DROP METHOD.**” “**JUMPERS HIT IT.**” 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 and eyes in either direction, pull up and out on the ripcord grip and drop it. Your reserve will activate.

## **ACTIVATION OF THE T-11 RESERVE PARACHUTE SYSTEM**

To activate the **T-11R**; you will use the “**PULL DROP METHOD.**” “**JUMPERS HIT IT.**” Maintain a good tight body position. With either hand grasp the ripcord handle. Throw your head back and to the rear and pull out on the ripcord handle and drop it. Your reserve will activate.

**NOTE:** If you have to activate the **MIRPS (SLCP)/T-11R** for a partial malfunction, any attempt to control either canopy will be useless as one canopy will act as a brake for the other. When activating the **T-11 Reserve** for a total malfunction, let up on the risers for the reserve. Pull a good two riser slip opposite your direction of drift during your fourth point of performance.

## **COLLISIONS AND ENTANGLEMENTS**

“**JUMPERS HIT IT. CHECK CANOPY AND GAIN CANOPY CONTROL.**” If you see another jumper approaching, immediately attempt to slip/turn away. If you cannot avoid the collision assume a spread eagle position and attempt to bounce off the other jumper’s canopy and suspension lines and immediately slip/turn away. If you should enter the other jumper’s suspension lines, snap into a modified position of attention. With either hand protect your ripcord grip/rip cord handle and with your other hand attempt to weave your way out of the suspension lines the same way you entered and then slip/turn away.

If you become entangled and are jumping the T-10 series parachute, the higher jumper will climb down to the lower jumper using the hand under hand method. Once both jumpers are even, you will face each other and grasp each other’s left main lift web with your left hand. Both jumpers will discuss which PLF to execute. Both jumpers will conduct the same PLF. Neither jumper will execute a front PLF. Both jumpers will continue to observe their canopies. If one canopy collapses, neither jumper will activate their reserve as one T-10 series parachute can safely deliver two combat equipped jumpers to the ground. If both canopies collapse the jumpers will pull towards each other to create a clear path for the activation of their reserve parachutes, and then activate their reserves using the pull drop method.

If you are jumping the MC-6 series parachute, both jumpers will remain where they are, obtain a clear and unobstructed path and immediately activate their reserve parachutes using the **PULL DROP METHOD**.

### **MODULE 3**

#### **EMERGENCY LANDINGS**

The first emergency landing is the **Tree Landing**. If you are drifting towards the trees, immediately slip/turn away. If you cannot avoid the trees and have lowered your equipment, look below you to ensure there are no fellow jumpers and jettison your equipment making a mental note of where it lands. If you have not lowered your equipment, keep it on you to provide extra protection while passing through the trees. At approximately 100 feet AGL, assume a landing attitude by keeping your feet and knees together, knees slightly bent with your head and eyes on the horizon. When the balls of your feet make contact with the trees, rotate your hands in front of your face with your elbows high. Be prepared to execute a PLF if you pass through the trees.

If you get hung up in the trees maintain your advanced combat helmet and lower and jettison all unneeded equipment. Activate the chest strap ejector snap and activate the quick release in your waistband. Place your left hand over the ripcord protector flap and apply pressure. Grasp the ripcord grip with your right hand and pull it and drop it. Control the activation of the reserve parachute toward the ground ensuring that all suspension lines are completely deployed. Disconnect the left connector snap and rotate the reserve to the right. Grasp the main lift web with either hand below the canopy release assembly and with the other hand activate the leg strap ejector snaps and climb down the outside of the reserve. If you are jumping the MC-6 and get hung up in the trees keep your advanced combat helmet on and jettison all unneeded equipment. Activate the quick release in the chest strap and the waistband. Ensure you have a clear and unobstructed path to activate your reserve. First remove the top tuck tab and insert either hand from top to bottom behind the rip cord handle and apply steady inward pressure. With the opposite hand grasp the rip cord handle, pull and drop it. Now control the activation of the reserve all the way to the ground. Ensure all canopy and suspension lines are free of the pack tray, and the reserve reaches close enough to the ground for you to safely climb down.

**Disconnect the left connector snap from the left D ring, and reattach it to the right Triangle Link.** Seat yourself well into the saddle and grasp the main lift web with either hand below the canopy release assembly. With the other hand activate the leg strap ejector snaps and climb down the outside of the reserve. Remember, when in doubt, stay where you are and wait for assistance.

**(Note:** The T-11 reserve suspension lines have a protective coating and are very slippery. Extra care must be taken when climbing down.)

The next emergency landing is the **Wire Landing**. If you are drifting toward wires, immediately slip/turn away. If you cannot avoid the wires, look below you to ensure there are no fellow jumpers and lower and jettison your equipment making a mental note of where it lands. Assume a landing attitude by placing your hands, fingers and thumbs extended and joined high on the inside of the front set of risers with the elbows locked. Place your chin on your chest, keep your feet and knees together and exaggerate the bend in your knees. When the balls of your feet make contact with the wires, begin a vigorous rocking motion in an attempt to pass all the way through the wires. Be prepared to execute a PLF if you pass all the way through the wires. If you get hung up in the wires, stay where you are and wait for assistance.

The last emergency landing is the **Water Landing**. The water landing is the most dangerous emergency landing because it takes the most time to prepare for. If you are drifting towards a body of water, immediately slip/turn away. If you cannot avoid the water, look below you to ensure there are no fellow jumpers and lower; do not jettison your equipment. Next, jettison your Advanced Combat Helmet. Activate the quick release in your waistband, disconnect the left connector snap and rotate the reserve to the right. Seat yourself well into the saddle and activate the chest strap ejector snap or quick release of the chest strap completely removing the chest strap from the chest strap friction adapter. Regain canopy control. Prior to entering the water assume a landing attitude by keeping your feet and knees together, knees slightly bent and place your hands on the leg strap ejector snaps. When the balls of your feet make contact with the water, activate the leg strap ejector snaps, arch your back, throw your arms above your head and slide out of the parachute harness. Swim upwind or upstream away from the canopy. Be prepared to execute a PLF if the water is shallow. If the canopy comes down on top of you locate a radial tape, follow it to the skirt of the canopy and swim upstream or upwind away from the canopy.

