Mode Mixup

An A320 continued descending after the flight crew initiated a go-around at decision height.

BY MARK LACAGNINA

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

'TOGA Tap' Was Ineffective

Airbus A320-232. No damage. No injuries.

Before departing from Christchurch, New Zealand, the morning of July 21, 2007, the flight crew was aware that fog might prevent them from landing at Melbourne, Victoria, Australia, and "had planned accordingly," said the Australian Transport Safety Bureau (ATSB) in a report published in February.

As the aircraft neared Melbourne and was sequenced for an instrument landing system (ILS) approach to Runway 27, the crews of "a number" of preceding aircraft conducted missed approaches, the report said.

The A320 pilot-in-command (PIC), the pilot flying, conducted the ILS approach with the autopilots and autothrottles engaged. "At the decision height, the crew did not have the prescribed visual reference to continue the approach to land and commenced a missed approach," the report said. "During the initial part of the missed approach, the PIC did not correctly move the thrust levers to the 'takeoff/go-around' [TOGA] position, and, as a result, the aircraft's automated flight mode did not transition correctly to the go-around mode."

The pilot told investigators that, because the aircraft was light, he did not select TOGA power but, instead, performed a procedure called a "TOGA tap," which involves moving the thrust levers briefly into the TOGA detent and then back to the maximum climb power detent.

However, in this incident, the thrust levers did not reach the TOGA detent before they were moved back to the climb detent.

The PIC said that he heard and felt a thrust increase, and noticed an apparent increase in pitch attitude, but did not hear the expected announcement by the copilot that a positive rate of climb had been achieved.

At this point, the go-around procedure effectively came to a halt, eliminating a timely check of the flight modes indicated on the primary flight display (PFD), the report said.

Checking and announcing the flight modes are among the actions that Airbus requires to be completed simultaneously when a go-around is initiated. However, the operator of the A320 had changed the go-around procedure, moving the flight-modes actions "to a much later position in the procedure," the report said. Confirming and announcing a positive rate of climb were among the actions preceding the flight modes check and callout on the operator's revised checklist.

As a result, the crew did not notice that, because of the PIC's incomplete TOGA tap, the autopilots remained engaged in the glideslope and localizer modes.

The copilot said he noticed that the aircraft continued to descend after the PIC announced the go-around. "Although aware of the requirement to alert the pilot flying of the continuing descent, the copilot was momentarily unable to

recall the correct phrase to be used," the report said, noting that the correct phrase is "sink rate."

Not hearing the expected "positive rate" callout and not seeing the flight director pitch-command bars rise on the PFD, the PIC "was unsure of the status of the aircraft," the report said. "[He] subsequently moved the thrust levers to the correct position [the TOGA detent], the flight mode transitioned to the go-around phase, and the aircraft responded normally."

The A320 was within 38 ft of the ground when it began to climb.

The A320 was within 38 ft of the ground when it began to climb — 48 seconds after the PIC's incomplete TOGA tap.

The crew conducted another ILS approach and an uneventful missed approach before diverting the flight to Avalon Airport, near Geelong, Victoria, where the aircraft was landed without further incident.

The report said that the aircraft operator had not analyzed the risks of changing the go-around procedure before issuing the revised checklist. Its safety management system (SMS) did not require formal risk analyses of changes to company policies or procedures.

"As a result of this occurrence, the aircraft operator changed its go-around procedure to reflect that of the aircraft manufacturer and [changed] its SMS to require a formal risk management process in support of any proposal to change an aircraft operating procedure," the report said.

The incident also prompted Airbus to "enhance its published go-around procedures to emphasize the critical nature of the flight crew actions during a go-around," the report said.

Near Collision at an Intersection

Bombardier CRJ200, Pilatus PC-12. No damage. No injuries.

Visual meteorological conditions (VMC) prevailed at Charlotte (North Carolina, U.S.)/Douglas International Airport the morning of May 29, 2009. Air traffic control (ATC) had instructed the flight crew of the CRJ200, which had 46 people aboard, to line up on the approach end of Runway 18L and to await clearance for takeoff.

