



**NTSB** National Transportation Safety Board

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# Professionalism

Robert L. Sumwalt  
Board Member  
July 9, 2009

NTSB





# Pinnacle Airlines Flight 3701

## Jefferson City, Missouri



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



# What the investigation discovered

- Intentional activation of stall warning
- Swapping crew seats
- Rudder mishandling
- Climb to FL 410
  - “have a little fun”
- Automation mismanagement
- Airspeed loss, stall, loss of control, double engine failure
- Did not fully disclose real problem with ATC

# 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...”

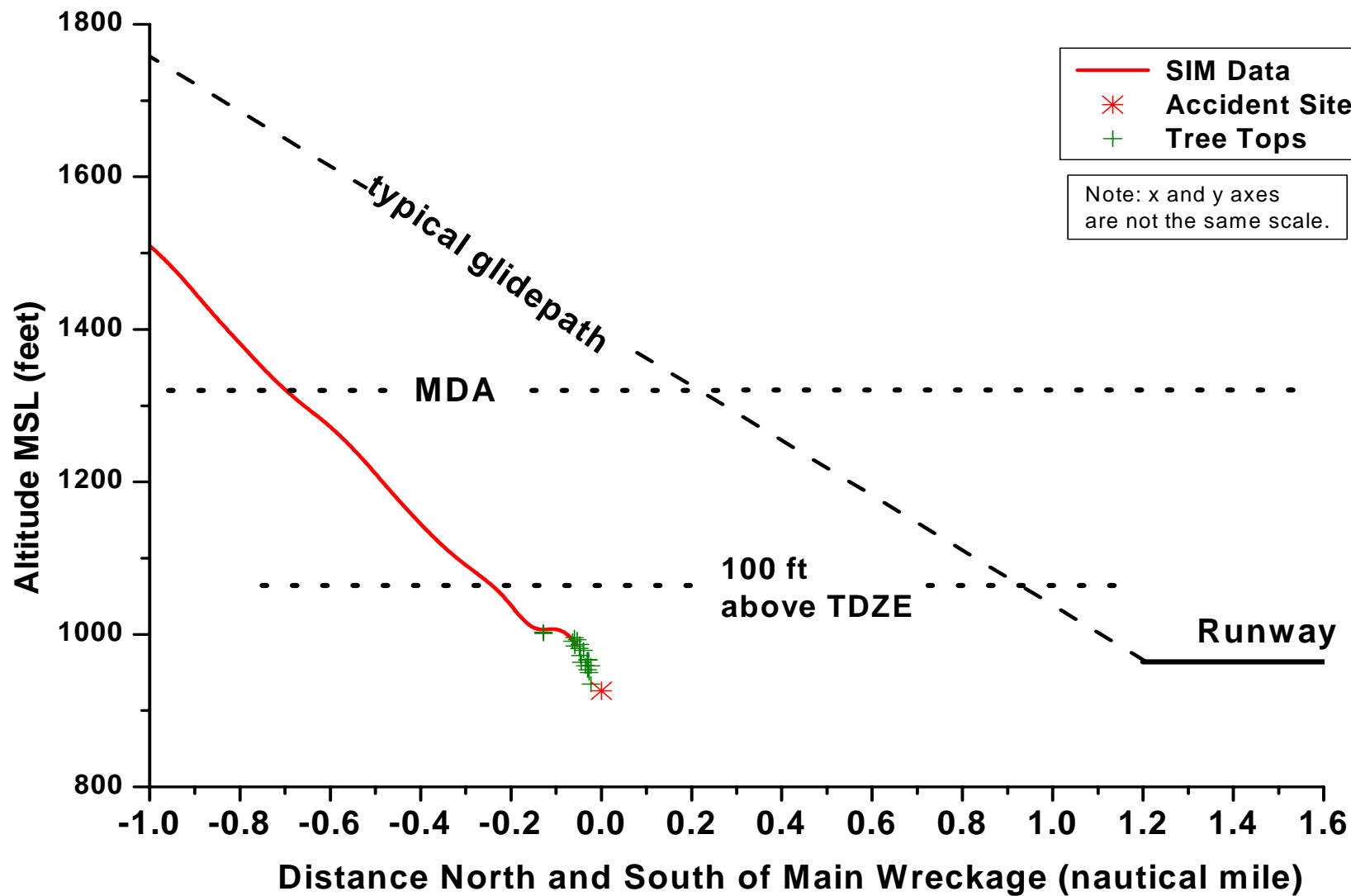




# Corporate Airlines dba American Connection Flight 5966 Kirksville, Missouri



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





