



## Aviation Human Factors Industry News

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### Citation Down: Van Nuys

**Two Reported Loss; No Injuries**  
On Ground A Cessna Citation on a flight from Van Nuys to Long Beach, CA, crashed on take-off Friday, **killing both people on board.**

Initial reports indicate the **baggage door on the nose of the aircraft opened on take-off.** The pilot called the tower, asking to return to the runway just before the crash.



The aircraft burned in a field about three-quarters of a mile north of the field, according to fire officials.

No one on the ground was hurt and no structures on the ground were damaged, according to KTLA TV News.

There's no immediate indication of the aircraft owner or the exact model of Cessna Citation involved.

## [Pilots in Ky. crash violated rules](#)

Transcripts shed light on cockpit conversations before the deadly crash of a Comair flight last Aug. Carlotta Bradley, A-P correspondent. Transcripts shed light on cockpit conversations before the deadly crash of a Comair flight last August. A-P correspondent Carlotta Bradley reports. Video Report WASHINGTON — [In the minutes before the crash of a commuter jet that took off from the wrong runway, the pilots discussed their families, their dogs and job opportunities, violating at times a rule against extraneous cockpit conversation, the airline said Wednesday.](#)



The National Transportation Safety Board released a transcript Wednesday of the cockpit recording aboard Comair Flight 5191. [The transcript also showed that one of the pilots noted something was amiss when he glanced down the Lexington, Ky., airstrip and said it looked "weird" because it had no lights.](#)

The transcript was the first public disclosure of the pilots' conversations during the ill-fated flight, which struggled to get airborne after trying to take off from a runway that was too short for passenger jets. The plane went down in flames, killing 49 people in the deadliest American aviation disaster in five years.

The transcript revealed that the [flight crew "did not follow Comair's general cockpit procedures,"](#) Comair spokeswoman Kate Marx said. "It is unclear what role, if any, this played in the accident, so it would be premature to determine that."

[In 1981, the Federal Aviation Administration adopted a so-called "sterile cockpit rule" that prohibits, among other things, extraneous conversation during taxi, takeoff and landing.](#)

[As the pilots went through preflight procedures, Capt. Jeffrey Clay talked about his young children having colds, and co-pilot James Polehinke discussed his four dogs. The two men also talked about pay and working conditions, even as the controller occasionally interrupted to provide instructions.](#)

"How old are they?" Polehinke asked six minutes before the crash.

"Three months and two years old," Clay answered.

"That's a nice range, age range," Polehinke said.

Marx said Comair does not believe those statements violated the rule because they were made before the aircraft began to taxi. But a later conversation about a fellow pilot was a violation, she said.

FAA spokeswoman Laura Brown said the [sterile cockpit policy prohibits "engaging in non-essential conversations within the cockpit."](#)

Peter Goelz, former managing director at the NTSB, said a little extraneous conversation among pilots is not unusual, but the extent of the chatter between the Comair crew was rare.

"I think that when the human-factors experts at the NTSB analyze the transcripts, they will identify this extraneous conversation as a contributing factor," Goelz said.

Polehinke was the lone survivor of the Aug. 27 crash, losing a leg and suffering brain damage. He has told relatives he remembers nothing about that morning.

## A Crash's Improbable Impact

'82 Air Florida Tragedy Led To Broad Safety Reforms

On a snowy day 25 years ago tomorrow, co-pilot Roger Alan Pettit was at the controls of an Air Florida jetliner taking off from Washington National Airport. As the plane rolled down the runway, Pettit looked at his instruments. Something was wrong.

"God, look at that thing," he told the plane's captain, Larry Wheaton, apparently referring to an anomaly in engine instrument readings or throttle position. "That doesn't seem right, does it?"

Pettit repeated himself, but Wheaton ignored him, according to a transcript of the cockpit voice recording. The crew continued down the slushy runway. After lifting briefly into the air, the plane slammed into the 14th Street bridge, killing 78 passengers, motorists and crew members, including Pettit and Wheaton, on Jan. 13, 1982.

