



*A member of the SGS Group*

**ROTARY WING NEWSLETTER**

Feb 2022 | Volume XXII | Issue II

# SAFETYWIRE



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Really?**

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## Here we go again, “pilot error”, really?

(Source: Dr. Shawn Pruchnicki. Flight Safety Information on behalf of Curt Lewis & Associates, LLC. January 6, 2022 No. 004)

It is with great interest that I read last week several reports regarding an Emirates Boeing 777 flight from Dubai (DXB) to Washington Dulles (IAD) on December 20, 2021 that has been described as “almost crashing”. Naturally as an accident investigator I was drawn to these reports in an effort to understand the preliminary information that was being reported at this early stage. However, as many of you know, this information is notoriously unreliable and any further speculation regarding the cause of the incident is simply ridiculous. Yet, there it was in print, exhortations claiming “pilot error” and calling for their termination. There was even one report saying that all four pilots had already been terminated.

It appears that the crux of the incident is that the pilots of the incident flight failed to set the initial departure altitude of 4,000 ft. MSL in the MCP and instead it was left set at zero feet from the previous crew for their landing in Dubai earlier. On climb out when the autopilot was engaged, the aircraft started to rapidly descend. However, the crew was able to intervene prior to impact. After the incident, it is reported that Emirates sent the following memo to its pilot group



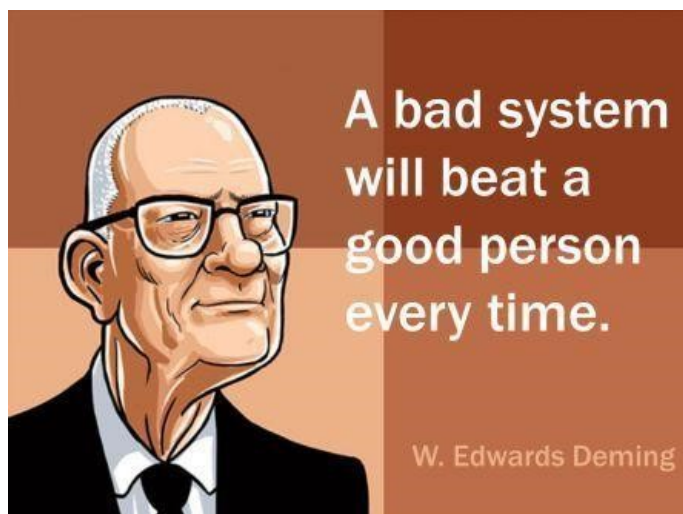
CREWS ARE REMINDED THAT THERE ARE NO FCOM NORMAL PROCEDURE REQUIREMENTS TO CHANGE THE MCP AFTER LANDING OR SHUTDOWN. THERE HAVE BEEN TIMES WHEN THE MCP “ALTITUDE WINDOW” HAS BEEN SET TO THE AIRPORT ELEVATION WHICH MAY CAUSE ISSUES ON THE SUBSEQUENT DEPARTURE. CREWS SHALL NOT SET AIRPORT ELEVATION ON THE MCP AFTER LANDING OR SHUT DOWN.

Well they were right, just as the memo says, setting the MCP to airport elevation can cause issues later for departing crews. That has been clearly demonstrated by this event. For an airline to send a reminding memo like this to its pilot group, this is not the only event of this type that has occurred. There would have been others. But yet, this trap is still occurring. This is another case of our industry slapping on the critical and pointless term “pilot error”. It tells us nothing of why something happened. It tells us nothing about the autoflight system design, the procedures the manufacture has crafted, in addition to those of the operator.

This very well might be another case of a poorly designed procedure for both landing and departing crews. We just do not know at this early phase. However, we have seen this many times in our industry and usually after killing enough people these procedure changes are finally implemented. Sad, but historically true. Why are these types of events still happening resulting in such a memo being sent to a highly trained and skilled pilot group? Apparently this is not the first time at this airline and I would bet that other operators have seen similar events as well. Why are we waiting for an accident to happen before these events are further investigated? Shouldn't we be spending far more resources than we typically do investigating incidents that are so close to being an accident? Why not? They are freebies. We can get 99% of the information gleaned from an accident without suffering a hull loss and loss of life. Take advantage of that! Dig into it, uncover the layers of information, discover the second stories and make meaningful recommendations before there is a loss of life.

