



**Technical Specification for
BUTTONS, RM
Bronze**

Defence Clothing

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PREFACE

TABLE 1 – PRODUCT LIST

Product Name	BUTTONS, RM Bronze	
Development File No	D/DCTA/41/43/3/2 (ST) & D/DCTA/82/187/1 (QPS)	
Nato Stock Number	Description	Pattern number
8455-99-977-2540	24mm (38 Ligne)	21969
8455-99-977-2541	17mm (27 Ligne)	21970

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

Issue No	Comments	Issue Date
3	Reformatted.	23 July 2009
2	Issue 2 reformatted without technical change and re-issued as Issue 2.	03 March 2002
1	New Specification	19 September 1967

PART 1

1. THE PRODUCT

- a. Use of the Product. Bronze buttons worn by the Royal Marines.

TABLE 3 – RELATED SPECIFICATIONS AND DOCUMENTS

Specification/Document	Detail
BS 3866	Specification for holes and shanks for buttons
BS 4162	Methods of test for buttons
DEF STAN 81-89	Paper tissue, wrapping

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 23. PRODUCT DESIGN

RM uniform buttons with bronzed face, filled back (i.e. double convex button) and short shank.

Table 4 – PRODUCT COMPONENTS

4.1 Main materials	Gilding metal, 85% copper and 15% zinc, chemically bronzed. After bronzing to be sealed with a coat of air-drying polyurethane lacquer or stove lacquer. In either instance shade and appearance to conform to shade tolerance pattern 21863
4.2 Back plates and shanks	Brass, 90% copper and 10% zinc

TABLE 5 – PRODUCT CONSTRUCTION

5.1 Design	<ul style="list-style-type: none"> • RM uniform buttons with bronzed face, filled back (i.e. double convex button) and short shank.
5.2 Front face	<ul style="list-style-type: none"> • The face of the button is to be clearly struck and be chemically treated to impart a bronze shade to pattern number 21863 and is to be coated with a colourless synthetic lacquer as specified in clause 4.1. • The face is to comply with the abrasion resistance property specified in Table 1.
5.3 Back and shank	<ul style="list-style-type: none"> • The backs are to be made using a suitable press tool, with two drainage holes and a central shank hole. The position of the drainage holes is to be such that the strength is not adversely affected or the drainage holes blocked when the wire is splayed and clenched. A peripheral rebate portion or step is to be provided. • The shank is to be formed using a suitable wire-bending machine to provide a loop or eye. The length and thickness of the shank is to comply with the requirements of BS 3866 Table 3. • The assembly of the shank to the back is to be by insertion of the ends of the shank in the back, which are to be splayed apart then clenched down so that the shank is rigidly attached to the back.

TABLE 5 – PRODUCT CONSTRUCTION CONTINUED

5.1 Assembly of back/shank to front	<ul style="list-style-type: none"> • The front is to be placed in a die and the back with the shank attached inserted into the front beneath a rolling tool. The wall of the front is to be rolled to overlap the peripheral rebate portion of the back so that the back is rigidly attached to the front and a neat smooth button is produced. • The shank is to be fitted horizontally in relationship to the insignia on the front.
5.2 General	<ul style="list-style-type: none"> • The buttons are to be free from imperfections and defects and are to comply with the measurements specified in the Schedule. • Finished buttons are to be tested according to the sampling quantity specified in BS 4162. • Finished buttons are to comply with the performance requirements detailed in Table 1

TABLE 6 - IDENTIFICATION

6.1 General	Information and format is to be as follows: NATO Stock Number, Contract number and quantity, as specified in the contract.
6.2 Buttons	The buttons are to be provided 25 buttons to a card and individually wrapped and labelled accordingly. Each is to be wrapped in acid free tissue paper to comply with DEF STAN 81-89.
6.3 Box Identification	Information and format on each box is to be as follows: Item name, NATO Stock No, Description, Contractor's name or initials, Contract number and date.

TABLE 7

PERFORMANCE REQUIREMENTS OF FINISHED BUTTONS

METHOD OF TEST					
Visual Assessment	BS 4162				
	Method 3	Method 4		Method 6	Method 7
	Abrasion resistance	Strength		Dry Cleaning Solvent	Steam Pressing
		(a) Tension	(b) Impact		
No change compared with Standard Pattern in shade, streakiness, or mechanical defects	No visible change compared with untested buttons	To be classified 'Light Duty' as defined in Table 1 of clause 4.6 of BS 4162	No breaks, fractures or distortion to occur	Clause 6.6 of BS 4162	Clause 7.6 of BS 4162
				Colour change 4 Staining Wool 5 No distortion or other defects	

SCHEDULE

NATO Stock No. 8455-99-977-	Size	Thickness of	
		Front	Back
2450	38L (24mm)	0.4mm	0.533mm
2541	27L (17mm)	0.30mm	0.40mm

The fronts may be of a heavier gauge gilding metal to enable the definition of the Standard Pattern to be reproduced.