



# The

# Safety

# Wire

## August 2015



**LUCKY CHARMS** have always been a part of aviation culture and lore. In movies and books, there is often the intrepid pilot with his lucky charm, or favorite article of clothing infused with the power of good fortune. Others had the classic picture of family, girlfriends, etc. stuck to the instrument panel, inside the flight cap, or painted on the nose of the fuselage. I keep no less than two such objects of mystical power in my flightsuit at all times despite being a staunch supporter of objective, data driven safety management. Why are they so influential to us?

In last month's newsletter, we reviewed loss of Situational Awareness (SA). Whereas SA can be easily lost, it can be just as easily regained given the right corrective action. We looked at how CRM can help maintain, or recover, SA with simple call outs from another crewmember of aircraft attitude during flight in instrument conditions. That is what instrument flight instructors do during training in actual or simulated IMC... "Watch your heading...watch your bank..." In response to such short comments, usually, we immediately recognize a condition about our 'situation' that prior to the comment had not been properly perceived, if at all, and correct it.

The small lucky charms we have play an important role in helping maintain perspective on what we are doing. They are reminders of lessons that should not be forgotten, but sometimes are. They remind us of the people who are depending on us to do things right so we can come home to them. They make sure the memory of an 'educational' incident stays fresh in our heads. The ones I carry remind me every day to be ready for the unexpected, my crew is depending on me, and how good life is as a law enforcement aviator, even on a 'bad' day at work. These are simple things that we all would like to think we do not need to be reminded of. And yet, we are human, and under the pressures to get a job done, be it in the air or on the ground, we are subject to forget. The simple glance at a picture of the kids, clank of the metal lucky charm bouncing in your pocket

while running out the door, or sight of the blue and black band on your wrist as you put on your gloves can be a powerful realignment of the SA gauges. It is no different than the other CRM or instrument driven solutions to correcting the same problem.

I have struggled over the past few years with the concept of safety posters. I admit, in the past, I did not put much stock in them. They were just wasting valuable bulletin board space with common sense

statements, right? Well, I would still say that many of them are, in fact, a waste of paper. Some, however, are more helpful than I had given them credit for. Just as lucky charms and CRM communication can snap a blurred picture of the world around us into focus, safety posters can give quick, useful reminders of important information that we are convinced we would never forget, but do. The key word here is, 'useful' and that is what separates a good safety poster from a poor one. Telling you to 'be safe' is not so useful. Telling you something about how to be safe...well, that is something we could benefit from.

I hope you find the safety posters ALEA distributes to be useful. Put it up in a place where the staff can glance at it on the way to perform their work. And keep those lucky coins in your pocket, magic amulets around your neck or picture of a loved one nearby. But please, for the sake of the crew, wash the lucky underwear once in a while.



**"I THINK A GOOD MECHANIC IS MUCH BETTER THAN A LUCKY CHARM."**

*~ AMELIA EARHART*





# FREE ONLINE TRAINING

I will host a free webinar for ALEA members next month. The topic will be an introduction to the new SMS Installation Guide and the first few steps in setting up your SMS. This will be the first in a series of webinars ALEA will be offering members. A link for the training will be posted on the ALEA website ([www.ALEA.org](http://www.ALEA.org)).

September 10<sup>th</sup>  
1300 EDT (1700 UTC)

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## *Practical* SMS

Safety Officers, you are sometimes more like a salesperson tasked with selling a poorly marketed product. We all put out the emails, fill bulletin boards and stick up safety posters. Then we sit back in frustration as all of that hard work seems to go to waste. Emails receive no response, materials go unread and nobody even noticed the new poster you put up three months ago.

This is an often-overlooked aspect of changing a traditional safety program into a Safety Management System. In a SMS, everything should be tied together as part of a 'system', instead of detached components of the operation having minimal influence on each other. One of the best ways to market the safety information you are putting out is to make sure the material is tied to a valid, active safety issue. Sometimes our information seems a bit random, which makes it less important to our audience.

Take the items that are active in your list of hazards that the SMS is currently addressing. The items that were reported by your coworkers, uncovered through inspections, targeted by the Safety Committee, etc. should be listed somewhere as the current hazard 'hit list'. Those hazards should all have an initial risk score and a risk control (mitigation) planned





out, which is aimed at lowering that risk score. The risk control, whatever it is, should have a training component. That component often includes training in the aircraft, learning a new procedure, online courses, presentations, etc. It should also include the materials you put on your bulletin boards, reading files and other items grouped under the Safety Promotion pillar of your SMS. The information you provide will help educate staff on the solutions to risks associated with hazards AT

YOUR OPERATION. You can also help explain why the risk is being targeted and what the consequences could be if the issue is not addressed. This makes your education (promotion) materials relevant to the audience, and more likely to be read.

