

C R U I S E - R E P O R T

RV S O N N E / DFCG

Voyage: 148; SO 52,2 SAA SEARCH; Port Louis to Port Louis

Charterer: SOUTH AFRICAN AIRLINES

11.12.1987

00.00 Begin charter of SAA  
 07.00 Mr. E. Potdieter boarding  
 09.00 Vessel cleared for departure  
 Harbour-Pilot on board  
 09.18 Cast off all lines, departure Port Louis  
 09.30 Harbour - Pilot disembarked, full speed ahead  
 10.40 - 11.50 Meeting of Capt., ship's scientists,  
 technicians, and Mr. E. Potgieter.  
 Agree on following objectives:  
 Priority 1) SEABEAM - mapping at max. permissible  
 speed,  
 2) Modify XPNDR-Nav-System to 37,5 khz,  
 and keep watch on that freq.  
 3) Prepare XPNDR for deployment  
 4) Prepare Ocean Floor Observation System  
 for deployment  
 5) Meet every day at 07.15 and 15.00 for  
 status report  
 18.12 Start monitoring XPNDR-Nav-System on 37,5 khz  
 21.42 Vessel arrives at Primary Search Area, start  
 Seabeam-Profile No. 1, eastwards on parallel  
 19° 09' Lat South  
 23.50 End profile No. 1  
 23.55 Start profile No. 2, parallel 19° 08' Lat South,  
 westwards

12.12.1987

01.45 End profile No. 2  
 01.53 Start profile No. 3, parallel 19° 07' Lat South,  
 eastwards  
 03.59 End profile No. 3  
 04.13 Start profile No. 4, parallel 19° 05' Lat South,  
 westwards  
 06.00 End profile No. 4  
 06.10 Start profile No. 5, parallel 19° 03' Lat South,  
 eastwards  
 08.45 End Profile No. 5  
 09.10 Start profile No. 6, parallel 19° 04' Lat South,  
 westwards  
 10.55 End profile No. 6  
 12.42 Start profile No. 7, parallel 19° 06' Lat South,  
 eastwards  
 15.05 End profile No. 7  
 15.35 Start profile No. 8, parallel 19° 10' Lat South,  
 westwards  
 17.24 End profile No. 8  
 17.30 Start profile No. 9, parallel 19° 11' Lat South,  
 eastwards

12.12.1987

- 19.45 End profile No. 9
- 20.00 - 21.46 Station SAA 001 MS, CTD-measurements  
(hydrographic data)
- 22.24 Start profile No. 10, southwards, cross-secting  
eastern part of Primary Search Area
- 23.10 End profile No. 10
- 23.35 Start profile No. 9/1 (re-run), parallel  $19^{\circ} 11' S$ .  
westwards

13.12.1987

- 02.10 End profile No.9,/1
- 02.31 Start profile No. 11, northwards, cross-secting  
western part of Primary Search Area
- 03.19 End profile No. 11, completed Seabeam-Data  
collecting of Primary Search Area, process data.
- 08.46 Speed-boat of MT 'John Ross' alongside,  
Dr. Lademann, Mr. Abich (RF) boarding SONNE,  
Mr. Bill Walker (US-Navy), Mr. Mike Kretzler  
(Seasteady Inc.) visiting SONNE
- 08.50 Meeting, present: Dr. Flüger, Mr. Abich,  
Mr. Walker, Mr. Kretzler, Mr. Potgieter,  
Capt. of RV SONNE, conclude that SONNE  
carry out Seabeam-mapping of Secondary Search  
Area, hand over CTD-data of station SAA 001 MS  
to Mr. Walker
- 09.40 Meeting closed
- 09.45 Speedboat returns with Mr. Walker and Mr. KUTZLER  
to MT 'John Ross'
- 11.12 Start profile No. 13 at position  $19^{\circ} 11' S$   
 $59^{\circ} 38' E$ ,  
course  $236^{\circ}$
- 12.48 End profile No. 13
- 12.55 Start profile No. 14, course  $56^{\circ}$
- 14.58 End profile No. 14
- 15.10 Start profile No. 15, course  $236^{\circ}$
- 16.40 End profile No. 15
- 16.40 - 17.45 Standing by for helicopter
- 17.48 Helicopter delivers six rolls copy-paper
- 18.10 Start profile No. 16, course  $56^{\circ}$
- 20.23 End profile No. 16
- 20.36 Start profile No. 17, course  $236^{\circ}$
- 22.10 End profile No. 17
- 22.28 Start profile No. 18, course  $56^{\circ}$
- 23.30 Bathymetric charts of Primary Search Area  
ready (2 sheets, Western and Eastern Part,  
covering area of approx. 8 by 25 nm)

