



## **Technical Specification for Cap Ceremonial, Rifle Band Officers (Shako)**

# Defence Clothing

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PREFACE

TABLE 1 – PRODUCT LIST

|                                |  |
|--------------------------------|--|
| <b>Product Name</b>            | Cap Ceremonial Rifle Band Officers (Shako) |
| <b>Development File No</b>     | DCIPT/RDG/NR/27/08                         |
| <b>Product Support File No</b> | N/A  |
| <b>Pattern No</b>              | 29449A                                     |
| <b>NATO Stock Numbers</b>      | 8405-99-500-7442                           |

**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> |
|-----------------|-------------------|-------------------|
| 01              | New specification | 12 January 2011   |
|                 |                   |                   |
|                 |                   |                   |
|                 |                   |                   |
|                 |                   |                   |
|                 |                   |                   |

PART 1

1. THE PRODUCT

- a. Use of the Product. A black synthetic astrakhan shako worn by The Rifle Band officers

FIGURE 1.



Table 3 – Related Specifications and Documents

| Specification/Document                | Detail  |
|---------------------------------------|---|
| BS EN ISO 105<br>Part B02<br>Part E01 | Textiles: Test for colourfastness<br>Colourfastness to light<br>Colourfastness to water |
| BS EN 12590                           | Textiles: Industrial sewing threads made wholly or partially from Synthetic fibres      |
| BS 3870                               | Stitches and seams  |
| UK/SC/2226                            | Straps, Chin chain  |
| UK/SC/4687                            | Embroidered and other Distinguishing Items and Components used therein                  |
| UK/SC/5516                            | Cloths, wool, uniform dress   |
| UK/SC/5696                            | Leather sheep headleathers  |

## 2. PATTERNS.

- a. Master Patterns. The DC holds a Master Pattern for this product. Potential contractors may view the pattern on site by arrangement with the DC Commercial Department.
- b. Standard Patterns. A Standard Pattern may be obtained from the DC 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 2

3. PRODUCT DESIGN

a. Product Description.

Synthetic, astrakhan, ceremonial shako style hat to be worn by Officers.  
Including a boss at the front, badge at the rear, and a chin chain.

TABLE 4 – PRODUCT COMPONENTS

|                           |  |
|---------------------------|--|
| 4.1 Cloth for outer cover | <ul style="list-style-type: none"> <li>• Cloth black synthetic astrakhan to standard pattern. To meet the colourfastness requirements of Table 9</li> </ul>  |
| 4.2 Cloth for crown       | <ul style="list-style-type: none"> <li>• Cloth melton lightweight Rifle Green to UK/SC/5516</li> <li>• NATO Stock No 8305-99-869-4376</li> <li>• Pattern No 8849E</li> </ul>                             |
| 4.3 Cloth for lining      | <ul style="list-style-type: none"> <li>• Cloth, twill, cotton, black.</li> </ul>   |
| 4.4 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> <li>• Or an alternative approved by DC</li> </ul>           |
| 4.5 Head leather          | <ul style="list-style-type: none"> <li>• Sheep, natural, at least 1mm thick but no more than 1.2mm thick to UK/SC/5696</li> <li>• Or an alternative approved by DC</li> </ul>                            |
| 4.6 Chin strap hooks      | <ul style="list-style-type: none"> <li>• Brass, self coloured, size and shape as on standard pattern</li> </ul>  |
| 4.7 Chin Chain            | <ul style="list-style-type: none"> <li>• Strap, chin, cap ceremonial, Rifle band, Officers</li> <li>• NATO Stock No 8415-99-397-4632</li> <li>• Pattern No D01988 to specification UK/SC/2226</li> </ul> |
| 4.8 Plume holder          | <ul style="list-style-type: none"> <li>• Brass with screw fixing, self coloured, size and shape as on standard pattern</li> </ul>  |
| 4.9 Cord for bevel        | <ul style="list-style-type: none"> <li>• Black 8mm rounded Russia weave as on standard pattern</li> </ul>  |

TABLE 4 – PRODUCT COMPONENTS CONTINUED

|                    |   |
|--------------------|---|
| 4.10 Russian Braid | <ul style="list-style-type: none"><li>• Black 3mm flat Russia weave as on standard pattern</li></ul>  |
| 4.11 Badge         | <ul style="list-style-type: none"><li>• As on standard pattern</li></ul>  |
| 4.12 Boss          | <ul style="list-style-type: none"><li>• Insignia, Organisation, Shako boss, Rifles band, Officers &amp; Other ranks.</li><li>• NATO Stock No 8455-99-151-8667</li><li>• Pattern No D02151 to UK/SC/4687</li></ul> |
| 4.13 Ring          | <ul style="list-style-type: none"><li>• Ring, nickel plated, internal circumference 9.5mm external circumference 14mm</li></ul>   |

