

**Docket No. SA-540**

**Exhibit No. 6-B**

**NATIONAL TRANSPORTATION SAFETY BOARD**

**Washington, D.C.**

FAA Safety Briefing Excerpts

(12 Pages)

# FAA Safety

## BRIEFING

January/February 2016

*Your source for general aviation news and information*

## Compliance Philosophy:

### *The FAA's* **Evolving Approach to Aviation Safety**

Another First in Our  
Safety Evolution, p. 8

How do You  
do Safety?, p. 10

In Data We  
Trust, p. 18



Federal Aviation  
Administration

[faa.gov/news/safety\\_briefing](http://faa.gov/news/safety_briefing)

@FAASafetyBrief



23

The January/February 2016 issue of *FAA Safety Briefing* focuses on the FAA's new Compliance Philosophy and what its foundational concepts mean to the general aviation community. Articles in this issue discuss how the agency and aviation community can identify a problem in the NAS, use the most effective tools to correct that problem, and monitor to be sure it stays fixed into the future.



10



14



18

## Features

- 8 Another First in Our Safety Evolution** A Message on FAA's New Compliance Philosophy  
by Michael Huerta
- 10 How do You do Safety?** Developing Sound Risk-Based Decision Making Practices in Aviation  
by Sabrina Woods
- 14 Keeping Up With Today's Tech** ...Without Breaking Any Rules  
by Jennifer Kileo
- 18 In Data We Trust** Does Flight Data Monitoring Hold the Key to Improving GA Safety?  
by Tom Hoffmann
- 23 Compliance Philosophy within General Aviation** FAA's Evolving Culture on Aviation Safety  
by Jeffrey Smith

## Departments

- 1 Jumpseat** – an executive policy perspective
- 2 ATIS** – GA news and current events
- 5 Aeromedical Advisory** – a checkup on all things aeromedical
- 7 Ask Medical Certification** – Q&A on medical certification issues
- 22 Checklist** – FAA resources and safety reminders
- 27 Nuts, Bolts, and Electrons** – GA maintenance issues
- 29 Angle of Attack** – GA safety strategies
- 30 Vertically Speaking** – safety issues for rotorcraft pilots
- 31 Flight Forum** – letters from the Safety Briefing mailbag
- 32 Postflight** – an editor's perspective
- Inside back cover FAA Faces** – FAA employee profile

## Getting a Fix on Safety

You might have heard that FAA Administrator Michael Huerta recently gave a speech introducing the FAA's "Compliance Philosophy Order." You can read key parts of the speech elsewhere in this issue of *FAA Safety Briefing*, so let me share here the summary I'm giving to Flight Standards Service employees.

Compliance is expected and required of everyone who operates in the National Airspace System, or NAS. Compliance means following the rules, but it also means going beyond the rules by taking proactive measures to find problems and fix them to manage or mitigate the risk they create in the system.

### Foundational Concepts

The Compliance Philosophy Order is based on two core premises.

The first assumption is that most people want to operate in compliance with the rules. We know that pilots don't walk out to the airplane trying to think of ways to break the rules; they intend to comply and they make efforts to do just that. We are all human, though, and mistakes happen to the best of us. In most cases, failure to comply with the rules happens as the result of things like lack of training, lack of knowledge, diminished skills, or procedures that are not working as they should.

It's not okay to do nothing when these errors occur, because they can have serious safety consequence in our highly complex airspace. But the correct response to inadvertent errors is not blame, which looks backward and focuses on punishment for what's already happened. Rather, we seek accountability, which takes responsibility and looks forward. Accountability is about finding the problem, using the most effective tools to fix it, and monitoring to be sure it stays fixed into the future.

The second assumption is that the greatest safety risk in the NAS does not arise from a specific event or its outcome. Instead, we have to evaluate risk based on the operator's willingness and ability to comply with safety standards. The greatest risk comes from an operator who is unwilling or unable to comply with rules and best practices for safety.

Let me talk a little about what those terms mean. A pilot who is *unwilling* is someone who knowingly violates regulations, or one who takes inappropriate risks. We also use the term "unwilling" to describe a pilot who does not cooperate or collaborate in the

effort to find the problem and fix it in a sustainable way. A pilot who is *unable* is one who fundamentally lacks the skills or qualifications needed to comply with the rules. That's different from someone who has the skills or qualifications, but makes an error for some of the reasons I listed earlier.

### WIIFM

So what does that mean for you? Given these foundational concepts, Compliance Philosophy means that in the case of pilots who are willing and able to comply, and who are cooperative in taking the steps necessary to get back to compliance, the best way to meet our safety goal is to use tools like training, education, or better procedures.

The enforcement tool is for cases involving someone who is unwilling or unable to comply as described above. Enforcement is a means to rehabilitate and bring those individuals or operators back into compliance — back into the category of those who are both willing and able to meet standards. If a pilot continues to be unwilling or unable, though, we use stronger enforcement to move that person out of the NAS. I think you'd agree that you don't want to be sharing the skies with someone who is either not willing or not capable of operating according to the rules and procedures intended to keep everyone safe.

