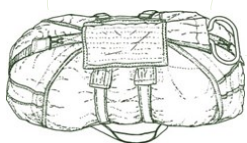
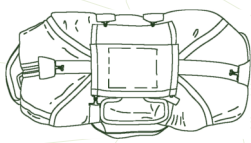


Part number	T-10R	MIRPS
Complete set (NSN)	62C4317-10 (1670-00-892-4218)	11-1-4012-1 (1670-01-420-4256)
Pilot chute	49J7161-2	11-1-6966-1
Canopy	48J7156-3	48J7156-3
Pack tray	62J4346-10	11-1-7360-1
Ripcord assembly	62C4250	11-1-7353-1
Ejector spring assembly	N/A	11-1-4040-1

Specification	T-10R	MIRPS
Canopy shape	Flat circular	Flat circular
Canopy diameter [ft]	24, nominal	24, nominal
Number of gores	24	24
Canopy material	PIA-C-7020 Type I	PIA-C-7020 Type I
Suspension line material	PIA-C-5040 Type III	PIA-C-5040 Type III
Suspension line length [ft]	20	20
Suspension line tensile strength [lbf]	550	550
Time for 360° turn [sec]	3.3	3.3
Assembled weight [lbs]	13.0	13.0
Suspended weight, max. [lbs]	350	350
Deployment altitude, min. [ft. AGL]	500	500
Deployment velocity, max. [KIAS]	150	150
Jump wind speed, max. [kts]	13	13
Rate of descent [fps]	15 - 20	15 - 20



<T-10R>



<MIRPS>



The T-10R, MIRPS parachute is reserve type designed to be activated manually, by means of a ripcord, by the parachutist in the event the primary parachute malfunctions. Both parachute assemblies consist of a flat circular 24-foot diameter canopy, and a pack assembly with ripcord. The 24-foot type troop chest reserve (T-10R) has a spring-actuated umbrella type pilot parachute with bridle line. The modified improved reserve parachute system (MIRPS) has a deployment assistance device activated pilot parachute with bridle line and apex weight.

The 24-foot reserve assembly is intended for use with the 35-foot, T-10 series or MC1 series main assembly. It is not to be used as a primary canopy. In the event that it is needed, it is manually activated through the use of the ripcord. The basic assembly, when packed for service, weight approximately 13-lbs. The packed assembly requires less than 27-lbs manual pull weight on the ripcord handle to activate the spring loaded pilot chute, thereby deploying the reserve canopy instantaneously.

**Difference between models**

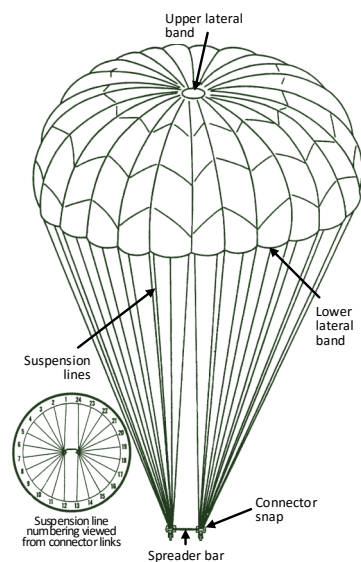
The MIRPS versus the standard 24-foot troop chest reserve (T-10R) is relatively the same parachute with the exception of a few distinguishing features. These features consist of a soft loop center pull ripcord, a deployment system, the pack assembly, and the ripcord grip. The MIRPS deployment system consists of the pilot chute, bridle assembly, and ejector spring assembly. The pack assembly contains a suspension line free bag pouch, upper and lower staging flaps, and a length of yellow binding tape sewn into the ripcord protector flap which aids in the identification of a MIRPS once the pack is complete.

The MIRPS ripcord grip protrudes from the top of the pack tray and the locking system consists of a soft loop system versus metal locking cones.