The next items to be discussed are **MISSION ORIENTED** items.

**B-7 LIFE PRESERVER:** When jumping the B-7 life preserver, activate it in the air. Lower but do not jettison combat equipment.

**NIGHT JUMPS:** When conducting night jumps, be sure to give your canopy an extra look, and maintain noise and light discipline all the way to the ground.

**AWADS:** When jumping under AWADS conditions, do not lower your equipment until you have passed through the clouds. Do not slip/turn unless you have to avoid a collision. If you have any type of malfunction, you must immediately activate your reserve using the pull drop method because you cannot compare your rate of descent with fellow jumpers. Ensure you recheck your canopy once you pass through the clouds.

**PARACHUTE LANDING FALLS:** We will now move to the PLF platform and conduct one satisfactory PLF in each of the four directions.

#### **T-10 PARACHUTE HARNESS**

CHEST STRAP EJECTOR SNAP WILL NOT SEAT	-35
WAISTBAND MISROUTED OVER RIGHT / LEFT D-RING	-11

#### **MODIFIED IMPROVED RESERVE PARACHUTE SYSTEM SOFT LOOP CENTER PULL**

LEFT CONNECTOR SNAP SAFETIED	-35
RIGHT CONNECTOR SNAP NOT SAFETIED	-35
RIP CORD GRIP MISROUTED BETWEEN RIP CORD GRIP RETAINER AND PILE TAPE	-35
LOCKING PIN BENT	-35
DEPLOYMENT ASSISTANCE DEVICE MISSING	-35
TOP RIGHT / LEFT PACK OPENING SPRING BAND MISROUTED OVER REINFORCED NYLON WEBBING	-11
EXPOSED METAL TOP RIGHT / LEFT PACK OPENING SPRING BAND	-35
TOP RIGHT / LEFT PACK OPENING SPRING BAND MISROUTED OVER TOP CARRYING HANDLE	-11
TOP RIGHT / LEFT PACK OPENING SPRING BAND MISROUTED OVER RIP CORD GRIP	-35
LEFT PACK OPENING SPRING BAND MISROUTED OVER REINFORCED NYLON WEBBING	-11
LEFT PACK OPENING SPRING BAND MISROUTED OVER LEFT CARRYING HANDLE	-35
BOTTOM LEFT / RIGHT PACK OPENING SPRING BAND MISROUTED OVER REINFORCED NYLON WEBBING	-11
EXPOSED METAL BOTTOM LEFT / RIGHT PACK OPENING SPRING BAND	-35
RIGHT PACK OPENING SPRING BAND MISROUTED OVER REINFORCED NYLON WEBBING	-11
EXPOSED METAL LEFT / RIGHT PACK OPENING SPRING BAND	-35

#### **UNIVERSAL STATIC LINE**

GIRTH HITCH UNIVERSAL STATIC LINE REVERSED	-35
UNIVERSAL STATIC LINE CUT	-35
STATIC LINE SLACK RETAINER CUT, TORN OR FRAYED MORE THAN 50%	-35
STATIC LINE SLACK RETAINER MISSING	-35
UNIVERSAL STATIC LINE MISROUTED THROUGH RIGHT / LEFT RISER ASSEMBLY	-35
UNIVERSAL STATIC LINE MISROUTED UNDER RIGHT / LEFT RISER ASSEMBLY	-35

UNIVERSAL STATIC LINE MISROUTED AROUND RIGHT / LEFT INNER STATIC LINE STOW BAR	-35
UNIVERSAL STATIC LINE MISROUTED AROUND RIGHT / LEFT OUTER STATIC LINE STOW BAR	-35
LAST STRAND UNIVERSAL STATIC LINE MISROUTED FROM LEFT OUTER STATIC LINE STOW BAR	-35
UNIVERSAL STATIC LINE MISROUTED BEHIND PACK CLOSING TIE	-35
PACK OPENING LOOP NOT LOCATED BETWEEN THE 6 - 9 O'CLOCK PACK OPENING LOOPS	-35
PACK OPENING LOOP CUT	-35
PACK CLOSING LOOP CUT MORE THAN 50% AT THE LOOPED PORTION	-35
IMPROPER PACK CLOSING TIE	-35

**ALICE PACK AND HOOK PILE TAPE LOWERING LINE**

FREE RUNNING END ADJUSTABLE SHOULDER CARRYING STRAP NOT SECURED PROPERLY	-11
HOOK PILE TAPE LOWERING LINE MISROUTED THROUGH NYLON CHAFE PORTION M1950 WEAPONS CASE	-11
EJECTOR SNAP HOOK PILE TAPE LOWERING LINE REVERSED	-11
HOOK PILE TAPE LOWERING LINE MISROUTED UNDER LEFT ADJUSTABLE SHOULDER CARRYING STRAP	-11
EJECTOR SNAP HOOK PILE TAPE LOWERING LINE MISROUTED OVER WAISTBAND	-35
EJECTOR SNAP HOOK PILE TAPE LOWERING LINE WILL NOT SEAT	-35
HOOK PILE TAPE LOWERING LINE MISROUTED BEHIND QUICK RELEASE LINK	-35
FREE RUNNING END EQUIPMENT RETAINER STRAPS ROLLED	-11
GIRTH HITCH HOOK PILE TAPE LOWERING LINE ROUTED EAST / WEST	-11
NO QUICK RELEASE IN EQUIPMENT RETAINER STRAPS	-11
RELEASE HANDLE LANYARD TWISTED	-11
RIGHT / LEFT ADJUSTABLE D-RING ATTACHING STRAP REVERSED	-11
ADJUSTABLE D RING ATTACHING STRAP SECURED TO INSIDE OF LEFT / RIGHT CONNECTOR SNAP	-11
RIGHT / LEFT ADJUSTABLE D RING ATTACHING STRAP TWISTED	-11
EQUPMENT RETAINER STRAP TWISTED	-11
GREEN ATTACHING LOOP ROUTED OVER GROMMET	-11
GREEN ATTACHING LOOP MISROUTED THRU GROMMET	-11
RELEASE HANDLE CABLE NOT ROUTED THROUGH RELEASE HANDLE CROSS STRAP	-11
RELEASE HANDLE LANYARD MISROUTED AROUND RELEASE HANDLE CROSS STRAP	-11

# T-10 Hollywood JMPI Sequence

## TC 3-21.220 Chapter 9

**Note:** As you are routing the Universal Static Line over the appropriate shoulder for which the jumper will exit, look at the riser assemblies to ensure that the type of parachute being inspected either has or does not have blue confluence wrap.