While most air disasters quickly become historical footnotes, aviation safety experts say few crashes have left a legacy as sweeping as Air Florida Flight 90.



Though some of the lessons may seem simple, such as communication and management skills, it helped break down an authoritarian cockpit culture dominated by captains. Over time, the principles learned from the disaster gradually migrated to other modes of transportation and into businesses, even hospitals.

"This accident was pivotal because it helped draw attention to the fact that pilots need to communicate better," said Robert L. Sumwalt III, vice chairman of the



National Transportation Safety Board and a former airline pilot who took off from National hours before the Air Florida crash. "This accident was ingrained in the minds of the entire world, and we watched the recovery efforts as they happened. I don't know of any other accident that has had this amount of impact on aviation but also in other industries."

The maritime and rail industries adopted lessons from the crash used to combat communication problems on ocean liners and in trains. Hospital executives became worried after an influential report in 1999 concluded that tens of thousands of Americans died each year because of medical errors. They began searching for ways to more easily avoid such errors. Some have turned to airline pilots.

"We are also in a high-risk environment," said Steve Smith, chief medical officer at the Nebraska Medical Center in Omaha. "The model of a surgeon being captain of the ship was very similar to the model in the cockpit many years ago."

In the months after the crash, the safety board and other regulators focused intensely on de-icing operations of Air Florida 90 in 20-degree temperatures during a snowstorm. Ice build-up can cripple an airplane's ability to fly.

The NTSB found errors in the way the plane was de-iced -- the crew even tried to reduce the build-up on their Boeing 737 by using the exhaust of a jet in front of them. That decision may have only worsened potential icing on the wings. Investigators believe that ice also covered critical engine probes, giving the pilots a false reading of the thrust needed for takeoff. Ice or snow on the plane and the lack of thrust likely caused the crash, the board concluded.

As experts and airline executives digested the safety board's report, they began to more closely scrutinize other problems in the cockpit that day. It emerged that Pettit and Wheaton were emblematic of aviation's lingering cowboy culture, a residue of an era when fighter jocks from World War II and Korea flew for the airlines. In that gung-ho environment, captains were always right. They did not need advice, and co-pilots and other crew members often were afraid to assert themselves.

"It was a more romantic time frame when aviation, wasn't just a transportation system, but that needed to change," said Larry Rockliff, vice president of training for Airbus North America.

The industry was starting to tackle some of those communication and management problems in the United States, especially after the 1978 crash of a United Airlines jet in Portland, Ore. Other major air crashes had also raised alarms about the lack of communication in cockpits.



But some experts believe it took the spectacular crash of Air Florida in the Potomac to **drill the lessons home** and spur widespread use of what was then a revolutionary training regime, later to be known as Crew Resource Management.

Soon, airlines were teaching the Air Florida crash as a textbook example of **what can go wrong when pilots do not communicate and listen properly**. Students at Embry-Riddle Aeronautical University, many of whom are destined to work for airlines, study the crash. Even budding aircraft engineers at the University of Iowa **review the accident so they can think of better ways to design systems to avert communications breakdowns**.

At Embry-Riddle, in Daytona Beach, Fla., professors **use the accident to highlight a litany of human errors made that day**. They even evaluate how the crew went through the pre-flight checklist.

"Anti-ice," Pettit said, referring to a device that prevents icing of critical gauges in the engine.

"Off," Wheaton replied, almost as if he were sitting on a tarmac in Florida and not watching the snow through the windshield.

"The co-pilot was reading the checklist, and he reads the anti-ice item. But then he kept going," said Thomas Kirton, an Embry-Riddle professor, adding that the fateful moment serves to bring home to students the need to carefully consider all actions in the cockpit, no matter who is in charge.

Kirton also has students dissect the last words of the pilots: Pettit is trying to explain that something is wrong. Many experts believe that Pettit should have been more assertive and that Wheaton should have rejected the takeoff so they could determine what was wrong.

