



FIGHTING Fatigue

The growing body of evidence that we in the aviation industry are not defending adequately against the dangerous consequences of fatigue is reaching, from my point of view, critical mass. I have been of this opinion before (*ASW*, 11/06), but I have been wrong in assuming that changes would be made to adjust current practices to take into account the new information. Maybe this is the time.

In this edition of *AeroSafety World*, we have stories on several fatigue studies and a first-person description of air traffic controller shift scheduling, all calling into question the way we do things. And the way we do things is to largely ignore what we know very well about fatigue, choosing for the most part to stick with strategies that date to the 1930s or, beyond that, to simply ignore it, pretending, for example, that flying late into the night is no different than ending a flight sequence in mid-afternoon.

To say that this is a complicated matter with roots entwined deep in the history of aviation labor-management relationships and leave it at that is simply irresponsible, yet that is how the issue has been handled — or not handled — for decades.

At the heart of this failure is the unfortunate fact that both sides are

responsible to some degree for the development and persistence of poor practices. Labor, in the cases of controller schedules and other shift practices, seeks to maximize blocks of time off at the expense of rational work routines, and management tries to minimize staff sizes and travel expenses by condensing flight sequences into neat little packets that meet the letter of the rule but do violence to its spirit and ignore what we have learned about fatigue since those rules were established.

The insidious nature of how fatigue debilitates personal performance is another part of the problem. Despite the fact that fatigue repeatedly is cited as a causal factor in reports of accident investigations — as it is in the report in this issue of *ASW* on the landing incident in Reykjavik International Airport, Keflavik, Iceland — it is easy to dismiss this and other more serious events as simply poor piloting. But science shows that the problem with fatigue is not simply that someone is on the verge of sleep. Rather, it also manifests in a wakeful state in which performance is unknowingly degraded to a level equal to what is produced by drinking alcoholic beverages for quite a while, accompanied by an inability to detect that degradation.

Both sides of the labor-management divide must surrender ground to solve this problem. However, that doesn't mean that solutions must come with a high cost.

Several years ago at Flight Safety Foundation's International Air Safety Seminar in Paris, I was struck by the presentation of an innovative program launched by easyJet, with the approval of the U. K. Civil Aviation Authority, to experiment with different pilot scheduling sequences. The degree of a schedule's success was judged not by survey ("How do you feel?"), but by flight data analysis, closely tracking exactly how crews performed. Improved schedules, it turned out, were not hugely expensive to management or invasive of crew time.

The good science on this matter must no longer be ignored, and further science must be developed, if new rules are to be effective. Hopefully, the European Aviation Safety Agency's ongoing effort to update its pilot fatigue rules will establish an enlightened benchmark that others will follow.

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

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