PACKING INSTRUCTION

for the

NON STEERABLE PERSONNEL TROOP PARACHUTE

35T-NST

P/N 903070-52

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erstellt: Technik Name; Datum; Unterschrift	geprüft: Herstellung Name; Datum; Unterschrift	genehmigt: QS / MPL Name; Datum; Unterschrift
Arndt	Herwig	Vogt

1 Table of content

2 General Information

This technical manual describes the technical performance, characteristics, construction, packing, handling and maintenance instruction for the personnel back parachute 35T-NST, manufactured by Brüggemann GmbH + CO.KG, Am Kalkheck 2, 58313 Herdecke, Germany.

3 Technical Data

- ❑ Overall weight — approx. 13,0 kg
- ❑ Rate of descent at 170 kg — approx. 6,0 m/s
- ❑ Rate of descent at 95kg — approx. 4,5 m/s
- ❑ max. suspended weight — 170 kg
- ❑ min. deployment altitude — 120 m
- ❑ max. deployment speed — 170 KIAS
- ❑ Life time — 10 Jahre

3.1 Components

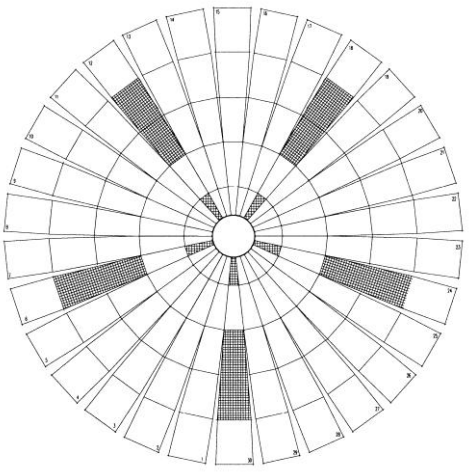
The parachute consists of the following main assemblies

- ❑ Main canopy 35 T - NST — P/N 903040-511
- ❑ Riser — P/N 900854-203
- ❑ Harness — P/N 900863-306
- ❑ Deployment bag — P/N 900430-401
- ❑ Bag pack — P/N 900868-402

3.1.1 Main Canopy 35 T – NST P/N 903040-511

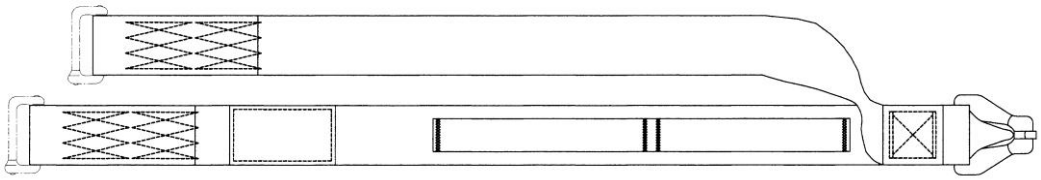
The 35T-NST is a non steerable parachute with a low rate of descent.

- ❑ Inflated canopy diameter — 10,7 m
- ❑ Geometric form — Triconical
- ❑ Apexdiameter — 1,05 m
- ❑ Number of lines — 30
- ❑ Length of lines — 8,0 m



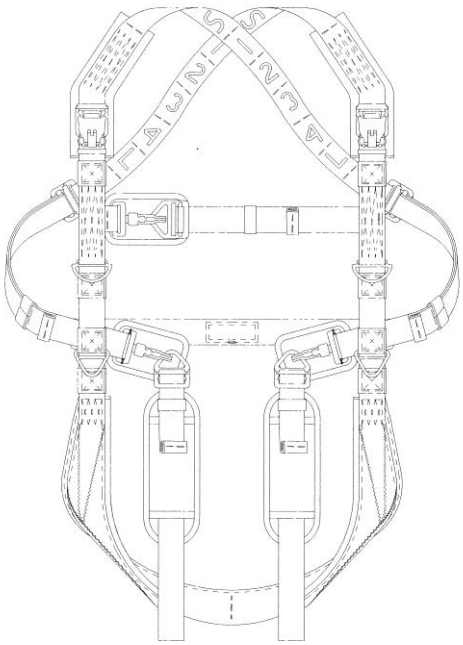
3.1.2 RiserP/N 900854-203

Each riser has a length of 760 mm and is made of MIL-W-4088, XIII nylon webbing with the male fitting of the canopy release permanently attached to one web end. The two other ends are looped for attachment of the suspension line connector links.