Kirton uses the comments to reinforce in his students that they need to forcefully tell captains that something is amiss in a way that cannot be ignored.

"You say: 'Captain Smith, I have a concern. . . . Do you agree with me?' " Kirton said. "If you are in the co-pilot's role, **you have to be assertive without being offensive**."

**In other instances, pilots acting and communicating quickly have averted disaster.**

In June 2005, a US Airways Boeing 737 was hurtling down a runway at Logan International Airport in Boston when the co-pilot looked out the windshield and saw a wide-body jetliner heading on a collision course. Both jets had been cleared to take off at the same time on intersecting runways.



The co-pilot of the US Airways jet, James Dannahower, **pushed down the yoke to prevent the pilot from taking off and told him to keep the plane on the ground.** The Aer Lingus jet took off and flew safely overhead.

"He saw it out of his peripheral vision, and I trusted him," the pilot, Hank Jones, said.

Jones, who said the cockpit was too **"autocratic"** when he started flying in the 1970s, begins **each trip with a briefing that involves the first officer and flight attendants.** He tells them to alert him to anything that concerns them. As he was descending into Mobile, Ala., recently, the co-pilot did some quick math and told him that the tailwinds were too strong for his aircraft to land safely. The crew then diverted to another airport. **"Little things can prevent big things,"** he said.

### **Nails found embedded in Indian plane tires**

DUBAI: Minutes before an Indian (formerly Indian Airlines) flight was to take off for Doha, officials at the Bahrain Airport **discovered four nails embedded in the front right tires of the aircraft.**

Ground engineers **found the five-inch-long nails during a final check** on Flight IC997 before departure, averting what an airline official described as a **'potential disaster'.**

The nails were discovered while checking the flight which had arrived from Kochi, via Calicut and Doha, at 8:20 am on January 2, Gulf Daily News reported.

Civil aviation officials in Bahrain confirmed there had been 'an incident,' but said the nails could have been picked up anywhere and not necessarily in Bahrain.

The flight, which originated in Kochi, had its first halt at Calicut from where it flew to Doha and then to Bahrain to return on the same route to Calicut.

**The nails were detected as the boarding was in progress,** and the flight left Bahrain 15 minutes behind schedule, at 12:20 pm on Thursday.



## **Piece by piece, WWII airplane resurrected**

**Restoring 1941 Avro a 'labour of love' for military aviation buffs**

**GREENWOOD — A piece of Canadian military aviation history is coming back to life as an aircraft used for training pilots, navigators and bombardiers is being painstakingly rebuilt in Greenwood.**

**A team of volunteers made up of [three air force aviation mechanics](#) and 10**

**mostly retired military personnel has put more than 9,000 hours into the careful restoration of a twin-engine 1941 Avro Anson MK 2 aircraft.**



The volunteers said in a recent interview [they look forward to gathering in the shop behind the aviation museum](#) near 14 Wing Greenwood from 8 a.m. to 4 p.m. every Monday and Tuesday to work on a project that began in December 2003.

["It's a labor of love,"](#) retired flight engineer Butch Fleury said in an interview.

["We want to see it be as close to original as possible."](#)

["It's a challenge just to see if we can do it,"](#) team leader Colin Ainsworth said.

The frame for the plane was found on a farm in Alberta. A nose section was found in a farmer's field in Saskatchewan, where Mr. Ainsworth said it was home to a nest of prairie rattlesnakes.

Other parts, such as instrument panels, wing tips and a rudder, have come from various places.

Mr. Ainsworth said he wonders if there is a yet-to-be-discovered treasure trove of parts closer by, since the planes were built at the Amherst plant of the Canada Car Foundry.

Many of the team members say they [look forward to the camaraderie](#) as well as the challenge.

