PRIVATE SPECIFICATION

ORIGINAL

Prepared for the

SOUTH AFRICAN NAVY

EMBOSSED BADGE INSIGNIA, BRANCH OF SERVICE, ADVANCED AND BASIC, BLUE ONTO WHITE

SAN 174

Revised May 2010

ORIGINAL

Tenderer's Comments

1. Scope

This specification covers the materials and make of embossed badges for the South African Navy.

2. Definitions

Acceptable: acceptable to the Directorate, Naval Logistics.

Nominal: subject to the tolerances normal to good manufacturing practice.

3. Requirements

- No materials will be supplied by the South African Navy
- Unless otherwise stated, all dimensions are indicated in millimeters

Tenderer's Comments

ORIGINAL

4. Base fabric

The base fabric to:

- be synthetic
- be warp knitted
- have a nominal mass of 265g/m^2
- have colour fastness to light of 4 when tested in accordance with SANS 105-B02 "Textiles - Tests for colour fastness Part B02: Colour fastness to artificial light: Xenon arc fading lamp test"
- have colour fastness to washing of 4 when tested in accordance with SANS 105-C03 "Textiles – Tests for colour fastness Part C03: Colour fastness to washing: Test 3"
- be an acceptable match to colour No. 1c – 95 "White" CKS 129 "Colours for textiles".

5. Adhesive film

The adhesive film to be:

- used to fuse the knitted backing
- an acceptable co-polymer adhesive
- of quality no less than 60 g/m^2

6. Embossing material

The embossing material to be:

- a rubber paint compound

The embossing must:

- have a high resistance to heat
- be colour fast
- show explicit detail
- colour No. 31c – 95* "Royal blue" of CKS 129 " Colours for textiles"

*Colours to be re-registered

7. Workmanship

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Tenderer's Comments

Each badge to be:

- cut, made and embossed with first-class workmanship throughout
- of uniform and acceptable make, colour and finish

Shall be free from:

- defects, that affect its appearance or may affect its serviceability (or both)
- marks
- spots
- stains, incurred in the making-up

All edges shall be:

- neatly double sealed – using a welding system
- free from fraying

Badge shall be:

- completely durable at all times and no separation must occur between the compound and the fabric of the badges

8. Construction

ORIGINAL

Tenderer's Comments

Illustrations are not to scale and are for guidance only, and unless inconsistent with the text, all measurements are nominal.

The badges to be:

- finished by means of a 3D- effect.

The badges to have the following properties:

- all ranking to be 100% proportionate in size to the original
- all ranks, where duplication occurs, will be identical
- all 3-D effects will be sculptured to create a mock wire embroidered effect
- corner sharpening and engraving will be used throughout
- contour effect must be used as a definition

The rank insignia to:

- be constructed from two layers of knitted outer fabric, laminated together with a hot melt co-polymer
- be embossed on the face side, with specified rank insignia as per attached profiles
- have double sealed edges on each end, sealed by a welding system

The hot melt co-polymer used between the layers of the material and welding system must render an article, which is:

- heat resistant
- machine washable
- dry cleanable
- soft and pliable
- sealed at the edges

