

# Absence of Required Lights Cited in Nighttime Landing Accident

**Hawker touched down off the left side of the snow-covered runway.**

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 on aircraft accidents and incidents by official investigative authorities.

## JETS

### Passengers Did Not Receive Safety Briefing

Hawker-Siddeley HS-125-600A. Substantial damage. Three serious injuries, three minor injuries.

The Hawker, operated by a U.S. aircraft-management company, was on a charter flight from Montreal to Bromont Airport in Quebec, Canada, on Feb. 21, 2005. The flight crew had not flown to Bromont before. The captain, the pilot flying, had 5,000 flight hours, including 750 flight hours in type. The copilot had 1,700 flight hours, including 100 flight hours in type.

The report by the Transportation Safety Board of Canada (TSB) said that while the captain was filing an instrument flight plan before takeoff, he was asked by the flight information center specialist if he needed notices to airmen (NOTAMs). The captain said that he did not need them. At the time, a NOTAM advised that the runway edge lights at Bromont were out of service.

The report said that the airport was not required to be closed because the runway edge lights were out of service. However, the flight crew was prohibited from conducting a nighttime landing at the airport because the absence of runway edge lights or reflective markers meant that the airport's lights did not meet Canadian, or U.S., requirements.

Bromont Airport did not have weather-observation or reporting services. The report said that weather conditions at Bromont were similar to those at an airport 30 nm (56 km) away, which had 1 mi (1,600 m) visibility in light snow flurries and cloud cover at 2,000 ft. "According to paragraph 135.213(b) of the FARs [U.S. Federal Aviation Regulations], when a flight is conducted under instrument flight rules, the weather observations produced and given to the pilots must be taken at the airport where the aircraft is heading, unless otherwise authorized by an operating specification issued by the FAA [U.S. Federal Aviation Administration] or by a designated person," the report said. "However, there is no indication that the company had such a specification."

The flight crew conducted the localizer approach to Runway 05L, which is 5,000 ft (1,525 m) long and 100 ft (31 m) wide. During the approach, the copilot activated the airport's



**Two seconds before touchdown, the copilot asked the captain if he had the runway in sight; the captain did not reply.**

radio-controlled lights and established radio communication with the Unicom operator, who told the crew that there was snow on the runway and that the runway edge lights were not in service. “However, the approach lights and the visual approach slope indicator did turn on,” the report said.

The aircraft was about 5 nm (9 km) from the runway threshold and at 1,000 ft when the crew gained visual contact with the approach lights and precision approach path indicator (PAPI). Although the approach chart and airport diagram in the crew’s possession indicated that the PAPI was on the left side of the runway, the crew apparently was unsure of its position. “In response to a query from the crew, the Bromont dispatcher [Unicom operator] indicated that the PAPI was on the right side of the runway,” the report said. “From his location facing the aircraft, the PAPI was to the dispatcher’s right.”

The crew continued the approach visually and aligned the aircraft to touch down left of the PAPI. “At approximately two miles [4 km] from the runway threshold, the copilot noticed that the approach lights were at his right,” the report said. “He reported his observation to the captain, who paid little attention to it.” Both pilots apparently were focusing their attention outside the aircraft; neither pilot noticed instrument indications of deviation from the localizer course.

Two seconds before touchdown, the copilot asked the captain if he had the runway in sight; the captain did not reply. “Since the snow-covered runway provided little contrast with the adjacent terrain, and the flight took place at night without runway edge lights, it was impossible to distinguish the runway from the surrounding terrain,” the report said.

The aircraft touched down 300 ft (92 m) left of the runway and 1,800 ft (549 m) beyond the threshold. “When the captain realized that he was not on the runway, he applied full power to execute a missed approach; however, the aircraft hit a ditch approximately four feet [1.2 m] deep that was perpendicular to the flight path,” the report said. “The nosewheel and right landing gear collapsed. The aircraft came to a stop

facing back the way it had come, after traveling a distance of 1,800 feet during which it made a full turn followed by a 180-degree turn.”

