

### SOUTH AFRICAN NOTICE TO MARINERS

### **MAY 2002 EDITION**

# PUBLISHED MONTHLY BY THE HYDROGRAPHIC OFFICE CAPE TOWN

### **CONTENTS**

I	Explanatory	Notes	and	Index
ı	L'Apidilator y	110103	unu	HILLON

- II SAN Notices to Mariners. Updates to Standard Navigational Charts
- III SAN Charts and SAN HO Publications New Charts / Editions
- IV Corrections to SAN HO Publications
- V Corrections to SA List of Lights and Radio Services
- VI Reprints of Radio Navigational Warnings

### **IMPORTANT**

Mariners are requested to inform the Hydrographer, Private Bag X1, Tokai 7966, immediately of the discovery of new dangers, or changes or defects in aids to navigation and of shortcomings in South African charts or publications. Copies of form HO-16, which is a convenient form on which to send in a report, may be obtained gratis from any Official Chart Agent or the reproduction at the end of Section VI of the monthly edition of Notices to Mariners.

In addition to postal methods, the following additional communication facilities are available:

Notices to Mariners Web site : Web : http://hydro.imt.za/hydronet/Ho/

Urgent navigational information: Fax: 021 787 2228 Phone: 021 787 2445

Other navigational information: Phone: 021 787 2444

E-mail: hydrosan@iafrica.co.za

General information: Phone: 021 787 2408

L.D. Reeder, Captain Hydrographer, SA Navy NAVAREA VII Co-ordinator

### INDEX OF CHARTS AND PUBLICATIONS AFFECTED

SAN Charts	Notices	Pages
1	53	2
75 (INT 2630)	49	1
122	51	2
125	52, 56	2, 6
1001 (INT 2611)	48, 55	1, 6
1003	54(T)	3
SC 5	50	1

SAN Publications	Notices	Pages
Annual Summary of South African Notices to Mariners 2002	57	7
SA List of Lights and Radio Services - SAN HO-1	59	7
Catalogue and Indexes of SAN Charts and other Hydrographic Publications - SAN HO-3	58	7

### **Spheroid / GPS Positions**

All positions quoted in these Notices are referred to Clarke 1880 (Mod) Spheroid unless otherwise stated. On chart scales of 1: 100 000 and smaller, positions from GPS receivers set to WGS 84 may be plotted directly on these charts. Mariners are warned that insertion of Clarke 1880 (or other) positions on Automatic Plotters which are set to WGS 84 Spheroid can result in inaccurate navigation practices.

### **Temporary and Preliminary Notices**

These are indicated by (T) or (P)after the notice number. These are printed on one side of the paper in order that they may be cut and filed and are placed at the end of Section II. To assist in filing, the year is indicated after the notice number. **Information from these notices is not included on charts before issue;** charts should be updated in pencil on receipt.

### **Permanent Notices**

Permanent corrections in Section II are marked by a star adjacent to the notice number to indicate that the notice is based on original information. Periodic lists of permanent corrections pertaining to affected navigational charts and publications are published annually and copies may be obtained from the Hydrographic Office or through a Chart Agent.

### **Chart Corrections**

Further details are contained in NP100 The Mariner's Handbook which should be consulted for the correct procedures of filing, inserting and noting all types of corrections on nautical charts and other hydrographic publications. The Handbook may be obtained from Admiralty Chart Agents in Cape Town and Durban. Consult SAN HO-6 for Symbols and Abbreviations used on SAN Charts and NP735 for an illustrated explanation of the IALA Maritime Buoyage System.

### **Provision of Notices to Mariners**

These Notices are *gratis* and may be obtained on request from the Hydrographic Office or through the approved Chart Agents. Additional copies required of "block" chart corrections can also be obtained through the above procedure.

### **Radio Navigational Warnings**

See Note at the start of Section III

### GUIDANCE NOTES FOR VIEWING AND PRINTING NOTICES USING ADOBE ACROBAT

For optimum results when viewing and printing material from the PDF digital files please note the following:

The minimum specification is a 486 PC with Windows 3.1 and 4MB of RAM.

