## RAID Update from an email from John Goodge

1. DOSECC Exploration Services (DES) finished the main RAID design in Dember 2013. There were some details yet to flesh out, which they continued to work on over the next two months, but the December design was submitted with a proposal to the NSF for Phase 2 funding.

2. The progress on Phase 1 was on time and on budget, and included several stepwise milestones and internal reviews.

3. A proposal for Phase 2 (construction, fabrication and testing, over 3 years) was submitted in January 2014. NSF convened a panel of experts in Arlington in February to review the progress on Phase 1 and to evaluate the Phase 2 proposal. We met with the panel to answer questions and they provided detailed review comments following. Principal recommendations from the panel included an expanded testing regimen, clarification of operational procedures, more detailed construction drawings, reanalysis of the fluid recirculation system, more detailed risk analysis, reevaluation of the project schedule, and validation of scientific goals. 4. Since February, we have continued to work through a transition period between Phases 1 and 2, mainly to refine design drawings, conduct some tests that we felt were urgently needed, and to draft responses to the panel review.

5. A response to the panel review, accompanied by a redefined scope of work, schedule and budget for Phase 2, will be submitted to the NSF by about May 1. Based on positive feedback from the panel and pending recommendation from NSF program officials, we are hopeful that Phase 2 funding will be awarded. We are planning a start date for Phase 2 on or about June 1.

6. A revised Phase 2 scope and timeline will include additional component and subsystem testing at cold temperatures, an integrated North American system test in early 2015, shipment to Antarctica in late 2015, and a set of Antarctic field trials in the 2016-17 field season.

7. Preliminary structure of a long-term RAID facility has been outlined, as illustrated in the attached graphic. It is divided into facility, cooperative program, and scientific areas, and the facility structure includes support from existing and proposed organizations affiliated with IDPO.

## possibilities

LONG-TERM RAID ORGANIZATION		
1.0 RAID drilling facility	2.0 Cooperative RAID programs	3.0 Scientific collaborations
1.1 Drilling rig facility	2.1 Geophysical imaging*	3.1 Collaborative proposals*
1.1.1 Facility management (UM)*	2.1.1 Reconnaissance mapping	3.1.1 Scientific groups
1.1.2 Public and community outreach*	2.1.2 Site selection	3.1.2 Chief scientist(s)
1.1.3 Equipment operation and maintenance (DES)*	2.1.3 Site safety surveys	3.1.3 Protocols for core handling and sample distribution
1.2 Ice Drilling Program Office (IDPO)	2.2 Borehole logging*	3.2 Logistical support (ASC)*
1.2.1 RAID Science Coordination Office (UNH/IDPO)*	2.2.1 Traverse logging	
1.2.2 Subglacial Access Working Group (IDPO)	2.2.2 High resolution logging	
1.2.3 Technical Advisory Board (IDPO)		
1.3 RAID Science Working Group		
1.4 Site Selection Committee (SSC)*		
1.5 Sample repositories		
1.5.1 Rock cores (USPRR)		
1.5.2 Ice cores (NICL)		
* new group or function		