

Fatal accidents

## Non-scheduled flights

Date: 16 Sep ● Carrier: Manaus Aerotaxi ● Aircraft type/registration: Embraer EMB-110 (PT-SOG) ● Location: Barcelos, Amazonas, Brazil Fatalities (crew/pax): 2/12 ● Total occupants (crew/pax): 2/12 ● Phase: Landing

The aircraft landed long on runway 27 at Barcelos. It overran, across an unpaved road, and struck an earth embankment about 50m (164ft) beyond the end of the runway. The accident happened in daylight but

with reduced visibility in heavy rain. Runway 27 has an asphalt surface, 1,200m long. The aircraft was operating a charter from Manaus with a group of sport fishermen.

Date: 29 Oct ● Carrier: ART Taxi Aereo ● Aircraft type/registration: Cessna Caravan (PT-MEE) ● Location: Rio Branco International airport, Brazil Fatalities (crew/pax): 12 ● Total occupants (crew/pax): 12 ● Phase: Climb

According to reports, soon after take-off the chartered aircraft crashed into forest. All 12 occupants were killed. Details have not yet been confirmed.

Fatal accidents:

## Regional and commuter flights

Date: 15 Jan ● Carrier: Yeti Airlines ● Aircraft type/registration: ATR 72-500 (9N-ANC) ● Location: Near Pokhara International airport, Nepal Fatalities (crew/pax): 4/68 ● Total occupants (crew/pax): 4/68 ● Phase: Runway approach

Inbound from Kathmandu, the aircraft descended to join a visual downwind leg for runway 12, positioned to turn left onto base leg and final approach. The pilot flying (PF), in the left-hand seat, was being checked out on the Pokhara approach by the pilot monitoring (PM), an instructor. According to the Nepalese investigator's report the crew selected flaps to 15° and gear down, and the PF disengaged the autopilot at about 700ft above ground level (AGL). The PF called for flaps 30, and the PM responded "flaps 30 and descending". According to the flight-data recorder, however, the flaps remained at 15°, but at the same time the propeller RPM and engine torque on both sides decreased dramatically, and the Master Caution alert chimed. The Nepalese authorities have now reported their acceptance that the instructor had retarded the propeller condition levers while intending

to lower the flaps. The crew began the 'Before Landing' checklist just before turning left onto the base leg. The PF reacted to the decreasing airspeed by advancing the power levers, but there was no reaction. Then the flaps were extended to 30° with no announcement. The aircraft was passing 500ft AGL, and shortly after that the air traffic control tower cleared it to land. The PF exclaimed that there was no power, and he advanced the power levers to the maximum setting. There was a click sound, and the high-pressure turbine speed on both engines increased, but the PF repeated that there was no power from the engines, and the PM took control. The stick-shaker activated twice, the left wing dropped dramatically, and the aircraft plunged to earth more or less on the runway extended centreline, hitting a river ravine Inm (2km) short of the threshold. All 72 on board were killed.

Date: 23 Jun ● Carrier: SAM Air ● Aircraft type/registration: Cessna Caravan (PK-SMW) ● Location: Yalimo Regency, Papua, Indonesia Fatalities (crew/pax): 2/4 ● Total occupants (crew/pax): 2/4 ● Phase: Climb

The aircraft took off from Elelim bound for Ilaga, but air traffic control contact was lost after 8min. It was found in high ground 6.4nm (12km) from Elelim.

#### Fatal accidents

### Regional and commuter flights

Date: 23 Jul ● Carrier: Unknown ● Aircraft type/registration: Antonov An-26 (unknown) ● Location: Port Sudan airport, Sudan Fatalities (crew/pax): 9 ● Total occupants (crew/pax): 10 ● Phase: Take-off

The aircraft, reported to be civilian but carrying up to four military personnel, crashed during take-off and suffered serious damage after bursting into flames. One child on board survived with injuries; all other

occupants were killed. Details are sparse because of the administrative breakdown in Sudan while two factions of the Sudanese military continue to fight for control of the country.

#### Estal accidents

#### Non-passenger flights

Date: 22 Aug ● Carrier: Wiggins Airways ● Aircraft type/registration: Beechcraft C99 (N55RP) ● Location: Near Litchfield, Maine, USA Fatalities (crew/pax): 2 ● Total occupants (crew/pax): 2 ● Phase: Manoeuvring

The aircraft was on a training flight, carrying an instructor and a newly-recruited commercial pilot on his third instructional trip. Wiggins Airways is a regional freight airline in the Ameriflight Group. The aircraft crashed about 1.6nm (3km) east of Litchfield during a local training flight from Auburn, Maine, in daylight (17:40 local time) visual meteorological conditions. After take-off the aircraft positioned for an ILS or localiser approach to Auburn's runway 04 and carried out a missed

approach, followed by departure to the northeast. At the Moyer missed approach fix it entered a left-hand holding pattern at 3,000ft above mean sea level. While completing the first turn of the holding pattern the aircraft entered a steep descent which continued until impact with the ground. The first impact was with mature oak trees, penetrating them at an estimated descent angle of 20°, with wings fairly level. The aircraft broke up but there was no fire.

