Starved of Fuel

Automatic transfer system failed during a long-range flight.

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

Computer Malfunction Blocked Warnings

Airbus A340-600. No damage. No injuries.

Leven hours after the A340 departed from Hong Kong with 293 passengers and 18 crewmembers for a flight to London on Feb. 8, 2005, the no. 1 engine lost power. The aircraft was in Dutch airspace at Flight Level (FL) 380 (about 38,000 ft). The flight crew observed an indication that the inner wing tank that supplies fuel to the no. 1 engine was empty.

"Initially, the pilots suspected a leak had emptied the contents of the fuel tank feeding the no. 1 engine, but a few minutes later, the no. 4 engine started to lose power," said the report by the U.K. Air Accidents Investigation Branch (AAIB).

The flight crew opened all the fuel crossfeed valves, and the no. 4 engine regained power. They attempted unsuccessfully to restart the no. 1 engine while still at FL 380. "The QRH [quick reference handbook] states that the maximum guaranteed altitude for a relight is FL 300," the report said. "Although [this was] read out aloud by the copilot, none of the three pilots seemed to have absorbed the information or said that a descent would be required, probably because most of their attention was focused on trying to understand the fuel problem."

During the restart attempt, the commander noticed that most of the 25,000 kg (55,115 lb) of fuel aboard the aircraft was in the trim tank and the center tank, and that fuel was not being transferred automatically from these tanks to the four inner wing tanks, which directly supply fuel to their respective engines. He told the copilot to manually transfer fuel from the trim and center tanks to the inner tanks.

The crew's efforts to manually transfer fuel were effective, but the pilots became confused by indications on the electronic centralized aircraft monitor (ECAM) fuel status page. "The flight crew were unsure whether the fuel was transferring into the inner tanks, partly because the arrows that symbolize fuel transfer in progress were not displayed," the report said.

The commander told air traffic control (ATC) that they had a fuel management problem and declared an emergency. He requested and received clearance to divert to Amsterdam (Netherlands) Schiphol Airport. The A340, with three engines operating, was landed without further incident about 22 minutes later. The report noted that the fuel management problem had not caused the aircraft's center of gravity to move beyond limits.

The flight crew
received no warnings
about the failure of
the automatic fuel
transfer system or the
low fuel quantity in
the inner tanks.

The A340's automatic fuel transfer system is governed by two fuel control and monitoring computers (FCMCs). The report said that the computer with the highest "health level" is designated automatically as the master; the other computer is the standby, or slave. Investigators determined that a malfunction of the master FCMC in the incident aircraft had caused the automatic fuel transfer system to fail about eight hours before the no. 1 engine ran down. "The slave FCMC was not able to take control as master FCMC due to its lower health status," the report said.

Due to the nature of the master FCMC's malfunction, which affected data bus output, and continued operation of the slave FCMC, the flight crew received no warnings about the failure of the automatic fuel transfer system or the low fuel quantity in the inner tanks. "The only indication to the flight crew of the failure of the fuel transfer system was the information presented on the [ECAM] fuel status page," the report said. "The flight crew were not monitoring the fuel status page closely, nor were they required to."

Based on the findings of the incident investigation, the AAIB recommended revision of European and U.S. transport category aircraft certification standards to include a requirement for an independent low fuel warning system for each tank that directly supplies fuel to an engine. The recommendation was accepted by the European Aviation Safety Agency, which said it plans to issue proposed rule making by the end of 2007, and was rejected by the U.S. Federal Aviation Administration (FAA), which said that an independent low fuel warning system would be redundant.

Flight Continued After Bird Strike

Boeing 767-300. Substantial damage. No injuries.

he aircraft was being rotated for takeoff from Melbourne (Australia) Airport the evening of Oct. 3, 2006, when the flight crew saw a large flock of birds. "With no evasive maneuver available to the crew at this stage of flight, the aircraft encountered the flock and sustained multiple strikes," said the report by the Australian Transport Safety Bureau (ATSB).

The crew noticed a change in the sound produced by the left engine and felt a slight airframe vibration. They also observed that the vibration indication for the left engine had increased to 4.5 units; exhaust gas temperature had not changed, however. "There were no changes noted to the engine parameters for the right engine," the report said.

The crew reported the bird strike to ATC and continued the climb. They reduced power from the left engine, and the vibration decreased. "Maintenance watch informed the crew that there was a maximum engine vibration limit of 2.5 units, but if they could keep it below 2.0, they were not concerned," the report said. "The crew reduced the power on the left engine by about 10 percent, and the vibration level reduced to about 1.3 units."

