Hfacs (human factors in aviation safety)

Government, Military



Human Factors in Aviation Safety al affiliation Introduction Human error simply refers to the deviation from the intention or even expectations. However, human error in the context of HFACS refers to the outcome of an act that has been done by an individual accidentally. These unplanned acts have undesirable consequences (Chialastri, 2012).

HFACS method used to classify human errors

The HFACS used a data obtained from databases. These databases were maintained by the National Transportation Safety Board (NTSB) and National Aviation Safety Data Analysis Centre (NASDAC). The information contained in these databases dated since 1990-2000. For the sake of analysis, the HFACS selected accidental reports that were written at that time. Specifically; the case of NTSB has two levels of report that is factual and final (Wiener & Nagel, 1989). The HFACS categorically selected the final one since it contained causal factors that were of interest in regards to the study. However, it deliberately neglected the factual one since, it only contained demographic information associated with the accident. This kind of information was of no interest as far as the study was concerned (wiener 1988).

Further, the NFACS did not put into consideration the kind of accidents that was classified as undetermined. These were kinds of accidents that were attributable to sabotage and criminal activity. Nevertheless, the information was culled until the desired general accident (GA) data was obtained (Merriti & Helmreich, 1996)

Finally any accident that has no relationship with aircrew unsafe practices was eliminated. The process leads to 14436 accidents out of 25000 aircrew

causal factors. This data was subjected to analysis. This analysis yielded three categories of errors, namely: skill-based error, perceptual and decision errors (wiener 1988).

How HFACS can Reactive and Proactive

HFACS can be both reactive and proactive by paying close attention to the substandard acts of supervision. It can be proactive by taking appropriate measures concerning the provision of adequate supervision and provide well-planned appropriate operations at the deck flight. These measures will prevent any occurrence of accidents (Salas & Maurino 2010).

On the other hand, it can be reactive by making changes in the flight desk after something awful has already been done. This includes making remedies to inadequate supervision and planned inappropriate supervision (wiener 1988).

References

Salas, E., & Maurino, D. E. (2010). Human factors in aviation. Amsterdam: Academic Press/Elsevier.

Chialastri, A. (2012). Automation in aviation. INTECH Open Access Publisher.

Merriti, A. C., & Helmreich, R. L. (1996). Human Factors on the Flight Deck

The Influence of National Culture. Journal of Cross-Cultural Psychology, 27(1),
5–24.

Wiener, E. L., & Nagel, D. C. (1989). Human factors in aviation. Gulf Professional Publishing.