TABLE 5 – PRODUCT CONSTRUCTION

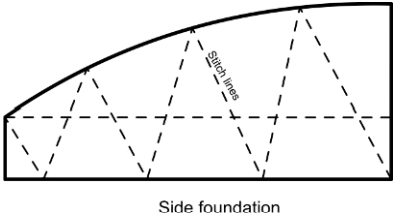
|   |  |
|---|--|
| <p>5.1 Sides foundations</p>  <p style="text-align: center;">Side foundation</p> | <ul style="list-style-type: none"> <li>• Two plies of bonded hair cloth/hemp are to be sewn with vertical rows of stitching, 2.5cm apart penetrating all layers.</li> <li>• Cut and shaped as the standard pattern</li> <li>• Single ply of bonded hair cloth/hemp to form a 2cm join using seam type 2.01.01 at the centre front</li> <li>• All three pieces (two sides and front) to be covered in lining fabric</li> <li>• Stitched through to create a neat finish as shown on diagram</li> </ul>  |
| <p>5.2 Plume Holder</p>   | <ul style="list-style-type: none"> <li>• Plume holder to be securely attached to the front of the foundation front</li> <li>• Plume holder should protrude 0.7cm above the foundation</li> </ul>   |
| <p>5.3 Chin strap hooks</p>   | <ul style="list-style-type: none"> <li>• Hooks to be securely attached to the side of the foundation</li> <li>• Bottom of the hook to be positioned 6.5cm above the bottom of the side foundations and 8.5cm from the front foundation seam</li> </ul>   |
| <p>5.4 Crown</p>  | <ul style="list-style-type: none"> <li>• Single ply of wool fabric and single ply of lining fabric to be bonded together</li> <li>• The crown is to be securely combined to black twill with a suitable adhesive to form a waterproof barrier and the laminate produced is to comply with the requirements set out in Table 10. The bond is to be continuous to ensure that the outer material is free from blisters.</li> <li>• Shaped as the standard pattern</li> <li>• 3mm Russia braid to be securely stitched to the centre of the crown</li> <li>• Knot design to be as standard pattern</li> <li>• Slits to be formed through both layers to allow braid to be pushed through to the inside of the cap</li> <li>• Ends to be sealed to prevent fraying</li> <li>• Crown to be securely attached to the top edge of the foundation</li> </ul> |



TABLE 5 – PRODUCT CONSTRUCTION CONTINUED

|                  |   |
|------------------|---|
| 5.5 Cover        | <ul style="list-style-type: none"> <li>• Synthetic astrakhan fur to be cut two piece shaped as standard pattern</li> <li>• Seams at centre front and back using seam type 1.01.01</li> <li>• Seams to be carefully constructed to ensure that the pile of the fabric appears to be continuous</li> <li>• Fur to be securely attached to the foundation to give a neat and unstretched appearance</li> </ul>   |
| 5.6 Head leather | <ul style="list-style-type: none"> <li>• One piece brachered head leather is to be securely attached to the bottom edge of the fur</li> <li>• Finished depth 4cm</li> <li>• Securely bonded to the inside of the cap with appropriate adhesive</li> </ul>   |
| 5.7 Braiding     | <ul style="list-style-type: none"> <li>• Double strand of braiding to be securely attached to the cap, stitching to penetrate all layers</li> <li>• Positioned as on standard pattern, to line up with base of cap at centre back, side to finish 10cm from base</li> <li>• Knotted braiding to be constructed as on standard pattern</li> <li>• Positioned as standard pattern, to line up with base of cap at centre front, sides to finish so as to cover the end of the double strand</li> <li>• Securely attached and to penetrate all layers</li> </ul> |
| 5.8 Boss         | <ul style="list-style-type: none"> <li>• A slit is to be formed at the centre front of the cap</li> <li>• 0.5cm wide and positioned 3cm from top to take boss</li> </ul>  |
| 5.9 Badge        | <ul style="list-style-type: none"> <li>• Securely attached to the centre back of the cap</li> <li>• Positioned just above the braiding at the back</li> </ul>   |
| 5.10 Ring        | <ul style="list-style-type: none"> <li>• Securely attached to the centre back at the base of the cap</li> </ul>   |

