South Africa National SOT 2008/9 report



VOS

- At present our fleet consist of 32 vessels, comprising merchant, fishing, commercial, naval, research as well as oil rigs.
- 2008 was a good year with more than 10 vessels being recruited, mostly from the Safmarine/Maersk lines as well as those switching routes. Here I can think of 2 vessels being taken from Julie's fleet.



Safmarine Nokwanda





Nokwanda in Cape Town harbour





SA VOS FLEET MARCH 2009

VESSEL	CALLSIGN		
TurboWin			
AFRICANA	ZUAB		y
BARRIER		n	
BORDER		n	
EDINBURGH	V3SY		n
GARIEP	V5GP	y	
HAMBISA	ELBV2		n
MAERSK BENTONVILLE	MLFV3		У
MAERSK CONSTANTIA	ONAV	y	
MAERSK GLOUCESTER	MLXD5	y	
NEXOE MAERSK	OVYB2		тм . П.

SA VOS FLEET MARCH 2009 cont.

Vessel TurboWin	Callsign		
NOKWANDA	MGJ58		У
NOMAZWE	MGGK4	У	
NICOLAI MAERSK-1			У
PRIDE SOUTH SEAS	ELDP4		
У			
RAINBOW		n	
SA AGULHAS	ZSAF	У	
SARAH BAARTMAN	ZRSB		У
SAFMARINE GONUBE			n
SAFMARINE ILLOVO			n

Presented by: Johan Stander

Sonth African Weather Service

SAFMARINE LISBON

SA VOS FLEET MARCH 2009 Cont

Vessel	Callsign	
TurboWin		
SAFMARINE MAFADI	y	
SAFMARINE MAKUTU	MRWF2 y	
SAFMARINE MBASHE		У
SAFMARINE MEMELIN		n
SAFMARINE MERU	MNDC9	У
SAFMARINE MULANJE	MPJH9	У
SAFMARINE NAMIBE		n

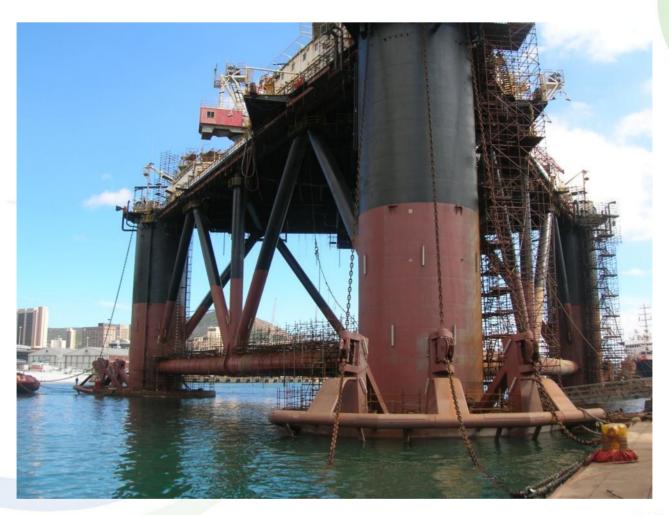


Pride South Seas





Oil rig Orca in Table Bay harbour





General

- Most of our fleet has been converted to the TurboWin software with few still using the manual logbooks. The aim is to convert all the vessels to the electronic format in the near future.
- IMMT records are downloaded from vessels and sent to our head office in Pretoria, from it is sent to the UK every month. Last year a total number of 163479 ships observations were sent to the UK centre.



VOSCLIM

- At the present moment we have only 1 vessel participating in this programme, ie the SA AGULHAS.
- On board we have a Milos 520 AWS and data is being sent via on board Sat-C inmarsat system.
- All of the parameters are measured via sensors. We are currently busy investigating the possibilities of installing 2 AWS systems on board vessels, one being a research vessel and the other being a merchant vessel.



Weather Lab. on SA Agulhas





- This project is currently being managed by the oceanographic dept. of the University of Cape Town, with Dr. Isabelle Ansorge as the head of the unit.
- They are responsible for the AX25 line. XBT's, floats and drifters are being deployed from the SA Agulhas in early December and January and February, while the ship is underway to Antarctica to relief the overwintering teams.
- Roughly around 180 XBT drops every 2 hours are being done on both legs of the voyage.



