

Deep Sound, DART Mooring and Guam-Tonga Transit Cruise Plan
Nov 6th – 19th, 2009.
David Barclay

Deep Sound

The first objective of the cruise is deployment of Deep Sound in the Mariana Trench. The ideal location for this deployment would be at the Challenger Deep, specifically 11 20' N, 142 15' E. An alternate deployment location is 12 20' N, 144 30' E. I have obtained detailed charts of the Challenger Deep that should help us get on station quickly. If the alternate location is used for deployment, some sounding will be necessary to find the best location for deployment, depending on the quality of charts on-board (I have only consulted the DMA charts of this alternate location). The deployment schedule once on station will be as follows:

0h00 (relative time to our arrival on station) - Deploy Deep Sound I to 9km

0h30 – Deploy Deep Sound II to 9km

Ship waits in 'quiet mode' during this time.

8h20 – Begin recovery of Deep Sound I and Deep Sound II

9h30 – Begin turn around (battery recharge, data download and assessment) of Deep Sound I and II.

12h30 – Deploy Deep Sound I to the sea floor.

Ship waits in 'quiet mode' during this time.

22h45 – Begin recovery of Deep Sound I at which point Deep Sound operations will end.

DART Mooring

Immediately preceding the Deep Sound operations, the ship will head towards the DART mooring deployment location, 11° 44' 25.8"N 154° 13' 02.28"E. The mooring will be deployed according to the procedure dictated by James Coleman and Russell Spiers of NOAA.