#### Significant non-fatal accidents/incidents:

## All commercial airline categories

Date: 1 Jan ● Carrier: Flair Airlines ● Aircraft type/registration: Boeing 737 Max 8 (C-FLRS) ● Location: Kitchener, Ontario, Canada Injuries (crew/pax): 0/0 ● Total occupants (crew/pax): 6/148 ● Phase: On ground

Preparing to depart from Region of Waterloo International airport, a belt loader driver inadvertently selected a forward gear instead of reverse while attempting to move his vehicle away from the aft cargo hold. The belt loader ran forward into the aircraft, knocking the driver off his seat.

Driverless, it continued under the aircraft, damaging the aft belly skins and proceeding across the ramp until it struck a parked Sunwing Airlines Boeing 737-800 (C-GFEH). The accident happened in darkness (07:00 local time). The aircraft was due to operate a flight to Cancun, Mexico.

Date: 5 Jan ● Carrier: Pionair ● Aircraft type/registration: BAE Systems BAe 146-200QT (VH-SFV)
Location: Rockhampton airport, Queensland, Australia ● Injuries (crew/pax): 0 ● Total occupants (crew/pax): 2 ● Phase: Final approach

The Australian Transport Safety Bureau (ATSB) has ruled that crew fatigue was a major contributory factor in a night approach during which the aircraft was allowed to descend well below its sector safety altitude, setting off a terrain alert from the ground proximity warning system. The crew had elected to go around from their first approach, then attempted a second, but began it from a holding pattern at 3,500ft when the approach procedure required that they cross their initial approach fix at the SARUS waypoint at 5,000ft. The crew began a 3° approach profile at that point, which led to them crossing waypoint BRKSI well below

their sector safe altitude. The ATSB states: "As the aircraft continued descending toward the [minimum descent altitude], along a descent profile consistent with it being one approach segment further along than it actually was, the flightcrew recognised that the ground lighting appeared different to the first approach and that distance measuring equipment indications were not as expected." The crew at that point began to realise that the DME reading and the ground lighting ahead was not what they should be seeing, so they carried out another go-around and diverted to Mackay, where they landed safely.



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# All commercial airline categories

Date: 12 Jan ● Carrier: Delta Air Lines ● Aircraft type/registration: Airbus A330-300 (N802NW)
Location: Amsterdam Schiphol airport, the Netherlands ● Injuries (crew/pax): 0 ● Total occupants (crew/pax): ?/? ● Phase: Landing

The aircraft, inbound from Detroit, the USA, touched down short of the runway threshold on approach to runway 22 and struck the approach lights, causing minor damage. The landing was completed safely and

the aircraft taxied to the gate for normal passenger disembarkation. The accident happened in daylight (07:53 local time), but with a gusting wind and poor visibility.

Date: 16 Jan ● Carrier: Kamaka Air ● Aircraft type/registration: Cessna Caravan (N236KA) ● Location: Kaunakakai airport, Molokai, Hawaii, USA Injuries (crew/pax): 0/0 ● Total occupants (crew/pax): 2/0 ● Phase: Final appproach

The cargo aircraft impacted the ground well short of the runway at Kaunakakai airport and was substantially damaged.

Date: 26 Jan ● Carrier: SAM Air ● Aircraft type/registration: De Havilland Canada Twin Otter (PK-SMS) ● Location: Beoga, Papua, Indonesia Injuries (crew/pax): 0/0 ● Total occupants (crew/pax): ?/? ● Phase: Landing

Inbound from Timika, the crew lost directional control during the landing roll at Beoga, Puncak Regency, Papua, and the aircraft ran

off the right-side of the runway, sustaining substantial damage. The accident happened in daylight (07:30 local time).

Date: 27 Jan ● Carrier: Fly Air Africa ● Aircraft type/registration: Aircraft Industries L410 (EY-473) ● Location: Juba airport, South Sudan Injuries (crew/pax): 0/0 ● Total occupants (crew/pax): 2/3 ● Phase: Early climb

Despite officially being a cargo flight to Langkien, the aircraft was carrying three passengers. Soon after take-off from runway 31 the aircraft force-landed in scrub about 2nm (3.7km) west of the

airport, but no-one on board was injured. The aircraft, however, was substantially damaged. The accident happened in daylight, visual meteorological conditions.

Date: 9 Feb ● Carrier: Allied Air Cargo ● Aircraft type/registration: Boeing 737-400SF (5N-OTT) ● Location: Brazzaville, Congo Injuries (crew/pax): 0/0 ● Total occupants (crew/pax): 3/0 ● Phase: Landing

Inbound from Libreville, Gabon at night, a tyre on the aircraft's left main undercarriage reportedly failed during landing at Maya-Maya International

airport, Brazzaville. Both wheels and the axle on the left main gear leg separated. The aircraft was brought to a safe stop on the runway.