### ADVANCED COMBAT HELMET (FRONT):

The jumpmaster will move to their jumper and issue the command, “**Open your rip cord protector flap.**” Place both hands on the right side of the Advanced Combat Helmet; fingers and thumbs extended and joined pointing skyward, palms facing the jumper. The left hand is the control hand; the right hand is the working hand. With the working hand trace across the rim of the Advanced Combat Helmet feeling for any sharp or protruding edges that may cut or damage the jumper’s static line upon exiting the aircraft. Once the hands are parallel place the thumbs on the rim of the Advanced Combat Helmet, tilt the jumpers head to the rear. Conduct a visual inspection to ensure the three suspension pads are present, are flush with the outer rim, and the oval pads are covering the bolt ends.

Place the right index finger on the front left adjustable buckle to ensure it is free of all cracked components and is serviceable, and the front left adjustable strap is properly routed through it and the free running end is secured in the webbing retainer. Now trace the front left adjustable strap down to the chinstrap fastener, ensuring it is free of all cracked components and properly secured. Now bypass the chinstrap fastener and trace the long portion chinstrap, under the jumpers chin to where it is sewn into the front right adjustable strap to ensure it is not twisted, cut or frayed. Now trace the front right adjustable strap up to the front right adjustable buckle to ensure it is free of all cracked components and is serviceable, and the free running end is secured in the webbing retainer. With the right index finger place it on the short portion chinstrap on the right side and trace the short portion chinstrap across the front of the jumper’s chin drop both hands.

### CANOPY RELEASE ASSEMBLIES:

Always start with the canopy release assembly opposite the Universal Static Line. Since the Universal Static Line is routed over the jumper’s right shoulder, we will begin the inspection with the jumper’s left canopy release assembly. Look at the left canopy release assembly; tap it with the knuckles of the right hand one time to ensure that it sounds solid. **(Jumpers, this is your key to place both hands on your Advanced Combat Helmet/Ballistic Helmet).** With your right hand form a knife cutting edge, fingers extended and joined, palms facing towards you, and insert it behind the main lift web in the vicinity of the chest strap. Trace up the main lift web 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 ¼ turn to the outside. With your head and eyes approximately six to eight inches away conduct a visual inspection to ensure that the male fitting canopy release assembly is properly secured by the female fitting canopy release assembly, and properly secured by the latch. Ensure the cable loop is properly secured by the safety clip and the canopy release assembly is free of all dirt or foreign material that will keep it from seating completely. Now let the canopy release assembly return back to its normal position. Keep your right hand in place, as you can see jumpmasters, the universal static line is routed over the jumper’s 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 secure it in place. Look at the right canopy release assembly; tap it with the knuckles of the right hand one time to ensure that it sounds solid. With your left hand form a knife cutting edge, fingers extended and joined palms facing towards you the jumpmaster and insert it behind the main lift web in the vicinity of the chest strap ejector snap. Trace up the main lift web 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 ¼ turn to the outside, and conduct the same inspection. Now let the canopy release assembly return back to its original position.

## CHEST STRAP:

Simultaneously slide both hands down the main lift web until the little fingers make contact with either one of the D-rings. Look at the chest strap to ensure that it has not been misrouted around the main lift web. Insert the right hand, fingers and thumb extended and joined, fingers pointed skyward, palm facing the jumpmaster from bottom to top behind the chest strap next to where it is sewn into the main lift web. Trace the chest strap across, conduct a visual inspection to ensure the chest strap is not twisted, cut, or frayed and the excess webbing of the chest strap is properly secured in the webbing retainer until the right hand is behind the ejector snap, ensure the ejector snap pad does not come between the right hand and the ejector snap. With the thumb of the right hand, press in on the activating lever of the ejector snap to ensure that it is properly seated over the ball detent and is free of all foreign matter. Leave the right hand and thumb in place, and move to the right side of the jumper.

## WAIST BAND:

Insert the left hand, fingers and thumb extended and joined fingers pointed skyward, palm facing the jumpmaster, from the bottom to the top behind the waistband next to where it sewn into the pack tray. Look at the waistband where it is sewn into the pack tray and ensure that at least 50% of one row of stitching is present. Trace the waistband forward to ensure that it is not twisted, cut, frayed or been misrouted behind the horizontal back strap. Trace the waistband forward until the left hand makes contact with the right D-ring. Look at the waistband to ensure that it is routed over the right main lift web and under the right D-ring. Rotate the right hand down and grasp the top-carrying handle of the reserve parachute, palm facing the reserve. Simultaneously lift up and out on the reserve parachute and place the left hand, palm facing the jumper, into the jumper's chest. Look at the waistband where it is routed behind the reserve parachute to ensure that it is routed through both waistband retainers and it is not twisted, cut, or frayed. Withdraw the left hand from the jumper's chest, reach under the right forearm, and insert the left hand into the left carrying handle of the reserve parachute, palm facing away from the reserve with the fingers spread. With the right hand, release the top carrying handle of the reserve parachute and move to the left side of the jumper. Insert the right hand, fingers and thumb extended and joined, fingers pointed skyward, palm facing the jumpmaster, from the bottom to top behind the waistband as close as possible to the left D-ring. Look at the waistband to ensure that it is routed over the left main lift web and under the left D-ring. Trace the waistband back to the metal adjuster, insuring that it is not twisted, cut or frayed. Leave the right hand in place behind the metal adjuster. Remove the left hand from the left carrying handle of the reserve parachute and insert the index finger and middle finger of the left hand from top to bottom into the quick release formed by waistband. Ensure that it is no more than three fingers, no less than two, and that it is not a false quick release. Remove the index finger and middle finger from the quick release and with the index finger and thumb of the left hand pinch off the free running end of the waistband where it comes out of the metal adjuster. Trace the free running end of the waistband until the fingers fall of the end, insuring it is not cut, torn, or frayed, and is easily accessible to the jumper. Reinsert the left hand into the left carrying handle of the reserve parachute with the palm facing away from the reserve and fingers spread. Look at the right hand and trace the waistband adjuster panel back to where it is sewn into the pack tray insuring that it is not twisted, cut, frayed or been misrouted behind the horizontal back strap. Look at the waistband adjuster panel where it is sewn to the pack tray and ensure that at least 50% of one row of stitching is present. Drop both hands and move to the front of the jumper.

