Specification for
OPERATIONAL TRAVEL BAG

Soldier Training and Special Programmes (STSP)
Dismounted Close Combat (DCC)

Defence Equipment & Support

MINISTRY OF DEFENCE

PREFACE

TABLE 1 – PRODUCT LIST

Item Name	OPERATIONAL TRAVEL BAG
NATO Stock Number	8465-99-421-5710

Any colour shown in this document is for representation and must not be used for colour matching.

IPR STATEMENT

Technical documents in this specification refer to the edition current at the date of this specification.

TABLE 2 – ISSUE RECORD

Issue No	Comments	Issue Date
2	Maximum weight of bag included at section 1.1.8	22 September 2017
1	New Specification superseding DC/PS/5839	03 May 2017

THE PRODUCT

Use of the Product: An Operational Travel Bag for use by troops on operations and by new recruits.

TABLE 1 – RELATED SPECIFICATIONS AND DOCUMENTS

Specification	Detail
BS EN ISO 845	Cellular plastics and rubbers. Determination of apparent (bulk) Density
BS EN ISO 1421	Rubber or Plastic coated fabrics. Determination of tensile strength and elongation at break
BS EN ISO 1798	Flexible cellular polymeric materials. Determination of tensile strength and elongation at break
BS EN ISO 1856	Polymeric materials, cellular flexible. Determination of compression set
BS EN ISO 2286 Part 2	Rubber or plastic coated fabrics. Determination of roll characteristics. Method for determination of total mass per unit area, mass per unit area of coating and mass per unit area of substrate
BS EN ISO 3386 Part 1	Polymeric materials. Determination of stress-strain characteristics
BS EN ISO 4674 Part 1	Rubber or plastic coated fabrics. Determination of tear resistance. Constant rate of tear methods
BS EN 1049 Part 2	Textiles. Woven Fabrics. Construction. Methods of analysis. Determination of number of threads per unit length
BS EN 1876 Part 1 Part 2	Rubber or Plastics. Coated fabrics. Low temperature tests. Bending test Impact test on loop
BS EN 12280 Part 3	Rubber or Plastic. Coated fabrics. Accelerated ageing tests. Environmental Ageing
BS EN 12590	Textiles. Industrial sewing threads made wholly or partly from synthetic fibres
BS EN 25978	Rubber or plastic coated fabrics. Determination of blocking resistance
BS 2861	Methods for the presentation of weave diagram and plans for drafting, denting and lifting
BS 3084	Specification for slide fasteners

TABLE 1 – RELATED SPECIFICATIONS AND DOCUMENTS continued

Specification	Detail
BS 3424 Part 26	Testing coated fabrics. Method for determination of resistance to water penetration and surface wetting
BS 5742	Textile labels requiring to be washed and/or dry-cleaned
BS 7141 Part 1	Narrow Fabrics. Specification for polyamide and polyolefin woven tapes and webbing
Def Stan 83-86	Touch and close fasteners

TABLE 2 – PRODUCT DESCRIPTION, CONSTRUCTION & LABELLING

A black travel bag with external pockets: The bag must be able to be collapsed for storage purposes and be stowable both on board ships and in overhead compartments of aircraft. The bag should withstand wear and tear from being stored in luggage compartments and in the back of vehicles. The operational travel bag shall be produced in accordance with the following specifications:

1.	**Main Material and Components**	
	1.1	The bag shall be made of cloth, coated polyurethane on textured nylon, black to meet the requirements of Table 3.
	1.2	All webbing is to comply with BS 7141 Part 1 and is to match the main material. The ends of the webbing are to be heat sealed.
	1.3	Threads, colour is to match the main material, and is to comply with the requirements of BS EN 12590 Table 5. Metric Ticket No 20.
	1.4	Slide fasteners heavyweight, colour to match the main material to meet the requirements of BS 3084, Table 1.
	1.5	Touch & Close fasteners, colour to match the main material, to meet the requirements of Def Stan 83-86 Selvedges are to be finished/sealed to prevent fraying
	1.6	Shoulder strap padding to comply with the requirements of Table 4
	1.7	Loose thread ends are to be trimmed and the bags are to be presented in a clean and tidy condition.
	1.8	The overall bag weight must not exceed 2kg, and the base board (para 2.12) must not exceed more than 10% of the overall weight.

