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THE NEW "COMPLIANCE PHILOSOPHY" AND ITS RELATIONSHIP TO SAFETY MANAGEMENT

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An Enlightened FAA Approach to Regulatory Compliance

I have about 50 years of aviation experience, including a decade at the FAA. Throughout that time, I could not have predicted the FAA's current approach to safety. As a longtime safety professional, I am proud to highlight that we are experiencing a regulatory organization doing "the new right thing." This new objective strives to ensure that regulatory compliance and safety are mutually inclusive.

Was FAA Really Watching Me?

For the first decade or two of my aviation career, I saw the Federal Aviation Administration as the aviation

police. They tested me and issued my flight and maintenance certificates. The FAA would conduct ramp checks or reviews of the approved 141 or 147 curricula (of which I was a student and later an instructor). Quite frankly, I did not see the FAA inspector as a partner who could help me to ensure safety. In fact, as a pilot/mechanic/Part 147 instructor, I never really saw the FAA, but I felt they were "watching." Indeed, they were watching. Through rules and guidance material they oversaw all of my actions.

The aviation rules and guidance helped to ensure that my training met a safety standard. They were

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intended to guide me to maintain a level of currency/proficiency as I flew/maintained aircraft. Most of the time, it was straightforward to comply with the rules. The implication has always seemed to be that if I was legal, then I was safe.

However, I came to understand that minimum compliance with the rules was not a guarantee of the highest level of safety. The difference between a certificate holder and a good certificate holder is the ability to find ways to go beyond the rules to achieve continuing safety and operational efficiency. That's what Safety Management Systems (SMS) are about. This has been the first step in a transition from being the “watcher” to becoming a partner

with organizations in transforming the nature of compliance and safety.

Throughout my career, it became clear that unintentional non-compliance with a regulation, while undesirable, did not necessarily breach acceptable levels of safety. Regardless, in recent history if such non-compliance was discovered, it would result in a Letter of Investigation with possible regulatory action. Plainly, FAA could “bust” you. Fortunately, FAA discovery of non-compliance never happened to me. But, any honest certificate holder would admit that they probably forgot to adhere to a regulation at some time in their history. The good news is, the new

FAA approach does not include “busting” someone as the first course of action. This new approach is called the “Compliance Philosophy.” It represents an important second step for FAA in transforming the nature of compliance and safety.

FAA Compliance Philosophy and Safety Management Systems

The current FAA “Compliance Philosophy (see Order 8000.373, June, ‘15) is straightforward. An excerpt from that order states:

“... When deviations from regulatory standards do occur, the FAA’s goal is to use the most effective means to return an individual or entity....to full compliance and to prevent

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Figure 1. Handshake showing the relationship between FAA Compliance Philosophy and Industry Safety Management Systems.

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recurrence.

....FAA recognizes that some deviations arise from factors such as flawed procedures, simple mistakes, lack of understanding, or diminished skills. The agency believes that deviations of this nature can most effectively be corrected by root cause analysis and training, education or other appropriate improvements to procedures....."

When Administrator Huerta briefed this concept to the FAA workforce in July 2015, he was very serious about the concept, stressing that the traditional enforcement action must not be the first choice to insure regulatory compliance. He stipulated that we are not ceasing enforcement action, but rather attempting to apply it to the extreme cases of noncompliance.

At the ground level, the guidance material for your FAA Aviation Safety Inspectors is located in Order 8900.323. Refer to it and see how your Aviation Safety Inspector is approaching the new Compliance Philosophy. It also stipulates how serious FAA management is about supporting the inspectors who embrace this new approach to compliance. Sample guidance states:

"....the Aircraft Flight Standards approach to oversight and compliance is evolving to stress an engaged, solution-oriented, outcomes-based approach. The goal is to identify deviations from standards and correct them as effectively, quickly, and efficiently as possible....This approach will more effectively address inadvertent deviations and conserve FAA enforcement for intentional, reckless, criminal, and uncooperative behavior..... Accordingly, AFS leaders, managers, and supervisors will support inspectors when they use critical thinking to exercise sound professional judgment and take actions in accordance with this notice."

