

#### NTSB National Transportation Safety Board

#### **Professionalism**

Robert L. Sumwalt Vice Chairman

## Pinnacle Airlines Flight 3701 Jefferson City, Missouri



- October 14, 2004
- Bombardier CL-600-2B19
- Repositioning flight
- Both flight crewmembers killed



#### **NTSB's Probable Cause**



 "the pilots' unprofessional behavior, deviation from standard operating procedures, and poor airmanship, which resulted in an in-flight emergency from which they were unable to recover..."

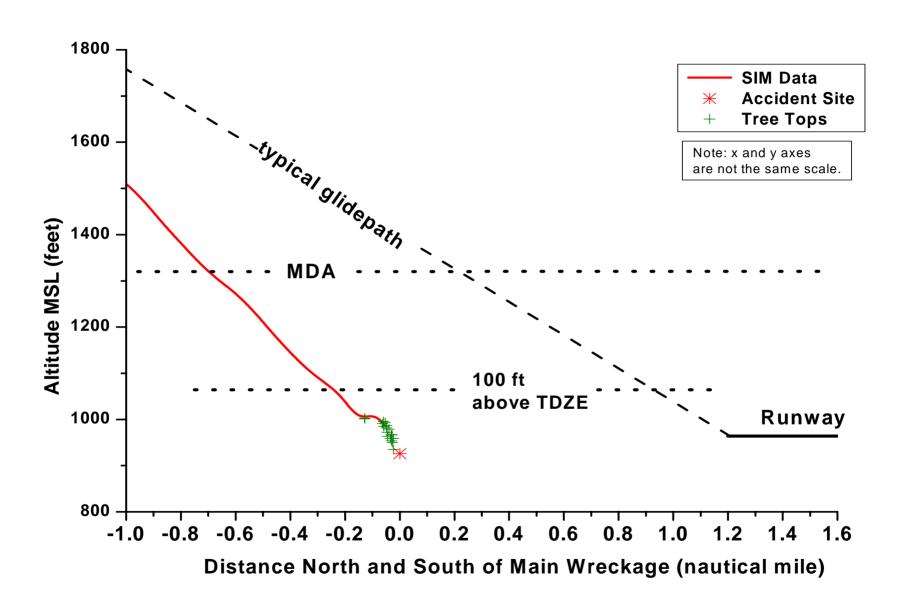


## Corporate Airlines dba American Connection Flight 5966 Kirksville, Missouri



- October 19,2004
- BAE J-32 (Jetstream)
- Crashed into trees on nighttime non-precision instrument approach
- 13 fatalities
- 2 serious injuries





#### **NTSB Finding**

 "The pilots' nonessential conversation below 10,000 feet MSL was contrary to established sterile cockpit regulations and reflected a demeanor and cockpit environment that fostered deviation from established standard procedures, crew resource management disciplines, division of duties, and professionalism, reducing the margin of safety well below acceptable limits during the accident approach and likely contributing to the pilots' degraded performance."



## Comair Airlines Flight 5191 Lexington, Kentucky

- Bombardier CRJ
- 49 Fatalities
- First officer severely injured
- Wrong runway takeoff







#### **Crew Actions**

- Setting tone during preflight
  - Casual and relaxed
  - Abbreviated taxi briefing
- Noncompliance with sterile cockpit rule
  - 40 of the 150 seconds during taxi were violations of sterile cockpit rule
- Distraction likely contributed to loss of positional awareness



#### **NTSB Finding**

 "The flight crew's noncompliance with standard operating procedures, including the captain's abbreviated taxi briefing and both pilots' nonpertinent conversation, most likely created an atmosphere in the cockpit that enabled the crew's errors."

#### The Probable Cause statement

"Contributing to the accident [was] the flight crew's nonpertinent conversation during taxi, which resulted in a loss of positional awareness ..."



#### A fine line

- "There is a fine line separating a relaxed and easy atmosphere in a cockpit from a lax one where distractions can result in critical failures."
- "Professionalism may be described as knowing the difference between the two."

