
http://avherald.com/h?article=48560213

20150427112128:20150426000000

Incident: United B739 near Des Moines on Apr 26th 2015, unusual

odour on board

A United Boeing 737-900, registration N77431 performing flight UA-112 from

Chicago O'Hare,IL to Denver,CO (USA) with 187 people on board, was enroute

at FL340 about 60nm east of Des Moines,IA when the crew reported an unusual

odour on board and decided to divert to Des Moines for a safe landing on

runway 05 about 15 minutes later.

The occurrence aircraft was able to depart again after about 6 hours on

the ground and reached Denver with a delay of 6 hours.

http://avherald.com/h?article=484a7186

20150412144737:20150412000000

Incident: Lufthansa B735 near Zurich on Apr 12th 2015, odour in cockpit

A Lufthansa Boeing 737-500, registration D-ABJB performing ferry flight

LH-9921 from Geneva (Switzerland) to Frankfurt/Main (Germany) with 2 crew,

was climbing out of Geneva when the crew stopped the climb at FL240 reporting

an unusual odour in the cockpit and decided to divert to Zurich, where the

aircraft landed safely on runway 14 about 20 minutes later.

Lufthansa confirmed the crew decided to divert to Zurich due to an unknown

odour in the cockpit. The cause of the odour is being investigated.

On Apr 7th 2015 the aircraft had arrived in Geneva as flight LH-1216 maintaining

routine communication, the return flight LH-1217 was cancelled however.

The aircraft remained on the ground in Geneva until Apr 12th.

http://avherald.com/h?article=483dd805

20150328190159:20150328000000

Incident: British Airways B772 over Atlantic on Mar 28th 2015,

electrical odour on board

A British Airways Boeing 777-200, registration G-VIIU performing flight

BA-2156 (dep Mar 27th) from Antigua (Antigua) to London Gatwick, EN (UK)

with 239 people on board, was enroute at FL390 over the Atlantic Ocean when

the crew reported an electrical smell and decided to divert to Shannon (Ireland),

where the aircraft landed safely on runway 24.

The airline confirmed a minor technical fault.

A replacement Boeing 787-800 registration G-ZBJG was dispatched to Shannon

and is estimated to reach London with a delay of 10.5 hours.

http://avherald.com/h?article=483d2857

20150327232730:20150327000000

Incident: Virgin America A320 near Milwaukee on Mar 27th 2015,

unusual odour on board

A Virgin America Airbus A320-200, registration N854VA performing flight

VX-351 from Boston,MA to San Francisco,CA (USA), was enroute at FL360 about

130nm northeast of Milwaukee,WI (USA) when the crew reported an unusual

odour on board and diverted to Milwaukee for a safe landing on runway 01L

about 25 minutes later.

The aircraft remained on the ground for 2.5 hours, then departed again and

reached San Francisco with a delay of 2.5 hours.

http://avherald.com/h?article=483c5227

20150327001143:20150326000000

Incident: Vueling A320 at Barcelona on Mar 26th 2015, burning smell

A Vueling Airlines Airbus A320-200, registration EC-KDT performing flight

VY-1812 from Barcelona, SP (Spain) to Munich (Germany), was climbing out

of Barcelona's runway 25L when the crew stopped the climb at 4000 feet reporting

a burning smell on board. The aircraft returned to Barcelona for a safe

landing on runway 25R about 8 minutes after departure. Emergency services

did not need to intervene.

A replacement A320-200 registration EC-LLJ reached Munich with a delay of 2.5 hours.

A passenger reported there was noise of grinding followed by a burning odour.

The occurrence aircraft departed for a test flight about 9 hours after landing but has not yet resumed service about 17 hours after landing.

http://avherald.com/h?article=48347c8a

20150316232150:20150315000000

Incident: Tiger A320 near Adelaide on Mar 15th 2015, electrical

odour in cabin

A Tiger Airways Airbus A320-200, registration VH-VNG performing flight TT-413

from Melbourne, VI to Perth, WA (Australia) with 171 people on board, was

enroute at FL340 about 80nm southeast of Adelaide, SA (Australia) when the

crew decided to divert to Adelaide due to an electrical odour in the cabin.

The aircraft landed safely in Adelaide about 25 minutes later.

The occurrence aircraft was able to position back to Melbourne as flight

TT-9020 about 4 hours after landing.

A replacement Airbus A320-200 registration VH-VNC positioned to

Adelaide

and continued the flight the following evening as flight TT-9413, departing

Adelaide about 27 hours after landing, and reached Perth with a delay of

28:45 hours.

The airline reported the aircraft diverted as a precaution due to a strange

smell on board, the passengers were taken to hotels and taken to Perth the

following day.

http://avherald.com/h?article=481d80b0

20150215230641:20150214000000

Incident: United B753 over Pacific on Feb 14th 2015, burning odour

on board

A United Boeing 757–300, registration N74856 performing flight UA-1716 from

Honolulu, HI to Los Angeles, CA (USA) with 207 passengers and 7 crew, was

enroute at FL340 about 450nm northeast of Kahului, HI (USA) when the crew

decided to divert to Kahului due to a burning odour on board. The aircraft

turned around, descended to FL240 and later to 12,000 feet. About 60nm northeast

of Kahului the crew decided to divert to Honolulu due to weather conditions

at Kahului and landed safely back in Honolulu about 1:45 hours after the

decision to divert.

The flight was cancelled.

http://avherald.com/h?article=4813f797

20150205134336:20150202000000

Incident: Germanwings A320 near Lyon on Feb 2nd 2015, unusual odour on board

A Germanwings Airbus A320-200, registration D-AIPU performing flight 4U-2520

from Stuttgart (Germany) to Barcelona, SP (Spain) with 74 passengers

and

6 crew, was enroute at FL390 about 40nm southeast of Lyon (France) when

the crew reported an unusual odour on board and decided to divert to Lyon $\,$

for a safe landing on runway 36L about 17 minutes later. Emergency services

did not need to intervene.

The airline confirmed an unusual odour on board of the aircraft the source

of which is being investigated.

A replacement Airbus A319-100 registration D-AGWK delivered the passengers

to Barcelona as flight 4U-2521 with a delay of 6 hours, then performed the

return flight 4U-2521 reaching Stuttgart with a delay of 5:40 hours.

The occurrence aircraft positioned to Stuttgart departing Lyon as flight

4U-6905 about 23 hours after landing, but has not yet resumed service 27

hours after landing in Lyon.

On Feb 5th 2015 the airline reported that the cause of the unsual odour,

described as an electrical smell, has been determined, the Avionic Ventilation

Extract Fan in the avionics compartment below the cockpit had failed. The

aircraft resumed service on Feb 3rd after the fan had been replaced and

all needed tests had succeeded.

http://avherald.com/h?article=4810cd92

20150130175441:20150129000000

Incident: United B753 near Ontario on Jan 29th 2015, burning smell

A United Boeing 757–300, registration N75851 performing flight UA-1181 from

Los Angeles,CA to Washington Dulles,DC (USA) with 199 passengers and 7 crew,

was climbing through FL280 out of Los Angeles when the crew aborted the

climb due to a burning odour on board, turned around and diverted to Ontario,CA

(USA) for a safe landing about 16 minutes later.

A replacement Boeing 737-900 registration N37464 reached Washington with a delay of 6 hours.

http://avherald.com/h?article=480df00e

20150127013918:20150125000000

Incident: Easyjet A320 near Amsterdam on Jan 25th 2015, smoke in

cockpit

An Easyjet Airbus A320-200, registration G-EZWK performing flight U2-6238

from Berlin Schoenefeld (Germany) to Bristol, EN (UK), was enroute at FL380

about 40nm southwest of Amsterdam (Netherlands) when the crew reported smoke

in the cockpit and a strong odour in the passenger cabin and diverted to

Amsterdam for a safe landing on runway 18R about 20 minutes later. Emergency

services checked the exterior and followed the aircraft to the apron, where

the passengers disembarked normally and firefighters checked the interior

of the aircraft, no further intervention by fire brigades was needed.

A replacement Airbus A320-200 registration G-EZTY reached Bristol with a delay of 4 hours.

The occurrence aircraft is still on the ground in Amsterdam about 27 hours after landing.

http://avherald.com/h?article=480b36ae

20150123184620:20150123000000

Incident: Eastern SB20 near Aberdeen on Jan 23rd 2015, odour in cockpit

An Eastern Airways Saab 2000, registration G-CDKB performing positioning flight T3-502 from Scatsta,SC to Aberdeen,SC (UK) with 3 crew, was

descending

towards Aberdeen when the crew reported an unusual odour in the cockpit.

The aircraft continued for a safe landing in Aberdeen.

The airline confirmed the crew reported an unusual odour during the repositioning

flight, the aircraft is being examined.

http://avherald.com/h?article=4808efca

20150120212851:20150119000000

Incident: Jetblue E190 at Worcester on Jan 19th 2015, lavatory smoke
indication

A Jetblue Embraer ERJ-190, registration N229JB performing flight B6-2019

from Worcester,MA to Fort Lauderdale,FL (USA) with 77 passengers and 4 crew,

was in the initial climb out Worcester's runway 29 when the crew advised

they had an issue going and levelled off at 3000 feet, a minute later they

declared emergency reporting they had "a lav smoke". On final The aircraft

returned to Worcester, on final approach to runway 29 the crew advised the

lav smoke announciation had gone out. The aircraft landed safely on runway

29 about 8 minutes after departure.

Passengers reported just after becoming airborne an alarm started to sound

in the cabin and an odour similiar to rubber burning occurred.

The occurrence aircraft was able to position to Boston about 12.5 hours

after landing back.

The flight is currently estimated to reach Fort Lauderdale with a delay

of 1340 minutes (22:20 hours).

http://avherald.com/h?article=480d0cd6

20150125223358:20150116000000

Incident: Argentinas B737 near Buenos Aires on Jan 16th 2015, loss

An Aerolineas Argentinas Boeing 737-700, registration LV-CBG performing

flight AR-1855 from Ushuaia, TF to Buenos Aires Aeroparque, BA (Argentina),

was enroute at FL390 about 210nm south of Buenos Aires when the crew needed

to initiate an emergency descent to FL100 due to the loss of cabin pressure,

the passenger oxygen masks were released. The aircraft continued to Buenos

Aires but diverted to Buenos Aires' Ezeiza International Airport for a safe

landing about 40 minutes later.

Passengers reported a burning odour and haze in the cabin as result of the

chemical oxygen generators while the aircraft was descending towards ${\sf FL100}$.

http://avherald.com/h?article=48044ae0

20150114205349:20150114000000

Incident: Condor B763 near Toulouse on Jan 14th 2015, unidentifyable odour on board

A Condor Boeing 767-300, registration D-ABUF performing flight DE-3184 from

Frankfurt/Main (Germany) to Havana (Cuba) with 258 passengers and 9 crew,

was enroute at FL310 about 40nm west of Toulouse (France) when the crew

squawked emergency and initiated a descent to FL090 (average rate of descent

1700 fpm) and turned around to return to Frankfurt. Enroute back to Frankfurt

the aircraft climbed to FL240 and landed safely in Frankfurt about 2:15

hours after leaving FL310.

The airline reported the crew decided to return as a precaution due to an

unidentifyable odour on board. The odour was present in cockpit and cabin

while the cabin pressure remained entirely normal. The passengers were taken

to hotels and are estimated to depart again the following day.

http://avherald.com/h?article=480395b8

20150113223755:20150112000000

Incident: Jetblue E190 near Norfolk on Jan 12th 2015, odour in

cockpit

A Jetblue Embraer ERJ-190, registration N306JB performing flight B6-1534

from Tampa,FL to Hartford,CT (USA) with 93 people on board, was enroute

at FL370 about 210nm southeast of Norfolk, VA (USA) when the crew reported

an unknown odour in the cockpit and diverted to Norfolk for a safe landing

on runway 23 about 40 minutes later. Emergency services did not find any

traces of fire, heat or smoke.

The occurrence aircraft was able to continue the flight after about 6:15

hours on the ground and reached Hartford with a delay of 7:15 hours.

http://avherald.com/h?article=481964f2

20150210155506:20150102000000

Incident: Lufthansa A321 at Hamburg on Jan 2nd 2015, odour in

cockpit

A Lufthansa Airbus A321-100, registration D-AIRM performing flight LH-2 $\,$

from Frankfurt/Main to Hamburg (Germany) with 84 people on board, encountered

an odour in the cockpit prompting the crew to don their oxygen masks at

some stage during the flight. The aircraft continued for a safe landing $% \left(1\right) =\left(1\right) +\left(1\right) +\left($

in Hamburg.

The occurrence aircraft remained on the ground in Hamburg for about 53 hours.

then positioned and returned to service about 56 hours after landing.

The French BEA reported in their weekly bulletin that the occurrence was

rated a serious incident and is being investigated by Germany's BFU.

http://avherald.com/h?article=47fa5ab4

20150105222453:20150101000000

Incident: Air France B773 near Montreal on Jan 1st 2015, overheating

passenger seat

An Air France Boeing 777–300, registration F-GSQL performing flight AF-54

from Paris Charles de Gaulle (France) to Washington Dulles,DC (USA) with

269 passengers and 17 crew, was enroute at FL380 about 50nm northwest of

Montreal,QC (Canada) when the crew declared emergency reporting an overheating

passenger seat in the business class and diverted to Montreal for a safe

landing on runway 24R about 30 minutes later. Emergency services attended

the aircraft, checked the seat and did not find any trace of fire or smoke.

