# Long Float Leads to Overrun

Light, variable winds were reported, but an 11-kt tail wind was encountered.

#### BY MARK LACAGNINA

The following information provides an awareness of problems that might be avoided in the future. The information is based on final reports by official investigative authorities on aircraft accidents and incidents.

# JETS



Bombardier CRJ700. Substantial damage. No injuries.

bout 45 minutes after departing from Delhi, India, for a scheduled flight to Kanpur the morning of July 20, 2011, the flight crew asked an air traffic controller at Kanpur's Chakeri Airfield for the current weather conditions. The controller said in part that the surface winds were variable at 5 kt, visibility was 2,000 m (1 1/4 mi) in thundershowers and the runway was wet.

The CRJ was nearing the airport when the controller advised that visibility had decreased to 800 m (1/2 mi), which was below the minimum of 1,200 m (3/4 mi) required to conduct the instrument landing system (ILS) approach to Runway 27, according to the report by the Indian Directorate General of Civil Aviation (DGCA). The crew decided to enter a holding pattern and wait for the visibility to improve. They told the controller that they had sufficient fuel to hold for 20 minutes before they would have to divert the flight to their alternate airport.

The aircraft had been in a holding pattern for nearly 20 minutes when the controller advised that visibility had improved to 1,200 m. The controller cleared the crew to conduct the ILS approach to Runway 27 and advised that there were patches of water on the runway. Chakeri Airfield is a joint military/civilian airport with one runway, which is 9,000 ft (2,743 m) long. "Since it is an air force airfield, it has arrestor barriers [nets] and a soft-ground area on either side of the runway to stop [an] aircraft in case of an overrun," the report said. The CRJ's quick reference handbook indicated that the aircraft could be landed within about 5,000 ft (1,524 m) on the wet runway.

The commander, the pilot flying, later told investigators that the approach was stabilized and that the copilot made all standard callouts. "Both the cockpit crew stated that they saw the runway at decision altitude and continued for landing," the report said. "The commander further stated that approximately 43 ft [above the runway], he retarded the throttle levers and round-off for landing was initiated."

Recorded flight data indicated that the aircraft's airspeed was 135 kt, or 7 kt above the reference landing speed ( $V_{REF}$ ), and ground-speed was 146 kt when the commander began the landing flare. The report said that this "implies that at the time of landing the tail wind component was around 11 kt."

The CRJ floated above the runway for about 10 seconds before the commander "had to deliberately put down the aircraft," the report said. Touchdown occurred with about 4,235 ft (1,291 m) of runway remaining. The speed brakes and thrust reversers were deployed, and the commander applied maximum wheel braking. However, "the remaining runway was not enough to stop the aircraft ... under the prevailing rainy conditions," the report said.

The aircraft overran the runway at 44 kt and rolled about 200 ft (61 m) before coming to a



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stop with the landing gear mired in soft ground. The left wing struck the localizer antenna, which tore a 3-in (8-cm) hole in the leading edge. There was no fire, and none of the 55 passengers and four crewmembers was injured.

"After the aircraft came to a complete halt, the commander informed ATC [air traffic control] that they [had] gone off the runway and required assistance," the report said. "The passengers were deplaned normally."

Among recommendations based on the findings of the investigation, the DGCA said that airlines should place more emphasis on wet/contaminated runway landings during recurrent training and proficiency checks, and should publish a nonpunitive go-around policy in training and operations manuals.

#### 'Startle Effect' Cited in Upset

Airbus A340-313. No damage. No injuries.

nvestigators said that the flight crew did not have their weather radar and navigation displays adjusted properly to show a small line of cumulus clouds that had built quickly to 38,000 ft over the Atlantic during a flight from Caracas, Venezuela, to Paris the night of July 22, 2011.

"It should be noted that this type of isolated cloud in an inter-tropical zone is beyond forecasting abilities other than immediate or very short-term forecasts," said the report by the French Bureau d'Enquêtes et d'Analyses (BEA).