When printing data from the files, ensure the Fit to Page icon in the Adobe Acrobat print menu is switched off before printing. Otherwise large text pages will be compressed, or large size Blocks may not fit the chart.

If printing text or monochrome NM Blocks, the minimum specification is an Inkjet or good quality Laser Postscript printer with at least 6 MB of memory. (NB. If using a Postscript printer, ensure the Postscript printer driver is installed).

For printing Colour NM Blocks the minimum specification of printer is a good quality Ink Jet/Laser printer with 300 dpi resolution or greater.

If using certain types of Ink Jet printer ensure the setting is set to Dithered screening not Pattern screening.

Printed colour copies should be compared with the colour image on screen to ensure that all the colours have reproduced correctly. Printer property resolution and ink density may need to be increased or adjusted to obtain the best results.

Ensure the Colour Ink Cartridge is in accordance with the printer manufacturers specifications. Minimum paper specification for printing Colour NM Blocks is International paper size A4, thickness/weight 80 gsm paper. (The same paper as used for NM Blocks in the NM Weekly). NB. (Ensure the paper quality is in accordance with the Printer manufacturers specifications).

The Hydrographer does not accept any liability for the display and printing of these digital Notices to Mariners on the users equipment.

### TEMPORARY NOTICES AND PRELIMINARY NOTICES **In force 26 May 2002**

Waverider Buoy laid.

Channel Buoys nos 1, 4 & 6 out of position.

### TEMPORARY NOTICES

1	999	Serie	S

1999 Ser	ries		
74(T)	RSA	East Coast	Current Meter laid.
93(T)	Namibia	South Coast	Buoy and Current Meters laid.
2000 C			
2000 Ser			
59(T)	RSA	South Coast	Current Meter - Buoy laid.
75(T)	RSA	South Coast	Current Meters laid.
88(T)	Namibia	South Coast	Current Meters laid.
•004.0			
2001 Ser	ies		
82(T)	Namibia	Walvis Bay	Unlit vessel at anchor.
86(T)	RSA	St Helenabaai	Telemetry Marker Buoy laid.
94(T)	Namibia	Lüderitz	Bell Buoy unlit.
95(T)	Namibia	Lüderitz	Tiger Reef Buoy missing.
109(T)	Namibia	Walvis Bay	Wave Meter Buoys laid.
2002 G	•		
2002 Ser	nes		
26(T)	Namibia	Lüderitz	Diaz Point Fog Signal inoperative.
27(T)	RSA	False Bay	Whittle Rock Buoy off station.
34(T)	Namibia	Walvis Bay	Waverider Buoy laid.

### PRELIMINARY NOTICES

Namibia

RSA

Nil prior to these Notices.

### 2001 Series

34(T)

53(T)

61(P)	RSA	South & East Coasts	Underwater cable laying.
81(P)	RSA	South & West Coasts	Underwater cable laying.
113(P)	RSA	East Coast, Durban	Vessel traffic Services.

Walvis Bay

Port Nolloth

(SAN 1001)

### SA NAVY SAN CHARTS OF SOUTH AFRICAN AND NAMIBIA THAT ARE REFERRED TO A WGS84 COMPATIBLE DATUM

The following is the current list of SAN charts of South Africa and Namibia that are referred to a WGS84 compatible datum.

125 132 1001(INT 2611)	1003
76(INT 2640) 79(INT 2670) 87(INT 7570)	113

1012(INT 2672) 1015 1017 1024(INT 7531)

1032(INT 7572) 1033(INT 7571) 2004 SC3

SC5

### **MISCELLANEOUS:**

1. Mariners are advised that South African Notices to Mariners is available in PDF format on the internet at

Website: http://hydro.imt.za/hydronet/Ho/.

2. Mariners attention is invited to the fact that the Hydrographic Office E-Mail address hydrosan@iafrica.co.za is only manned during office hours, Mondays to Friday, between the hours of 0600 UTC and 1400 UTC. Only matters of a routine nature must be forwarded by this method.

