From the Front Lines

ALPA in the News

Poor Training, Engine Flaws May Have Led to Pinnacle 3701 Accident

Capt. Terry McVenes (US Airways), ALPA's Executive Air Safety Chairman, said on June 13, after the first day of the NTSB's 3-day public hearing on the Pinnacle Airlines Flight 3701 accident on Oct. 14, 2004, in Jefferson City, Mo., "Today, we again mourn our colleagues who lost their lives on that terrible day, and we pledge to do all we can to learn and apply every lesson we can from this accident. We will ensure that their legacy is one of improved safety and training to make certain a tragedy like this never happens again."

Both engines on the CRJ-200 flamed out after the pilots leveled off at FL410 during a night repositioning flight. Unable to restart either engine, they crashed in a residential area a few miles short of the airport in Jefferson City.

Capt. McVenes observed, "If just one of the engines had restarted, this accident might never have occurred." He also noted that the pilots followed proper procedures and tried to restart their engines multiple times. Accident investigators are looking into the role that engine core lock may have played in this accident.

"Core lock" is a safety risk previously known only to engine and aircraft manufacturers until very recently—and about which pilots knew nothing. "While the FAA's Special Airworthiness Information Bulletin issued on June 2, 2005, instructs pilots about how to avoid the core-lock danger," Capt. McVenes noted, "the warning comes far too late for our lost colleagues.

"Regional airlines across the United States are experiencing enormous growth and adding ever more sophisticated aircraft to their fleets," Capt. McVenes continued. "This environment means that pilots often have less time to gain firsthand experience with an aircraft before assuming command. While many regional airlines are putting safety first, others still have opportunities to improve their safety cultures. These 'improving' carriers must provide comprehensive operational training to compensate for their lack of hands-on experience and to better prepare their pilots for the transition to jet aircraft.

"Critical proactive safety reporting programs could be put in place to help detect and correct safety issues before accidents occur," Capt. McVenes declared. "Carriers around the world rely upon cost-effective, nonpunitive, confidential safety reporting programs such as the Flight Operations Quality Assurance Program (FOQA) and the Aviation Safety Action Program (ASAP) to help ensure that air travel remains the safest mode of transportation."

For more than a year, "ALPA has repeatedly requested that Pinnacle Airlines put both of these programs in place," Capt. McVenes noted. "Pinnacle has very recently agreed to implement the programs," he added, and "ALPA stands ready to work together with management to institute these programs as quickly as possible."

The Department of Transportation's Inspector General recently issued a report highlighting how far the FAA's resources are stretched with regard to monitoring aviation safety. "A positive safety culture that includes active safety reporting programs is more critical than ever to helping the FAA do its job and to ensuring that aviation safety remains paramount in these times of ever-increasing numbers of flights and passengers," Capt. McVenes argued.

"As passenger and cargo air transportation continue to grow," he suggested, "our challenge is to make sure that the safety lessons that the legacy carriers have learned are passed on to others. The FAA and the NTSB must set the pace for progress by making certain that all airlines adhere to the same level of safety. Inadequate training, a poor safety culture, and poor procedures tell us that Pinnacle Airlines is an example of how One Level of Safety has not yet penetrated to all levels of the airline industry."

Experience teaches that aircraft accidents usually result from a combination of several contributing factors. The Pinnacle Airlines Flight 3701 accident stands as no exception. In response, ALPA designed a multi-layered communications strategy to help ensure that all the factors that could have played a role in the accident, including pilot training, Pinnacle Airlines' safety culture, flight crew performance, and engine design, were presented in news media coverage of the NTSB public hearing.

ALPA Issues Alert on CRJ-200 Dual- Engine Failure Checklist

On June 22, the Association issued ALPA Safety Alert Bulletin 2005-01, CRJ-200 Dual-Engine Failure Checklist, to inform pilots of this widely used airplane type about a safety issue revealed by an ongoing NTSB accident investigation. ALPA is participating in the NTSB investigation, which has "revealed potential improvements in the CRJ-200 dual-engine failure checklist used by some airlines," the bulletin notes.