The crew decided to continue the one-hour flight to Sydney at FL 290, which is below the 767's maximum single-engine operating altitude. "The vibration level on both engines remained below one unit for the remainder of the flight," the report said. "During the descent into Sydney, the crew reduced the left engine to flight idle as a precautionary measure and conducted an asymmetric-thrust approach and landing. The aircraft landed without further incident."

Minor damage from the bird strike was found on the aircraft's nose, landing gear and wing leading edges. However, several fan blades in both engines had been deformed, and the precooler for the left engine had been blocked.

The report said that the flight crew's decision to continue the flight "did not fully take into account the potential effect of the bird strike on the durability of the left engine, nor did it account for the performance of the aircraft if the right engine ceased operating during the flight."

The operator subsequently issued a policy requiring flight crews of its twin-engine aircraft to land at the nearest suitable airport if an obvious sign of engine damage is observed after a bird strike.

Fuselage Punctured by Deicing Vehicle

Boeing 747-200F. Substantial damage. No injuries.

he cabin failed to pressurize during the airplane's departure in nighttime instrument meteorological conditions (IMC) from Anchorage, Alaska, U.S., for a cargo flight to Dallas on Dec. 23, 2006. The flight crew returned to the airport and landed the 747 without further incident, said the report by the U.S. National Transportation Safety Board (NTSB).

Maintenance personnel found a gouge that penetrated the fuselage near the cargo door. Subsequent examination of the 747 by an FAA inspector indicated that the gouge was 18 in (46 cm) long and 1 to 2 in (3 to 5 cm) wide. The inspector also found a shallower gouge that was about 3 ft (1 m) long. "The damage was consistent with the size and shape of the counterbalance weight on the truck used to deice the airplane," the report said.

The NTSB said that the probable cause of the accident was "the failure of the deicing truck crew to maintain sufficient distance from the parked airplane during deicing, which resulted in a collision and substantial damage to the airplane."

Ice Ingestion Causes Engine Flameouts

Cessna Citation II. Substantial damage. Four minor injuries.

he NTSB report said that the purpose of the flight, which originated at Fairbanks, Alaska, U.S., on Sept. 30, 2005, was to find icing conditions suitable for icing-certification tests of a prototype helicopter. Two research scientists were aboard as passengers. The Citation, which was a restricted category airplane equipped for atmospheric research, encountered icing conditions while cruising in IMC at an unspecified altitude.

The report said that neither pilot could recall "if or when the airplane's anti-ice [system] was turned on prior to the accident sequence." The anti-ice system heats the leading edges of the inboard sections of the wings and the engine inlets. The report indicated that the crew might have activated the anti-ice system when they activated the deicing boots after about 1.0 in (2.5 cm) of ice had accumulated on the leading edges of the wings. The deicing boots protect the outboard sections of the wings.

Photographs taken by a passenger showed that the deicing boots shed the ice from the outboard sections of the wing but that ice remained on the inboard sections. About four minutes later, the occupants heard a loud bang and both engines flamed out.

"An engineer from the airplane's manufacturer said that if the anti-ice system was activated after ice had accumulated on the wings, it would take two to four minutes for the anti-ice portion of the wings and engine inlets to heat sufficiently to shed the ice," the report said.

The pilots made several unsuccessful attempts to restart the engines. The Citation broke out of the clouds at about 6,000 ft. "The captain reported that he selected a fairly clear, burned area with some trees and landed the airplane with the landing gear retracted," the report said. "The airplane sustained structural damage to the wings, fuselage and empennage." The accident occurred about 60 nm (111 km) west of Fort Yukon.

Examination of the engines revealed that fan blades had broken off and had been ingested by both engines.

NTSB concluded that the probable cause of the accident was "the pilot's improper use of anti-icing equipment during cruise flight, which resulted in ice ingestion into both engines [and] the complete loss of engine power."

TURBOPROPS

Wing Separates on Takeoff

Grumman Turbo Mallard. Destroyed. 20 fatalities.

he right wing separated about one minute after the amphibious airplane took off from Miami Seaplane Base for a scheduled flight to Bimini, Bahamas, the afternoon of Dec. 19, 2005. The Turbo Mallard crashed in a shipping channel, killing the two pilots and 18 passengers, three of whom were lap-held infants.



"Repetitive fuel leaks were indicators of structural damage inside the right wing." The NTSB report said that the wing separated under normal flight loads because of pre-existing fatigue fractures and cracks in the rear Z-shaped stringer, to which the wing skin is fastened, and cracks in the lower wing skin and lower rear spar cap.