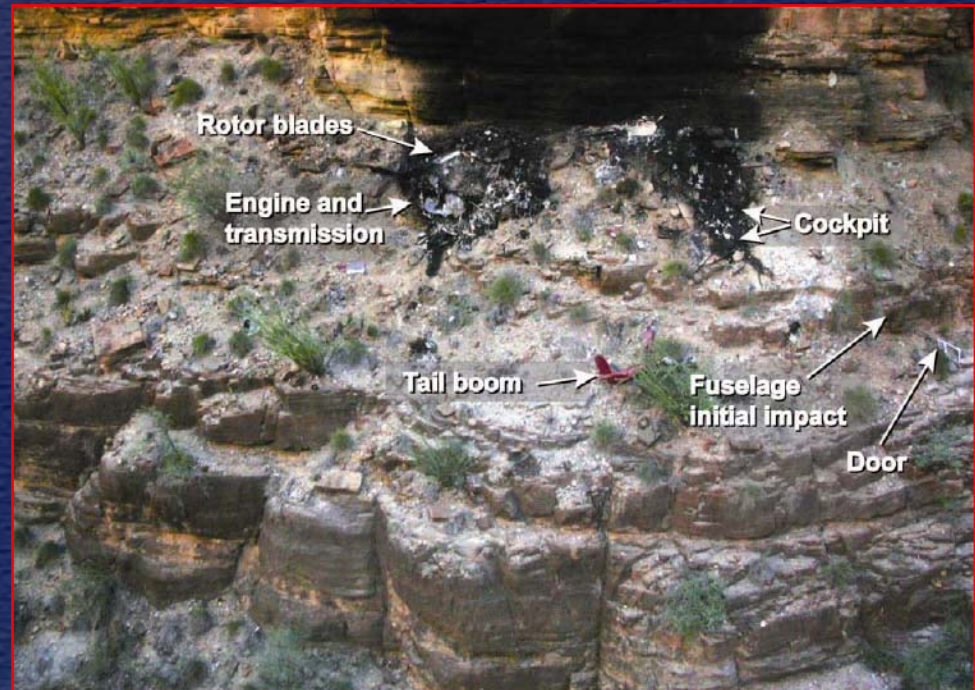
# NTSB Finding

- “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.”



# Part 135 Operator

- Sundance Helicopters
- Air tour operator
- September 20, 2003
- Grand Canyon
- Aerospatiale AS350BA
- CFIT, 7 Fatalities





# NTSB Investigation Revealed...

- The accident pilot repeatedly flew recklessly and well outside of operator's operations policy and FARs.
- Regularly flew with extreme pitch and roll attitudes with passengers on board.



# Accident Flight



AS350BA at 69° left bank

# Accident Flight



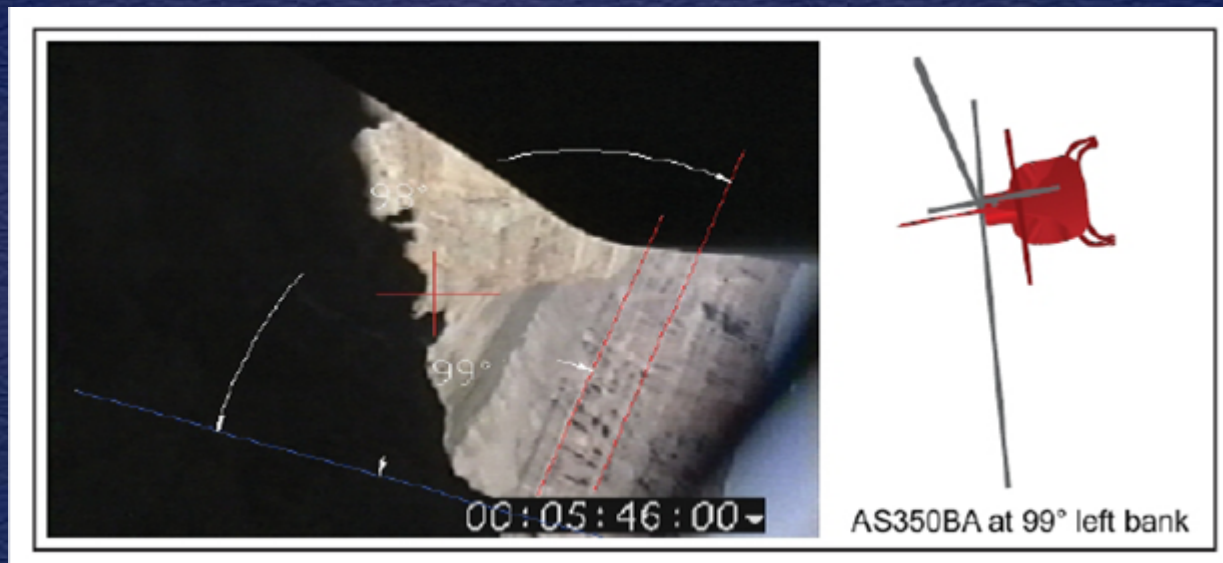
AS350BA at 55° nose-low pitch



# Accident Flight



# Precursor Flight





NTSB: Probable Cause was the pilot's disregard of safe flying procedures and misjudgment of the helicopter's proximity to terrain....

