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Improving Safety in General Aviation

Joe Dewar – Civil Aviation Authority
Aviation safety improvements in worldwide air transport

85% reduction in accidents since 2000


Civil Aviation Authority of New Zealand
Developments in technology, training, operating practices, spread rapidly throughout the full aviation system and are ‘trapped’ into rules and procedures.

**Standardization and a professional safety culture have made it much harder for accidents to occur.**
General Aviation safety has not followed the airlines

**Other Commercial Accidents per 100,000 hours**

- Other Commercial Operations - Aeroplanes
- Other Commercial Operations - Helicopters

**Agricultural Accidents per 100,000 hours**

- Agricultural Operations - Aeroplanes
- Agricultural Operations - Helicopters

Civil Aviation Authority of New Zealand
Why?

Researchers identify a number of causal factors:

- Less sophisticated aircraft
- Less technology
- Less experienced pilots
- Less training
- Fewer rules
- More deviations from procedures
When we asked the industry they said:

“Pilots experience too much pressure to get the job done in conditions that sometimes are not ideal”.

“Some operators cultivate a culture of non-compliance that becomes an inherent part of their organisational culture”.

“Poor attitude, complacency, distraction, non-engagement in safety processes”.

Common theme? SAFETY CULTURE

Sources: New Zealand Part 135 Sector Risk Profile (Navigatus 2015) and the New Zealand Agricultural Aviation Sector Risk Profile (Aerosafe Risk Management 2014).
What we talk about when we talk about ‘culture’

- Not just focused on identifying broken or malfunctioning people or things;
- About actually doing stuff, not an abstract concept (e.g. ‘attitudes’);
- Tied to ‘professionalism’ and its attendant values.

Overall it is about the transmission of information about hazards and risk that can be actively used to maintain either a documented or a mental ‘risk register’.

Also about the transmission of norms and professional standards throughout an industry. With a properly functioning system we should be able to say: “each accident or incident makes the next similar one less probable”.
What steps should we take?

- Information-driven safety management systems
- Lessons learned-oriented investigations
- Dissemination of lessons, norms and standards through the General Aviation Sector

Guiding operators to improve safety information: