Mixed Mode Mishap

Landing was conducted with autopilot off, autothrottles on.

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

No Guidance for Bounced Landing Recovery

Boeing 737-800. Substantial damage. No injuries.

ighttime visual meteorological conditions (VMC) prevailed, with winds from 260 degrees at 4 kt, when the flight crew conducted a visual approach to Runway 24 at University Park Airport in State College, Pennsylvania, U.S., on Nov. 19, 2005. The captain used the "mixed-mode method of flight control," said the report by the U.S. National Transportation Safety Board (NTSB) — he disengaged the autopilot about 575 ft above ground level (AGL) but left the autothrottles engaged.

The flight crew said that they used flight management system vertical navigation guidance and the Runway 24 instrument landing system (ILS) as backups for the visual approach. After disengaging the autopilot, the captain observed that the airplane was "a little low" with reference to the ILS glideslope and increased the 737's pitch attitude. The autothrottle system commanded a thrust increase when airspeed decreased below 143 kt, the value selected on the mode control panel.

Nearing the runway, the captain observed that the airplane was "a little high" with reference to the precision approach path indicator (PAPI) lights. He disengaged the autothrottle system but did not move the throttle levers to idle when he began the landing flare about 30 ft AGL. Ground-speed was 132 kt when the airplane touched down on the 6,700-ft (2,042-m) runway.

The airplane bounced and became airborne. The captain moved the throttles to idle, which caused deployment of the speed brakes. He said that he then attempted to reduce the resulting high descent rate by "adding flare." Pitch attitude was 9.5 degrees nose-up, and peak vertical acceleration was $2.5~\mathrm{g}-2.5$ times standard gravitational acceleration — when the 737 touched down again. The tail struck the runway, damaging the tail skid, several fuselage skin panels and some internal structural components. None of the 127 airplane occupants was injured.

The Boeing 737NG Flight Crew Training Manual (FCTM) recommends that, to recover from a bounced landing, the pilot flying should hold or re-establish a normal landing attitude and add thrust as necessary to control the rate of descent. "The FCTM also advises that thrust need not be added for a 'shallow skip or bounce'; however, if a 'high, hard bounce' occurs, the pilot should initiate a go-around," the report said.

The report noted that two months before the accident, NTSB recommended that the U.S.

Federal Aviation Administration (FAA) require commercial aircraft operators to incorporate bounced landing recovery techniques in their flight manuals and to include the techniques in initial and recurrent pilot training. The recommendation was generated by the investigation of a nonfatal ATR 72 bounced landing accident in San Juan, Puerto Rico, on May 9, 2004. In response to the recommendation, the FAA in June 2006 issued Safety Alert for Operators (SAFO) 06005, recommending that operators revise their manuals and training programs to include bounced landing recovery techniques. "The SAFO was not a requirement," the report said. "Rather, it was a recommendation." NTSB subsequently asked the FAA to survey operators to determine how many of them adopted the SAFO recommendations. At press time, the FAA had not responded to the request.

The report also noted that, in a 1996 FAA document titled The Interfaces Between Flightcrews and Modern Flight Deck Systems, a human factors (HF) team said that possible hazards of mixed-mode flight control operations include unintended mode or airplane configuration changes, inappropriate pitch or thrust applications and masking of flight path or energy trends (Flight Safety Digest, 9-10/1996). "Some operators [surveyed by the team] stated they expressly discouraged mixed-mode flying on some airplane types, while others generally encouraged its use as a means to retain manual skills proficiency while minimizing workload," the report said. "As a result of the study, the HF team recommended that the FAA require operator manuals and initial/ recurrent qualification programs to provide clear and concise examples of circumstances in which the autopilot should be engaged, disengaged or used in a mode with greater or lesser authority ... and appropriate combinations of automatic and manual flight path control — for example, autothrottles engaged with the autopilot off."

