



NTSB National Transportation Safety Board

Safety Culture: How leaders continue the journey.

Robert Sumwalt

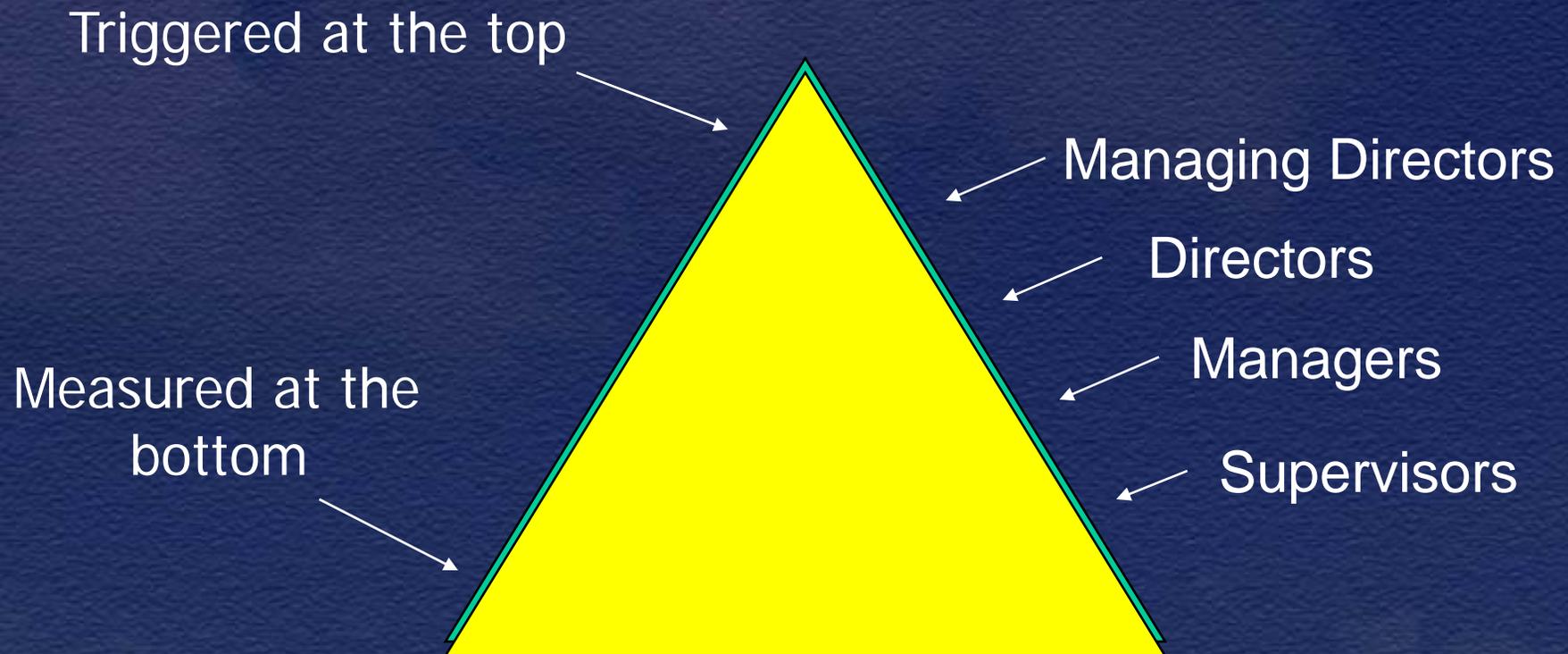
Presentation to Embry-Riddle Aeronautical University

You are the Leaders of Embry-Riddle

**“Leadership is about influence.
Nothing more. Nothing less.”**

- John Maxwell

Safety Culture is:



Safety culture starts at the top of the organization and permeates the entire organization.

How leaders influence safety

“The safety behaviors and attitudes of individuals are influenced by their perceptions and expectations about safety in their work environment, and they pattern their safety behaviors to meet demonstrated priorities of organizational leaders, regardless of stated policies.”

