Complacency and Laziness are often used interchangeably. While complacency can often be attributed to laziness, they are not the same thing. The focus on laziness often restricts our view of complacency, leaving other factors unaddressed. The studies I have read vary in their analysis of the contributing factors, but generally the following three major ingredients are involved:

1. Belief that the system or operation being conducted is highly reliable.
2. Lowered awareness of risk factors (likelihood or severity of an occurrence).
3. Degraded monitoring of the system or operation by the person involved.

I like to think of two major groups of errors: the new guy error, and the old guy error. New guy errors are more often related to a lack of experience, whereas old guy errors are generally complacency related. For example, I have taken upon myself the task of cutting my son’s hair. The first time I did it was for his 1st birthday. I had been cutting my hair for years and assumed that a little kid would need a little cutter guard. I was wrong. The buzz cut I gave him literally made my wife cry. This qualified as a new guy error. Once I had that lesson under my belt, I used the appropriate clipper guard sizes and, according to my wife, did an acceptable job for
the last 6 years. In December, I was cutting his hair again. While setting up the clippers, I received a text from work. I read the text quickly and returned to cutting his hair. The first swipe of the cutter produced an abnormally large amount of hair. I realized that I had put on the wrong guard. I was able to blend in the short area without anyone noticing, but it didn’t change the fact that I had messed up something that I knew how to do properly. It was an old guy error.

Studies have shown that it is not the actual risk, but the perceived risk, that influences risk behavior. A new guy is more likely to miscalculate actual risk because they do not have the experience to make a good estimation of it. Over time, we can become tolerant of the risk involved in a common task degrading our awareness of it in a slow and imperceptible manner. Experiences with a positive ending may also lead the old guy to attribute the happy outcome with some personal skill instead of the good fortune that may actually deserve the credit.

As we become confident, risk tolerant, or bored with a task, we give it less attention. What is worse is that we divert this attention to something else at the same time. The false belief that we can do two things at the same time is the complacency trap that hurts so many people. Again, this does not require any element of laziness. On the contrary, a highly motivated person may try to cram more work into a time period because they think that some tasking no longer needs the attention actually required.

How can experienced people protect themselves from complacency errors? Outside of the obvious need to continually learn and review old materials, we also need to understand how human factors influence our decision making. Abandon the myth of multitasking. Push aside other tasks, put down the phone, and give critical tasks the attention they deserve. Use Crew Resource Management to monitor and backup each other’s inherent human limitations. Utilize tools such as a FRAT to provide a
clear picture of the risks involved in your daily operations so the edge of your sword does not dull over time.

Flyers have a sense of adventures yet to come, instead of dimly recalling adventures of long ago as the only moments in which they truly lived.

~ Richard Bach
U.S. Coast Guard

APSA Online Meetings

The schedule for upcoming APSA online meetings is as follows. If you would like to join, send an email to: Safety@PublicSafetyAviation.org

**UAS:**
Wednesday, March 14, 2018
1:00 PM - 2:00 PM EST (1800 UTC)

**Safety Officers:**
Tuesday, March 20, 2018
1:00 PM - 2:00 PM EST (1800 UTC)

**Maintenance:**
Thursday, March 29, 2018
1:00 PM - 2:00 PM EST (1800 UTC)

“Mother does not need to worry about me; things are not so terrible as she pictures them. She just needs to think of all the experience I have had at this work, not to mention our advantage in knowledge of how to fly and shoot.”

~ Oswald Bolcke, WWI Fighter Ace
Final letter home before being killed in battle
The crew conducted a flight brief before departing at about 1030 to rendezvous with a vessel for their deck winching evolutions. The brief included plans for dealing with major and minor helicopter malfunctions while winching, and concluded with an overall risk assessment score of low, which was calculated in accordance with the operator’s risk scoring system.

After they rendezvoused with the vessel, the crew set up for the first evolution, which was planned to be a stretcher winch using the hi-line. On the first winch, one rescue crewman, with the hi-line bag, was transferred to the vessel with the instructor acting as winch operator for his own currency. As soon as the winch operator received the signal from the rescue crewman that he was safely on deck and disconnected from the winch hook, the winch operator called to the pilot flying (captain in the right seat) that the helicopter was clear to move back to the rest position.

The helicopter started to move left, away from the transfer point. At the same time, the winch operator was slowly winching in and monitoring the line, which was paying out from the hi-line bag. When the helicopter was just clear of the deck, but still moving to the left, with about 30 ft (9 m) of winch cable still extended, a restriction of the line inside the hi-line bag occurred. The hi-line bag flicked up from the deck around the rescue crewman’s waist and applied additional tension to the weak-link (the weak-link connected the line to the winch hook). The weak-link immediately fractured and the release of the additional tension sent the winch hook on a near vertical trajectory towards the helicopter’s main rotor disc. The winch cable snatched out of the winch operator’s hand and the hook reached its apogee at about the height of the winch. The pilot flying observed the hook appear at about the height of the winch before the winch operator had time to warn the rest of the crew.
A Cessna 182Q was substantially damaged following a loss of control while maneuvering near Lamar, Oklahoma. The instrument rated private pilot and the observer were seriously injured. According to the 2,500-hour pilot, he was performing low-level surveillance operations, and had extended the flaps to 10 degrees, descended to about 1,400 feet mean sea level, set the engine power at about 18 inches of manifold pressure, trimmed the aircraft, and began to grid search the area. Coming to the end of his search area he banked the aircraft 180 degrees to a northerly, downwind direction, added power, and began another pass. The pilot reported that while making the pass, he felt the controls become "mushy" and the airplane began to settle. He added a little power, but noticed "no response" to the aircraft controls. He then added full power and attempted to turn the airplane into the wind; however, the directional control continued to deteriorate, and it became evident that he was in a "stall situation." Subsequently, the airplane impacted trees and came to rest inverted on the ground. The pilot further reported that there did not appear to be any mechanical problems with the airplane.

An inspector from the Federal Aviation Administration (FAA) and a representative from Cessna Aircraft evaluated the damage to the airplane. They reported that control continuity was established to all controls. The flaps and flap selector were found in the "up" position and that the elevator trim tab was nearly faired with the elevator. The left wing had a 12-inch diameter semi-circular dent near its tip that crushed the leading edge to within about 8 inches of the trailing edge. The impact also tore off a 42-inch section of the left wing and a 50-inch section of the left aileron. They further reported that the engine separated from the airframe during the mishap. There were no apparent pre-impact anomalies with the engine and the spinner exhibited rotational crushing and scoring. They also reported that the 1980-model airplane had been modified with leading edge cuffs, stall fences, and flap gap seals. At 1444 central daylight time, the weather observation facility at McAlester Regional Airport (MLC) near McAlester, Oklahoma, which is located approximately 20 miles southeast of the accident site, reported the wind from 210 at 14 knots, visibility 10 statute miles, scattered clouds at 2,700 feet, temperature 84 degrees Fahrenheit, dew point 72 degrees Fahrenheit, and a barometric pressure setting of 29.93 inches of Mercury.

There are no new ways to crash an aircraft…

…but there are new ways to keep them from crashing.

Safe hunting,
Bryan 'MuGu' Smith
Safety@PublicSafetyAviation.org
407-222-8644