Honorable John L. Lauber





#### **Two Essential Qualities**

Good technical skills

Good interpersonal skills



#### Which Are Best Leaders?

- Group A Interpersonal warmth, sensitivity, gentleness, kindness and awareness of the feelings of others. Strong drive to do their job well and approaches their task seriously.
- Group B Tendency to express oneself in a negative fashion such as frequent complaining.
- Group C High levels of verbal aggressiveness, such as complaining, impatience and irritability; emotional invulnerability, cynicism and hostility; arrogance, boastfulness, egotism, authoritarianism and dictatorialness.

Source: NASA study, "Personality factors in flight operations: Volume 1." By Chidester, Kanki, Foushee, Dickinson and Bowles, 1990.



#### **Strong Leadership Qualities**

- Good communicators
  - Good briefings
- Keeps ego in check
  - "I want to know what you think"
  - "I don't know"
  - -"I am wrong"
- Having a strong moral compass
- Having the courage to take unpopular positions







**NTSB** 



### **NTSB**

#### **Negative Publicity Avoidance**

# "You never know on which flight your career will be judged."





By Andrew Itkoff NDRUW JONES: 25 Rs and 100 RBL 1C

#### DETROIT **STUNS 49ERS** 27-24 1,10C

LIONS WERE WINLESS ▶ REFS UNDER REVIEW, 1C ▶ NFL REPORT, 1,10,13C

ANDRUW JONES IS USA TODAY'S MINOR LEAGUE PLAYER OF THE YEAR

**OUTFIELDER ANOTHER STAR IN** ATLANTA CONSTELLATION, 1C

NO. 1 IN THE USA ... FIRST IN DAILY READERS

**HOME SALES** HIT HIGHEST **POINT IN** 15 MONTHS 18

EVEN IF SURGE FALTERS. ECONOMY WILL GET BOOST

**NEW FILMS FEATURE WOMEN AND ISSUES** THEY FACE TOGETHER

SISTERHOOD TO OUTSHINE SHOWGIRLS, DRAG QUEENS, 1D WINO

TUESDAY, SEPTEMBER 26, 1995

#### **NEWSLINE**

WALL STREET: Dow Jones industrial average rises 5.78 points to 4769.93; Nasdaq index falls 7.24 to 1046.15; 30-year Treasury bond yield remains at 6.58%. 1,3B.

CHILD BURIED: Stephanie Kuhen, 3, is buried; she died when the car she was in was hit by gunfire on Los Angeles dead-end street. Fourth suspect arrested, 4A.

BALANCING ACT: Clinton administration walks fine line to balance human rights commitment with pledge to make job protection heart of foreign relations. 9A.

NEW AIRLINE: British entrepreneur Sir Freddie Laker and a Texas oilman plan to launch U.S.-based trans-Atlantic airline with flights from Florida to Britain, 1B.

CHESS BATTLE: Challenger Viswanathan Anand,



left, beats reigning champ Garry Kasparov in the ninth game, breaking series of draws and recording the first win in Professional Chess Association world championship in New York, 13C.

**DELANY DIES:** Bessie Delany, second black female dentist in

#### Your name here



#### Dead Calif

mont

By Mimi Ha USA TODA

Former dential can said Monda porters are third nation

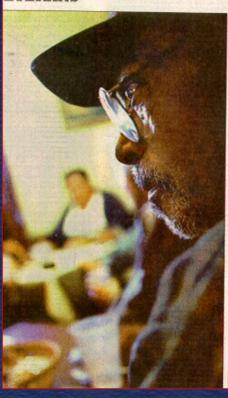
Such a p dramatic e presidential

Perot, on Live, said dence Part voters who they don't i

Democrats "It will n special inte who got 19 he ran in

owned by ( He told K economy, " that have to

#### ETERANS



## Pilots' acts might have led to crash

■ Tail section of doomed jet found on ocean floor

By ERIC MALNIC, MATT SURMAN and MITCHELL LANDSBERG Los Angeles Times

PORT HUENEME, Cair. — Investigators are considering whether the pilots of Alaska Airlines Flight 261 unwittingly triggered their violent plunge into the Pacific Ocean by following prescribed procedures for an emergency landing, air safety officials said Thursday.