Date: 16 Feb ● Carrier: Aeromas ● Aircraft type/registration: Cessna Caravan (CX-MAX) ● Location: Near Berisso, Argentina Injuries (crew/pax): 0/0 ● Total occupants (crew/pax): 2/0 ● Phase: En route

En route at night across the River Plate estuary from Montevideo, Uruguay to Buenos Aires airport, the engine of the Cessna Caravan lost power. The crew attempted to locate La Plata airport, which was close to the Argentinian coast not far to the left of their planned track, but they were unable to see it in the dark and attempted a forced landing on a well-lit road. During the landing the wings struck trees and telegraph poles. The crew escaped the aircraft, which was then destroyed by fire.

Date: 19 Feb ● Carrier: Eurowings Discover ● Aircraft type/registration: Airbus A330-200 (D-AXGB) ● Location: Windhoek, Namibia Injuries (crew/pax): 0/0 ● Total occupants (crew/pax): 11/263 ● Phase: Landing

Inbound from Frankfurt, Germany to the Namibian capital, the aircraft sustained damage in a hard landing on runway 26 at Windhoek International airport. The accident happened in daylight and good visibility. The preliminary investigation reported that, following a

stabilised approach, the landing flare was initiated 'late' and the aircraft subsequently touched down hard. The landing was performed by the co-pilot on his first flight on the A330 following initial type rating. Airfield elevation is 5,640ft.

Date: 20 Feb ● Carrier: American Airlines ● Aircraft type/registration: Boeing 787-9 (N839AA) ● Location: Dallas/Fort Worth airport, Texas, USA Injuries (crew/pax): 0/0 ● Total occupants (crew/pax): ?/? ● Phase: En route

The aircraft, inbound from Tokyo Narita, Japan, suffered a lightning strike to the top of its fuselage at some point on the journey. There was visible

heat damage covering an area of about 0.5m  $\times$  0.2m. The aircraft landed safely and the passengers disembarked normally at the gate.

Date: 20 Feb ● Carrier: Skylink Express ● Aircraft type/registration: Beech 1900 (C-FJXO) ● Location: Winnipeg airport, Manitoba, Canada Injuries (crew/pax): 0/0 ● Total occupants (crew/pax): ?/? ● Phase: Final appproach

The aircraft was inbound from Regina, but when the undercarriage was selected down on approach to runway 36 at Winnipeg the nosegear did not extend. The crew put the aircraft into a hold while they attempted to troubleshoot the problem, but they were unable to resolve it. The aircraft returned and landed with its nose-gear retracted. The accident happened in darkness (20:33 local time). During subsequent

gear retraction tests it was noted that the nose-gear nitrogen charge had decreased such that the oleo piston collapsed once the gear was retracted into the nose-wheel well. In the collapsed position, the nose-gear will not extend to the down-locked position becaused of interference with the nose-gear compartment structure. There was damage to the aircraft's nose and left propeller.

Date: 22 Feb ● Carrier: Thai Smile ● Aircraft type/registration: Airbus A320 (HS-TXG) ● Location: Phuket airport, Thailand ● Injuries (crew/pax): 0/0 Total occupants (crew/pax): ?/? ● Phase: Landing

The aircraft suffered a hard, bounced landing and tail strike on runway 09 at Phuket in daylight and good weather. It was operating a flight from Bangkok.

Date: 2 Mar ● Carrier: Emirates Airline ● Aircraft type/registration: Airbus A380 (A6-EVJ) ● Location: Singapore Changi airport Injuries (crew/pax): 0/0 ● Total occupants (crew/pax): ?/? ● Phase: Landing

Inbound from Dubai to runway O2L in heavy rain, the aircraft was carrying out an ILS approach with autopilot engaged until 180ft, when the pilot flying (PF) disengaged it. At this point both the crew noticed that the aircraft was drifting to the right of the extended runway centreline. At 30ft above touchdown the pilot monitoring (PM) called "go-around", and the PF responded "no, it's OK", but later said he had not heard exactly what the PM

had said. At touchdown the PM repeated his call to go around, but again the PF continued with the landing. The aircraft hit some runway edge lights, damaging them and blowing one of its main landing-gear tyres. No-one was injured. Once the Singapore Transport Safety Investigation Bureau had reported on the event, Emirates publicised the details among its crews and reminded them that if the PM calls for a go-around, it must be executed.

Date: 3 Mar ● Carrier: SLJ Aeronautica Congo ● Aircraft type/registration: Embraer ERJ-135 (D2-FIA)
Location: Lubumbashi, Democratic Republic of Congo ● Injuries (crew/pax): 0/0 ● Total occupants (crew/pax): 3/30 ● Phase: Landing

The aircraft overran the landing on runway 07 and came to rest, bogged down, in a field about 300m (984ft) beyond the end of the runway, some

50m left of the extended centreline. The accident happened in daylight, visual meteorological conditions.