Contributing to the accident was the failure of Sundance Helicopters to provide adequate surveillance of their air tour operations ...

# Comair Airlines Flight 5191

## Lexington, Kentucky

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

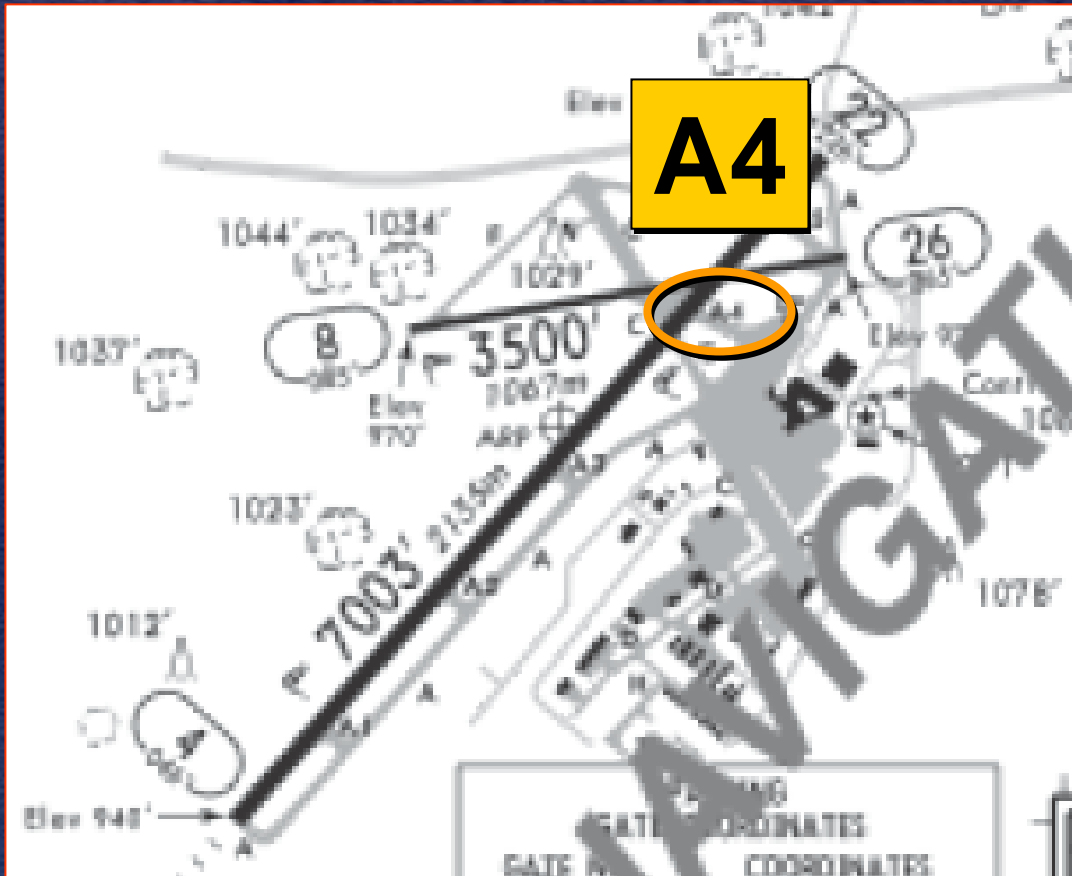








# Professionalism?





# 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.”

# 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 K. Lauber



**A Few Tips**

**to Avoid This**





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**Negative Publicity Avoidance**

