

Takeoff Rejected Well Above V_1

Incorrectly trimmed stabilizer resisted rotation.

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The following information provides an awareness of problems in the hope that they can be avoided in the future. The information is based on final reports by official investigative authorities on aircraft accidents and incidents.



JETS

Breaks in Routine Distracted Pilots

Boeing 737-300. No damage. No injuries.

Distractions and unusual situations that interfered with normal routine led to a breakdown of standard procedures that resulted in an attempted takeoff with an incorrect stabilizer setting and a rejected takeoff 29 kt above V_1 , according to the U.K. Air Accidents Investigation Branch (AAIB).

The serious incident occurred the morning of Feb. 6, 2009, at Birmingham (England) Airport. The 737 was scheduled for a round-trip flight to Edinburgh, Scotland. There were 100 passengers and five crewmembers aboard for the outbound sector. The first officer was designated as the pilot flying.

The AAIB report said that both pilots were concerned about the weather conditions at Birmingham, which included 2.5 km (1.6 mi) visibility in snow, a broken ceiling at 2,600 ft, surface winds from 350 degrees at 6 kt and a surface temperature of 0° C (32° F).

“The first officer stated to the operator when interviewed that he was less comfortable about the weather than the captain,” the report said. “The captain, however, was not sufficiently aware of the first officer’s concerns to decide to operate the outbound sector himself.”

The crew requested that the aircraft be deiced before departure, and the deicing was begun at 0659 local time. In the prevailing conditions, the Type 2 fluid had a maximum holdover time of 65 minutes.

Per company procedure, the 737 had been parked overnight with the stabilizer at a nose-down trim setting. “It was normal practice during preflight preparations for the first officer to set the stabilizer trim to the takeoff position when the crew checked information from the loadsheet,” the report said. “On this occasion, however, [the aircraft] was being deiced at the time and the trim could not be set.”

After starting the engines, the pilots decided to leave the flaps up while taxiing on the slush-covered taxiways. However, they did not check the stabilizer trim setting while conducting the after-start checks. The required setting was 4.5 units, but the stabilizer was set at 2.3 units — a nose-down setting that was within the allowable takeoff range of 1.0 to 6.3 units.

The loadsheet showed a takeoff weight of 46,766 kg (103,100 lb), or about 9,700 kg (21,385 lb) below the 737’s maximum takeoff weight. The pilots had calculated V_1 as 126 kt and V_R , or rotation speed, as 132 kt.

V_1 is defined by regulations as “the maximum speed in the takeoff at which the pilot must take the first action (e.g., apply brakes, reduce thrust, deploy speed brakes) to stop the airplane within the accelerate-stop distance” and as “the minimum speed in the takeoff, following a failure of the critical engine at V_{EF} at which the pilot can continue the takeoff and achieve the required height above the takeoff surface within the takeoff distance.” V_{EF} is the speed at which

the critical engine is assumed during performance certification to fail during takeoff.

The report did not specify the calculated takeoff distance. Runway 15/33 at Birmingham is 2,600 m (8,530 ft) long.

As the 737 was taxied to the runway, the snowfall intensity increased, and the captain decided to reduce the holdover time to 40 minutes, which would require that the aircraft be deiced again if it did not depart by 0739.

The captain told investigators that he felt pressure to depart before the deicing fluid holdover time expired. “This was compounded by the ATC [air traffic control] taxi clearance that required them to taxi the longest route to the holding point and caused the aircraft to be at the back of the queue on arrival,” the report said. “While they focused on selecting takeoff flap prior to departure, they did not notice the incorrect trim setting.”

The takeoff was begun two minutes before the holdover time expired. At V_R , the copilot applied normal rotation force on the control column. “He doubled his effort after his first attempt had no effect,” the report said. “The captain was aware that there was no rotation and decided to stop the aircraft.”

Airspeed was 155 kt when the pilots brought the throttles to idle and proceeded with the rejected takeoff procedure. “The speed was under control with 900 m [2,953 ft] of runway remaining, which allowed braking to be reduced, and the aircraft vacated the runway at the upwind end,” the report said.

