



PREFLIGHT

Chairman's Message

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I hope each member of our Section will mark his/her calendar for our annual meeting held in conjunction with the Mid-Year Meeting of the State Bar of Georgia. The meeting will take place at Sheraton Colony Square, and we will have a luncheon program on Friday, January 16, 2004, beginning at 12:00 noon. Our luncheon speaker will be Captain Loyd Florence, who was a Pan American clipper pilot during WWII.

In the early days of aviation, pioneers such as Charles Lindbergh recommended that aircraft called upon to span large bodies of water be flying boats. Among others, Pan American Airways operated the Boeing 314, a four-engine, triple-tailed flying boat that operated from harbors as opposed to runways. Celestial navigation and dead reckoning navigation were forms of art honed to precision to ensure the aircraft flew along its intended course. There were no flight management systems or instrument landing systems to guide the airplane down through clouds, fog, and rain. The Pan American clipper boats had such exotic destinations as Lisbon, Wake Is-

land, Singapore, Rangoon, and Hong Kong, to name a few. With the outbreak of WWII, the Pan American clipper boats were placed into the service of the American military. In order to get a seat on the aircraft, one had to be a high-ranking military officer, an important member of the American press, or, in some circumstances, a secret agent employed by the OSS. Captain Florence will give you more details during his luncheon address.

For those of you who represent pilots before the NTSB, the United States Court of Appeals for the District of Columbia has recently issued a decision that re-affirms the existence of the Stale Complaint Rule found in 49 C.F.R. § 821.33. See *Ramaprakash v. Federal Aviation Administration and National Transportation Safety Board*, Case No. 02-1283 (October 21, 2003). Mr. Ramaprakash was my client. An airline pilot, he neglected to report his DUI conviction to the FAA as required by 14 C.F.R. § 61.15 (e). Fourteen months after his infraction, he received a Notice of Proposed Certificate Action ("NOPCA") from the FAA. We moved to dismiss the case as stale, since the alleged violation took place more than six (6) months prior to the issuance of the NOPCA. Of interest was the fact that the FAA was on notice of the infraction in May of 1997, when it received a computer tape from the



Mystery Plane #1

(Continued on page 5)

From the Editor:
Mystery Aircraft Sweepstakes Winner!



I wanted to announce that C. Keith Wood, Jr. of Jonesboro was the winner of our first Mystery Plane Contest! Keith correctly identified the aircraft in our last issue as a P-40, a Spitfire, a Hellcat and a B-17. He beat out the next closest competitor by just a couple of hours, so please keep your emails and phone calls coming for our next contest. Given the strong response, I have included another group of four mystery aircraft. To keep things interesting, the immediate past winner (Keith) and the current section officers are ineligible for this issue's contest. The prize is lunch for two at the Downwind at PDK, so good luck! Please email or call in your responses to my office address listed on the back page.

I wanted to thank our regular contributors, and encourage all of you to send in your articles whenever possible. Transactional issues, litigation issues and aviation history pieces are always appreciated. I also wanted to confirm that I survived my private pilot check ride, even though I suggested an engine out landing at a nice field at my 2 o'clock rather than at the runway right in front of me!

I even got one of those new fancy private pilot cards with a FAA hologram and everything.

I am also considering doing a story on any JAG members who are aviators and have been drawn into the Iraqi conflict. I thought it would be an interesting perspective on the war that I have not seen covered. If you or one of your colleagues fit into this profile, send me an email. It would be much appreciated.

Finally, I ran across the following photo of a rather low approach somewhere out in the Caribbean. Let's see if we can figure out what really had the pilot's attention✳



Captain: "Isn't that red over red on the VASI?"
First Officer (flying): "Actually, that's a black over white zebra print."

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ALASKA AIRLINES FLIGHT 261

By Mark Stuckey

Alaska Airlines Flight 261 is a study in how corporate aviation management can affect aviation safety to its detriment. As will be discussed further, Flight 261 (N963AS) crashed on January 31, 2000 because of the failure of the jackscrew system that controlled the horizontal stabilizer of the aircraft, a McDonnell Douglas MD-83. However, the failure was hardly an instantaneous event. Indeed, the aircraft had two terrifying episodes: an initial dive from 31000 feet to 24000 feet, starting at 1609:20 PST and ending at 1610:33, and then the second fatal dive from 17800 feet, which started at 1619:29 and ended at 1620:57 when the aircraft impacted the Pacific Ocean. To add to the terror of the crew and passengers, the aircraft was inverted during the second fatal dive. And why did this happen? Because there was no longer any grease on the jackscrew. And why was there no grease on the jackscrew? Because Alaska Airlines had successfully petitioned the FAA to have the maintenance and inspection intervals increased to save money.