You may wonder how Compliance Philosophy is different. In many ways, it's not; It simply clarifies and reinforces the discretion that the FAA already has to use the most appropriate action to resolve safety issues in the NAS. But that clarification is important, because it firmly puts the focus where it should be: to achieve rapid compliance, to eliminate the safety risk, and to ensure positive and permanent changes.

The Compliance Philosophy approach does require new mindsets and new behaviors in both the FAA and the community. These include the expectation and appreciation for self-disclosure of errors, and recognition that compliance means operating according to both the letter and the spirit of the law. It will take effort from all of us, and it won't be perfect. But the kind of change we are promoting is essential to achieving our safety mission, and the results will more than justify the effort.

# Another First *in Our* Safety Evolution

*Editor's Note: The text below is an abbreviated version of FAA Administrator's "Another First in Our Safety Evolution" speech to the Flight Safety Foundation Media Breakfast on October 6, 2015. For the full text, please see: <http://1.usa.gov/1PjtCCr>*

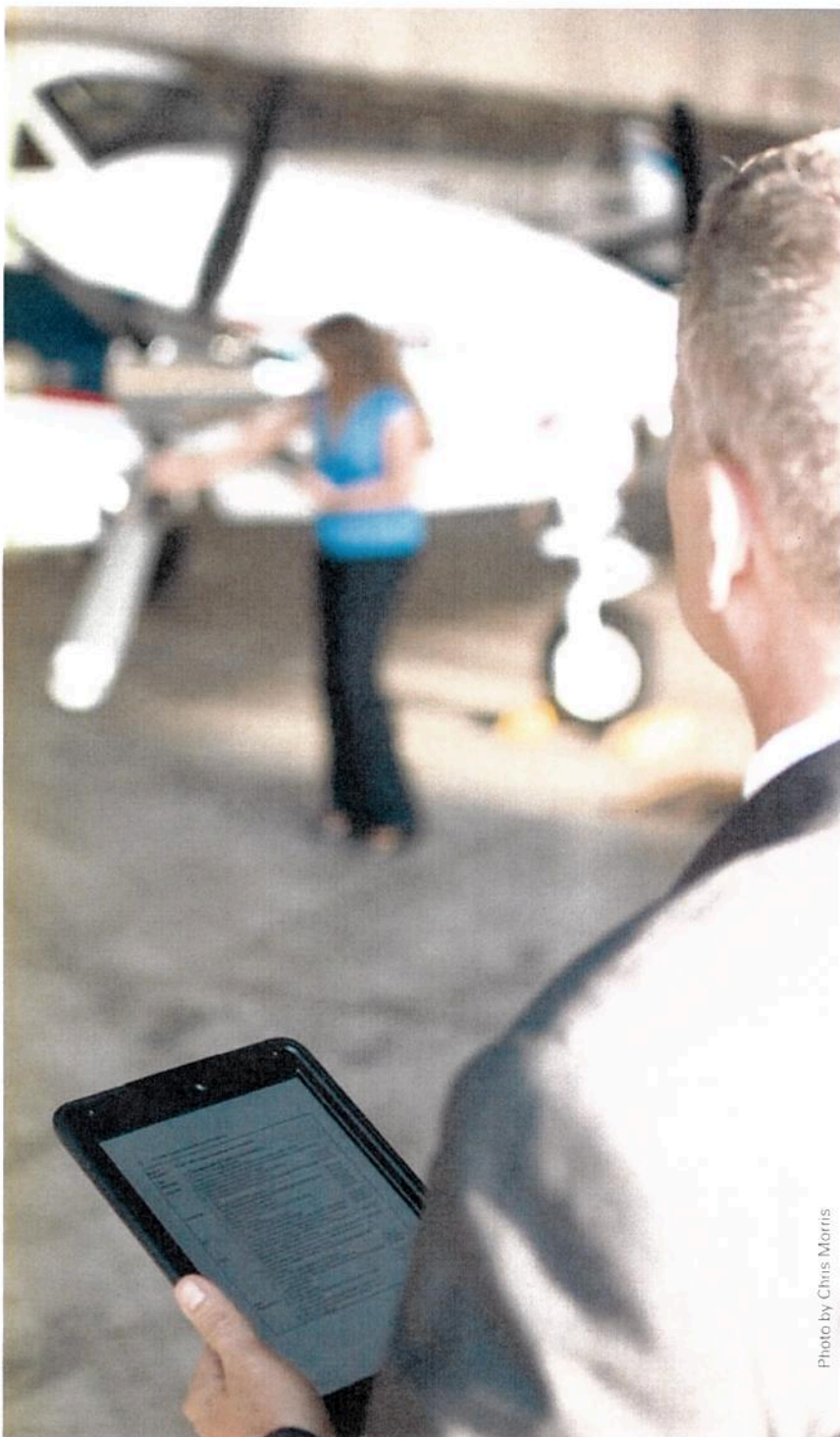


Photo by Chris Morris

Improving safety is an endless series of “firsts,” because improving safety is an endless evolution. Today, because the FAA and our aviation partners have embraced this evolutionary approach, airline passengers in the U.S. take safety for granted. Our aviation system has achieved a level of safety that really has no historical precedent in any mode of transportation — and there is an assumption that we will continue to set the gold standard when it comes to safety.