Tenderer's Comments

9. Embossed badge insignia, branch of service, Blue onto White

ORIGINAL

Table 1: Branch Badges Insignia Basic: Gold onto Black

1	2	3	4
SERIAL NUMBER	NSN	DESCRIPTION	DRAWING NUMBER
1	8455-18-097-3744	BANDSMAN	1
2	8455-18-097-3753	CHEF	2
3	8455-18-097-3758	COMMUNICATION INTELLIGENCE	3
4	8455-18-097-3769	DIVER	4
5	8455-18-097-3772	ELECTRICAL FITTER (MACHINERY) SHIPS	5
6	8455-18-097-3780	ELECTRICAL FITTER (RADIO/RADAR) SHIPS	6
7	8455-18-097-3788	ELECTRONIC FITTER (WEAPONS) SHIPS	7
8	8455-18-097-3790	ENGINE ROOM MECHANIC (E.R.M.)	8
9	N/A	FINANCE	9
10	8455-18-097-3792	FIREMAN	10
11	8455-18-097-3793	GUNNERY SURFACE CONT. OPERATORS	11
12	8455-18-097-3797	GUNNERY SURFACE WEAPONS OPERATORS	12
13	8455-18-097-3800	INSTRUMENT FITTER	13
14	8455-18-097-3802	INTELLIGENCE	14
15	8455-18-097-3803	MECHANICAL FITTER MACHINERY	15
16	8455-18-097-3804	MINE COUNTER-MEASURES	16
17	8455-18-097-3805	MILITARY POLICE (NAVAL)	17
18	8455-18-097-3806	ORDINANCE ARTICIFER	18
19	N/A	PHOTOGRAPHER	19
20	8455-18-097-3809	PHYSICAL TRAINNING INSTRUCTOR (P.T.I.)	20
21	N/A	PRINTER	21
22	8455-18-097-3816	PROTECTION (SECURITY)	22
23	8455-18-097-3817	RADAR OPERATER	23
24	8455-18-097-3819	RIGGER	24
25	8455-18-097-3820	SHIPWRIGHT	25
26	N/A	SIGNWRITER	26
27	8455-18-097-3842	STEWARD	27
28	8455-18-097-3843	STOREKEEPER	28
29	8455-18-097-3844	SURVEY RECORDER	29
30	8455-18-097-3847	TELECOMMUNICATIONS OPEDRATOR-RADIO	30
31	8455-18-097-3860	TELECOMMUNICATIONS OPERATORE-TACTICAL	31
32	8455-18-097-3863	TORPEDO ANTI-SUBMARINE	32
33	8455-18-097-3865	WRITER	33
34	N/A	MASTER-AT-ARMS / COXSWAIN	34
35	8455-18-181-7759	CORPORATE COMMUNICATIONS	35
36	8455-18-186-3697	MARINES	36

