

AIRBORNE PUBLIC SAFETY ASSOCIATION



The

Safety

Wire

July 2020

100TH NEWSLETTER!

The monthly safety newsletter is one of my favorite aspects of the APSA Safety Program. The reason I enjoy putting it together so much is because, to me, it highlights the real power of our association, which is the people. Many of you have been extremely kind to give me credit for this monthly document. While I appreciate the gesture, the credit goes to so many people.

Every month, I send a rough (sometimes very rough!) draft to APSA CEO Dan Schwarzbach who takes time out of his extremely busy schedule to look through every word, picture and web link for required edits. Dan turns a draft into a quality document worthy of publication, He then sends it to APSA Operations Manager Benay Osborne, who reworks my formatting, pictures, etc. so it looks professional and is compatible for email distribution. Most importantly, she then makes sure it gets out to all of our members.



The draft that I send to Dan does not come from some bottomless pit of ideas I possess. It comes from all of you. When I wrote the first newsletter in 2012, I wondered how long I could come up with new ideas. In that newsletter, I asked for members involved in safety to email me if they wanted to start a mutual aid group. The response was better than expected and the group has grown to over 180 members who have talked via email, phone or our regular online meetings for the last eight years. Soon we added similar groups for maintenance, SAR and UAS discussions. Through these



MN Game Survey, 1946. Photo courtesy of J. Jensen

groups, I receive questions, documents and suggestions concerning day-to-day challenges and lessons learned from public safety aviators around the world.

At our seminars, Safety Stand-To events and conferences, many of you have taken the time to talk to me about issues you are struggling with or ideas you have to make our industry better. I receive regular emails from you all asking for information or resources.

Often, I forward the questions to other members active in

our various groups for answers. Even the pictures in the newsletter are frequently sent from APSA members. Finally, I am truly thankful to those of you who were willing to share a story of an incident you experienced in the hopes of saving someone else from a similar fate.

This is all to say, the newsletter is the collective voice of our membership. The ideas for each newsletter, and the information included come from all of you. Through our active membership, I can find an answer to every question I receive. With your input, I never run out of content for the newsletter. I cannot describe how blessed I feel to be working with you all in this process of sharing ideas and experiences. Thank you for being involved and thank you to Dan, the APSA Board of Directors and staff for making this newsletter, and so many other incredible things, happen on a regular basis. To end, I'll leave you with the following excerpt from the first newsletter:

The safety program is your program. You, the membership, are the greatest resource of information out there on law enforcement safety. From firsthand knowledge of the many unreported 'close calls' that are constantly threatening to turn into an accident to the various war stories and personal experiences that could help send another of our peers home safely at the end of their shift, your input is critical. Everyone, from the newest TFO to the pilot who counts his years of experience in decades, has something to add to this program. Something that can save a life.

If you would like to be a part of this process, please contact me.

If you have a story to tell or a lesson to pass on, send it to me.

If you like what you see happening with the program, I would like to hear from you.

If you want to see something different, or additional...I NEED to hear from you!

“To tell a pilot to play it safe is to tell him nothing, nobody wants to crack up; the question is: just exactly what are the dangers, and how does one deal with them?”

*~Wolfgang Langewiesche
Stick and Rudder, 1944*

RESOURCES

Transportation Safety Board of Canada – Partial Instrument accident review
<https://www.tsb.gc.ca/eng/medias-media/communiques/aviation/2020/a19w0015-20200427.html>

Transport Canada – Safety Newsletter
<https://tc.canada.ca/en/aviation/publications/aviation-safety-letter/issue-2-2020>

Australian Transport Safety Bureau – Hydraulics training dangers
<https://www.atsb.gov.au/media/news-items/2020/hovering-without-hydraulics/>

ONLINE MEETINGS

APSA conducts regularly scheduled online meetings for safety officers, maintenance technicians, SAR personnel, and UAS operators via a conference call you can join using your computer, mobile device or phone. Online meetings are open to any APSA member. Contract maintenance providers to APSA members are welcome to participate in the maintenance meeting as well. If you would like to join, send an email to: safety@publicsafetyaviation.org

The schedule for upcoming APSA online meetings is as follows:



Safety Officers:

Friday, August 14, 2020
12:00 PM - 1:00 PM EDT (1600 UTC)

Maintenance:

Wednesday, September 9, 2020
1:00 PM - 2:00 PM EDT (1700 UTC)

SAR:

Wednesday, September 16, 2020
1:00 PM – 2:00 PM EDT (1700 UTC)

UAS:

Wednesday, September 23, 2020
1:00 PM - 2:00 PM EDT (1700 UTC)

EMERGENCY PROCEDURE OF THE MONTH

In each monthly emergency situation, discuss what you would do, as a crew, to respond to the following emergency. If the EP does not apply to your specific aircraft, think of something similar.

