

**PRV Committee Meeting
Stanford University
May 5 & 6 May, 2011**

Attendees

Rob Dunbar
Maria Vernet
Eugene Domack
Larry Lawver
Doug Russell
Vernon Asper
Hugh Ducklow
Carin Ashjian
Dan Oliver
Jon Alberts

Rob Dunbar, PRV Chair opened the meeting at 0900 with review of what we had accomplished thus far and the goals of the next two days. The PRV committee will work towards submitting a draft/interim report to NSF in June 2011.

Hugh Ducklow brought us up to date on activities of the National Academy Research Board as it relates to our efforts. The academy report is on a fast track with the second draft scheduled to be submitted by end of May. It will then be reviewed and finished by end of September.

In the ocean atmospheric section there will be a series of recommendations as defined by the science questions for next 20 years. They did a survey and results showed they need observing platforms. Blue Ribbon will follow the NASB study.

Polar Research Board- Hugh also on this, report coming out any day now. Also the Consortium for Ocean Leadership's Working Group report will tie into this and will be made public in a week.

The Polar Research Vessel will be bipolar, serving both Arctic and Antarctic, and the science drivers will be the key things on the vessel characteristics.

One of the goals of this meeting is to develop and finish a one page polished document on each discipline.

Larry Lawver has been doing research on coring and provided an overview and feedback from Conoco on moonpools. Apparently in industry a 4m by 4 m moonpool is standard.

Larry also reviewed various coring systems such as:

- Calypso which is a standard large piston corer.
- WHOI Long Core System
- Prod Drill
- Mebo Drill Rig

Question was asked on how far should we go to make the ship capable of coring?

Larry- I think it is critical to answer science questions at hand.

Eugene- year round use is important to accommodate all seasonality demands.

Carin- Are their science drivers requiring winter conditions?

Larry- If you are doing a complicated science ops, having the ice will help keep ship stable.

Carin – this is an operational issue, not a science driver.

Rob- we are talking about access to 50-100 meter depth cores.

Moon Pool-

Basic question- if you want an icebreaker to work in the ice, you need a moon pool.

per Dan Oliver.

Carin – Having a moon pool, it needs to be fully capable for everything, ctd's, net tows,

Niskins casts, but also be able to also use a Baltic room. So it would be a combination

moon pool inside a Baltic Room.

Rob- I think we are in agreement that we want a interior moon pool. This is a substantial change from the 2006 study. On the order of 4 X 4 meter square.

There will be mission specific cases where we can't use this ship, ie. Joides Resolution might need to be brought in . We need to call out examples of cases where we know this ship can't do everything.

Core Lengths- 50 meter for long core, 100 meter for prod drill type.

On the moon pool issue, Dan Oliver and Doug Russell will collaborate on this and on coring, Larry and Eugene will work on this.

McMurdo Breakout- we recommend that this ship not be used to perform McMurdo Breakout.

Helicopters- Dan Oliver and Doug Russell will write-up a draft report on this.

Special Purpose Science- There will be times when we need a special purpose vessel.

Ice Coverage- We need a figure in the report for sea ice extent and thickness in both the Arctic and the Antarctic.

Frontiers- there is a need for comparative science to be done for both Arctic and Antarctic . The AMT program, per Hugh Duck.

Operators- Will this be a UNOLS versus a commercial operator. This question will need further investigation.

Hull noise criteria and the type of transducer well needs to be considered, will it be a box keel design?

Conference room –

Power compatibility of multi—national powered equipment from foreign countries.

6 May 2011- Meeting Commenced at 0830

General discussion on the report followed.

- References- We should put these in to validate where needed.
- Blue Sky science- we need to be focused on our readers.
- Glossary- Yes, we will have one.
- Interim report by 20 June due to NSF-
- Science Mission Requirement, (SMR) Table- We will use the UNOLS template and start to populate it with feedback and details we already know that came from workshop and surveys.
- Plan to have a face to face at NSF/Wash DC with some high level people there.

Ask Alex- about how she wants final copy of the report to look, That is does she want color, with nice pics?., binding. See Alex's e-mail on 6 May 2011

Rob asked each discipline leader to make sure science questions are