Aircraft rescue and fire fighting personnel inspected the 737’s wheel brakes and, finding no sign of fire, told the pilots that they could proceed to the stand. While taxiing, the pilots noticed the incorrect trim setting.

They told investigators they had believed that the inability to raise the aircraft’s nose-wheel at V_R was the result of a flight control problem. “Both crewmembers were concerned about the weather conditions and taking off at the limit of the deicing holdover time,” the report said. “When the captain saw the lack of rotation, his concerns about possible ice accretion were reinforced, and [believing the aircraft

was incapable of flying] he made the decision to reject the takeoff even though the speed was, by then, well above V_1 .”

Tests in a flight simulator indicated that the nosewheel could have been raised at V_R if the copilot had pulled more forcefully on the control column. “The results also showed that rotation was achievable and that the aircraft could have climbed away safely,” the report said.

Glass Cockpit Darkens

Dornier 328-300. Minor damage. No injuries.

Investigators were unable to determine the root cause for the failure of all five electronic flight displays during a ferry flight from Biggin Hill, England, to Southampton the afternoon of March 3, 2009.

The AAIB incident report said that the aircraft had been stored in a hangar for about a year after the tail section was repaired following an accident. It had been flown only three hours during that time, although regular engine ground runs and routine maintenance had been performed.

About 20 minutes into the ferry flight, the Dornier was in instrument meteorological conditions (IMC) at 8,000 ft when the no. 1 multifunction display failed. Over the next 15 minutes, the no. 2 multifunction display, both primary flight displays and the engine indicating and crew alerting system display went blank.

The flight crew used the standby instruments to conduct a localizer approach to Southampton Airport and landed the aircraft without further incident.

The display failures were traced to malfunctions of the transformers in the high-voltage power supplies. “The transformers were epoxy-encapsulated, and the potting around the secondary winding [in each transformer] had failed, most likely due to overheating, causing the winding to short-circuit,” the report said.

To prevent damage from overheating, the display manufacturer recommends avoidance of sustained operation when cockpit temperature exceeds 40° C (104° F). However, investigators concluded that it is unlikely the incident aircraft had been exposed to such temperatures.

The captain felt pressure to depart before the deicing fluid holdover time expired.

The displays were replaced, and, following no sign of recurrence of the problem, the aircraft was returned to service.

“Given the lack of any additional findings from inspection of the incident aircraft, it has not been possible to determine a common trigger mechanism for the possible overheat and breakdown of the [transformer] potting, although investigations into the failure of other units in the world fleet may lead to a definitive cause being identified,” the report said.

Similar display failures have occurred recently in three other Dornier 328s during ground operations. “All three aircraft had been subject to extended periods without airborne operation,” the report said.

Airplanes Backed Into Each Other

Boeing 757-300, 737-800. Substantial damage. No injuries.

Night visual meteorological conditions (VMC) prevailed when the airplanes collided while being pushed back from gates facing each other at Seattle-Tacoma (Washington, U.S.) International Airport on Dec. 28, 2008.

The 757 flight crew had requested and received clearance for pushback first, said the report by the U.S. National Transportation Safety Board (NTSB). Shortly thereafter, the 737 crew requested clearance for pushback, reporting that they were at Gate 11. The ramp controller, however, thought that the 737 crew had requested clearance for pushback from Gate 14, and she issued clearance for pushback.

After pushback, the 737 was in the ramp alleyway facing north with the parking brake set. The flight crew was starting the no. 2 engine and the ground crew was disconnecting the tow bar when they felt the airplane shudder. “The tug operator and [his] assistant immediately ran toward the rear of the 737 and observed [the 757] immediately behind the 737,” the report said.

The 757 was being pushed back into the alleyway to face south when the flight crew “felt what appeared to be the nosewheel sliding slightly on the wet ramp,” the report said. Neither the flight crew nor the ground crew realized that a collision

had occurred. The ground crew disconnected the tow bar and returned to the gate.

