

SAFETY BULLETIN

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Man versus Machine



Today we live in an age where we are surrounded by machines and on the whole these are very reliable. You press a button, something happens, and it always happens within the same timeframe, to the same standard, nothing more and nothing less. When it doesn't we can get quite upset.

Growing up in a world full of such machines is this level of consistency and reliability so high that we possibly come to expect it of people? Going back in time, did we always expect other people to be so consistent and reliable before our lives were so full of machines?

Machines today, particularly in aviation, are designed to high levels of reliability, but what about the people who interact with them? People are affected by so many things, their health, people around them, the environment and their own experiences, to name a few. Machines are not so affected, they do not suffer from a stressful drive to work or being kept awake by noisy neighbors.

So can we expect people to perform to the same level day in and day out? Not really. Therefore we need to accept and manage the variable levels of human performance as a day to day reality. Many people use the term human error, but others argue it is better to think of this as variation in human performance. It is also important to remember that it is how the humans perform that prevents incidents from occurring but we do not capture these good events.

When reviewing any incident, more often than not, there are elements where human performance has been a factor. It is important to carefully spend time to consider these to prevent further occurrences and use this knowledge when conducting our hazard analysis. This area is often overlooked; think about this the next time you review an occurrence. Has the human performance aspect been fully thought out? Think about all the factors that affect people.

People, on the whole, do not set out to perform poorly. Where they willfully violate procedures, or set out to sabotage, this should not be tolerated and traditional disciplinary processes should be followed. So we need to keep in mind that people do not always perform to the required levels all the time, and on the whole, they do not set out to fall below what is required. Think how many times a day you do not operate perfectly, forgetting things such as keys, paperwork, names or miss-typing or miss-reading something?

Where something has gone wrong we also tend to be consequence focused. Where someone's performance falls below that required and this leads to a big incident the follow up action tends to be related to the scale of the consequence and not based on the factors that lead up to that incident. Applying the principles of Just Culture within a business should provide a level of protection and confidence for staff to openly report safety concerns. As part of the Safety Management System these reports, or those issues found through internal audit,

should feed the hazard/ issues log. Within the hazard/issues log ways to mitigate the likelihood or consequence of a variable human performance should be considered and applied.

We should not forget that humans are truly amazing. They are the glue that holds the safety system together but we must accept they are not machines. They are affected by many things and may not always perform at the same level expected every time.

The more everybody within a business thinks of and applies human factors on a day to day basis the more effective the safety management system should become.

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