Interagency Aviation
Lessons Learned

Subject: Aircraft Accident Lessons Learned

Area of Concern: Aggressive flying and Pilot Over-Confidence

Distribution: All Aviation Users

Discussion: Over all**,** pilots tend to have very similar personality traits. In his article, Practical Use Of The Pilot Personality Profile, Dr. Robert G. Rose reports that pilots, as a group, are fairly consistent. They generally have good social skills and good reasoning, are able to deal with complex information, make decisions and deal with people. Thus, they tend to be bright, and capable of good social interaction.

But because of their strong need to achieve, their low tolerance toward personal imperfections, and the fact that they don't handle failures well, pilots sometimes exhibit signs or characteristics of a "High Risk" aviator. In the pamphlet "Human Factors Checklist, An Aircraft Accident Investigation Tool", Dr. Anthony Ciavarelli and Dr. Thomas Sather cite that such characteristics include patterns of overconfidence about their flying ability; patterns of anger and frustration in their job; patterns of "Hot Dogging"; and patterns of excess motivation or being too assertive.

So when do pilots become too aggressive or over-confident in their abilities and place themselves or others at risk? This Lessons Learned looks at two accidents where aggressive flying and over-confidence led to an accident.

In July of 2007, a Hughes 500 crashed as a result of an aggressive approach to the dipsite during fire suppression operations. Although there were no witnesses to this accident, personnel who have observed the mishap pilot's flight performance in the past stated that the mishap pilot flew the aircraft in an abrupt and aggressive manner. The owner said that he had counseled the mishap pilot about his rough flying well before the accident occurred. An AMD inspector pilot told the mishap pilot during a check flight that he (the mishap pilot) was too aggressive. Fortunately there were no injuries.

In October of 2007, a Bell 206B III crashed while herding feral horses into a corral. The mishap pilot was a very highly experienced pilot with over 35,000 total flight hours, 21,000 of which were in helicopters. A biologist was onboard during the mission. The dynamic rollover occurred when the helicopter's left skid contacted, and became entangled in, a wire fence as the helicopter was attempting to maneuver horses into a corral. Both the pilot and the biologist stated that the fuselage/skids of the helicopter needed to be below the top of the 10-foot high fence in order to prevent the horses from turning around and running back out of the chute. In a practical sense, the only real opportunity to have avoided the accident was for the pilot to have either refused to operate below the fence within the chute system or refused to operate within the corral. However, the pilot stated that the *risks of operating within the chute system were acceptable to him.* Fortunately the crew received only minor injuries.

LESSONS LEARNED: After a thorough investigation and analysis of these accidents, the following lessons learned are provided for future mishap prevention purposes.

Professionalism. Being too aggressive or over-confident is not professional, it's unsafe. Doing the job safely, effectively, and economically are traits of a true professional.

Accepting unnecessary risk. While a pilot's "can-do" attitude is commendable, taking unwarranted risks can mean the loss of life or loss of a valuable asset.

Supervision. In these accidents, supervisors had the opportunity to break the mishap chain but failed to do so. For more information on the role of supervisors, see DOI Lessons Learned 09-03, "Supervisory Factors in Aviation Mishaps."

On-the-spot correction. As an aerial supervisor, aircrew member, passenger, or controller on the ground, if you see or feel that something is unsafe, it's your duty and responsibility to SPEAK UP! By speaking up, you just may prevent an accident from occurring.

References:

1. Practical Use Of The Pilot Personality Profile, Robert G. Rose, 2001

2. *Human Factors Checklist, An Accident Investigation Tool*, Anthony Ciavarelli and Thomas Salther, July 15, 2002.

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