The A340 was in cruise flight at 0.83 Mach and Flight Level (FL) 350 (approximately 35,000 ft), with the ranges on both navigation displays set to 320 nm (593 km) and the weather radar tilt set between minus 0.5 degree and minus 1.0 degree. The report said that, at the low tilt settings, the radar was scanning a portion of the clouds that consisted primarily of ice crystals, which have very low reflectivity. The report also noted that the recommended display ranges for weather avoidance are 80 nm (148 km) and 160 nm (296 km).

Both pilots told investigators that they saw no areas of precipitation on the navigation displays before the aircraft skirted the edge of the line of clouds and encountered moderate turbulence. A strong wind gust caused airspeed to increase momentarily to 0.87 Mach (maximum operating speed is 0.86 Mach).

The pilots said that they were surprised when the master warning light illuminated and the aural overspeed warning sounded. The copilot, the pilot not flying (PNF), manually disengaged the autopilot by pressing the takeover pushbutton on his sidestick. Moreover, "a pitch-up input on the PNF's sidestick going as far as three-quarters to the stop was recorded for six seconds," the report said. "This input was accompanied by an input to bank to the right then left. The PNF stated that he did not remember these inputs."

The report said that the control inputs likely were reflexive actions that resulted from the "startle effect" produced by the overspeed warning. "Sometimes this effect sparks primal instinctive reaction, instant and inadequate motor responses," the report said. "These basic reflexes may prove to be incorrect and difficult to correct under time pressure and may affect the pilot's decision-making ability."

The continuous sounding of the overspeed warning likely masked the aural alert that was generated when the autopilot was disengaged. The captain, the pilot flying (PF), deployed the speed brakes in reaction to the overspeed warning. "The PF indicated that in the seconds that followed, he switched on the lights and noticed being in IMC [instrument meteorological conditions] and that there was precipitation," the report said. "He also indicated that he turned around to put his meal tray on the seat behind him."

The pilots said that they did not hear the aural altitude alert activate when the aircraft climbed through 35,200 ft at 1,950 fpm. The speed brakes retracted automatically as the aircraft's angle-of-attack exceeded the designed threshold. Pitch attitude increased to 12 degrees as the aircraft climbed through FL 360. "Vertical speed reached a maximum of 5,700 fpm," the report said. "The crew was not aware of this."

The A340 was climbing through 37,950 ft at 0.66 Mach when the captain disengaged the autothrottle and moved the thrust levers to the takeoff/go-around position. "The PF stated that

The pilots said that they were surprised when the master warning light illuminated and the aural overspeed warning sounded. he noted with surprise that altitude was 38,000," the report said.

The aircraft then began to descend with a high nose-up pitch attitude. "The PF then became aware of the disengagement of the AP [autopilot] and made a pitch-down input on his sidestick," the report said. "Pitch attitude began to decrease two seconds later."

The crew returned the aircraft to stable flight at FL 350 and landed without further incident about eight hours later in Paris. None of the 270 passengers and 14 crewmembers had been injured during the upset, and there was no damage to the aircraft.

BEA concluded that "this serious incident was due to inadequate monitoring of the flight parameters, which led to the failure to notice AP disengagement and the level bust [assigned altitude deviation], following a reflex action on the controls." The report noted that if the autopilot had remained engaged, the incident likely would have comprised only the 200-ft altitude deviation.

#### **Engine Vibration Prompts Diversion**

Boeing 757-200. No damage. No injuries.

he aircraft was at FL 370, en route with 96 passengers and seven crewmembers from Sierra Leone to London the night of Aug. 25, 2010, when the flight crew noticed an increase in engine vibration levels. In accordance with the quick reference handbook procedure, they activated the engine anti-icing systems, but the vibration levels continued to increase, said the report by the U.K. Air Accidents Investigation Branch.

"The vibration could now be felt through the airframe by both the flight crew and the cabin crew," the report said. "The commander decided to perform the manufacturer's 'Fan Ice Removal' procedure detailed in their OM [operations manual] in an attempt to reduce the vibration."