## **United Airlines employees witness Alien Spacecraft in Chicago**

Recently, there were several published reports including those on CNN, **about Alien Spacecraft being sighted by United Airline personnel on November 7, 2006**. Several employees of the company did confirm the observation of a saucer-like spacecraft. The spacecraft hovered low over O'Hare International Airport for several minutes before bolting through thick clouds with such intense energy that it left an eerie hole in overcast skies, said the United Airlines employees who observed the phenomenon. **The employees are now upset because appointed airline spokesmen are denying that the sighting took place.**



Although air traffic controllers denied seeing anything unusual that day on the record, **as many as 12 of United's employees have stated that the event did indeed occur**. The strange thing is that even though United denies it, the Federal Aviation Administration said that the air traffic tower control tower did get a call from a supervisor at United asking them about the sighting. It only makes sense that if United was asking about the sighting, they had to get their knowledge of the event from someone, and would not that have been the 12 employees that saw it?

All the witnesses said the object was dark gray and well defined in the overcast skies. They said the craft, estimated by different accounts to be 6 feet to 24 feet in diameter, and did not display any lights.

Some said it looked like a rotating Frisbee, while others said it did not appear to be spinning. All agreed the object made no noise and it was at a fixed position in the sky, just below the 1,900-foot cloud deck, until shooting off into the clouds.

### **Witnesses shaken by sighting**

**"I tend to be scientific by nature, and I don't understand why aliens would hover over a busy airport," said a United mechanic who was in the cockpit of a Boeing 777 that he was taxiing to a maintenance hangar when he observed the metallic-looking object above Gate C17.**

**"But I know that what I saw and what a lot of other people saw stood out very clearly, and it definitely was not an [Earth] aircraft," the mechanic said.**

One United employee **appeared emotionally shaken** by the sighting and "experienced some religious issues" over it, one co-worker said.



"There have been documented cases where safety appears to have been implicated, and more and more we are coming to the point of view that we are dealing with an intelligent phenomenon," said Richard Haines, science director at the National Aviation Reporting Center on Anomalous Phenomena, a private agency.

"We must be proactive before an aircraft goes down," said Haines, a former chief of the Space Human Factors Office at NASA's Ames Research Center.

Haines is investigating the O'Hare incident. He said he has determined that no weather balloons were launched in the vicinity of O'Hare on Nov. 7.

"It's absurd that the military would be conducting aerial test flights" near the airport, Haines said.

All the witnesses to the O'Hare event, who included at least several pilots, said they are certain based on the disc's appearance and flight characteristics that it was not an airplane, helicopter, weather balloon or any other craft known to humankind

### ***Thoughts on a crash.***

The Indonesian National Committee of Transportation Safety (KNKT), which will doubtless investigate the January 1 crash of an Adam Air B737, has a challenge: to maintain the independence and unbiased nature of its investigation.

You see, Adam Air (known more formally as Adam SkyConnection Airlines) was founded and is currently headed today by Chairman Agung Laksono, who is also speaker of Indonesia's house of representatives. This body, needless to say, has a great say in the KNKT's budget. **To put it mildly, there is just the slight hint of a conflict of interest here.**

Let me put the situation in terms easy to understand. Imagine U.S. House of Representatives speaker Nancy Pelosi were also chairman of an airline called Low Budget Express.



As speaker, she also exercises authorization of the budget of the National Transportation Safety Board (NTSB). The arrangement would be an affront to the notion of independent checks and balances.

In the case of the Adam Air accident, the airplane went down with 102 people on board about halfway through a two hour flight from the East Java capital, Surabaya, on a flight to the town of Manado. About half the scheduled journey was over water. Ninety of the passengers were reportedly killed, but the death toll could go higher. As of this writing, search teams are trying to locate the wreckage, so the number of survivors remains problematic.

The search teams must cover a vast area, extending perhaps as much as 150 by 300 miles, to include the waters off the north coast of Sulawesi. Two signals from the aircraft's beacon have reportedly been detected.

