



Is Safety Really Our Top Priority?

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Honest Discussions About Safety

- Are particularly important to the business aviation community

NBAA Has Led the Way

- Enhanced the quality and scope of training
- Promoted standardization and professionalism
- Developed a sense of community to help create more knowledgeable and proficient pilots

Much of the Aviation Community's Discussion Regarding Safety

- Hasn't been as helpful or insightful as it could be
- In some cases can actually be counter-productive

Soothing Comments Heard After an Accident

- “Safety is our number one priority”
- “There can be no compromise with safety”

These Comforting Assertions

- Assure the public of the firm resolve by people in power to do better
- Aren't, and can't be, true

Going Somewhere

- Demonstrates that moving the aircraft ranks ahead of safety
- It would always be safer to stay put

A Comforting Thought: One Level of Safety

- It can't be true
- Safety costs money and requires heavier equipment

These Intellectual Dishonesties

- Tend to end discussion
- Substitute for thoughtfulness on the subject

Dick Smith, Chairman of Civil Aviation Safety Authority of Australia

- Steered people away from disingenuous talk about safety
- Advocated “Affordable Safety”
- Explained that when safety becomes too expensive, there is a net reduction in safety

Safety Advice Can Generate Resistance

- Can be preachy—taking on an off-putting air of smugness and superiority
- Suggests that someone does not exercise proper “judgment” or “aeronautical decision-making”
- Provides vague, demeaning criticism, with very little guidance
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Our Vocabulary is Often Not Acceptable to the Listener

- We talk about aeronautical decision-making and judgment as if folks don't know how to make a decision
- We talk about the “5 hazardous attitudes” as if pilots were character defectives

Talk About Aeronautical Decision-Making is

- Offensive, demeaning, and gives no guidance
- Reactive—implies you come to a decision point and make a decision

The Better Approach is that

- Pilots should proactively be situationally aware to avoid the need for a reactive decision
- The concept of risk management gives guidance

We Need to Change Our Vocabulary

- It is more insightful and helpful to talk about risk management
- The concept of risk management suggests a proactive habit of identifying risks and mitigating them

Today There is a New Opportunity to Lead the Way

How Many People in Here Are Flight Instructors?

**How Many People in Here Do Something
Else for a Living, and
Instruct As a Passion?**

We Need to Support the Use of Clear and Honest Language

- Demonstrate intellectual honesty
- Avoid:
 - “Safety is our number one priority”
 - “There can be no compromise with safety”
- Give positive guidance—talk about Risk Management
 - Safety is an outcome
 - Risk Management is how you get there

Risk Management Teaching and Practice is Flawed

- When students leave training, accident rate jumps 50%
 - Student = 5.8
 - Private = 8.55

Pilots Learn Risk Management by Exposing Themselves to Risk

- They then evaluate the result
- If not too scary, they call it “acceptable”
 - May have just been lucky
 - More times they get away with it, the more “acceptable” it is
- If scary, they add it to a long list of “won’t do that again!”
- If they don’t run out of luck, they become “experienced”

Experience Is A Hard Teacher: The Test Comes First, the Lesson Afterward

- Many pilots and passengers don't live to get the lesson
- This doesn't prepare them for unanticipated risks
- To manage risk pilots must be proactive, not reactive

Provide Risk Management Tools

- All innovations seem simple and obvious in hindsight
 - Wheels on luggage
 - PAVE and C-CARE
- Risk management tools give a vocabulary and help provide situational awareness

PAVE Gives Guidance on How to Plan for Situational Awareness

- PAVE, for putting risks into the categories of
 - Pilot
 - Aircraft
 - Environment
 - External/internal pressures

C-CARE Gives Guidance to Maintain Situational Awareness in Flight

- C-CARE, for awareness of
 - C hanges –
 - C onsequences
 - A lternatives
 - R eality
 - E xternal/internal pressures

Two Reasons for Poor Risk Management

- “Fat, dumb and happy”
- Resistance to mitigating the risks

The Cure for “Fat, Dumb and Happy” is Relatively Simple

- Share and teach how to use tools like PAVE and C-CARE as a habit to
 - Maintain situational awareness
 - Identify risks

The Cure for Lack of Risk Mitigation is More Complicated

- Some pilots are resistant to mitigating risks
- They fall into at least two identifiable groups

1st Group: Big-Shot/Show-Off/Thrill-Seeker

- Step into risk
 - Risk is a part of the fun of flying for them
 - Think risk-taking makes them look like superior pilots
- Often keep on enjoying risk-taking until they, and their passengers, pay the ultimate price

2nd Group: The Achiever

- Good at almost everything they do
- Movers and shakers of every community they belong to
- Hard-wired to complete what they set out to do
- Hate to give up on a goal

The Key is Understanding the Last "E" in PAVE and C-CARE

- This is the external and internal pressures that impinge on pilots
- How they affect pilots varies with the individual

Goal-Orientation is a Wonderful Characteristic in Almost All of Life

- But as a pilot it can be a risk factor
- The word “mission” can be dangerous
 - Requests from “the boss” can create undue pressure
- It tends to make us want to keep on going when good risk mitigation says we should change our plan

We Must Come to Terms With This Tension

- In GA we don't want or need to be as rigid as the airlines
- We do have to accept reasonable limitations on our utility

When Doing Something New

- Start with “Why are we doing this?”
- Brainstorm ways to mitigate risk
- Talk to people who already do it

Teaching Risk Management Complies with the Airman Certification Standards (ACS)

- Provides the controlling guidance for everything a pilot is required to know, consider and do for a specific certificate or rating
- Is the controlling guidance for the FAA Handbooks

The ACS, for the First Time

- Provides standards for knowledge
- Requires applicants to demonstrate the ability to identify, assess and mitigate risks

The Airman Certification Standards (ACS) Require

- A new way of thinking about managing the risks of flight
- A richer, expanded, more specific vocabulary

Standards for Risk Management

- Convert formerly subjective areas into objective ones
- Establish risk management as a habitual process
- Provide needed guidance to instructors and evaluators

Traditional Categories for Instructional Process

- Knowledge
- Skills
- Attitude

There is Disbelief That Attitude Can Be Taught

- “You can’t teach judgment”
- “...I'm afraid no amount of 'risk management' training is going to change your attitude”
- “I am rather skeptical about whether risk management (judgment) is something that can be taught and tested...”

The Readers and the Columnist Are To Be Excused

- A lot of people confuse risk management with judgment and attitude
- In order to get a safe outcome, we must teach risk management

ACS Categories for Instructional Process

- Knowledge
- Risk Management
- Skills

Why the Change?

- It is easier to teach – and evaluate – habits, than attitudes
- Habits then change attitudes

Flight Instruction is All About Developing Habits

- Meticulously inspecting our aircraft before taking it into the air
- Using checklists
- Fastening seatbelts
- Checking flight controls
- Many, many more

Risk Management is Just Another One of Those Habits

- Once developed, it will serve pilots well for the rest of their flying

Scenario-Based Training

- Is the ideal way for a learning pilot to develop the habits of
 - Maintaining situational awareness
 - Active risk identification

Why This Is Important

Why This Is Important

How Many People In Here
Know Someone Personally
Who Was Killed In A GA Aircraft?

We Urge You to Exercise Leadership

- Ensure pilots learn how to develop the habit of identifying the risks of flight
- Help pilots learn to think proactively about mitigating the risks they have identified
- Develop procedures to help pilots be introspective about why they might be resistant to mitigating risks

The Future Of Our Entire Aviation Community Depends On It



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