



# The

# Safety

# Wire

## July 2018

**PROFESSIONALISM** was the foundation of every aspect of APSCON 2018 this month. The quest for the highest level of professionalism motivated every class, booth, social event and demonstration. I found myself asking what it means to be a professional in our business. Often, I tend to focus on the results of our efforts, such as the spectacular videos and stories we share. Those episodes are often used as exhibits of how to be professional, or not, depending on the event.

I admit that this may be seen as my opinion, but I submit that professionalism describes everything that happens before that grand event or career highlight. It is not defined by the results. Instead, professionalism is measured in how we conduct our business day-to-day, minute-to-minute. It's how we handle every task, not just the big-ticket items that we typically to concentrate on.



We may look for professionalism in how a pilot maneuvers an aircraft. However, we can also see it in how that same pilot cares for the upkeep of the aircraft and equipment or how much effort they put into training, marketing the unit, proactively listening for calls or any of the hundreds of other tasks that make us true professionals. Focusing solely on results can lead us to confuse professionalism with luck.

I have to remember that the moments and events which draw my attention so often are just highlights in a lengthy book. Those highlights do not exist without the rest of the book. If I want to get to those great moments, I have to read the whole book,

even if it's not always as exciting. The more of the book we know, the more professional we can be...and the more highlights we will find.

The good news is that the book is available to us all. It's at our Expo, seminars and Safety Stand-To events. It's in *Air Beat* and in the online meetings. It's in the contacts we make with our brothers and sisters through the association. Professionalism is there for us to take and live up to if we choose to do so.

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**YOU ARE PROFESSIONALS TRAINED TO DEAL WITH THREE THINGS THAT CAN KILL YOU: GRAVITY, COMBUSTION, AND INERTIA. KEEP THEM UNDER CONTROL, AND YOU'LL DIE IN BED.**

*~ SAILOR DAVIS  
TWA INSTRUCTOR*

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## ***REAL WORLD SAFETY MANAGEMENT***

Complacency is consistently a top concern for public safety aviation organizations. While it is often associated with people getting too comfortable with their job, or just plain laziness, this is not always the case. From day one in the aviation industry, we are bombarded with an endless list of 'safety' issues. Over time, we become desensitized to the importance of each issue. This works against safety officers, who are tasked with combating complacency with a steady flow of information. Further complicating the issue is the 'grand events' mentioned above rarely address the important role that risk management plays in making the event possible. Often, the success of a noteworthy mission is even attributed, incorrectly, to the crew bravely casting aside safety doctrine to 'get the job done.'



When selecting safety information to share with unit members, a couple tips can make our efforts more effective. Maintain the connection between the successful missions we all want with professional risk management. Connect your safety information with issues identified by unit members through safety surveys, safety or hazard reports, etc. If an issue is keeping aircrews from flying, address it as a means of increasing time

available for crews to pursue the 'big call' that we all dream about.

Risk management and operations should not be seen as two different things. Safety information is the rest of the book of professionalism I mentioned above. It does not need to be just a traditional 'safety' topic. Knowing how to be an effective crew member has a huge impact on safety as well. Include information such as predicting suspect behavior, thermal imager setup, tactical management of calls, etc. It will increase interest in the overall safety program and increase professionalism at the same time.

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## **RESOURCES**

Transport Canada Aviation Safety Letter

<http://www.tc.gc.ca/eng/civilaviation/publications/tp185-menu-5395.htm>

NASA Safety Newsletter

[https://asrs.arc.nasa.gov/publications/callback/cb\\_462.html](https://asrs.arc.nasa.gov/publications/callback/cb_462.html)

Human Factors Newsletter

<https://nebula.wsimg.com/27e58c48af754813f7c11636992fd715?AccessKeyId=9ADBA739B30D22098056&disposition=0&alloworigin=1>

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## **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](mailto:Safety@PublicSafetyAviation.org)



### **UAS:**

Wednesday, August 8, 2018  
1:00 PM - 2:00 PM EDT (1800 UTC)

### **Safety Officers:**

Friday, August 17, 2018  
1:00 PM - 2:00 PM EDT (1800 UTC)

### **Maintenance:**

Friday, August 24th, 2018  
1:00 PM - 2:00 PM EDT (1800 UTC)