If the aircraft sank some 15-30 minutes after a controlled ditching following fuel exhaustion, the signals would cease, and that is apparently what has happened. It is possible that the aircraft will never be found. The north coast of Sulawesi is poorly mapped, oceanographically speaking, and contains some very deep undersea trenches. It is the area where the U.S. nuclear submarine San Francisco hit an uncharted seamount while doing 35 knots on January 8, 2005.

The airline was founded in 2003 and now has 18 aircraft in its fleet. Although sometimes referred to as a low-cost carrier, the airline markets itself as straddling between low-cost and traditional carriers, offering good on board service with meals, but at competitive ticket prices.

**The views of some passengers who have flown Adam Air contrasts somewhat with the marketing hype.** For example, Marek Bialoglowy posted a blog on February 17, 2006, titled **"Fear Factor: Flying in Indonesia,"** in which he recounts his experience flying a 17-year old Adam Air aircraft:

**"When boarding, I immediately noticed that the Boeing 737-400 had engine cover scratches everywhere, wings were all dirty and had broken paint in several places, door also looked very old and far from my expectations of a brand new airplane. Nevertheless, I decided to test the level of my fear and get on the plane."**

In response to his [blog](#), others posted similar experiences flying Adam Air and other Indonesian carriers:

[“Light didn’t work, back rest busted, could not turn off the air. Just scary to think about the important stuff that I could not see.”](#)

And,

[“I always think how can \[low-cost carriers in Indonesia\] sell very cheap tickets without giving away the safety. Now I know; they sell very cheap tickets of very old aircraft to non-informative \(sic\) passengers like me.”](#) (For an example, see below)

And,

[“Last time I boarded Adam Air:](#)

- [-- Poor guy next to me didn’t have any seatbelt on his seat.](#)
- [-- \[I\] had a different seat belt compared to other seats.](#)
- [-- The passengers were not told to straighten up their seats on takeoff or landing. I ended up having this big \[fellow\] recline his seat right to my nose.](#)
- [-- While waiting to take off, the air conditioner was shut down, in the middle of a very hot day in Jakarta.](#)
- [-- The plane looked plainly old, that if it were human, we could have studied at the same year in high school.”](#)

And finally,

[“I think deep down people realize that those airlines have serious problems with all the crashes going around.”](#)

In recent months, Indonesian authorities have expressed concerns that attention to costs may be compromising safety. Last November, President Susilo Bambang Yudhoyono urged the Transport Ministry to tighten oversight of low-cost carriers. Last year, also, the Transport Ministry banned local airlines from the use of aircraft that had logged more than 50,000 takeoffs and landings. Given the expansion of low-cost carriers in the region, the supply of [qualified pilots](#) has also been a source of concern.

Some local politicians have nevertheless fretted about safety. “I’m concerned that those lower fares are leading to a fall in safety standards,” said Akhmad Muqowam, head of parliament’s Transportation Committee. He is pushing for a full investigation into Adam Air’s safety record.

That record has been criticized in the past. In 2006 one plane skidded off a runway. Earlier that year, an Adam Air B737-300 was off course, essentially lost, later making an emergency landing at a small airfield at Tambolaka.

The airplane was flown out by the airline’s operations director, a gambit criticized by the KNKT, which complained, “In view of that, the Adam Air management must be examined, including the pilot that flew it.” Since an KNKT go-team was expected to visit the airplane before it was flown out, there was a suspicion that Adam Air personnel were tampering with the evidence.

It was also suspected that the airplane was dispatched with a faulty IRS (inertial reference system) and that the pilot’s pre-takeoff request to change the aircraft was reportedly refused. As a result of this incident, the Indonesian government issued a formal warning to the airline. As suggested below, this incident may bear on the recent Adam Air tragedy.