The 737 FCTM recommends that, except during takeoff and climb, the autothrottles be used only when the autopilot is engaged. The report said that the accident airplane operator's manuals contained no prohibition against

mixed-mode operations or guidance for bounced landing recovery.

Based on the findings of the investigation, NTSB said that contributing factors were "the operator's failure to provide sufficient information on the use of autothrottles and bounced landing recovery techniques, along with the [FAA's] failure to require the inclusion of mixed-mode flight control guidance and bounced landing recovery techniques in operator pilot training programs and flight manuals." The probable cause of the accident was "the pilot's improper touchdown and recovery from a bounced landing," NTSB said.

Parking Brake Engaged on Approach

Airbus A319-100. Substantial damage. No injuries.

he first officer was the pilot flying the scheduled flight from London to Leeds–Bradford (England) Airport on Jan. 24, 2007. The airplane entered a snow shower when it descended below the clouds about 3,000 ft AGL during the approach to Runway 32. Winds were reported from 010 degrees at 14 kt, variable from 340 degrees to 050 degrees. However, weather conditions at the airport were changing, and air traffic control (ATC) issued five wind reports to the crew, said the report by the U.K. Air Accidents Investigation Branch (AAIB).

The report said that the commander likely focused his attention on the wind reports during the approach. "The commander stated that he had been involved in a previous landing at Leeds–Bradford in difficult wind conditions, which resulted in the use of a significant portion of the runway length, due to a tail wind," the report said.

The A319 was descending through 1,300 ft when the first officer called for full flaps. "Coincidentally, ATC transmitted a further wind check, and this was acknowledged by the commander," the report said. Meanwhile, the captain engaged the parking brake, instead of selecting full flaps. "The parking brake handle and flap selection lever are located on the aft section of the center pedestal," the report said. "The flap lever is moved fore and aft through the various flap position 'gates,' while the parking brake is selected

Possible hazards of mixed-mode flight control operations include unintended mode or airplane configuration changes, inappropriate pitch or thrust applications and masking of flight path or energy trends.

by grasping the parking brake handle and rotating it clockwise. Despite these controls being of different shapes, requiring different methods of activation, their shapes allow both to be grasped in a similar manner prior to selection."

The report noted that the airplane's flight warning computer (FWC) was an earlier model that displays an amber "PARK BRK" indication on the electronic centralized aircraft monitor (ECAM) when the parking brake is engaged in flight. Later-model A319 FWCs also trigger the master caution light and an aural tone, and display a checklist item on the ECAM that advises the crew to disengage the parking brake.

A few seconds after calling for full flaps, the first officer noticed that the "FLAP 3" setting was still selected. He repeated the request, and the commander selected full flaps. Neither pilot noticed the "PARK BRK" indication on the ECAM.

"Immediately after touchdown, the flight crew noted that the brakes appeared to take effect immediately with a greater deceleration than usual," the report said. "After coming to a halt, the commander requested the first officer to apply the parking brake, but the first officer found it already set."

The crew thought that one tire on the main landing gear had deflated during the landing. However, aircraft rescue and fire fighting (ARFF) personnel notified the crew that all four main landing gear tires had deflated. The 53 passengers disembarked and were taken to the terminal by bus.

Wing Strikes Runway on Landing

Cessna Citation 560. Substantial damage. No injuries.

ive passengers were aboard the airplane for a charter flight from Chicago to Lakeland Airport near Woodruff, Wisconsin, U.S., the morning of Jan. 5, 2006. The airport was reporting 10 mi (16 km) visibility, a 1,300-ft overcast and winds from 350 degrees at 14 kt, gusting to 21 kt. The flight crew calculated a landing reference speed, VREF, of 101 kt, and the captain flew the localizer approach to Runway 36 at 110 kt, the NTSB report said.