### \*48 NAMIBIA, Walvis Bay - Approaches To - Eastern Longitude Limit

1. Amend : East Longitude limit to read 14°32'50" E

SAN Charts: 1001 (INT 2611) (NC)

Source: Hydrographer SA Navy

\*49 NAMIBIA, South Coast - Bogenfels - Non-dangerous Wreck

1. Insert: +++ PA in position 27°30'.0 S 015°24'.0 E

- 2. Wreck is that of Marine Mining Vessel SHELF EXPLORER, GRT 1886, 83m sunk in depth of approximately 45m.
- 3. Originally issued as Coastal Navwarning 186 of 2002.

SAN Chart: 75 (INT 2630) (23/01)

Source: Gemfarm Investments. (SAN 75)

\*50 SOUTH AFRICA, South West Coast - Waenhuiskrans - Arniston Light (Z5988)(D6370.3)

in approximate position 34°40′.0 S 020°13′.9 E

*SAN Chart*: *SAN SC 5* (101/01)

Source: National Ports Authority (SAN SC 5)

(SAN 1)

II

*51	SOUTH AF	RICA, South (	Coast - Wells	S			
1. Insert :		in position	a. (E-BD7) b. (E-CE4) c. (E-BD6)	35°11'28".84 \$35°11'36".60 \$35°12'58".22 \$	S 2	1°18'09".42 E 1°20'02".82 E 1°17'28".98 E.	
2. Wells are for th	ne proposed "Sab	ole Oilfield." Posi	itions are giver	n in Clarke 1880	(MOD) spheroi	d.	
SAN Chart : Source :	12	2 Petroleum 2	Agency SA	(74	//01)		(SAN 122)
*52	SOUTH AF	RICA, South (	Coast - Port	Elizabeth			
1. Delete : "The V	TS indicated on	this chart is not	yet in operatio	n" from the Not	e on Vessel Trat	fic Services.	
2. Superinpose :	$\Diamond$		ing-in point nate position	1C 34°01'.8 S	0.	25°43'.6 E	
3. Amend : North	ern Latitude valu	ie to read - 40' -	in both North	Western and No	orth Eastern limi	ts of the chart.	
4. Insert : Legend			Chart SAN 124 mate position	4 in Western bo 34°07' S	rder of chart		
5. Insert : Legend			Chart SAN 126 nate position	6 in Eastern bord 33°57' S	der of chart		
SAN Charts : Source :	12		her SA Navy	(	(NE)		(SAN 125)
*53	INDIAN OC Depths	CEAN, Seychel	les Group S	outheastward	s and Agalega	Islands Eastv	wards -
1. Delete: depth	23m enclosed by	0		10°26'.0 S	0:	57°30′.0 E	
SAN Chart : Source :	1	Admiralty l	Notices to Mar	(112 iners 1965/02	//00)		(SAN 1)

II

### \*54(T)/02 SOUTH AFRICA, West Coast - Port Nolloth - Channel Buoys - Out of position

1.Insert: (Out of position) alongside buoys as follows;

 Buoy No 1
 in position
 29°15'13" S
 016°51'55" E

 Buoy No 4
 in position
 29°15'17" S
 016°51'58" E

 Buoy No 6
 in position
 29°15'22".5 S
 016°51'58".5 E

SAN Chart: 1003 (97/01)

Source: National Ports Authority

(SAN 1003)

### IIA

# LIST OF TEMPORARY AND PRELIMINARY NOTICES TO MARINERS ISSUED BY THE MOZAMBIQUE INSTITUTE OF HYDROGRAPHY AND NAVIGATION (INAHINA) IN FORCE

### Nil prior to these Notices.

### 2002 Series

04MOZ(P)/02	Baía de Maputo	Underwater Cable Laying.
05MOZ(P)/02	Vilanculos	Underwater Cable Laying.
06MOZ(P)/02	Porto da Beira	Underwater Cable Laying
11MOZ(T)/02	Porto de Pebane	Ponta Matirre Light (D6576) Temporarily unlit.
12MOZ(T)/02	Porto de Pebane	Ilha Epidendron Light (D6582) Temporarily unlit.
13MOZ(T)/02	Porto de Mozambique	Ilha de Goa Light (D6598.1) Temporarily unlit.
14MOZ(T)/02	Porto de Nacala	Ponta Namuaxi Light (D6614) Temporarily unlit.
15MOZ(T)/02	Porto de Nacala	Ponta Zuani Light (D6613) Temporarily unlit.