– D. Zohar, as cited in NTSB accident report



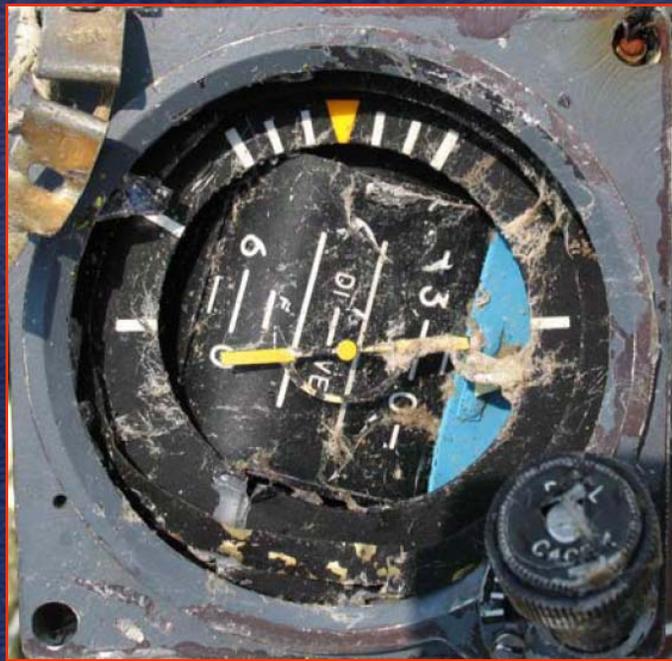
Three leadership questions

- Is safety the top priority of Embry-Riddle?
- Do you have a good safety culture?
- Are you on the right track?

Priority or Core Value?

“Safety culture is the core values and behaviors resulting from a collective commitment by leaders and individuals to emphasize safety over competing goals to ensure protection of people and the environment.”

Source: U.S. Nuclear Regulatory Commission



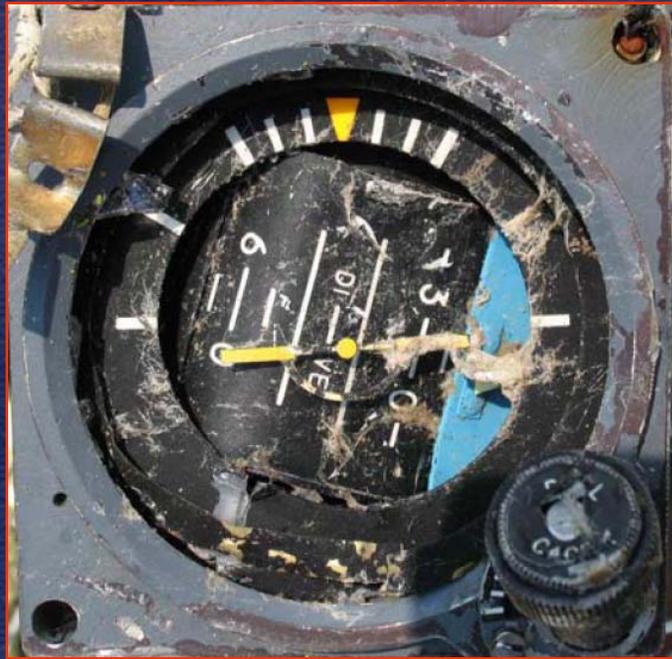
Do you have
the right attitude
about safety culture?

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June 4, 2007

6 Fatalities







Do you have a good safety culture?

Do you have a good safety culture?

- “... it is worth pointing out that if you are convinced that your organization has a good safety culture, you are almost certainly mistaken.”
- “... a safety culture is something that is striven for but rarely attained...”
- “...the process is more important than the product.”

- James Reason, “Managing the Risks of Organizational Accidents.”

Are you on the right track?

“Even if you're on the right track, you'll get run over if you just sit there.”

- Will Rogers

A Word of Caution:

**NEVER EVER BELIEVE GOOD
NEWS**

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Monday's Headlines
January 12, 2009



Friday's Headlines
January 16, 2009



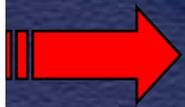
4 Weeks Later
February 12, 2009

“Good can be Bad”

- With good safety performance, people/organizations can easily become complacent.
- Don't ever believe that a lack of accidents means you are “safe.”
- To counter this complacency, there must be a leadership obsession with continuous improvement.

