Silent Squawker

Failure to use transponder cited in collision of glider and jet.

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

High Closure Rate Limited See-and-Avoid

Raytheon Hawker XP, Schleicher ASW27. Substantial damage. Three minor injuries.

The Hawker was descending to land at Reno, Nevada, U.S., and the Schleicher was in a climbing turn when they collided at about 16,000 ft on Aug. 28, 2006. Both Hawker pilots and the glider pilot received minor injuries; the three passengers aboard the jet were not injured. The Hawker crew landed at Carson City Airport, which is about 25 nm (46 km) south of the Reno airport. The glider pilot bailed out and parachuted to the ground.

The collision occurred in daytime visual meteorological conditions (VMC) about 42 nm (78 km) south-southeast of Reno, "an area that is frequently traversed by air carrier and other turbojet airplanes inbound to RNO [Reno/Tahoe International Airport] and that is also popular for glider operations because of the thermal and mountain-wave gliding opportunities there," said the report by the U.S. National Transportation Safety Board (NTSB).

NTSB said that the probable causes of the collision were "the failure of the glider pilot to utilize his transponder and the high closure rate of the two aircraft, which limited each pilot's opportunity to see and avoid the other aircraft." The report also said that the "slim design of the glider would have made it difficult for the Hawker crew to see it." Both pilots were looking out the windshield, but the first officer did not see the glider, and the captain saw it about one second before the collision.

The glider's right wing penetrated the Hawker's nose and instrument panel, and debris caused the right engine to flame out. The landing gear did not extend normally, and the crew conducted a gear-up landing at Carson City. The glider entered a flat spin after the collision. After bailing out, the pilot said that he saw the glider spiral to the ground with the left wing and inboard section of the right wing still attached. The minor injuries to the glider pilot occurred when he was dragged over the ground by the parachute.

Because the glider's transponder was not operating, the glider was not detected by the traffic-alert and collision avoidance system (TCAS) aboard the Hawker. "Had the glider pilot turned on his transponder, the Hawker's TCAS-II likely would have depicted the glider on the flight crew's monitor and would have generated an RA [resolution advisory] to alert the crewmembers and prompt them to deviate their course in time to prevent the accident," the report said.

U.S. Federal Aviation Regulations do not require gliders — and other aircraft without engine-driven electrical systems — to be equipped with transponders if they are not flown in specific types of controlled airspace. However, the regulations require pilots to use transponders in aircraft that are equipped with them.

The glider pilot told investigators that he did not turn on the transponder because he wanted to reserve battery power for radio use.

"According to Reno Terminal Radar Approach Control personnel, it is not uncommon for arriving and departing air traffic to receive TCAS RAs because of transponder-equipped gliders operating in the area," the report said. "In a 30-day interval before the accident, the facility recorded four such TCAS RA events reported by pilots."

If the Schleicher's transponder had been operating, it also would have provided air traffic controllers with the glider's position and altitude, allowing them to ensure separation between the aircraft, the report said. The glider pilot told investigators that he did not turn on the transponder because he wanted to reserve battery power for radio use.

Based on the findings of the investigation, NTSB in March 2008 recommended that the U.S. Federal Aviation Administration (FAA) remove the exemption of gliders from the regulations requiring transponder installation and establish a discrete transponder code for glider operations.

NTSB told the FAA that the U.S. Aviation Safety Reporting System (ASRS) database includes 60 reports of near-midair collisions between corporate or air carrier jets and gliders from 1988 to August 2007. "Most of the ASRS reports involved gliders that were neither detected by the jet flight crews' TCAS equipment nor visible on the ATC [air traffic control] facilities' radar screens, indicating that the gliders were not equipped with, or not using, a transponder," the board said.

Spilled Coffee Causes Short Circuit

Boeing 737-300. No damage. No injuries.