Tenderer's comments

Tenderer's Comments

ORIGINAL

DRAWING NO. 1 – NSN: 8455-18-097-3744: **BANDSMAN**

DRAWING NO. 2 – NSN: 8455-18-097-3753: **CHEF**

Tenderer's Comments

ORIGINAL

DRAWING NO. 3 – NSN: 8455-18-097-3758: **COMMUNICATION INTELLIGENCE**

DRAWING NO. 4 – NSN: 8455-18-097-3769: **DIVER**

Tenderer's Comments

ORIGINAL

DRAWING NO. 5 – NSN: 8455-18-097-3772: **ELECTRICAL FITTER (MACHINERY)**

DRAWING NO. 6 – NSN: 8455-18-097-3780: **ELECTRICAL FITTER (RADIO/RADAR)**

Tenderer's Comments

ORIGINAL

DRAWING NO. 7 – NSN: 8455-18-097-3788: **ELECTRICAL FITTER (WEAPONS)**

DRAWING NO. 8 – NSN: 8455-18-097-3790: **ENGINE ROOM MECHANIC**

ORIGINAL

Tenderer's Comments

NO REQUIREMENT FOR DRAWING NO. 9: **FINANCE**

DRAWING NO. 10 – NSN: 8455-18-097-3792: **FIREMAN**

Tenderer's Comments

ORIGINAL

DRAWING NO. 11 – NSN: 8455-18-097-3793: **GUNNERY SURFACE CONT. OPERATORS**

DRAWING NO. 12 – NSN: 8455-18-097-3797: **GUNNERY SURFACE WEAPONS OPERATORS**

Tenderer's Comments

ORIGINAL

DRAWING NO. 13 – NSN: 8455-18-097-3800: **INSTRUMENT FITTER**

DRAWING NO. 14 – NSN: 8455-18-097-3802: **INTELLIGENCE**

Tenderer's Comments

ORIGINAL

DRAWING NO. 15 – NSN: 8455-18-097-3803: **MECHANICAL FITTER MACHINERY**

DRAWING NO. 16 – NSN: 8455-18-097-3804: **MINE COUNTER MEASURES**

Tenderer's Comments

DRAWING NO. 17 – NSN: 8455-18-097-3805: **MILITARY POLICE (NAVAL)**

DRAWING NO. 18 – NSN: 8455-18-097-3806: **ORDINANCE ARTIFICER**

Tenderer's Comments

ORIGINAL

NO REQUIREMENT FOR DRAWING NO. 19: **PHOTOGRAPHER**

DRAWING NO. 20 – NSN: 8455-18-097-3809: **PHYSICAL TRAINING INSTRUCTOR**

NO REQUIREMENT FOR DRAWING NO. 21: **PRINTER**

Tenderer's Comments

ORIGINAL

DRAWING NO. 22 – NSN: 8455-18-097-3816: **PROTECTION (SECURITY)**

DRAWING NO. 23 – NSN: 8455-18-097-3817: **RADAR OPERATOR**

Tenderer's Comments

ORIGINAL

DRAWING NO. 24 – NSN: 8455-18-097-3819: **RIGGER**

DRAWING NO. 25 – NSN: 8455-18-097-3820: **SHIPWRIGHT**

NO REQUIREMENT FOR DRAWING NO. 26: **SIGNWRITER**

Tenderer's Comments

ORIGINAL

DRAWING NO. 29 – NSN: 8455-18-097-3844: **SURVEY RECORDER**

DRAWING NO. 30 – NSN: 8455-18-097-3847: **TELECOMMUNICATIONS OPERATOR RADIO**

Tenderer's Comments

DRAWING NO. 27 – NSN: 8455-18-097-3842: **STEWARD**

ORIGINAL

DRAWING NO. 28 – NSN: 8455-18-097-3843: **STOREKEEPER**

ORIGINAL

Tenderer's Comments

DRAWING NO. 31 – NSN: 8455-18-097-3860: **TELECOMMUNICATIONS OPERATOR TACTICAL**

DRAWING NO. 32 – NSN: 8455-18-097-3863: **TORPEDO ANTI-SUBMARINE**

Tenderer's Comments

DRAWING NO. 33 – NSN: 8455-18-097-3865: **WRITER**

NO REQUIREMENT FOR DRAWING NO. 34: **MASTER-AT-ARMS/COXSWAIN**

DRAWING NO. 35 – NSN: 8455-18-181-7759: **CORPORATE COMMUNICATIONS**

DRAWING NO. 36 – NSN: 8455-18-186-3694: **MARINES**

ORIGINAL

Tenderer's Comments

Tenderer's Comments

Table 2: Branch Badges Insignia Advanced, with crest: Gold onto Black

ORIGINAL

1	2	3	4
SERIAL NUMBER	NSN	DESCRIPTION	DRAWING NUMBER
1	8455-18-097-3748	BANDSMAN	1
2	8455-18-097-3754	CHEF	2
3	8455-18-097-3764	COMMUNICATION INTELLIGENCE	3
4	8455-18-097-3770	DIVER	4
5	8455-18-097-3776	ELECTRICAL FITTER (MACHINERY) SHIPS	5
6	8455-18-097-3787	ELECTRICAL FITTER (RADIO/RADAR) SHIPS	6
7	8455-18-097-3789	ELECTRONIC FITTER (WEAPONS) SHIPS	7
8	8455-18-097-3791	ENGINE ROOM MECHANIC (E.R.M.)	8
9	N/A	FINANCE	9
10	8455-18-097-3881	FIREMAN	10
11	8455-18-097-3887	GUNNERY SURFACE CONT. OPERATORS	11
12	8455-18-097-3892	GUNNERY WEAPONS / CONTROL ARMOUR	12
13	8455-18-097-3894	INSTRUMENT FITTER	13
14	8455-18-097-3895	INTELLIGENCE	14
15	8455-18-097-3896	MECHANICAL FITTER (MACHINERY) SHIPS	15
16	8455-18-097-3897	MINE COUNTER-MEASURES	16
17	8455-18-097-3900	NAVAL MILITARY POLICE	17
18	8455-18-097-3903	ORDINANCE ARTICIFER	18
19	8455-18-097-3905	PHOTOGRAPHER	19
20	8455-18-097-3906	PHYSICAL TRAINNING INSTRUCTOR (P.T.I.)	20
21	N/A	PRINTER	21
22	8455-18-097-3908	PROTECTION (SECURITY)	22
23	8455-18-097-3909	RADAR OPERATER	23
24	8455-18-097-3912	RIGGER	24
25	8455-18-097-3913	SHIPWRIGHT	25
26	8455-18-097-3914	SIGNWRITER	26
27	8455-18-097-3915	STEWARD	27
28	8455-18-097-3916	STOREKEEPER	28
29	8455-18-097-3917	SERVEY RECORDER	29
30	8455-18-097-3919	TELECOMMUNICATIONS OPEDRATOR-RADIO	30
31	8455-18-097-3921	TELECOMMUNICATIONS OPERATORE-TACTICAL	31
32	8455-18-097-3922	TORPEDO ANTI-SUBMARINE (TAS)	32
33	8455-18-097-3924	WRITER	33
34	8455-18-174-6251	MASTER-AT-ARMS / COXSWAIN	34
35	8455-18-181-7758	CORPORATE COMMUNICATIONS	35
36	8455-18-186-3698	MARINES	36

