

Undersøkelse av Human Factors: eksempel fra en transportulykke

Investigating Human Factors:
A transport accident case

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A model for Human Performance investigation

Purpose:

- Ensure a systematic way of collecting evidence
- Ensure that all major relevant issues are covered in the first interview
- Help organize large amounts of information from interviews
- Help link Human Performance evidence to the operational and technical evidence in the process of analyzing the accident
- Help assessing the importance of Human Performance findings in the accident / incident at hand

SERIOUS INCIDENT 2. DESEMBER 2010 CLOSE TO SVOLVÆR AIRPORT, HELLE



- Bombardier Inc. DHC-8-103 LN-WIU
- 35 passengers, 2 pilots, 1 cabinr.
- **Preliminary** report published in August 2015

Situation

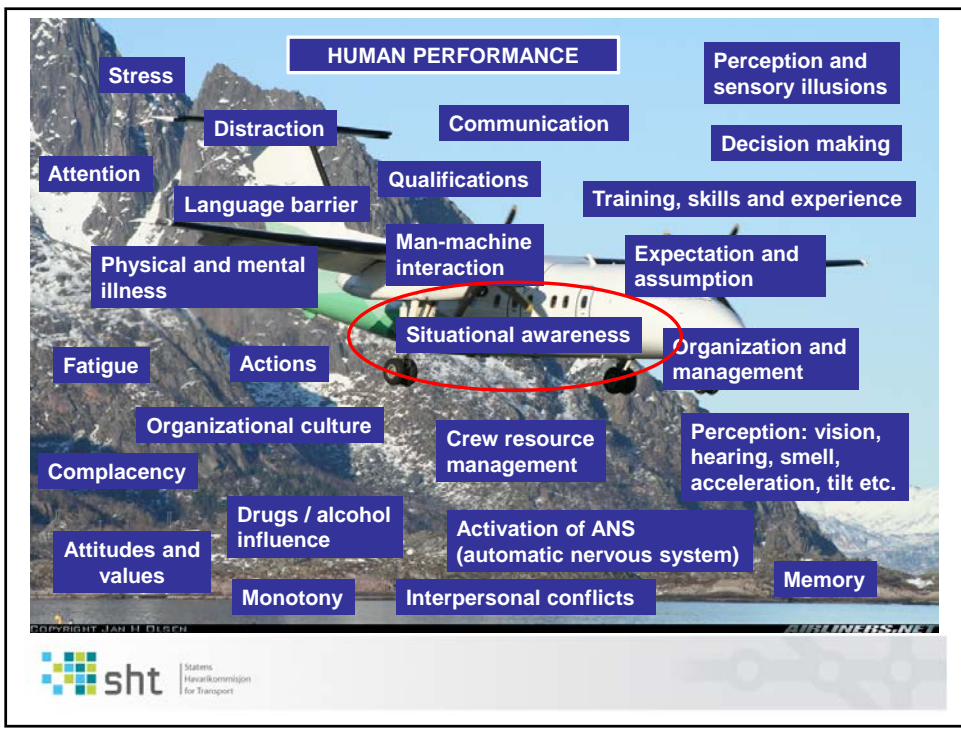
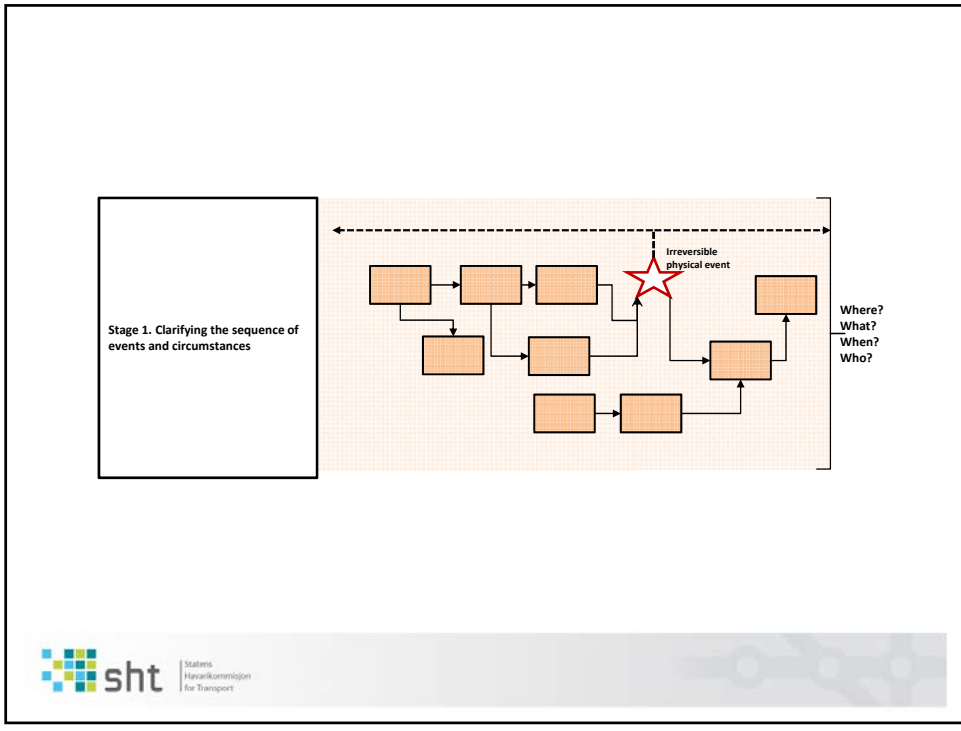
<https://www.youtube.com/watch?v=k2PA8X09IQw>