## RESERVE (SLCP)

With the left hand grasp the top carrying handle of the reserve parachute, palm facing the reserve and lift up and out. Look at the left connector snap and with the index finger of the right hand, finger the left connector snap one time to ensure that it is properly secured to the left D-ring, has spring tension, and has not been safe-tied. Grasp the top carrying handle of the reserve parachute with the right hand, palm facing the reserve and lift up and out. Look at the right connector snap and with the index finger of the left hand, finger the right connector snap one time to ensure that it is properly secured to the D-ring, does not have spring tension, and has been safetied. You will now inspect the safety wire and lanyard by using the letters **PLF, pull, look** and **feel**. With the left index finger, form a hook around the lanyard portion of the safety wire and lanyard. **Pull** on the lanyard portion to ensure it is secured to the reinforced nylon webbing on the right rear portion of the reserve parachute, and to the coiled portion of the safety wire. **Look** at it to ensure 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 the index finger of your left hand insert it from top to bottom and **Feel** the

safety wire on the inside of the right connector snap to ensure it is bent down at a 90 degree angle, and that the safety wire is routed between the waistband and the reserve parachute, and not the waistband and the jumper's body. Keep your left index finger in place. The jumpmaster will place their right hand on the left end panel of the reserve parachute, then form a knife cutting edge with your left hand, fingers and thumb extended and joined pointed down, palm facing the jumpmaster; and sweep one time from the jumper's left to right behind the rip cord grip. Ensuring the top left and top right pack opening spring bands have not been misrouted over the ripcord grip. Form a fist with your left hand leaving the index finger exposed and insert it behind the ripcord grip retainer, ensuring that the ripcord grip is routed between the top panel and the rip cord grip retainer and not the ripcord retainer and the pile tape. Remove the left index finger and place it on the right steel swaged ball to ensure that it is present and against the ripcord grip and it is not cracked or corroded. With the index finger and thumb of your left hand pinch off the right cable where it emerges from the ripcord grip and trace it down until you come in contact with the locking pin, ensuring the cable is not kinked or frayed and it is properly routed over the pile tape. Continue to trace down the locking pin until you come to the end, ensuring the locking pin is not bent, cracked, or corroded. Leave your left index and thumb on the end of the right locking pin, and make a visual inspection of the red soft loop, to ensure it is not cut, frayed, burned or twisted and the locking pin is routed through it completely and not puncturing it. Place your right index finger on the left steel swaged ball and conduct the same inspection. Now place either hand on an end panel, and with the index finger and thumb of the other hand, pinch off the ripcord protector flap making a visual and physical inspection of the Army Parachute Log Record to ensure that it is present. Close the ripcord protector flap and make a visual inspection to ensure a piece of ¼ inch yellow binding tape is permanently sewn across the top of the ripcord protector flap. With either hand feel for the bulge created by the deployment assistance device to ensure it is centered behind the ripcord protector flap. The pack opening spring bands must be inspected for exposed metal, spring tension, and proper routing. Form a knife edge with the left hand, fingers and thumb extended and joined, palm facing you the jumpmaster and sweep the top carrying handle and universal static line snap hook back toward the jumper; this will become the control hand. Begin the inspection of the pack opening spring bands with the top right pack opening spring band. With the index finger and thumb of the right hand pinch off the tab portion of the top right pack opening spring band and pull it down toward the ripcord protector flap. Look at the pack opening spring band to ensure that it is routed through the reinforced nylon webbing on the back of the reserve, it is properly routed under the top carrying handle, and there is no exposed metal on the pack opening spring band. When the tab portion of the pack opening spring band is released the pack opening spring band should pop back into place. Repeat the same inspection for the top left pack opening spring band. With the left hand, form a knife-edge, fingers and thumb extended and joined, palm facing you the jumpmaster, fingers pointing down and sweep the left carrying handle out of the way and inspect the left pack opening spring band. With both hands secure the bottom corners of the reserve parachute and lift it up high so that it is parallel to the ground, and inspect the bottom left then bottom right pack opening spring bands with the right hand. **(On a Hollywood rigged jumper you should be able to see the waistband behind the reserve parachute.)** Remove your left hand from the bottom right corner of the reserve parachute; it should go back to its normal position. With your left hand form a knife cutting edge fingers extended and joined, palm facing toward you, the jumpmaster, and sweep the lanyard portion of the safety wire and lanyard out of your line of sight, and inspect the right pack opening spring band. An overall inspection of the reserve parachute must now be conducted to ensure that it is free of grease, oil, dirt, mud, tears, and exposed canopy. Now with both hands form a knife cutting edge, fingers extended, with your fingertips facing toward the jumper's body and place the palms of your hands on the top right corner 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 head and eyes approximately six to eight inches away, focus your attention on your right hand and trace the top panel of the reserve, now trace down the left end panel of the reserve parachute insuring your pinkie finger leads the way. When you reach the bottom left panel of the reserve parachute with your working hand, drop your control hand down to the bottom right corner of the reserve parachute and lift the reserve parachute up high, ensuring your left hand does not cover up the seam on the reserve parachute, your thumb should be touching the reinforced webbing on the bottom right corner and finger tips pointing the ripcord protector flap. Hold the reserve parachute up with your control hand so it is parallel to the ground. With your working hand, trace the bottom panel of the reserve parachute insuring your index finger is leading the way, when your working hand makes contact with your control hand, drop your control hand leaving your working hand in place on the bottom right corner of the reserve parachute and let the reserve parachute fall back to its normal position. Move your control hand back to the top right corner of the reserve parachute, ensuring that you do not cover the seam on the reserve parachute, and with your head and eyes approximately four to six inches away, trace up the right end panel of the reserve parachute insuring your pinkie finger leads the way conducting a visual inspection. Once your working hand

makes contact with your control hand, you will lift control hand up ensuring that your working hand traces where your control hand just was. Now issue the jumper the command of,