The 757 crew observed, and cleared, a status message about the left elevator. They told investigators that “everything appeared normal.” Shortly thereafter, the ramp controller told the crew that a collision had occurred.

Data from a security surveillance camera showed that the 737 was stationary for 36 seconds before the collision occurred. The airplanes, which were operated by different airlines, both received substantial damage to their left elevators.

The probable cause of the accident was “the failure of the tug operator and wing walker of [the 757] to maintain clearance with the other airplane,” the report said. “Also causal was the ramp controller’s misinterpretation of the [737’s] gate location and her improper clearance for both airplanes to simultaneously push back from nearly opposing gates.”

Hard-Landing Damage Not Detected

Airbus A321-231. Substantial damage. No injuries.

The A321 was inbound to Manchester, England, on a charter flight from Spain the night of July 28, 2008. The copilot, the pilot flying, initiated the landing flare early, and the aircraft began to float about 10 ft above the runway.

“While in the float, the copilot’s sidestick moved to full forward then to full aft,” the AAIB report said. “The aircraft reacted with a rapid nose-down pitch and touched down [nosegear-first] in a near-flat attitude. A significant bounce occurred, which was controlled by the copilot; a second touchdown and rollout ensued.”

The commander taxied the aircraft to the stand, where the 159 passengers disembarked normally. “Three passenger service unit oxygen masks had dropped from their stowages, but no other effects of the landing were apparent,” the report said.

When the flight crew told a company engineer about the hard landing, they expressed certainty that there had been some damage. However, the on-board data system had not generated a printed structural exceedance report based on recordings of excessive rate of descent and vertical acceleration on touchdown.

Neither the flight crew nor the ground crew of the 757 realized that a collision had occurred.

The engineer concluded that the landing could not have been as hard as the crew suspected.

The engineer checked the data management unit (DMU) to determine if a report had been stored but not printed. “The DMU did not contain any such report; consequently, the engineer concluded that the landing could not have been as hard as the crew suspected [and that] no inspection was required,” the report said.

Nevertheless, because of the crew’s concern about damage, the engineer performed a visual inspection of the aircraft. He found no sign of damage, so the oxygen masks were restowed and the A321 was released for service.

Later that night, another flight crew was unable to retract the landing gear while departing from Manchester. They returned to the airport and landed without further incident.

“Subsequent inspection of this defect identified internal damage to the nose landing gear and a bent proximity switch link rod,” the report said. “The [nosegear] was replaced and extensive inspections were conducted before the aircraft was released to service.”

Among recommendations prompted by the investigation, the AAIB called on Airbus to review on-board data system parameters to ensure that a report is issued whenever there is a potential for damage from a hard or overweight landing, or from an abnormal landing such as a nosewheel-first touchdown.

Broken Slat Track Causes Control Problem

Boeing 737-200. Substantial damage. No injuries.

The 737 was en route the afternoon of Dec. 29, 2007, from Brisbane, Queensland, Australia, to Norfolk Island, where VMC with temporary visibility and ceiling reductions was forecast. On arrival, visibility was 3,000 m (about 1 3/4 mi), the ceiling was at 500 ft, and surface winds were from the east at 20 kt, gusting to 35 kt.

The flight crew conducted the VOR (VHF omnidirectional radio) approach to Runway 11, according to the report issued in February 2010 by the Australian Transport Safety Bureau (ATSB).

The aircraft was 2 nm (4 km) from the airport when the crew established visual contact with the runway. They determined that excessive maneuvering would be required for a straight-in

landing and circled over the ocean to enter a base leg. “As the aircraft was turned through the base leg and onto final approach, the visibility deteriorated, and a missed approach procedure was conducted,” the report said.

While retracting the flaps, the crew felt a high-frequency vibration and saw the control yokes deflect to the left. The control deflection increased to about 40 degrees, and the autopilot disengaged automatically.

