SAFETY FIRST

Ring Out the Old and Ring In the New – Winter Flying Thoughts

By Felix R. Tormes, MD, FACS
CAPT, (FS), MC, USN
Department of Orthopaedic Surgery
Naval Hospital, Pensacola, Florida
President-elect of Flying Physicians Association

T’is the time of year to remind ourselves of winter flying risks. Two weeks ago, on a crisp morning, with the ambient temperature 20 degrees cooler than typical for Pensacola, 38V lifted off the runway with a rather short roll and climbed like the proverbial home sick angel. Although our airplanes perform better in the cool air, it also serves as a reminder to uncowl the engine, carefully inspect the exhaust system and heating shroud for cracks and then, upon the first application of cabin heat, to insure that some form of monitor for carbon monoxide is available.

Additionally, most of the fall issue popular aviation magazines feature articles relating to the avoidance and management of icing encounters. Many of our northern based brethren are well into the season for these concerns. But it behooves all of us to review how our own airplane would perform, for example, with a load of ice and on the horizontal stabilizer, and how the recovery technique would vary from a significant ice accretion mainly on the wings.

I’d like again to remind and encourage you to visit the Air Safety Foundation site http://www.aopa.org/asf/online_courses/ for short courses on safety topics like airframe icing. These courses are easy to take and document for your insurance company. The companies do take note, according to my agent.

On another subject, random discussions with many of our members revealed that many of us are currently flying behind glass panels, and others are considering or have upgraded to retrofit glass panels which are significantly less expensive than the original factory installed PFDs and MFDs. In the current economic climate, while the major airframe manufacturers are either shutdown or in a state of hibernation, the avionic shops are doing a brisk business upgrading avionic panels. In fact, the major advances in GA in the past 10 years have not been so much in improved performance, but rather in the penetration of advanced technology into panel displays. Features once limited to high end commercial aircraft, such as synthetic vision and IR imaging, are now available at reasonable cost in our aircraft. It is difficult to demonstrate statistically that these improved avionics have impacted the accident rate in GA, but those of us who lived through the transition from steam gages to glass displays readily recognized the vast improvement in situational awareness provided by glass panels.

Most of us learned to fly instrument approaches using DME, loran, and two VORs. I distinctly remember an approach into Rockford, IL, in a well equipped for-the-time TR 182, when for a good 20 seconds in the clag, I literally did not know if runway was ahead of me or behind me. That was a pilotage deficit, not an instrument deficit, but one that would not have occurred today with GPS instrumentation. I think it is reasonable to deduce that the improvement in situational awareness must have an impact on the accident rate related to instrument approaches.

Of course, a new set of skills is required for the aviator that ventures into IFR conditions behind a glass panel, but it appears that the main challenge is learning the switchology, rather than mastering a new scan pattern and of switching to tapes rather than round dials. There is now a new crop of pilots who trained ab initio behind glass panels, and who would be totally unqualified to perform an instrument approach behind steam gages and needles. Such is the price of progress.

Nil illigitimae carborundum