A major repair had been performed on the wing skin in the failure area, which was near a fuel sump drain. The operator's maintenance records contained no information about the repair, which included installation of one external doubler and three internal doublers intended to relieve structural loads in the wing skin.

The repair was ineffective "because the doublers did not restore the load-carrying capability of the skin in the area of the fuel sump drain, and the repair did not properly address the underlying cause of the skin cracking, which was the cracked or fractured rear Z-stringer," the report said. "Repetitive fuel leaks near the area where the accident airplane's right wing separated from the fuselage were indicators of structural damage inside the right wing."

In its determination of probable cause, the NTSB said that the wing separation resulted from the failure of the operator's maintenance program to "identify and properly repair fatigue cracks in the right wing and the failure of the [FAA] to detect and correct deficiencies in the company's maintenance program."

Based on the findings of the investigation, the NTSB made several recommendations to the FAA for improving its oversight of maintenance performed by commercial aircraft operators (*ASW*, 9/07, p. 8).

The accident airplane was built in 1947 and had accumulated 31,226 flight hours. The original radial piston engines had been replaced with turboprop engines, and passenger seating had been increased from 10 to 17 seats. The conversion — from a G-73 Mallard to a G-73T Turbo Mallard — had been performed in accordance with a supplemental type certificate (STC) issued by the FAA to Frakes Aviation in 1971.

The report said that the FAA had "missed an opportunity" by not requiring a full recertification, rather than an STC, for the Turbo Mallard. "A new type certificate would likely have included a fatigue analysis of the airplane," the report said. "Such a fatigue analysis likely would have included a determination of a safe operating life for the wing structure that would have been used as the basis for inspection and retirement requirements that could have prevented the accident."

EMS Pilot Faulted for Continuing Approach

Beech King Air A100. Substantial damage. No injuries.

he pilot was notified at 0030 local time on Jan. 5, 2006, of an emergency medical services (EMS) flight from Traverse City, Michigan, U.S., to pick up a patient at Sault Ste. Marie and transport the patient back to Traverse City.

The pilot said that during his preflight weather briefing, he was especially concerned about runway conditions at Sault Ste. Marie but was told by the flight service specialist that there were no notices to airmen (NOTAMs) about runway conditions at the airport.

The NTSB report said that the King Air departed from Traverse City at 0110. The pilot conducted the VOR (VHF omnidirectional radio) approach to Sault Ste. Marie's Runway 32, which is 5,235 ft (1,596 m) long and 100 ft (31 m) wide. The airplane broke out of the clouds about 900 ft above ground level (AGL) and was about 2 mi (3 km) from the runway when the pilot observed that the runway was covered by snow and slush, and that the runway lights were difficult to see.

The pilot said that the airplane veered left after touching down on the runway and that the left main landing gear struck a snow bank. The airport manager said that the King Air touched down left of the runway centerline and traveled 1,200 ft (366 m) before striking the snow bank and coming to a stop perpendicular to the runway, with the nose landing gear and main landing gear off the runway edge. Damage was substantial, but the pilot and two passengers were not injured.

The NTSB said that the probable causes of the accident were the pilot's "inadequate inflight decision to continue the approach to land," his inability to maintain directional control and the contaminated runway. Among the contributing factors was the failure of airport personnel to issue a NOTAM about the contaminated runway.

Pitch-Control Problem on Takeoff

BAE Systems Jetstream 41. No damage. No injuries.

he flight crew conducted a flight control check as part of their preflight preparations before departing from Durham, England, with three passengers the morning of Jan. 12, 2007. The commander tightened the condition lever friction wheel after applying takeoff power and transferred control to the copilot.

"The aircraft was rotated normally into the climb, and the landing gear was retracted," the AAIB report said. "At about 400 feet ... the copilot stated that he was having control difficulties and could not push the aircraft's nose down using the control column. The commander took control, and he, too, found it was difficult to control the pitch attitude, resorting to power reduction to reduce the rate of climb."

The crew reported the control problem to ATC and requested and received clearance to return to the airport. The controller provided vectors to intercept the instrument landing system (ILS) localizer 10 nm (19 km) from the runway.

"The decision was made to keep the flaps at their takeoff setting of 9 degrees in case further flap extension exacerbated the problem," the report said. "The crew found that it was possible to control the pitch attitude satisfactorily using power variations, and a safe landing was made."