Passengers reported they did not notice any unusual odour or did not see smoke/haze.

The airline reported a minor technical problem.

The aircraft refueled and continued the journey to Washington arriving with a delay of 3:45 hours.

On Jan 5th 2015 the Canadian TSB reported that a member of the cabin crew

reported a burning odour from the passenger cabin, a flight crew member

investigated and found a first class seat's electronic module overheating.

Unable to stop the overheating the crew declared emergency and diverted

to Montreal. Maintenance electrically deactivated the seat, the aircraft

continued the journey without further incident.

http://avherald.com/h?article=47fb0327

20150102202600:20141229000000

Incident: Air Canada B763 over Atlantic on Dec 29th 2014, odour in cockpit

An Air Canada Boeing 767-300, registration C-GLCA performing flight AC-850

(dep Dec 28th) from Calgary, AB (Canada) to London Heathrow, EN (UK) with

213 people on board, was enroute at FL310 about 380nm northnorthwest of

Nuuk (Greenland) when the crew received a "NO LAND 3" indication followed

by the loss of the first officer's flight director and an acrid odour on

the flight deck. The crew worked the related checklists trying to locate

and isolate the source of the odour, however unsuccessful. The crew declared

PAN and decided to divert to Toronto, ON (Canada) where the aircraft landed

safely about 3:50 hours later.

The Canadian TSB reported maintenance replaced the right flight control computer.

http://avherald.com/h?article=47f49fa1

20141225171041:20141223000000

Incident: Envoy E135 near Lexington on Dec 23rd 2014, burning electrical odour on board

An Envoy Embraer ERJ-140 on behalf of American Airlines, registration N809AE

performing flight MQ-2914/AA-2914 from Lexington, KY to Chicago O'Hare, IL

(USA) with 17 passengers and 3 crew, was climbing out of Lexington when

the crew stopped the climb at FL220 due to a burning eletrical odour on

board. The aircraft returned to Lexington for a safe landing on runway 22

about 25 minutes after departure, vacated the runway and stopped on the

adjacent taxiway for an inspection by emergency services. Emergency Services

did not find any trace of fire, heat or smoke.

The flight was cancelled.

http://avherald.com/h?article=47f282b5

20141222235514:20141222000000

Incident: Air France A319 near Amsterdam on Dec 22nd 2014, unusual

odour in cockpit

An Air France Airbus A319-100, registration F-GRHV performing flight AF-1820

from Marseille (France) to Amsterdam (Netherlands) with 121 people on board,

was descending towards Amsterdam when the crew reported an unsual odour

in the cockpit. The aircraft continued for a safe landing on Amsterdam's

runway 27, emergency services did not find any trace of fire, smoke or heat.

The aircraft was able to depart again for the return flight AF-1821 about

90 minutes later.

The airline confirmed the crew noticed the smell of smoke in the cockpit.

http://avherald.com/h?article=47f881cd

20150312162602:20141218000000

Incident: British Airways A320 near London on Dec 18th 2014, fumes in cockpit and cabin

A British Airways Airbus A320-200, registration G-TTOB performing flight

BA-326 from London Heathrow, EN (UK) to Paris Charles de Gaulle (France),

was climbing out of Heathrow's runway 27R when fumes were detected in cockpit

and cabin prompting both crew to don their oxygen masks, stop the climb

at FL170 and return to Heathrow Airport for a safe landing on runway

27L

about 30 minutes after departure.

The flight was cancelled.

The French BEA reported in their weekly bulletin that the occurrence was

rated a serious incident and is being investigated by the AAIB. No injuries

are being reported.

On Mar 12th 2015 the British AAIB released their bulletin reporting that

hydraulic fluid leaking from a hydraulic actuator had been ingested by the

air conditioning system.

The aircraft was climbing through 5000 feet when the flight crew noticed

a "musty" smell in the cockpit, donned their oxygen masks and worked the

related checklists. In the meantime cabin crew reported that the odour was

noticed in the cabin as well and a couple of passengers reported being light

headed and feeling nausea. As the check lists did not permit to identify

the origin and the smell did not dissipate the crew decided to return to

London, where the aircraft landed without further incident. After vacating

the runway the smell had reduced sufficiently for the flight crew to remove

their oxygen masks while taxiing to the apron.

Maintenance identified that a yaw damper actuator had been leaking hydraulic

fluid which was ingested into the inlet of the auxiliary power unit (APII)

from where the hydraulic fluid "found its way into the air conditioning

system". The actuator was replaced and the decontamination conducted before

the aircraft returned to service without further occurrences.

http://avherald.com/h?article=47eda38f

20141216220103:20141216000000

Incident: Delta B763 near Billings on Dec 16th 2014, electrical

odour on board

A Delta Airlines Boeing 767–300, registration N177DN performing flight DL-32

(dep Dec 15th) from Seattle, WA (USA) to Paris Charles de Gaulle (France)

with 203 passengers and 10 crew, was enroute at FL330 about 170nm northnortheast

of Billings,MT (USA) when the crew decided to divert to Billings due to

an electrical odour on board. The aircraft landed safely on Billings' runway

10L about 35 minutes later, attending emergency services found no trace

of fire, smoke or heat.

After about 6 hours on the ground in Billings the aircraft continued the

flight to Detroit,MI (USA), were a crew and aircraft change was planned,

but needed to divert a second time due to electrical fumes, this time to

Minneapolis,MN (USA) for a safe landing on runway 30L, requested emergency

services to keep an eye on them while they were taxiing to the gate.

The remainder of the flight was cancelled, the passengers were rebooked onto other flights.

h++---//---h----1-| -----/h2---+--1-- 47--7-h-

http://avherald.com/h?article=47ea7eba

20141212211113:20141211000000

Incident: Lufthansa A320 near Venice on Dec 11th 2014, electrical odour on board

A Lufthansa Airbus A320-200, registration D-AIZF performing flight LH-1843

from Rome Fiumicino (Italy) to Munich (Germany), was enroute at FL340 about

100nm southsouthwest of Venice (Italy) when the crew decided to divert to

Venice after an electrical odour raising suspicion of a possible cable fire

was noticed on board of the aircraft. The aircraft landed safely in $\mbox{\it Venice}$

about 20 minutes later.

The aircraft was able to continue the flight after about 140 minutes

the ground in Venice and reached Munich with a delay of 3 hours.

http://avherald.com/h?article=47e71438

20141208152523:20141208000000

Incident: Qantas B738 near Perth on Dec 8th 2014, odour in cabin

A Qantas Boeing 737-800, registration VH-VYD performing flight QF-904 from

Perth, WA to Karratha, WA (Australia) with 86 people on board, had just reached

cruise level 310 about 60nm north of Perth when the crew decided to return

to Perth due to an unusual odour in the forward cabin. The aircraft landed

safely back on Perth's runway 21 about 35 minutes after departure and taxied

to the apron. There were no injuries.

A replacement Boeing 737-800 registration VH-VYI reached Karratha with a delay of 5:45 hours.

The airline confirmed an unusual odour in the cabin as reason for the precautionary return. The cause of the odour is under investigation.

The occurrence aircraft is still on the ground in Perth about 9 hours after landing.

http://avherald.com/h?article=47e5931d

20141206201743:20141206000000

Accident: US Airways A332 near Rome on Dec 6th 2014, fumes in cabin, 13 feel ill

A US Airways Airbus A330-200, registration N289AY performing flight US-797

(dep Dec 5th) from Tel Aviv (Israel) to Philadelphia, PA (USA) with 129 passengers

and 14 crew (4 flight crew), was enroute at FL360 about 160nm east of Rome

(Italy) when the crew decided to divert to Rome's Fiumicino Airport

declaring

a medical emergency after 11 crew and 2 passenger reported feeling ill and

showing red eyes, a number vomitted. The aircraft landed safely at Fiumicino

Airport about 30 minutes later, all crew and the two ill passengers were

taken to a hospital.

A malfunction of the aircraft's airconditioning system is being suspected

based on initial examination.

The airline reported that the aircraft made an unscheduled landing after

an odour was reported in the cabin causing nausea and eye irritations. The $\,$

two passengers feeling ill and all crew were taken to a hospital for medical

examination, 3 flight attendants needed additional hospital care, the others

were discharged after examination. All passengers were reaccomodated on other flights.

http://avherald.com/h?article=47e4e871

20141205203857:20141204000000

Incident: Delta B753 near Toledo on Dec 4th 2014, smoke in cockpit

A Delta Airlines Boeing 757–300, registration N593NW performing flight DL-312

from Detroit,MI to Fort Lauderdale,FL (USA), was climbing through 17,000

feet out of Detroit when the crew donned their oxygen masks due to smoke

on the flight deck and decided to divert to Toledo,OH (USA). The crew suspected

the smoke was coming from oil off the left hand engine (PW2043). The aircraft

landed safely on Toledo's runway 07 about 13 minutes after stopping the

climb. The aircraft turned off the runway and stopped on the adjacent taxiway

for an inspection by emergency services, then taxied to the apron.

A replacement Boeing 757-300 registration N581NW reached Fort Lauderdale with a delay of 6 hours.

The airline reported the crew diverted to Toledo due to a smokey odour in

the cockpit, the cause of which is not yet known.

http://avherald.com/h?article=47dda717

20141126211838:20141119000000

Incident: Jazz CRJ9 at Toronto on Nov 19th 2014, rejected takeoff

due to nose wheel vibrations

A Jazz Aviation Canadair CRJ-705 operating as Air Canada Express, registration

C-GNJZ performing flight QK-8902/AC-8902 from Toronto,ON (Canada) to New

York JFK,NY (USA) with 64 people on board, was accelerating for takeoff

from Toronto's runway 24R when the crew rejected takeoff at low speed (about

50 knots) due to nose wheel vibrations and the aircraft pulling to the right.

The aircraft stopped safely on the runway, the crew reported an odour and

smoke from the front of the aircraft. Emergency services responded and reported

there was no fire, however the nose gear appeared to be out of alignment.

The aircraft was towed off the runway to a gate where passengers disembarked.

A replacement CRJ-705 reached New York with a delay of 4.5 hours.

The Canadian TSB reported that the nose gear torque links had not been connected.

The upper and lower torque links as well as both nose wheel assemblies were

replaced and the torque links connected.

NAV Canada reported the runway was closed for about 45 minutes as result

of the occurrence.

http://avherald.com/h?article=47d44f9e

20141114202000:20141113000000

Incident: Lufthansa A321 near Stuttgart on Nov 13th 2014, burning

A Lufthansa Airbus A321-200, registration D-AISV performing flight LH-2505

from Manchester, EN (UK) to Munich (Germany) with 82 passengers and 7 crew,

was enroute at FL390 overhead of Frankfurt/Main Airport (Germany) when the

crew decided to divert to Stuttgart (Germany) 90nm south of their position

due to a burning odour on board of the aircraft followed by haze in cockpit

and cabin. The captain donned the oxygen mask, the aircraft landed safely

on Stuttgart's runway 25 about 19 minutes later. Emergency services did

not need to intervene.

Maintenance determined there had been a fire in the electronic compartment

at the brakes controls which extinguished by itself.

The airline confirmed the aircraft diverted to Stuttgart due to an unusual

odour on board, the passengers were bussed to Munich.

http://avherald.com/h?article=47ccc097

20141104214546:20141103000000

Incident: Virgin Australia B773 over Pacific on Nov 3rd 2014, blocked sinks

A Virgin Australia Boeing 777-300, registration VH-VPH performing flight

VA-2 from Los Angeles,CA (USA) to Sydney,NS (Australia), was enroute at

FL300 over the Pacific Ocean about 1300nm southwest of Los Angeles and about

1000nm east of Hilo,HI (USA) when the crew decided to return to Los Angeles

due to two blocked sinks. The aircraft landed safely back in Los Angeles

about 6 hours after departure.

Passengers reported a toilet was overflowing and an incredible stench developed

on board. They were sitting in crap and used face masks due to the odour,

some passengers vomitted.

The airline said, two sinks were blocked causing a fresh water system overflow,

one of the sinks was blocked by a tooth paste cap. No human waste was leaked

in the occurrence.

http://avherald.com/h?article=47cbfd77

20141103215253:20141103000000

Incident: Openskies B752 over Atlantic on Nov 3rd 2014, fumes on board

An Openskies Boeing 757-200 on behalf of British Airways, registration F-HAVI

performing flight EC-4/BA-8004 (dep Nov 2nd) from Newark,NJ (USA) to Paris

Orly (France), was enroute at FL350 about 150nm northeast of St. John's,NL

(Canada) when the crew decided to turn around due to fumes on board. The

aircraft descended to FL320 and diverted to Boston, MA for a safe landing $\,$

about 160 minutes later.

British Airways confirmed a suspected technical problem as cause for the

diversion. The passengers were rebooked onto other flights.

Passengers reported an odour on board of the aircraft.

http://avherald.com/h?article=47d45fc1

20141114222008:20141031000000

Incident: Air Canada E190 near Calgary and Vancouver on Oct 31st 2014, odour on board

An Air Canada Embraer ERJ-190, registration C-FHJT performing flight AC-207

from Calgary, AB to Vancouver, BC (Canada) with 101 people on board, was

climbing out of Calgary when an odour was observed on board of the aircraft,

which dissipated quickly however. The flight was continued. During

the descent

towards Vancouver the same odour occurred again prompting the crew to declare

PAN PAN. The aircraft landed safely on Vancouver's runway 26R about

6 minutes later.