**“HOLD, SQUAT.”**

### **LEG STRAPS:**

Insert the index finger and middle finger of each hand from outside to inside behind the leg straps under the aviator’s kit bag where the natural pocket is formed. Simultaneously slide both hands rearward on the leg straps tracing back to the saddle, insuring that the leg straps are not crossed. Keep your right hand in place. With the left hand trace the right leg strap up to the quick fit V-ring insuring that it is not twisted, cut, or frayed and the excess webbing is secured in the webbing retainer. With the thumb of the left hand press in on the activating lever of the right leg strap ejector snap to ensure that it is properly seated over the ball detent and is free of all foreign matter. Leave the left hand and left thumb in place and look at the left leg strap. With the right hand trace the left leg strap up to the quick fit V-ring insuring that it is not twisted, cut, or frayed, excess webbing is secured in webbing retainer, and it is properly routed through the exposed carrying handle of the aviator’s kit bag, over the bottom and under the top. With the thumb or index finger of the right hand press in on the activating lever of the left leg strap ejector snap to ensure that it is properly seated over the ball detent, and is free of all foreign matter. Look at the aviator’s kit bag to ensure that it is present, has not been reversed and the sewn re-enforced portion is facing away from the jumper. Once satisfied with the inspection, stand up in front of your jumper. **(Hollywood jumpers will automatically recover.)**

### **UNIVERSAL STATIC LINE:**

Reach across your body with your right hand and grasp the Universal Static Line Snap Hook. Pull up on the universal static line snap hook to ensure it is that it is secured to the top carrying handle of the reserve parachute, spring opening gate facing towards the jumper. Open the right hand and let the universal static line snap hook rest in the palm. Place the index finger of the left hand on the girth hitch of the universal static line. Ensure the green marking stitching is present and the girth hitch is properly routed around the narrow portion of the universal static line snap hook. With your left index finger trace down the universal static line snap hook until your left index finger makes contact with the rivet pin, ensure it is secure and free of rust and corrosion. With the right hand, re-grasp the universal static line snap hook and hold it perpendicular to the reserve parachute with the spring opening gate facing toward the jumper. With the left hand, palm facing the jumper, thumb pointing downward, grasp the universal static line just above the universal static line snap hook. Rotate the universal static line down and to the jumper’s right and push it toward the universal static line snap hook. Inspect the inside of the girth hitch for the first time to ensure it is free of all cuts frays and burns. With the index finger or thumb of the right hand push the girth hitch back towards the universal static line snap hook and again inspect the inside the girth hitch for the second time for any cuts frays or burns. Redress the girth hitch down around the narrow portion of the universal static line snap hook and release the universal static line with the left hand. Since the universal static line is routed over the jumper’s right shoulder, with the index finger and thumb of the right hand, form an “O” around the universal static line just above the universal static line snap hook, you should see metal. Raise the right hand up simultaneously inspecting the universal static line as it passes through the “O” formed by the right hand to ensure that it is free of all cuts, frays, and burns. When the right hand has been raised as high as it can go issue the jumper the command **“TURN.”** Once the jumper has completed the turn, the right hand should have been raised high enough so as to pull all of the slack from the static line slack retainer. Keep the universal static line tight between the control hand and the first stow, place the index finger, or index finger and the middle finger of the working hand behind the universal static line below the control hand so there is skin to skin contact. Trace the universal static line down to the first stow insuring that it is free of all cuts, frays, and burns and it has not been misrouted under or through either riser assembly. With either hand, form a bight in the universal static line and look at the static line slack retainer. Ensure the static line slack retainer it is not cut, torn or frayed more than 50%, if it is it renders the parachute unserviceable and must be turned in. Then insert the bight from top to bottom through the static line slack retainer and pull all excess universal static line through. Flip the bight on top of the pack tray and place either hand on it. The hand that controls the bight becomes the control hand. With the index finger and thumb of working hand pinch off the first stow and pull it one or two inches toward the center of the pack tray. Look behind the stow to ensure that the universal static line has not been misrouted around the static line stow bar and it is free of cuts, frays, or burns. Release the first stow and let it pop back into place. Insert the index finger of the working hand from bottom to top behind the first strand of universal static line as close as possible to

the first stow. Trace the first strand of universal static line over to the second stow to ensure that it is free of all cuts, frays, and burns. Once contact is made with the second stow, pinch it off with the index finger and thumb of the working hand pull it one to two inches toward the center of the pack tray and conduct the same inspection. Place the index finger or thumb of the working hand behind the second strand of universal static line and trace it away from you insuring it is not cut, frayed, or burned. Continue to inspect the universal static line in the same manner all the way down to the pack opening loop insuring that you inspect the last strand of static line with the index finger only and the last strand of universal static line is routed from the right outer static line stow bar.

Note: When tracing towards yourself, you must use the index finger only.

### **PACK OPENING LOOP; PACK CLOSING LOOPS, PACK CLOSING TIE:**

Once contact is made with the pack opening loop, ensure that it is situated between the pack closing loops at the 6 and 9 o'clock position. Insert the index finger of the working hand from bottom to top into the pack opening loop. Pull down and out on the pack opening loop, look inside the pack opening loop to ensure the pack closing tie has been routed through the pack opening loop and that the pack opening loop is not torn or frayed at all. Let the pack opening loop pop off your finger. Place the index finger of the working hand on the pack closing loop at the 6 o'clock position. Look at the pack closing loop to ensure the pack closing tie is routed through the pack closing loop and the pack closing loop is not cut, torn or frayed more than 50% at the looped portion. Inspect the remaining pack closing loops in the same manner using a clockwise motion, 9 o'clock, 12 o'clock, and 3 o'clock. If the universal static line is covering either of the pack closing loops it must be moved by the index finger of your working hand so it does not impede your inspection. Look at the pack closing tie and the surgeon's knot locking knot. Ensure the surgeon's knot locking knot is properly positioned between the pack closing loops at the 3 and 6 o'clock position. Insert the index finger of working hand from bottom to top behind the surgeon's knot locking knot and pull down and out, to ensure it is secure and that the pack closing tie has been properly constructed of one turn and one turn only of ¼ inch cotton webbing. Let the pack closing tie pop off the end of your finger. Drop both hands and stand up behind your jumper.