Company engineers found that the elevator trim wheel and the condition lever friction wheel had jammed. The wheels, which rotate on a common shaft in the center pedestal, had come in contact "such that application of nosedown elevator trim also caused rotation of the friction wheel in the 'tighten' sense until the two had jammed together," the report said.

The company concluded that the problem had been caused by the use of greater-thannormal force on the condition lever friction wheel. "In this incident, what the crew initially believed to be an abnormality in the primary pitch controls appears, in fact, to have been an out-of-trim condition," the report said.

Low Clouds on Night Visual Approach

Lancair IV-P Propjet. Destroyed. Three fatalities.

he pilot canceled his instrument flight rules flight plan about 10 nm (19 km) from Provo (Utah) Municipal Airport the night of June 8, 2006. The airport was reporting 10 mi (16 km) visibility, scattered clouds at 100 ft and 1,800 ft, and a broken ceiling at 2,800 ft, the NTSB report said.

The experimental, single-turboprop airplane was over a lake, on short final approach to Runway 13, when it began to turn right. The descending turn continued until the airplane struck the water.

Because of the low clouds, it was "unlikely that the pilot was able to maintain visual contact with the airport during his approach," the report said.

The pilot had completed a familiarization training course in the airplane the day before the accident. His flight instructor had told him not to fly at night until he had accumulated 50 flight hours in the Lancair and not to fly in IMC until he had 100 flight hours in the airplane.

PISTON AIRPLANES

Broken Door Jams Landing Gear

Piper Navajo. Substantial damage. No injuries.

aytime visual meteorological conditions (VMC) prevailed for the commercial flight from Kramfors, Sweden, to Umeå on May 13, 2006. During approach, the flight crew received no indication that the left main landing gear was down and locked, said the report by the Swedish Accident Investigation Board.

The crew cycled the landing gear, but the green light for the left main landing gear did not illuminate. They conducted low passes near the airport traffic control tower with the landing gear extended and retracted. The controller and a maintenance technician summoned to the



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tower saw the left gear door hanging at a 45degree angle to the underside of the wing during each pass; the rest of the left main landing gear remained retracted.

"After about one hour circling around and over Umeå airport, with repeated attempts to resolve the situation, the commander decided to perform an emergency landing," the report said. "After evaluating the alternatives, it was decided to land on the snow at the right side of the runway."

The crew shut down the engines and feathered the propellers before landing the airplane with the gear retracted and with full flaps. The report described the touchdown as gentle. The Navajo veered left while sliding on the snow, which was 30–50 cm (12–20 in) deep, and came to a stop near the edge of the paved runway. The pilots and the six passengers were not injured.

Examination of the airplane revealed fatigue damage to the gear door hinge, which broke when the crew initially attempted to lower the landing gear on approach. "The actuating rod in the hydraulic cylinder that maneuvers the gear door then got stuck in a position between half open and closed, blocking the landing gear from being extended," the report said.

Weather Was Below Approach Minimums

Cessna 414. Destroyed. Two fatalities.

ighttime IMC prevailed when the airplane arrived at Edwards County Airport near Rocksprings, Texas, U.S., on a business flight from Houston on Feb. 9, 2007. The uncontrolled airport was reporting 3/4 mi (1,200 m) visibility in mist, a 300-ft overcast and winds from 020 degrees at 10 kt, gusting to 14 kt.

The NTSB report said that the pilot was familiar with the airport and the two nonprecision approaches — a VOR approach and a global positioning system (GPS) approach — to Runway 14. The circling minimums are 500 ft and 1 mi for the VOR approach and 700 ft and 1 mi for the GPS approach.

The last recorded ATC radar data showed the airplane about 232 ft AGL with a groundspeed

of 186 kt. "Two witnesses reported that the airplane circled over the airport and then descended straight to the ground [east of the runway]," the report said. "A detailed examination of the wreckage of the airplane failed to reveal any anomalies with the airframe, structure or systems."

Fuel Order Was Not Verified

Beech E55 Baron. Substantial damage. Two minor injuries.

here were 55 gal (208 liters) of fuel aboard the Baron, but the pilot believed that he had 115 gal (435 liters) of fuel when he departed from Friday Harbor, Washington, U.S., the morning of Oct. 12, 2006, for a personal flight to Nampa, Idaho.

"The shortfall of 60 gallons [227 liters] was the result of a refueling request that the pilot made to a fixed base operator that did not take place and that the pilot did not verify had taken place," the NTSB report said.

