



Ministry
of Defence



DE&S Policy Secretariat

DESSEC-PolSecLE-JSC-WPNS@mod.gov.uk

Defence Equipment & Support
Maple 0a #2043
MOD Abbey Wood
Bristol BS34 8JH

Reference: FOI2023/16125

22 January 2024

Dear [REDACTED]

Thank you for your email of 29 December 2023, requesting the following information:

I'm looking for information on how to wash/laundry and reproof the Parka, Middle and hood that were issued between the 1950's until the introduction of the Parka, Mans, Cold Weather.

Also anything on the size range and design/construction of the Parka, Middle and hood.

*NSN and Contract No. I've found for Parka are 8405-99-975-9930,
A/78/Clo/34659/DC69(I)
NSN for hood 8405-99-976-0072, Contract No. same as Parka*

I am treating your correspondence as a request for information under the Freedom of Information Act 2000 (FOI Act).

A search for the information has now been completed within the Ministry of Defence (MOD), and I can confirm that some information in scope of your request is held. The information identified relating to these garments is attached, as follows:

- Annex A – Specification Number UK/ISC/C/2220K (redacted)
- Annex B – Specification Number UK/SC/3698D (redacted)

Some of the information within Annex A falls entirely within the scope of the absolute exemption provided for at Section 40 (Personal Information) of the FOI Act and has been redacted. Section 40(2) has been applied in order to protect personal information as governed by the General Data Protection Regulations (GDPR). Section 40 is an absolute exemption and there is no requirement to consider the public interest in deciding to withhold the information.

No further information in scope of your request has been identified.

If you have any queries regarding the content of this letter, please contact this office in the first instance. If you wish to complain about the handling of your request, or the content of this response, you can request an independent internal review by contacting the Information Rights Compliance team, Ground Floor, MOD Main Building, Whitehall, SW1A 2HB (e-mail CIO-FOI-IR@mod.gov.uk). Please note that any request for an internal review should be made within 40 working days of the date of this response.

If you remain dissatisfied following an internal review, you may raise your complaint directly to the Information Commissioner under the provisions of Section 50 of the Freedom of Information Act. Please note that the Information Commissioner will not normally investigate your case until the MOD internal review process has been completed. The Information Commissioner can be contacted at: Information Commissioner's Office, Wycliffe House, Water Lane, Wilmslow, Cheshire, SK9 5AF. Further details of the role and powers of the Information Commissioner can be found on the Commissioner's website at <https://ico.org.uk/>.

Yours sincerely,

DE&S Policy Secretariat

SPECIFICATION NO UK/ISC/C/2220K

PARKAS, MIDDLE (Without Hood)
HOODS, ATTACHABLE (for Parkas Middle)

AMENDMENT NO 2 Incorporating Amdt No 1AMENDMENT NO 1

Marking. The alternative materials and methods of marking and application given in specification UK/SC/4528 are permitted.

Colour fastness of the marking shall be as required by specification UK/SC/4528.

Marking of Clothing - Stock Size Garments

The label shall carry the following information, arranged as follows:

Name of garment
NATO stock number
Size (if it is a sized article - to be in lettering 1/4 inch high)
Name or initials of contractor
Contract number

A space of 1/2 inch shall be provided at the bottom of the label for the wearer to write his name and number.

Marking of Clothing - Special Measure Garments

The label shall carry the following information clearly and indelibly marked in ink and arranged as follows:

Name of garment
NATO stock number
Name and number of wearer
Name or initials of contractor
Contract number

Threads, cotton, sewing, shall be to Defence Standard 83-8
Issue 1 12 Nov 1968.

Threads, linen, sewing, shall be to Defence Standard 83-24
Issue 1 9 Sept 1971.

PAPER PATTERNS

Paper Patterns, which are intended for guidance, may be obtained on application to the:

Ministry of Defence
Stores and Clothing Research and Development Establishment
Flagstaff Road
Colchester
Essex

Patterns are not returnable and a charge will be made.