The Citation encountered light rime icing conditions while descending from 4,500 ft to 2,600 ft, and the crew activated the deicing boots three times. According to the report, the airplane operating manual (AOM) says that small amounts of ice normally form on unprotected areas of the airplane and can cause about a 5-kt increase in stall speed. The AOM advises that approach speeds and landing reference speeds should be adjusted accordingly.

After descending below the clouds about 1,000 ft AGL, the captain used the PAPI for visual descent guidance to the runway. "At approximately 50 feet, the captain brought the power levers to idle," the report said. "All seemed normal until [the Citation was] approximately 20 to 30 feet [AGL], when the aircraft felt as if it lost lift, and the right wing dropped."

The first officer said that airspeed decreased 4 or 5 kt below VREF when the Citation was about 20 ft AGL. The captain said that he increased power when the stick-shaker — stall warning — activated and attempted to level the wings. However, the right wing tip struck the runway when the airplane touched down. The airplane bounced, turned slightly right, touched down off the right side of the runway and struck a snow bank.

NTSB said that the probable cause of the accident was "the captain's failure to maintain adequate airspeed during the landing, which resulted in a stall/mush."

Brake Warning Caused by Broken Wheel Hub

Boeing 767-300. Substantial damage. No injuries.

he "BRAKE TEMP" warning light illuminated during takeoff from London Heathrow Airport on March 3, 2007, and the flight crew saw indications that the no. 1 wheel brake was hot and getting hotter, the AAIB report said. Airspeed was between 90 and 100 kt when the crew rejected the takeoff. After slowing to taxi speed, they turned the 767 off the runway.

Brake temperature continued to increase rapidly, and the crew requested ARFF services. ARFF personnel saw that the no. 1 wheel was severely damaged. "Although there was no fire, the

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wheel was sprayed with water as a precaution," the report said. The 189 passengers disembarked and were taken by bus to the terminal. The no. 1 wheel was replaced before the airplane was towed off the taxiway.

Examination of the damaged wheel showed that a bearing housing had become detached and had rubbed against the inner hub. "The likely cause of the failure was probably fatigue or stress corrosion, or a combination of both," the report said. The wheel was manufactured in 1994 and had accumulated 1,145 flight hours and 205 cycles.

Flight Attendant Ejected From Galley

Bombardier CRJ200. No damage. One serious injury.

he flight attendant said that before the passengers were boarded for departure from Chicago on May 31, 2005, the captain told her to keep at least one door open because an external air conditioning cart was being used to cool the cabin. "The captain did not specify that the reason the flight attendant needed to keep a door open was because the air conditioning cart [also] pressurized the cabin if all the doors were closed," the NTSB report said.

"The flight attendant stated that after the [24] passengers had boarded the airplane ... the captain asked her to shut the [galley] service door and the main cabin door," the report said. She shut the doors, and the cabin began to pressurize. "The captain felt the pressure rise in his ears and yelled, 'Get the door open."

The flight attendant said that she bent over, held the service door assist handle with her left hand and opened the service door with her right hand. "As she lifted the handle upward, the door exploded open, and she was blown out of the airplane and onto the ground," the report said. "The flight attendant sustained a fractured left shoulder."

The air conditioning cart is powered by a diesel engine and provides 1,500 cu ft per minute of cooled or heated air to the cabin. With only an on/off switch, "the cart has no means of regulating the amount of pressurized, conditioned air that it feeds to the cabin," the report said.

The operator's pilots and ramp personnel — but not its flight attendants — receive training

on the operation of the air conditioning cart. "The airplane has two placards warning to keep a door open when the air conditioning cart is hooked up to the airplane," the report said. "One placard is on the overhead console in the cockpit, and the other is outside of the cabin on the fuselage skin directly above the connection for the external air conditioning cart."

TURBOPROPS

Asymmetric Power Cited in Excursion

BAE Systems ATP. Minor damage. No injuries.

he airplane was on a cargo flight from Umeå, Sweden, to Luleå–Kallax Airport the night of Oct. 13, 2006. The destination airport was reporting winds from 320 degrees at 4 kt, runway visual range (RVR) 550 m (1,800 ft) and vertical visibility 100 ft in fog. The RVR was at the minimum for the ILS approach to Runway 32, said the report by the Swedish Accident Investigation Board (SHK).

