



The

Safety

Wire

May 2022

Improving without realizing it.

Many mature safety programs struggle with misperceptions about the performance of the system. The impact of Safety Management Systems (SMS) can be like any lifestyle change we make to improve our health. At first, the changes are obvious because so much needs to be changed. The improvements are quantifiable as we lose pounds, lower blood pressure numbers, etc. We feel significantly better, and the physical changes are obvious. The long term and more critical benefits to our cardiovascular and immune systems, or perhaps mental health, are difficult to measure or perceive. After the big, obvious changes stabilize, it can become hard to continue exercise or diet regimens because we don't see any changes taking place. Left unchecked, we rebound and end up having to start all over.



The safety program starts with big changes as well. Fixing issues that are obvious and filling in gaps that often have been clear deficiencies for some time. Just like our diet, the benefits of the program become less obvious over time as the big changes subside and your SMS moves more towards sustaining the healthy lifestyle your operation has put in

place. People will start suggesting that the safety program is not doing anything anymore because they gauge performance on obvious change or the incorporation of new stuff in the form of policies, procedures, equipment, etc.

If I make healthy choices on my diet and exercise habits, I will see the change in weight, but I'll never really know if it prevented cancer for example. Just because my diet is not producing a reduction in weight, it does not mean it isn't doing something good for me. A safety program does the majority of its work interwoven into all of the daily tasks of the unit. An SMS is working in how we prepare the crew and aircraft, to scheduling and



maintaining aircraft or budget and training decisions. The benefits of a mature, established program are sometimes not easy to see. The SMS keeps the entire aviation program healthy and running smoothly. If you've had one in place for a while, it's easy to forget about how much of an impact it is making every minute of the day, without anyone even noticing.

"Great pilots are made, not born. A pilot may possess good eyesight, sensitive hands and perfect coordination, but the end result is only fashioned by steady coaching, much practice, and experience."

*~ James 'Johnnie' Johnson
Air Vice-Marshal - RAF*

ONLINE MEETINGS

APSA conducts regularly scheduled online meetings for safety officers, maintenance technicians, SAR personnel, UAS operators and natural resource personnel 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.



Maintenance:

Wednesday, June 15, 2022
1:00 PM - 2:00 PM EDT (1700 UTC)

Natural Resources:

Wednesday, June 29, 2022
1:00 PM - 2:00 PM EDT (1700 UTC)

UAS:

Wednesday, July 6, 2022
1:00 PM - 2:00 PM EDT (1700 UTC)

Safety Officers:

Friday, July 15, 2022
1:00 PM - 2:00 PM EDT (1700 UTC)

SAR:

Wednesday, August 10, 2022
1:00 PM - 2:00 PM EDT (1700 UTC)

RESOURCES

NASA Callback – Maintenance Issue

<https://campaignlp.constantcontact.com/em/1101073741327/3d263b6b-d609-48cf-89c9-1b28fcf5d96b>

FAA FAASTeam Safety Magazine

<https://www.faa.gov/sites/faa.gov/files/2022-04/MayJun2022.pdf>

Police Aviation News

<http://www.policeaviationnews.com/Acrobat/313PanMay2022.pdf>

US Helicopter Safety Team – webinar recordings

<https://ushst.org/ushst-all-hands-webinars/>

“Nobody who gets too damned relaxed builds up much flying time.”

~ Ernest Gann
The Black Watch, 1989

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.

Laser strike - pilot is temporarily blinded

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:	Airbus AS-350 B2
Injuries:	7 Fatal
NTSB#:	ANC20MA010

<https://www.nts.gov/investigations/Pages/ANC20MA010.aspx>

On December 26, 2019, about 1657 Hawaii standard time, an AS350 B2 operated as a commercial air tour flight encountered instrument meteorological conditions (IMC) and collided into terrain in a remote, wooded area near Kekaha, Hawaii, on the island of Kauai. The pilot and the six passengers were fatally injured, and the helicopter was destroyed. The weather on Kauai had been favorable for tours for most of the day; however, just before the accident flight departed, low clouds and rain began moving onshore from the northwest (which was an atypical weather pattern for Kauai) and affecting locations on the tour route, including areas where the accident flight was headed. At least three other tour pilots saw the adverse weather and decided to divert their tours away from it. The accident

pilot (also the Chief Pilot), however, decided to continue his tour into deteriorating weather, eventually losing adequate visual references before the helicopter struck terrain.