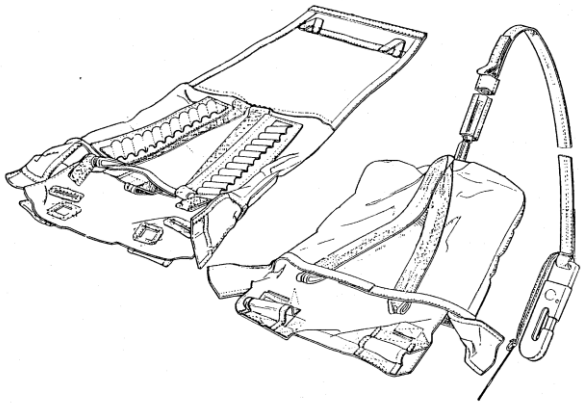
3.1.3 Harness P/N 900863-306

Adjustable 3 point harness with quick ejectors, padded shoulder and padded leg straps. The harness assembly is made of MIL-W-4088, XIII nylon webbing.



3.1.4 Deployment Bag P/N 900430-401

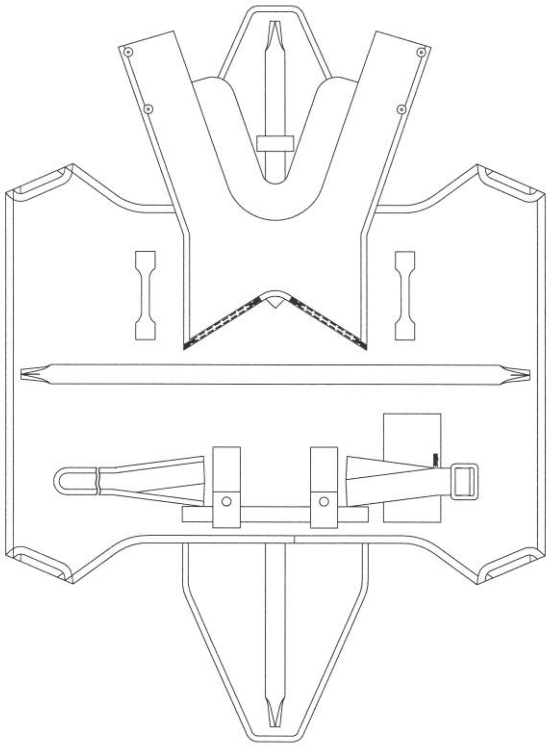
The deployment bag is made from MIL-C-10296 cotton sateen cloth and features flexible stow loops.



Deployment bag with snap hook PS 70120

3.1.5 Bag Pack P/N 900868-402

The back pack tray is made from MIL-C-7219, III nylon cloth.



4 Maintenance

4.1.1 Cleaning

Cleaning must be performed manually by shaking, gently brushing or rubbing the soiled area with a soft-bristled brush or clean cloth and must be limited to the soiled area. Do not wring out the cleaned areas

4.1.2 Drying

Suspend a wet or damp parachute in well-ventilated room away from direct sunlight. Do not dry assembly in direct sunlight or by spreading it on the ground. Drying time may be decreased by the use of' fans or by suspending the assembly in a heated drying room. Do not use a room where the temperature exceeds 50°C, nor dry the assembly for more than 3 consecutive hours at this temperature.

4.2 Special handling of parachute immersed in water

4.2.1 Salt water

Cotton components that have been immersed in salt water for any length of time and nylon components that have been immersed in salt water for a period of 24 hours or more, must be condemned. Nylon components that have been immersed in salt water less than 24 hours must be given special handling (A.-C. below) within 48 hours after recovery or be condemned. The following instructions cover special handling of the canopy assembly but may be adapted for other components of the parachute assembly.

A. Immediately after recovery, hang parachute by the bridle loop in the shade and allow it to drain for at least 5 minutes. Do not wring out canopy or lines.

B. Rinse parachute as soon as possible, but within 48 hours after recovery, as follows:

(1) Place the parachute in a large container with 20 or more gallons of fresh clean water and agitate by hand for 5 minutes. Remove parachute from water, hang by bridle loop and drain for 5 minutes. Do not wring out canopy or lines.

(2) Repeat rinsing procedure twice, using fresh clear water for each rinse. Allow parachute to drain and dry thoroughly after third rinse. Do not dry parachute in sunlight.