A key element in our approach is to constantly strive to be better. That means we have to question whether we can do things differently, to work smarter, or to work more efficiently.

We know that we need to constantly and continually evolve to meet the safety challenges of tomorrow. And we recognize that the aviation environment has reached a level of complexity where we can't achieve further safety improvements by following a purely rule-based approach.

So the FAA and industry began implementing Safety Management Systems, which are designed to identify hazards, assess the risks from those hazards, and put measures in place to mitigate those risks. This is the core of what we call our Risk-Based Decision Making Initiative.

Now we're taking our Risk-Based Decision Making initiative to the next level through what we are calling the Compliance Philosophy.

## **Compliance Philosophy**

The Compliance Philosophy is the latest step in the evolution of how we work with those we regulate. It focuses on the most fundamental goal: find problems in the National Airspace System before they result in an incident or accident, use the most appropriate tools to fix those problems, and monitor the situation to ensure that they stay fixed.

The Compliance Philosophy recognizes that what we all want is for everyone to comply with aviation's high safety standards. It recognizes that most operators voluntarily comply with both the rules and the core principles of a Safety Management System. It also recognizes that in today's complex aviation environment, even the best operators make

honest mistakes. But even unintentional errors can have a serious adverse impact on aviation safety, so we have to fix the problem.

So, in cases where a deviation results from factors such as flawed procedures, simple mistakes, lack of understanding, or diminished skills, we use tools like training or documented improvements to procedures to ensure compliance.

That doesn't mean we're going to go easy on compliance, or that we're ignoring minor issues, or making anyone feel like they have a free pass. We still have zero tolerance for intentional reckless behavior or inappropriate risk taking. Enforcement is, and always will be, one of the tools that we will use to ensure compliance. We use the enforcement tool in the case of willful or flagrant violations, or for refusal to cooperate in corrective action.

The success of our Risk-Based Decision Making initiative, which includes Safety Management Systems and now the Compliance Philosophy, requires both the FAA and the aviation community to evolve in how we do business and how we interact with one another.

To find and fix safety problems, there has to be an open and transparent exchange of information and data between the FAA and industry. We don't want operators who might inadvertently make a mistake to hide it because they have a fear of being punished. If there is a failing, whether human or mechanical, we need to know about it, to learn from it, and make the changes necessary to prevent it from happening again. Again, it's about finding the problem, fixing the problem, and making sure it stays fixed.

## A New Mindset

That open and transparent exchange of information requires mutual cooperation and trust, which can be challenging to achieve in the traditional, enforcement-focused regulatory model.

So what specifically are we doing on the FAA side?

- We have started training for all FAA employees on the new Compliance Philosophy, with detailed "how-do-I-implement-it" training for each Line of Business.
- We are using data, not calendar dates, to determine when and where to conduct surveillance and inspections.
- We are emphasizing that we expect our employees to use critical thinking, which is essential to successful implementation of the Compliance Philosophy. We want inspectors


to use their judgment, experience, expertise and qualifications to identify risk, to work with the individual or operator, and to identify the most appropriate tools needed to permanently fix the problems.

On the industry side, success requires understanding that compliance means going above and beyond. The FAA expects certificate holders to develop and implement risk controls that are appropriate to their operational environment. That means thinking about outcomes and performance, identifying hazards, and mitigating associated risks, and implementing practices and procedures that encourage reporting.

To get useful reporting, both regulators and operators have to understand the difference between accountability — which accepts responsibility and looks forward — and blame, which focuses on punishment for what's already happened. With accountability, the idea is to look at the operator's compliance attitude.

And that's where the Compliance Philosophy is a critical part of the risk-based decision-making approach. The Compliance Philosophy recognizes that the greatest systemic safety risk arises not from a specific operational event or its outcome, but rather from the operator's willingness and ability to comply with safety standards and to operate in accordance with the core principles of a Safety Management System.

So, we use tools like training or documented improvements to procedures to ensure compliance in cases where a deviation results from factors such as flawed procedures, simple mistakes, lack of understanding, or diminished skills. And we use the enforcement tool in the case of willful or flagrant violations, or for refusal to cooperate in corrective action.

In our continuing work to maintain the U.S. system as the gold standard for aviation safety, we start with the fundamental idea that compliance is the foremost factor in safety. In all cases, the goal is to achieve rapid return to compliance, to mitigate the risk, and to ensure positive and permanent changes that benefit the aviation industry. That's what Compliance Philosophy is all about. 

