

SECTION 1

PERSONNEL AIRDROP PROCEDURES

TABLE OF CONTENTS

<u>PARAGRAPH</u>	<u>TITLE</u>	<u>PAGE</u>
7-1.1	GENERAL	7-1-1
7-1.2	DESCRIPTION OF PERSONNEL AIRDROP	7-1-1
7-1.3	PARATROOP SEATS	7-1-1
7-1.4	SPECIFIC EQUIPMENT FOR PERSONNEL AIRDROP	7-1-1
7-1.4.1	Anchor cables	7-1-1
7-1.4.2	Jump platforms	7-1-2
7-1.4.3	Retrieval pulley	7-1-2
7-1.4.4	Retrieval bars.....	7-1-2
7-1.4.4.1	<u>PARATROOP DOOR RETRIEVAL BAR</u>	7-1-2
7-1.4.4.2	<u>RAMP RETRIEVAL BAR</u>	7-1-2
7-1.4.5	Safety harness attaching rings	7-1-2
7-1.5	PERSONNEL AIRDROP RESTRICTIONS.....	7-1-3
7-1.6	AIRCRAFT PREPARATION FOR PERSONNEL AIRDROP AMPLIFIED CHECKLIST	7-1-3

LIST OF FIGURES

7-1-1 Configuration for personnel airdrop (49 paratroopers) 7-1-7

7-1-2 Jump platform 7-1-8

7-1-3 Retrieval pulleys 7-1-9

7-1-4 Towed paratrooper retrieval bar (paratroop door)..... 7-1-10

7-1-5 Towed paratrooper retrieval bar (ramp) 7-1-11

7-1-6 Static line retrieving spool..... 7-1-12

7-1-7 Safety harness attaching rings 7-1-13

SECTION 1

PERSONNEL AIRDROP PROCEDURES

7-1.1 GENERAL

This section contains specific information for preparing the aircraft for airdrop of static line parachutists. A list of specific equipment required for the airdrop of personnel, and a diagram showing personnel arrangement in the cargo cabin are also included.

7-1.2 DESCRIPTION OF PERSONNEL AIRDROP

The aircraft has up to 50 seats for the airdrop of paratroopers, including jump masters. Personnel airdrop may be conducted through the paratroop doors, or ramp and cargo door (tailgate). At the appropriate in-flight warning, paratroopers stand up, secure their seats in the vertical position, and hook up their static lines to the anchor cables. After the aircraft slows down to drop speed and jump masters have checked all paratroopers for proper attachment of static lines, appropriate aircraft exits (paratroop doors or ramp and cargo door) are opened. At release point, the green light is activated, and paratroopers exit the aircraft. Parachutes are pulled out of their D-bags, and then deploy thanks to the paratrooper's weight supported by the anchor cable through the static line (automatic opening). Once all paratroopers have exited the aircraft and towed paratrooper checks have been completed, static lines and parachute deployment bags are retrieved into the aircraft by means of the cargo winch.

7-1.3 PARATROOP SEATS

Paratroopers are accommodated on sidewall seats until actions are initiated at the appropriate in-flight warning. Figure 7-1-1 depicts arrangement of paratroopers on board for maximum capacity (50 parachutists, including jump masters). Seat spacing (54 cm, 22 in.) allows room for a fully-equipped paratrooper (individual weapon, main and reserve parachutes, and personal rucksack).

NOTE: Install sidewall seats in accordance with CHAPTER 3 - AIRCRAFT CONFIGURATION.

7-1.4 SPECIFIC EQUIPMENT FOR PERSONNEL AIRDROP

The following items are used for the airdrop of paratroops through the paratroop doors and/or ramp and cargo door:

7-1.4.1 Anchor cables

For the airdrop of static line parachutists, anchor cables are installed as outlined in CHAPTER 3 - AIRCRAFT CONFIGURATION. When paratroopers are to tailgate, the anchor cables are installed in the lateral configuration. For airdrop through the paratroop doors, the anchor cables are installed in the central configuration. In the central configuration, the anchor cables are routed through the overhead support brackets at FR29. In both cases, static line retrieving spools (see Figure 7-1-6) are secured with a single turn of 80 lb cord.

NOTE: Static line stops are not required for personnel airdrop. (See paragraph 3.13.1)

NOTE: For the airdrop of parachutists using manually-opened parachutes, the anchor cables are not required.

7-1.4.2 Jump platforms (see Figure 7-1-2)

During paratroop operations using the paratroop doors, jump platforms are installed to provide good footing for the parachutists as they exit the aircraft. Jump platforms are covered with nonskid material, and are attached to the outboard cargo floor restraint tracks. Hinges in jump platforms allow to keep them folded until the paratroop doors are opened in flight.