The Flight

Flight 261 departed from Puerto Vallarta at 1337 PST and was scheduled to arrive in Seattle, with a stop at San Francisco. It appears from the recorders that the first sign of trouble began somewhere during the cruise portion of the flight at 31000. The crew contacted mainte-

nance personnel at Alaska Airlines at about 1521 to discuss a problem with the horizontal stabilizer jamming and about diverting to Los Angeles. During the cruise portion of the flight, the autopilot was switched off and various control yoke pressures were

regardless of the flow issues. When the autopilot was disengaged again at 1609:20, the aircraft began a steep dive, reaching speeds of 353 KIAS until the aircraft stabilized at 24000 at 1610:33. Even after the aircraft stabilized, 120 pounds of pulling pressure



N963AS In Flight

noted in the Flight Data Recorder (FDR), suggesting that the crew were testing the amount of force necessary to keep the aircraft stabilized.

At about 1552 the Alaska Airlines dispatcher contacted the crew about their request to divert and felt it was appropriate to remind the crew of a flow problem if they diverted to LAX. The captain rebuked the dispatcher and stated that he was much more concerned about overflying suitable airports than he was about flow problems. The captain was then recorded on the cockpit voice recorder (CVR) as complaining to the crew and flight attendants that the dispatcher didn't seem to understand that the airplane was not going anywhere upon landing,

were still being applied by the crew. At 1619:36, after various attempts at troubleshooting were made by the crew, a loud bang was heard on the CVR, at which point the aircraft entered into a second steep inverted dive from 17,800 feet and subsequently impacted the Pacific Ocean at 1620:57.

The Horizontal Stabilizer

So what caused this tragedy? There was a complicated sequence of events, but the final dive was caused by the complete failure of the jackscrew assembly that manipulated the horizontal stabilizer. (On a MD-83, the entire horizontal stabilizer can be manipulated to adjust pitch, as well as the elevators).

(Continued on page 4)

Alaska Airlines (cont.)

(Continued from page 3)

The jackscrew that manipulates the horizontal stabilizer rotates into an "acme nut". Recovery of the jackscrew assembly and the acme nut from N963AS indicated the following: (a) the acme nut was completely stripped; (b) the jackscrew threads had been shearing off for some time; (c) the grease on either end of the jackscrew was sandy and filled with metallic shards; and (d) there was no grease whatsoever found on the jackscrew operating surfaces.

In a nutshell, the crash came about when the jackscrew became jammed for a period of time and then slid upward until it was temporarily stopped by the structural fairings of the vertical stabilizer. These fairings were clearly never designed to withstand such loads, and thus the fairings failed. This allowed the horizontal stabilizer to fly upwards and actually penetrate the top of the vertical stabilizer, resulting in the final, fatal dive. The complete NTSB report, as well as an animation of the sequence of events, can be found at the NTSB website at the Major Investigations Page and at www.nts.gov/events/2000/aka261/animations/jackscrew_261.wmv.

A Lack of Lubrication

All of this came about due to a very simple cause: a lack of lubrication of the jackscrew assembly. As noted above, the jackscrew was found without any grease on its operating surfaces, and



Normal Acme Nut



**Acme Nut from N963AS,
Completely Stripped**



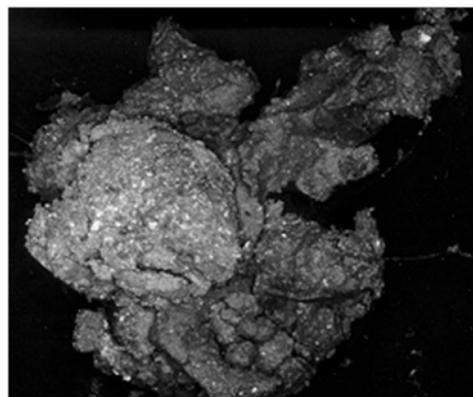
**Jackscrew from N963AS,
Recovered without any
Grease on the Operating Sur-
faces and with Remnants of
Screw Shavings Still Attached**

with sandy, metallic grease located at each end. It doesn't take an accident investigator to figure out that a lack of grease on the jack screw assembly would subject the assembly to excessive wear and catastrophic failure. So how did this happen?

Alaska Airlines petitioned the FAA to have the maintenance intervals and end play checks of the assembly lengthened in order to save money. Despite a lack of data indicating that such action was a good idea, the FAA permitted the lengthening of lubrication intervals and end play checks, with disastrous results.

The NTSB made over 24 Safety Recommendations as a result of the crash of Alaska Airlines Flight 261, with over half of these addressing the issues of improving the number and quality of

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**Sandy, Metallic Grease Sample Recov-
ered from the Ends of the Jackscrew of
N963AS**



Mystery Plane #2

Chairman's Message (cont.)