## Learn More

**FAA Compliance Philosophy Order**

<http://1.usa.gov/1NYfePK>

# How do **You** do Safety?

## Developing Sound Risk-Based Decision Making Practices in Aviation

SABRINA WOODS

*“The world as we have created it is a process of our thinking. It cannot be changed without changing our thinking.”*

— Albert Einstein

Change is coming.

While the FAA’s mission will always be to provide the safest and most efficient aerospace system in the world, our way of going about that has changed a bit. Having the greatest aviation system has been a result of learning from the school of hard knocks. In the past, when an aviation accident would occur, the

aviation community — consisting of the airlines, the manufacturers and the government, — would work tirelessly to determine the cause and put measures in place to help ensure it would never happen again. We have gotten pretty darned close too, at least in the air carrier world. But now we have invested in a new way of doing business, and in order for it to be successful, everyone has to be on board. From AOPA, Aeronca, and American Airlines, to GAMA, Garmin, and Grand Rapids Technologies — we all have a duty to help safeguard the national airspace system. This includes you, too, dear aviator.

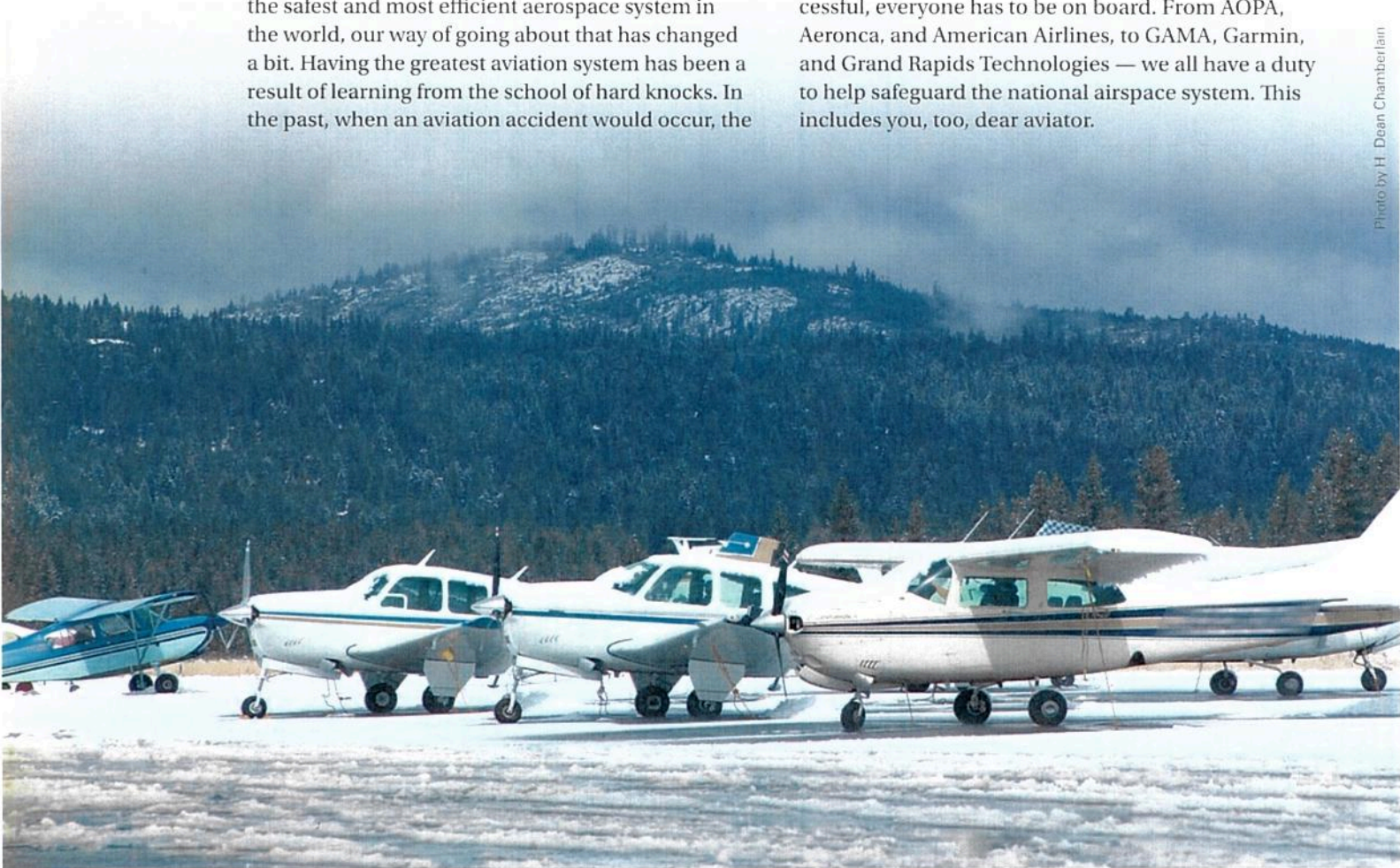


Photo by H. Dean Chamberlain

## Compliance Philosophy

As you will read elsewhere in this edition, FAA Administrator Michael Huerta has laid the foundation for a new compliance-based way of doing business. While the old methods have served us well, it is now time to move to more forward-thinking initiatives. We want to be proactive, rather than reactive when it comes to aviation safety. This all starts with something we call “Risk-Based Decision Making,” or RBDM. Compliance philosophy focuses on following the rules, but our ultimate goal is to find problems and fix them *before* the metal gets dented. We achieve this by applying RBDM. It is a key component of risk management and is the hallmark of a good safety management system (SMS).