Firing the employees in the name of "pilot error" does absolutely nothing to enhance safety in complex socio-technical systems such as aviation. In fact, there is an overwhelming amount of evidence that it does the opposite. It drives safety reporting and event capturing underground. One example of how this would be harmful is in our event reporting systems like ASAP programs. Typically the reports received are around 65% sole-source reports. In other words, had the reporter not come forward and reported the event (confession if you like) your operation would have never known about it. Think about that, never would have known about the safety issue they are telling you about. Why would you want to suppress the flow of that valuable information?

Additionally, determining pilot error to be the "cause" of an event provides a dead-end for making any meaningful recommendations. How can you make any recommendations to prevent further events if "bad apples" were deemed the cause with a "pilot error" diagnosis? Once the bad apples are gone, you should be fine right? Hardly, the system with all of its interactions, imperfections, automation considerations, trade-offs and more remain completely unchanged. If you do not investigate the system as a whole, understanding the human-computer interface and all of the other facets of the system, your luck will eventually run out. Review numerous accidents that have occurred over the years and the signals that were present prior that were not recognized or even ignored because of our oblivious fascination with pointless terms such as "pilot error".







In closing, I would like to remind everyone that our worldwide aviation system is as safe as it is because of the humans, not unsafe because of them. Computers will do whatever you tell them to do, regardless of the context, they are literal and brittle. They are simply not adaptable and are unreliably awful at communicating their intentions and when reaching the limits of their capabilities. A classy bumpy-transfer situation. We are the ones that can recognize

when a situation is only slightly starting to change or mildly becoming suspicious of changes. Computers will push along blind fully and dutifully. We are also the ones that can recognize a rapidly changing situation and develop a new plan within seconds. We are the only system on the flight deck that has ever been able to be adaptive. And WE are the reason that aviation is the safest form of travel – we make it that way everyday all over the world.

## New Service Difficulty Reporting System

(Source: Jennifer Caron, FAA Safety Briefing Magazine)

Phase I of the new Service Difficulty Reporting System (SDR) is complete and launched this past November at [av-info.faa.gov/sdrx](http://av-info.faa.gov/sdrx). SDR is refreshed, updated, personalized, and packed with new features that take the power of this aviation reporting system to an entirely new level.



### Improved Navigation

Now you can find everything you need — right there on the navigation bar. Click the tabs to reach your links quickly and easily.

### New Reporting Tools

In just one click, general aviation users can now create a Malfunction or Defect Report straight from the home screen and search and find all processed reports faster.

## New Quick Reference Panels

Instantly jump to information using the Quick Reference Panels on the left-hand side.

### Welcome to the Service Difficulty Reporting System Site

#### What is SDRS?

- Service Difficulty Program
- Service Difficulty Report
- Malfunction or Defect Report
- Form Completion
- Reportable Occurrences
- Improve Aviation Safety

#### General Aviation Reporting (Voluntary Submissions)

##### Malfunction or Defect reports

You can electronically submit Malfunction or Defect reports.

[Create a Malfunction or Defect Report](#)

##### Search All Processed Reports (Malfunction or Defect and Service Difficulty Reports)

You have the ability to search and review all processed reports.

[Search All Processed Reports](#)

#### Resources

- [AC 20-109A](#)
- [View reference documents](#)
- [Instructions for Single Submission](#)
- [Instructions for Batch Submission](#)
- [Look-up Tables](#)
- [Provide Feedback to AFS-620](#)
- [SDRS Quick Reference Guide](#)

#### Other Links

- [Dynamic Regulatory System \(DRS\)](#)
- [FAA Aircraft Information](#)
- [FAA Forms](#)

## Updated References and Resources

Questions? Click “FAQs” to find answers. Click “What’s New?” for updates. Rules and regulations are on the right side of the screen.

