TRB/MB Consensus Studies Update

- Three Ongoing Studies
- New Study in Coast Guard Authorization Act 2018
- NAS Studies in WRDA 2018

USCG's Vessel Stability Regulations—Phase 2

First phase (report issued in 2018):

 How can vessel stability (sub S) requirements be made more consistent, current, and useable?

Second phase (same committee, chaired by Eugene Van Rynbach):

- Provide more in-depth examination of options in August report
- Consider any new statutory requirements relevant to stability requirements

Save Our Seas Act of 2018 (in response to El Faro sinking)

- USCG must require companies to maintain records of all weight changes
 - -- USCG wants advice on options for USCG to implement this mandate?
- USCG must review "effectiveness" of intact and damage stability standards
 - -- USCG wants advice on options for assessing effectiveness?

Status

- Report being drafted
- Next Meeting: May 22-23
- Due August 2019

ONR's National Naval Responsibility—Naval Engineering Program

Charge:

Are the technical areas of NE program the right ones to ensure a healthy S&T and educational enterprise to meet the future technology needs of Navy?

Consider existing program topics and possible new ones---including the cybersecurity of connected and automated vessels, ship design tools, structural systems, hydromechanics, propulsors, platform power, and automation, control, and system integration.

Approach:

Sponsor wants advice on a strategic approach for making the choices about program emphasis areas.

When should ONR be a) taking the lead, b) coordinating and collaborating, c) monitoring?

Status:

- Heidi C. Perry, Draper Lab (Chair), 13 committee members
- Report being drafted
- Final meeting scheduled for June
- Report due Sept 30
- Looking for peer reviewers

Review of BSEE's Offshore Inspection Program

Charge:

- Evaluate BSEE's risk-based inspection program and how it can be improved
- Identify opportunities to learn from practices in other countries (UK, Norway, Australia, Mexico)
- How best to use third-parties for inspection and verification functions?
- Appropriate role of real-time monitoring?
- How should BSEE seeks to evolve the program over longer-time frame?

Status:

- Greg Parnell, University of Arkansas (risk expert), chair
- Fourth committee meeting, June 5-6
- Due May 2020

Approach:

How to make BSEEs program more:

USG's Use of Unmanned Technologies (Section 812 Coast Guard Authorization Act of 2018)

What should guide Coast Guard priorities for developing, testing, and deploying unmanned technologies for maritime domain awareness applications?

Example considerations:

- acquisition, operations, and maintenance costs;
- service life, reliability, and versatility;
- readiness for testing and/or deployment;
- operational support and infrastructure requirements, such as for beyond line of sight control and for data transmission, collection, analysis, and storage;
- ability to aid CG in pursuing its missions at lower cost and deploying its vessels, aircraft, equipment, and personnel more efficiently and effectively;
- ability to create new mission-related capabilities, e.g., by increasing persistence of effort and expanding the scope and range of maritime domain awareness;

<u>Main CG Missions to Consider</u>: Asset-intensive missions due to distance, remoteness, and size of geographic areas—SAR, law enforcement (drug and migrant interdiction, fisheries management)

WRDA Studies

Sec 1102: Study of effects of transferring USACE civil works to new or existing agencies.

Consider the effect of annual appropriations, USACE's leadership and division structure, rotations of senior leaders, effects on national security, USACE ability to maintain sufficient engineering capability and ability to assist with disasters

Appropriations language read by USACE as preventing study funding

Sec 1103: Study on Economic and Budgetary Analysis

Recommend potential changes to economic principles and methods used by USACE in assessing benefits and costs of projects; do they account for all benefits and costs?

Tom Menzies
Consensus and Advisory Studies
Transportation Research Board
National Academy of Sciences

tmenzies@nas.edu

202-334-1837