# 民間航空機の主な航空事故一覧

Major Air Disasters Involving Commercial Airlines

1937-2024

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はじめに

Major Airline Disasters は私が国際運送協会(IATA)の安全部門で全世界の航空安全の向上を課題

に検討を行っていた時、自分自身の検索の便利のために過去の民間航空が関わる航空事故の一覧を

準備するために作成したものです。情報源は世界の主要なメディアの報道、各国政府の発表、事故調

査報告などから、事故の発生日時、発生地点(発生国)、運航航空会社、航空機型式、乗客乗員の死者

負傷者数、知り得る発生原因を掲載しています。事故とは航空機が破壊され使用に耐えなくなった場合、

乗客乗員に死者が発生した場合としていますが、私の専門分野の航空管制に関わるニヤミスなど事故

には至らなかったものの世間が注目した案件も取り入れています。

当初、は自分のためにとしていたのですが、多国籍メンバーの世界各国からの同僚に見てもらうこと、

また、情報源が世界のメディアであったことから、航空業界の標準語である英語で編集しています。少

ないですが、案件が日本で発生したものであってメディアが日本語で報道している場合は、日本語で

記述してある場合もあります。また、私がインドネシアで JICA の航空管制専門家として勤務した関係か

ら、特にインドネシアの事故を取り上げている場合があります。

過去に発生した事故を検索する場合、事故の発生日(dd/mm/yyyy)、英字地点名(例:Osaka)、運航

会社(英文のフルネームあるいは略号)、航空機型式(例:B737)、発生原因(例:CFIT)をキーワードとさ

れるとよいでしょう。

皆様のお役立てばうれしいです。

もし内容に誤りを発見されたら、改善のため、ご連絡ください。

前川博和

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ii

### **Preface**

"Major Airline Disasters" was created when I was engaged in the Safety Committee (SAFAC) of the International Air Transport Association (IATA) to investigate the issue of improving aviation safety around the world. This was created to prepare a list of accidents. Information sources include the world's major media reports, government announcements, accident investigation reports, etc., including the date and time of the accident, location (country of occurrence), operating airline, aircraft type, number of dead and injured passengers and crew, and information on the accident. The provable causes of occurrence are also listed. An accident is defined as a situation in which an aircraft is destroyed and is no longer fit for use, or in which a passenger or crew member is killed. However, there are incidents that did not result in an accident but received attention from the public, such as near-misses involving air traffic control, which is my field of expertise.

At first, I was using it for myself, but since I thought my multinational colleagues from all over the world might use it, and because the source of information was the world's media, I decided to compile in English, the common and standard language of the aviation industry. Although it is rare, if the incident occurred in Japan and the media is reporting it in Japanese, it may be written in Japanese. Additionally, because I worked there as a Japan International Corporation Agency (JICA) air traffic control expert, accidents and/or incidents occurred in Indonesia are sometimes focused.

When searching for accidents, you can search from the date of the accident (dd/mm/yyyy), the location (e.g. Osaka), the operating company (full name or abbreviation in English), the type of aircraft (e.g. B737), and the cause of accident (e.g. CFIT) as a keyword.

I would be happy if it could be of help to you.

If you find any errors in the content, your reporting would be appreciated for the improvement.

Mike Maekawa

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# **目次**∕Table of Contents

1930	1
1940	2
1950	4
1960	6
1970	15
1980	31
1990	40
2000	53
World Trade Center 9/11 Terror	56
2010	64
2020	141
END	164

### 【記載方法]

事故は時系列的な表形式で列挙し、発生日、衝突の状況、場所、航空機型式、航空会社名、報告された事故原因、死亡者数(乗客+乗員)を掲載しています。また、一部については航空交通管制上の視点が、日本と関係する事故については当時の報道内容などが付加されています。

### [Notation]

Incidents are listed in a table in chronological order giving the Date, details of Crash, Location, Aircraft Type, Airline, Likely Reason for Crash as reported, Number of Fatalities (Passengers+Crew). Certain ATC point of view and Japan related incidents are also added for your information.

### 1930

06/05/1937 Manchester Township, New Jersey, USA. The Hindenburg airship LZ 129 Hindenburg caught fire and was destroyed during its attempt to dock with its mooring mast at Naval Air Station Lakehurst. 35 fatalities (13 pax+22 crew) from the 97 on board (36 pax + 61 crew), and an additional fatality on the ground. (Personally, I was born 8 days after this incident. HM)







24/08/1938 Haneda, Tokyo, Japan, Japan Flight School (日本飛行学校) Hanriot HD.14 trainer airplane (பвлон) with 1 flight instructor and 1 student pilot and Japan Air Transport (日本航空輸送) Fokker Super Universal aircraft (பвло) with 1 pilot and 2 student pilots, collided in the air over Omori, Tokyo. Japan's first air accident in the history. Mid Air Collision. 85/5crew+80 on ground.

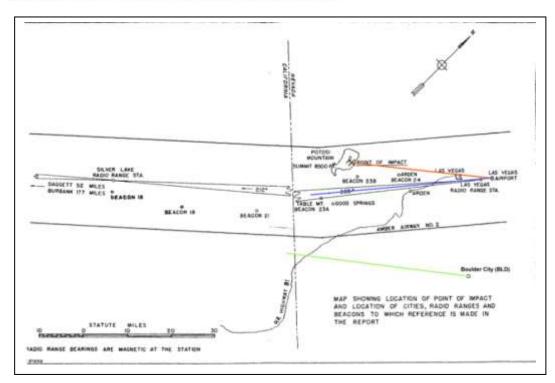
### 1940

16/01/1942 Potosi Mountain, Nevada, USA, TWA, DC-3, LAS-LAX, CFIT, 22/22, Carol Lombard killed.









28/10/1949 Pico da Vara, São Miguel Island, Azores, Portugal, Air France AF009, L-749A from Paris-Orly Airport, France to New York City, USA with a Stopover at Santa Maria Airport, Azores, Portugal. CFIT, 48/37 pax + 11crew

Air France Flight 009 was a scheduled international flight that crashed into a mountain while attempting to land at Santa Maria Airport, Azores on a stopover during a scheduled international passenger flight from Paris-Orly Airport to New York City. All 48 people on board were killed.



Lockheed L-749A Constellation

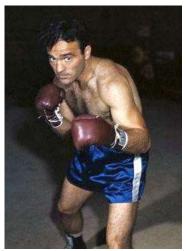
F-BAZN departed Paris-Orly at 20:05 for a flight to New York with an intermediate stop at Santa Maria, Azores. At 01:41 the crew reported 150nm from Santa Maria with an ETA of 02:45. The ETA was later changed to 02:55. At 02:51 the flight reported flying at 3000 feet with the airfield in sight. After acknowledging landing instructions, nothing more was heard from the flight. The Constellation had struck the Redondo Mountain at an elevation of 900 m.

#### Probable Cause:

- Failure to carry out either of the approach procedures for Santa Maria airport.
- False position reports given by crew. Inadequate navigation.
- Failure to identify Santa Maria Airport, when flying in VFR conditions.

Famous violinist Ginette Neveu and famous boxer Marcel Cerdan were killed in the crash.

Although married with three children, Cerdan had an affair with the famous singer Édith Piaf. The affair lasted from summer 1948 until his death in autumn 1949. They were very devoted to each other and Piaf dedicated one of her most famous songs, Hymne à l'amour, to Cerdan. It is said that Piaf suggested Cerdan in the telephone conversation previous night to prefer faster air travel than sailing to the US by boat he had planned.







Édith Piaf

### 1950

 $12/03/1950 \quad Cardiff, Wales, UK\ Avro\ Tutor\ 5, Not\ Available, Not\ Available, 80$ 

27/01/1951 Tarquinia, Italy, SM95, Alitalia, Not available, Not available

25/04/1951 Key West, USA, DC-4, Cubana, Collision, 44

24/08/1951 Oakland, USA, DC-6B, United Airlines, Hit a Hill, 50

16/12/1951 New Jersey, USA, Curtiss C46, Miami Airlines, Crashed into River, 56

22/01/1952 New Jersey, USA, Convair, American Airlines, Fog, 23

11/02/1952 New Jersey, USA, DC-6, National Airlines, Collision with Grovna, 26

 $22/03/1952 \quad Frankfurt, Germany, DC\text{-}6, KLM, Fog, 45$ 

 $09/04/1952 \quad Mt. \ Mihara, \ Japan, \ Martin-202, \ Japan \ Airlines, \ Hit\ a\ mountain, \ CFIT, \ 37/37$ 

The aircraft, leased from Northwest Airlines, crashed into a mountain: The plane was named "もく星号".





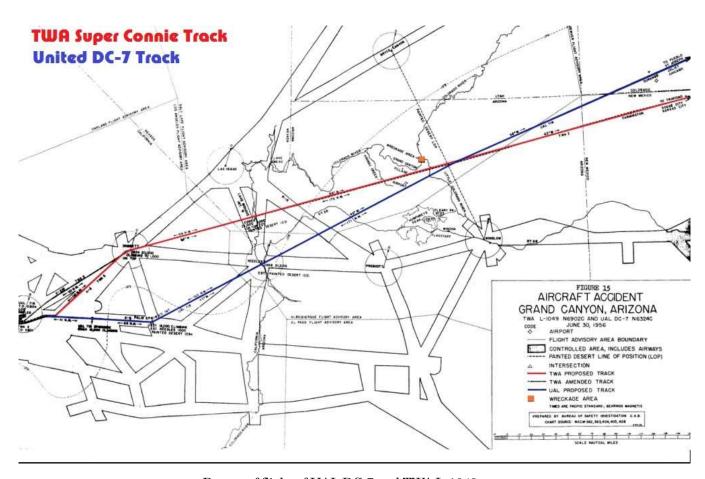
Japan Airlines (leased from Northwest Orient Airlines) Martin 2-0-2 30 seats

Passengers perished



Haneda Air Base Air Traffic Control Tower

- 26/10/1952 Rome, Italy, Comet1, BOAC, Accident at Take-off, 0
- 03/03/1953 Karachi, Pakistan (India), Comet 1A, Canadian Pacific, Nose High on Take-off, 11
- 02/05/1953 Calcutta, India, Comet 1, BOAC, Ground collision, 43
- 15/07/1953 BOAC Comet landed at wrong airport in Juhu, India, 0
- 10/01/1954 Elba, Italy Comet 1, BOAC, Crashed into Ocean, 35
- 08/04/1954 Naples, Italy, Comet 1, South African Airways, Broke up in flight, 14
- 23/07/1954 South China Sea, DC-4, Cathay Pacific, Shot Down, 9
- 05/09/1954 Dublin, Ireland, Lockheed Constellation, KLM, Crashed into River, 28
- 27/07/1955 Bulgaria, Lockheed Constellation, ELAL, Shot Down, 58
- 06/10/1955 Medicine Bow Peak, Laramie, USA, DC-4, United Airlines, Crashed into Mountain, 66
- 01/11/1955 Denver, USA, DC-6B, United Airlines, Mid-Air Bomb, 44
- 30/06/1956 Grand Canyon, USA, Super Constellation, TWA, Mid-air collision, TWA pilot's failure to comply VFR on Top rules. 70/70
- 30/06/1956 Grand Canyon, USA, DC-7, United Airlines, Mid-air collision w/TWA, 58/58



Routes of flight of UAL DC-7 and TWA L-1049





TWA L-1049 Super Constellation

UAL Douglas DC-7

09/12/1956	Mount Slesse, Canada, DC-4, Trans Canada Airlines, Engine Failure, 62
14/03/1957	Manchester, UK, Vickers Viscount, BEA, Ground Collision, 20
08/04/1957	Moose Jaw, Canada, DC-4M, Trans Canada, Mid air collision, 35
11/08/1957	Issoudun, Canada, DC-4, Maritime Central Airways, Not available, 79
15/09/1957	New Bedford, USA, DC-3, North East Airlines, Crashed on landing, 12
09/11/1957	Pacific Ocean, Boeing 377 Strato Cruiser, Pan American World Airways, Crashed into Sea, 44
30/09/1957	Osaka, JPN, JAL DC4, belly landed, rest in flames. The aircraft totally destroyed by fire. 0/57
15/11/1957	Hents, England, UK, Short Solent 3, Aquilla Airways, Not Available, 46
08/12/1957	Bolivar, Argentina, DC-4, Aerolineas Aregintinas, Crashed in Storm, 61
06/02/1958	Munich, Germany, Airspeed ST Ambassador A557, BEA, Failed to leave Runway due to Ice on wings, 23
06/04/1958	Saginaw, USA, Vickers Viscount 745D, Capital Airlines, Crashed on landing, 49
21/04/1958	Sloan, Las Vegas, USA, DC-7, United Airlines, Midair collision, 47
18/05/1958	Casablanca, Morocco, DC-7C, Belgian World Airlines, Crashed on landing, 65
20/05/1958	Brunswich, Maryland, USA, Vickers Viscount, Capital Airways N7410, Mid-air-collision, w/T33, 11/11
02/06/1958	Guadalajara, Mexico, Lockheed 749A Constellation, Aeronaves de Mexico, Hit a mountain, 45
14/08/1958	North Atlantic, Ireland, Lockheed 1049H Super Constellation, KLM, Crashed into Sea, 99
12/08/1958	Off Shimoda (下田神), Japan, ANA (NH24), DC3 JA5045 (leased), crashed when air-return to HND due to eng trouble, 33/33
15/08/1958	Chetia, USSR, Tupolev 104A, Aeroflot, Stalled, 64
17/10/1958	Kanash, USSR, Tupolev 104A, Aeroflot, Turbulence, 80
03/02/1959	La Guardia, New York, USA, Lockheed Electra L-188A, American Airlines, Crashed on landing, 65
12/05/1959	Chase, USA, Vickers Viscount 745D, Capital Airlines, Broke up, 31
26/06/1959	Lombardia, Italy, Lockheed 1549A, TWA, Hit by Lightning, 68
10/07/1959	Nicaragua, Curtiss C-46, Aerolineas Nacionales, Shot down, 60
24/09/1959	Bordeaux, France, DC-7C, TA Intercontinentaux, Crashed on take-off, 50
29/09/1959	Buffalo, Texas, USA, Lockheed Electra 188A, Braniff, Structural Failure, 34
15/11/1959	Golf of Mexico, DC-6B, Delta Air Lines, Not Available, 40
16/11/1959	Ukraine, USSR, Antonov 10, Aeroflot, crashed on approach, Icing, 40
21/12/1959	Ciampino, Italy, Viscount, Alitalia, Training T& Go. 2

# 1960

06/01/1960 Wilmington, Bolivia, DC-6B, National Airlines, Bomb, 34
18/01/1960 Charles City, USA, Viscount 745D, Capital Airlines, Engine Failure, 50
19/01/1960 Ankara, Turkey, Caravelle, SAS, Crashed into Hill, CFIT, 42

05/02/1960 Laguna de Hunana - Costa, Bolivas, DC-4, Lloyd Aereo Boliviano, Engine Fire, 59

26/02/1960 Shannon, Ireland, DC-7C, Alitalia, Not Available, 52

16/03/1960 Nagoya, Japan, DC-3, ANA, On Runway Collision with F86D, ATC Error. 3/33

After landing at Nagoya, JA5018 made a u-turn and taxied towards the terminal. At the same time, a Japan Air Self Defense Force (JASDF) North American F-86D Sabre fighter (94-8137) took off from the same runway. The fighter plane collided with the aft fuselage and tail of the All Nippon aircraft. The Sabre crashed and burned but the pilot survived.



Douglas DC-3 (C-47)

17/03/1960 Tell City, Indiana, USA, Lockheed Electra 188C, Northwest Airlines, Structural Failure, 63

10/06/1960 Orly, France, Caravelle, Air Algeria, Mid Air Collision, 1

10/06/1960 Australia, Fokker Friendship, Trans-Australia Airlines, Crashed into Sea, 29

24/06/1960 Rio de Janerio, Brazil, Convair 340-62, REAL, Not Available, CFIT, 53

29/08/1960 Dakar, Senegal, Lockheed 1049G, Air France, Crashed into ocean, WX, 63

17/09/1960 Chicago, USA, Lockheed Electra, North West Airlines, Jammed Aileron, 37

19/09/1960 Guam, Mariana Islands, DC-6-AB, World Airways, Crashed on take-off, 80

04/10/1960 Boston, USA, Lockheed 180A, Eastern Airlines, Bird Strike, 62

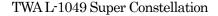
14/10/1960 Elba, Italy, DH Heron, Itavia, Hit a mountain, CFIT, 11

16/12/1960 New York, USA, Douglas DC-8-11, United Airlines 826 from ORD IL, Mid-air collision, 84/84 Ground: 6

16/12/1960 New York, USA, Lockheed Constellation L-1049, TWA266, from Columbus OH, Mid-air collision, 44/44

United Airlines DC-8-11, N8013U, UA826 and Trans World Airlines Lockheed L1049 Super Constellation, N6709C, TW266, Midair collision over Staten Island, New York







United Air Lines Douglas DC-8

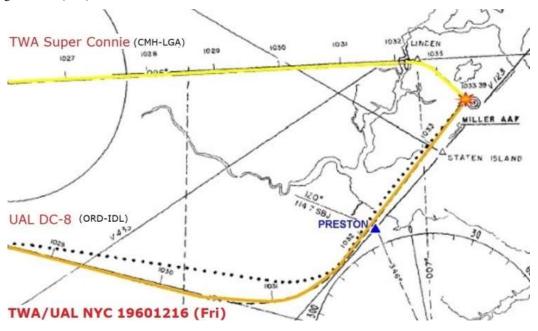
Location: TWA Constellation - Miller Army Airfield in Staten Island, United DC-8 - Brooklyn, New York

\*Constellation broke in three sections and crashed in flames on Staten Island, Miller Army Air Station.

and

\*DC-8 continued for another 13,5 km before crashing in a residential area of Brooklyn, killing 5 (?) people on the ground.

On the morning of December 16, 1960, United Airlines Flight 826, a Douglas DC-8, collided with Trans World Airlines Flight 266, a Lockheed L1049 Super Constellation. The TWA aircraft crashed at Miller Airfield on Staten Island. The United DC-8, however, continued several miles to the northeast and impacted the ground in Brooklyn. The death toll included 128 persons aboard both aircraft and six additional persons on the ground in Brooklyn. This death toll exceeded that of the midair collision over the Grand Canyon four years earlier, making this, at the time, the worst air disaster to date. As a result of the Grand Canyon accident, a broad reaching overhaul of the U.S. air traffic control system was underway. Although these efforts reduced the chance for additional midair collisions, the possibility was not eliminated. This accident was a landmark event and caused a re-evaluation of the air traffic modernization effort at the highest levels of government. (FAA)



24/01/1961 USAF B52 crashed near Goldsboro, North Carolina, B52 Stratofortress carrying two Mark 39 nuclear bombs broke up in mid-air, dropping its nuclear payload in the process. The captain ordered the crew to eject, which they did at 9,000 feet (2,700 m). Five men ejected and landed safely. Another ejected but did not survive the landing, and two died in the crash.

15/02/1961 Brussels, Belgium, Boeing 707, Sabena, Stalled, 72

28/03/1961 Russelbach, East Germany, Ilyushin 18, Ceskosloveneke Aerolinie, Explosion, 82

25/04/1961 Haneda, Japan, DC-8 ran off the end of the 8,900 feet rwy and came to rest after the main gear entered a ditch 9 feet. wide and 6 feet deep, situated 150 feet beyond the end of the runway



10/05/1961 Sahara Desert, Lockheed L-1649, Air France, Bomb, 79

31/05/1961 Lisbon, Portugal, DC-8-53, KLM, Crashed into ocean, 61

12/06/1961 Osaka, JPN, ANA Viscount A-PKJ, hard landing, aircraft damaged beyond repair, 0/49

11/07/1961 Denver, USA, DC-8, United Airlines, Crashed on landing 17

01/09/1961 Hinsdale, USA, Lockheed 1049, TWA, Elevator Failure, 78

10/09/1961 Shannon, Ireland, DC-6, President Airlines, Engine Failure, 86

12/09/1961 Rabat, Morocco, Caravelle III, Air France, Crashed on landing, 77

17/09/1961 Chicago, USA, Lockheed 188C, Northwest, Mechanical failure, 37

18/09/1961 Ndola, Northem Rhodesia (Zambia), UN DC-6 {Sweden SE-BDY} crashed. Dag Hammarskjöld killed. 16/16

08/11/1961 Richmond, USA, Lockheed C69, Imperial Airlines, Ground Collision, 77

01/03/1962 Jamaica Bay, 707-123B, American Airlines, Electrical Fault, 95

04/03/1962 Douala, Cameroon, DC-7C, British Caledonian Airways, Jammed elevator, 111

16/03/1962 Pacific Ocean, Lockheed Super Constellation, Flying Tiger Line, Crashed into ocean, 107

10/04/1962 Osaka, JPN, JAL DC4, wheels up landing, 64 occupants escaped uninjured while the aircraft was damaged beyond repair.0/64



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22/05/1962 Unionville, USA, 707-124, Continental Airlines, flight 11, Bomb, 45
03/06/1962 Orly, France, 707-328, Air France, At Take-off, 130
22/06/1962 Pointe-a-Pitre, West Indies, 707-328, Air France, Crashed into Hill, 113
28/06/1962 Adler, USSR, Antonov 10A, Aeroflot, Hit a mountain 81
30/06/1962 Krasnoyarsk, USSR, Tupelov 104A, Aeroflot, Ground Collision, 84
07/07/1962 Bombay, India, DC-8-43, Alitalia, Hit a Hill, 94
02/09/1962 Khabarovsk, USSR, Tupolev 104A, Aeroflot, Ground Collision, 86
23/09/1962 North Atlantic Ocean, Lockheed 1049H, Flying Tiger Airlines, Engine Failure, 28
23/11/1962 Ellicot, USA, Vickers Viscount 745D, United Airlines, Bird Strike, 18
27/11/1962 La Cruz, Mexico, 707-441, Varig, Hit a Hill, 97
30/11/1962 New York, USA, DC-7B, Eastern Airlines, Crashed on landing, 25
28/01/1963 Kansas City, USA, Vickers Viscount 812, Continental Airlines, Crashed on landing, 8
01/02/1963 Ankara, Turkey Vickers Viscount 754D, Middle East Airlines, Mid Air Collision, 104
12/02/1963 Everglades, USA, 707-720B, North West Airlines, Ground Collision, 43
01/05/1963 Awaji, JPN, Nitto Koku DHC-3, sched Osaka-Tokushima, CFIT, Awaji Mountain in IMC. 11/11
03/05/1963 Buca, Cameroon, DC-6B, Air Afrique, Hit a mountain, 55
03/06/1963 Annette Islands, DC-7CF, Northwest Orient Airlines, Crashed into ocean, 101
28/07/1963 Bandra, India, Comet 4C, United Arab Airlines, Crashed into Ocean, 63
04/09/1963 Durrenasch, Switzerland, Carvelle III, Swisair, Onboard fire, 80
15/10/1963 Idlewild, USA, S-55 Helicopter, New York Airways, Structural Failure, 6
29/11/1963 St. Therese, Montreal, Canada, DC-8F-54F, Air Canada, Stalled, 118
08/12/1963 Elkton, USA, 707-121, Pan American World Airways, Hit by lightning, 81 (fuel tank?)
30/12/1963 Off Okinawa, JPN, JAL DC-8 Engine #1 &#4 fell off during pilot air training. Safe emergency landing.
18/02/1964 Osaka, JPN, JDA Grumman Mallard G-73, crashed after departure due to Eng trouble, 2/8
25/02/1964 Lake Pontchartrain, USA, DC-8-21, Eastern Airlines, Crashed into lake, 58
29/02/1964 Innsbruck, Austria, Bristol, Britannia British Eagle International Airlines, Hit a mountain, 84
01/03/1964 Nevada, USA, Lockheed 049, Paradise Airlines, Ground Collision, 85
07/05/1964 San Romon, USA, Fairchild 27A, Pacific Airlines, Pilots Shot, 44
09/07/1964 Parrotts Ville, USA, Vickors Viscount 745D, United Airlines, Fire, 39
02/09/1964 Sakhalin, USSR, Ilyushin 18B, Aeroflot, Hit a Hillside, 84
02/10/1964 Granada, Spain, DC-6B, UTA, Hit a mountain, 80
15/11/1964 Las Vegas, USA, Fairchild 27A, Bonanza Airlines, Crashed on Approach, 29
20/11/1964 Anjelholm, Sweden, Convair 440, Linjetflyg, Ground Collision, 31
23/11/1964 Rome, Italy, 707-331, TWA, Crashed on take-off, 51
08/02/1965 New York, USA, DC-7B, Eastern Airlines, Near Collision, Illusion, Spatial disorientation, Hit Ground, 84/84
            EA 663 was a scheduled passenger flight originating at Boston, MA (BOS), and terminating at Atlanta, GA (ATL) with intermediate stops
            at New York (JFK), Richmond, VA (RIC), Charlotte, NC (CLT), and Greenville-Spartanburg, SC (GSP).
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The DC-7B took off from runway 31L at New York-JFK at 18:20 on an IFR clearance to the Richmond Airport. The crew flew a SID Dutch 7. About 18:24 EAL 663 was further cleared to 8,000 feet and instructed to turn right to a heading of 150 degrees. The flight acknowledged this clearance and reported leaving 3,000 feet. Shortly thereafter the crew reported leaving 3,500 feet at which time the flight was instructed to turn left to a heading of 090 degrees. At 18:25, while climbing through 3700 feet Departure Control instructed the flight to "... turn right now, heading one seven zero to Victor 139, traffic 2 o'clock five miles northeast bound below you." The flight responded, "OK we have the traffic, turning one seven zero..." The other traffic was PA 212 from San Juan. The B707 was being vectored to intercept the final approach course to runway 31R. At approximately 18:24 Approach Control had instructed the PA212 to turn right to a heading of 020 degrees and inquired if the flight had as yet, reached 3,000 feet. Approach Control then instructed the flight to report leaving each 500-

foot level down to 3,000 feet and advised the flight of "...Traffic at 11 O'clock, six miles southeast bound just climbing out of three (3,000 feet)."

As the Eastern DC-7 was turning from 090 to 170 degrees, the airplane was in a 35-degree banked nearly level turn.

With PA212 approx. 700 feet lower and four miles away at 3 o'clock, PA212 would not be visible to the captain of EA663 until he was nearly around the turn and on the rollout. Upon completion of the turn, they were on a nearly head-on, converging course with PA212. At that moment, PA212 started a left turn to the assigned heading of 360 degrees. The results of this turn would be to produce an illusion of an apparent collision track.

Also, EA663 was turning away from the background lights of the Long Island shore into a black area, so there was no horizon available to assist in the determination of the relative altitude of the target airplane.

Under these circumstances, it is likely that the Eastern pilot started a descent, initially as a precautionary measure, which would give him a longer time to observe the other aircraft, and provide him with a measure of vertical separation.

Afraid of a collision, PA212 rolled rapidly to the right and also initiated a descent. The Eastern pilot also made a rapid roll to the right and/or a pullup. In this circumstance the DC-7 was placed in an unusual attitude, resulting in spatial disorientation of the crew. They were not able to recover from the vertical bank. The DC-7 struck the sea and disintegrated.

PROBABLE CAUSE: "The evasive action taken by EAL 663 to avoid an apparent collision with PAA 212. The evasive manoeure of EAL 663, prompted by illusion, placed the aircraft in an unusual attitude from which recovery was not effected."

- 31/03/1965 Tangiers, Morocco, Convair 440-62, Iberia, Not Available, 50
- 07/05/1964 San Remon, California, Fairchild F27, Pacific Airlines, Pilot Shot, 44
- 20/05/1965 Cario, Egypt, 720-040B, Pakistan International Airlines, Crashed on landing, 119
- 02/06/1965 San Jose, Chile, DC-6-B, LAN-Chile, Hit a mountain, 87
- 01/07/1965 Kansas, USA, 707-124, Continental Airlines, Overran Runway, 0
- 08/07/1965 British Columbia, Canada, DC-6B, Canadian Pacific Airlines, Bomb, 52
- 16/08/1965 Chicago, USA, 727-22, United Airlines, Crashed into lake, 30
- 08/11/1965 Cincinnati, USA, 727-23, American Airlines, Crashed on landing, 58
- 11/11/1965 Salt Lake City, USA, 727, United Airlines, On landing, 41
- 04/12/1965 Carmel, USA, 707, TWA, Collision, made safe landing.
- 04/12/1965 Carmel, USA, Constellation, Eastern Airlines, Collision, Human Factor (optical illusion) 4/54
- 01/01/1966 Palembang, INA, DC3, PKGDE, Two Garuda C-47 collided while approaching Palembang and crashed into a swamp.17/17
- 14/01/1966 Cartagena, Columbia, DC-6-54B, Avancia, crashed after take-off, maintenance error, 56/64
- 24/01/1966 Mont Blanc, 707-437, Air India, Hit a mountain, CFIT (ATC, navigation error) 117/117
- 04/02/1966 Tokyo Bay, Japan, 727-81, All Nippon Airways, Crashed during approach, CFIT, 113/133

The Boeing 727-81 (JA8302) departed Sapporo-Chitose (CTS), about 1800i for Tokyo-Haneda (HND). While approaching the airport, the crew cancelled IFR and radioed their intentions to continue VFR. At 1859 hours the flight was instructed to report when entering the right base leg for an approach to runway 33R. Winds were 020 degrees at 10 knots. The flight reported on a long base at 19:00 hours. This was the last radio contact with the flight. The aircraft impacted the water, 12 km east-southeast of the airport, disintegrated and sank.



Boeing 727

04/03/1966 Haneda, Tokyo, Japan, DC-8-43, Canadian Pacific Airlines, Crashed on landing, 64/72

At one mile from touchdown on GCA the aircraft was 20 feet below glide path and was instructed to level off momentarily. The aircraft continued to descend however and struck the no.14 approach light, 2800 feet from the runway threshold. The plane then struck a number of other approach lights, crashed against a sea wall and caught fire.

05/03/1966 Mt. Fuji, Japan, 707-436, BOAC, BA911, Broke up in Flight over Mt. Fuji, 124/124

The aircraft departed Tokyo (HND) at 13:58. After takeoff the aircraft flew over Gotemba City on a heading of approximately 298 deg at an altitude of approximately 4900 m and indicated airspeed of 320 to 370 knots. The aircraft, trailing white vapor, then suddenly lost altitude over the Takigahara area, and parts of the aircraft began to break away over Tsuchiyadai and Ichirimatsu. Finally over Tarobo at an altitude of approx. 2000 m, the forward fuselage broke away. The mid-aft fuselage together with the wing, making a slow flat spin to the right, crashed into a forest at the foot of Mount Fuji. The forward fuselage crashed into the forest approx. 300 m to the west of the above site and caught fire. PROBABLE CAUSE: "The aircraft suddenly encountered abnormally severe turbulence over Gotemba City which imposed a gust load considerably in excess of the design limit."

22/04/1966 Ardmore, USA, Lockheed 188C, American Flyers Airline, Captain Became Ill, 83

03/06/1966 Hatfield, UK, Trident, BEA, Deep Stall, 4

01/09/1966 Ljubljana, Yugoslavia, Bristol 175, Britannia, Crashed into Forest, 98

01/10/1966 Wemme, USA, DC-9-14, West Coast Airlines, Hit a mountain, 18

16/11/1966 Matsuyama, Japan, NAMC, YS-11, All Nippon Airways NH53, Overshot runway, 50/50

The flight from Osaka to Matsuyama was uneventful and cleared to land at runway 31. The approach was slightly higher than usual and touchdown was at 460m past the runway threshold. After a 170m ground run the plane became airborne again and a go-around was initiated. A height of 230-330 feet was reached, followed by a left turn The YS-11 descended and crashed into the water.



YS-11

- 24/11/1966 Bratislava, Czechoslovakia, Ilyushin 18B, TABO, Hit a Hillside, 82
- 24/12/1966 Da Nang, Vietnam, Canadair CL-44, Flying Tiger Line, Crashed into Village, 111
- 09/03/1967 Urbana, USA, DC-9-15, Trans World Airlines, Mid Air Collision, 26
- 20/04/1967 Nicosia, Cyprus, Bristol 175, Globeair Crashed on landing, 126
- 03/06/1967 Pyrenees, Spain, DC-4, Air Ferry Ltd., Crashed on landing, 88
- 04/06/1967 Manchester, UK, Argonaut, British Midland, Engine Failure, 72
- 23/06/1967 New York, USA, BAC-111, Mohawk Airlines, Fire, 34
- 19/07/1967 Hendersonville, USA, 727-22, Piedmont Airlines, Mid Air Collision, 82
- 12/10/1967 South-Western Turkey, Comet 4B, BEA, Bomb, 66
- 06/11/1967 Cincinnati, USA, 707-131, Trans World Airlines, Crashed on take-off, 1
- 16/11/1967 Sverdlovsk, USSR, Ilyushin 18B, Aeroflot, Ground Collision, 107
- 20/11/1967 Cincinnati, USA, Convair 880-22-1, Trans World Airlines, Crashed on Approach, 70
- 21/01/1968 Thule Airbase, Greenland, Denmark, USAF B52 crashed after in flight fire, crew abandoned the ship, 1/7
- 29/02/1968 Bratsk, USSR, Ilyushin 18D, Aeroflot, Emergency Descent, 82
- 05/03/1968 Guadeloupe, West Indies, 727-328C, Air France, Hit a Volcano, 63
- 24/03/1968 Wexford, Ireland, Vickers Viscount 803, Air Lingus, Went into a Spin, 61
- 08/04/1968 London, UK, 707, BOAC, Engine Failure, 16
- 20/04/1968 Windhoek, Namibia, 707-344C, South African Airways, Navigational error, 123
- 03/05/1968 Dawson, Texas, USA, Lockheed 180A, Braniff Airlines, Structural Damage, 85
- 04/08/1968 Milwaukee, USA, Convair 580, North Central Airlines, Mid Air Collision, 1
- 11/09/1968 Cap d' Antibes, France, Caravelle, Air France, Fire, 95
- 22/11/1968 San Francisco, CA, USA, JAL DC-8 JA8032 "Shiga" Capt. Kohei Aso (麻生幸平機長、元航空管制官 4 期生、1922.11 生れ), arrived in the San Francisco area after an uneventful flight from Tokyo Haneda. Normal communications were established, and the crew was radar vectored to the Woodside VOR and thence to intercept the ILS for runway 28L at San Francisco. The flight crossed the Woodside VOR at 17:16 at approximately 4,000 feet and, at 17:18:30, was cleared to descend to 2,000 feet . The flight descended in a constant, uninterrupted rate of descent from this time until about 6 seconds before water impact at 17:24:25. The aircraft was on the localizer and contacted the water about 2,5 miles from the end of runway 28L. There were no injuries to any of the passengers or crew during the accident and ensuing evacuation. The aircraft was recovered from the waters of San Francisco Bay about 55 hours after the accident. Repairs were carried out by United Air Lines and the plane was delivered back to JAL on March 31, 1969. This will a CFIT. 0/107

PROBABLE CAUSE: "The improper application of the prescribed procedures to execute an automatic-coupled ILS approach. This deviation from the prescribed procedures was, in part, due to a lack of familiarization and infrequent operation of the installed flight director and autopilot system."







JAL DC8 JA8032 ditched short final RWY28L



People stand on wing of DC8 awaiting rescue

12/12/1968 Caracas, Venezuela, 707-321B, Pan American World Airways, Crashed into Ocean, 51

27/12/1968 O'Hare, Chicago, USA, Convair 580, North Central, 27

31/12/1968 Port Hedland, Australia, VC-7, Mc Robertson Millar, Structural Failure, 26

05/01/1969 Gatwick, Surrey, UK, 727-113C, Ariana Afghan Airlines, Crashed on landing, 50

 $06/01/1969 \quad Pennsylvania, USA, Convair \, 440, Allegheny, During \, Approach, \, 11$ 

13/01/1969 Los Angeles, USA, DC-8-62, SAS, Crashed into Ocean, 15

18/01/1969 Los Angeles, USA, B727-22QC, United Airlines, Crashed into ocean, 38

16/03/1969 Maracaibo, Venezuela, DC-9-32, VIASA, Struck Power Lines, 155

 $20/03/1969 \quad Aswan, Egypt, Ilyushin \ 18D, United Arab \ Airlines, Crashed on landing, 100$ 

04/06/1969 Nuevo Leon, Mexico, 727-64, Compania Mexicana de Avicion, Hit High Ground, 79

29/08/1969 TWA Flight 840 (N776TW) was a flight from Leonardo Da Vinci International Airport in Rome, Italy to Ben Gurion International Airport in Tel Aviv, Israel, that was hijacked on 29 August 1969. There were no injuries or fatalities (120+9), although the aircraft was significantly damaged, and two hostages were held for two months.



#### **TWA B727**

09/09/1969 Indianapolis, USA, DC-9-31, Allegheny Airlines, Mid air Collision, 84
20/09/1969 Hoi An, Vietnam, DC-4, Air Vietnam, Mid Air Collision, 77
21/09/1969 Mexico City, Mexico, 727-64, Mexicana, Crashed on landing, 27
20/11/1969 Nigeria, BAC VC10, Nigerian Airways, Crashed on landing, 87
08/12/1969 Mt. Pan, DC-6B, Olympic Airways, Hit a mountain, 90
14/12/1969 Awajishima, Japan, All Nippon Airwyas YS-11 and Beechcraft C50 Twin Bonanza, Mid Air Collision, both landed at Osaka. 0

### 1970

04/02/1970 Corrientes, Argentina, BAe 748, Aerolineas Aergentinas, Crashed at take-off, 37 06/02/1970 Samarkand, USSR, Ilyushin 18, Aeroflot, Hit a mountain, 92 15/02/1970 Santo Domingo, Dominican Rep, DC-9-32, Dominicana, Engine Failure, 101 21/02/1970 Wuerenling, Switzerland, Convair 990, Swissair, Bomb, 47 21/04/1970 Manila, Philippines, BAe 748, Philippine Airlines, Explosion, 36 02/05/1970 Virgin Islands, DC-9-33CF, Antillian Airlines, Ran out of Fuel, 22 03/07/1970 Sierra Montensy, de Havilland Comet 4, Dan-Air Services, Hit a mountain, 112 05/07/1970 Toronto, Canada, DC-8-8-63, Air Canada, Crashed at Take-off, F/O inadvertently deployed the ground spoilers at ~60'AGL, 109 05/08/1970 Islamabad, Pakistan, F27, Pakistan Int. Airlines, At take-off, 30 09/08/1970 Cuzco, Peru, Lockheed Electra 188A, LANSA, Engine Failure, 100 12/08/1970 Taipei, Taiwan, YS-11, China Airlines, Struck a ridge, 14 14/11/1970 Huntington, West Virginia, USA, DC-9, Southern Airways, Mountain Side Collision, 75 28/12/1970 Virgin Islands, 727-200, American Airlines, On landing, 2 31/12/1970 Leningrad, USSR, Ilyushin 18, Aeroflot, Not Available, 93 31/12/1970 East Pakistan, F27, Pakistan Int. Airlines, On landing, 7 09/01/1971 Newark, NJ, USA, 707-323, American Airlines, Mid air collision with Cessna 150, 2

B707 N7595A and Cessna 150 N60942 were both involved in a mid-air collision at 910 m. The Cessna, flying VFR, crashed.

he Boeing (on IFR, approach to Newark runway 04L) landed safely at Newark.



B707

23/05/1971 Rijeka, Yugoslavia, Tupolev 134A, Aviogenex, Crashed During Landing, 78 06/06/1971 Duarte, California, USA, DC-9-31, Hughes Airwest, Mid Air Collision, 50

Airwest 706, DC-9, Los Angeles, CA (LAX) to Seattle, WA (SEA) with intermediate stops at Salt Lake City (SLC), Boise (BOI), Lewiston (LWS), Pasco (PSC) and Yakima (YKM) departed Los Angeles at 18:02. At 18:09 the crew reported leaving FL120 and Los Angeles ARTCC cleared them direct to Daggett. At 17:16 h a USMC McDonnell F-4B Phantom 151458 departed Naval Auxiliary Air Station (NAAS) Fallon for a flight to MCAS El Toro at low altitude. The aircraft had several technical difficulties, including an inoperative transponder and a leak in the oxygen system. Due to deteriorating visibility northwest of Palmdale, the crew climbed to 15,500 feet. Shortly after level-off, aircraft was 50 miles from MCAS El Toro. The pilot executed a 360° aileron roll at this time, which took approximately 3seconds to complete. The Radar Intercept Officer (RIO) estimated that the true airspeed in the climb and after level-off was 420 knots. The F-4B collided with the Airwest DC-9 about 1 minute and 20sec after the roll, at 15150 feet. After the collision, the F-4 began to tumble violently about the lateral axis. The RIO waited about 5 seconds, and, after seeing numerous warning lights in the cockpit, he ejected from the aircraft. The ejection was successful, and he parachuted to the ground without injury. The other F-4 crewmember did not survive the accident.

Probable Cause: The failure of both crews to see and avoid each other but it is recognized that they had only marginal capability to detect, assess, and avoid the collision. Other causal factors include a very high closure rate, commingling of IFR and VFR traffic in an area where the limitation of the ATC system precludes effective separation of such traffic, and failure of the crew of BuNo458 to request radar advisory service, particularly considering the fact that they had an inoperable transponder."





F4B (left)

and

DC-9 (right)

07/06/1971 New Haven, USA Convair 580 Allegheny Airlines Crashed on approach 28/31

The aircraft struck cottages, located 4890 feet short of runway 02, and crashed. The aircraft was on a non precision instrument approach. The

Convair was originally manufactured as a Convair CV440 and converted to a CV580.

Probable Cause: "The captain's intentional descent below the prescribed minimum descent altitude under adverse weather conditions without adequate forward visibility or the crew's sighting of the runway environment. The captain disregarded advisories from his first officer that minimum descent altitude had been reached and that the airplane was continuing to descend at a normal descent rate and airspeed. The Board was unable to determine what motivated the captain to disregard prescribed operating procedures and altitude restrictions and finds it difficult to reconcile the actions he exhibited during the conduct of this flight."



Allegheny Convair 580

03/07/1971 Hokkaido, Japan, NAMC YS-11A, TOA Domestic, Hit a mountain, CFIT, 68/68

NAMC YS-11 passenger plane, JA8764, was destroyed in an accident on Yokotsudake Mountain, Japan. All 64 passengers and 4 crew members were killed. TDA63 Sapporo-Chitose (CTS) and was approaching Hakodate Airport (HKD) at the time of the crash.

The crew mistook a point approximately 5 nautical miles north of the Hakodate NDB as being just over the Hakodate NDB, a navigation aid, and initiated their descent from an estimated altitude of 6,000ft in an attempt to cross the high station at 2,500ft by making a single circle. The outbound flight leg was extended westward and because of a strong southwesterly wind, the aircraft drifted further to the north than the crew expected, striking the mountain.



TDA YS-11

25/07/1971 Irkutsk, USSR, Tupolev 104B, Aeroflot, Crashed on landing, 97/126

The Tupolev was on a night-time approach to Irkutsk in instrument conditions when the crew were told that they were flying to the left of the extended runway centerline. An excessive turn then placed the aircraft to the right of the extended centerline. The approach was being flown at a speed some 15-20 mph below the normal approach speed with a high rate of descent. The plane was in a slight left bank when it touched down hard some 500 feet short of the runway. The left wing broke off, causing the plane to roll to the left, bursting into flames.

30/07/1971 SFO, Cal, USA, Pam Am B747-100, PA845, Tail Strike on Dept, Pilot error, 0/218

31/07/1971 Shizukuishi, near Morioka, Japan, 727-200, All Nippon Airways (ANA), NH58, Mid Air Collision with F86, 162/162

ANA JA8329 (NH58), Sapporo-Chitose (CTS) to Tokyo-Haneda (HND) climbed to an altitude of FL280. While cruising at this altitude, it approached an area where a Japan Air Self Defense Force student and his instructor were flying in their Mitsubishi-built North American F-86F fighters. The trainee was not watching out for traffic when the 727 approached. The instructor ordered him to break away from the 727. It was too late. He banked to the left but the leading edge of the right wing of his F-86F (92-7932) struck the left horizontal stabilizer of the ANA plane. The fighter's right wing broke off, causing the plane to crash out of control, but the pilot ejected safely. Damage to the stabilizer caused a loss of control of the B727.









04/09/1971 Juneau, Alaska, 727-193, Alaska Airlines, Hit a mountain, 111

02/10/1971 Aarsele, Vanguard BEA, Structural Failure: bulkhead corrosion from leaky toilets, 63

21/11/1971 Penghu Islands, Caravelle, China Airlines, Mid-Air, Bomb, 25

24/12/1971 Puerto Inca, Locheed Electra 188A, LANSA, Structural Failure due lightning, 91/92

About 40 minutes after takeoff, the aircraft entered a zone of strong turbulence and lightning. After flying for 20 minutes in this weather at FL210 lightning struck the aircraft, causing fire on the right wing which separated, along with part of the left wing. The aircraft crashed in flames into mountainous terrain. Structural failure occurred because of the loads imposed on the aircraft flying through a severe thunderstorm, but also because of stresses resulting from the maneuver to level out the aircraft.



A 17-year-old German Peruvian, Juliane Koepcke, survived the accident. Despite sustaining a broken collar bone, a deep gash to her right arm, a concussion and an eye injury in the fall, she was able to trek through the dense Amazon jungle for 10 days, until she was rescued by local lumbermen.



The movie Miracles Still Happen (1974) is based on the story. Koepcke's story was also told in 1998 in the documentary film Wings of Hope. Koepcke's memoir Als ich vom Himmel fiel was published by the German publisher Piper Malik. The English edition When I Fell From the Sky, was published by Titletown Publishing in November 2011. The crash also features in the final season-one episode of the Discovery Channel documentary Aircrash Confidential.

07/01/1972 Sierra de Atalayasa, Caravelle SE-210, Iberia, Hit a mountain, 104

26/01/1972 Hamsdorf, Czechoslovakia, DC-9-32, JAT, Bomb, 27

14/03/1972 Dubai, United Arab Emirates, Caravelle, Sterling Airways, Hit a mountain, 112

19/03/1972 Mt. Shamsen, South Yemen, DC-9-32, Egyptair, Hit a mountain, 30

13/04/1972 Rio de Janerio, Brazil, YS11, VASP, Hit high ground, 25

18/04/1972 Ethiopia, VC-10-1154, East African Airways, Mechanical failure, 43

05/05/1972 Mt. Lunga, DC-8-43, Alitalia, Ground collision, 115

18/05/1972 Kharkov, USSR, Antonov 10, Aeroflot, Ground Collision, 108

30/05/1972 Forth Worth, Texas, USA, DC-9-14, Delta Airlines, Crashed on landing, 4

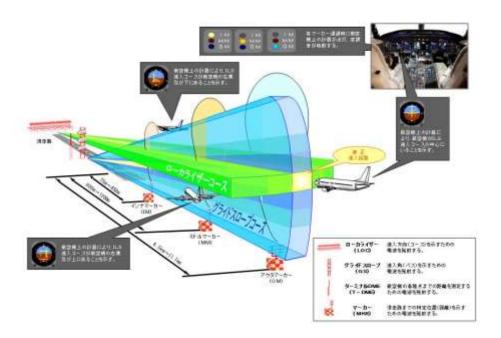
12/06/1972 Ontario, Canada, DC-10, American Airlines, Loss of cargo door, 0

14/06/1972 New Delhi, India, DC-8-50, Japan Airlines, Crashed on landing, CFIT, 82/87 +Ground 4

The DC-8 took off from Bangkok at 1121 UTC on a flight to Delhi, India. Clearance for a straight-in ILS approach to Delhi runway 28 was given at 14:43 UTC. Shortly after reporting 23DME, the aircraft struck the banks of River Yamuna. The first officer was Pilot Flying during the approach to Delhi.

PROBABLE CAUSE: Japanese investigators claimed a false glide path signal to be responsible for the descent into terrain. Indian investigators say the accident was caused by a total disregard of laid down procedures by the crew and abandoning all instrument indications without properly ensuring sighting of the runway.





15/06/1972 Pleiku, South Vietnam, Convair 880, Cathay Pacific, Mid-Air Bomb, 81

18/06/1972 Kharkov, USSR, Antonov 10A, Aeroflot, Structural Failure, 122

18/06/1972 Staines, UK, Hawker Siddeley Trident, British European Airways, Ground Collision, 118

14/08/1972 Berlin, Germany, Ilyushin 62, Eastern Germany Airlines, Onboard Fire, 156

31/08/1972 Magnitogorsk, USSR, Ilyushin 18, Aeroflot, Onboard Fire, 101

24/09/1972 Bombay, India, Japan Air Lines DC8, landed wrong airport.

Japan Airlines DC-8, JL472, bound for Bombay, India (BOM) mistakenly lands at Juhu Aerodrome.



Interflug Il-18 on December 14, 1972 just behind JAL DC8

- On July 15, 1953, a BOAC DH.106 Comet landed at Juhu Aerodrome instead of Santacruz Airport.
   The aircraft was flown out some nine days later.
- On 28 May 1968, Garuda Indonesia Convair 990 had also mistaken the same Juhu Aerodrome for Santacruz Airport and tried to land his aircraft. It overshot the runway falling just short of the traffic

- road ahead and several residential buildings when its nose wheel got stuck in a ditch at the end of the runway. All passengers survived.
- December 14, 1972 an Ilyushin Il-18 (turboprop airliner) of Interflug of the German Democratic Republic (East Germany), landed and stopped immediately in the back of a disabled Japan Airlines aircraft, narrowly escaping a collision.
- In 2006 alone, there were three events of civilian airliners landing at Poznań-Krzesiny military airbase in Poland: a British Beech 400A Beechjet (N709EL) on July 17, Turkish Boeing 737-400 (TC-SKG) on August 16 and Cessna 560 (DCASA) on October 3.
- On 17 December 2017, Singapore A359 at Mumbai go-around on final approach portrayed as approach to wrong airport.



 $01/10/1972 \quad Sochi, USSR, Ilyushin \ 18B, Aeroflot, Crashed \ after \ take-off, \ 109$ 

13/10/1972 San Fernando, Chile, Fairchild 227D, TAMU, Hit a mountain, 29

13/10/1972 Krasnaya, USSR, Ilyushin 62, Aeroflot, Crashed During Landing, 174

21/10/1972 Athens, Greece, YS-11 Olympic, Crashed into sea, 37

27/10/1972 Clermont Ferrand, France, Viscount, Air Inter, Instrument Failure, 60

28/11/1972 Moscow, USSR, DC-8-60, Japan Airlines, Stalled on take-off, 61/76

DC-8-62 JA8040, was destroyed when it crashed on takeoff from Moscow's -Sheremetyevo (SVO), Russia. Five of the 14 crew members and ten of the 62 passengers survived the accident. JL446 was a scheduled international flight from Copenhagen (CPH), Denmark to Tokyo-Haneda (HND), Japan with an en route stop in Moscow. JL446 was cleared for takeoff from runway 25 at 19:49.

On takeoff the DC-8 climbed to 100m with a supercritical angle of attack and lost height abruptly. It hit the ground and burst into flames. Probable Cause: The cause of the disaster to aircraft DC-8-62 JA-8040 resided in the fact that during take-off and following attainment of the safety speed V2, the crew put the aircraft into a supercritical angle of attack which resulted in loss of speed and altitude.

The aircraft's assumption of supercritical angles of attack was the consequence of one of the following circumstances:

a) inadvertent extension of the spoilers in flight, leading to a fall in the maximum value of the lift ratio and an increase in drag;

b) loss of control of the aircraft by the crew in conditions associated with malfunctioning of the No. 1 or No. 2 engine consequent upon possible ice formation on the engine intake at a time when the de-icing system was switched off.

The anomalies in the functioning of the engines observed by the crew and other witnesses may have arisen after the aircraft had assumed a supercritical angle of attack with the spoilers extended.



モスクワのシェレメチェボ空港近くで墜落した日本航空 D C8-62型ジェット旅客機。1972年 11月29日【P A N A = 時事】

03/12/1972 Tenerife, Spain, Convair 990, Spantax, Ground Collision, 155

08/12/1972 Chicago, USA, 737-222, United Airlines, Crashed on landing, 61

08/12/1972 Jalot, Pakistan, F27, Pakistan Int. Airlines, Ground collision, 33

13/12/1972 Moscow, USSR, Ilyushin 62, Aeroflot, Not Available, 174

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20/12/1972 Chicago, USA, Convair 880, Delta Airlines, Collision, 0

20/12/1972 Chicago, USA, DC-9-31, North Central Airlines, Collision, 9

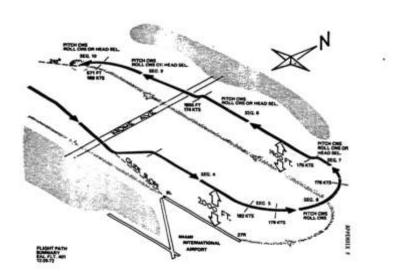
23/12/1972 Skaugum, Norway, F-28-1000, Braathens, SAFE, Hit high ground, 40

29/12/1972 Miami, Florida, USA, Lockheed L-1011, Eastern Airlines, Crashed on landing, CFIT, 101/176

EA401 departed New York-JFK at 21:20 EST for a flight to Miami. The flight was uneventful until the approach to Miami. After selecting gear down, the nosegear light didn't indicate 'down and locked'. Even after recycling the gear, the light still didn't illuminate. At 23:34 the crew called Miami Tower and were advised to climb to 2000 feet and hold. At 23:37 the captain instructed the second officer to enter the forward electronics bay, below the flight deck, to check visually the alignment of the nose gear indices. Meanwhile, the flight crew continued their attempts to free the nosegear position light lens from its retainer, without success. The second officer was directed to descend into the electronics bay again at 23:38 and the captain and first officer continued discussing the gear position light lens assembly and how it might have been reinserted incorrectly. At 23:40:38 a half-second C-chord sounded in the cockpit, indicating a +/-250 feet deviation from the selected altitude. None of the crewmembers commented on the warning and no action was taken. A little later the Eastern Airlines maintenance specialist, occupying the forward observer seat went into the electronics bay to assist the second officer with the operation of the nose wheel well light. At 23:41:40 Miami approach contacted the flight and granted the crew's request to turn around by clearing him for a left turn heading 180 degrees. At 23:42:05 the first officer suddenly realized that the altitude had dropped. Just seven seconds afterwards, while in a left bank of 28deg, the TriStar's no.1 engine struck the ground, followed by the left main gear. The aircraft disintegrated, scattering wreckage over an area of flat marshland, covering a 1600 ft x 300 ft area. Five crew members and 94 passengers died in the accident. Two passengers died more than seven days after the accident as a result of their injuries. PROBABLE CAUSE: "The failure of the fight crew to monitor the flight instruments during the final 4 minutes of flight, and to detect an unexpected descent soon enough to prevent impact with the ground. Preoccupation with a malfunction of the nose landing gear position indicating system distracted the crew's attention from the instruments and allowed the descent to go unnoticed."