### IIA

### 09MOZ/02 MOZAMBIQUE. Porto da Beira - Buoys - Re-Positioned.

1. Re-position the following buoys as follows:

Buoy T	19°47'.14 S	034°49'.07 E
Buoy Nr 8	19°53'.68 S	034°50'.09 E
Buoy P	19°52'.60 S	034°57'.70 E

2. Originally issued as NAVAREA VII 062/02

Charts: MOZ 488, 49638-M and BA 642, 1003.

Source: INAHINA Notices 01/02, 02/02 and 26/02

### 10MOZ/02 MOZAMBIQUE. Porto de Quelimane - Buoy P - Re-Positioned.

1. Re-position Buoy **P** to 18°04'.39 S 037°01'.58 E

2. Originally issued as NAVAREA VII 063/02

Charts: MOZ 415, 49626, 42625-M and BA 650, 2935.

Source: INAHINA Notice 28/02

### 11MOZ(T)/02 MOZAMBIQUE. North Coast - Porto de Pebane - Ponta Matirre Light - Temporarily Unlit.

1. Insert: (Temp. Unlit) adjacent to Ponta Matirre Light (D6576)

in position 17°16′.60 S 038°11′.0 E

2. Originally issued as NAVAREA VII 043/02

Charts: MOZ 42625-M, 49625-m BA 2935.
Source: INAHINA Notice MOZ 22/02(T)

### IIA

### 12MOZ(T)/02 MOZAMBIQUE. North Coast - Porto de Pebane - Ilha Epidendron Light - Temporarily Unlit.

1. Insert : (Temp. Unlit) adjacent to Epidendron Light (D6582)

in position 17°05'.01 S 039°07'.0 E

2. Originally issued as NAVAREA VII 061/02

Charts: MOZ 42624, BA 2935, 2936.

Source: INAHINA Notice MOZ 22/02(T)

### 13MOZ(T)/02 MOZAMBIQUE. Porto de Mozambique - Ilha de Goa Light - Temporarily Unlit.

1. Insert: (Temp. Unlit) adjacent to Ilha de Goa Light (D 6598.1)

in position 15°03'.2 S 040°47'.6 E

2. Originally issued as NAVAREA VII 042/02

Charts: Moz 42622-M, 46614-M and BA 653

Source: INAHINA.

### 14MOZ(T)/02 MOZAMBIQUE. Porto de Nacala - Ponta Namuaxi Light - Temporarily Unlit.

1. Insert: (Temp. Unlit) adjacent to Ponta Namuaxi Light (D 6614)

in position 14°31'.4 S 040°39'.4 E

2. Originally issued as NAVAREA VII 059/02

Charts: Moz 49611-M and BA 649
Source: INAHINA.Notice 13/02(T)

### 15MOZ(T)/02 MOZAMBIQUE. Porto de Nacala - Ponta Zuani Light - Temporarily Unlit.

1. Insert: (Temp. Unlit) adjacent to Ponta Zuani Light (D 6613)

in position 14°29'.9 S 040°40'.2 E

2. Originally issued as NAVAREA VII 058/02

Charts: Moz 49611-M and BA 649

Source: INAHINA.Notice 14/02(T)

### SAN CHARTS AND SAN HO PUBLICATIONS - NEW CHARTS / EDITIONS

SYMBOLS AND ABBREVIATIONS SAN HO-6 (INT 1) and SOUTH AFRICAN SAILING DIRECTIONS Volume II SAN HO-22 are currently undergoing major revision and upgrading. The new editions will be available mid-2002.