7-1.4.3 Retrieval pulley (see Figure 7-1-3)

Retrieval pulley is used to route the winch cable from the winch position, at the forward section of the cargo cabin, to the static line retrieving spool, for the retrieval of static lines and parachute D-bags and/or a fouled parachutist. Pulley is installed in the forward right anchor cable attaching point (STA 5644), whether the airdrop is to be accomplished through the paratroop doors or ramp and cargo door.

WARNING: DURING THE ASSEMBLY, CHECK THAT THE CABLE OF THE WINCH REMAINS CORRECTLY INTO THE GUIDE OF THE RETRIEVAL PULLEY.

When preparing on ground the equipment for the airdrop, route the winch cable through the retrieval pulley. Extend the winch cable over the floor to the appropriate length, so as ensure it will be immediately available when needed. Secure the winch cable to the floor with 80 lb cord, one turn single. When it is required to use the winch, attach the retrieval pulley to the forward right anchor cable attaching point.

7-1.4.4 Retrieval bars

Retrieval bars are used in conjunction with the aircraft winch. They serve as a support point over which a towed paratrooper is retrieved on board in the event of such emergency situation arises following a troop or ramp drop. The use of retrieval bars greatly reduces the friction between the retrieving spool and the anchor cable during retrieval by allowing a straight line pull.

7-1.4.4.1 PARATROOP DOOR RETRIEVAL BAR (see Figure 7-1-4)

The paratroop door retrieval bar is stowed in vertical position between FR32 and FR33, just backward of the right paratroops door. The bar is installed in flight by means of pip pins inserted into holes at the paratroop door frame located, approximately, 1 m high above the cargo floor.

7-1.4.4.2 RAMP RETRIEVAL BAR (see Figure 7-1-5)

The ramp retrieval bar is stowed in horizontal position between FR33 and FR40, left side. For in-flight installation, the bar is hinged on its aft attaching point; the bar is released from its forward attaching point, and then rotated to a symmetrical point at FR40, right side. The bar has a teflon cylinder, over which the static line of the towed paratrooper is supported.

NOTE: To move the ramp retrieval bar to its stowed position, the teflon cylinder must be previously positioned on the opposite side of the hinged end (forward end when the bar is stowed).

7-1.4.5 Safety harness attaching rings (see Figure 7-1-7)

For attachment of the life line of the loadmaster's safety harness, a set of three rings are installed on the ramp floor centerline. One of these rings is located on STA 17460, forward of FR31, and the remaining two on STA 17639, aft of FR31. When not in use, these rings are folded into their recesses and are flushed with the ramp floor.

WARNING: DO NOT FASTEN TIEDOWN DEVICES TO THE SAFETY HARNESS ATTACHING RINGS. THESE RINGS ARE NOT USABLE FOR CARGO RESTRAINT.

7-1.5 PERSONNEL AIRDROP RESTRICTIONS

In-flight procedures, as well as restrictions applicable to personnel airdrop can be found in the Operations Manual, and other Command-approved directives. However, for mission planning purposes and proper aircraft preparation, the following general restrictions shall be taken into account:

WARNING: MIXED AIRDROP SHALL ALWAYS BE CONDUCTED USING RAMP AND CARGO DOOR. DO NOT PERFORM AIRDROP THROUGH RAMP AND CARGO DOOR AND ONE OR BOTH PARATROOP DOORS AT THE SAME TIME.

WARNING: NO MORE THAN 24 STATIC LINE PARACHUTISTS SHALL BE DROPPED PER ANCHOR CABLE ON A SINGLE PASS.

WARNING: DO NOT TAILGATE PARATROOPERS WITH THE ANCHOR CABLES INSTALLED IN THE CENTRAL CONFIGURATION.

WARNING: DO NOT DROP PERSONNEL THROUGH BOTH PARATROOP DOORS AT THE SAME TIME WHEN MANEUVERABLE PARACHUTES ARE USED. AFTER THE FIRST STICK HAS EXITED THE AIRCRAFT USING ONE DOOR, AND FOULED-PARACHUTIST CHECKS ARE COMPLETED, JUMP CAN START FROM THE OPPOSITE DOOR.

WARNING: AIRDROPPING PERSONNEL THROUGH BOTH PARATROOP DOORS AT THE SAME TIME IS ONLY PERMITTED WHEN NON-MANEUVERABLE PARACHUTES ARE USED. AS IN THIS EVENT CANOPY INTERFERENCE CANNOT BE PRECLUDED, IT IS RECOMMENDED TO CONDUCT DROPPING IN AN IMMEDIATE SEQUENTIAL WAY, COORDINATING BOTH STICKS TO ALTERNATE THE EXIT THROUGH EACH PARATROOP DOOR, ONE PARATROOPER AT A TIME.