## The Best Is Still To Come!

Now you have a powerful new tool to let the aviation community know when you see something that could potentially cause a safety hazard. If a system component or a part has malfunctioned, report it. If there’s a flaw or an imperfection, report that too. We need your input. Check out the new SDR and take it for a flight.



The data you provide improves safety. The FAA uses your data to identify equipment malfunctions, and your reports also help manufacturers catch issues that could potentially cause a safety hazard.

“These reports provide valuable safety information and may be the first indication of a potential safety problem or a defect,” says Gracie Robino, Business Program Manager in the FAA’s Flight Standards Service. “They help us spot the trends and identify problems early so that we can create airworthiness directives, service bulletins, and alerts to mitigate the safety hazard proactively,” she explains.

The next phase of updates and new features will roll out this spring. New tools will prompt you to fill in the gaps and details to help you build a detailed, comprehensive, and format-friendly document to expedite the processing of your report.

“We’ve received positive feedback from our initial updates,” says Robino, “and we’re excited about this next phase as we continue to revamp the system, making it even more user-friendly and responsive to your needs.”

## 5G and Aviation Safety

(Source: FAA and PRISM Team)

***From the PRISM Team: This information is changing often, in some cases, daily. Please review FAA and industry information regularly.***



The FAA is working on measures to ensure that radio signals from newly activated wireless telecommunications systems can coexist safely with flight operations in the United States, with input from the aviation sector and telecommunications industry.

[Check here for information and updates as this work continues.](#)

### The Safety Issue

Safety is our mission, and it guides all of our decisions. In the United States, 5G services are planned for launch beginning January 19 using frequencies in a radio spectrum called the C-band. These frequencies can be close to those used by radar altimeters, an important piece of safety equipment in aircraft. To make sure that this does not lead to hazardous interference, the FAA requires that radar altimeters are accurate and reliable.



## Disruption Risk to Aviation from 5G

Because the proposed 5G deployment involves a new combination of power levels, frequencies, proximity to flight operations, and other factors, the FAA will need to impose restrictions on flight operations using certain types of radar altimeter equipment close to antennas in 5G networks.

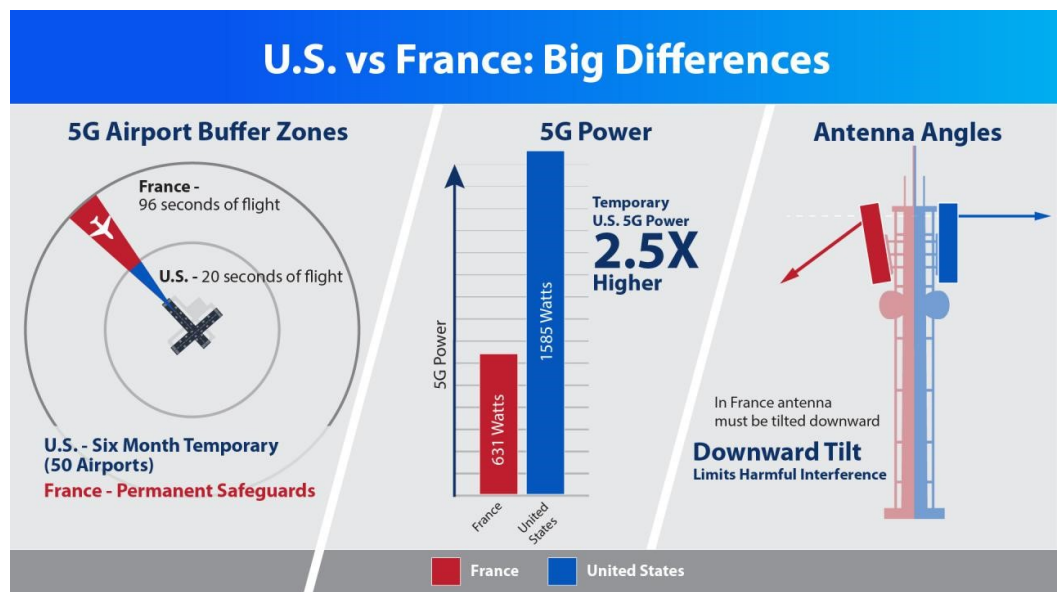
These safety restrictions could affect flight schedules and operations, affecting the aviation system. Before and after the 5G deployment begins, the FAA will continue to work every day to reduce effects of this disruption as we make progress to safely integrate 5G and aviation.