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National Driver Register ("NDR") including data on Mr. Ramaprakash. The computer tape sat dormant until September of 1997 and went from one investigator to a second investigator, to a third investigator. Finally, in February of 1998, a cross-reference between the NDR tape and the National Law Enforcement Telecommunications System ("NLETS") revealed that Mr. Ramaprakash, had, indeed, suffered a DUI conviction that was not reported to the FAA.



Mystery Plane #3

In response to our Motion to Dismiss based upon the Stale Complaint Rule, Judge Pope refused to grant the motion. On appeal, the Board split in a 3 to 2 de-

cision to affirm the denial of the Motion to Dismiss. We filed a Motion for Reconsideration, which was denied. I then referred the matter to Mark McDermott, Esq. and Peter Wiernickie, Esq. to prosecute an appeal before the United States Court of Appeals for the District of Columbia. The reason we decided to appeal to the D.C. Circuit Court of Appeals was because my experiences in the Eleventh Circuit in airman certificate cases had not been encouraging. On the other hand, the DC Circuit Court of Appeal has a track record of reversing administrative agencies who act outside their scope of authority or who

render decisions that are arbitrary or capricious. Thankfully, the D.C. Circuit Court of Appeals examined the record and legal authorities very carefully and concluded that the NTSB had abused its discretion in refusing to dismiss the case as being time-barred by the Stale Complaint

Rule.

The complete text of *Ramaprakash* may be viewed at www.cadc.uscourts.gov.

I have another case with facts virtually identical to those in

Ramaprakash, in which Judge Roger Mullins granted a Motion to Dismiss based upon application of the Stale Complaint Rule. The FAA appealed, and the Board reversed Judge Mullins. However, with the Court of Appeal's decision in *Ramaprakash*, it appears the Board will have no choice but to reverse its decision in this related case. On behalf of two determined pilots and Messrs. McDermott and Wiernicki, I take pleasure in reporting to you that the NTSB's Stale Complaint Rule appears to be alive and well.

I look forward to seeing all of you at our Section's annual meeting on January 16, 2004 at 12:00 noon.

Happy Landings,

Alan



Mystery Plane #4

Alaska Airlines (cont.)

(Continued from page 4)

maintenance and inspection intervals of critical flight control surfaces. The Board clearly saw this crash as a maintenance problem more than anything else. The most succinct and damning statement came from Board Member John Goglia, who spoke at the Aviation Section's seminar earlier this year:

"This is a maintenance accident. Alaska Airlines maintenance and inspection of its horizontal stabilizer activation system was poorly conceived and woefully executed. The failure was compounded by poor oversight. Lubrication periods were extended and inspection intervals were simultaneously lengthened, neither with sound technical basis. And if logic and standard practice dictate that as risk increases so should monitoring, Alaska's program was otherwise. . . .

Had any of the managers, mechanics, inspectors, supervisors or FAA overseers whose job it was to protect this mechanism had done their jobs conscientiously, this accident cannot happen. . . .

Virtually any system on an aircraft treated with the indifference shown to this mechanism will break, many with equally catastrophic effect. Aircraft must simply be maintained, and maintained with care and at all cost. . . .

I am interested to see what system enhancements come from this, but I am still left with a mechanic's perspective—you either maintain it or it breaks. This is universally applicable. Like the old adage says, 'you schedule maintenance, or the maintenance will schedule you.'" ✕

SKYNOTES

CAF Dinner with VMF-214 (Black Sheep Squadron)
November 15 at Falcon Field;
www.dixiewing.org

Fernbank Centennial of Flight Lecture Series
Dec. 5 - Pearl Harbor
Dec. 13 - Grand Finale Party
fsc.fernbank.edu/flight

Centennial of Flight Celebration
December 12-17 at Kill Devil Hills, NC;
www.firstflightcentennial.org

Aviation Section Midyear Meeting and Luncheon
January 16, 2004 at 12:00 PM;
Speaker is Capt. Lloyd Florence; Sheraton Colony Square

In Memoriam



We at the Aviation Section are sad to report the loss of the last known Heinkel HE-111 in regular use. N72615 was owned and operated by the Arizona Wing of the Commemorative Air Force, and was the one-time personal transport of the late General Franco.

The aircraft was lost in Cheyenne after being cleared to land on Runway 26. When the aircraft suddenly entered a steep left bank, ATC inquired about the pilots intentions, and he indicated that they had just lost the left engine. The aircraft slid through a fence, struck a car and then a barn. The barn

and the aircraft were destroyed by fire. Both pilots, Neil R. Stamp and Charles Stephen Bates, were killed in the crash.

Our condolences go out to the pilots' families and also to the CAF for the tragic loss of this piece of aviation history and those that flew her. ✕

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www.gabar.org/avlaw.htm

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