AMENDMENT NO 2

Page 6 SCHEDULE 'A'

Waist drawcord Delete all detail

Insert Braid, tubular cotton,
to Specification
UK/SC/4888 Nato Stock No
8415-99-132-0617

Page 7

Under, Hoods Attachable
Drawcords

Delete all detail

Insert Braid, tubular cotton,
to Specification
UK/SC/4888 NATO Stock No
8415-99-132-0617

Didcot 815191 Ext:3537
20 September 1985

Central Records Section
Quality Assurance Directorate
(Stores & Clothing)

W A R O F F I C E
INSPECTORATE OF STORES & CLOTHING
CENTRAL ORDNANCE DEPOT,
DIDCOT, BERKS.

Specification No: UK/CIC/2220D	Issued 25th April, 1952
" " " " 2220E	" 24th June, 1952
" " " " 2220F	" 17th December, 1952
" " " " 2220G	" 28th January, 1953
" " " " 2220H	" 20th April, 1953
" " UK/ISC/C/2220J	" 11th January, 1962
" " " " 2220K	" 23rd May, 1962

<u>Designation</u>	<u>Catalogue No.</u>	<u>Pattern No.</u>
Parkas, Middle (without Hood)	CM.0621-30	15453
Hoods, Attachable (for Parkas Middle)	CM.0631- 4	15454

- INTRODUCTION:
- (A) THIS SPECIFICATION CONSISTS OF EIGHT PAGES.
 - (B) THIS SPECIFICATION IS THE PROPERTY OF HER MAJESTY'S GOVERNMENT. IT IS LIABLE TO AMENDMENT AT ANY TIME AND MUST BE RETURNED TO THE DIRECTOR OF INSPECTION OF CLOTHING IMMEDIATELY ON COMPLETION OF THE TENDER OR ORDER FOR WHICH IT WAS ISSUED.
 - (C) THIS SPECIFICATION, OR ANY DRAWINGS, PATTERNS OR OTHER INFORMATION ISSUED IN CONNECTION THEREWITH MAY ONLY BE USED FOR A SPECIFIC ORDER PLACED BY COMPETENT AUTHORITY; IT IS NOT TO BE USED FOR ANY OTHER PURPOSE WHATSOEVER WITHOUT THE EXPRESS WRITTEN SANCTION OF THE DIRECTOR OF INSPECTION OF CLOTHING.
 - (D) ALL CLAUSES IN THIS SPECIFICATION SHALL BE COMPLIED WITH IN EVERY RESPECT IRRESPECTIVE OF THE SOURCE OF SUPPLY OF THE MATERIALS AND/OR COMPONENTS.

1. MATERIALS The Parkas, Middle, and Hoods shall be made of the materials set out in Schedule 'A'.
2. MEASUREMENTS Stock size garments shall conform to the measurements shown in Schedule 'B'. Special measure garments shall be made to the measurements of the individual for whom they are ordered, Schedule 'B' being used as a guide as to the allowances over those measurements.
3. MANUFACTURE

(a) Parka and Hood

Machine stitching shall be lockstitch with no fewer than 8 nor more than 10 stitches to the inch. The buttons may be sewn on by hand or machine, except where otherwise specified. When sewn on by hand there shall be no fewer than 3 stitches of 4 cord thread (twisted and waxed) passing through each hole and when sewn by machine no fewer than 9 stitches through each hole. All buttonholes shall be bar-tacked. They shall be cut before being worked and shall have no fewer than 24 stitches to the inch. All eyelets, buttonholes and buttons shall be stayed with gaberdine, or canvas as indicated in Schedule 'A'.

The Middle Parkas and Attachable Hoods shall be made with the "satin face" side of the material on the inside of the garment.

The sewing threads used in the manufacture of the Parkas and Hoods must not be treated with oil or any substance of an oily nature.

(b) Parka

The Parkas shall be lined throughout with wool pile. The body lining shall be sewn to the outer material at the front edges, side, shoulder and gorge seams and at the reinforcing patches of the waist drawcord only. The back lining shall also be attached to the outer material at the bottom edge by 2 buttons and buttonholes.

All seams shall be lapped and the edges of the sleeve and gorge seams shall be overlocked.