C. Inspect the parachute (lines, webbing, fabrics and hardware) thoroughly after drying. Corroded hardware must be cleaned with crocus cloth or be replaced and corrosion stained fabrics, webbing and lines must be repaired as authorized by the maintenance allocation chart.

Enter record of immersion, rinsing and repairs in parachute log record.

4.2.2 Fresh water

Immersion of cotton or nylon parachute components in fresh water lakes or rivers does not require rinsing unless the water is dirty, oily or otherwise contaminated. Minor discoloration due to immersion in uncontaminated water should be allowed to remain. Small stains, such as those caused by oil, grease, blood or hydraulic fluid, should be removed as prescribed in paragraph 4.1.1. It is not necessary to remove stains completely; slight discoloration is preferable to a too vigorous washing procedure.

4.2.3 Storage

When available, a warehouse should be used for storage of parachute assemblies. The assemblies must be stored in a dry place, on wood racks that will provide airspace between floor and parachutes, so that dampness will be minimized. Except when required for anticipated use, parachutes must be stored unpacked. Never store parachutes on a concrete floor.

The storage rooms must be closed, the environmental temperature must be between $+15^0$C + 25^0C and relative humidity of maximum 60%. It must be protected from direct sun light. There must be no toxic, corrosive, humid, greasy, etc. substances in the parachute warehouse.

4.2.4 Preventive Maintenance

Preventive maintenance to be performed on the troop-back personnel parachute includes before-use services such as prepack inspection, inspection and repack of a parachute that has been packed for 90 days and a routine inspection before the parachute is issued for use. Preventive maintenance also includes after-use service such as shakeout.

5 Inspection

5.1 General

The parachute must be given a detailed inspection before and after repairs are made and before the actual packing is begun. In addition, visible components of the packed parachute must be given a routine inspection before the parachute is issued for use. If, during inspection by the packer, a component is found to be defective, the parachute must be rigger-rolled and processed for repair. The inspection at the repair activity is performed on a illuminated inspection table to determine the most detail requiring repair. The necessity for care and diligence in inspecting the parachute assembly can not be overemphasized. Failure to detect areas of damage may cause the parachute to malfunction.

5.2 Maintenance Indicator Checklist

This list indicates possible areas of damage that would make the parachute unserviceable.

5.2.1 Canopy

Dampness, debris, large rips or holes, loose or broken stitching, tears, frays, detrimental spots, snags.

5.2.2 Lines

Burns, cuts, breaks.

5.2.3 Harness and Pack/Risers

Dampness, debris, holes, tears, loose or broken stitching, frays, detrimental spots.

5.2.4 Hardware

Corrosion, malfunction, missing damaged surface.

6 Packing Procedures

6.1 General

During the packing of the parachute assembly the supervising rigger must inspect every step for proper procedure and damages.

The packing process has to be performed on a smooth, splinter-free table, about 12 m long, 1 m wide and 0.8 m high.

All ties utilized in the packing of the 35T-NST parachute are made with 36 daN cotton tape and secured by a surgeons knot and a locking knot.

6.2 Placing parachute in proper layout

Position canopy on packing table and remove any inversions, turns, tangles and twists. Make two groups of suspension lines, with lines 1 through 15 in left group and lines 16 through 30 in right group. Lines 1 and 30 should be on the inside of the top connector links and lines 15 and 16 on the inside of the bottom connector links. The male fittings of the canopy release should be facing down.

6.3 Folding Canopy

6.3.1 Folding Gores

Hold top center gore in position and flip right group of gores over left group. Fold gores in two groups, starting right group with line 16 and ending with line 30. Start folding left group with line 1. Insert the two groups of lines in the correct slots of line separator, place canopy back on table and dress canopy. Check for clear channel**.**

6.3.2 Long folding the Canopy

Long fold right group first, then long fold left group.

Fold the left canopy side 90° towards the center of the canopy.

Fold the right canopy side 90° towards the center of the canopy.

6.4 Stowing the canopy

Make a single break cord tie using 36daN break cord.