“Controlled flight was maintained manually by the crew with difficulty,” the report said. “There were no other cockpit indications to assist the crew to identify the problem. The cabin crew reported that they also noticed that the aircraft was shaking and vibrating, similar to the effect of flying through cloud and turbulence.”

The pilot-in-command (PIC) asked the cabin manager to look out the cabin windows for any anomalies. The cabin manager reported that a leading-edge slat on the right wing was protruding at an unusual angle and showed the pilots a photograph made with a mobile telephone.

The flight crew declared an urgency (pan) and diverted to their designated alternate airport at Nouméa, New Caledonia. Concerned about controllability and the effects on performance and fuel consumption from the aerodynamic drag created by the protruding slat, the PIC told the cabin crew to prepare the passengers for a possible ditching.

Lacking a checklist for the situation, the crew decided to cycle the flaps. This reduced the protrusion of the no. 4 slat; the vibration decreased slightly, and performance and controllability were improved. The 737 was landed in Nouméa without further incident.

There were no injuries during the flight, but “a number of passengers reported psychological issues and resultant physical problems following the flight,” the report said. “That included one passenger who suffered two seizures after disembarkation at Nouméa.”

Examination of the 737 revealed that the inboard main track for the no. 4 leading edge slat had fractured at mid-span. “An examination of the failed track identified fatigue cracking that

originated at the intersection of diverging machining marks at the fracture site,” the report said.

TURBOPROPS

‘Competing Tasks’ Cited in Control Loss

Beech 1900C. Destroyed. One fatality.

VMC prevailed for the single-pilot cargo flight from Honolulu, on the island of Oahu in Hawaii, U.S., to Lihue, on Kauai, the night of Jan. 14, 2008. The airplane was nearing the destination from the south at 2,000 ft when ATC verified that the pilot had both the airport and a preceding Boeing 737 in sight.

The controller then cleared the pilot to follow the 737 for a visual approach, terminated radar services and told the pilot to change to Lihue’s common traffic advisory frequency.

Recorded ATC radar data “showed that the pilot altered his flight course to the west, most likely for spacing from the airplane ahead, and descended into the water as he began a turn back toward the airport,” said the NTSB report.

The accident occurred about 6 nm (11 km) south of the airport. Most of the wreckage sank in 4,800 ft of water and was not recovered. The pilot was not located and is presumed to have been killed.

The report said that the pilot had been confronted with the “competing tasks” of monitoring his airplane’s instruments, lining up with the runway and maintaining separation from the 737. This resulted in vulnerability to visual and vestibular illusions, and reduced awareness of his airplane’s attitude, altitude and trajectory.

“The pilot most likely descended into the ocean because he became spatially disoriented,” the report said. “Although VMC prevailed, no natural horizon and few external visual references were available during the visual approach.”

Undetected Crack Causes Wheel Fracture

Saab 340B. Substantial damage. No injuries.

During a post-flight inspection of the aircraft in Sydney, New South Wales, Australia, the afternoon of Feb. 9, 2009, the flight crew noticed that the outboard tire on the left

main landing gear was deflated and the wheel assembly was damaged.

“The crew reported that there had been no prior indication of any problems with the aircraft, with normal handling during the landing and taxiing phase of the flight,” said the ATSB report.

During an examination of the 340, maintenance personnel found that about one-half of the circumference of the wheel rim had fractured but was still attached to the wheel assembly. Damage to the axle and brake assembly also was found, and replacement of the entire left main landing gear was required before the aircraft was returned to service.

The wheel had accumulated 252 hours of service and 298 cycles since its last overhaul. Investigators found that the wheel design was being phased out because of known fatigue cracking at the rim bead seat area. “Both the manufacturer and the operator were aware of the increased fatigue susceptibility of the earlier wheel design and had established increased inspection regimes for those wheels remaining in service,” the report said.

The investigation concluded that the fatigue crack likely was in the incipient stage and had not been detected during the last eddy current inspection of the failed wheel.

Gyro Problem Precedes Breakup

Jetprop DLX. Destroyed. Five fatalities.