The front edges, the edges of the cuffs and the bottom edge of the outer material shall be bound with strips of sateen. The bottom of the back shall be reinforced with a patch of gaberdine where the underfork strap is attached. The bottom edge of the lining shall be bound with gaberdine.

A strip of gaberdine, $2\frac{1}{2}$ inches in width, shall be stitched to the inside of the outer material to form a channel for the waist drawcord. The buttonholes in the lining through which the drawcord passes shall be reinforced on either side by gaberdine patches which shall be securely tacked to the outer material. The drawcord shall be secured in the channel by a tack at centre back and shall be of sufficient length to allow 6" to protrude at each end of the channel.

The buttons securing the underfork strap on the inside of the back shall be sewn through the lining and the stay only. Two buttons, one on each forepart, shall also be provided on the outside of the foreparts, level with the pocket flaps, for fastening the strap.

Two breast and two hip pockets with flaps shall be provided in each forepart. They shall be fastened by means of button and buttonhole. The mouths of the pockets shall be of double sateen interlined with double canvas to a depth of 3 inches and stitched with 4 rows of stitching $\frac{1}{2}$ " apart. The top of the pocket shall be turned down $1\frac{1}{2}$ " to the outside and this part of the pocket shall not be sewn to the forepart but securely stitched at the front and back edges to the respective edges of the flap.

by 6 $\frac{1}{2}$ " in width. A pencil slot shall be attached at the front of the left breast pocket.

The hip pockets shall be lined with wool pile with the back of the material to the inside of the pocket. The pockets and flaps shall be 10 inches in depth by 9 inches in width.

The sliding fastener shall terminate 2 inches from the bottom edge of the Parka, at which end it shall be attached to a tab of double sateen 2 $\frac{1}{2}$ inches in length by 1 $\frac{1}{4}$ inches in width. This tab shall be securely sewn to the garment and be finished by hand tacking as portrayed on the Pattern Parka. A ball toggle shall be attached to the puller by a piece of sateen folded in four to form a $\frac{1}{2}$ inch tape 2 inches in length.

The flap on the left front edge shall be 2 inches in width and be made of double material lined with canvas. The five buttonholes shall be spaced equidistantly with the top and bottom buttonholes 1 inch from the top and bottom edges respectively.

The stand collar of double sateen interlined with canvas shall be 1 $\frac{1}{2}$ inches in depth. There shall be 8 buttonholes 1 inch in length, in the centre of the stand, positioned as follows, the measurements being to the centre of the buttonhole in each case:-

One buttonhole each side of and 1 $\frac{1}{2}$ inches from the centre back, one buttonhole at the left end of the collar 1 $\frac{1}{4}$ inches from the front, one buttonhole at the right end of the collar 3 $\frac{1}{4}$ inches from the front and the remaining buttonholes spaced equidistantly between these buttonholes. A 30 line button shall be sewn by hand, a short shank being provided, at the end of the collar on the righthand side $\frac{3}{4}$ inch from the edge.

The button at the top of the left forepart shall be sewn by hand and be provided with a $\frac{1}{4}$ inch shank. This button shall be 1 $\frac{3}{4}$ inches from the collar seam and 1 inch from the forepart edge.

The shoulder straps shall be 6 inches long, with rounded ends, fastened with a button and buttonhole. They shall be 2 $\frac{1}{4}$ inches in width at the base tapering to 1 $\frac{3}{4}$ inches at the eye of the buttonhole.

The sleeves shall be reinforced with a patch of sateen 4 inches from the top to 4 inches from the bottom measured at the under-arm seam. The 1 inch wide cuff strap shall be formed of sateen folded to four thicknesses and shall pass through a channel 2 inches wide with its centre 4 inches from the bottom of the cuff. The channel shall terminate 1 inch from the underarm seam on either side. The strap shall be secured to the sleeve 1 inch from the buckle and at its free end it shall be rolled and stitched to prevent it pulling through the buckle. A release tab shall be sewn to the buckle.

The knitted cuffs shall be attached to the inside of the sleeves by means of a strip of double gaberdine 3 inches in width. The bottom edge of each cuff shall be 2 inches above the bottom of each sleeve.

