

## AIRBORNE PUBLIC SAFETY ASSOCIATION



The

Safety

Wire

**October 2018**

### ***CRM IS NOT JUST FOR EMERGENCIES.*** Crew (or Cockpit)

Resource Management is usually associated with the prevention of accidents. When we discuss CRM, it is often attached to an accident where the application of it either saved, or doomed, the crew. Even when we broaden the scope to include maintenance, we do so in the context of an accident report. The connection between CRM and accidents can lead to the impression that CRM is what happens just prior to, or during, an emergency. These conversations are important because CRM does have a powerful effect on the outcome of an emergency situation. However, if CRM wasn't strong and healthy before the flight, or aircraft repair, in question...it is not going to magically appear as soon as a problem presents itself.

CRM starts long before the flight starts or the wrenches come out of the toolbox. It starts the first second we walk into the office and greet our coworkers. CRM starts when we ask the crew or maintenance staff how they are doing today. It may start before a word even leaves our mouth and we read the body language or sense the disposition of people we know well. CRM starts when we ask what we have planned for the day, when we mention how hot it is, ask how our coworker's kids' baseball game went yesterday or discuss what the lunch plan is. CRM happens when we complete a Flight Risk Assessment as a crew, finding what the inevitable imperfections for the day are going to be. CRM works when we are



receiving dispatch information and planning for a flight and it is just as important after the task is complete.

CRM is not how we do things when problems arise. CRM is simply, how we do things all the time. Or, as the case may be, how we don't do things. Those are the only two options, and the choice is given to us every day.

**IF YOU DON'T THINK YOU'RE THE BEST PILOT IN THE BUSINESS, MAYBE YOU'RE IN THE WRONG BUSINESS.**

**IF YOU THINK YOU COULD NEVER MAKE A MISTAKE, YOU ARE REALLY IN THE WRONG BUSINESS.**

*~ RANDY SOHN  
AVIATION AUTHOR AND PILOT*

## ***SAFETY SURVEY***

It's that time of year again! As always, we are requesting your assistance in helping us collect accurate information about safety-related issues in public safety aviation. This information helps direct APSA's safety and education programs as well as our outreach efforts to improve our industry. Your input is completely anonymous. There is no other source of accurate safety information for our profession. So, if you are a mechanic, administrator, TFO, manned or unmanned pilot, etc., please take a few minutes to fill out the survey. The survey will close on December 1<sup>st</sup>.

**[CLICK HERE TO START SURVEY](#)**

## ***RESOURCES***

EASA - CRM Training Implementation

<https://www.easa.europa.eu/document-library/general-publications/crm-training-implementation>

RAF Flight Safety Publication

<https://www.raf.mod.uk/our-organisation/units/raf-safety-centre/documents/air-clues-issue-25/>

FAA – Pilots and Medication

[https://www.faa.gov/news/safety\\_briefing/2018/media/SE\\_Topic\\_18-10.pdf](https://www.faa.gov/news/safety_briefing/2018/media/SE_Topic_18-10.pdf)

FAA Safety Alert – Weight and Balance (sent to Part 135, but applicable to all of us)

[https://www.faa.gov/other\\_visit/aviation\\_industry/airline\\_operators/airline\\_safety/safos/media/2018/SAFO18012.pdf](https://www.faa.gov/other_visit/aviation_industry/airline_operators/airline_safety/safos/media/2018/SAFO18012.pdf)

## **CRM CHECKLIST**

How healthy is Crew Resource Management at your operation? Here is a brief checklist of some of the CRM skills present in a strong CRM program. How do you stack up? What do you need to work on? This is not an all-comprehensive list, however it is a good start.

<b>Yes</b>	<b>No</b>	<b>CRM Skill</b>	<b>Definition &amp; Examples</b>
		Briefing	Interactive, whole group involved. Limits established, operational plan clear, risks identified and mitigated.
		Tasking Assignments	Roles and responsibilities defined and clear. Everyone assigned role in risk management. Different roles synchronized with each other.
		Crew Performance Monitoring	Ability to monitor each other's performance, <del>give</del> , seek and accept advice.
		Workload <del>Mgmt</del>	Tasks prioritized, tasking assignments upheld, avoid target fixation, workload overload avoided.
		Shared S.A. Vigilance	Ability to gather, use and share information to keep group alert of task/team environment and course.
		Adaptability	Plan modified as needed by crew/team. Safety operational concerns addressed when changing tasks.
		Inquiries	Questions asked to verify plans, SA; nothing taken for granted. No hesitation or reluctance to question actions by other team members.
		Assertiveness	Critical info communicated with appropriate persistence, required verification of communication, spoke up without hesitation. 2 Challenge Rule
		Communication Environment	Open environment established and maintained, Good cross talk, clear and fluid and direct.
		Leadership	Knowledgeable, supports open communication, encourages participation.
		Resource <del>Mgmt</del>	All available resources are used to complete tasks.

