

The ATO and Safety: Improving Our Safety Culture

Presented to: ICAO Training-Mexico City
By: Joe Schanne, ATO Safety Service
Date: December 2005



Federal Aviation
Administration



Safety Our Highest Priority

The ATO Safety. Service. Value.

*A key goal of ATO is to improve Safety Culture thru:
training, measurement and improvement initiatives.*

U.S. ATC Safety
November 2005



Federal Aviation
Administration

2

Three ATO Safety Culture Initiatives

- 1. Safety Culture Awareness and Training:**
 - Awareness material being developed (CDs). Two completed.
 - New Employee Training will have a module on Safety Culture.
 - Safety Promotion Clips (based on past ATC incidents/accidents) being developed. They will be both web-based and downloadable.
- 2. Safety Climate/Culture Measurement and Improvement:**
 - The first step is a Safety Culture Survey at the ATCS/ATSS level.
 - The second step is using the results to improve the environment.
- 3. Improved Safety Reporting/Metrics:**
 - Develop strategy for encouraging employees to report problems (e.g., ASAP program for ATC)
 - Reinforce that management should welcome safety hazard reports
 - Develop new safety measures that better describe collision risk

U.S. ATC Safety
November 2005



Federal Aviation
Administration

3

Safety Culture Awareness and Training:

In 2005, two major safety culture awareness training products have been developed.

- In person presentations provided to more than 1000 ATO employees
- Approx. 5000 CD's and DVD's delivered

The following slides are an example from that training

U.S. ATC Safety
November 2005

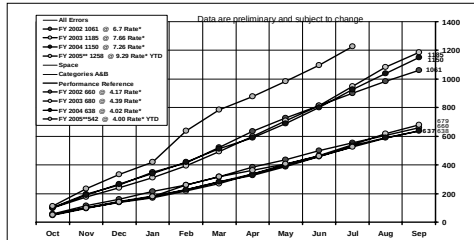


Federal Aviation
Administration

4

How Are We Doing?

We have established safety measures, but they are not well-understood.



Wrong Message:



"Keep those numbers down"

Right Message:



"Tell us honestly about what's happening"

U.S. ATC Safety
November 2005



Federal Aviation
Administration

5

The primary purpose of the ATC system is to prevent a collision....



Tenerife Accident: March 27, 1977

U.S. ATC Safety
November 2005



Federal Aviation
Administration

6

What is a Safety Culture?

• A Safety Culture includes:

- Personal dedication and accountability
 - Individual attitudes and behaviors
- Shared vision with structures to attain it
 - Organizational processes, methods and metrics
- Commitment to improve (resist complacency)
 - Beyond simple adherence to procedures
 - Learning and continuous improvement
- Pervasive safety thinking
 - Commitment to excellence
 - Integration of safety into all activities

U.S. ATC Safety
November 2005



Federal Aviation
Administration

7

Safety Culture and Communication

• Leaders must:

- Create a climate in which news is quickly and easily communicated, whether good or bad
- Be committed to investing the time, energy, and resources required to address risk proactively

U.S. ATC Safety
November 2005



Federal Aviation
Administration

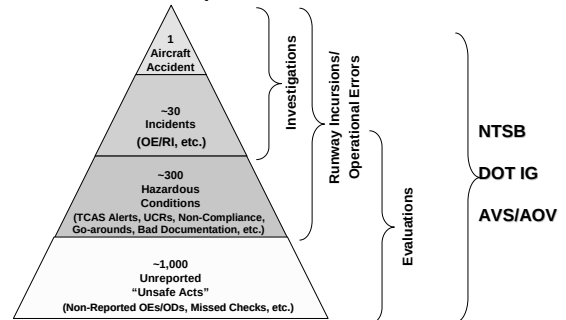
8

Potential Challenges to Evolving the Safety Culture

- Complacency based on past success
- Belief that the organization is as advanced as possible
- Data questioned rather than acknowledging need for change
- History of mistrust and hiding information
- Facilities penalized for reporting errors
- Difficulty in breaking through the bureaucracy
- Resistance to change; Cynicism