# SOUTH AFRICAN HYDROGRAPHIC PUBLICATION - NEW INTERNATIONAL CHART

### 55 INT2611 SAN 1001 APPROACHES TO WALVIS BAY AND WALVIS BAY

### Approaches to Walvis Bay.

Publication Date: 26 April 2002

Scale: 1:37 500 (22°55' S)

Limits: Latitudes: 22°45'24" S - 22°58'19" S Longitudes: 14°20'00" E - 14°32'50" E

Projection: Mercator

Spheroid: WGS 84

Walvis Bay.

Publication Date: 26 April 2002

Scale: 1:15 000 (22°55' S)

Limits: Latitudes: 22°52'36" S - 22°57'45" S Longitudes: 14°28'30" E - 14°31'41" E

Projection: Mercator

Spheroid: WGS 84

This chart using the WGS 84 spheroid is a fully revised international chart for the area. This chart is available from the official Chart Agents. This chart complies with International charting standards. It replaces the chart of the same number which is now cancelled.

### SOUTH AFRICAN HYDROGRAPHIC PUBLICATION - NEW EDITION CHART

### 56 SAN 125 CAPE ST FRANCIS TO BIRD ISLAND

New Edition Date: 26 April 2002

Scale: 1:150 000 (34°00' S)

 $Limits: \\ Latitudes: 33°40'00" \ S - 34°31'28" \ S \\ Longitudes: 24°45'00" \ E - 26°19'01" \ E$ 

Projection: Mercator

Spheroid: WGS 84

This chart using the WGS 84 spheroid, shows the Vessel Traffic Service for Port Elizabeth, and includes updated Sailing Direction information for the area. This chart is available from the official Chart Agents. This chart complies with International charting standards. It replaces the chart of the same number which in now cancelled.

### CORRECTIONS TO SAN PUBLICATIONS

### 57/02 ANNUAL SUMMARY OF SOUTH AFRICAN NOTICES TO MARINERS - 2002

1. Notice No 16 of 2002 **ABANDONED AND SUSPENDED WELL HEADS / cont**Page 32 Replace existing block of Wells with new block: See Run-on.

58/02 CATALOGUE AND INDEXES of SAN CHARTS and other HYDROGRAPHIC PUBLICATIONS. SAN HO-3 (2000 Edition)

Page 2 INDEX OF NAVIGATIONAL CHARTS

Amend: SAN 1001 to read INT 2611 SAN 1001.

Page 11

Delete reference to LARGE SCALE NATIONAL CHARTS

Insert: LARGE SCALE INTERNATIONAL CHARTS (See run-on)

Page 13 LARGE SCALE INTERNATIONAL CHARTS &

LARGE SCALE NATIONAL CHARTS

Insert: See Run-on

Page 15 1: 300 000 INTERNATIONAL SERIES

Insert: WGS 84 before INT 2640 SAN 76, (Column 1)

1:150 000 NATIONAL SERIES

Delete: WGS 84 before SAN 116, (Column 1)

Page 17 1: 150 000 NATIONAL SERIES

Insert: WGS 84 before SAN 125, (Column 1) and Apr 2002 under New Edition Date, (Column 9)

Page 29 SMALL CRAFT CHARTS

Insert: WGS 84 before SAN SC 3 and SAN SC 5, (Column 1)

Page 32 SAN CHART FOLIO LIST No 1

Insert: INT 2611 before SAN 1001.

V

59/02 CORRECTION TO SA LIST OF LIGHTS AND RADIO SERVICES - SAN HO-1 (New Edition 2001)

1. Page 51 RADIO TELEPHONE VHF STATIONS

Amend: KAREEDOUW TRFC ONE to read 01/24.

## NAVAREA VII and Coastal Navigational Warnings Bulletin in force as at 27 May 2002

See NM 3/2002. Broadcast Warnings are available at Port Offices and remain valid until cancelled or until superseded by this and/or other broadcast bulletins.

