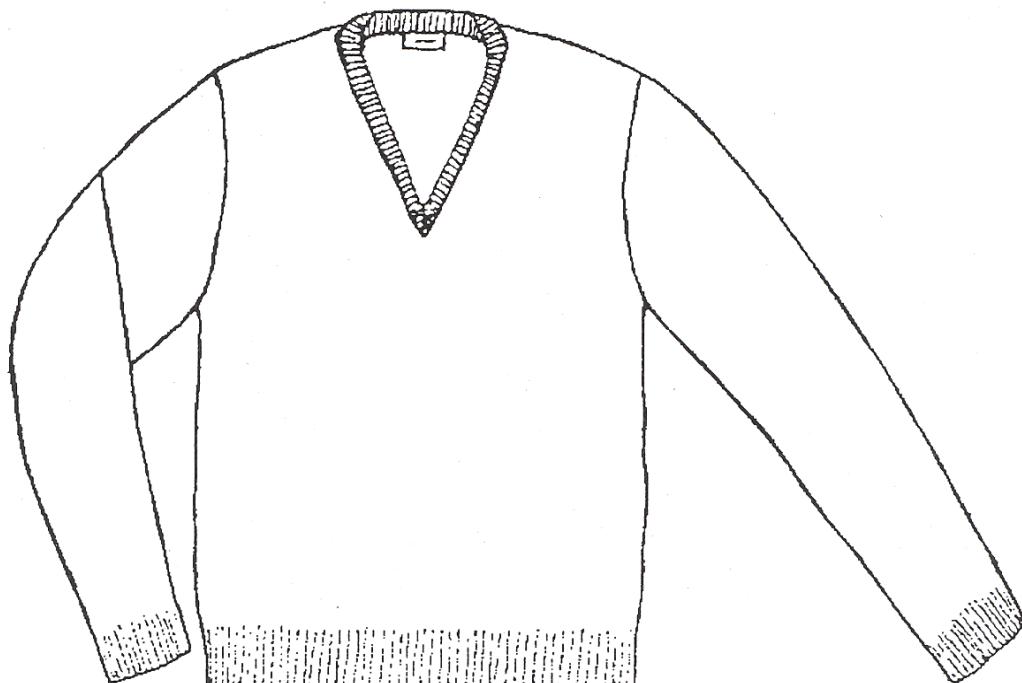


PRIVATE SPECIFICATION

prepared for



JERSEY, V-NECK, MEN (GROUND STAFF and FDC)



**Item Number: C070
Document Number: SAA 1009
April 2014**

1. Scope

This specification covers the material and make of jerseys for male ground staff personnel and FDC of South African Airways.

2. Definitions

For the purpose of this specification, the definitions given in SANS 10371 and the following definitions shall apply:

acceptable: acceptable to South African Airways

nominal: subject to the tolerances normal to good manufacturing practice

SANS: South African National Standard

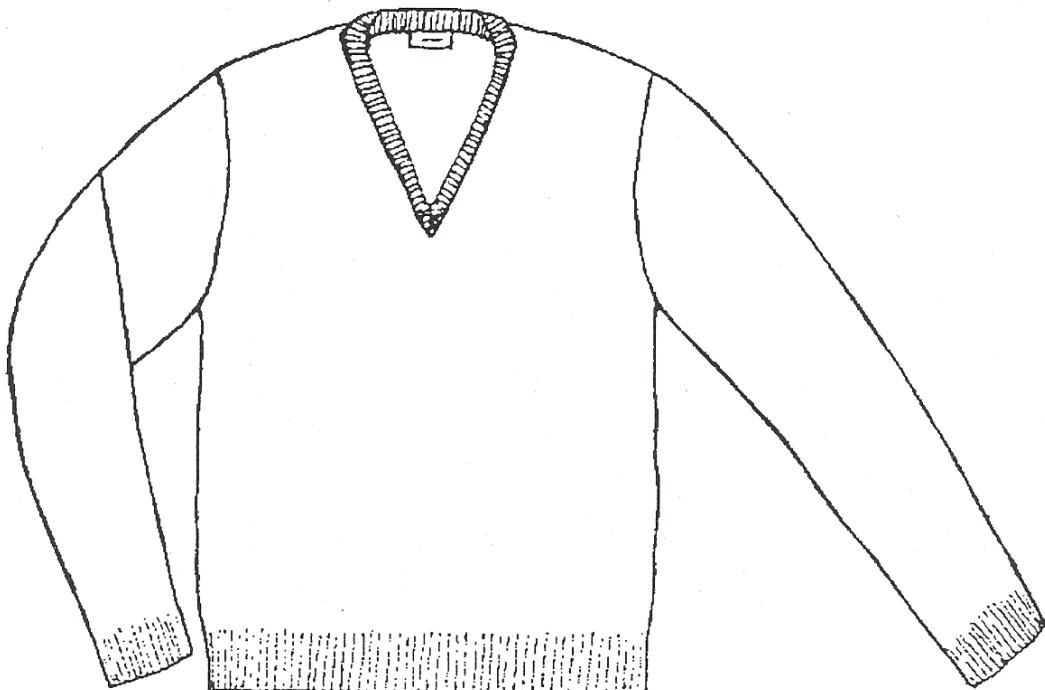
SAA: South African Airways

3. Style

- V-neck
- long sleeves
- rib body welt
- rib cuffs

Ref. No	Item No.	Date	Responsibility	Doc Issue	Page	No of pages
SAA 1009	C070	April 2014	SAA	02.0	2	14

4. Illustrations



OK

Ref. No	Item No.	Date	Responsibility	Doc Issue	Page	No of pages
SAA 1009	C070	April 2014	SAA	02.0	3	14

5. Materials - General

No materials will be supplied by South African Airways (unless otherwise specified in the order or contract)

6. Component materials

The following materials shall be supplied and used by the manufacturer. Trim charts shall also be submitted by the manufacturer (see Annex A).

NOTE: All components listed below shall be manufactured in the Republic of South Africa. In instances where the raw material and/or finished components are not available in the Republic of South Africa, the onus shall be on the bidder to apply for exemption certificates from DTI. Exemption certificates, where relevant, shall be submitted together with each bid.

6.1 Knitted fabric

- ◆ to comply with the requirements of table 1
- ◆ to be an acceptable match to colour No. 634c-2014 "SAA Navy Knit Men's" of CKS 129 "Colours for textiles"

three metres of the knitted fabric must be submitted for colour registration purposes (when required): see annex A

6.2 Stay tape

- to comply with the requirements for type TA 13 of SANS 877

6.3 Sewing thread

- to comply with the relevant requirements of SANS 1362
- polyester-and cotton core-spun, ticket No. 75 **OR**
- staple polyester ticket No. 60

6.4 Cover thread

- the same yarn as that used in the knitted fabric

6.5 Elastic thread

- an acceptable elasticized thread

Ref. No	Item No.	Date	Responsibility	Doc Issue	Page	No of pages
SAA 1009	C070	April 2014	SAA	02.0	4	14

Table 1 – Knitted fabric requirements

1	2	3
Property	Requirement	Method of test
Composition Acrylic ¹⁾	100 %	Microscopical examination and chemical analysis
Construction Body and sleeves	Half milano rib	Visual examination
Body welt and cuffs	2 x 2 rib	
Courses per 10 cm, min. Body and sleeves	44 ²⁾	SANS 5275
Body welt and cuffs	80	
Mass per unit area, g/m ² , min. Body and sleeves	550	SANS 79
Resistance to pilling, rating, min.	3 - 4	BS 5811 ³⁾
Dimensional changes on washing, %, max. Length	7	SANS 960
Width	5	Procedure D ⁴⁾
Colour fastness to light, rating, min.	5	SANS 105-B02
Colour fastness to washing, rating, min. Change in colour	4	SANS 105-C01
Staining of transfer cloths	4	
Colour fastness to perspiration, rating, min. Change in colour	4	SANS 105- E04
Staining of transfer cloths	4	

1) The acrylic yarn shall be of the low pill type.
 2) Measured on the face side of the fabric.
 3) The testing time shall be 2h and the test shall be carried out after a pre-treatment in accordance with the prescribed test method for dimensional changes on washing.
 4) Test in tubular form and flat dry.