The Canadian TSB reported maintenance could not identify any fault.

http://avherald.com/h?article=47b478e5

20141004160620:20141003000000

Incident: Lufthansa A343 over Norwegian Sea on Oct 3rd 2014, strong odour on board

A Lufthansa Airbus A340-300, registration D-AIGI performing flight LH-490 $\,$

from Frankfurt/Main (Germany) to Seattle,WA (USA), was enroute at FL340

over the Norwegian Sea north of the Faroe Islands when the crew decided

to return to Frankfurt due to a strong odour on board. The aircraft landed

safely back in Frankfurt about 2.5 hours later.

Passengers reported a strong odour on board, one passenger even mentioned smoke on board.

The flight was cancelled.

http://avherald.com/h?article=47b248bb

20141001191201:20140930000000

Incident: British Airways B772 near Sao Paulo on Sep 30th 2014,

unusual odour

A British Airways Boeing 777-200, registration G-YMMB performing flight

BA-244 from Buenos Aires, BA (Argentina) to London Heathrow, EN (UK), was

enroute at FL310 about 230nm west of Sao Paulo, SP (Brazil) when the

decided to divert to Sao Paulo due to an unusual odour on board. The

crew

turned the aircraft to the east and dumped fuel on the way to Sao Paulo,

where the aircraft landed safely on runway 27L about 35 minutes later.

The airline confirmed an odour in the cabin which is being investigated by maintenance.

The aircraft is still on the ground in Sao Paulo about 23 hours after landing.

The remainder of the flight was cancelled, the passengers were rebooked onto other flights.

http://avherald.com/h?article=47ac289b

20140923210151:20140923000000

Incident: Germanwings A320 near Munich on Sep 23rd 2014, fan woes

A Germanwings Airbus A320-200, registration D-AIQH performing flight 4U-8891

from Rome Fiumicino (Italy) to Berlin Tegel (Germany), was enroute at FL360

about 85nm south of Munich at the border Italy/Austria when the crew reported

a fan overheat indication and associated odour in cockpit and cabin. The

aircraft diverted to Munich (Germany) for a safe landing on runway 26L about

20 minutes later. Emergency services did not detect any indication of fire,

heat or smoke and followed the aircraft to the apron.

The occurrence aircraft is still on the ground in Munich about 7 hours later.

A passenger reported the captain announced they had an overheat indication

for one of the air conditioning fans and according odour in $\operatorname{cockpit}$ and

cabin in the area of the aft galley.

20140923144220:20140923000000

Incident: Southwest B735 at Austin on Sep 23rd 2014, odour in cabin

A Southwest Airlines Boeing 737-500, registration N527SW performing flight

WN-481 from Austin,TX to Dallas Love,TX (USA) with 107 passengers and 5

crew, was climbing out of Austin's runway 35R when the crew stopped the

climb at 12,000 feet reporting an unidentified strong odour in the cabin

and air vent system. The aircraft returned to Austin for a safe landing

on runway 35R about 20 minutes after departure, vacated the runway and stopped

on the adjacent taxiway. Attending emergency services identified a "hot

spot" in the wing area prompting the crew to initiate an evacuation via

slides. There were no injuries.

The runway was closed as result.

The airline reported an odour in the cabin prompted the crew to declare

emergency, a hot spot was identified in the wing area which prompted the

evacuation.

http://avherald.com/h?article=47acf074

20140924212808:20140919000000

Accident: Air Canada A321 near Winnipeg on Sep 19th 2014, bleach odour

An Air Canada Airbus A321-200, registration C-GJWD performing flight AC-1167

from Toronto, ON to Vancouver, BC (Canada) with 146 people on board, was climbing

out of Toronto, when a bleach odour was noticed in the forward cabin. The

flight was continued and was enroute at FL340 about 140nm southwest of Winnipeg,MB

(Canada) in US Airspace, when the flight crew was informed two cabin did

not feel well and were unable to continue their duties. The aircraft diverted

to Winnipeg for a safe landing about 25 minutes later.

The Canadian TSB reported that maintenance had performed maintenance

a clogged drain in the forward galley prior to departure from Toronto.

http://avherald.com/h?article=479a10f0

20140831224340:20140831000000

Incident: KLM Cityhopper F70 near Amsterdam on Aug 31st 2014, odour

on board

A KLM Cityhopper Fokker 70, registration PH-KZF performing flight WA-1539/KL-1539

from Amsterdam (Netherlands) to Durham Tees Valley, EN (UK), was

at FL250 over the North Sea about 100nm northwest of Amsterdam when

crew decided to return to Amsterdam due to a bad odour on board originating

from the air conditioning systems. The crew subsequently donned their oxygen

masks and declared PAN reporting the passengers were suffering from

odour, too. The aircraft landed safely on Amsterdam's runway 36C about 25

minutes later. After landing the crew indicated no further assistance was

needed, the aircraft taxied to the apron.

The flight was cancelled.

http://avherald.com/h?article=4799fc34

20140908125330:20140831000000

Incident: TAP A332 near Sal on Aug 31st 2014, smoke indication

A TAP Air Portugal Airbus A330-200, registration CS-TOJ performing flight

TP-16 from Recife, PE (Brazil) to Lisbon (Portugal) with 262 people

was enroute over the Atlantic Ocean near Sal (Cabo Verde) when the crew

received a smoke indication and decided to divert to Sal for a safe landing.

Attending emergency services found no trace of fire, heat or smoke.

The airline reported the passengers were taken to hotels, technicians have

been dispatched to Sal to examine the aircraft.

The occurrence aircraft was able to depart Sal after about 24 hours on the

ground and reached Lisbon with a delay of 24 hours.

On Sep 8th 2014 Portugal's GPIAA reported that the crew received a smoke

indication for the lower deck mobile crew rest area. Cabin crew reported

observing a burning odour and smoke venting from the outlets of the lower

deck crew rest area and discharged fire extinguishers into the area. After

landing all electrical power was disconnected from the aircraft and an inspection

performed which was unable to find any evidence of fire. Maintenance engineers

subsequently released the aircraft to continue the flight to Portugal under

restrictions and requirements to conduct further corrective and preventive

maintenance in Portugal. The GPIAA have not dispatched investigators

Sal but opened an investigation into the occurrence.

The occurrence aircraft resumed service after about 5 hours on the ground $\ensuremath{\mathsf{S}}$

in Lisbon on Sep 1st 2014.

http://avherald.com/h?article=4797580b

20141211153416:20140828000000

Incident: Easyjet A320 near London on Aug 28th 2014, smoke in cockpit

An Easyjet Airbus A320-200, registration G-EZWM performing flight U2-7215

from Liverpool, EN (UK) to Naples (Italy) with 157 passengers and 6 crew.

was climbing through FL340 about 50nm northwest of London's Gatwick Airport, EN

(UK) when the crew reported smoke in the cockpit and decided to divert to

Gatwick Airport for a safe landing on runway 26L about 17 minutes later.

Responding emergency services found no trace of fire, heat or smoke.

The airline reported the crew received a smoke indication which was identified false.

A replacement Airbus A320-200 registration G-EZUC reached Naples with a delay of 3 hours.

The occurrence aircraft resumed service about 6.5 hours after landing.

On Sep 10th 2014 the French BEA reported in their monthly bulletin quoting

preliminary information provided by the AAIB, that an Airbus A320 with 326

people on board (!!) diverted to London Gatwick because of smoke in the

cockpit, identifying the occurrence location and time at London Gatwick

at 06:45L (05:45Z) but stating a Portuguese aircraft, without providing

a tail number (all details matching G-EZWM except for the Portuguese aircraft).

There were no injuries. The British AAIB rated the occurrence an accident

(!) and opened an investigation.

Editorial note to BEA report (Sep 10th 2014): Given the reported 326 people

on board and the reported Portuguese A320 aircraft (no tail number provided),

though all other data match G-EZWM, The Aviation Herald discards the classification

as accident as well assuming there has been a mixup of occurrences (there

was no second inflight diversion to Gatwick in progress at that time). At

this time there is no detail reported that would suggest a classification

as accident. At the same time, the fact that the AAIB informed the BEA about

this occurrence and the occurrence is being investigated by the AAIB suggests,

that the airline's statement was "premature", and the AAIB considers the

occurrence at least as incident, possibly serious incident. The AAIB has

not yet released any information on the occurrence to the public.

On Dec 11th 2014 the British AAIB released their bulletin rating the

occurrence

a serious incident, reporting 157 passengers and 6 crew and reporting the

crew received a "AVIONICS SMOKE" warning and could see smoke emanating from

the right side of the center console inside the first officer's footwell.

The smoke ceased during the descent back to London's Gatwick Airport. A

component in a static inverter powering electrical outlet sockets in the

cockpit was found overheated.

The AAIB reported that the aircraft was climbing through FL320 when the

first officer noticed an odd odour, the captain could not smell anything

and used the surveillance camera to check the galley whether cabin crew

was cooking anything. When he pressed the interphone call button to talk

to the lead flight attendant, he noticed smoke coming from the right of

the center console near the first officer's knee. The captain told the lead

flight attendant he would call back, both pilots donned their oxygen masks.

An "AVIONICS SMOKE" indication on the ECAM together with an amber "SMOKE"

light on the "GEN 1 LINE" pushbutton and "FAULT" captions on the "BLOWER"

and "EXTRACT" buttons appeared. The captions and lights extinguished after

about a minute, the smoke however continued. The crew declared PAN, commenced

a descent and worked the "AVIONICS SMOKE" checklist. The commander handed

control of the aircraft as well as communication duties over to the first

officer while he worked the related checklists, informed cabin crew and

passengers and reprogrammed the FMGS for the return to Gatwick.

During the descent the smoke stopped, the aircraft landed without further

event on Gatwick's runway 26L. Emergency services attended to the aircraft

and escorted the aircraft to a remote stand, where passengers disembarked

normally. After engine shut down the crew removed their oxygen masks. Emergency

services did not find any hot spots.

Engineers subsequently found a static inverter showed significant

burn marks

and replaced the inverter. The inverter was sent to the manufacturer for

further examinations, the manufacturer identified a capacitor had been destroyed $% \left(1\right) =\left(1\right) \left(1\right) +\left(1\right) \left(1\right) \left(1\right) +\left(1\right) \left(1\right$

by overheating, the destruction preventing to determine the exact reason

for its failure. The AAIB stated summarizing the statement of the manufacturer:

"They consider this failure was an isolated incident but advise that they

will monitor the reliability of the static invertors."

The static inverter causing the "false" smoke indication (Photo: AAIB):

http://avherald.com/h?article=4790c79e

20140819204425:20140818000000

Accident: US Airways A332 near Charlotte on Aug 18th 2014, odour on board

A US Airways Airbus A330-200, registration N290AY performing flight US-706 $\,$

from Charlotte,NC (USA) to Frankfurt/Main (Germany), was enroute at FL370

about 320nm northeast of Charlotte when the crew decided to return to Charlotte

due to an unbearable odour on board. The aircraft landed safely back in

Charlotte about 100 minutes after departure. Emergency services searched

the aircraft but were unable to identify a source of the odour. 11 passengers

were treated at the airport, 4 needed to be taken to a hospital with injuries.

A replacement Airbus A330-200 registration N281AY reached Frankfurt with

a delay of 5.5 hours.

http://avherald.com/h?article=4790c9e7

20140819210130:20140817000000

Incident: Southwest B737 near Milwaukee on Aug 17th 2014, electrical odour in cabin

A Southwest Airlines Boeing 737-700, flight WN-663 from Orlando,FL to Milwaukee,WI

(USA) with 127 passengers and 5 crew, was descending towards Milwaukee when

the crew declared emergency reporting an electrical odour in the cabin.

The aircraft continued for a safe landing in Milwaukee. Attending emergency

services found no trace of fire, heat or smoke.

A replacement Boeing 737-700 performed the onward legs to Los Angeles,CA and Oakland,CA.

http://avherald.com/h?article=4786d9df

20140812185100:20140805000000

Incident: United B772 near Halifax on Aug 5th 2014, burning odour in aft cabin

A United Boeing 777–200, registration N780UA performing flight UA-999 from

Newark,NJ (USA) to Brussels (Belgium) with 233 people on board, was enroute

FL370 about 80nm westnorthwest of Halifax,NS (Canada) when the crew decided

to divert to Halifax due to a burning odour observed in the aft cabin. The

aircraft landed safely on Halifax's runway 23 about 18 minutes later. Fire

fighters entered the aircraft and inspected the aft galley, the passengers

subsequently disembarked normally.

Passengers reported there was odour of burning plastics near the aft galley,

presumably originating from a galley oven possibly as result of a short

circuit. Two cabin crew arrived with fire extinguishers, shut the galley

down and examined the galley. A short time later the captain announced that

a fire in the aft galley had been put out and they were diverting to Halifax.

A replacement Boeing 777-200 registration N783UA was dispatched to Halifax

and reached Brussels with a delay of 7.5 hours.

Neither Transport Canada (Transport Ministry), NAV Canada (Air Traffic Service

Provider) nor the Canadian TSB (Accident Investigation) have yet reported

the occurrence in Canada's reporting system, even though the occurrence

made global media headlines reported as an open/raging fire in the cabin

(without these media reports The Aviation Herald would not even have mentioned

the occurrence until the Canadian TSB reported the circumstances of the $\,$

occurrence).