### **ADVANCED COMBAT HELMET (REAR):**

Place both hands on the left side of the Advanced Combat Helmet, fingers and thumbs extended and joined fingers pointing skyward, palms facing the jumper. The left hand is the control hand; the right hand is the working hand. With the working hand trace the rim of the Advanced Combat Helmet feeling for any sharp or protruding edges that may cut or damage the jumper's static line upon exiting the aircraft. Once the hands are parallel place the thumbs on the rim of the Advanced Combat Helmet and tilt the jumper's head forward. Conduct a visual inspection to ensure the oval pads are covering the bolt ends, they are flush with the rim of the Advanced Combat Helmet and the rear trapezoid pad is flush or protruding slightly past the rim of the Advanced Combat Helmet, no more than ½ inch.

Place the right index finger on the rear right adjustable buckle to ensure the rear right adjustable strap is properly routed through it and free of all cracked components and the free running end is secured in the webbing retainer. Now trace the rear right adjustable strap down until contact is made with the long portion chinstrap to ensure it is not twisted cut or frayed. Leave the right index finger in place; now place the left index finger on the rear left adjustable buckle and conduct the same inspection. Leave the left index finger in place. Conduct a visual inspection of the nape pad to ensure it is present, secure, serviceable, and has not been reverse.

### **RISER ASSEMBLIES:**

Reach as far forward over the jumper's shoulders as possible and with each hand grasp a riser assembly, thumbs down, knuckles skyward, just above the canopy release assemblies. Since these are like items of equipment, either riser assembly can be inspected first, however for this talk through we will begin the inspection with the left riser assembly. Give the left riser assembly a sharp **TUG** to the rear. **OPEN** the left hand to form an "L". Apply upward pressure with the left thumb and **TRACE** the riser assembly rearward to where it disappears into the main pack tray, ensuring it is not twisted, cut, or frayed. Leave the left hand in place and with the right hand conduct the same inspection on the right riser assembly. You must ensure an Army Parachute Log Record is present in either riser assembly.

## PACKTRAY:

An overall inspection of the pack tray must be conducted to ensure the pack tray is free of grease, oil, dirt, mud, or tears. Place both hands on the top left corner of the pack tray, palms facing the pack tray, fingers and thumb extended and joined. The left hand is the control hand and the right hand is the working hand. Ensuring the pinkie finger leads the way. With the head and eyes 6 to 8 inches away from the working hand trace across the top pack closing flap, down the right pack closing flap, across the bottom pack closing flap, as you trace the bottom pack closing flap ensure you lower your head so you are able to see the bottom, flip the right hand over and trace up the left pack closing flap. When the working hand makes contact with the control hand, raise the control hand out of the way and trace across the top left corner of the pack tray where the control hand had been. Form knife-edges with both hands, palms facing the jumpmaster and issue the command “**ARCH YOUR BACK**”.

## DIAGONAL BACKSTRAPS:

Insert each hand under the X formed by the diagonal back straps. Look at the diagonal back straps to ensure they have been properly routed over the appropriate shoulder, and that the top diagonal back strap has one more row of exposed stitching than the one on the bottom. Look at the diagonal back strap retainers to ensure they are routed through the sizing channels on the diagonal back straps. The diagonal back strap retainers are routed around the diagonal back strap keepers and the pull the dot fasteners are secured. To further ensure the pull the dot fasteners are secure, with both thumbs; **PLUCK** the tab portion on the pull the dot fasteners upward. (**Instructors go and make sure that all students understand Plucking, PLUCK certified**) Focus your attention on the left hand and the left side of your jumper. With the left hand, trace down the diagonal back strap to the back strap adjuster, insuring that it is not twisted, cut, or frayed. Grasp the back strap adjuster with the left hand and focus your attention on the right side of your jumper. With the right hand, trace down the diagonal back strap, ensuring it is not twisted, cut or frayed, bypass the back strap adjuster and pick up the inspection of the horizontal back strap.

## HORIZONTAL BACKSTRAPS:

Trace the horizontal back strap down to where it disappears into the main lift web, ensuring that it is not cut or twisted and the excess webbing is secured in the webbing retainer. Withdraw the right hand from under the horizontal back strap, and reinsert it, fingers and thumb extended and joined, fingers pointing skyward, palm facing the jumpmaster, from bottom to top behind the horizontal back strap where it reemerges from the main lift web, your index finger should make contact with the main lift web, once the index finger has made contact with the main lift web, issue the jumper the command “**BEND.**” Place your left shoulder on the bottom pack closing flap and push up on the bottom of the pack tray. Simultaneously, with your left hand pull down on the back strap adjuster. With your head and eyes approximately six to eight inches away trace the horizontal back strap across the small of the jumper’s back, until your right pinkie finger makes contact with the main lift web on the jumpers left side.

You’re inspecting the horizontal back strap to ensure that horizontal back strap is not twisted, cut or frayed, and that the horizontal back strap retainer is routed under and over the horizontal back strap keeper and secured to itself with a pull the dot fasteners and that nothing is misrouted behind the horizontal back strap

Now remove your right hand from behind the horizontal back strap form a knife cutting edge fingers extended and joined and insert it from outside to inside or inside to outside where the horizontal back strap re-emerges just above the waistband adjuster panel on the jumpers left side. Trace up the horizontal back strap until your right hand makes contact with your left hand which should still be in place around the back strap adjuster on the jumpers left side, inspecting the horizontal back strap ensuring that it is not twisted, cut, or frayed, and that the excess webbing is secured inside the webbing retainer and that nothing is misrouted behind the horizontal back strap

Withdraw the right hand from behind the horizontal back strap and get left hip to left hip with the jumper.