## Airports with 5G buffers

Telecommunications carriers have offered to voluntarily delay 5G deployment by two weeks and to restrict their own antenna operations in areas close to key airports where interference could lead to significant disruptions. The FAA, working with the aviation community and wireless companies, established buffer zones around 50 airports with wireless transmitters in close proximity to the runways. [View list of airports](#)

**The FAA has issued approximately 1500 NOTAMs. Please review them regularly.**


**In addition to disruptions at airports, helicopter and other low level operations could be affected anywhere there is a tower.**





## USHST Monthly Safety Report

The report below includes information for the full year 2021.



# USHST

## United States Helicopter Safety Team

### Monthly Safety Report

### January 2022

The USHST is a regional partner to the International Helicopter Safety Foundation.

**USHST GOAL:** Reduce the 5 year average fatal US helicopter accident rate to **0.55 fatal** accidents per 100K hrs by 2025

**USHST Vision:** A Civil Helicopter Community with Zero **Fatal** Accidents

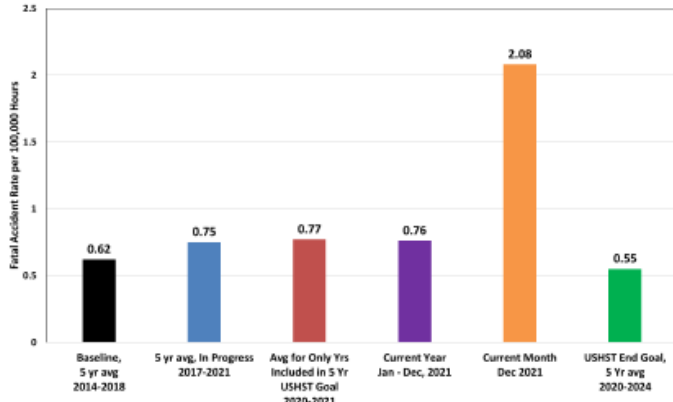
Safety by the Numbers!	Metric	2017 - 2021	2016 - 2020
	Avg <b>Fatal</b> Acc Rate	0.75	0.70
	Avg Accident Rate	3.94	3.85
	Year To Date	Current Year (CY21)	Previous Year (CY20)
	<b>Fatal</b> Accidents	22	19
	Accidents	114	92
	Fatalities	42	35

Highest consecutive days w/o fatal accident:

107 days (2020)

Average days between fatal accident (5yr):

17 days



Fatal Accident Counter

11 : 03 : 42 : 56

Days : Hours : Mins : Secs

Each year the U.S. helicopter industry safely flies approx. 3 million flight hours and **every** second of **every** flight must be handled with professionalism.

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# SAFETY MANAGER'S CORNER

## Safety Intelligence

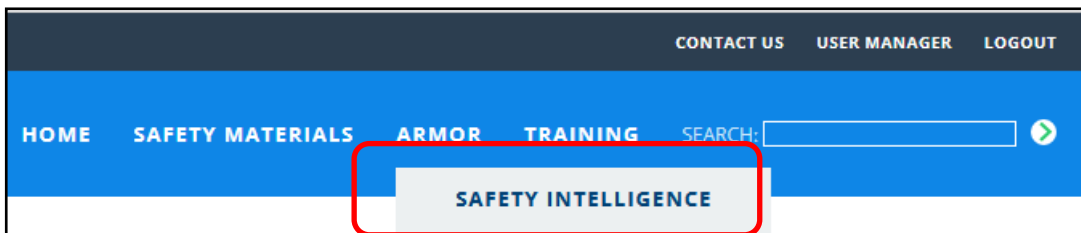
Transform your operation's safety data into actionable insights with PRISM ARMOR Safety Intelligence.

- ◆ Safety Intelligence enables risk management by turning your operation's safety data into proactive and predictive displays that help drive better decisions.
- ◆ Discover common issues and trends through in-depth graphical analysis.
- ◆ Track Safety Performance Indicators with ease.