This new FAA attitude will take some time to evolve. The good news is this is an approach that certificate holders and inspectors have clamored for, as evidenced by the hundreds of comments reflecting as much throughout our 25 years of conducting human factors courses. The next important step lies with Certificate holders and inspectors to search for new and improved methods for open communication and joint efforts to identify and manage risk.

Necessary Process for Compliance Philosophy to Succeed

The FAA acknowledges that the complexity of today's aviation environment requires that safety improvements move beyond simple compliance through prescriptive rules. Certificate holders have been instrumental in identifying multiple avenues to compliance that suits their unique organizational needs. In this same way, all segments of the industry must move forward with effective ways to identify hazards and manage their respective risk. FAA Inspectors will use this new approach to evolve current enforcement action beyond strict adherence to rules. Forming a partnership, inspectors will work

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with certificate holders to see how their processes and practices are quantifying safety performance, further understanding how best to improve safety. It will take time, but it will happen.

Industry and FAA must become a non-competitive engagement, where success and failure is shared by the industry and the government. Again, the industry, including every certificate holder, must apply a process to identify and then address personal or organizational hazards. Voluntary reporting of safety hazards, or even minor violations, must become a norm. In order for that to happen, FAA will continue to respect voluntary reports and not use them against reporters. The current FAA Aviation Safety Reporting System is the very best example of the industry and government partnership of identifying hazards, reducing risk, and sharing the lessons learned.

What can you do to Capitalize on the New Compliance Philosophy?

The answer to how to capitalize on the new philosophy depends on your role and segment in the industry. The International Civil Aviation Authority (ICAO) recommends that civil authorities

and those whom they regulate have a safety management system. Authorities must comply with ICAO or have evidence for why they cannot. You can learn about FAA SMS Regulations and Guidelines at (www.faa.gov/about/initiatives/sms/). If you are in an Airline Organization (Part 121) or an MRO (145) doing work for the airlines, then you are probably high on the learning curve. You know about risk assessment, root cause analysis, and receive regular updates and training from your companies. Other operators and individuals are voluntarily adopting safety management system practices not only to prepare for evolving regulations, but also to ensure continuing safety and increasing operational efficiency.

When you are able to “walk the walk” surrounding safety management you can expect many things, but here are two. First, it diminishes the chance that you will have non-compliance issues with your FAA inspector. Second, should a non-compliance issue arise, your documented approach to personal and organizational safety management will make you the ideal candidate for proper execution of the Compliance

Philosophy.

Finally, I cannot talk about this Compliance Philosophy and SMS without mentioning “Safety Culture.” I believe that the FAA has a very good Safety Culture. It is clearly a corporate value that is expressed at the top and practiced throughout the organization. FAA employees can even tell you their role and activity that supports continuing safety. The Compliance Philosophy is only the latest example of how the FAA is trying to reinforce and formalize the safety culture that permeates our industry.

Comments – Send comments to Dr. Bill Johnson at Bill-dr.johnson@faa.gov



WE CAN'T MAINTAIN PLANES WITHOUT PEOPLE, AND PEOPLE MAKE MISTAKES, RIGHT?

MR. D SMITH

Dr. Johnson's article highlights how the FAA's relationship with aviation maintenance organizations is changing. Our guest contributor showcases one example of how the FAA is actively pursuing this change.

Mr. D Smith is a US Federal Senior Air Safety Investigator, Senior Instructor, and TSI Aviation Division Training Manager.



There's a lot of buzz and attention these days in the aviation community given to Safety Management Systems or SMS as it has become known, and for good reason. I've heard some say that SMS is the future. Folks, that's not true. SMS is the present, it's here. Aviation SMS is an international industry standard. Forget about the regulatory requirements. If your organization provides aviation services, including aviation maintenance, you must have a verifiable SMS. Without it, you simply will not keep pace with competitors or meet customer demands.