Stow the excess apex line with one rubber band

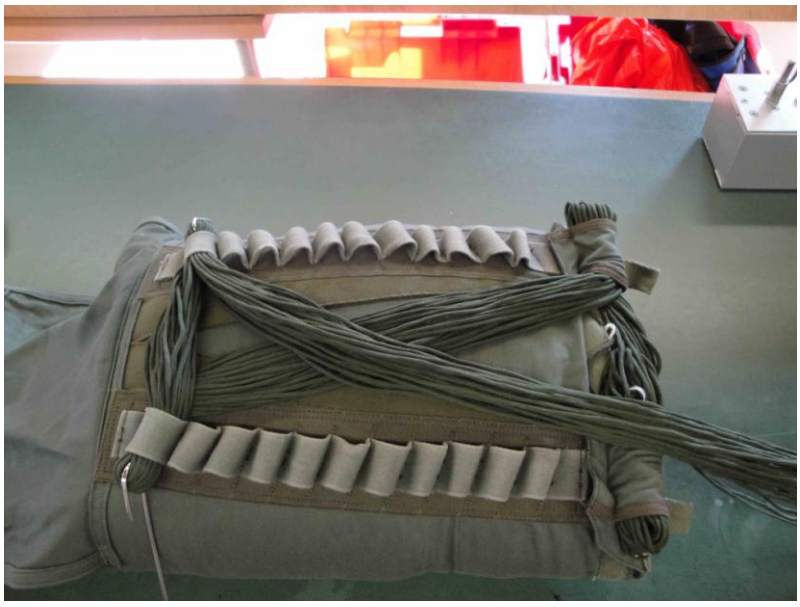
Stow apex canopy in upper right hand corner of deployment bag and within 250 mm of lower lateral band. Remove line separator, and place remainder of canopy in bag, keeping groups of suspension lines separated.

6.4.1 Closing the deployment bag and stowing suspension lines

Fold side flaps over and of deployment bag and place locking loops through slots in locking panel.

Make first two suspension line stows in the locking loops.

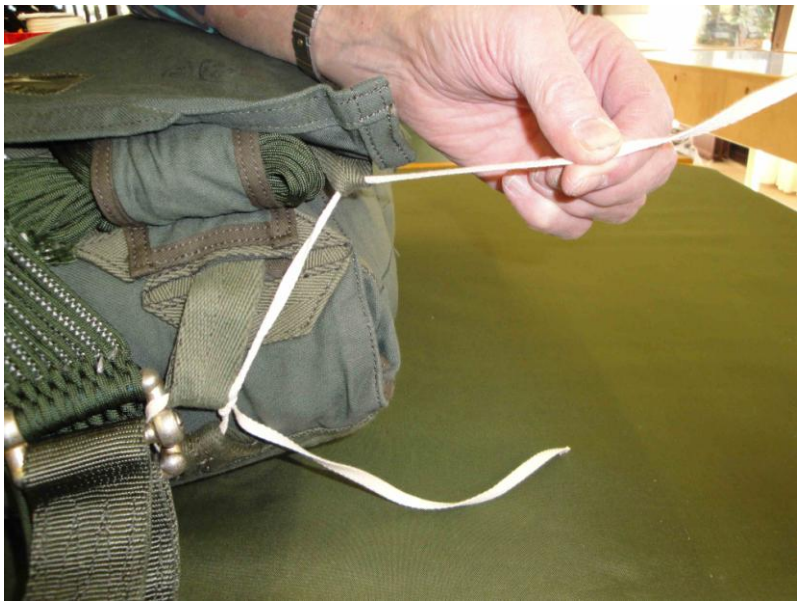
Stow the rest of the suspension lines in the regular stow loops, starting at the upper right corner of the bag and alternating stows from right to left.



All suspension lines have been stowed.

Tying connector links to tie loops using 36 daN break cord.

Securing the protecting cover



6.4.2 Closing the back pack

Pack deployment bag on backpack with risers folded under bag and rotate bag onto tray

Deployment bag is placed into the back pack

Place the static line pack opening loop on top of the deployment bag.

Fold closing flaps over bag and run a 36daN break cord of 635 mm length through closing loops and static line pack opening loop, pull tight.

The closed back pack.

6.4.3 Stowing the load limiter

Stow the load limiter to the with the on the back pack attached rubber band to the side of the back pack.

The load limiter is stowed to the back pack.

Route the static line through the rubber bands of the load limiter, than to the left side of the back pack and start stowing the static line from left to right.

Finished stowed static line.

Arrange the harness

!!! IMPORTANT !!!

Check and count your packing tools