Ref. No	Item No.	Date	Responsibility	Doc Issue	Page	No of pages
SAA 1009	C070	April 2014	SAA	02.0	5	14

7. Workmanship

The jerseys to be:

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

To be free from:

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

Seams and stitches to be:

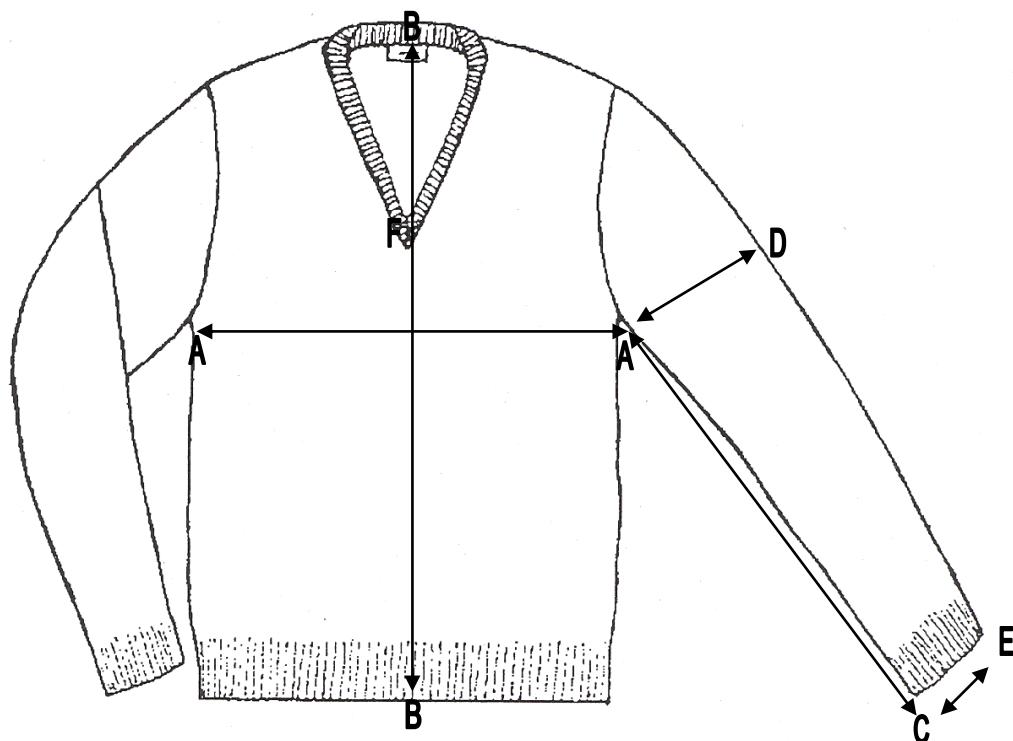
- smooth and uniform
- free from twists, pleats and puckers

Ends of sewing to be:

- trimmed and loose threads removed
- back tacked if unsecured

Ref. No	Item No.	Date	Responsibility	Doc Issue	Page	No of pages
SAA 1009	C070	April 2014	SAA	02.0	6	14

8. Sizes



Measuring point		Description
A - A	Chest circumference	Measure at the base of the armhole, with the garment spread completely flat, and multiply by two.
B - B	Back length	Measure from the seam at the centre back of the neck to the outer edge of the bottom hem.
A - C	Sleeve length	Measure along the underarm seam, from the base of the armhole to the outer edge of the cuff.
A - D	Sleeve circumference	Measure at the widest point of the sleeve and multiply by two.
C - E	Cuff circumference	Measure at the outer edge of the cuff and multiply by two.
B - F	Depth of neck opening	Measure from the top edge of the centre back neck to the top edge of the V.

Ref. No	Item No.	Date	Responsibility	Doc Issue	Page	No of pages
SAA 1009	C070	April 2014	SAA	02.0	7	14

Table 2 – Size range

1	2	3	4	5	6	7
Size designation ¹⁾	Nominal finished garment measurements, cm					
	Chest	Back length	Sleeve length	Sleeve circumference	Cuff circumference	Depth of neck opening
X-Small 77 - 82	83	65	46	34	14	18
Small 87 - 92	93	67	48	38	14	19
Medium 97 - 102	103	70	50	42	15	20
Large 107 - 112	113	72	51	45	16	20
X-Large 117 - 122	123	73	52	49	17	21
XX-Large 127 - 132	133	74	53	51	18	21
XXX-Large 137 - 142	143	74	53	51	18	21

1) Based on the chest girth, in centimetres, of the intended wearer.

