



**Technical Specification for  
BUSBY, CEREMONIAL, KING'S TROOP  
RHA, Soldiers.  
ROYAL ENGINEERS BAND and ROYAL SIGNALS BAND**

**Defence Clothing**  
Integrated Project Team

PROPERTY OF :-  
DEFENCE CLOTHING  
INTEGRATED PROJECT TEAM  
DE&S Caversfield  
Skimmingdish Lane  
Bicester  
Oxon  
OX27 8TS



PREFACE

TABLE 1 – PRODUCT LIST

<b>Item Name</b>	BUSBY, CEREMONIAL, KING'S TROOP RHA, Soldiers, ROYAL ENGINEERS BAND and ROYAL SIGNALS BAND	
<b>Development File No</b>	NN/SCD/P1828 & D/DCIPT/RDG/NR/01/22	
<b>NATO Stock Numbers</b>	<b>Pattern Number</b>	<b>Pattern Number</b>
8405-99-130-9763 to 9769	KING'S TROOP RHA, Soldiers	23501A
8405-99-130-9773	Special Measure	
8405-99-212-1573	ROYAL ENGINEERS BAND and ROYAL SIGNALS BAND	29170

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

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TABLE 2 – ISSUE RECORD

<b>Issue No</b>	<b>Comments</b>	<b>Issue Date</b>
06	Reformatted to DE&S template. Updated related specs & docs.	30 October 2008
05	Colour fastness Requirements reviewed, Table 9.	21 March 2007
04	Pattern 23501 updated to 23501A	26 April 2006
03	Addition of the synthetic fur composition and amendment to the bag holder strap.  Amendment to colour fastness test methods.	20 September 2005
02	Reformatted, specs and docs updated. Royal Engineers and Royal Signals busby included. Change in size range	15 September 2004
01	New Issue	11 August 1998

PART 1

1. THE PRODUCT

a. Use of the Product.

Kings Troop RHA Busby made from knitted polyester base/acrylic pile material outer and dowel reinforced canvas foundation. For wear by soldiers of the King's Troop RHA as part of ceremonial dress. The size schedule provides for seven sizes and special measure.

Royal Engineers and Royal Signals Busby made from coney skin dyed black outer and dowel reinforced canvas foundation. For wear by the Bands of ROYAL ENGINEERS and ROYAL SIGNALS as part of ceremonial dress, special measure only.

Figure 1.



TABLE 3 – RELATED SPECIFICATIONS AND DOCUMENTS

Specification/Document	Detail
BS EN ISO 105 Part B02 Part E01	Textile test for colour fastness. Colour fastness to Light. Colour fastness to Water.
BS EN ISO 11640	Leather – Test for colourfastness – Colour Fastness to cycles of to-and-fro rubbing.
BS EN ISO 11641	Leather – Test for colourfastness – Colour Fastness to perspiration.
BS EN 20105-A02	Textiles. Test for colourfastness. Greyscale for assessing change in colour.
BS EN 12590	Textiles. Industrial Sewing Threads made wholly or partly from Synthetic Fibres.
BS 3870 Part 1 and 2	Stitches and seams.
BS 4560	Fabrics for lining in uniform clothing.
BS 5742	Requirement for the labelling of garments.
UK/SC/4831	BAG, BUSBY, RHA LINE, BUSBY, Short, RHA LINE, BODY, Long, RHA BAG, BUSBY, Royal Engineers Band BAG, BUSBY, Royal Signals Band

## 2. PATTERNS.

- a. Master Patterns. The DC IPT at Caversfield holds a Master Pattern for this product. Potential contractors may view the pattern on site by arrangement with the DC IPT Commercial Department.
- b. Standard Patterns. A Standard Pattern may be obtained from the DC IPT Technical Information Office and may be used to provide the criteria for all materials, components and manufacturing features not fully defined in this specification.

PART 23. PRODUCT DESIGN

- a. Product Description. The design and shape of the Busbies is to be strictly in accordance with that of the Standard Pattern. The Busby is to be supplied with plume holder and chinstrap for the RHA and with plume holder but without chinstrap for the Royal Engineer and Royal Signals Bands.