Two scenarios may possibly explain the loss of the aircraft, a B737-400. One explanation is that the aircraft took a large drink of heavy precipitation and lost both engines, as has happened a number of times before with the B737. Or, alternatively, the pilots had an upset as they were very near the “coffin corner,” which is to say close to the high altitude stalling speed at the 35,000 feet the airplane was flying. For a loaded B737 less than halfway along its two hour route of flight from Surabaya to Manado, that is a high cruising altitude. There could also have been some wave turbulence over the mountains of Sulawesi, the island over which the jet was flying on its way to Manado (see below).

If so, the aircraft may have stalled and spun in the sudden turbulence, and broken up during efforts to recover control of the aircraft. Turbulence in and around thunderstorms can be severe. That particular area has a good deal of nasty ITCZ related weather lately (Intertropic Convergence Zone, the belt of bad weather that seasonally waxes and wanes just above the equatorial region), as evidenced by the recent ferry sinking in bad weather in the same area

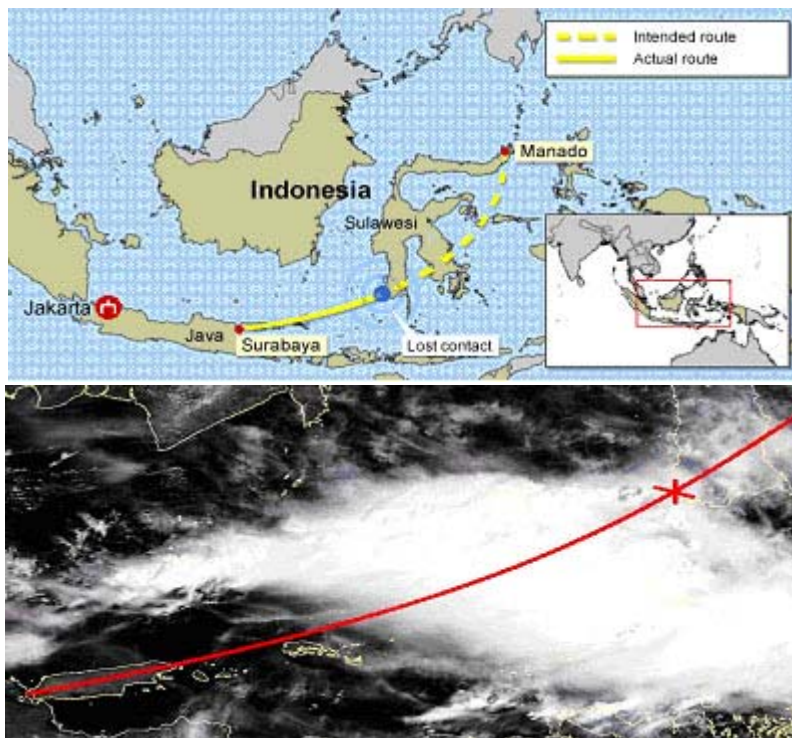
The accident is also a quite possible replay of that incident involving Adam Air pilots over Tambolaka, in which they had become too reliant on the not-too-reliable auto-tune function for VOR updating, rather than manually tuning their

**inertial reference system.** The pilots were aware that they were lost when they broke out of clouds at lower levels over the Java Sea – and saw nothing. Fortunately, they found an old abandoned airstrip on a small island upon which to land. In similar fashion, the accident aircrew may have overflown Sulawesi, and the point for top of descent would have been past the northern coastline, with nothing but sea ahead. **Without satellite navigation, and with a nonexistent or flawed update from the ground-based VOR they, too, may have been lost.**

**It is possible that:**

- a.** The pilots were **unaware or had no warning** of the excessive drift-rates in their twin IRS and believed their position to be within normal (and inconsequential) drift limits – until they broke out of cloud somewhat below 10,000 feet on descent and found nothing but ocean in all directions, with the northern coast of Sulawesi behind them and over the horizon (i.e., if they had taken a 360-degree turn to look, and hadn't just ploughed onwards expecting to see the Sulawesi coastline).'
  - b.** High-speed winds aloft that day may have added to the navigational error.
  - c.** Descending at that point, the pilots were well below VHF communications height with any ground station, not to mention that they were in the wrong area for any overflying traffic to intercept and relay their calls.
  - d.** As in the case of the Tambolaka team, the pilots may have been quite perplexed and unprepared for their difficulty, if not fearful of admitting the problem and declaring an emergency on all available frequencies.
  - e.** A little flotsam and jetsam may be picked up in the fullness of time, but this debris will provide little more than a vague localization of the ditching event.
- Whatever the factors, the KNKT must conduct its investigation under the watchful (and hardly impartial) eye of an airline chairman who also happens to have oversight authority over the agency's budget.