Additional tips: Keep the material as short as possible in public areas. Anything past the first page on the bulletin board will not likely be read. Longer materials are best kept in 'reading rooms', a.k.a. in the restroom. Make the print bigger than standard 12 point, and/or highlight the most relevant materials. Pictures and colors on the documents always help.

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## SMS INSTALLATION

If you are working on setting up a Safety Management System at your agency, please look through the new SMS Installation Guide, which is available through the link below. It has references to the original SMS Toolkit, PSAAC Accreditation Standards and a series of sample documents and policies to get you started. If you have questions, comments or feedback, please let me know.

<http://aleaproduct.ungerboeck.com/sms-installation-guide>

*(Note: You must be logged in to the website first)*

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## RESOURCES



- The German Federal Police aviation unit has produced a laser strike safety video. They made a version in English to share with ALEA members. It can be viewed on the Safety First page of our website:  
<https://drive.google.com/file/d/0BxWRuMB7s2KWazJNcU9IUWhDdXM/view?invite=CKSytfAL&pli=1>
- IHST Training Video – Energy in Autorotations  
[http://ihst.org/portals/54/training\\_videos/energy\\_in\\_autorotations/story.html](http://ihst.org/portals/54/training_videos/energy_in_autorotations/story.html)
- NEW - FAA Flight Risk Assessment Tool:  
[https://www.faasafety.gov/gslac/ALC/lib\\_categoryview.aspx?categoryId=31](https://www.faasafety.gov/gslac/ALC/lib_categoryview.aspx?categoryId=31)
- FAA Safety Briefing – Summer 2015  
[http://www.faa.gov/news/safety\\_briefing/2012/media/JulAug2012.pdf](http://www.faa.gov/news/safety_briefing/2012/media/JulAug2012.pdf)

**"DEAR LORD, IF WE MUST HAVE AN INSTRUMENT FAILURE TODAY, PLEASE LET IT BE THE HOBBS METER."**

*~ STUDENT PILOT'S PRAYER*

## ***SAFETY OFFICER MUTUAL AID***



The next ALEA safety online meeting will be on September 15th at 2:00 pm EDT (1800UTC). Please send me an email if you are not on the mailing list and would like to attend. The minutes from previous meetings are also available. [safety@alea.org](mailto:safety@alea.org)

September 15, 2015  
2:00pm EDT (1800UTC)

## **REALITY CHECK...**

**Note:** The following reports are taken directly from the reporting source and edited for length. The grammatical format and writing style of the reporting source has been retained. My comments are added in *red* where appropriate. The goal of publishing these reports is to learn from these tragic events and not to pass judgment on the persons involved.

**Aircraft: Piper PA-18**

**Injuries: 2 Serious**  
**NTSB#: ANC15FA009A**

[http://www.nts.gov/layouts/ntsb.aviation/brief.aspx?ev\\_id=20150202X20456&key=1ANC15FA009A](http://www.nts.gov/layouts/ntsb.aviation/brief.aspx?ev_id=20150202X20456&key=1ANC15FA009A)

A wheel/ski-equipped Piper PA-18 airplane [State of Alaska Department of Public Safety, Alaska State Troopers], and a ski-equipped Piper PA-18 airplane, collided midair. The sole occupants of the airplanes, both certificated commercial pilots, sustained serious injuries. After the collision, both aircraft descended uncontrolled into an area of densely populated birch and spruce trees and sustained substantial damage. Visual meteorological conditions prevailed in the area at the time of the accident. One aircraft departed about 1300 bound for Beluga, Alaska, and company flight following procedures were in effect. The other departed at an unknown time destined for an off-airport landing site near Johnson Creek with no flight plan on file.

N78NR impacted in a near vertical attitude, coming to rest inverted, at an elevation of approximately 355 feet mean sea level (MSL), on a heading of about 240 degrees. The accident site for N82735 was located approximately 1,125 feet southwest of N78NR. The airplane came to rest on its left side at an elevation of about 335 MSL, on a heading of approximately 225 degrees. Two large birch trees penetrated the cockpit, and **pieces of the pilots fractured flight helmet were found near the base of the trees**. All the primary flight control surfaces were identified at the accident site, and flight control continuity was verified from all of the primary flight control surfaces to the cockpit.