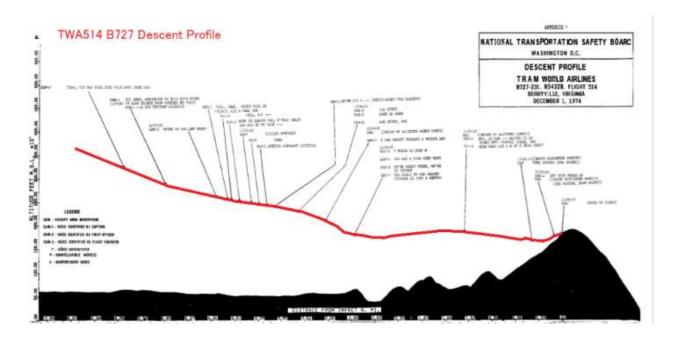
L-1011



- $22/01/1973 \quad Kano, Nigeria, 707, Royal \, Jordanian \, Airlines, Crashed \, on \, landing, 176$
- 21/02/1973 Sinai, Egypt, 727, Liban Airlines, Shot Down, 104
- 05/03/1973 Nantes, France, DC-9-32, Iberia, Mid air collision, 68
- 10/04/1973 Basle, Switzerland, Vickers, Vanguard 952, Invicta International Airways, Instrument Failure, 108
- 18/05/1973 Siberia, USSR, Tupolev 104A, Aeroflot, Bomb, 81
- 31/05/1973 New Dehli, India, 737-200, Indian Airlines, Crashed during landing, 48
- 03/06/1973 Goussainville, France, Tupolev 144, Aeroflot, Crashed during Air Show, 6
- 21/06/1973 Puerto Vallarta, Mexico, DC-9-15, Aeromexico, During landing, 27
- 11/07/1973 Orly, France, 707, Varig, Fire, 123
- 22/07/1973 Papeete, Tahiti, 707, Pan American World Airways, Crashed after Take-off, 78
- 31/07/1973 Boston, USA, DC-9-31, Delta Airlines, On landing, 89
- 13/08/1973 Corunna, Spain, Caravelle 10-R, AVIACO, Crashed during landing, 85
- 27/08/1973 Bogota, Columbia, Lockheed 188A, Aerovias, Navigation Error, CFIT, 42/36+6,
- $28/08/1973 \quad Los\ Angeles,\ USA,\ 707-331B,\ Transworld\ Airlines,\ Design\ Tolerances,\ 1$
- 30/09/1973 Sverdlovsk, USSR, Tupolev 104B, Aeroflot, Instrument Failure, 108
- 03/10/1973 Domodedovo, USSR, Tupolev 104B, Aeroflot, Electrical Failure, 119
- 23/10/1973 Rio de Janeiro, Brazil, YS-11, VASP, Rejected take-off, Runway Excurtion, 8/65
- 03/11/1973 Albuquerque, New Mexico, DC-10-10, National Airlines, Engine Failure, 1

- 03/11/1973 Boston, USA, 707-321C, Pan American World Airways, Onboard Fire, 3
- 20/12/1973 New Delhi, India, 707-330B, Lufthansa, Crashed on approach, 0
- 22/12/1973 Tetuan, Morocco, Caravelle, Sobelair (Belgium), Hit a mountain, 106
- 01/04/1974 Turin, Italy, F-28, Aerolineeitavia, Crashed during Take-off, 38
- 26/01/1974 Izmir, Turkey, F28-1000, THY, During take-off, 68
- 30/01/1974 Pago, Pago, 707-321B, Pan American World Airways, Crashed during landing, 97
- 03/03/1974 Orly, France, DC-10, Turkish Airlines, Loss of cargo door, 346
- 03/04/1974 Francistown, Botswana, DC-4, Werenla Air Services, Crashed on take-off, 77
- 13/03/1974 Bishop, California, USA, Convair 340/440, Sierra Pacific Airlines, Hit a mountain, 36
- 22/04/1974 Denpasar, Bali, 707-321-B, Pan American World Airways, Hit a mountain, 107
- 27/04/1974 Leningrad, USSR, Ilyushin 18, Aeroflot Engine Failure, fire, 118
- 08/06/1974 Monte San Isidoro, Colombia, Viscount 785D, Aerolineas, Not Available, 44
- 07/09/1974 Telukbetung, INA, F27, Garuda Indonesian Airlines, Crashed on landing, 31
- 08/09/1974 Ionian Sea, Greece, 707, TWA, Bomb, 88
- 11/09/1974 Charlotte, USA, DC-9-31, Eastern Airlines, Crashed during Approach, 72
- 15/09/1974 Phan Rang, 727, Air Vietnam, Hijacked, 76
- 20/11/1974 Nairobi, Kenya, 747, Lufthansa, Crashed at Take-off, 59
- 01/12/1974 Berryville, Virginia, USA, 727-231, Transworld Airlines, TW514, While Landing in Bad Weather, CFIT, 92/92

PROBABLE CAUSE: "The crew's decision to descend to 1800ft before the aircraft had reached the approach segment where that minimum altitude applied. The crew's decision to descend was a result of inadequacies and lack of clarity in the air traffic control procedures which led to a misunderstanding on the part of the pilots and of the controllers regarding each other's responsibilities during operations in terminal areas under instrument meteorological conditions. Nevertheless, the examination of the plan view of the approach chart should have disclosed to the captain that a minimum altitude of 1800ft was not a safe altitude. Contributing factors were: 1) The failure of the FAA to take timely action to resolve the confusion and misinterpretation of air traffic terminology although the Agency had been aware of the problem for several years; 2) The issuance of the approach clearance when the flight was 44 miles from the airport on an unpublished route without clearly defined minimum altitudes; and 3) Inadequate depiction of altitude restrictions on the profile view of the approach chart for the VOR/DME approach to runway 12 at Dulles Int. Airport."



04/12/1974 Maskeliya, Sri Lanka, DC-8-55F, Garuda, Instrument misreading, 191

22/12/1974 Maturin, Venezuela, DC-9-14, Aerovias, Crashed after take-off, 75

30/01/1975 Istanbul, Turkey, F28-1000, THY, Crashed during landing, 41

03/02/1975 Manila, Philippines, BAe 748, Philippine Airlines, Engine Failure, 32

27/02/1975 Sao Paulo, Brazil, Bandeirante, VASP, On take-off, 15

24/06/1975 JFK Airport, NY, USA, 727-225, Eastern Airlines, Wind Sheer, 113

03/08/1975 Agadir, Morocco, 707-321C, Royal Jordanian Airlines, Hit a mountain, 188

07/08/1975 Denver, Colorado, USA, 727-224, Continental Airlines, Crashed at Take-off, 15 Seriously injured

20/08/1975 Damascus, Ilyushin 62, Ceskoslovenske Aerolinie, Crashed during Approach, 126

24/08/1975 Palenbang, INA, F28-1000, Garuda Indonesian Airways, Crashed on landing, 25

30/10/1975 Prague, Czechoslovakia, DC-9-32, Inex Adria Aviopromet, Crashed during Approach, CFIT, 75

12/11/1975 Raleigh, North Carolina, USA, 727, Eastern Airlines, On ILS Landing, 9 Seriously Injured

12/11/1975 JFK, New York, USA, DC-10-30, Overseas National Airways, Struck by Birds at Take-off, 2 Seriously Injured

16/12/1975 Anchorage, Alaska, USA, 747-246, Japan Airlines, Skided off Taxiway, 2 seriously Injured. 0/121

The aircraft slid off the north side of the east-west taxiway of Anchorage International Airport while taxiing out for a takeoff on runway 06R. The Boeing weathercocked about 70° to the left and slid backward down a snow-covered embankment with an average slope of -13°. The aircraft came to rest on a heading of 150° on a service road approximately 250 feet from, and 50 feet below, the taxiway surface. PROBABLE CAUSE: "The loss of directional control during taxi as a result of ice on the taxiway and strong, direct crosswinds. Contributing to the accident were (1) the captain's decision to take off from runway 6R after receiving reports that taxiing conditions were deteriorating, and (2) failure of airport management to anticipate predictable unsafe icing conditions on the airport. This failure to anticipate these conditions resulted in delayed and insufficient preventive action."



JAPAN AIR LINES PLANE SLID OFF TAXI-WAY AT ANCHORAGE, ALASKA heavy winds and a slippery payement were blamed for the accident

## Plane Blown Off Runway

ANCHORAGE, Alaska (AP) — A Japan Atrines 747 jumbo jot, buffeted by stiff winds gusting to 30 knots, blew off an icy taxiway at Anchorage International Airport and spun into a gully at least 80 feet deep, officials said.

said.
A spokesman at an Anchorage hospital said
Capt. Noboru Kaneda and one passenger
received emergency room treatment.
Neither were reported seriously injured.
Minor bruises and cuts were reported by
others among the 101 passengers and 20 crew
members aboard the Tokyo-bound jet. They
were given emergency first aid treatment at
the airport. the airport.

The passengers were evacuated by emergency clute, bundled into blankets and

lodged in an Anchorage hotel for the might, JAL flight 422, originating in Paris, had flown to Anchorage from London, Airport Police Chief Juhn Hynes said the

Airport Police Chief John Hynes said the \$35-milion plane probably would have to be cut apart to be removed from the gally Officials said the plane spun into the gally north of the taxiway as the wind caught it. The plane awang like a pendulum, backing tail first down the ditch and up the far side, then plangang nose first to the bottom again as it came to rest.

There was no fire, but George LaRine, Alaska's schief of airport operations, said an

Alaska's chief of airport operations, said an emergency crew and fire truck would stay with the plane, which was leaking highly flammable hydraulic fuel from its landing

struts.
"The aircraft canted to one side," said Capt. David Allan, a tanker ship captain on route from London to Tokyo who was aboard the plane. "It careesed backward down an embankment and collapsed. It appeared to slither around on one tire. The runway was blee as jee runk out here."

like an ice rink out there.

The plane had not started its takeoff when the accident occurred.

His accident occurred.

Hynes said the plane's fusilage was cracked in three places and the turbine on each wing was bent by the force of its slide.

Early this year, the International Airline Phots Association cited Anchorage and Los Angeles as the two most hazardous airports in the Umted States

01/01/1976 Northeastern Saudi Arabia, 727, Middle East Airlines, Bomb, 81

22/01/1976 Chapeco, Brazil, Bandeirante 110C, Transbrasil, during take-off, 7

06/03/1976 Yerevan, USSR, Ilyushin 18D, Aeroflot, Electrical failure, 127

05/04/1976 Ketchikan, Alaska, 727, Alaska Airlines, Runway overrun, 1

27/04/1976 St Thomas, Virgin Islands, 727-95, American Airlines, Crashed on landing, 37

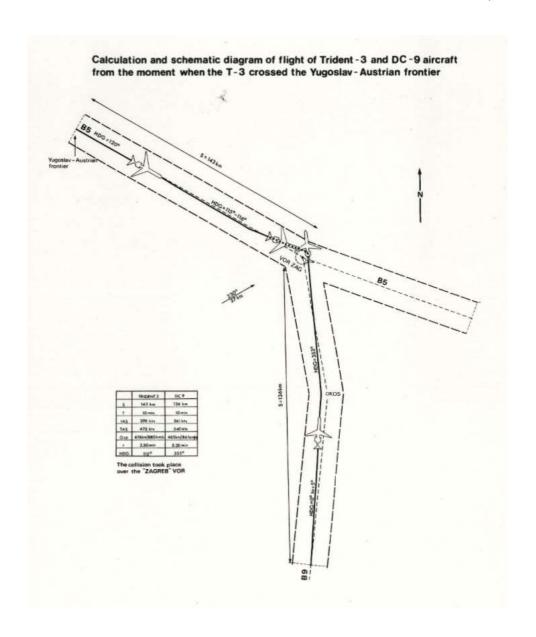
09/09/1976 Sochi, USSR, Antonov 24, Aeroflot, Collision, 90

09/09/1976 Sochi, USSR, Yakovlev 40, Aeroflot Collision, 90

10/09/1976 Zagreb, Yugoslavia (Croatia), Trident, British European Airways, Mid-air Collision, 54 pax + 9 crew/63

10/09/1976 Zagreb, Yugoslavia (Croatia), DC-9, INEX Adrian (Yugoslavian), Mid-air Collision, 108 pax + 5 crew/113 Hawker Siddeley HS-121 Trident 3B operated by British Airways as flight BE476 and a McDonnell Douglas DC-9-32, operated by Inex-

Adria Aviopromet, were destroyed when both aircraft crashed near Vrobec following a mid-air collision. The collision was the result of a procedural error on the part of Zagreb air traffic controllers. All 176 on board both aircraft were killed.



19/09/1976 Karatepe Mts, Turkey, 727-2F2, Turk Hava Yollari, Hit a mountain, 154

06/10/1976~ Barbados, USA, DC-8-40, Cubana, Bomb on board, 73

12/10/1976 Bombay, India, Caravelle SE-210, Indian Airlines, Engine failure, 95

13/10/1976 Santa Cruz, Bolivia, 707-131F, Aereo Boliviano, Hit a Building, 91

16/11/1976 Denver, Colorado, USA, DC-9-14, Texas Int. Airlines, Crashed on Take-off, 0

23/11/1976 Kozani, Greece, YS11, Olympic Airways, Crashed during approach, 50

25/12/1976 Bangkok, Thailand, 707-366C, Egyptair, Crashed on landing, 62

13/01/1977 Alma Ata, Tupolev 104A, Aeroflot, Engine fire, 96

15/01/1977 Stockholm, Sweden, VC-8, Linjeflyg, Tailplane Icing, 22

15/02/1977 Mineralnyye, USSR, Ilyushin 18V, Aeroflot, Crashed on landing, 77

27/03/1977 Tenerife, Canary Island - Spain, 747, Pan Am, Collision on runway, 335/396

27/03/1977 Tenerife, Canary Island - Spain, 747, KLM, Collision on runway, 248/248







KLM B747, PH-BUF, KL4805, took off from Amsterdam Schipol Airport at 0900L on March 27, 1977, en route to Las Palmas, Canary Islands.

Pan Am B747, N73PA, PA1736, left Los Angeles International Airport at 1729L on March 26, 1977, arriving at New York JFK Airport at 0117L on March 27, 1977. After refueling and a crew change, the aircraft departed for Las Palmas, Canary Islands at 0242L.

"The KLM aircraft had taken off without take-off clearance, in the absolute conviction that this clearance had been obtained, which was the result of a misunderstanding between the tower and the KLM aircraft.

This misunderstanding had arisen from the mutual use of usual terminology which, however, gave rise to misinterpretation. In combination with a number of other coinciding circumstances, the premature take-off of the KLM aircraft resulted in a collision with the Pan Am aircraft, because the latter was still on the runway since it had missed the correct intersection."

04/04/1977 New Hope, Georgia, USA, DC-9-31, Southern Airways, Engine Failure, 9

 $16/05/1977 \quad \text{Pan-AM Building, New York, USA, Sikorsky S-61L, New York Airways, Landing Gear Failure, } 5$ 

27/05/1977 Havana, Cuba, Ilyushin 62, Aeroflot, Not Available, 62

27/09/1977 Kuala Lumpur, Malaysia, DC-8-60, Japan Airlines JL715, Crashed on landing, CFIT, 34/79

The aircraft struck a 300 feet hill, 4 miles short of the runway while on a VOR approach to runway 15 at Kuala Lumpur Subang International Airport (KUL), Malaysia. The aircraft had descended below MDA of 750 feet.

Probable Cause:

The accident was caused by the captain descending below minimum descent altitude without having the runway in sight, and continuing the descent until the aircraft struck terrain four nautical miles short of the runway threshold. A subsidiary contributory factor was insufficient monitoring of the aircraft's flight path by the captain under the adverse weather conditions with several aircraft in the holding pattern awaiting their turn for approach and, more importantly, the co-pilot's failure to challenge the captain's breach of company regulations.



JAL715 crashed short of Kuala Lumpur in 1977

03/11/1977 Belgrade, Yugoslavia, 747, El Al, Decompression, 1

19/11/1977 Funchal, Portugal, 727-282, Air Portugal, Crashed on landing, 131

04/12/1977 Johore Strait, 737-2H6, Malaysian Airlines, System Explosion, 100

13/12/1977 Evansville, USA, DC-3, National Jet Services, Crashed during take-off, 29

01/01/1978 Bandra, India, 747-237B, Air India, Instrument Failure, 213

11/02/1978 Cranbrook, Canada, 737-275, Pacific Western Airlines, Reverse Thrusters Failed, 42

 $01/03/1978 \quad Los \, Angeles, \, USA, \, DC\text{-}10, \, Continental \, Airlines, \, Tire \, burst, \, 2$ 

01/03/1978 Kano, Nigeria, F28-1000, Nigeria Airways, Mid air collision, 18

02/03/1978 Bombay, India, 747-200, Air India, Instrument failure, 213

 $20/04/1978 \quad \text{Kem, USSR, } 707\text{-}300, \text{Korean Air Lines KL } 902\text{--}HL7429, \text{shot by USSR fighter --} Forced landing, } 20/04/1978 \quad \text{Kem, USSR, } 707\text{-}300, \text{Korean Air Lines KL } 902\text{--}HL7429, \text{shot by USSR fighter --} Forced landing, } 20/04/1978 \quad \text{Moreover} 10/1000 \quad \text{Moreover} 10/10000 \quad \text{Moreover} 10/1000 \quad \text{Moreover} 10/10000 \quad \text{Moreover} 10/1000 \quad \text{Moreover} 10/10000 \quad \text{Moreover} 10/100$ 

08/05/1978 Pensacola, USA, 727-235, National Airlines, Crashed on landing, 3

26/06/1978 Toronto, Canada, DC-9-32, Air Canada, Tire Burst, 2

18/08/1978 Manila, Philippines, BAC 111, Philippine Airlines, Bomb, 1

03/09/1978 Zimbabwe, Viscount, Air Rhodesia, Shot Down, 38

25/09/1978 San Diego, USA, 727, Pacific Southwest Airlines, Collision with Cessna 172, 144

PSA Flight 182 (a scheduled passenger flight from Sacramento to San Diego via Los Angeles), cleared for a runway 27 approach, was advised by the approach controller that there was traffic in front of them. The PSA crew reported the traffic in sight immediately thereafter and the PSA flight was instructed to maintain visual separation and contact Lindbergh tower. Lindbergh tower again warned the PSA flight crew of "traffic, twelve o'clock, one mile, a Cessna". The crew had lost track of the Cessna and radioed back: "think he's passing off to our right". The flight crew still weren't sure of the actual position of the Cessna.

At 09:01:28 a conflict alert warning began in the San Diego Approach Control facility, indicating a collision hazard between PSA182 and the Cessna. At 09:01:47 the approach controller warned the Cessna pilot of traffic in the vicinity. At the same moment both aircraft collided. Flight 182 was descending and overtaking the Cessna, which was climbing in a wings level attitude. The Cessna broke up immediately and exploded after colliding with the Boeing's right wing. The Boeing entered a shallow right descending turn and crashed into a residential area.

- 15/11/1978 Colombo, Sri Lanka, DC-8, Icelandic Airways, Crashed on landing, 183
- 23/12/1978 Palermo, Italy, DC-9-32, Alitalia, Crashed into sea, 115
- 28/12/1978 Portland, USA, DC-8-61, United Airlines, No Fuel During Approach, 18
- 30/01/1979 Boeing 707-323C, PP-VLU, VARIG967 Cargo, en route from Tokyo-Narita to Rio de Janeiro-Galeão via Los Angeles went missing over the Pacific Ocean some 30 minutes (200 km ENE) from Tokyo. Causes are unknown since the wreck was never found. Among other cargo, the aircraft was carrying 153 paintings by the Japanese Brazilian artist Manabu Mabe, worth USD 1.24 million. The aircraft was flown by Gilberto Araújo da Silva, who was also the captain and survivor of the accident with Flight 820 six years earlier. The crew of 6 died and their bodies were never recovered.
- 12/02/1979 Kariba Corge, Zimbabwe, VC-7, Air Rhodesia, Shot Down, 59
- 12/02/1979 Clarksburg, USA, Mohawk 299, Allegheny Airlines, During take-off, 2
- 14/03/1979 Doha Airport, Qatar, 727-2D3, Royal Jordanian Airlines, On Landing, 44
- 17/03/1979 Moscow-Vnukovo, USSR, Tupolev, Aeroflot, Not Available, 90
- 25/05/1979 Chicago O'Hare, USA, DC-10-10, American Airlines, Engine fell off, 273
- 30/05/1979 Rockland, Maine, USA, DeHavilland, Downeast Airlines, On approach, 17
- 11/07/1979 Medan, INA, F28-1000, Garuda Indonesian Airways, Hit a mountain, 61
- 11/08/1979 Donetsk, USSR, Tupolev 134A, Aeroflot, Collision, 178
- 11/08/1979 Donetsk, USSR, Tupolev 134A, Aeroflot, Collision, 178
- 14/09/1979 Sarroch, Italy, DC-9-32, Aerotransporti, Hit a mountain, 31
- 07/10/1979 Athens, Greece, DC-8-60, Swissair On landing, 14
- 31/10/1979 Mexico City, Mexico, DC-10-10, Western Airlines, Struck vehicle on (wrong) rwy at landing, 72
- 26/11/1979 Jeddah, Saudi Arabia, 707-340C, Pakistan Int. Airlines, On board fire, 156
- 28/11/1979 Mount Erebus, Antarctica, DC-10, Air New Zealand, Hit a mountain, CFIT, 257
- 23/12/1979 Ankara, Turkey, F28-1000, THY, Structural failure, 39

### 1980

- 21/01/1980 Elburz Mts, 727-86, Iran Air, Hit high Ground, 128
- 27/02/1980 Manila, Philippines, 707-300, China Airlines, Crashed on landing, 2
- 14/03/1980 Warsaw, Poland, Ilyushin 62, Polskie, Engine Failure, 87
- 12/04/1980 Florianopolis, Brazil, 727-27C, Transbrasil, Hit high ground, 55
- 25/04/1980 Tenerife, Spain, 727-64, Dan-Air Services, Hit a mountain, CFIT due miss-comm, 146
- 27/04/1980 Bangkok, Thailand, BAe-748, Thai Airways, On approach, 44
- 10/05/1980 Rampur, India, 737-200, Indian Airlines, Turbulance, 2
- 27/06/1980 Ustica, Italy, DC-9-15, Aerotransporti, Struck by missile, 81
- 07/07/1980 Alma Ata, Tupolev 154B, China Northwest Airlines, Wind sheer, 163
- 19/08/1980 Riyadh Airport, Lockheed Tristar, Saudia, Fire, 301
- 19/11/1980 Seoul, Korea, 747-200, Korean Air Lines, On landing, 15+
- 23/12/1980 Arabian Gulf, L1011-200, Saudia, Tyre Burst, 2
- 02/02/1981 Leningrad, USSR, Tupolev 134, Aeroflot, Not Available, 73

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27/07/1981 Chihuahua, Mexico, DC-9-32, Aeromexico, Crash landing, 50
22/08/1981 Taipei, Taiwan, 737-222, Far Eastern Air Transport, Structural Failure, 110
07/10/1981 Moerdijk, Netherlands, F28-4000, KLM, Structural failure, 17
09/11/1981 Acapluco, Mexico, DC-9-32, Aeromexico, Pressurization failure, 18
16/11/1981 Norilsk, USSR, Tupolev 154-B2, Aeroflot, During Landing, 99
01/12/1981 Ajaccio, Corsica, DC-9-81, Inex Adria Aviopromet, Hit a mountain, 180
13/01/1982 Washington, USA, 737-222, Air Florida, Ice on Wings, 74
23/01/1982 Boston, USA, DC-10-30, World Airways, Crashed before Runway, 2
            DC-10-30CF, N113WA, with 12 crew and 200 pax, touched down 2,800 ft (853 m) beyond the displaced threshold of rwy 15R at Boston-
            Logan Intl Airport. During the landing roll the aircraft veered to avoid the approach light pier at the departure end of the rwy and slid into
            the shallow water of Boston Harbour. The nose section separated from the forward fuselage as the aircraft dropped from the shore
            embankment. The NTSB determined that the accident resulted from the minimal braking effectiveness on the ice-covered runway. Two
            pax were not found and were presumed dead. The other people on board evacuated the aircraft safely but with some injuries.
09/02/1982 Haneda Airport short final, Tokyo Bay, Japan, DC-8-61, JA8061, Japan Airlines, Pilot mental illness, 24/174 (166pax+8crew)
20/03/1982 Branti Airport, INA, F28-1000, Garuda Indonesian Airways, Crashed on landing, 26
26/04/1982 Mt. Yangsu, Hawker Siddeley Trident, CAAC, Hit a mountain, 112
25/05/1982 Brasilia, Brazil, 737-200, VASP, on landing, 2
08/06/1982 Fortaleza, Brazil, 727-212, VASP, during approach, 135
21/06/1982 Bombay, India, 707-400, Air India, Stalled at Take-off, 17
24/06/1982 Jakarta, INA, BA B747-236B, G-BDXH, 262 SOB, en-route KUL-PER, all 4 engines failed. Crew managed to restart
            engines,
            a 3-engined emergency landing was carried out at Jakarta Kemayoran airport. Volcano ashes, 0/247+15
28/06/1982 Belorussia, USSR, Yakoviev 42, Aeroflot, Mechanical Failure, 132
06/07/1982 Moscow, USSR, Ilyushin 62M, Aeroflot, Systems Failure, 90
09/07/1982 New Orleans, USA, 727-235, Pan AM, Storm, 137
11/08/1982 Pacific Ocean, 747, Pan American World Airways, Bomb, 1
16/08/1982 Hong Kong, 747, China Airlines, Inflight Turbulence, 2
13/09/1982 Malaga, Spain, DC-10-30CF, Spantax, During Take-off, 51
09/01/1983 Minnesota, USA, Convair 580-11-A, Republic Airlines, Not Available, 1
16/01/1983 Ankara, Turkey, 727-2F2, THY, Crashed on landing, 47
11/03/1983 Barquisimeto, Venezuela, DC-9-32, Avensa, on landing, 23
02/06/1983 Tanjung karang, INA, F28-1000, Garuda Indonesian Airways, Crashed on take-off, 61
02/06/1983 Cincinnati, USA, DC-9-32, Air Canada, on board fire, 23
11/07/1983 Cuenca, Ecuador, 737-2V2, Tame, Hit a mountain, 118
30/08/1983 Alma Ata, Tupolev 134A, Aeroflot, Crashed on landing, 90
01/09/1983 Sakhalin Island, USSR, 747-230B, Korean Airlines, Shot Down by Russian fighter, 269
23/09/1983 Abu Dhabi, UAE, 737-2P6, Gulf Air, Bomb, 112
08/11/1983 Lubango, Angola, 737-2M2, Angola Airlines, Shot Down: navigation error, 130
27/11/1983 Madrid, Spain, 747-283B, Avianca, Ground Collision, CFIT: Ignored GPWS, 181=158pax + 19crew + 4other
28/11/1983 Enugu, Nigeria, F28-2000, Nigeria Airways, Crashed on approach, 53
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07/12/1983 Madrid, Spain, 727-256, Iberia, Collision, due rwy incursion of Aviaco DC-9, 42 (altogether: 42+51) 07/12/1983 Madrid, Spain, DC-9-32, Aviaco, Collision, due Aviaco rwy incursion, 51 (altogether: 42+51)

27/10/1984 Near Kabul, Afghanistan, II76, Soviet AF Cargo, Shot down on approach by a shoulder-fired 'Strela' SAM. 11/11

30/08/1984 Douala, Cameroon, 737-2H7C, Cameroon Airlines, Engine Failure, 2 11/10/1984 Omsk, USSR, Tuplev 154B-1, Aeroflot, Hit Trucks on Runway, 178

28/10/1984 Kabul, Afghanistan, Antonov 22, Aeroflot, Mid Air Collision, 240

06/12/1984 Jacksonville, USA, Embraer 110P1, Boston Airlines, Systems Failure, 13

23/12/1984 Kranoyarsk, USSR, Tupolev 154B, Aeroflot, Engine Failure, 117

01/01/1985 Bolivia, 727-225, Eastern Airlines, Hit a mountain due to nav error, CFIT, GPWS not equipped, 29

19/01/1985 Havana, Cuba, Ilyushin 18D, Cubana, Engine failure, 41,

21/01/1985 Reno, USA, Lockheed Electra 188A, Galaxy Airlines, Crashed at Take-off, 64

19/02/1985 San Francisco, USA, 747-SP, China Airlines, Engine Failure, 2 Seriously Injured

19/02/1985 Bilbau, Spain, 727-256, Iberia, Hit high ground due to misunderstanding of Altitude Alert System, 148

05/03/1985 Ukraine, USSR, Tupolev 134A, Aeroflot, Mid Air Collision, 94

28/03/1985 Florencia, Colombia, F-28, Satena, Hit a mountain, 52

15/04/1985 Phuket, Thailand, 737-200, Thai Airways, Hit high ground, 11

28/04/1985 Maniheska, MD-83, Airtours, Structural Failure, 0

14/06/1985 Athens, Greece, 727, Trans World Airlines, Hijacking, 1

23/06/1985 Irish Coast, 747-200, Air India, Bomb, 329

10/07/1985 Uzbekistan, USSR, Tupolev 154B-2, Aeroflot, Uncontrolled descent, 200

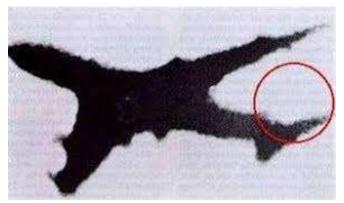
02/08/1985 Dallas, USA, Locheed TriStar, Delta Air Lines, 191 Wind shear on final, 135

### 12/08/1985 Mt. Osutaka, Japan, 747 SR, Japan Airlines, JL123, Structural Failure, 520/524

**Probable Cause:** It is estimated that this accident was caused by deterioration of flying quality and loss of primary flight control functions due to rupture of the aft pressure bulkhead of the aircraft, and the subsequent ruptures of a part of the fuselage tail, vertical fin and hydraulic flight control systems.

The reason why the aft pressure bulkhead was ruptured in flight is estimated to be that the strength of the said bulkhead was reduced due to fatigue cracks propagating at the spliced portion of the bulkhead's webs to the extent that it became unable to endure the cabin pressure in flight at that time.

The initiation and propagation of the fatigue cracks are attributable to the improper repairs of the said bulkhead conducted in 1978, and it is estimated that the fatigue cracks having not be found in the later maintenance inspection is contributive to their propagation leading to the rupture of the said bulkhead."





B747 SR

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22/08/1985 Manchester, UK, 737-236, British Airtours, Engine Failure, 55
06/09/1985 Milwaukee, USA, DC-9-14, Midwest Express Airlines, Engine Failure, 31
24/11/1985 Valletta, Malta, 737-266, Egyptair, Hijacking, 60
12/12/1985 Gander, Canada, DC-8-163, Arrow Airways, Not Available, 248
18/01/1986 Peten, Guatemala, Caravelle, Aerovias de Guatemala, On Approach, 94
28/01/1986 Sao Paulo, Brazil, 737-200, VASP, On take-off, 1
16/02/1986 Makung, China, 737-200, China Airlines, Crashed on landing, 13
02/03/1986 Bugulma, USSR, Antonov 24, Aeroflot, Engine Failure, 38
31/03/1986 Maravatio, Mexico, 727-264, Mexicana, Tire burst, 167
02/04/1986 Athens, Greece, 727, TWA, Bomb, 4
03/05/1986 Colombo, Sri Lanka, TriStar, Air Lanka, Bomb, 20
31/08/1986 Cerritos, California, DC-9-32, Aeromexico, Mid-Air Collision/PA28, 64/64 +15 =82
            Probable Cause: "The limitations of the ATC system to provide collision protection, through both ATC procedures and automated
            redundancy. Factors contributing to the accident were (1) the inadvertent and unauthorized entry of the PA-28 into the Los Angeles Terminal
            Control Area and (2) the limitations of the "see and avoid" concept to ensure traffic separation under the conditions of the conflict."
20/10/1986 Kuybyshev, USSR, Tupolev 134A, Aeroflot, On Landing, 70
23/10/1986 Peshawar, Pakistan, F-28, Pakistan Int. Airlines, Ground collision due Undershoot, 13/54
26/10/1986 Off Tosa, Japan, A-300, TG620, Grenade explosion
            Airbus A300 from Manila to Osaka with 239 occupants; while cruising at 33,000 ft over Tosa Bay off the coast of Japan, an explosion
            occurred in the aft lavatory. The blast caused a rapid decompression and damaged two of the plane's hydraulic systems. The captain and
            co-pilot initiated an emergency descent and managed to land heavily damaged aircraft safely at Osaka with no fatalities. The cause of the
            blast was a hand grenade a passenger was attempting to smuggle into Japan that exploded in the lavatory.
12/11/1986 Leninakan, USSR, Ilyushin 76, Aeroflot, Collision, 78
18/11/1986 JAL B747 Cargo CDG ANC reported close encounter with UFO in Anchorage ACC area.
25/12/1986 Arar, Saudi Arabia, 737-270C, Iraqi Airways, Hijacked, 63
03/01/1987 Abidjan, Ivory Coast, 707-300, Varig/Brazil, Explosion in Turbine, 51
14/02/1987 Mexico, 707-323B, Ports of Call, Not Available, 1
04/03/1987 Detroit, USA, CASA 212-CC, Northwest Airlines, On landing, 9
04/04/1987 Medan, INA, DC-9-32, Garuda Indonesian Airways, Crashed on landing, 27
09/05/1987 Warszawa, Poland, Ilyushin 62M, LOT, Engine Failure, 183
26/06/1987 Baguio, Philippines, BAe 748, Philippine Airlines, Hit high ground, 50
31/07/1987 Mexico City, Mexico, Belize Air International, B377 crashed after tkof, below tkof min. 1/12 +57
04/08/1987 Calama, Chile, 737-200, LAN Chile, Landing gear failure, 1
16/08/1987 Detroit, USA, DC-9-82, Northwest Airlines, Engine Failure, 154
31/08/1987 Phuket, Thailand, 737-2P5, Thai Airways, Crashed into sea, 83
15/10/1987 Mt.Crezzo, Italy, ATR-42-312, ATI, Icing, 37
15/11/1987 Denver, USA, DC-9-14, Continental Airlines, Snow Storm, 28
28/11/1987 Indian Ocean, 747-244B, South African Airways, Onboard fire, 159
29/11/1987 Andaman Sea, 707-3B5C, Korean Air, Bomb, Sabotage, 115
07/12/1987 San Luis, USA, Bae 146-200, Pacific Southwest, Pilot's Shot, 43
13/12/1987 Mindanao, Philippines, Shorts 360, Philippine Airlines PR443, Hit a mountain, 15
02/01/1988 Izmir, Turkey, 737-230, Condor, crashed on approach, wrong use of NAVaids, CFIT, 16/16
18/01/1988 Chongqing, China, Ilyushin 18D, CAAC, Engine Failure, 108
19/01/1988 Durango, USA, Fairchild Metro, Trans-Colorado, Crashed on approach, 8
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19/02/1988 Cary, USA, Fairchild Metro, AVAir, Ground collision, 12

01/03/1988 Not Available, Not Available, BOP, Air Bomb, 17

04/03/1988 Machault, France, Fokker 27, TAT, Hit power lines, 23

17/03/1988 Cucuta, Colombia, 727-21, Avianca, Hit high ground, 143

28/04/1988 Maui, Hawaii, 737-297 N73711, Aloha Airlines Flt AQ243, Structural, 1

12/06/1988 Posadas, Argentina, DC-9-81, Austral Lineas, Crashed on approach, 22

26/06/1988 Mulhouse, France, Airbus A-320, Chartered, Pilot Error, 4

03/07/1988 Straits of Hormuz, Airbus A-300, Iran Air, flt 655, Shot Down by USS Vincennes, 290/290

Iran Air Flight 655, a scheduled passenger flight from Tehran to Dubai, was shot down by an SM-2MR surface-to-air missile fired from USS Vincennes, a guided missile cruiser of the United States Navy. The aircraft, an Airbus A300, was destroyed and all 290 people on board including 66 children were killed. The jet was hit while flying over Iran's territorial waters in the Persian Gulf along the flight's usual route. Vincennes had entered Iranian territorial waters after one of its helicopters drew warning fire from Iranian speedboats operating within Iranian territorial limits. In 1996, the United States and Iran reached a settlement at the International Court of Justice which included the statement "...the United States recognized the aerial incident of 3 July 1988 as a terrible human tragedy and expressed deep regret over the loss of lives caused by the incident...". As part of the settlement, even though the United States did not admit legal liability or formally apologize to Iran, they still agreed to pay US\$61.8 million on an ex gratia basis, amounting to \$213,103.45 per passenger, in compensation to the families of the Iranian victims.



The plane, an Airbus A300 (registered as EP-IBU), flown by 37-year-old Captain Mohsen Rezaian, a veteran pilot with 7,000 hours of flight time, left Bandar Abbas at 10:17 Iran time (UTC +03:30), 27 minutes after its scheduled departure time. It should have been a 28-minute flight. After takeoff, it was directed by the Bandar Abbas tower to turn on its transponder and proceed over the Persian Gulf. The flight was assigned routinely to commercial air corridor Amber 59, a 20-mile (32 km)-wide lane on a direct line to Dubai airport. The short distance made for a simple flight pattern: climb to 14,000 feet (4,300 m), cruise, and descend into Dubai. The airliner was transmitting the correct transponder "squawk" code typical of a civilian aircraft and maintained radio contact in English with appropriate air traffic control facilities. On the morning of 3 July, Vincennes was passing through the Strait of Hormuz returning from an escort duty. A helicopter from USS Vincennes reported that it received small arms fire from Iranian patrol vessels as it observed from high altitude. The cruiser moved to engage the Iranian vessels, in the course of which they all violated Omani waters and left after being challenged and ordered to leave by a Royal Navy of Oman warship. Vincennes then pursued the Iranian gunboats, entering Iranian territorial waters to open fire. USS Sides and USS Elmer Montgomery were nearby. Thus, Vincennes was in Iranian territorial waters at the time of the incident, as admitted by the U.S. government in legal briefs and publicly by Chairman of the Joint Chiefs of Staff, Admiral William J. Crowe, on Nightline. Admiral Crowe denied a U.S. government coverup of the incident and claimed that Vincennes's helicopter was over international waters initially, when the gunboats first fired upon it.

Contrary to the accounts of various Vincennes crew members, the ship's Aegis Combat System recorded that the airliner was climbing at the time and its radio transmitter was "squawking" on only the "Mode III" civilian mode, and not on the military "Mode II." After receiving no response to multiple radio challenges, and assuming the airliner was an Iranian F-14 Tomcat (capable of carrying unguided bombs since 1985) diving into an attack profile, Vincennes fired two SM-2MR surface-to-air missiles, one of which hit the airliner. The plane disintegrated immediately and crashed into the water soon after. None of the 290 passengers and crew on board survived. Throughout its final flight, Flight 655 was in radio contact with various air traffic control services using standard civil aviation frequencies, and had spoken in English to Bandar Abbas Approach Control seconds before Vincennes launched its missiles. According to the U.S. Navy investigation, Vincennes at that time had no equipment suitable for monitoring civil aviation frequencies, other than the International Air Distress frequency.

Subsequently U.S. Navy warships in the area were equipped with dialable VHF radios, and access to flight plan information was sought, to better track commercial airliners. The official ICAO report stated that ten attempts were made to contact Iran Air flight 655: seven on military frequencies and three on commercial frequencies, addressed to an "unidentified Iranian aircraft" and giving its speed as 350 knots (650 km/h), which was the ground speed of the aircraft their radar reported. Flight 655's crew, however, would have seen a speed of 300 knots (560 km/h) on their cockpit instruments, which was their indicated airspeed, possibly leading them to conclude that the Vincennes was talking to another aircraft. Both Sides and Vincennes tried contacting flight 655 on several civilian and military frequencies. International investigations concluded that the Flight 655's crew assumed that the three calls that they received before the missiles struck must have been directed at an Iranian



31/08/1988 Dallas, Texas, 727-232, Delta Air Lines, Crashed at Take-off, 14

15/09/1988 Bahir Dar, Ethiopia, 737-230, Ethiopian Airways, Engine damage, 35

19/10/1988 Ahmedabad, India, 737-2A8, Indian Airlines, On Approach, 124

25/10/1988 Juliaca, Peru, F-28, Aero Peru, On Take-off, 12

21/12/1988 Lockerbie, UK, 747-121, Pan Am, Bomb, 270:259/259+11grd

Pan Am Flight 103 was a regularly scheduled Pan Am transatlantic flight from Frankfurt to Detroit via London and New York. On 21 December 1988, N739PA, the aircraft operating the transatlantic leg of the route, was destroyed by a bomb, killing all 243 passengers and 16 crew in what became known as the Lockerbie bombing. Large sections of the aircraft crashed onto residential areas of Lockerbie, Scotland, killing 11 more people on the ground.



PROBABLE CAUSE: "The in-flight disintegration of the aircraft was caused by the detonation of an improvised explosive device located in a baggage container positioned on the left side of the forward cargo hold at aircraft station 700."

08/01/1989 Kegworth, UK, 737-400, British Midland, Engine Fire, crashed at M-1 road near runway end, Kegworth air disaster, The crew mistakenly shut down the functioning engine. **Human Factors involved**. 47/118

08/02/1989 Azores, Portugal, 707-331B, Independant Air, Mountain Collision, CFIT, ATC error, 144/144

Flight IDN 1851, a B707, departed Bergamo, Italy (BGY) at 10:04 UTC for a flight to Punta Cana, Dominican Republic (PUJ) via Santa Maria, Azores (SMA). At 13:56:47 Santa Maria Tower cleared the flight to descend to 3000 feet for a runway 19 ILS approach: "Independent Air one eight five one roger reclear to three thousand feet on QNH one zero two seven and runway will be one niner." In that transmission, the trainee controller had transmitted an incorrect QNH that was 9 hPa too high. The actual QNH was 1018.7 hPa.

After a brief pause the message resumed at 13:56:59: "expect ILS approach runway one niner report reaching three thousand." This transmission was not recorded on the voice recorder of Flight 1851, probably because the first officer keyed his mike and read back: "We're recleared to 2,000 feet and ah ...." The first officer paused from 13:57:02 to 13:57:04, then unkeyed the mike momentarily. This transmission was not recorded on the ATS tapes. In the cockpit, the first officer questioned aloud the QNH value, but the captain agreed that the first officer had correctly understood the controller.

After being cleared for the ILS approach the crew failed to accomplish an approach briefing, which would have included a review of the approach plate and minimum safe altitude. If the approach plate had been properly studied, they would have noticed that the minimum safe altitude was 3,000 feet and not 2,000 feet, as it had been understood, and they would have noticed the existence and elevation of Pico Alto.

At 14:06, the flight was 7.5 nm from the point of impact, and beginning to level at 2,000 feet (610 meters) in light turbulence at 250 KIAS. At 14:07, the flight was over Santa Barbara and entering clouds at approximately 700 feet (213 meters) AGL in heavy turbulence at 223 KIAS. At 14:07:52, the captain said, "Can't keep this SOB thing straight up and down". At approximately 14:08, the radio altimeter began to whine, followed by the GPWS alarm as the aircraft began to climb because of turbulence, but there was no reaction on the part of the flight crew. At 14:08:12, the aircraft was level when it impacted the ridge of the mountain. It collided with a rock wall on the side of a road at the mountain top at an altitude of approximately 1,795 feet (547 meters) AGL. Transmission by the Santa Maria Aerodrome Control Tower of a QNH value 9 hPa higher than the actual value, which put the aircraft at an actual altitude 240ft below that indicated on board.

19/02/1989 Kuala Lumpur, Malaysia, Flying Tiger B747Cargo, crashed 12 km (7.5 mls) from Kuala Lumpur Subang Airport (KUL), 4/4

The Boeing, named "Thomas Haywood", was less than half loaded with textiles, computer software and mail when it departed Singapore.

Approaching Kuala Lumpur, the crew were cleared to route direct to the Kayell (KL) beacon for a runway 33 approach. While on the NDB approach, the crew were cleared to "...descend two four zero zero..." which was interpreted by the crew as "...to 400...". The aircraft descended below minimum altitude and crashed into a hillside at 600 feet/180 m msl just before reaching the Kayell NDB, where minimum descent height was 2400 feet. The Boeing hit treetops and started to break up until bursting into flames.



B747 Cargo

24/02/1989 Hawaii, USA, 747-122, United Airlines, Cargo Door Separation, 9

09/03/1989 Dayton, USA, 737-201, Piedmont Airlines, Rapid Decompression, 1

10/03/1989 Ontario, Canada, F-28, Air Ontario, Ground Collision, 24

10/04/1989 Valence, France, Fokker 27, EAS, Hit a mountain, 22

07/06/1989 Paramaribo, Surinam, DC-8-62, Suriname Airways, On landing, 176

19/07/1989 Sioux City, USA, DC-10-10, United Airlines, Engine Failure, 111/296

UAL232 departed Denver at 14:09 CDT for a flight to Philadelphia. Cruising altitude was FL370. About 1 hour and 7 minutes after takeoff the crew heard a loud bang, followed by vibration and a shuddering of the airframe; the no.2 engine had suffered an uncontained failure. It then appeared that the hydraulic pressure was zero. The DC-10 didn't respond anymore to flight control inputs and the descending right turn was arrested by using no. 1 engine power reduction. The air driven generator (ADG), which powers the no.1 auxiliary hydraulic pump, was deployed but hydraulic power couldn't be restored. An emergency was declared at 15:20, and vectors to Sioux City were given by Minneapolis ARTCC. An off-duty training check airman was travelling on Flight 232 and offered his assistance. He was asked to manipulate the throttles to control pitch and roll, which was difficult because the plane had a continuous tendency to turn to the right The no.1 and 3 thrust levers couldn't be used symmetrically, so he used two hands to manipulate the throttles. Sioux City Airport was sighted at 9 miles out, but the aircraft was aligned with the closed runway 22 (6600 feet long) instead of the longer (8999 feet) runway 31. Given the position and the difficulty in making left turns, the approach to runway 22 was continued. The aircraft approached with a high sink rate (1620 feet/min for the last 20 seconds) at an airspeed of 215 knots. At about 100 feet above the ground the nose began to pitch downward and the right wing dropped. The plane touched down on the threshold slightly left of the center line, skidded to the right and rolled inverted. The DC-10 caught fire and cartwheeled.



DC-10

27/07/1989 Tripoli, Libya, DC-10-30, Korean Air Lines, During Landing, 78

03/08/1989 Samos, Greece, Shorts 330, Olympic Airways, Ground collision, 34

25/08/1989 Bunji, Pakistan, F27, Pakistan Int. Airlines, Ground collision, 54

03/09/1989 Havana, Cuba, Ilyushin 62M, Cubana, Crashed on take-off, 140

03/09/1989 Amazon Forest, Brazil, Varig 737-200, flight 254, Crash Landing due to Fuel starvation from navigation error, 13/54

Varig Boeing 737-200, PP-VMK, was damaged beyond repair in a forced landing in the Amazon jungle in Brazil.

Flight RG254 was a regular domestic service from São Paulo to Belém (SBBE) with an en route stop at Marabá (SBMA). When the aircraft was preparing for departure at Marabá, the captain inadvertently entered the wrong course, 270 degrees in his Horizontal Situation Indicator (HSI). The flight plan called for a course of 027 degrees. When the copilot returned from the walk-around check, he checked the course on the captain's HSI and inserted the same course in his HSI. The flight took off from Marabá at 17:25. The aircraft climbed to FL290 and maintained the 270 radial of Marabá for about forty minutes. The flight was then cleared to descend to FL200 by Belém ACC. However, the crew failed to find navigational aids and lost radio contact.

Course was changed to 090 degrees as the aircraft further descended down to FL40. The crew then followed a river, heading 165 degrees. Because of the sunset and haze the pilot's had difficulty navigating. Also, they failed to establish radio contact on several frequencies and failed to find navaids in the area. Just after finding two NDB beacons the engines lost power due to fuel shortage. The aircraft lost altitude

and the pilots were forced to carry out a landing in the dark and without external references. At about 20:45 the aircraft made a forced landing in the jungle. The aircraft was located 44 hours after the accident. Forty-one occupants survived and thirteen had sustained fatal injuries in the accident.

It appeared that the computerized flight plan used a four-digit representation of the magnetic bearing with the last digit being a tenth of a degree without any decimal separator. A course of '027.0' was presented as '0270'.



B737-200 aircraft that actually crashed

Upon investigation, it was concluded that the crash had been caused primarily by negligence on the part of the flight crew. Customary investigations showed that the aircraft was in perfect condition for the flight, and that its mandatory periodic inspections had been properly conducted. It was concluded that the main factor for the accident was an error in reading the correct heading from the flight plan by the commander, compounded by the co-pilot copying the setting from the commander's panel instead of checking the flight plan. The fact that plan course 0270 actually asked for 027.0 degrees was due to the Varig standardization of flight planning for all its fleet, but only aircraft equipped with an inertial navigation system actually used headings with decimals. Despite the pilots having been told about this peculiarity in the airline's training program, the value expressed in the flight plan 0270 was interpreted by the commander as 270° (he was on vacation during the change of standard). This misinterpretation changed the general direction north-northeast (27.0°) to west (270°). The Boeing 737 was not equipped with INS, using only automatic direction finders (ADF) and VOR. Months after the accident, the flight plan VARIG 254 used was shown to 21 pilots of major airlines in the world during a test conducted by the International Federation of Air Line Pilots' Associations (IFALPA). No fewer than 15 pilots committed the same mistake that the VARIG flight 254 crew had made. After the flight 254 accident, VARIG would install Omega navigation systems in their aircraft.

Also, there were several contributing factors to the accident: the pilot did not realise he should be receiving a stronger VHF signal from Belém if he was nearing that airport, he should be receiving the local radio stations from Belém instead of other distant stations at the same frequencies, he should have checked his position and heading against the sun and geographic landmarks, and the airline's support team in Belém did not take action upon realizing the aircraft arrival was delayed.

08/09/1989 Skagerrak, Denmark, Convair 580, Partnair, Structural Failure, 55

19/09/1989 Niger, West Africa, DC-10-30, Union de Transportes Aeriens, Bomb, 170/170

The DC-10 was operating as UTA Flight 772 on the Brazzaville-N'Djamena-Paris route. The aircraft took off from N'Djamena at 13:13 and climbed to a cruising altitude of FL350. At 13:59 an explosion on board caused the aircraft to crash into the desert. The explosive device was located at location 13R in the cargo hold. The device was most probably hidden in baggage, placed aboard at Brazzaville. Possible groups responsible for the explosion are the Islamic Jihad group (demanding the freedom of a Shi'ite Muslim in Israel) or the Secret Chadian Resistance. Co-incidental on March 10, 1984 another UTA aircraft was destroyed when a bomb exploded; in this case the bomb exploded during embarkation at N'Djamena.



DC-10

 $20/09/1989\;$  New York, USA, 737-400, US Air, Failed Take-off, 2

18/10/1989 Nasosny, USSR, Ilyushin 76MD, Aeroflot, Not Available, 67

21/10/1989 Tegucigalpa, Honduras, B727-224, TAN, Airlines, On landing, 131

26/10/1989 Hualien, Taiwan, 737-209, China Airlines, Hit High Ground, 56

25/11/1989 Seoul, South Korea, F-28-4000, Korean Air Lines, Engine Failure, 1

27/11/1989 Bogota, Colombia, 727-21 AVIANCA (Bogota-Cali), Bomb, 107

Flight 203 departed Bogotá at 07:11 for a flight to Cali. While climbing through FL130, a bomb detonated on board, igniting fuel vapours in an empty fuel tank. The subsequent explosion caused the aircraft to crash.



B727

26/12/1989 Pasco, USA, Bae-3101, United Express, On approach, 6 27/12/1989 Bolivia, 727-225B, Eastern Airlines, Not Available, 1

# 1990

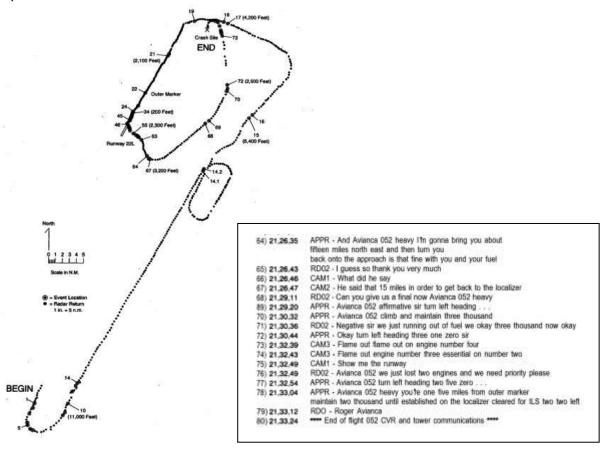
18/01/1990 Atlanta Georgia, USA, 727-225A, Eastern Airlines, Collision with Beechcraft A100, 1

25/01/1990 Mt Rinjani, West Nusa Tenggara, Indonesia, Alfast CASA212, 19

### 25/01/1990 New York, USA, Avianca (AVA052) B707, No Fuel, 73/158

Avianca AV052 (Bogotá - Medellin - New York-JFK) took off from Medellin at 15:08 with approx. 81000 lb of fuel on board. When arriving near New York, the aircraft had to enter 3 holding patterns. The first for 19 minutes over Norfolk, the second for 29 minutes over New Jersey, and the third pattern over the CAMRN intersection for 29 minutes. Over CAMRN the aircraft descended from FL140 to FL110. At 20:44:43, while holding at CAMRN for 26 minutes, the New York (NY) ARTCC radar controller advised AVA052 to expect further clearance at 21:05. At that moment the Avianca crew advised ATC that they could only hold for 5 more minutes and that their alternate Boston couldn't be reached anymore due to the low state of fuel. The flight left the holding pattern at 20:47 and the crew contacted the New York TRACON (Terminal Radar Approach Control) who guided AV052 for a runway 22L ILS approach. On finals, at 21:15 the crew contacted JFK Tower and they were cleared to land four minutes later.

Due to the bad weather (300 feet ceiling, 400 m visibility, RVR - runway Visual Range of 2400 feet and wind shear of ca. 10 kt) the crew had to carry out a missed approach at 21:23. ATC vectored the crew for another approach. About 21:32, at 12 miles SE of JFK Airport, engines number 3 and 4 ran down. Shortly afterwards followed by the remaining two. At 21:34, heading 250° and flaps at 14° and gear up, the aircraft impacted on a hillside in a wooded residential area on the north shore of Long Island. The starboard side of the forward fuselage impacted and fractured the wooden deck of a residential home.







14/02/1990 Bangalore, India, A320, Indian Airlines, On approach, CFIT 92/146

IC605 took off from Mumbai (Bombay) at 11:58 for Bangalore (BLR). At 12:25 Bangalore approach was contacted and prevailing weather at Bangalore was: wind variable 5 knots, visibility 10 km, clouds 2 octas 2000 feet, temp 27deg, QNH 1018. At 12:44 the aircraft was cleared to descend to FL110. Reaching FL110, vectors were given for a visual runway 09 approach. On final approach, the aircraft descended well below the normal approach profile and kept descending until it struck the boundaries of the Karnataka Golf Club, 2300 feet short of the runway and 200 feet right of the extended centerline. The aircraft rolled for 80 feet and lifted off again for about 230 feet and came down again on the 17th green of the golf course. The landing gear wheels dug into the ground and the aircraft impacted a 12 feet high embankment, causing the gears and engines to be sheared off. The aircraft continued over the embankment and came to rest in a grassy, marshy and rocky area.

PROBABLE CAUSE: "Failure of the pilots to realize the gravity of the situation and respond immediately towards proper action of moving the throttles, even after the radio altitude call-outs of "Four hundred", "Three hundred" and "Two hundred" feet, in spite of knowing that the plane was in idle/open descent mode. However, identification of the cause for the engagement of idle/open descent mode in short final approach during the crucial period of the flight is not possible."

11/05/1990 Manila, Philippines, 737-300, Philippine Airlines, Fuel tank explosion, 8

02/06/1990 Unalakleet, Alaska, 737-246C, MarkAir, Crashed on Landing, 1 Seriously Injured

02/10/1990 Kuwait City, Kuwait, Ilyushin 60, Iraqi Airways, Shot Down, 130

02/10/1990 Guangzhou, China, 737, Xiamen Airlines, Ground Collision during Hijacking, 132

02/10/1990 Guangzhou, China, B757-21B, China Southwest Airlines, Collision, 132

03/10/1990 Cape Canaveral, USA, DC-9-31, Eastern Airlines, Air Turbulance 1

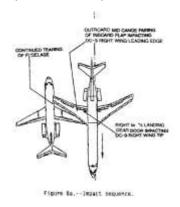
24/10/1990 Santiago, Cuba, Yak 40, Cubana, Hit high ground, 29

14/11/1990 Zurich, Switzerland, DC-9-32, Alitalia, CFIT, On approach, 46

21/11/1990 Yakutsk-Magan, USSR, Ilyushin 62, Aeroflot, Crashed during approach, 76

03/12/1990 Detroit, USA, DC-9, Northwest, Airlines, Collision with B727, 8/44

03/12/1990 Detroit, USA, 727, Northwest Airlines, Collision with DC9, 0/154





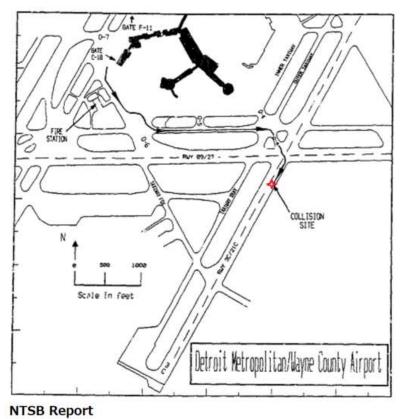


Figure 1.--DTW layout and DC-9 taxi route.

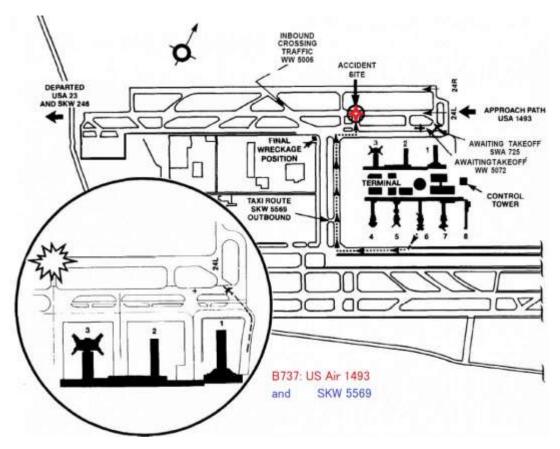
## 01/02/1991 Los Angeles, USA, 737-300, US Air, flight 1493, Collision on runway, 22/89

USAir B737 aircraft entered LAX airspace around 17:57 and was cleared for a CIVET Two Profile Descent and ILS runway 24R approach. At 17:59 this was changed to a runway 24L approach clearance. At about the same time a SkyWest Metro II (Flight **5569** to Palmdale) taxied out from Terminal 6, Gate 32 to runway 24L. At 18:03 the crew were advised to "taxi up to and hold short of 24L" because of other traffic. At 18:04:49 the flight was cleared to taxi into position and hold. Immediately thereafter the controller became preoccupied with instructing **WingsWest 5006** who had unintentionally departed the tower frequency. The **WingsWest 5072** reporting ready for takeoff caused some confusion because the controller didn't have a flight progress strip in front of her. The strip appeared to have been misfiled at the clearance delivery position. Meanwhile, Flight **5569** was still on the runway at the intersection with taxiway 45, awaiting takeoff clearance. At 18:07 Flight 1493 touched down. Simultaneous to the nose gear touchdown, the Boeing 737 collided with the SkyWest Metro. Both aircraft caught fire and slid to the left into an unoccupied fire station.