On Aug 12th 2014 the Canadian TSB reported that the internal fan of the

oven showed signs of overheating, after the inspection the aircraft ferried

back to Washington. The crew had reported a fire in the aft galley oven,

fire extinguishers were discharged, the aircraft diverted to Halifax for

a safe overweight landing.

http://avherald.com/h?article=478247f4

20140805210717:20140731000000

Accident: Lufthansa A320 near Budapest on Jul 31st 2014, acrid smell on board

A Lufthansa Airbus A320-200, registration D-AIPK performing flight LH-1788

from Munich (Germany) to Bodrum (Turkey), was enroute at FL350 about 130nm

south of Budapest (Hungary) in Serbian Airspace when the crew reported an

unusual odour and decided to divert to Budapest. On approach to Budapest

the crew advised they expected a normal landing but declined the offer to

land on runway 13L into the wind indicating they could accept 7 knots of

tailwind on ILS approach to runway 31R (opposite to the active

runway).

The aircraft landed safely on runway 31R about 17 (!) minutes after turning

towards Budapest and leaving FL350. Two cabin crew became incapacitated

as result of the occurrence. All crew went to see the doctor after landing.

The airline confirmed an unusual odour on board caused the precautionary diversion to Budapest.

Passengers reported an acrid smell on board of the aircraft causing all

sort of irritations despite attempts to filter the air with cloth before

mouth and nose. Cabin crew were wearing protective masks.

A replacement A320-200 registration D-AIPA, that had arrived in Budapest

as regular flight LH-1678 from Munich to Budapest, resumed the flight LH-1788 $\,$

and reached Bodrum with a delay of 5:45 hours.

On Aug 5th 2014 the French BEA reported in their weekly bulletin that after

takeoff cabin crew observed smell in the aft galley, both galley ovens were

switched off, but the smell continued and filled half of the cabin in the

back of the aircraft. The crew decided to divert to Budapest, two cabin

crew became incapacitated as result of the smell. All crew members were

taken to hospitals. Hungary's KBSZ opened an investigation.

The airline reported to a German mass media (who as the only newspaper across

Germany took over that statement), that a passenger had dropped a phial

with nail cleaning fluid causing the acid smell, but did not mention, that

the very same aircraft had suffered two more similiar fume events on flights

LH-2502 from Munich (Germany) to Manchester, EN (UK) on Jul 14th 2013 and

LH-2229 from Paris Charles de Gaulle (France) to Munich on Jul 23rd 2014

(the details of these two occurrences still under investigation by The Aviation

Herald, but the actual occurrences are already fully confirmed by evidence on hand).

Scenes on board (Photo: whatiplay):

http://avherald.com/h?article=4782b795

20140801111412:20140729000000

Incident: Lufthansa A321 at Frankfurt on Jul 29th 2014, fumes in cockpit

A Lufthansa Airbus A321-200, registration D-AIRE performing flight LH-1133

(scheduled dep Jul 28th, actual dep Jul 29th) from Barcelona, SP (Spain)

to Frankfurt/Main (Germany), was decending towards Frankfurt when at about

FL100 an odour of old socks was noticed in cabin and cockpit. The crew continued

for a safe landing on Frankfurt's runway 07R about 13 minutes later. All

crew went to see the doctor after landing.

The aircraft remained on the ground for about 3 hours then resumed service.

The aircraft had been involved in a fumes event the day before on flight

LH-1132 to Barcelona, see Incident: Lufthansa A321 at Barcelona on Jul 28th

2014, fumes in cockpit, underwent maintenance over night, then departed

Barcelona with the same crew, that flew LH-1132, for the return flight.

Germany's BFU confirmed they are aware of both occurrences on LH-1132 and LH-1133.

According to information The Aviation Herald received Germany's Pilot Association

"Vereinigung Cockpit" may have a particular interest to identify the circumstances

of the occurrences because of the captain of both occurrence flights.

http://avherald.com/h?article=477f087f

20140727172645:20140726000000

Incident: Delta MD88 near Milwaukee on Jul 26th 2014, smell of smoke on board

A Delta Airlines McDonnell Douglas MD-88, registration N922DL performing

flight DL-1496 from Minneapolis, MN to New York La Guardia, NY (USA)

145 people on board, was enroute at FL330 about 50nm northwest of Milwaukee,WI

when the crew reported a smokey odour on board and decided to divert

Milwaukee. On approach the crew reported that whatever caused the

appears to have gone out by itself and continued for a safe landing on Milwaukee's

runway 25L about 20 minutes later.

A replacement MD-88 reached New York with a delay of 5 hours.

http://avherald.com/h?article=477e3765

20140726171955:20140725000000

Incident: United B772 near Salt Lake City on Jul 25th 2014,

electrical odour on board

A United Boeing 777-200, registration N206UA performing flight UA-328 from

Denver, CO to Honolulu, HI (USA) with 269 passengers and 10 crew, was enroute

at FL380 about 200nm east of Salt Lake City, UT (USA) when the crew reported

an electrical odour on board and decided to divert to Salt Lake City where

the aircraft landed safely about 30 minutes later.

The remainder of the flight was cancelled.

http://avherald.com/h?article=4778101f

20140806194140:20140714000000

Accident: US Airways A332 near Philadelphia and Gander on Jul 14th

2014, fumes on board

A US Airways Airbus A330-200, registration N287AY performing flight US-796 $\,$

from Philadelphia, PA (USA) to Tel Aviv (Israel), was climbing out of Philadelphia

when the flight crew reported an odour of burning plastic but decided to

continue the flight. The aircraft was enroute at FL370 about 90nm northwest

of Gander, NL (Canada) when the crew declared emergency reporting several

flight attendants were reporting sick. The aircraft diverted to Gander for

a safe overweight landing about 30 minutes later.

The FAA reported that during departure from Philadelphia the flight crew

reported a smell of burning plastic but decided to continue the flight.

About 1.5 hours into the flight numerous flight attendants reported feeling

dizzy due to fumes. The aircraft diverted to Gander where medical services

met the aircraft.

NAV Canada reported the crew declared emergency reporting fumes in the back

of the aircraft and flight attendants were ill due to the fumes. The aircraft

diverted to Gander but could not dump fuel and had to land overweight.

On Aug 6th 2014 the Canadian TSB reported that cabin crew reported fumes

in the aft cabin while enroute about 100nm northwest of Gander, the flight

crew declared emergency and diverted to Gander for a safe overweight landing.

One flight attendant was transported to a medical facility and released

soon after. The other flight attendants and one passenger were examined

by medical staff at the airport and released. Maintenance inspected the

aircraft and was unable to reproduce the fumes. The aircraft was ferried

back to Philadelphia without incident, was released to service and has not

encountered another fumes event so far.

http://avherald.com/h?article=4776f91e

20140717124611:20140711000000

Incident: Condor B753 at Antalya and Munich on Jul 11th 2014, odour

on board

A Condor Boeing 757-300, registration D-ABOK performing flight DE-5747 from

Antalya (Turkey) to Munich (Germany), completed the flight with a safe landing

on Munich's runway 26L. As there had been a number of fume events during

the flight the entire crew decided to go to a hospital for a medical checkup.

Germany's BFU reported that they received notification on Jul 14th (after

the weekend) about the occurrence of Jul 11th, the BFU is currently collecting

evidence and has not yet made an assessment whether to rate the occurrence

an accident, serious incident or incident.

The airline reported that cabin crew noticed an odour similiar to chlorine/cleaning

agents prior to departure. The odour re-occurred shortly before and during

landing causing minor eye irritation to cabin crew. The flight crew

not notice any odour. There were no reactions from the passengers. Procedures

established by the airline require all crew to undergo a medical checkup

in such cases of odour. The occurrence was reported to the BFU, the aircraft

underwent tests in Munich that did not identify any anomaly and returned

to service the following day. The cause of the odour was subsequently identified

in the fact, that a number of toilets had been removed from the aircraft,

received deep cleaning and were re—assembled prior to departure for the

previous flight from Stuttgart to Antalya. The cleaning agent used contains

chlorine and develops an acid smell.

Incident: American MD83 near Pensacola on Jul 3rd 2014, strong odour in cabin

An American Airlines McDonnell Douglas MD-83, registration N9627R performing

flight AA-386 from Jacksonville, FL to Dallas Ft. Worth, TX (USA) with

passengers and 5 crew, was enroute at FL300 about 50nm north of Pensacola,FL

(USA) when the crew decided to divert to Pensacola reporting a strong odour

in the cabin. The aircraft landed safely in Pensacola about 12 minutes later.

A replacement MD-82 registration N466AA reached Dallas with a delay of 3.5 hours.

http://avherald.com/h?article=4766f146

20140626201305:20140618000000

Incident: Austrian B763 near Toronto on Jun 18th 2014, white smoke in cockpit

An Austrian Airlines Boeing 767-300, registration OE-LAZ performing flight

OS-66 from Chicago O'Hare, IL (USA) to Vienna (Austria) with 195 people on

board, was enroute at FL330 about 130nm northeast of Toronto,ON (Canada)

when the crew noticed white smoke in the cockpit, which dissipated after

about 15 seconds, the odour however remained. The crew worked the related

checklists and decided to turn around and divert to Toronto. On downwind

to runway 05 the crew requested emergency services on stand by due to an

overweight landing and a necessary brakes inspection. The aircraft landed

safely on runway 05 about 35 minutes after turning around and taxied to

the apron with emergency services in trail.

The Canadian TSB reported that the crew used autobrakes 1, the brakes temperatures

did not exceed 270 degrees C. Maintenance was subsequently advised

that

a ground unit used in Chicago, that supplied pneumatic pressure to the aircraft

due to the non-availability of the APU, had broken down and possibly contaminated

the pneumatic ducting. The pneumatic ducting was cleaned, the system was

operated using engine power until the odour had disappeared, then the aircraft

was returned to service.

The remainder of the flight was cancelled, the passengers were rebooked onto other flights.

The occurrence aircraft resumed service 22 hours after landing as flight

OS-72 from Toronto to Vienna.

http://avherald.com/h?article=4761a430

20140620171215:20140618000000

Incident: Jetblue A320 near Minot on Jun 18th 2014, electrical odour
in cockpit

A Jetblue Airbus A320-200, registration N564JB performing flight B6-597

from Boston,MA to Seattle,WA (USA) with 132 people on board, was enroute

at FL340 about 90nm northeast of Minot,ND (USA) when the crew noticed an

electrical odour on the flight deck and decided to divert to Minot for a

safe landing about 23 minutes later. The crew cancelled the emergency after

landing advising the smell had dissipated.

The incident aircraft was able to continue the flight after 4:15 hours on

the ground and reached Seattle with a delay of 4.5 hours.

On Jun 20th 2014 the Canadian TSB reported that the aircraft was approximately

75nm southwest of Winnipeg, MB (Canada) when the crew detected heavy electrical

odour in the cockpit and spotted the cabin air recirculation fan circuit

breaker had tripped. The crew worked the related checklists turning off

the inflight entertainment system, declared emergency and diverted

to Minot.

Maintenance identified the left cabin air recirculation fan was faulty,

disconnected the fan and the inflight entertainment system and released

the aircraft to continue the flight under minimum equipment list requirements.

http://avherald.com/h?article=480e7b0b

20150127175116:20140609000000

Report: Virgin Australia A332 at Perth on Jun 9th 2014, fumes in cabin

A Virgin Australia Airbus A330-200, registration VH-XFB performing flight

VA-558 from Perth,WA to Sydney,NS (Australia) with an unknown number of

passengers and 15 crew, was accelerating for takeoff from Perth when cabin

crew in the rear of the cabin noticed a burning odour starting when the

engines accelerated for takeoff. Cabin crew initially dismissed the odour

as relatively common. The purser assisted in locating the source of the

odour, the fridges were turned off believing they might cause the odour,

the odour however persisted. The purser eventually identified a vent at

the aft cabin bulkhead. A number of cabin crew were negatively affected

and were unable to continue their inflight duties, the captain considered

to divert to Adelaide, SA (Australia) but decided to continue to Sydney reasoning

that the affected cabin crew were administered oxygen and recovered. The

aircraft landed in Sydney without further incident.

The captain made a log entry reporting acrid fumes at the rear aft galley after takeoff.

The ATSB released their brief final report releasing following safety message:

Fumes can originate from a wide range of sources. While some fumes

may appear

subtle and innocuous, they may be the first indication of a more serious

problem. Furthermore, the effect of fumes on the human body is dependent

on many variables, including the nature and intensity of the fumes, and

the duration of exposure. This incident serves to highlight the importance

of treating all fumes with suspicion, and implementing a cautious and conservative

response, consistent with published guidance.

The ATSB reported that maintenance subsequently found a portion of insulation

blankets attached to the rear pressure bulkhead had collapsed and came into

contact with the APU bleed air duct where the duct passes through the aft

pressure bulkhead. The investigation determined that the blankets had been

improperly installed by the previous operator of the aircraft.

The ATSB wrote: "The insulation blanket is constructed of glass wool encased

in a wrapping material. The wrapping was damaged and heat affected where

the insulation blanket was in contact with the APU bleed air duct. Damage

to the wrapping exposed the inner glass wool material, which also showed

evidence of having been affected by heat where the material was in contact

with the bleed air duct. Engineering staff determined that the insulation

blanket in contact with the bleed air duct was the likely source of the

fumes."