14.12.1987

- 00.46 End Profile No. 18
- 01.29 Start profile No. 19, course  $236^{\circ}$
- 03.04 End profile No. 19
- 03.23 Start profile No. 20, course  $56^{\circ}$
- 05.16 End profile No. 20
- 05.28 Start profile No. 21, course  $236^{\circ}$
- 07.08 End profile No. 21
- 07.16 Start profile No. 22, course  $56^{\circ}$
- 09.25 End profile No. 22
- 09.40 - 09.55 Rendezvous with MT 'John Ross', hand  
over three sets bathymetric charts of Primary  
Search Area

14.12.1987

10.30 Start profile No. 23, course 236°  
12.28 End profile No. 23  
13.01 Start profile No. 23/Rerun, course 56°  
15.12 End profile No. 23/Rerun  
15.56 Start profile No. 24, course 236°  
16.44 End profile No. 24, collecting of Seabeam-data  
of Secondary Search Area completed, process data  
16.44 - 17.35 Stand by  
17.35 Receive order from MT 'John Ross' to map  
Tertiary Search Area  
17.40 - 18.26 Proceed to Tertiary Search Area  
18.26 Start profile No. 25, course 90°  
19.46 End profile No. 25  
20.06 Start profile No. 26, course 270°  
21.15 End profile No. 26  
21.45 Start profile No. 27, course 90°  
23.25 End profile No. 27  
23.35 Start profile No. 28, course 270°

15.12.1987

00.43 End profile No. 28  
00.53 Start profile No. 29, course 90°  
02.21 End profile No. 29,  
02.38 Start profile No. 30, course 270°  
03.45 End profile No. 30  
03.58 Start profile No. 31, course 90°  
05.29 End profile No. 31  
05.42 Start profile No. 32, course 270°  
06.54 End profile No. 32  
07.03 Start profile No. 33, course 90°  
08.27 End profile No. 33  
08.40 Start profile No. 34, course 270°  
10.02 End profile No. 34  
11.07 Start profile No. 35, course 90°  
12.40 End profile No. 35, collecting of Seabeam-data  
in Tertiary Search Area completed, process data  
13.45 Reached deployment position for TV-survey,  
start TV-track, Station SAA 002 OFOS  
23.10 End of TV-survey, station SAA 002 OFOS

16.12.1987

00.24 - 00.27 Zodiac of 'John Ross' delivers  
one pinger (37 khz)  
00.27 - 01.55 proceed to Tertiary Search Area  
01.55 - 03.19 Seabeam-Profile No. 36, course 270° (Rerun  
03.19 - 04.15 - " - No. 37, course 172° (check  
04.19 - 06.18 - " - No. 38, course 060° (Rerun  
06.18 - 07.45 Std. by, discuss further action with  
'John Ross'  
07.45 - 12.38 Station SAA 003 MS, CTD-Probe with  
pinger (37 khz) lowered to 4000 m and 4388 m,  
'John Ross' pass SONNE in 0.7 nm distance to  
check pinger-locator  
13.09 - 22.25 Station SAA 004 GTVB, deploy TV-Grab  
with pinger (37 khz)  
14.00 - 16.00 'Wolraad Woltemade' pass SONNE in 0.7 nm  
distance to check pinger-locator  
15.02 - 16.00 Mr. R. Albaugh ('Wolraad Woltemade') on board  
SONNE to do phone call by SONNE's Sat-Comms.  
16.00 Continue TV-survey with GTVB

16.12.1987

- 20.30 - 21.10 Meeting, Mr. Potgieter, Dr. Plüger, Mr. Abich, and Capt. Müller; discuss further actions
- 21.15 - 21.30 Discuss plans with 'John Ross'
- 21.30 Proceed to 4TH Search Area
- 23.00 Maps of Secondary and Tertiary Search Area finished processing

17.12.1987

- 00.12 Arrive at 4th Search Area
- 00.12 - 01.05 Seabeam-profile No. 40, course 180°
- 01.17 - 02.12 - " - No. 41, course 360°
- 02.26 - 03.19 - " - No. 42, course 180°
- 03.32 - 04.23 - " - No. 43, course 360°
- 04.34 - 05.26 - " - No. 44, course 180°
- 05.38 - 06.30 - " - No. 45, course 360°
- 06.38 - 07.30 - " - No. 46, course 180°
- 07.30 Seabeam-data collection of 4th Search Area completed
- 08.45 Arrive at TV-sled deployment position, TV-track proposed by 'John Ross'
- 09.33 Start Station SAA 005 OFOS, TV-survey of 4th Search Area, 15.00 Charts Area 4 ready
- 20.40 End TV-survey Station SAA 005 OFOS
- 22.30 Start TV-survey Station SAA 006 GTVB