WARNING: WHEN AIRDROPPING PERSONNEL OVER THE RAMP, ONLY ONE ANCHOR CABLE (LEFT OR RIGHT) WILL BE USED PER PASS FOR PARATROOPERS. AFTER ONE PARATROOPER STICK HAS JUMPED USING ONE ANCHOR CABLE, THEIR DEPLOYMENT BAGS MUST BE RETRIEVED, OPPOSITE ANCHOR CABLE WILL BE RIGGED FOR STATIC LINE RETRIEVAL, AND THEN A SECOND STICK MAY JUMP.

7-1.6 AIRCRAFT PREPARATION FOR PERSONNEL AIRDROP AMPLIFIED CHECKLIST

The following amplified checklist summarizes information presented in preceding paragraphs, relative to seat and anchor cable installation, and provides a step-by-step guide for the preparation of the aircraft for the mission.

Intentionally Left Blank

PREPARATION FOR PERSONNEL AIRDROP

NOTE: Perform applicable items from this list for personnel through the paratroop doors, ramp, or mixed airdrop.

1. Paratroop doors.....CHECKED
 - A. Open and close both paratroop doors to ensure they work properly.
2. Winch operation.....CHECKED
3. General preparation for ramp and cargo door airdrop checklist.....
.....COMPLETE (If required)
4. CHADS restraint rail sections REMOVED (If required)
 - A. If paratroop doors are to be used, remove and stow appropriate CHADS sections IAW paragraph 3.12.3.
5. Roller conveyor trays REMOVED (As required)
 - A. Remove intermediate roller conveyor trays, as required, to allow a clear cargo floor for parachutists' movement.
6. Sidewall seats.....INSTALLED (As required)
7. Jump platforms and inboard paratroop door area
.....INSTALLED, CHECKED (If required)
 - A. Install one or both jump platforms, as required.
 - B. Check cargo floor around paratroop doors is clear of grease.
 - C. Check inboard frame of paratroop doors for sharp edges.
8. Anchor cables..... CHECKED, INSTALLED (As required)
 - A. Check condition of anchor cables IAW Figure 3-17.
 - B. Check condition of forward and aft cable attaching points.
 - C. Install anchor cables for paratroop door (central configuration), or ramp (lateral configuration), IAW CHAPTER 3 - AIRCRAFT CONFIGURATION.
9. Anchor cable stops and retrieving spools.....REMOVED, SECURED (As required)
 - A. Anchor cable stops are not required. Remove or position forward of the preplanned position for the static lines.
 - B. Secure retrieving spools against the center anchor cable supports located at FR29 (paratroop door exit) or aft anchor cable attaching points (tailgate) with 80 lb cotton cord, one turn single.
 - C. Route winch cable through the forward pulley assembly, extend winch cable IAW paragraph 7-1.4.3 and Figure 7-1-3.

CAUTION: PULLEY THAT SHALL BE INSTALLED ON FORWARD POSITION DOES NOT HAVE BREAK POINT. ENSURE APROPRIATE PULLEY IS USED.

- D. Extend the winch cable as required, and check that winch cable hook can be attached to retrieving spool. Secure with 80 lb cord, one turn single IAW paragraph 7-1.4.3 and Figure 7-1-3.

10. Aircraft exterior inspection ACCOMPLISHED

- A. Check outboard frame of paratroop doors for sharp edges, as required.

11. Ramp area..... CHECKED, CLEAR OF OBSTACLES (If required)

- A. Check that cargo floor at the ramp area is clear of grease.

- B. Remove ramp roller trays.

- C. Remove any item that may interfere with paratroopers exit.

12. Embarking personnel checklist COMPLETE

13. Preparation for Personnel Airdrop Checklist COMPLETE

14. After Loading checklist..... COMPLETE

- A. Refer to the Amplified Loading/offloading checklist contained in chapter 4 for after loading checks.