**EDUCATION IS THE KINDLING OF A FLAME,  
NOT THE FILLING OF A VESSEL.**

~ *SOCRATES*

**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: Agusta 119K**

**Injuries: None**

**From the CONCERN Network:** Recently, a pilot used the approved portable electronic device (PED) for the preflight process. Upon completion of use, the pilot placed the PED on the aircraft floor, leaning against the aircraft center console, in preparation for departure. Shortly after lifting the aircraft would not respond fully to left cyclic input. While in the air, the pilot forced the cyclic left, regained full control, and landed safely. Upon landing the pilot observed the PED had tipped over and wedged itself between the center console and the cyclic. The action by the pilot to regain full cyclic control resulted in the PED breaking in half. The investigation identified no process or procedural failure by the pilot. The operator now provides guidance where to store the approved PED during flight operations.

**Aircraft: Cessna 206**

**Injuries: None**

**New Zealand TAIC#: AO-1999-001**

**<https://taic.org.nz/inquiry/ao-1999-001>**

On Thursday 18 March 1999 at about 1645 hours, a Cessna 206 on an aerial surveillance air transport flight had a sudden engine failure and ditched in the sea. During the orbit the aircraft descended to a height just above the level of Hakepa Hill, about 800 feet. The pilot completed the orbit and straightened the aircraft on an east to south-east heading some 700 metres off-shore. The pilot turned to ask the passengers what their requirements were and if they wanted him to complete another orbit, when the engine lost power suddenly without any warning.

The pilot said the loss of power sounded similar to the throttle being closed quickly. He immediately pushed the throttle forward fully and checked that the mixture was rich. Around the time the engine lost power he noticed the fuel flow gauge reading zero. He changed the fuel selector to the right wing tank but the engine did not regain power.

The sea was relatively calm and the aircraft impacted the water sooner than the pilot expected, about 800 metres from shore. The aircraft occupants reported that the aircraft nosed down during the ditching, inverted and sank quickly. All the occupants escaped from the sinking aircraft and managed to swim to the surface. Life-jackets were on board the aircraft for the occupants' use but there was insufficient time for them to locate and don the jackets. No one was able to locate and don a life-jacket during the short time of about 30 seconds from when the engine failed to the impact with the water.

The aircraft occupants received minor injuries, including abrasions, during the impact and their escape from the aircraft. The occupants assisted one another to swim to shore and were aided by an on-shore current. They believed they were in the water for about one hour before they reached the safety of the shore. All the occupants suffered from varying degrees of hypothermia.

No one on board ZK-DOA wore a life-jacket. The passengers said they were not instructed on the use of the life-jackets and life-raft, or made aware of their location. The pilot could not recall if he referred to the jackets or life-raft during his passenger briefing. He said the passengers had all flown in ZK-DOA before and should have been familiar with the location and use of the life-jackets and raft.