Having a verifiable SMS includes documenting SMS activities. Safety Policies, Safety Risk Management, Safety Assurance, and Safety Promotions make up the "Big Four" SMS components or activities. These days most organizations can fluently recite the "Big Four".

My interaction with industry indicates that knowledge and understanding of the many SMS sub elements to be much less prevalent. That needs to change. Future success for your organization requires the ability to move beyond the basic knowledge of the "Big Four." It requires that you focus effort on and document activity related to multiple SMS sub elements.

One very important sub element is human factors training for aviation maintenance personnel. Thanks in part to the advent of SMS we now have increased emphasis and greater opportunity to focus on the human factors aspects of aviation maintenance and related activities.

We can't maintain planes without people. And people make mistakes, right? The really cool thing is that we've learned there's much we can do to prevent and mitigate human error. Quality training is how we share that knowledge. Human factors awareness training is a critical aspect of human error prevention in aviation maintenance. It's also an SMS sub element worthy of our resources, effort, and documentation.

That's why here at the Transportation Safety Institute (TSI) we implemented a new training course for The Federal Aviation Administration (FAA) maintenance inspectors. We believe it vital that FAA inspectors have a deeper understanding of human factors, the threats they pose to aviation safety, and knowledge of the most current and emerging error prevention methodologies. Equipped with new information, FAA inspectors have the ability to share this knowledge with aviation service providers fostering a cooperative and collective effort to reduce risk in aviation operations.

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WE CAN'T MAINTAIN PLANES WITHOUT PEOPLE, AND PEOPLE MAKE MISTAKES, RIGHT? (CONT.)

Effective and meaningful training requires the very best, that's why we called in the A-Team. The TSI instructor team includes world class experts like Dr. Bill Johnson - FAA Chief Scientist for Aviation Maintenance Human Factors, Mr. Jeff Grenier - Southwest Airline Human Factors Analysis and Classification System expert, Dr. Michelle Bryant - FAA Civil Aerospace Medical Institute Human Factors Research Psychologist, and Mr. Pat Duggins - retired airline human factors training expert.

While it's true that people make mistakes, it's equally true that people are the heroes that make your operation successful. I urge you to place emphasis and organizational effort on providing meaningful human factors training to your most valuable asset, your employees.

Join the maintenance human factors training movement today. Contact me for help or more information about how your organization can participate.

Mr. D Smith, d.smith@dot.gov

Learn more about TSI at: www.tsi.dot.gov



Here at CAMI, we are working to help organizations implement voluntary Fatigue Risk Management Systems (FRMS) alongside their current Safety Management Systems (SMS). We're looking for organizations who haven't yet done this, but are interested in learning more about how to implement FRMS. We will work with you to collect, analyze, and understand how fatigue may be influencing your daily operations. These FRMS make it possible to target specific issues and mitigate their effects, while enhancing the safety of your organization. If you are interested in learning more, please contact Dr. Michelle Bryant at michelle.bryant@faa.gov. Additionally, FRMS resources can be found at MxFatigue.com. There you will have access to the Fatigue Risk Assessment Tool, a computer-based Fatigue Countermeasures Training, "Grounded", the Fatigue Awareness video, and much more.

www.humanfactorsinfo.com

The FAA maintenance human factors site was launched in the late nineties. For over 10 years, it has served not only as a way for human factors professionals to share what we know and have learned, but also as a valuable resource for the maintenance community on the whole. As we continue to research topics related to human factors maintenance safety, we update and improve the resources available. Feedback on the usefulness of these resources continues to be overwhelmingly positive. You can find a great deal of ready-to-use information by visiting today. As always, comments and suggestions on improving these resources are welcomed too. Please reach out to us by emailing the editorial staff with your questions or comments. We strive to continue to provide the best and most useful resources in the aviation maintenance community. Don't forget to share with your colleagues!



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