JOIDES Resolution Facility Board (JRFB) Meeting: 15-16 May 2018 - Alexandria, VA USA

Summary of Consensus Statements and Action Items

Consensus Statements

Consensus 1

The JRFB approves the Agenda for its 15-16 May 2018 meeting.

Consensus 2

The JRFB approves the May 2017 JRFB Meeting Minutes with no changes.

Consensus 3

The JRFB approves the following updated policies and guidelines:

- 1) IODP Proposal Submission Guidelines (15 May 2018)
- 2) IODP Guidelines for Site Characterization Data (15 May 2018)
- 3) IODP Standard Confidentiality Policy (15 May 2018)
- 4) IODP Limited Non-Disclosure Agreement Policy (15 May 2018)
- 5) IODP Sample, Data and Obligation Policy (15 May 2018)
- 6) IODP Environmental Principles (15 May 2018)
- 7) JR Third Party Tool Policy (15 May 2018)
- 8) JR Staffing Procedures (15 May 2018)
- 9) SEP-EPSP Terms of Reference (15 May 2018)

Consensus 4

The new IODP Standard Confidentiality Policy and the new minimum data requirement for all restricted data files will come into effect immediately for new PRE proposals being submitted at the 1 October 2018 proposal submission deadline. The JRFB encourages proponent teams of proposals already in the IODP Proposal Database (PDB) to work toward all the new guidelines in this policy as much as possible.

Consensus 5

The JRFB recommends the rescheduling of Expedition 384 (Engineering Testing) to FY'20, following Expedition 385 (Guaymas Basin) and a tie-up period. This will be followed by Full Proposal 859 (Amazon Margin), Full Proposal 864 (Equatorial Atlantic Gateway) and a second tie-up period. Furthermore, the JRFB recommends the scheduling of the first expedition for Full Proposal 853 (South Atlantic Transect) in the beginning of FY'21, followed by Full Proposal 890 (Walvis Ridge Hotspot), Full Proposal 834 (Agulhas Plateau) and the second expedition for Full Proposal 853 (South Atlantic Transect). The expectation of the JRFB is that there will be in total 8 months of operations in FY'21.

Consensus 6

The JRFB recommends the following engineering tests to be carried out during Expedition 384 by the JRSO in order of priority:

- 1) New drilling bits for improved advancement, opening and remediation of drill holes in hard rock formations.
- 2) New underreamers for opening up holes in hard rock formations.
- 3) New coring bits for coring in hard rock formations.
- 4) New biodegradable drilling fluid additives for improved hole cleaning.
- 5) New bottom-driven XCB based on current Chikyu XCB designs.
- 6) Continued testing of the Turbine Driven Coring System (TDCS) depending on the outcome of first tests during Expedition 376 and discussions with CDEX.
- 7) MDHDS testing in conjunction with the T2P system.

Consensus 7

Based on the long-term regional track of the *JOIDES Resolution* from 2021 until 2023/24, the JRFB is encouraging the IODP science community to submit proposals for drilling projects in the North Atlantic, Arctic Ocean, and the North Pacific.

Consensus 8

The JRFB reaffirms that, based on current and anticipated proposal pressure, the *JOIDES Resolution* will start to operate in the general area of the Equatorial and North Atlantic, Gulf of Mexico, Mediterranean, Caribbean, and the Arctic in FY'21 and through FY'22. Furthermore, the JRFB expects that the *JOIDES Resolution* will complete its global circumnavigation in the Indo-Pacific region in FY'23.

Consensus 9

The JRFB in exceptional circumstances on a case-by-case basis will consider to keep unimplemented sites on the board for potential completion at a later date during the IODP 2013-2023 program. The JRFB has decided to keep Expedition 374 Sites U1524 and RSCR-19A and Expedition 368 Site U1503 on the board.

Consensus 10

The US Coast Guard has informed the JRSO and ship owner ODL/SIEM that the *JOIDES Resolution* needs to fulfill all requirements of the Mobile Offshore Drilling Unit (MODU) 1989 Standard in order to receive permitting for Expedition 386 in the US EEZ of the Gulf of Mexico. Given the high costs and insufficient available time for the large number of upgrades required, the JRFB cancels Expedition 386 and removes it from the *JOIDES Resolution* schedule. However, the JRFB will forward proposal 887-CPP2 and 887-ADD2 to the ECORD Facility Board (EFB) for consideration of the potential implementation of this drilling project as a Mission Specific Platform (MSP). The JRFB highlights the face that the implementation of this drilling proposal addresses Challenge 13 in the IODP 2013-2023 Science Plan.

Consensus 11

The JRFB is very pleased with the results and recommendations presented in the FY'17 Co-chief Scientists Report and the FY'17 JRSO NSF Panel Facility Review Report

(February 2018). Both reports point out the outstanding, safe, and efficient operation of the *JOIDES Resolution* through capable management and critical engineering improvements by the JRSO. In addition, the JRFB supports the recommendations by the NSF in their response to the FY'17 reports, emphasizing that effective operation of this facility requires enhancement of operations risk management methods and safety evaluations, and improved retention of overall drilling knowledge.

Consensus 12

The JRFB requests from the SEP/EPSP, and in consultation with the JRSO representation at their meetings, to ensure that the proponents provide sufficient alternate sites and strategies in IODP proposals, including alternate sites that would require differing operational approaches (such as different water depths, sediment thicknesses and/or types) in order to increase operational flexibility and decrease risk during implementation of the project at sea.

