

### NTSB National Transportation Safety Board

Office of Marine Safety

# **Human Factors**

#### The Master:

- Insufficiently considered the readiness of the junior 3<sup>rd</sup> mate to stand the watch
- Failed to prepare the 3<sup>rd</sup> mate or the AB for the watch (e.g., night orders, review of route, vessel handling, etc.)
- Failed to verify whether the 3<sup>rd</sup> mate could legally serve as the watch officer



#### The Master's Decision

- Static conditions
- Sufficient time available
- Possible sleep deprivation
- No economic disincentive
- No real explanation



### **Effects of the Decision**

- On the 3<sup>rd</sup> mate
- On the helmsman
- On the team



#### **Team Research**

- Structure
- Leadership
- Size
- Experience in teams



### **An Ineffective Team**

- Small team
- Uncertain leadership
- Poorly understood roles, duties, and responsibilities
- Leader with no previous "real" experience as team member



### The Company

- Attempting to integrate multiple operations
- Relatively "new" senior managers
- Safety management system



# The Company

- Hired experienced personnel
- Hired dedicated safety person
- Brought 3<sup>rd</sup> mate up for an extra week



#### Lessons

- Putting an inexperienced person in a safety sensitive position creates opportunities for errors and is counter to system safety
- When time is available to make a decision, viable options should be carefully evaluated
- Inexperienced crewmembers should speak up if they feel unprepared to perform an assigned task.





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