TABLE 5 – PRODUCT CONSTRUCTION CONTINUED

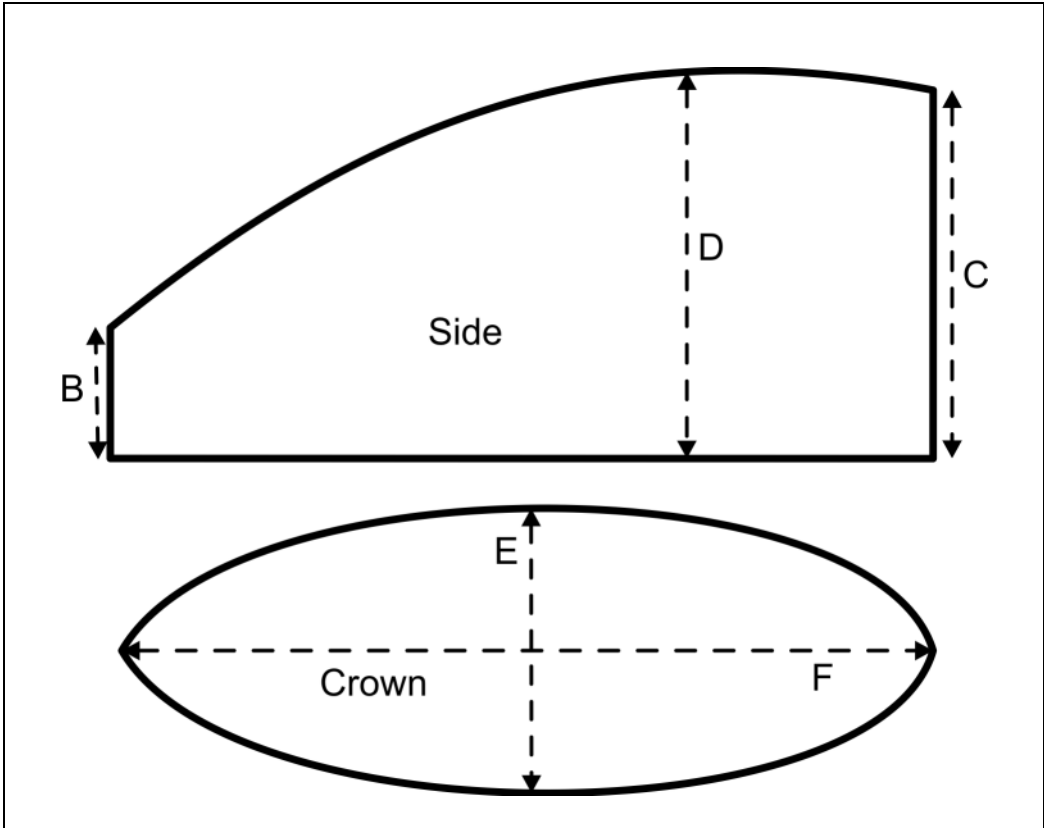
|                                     |   |
|-------------------------------------|---|
| 5.11 Seams and stitching to BS 3870 | <ul style="list-style-type: none"><li>• Machine stitching is of stitch type 301, with at least 8 but no more than 10 stitches per 2cm and correctly tensioned</li><li>• All hand stitching is to neat and tidy, and finish stitching is to lie flat against the lining</li><li>• The brachering on the headleather is to comply with stitch type 304, to BS 3870 with at least 6 stitches per 2cm</li><li>• Sewing threads may be treated with stain free lubricant</li><li>• Shade of threads to match fabric of cap.</li><li>• All seams are to be free from pucker</li></ul> |
|-------------------------------------|---|

TABLE 6 – SCHEDULE OF NATO STOCK NUMBERS

|                  |         |
|------------------|---------|
| 8405-99-500-7442 | Outsize |
|------------------|---------|

TABLE 7 – MEASUREMENTS AND TOLERANCES

All measurements in centimetres



|  | Internal circumference of head band | Depth of side |              |                        | Crown |        |
|--|-------------------------------------|---------------|--------------|------------------------|-------|--------|
|  |                                     | centre back   | centre front | 12cm from centre front | Width | Length |
|  | A                                   | B             | C            | D                      | E     | F      |
| Size 57  | 57                                  | 5             | 13           | 15                     | 12.5  | 25     |
| These measurements are to be used to guide for all other sizes |                                     |               |              |                        |       |        |

4. LABELLING REQUIREMENTS.

TABLE 8 – SPECIMEN LABELS

|  |
|--|
| <p>CAP CEREMONIAL RIFLE<br/>BAND OFFICERS</p> <p>Size 57</p> <p>NSN 8405-99-500-7442</p> <p>Contract No.</p> <p>Name:</p> <p>No:</p> |
|--|

Figure 2 Example Identification and marking label

TABLE 9 – COLOURFASTNESS 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        |

TABLE 10 - METHOD OF TEST:

To Determine Fabric/lining Laminate Bond Strength. The minimum bond strength of the laminated fabric is to be 1.25N/25mm when determined by the following method:

|   |   |
|---|---|
| 9.1 Sample preparation                    | <ul style="list-style-type: none"> <li>Specimens which have been conditioned for 24 hours in the standard testing atmosphere defined in BS EN ISO 139 are to be cut 200mm x 25mm with at least two samples being cut with the 200mm dimension in the warp and weft direction respectively.</li> </ul> |
| 9.2 Procedure                             | <ul style="list-style-type: none"> <li>The conditioned samples are to be delaminated by hand for 100mm. The tails are to be clamped in the jaws of a CRE tensile testing machine. The sample is then to be peeled apart with a jaw separation of 100mm/min for a 50mm length of sample.</li> </ul>    |
| 9.3 Calculation and expression of results | <ul style="list-style-type: none"> <li>The maximum value of peel bond strength is to be recorded for each sample that peels for 50mm.</li> <li>The mean value of two results for samples, which delaminate for 50mm, is to be calculated in the warp and weft direction respectively.</li> </ul>      |