**Canopy assembly**

The canopy assembly consists primarily of a 24 feet diameter flat circular canopy construction from 1.1 ounces rip-stop nylon parachute cloth. The canopy has twenty-four (24) gores, an upper lateral band, a lower lateral band, twenty-four (24) V-tabs, twenty-four (24) pocket bands, twelve (12) canopy lines, two (2) connector snaps, and a spreader bar. Each canopy gore consists of three (3) or four (4) sections joined together by diagonal seams. Each gore is joined to the adjacent gore by a radial seam, which forms a channel through which one radial line passes. The twelve (12) canopy lines, which run continuously from one connector snap to the other, form twenty-four (24) suspension lines, twenty-four (24) radial lines, and twelve (12) apex lines. The suspension lines are numbered counterclockwise from one (1) through twenty-four (24) consecutively when viewed from the connector snaps. The bridle line is used for attaching the pilot chute to the parachute canopy. The canopy assembly is attached to the pack assembly by either hand tacking the connector snaps to the pack (T-10R) or by lift-the-dot fasteners (MIRPS).

- Shape: flat circular
- Diameter: 24 feet, nominal
- Number of gores: 24
- Number of sections per gore: 3 or 4
- Number of suspension lines: 24
- Number of V-tabs: 24
- Number of pocket bands: 24

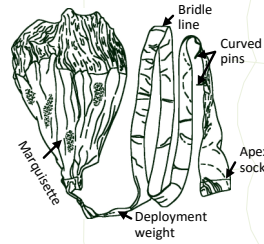
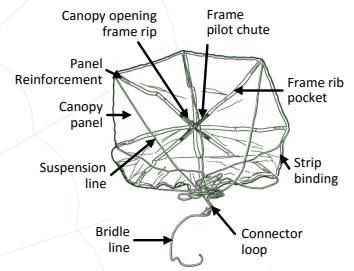


Troop Chest Personnel Reserve Parachute System  
24 feet diameter, non-steerable

**Pilot chute**

The pilot chute assists in the deployment of the parachute canopy by serving as an air anchor. The two types of pilot chutes are as follows:

**The T-10R pilot chute** assists in the deployment of the parachute canopy by serving as an air anchor. The pilot chute consists of a 3 feet 4 inches diameter octagonal canopy constructed from 1.1 ounces rip-stop nylon parachute cloth, eight (8) nylon suspension lines, and a spring activated umbrella type opening frame with four (4) frame ribs. The canopy is reinforced with four (4) panel reinforcements across the diameter on the inside of the panels and by a strip binding that encircles the skirt down to the connector loop and up to the opposite side of the canopy skirt. The suspension lines are stitched together near the lowest point to form the connector loop. The connector loop is used for attaching the pilot chute to the main parachute canopy by means of the bridle line. The opening frame is positioned on the inside of the canopy. The four (4) frame ribs are secured in four (4) frame rib pockets either by zigzag stitching or by hand tacking. A manually operated ripcord releases the spring activated pilot chute.

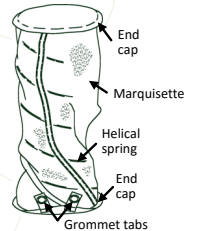


**The MIRPS, 5 feet pilot chute** with bridle, pilot chute consists of a flat circular canopy constructed from Type I low porosity nylon parachute cloth and marquisette netting. The netting is reinforced with six radial tapes, which form the bridle attachment loop. A centerline is attached to the Type I low porosity nylon parachute cloth to speed pilot chute inflation and, also forms part of the bridle attachment loop. The pilot chute does not have suspension lines and it appears somewhat like a large ball. The bridle line assembly is 13 feet long and is constructed from 2 inches wide polyester webbing with a 4 inches loop at each end. One end of the bridle line is fitted with an apex sock, which aids in pressurizing the reserve main canopy during low speed deployments. Adjacent to the apex sock, the bridle line is fitted with two curved metal pins, which are used to secure the canopy staging flaps located in the pack assembly. The other end of the bridle line is fitted with a 5 ounces deployment weight. The deployment weight provides the necessary mass

to cause positive launch of the pilot chute once the pilot chute ejector spring reaches full extension.