USAir B737 Metroliner



Los Angeles Airport Layout

## 01/02/1991 Los Angeles, USA, Metroliner SA-227-AC, Skywest, Collision with 737, 12/12 17/02/1991 Cleveland, USA, DC-9-15, Ryan International, Crashed on Take-off, 2 20/02/1991 Puerto Williams, Chile, BAe146-200, LAN Chile, Overran runway, 20 03/03/1991 Colorado Springs, USA, 737/291, United Airlines, On landing approach, 25 05/03/1991 La Puerta, Venezuela, DC-9-32, Linea Aeropostal, Hit a mountain, 43 23/03/1991 Navoi, USSR, Antonov 24B, Uzbek Civil Aviation, Overran Runway, 34 05/04/1991 Brunswick, USA, Embraer 120RT, Atlantic Southeast Airlines, Engine Failure, 23 26/05/1991 Suphan Buri, Thailand, 767-329ER, Lauda Air, Engine Mismanagement, 223 11/07/1991 Jeddah, Saudi Arabia, DC-8-61, Nigeria Airways, Systems Failure, 261 16/08/1991 Imphal, India, B737-2A8, Indian Airlines, On approach, 69 11/09/1991 Eagle lake, USA, Embraer-120RT, Continental Express, Maintenance error, 14 25/10/1991 Tumbang Mari, Central Kalimantan, INA, Bali Air BN2A, 17 07/11/1991 Makhackala, USSR, Yakoviev-40, Aeroflot, Hit a mountain, 51 11/11/1991 Recife, Brazil, Bandeirante, Nordeste Limhas Aereas, Crashed on take-off, 17 27/12/1991 Heidelberg, Germany, DC-3, Chartered, Hill Side Collision, 26 27/12/1991 Stockholm, Sweden, MD-80, SAS, Power Loss, 0 29/12/1991 Wanli, Taiwan, B747-2R7F, China Airlines, Engine Fell off, 5 20/01/1992 Alsace, France, A-320, Air Inter, Hit a mountain, 87 09/02/1992 Cape Skirrinng, Senegal, Convair-64, Afrique Airlink, Crashed on Approach, 31 22/03/1992 New York, USA, F-28-4000, US Air, Crashed on Take-off, 27 06/06/1992 Tucuti, Panama, B737-204, COPA Panama, High Speed Dive: loss of contol, 47

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24/07/1992 Ambon Maluku, INA, Mandala Vickers Viscount 816, 70
20/07/1992 Tbilisi, USSR, Tupolev 154B, Gerogian Airlines, Crashed on take-off, 24
30/07/1992 New York, USA, L-1011, TWA, Crashed on take-off, 10 Injuries
31/07/1992 Jiangsu, China, Yakovlev 42D, China General Aviation Corporation, Possible Engine Failure, 106
31/07/1992 Kathmandu, Nepal, Airbus A-310, Thai International, Missed approach, 113/99+14
27/08/1992 Ivanova, USSR, Tupolev 134A, Aeroflot, Crashed on approach, 84
28/09/1992 Kathmandu, Nepal, Airbus A-300, Pakistan Int. Airlines, Hit high ground, 167/148+19
04/10/1992 Amsterdam, Netherlands, 747-258F, El Al, flight 1862 Engine Fell off due to PYLON bad design, 4/3+1+39(gnd)
18/10/1992 Garut West Java, INA, CASA235, 31/27+4
24/11/1992 Guilin, China, 737-3Y0, China Southern Airlines, Loss of control, 141/130+11
21/12/1992 Faro, Portugal, DC-10-30CF, Marinair, Crashed on landing, 56/127+14
22/12/1992 Tripoli, Libya, 727-2L5, Libyan Arab Airlines, Mid Air Collision w/MiG-23UB took off while waiting to land, 157/147+10
06/01/1993 Paris, France, DHC8, Contactair, Crashed on Landing 4
09/01/1993 Surabaya, INA, HS74, Bouraq Indonesia, Crashed on take-off, 17
08/02/1993 Meherabad, Iran, Tupolev 154M, Iran Air Tours, Mid Air Collision w/Su-24MK 131/119+12
05/03/1993 Skopje, Macedonia, Fokker 100, Palair, Icing, 81
31/03/1993 Anchorage, Alaska, 747-121, Japan Airlines, #2 Engine fell off due turbulence after take-off
06/04/1993 Aleutian Is, Alaska, MD-11, China Eastern, violent pitch oscillation in flight, 2 pax killed
14/04/1993 Dallas, USA, DC-10, American Airlines, Crashed on Landing, 2 Seriously Injured
26/04/1993 Aurangabad, India, 737-2A8, Indian Airlines, Runway Collision, 56
19/05/1993 Medellin, Colombia, 727-46, SAM, Hit a mountain, 133
17/06/1993 Tbilisi, Antonov 26, Tajikistan Airlines, Turbulence, 33
01/07/1993 Irian Jaya, INA, F-28, Merpati Nusantara Airlines, Crashed on landing, 41
23/07/1993 Yinchuan, China, BA46, China Northwest, Mechanical Failure, 55
26/07/1993 Haenon, South Korea, 737-5L9, Asiana Airlines, Mountain Collision, 68
28/08/1993 Khorag, Tadzhikistan, Yakovlev 40, Tadzhikistan National Airlines, Crashed on take-off, 82
14/09/1993 Warsaw, Poland, A-320-200, Lufthansa, On landing, 2
21/09/1993 Sukhumi, Georgia, Tupolev 134, Transair, Hit by Missile, 27
22/09/1993 Sukhumi, Georgia, Tupolev 154B, Transair, Hit by Shell, 108
26/10/1993 Fuzhou, China, MD-82, China Eastern, Crashed on landing, 2
13/11/1993 Xinjiang, China, MD82, China Northern, Crashed on landing, 12
20/11/1993 Ohrid, Macedonia, Yakovlev 42D, Avioimpex, Crashed on approach, 116
01/12/1993 Hibbing, USA, BAe Jetstream 31, Express Airlines, Ground collision, 18
26/12/1993 Armenia, Russia, Antonov 26, Kuban Airlines, Crashed on landing, 35
03/01/1994 Irkutsk, Russia, Tupolev 154, Baikal Air, Engine Fire, 124
07/01/1994 Columbus, USA, Atlantic Coast BA41, Stalled, 5
25/02/1994 Cerro Carpich, Peru, YK-40, Expresso Aereo, Hit high ground, 31
02/03/1994 New York, USA, MD-82, Continental Airlines, Rejected take-off, 0
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On 2 March 1994, a McDonnell Douglas MD-82, registered N18835 with 6 crew and 110 passengers on board, sustained substantial damage following a rejected takeoff roll on runway 13 at LaGuardia Airport, Flushing, New York. The aircraft overran the runway and came to rest on a dyke. There were no fatalities or serious injuries but one flight crew member and 29 passengers sustained minor injuries during the evacuation of the aircraft. The NTSB determined that the accident resulted from the flight crew's failure to turn on the pitot/static heat system and their untimely response to anomalous airspeed indications with the consequent rejection of the takeoff at an actual speed of 5 kts above V1.

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22/03/1994 Novokuznetsk, Russia, A-310-304, Aeroflot-Aria, Pilot Error, 75 04/04/1994 Amsterdam, Netherlands, SAAB 340, KLM, Engine failure, 24
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06/04/1994 Kigali, Rwanda, President Habyarimana's Falcon 50, shot down by missile, terrorism, 12

 $07/04/1994 \quad \text{Memphis Tennessee, USA, FEDEX Cargo flight 705, DC-10-30, \textbf{hijack attempt} by its employee, 3 crew fought, calvit arrested.}$ 

26/04/1994 Nagoya Komaki, Japan, A-300-600R, China Airlines, During Landing, 264/271

CAL 140 from Taipei Intl Airport, Taiwan, to Nagoya Airport, Japan, while on ILS approach to rwy 34 crashed onto the airport.



#### Probable Cause:

While the aircraft was making an ILS approach to runway 34 of Nagoya Airport, under manual control by the F/O, the F/O inadvertently activated the GO lever, which changed the FD (Flight Director) to GO AROUND mode and caused a thrust increase. This made the aircraft deviate above its normal glide path. The APs were subsequently engaged, with GO AROUND mode still engaged. Under these conditions the F/O continued pushing the control wheel in accordance with the CAP's instructions. As a result of this, the THS (Horizontal Stabilizer) moved to its full nose-up position and caused an abnormal out-of-trim situation. The crew continued approach, unaware of the abnormal situation. The AOA increased the Alpha Floor function was activated and the pitch angle increased.

It is considered that, at this time, the CAP (who had now taken the controls), judged that landing would be difficult and opted for go-around. The aircraft began to climb steeply with a high pitch angle attitude. The CAP and the F/O did not carry out an effective recovery operation, and the aircraft stalled and crashed.

06/06/1994 Xian, China, Tupolev 154M, China Northwest Airlines, Ground Collision, 160

18/06/1994 Palu, INA, F27, Merpati Nusantara, Crashed on Descent, 12

24/06/1994 Fairchild Air Force Base B-52 crash, Lt Col Arthur "Bud" Holland (46) Lt Col Mark McGeehan (38), Col Robert Wolff (46), weapon systems officer/radar navigator Lt Col Ken Huston (41) killed in the accident.

26/06/1994 Abidjan, Ivory Coast, F27, Air Ivoire, Ground Collision, 17

 $30/06/1994 \quad Toulouse, France, A330-321, Airbus \ Industrie, Crashed \ on \ take-off, 7$ 

01/07/1994 Tidjika, Mauritania, F-28, Air Mauritanie, Crashed on landing, 80

02/07/1994 Charlotte, USA, DC-9-30, US Air, Crashed on approach, 37

21/08/1994 Agadir, Morocco, ATR 42, Royal Air Maroc, Ground collision due air crew suicide, 44

08/09/1994 Aliquippa, USA, 737-300, US Air, Crashed on approach, 132

29/09/1994 Vanavara, Russian Fed., YK-40, Cheremshanka Airline, Crashed on approach, 28

12/10/1994 Natanz, Iran, F-28, Assemain, Mountain Collision, 66

31/10/1994 Roselawn, USA, ATR-72-212, American Eagle, Ice Induced, 68

22/11/1994 Bridgeton, USA, DC-9-82, Trans World Airlines, Collision on Runway, 2

11/12/1994 Tokyo, Japan, 747-200, Philippine Airlines, Bomb, 1

13/12/1994 Morrisville, USA, Jetstream 32, Flagship Airlines, On landing, 15

17/12/1994 Cerro Aicha, Venezuela, DC-3, Servivensa, On landing, 7

29/12/1994 Van, Turkey, 737-400, THY, Crashed on approach, 57

11/01/1995 Cartagena, Colombia, DC-9, Intercont Colombia, Ground Collision, 51

17/03/1995 Barranquilla, Columbia, DC-9-15, Intercontinental de Aviacion, Burnt out after short-circuit in rear toilet.

31/03/1995 Balotesti, Romania, A-310-324, Transporturile Aeriene Romane RO371, Crashed at Take-off, faulty autothrottle, 60/49+11



A-310

Tarom flight 371 was a scheduled passenger service from Bucharest Otopeni Airport (OTP) in Romania to Brussel Airport (BRU), Belgium. On board were 49 passengers and eleven crew members. The first officer was pilot flying, the captain was pilot monitoring. The aircraft started dive while climbing at 4200ft and crashed.

### Probable Cause:

The investigation commission consider the following causal factors:

- Thrust assymetry;
- Possible pilot incapacitation (the Captain);
- Insuficient corrective action from the Copilot in order to cover the consequences of the first factors.

The French Ministry of Transport commented on the Romanian investigation report, stating that the pilot flying's actions that led to the loss of control could have been caused by the fact that the artificial horizon between Eastern and Western built aircraft is inverted in roll and that the first officer spent the majority of his carreer on Eastern-built aircraft.

- 08/06/1995 Atlanta, USA, DC-9-32, ValuJet, Engine Fire, 0
- 09/06/1995 Palmerston, New Zealand, DHC-8, Ansett New Zealand, Ground Collision, 4
- 24/06/1995 Lagos, Nigeria, Tupolev 34, Harka Air Services, Crashed on Landing, 16
- 09/08/1995 Mt. Chichontepec, El Salvador, 737-2H6, Aviateca, Mountain Collision, 65
- 09/08/1995 Cordoba, Argentina, Casa Nurtanio 235, Inter Austral, Door failure, 1
- 21/08/1995 Carrolton, USA, Embraer 120ER, Atlantic South-East, On landing, 8
- 05/09/1995 Brussels, Bel, NW DC10, DC-10 misses Frankfurt runway by 300km (Flight Global)

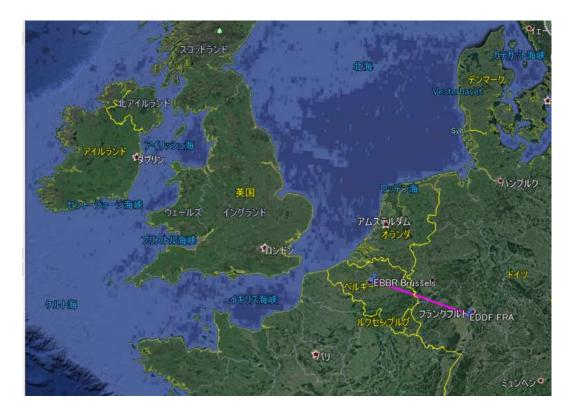
DC-10-40 carrying 241 pax from Detroit to Frankfurt missed its intended destination landing at Brussels. The pilots of NW52 only realized their error when they lined the aircraft up for the approach at Brussels.



DC-10

Flight Global: A NORTHWEST AIRLINES McDonnell Douglas DC-10-40 carrying 241 passengers from Detroit to Frankfurt missed its intended destination by 300km (160nm), landing at Brussels Airport by mistake on 5 September. The pilots of Flight 52 only realised their error when they lined the aircraft up for the approach at Brussels. In spite of that, they decided to land anyway. The pilots apparently were the only people unaware of the unplanned detour. Puzzled cabin crew and passengers had been following progress on the live map display in the cabin. Although the flight was not at put at risk, the US Federal Aviation Authority has set up a full inquiry into the incident, and Northwest Airlines has suspended the pilots from duty. Early reports from Brussels air traffic control (ATC) attributed the original error to Shannon ATC, alleging that an incorrect code had been entered into the aircraft's ATC flight-plan data, re-designating the aircraft's destination as Brussels. The Irish Aviation Authority denies this, saying that the crew had acknowledged its destination as Frankfurt, and that the correct data was passed to the London Air Traffic Control Centre, the last such centre before Brussels. By the time the aircraft entered the Brussels control region, however, its destination had been re-designated, Brussels ATC maintains. The UK National Air Traffic Services declines to comment, as the event is under investigation. The aircraft's planned track for Frankfurt would normally have taken it over Belgium at its cruising altitude of 37,000ft (11,300m), according to ATC conditions. The upper-airspace (above 24,500ft) over Belgium, however, is handled by the Maastricht ATCC in the Netherlands.

A senior Brussels ATC official confirms that the aircraft was cleared by the LATCC as it left the London control region to descend to 24,000ft and contact Brussels. The crew started the descent and called Brussels on the assigned frequency, addressing the controller as "Frankfurt" and announcing its intention to land. Brussels did not question the addressing error which, Northwest says, occurred more than once in subsequent transmissions. Brussels approach instructed the crew to descend in-bound via Bruno, a VOR navigation beacon on one of the standard approaches to Brussels Airport. The crew had to ask ATC for the VORs frequency. The aircraft was subsequently cleared for an instrument-landing system (ILS) approach to Brussels' runway 25L, which is the same runway orientation as at Frankfurt, but with different ILS frequencies. At some point the crew finally realised they were landing at the wrong airport and opted to continue the landing for safety reasons, says Northwest. The airline has said that, whatever errors ATC may have made, if any, the crew must "share responsibility" for what happened.

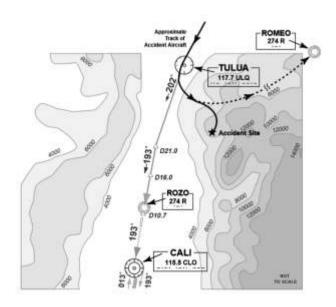


- 11/09/1995 Jalalabad, Afghanistan, Antonov 26, Ariana, Ran out of fuel, 3
- 15/09/1995 Tawau, Malaysia, F50, Malaysia Airlines, On landing, 34
- 21/09/1995 Moron, Mongolia, Antonov 24, Mongolian Airlines, Crashed on Approach, 42
- 05/11/1995 Nahicevan, Azerbaijan, Tupolev 34, Azerbaijan Airlines, Engine Failure, 54
- 08/11/1995 Sierra Gr. Argentina, F27, LADE, Crashed into Mountain, 53
- 13/11/1995 Kaduna, Nigeria, 737-2F9, Nigerian Airways, On landing, 9
- 03/12/1995 Douala, Cameroon, 737-2KY, Cameroon Airlines, On landing, 72
- 07/12/1995 Grossevichi, Russia, Tupolev 154B, Aeroflot/Khabarovsk Airlines, Mountain Collision, 97
- 13/12/1995 Villafranca, Italy, Antonov 24, Romanian Banat, Air Icing, 45
- 18/12/1995 Kahengula, Angola, Locheed 188-C, Trans Service Airlift, Unsecured baggage, 141
- 20/12/1995 Cali, Colombia, B757, American Airlines, Hit a mountain, CFIT, 159/163

At about 18:34 EST, American Airlines Flight 965 took off from Miami for a flight to Cali. At 21:34, while descending to FL200, the crew contacted Cali Approach. The aircraft was 63nm out of Cali VOR (which is 8nm South of the airport)) at the time. Cali cleared the flight for a direct Cali VOR approach and report at Tulua VOR. Followed one minute later by a clearance for a straight in VOR DME approach to runway 19 (the Rozo 1 arrival). The crew then tried to select the Rozo NDB (Non Directional Beacon) on the Flight Management Computer (FMC). Because their Jeppesen approach plates showed 'R' as the code for Rozo, the crew selected this option. But 'R' in the FMC database meant Romeo. Romeo is a navaid 150nm from Rozo, but has the same frequency. The aircraft had just passed Tulua VOR when it started a turn to the left (towards Romeo). This turn caused some confusion in the cockpit since Rozo 1 was to be a straight in approach. 87 Seconds after commencing the turn, the crew activated Heading Select (HDG SEL), which disengaged LNAV and started a right turn. The left turn brought the B757 over mountainous terrain, so a Ground Proximity (GPWS) warning sounded. With increased engine power and nose-up the crew tried to climb. The spoilers were still activated however. The stick shaker then activated and the aircraft crashed into a mountain at about 8900 feet (Cali field elevation being 3153 feet).



B757



20/12/1995 New York, USA, 747, Tower Air, crashed on take-off, 1 seriously injured, 189/189

06/02/1996 Puerto Plata, Dominican Republic, 757-225, Birgenair, Instrument Malfunction. Provable Cause: The crew's failure to recognize the activation of the stick shaker as a warning of imminent entrance to the stall, and the failure of the crew to execute the procedures for recovery from the onset of loss of control. The incorrect ASI readings were probably caused by the obstruction of the pitot system by mud and/or debris from a small insect that was introduced in the pitot tube during the time the aircraft was on the ground. 189/189

29/02/1996 Arequipa, Peru, 737, Faucett, Engine Failure, 123

03/05/1996 Haj Yousif, Khartoum, Antonov 24, Federal Airlines, On Approach, 53

11/05/1996 Miami, USA, DC-9, ValuJet, Uncontrolled decent, 110

13/06/1996 Fukuoka, Japan, DC-10-30, Garuda Indonesia, Engine Fire, 3

07/07/1996 Pensacola, USA, MD-88, Delta Airlines, Engine failure, 2

17/07/1996 New York, USA, 747-100, TWA TW800, Crashed on climb after take-off from JFK, Fuel tank explosion, 230

24/07/1996 Myeik, Burma, F27, Myanmar Airways, Crashed on Landing, 8

29/08/1996 Svalbard, Norway, Tupolev 154M, Vnukovo Airlines, Mountain Collision due lost position, 141

05/09/1996 Burkina Faso, 747-400, Air France, Turbulence, 1

02/10/1996 Lima, Peru, 757-200, Aeroperu, Instrument Malfunction, the maintenance staff did not remove the protective adhesive tape from the static ports. 70/70

03/10/1996 Kahemba, Zaire, DC-3 (or DHC-6 by ASN), Malu Avn, (data unreliable) Not Available, 23 (DHC-6:4/4)

22/10/1996 Manta, Ecuador, 707-323C, MilLion Air, Engine Fire, 27

26/10/1996 Mansiisk, Siberia, YK-40, Tyumen Aviatrans, Crashed on Landing, 5

28/10/1996 New York, USA, MD82, American Airlines, Nose gear did not deploy, 3 Injuries

31/10/1996 Sao Paulo, Brazil, Fokker 100, TAM, Ground Collision, 99

07/11/1996 Lagos, Nigeria, 727-231, Aviation Development Corporation, Ground Collision, 143

12/11/1996 Delhi, India, 747-100, Saudia, Mid-air Collision with IL-76 under ATC, 312

12/11/1996 Delhi, India, Ilyushin 76TD, Kazahkstan Airlines, Mid-air Collision with 747 under ATC, 37

Air Kazakhstan 1907, an Ilyushin 76 departed Shymkent (aka Chimkent), Kazakhastan for a flight to Delhi. While descending on Airway G452 the crew contacted Delhi: "Good evening 1907. Passing through 230 for 180, 74 miles from DPN [the Delhi Airport beacon]". The controller then cleared the flight to descend to and report at FL150. In the meantime, a Saudi Arabian Airlines Boeing 747 had departed Delhi at 18:32 for a passenger flight to Dhahran. Flight SV763 followed the Parvi SID and reported approaching FL100. The Delhi controller cleared the flight, which was also on Airway G452, to climb to FL140. Because Flight 1907 was approaching from the opposite side, the controller told SV763: "Maintain level 140, Standby for higher." A little later, Flight 1907 reported reaching FL150 at 46 miles

from the airport. The controller then responded: "Roger. Maintain 150. Identified traffic 12 o'clock, reciprocal Saudia B747, 14 miles. Report in sight." The Kazakhstan crew replied by querying the distance to which the controller answered: "Fourteen miles now, roger 1907." When no reply followed, he again warned: "Traffic in 13 miles, level 140."

Apparently, the Kazakh aircraft had descended below its assigned altitude and was flying at 14500 feet. A few second later seconds later the Ilyushin had descended another 310 feet. Shortly afterwards both aircraft collided, plummeted down in flames and crashed in an arid farming area.

Probable Cause: "The root and approximate cause of the collision was the unauthorized descending by the Kazak aircraft to FL140 and failure to maintain the assigned FL150".





Kazakhstan Il-76 Saudia B747

23/11/1996 Moroni, Comoros Islands, 767-200ER, Ethiopian Airlines, Ditched, low on fuel under HJ, 127

30/11/1996 Medelin, Colombia, De Havilland 6-300, Aerolines Centrales de Colombia, Mountain Collision, 14

24/12/1996 Atlas Air B747 bound for Pinal Airpark (MZJ) in Marana, Arizona, mistakenly landed at Avra Valley Airport (AVW)

09/01/1997 Monroe County, USA, Embraer 120RF, Comair, Ground Collision, 29

31/01/1997 Yola, Nigeria, Embraer 110PIA, SkyPower Express Airways, Crashed on landing, 5

01/02/1997 Tambacounda, Senegal, Hawker Siddeley 748-353, Air Senegal, Engine Failure 23

14/02/1997 Carajas, Brazil, 737-2C3, Varig, Over-ran runway, 1

18/03/1997 Caucasus, Russia, Antonov 24, Stavropol Airlines, Crashed into Forest, 50

27/03/1997 Sun Pacific International Airlines aircraft, chartered by the Arkansas Razorbacks and bound for Fayetteville, Arkansas (FAY), mistakenly lands at Springdale Municipal Airport (SPZ).

08/05/1997 Shenzhen, China, 737-31B, China Southern Airlines, Crashed on landing, 35

11/05/1997 near Corpus Christi, Texas, CO1760, B737-524, landed at the wrong airport near Corpus Christi, Texas. http://www.ntsb.gov/aviationquery/brief2.aspx?ev\_id=20001208X07902&ntsbno=FTW97IA187&akey=1

09/07/1997 San Paulo, Brazil, Fokker 100, TAM, Explosion, 1

12/07/1997 Santiago de Cuba, Antonov 24, Cubana de Aviacion, Crashed in sea, 44

17/07/1997 Bandung, INA, Fokker F-27, Sempati Air, Engine Failure, 28

30/07/1997 Florence-Peretola, Italy, ATR-42-512, Air Littoral, Crashed on Landing, 1

03/08/1997 Manchester, UK, BAe Turpo-Prop, British Airways, Failed Landing Gear, 0

05/08/1997 Guam, US, 747, Korean Air Lines, Crashed on Landing, 227

07/08/1997 Miami Florida, USA, DC-8-60 cargo, Fine Air, crashed shortly after TKOF, 3 crew + 1 pax + 1 on ground

10/08/1997 Matsu, Taiwan, Dornier 228, Formosa Airlines, Hit a mountain, 16

03/09/1997 Phnom Penh, Tupolev 134, Vietnam Airlines, Crashed on Approach, 65

26/09/1997 Medan Sumatra, INA, A-300 B4, Garuda Airlines, Crashed on Approach under ATC, 234

Flight GA152 (Jakarta-Medan) was cleared for an ILS approach to Medan runway 05 and was flying on a 316 deg heading on Airway 585/W12. Having descended to 3000 feet the crew was instructed to turn left heading 240 deg for vector to intercept the runway 05 ILS. At 13:28 the flight was instructed to continue on a 215 deg heading and descend to 2000 feet. At 13:30 ATC directed the flight to turn right heading 046 and report when establishing the localizer. Confusion on the part of the air traffic controller followed over whether GA152 was turning left or right. Just 10 seconds after confirming the right turn, the Airbus crashed in a wooded area, broke up and burst into flames.

The wreckage covered a 150x75m area near the village of Pancur Batu, which is located at 900-1000m amsl. The accident happened 30 kms short of Medan Airport. The region was affected by smog from forest fires; visibility was reported to be 600-800m. (ASN)

10/10/1997 Nuevo Berlin, Uruguay, DC-9, Austral, Bad Weather, 74

05/11/1997 London, UK, A-340, Virgin Atlantic, Failed Landing gear, 0

15/12/1997 Shafjah, United Arab Emirates, Tupolev 154, Tajikistan Airlines, Crashed on Approach, 85

17/12/1997 Salonica, Greece, Yak-42, Ukraine Airlines, Crashed on Approach, 70

19/12/1997 Palembang Sumatra, INA, B737-300, SilkAir MI185, Crashed into river, Capt suicide, 104

28/12/1997 Pacific Ocean, 747, United Airlines, Turbulence, 1

27/01/1998 Myanmar, Burma, Fokker F-27, Myanmar Airways, Engine Failure, 14

02/02/1998 Claveria Cagayan de oro, Philippines, DC-9, Cebu Pacific, Air Ground Collision (CFIT), 104

16/02/1998 Taipei, Taiwan, A-300, China Airlines, Crashed on Landing, 204

18/03/1998 Taipei, Taiwan, SAAB 360B, Formosa Airlines, Crashed into sea, 13

19/03/1998 Kabul, Afghanistan, 727, Ariana Airlines, Unknown, 22

22/03/1998 Bacolod, Philippines, A-320, Philippine Air Lines, Crashed on Landing, 3

31/03/1998 Stanstead, UK, BA 748, Emerald Air, Engine Fire, 0

20/04/1998 Bogota, Colombia, 727, Air France, Crashed into Mountain, 53

27/05/1998 Mongolia, Y-12, MIAT, Unknown, 28

24/08/1988 Manibagi, Myanmar, Fokker F-27, Myanmar Airways, Hit a mountain, 39

29/08/1998 Quito, Ecuador, Tupolev 154M, Cubana, Crashed on take-off, 80

02/09/1998 Nova Scotia, Canada, MD-11, Swissair FL111, Smoke in cockpit-Crashed into ocean, 229



25/09/1998 Nador, Morocco, BAE-146, Paukn Air, Ground Collision, 38

10/10/1998 Kinshasa, Congo, 727, Congo Air, Shot Down, 41

11/12/1998 Surat Thani, Thailand, Thai Airways, A310-240, Crash on 3rd VOR approach, 101 of 146

24/02/1999 China, China South West Airlines, Tu-154, Crash just before landing,, 61

25/02/1999 Genoa, Italy, Dornier 328, Mineva Airlines, Overrun, 1 of 4 crew member + 3 of 27 pax killed.

07/03/1999 New Delhi, India, Indian Airlines, AN-32, Crash just before landing, 16

15/03/1999 Pohang, Korea, Korean Airlines, MD83, Overrun after landing, 70 injured

07/04/1999 Adana, Turkey, THY Turkish Airlines, 737-400 (TC-JEP), Crashed on Take-off engulfed fire, 6

15/04/1999 Shanghai, China, Korean Airlines, MD11 Cargo, Crash just after takeoff. 3 crew and 6 on ground

01/06/1999 Little Rock, Arkansas, USA, American Airlines, MD80-82, Overrun after landing in bad wx, 10 of 145 SOB

07/07/1999 Kathmandu, Nepal, Lufthansa 727 cargo, crashed just after departure, 5 crew

23/07/1999 Tokyo, Japan, All Nippon Airways, B747-400, Hijacked-Captain killed in flight deck from stabbed wound, 1.

24/07/1999 nr Namoji, Fiji, Air Fiji, Embraer 110P1 Banderande, Crash against hill enroute from Suva to Nadi, 17

22/08/1999 Hong Kong, China Air Lines, MD-11, Lurched as landed in bad wx -wing hit ground and flipped over, 3 of 315

25/08/1999 Turtkul, Uzbekistan, Hava Yulari, Yak-40, Overshot on landing and flipped over, 2 of 28 pax and 4 crew

- $31/08/1999 \quad Buenos\,Aires, Argentina, LAPA, B737-204C (LV-WRZ), Crash \, on \, TKOF, 65 \, plus \, 2 \, on \, ground$
- 05/09/1999 Kathmandu, Nepal, Nicon Air Avro aircraft, crashed struck telecomm tower, 15
- 09/09/1999 Uruapan, Mexico, TAESA, DC9-31, exploded shortly after TKOF about 6 miles from A/P. 5 crew and 13 pax
- 15/09/1999 Gerona, Spain, Britannia Airways, B757-204(G-BYAG), Skidded off R/W on landing in rainstorm, 1
- 25/09/1999 Mt. Mauna Loa, Hawaii, Big Island Airlines, Piper PA-31-350 Navajo Chieftain, 10
- 31/10/1999 Off Mass, USA, Egypt Air, B767-300ER, MS990, Lost contact at FL330 and crashed, Suicide, all 202 pax + 15 crew
- 09/11/1999 Uruapan, Mexico, TAESA, DC-9-31, FL725, Crashed during climb after TKOF, 18
- 11/11/1999 San Jorge Island, Azores, SATA, ATP, Crashed during a flight, 4 crew and 31 pax
- 12/11/1999 Nr Pristina, Kosovo, UN charter, Aerospatiale Alenia ATR-42, disappeared from radar en-route, 24
- 07/12/1999 Cauayan, Philippines, Asian Spirit, LET410-UVP-E (RP-C3880), 96 miles out for landing, 15 pax and 2 crew
- 21/12/1999 Guatemala City, Guatemala, Cubana de Aviation, DC-10, skid off R/W on landing, 17 pax and 9 on ground
- 22/12/1999 London-Stansted, UK, Korean Air Lines, B747 Cargo, Shortly after TKOF, all 4 crew
- 25/12/1999 Bejuma, Venezuela, Cubana de Aviacion (CU-T1285), Yak-42, crashed on approach, 22 including 12 crew
- 25/12/1999 Near Simara, Nepal, Skyline Air, de Havilland Canada DHC-6 Twin Otter, crashed on TKOF, 10

## 2000

- 05/01/2000 Abuja, Nigeria, Skypower Express Airways Embraer EMB-110 1:13 + 1
- 10/01/2000 Zurich, Switzerland, Crossair, SAAB-340 City Liner, crashed after TKOF, 10 (7 pax + 3 crew).
- 13/01/2000 Marsa el-Brega, Lybia, Avisto Shorts 360-300 23 of 41
- 15/01/2000 San Jose, Costa Rica, Taxi Aero Centroamericano LET 410, 4 of 20
- 30/01/2000 Abigjan, Ivory Coast, Kenya Airways, A310-204 (5Y-BEL), crashed on TKOF, 169 0f 179 pax & crew.
- 31/01/2000 Off Los Angeles, USA, Alaska Airlines 261, MD-83, crashed into the ocean due to inadequate maintenance, 88 of 88
- 01/02/2000 Teheran, Iran, Iran Air A-300, Ground collision, 10
- 03/02/2000 Lake Victoria nr Mwanza AP, Tanzania, Trans Arabian Air Transport, B707-351C, hit water on final, 0
- 16/02/2000 Mather Field nr Sacramento, USA, Emery Worldwide, DC-8, crashed while an emergency landing, 3 crew
- 05/03/2000 Burbank, USA, Southwest Airlines, B737-3T5 (N668SW SWA1455) Ovr run on lndg, 0 of 137 pax +5 crew
- 09/03/2000 Moscow, Russia, Vologda Air Enterprise, Yak 40, Immediately after airborne, crashed on r/w, 4 pax + 5 crew
- 17/03/2000 Kuna Yala area/San Blas Province, Panama, AeroPerlas, DHC-6-300 Twin Otter, lost en-route, 9 pax + 2 crew
- 24/03/2000 Kadirana/Colombo-Katunayake Int'l, Sri Lanka, Sky Cabs, An-12-Cargo, crashed on apc in bad wx, 6 crew
- 25/03/2000 Huambo-4 de Fevereio, Angola, Uralex, An-32-Cargo, veered off on take off run, 3 of 33 pax/crew
- 30/03/2000 Anuradhapura, Sri Lanka, Sri Lanka Air Force Antonov AN-26 40 of 40
- 19/04/2000 Samal Island off Davao, Philippines, B737-200 Manila-Davao, crashed on approach, 124 pax + 6 crew+1 mech
- 03/05/2000 Entebbe, Uganda, DAS Air Cargo DC-10-30F, on landing overran r/w 35 into Lake Victoria, 7 crew rescued
- 21/05/2000 Bear Creek, PA USA, Jetstream 31 Air Taxi, crashed on apc after both engine lost, all 17 pax + 2 crew
- 21/05/2000 Wilkes-Barre, Pennsylvania USA, Executive Airlines British Aerospace J-31 19 of 19
- 25/05/2000 Paris, France, Air Liberte/Stream Aviation MD-80/Shorts 330, Collision, 1
- 05/06/2000 Accra, Ghana, Air Link 200 ops by mil, Fokker 27, crashed when landing. Of 52 pax and crew aboard, 6 of 54
- 22/06/2000 Wuhan, China, Wuhan Airlines YUN-7, broke up in air by lightening and crashed, 44 + 7 ground.
- 05/06/2000 Accra-Kotoka, Ghana, Ghana Airline F-27, On landing, 6
- 22/06/2000 Sitai, China, Wuhan Airlines Xian Yunshuji 100C, Ground collision, 42
- 02/07/2000 Cagayancillo, Philippines, Phil Air Force Nomad, Engine trouble, 14 crew and pax
- 08/07/2000 Chiapas Tuxtla Gutierrez, Mexico, AeroCaribe Jetstream 32, crashed after dept in bad wx, 17 pax + 2 crew
- 09/07/2000 Villavicencio, Colombia, CORAL Colombia Curtiss C-46A (HK-851P), 14 of 20
- 12/07/2000 Vienna, Austria, Hapag-Lloyd (German charter) A310-300, forced landing due no fuel, 24 of 140 pax injured
- 17/07/2000 Patna, India, Alliance Air 737-200, when landing Patna, 51 + 5 on gnd killed 52 pax + 6 crew survived

20/07/2000 Nassau, Bahamas, Caribbean Air/Allied Air Freight DC-3 cargo, crashed, 3 crew killed 3 survived

25/07/2000 Paris, France, Air France Concorde crashed while taking off from the CDG airport, 100 pax +9 crew +5 ground

27/07/2000 Daduldhura, Nepal, Royal Nepal Airlines Twin Otter DHC-6, crashed shortly before landing, 25 of 25

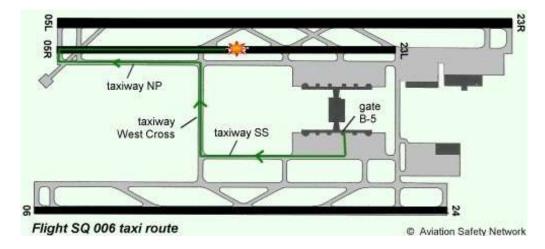
23/08/2000 Bahrain, United Arab Emirates, Gulf A320 (FLT072 CAI-BAH), crashed shortly before land, 135 pax + 8 crew

 $06/10/2000 \ \ Reynosa, Mexico, Aeromexico \ DC-9-31, skidded \ off rwy \ in \ heavy \ rain, 0+0 \ of \ 88 \ but \ 4 \ on \ ground \ killed.$ 

19/10/2000 Sam Neua, Laos, Lao Aviation Harbin Yunshuji Y-12, 8 of 17

25/10/2000 Batumi, Georgia, Russian military Ilyushin IL-18 turboprop, crashed into high terrain, 11 crew+64 pax.

31/10/2000 Taipei, Taiwan (台湾), Singapore Airlines SQ006 B747-400, crashed taking off wrong r/w, 83 of 159 pax + 20 crew



The crew had been cleared for a runway 05L departure because runway 05R was closed because of construction work. After reaching the end of taxiway NP, SQ006 turned right into Taxiway N1 and immediately made a 180-degree turn to runway 05R. After approx 6 second hold, SQ006 started its takeoff roll at 23:15:45. Weather conditions were very poor because of typhoon 'Xiang Sane' in the area. On takeoff, 3.5 seconds after V1, the aircraft hit concrete barriers, excavators and other equipment on the runway. The plane crashed back onto the runway, breaking up and bursting into flames while sliding down the runway and crashing into other objects related to work being done on runway 05R. The aircraft wreckage was distributed along runway 05R beginning at about 4,080 feet from the runway threshold. The airplane broke into two main sections at about fuselage station 1560 and came to rest about 6,480 feet from the runway threshold.



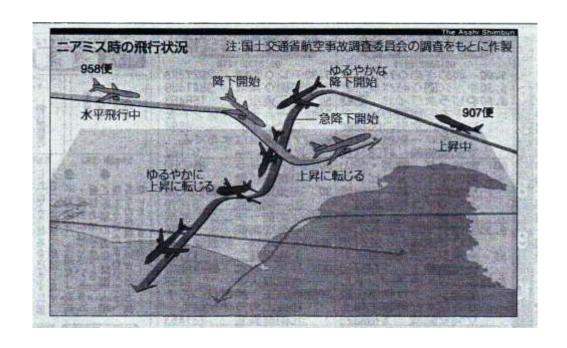
31/10/2000 Saurimo, Angola, Antonov 26, exploded in air shortly after takeoff, all 42 pax + 6 crew killed 15/11/2000 Luanda, Angola, Antonov 24, crashed on takeoff, all 37 pax + 4 crew + 1 on ground killed

25/01/2001 Ciudad Bolivar, Venezuela, Rutaca Airlines DC-3, crashed on takeoff, 24 pax + 3 crew

31/01/2001 Yaizu, Japan, JL907 B747 and JL958 DC10, near mid-air collision, 40 injured

### 2001年01月31日17時00分頃、静岡県駿河湾上空で異常接近

日本航空 907 便:東京国際空港(HND)発、那覇空港(OKA)行ボーイング B747-446D(JA8904) および日本航空 958 便:韓国金海国際空港(PUS)発、新東京国際空港(NRT)行ダグラス DC-10-40(JA8546)



## 日航機ニアミス、管制官の有罪確定へ 最高裁 2010/10/28 付日経

静岡県上空で2001年、日本航空機同士が二アミス(異常接近)した事故で、便名を呼び間違えて57人にけがをさせたとして、業務上過失傷害罪に問われた国土交通省の管制官、蜂谷秀樹被告(36)と籾井康子被告(41)の上告審で、最高裁第1小法廷(宮川光治裁判長)は28日までに、両被告の上告を棄却する決定をした。両被告を執行猶予付き有罪とした二審判決が確定する。二アミス事故で管制官の刑事責任が問われた初のケースで、今後の航空事故の司法判断に影響を与えそうだ。有罪が確定すると、国家公務員法に基づき2人は失職する。被告側は上告審で「実質的な危険はなかった」と主張したが、同小法廷は「言い間違いによる危険性が現実化した事故で、誤った指示と二アミスの間には因果関係がある。乗客の負傷も予見できた」と認定した。事故当時、管制官の指示と航空機衝突防止警報装置(TCAS)の指示が異なった場合に、どちらを優先するかが明確になっていなかった。被告側は、誤った指示を伝えられた機長が、管制官ではなく上昇を指示するTCASに従っていれば事故は避けられたと主張したが、同小法廷は「両被告が全責任を負うべきでないというだけで、罪の成否は左右しない」と結論付けた。現在はTCAS優先のルールが明確化されている。宮川裁判長は補足意見で「緊張感があれば防げた事故。管制官は求められた注意義務を尽くすべきで、怠れば刑事責任を問われうる」と述べた。桜井龍子裁判官は「予見可能性があったとはいえない」として反対意見を付けた。国交省航空・鉄道事故調査委員会(当時)は02年の最終報告で、管制官による呼び間違えや急降下した機長がTCASに従わなかったことなどによる複合要因と断定。管制官2人と機長が書類送検されたが、東京地検は機長について「誤った相手に従ったことが過失とはいえない」として嫌疑不十分で不起訴とした。

06 年の一審・東京地裁は「管制指示は不適切だったが、事故の予見可能性はなく、指示と事故の因果関係もない」として無罪を 言い渡したが、08 年の二審は「便名を間違えるという初歩的ミス。最も基本的な注意義務に違反しており、刑事責任は重い」として で<mark>籾井被告に禁固1年6月、執行猶予3年、蜂谷被告に禁固1年、執行猶予3年</mark>の逆転有罪を言い渡した。

10/02/2001 Jakobkondre, Suriname, Gum Air Charter GAF Normad, 10 of 10

03/03/2001 Bangkok, Thailand, B737-407, exploded at gate by explosives of C4 and TNT mixture, 1 cabin crew

- 24/03/2001 St Barth, Carib, Air Carib DHC-6, crashed to home on approach, 19 pax + crew, 1 on ground
- 17/05/2001 Nr Sari, Iran, Faraz Qeshm Airlines YAK-40, 30 of 30
- 03/07/2001 Nr Ilkutsk, Russia, Vladivostokavia TU-154, on apc after 2 trials, 145
- 05/07/2001 Off Chinhae, ROK, Daewoo Shipbuilding, Sikorsky S-76, 8 of 12
- $12 / 07 / 2001 \;$  Nr Puebro Cabello, Venezuela, Overtec Company M2 Sky Truck, on take off, 13 of 13
- 14/07/2001 Nr Moscow, Russia, RusAir Transport Ilyushin il-76, on tkof due overloaded, 10 of 10

## World Trade Center 9/11 Terror

- 11/09/2001 NYC, USA, AA11 BOS-LAX B767, hijacked and crashed into WTC, 81 pax + 11 crew
- 11/09/2001 NYC, USA, UA175 B767, hijacked and crashed into WTC, 56 pax + 9 crew
- 11/09/2001 Arlington VA, USA, AA77 B757, IRD-LAX, hijacked and crashed into Pentagon, 58 pax + 6 crew
- 11/09/2001 Nr Pittsburgh PA, UA93 EWR-SFO, hijacked and crashed into ground, 38 pax + 7 crew





Entire Air Traffic in the US Airspace

04/10/2001 Black sea, Ukraine, Sibir Airlines Tu-154 F#1812, hit by Ukrainian military SA-5 missile, 66 pax +12 crew 08/10/2001 Milan-Linate, Italy, SAS MD-87 SK686, collided with Cessna on take-off run then crashed onto hangar, 110+4 more

10/10/2001 Dillingham Alaska, USA, PenAir commuter, crashed shortly after take off, 10 people dead + 1 injured 12/11/2001 Rockaway New York, USA, American Airlines A300, crashed 3 min after take off, 246 pax + 9 crew + 6 grd 19/11/2001 Zakharyino, Russia, IRS Aero II-18 RA-75840, Crashed en-route, 18 pax + 6 crew of all 24 souls 24/11/2001 Zurich, Switzerland, Crossair Avro RJ-100, crashed short final in bad wx, 24 killed 10 survived 25 pax + 5 crew 27/11/2001 Port Harcourt, Nigeria, MK Airlines Boeing 747 Cargo, crashed short final due to run out of fuel, 1 of 13 01/12/2001 Okhotsk, Russia, military chartered Il-76, in flight fire at FL290, 9 crew +4 cargo handler + 5 soldiers 14/01/2002 Pekanbaru, INA, Lion Air B-737 (PKLID), Crash landing on tarmac after tkof, 7 of 96 pax injured 16/01/2002 Bengawang Solo near Yogjakarta, INA, GARUDA B-737, emergency crash during approach. 1 CA of 60 28/01/2002 Tulcan, Colombia, TAME B-727-100 (Flt 120 HC-BLF), cause unknown, 83 pax + 9 crew 12/02/2002 Khorramabad, 225 mi SW Teheran, Iran Air Tour Tu-154, crashed on app in fog (CFIT?), 105pax+13crew 15/04/2002 Pusan, Korea, 3 mi N Kimhae airport, B767 CA129, crashed on app in bad wx (CFIT?), 128/166 38 saved 15/04/2002 Mt Salak, INA, Ultra-light crashed, 2/2 04/05/2002 Kano, Nigeria, soon after take-off, EAS Nigerian Airlines BAC-110, 105 pax + gnd killed -148 07/05/2002 Tunis, Tunisia, Egypt Air Flt843 B-737, crashed while landing in bad WX, 18 of 63 (pax + crew) 07/05/2002 Dalian, China, China Northern Airlines Flt6136 MD82, crashed into sea when landing due fire, 112 of 112 25/05/2002 Taiwan straight, Taiwan, China Airlines CI611 B747-200, disintegrated at FL350 & crashed, 206 pax +19 crew 01/07/2002 Uberlingen, Switzerland, Bashkirian Airlines (BTC) Tu-154 and DHL B757, mid air collision, 69 BTC+2 DHL







B757 Tu-154



Zurich Air Traffic Control Center

An air traffic controller in charge in Switzerland when two aircraft collided, killing scores of Russian schoolchildren, has been stabbed to death in his home in a suspected revenge killing in 2004.

29/07/2002 Sheremetyevo Moscow, Russia, Pulkovo Aviation IL-86 widebody passenger airliner, crashed on takeoff. 16

22/08/2002 Pokhara, Nepal, Shangrila Airline Twin Otter, crashed en route in bad weather, 15pax + 3cre w

### 10/02/2002 Mt Salak, INA, Ultra-light crash

06/11/2002 Luxembourg International Airport, Luxembourg, Fokker 50, crashed short final in fog, 17 killed out of 22 sob

10/11/2002 Manila, Philippines, Laoag Air Fokker 27, crashed shortly after takeoff into Manila Bay, 13 saved of 34pax

23/12/2002 Isfanan, Iran, Aeromist Kharkiv AN-140, carrying aeronautical engineers crash on approach, 46 out of 46

08/01/2003 Charlotte, USA, US Airways Express/Air Midwest Beech 1900, crash onto hangar on tkof, 21/19pax +2crew

08/01/2003 Diyarbakir, Turkey, Turkish Airlines F634 Avro RJ100, crash on app in bad wx, 77 /72pax +5crew

08/01/2003 Chachapoyas, Peru, F28, CFIT into mountain on initial approach, 46

10/02/2003 Tallinn, Estonia, Enimex airline Antonov 28, crashed soon after airborne, 2 of 3crew

19/02/2003 Nr Kerman, Iran, Iranian Military Il-76, Crashed 330 feet below a peak in the Sirach Mountains. 275/275

06/03/2003 Tamanrasset, Algeria, Air Algerie B737 F6289 crashed shortly after takeoff, 102 but 1 survived. 97pax+6

26/05/2003 Trabzon, Turkey, Spanish Military chartered Ukrainian Yak-426, crashed on approach in fog, 40+12 crew

08/07/2003 Port Sudan, Sudan, Sudan Airways B737-200, crashed after take off, 105pax + 11crew 1 child survived

## 29/10/2003 Mt Salak, INA Air Force Sikorsky Helicopter, crashed, 7/7

17/11/2003 Wau, Sudan, Saria Airlines AN-12, plane caught fire and exploded while preparing to land, 13

 $22/11/2003 \quad \text{Baghdad, Iraq, DHLA300B4, } \\ \text{impacted by a SAM shortly after takeoff, crash landed, } \\ 0/2$ 

The aircraft was on a cargo flight from Baghdad to Bahrain. It was impacted by a surface-to-air missile shortly after takeoff from the Baghdad International Airport (Iraq). The wing and wing devices are seriously damaged. All the three hydraulic circuit are lost: the moveable parts of the plane (ailerons, rudder, elevator ...) are frozen. Many warnings are triggered. The aircraft is uncontrollable and fly by its own. See: <a href="http://www.1001crash.com/index-page-description-accident-dhl\_A300-lg-2-crash-57.html">http://www.1001crash.com/index-page-description-accident-dhl\_A300-lg-2-crash-57.html</a>

25/12/2003 Cotonou, Benin, B-727, crashed on the water after take-off, 90 killed 18 survived

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03/01/2004 Off Sharm el Sheikh, Egypt, Flash Air B-737-3Q8 SU-ZCF 148/148

13/01/2004 Tashkent, Uzbekistan, Uzbekistan Airways YAK-40, UK-87985 37/37

17/01/2004 Lake Erie, off Pelee Island, Ontario, Canada, Georgia Express Cessna 208B C-FAGA,10/10

06/02/2004 Bitonja, Bosnia-Herzegovina, Beechcraft Super King Air 200, Z3-BAB, 9/9

10/02/2004 Sharjah, United Arab Emirates, Kish Airlines Fokker F-50, EP-LCA, crashed on apc, 44/46

24/02/2004 Cagliari, Italy, City-Jet Cessna Citation 500, OE-FAN, 6/6

21/03/2004 Pyote, Texas, Air Ambulance - Med-Trans Corp. Bell 407, N502MT, 4/5

02/05/2004 Near Milpillas, Mexico, Procuradoria General de la Republica Gulfstream Jetprop 840, XC-JEH, 7/7

04/05/2004 Chimanta mountains, Venezuela, Venezuelian Government Cessna 208 Grand Caravan I, YV-O-CBL-7, 7/7

06/05/2004 Jiech, Sudan, Charter - Air Cush Let 410UVP, ?, 6/10

14/05/2004 Near Manaus, Brazil, Rico Linhas Aereas Embraer 120ER Brasilia, PT-WRO, 33/33

19/06/2004 NWAA319, bound for Rapid City, South Dakota (RAP), mistakenly landed at nearby Ellsworth Air Force Base

08/06/2004 Off Libreville, Gabon, Gabon Express BAe HS-748-232 Srs 2A, TR-LFW, 19/30

20/06/2004 Mt Salak, INA, Cessna Sky-Wagon crashed, 5/5

28/06/2004 Near Yengema, Sierra Leone, United Nations - UTair Charter Mi-8MTV-1, RA-27113, 24/24

02/07/2004 Panama City, Panama, Air Trek IAI 1124 Westwind, N280AT, 6/6

10/07/2004 Ticonderoga, New York, Capital Airlines Inc. Piper PA-31-350 Navajo Chieftain, N45032, 2/2

13/08/2004 Hebron, Kentucky, USA, Air Tahoma (DHL) Convair CV-580 cargo, crashed on apc 1 of 2

21/08/2004 Near Maracay, Venezuela, Venezuelan Air Force Shorts 330-UUT, FAV-1652, 25/25

24/08/2004 Tula, Russia, Tu-134, crashed, 34/34

24/08/2004 Rostov-on-Don, Russia, Tu-154 en route to Volgograd, crashed, 52/52

08/10/2004 Sylhet, Bangladesh, Bima F-28, flt from Dhaka overrun 9,000ft r/w in rainy wx, 0/83

14/10/2004 Halifax, Nova Scotia, Canada, MK Airline B747-244 cargo, crashed on tkof, r/w 24 (8800ft), 7/7

On 14 October 2004, a Boeing 747-244SF, registered 9G-MKJ, attempted to take off from runway 24 at the Halifax International Airport. The aircraft overshot the end of the runway for a distance of 825 ft (251 m), became airborne for 325 ft, then struck an earth mound. The aircraft's tail section broke away from the fuselage, and the aircraft remained in the air for another 1,200 ft before it struck terrain and burst into flames. The aircraft was destroyed by impact forces and a severe post-crash fire. All seven crew members were fatally injured.

20/10/2004 Kirksville, Mo, USA, Corporate Airlines Jetstream 32, crashed on apc, 13/?

21/11/2004 Inner Mongolia, China, China Eastern Airlines Bombardier CRJ-200, crashed after airborne, 53+1 on Gnd

30/11/2004 Solo, INA, Lion Air MD-82, overran runway in heavy rain, 26/153

an MD-82 crashed in Surakarta, killing 25 people. The accident report attributed the cause to poor airport condition. Data however showed pilot error, and lack of reserve fuel forcing the pilot to attempt to land in bad weather.

As Flight 583 approached Solo City a cumulo-nimbus rainstorm was overhead the field at 1500 feet. There was more than three millimeters of water on the runway at the time the plane landed. Also, it landed with a 13 knot tailwind component. After touchdown the spoilers deployed automatically. Since the power levers were probably positioned forward of idle thrust, the spoilers retracted again. The aircraft started to aquaplane and thrust reversers were deployed. The MD-82 continued and overran the 2600 metres long runway 26 and crashed into a metal fence of a cemetery. (ASN)

27/01/2005~ Iasi, Romania, Farnair Hungary, Let  $410\,2$  of 2

03/02/2005 Near Khartoum, Sudan, Russian IL-76, killed all the crew -- one Sudanese and six Russians

03/02/2005 Near Kabul, Afghanistan, Kam Air B737-200, Herat-Kabul, crashed after divert, 96 pax +6 Rus+ 2Afg crew

16/02/2005 Pueblo, Colorado, Citation 560, CFIT at Pueblo airport, 8 of 8

16/03/2005 Russia, Regional Airlines An24, 29

19/03/2005 Lake Victoria, Entebbe Uganda, Cargo Plus Aviation B707 crash-landed on 2nd attempt 5 crew minor injuries

23/03/2005 Lake Victoria, Tanzania, Moldovan-registered II76, crashed after tkof from Mwanza at 7.5km from a/p, 8 crew

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26/03/2005 Colombia, West Caribbean Airways Let 410 HK-4146、8
12/04/2005 Enarotali, INA, GT Air DHC-6 Twin Otter PK-LTZ, 17
Twin Otter left Timika (WABP) at 11:50 and ETA Enarotali (WABT) was 12:15. The wreckage was found April 17. 14+3/17
20/04/2005 Teheran, Iran, Saha Airlines B707-319, 169?
05/05/2005 Central Congo, Kisangani Airlift, Antonov 26 crashed, killing 10 of the 11 passengers aboard.
07/05/2005 Iron Range Queensland, Australia, Aero Tropics Air Services Swearingen 227, Metroliner 15 of 15
10/05/2005 Minneapolis, USA, Northwest A319/DC-9-51 ground collision, 2 of DC9 crew seriously injured.
25/05/2005 Goma, Congo, Victoria Air Antonov 12, crashed after tkof, 21+5 crew
31/05/1005 Khartoum, Sudan, An24, crashed after takeoff, killing at least 5 and injuring 2 out of 34+6
02/06/2005 Khartoum, Sudan, al-Majal Company Antonov AN-24V ST-WAL, 5 of 40
16/07/2005 Malabo, Guinea, Equatair An32, crashed soon after departure near Baney, 6 crew + 49 pax
02/08/2005 Toronto, Canada, Air France A340-300 skidded Toronto R/W in bad wx & caught4 injured /309
06/08/2005 Palermo, Italy, Tuninter ATR-72-202, ditched into sea due to engine trouble, fuel starvation, 16/39
14/08/2005 Grammatikos, (Kalamos) Greece, Helios Airways B737, enroute fro Cyprus to Athens crashed, 115pax + 6crew
16/08/2005 Machiques, Venezuela, West Caribbean Airways MD-82, crashed after 2 engine lost, 152+10 crew
23/08/2005 Pucallpa, Peru, TANS airline 22 yr old B737, crash while on approach in bad wx, 40 of 6crew+92pax
05/09/2005 Medan, INA, Mandala Airlines B737-200 crash after t/o rwy23 killed 102 (117pax+5crew) +47=149
22/10/2005 Lagos, Nigeria, Bellview Airlines Flight 210, B737 crashed shortly after takeoff, 117(111pax+6crew)
06/12/2005 Teheran, Iran, Lockheed, Iran AF C130, 94
10/12/2005 Port Harcour, Nigeria, Sosoliso Airlines DC9, on landing off runway, wx, 108
19/12/2005 Miami, Florida, Grumman G-73T N2969 Chalk"s, 20
23/12/2005 Baku, Nardaran, Azerbaijan, Azerbaijan Airlines Antonov 140, after take-off, system failure, 23
19/01/2006 Heice, Hungary, Slovak Air Force (Military) Antonov AN-24B, CFIT, UN personnel 42/43
31/03/2006 Saquarema, RJ (Brazil), TEAM Let 410UVP-E20, E/R Rio- Santos Dumont (SDU) Crew: 2/2 Pax17/17
16/04/2006 Guayaramerín, Bolivia, Transporte Aéreo Militar - TAM Fokker F-27 Friendship 400M landed in rain, 1/31
27/04/2006 Amisi, Congo, LAC, Sky Congo Convair CV-580F crashed on approach, 8/8
03/05/2006 Sochi, Russia, Armenian A320 from Yerevan Armenia crashes on final to Adler, WX, 113 (8+105)
09/07/2006 Irkutsk, Siberia Russia, Sibir Airlines A310 over ran, 125/203
22/08/2006 Donetsk, Eastern Ukraine – Pulkovo Aviation Tu-154, pilot error, 170/170 (45 children)
27/08/2006 Lexington, Kentucky, USA, Comair Bombardier Canadair CRJ-100ER tkof from wrong rwy, 49/50
01/09/2006 Mashad, Iran, Iran Air Tour Tupolev TU-154M crashed on landing, 29/147
29/09/2006 São Félix do Xingu, Brazil, Gol Transportes Aéreos B737-8EH, Mid-air, 154/154
            Neither active failures were identified in relation to the crew, nor latent failures in relation to the organizational system of the company.
29/09/2006 São Félix do Xingu, Brazil, Embraer EMB-135BJ Legacy 600, 0/7
           Relatively to the crew of the N600XL, the following active failures were identified: lack of an adequate planning of the flight, and insufficient
           knowledge of the flight plan prepared by the Embraer operator; non-execution of a briefing prior to departure; unintentional change of the
           transponder setting, failure in prioritizing attention; failure in perceiving that the transponder was not transmitting; delay in recognizing the
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problem of communication with the air traffic control unit; and non-compliance with the procedures prescribed for communications failure.