### All commercial airline categories

Date: 22 Mar ● Carrier: United Airlines ● Aircraft type/registration: Airbus A320 (N1902U)
Location: George Bush International airport Houston, Texas, USA Injuries (crew/pax): 0/0 ● Total occupants (crew/pax): 6/151 ● Phase: Landing

The aircraft suffered a tail-strike when landing on runway 27. The landing was completed safely and the aircraft taxied to the gate for normal passenger disembarkation. It was operating a flight from Mexico City, and

there was a gusting crosswind from the left. The tail-strike damage was only discovered after seven more sectors, and it was grounded at Dallas/Fort Worth airport on 25 March.

Date: 4 Apr ● Carrier: Scoot ● Aircraft type/registration: Airbus A320 (9V-TRH) ● Location: Hat Yai airport, Amphe, Thailand Injuries (crew/pax): 0/0 ● Total occupants (crew/pax): ?/? ● Phase: Landing

The aircraft, inbound from Singapore Changi International airport, was damaged by a tail-strike landing on runway 26 in good visibility

and light wind, and taxied safely to the gate for normal passenger disembarkation. The rear fuselage suffered skin abrasion.

Date: 11 Apr ● Carrier: Air Kasai ● Aircraft type/registration: Antonov An-26 (9S-AFP) ● Location: Lisala, Democratic Republic of Congo Injuries (crew/pax): 0/0 ● Total occupants (crew/pax): ?/? ● Phase: Landing

The aircraft, which was operating a daytime flight from Kinshasa, overran runway 05 by about 200m (656ft) and came to rest in tall grass, suffering significant damage, including to its nose cone. The freighter was carrying insecticide-impregnated mosquito nets as part

of an anti-malaria programme. The landing took place in poor weather with heavy rain and strong winds. Runway 05 at Lisala is 2,200m (7,200ft) long with an asphalt surface, although this is reported to be in poor condition.

Date: 14 Apr ● Carrier: IndiGo ● Aircraft type/registration: Airbus A321neo (VT-IML) ● Location: Nagpur, India ● Injuries (crew/pax): 0/0 Total occupants (crew/pax): 7/225 ● Phase: Landing

The aircraft, inbound from Mumbai, bounced while landing in daylight on runway 32, and suffered a tail-strike during a second touchdown.

Date: 15 Apr ● Carrier: Cargolux ● Aircraft type/registration: Boeing 747-400ERF (LX-ECV) ● Location: Luxembourg ● Injuries (crew/pax): 0/0 Total occupants (crew/pax): ?/? ● Phase: Landing

The freighter was inbound from Dubai landing on runway 06 at Luxembourg airport, when the No 1 and 2 engines struck the ground. The crew flew a successful go-around and returned for a safe landing.

An inquiry determined that there was a significant shift in the wind speed and direction at the time of the flare for landing, and the engine strike was not the result of crew control inputs.

Date: 16 Apr ● Carrier: TAG Airlines ● Aircraft type/registration: Saab 340A (TG-TAI) ● Location: Mundo Maya airport, Flores, Guatemala Injuries (crew/pax): 0/0 ● Total occupants (crew/pax): 3/14 ● Phase: Landing

Inbound from Cancun, Mexico, landing on runway 10, the right main landing gear failed to extend. The crew performed two flyovers to get visual

confirmation from the control tower. On landing the aircraft veered off the runway onto rough ground. No-one on board was injured.

Date: 21 Apr ● Carrier: Flytec ● Aircraft type/registration: Beechcraft 200 Super King Air (LV-WPM)

Location: Martin Miguel de Guemes airport, Salta, Argentina ● Injuries (crew/pax): 0/0 ● Total occupants (crew/pax): 2/7 ● Phase: Landing

The crew of the chartered aircraft was unable to lower the undercarriage and made a belly landing. There were no injuries.





# All commercial airline categories

Date: 23 Apr ● Carrier: Pel-Air Aviation ● Aircraft type/registration: Saab 340A (VH-KDK) ● Location: Cobar, New South Wales, Australia Injuries (crew/pax): 0/0 ● Total occupants (crew/pax): 2/0 ● Phase: En route

Thick smoke entered the aircraft's cabin and cockpit in cruise flight at 22,000ft about 54nm (100km) northeast of Cobar, New South Wales, on a cargo flight from Wagga Wagga to Charleville, Queensland. The crew donned oxygen masks and the pilot carried out an emergency

descent and diverted to Cobar, where a safe landing was made. The airport fire service reported that there was smoke coming from the right side of the aircraft, "under the wing area". The batteries were isolated and the fire extinguished.

Date: 5 May ● Carrier: American Airlines ● Aircraft type/registration: Airbus A321 (N921US) ● Location: Charlotte, North Carolina, USA Injuries (crew/pax): 0/0 ● Total occupants (crew/pax): 5/172 ● Phase: Landing

Inbound from Fort Lauderdale, the aircraft suffered a tail-strike landing on runway 18L at Charlotte Douglas airport in daylight, visual

meteorological conditions. It subsequently taxied to the gate for normal passenger disembarkation.