The aircraft was climbing through 20,000 ft during a scheduled flight from Wellington, New Zealand, to Auckland the night of May 3, 2007, when the flight crew observed several warning lights. "The warning lights included panels such as engine overheat, engine and wing anti-ice, dual hydraulic system failure, pressurization altitude, window overheat and auxiliary power unit," said the report by the New Zealand Transport Accident Investigation Commission.

The crew stopped the climb and advised ATC of the situation. Checks of the flight controls, instruments and circuit breakers indicated that an electrical malfunction was causing spurious warnings. "The captain consulted the quick reference handbook [QRH] but found that it provided no help because of the number of different lights, so he contacted the operator's maintenance watch for advice," the report said. "The maintenance watch personnel provided no solution but mentioned that the problem could be linked to a fluid spill in the cockpit that afternoon."

While discussing whether they should return to Wellington, continue to Auckland or divert to a nearby airport, the pilots detected the odor of burning electrical insulation. They donned smoke goggles and oxygen masks, declared an urgency and diverted to Royal New Zealand Air Force Base Ohakea. After extending the landing gear, the crew saw three green lights, indicating that the gear was down and locked; however, a subsequent check on short final approach showed that the gear lights were not illuminated.

The crew conducted a go-around and the manual gear-extension procedure. The gear lights did not illuminate, but the airport traffic controller advised that the gear appeared to be down. Based on this advisory and other cues — including the sound and feel of the aircraft, and the thrust required to maintain airspeed — the crew decided that the gear was extended and the gear lights were faulty. The captain elected not to use the viewing ports to check the gear. "The captain knew that the time involved would delay the aircraft landing, and with a potential electrical fire, landing as soon as possible was a priority," the report said.

The crew landed the 737 without further incident and taxied to the apron, where the 121 passengers disembarked on airstairs.

The report said that while another crew was preparing the aircraft for an earlier flight from Wellington, the first officer spilled coffee on the center control pedestal. The pilots used paper towels to mop the spilled coffee and called a maintenance engineer to the cockpit. The engineer replaced the audio selector panel but found no sign that the spilled coffee had affected other equipment in the pedestal. "A functional check

of the various modules and other electrical systems showed that they were operating normally," the report said. The engineer recorded the fluid spill in the technical log. The aircraft then was flown to Auckland and back to Wellington without incident.

Investigators found that some of the spilled coffee had leaked into the stabilizer trim and cockpit door lock module, which shares circuitry with other components in the center pedestal. "The heat generated by the lights in the module and the surrounding area slowly evaporated the water in the spilled liquid, leaving a sticky residue of carbonized sugar that was a better conductor than liquid coffee," the report said. "Consequently, the electrical current flow gradually increased and generated more heat, resulting in the slow electrical breakdown and subsequent melting and burning of the light assembly components in the module."

Missed Turn Leads to Close Call on Runway

Airbus A320, Boeing 757-200. No damage. No injuries.

Daytime VMC prevailed when the 757 flight crew taxied toward Runway 09L for departure from Fort Lauderdale–Hollywood (Florida, U.S.) Airport on July 11, 2007. The airport ground traffic controller's taxi instructions had included a turn onto a taxiway that parallels Runway 09L, the NTSB report said.

The crew missed the turn and continued taxiing toward the runway. The airport local traffic controller, who had cleared the A320 flight crew to land on Runway 09L, noticed that the 757 was nearing the runway. The local controller told the ground controller to instruct the 757 crew to stop. The ground controller radioed the 757's call sign and said, "Stop, stop, stop." The crew brought the 757 to a stop on the runway, 30 ft (9 m) from the centerline.

Meanwhile, the local controller told the A320 crew to go around. "When the crew received the instruction, the main landing gear was on the ground," the report said. "They [said] they noted the urgency in the controller's voice, so they knew they had to get the aircraft airborne." During the go-around, the A320 passed the 757 within 100 ft vertically and 230 ft (70 m) laterally. There were 307 people aboard the two airplanes.