Runway 32 was 3,450 m (11,319 ft) long and 45 m (148 ft) wide. It had a painted runway centerline but no centerline lights. The report said that the edge lights were 4 m (13 ft) from the runway edges despite Swedish civil aviation regulations that require edge lights to be displaced no more than 3 m (10 ft).

The copilot flew the approach with the autopilot engaged. Both pilots said that although the power levers were in the same position, the engine instruments showed indications of asymmetric power. Recorded flight data showed that the right engine was producing more power than the left engine. Among the recorded torque values were 50.2 and 28.0, respectively, at 50 ft radar altitude and 17.0 and 4.2 on touchdown.

The pilots saw the approach lights about 200 ft AGL, and the copilot disengaged the autopilot. The report said that when the copilot reduced power to flight idle about 50 ft AGL, he likely did not reduce right rudder control pressure that had been applied to counter the asymmetric thrust; as a result, the airplane yawed right and touched down near the right side of the runway. "Rudder control was applied, but the aircraft



went out to the edge of the runway before it could be steered back to the center of the runway," the report said.

After parking the airplane, the crew found that one of the tires on the right main landing gear had been damaged when it struck a runway edge light.

SHK said that the incident was caused by the crew's "failure to maintain the correct heading during landing, probably caused by the differential power from the engines, combined with the limited experience of the pilots [in] this type of aircraft." The crew had been flying the ATP about three months. The commander had 3,495 flight hours, including 124 flight hours in type. The copilot, the pilot flying, had 1,861 hours, including 109 flight hours in type.

The board said that contributing factors were the absence of runway centerline lighting and the displacement of the runway edge lights.

Ice Ingestion Suspected in Power Loss

Jetstream 41. No damage. No injuries.

he airplane was en route from Leeds–
Bradford (England) Airport to Southampton with 17 passengers the morning of Jan.
11, 2007. In adherence with the manufacturer's recommendations and the company's standard operating procedures for flight in potential icing conditions, the flight crew operated the engine anti-icing and continuous ignition systems throughout the flight, the AAIB report said.

The crew also activated the propeller deicing system when the Jetstream encountered light-to-moderate icing conditions during climb and cruise at Flight Level (FL) 190 (about 19,000 ft). "During the flight, the crew occasionally heard ice being shed from the propellers ... but airframe ice accretion was not sufficient to require operation of the pneumatic deicing boots," the report said.

Nearing Southampton, the crew was told by ATC to descend to FL 70 and was given a radar vector to intercept the ILS localizer for Runway 20. As the airplane descended through 7,500 ft, the right engine lost power. "Some 62 seconds later, the right engine began an auto-restart as a result of the operation of the continuous ignition system, following which, both engines

ran normally," the report said. The airplane was landed without further incident.

Examination of the airplane revealed no technical defects that could have caused the power loss. The report said that it might have been caused by ice that accumulated above the heated upper lip of the right engine's air intake and then entered the intake when the airplane descended into warmer air.

Investigators were unable to determine why the continuous ignition system did not restart the engine within five seconds, as designed, "or why, given that both engines were likely to have experienced exactly the same environmental conditions, only the right engine was affected," the report said. "The possibility that the right engine was predisposed to flameout in the 'right' conditions — due to, for example, the condition of the igniters or fuel nozzles — could not be dismissed."

The report said that modified engine air intakes developed by the manufacturer to further reduce the risk of ice ingestion had not been installed — and were not required to be installed — on the airplane.