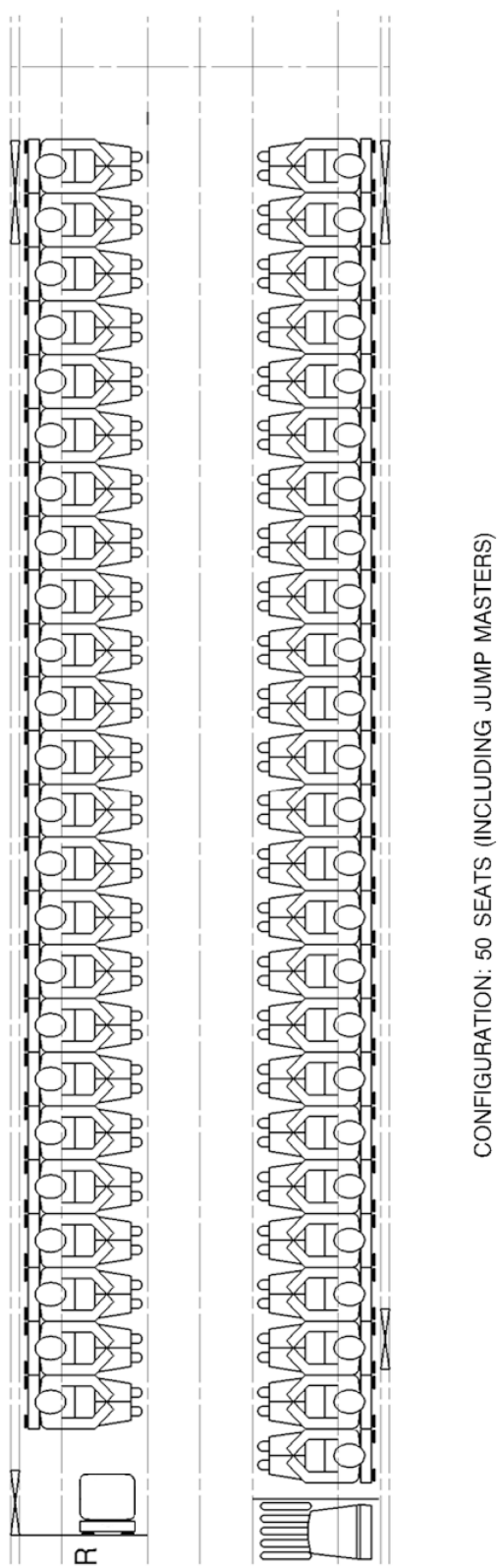


Figure 7-1-1 Configuration for personnel airdrop (49 paratroopers)