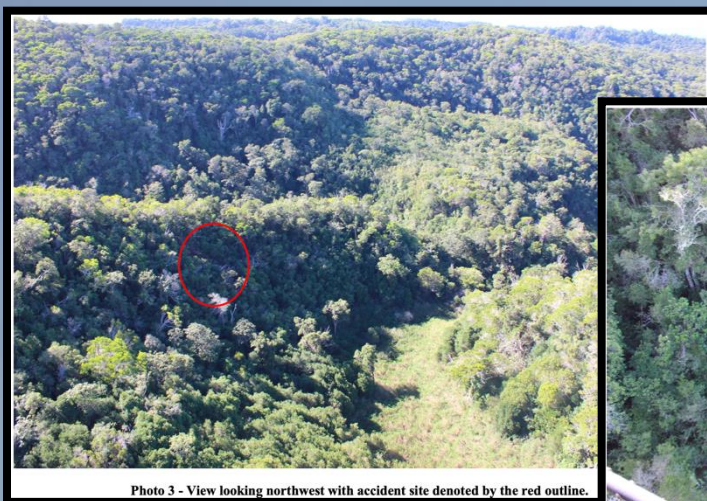
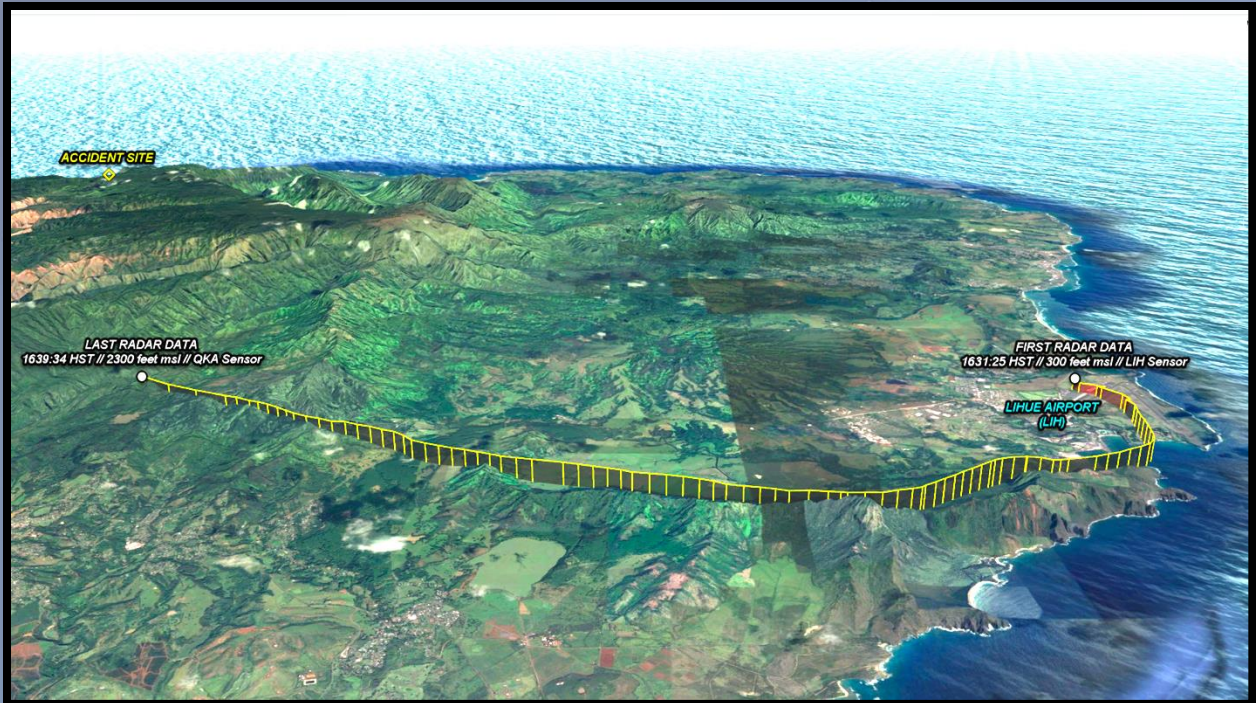


Photo 3 - View looking northwest with accident site denoted by the red outline.