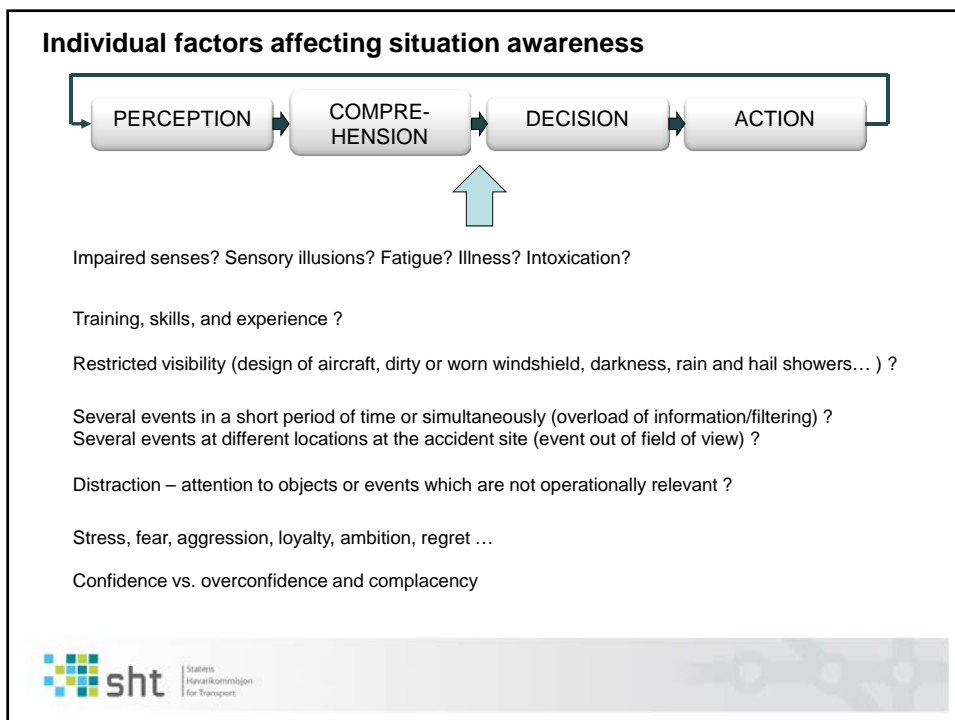
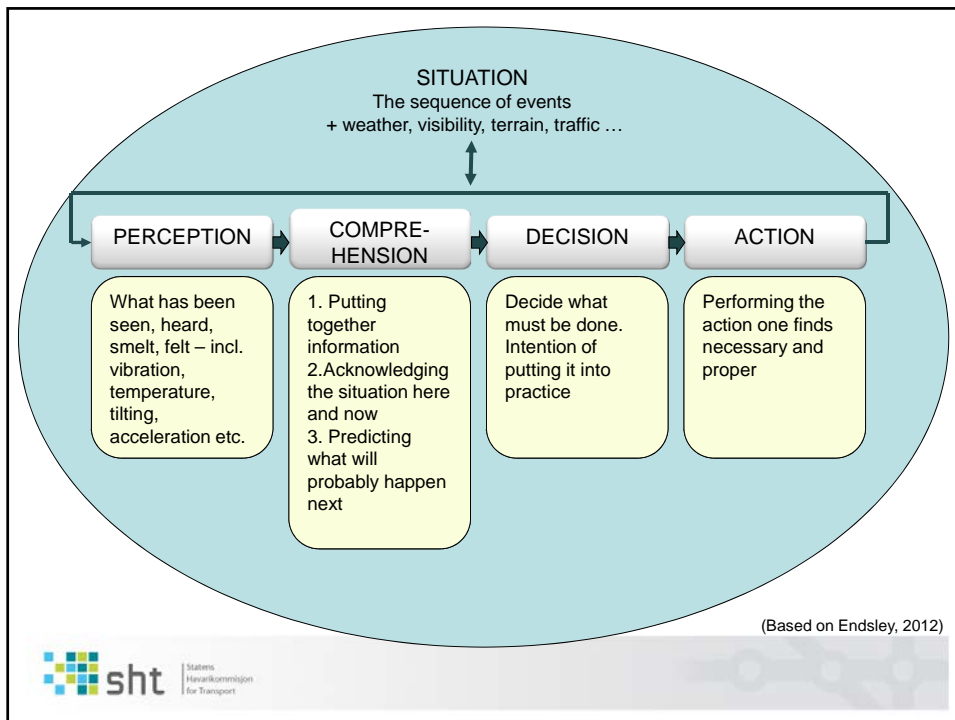
What happened?