Consensus 13

The *JR* Consortium Partners all intend to provide continued support to the *JOIDES Resolution* in the second IODP phase from 2019-2024.

Consensus 14

Marine seismic data are critical to IODP, as every site drilled, cored and logged with the *JOIDES Resolution* requires high quality seismic data. If drilling targets cannot e imaged properly or if sites cannot be occupied safely, the proposals will not be approved by SEP/EPSP and will not be implemented by the JRFB. Over the last 15 years, 47% of the seismic data in support of 81 IODP expeditions have been collected with US seismic-enabled research vessels. The JRFB underscores the deep concern expressed in the 2018 NSF Panel Review of JRSO, which states that a decrease in availability of sufficient high-quality seismic data continues to impact our ability to submit competitive IODP proposals, a trend that ultimately impacts the viability of *JOIDES Resolution* operations. Having the capability to carry out deep-ocean crustal imaging in the US and worldwide is key for the safe operation of the *JOIDES Resolution* and to support IODP in fulfilling its 2013-2023 Science Plan, which requires operation in challenging drilling environments, including seismogenic subduction zones, continental shelves, deep ocean crustal formations, methane hydrates, hydrothermally active regions, and more.

Consensus 15

The *JOIDES Resolution* Science Operator (JRSO) Annual Program Plan FY'19 is recommended for approval in principle. The final plan, including the addition for the annual support of the Rutgers Core Repository, will be considered for approval by the JRFB at a later date, but before July 2018.

Consensus 16

The Science Support Office Annual Program Plan FY'19 is recommended for approval.

Consensus 17

IODP is at the mid-point of the current science plan "Illuminating Earth's Past, Present, and Future," which continues until 2023. The JRFB will foster the development of the next IODP science plan that will be required for a new program beyond 2023. This effort will instruct the nature of future drilling platforms as well as define the science strategy for the next stage of scientific ocean drilling. The JRFB Chair will coordinate with the IODP Forum and other IODP members and consortia, so that the renewal effort will be international in scope and represents the consensus of the overall scientific ocean drilling community.

Consensus 18

The JRFB sincerely thanks Paul Wilson and Mike Coffin for their great enthusiasm for everything *JR* and their contributions on the JRFB. Over the past years the JRFB has gained tremendously from Paul's and Mike's extensive knowledge.

Consensus 19

Ken Miller has been the SEP Science Co-chair for the last three years and has done so with the strongest sense of commitment toward IODP science and with great energy! He has done an exceptional job in nurturing a large number of proposals, in particular numerous fast-track proposals, which allowed the JRFB to put together many strong expedition schedules for the *JR*. Ken, your contributions to IODP have been enormous and your work leaves a great legacy in Scientific Ocean Drilling. We hope to see you again on "groundhog day" at Scripps!

Consensus 20

After a versatile career in Scientific Ocean Drilling, Tom Janecek will retire from his program director position at the National Science Foundation. The JRFB and all in IODP are thanking Tom for his many contributions to the program, starting with his work as Expedition Project Manager during the days of JOI, as vice president in the IODP-MI DC office, and his time at the NSF during the two IODP programs. His leadership has been instrumental in developing the new International Ocean Discovery Program and *JR* business model. Tom, we will miss your straightforward decision making and dry humor from the back of the room!

Consensus 21

Outgoing JRFB chair Anthony Koppers has exhibited insightful and effective leadership over the last 3 years. During his tenure, the development of the regional ship track has allowed more efficient planning and cost-effective implementation of challenging expeditions, while executing the IODP Science Plan and allowing efficient operation of the *JOIDES Resolution*. His knowledge and attention to detail have created a legacy that forms an excellent foundation to not only successfully complete this phase of the scientific ocean drilling program, but to prepare for the renewal of the program beyond 2023. Anthony, the JRFB and the broader international ocean drilling community sincerely thank you for your dedicated service and leadership.

Action Items

Action Item 1

The JRFB Subcommittee on Policies and Guidelines will continue to update and reformat all remaining policies and guidelines for the general IODP program, for the *JOIDES Resolution*, and for the JRFB Advisory Panels.

Action Item 2

The JRSO is asked to provide annual reports to the JRFB, including risk analyses, development of risk management methods, and approaches to retain insight/experience in the current JRSO staff and engineering.

Action Item 3

The JRSO is asked, before the next JRFB meeting in 2019, to provide how their science planning for *JR* operations has been improved based on recommendations in the FY'17 JRSO NSF Site Review Report. This includes a cost-benefit analysis and plan toward the potential installation of a whole-core XRF core scanner onboard the *JOIDES Resolution*.

Action Item 4

The JRFB Chair, in collaboration with the SEP Co-Chairs, will continue monitoring and deactivating inactive (>5 years) IODP proposals under SEP review as necessary.

Action Item 5

The JRFB Chair will continue monitoring proposals at the JRFB that have been inactive for 5 years or more and request proponent teams to provide the JRFB with an update via an Addendum and/or PRL.

Action Item 6

The JRFB Chair will work together with the EFB and CIB Chairs and the three IODP Curators for nominations to replace CAB members Elizabetta Erba (ECORD) and Hideyoshi Yoshioka (Japan).

Action Item 7

The JRFB Chair will request that the US Science Support Program (USSSP) solicit applications for the replacement of JRFB non-US science member Paul Wilson and US science member Anthony Koppers. Recommendations from this process will be circulated to the JRFB for approval.