CHANNEL DESIGN CRITERIA: *Breakout Sessions*

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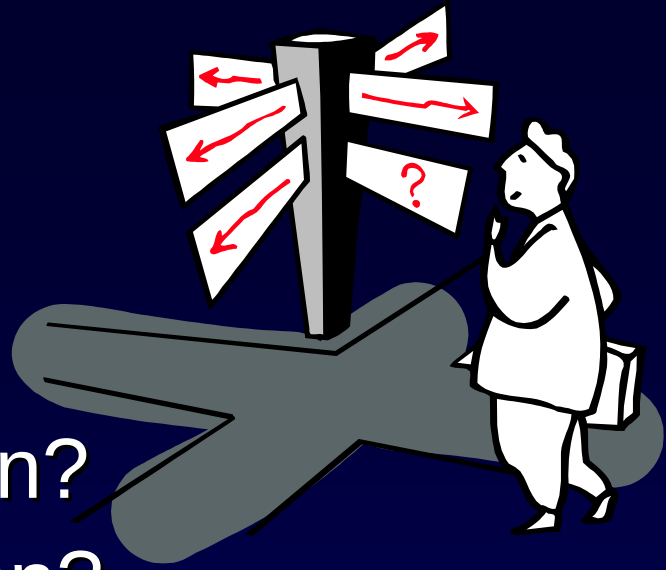
Tasking



- What is the current situation?
- What is the desired situation?
- Why is there a difference between the current situation and the desired situation?
- What are the impediments to change?
- How can these impediments be most effectively addressed?

Overview

- Format
- First Breakout Session

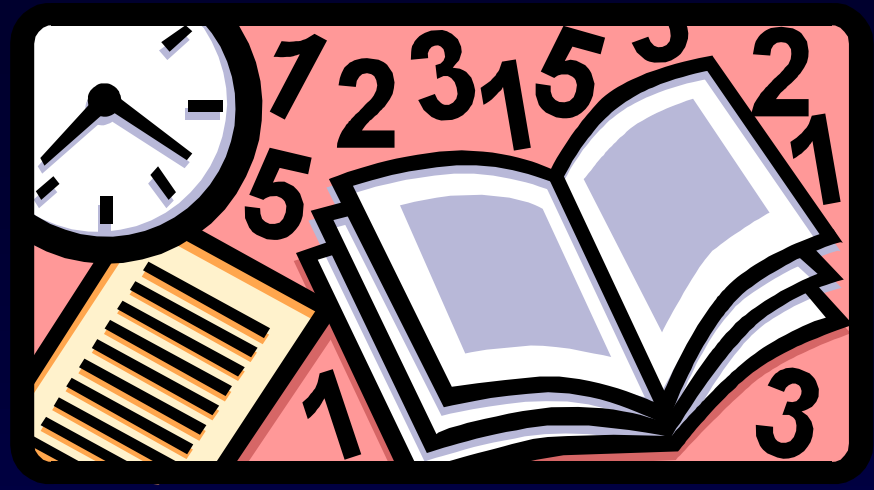
  → discussions generally centered around more technical issues
- Second Breakout Session

  → discussions generally more policy-related
- Findings

General Comments

- Each group had different emphasis, however…
- Many similar concerns between both groups
- Most of discussions centered around U.S. practices and concerns

Current Situation



- Projects incorporate many agencies
- Process is [too] long
- Economics drive everything
- Vessels are becoming larger
  - L,B,T, coefficients of form
  - Other parameters: height
    - Windage of containerships vice comparably sized bulk/tankers
    - Cruise ship industry

Current Situation (cont'd)

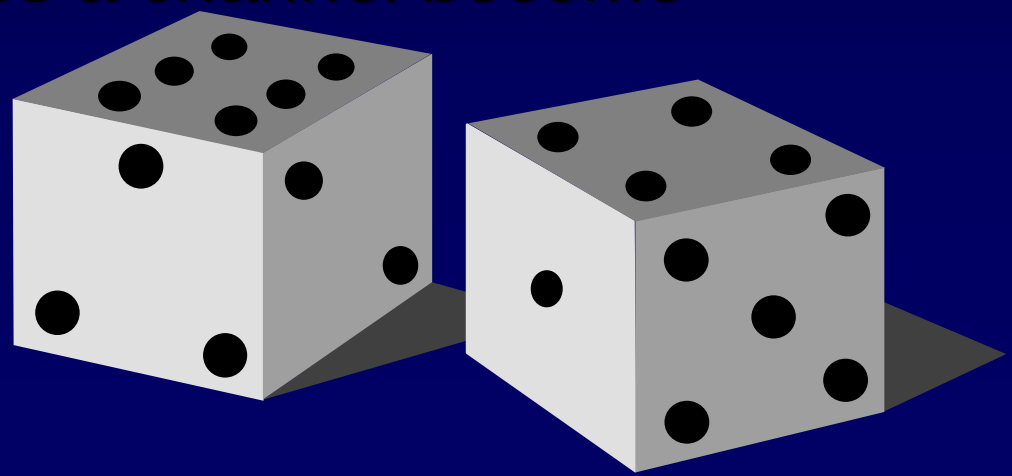
- Channel Design process is moving from a deterministic process toward a more probabilistic approach
  - As margins are decreased and ship parameters increase, it is imperative to understand limitations
- Channels are used by vessels other than those originally designed for

Desired Situation

- Maximize **Safety** (minimize risk)
- Maximize **Reliability** (minimize delays)
- Minimize **$$$** and **Time** for design process

Differences between Current & Desired

- Deterministic guidance needs to be updated to incorporate risk & uncertainty
  - How much risk is acceptable?
  - At what point does a channel become substandard?



Impediments to Change

- Process is very long
  - By the time channel is constructed, vessel predictions are obsolete
  - Current “just in time inventory” differs from when formulation plans were developed
- Coordination difficulties
  - Datasets differ between orgs (USACE, USCG, NOAA, etc.)
  - Numerous federal, user, & environmental parties

How to Address Impediments?

- Reduce risk / increase safety / increase reliability
  - ATON
  - Real-time environmental data (PORTS)
- Channel design guidance needs to address risk & uncertainty
- Channel design guidance needs to take a new approach to more clearly address traffic congestion

How to Address Impediments?

- Channel width is becoming more of a critical dimension
  - Examples of channel “savings” via channel width reduction
  - Newer ship types (with high windage) require more width
  - Channel dredging methods/policies
  - One-way vs. two-way traffic
  - Congestion
  - Recreational traffic

How to Address Impediments?

- Proactive approach
  - Re: plan formulation
  - Re: environmental issues

Additional Key Points

- Communication and Education
  - Multi-Agency, Multi-Functional task group implementation early in design process
- Increase Public Awareness
  - Most Americans do not know value of commercial shipping

Thanks...

To all breakout session participants.

Questions / Comments

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