The aircraft, a turboprop conversion of the Piper Malibu, was en route on a private flight from Edmonton, Alberta, Canada, to Winnipeg, Manitoba, the morning of March 28, 2008. Shortly after the aircraft leveled off at its assigned altitude, Flight Level 270, ATC radar showed that it was climbing.

“When contacted by the controller, the pilot reported autopilot and gyro/horizon problems and difficulty maintaining altitude,” said the report by the Transportation Safety Board of Canada (TSB). “Subsequently, he transmitted that his gyro/horizon had toppled and could no longer be relied on for controlling the aircraft.”

ATC radio and radar contact were lost after the aircraft made several heading and altitude changes, and began a steep descent that accelerated to more



than 30,000 fpm. “On final descent, the ground-speed dropped [from 260 kt] to 100 kt, indicating a near-vertical flight path,” the report said.

An emergency locator transmitter signal was detected, and the Royal Canadian Mounted Police found the wreckage 16 nm (30 km) northeast of Wainwright, Alberta, about four hours later. Examination of the aircraft showed that both wings and the vertical and horizontal stabilizers had failed in flight.

Investigators determined that the aircraft was about 712 lb (323 kg) over its maximum gross weight and that the center of gravity was about 0.87 in (2.21 cm) beyond the aft limit when the accident occurred.

“The vacuum system appeared to have been operating normally, although possibly at a lower setting than specified by the manufacturer due to an over-reading gauge,” the report said.

Before the accident flight, an instrument repair shop had recommended replacement of the attitude indicator because of noisy bearings and unstable output signals to the autopilot. The attitude indicator had been in service for 1,200 hours.

The pilot, an executive for the company that owned the airplane, had logged about 987 of his 2,200 flight hours in the Jetprop. He had passed an instrument proficiency check in December 2007. Partial-panel exercises were not included, and were not required to be included, in the check. Records indicated that the pilot’s last partial-panel training was conducted in May 2001.

Based on these findings, TSB said, “Many high-performance aircraft in Canada are operated in [instrument] conditions by single pilots. The board is therefore concerned that without either additional instrument redundancy, partial-panel currency, or both, there is a risk that this type of accident will be repeated.”

from Indore, India, to Shivpuri the morning of March 21, 2009. About 15 minutes after takeoff, a total electrical failure occurred, said the report by India’s Directorate General of Civil Aviation.

The aircraft was 30 nm (56 km) from Bhopal when the pilot told his passenger, the chief instructor for the operator’s flight school, to use his mobile telephone to inform the ATC facility at Bhopal Airport of their situation, their position and their intention of proceeding to Shivpuri.

After receiving the information, ATC instructed the pilot to land at Bhopal, but there was no reply.

The pilot used a hand-held global positioning system receiver to navigate to the Shivpuri airport, which is uncontrolled and has a 2,800-ft (853-m) runway. On approach in VMC, he extended the landing gear manually but could not extend the flaps. The 421 floated during the flare and touched down about 800 ft (244 m) from the threshold. “At around 150 ft [46 m] from the runway end, the aircraft swung toward the left, probably due to pilot inputs,” the report said.

The main landing gear separated, the nosegear collapsed and the engines and fuselage were damaged when the aircraft veered off the runway and struck a ditch. There was no fire, and the pilot and passenger escaped injury.

The report said that the electrical failure occurred because the pilot did not reset the alternator circuit breakers before takeoff. With the alternators off line, the battery was drained of charge.

Lack of recent experience in the aircraft was a factor in the accident, the report said. The pilot had logged 250 of his 11,600 flight hours in type. However, he had not flown a 421 during the 18 months preceding the accident and had not received the required refresher training.



PISTON AIRPLANES

Electrical Failure Endangers Ferry Flight

Cessna 421B. Substantial damage. No injuries.

The 421’s airworthiness certificate had expired, and the operator had received a permit to conduct a visual flight rules (VFR) ferry flight

Low Pass Ends With a Stall

Piper Chieftain. Destroyed. One fatality.