Pilot Continues Landing Over Snowplow

Beech Super King Air 200. Substantial damage. No injuries.

he pilot was conducting a positioning flight from Oklahoma City to Angel Fire (New Mexico, U.S.) Airport, which was reporting 7 mi (11 km) visibility in light snow and a broken ceiling at 1,900 ft the morning of March 24, 2007. The pilot said that he announced his position three times on the common traffic advisory frequency while conducting an area navigation approach to Runway 17, which is 8,900 ft (2,713 m) long and 100 ft (30 m) wide.

The King Air was about 2 nm (4 km) from the airport when the pilot saw a snowplow near the approach end of the runway. He maneuvered the airplane to avoid flying over the snowplow and touched down about 1,000 ft (305 m) from it. "Pictures of the accident airplane and runway environment, taken immediately after the accident, depict a swath of unplowed snow in the middle of the runway," the NTSB report said. "During the landing roll, the left wing contacted the swath of

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snow. The airplane yawed about 25 degrees left and departed the runway environment." Damage included a collapsed nose landing gear.

The report said that no notices to airmen (NOTAMs) had been issued for runway conditions or the snow-removal operations at the airport. The snowplow operator said that he was carrying a hand-held radio but did not hear the pilot's position reports.

NTSB said that the probable cause of the accident was "the pilot's inability to maintain clearance from the snow bank." Contributing factors included "the pilot's failure to perform a go-around/missed approach procedure after observing snow-removal equipment on the runway [and] the lack of NOTAMs for runway conditions."



Procedures Omitted After Engine Failure

Cessna 414A. Destroyed. Three fatalities.

aytime VMC prevailed for the air ambulance positioning flight from Honolulu to pick up a patient in Kahului, Maui, Hawaii, U.S., on March 8, 2006. The airplane was about 2 nm (4 km) from Runway 02 at Kahului Airport when the pilot told ATC, "We lost an engine. We need assistance."

Investigators determined that the left engine had failed but were unable to determine why it failed. The pilot did not feather the propeller or retract the landing gear and flaps. The 414 stalled, rolled right, descended rapidly into an automobile dealership and was destroyed by the impact and post-impact fire. The pilot and both flight medical attendants were killed. Ten automobiles were destroyed, but no one on the ground was hurt.

NTSB said that the probable cause of the accident was "the failure of the pilot to execute the published emergency procedures pertaining to configuring the airplane for single-engine flight."

The report indicated that the pilot — who held airline transport pilot and flight instructor certificates and had about 3,142 flight hours, including 1,519 flight hours in multiengine airplanes — had been involved in a similar accident about eight months earlier.

That accident occurred while the pilot was providing flight instruction to a private pilot in a Piper Apache 160 on July 1, 2005. He had intentionally shut down the left engine and feathered the propeller for instructional purposes but then was unable to restart the engine. The hydraulic pump driven by the left engine normally is used to extend the landing gear. With the left engine inoperative, the pilot attempted to extend the landing gear manually while the student flew the Apache back to Honolulu International Airport.

The July accident report said that the pilot did not conduct the manual or emergency gear-extension procedures correctly. However, a tower controller told the pilot that the landing gear appeared to be fully extended. The pilot took control of the Apache and was about to flare the airplane for landing when someone radioed that the nose gear did not appear to be extended. "The [pilot] then reactively applied power, and the airplane rolled to the left and impacted the ground," the report said. Neither pilot was injured; the Apache was substantially damaged.

Air in Brake Line Contributes to Overrun

Piper Seneca II. Minor damage. No injuries.

uring an instructional flight the evening of March 3, 2007, the airplane was landed about 476 m (1,562 ft) beyond the normal touchdown point on the 1,310-m (4,298-ft) runway at Cork (Ireland) Airport. The instructor, the pilot flying, said that judging the approach and flare had been difficult because of sun glare. When he applied the wheel brakes after touchdown, the left toe-brake pedal "went full down" and the right main wheel locked, causing the tire to skid, said the report by the Irish Air Accident Investigation Unit.