Embraer EMB-135BJ Legacy 600



GOL B737-800

28/10/2006 Continental Airlines Flight 1883, B757 mistakenly landed on a twy at Newark Liberty Intl Airport. 0/148+6

29/10/2006 Abuja, Nigeria, Nigerian airline ADC B737-2B7, crashed on takeoff, 96/105

24/12/2006 Ujungpandang, INA, Lion Air B737-400 crash landing at Ujung Pandang-Hasanudin, hull loss. 0/164

01/01/2007 Sulawesi, INA, Adam Air B737-400 Surabaya-Menado flight, missing at FL350, 102/102

The Adamair flight went missing during a domestic flight to Manado. Last contact was at 14:07 when the flight was enroute at FL350. Initial reports indicate that the flight changed course twice as a result of severe (130 km/h) crosswind. The airplane crashed into the sea. On January 11 part of a jetliner's tail, food trays and other debris was pulled from the sea. On January 25 a U.S. navy ship detected signals coming from the flight recorder, at a depth of over 1000 m.

21/02/2007 Surabaya, INA, Adam Air B737-300, JKT-SUB flt, landed hard Rwy10, 0/155

An Adam Air Boeing 737-300, registration PK-KKV performing flight KI-172 from Jakarta to Surabaya (Indonesia) with 148 passengers and 7 crew, was approaching Surabaya's runway 28 in thunderstorm rain, visibility 8000 meters. When the aircraft descended through 200 feet AGL the captain called the aircraft was too high and took control, subsequently the Ground Proximity System issued alerts "Pull Up!" and "Sink Rate!" The right hand main gear touched down outside the runway, about 4 meters off the right edge of the runway. The captain steered the aircraft back to the center line of the runway and brought it to a stop about 100 meters short of taxiway N3. Two passengers received minor injuries (backbone pain), the aircraft received substantial damage including a fractured/bent fuselage.

07/03/2007 Yogyakarta, INA, Garuda B737-400, JKT-JOG, crashed overshot after landing. 57/133pax /140

Garuda flight 200 was an early morning service from Jakarta (CGK) to Yogyakarta (JOG). Weather was fine as the Boeing 737-400 approached the airport. At 07:52 the plane was given clearance to descend to 2500 ft. Three minutes later the crew contacted Yogyakarta Tower. The controller replied: "Selamat pagi [good morning], Garuda 200. Surface wind calm continue approach runway 09. Report final traffic one bravo on line-up position." This was confirmed by the crew. Meanwhile, a TNI-AU AS.202 Bravo trainer was lined up for departure. After clearing the Bravo for takeoff, the tower controller turned to GA200: "GIA 200 wind calm. Check gear down and lock. Clear to land." The confirmation from the pilot was the last radio contact with the flight. Preliminary investigation results indicate that the plane approached fast. The NTSC chairman said in an interview ""There's ... some argumentation between the co-pilot and the pilot, and the captain, relating with the speed and flaps." The co-pilot reportedly did not select the flaps at the proper angle because the plane was flying too fast for the flaps to be deployed. He urged the captain to go-around but the approach was continued. The airplane overran runway 09 (an asphalt runway, 7215 x 148 feet), skidded through the perimeter fence and ended up in a rice paddy. The airplane caught fire and burned out.

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05/05/2007 Douala, Cameroon, Kenya Airway B737-800, soon after departing in bad wx, Loss of control 114/114
17/07/2007 San Paulo, Brazil, TAM Linhas Aéreas A320, overrun rwy 35L, crashed off runway, 187+12 on grnd/187
20/08/2007 Naha, Okinawa, China Airlines Boeing 737-800 B-18616, Fire on ramp, exploded, by fuel leak 0
22/08/2007 near Curitiba, PR, Embraer 110, Táxi Aéreo, Cause unknown 2
26/08/2007 near Kongolo Airport (GLBC), Congo, Antonov 32, Engine trouble 14/15
07/09/2007 Goma, Congo, SAS Transaviaservice Antonov 12, crash landed on rwy, 8/8
16/09/2007 Phuket, Thailand, One-Two-Go Airlines MD-80, went off the right side of the runway 27, 90/130
20/09/2007 Shorts Skyvan N2088Z Arctic Circle Air Service 1 Mystic Lake
04/10/2007 Kinshasa, Congo, El Sam Airlift Antonov 26, crash soon after tkof, 21/22+28(gnd)
08/10/2007 near Cubarral, Colombia, Nacional de Aviación Let 410, missing en route, 18/18
17/10/2007 near Guadalcanal Islander G-CHES Auxiliar de Actividades Aérea, Engine trbl 1
04/11/2007 near São Paulo-Ca Learjet 35 PT-OVC Reali Táxi Aéreo, Human factor+, 2+6.
30/11/2007 near Isparta, Turkey, Atlasjet MD-83 crashed on approach, CFIT, 57/57
30/12/2007 near Sabang, INA, INA Navy GAF Nomad P-833, after dept tried to return due eng prob, 5/7
17/01/2008 London Heathrow, BA B777-236 crashed at the approach end of runway, no casualties/152
01/02/2008 Trinidad, Bolivia, Lloyd Aéreo Boliviano B727-251, 0:159, possible fuel exhaustion
21/02/2008 Merida, Venezuela, Santa Barbara ATR42 went straight into mountain wall shortly after tkof, 46/46
            Accident Report came out 12 years later in April, 2020
15/04/2008 Goma, Congo, Hewa Bora DC-9-51 failed to take off, crashed into a market off end of rwy, 69/85
14/05/2008 Germwanwings A319 at Zweibruecken on May 14th 2008, near collision on runway with Transall,
            Accident Report came out 6 years later in January 2014: http://avherald.com/h?article=46ea71df&opt=0
20/05/2008 Tegucigalpa, Honduras, TACA A320 skidded across a busy roadway, impacting several vehicles, 3/142
10/06/2008 Khartoum, Sudan, Sudan Airways A310-300 ST-ATN 203+14 crew crashed and burst into flames. 100+killed
26/06/2008 Mt Salak, INA, INA AF CASA NC-212 Aviocar 200M crashed in Mt in fog. 5/18 killed (18 killed?)
23/07/2008 Banjarmasin, INA, GA B737, Landing Gear collapsed on landing.
09/08/2008 Ndundu, Papua, INA, AMV Pilatus PC-6B2-H4 cargo from Wamena, crashed en route, 1
14/08/2008 Lome, Togo, West Africa, Rescue of Turkish Airlines TK1123 w/169 pax: https://avherald.com/h?article=40d2752c
20/08/2010 Madrid-Barajas airport Spain, Spanair MD-82 caught fire during takeoff, 162 pax + 4 (passive) +6 crew
24/08/2008 Manas, Kyrgyzstan, Iran Aseman Airlines B732 crashed returning soon after dept, CFIT 68/73 w/169 pax
27/08/2008 Jambi, INA, Sriwijaya B737-200, overran landing gear c ollapsed. 18 injured. (AAR: KNKT.08.08.12.04)
14/09/2008 Perm, Russia, SU821 B737-500 from Moscow, crashed while approach, CFIT 82pax+5crew
06/11/2008 Fak Fak Torea, Papua, INA, Expressair Domier-328, hard landing 0/3
20/12/2008 Denver, Colorado, Continental B737-500, rwy excursion when tkof rwy34L, Turbulence/Mountain Wave, 0/115
          A Continental Airlines Boeing 737-500, registration N18611 performing flight CO-1404 from Denver, CO to Houston, TX (USA) with 110
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passengers and 5 crew on board, veered off Denver's runway 34R around 2000 feet (approx. 600 meters) into the takeoff run at 6:18pm local (Dec 21st 01:18Z), went down a ravine north of the west fire station and burst into flames. All people got out of the airplane using slides on both sides of the airplane, 38 of the 115 people on board received injuries ranging from broken bones to bruises. Two passengers were reported to be in critical condition, but their status was upgraded to one serious and one fair during Sunday.

PROBABLE CAUSE: "The National Transportation Safety Board determines that the probable cause of this accident was the captain's cessation of right rudder input, which was needed to maintain directional control of the airplane, about 4 seconds before the excursion, when the airplane encountered a strong and gusty crosswind that exceeded the captain's training and experience.

Contributing to the accident were the following factors: 1) an air traffic control system that did not require or facilitate the dissemination of key, available wind information to the air traffic controllers and pilots; and 2) inadequate crosswind training in the airline industry due to deficient simulator wind gust modeling."

11/01/2009 Caticlan, Philippines, Zest Air Xian MA-60, crashed short of runway, 0/25

15/01/2009 Makhachkala Airport (MCX), Russian AF, dept and land II76D's collided on rwy, 3/7

15/01/2009 Hudson River, NY, USAir A320 ditch on river due eng failure from bird strike, 0/155

12/02/2009 Clarence, NY, Colgan Air (Continental Connection) Bombardier Dash 8Q-400 49/49+1

20/02/2009 Beoga, **Puncak Jaya**, **Papua**, Trigana Twin Otter overshot runway 0/0

25/02/2009 Amsterdam, NL, Turkish Airlines B737-800, crashed short on final Rwy18R, 9 of 127pax + 7crew

09/03/2009 Jakarta, INA, Lion Air MD-90-30, skidded off rwy with 180 deg spin in heavy rain, 0/166

23/03/2009 Narita, Japan, FEDEX MD11F, crashed on landing, 2 crew/2

06/04/2009 Bandung, INA, IAF F27, crashed on landing to hangar with 20kts crosswind, 24/24

09/04/2009 Wamena, Papua, INA, AviaStar Bae146, crashed on approach to Wamena Rwy 15, 6/6

17/04/2009 Mt Gergaji, Puncak Jaya, Papua, (S4 05 E137 11) Mimika Air Pilatus Porter crashed, 9/9

30/04/2009 Mt Salak, INA, Curug Training Center small airplane crashed, 3/3 (?)

11/05/2009 Indonesian AF C130 lost four tires when land. No casualties

### 11/05/2009 LAX, USA, JAL 機がコンテナ吸い込み、離陸中止 ロサンゼルス

米ロサンゼルス国際空港(Los Angeles International Airport)で離陸準備をしていた日本航空 (JAL)のジェット旅客機が 11 日、エンジンに貨物用コンテナが吸い込まれていることが確認され、離陸を中止した。 空港管理当局が明らかにした。







Delta L1011 also

20/05/2009 Madiun, INA, INA Air Force C-130 crashed at landing, 95/110 pax

01/06/2009 Atlantic, Brazil, AFR447, A330-202, crashed into ocean near INTOL, 216+12crew/228

30/06/2009 Moroni, Comoros, Yemenia A310, crashes on approach off Comoros, 150 dead. 1 survived.

12/06/2009 Mt Salak, INA, Air Force Puma SA330 helicopter crashed during test flight, 2/2

14/06/2009 Tanah Merah, Papua, INA, Express Air Domier328-100, Rwy excursion, 0/36

15/07/2009 Teheran, Iran, Caspian Airlines TU-154M, crashed 16min after tkof, 153 pax and 15crew.

02/08/2009 Oksibil, Papua, INA, Merpati Nusantara Twin Otter, crashed on mountain near OKL, 15/15

A Merpati Nusantara Airlines de Havilland DHC-6-300 Twin Otter, registration PK-NVC performing flight MZ-9760D from Jayapura to Oksibil (Indonesia) with 13 passengers and 2 crew, departed Jayapura at 10:10 local (01:10Z) and was last heard on radio at 10:25 local. The airplane was due at Oksibil at 11:05 local (02:05Z), but failed to contact Oksibil tower. The wreckage of the airplane was located on a mountainside two days later, Indonesian Authorities confirmed on Aug 5th, that all on board perished in the crash. A land rescue team has reached the wreckage on Wednesday and recovered all 15 bodies.

14/09/2009 Serui, Papua, INA, Aviastar Twin Otter skidded off runway while landing. ?/8

17/10/2009 Manila, Philippines, Victoria Air DC-3C crashed near ap when returning after tkof emergency, 4/4

21/10/2009 Sharjah, UAE, Azzi B707-330C crashed on takeoff 3km off a/p, 6/6

01/11/2009 Yakutia, Russia, Government Il-76 crashed while climbing after departure, cause unknown, 16/16

02/11/2009 Mt Dorman, Papua, INA Police, Skytruck, crashed enroute DJJ -Mulia (LII/WABQ), 4/4

28/11/2009 Shanghai-Pudong, China, Avient Aviation MD-11 crashed on tkof after tail strike, 3/7

02/12/2009 Kupang, INA, Merpati F100 landed without L main gear, 0/94

Merpati Airlines Fokker 100, registration PK-MJD performing flight MZ-5840 from Ujung Pandang/Makassar to Kupang (S10 10 40.0 E123 39 49.0) with 88 passengers and 6 crew, aborted the approach to Kupang, when the crew received an unsafe indication for the left hand main gear. The crew entered a holding to troubleshoot the problem, but was unable to fully extend the left main gear. A low approach confirmed, that the left gear was just partially extended. The crew had to decide to land without the left main gear and touched down on runway 07. The crew lost directional control just prior to coming to a stop, the airplane came to stop about 1850 meters past the runway threshold just to the left of the runway on soft ground, no injuries occurred.

06/12/2009 Rhode Island, USA, On December 6, 1999, at 2035EST, UAL1448, a B757, and FDX1662, a B727, were involved in a runway incursion on runway 5R at the Theodore Francis Green State Airport, Providence, Rhode Island. No injuries were reported, and neither aircraft was damaged. The crew of UAL1448 landed on runway 5R and, during taxi to the terminal, became disoriented and inadvertently turned on taxiway B and stopped on the edge of runway 5R. FDX1662 departed runway 5R, passing very near UAL1448. The incident occurred during night instrument meteorological conditions. Reported visibility was 1/4 mile and the runway visibility range was 1,400 feet. (DCA00SA012AB)

07/12/2009 Pondok Cabe, Tangerang, INA, Army Cessna 212 skidded off runway when landing. 0/?

22/12/2009 Kingston, Jamaica, AA331 B737-823, N977AN runway excursion with tailwinds, on rwy12, 0/152

31/12/2009 Ketapang, West Kalimantan, INA, Cessna crashed in front of a hospital, killing a pilot and a technician

## 2010

## 19/01/2010 Lion Air B739 at Padang on Jan 19th 2010, runway excursion on landing

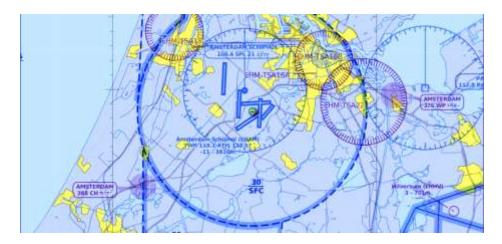
25/01/2010 Beirut, Lebanon, Ethiopian Airlines Boeing 737-800, ET-409, crashed after dept, 82 pax + 8 crew

Aircraft had received departure clearance from runway 21 via the LATEB 1D standard instrument departure route. Immediately prior to takeoff the clearance was changed to "immediate right turn direct Chekka". After takeoff tower instructed the aircraft to turn onto a heading of 315 degrees and change to control frequency. The crew acknowledged and continued the right hand turn. Although heading 315 was selected on the master control panel, the airplane continued until a heading of 003 degrees, a series of 10 bank angle warnings began while the airplane turned right. In the meantime Control had instructed the flight turn left to heading 270 degrees. The crew acknowledged the instruction, the aircraft initiated that left turn, 270 was selected on the master control panel, but the aircraft did not maintain the assigned heading. The aircraft turned onto a southerly heading, almost immediately followed by a first stick shaker activation that lasted for 29 seconds, about 13 seconds after the stick shaker activation the airplane reached its maximum angle of attack of +32 degrees. Another stick shaker activation followed 55 seconds after the first activation, this time the stick shaker operated for 26 seconds. During these 26 seconds the aircraft made two sharp left turns reaching a maximum left bank angle of 118 degrees and a nose down attitude of 63.1 degrees during the second left turn. 3 seconds after the stick shaker ceased the overspeed clacker activated and continued until impact at approx. N33.743 E35.410 about 15 seconds later. In those last seconds the aircraft reached a speed of 407.5 KIAS and a G-load of 4.412. The aircraft left a debris field 300 meters long and 100 meters wide, all on board perished. The waters are about 45 meters deep in that area.

28/01/2010 Wamena, Papua, INA, Manunggal Air, Antonov 26B cargo, from Jayapura, overrun rwy, 00/03 crew

10/02/2010 Schiphol, Amsterdam Netherland, KLM took off from taxiway.

A KLM Boeing 737-300, registration PH-BDP performing flight KL-1369 from Amsterdam (Netherlands) to Warsaw (Poland), was cleared to take off runway 36C at about 20:36L (19:36Z), however actually took off along the parallel taxiway B. The airplane continued to Warsaw for a safe landing.



Amsterdam Schiphol Airport

11/02/2010 Bone, near Balikpapan, INA, Trigana AT42, forced landing on a field, both engines not operating, 00/46+5crew 10/02/2010 Smolensk, Russia, A Polish Air Force Tupolev TU-154M Warsaw-Smolensk crashed on approach, wx, 0/88 pax+8 crew



13/04/2010 Manokwari, INA, Merpati B737-300, PK-MDF MZ-836, Sorong to Manokwari, 0/97 pax+ 6 crew, overran rwy 35

13/04/2010 Monterrey, Northern Mexico, Aero Union, A300-B4 Freighter, (04.30hrs GMT, April 14th), 5/5+1 ground casualty

The Direccion de Investigacion de Accidentes e Incidentes de Aviacion (DIAIA):

(Final Report 20180804 according to AVH)

While on a missed approach the aircraft impacted terrain as result of loss of control.:

Contributing factors were:

- Lack of crew resource management (coordination) amongst the crew
- Reduced situation awareness
- standard operating procedures not being followed
- non-stabilized approach in a non-precision approach procedure
- improper aircraft configuration
- adverse weather conditions

12/05/2010 Tripoli, Libya, Afriqiyah Airways A330-202 crashed while on approach short of rwy 09, 93+11 crew, 1/104.

Libyan investigators have determined that poor co-ordination between the pilots of an Afriqiyah Airways Airbus A330-200, spurred by sensory illusion, preceded the fatal go-around crash at Tripoli. (Flight Intl Feb 28,2013)

17/05/2010 Salang Pass, Afghanistan, Pamir Airways AN-24, crashed enroute Kundus - Kabul (Afghanistan), bad wx, 38+6 crew 22/05/2010 Mangalore, India, Air India Express B737-800 from Dubai crashed on landing after overrun, 160+/165



26/05/2010 En-route Dubai India, Air India Charter B737-800NG, Inflight Upset due to copilot error, 0/113

02/07/2010 Bintuni, INA, Merpati Nusantara de Havilland DHC-6-300 Twin Otter. RTO, Overrun, nose gear collapsed. 0/8

Merpati Nusantara de Havilland DHC-6-300 Twin Otter, registration PK-NUH performing flight MZ-836 from Bintuni to Sorong (Indonesia) with 6 passengers and 2 crew, rejected takeoff from Bintuni when the lefthand main gear tyre burst, but veered to the right during slow down and came to a stop with the nose gear and righthand main gear off the paved surface of the runway, the nose gear collapsed. No injuries occurred, the aircraft received substantial damage.

 $28/07/2010\ Islamabad, Pakistan, Airblue\ A321, crashed\ into\ the\ Margalla\ Hills\ near\ Islamabad\ airport,\ 150$ 

AirBlue A321-200, AP-BJB performing flight ED-202 from Karachi to Islamabad (Pakistan) with 146 passengers and 6 crew, was on approach to Islamabad in poor weather conditions (monsoon rain and low visibility) when the airplane impacted the Margalla Hills about 10nm north of the airport (N33.74433 E73.04347) at a height of about 1000 feet above the city/aerodrome (2,858ft MSL).

28/07/2010 Elmendorf, Alaska, USAF C-17 crash, 4/4.

16/08/2010 San Andres Island, Caribbean Sea, Colombia, Aires B737 crashed while landing during a storm, 2/125+6crew

An B737-700, HK-4682 performing flight 4C-8250 from Bogota to San Andres Island (Colombia) with 125 passengers and 6 crew, touched down short of runway 06 and broke up in three parts while landing at San Andres Island Airport at 01:49L (06:49Z). Two passengers were killed, 33 passengers received injuries of varying degrees.

 $24/08/2010\ \ Nepal, AGRI Air Dornier 228 crashed en-route in bad wx, <math display="inline">14/14$ 

24/08/2010 Yichun in Northeast China, Henan Airlines Embraer 190, runway excursion on landing, 42/96

25/08/2010 Bandundu, Congo, Filair Let 410 crashed on approach, fuel starvation, 20/21

 $03/09/2010 \;\; \text{Dubai UAE, UPS B747 Cargo crashed near high way of Dubai, in cabin fire, 2 crew/2}$ 

At about 7:51 pm local time (1551 UTC), United Parcel Service (UPS) Flight 6, a Boeing 747-400F (N571UP), crashed while attempting to land at Dubai International Airport (DXB), Dubai, United Arab Emirates (UAE). The flight had departed from Dubai approximately 45-minutes earlier as a scheduled cargo flight to Cologne, Germany, but the flight crew declared an emergency and requested an immediate return to DXB. The airplane impacted inside an Emirati army base near a busy highway intersection, approximately nine miles from Dubai's international airport. The two flight crew members were fatally injured.

07/09/2010 Mt Salak, INA, Hang Glider crashed, 1/1

- 13/09/2010 Puero Ordaz, Ciudad Guyana area (SVPR), Venezuela, Conviasa ATR-42, crashed after tkof, loss of control, 26/47
- 13/09/2010 Aeromexico MD-83, bound for Tuxtla, Mexico (TGZ), mistakenly landed at Francisco Sarabia/Teran Military Airport. Wrong rwy
- 12/10/2010 Kabul, Afghanistan, National Air Cargo Lockheed L-100 Hercules cargo, damaged beyond repair near Kabul Airport, 8/8
- 27/10/2010 Wami, Papua, INA, PZL-Mielec M28-05PI Skytruck of National Police, Nabire-Ambon, crashed, 5/5
- 02/11/2010 Pontianak, INA, Lion Air B737-4, overrun rwy15, 0/174
- 04/11/2010 Guasimal, Sancti Spiritus Province, Cuba, Aerocaribbean ATR-72-212, crashed en-route, 68/68
- 04/11/2010 Over Batam INA, QF32, A380 (RR Trent 900) SIN to Sydney, uncontained Engine Failure, 0/469 pax and crew
- 11/11/2010 Zalingei Airport, Sudan, Tarco Airlines An24B, burst when landing, 6/38
- 27/11/2010 Hong Kong, FIN A330, rejected take off (RTO) from Taxiway for RWY07L. no injuries.

Hong Kong's Civil Aviation Department (CAD) released a preliminary report reporting, that OH-LQD had been cleared to taxi along taxiway B to holding point runway 07L. When the aircraft reached the western end of taxiway B the air traffic controller cleared the aircraft for takeoff from runway 07L, the crew however made a premature turn onto taxiway A and **began the takeoff roll on the taxiway**. The tower controller noticed that anomaly and ordered the A340 to stop, the airplane came to a stop abeam taxiway A5 about 1400 meters down taxiway A. The investigation found that weather was no factor with visibility above 10km, cloud base at 2500 feet and no precipitation. Runway lights were configured in standard configuration for single runway use (runway 07R was closed for routine maintenance). Immediately after the occurrence the lighting was checked and all lights were found serviceable.

The Civil Aviation Department has modified ATC procedures as an immediate response to the incident requiring tower controllers to issue takeoff clearances for runway 07L only after the airplane has crossed taxiway A.

- 28/11/2010 Karachi, Pakistan, Sun Way Ilyuhsin 76TD cargo, crashed soon <tkof, 8/8+4/gnd
- 04/12/2010 Moskva-Domodedovo Airport (DME), Russia, Dagestan Airlines Tu-154M, 2/
- 15/12/2010 Palunge Hill, Nepal, DHC-6, Tara Air, Twin Otter 310, crashed, 22/
- 19/12/2010 1 km N of St. Moritz-Samedan Airport (SMV), Switzerland, Windrose Air Hawker Beechcraft 390 Premier, 2/
- 28/12/2010 near Krasny Oktyabr, Tula Region, Russia, Russian AF An22, crashed, 12/12
- 01/01/2011 Surgut, Russia, Kogalymavia Tu-154B, Fire while taxiing, 3/124
- 09/01/2011 Urmia Airport, West Azarbaijan province, Iran, Iran Air B727-200 crashed after Go-Around in bad wx, 77/105
- 20/01/2011 El Capricho Area, Napo, Ecuador, Fuerza Aerea Ecuadoriana DHC-6 crashed near dest. 4pax + 2crew.
- 20/01/2011 New York, USA, American B772, near collision with USAF C-17s due to ATC error, 0/

On Nov 6th 2012 the NTSB released their final report concluding: Incomplete and incorrect coordination between air traffic controllers that resulted in the 777 and the two C17s being cleared to maintain the same altitude. Contributing to the incident was the controllers' non-adherence to established communications phraseology and incorrect data entry into the radar data blocks for each aircraft.

### NTSB Update (Released 2012/11/05)

A near-midair collision occurred between a Boeing 777-200 and a flight of two US Air Force C-17s as the result of an operational error by controllers at the New York air route traffic control center (ZNY). The airplanes responded to traffic collision avoidance system (TCAS) advisories, and both controllers immediately provided traffic advisories and turned each aircraft to resolve the conflict. According to recorded radar data, the three airplanes passed within approximately 0 feet vertically and .38 miles laterally from each other.

The air traffic data controller, who was the coordinator between two radar controllers, told the controller working the 777 to stop the airplane at flight level (FL) 210. Following that coordination and while still on an open line with that controller, the data controller leaned toward the controller working the two-C17s and told him to stop his flight at FL220. The controller working the 777 overheard the portion of the communication where the data controller said to stop at FL220 and believed that the instruction was meant for the 777.

Therefore, the controller instructed the 777 to climb to FL220, while at the same time the controller instructed the C17s to descend to FL220. Additionally, the investigation revealed that the radar data blocks for each of the airplanes displayed incorrect assigned altitude data. The data block for the 777 indicated that the airplane was cleared to climb to FL230 and the data block for the C17s indicated that the flights were cleared to descent to 10,000 feet. Both of these were incorrect: the radar data block for all involved airplanes should have reflected the assigned altitudes of FL220.

The National Transportation Safety Board determines the probable cause(s) of this incident to be: Incomplete and incorrect coordination between air traffic controllers that resulted in the 777 and the two C17s being cleared to maintain the same altitude. Contributing to the incident was the controllers' non-adherence to established communications phraseology and incorrect data entry into the radar data blocks for each aircraft.

01/02/2011 Williamtown, Australia, Virgin Blue B737 had near miss with Mil aircraft, lost separation due to ATC error.

Virgin Blue Boeing 737-700, registration VH-VBK performing flight DJ-1590 from Williamtown, NS to Melbourne, VI (Australia), was climbing to 5000 feet out of Williamtown, while a military aircraft was inbound to Williamtown at 5000 feet. Separation reduced to 400 feet vertical and 0.7nm lateral. Both airplanes reached their destinations safely.

The ATSB initiated an investigation into the serious incident.

04/02/2011 Sulaimaniyah airport, Iraq, Raytheon Hawker 850XP crashed in a heavy snowstorm. 7/7

10/02/2011 Cork Airport, Ireland, Swearingen SA-227BC Metro III crashed in a landing, 2crew+4pax/2crew+10pax

Flightline (call sign Flightavia, based in Barcelona, Spain) Swearingen SA-227 Metroliner on behalf of Manx2, registration EC-ITP performing flight FLT-400C/NM-7100 from Belfast City Airport, NI (UK) to Cork (Ireland) with 10 passengers and 2 crew, rolled on its back while attempting to land at Cork's runway 17 in low visibility (CAT II conditions) just before 10:00L (10:00Z). The airplane came to rest near the runway abeam taxiway C, a fire broke out which was quickly (within 2-3 minutes) put out by responding emergency services. Debris is scattered across a wide area including the runway. Six people including both crew have been killed, 4 passengers received serious, 2 passengers minor injuries.

The Irish AAIU have released their final report (in Jan 29, 2014) concluding the probable cause of the accident was: **Loss of control** during an attempted go-around below Decision Height in Instrument Meteorological Conditions. AAIU reported that the captain (31, CPL, 1800 hours total, 1600 hours on type, 25 hours in command on type) was pilot monitoring, the first officer (27, CPL, 539 hours total, 289 hours on type) was pilot flying. Both pilots were certified for CAT I, however, were not certified for CAT II.

\*HUMAN FACTORS\* AAIU continued analysis: "Systemic deficiencies at the operational, organisational and regulatory levels were identified by the Investigation as being contributory to the accident. Such deficiencies provided the conditions for poor operational decisions to be made on the day of the accident which resulted in the loss of the aircraft with fatalities and serious injuries."

10/02/2011 Niihau, Hawaii, USA, JAL B767-300, Turbulence, 0/239+11, 4 injured

JAL Japan Airlines Boeing 767-300, registration JA603J performing flight JL-74 from Tokyo Narita (Japan) to Honolulu, HI (USA) with 239 passengers and 11 crew, was descending from FL380 through FL350 about 300km (162nm) west of Honolulu and 4nm south of Niihau, HI at approx 08:33L (18:33Z) when the aircraft encountered severe turbulence causing serious injuries to four occupants of the aircraft. The crew continued for a safe landing in Honolulu about 25 minutes later.

12/02/2011 Tanjung Pinang, Bitang Island, INA, CN212, crashed 13nm N of airport on approach, 5/5

Sabang Merauke Raya Air Charter (SMAC) Casa C-212-100 Aviocar, registration PK-ZAI performing a test flight from Batam to Tanjung Pinang (Indonesia) with 5 crew on board, was enroute between Tanjung Berakit and the village of Malang Rapat (around 9nm SSE of Tanjung Berakit) about 30 minutes into the flight when the airplane disappeared from radar. The aircraft was later found in a mud puddle on the ground, all 5 occupants had perished in the crash. The airplane had just undergone maintenance during which an engine had been changed. A subsequent search located the aircraft at final position N1.1792 E104.5728, all occupants had perished, the aircraft was destroyed. The first impact mark was found 16 meters to the west of the main wreckage, where the aircraft had impacted and broken a tree at 6 meters of height.

14/02/2011 Pekanbaru, Sumatra, INA, Lion Air B737-900 ER, JT 392 plane slipped off runway after landing in bad wx, 0/213pax

Transportation Ministry grounded the pilot of a Lion Air plane that skidded off the runway at Sultan Syarif Kasim II Airport in Riau, capital of Pekanbaru, on Monday. The plane, carrying 213 pax, slipped off the end of the runway while landing on Sunday evening. There were no human casualties in the incident, but it led to the closing of the airport until Tuesday morning. "Firm action has been imposed on the pilot of the plane; he's been temporarily grounded," ministry spokesman Bambang Supriyadi Ervan said on Tuesday in Jakarta, as quoted by tribunnews.com. The B737-900ER, JT 392, was piloted by Habaoran Adriansyah. Air Traffic Control officers at Pekanbaru airport said the plane circled the airport twice before making the landing. There were heavy rains and strong winds around the time of the landing. (Jakarta Post)

15/02/2011 Pekanbaru, INA, B739, Lion Air 295, overran runway on landing

Lion Air B737-900, PK-LHH, JT-295 from Medan to Pekanbaru with 218 people on board, overran Pekanbaru's runway 36 and came to a stop about 25 m off the paved surface around 17:00L (10:00Z) in drizzle. Pax disembarked onto soft ground via mobile stairs.

15/02/2011 near Cerro de Hula, Toncontin Honduras, Central American Airways L-410, crashed in a forest, 14/12pax + 2crew

05/03/2011 Garbuzovo, Belgorod Region, Russia, Antonov 148-100E jet, aircraft broke up in flight, 6/6

04/03/2011 Cakrabhuwana Airport, Cirebon West Java, INA, Aero Flyer Institute Cessna 172, PK-HAF,

On 4 March 2011, a Cessna 172 aircraft, registered PK-HAF, was being operated by Aero Flyer Institute for a series of Touch and Go exercise flight. The aircraft veered to the left and out of the runway, the aircraft stopped on left shoulder opposite the landing direction runway 04.0/3

12/03/2011 Cakrabhuwana Airport, Cirebon - West Java, INA, Aero Flyer Institute Cessna 172, PK-HAI,

On 12 March 2011, a Cessna 172 aircraft, registered PK-HAI, was being operated by Aero Flyer Institute on a cross country exercise flight from Cakrabhuwana Airport (WICD), Cirebon, West Java to Budiarto Airport (WICB), Tangerang, Banten. There were 4 persons on board; one pilot instructor, two students and one mechanic helper. At 01.11 UTC1 (08.11 LT) the aircraft request taxi to runway 04, at 01.13 the aircraft on short runway 04 and continue to enter backtrack runway 04. The aircraft take off at 01.19, the student on the left seat as a pilot flying and the instructor on the right seat monitored the student, the pilot get information from the ATC that the weather condition was good with visibility 6 – 8 Km and wind calm. During takeoff role about 235 meters from the beginning runway 04, the aircraft veered to the left. The pilot noticed the movement of the aircraft and tried to return the aircraft back to the runway centreline. After the aircraft speed reaches about 60 knots, the student pull the control yoke the aircraft pitch up and recovered to the centreline. As the aircraft nose attitude getting higher, the pilot's right seat start move backward. The pilot spontaneously reached his yoke in order to stop his seat shifting, at the same time the student spontaneously pushed the yoke to lower the aircraft nose. As a result the aircraft pitch getting high following by the stall warning hom comes on and the lower rudder strike to the runway surface. The aircraft veered to the right, then out of the runway, bounced twice and finally stopped by impacted a cliff at 01.19, at coordinate 6°45'20" S 108° 33' 26" E. The forward and twisted force caused the left yoke shaft was broken at the pin hole. 0/4

15/03/2011 Zurich, Switzerland, Swiss A320 and Swiss A320, close encounter between departing aircraft on crossing runways

A Swiss Airbus A320-200, registration HB-IJW performing flight LX-2026 (radio call sign Swiss 202 Whiskey) from Zurich (Switzerland) to Madrid, SP (Spain), was in the takeoff run on runway 28, when the tower controller ordered the crew to reject takeoff at high speed (approx 130 KIAS). The airplane came to a stand still about 20 meters prior to the intersection with runway 16 with hot brakes. At the same time another Swiss Airbus A320-200, registration HB-IJH performing flight LX-1326 (radio call sign Swiss 1326) from Zurich (Switzerland) to Moscow Domodedovo (Russia), was in the takeoff run from Zurich's intersecting runway 16, the aircraft continued takeoff.

The Swiss BFU have released their final report concluding the probable causes of the serious incident were:

The serious incident is attributable to the fact that the **air traffic control officer** concerned gave take-off clearance to an aircraft on runway 28 although another aircraft on runway 16, to which he had given take-off clearance shortly before, was still on its take-off roll. The result was that an **inadvertent convergence of these aircraft occurred**, involving a high risk of collision.



Zurich

21/03/2011 Pointe-Noire, Congo, AN12 cargo plane, on approach struck several houses and burst into flames, 9/9

04/04/2011 Kinshasa-N'Djili Airport, Congo, UN Charter CRJ-100ER, 1pax/29 pax+4 crew

04/04/2011 New Orleans, LA, UALA320, UA497, smoke in cockpit, complete electronic failure, runway excursion, evacuation

United Airlines Airbus A320-200, N409UA UA-497 New Orleans, LA to San Francisco, CA with 104 pax and 5 crew, was in the initial climb when the crew reported smoke in the cockpit, levelled off at 5000 feet and returned to New Orleans. The crew reported before joining downwind that they had lost all instruments and requested to **be talked down by ATC via Precision Approach Radar (PAR)**. The crew descended to 600 feet where they got visual contact with the water of Lake Pontchartrain and continued visually for a landing on rwy 19 about 10 minutes after departure. During landing the aircraft blew both right hand main gear tyres, went left off the runway, stopped with all gear just off the paved surface north of the intersection with rwy 10/28, and was evacuated via slides. A number of pax needed medical attention due to smoke inhalation.

Post landing photos showed the RAM Air Turbine (RAT) deployed. Rwy 01/19 was closed for about 10 hours.

The first officer (FO, Copilot Ronald Lee Young, 51, ATPL, 11,500 hrs total, 1,154 hrs on type) was the pilot flying for the flight and the captain (50, ATPL, 15,000 hrs total, 1,487 hrs on type) was the pilot monitoring.



### TRANSCRIPT OF AIR TRAFFIC CONTROLLER, PILOT CONVERSATION: Good Job, ATC!

UA 497: Clear for takeoff runway 19, thank for you very much.

UA 497: We need to vector back to the airport, we got a smoke issue with the airplane.

N.O. Approach: Turn right 030 (degrees) and maintain 4,000 (feet.)

UA 497: 030 4,000. And we'd like the longest runway please.

N.O. Approach: There are men and equipment on the runway - they're going to try to get them off now. Descend at pilot's discretion. Maintain 2,000.

UA 497: We are declaring an emergency and please roll equipment for our landing please.

N.O. Approach: We are unable for (runway) 10, can you take (runway) 19?

UA 497: ..no..

N.O. Approach: Roger, we are clearing the runway now.

Airport operations: How much time do we have?

New Orleans Tower: I'd say they are about 11 miles to the west.

 $Airport\ operations:\ Tower,\ we\ can\ start\ trying\ to\ pull\ them\ off,\ but\ I\ don't\ think\ we\ will\ get\ them\ all\ off\ in\ time.$ 

N.O. Approach: United 497, Say souls on board and fuel remaining.

UA 497: 106 souls on board, fuel remaining 32,400 pounds.

N.O. Approach: They are still trying to get all the vehicles off the runway and 19 is still available if you like...

New Orleans Tower: ... working as fast as they can (unintelligible) There is a bunch of equipment on there they're tying to get off now.

UA 497: You need to clear it for us.

New Orleans Tower: I understand, sir. We're getting them off as fast as we can.

N.O. Approach: Turn right heading 140, main 2,000 ....cleared ILS runway 10 approach.

New Orleans Tower: Can you verify the vehicles are exiting?

Airport operations: We are attempting to get the vehicles off right now, I'm removing the cones also.

New Orleans Tower: OK, cause I haven't seen any of the vehicles move and the aircraft is ten to the northwest and they have to have runway 100.

N.O. Approach: United 497, Turn right heading 180.

UA 497: um.... We only have one... um ... (Alarms sounding in background.)

N.O. Approach: United 497 say again sir?

New Orleans Tower: We need three minutes to get the runway clear.

UA 497: (alarms blaring) We've lost all our instruments right now and we're going to need (directions)

N.O. Approach: United turn left heading, 20 degrees left

N.O. Approach: Just continue left turn, I'll tell you when to stop.

UA 497: (unintelligible) What vector are we from the airport?

N.O. Approach: Right now sir you are on the 330 degree heading from the airport. Northwest of the airport for runway 19er. If you continue on this present heading you'll set up on the shoreline for 19.

UA 497: Shoreline for 19.

 $N.O.\,Approach: I\,can\,set\,u$  up there or I can vector you, what'd you need?

UA 497: That's fine.

N.O. Approach: (unintelligible...)You got the water, right?

UA 497: Yeah, we got the water and we're going to stop here about 600 feet.

N.O. Approach: Roger that. The airport's currently at your 1 o'clock and five miles.

UA 497: 1 o'clock and five miles roger.

New Orleans Tower to fire crews: Fox-6, next arrival runway 19er is our aircraft. And the aircraft is approximately 3 miles northwest runway 19er.

N.O. Approach: If you start your right turn now I can set you up on final.

UA 497: Start turn on final.

New Orleans Tower to fire crews: The aircraft is over the shoreline around two miles out. You do have permission to proceed on to the runway after he lands.

N.O. Approach: Make a right turn. The airport is off to yoru right side,

N.O. Approach: 497, clear to land 19er. You'll be able to make it sir? Winds 180 at 16, gusts to 20, Clear to land. Runway 19er.

New Orleans Tower to fire trucks: Fox-5, this is our aircraft touvh ing down bow.

New Orleans Tower: Follow the aircraft down the runway.

New Orleans Tower. We're going to need runway 10 operational. Runway 19er is fouled at this time.

Fox-5: The aircraft is off the runway.

http://www.nola.com/news/index.ssf/2011/04/united airlines jet landed aft.html





07/05/2011 Kaimana Airport (KNG), INA, Merpati Xian MA60 passenger plane crashed on water, 25/21 pax+4 crew

A Merpati Nusantara Xian MA-60, registration PK-MZK performing flight MZ-8968 from Sorong to Kaimana (Indonesia) with 21 passengers and 4 crew (25 occupants), last reported its position at 13:45L (04:45Z) about 15nm before touchdown and was on approach to Kaimana's runway 19 when the aircraft impacted waters about 800 meters/2620 feet off the runway at about 14:00L (05:00Z). All occupants perished in the crash.

18/05/2011 Prahuaniyeu, Argentina, A Saab 340A passenger plane, crashed 20 km north, 22/19 pax+3crew

20/06/2011 Petrozavodsk Airport (PES), Russia, RusAir Tu134A-3, crash-landed on a highway while on final approach to runway 01,47/52

06/07/2011 near Bagram Air Base, Afghanistan, II76TD, crashed ca 25 km from Bagram Air Base (BPM), 9/9

08/07/2011 Kisangani Airport (FKI), D.R. Congo, Hewa Bora Airways B727-030 (WL) crashed on landing, 74

11/07/2011 Ob River, Russia, Angara Airlines An24RV crashed into River near Strezhevoy, in flight fire, 7pax

13/07/2011 1.7 km SSE of Recife-Guararapes International Airport, PE (REC), Linhas Aéreas Let L-410UVP-E20 16

22/07/2011 Malang, INA, Garuda B733, hard landing

A Garuda Indonesia Boeing 737-300, registration PK-GGO performing flight GA-292 from Jakarta to Malang (Indonesia) with 108 passengers and 8 crew, performed a VOR approach to Malang's runway 35 visually circling to runway 17, however, the aircraft got too high on the approach and turned in too early on base to runway 17 struggling to acquire the extended runway and glidepath. The aircraft subsequently touched down hard prompting the tower controller to inquire the possibility of a hard landing with the crew. The aircraft was instructed to stop at the end of runway 17 and hold pending a runway inspection, which revealed some metal debris in the touch down zone of runway 17. The aircraft subsequently was cleared to backtrack the runway to taxi to the apron. No injuries occurred, the aircraft received substantial damage including wrinkles of the left wing, a fractured nose wheel hub and damage to the left engine inlet.

NTSC released final report on July 23, 2014. KNKT. 11.07.15.04

26/07/2011 Near GOULIMINE, Morocco, Moroccan AF C130H, 10 km E of Goulimine Airport (GM47/GLN)

28/07/2011 West of Jeju, Korea, B747-400F, destroyed when it crashed into the sea off Jeju, in flight fire, 2/2

09/08/2011 Magadan, Russia, AN-12, cargo plane, crashed about 10 km from Omsukchan, 11/11

20/08/2011 Resolute Bay, Canada, First Air B732 from Yellowknife, NT crashed, 11+4 crew. 3 pax survived, CFIT.

The aircraft performed an ILS approach (minimum 200 feet AGL, 0.5 miles visibility) to runway 35 True.

The crew initiated a go-around 2 seconds prior to impact. The aircraft impacted terrain at 396 feet MSL (runway level 215 feet MSL) about 1nm east of the mid point of the runway (at N74.71883 W94.91867). Examination of the aircraft revealed no technical problem prior to impact, both engines were operating and delivering considerable power at the time of impact. Categorized as CFIT but under other ontributing factors of poor navigation techniques and bad CRM involved.

06/09/2011 Off Honshu, Japan, ANK B737 NH140 went upset due to copilot error operation of door switch, Human Error, 0/

07/09/2011 Yaroslavl, Russia, Yak Service YK42 failed to climb on takeoff, 43/44

A Yak Service Yakovlev Yak-42, registration RA-42434 performing a charter flight from Yaroslavl (Russia) to Minsk (Belarus) with 37 passengers (the Lokomotiv Yaroslav Hockey Team) and 8 crew, could not climb out after takeoff from Yaroslavl's Tunoshna Airport at approx. 15:50L (11:50Z). The airplane impacted Localizer antenna outside the airport perimeter, impacted ground and came to rest about 1000 meters from the airport broken up in two major parts, the tail section at the bank of Volga River and the fuselage in the river. 43 bodies have been recovered, two occupants have been taken to hospitals with critical injuries, one of the two survivors died on Sep 12th in hospital care. The Lokomotiv Yaroslavl Club reported, all of the A-Team (Ice Hockey Team) was on board of the aircraft.

07/09/2011 Colgan Air Saab 340, bound for Lakes Charles, Louisiana (LCH), mistakenly landed at Southland Field (L75) in Carlyss

09/09/2011 Yahukimo, Papua, INA, Susi Air Cessna 208-B Caravan, crashed in rugged mountainous enroute Wamena-Kenyem, 2/2.

The single turboprop engine aircraft was carrying four drums of diesel fuel, and was flown by two foreign pilots: Australian David Cootes and Slovakian Thomas Munk.

25/09/2011 Kathmandu, Nepal, Buddah Air Beechcraft 1900D, CFIT, 19

A Buddha Air Beech 1900D, registration 9N-AEK performing flight U4-103 from Kathmandu to Kathmandu (Nepal) with 16 passengers and 3 crew, was returning to Kathmandu after the "Everest Experience" sightseeing flight around Mount Everest. While approaching Kathmandu Airport from the south in fog and rain the aircraft impacted terrain near Kotdanda 7.8km (4.2nm) SSE of Kathmandu's Airport at approximately 07:31L (01:46Z). All 19 occupants of the aircraft perished.

29/09/2011 Near Kutacane, INA, Buana Air CASA C212 Aviocar missing near Medan, 18/18

A NBA Nusantara Buana Airlines Casa C-212-100 Aviocar, registration PK-TLF performing a flight from Medan to Kutacane (Indonesia) with 14 passengers and 4 crew, went missing while on approach to Kutacane, an Emergency Locator Transmitter (ELT) signal was received around that time from the area. Search aircraft located the wreckage but found no trace of survivors. On Oct 1st rescue teams reached the crash site and found all 18 occupants dead in their seats.

04/10/2011 Northwest Territories, Canada, Air Tindi Cessna 208B Grand Caravan, 2/4

12/10/2011 Hawaiian B763 at Osaka KIX, entered runway (R/W incursion) misunderstanding ATC instruction

A Hawaiian Airlines Boeing 767-300, N588HA performing flight HA-450 from Kansai to Honolulu, HI with 208 people on board, had been cleared to taxi to the holding point of runway 06R and had been instructed to hold short of the runway, the clearance and instructions had been correctly read back by the crew. (JTSB AAR AI2014-3)

「待機せよ」管制指示を「滑走路上で」と聞き間違え ハワイ機の関空誤進入 (産経)

2014.6.27 10:58 http://sankei.jp.msn.com/affairs/news/140627/dst14062710580002-n1.htm

関西空港で平成23年(2011)、ホノルル行きハワイアン航空ボーイング767が誤って滑走路に進入したトラブルで運輸安全委員会は27日、機長らが管制官の指示を聞き間違え、管制官もパイロットの復唱を十分確認しなかったのが原因とする調査報告書を公表した。

報告書によると、23 年 10 月 12 日、滑走路手前にいたハワイアン機を引き続き待機させるため管制官は「Hold Position」と指示。機長らは 米国で2010 年 9 月まで使われていた「Position and Hold」という管制用語と聞き間違え、滑走路に入った。

このため滑走路に着陸しようとした全日空の貨物機が着陸をやり直した。副操縦士は「滑走路上で待機する」と誤って英語で復唱、管制官は指示が伝わったと思いこみ確認しなかった。安全委はハワイアン航空にパイロット教育を求め、管制官には「Hold short of runway」との用語で待機場所を示すべきだったとした。

13/10/2011 20 km S of Madang, Papua New Guinea, Airlines PNG, DHC-8-102, crashed on arrival, 28 / 32

17/10/2011 Dabra, Papua INA, Merpati DHC-6, Rwy excursion. 0/16

De Havilland DHC-6 Twin Otter aircraft registered PK-NUH operated by PT. Merpati Nusantara flight number MZ9782D. It was a scheduled flight from Sentani Airport (DJJ / WAJJ) Jayapura, to Dabra Airstrip (DRH / WAJC) Dabra Papua. The flight departed from Sentani at 06.20 UTC (15.20 WIT)1 to Dabra as the destination. The total of persons on board were 2 pilots, 1 company aircraft maintenance engineer and 13 passengers. This flight was the second flight for the same route and same crew. At about 07.10 UTC, the aircraft was approaching Dabra and flight crew was able to see the runway. The aircraft touchdown at runway 24 and experienced bouncing about 175 meters than the aircraft veered to right side of runway 24. The aircraft was out in the right of runway about 120 meters and the aircraft right wing hit banana tress 6.5 meters in the right of runway. The flight crew of PK-NUH tried to correct the aircraft direction into the runway centerline. After the aircraft entering the runway, the flight crew recovered by ground loop about 18.4 meters before the end of runway 24. The aircraft stopped 35.8 meters before the end of runway 24 and heading 035.

23/10/2011 Balikpapan, INA, Lion Air B739, runway excursion w/runway wet, 0/205

Lion Air plane with 193 passengers on board skidded upon landing on Sunday at Sepinggan Airport in Balikpapan, East Kalimantan. "The runway was wet which caused the 10 meter overrun. There were no fatalities," PT Angkasa Pura I spokesperson Abdullah Husein said.

30/10/2011 Azul Linhas Aereas E-195, bound for Teresina, Brazil (THE), mistakenly landsed at Domingos Rego Airport in Timon

16/11/2011 Java, INA, Cessna-172, Nusa Flying International school lost contact at 8:53, 2 students/1 instructor on board

The wreckage of the Cessna C172-PK NIP training plane belonging to flying school PT Nusa Flying International, which went missing on a Jakarta-Cirebon flight on Nov. 11, was found on Monday on the western slope of Mt. Ciremai in Argapura district, Majalengka regency, West Iava

23/11/2011 Sugapa, Bintang mountains West Papua, INA, Susi Air Twin Otter cargo plane Caravan, crashed when landing, 2/2

Cessna 208B Grand Caravan PK VVG was destroyed on an attempted "go around" pass the committed point to Bilogai, Iran Jaya, Papua Indonesia. Hitting the left side of terrian of landing vector 27. Reports to date are that Co-Pilot has sustained fatal injuries and the captain is in a serious condition, no information to date on passengers. (Jakarta Post)

A poorly managed runway in the Bintang Mountains in West Papua, took its toll on Wednesday morning as a Twin Otter airplane operated by Susi Air crashed onto a mountain slope after it attempted to avoid a local resident passing the runway.

The accident killed copilot Albert Citores Gallego of Spain. Pilot Jessie Becker, a New Zealand national, survived and was in critical condition at a Timika hospital.

03/12/2011 Larat, Maluku, INA, Merpati C212 runway excursion

A Merpati Nusantara Casa C-212-200 Aviocar, registration PK-NCZ performing flight MZ-9933 from Langgur [WAPL] to Maluku Larat [WAPO] (Indonesia) with 19 passengers and 3 crew, landed on Larat Airfield's runway 09 however veered left off the runway and came to a stop with all gear on soft ground facing north at about 13:08L (04:08Z). The aircraft was evacuated, one passenger received serious injuries, another person minor injuries. The aircraft received substantial damage.

AKA:Larat-Watidar Airport (WAPO)

20/12/2011 Yogyakarta, INA, Sriwijaya B733, runway excursion, 0/133

Sriwijaya Air Boeing 737-300, registration PK-CKM performing flight SJ-230 from Jakarta to Yogyakarta (Indonesia) with 131 passengers, veered left off runway 09 while landing in strong rain at 17:35L (10:35Z) and came to a stop on soft ground about 25 meters past and left of the runway end with the right main gear and the nose gear collapsed. The aircraft was evacuated. Two passengers received injuries during the evacuation and were taken to a hospital.

Indonesia's NTSC have released their final report (in Jan 2014) concluding the probable cause of the accident was:

Unsuccessful to recognize the two critical elements, namely fixation and complacency affected pilot decision to land the aircraft while the approach was not meet the criteria of stabilized approach.

http://www.dephub.go.id/knkt/ntsc\_aviation/aaic.htm

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07/01/2012 Sampit, INA, Merpati Xian MA-60, Runway excursion

A Merpati Nusantara Xian MA-60, registration PK-MZM performing flight MZ-536 from Surabaya to Sampit (Indonesia) with 62 passengers and 6 crew, had landed safely on Sampit's runway 31 but veered left off the runway while turning to backtrack the runway and came to a stop with the left main gear on soft ground around 15:45L (08:45Z). No injuries occurred, the aircraft sustained minor if any damage

19/01/2012 Helmand? Afghanistan, US CH-53 Sea Stallion helicopter crashed, 6 ISAF officers died Detail not publicized.

24/01/2012 Kandahar, Afghanistan, Swiftair MD-83 wingtip strike, 0/86+6

Swiftair McDonnell Douglas MD-83 on behalf of Gryphon Airlines, registration EC-JJS performing a flight from Dubai (United Arab Emirates) to Kandahar (Afghanistan) with 86 passengers and 6 crew, was in the flare to land on Kandahar's runway 05 (length 3200 meters/10500 feet) when the aircraft experienced a strong roll to the right resulting in the right hand wing tip contacting the runway surface. The landing was continued, the aircraft rolled out without further incident and taxied to the apron on its own power.

30/01/2012 Namoya Airstrip, Congo (Democratic Republic), An-28 crashed on approach, 3/5

An Antonov 28 airplane was destroyed in an accident near Namoya, D.R. Congo. Two of the five occupants survived the accident The airplane departed Bukavu (BKY) at 07:45 on a domestic flight to Namoya. The plane failed to arrive and a search was initiated. The crew of another aircraft found what looked like the debris of the Antonov in a forest. A government spokesman could not confirm whether any had survived, but said that it was unlikely given the degree of debris at the crash site.

07/02/2012 Jayapura, Papua, INA, Batavia A320-200, overrun in strong rain, 0/154

A Batavia Air Airbus A320-200, registration PK-YVE performing flight Y6-837 from Makassar to Jayapura (Indonesia) with 148 passengers and 6 crew, was landing on Jayapura's runway 12 (length 2,180 meters/7,150 feet) in strong rain when the aircraft overran the end of the runway and came to a stop on the paved surface of the runway end safety area at about 06:40L (22:40Z Feb 6th).

12/02/2012 Bukavu Kavum, D.R. Congo, Gulfstream IV sustained substantial damage in a runway excursion, 3/9

06/03/2012 Silkair Airbus A319-100, MI-112 from Singapore to Solo with 124 passengers and 7 crew, had touched down on Solo's runway when tower informed the crew there was fire at the left main gear. The crew brought the aircraft to a standstill and queried whether it was fire or smoke, the tower confirmed he saw fire. The crew initiated an evacuation via slides, no injuries occurred during landing, one passenger received minor injuries during the evacuation.

Indonesia's NTSC released their final report (in Jan 2013) concluding the probable cause of the accident was:

Uncertain identification combined with ineffective communication by the controller caused the pilot to make the emergency decision. http://www.dephub.go.id/knkt/ntsc\_aviation/aaic.htm

12/03/2012 Balikpapan, INA, Batavia A320 overran, Rwy 25, 0/176+10crew

A Batavia Airbus A320-200, registration PK-YVE performing flight Y6-883 from Denpasar to Balikpapan (Indonesia) with 176 passengers and 10 crew, overran the end of runway 25 while landing in Balikpapan at 11:31L (03:31Z) and came to a stop with all wheels on the paved surface of the runway end safety area (RESA).