Late Thursday searchers found the tail of the jet after recovering the flight data recorder earlier in the day.

Underwater robots exploring the ocean floor found where the wreckage came to rest after the MD-83 ies, some of which are believed trapped under the debris.

National Transportation Safety Board officials raised the question about the pilots' actions after listening to a recording of the final 30 minutes that was contained in a cockpit voice recorder retrieved late Wednesday.

One NTSB official, speaking on condition of anonymity, said the investigation into the crash is increasingly focusing on the pilots' actions during their preparation for an emergency landing at Los Angeles International Airport.

In hindsight, investigators say, it appears possible that a by-the-book response to the mechanical problem reported by the pilots — a "horizontal stabilizer jam" — could have sent the plane into its wild, corkscrewing descent into the sea.



#### **NTSB**

**Take the Most Conservative Approach** 

#### What to do?

#### Take the most conservative approach

De-ice?

Divert?

Add more fuel?



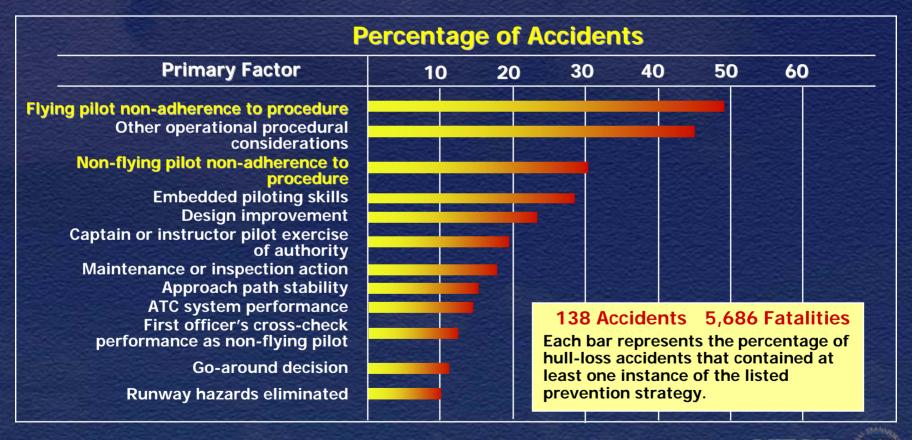




## NTSB SOP Adherence

#### **Accident Causal Factors**

#### **Hull-loss Accidents over 10 Year Period**



g NTSB

Source: Boeing

#### How SOPs relate to error

 LOSA data: crews that intentionally deviate from SOPs are approximately three times more likely to commit additional errors with consequential results.

"Normalization of Deviance"



### Flying by the book

- Allows other crewmembers to know exactly what to expect from you, 100 percent of the time.
- As a new captain, don't you want the F/O to be in sync with you, by knowing what to expect from you?
- Is how professionals operate.



### What message do you send?

- Whenever you allow or accept anything less than SOPs, you send a strong message to every crewmember and employee you come in contact with
- That message is that it is OK to do whatever you want, right or wrong



#### Captains influence others

- As a captain, you may never fully know the influence that you have by doing things by SOP
- Following SOPs encourages others to also follow SOPs





#### **NTSB**

**Be Professional** 

#### What is a professional?

- A mindset
  - Precise checklist usage
  - Precise callouts
  - Precise compliance with SOPs and regulations
  - Staying abreast and current with knowledge and skills
  - The ability and willingness to say
     "I don't know" or "I am wrong"



#### **Professionalism**

Doing the right things, even when no one is watching.





**NTSB** 



NTSB