## SADDLE:

Place the finger tips of the right hand, fingers and thumb extended and joined, fingers pointed down, palm facing the jumper just below the triangle link on the single box “X” stitch under the left triangle link. Trace the saddle across the

jumper's buttocks insuring that the saddle is not twisted, cut, frayed, been inverted, or that neither leg strap has been misrouted around the saddle. Trace the saddle until contact is made with the single box "X" stitch under the right triangle link. Reach back and get a hand full of air and issue the jumper that good seal of approval by tapping the jumper on the buttocks, and issue command of "**RECOVER**".

# **T-10 Combat Equipment JMPI Sequence**

## **TC 3-21.220 Chapter 9**

### **COMBAT EQUIPMENT:**

The inspection of a combat equipped jumper is the same as the Hollywood jumper down to the waistband, so the jumpmaster will start the inspection at the waistband. Place the right hand behind the ejector snap of the chest strap, right thumb in place on the activating lever. Move to the right side of the jumper. Insert the left hand, fingers and thumb extended and joined, fingers pointing skyward, palm facing the jumpmaster, from bottom to top behind the waistband next to where it is sewn into the pack tray. Look at the waistband where it is sewn into the pack tray to ensure that at least 50% of one row of stitching is present. Trace the waistband forward, insuring it is not twisted, cut, frayed, or been misrouted behind the horizontal back strap. Continue tracing the waistband forward until contact is made with the right D-ring. Look at the waistband to ensure it is routed over the right main lift web and under the right D-ring. Rotate the right hand down and grasp the top carrying handle of the reserve parachute, palm facing the reserve, knuckles skyward. Simultaneously lift up and out on the reserve parachute and place the left hand in the center of the jumper's chest, palm facing the jumper. Look at the waistband where it is routed behind the reserve parachute to ensure it is properly routed through both waistband retainers and is not twisted, cut, or frayed. Withdraw the left hand from the jumper's chest, reach under your right forearm and insert your left hand into the left carrying handle of the reserve parachute, palm facing away from the reserve with your fingers spread. With the right forearm, push out on the lead edge of the M1950 weapons case for the first time. Look at the waistband to ensure it is routed over the left main lift web and under the left D-ring. With the right hand, grasp the trail edge of the M1950 weapons case and pull it forward. Insert the right hand, fingers and thumb extended and joined, fingers pointed skyward, palm facing the jumpmaster, from bottom to top behind the metal adjuster. Remove the left hand from the left carrying handle of the reserve parachute and insert the index finger and middle finger of the left hand from top to bottom into the quick release formed by the waistband. Ensure that it is no more than three fingers, no less than two, and that it is not a false quick release. Remove the index finger and middle finger from the quick release and with the index finger and thumb of the left hand pinch off the free running end of the waistband where it comes out of the metal adjuster. Trace the free running end of the waistband until the fingers fall off the end, insuring it is not cut, torn, or frayed and is easily accessible to the jumper, exaggerating your trace. Reinsert the left hand into the left carrying handle of the reserve parachute with the palm facing away from the reserve parachute with fingers spread. Look back at the right hand, which should still be behind the metal adjuster and trace the waistband adjuster panel back to where it is sewn into the pack tray insuring that it is not twisted, cut, or frayed. Look at the waistband adjuster panel where it is sewn to the pack tray and ensure that at least 50% of one row of stitching is present. Maintain control of the left carrying handle with the left hand, remove your right hand and move back to the front of the jumper. With the right forearm, push out on the lead edge of the M1950 weapons case for the second time.

### **M1950 WEAPONS CASE:**

The M1950 weapons case will be inspected in its entirety prior to inspecting the reserve parachute. The inspection of the M1950 weapons case begins with its point of attachment, the quick release snap, on the left D-ring. Look at the opening gate of the quick release snap to ensure that the opening gate is facing the jumper's body and it is the outermost item on the left D-ring unless the harness is not equipped with the triangle links. With the right index finger, finger the opening gate one time to ensure that it is properly attached to the left D-ring, it has spring tension and it has not been safe-tied. With the heel of the right hand press up on the activating arm of the quick release snap to ensure that it is seated between the ball detents. With the index finger of the right hand, trace down until contact is made with the V-ring. Ensure the quick release link is routed through the V-ring, and the rotating claw secures the quick release link. Continue to trace down the inside of the M1950 weapons case until contact is made with the adjusting strap. Ensure the adjusting strap is routed through the appropriate set of adjusting strap connectors, secured by means of a half hitch and is not twisted, cut or frayed. Continue tracing down the adjusting strap to where it is sewn to the M1950 Weapons Case. Form a knife cutting edge with your right hand, palm facing skyward and trace from front to rear along the bottom of the M1950 weapons case to ensure the muzzle of the weapon is not protruding. Place the index finger of the right hand on the slide fastener at the bottom of the closing flap. Ensure the slide fastener is secure by tracing up the outside of the M1950 weapons case. Bypass the lower tie down strap and continue to trace up to the vicinity of the lift fastener inspecting to

ensure all teeth are engaged. With the index finger of the right hand, secure the tab thong portion. Pull down and out to ensure the slide fastener and tab thong is secured by the upper tie down tape or been separated over the lift fastener, never both. **(However, while here at this Jumpmaster Course it will be secured by Upper tie down tape)** Drop the right hand down 10 to 12 inches from the top of the M1950 weapons case and give it a sharp slap, feeling for the forward assist of the M4/M16 series rifle or the charging handle of the M249 SAW. **(Allow Jumpmasters time to find the forward assist/charging handle)** With the index finger and thumb of the right hand, pinch off the single or double loop bowknot of the upper tie down tape on the lead edge of the M1950 weapons case. Visually inspect the upper tie down tape to ensure it is properly routed behind the M1950 weapons case, around the main lift web, above the chest strap, and secured by a single or double looped bowknot. This concludes the inspection of the M1950 weapons case. With the left hand, grasp the top carrying handle of the reserve parachute palm facing the reserve parachute and lift up and out. Inspect the reserve parachute in the same manner as if it were on a Hollywood jumper all the way until you issue the jumper the command of **"HOLD."**