Ref. No	Item No.	Date	Responsibility	Doc Issue	Page	No of pages
SAA 1009	C070	April 2014	SAA	02.0	8	14

9. Make

Unless inconsistent with the text, all measurements are nominal

9.1 Body

- to consist of two parts (front and back)
- seamed together at the shoulders
- seamed together at the sides
- secured at the bottom of the side seams
- lower edge of body to have a rib
 - of depth 60 mm
 - welt to incorporate a laid-in elastic thread
- shoulders to be stayed on the inside with stay tape
 - sewn in with the shoulder seam

9.2 Neck opening

- forming a V at the centre front
- finished off with rib-knitted fabric
 - of finished depth 20 mm
 - after being folded double and sewn to the neck opening

9.3 Sleeves

- one-piece
- set-in
- seamed under the arms
- secured at the bottom of the seams
- tapering to a ribbed cuff
 - of depth 60 mm
 - cuff welt to incorporate a laid-in elastic thread

Ref. No	Item No.	Date	Responsibility	Doc Issue	Page	No of pages
SAA 1009	C070	April 2014	SAA	02.0	9	14

10. Stitches and seams

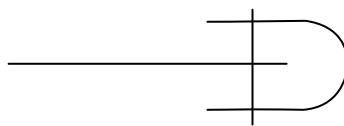
10.1 Stitches

overlocking: three-thread overlock stitch

attaching of neck trim: mock linking stitch

10.2 Seams

attaching of neck trim: seam type BSa



Fold a binding strip round the edge of a ply or plies of material and seam with the appropriate number of rows of stitches.

all other seams: seam type SSa and finished with cover thread



Superimpose two or more plies of material and seam with the appropriate number of rows of stitches positioned at the specified distance(s) from the aligned edges.

10.3 Number of stitches

for both seams and cover thread: 40 ± 4 per 10 cm

Ref. No	Item No.	Date	Responsibility	Doc Issue	Page	No of pages
SAA 1009	C070	April 2014	SAA	02.0	10	14

11. Garment labels

11.1 Label identification

Each garment to be fitted with the labels as given in the table below:

Table 4 – Label identification

Type*		Requirements
1	a generic woven jacquard label	see 11.2
2	a garment specific printed woven fabric label	see 11.3
3	a care-label	see 11.4
4	a paperboard swing tag	see 11.5

* Types 2 and 3 may be combined provided the size designation is visible when packed in a plastics envelope.

11.2 Jacquard label

Each label shall

- be a woven jacquard label
- have properly finished edges to prevent fraying
- show information in legible and indelible block letters of height at least 3 mm
- be permanently secured to the seam on the inside at the back of the neck
- be such that it shall outlast the garment
- include the following information
 - the registered full-colour SAA logo at the top of the label (see below)
 - the manufacturer's name or trademark or both
 - the month and year of manufacture
 - the VAT number of the contractor
 - the SAA order number
 - the country of origin, i.e. "Made in South Africa"



Ref. No	Item No.	Date	Responsibility	Doc Issue	Page	No of pages
SAA 1009	C070	April 2014	SAA	02.0	11	14

11.3 Printed garment label

Note: This label and the care-label may be combined (loop label)

Each label shall

- be a white woven rayon label that is printed
- comply with SANS 1309
- show information in legible and indelible block letters of height at least 3 mm
- be permanently secured so that it is easily accessible and visible when packed in a plastics envelope
- be such that it shall outlast the garment (including the markings)
- include the size designation

11.4 Care-labelling

Each label shall

- be a white woven rayon label that is printed
- comply with SANS 1309
- show information in legible and indelible block letters of height at least 3 mm
- be permanently secured to the inside left side seam
- be such that it shall outlast the garment (including the markings)
- provide appropriate care instructions (in words and symbols) in accordance with SANS 10011
- provide the fibre composition of the fabric in accordance with the requirements of SANS 10235

11.5 Printed swing tags

Each swing tag shall

- be a white cardboard label that is printed
- show information in legible and indelible block letters of height at least 3 mm
- shall include the following information
 - the size designation
 - the item description
 - the month and year of manufacture
 - the order number

Ref. No	Item No.	Date	Responsibility	Doc Issue	Page	No of pages
SAA 1009	C070	April 2014	SAA	02.0	12	14

12. Packaging and marking of packaging

12.1 Packing

The jerseys to be:

- delivered in a clean and commercially dry condition
- so packed that they will not be damaged in transit or in storage
- neatly folded and individually packed in a plastics envelope of suitable size and shape
- unless otherwise specified in the order or contract, packed (in units of 10) for transit in acceptable bulk containers