- On base leg / final the pilots noticed a significant speed drop, the aircraft started buffeting, and quickly lost altitude
- The commander (captain) immediately gave full engine power and pitched up the nose of the aircraft to compensate
- Both airspeed and altitude continued to decrease, and it felt like the aircraft was falling or being pushed down
- The pilots managed to recover just in time – minimum altitude was 25 meters
- The pilots aborted the landing procedure and proceeded to Leknes airport, where the landing conditions were better
- The critical time frame was nine seconds

Interviewing the pilots: setting

Commander	First Officer	Flight Data Recorder
<p>* Gave full engine power and lowered the nose of the aircraft when airspeed was lost and buffeting started</p> <p>* Intentionally kept the aircraft low and accelerated at a safe altitude towards a red obstacle light</p> <p>* Airspeed increased and climb was initiated prior to the First Officer unnecessarily took over the controls</p>	<p>* The nose was lowered as a result of external influence, without corrective measures being implemented by the Commander</p> <p>* Instinctively assumed controls of the aircraft to avert crashing into the sea</p>	<p>Not analyzed at the time of the interviews</p>





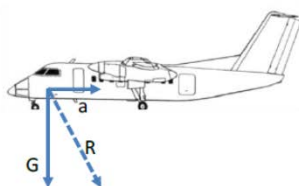
“What did you see?”

- And how did your brain help you to understand what you saw?

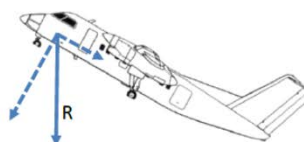
According to research at an English university, it doesn't matter in what order the letters in a word are, the only important thing is that the first and last letter are in the right place. The rest can be a total mess and you can still read it without a problem. This is because we do not read every letter by itself but the word as a whole.