**Ejector spring assembly for the MIRPS only**

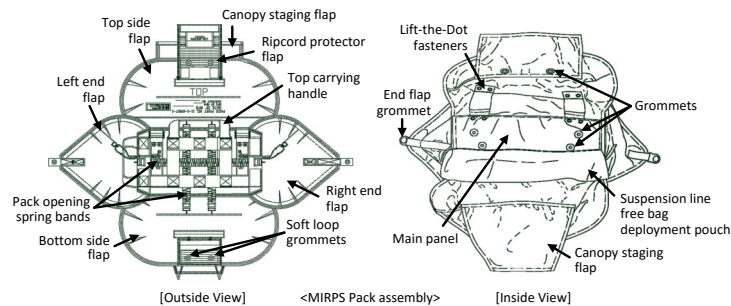
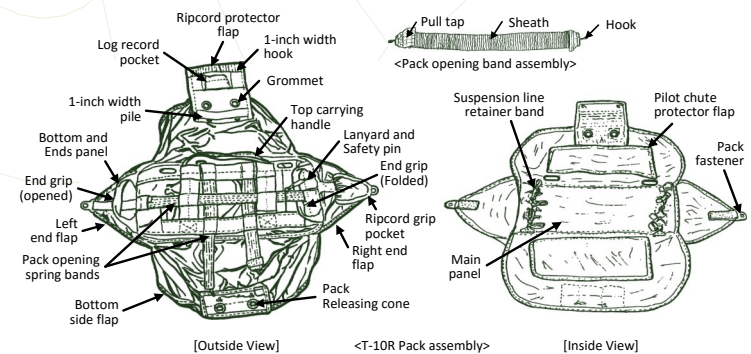
The deployment assistance device is a 30 inches long helical spring encased in marquisette netting and fitted with an end cap at each end. On one end cap, four (4) grommet tabs are attached which are only used during packing to keep the spring in a compressed condition. Before final closing of the pack is completed the spring compression aids are removed and the grommet tabs are no longer used. **CAUTION) Use care in handling the ejector spring assembly in a compressed state. The ejector spring could prematurely actuate causing personal injury.**



**Pack assembly**

There are two different pack trays used with the 24 feet diameter troop chest reserve parachute canopy. They are similar in appearance on the outside once the reserve is fully packed and closed with the exception of the MIRPS pack tray that has the ripcord grip protruding from the top center of the pack tray. In addition, an identifying yellow binding tape has been added to the ripcord protector flap to identify the MIRPS.

**The T-10R pack tray** has two (2) major parts of the pack. They are the main panel and the bottom and end panels. The main panel forms a top-side flap and a bottom side flap, and the bottom and end panels form a right end flap and a left end flap. The main panel is positioned across the bottom and end panels, and the overlap central areas are stitched together to form the pack bottom. A rectangular shaped pack frame is enclosed in a pocket formed in the pack bottom. The two (2) holes are provided in the bottom of the pack for the connector snaps, which are used for attaching the parachute to the primary parachute harness. The two (2) suspension line retainer band keepers are attached on the inside near the ends of the pack bottom. A pilot chute protector flap is attached to the inside of each of the side flaps.



MIRPS pack tray has a center pull ripcord grip location and contains soft loop closures versus metal cones.

**Ripcord assembly**

**The T-10R ripcord** consists of a stainless steel grip and a flexible steel cable to which steel locking pins are swaged. The ripcord also has two (2) ripcord pins 1-1/4 inches in length.

**The MIRPS ripcord** consists of a stainless steel grip and two (2) flexible steel cables to which steel locking pins are swaged. The ripcord also has two (2) ripcord pin assemblies mounted 2-1/2 inches apart one on either side of the cloverleaf and each assembly has a 1-1/4 inches ripcord pin.

