Expedition Log for IODP Expedition 325 Week 4 Great Barrier Reef Environmental Changes

11th March 2010

Many hands.... by Carol Cotterill

Behind every drilling operation there are numerous crew who accept us onto their boat, look after us while we're onboard, and generally try and help in every possible way to make sure things run as smoothly as they can. On this expedition, there are two companies involved in addition to ECORD and ESO – Bluestone Offshore who provide the drilling crew and GC Rieber who provide the marine and steward crew. The compliment of staff onboard is quite staggering, so who is who, and what do they do?

From GC Rieber, we have:

Hallgeir Johansen – Master Edgardo Manio – Cook

Frank Hammero – Chief Officer Ryan Gomez – Steward

Nils Leikvoll – 2nd Officer Lester Anino – Steward

Lyonidd Cimafranca – 2nd Officer Michael Nacion – Steward

Leo Mutia – 2nd Officer Gair Strand – Chief Engineer

Edwin Reyes – Bosun Andre Skadal – 2nd Engineer

Jose Odguin – Fitter Wojciech Frackowiak – 2nd Engineer

Dennis Santos – AB Nicholas Giray – 3rd Engineer

Honorato Arriola – AB Gunvald Varleite– Electrician

Elin Tasas – Chief Steward Michael Caro – Electrician Cadet

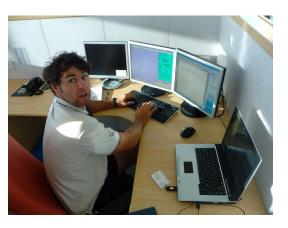
Jeferson Garcia - Chief Cook Glenn Pena - Oiler

The Master and Chief Officer alternate on the bridge, keeping a watchful eye over all operations, and resolving problems as wide ranging as permits for crane operations, GPS antennae issues to viruses infiltrating the email system onboard – and everything in between! The 2nd Officers are also predominantly bridge based, and are responsible for monitoring the dynamic positioning system and so keeping us on station. They also liaise with the drill floor to adjust the vessel's heading in bad weather to best protect the drill floor and minimise heave on the coring system.

When not on DP, they have other tasks such as maintaining the equipment on the fast rescue boats and fire fighting equipment.



S_Green@ECORD_IODP; Frank up on the bridge

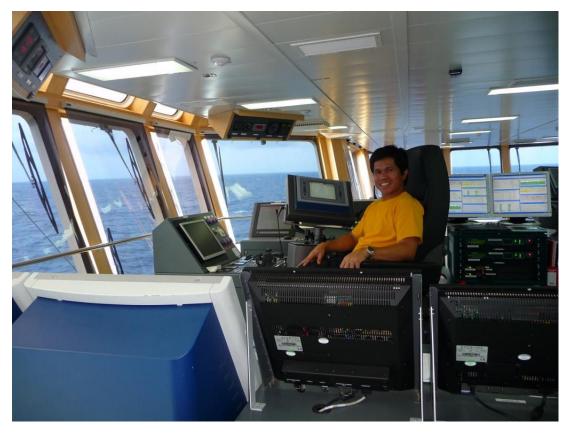


C_Cotterill@ECORD_IODP; Surprising Blake, one of the EGS surveyors

The bridge is also where our two surveyors Blake and Grant from EGS lurk, in their sunken workspace. During the day the bridge is often a hive of activity, as people go about their daily chores, recording the weather at four hourly intervals, and coming up to select the next DVD from the 200 in the ship's library! However at night it appears much more serene, with the glow from the drill floor providing much of the illumination. The dim lighting (in order that the officers on watch maintain their night vision) and low music (often from Lyonidd) give a sense of hush, with "visitors" often feeling the need to speak in whispers!



C_Cotterill@ECORD_IODP; Night on the bridge, illuminated by the drill floor lights



S_Green@ECORD_IODP; Leo monitors the Dynamic Positioning system by day

The chief engineer and his team are responsible for the mechanical and electrical side of the ship – from making sure our engines and thrusters work smoothly to unblocking the toilet system! They tend to work on the main decks and lower decks, in the very bowels of the vessel and the impressive engine room. They have their own control room from where they can monitor the ship's systems, and are often in direct conversation with the bridge if any alarms have sounded, or any specific maintenance needs to be undertaken.