Date: 6 May ● Carrier: UPS ● Aircraft type/registration: Boeing 747-400F (N580UP) ● Location: Tokyo Narita airport, Japan Injuries (crew/pax): 0/0 ● Total occupants (crew/pax): 3/0 ● Phase: Landing

The aircraft was operating a flight from Shanghai, China to Narita airport, Tokyo. The freighter touched down 'hard' on runway 16L and bounced,

causing some damage. The crew carried out a successful go-around, then returned and landed safely.  $\,$ 

Date: 10 May ● Carrier: Azul ● Aircraft type/registration: Embraer 195 (PS-AED) ● Location: Salvador, Brazil ● Injuries (crew/pax): 0/0 Total occupants (crew/pax): 5/100 ● Phase: Landing

Landing on runway 17 inbound from Sao Paulo, the aircraft overran and became bogged down on flooded ground about 50m (164ft) beyond the

end. The accident happened in darkness (01:25 local time). The aircraft suffered minor damage.

Date: 12 May ● Carrier: Bar Aviation ● Aircraft type/registration: Cessna Grand Caravan (5X-RBR) ● Location: Kajjansi airfield, Uganda Injuries (crew/pax): 2 ● Total occupants (crew/pax): 2/0 ● Phase: Landing

The aircraft took off from Kajjansi on a ferry flight to Mweya where it was to pick up passengers and fly them to Entebbe. After take-off the crew

reported problems and returned to Kajjansi. On landing the aircraft left the runway and overturned, damaging it terminally and injuring both crew.

## All commercial airline categories

Date: 14 May ● Carrier: Cargolux ● Aircraft type/registration: Boeing 747-400F (LX-OCV) ● Location: Luxembourg Findel airport, Luxembourg Injuries (crew/pax): 0/0 ● Total occupants (crew/pax): 2/0 ● Phase: Landing

Soon after take-off from Luxembourg airport for Chicago O'Hare, the USA, the crew of the freighter selected the gear up but it failed to retract. They elected to return to Luxembourg after dumping fuel for

around 10-15min. The right inboard main undercarriage bogie separated from the fuselage on landing and the crew was able to halt the aircraft on the runway.

Date: 31 May ● Carrier: United Nigeria ● Aircraft type/registration: Embraer ERJ-145 (5N-BWW)
Location: Murtala Muhammad airport, Lagos, Nigeria ● Injuries (crew/pax): 0/0 ● Total occupants (crew/pax): 3/50 ● Phase: Landing

Inbound on a domestic flight from Ebonyi State airport, Abakaliki, to Lagos Murtala Muhammad airport, the aircraft ran off the right side of

runway 18L and came to rest in the grass with its nose undercarriage partially collapsed.

Date: 28 Jun ● Carrier: Delta Air Lines ● Aircraft type/registration: Boeing 717 (N955AT)
Location: Charlotte Douglas airport, USA ● Injuries (crew/pax): 0/0 ● Total occupants (crew/pax): 5/99 ● Phase: Landing

On final approach to Charlotte Douglas, using the ILS for runway 36L, when the crew selected the landing gear down the nosewheel indicated "unsafe", and air traffic control told them they could not see the nosewheel. The crew carried out a go-around, and before returning made

various attempts to get the nose gear to deploy. When this failed, they made another approach and came to a halt safely on the runway. The fire and rescue service cooled the nosewheel area with water, and the passengers were evacuated via slides at the two front doors.

Date: 11 Jul ● Carrier: Halla Airlines ● Aircraft type/registration: Embraer EMB-120 (60-AAD) ● Location: Mogadishu Aden Adde airport, Somalia Injuries (crew/pax): 0/2 ● Total occupants (crew/pax): 4/30 ● Phase: Landing

The aircraft, inbound on a domestic flight from Garowe, Somalia, landed on runway 05 with a tailwind of 15kt (28km/h). A video shows that, after

touchdown, the crew lost directional control and the aircraft swerved left off the runway, coming to rest badly damaged against a low wall.

Date: 12 Jul ● Carrier: Allegiant Air ● Aircraft type/registration: Airbus A320 (N249NV) ● Location: Near St Petersburg-Clearwater airport, Florida, USA Injuries (crew/pax): 2/0 ● Total occupants (crew/pax): 6/179 ● Phase: Initial descent

During the descent to St Petersburg the crew was alerted to heavy precipitation ahead, but the aircraft's weather radar did not show anything to worry about. The crew followed air traffic control advice on the rate of

descent, but cabin crew were carrying out the passenger seatbelt checks when the aircraft hit heavy turbulence. All the cabin crew were projected at the ceiling and then the floor, and two were injured badly.

Date: 20 Jul ● Carrier: Air Canada Rouge ● Aircraft type/registration: Airbus A321 (C-GYFM) ● Location: Approaching Toronto Pearson airport, Canada Injuries (crew/pax): 0/0 ● Total occupants (crew/pax): 6/161 ● Phase: Descent

Inbound from Kelowna and descending through 8,000ft, the aircraft went through an active weather front that had not shown as such on the weather radar. Turbulence and heavy precipitation caused the captain's

main windshield to crack and the electronic centralised aircraft monitor showed a windshield heat. The crew made the approach safely, but there was considerable hail damage to the radome and stabiliser leading edges.