Computer Failure Darkens Flight Displays

Embraer 145EP. Minor damage. No injuries.

There was a broken ceiling at 1,000 ft when the aircraft departed from Aberdeen (Scotland) Airport with 16 passengers for a scheduled flight to Manchester, England, on May 10, 2007. The aircraft was climbing through 11,600 ft when the autopilot disengaged and the commander's primary flight display and multifunction display, and the engine indicating and crew alerting system display went blank, said the report by the U.K. Air Accidents Investigation Branch (AAIB). A red "X" appeared on each of the failed displays.

The flight crew said that a "smoky haze" emerged from the left side of the commander's seat, and they detected an "acrid burning smell." The crew declared an emergency and returned to Aberdeen. After descending below the clouds during the approach, the commander saw the runway but the copilot, the pilot flying, did not. The commander took control and landed the aircraft using the standby flight instruments.

"At no time during the incident did the crew put on their oxygen masks, instruct the cabin crew to put on their oxygen masks, deploy the passenger oxygen masks or refer to the QRH," the report said.

The 145's QRH has three checklists pertaining to smoke; among immediate actions common to all three checklists is to don oxygen masks and smoke goggles. The commander told investigators that he did not don his oxygen mask because there was only a small amount of smoke. The copilot said that he did not call for the appropriate checklists because he was concentrating on flying the aircraft and was worried that his flight displays also might go blank.

The report said that these omissions could have had serious consequences. By donning their oxygen masks, "the crew would have been protected from any invisible gases that might have been present during the recovery," the report said, adding that if the appropriate checklist

The commander took control and landed the aircraft using the standby flight instruments.

had been conducted, the commander's failed displays would have been restored.

The aircraft operator determined that the display failures and the smoke had been caused by the failure of a capacitor in the power supply for the no. 1 integrated avionics computer.

Altitude Callouts Neglected Below DH

Learjet 35A. Destroyed. Two fatalities, three minor injuries.

The flight crew was conducting a charter flight from Atlantic City, New Jersey, U.S., to Groton, Connecticut, the afternoon of June 2, 2006. The automatic terminal information system (ATIS) indicated that Groton, a coastal airport, had 2 mi (3,200 m) visibility in mist, a 100-ft broken ceiling and surface winds from 170 degrees at 8 kt.

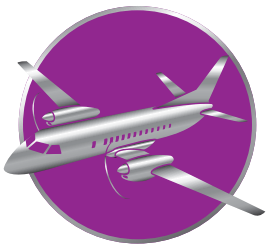
The crew briefed the ILS (instrument landing system) approach to Runway 05, which is conducted over water, and the missed approach procedure. "Two smaller airplanes had successfully completed the approach prior to the accident airplane," the NTSB report said.

The captain flew the approach, and the first officer made 100-ft callouts until the airplane was 200 ft above decision height (DH). "At that point, the captain asked the first officer if he saw anything," the report said. "The first officer reported 'ground contact,' then 'decision height.' The captain immediately reported, 'I got the lights,' which the first officer confirmed."

Neither pilot made altitude callouts after the Learjet descended below DH. "The absence of ground references could have been conducive to a featureless terrain illusion in which the captain would have believed that the airplane was at a higher altitude than it actually was," the report said.

The captain had reduced power to flight idle at DH. "Approximately four seconds later, the captain attempted to increase power," the report said. "However, the engines did not have time to respond before the airplane descended into the water and impacted a series of approach light stanchions, commencing about 2,000 feet [610 m] from the runway." Both pilots were killed; the three passengers received minor injuries and were rescued by boaters.

TURBOPROPS



'Thrown Inverted' by Turbulence

Beech C90-1 King Air. Substantial damage. No injuries.

The King Air was in cruise flight between cloud layers at 17,000 ft near Meridian, Mississippi, U.S., on Jan. 31, 2008, when the pilot saw cloud buildups ahead. He requested and received clearance from ATC to make a slight turn and to climb to Flight Level (FL) 190 (about 19,000 ft), to avoid the largest buildup, the NTSB report said.