Damage to blanket at the lower side of the APU bleed air duct (Photo: ATSB/Virgin Australia):

http://avherald.com/h?article=4751587d

20140529180156:20140529000000

Incident: ANA B788 near Tokyo on May 29th 2014, burning odour in galley

An ANA All Nippon Airways Boeing 787-800, registration JA820A performing

flight NH-905 from Tokyo Narita (Japan) to Beijing (China) with 105 people

on board, had just reached cruise level FL340 about 20 minutes into the

flight when the crew decided to return to Tokyo's Narita Airport due to

a burning odour in the aft galley of the aircraft, the galley was powered

down and the smell dissipated. The aircraft landed safely back on Narita's

runway 16R about one hour after departure.

The airline reported a faulty galley oven was identified as source of the burning odour.

The flight was cancelled, the passengers were rebooked onto another flight.

http://avherald.com/h?article=47517c65

20140529223242:20140527000000

Incident: Air Canada E190 near Montreal on May 27th 2014, emissions of unknown nature in cabin

An Air Canada Embraer ERJ-190, registration C-FNAX performing flight AC-1177

from Montreal,QC to Calgary,AB (Canada) with 95 people on board, was enroute

at FL300 about 120nm northwest of Montreal when the crew declared emergency

reporting emissions of unknown nature in the cabin. The aircraft returned

to Montreal for a safe landing about 40 minutes later. The aircraft stopped

on the runway and was towed to the apron.

The Canadian TSB reported the maintenance team performed an inspection using

ultraviolet beams, replaced the filters, cleaned the left hand air conditioning

system and performed full power ground runs to purge any odour.

20140506221056:20140503000000

Incident: Lufthansa B744 near Halifax on May 3rd 2014, electrical

odour

A Lufthansa Boeing 747-400, registration D-ABVO performing flight IH-423

from Boston,MA (USA) to Frankfurt/Main (Germany), was enroute at FL370 about

280nm eastsoutheast of Halifax,NS (Canada) when the crew requested to return

to Boston due to an electrical odour on board. The aircraft descended to

FL360 and landed safely back in Boston about 105 minutes after turning around.

The airline reported a strong electrical odour in a galley prompted the

return to Boston. A defective coffeemaker was identified as cause of the odour.

http://avherald.com/h?article=47313257

20140417213128:20140413000000

Incident: El Al B738 at Zurich on Apr 13th 2014, burning rubber smell in cabin

An El Al Boeing 737-800, registration 4X-EKJ performing flight LY-347 from

Tel Aviv (Israel) to Zurich (Switzerland), had been sent into a holding

pattern at FL150 while on approach to Zurich, when inbound to the hold the

crew declared PAN reporting a smell of burning rubber in the cabin. The

aircraft was cleared for an immediate approach to runway 14, the crew reported

the smell was decreasing. The crew advised they would vacate the first taxiway

to the left and then stop for emergency services to check the aircraft.

The aircraft landed safely on runway 14 about 12 minutes after declaring

PAN, vacated the runway to the right and stopped on taxiway H1. Emergency

checked the aircraft, the crew reported that the odour had subsided and

everything was normal in the cabin, they would now continue taxi to the

gate but requested emergency services to follow the aircraft to the stand.

The incident aircraft was able to depart for the return flight and reached

Tel Aviv with a delay of 75 minutes.

http://avherald.com/h?article=477635ad

20150316172453:20140411000000

Incident: China Airlines B738 near Bangkok on Apr 11th 2014, burning smell, smoke and arcing in cabin

A China Airlines Boeing 737–800, registration B-18601 performing flight

CI-7916 from Yangon (Myanmar) to Taipei (Taiwan) with 155 passengers and

8 crew, was enroute at FL370 about 250nm northwest of Bangkok when the crew $\,$

noticed a burning odour near the main cabin door 1L, then observed smoke

and arcing. While cabin crew discharged fire extinguishers the flight crew

diverted the aircraft to Bangkok. The aircraft entered a hold at 6000 feet,

climbed to FL100, descended to 7000 feet again to enter another hold and

landed safely at Bangkok about 2 hours after leaving FL370.

Taiwan's Aviation Safety Council (ASC) reported the occurrence on Jul 16th

2014 stating that an investigation into the Fire/Smoke occurrence has been opened.

On Mar 16th 2015 Taiwan's ASC released their final report in Chinese concluding

the probable causes of the occurrence were:

- There were existing compression situation of forward galley 2 electric

wire and the ceiling panel, the normal operation vibration caused the wire

rubbing against the ceiling panel. The exposed conducting wire inside the

electric wire and graphite fibers inside the ceiling panel rubbing against

each other caused short circuit happened between the left side panel

and

the metal beam. The electric circuit from conducting wire to the right hand

side then to the left hand side metal beam panel, the electric circuit formed

a short circuit to ground and caused the cabin electric arcing.

There are 2 probable causes regarding to the situation of the compression

between the forward galley 2 electric wire and the ceiling panel.

+ When the aircraft was shop out 16 years ago, the forward galley 2 wire

had compressed to the ceiling panel, however, the occurrence did not occur

due to the wire wrap was the close type; 8 years ago, the wire wrap was

changed to open type when the mechanic re-installed the clamp and wire in

accordance with Engineering Order (EO) instruction, at the time the wire

had compressed to the ceiling panel directly. The vibration of normal operation

caused the electric wire to rubbing against the ceiling panel. The conducting

wire inside the electric wire and graphite fibers inside the ceiling panel

was exposed and compressed each other.

+ China Airlines did not train the mechanic regarding the positioning marking

before remove and reinstall the components when the aircraft was shop out;

consequently, the mechanic did not perform positioning marking when the

 ${\sf EO}$ was performed 8 years ago. The ${\sf EO}$ content also did not include the positioning

marking step which caused the clamp was installed onto the fore side of

the fastener mistakenly lead the wire compressed to the ceiling panel.

The ASC reported that the aircraft was enroute when the cabin crew at position

1R heard a "bang" sound and noticed a burning smell, a passenger pointed

to smoke coming from the cabin ceiling. Cabin crew 1R found a dark spot

near the door 1L and dripping material. The purser was informed, checked

the spot, felt an electrical shock when touching the panel and suspected

a hidden fire. While the flight crew initiated a diversion to Bangkok, cabin

crew disconnected all power to forward galley #2. Being unable to get behind

the panel for identifying the source of the fire, the purser requested the

axe from the captain, that is kept in the cockpit, the captain handed the

axe to the purser, the purser used the axe to create a hole in the panel,

during that process an electrical arc shot about 30cm in length came off

the ceiling. The arc ceased after a fire extinguisher was discharged into

the hole.

The dark spot at the cabin ceiling (Photo: ASC):

The chafed wires (Photo: ASC):

http://avherald.com/h?article=472bcd16

20140410220746:20140410000000

Incident: Lufthansa Cityline E195 at Dresden on Apr 10th 2014,

electrical odour on board

A Lufthansa Cityline Embraer ERJ-195, registration D-AEBE performing flight

LH-2125 from Dresden to Munich (Germany), was climbing out of Dresden's

runway 04 when the crew stopped the climb at 4000 feet due to an electrical

odour on board and returned to Dresden's runway 04 for a safe landing about

13 minutes after departure.

The flight was cancelled, the passengers were rebooked onto other flights.

http://avherald.com/h?article=4726e593

20140404171723:20140404000000

Incident: Austrian F100 near Linz on Apr 4th 2014, smelly galley

An Austrian Fokker 100, registration OE-LVI performing flight OS-183 from

Vienna (Austria) to Stuttgart (Germany) with 98 passengers and 4 crew, was

climbing through FL240 out of Vienna when the crew decided to divert to

Linz (Austria) due to an unusual odour in the galley. The aircraft landed

safely on Linz' runway 08 about 10 minutes later. The passengers disembarked normally.

The airline reported an unusual smell in the galley prompted the crew to

divert to Linz, there was no danger to the occupants of the aircraft. The $\,$

smell is probably the result of a technical defect.

The remainder of the flight was cancelled, the passengers were rebooked

onto other flights or bus services to Stuttgart or are being offered to

return to Vienna by air, train or road.

http://avherald.com/h?article=471f28a3

20140325215903:20140321000000

Incident: Westjet B737 near Winnipeg on Mar 21st 2014, smoke in cabin

A Westjet Boeing 737-700, registration C-GRWS performing flight WS-655 from

Toronto, ON to Calgary, AB (Canada) with 109 passengers and 5 crew, was enroute

at FL380 near Winnipeg, MB (Canada) when the crew reported a burning odour

and smoke in the cabin. The crew shut down the cabin utility power after

which smoke and odour subsided. The crew continued the flight to Calgary

for a safe landing.

The Canadian TSB reported a recirculation fan was reported failed.

Incident: Lufthansa Cityline E195 near Vienna on Feb 28th 2014, electrical odour on board

A Lufthansa Cityline Embraer ERJ-195, registration D-AEMB performing flight

LH-1682 from Munich (Germany) to Budapest (Hungary) with 111 passengers

and 5 crew, was enroute at FL350 about 40nm westnorthwest of Vienna (Austria)

when the crew decided to divert to Vienna due to an electrical odour on

board. The aircraft landed safely on Vienna's runway 16 about 25 minutes later.

The airline confirmed an unusual electrical odour prompted a precautionary diversion to Vienna.

http://avherald.com/h?article=47072f03

20140223230156:20140223000000

Incident: Mount Cook AT72 near Palmerston on Feb 23rd 2014, burning odour on board

A Mount Cook Airlines Avions de Transport Regional ATR-72-500 on behalf

of Air New Zealand, flight NZ-5031 from Hamilton to Wellington (New Zealand),

was enroute near Palmerston (New Zealand) when a faint burning odour on

board prompted the crew to divert to Palmerston North Airport. While descending

towards the aerodrome the odour became stronger and stronger. The aircraft

landed safely about 10 minutes after the decision to divert.

Passengers reported the crew announced a technical problem.

The remainder of the flight was cancelled, the passengers made it to Wellington by road transport.

http://avherald.com/h?article=47071bc7

20140224152513:20140222000000

Incident: TAM B773 near Las Palmas on Feb 22nd 2014, odour on board

A TAM Linhas Aereas Boeing 777-300, registration PT-MUD performing fliaht

JJ-9374 from Frankfurt/Main (Germany) to Sao Paulo Guarulhos, SP

with 234 passengers and 17 crew, was enroute at FL320 about 300nm south

of Las Palmas, CI (Spain) when the aircraft entered turbulence. Subsequently

a unidentifyable odour was noticed in the cabin and dark smoke from the

lower deck raising concerns something in the cargo bay might emit the fumes,

the crew reported hazardeous goods on board. The aircraft turned around

and diverted to Las Palmas for a safe landing at Gran Canaria Airport about

one hour after turning around. Attending emergency services found no

of fire, heat or smoke.

The airline reported fractured equipment within a lavatory was identified

as source of the bad odour that passengers had complained about. Chemical

materials transported in the cargo hold were not affected.

The aircraft reached Sao Paulo on Feb 24th 2014 around 02:00L (05:00Z) with a delay of 30 hours.

The airline detailed that a recirculation fan within a lavatory had seized.

http://avherald.com/h?article=4703db82

20140220171254:20140217000000

Incident: Etihad B773 over Indian Ocean on Feb 17th 2014, repeated arson in lavatories

An Etihad Boeing 777-300, registration A6-ETM performing flight EY-461 from

Melbourne, VI (Australia) to Abu Dhabi (United Arab Emirates), was enroute

over the Indian Ocean west of Australia when the fire detectors in a

in economy class triggered alarm. Smoke and flames were visible from a bin

in the lavatory, cabin crew quickly extinguished and contained the small

fire. About 2 hours later the fire detector of another lavatory in the economy

class triggered alarm, again cabin crew needed to extinguish a small fire

in the bin of that lavatory. The captain decided to divert the aircraft

to Jakarta (Indonesia) where the aircraft landed safely, all passengers

disembarked and were questioned by Indonesian police.

The aircraft continued the flight after about 4 hours on the ground with

all passengers aboard and reached Abu Dhabi with a delay of 4:15 hours.

however, not without three more fire incidents after which the captain ordered

cabin crew to stop all cabin service and guard the lavatories instead until

landing in Abu Dhabi.

The airline confirmed multiple disruptions on the flight prompting the diversion

to Jakarta. No arrests have been made, about a dozen passengers were detained

by UAE police after arrival in Abu Dhabi however for further interviews.

Passengers reported there were sirens and flashing red lights going on and

odour of smoke was noticed throughout the aircraft, with smoke visibly coming

from first one then another lavatory. Breakfast service was stopped while

the aircraft diverted to Jakarta. Passengers were upset about the flight

being continued without the arsonist being identified and removed from the

flight. Gossip amongst passengers indicated a female had set the lavatories alight.

On Feb 20th 2014 the airline reported that the 12 detained passengers were

all released again, as there was no conclusive evidence. There had

two fire incidents after takeoff resulting in the diversion to Jakarta.

three more fire incidents occurred while enroute from Jakarta to Abu Dhabi.

http://avherald.com/h?article=46fc629d

20140209193656:20140207000000

Incident: British Airways B744 near Dallas on Feb 7th 2014, smoke in

aft cabin

A British Airways Boeing 747-400, registration G-BNLW performing flight

BA-288 (dep Feb 6th) from Phoenix,AZ to London Heathrow,EN (UK), was enroute

at FL350 about 240nm north of Dallas Ft. Worth, TX (USA) when an electrical

odour and smoke emanated from the aft cabin. While cabin crew isolated the

fault, the flight crew diverted the aircraft to Dallas Ft. Worth for a safe

landing on runway 35C about 40 minutes later.

The aircraft was able to continue the flight after about 3 hours on the

ground and reached London with a delay of 3:10 hours.

