

Freeing Up the Resources for a Human Factors Programme

Summary of presentation given by Phil Hall Quality & Safety Management Director of Monarch Aircraft Engineering Ltd.

There is a perception that a human factors programme can be satisfied by running a human factors course. The current demand for training within the aircraft maintenance environment makes the demand for adding an additional training programme an unpopular one. It is difficult to put a business case that supports the benefits for human factors training. It is also true to say that a human factors course is not the answer to the problem merely the start of a possible solution.

There is adequate research to show that the very nature of aircraft maintenance creates an environment for error. There is also medical evidence to suggest that, in general, people attracted to the industry are likely to display a number of similar behavioral characteristics. Both these elements need to be understood in order to appreciate where best to target a human factors programme directed at the work environment and the people.

Aircraft maintenance has always required a comprehensive level of technical training. This training needs to be reviewed in order to incorporate the human factors elements in the appropriate areas. It is probable that the time spent on technical training does not need to be increased to incorporate these additional elements. For example, modern aircraft require a more procedural approach to maintenance that should be reflected in the type training, much of which still tends to have a heavy reliance on imparting detailed systems knowledge to the maintenance person.

The use of personality profiling or psychometric testing can be a useful tool to identify the predominance of some of the characteristics in maintenance staff that we are now being tasked to recognise and do something about. Training can then be targeted rather than applying the same level to all.

A maintenance error-reporting programme is a useful tool to identify the specific elements that contribute to error within an individual organisation. Investigation tools such as MEDA (Boeing's Maintenance Error Decision Aid) provide essential information when the results are interrogated on a database. This information can then be used to target action against areas which are cited most frequently.