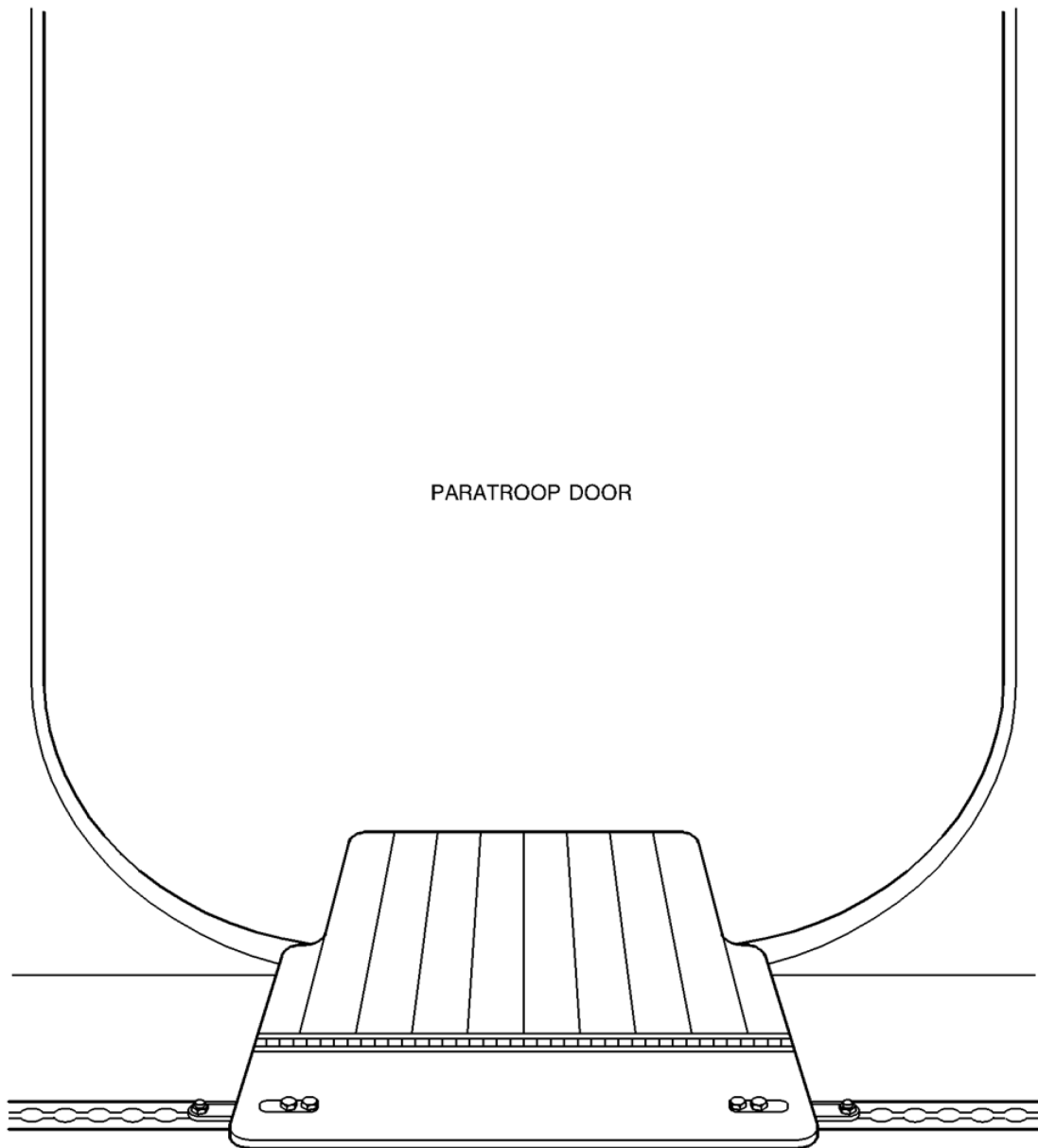


Figure 7-1-2 Jump platform

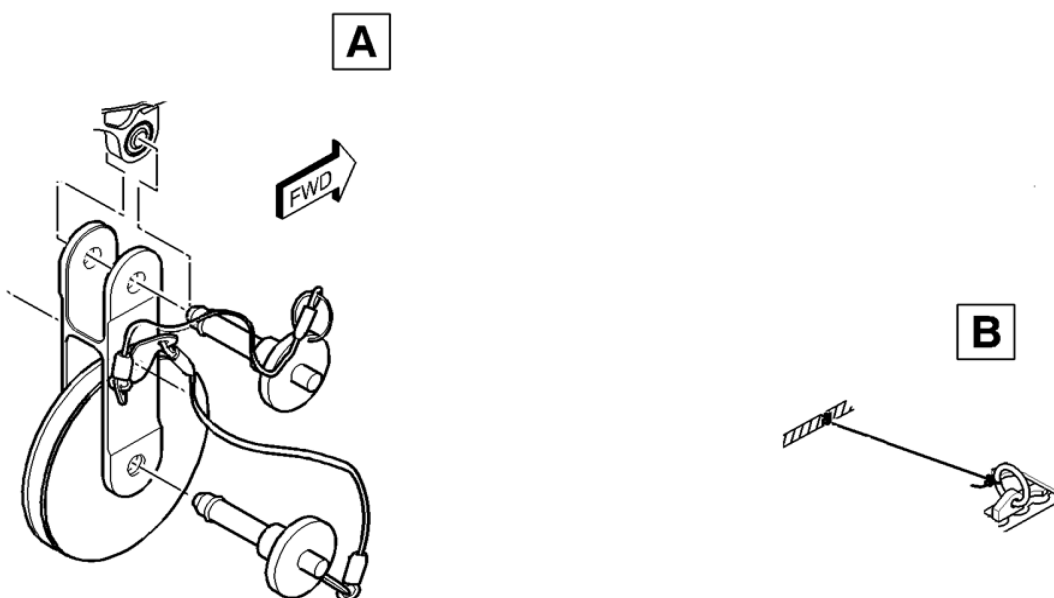
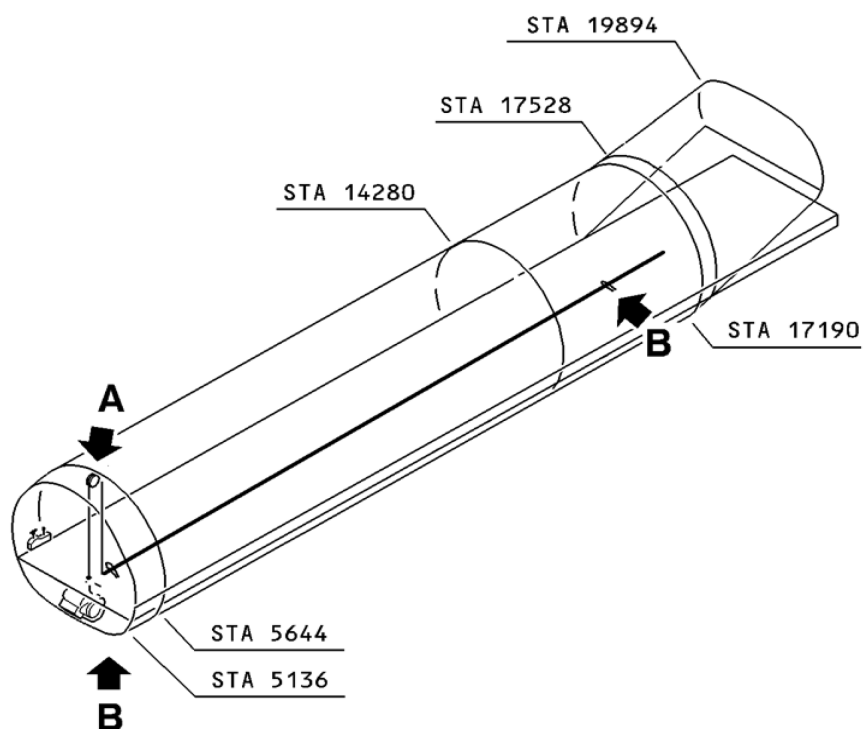