### **NAVAREA VII MESSAGES**

#### Nil Prior to these Messages.

#### 2002 Series

042	Mozambique, Porto of Nacala	Ihla de Goa Light	Temporary unlit.
043	Mozambique, Porto of Pebane	Ponta Matirre Light	Temporary unlit.
058	Mozambique, Porto of Nacala	Ponta Zuani Light	Temporary unlit.
059	Mozambique, Porto de Nacala	Ponta Namuaxi Light	Temporary unlit.
061	Mozambique, Porto de Pebane	Ilha Epidendron Light	Temporary unlit.
062	Mozambique, Porto de Beira	Buoy T	Re-positioned.
063	Mozambique, Porto de Quelimane	Buoy P	Re-positioned.
066	Angola	Rig list.	

### **COASTAL NAVIGATIONAL WARNINGS**

### Nil Prior to these Messages

#### 2002 Series

178	RSA	West Coast	Channel buoys out of position.
186	Namibia	West Coast	Submerged wreck "Shelf Explorer" salvage operations.
216	RSA	South Coast	Deal Light unlit.
221	RSA / Namibia		Rig list.
228	RSA / Namibia		Marine mining vessels.
230	RSA	East Coast	South Petingo Buoy damaged.

### ANNEX A

USA Government Special Warning in force 18 December 2001

### SPECIAL WARNING NUMBER 120 WORLDWIDE

- 1. Due to recent events in the Middle East and the American Homeland, U.S. Forces worldwide are operating at a heightened state of readiness and taking additional defensive precautions against terrorists and other potential threats. Consequently, all aircraft, surface vessels, and sub-surface vessels approaching U.S. Forces are requested to maintain radio contact with U.S Forces on bridge-to-bridge channel 16, international air distress (121.5 Mhz VHF) or MILAIR distress (243.0 Mhz UHF).
- 2.. U.S. Forces will exercise appropriate measures in self-defence if warranted by the circumstances. Aircraft, surface vessels, and sub-surface vessels approaching U.S. Forces will, by making prior contacts as described above, help make their intentions clear and avoid unnecessary initiation of such defensive measures.
- 3. U.S. Forces, especially when operating in confined waters, shall remain mindful of navigational considerations of aircraft, surface vessels, and sub-surface vessels in their immediate vicinity.
- 4. Nothing in the Special Warning is intended to impede or otherwise interfere with the freedom of navigation or overflight of any vessel or aircraft, or to limit or expand the inherent self-defence rights of U.S. Forces. This Special Warning is published solely to advise of the heightened state of readiness of U.S. Forces and to request that radio contact be maintained as described above. (Issued 16 Nov 2001)

H<sub>0</sub>-16 Ship's Name:

Consec No:

Date and Year:

### HYDROGRAPHIC NOTE

General Locality:		
Subject:		
Approx Position: SAN chart(s) affected:	Latitude:	Longitude:
Publications affected: (quote Volume, Supplement and	d Page)	
Full details :		
A replacement copy of C	Chart No	is required.
Navigating Officer or Ob	oserver:	
Captain or Master:		
Ship (or address):		
If Merchant Vessel add I Company with Head Off		
Note: An acknowledgmen	t of receipt will be sent and	the information then used to the best advantage which may mean immediate action

or inclusion in a revision in due course.

When a Notice to Mariners is issued the sender's ship or name is quoted as authority unless as sometimes happens the information is also received in a foreign Notice to Mariners.

