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Integration of Human Factors into Classification / Certification

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Integration of Human Factors into Classification / Certification
1996 Conference

• Nearly six years since the first workshop in 1996
• PTP was getting underway
• Four pillars of Maritime Safety:
  – Management
  – Work Environment
  – Behavior
  – Technology Application
ABS, Classification Societies

- ABS founded in 1862
- Mission has been to promoting the security of life, property, and the natural environment
Human Error and Accidents

- 80% of marine casualties and accidents (IMO, USCG)
- 90% of ship collisions (NTSB)
- 85% of ship accidents (Navy Safety Center)
- 66% of marine oil spills (UK)
- 62% of hazardous materials spills (OTA)
- 75% of merchant ship accidents (Republic of Germany)
ABS has organized its approach around into four human factors areas:

- People
- Ambient Environment
- Installation Design & Layout
- Management & Organizational Issues
ABS - Management and Organizational Issues

- Reviewing Accident and Near Miss Data Bases
- Develop a scheme for root cause analysis which includes human factors related causes
ABS - Management and Organizational Issues

- Installation-to-Marine Vessels, Installation-to-Helicopters, Installation-to-Beach and Internal Installation Communications Guide
Guidance Notes on the Application of Ergonomics to Marine Systems
ABS – Installation Design and Layout

ABS Guide to Crew Habitability on Offshore Installations
ABS –

Installation Design and Layout

ABS Guidance Notes for Human-Computer Interfaces
ABS – Ambient Environment

ABS Guide for Crew Habitability on Offshore Installations
• Development of Personnel Verification Tools
  – Qualifications
  – Personnel Selection
  – Training
  – Crew Endurance
  – Risk Tolerance
• Workload and Situation Awareness Assessment
Different Models – Same Message