

Inviting Disaster: Chapter 7 Red Line Running

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Overview

- Red Line - Humans have limits too



"Short on Sleep"

- Fatigue & Effects
- Cost Considerations
- Companies bend rules
 - Ghost Truckers
- High Motivation
- Rotating Shifts
 - "Southern Swing" - Early, Night, Day Shifts
 - 15 million workers in USA work nights or rotating shifts
- Communication



"The Can-Do Man"

- British airliner story
- Reacting in pressure situations
- Taking on tasks that one isn't suited for
- Taking on too much/ trying to meet deadlines



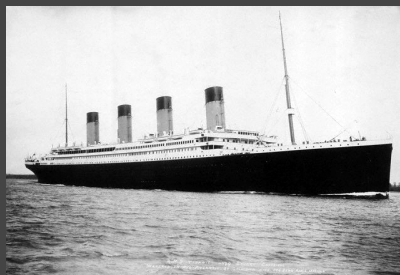
"Poisoned Judgment"

- Captain made poor judgements
- Broken equipment, and cheap substitutes worsened conditions.
- Lack of oxygen lowered mental capacity of the crew
- Decreased mental capacity slowed the repair processes and increased the amount of mistakes.
- This effect continued to compound until the final mistake caused a fire in the engine compartment.
- The vessel became unrecoverable and only 4 of the 103 crew members survived.



"Fear and Fury"

- Anger - in stressful situations
- Knowing when to let others step in
- Titanic
- Smoke Jumpers



"Over the Edge"

- Hypervigilance
 - Human 'red-line'
 - Effects on Mind/Body
- Mitchell Berkun's tests
 - Engine trouble
- "Fight-or-Flight"
- Manager's Role
- James Lovell's jet fighter landing



Systems with similar problems/outcomes

- Denver Airport baggage system
- Train wrecks
- Bhopal gas tragedy
- Exxon Valdez Oil Spill



Conclusion

- Humans have limits - many disasters caused as a result of humans reaching this "limit"
- Avoid "red lining"
 - Fredrick Taylor: "Work needs to fit people, rather than the other way around."

Discussion and Questions

1. How do you feel a lack of sleep affects your performance and abilities?
2. What problem factors lead to the Chernobyl disaster?
3. Should supervisors step in and take the role of the people they manage?
4. What is your view on Mitchell Berkun's tests, and should his experiments be implemented today?
5. Where is your "red line"? When do you let someone else step in when there is trouble or potential trouble?
6. How can managers analyze a potential employee's ability to work under extreme pressure?