Save Your Changes

Advance review of procedural change implications helps make sure they work for, not against, safety.

BY BART J. CROTTY

Changes involving an operator's policy, procedure, manual, service bulletin, airworthiness directive, checklist, placard, etc., intended for safety improvement, could paradoxically result in an unintended, dormant hazard. It's amazing how far-reaching even seemingly minor changes can be throughout an organization.

A later operating event might trigger a situation leading to a human or organizational error and an aircraft accident or serious incident. The root cause is "the devil in the detail" — a problem with planning, documentation, paperwork or implementation of the change.

Managers, the operator's decision makers, may not possess the skill, intuition and discipline to fully think through the consequences of changes. This is especially the case if they haven't investigated accidents and incidents or are not naturally prone to think outside the box. Airlines and large operators usually have staff to handle changes. But the small operator's chief pilot/owner has many functional or administrative "hats" to wear besides flying, and this leaves little time to adequately manage change — a basic management responsibility.

The best way to defend against faulty change management becoming Reason's "Swiss cheese holes"[1] is to engage another qualified person or two in a change review process. This should be kept simple. The reviewers should brainstorm and come up with a list of areas affected by the proposed change and identify actions that might need attention and revision. These might involve training, manuals, parts inventory, worksheets, tools, checklists, weight-and-balance, maintenance schedules, security safeguards, etc.

An added plus is that change review participants, being in on the front-end activity, will likely champion the change when it's implemented and influence co-workers to adopt its practice and spirit.

The review process shouldn't be complicated, and any further actions due for follow-up should be recorded. A few times through the process will develop a good starting list of possible impact areas to consider.

If something slips through the change review process, then employees — now aware of the increased management safety focus on changes — will be more alert for any neglected areas and provide constructive feedback. This would be a perfect example of a safety culture and a learning organization at work.

Civil aviation regulations don't require operators to have a management system or written procedures for change control. However, these practices could be the foundation of an industry best practice, particularly for small operators.

"Change is not made without inconvenience, even from the worse to the better," said Robert Hooker in the 16th century. An operator's change review process can ensure that the intended safety or security gains occur and do not lead to latent risks for future flight operations.

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Note

1. James Reason in the 1990s coined the "Swiss cheese" metaphor in modeling the breakdown of defenses, barriers and safeguards that creates latent failures leading to accidents.

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