HDXBT Programme

Our Durban PMO is also assisting with the HDXBT (High Density) programme for NOAA, and has already participating on two cruises, one to Beunos Aires and the other to New York.



Safmarine Ngami in Cape Town





Safmarine Ngami



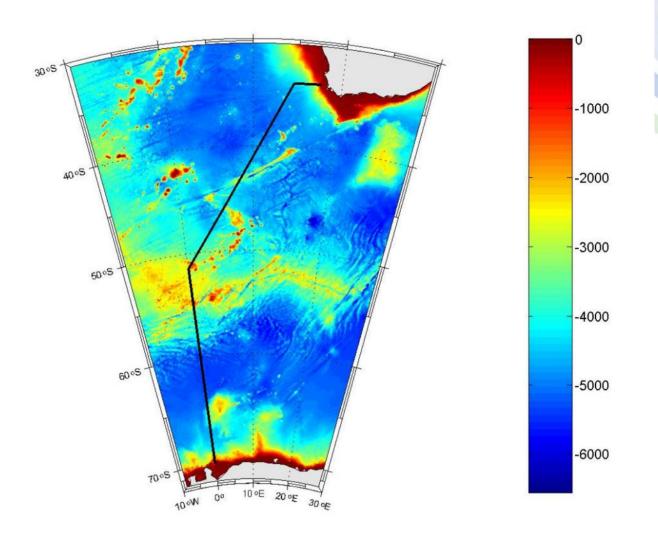


Gus Mckay leaving for New York



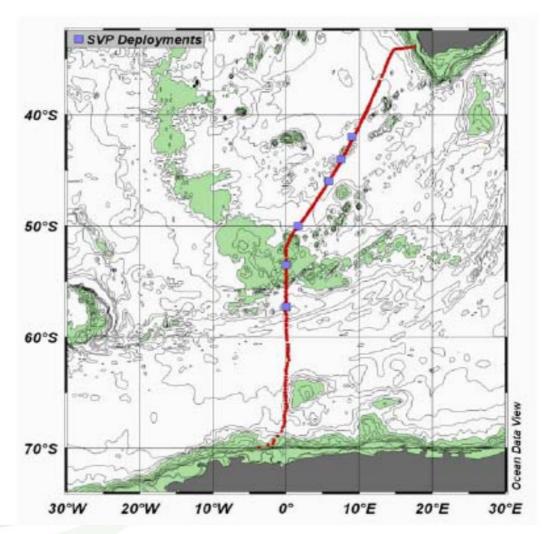


overlaid onto the bathymetry of the





Blue dots are positions of SVP drifters red dots are XBT deployments





Weather Bouy





Thule Island-South Sandwhich Group





ASAP

- Once again, the SA Agulhas is the only vessel participating in the upper air programme. Ascents are being done on all the voyages, starting with the Marion Is. relief in April, the Gough Is. relief in September and the Antarctic voyage in December.
- Ascents are being done twice daily and an average height of 25km is the norm. During 2008 there were 135 ascents being done from the vessel, with only 15 relaunches taking place, or 11 percent failure rate, which is quite good, taking the conditions into account.
- The data is being transmitted in realtime and although our NWS cannot use the data, due to software problems, it is being used elsewhere by the international community.



SA Agulhas





Balloon being launced from ship





Challenges

- Aging Observation equipment
- Budget:
 - for sustained upper air program on S A Agulhas (R2.m/annum)
 - for AWS on various vessel
- "No pay no work"
- Human capacity



Short and Medium plans

- Install two AWS
- Continue to grow VOS fleet by at least 10% / annum
- Seeking sponsors for Upper air program (new vessel)
- Seeking sponsors for more AWS on VOS fleet
- Currently busy with draft proposal to DST
- Form partnership with InterMet



Thank You!!

Contributions from Sydney Marais, Gus Mckay, Lithakazi Mkatshwa (Shine)