Both pilots and one passenger received serious injuries, and three passengers received minor injuries. The pilots were unable to shut down the left engine because of damage that restricted movement of a fuel valve. The report said that the passengers, who had not received a safety briefing before departure, had difficulty hearing the copilot’s evacuation instructions because of the noise from the engine. The emergency exit above the right wing could not be opened because of structural damage. The main door at the front, left side of the cabin was opened with difficulty, but the airstairs could not be lowered fully because of the collapsed nose gear. Several occupants tripped or entangled their feet while exiting the aircraft.

Based on the findings of its investigation, TSB said that the following were causes or factors contributing to the accident:

- “The flight crew attempted a night landing in the absence of runway edge lights;
- “The runway was not closed for night use despite the absence of runway edge lights. Nothing required it to be closed; [and,]
- “Poor flight planning, noncompliance with regulations and standard operating procedures (SOPs), and the lack of communications between the two pilots reveal a lack of airmanship on the part of the crew.”

### Glideslope Excursion Unexplained

Boeing 747-200. No damage. No injuries.

Lacking recorded flight information, investigators were unable to determine whether an instrument landing system (ILS) signal error or a fault in the aircraft’s equipment caused the aircraft, which had 15 crewmembers and 450 passengers aboard, to descend to 1,200 ft when it was 8 nm (15 nm) from the runway threshold during a coupled approach to London Heathrow Airport about 1220 local time Jan. 10, 2006.

The report by the U.K. Air Accidents Investigation Branch (AAIB) said that visibility was good below a 1,500-ft ceiling when the flight crew was cleared to conduct the ILS approach to Runway 27R. The airplane was 14 nm (26 km) from the runway and at 4,000 ft when the autopilot captured the glideslope and the aircraft began to descend. “The flight crew reported that after a short time, they identified that the glideslope indications were showing progressively greater ‘fly-down’ commands and the autopilot was attempting to pitch the aircraft’s nose down to follow these indications,” the report said.

The crew then received a glideslope failure indication and a “NO AUTOLAND” message on the engine indicating and crew alerting system. The first officer, the pilot monitoring, asked the air traffic controller if there was a fault with the glideslope. The controller, who had observed the aircraft’s unusually low altitude, told the crew to climb and said that the glideslope was serviceable. The aircraft was descending at 1,800 fpm when the commander disengaged the autopilot and conducted a climb to 1,800 ft. “With the glideslope indications then looking reasonable again and no failure indications, the commander armed the autopilot to capture the glideslope, and it did so,” the report said. “A successful autopilot approach was completed, and the landing was accomplished manually.”

None of the pilots who conducted the ILS approach before and after the 747 crew reported problems with the glideslope. No faults or failures were recorded by the ILS self-monitoring system. The 747 crew recorded the glideslope fluctuation in the aircraft’s technical log but did not file a report on the incident. Heathrow controllers reported the incident as a level bust.

AAIB said that it became aware of the incident several weeks after it occurred; by then, the aircraft’s flight data and cockpit voice recordings had been overwritten. “Based on the available evidence, the problem was either external to the aircraft but experienced only by [the aircraft] or an unidentified internal fault within the aircraft,” the report said. “However, the lack of recorded flight data and the inability to evaluate the

aircraft soon after the incident rendered further investigation impracticable.”

The report said that risk was minimal in the incident. Had the flight crew continued the descent, they likely would have gained visual contact with terrain in time to avoid controlled flight into terrain. “Had the cloud base been lower, the aircraft’s GPWS [ground-proximity warning system] should also have provided a timely warning of proximity to the ground,” the report said.

### Rough Runway Blamed for Jammed Nosewheel

Cessna Citation 560XL. Substantial damage. No injuries.

The Citation was scheduled for a charter flight with four passengers from Stockholm, Sweden, to Plovdiv, Bulgaria, the morning of Dec. 1, 2004, and to return to Stockholm that evening. Neither pilot had flown to Plovdiv previously.