The pilot of the PC-12, a single-turboprop with three people aboard, was holding for takeoff from Runway 18L at Intersection A, which is about 2,500 ft (762 m) from the approach end of the runway.

According to the report by the U.S. National Transportation Safety Board (NTSB), the ground air traffic controller had told the local air traffic controller that the PC-12 pilot had requested the intersection departure. The ground controller had also noted this on the PC-12's flight progress strip and had circled the notation in red, per procedure.

The report said that the local controller forgot the verbal briefing by the ground controller, did not scan the flight progress strip, did not check the PC-12's position on the airport surface detection equipment (ASDE) display and did not visually scan the runway to ensure that it was clear of traffic before clearing the PC-12 crew for the intersection takeoff — four seconds after clearing the CRJ crew for takeoff.

When the PC-12 entered the runway, the ASDE generated an aural alert: "Warning, Runway 18L occupied." The local controller then radioed the CRJ crew to "cancel takeoff clearance."

However, the CRJ crew had observed the PC-12 moving toward the runway and had initiated a rejected takeoff at about 85 kt, after rolling about 1,600 ft (488 m). The PC-12 pilot taxied the airplane to the left side of the runway when he "recognized what was happening," the report said.

The PIC of the CRJ told investigators that the airplane came to a stop on the runway centerline about 3 ft (1 m) from the PC-12. He said that a collision had been avoided because the PC-12 had "stayed left of the centerline."

'Saw a Man Riding a Lawn Mower'

Boeing 757-200. No damage. No injuries.

Wet weather conditions had hindered grass-cutting operations at Dublin (Ireland) Airport, and it had become imperative to mow tall grass near the localizer antenna and approach lights for Runway 10. Surface winds were forecast to favor that runway for an extended period, so airport and ATC authorities arranged to have the mowing done the night of May 29, 2009.

Mowing at night is preferred because "cutting close to an active runway during the hours of daylight is highly problematic due to the intensity of aircraft movements," said the report by the Irish Air Accident Investigation Unit (AAIU).

The driver of a four-wheel vehicle supervised the operators of three mowing vehicles. The supervisor was able to monitor the local and ground ATC radio frequencies, and to communicate with the controllers via a mobile telephone. The supervisor and the mowing vehicle operators communicated with each other via hand-held radios set to a discrete frequency.

At 0247 local time, the air movements controller (AMC) told the supervisor to discontinue mowing operations because of decreasing visibility and to report when all the vehicles were clear of the field.

The supervisor radioed the mowing vehicle operators to return to the maintenance base, which is on the south side of the airport. He told investigators that he instructed the operator of mowing vehicle T3, which was near the approach end of Runway 10, to "clear the field" and use the airport's south perimeter road to return to the maintenance base.

However, the T3 operator recalled that he had been told only to "vacate the runway area" and, believing that he had "an extra few minutes to vacate the runway," drove along the right side of the runway toward the maintenance base after acknowledging the supervisor's radio message.

At 0249, the flight crew of the 757, inbound on a charter flight from Egypt with 198 passengers and eight crewmembers, radioed the AMC that they were established on the ILS approach to Runway 10 and requested the current ceiling and visibility. The AMC replied that the ceiling was broken at 100 ft and that runway visual range on the touchdown area of the runway was more than 1,500 m (5,000 ft).

The AMC then telephoned the mowing supervisor, who, mistakenly believing that the T3 operator had followed his instructions to clear the runway, reported that all the vehicles had vacated the field.

"The driver of the [T3] mower was unaware that an aircraft was arriving until he heard it on the runway behind him," the report said. The 757 had touched down at 0252 and as it passed by the mower, the copilot told the AMC that there was ground equipment on the runway.

"I don't believe it," the AMC said. "They guaranteed me that they were clear of the runway."