A passenger reported there was smoke from one of the rear of the cabin.

then the cabin lights extinguished while cabin crew attempted to isolate

the fault.

http://avherald.com/h?article=46fbc42f

20140208234527:20140207000000

Incident: United B744 over Pacific on Feb 7th 2014, fumes on board

A United Boeing 747-400, registration N179UA performing flight UA-840 from

Sydney,NS (Australia) to Los Angeles,CA (USA), was enroute at FL350 about

one hour southwest of Honolulu, HI (USA), when the crew reported an electrical

smell on board and decided to divert to Honolulu. On initial approach to

Honolulu the crew mistakenly made their lengthy announcement to passengers

on the radio reporting the aircraft was fine, they had some sort of an electrical

smell about half an hour ago, and they were not going to Los Angeles

diverting to Honolulu as a precaution. Queried by ATC the crew

confirmed

they did have an electrical smell on board of the aircraft and apologized

for the mistransmission. On tower frequency the crew told tower to treat $% \left(1\right) =\left(1\right) \left(1\right) +\left(1\right) \left(1\right) \left(1\right) +\left(1\right) \left(1\right)$

the landing a precautionary rather than an emergency landing advising the

odour had not gone any stronger. The aircraft landed safely on Honolulu's

runway 08L about one hour after first reporting an electrical smell on board

and taxied to the gate without stop. The crew terminated emergency status

after vacating the runway.

The remainder of the flight was cancelled, the passengers were rebooked onto other flights.

The incident aircraft resumed service after 12 hours on the ground.

http://avherald.com/h?article=46dd3f95

20131231205826:20131227000000

Incident: AirAsia A320 at Phuket on Dec 27th 2013, bird strike

An Air Asia Airbus A320-200, registration HS-ABB performing flight FD-3167

from Phuket to Chiang Mai (Thailand) with 181 people on board, was climbing

out of Phuket when an engine (CFM56) ingested a number of small birds and

an odour of roast feathers developed on board. The crew announced they suspected

a bird strike and decided to return to Phuket for a safe landing about 30

minutes after departure.

Maintenance inspected and cleaned the engine, the aircraft was able to depart

again with about 110 minutes delay and reached Chiang Mai without further

odour but with a delay of about 105 minutes.

http://avherald.com/h?article=46da3e5a

20140408130315:20131210000000

Incident: Germanwings A319 at Cologne on Dec 10th 2013, fumes prompt flight crew to don oxygen masks

A Germanwings Airbus A319-100, registration D-AGWK performing flight 4U-825

from Milan Malpensa (Italy) to Cologne/Bonn (Germany), was on approach to

Cologne's runway 14L when fumes on board prompted the flight crew to don

their oxygen masks until after landing. The aircraft continued for a safe

landing on runway 14L. The entire crew subsequently went to the hospital for tests.

Germany's BFU confirmed the incident stating the occurrence was rated a

serious incident. An investigation has been opened.

The airline stated the occurrence flight 4U-825 was reported to the relevant

authorities in time and promptly after the pilots donned their oxygen masks

on approach to Cologne due to fumes in the cockpit.

The aircraft remained on the ground for about 48 hours and resumed service

on Dec 12th 2013.

On Apr 8th 2014 the BFU reported in their monthly bulletin (released two

months past schedule) that the aircraft was on approach descending through

5500 feet when an odour of burning oil was noticed in cockpit causing irritation

of respiratory tracts of all 3 pilots in the cockpit. All three donned their

oxygen masks, queried the cabin where a similiar odour was reported. The

captain assumed control and continued for a safe landing. All three pilots

and one flight attendant went for a medical examination, which was without

findings according to feedback by the crew members receiving their test results.

D-AGWK has been involved in two similiar occurrences in the past: Accident:

Germanwings A319 at Dublin on May 27th 2008, pressurization problems and

Accident: Germanwings A319 near Cologne on Dec 19th 2010, smoke in cockpit,

both pilots nearly incapacitated. The investigations by the Irish AAIU and

German BFU following the events in Dublin 2008 and the event in Cologne

2010 could not determine the causes of the events on board of D-AGWK.

http://avherald.com/h?article=46c89814

20131205224830:20131128000000

Incident: Regional 1 DH8A near Fort Mackay on Nov 28th 2013, burning
odour and bleed air "disco"

A Regional 1 Airlines de Havilland Dash 8-100, registration C-FRIB performing

flight TSH-441 from Fort Mackay Albian, AB to Edmonton, AB (Canada) with 38

people on board, was climbing through 15,000 feet out of Fort Mackay's Albion

Airport when the crew noticed a vague burning odour on board, which was

shortly followed by the #2 bleed air hot indication cycling on and off.

The crew worked the associated checklist, turned bleed air system #2 off

and requested FL200 instead of FL240. After the aircraft levelled off at

FL200 the #1 bleed air hot started to illuminate and extinguish repeatedly.

Again the associated checklist was performed resulting in the shutdown of

the #1 bleed air system. The crew declared emergency reporting smoke in

the cockpit and initiated a descent to 8000 feet due to the loss of pressurization.

The aircraft landed safely on Edmonton's runway 20 about 75 minutes after

departure.

The Canadian TSB reported that the crew initiated a "moderate descent" to

8000 feet due to the loss of pressurization. It was suspected that de-icing

fluid in the engine intakes was the source of the odour. The bleed systems

are being investigated by maintenance.

http://avherald.com/h?article=46c05c11

20131125221948:20131125000000

Incident: THY B773 at Istanbul on Nov 25th 2013, bird strike

A THY Turkish Airlines Boeing 777-300, registration VT-JEM performing flight

TK-1979 from Istanbul (Turkey) to London Heathrow, EN (UK), was climbing

out of Istanbul's runway 17R when the crew radioed ATC they would stop the

climb at FL110 due to a technical problem. The aircraft entered a hold for

about 5 minutes, then the crew advised they had problems with one of

engines (GE90) and a strong burning smell on board and would need to

to Istanbul. The aircraft landed safely on runway 17L about 30 minutes after departure.

The passengers reported they smelled strong odour of burning meat immediately

after departure, they were told after landing that the smell originated

from one of the engines, that developed problems and vibrations.

The airline reported the engine trouble was the result of a bird strike.

The aircraft has been wet leased from Indish Operator Jet Airways.

http://avherald.com/h?article=46b6f7ce

20131113221855:20131113000000

Incident: Endeavor CRJ9 at New York on Nov 13th 2013, burning odour in cabin

An Endeavor Air Canadair CRJ-900 on behalf of Delta Airlines, registration

N917XJ performing flight 9E-2921/DL-2921 from New York JFK,NY to Minneapolis, MN

(USA) with 69 people on board, was on a Canarsie climb through 10,000 feet

out of JFK when the crew reported a burning odour on board, donned

their

oxygen masks and advised they needed to return. The aircraft descended to

4000 feet and positioned for an approach to runway 31R. The aircraft landed

safely on runway 31R, vacated the runway and stopped. Passengers disembarked

normally and were bussed to the terminal.

http://avherald.com/h?article=46b46c33

20131110183625:20131109000000

Incident: SAS B738 near Brussels on Nov 9th 2013, electrical smell from aft galley

A SAS Scandinavian Airlines Boeing 737-800, registration LN-RRF performing

flight SK-7320 from Las Palmas,CI (Spain) to Trondheim (Norway) with 164

passengers, was enroute at FL380 about 50nm west of Brussels (Belgium) when

the crew reported an electrical odour from the aft galley and decided to

divert to Brussels. The aircraft landed safely on runway 25R about 21 minutes

after leaving FL380.

A replacement Boeing 737-800 registration LN-RPM departed Brussels the following morning and reached Trondheim with a delay of 14 hours.

http://avherald.com/h?article=46b36b7c

20150112134911:20131108000000

Incident: Ryanair B738 near Seville on Nov 8th 2013, white smoke on board

A Ryanair Boeing 737-800, registration EI-DPF performing flight FR-2355

from Tangier (Morocco) to Dusseldorf Niederrhein (Germany) with 175 passengers

and 6 crew, was climbing out of Tangier when the crew stopped the climb

at FL110 and decided to divert to Seville, SP (Spain) after a

passenger reported

fumes on board. The aircraft landed safely on Seville's runway 27 about

17 minutes later.

Maintenance determined an air conditioning fault causing a pipe to blow

dust and/or debris into the cabin.

The airline reported a passenger reported fumes in the cabin, the crew alerted

the fire services in Seville, who were on standby for the arrival of the

aircraft, that landed normally. The passengers were taken to a replacement

aircraft which continued towards Dusseldorf's Niederrhein (Weeze) Airport.

Engineers inspected the aircraft and found a fault in the air conditioning

system, the relevant safety agencies in Spain and Ireland have been advised.

A number of Spanish media reported a cabin fire and smoke in the cabin,

the aircraft diverted to Seville, vacated the runway and taxied to the terminal,

others reported the crew reported smoke in the cabin.

On Nov 14th 2013 Spain's CIAIAC reported that cabin crew reported dense

white smoke with no odour while climbing through 8000 feet out of Tangier.

The flight crew stopped the climb and diverted to Seville, the aircraft

vacated the runway and stopped on the taxiways, doors were opened and passengers

disembarked normally. An investigation has been opened.

On Jan 12th 2015 Spain's CIAIAC reported in an interim statement, that the $\,$

examination of the aircraft revealed three air conditioning ducts in the

area where the smoke originated out of position. The investigation focusses

on why the ducts were in that condition and on analyzing the crew's handling

of the emergency. The draft reported is being written.

A replacement Boeing 737-800 registration EI-DYI departed Seville about

4.5 hours after landing of EI-DPF and reached Cologne/Bonn at about
03:45L

about 4 hours behind scheduled landing at Weeze Airport.

http://avherald.com/h?article=46b2d714

20131108203937:20131108000000

Incident: Lufthansa A321 near Berlin on Nov 8th 2013, burning odour

in cockpit

A Lufthansa Airbus A321-200, registration D-AISJ performing flight LH-195

from Berlin Tegel to Frankfurt/Main (Germany) with 196 passengers and 6

crew, was climbing through FL160 out of Berlin when the crew declared emergency

reporting a burning odour in the cockpit and returned to Tegel for a safe

landing on runway 08L about 14 minutes later. Attending emergency services

found no trace of fire, heat or smoke.

Lufthansa reported a safety landing because of an unidentified odour, there

was no fire or smoke involved. The passengers were rebooked onto other flights.

http://avherald.com/h?article=46a8fb9e

20131027210026:20131026000000

Incident: Germanwings A319 near Bologna on Oct 26th 2013, odour on board

A Germanwings Airbus A319–100, registration D-AKNF performing flight 4U-816

from Cologne (Germany) to Catania (Italy) with 125 passengers and 5 crew,

was enroute at FL390 about 60nm north of Bologna (Italy) when the crew declared

emergency reporting an undefined odour on board. The aircraft landed safely

on Bologna's runway 12 about 14 minutes after leaving FL390.

The airport was closed for about 40 minutes until emergency services declared

the aircraft safe, the occupants disembarked normally via stairs, and the

aircraft was towed off the runway.

A replacement Airbus A319-100 registration D-AKNN reached Catania

with a delay of 6.5 hours.

The incident aircraft returned to Cologne (Germany) as positioning flight 4U-6905 after about 4.5 hours on the ground.

http://avherald.com/h?article=46a76096

20131025210045:20131024000000

Incident: Spirit A319 at New Orleans on Oct 24th 2013, smell of smoke in cabin

A Spirit Airlines Airbus A319-100, registration N512NK performing flight

NK-365 from New Orleans,LA to Dallas Ft. Worth,TX (USA) with 129 people

on board, was climbing out of New Orleans when the crew stopped the

at 14,000 feet and returned to New Orleans reporting a smokey odour on board.

The aircraft landed safely on New Orleans' runway 20 about 18 minutes after departure.

The incident aircraft was able to depart again after about 3:15 hours on the ground and reached Dallas with a delay of 3 hours.

http://avherald.com/h?article=46a69edb

20131024233941:20131022000000

Incident: American B752 near El Paso on Oct 22nd 2013, electrical odour on board

An American Airlines Boeing 757–200, registration N688AA performing flight

AA-2420 from Los Angeles, CA to Dallas Ft. Worth, TX (USA) with 162 passengers

and 6 crew, was enroute at FL370 about 50nm northwest of El Paso,TX when

the crew declared emergency reporting an electrical smell on board and diverted

to El Paso for a safe landing on runway 22 about 18 minutes later.

Emergency

services found no trace of fire, heat or smoke.

The remainder of the flight was cancelled, the passengers were rebooked onto other flights.

The incident aircraft resumed service about 27 hours later.

http://avherald.com/h?article=46a5c3a3

20131023230252:20131021000000

Incident: Delta MD88 near Syracuse on Oct 21st 2013, coffee pot

smoking

An Delta Airlines McDonnell Douglas MD-88, registration N920DL performing

flight DL-1841 from Syracuse, NY to Atlanta, GA (USA) with 116 people on board,

was climbing through about 15,000 feet out of Syracuse when the crew declared

emergency reporting they had a fire extinguisher discharged, a coffee pot

at the right forward galley was smoking. The aircraft returned to Syracuse

for a safe landing on runway 10 about 12 minutes later, vacated the runway

and stopped for a brief examination by emergency services, then continued to the apron.

The airline confirmed a smokey odour in the galley.

The airport reported there had been a small electrical fire at the coffee

pot, which had been quickly extinguished.