(c) Hood

The Hood shall be lined with pile except for the overlapping portion on the left side and the front extension. The pile shall be covered with gaberdine from the front edge to a distance of approximately 5 inches back on the right side and to a corresponding position on the left side. The overlapping portion shall be interlined with double dowlas and stitched with rows of stitching $\frac{1}{4}$ inch apart, care being taken that the shape imparted by the two large darts is not destroyed. The loop of $\frac{1}{2}$ inch lace sewn at the end of the overlapping portion shall be loose at its bottom edge. A hook to engage this loop shall be securely sewn to the right side of the face piece and covered with a patch of sateen.

3. MANUFACTURE (c) Hood contd.

The shoulder curtain of the hood, 3 inches deep, shall be of double sateen interlined with canvas, and shall have a $\frac{1}{2}$ inch stand at its upper edge. The stand portion shall be attached to the bottom edge of the hood from the left front edge to 2 inches from the right front edge. There shall be four buttonholes, $1\frac{1}{4}$ inches in length, in the curtain, positioned as follows:-

One horizontal buttonhole at the left front 2 inches up from the lower edge of the curtain; one oblique buttonhole at the right front, in each case the front of the buttonhole being 1 inch from the edge.

A horizontal buttonhole $2\frac{1}{2}$ inches up from the lower edge of the curtain on each side of the back, the centre of the buttonhole being $5\frac{1}{2}$ inches from the centre back for sizes Small, Medium, Large and $5\frac{3}{4}$ inches for Extra Large.

The inner flap of the Hood 2 inches deep, of double gaberdine interlined with canvas, shall be stitched to the Hood $1\frac{1}{2}$ inches up from the bottom edge and shall extend from the left front to 2 inches from the right front. There shall be 8 horizontal buttonholes, 1 inch in length, in the centre of the inner flap, positioned as follows, the measurements being to the centre of the buttonhole in each case:-

One buttonhole each side of and $1\frac{1}{2}$ inches from the centre back, one buttonhole at each end of the flap $1\frac{1}{4}$ inches from the front edge, and the remaining buttonholes spaced equidistantly between these buttonholes.

Eight 30 line buttons shall be sewn by hand with $\frac{1}{4}$ inch shanks, to the inside of the hood in positions corresponding to the buttonholes in the inner flap.

The face adjustment drawcords shall pass through two eyelets at either side to a $1\frac{1}{2}$ inch channel formed by stitching the outer material to the lining. The drawcords from each side shall overlap at the top and be secured to the hood 3 inches beyond the centre seam.

There shall be four eyelets at the back of the hood, two on each side of, and four inches from the centre seam for the back adjustment cord. The upper and lower pairs of eyelets shall be $6\frac{1}{2}$ inches and $2\frac{1}{2}$ inches respectively from the bottom of the hood. The drawcord shall pass on the outside of the hood between the upper eyelets, where it shall be covered by a strip of sateen, and between the outer material and the lining, diagonally from the upper to the lower eyelets.

The hood shall have an extension at the front, 4 inches in width of double sateen interlined with dowlas. This extension shall be stitched with rows of crossed stitching $\frac{3}{4}$ inch apart and shall have a strip of copper wire, in a channel, at its outer edge and ends.

4. MARKING

to UN/SC/4528

Each garment shall be fitted with a stitched on calico label (the edges of which shall be turned in) which shall be clearly and indelibly marked: Parkas, Stock Sizes - with the name of the garment, size, measurements of wearer, name of contractor, year of supply and the broad arrow; Special Measure Parkas - with the name of the garment, order number, name and measurements of wearer, name of contractor, year of supply, and the broad

Stock Height 5' 7" - 5' 10"
Sizes Breast 37 - 39
Smith & Co.
1962
↑

HOOD)
Order No.
Name
Height
Breast
Smith & Co.
1962
↑

See amendment No 1

The broad arrow and size number (stock sizes) shall be in $\frac{1}{4}$ inch figures.

Hoods Attachable (for
Parkes Middle)
Medium
For Parkas Sizes
2, 5 and 7
Smith & Co.
1962
↑

The broad arrow shall be in $\frac{1}{4}$ inch figures.