While it is always prudent to learn from the past, we can only measure success when we push the conversation forward and challenge what we think we know. When applying RBDM, we must take into consideration every factor available in order to identify and control the potential for hazard. Information can come from all sorts of valuable sources: industry crosstalk, pilot information sharing venues such as the aviation safety reporting system (ASRS), manufacturing defects reports, and from an introspective (and critical) look at our own processes. With each new piece of information, we determine how it fits into the big picture, and how it might affect something else in the system. This way we can hash out solutions — hopefully far in advance of an incident ever occurring.

Even better is that we constantly share this information back and forth with our aviation industry and government counterparts, and even with other countries, and it is our hope that they do the same. The more we all talk, the stronger we become. Just think about how far commercial air travel has come in just the last decade. By applying some basic principles of safety risk management, we’ve decreased fatal accidents in commercial aviation by over 80 percent. Now we are going to do the same for GA.

## How do YOU do Safety?

As I mentioned before, in order for compliance philosophy to work, we all need to be a part of it. So now it is your turn; How do *you* do safety? A personal safety risk management process that includes RBDM isn’t much different than what a large organization would follow.

Still unsure about it? You might not realize it, but you are likely engaging in risk management every single day. It happens when you change lanes while driving, and you take the time to look and see how

close the other cars are around you. It occurs when you judiciously lather on sunscreen and select a wide brim hat and UV protected lenses prior to a day out at the beach to avoid getting burned. It also happens when you opt for the 7 p.m. movie instead of the 10 p.m. because you know you have to be up at 5 a.m. for an early meeting and you want to be alert. For almost every decision, there is a chance for an unwanted outcome, so all RBDM does is consider what those outcomes might be ahead of time so you can do things to prevent the bad ones from happening.

For the GA pilot this might mean gathering weather briefings, engaging in “hangar flying” conversations with fellow aviators, listening to traffic information, and taking time to really scrutinize the route. It could mean investing in the latest technologies to assist in increasing situational awareness, taking a refresher lesson with a CFI to brush up on instrument approaches, and reviewing the *Pilot’s Handbook of Aeronautical Knowledge* for safety tips. RBDM differs from aeronautical decision making slightly in that it is entirely proactive, whereas ADM can be “in the thick.”

For those who like a more structured approach to things, the following is a good way to apply RBDM. It is not unlike the PAVE checklist that wants you to consider the Pilot in command, the Aircraft, environmental factors, and External pressures when stepping to fly:

First, every decision starts with a question, so determine what you have to decide. For example, what if you are scheduled to fly in a few days but there is a chance the weather might turn poor with high winds and low visibility? The question then would be; *Do I still go fly?*

Second, figure out who else is affected by your decision. Do you have passengers you could be putting at risk? Is there a seasoned pilot flying with you who can act as PIC if needed? Is there an aircraft owner who might not appreciate his aircraft returning with a few unwanted dings in it?

Next, identify the external factors that affect the decision. This can often be the most time-consuming part of running the RBDM process. There can be so many factors! This is where the PAVE checklist and good RBDM parallel one another. Your experience, proficiency, health, aircraft equipment, and motivation can really sway a decision in one direction or another. Understanding your motivation for wanting to fly will help you determine whether or not you are aiming to go out and punch holes in the sky or if



you have somewhere you really want to be, like your son's high school graduation. The latter is the kind of external pressure that sneaks up on us if we aren't aware of it. Although the risk doesn't change, sometimes we find ourselves making a poor decision if we believe the price is worth it.

After considering the external factors, determine how likely you are to actually encounter the risk you are trying to mitigate. In this scenario, it is that bad weather. Can you flightplan your way out of danger or is it more likely that weather is going to be a factor, regardless? Lastly, if you decide to proceed with your flight, how severe might the effects of the risk be? What will your options be for remaining safe at that point?

Running through these mental exercises can be an eye-opening experience. Practicing risk-based decision making forces you to stop and consider all of the variables you just might not otherwise. When we make decisions that lead to mishap, the mistake is rarely in our intention. Usually, we just don't have enough information, or we misinterpret what we do know, and that is what causes the mishap. On that note though, if you should get in over your head and commit an error, the Aviation Safety Reporting System (ASRS) is a great way to improve aviation safety by reporting your experiences so that others


might be able to learn from them. Reports sent to ASRS (<http://asrs.arc.nasa.gov>) are on a volunteer basis and are anonymous — so there is no jeopardy in reporting.