A replacement MD-88 reached Atlanta with a delay of 5.5 hours.

http://avherald.com/h?article=469d410e

20131012165724:20131009000000

Incident: Frontier A320 near Indianapolis on Oct 9th 2013, hydraulic

problems and foul odour on board

A Frontier Airbus A320-200, registration N213FR performing flight F9-419

from Washington National,DC to Denver,CO (USA) with 171 people on board,

was enroute at FL340 about 160nm east of Indianapolis, IN (USA) when passengers

noticed a foul odour on board, shortly followed by the crew reporting hydraulic

problems to ATC. The aircraft diverted to Indianapolis for a safe landing

on runway 05L about 45 minutes later.

A replacement Airbus A319-100 registration N939FR reached Denver with the $\,$

majority of passengers with a delay of 5.5 hours, the other passengers spent

the night in Indianapolis and were rebooked onto other flights.

http://avherald.com/h?article=46972b4f

20131004213636:20131004000000

Incident: Germania B737 near Varna on Oct 4th 2013, electrical smell

A Germania Boeing 737-700, registration D-AGEL performing flight ST-8167

from Adana (Turkey) to Berlin Tegel (Germany) with 152 passengers, was enroute

at FL380 about 60nm northeast of Varna (Bulgaria) in Romanian Airspace when

the crew reported an electrical odour like burnt wires and decided to divert

to Varna, where the aircraft landed safely about 20 minutes later.

After an examination the aircraft was released to flight, departed Varna

after 90 minutes on the ground. According to flight plan the aircraft reached

Berlin with a delay of 12 hours after a departure from Adana about 11 hours

behind schedule.

http://avherald.com/h?article=46860223

20130913211021:20130913000000

Incident: Delta B764 near Dublin on Sep 13th 2013, odour on board

A Delta Airlines Boeing 767-400, registration N832MH performing

from Frankfurt/Main (Germany) to Detroit, MI (USA) with 246 people on board.

was enroute at FL320 about 200nm northnorthwest of Dublin (Ireland)

the crew decided to divert to Dublin reporting an odour on board. The aircraft

landed safely on Dublin's runway 28 about 30 minutes later.

The airline confirmed the aircraft diverted to Dublin as a precaution to

check out the source of an odour on board.

A replacement Boeing 767-400 registration N838MH is estimated to reach Detroit with a delay of 9 hours.

The incident aircraft is still on the ground about 11 hours after landing.

http://avherald.com/h?article=4684624b

20130911200324:20130910000000

Accident: Air Berlin A321 near Nuremberg on Sep 10th 2013, unusual odour near lavatory, 2 cabin crew treated for smoke inhalation

An Air Berlin Airbus A321-200, registration D-ABCF performing flight AB-9152

from Berlin Tegel (Germany) to Palma Mallorca, SP (Spain) with 140 passengers,

was enroute at FL350 about 50nm north of Nuremberg (Germany) when the crew

decided to divert to Nuremberg due to an unusual, unidentifyable smell near

the lavatory. The aircraft landed safely, however two cabin crew members

were taken to a hospital, where they were diagnosed with smoke inhalation.

A replacement Boeing 737-800 registration D-ABMG reached Palma Mallorca with a delay of 4 hours.

The airline reported that the aircraft diverted to Nuremberg due to

a smell

near a lavatory that could not be identified. A male and a female cabin

crew member were taken to a hospital.

The hospital reported the two cabin crew were diagnosed with smoke inhalation

and remained in intense hospital care for 24 hours.

The accident aircraft resumed service the following day.

http://avherald.com/h?article=4680579a

20130907172403:20130905000000

Incident: Sun Country B737 near Spokane on Sep 5th 2013, smell of smoke as result of passenger laser burning holes

A Sun Country Airlines Boeing 737-700, registration N716SY performing flight

SY-283 from Minneapolis,MN to Seattle,WA (USA) with 105 passengers and 5

crew, was enroute at FL400 about 60nm east of Spokane,WA (USA) when the

crew reported the smell of smoke on board and diverted to Spokane for a

safe landing on runway 03 about 15 minutes later. Attending emergency services $\,$

found no trace of fire, heat or smoke.

On Sep 7th Authorities reported the FBI arrested a passenger who had brought

along home built laser devices and had operated those devices in flight

burning a number of holes into aircraft seats around his seat resulting

in the odour that prompted the diversion to Spokane.

http://avherald.com/h?article=467fa2cd

20130905200135:20130904000000

Incident: American B738 near Dallas on Sep 4th 2013, air

conditioning system failure and odour

An American Airlines Boeing 737-800, registration N935NN performing

flight

AA-1511 from Dallas Ft. Worth, TX to Fort Lauderdale, FL (USA), climbed through

FL200 out of Dallas when the left hand air conditioning system failed and

an overheating odour appeared in the cabin. The crew stopped the climb at

FL230 and return to Dallas for a safe landing about 30 minutes later.

A replacement Boeing 737-800 registration N890NN reached Fort Lauderdale with a delay of 3 hours.

http://avherald.com/h?article=467ab70a

20130830213825:20130830000000

Incident: Lufthansa A320 near Copenhagen on Aug 30th 2013, smelly

carpet

A Lufthansa Airbus A320-200, registration D-AIZE performing flight IH-809

from Stockholm (Sweden) to Frankfurt/Main (Germany) with 129 passengers,

was enroute at FL360 about 85nm northeast of Copenhagen (Denmark) when the

crew decided to divert to Copenhagen due to a strong odour on board. The

aircraft landed safely on runway 22L about 15 minutes later.

The passengers were rebooked onto other flights.

Maintenance determined that the odour originated from a newly installed carpet.

The incident aircraft departed Copenhagen after about 2.5 hours on the ground

just with the flight crew on board and positioned to Frankfurt reaching

Frankfurt with a delay of 2:45 hours.

http://avherald.com/h?article=467737ff

20130826153727:20130825000000

Incident: Delta B752 near Montgomery on Aug 25th 2013, smokey odour
on board

A Delta Airlines Boeing 757-200, registration N6700 performing flight DL-534

from Cancun (Mexico) to Atlanta, GA (USA) with 184 passengers and 6 crew.

was enroute at FL370 about 95nm southwest of Montgomery, AL (USA) when the $\,$

crew detected a smokey odour on board and decided to divert to Montgomery

for a safe landing about 16 minutes later. Emergency services found no trace

of fire, heat or smoke.

The airline reported a malfunctioning fluorescent light was identified as source of the odour.

A replacement Boeing 757-200 reached Atlanta with a delay of 4 hours.

http://avherald.com/h?article=46700b2f

20130819163155:20130816000000

Incident: Ryanair B738 at Bremen on Aug 16th 2013, rejected takeoff

A Ryanair Boeing 737-800, registration EI-EGD performing flight FR-7602

from Bremen (Germany) to Vilnius (Lithuania) with 164 passengers, rejected

takeoff from Bremen's runway 09 at low speed after the crew noticed a strong

odour in the cockpit. The aircraft slowed safely and returned to the apron.

Germany's BFU confirmed the aircraft returned to the gate due to fumes in

the cockpit, however no investigation has been initiated.

A replacement Boeing 737-800 registration EI-DWJ reached Vilnius with a delay of 3.5 hours.

The incident aircraft resumed service after about 5.5 hours on the ground.

On Aug 19th 2013 Ryanair told The Aviation Herald: "A Ryanair flight from

Bremen to Vilnius (16 Aug) returned to stand prior to take-off as a precaution

after the crew reported the smell of fumes in the cabin. Passengers were

disembarked and switched to a replacement aircraft, which was sent from

Stansted and which departed for Vilnius with an approximate 3 hour delay.

Ryanair apologised sincerely to all 164 passengers affected by this delay.

The aircraft was inspected by Ryanair engineers and cleared to return to service."

http://avherald.com/h?article=478cc4e0

20140814151520:20130802000000

Report: Jet2 B733 at Leeds on Aug 2nd 2013, electrical failure and burning smell

A Jet2.Com Boeing 737-300, registration G-CELF performing flight LS-201

from Leeds, EN (UK) to Amsterdam (Netherlands) with 119 passengers and $5\,$

crew, was climbing out of Leeds' runway 14 with the first officer flying $% \left(1\right) =\left(1\right) \left(1\right) +\left(1\right) \left(1\right) \left(1\right) +\left(1\right) \left(1\right)$

the aircraft and the captain (56, ATPL, 8,130 hours total, 3,300 hours on

type) being pilot monitoring, when the captain heard a click sound and noticed

the autothrottle had disconnected. Subsequently the Master Caution and FLT

CONT indication activated indicating the Mach trim had failed. At the same

time the commanders electronic ADI, HSI, Altimeter, VSI, Mach and radio

altimeter failed, the #1 rectifier transformer unit circuit breaker tripped,

the flight management computer locked up with both CDUs becoming unresponsive.

The right hand instruments remained all functional except for the flight

track (from the FMS) no longer being displayed on the navigation display

and crosschecked with the stand by instruments. The crew continued to retract

gear and flaps and at safe height levelled off at 4000 feet. The captain

checked the condition of the electrical systems, detected that yaw damper,

left forward window overheat, a fuel pump and normal exhaust fan were also

inoperative. The circuit breakers for battery charger, electric hydraulic

pump B and normal exhaust fan had tripped in addition. The commander started

the APU, called the purser to the flight deck for a briefing. When the purser

returned to the cabin she noticed a distinct smell of burning but no visible

smoke or haze, her collegues at the aft galley confirmed they were smelling

the odour as well. Cabin crew alerted the commander to the smell and shut

down the galleys. The commander declared PAN, the aircraft returned to Leeds.

While on final approach to runway 14 the left hand generator tripped offline,

the captain selected the APU as source for generator bus 1, and all instruments

including the FMS were reinstated. The aircraft landed safely on runway

14 and vacated the runway, then stopped. The passengers disembarked onto

the taxiway, the aircraft was towed to the apron.

The AAIB released their bulletin stating that maintenance found the "the

red phase $\ddot{\mathrm{e}}\mathrm{A}\acute{\mathrm{1}}$ ground cable from the No 1 generator had separated from the

T191 stud on the side of the No 1 engine. This cable had separated due to

a failure of its terminal lug. Further examination of the generator harness

revealed a cracked terminal lug on the blue phase ëCí ground cable at the

T191 stud and a further cracked terminal lug at the firewall end of the

grey ground cable. The crack on the blue phase ëCí lug was only visible

after the heatshrink insulation was removed."

The left hand generator harness had not undergone maintenace since last

overhaul in 2008. During that overhaul the harness, taken from another engine,

had been moved onto G-CELF.

The lug of the fractured cable had suffered from fatigue causing cracks to develop.

The AAIB analysed: "The initial loss of the AT was recognised by the commander

who was aware that it was not a ëno goí item in the Minimum Equipment List

(MEL) and expected to continue the flight. As his instruments and other

services failed, he realised that there had been a significant electrical

failure although he did not recognise the situation as one which was covered

in the abnormal checklist. The PF continued to fly the aircraft, using his

instruments, and ATC were notified of the situation. The crew agreed that

there was no abnormal procedure for their circumstances and that they should

return to Leeds Bradford Airport. At that stage, there was no urgency to

return and the Standard Operating Procedures (SOPs) regarding briefing the

cabin crew were carried out as normal. When the SSC made the commander aware

of the burning smell, the flight crew decided to expedite their return and

transmitted a PAN call. From his training background, the commander knew

that 140 kt was a safe approach speed and would not be runway limiting.

When the No 1 generator tripped offline, the commander carried out the abnormal

procedure and the FMC became available, enabling the appropriate approach

speed to be obtained."

With respect to the failure of the lugs the AAIB analysed: "The red phase

ëAí ground cable terminal lug failed due to corrosion fatigue under the

influence of loads consistent with high frequency vibrations. The blue phase

ëCí terminal lug and the grey ground terminal lug had started to crack in

the same manner and would probably have failed eventually as well. This

engine had been subject to higher than normal vibration in the month preceding

the failures, which was probably a contributory factor."

The damaged cables (Photo: AAIB):

20130808155450:20130728000000

Accident: Air France B773 at Paris on Jul 28th 2013, evacuation

while boarding due to fumes

An Air France Boeing 777-300, registration F-GSQA performing flight AF-116

from Paris Charles de Gaulle (France) to Shanghai (China) with 315 people

on board, was boarding at the gate when the crew noticed a strong burning

odour on board and saw smoke in the cabin. The captain ordered the evacuation

of the aircraft, the first officer declared Mayday and requested emergency

vehicles. The overwing exits were opened for the evacuation, a number of

passengers evacuated that way. One passenger received a serious injury during

the evacuation and was taken to a hospital.

France's BEA reported in their weekly bulletin released Aug 8th that the

crew noticed a strong burning odour on board and noticed visible smoke in

the cabin, the captain ordered the evacuation which in part was performed

through the overwing exits. One passenger evacuating that route received $% \left(1\right) =\left(1\right) \left(1\right) \left$

an elbow fracture.

http://avherald.com/h?article=465fe5a7

20130727211442:20130725000000

Incident: Delta B752 near Detroit on Jul 25th 2013, smokey odour on board

A Delta Airlines Boeing 757-200, registration N521US performing flight DL-903

from Detroit,MI to Fort Lauderdale,FL (USA), had just reached cruise level

350 when the crew reported a smokey odour on board and decided to return

to Detroit, subsequently changing the decision to divert to Cincinnati's

Northern Kentucky Airport, KY for a safe landing on runway 18C about 35 minutes later.