In addition an instruction label shall be stitched (with the edges turned in) to each Parka on the inside of the right front edge immediately below the drawcord channel.

5. PAPER PATTERNS See amendment No 1

If paper patterns are required application should be made to the Directorate of Stores and Clothing (Development), Garment Development Section, Building E.51, Griffin Way, Royal Arsenal, Woolwich, S.E.18. The patterns will be charged for and are not returnable.

6. PACKING

Stock size garments shall be neatly folded and packed in containers to ensure delivery in a clean condition in quantities of not more than 50 garments of one size as far as possible.

7. GENERAL

As regards any properties or qualities not defined in this specification, supplies shall be in accordance with the Standard Pattern.

(Sgd) [REDACTED]

Director of Inspection of Clothing.

[REDACTED]

SCHEDULE 'A'PARKAS MIDDLE (WITHOUT HOOD)Pattern No. 15433MSB.

Body of garment, re-inforcing patches, binding edges of outer material.	Cotton Sateen (SCC.15) Olive Drab, 36"	1898
Stays for pockets, eyelets, buttonholes and buttons, binding edges of lining.	Gabardine 3170 (SCC.15) Olive Drab, 54"	1710
Body and sleeve lining	Worsted pile fabric (SCC.15) Olive Drab	0756
Size label	To comply with UKIS/4528 Caligo No. 2 White, 35" (pure finish) (Pattern No. T.504 Specification DEF-1007) or an approved alternative.	1157
Waist drawcord	Lace Tubular, green	2732
Hanger	Lace worsted, drab, $\frac{1}{2}$ "	2250
Interlining of front flaps and pockets	Canvas cotton ironproof, 24"	1036
Sliding fastener	Fasteners, slide, green, heavy, open end, auto locking	26" 2751 28" 2752 31" 2753
Buckles for cuff strap	Buckles, Bennett Black Japanned, 1"	4530
Cuffs	Cuffs, knitted rib	Contractor to supply and submit samples to D.I.S.C. for approval
Buttons for sliding fastener	Toggles, ball, $\frac{3}{4}$ "	4782
Buttons for fronts, pockets, shoulder straps, bottom and back of underfork strap	Buttons, grey green 4 hole, 45 line.	4110
Buttons for collar	- ditto - 30 line	4113
<u>Sewings</u>		
For barring buttonholes	Thread Cotton, Glace, Green, 16/9 DEF STAN 83-8	3271
For overlocking	Thread Cotton Green 50/6 DEF STAN 83-8	3273
For sewing buttons	Thread, Linen, Machine, Green, DEF STAN 83-2, 50/3	3274
For all other purposes	Thread Cotton, Green, 30/6 DEF STAN 83-8	3272

	Cotton, Gabardine (SCC.15) Olive Drab, 36"	1898
Inner flap, covering pile lining at front, staying eyelets	Gabardine 3170 (SCC.15) Olive Drab, 54"	1710
Lining	Worsted pile fabric (SCC.15) Olive Drab	0756
Drawcords	Cord Cotton, Green	2731
Closure loop	Lace, Worsted, Drab, $\frac{1}{2}$ "	2250
Interlining of overlap and front extension	Dowlas, rescutched flax tow 40"	MSM. 1045
Interlining of shoulder curtain and inner flap	Canvas Cotton ironproof, 24"	M.S.B. 1036
Hook for closure	Hooks, waist, black	4460
Wire for hood extension	Wire copper, soft, 13 s.w.g.	2730
Button for face adjustment cords	Toggles ball, $\frac{3}{4}$ "	4782
Buttons	Buttons, grey green, 30 line	4113
<u>Sewings</u>	As for Parkas Middle, (without Hood)	

SCHEDULE 'B'

SPECIFICATION NO. UK/ISC/G/2220J

PATTERN NUMBER 15453

PATTERN NUMBER 15454

MIDDLE (WITHOUT HOOD)
TACHABLE (FOR PARKAS MIDDLE)