TABLE 4 – PRODUCT COMPONENTS

4.1 Outer Fabric for Pattern No 23501A	<ul style="list-style-type: none"> <li>Knitted pile fabric. 50% modacrylic &amp; 50% acrylic pile (approx. 83% of gross weight) and 100% polyester backing (approx. 17% of gross weight). Pile height 13mm, all physical appearances to match those of the Standard Pattern.</li> <li>To meet the colour fastness requirements in Table 9.</li> </ul>
4.2 Outer Fabric for Pattern No 29170	<ul style="list-style-type: none"> <li>Coney Skin dyed black, all physical appearances to match those of the Standard Pattern.</li> </ul>
4.3 Sides (foundation)	<ul style="list-style-type: none"> <li>Cloth, viscose, hemp, hair 213g/m<sup>2</sup> adhesively bonded to cloth hemp 191g/m<sup>2</sup>.</li> </ul>
4.4 Sides (stiffener)	<ul style="list-style-type: none"> <li>Dowling, deal, semi circular, 10mm dia.</li> </ul>
4.5 Waterproof crown	<ul style="list-style-type: none"> <li>Natural cowhide, lacquered, 2.7mm thickness as on the Standard Pattern.</li> </ul>
4.6 Sides stabiliser	<ul style="list-style-type: none"> <li>Wire spring steel 1.8mm.</li> </ul>
4.7 Stabiliser casing	<ul style="list-style-type: none"> <li>Tape, nylon coated PVC black, 25mm.</li> </ul>
4.8 Crown edging former	<ul style="list-style-type: none"> <li>Tubing, polyethelene, 5mm internal dia.</li> </ul>
4.9 Headband	<ul style="list-style-type: none"> <li>Natural cowhide, vegetable tanned, 3mm thickness.</li> </ul>
4.10 Headleather	<ul style="list-style-type: none"> <li>Leather, black grained sheep, dyed with pigment on the grain surface, 1.5mm thickness, to meet the requirements of BS EN ISO 11640 and BS EN ISO 11641 to be colour fast to BS EN 20105-A02 level 3.</li> </ul>

TABLE 4 – PRODUCT COMPONENTS Continued

4.11 Lining	<ul style="list-style-type: none"> <li>• Cloth, plain weave, polyester black, Pattern No.8721B to BS 4560. NATO Stock No.8305-99-769-6219.</li> </ul>
4.12 Lining drawcord	<ul style="list-style-type: none"> <li>• Tape, woven, 15mm, black.</li> </ul>
4.13 Bag holder tab fastening	<ul style="list-style-type: none"> <li>• Button, nylon, black, 15 ligne as on the Standard Pattern or an alternative approved by the DC IPT.</li> </ul>
4.14 Bag holder tab	<ul style="list-style-type: none"> <li>• Cowhide, black, patent, 1.2mm thickness.</li> </ul>
4.15 Bag	<ul style="list-style-type: none"> <li>• Bag, Busby RHA, Cloth, OR's, Scarlet, to UK/SC/4831 NATO Stock No.8405-99-975-6184.</li> <li>• Bag, Busby Royal Engineers Band, Cloth, blue, to UK/SC/4831 NATO Stock No.8405-99-241-5574. Pattern No 29171</li> <li>• Bag, Busby Royal Signals Band, Cloth, black, to UK/SC/4831 NATO Stock No.8405-99-994-8385. Pattern No 29172</li> </ul>
4.16 Hooks for Pattern No 29170	<ul style="list-style-type: none"> <li>• Brass 5.5cm long folded at 3.5cm</li> </ul>
4.17 Chinstrap's	<ul style="list-style-type: none"> <li>• Cowhide, black, patent, 1.5mm thickness, 15mm wide.</li> </ul>
4.18 Chinstrap adjuster	<ul style="list-style-type: none"> <li>• Buckle, brass, black.</li> </ul>
4.19 Plume holder	<ul style="list-style-type: none"> <li>• Fitting, brass, as on the Standard Pattern or an alternative approved by DC IPT.</li> </ul>
4.20 Line retention ring	<ul style="list-style-type: none"> <li>• Ring, split, brass, 1.3cm diameter or an alternative approved by DC IPT.</li> </ul>
4.21 Identification label	<ul style="list-style-type: none"> <li>• Fabric marking and attachment to comply with the requirements of Specification BS 5742.</li> </ul>
4.22 Sewing threads for all purposes	<ul style="list-style-type: none"> <li>• Thread, polyester and cotton, continuous filament polyester core, cotton sheath to BS EN 12590 or approved alternatives may be used: <ul style="list-style-type: none"> <li>a. Metric Ticket No.25, black. For Fastening crown, headband stabiliser headleather, plume holder and straps</li> <li>b. Metric Ticket No.75, black. for all other purposes</li> </ul> </li> </ul>

