SOOP Report for 2008   **(Australia)**

a.	**Programme description:**		
Line	**Agency**	**Sampling programme and mode (if applicable)**	**No. of ships**
IX01	ABOM	FRX+	5
IX12	ABOM	FRX	4
PX11/IX22	ABOM	FRX	3
PX02	ABOM	FRX	2
IX28	CMAR	HDX, SST/SSS, pCO_2, TCO_2, alkalinity, pigments, fluorescence, macronutrients	1
PX30	CMAR	HDX	1
PX34	CMAR	HDX	1
	RAN	XBT for Operational requirements and or hydrographical surveying	14 / 6

b.	**Data management**	
Agency	**No. of JJVV messages on the GTS in 2008**	**Location of delayed-mode data**
ABOM	597	US NODC
CMAR	788	US NODC
RAN	508	US NODC

c.   Major challenges and difficulties:

1. It was realised in May 2008, that BATHY were only being distributed within the Bureau. All BATHY created after 11 June 2008 were distributed on the GTS.
2. The Bureau achieved its full XBT network (10 ships) during 2008, however this was short-lived due to the re-routing of several ships.
3. Four Navy ships were fitted with "Devil" XBT system with no operational problems reported.
4. As always, recruiting ships when one changes route or goes off the line has been the biggest challenge. This year, Vega Gotland changed her route so she is going to Sydney from New Zealand via a more northerly route. We have used this new route but prefer the more southerly track and are looking for another ship. Just recently, we think we have found one. The challenge now is to get permission from all interested parties.

d.   Research / development / testing:

1. The Bureau tested several DEVIL XBT updates during the year. A program to update to version 3.03.1 commenced in November 2008. The much improved QC in version 3.03.1 will enable automatic transmission of the BATHY to the GTS via the ABOM.
2. Procedure was developed to use "Devil" XBT acquisition system on new Armidale Class Patrol Boats.
3. Devil Iridium transmission of JJVV messages has been tested and is now working well. This is a cost effective, fast and efficient way to get the GTS messages to BOM for distribution. Processing takes place at CMAR and the resulting JJVV messages are then sent to BOM. All is handled automatically with an email sent to Ann Thresher for verification that the system is working.

e.   Other comments:

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