

## **Expedition Log for IODP Expedition 347 Baltic Sea Paleoenvironment**

**22<sup>nd</sup> September 2013**

### **How Many People Does It Take To Drill in the Baltic Sea.....**

**Carol Cotterill**

Behind every drilling operation there are numerous crew and operations staff who accept us onto their boat and onto their drill floor, 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 five companies involved in addition to ECORD and ESO – Island Drilling who are the project managers for the drilling, Geoquip who provide the drilling crew, Geocean who provide the surveyor, Greatship Global who provide the marine as well as the catering crew and Weatherford who provide the two logging engineers. The compliment of staff onboard is quite staggering, so who is who, and what do they all do?

From Greatship, we have:

Nikhil Arun Kanetkar – Captain

Rayan D Coutho – Chief Officer

Peter Trink – Chief Officer

Vinay Kumar Sharma – 2<sup>nd</sup> Officer

Raniith Kumar K – 2<sup>nd</sup> Officer

Roman Kolesnyk – Camp Boss

Joginder Singh – Cook

Harendra Kumar – Steward

Sergiy Mayko – Cook

Saju Sebastian – Chief

Engineer

Vilvo Fernandes – Steward

Akash Majhi – Steward

Arun Kumar – Steward

Chetan Raje – 2<sup>nd</sup> Engineer

Nair Babu R Shivachandran - ETO

Harikumar Pullil – 3<sup>rd</sup> Engineer

Joshvin Paradise John – AB

Binoj Vinayakan – AB

Joginder Kumar – AB

Kuldeep Purtv - AB

Melwvn Gomes – Oiler

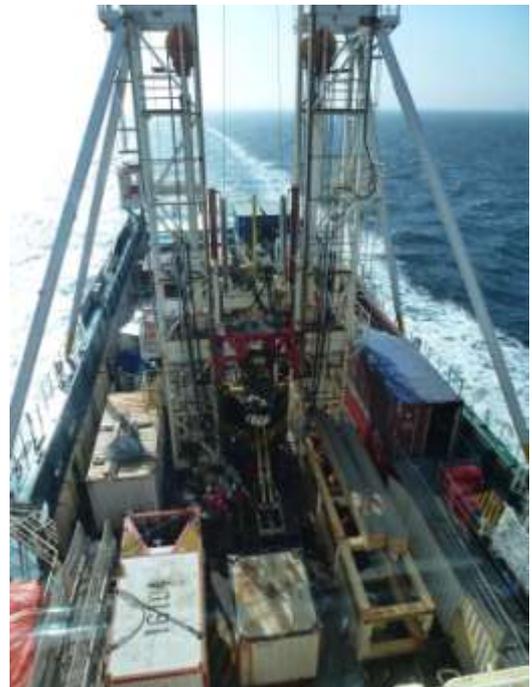
Ragbir Sandhal - Oiler

The two Chief Officers alternate on the bridge, keeping a watchful eye over all operations & performing the role of Senior DP Operator, resolving problems as wide ranging as permits for crane operations, cabin cleaning rotas, power cuts – and everything in between! The 2<sup>nd</sup> Officers are also predominantly bridge based, and are performing the role of Junior DP Operator responsible for monitoring the dynamic positioning system and keeping us on station with decimetre accuracy while we are drilling or logging. Between them they also maintain the safety equipment, medicine chest and the bridge. The Captain is in overall charge and spends most of his time on the bridge overseeing all activities that are happening on board the ship with his biggest concern being that each and every activity is conducted in a totally safe manner. Once the ship is at the correct location, as verified by the surveyor, the DP Operators set up the ship in position using a system called a Dynamic Positioning System which essentially uses various sensors and reference systems to literally sense the environmental forces acting on her and give corrective thrust using the five big thrusters on the ship. The system slowly builds a computer generated model which “teaches” itself where we need to be, controlling our position and thus holding us on station within centimetres of that position for days on end. 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. You often see their watchful gaze from the bridge high above the drill floor as they keep an eye on all that is going on. When not on DP, they have other tasks such as navigation during a sea passage, general maintenance of the ship and its equipment such as the life saving and fire fighting equipment.



Vinay and Peter on watch on the bridge

The bridge is also where our surveyor, Marianne Herve from Geocean, can be found, in her sunken workspace overlooking the drill floor. She is responsible for ensuring we are on the correct position, from the sets of coordinates supplied by the ESO team. She monitors vessel movement around that point,



View of the drill floor from the DP console

and maintains the two transponder beacons that act as our back-up should we lose Dynamic Global Positioning (DGPS). One of these beacons is lowered over the side of the vessel whilst the other sits on the seabed template which is lowered from the vessels centre of gravity – the moonpool.



Marianne and one of her transponders



Marianne and Captain Nikhil assess the transponder signal

During the day the bridge is often a hive of activity, as people go about their daily chores, recording the weather at regular intervals, and coming up to ask questions of the surveyor or Captain Nikhil and his officers. However at night it appears much more serene!

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, the accommodation aircon plant is working fine 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 as nearly all machineries have a large number of sensors and alarms fitted, and are often in direct conversation with the bridge if any alarms have sounded, or any specific maintenance needs to be undertaken.



View of two of the four engines powering the Manisha



Saju and some of his team in the engine control room



The switchboard room for the whole ship



Some of the AB's waiting to see a film crew safely onto the vessel

The Camp Boss, Roman, and his 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! In addition, we also have the luxury of having our personal washing done for us twice a week – definitely going to be hard coming home after two months of having food cooked and washing done for us!



Sergiy and Akash in the galley cooking our dinner



Roman ensures we are all well fed! A very important man in charge of the ice cream.....

And from Island Drilling and Geoquip we have:

Andy Frazer – Project Manager

Ian Abraham Pygs –Driller

Moose Murphy - Driller

Peter Indenyi – Roughneck

Damion Abder – Electrician

Ben North – Roughneck

Liam Tregembo - Roughneck

Muhammad “YaYa”

Razally - Roughneck

Marius Cosmin Sicoe -

Roughneck

Mark Rundle – Roughneck

The two teams of drillers are led by Moose, working with Ben, Liam and Peter, and Pygs working with Cosmin, YaYa and Mark. These are the people who are on the frontline so to speak, dealing with the mechanics of the drilling operation – from 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 our planned 2.5km of core, reaching back over 130,000 years before present! At the end of each shift, both drilling crews 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.



Ali and Andy on the drill floor



Cosmin and Yaya "breaking" a pipe open



Yaya greases a pipe before adding to the string



Damion, Peter and Liam on the Hammer coring



Pygs becomes infamous on video



Moose wants to know when his camera moment is!

After a few weeks of working together during mobilisation and now coring, 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 get excited by black smelly mud, but instead of incredulous looks, we now get smiles and laughs. And there is always the on-going banter as to who has the best biscuit stash.....currently Moose and his team are leading!

Bo and Thomas (our two Co-chiefs) will be giving an overview of the scientific reasons for drilling here for the marine and drilling crew whilst we are on transit to our second site – this will help give the drillers ownership of the coring.....and maybe an understanding of why smelly black mud makes us excited! We also welcome visitors to the turquoise “science garden”, with curious crew starting to come and say hello.

So between the 32 Greatship Manisha, Geoquip and Island Drilling personnel, 16 ESO personnel (including two logging engineers from Weatherford), 17 scientists and 1 surveyor, we can maintain 24 hour operations, working in two shifts.....definitely a case of “many hands” although not always “light work”. So the answer to the initial question is.....it takes 66 of us to drill in the Baltic Sea.



24 hour operation with the drill rig lit up

All photos CarolCotterill©ECORD/IODP