Tenderer's comments

Tenderer's Comments

DRAWING NO. 1 – NSN: 8455-18-097-3748: **BANDSMAN**

ORIGINAL

DRAWING NO. 2 – NSN: 8455-18-097-3754: **CHEF**

Tenderer's Comments

DRAWING NO. 3 – NSN: 8455-18-097-3764: **COMMUNICATION INTELLIGENCE**

ORIGINAL

DRAWING NO. 4 – NSN: 8455-18-097-3770: **DIVER**

Tenderer's Comments

DRAWING NO. 7 – NSN: 8455-18-097-3789: **ELECTRICAL FITTER (WEAPONS)**

ORIGINAL

DRAWING NO. 8 – NSN: 8455-18-097-3791: **ENGINE ROOM MECHANIC**

Tenderer's Comments

DRAWING NO. 5 – NSN: 8455-18-097-3776: **ELECRICAL FITTER (MACHINERY)**

ORIGINAL

DRAWING NO. 6 – NSN: 8455-18-097-3787: **ELECRICAL FITTER (RADIO/RADAR)**

Tenderer's Comments

DRAWING NO. 12 – NSN: 8455-18-097-3892: **GUNNERY SURFACE WEAPONS OPERATORS**

ORIGINAL

DRAWING NO. 13 – NSN: 8455-18-097-3894: **INSTRUMENT FITTER**

Tenderer's Comments

NO REQUIREMENT FOR DRAWING NO. 9: **FINANCE**

ORIGINAL

DRAWING NO. 10 – NSN: 8455-18-097-3881: **FIREMAN**

DRAWING NO. 11 – NSN: 8455-18-097-3887: **GUNNERY SURFACE CONT. OPERATORS**

Tenderer's Comments

DRAWING NO. 16 – NSN: 8455-18-097-3897: **MINE COUNTER MEASURES**

ORIGINAL

DRAWING NO. 17 – NSN: 8455-18-097-3900: **MILITARY POLICE (NAVAL)**

Tenderer's Comments

DRAWING NO. 14 – NSN: 8455-18-097-3895: **INTELLIGENCE**

ORIGINAL

DRAWING NO. 15 – NSN: 8455-18-097-3896: **MECHANICAL FITTER MACHINERY**

Tenderer's Comments

DRAWING NO. 18 – NSN: 8455-18-097-3903: **ORDINANCE ARTIFICER**

ORIGINAL

NO REQUIREMENT FOR DRAWING NO. 19 **PHOTOGRAPHER**

Tenderer's Comments

DRAWING NO. 20 – NSN: 8455-18-097-3906: **PHYSICAL TRAINING INSTRUCTOR**

ORIGINAL

DRAWING NO. 21 – NSN: 8455-18-097-4059: **PRINTER**

Tenderer's Comments

DRAWING NO. 22 – NSN: 8455-18-097-3908: **PROTECTION (SECURITY)**

ORIGINAL

DRAWING NO. 23 – NSN: 8455-18-097-3909: **RADAR OPERATOR**

Tenderer's Comments

DRAWING NO. 24 – NSN: 8455-18-097-3912: **RIGGER**

ORIGINAL

DRAWING NO. 25 – NSN: 8455-18-097-3913: **SHIPWRIGHT**

Tenderer's Comments

NO REQUIREMENT FOR DRAWING NO. 26: **SIGNWRITER**

ORIGINAL

DRAWING NO. 27 – NSN: 8455-18-097-3915: **STEWARD**

DRAWING NO. 28 – NSN: 8455-18-097-3916: **STOREKEEPER**

Tenderer's Comments

DRAWING NO. 29 – NSN: 8455-18-097-3917: **SURVEY RECORDER**

ORIGINAL

DRAWING NO. 30 – NSN: 8455-18-097-3919: **TELECOMMUNICATION OPERATOR RADIO**

Tenderer's Comments

DRAWING NO. 31 – NSN: 8455-18-097-3921: **TELECOMMUNICATIONS OPERATOR TACTICAL**

ORIGINAL

DRAWING NO. 32 – NSN: 8455-18-097-3922: **TORPEDO ANTI-SUBMARINE**

Tenderer's Comments

DRAWING NO. 33 – NSN: 8455-18-097-3924: **WRITER**

ORIGINAL

DRAWING NO. 34 – NSN: 8455-18-097-6251: **MASTER-AT-ARMS/COXSWAIN**

DRAWING NO. 35 – NSN: 8455-18-181-7758: **CORPORATE COMMUNICATIONS**

Tenderer's Comments

DRAWING NO. 36 – NSN: 8455-18-186-3696: **MARINE**

ORIGINAL

Tenderer's Comments

10. Packing, marking and delivery

ORIGINAL

10.1 Packing

The embossed badges shall be:

- delivered in a clean and dry condition
- so packed that they will not be damaged in transit or in storage
- unless otherwise specified in the order or contract, each badge shall be packed in a suitable plastics envelope with a pull and press opening and closure and placed in acceptable bulk containers

10.2 Marking

Each plastics envelope to be clearly marked with the following information:

- the manufacturer's name or trade mark or both
- the year of manufacture