Photo 6 - Close up view of the north facing ridge impacted by the helicopter, terrain scarring and debris field visible.

The pilot held a commercial pilot certificate with a helicopter rating and a mechanic certificate with airframe and powerplant ratings. On the [most recent] application for the medical certificate, the pilot reported 14,000 hours of total flight experience with 475 hours accumulated in the preceding 6 months. No other records for the pilot's recent flight times

were available. Safari's assistant chief pilot estimated that the pilot flew about 40 hours per month.

The probable cause of this accident was the pilot's decision to continue flight under visual flight rules (VFR) into instrument meteorological conditions (IMC), which resulted in the collision into terrain. Contributing to the accident was Safari Aviation Inc.'s lack of safety management processes to identify hazards and mitigate the risks associated with factors that influence pilots to continue VFR flight into IMC. Also contributing to the accident was the Federal Aviation Administration's delayed implementation of a Hawaii aviation weather camera program, its lack of leadership in the development of a cue-based weather training program for Hawaii air tour pilots, and its ineffective monitoring and oversight of Hawaii air tour operators' weather-related operating practices.

Aircraft:	Cessna R182
Injuries:	1 Minor
ATSB#:	WPR21LA215

<https://data.nts.gov/carol-repge/api/Aviation/ReportMain/GenerateNewestReport/103187/pdf>

The pilot receiving instruction reported that, during the first landing roll of the instructional flight, the airplane deviated slightly to the right and away from the runway centerline. The pilot receiving instruction corrected to the left and described the subsequent movement of the airplane as crabbing to the left while tracking down the runway. The flight instructor asserted that the pilot receiving instruction overcorrected with excessive left rudder and brake. The flight instructor told the pilot receiving instruction to get off the brake, and she



applied right rudder. The instructor stated that the pilot receiving instruction "froze up" and she could not regain directional control of the airplane. The airplane exited the left side of the runway, nosed over and came to rest inverted. The airplane sustained substantial damage to the right-wing lift strut and the empennage.

Aircraft:
Injuries:
ATSB#:

Cessna 182
1 Fatal, 2 Serious
ERA21LA004

<https://data.nts.gov/carol-repge/api/Aviation/ReportMain/GenerateNewestReport/102080/pdf>

The pilot of the amphibious float-equipped airplane was landing on a river near his home. The pilot reported that the airplane bounced after touchdown and he applied full throttle to abort the landing, during which the airplane veered left and impacted a concrete bulkhead. The pilot-rated passenger reported that, during touchdown, the pilot attempted to avoid a boat and the airplane veered left. The floats contacted the wake from the boat, resulting in a bounce, after which the pilot applied power to abort the landing. The pilot and passenger both reported that, had the pilot reduced engine power to idle instead of attempting to take off, the airplane would have collided with the bulkhead at a slower speed.

Surveillance video captured the airplane travelling at high speed, in a nose-high attitude, with both pontoons in the water when it collided with the bulkhead. The pontoons were generating white foam, spray, and a noticeable wake. A witness on a nearby boat reported that the airplane was landing with a 10- to 15-knot tailwind and a weather observation from the nearest airport indicated a 10-knot quartering tailwind for the pilot's chosen landing direction.



Photo 3 – View of Main Wreckage as Found. (FAA)

Based on the available information, it is most likely that the pilot selected a landing area where tailwind conditions prevailed and that provided inadequate distance from obstacles (boats and the concrete bulkhead). His subsequent decision to abort the landing with insufficient takeoff distance available resulted in a high-speed collision with the concrete bulkhead. It is likely that the tailwind/quartering tailwind conditions contributed to the accident by increasing the airplane's touchdown speed, decreasing its directional stability upon touchdown, and increasing the takeoff distance after the pilot chose to abort the landing.

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

Bryan 'MuGu' Smith

Safety@PublicSafetyAviation.org
407-222-8644