15/03/2012 San Juan, Puerto Rico, CV-340, crashed soon after departure when returning to airport, 2/2

Mar 15th 2012 16:58Z, A Jet One Express Convair CV-340, registration N153JR performing a freight flight call-sign 153JR from San Juan (Puerto Rico) to Saint Maarten (Dutch Antilles) with 2 crew, was climbing out of San Juan's runway 10 and had just been handed over to departure when the crew declared emergency and requested an immediate return asking departure whether they would see any smoke from the aircraft, the controller reported seeing no smoke. The aircraft was cleared to land on runway 28, however did not reach the airport anymore and impacted lagoon La Torrecilla just east of the aerodrome at about 07:45L (11:45Z). Both pilots perished.

16/03/2012 Near Kabul, Afghanistan, Turkish Forces UH60 crashed into a residential area, 12/12 +2 and 3 Afghan civilians on the ground.
Turkish Army Sikorsky UH-60 Black Hawk helicopter crashed in Kabul, killing all 12 Turkish soldiers and 2 Afghan interpreters on board and 3 civilians on the ground.

17/03/2012 Tembagapura, Timika, INA, Eurocopter AS 350B3 crashed, 3/3

An Eurocopter AS 350B3 Ecureuil was missing while carrying food for U.S. mining giant Freeport-McMoRan in Indonesia. Rescuers found the crashed helicopter one day later in the morning about five miles near Tembagapura, Mimika district. All three occupants were killed.

#### 31/03/2012 JAL tail strike on go around

JAL B777-200, JA701J performing flight JL-82 from Shanghai Hongqiao (China) to Tokyo Haneda (Japan) with 296 passengers and 12 crew, was on approach to Haneda Airport at 16:10L (07:10Z) when in the flare the aircraft caught a gust prompting the crew to go-around, the tail however contacted the runway surface leaving tracks of about 7 meters/23 feet length and about 50cm/1.6 feet width on the runway. The aircraft climbed out and landed on the second attempt about 28 minutes later. No injuries occurred, the aircraft received substantial damage.

02/04/2012 Tyumen, Russia, UTAir Avion de Transport Regional ATR-72-200 impacted snow covered ground and burst into flames 32/43
UTAir ATR-72-200, VP-BYZ flight UT-120 from Tyumen to Surgut (Russia) with 39 passengers and 4 crew, impacted snow covered ground and burst into flames 1.4nm past the end of Tyumen Airport's runway 21 (approx. coordinates N57.1544 E65.2478) shortly after takeoff at 07:33L (01:33Z). 32 people perished, 11 people with serious injuries are in hospital care.

11/04/2012 Jayapura, INA, Garuda B738 went off runway pavement, 0/153

Garuda B738 at Jayapura on Apr 11th 2012, runway excursion on backtracking: A Garuda Indonesia Boeing 737-800, registration PK-GMV performing flight GA-653 from Jayapura to Tembagapura (Indonesia) with 153 people on board, had backtracked the runway taxiing for departure and was turning around 09:30L (00:30Z) when the right hand main wheels went off paved surface by about 4 feet/1.3 meters. The aircraft remained disabled on the runway, the passengers disembarked onto the runway.

20/04/2012 Islamabad, Pakistan, Bhoja Air B737-200 crashed on final, 127/121+6

Bhoja Air Boeing 737-200, AP-BKC, 27.4 yr old, B4-213 from Karachi to Islamabad (Pakistan) with 121 passengers and 6 crew, impacted terrain about 5 km short of and slightly left of the extended runway center line of Islamabad's runway 30 near Jinnah Gardens, completely broke up and burst into flames at about 18:50L (13:50Z). 10 houses on the ground were destroyed, their occupants are reported safe however, the crash site extends over an area of about 1000 meters, the main wreckage came to rest about 4km short of the runway. All occupants of the aircraft perished in the crash.

Probable Cause:

The ineffective automated flight deck management in extreme adverse weather conditions by cockpit crew caused the accident. The ineffective automated flight deck management was due to various factors including; incorrect selection of cockpit crew on account of their inadequate flying experience, training and competence level for B737-236A (advanced version of B737-200 series), absence of formal simulator training in respect of FO for handling an automated flight deck, non-existence of cockpit crew professional competence / skill level monitoring system at operator level (Bhoja Air). The cockpit crew incorrect decision to continue the flight for destination and non-adherence to Boeing recommended QRH and FCOM remedial actions /procedures due to non-availability of customized aircraft documents (at Bhoja Air) for B737-236A contributed towards the causation of accident. The inability of CAA Pakistan to ensure automated flight deck variance

type training and monitoring requirements primarily due to incorrect information provided by the Bhoja Air Management was also a contributory factor in causation of the accident.



B737-200

# 22/04/2012 Ibaraki, Japan, Skymark B737-800, JA73NE, BC-794 Sapporo to Ibaraki landed on wrong runway.

Skymark Boeing 737-800, registration JA73NE performing flight BC-794 from Sapporo to Omitami (Japan), was cleared to land on Omitami's civil runway 21R, aligned visually with the runway centerline and landed at 17:33L (08:33Z). Following their landing tower instructed the aircraft to turn onto runway 21R, at which point the crew realized they had landed on the military runway 21L.

スカイマーク機、滑走路誤り着陸…茨城空港(読売)

茨城空港(茨城県小美玉市)で今月22日、新千歳(北海道)発茨城行きのスカイマーク794便(乗員乗客142人)が、管制官の指示と異なる滑走路に誤って着陸していたことが28日、同社などへの取材で分かった。当時、滑走路に他の飛行機はなく、乗員、乗客にけがもなかった。同社や国土交通省東京航空局百里空港事務所によると、同便の機長は22日午後5時半頃、管制官が西側の滑走路への着陸を指示したのに、東側の滑走路に着陸した。茨城空港には、ほぼ南北に延びる2本の滑走路(2700メートル)が約210メートル間隔で並んでいる。機長は着陸後、誘導を受ける際に誤着陸に気づいたという。同社は、23日に国交省に誤着陸を報告。同省は事実関係や原因を調査した上で、改めて報告するよう同社に指示した。(2012年4月28日22時54分 読売新聞)



25/04/2012 Ritan village, Kutai Kartanegara, INA, Susi Air Pilatus Porter PC6 crashed into a cliff, 2/2

A Susi Air plane crashed into a cliff in East Kalimantan, with two passengers found dead at the scene. A team is still evacuating victims of the plane crash, in Ritan village, Kutai Kartanegara regency, the National Disaster Mitigation Agency said in a press statement on Thursday.

Rajoki Aritonang, head of Temindung Airport in Samarinda, East Kalimantan, said that the Susi Air plane, with the registration number PK VVQ, lost contact with an airport in Balikapapan, East Kalimantan, at 5:10 p.m. local time on Wednesday. "The plane crashed into the edge of a cliff in Muara Ritan village, Kembang Janggut, Kutai Kartanegara regency," Rajoki told the Post in a telephone interview.

Having lost five pilots in three airplane crashes that all occurred within one year time, self-made woman Susi Pudjiastuti is seriously considering leaving the airline business. The grief-stricken owner of Susi Air had to face the public again on Thursday following the news of another crash, this time a Pilatus Porter PC6 aircraft carrying 28-year-old pilot Jonathan James Willis of South Africa and Ian McDouglas, an Australian surveyor from PT Surtech. "I can't stand to hear about more air crashes; I want to call it quits," Susi said while sobbing incessantly. The Pilatus crashed into a cliff in Muara Ritan, East Kalimantan, after losing contact with Balikpapan Airport at 5:10 p.m. local time (4:10 p.m. Jakarta time) on Wednesday, 25th. (Jakarta Post)

**Fuel problems** are thought to be behind the crash of a Susi Air aircraft that killed two en route from Balikpapan to Kutai Kartanegara, East Kalimantan. The aircraft was conducting a mining survey when it lost contact with Balikpapan Airport five hours after take-off.

"The pilot told air-traffic controllers that the aircraft suffered technical glitches in its fuel system before completely losing contact at around 5

p.m. local time," Susi Air owner Susi Pudjiastuti told media in Jakarta on Thursday. The victims were identified as pilot Jonathan Willis (28) of South Africa and Ian Russell McDougall (57), an Australian surveyor working for PT Surtech. (Jakarta Post)

09/05/2012 Mt Salak, Bogor, INA, Sukhoi SSJ-100-95, crashed while demo flight near Mt. Salak. 45/45

Sukhoi Superjet 100-95, RA-97004 performing a demonstration flight from Jakarta Halim Perdanakusuma Airport with 35 passengers, 6 crew and 2 Sukhoi officials, was enroute near Mount Salak and Bogor about 36nm south of Jakarta about 30 minutes into the flight when the radio contact with the aircraft was lost. All 45 people on board - 8 Russians, 35 Indonesians, 1 French citizen and 1 American – were killed in the crash <a href="http://avherald.com/h?article=44f464f7/0015&opt=0">http://avherald.com/h?article=44f464f7/0015&opt=0</a>

Crash: Sukhoi SU95 over Indonesia on May 9th 2012, aircraft impacted mountain



Sukhoi Superjet 100-95, registration RA-97004 performing a demonstration flight from Jakarta Halim Perdanakusuma Airport to Jakarta Halim Perdanakusuma Airport (Indonesia) with 37 passengers, 6 crew and 2 Sukhoi officials, was enroute near Mount Salak and Bogor about 36nm south of Jakarta about 30 minutes into the flight when the radio contact with the aircraft was lost between 14:21L and 14:33L (07:21Z to 07:33Z). The aircraft did not turn up at Jakarta or any other airport in the area. The aircraft wreckage was found by a helicopter the following morning (May 10th) at about 09:15L (02:15Z) on the slopes of Mount Salak at an elevation of about 5300 feet MSL. On May 11th around 14:00L (07:00Z) rescuers reached the crash site and so far recovered 27 bodies.

Rescue and Recovery teams are currently on their way to the crash site. First attempts to reach the crash site, including attempts to set rescuers down by helicopters, have failed so far (May 10th 17:45L) due to the extremely steep terrain rising at up to 85 degrees. About 450 rescue personnel are currently moving towards the crash site on the ground but did not reach the site before darkness. At this time (May 10th 17:45L/10:45Z) no rescuer has yet reached the site, the status of the occupants on board of the aircraft is still unknown. The rescue operation has been suspended for the night May 10 to 11th.

The coordinator of the rescue operation said, that the aircraft appeared relatively intact from the air however has received substantial damage after leaving a trail away from the crater down the slope, there was no sign of survivors from the air. Rescue teams are currently on the ground about 1km from the crash site, the terrain being difficult to reach the wreckage.

The Air Force said the aircraft impacted the edge of a cliff (top of the cliff at 6250 feet MSL) about 1.7 nm from Cijeruk. Approximate final

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O7:32:57 - Rec commanded to request heading 300

O7:32:57 - Mod Set 150

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position of the aircraft is S6.7102 E106.7447 (initially reported as S6.7045 E106.7373 but updated on May 11th taking the crash site from the western to the eastern cliff).

Indonesian Authorities reported the aircraft was enroute at 10,000 feet near Mount Salak when at about 15:30L (08:30Z) the crew requested and was cleared to descend to 6,000 feet. This proved to be the last radio transmission. Radar contact was lost when the aircraft was in a righthand turn descending through 6,200 feet between Mount Salak and Mount Gede at approximate position S6.72 E106.72. The aircraft was flying clockwise around Mount Salak at that time. A search operation has been initiated and is mounting, first search flights on May 9th did not yet found any trace of the aircraft. Search on the ground is under way, a first team has departed for Mount Salak in the evening, a second ground team is expected to depart on May 10th early morning, more than 600 ground personnel have been deployed by sunrise May 10th.

- In the evening of May 10th Police reported a total of 1353 rescue personnel are currently working to reach the aircraft and evacuate the occupants of the aircraft, which has to happen on the ground with the use of ladders. Access to the crash site from the air is not possible. Four rescue teams have been formed, each of which needs about 7 hours to climb to the wreckage. The first team of 10 people has already reached the site and was near the wreckage, but has not yet entered the wreckage. A second team of 75 people is due to arrive any time, a third team of 225 people departed during the night to May 11th and a fourth team of 250 people is going to depart at 05:00L May 11th.
- In the morning of May11th a first team reached the top of the cliff and is now descending on ropes towards the crash site.
- On May 11th early afternoon Indonesia's President and rescuers announced in a press conference that 12 bodies have been
  discovered. The discovered 12 bodies were recovered and flown out on May 11th, the recovery was subsequently suspended for
  the night at nightfall.
- On May 12th Indonesia's Transport Minister said the black boxes have not yet been recovered, the search for them is under way.
- On May 12th the chief of the disaster victim identification team reported identification of the bodies recovered so far began, 16
   body bags have arrived at the hospital so far, the bodies are not intact. DNA testing will be needed to identify the victims. Russia pledged to send a DNA expert team to Indonesia to assist identification. DNA samples have been taken from the families.
- By May 13th 21 body bags had been delivered to the hospital, where identification is going to be performed. 3 of the body bags however contained belongings of occupants of the aircraft, 18 of the bags contained human remains.
- By May 15th 27 bodies have been taken to the hospital for identification.

On May 16th the cockpit voice recorder was recovered and taken to Jakarta, where the recorder is being examined and opened.
 Russia and Indonesia agree that analysis of the data should take place in Indonesia, the necessary tools if necessary will be brought to Indonesia. The search for the flight data recorder is still underway.

Sukhoi reported the aircraft registration RA-97004 (MSN 95004) was piloted by a very experienced crew that also flew the first prototype of the aircraft, the commander had more than 10,000 hours total. The crew did not report any anomaly and did not issue a distress call prior to the aircraft disappearing. The aircraft had already concluded another demonstration flight earlier the day. The accident aircraft had accumulated 800 flight hours in more than 500 cycles, there had been no serious technical problems since its first flight in 2009. Indonesia's Ministry of Transport quoted the Director of Civil Aviation stating that the crew had requested to descend from 10,000 feet to 6,000 feet. Contact with the aircraft was lost between 14:21L and 14:33L (07:21Z to 07:33Z). The aircraft was later located on Mount Salak. The aircraft type has not been grounded, flights can continue with the Superjet 100. The area around Borok was chosen for the demonstration

flight because of lack of other flights in the area. Weather data from Indonesia's "Badan Meteorologi, Klimatologi dan Geofisika" (Institute for Meteorology, Climate and Geophysics) do not suggest the weather was below visual meteorologic conditions, however there is possibility of local cloud at Mount Salak that may have restricted the view of the crew. The occurrence is being investigated by Indonesia's National Transportation Safety Committee (NTSC). The Transport Minister called for all sides to wait for the results of the investigation by the NTSC. The Minister also stated that the ministry will not block the purchase of a total of 42 Superjet 100s by two Indonesian Airlines.

Indonesia's Air Traffic Control, Jakarta Branch reported that communication between ATC and aircraft was done in English, there was no language problem hampering communication. The aircraft had been in the area of Bogor, approximate coordinates S6.55 E106.9, about 13nm north of the peak of Mount Salak and 7nm clear of mountainous terrain in safe flat area, when the crew requested to descend from 10,000 to 6,000 feet and to perform a right orbit. As there was no reason to decline such a clearance the flight was cleared down and for the right orbit. This was the last transmission from the aircraft, the aircraft could not be reached afterwards. It is unclear how the aircraft got into the area of Mount Salak and crashed afterwards, ATC services hope the black boxes will explain how the aircraft got there. All data including flight plan, radar data and ATC recordings as well as transcripts of interviews with the air traffic controller have been handed to Indonesia's NTSC.

Mount Salak is 2,211 meters/7254 feet high, nearby Mount Gede is 2,958 meters/9,705 feet high.

At 14:30L and 15:30L the local weather station in Bogor reported visibility at 9000 meters (increasing to 10000 meters in the next reading at 16:30L), temperature at 31 degrees C, dew point at 25 degrees C, humidity 70% and winds around 5 knots from northeast, no precipitation. In the morning the weather station had reported low visibility around about 2000 meters.

じゃかるた新聞 2012年5月11日(金)の紙面 第4025号 スホイ機、残骸発見 ボゴール山中に墜落 搭乗者45人の安否不明

9日のデモ飛行中に消息を絶っていたロシア製小型旅客機「スホイ・スーパージェット(SSJ100)」の残骸を10日朝、西ジャワ州ボゴール県のサラック山(標高2,221メートル)付近、チジュルック郡チペラン村で空軍ヘリが発見し、墜落を確認した。捜索隊は悪天候で現場に到達できず、搭乗者45人の安否確認はできていない。 SSJ100 は9日午後2時33分以降、東ジャカルタ・ハリム空港を離陸した後、消息を絶っていた。同日から救命救助隊(SAR)、国軍らが捜索にあたり、10日午前、空軍ヘリがサラック山付近の崖で残骸を発見。スホイのロゴも確認した。 地元メディアによると、現場では残骸の大部分が焼失しており、細かい破片が散っている。

救助隊は陸路で現場を目指したが、山間で森林に覆われた斜面に加え、午後からの悪天候にも見舞われたため捜索活動を中断。11 日朝に再開する。ハリム空港 に対策本部が設置され、救助隊や政府関係者が対応に追われた。 ロシアのスホイ社の代理業者トリマルガ・ルカタマ社は搭乗者数を 45 人と確認したと発表。内 訳はインドネシア人の航空関係者や記者らが35 人、ロシア人の航空技師やスホイ社関係者らが8 人、米国人が1 人、フランス人が1 人。

デモ飛行は9日正午に1回目が行われ、ハリム空港周辺を30分間飛行した。事故が発生したのは2回目。午後2時11分に同空港を離陸し、西ジャワ州スカブミ県プラブハンラトゥで折り返す予定だった。 だが、同33分に同州ボゴール県アタン・サンジャヤ付近で、操縦士が通信で「高度を10,000ft(約3,000m)から6,000ft(約1,800m)まで下げる」と伝えたのを最後に消息を絶った。サラック山の標高は2,221メートルで、下げる予定の高度よりも高い。事故原因については国家安全運輸委員会が発明する。

国際協力機構(IICA)専門家で、インドネシア運輸省で「航空安全政策向上プロジェクト」のプロジェクトリーダーを務める安田弘氏は「現状では情報が少なく 原因特定は難しい。ただ、考えられる事故原因は三つある。旅客機の機器の故障か、バイロットの操作ミス、あるいは管制の指示を受けている場合は、管制官が指 示を誤った可能性が考えられる」と話した。

航空評論家のサムドゥラ・スカルディ氏は「デモ飛行は機体の大小にかかわらず、ジャカルタから(スマトラ島とジャワ島の間のスンダ海峡の)アナック・クラカタウ方面など海上で行うのが通例だ」と指摘。「今回、なぜ悪天候で事故が多発しているボゴール山間部を通過するルートを選び、運輸省などが許可を出したのか」と述べ、諸手続の過程を調査する必要があると強調した。

SSJ100 はロシアのスホイ社が製造する小型旅客機。旅客数は最多で100 人程度。機長はパイロットのアレクサンダー・ヤブロンツェフさん (57)。AFP 通信によると、「飛行経験が豊富な、SSJ100 の一流テストパイロット」だという。 デモ飛行はスホイ社が開催するアジアツアーの一環。アジアでの受注を促進するため、ミャンマー、パキスタン、カザフスタンの後にインドネシアを訪れた。

#### 12/05/2012 Oksibil, Papua, INA Trigana Avion de Transport Regional ATR-42-300, landed without front wheel, 0/18

A scheduled passenger flight from Oksibil to Jayapura (Indonesia) with 18 people on board, dropped the left nose wheel immediately after becoming airborne at Oksibil. The crew decided to continue the flight to Jayapura's Sentani Airport where the aircraft performed two low approaches for a visual inspection of the landing gear from the ground and subsequently landed safely.

14/05/2012 Jomsom, Nepal, Agni D228 impacted terrain during go-around, 16/18+3

Agni Air Domier Do-228, registration 9N-AIG performing flight AG-CHT from Pokhara to Jomsom (Nepal) with 18 passengers and 3 crew, went around on final approach to Jomsom's runway. The aircraft joined a downwind when a wing contacted a hilltop about 270 meters/890 feet north of the aerodrome at around 09:45L (04:00Z), the aircraft subsequently impacted a muddy slope nose section first. 6 people including the flight attendant were rescued alive, one of them in critical condition, 15 bodies including both flight crew have been recovered. (Local News Media): A 9N-AIG Domier of Agni Air crashed in Marfa VDC-5 near Jomsom Airport in Mustang district on Monday, killing 15 people. Six people survived the crash. Airline officials said 18 passengers and three crew members were on board the flight that had left Pokhara for Jomsom.

### 01/06/2012 Pontianak, INA, Sriwijaya Boeing 737-400, runway excursion in bad wx / cross winds, 0/163

Sriwijaya Boeing 737-400, registration PK-CJV performing flight SJ-188 from Jakarta to Pontianak (Indonesia) with 163 people on board, landed on Pontianak's runway 15 in heavy rain at 12:10L (05:10Z) but veered left off the runway and came to a stop with all gear on soft ground resting on belly and engines, the righthand flaps being damaged. No injuries occurred, the aircraft received substantial damage.

02/06/2012 Accra, Ghana, Allied Air Cargo B727-200F (5N-BJN) overrun, 4/4 taken to hospital, 12 on gnd, 11 on Bus +1 killed.

Allied Air Cargo B727-200 freighter on behalf of DHL Aviation Africa, registration 5N-BJN performing flight DHV-3 from Lagos (Nigeria) to Accra (Ghana) with 4 crew, was on approach to Kotoka International Airport but overran runway 21 upon landing and came to rest near the El Wak Sports Stadium at the Hajj village at about 19:10L (19:10Z) basically in one piece. The 4 crew were taken to a hospital with injuries, the extent of which are unknown. 12 people on the ground, 11 occupants of a Benz 207 Bus and a soldier riding a bike along the road, have been killed, a number of injured were taken to a hospital. The aircraft received substantial damage.

03/06/2012 Lagos, Nigeria, Dana Air MD-83 from Abuja to Lagos crashed on approach after declaring emergency, 153/147+6

Dana Air MD-83, 5N-RAM, 9J-992 from Abuja to Lagos (Nigeria) with 147 passengers and 6 crew, was on approach to Lagos about 11nm from LAG VOR when the crew declared emergency reporting both engines had failed and they were going down. At about 15:43L (14:43Z) the aircraft collided with a power line, crashed into a built up area about 5nm short of the threshold of runway 18L near Akande St (not Adebayo Akande St) and 1.2nm south of LAG VOR and burst into flames. All occupants of the aircraft perished in the crash, so far 16 fatalities on the ground have been confirmed, 5 injured people on the ground have been taken to hospitals.

06/06/2012 Flores Is, Uruguay, Air Class SW4, crashed in ocean, 2/2

13/06/2012 Jumla, Nepal, Tara DHC6, bird strike, 0/21

Tara Air de Havilland DHC-6-300 Twin Otter, registration 9N-AEV performing flight TA-714 from Jumla to Nepalgunj (Nepal) with 19 passengers and 2 crew, was climbing out of Jumla when a bird struck the windshield causing injuries to the first officer. The captain decided to divert the aircraft to Surkhet (Nepal), located about 50nm southwest of Jumla in less difficult terrain, for a safe landing. The first officer received minor injuries, the aircraft received minor damage.

- 21/06/2012 Halim, Jakarta, INA, IAF F-27 crashed into the Rajawali housing complex near Halim due to Eng trouble? 7/7+3 gnd.
- 07/07/2012 Silver Airways Saab 340B, bound for Clarksburg, West Virginia (CKB), mistakenly landed at Fairmont Municipal Airport (4G7)
- 02/07/2012 Keningan, INA, Cessna crashes in Kuningan, One died, two injured as Cessna crashes in Kuningan.
- 17/07/2012 Pekanbaru, INA, GA B738, veered off to left rwy when landing in RA at rwy36, 0/162 pax.

Garuda Boeing 737-800, registration PK-GEJ performing flight GA-174 from Jakarta to Pekanbaru (Indonesia) with 162 passengers, landed on Pekanbaru runway 36 in heavy rain at about 15:32L (08:32Z) but veered left off the runway and came to a stop with all wheels off paved surface. No injuries occurred.

20/07/2012 USAF C-17, bound for MacDill AFB mistakenly landed at Peter O'Knight Field (TPF)





USAF C-17 Location

19/08/2012 Tolofi, South Sudan, Alfa Airlines Sudan An24 from Khartoum crashed into Nuba mountains south of Talodi, 26pax + 5 crew.

27/08/2012 Natuna, INA, Sky Aviation F50, overrun rwy18 on landing in heavy rain.0/48

Sky Aviation Fokker 50, PK-ECD performing flight SYA-350 from Tanjung Pinang (WIDN Kijang) to Natuna (WION Ranai) with 48 people on board, overran the end of the runway 18 while landing in Natuna during heavy rain and reduced visibility at about 11:15L (04:15Z). The aircraft came to a stop with all gear on soft ground with the main gear about 2 meters past the end of paved surface. No injuries occurred, the aircraft sustained minor damage.

12/09/2012 near Palana, Kamchatka, Russia, Petropavlovsk-Kamchatsky AN28, missing aircraft impacted a slope, 10/14

Petropavlovsk-Kamchatsky Air Antonov AN-28, RA-28715 performing flight PTK-215 from Petropavlovsk-Kamchatsky to Palana [UHPL] (Russia) with 12 passengers and 2 crew, had departed Petropavlovsk at 10:15L (22:15Z Sep 11th) and was due to arrive at Palana on Kamchatka Peninsula at 12:23L (00:23Z), located about 350nm north of Petropavlovsk, but went missing on approach. The aircraft was later found crashed about 10km (5.4nm) southwest of the airport, 10 occupants perished, 4 sustained serious injuries.

21/09/2012 Dolpa, Nepal, Tara DHC6 runway excursion on takeoff, 0/7

Tara Air de Havilland Dash DHC-6-300 Twin Otter, registration 9N-ABQ performing flight TA-717 from Dolpa to Nepalgunj (Nepal) with 5 passengers and 2 crew, was accelerating for takeoff from Dolpa when the left hand wing entangled with the wire fence of the aerodrome. The takeoff was rejected, the aircraft came to a stop about 50 meters off the runway contacting rocks. No injuries occurred, the aircraft however received substantial damage to its left hand wing, left hand engine and left hand main gear.

28/09/2012 Kathmandu, Nepal, Sita D228 crashed 2 min after departure, possible bird strike, 19/16+3

Sita Air Domier Do-228, registration 9N-AHA performing flight 601 from Kathmandu to Lukla (Nepal) with 16 passengers and 3 crew, attempted an emergency landing at the bank of Manohara River near Jadibutti, just outside the airport perimeter, about 2 minutes after departure from Kathmandu, but the aircraft burst into flames upon ground contact at about 06:20L (00:35Z). All occupants perished, the aircraft was destroyed in the crash. Emergency services needed 40 minutes to extinguish the fire, the bodies of the occupants are all charred beyond recognition. The airline said the aircraft hit birds on takeoff from Kathmandu.

29/09/2012 Bandung, INA, Two die in crash during air show, 2/2

Two senior pilots, identified as First Marshal (ret.) Norman Tagor Lubis and Lt. Col. (ret.) Toni Hartono, died in a plane crash during the Bandung Air Show (BAS) 2012 on Saturday. Husein Sastranegara Air Base commander Col. Umar Sugeng said their aircraft took off at 11:37 a.m. and crashed only five minutes later. The double-seat AS 202 aircraft with registration number LM-2003 crashed after conducting a twisting maneuver and falling into a nosedive. It flew to the north above the air base before it suddenly disappeared and white smoke appeared.

### 07/10/2012 near Khartoum, Egypt, Azza AN12, dual engine failure, made emergency landing, 13/22

An Azza Transport Company Antonov AN-12 on behalf of Sudan's Air Force, military flight from Khartoum to El Fasher (Sudan) with 16 passengers and 6 crew, was climbing out of Khartoum in the vicinity of Khartoum's proposed new airport about 22nm southwest of Khartoum Airport around 12:00L (09:00Z) when the crew first reported the failure of one engine and turned to return to Khartoum. The crew subsequently reported the failure of a second of the aircraft's four engines. The crew attempted an emergency landing, the aircraft however broke up before coming to rest near the proposed new airport. 13 occupants perished, 9 were taken to hospitals with injuries of varying degrees.

#### 07/10/2012 Antigua, Montserrat BN2P lost height after takeoff and hit ground, 3/4

Fly Montserrat Britten-Norman BN2 A Islander, registration VP-MON performing flight 5M-107 from Antigua (Antigua and Barbuda) to Montserrat (Montserrat) with 1 crew and 3 passengers, took off V.C. Bird International Airport's runway 07 at 16:15L (20:15Z), but lost height immediately after becoming airborne and contacted ground nose first. 2 occupants died on the spot, a third initial survivor succumbed to the injuries in hospital, the fourth person is in hospital care in critical condition. The airline confirmed the aircraft crashed shortly after takeoff, one passenger survived with critical injuries, the pilot and 2 passengers died.



Britten-Norman BN2

A preliminary report released by the East Caribbean Civil Aviation Authority on Oct 13th 2012 states, that the aircraft yawed to the right shortly after becoming airborne and stopped climbing while rolling to the right. The aircraft subsequently lost height and impacted ground right wing tip first at low forward speed and cart wheeled before coming to rest in an upright position. The fuselage section forward of the wing was destroyed, the rest of the aircraft sustained comparatively less damage. The pilot (31, CPL, 710 hours total, 510 hours on type) and two passengers were killed, another passenger survived with serious injuries. Examination of the wreckage showed that the righthand engine was not producing power at the time of impact, investigation of the fuel system showed contamination with significant quantities of water. The righthand propeller was not feathered.

### 13/10/2012 Padang WIMG, INA, Sriwijaya B734, landed at wrong airport, 0/96

Sriwijaya Boeing 737-400, registration PK-CKD performing flight SJ-21 from Medan (WIMM) to Padang (WIPT) with 96 people on board, was supposed to land on Padang's new Minangkabau International Airport (WIPT), but landed on Padang's former civil, now only military Tabing Airport (WIMG) about 7nm south of Minangkabau International Airport. The landing at about 17:00L was safe.





Sriwijaya Boeing 737-400

Location of two, new and old airports

### 16/10/2012 Batam, INA, Asia Link Fokker 27-500 skids while landing at Hang Nadim airport in Batam, Riau Islands, 0/

The plane from Singapore's Seletar Airport, was carrying electronic items for factories in Batam. No casualties were reported. The cargo plane, flying from Seletar Airport in Singapore, skidded soon after landing at Hang Nadim Airport in Batam, Riau Islands at 12:15 p.m. on Wednesday. Batam Free Trade Zone Authority (BPK-FTZ) spokesman Dwi Djoko Wiwoho reported that there were no casualties in the incident. The plane was carrying electronic materials, which were to be distributed to factories in the city.

Dwi said the plane skidded on the east side of the airport's taxiway after its front wheel broke. He added that the incident did not disrupt other flight schedules at the airport. The airport's officials are still investigating the cause of the incident.

#### 19/10/2012 Pontianak, INA, Sriwijaya B734 overran runway 15 on landing, 0/160

Sriwijaya Boeing 737-400, PK-CKN performing flight SJ-182 from Jakarta to Pontianak (Indonesia) with 160 people on board, landed on Pontianak's runway 15 in heavy rain at about 16:45L (09:45Z) but overran the end of the runway and came to a stop just past the paved surface of the runway end safety area with all wheels on soft ground. No injuries occurred, the aircraft sustained no damage.

23/10/2012 Pasir Putih, Kampar, Riau, INA, IAF British Hawk 200 fighter jet crashed during a routine training mission, pilot bailed out, 0/1 Hawk crash 'due to mechanical failure' The Jakarta Post reports, Wed, October 17 2012

### 01/11/2012 Pontianak, INA, Lion Air B737-400, Jakarta (WIII) - Pontianak (WIOO) overrun Pontianak's rwy15 in rain, 0/

Lion Air Boeing 737-400, flight JT-716 from Jakarta to Pontianak (Indonesia), landed on Pontianak's runway 15 in rain at about 19:45L (12:45Z) but overran the end and overrun area and came to a stop with all wheels on soft ground a few meters past the end of the paved surface. No injuries occurred. There was no visible damage to the aircraft.

# 30/11/2012 Trans Air Congo IL76 at Brazzaville on Nov 30th 2012, overran runway and impacted buildings

Trans Air Congo Ilyhushin IL-76T freighter, registration EK-76300 performing a freight flight from Pointe Noire to Brazzaville (Congo) with 6 crew, landed on Brazzaville's runway 23R in bad weather at around 17:30L (16:30Z) but overran the end of the runway, broke through the airport perimeter fence, crossed a road, impacted multiple buildings and fell into a ravine about 1000 meters/0.54nm past the end of the runway. All crew perished in the accident, 19 people on the ground were killed as well, 14 people on the ground were taken to hospitals with injuries.

09/12/2012 Near Iturbide, Mexico, charter Learjet 25 corporate jet crashed while en route Monterrey and Toluca (TLC), Mexico. 7/5+2crew

Learjet 25 corporate jet crashed near Iturbide, Mexico while en route on a flight between Monterrey and Toluca Airport (TLC), Mexico.

There were two pilots and five passengers on board. Reportedly all were killed in the crash. The airplane had been chartered to transport Mexican-American singer Jenni Rivera and four others to Toluca following an evening concert in the Monterrey Arena.

# 17/12/2012 Near Lima, Peru, Amazon Sky AN26, impacted Andes mountain, 4/4

Amazon Sky Antonov AN-26, registration OB-1887-P performing a freight flight from Lima to Cusco Malvinas (Peru) with 4 crew, had departed Lima at 10:09L (15:09Z) and was enroute about 32 minutes into the 78 minutes flight when radio contact with the aircraft was lost. Last radar contact showed the aircraft 110nm east of Lima at FL195. When the aircraft did not arrive at the destination, located about 245nm east of Lima, at 11:27L, a search for the aircraft was initiated, the aircraft was declared missing after 14:00L when the aircraft

carrying 4 hours of fuel would have exhausted fuel but did not turn up at any airport. Other aircraft overflying the region of last radar contact reported hearing an ELT signal.

22/12/2012 Sanikiluaq, Canada, SA227Metro III impacted runway after go-around, 1/9

Perimeter Aviation Swearingen SA-227 Metro III on behalf of Keewatin Air, charter flight 4B-993 from Winnipeg, MB to Sanikiluaq, NU (Canada) with 7 passengers and 2 crew, went around while on final approach to Sanikiluaq but lost height and impacted Sanikiluaq's runway coming to a rest south of the runway near the end of the runway at 18:11L (23:11Z). An infant amongst the passengers died, the first officer received serious injuries and was flown to Winnipeg for treatment, the captain and other 7 passengers received injuries and are being treated in Sanikiluaq.

29/12/2012 Vnukovo Airport (VKO) Moscow, RU, Red Wings Tu-204 was destroyed following overrun, 5/8

Russia's MAK released their final report in Russian concluding the probable causes of the accident were:

Misalignment of mechanism and locks of thrust reversers on both engines as well as inappropriate actions (inappropriate provisions in the flight crew operating manual) by the crew during the landing run that resulted in lack of effective braking overrunning the runway and colliding with obstacles at high speed (about 190 kph/102 knots), the destruction of the aircraft and loss of life.

12/01/2013 Gunung Sitoli, INA, Wings Abadi AT72 Blew up tires on landing, 0/62pax

Wings Air Avion de Transport Regional ATR-72-500, registration PK-WFH performing flight IW-1264 from Medan to Gunung Sitoli with 62 passengers, landed at Gunung Sitoli when tower observed smoke coming from the right main landing gear.

17/01/2013 Wamena, INA, Yayasan Jasa Aviasi Indonesia (YAJASI) Pilatus Porter PC-6/B2-H4, runway excursion. 0/2

18/01/2013 Makassar, INA Wings Abadi AT72, engine vibrations, 0/76

Wings Abadi Avions de Transport Regional ATR-72-500, registration PK-WFV performing flight IW-1787 from Ambon to Makassar with 76 people on board, was on approach to Makassar when one of the engines caused serious vibrations to the airframe. The crew continued for a safe landing.

29/01/2013 Almaty, Kazakhstan, Scat CRJ2 impacted ground near airport, 21/21

Scat Airlines Canadair CRJ-200, UP-CJ006, flight DV-760 from Kokshetau to Almaty (Kazakhstan) with 16 passengers and 5 crew, was on final approach to Almaty's runway 23R in poor visibility due to fog when the crew decided to go around but the aircraft disappeared from radar screens at 13:13L (07:13Z). The aircraft was found in swampy terrain about 1400 meters short of the runway threshold at around 14:00L. All occupants perished. The passenger and crew manifest lists 21 names (16 passengers and 5 crew, a lap child's name was later added). Kazakhstan's emergency ministry reported 16 passengers (including one child) and 5 crew were killed in the crash near the village Kyzyltu (about 1km north of the approximate final position, see map below).

05/02/2013 Apalapsili, INA, Trigana DHC6 (Cargo), runway excursion on landing, 0/3

Trigana Air Service de Havilland DHC-6-300 Twin Otter, registration PK-YRF performing a charter cargo flight from Jayapura to Apalapsili with 3 crew, performed a visual approach to Apalapsili's runway 15. Following a normal downwind and configuration the aircraft touched down on about what would be the center line of the runway and in the designated touch down area, but veered to the left and went off the runway coming to a stop about 500 meters past the runway threshold with the nose and left main gear in a drainage ditch. There were no injuries, the aircraft received substantial damage.

13/02/2013 Donetsk, Ukraine, South Airlines AN-24, burst into flames after landing, 4/45

South Airlines AN-24, UR-WRA flight YG-8971 Odessa to Donetsk (Ukraine) with 41 passengers and 4 crew, landed rwy08 at 18:09L (16:09Z), after touchdown the aircraft burst into flames. The occupants evacuated. 39 survived the accident, 4 confirmed dead, 2 unaccounted for, 12 received injuries of varying degree.

04/03/2013 Goma, Zaire, Compagnie Africaine Aviation Fokker 50, 4 pax + 5 crew impacted short of the rwy on app, 6/9

27/03/2013 Padang WIPT, INA, Sriwijaya B735, runway excursion when landing rwy33

Sriwijaya Boeing 737-500, registration PK-CLJ performing flight SJ-21 from Medan to Padang (Indonesia), went off the runway after landing in Padang at around 18:30L (11:30Z) and came to a stop with all wheels on soft ground. No injuries occurred, and the aircraft sustained minor if any damage.

05/04/2013 Padang WIPT, INA, Citilink B733, runway excursion when landing rwy33, 0/135 pax

Citilink Garuda Indonesia Boeing 737-300, flight QG-970 from Jakarta to Padang (Indonesia) with 135 passengers, landed on Padang's runway 33 at 21:10L (14:10Z) but veered right, took out three runway edge lights before coming to a stop about 2100 meters/6890 feet down

the runway (length 2750 meters/8860 feet) with all gear on soft ground, the righthand tyres burst. The passengers disembarked via mobile stairs.

# 13/04/2013 Bali INA, Lion Air B738 at Denpasar overran runway and came to stop in sea

(Later report) Lion Air B738 at Denpasar on Apr 13th 2013, landed short of runway and came to stop in sea

Lion Air Boeing 737-800, registration PK-LKS performing flight JT-960 from Bandung to Denpasar (Indonesia) with 101 people on board, overran runway 09 while landing in Denpasar/Bali, went down the slope past the runway and came to a stop in the sea, the aircraft broke up in two parts. All occupants were evacuated from the aircraft and have been taken to hospitals.

# (later report)

A Lion Air Boeing 737-800, registration PK-LKS performing flight JT-904 from Bandung to Denpasar (Indonesia) with 101 passengers and 7 crew, was on approach to Denpasar's runway 09 at about 15:10L (07:10Z), but came to a stop in the sea short of the runway, the aircraft broke up in two parts. All occupants were evacuated from the aircraft and have been taken to hospitals with minor injuries (scratches).

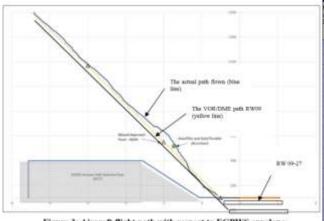
Preliminary Report: http://www.dephub.go.id/knkt/ntsc\_aviation/aaic.htm

Final Report: "Final Report No. KNKT.13.04.09.04, PT.Lion Mentari Airlines (Lion Air) Boeing 737 - 800; PK-LKS Ngurh Rai International Airport, Bali Republic of Indonesia 13 April 2013"



Figure 1: The sequence of events

Figure 2: The aircraft after the accident





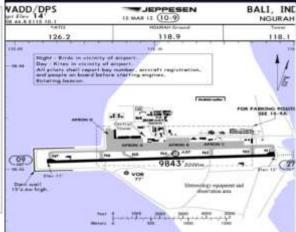




Figure 13: Aircraft flight path superimposed to Google Earth



Figure 16: Final aircraft resting position

Figure 17: The evacuation process



Figure 18: The situation during evacuation process

29/04/2013 Bagram Air Base, Afghanistan, National Air Cargo B747-428BCF, crashed + burned just after tkof rwy03, 7/7

Jamie Brokaw, pilot, Monroe, MI, Brad Hasler, pilot, Trenton, MI, Jeremy Lipka, pilot, Brooklyn, MI, Rinku Summan, pilot, Canton, MI, Michael Sheets, loadmaster, Ypsilanti, MI, Gary Stockdale, mechanic, Romulus, MI, Timothy Garrett, mechanic, Louisville, KY

# 08/05/2013 Wamena, INA, Nusantara B462, aircraft burns down during unloading

Nusantara Air Charter British Aerospace BAe 146-200, registration PK-JKC performing a daily freight flight from Jayapura to Wamena (Indonesia) carrying fuel supplies for Wamena, had safely landed at Wamena, had reached its parking position, was shut down and being unloaded at around 11:50L (02:50Z), when one of the fuel drums caught fire and set the airplane ablaze. No injuries occurred, however, the aircraft burned down beyond repair.

#### 16/05/2013 Jomsom, Nepal, DHC6, runway excursion

A Nepal Airlines de Havilland DHC-6-300 Twin Otter, registration 9N-ABO performing flight RA-555 from Pokhara to Jomsom (Nepal) with 19 passengers and 3 crew, landed on Jomsom's runway 24 at 08:33L (02:48Z) but veered left off the runway, went down the slope to the Kaligandaki river and came to a stop on the bank with the left wing in the water. All three crew and 4 passengers received serious injuries and were taken to hospitals, the other 15 passengers escaped with minor or no injuries. The aircraft sustained substantial damage beyond repair, the cockpit area was crushed, the right wing separated.

### 20/05/2013 Wamena, INA, Trigana B733 overran runway on landing

Trigana Air Service Boeing 737-300, registration PK-YRZ performing freight flight TGN-7329 from Jayapura to Wamena (Indonesia), overran the end of runway 33 by about 5 meters/15 feet while landing at Wamena at 16:07L (07:07Z) and came to a stop with the nose gear on soft ground. No injuries and no damage occurred.

### 31/05/2013 Wamena, INA, Deraya Air ATP, runway excursion

Deraya Air British Aerospace BAe ATP, registration PK-DGI performing a freight flight from Jayapura to Wamena with 3 crew, landed on Wamena's runway 15 at 07:09L (22:09Z May 30th) following an unstable approach, went left off the runway, the nose gear collapsed and separated, the aircraft came to a stop about 50 meters off the runway center line with damage to the propellers and nose of the aircraft.

On Mar 11th 2016 Indonesia's NTSC released their final report concluding the probable causes of the accident were:

The flight did not meet the criteria according to the recommended elements of stabilized approach which required go around. The aircraft touched down with  $2^{\circ}$  misalignment with the runway direction then the aircraft veered off to the left.

The recovery action was not in accordance to the correct technique according to the ALAR Tool Kit.



#### 01/06/2013 Simikot, Nepal, Sita D228 landed short of runway, gear collapse

Sita Air Domier Do-228, registration 9N-AHB performing a charter flight from Nepalgunj to Simikot (Nepal) with 5 passengers and 2 crew, approached Simikot's runway 28 but touched down short of the runway, the nose and left main gear collapsed, the left hand wing fractured about halfway between engine and wing tip, the aircraft came to a stop perpendicular to the runway center line with nose inside the runway and the tail beyond the right hand edge of the runway just past the aiming marker for runway 28. No injuries occurred, the aircraft received substantial damage.

### 10/06/2013 Kupamg, INA, Merpati MA60, landed short of runway and broke up, 0/50

Merpati Nusantara Airlines Xian MA-60, registration PK-MZO performing flight MZ-6517 from Bajawa to Kupang (Indonesia) with 46 passengers and 4 crew, touched down short of Kupang's runway 07 at 09:40L (01:40Z), sheared off all landing gear, the propellers and engines contacted ground causing the wing to break apart and tilt. The aircraft came to a stop with the fuselage broken up in two parts just past the western threshold of the runway (07). One passenger was taken to a hospital with injuries.

Flight MZ 6517 from Bajawa on Flores Island was carrying 45 adult passengers, an infant and four crew members identified as Capt. Aditya

Prio Joewono, co-pilot Au Yong Vun Pin and flight attendants Lanny Wulandari and Anesa Purwanti. (Jakarta Post)





Xian MA-60

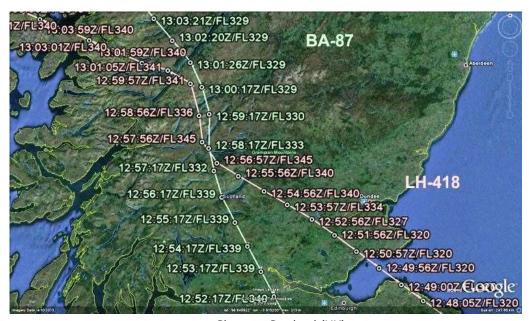
Xian MA-60

### 23/06/2013 Lufthansa B748 and British Airways B744 near Glasgow on Jun 23rd 2013, loss of separation

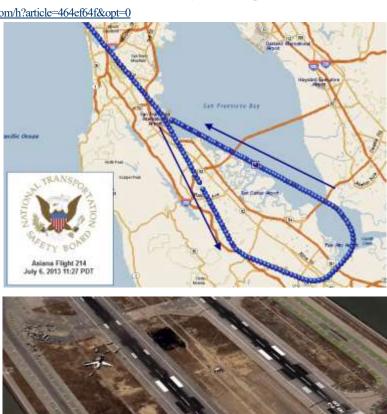
Lufthansa Boeing 747-800, registration D-ABYC performing flight LH-418 from Frankfurt/Main (Germany) to Washington Dulles,DC (USA), was enroute at FL320 nearing Glasgow,SC (UK) tracking roughly 305 degrees and had issued a request for FL340 about 5 minutes prior to the occurrence, the controller had confirmed receiving the request and stated "standby".

The British Air Proximity Board released their final report concluding the probable cause of the loss of separation was:

The pilots of aircraft on converging tracks flew into conflict because, although they acknowledged timely avoiding action, they did not follow it.



near Glasgow, Scotland (UK)



06/07/2013 KSFO, USA, Asiana B772, touched down short of the runway 28L, broke up and burst into flame, 3/307 <a href="http://avherald.com/h?article=464ef64f&opt=0">http://avherald.com/h?article=464ef64f&opt=0</a>

B777-200 operated by Asiana Airlines was destroyed in a landing accident at San Francisco International Airport, CA (SFO). There were 291 passengers and 16 crew members on board. Three passengers died and 48 were seriously injured. OZ-214 originated in Seoul-Incheon International Airport (ICN), South Korea. The weather at San Francisco was fine with 6-7 knot winds and a visibility of 10+ miles. The pilot undergoing initial operating experience was in the left hand seat as Pilot Flying. An instructor pilot was sitting in the right hand seat. The relief first officer was in the jump seat at the time of the approach. The pilot flying had logged about 9700 flying hours. Flight 214 was his tenth flight leg on a B777 while undergoing initial operating experience.

The flight was cleared for an approach to runway 28L, the ILS glidepath of which had been declared unserviceable in the current Notam. The airplane was configured for landing with 30 degrees of flaps and gear down. Target threshold speed was 137 knots. According to preliminary information from the cockpit voice recorder, the crew did not state and anomalies or concerns during the approach. The throttles were at idle and autothrottle armed. At 1600 feet the autopilot was disengaged. The aircraft descended through an altitude of 1400 ft at 170 kts and slowed down to 149 kts at 1000 feet. At 500 ft, 34 seconds prior to impact, the speed dropped to 134 kts, which was just below the target threshold speed. The airspeed then dropped significantly, reaching 118 knots at 200 ft altitude. The instructor pilot reported that he noticed four red PAPI lights and concluded that the autothrottle had not maintained speed. Eight seconds prior to impact, the throttles were moved forward. Airspeed according to the FDR, was 112 knots at an altitude of 125 ft. Seven seconds prior to impact, one of the crew members made a call to increase speed. The stick shaker sounded 4 seconds prior to impact. One second later the speed was 103 knots, the lowest recorded by the FDR. One of the crew members made a call for go a around at 1.5 seconds before impact. The throttles were

advanced and the engines appeared to respond normally. The main landing gear and rear fuselage then struck a sea wall, just short of runway 28L. Airspeed was 106 knots. The empennage separated at the rear bulkhead. The airplane then ballooned, yawed left and spun 360 degrees before it came to rest to the left of runway 28L, 735 m (2400 ft) from the seawall. A post impact fire occurred when a fuel tank ruptured inboard of the no.2 engine, spilling fuel on the hot engine, causing it to ignite. The ILS glidepath for runway 28L and 28R at SFO had been declared unserviceable from June 1 until August 22.

The National Transportation Safety Board determines that the probable cause of this accident was the flight crew's mismanagement of the airplane's descent during the visual approach, the pilot flying's unintended deactivation of automatic airspeed control, the flight crew's inadequate monitoring of airspeed, and the flight crew's delayed execution of a go-around after they became aware that the airplane was below acceptable glidepath and airspeed tolerances.

Contributing to the accident were;

- (1) the complexities of the autothrottle and autopilot flight director systems that were inadequately described in Boeing's documentation and Asiana's pilot training, which increased the likelihood of mode error;
- (2) the flight crew's nonstandard communication and coordination regarding the use of the autothrottle and autopilot flight director systems;
- (3) the pilot flying's inadequate training on the planning and executing of visual approaches;
- (4) the pilot monitoring/instructor pilot's inadequate supervision of the pilot flying; and
- (5) flight crew fatigue which likely degraded their performance.
- 11/07/2013 near Nizhnevartovsk Angara AN24, water landing after engine fire, 5/33+4

Angara Airlines Antonov AN-24 on behalf of Tomsk Avia, registration RA-47302 performing flight TSK-5007 from Tomsk to Surgut (Russia) with 33 passengers and 4 crew, was enroute near Nizhnevartovsk when a fire broke out in the left hand engine (AI-24) prompting the crew to attempt a diversion to Nizhnevartovsk. Seven minutes later, about 35nm from Nizhnevartovsk, the crew however decided to ditch the aircraft on the river Ob Canal about 1.6km off Medvedevo about 30nm short of Nizhnevartovsk and about 14nm short of Strezhevoy at 11:55L (04:55Z). 5 occupants were killed, 32 people received injuries of varying degree.

23/07/2013 KSFO, USA, EVA B773, descended below safe height, went around, landed safe on second approach. 0/?

EVA Airways Boeing 777-300, registration B-16701 performing flight BR-28 from Taipei (Taiwan) to San Francisco, CA (USA), was on final approach to San Francisco's 28L being cleared to land when the aircraft descended to about 600 feet about 3.8nm before the runway threshold (about 600 feet below glidepath, remaining glidepath angle 1.5 degrees instead of 3 degrees), tower warned the aircraft "climb immediately, altitude alert, altimeter 29.97", the crew initiated a go-around and positioned for another approach, that concluded in a safe landing about 13 minutes later.

05/08/2013 Niigata, Japan, Korean B739 overrun runway on landing, 0/100pax+9crew

A Korean Air Boeing 737-900, HL7599 performing flight KE-763 from Seoul (South Korea) to Niigata (Japan), landed on Niigata's runway 10 at about 19:44I (10:44Z) but overran the end of the runway and came to a stop with the nose gear off paved surface and down a slope and the main wheels barely on the paved surface of the runway end safety area. No injuries occurred, the aircraft received no damage. Emergency services attending to the scene reported both passengers and aircraft remained unharmed.

METAR: RJSN 051100Z 03005KT 9999 FEW030 SCT080 25/24 Q1005

06/08/2013 Gorontalo, INA, Lion Air JT892 carrying 174 pax skid off in rain when landing rwy27, at around 9:00 p.m. on Tuesday, 0/181

14/08/2013 KBHM, USA, UPS A306, contacted trees and touched down outside airport

UPS Airbus A300-600, registration N155UP, 5X-1354 from Louisville, KY to Birmingham, AL (USA) with 2 crew, was on approach to Birmingham's runway 18 at 04:51L (09:51Z) but touched down near the intersection Airport Road/Tarrant Huffman Road about 0.8nm short of the runway in open terrain, burst into flames leaving a trail of debris of about quarter of a nautical mile and coming to a stop about 0.55nm before the runway threshold and slightly left of the extended center line. Both crew were killed. The area has been cordoned off. No people on the ground or houses on the ground were affected.

The Jefferson County, Alabama, Medical Examiner has confirmed that two of our crew members, Captain Cerea Beal, Jr. and First Officer Shanda Fanning, lost their lives in the accident involving UPS Flight 1354. Shanda Carney Fanning, 37, the co-pilot.

19/08/2013 Montana, USA, USAF B1B crashed, 170 miles southeast of Billings, Montana, 4 crew ejected safely.

The cost of a B-1B bomber is about \$283 million, said Air Force spokesman Lt. Col. Allen Herritage. The Air Force will conduct a thorough investigation to determine the cause of the crash. The B-1B is a swing-wing bomber intended for high-speed, low-altitude penetration

missions. The plane, which was built in 1985, was based out of Ellsworth Air Force Base, one of only two bases in the U.S. that have B-1B crews. Ellsworth has 28 of the planes, including the one that crashed, the Air Force said. The only other base with B-1B crews is Dyess Air Force Base in Abilene, Texas. (Stars & Stripes)

05/09/2013 Padang WIPT, INA, Citilink Garuda Indonesia Airbus A320-200, registration PK-GLN performing QG-970 from Jakarta to Padang (Indonesia) with 179 people on board, landed on Padang's runway 33 at about 19:40L (11:40Z) but veered off the runway damaging two runway edge lights and two wheels.

09/09/2013 Corpflite D228 near Vina del Mar impacted ground short of runway, CFIT, 2/2

Corpflite DO-228, CC-CNW a positioning flight from Los Pelambres [SCNK] to Vina del Mar (SCVM, Chile) with 2 crew, was on approach to Vina del Mar from the south in fog and poor visibility when the aircraft contacted a power line and trees and fell to the ground about 7km (3.8nm) short of runway 05 at about 09:45L (12:45Z). Both pilots perished in the crash, the aircraft was destroyed. The Final Report concludes the probable cause of the crash was: a controlled flight into terrain (CFIT) one nautical mile southeast of the threshold rwy 05, when the aircraft descended below the Minimum Descent Altitude (MDA) published for the ILS X Approach with no glideslope available at Vina del Mar Aerodrome.

According to the approach chart the recommended rate of descent was 677 fpm between the FAF (Final Approach Fix) and the MAP (Missed Approach Point), however, the crew had adopted 1200 fpm, which also exceeds the criteria for stabilized approaches limiting the rate of descent to 1000 fpm. The crew thus performed an unstabilized approach, and despite some attempts to correct the trajectory did not stop the descent at the MDA. As result the aircraft contacted the pine tree located about 0.48nm ahead of the position they should have reached 1000 feet MSL.

28/09/2013 Wings Abadi AT72 at Makassar on Sep 18th 2013, engine vibrations, 0/76

Wings Abadi ATR-72-500, PK-WFV performing flight IW-1787 from Ambon to Makassar (Indonesia) with 76 people on board, was on approach to Makassar when one of the engines caused serious vibrations to the airframe. The crew continued for a safe landing.

14/10/2013 Incident: Comair B738 at Johannesburg on Oct 11th 2013, rejected takeoff

Comair Boeing 737-800, registration ZS-ZWD performing flight MN-109 from Johannesburg to Cape Town (South Africa), was lined up for departure from runway 03L when ATC cleared a private aircraft to cross the runway. After the private aircraft had vacated the runway flight MN-109 was cleared for takeoff but did not immediately commence takeoff. In the mean time the private aircraft appeared to turn the wrong way back onto the runway prompting the controller to cancel takeoff clearance with the Boeing still stationary at that time, the instruction was not acknowledged by the crew and the aircraft began to commence takeoff. The controller therefore instructed the aircraft to stop and hold position, this time the crew reacted, rejected takeoff at low speed and stopped about 200 meters down the runway. The private aircraft in the meantime had corrected and turned correctly onto the next taxiway. The Boeing vacated the runway, returned to the holding point and departed a few minutes later.

16/10/2013 Lao AT72 at Pakse on Oct 16th 2013, went into Mekong River on approach, 49/49

A Lao Airlines Avions de Transport Regional ATR-72-600, RDPL-34233 performing flight QV-301 from Vientiane to Pakse (Laos) with 44 passengers and 5 crew, was on final approach to Pakse in poor weather conditions at about 15:55L (08:55Z) when the aircraft impacted Mekong River. All occupants of the aircraft are confirmed perished in the accident.