The pilot told investigators that no severe weather was depicted by the airplane's weather radar system or Stormscope. However, when the airplane entered the clouds in a right, climbing turn, it almost immediately encountered severe turbulence and was "thrown inverted" in a nose-down attitude, the pilot said.

"As the airplane gained airspeed, the pilot pulled the throttles to idle and pushed the propeller levers full forward," the report said. "He then rolled the airplane upright and had to pull the yoke 'extremely hard' to recover from the dive." The upset occurred at 17,500 ft, and the recovery was completed at 10,500 ft. None of the four people aboard the King Air was injured.

"The pilot then climbed the airplane to FL 190 and completed the rest of the flight uneventfully," the report said. "On the subsequent preflight inspection, the pilot found wrinkling in wing sheet metal."

Starter Failure Causes Cowling Separation

Lockheed Electra. Minor damage. No injuries.

After a cargo flight from Nottingham, England, to Cork, Ireland, the morning of Oct. 12, 2006, a ground crewmember observed that two cowlings were missing from the no. 3 engine. Minor damage also was found on the Electra's fuselage and the no. 4 engine's propeller, said the AAIB report.

The pilots said that the engine-start sequence and the Electra's handling and engine indications during the flight to Cork had been normal.

The cowlings were found on a taxiway at the Nottingham airport. The investigation revealed that while the Electra was being taxied for

departure, the casing on the no. 3 engine's air turbine starter motor gearbox failed, releasing a rotating clutch assembly into the engine nacelle. The clutch assembly struck the leading edge of the left cowling, bending it outward, where it was exposed to propeller wash. "This appeared to have pressurized the interior of the engine nacelle sufficiently to have overloaded the cowlings' latch structure, allowing both cowlings to be released," the report said. "The right cowling was then struck by the no. 4 propeller."

The report said that the failure of the air starter gearbox casing likely was caused by propagation of a crack in the casing and eventual overload of the casing material.

Shortcut During a Nighttime Approach

Beech B-99. Substantial damage. One minor injury.

The cargo airplane was nearing the destination at about 0200 local time on Dec. 29, 2006, when the en route traffic controller told the pilot that the weather conditions at Rapid City, South Dakota, U.S., included surface winds from 340 degrees at 18 kt, gusting to 25 kt, 2.5 mi (4,000 m) visibility and a broken ceiling at 1,300 ft. The altimeter setting was 30.31 in Hg.

The controller cleared the pilot to conduct the ILS approach to Runway 32 and to cross the initial approach fix (IAF) — the locator outer marker, 4.6 nm (8.5 km) from the runway — no lower than 6,000 ft, the NTSB report said. The airport traffic control tower was closed, and ATC radar service was not available for the approach.

Instead of flying to the IAF and conducting the published procedure turn, the pilot flew the DME (distance measuring equipment) arc for the published VOR (VHF omnidirectional radio) approach to Runway 32 at 4,700 ft to intercept the ILS localizer. "He stated that after turning inbound on the final approach course, he performed the 'Before Landing' checklist, set the gear and flaps, and reported inbound on the common traffic advisory frequency," the report said. "He stated that less than five minutes later, he felt a sharp blow, added full power and pitched the nose up, but the recovery attempt was unsuccessful."

The B-99 struck terrain about 7 nm (13 km) from the airport, at 3,200 ft. Airport elevation is 3,204 ft. NTSB said that the probable cause of the accident was "the pilot's failure to follow the published instrument approach procedure, which contributed to his failure to maintain altitude and clearance from terrain."

The report noted that the pilot's altimeter was set to 30.44 in Hg and that tests showed it read 360 ft high. "No determination was made as to whether the discrepancy existed prior to impact," the report said. "However, the pilot did not report any preflight discrepancies with regard to the airplane's altimeters."