The OM said that the procedure is to be followed for one engine at a time by quickly moving the thrust lever to idle and waiting five seconds for the engine to stabilize before advancing the lever to attain the desired engine pressure ratio (EPR). The initial rapid reduction

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of thrust causes the engine fan blades to twist and shed any accumulated ice.

When the crew retarded the left thrust lever, however, the vibration level suddenly and unexpectedly increased to the maximum value. The crew responded by moving the lever forward, without the required five-second pause. The result was that EPR increased only slightly, while exhaust gas temperature (EGT) increased almost to the limit. The lever was retarded again to bring the vibration level and the EGT within limits.

The crew decided to divert the flight to Nouakchott, Mauritania. During the descent, the left engine began again to respond normally to thrust lever movement, and the aircraft was landed in Nouakchott without further incident. "Subsequent examination of both engines on the ground, both externally and internally, did not reveal any damage," the report said.

Investigators determined that the left engine had begun to surge or stall during the interrupted fan ice removal procedure. "The vibration condition was attributed by the engine manufacturer [Rolls-Royce] to an asymmetric ice buildup under the [engine] spinner fairings," the report said.

Rolls-Royce in 2001 had issued a service bulletin, revised in 2006, requiring the installation of seals between the engine spinners and the spinner fairings to prevent moisture from entering the spinner cavities and freezing. The report said that the spinners on the incident aircraft had not been modified according to the service bulletin, which calls for compliance by March 2015.

#### **Oil Tube Fractures on Takeoff**

McDonnell Douglas MD-90-30. Substantial damage. No injuries.

he MD-90, with 111 people aboard, was on initial climb when ATC told the flight crew that white smoke had been observed from the right engine as the aircraft was rolling for takeoff from Sendai (Japan) Airport the afternoon of Aug. 15, 2010. The captain, the pilot monitoring, noticed an indication of low oil pressure and received clearance from ATC to stop the climb at 6,000 ft and proceed to an The left engine had begun to surge or stall during the interrupted fan ice removal procedure.

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area south of the airport, where the problem could be diagnosed.

The aircraft was climbing through 5,500 ft shortly thereafter when the engine fire warning activated, said the report by the Japan Transport Safety Board (JTSB). The captain declared an emergency and assumed control of the aircraft. The crew then shut down the right engine, activated the fire-extinguishing system and returned to the airport, where a single-engine landing was completed without further incident.

Investigators found that the no. 4 bearing scavenge tube had fractured, spraying oil that ignited on contact with the engine's hot section. The tube, located inside the engine case, returns oil used to lubricate and cool the aft bearing on the highpressure rotor shaft to the oil tank. The report said that stresses imposed by temperature and pressure changes inside the tube likely had caused a fatigue crack to form at a bend in the tube.

The report noted that a heat shield precludes a visual check of the tube during maintenance inspections. As a result of the investigation, the JTSB recommended that the U.S. Federal Aviation Administration require the engine manufacturer, International Aero Engines (IAE), to review the tube design and inspection procedures.

The report, issued in June, noted that IAE believes the fracture was caused partly by assembly stresses and has revised the installation procedures.

#### Stall on Go-Around

Hawker Beechcraft 390. Substantial damage. Two serious injuries.

Special ATC procedures were in effect for a high volume of traffic at a major air show in Oshkosh, Wisconsin, U.S., the afternoon of July 27, 2010. Arrivals and departures were being handled by different controllers on different radio frequencies. An arrivals controller had cleared the pilot of the Premier 1A to turn onto a base leg about the same time that a departures controller cleared the pilot of a Piper Cub, which was holding on the runway, for an immediate takeoff and to make an "angled departure" that is a slight left turn after liftoff to clear the runway for the light jet. The Premier pilot was not aware that the Cub was going to make an angled departure, and he became concerned about a potential conflict with the smaller airplane, said the report by the U.S. National Transportation Safety Board (NTSB).

