



# SWEATING THE Small Stuff

**T**rudging through the heat of this year's Farnborough Air Show outside of London, I blinked the sweat out of my eyes and worked to refocus my vision on events at the show that mattered to me from an *Aviation Safety World* point of view. Several decades of watching the business end of air transport had deeply embedded a different set of air-show reflexes. But this year, all that mattered to me were the things related to safety — improving safety, mostly, but also trying to be attuned to developments that had the potential to degrade safety margins. Frankly, I expected that there would be a number of developments discussed at the show that enhanced safety, but having never concentrated on that aspect it was just my best guess.

There were, it turned out, numerous announcements that met these new specifications. Further, the wide selection of topics reminded me that a safe operation is a construct of thousands of little details — small stuff, really.

The aviation safety community is a decade into an era in which important classes of accidents, the killers — things like controlled flight into terrain, approach-and-landing accidents, and loss of control — have been identified

and targeted for action. The great achievements of the campaigns against those big issues may have drawn some attention from the smaller parts of the safety mosaic, but they remain. Thankfully, the drive to maximize safety remains so strong, and therefore the market for such improvements remains so healthy, that manufacturers remain motivated to invest time and money in development and innovation, continuing to push the cause forward on a wide front.

Avionics remains a leading provider of new safety tools. At Farnborough, one could see a new generation of radars; evolving electronic flight bags; improved enhanced vision systems and now synthetic vision systems; ground navigation assists; and a wide range of new applications based on the developing automatic dependent surveillance-broadcast technology which promises a step-change advancement of information distribution and air traffic control innovation and amounts to another really Big Thing.

But there are other things, as well. For example, Michelin's Near Zero Growth tire technology that resists cuts and wear — developed for Concorde after the fatal accident — is becoming available for other aircraft. And tests are under way on a wake vortex warning system that aims to increase airport capacity by minimizing the risk of vortex encounters.

Unfortunately there still are issues that await serious progress. One that

comes immediately to mind is the question of fuel tank inerting. European Aviation Safety Agency (EASA) officials speaking at the show said there still is no answer. "We are discussing this for two years now with [the U.S. Federal Aviation Administration (FAA)], but it is not finalized," said EASA Technical Director Norbert Law. "We are still forming a decision with FAA on both sides."

While there remains a lack of agreement about the best way forward on this matter, or even agreement on the degree of risk posed by continued operation without inerting in existing or newly designed aircraft, Law said EASA felt confident enough about the issue to tell Airbus that the A380, which does not have a center tank, can be built without inerting. This despite the fact that recently a 727 blew up on the ramp, and it wasn't a center tank but a wing tank that triggered that event.

Nonetheless, advances continue, both on the big topics and in a thousand smaller things across the board. And while the system is still a bit short of perfect, it was gratifying to see at Farnborough evidence of progress in small stuff moving toward that perfection goal.

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