Date: 24 Jul ● Carrier: Delta Air Lines ● Aircraft type/registration: Boeing 767-300ER (N189DN) ● Location: Near Milan Malpensa airport, Italy Injuries (crew/pax): 0/0 ● Total occupants (crew/pax): ?/? ● Phase: Climb

The aircraft encountered "severe turbulence" and was damaged by hail as it climbed after take-off from runway 35R at Malpensa airport. The climb was stopped at 23,000ft and the crew elected to divert to Rome,

where a safe landing was made. The accident happened in daylight (12:30 local time). The aircraft was operating a flight to John F Kennedy airport. New York, the USA.

Date: 28 Jul ● Carrier: United Airlines ● Aircraft type/registration: Boeing 737-900ER (N77431) ● Location: Over sea off South Carolina, USA Injuries (crew/pax): 2/0 ● Total occupants (crew/pax): 185 ● Phase: En route

The aircraft encountered unreported and unforseen severe turbulence while en route from Newark to Punta Cana, Dominican Republic, severely injuring two cabin crew. The aircraft subsequently diverted to

Myrtle Beach. Weather radar showed only minor convective build-up of clouds, and there were no pilot reports nor significant meteorological reports for that part of the route.

Date: 29 Jul ● Carrier: United Airlines ● Aircraft type/registration: Boeing 767-300ER (N641UA)
Location: George Bush International airport, Houston, Texas, USA Injuries (crew/pax): 0/0 ● Total occupants (crew/pax): 202 ● Phase: Landing

Following a stable approach to runway 26L, the aircraft was damaged in a heavy landing. A preliminary review of the flight-data recorder confirmed that, after the initial touchdown, the aircraft rolled to the left and the right main gear lifted off the runway before the nose wheel touched down with a force of 1.4g and bounced. The speed brakes

deployed and the nose wheel hit the runway a second time at about 1.6g and bounced again. The right thrust reverser deployed and the nose wheel impacted the runway a third time at 1.6g, followed by the deployment of the left thrust reverser. The rest of the landing rollout was normal, but the aircraft's fuselage suffered buckling at its centre top.

Date: 3 Aug ● Carrier: United Airlines ● Aircraft type/registration: Boeing 767-300ER (N676UA) ● Location: Washington Dulles airport, USA Injuries (crew/pax): 0/0 ● Total occupants (crew/pax): ?/? ● Phase: Take-off

The aircraft took off for London Heathrow airport at about 22:30 local time. After retracting the undercarriage, the crew observed a "gear disagree" message, and set up a holding pattern. About 2h 15min later

the crew made a gear-down low pass over runway 19 so the tower could inspect the undercarriage, then safely landed on 19L. The aircraft was found to have been damaged during an earlier heavy runway contact.

Date: 7 Aug ● Carrier: Federal Airlines ● Aircraft type/registration: Cessna Caravan (ZS-JEM) ● Location: Arethusa Safari Lodge, South Africa Injuries (crew/pax): 0 ● Total occupants (crew/pax): 9 ● Phase: Landing

The aircraft landed long, and a hydraulic leak in the right brakes caused a braking failure, which saw the aircraft overrun the runway. It was undamaged.

Date: 15 Aug ● Carrier: Ameriflight ● Aircraft type/registration: Beechcraft C99 (N261SW) ● Location: Lansing airport, Michigan, USA Injuries (crew/pax): 0 ● Total occupants (crew/pax): 1 ● Phase: Take-off

As speed increased during the take-off roll the aircraft began to drift right, and left rudder input by the pilot and reduction in engine power failed to control it. The aircraft had got airborne and drifted clear of the runway to the right over a taxiway, so the pilot attempted to land on it, but poor

visibility made this difficult, and the aircraft came to rest to the right of the taxiway, seriously damaged. In the investigation it emerged that the rudder trim had been subjected to maintenance (lubrication) and had not been re-set to neutral, and the pilot missed this in the pre-start checklist.

# All commercial airline categories

Date: 18 Aug ● Carrier: Emirates Airline ● Aircraft type/registration: Airbus A380 (A6-EOM) ● Location: Nice Cote d'Azur airport, France Injuries (crew/pax): 0/0 ● Total occupants (crew/pax): ? ● Phase: Final approach

On final approach to runway O4L, just after the crew had selected the first slat/flap setting, they noticed an unexpected noise and vibration, but the aircraft's handling seemed unaffected so they safely completed the approach and landing. After parking, one of the right wing leading edge slats was discovered to be badly damaged. Investigation into reports of a drone-strike is continuing.