- Courtesy of Jim Schultz

Continuing the Journey



1. Management Commitment and Emphasis
2. Culture of Compliance
3. Continuous Learning and Risk Awareness
4. Just Culture & Trust

Roadmap to Safety Culture

Management commitment and emphasis on safety

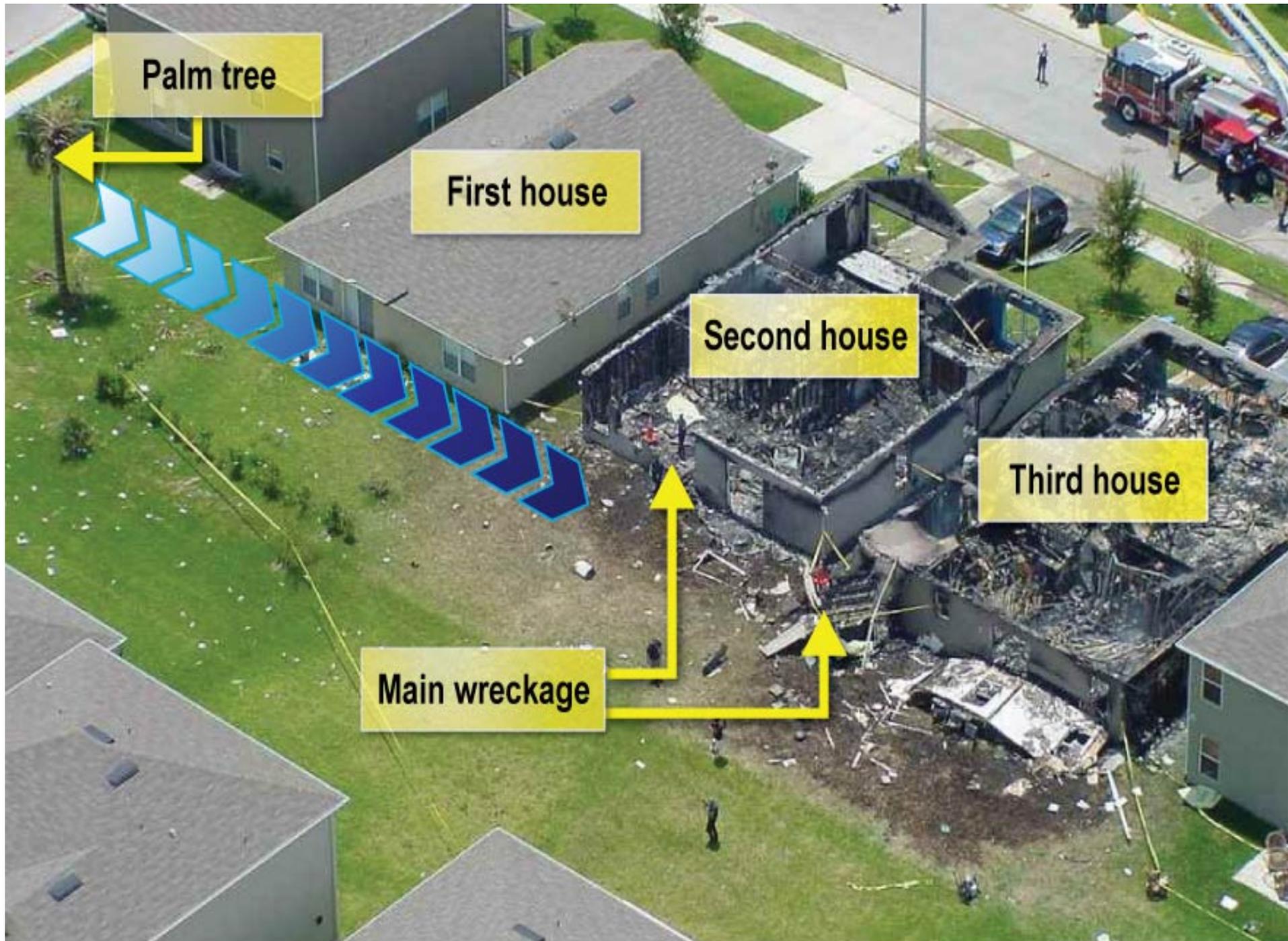
- Safety begins at top of organization
- Safety permeates the entire operation



July 10, 2007, Sanford, FL



- Cessna 310
- 5 fatalities



Palm tree

First house

Second house

Third house

Main wreckage

Declared Emergency

“Smoke in the cockpit.”

“Shutting off radios, elec.”