"Could have sworn I saw a man riding a lawn mower," the copilot said.

After the serious incident, the Dublin Airport Authority complied with an AAIU recommendation to ensure that all vehicles operating on or near active runways be equipped with radios capable of monitoring ground and local ATC frequencies, flashing yellow lights and transponders compatible with the airport's advanced surface movement guidance and control system.

Wing Scraped in Crosswind Landing

Airbus A320-211. Minor damage. No injuries.

Freezing rain caused a two-hour delay in the A320's departure from Munich, Germany, for a scheduled flight with 132 passengers and five crewmembers to Hamburg the afternoon of March 1, 2008.

During cruise, the flight crew received a Hamburg automatic terminal information system (ATIS) report of winds from 280 degrees at 23 kt, gusting to 37 kt. They planned for — and later received clearance for — an approach and landing on Runway 23, which is equipped with an ILS, said the report by the German Federal Bureau of Aircraft Accident Investigation.

When the crew reported that they were established on the ILS approach, the aerodrome controller said that the wind was from 300 degrees at 33 kt, gusting to 47 kt.

The report said that a decision to go around would have been reasonable.

The report said that a decision to go around would have been "reasonable" because the controller's report indicated that the winds exceeded the maximum demonstrated crosswind for landing, which was "33 kt, gusting up to 38 kt" and presented as an operating limitation in the A320 flight crew operating manual.

The captain asked for the current "go-around rate," and the controller replied, "Fifty percent

in the last 10 minutes." The controller offered to vector the aircraft for a localizer approach to Runway 33, but the captain replied that they would attempt to land on Runway 23 first.

The crew gained visual contact with the runway at the outer marker. The copilot, the pilot flying, disengaged the autopilot and autothrottles about 940 ft above the ground. She used the wings-level, or crabbed, crosswind-correction technique until the aircraft crossed the runway threshold and then applied left rudder and right sidestick to decrab the aircraft — that is, to align the fuselage with the runway centerline while countering the right crosswind.

The A320 was in a 4-degree left bank when it touched down on the left main landing gear and bounced. Although the copilot applied full-right sidestick and right rudder, the aircraft unexpectedly rolled into a 23-degree left bank. It touched down on the left main landing gear again, striking the left wing tip on the runway, and bounced a second time.

The crew conducted a go-around and landed the aircraft without further incident on Runway 33. The left wing tip, the outboard leading-edge slat and slat rail guides were found to have been slightly damaged during the serious incident, the report said.

Overheated Brakes Cause Fire

Gates Learjet 55. Substantial damage. No injuries.

The Learjet was accelerating through 80 kt when the airport traffic controller told the flight crew, "Appears you have a lot of smoke coming out of your engine." The captain, the pilot monitoring, called for a rejected takeoff (RTO), and the first officer used the wheel brakes and thrust reversers to bring the airplane to a stop on the 10,165-ft (3,098-m) runway at Casper, Wyoming, U.S.

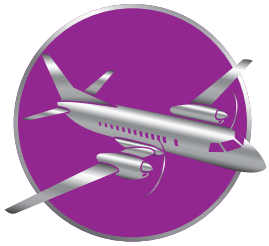
After exiting the runway, the captain conducted a power check on both engines but found no anomalies. He requested and received clearance to taxi back to the runway for another takeoff.

The NTSB report on the March 17, 2009, accident said that the second takeoff was initiated about five minutes after the RTO. The captain told investigators that airspeed was above 80 kt but below V_1 when he heard a loud bang and felt the airplane yaw right and then left more severely. The crew performed another RTO and taxied off the runway near the departure end.

Examination of the airplane revealed fire damage to the left main landing gear and that one of the two tires had burst.

The report said that although the captain did not suspect that the wheel brakes had overheated during the first RTO, the airplane's gross weight was 20,772 lb (9,422 kg), or 472 lb (214 kg) over the maximum brake energy weight for the conditions. The airplane flight manual requires that a high-energy-stop inspection be conducted by maintenance personnel following an RTO above the maximum brake energy weight.

