

AIRBORNE PUBLIC SAFETY ASSOCIATION



The

Safety

Wire

January 2019

TOO MANY of our brothers and sisters were killed or injured last year. Too many have already been murdered this year. We usually talk about safety as it relates to us in the air or on the maintenance floor. From that perspective we have been making progress, as can be seen from the results of the latest APSA annual safety survey below. Of course, we will continue to work on ways to improve those numbers even more this year. However, I'd like to propose a challenge: How can we increase safety for those we serve? How can we reduce risk for the police officers, firefighters and public safety personnel we are charged with guarding over?

Many years ago, I heard a patrol unit call out a traffic stop while we were on a nighttime patrol flight. He wasn't too far away so we headed to his location and turned a few orbits while watching him through the camera. There had been nothing in the tone of his voice or any information on the stop to raise concern. So, we were a bit surprised when we realized the officer was taking the driver into



custody. Once a backup unit was on scene, we left the area to look for more work. A couple hours later the officer called us at the hangar and asked, "Did you see that?!" He proceeded to tell us that the driver had pulled a knife on the officer but when we arrived overhead he looked up at us and threw the knife down. We were shocked that we'd had such an influence on a dangerous situation and never knew it. It has been a constant reminder that often the simple presence of air support shifts the tactical balance into the favor of our ground units.

In 2019, we should all work on finding at least one new way we can reduce risk for those we serve. Throw all of your tactics and techniques on the table and reevaluate how you do business. We will be doing the same thing in the APSA safety and education programs. Yes, it means doing some extra work. Yes, self-critique is not always fun. However, too much is at stake for us to ignore this challenge.

2018 PUBLIC SAFETY AVIATION ACCIDENTS:

1. OH-58 – ground handling equipment mishap
2. Beech 99 - training flight (4 fatalities)
3. AS350 - crash during missing person search (unknown causes)
4. OH-58 – engine failure
5. Cessna 206 - (engine failure?)
6. Cessna 206 – engine failure, wire strike during emergency landing.
7. TH-67– loss of control on dolly (1 serious injury)
8. Bell 412 – low clouds and fog in mountains during SAR mission (9 fatalities)
9. OH-58 - wire strike damage, no crash.
10. TH-67 - wire strike damage, no crash.
11. AS350 - wire strike damage, no crash.
12. OH-58 - wire strike (2 fatalities)

**RULE BOOKS ARE PAPER.
THEY WILL NOT CUSHION A SUDDEN MEETING OF STONE AND METAL.**

*~ ERNEST GANN
FATE IS THE HUNTER*

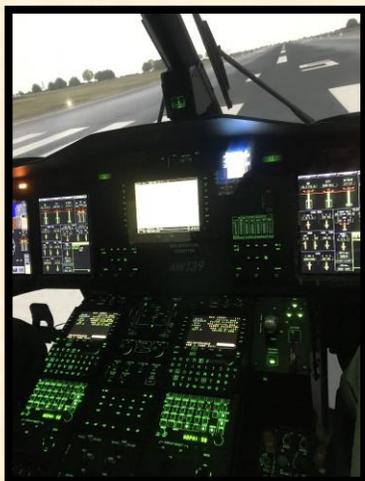
SAFETY SURVEY RESULTS

	<u>2016</u>	<u>2017</u>	<u>2018</u>
• Have a Safety Management System (SMS)	63%	67%	76%
• Use a Flight Risk Assessment Tool (FRAT):	58%	68%	83%
• Have a Safety Officer:	85%	75%	90%
• Safety Officer received training:	57%	47%	64%
• Received annual refresher training on SMS:	43%	52%	58%
• Have an Emergency Response Plan (ERP):	78%	79%	85%
• Have tool control system in place:	45%	47%	48%

• Maintenance personnel involved in the SMS:	48%	54%	50%
• Have a formal TFO training program:	66%	73%	80%
• Reported safety concern/hazard/incident this year:	47%	47%	59%
• Received a response to that safety report:	38%	42%	51%
• SMS includes a Just Culture policy:	Yes	46%	51%
	Not sure	29%	27%
• Have instrument rating:	51%	59%	79%
• Conduct IIMC training for pilots:	74%	76%	82%
• Conduct IIMC training for other aircrew:		52%	61%
• Inadvertently entered into (IIMC) –	In the last three years:	10%	13%
	In the last ten years:	30%	30%
• At least one bird strike in the last three years:	54%	55%	52%
• Debris from bird strike entered cockpit:		15%	12%
• Wire strike within last 3 years:		2%	2%
• Wire strike within last 10 years:		6%	5%
• Hit by gunfire - last ten years:	4%	5%	1.6%
• UAS mid-air close call		22%	33%

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



Safety Officers:

Friday, Feb 22, 2019
1:00 PM - 2:00 PM EST (1800 UTC)

Maintenance:

Wednesday, Feb 20, 2019
1:00 PM - 2:00 PM EST (1800 UTC)

UAS:

Wednesday, Feb 13, 2019
1:00 PM - 2:00 PM EST (1800 UTC)

PRACTICAL SAFETY MANAGEMENT

We previously discussed the importance of putting together an annual report on your Safety Management System. Now it is time to use that information to set up the course for this year. Using your 2018 report and information such as a safety survey, you should work to create at least three goals for 2019. These are operational goals that tie safety and operations together. The goals are usually broad in scope, so for each goal put together three objectives to meet that goal.