03/11/2013 Riberta, Bolivia, Aerocon SW4, SA-227AC Metro III, runway excursion on landing, 8/16+2

Aerocon Swearingen SA-227AC Metro III, CP-2754 performing flight A4-25 from Trinidad to Riberalta (Bolivia) with 16 passengers and 2 crew, landed on Riberalta's runway 14 in poor visibility at about 15:56L (19:56Z) however went off the runway, ran through brush, overturned and caught fire. 8 passengers perished in the accident, one of the pilots and a female passenger received serious, the other pilot and 7 passengers escaped with minor injuries.

10/11/2013 Red Lake, Canada, Bearskin SW4 SA-227AC Metro III, severed power lines and impacted ground short of runway, 5/7

Bearskin Swearingen SA-227AC Metro III, registration C-FFZN performing flight JV-311 from Sioux Lookout,ON to Red Lake,ON

(Canada) with 5 passengers and 2 crew, was on final approach to Red Lake's runway 26 at about 19:34L (00:34Z Nov 11th) when the aircraft severed power lines and impacted ground about 800 meters/0.43nm south of the runway and burst into flames. Both pilots and 3 passengers died in the accident, one passenger seated in the aft row survived the accident, rescued the other passenger in the aft row, and called rescue services.

17/11/2013 Kazan, Russia, Tatarstan B735 crashed on landing, 50/44+6crew

Tatarstan B737-500 on behalf of Ak Bars Aero, VQ-BBN, U9-363/2B-363, Moscow Domodedovo to Kazan (Russia) crashed on touchdown on Kazan's runway 29 and burst into flames at 19:25L (15:25Z). The aircraft came to rest between runway and taxiway (former runway 11L/29R), all occupants perished in the accident. Pilot error.

Accidetn Report: https://mak-iac.org/upload/iblock/459/report\_vq-bbn\_eng.pdf

20/11/2013 Yogyakarta, INA, Indonesia Asia A320 and Batik B739, near collision on runway

21/11/2013 Wichita, USA, Atlas BLCF (Dreamlifter), landed at wrong airport

Atlas Identifies Causes of 747's Landing at Wrong Airport January 6, 2014, 3:05 PM

www.ainonline.com/aviation-news/ainsafety/2014-01-06/atlas-identifies-causes-747s-landing-wrong-airport#.Ussr5JOufZM.twitter

Atlas Air's internal investigation into how its crew landed a Boeing 747 Dreamlifter at the wrong airport last November has uncovered important factors explaining how the freighter, headed to Wichita's McConnell Air Force Base, mistakenly landed at the smaller Jabara Airport, nine miles to the northeast of the air base.

In a crew-training video obtained by AIN, Atlas Air flight operations vice president Jeff Carlson said that a number of intermittent issues with the first officer's primary flight display earlier in the night-time flight created some skepticism on the part of the pilots about the reliability of the aircraft's automation system. Although Wichita's weather was good, the pilot flying programmed an Rnav/GPS approach to Runway 19L at McConnell that would have placed the aircraft at 3,000 feet over Jabara. According to Carlson, the pilot said previous VFR approaches to McConnell had often put him at a higher altitude than expected and that difficulties in picking out McConnell's runway prompted him to make an instrument approach.

The two pilots did not brief each other about other area airports or the 19L approach lighting system that could have helped them to verify that they were landing at McConnell. Wichita approach controllers cleared the 747 for the instrument procedure 25 miles out and immediately switched the aircraft to the McConnell tower, which cleared the aircraft to land. The 747 remained on autopilot until passing the initial approach fix, at which time the flying pilot saw a brightly lit runway slightly to his left, which seemed to match what he was searching for.

Believing the aircraft was too high to land safely, the flying pilot disconnected the autopilot and increased the rate of descent toward what he thought was 19L at McConnell but was in fact Runway 18 at Jabara. The pilot monitoring was uncertain about the runway's identity, but remained silent.

Carlson said the primary reason for the incident was the flying pilot's late decision to abandon the instrument approach for a visual approach that required him to hand-fly the aircraft, as well as inadequate monitoring by the other pilot. Also mentioned in the video, which Atlas has not released for public viewing, was ATC's failure to notice the aircraft descending toward the wrong airport. Atlas Air now requires pilots to remain on an instrument approach procedure–even in visual conditions–until passing the final approach fix.



Boeing Dreamlifter

NTSB Final Report (20200925): https://www.ntsb.gov/ layouts/ntsb.aviation/brief.aspx?ev\_id=20131122X05100&key=1

29/11/2013 Bwabwata National Park, Namibia, ERJ-190AR, TM470 Maputo, Mozambique to Luanda, Angola, crashed. 33/27+6crew

18/12/2013 Ethiopian Airlines B767 bound for Kilimanjaro International Airport in Kenya wound up (mistakenly landed) at Arusha Airport, 27 miles away, and across the border in Tanzania.

24/12/2013 St. Lucia, Virgin A333 mud landing on runway, 0/

Virgin Atlantic Airbus A330-300, registration G-VNYC performing flight VS-98 from Tobago (Trinidad and Tobago) to Saint Lucia (Saint Lucia), was on final approach to Saint Lucia at about 19:40L (23:40Z) and had just received landing clearance when river "Petite Riviere Du Vieux Fort" burst its banks and flooded the airport reportedly washing the weather station away and setting the runway under mud and water. The aircraft touched down on the flooded runway without warning and managed to come to a stop. No injuries occurred, the aircraft however received substantial damage to landing gear and underside of the fuselage.

26/12/2013 Irkutsk-2 Airport (UIIR), Russia, Irkut Aircraft Plant An-12, 9/3crew+ 6pax

With 1,5 tons of aircraft parts on board, the Antonov An-12 disappeared from radar about 1 kilometer outside the aerodrome when approaching the runway in darkness and low visibility conditions. The aircraft ran over rough ground until it impacted the side of a warehouse killing all nine persons on board. The An-12 was destroyed by impact.

22/12/2013 BA B744 at Johannesburg took wrong taxiway and buried wing in building, 0/199

British Airways Boeing 747-400, registration G-BNLL performing flight BA-34 from Johannesburg (South Africa) to London Heathrow, EN (UK) with 182 passengers and 17 crew, was taxiing for departure and had been cleared to taxi to holding point runway 03L via taxiway B but missed the turn towards the holding point runway 03L (editorial note: watch the relevant caution on the taxi chart below) and continued on general aviation taxiway M until the right hand wing collided with and sliced an office building. 4 ground staff in the building received minor injuries, none of the aircraft occupants received injuries. The building and aircraft received substantial damage.

Cause: The loss of situational awareness caused the crew to taxi straight ahead on the wrong path, crossing the intersection/junction of Bravo and Mike instead of following Bravo where it turns off to the right and leads to the Category 2 holding point. Following aircraft stand taxilane Mike; they collided with a building on the righthand side of Mike.

Contributory Factors: The crew did not conduct a briefing to discuss the cleared route, nor did they refer to the correct taxiway information in chart 10-6. In combination with the ground movement visual aids, this created confusion and loss of situational awareness when taxiing on taxiway Bravo.



Figure 1 The expected taxi route which the flight crew discussed during the taxi and take-off briefing session



Figure 4 Damage caused to the starboard wing of the BA034 aircraft

03/01/2014 Sorong, INA Garuda CRJX, runway excursion during back track after landing rwy27, 0/

05/01/2014 KASE, Aspen, CO, at 1222mst Bombardier CL-600-2B16 impacted Aspen-Pitkin County Airport rwy 15, 1/3.

PROBABLE CAUSE: "The flight crew's failure to maintain airplane control during landing following an unstabilized approach. Contributing to the accident were the flight crew's decision to land with a tailwind above the airplane's operating limitations and their failure not to conduct a go-around when the approach became unstabilized."



Bombardier CL-600-2B16

12/01/2014 KBBG, MO, USA, Southwest B737 at Hollister, landed on wrong airport (KPLK), 0/129

Southwest Airlines B737-700, N272WN, WN-4013 Chicago Midway, IL to Hollister Branson Airport, MO with 124 passengers and 5 crew, was on approach to Hollister's Branson Airport [KBBG] but managed to touch down on runway 12 of Hollister/Branson's Graham Clark Airport [KPLK] about 5.5nm north of Branson Airport at about 18:11L (00:11Z Jan 13th) and stopped just at the end of the short runway with the main gear on the "piano keys".

On Jan 17th 2014 the NTSB reported that the aircraft was piloted by a captain with about 16,000 hours of flying experience and a first officer with about 25,000 hours of flying experience. The captain was on his first approach to Branson Airport, the first officer had flown into Branson one time before however in daylight. Air Traffic Control informed the crew they were 15nm from their destination, the crew advised they had the airfield in sight, and the air traffic controller cleared the flight for a visual approach to Branson's runway 14. The crew did not realize until after landing that they were at the wrong airport. The NTSB collected two hours of good recordings from the cockpit voice recorder and about 27 hours of data from the flight data recorder. In addition to the interviews with the two pilots the NTSB also talked to a Southwest Airlines dispatcher who was occupying the observer's seat. The crew reported they had programmed the approach into the flight management system, however then saw the airport beacon and runway lights that they identified as Branson Airport. They believed to be at Branson Airport until after touchdown when they applied heavy braking to stop the aircraft on the runway, then they radioed Branson Tower that they had landed at the wrong airport.





Rwy14/32 (7140ft) Hollister's Branson [KBBG]

Rwy12/30 (3738ft) Hollister/Branson's Graham Clark [KPLK]

11/02/2014 near Ain Kercha, Constantine Airport, Algeria. Algerian Air Force C-130 crashed in a mountainous area, 77/78

One person survived the accident. The airplane carried military families on a flight from Tamanrasset to Constantine.

The accident location would suggest that the airplane was flying an ILS approach to runway 34 at Constantine Airport. The accident location was at about 16 DME. A Category C or D ILS-approach should be initiated from an altitude of 6730 feet at 12.5 DME, according to approach charts. WX (about 12:00 LT / 11:00 Z): DABC 111200Z 31017G27KT 8000 FEW013 FEW023CB BKN026 07/03 Q1015

16/02/2014 near Khidim Nepal DHC6 from Pokhara to Jumla (Nepal) impacted terrain, 18/15 passengers and 3 crew

17/02/2014 Bentiu (HSBT), South Sudan, 748 Air Services Hawker Siddeley HS-748, runway excursion, 1/4

748 (Seven Four Eight) Air Services Hawker Siddeley HS-748 on behalf of International Organization for Migration (United Nations), registration 5Y-HAJ performing a charter freight flight from Juba to Bentiu (South Sudan) with 4 crew, veered off the runway while landing in Bentiu and collided with vehicles near the runway. One occupant, reportedly the flight engineer, was killed, the others received serious injuries. The aircraft received substantial damage beyond repair.

08/03/2014 Malaysia B772 over Gulf of Thailand, aircraft missing, 239/239

Malaysia Airlines B777-200, 9M-MRO performing flight MH-370 from Kuala Lumpur (Malaysia) ATD 0041L (1641z) to Beijing (China) with 227 pax and 12 crew, was enroute at FL350 about 40 min into the flight about 90nm northeast of Kota Bharu (Malaysia) over the Gulf of Thailand in contact with Subang Center (Malaysia) just about to be handed off to Ho Chi Minh Air Traffic Control Center (Vietnam) when radar and radio contact was lost at about 01:22L (17:22Z Mar 7th). Subang Air Traffic Control Center officially told the airline at around 02:40L (18:40Z Mar 7th) that the aircraft was missing. Malaysia's Prime Minister stated on Mar 15th that based on new satellite data there is evidence that the data communication systems and transponder had been turned off by deliberate action by someone on board and the aircraft deviated off course, the last confirmed communication between aircraft and satellites occurred at 00:11Z (Mar 8th). On Mar 24th 2014 Malaysia's Prime Minister announced that according to new computations by Inmarsat and the British AAIB there is no reasonable doubt that flight MH-370 ended in the South Indian Ocean west of Perth (Australia).

Malaysia: 38 Indonesia: 12 Australia: 7 France: 3 USA: 4, (1 infant) New Zealand: 2 Ukraine: 2

China: 153, (1 infant)

Canada: 2 Russia: 1 Italy: 1

Taiwan: 1 Netherlands: 1 Austria: 1

The flight was piloted by Captain Zaharie Ahmad Shah, a Malaysian aged 53. He has a total flying hour of 18,365 hours. He joined Malaysia Airlines in 1981. First officer, Fariq Ab. Hamid, a Malaysian, is aged 27. He has a total flying hour of 2,763 hours. He

joined Malaysia Airlines in 2007.



UPDATE [11:32am]: VN Express, Vietnam's largest news site, reports that Vietnam Emergency Rescue Center just announced it has found signal of the missing plane at 9.50am 120 miles South West of Ca Mau cape, the Southern-most point of Vietnam.

The signal is believed to be the ELT (Emergency Locator Transmitter), which can be activated manually by the flight crew or automatically upon impact.

A Malaysia Airlines flight from Kuala Lumpur to Beijing, China has gone missing, the airline said.

Earlier this morning, MAS confirmed that flight MH370 had lost contact with the Subang Air Traffic Control at 2.40am today (March 8th, 2014)

Flight MH370, operated on the B777-200 aircraft, departed Kuala Lumpur at 12.41am and was expected to land in Beijing at 6.30am the same day. The flight was carrying a total number of 227 passengers (including 2 infants), 12 crew members.

Malaysia Airlines is currently working with the authorities who have activated their Search and Rescue team to locate the aircraft.

# 05/07/2014 Katowice-Pyrzowice (EPKT), CRJ-700 landed on wrong runway, 0/56

Bombardier CRJ-700, D-ACPJ, LH1360, operated by <u>Lufthansa Cityline</u> landed on a new runway under construction. None of the pax was hurt, and the aircraft later made a technical flight to land on the correct runway, as the runway being built had yet no tarmac connections to apron. 52 Passengers, 2 Cabin Crew, 2 Flight Crew, all uninjured.

Captain: Male, age 64, German, holder of ATPL(A) issued by LuftfahrtBundesamt Germany, valid until 31 July 2015

Co-Pilot: Male, age 44, German, holder of ATPL(A) issued by LuftfahrtBundesamt Germany, valid until 31 March 2015

EGPWS: The Bombardier CRJ-700 was equipped with a Honeywell MKV Enhanced Ground Proximity Warning System (EGPWS). The system did not warm the flight crew of a dangerous situation due to the lack of "Smart Landing" function (implemented in newer EGPWS models) and because of insufficient resolution of the area map.





# 28/03/2014 Makassar, INA, Wings AT72, runway excursion on landing, 0/76

Wings Air ATR-72-500, PK-WFR, IW-1205 from Pomala (WAAP) to Makassar/Ujung Pandang (WAAA) with 71 pax and 5 crew, landed on Makassar's runway 03 at about 16:15L (08:15Z) but veered right off the runway and came to a stop with all gear off the runway and runway safety area in rough soft ground. No injuries occurred, the aircraft received minor damage.

08/05/2014 north of San Vicente del Caguán, Colombia, ALIANSA Colombia DC-3 cargo impacted mountain, 6/6

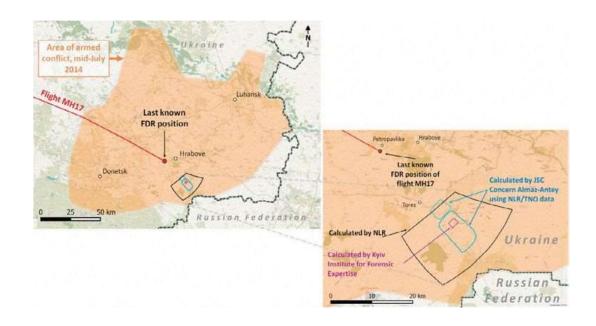
17/05/2014 Xiangkhouang, Laos, Laos Air Force AN-74TK-300 crashed on landing, 2 ministers among 17 killed, 17/20

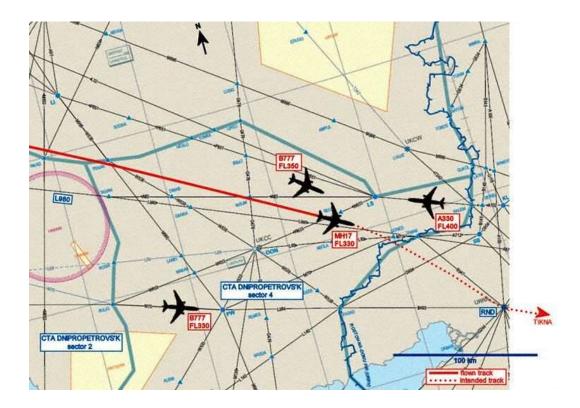
The Deputy Prime Minister of Laos, Douangchay Phichit, who is also the country's Defense Minister has died in a plane crash in the north east of the country. A number of other high-ranking officials have also been killed

02/07/2014 Jomo Kenyatta, Nairobi, Kenya, Fokker 50 cargo, impacted a residential area Utawala, Embakasi, shortly after takeoff. 4/4.

17/07/2014 near Donetsk, Ukraine, Malaysia B772, MH17, aircraft was shot down, 298/298

Malaysia Airlines B777-200, 9M-MRD flight MH17/KL4103, Amsterdam (EHAM) - Kuala Lumpur (WMKK) with 283 passengers and 15 crew, was enroute at FL330 about 20nm NE of Donetsk (Ukraine) when the transponder data became unreliable at 13:18Z (at N48.28 E38.08) and was lost at FL330 at 13:20Z. The aircraft came down near the villages of Shakhtarsk and Hrabove (Ukraine) about 20nm from the last transponder position and 20nm from the Ukrainian/Russian border, the ELT of the aircraft was recorded at position N48.1230 E38.5258.





On Jul 19th 2014 the airline released the final passenger manifest:

- 192 Dutch (including 1 dual citizen Dutch/US),
- 44 Malaysian (including 2 infants and 15 crew),
- 27 Australian,
- 12 Indonesian (including 1 infant),
- 10 British (including 1 dual citizen UK/South Africa),
- 4 German,
- 4 Belgian,
- 3 Philippine,
- 1 Canadian and
- 1 New Zealand

A Boeing 777-200 passenger plane, operating Malaysia Airlines Flight 17, crashed in the Ukraine, east of Donetsk. All 298 on board were killed. Flight MH17 departed the gate at Amsterdam-Schiphol Airport, the Netherlands at 12:14 hours local time, bound for Kuala Lumpur, Malaysia. It was airborne at 12:30 (10:30 UTC) from runway 36C and reached a cruising altitude of FL310 at 12:53 (10:53 UTC). Ninety minutes into the flight, at 12:01 UTC and just prior to entering Ukrainian airspace, the flight climbed to FL330. This altitude was maintained until last contact by ADS-B receivers of flight tracking websites, about 13:21 UTC. [ASN]

At the point of last contact it was flying 1000 feet above airspace that had been restricted as a result of ongoing fighting in the area. Malaysia Airlines reported that MH17 filed a flight plan requesting FL350 throughout Ukrainian airspace. However, the flight was instructed by Ukrainian air traffic control to fly at FL330.



Aircraft destroyed by the incident

On May 24th 2018 the Joint Investigation Team, combining criminal investigations of Netherlands, Australia, Malaysia and Belgium with the assistance by the Ukraine, released another update into their investigation stating: The JIT is convinced that the BUK-TELAR that was used to down MH17, originates from the 53rd Anti Aircraft Missile brigade (hereinafter 53rd brigade), a unit of the Russian army from Kursk in the Russian Federation. The JIT reached this conclusion after extensive comparative research. During today's meeting, an animation of this comparative research was shown. Several images of the BUK-TELAR with which MH17 was downed are available. Analysis of those produces a number of characteristics. The combination of those is so special that that can be considered as a fingerprint. This fingerprint has been compared with numerous images of BUK-TELARS, both Ukrainian and Russian ones. The only BUK-TELAR on which this combination of characteristics also was found, is a BUK-TELAR that was recorded several times when it joined a convoy of the 53rd brigade on 23 – 25 June 2014. Consequently, the JIT presumes that within the 53rd brigade and within the circle around it, people have knowledge about the operation in which that particular BUK-TELAR was deployed and about the persons that were involved in it. Therefore, the JIT calls on insiders and eyewitnesses to share their information with the investigation team. Also information about the instruction of the BUK-TELAR's crew matters greatly for the criminal investigation.



 $Video\ produced\ by\ Dutch\ Aircraft\ Accident\ Investigation: \underline{http://www.youtube.com/watch?v=KDiLEyT9spI}$ 

23/07/2014 Makung (Magong), Penghu (海湖) island, Taiwan, Transasia Airlines ATR-72, impacted buildings on approach, 48/58
24/07/2014 nearly an hour after takeoff from Burkina Faso, Swiftair MD-83 on behalf of Air Algerie, missing, 116/116
The aircraft was located in the evening, about 18 hours after the aircraft went missing, southeast of the city of Gossi, about 50km north of the border Burkina Faso/Mali and about 100km southwest of Gao (approx. position N15.6 W0.7)

- 10/08/2014 Teheran, Iran, Sepahan Hesa IrAn-140-100, (Iran domestic) lost height after takeoff crashed 2nm from a/p, 48/40+8
- 30/08/2014 Tamanrasset, Algeria, Ukraine Air Alliance AN12 Cargo, impacted terrain, 7/7 crew
- 30/08/2014 Wamena, INA, Jayawijaya B732, burst tyres during backtrack

  Jayawijaya Dirgantara B737-200, PK-JRB from Jayapura to Wamena had safely landed. While turning around on the runway to backtrack
  the runway towards the apron the aircraft burst both nose tyres causing the aircraft to become disabled on the runway. The aircraft was
  towed off the runway. Indonesian media report a forklift was used to tow the aircraft off the runway.
- 20/09/2014 Near Port Moresby, DHC-6 Twin Otter, P2-KSF, impacted wooded terrain near the top of Mount Lawes, Papua New Guinea, in bad weather. Both pilots and two passengers sustained fatal injuries.
- 26/09/2014 Fire started at about 5:40 a.m. and caused the evacuation of Chicago air traffic control center in Aurora, Illinois.
- 26/09/2014 Chicago air traffic control fire CNN: <a href="http://edition.cnn.com/2014/09/29/travel/chicago-ohare-midway-flights-delayed/">http://edition.cnn.com/2014/09/29/travel/chicago-ohare-midway-flights-delayed/</a>
- 09/11/2014 Bahama, Bahamas, Learjet 35A, a charter flight, clipped a crane and impacted shipyard terrain while on approach to runway 6 the Grand Bahamas International Airport (MYGF) in Freeport. Weather may have been a factor in the accident. 9/9
- 12/12/2014 London Hit by Air Traffic Control Computer Failure (ABCNews:

  <a href="http://abcnews.go.com/International/wireStory/london-airspace-closed-due-computer-failure-27555726?singlePage=true">http://abcnews.go.com/International/wireStory/london-airspace-closed-due-computer-failure-27555726?singlePage=true</a>
- 28/12/2014 Air Asia flight QZ8501 (AWQ8501) WARR-WSSS has gone missing, ECAM malfunction + Pilot Error, 162/pax155+crew7 Indonesia Asia A320 over Java Sea on Dec 28th 2014, aircraft lost height and impacted waters (AVH) Captain of the flight QZ8501 was Iriyanto (ex-F16 pilot) and Ist Officer French man.



On December 30 pieces of debris and bodies were recovered from the sea. On January 12 and 13, 2015 the Flight Data Recorder (FDR) and Cockpit Voice Recorder (CVR) were retrieved. On January 14 the main fuselage was located by a Singapore Navy ship.

#### Contributing factors:

- The cracking of a solder joint of both channel A and B resulted in loss of electrical continuity and led to RTLU failure.
- The existing maintenance data analysis led to unresolved repetitive faults occurring with shorter intervals. The same fault occurred 4 times during the flight.
- The flight crew action to the first 3 faults in accordance with the ECAM messages. Following the fourth fault, the FDR recorded different signatures that were similar to the FAC CB's being reset resulting in electrical interruption to the FAC's.
- The electrical interruption to the FAC caused the autopilot to disengage and the flight control logic to change from Normal Law to Alternate Law, the rudder deflecting  $2^{\circ}$  to the left resulting the aircraft rolling up to  $54^{\circ}$  angle of bank.
- Subsequent flight crew action leading to inability to control the aircraft in the Alternate Law resulted in the aircraft departing from the normal flight envelope and entering prolonged stall condition that was beyond the capability of the flight crew to recover.

The example of miscommunication between the pilots was when the plane was in a critical stalling condition, the co-pilot misunderstood the captain's command "pull down"; instead of pushing the airplane's nose down (pushing forward on the stick to regain speed and escape the stall), he pulled the stick back, which would have ordered the aircraft to pitch up, deepening the stall. Because the captain was also pushing the stick forward and because Airbus has a dual-input system, the two stick inputs cancelled each other out, which led to the plane remaining in a stall condition until the end of the black box recording.

08/01/2015 Ulanbaator, Mongolia, Air China B738, B-5500 rejected takeoff due to amended route clearance, ATC comm. error

B-5500 had reached the runway and was accelerating for takeoff, when tower began to transmit the amended initial departure clearance.

20 seconds after CA-902 began their takeoff run the crew rejected takeoff at high speed due to mis-hearing ATC.

11/01/2015 Trigana DHC6 at Enarotali, runway excursion

Trigana Air de Havilland DHC-6-300 Twin Otter, PK-YRU performing a positioning flight from Timika to Enarotali [WABT] (Indonesia) with 2 crew, landed at Enarotali in clear weather but strong gusting winds and veered off the runway at 13:30L (04:30Z). The aircraft came to a stop off the runway with the nose gear collapsed and damage to the nose section and a propeller. No injuries occurred.

04/03/2015 THY A333 at Kathmandu on Mar 4th 2015, runway excursion and nose gear collapse

04/03/2015 Deraya ATP at Wamena on Mar 4th 2015, runway excursion on landing, gear collapse, broken wing

15/03/2015 Skytraders A319 at Melbourne on May 15th 2015, push buttons, human perceiption and a descent below minimum safe altitude

The pilot flying inadvertently selected the EXPED pushbutton instead of the APPR pushbutton.

24/03/2015 near Barcelonnette, France, Germanwings A320 lost height and impacted terrain. Suicide. 150/150

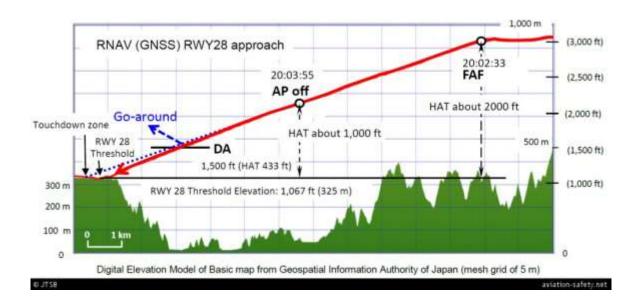
Germanwings A320-200, D-AIPX, 4U-9525 from Barcelona, SP (ELBL) to Dusseldorf (EDDL) ATD 10:01L (0901Z) was enroute at FL380 about 30nm southeast of Marseille (France) when the aircraft initiated a rapid descent. Radar contact with the aircraft was lost at about 6800 feet at approx. 10:45L (0945Z) about 12nm southwest of Barcelonnette (France), 75nm northeast of Marseille. The aircraft was found at approximate position N44.2979 E6.4670, all on board perished. 150/150 (142+2infants+6crew) including 2 JPN.

20/04/2015 Wings AT72 at Sumbawa Besar made 4.8G touchdown and go-around.

Wings Air Avions de Transport Regional ATR-72-212A, registration PK-WGS performing flight IW-1882 from Praya (WADL) to Sumbawa Besar (WADS) with 73 people on board, was on approach to Sumbawa Besar in bad weather and low visibility. The aircraft touched down hard and bounced prompting the crew to initiate a go-around and subsequently returned to Praya, where the aircraft landed without further incident.

14/05/2015 Hiroshima, Japan, Asiana A320 touched down short of runway, 0/74+8crew

Asiana Airlines Airbus A320-200, HL7762, flight OZ-162 from Seoul (South Korea) to Hiroshima (Japan) with 74 pax and 8 crew, was on approach to Hiroshima's runway 28 at about 20:05L (11:05Z) but touched down about 330 meters short of the runway threshold, the tail struck the ground, the aircraft broke through the localizer antenna for runway 10 and came to a stop about 1500 m past the runway threshold and about 130 m to the left of the runway center line on soft ground, the aircraft nose pointed towards the runway threshold (180 degrees turned around), just in front of the airport's main apron. The aircraft was evacuated. 2 cabin crew and 25 passengers received injuries. The aircraft sustained substantial damage.



22/05/2015 Kalstar ATR72 near Pontianak hydraulic failure

02/06/2015 Garuda B738 at Makassar overran runway on landing

Garuda Boeing 737-800, PK-GFA, GA-618 from Jakarta to Makassar/Ujung Padang (Indonesia) with 144 passengers and 8 crew, landed on Makassar's runway 13 at 14:34L (06:34Z) but overran the end of the runway and came to a stop with the right main gear on the paved surface of the runway end safety area and left and nose gear on soft ground. The passengers disembarked onto the runway end safety area and were taken to the terminal.

Runway 13/31 (length 2500 meters/8200 feet) was closed for about two hours until the aircraft could be moved off the runway.

30/06/2015 Indonesia military (TNI) C130 Hercules cargo aircraft has crashed into a residential area on Jl. Jamin Ginting, near Polonia Airport in North Sumatra's capital of Medan, shortly after taking off. (Jakarta Post)

The Hercules transport aircraft crashed into a residential area on Jl. Jamin Ginting, shortly after taking off from Soewondo Air Force Base (previously known as Polonia International Airport) in Medan en route to Riau on Tuesday afternoon, killing all 113 people on board. The aircraft was reported to have been carrying supplies. Air force chief Marshal Agus Supriatna said the manifest showed there were 113 people on board the plane — 12 crew and 101 passengers — when it crashed, and he did not believe anyone had survived.

ASN: The Lockheed C-130 Hercules transport plane, operated by the Indonesian Air Force's 32 Squadron, was destroyed when it crashed shortly after takeoff from Medan-Soewondo Air Force Base. On board were a crew of 12 and 110 passengers.

The aircraft took off at 11:48 hours local time (04:48 UTC) from runway 23 at Soewondo Air Force Base. Shortly after takeoff the crew radioed that they were returning to base. About two minutes later the aircraft impacted buildings and crashed. A fire erupted.

26/07/2015 Chofu airfield, Tokyo, Japan, Three dead as light plane crashes in Tokyo suburb. The single-engine Piper PA-46 propeller aircraft came down in a residential neighborhood at around 11 a.m., shortly after it took off from nearby Chofu Airfield. A 36-year-old pilot was at the controls and the plane was carrying four passengers. 2+1 (on ground) /6

16/08/2015 Trigana AT42 enroute from WJJJ to Oksibili in Papua collided with terrain

Trigana Air Avions de Transport Regional ATR-42-300, PK-YRN, TGN-257 from Jayapura to Oksibil (Indonesia) with 49 passengers and 5 crew, was enroute estimated to arrive in Oksibil at 15:15L (06:15Z), however, did not contact or land in Oksibil. On Aug 17th 2015 the aircraft was found at an altitude of about 8,300 feet at the side of the Pegunungan Bintang Regency mountain at coordinates S4.8215 E140.4992, 54/54

Trigana accidents: Jan. 11, 2015: Trigana airplane skidded off the runway in Enarotali airport in Papua. No casualties reported.

May 20, 2013: Boeing 737-300 PK-YRZ cargo plane lost its traction and skidded while landing at Wamena. Feb. 11, 2010: Landed on a paddy field, in Kutai, East Kalimantan due to engine failures on one of its wings. Jul. 08, 2008: Twin Otter light planecrashed on landing at Dekai airport in Papua regency of Yahukimo. Nov. 17, 2006: Crashed on the way to Puncak Jaya in Papua. Nine passengers and 3 crew died. Apr. 23, 2002: Cargo aircraft leased by Trigana crashed when one of its front tires suddenly exploded.

On Aug 25th 2015 the French BEA reported in their weekly bulletin based on information from Indonesia's NTSC, that flight IL-257, PK-YRN, departed Jayapura at 14:22L with 3.5 hours of fuel endurance, established contact with Oksibil tower at 14:55L with an estimate of 15:04L for landing. At 15:00L Oksibil tower lost contact with the aircraft, at 15:15L Oksibil tower declared the aircraft as "lost contact". The next morning a SAR helicopter located the wreckage at Bintang Mountains at an approximate altitude of 8300 feet. All 54 occupants perished. the NTSC is investigating the accident. Indonesia's Ministry of Transport states, Oksibil Airport is located at coordinates \$4.907222 E140.628333, 4000 feet elevation, and features a runway 11/29 of about 3900 feet/1200 meters length. The unattended aerodrome is capable of receiving Dash 7 and ATR-42 aircraft.

28/08/2015 First Flying DHC6 at Aguni, runway excursion on landing

First Flying De Havilland DHC-6-400 Twin Otter, JA201D, DAK-101 Naha to Aguni (Japan) with 12 passengers and 2 crew, landed on Aguni's runway 19 at about 08:55L (23:55Z Aug 27th) but veered right off the runway, went across a ditch and came to a stop entangled into bushes. The aircraft sustained substantial damage. 0/14

28/08/2015 Cardig B733 at Wamena on Aug 28th 2015, main gear collapse on landing short of runway

Cardig Air Cargo Boeing 737-300 freighter, registration PK-BBY performing freight flight 8F-197 from Jayapura to Wamena (Indonesia) with 2 crew and 14 tons of rice, landed on Wamena's runway 15 at about 15:00L (06:00Z) but suffered the collapse of the lefthand main

gear on touchdown. The aircraft skidded along the runway before coming to a stop about 1500 meters down the runway just past the new apron.

On Jul 1st 2016 the NTSC released their final report concluding the probable cause of the accident was: The large thrust reduction during the windshear resulted in rapid descend and the aircraft touched down with 3.683 G then collapsed the landing gear that had strength degradation.

05/09/2015 Senegal, Ceiba 737-800 mid-air collision with HS-125 Jet over Senegal between GATIL and DEMOL on UA601.

The collision is due to the HS-125's non-compliance with its flight level. The B737-800 was at assigned FL350.

Ceiba Intercontinental Boeing 737-800, 3C-LLY, C2-71 from Dakar (Senegal) to Cotonou (Benin) with 104 passengers and 8 crew, was enroute at FL350 over the Senegal 45 minutes into the flight at 18:13Z when the flight path crossed with an ambulance jet, a Senegalair Hawker Siddeley HS-125 registration 6V-AIM from Ouagadougou (Burkina Faso) to Dakar (Senegal) carrying a patient, a doctor, two nurses and three crew. The Boeing 737-800 continued their flight but diverted to their ultimate destination and home base Malabo (Equatorial Guinea) where the aircraft landed safely.





Ceiba B737-800

HS-125 Jet

02/10/2015 Aviastar DHC6 near Makassar on Oct 2nd 2015, aircraft missing

Aviastar Mandiri DHC-6-300 Twin Otter, PK-BRM from Masamba (WAWM) to Makassar with 10 passengers and 3 crew, was enroute at 8000 feet about 60nm before Makassar at about 15:15L (07:15z) when contact with the aircraft was lost.



DHC-6

At 06:50 UTC, the PIC told the SIC that he wanted to climb and the CVR stopped recording. The aircraft impacted treetops and crashed on the top of a mountain at an elevation of 7734 feet. The wreckage was located on Mount Latimojong on October 5. Mount Latimojong is a mountain range with several peaks. One of the peaks is the highest peak of Sulawesi at 3430 m above sea level. On 5 October 2015, the wreckage was found by ground search team on top of Bajaja Mount, Gamaru, Ulusalu Village, Luwu District, All occupants were fatally injured and the aircraft was destroyed by impact force and post impact fire.

AAR: PT. Aviastar Mandiri DHC6-Twin Otter; PK-BRM, Collision with terrain at coordinate 3° 25' 52.80" S, 120° 4' 12.10" E

#### NTSC Republic of Indonesia 02 October 2015 PRELIMINARY KNKT 15.10.21.04

## 31/10/2015 Metrojet A321 over Sinai disappeared from radar in climb over Sinai. Terror? 224/224

Metrojet (former Kogalym Avia, Kolavia) Airbus A321-200, EI-ETJ, 7K-9268 from Sharm el Sheikh (Egypt) to St. Petersburg (Russia) with 217 passengers and 7 crew, was climbing through FL307 out of Sharm el Sheikh over the Sinai Peninsula (Position N30.16 E34.17, 60nm south of Al-Arish) at 04:12Z when the aircraft disappeared from radar. Wreckage of the aircraft was later located in mountainous terrain about 20nm south of Al-Arish (Sinai, Egypt).



4:13:22z KGL9268 N30.183 E34.161 27925ft 62kts 351mag 6528ft (vertical) AP32000ft

### 04/11/2015 Allied Services AN12 at Juba on Nov 4th 2015, impacted hill in initial climb. 13/15

Allied Services Limited AN-12B, EY-406, a freight flight from Juba to Paloich (South Sudan) with 12 pax and 5 crew, departed Juba's runway 13 but impacted a hill about 800 m past the aerodrome/1100 m past the runway end and came to rest at the banks of White Nile River. One member of the crew and a child are reported to have survived the crash with serious injuries, 15 occupants are reported killed, a number of people on the ground perished, too. Police reported 41 people were killed in the crash. South Sudan Authorities reported the aircraft did not gain height due to overload.

# 06/11/2015 Yokyakarta, INA, Batik B739 overran runway 0/165

Batik Air B737-900, PK-LBO, ID-6380 from Jakarta to Yokyakarta with 160 passengers and 5 crew, landed on Yokyakarta's rwy 09 (2,200m/7,220ft) but overran the end of the runway and came to a stop about 100m off paved surface with the nose gear collapsed. The passengers were evacuated. No injuries are being reported, the aircraft received substantial damage. Local media reports state it was raining heavily at the time of the landing and speak of a "water landing".

The following are just overrun/excursion events in INA.

7 MAR 2007: Garuda 200 (B737)
18 APR 2008: Sriwijaya 76 (B737)
27 AUG 2008: Sriwijaya 62 (B737)
2 NOV 2010: Lion Air 712 (B737)
14 FEB 2011: Lion Air 392 (B737)
15 FEB 2011: Lion Air 295 (B737)
20 DEC 2011: Sriwijaya 230 (B737)
11 APR 2012: Garuda 653 (B737)
1 JUN 2012: Sriwijaya 188 (B737)
17 JUL 2012: Garuda 174 (B737)
19 OCT 2012: Sriwijaya 182 (B737)
1 NOV 2012: Lion Air 716 (B737)
30 DEC 2012: Lion Air 718 (B737)
27 MAR 2013: Sriwijaya 21 (B737)

5 APR 2013: Garuda 970 (B737) 6 AUG 2013: Lion Air 892 (B737) 2 JUN 2015: Garuda 618 (B737)

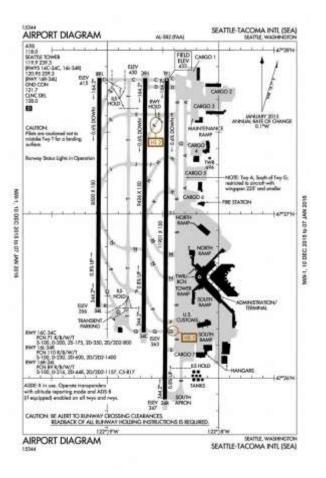
2 JUN 2015: Garuda 618 (B/3/) 6 NOV 2015: Batik Air 6380 (B737)

#### 21/12/2015 Kupang, INA, Kalstar E195, overran runway 07 on landing 0/125

Kalstar Aviation Embraer ERJ-195, PK-KDC, KD-678 from Denpasar to Kupang with 120 pax and 5 crew, overran the end of runway 07 while landing in Kupang at about 17:30L (09:30Z) and came to a stop on soft ground about 200 meters past the end of the runway with the right main gear collapsed. The passengers were evacuated via slides. There were no injuries, the aircraft sustained substantial damage. On Mar 11th 2016 Indonesia's NTSC released their preliminary report.

#### 19/12/2015 Seattle (KSEA), Alaska B739, landed on taxiway

Alaska Airlines B737-900, N477AS, flight AS-27 from Chicago O'Hare,IL to Seattle,WA (USA) with 153 pax on board, was on an ILS approach to rwy 16R cleared to land on rwy 16R, when tower offered a visual swing over to rwy 16C, the crew opted to accept rwy 16C but aligned with taxiway T in between rwys 16R and 16C and continued for a safe landing on taxiway T at 08:31L (16:31Z), no other traffic was on taxiway T at that time. Tower, maintaining routine communication, cleared the aircraft to cross rwy 16L, the crew read that clearance back after a slight hesitation and maintained routine communication, too. On Feb 13th 2016 the NTSB announced that they have opened an investigation into the occurrence rated an incident. At the time of landing visual meteorologic conditions prevailed when the aircraft touched down on taxiway T instead of the intended rwy 16C.



By Eric on Friday, Jun 16th 2017 22:40Z AVHerald:

A few points from the **FO that was the non flying pilot for that flight...** Light rain had just finished, making the rwys wet. With the type of overcast and light conditions, the rwys and T don't have markings at that angle/alt. 16L "hides" in the ramp/terminal view, and 16R, T, 16L

look like the 3 rwys. So T looks like 16C. When one is the NFP, going heads down to retune the LOC and reprogram the FMC, ya kinda loose some situational awareness when coming heads up. Officially, there have been only a few landings on T. Unofficially, the FAA understands there have been almost 20 landing on T in half as many years.

Opinion: In Toronto's airport, the highly landed taxiway now has obvious paint on it. The cost of painting clear markings on T clearly is too expensive to support safety.

On Jun 10th 2020 the NTSB released their final report concluding the probable cause of the incident was:

The flight crew inadvertently landed on a taxiway that ran parallel to the intended landing rwy. About 5 miles from the rwy and having been cleared to land on rwy 16R, the tower controller asked if the flight would like to sidestep to rwy 16C which had recently opened. The flight crew accepted and visually lined up with taxiway T, instead of the intended landing rwy 16C. Although visual meteorological conditions were present, the sun was reflecting off taxiway T resulting in the flight crew visually focusing on it during landing. The flight crew and controller did not recognize the error until after landing.

The NTSB determines the probable cause(s) of this incident as follows: NTSB Identification: DCA16IA036: the flight crew's misidentification of the taxiway as the landing rwy.

27/01/2016 Detroit USA, Endeavor CRJ9 rejected takeoff due to operational error (ATC error)

Endeavor Canadair CRJ-900 on behalf of Delta Airlines, N316PQ, DL-3860 from Detroit,MI to Dallas Ft. Worth,TX was cleared for takeoff from rwy 22L and commenced takeoff. About 20 seconds later tower instructed DL-3860 to abort takeoff and instructed a vehicle on the rwy to turn right off the rwy. CRJ slowed safely, the closest distance to the vehicle was 211 ft. Controller apologized "that was my fault".

02/02/2016 Mogadishu, Somalia, A321-111, Daallo Airlines flight D3 159, suffered an in-flight explosion about 15 minutes after takeoff from Mogadishu Airport, Somalia when the aircraft was at about 12,000 feet. The explosion occurred on the right hand side of the aircraft, just behind the R2 door, at or around seat 16F. A large hole was blown in the fuselage and one passenger fell out of the aircraft and was killed. Two other passengers were injured. The aircraft returned to Mogadishu where it landed safely at 08:53 UTC (11:53L). 1/81

20/02/2016 Lion Air B739 at Surabaya, rwy excursion on landing 0/205

Lion Air B737-900, PK-LFG JT-263 Balikpapan to Surabaya with 205 people on board, landed on Surabaya rwy10 (3000m/9845ft) in thunderstorms and heavy rain at about 11:08L (04:08Z). The aircraft came to a stop about 80m past the rwy end with the nose wheel on soft ground past the rwy end safety area. No injury, the aircraft received minor if any. 0/205



16/02/2016 Easyjet A320 at Amsterdam on Feb 16th 2016, flaps retracted instead of gear

24/02/2016 Myagdi, Nepal, Viking Air DHC-6 Twin Otter 400, Tara Air 193, was destroyed in an accident. The aircraft departed at 07:50 hrs local time from Pokhara Airport (PKR) on a domestic 20-minute flight to Jomsom Airport (JMO), 23/23

The aircraft took off from Oksapmin Airport at 13:56 local time on a flight to Kiunga.

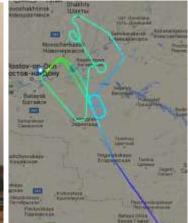
Initial on scene reports suggest a BN-2T Islander crashed in rugged terrain in Papua New Guinea.

19/03/2016 Rostov-on-Don, Russia, Flydubai FZ981, B737, crashed on second apc, struck wing onto rwy after holding for 2 hrs, 62/55+7

Flydubai B737-800, A6-FDN, FZ-981 from Dubai to Rostov on Don (Russia) with 55 pax and 7 crew, had aborted the approach to Rostov's rwy 22 at 01:41L (22:41Z) due to weather and entered a hold initially at 8000 feet, after 30 minutes at 8000 feet the aircraft climbed to FL150. After about 2 hours of holding the aircraft commenced another approach to Rostov's rwy 22, winds 240/27 knts (14 m/s) +42 knts (22 m/s), but struck a wing onto the rwy at about 3:43 (00:43Z), broke up, came to a rest near the end and to the right of the rwy and burst into flames.

Cause of accident: an incorrect aircraft configuration and crew piloting, the subsequent loss of PIC's situational awareness in nighttime in IMC. This resulted in a loss of control of the aircraft and its impact with the ground.





Flydubai B737-800, A6-FDN, FZ-981

Flight path

04/04/2016 Halim, INA, Batik B738 and Transnusa AT42, collision on rwy, both aircraft on fire. 0/56

Batik Air B737-800, PK-LBS, ID-7703 from Jakarta Halim Perdanakusuma to Ujung Padang (INA) with 49 passengers and 7 crew, was in the takeoff roll on rwy 24 at 19:55L (12:55Z) when its left wing tip entangled with the vertical tail and left wing of a Transnusa ATR ATR-42-600, PK-TNJ crossing the rwy under tow and separated the most of the vertical tail plane as well as the left wing from the ATR, the left wing tank ruptured open. Both aircraft caught fire. The B737 was evacuated via slides. Fire engines responded and were able to put the fires out in a matter of minutes. No injuries, both aircraft received substantial damage.



WIHH R/W 06/24

On Apr 14th 2016 the French BEA reported based on preliminary information from NTSC Indonesia, that the Batik B737-800 had been **cleared** to enter rwy 24 via taxiway C and backtrack the rwy. In the meantime the tug driver of the Transnusa ATR requested clearance to cross the rwy from the north to the south apron and **received clearance to taxi via taxiway C, rwy 06/24 and taxiway G.** While crossing the rwy the tug driver saw the B737 accelerate for takeoff and attempted to steer the tug and aircraft to the right rwy shoulder, however the left wing of the Boeing collided with the vertical stabilizer and left wing of the ATR. The Boeing rejected takeoff and came to a stop 400 meters past the point of collision.



- 13/04/2016 Kiunga, Papua New Guinea, BN-2T Islander, CFIT (?), 12/12
   BN-2T Islander aircraft impacted terrain near Kiunga Airport in Papua New Guinea, killing all 12 persons on board.
- 02/05/2016 Jakarta, INA, Soekarno-Hatta airport, Lion Air JT026 Jakarta-Denpasar and JT770 Jakarta-Manado collided.

  Two Lion Air planes, one heading to Denpasar and the other going to Manado, had a minor collision with each other on the rwy following what appears to be a communications mishap.
- 08/05/2016 Camp Dwyer, Afghanistan, Silk Way Airlines AN-12B, registration 4K-AZ25 performing a positioning flight to Mary (Turkmenistan) with 9 crew, lost height after an engine had failed on departure from Camp Dwyer's rwy 23 before 19:00L (14:30Z). 7/9. 2 Ukrainian crew survived with serious injuries.
- 19/05/2016 Egypt, Mediterranean, MS804, AB320 LFPG -HECA found crashed, ACARS messages indicate fire on board, 66/66
  Egyptair A320-200, SU-GCC, MS804 (dep May 18th) from Paris Charles de Gaulle (LFPG) to Cairo (HECA) with 56 pax and 10 crew, was enroute at FL370 over the Mediterranean Sea about 130nm north of Alexandria (Egypt) and about 210nm northnorthwest of Cairo when the transponder signals of the aircraft ceased at 02:33L (00:33Z). The aircraft was located crashed in the Mediterranean Sea, there were no survivors.



Airbus A320

2018/07/07 Investigation prolonged: The French BEA considers (against Egypt) that the most likely hypothesis is that a fire broke out in the cockpit while the aeroplane was flying at its cruise altitude and that the fire spread rapidly resulting in the loss of control of the aeroplane, thus asking Egypt Investigation Team to expedited works.

Later info leaked on 20220503 indicates FO's smoking ignited leaked Oxygen in flight deck might be the cause of fire.

30/06/2016 Easyjet A319 at Bristol on Jun 30th 2016, inadvertent flaps retraction instead of gear, Human Error.

Easyjet Airbus A319-100, G-EZEW, U2-6253 from Bristol, EN (UK) to Lisbon (Portugal) with 144 passengers and 6 crew, was in the initial climb out of Bristol's rwy 27 with flaps and slats at position 1+F. The first officer was pilot flying and instructed to select the landing gear up, the captain (38, ATPL, 8,500 hours total, 6,500 hours on type), pilot monitoring, however selected the flaps up when the aircraft climbed through 190 feet AGL. The aircraft began to pitch up, at a height of 370 feet AGL the first officer applied nose down inputs to prevent the aircraft from falling below 153 KIAS. Climbing through 550 feet AGL the flaps were fully retracted, the slats were retracting through 7.5 degrees and the indicated airspeed was increasing through 160 KIAS. The captain, realizing his mistake, advised what he had done and instructed the first officer to apply TOGA thrust, the first officer set the thrust levers to the TOGA detent. When the slats reached their fully retracted position the VIs (Lowest Selectable Speed) "shot up" to 180 KIAS, 30 knots above present speed. The first officer requested flaps at position 1 again, the captain selected the flaps to position 1, the slats began to extend and the VIs dropped below the present airspeed again at about 710 feet AGL. The first officer set the thrust levers into the CLB detent. At About 850 feet AGL the slats were retracted again and the flight continued to destination without further incident.

07/07/2016 DALA320 bound for Rapid City, South Dakota mistakenly landed at Ellsworth AFBase about 10 miles away. Cf: 19/06/2004

01/07/2016 Irkutsk Airport (IKT/UIII), Russia, Ilyushin 76 firefighting aircraft was destroyed when it impacted wooded terrain 9 km east-southeast from the settlement of Rybnyi Uyan in the Kachug Region, on the side of a volcanic cone. The Il-76 transport plane was equipped with spray tanks to extinguish wildfires in the Bayanday district of the Irkutsk region. It departed Irkutsk Airport at 10:19 hours and climbed to FL100. En route the pressure was set at 1007 hPa, which had been reported by the air traffic controller. About 11:02 the flight crew initiated their descent towards the forest fires. After carrying out a 180 degree turn over a mountainous area, the GPWS activated several times. The aircraft was flying at a height of about 210 m agl and headed towards one of the higher mountains in the area. At 11:13 the aircraft impacted the wooded slope of the mountain and disintegrated. Searchers located the wreckage on July 3. 10/10

22/07/2016 Tambaram Air Base (VOTX), India to Port Blair Airport (IXZ/VOPB), India, 29/29

Antonov 32 transport plane of the Indian Air Force went missing over the Bay of Bengal during a flight from Tambaram Air Base near Chennai to Port Blair on South Andaman Island, India. The aircraft took off from Tambaram at 08:30 and was expected to arrive at Port Blair at 11:30. The aircraft was last detected on radar 151 nautical miles (280 km) east of Chennai, making a left turn with a rapid loss of height from 23,000 ft, according to the Defence Ministry.

03/08/2016 Dubai airport, UAE, Emirates B773, EK521, touched down during go-around without gear, aircraft on fire, 0/300

Emirates Airlines B777-300, A6-EMW, EK-521 from Thiruvananthapuram (India) to Dubai (United Arab Emirates) with 282 pax and 18 crew, was on final approach to Dubai's rwy 12L at 12:41L (08:41Z) but attempted to go around from low height. The aircraft however did not climb, but after retracting the gear touched down on the rwy and burst into flames. All occupants evacuated via slides, 13 passengers received minor injuries, 10 were taken to hospitals, 3 treated at the airport. The aircraft burned down completely.

A firefighter attending to the aircraft lost his life.



Emirates B773, EK521

05/08/2016 ASL Hungary B737-400 cargo, for DHL, suffered a rwy excursion after landing in tailwinds at Bergamo-Orio Al Serio (BGY), Italy. 0/2 28/08/2015 Wamena, INA, Cardig B733, main gear collapse on landing short of rwy, 0/2

Cardig Air Cargo Boeing 737-300 freighter, registration PK-BBY performing freight flight 8F-197 from Jayapura to Wamena with 2 crew and 14 tons of rice, landed on Wamena's rwy 15 at about 15:00L (06:00Z) but suffered the collapse of the left hand main gear on touchdown. The aircraft skidded along the rwy before coming to a stop about 1500 meters down the rwy just past the new apron. Contributing Factor: The large thrust reduction during the windshear resulted in rapid descend and the aircraft touched down with 3.683 G then collapsed the landing gear that had strength degradation.

13/09/2016 Wamena, INA, Trigana B733 hard landing results in main gear collapse, 0/3

Trigana Air Service Boeing 737-300 freighter, registration PK-YSY performing flight IL-7321 from Jayapura to Wamena (Indonesia) with 3 crew and 15.3 tons of cargo (fuel, rice, sugar), landed on Wamena's rwy 15 at 07:35L (22:35Z Sep 12th) but touched down and both engines to a halt at and partly beyond the right hand edge of the rwy. There were no injuries, the aircraft sustained substantial damage. http://avherald.com/h?article=49deae9a&opt=0





31/10/2016 Timika, INA, Trigana Air Service, de Havilland Canada DHC-4T Caribou cargo PK-SWW, 4/4

De Havilland Canada DHC-4T Caribou cargo plane is reported missing on a flight from Timika to Ilaga, Papua, Indonesia with four crew members on board. The aircraft, owned by the Puncak Regency, carried water-channel construction materials and a cement mixer, weighing 3,130 kilograms in total. The aircraft took off from Timika at 07:57. Last radio contact was at 08:23 when the flight reported at the Ilaga Pass. The aircraft failed to arrive and an ELT signal was detected 40-45 NM from the 060 radial of the TMK VOR. The wreckage of the aircraft was located the next day, scattered on a mountainside at an elevation of 3650 meters, 12 km south of Ilaga Airport. (WABP TIM Timika ICAO: WAYY old: WABP)



DHC-4T Caribou

28/11/2016 Medellin, Colombia, LAMIA Bolivia RJ85 near Medellin on Nov 28th 2016, electrical problems, impact with terrain. 71/68+9

LAMIA Bolivia Avro RJ-85, registration CP-2933 performing flight LMI-2933 from Santa Cruz (Bolivia) to Medellin (Colombia) with 68 passengers and 9 crew, was descending towards Medellin about 15-20nm southeast of Medellin in the area of La Ceja (Colombia) at 21:56L (02:56Z Nov 29th) when the aircraft disappeared from radar screens. The Airport of Medellin reported a search was initiated and the crash site has been located in the municipality of La Ceja at the slopes of Cerro Gordo (main wreckage location N5.9789 W75.4189 190m southsouthwest of the VOR RNG on the north slope of a hilltop, point of first impact at N5.9779 W75.4183 on the southern edge of the hilltop about 290m south of the VOR RNG). Authorities confirmed 6 survivors (3 players, one flight attendant, one mechanics and one journalist) and 71 fatalities. The GRIAA located the main wreckage site at GPS coordinates "N05°58.725 W75°25.138" (N5.9787 W75.4190) about 140m from the point of first impact.



General appearance of the AVRO 146-RJ85



On Apr 27th 2018 Colombia's GRIAA released their final report concluding the probable causes of the crash were:

- Inappropriate planning and execution of the flight with an amount of fuel that did not include any fuel for a diversion from destination to an alternate airport, any contingency, any reserve, the required minimum fuel after landing as would have been required by regulations for the type of international flight performed by CP-2933.
- The four engines shut down in sequence while the aircraft descended towards the holding pattern at GEMLI as result of depletion of fuel.
- Inadequate decision making within the operator's management resulting in lack of assurance of operational safety.
- Loss of situational awareness and inadequate decision making by the crew which maintained their fixation to complete the
  flight with an extremely limited amount of fuel. The crew was aware of the low level of remaining fuel, however, did not take
  corrective actions required, e.g. to land at an aerodrome and replenish the fuel.

#### Contributing factors were:

- Premature configuration of the aircraft for landing during the descent towards the holding pattern at GEMLI. Considering the
  absence of thrust this configuration affected the gliding distance to Rionegro Airport's rwy.
- Latent deficiencies in the planning and execution of non-regular transportation flights by the operator, in particular insufficient supply of fuel.