TABLE 5 – PRODUCT CONSTRUCTION

5.1 Sides foundation	<ul style="list-style-type: none"> <li>• Two plies of bonded hair cloth/hemp are to be sewn with vertical rows of stitching, 2.5cm apart, penetrating all layers. Closing seam is to be at the centre front.</li> <li>• Stiffener dowls are to be housed in each division; terminating adjacent to top edge of headleather and 2.5cm below top edge of sides.</li> <li>• Wire stabiliser, encased in nylon tape, is to be securely tacked to sides; positioned 6cm above and parallel to bottom edge of Busby; tacks are to be spaced at 5cm intervals.</li> </ul>
5.2 Headband	<ul style="list-style-type: none"> <li>• The shaped band, 2.5cm deep at front and 3.5cm at back, is to be attached to the sides by two rows of stitching, adjacent to the top edge.</li> </ul>
5.3 Headleather and stay	<ul style="list-style-type: none"> <li>• Leather, 6cm deep (effective) is to be joined using seam type 4.03.03 of BS 3870 and sewn to stay using seam type 2.01.01 of BS 3870.</li> <li>• The stay is to be sewn to sides, with the free edge uppermost and positioned 4cm above the bottom edge of the headband at the centre front and 5cm above the band at centre back.</li> <li>• 5 stitches per 2.5cm.</li> </ul>
5.4 Head lining	<ul style="list-style-type: none"> <li>• Lining, 8cm deep, is to be attached to headleather using seam type 2.02.03 of BS 3870.</li> <li>• A channel is to be formed in the free edge of the lining using seam type 6.03.01 of BS 3870, inturn 1.5cm deep.</li> <li>• A drawcord is to be housed in the channel.</li> </ul>
5.5 Hook on Pattern No 29170	<ul style="list-style-type: none"> <li>• Two hooks attached securely one either side to be positioned midway between the centre back and centre front at lower edge.</li> </ul>
5.7 Plume holder on Pattern No 29170	<ul style="list-style-type: none"> <li>• Positioned immediately in front of side hook, left side in wear. Securely sewn to foundation, bottom of plume holder in line with the bottom of brow.</li> </ul>



TABLE 5 – PRODUCT COMPONENTS continued

5.6 Plume holder on Pattern No 23501A	<ul style="list-style-type: none"> <li>• Positioned at top centre front aligned with top edge of side and securely sewn to the foundation.</li> </ul>
5.8 Waterproof crown	<ul style="list-style-type: none"> <li>• Shaped as on the Standard Pattern with rim edge 2.5cm deep. The rim is to be stapled to the sides of the foundation.</li> </ul>
5.9 Chinstrap for Pattern No.23501A only	<ul style="list-style-type: none"> <li>• A strap, 36cm long, is to be securely tacked to the outside of the headleather; positioned centrally on the left side (in wear). The buckle is to be securely sewn to the free end.</li> <li>• A strap, 9cm long, is to be securely tacked to the outside of the headband, positioned centrally on the right side (in wear). Four eyelets are to be provided, positioned centrally and spaced at 1.5cm intervals, the first eyelet 4cm from the free end.</li> </ul>
5.10 Outer and crown former	<ul style="list-style-type: none"> <li>• The outer fabric is to be cut and assembled so that the lie of the pile is from right to left (in wear).</li> <li>• The top edge of the outer and tubular crown former are to be securely tacked to the crown rim/sides, with outer enclosed between rim and former. The outer fabric is to wrap over former and cover the sides closely and evenly.</li> <li>• The bottom edge of the outer is to be attached to headband, using stitch type 211 of BS 3870 with six stitches per 2cm.</li> </ul>
5.11 Bag holder strap	<ul style="list-style-type: none"> <li>• A shaped strap, 3.2cm wide at the top edge, 4.5cm wide at the bottom edge, 6cm long, is to be securely tacked at the top edge to right side (in wear) positioned 8cm below the top edge of side; stitching is to penetrate all layers.</li> <li>• A buttonhole is to be cut in the strap 6mm above the bottom edge, centrally positioned. A button is to be attached to the side of the busby, 12.5cm below the crown, stitching to penetrate all layers, so as to accommodate the buttonhole strap.</li> </ul>
5.12 Line retention ring	<ul style="list-style-type: none"> <li>• A split ring is to be attached to the right side (in wear); positioned 4cm below top edge and aligned centrally with bag holder strap, stitching is to penetrate all layers.</li> </ul>

TABLE 6 – SCHEDULE OF NATO STOCK NUMBERS AND ACTUAL BODY MEASUREMENTS

<b>KING'S TROOP RHA, Soldiers</b>	
<b>NATO Stock Numbers 8405-99-130-</b>	<b>Size Numbers</b>
9763	54
9764	55
9765	56
9766	57
9767	58
9768	59
9769	60
9773	Special measure
<b>ROYAL ENGINEERS BAND and ROYAL SIGNALS BAND</b>	
8405-99-212-1573	Special measure

**TABLE 7 – MEASUREMENTS AND TOLERANCES**

All measurements are in centimetres except where otherwise stated.

									Tolerances (mm)	
Size		54	55	56	57	58	59	60	+	-
Internal Circumference	Headband	54	55	56	57	58	59	60		
	Crown	51.5	52.5	53.5	54.5	55.5	56.5	57.5		
Depth of Sides	Front	16.5							2	2
	Back	21							2	2
	Side	18.5							2	2

4. LABELLING REQUIREMENTS.

- The size number, NATO Stock Number, and the contract number are to be clearly marked on the inside of the crown, arranged as in Figure 2.

TABLE 8 – SPECIMEN LABELS

Size
NATO Stock No.
Contract No.

Figure 2. Example Identification and marking label

TABLE 9 –TEST REQUIREMENTS

The fur is to conform to the requirements of the following table:

METHOD OF TEST BS EN ISO 105			
B02		E01	
Light (Xenon)		Water	
Colour Change	Staining	Colour Change	Staining
4 – 5	N/A	4 – 5	4