The report said that as the light jet made a continuous left turn from downwind to short final, the bank angle varied between 32 and 43 degrees. The enhanced ground-proximity warning system aboard the Premier generated five "bank angle" warnings.

The pilot "stated that he overshot the runway centerline during his turn from base to final and, when he completed the turn, his airplane was offset to the right of the runway," the report said. The Premier was 37 ft above the ground when the pilot radioed that he was going around.

"The pilot reported that he initiated a goaround, increasing engine power slightly but not to takeoff power as he looked for additional traffic to avoid," the report said. "He estimated that he advanced the throttle levers 'probably a third of the way to the stop' and, as he looked for traffic, the stall warning stick-shaker and stickpusher systems activated almost simultaneously as the right wing stalled."

The airplane was in a nose-down and rightwing-low attitude when it struck a grass drainage ditch about 4,300 ft (1,311 m) north of the departure end of the runway. The pilot and his passenger were seriously injured, but no one on the ground was hurt.

#### **TURBOPROPS**

#### Prop Overspeed Causes Control Loss

Bombardier DHC-8-103. Substantial damage. No injuries.

The flight crew had turned on the seat belt sign, expecting turbulence during the descent over mountainous terrain to Sørkjosen (Norway) Airport the night of Feb. 21, 2006. When the aircraft encountered "heavy" turbulence at about 9,000 ft, the commander moved the power levers toward flight idle, intending to decrease airspeed from 225 kt to 180 kt, the maximum speed for flying in turbulence.



However, the commander inadvertently lifted the tabs beneath the power lever knobs that release the locks that prevent the levers from being moved past the flight idle gate and into the beta range, said the report issued by the Accident Investigation Board Norway in June 2012.

"Unintentionally, both power levers ended up aft of the flight idle gate," the report said. "As a result, both propellers overspeeded." Possibly because the right power lever was moved farther into beta than the left power lever, the right propeller entered an uncontrollably high rotation speed and caused severe internal engine damage.

The drag produced by the right propeller caused a momentary loss of control. The Dash 8 pitched 20 degrees nose-down, entered a 58-degree right bank and descended about 1,000 ft before the crew was able to level the aircraft, feather the propeller using the alternate feathering system and shut down the engine. None of the 17 passengers or three crewmembers was injured. The crew decided to return to Tromsø, where a single-engine landing was conducted without further incident.

The report noted that the aircraft had not received a service bulletin modification preventing the power levers from being moved into beta unless the weight-on-wheels sensing system is activated.

#### Icing, Turbulence Trigger Upset

Beech King Air A100. Substantial damage. No injuries.

he airplane was on a positioning flight from Bridgewater, Virginia, U.S., to Wichita, Kansas, the afternoon of June 15, 2011. The pilots said that the ride in IMC at FL 200 over Tennessee was smooth, but the weather radar system showed a large area of moderate to extreme precipitation about 30 nm (56 km) northwest.

"Meteorological and radar data revealed that the airplane entered an area of rapidly intensifying convective activity [that] developed along the airplane's flight path," the NTSB report said.

The King Air encountered moderate turbulence and severe icing conditions, and the pilot altered course 40 degrees south. "However, the turbulence increased, and the airplane entered an uncommanded left roll and dive," the report said. "The autopilot disengaged, and the pilot's electrically driven attitude indicator tumbled. The flight crew reduced the engine power levers to idle and were able to recover utilizing the copilot's vacuum-driven attitude indicator. The airplane was returned to straight-and-level flight at an altitude of 8,000 ft; however, flight control instability persisted."

The crew diverted the flight to Blountville, Tennessee, and landed the King Air without further incident. Examination of the airplane revealed that the outboard one-third of the left elevator had separated in flight and the outboard section of the right elevator was bent downward. "In addition, the horizontal stabilizer bulkhead frame was fractured, and the aft portion of the airframe sustained several areas of deformation," the report said.