“On short final during approach to Plovdiv, the crew noticed that the runway consisted of concrete blocks and had a rough appearance,” said the report by the Swedish Accident Investigation Board (SHK). “The crew considered the landing and the rollout to be very severe for the aircraft.”

The pilots inspected the aircraft after landing and found no visible damage. While preparing for departure from Plovdiv that evening, they observed no abnormalities. The commander, the pilot flying, applied the wheel brakes while setting takeoff power to decrease the length of the takeoff roll on the rough runway.

“When the landing gear was retracted after takeoff, a warning was displayed that the nose gear wasn’t retracted,” the report said. The crew cycled the landing gear and flaps, but the fault indication remained. The commander decided to continue the flight to Stockholm. “Due to the faults, the flight continued with limitations of the performance according to the checklist for abnormal procedures,” the report said. “After consultation with a responsible technician in Gothenburg via satellite telephone, the pilots suspected that a failure had occurred in the aircraft hydraulic system.”

**The crew cycled the landing gear and flaps, but the fault indication remained.**

Entering Swedish airspace, the crew told air traffic control (ATC) that they would land the aircraft at Stockholm-Arlanda Airport, rather than Stockholm-Bromma Airport. “The reason that the crew preferred Arlanda was that they [would have] more choices regarding runways if any problem should arise in connection with the landing,” the report said. “All runways at Arlanda are longer than the single runway at Bromma and available rescue service has higher capacity.”

When the landing gear was extended on approach to Runway 26, the green light indicating that the nose landing gear is down and locked did not illuminate. The crew conducted the alternate gear-extension procedure according to the “Abnormal” checklist. “They followed the list with actions, with exception of ‘nose yaw’ — an action where side forces help extension and locking, to solve the problem,” the report said. The nose gear light did not illuminate.

The commander held the nose gear off the runway as long as possible after touchdown. The aircraft was rolling at about 50 kt when the nose contacted the runway. The aircraft then traveled about 200 m (656 ft) before being brought to a stop. The six occupants were not injured.

Investigators determined that the nose gear strut had not extended and the nose gear had become jammed between the door-hinge arms. The report said that violent vibrations and stress on the aircraft during the landing at Plovdiv had contributed to the leakage of nitrogen through a defective O-ring in the strut and the consequent reduction of pressure within the strut.

Based on these findings, SHK said, “The accident likely occurred because the aircraft was operated on a very rough runway, which caused the damage [to] the nosewheel.” The board said that inadequate design of the nose landing gear retraction mechanism was a contributing factor.

### ‘Oily Smell’ Prompts Turn-Around

Airbus A340-600. No damage. No injuries.

The cabin filled with a light white mist as the aircraft was rotated for takeoff from London Heathrow Airport for a flight with 308 passengers to Los Angeles on Dec. 30, 2005.

“The mist was accompanied by a smell which was described as ‘oily’ by the cabin crew,” said the AAIB report. “The flight services manager, head of the cabin crew, notified the commander over the intercom that there was ‘smoke’ in the cabin.”

The flight crew also had detected an “oily-type” odor, but there was no smoke or mist on the flight deck. The commander completed the after-takeoff checks, leveled at a safe altitude and asked the relief first officer, who was in the jump seat, to assess the situation in the cabin. The relief first officer reported that there was no smoke in the cabin but the odor of oil persisted.

The captain decided to return to Heathrow. The flight crew declared an urgency — pan, pan — conducted the “Smoke/Fumes Removal” checklist and advised the cabin crew and passengers of the situation. The aircraft was above its landing weight limit, and ATC provided vectors to a suitable area to jettison fuel. “It took approximately 60 minutes to jettison the 83 tonnes [182,600 lb] of fuel required,” the report said. “The subsequent approach and landing back at Heathrow were uneventful.” Fire-service personnel inspected the aircraft after it was taxied off the runway and noticed nothing unusual. The aircraft then was taxied to a remote stand, where the passengers were deboarded.

