Airworthiness Facts

Date FY19 3nd Quarter



Airworthiness Section Arno Boyle.....(816)329-4008 (Avionics) Tom Davis(816)329-4022 (*Maintenance*) Donald Halbert.....(816)329-4017 (FAASTeam) (*Maintenance*) Rusty Knox.....(816)329-4021 (*Maintenance*) (*Maintenance*) David Wood(816)329-4027 (Avionics) Chip Taylor(816)329-4024 (Maintenance)

The Buck Stops with Me

When pressure increases so does temperature. Pressure to produce can be brutal! When you experience it, you hear words like these ("I'm sure you know what to do, just get the job done").

Has anyone ever said things like this to you?

The team player thing is subtle and deadly. It means, during the summer, when we are busy, we hire extra people. When winter comes and there is less to do, we do the best we can to keep everyone, but if you are not a team player, we may not have work for you...Sorry. It is isolating and demoralizing. Words like these are meant to undermine your integrity and conform you to a company culture that is inappropriate. So, yes... sometimes the buck does stop with you.

It leaves you asking, "Where is my back up"? Who will stand with me?

Dr. Bill Johnson, The FAA's Chief Scientist for Maintenance Human Factors, has developed a course designed to foster a positive safety climate. If your company will implement his Safety Champion program, it will increase pressure to do the right thing. We encourage you to take the training and ask your company to implement his program.

His course has three case studies where aspects of rule breaking caused less than optimum outcomes. They cover a large airline, a small airline, and a rotorcraft tour operator.

The first case study is about cowl latches, or more precisely, improperly latching cowl latches on a large aircraft. A passenger took the picture of the fire. Fortunately, the scenario ends with an emergency landing and an evacuation. No injuries, but it still does not look good.

The small airline case study covers the installation of chip detectors without "O" ring seals. The issue caused the crew to shut down three of four engines in flight. Fortunately, the emergency landing ended well.

The rotorcraft case study involved reusing locking nuts. It caused a control rod to disconnect in flight. This resulted in 5 fatalities.

The training includes three video depictions of safety champion skills in action.

Rule Breaking is a symptom, not a cause. Human error, rule breaking is certainly an error, is the result of trouble deeper inside

Airworthiness Facts

Date FY19 3nd Quarter

the system. To do something about rule breaking, we must turn to the system in which people work: the design of equipment, the usefulness of procedures, the existence of goal conflicts and production pressure. This course is designed to reduce the pressure to break rules.

The course explains that in an organizational mishap, in this case rule breaking, there is plenty of blame to spread around. Mechanics, inspectors, managers, the manufacturer, procedure writers, lawyers, and regulators all contribute to our culture. If we all contribute to the culture then we all should work together to make sure it is a positive culture.

This course will provide the tools to champion a commitment to reduce pressure to break rules.

It includes the eleven attributes of a safety champion... ...a safety pledge, an email signature badge, and an email banner. The course includes three, printable; badge sized, before and after task, checklists. The checklists are designed for three categories of teammates, AMT's, Managers, and procedure writers.

The FAASTeam hosts the course on FAASafety.gov. Go to the website, on the home page mouse over the Activities, Courses, Seminars and Webinars tab, select "Courses" from the drop down menu.

Once in the course catalog select "Show AMT Courses".

Scroll the list until you see, "The Buck Stops with Me". Select enroll. Follow the prompts to begin the course.



Federal Aviation Administration

Here are some parting thoughts. Violation + Error = Death/Doom/Disaster It is possible to violate for an entire career without being caught or hurting someone. Violations are generally harmless until they are accompanied by an error.

The question is, "whose error is going to kill you, maim you, or cause a crash? You're own, or your teammate's"? Rule breaking is more dangerous than mistake making. If an accident is caused by violation, it is four times as likely to be fatal as an accident caused by human error. Here are two reasons rule breaking is more dangerous than making a mistake. Rule Breakers actively hide their actions. This makes it difficult for team members to anticipate the person's behavior. It makes for the occasional nasty surprise for the team.

Rule Breakers assume everyone else is following the rules and procedures, so they operate in the safety margin meant to be protecting their team members. Errors are much different than violations. People want their mistakes to be revealed before they cause trouble. They ask for help preventing their error.