SOMATOGRAVIC ILLUSION

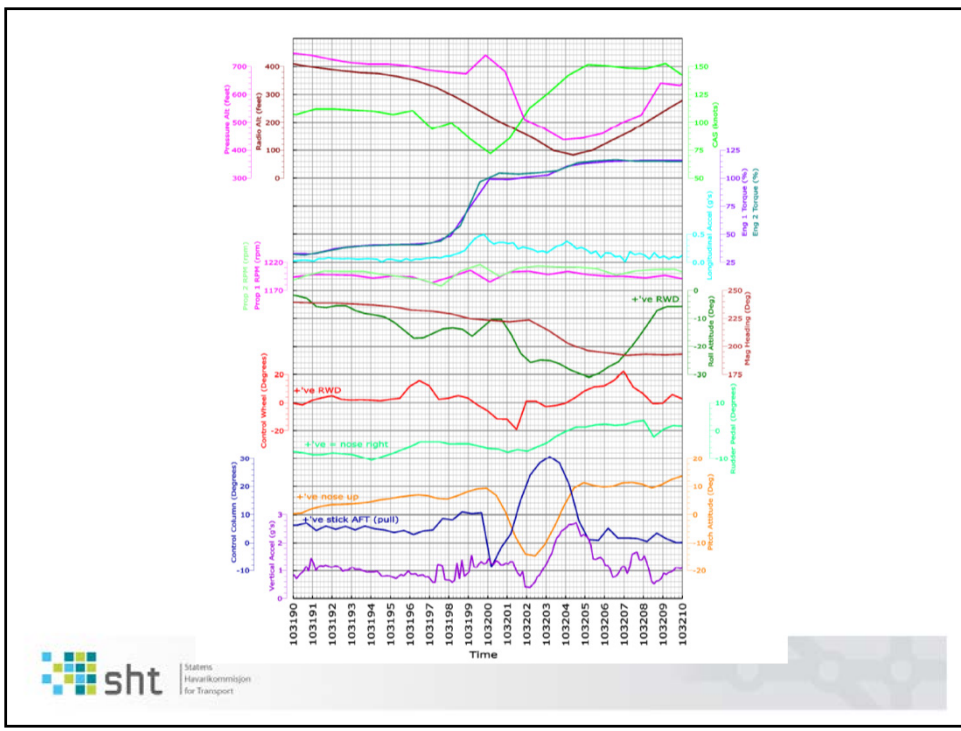
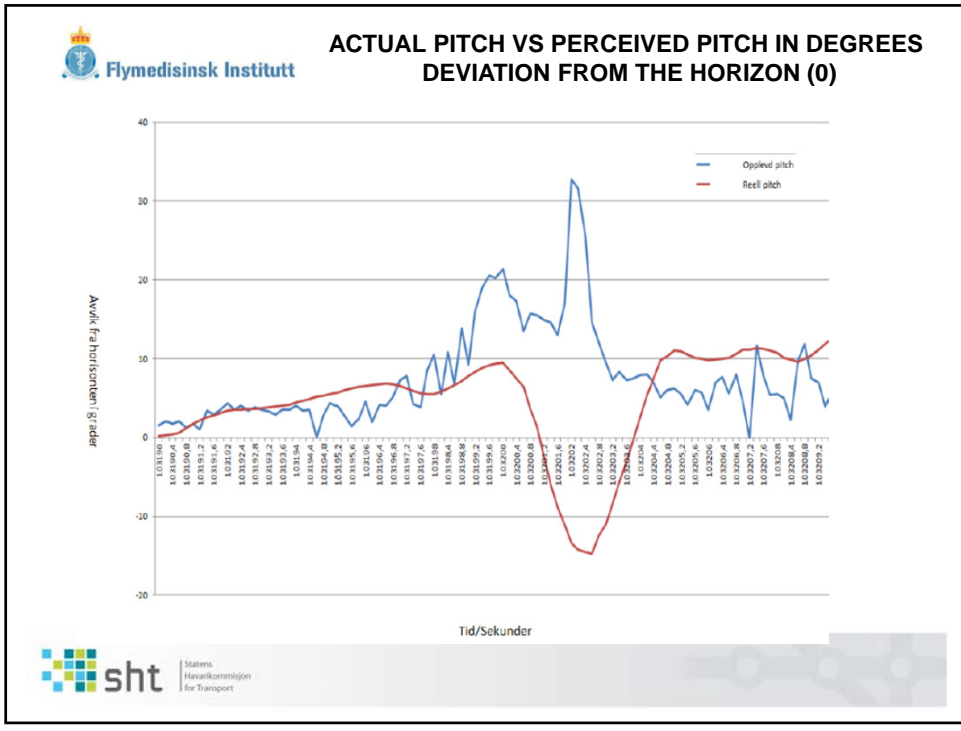
Reell pitch ved akselerasjon