Figure 7-1-3 Retrieval pulleys

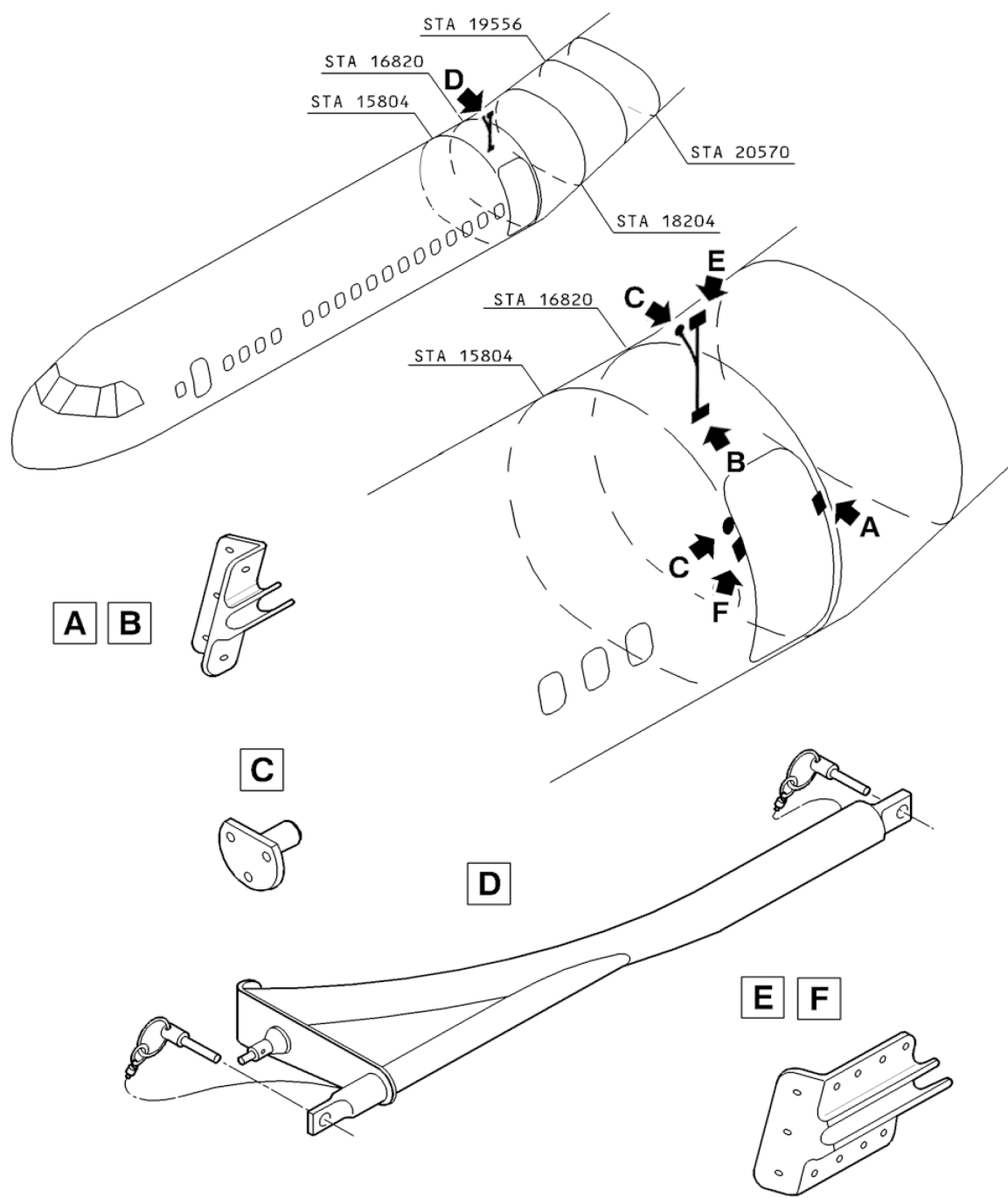


Figure 7-1-4 Towed paratrooper retrieval bar (paratroop door)

