Preventing Future DWH Blowouts

Topics for

Marine Board Discussions

April 2013

Candidate Project Guidelines

- Significant Safety & E.P. Potential
- Contributions of Lasting Impact
- Outside of traditional missions of existing Government / Private Institutions
- Facilitate Cooperation / Emphasize Integration
- Create Opportunities for Applied Research

1. Extreme Event Survivability

• Industry & regulators should develop fail-safe design requirements for combined systems of rig, riser, BOP, drilling systems, etc. (NRC 2012)

 Evaluate design concepts for surviving most severe incidents ---- Fires / explosions / structural failures ---- Analyze outcomes

2. Training, Testing, Certification

- Research is needed on standard requirements for education, training and certification of everyone working on offshore rigs (NRC2012)
- There are too few standard requirements across companies for Ed Tr. Cert.... (NRC 2012)
- Integrate existing requirements and propose comprehensive approach to achieving adequate levels of total competence

3. Uniformity of Safety Standards

- Harmonization of multiple regimes is the new mantra for [Cruise Line] Industry (Maritime Professional, 2013)
- Definition of command at sea should be absolutely unambiguous and should not change during emergencies (NRC, 2012)
- Evaluate multiple jurisdiction harmonization and project safety impacts

4. Testing of Critical Safety Systems

 The performance of design capabilities [of BOP] should be demonstrated and independently certified on a regular basis (NRC 2012)

 Evaluate critical safety needs and propose approaches to independent testing and validation

5. Emergency Response Capabilities

• [It was] dismayingly clear that neither BP nor the government was prepared to deal with a spill of this magnitude and complexity. (OSC 2011)

 Develop a realistic estimate of response capabilities needed for adequate readiness planning for deepwater and Arctic drilling.

6. Lessons from Past Events

- Blowouts with severe consequences may not be as rare as initially thought – important accidents need to be investigated and lessons identified, classified and shared. (EU 2012)
- There seems to be an industrywide reluctance to disseminate information on near misses or their causes (NRC 2012)
- Evaluate feasible approaches to inform future operations and learn from past mistakes.