The operator’s SOP for the A340-600 was to operate the auxiliary power unit (APU) during takeoff and until reaching 1,500 ft above ground level (AGL). Maintenance personnel detected a slight oily odor after selecting APU bleed air but found no sign of an oil leak. The aircraft was released to service with the APU inoperative. During subsequent routine maintenance, a maintenance technician found a small drain hole near the APU inlet blocked by a buildup of dirt and dried oil. When he cleaned the drain hole, almost a liter of an oil-water mixture drained out.

AAIB said that the mist and odor encountered during the incident flight likely resulted from the drain hole becoming unblocked by vibration during the takeoff and the subsequent ingestion of the untrapped fluid by the APU.

**A maintenance technician found a small drain hole near the APU inlet blocked by a buildup of dirt and dried oil.**

“Once ingested, this contaminant could pass into the bleed air duct and subsequently into the cabin air-conditioning system,” the report said.



## TURBOPROPS

### Elevator Cable Snaps on Takeoff

Swearingen SA226TC Metro II. Minor damage. No injuries.

The pilot told investigators that he checked the aircraft's flight controls before attempting to depart from Denver International Airport in visual meteorological conditions at 0623 local time April 5, 2006, for an unscheduled cargo flight to Dodge City, Kansas, U.S. He said that the elevator control feel seemed very light during the takeoff roll. When he pulled the yoke back at rotation speed, the yoke moved to its full aft travel, and the aircraft rapidly pitched nose-up.

“The pilot reported that moving the yoke forward had no effect, and it felt disconnected from the elevators,” said the U.S. National Transportation Safety Board (NTSB) report. “The pilot quickly began to trim nose-down and reduced power to stop excessive nose-up pitch.”

The pilot gained marginal control of the aircraft and told ATC that he had a flight control problem and was returning to land. He said that while flying the downwind leg, he “experimented with various configurations ... to determine the method of approach and landing” and then conducted a gradual descent and an uneventful landing on the runway.

Company maintenance personnel found that the elevator “down” cable was improperly routed at the pulley in the vertical stabilizer and had worn to the point of failure from contact with a guide. Maintenance records showed that the cable had been installed by a previous operator of the aircraft in 1998. The aircraft had been inspected at the current operator's maintenance facility 10 days prior to the incident. “According to the inspection checklist, the elevator cables and related components were inspected, with no anomalies noted,” the report said.

NTSB said that the probable cause of the incident was “the failure of the elevator down cable due to an improperly routed cable by unknown maintenance personnel” and that a contributing factor was “the improper inspection of the elevator cable by the operator's maintenance personnel.”

### Propeller Would Not Feather

De Havilland Canada Dash 8-300. Substantial damage. No injuries.

The flight crew was not able to feather the propeller after the right engine failed soon after takeoff from Manchester, England, on Aug. 9, 2005, for a scheduled flight to Aberdeen, Scotland, with 33 passengers. The crew declared an emergency, returned to the airport and landed the airplane.

“It was fortunate that, despite the propeller not being fully feathered, sufficient rudder authority was available to maintain directional control,” said the AAIB report.

Investigators found that a propeller blade support bearing had failed catastrophically, resulting in a large imbalance of engine loads. The power turbine shaft fractured, and the consequent overspeed of the power turbine led to the separation and ejection of the turbine blades from the rear of the engine.

“The failure of the propeller to feather was due to a ball from the failed bearing becoming jammed between the propeller blade root and the propeller hub,” the report said. “The origin of the bearing failure was not determined, although metallic examination revealed that cracking had been occurring for a period of time.” The failed bearing had accumulated 16,714 hours in service. Another bearing in the propeller had accumulated 24,737 hours in service and showed no sign of impending failure.

Strong propeller vibration had been reported six days before the incident, and vibration-monitoring equipment had been installed in the aircraft. The report said, however, that the equipment had been installed incorrectly, and no meaningful readings were recorded before the incident occurred.