### Keep 'er Going

Another thing you can do is keep the safety conversation going. Publications such as this one, *Flying*, *Aviation Safety*, AOPA's *AOPA Pilot* and *AOPA Flight Training*, and EAA's *Sport Aviation*, keep you abreast of all the latest news and issues concerning general aviation. You can get information on the most recent policy changes by attending safety seminars such as those hosted by the FAA Safety Team (FAAST) and the ones held at local and national air shows. Type club meetings and FBO "coffee machine chats" do wonders for building camaraderie, encouraging crosstalk, and can offer great insight on your specific region or aircraft. Know a fellow pilot (or two) who just isn't as involved? Offer them this edition of *FAA Safety Briefing* and start a discussion of your own.

### The Last Word ...

An aviator friend of mine told me about a flight he intended to make in southern Florida. His route would take him directly over the Everglades and at the time, his intention was to leave early in the morning, right before dawn. While prepping for his flight he noted just how dark it was. He then remembered an article I wrote in the September/October 2015 of *FAA Safety Briefing* about spatial disorientation and the factors that can create the "black hole" effect. My buddy is a highly experienced, night and IFR qualified aviator and yet the situation gave him pause. He decided to delay an hour and wait until the sun was dawning before launching out on his trip. In the end he had a lovely, uneventful flight. This is *exactly* the kind of pause and introspection that we need, and serves as a great example of stellar risk-based decision making.

Part of maintaining a healthy aviation culture is staying engaged. While a "program" has a definitive start and ending date, a *culture* is a philosophy that must be embraced and infused into every aspect of the activity. Safety doesn't happen in a vacuum. It needs to be actively pursued and we all need to take responsibility for it. So I ask you again; How do *you* do safety? 

---

*Sabrina Woods is an associate editor for FAA Safety Briefing. She spent 12 years as an aircraft maintenance officer and an aviation mishap investigator in the Air Force.*

Photo by H. Dean Chamberlain





JEFFREY SMITH

## Compliance Philosophy within General Aviation

### *FAA's Evolving Culture on Aviation Safety*

They may be referenced formally as Title 14 of the Code of Federal Regulations, referred to colloquially as the Federal Aviation Regulations or FARs, or simply noted as “the rules.” Whatever you call them, regulations are intended to be risk controls and thus a critical safety component of the National Airspace System (NAS). Therefore adherence to the regulations, and the FAA’s obligation to enforce them, are important to all general aviation (GA) participants. The following is a little bit about what the expectations are under the FAA’s new Compliance Philosophy policies and what we all can do to promote the safest aviation system possible.

First, some “big picture” background. The Compliance Philosophy plays a significant role in the FAA’s strategic initiatives. As you will find on the FAA Plans & Reports webpage (<https://www.faa.gov/>

about/plans\_reports/) these initiatives are designed to “lay the foundation for the aerospace system of the future.” In this edition of *FAA Safety Briefing*, we have introduced different aspects of Compliance Philosophy so that you might better understand our role, and your role in it.

Why the need for the change? Most of us would likely agree that GA operations are reasonably safe, however, improvements can always be made. Technological advances in airspace, aircraft, training, etc., are continuing at an increasing pace. While the regulations provide a minimum foundation for safe operations, they simply cannot keep pace with changes happening in aviation. If we do not change our perspective on how we comply with the regulations, the ability of GA to maintain and improve upon the existing safety record will not be possible.

As Sabrina Woods penned in her “How do You do Safety?” article, our previous system was largely focused on finding a problem through an accident, incident, or other occurrence and then fixing that problem before continuing on. Many aircraft checklist items, maintenance procedures, certification standards, operating procedures, and certainly regulations have been created through this process. Of course, the FAA and industry puts these items in place in order to prevent the event from repeating. While this method has brought us to where we are today, in order to advance to the next level of safety we need to identify and address problems *before* an accident or incident occurs.

So how does the Compliance Philosophy help achieve this higher safety goal? Essentially, it calls for both the FAA and industry to focus on finding problems early, applying the best fix, and taking the appropriate steps to ensure the problem remains fixed. With this background in mind, let’s look at several interlocking parts of the Compliance Philosophy.