The pilot was conducting a VFR, single-pilot positioning flight from Sept-Îles, Quebec, Canada, to Wabush, Newfoundland and Labrador, for a medical evacuation flight the morning of April 1, 2007. About 30 minutes

after departure, he turned off the route and flew to Grand lac Germain, Quebec, where he made two passes between 100 and 300 ft over a lakeshore cottage inhabited by friends.

The Chieftain was in a steep climbing turn after the second pass when it stalled and descended onto the frozen lake. “The aircraft broke through the top layer of ice, which was about two inches thick, then bounced off the second layer of ice,” said the TSB report.

Baggage Door Opens on Takeoff

Britten-Norman Trislander. Minor damage. No injuries.

The commander was rotating the aircraft for takeoff from Jersey Airport, Channel Islands, the morning of March 24, 2009, when he saw the nose baggage door warning light illuminate. “He decided to continue the takeoff but, at around 200 ft, saw the door open,” said the AAIB report.

While the commander was turning the Trislander back to the airport, the door separated and fell into the sea. “The commander continued the approach, and the aircraft landed safely,” the report said.

The baggage door was not recovered, and investigators were unable to determine conclusively why it opened. However, inspection of other Trislanders in the operator’s fleet showed that their door latching mechanisms were worn and that further wear could cause the door handles to separate. The manufacturer subsequently issued a service bulletin recommending periodic inspections of the latching mechanism.

HELICOPTERS

Mechanic Left Drive Shaft Bolts Loose

Bell 206L-3. Substantial damage. No injuries.

Shortly after starting the LongRanger’s engine for a ferry flight, the pilot heard a loud bang and felt a vibration. “He immediately shut down the engine and exited the helicopter,” the NTSB report said. “Examination of the helicopter revealed that the tail rotor drive shaft and coupling had severed just forward of the gearbox, which resulted in substantial damage to the tail boom.”

The accident occurred at Galliano, Louisiana, U.S., the morning of March 2, 2009, following maintenance that included removal of the tail rotor drive shaft from the coupling. “When the two components were reattached, the mechanic only hand-tightened the bolts, figuring additional maintenance was still planned for the gearbox,” the report said.

The mechanic reinstalled the drive shaft cover but did not make a logbook entry indicating that the bolts [on the drive shaft and coupling] were only hand-tight. “Another mechanic later performed additional maintenance to the gearbox, but the bolts were not checked since the maintenance manual did not require the removal of the tail rotor drive shaft cover,” the report said.

The helicopter had been returned to service after an uneventful 12-minute maintenance flight check. The accident occurred during the next engine start.

Selector Breaks During Gear Retraction

Agusta A109A. Minor damage. No injuries.

While taking off from Manchester, England, for a flight to London on May 2, 2008, the commander felt the landing gear handle rotate in his hand when he retracted the gear. He asked the copilot to check the operation of the gear system.

“When the copilot pulled on the handle prior to selecting the landing gear lever down, the handle and spindle became detached from the lever,” the AAIB report said. “Several attempts were made to lower the gear by pushing down on the visible stub of the lever, but it failed to move.”

The commander diverted the flight to Redhill, where the helicopter was based. He flew the 109 in a hover while discussing the situation with maintenance personnel. With fuel running low, the commander disembarked the four passengers while in a low hover, then flew to a remote area of the airport where he landed the helicopter on tires that had been placed in parallel rows.

Investigators determined that a circlip had not been inserted in its groove when the landing gear selector assembly was reinstalled following an overhaul two years earlier. ➔