### Cargo Shift Causes Tail Strike

Convair 440. Minor damage. No injuries.

The flight crew landed the airplane at Keno-sha (Wisconsin, U.S.) Airport at 2350 local time Sept. 22, 2005, and removed the straps restraining the cargo. After waiting 1.5 hours for the ground crew to arrive to unload the cargo, the captain called the company and was told to fly the aircraft to Milwaukee and have the cargo unloaded there.

“Since we unstrapped the freight for offload almost two hours ago, we didn’t think to check the freight,” the captain told investigators. He also noted that the “Before Start” checklist does not remind the flight crew to verify that the cargo is properly restrained.

The captain began the takeoff at about 0120. The aircraft had rolled about 400 ft (122 m) when the cargo shifted. The aircraft’s tail struck the runway, and the captain rejected the takeoff.



## PISTON AIRPLANES

### Chieftain Strikes Trees During Approach

Piper PA-31-350. Destroyed. One fatality.

The pilot was conducting a cargo flight from Knoxville, Tennessee, U.S., to Dayton (Ohio) International Airport in nighttime instrument meteorological conditions on Dec. 7, 2004. He reported that the aircraft was established on the localizer course for the ILS approach to Runway 06L at Dayton. The tower controller told the pilot that touchdown RVR (runway visual range) was 1,800 ft (550 m).

Radar contact was lost when the aircraft was at 1,200 ft. The aircraft struck trees and came to rest inverted about 0.5 nm (0.9 km) from the runway at 0104 local time. A weather observation at the time of the accident included RVR variable between 1,800 ft and 2,000 ft (600 m) in fog and vertical visibility 100 ft. The published minimum visibility for the ILS approach was 1,800 ft RVR, and decision height was 1,198 ft, or 200 ft height above touchdown.

### Landing Gear Lever Breaks

Piper PA-23-250. Substantial damage. No injuries.

A flight instructor with 18,800 flight hours, including 500 flight hours in Aztecs, and a student pilot receiving training for a multi-engine airplane type conversion were conducting takeoffs and landings at Napier (New Zealand) Aerodrome on April 13, 2006. The Aztec was on the downwind leg for the second landing when the student attempted to extend the landing gear. “However, the handle of the landing gear selector lever broke off in his hand, and the gear remained selected ‘UP,’” said the report by the New Zealand Transport Accident Investigation Commission.

The instructor told the tower controller about the problem and their intention to fly the airplane to a safe position east of the airport where they could attempt to resolve the problem. The Aztec had two emergency landing gear extension systems, but the pilots were not able to use them because they require the landing gear handle to be in the “DOWN” position. With the student flying the airplane, the instructor attempted unsuccessfully to use the crash ax to gain access to the remaining section of the gear lever.

Unable to resolve the problem, the instructor told the controller that he would conduct a gear-up landing on the grass portion of the runway and asked the controller to alert the airport’s emergency services. “During the circuit before landing, the instructor shut down the right engine and feathered its propeller, and the student turned off the fuel and magnetos,” the report said. “To prevent any propeller damage during the landing, the instructor had the student crank the engine until the stationary propeller was aligned approximately horizontal.”

To prevent flap damage, the instructor did not extend the flaps. “To reduce the potential of a fire and to help minimize any engine damage, the instructor shut down the left engine and had the student turn off the fuel, magnetos and master switch just before the aeroplane touched down,” the report said. The airplane touched down smoothly on the grass portion of the

runway and turned 90 degrees right when it slid onto the paved portion of the runway, where it came to a stop. Damage included a bent left propeller blade, scrapes on the lower fuselage and broken antennas.

### False Fuel Indications Lead to Ditching

Beech E55 Baron. Destroyed. Two fatalities, two serious injuries, one minor injury.