### Instructions for the forwarding information for South African charts and hydrographic publications

- 1. Mariners are requested to notify the Hydrographer of the South African Navy, Private Bag X1, Tokai, 7966, or by Fax 021-787 2228, or e-mail hydrosan@iafrica.co.za when new or suspected dangers to navigation are discovered, changes observed in aids to navigation, or corrections to publica-
- 2. Copies of this Form may be obtained gratis from the Hydrographer, Private Bag X1, Tokai, 7966 or the Chart Agents listed in Annual Summary of South African Notices to Mariners
- 3. When a position is defined by sextant angles or bearing (true or magnetic north being specified) more than two should be used in order to provide a check. Any distances observed by radar should be quoted. When however there is a series of fixes along a ship's course, only the method of fixing and the objects used need
- 4. For positions obtained using GPS equipment the type of receiver and reference spheroid used must be included under Full Details.
- 5. A tracing from the largest scale chart or a cutting from it may be the best medium for forwarding details, and the alterations and additions should be shown thereon in red. A new copy of the chart will be sent if requested.
- 6. When soundings are forwarded the method used should be stated. If it is echo sounding, details should be forwarded as in Annual Notice to Mariners No 4. It is important to state whether echo depths are referred to the surface of the sea or to a transmitter at a specified depth below it. Time and date will be necessary to correct sounding for tidal height; and if any correction has already been made details must be given.
- 7. Reports which cannot be confirmed or are lacking in certain details should not be withheld. Shortcomings should be stressed and any firm expectation of being able to check the information on a succeeding voyage should be mentioned.
- 8. Reports of shoal soundings, navigation aids out of order, should be made by radio to the nearest coast radio station and addressed to HYDROSAN, CAPE TOWN. These reports should then be followed by documentary evidence on this form accompanied by the relevant echo sounder traces.

To accompany Notice to Mariners 57 of 2002 Annual Summary of South African Notices to Mariners 2002 Edition

### ABANDONED AND SUSPENDED WELL HEADS /cont

Name	S.	E. Statu	s Name	S.	E. Stat	tus Name	S.	E.	Status
E-BR1	34 57 44.58	21 34 58.01	A† E-BA1	35 09 29.67	21 28 31.19	S E-BT1	35 13 58.64	21 29	56.48 S
F-AD01P	34 57 46.96	22 05 52.14	S E-BH1	35 09 41.57	21 43 13.12	S E-BT01P	35 13 59.38	21 29	54.55 S
E-AP1	34 58 07.65	21 10 31.12	A† E-CC1	35 09 44.87	21 22 33.96	A E-BB1	35 14 15.33	21 41	41.08 S
F-BE1	34 58 18.85	22 07 37.00	S E-N1	35 10 10.84	21 17 54.39	A E-BB2	35 14 17.61	21 41	22.55 S
F-A5	34 59 01.15	22 11 01.14	S E-AA2	35 10 23.78	21 33 32.73	A E-G2	35 15 58.01	21 28	21.83 A
F-AX1	34 59 12.10	22 19 08.45	A E-AM1	35 10 42.23	21 48 48.23	A*† E-G1	35 16 48.03	21 27	40.40 A
F-A2	34 59 13.98	22 12 38.78	S E-AA1	35 11 08.80	21 35 36.18	S† E-CR1	35 19 25.64	21 54	54.21 S
F-A4	34 59 39.26	22 16 02.59	A E-CE1	35 11 09.34	21 19 52.76	S F-F2	35 19 38.25	22 17	50.00 A
E-K1	34 59 45.07	21 36 14.80	A* E-CE2	35 11 25.34	21 20 34.62	S E-BK1	35 21 19.70	21 53	04.70 S
F-A1	35 00 04.19	22 14 33.90	A† E-CBD6	35 11 28.84	21 18 09.42	S E-P2	35 21 48.86	21 23	52.08 A*
F-A7	35 00 23.89	22 12 01.11	A E-CE5	35 11 29.83	21 18 09.52	S E-CB2	35 21 53.25	21 46	47.38 S
E-AS1	35 00 32.01	21 52 50.78	A E-CE3	35 11 31.88	21 18 34.03	S E-CB1	35 22 25.16	21 47	55.49 S
F-A9	35 00 33.40	22 14 19.00	A E-AR2	35 11 33.22	21 32 17.29	S E-BL1	35 23 19.35	21 59	14.67 A
F-A8	35 01 01.17	22 18 08.07	A E-CE4	35 11 36.60	21 20 02.82	S E-T1	35 24 01.22	21 32	02.57 A
F-A3	35 01 44.70	22 16 38.60	S $E-ARO3P$	35 11 55.62	21 32 20.06	S F-P2	35 26 01.17	22 04	16.73 A†
F-AF1	35 03 21.70	22 13 39.40	A E-ARO1P	35 11 56.12	21 32 20.70	S E-R1	35 26 25.10	21 39	24.10 A
E-BO1	35 05 05.93	22 02 00.80	A E-ARO2P	35 11 56.75	21 32 20.44	S E-P1	35 27 07.60	21 29	14.20 A
D-A1	35 05 30.87	20 55 07.98	A E-AD1	35 11 59.08	21 38 58.25	S† E-D1	35 27 11.99	21 50	34.00 A
E-L1	35 06 08.20	21 11 43.46	A E-AR1	35 12 13.72	21 32 42.43	S E-D2	35 28 10.27	21 52	08.68 A
E-CN1	35 06 51.10	21 46 36.10	A E-BD1	35 12 20.44	21 17 49.23	S F-P1	35 28 21.09	22 10	57.58 A†
F-O4	35 06 59.48	22 32 27.49	S E-BD3	35 12 23.63	21 17 17.46	S E-D4	35 28 36.70	21 46	38.20 A
F-O2	35 07 10.99	22 33 33.34	S E-BD4	35 12 37.27	21 16 36.85	S E-D3	35 28 45.91	21 56	16.16 A
E-Z1	35 07 37.50	21 23 14.45	A E-CJ1	35 12 43.02	22 01 08.48	A E-O1	35 30 09.40	21 46	03.70 A
F-O3	35 08 15.54	22 33 32.46	S E-BD2	35 12 57.57	21 16 04.94	A E-DQ1	35 31 11.07	21 43	50.34 S*
E-BA3	35 08 34.05	21 28 50.22	S E-BD6	35 12 58.22	21 17 28.98	S E-F1	35 31 19.20	21 45	56.10 A
E-BW1	35 09 12.04	21 11 25.85	A E-BD8	35 12 58.22	21 17 27.79	S F-L2	35 33 48.30	22 13	33.70 A
E-CA1	35 09 20.09	21 33 34.96	S E-BX1	35 13 21.10	21 25 08.45	A* F-L1	35 34 17.61	22 13	18.55 A†
F-R1	35 09 25.27	22 36 01.98	S† E-AK1	35 13 34.75	21 12 15.35	A E-Q1	35 43 20.70	21 45	
F-S1	35 09 29.07	22 41 45.88	S E-BT5	35 13 37.79	21 31 22.48	S F-Q1	35 44 41.50	22 13	52.10 A†
						E-Q2	35 47 49.90	21 58	59.50 A