C_Cotterill@ECORD_IODP; The engine room control room



C_Cotterill@ECORD_IODP; Nicolas walking between two of the four engines



C_Cotterill@ECORD_IODP; Looking down onto one of the engines



 $C_Cotterill@ECORD_IODP; The pump room$



C_Cotterill@ECORD_IODP; The switchboard room, where all electrics on the vessel are controlled

The chief steward, Elin, and her team look after all the housekeeping issues. They ensure that hot meals are available every six hours for the two shifts. While people are on shift, they also clean our rooms and change our linen and towels, and keep the communal areas, such as the two day rooms, clean and tidy. Then there is the task of washing our mud soaked and grease stained overalls – not an enviable one that one!



C_Cotterill@ECORD_IO DP; in the galley with Edgardo!

And from Bluestone we have:

Sukhwinder Singh Gill – Party Chief Govindasamy Selvam – Exploration Manager

Mikheev Vladimir – Senior Driller Packrisamy Kanesan – Drilling Supervisor

Bernard S – Assistant Driller Vikram s/o Raju – Assistant Driller

Ismail Ressy – Assistant Driller Ajith Dsouza – CPT Operator

Simon Dsouza – CPT Operator Vimal s/o Raju – Roughneck

Amerda Lingam – Roughneck Andi Sujito – ISOS Medic

Mulyadi Haryadi - HSE Officer

The two teams of drillers are led by Vlad, working with Vikram, Vimal, Bernard and Ajith, and PK working with Simon, Ismail and Lingam. These are the people who are on the frontline so to speak, dealing with the mechanics of the drilling operation – from putting together the core barrel assemblages to mixing mud, working up on the rooster box running and tripping the core barrels to attaching new API pipes. It's hard, heavy and very often hot work, and without them we would definitely not be able to succeed in our mission to retrieve fossil cores!



S_Green@ECORD _IODP; Simon up in the rooster box



S_Green@ECORD _IODP; Ismail, Selvam and Simon lubricating a core barrel



C_Cotterill@ECORD_IODP; Ajith, Vikram and Vimal "breaking" a core barrel



C_Cotterill@ECORD_IODP; Bringing a core barrel safely to deck

After a few weeks out here, there is now a sense of camaraderie building between the drilling crews and the ESO personnel who work on the drill floor with them. Sometimes I do wonder what they think when we try additional experiments such as trying to fry an egg on the core bench (see the blog "Hot hot hot"), but instead of incredulous looks, we now get smiles and laughs.

Jody and Yusuke (our two Co-chiefs) gave the marine and drilling crew a run-down on the aims of objectives of this project, and that has helped the drillers gain ownership of the coring. They now congregate round each core retrieved, puzzling over why recovery wasn't better and what the sediments and corals recovered mean in the story of sea level rise.

Selvam oversees the drilling operation, and is incredibly handy in both the lateral thinking department and the fixing and repairing of equipment department! He is often to be seen puzzling over some conundrum we have set him, like how to stabilise a 10 ton seabed template suspended over the moonpool!

Sukhwinder is the Bluestone Party Chief, and as such oversees all Bluestone operations onboard. He is the liaison for ESO and the vessel's Master, coordinating the logistics of ordering drill spares, sourcing more drilling mud, arranging shipping of both out to the Maya through an agent in Townsville etc.

At the end of each shift, both drilling crews, Selvam, Suki, a representative from the bridge and the ESO drilling coordinators all have a tool box talk, to discuss what has

occurred during the previous 12 hours – a vital meeting to ensure that all necessary operational information is passed between shifts!



C_Cotterill@ECORD_IODP; The midday toolbox meeting on the drill floor

So between the 35 Bluestone and GC Rieber personnel, 9 scientists, 15 ESO personnel, 2 EGS surveyors and 1 pilot, the Greatship Maya can maintain 24 hour operations out here in the Coral Sea – definitely a case of "many hands", although not "light work"!