Nosegear Collapses During Tow

British Aerospace Jetstream 41. Substantial damage. No injuries.

The ground crewmembers were not wearing headsets and were using hand signals to communicate with the commander during pushback from the stand at Birmingham (England) Airport on June 26, 2007. The aircraft was towed onto a taxiway, the parking brake was set, and the nosewheel was chocked. However, the ground crew was unable to disconnect the towbar.

"The aircraft was now blocking the taxiway and obstructing another aircraft that was waiting to taxi," the AAIB report said. "The flight crew obtained ATC permission to return to the stand. The commander used hand signals in an attempt to communicate his intentions to the [ground] crew."

The commander pointed at the aircraft waiting to taxi, at himself and then in the direction of the stand. When a ground crewmember pointed at the stand, the commander gave him a thumbs-up signal to confirm his intention to return to the stand. However, the ground crew apparently understood the commander's thumbs-up signal to mean that the Jetstream's brakes were off and that he was ready to return to the stand. The commander had not released the parking brake. "Without any further signals, the tug commenced reversing, and the nosegear collapsed," the report said, noting that the propellers came close to striking the ground.

The ground crew apparently understood the commander's thumbs-up signal to mean that the Jetstream's brakes were off.

The driver of the tow vehicle told investigators that the ground crew was not using headsets because they were unserviceable. Both the airport and the operator require voice communication between the ground crewmember-in-charge and the aircraft commander during towing operations. "Despite these requirements, it was not unusual for a pushback to be conducted using hand signals only," the report said. "However, following this accident, ground-handling staff have been instructed to use a headset at all times."

PISTON AIRPLANES

Commuter Flight Runs Out of Fuel

Piper Chieftain. Substantial damage. No injuries.

VMC prevailed for the 85-nm (157-km) commuter flight from Aniak to Kalskag and Bethel in southwestern Alaska, U.S., the morning of June 13, 2007. The pilot estimated that the airplane had 1.2 hours of fuel for the 30-minute flight, the NTSB report said.

The Chieftain was en route from Kalskag to Bethel when the left engine fuel pressure warning light illuminated. The light went out when the pilot engaged the emergency fuel pump and switched fuel tanks. "A few minutes later, the right engine fuel pressure light illuminated," the report said. "He turned on the emergency pump and switched tanks, but the light did not extinguish. When the right engine began to surge, he shut the engine down and feathered the propeller."

The pilot diverted the flight toward the nearest airport, in Tuluksak. "On short final, the left engine began to surge, and he put the gear extension handle in the 'DOWN' position, but the gear failed to fully extend and lock prior to touchdown," the report said. "The airplane sustained damage to the gear-attachment points and wings when the landing gear collapsed during landing." The pilot and eight passengers were not injured.

The report said that about 8 oz (237 mL) of fuel were drained from each of the main tanks, 1.0 gallon (3.8 L) from the right main tank and 2.0 gallons (7.6 L) from the left main tank. The Chieftain's usable fuel capacity is 182 gallons (681 L).

Pilot Incapacitated During Training Flight

Beech 58 Baron. No damage. No injuries.

The 22-year-old flight instructor was practicing instrument procedures at Brusselton, Western Australia, on Feb. 13, 2007. "A second pilot was on board to act as a safety pilot and to look out for other aircraft," said the report by the Australian Transport Safety Bureau.

While conducting an NDB (nondirectional beacon) approach in VMC, the pilot became incapacitated. The safety pilot assumed control and landed the Baron. "The incapacitated pilot received treatment from attending ambulance officers," the report said. "Following a check by a designated aviation medical examiner and four days rest, the pilot was approved to return to work."

Medical testing had disclosed no health problems, and the incident was suspected to have been caused by inadequate nourishment. The pilot told investigators that he had experienced a similar event 12 months earlier that was attributed to dehydration.

