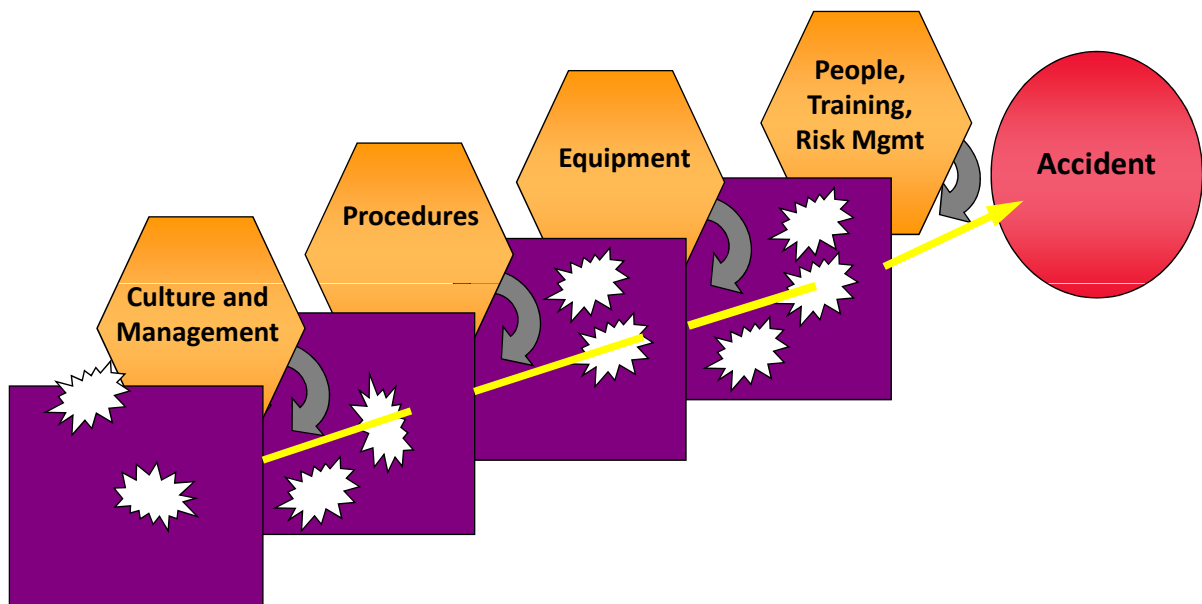


Human Factors analysis based on real world examples: What actions could prevent reoccurrence?

Daniel Knecht and
Gretchen Haskins

Reason's Model



Ways to improve human performance

People	Workplace	Organisation	Strategic	External
<ul style="list-style-type: none">• Competence• Motivation• Team working• Risk perception• Fatigue• Supervision	<ul style="list-style-type: none">• Equipment Design• Physical Environment	<ul style="list-style-type: none">• Performance targets/feedback• Procedures• Planning• Maintenance• Pay/conditions• Process Design	<ul style="list-style-type: none">• Company Standards• Contracting Strategy• Profitability• Worker Engagement/Comms	<ul style="list-style-type: none">• Markets• Regulation• Social and Political• Industry Standards

Accident Summary

Owing to a technical problem in the onboard electrical system, the pilot decided when south of Zurich to abort the flight with three passengers on board from Geneva to Berlin- Schönhagen and to land at Zurich airport. After an instrument approach on runway 14 associated with navigation problems, the pilot attempted, by means of visual flight navigation, to bring N467BD into a position from which a landing on runway 14 would have been possible. In the course of this manoeuvre, shortly before the beginning of runway 14, N467BD collided with the ground from a right turn. The pilot and the male passenger in the front right seat were fatally injured in the crash. The female passenger in the rear right seat died a few days after the accident from her injuries. The male passenger in the rear left seat was seriously injured. The aircraft was destroyed during the accident. Fire did not break out.

Exercise

- In your group, skim read through the SAIB accident report by focusing on the given subcategory:
 - 1) People
 - 2) Workspace
 - 3) Organisation
 - 4) Strategic
 - 5) External
- What are the top causal factors?
- What actions would prevent reoccurrence?
- How would you measure or judge if they have worked?
- Be prepared to present back