***Cruise Report (28/08/2017 – 07/09/2017)***

***AX180817 – Swift Ace***

***Technical rider: Chris Jacobs***

Departing Zarate on the 28th August, the Swift Ace headed down the river to make its crossing from Buenos Aires, Argentina to Durban, South Africa (AX18). This transect was undertaken with various two different densities of deployments, namely: High Density deployment and intermediate density deployments. Although there were two different density deployments the sampling space of each was different due to the number of XBTs available. The intended XBT deployment plan requires a total of at least 390 XBTs however only 336 XBTs were loaded on board. Because of this, the sampling was as follows:

54°W – 40°W: High density deployments – 1 drop every 10 km (±144 xbts used)

40°W – 0°E: Intermediate/Low density deployments: - 1 drop every 50km (±72 xbts used)

0°E – 18.5°E: High density deployments – 1 drop every 25km (±100 xbts used)

Travelling at an average speed of 19 Knots, this meant high density deployments had a drop every 17 mins and intermediate deployments had a drop every 90mins. The cruise track deviated from the normal cruise track due to severe weather. This involved delays in exiting the river as well as travelling further south along 41°S and then later along 45°S.

Minor issues were experienced with the Auto Launcher (AL). The pin in tube 1 one removed from the launch sequence as the pin would not retract even after trying to retract it using the diagnostic command. The pin of tube 5 started giving a similar issue however this tie the pin would not extend after the drop. This was easily overcome but using the diagnostic command to extend the pin.

With the accommodation being over 100m away and 6 decks up, many a cold night was spent in the rope room where the computer was setup. This was made slightly bearable with a camping chair and cot being provided for sleep. Although this wasn’t all too comfortable or warm, the Swift Ace is an ideal vessel for the AX18 transect. A thank you goes out to the Captain Evgeny Yemel’yanov, all the officers, and crew of the Swift Ace, for all the effort and assistance. Many thanks for the great hospitality aboard the cruise and for making me feel welcome and safe throughout the cruise, especially during the severe weather. Thank huge you to Javier Pardinhas, for all the hospitality, and paperwork in Buenos Aires. I sincerely do appreciate it.