The owner of the airplane told investigators that the fuel quantity indicators mounted in the instrument panel did not work properly. Before departing from Redmond, Oregon, U.S., for a flight to Friday Harbor, Washington, on July 1, 2005, the pilot used the fuel tank sight gauges to check fuel quantity. The left gauge showed 45 gal (170 liters), and the right gauge showed 55 gal (208 liters), which the pilot believed was sufficient for the 1 hour, 50 minute flight.

The airplane was descending to land when power was lost from both engines. The pilot ditched the airplane in the ocean about 8 mi (13 km) from the destination. Two passengers were killed, the pilot and one passenger were seriously injured, and one passenger received minor injuries. The surviving passengers said that the airplane hit the water hard in a slightly nose-down attitude and immediately began to sink.

The NTSB report said that maintenance had been performed on the airplane four months before the accident to replace leaking fuel cells and that the fuel sight gauges were installed incorrectly, resulting in float travel being restricted by wing structure. "If the sight gauges had been properly installed, they would have read in the cross-hatched (unusable) area," the report said.

NTSB said that the probable cause of the accident was "the pilot's failure to refuel the airplane, which resulted in a dual loss of engine power during normal descent due to fuel exhaustion" and that a contributing factor was "the incorrect installation of the left and right wing fuel sight gauge/float assemblies by unknown persons."

## HELICOPTERS

### Broken Hoist Cable Strikes Rotor Blades, Canopy

Sikorsky S-61N. Substantial damage. One minor injury, five uninjured.

The crew was conducting a search-and-rescue training flight over the ocean south of Waterford, Ireland, on Jan. 17, 2006. The helicopter was brought to a hover over a ship at anchor, and the winchman was lowered by cable to the deck on the bow of the ship. As the winchman prepared to release himself from the hoist hook, he was thrown off balance when the ship rose on a 2-m (7-ft) swell; he grasped a ladder to steady himself. "During the process, a coil of cable looped around a small steel protrusion welded to the side of the ladder," said the report by the Irish Air Accident Investigation Unit.

The winch operator aboard the helicopter saw that the winchman had released the hoist hook and began to winch the cable back aboard the helicopter. "At the same time, the bow of the ship pitched down, load was put on the unseen snagged cable, and the cable sheared just above the hook-attachment point," the report said.

The cable, which recoiled after shearing, lacerated the winch operator's hand, broke the canopy above the pilots' heads and struck two of the five main rotor blades. The pilots flew the helicopter back to their base.

### Ground Resonance Encounter

Agusta A109E. Destroyed. No injuries.

The 6,500-hour pilot was ground-taxiing the helicopter at Fort Worth (Texas, U.S.) Meacham International Airport in preparation for a repositioning flight on Jan. 19, 2005. He said that when he applied the wheel brakes to give way to an airplane that was being taxied to the ramp, the helicopter began to shake and turn 90 degrees left.

After the helicopter turned left, the main rotor and transmission assembly separated from the aircraft. The pilot was not injured.

NTSB said that the probable cause of the accident was "the pilot's inadvertent encounter with ground resonance." ●