### The Role of the Regulator

The FAA has a statutory obligation to prescribe, revise, and enforce aviation regulations. And when most of us think about traditional methods of how the FAA addresses violations of the regulations, things such as civil penalties, and certificate suspensions or revocation probably come to mind. However, the Compliance Philosophy recognizes that enforcement is only one option when dealing with a violation of the regulations. While the FAA will still use enforcement when necessary or required, additional tools, called compliance actions, are also available. The FAA can use compliance actions, instead of enforcement actions, for many deviations that occur. The following list demonstrates how differing violations may be viewed by the FAA in terms of enforcement, compliance, and other actions:

- For violations resulting from flawed procedures, simple mistakes, lack of understanding, or diminished skills:
  - Compliance action, which includes:
    - On-the-spot correction
    - Education
    - Additional Training
    - Counseling
    - Improvements to systems, procedures, and training programs

- For violations resulting from intentional, reckless, or criminal acts; failure to adhere to agreed-upon corrective actions; repeated violations:
  - Enforcement action, which includes
    - Warning letters
    - Formal letters of correction
    - Suspension
    - Revocation
- Matters involving qualification or competence
  - Compliance action
    - Remedial training
  - Reexamination
  - Enforcement action

The new policy does not mean that the FAA is getting softer on compliance. Instead, the intent is to use the most appropriate tool to fix a safety issue. The FAA recognizes that not all safety problems are caused by intentional non-compliance with regulations. Rather, they may be due to flawed procedures, simple mistakes, lack of understanding, or diminished skills. However, all violations, even the small ones, must be addressed as part of maintaining the expected level of safety in the NAS.

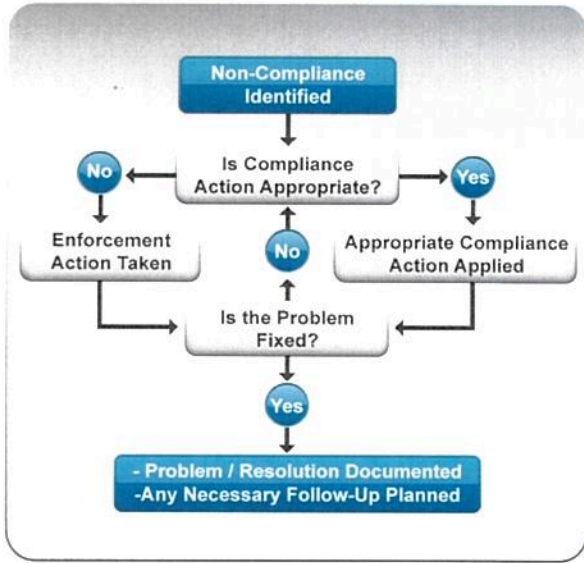
Education will continue to be emphasized as a means to promote safety. In particular, this includes an understanding of risk and methods of positive, effective compliance. As described in more detail further on, the FAA seeks to work together with organizations and airmen in an interchange of information and action that uphold regulatory compliance.

Figure 1 provides a simplified overview of the process that aviation safety personnel within the FAA will use when addressing non-compliance:

### A Transparent Exchange

A crucial element of the Compliance Philosophy involves a transparent exchange of safety information. While it may be intimidating to speak with the FAA, there is good reason why a safety inspector will ask you questions about an apparent deviation from the rules. In gathering facts about the event, the inspector is carrying out their duty to investigate, analyze, assess the situation, and, ultimately work with you to develop a fix for the problem.

The FAA will use information acquired on multiple levels. On the smallest scale, the safety inspectors will discuss the situation with the responsible



**Figure 1. Overview of process to address non-compliance.**

person. Immediate notification and action will be taken to mitigate any significant safety hazards and ongoing operational risks.

On a larger scale, the FAA can use aggregated data when attempting to determine if a systemic problem is at hand. Examples may include issues at an airport, difficulties with a particular aircraft, certification standards or handbook information that require updating, or even the need for an amendment to the regulations.

The FAA may also use information as part of collaborative government and industry initiatives, such as the General Aviation Joint Steering Committee or to build courses on FAASafety.gov, courses provided by other safety organizations, safety forums, online or printed articles, etc. This exemplifies the other side of the exchange of safety information that is crucial in adequately identifying and addressing the hazards and risk in our activities.

### A Quick Look at Safety Management

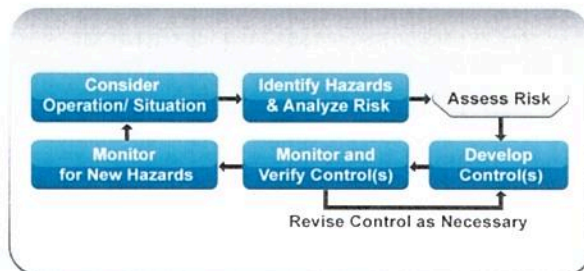
The FAA cannot directly oversee all aspects of aviation activities. This is a product of the wide variety, and large amount, of GA operations we enjoy in the United States. Of course, regulatory compliance is expected and required of everyone. Our civil aviation depends on — and the FAA expects — voluntary adherence to legal requirements. In addition, the FAA expects that you will maintain the knowledge and skills required for the privileges you are exercising.

In order to achieve a better safety record, we must go beyond the minimum of simply complying with the regulations. Instead, we need to take proactive measures to identify and address safety issues. Also, it would be impractical to write prescriptive rules for every possible risk. That’s where each of us, whether as individual airmen or large complex organizations, must integrate compliance into our safety management practices.

