



# TRAINING Footprint

Not long ago I would write stories fairly regularly about aviation training, probably a couple each year. One of the most dependable recurring themes I would hear from training providers was the difficulty they had in dealing with the additional required training modules regulators continually loaded onto the operators. Some of this was back in the old days of tombstone regulation when the industry knee-jerked to do something, anything, after each accident, but some of it also was the result of well-considered responses to developing knowledge and technology.

The problem, the providers would always say, was trying to fit the new material into the existing training “footprint,” the investment in time and money operators set aside for the process. They weren’t worried about the validity of the additional material as much as they were concerned about which part of the existing training curriculum would get compressed or even tossed out in order to make room for the new stuff.

The fixed training footprint is not the same for all operators or all types of operations, of course, but in most cases there are defined amounts of time and money. Managers who don’t make and adhere to a budget are not managers at all, and

training is one of many business elements to account for in the budget cycle.

Make no mistake, training for modern flight operations is a pricey process, involving travel, rooms and food, expensive training technology and technicians, and instructors. Plus, crews in training are not working, so productivity is lost.

Meanwhile, our aircraft are becoming increasingly complex, often in the quest to make flying safer. Perhaps counter-intuitively, experience and studies are showing that the greater the amount of automation, the more hidden become dangerous failure modes.

The crew of the Turkish Airlines 737 that crashed short of the runway in Amsterdam apparently didn’t realize what it meant to the automation system as a whole to have one of its two radar altimeters displaying an altitude below sea level (*ASW*, 6/10, p. 32). This is but one of many examples. In addition, there seems to be an increasing number of catastrophic loss-of-control accidents in which mis-managed automation plays a role.

The key thought here is that it seems increasingly obvious that pilots need additional training in their aircraft’s systems and their operation.

The point that ties the start of this column to the automation part is that

operators, we are told, are distancing themselves from the idea that economic decisions play any role in developing training programs. If that were to be true, operators would voluntarily boost systems training in nearly every phase of the process, from computer-based training to fixed-base training devices to the full-motion simulators. But we won’t see much of this because it is expensive, and the economic squeeze is still on for most operators.

Airlines and corporate flight departments don’t want their complete training process mapped out for them, but if the training footprint is not enlarged voluntarily to deal with the complexities of modern cockpit systems we may see regulators move more and more in that direction, especially should there be one or two more high-profile accidents. With operators in a public state of denial about the role economic considerations take in formulating a training plan, I see a rough road ahead for cooperative efforts to boost systems training without a regulatory mandate.

A large, stylized handwritten signature in black ink that reads "J.A. Donoghue".

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