"The resulting asymmetric braking made directional control difficult," the report said. Because of this, and because he believed enough runway remained to stop the aircraft, the instructor decided not to conduct a go-around.

The student pilot then applied hard wheel braking, locking both main wheels and deflating the tires. With no effective braking remaining, the Seneca overran the runway at 40 kt and



came to a stop in a grassy area 30 m (98 ft) from the end of the runway.

Investigators determined that air had entered the hydraulic fluid in the wheel-braking system operated from the Seneca's right seat and had caused the inadequate and asymmetric braking performance encountered by the instructor.

Reversed Trim Causes Loss of Control

Cessna 310Q. Substantial damage. One fatality.

he airplane was being flown on Dec. 14, 2006, for the first time following completion of an annual inspection in Montgomery, New York, U.S. Witnesses said that pitch oscillations occurred on initial climb before the 310 turned left, descended and crashed in a wooded area.

The elevator trim tab was found in the full, 10-degree, nose-down position. The NTSB report said that further examination revealed that the elevator trim cables had been reinstalled incorrectly after replacement of the trim actuator during the annual inspection.

NTSB said that the probable causes of the accident were "improper maintenance performed on the airplane by maintenance personnel and the failure of the mechanic with an inspection authorization to verify the maintenance work performed, which resulted in a reversed elevator trim system and subsequent loss of control."



HELICOPTERS

Winds, Weight Reduce Climb Performance

Bell 212. Substantial damage. Twelve minor injuries.

he helicopter was near maximum gross weight after boarding 11 people who had skied down Spearhead Glacier near Whistler, British Columbia, Canada, on Feb. 11, 2005. Elevation of the area was 6,300 ft, and the pilot took off into 30-kt, gusting winds and toward the face of the glacier, said the report by the Transportation Safety Board of Canada.

After attaining a positive rate of climb, the pilot turned the helicopter downwind. "It began to descend, and it was evident that the helicopter would not clear the lower ridge," the report

said. "The pilot turned the helicopter toward a somewhat level area. As it contacted the snow, the helicopter bounced, struck a snowdrift, dug in, stood on its nose, pirouetted and came to rest on its right side."

The main rotor blades severed the tail boom. There was no fire. The report noted that stainless steel elbow fittings, installed on the helicopter's fuel lines in accordance with Airworthiness Directive CF 97-04, remained intact in an area that was crushed during the accident.

"The evacuation from the wrecked helicopter was carried out in a calm manner," said the report, which noted that the passengers remembered instructions they had received during interactive emergency training before the first flight of the day.

Engine Fails Over Dense Forest

Eurocopter AS 350BA. Destroyed. One serious injury, four minor injuries.

he pilot was conducting a sightseeing flight over a dense tropical forest in Hana, Maui, Hawaii, the morning of Jan. 10, 2006, when the helicopter began to vibrate, and the low-rotor-rpm warning horn sounded. "The pilot entered an autorotation and tried to arrest the helicopter's forward velocity before settling into the treetops [on a steep slope]," the NTSB report said.

"The helicopter dropped nose-first toward the forest floor and came to rest on its right side, suspended in the trees a few feet from the ground. The four passengers and the pilot [who was seriously injured] were able to lower themselves to the ground." They used a cell phone to call for assistance.

Examination of the Turbomeca Arriel 1B engine revealed that a second-stage turbine blade had separated as a result of a fatigue fracture initiated at a corrosion pit. The engine had been operated 9,593 hours, including 1,764 hours since its last overhaul. "As a result of the investigation into the engine failure, the engine manufacturer has reduced the life limit of the second-stage turbine blades from 6,000 hours to 3,000 hours and implemented additional turbine-inspection criteria," the report said. •

