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NORMALIZATION OF DEVIANCE

During the closing keynote session on Thursday, December 8 at the 2016 ICAS Convention, former Space Shuttle astronaut Charlie Precourt introduced the air show industry to a new term: the normalization of deviance. The root cause of both the Challenger and Columbia Space Shuttle accidents, the normalization of deviance is the gradual acceptance of unsafe or unsatisfactory conditions which, in some cases, leads to an incident or accident.

On January 16, 2003, the Space Shuttle Columbia launched from Cape Canaveral, Florida. During takeoff, foam broke off of the bipod connecting the space shuttle to the main fuel tank and struck the left wing of the shuttle, significantly damaging the heat shield designed to protect the shuttle during re-entry into the atmosphere. At NASA, damage caused to the Shuttles' heat shield was a known problem that had occurred in almost every mission. Because the problem had not caused an accident or major incident, over time, it had become accepted or overlooked. But, on that 2003 Columbia mission, during re-entry, the heat shield damage allowed hot gases to penetrate and destroy the wing, causing the shuttle to break apart. To be clear, the normalization of deviance on this issue at NASA had occurred years before when responsible persons accepted unsafe conditions when they should not have. But the phenomenon was not identified until it had led to catastrophic failure of Columbia.

The normalization of deviance is an enormously helpful concept for the air show community. And Precourt's introduction of the concept at last month's ICAS Convention should serve as a reminder to our entire industry to consider those aspects of our businesses in which we unknowingly accept the normalization of deviance. There is no better time than the winter months to consider the areas of your operations that have had seemingly minor hiccups. Analyze these items with your safety team, mentors, friends and peers, and critically consider if you have normalized deviance in any way.

If you were not able to attend the closing keynote or if you want to share the details of Charlie's presentation with your colleagues, you can watch the entirety of his speech in this video here.