The FAA had issued, on June 2, a Special Airworthi-

IN MEMORIAM

"To fly west, my friend, is a flight we all must take for a final check."—Author unknown

S/O C.M. Petersen	United	August
Capt. A.R. "Satch" Hoghland, Jr.	United	September
Capt. Donald K. Hopkins	FedEx	October
Capt. Everett W. Wood	Pan Am	December

2005		
Capt. C. Brown	United	February
Capt. Jerry D. Harris	United	February
Capt. Winfield H. Lippincott	United	February
Capt. James K. Lockhart	Continental	February
Capt. Thomas P. Mackay	Pan Am	February
F/O James C. Robertson	Continental	February
Capt. R.W. Tappan	United	February
Capt. Robert G. Cumming	United	March
Capt. Joseph B. Joyce	United	March
F/O Earl W. Woodard	US Airways	March
Capt. Norman T. Bradley	TWA	April
Capt. William J. Cox	US Airways	April
F/O Gary C. Davis	Pinnacle	April
Capt. R.J. Dooley	Pan Am	April
Capt. Wallace L. Young	Hawaiian	April
Capt. Thomas W. Anderson	TWA	May
Capt. Jack L. Baker	TWA	May
Capt. Walter R. Brady	Eastern	May
Capt. Robert Christiansen	TWA	May
Capt. William A. Devane III	US Airways	May
Capt. O.J. Dio Guardi	Eastern	May
F/O William B. Downs	US Airways	May
F/O Larrie B. Harlan	Trans States	May
Capt. John W. Harpster, Jr.	TWA	May
F/O Howell C. Hollis	Delta	May
Capt. J.A. Hyde	US Airways	May
S/O Joel A. Leach	TWA	May
Capt. William D. McMinn	TWA	May
Capt. L.H. Mouden	Braniff	May
Capt. James E. Sanders III	Delta	May
Capt. Joseph N. Saporito	Delta	May
Capt. David W. Schirmer	Delta	May
Capt. Bernard T. Stark	United	May
Capt. Edward C. Wilkinson	Golden West	May
Capt. Chester G. Williams, Jr.	Eastern	May
Capt. Laurence Ray Wood	United	May
Capt. Clifton C. Davis	TWA	June
Capt. Glen J. Giles	US Airways	June
Capt. David A. Harris	Eastern	June
Capt. Thaddeus W. McLean	Eastern	June
Capt. Refus Webb	Eastern	June
*Capt. F. Simmonds	Altair	N/A
* Date of death not available		

ness Information Bulletin (SAIB) to clarify "the steps necessary to improve the chances for a successful air start [in the CRJ-200] in case of a dual engine failure...." The SAIB is not mandatory but is a strong recommendation to incorporate changes into the CRJ-200 AFM and quick reference checklists. The FAA is considering taking similar action in regard to other CRJ models.

The revised checklist cites the importance of maintaining a positive $\rm N_2$ at all times, clarifies the need to maintain at least 240 KIAS/0.7M, and provides information regarding the altitude loss and pitch attitude required to accelerate to the airspeed required (300 KIAS) for a windmilling air start. The following excerpts from the revised checklist highlight these issues:

• CAUTION: Failure to maintain positive N_2 may preclude a successful relight. If required, increase airspeed to maintain positive N_2 indication.



- NOTE: An altitude loss of approximately 5,000 feet can be expected when accelerating from 240 to 300 KIAS and may require a pitch attitude of 10 degrees nose down.
- CAUTION: [A speed of] 300 KIAS or [faster] is required to achieve sufficient $N_{\scriptscriptstyle 2}$ for start. Airspeed must be maintained until at least one engine relights (stable idle) or start attempts [are] abandoned.

ALPA recommends that

- pilots review the SAIB at www.faa.gov/aircraft/safety/alerts/saib/media/NM-05-55.pdf;
- each ALPA central air safety chairman work with his or her airline's safety and training officials to ensure that accurate information regarding dual-engine failure is available to all affected flight crews; and
- pilots always comply with their company's guidance when operating the aircraft.

Pilots who have questions or comments about this safety issue should contact ALPA staff engineers Mike Huhn or Pierre Huggins in the ALPA Engineering and Air Safety Department via the Association's toll-free air safety reporting line, 1-800-424-2470.

ALPA Offers Online Runway Safety Education Program

In July, ALPA launched an online program to educate its members about runway safety. Developed in conjunction with the FAA's Office of Runway Safety and Operational Services and AOPA's Air Safety Foundation, the program was created in an effort to reduce the number of incidents and accidents that occur at airports, with special emphasis on avoiding runway incursions.

The interactive program, which is based on a similar initiative offered through the AOPA website for the general aviation community, includes animations, video, and audio designed to educate airline pilots and other commercial-certificated pilots about the many potentially hazardous situations that can occur during ground operations. The program leads participants through a number of modules using scenarios that pilots frequently encounter to educate the pilots on standard operating procedures and best practices that pertain to ground operations—navigating ramps, runways, and taxiways to ensure safe operation on the airport.