Date	Location	Aircraft Type	Aircraft Damage	Injuries
Oct. 4, 2007	Kinshasa, Democratic Republic of Congo	Antonov An-26	destroyed	49 fatal, 1 serious
he airplane c	rashed in a residential area after an engine fail	ed on takeoff. The fatalities incl	uded 28 people on the g	round.
Oct. 4, 2007	Pagosa Springs, Colorado, U.S.	Raytheon King Air C90A	destroyed	3 fatal
The air ambula 1,900 ft.	nce was descending in nighttime visual mete	orological conditions (VMC) du	ring a positioning flight v	when it struck terrain a
Oct. 7, 2007	Naches, Washington, U.S.	Cessna 208B	destroyed	10 fatal
	icated that the Caravan entered a rapid desce to Shelton, Washington, after a skydiving ever		ountainous terrain at abo	ut 4,300 ft. The airplane
Oct. 7, 2007	Santo Domingo, Venezuela	Gulfstream IIB	destroyed	2 fatal
Nighttime inst	rument meteorological conditions (IMC) previ	ailed when the airplane struck t	rees and crashed on app	roach.
Oct. 8, 2007	Cubarral, Colombia	Let 410UVP	destroyed	18 fatal
he airplane w	as on a scheduled flight from Villavicencio to	Uribe when it struck a mountai	n at about 7,875 ft.	
Oct. 11, 2007	Bogotá, Colombia	Beech Super King Air 200	destroyed	7 fatal
	captain reported an engine problem during t a. The fatalities included two people on the gr		ht, the King Air stalled an	d descended into a
Oct. 11, 2007	Istanbul, Turkey	McDonnell Douglas MD-83	substantial	163 NA
	as en route from Hurghada, Egypt, to Warsaw, ear separated when the MD-83 overran the rui		ed an electrical problem a	and diverted to Istanbu
Oct. 11, 2007	Memphis, Tennessee, U.S.	Cessna Citation 525	none	2 none
	C prevailed when the airplane took off from Ta 0–500 ft over a regional jet holding on the tax		ed Runway 36L, at Mempl	nis International Airpor
Oct. 14, 2007	Olathe, Kansas, U.S.	North American Sabreliner 6	5 substantial	2 none
	ng on Runway 18 in heavy rain, the pilot selec st, and the Sabreliner hydroplaned off the left		nd shifted from southeas	t to west. Directional
Oct. 14, 2007	Cumberland, Maryland, U.S.	Aero Commander 560F	destroyed	4 fatal
	that they heard a "rough-running" engine whkm) from the airport.	en the airplane took off in VMC	. The Aero Commander st	ruck a barn and burne
Oct. 17, 2007	Phnom Penh, Cambodia	Antonov An-12BP	substantial	1 serious, 4 none
	rted an engine problem during departure for eld about 25 km (14 nm) from the airport.	a cargo flight to Singapore and	attempted to return to P	hnom Penh. The Anton
Oct. 17, 2007	Guadalcanal, Spain	Britten-Norman Islander	destroyed	2 fatal
he airplane, v	hich was operated by a police department in	England, struck mountainous t	errain under unknown ci	rcumstances.
Oct. 17, 2007	Goodland, Kansas, U.S.	Learjet 35A	substantial	2 none
	hat after entering VMC about 250 ft above gro opted to align the airplane with the runway ce			
Oct. 25, 2007	Chibougamau, Quebec, Canada	Beech King Air A100	destroyed	2 fatal
Ouring the sec	ond landing attempt in IMC, the airplane cras	hed and burned near the end o	of the runway.	
Oct. 26, 2007	Butuan, Philippines	Airbus A320-200	destroyed	34 serious, 120 no
he A320 land	ed long in VMC, overran the 6,450-ft (1,966-m) runway and came to a stop in	a coconut grove.	
Oct. 27, 2007	Atlantic City, New Jersey, U.S.	Cessna Citation 650	substantial	2 none
he Citation la	nded hard and overran the runway.			
Oct. 28, 2007	Katowice, Poland	Boeing 737	substantial	125 NA
Nighttime IMC	prevailed when the 737 struck approach ligh	ts while landing.		