**Aircraft: AS350 BA**

**Injuries: 1 Fatal**

**New Zealand TAIC#: AO-2017-001**

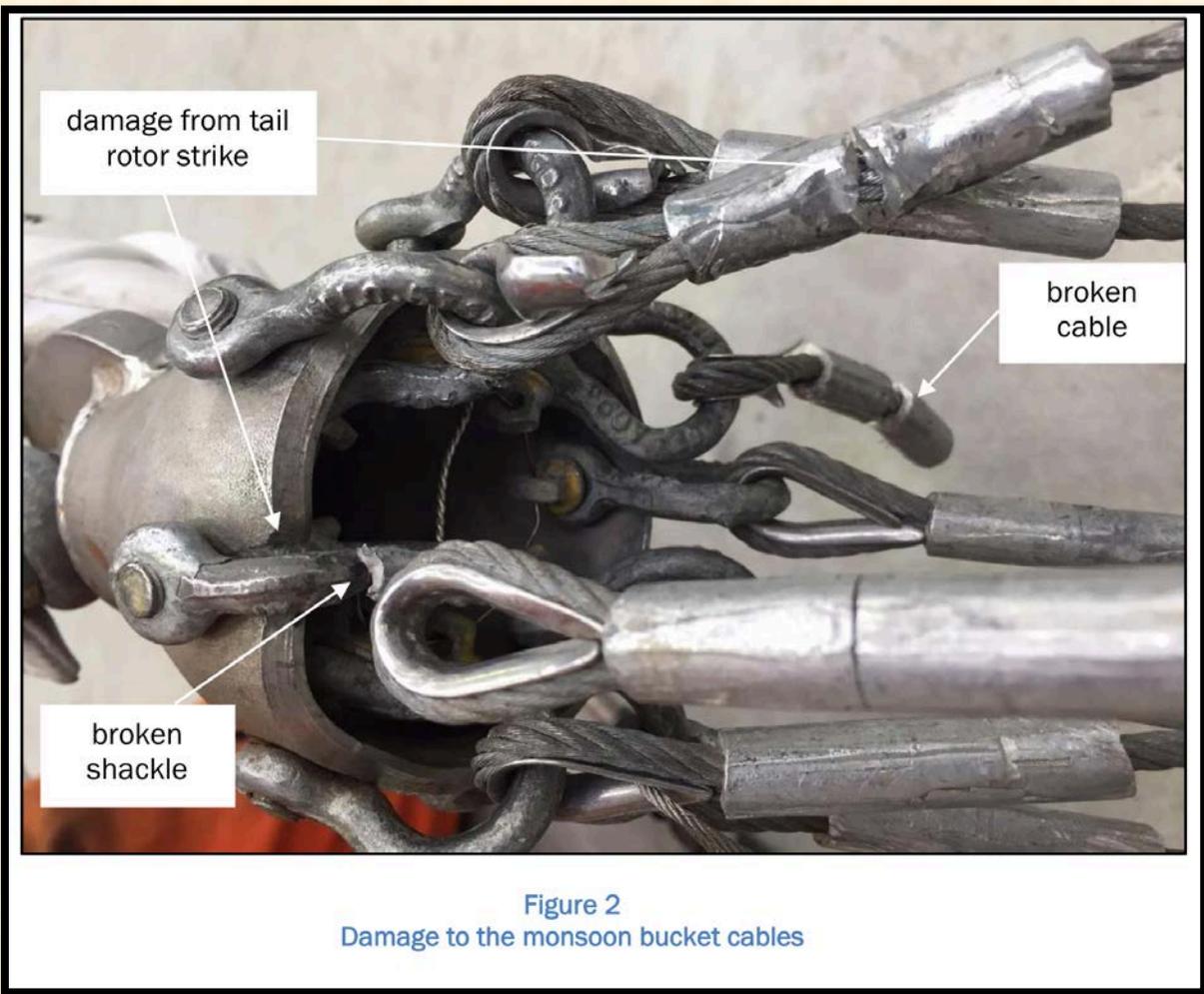
**<https://taic.org.nz/inquiry/ao-2017-001>**

On the afternoon of 13 February 2017, wildfires broke out on the Port Hills between Lyttelton Harbour and the south-eastern suburbs of Christchurch. A major effort began early the following day to control the fires, using large ground parties assisted by up to 12 helicopters and two aeroplanes. In the early afternoon one of the helicopters, a Eurocopter AS350 BA 'Squirrel' registered ZK-HKW, crashed while returning to the dipping pond to refill an underslung monsoon bucket. The pilot was fatally injured and the helicopter was destroyed.

The suspension line for the monsoon bucket had contacted the tail rotor. The damage to the tail rotor caused the vertical stabiliser to tear off the tail boom,

and the helicopter became uncontrollable and crashed.

A video recording taken from a camera mounted underneath the helicopter showed the monsoon bucket rising towards the tail rotor. The video recording also showed that an object fell from the helicopter shortly beforehand. It is



virtually certain that this was the window that had dislodged from the left rear sliding door. The pilot had experienced a similar loss of the left rear window while flying the same helicopter on a firefighting mission in 2015.

The Transport Accident Investigation Commission (Commission) found that the door configuration was prohibited in the flight manual, and therefore the helicopter was being flown outside the manufacturer's approved limits. It was very likely that the monsoon bucket flew up towards the tail rotor due to a combination of forward air speed and turbulence. At the same instant, the pilot's slowing of the helicopter in response to losing the window resulted in the tail rotor dipping and making contact with the rising suspension line for the monsoon bucket.

Two safety issues were identified in the inquiry:

- there may not be a good awareness within the helicopter industry of the additional risks involved with underslung load operations, particularly with the use of monsoon buckets during firefighting operations
- the operator did not have adequate systems available for the pilot to determine the actual all-up weight and balance of the helicopter for the firefighting operation, or to ensure that incidents such as the previous loss of a window were recorded, notified to the CAA and investigated.

*Associated article about the accident report:*

<http://aerossurance.com/helicopters/wayward-window-fire-fighting/>

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

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

Safe hunting,

*Bryan 'MaGi' Smith*

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