Human Factors in the context of mountaineering and aviation


‘Avalanche accident statistics have long shown the majority of avalanches catching people are triggered by people’.

‘Human factors are a major influence in almost all avalanche accidents’.

‘Most avalanche fatalities in North America result from slab releases triggered by either the victim or a member of the victim’s party’.

‘By investigating avalanche accidents, we’ve learned that the human factor is a major contributor’.

‘In teaching mountain travellers how to evaluate avalanche hazard... especially with experienced travellers, it is not enough to focus on the physical factors causing avalanches’

‘Teaching techniques [to avoid accidents] include learning by doing with an emphasis using a decision-making framework such as checklist to help seek and assimilate important information’.


‘...our results show that the number of avalanche accident injuries and death can be substantially reduced if avalanche safety training courses focus more attention on highlighting the importance of human factors in causing avalanche accident deaths and reducing survival’.

Aero Boeing No. 8, Human Factors [online], http://www.boeing.com/commercial/aeromagazine/aero_08/human_textonly.html (last accessed 21st December 2016)

‘Human error has been documented as a primary contributor to more than 70 percent of commercial airplane hull-loss accidents. Boeing human factors professionals work with engineers, pilots, and mechanics to apply the latest knowledge about the interface between human performance and commercial airplanes to help operators improve safety and efficiency in their daily operations’.
‘In aviation, human factors is dedicated to better understanding how humans can most safely and efficiently be integrated with the technology. That understanding is then translated into design, training, policies, or procedures to help humans perform better... because improving human performance can help the industry reduce the commercial aviation accident rate’.

‘Boeing has addressed this issue [of aviation accidents] by employing human factors specialists. This group of about 30 experts now considers a much broader range of elements such as cognitive psychology, human performance, physiology, visual perception, ergonomics, and human-computer interface design. Applied collectively, their knowledge... help[s] humans perform to the best of their capability while compensating for their natural limitations’.