



The

Safety

Wire

January 2022

Reset points

are healthy for those of us whose personality throttles only have settings for OFF or FULL. Many of you in public safety aviation tend to push forward relentlessly, without taking time to catch your breath let alone catch up with the ever-growing piles of tasks that all need to be done right now. Sometimes, we are so engrossed with pushing through the obstacles in the road ahead of us that, over time, we lose sight of why we were making our way down this path to begin with.



A new year is a perfect time to pause, look around and reset our navigational database.

We fly, we train, we fix, we design, etc., etc. After a while, we do it just because it's Monday, and that's what we do every Monday. We need to stop and look around to remember why we really do it. Only you can answer that question for yourself. I love to fly, and I truly believe that what we do is important.

Our safety programs need to take the same pause so we can reset our perspective. We do not 'do' safety because we need to check this box or produce adequate weight in paperwork as evidence that we have an active safety program. We manage a safety program in order to get results. Those results will be some form of risk reduction that translates into less damage to people and machine. The goal of a program is to preserve our ability to provide our services to those who count on us. As the year starts,

take a moment to look at what you are doing with your safety program. What is the goal? It has to be more than highlighting potential problems and telling people to be careful. What is the change in tactics, techniques, training, policy, equipment, etc. that you want? Once we have that reset point established, then we can look to what we need to do in 2022 to get there.

*"I learned that danger is relative,
and that inexperience can be a magnifying glass."*

~ Charles Lindbergh

2021 PUBLIC SAFETY AIRCRAFT ACCIDENTS

1. Detroit Police OH-58 – Collision during hover. No injuries.
2. Collier County OH-58 – Engine failure. No injuries.
3. Spanish Customs/Police AS365 N3 – Unknown/CFIT. 1 Fatality, 2 injuries.
4. US Bureau of Land Management Beech C-90 – Unknown. 2 Fatalities.
5. Tampa Police Bell 407 – Training. No injuries.
6. Livingston Parish Sheriff's Office OH-58 – Takeoff rollover. No injuries.
7. Hernando County OH-58 – Engine/mechanical issue. No injuries.
8. US Customs and Border Patrol AS350B3 – Inflight fire. 2 minor injuries.
9. US Forest Service UH-1H – Hard landing. No injuries.
10. Yavapai County R-44 – Loss of Control. No injuries.
11. US Customs and Border Patrol AS350B2 – Training. 2 minor injuries.
12. St. Louis County Police MD-500E. Unknown. No injuries.
13. Columbian National Police UH-1H. Unknown. 3 fatalities.

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.



SAR:

Wednesday, February 9, 2022
1:00 PM – 2:00 PM EST (1800 UTC)

Maintenance:

Wednesday, February 23, 2021
1:00 PM - 2:00 PM EST (1800 UTC)

UAS:

Wednesday, March 2, 2022
1:00 PM - 2:00 PM EST (1800 UTC)

Safety Officers:

Friday, March 18, 2022
1:00 PM – 2:00 PM EDT (1700 UTC)

Natural Resources:

Wednesday, March 30, 2021
1:00 PM – 2:00 PM EDT (1700 UTC)

"Do not let yourself be forced into doing anything before you are ready."

~Wilbur Wright

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.

Electrical burning smell or smoke in the cockpit

RESOURCES

HAI IIMC Educational Materials

<https://rotor.org/resources/hai-vfr-best-practices/>
<https://rotor.org/education/>

5G Safety Alert

https://www.faa.gov/other_visit/aviation_industry/airline_operators/airline_safety/safo/all_safos/media/2021/SAFO21007.pdf

Helicopter Safety Alliance – Safety Newsletter

[https://helicoptersafetyalliance.com/join-alliance/?ct=t\(EMAIL_CAMPAIGN_1_6_2022_13_59\)&mc_cid=8df11fb4b5&mc_eid=8bc0c962b2](https://helicoptersafetyalliance.com/join-alliance/?ct=t(EMAIL_CAMPAIGN_1_6_2022_13_59)&mc_cid=8df11fb4b5&mc_eid=8bc0c962b2)

FAA Pilot Minute – OTC meds, survival kits

<https://www.youtube.com/playlist?list=PL5vHkqHi51DQvRjGJo1SuXyZpKI5HbzOI>

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:	BELL UH-1H
Injuries:	1 Serious
ATSB#:	AO-2018-031

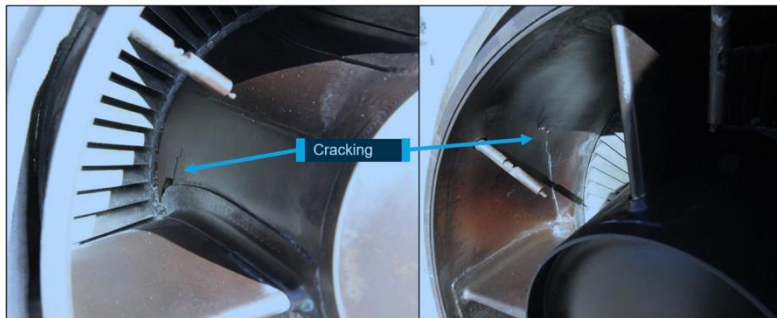
http://www.atsb.gov.au/publications/investigation_reports/2018/aair/ao-2018-031/

On 17 April 2018, the pilot of a UH-1H was conducting long-line lifting operations. While on approach to pick-up a load, the helicopter's engine failed. During the subsequent forced landing, the helicopter collided with trees and a riverbed. The pilot sustained serious injuries and the helicopter was destroyed.