- Specific deficiencies in the planning of the accident flight by the operator of the aircraft.
- Lack of supervision and operational control of the flight by the operator who did not supervise the planning of the flight nor its
  execution and did not follow up on the flight to assist the crew in decision making.
- Absence of timely calls requesting urgency or declaring emergency (or similiar) by the crew of the aircraft during the flight, especially when fuel depletion was already imminent during the descent, which could have alerted air traffic control to provide the support needed.
- Organizational and operational deviation from fuel management procedures by the operator, who in practise did not comply
  with the approval by Bolivia's DGCA during certification of the company.
- Delay during the approach of the aircraft to Rionegro rwy due to its late priority request and late emergency call for fuel added to the traffic density in the VOR RNG holding pattern.

#### 03/12/2016 INA, Pangkal Pinang Airport (PGK/WIPK) to Batam-Hang Nadim Airport (BTH/WIDD), 13/13

PZL-Mielec M28 Skytruck transport plane, operated by the Indonesian Police crashed into the sea off Batam, Indonesia. The aircraft departed Pangkal Pinang Airport at 09.24L and was expected to arrive in Batam at 10.58. Its last known radar position was about 40 nautical miles southeast of Tanjung Pinang over the South China Sea.

07/12/2016 ISB, Pakistan, PIA ATR42-500, Islamabad-Benazir Bhutto International Airport (ISB/OPRN), 47/47

Pakistan International Airlines PK661, ATR 42-500, destroyed after impacting a hillside near Havelian, Pakistan.

The aircraft took off from Chitral around 15:30, bound for Islamabad. At 16:09 the flight changed frequencies from Cherat to Islamabad ATC. At 16:14 the flight radioed that they had an engine problem and that they were descending. One minute later a Mayday call was issued. That was the last contact with the aircraft.

16/12/2016 Los Angeles, CA, Eva B773, ATC instructs turn left instead of right, loss of separation, confusion, Near CFIT



Eva Air B777-300, B-16726, flight BR-15 (scheduled Dec 15th, actual Dec 16th) from Los Angeles, CA (USA) to Taipei (Taiwan), departed LAX rwy 07R, contacted departure and was instructed to climb to 7000 feet, heading 090. The aircraft was subsequently instructed to climb to 7000 feet and turn left heading 180. The crew correctly acknowledged the instruction and turned left. Shortly after BR-15 an Air Canada Boeing 787-800, C-GHPX performing flight AC-788 (scheduled dep Dec 15th, actual dep 16th) from LAX to Toronto,ON (Canada), departed Los Angeles' rwy 06R, was instructed to climb to 7000 feet and join GABRE departure (which involves a left turn to the north). A conflict arose between AC-788 and BR-15, when BR-15 unexpectedly turned to the north, the controller instructed BR-15 to turn right heading 180. The crew acknowleded turn right heading 180, but continued to turn left. With raised voice the controller instructed BR-15 to stop climb. In an attempt to resolve the situation the controller now instructed BR-15 to turn left onto a heading 270, the aircraft continued to the north however. "What are you doing now" the controller asked and instructed to turn southbound NOW, crew asked "confirm heading", "turn southbound NOW", "left or right?" In the mean time the controller instructed AC-788 to climb to 12000 feet and expedite the climb, AC-788 complied and continued to Toronto for a safe landing without further incident.

BR-15 still continued to the north at about 4900-5000 feet, mountains rising there to 6653 feet. The controller instructed BR-15 to climb to 7000 feet, abeam of Pasadena, CA (USA) the crew finally began to turn right, which brought the aircraft even closer to Mount Wilson (peak

and Mount Wilson Observatory at 5715 feet MSL), and to climb. The aircraft passed the peak 0.3nm south of the peak still at about 6000 feet at a heading of about 090 degrees, rolled out at heading 180, climbed to 7000 feet and continued the flight to Taipei for a safe landing without further incident.

#### The National Transportation Safety Board determines the probable cause(s) of this incident to be:

The incident was caused by the air traffic controller assigning the pilots a left turn instead of the required right turn after departure which placed the aircraft in an unsafe proximity with terrain and obstructions. Contributing to the incident was the air traffic controller's inadequate recovery technique during the development of the incident.



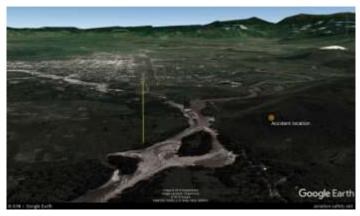
NTSB

#### The NTSB analysed:

Due to weather in the area, LAX was operating in an east flow configuration with aircraft departing to the east. The B777-300 pilot contacted the SCT controller and was given an initial climb to 7,000 feet. A short time later, the SCT controller instructed the pilot to turn left to a heading of 180 degrees which required a left 270-degree turn. The turn resulted in the aircraft turning toward rising terrain and back toward the airport; normal procedures in an east flow would have been for a right turn to a heading of 180 degrees. While in the left turn, the pilot requested a high-speed climb which resulted in the aircraft accelerating beyond the 250 knot LAX class B speed restriction and required additional airspace in order to complete an assigned turn. After recognizing the aircraft was in a left turn, the SCT controller issued the crew a right turn to a heading of 180 degrees. As the aircraft began to turn right, the air traffic controller instructed the crew to expedite the turn due to recognizing a developing proximity issue with another aircraft that had departed from LAX. The air traffic controller stopped the climb of the B777-300 and issued a left turn to a heading of 270 degrees. These turns in quick succession, combined with the speed of the aircraft, resulted in the flight tracking northbound toward rising terrain. The closest lateral and vertical proximity between the airplane and terrain/obstructions was about 0.3 miles and 0 ft, respectively, which is less than the minimum separation requirements.

#### 18/12/2016 Wamena, INA, C-130, from TIM/WAYY to Wamena Airport (WMX/WAJW) crashed, CFIT, 13/13

Lockheed C-130H Hercules was destroyed when it impacted mountainous terrain near Wamena, Papua, Indonesia. All 13 on board were killed. The aircraft left Timika at 05:35 and was expected to arrive at Wamena at 06:13. It was approaching rwy33 at the time of the accident. The aircraft went through the center line of the final approach and impacted the south slope of the hills to the right of the center line, about 0.9 NM from the rwy threshold at about 5,700 ft, Wamena EL is 5,085 ft.



20/12/2016 B727 From Puerto Carreño-Germán Olano Airport (PCR/SKPC), Colombia, crashed after tkof, 5/6

B727 cargo plane, operated by Aerosucre Colombia, was destroyed when it crashed shortly after takeoff from Puerto Carreño Airport in Colombia. One of the six crew members survived the accident. The aircraft took off from rwy 24, a 1780 m long rwy, about 17:20. Videos circulating online show the accident aircraft on takeoff. The airplane fails to lift off the rwy and crosses the airport perimeter fence and road in a nose up attitude. The aircraft then became airborne and is seen in a right hand turn losing altitude until it impacted flat terrain, bursting into flames. Distance from the end of the rwy to the perimeter road is 95 meters. Aerocivil reports the aircraft crashed 10 miles from the airport. A video posted on Youtube in October 2016 shows a takeoff of an Aerosucre Boeing 727 at Puerto Carreño Airport barely clearing the perimeter fence.



25/12/2016 Semarang, INA, rwy excursion, main gear collapse. 0/68

Wings Abadi ATR-72-212A, PK-WGW, IW-1896 from Bandung to Semarang (Indonesia) with 64 passengers and 4 crew, landed on Semarang's rwy 13 in rain at about 18:24L (11:24Z), but veered right off the rwy and came to a stop with the right main gear collapsed. There were no injuries, the aircraft sustained substantial damage.



16/01/2017 Bishkek, Kyrgyzstan (UAFM), MyCargo B744 impacted terrain on go around, 4/4+35(on gnd)=39

MyCargo Airlines B747-400 freighter on behalf of Turkish Airlines, TC-MCL performing flight TK-6491 from Hong Kong (China) to Bishkek with 4 crew, was on final approach to Bishkek's rwy 26 at 07:18L (01:18z) when the aircraft went around from very low height but did not climb out to safety, impacted terrain about 1100 meters/3600 feet past the rwy end and went through a couple of houses of a village. All 4 crew on board the 747 as well as 35 people on the ground perished, 8 people on the ground received injuries and were taken to hospitals.



B744

01/02/2017 Garuda B738 at Yogyakarta, rwy excursion on landing. 0/128

Garuda Boeing 737-800, registration PK-GNK, GA-258 from Jakarta to Yogyakarta with 123 passengers and 5 crew, landed on Yogyakarta's rwy 09 at 19:47L (12:47Z) but veered left off the rwy and came to a stop with all gear on soft ground.

The passengers disembarked onto soft ground via stairs. The airport reported flight GA-258, Tail PK-GNK, overran the end of the rwy 09 while landing in heavy rain, there were no injuries. The occupants have been evacuated from the aircraft.

Jepp AIP: <a href="https://saripedia.files.wordpress.com/2010/08/yogyakarta.pdf">https://saripedia.files.wordpress.com/2010/08/yogyakarta.pdf</a>

19/03/2017 Easyjet A320 at Paris on Mar 19th 2017, inadvertent flaps retraction on takeoff

 $28/03/2017 \quad \text{Jauna, Peru, Peruvian B733, hard landing, rwy excursion, all gear collapsed, aircraft caught fire \underline{0/141}$ 

Peruvian Airlines B737-300, OB-2036-P performing P9-112 from Lima to Jauja (Peru) with 141 POB, landed on Jauja's rwy 31 at about 16:40L (21:40Z) but veered off the rwy, suffered the collapse of all gear and burst into flames coming to a stop after skidding on fire for some distance. The aircraft was evacuated. There were no injuries, the aircraft received substantial damage beyond repair.

12/04/2017 Oksibil, INA, Cessna 208 PK-FSO, non-sched cargo flight from Tanahmerah to Oksibil Airport crashed en-route. 1/1

05/05/2017 Charleston, WV, Cargo Carriers SH33 impacted terrain on landing, 2/2

Air Cargo Carriers Short SD-330 on behalf of UPS, 2Q-1260 from Louisville, KY to Charleston, WV (USA) with 2 crew, was on final approach to Charleston Chuck Yeager Airport's rwy 05 at 06:53L (10:53Z) when the aircraft impacted trees and terrain to the left of the rwy. The aircraft burst into flames and was destroyed. Both crew perished in the crash.



Cessna 208

#### 15/05/2017 Hakodate, Japan, JGSDF LR2 (Super King Air 350) CFIT, approx. 33km West of HWE at about 1147I, 4/4

LR-2 reconnaissance aircraft of Northern Army Aviation Group, Japan Ground Self-Defense Force, carrying four persons, was en route to pick up a patient and is feared to have crashed. The accident airplane lost radar contact at 18 NM west of Hakodate Airport at 3000 feet. The wreckage and four bodies were found in a forest the next day. Elevation of the accident site is 300 to 400 meters (1000-1300 ft), though the last ATC instruction was 'maintain 3500 feet'. The FDR of the accident plane had removed due to electrical malfunction, however, the CVR was operating at the time of the accident.





JGSDF LR2 (Super King Air 350)

Super King Air 350

### 自衛隊機墜落で4人死亡 原因は操作ミス 日テレ:2017 年 9 月 13 日 18:01

防衛省は、今年5月に北海道で自衛隊機が墜落し4人が死亡した事故について、操縦士の操作ミスが原因だとする調査結果を公表した。この事故は今年5月、陸上自衛隊のLR2連絡偵察機が北海道北斗市の山中に墜落し、搭乗していた4人の隊員が死亡したもの。調査結果によると、操縦士が誤って自動操縦機能を解除したうえ、それを知らせる警報や表示に気付かず、手動操縦に切り替わったことを認識していなかった。さらに、悪天候で視界が悪い中、機体が山に接近していることを知らせる警報にも気付かず、墜落を手動で回避しなかったという。機体に故障などはなかったとしている。防衛省は、操縦士の訓練などを徹底し再発防止に取り組むとしている。

(防衛庁の事故報告書は公表されていない。(HM))

### 27/05/2017 Lukla, Nepal, Summit L410 contacted trees and impacted ground before rwy, 2/3

Summit Air (former Goma Air) Let L-410, 9N-AKY from Kathmandu to Lukla (Nepal) with 3 crew, was on final approach to Lukla's rwy 06 at about 14:04L (08:19Z) when the aircraft contacted a tree short of the rwy and contacted ground about 3 m/10 ft below the rwy level. The aircraft slid down the slope before coming to a rest about 200 meters below the rwy level. The captain and the first officer died as result of the accident, another crew member received injuries. Nepali Police reported the aircraft touched branches of a tree, suffered technical problems and impacted ground about 3 m below the rwy level just before 14:00L (08:15Z).



LET L-410

### 31/05/2017 Manokwari, INA, Sriwijaya B733 overran rwy on landing, nose gear collapsed, 0/152

Sriwijaya B737-300, PK-CJC SJ-570 from Sorong to Manokwari (Indonesia) with 146 passengers and 6 crew, landed on Manokwari's rwy 35 in rain at about 09:10L (00:10Z) and overran the end of the rwy coming to a stop with the nose gear collapsed about 30 meters past the end of the rwy on soft ground. The occupants were evacuated. There were no injuries, the aircraft sustained substantial damage.

07/06/2017 Off Dawei, Myanmar, **Shaanxi Y-8-200F** transport plane operated by the Myanmar Air Force impacted the sea during a flight from Myeik to Yangon in Myanmar. Last contact with the flight was about 20 miles west of Dawei. 122/122

Shaanxi Y-8 or Yunshuji-8 aircraft is a medium size medium range transport aircraft produced by Shaanxi Aircraft Corporation in China, based on the Soviet Antonov An-12.

03/07/2017 Cali, Colombia, Avianca A320 near Cali GPWS prevents flight into terrain, Near CFIT

Avianca A320-200, N742AV, AV-9882 from Leticia to Cali (Colombia), was descending through about 13,000 feet into mountaineous terrain about 45nm SE of Cali with mountain tops up to 4,050 meters/13,290 feet MSL in close vicinity, when the GPWS activated at about 08:24Z prompting the crew to perform an evasive maneouver and climb back to about 14,000 feet. The aircraft continued to Cali and landed safely in Cali. Cause: Loss of situational awareness by the crew, and Erroneous clearance by Bogota Control Center See AA965 accident 1995/12/20 for information.

#### 07/07/2017 KSFO Canada A320 at San Francisco lined up with taxiway for landing

Air Canada A320-200, C-FKCK, AC-759 from Toronto, ON (Canada) to San Francisco, CA (USA) with 140 people on board, was on final approach to rwy 28R in night conditions being cleared to land at about 23:56L (06:56Z Jul 8th), when a short time after reading back the landing clearance the crew queried tower to confirm they were cleared to land advising they were seeing lights on the rwy, tower advised the rwy was clear and they were cleared to land indeed. Another voice chimed in calling they were lined up with the taxiway, tower immediately instructed AC-759 to go around as result commenting it looked like they were lined up for taxiway C. The aircraft went around from below 100 feet AGL. Other flight crew taxiing their aircraft on taxiway C commented the A320 was flying straight over them. The A320 positioned for another approach and landed safely about 15 minutes later.



Air Canada A320-200



10/09/2017 Moscow, Russia, Emirates A388, go around from about 400 ft AGL 8nm before runway, 0/422+26

Emirates A380-800, A6-EEZ EK-131 from Dubai (UAE) to Moscow Domodedovo (UUDD Russia) with 422 passengers and 26 crew, was positioning for an approach to Domodedovo's runway 14R about to intercept the localizer about 8nm before the runway threshold when the aircraft descended to about 400 feet AGL, initiated a go around following an EGPWS warning and climbed straight ahead to safe altitude while crossing through the localizer. The aircraft subsequently positioned for another approach to runway 14R, aligned with the extended runway center line but did not initiate the final descent and joined the missed approach procedure as result. The aircraft positioned again for an approach to runway 14R and landed without further incident on runway 14R about 35 minutes after the first go around (from 400 feet AGL).

UAE General Cvil Avaton Authority (GCAA) reports: during approach to UUDD, the aircraft was cleared for the rwy 14R ILS approach when it was on the base leg. The aircraft descended below its cleared altitude of 500m QFE prior to establishing on the localizer. The Radar Controller alerted EK131 to stop the descent. The flight crew then performed a go-around and requested vectors for a second approach. During the go-around, the minimum radio altitude reached was 395 ft above ground level, and EGPWS "Glideslope" and "Terrain Ahead-Pull Up" alerts were activated.



Incident Report: by UAE GCAA

The flight crew flew one go-around and one discontinued approach and landed on runway 14R from the third approach. The go-around, discontinued and landing are shown in figure above. The trajectory in magenta depicts the first approach and go-around, the green line illustrates the second approach and discontinued approach, and the third approach and landing is shown by the blue line.

The Air Accident Investigation Sector determines that:

The descent below the cleared altitude on the first approach can be explained by an erroneous flight crew perception that the Aircraft would capture the 3° glideslope from above and by insufficient coordination between the flight crewmembers. After the Co-pilot carried out the glide interception from above procedure, he focused on the horizontal position of the aircraft to establish on the localizer and neither of the two pilots maintained a correct awareness of the Aircraft vertical position.

20/07/2017 NAM AT72 at Nabire, engine shut down in flight, 0/

NAM Air ATR-72-212A, PK-NYY flight IN-750 from Nabire to Biak (Indonesia), was climbing out of Nabire's rwy 34 when the crew needed to feather the righthand propeller and shut the righthand engine (PW127) down. The aircraft returned to Nabire for a safe landing on rwy 16 about 15 minutes after departure.

03/08/2017 Medan (WIMM) INA, Lion B739 and Wings AT72 collision on rwy, 0/

14/09/2017 Shenzhen, China, China Eastern Airlines flight attendant injured after falling out of an aircraft at Shenzhen airport

01/10/2017 AF66 CDG-LAX diverts - uncontained engine failure over Atlantic, no pax & crew injury.

A388 F-HPJE operating from Paris-CDG to LAX as AFR 066 diverted to YYR (Goose Bay) due to in-flight engine  $N^{\circ}4$  problem The aircraft took-off at about 0945z/30SEP and landed at YYR at 1545.



uncontained engine failure

12/10/2017 Near Dundo (Angola), Air Guicango EMB-120, D2-FDO charter flight Dundo-Luanda (Angola) with 4 pax and 3 crew, was enroute about 15 minutes into the flight when the crew declared emergency reporting an engine (PW118) failure followed by fire. About 20 minutes after departure radio contact was lost, the aircraft was found the following day, there were no survivors.



EMB-120

15/11/2017 Nelkan, Russia, Khabarovsk L410 impacted ground short of rwy. 6/7

Khabarovsk Avia Let L-410, RA-67047, flight RNI-463 from Khabarovsk to Nikolayevsk-on-Amur (Russia) with 5 pax and 2 crew, could not land in Nikolayevsk-on-Amur due to weather, continued to their alternate aerodrome Indiga but also could not land there due to weather. The aircraft thus diverted to their next scheduled destination Nelkan [UHNX]. The aircraft was on final approach to Nelkan at 13:09L (0309Z) when the aircraft contacted trees about 2km (1.08nm) short of the rwy and crashed into a forest. A 3 year old girl survived the crash with serious injuries, the crew and the other passengers perished.

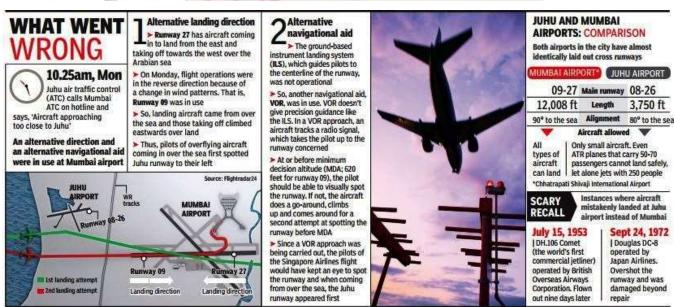
22/11/2017 Off Okinawa, Japan, USN C-2 carrying 11 crew and passengers crashed into the ocean SE of Okinawa at approx 14:45 LT. The aircraft was en-route to the carrier USS Ronald Reagan (CVN 76), which is currently operating in the Philippine Sea. Some USN sources say the aircraft was "on approach". 3 people are missing. 8 people were rescued at 15:23 LT in good condition, according to 7th Fleet. Search for the three missing occupants was suspended on November 24. 3/11

28/11/2017 Simikot, Nepal, Tara DHC6, rwy excursion on takeoff, 5 occupants received serious 11 minor injuries 0/16

Tara Air de Havilland DHC-6-300 Twin Otter, 9N-ABM, a flight from Simikot to Surkhet (Nepal) with 13 pax and 3 crew, was accelerating for takeoff from Simikot's rwy 28 when the aircraft went off the rwy and came to stop on soft ground. The aircraft was substantially damaged, 5 occupants received serious, 11 minor injuries. The aircraft was carrying 13 policemen who had assisted an election, 2 flight crew and 1

04/12/2017 Singapore (SQ) A359 at Mumbai (Bombay) go-around on final approach portrayed as approach to wrong airport.





Singapore Airlines A350-900, 9V-SMH, SQ-422 from Singapore to Mumbai (India), was cleared for the approach to Mumbai International Airport's rwy 09 and was descending through about 1000 ft MSL when the crew initiated a go around, positioned for another approach to rwy 09 of the Airport and landed safely on that rwy about 18 minutes later.

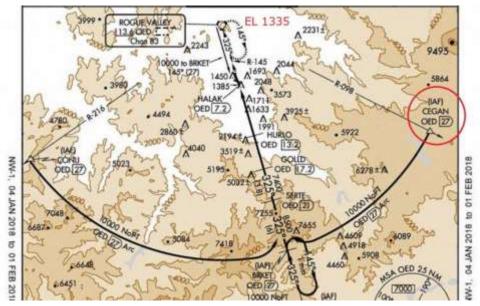


The airline reported: "Singapore Airlines SQ422, an Airbus A350, operating from Singapore to Mumbai on 04 December, was scheduled to land on Rwy 09 at Chhatrapati Shivaji Intl Airport at 1035L. Due to poor visibility conditions, the crew discontinued the approach to Rwy 09 at approximately 1000 ft, in accordance with standard operating procedures. Mumbai ATC then vectored the flight for a subsequent approach onto Rwy 09 and the flight landed uneventfully at 1048LAt no time did the pilots of SQ422 mistake Juhu airport as Chhatrapati Shivaji International Airport."

(Ref: JAL DC-8 accident on 24/09/1972: Bombay, India, Japan Air Lines DC8, landed wrong airport.)

### 24/12/2017 Skywest CRJ9 at Medford, GPWS alert on approach, ATC involved

Skywest Canadair CRJ-900 on behalf of Delta Airlines, N162PQ performing flight OO-3567/DL-3567 from Salt Lake City,UT to Medford,OR (USA), was on approach to Medford's rwy 32 cleared for the VOR/DME C via the arc approach with the additional instruction "cross CEGAN at or above 7800 feet". The crew descended the aircraft to 7800 feet, received a GPWS warning while on the arc and climbed out to safety at 11,000 feet. A discussion ensued with ATC, the crew arguing they had been cleared down to 7800 feet, ATC stating that according to his approach plate the arc was to be flown at 10,000 feet and he had cleared them to cross CEGAN (at the beginning of the arc) at or above 7800 feet (which includes crossing CEGAN at 10,000 feet as required by the approach procedure).



# 29/12/2017 Pullman Moscow, WA, USA, KPUW, Horizon DH8D at landed on taxiway, 0/46

Horizon de Havilland Dash 8-400 on behalf of Alaska Airlines, N412QX, flight QX-2184/AS-2184 from Seattle to Pullman Moscow, Washington (USA) with 42 pax and 4 crew, was on final approach to the uncontrolled aerodrome of Pullman and Moscow in night conditions intending to land on rwy 06, when the crew aligned the aircraft with the parallel taxiway to the left of the rwy and landed on the taxiway, that was unoccupied at that time. The aircraft rolled out without further incident.



31/12/2017 Costa Rica, Nature Air Non-Sched 10 seat Cessna 208B Grand Caravan destroyed after impacting wooded terrain. 12/12

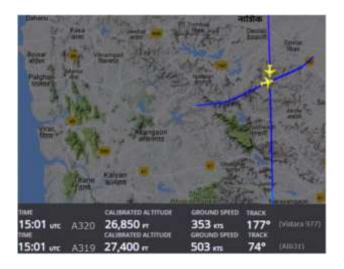
13/01/2018 Trabzon, Turkey, Pegasus B738, rwy excursion, 0/168

Pegasus B737-800, TC-CPF PC-8622 from Ankara to Trabzon (Turkey) with 162 passengers and 6 crew, landed on Trabzon's rwy 11 at 23:26L (20:26Z) but veered left off the rwy, went down a slope and came to a stop on soft ground just short of the sea about 60 meters before the rwy end and about 60 meters to the left of the left rwy edge. The aircraft was evacuated. There were no injuries, the aircraft sustained substantial damage. Wx: LTCG 132050Z 25001KT 2800 -RA BR BKN004 BKN025 08/07 Q1021 BECMG TL2100 3200=





07/02/2018 NEW DELHI: Air traffic controllers handling the Vistara and Air India flights that came dangerously close in Mumbai airspace+ have been suspended. Investigators are probing if in those tense seconds — when the two planes with 261 passengers on them — had to be pulled apart, there was some confusion in the controller's coordination with the two cockpits which were both manned by women at that time. Al's Airbus A-319 was enroute from Mumbai to Bhopal as AI 631 and Vistara's A-320 Neo was flying from Delhi to Pune as UK 997. "The planes were barely seconds away from each other. Vistara was descending from its assigned level of 29,000 feet to 27,100 feet where an AI flight was coming in the opposite direction.



11/02/2018 Moscow, Domodedovo (UUDD), Russia, Saratov AN148 lost height after departure, pitot heatings off, 71/65+6

Saratov Airlines AN-148-100, RA-61704, 6W-703 from Moscow Domodedovo to Orsk (Russia) was climbing out of Moscow's rwy 14R when the aircraft reached an altitude of 6000 feet then descended and disappeared from radar at about 14:28L (11:28Z). The aircraft was subsequently found crashed at N55.3 E38.41.



AN-148-100

#### 18/02/2018 OISY Iran, Aseman AT72 near Semirom, impacted terrain, 66/60+6

Iran Aseman Airlines Avions de Transport Regional ATR-72-212, EP-ATS, EP-3704 from Tehran Mehrabad to Yasuj (Iran) disappeared from radar near the Zagroz Mountains at about 08:45L (05:15Z). The wreckage was later found near the village of Semirom (Iran) at the Dena Mountain at an elevation between 12,500 and 13,500 feet. No survivors were sighted. On Mar 11 2018 Iran's AIB released their preliminary report in Persian reporting that according to FDR and CVR the case may be a CFIT.

14/03/2018 Entebbe, Uganda, Emirates CA falls off B777-300ER plane at Entebbe Airport and dies.



Photo carried by a local newspaper

12/03/2018 Kathmandu, Nepal, US-Bangla DH8D, rwy excursion on landing, 49/67+4

US-Bangla de Havilland Dash 8-400, S2-AGU, flight BS-211 from Dhaka (Bangladesh) to Kathmandu (Nepal) was on final approach to Kathmandu's rwy 02 cleared to land, when the aircraft turned left, tower radioed "Do not turn towards rwy 20, turn right" and repeated "cleared to land rwy 02". The crew requested to land on rwy 20, tower cleared the aircraft to land on rwy 20. When tower queried the aircraft whether they had the rwy in sight, the crew responded "negative". Tower queried whether they had rwy 02 in sight, crew affirmed, tower cleared the flight again to land on rwy 02. The aircraft collided with the ground and burst into flames at about 14:25L (0835Z), tower stopped all traffic in and out of Kathmandu and sent arriving aircraft into holds reporting an aircraft accident. 39 people perished in the accident, 31 people were rescued alive.

The probable cause of the accident is the disorientation and complete loss of situational awareness on the part of crewmember.

14/03/2018 Entebbe, Uganda, Emirates CA falls off B777-300ER plane at Entebbe Airport and dies.

18/03/2018 Naha, Okinawa, JPN, Juneyao A320 commenced takeoff without clearance, high risk of collision on rwy

Juneyao Airlines (吉祥航空) A320-200, B-8236, HO-1332 from Okinawa (Japan) to Shanghai Pudong (China) with 115 people on
board, was cleared to line up rwy18 and wait. The crew read the instruction back correctly, lined up but commenced takeoff.

11/04/2018 Algerian Air Force II-76 transport plane, crashed shortly after take-off from Boufarik AFB in northen Algeria, 247/247

11/04/2018 Haneda airport, Tokyo, TG660 EGPWS showed too low.

B747-400 of Thai Airways International, THA/TG660 from Bangkok/Suvarnabhumi, Thailand to Tokyo/Haneda, Japan, experienced "Too Low" EGPWS warning during a night time approach to rwy 16L of Haneda. The airplane was at 8 km northeast of Haneda and descended to 170 m (560 ft) at the time of the incident. The Boeing executed a go-around, and made a safe landing on rwy 22 about 15 minutes later at 00:04 LT of 12 April. No personal injuries were reported. JTSB launched an investigation as a serious incident on 17th April, six days after the incident.





17/04/2018 Southwest Airlines B737-700, WN1380 diverted to Philadelphia, Pennsylvania, USA, after suffering an in-flight uncontained engine failure.

The flight originated from New York-La Guardia Airport at 10:43 for a flight to Dallas-Love Field, Texas. 1/149



An engine on Southwest Airlines exploded, killing one passenger

29/04/2018 Lion B738 at Gorontalo on Apr 29th 2018, rwy excursion on landing, 0/181

Lion Air Boeing 737-800, PK-LOO flight JT-892 from Makassar to Gorontalo (INA) with 174 pax + 7 crew, landed on Gorontalo's rwy 27 in rain at about 18:35L (10:35Z) but veered left off the rwy and came to a stop on soft ground with the nose gear collapsed and main gear struts dug in. There are no injuries being reported, the aircraft sustained substantial damage however.

29/04/2018 Nha Trang, Vietnam, Vietnam A321, landed on rwy under construction.

05/05/2018 Charleston KCRW Short-33, wing tip strike on landing 2/2

Air Cargo Carriers Short SD-330 on behalf of UPS, N334AC, flight 2Q-1260 from Louisville, KY to Charleston, WV (USA) with 2 crew, performed a VOR-A approach to and was on final approach to Charleston Chuck Yeager Airport's rwy 05 at 06:53L (10:53Z) when the aircraft impacted the rwy with its left wing and went down the hill to the left of the rwy located on top of the hill. The aircraft was destroyed. Both crew perished in the crash.

On May 7th 2017 Officials reported the male captain (47) and female first officer (31) have been identified. The families have been informed. (Johnathan Pablo Alvarado, 47, of Stamford, Texas and Anh K. Ho, 31, of Cross Lanes were killed Friday morning after their Short 330 twin-engine turbo plane crashed during landing at Yeager Airport, according to a news release from the airport.)

On Jun 5th 2018 the NTSB opened their investigation docket. The docket contains SMS text messages by the first officer that she exchanged with her friends, one snippet quite highlighting the atmosphere on the flight dec.



Short SD-330

### 11/05/2018 Vueling A320 at Hamburg ATC prevents landing on wrong airport

Spanish LCC Vueling A320-200, EC-KDG, VY-1820 Barcelona, SP (Spain) to Hamburg Fuhlsbüttel (フールスピュッテル), was on approach to Hamburg's International Airport Fuhlsbüttel (EDDH). ILS for rwy 05 as well as NDB approach were out of service, the approach minima had been raised due to obstacles near the rwy 05. Aircraft were cleared for RNP approaches to rwy 05, the Vueling crew however performed a visual approach to rwy 05 and lined up with Finkenwerder (フィンケンヴェルダー: EDHI) rwy 05 (about 15km away).

ATC intervened, instructed the crew to turn left and not to descend. The crew shifted their flight path slightly to the left, climbed 200 feet, now aligned with the rwy 05 of Fuhlsbüttel and continued for a safe landing on the correct rwy.



EDDH and EDHI airports in Frankfurt, Germany

#### 18/05/2018 Havana, Cuba, Global Damojh B732 lost height shortly after takeoff, crashed. 110/113

Global Aerolineas Damojh Boeing 737-200 on behalf of Cubana de Aviacion, XA-UHZ, CU-972 from Havana to Holguin (Cuba) lost height shortly after takeoff at 12:08L (16:08Z), contacted a house, trees and a railway track near position N22.9914 W82.3912 and burst into flames.

# 19/06/2018 Sintang, Kalimantan, INA, Wings AT72 at Sintang on Jun 19th 2018, landed at wrong airport

Wings Air ATR-72-212A, PK-WHF, IW-1370 from Pontianak to Sintang Tebelian (WoS Indonesia), landed safely on Sintang's former Susilo Airport. Susilo Airport had been in use until April 26th 2018. On April 26th 2018 00:00Z (07:00L) the new Tebelian Airport (rwy 09/27 length 1660 meters) located about 11km south replaced Susilo Airport (rwy 08/26 length 1300 meters) maintaining the ICAO and IATA identifiers of Susilo Airport, Susilo Airport was shut down. (Old Sintang Sisulo: N0.063619E111.473428)



Wings Air ATR-72-212A



Figure 2: The flight track as recorded on the FDR. Purple line indicated the flight from Pontianak to Susilo Airport, and the blue line indicated the flight from Susilo Airport to Tebelian Airport.

### 10/07/2018 Pretoria, South Africa, Rovos Rail CVLP, engine problem, 1/19+1 on gmd

Rovos Rail Tours Convair CV-340 in MAC Martin's Air Charter colours, registration ZS-BRV performing a test flight from Pretoria Wonderboom to Pilanesberg (South Africa) with 4 crew and 15 passengers, was climbing out of Wonderboom's rwy 29 when ground observers observed smoke from the lefthand engine, the aircraft appeared to not climb anymore, estimated height was about 300 feet. The aircraft appeared to maneouver to join a right downwind and turn for final when it lost height, impacted and broke through an industrial building and came to rest about 5.7km/3.1nm east of the airport at position S25.6711 E28.2838. About 20 people on the aircraft and on the ground received injuries, the flight engineer received critical injuries and subsequently died, three other people - reportedly including the pilots - received serious injuries.



Convair CV-340

21/07/2018 Burnet Municipal Airport, Texas, USA. Douglas C-47, named "Bluebonnet Belle", was involved in an accident during takeoff.

The aircraft came to rest in the grass next to the rwy and burst into flames. The captain, crew chief, and 4 passengers sustained serious injuries, 1 passenger sustained minor injuries, and the co-pilot and 5 passengers were not injured. The destroyed aircraft was to be flown to a fly-in at Oshkosh, Wisconsin.



Commemorative Air Force, Highland Lakes Squadron C-47B (DC-3)

Examination of the accident site revealed that the airplane came to rest upright on a heading of about 113° magnetic, about 145 ft east of the left side, and 2,638 ft from the approach end of rwy 19. The postimpact fire consumed the fuselage from the nose cone aft to about 3 ft forward of the left side cargo door along with a majority of the wing center section.

22/07/2018 Bosnia, Transavia B738 over Bosnia, lost ATC communication, intercepted by Italian fighter jet.

Transavia B737-800, reg PH-HSC flight HV-1834 from Kos (Greece) to Amsterdam (Netherlands), was enroute at FL400 over Bosnia when radio comm with ATC was lost. Italian Air Force dispatched two Eurofighters to intercept and identify the aircraft, radio communication was soon restored. The Eurofighters returned to their base, the Boeing continued to Amsterdam for a safe landing.





Quick Reaction Alert fighters dispatched from Grosseto Air Base, in the Province of Grosseto on the west Italian coast.

### 30/07/2018 Narita, Japan, Canada B788 turns off rwy into dead end

Air Canada B787-800, C-GHPV flight AC-5 (dep Jul 29th) from Montreal,QC (Canada) to Tokyo Narita (Japan) with 201 pax and 11 crew, landed on Tokyo Narita's rwy 16L and slowed to taxi speed, subsequently vacated the rwy via an apparent high speed turn off but became stuck due to the taxiway's surface not being paved with the tail not being clear of the rwy protected area.

### エア・カナダ機が立往生、成田空港B滑走路6時間閉鎖

30 日、成田空港で、エア・カナダ機が工事中の誘導路に誤って進入し、滑走路がおよそ6時間に渡って閉鎖されました。 30 日午後 4 時前、エア・カナダ機が B 滑走路の間違った誘導路に進入しました。この誘導路は、工事中で一部が舗装されていませんでした。このため機体は誘導路上に 4 時間半あまり停止していましたが、30 日午後 9 時ごろ牽引されて駐機場へ移動しました。乗客・乗員 212 人にけが人はいませんでした。この影響で滑走路は 6 時間以上閉鎖され 6 便が欠航するなど一部ダイヤが乱れました。国土交通省は誤って進入した原因などを調べる方針です。(TBS 2018/07/31/00:02)



04/08/2018 In Alps near N46.9022 E9.2247, Ju-Air JU52 at Piz Segnas impacted terrain

Ju-Air Junkers JU-52 ("Tante Ju", "Auntie Ju"), HB-HOT performing a flight from Locarno to Dubendorf (Switzerland) with 17 pax and 3 crew, impacted terrain near N46.9022 E9.2247 and came to rest at an elevation of about 2540m/8330ft near Martinsloch/Piz Segnas (Switzerland) at about 16:50L (14:50Z). No survivors have been located.





HB-HOT crashed

12/08/2018 Oksibili, Papua, INA, Martha Buana Abadi, PAC750X, PK-HVQ crashed in the Gunung Menuk area in Pegunungan Bintang regency, Papua, killing eight people on board, including the pilot and co-pilot, while a 12yr boy survived. The plane, operated by PT Martha Buana Abadi, was found on Sunday at 6:15 a.m. local time, according to Jayapura Search and Rescue Agency. The plane departed from Tanah Merah airport in Boven Digul on Saturday at 1:42 p.m. and was scheduled to arrive at Oksibil airport at 2:20 p.m.

18/08/2018 Toronto, Canada, Canada A321 continued landing despite go-around instruction

Air Canada A321-200, C-GITU, AC-150 Calgary to Toronto (Canada) with 196 people on board, was on short final to Toronto's rwy 06L, when the preceding arrival could not vacate the rwy in time. Tower instructed AC-150 to go around, the crew however did not acknowledge the call and continued for landing. The aircraft rolled out and vacated the rwy without further incident. TSB rated the occurrence an incident reportable involving the risk of a collision, however, did not open an investigation.

25/08/2018 Ulan-Ude, Russia, Ural A320 landed on closed rwy

Ural Airlines A320-200, VQ-BGJ, U6-105 (dep Aug 24th) from Moscow Domodedovo to Irkutsk (Russia), was on approach to Irkutsk when the crew stopped the descent at FL080 due to present weather conditions, the aircraft entered a hold. After about 35 minutes in the hold the crew decided to divert to Ulan-Ude's Mukhino Airport but landed on a newly built, still closed rwy to the north of rwy 08/26 at about 08:30L (00:30Z). At the time of the landing the rwy lighting of the new rwy was being tested.

30/08/2018 American A320 at Fort Myers approached wrong airport and went around

AAA320-200, N123UW, AA-862 from Philadelphia, PA to Ft. Myers,FL (USA), was cleared for a visual approach to Ft. Myers' rwy 06, reported the airport in sight and was handed off to tower. The aircraft lined up with rwy 05 of nearby Page Field, about 3nm from Ft. Myers Airport, and descended to about 800 feet MSL, about one minute after being handed off to tower the crew announced they were going around. ATC vectored them for the approach to rwy 06, the aircraft performed a safe visual landing to Fort Myers' rwy 06 on second approach about 6 minutes after the go around.

09/09/2018 Yirol (HSYL), South Sudan, South West Aviation L410 impacted river on approach to Yirol City, 20/23

South West Aviation Let L-410, UR-TWO performing a flight from Juba to Yirol (South Sudan) with 20 passengers and 3 crew, impacted Yirol River south of the aerodrome at Yirol City about 1.75nm south of the aerodrome at about position N6.53 E30.49 at about 09:00L (06:00Z). 19 bodies were recovered from the river with the help of local fishermen, 4 survivors were taken to a hospital with serious injuries. On Sep 10th 2018 Authorities reported 20 people have died as result of the accident, 3 passengers survived

15/09/2018 Tunis A320 at Frankfurt on Sep 15th 2018, nearly landed on taxiway

Tunisair A320-200, TS-IMG TU-744 Tunis (Tunisia) to Frankfurt/Main (Germany), was on approach to Frankfurt's rwy 25L when a swing over to rwy 25C was offered and accepted. The crew however aligned with taxiway M - the parallel taxiway between rwys 25L and 25C - and continued the approach until about 200 feet AGL, then went around at about 11:22L (09:22Z). The aircraft positioned for another approach to rwy 25C and landed safely about 15 minutes later.

26/09/2018 Sao Paulo, BRA, LATAM A321 landed on wrong rwy

LATAM Brasil A321-200, PT-MXH JJ-4627 Fortaleza to Sao Paulo Guarulhos (Brazil) with 184 pax and 8 crew, was cleared to land on Guarulhos' rwy 27L, however, touched down on rwy 27R and rolled out without further incident.

28/09/2018 Chuuk, (かつてのトラック諸島) Federated States of Micronesia, Niugini B738 touched down in sea short of rwy, 1/35+12



Air Niugini B737-800, P2-PXE PX-73 Pohnpei to Chuuk (Micronesia) with 35 pax and 12 crew, was on final approach to Chuuk's rwy 04 in poor weather when the aircraft came too low and touched down into the sea and came to a stop about 150 meters left abeam of rwy threshold.

15/10/2018 Mumbai, India, Air India flight attendant falls from B777

"In an unfortunate incident, one of our cabin crew (members), Harsha Lobo (53), fell down on the tarmac from the B777 aircraft door while closing it," the airline said later in a statement. "She sustained injuries to her legs and has been taken to the Nanavati Hospital for further treatment."

 $20/10/2018 \quad Hong\ Kong, Air\ India\ (AI)\ B787-8\ descended\ to\ 200\ feet\ AGL\ 2.6nm\ short\ of\ the\ rwy,\ GP\ problem$ 

29/10/2018 Off Jakarta, INA, Lion B38M crashed into Java Sea, off Karawang, 11 min after takeoff from WIII rwy 27L and left turn after departure. 0/189 (181+8 crew).



On Monday 29 October 2018 at 0631z a Lion Air B737 MAX 8, PK-LQP, lost height and crashed into Java Sea, 15 km (9.4 mls) N off Tanjung Bungin, Indonesia. The flight departed Jakarta-Soekarno-Hatta International Airport (CGK/WIII), to Pangkal Pinang Airport (PGK/WIKK), Indonesia. The aircraft is commanded by Captain. Bhavye Suneja and co-pilot Harvino with six cabin crew Shintia Melina, Citra Noivita Anggelia, Alviani Hidayatul Solikha, Damayanti Simarmata, Mery Yulianda, and Deny Maula. The captain (Indian national) has 6,000 flight hours and the co-pilot (Indonesian) has more than 5,000 flight hours.

The Aircraft Flight Maintenance Log (AFML) recorded that since October 26, 2018 until the occurrence date several problems occurred related to airspeed and altitude flags that appeared on the captain's (left) Primary Flight Display (PFD) on three occasions, SPEED TRIM FAIL light illumination and MACH TRIM FAIL light illumination that occurred twice.

Several attempts were made by engineers to rectify these issues. The day before the accident the Angle of Attack (AoA) sensor was replaced by engineers at Denpasar Airport. During takeoff from Jakarta, the DFDR recorded a difference between left and right Angle of Attack of about 20° which continued until the end of the recording. During rotation of the aircraft, the left control column stick shaker activated and continued for most of the flight. After the flaps were retracted, the FDR recorded automatic aircraft nose down (AND) trim for 10 seconds followed by flight crew commanded aircraft nose up (ANU) trim. Automatic AND trim briefly stopped when the flaps were temporarily extended to 5. In their communications with air traffic control, the flight crew asked the controller to confirm the altitude of the aircraft and later also asked the speed as shown on the controller radar display. The copilot reported experiencing a "flight control problem" and that they were flying the aircraft manually.

Last radio contact was at 06:31 local time when the captain requested the arrival controller to block altitude 3,000 feet above and below for traffic avoidance. The controller asked what altitude the pilot wanted, to which the captain responded "five thou". The controller approved the pilot request. The FDR stopped recording within twenty seconds of the pilot's response.

The aircraft impacted the sea some 15 km north off Tanjung Bungin.

On Sep 16th 2020 the Committe on Transportation and Infrastructure of the United States House of Representatives released their final report of 238 pages into the safety cultures of both Boeing and FAA which led to the crashes of both Lionair's B737-8 Max and Ethiopian Airlines' B737-8 Max.

The Committee concluded:

Both Boeing and the FAA share responsibility for the development and ultimate certification of an aircraft that was unsafe. Both must learn critical lessons from these tragic accidents to improve the certification process, and the FAA must dramatically amplify and improve its oversight of Boeing. While the changes that the FAA and Boeing have proposed will be the start of a long process, changing the fundamental cultural issues that led to an environment that permitted Boeing to build, and FAA to certify, a technologically faulty aircraft will take much longe.

Final Report: <a href="http://knkt.dephub.go.id/knkt/ntsc\_aviation/baru/2018%20-%20035%20-%20PK-LQP%20Final%20Report.pdf">http://knkt.dephub.go.id/knkt/ntsc\_aviation/baru/2018%20-%20035%20-%20PK-LQP%20Final%20Report.pdf</a>

11/11/2018 Alverca, Portugal, Astana E190, severe control problems, 0/6

Air Astana flight KC1388 lost control shortly after departing from Alverca Airport (LPAR) over Lisbon made emergency landing in Beja (LPBJ).





#### ATC Comm:

- 02:40 MAYDAY
- 11:30 First ditching statement
- 13:00 ATC offers "the river"
- 17:55 "Completely uncontrollable"
- 20:00 Request for VMC
- 21:50 6 POB "Completely uncontrollable. Flight control problem" Planning a sea ditching 23:55 ATC suggests southbound heading to better weather.
- 27:10 Confirming planning to ditch
- 29:10 Controller change
- 04:50 "Improved our conditions" ?
- 06:42 "Request vectoring to the sea" Discussion about river and "weather below us" 09:30 Requested confirmation that they could reach the sea on present heading
- 11:50 Still planning ditching. "Completely uncontrollable"
- 15:45 "We are in thunderstorm now"
- 18:58 "In this heading, can we reach the sea?"
  19:30 "There's a couple of F-16 fighters. They are flying your way, to assist you with your navigation". 1388 does not understand the transmission.
- 21:30 ATC points out a river dam. 24:21 "You have the F-16 fighters reaching your position now". No response.
- 25:50 Very stressed transmission
- 26:15 Transmission from F-16 c/s "Portuguese Air Defence" 27:05 "Cannot maintain heading". "Climbing and descending all the time"
- 28:48 F-16 transmission "Can you get a lock on me?" Probably talking to a military controller.
- 29:15 Very stressed transmission
- 30:30 "If you fly south or southwest, you'll reach the sea"
- 02:50 "Eastbound cannot take you to the sea". "Fly westbound" 04:02 F-16 "... maintain two miles"  $\,$
- 04:40 Calls to and from F-16. 60 miles north, planning to intercept and offering assistance. 1388 confirms intention to ditch.
- 06:30 Request heading to sea for ditching
- 06:50 F-16 "Faro is Victor Mike Charlie. Confirm you are unable to reach Faro?" 1388 confirms ditching
- 09:05 "If you continue that heading, you have an aerodrome, civilian aerodrome, 13 miles"
- 10:58 "The maintenance officer from [?] will try and contact you on this frequency as well" 11:45 "You are flying away from the sea. You are flying into Spanish territory."
- 12:05 "You'll probably find better weather if you move further east"
- - "Aircraft is now controllable" "Roger. Confirm intentions?"
- 12:30 "We need closest airport with good weather" 12:45 "You have aerodrome with good weather, south of your position 135 miles. Can you fly that?" 13:10 F-16 offering to intercept and guide to the aerodrome. 1388 accepts.
- 13:35 F-16 requests confirmation from Lisbon that Faro will be the diversion.
- 13:50 F-16 advises that Beja is a closer aerodrome, 70 miles south.
- 14:15 F-16 requests confirmation from Lisbon that Beja will be suitable. 14:30 Lisbon confirms Beja is suitable and 1388 is expected
- 15:40 1388 requests rwy information at Beja
- 16:00 Lisbon asks the F-16 if he can escort 1388 to Beja. F-16 reports 19 miles to intercept and VMC
- 16:50 F-16 advises a turn to line up with Rwy 19 at Beja
- 17:35 F-16 10 miles out, offers to formate and guide 1388
- 18:55 1388 confirms under control, repeats that they need an airport with good weather indicates some issue with flight controls. 19:25 Lisbon passes Beja information
- 19:45 F-16 reports formating.
  - 1388 requests F-16 transponder off due to TCAS
- 20:30 F-16 gives heading and altitude
- 21:55 1388 confirms they can see the F-16 but they would prefer control from ATC. 22:15 Lisbon suggests following the F-16
- 23:45 Lisbon advises 45 miles to Beja. Requests a call when visual.

24:00 1388 requests airport spelling again

24:40 F-16 requests maintain VMC and passes ILS information

26:30 Discussion about 19R

27:15 Lisbon advises 9 mile final

27:35 Lisbon passes Beja weather

28:50 Lisbon passing information, 23 miles from field but no recorded response.

30:50 Lisbon tranfers 1388 to Beja

Landing Video: https://www.publico.pt/2018/11/12/video/imagens-f16-forca-aerea-aterragem-emergencia-beja-20181112-120548

16/11/2018 Taban MD88 at Karaj on Nov 16th 2018, went around from very low height (3ft agl) at wrong airport



20/12/2018 Kinshasa, Congo, Gomair AN26 Cargo, impacted terrain short of rwy, ATC error? 2/2?

23/12/2018 BOBCAT L509 near New Delhi NAC B744 climbed without ATC clearance, loss of separation with KLM875 and BR61



Location: N28 59 35.3 E78 18 57.3 at Dec 23 in India (but Dec 22 2332Z)

25/12/2018 Nha Trang (VVCR: Cam Rahn Bay), VietJet A320, landed on closed (new) rwy on technical return

14/01/2019 Karaj Payam airport, Iran, Saha B703 at Fath, landed at wrong airport. 16/

Saha Airlines Boeing 707-300 freighter, EP-CPP from Bishkek (Kyrgyzstan) to Karaj (Iran) with 16 crew and a cargo of meat, was on approach to Karaj's Payam Airport's rwy 30 (length 3660 meters/12,000 feet) when the crew descended towards and landed on Fath's airport 31L (official length 1070 meters/3510 feet and width 25 meters/80 feet), overran the rwy, broke through an airport wall, crashed into houses past the end of the rwy and burst into flames at about 08:30L (03:00Z).

Another aircraft had confused the same airports but gone around in time; Taban MD88 at Karaj on Nov 16th 2018, went around from very low height at wrong airport. (see previous page)

#### 16/02/2019 Pontianak, INA, Lion JT714 B738, overran rwy on landing in TS. 0/189

Lion Air B737-800, PK-LPS flight JT-714, Jakarta-Pontianak (WIOO) landed on Pontianak's rwy 15 in rain (TS) at about 15:10L when the aircraft overran the end of the rwy and came to a stop about 220 feet/67 meters past the end of the rwy with all gear on soft ground just past the paved surface of the rwy end safety area.

The following are overrun/excursion events in INA (that I know) since 2000. (Lion Air related events are shown in red letter)

14 JAN 2002: Lion Air B737-200 overrun at Sultan Syarif Kasim airport, hull loss. 7(injury)/96

30 NOV 2004: Lion Air MD-82 Overrun at Surakarta (Solo) airport in heavy rain. Tail wind, Hydroplane, 26/153

4 Mar 2006: Lion Air MD-82 rwy excursion Surabaya-Juanda, hull loss.0/144

24 Dec 2006: Lion Air B737-400 crash landing at Ujung Pandang-Hasanudin, hull loss. 0/164

7 MAR 2007: Garuda 200 (B737) 18 APR 2008: Sriwijaya 76 (B737) 27 AUG 2008: Sriwijaya 62 (B737)

2 NOV 2010: Lion Air B737-400, JT712, at Pontianak, overrun rwy15, 0/174

14 FEB 2011: Lion Air B737-900 ER, JT392, at Pekanbaru, Sumatra, slipped off rwy after landing in bad wx, 0/213

15 FEB 2011: Lion Air B737-900, JT295, at Pekanbaru, Sumatra, overran rwy on landing, 0/218

20 DEC 2011: Sriwijaya 230 (B737) 11 APR 2012: Garuda 653 (B737)

1 JUN 2012: Sriwijaya 188 (B737-400) at Pontianak

2 JUL 2012: Batavia (A320-200) 17 JUL 2012: Garuda 174 (B737) 19 OCT 2012: Sriwijaya 182 (B737)

1 NOV 2012: Lion Air B737-400, JT716, at Pontianak, overrun rwy15 on landing in rain, 0/missing

30 DEC 2012: Lion Air B737, JT718 27 MAR 2013: Sriwijaya 21 (B737) 5 APR 2013: Garuda 970 (B737)

6 AUG 2013: Lion Air B737, JT892, at Gorontalo, skid off rwy27 on landing in rain, 0/181

2 JUN 2015: Garuda 618 (B737) 6 NOV 2015: Batik Air 6380 (B737)

21 DEC 2015: Kalstar E195 at Kupang, overran rwy 07 on landing 0/125

20 FEB 2016: Lion Air B739, JT263, at Surabaya overran rwy10 in thunderstorms and heavy rain. 0/205

16 FEB 2019: Lion Air B738, JT714, at Pointianak overran rwy 15 on landing in TS. 0/189

# 14/1/2019 Fath/Karaj, Iran, Saha B703 at Fath on Jan 14th 2019, landed at wrong airport Human Factor. 16/17

Saha Airlines B707-300 freighter, EP-CPP, from Bishkek (Kyrgyzstan) to Karaj (Iran) with 16 crew and a cargo of meat, was on approach to Karaj's Payam Airport's rwy 30 (3660 m/12,000 ft) when the crew descended towards and landed on Fath's airport 31L (1070 m/3510 ft and width 25 m/80 ft), overran the runway, broke through an airport perimeter wall, crashed into houses past the end of the runway and burst into flames at about 08:30L (03:00Z). Flight engineer survived.

Another aircraft had confused the same airport but gone around in time, see Incident: Taban MD88 at Karaj on Nov 16th 2018, went around from very low height at wrong airport.

On Feb 28th 2019, with the release of AIRAC Cycle 02/2019, all approach charts of Payam were modified to show Fath Airport with a prominent remark "Do not mistake Fath and Naja Airports for Payam Airport which have similiar runway alignments."

Similar incidents for reference:

American A320 at Fort Myers on Aug 30th 2018, approached wrong airport and went around

Iran AT72 at Tabriz on Feb 10th 2020, landed on wrong runway

Atlas BLCF at Wichita on Nov 20th 2013, landed at wrong airport

Asiana A320 at Seoul on Nov 15th 2019, landed on wrong and occupied runway

#### 23/02/2019 Houston, TX, USA, Atlas B763 carrying Amazo Cargo lost height on approach. 3/3, Human Error (Somatogravic illusion)

B763 cargo aircraft with 3 crew, was on approach to Houston in contact with Houston Approach, routine communication, when radio and radar contact with the aircraft was lost about 30nm southeast of Houston Intercontinental Airport at about 12:40L (18:40Z). The aircraft was found near position N29.7636 W94.7145 having impacted the waters of Trinity Bay about 1.5nm northwest of Anahuac's Bayside Community Hospital. NTSB determines that the probable cause of this accident was the inappropriate response by the first officer as the pilot flying to an inadvertent activation of the go-around mode, which led to his spatial disorientation and nose-down control inputs that placed the airplane in a steep descent from which the crew did not recover.









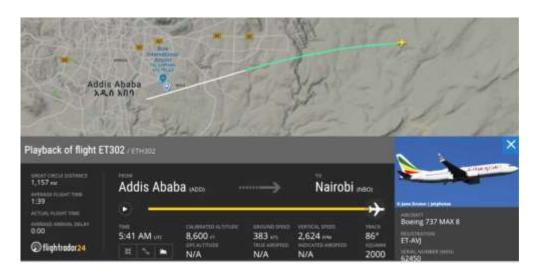


09/03/2019 near Villavicencio, Colombia, Laser Colombia DC3 lost height on approach. 14/14

Laser Aereo Colombia DC-3, HK-2494 from San Jose del Guaviare to Villavicencio (Colombia) with 14 people on board, was on approach to Villavicencio when the crew declared emergency at 10:40L (15:40Z), the aircraft subsequently lost height and impacted ground at La Bendicion and burst into flames.

10/03/2019 Addis Ababa, Ethiopia, Ethiopian B38M near Bishoftu impacted terrain after departure, 157/149+8crew.

Ethiopian B737-8 MAX, ET-AVJ flight ET-302 from Addis Ababa (Ethiopia) to Nairobi (Kenya) with 149 passengers and 8 crew, departed Addis Ababa's rwy 07R and was climbing out of Addis Ababa when the aircraft levelled off at about 9000 feet MSL, radar contact was lost shortly after at 08:44L (05:44Z). No survivors. Senior captain Yared Getachew, who had more than 8,000 flight hrs, was in command of the plane. First officer, Ahmed Nur Mohammod Nur, had 200 hours of flight time.