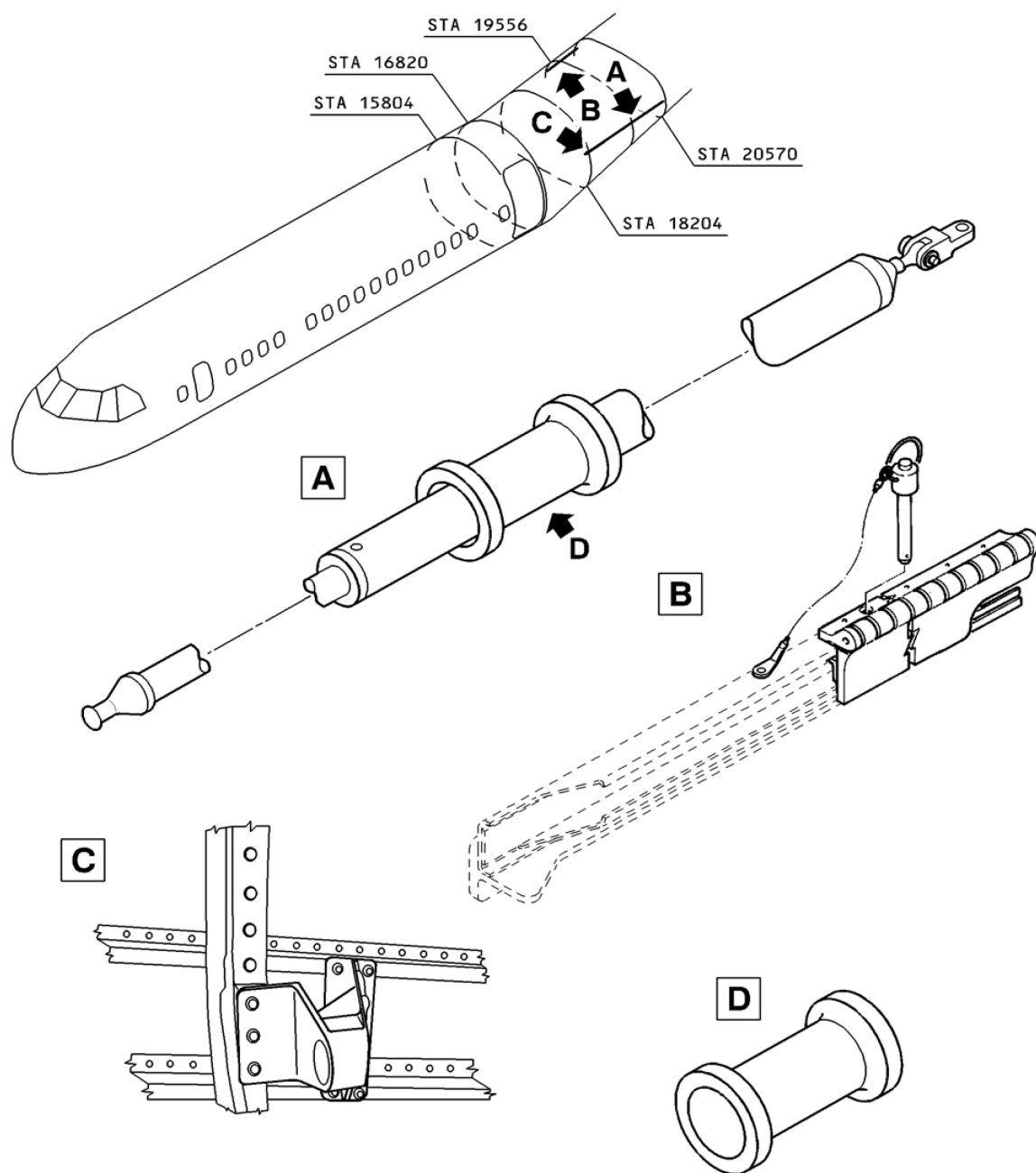
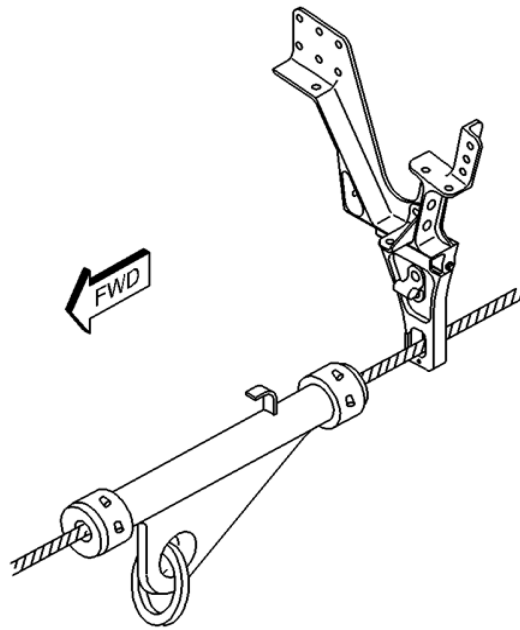
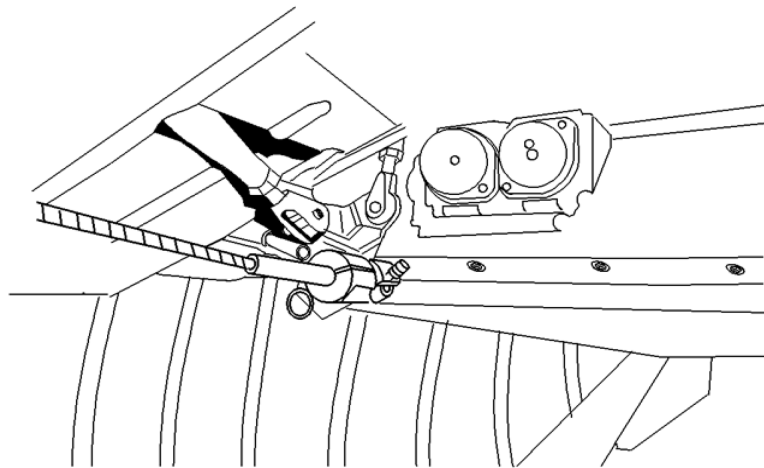


