

ARRV Update



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Current Status

- RCP Closes October 28
- 242 ft with 12 ft option for anti-roll tank
- Source Selection follows - best value
- Results to NSF November 17
- Projected Shipyard contract early January
- It all depends.....
- OFE Z-drive contract in place, preliminary work underway, including hull CFD
- Oversight Committee (Margo Edwards, UH, Chair) continues to be actively engaged
- Buy American issues

SMR Comparison

- Areas where ARR_V deviates from OCR_V
- ARR_V SMR is different from OCR_V SMR

SMR Comparison

- Non-crew Berthing: OCRV 22 vs. ARRV 26
- Single science SR: OCRV 4 vs. ARRV 0
- Single crew SR: ARRV 14 single + 2 double
- Vans: OCRV 2+2 non-std
ARRV 2+1 std+1 non-std forward
- Storage: OCRV 4000-5000 ft³, ARRV 7000 ft³
- Holding Capacity: OCRV 36 hrs, ARRV 24 hrs
- Variable Science load: OCRV 150T, ARRV 100T

Seakeeping

- What is wave climatology for design?
- STOP thinking in terms of degrees of roll and pitch
- START thinking in terms of vertical displacement and 3D acceleration at critical points, e.g.,
 - Labs
 - Staterooms
 - Mess Room
 - Launch/recovery points = end of booms
 - Others

Noise

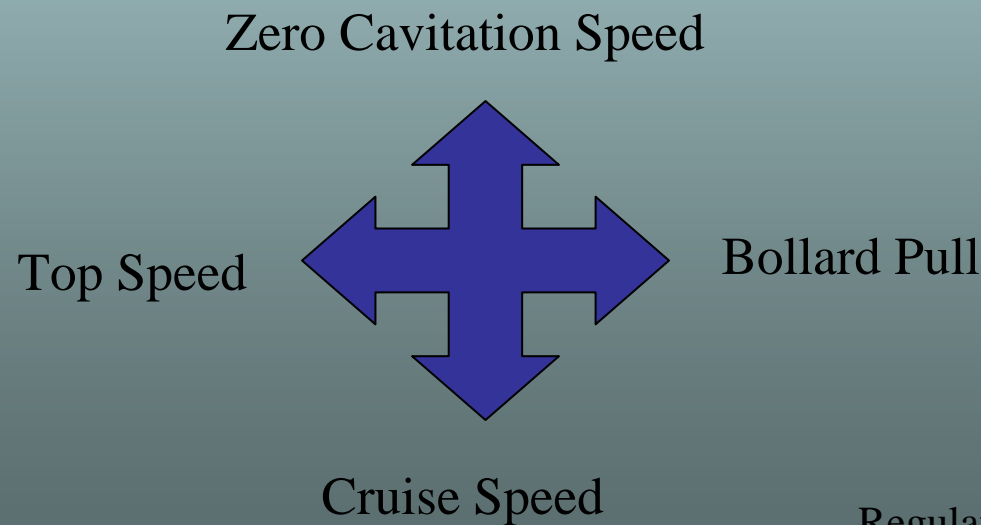
- URN and airborne noise
- You get what you pay for
- Quieter = more expensive
- Define an affordable/achievable curve
- ICES is not the answer, there are more questions: speed, heading, sea state, etc.

SMRs in General

- Need for prioritization
- Prioritize, and let the tradeoffs develop

Speed/Bollard Pull/ Propellor Design

- Requires Prioritization.
What is negotiable and what is not?
- Interaction of factors, for example:



- Regulatory requirements (PC5)
- Ice milling

SMRs in General

- Need more definition and precision
- Critical elements need critical consideration
- If you want it, you have to specifically ask for it
- Don't be afraid to challenge designers, but also give good guidance
- Statements of values and intent sound good, but are difficult for designers to implement
- Pay attention to the most important elements
 - Handling systems
 - Airborne noise and URN
 - Accommodations
 - Others