#### **Takeoff Rejected Too Late**

Cessna 208B. Destroyed. One fatality, eight minor injuries.

he pilot was familiar with the airport in Pukatawagan, Manitoba, Canada, and, having conducted two scheduled flights there earlier in the day on July 4, 2011, likely was aware of several soft spots caused by recent rainfall on the 3,000-ft (914-m) gravel runway. With eight passengers, baggage and 900 lb (408 kg) of fuel aboard, the Caravan was about 1,000 lb (454 kg) below its maximum takeoff weight, and the center of gravity was within limits, said the report by the Transportation Safety Board of Canada.

The pilot began the takeoff from the approach end of Runway 33, with 20 degrees of flaps per the company's standard operating procedure. Groundspeed stagnated when the aircraft encountered soft spots about halfway down the runway. "One or both of the main landing gear wheels lifted off the ground momentarily, but the aircraft was unable to fly away," the report said. "This indicates that either the aircraft was rotated too early or a significant degree of rotation occurred before liftoff speed was attained."

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The report said that the aircraft's takeoff performance might have been affected by an unexpected wind shift or wind shear. The surface winds were estimated as from 280 degrees at 12 kt, gusting to 22 kt.

The pilot rejected the takeoff with about 600 ft (183 m) of runway remaining, which was insufficient to stop the aircraft, the report said. The Caravan overran the runway, rolled down a steep 20-ft (6-m) slope into a ravine and caught fire. One passenger, who was not wearing a shoulder harness, was rendered unconscious by severe head wounds. The pilot and another passenger tried to extricate the unconscious passenger but were forced away from the aircraft by the increasing heat and smoke. The passenger died of smoke inhalation.

#### **PISTON AIRPLANES**

#### **Split-Flap Condition**

Cessna 421B. Minor damage. No Injuries.

he airplane was about 1,000 ft above the designated pattern altitude when it entered the downwind leg at Truckee-Tahoe (California, U.S.) Airport during an emergency medical services positioning flight the afternoon of May 2, 2011. When the pilot extended the landing gear and flaps to facilitate a descent, he heard a "popping sound," and the 421 banked 80 degrees right, the NTSB report said.

The pilot attempted to retract the flaps, but the left flap remained fully extended, and the pilot had to use full left aileron control and trim to keep the wings level. He circled the airport and cycled the flap selector several times, but the split-flap condition persisted.

"He was able to accomplish left turns with about 5 degrees of bank, and although right turns could be performed, recovery to wingslevel was slower than normal," the report said. "Due to terrain and wind concerns, he decided to divert back to [Sacramento, California]. For the remaining 35 minutes of flight, the pilot employed the assistance of a medical crewmember to help with maintaining left aileron control deflection." After the airplane was landed in Sacramento, investigators found that the right wing flap extension cable had failed where it contacts a pulley — a cable section that cannot be inspected for damage unless the cable is removed, the report said. The cable was installed when the airplane was manufactured in 1975 and had accumulated over 4,830 flight hours.

#### **Brake Failure Leads to Ramp Overrun**

Lockheed P2V-5 Neptune. Substantial damage. No injuries.

he air tanker was returning to its base in Broomfield, Colorado, U.S., the afternoon of June 26, 2010, when the flight crew discovered that the main hydraulic system had failed — a fault later attributed to a ruptured hydraulic line. The copilot used emergency systems to extend the landing gear. However, she inadvertently returned the emergency nose gear selector to the "bypass" position, rather than to the "normal" position, which isolated emergency hydraulic system pressure from the emergency brakes.

There was enough residual accumulator pressure to engage the brakes during landing, and the captain exited the runway on a high-speed turn-off onto a taxiway leading to the tanker ramp. However, when he tried to stop the airplane on the ramp, the brakes did not respond. The P2V crossed the ramp, rolled through the airport perimeter fence and down an embankment, and came to a stop on a road.

The report noted that the airplane flight manual procedure for a hydraulic failure is to stop and shut down the airplane on the runway after landing, pin the landing gear and have the airplane towed to parking.