Date: 20 Aug ● Carrier: Alaska Airlines ● Aircraft type/registration: Boeing 737-800 (N516AS)
Location: Santa Ana John Wayne airport, California, USA ● Injuries (crew/pax): 0/0 ● Total occupants (crew/pax): 6/106 ● Phase: Landing

Arriving from Seattle, the captain reported that - from touchdown

aircraft was pulling hard toward the left. At the end of the landing run the aircraft was left-wing-low, so the captain stopped it and selected the parking brake on. Having opened his direct view windscreen the captain could see that the left wing was resting on the engine cowling, so he shut that engine down. As the auxiliary power unit had been started, he

also shut down the right engine. The tower was not operating, so the captain broadcast the aircraft's situation on the common traffic advisory frequency, and the crash and rescue team attended. The passengers were disembarked using mobile air stairs. The left main landing gear had failed on landing because the aft trunnion pin had failed. The gear had collapsed rearward, forcing structural components through the top of the wing.

Date: 24 Aug ● Carrier: Air Antilles ● Aircraft type/registration: De Havilland Canada DHC-6 Twin Otter (F-OMYS)
Location: St Barthelemy airport, French Antilles ● Injuries (crew/pax): 0/0 ● Total occupants (crew/pax): 2/25 ● Phase: Landing

The aircraft veered off the left side of runway 28 while landing at St Barthelemy, and its left wing struck a parked Helivet Airbus Helicopters H125 (F-HMYL) causing significant damage. The accident happened

in daylight (11:42 local time), visual meteorological conditions, wind 020°/8kt (14km/h) and temperature 33°C (91°F). The aircraft was operating a flight from Pointe-a-Pitre, Guadeloupe

Date: 2 Sep ● Carrier: TUI fly Belgium ● Aircraft type/registration: Boeing 737 (OO-JAO) ● Location: Oudja, Morocco ● Injuries (crew/pax): 0/0 Total occupants (crew/pax): ?/? ● Phase: Landing

The aircraft made a night landing on runway 13, during or shortly after a heavy rain storm. It encountered deep standing water, mud and debris that had been washed onto the runway. An object, possibly a tree branch, struck and damaged the leading edge of the right horizontal stabiliser, and water and mud entered the belly holds and the electronics bay, causing some damage. The aircraft was operating a flight from Lille, France.

Date: 6 Sep ● Carrier: United Airlines ● Aircraft type/registration: Boeing 737 Max 9 (N37531) ● Location: En route near Cincinnati, USA Injuries (crew/pax): 1/0 ● Total occupants (crew/pax): 71 ● Phase: En route

The aircraft encountered unexpected turbulence near Cincinnati, seriously injuring one of the cabin crew.

Date: 7 Sep ● Carrier: Perimeter Aviation ● Aircraft type/registration: Fairchild Metro (C-GJVW) ● Location: Detour Lake airport, Ontario, Canada Injuries (crew/pax): ?/? ● Total occupants (crew/pax): 2/8 ● Phase: Landing

The aircraft's right wing struck the ground while landing on runway 10, then veered to the right, off the runway and slid down an embankment,

sustaining substantial damage. The accident happened in daylight (09:30 local time). The aircraft was operating a flight from Toronto via North Bay.

Date: 12 Sep • Carrier: Ural Airlines • Aircraft type/registration: Airbus A320 (RA-73805) • Location: Near Kamenka, Russia Injuries (crew/pax): 0/0 ● Total occupants (crew/pax): 6/161 ● Phase: En route

The aircraft was operating a flight from Sochi, but its crew reported a "hydraulic failure" during the approach to Omsk. The pilot carried out a missed approach and diverted to Novosibirsk, some 340nm (630km) away. However, while en route, the crew became concerned about the aircraft's

fuel state and decided to carry out a forced landing in a wheat field near Kamenka, about 108nm west of Novosibirsk. The landing was successful and the aircraft came to rest on its undercarriage. The accident happened in daylight (09:44 local time) visual meteorological conditions

Date: 21 Sep ● Carrier: DHL International ● Aircraft type/registration: Boeing 767-300ERBDSF (A9C-DHAB) ● Location: Beirut airport, Lebanon Injuries (crew/pax): 0 ● Total occupants (crew/pax): 3 ● Phase: Landing

The aircraft was damaged in a hard night landing at Rafic Hariri International, Beirut. It was dark, but visibility was good, and wind 270°/4kt (7km/h).

Date: 25 Sep ● Carrier: JetBlue Airways ● Aircraft type/registration: Airbus A320 (N569JB) ● Location: En route near Jamaica Injuries (crew/pax): 1/7 ● Total occupants (crew/pax): ?/? ● Phase: En route

Over the Caribbean Sea the aircraft passed through an isolated storm cell that was not showing on the weather radar. During the disturbance the

aircraft climbed 800ft before resuming its cruising level at 34,000ft. One of the cabin crew and seven passengers were injured

Date: 4 Oct • Carrier: FedEx Express • Aircraft type/registration: Boeing 757-200SF (N977FD) • Location: Chattanooga Lovell Field airport, USA Injuries (crew/pax): 0 ● Total occupants (crew/pax): 3 ● Phase: Landing

The aircraft took off normally from Chattanooga for Memphis. The undercarriage retracted and locked up, but when the flaps were retracted the Master Caution light came on, with the crew alerting system showing "TE FLAP DISAGREE". The crew carried out checklist procedures, and succeeded in getting the flaps to retract fully. But the EICAS showed "L HYD SYS PRESS", with zero pressure and hydraulic fluid near empty. The captain decided to return to Chattanooga, but the gear failed to deploy,

and following a fly-by, the tower reported no sign of gear deployment. The alternate gear extension procedure did not produce results, so the crew declared an emergency and prepared to land on runway 20. The aircraft slid beyond its end and into the localiser antennae, and when the crew attempted to open the front left door it only half-opened before becoming jammed. Despite problems with the right-hand front door, the crew managed to open it, deploy the slide, and evacuate safely.