25/03/2019 Edinburgh, UK, BA, BA3271, BAe 146-300 destined for Düsseldorf in Germany has landed in Edinburgh by mistake, after the flight paperwork was submitted incorrectly. The passengers only realized the error when the plane landed and the "welcome to Edinburgh" announcement was made. The plane, which started at London's City Airport, was then redirected and landed in Düsseldorf.

WDL Aviation ran the BA flight through a leasing deal. BA said it was working with WDL to find out why it filed the wrong flight plan.





03/05/2019 Jacksonville NAS, Fla, USA, Military chartered Miami Air Intl B738, rwy overrun on landing, aircraft ends up in river, 0/143

Miami Air International B737-800, N732MA, LL-293 from Guantanamo Bay Naval Air Station (MUGM, Cuba) to Jacksonville Naval

Air Station, FL (KNIP, USA) with 136 pax and 7 crew, landed on Jacksonville NAS's rwy 10 at 21:42L (01:42Z May 4th) but overran the
end of the rwy and came to a stop in the shallow waters of St. John's River about 380m/1250ft past the end of the rwy and was partially
submerged.

In late May the NTSB released an investigative update stating that APP had advised the crew that both rwy looked pretty bad and were "socked in". Winds favoured rwy 28, however, as the aircraft came closer, TWR queried whether the crew wanted rwy 10 as it was looking better. The crew accepted rwy 10. TWR reported the winds from 240 degrees at 10 knots when he cleared the flight to land. KNIP to MUGM, then operated the return flight to KNIP (accident flight)."

05/05/2019 Sheremetyevo, Moscow, Russia, Aeroflot SU95 bursts into flames during rollout and burns down, 41/73+5

Aeroflot Sukhoi Superjet 100-95, RA-89098, SU-1492 from Moscow Sheremetyevo to Murmansk (Russia) with 73 pax and 5 crew, departed Sheremetyevo's rwy 24C at 18:04L (15:04Z) but stopped the climb at about FL100 following a lightning strike, declared loss of radio communication first, later emergency via transponder codes and returned to Sherementyevo for a landing on rwy 24L at 18:31L (15:31Z). During the roll out the aircraft burst into flames, veered left off the rwy and came to a stop on the grass adjacent to the rwy, the aircraft burned down. 41 occupants perished in the accident, 35 occupants were able to evacuate the aircraft via both front door emergency slides, the 2 flight crew escaped via the escape ropes through the cockpit windows, there were 11 injuries. The aircraft's tail section completely burned down and was destroyed.



01/06/2019 ANA B788 near Tokyo, loss of cabin pressure. Emergency descent.

JA828A, NH-171 San Jose -Tokyo Narita with 151 pax +12 crew enroute at FL430 about 300nm northeast of Narita initiated an emergency descent due to the loss of cabin pressure at 38°54'19" N, 144°45'50" E. The aircraft levelled off at FL100 and continued to Tokyo for a safe landing on Narita about 55 minutes after leaving FL430.

15/06/2019 Haneda, Japan, Skymark B738 and ANA B789 on Jun 15th 2019, ATC operational error, B789 crosses rwy while B738 lands

Skymark Airlines B737-800, JA73AB, BC-110 from Kobe to Tokyo Haneda (Japan), was on final approach to Haneda's RWY 34L and was cleared to land on RWY 34L. ANA B787-9, JA885A, NH-115 from Vancouver,BC (Canada) to Tokyo Haneda, had landed about 6 minutes earlier and was cleared to cross rwy 34L near the end of the rwy just when the Skymark aircraft was on short final at less than 1000 feet AGL. The aircraft entered the rwy and crossed the rwy, the 737 touched down just after the B789

had left the rwy surface. ATC error.

羽田着陸寸前に別機が滑走路横断(朝日デジタル)

国土交通省は、羽田空港で航空機が着陸寸前に、別の航空機が滑走路を横切る問題があったと発表した。 国交省によると、問題が起きたのは 15 日午後 6 時 4 分ごろ。神戸発羽田行きスカイマーク 110 便(乗員・乗客 186 人)がA滑走路(RWY34L)に向け着陸しようとしていたところ、カナダ・バンクーバー発羽田行きの全日空 115 便(乗員・乗客 239 人)が同滑走路を横切った。スカイマーク機は約3 分後、無事に着陸した。けが人はいなかった。スカイマーク機は羽田の航空管制官から着陸許可を受け、全日空機もその直後にA滑走路横断の許可を受けたという。通常は同じ管制官が、これらの許可を出すことになっているという。管制官が誤って許可を出した可能性があり、運輸安全委が調査する。

21/07/2019 Naha, Japan, アシアナ機 滑走路に誤進入 重大インシデントに認定 Pilot error

那覇空港でアシアナ航空の旅客機が管制官の指示に反して滑走路に進入するトラブルが発生し、国土交通省は重大インシデントとして調査を始めることになった。21 日午後 1 時すぎ、那覇空港の上空で、日本トランスオーシャン航空の機体が着陸態勢にあったことから、管制官はアシアナ航空の旅客機に待機指示を出した。しかし、誤って滑走路内に進入したため、日本トランスオーシャン航空の機体は着陸をやり直し、予定より 13

分間の遅れが生じた。これを受け、国の運輸安全委員会は大きな事故につながりかねない重大インシデントに認定し、調査を開始することになった。(沖縄テレビ) JTSB Final report: https://www.mlit.go.jp/jtsb/eng-air\_report/HL8256\_JA01RK.pdf

22/08/2019 Ibaraki, Japan (RJAH), Eastar B738 approached wrong rwy

Eastar Jet B737-800, HL8052, ZE-681 from Seoul (South Korea) to Ibaraki (Japan), was cleared for the approach to Ibaraki's rwy 03L at about 16:16L (07:16Z), however, aligned with rwy 03R, which was occupied by a vehicle. The aircraft went around from very low height, positioned for another approach to rwy 03L and landed safely on rwy 03L about 9 minutes after the go around. JTSB reported on Dec 9th 2019, they have opened an investigation into the occurrence. The aircraft went around as instructed by ATC and landed at the western rwy 9 minutes later.

18/09/2019 Carpediem DHC-6 near Ilaga (Illaga?), Papua, INA, aircraft missing, CFIT

Carpediem Aviation de Havilland DHC-6-400 Twin Otter, PK-CDC performing a freight flight from Timika to Ilaga (Papua) with one pax, three crew and 1700kg of rice, was enroute about 15 minutes prior to ETA in Ilaga (11:09L/02:09Z) when radio contact with the aircraft was lost at 10:54L (01:54Z). 27/09/2019, h 2019 climbers managed to reach the tail of the aircraft, which had separated from the rest of the aircraft, and recover both flight data and cockpit voice recorder. The helicopter subsequently carried climbers and black boxes back to Timika, where the black boxes were handed over to Indonesia's accident investigators of the KNKT/NTSC.

19/09/2019 Incorrect configuration involving Boeing 787, VN-A870 near Melbourne, Victoria

Vietnam Airlines flight was within one minute of landing at Melbourne Airport on Thursday morning when air traffic controllers were shocked to discover the Boeing 787 Dreamliner's landing gear was still up. Air safety officials have launched an investigation into the incident, regarded as extremely serious because the plane came so close to the ground without landing gear having been put down.



"During approach to land, Melbourne ATC advised the crew that the aircraft's landing gear was observed not to be extended. The crew

initiated a missed approach," the Australian Transport Safety Bureau said in a statement on Thursday. FlightRadar24 shows the service approaching Melbourne Airport just after 8am on Thursday morning. The flight dropped as low as 675 feet, the website indicated, and then rapidly ascended to 5000 ft after aborting the landing. The flight then circled the airport and landed safely just before 8.30am.

30/09/2019 Fly One A319 at Chisinau takes off over vehicles

Fly One A319-100, ER-00002, flight 5F-131 from Chisinau (Moldova) to Moscow Vnukovo (Russia), departed Chisinau's rwy 26 when the crew noticed three vehicles near the end of the rwy while climbing over the vehicles. The crew immediately notified tower asking whether this was normal. The aircraft continued to Moscow for a safe landing about 90 minutes later. The former head of Moldava's Air Traffic Service Provider Moldatsa reported tower forgot to first send the vehicles performing cleaning works on the rwy off the rwy. Moldatsa reported the tower controller was suspended.

04/10/2019 UAAAN12 at Lviv crashed short of rwy, ran out of fuel, 5/8

UAA Ukraine Air Alliance AN-12 freighter, UR-CAH, flight UKL-4050 from Vigo (Spain) to Lviv (Ukraine) リヴィウ (ウクライナ語) with 7 crew and one passenger, was on approach to Lviv about 7.4 nm before the airport when the aircraft disappeared from radar. The aircraft was subsequently found on the ground about 0.8 nm before Rwy31 in soil and vegetation, near a soccer stadium and a cemetary, where the crew had attempted an emergency landing due to running out of fuel. Five occupants were killed, three occupants were taken to hospitals with injuries. The flight plan was filed at FL260 ETE 05+45, 1580nm, 272KTS, alternate UKBB. Crew reached FL210 after 140nm and climbed to the final FL250 above Switzerland (800nm).



Oct 8th 2021 the NBAAI released their final report concluding the probable causes of the accident was the crew's failure to perform the flight in the instrument conditions due to the probable physical excessive fatigue.

## 24/11/2019 Goma, Congo, Busy Bee D228 9S-GNH impacted populated area past departure rwy, 19/19+7 on grd.

Busy Bee Congo Domier 228-200, 9S-GNH, a scheduled flight from Goma to Beni (DR Congo) with 17 pax + 2 crew, departing Goma's rwy 17 at 09:10L (07:10Z) either did not manage to become airborne or lost height after becoming airborne, impacted houses in the densely populated area of Birere just south of the rwy. All occupants perished in the crash, a number of injuries and fatalities occurred on the ground.



## 27/12/2019 Almaty, Kazakhstan, Bek F100 lost height shortly after takeoff and impacted building after two tailstrikes, Icing? 12/93+5 crew

Bek Air Fokker 100, UP-F1007, flight Z9-2100 from Almaty to Astana (Kazakhstan) with 93 pax and 5 crew, departed Almaty's rwy 05R at 07:21L (01:21Z) but lost height shortly after departure, impacted ground, broke through a concrete wall/fence and impacted a building. No fire broke out, the aircraft broke into several sections. 66 people were taken to hospital with partly extremely critical injuries, 12 people (including one of the initial survivors) were confirmed to have perished, 12 people remain in hospital care, 74 people survived with no or minor injuries.

## 2020

## 08/01/2020 Teheran, Iran, UIA B738 lost height after departure, aircraft shot down by Iran's armed forces 176/167+9(crew)

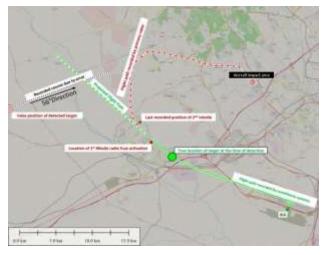
UIA Ukraine International Airlines B737-800, UR-PSR flight PS-752 from Tehran Imam Khomeini (Iran) to Kiev (Ukraine) with 167 pax and 9 crew, was climbing through 8000 feet MSL out of Tehran's rwy 29R about 12nm northwest of the airport at about 06:18L (02:48Z), when the aircraft's transponder signals ceased. The aircraft was found in an open field near Parand, a surbub of Tehran, at position N35.5529 E51.1121 about 10nm east of the last transponder position (N35.52 E50.91). All occupants perished in the crash.





Jan 11th 2020 Iran's Civil Aviation Organisation confirmed the aircraft was unintentionally and accidentally shot down. The CAO wrote quoting Iran's armed forces: "A Ukrainian passenger plane was hit unintentionally by human error, which unfortunately killed a number of dear compatriots and killed a number of foreign nationals."

Mar 17th 2021 Iran's CAO released their **final report**, concluding the probable causes of the crash were: **The air defense's launching two surface-to-air missiles at the flight PS752, UR-PSR aircraft**, the detonation of the first missile warhead in proximity of the aircraft caused damage to the aircraft systems, and the intensification of damage led the aircraft to crash into the ground and explode instantly. Other Contributing Factors- The mitigating measures and defense layers in risk management proved to be ineffective due to the occurrence of an unanticipated error in threat identifications, and ultimately failed to protect the flight safety against the threats caused by the alertness of defense forces.



Complete flight trajectory and missile last positions (Graphics: Iran's AIB):

01/01/2020 Frankfurt, Germany, Thai A359, descended to about 800 feet AGL about 7nm from touch down, Near CFIT

Thai Airways A350-900, HS-THF, TG-926 from Phuket (Thailand) to Frankfurt/Main (Germany), was on final approach to Frankfurt's rwy 07R when the aircraft descended to about 800 feet AGL (about 1150 feet MSL) before initiating a go around. The aircraft climbed to 5000 feet MSL, positioned for another approach and landed safely on rwy 07R about 15 minutes later.



Airbus A350-900 (HS-THF)



Mar 27 2020 the BFU reported in the January bulletin, that the first officer (36, ATPL, about 4000 hrs total, about 1500 hrs on type) was PF, the captain (43, ATPL, about 8000 hrs total, about 400 hrs on type) was PM. Two more first officers (all with ATPL) were on board. Descending through 7600 ft, Frankfurt App (feeder) instructed the crew to increase the descent to 3000 ft, turn to heading 040 and cleared the flight for ILS rwy 07R Approach, the crew was instructed to maintain 170 KIAS or more. The crew extended flaps to position 1 at about 6000 ft MSL, 18 sec (later?) to position 2, the gear was lowered at 5100 ft, sink rate was about 2000 ft per min at that time. The aircraft intercepted the localizer and was following the LOC with increasing sink rate. The automatated call "two thousand five hundred" occurred, the autopilot was disengaged. The GPWS sounded 9 sec later "Sink Rate" two times. 5 sec later the automated call "one thousand" occurred and the GPWS sounded "Glideslope". 34 sec after the 2500 ft call the PF called a go-around, the PM informed Tower. At that point the aircraft was at 668 ft AGL/936 ft MSL 6.43nm before the rwy threshold. The aircraft performed a second approach, passed the point 6.43nm before the threshold at 2238 ft MSL and landed safely.

## 07/01/2020 PIA B772 and Emirates B773 near Karachi on Jan 7th 2020, loss of separation, near-miss

PIA Pakistan International Airlines B777-200, AP-BGY, flight PK-301 from Islamabad to Karachi (Pakistan), at FL400, reached the top of descent into Karachi about 140nm northeast of Karachi and was in the initial descent.

Emirates B777-300ER, A6-EPS, flight EK-516 from Dubai (United Arab Emirates) to Delhi (India), at FL350 about 50nm northeast of Karachi tracking into a northeasterly heading. About 90nm northeast of Karachi the Emirates Boeing received a TCAS resolution advisory to descend due to the PIA Boeing descending at high sink rate, the Emirates crew complied with the advisory, the PIA Boeing received a TCAS resolution advisory to reduce rate of descent about 110nm northeast of Karachi. The PIA Boeing continued to descend, descended to

below FL360 about 106nm northeast of Karachi. According to ADS-B data the horizontal separation reduced to about 1nm at about 07:48:50Z while due to TCAS activations and compliance with the resolution advisories the vertical separation was kept at about 1000 feet. About 106m northeast of Karachi, about 45 seconds after point of closest approximation, the Emirates had returned to FL350, the PIA Boeing was descending through FL353, the horizontal separation between the aircraft had increased to 13mn again. Pakistan's CAA reported a near collision occurred and suspended three air traffic controllers involved into the occurrence.





08/01/2020 TEHRAN, Jan. 08 (MNA) – A Boeing 737 plane carrying 176 passengers and crew, mostly Iranians, crashed shortly after takeoff from Imam Khomeini Airport in Tehran early Wednesday, leaving no survivors. Technical difficulties were cited as the cause of the crash.

Ukraine International Airlines PS752, B737-800, crashed near Sabashahr, 7 min after tkof from Tehran Imam Khomeini International Airport, Iran. 176/167+9crew, Shut down from ground.



Iran's Revolutionary Guard Corp fired two surface-to-air missiles at PS752,

killing all 176 people onboard, on Jan, 8, 2020. (Reuters)

On Mar 17th 2021 Iran's CAO released their final report and attachments in both Persian and English, concluding:

Cause of the Accident (By Iranian CAO)

The air defense's launching two surface-to-air missiles at the flight PS752, UR-PSR aircraft the detonation of the first missile warhead in proximity of the aircraft caused damage to the aircraft systems and the intensification of damage led the aircraft to crash into the ground and explode instantly.

Other Contributing Factors

- The mitigating measures and defense layers in risk management proved to be ineffective due to the occurrence of an unanticipated error in threat identifications, and ultimately failed to protect the flight safety against the threats caused by the alertness of defense forces.

In addition to the facts reported in the preliminary report the CAO states:

Every State has complete and exclusive sovereignty over the airspace above its territory, and no aircraft may be operated over an airspace except with the permission of the State managing that airspace. Each State has the authority to limit the operation over the airspace managed by them.

On the other hand, the States have oversight on the safety of airlines for which they have issued certificates and may impose restrictions on their activities in accordance with the laws and regulations they enact.

Further, airlines are inherently responsible for the safety of their operation and shall ensure the safety of the routes in which they conduct flights.

One of the factors potentially hazardous to flight safety is military activities. Therefore, the States managing the airspace, the ones that have oversight on the airline activities as well as the airlines themselves shall gather information related to military activity hazards, conduct relevant risk assessment and adopt mitigating measures to maintain the associated risk within acceptable levels.

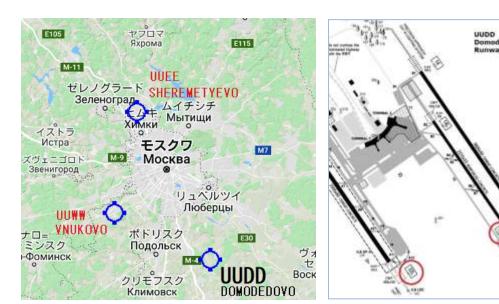
As can be seen in Figure 42, the State managing the airspace may impose restrictions over its own airspace, which can include the prohibition on entry into certain geographical areas, limitations on some routes, flight altitude and some of the normal procedures.

Naturally, the State can impose restrictions on the operations of operators certified by them, beyond those done by the State managing the airspace.

The airline shall comply with the restrictions imposed by the State managing the airspace and those of the one that has certified their operation. However, they may consider more operation-related restrictions in that airspace in order to ensure their desired level of safety.

## 16/01/2020 Moscow Domodedovo, Russia, IrAero SU95, landed on rwy under construction, wrong rwy landing

IrAero Sukhoi Superjet 100-95, RA-89078, flight IO-4284 from Sabetta to Moscow Domodedovo (UUDD), was on approach to Domodedovo's rwy 32R however touched down on the rwy under construction to the right of rwy 32R at 14:15L(11:15Z). The aircraft rolled out without further incident, no injuries.



05/02/2020 Istanbul, Turkey, Pegasus B738, overran rwy, impacted wall, fell off the cliff, broke up. 3/177+6

Pegasus B737-800, TC-IZK flight PC-2193 from Izmir to Istanbul Sabiha Gokcen (LTFJ Turkey) with 177 passengers and 6 crew, landed on Sabiha Gokcen's rwy 06 at 18:20L (15:20Z) but overran the end of the rwy, impacted the airport perimeter wall and broke into three parts about 170 meters/550 feet past the rwy end. Judgment in selection of rwy in badWX (strong tailwinds) noted. LTFJ 051520Z 29022G37KT 240V330 7000 -TSRA FEW017CB BKN025 BKN070 11/09 Q0992 RESHRA NOSIG=

26/03/2020 Manila, Philippines, IAI 1124A Westwind crashed on takeoff from rwy 24 and burst into flames. The aircraft carried out a medical evacuation flight to Tokyo, Japan. 8/8

07/05/2020 Austin, Texas, USA, SWA B737 landing aircraft hits man on rwy, 0/53+5



20/05/2020 Karachi, Pakistan, PIA A320-214, AP-BLD, Lahore (OPLA) to Karachi (OPKC), PK8303, 97/99, 8 crew (Capt, F/O, 6 FA) + 91 pax. At 14:35 the aircraft performed an ILS approach for rwy 25L and touched down without landing gears, resting on the engines. Both engines scrubbed the runway at high speed. Flight crew initiated a go-around and informed "Karachi Approach" that they intend to make a second approach. About 4 minutes later, during downwind leg, at an altitude of around 2,000 ft, flight crew declared an emergency and stated that both engines had failed. The aircraft started losing altitude. It crashed in a populated area, short of rwy 25L by about 1,340 meters. An immediate subsequent post impact fire initiated. Out of 99 souls on-board, 97 were fatally injured and 2 pax survived. On ground 4 persons were injured however 1 out of these reportedly expired later at a hospital. One on ground killed.





Fig 1: Google Earth crash site location (direction of flight from right to left)

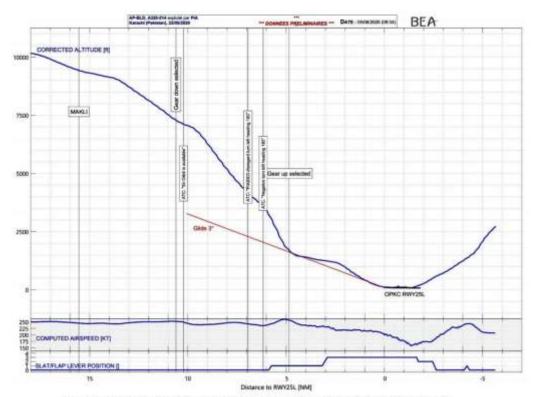


Fig 21: Selected FDR parameters during last part of the first approach

The aircraft crashed on the second approach

20/07/2020 Paris, CDG, France, UAL B78X 2020, cleared to land on wrong runway, ATC error saved by Easyjet

UAL B787-10, N16009 UA-57 from Newark, NJ (USA) to Paris Charles de Gaulle (France), was on final approach to Paris' rwy 09L when tower cleared the aircraft to land on rwy 09R. The crew read back the clearance and performed a swing over to rwy 09R.

An Easyjet Europe A320-200, OE-IJF U2-3955 from Paris CDG (France) to Malaga, SP (Spain), had been cleared to line up rwy 09R and wait, recognized the developing situation and reported the conflict on radio.

B78X initiated a go around from about 260 ft AGL (500 ft transponder altitude corrected to QNH 1018 and 367 ft ground elevation) resolving the conflict.

AAR by BEA: <a href="https://bea.aero/fileadmin/user\_upload/BEA2020-0289.en.pdf">https://bea.aero/fileadmin/user\_upload/BEA2020-0289.en.pdf</a>

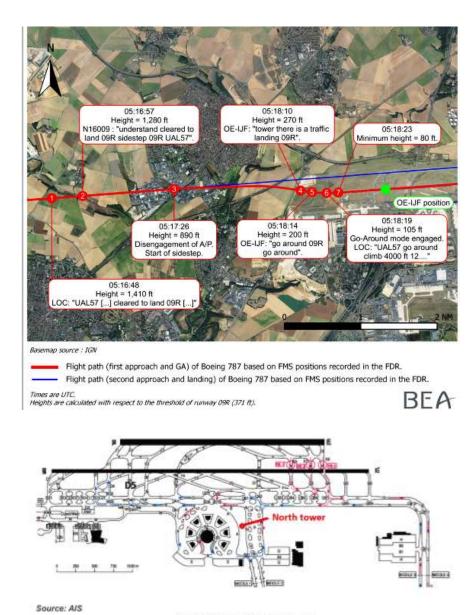


Figure 2: Excerpt from airport chart

Lapsus by a controller when giving a landing clearance, read back not checked, missed approach on short final on request from aeroplane lining up on runway

07/08/2020 Calicut airport, Kozhikode (コジコード) India overran runway and fell into valley, 21/184+6

Air India Express B737-800, VT-AXH flight IX-1344 from Dubai (UAE) to Kozhikode (VOCL) with 184 pax and 6 crew, landed on Kozhikode's rwy 10 in bad WX with tail winds but went past the end of the rwy, went past the rwy end safety area (150m/500 ft) and fell into a valley at 19:41L (14:11Z) coming to a stop about 100 ft below the rwy and about 245 m/800 ft past the rwy end. 21 people including both pilots died in the accident,

Kozhikode's rwy 10/28 is 2845 m/9330 ft long and features ILS approaches for both rwy 10 and 28 as well as VOR approaches to both rwys. The runway sits on a flattened hilltop, a drop off of 35 m/114 ft exists past the runway 10 end.



## 15/11/2020 JFK, USA, Seoul-Bound B777-200F, Southernair 947 (9S-947) Suffers Stall Warning On Departure From New York

Southern Air B777-200 freighter from New York JFK to Seoul Incheon experienced a stall warning while climbing out of JFK. This incident was recorded on audio as a hot microphone on the flight deck captured a pilot saying "Stall! Stall! Stall! Stall! Stall! Stall!" with warning alarms heard in the background. The Southern Air flight was operated by a B777-200 freighter. On November 15th at 14:27 local time, the aircraft departed JFK, climbing out of rwy 22R to 5000 feet. Given clearance by air traffic control (ATC) to climb to 11,000 feet, the aircraft continued its climb. However, as the pilot read back this clearance to ATC, the other pilot can be heard shouting "Stall! Stall! Stall! Stall! Stall!" in the background, with aircraft warning alarms beeping. Speaking to ATC, the Southern Air flight then responded with "Standby." In the short span of time, the aircraft's speed over ground had decreased from about 273 knots to 256. At the same time, its altitude decreased from 5,150 feet to around 4,950 feet before stabilizing. The incident was recorded and shared online:



Southern Air is a wet lease cargo airline and subsidiary of Atlas Air

## 09/01/2021 Off Jakarta, Indonesia, Sriwijaya B735 lost height and impacted Java Sea, 62/56+6

https://simpleflying.com/southern-air-stall-777f/

Sriwijaya B737-500, PK-CLC, SJ-182 from Jakarta to Pontianak (Indonesia) with 56 pax and 6 crew, was climbing out of Jakarta about 11nm north of Jakarta's Sokarno International Airport WIII) over the Java Sea when radar and radio contact was lost with the aircraft at 14:40L (07:40Z).





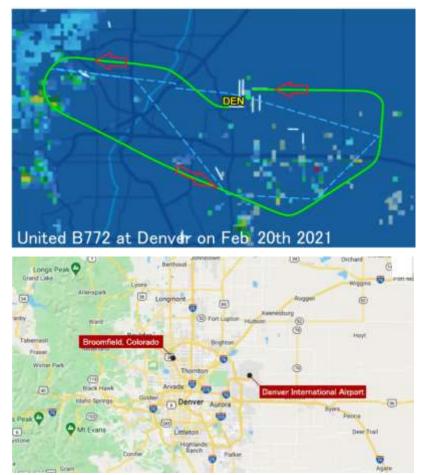
The KNKT informed the minister, that the wreckage field of the aircraft is about 110m long and 80m wide at the sea floor at a depth between 16 and 23m. All parts of the aircraft, from the nose cone to the tail, were found in this area. There is no evidence of an explosion of the aircraft prior to impact with the water, there is also no evidence the aircraft broke up before impact with water. Impact damage indicates the engines were still operating upon impact with water. At the time of the actual departure there were CB clouds over Jakarta which were dispersing, visibility improved, rain intensity decreased. There were no lightning strikes around the area while SJ-182 was in flight. Lightning and turbulence conditions did occur south of Jakarta, the weather along the flight path of SJ-182 north of Jakarta was rather good however. The aircraft had reported with Jakarta Departure while climbing through 1700 feet and was cleared to climb to FL290 following the standard departure route. While climbing through 7900 feet the crew requested to deviate around weather at a heading of 075 degrees, ATC cleared them for a heading of 075 degrees but restricted their climb at FL110 due to conflicting traffic, later clearing the flight to climb to FL130. The crew acknowledged these instructions including the clearance to climb to FL130 normally. Less than a minute later the controller noticed the aircraft was turning left instead of turning right to 075 degrees and queried the crew, but did not receive a reply anymore. The aircraft disappeared from radar shortly afterwards. ATC called SJ-182 11 times without a reply, other aircraft attempted to call SJ-182 as well also remaining without reply.

02/21/2021 Denver, USA, UAL B777-200, engine inlet separates from engine, engine fire, 0/229+10

UAL B777-200, N772UA flight UA-328 from Denver, CO to Honolulu, HI (USA) with 229 pax and 10 crew, was in the initial climb out of Denver's rwy 25 when the righthand engine's (PW4077) inlet separated associated with the failure of the engine. The crew declared Mayday reporting an engine failure. The aircraft stopped the climb at about 13000 feet, the crew requested to return to Denver after running the

checklists. ATC offered any runway, they would make it happen. The aircraft returned to Denver for a safe landing on rwy 26 about 23 minutes after departure. The aircraft stopped on the runway for a check by emergency services. Emergency services advised of an active fire within the righthand engine and extinguished the fire a few minutes later. The aircraft was subsequently towed off the runway to a remote parking stand, where passengers disembarked and were bussed to the terminal. There were no injuries.

On Feb 21st 2021 United, Japan Airlines and All Nippon Airways grounded their active B777 aircraft equipped with PW-40xx engines.





**Contained** Engine Failure

04/04/2021 Ndola, Zamvia, Ethiopian B738 landed at wrong airport under construction

Ethiopian Airlines B737-800 freighter, ET-AYL freight flight ET-3891 from Addis Ababa (Ethiopia) to Ndola (FLSK, Zambia), was expected

to land at Ndola's current (and old) Simon Mwansa Kapwepwe International Airport (S12.9977 E28.6634) but landed on Ndola's new Copperbelt International Airport (S12.9624 E28.5141), about 9nm westnorthwest of the current airport and is still under construction. The aircraft taxied to the apron, where airport construction workers signalled to the crew they were not expected at that airport. The crew thus continued taxi across the apron, entered the runway via the next taxiway and departed again.



Simon Mwansa Kapwepwe Intl Airport with parallel rwy, 10L/28R, 2515m/8250 ft + 10R/28L 1215m/3980 ft. New Airport; rwy ca 09/27, 3500m.



Ethiopian B737-800 Cargo

04/04/2021 Ndola, Zamvia, Ethiopian B738 approached wrong airport under construction and went around from 50ft AGL

Ethiopian Airlines B737-800, ET-AQP, flight ET-871 from Addis Ababa (Ethiopia) to Ndola (Zambia), was scheduled to land at Ndola's current (and old) Simon Mwansa Kapwepwe International Airport but joined short final for Ndola's new Copperbelt International Airport still under construction. Construction workers at the aerodrome gesticulated while the aircraft was on final approach, the crew performed a go around from about the threshold of the new runway at about 50 feet AGL and subsequently positioned to the correct airport for a safe landing. A local pilot reported the runway has some very faint X-marks indicating the runway was still closed, the crew might have noticed the x-bars.

About 2.5 hours earlier another Ethiopian B738 (ET3891) landed at the same airport by mistake. (See above)

12/05/2021 Key Lime SW4 and private Cirrus aircraft at Denver on May 12th 2021, midair collision, 0/1+2

SR22 N416DJ and Key Lime Air Flight 970, Swearingen SA-226-TC Metro II N280KL cargo flight, collided on approach to Centennial Airport in Colorado. (El:5884.9 ft. / 1793.7 m. Var 08E (2015):15 miles SE of DENVER, CO.) The Cirrus made a safe off-airport parachute-assisted landing, while the Key Lime pilot landed safely at Centennial despite the loss of a section of the cabin roof, damage to the empennage, and failure of one engine. There were no injuries.

Cirrus apparently struck across through the fuselage of the Metroliner just above the wings taking out the whole cabin section at that point.

The Metro crew declared emergency on tower frequency reporting their righthand engine had failed. After landing the crew advised, it had definitely been a mid air collision.





NTSB report: (20230404)

The Cirrus pilot's failure to maintain the final approach course for the assigned runway, which resulted in a collision with the Swearingen which was on final approach to the parallel runway.

Contributing to the accident was the failure of the controller to issue a traffic advisory to the Swearingen pilot regarding the location of Cirrus, and the Cirrus pilot's decision to fly higher than recommended approach speed which resulted in a larger turn radius and contributed to his overshoot of the final approach course.



 $17L/35R: 10001 \times 100 \text{ ft/3048} \times 30 \text{ m} \quad Asphalt/Grooved} \quad El: 5793.0/5884.9 \quad Traffic Pattern: Left/Right \\ 17R/35L: 7001 \times 75 \text{ ft/2134} \times 23 \text{ m} \quad Asphalt/Grooved} \quad El: 5803.7/5868.7 \quad Traffic Pattern: Right/Left$ 

23/05/2021 Near Minsk, Belarus, Ryanair Sun B737-800, SP-RSM (Poland), FR-4978 from Athens to Vilnius (Lithuania) with 126 pax and 6 crew, was enroute a FL390 about 45nm south of Vilnius still in Belarus Airspace, when the aircraft diverted to Minsk (Belarus), located about 90nm east of their present position, where the aircraft landed safely about 25 minutes later. The aircraft remained on the ground in Minsk for about 7 hours, then continued the flight with 5 pax less than had arrived in Minsk, climbed to FL090 enroute and reached Vilnus with a delay of 8.5 hours. On May 24th 2021 Lithuania's Authorities reported that 126 pax and 6 crew were on board the aircraft when it departed Athens, but 121 pax and 6 crew were on board when the aircraft arrived in Vilnius.

One of its pax was Roman Protasevich—a Belarusian journalist and dissident who played a key role in protests against Alexander Lukashenko's regime in the wake of the contested 2020 presidential elections. Sofia Sapega, a Russian law student and his partner, was travelling with him. (Similar case: BOAC VC-10 in Libya in 1971.: Aeromexico flight 006 at Montreal on May 31, 2010)



20/07/2022 ICAO issued final report, concluding the case as Hijack:

https://www.icao.int/Security/Documents/Ryanair%20FR4978%20FFIT%20report.pdf

## 02/07/2021 Trans/Rhoades B732 at Honolulu ditched about 2nm out of Honolulu, 0/2

Transair/Rhoades Aviation B737-200, N810TA T4-810 (Transair 810) from Honolulu to Kahului, HI (USA) with 2 crew, was climbing out of Honolulu's rwy 08R when the crew stopped the climb at about 2000 ft reporting they had lost the #1 engine (JT8D, left hand). Tower cleared the flight for a visual approach to runway 04R. The aircraft began to descend while trying to position for a return to Honolulu's rwy 04R. The crew advised they might lose their other engine, it was running very hot, and requested the coast guard out, and then reported: "We have all the Rhoades 810" and requested to turn right towards the airport and received clearance. The aircraft did not make it to the airport and needed to ditch in the Ocean about 2.7nm short of the Kalaeloa's rwy 29 (last position received from the transponder: N21.275 W158.026 at 50 ft MSL at 113 knots over ground). Both crew were rescued.





06/07/2021 Palana, Russia, Petropavlovsk-Kamchatsky (UHPP), AN26 near Palana (UHPL), impacted edge of coast, CFIT. 28/22+6

Petropavlovsk-Kamchatka Aviation Antonov AN-26, RA-26085 flight PTK-251 from Petropavlovsk-Kamchatsky to Palana (Russia) with 22 pax and 6 crew, was on approach to Palana in foggy and cloudy conditions when contact with the aircraft was lost. The aircraft was found collided with the top of the coastal slope about 3.8km (2.1nm) from the airport at position N59.1078 E159.8478, there are no signs of survivors.



## 20/08/2021 Honolulu, Hawaii, USA, Transair SH36, gear up landing

Transair Shorts 360, N4476F, flight P6-7 from Kahului, HI to Honolulu, HI (USA) with 2 crew, landed on runway 04R at 04:02L (14:02Z) when tower queried: "did the gear collapse or did you land gear up?" There were no injuries, the aircraft sustained substantial damage. The FAA reported the aircraft landed gear up.



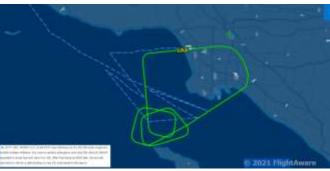
Tower queried: "did the gear collapse or did you land gear up?"

12/09/2021 Kazachinsk Russia, Aeroservice L410 near UITK airport collided with trees on approach, ?/14+2

15/09/2021 Intan Jaya, INA, Rimbun DHC6 Cargo, PK-OTW Nabire-Intan Jaya, Bilorai A/P, WABV/UGU crashed on go around at 7870ft MSL 2.4nm from the rwy. 3/3

15/10/2021 Los Angeles, USA, JAL B773 at LAX engine failure upon departure, fuel dump, landed KLAX safe.





02/11/2021 Juba, South Sudan, Euro AN26 lost height after takeoff and crashed. 5/5

Euro Airlines Antonov AN-26, TR-NGT, from Juba to Maban (South Sudan) with 5 crew and 28 drums of Diesel, was climbing out of Juba's rwy 13 at about 10:33L (08:33Z) when the crew declared emergency about 3 minutes after departure. The aircraft went down at 10:37L (08:37Z) near the rwy 13 end across river White Nile, about 0.7nm from the rwy 13 end/rwy 31 threshold. Juba's Airport director confirmed a cargo AN-26 belonging to Optimum Aviation Ltd has crashed shortly after takeoff from Juba.

01/12/2021 Near Cleaveland, USA, Canada B789, TCAS RA, ATC instruction results in another TCAS RA

Air Canada B787-9, C-FRTU AC-990 Mexico City (Mexico) to Toronto, ON (Canada) with 223 pob, was enroute at FL390 in contact with Cleveland Center, OH (USA) when the crew received a TCAS resolution advisory and followed the advisory. Cleveland Center cleared the flight to descend from FL390 to FL350, however, now the crew received a TCAS resolution advisory due to traffic below. The crew complied with the resolution advisory, too, and subsequently continued to Toronto for a safe landing without further incident.

20/12/2021 Dubai, UAE, Emirates B773, overran runway on departure, Near CFIT

Emirates B777-300, registration A6-EQI, EK-231 from Dubai (UAE) to Washington Dulles, DC (USA), was accelerating for takeoff from Dubai's rwy 30R when the aircraft rotated for takeoff past the end of the rwy and became airborne just at the end of the rwy end safety area. The aircraft continued to Washington for a landing without further incident. The aircraft performed the return flight EK-232 on schedule, then was grounded in Dubai and remained on the ground in Dubai for 4 days.



B777-300-mode-control-panel

On Dec 27th 2021 Emirates Airlines released a crew alert to their pilots following the occurrence suggesting the crew had not picked up the previous flight crew had left the altitude setting at the Master Control Panel at airport elevation/00000 ft causing the flight director to not indicate takeoff rotation and climb out but instead indicate to maintain that altitude (ALT mode).

The four flight crew who operated the "CFIT" flight have all been let go (fired) by EK as a result of the potentially devastating incident and further decision to carry on, despite the potential for overspeed damage to either the flaps or landing gear as a result of the error.

CREW ALERT
\*\*\*\*\*\*\*\*

CO1408/21 COMPANY NOTAM - B777 MCP POWER UP DEFAULTS AND AFTER
LANDING/ SHUT DOWN MCP CHANGES
CREWS ARE REMINDED THAT THERE ARE NO FCOM NORMAL PROCEDURE (NP)
REQUIREMENTS TO CHANGE THE MCP AFTER LANDING OR SHUTDOWN.
THERE HAVE BEEN TIMES WHEN THE MCP "ALTITUDE WINDOW" HAS BEEN SET
TO THE AIRPORT ELEVATION WHICH MAY CAUSE ISSUES ON THE SUBSEQUENT
DEPARTURE. THE FCOM 4.10.2 STATES THAT THE AFDS WILL ENGAGE IN
"ALT" WHEN THE FIRST FLIGHT DIRECTOR SWITCH IS TURNED ON, IF THE
MCP SELECTED ALTITUDE IS WITHIN 20 FEET OF THE DISPLAYED BARO
ALTITUDE. CREWS SHALL NOT SET AIRPORT ELEVATION ON THE MCP AFTER
LANDING OR SHUT DOWN.
- FTPB 27DEC21

09/01/2022 Dubai, UAE, Emirates B773 rejected takeoff without ATC clearance due to crossing aircraft with ATC clearance. Pilot Error
Emirates B777-300, A6-EQA EK-524 from Dubai (OMDB UAE) to Hyderabad (India), was accelerating for takeoff from Dubai's rwy
30R when the crew was instructed to reject takeoff at high speed (above 100 kts over ground) due to a crossing aircraft. The aircraft slowed

safely and vacated the rwy via twy N4 behind the aircraft, that had crossed the rwy.

Emirates B777-300, A6-EBY EK-568 from Dubai (OMDB UAE) to Bangalore (India), was taxiing for departure and was cleared to cross rwy 30R from twy M5A to N4 and was entering the rwy just when EK-524 began the takeoff roll.

According to information received from sources, EK-524 began their takeoff roll without ATC clearance. Tower subsequently instructed EK-524 to stop. According to information EK-524 may have reached 130 KIAS when they rejected takeoff. According to ADS-B data transmitted by the aircraft's txpndr EK-524 had reached 100 kts over ground about 790m/2600ft down the rwy and about 1700m/5700ft short of twy N4. Dimensions: OMDB RWY30R: 13123 x 197 ft / 4000 x 60 m

21/03/2022 Guangzhou, China, China Eastern B738 near Guangzhou lost altitude and impacted terrain, Suicide? 0/123+9

China Eastern B737-800, B-1791 (6.8yo) MU-5735 from Kunming to Guangzhou (China) with 123 pax and 9 crew on board, was enroute at 8900 meters/FL291 about 130nm west of Guangzhou nearing the top of descent when the aircraft suddenly lost altitude and impacted ground about 119nm west of Guangzhou (N23 20.251 E111 06.335) in mountainous terrain.



The CAAC report on April 20 2022, shows that the B737-800 aircraft, Flight MU5735, departed Kunming, capital of southwest China's Yunnan Province, for Guangzhou, capital of Guangdong Province, on March 21, and entered the Guangzhou control area at 2:17 p.m. The area control radar warned of a deviation at 2:20:55 p.m., and the aircraft left the cruising altitude of 8,900 meters. The controller called the crew immediately, but received no reply.

At 2:21:40 p.m. on March 21 2022, the last aircraft information recorded by the radar was: standard pressure altitude at 3,380 meters, ground speed at 1,010 kph, with the aircraft on a heading of 117 degrees. Subsequently, the radar signal disappeared, the report shows.

The plane finally crashed into an area near Molang Village under Langnan Township of Tengxian County in the city of Wuzhou, south China's Guangxi Zhuang Autonomous Region, killing all 123 passengers and nine crew members on board. The crash site is located in a valley near the Molang Village. A crater with an area of about 45 square meters and a depth of 2.7 meters has been determined as the main impact point, the report shows. Before the plane deviated from the cruising altitude, the radio communications between the crew and the air traffic control department did not show any abnormality.

## Ref: Past cases presumed to be pilot suicide.

09/02/1982 Haneda Airport, Japan, Japan Airlines, DC-8-61, JA8061, Ditched short final Pilot mental illness, 24 killed

21/08/1994 Agadir, Morocco, ATR 42, Royal Air Maroc, Ground collision Suicide, 44 killed

19/12/1997 Palembang, Sumatra, Indonesia, B737-300, SilkAir MI185, Crashed into river, Suicide, 104 killed

31/10/1999 Off Mass, USA, Egypt Air, B767-300ER, MS990, Lost contact at FL330 and crashed, Suicide, 217 killed

24/03/2015 Near Barcelonnette, France, Germanwings A320 lost height and impacted terrain. Suicide. 150 killed

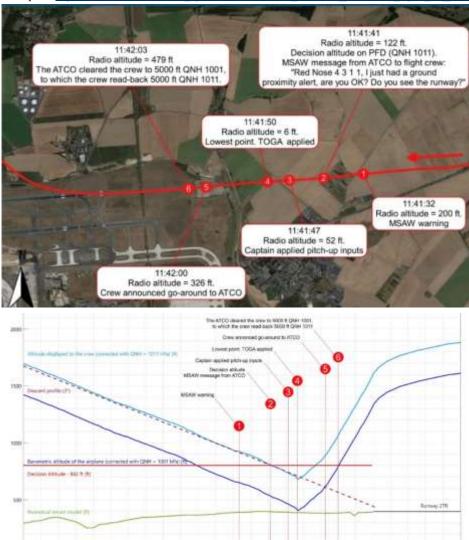
21/03/2022 Near Guangzhou, China, China Eastern B738 lost altitude and impacted terrain, Suicide? 132 killed

23/05/2022 Paris, France, A320, 9H-EMU, Getjet Malta A320 descended below safe height on approach twice. Red Nose 4311, on approach to Paris-Charles de Gaulle airport, near CFIT, due to Incorrect QNH information, RNP approach with LNAV/VNAV minima conducted below the descent profile, go-around performed at low height before the runway without visual references, second approach performed below descent profile. 0/178

ASN reports: Norwegian Air Sweden flight D84311, an A320-233, nearly struck the ground on approach to Paris-Charles de Gaulle Airport in France when it descended to 6 feet above ground level during a go-around.

AvHerald reprts: Getjet Airlines Malta Airbus A320-200 on behalf of Norwegian, registration 9H-EMU performing flight D8-4311 from Stockholm (Sweden) to Paris Charles de Gaulle (France), was on an RNP approach to CDG's runway 27R, however, with an erroneous Altimeter setting, instead of QNH 1001 hPa the crew had selected 1011hPa). The approach was thus performed below the glide path and eventually triggered a Minimum Safe Altitude Warning (MSAW) at the controller's desk. In response the crew initiated a go around at low height, without having acquired visual contact with the ground, and positioned for another approach. The second approach was also performed below the glideslope, the crew however acquired visual contact, corrected their trajectory and landed without further incident about 16 minutes after the go around.





#### Metars:

LFPG 231200Z 29010KT 5000 SHRA FEW010 BKN015 BKN028 FEW050CB 16/15 Q1001 TEMPO 3500 SHRA SCT060CB= LFPG 231130Z 26008KT 9999 SCT016 BKN028 18/15 Q1001 RESHRA TEMPO 3500 SHRA SCT060CB=

29/05/2022 Near Jomsom, Nepal, Tara DHC6, CFIT, 22 (19+3) on board, 22/19+3

Tara Air de Havilland DHC-6-300 Twin Otter, 9N-AET a flight from Pokhara to Jomsom (VNJS, 8976 ft MSL) with 19 pax and 3 crew, was enroute at 13,000 ft about 16nm south of Jomsom, about to enter the valley for the approach into Jomsom near Lete Pass, when the aircraft disappeared from radar. A search with two helicopters is underway but hampered by poor visibility in the area near Lete (Nepal), where the aircraft is assumed to have crashed.

In the morning of May 30th rescue teams reached the crash site at 14500 ft MSL (about 4400 m above sea level) on Sano Sware Bhir (Sano Sware Cliff) of Thasang in Mustang (about 6.3nm north of Lete, about 7nm southwest of Jomsom) but found no survivors.

21/06/2022 Miami, FL, USA, Red Air MD82, runway excursion causes gear collapse on landing, 0/130+10

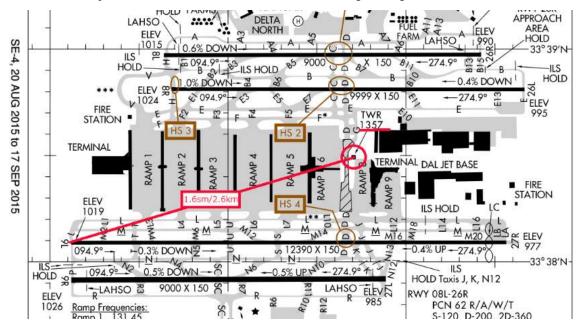
Red Air Dominicana McDonnell Douglas MD-82, HI1064, flight L5-203 from Santo Domingo (Dominican Republic) to Miami, FL (USA) with 130 pax and 10 crew, landed on Miami's Rwy 09 at 1737L (2137Z) maintaining routine communication but suffered the collapse of its landing gear. Tower pressed the crash button and instructed the next approaches to go around. The MD-82 came to a stand still off the runway with a fire developing at the righthand wing, where a fuel spill occurred. The aircraft was evacuated via slides. Three people received minor injuries and were taken to the hospital. Emergency services quickly extinguished the fire.

16/07/2022 Near Kavala, Greece, Meridian AN12 impacted terrain, engine trouble 8/8

Meridian AN12 near Kavala, Meridian Ltd. AN-12BK, UR-CIC, flight MEM-3032 from Nis (Serbia) to Amman (Jordan) with 8 pax on board, was enroute at FL210 over the Aegean Sea when the aircraft began to lose altitude, the crew reported engine trouble, and turned around towards land in Greece. The aircraft attempted to land in Kavala (Greece) but cut a power line and impacted ground about 17nm west of the airport (approx. N40.9582 E24.1982) in an open field near Paleochori Kavalas village and burst into flames leaving a wreckage trail of about 160 m/525 ft length. No survivors.

15/07/2022 Atlanta, USA, Frontier A20N on short final for wrong runway. Tower resolved the situation.

Frontier Airlines A320-200N, N365FR, flight F9-1498 from New Orleans, LA to Atlanta, GA, was cleared to land on Atlanta's rwy 09R but lined up with rwy 09L. The aircraft was on short final to rwy 09L descending through about 250 ft AGL about 1500 m/4900 ft before the runway threshold. Turkish Airlines B777-200 freighter, TC-LJM flight TK-6319 from Atlanta, GA to Chicago O'Hare, IL (USA), had been cleared to line up rwy 09L and was just being cleared for takeoff from rwy 09L, when tower noticed the Frontier Airbus on short final for rwy 09L and instructed the Frontier to go around advising them they were lined up with the wrong runway and cancelled the takeoff clearance for the Turkish. The Frontier went around from about 200 ft AGL, climbed to 3000 ft MSL, positioned for another approach and landed safely on rwy 09R about 15 minutes after the go around. The Turkish Airlines freighter, not yet having accelerated for takeoff, received a new takeoff clearance and departed about 2 minutes after the first takeoff clearance landing in Chicago without further incident.



Atlanta (KATL) airport runway layout

17/09/2022 near Osaka, Japan, ANA B788, loss of cabin pressure, emergency descent

ANA B787-8, JA811A NH-88 from Miyako to Tokyo Haneda with 239 pax and 9 crew, was enroute at FL430 about 180nm WSW of Osaka when the crew donned their oxygen masks, released the pax oxygen masks and initiated an emergency descent to 9,000 ft, descending through 10,000 ft about 6 min after leaving FL430, due to the loss of cabin pressure. The aircraft entered a hold and landed safely on Osaka Itami's rwy 14R about 65 min after leaving FL430.



06/11/2022 Bukaba (HTBU), Tanzania, Precision AT42 overran rwy on landing in bad wx and ended up in Lake Victoria. 19/39+4

Precision Air Service ATR-42-500, 5H-PWF, PW-494 from Dar es Salaam (HTDU) to Bukoba (HTBU) with 39 pax and 4 crew, was on approach to Bukoba's rwy 13 at about 08:53L (05:53Z). The aircraft overshot Bukoba's rwy 13 and came to a stop submerged in Lake Victoria about 100 m/330 ft past the end of the rwy with the nose of the aircraft pointing away from the shore. The aircraft is about 80% submerged. 26 survivors were taken to hospital. 24 survivors and 19 fatalities (amongst them the captain and first officer of the flight) were confirmed.

18/11/2022 Lima, Peru, LATAM Chile A20N collision with fire truck on takeoff, 0/102+6

LATAM Chile Airbus A320-200N, CC-BHB, flight LA-2213 from Lima to Juliaca (Peru) with 102 pax and 6 crew, was accelerating for takeoff from Lima's rwy 16 at about 15:11L (20:11Z) when multiple fire trucks with flashing lights and sirenes sounding crossed the runway in front of the accelerating aircraft. The crew rejected takeoff at high speed (at about 125 kts over ground) but wasn't able to avoid contact with fire truck #3 although the truck tried to turn around turning right (into direction of the aircraft). The right main gear collapsed causing the aircraft to veer right towards the right-hand runway edge coming to a stop partially off the runway about 2500 m/8300 ft down the runway. All occupants were able to evacuate the aircraft. 4 pax received serious and 36 pax received minor injuries. The aircraft sustained substantial damage. The fire truck was destroyed. Two fire fighters on board of the truck involved in the collision did not survive, a third fire fighter on the truck involved received serious injuries.

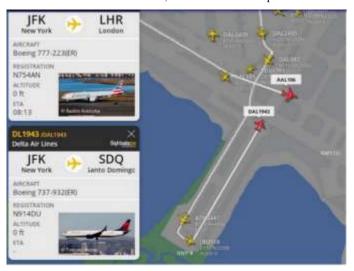


Peru's Ministry of Transport and Communication in its role as Civil Aviation Authority stated the prior communication and coordination between the offices about the fire truck exercise did not mean that the trucks had been cleared to enter the active runway. The exercise is authorized, but this does not mean that there is anyone cleared to enter the runway.

13/01/2023 JFK airport, NYC, USA, American B772, runway incursion, near collision with DL B739, 0/
American Airlines B777-200, N754AN, flight AA-106 JFK, NY (USA) to London Heathrow, EN (UK), was taxiing on twy B for departure

from rwy 04L being cleared to cross rwy 31L on twy K, the aircraft however continued straight on, joined twy J and crossed rwy 04L at twy J about 1200 m/4000 ft down rwy 04L, crossing in front of Delta B737 taking off from rwy 04L.

At that very moment a Delta Airlines Boeing 737-900, N914DU, DL-1943 JFK, NY (USA) to Santo Domingo (Dominican Republic) with 145 pax and 6 crew, was cleared for takeoff from rwy 04L and was accelerating when tower noticed the conflict and instructed DL-1943 to cancel takeoff clearance, repeating that instruction a few seconds later until the crew reported they were rejecting takeoff. The Delta crew subsequently, in the voice of their transmissions to tower and "Uch!", indicated this became quite close.



ATC Audio JFK Tower, Delta 1943 and American 106:



15/01/2023 Pokhara (VNPR), Nepal, <u>Yeti Airlines AT72, 9N-ANC lost height on final approach</u> to new airport. 68/69 1 missing.

Pokhara's new International Airport was opened on Jan 1st 2023 to replace the old domestic Airport.



Yeti Airlines AT-72

Yeti AT72 crashed on Jan 15th 2023, found, lost height on final approach, both propellers went into feather by human error.

04/02/2023 Austin, Texas, USA, FeDex B763 and Southwest B737, loss of separation on rwy resolved by go around, near miss.

Fedex Federal Express B767-300, N297FE FX-1432 from Memphis, TN to Austin, TX (KAUS) was on final for a CATIII ILS approach to Austin's rwy 18L and was cleared to land on rwy 18L, RVR was at 1400, mid point 600 and r oll out 1800 ft, tower also informed the crew that a Boeing 737 would depart prior to their arrival.

About 4 min after the 767 was cleared to land a Soutwest B737-700, N7827A WN-708 from Austin, TX (KAUS) to Cancun (MMUN),

reported holding short of rwy 18L for departure and was cleared for takeoff from rwy 18L, tower advised a heavy B767 was on a 3 mile-final. Tower queried about 30 sec later whether they were on the roll, the crew confirmed they were rolling now. Another 25 sec later someone advised "Southwest abort, the Fedex was on the go (around)". Tower acknowledged and instructed the 737 to turn right when able. However, the 737 continued takeoff, after liftoff went off the extended runway center line to the right, climbed out, subsequently tower instructed them to turn left and handed them off to departure. The 767 initiated a go around from about 150 ft AGL about 1000 ft short of the rwy threshold, climbed to 3000 ft MSL overflying the rwy, turned for a left downwind, positioned for another approach and landed on rwy 18L without further incident about 11 min after the go around.

19/02/2023 JAL331, RJTT-RJFF carrying 335 pax forced to turn back after missing destination airport's (RJFF) closing time by 10 min.

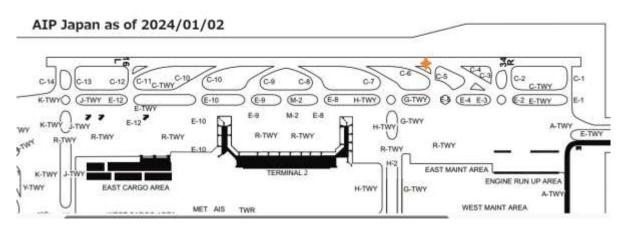
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20240102 JAL A359 at Tokyo collided with Coast Guard DH8C on rwy and burst into flames, JAL 0/379, JCG 5/6.

JAL A350-900, JA13XJ, JL516 from Sapporo to Tokyo Haneda (Japan) with 367 pax and 12 crew, landed on Haneda's rwy 34R at 1747i (0847Z) in night time conditions but collided with a Japan Coast Guard Dash 8-300, JA722A (Coast Guard code MA722) on the rwy shortly after touchdown and burst into flames. The A350 came to a stop off the righthand edge of the rwy about 1680 m/5510 ft down the rwy and was evacuated. All occupants were able to evacuate. The other aircraft carrying 6 people also burst into flames, 5 of the six occupants are confirmed dead. Both aircraft burned down. 15 pax of the A359 received injuries, the captain of the Dash 8 received serious injuries. The aircraft fires were extinguished about 8 hrs after the collision.

A350 was carrying 367 pax (incl 8 children) and 12 crew, all of them evacuated from the aircraft. The JAL516 crew had received and read back landing clearance. After the collision and coming to a stand still three emergency slides were used to evacuate the occupants of the aircraft. The cause may have been a misunderstanding of ATC instructions by the JCG flight crew.





Haneda Airport Runway Layout (Red star indicates collision point)

# **END**