FOD jamming rudder/anti-torque pedals in flight

“That is the whole secret of successful fighting.

Get your enemy at a disadvantage; and never, on any account, fight him on equal terms.”

~George Bernard Shaw

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 185
Injuries:	1 Serious
NTSB#:	ANC19TA017

<https://app.nts.gov/pdfgenerator/ReportGeneratorFile.ashx?EventID=20190416X30036&AKey=1&RTType=HTML&IType=TA>

A wheel/ski-equipped Cessna A185F airplane impacted mountainous terrain about 90 miles north of Nome, Alaska. The airplane was operated by the National Park Service (NPS) as a public aircraft operation. Day visual meteorological conditions (VMC) existed at the departure airport, and instrument meteorological conditions (IMC) prevailed at the time of the accident.

During an interview with the National Transportation Safety Board investigator-in-charge, the pilot stated that the purpose of the flight was to relocate from PAOT to PAOM (about 160 nm) to pick up two NPS employees for transport. The pilot reported that he had flown the route from POAT to PAOM many times and was very familiar with the terrain along the route. He recalled that the graphical weather forecast for the area was for marginal VFR, and the forecast for PAOM was 1,900 ft ceilings and 5 statute miles of visibility. While en route, he decided to perform an overflight of the Serpentine

Hot Springs area, which was to the west of his anticipated flight route. While maneuvering through an area of mountains terrain, he observed deteriorating weather conditions to the south, and in the direction of his destination. He recalled that he was flying about 1,600 ft mean sea level (msl), heading to the southwest, with a ridgeline close on the right side of the airplane. The pilot stated that he was momentarily looking down at the GPS unit to check a navigation point, and when he looked up, the airplane had entered IMC. He immediately began an instrument scan and verified that the wings were level. He stated that in an attempt to turnaround and return to VMC, he initiated a right turn, momentarily forgetting that terrain was to the right, and the airplane immediately impacted snow covered terrain. During the impact sequence, the left wing separated from the fuselage.

The pilot recalled that he woke up inverted secure in the seat restraint harness. He carefully released the harness and egressed the wreckage. He observed heavy snow and wind (IMC) and elected to shelter inside the airplane. He was able to apply battery power to the integral satellite radio on the airplane and call the NPS dispatch center to report the accident and request rescue. The airplane was outfitted with survival equipment that the pilot used while waiting for rescue.

Aircraft:	Airbus AS350B2
Injuries:	3 Uninjured
NTSB#:	DCA20IA034A

<https://app.nts.gov/pdfgenerator/ReportGeneratorFile.ashx?EventID=20191205X95005&AKey=1&RType=Final&IType=IA>

The helicopter was operating under the provisions of 14 CFR Part 91 as an electronic news gathering flight, under visual flight rules, within Class G airspace. The pilot heard a noise which he first thought might be a bird strike and made a precautionary landing. Post flight examination led the pilot and operator to believe they collided with a drone. A search by ground and electronic methods did not locate a drone.

Laboratory examinations indicated that the shape and dimensions of the damage to the horizontal stabilizer were consistent with the configuration and dimensions of many popular small drones. A small mark inside the larger round dent was consistent with the propeller shaft diameter of common small drones.

Infrared examination revealed material transfer of polycarbonate polymer, which is a commonly used construction material of small drones. Although many items which could come in contact with the helicopter as ground FOD, are manufactured of polycarbonate (e.g. safety glasses, light lenses), the shape and configuration of the indentations and scuffs were very consistent with a small drone.

The reported collision occurred in Class G airspace, but higher than the 14 CFR Part 107 regulatory maximum of 400 feet agl for small drones. A provision in Part 107 allows for operations above 400 feet if the drone is within 400 feet laterally of a tall structure.

Downtown Los Angeles was approximately 1/4 mile away from the collision site, therefore, although the altitude and location are not authorized for drones without a waiver, it is not inconceivable that a drone operator could have been operating near the tall buildings, and deviated or exceeded the lateral requirements.

Although no drone was located, preventing complete certainty, all the available evidence was consistent with a collision with a small UAS.

*There are no new ways to crash an aircraft...
...but there are new ways to keep them from crashing.*

Bryan 'Mug' Smith

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