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Maintenance Discrepancy Entry

AIRCRAFT: N561N	DATE: 07-09-07	-ACTT	
		-ACTL	
MAINTENANCE WRITE-UP		MAINTENANCE CLEARING ACTION	
Entered By: ACT	Location: DAB	<input type="checkbox"/> Repaired	<input type="checkbox"/> Replaced
		<input type="checkbox"/> Released- Could Not Duplicate	<input type="checkbox"/> Loaner Installed
RADAR WENT BLANK DURING CRUISE FLIGHT. RECYCLED - NO RESPONSE... SMELL OF ELECTRICAL COMPONENTS BURNING TURNED OFF UNIT - PULLED RADAR C.B. - SMELL WENT AWAY. - RADAR INOP		Corrective Action:	

“SMELL OF ELECTRICAL COMPONENTS BURNING”



Probable Cause

- “...actions and decisions by [the organization’s] corporate aviation division’s management and maintenance personnel to allow the accident airplane to be released for flight with a known and unresolved discrepancy, and;
- “The accident pilots’ decision to operate the airplane with that known discrepancy, a discrepancy that likely resulted in an in-flight fire.”

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Culture of Non-Compliance

- Aviation director could not readily locate SOP manual
- SOP manual viewed as a “training tool”
- Aircraft to only be used for company business
 - Accident flight was a personal flight
- PIC must possess ATP
 - PIC did not possess ATP
- Last 3 maintenance discrepancies had not been addressed

Intentional Non-Compliance



**US Airways Express
January 19, 2010
Charleston, WV**



Probable cause:

- “...the flight crewmembers’ unprofessional behavior, including their non-adherence to sterile cockpit procedures by engaging in non-pertinent conversation, which distracted them from their primary flight-related duties and led to their failure to correctly set and verify the flaps.”



Intentional Non-Compliance



Air Methods
August 26, 2011
Mosby, MO

A Culture of Compliance

- Internal company policies, procedures, rules
- Ethical principles
- Company code of conduct
- Federal, state, and local laws and ordinances
- Industry best practices
- Financial guidelines and principles
- Etc.

A commitment to doing things right.
Always.

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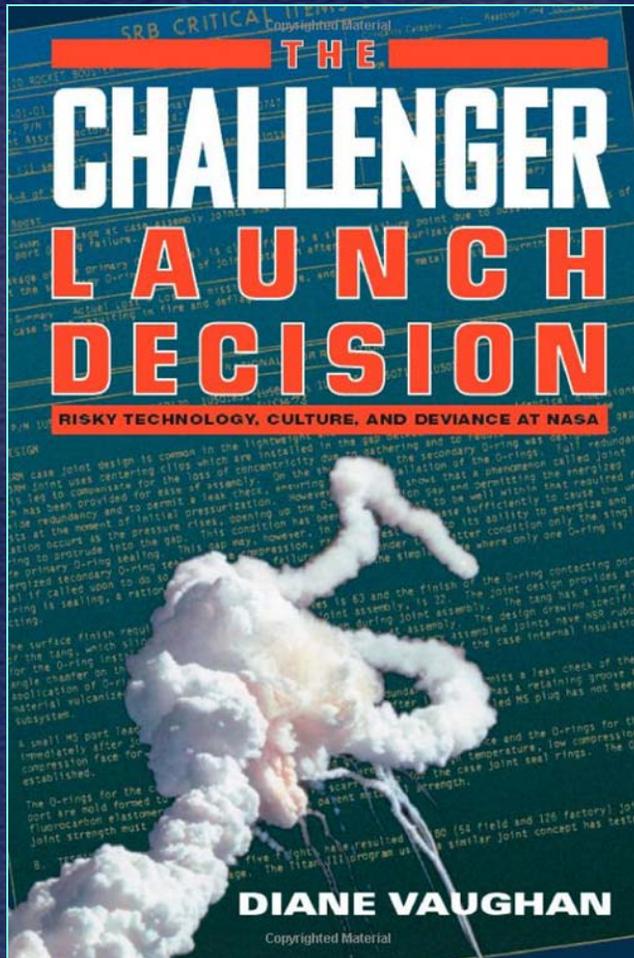
Avoid Selective Compliance



- “That is a stupid rule.”
- “I don’t have to comply with that one.”



Avoid “Normalization of Deviance”



- Normalization of Deviance: When not following procedures and taking “short cuts” and becomes an accepted practice.

Continuing the Journey

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Continuous Learning and Risk Awareness

- Organizations with a healthy safety focus are constantly learning.
- They actively seek ways to improve safety.
- They learn from their mistakes and those of others.
- Information regarding prior incidents and accidents is shared openly and not suppressed.
- They are ever mindful of risks and are looking for ways to mitigate those risks.



How do you stay informed?

- Internal safety audits
- External safety audits
- Confidential incident reporting systems
- Employee feedback



Staying informed

- How do you detect and correct performance deficiencies before an accident?
- How do you know what is going on in your operations?
- Do you have multiple data sources?



Are students, faculty, and staff comfortable reporting?

