

# Communication Efficiency & Can new Technology on board the ships lead to accidents?



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# Cost Cutting in Data

- Various E-mail solutions
  - Amos Connect
  - Skyfile
  - Rydex...Etc...
- Various Inmarsat Solutions
  - Inmarsat B & B-HSD
  - Inmarsat Fleet



# E-mail Solutions

There are various providers providing cost cutting solution

- ✓ **Work on all Inmarsat Services**
- ✓ **Duplex (Send & Receive)**
- ✓ **Compression**
- ✓ **Break recovery**
- ✓ **Multiple Users**

**Each With It Own Benefits  
& Disadvantages**



# UASC & Amos Connect

- Best Compression
- Anti-Virus option
- Security
  - IP Tunneling with HQ
- UASC Domain

More Importantly

**CONTROL**

# Control (1)



- View of All Communication via Web
  - Message in Queue
  - Set & Change Settings (Size Limitation..etc)

## Manage rules for customer A00003

3 records were found. Showing record 1 to 3:

edit	all	none	rule type	Rule	Name
	<input type="checkbox"/>		system	Deny messages with size bigger than or equal to 150 KB	system
	<input type="checkbox"/>		user	Allow messages from administrator@mycompany.com with size smaller than or equal to 500 KB	my rule 1
	<input type="checkbox"/>		user	Deny messages from x@x.com	my rule 2

search for records with:

Rule description  equals   Show  results per page

### Actions:

Add a new rule rule

Delete selected rules



## Control (2)

- View Daily Traffic Via Traffic & Billing Explorer
  - Report
  - View All Message Log.
- Make use of more than 1 LES
- Ship not Dialed Notification
- Access to GSM/PSTN/FAX & PSDN



## Other Cost Cutting (Fleet 77)

- Inmarsat B-HSD (UASC implemented HSD on it whole fleet)
  - Faster Connection (+/- 6 sec. Handshake)
  - Faster Transfer of File
  - Modems are relatively Cheap

**All Files Above 32kb Cheaper  
Via HSD**

## Fleet 77



- Slightly Cheaper Communication cost
- Good promotions Available in the Market
- Access to 128Kb/s (For large files)
- Voice Calls are Cheaper
- MPDS for Web browsing (Not been used now)
- Ready for Inmarsat Next Generation of Services (Maritime BGAN????)



# Can new Technology on board the ships lead to accidents?

Technological aids designed to prevent accidents at sea sometimes have the opposite effect as a contributory factor in collision and groundings.

Ship collision and grounding accidents will continue to happen no matter how a ship is designed, constructed or operated.



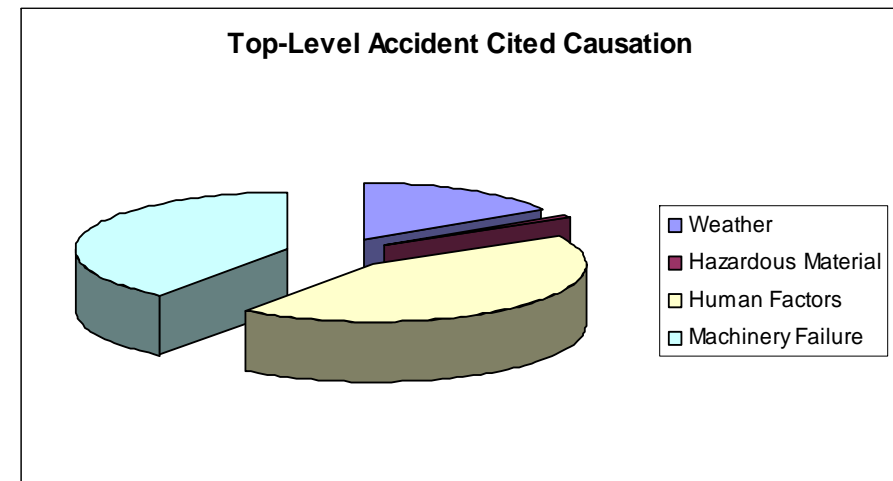
Efforts made by IMO and other organisations to improve Ship design in respect of safety and environmental performance.



# Top-Level Accident Cited.

- Weather 16%
- Hazardous Materials >1%
- Engineering Failure 40%
- **Human Factor 44%**

USCG Database



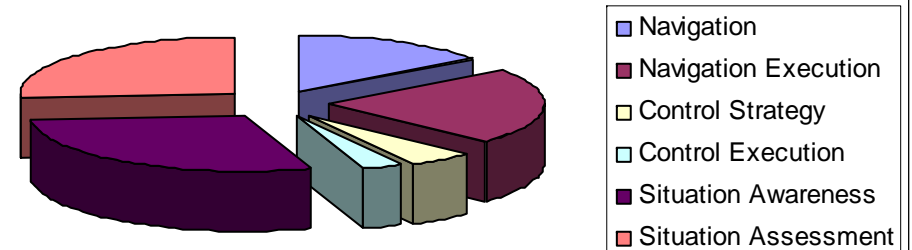


# Human Error Induced Accidents

- Navigation 15%
- Navigation Execution 22%
- Situation Awareness 29%
- Situation Assessments 26%
- Control Strategy 5%

USCG Database

Top-Level Breakdown of Causes for Human Error Induced Accidents





# ABS Data Analysis

Approximately 50 per cent of the maritime accidents are initiated by human error while another 30 per cent of the accidents occurred due to failures of humans during their actions to avoid the accident.

In other words this last 30 per cent of maritime accidents could have been avoided by humans.

Human errors continues to be the dominant factor in maritime accidents



## Open Discussion

- Is this due to Insufficient knowledge/abilities of the sea staff?
- Is this lack of training of sea staff?
- Is the technology implemented nowadays ahead of the capability of the sea staff?
- Is the ship staff overloaded?
- Is this due to task omission?
  - Relying too much on a single source?
- Would it be beneficial for the Industry to put more attention to the human element?