### **MOLLE RUCKSACK:**

Now you will begin the inspection of the Harness Single Point Release beginning with the adjustable D-ring attaching straps. These are like items of equipment so either one can be inspected first, however for the purpose of this talk through you will begin with the right adjustable D-ring attaching strap. 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 ensure 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. With the index finger of the left hand, finger the opening gate one time to ensure that it is properly secured to the right D-ring, and it has spring tension. With the left thumb flip the free running end of the right adjustable D-ring attaching strap out of the way. Place the index finger of the left hand on the front of the right adjustable D-ring attaching strap just below the snap hook. Trace down the right adjustable D-ring attaching strap until contact is made with the triangle link, insuring that the right adjustable D-ring attaching strap is not twisted cut, or frayed. Bypass the triangle link and pick up the inspection of the white attaching loop in front of the triangle link. With the left index finger, trace down the attaching loops to ensure that the white attaching loop is routed from bottom to top through the triangle link, the green attaching loop has been 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, and routed from bottom to top through the grommet in the female portion leg strap release assembly. Place the index finger of the left hand on the single box "X" stitch on the release handle cross strap. Look at the release handle cable where it emerges from the release handle cross strap. Ensure the release handle cable is properly routed through the red attaching loop and secured by the cable loop retainer. Leave the left index finger in place and with your right hand; conduct the same inspection on the left adjustable D-ring attaching strap until your right index finger rests on the single box "X" stitch. Now focus your attention on the release handle. With the right index finger and thumb, index finger on top, thumb on the bottom lift up gently on the release handle. Ensure the release handle is properly routed between the two plies of the release handle cross strap and secured by the hook pile tabs. Now form a hook with your right index finger and lift up on the release handle lanyard, to ensure it is not twisted or misrouted around the equipment retainer strap. Place your right index finger back on the single box "X" stitch. Trace the equipment retainer straps down the outside of the pouch of the MOLLE Rucksack until you make contact with the adjustable cross strap. Leave your left index finger in place and with the index finger and thumb of the right hand grasp the free running end of the adjustable cross strap and give it a tug to the jumper's left, insuring that all the slack has been removed from the adjustable cross strap. Now place your right index finger back on the single box "X" stitch and continue to trace the equipment retainer straps down until your fingers fall off. Now secure the sides of the MOLLE Rucksack and raise it to eye level and look at the equipment retainer straps to ensure they are routed through the slots at the top corners of the MOLLE Rucksack frame and have not been twisted. Raise the MOLLE Rucksack to the jumper and issue the command **"HOLD"**.

**(Jumpers you will secure the top of the MOLLE Rucksack, and hold it up high.)** You will continue your inspection of the equipment retainer straps as they route through the Adjustable Shoulder Carrying Straps. Ensure the equipment retainer straps are routed over the comfort pad and form an "X" configuration on the rear of the MOLLE Rucksack and are not twisted, cut or frayed. 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 ensure it is routed north to south, south to north, never east to west. 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 ensure 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 ensure they are routed through the oval cutouts at the base of the MOLLE Rucksack frame. With the index finger of each hand, lightly tap them to ensure the S-folds are secure. Now with the thumb and index fingers of each hand, form an "O" around the base of the adjustable shoulder carrying straps. Simultaneously pull out to ensure they are properly secured to the MOLLE Rucksack frame. Visually inspect the free running ends of the adjustable shoulder carrying straps to ensure 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 adjustable shoulder carrying straps to ensure the S-folds are secure.

### **HOOK, PILE, TAPE LOWERING LINE:**

With the index finger of your right hand place it on the Hook Pile Tape Lowering line just to the right of the girth hitch. You will visually inspect to ensure the girth hitch is vertical. With your right index finger trace the Hook Pile Tape Lowering line ensuring that the Hook Pile Tape Lowering line is properly routed over the left adjustable shoulder carrying strap until you make contact with the first hook pile tabs. Visually inspect to ensure the hook pile tabs are present and secured and there are no S-folds protruding from the end of the retainer flap. Continue to inspect down the retainer flap ensuring that it is secured to the MOLLE Rucksack frame by two sets of girth hitched retainer bands on either end of the retainer flap. Continue to trace down until you make contact with the second set of hook pile tabs, once again ensure they are present and secured and there are no S-folds protruding from the end of the retainer flap. Continue to trace the Hook Pile Tape Lowering line until your hand disappears behind the M1950 Weapons case. Visually inspect to ensure the Hook Pile Tape Lowering line is properly routed between the main body of the M1950 Weapons Case and the 1 ply of reinforced nylon webbing. Route your left hand over your right forearm and secure the trail edge of the M1950 Weapons case. Remove your right index finger place it back on the Hook Pile Tape Lowering line where it reemerges from the M1950 Weapons Case. Continue to trace up until you make contact with the ejector snap ensuring it is secured to the triangle link. With the right thumb press in on the activating lever to ensure that it is properly seated over the ball detent and free of all foreign matter and the opening gate is facing the jumper. Turn the ejector snap ¼ turn out to ensure the small tooth is present. Visually inspect the yellow safety lanyard to ensure that it is serviceable and it has not been wired, tied, or taped down. Drop both hands and move back to the front of the jumper and issue the command "**SQUAT**".

Now insert the index and middle fingers of both hands behind the leg straps just under the aviator's kit bag where the natural pocket is formed 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. Ensure that the excess webbing is secured in the webbing retainer. Continue tracing until you reach the quick-fit V ring. Rotate your left thumb up and seat the activating lever and conduct a visual inspection to ensure that it is free of any foreign material. 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. Ensure 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 fingertip to metal contact. 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 straps and seat it. Conduct a visual inspection to ensure that it is free of any foreign material 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 MOLLE Rucksack and issue the command of "**RECOVER**". (Jumpers pick up on the reserve parachute and jumpmasters simply allow the MOLLE Rucksack to rotate between your body and the jumper's body.)

Inspection continues in the same manner as a Hollywood jumper.