#### Multiple Modifications Blur V<sub>MCA</sub>

Beech 58 Baron. Substantial damage. Two fatalities.

he pilot had recently purchased the airplane, which had been modified according to a supplemental type certificate (STC) with vortex generators that decreased the minimum single-engine control speed ( $V_{MCA}$ ) from 81 kt to 74 kt and under another STC with more powerful engines and different

propellers. The STC for the latter modification specified a  $V_{MCA}$  of 87 kt.

Because no flight testing had been performed to determine the interrelationship of the two STCs, which had been obtained by different companies, "the actual performance data for the airplane, including the  $V_{MCA}$ , were unknown," the NTSB report said. "However, the  $V_{MCA}$  ... likely was higher than the 74-knot  $V_{MCA}$  marked on the airspeed indicator."

The pilot was receiving an instrument competency check the morning of Aug. 7, 2010, when the airplane stalled, entered a spin and struck a house in Saltsburg, Pennsylvania. The pilot and flight instructor were killed, but no one on the ground was hurt.

Investigators determined that the pilot likely lost control of the Baron during a  $V_{MCA}$  demonstration. "Because the airplane was equipped with only a throw-over control yoke, the [flight instructor] had limited ability to assist in the recovery of the airplane," the report said.

#### **HELICOPTERS**

#### **Clipboard Strikes Tail Rotor**

Hiller UH-12E. Substantial damage. Three fatalities.

he pilot stowed most of the passengers' equipment and personal effects in the helicopter's external racks before departing from Clarkston, Washington, U.S., for a wildlifesurvey flight the morning of Aug. 31, 2010.

About 40 minutes later, the pilot radioed that he was diverting the flight to Kamiah, Idaho, which was about 35 nm (65 km) short of the planned destination, but gave no reason for the diversion. "No further transmissions were received from the helicopter," the NTSB report said. "Several witnesses ... heard unusual noises emanating from the helicopter and observed objects separating or falling from it. [They] reported that it was rotating as it descended."

The Hiller crashed out of control on a driveway in a residential area near Kamiah. Investigators determined that a metal clipboard belonging to one of the passengers had struck and destroyed the tail rotor. "The original location of the clipboard and how it became free could not be determined," the report said.

#### **Rotor Stalls on Approach**

Robinson R22 Beta. Destroyed. Two fatalities.

he pilot was returning to a helipad in Yamaga, Japan, after a route-familiarization flight the afternoon of Aug. 1, 2010. A witness saw the R22 cross utility lines and then enter a steep, descending right turn. Both occupants were killed when the helicopter crashed in a paddy about 160 m (525 ft) from the helipad.

The JTSB report said that the helicopter likely had been descending with a relatively high approach speed and a low main rotor speed when the pilot increased collective control to stay above the power lines. Main rotor speed continued to decrease until the rotor blades stalled, resulting in the loss of control, according to the report.

#### Bent Pneumatic Line Fractures

Hughes 500D. Minor damage. No injuries.

he helicopter was descending to land at McGrath, Alaska, U.S., during a charter flight the evening of July 4, 2011, when the engine noise abruptly changed and the aural and visual engine failure warnings activated. The pilot initiated autorotative flight and conducted an emergency landing on uneven tundra. The main rotor blades were damaged when they struck several small trees during the emergency landing, but the pilot and her two passengers escaped injury.

"A post-accident inspection revealed a fatigue fracture in the engine Pc line that provides compressed air to operate the engine governor and fuel control units," the NTSB report said. "The Pc line met the metallurgical material specifications, but there was a bend in a normally straight portion of the line." The bend, which was of unknown origin, created material stress and fatigue that eventually caused the line to fracture.