All measurements are in inches unless otherwise stated

Measurements of Man

Measurements of Garment

Height Ins.	Breast	Size round from edge to edge of Sliding Fastener excluding front flap			Length from Collar Seam				Length of Sliding Fastener	Sleeve		Length of collar stand at centre end to end	
		Breast	Waist	Bottom	Front	To bottom edge	Back	To bottom edge		Length from neck-point	Width		
					To centre of waist channel		To centre of waist channel				Elbow		Cuff
3	34/36	52	52	X					29½	19½		22½	
6	37/39	55	55	55	16	28	17	38	26	30	14	24	
6	40/43	59	59	59						30½	20	25	
7	34/36	52	52	52						31½	19½	22½	
10	37/39	55	55	55	17	30	18	40	28	32	14	24	
10	40/43	59	59	59						32½	20	25	
11	36/38	54	54	54						33½	20	15	24
12	39/42	58	58	58	18½	33	19½	43	31	34	20	15	25
12	43/46	52	62	62						34½	21	15½	26½

X Bottom of forepart and straight across back.

Hood Length of inner flap at centre - end to end
Small 22½ Medium 24 Large 25 Extra Large 26½

PARKAS MIDDLE (WITHOUT HOODS)

Fig. 1

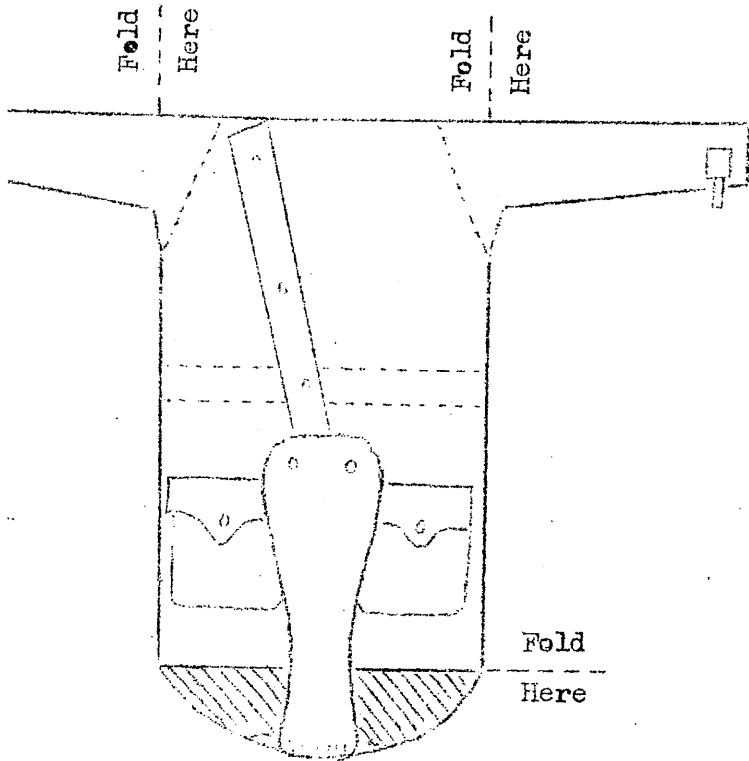


Fig. 2

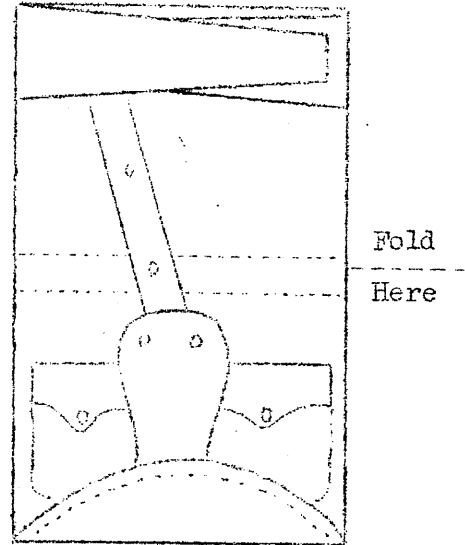
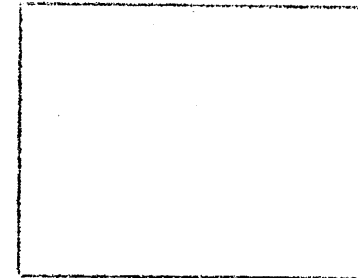


Fig. 3



In Bundles of 5.
Placed alternate
ways and tied with
2 strings.