TABLE 2 – PRODUCT DESCRIPTION, CONSTRUCTION & LABELLING continued

2.	**Construction**	
	2.1	The travel bag is to have an overall capacity of 80 litres (+ 5L / -0L) including external pockets.
	2.2	The bag must have a pocket at both ends with slide fastener closure and protective flaps. The end pockets are to have a capacity of 3L (+/- 0.5L); this is to be included in the overall capacity. One of these pockets is to have an identification window attached.
	2.3	The bag is to have a pocket on each side. These must have secure fastenings along the full length of the pocket to prevent loss of items.
	2.4	The main carriage handles are to extend from the base of the bag and be securely sewn to the sides. The effective length of the handles is to be 60cm (+/- 2cm)
	2.5	The bag is to have compression straps, a minimum width of 25mm, across the top closure. The compression straps are to be fitted with side release buckles.
	2.6	Additionally the bag is to have rucksack style carrying straps padded with a closed cell foam, apparent density 40Kg/m^3 +/- 10Kg/m^3, 15mm thick (+/- 2mm), to meet the requirements of Table 4. These are to be covered by flaps when not in use. Any webbings used on these straps are to be a minimum width of 25mm fitted with the appropriate sized buckles
	2.7	The bag is to have grab handles on each end. The effective length of the handles is to be 48cm (+/- 2cm).
	2.8	The top seams of the bag are to be triple stitched. These seams must be triple stitched to ensure strength & durability and security of the handles and compression straps.
	2.9	The bag is to have a two-way, heavy weight slide fastener closure.
	2.10	The bag is to have external reinforced corners.
	2.11	The base of the bag is to have six stitched on reinforced non-slip grips. The corner grips positioned approximately 10cm in from the sides and ends of the bag. The middle grips placed equidistantly along the sides.
	2.12	The bag should have a hard removable base for added protection of contents. See para 1.8 for weight constaints.

TABLE 2 – PRODUCT DESCRIPTION, CONSTRUCTION & LABELLING continued

3.	**Labelling**	
	3.1	Marking label to comply with the requirements of BS 5742 paragraph 3.
	3.2	The labels are to be attached on the inside of the bag and contain the following information. • OPERATIONAL TRAVEL BAG • NSN 8465-99-421-5710 • Contractor Name • Contract Number

TABLE 3 – PHYSICAL PERFORMANCE REQUIREMENTS OF MAIN MATERIAL

METHOD OF TEST													
BS 2861	BS EN 1049-2		BS EN ISO 2286-2			BS EN ISO 1421 Method 1		BS EN ISO 4674 -1 Method A		BS 3424 Pt 26 Method 29C Index Mode (1)		BS EN 1876-1 & BS EN 1876-2	BS EN 25978
Weave	Threads		Mass			Breaking Load		Tear Strength Using Large Samples		Resistance to Water Penetration		Cold Crack Temperature	Blocking
	per cm		g/m^2			N		N		kPa		°C	
	min		min			min		min		min		min	
	Warp	Weft	Total	Base Cloth	Coating	Warp	Weft	Warp	Weft	As Rec'd	After ageing (2)		
1x1 Plain	13.5	11.0	370	305	65	2800	2500	550	525	6.5	4.0	No individual sample higher than -20	No blocking

(1) 10 specimens are to be tested with the fabric side in contact with the water. There is no requirement to test coated side to water.

(2) Ageing to BS EN 12280-3 (70°C & 95% rh) for 24 hrs

TABLE 4 – PHYSICAL PERFORMANCE REQUIREMENTS OF CLOSED CELL FOAM

BS EN ISO 845	BS EN ISO 1798		BS EN ISO 3386-1		BS EN ISO 1856
Density	Tensile Strength	Elongation	Compression Stress		Compression Set RH
		Min	25%	50%	25% (24 Hr Rec)
Kg/m^3	kPa	%	kPa	kPa	%
40 ± 10	300-450	90	40 ± 10	110 ± 20	5-10