Both engines lost power due to fuel exhaustion when the Baron was cruising at 7,500 ft above Ontario (Oregon) Municipal Airport. "The pilot spiraled down over the airport and entered the pattern for Runway 14," the report said. "He said that he intentionally elected to 'err on the side of landing long and not have any risk of being short.""

The pilot told investigators that, on short final approach to the 4,300-ft (1,311-m) runway, the airplane was "clearly high and fast, pretty much as expected, but not slowing, which was not expected." The Baron touched down about 1,000 ft (305 m) from the departure end of the runway, overran the runway and struck a concrete irrigation channel.

HELICOPTERS

Heads Down When S-76 Hit Water

Sikorsky S-76A. Destroyed. One minor injury.

he helicopter departed from Amelia, Louisiana, U.S., in VMC the morning of Oct. 22, 2006, to pick up a passenger on an oil-drilling platform 60 nm (111 km) offshore. Weather conditions at the platform included a 500-ft overcast, 2 mi (3,200 m) visibility in



rain showers and 15-kt winds, the NTSB report said.

The pilot said that he could see the platform on final approach, but there was no visible horizon. He told the copilot, who had 10 flight hours in type, to arm the floats and activate the windshield wipers. "The pilot added that the copilot appeared to be fumbling with the switches [and he] looked down to see what was happening," the report said. "At that time, the helicopter impacted the water in a near-level attitude, rolled over and began filling with water."

The pilots were wearing life vests but were unable to deploy the life raft before the helicopter sank in 6-ft (2-m) swells. The pilots were in the water about 40 minutes when they decided to swim toward an abandoned platform that they believed was about 2 mi away. They swam for 2.5 hours before reaching the platform, where they found drinking water, food and medical supplies.

The report said that both pilots were suffering from severe fatigue when they were rescued by the crew of a Bell 407 and transported to a hospital. The first officer was treated for a puncture wound in his thigh.

The NTSB said that the probable causes of the accident were "the flight crew's failure to maintain clearance with the water and their diverted attention to secondary tasks while preparing to land."

Power Line Struck During Search Flight

Robinson R44. Minor damage. One serious injury.

he helicopter was engaged in a police search of the coast near Punakaiki, New Zealand, the afternoon of Nov. 9, 2006. The pilot had not conducted a reconnaissance of the area before beginning the flight, said the report by the New Zealand Transport Accident Investigation Commission.

"The pilot said that the search was mostly conducted at a very low 'hover-taxi' speed at a height of about 50 m [164 ft] AGL but went as low as 3 m [10 ft] when hovering near something of interest," the report said.

The pilot said that, after he flew around Motukutuku Point, he lost sight of a power line that ran along the coast and assumed that the power line had been routed underground. The report said that the power line blended with the terrain in the area.

Soon after the pilot turned the R44 toward the beach, the occupants heard a bang, and the windshield shattered. "The pilot immediately felt winded [i.e., out of breath] but kept control and brought the helicopter to a high hover," the report said. He then landed the helicopter on the beach and used a satellite telephone to notify the company of the accident.

The pilot received a small puncture wound to his chest; the three police officers aboard the helicopter were not injured. The R44's rotor blades, as well as the windshield, were damaged and required replacement.

Load Shift Causes Drive Shaft Separation

Aerospatiale SA-319B. Substantial damage. No injuries.

he Alouette was being used to transport the wreckage of a Piper Super Cub from an unspecified site near Mulchatna River to Port Alsworth, Alaska, U.S., on Sept. 23, 2006. The helicopter's 100-ft (30-m) external load line was attached to a spreader bar on the Super Cub's wing structure, and covers designed to spoil lift were placed on the airplane's wings.

The helicopter was being flown at 60 kt and about 2,000 ft AGL when the pilot felt the external load shift. "The helicopter then suddenly pitched nose-down about 45 degrees," the NTSB report said. "The tail boom of the helicopter was struck by one or more main rotor blades, severing the tail rotor drive shaft."

The pilot released the external load and conducted an autorotative landing on soft tundra. "One of the main landing gear wheels dug into the terrain, and the helicopter's tail boom was struck by the main rotor blades, severing about two feet off the aft end of the tail boom," the report said. The pilot and crewmember were not injured.

The NTSB said that the probable cause of the accident was "the pilot's failure to adequately secure the external load rigging."

Soon after the pilot turned the R44 toward the beach, the occupants heard a bang, and the windshield shattered.