- the National Stock Number
- the item description

10.3 Bulk Containers

Each container shall have a label securely attached to the outside, visible when the containers are stacked and shall provide the following information in legible and indelible marking:

- the manufacturer's name or trade mark or both
- the year of manufacture
- the item description
- the National Stock Number
- the quantity

10.4 Additional marking

When so required by the South African navy, badges, envelopes or containers (or any combination of these) shall bear information additional to that specified above.

Tenderer's Comments

11. Normative references

ORIGINAL

The following standards contain provisions which, through reference in this text, constitute provisions of this specification. All standards are subject to revision and since any reference to a standard is deemed to be a reference to the latest edition of a standard, parties to agreements based on this specification are encouraged to take steps to ensure the use of the most recent editions of the standards indicated below. Information on currently valid national and international standards may be obtained for Standards South Africa.

CKS 129, *Colours for textiles.*

SANS 105-B02, *Textiles – Tests for colour fastness – Part B02: Colour fastness to artificial light: Xenon arc fading lamp test.*

SANS 105-C03, *Textiles – Test for colour fastness – Part C03: Colour fastness to washing: Test 3.*

ORIGINAL

Annex A
(normative)

Special conditions of tender

General

A-1 Unless otherwise stated, the South African Bureau of Standards shall be the inspecting authority.

A-2 Three pre-production sample badges, shall have been inspected, tested and approved by the inspecting authority before bulk production is commenced. Each one of these samples shall be accompanied by a trim chart containing a sample of each component material (as given in 4 -6) and the relevant certificates. It shall be the duty of the manufacturer to give adequate notice to the inspecting authority of the availability to these samples.

A-3 The badges shall be subject to inspection during the course of manufacture. The inspector shall, during normal working hours, be given all reasonable facilities for carrying out his duties and shall have the right of entry into the contractor's factory and the factory or works of any subcontractor where work on the badges supplied to this specification may be in progress.

A-4 The contractor shall inspect the finished badges for compliance with the specification before submitting them to the inspecting authority for final inspection.

A-5 Before acceptance, the badges shall have been inspected and tested by the inspecting authority and found to comply with the requirements of the specification.

A-6 Any applications for deviations from drawings or the specification, or any laid down process, treatment or procedures as set out in this specification, must be made to the SA Navy Office, Pretoria.

Documentation

One container of each consignment shall be marked "documents" and shall, in addition to the badges, contain the following:

1) The packing slip/delivery not;
2) where applicable, the certificate(s) of conformance; and
3) a copy of the invoice containing the following:
   a) The order number
   b) the financial authority number
   c) a full description of the consignment, i.e. items, rank, quantity, etc.