- They are open to report safety problems, if they receive assurances that:
 - The information will be acted upon
 - Data are kept confidential or de-identified
 - They will not be punished or ridiculed for reporting
 - Non-reprisal policy

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“Just” Culture

- People realize they will be treated fairly
 - Not all errors and unsafe acts will be punished (if the error was unintentional)
 - Those who act recklessly or take deliberate and unjustifiable risks will be punished

Just Culture

“An atmosphere of trust in which people are encouraged, even rewarded, for providing essential safety-related information, but in which they are also clear about where the line must be drawn between acceptable and unacceptable behavior.”

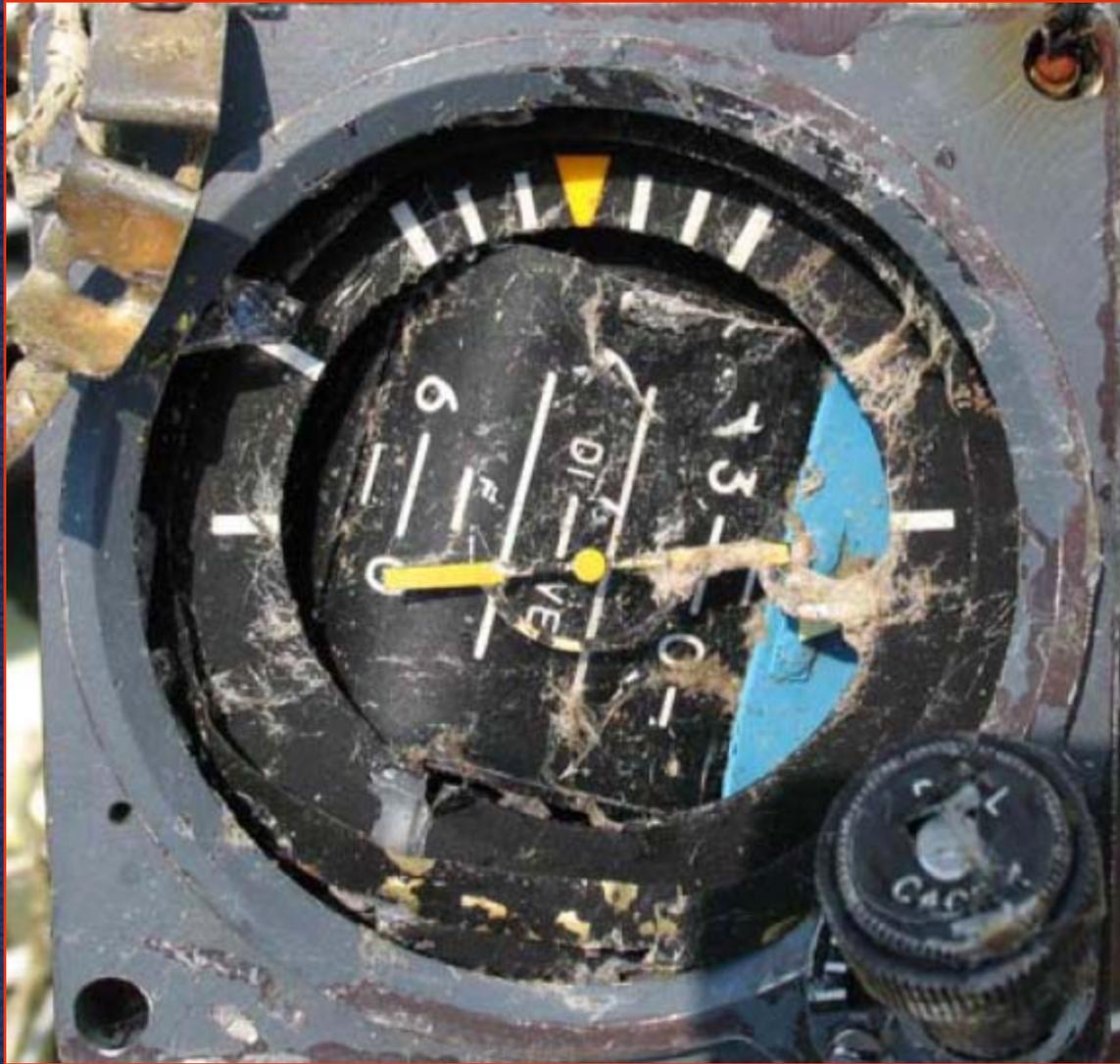
- James Reason, Ph.D.

Three leadership questions

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