Panel Formula:

Opinion + Hearsay + Gossip = Discussion





- ITB / ATB / Ship Hull Design Changes
- ITB / ATB / Ship Machy Design Changes
- ITB / ATB / Ship Control Design Changes
- Shipyard Technology Changes
- Technology Related to Cost





- ATB HullCharacteristics
 - Safe Hull (recent)
 - Size (comparable)
 - Improved Coupler
 - Seaworthy (comp)
 - ◆ Speed (~ 13+kts)

- Ship HullCharacteristics
 - Safe Hull
 - Size
 - Not Required
 - Seaworthy
 - ◆ Speed (~ 14kts)



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- ATB MachyCharacteristics
 - More Efficient Engines
 - Computer Controls

- Ship MachyCharacteristics
 - More Efficient Engines
 - Computer Controls





- ATB Control Characteristics
 - In Every System
 - Bridge
 - Engine Room
 - Cargo

- Ship ControlCharacteristics
 - In Every System
 - Bridge
 - Engine Room
 - Cargo





- Barge YardCharacteristics
 - Product Match Yard History
 - Some Pre-outfit & Steel Sub-assy
 - New Designs

- Ship YardCharacteristics
 - Product Match Yard History
 - Pre-outfitted Modules
 - Proven Foreign Designs w/ Material Packages





- \$~78m ATB
 - ◆ ~12,000 HP Twin
 - ◆ ~335,000 BBLs
 - ◆ ~49,000 T Dwt
 - ◆ ~60,000 T Disp.
 - \sim ~5500 ft² Accom.
 - ◆ ~34 T HF/day

- \$~95m Tank Ship
 - ~11,000 HP Single
 - ◆ ~340,000 BBLs
 - ◆ ~46,000 T Dwt
 - ◆ ~57,000 T Disp.
 - \sim 11,000 ft² Accom.
 - ◆ ~34 T HF/day



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- Future Technical Solution?
 - \$95m \$78m = ATB
- If Both Vessels Meet Mission?
 - Ship is > Machy Vol. = >\$
 - \bullet Ship is > Accom. Area =>\$
- What Do You Think?