## **ONRECORD**

Preliminary Reports, June 2012					
Date	Location	Aircraft Type	Aircraft Damage	Injuries	
June 1	Pontianak, Indonesia	Boeing 737-400	substantial	163 minor/none	
Visibility was 600 m (3/8 mi) in heavy rain, and surface winds were from 230 degrees at 22 kt when the 737 veered off the left side of Runway 15 while landing.					
June 2	Accra, Ghana	Boeing 727-200F	destroyed	12 fatal, 4 minor/none	
A thunderstorm was overhead when the 727 overran the 3,400-m (11,155-ft) runway during a night landing, rolled through the airport perimeter fence and struck two vehicles on a road. Twelve people on the ground were killed.					
June 3	Lagos, Nigeria	McDonnell Douglas MD-83	destroyed	163 fatal	
The MD-83 was 11 nm (20 km) from the airport when the flight crew declared an emergency because of a loss of power from both engines. The aircraft then struck a power line and crashed in a residential area. All 153 people aboard the aircraft and 10 people on the ground were killed.					
June 3	Modena, Utah, U.S.	Lockheed P2V-7 Neptune	substantial	2 fatal	
The air tanker struck terrain while turning onto final approach to drop retardant on a forest fire at the bottom of a narrow valley.					
June 4	Indiantown, Florida, U.S.	Bell 427	substantial	5 minor	
The helicopter was in cruise flight at 800 ft when several large birds struck the main rotor head. The pilot said that the 427 began to shake violently and became difficult to control. The helicopter rolled over after striking the ground hard during the emergency landing. Recovered bird remains were sent to the Smithsonian Institution for identification.					
June 6	Rio de la Plata, Uruguay	Swearingen Metro III	(missing)	NA	
The Metro is presumed to have crashed, and the four crewmembers killed, shortly after departing from Montevideo, Uruguay, for a cargo flight to Buenos Aires, Argentina.					
June 7	Lake Wales, Florida, U.S.	Pilatus PC-12/47	destroyed	6 fatal	
The airplane was in instrument meteorological conditions, climbing through 25,000 ft and deviating from course to avoid an area of moderate to extreme precipitation, when it departed from controlled flight and broke up. Witnesses saw the PC-12 emerge from the clouds in a spin.					
June 9	Prague, Czech Republic	ATR 42-500	destroyed	1 NA	
A mechanic was injured when an explosion occurred and the ATR 42 caught fire inside a maintenance hangar.					
June 9	Teisendorf, Germany	Robinson R44	destroyed	4 fatal	
Visual meteorological conditions (VMC) prevailed when the R44 struck mountainous terrain during a flight from Worms, Germany, to Salzburg, Austria.					
June 10	Kiev, Ukraine	Let 410UVP	destroyed	5 fatal, 15 minor/none	
The skydiving air	craft was returning to the airport because o	of an approaching rainstorm wl	hen it crashed in a field		
June 18	Atlanta, Georgia, U.S.	Beech 400A Beechjet	substantial	2 serious, 2 minor	
Witnesses said that the Beechjet touched down at DeKalb-Peachtree Airport with about 3,000 ft (914 m) of the 4,800-ft (1,463-m) runway remaining. The airplane overran the runway and rolled down an embankment.					
June 19	Ceduna, South Australia, Australia	Eurocopter AS 350-BA	destroyed	2 none	
The pilot conduc	ted a precautionary landing after detecting	g fuel fumes. The helicopter cau	ight fire after the landir	ng.	
June 20	Pweto, Democratic Republic of Congo	Grumman Gulfstream 1	destroyed	5 minor/none	
The Gulfstream touched down hard, bounced 20 ft and overran the runway onto a rocky embankment.					
June 20	Tokyo, Japan	Boeing 767-300	substantial	193 none	
Winds were from 220 at 14 kt, gusting to 27 kt, when the 767 touched down hard on Narita's Runway 16R and bounced twice.					
June 22	Morgantown, West Virginia, U.S.	Beech King Air C90GT	substantial	1 fatal	
The King Air struck a communications tower and crashed about 7.5 nm (14 km) from the airport during a positioning flight in VMC.					
NA = not available					

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.