TURBOPROPS



Pilot Incapacitated by Heart Problem

Beech B200 King Air. No damage. One fatality.

After departing from Marco Island, Florida, U.S., the afternoon of April 12, 2009, the King Air was climbing through 6,000 ft, with clearance to 14,000 ft, when the front-seat passenger noticed that the pilot's head was down and both hands were at his sides.

The passenger, who owned the airplane and held a private pilot certificate for single-engine airplanes, tried unsuccessfully to get the pilot's attention. He then declared an emergency on the Miami Air Route Traffic Control Center (ARTCC) frequency and told the controller that the pilot was incapacitated and that he needed to speak with someone familiar with B200s.

The airplane, with four people aboard, continued flying a northerly track and climbed to 17,300 ft in VMC. "Another Miami ARTCC controller talked the owner through the process of disengaging the autopilot, descending and [making] heading changes," the NTSB report said.

The center controller vectored the King Air toward Southwest Florida International Airport in Fort Myers and then handed off the flight to a Fort Meyers approach controller, who provided the owner with information

about the landing gear, flaps, power levers and airspeed settings.

"The flight was vectored for a 15-nm [28-km] final approach for Runway 06 … and was landed uneventfully," the report said. "The owner taxied onto a taxiway, where the engines were secured and medical personnel were standing by. … The pilot was noted to have an abnormal heart rhythm during resuscitation efforts and died."

The report said that the pilot, 67, had a history of coronary disease and had received a special-issuance, limited second-class medical certificate following comprehensive cardiovascular evaluation. The medical examiner who performed an autopsy on the pilot determined that the cause of death was "hypertensive and arteriosclerotic cardiovascular disease."

Power Problem Plagues Night Approach

Fairchild Metroliner III. Minor damage. No injuries.

There were two pilots and three medical crewmembers aboard when the Metroliner departed from Auckland, New Zealand, to pick up a patient in New Plymouth the night of March 30, 2009. The air traffic control tower at the destination airport was closed, but the air ambulance operator had arranged to have the runway lights activated before the airplane arrived. The precision approach path indicator, however, was not activated.

"The pilots carried out a visual approach, although that was generally not permitted by the airplane operator at an uncontrolled airport, and without the help of approach slope indicator lights," said the report by the New Zealand Transport Accident Investigation Commission.

While conducting the landing checklist, the pilots became distracted in attempting to determine why the right engine did not respond as expected when the speed/rpm lever was set to "HIGH." Engine speed remained at 97 percent instead of increasing to 100 percent.

"The base turn was carried out close to the airport and involved a high rate of descent that generated ground-proximity warnings," the report said. "Late on final approach, the pilots realized that the airplane's current glide path would result in a landing very close to the runway end."

The PIC, the pilot flying (PF), decided to continue the approach rather than go around because the airplane rolled right when he increased power. He was concerned that the Metroliner might become uncontrollable if he attempted to apply go-around power.

"The PF said that he was holding full left rudder and nearly full left aileron in an attempt to keep the airplane straight, but a main wheel tire crushed a runway edge light 60 m [197 ft] from the threshold, and the airplane then veered off the right side of the runway," the report said. "No one was injured and, apart from minor damage to the tires, the airplane was undamaged."

'The PF said that he was holding full left rudder and nearly full left aileron in an attempt to keep the airplane straight.'

Among the report's conclusions was that "if the pilots had conducted an instrument approach, as the operator had required, the approach would likely have been stable and given them more time to deal with the engine speed issue."

Maintenance personnel were unable to determine the cause of the engine anomaly. The report noted that a few days before the incident, maintenance had been performed on the airplane to correct a fuel-bypass problem that had caused the right engine to malfunction. "A fuel bypass was not considered to have occurred at New Plymouth, and the two events were likely to have been unrelated," the report said.

However, as a precaution, the operator replaced the fuel control unit and propeller governor on the right engine.