Date: 20 Oct ● Carrier: TUI UK ● Aircraft type/registration: Boeing 737 (G-TAWD) ● Location: Leeds Bradford airport, UK ● Injuries (crew/pax): 0/0 Total occupants (crew/pax): 6/189 ● Phase: Landing

Inbound to Leeds Bradford from Corfu, Greece, directional control was lost during the landing roll on runway 14, and the aircraft ran off the left

side of the runway onto soft ground. It was daylight but there was a crosswind from the left of 070°/17kt (31km/h), gusting to 32kt.

Date: 22 Oct ● Carrier: Air Arabia Maroc ● Aircraft type/registration: Airbus A320 (CN-NMI) ● Location: Tangiers, Marocco ● Injuries (crew/pax): 0/0 Total occupants (crew/pax): ?/? ● Phase: Landing

The aircraft, inbound from Barcelona, Spain, suffered a hard, bounced landing on runway 10 at Ibn Battouta airport, and its right engine struck the surface. It was daylight in rain, with a crosswind from the right of 190°/25kt (46km/h), gusting to 45kt.



## All commercial airline categories

Date: 25 Oct ● Carrier: Westair Aviation ● Aircraft type/registration: Reims-Cessna F406 (V5-WAI) ● Location: Near Osire, Namibia Injuries (crew/pax): 0/0 ● Total occupants (crew/pax): 1/5 ● Phase: En route

While the chartered flight was en route from Windhoek to a landing strip at the Otjikoto mine an elevator cable failed. The crew elected

to make a forced landing on open ground, but the aircraft suffered considerable damage.

Date: 3 Nov ● Carrier: RICO Taxi Aereo ● Aircraft type/registration: Embraer EMB-110 (PT-OCV) ● Location: Eduardo Gomes airport, Manaus, Brazil Injuries (crew/pax): 0/0 ● Total occupants (crew/pax): 2/13 ● Phase: Landing

The crew reported a hydraulics failure while en route from Manaus to Barcelos, Amazonas and the pilot elected to return to Manaus. However, directional control was lost during the daylight landing roll and the

aircraft ran off the left side of the runway. Its nose undercarriage ran through a drainage ditch beside the runway, failed and collapsed. There were no injuries.

Date: 28 Nov ● Carrier: Unity Air Zanzibar ● Aircraft type/registration: Embraer EMB-120 (5H-FLM) ● Location: Kikoboga airstrip, Mikumi, Tanzania Injuries (crew/pax): 0/0 ● Total occupants (crew/pax): 4/30 ● Phase: Take-off

The aircraft was chartered to carry tourists from the Mikumi National Park to Zanzibar, but something went wrong during the take-off run and it collided with a structure, damaging its right wing and landing gear and

suffering a nosewheel collapse. Another EMB-120 from the same airline (5H-MJH) also had a runway excursion at the same airstrip the same day, suffering serious damage. No-one was injured in either of the events.

Date: 27 Dec ● Carrier: Air Tindi ● Aircraft type/registration: De Havilland Canada DHC-6 Twin Otter (C-GMAS) Location: Notheast of Yellowknife, Canada ● Injuries (crew/pax): O/8 ● Total occupants (crew/pax): 2/8 ● Phase: En route

The ski-equipped Twin Otter departed Margaret Lake, North West Territories bound for Lac de Gras in the same province. Air Tindi, a specialist in providing air services to isolated communities, had been chartered to carry a team of people tasked with preparing winter roads from Yellowknife to diamond mines in the area. Official details of the accident are still sparse, but the aircraft appears to have crashed on approach to the ice-covered lake, injuring eight out of the 10 people on board, with two of them suffering broken bones. The location is about 8.6nm (16km) south-east of the Diarvik diamond mining community where there is an

airstrip, but the aircraft occupants needed equipment to survive until rescue was possible. The Royal Canadian Air Force (RCAF) provided a Lockheed Martin C-130, which circled the site and dropped equipment and two survival and rescue paramedics by parachute, although it was already dark and the winds were high. The accident aircraft's precise position was known via satellite tracking. The survivors were found huddled in a tent provided in the aircraft's survival pack, but the RCAF rescue team erected heated tents. In the morning two helicopters evacuated the passengers and crew to Diarvik, and an Air Tindi aircraft took them to Yellowknife.