



Technical Specification for HAT SERVICE PMRAFNS OFFICERS

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

Item Name	HAT SERVICE PMRAFNS	
Development File No	NN/SCD/P1796	
Product Support File No.	NV/446/08	
Item	NATO Stock Number	Pattern Number
Air Commodore	8410-99-869-4637 to 4648	35/R/2276
Group Captain	8410-99-869-4625 to 4636	35/R/2275
Officers and WO's	8410-99-130-8171 to 8182	35/R/2029A

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TABLE 2 – ISSUE RECORD

Issue No	Comments	Issue Date
3	Reformatted to DE&S template. Updated related specs & docs.	03 November 2008
2	Reformatted and component specification and documents checked	10 August 2005
1	Original issue	28 November 1986

PART 1

1. THE PRODUCT

- a. Use of the Product. A hat worn by Officers in the PMRAFNS

FIGURE 1.



Patt 35/R/2275



Patt 35/R/2275

TABLE 3 – RELATED SPECIFICATIONS AND DOCUMENTS

Specification/Document	Detail
BS EN ISO 105 Part B02 Part D01 Part E04	Textiles, Test for colourfastness. To light Dry Cleaning To Perspiration Acidic and Alkaline
BS EN 12590	Textiles- industrial sewing threads made from wholly or partly from synthetic fibres.
BS 3870 Part 1 & 2	Stitches and seams.
BS 4560	Specification for Linings and interlinings for uniform clothing
UK/SC/4667	Ribbon textile, viscose and cotton, black for Rosettes, Glengarries and bonnets, Scottish Regiments.
UK/SC/4687	Embroidered and other distinguishing items and components used therein
UK/SC/5146	Braid, cord & lace, aiguillettes & other cord based accoutrements metalised polyester gold and silver

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 2

3. PRODUCT DESIGN

- a. Product Description. A four cornered shaped and blocked fur felt hat. The size schedule provides for eleven sizes and a special measure.

TABLE 4 – PRODUCT COMPONENTS

4.1 Hood	<ul style="list-style-type: none"> • Black fur felt, (100% Rabbit fur) 90gms ± 5% formed weight (including stiffening agent). • Shellac proofed and stiffened before dyeing. • Free from soluble mercury salts or other deleterious substances. • Colour fastness to meet the requirements of Table 7.
4.2 Internal lining	<ul style="list-style-type: none"> • Cloth, twill viscose; plain weave polyester or plain weave viscose. • Black to meet the colour fastness requirements for perspiration, Table 4 Ref 1.4 of BS 4560.
4.3 Brim to crown fastening	<ul style="list-style-type: none"> • Ribbon textile black 16mm wide Pattern No. 9476A NATO Stock No. 8315-99-433-2051 to UK/SC/4667
4.4 Headband for pattern No 35/R/2029A	<ul style="list-style-type: none"> • Braid, worsted, black, 44mm, Pattern No. 9337A NATO Stock No. 8315-99-973-0787 to UK/SC/4687
4.5 Headband for Pattern No 35/R/2275 and 35/R/2276	<ul style="list-style-type: none"> • Ribbon textile black 42mm wide Pattern No. 9558A NATO Stock No 8315-99-551-2688 to UK/SC/4667
4.6 Braid for Pattern No 35/R/2275 and 35/R/2276	<ul style="list-style-type: none"> • Braid gold synthetic Russia No. 3 Pattern No 9515A NATO Stock No 8315-99-130-8321 to UK/SC/5146
4.7 Badge for Pattern No 35/R/2276	<ul style="list-style-type: none"> • Badge organisation RAF cap officers of Air rank Pattern No 35/R/1979A NATO Stock No 8455-99-130-2580
4.8 Badge for Pattern No 35/R/2275	<ul style="list-style-type: none"> • Badge organisation RAF cap officers below Air rank Pattern No 35/R/1977A NATO Stock No 8455-99-130-2851
4.9 Cord for adjustment	<ul style="list-style-type: none"> • Braid 10mm wide black
4.10 Thread for all purposes	<ul style="list-style-type: none"> • Thread, corespun polyester/cotton to BS EN 12590 black and yellow. • Metric Ticket No. 75