Figure 7-1-5 Towed paratrooper retrieval bar (ramp)

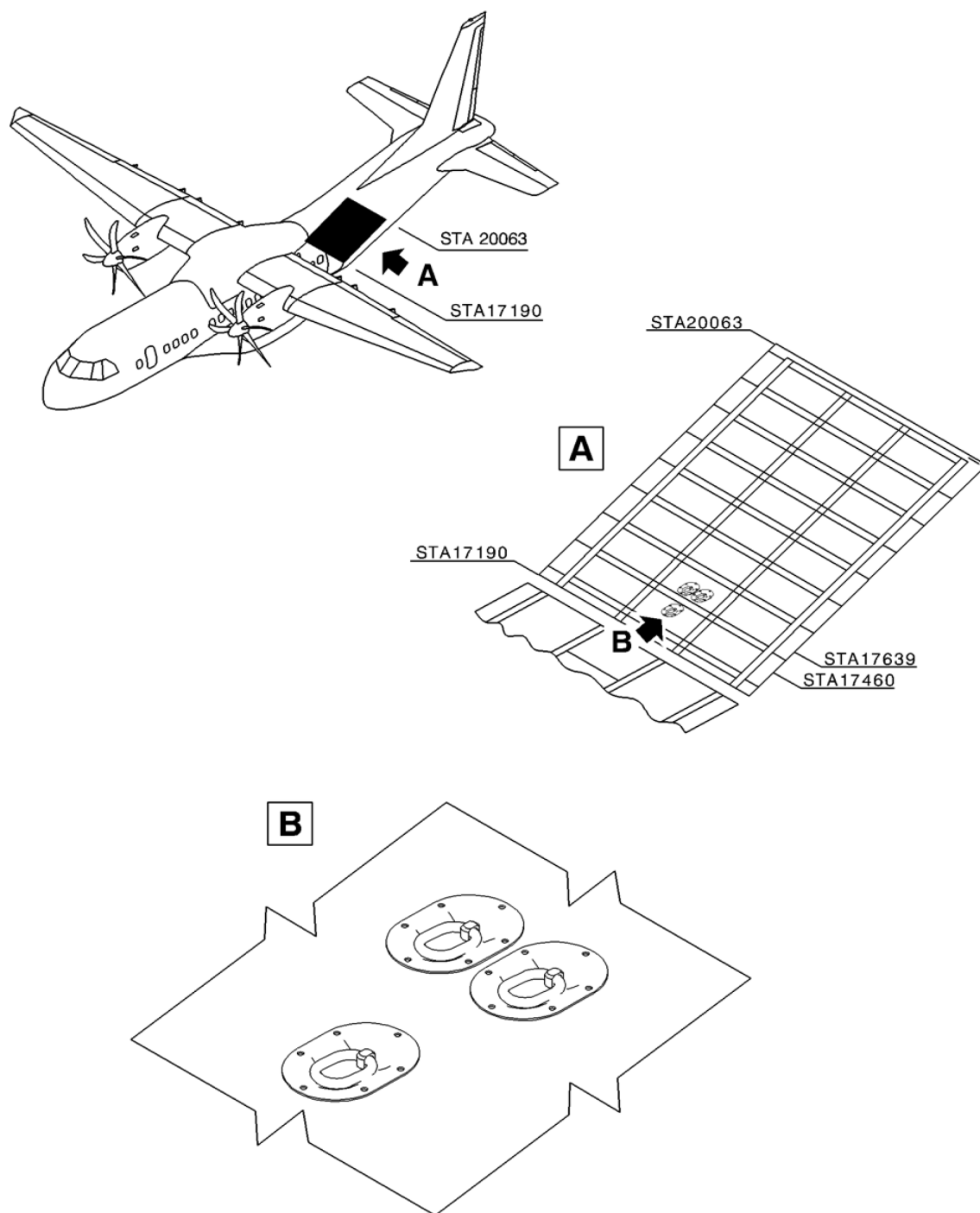


AIRDROP THROUGH PARATROOP DOORS



TAILGATING PARATROOPERS

Figure 7-1-6 Static line retrieving spool



TAILGATING PARATROOPERS

Figure 7-1-7 Safety harness attaching rings

Intentionally Left Blank