Red Gear Light Disregarded

Socata TBM 700C1. Substantial damage. No injuries.

After taking off from Biggin Hill, England, for a private flight to Alderney in the Channel Islands the morning of March 27, 2008, the pilot noticed that the green nose landing gear light and the red landing gear warning light were illuminated. He cycled the gear, but the lights remained on.

"He elected to continue the flight with the gear down, observing the airspeed limitation in the POH [pilot's operating handbook]," said the report by the U.K. Air Accidents Investigation Branch.

When the pilot extended the gear on approach to Alderney Airport, he saw that all three green lights were illuminated and believed that the landing gear was locked down, despite the continued illumination of the red light.

"However, the red light signifies that the gear is unlocked and takes precedence over the three greens," the report said. "Although the correct procedure required the landing gear to be operated manually using the hand pump, it was dependent on the pilot recognizing that a red warning light signifies that the landing gear is unlocked."

The nosegear collapsed at about 40 kt during the landing rollout. The TBM 700 veered off the runway and came to a stop on a taxiway.

Examination of the aircraft revealed that contamination of the nose gear actuator might have prevented the nose gear from locking down and that the actuator was sending anomalous signals to the landing gear control unit indicating that the nose gear was locked both up and down, the report said.

PISTON AIRPLANES

Mental Miscalculation

Piper Navajo. No damage. No injuries.

A company aircraft required maintenance, and the pilot was asked to transport a maintenance engineer as soon as possible from Canberra, Australian Capital Territory, to Albury, New South Wales, the afternoon of May 21, 2009.

The pilot decided that the 280 L (74 gal) of fuel aboard the Navajo was more than sufficient for the 53-minute flight. "The flight to Albury took less time than planned because of a 25-kt tail wind," the ATSB report said.

The repairs took about one hour. The Navajo's gauges indicated that 160 L (42 gal) of fuel remained. The pilot performed a mental calculation and decided that this was sufficient for the return flight. However, the calculation inadvertently had been based on the substantially lower fuel consumption rate for the Beech Duchess that he normally flew.

About halfway to Canberra, the pilot became concerned about the indicated fuel quantity. "He re-evaluated the aircraft's endurance and assessed that the aircraft might not have sufficient fuel to reach Canberra or to return to Albury," the report said. "The pilot assessed that the second half of the flight would mostly pass over inhospitable terrain, where a safe landing would not be possible."

Therefore, he elected to conduct a precautionary landing on a field 50 km (27 nm) southwest of Canberra. "There was no reported damage to the aircraft or injuries to the occupants," the report said.

Training Exercise Ends in Excursion

Piper Seneca. Substantial damage. No injuries.

The airplane was accelerating through 40 kt on takeoff from the 2,600-ft (792-m) airstrip in Plaquemine, Louisiana, U.S., on May 31, 2008, when the flight instructor moved the left throttle to idle to simulate an engine failure.

The NTSB report said that the grass runway was wet with dew and that after moving the right throttle to idle and applying the wheel brakes to reject the takeoff, the student pilot lost directional control of the airplane.

The Seneca slid off the side of the runway and struck a ditch. "Examination of the airplane revealed the left wing had pulled forward, separating the trailing edge from the fuselage approximately 1.5 in [3.8 cm] and buckling the fuselage at the leading edge," the report said.

Seaplane Stalls, Strikes Ridge

Grumman G21 Goose. Destroyed. Five fatalities, one serious injury, one minor injury.

The seaplane was chartered to transport logging-company personnel from Port Hardy to Chamiss Bay, both in British Columbia, Canada, the morning of Aug. 3, 2008.

Port Hardy had 20 mi (32 km) visibility and an overcast at 1,000 ft, and "sunny skies and good visibility" were reported at Chamiss Bay, said the report by the Transportation Safety Board of Canada.

However, a mountain ridge along the 37-nm (69-km) direct route was obscured by clouds. Neither the pilot nor the aircraft was certified to conduct instrument flight rules operations.