LADOE	COALE	INITEDNIATION		CHARTO
LAKGE	SCALE	INTERNATION	JAL	CHARIS

WGS 84	INT 2611 SAN 1001	Approaches to Walvis Bay	37 500	22°45′24"	22°58′19"	14°20'00"	14°32′50"	Apr 2002
		Walvis Bay Harhour	15 000	22°52′36"	22°57′45"	14°28′30"	14°31′41"	

Page 13

WGS 84 SAN 1003

### LARGE SCALE INTERNATIONAL CHARTS

WGS 84	INT 2611 SAN 1001	Approaches to Walvis Bay	22°45′24" 22°52′36"	22°58′19" 22°57′45"	14°20′00" 14°28′30"	14°32′50" 14°31′41"	Apr 2002
	INT 2631 SAN 1002	Approaches to Lüderitz         30 000           Lüderitz         15 000	26°30′00" 26°37′00"	26°45′16" 26°39′00"	14°59′04" 15°08′12"	15°11′00" 15°10′18"	Mar 1996

### LARGE SCALE NATIONAL CHARTS

Harbours on SW Coast of Africa Oranjemund	50000	28°33′01"	28°38′25"	16°17′07"	16°25′33"	Jul 1998
Alexander Bay		28°39'49"	28°41′11"	16°29′11"	16°30′57"	
Hondeklipbaai	10 000	30°18′24"	30°19'29"	17°15′36"	17°16′46"	
Port Nolloth	10 000	29°14′20"	29°16′07"	16°50′15"	16°53′12"	
Lambert's Bay	9 000	32°04′25"	32°05′49"	18°16′39"	18°19′24"	