If you find these ideas to be interesting, take Dr. Johnson's course. Take the Safety Champion pledge. Talk about the program with your co-workers. Revisit past events that did not end well. Were there aspects of rule breaking causing some of the events? Give procedure writers feedback when procedures do not work. Bottom line; speak up when you see rule breaking.

Airworthiness Facts

Date FY19 3nd Quarter

If you are interested in digging deeper into why people behave the way we do, then Dr. Johnson also has a Human Factors page on faa.gov. It has an excellent set of human factors publications.

Original Author: (Bill Johnson) (01/31/2019); POC (Guy Minor), AFS-920 (A/W Lead), revised by; Donald Halbert, Original, 06/14/2019



<u>New Airworthiness</u> <u>Directives:</u>

This link is for Airworthiness Directives, for all aircraft engines, airframes, and appliances.

http://rgl.faa.gov/Regulatory_and_Guidance_ Library/rgAD.nsf/MainFrame?OpenFrameSet

<u>Special Flight Permits (ferry</u> <u>permit:</u>

Need a Ferry Permit, and the Local Flight Standards Office is closed? You can reach out and request the service from a Designed Airworthiness Representative (DAR). How do you find a DAR? Follow this link:

https://www.faa.gov/about/office_org/field_o ffices/fsdo/mci/local_more/media/dar.pdf

Notice of Proposed Rules Airworthiness Directives:

Notice of Proposed Rule Making is your chance to make a difference. If you go through the process you can make a difference.

This link is for Proposed Rules Airworthiness Directives;

http://rgl.faa.gov/Regulatory_and_Guidan ce_Library/rgADNPRM.nsf/MainFrame? OpenFrameSet

Service Difficulty Program:

When a system, component or part of an aircraft (powerplants, propellers, or appliances) functions badly or fails to operate in the normal or usual manner, it has malfunctioned and should be reported. Also, if a system, component, or part has a flaw or imperfection which impairs function or which may impair future function, it is defective and should be reported. While at first sight it appears this will generate numerous insignificant reports, the Service Difficulty Program is designed to detect trends. Any report can be very constructive in evaluating design or maintenance reliability.

The reports can be filed electronically or by paper. For electronic go to:

http://av-info.faa.gov/sdrx/.

For paper submission the form can be downloaded:

www.faa.gov/documentlibrary/media/form/faa8010-4.pdf

You may have to cut and paste this Link into your browser.

Airworthiness Facts

Date FY19 3nd Quarter



Special Airworthiness Information Bulletins:

A Special Airworthiness Information Bulletin (SAIB) is an information tool that alerts, educates, and makes recommendations to the aviation community. SAIBs contain non-regulatory information and guidance that does not meet the criteria for an Airworthiness Directive (AD).

http://rgl.faa.gov/Regulatory_and_Guidanc e_Library/rgSAIB.nsf/Frameset?OpenPage

ADS-B out, the clock is ticking.

By January 1, 2020, ADS-B Out will be required to fly in most controlled airspace. Federal Regulations <u>14 CFR 91.225</u> and <u>14 CFR 91.227</u> contain the details.

A reminder that 80% of the ADS-B Rebates have been claimed, there is still time to reserve one, but they are going fast.

Has the ADS-B system been tested? The FAA has a web site to get a free report on the operation of an installed system. This information can be found using this link:

https://adsbperformance.faa.gov/PAPRReq uest.aspx

<u>Kansas City Flight Standards</u> <u>Office Information</u>

Have you ever used an FAA Designee? Designees are individuals and organizations in the aviation industry authorized to conduct examinations, perform tests, and issue approvals and certificates on behalf of the FAA. For information on the local Designees,

Designated Airworthiness Representatives (DAR),

Designated Mechanic Examiners (DME), Designated Parachute Rigger Examiners (DPRE) Use this link:

https://www.faa.gov/about/office_org/field_of fices/fsdo/mci/

Next Quarter:

TBD

Airworthiness Facts are published on a quarterly basics and available via email only. If you would like to receive Airworthiness Facts or be removed from the mailing list, contact the Kansas City FSDO FAASTeam Donald Halbert, Donald.D.Halbert@FAA.gov Marvin Moore, Marvin.L.Moore@FAA.gov

age 4