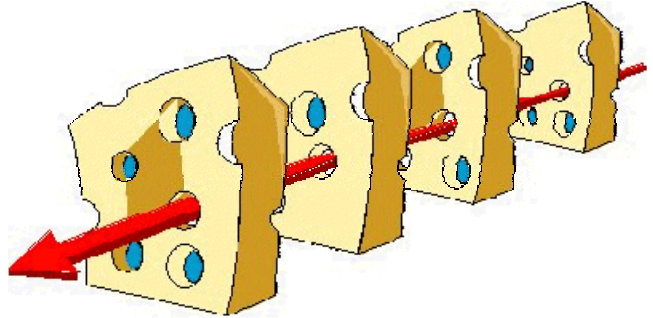
*Top, overall scene and approximation of the Adam Air flight path. Bottom, the weather situation: a line of tropical thunderstorms, visible in this high resolution satellite image (resolution 1 km), showing thunderstorms moving east about 4 hours prior to the accident. Source: NOAA*



*An Adam Air instant airframe tape patch, emblematic of the type of maintenance witnessed by passengers. The tape was used to hold down a panel that was reluctant to stay closed on the 737 engine support fairing. As shown in the photograph below, the tape is starting to lift. This type of cell phone photograph taken by a passenger is increasingly likely to find its way onto the Internet.*

## **NTSB lays blame on controllers in 3 deadly crashes**

The National Transportation Safety Board has **determined that air traffic controllers have erred in not properly responding to computerized warnings in three fatal plane crashes in California since 2004.** Two of them were in San Diego County. **Ten people died.**



### **May 10, 2004**

A twin-engine Piper with the pilot and a crew member aboard crashed into Volcan Mountain near Julian shortly after 9 p.m. **Both perished.** The pilot was being guided by air traffic controllers on an instrument flight.

The Piper was one of five planes owned by the same company that were being flown from Phoenix to McClellan-Palomar Airport in Carlsbad. The pilots were flying five to 10 minutes apart. **Two of the planes had similar call signs: N434PA and N304PA.**

Thirteen minutes before the crash, an FAA controller from the Southern California TRACON near Miramar **radioed the plane that was in front, N434PA, to descend to 5,200 feet.**

**It was the pilot of the second plane who responded and accepted the order, though it had not been intended for him.** “Down to five thousand two hundred for 3-0-4 Papa Alpha,” the pilot said, correctly identifying his plane. **The controller did not recognize that the clearance had been acknowledged by the wrong pilot, who was about to fly into an area where his altitude should have been at least 7,700 feet.**

**Eleven minutes before the crash, an automated “minimum safe altitude warning” appeared on the controller's screen. He did not notify a supervisor that he was receiving the safety alert, as required by FAA regulations, the NTSB said.**

**About nine minutes before the crash, the computerized system generated two altitude alerts five seconds apart, which would have caused a five-second, audible alert to the controller along with a flashing red “LA” (for low altitude) on the controller's radar screen.**

The plane then descended below radar coverage and the alert stopped. The plane's wreckage was later found on a ridgeline near Julian at 5,537 feet.



The NTSB found several probable causes for the crash:

- Incorrect use of an abbreviated call sign by the controller as he issued a “descent clearance.”
- The same controller's failure to detect that the clearance had been acknowledged by the pilot of another aircraft.
- The pilot's failure to question a clearance that descended below the published Minimum En Route Altitude.
- Failure of controllers both in Los Angeles and Southern California TRACON to properly respond to the altitude warning alert.