A search was initiated after the Goose was reported overdue to land at Chamiss Bay. The wreckage was found at 1,860 ft on a steep, densely wooded slope near Alice Lake, about 14 nm (26 km) from Port Hardy.

Investigators concluded that the aircraft had stalled and struck treetops as the pilot attempted to climb above a ridge that was about 2,000 ft high. The two survivors, who had been seated in the rear of the seaplane, were able to exit through a tear in the fuselage before an intense fire erupted.

HELICOPTERS

Tail Rotor Hits Tower on Takeoff

Sikorsky S-76A. Destroyed. Two serious injuries.

The pilot, who was receiving a proficiency check ride the morning of May 29, 2008, believed that he lifted the air-ambulance helicopter straight up for a vertical takeoff from a hospital rooftop helipad in Grand Rapids, Michigan, U.S., but reports by witnesses and videotape from a security camera showed that the S-76 moved backward about 60 ft (18 m).

The helicopter was about 40 ft in the air when the tail rotor struck a radio tower. It yawed right, and, as the pilot attempted to land on the helipad, the main rotor blades struck the tower-support structure. "The helicopter fell straight down, impacting the hospital roof," the NTSB report said.

The pilot and the U.S. Federal Aviation Administration inspector were able to exit the S-76 before it was consumed by fire.

Weather Briefing Omitted

Bell 430. Destroyed. Four fatalities.

The flight crew, who were conducting their first flight along the route, did not obtain a weather briefing before taking off from Hyderabad, India, for a charter flight with two passengers to Jagdalpur the afternoon of March 8, 2008.

"The crew encountered bad weather [and] continuously kept descending the helicopter," said the report by India's Directorate General of Civil Aviation. The 430 was below the minimum safe altitude for the area when it struck a hill about 27 minutes after takeoff. The helicopter was destroyed by the impact and a post-impact fire.

Fuel Lever Moved Inadvertently

Eurocopter AS 350-B2. Substantial damage. Four fatalities, one serious injury.

The pilot was transporting telecommunications technicians to remote sites near Chickaloon, Alaska, U.S., the morning of April 15, 2008. There were two technicians aboard the helicopter when the pilot landed at a highway rest area to pick up another technician and his stepson, who occupied the front passenger seat.

"The destination site was about 2.5 mi [4.0 km] from the rest area, across a ravine," the NTSB report said.

A witness said that visibility was about 2 mi (3,200 m) in light snow when the helicopter departed from the rest area and descended steeply into the ravine. "He said he thought the descent was unusual, but he did not see any impact and thought the helicopter was working in the ravine," the report said.

A search was launched after the helicopter was reported overdue that afternoon. The wreckage was found the next morning in the ravine. The front-seat passenger survived with head injuries and hypothermia.

Investigators found pre-impact internal engine damage that was consistent with an engine overspeed. The report said that the overspeed likely had occurred when the fuel control lever, which is on the forward cabin floor, had been moved inadvertently to the emergency position by the front-seat passenger's foot or by his backpack.

"According to the manufacturer, inadvertent movement of the fuel flow lever into the forward emergency position can cause the engine to overspeed within seconds," the report said.

The helicopter apparently had entered a vertical descent after the subsequent loss of power. "Given the rough and uneven terrain and the helicopter's low altitude, a successful autorotative landing was improbable," the report said.

