SPRING 2018

OWNERS AND PILOTS MAGAZINE

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CURRENCY vs PROFICIENCY

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The aviation community will never be able to eliminate aircraft accidents. Technological improvements in the cockpit, aircraft design, aircraft simulation, and improvements in flight instruction have had a major impact on reducing the accident rate. Despite these advancements, pilot error is all too often mentioned as a casual factor in the accident reports. Our dependence on technology and our inability to objectively evaluate our piloting skills has reduced our proficiency on basic piloting skills. Evaluating our piloting skills based on "currency" vs. "proficiency" has limited the reduction in the accident rate. Advancements in technology have both increased automation and the amount of information available in the cockpit.

Technological improvements in aircraft design and avionics have increased our range of operation while reducing pilot workload and fatigue. I frequently come across pilots who will engage the autopilot immediately following landing gear retraction. I see this as an over dependence on technology. It was announced at NBAA in 2016 that controlled flight into terrain (CFIT) is no longer the number one cause for aircraft accidents. It is loss of control in flight (LOC–I) that has taken the number one position. A major factor of loss of control is not the failure of technology, but the improper management of technology.

Improper management can be caused by distractions in the cockpit or unfamiliarity of an upgraded avionics installation. Some examples of mismanagement include: loading the wrong approach, forgetting to activate the approach, tuning or selecting the wrong navaid, setting the wrong final approach course, or selecting the wrong autopilot mode. In the TBM, one of the more common mistakes observed has been the pilot forgetting to arm the approach while using VNAV step down fixes which does not allow the aircraft to intercept the glidepath or glideslope. Another common mistake would be reactivating the approach on the Garmin while the aircraft is already established on a segment of the approach. This would cause the autopilot to turn off course and proceed back to the initial approach fix.

Unfortunately, technology has relegated us to a "baby-sitter" role instead of a pilot. Pilots have to closely monitor the systems and be ready to take over quickly when things do not go as planned. On November 22, 2004, a Gulfstream III crashed during an attempted ILS approach to Hobby Airport in Houston where everyone onboard died. According to the NTSB, the probable cause "was the flight crew's failure to adequately monitor and cross–check the flight instruments during the approach. Contributing to the accident was the flight crew's failure to select the instrument landing system frequency in a timely manner and to adhere to approved company approach procedures, including stabilized approach criteria."

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Another issue with improvements in technology is the abundance of information displayed on primary flight displays. I find it amusing that when I fail the MFD during training, that some pilot's get flustered because they cannot see where they are on the moving map. This is despite the fact they still have two RMI needles, a HSI and two VOR's available. They chuckle too when I point out they still have more navigation information available that they did in their primary instrument trainer. On the other hand, some pilots display so much information that they cannot see the forest through the trees. I have a lot of respect for the pilots who recognize there is too much information being displayed and declutter their primary flight display to what is necessary for the conditions. I feel pilots need to be able to properly manage cockpit information available as well as safely fly the aircraft safely with system degradation. What if there is a RAIM outage and you have to rely on short range navigation? In other words, the pilot must be instrument proficient.

One of the first aspects investigators look at is whether or not the pilot was current. Later on in their investigation, proficiency is investigated. Pilots can evaluate their ability to fly safely from several different points of view. From the point of view of "currency" is an objective way to evaluate our readiness whereas "proficiency" is a little more subjective. Instrument flying is an excellent example of this. To be instrument current, pilots must have flown and logged in the preceding six months: six actual or simulated approaches, holding procedures and tasks, and intercepting and tracking of courses through navigational electronic means (61.57.c.2). By the way, if they were simulated, you need to have a safety pilot. Does simply meeting these minimum requirements mean we are proficient at instrument flying? Were any of the approaches flown in adverse weather conditions to minimums? Were any of the approaches flown by hand without a flight director or did you rely on the autopilot? What if it has been five months since we have flown an approach? Pilots tend to compensate for the lack of proficiency by utilizing and relying upon technology. Instrument proficiency is only one aspect of our readiness to fly. How often do you utilize a flight risk assessment tool (FRAT) before you go flying?

There are many FRAT's available to objectively asses your risks to conduct a flight. I strongly encourage you to research them on the internet. You can find them listed by various names such as: IMSAFE, PAVE, and CARE. Do not forget to evaluate yourself on post flight as well as preflight. Use these same FRAT's on post flight. Ask yourself: Did the flight go as planned; was I prepared for any unexpected events encountered; would I have done anything differently in hind sight; and what can I do to be better prepared for my next flight? Commit yourself to improve. ∎