Specification No. UK/ISC/C/2220K

PARKAS, MIDDLE (Without Hood)
HOODS, ATTACHABLE (for Parkas Middle)

AMENDMENT NO 1

Marking. The alternative materials and methods of marking and application given in specification UK/SC/4528 are permitted.

Colour fastness of the marking shall be as required by specification UK/SC/4528.

Marking of Clothing - Stock Size Garments

The label shall carry the following information, arranged as follows:

Name of garment
 NATO stock number
 Size (if it is a sized article - to be in lettering $\frac{1}{4}$ inch high)
 Name or initials of contractor
 Contract number

A space of $\frac{1}{2}$ inch shall be provided at the bottom of the label for the wearer to write his name and number.

Marking of Clothing - Special Measure Garments

The label shall carry the following information clearly and indelibly marked in ink and arranged as follows:

Name of garment
 NATO stock number
 Name and number of wearer
 Measurements of wearer
 Name or initials of contractor
 Contract number

Threads, cotton, sewing, shall be to Defence Standard 83-8
 Issue 1 12 Nov 1968.

Threads, linen, sewing, shall be to Defence Standard 83-24
 Issue 1 9 Sept 1971.

PAPER PATTERNS

Paper Patterns, which are intended for guidance, may be obtained on application to the:

Ministry of Defence
 Stores and Clothing Research and Development Establishment,
 Flagstaff Road,
 Colchester,
 Essex.

Patterns are not returnable and a charge will be made.

Central Records Section
 Quality Assurance Directorate
 (Stores and Clothing)

Didcot 815191 Ext 551
 2 June 1980

ED

NN/618/05

NV/404/02

Number: UK/SC/3698D

Date of publication: 15 June 1981

Previous issue: 29 April 1976

Specification for:
METHODS FOR LAUNDERING, RENDERING WATER-REPELLENT,
AND TESTING WATER-REPELLENCY OF COMBAT GARMENTS

Prepared by:
MINISTRY OF DEFENCE,
STORES AND CLOTHING RESEARCH AND DEVELOPMENT ESTABLISHMENT,
Flagstaff Road,
Colchester,
Essex,
CO2 7SS.

This specification has 4 pages.

1. SCOPE

This specification describes the methods to be used for the laundering, rendering water-repellent, and testing the water-repellency of combat clothing (and other garments) made from the following cloths:

CLOTH, SATIN DRILL, COTTON, Olive drab,
FS, SF, WR, Pattern No.8014A to DEF STAN 83-55

CLOTH, SATIN DRILL, COTTON, Orange,
FS, SF, WR, Pattern No.8014B to DEF STAN 83-55

CLOTH, SATIN DRILL, COTTON,
DP, FS, SF, WR, Pattern No.8014C to DEF STAN 83-55

CLOTH, SATIN DRILL, COTTON AND MODAL,
DP, WR, FS, Pattern No.8485A to UK/SC/4411

2. RELATED SPECIFICATIONS AND DOCUMENTS

Reference is made in this specification to:

BS 3702

Method of test for the resistance of a
fabric to surface wetting (spray test)

Reference in this specification to a British Standard or any other specification or document means, in any tender or contract, the edition current at the date of such tender or contract.

Copies of British Standards may be obtained from:

a. British Standards Institution (Sales Branch), Newton House,
101 Pentonville Road, London N1 9ND.

b. British Standards Institution, 10 Blackfriars Street, Manchester
M3 5DT.

3. LAUNDERING AND RENDERING WATER-REPELLENT

Water of zero hardness is to be used.

Maximum degree of loading, 56kg/m³.

Dips are quoted for a machine of cage diameter 86cm.