We Have Data, But We Are Reactive, Not Proactive



Examples

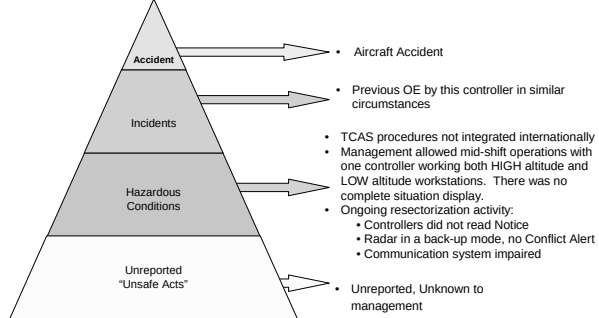
- We have previously discussed the NASA Challenger Disaster and how complacency crept back in before Columbia.
- Recent Discovery flight showed willingness to do the right thing, even when not the popular thing to do.
- An ATC Example: Überlingen Collision Video
—Credit: DFS Deutsche Flugsicherung GmbH



Überlingen Collision Video



Example Überlingen Accident July 1, 2002



... An Update ...



Monument on the grave of Vitaly Kaloyev's wife and two children, Diana, 4, right, Konstantin, 10, and Svetlana, 44, in the city of Vladikavkaz, southern Russia, in this Feb. 27, 2004 file photo. Swiss prosecutors are urging a Zurich court, Switzerland to convict Russian man Vitaly Kaloyev of stabbing the air traffic controller he believed was responsible for the death of his wife and two children in a mid-air collision.



... An Update ...

Russian Sentenced for Controller's Death

ZURICH, Switzerland (AP) 10/26/05 -- A Swiss court on Wednesday sentenced a Russian architect to eight years in prison for the premeditated homicide of an air traffic controller who was on duty at the time of a mid-air plane collision in which the Russian man's wife and children were killed.

The Zurich Superior Court found Vitaly Kaloyev guilty of premeditated homicide, which is a lesser charge than murder and carries a maximum sentence of 20 years in prison under Swiss law. Kaloyev acknowledged that he must have killed Peter Nielsen in February 2004, but said he could not remember the slaying.

The Swiss prosecutor had asked the court to sentence Kaloyev to 12 years' imprisonment, asserting that the crime was clearly premeditated homicide, but fell short of murder because Kaloyev had not acted out of malice. Kaloyev, 49, told the court Tuesday that he had not wanted to cause any physical harm and **only sought an apology from the head of the air navigation service Skyguide, whom he called the "main culprit"** in the July 1, 2002, air crash that killed his family.

Neilson, 36, died of multiple stab wounds in front of his wife in his back yard. Kaloyev was later arrested in Zurich.



Where do you think we are?

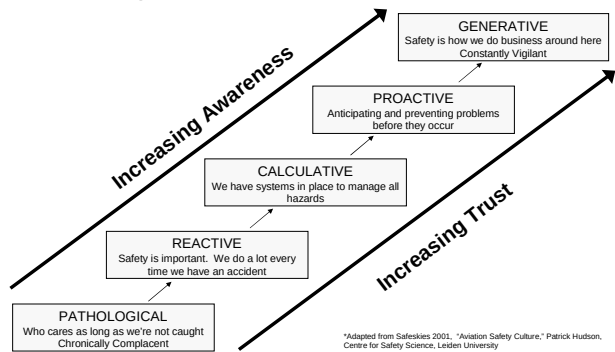
• Questions to indicate health of the Safety Climate

- Are ATO employees committed to safety and ready to apply the resources necessary?
- Do employees feel encouraged to point out possible problems?
- Do employees fear retaliation for exposing problems?
- Does management show that they want to know the problems?
- Are Safety positions seen as a career boost, not a dead-end?

• If improvement is necessary, what can be done to improve?



Safety Culture Evolution



Operationally, what can you do to improve the Safety Culture?

- Maintain situational awareness
- Eliminate distractions in operational quarters
- Open/close positions/sectors in a timely manner
- Provide on-the-spot corrections when needed
- Avoid complacency
- Communicate to employees that you need to know about hazards they see

Are you in denial, or are you doing the right things?



A Final Thought ...

All truth passes through three stages:

- First, it is ridiculed.
- Second, it is violently opposed.
- Third, it is accepted as being self-evident.

(Arthur Schopenhauer, 19th Century Philosopher)

As an ATO Leader/Manager, how do you respond when a safety "truth" is brought to you?



www.ato.faa.gov