**Oct. 24, 2004**

A twin-engine Learjet 35A hit Otay Mountain about 12:25 a.m. after taking off from Brown Field in Otay Mesa. The crash killed the five people aboard the medical air ambulance.

The flight crew did not follow recommended departure procedures, NTSB investigators said, though they had filed for an instrument-guided flight. The pilot maintained an altitude of 2,300 feet, when the aircraft should have been flying more than twice as high – 5,000 feet.

The crew's mistake was compounded by an air traffic controller who failed to warn crew members that they were flying straight toward mountains, the board said.

“The board noted that the controller's computer system generated aural and visual (minimum safe altitude warning) alerts on the display, yet the controller took no action to warn the flight crew about the alerts,” board representatives wrote.

Contributing to the accident was the pilots' fatigue, which probably contributed to “degraded decision-making,” investigators added.

The flight was headed to Albuquerque, N.M., and was on the fourth and final leg of a mercy mission from Mexico that had started the day before.

**Nov. 10, 2004**

A Piper plane flying from Bakersfield to Santa Barbara crashed in the San Rafael Mountains northeast of Santa Barbara at 10:01 p.m., killing the pilot and two passengers.

The pilot had flown the round-trip route previously and was being directed by a controller from the Los Angeles Air Route Traffic Control Center, investigators said.

During the last few minutes of the radar-recorded flight, the pilot was cruising at 6,500 feet. The controller observed the airplane on his radar screen and was aware that the minimum altitude for instrument clearances along the airway was 9,000 feet.

Both the controller and pilot had charts showing a 6,840-foot peak – apparently Big Pine Mountain – along the route. But the pilot's course did not vary as he approached it.

The probable cause of the crash was the pilot's failure to select and maintain an adequate terrain-avoidance cruise altitude, the NTSB said.

“Contributing factors were the dark night conditions, the rising mountainous terrain and the controller's failure to issue a terrain-related safety alert,” the board added.

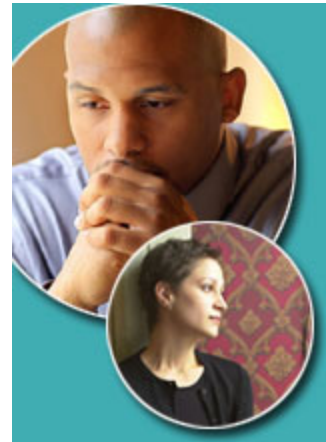
## New approaches to managing depression, from the Harvard Mental Health Letter

BOSTON — Most people who seek help for depression first visit their primary care doctors. So these professionals, along with mental health professionals and insurers, have been looking for better ways to identify and treat depression in the doctor's office, reports the *Harvard Mental Health Letter*.

Depressed patients are often reluctant to bring up the subject with their doctors, so a short but valid screening test could help with detection and diagnosis. The *Mental Health Letter* says doctors might start by asking patients two questions: Over the past two weeks, have you felt down, depressed, or hopeless? Over the past two weeks, have you felt little interest or pleasure in doing what you normally do? Studies suggest that almost every patient who needs treatment for depression will answer yes to at least one of these questions.

Other new approaches focus on managing the treatment of depressed patients. In one program, for example, a depression care manager provided telephone checkups and a relapse prevention plan. Patients were referred to a psychiatrist if they did not improve. Nearly half of patients in the program showed a reduction of at least 50% in depressive symptoms, compared with 19% in usual care, and differences persisted even a year after the program ended.

Two general reviews covering dozens of studies have found that depressed patients in management programs are more likely to comply with treatment and





more satisfied with the results. “Thankfully, attitudes toward [depression](#) have improved over the last 20 years, which has opened up the possibility for wider use of care management systems,” says Dr. Michael Miller, editor in chief of the *Harvard Mental Health Letter*.

**[At-Risk Behavior on display!](#)**









END