Wash 1

Load, Start

Add cold water to standing dip - cm
Soap/CMC, predissolved25
sufficient to lathereitherSodium metasilicate, predissolved,
one half the soap quantityorSodium carbonate, predissolved,
one quarter the soap quantityorSodium sesquicarbonate, predissolved,
one quarter the soap quantityThen run 7 minutes, heating with agitation
as quickly as possible to -°C

32

Drain - minute

1

Wash 2

Add water not above 49°C to running dip - cm

15

Washing chemicals as for Wash 1

Then run 7 minutes, heating with agitation
as quickly as possible to -°C

49

Drain - minute

1

Wash 3

Add water not above 66°C to running dip -cm

10

Washing chemicals as for Wash 1

Heat with agitation to 66°C, then run 14 minutes,
maintaining the temperature at -°C

66

Drain - minute

1

Rinse 1

Add cold water to running dip - cm

25

Then run - minutes

3

Drain - minute

1

Rinse 2

Add cold water to running dip - cm	25
Then run - minutes	2
Drain - minute	1

Rinse 3

Add cold water to running dip - cm	25
Then run - minute	1
Drain - minute	1

Rinse 4

Add cold water to running dip - cm	25
Then run - minute	1
Hydroextract and tumble dry.	
Maximum temperature in air outlet -°C	70

After laundering, the articles are to be rendered water-repellent using a suitable reproofing agent. Mystolene MK 9 has been found to give satisfactory results, but there are other proofing agents which are equally suitable. The reproofing agent is to be applied strictly in accordance with the maker's quantities and instructions to ensure maximum efficiency.

4. TESTING

After being rendered water-repellent, the article is to have a spray rating not lower than 4 (i.e. no wetting of the sprayed surface) when subjected to the test in British Standard 3702. "Method of test for the resistance of a fabric to surface wetting spray test".



Director, Stores and Clothing
Research and Development Establishment

Colchester

UK/SC/3693 METHODS FOR LAUNDERING, RENDERING WATER-REPELANT AND TESTING WATER REPELLENCY OF COATED GARMENTS.

THE WASH DESCRIBED IN THIS SPECIFICATION IS FOR A COMMERCIAL LAUNDRY, WHICH USES A MACHINE BIGGER THAN THE WASCATOR, SO ALL THE VALUES HAVE BEEN SCALED DOWN TO THE WASCATOR SIZE, BY USING RATIOS. THE DIPS ARE QUOTED FOR AN 86CM CAGE DIAMETER. THE WASCATOR CAGE DIAMETER IS 51.5CM, SO THE RATIO IS 1 : 0.593 (86:51.5)

A DIP OF 25 BECOMES 15 IN THE WASCATOR.

A DIP OF 15 BECOMES 9 IN THE WASCATOR.

A DIP OF 10 BECOMES 6 IN THE WASCATOR. THIS DIP HOWEVER GIVES VERY LITTLE LIQUOR IN THE DRUM SO IT WAS AGREED BETWEEN G AND T SECTION THAT THIS BE 9 ALSO.

THE LOAD QUOTED IS 56KG/M³. THE WASCATOR VOLUME IS 0.07 M³ WHICH GIVES A MAX LOADING IN THE WASCATOR OF 3.92KG=3920G. BECAUSE THIS LOAD IS A MAXIMUM THERE IS NO NEED TO ADD MAKEWEIGHTS.

28P :- THE REQUIREMENT IS "SUFFICIENT TO LATHER". IT WAS FOUND THAT 16 G OF E.C.E. POWDER GAVE A SMALL LATHER. THERE IS THEN THE CHOICE OF 3 CHEMICALS WHICH CAN BE ADDED. SODIUM CARBONATE WAS CHOSEN. THIS REQUIRES ONE QUATER THE SOAP QUANTITY TO BE USED, WHICH IS 4 G. WASH 1 REQUIRES COLD WATER TO BE USED AND HEATED UP TO 32^o C WHILE BEING AGITATED. THE WHOLE OF THIS IS TO BE RUN FOR 7 MINUTES. IF COLD WATER ONLY IS RUN IN THEN THE REQUIRED TEMPERATURE CANNOT BE GOT IN THE 7 MINUTES ALLOWED FOR THIS STAGE, SO IT WAS AGREED BETWEEN G AND T SECTIONS THAT HOT AND COLD COULD BE RUN IN AT THIS STAGE.

COPY OF THIS IN FILE NV/452/031.

ALSO WITH METHOD IN SHRINKAGE METHOD FILE.

24-3-82.