During on-scene interviews with the NTSB IIC on February 1, witnesses consistently reported that they observed one Piper PA-18 traveling in a southwesterly heading, and the other Piper PA-18 traveling in a northwesterly direction. One witness on the ground observed both airplanes converge at approximately a 90 degree, right angle. The witness said that as both airplanes converged, neither airplane changed altitude or direction as they approached each other, and the two subsequently collided.

During an interview with NTSB IIC on February 1, a pilot-rated witness that was standing on the east end of South Hollywood Airport, who observed the airplanes just after the collision, stated that he recognized the Alaska State Trooper airplane. He said that after the collision the state trooper's airplane entered a spin, and it began a nose low, spiraling descent. As the airplane reached approximately 400 feet above ground level, the airplane recovered from the spin, briefly leveled off, this was followed by an increase in engine noise. The nose of the airplane then pitched abruptly down, and then the engine noise decreased, which was followed by the sound of the airplane impacting the tree-covered terrain. He said that after the midair collision, the other Piper PA-18 appeared to snap roll to the right as the airplane traveled away from his location. He then observed a large portion of that airplane's right wing flutter to the ground, as it entered a near vertical, uncontrolled, spiraling descent.

During a hospital room interview with the NTSB IIC on February 2, the Alaska state trooper pilot of N82735 stated that after departure from the Wasilla Airport, he climbed the airplane to approximately 1,500 to 2,000 feet MSL, and configured the airplane for cruise flight. While in level cruise flight, traveling in a southwesterly heading, with the sun at his 1130 to 1200 o'clock position, he saw a momentary flash in the upper left corner of his windscreen, which was instantaneously followed by the collision. After the collision his airplane entered an uncontrollable dive, with no elevator control. In a final effort to regain control, he pushed the control stick forward, and he was able to regain limited elevator



authority, but the airplane continued to descend, nose low, into the tree-covered terrain. The last thing the trooper pilot remembered was entering the trees.

**Aircraft: Piper PA-28 and Robinson R22**

**Injuries: 4 Uninjured**

**NTSB#: ERA15LA115B**

[http://www.nts.gov/\\_layouts/nts.aviation/brief.aspx?ev\\_id=20150129X05038&key=2](http://www.nts.gov/_layouts/nts.aviation/brief.aspx?ev_id=20150129X05038&key=2)

A Piper PA-28 airplane, and a Robinson R22 helicopter, experienced a midair collision while maneuvering for landing. The helicopter received substantial damage and performed a precautionary landing to the runway, while the airplane received minor damage and performed a go-around and subsequently landed uneventfully. The flight instructor and private pilot receiving instruction in the helicopter were not injured. The Federal Aviation Administration (FAA) designated pilot examiner (DPE) and commercial pilot on board the airplane were not injured. Visual meteorological conditions prevailed, and no flight plan was filed for either instructional flight.

The pilot in the airplane was undergoing a certificated flight instructor practical test from the DPE, and the airplane-rated pilot in the helicopter was receiving primary rotary wing instruction.

Preliminary radar information from the FAA revealed that both aircraft were operating in the traffic pattern at LNA prior to the accident. The airplane was performing left-hand traffic patterns, while the helicopter was performing right-hand traffic patterns.

The helicopter maneuvered around the right-hand traffic pattern and was established on a shallow final approach for a run-on landing to runway 33. About the same time, the airplane was on a left downwind, with the applicant pilot preparing for a power-off descending turn for the same runway.

The DPE stated that while the airplane had been conducting left-hand traffic patterns, he and the applicant had observed other helicopters in the right-hand pattern completing their approaches parallel and to the right side of runway 33. In light of these operations, the DPE advised the applicant that the airplane would remain clear of the helicopter, and to continue the approach and landing. Once the airplane entered the turn and while on final approach, the DPE's view of the helicopter was blocked by the cabin and right wing.

Witnesses observed the airplane overtake the helicopter from above and behind, heard the contact, and watched the helicopter enter a rapid, controlled descent to the runway. The airplane banked sharply, the engine accelerated, and the airplane completed a go-around.

A review of the recorded radio communications revealed that the helicopter transmitted position reports on the downwind, base, and final legs of the traffic pattern. The airplane transmitted position reports for the crosswind and downwind legs.

*There are no new ways to crash an aircraft...*

