**High-density XBT cruise AX180211 report**

Ship : JPO Volans

Call sign : A8RW3

Ship Rider : Fergus Mckay

Dates XBTs deployed : February 10th to February 19th

a) XBTs deployed : 162

b) Drifters deployed: No drifters were deployed.

ID DEPLOYED POSITION

c) Profiling floats deployed: No floats were deployed .

ID DEPLOYED POSITION

d) Equipment tools and supplies needed: A new set of screw drivers and a fitting for the antenna cable. Maybe a replacement for the 8 shooter A/L, which is at present a 6 shooter.

e) Problems: Once I was on the ship I had very few problems with the equipment. Tubes 7 and 8 of the primary Auto launcher aren't working, but the remaining six worked perfectly. On the last evening and day of the voyage the drops were adversely affected by strong crosswinds (SE Cape doctor), but there was nothing that could be done to avoid it.

f) Recommendations: Since the JPO Volans will not be stopping at Durban on a consistent charter I recommend we find another ship to cover the AX18 .

g) Other narrative: The JPO Volans is an ideal ship for dropping XBT's drifters and argo floats, with it being very steady ,and the point of release close to the water, hence very few faulty and no failed drops occurred during my trip. The officers and crew were also very hospitable making for a pleasant voyage.

h) Ship contact: Captain V. Lytvynenko

email: HapagLloyd.JPOVOLANS@telaurus.net

Summary of cruise AX180211 between Santos and Cape

AX180211 was conducted aboard the JPO Volans. I boarded the ship on the morning of the 9th of February 2011 and the ship left Santos early in the morning of the 10th February. The ship birthed at Singapore during the evening of the 07th March 2011.

In total 162 XBTs were deployed. High density deployments at a rate of one per 30 km, were started at 046.18° W. Intermediate density deployments commenced from 40° W until 01° W. High density measurements commenced again until 019.15°W.

No drifters or profiling floats were deployed .

The weather was fine for most of the cruise, but on the last evening on approaching Cape Town

We experienced strong SE’ ly cross winds (Cape doctor) which adversely affected my drops.

Only four second drops were done. The first was due to an early wire stretch. The next two were from a box of an old batch (1997) that I tried, but stopped once I saw they were unreliable. The forth one was to check the previous drop, since there was a large change in the profile, but it corresponded with it proving both drops to be fine. One XBT was found to be faulty before launching.

At the last moment the shipping company informed us of a change of plans, ie that they weren’t stopping at Durban, which meant I would have to sail through to Singapore. Since our equipment was already loaded and I was basically on the ship in Santos already, after consultation with Robert we decided to go ahead with the voyage.

F.Mckay

Port Meteorological Officer

Durban