The ATSB found that the inner struts in the exhaust diffuser fractured leading to the engine failure. The fracture was the result of high-cycle metal fatigue, which had not been detected for at least 36 routine maintenance inspections prior to the accident. It

Figure 7: Visible cracking in the exhaust diffuser area



was also established that the maintenance practices and processes were likely inadequate to detect the potential impending failure of safety critical components. These practices related to inspections, record keeping and trend monitoring.

Following the engine failure, the pilot had limited assurance that ground support personnel could vacate the clearing directly below the helicopter, necessitating a forced landing to a less suitable location. This was likely the result of a risk assessment for helicopter operations that did not consider the hazard of an emergency landing as the helicopter approached to hook-up a load.

The pilot was not wearing the upper torso restraint fitted to the helicopter during the flight. It was virtually certain that this resulted in the pilot sustaining serious head injuries when the aircraft collided with terrain.

Aircraft:
Injuries:
ATSB#:

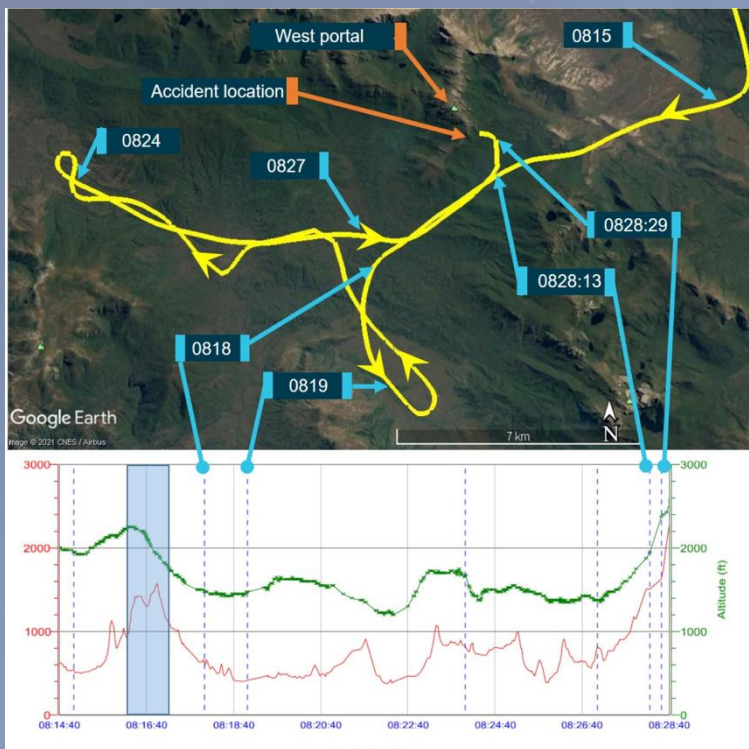
Pilatus Islander
1 Fatal
AO-2018-078

http://www.atsb.gov.au/publications/investigation_reports/2018/aair/ao-2018-078/

On 8 December 2018, the pilot of a Pilatus Britten-Norman BN2A-20 Islander was conducting a positioning flight from Cambridge Airport to Bathurst Harbour, Tasmania, under the visual flight rules. The aircraft departed Cambridge and was scheduled to arrive at Bathurst Harbour about 45 minutes later to pick up five passengers for the return flight. The aircraft did not arrive and the Australian Maritime Safety Authority received advice that an emergency locator transmitter had activated. That evening, the wreckage was located near the Western Arthur Range. The pilot was fatally injured and the aircraft was destroyed.



The ATSB found that the pilot was using a route through the Arthur Range due to low cloud conditions and had continued over a saddle in the range at a lower altitude than previous flights. During this, the pilot likely encountered reduced visual cues, as per the forecast conditions. This led to controlled flight into terrain while attempting to exit the range.



Specific guidance provided by Airlines of Tasmania to their pilots for the Bathurst Harbour operations was primarily given verbally and was not well documented. This resulted in the pilots having varied understanding of the expectations regarding in-flight weather-related decision-making at the Arthur Range saddle.

The ATSB identified that Airlines of Tasmania's safety management processes for identifying hazards extensively relied on safety occurrence reports. This limited the opportunity to proactively identify the risks in all operational activities and assess the effectiveness of any controls in place.

In January 2020, the operator introduced specific guidance for the south-west operations, which introduced visibility requirements for pilot's using the direct route through the Arthur Range saddle. Additionally, further information and guidance has been added to the training syllabus, and the safety management system around weather assessment criteria and seeking further guidance when required. The operator has also implemented a number of changes to make the safety management system more proactively assess risks from sources other than safety reports.

The incident demonstrates the importance of using multiple sources to identify the hazards potentially affecting the safety of an organization, rather than relying on one key source. Such sources include safety occurrence reports, inspections, audits, flight data, and expert judgment. Likewise, it is equally important to monitor and evaluate the ongoing effectiveness of existing risk controls to ensure that they remain appropriate.

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

Bryan 'MuGu' Smith

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