Jerseys:

- of the same size designation to be packed together in a bulk container (unless quantities ordered are such that packing together of the same size only is not justified)
- of different size designations may also be packed together to accommodate the last part of an order or contract

12.2 Marking

12.2.1 Plastics envelopes

Each envelope to be clearly marked with the following information:

- the item number
- the item description
- the size designation
- the order number
- the month and year of manufacture

12.2.2 Bulk containers

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

- the manufacturer's name or trade mark or both
- the item description, i.e. "Jerseys, V-neck, men (Ground staff)"
- the size designation
- the quantity
- the month and year of manufacture
- the order number or contract number or both
- the box number, e.g. "1 of 5"
- the total mass of the packed container
- the Inspection Certificate Number

12.3 Additional marking

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

Ref. No	Item No.	Date	Responsibility	Doc Issue	Page	No of pages
SAA 1009	C070	April 2014	SAA	02.0	13	14

13. Normative references

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 from SABS Standards Sales Division (012 428-7911) or www.sabs.co.za

CKS 129, *Colours for textiles*.

BS 5811, *Determination of the resistance to pilling and change of appearance of fabrics*.

SANS 79, *Textiles - Mass per unit area of conditioned fabrics*.

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

SANS 105-C01, *Textiles - Tests for colour fastness - Part C01: Colour fastness to washing: Test 1*.

SANS 105-E04, *Textiles - Tests for colour fastness - Part E04: Colour fastness to perspiration*.

SANS 877, *Woven cotton tapes*.

SANS 960, *Textiles - Dimensional stability during washing and drying procedures*.

SANS 1309, *Printed labels for textiles*.

SANS 1362, *Sewing threads*.

SANS 5275, *Wales and courses per unit length in knitted textile fabrics (counting glass method)*.

SANS 10011, *Care-labelling of textiles and clothing*.

SANS 10235, *Fibre content labelling of textiles and textile products*.

SANS 10371, *Terms and definitions for clothing*

Ref. No	Item No.	Date	Responsibility	Doc Issue	Page	No of pages
SAA 1009	C070	April 2014	SAA	02.0	14	14

Annex A

(normative)

Special conditions of tender

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

A-2 Three pre-production sample jerseys, and at least two square metres of the main knitted fabric clearly marked with the dye batch, shall have been inspected, tested and approved by the inspecting authority before bulk production is commenced and it shall be the duty of the manufacturer to give adequate notice to the inspecting authority of the availability of these samples. The samples shall also be accompanied by a trim chart containing a sample of each component material (as given in 6.2 to 6.5) and the relevant certificates. When relevant, three metres of the knitted fabric must also be submitted by the successful tenderer to make swatches for colour registration purposes.

A-3 The jerseys 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 jerseys supplied to this specification may be in progress.

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

A-5 Before acceptance, the jerseys 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 South African Airways and be verified by the SABS¹.

¹ **SABS Inspection Authority: (Tel) 012 4287371;**

Ref. No	Item No.	Date	Responsibility	Doc Issue	Page	No of pages
SAA 1009	C070	April 2014	SAA	02.0	15	14

ANNEX B
(Normative)
CKS 129 Colours

Due to the fact that colours can change over a period of time, any colour standard which has been registered for a period of **SEVEN YEARS** or more shall be considered obsolete. These standards shall then be allocated an archived status (as opposed to current status) and re-registration shall be required.

A. The following scenarios require a submission of knitted fabric from the successful tenderer:

1. A colour standard is archived.
2. First time registration is required (CKS 129 colour number does not exist).
3. Colour swatch stock at the SABS is no longer available.

B. Requirements for the submission of fabric as identified in A:

1. The colour shall be as agreed upon between the South African Airways and the successful tenderer.
2. The fabric shall be used to make new colour swatches which shall be the responsibility of the SABS.
3. The cost of the knitted fabric shall be incorporated in the relevant tender submission.

HISTORY SHEET				
VERSION	DATE	AMENDMENTS/HISTORY	CHECKED	
			NAME	INIT.
1	December 2009	First release		
2	April 2014	KEPT SPEC AS IS, with following additions: Add CKS 129 colour Add note regarding local content Add Annex B		

Ref. No	Item No.	Date	Responsibility	Doc Issue	Page	No of pages
SAA 1009	C070	April 2014	SAA	02.0	16	14