Most of us utilize safety management on some level, even if we are not aware of it. Prior to flight we naturally think about the regulations (and other safety standards) that will apply to the operation we are going to conduct. We then project whether or not we will be able to operate within the boundaries of the regulations. If we determine that we will not be in compliance, we take the steps necessary to correct the problem prior to the flight.

We can use regulations and standards, and skills that we already have, to control for risk. The key is making it part of our normal routine, and this is where the principals of safety management come in. Even without the structured processes of safety or quality management systems, you can still monitor your activity for compliance. The use of personal minimums and practices, memory aids (such as IMSAFE and PAVE), pre-flight preparation checklists, or simply personal habits can work. Using such tools, and continuing to evaluate their effectiveness for your activities, reflect the safety management principles that are critical to the Compliance Philosophy.

As an example, assume you are planning a night flight with passengers. You would likely think about the night takeoff and landing currency required by 14 CFR section 61.57(b). You might even go beyond the regulatory requirement and consider whether or you not you feel you are proficient with night landings considering the projected weather, airport, and aircraft you plan to use. [Of course, having read the November/December 2015



**Figure 2. Safety Management Overview**

edition of the *FAA Safety Briefing*, which focused on night flying, helped you in your analysis.] If you do not meet the currency requirements or do not feel proficient, you would take steps to correct the deficiency. This might include obtaining additional instruction prior to the flight, postponing the flight until better weather is forecast, or switching to an aircraft with which you are more familiar.

After the flight is over you should conduct self-review. The purpose is to determine if your flight preparation was adequate to identify hazards and analyze the risk. If not, and you realize you did not properly consider an aspect of the flight, that piece will need to be added to your preparation for subsequent flights. Perhaps you did not realize that the runway in use had a tri-color approach slope indicator. Being more familiar with the precision approach path indicator, you wish you would have refreshed yourself on the indications of the tri-color system. To prevent this for future flights, you add checking your electronic flight bag for information on airport lighting as part of your flight preparation tasks.

### Cultural Evolution

The Compliance Philosophy does not represent a revolution. Rather, it's an evolution of existing practices for both the FAA and GA community. This evolution, however, will require some cultural change for both parties in order to be fully successful.

One cultural change required is recognizing that adherence to safety management principles, and our willingness and ability to comply with the regulations, are necessary to control for safety risks.


It seems intuitive to link the outcome, such as an accident, incident, or negative finding during FAA surveillance (such as a ramp check), as requiring the strongest corrective action. In parallel, it is natural to conclude that a flight that ended without occurrence does not necessitate any changes in procedure. The Compliance Philosophy requires this mindset to change.

Certainly, an accident, incident, or surveillance may reveal behaviors that need to be addressed. Most of the time, the person involved is willing and able to make corrections that prevent future reoccurrence. By taking needed measures, they adequately control for future risk. In contrast, someone who refuses to take action to prevent future reoccurrence presents the greatest safety threat. Regardless of their previous flights, this person will continue to violate the regulations, or will remain unable to meet the standard, until a negative result eventually occurs.

Therefore, we always need to ask ourselves not just did we comply with the regulations, but *how* did we comply? Did we adhere to the requirements, but only inadvertently through luck and circumstance? If so, it may be only a matter a time before those circumstances change and we find ourselves out of compliance. We should use safety management principles to ensure our continued compliance with the regulations.

### Managing the Changes

As noted at the beginning of the article, the FAA considers the Compliance Philosophy an essential part of the aviation system of the future and is taking it very seriously. FAA's Flight Standards Service (AFS) is utilizing change management to ensure adoption and utilization of the updated policies and procedures. Change management involves a formalized and structured approach that focuses on the people side of the change. AFS has utilized online training courses, workshops, messages to managers, and internal town-hall style discussions to help the workforce with the changes.

The outreach for Compliance Philosophy will only broaden as external communications and involvement expand. As you probably concluded, this *FAA Safety Briefing* edition is part of the outreach. Be on the lookout for additional opportunities to learn about this topic. In the meantime, you can read up on the Compliance Philosophy using the resources listed in the Learn More section below: 

---

*Jeffrey Smith is the manager of the FAA's Airman Training and Certification Branch. He holds an ATP certificate, is a flight and ground instructor, and is certificated as an A&P mechanic.*

### Learn More

#### Flight Standards Service Compliance Policy / Philosophy

**FAA Notice 8900.323:**  
<http://go.usa.gov/cZu2R>

**FAA Order 8900.1, Volume 14, Chapter 1, Section 1:**  
<http://go.usa.gov/cZu2d>

#### Remedial Training Guidance and Procedures

**FAA Notice 8900.325:**  
<http://go.usa.gov/cZu2F>

#### Flight Standards Service Compliance Action Decision Process

**FAA Order 8900.1, Volume 14, Chapter 1, Section 2:**  
<http://go.usa.gov/cZuTT>