18.12.1987

- 08.52 End TV-survey Station SAA006 GTVB
- 09.35 Zodiac of 'John Ross' alongside SONNE, exchange test-pinger, hand over two (2) sets of bathymetric charts of areas 2,3,4 to 'John Ross'
- 10.55 On request of 'John Ross' start station SAA 007 MS with test pinger to check pinger locator system, cable paid out: 4000 m
- 14.45 End of Station SAA 007 MS, Pinger test
- 15.05 Zodiac of 'John Ross' alongside, exchange test pingers
- 15.25 SAA frame specialist Mr. Henning Viljoen arrives by helicopter
- 15.27 - 16.20 Sta. by, briefed Mr. Viljoen on situation
- 16.20 'John Ross' requests pinger locator test, 1500m
- 16.23 Start Station SAA 008 MS with pinger
- 16.52 MS at 1500 m, 'J.R.' requests 2000 m
- 17.00 MS at 2000 m
- 17.33 'J.R.' requests to lower MS in 500 m intervals to 4000 m
- 18.00 RV 'AFRICANA' arrives on scene
- 18.25 Boat of 'John Ross' alongside to pick up Mr. Abich, Mr. Potgieter for meeting on 'J.R.'
- 18.45 MS at 4000 m
- 19.25 Pinger locator test finished
- 20.25 End of station SAA 008 MS/Pinger test
- 20.55 Boat of 'John Ross' returns with Mr. Abich, Mr. Potgieter, Mr. B. Walker, Mr. M. Kutzleb, Mr. G. Tettelbach, discuss further actions, SONNE assigned to survey area 5
- 22.20 Boat of 'J.R.' pick up Mr. Walker, Mr. Kutzleb, Mr. Tettelbach
- 23.05 Start Seabeam-profile No. 47, course 90°  
Area 5

19.12.1987  
00.11 End Seabeam-profile No. 47  
00.20 - 01.12 Seabeam-profile No. 48, course 270°  
01.17 - 02.16 " " - No. 48, Rerun, crs. 90°  
02.36 - 03.20 " " - No. 49, course 270°  
03.39 - 04.37 " " - No. 50, course 90°  
04.46 - 05.35 " " - No. 51, course 270°  
05.35 - 06.50 Proceed to TV-sled deployment-position  
06.50 - 15.58 TV-Survey station SAA 009 OFOS, Area 5  
15.58 - 18.00 Proceed to TV-sled deployment position  
18.00 Start TV-survey station SAA 010 OFOS

20.12.1987  
00.12 End TV-survey station SAA 010 OFOS  
00.16 - 11.00 Std by for RV 'Africana' as nav.-reference  
11.00 - 12.15 Proceed to 'John Ross'  
12.15 - 12.40 Std by  
12.40 Zodiac of J.R. delivers copy paper, return  
pinger and map of TV-tracks to 'J.R.'  
12.40 Proceed to TV-sled deployment position  
13.50 Start TV-survey station SAA 011 OFOS  
18.30 - 19.42 Deep Sea Winch System out of order  
21.10 End TV-survey station SAA 011 OFOS  
22.08 Start TV-Survey station SAA 012 OFOS

21.12.1987  
03.33 End TV-Survey station SAA 012 OFOS, proceed  
at max. speed to Port Louis  
14.55 Port Louis Harbour Pilot boarding  
15.42 Vessel moored at bouys 'Outer Tier', Arrival  
Port Louis  
24.00 End of charter for South African Airlines

Summary

Weather conditions were fine throughout the cruise, ship's operations were not affected negatively in anyway by weather conditions.

Stations/Tracks carried out:

TV-Tracks : 8

CtD-Probes: 1

CTD-Pinger Test: 3

Area charted with Seabeam: approx. 685 sm<sup>2</sup>

Slides taken: approx. 2000

Video tapes recorded: 11

Total mileage run : 1446 sm

*A. G. Mull*



VOY.: 5052/2 A) - SEARCH

685 sm<sup>2</sup>

# SEARCH AREAS COVERED BY SEABEAM