Preliminary Reports, March 2010

Date	Location	Aircraft Type	Aircraft Damage	Injuries
March 1	Bagram, Afghanistan	Airbus A300B4-200F	destroyed	5 none
The A300 was inbound on a cargo flight from Bahrain when its left main landing gear collapsed on landing.				
March 1	Tomé, Chile	Piper Turbo Navajo	destroyed	6 fatal
The Navajo was on an earthquake-relief flight when it crashed while descending to land in Concepción.				
March 1	Stuttgart, Germany	Cessna Citation CJ2	substantial	1 none
An uncontained failure of the left engine occurred during departure. The pilot returned to Stuttgart without further incident.				
March 1	Mwanza, Tanzania	Boeing 737-200	substantial	80 none
The nose landing gear collapsed when the 737 veered off a wet runway on landing.				
March 1	Gaithersburg, Maryland, U.S.	Socata TBM 700	destroyed	1 minor
Visual meteorological conditions (VMC) prevailed when the TBM 700 hit treetops and crashed on approach.				
March 2	DeKalb, Illinois, U.S.	Beech King Air A90	substantial	2 none
The King Air's left main landing gear collapsed during landing rollout.				
March 4	Anchorage, Alaska, U.S.	Boeing 747-400F	substantial	3 none
The flight crew continued the cargo flight to Taiwan after the 747's tail struck the runway on takeoff from Anchorage.				
March 4	Louisa, Virginia, U.S.	Cessna T303 Crusader	destroyed	1 fatal
Witnesses heard abnormal engine noises before the airplane struck a tree and crashed into a house during takeoff.				
March 6	Delta Junction, Alaska, U.S.	McDonnell Douglas 369E	substantial	1 serious, 4 none
The helicopter struck trees during an autorotative landing after losing power during an air taxi flight.				
March 7	Manaus, Brazil	Learjet 35A	substantial	6 none
The Learjet veered off the runway and struck trees after a landing gear problem occurred on takeoff.				
March 7	Guatemala City, Guatemala	Bell B206L-1	destroyed	3 serious, 3 minor
The LongRanger crashed on a soccer field after losing power during an air taxi flight.				
March 8	Bugiri, Uganda	Agusta A119	substantial	1 serious, 7 none
During an attempted precautionary landing at a hospital, the helicopter began to spin, struck trees and touched down hard. The pilot was seriously injured.				
March 10	Tegucigalpa, Honduras	Cessna 421B	destroyed	3 fatal
The 421 crashed soon after the pilot reported a mechanical problem on takeoff in night VMC.				
March 10	Farmingdale, New York, U.S.	Gulfstream III	substantial	5 none
The flight crew said that the airplane was climbing through 35,000 ft when a cabin windowpane separated and was ingested by the right engine. The crew returned to Farmingdale and made a single-engine landing without further incident.				
March 15	Kodiak, Alaska, U.S.	Britten-Norman Islander	destroyed	3 minor
After an intersection takeoff, the pilot lost control of the Islander while attempting to clear terrain off the end of the runway.				
March 17	Bracciano, Italy	Agusta-Bell 412EP	destroyed	1 fatal, 4 serious
The helicopter crashed and sank in a lake during a fire-control training flight.				
March 18	Tallinn, Estonia	Antonov 26	destroyed	1 serious, 1 minor, 4 none
The crew was conducting a go-around due to an unsafe-gear indication when an engine problem occurred. The An-26 struck trees and crashed on a frozen lake.				
March 22	Darwin, Australia	Embraer 120ER Brasilia	destroyed	2 fatal
The Brasilia crashed on a golf course shortly after taking off for a training flight.				
March 22	Moscow, Russia	Tupolev 204-100	destroyed	8 NA
Runway visual range was 450 m (about 1,500 ft) when the Tu-204 struck trees and crashed on approach. No fatalities were reported.				
March 25	Brownsville, Tennessee, U.S.	Eurocopter AS 350-B3	destroyed	3 fatal
After transporting a patient to Jackson, the air-ambulance helicopter crashed in a field on approach to its home base.				
March 30	Ivanovo, Russia	Antonov 74	destroyed	2 serious, 3 minor
The An-74 overran the runway after an engine failed on liftoff.				
March 31	Krasnoyarsk, Russia	Boeing 737-400	substantial	NA
The 737 was in a right turn during a go-around when a compressor stalled in the right engine. The crew regained control after the airplane dived from 4,000 ft to 400 ft. No injuries were reported.				

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.