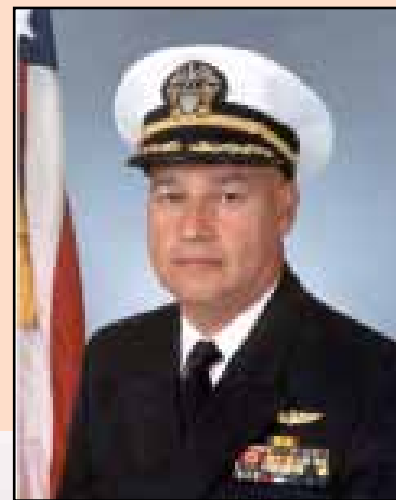


Safety First

By: Felix Tormes, M.D.

RANDOM EVENTS



There are inherent risks in aviation, as in other modes of transportation, that cannot be totally eliminated. Where kinetic energy is at play, the risk is there by definition. Even a conscientious, well trained pilot, flying a well maintained machine, can come to grief under a set of given circumstances. It's the nature of the endeavor, and this Association lost two colleagues last year in a mishap that was statistically highly improbable.

The risk of a mid air collision in uncontrolled airspace in remote areas of the Western US is exceedingly small due to the low traffic volume and immense volume of airspace. The relative risk of an encounter increases however, as one approaches an uncontrolled airport. Within ten miles of an airport, the little airplane/big sky concept cannot be relied upon for separation, particularly in the absence of traffic advisories, and all eyes should be outside the cockpit.

Another extremely low probability event also led to a fatal accident of two pilots recently. It involved a light twin on a training flight in October 2007, de-

termined to be caused by a bird strike. Reading that mishap report reminded me of a brief encounter with a bird during a short flight at 2500 ft from PNS to MOB. A solitary bird that I took to be a large hawk appeared at my one o'clock and level. As he blossomed in my field of view, we both took evasive action simultaneously; I banked left and he dove.

The twin accident occurred at night and DNA samples from the recovered airframe were verified as tissue from a Canada goose by forensic ornithologists. My incident was daytime but could have resulted in an impact in night time conditions. An interesting aside from the twin accident (NTSB CHI08FA027), analyzed bird strike data from 1990-2004 by the USDA Wildlife Services is useful information for flyers. They noted that 74% of bird strikes occur below 500 ft AGL, 19 % between 500 and 3500 ft AGL and only 7 % above 3500 ft. Of the 26% that occurred above 500 ft, seven times more strikes occurred at night. I was surprised to learn this, having surmised that migrating birds flock during daylight only. They further cal-

culated that probability of a bird strike decreases by 32% for every 1000 ft increase in altitude. Canada geese collisions with aircraft were recorded 668 times between 1990-2002, and these are big birds, with an average weight of 8 lbs.

A take home point after review of these mishaps is that, even when considering accidents that seem totally random events, there are strategies to attenuate risk, for example, enhanced vigilance within 10 miles of an airport irrespective of perceived low traffic density, and selecting higher cruise altitudes, particularly at night.

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