## 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)



### Safety Officers:

Friday, Nov 16, 2018  
1:00 PM - 2:00 PM EST (1700 UTC)

### Maintenance:

Tuesday, Nov 20, 2018  
1:00 PM - 2:00 PM EST (1700 UTC)

### UAS:

Wednesday, Nov 21, 2018  
1:00 PM - 2:00 PM EST (1700 UTC)

**WE HAVE NO EFFECTIVE SCREENING METHODS TO MAKE SURE PILOTS ARE SANE.**

*~ DR. HERBERT HAYNES  
FAA*

## 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 T206  
**Injuries:** 2 minor  
**NTSB#:** ERA18LA228

[https://www.nts.gov/layouts/nts.aviation/brief.aspx?ev\\_id=20180823X31321](https://www.nts.gov/layouts/nts.aviation/brief.aspx?ev_id=20180823X31321)

On August 22, 2018, about 2300 eastern daylight time, a Cessna T206H, operated by the US Department of Homeland Security, was destroyed during a forced landing after a loss of engine power near Pittsfield Municipal Airport (2B7), Pittsfield, Maine. The commercial pilot and passenger sustained serious injuries. Visual

meteorological conditions prevailed, and a flight plan was filed for the public use flight that originated from Bangor International Airport (BGR) Bangor, Maine.

According to the pilot, he departed BGR around 2100 for a mission that would last about 3 hours. During the return flight to BGR, at an altitude of 8,000 ft. he requested a lower altitude from air traffic control. During the decent, he heard a "bang," followed by a vibration and a sound like a "machine gun." The pilot noticed the engine was not producing engine power and a cylinder was "lost" on the engine monitoring instrument. The pilot then declared an emergency, and air traffic control gave him vectors to the closest airport, 2B7. While on an extended final approach to runway 36 at 2B7, the pilot determined that they would not be able to glide all the way to the runway. He noticed a river between the airplane and the runway, so he turned to avoid landing in the river. The pilot tried to land in an open area of the forest about 4,500 ft. south of runway 36.

Examination of the wreckage by a Federal Aviation Administration inspector revealed that the airplane sustained damage to the elevator by contacting maple trees. The fuselage was fractured at a 45° angle. The pilot's floorboard and seat tracks were buckled from impact.

Detailed examination of the engine revealed that the No. 4 cylinder exhaust hydraulic roller tappet was fractured and had separated. The engine was retained for further examination.

**Aircraft: Airbus AS350**  
**Injuries: 1 Fatal**  
**NTSB#: ANC16FA023**

<https://app.nts.gov/pdfgenerator/ReportGeneratorFile.aspx?EventID=20160507X31120&AKey=1&RTYPE=HTML&ITYPE=FA>

The non-instrument-rated commercial pilot was making a visual flight rules internal-cargo company flight in the helicopter. He was returning to base in the helicopter [from] a remote dog camp situated on a glacier surrounded by mountainous terrain. The pilot had previously completed 5 of the day's 7 planned roundtrip flights from the base to the dog camp. According to the dog camp manager, the weather was deteriorating with snow and wind increasing when the pilot departed on the accident flight. The dog camp manager's observations and radar data indicated that the pilot attempted to depart via the normal route to the south but turned around. He likely encountered low visibility conditions and then attempted several departures by routes to the north of the dog camp. About 8 minutes after departure, the helicopter impacted snow-covered mountainous terrain about 2 miles northeast of the dog camp.



Photo 4 – View of fuselage

Immediately before departing from the dog camp on the accident flight, the pilot told the dog camp manager that, due to the degrading weather conditions, he would not be coming back for the last scheduled trip of the day, and the dog camp manager told the pilot that he agreed with him. However, the pilot then told the dog camp manager, "but don't give up on me yet," a statement

consistent with self-induced pressure to complete the day's series of flights.

During the impact sequence, the two cargo straps used to secure two wooden dog boxes to the rear cabin floor failed, and the dog boxes shifted forward, striking the back of the pilot's fiberglass seat.

According to the operator, the pilot's total aeronautical experience was about 7,190 hours of which about 5,700 hours were in the accident helicopter make and model. In the 90 and 30 days before the accident, the pilot flew 5 and 3 flight hours, respectively. This was his 25th season with TEMSCO.

The National Transportation Safety Board determines the probable cause(s) of this accident to be:

The pilot's decision to continue visual flight into an area of instrument meteorological conditions, which resulted in the pilot experiencing a loss of visual reference and subsequent controlled flight into terrain. Contributing to the accident were the pilot's self-induced pressure to complete the flight and the operator's failure to maintain operational control over the flight.



Photo 7 – View of cockpit



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

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

Safe hunting,

*Bryan 'McGu' Smith*

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