Preliminary Reports				
Date	Location	Aircraft Type	Aircraft Damage	Injuries
Aug. 28, 2006	Smith, Nevada, U.S.	Raytheon Hawker/Schleicher ASW-27	substantial/destroyed	3 minor, 3 none
The Hawker 800XP was descending through 16,000 ft when the captain saw the glider close ahead. She attempted evasive action, but the airplane's nose struck the glider's right wing. The Hawker pilots received minor injuries. The airplane's right engine flamed out, and the landing gear would not extend. The pilots conducted a gear-up landing at Carson City, Nevada. The glider entered a flat spin after the collision, and the pilot bailed out. He received minor injuries after landing when the parachute dragged him across the ground.				
Aug. 29, 2006	Ravensthorpe, Australia	British Aerospace 146-100	NA	none
Soon after takeoff, the flight crew reported a fire in the cockpit and returned to the Ravensthorpe airport. The pilots flew the airplane in a holding pattern over the airport while conducting the emergency checklist. They extinguished the fire and landed without further incident.				
Sept. 1, 2006	Mashad, Iran	Tupolev Tu-154M	destroyed	28 fatalities, 120 NA
The nosewheel tires reportedly burst on landing, and the airplane swerved off the runway and caught fire.				
Sept. 1, 2006	Argyle, Florida, U.S.	Mitsubishi MU-2B	destroyed	1 fatal
Intense to extreme weather radar echoes were recorded in the area when the aircraft broke up while descending to land at Panama City, Florida, during a business flight from Tulsa, Oklahoma.				
Sept. 3, 2006	Karachi, Pakistan	Boeing 737-300	NA	NA
Soon after departing from Karachi, the flight crew heard a thud and felt a vibration. The crew saw an unsafe landing gear indication on approach to Doha, Qatar, and conducted a go-around and fly-by of the control tower, which reported that portions of the right elevator and trim tab were missing.				
Sept. 5, 2006	San Juan, Puerto Rico	Boeing 757-200	substantial	116 none
The aircraft began to drift right of the runway centerline, and the first officer, the pilot flying, disconnected the autopilot. "During the landing flare, the nose raised to a high angle, and the tail struck the runway," the preliminary report said.				
Sept. 6, 2006	Porterville, California, U.S.	North American OV-10A	destroyed	2 fatal
The airplane was being maneuvered during a forest-firefighting operation when it struck trees and mountainous terrain.				
Sept. 6, 2006	Somis, California, U.S.	Hughes 369D	destroyed	2 fatal
The helicopter was engaged in a powerline-inspection flight when it struck powerlines about 75 ft AGL and descended to the ground.				
Sept. 14, 2006	Subic Bay, Philippines	McDonnell Douglas MD-11	NA	NA
The aft portion of the aircraft was damaged by a tail strike while landing.				
Sept. 14, 2006	Fort Meade, Florida, U.S.	Piper Aztec	destroyed	2 fatal
The aircraft was engaged in a mosquito-control flight when it struck a tower and descended to the ground.				
Sept. 17, 2006	NA	Boeing 767-300	NA	NA
The aircraft was cruising at Flight Level 320 when the flight crew detected an electrical odor and saw smoke emerging from the autoflight mode control panel. The flight crew declared an emergency after losing the autopilot, autothrottles and flight directors, and diverted the flight to Pointe a Pitre, Guadeloupe.				
Sept. 18, 2006	Brisbane, Australia	Boeing 777-200	none	none
Soon after departing from Brisbane for a scheduled flight to Malaysia, the flight crew reported that the right engine had flamed out. The crew was able to restart the engine and, after dumping fuel, landed at Brisbane.				
Sept. 21, 2006	Kodiak, Alaska, U.S.	de Havilland DHC-2 Beaver	substantial	1 fatal, 2 serious, 4 none
The pilot had transported fishermen to a narrow stream 75 mi (121 km) northwest of Kodiak. Weather conditions deteriorated, and the pilot told the passengers that they would have to return to the operator's lodge. Surviving passengers said there was heavy rain and strong winds when the float-equipped airplane crashed soon after taking off from the stream. One passenger was killed, one passenger was seriously injured, and the pilot and three passengers escaped injury.				
Sept. 22, 2006	NA	Boeing 777-200	NA	NA
The aircraft was en route from Israel to the United States when smoke and fire emerged from the lower corner of the first officer's windshield. The flight crew donned oxygen masks, declared an emergency and diverted to Brindisi, Italy.				
Sept. 29, 2006	Peixoto Azevedo, Brazil	Boeing 737/Embraer Legacy	destroyed/minor	155 fatal/7 none
The 737 was at Flight Level 360 during a scheduled flight from Manaus to Brasilia when it apparently collided with the Legacy and descended into the Amazon jungle. The Legacy, which was on a delivery flight from Sao Jose dos Campos to the United States, was landed safely at Cachimbo Air Base.				
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.				