This process is best done by the safety committee, as completing these objectives will require training, purchase of equipment, changes in policies or procedures, etc. Remember not to forget maintenance! Once the goals and objectives are set, publish them for the unit to see. This list will define the road that the entire unit will take together over the course of this year.

RESOURCES

NVG Advisory Circular from Transport Canada:

<https://www.tc.gc.ca/en/services/aviation/reference-centre/advisory-circulars/ac-603-001.html#appe>

FAA Safety Briefing

https://www.faa.gov/news/safety_briefing/

Human Factors Newsletter

<https://www.decodinghumanfactors.com>

ROBBIE, LISTEN TO ME. I NEVER ONCE WENT UP IN THE AIR WITHOUT LEARNING SOMETHING NEW. NEVER, EVER THINK YOU KNOW IT ALL.

~ GENERAL ROBERT OLDS'S DYING WORDS TO HIS SON, LEGIONARY FIGHTER PILOT ROBIN OLDS



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: Cessna 206
Injuries: 1 Minor, 2 Uninjured
NTSB#: CEN18LA382

<https://app.nts.gov/pdfgenerator/ReportGeneratorFile.ashx?EventID=20180919X84852&AKey=1&RType=Prelim&IType=LA>

The airplane was operated by the United States Drug Enforcement Administration as a Public Use instructional flight. Visual meteorological conditions prevailed. Information from the operator indicated that the commercial pilot, under the oversight of a flight instructor, was flying the area navigation (RNAV) global positioning system (GPS) instrument approach to runway 17. After crossing the final approach fix, and before arriving at the missed approach point (MAP), the engine lost power. The instructor took control and maneuvered the airplane over a set of power lines. He was attempting to maneuver the airplane under a second set of power lines when the right wing struck one of the lines. The airplane touched down on a roadway, but its left wing struck a passing vehicle. The landing gear then struck the concrete median, yawing the airplane clockwise, and the tail struck a second vehicle.

Aircraft: Bell 407
Injuries: 3 fatal
NTSB#: CEN18FA033

<https://app.nts.gov/pdfgenerator/ReportGeneratorFile.ashx?EventID=20171119X32831&AKey=1&RType=HTML&IType=FA>

The helicopter air ambulance flight was en route to pick up a patient when company satellite tracking was lost at an altitude about 1,250 ft. mean sea level. The helicopter impacted a reservoir bank and a postimpact fire consumed a majority of the fuselage. Examination of the helicopter did not reveal any anomalies with the airframe or engine that would have precluded normal operation.

A postaccident examination of the wreckage found multiple bird remains, identified as snow geese, were located in the cockpit and embedded in the pilot's clothing and boot. Fragments of a night vision goggle (NVG) system near the pilot's position suggest that the pilot was using them for visual navigation; however, there was no moon illumination to enhance the NVG effectiveness, and it is unlikely that the pilot would have been able to visually detect the birds before impact. While the helicopter flight controls were continuous, it could not be determined if the bird strikes jammed the pilot's controls and/or incapacitated the pilot.

The National Transportation Safety Board determines the probable cause(s) of this accident to be: An in-flight loss of control due to bird strikes.

Aircraft: Bell OH-58
Injuries: 1 Serious
NTSB#: WPR13LA087

<https://app.nts.gov/pdfgenerator/ReportGeneratorFile.ashx?EventID=20130109X74659&AKey=1&RType=HTML&IType=LA>

The pilot was conducting agricultural spray operations when he experienced a flight control system anomaly that was described as a right rolling tendency. The pilot increased altitude in an effort to return to the operator's base for repairs. The helicopter became progressively difficult to control, continuing to roll right and not fully responding to left cyclic control inputs, and the pilot maneuvered to a nearby company loader to land. However, the right rolling tendency continued and the helicopter subsequently collided with terrain.

Postaccident examination of the flight control assembly revealed that the gas producer throttle control cable, which is routed adjacent to the connecting linkage push-pull tubes, was entwined with the push-pull tubes. A section of the cable appeared to be pinched between the lower mixing lever unit and the tunnel partition wall. Multiple nylon loop cable clamps, used to secure the throttle cable to the vertical tunnel partition, were broken and separated; however, it was not possible to determine whether the observed damage was the result of the wreckage recovery efforts or a preexisting condition.

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

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

Safe hunting,

Bryan 'MaGu' Smith

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