**“You never know on which flight your career will be judged.”**



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SPORTS FINAL

# DETROIT STUNS 49ERS 27-24

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



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

By Andrew Itoff  
ANDREW JONES: 25  
Rf and 100 RBI, 1C

OUTFIELDER ANOTHER STAR IN ATLANTA CONSTELLATION, 1C

# USA TODAY

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

## HOME SALES HIT HIGHEST POINT IN 15 MONTHS

EVEN IF SURGE FALTERS, ECONOMY WILL GET BOOST

## NEW FILMS FEATURE WOMEN AND ISSUES THEY FACE TOGETHER

SISTERHOOD TO OUTSHINE SHOWGIRLS, DRAG QUEENS, 1D

TUESDAY, SEPTEMBER 26, 1995

# NEWSLINE

A QUICK READ ON THE NEWS

**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 New York, subject of

# Your name here (?)

FIRST IN A 3-PART SERIES

## WARNING: PILOT ERROR

How regional airlines failed to heed warning signals about pilots who didn't belong in the cockpit

## Dead Calif mont

By Mimi H... USA TODAY

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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, Calif. — 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.







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**Take the Most Conservative Approach**



# What to do?

Take the most conservative approach

De-ice?

Divert?

Add more fuel?



Don't de-ice

Continue?

Risk min fuel  
landing?



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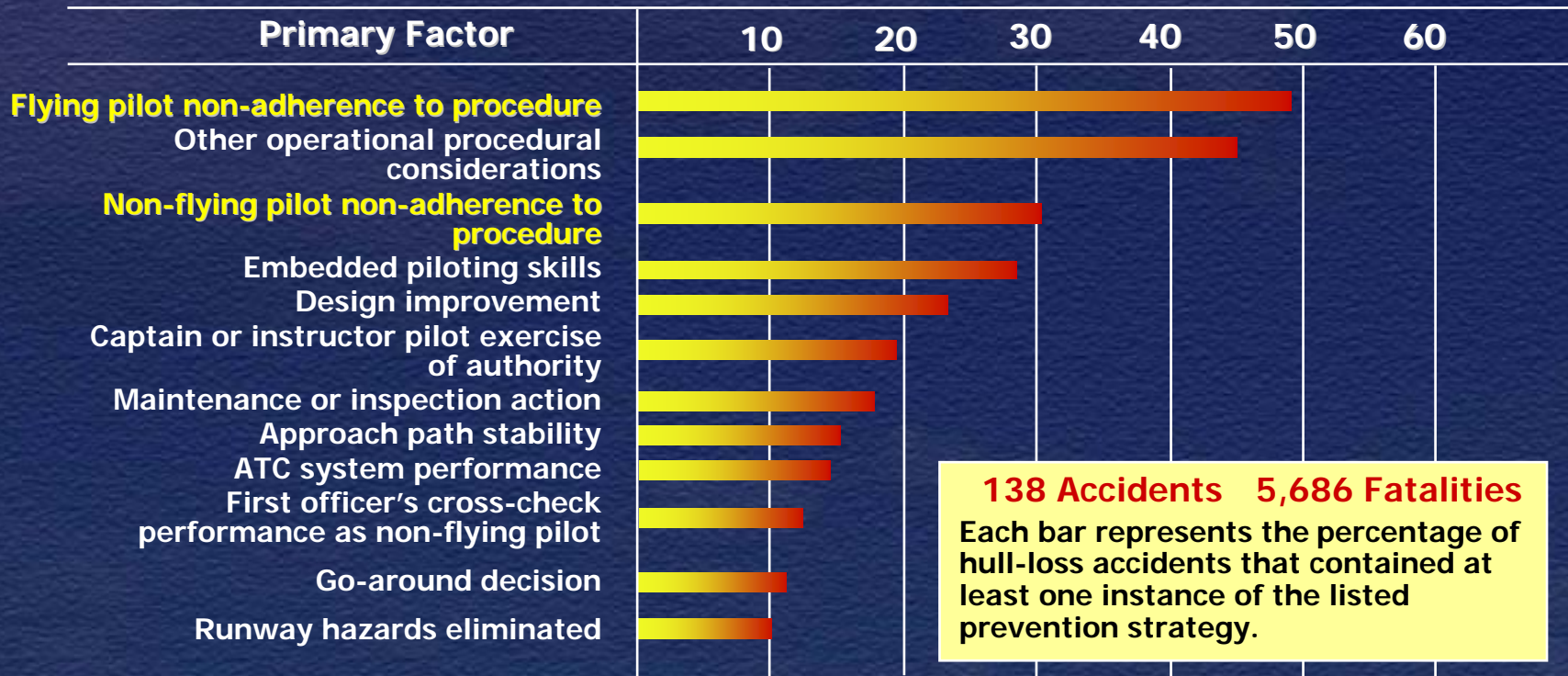
**SOP Adherence**



# Accident Causal Factors

## Hull-loss Accidents over 10 Year Period

### Percentage of Accidents



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”





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**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.



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