Preliminary Reports, January 2010

Date	Location	Aircraft Type	Aircraft Damage	Injuries
Jan. 2	Kinshasa, Democratic Republic of Congo	Boeing 727-200F	substantial	3 none
The flight crew turned back when a hydraulic problem occurred on departure in heavy rain. The freighter veered off the runway during the landing.				
Jan. 5	Auberry, California, U.S.	Bell 206B-3	destroyed	4 fatal
The JetRanger was on a wildlife-survey flight when it struck a power line and crashed on a hillside.				
Jan. 5	Prospect Heights, Illinois, U.S.	Learjet 35A	destroyed	2 fatal
Day visual meteorological conditions (VMC) prevailed when the Learjet entered a steep bank, rolled inverted and crashed short of Runway 34 during a circling visual approach to Chicago Executive Airport.				
Jan. 6	Piajo, Botswana	Cessna 208B	destroyed	1 serious, 5 minor
The Caravan flipped over during a forced landing on a wet flood plain after losing engine power on takeoff.				
Jan. 8	Vail, Colorado, U.S.	Dassault Falcon 20	substantial	7 none
The landing gear collapsed when the Falcon overran the runway during a takeoff that was rejected because of a burst tire.				
Jan. 8	Pierce, Idaho, U.S.	Hughes 369D	substantial	3 serious
The helicopter touched down hard and rolled over during an autorotational landing following a loss of power during a wildlife-survey flight.				
Jan. 9	Kiev, Ukraine	Ilyushin 76T	substantial	13 NA
The cargo airplane veered off the runway shortly after touching down.				
Jan. 10	San Lorenzo Acopilco, Mexico	Agusta A109E	destroyed	6 fatal
The helicopter was on a night flight to Mexico City when it crashed in fog.				
Jan. 14	Beagle Bay, Australia	Cessna 208B	destroyed	1 minor
The airplane stalled and crashed short of the runway during an emergency landing following a precautionary engine shutdown due to low oil pressure.				
Jan. 15	Kidlington, England	Piper Navajo 31P	destroyed	2 fatal
The Navajo crashed in an open field soon after departing from Oxford Airport.				
Jan. 15	La Chaux-de-Fonds, Switzerland	Beech C90GT King Air	destroyed	2 serious, 2 minor
The King Air overran the runway and struck the localizer antenna during a rejected takeoff.				
Jan. 18	Madison, Alabama, U.S.	Beech B60 Duke	destroyed	2 fatal
The pilot was attempting to return to Huntsville after an engine failed on departure. The Duke struck treetops and crashed about 3 nm (6 km) from the airport.				
Jan. 18	Elyria, Ohio, U.S.	Mitsubishi MU-2B-60	destroyed	4 fatal
The MU-2 stalled and crashed short of the runway during an instrument landing system approach in instrument meteorological conditions (IMC).				
Jan. 19	Charleston, West Virginia, U.S.	Bombardier CRJ-200ER	minor	34 none
The airplane came to a stop in an engineered material arresting system bed after overrunning the runway during a rejected takeoff (ASW, 12/09-1/10, p. 5).				
Jan. 21	Tijuana, Mexico	Embraer 145LU	substantial	39 NA
The regional jet veered off the runway while landing in strong, gusting winds.				
Jan. 21	Luxembourg City, Luxembourg	Boeing 747	minor	5 none
The freighter was landed safely after its main landing gear struck and severely damaged a maintenance vehicle that was on the runway.				
Jan. 22	Sand Point, Alaska, U.S.	Beech 1900C	destroyed	2 fatal
Night VMC prevailed with winds gusting to 26 kt when the cargo airplane crashed on takeoff.				
Jan. 24	Mashad, Iran	Tupolev 154M	substantial	46 serious, 124 none
The landing gear collapsed when the airplane veered off the runway during a night landing in low visibility.				
Jan. 25	Senador José Porfirio, Brazil	Embraer Bandeirante	destroyed	2 fatal, 6 NA
The Bandeirante crashed short of the runway during the third landing attempt.				
Jan. 25	Beirut, Lebanon	Boeing 737-800	destroyed	90 fatal
Night IMC prevailed when the 737 struck the Mediterranean Sea shortly after departing from Beirut.				
Jan. 27	Horten, Norway	Robinson R44 Astro	destroyed	4 fatal
The R44 entered a spin at low altitude and plunged through the ice on a fjord.				

NA = not available

This information, gathered from various government and media sources, is subject to change as the investigations of the accidents and incidents are completed.