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Preliminary	Reports				
Date	Location	Aircraft Type	Aircraft Damage	Injuries	
Sept. 3, 2007	San José, Costa Rica	North American Sabreliner 70	substantial	6 none	
The landing gear collapsed when the Sabreliner overran the runway during a rejected takeoff.					
Sept. 5, 2007	Cross City, Florida, U.S.	Cessna 208B	substantial	1 none	
The pilot was unable to restart the engine after it failed at 11,000 ft during a nighttime positioning flight. The Caravan struck trees during an attempted emergency landing at the Cross City airport.					
Sept. 7, 2007	Goma, Democratic Republic of Congo	Antonov An-12	destroyed	8 fatal	
The cargo airpla	ane reportedly overran the runway and caught fire	during a crash landing.			
Sept. 8, 2007	Buhl, Germany	Robinson R22 Beta	destroyed	2 fatal	
The helicopter of	rashed on a highway after the tail boom failed dur	ing a level turn.			
Sept. 10, 2007	Hobbs, New Mexico, U.S.	Cessna 402B	substantial	1 none	
The airplane rar	n off the side of the runway after the left main land	ing gear collapsed on landing. Th	ne gear actuator ro	d was found fractured.	
Sept. 11, 2007	Port-au-Prince, Haiti	Cessna 208B	destroyed	5 serious, 5 minor	
Initial reports said that either the engine failed or a door came open during departure for a scheduled flight to Cap-Haitien. The Caravan overturned during the emergency landing.					
Sept. 11, 2007	Nokomis, Florida, U.S.	Bell 206B	destroyed	2 fatal, 1 serious	
The helicopter w	was being used to photograph a racing boat when	it struck the water at about 74 kt			
Sept. 14, 2007	Guadalajara, Mexico	Boeing 737-200	substantial	109 none	
The flight crew conducted a go-around because of an asymmetric flap indication and used the alternate flap-extension system. The 737 then was landed with the landing gear retracted.					
Sept. 14, 2007	Chamblee, Georgia, U.S.	Israel Aircraft Industries Astra	substantial	2 none	
Light rain was fa	alling when the airplane overran the runway on lan	iding and struck the localizer inst	tallation.		
Sept. 16, 2007	Phuket, Thailand	McDonnell Douglas MD-82	destroyed	89 fatal, 41 NA	
The MD-82, inbound from Bangkok, overran the runway and struck an embankment while landing in heavy rain and strong winds.					
Sept. 19, 2007	Chattanooga, Tennessee, U.S.	Beech B90 King Air	destroyed	4 minor	
	ed to Chattanooga because of low-fuel indications ling in a parking lot, where the King Air struck cars		al approach, and th	ne pilot conducted an	
Sept. 20, 2007	near McGrath, Alaska, U.S.	Shorts SC-7 Skyvan	substantial	1 fatal	
The airplane str	uck trees while taking off for a maintenance ferry f	light from a 1,100-ft (335-m) grav	vel runway.		
Sept. 21, 2007	Fort Lauderdale, Florida, U.S.	Beech H18	destroyed	1 minor	
The airplane cra	ished on a highway soon after takeoff.				
Sept. 24, 2007	Malemba-Nkulu, Democratic Republic of Congo erran the runway on landing and came to a stop in	Let 410	destroyed	1 fatal, 5 serious, 1 none	
•		•		2 NA	
Sept. 24, 2007	Tixkokob, Mexico	Gulfstream II	destroyed	2 NA	
of cocaine aboa	s being chased by Mexican air force aircraft when i rd the G-II and arrested both pilots.				
Sept. 26, 2007	Entebbe, Uganda	Cessna 406	destroyed	2 fatal	
	shed and burned during takeoff for a geophysical				
Sept. 28, 2007	St. Louis	McDonnell Douglas MD-82	minor	143 none	
A left-engine fire warning occurred during initial climb. The flight crew discharged the fire bottles, shut down the engine and returned to St. Louis for a single-engine landing.					
Sept. 29, 2007	Philadelphia	Boeing 737	minor	1 minor, 1 none	
The windshield collapsed when the 737 struck a bird on departure. The crew returned to Philadelphia and landed the airplane without further incident.					
Sept. 30, 2007	King Salmon, Alaska, U.S.	Helio H-295 Super Courier	destroyed	4 fatal	
	ogical conditions prevailed when the single-pistor	-engine floatplane struck trees a	nd terrain on initia	al approach to a lodge.	
NA = not available					
This information,	gathered from various government and media sources, is	subject to change as the investigation	ons of the accidents a	nd incidents are completed.	