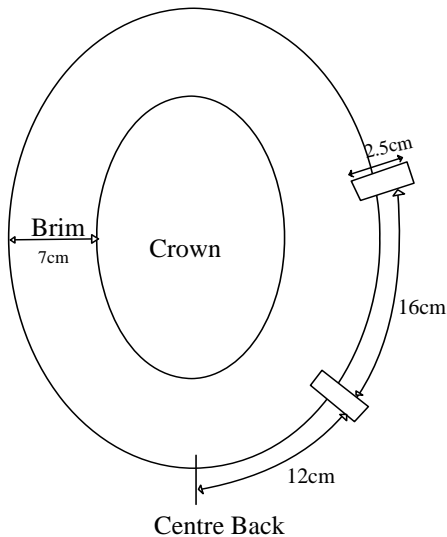
TABLE 5 – PRODUCT CONSTRUCTION

5.1 Hood	<ul style="list-style-type: none"> • The hood is to be shaped in accordance with the standard pattern. • Crown height of 9.5cm. • Brim width 7cm
5.2 Lining	<ul style="list-style-type: none"> • The lining, cut on the bias, hemmed, 1.5cm, seam type 6.02.01 to BS 3870. • The lining is to be attached to the hood at the brim/crown fold, seam type 1.01.01 to BS 3870 • The lining joined at the back, 1.5cm, seam type 1.01.01 to BS 3870, hand stitched, a braid bow to place over the seam
5.3 Headbands for Pattern No's 35/R/2275 and 35/R/2276	<ul style="list-style-type: none"> • For Pattern No 35/R/2275 one row of Russia braid is to be sewn to the top of the ribbon using seam type 1.01.01, through the centre of the braid using yellow thread • For Pattern No 35/R/2276 two rows of Russia braid are to be sewn to the top of the ribbon using seam type 1.01.01, through the centre of each braid using yellow thread
5.4 Headbands	<ul style="list-style-type: none"> • All headbands are to be joined at the centre front using seam type 1.01.01. • The corners are to be turned under and stitched to prevent fraying • The size of the headband is determined by the size of the hat and should be a tight fit on the crown • The headbands are to be attached to the hood, by hand, along the lining/hood joining seam. • The correct badge should be sewn centrally over the centre front seam through all layers

TABLE 5 – PRODUCT CONSTRUCTION continued

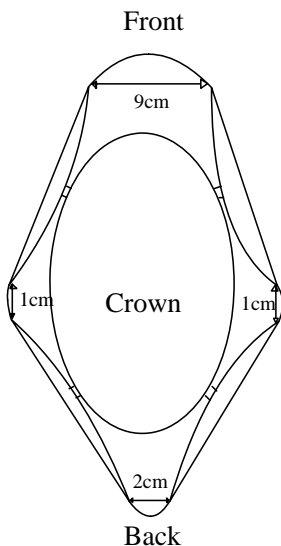
5.5 Brim shaping

Diagram 1a



Size 56 (proportionately for all other sizes)

Diagram 1b



Size 56 (proportionately for all other sizes)

- The brim is to be shaped using 4 lengths of ribbon
- The ribbon to be 5cm long and doubled over
- Each section of ribbon is attached to the top side of the brim, by hand, not penetrating fully through the felt.
- Positioned as shown in diagram 1a (2 ribbon on either side of hat) 12cm from the centre back and 16cm from the first
- The brim edges are to be folded inwards, using the ribbon.
- The other end of the ribbon is to be sewn by hand to the top of the headband and through the felt hood
- Diagram 1b shows final look of hat.
- The front opening should be 9cm, 1cm for the sides and 2cm at the centre back

TABLE 6 – NATO STOCK NUMBERS AND SIZES

- All measurements in centimetres

Air Commodore NATO Stock No 8410-99-869-	4637	4638	4639	4640	4641	4642	4643	4644	4645	4646	4647	4648
Group Captain NATO Stock No 8410-99-869-	4625	4626	4627	4628	4629	4630	4631	4632	4633	4634	4635	4636
Officers and WO's NATO Stock No 8410-99-130-	8171	8172	8173	8174	8175	8176	8177	8178	8179	8180	8181	8182
Size and internal circumference of headband in centimetres	51	52	53	54	55	56	57	58	59	60	61	Special measure
Oval shaping	Crown to be a 2cm oval, for size 56 width 17cm and length 19cm (proportionately for all other sizes).											

TABLE 7 – MINIMUM COLOUR FASTNESS REQUIREMENTS FOR FUR FELT

Part	METHOD OF TEST TO BS ISO 105				
	BO2	EO4		DO1	
Agent	Light	Perspiration Acidic & Alkaline		Dry Cleaning	
		Colour Change	Staining Cotton	Colour Change	Staining Solvent
Rating	6	4-5	4-5	4-5	4-5

4. LABELLING REQUIREMENTS.

- The size number, NATO Stock Number and the contract number is to be clearly printed on a pressure sensitive self adhesive label to be adhered to the inside crown
- The size number is to be 1.2cm high and the remainder of the characters 0.6cm high.

TABLE 8 – SPECIMEN LABELS

Specimen labels