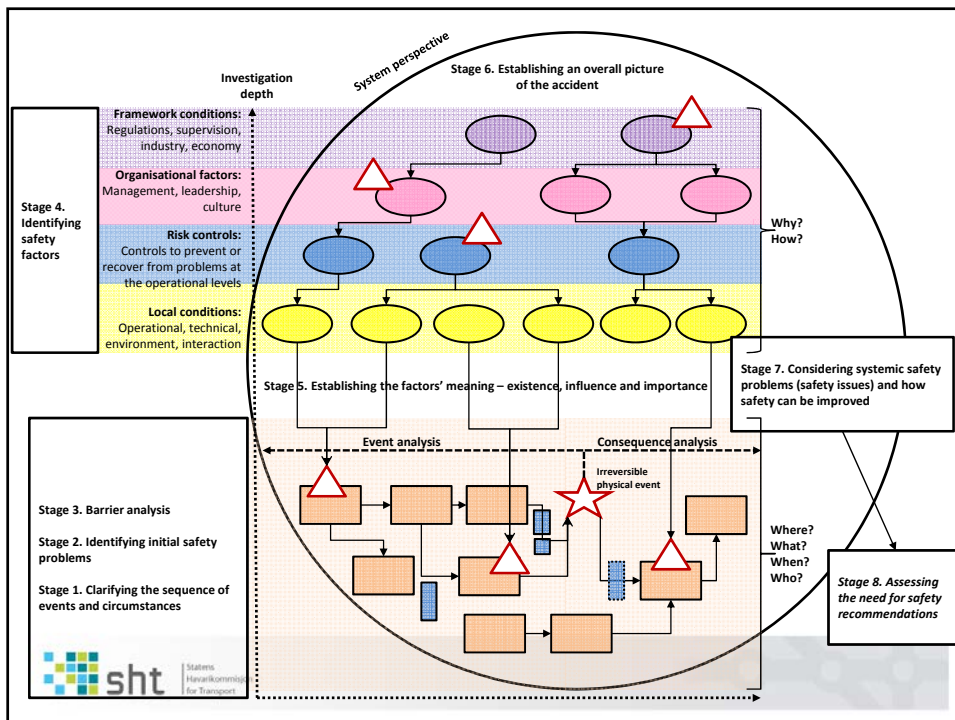
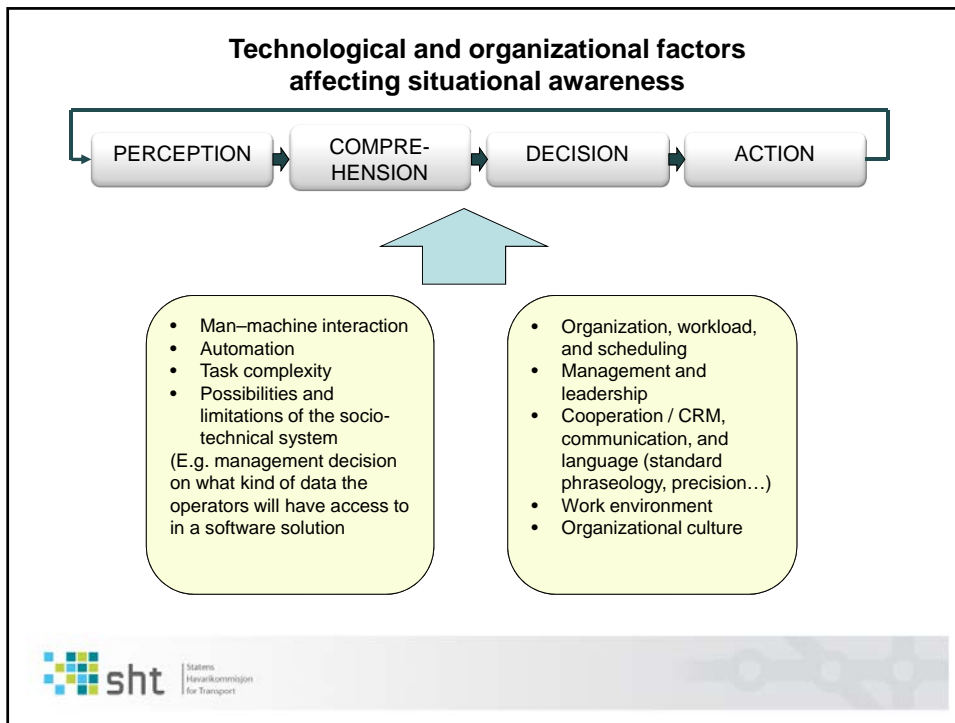


Opplevd pitch ved akselerasjon



a= akselerasjon
G= tyngdekraft
R= resultat





Questions?

Thank you for your attention

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