After the Feb. 13 incident, the Australian Civil Aviation Safety Authority (CASA) suspended the pilot's medical certificate and requested that he undergo further medical testing. "The testing found that the pilot had epilepsy, and CASA revoked the pilot's medical [certificate]," the report said.

Fatigue Cited in Control Loss

Cessna T303. Destroyed. Five fatalities.

The pilot departed from Atlantic, Iowa, U.S., at 0502 local time Nov. 13, 2006, picked up three company employees in Ankeny, Iowa, and flew them to South Bend, Indiana. The pilot stayed at the airport while the passengers attended a business meeting. A fourth passenger was aboard for the return flight, which began at 1953. The NTSB report said that a ground-service person noted that the pilot "looked tired, or just ready to go home."

After departing from South Bend, the pilot prematurely attempted to establish radio communication with air traffic departure control on the airport tower frequency and flew a heading of 270 degrees rather than the assigned heading of 220 degrees. "The pilot corrected the heading, and shortly thereafter the airplane once again began a right turn back toward the west," the report said. "[ATC] radar data showed the airplane then began another left turn, during which time it entered a spiraling rapid descent. According to weather data, the airplane was in instrument meteorological conditions when this occurred."

The airplane struck terrain about 8 nm (15 km) west-southwest of the airport at 2003. NTSB said that the accident occurred because "the pilot became spatially disoriented and, as a result, failed to maintain control of the airplane" and that contributing factors were the weather conditions and pilot fatigue.

HELICOPTERS

Power Loss Noticed Too Late on Takeoff

PZL-Swidnik Mi-2. Substantial damage.
One fatality, five minor injuries.

The helicopter was hired to pick up five people in a paved area near a nursing home in Heby, Sweden, and fly them to Ljusterö as part of a celebration of a passenger's 100th birthday on June 21, 2005. The pilot checked the site from the air and decided it was suitable for a landing, said the report by the Swedish Accident Investigation Board.

After boarding the passengers, the pilot restarted the two turboshaft engines, "checked that the power output and the rotor speed were normal, hovered vertically, reversed and began a climb," the report said. The helicopter was about 3 m (10 ft) above the ground when one engine lost power. The report said that the pilot did not detect the power loss soon enough to safely reject the takeoff.

"Because of the possible risk to the spectators who had assembled near the takeoff site, the pilot decided that it was dangerous to them to land immediately and continued the flight at the altitude reached, veering slightly to the right," the report said.

The main rotor struck tree branches and a street-light pole, and the helicopter descended to the ground and rolled over. A post-impact fire was extinguished by one of the passengers and some bystanders while the pilot assisted the other passengers in evacuating the aircraft. The 100-year-old passenger had received serious injuries and died three days later.

Examination of the engine revealed that corrosion had caused partial blockage of the fuel-injection nozzle; the resulting decrease in fuel flow reduced the engine's power output by half.

Passenger Walks Into Tail Rotor

Bell 206L-1. No damage. One serious injury.

The helicopter departed from Houma, Louisiana, U.S., the morning of June 6, 2006, to pick up three passengers on a platform in the Gulf of Mexico. The pilot had briefed and flown the passengers before. The purpose of the flights was to conduct checks of the company's offshore platforms.

After boarding the passengers, the pilot asked if they had any questions about aircraft safety. "The passengers indicated that they had no questions regarding safety or emergency equipment," the NTSB report said.

The pilot flew the LongRanger to another platform and landed in the middle of the 40- by 40-ft (12- by 12-m) helideck. He kept the engine running as two of the passengers disembarked and walked to a stairway in front of the helicopter. About five minutes later, one of the passengers emerged from the stairway in front of the helicopter and saw the other passenger emerge from the other stairway, behind the helicopter. He yelled a warning, but the other passenger walked into the tail rotor.