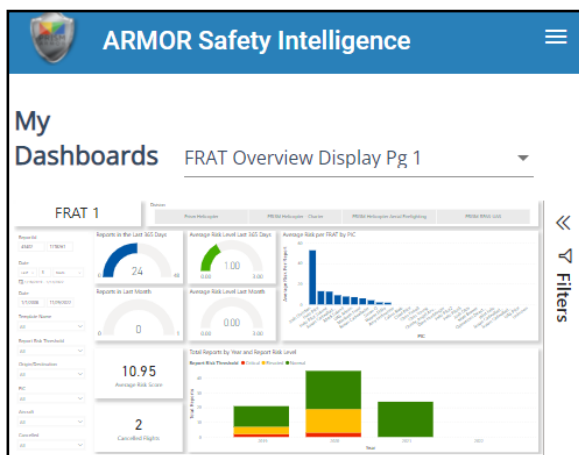
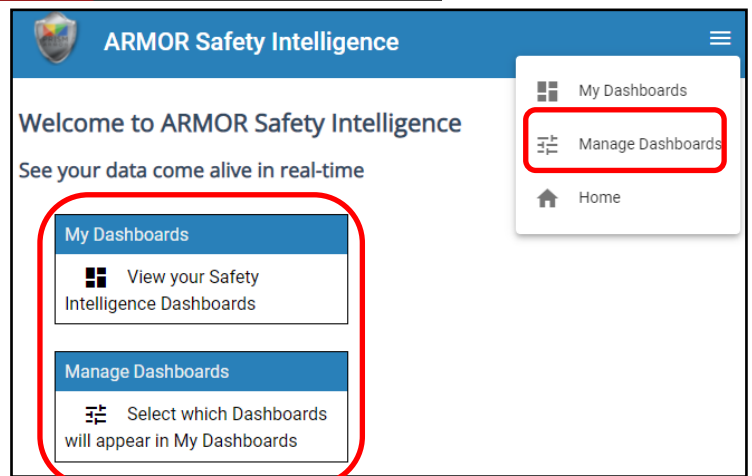
Safety Intelligence makes accessing valuable, real-time safety data, quick-view performance and risk metrics easier than ever before.

### To get started:

⇒ Select Safety Intelligence from the ARMOR Tools.



⇒ Select the dashboards you would like to see by clicking on Manage Dashboards.



⇒ View My Dashboards and navigate between display pages to see the data the ARMOR tools are gathering for your organization.

Utilizing raw safety data and turning it into risk and performance insights raises safety management to higher levels.

## Quote of the Month

**The time is always right to do the right thing**

BY: Dr. Martin Luther King Jr.



We always want to do the right thing but sometimes doing the right thing can be difficult—or just seem to be difficult. This applies to everyone at all levels of an organization, from the accountable executive to the most junior employee. Speak up when you have a concern and treat others who speak up with professionalism and respect. You may not get all the answers right away, but you may break the chain of events leading to an accident.

### On Short Final...



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# PRISM PREFERS

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## UPCOMING COURSES

Mar 29 to Mar 31, 2022—PRISM Course  
**Safety Management System (SMS)**  
Denver, CO

Apr 4 to Apr 8, 2022—PROS Course  
**Aviation Lead Auditor Training (ALAT)**  
Denver, CO

Apr 18 to Apr 22, 2022—PROS Course  
**IOSA Auditor Training**  
Denver, CO

Aug 22 to Aug 26, 2022—PROS Course  
**Aviation Lead Auditor Training (ALAT)**  
Denver, CO

Sept 27 to Sept 29, 2022—PRISM Course  
**Safety Management System (SMS)**  
Denver, CO

Oct 3 to Oct 7, 2022—PROS Course  
**IOSA Auditor Training**  
Denver, CO

Nov 28 to Dec 2, 2022—PROS Course  
**Aviation Lead Auditor Training (ALAT)**  
Denver, CO

Dec 12 to Dec 16, 2022—PROS Course  
**IOSA Auditor Training**  
Denver, CO

Go to [Upcoming Training Classes](#) to register.