



Bakersfield Composite Squadron #121

60-Second Safety Advisor #56

Was it Really an “Accident”?

What is an accident? One definition of an accident is, “a sudden and unforeseen event”. Given that definition, can we say that the Apollo fire that killed three astronauts on the launch pad, and the Challenger disaster, were accidents?

The Challenger exploded because cold temperatures affected the performance of an o-ring seal already stressed due to an inadequate design. Previous inspections had shown that the seals were not holding up as intended during launches, and it was known that low temperatures would degrade them further.

The Apollo fatalities were due to a fire that occurred when the spacecraft cabin was charged with pure oxygen during a test. Unfortunately, there was an electrical short under the seat of one of the astronauts. Oxygen fed the resulting fire. The men could not escape because of a poorly designed escape hatch (with multiple redundancies) that took too long to open.

What do these events have in common? In each case, there were experts in charge and opportunities to anticipate problems. We must be alert to warnings and take heed when they are encountered. Think about what could go wrong before you act. If something minor goes wrong, this is a warning to stop. Consider what has happened to give this warning. Figure out what the solution is to correct the problem, then take care of it. Accidents are usually errors on someone's part.