NTSB said that the probable causes of the accident were "the passenger's failure to follow procedures associated with operations in the vicinity of the helicopter and his failure to see/avoid the tail rotor." ●

Preliminary Reports

Date	Location	Aircraft Type	Aircraft Damage	Injuries
April 3, 2008	Benzdorp, Suriname	Antonov An-28	destroyed	19 fatal
On approach to Lawa-Atino Airport, the flight crew was told that another aircraft was on the runway. The crew was conducting a go-around when the An-28 struck a hill.				
April 3, 2008	Mwanza, Tanzania	Reims F-406	destroyed	2 fatal
The twin-turboprop airplane struck a hill while departing on a training flight.				
April 9, 2008	Bundeena, Australia	Swearingen Metro III	destroyed	1 fatal
The airplane crashed in the sea soon after the pilot reported a technical problem while departing from Sydney on a cargo flight.				
April 9, 2008	Nazca, Peru	Cessna U206C	destroyed	5 fatal, 1 minor
The pilot was attempting to return to the airport after losing power during departure for a sightseeing flight when the single-engine airplane struck power lines and crashed.				
April 9, 2008	Unalaska, Alaska, U.S.	Grumman G-21A Goose	substantial	1 serious, 8 minor
The commuter airplane crashed on the runway after the landing gear struck the top of a truck that was being driven on a road near the approach end of the runway.				
April 11, 2008	Chisinau, Moldova	Antonov An-32B	destroyed	8 fatal
Following maintenance, the Sudanese aircraft was departing at nighttime when an on-board equipment malfunction occurred. The crew was attempting to return to the airport when the An-32 struck navigation equipment and exploded on final approach.				
April 11, 2008	Taylor, Texas, U.S.	Beech King Air 200	minor	1 fatal
The pilot heard a high-pitched sound during a post-maintenance test flight and returned to the airport. The engines were at idle power, and the cabin was partially pressurized when a maintenance technician attempted to board the King Air. The cabin door blew open and struck the technician.				
April 15, 2008	Goma, Democratic Republic of Congo	Douglas DC-9-51	destroyed	40 fatal, 111 serious
The crew rejected the takeoff after an engine lost power. The DC-9 overran the runway and crashed and burned in a residential area. Three of the 86 passengers and 37 people on the ground were killed; 40 passengers and 71 people on the ground were seriously injured.				
April 15, 2008	Chickaloon, Alaska, U.S.	Eurocopter AS 350B2	substantial	4 fatal, 1 serious
There were both visual and instrument meteorological conditions in the area when the helicopter struck steep snow-covered terrain during a visual flight rules air-taxi flight.				
April 16, 2008	Annobon Island, Equatorial Guinea	Antonov An-32	destroyed	11 fatal
The aircraft overran the runway while landing in strong wind and heavy rain.				
April 19, 2008	Mount Vernon, Missouri, U.S.	Cessna P206	destroyed	2 fatal, 2 serious, 3 none
The airplane stalled while being turned toward the drop zone. Four parachutists jumped before the Cessna spun to the ground; one was injured while exiting the airplane. Another parachutist was killed when her reserve parachute deployed and became entangled with the empennage. The sixth parachutist was killed when the airplane struck terrain. The pilot was seriously injured.				
April 21, 2008	Coari, Brazil	Embraer Bandeirante	destroyed	14 none
The crew diverted to Coari after an engine problem occurred during a scheduled flight from Manaus to Carauari. The Bandeirante slid off the runway during the landing.				
April 28, 2008	Black Sea	Mil Mi-8T	destroyed	20 fatal
The helicopter crashed in the sea after the tail rotor struck a tower during approach to a platform 70 km (38 nm) southwest of Cape Tarhankut, Crimea, Ukraine.				
April 28, 2008	Catia La Mar, Venezuela	Piper Navajo	destroyed	3 fatal
The Navajo crashed into a building after the pilot reported an engine problem during approach.				
April 29, 2008	Shannon, Ireland	ATR 72	none	30 none
An engine problem occurred during a flight from Dublin to Galway. The crew shut down the engine, diverted to Shannon Airport and landed without further incident.				

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