The airline reported the crew diverted out of abundance of caution

after

a smokey odour was detected on board.

A replacement Boeing 757-200 reached Fort Lauderdale with a delay of 6:15 hours.

http://avherald.com/h?article=4656fea9

20130716173819:20130712000000

Accident: Alaska B738 near Chicago on Jul 12th 2013, odour in cabin

An Alaska Airlines Boeing 737-800, registration N538AS performing flight

AS-769 from Boston,MA to San Diego,CA (USA), was enroute at FL340 about

120nm east of Chicago, IL (USA) when the crew decided to divert to Chicago's

O'Hare Airport reporting an odour in the cabin. The aircraft landed safely

on O'Hare's runway 10 about 25 minutes later.

The FAA reported three flight attendants received injuries.

http://avherald.com/h?article=46485b19

20130628160625:20130627000000

Incident: Lufthansa A346 near Portland on Jun 27th 2013, electrical odour on board

A Lufthansa Airbus A340-600, registration D-AIHV performing flight LH-459

from San Francisco,CA (USA) to Munich (Germany) with 323 passengers and

16 crew, was enroute at FL340 about 240nm eastsoutheast of Portland, OR (USA)

when the crew reported an electrical odour on board and decided to divert

to Portland later changing their diversion destination to Seattle,WA (USA).

The aircraft landed safely on Seattle's runway 34R about one hour after

reporting the odour on board. Two flight attendants and a passenger were

treated by paramedics at the airport for breathing irritation.

The passengers were taken to hotels.

Lufthansa's website currently estimates the flight will arrive in Munich with a delay of 19 hours.

http://avherald.com/h?article=46463070

20130625220856:20130625000000

Incident: Lufthansa A333 near Amsterdam on Jun 25th 2013, electrical

odour on board

A Lufthansa Airbus A330-300, registration D-AIKO performing flight

from Frankfurt/Main (Germany) to Detroit, MI (USA) with 207 people on

was enroute at FL350 over the North Sea about 30nm northwest of Amsterdam

when the crew reported an electrical odour on board and decided to

to Amsterdam. The aircraft landed safely on Amsterdam's runway 27 about

30 minutes later.

The aircraft was able to continue the flight after 2:45 hours on the around

and is currently estimated to reach Detroit with a delay of 4 hours

a coffee maker, identified as source of the smell, was removed from service.

http://avherald.com/h?article=46445a3e

20130623145633:20130621000000

Incident: American B738 at Washington on Jun 21st 2013, electrical odour in cockpit

An American Airlines Boeing 737-800, registration N855NN performing fliaht

AA-1227 from Washington National, DC to Miami, FL (USA), was climbing

out

of Ronald Reagan National Airport's runway 19 when the crew stopped the

climb reporting an electrical odour on board and decided to divert to Washington's

International Airport. The crew, audibly on oxygen masks at that time, requested

emergency services on stand by while reporting on International Airport's

tower frequency, emergency services were already on stand by, and continued

for a safe landing on runway 19L about 15 minutes after departure. The aircraft

vacated the runway, flight crew still audibly on oxygen masks, emergency

services requested the engines be shut down for inspection of the aircraft.

The airline reported the aircraft diverted to Washington's International

Airport as a precaution due to an odour on board of the aircraft, the airport

was chosen due to the longer runways available.

The incident aircraft was able to continue the flight after about 4.5 hours

on the ground and reached Miami with a delay of 4.5 hours.

http://avherald.com/h?article=4642f2b1

20130621201158:20130616000000

Incident: Air Canada B772 over Pacific on Jun 16th 2013, acrid odour in lavatory

An Air Canada Boeing 777-200, registration C-FIUF performing flight AC-34

from Sydney, NS (Australia) to Vancouver, BC (Canada) with 288 people on board,

was enroute over the Pacific Ocean when an acrid odour developed in the

R2 lavatory. The crew declared PAN and diverted to Nadi (Fiji) for a safe landing.

The Canadian TSB reported that maintenance replaced a light ballast according $% \left(1\right) =\left(1\right) +\left(1$

to aircraft maintenance manual.

The aircraft reached Vancouver with a delay of 30 hours.

http://avherald.com/h?article=4625ed5c

20130516202052:20130514000000

Incident: Inuit DH8C near Baie-Comeau on May 14th 2013, smoke in

cockpit

An Air Inuit de Havilland Dash 8-300, registration C-GRAI performing flight

3H-833 from Schefferville,QC to Quebec,QC (Canada) with 18 passengers and

3 crew, was enroute at FL220 about 50nm southwest of Baie-Comeau,QC when

the crew noticed light smoke in the cockpit and a burning odour, declared

emergency and diverted to Baie-Comeau for a safe landing.

The Canadian TSB reported maintenance is examining the aircraft to determine

the source of the smoke.

http://avherald.com/h?article=4621be5e

20130511134258:20130510000000

Incident: KLM Cityhopper F70 near Amsterdam on May 10th 2013,

burning odour in cockpit

A KLM Cityhopper Fokker 70, registration PH-KZC performing flight WA-1515/KL-1515

from Amsterdam (Netherlands) to Norwich, EN (UK), was climbing out of Amsterdam's

runway 24 when the crew stopped the climb at FL080 reporting a burning rubber

odour in the cockpit and returned to Amsterdam for a safe landing on runway

18R about 17 minutes after departure and taxied to the apron.

A replacement Fokker 70 registration PH-KZP reached Norwich with a delay of one hour.

http://avherald.com/h?article=46205c17

20130509193350:20130508000000

Incident: American MD83 near Denver on May 8th 2013, burning odour

on board

An American Airlines McDonnell Douglas MD-83, registration N980TW performing

flight AA-880 from Denver, CO to Dallas Ft. Worth, TX (USA) with 107 people

on board, was climbing out of Denver when the crew stopped the climb

FL280 reporting a burning electrical odour on board and decided to divert

to Pueblo,CO (USA) for a safe landing 15 minutes later. Emergency services

did not find any trace of fire, heat or smoke.

The passengers were bussed to Colorado Springs,CO, boarded another aircraft

and reached Dallas with a delay of 8 hours.

The incident aircraft was able to position to Dallas the following day (AA-9606)

and resumed service.

http://avherald.com/h?article=461f631b

20130508134532:20130507000000

Incident: American Eagle E145 near Jacksonville on May 7th 2013,
odour of nail polish remover

An American Eagle Embraer ERJ-145, registration N902BC performing flight

MQ-3505 from Miami,FL to Cincinnati,KY (USA), was enroute at FL370 about

35nm northwest of Jacksonville, FL (USA) when the crew reported an odour

in the cockpit and decided to divert to Jacksonville for a safe landing

about 20 minutes later.

The airline reported passengers had smelled an odour similiar to a nail

polish remover prompting the crew to divert to Jacksonville as a precaution.

The aircraft was able to continue the flight after about 3.5 hours on the

ground and reached Cincinnati with a delay of 3:45 hours.

http://avherald.com/h?article=461ee35d

20130719143140:20130507000000

Incident: British Airways B763 near Amsterdam on May 7th 2013, burning odour and smoke in cockpit

A British Airways Boeing 767-300, registration G-BNWI performing flight

BA-234 from Moscow Domodedovo (Russia) to London Heathrow, EN (UK) with 63

passengers and 9 crew, was enroute at FL400 about 115nm east of Amsterdam

(Netherlands) when the crew reported a burning odour in the cockpit and

decided to divert to Amsterdam subsequently advising there was visible smoke.

Further into the approach the crew reported that the smoke was no longer

visible, they suspected an electrical problem. The aircraft continued for

a safe landing on Amsterdam's runway 36R about 32 minutes after leaving

FL400. The aircraft taxied to the gate after a quick check by emergency

services, that did not find any trace of fire or heat.

All 63 passengers were rebooked onto flight BA-433 flown by an Airbus A319-100 $\,$

and reached London with a delay of 1.5 hours.

A maintenance team is being flown in from London to further examine the aircraft.

The Dutch Onderzoeksraad (DSB) opened an investigation reporting there was

odour and smoke in the cockpit, the aircraft also encountered problems with autothrottle.

The DSB reported in their quarterly bulletin of July 2013 that the aircraft

was enroute from Moscow to London when the autothrottle disconnected

unexpectedly.

The crew worked the relevant checklists and consulted with dispatch, then

reengaged autothrottle. Seconds later a burning smell developed in the cockpit,

dissipated and reappeared. Suspecting a causal link between the autothrottle

disconnect and the burning smell the crew disengaged autothrottle, the burning

smell dissipated again. Some time later the burning smell appeared again

however, one of the cabin crew was called to the cockpit and reported feeling

unwell prompting the flight crew to don their oxygen masks and divert to

Amsterdam. The cockpit smoke and fire checklists were executed, the aircraft

landed in Amsterdam without further incident, the cabin crew member did

not require medical treatment. A preliminary investigation did not identify

any problem with autothrottle, however, a recirculation fan of the air conditioning

system was found seized due to a defective bearing causing the burning smell.

The occurrence was rated a serious incident, the investigation continues.

http://avherald.com/h?article=461f7f57

20130508170857:20130506000000

Incident: Aeroflot A320 at Minsk on May 6th 2013, odour in cabin, smoke after landing

An Aeroflot Airbus A320-200, registration VQ-BHL performing flight SU-1830

from Moscow Sheremetyevo (Russia) to Minsk (Belarus) with 70 people on board,

was about to turn onto final approach when a burning odour was noticed in

the business class cabin. The aircraft continued for a safe landing.

Rosaviatsia reported that after landing smoke became visible in the cabin.

but did not report further details.

The incident aircraft remained on the ground for about 14 hours, then resumed service and performed the return flight SU-1831.

http://avherald.com/h?article=46179673

20130428190231:20130427000000

Incident: Luxair B737 near Luxembourg on Apr 27th 2013, returned

twice because of burning odour in cabin

A Luxair Boeing 737-700, registration LX-LGS performing flight LG-263 from

Luxembourg (Luxembourg) to Bastia (France) with 141 passengers, was climbing

out of Luxembourg when a burning odour developed in the cabin prompting

the crew to stop the climb at FL270 and return to Luxembourg for a safe

landing on runway 06 about 40 minutes after departure.

Following checks the aircraft departed again after about 4 hours on the

ground, however a burning odour developed again in the cabin so that the

crew stopped the climb at 6000 feet and returned to Luxembourg again for

a safe landing on runway 06 about 10 minutes after second departure.

The flight was subsequently cancelled.

Two de Havilland Dash 8-400 registrations LX-LGN and LX-LGG took the passengers

to Bastia as flights LG-265 and LG-267 and reached Bastia with a delay of about 8 hours.

http://avherald.com/h?article=461acbe3

20130502194413:20130426000000

Incident: Air Canada E190 at Calgary on Apr 26th 2013, rejected

takeoff

An Air Canada Embraer ERJ-190, registration C-FMYV performing flight AC-225

from Calgary, AB to Vancouver, BC (Canada) with 102 people on board, rejected

takeoff from Calgary's runway 28 when a strong odour and white smoke appeared

in the cockpit. The aircraft slowed safely and vacated the runway,

emergency

services responded, the smoke dissipated after the engine thrust had been

reduced to idle.

The Canadian TSB reported maintenance identified the left hand air cycle

machine as source of the odour and smoke and replaced the machine, the recirculation

fans and filters. Following engine grounds runs went without residual odour.

http://avherald.com/h?article=46179054

20130501195459:20130425000000

Incident: Lufthansa A346 near Black Tickle on Apr 25th 2013,

electrical smell in galley

A Lufthansa Airbus A340-600, registration D-AIHC performing flight LH-423

from Boston,MA (USA) to Frankfurt/Main (Germany), was enroute at FL370 about

20nm southwest of Black Tickle, NL (Canada) when the crew reported an electrical

smell in the lower galley and requested to return to Boston. The aircraft

descended to FL320. While descending towards Boston the crew reported that

the electrical smell still persisted but hadn't gotten any worse, maybe

a bit better, and advised they did not need emergency services on stand

by. The aircraft landed safely on Boston's runway 04R about 2.5 hours after

turning around.

The aircraft was able to resume the flight after about 20 hours on the ground

and reached Frankfurt with a delay of 26:15 hours.

On May 1st 2013 the Canadian TSB reported that the odour was traced to the $\,$

inflight entertainment system, the system was shut down and the odour dissipated.

The entertainment unit was removed from the aircraft after landing in Boston

and the aircraft was released to service.

http://avherald.com/h?article=46138a01

20130423181618:20130421000000

Incident: Lufthansa A320 near Stockholm on Apr 21st 2013, burning

odour on board

A Lufthansa Airbus A320-200, registration D-AIPL performing flight LH-2419 $\,$

from Stockholm (Sweden) to Munich (Germany) with 137 passengers, was climbing

out of Stockholm when the crew stopped the climb at FL230 reporting a burning

odour on board and decided to return to Stockholm's Arlanda Airport for

a safe landing on runway 26 about 30 minutes after departure. Emergency

services found no trace of fire, heat or smoke.

Following checks the aircraft was able to depart again after about 3:00

hours on the ground and reached Munich with a delay of 3:20 hours.

http://avherald.com/h?article=460d6f21

20130416124501:20130415000000

Incident: US Airways A321 near Phoenix on Apr 15th 2013, unusual odour on board

A US Airways Airbus A321-200, registration N191UW performing flight US-797 $\,$

from Philadelphia, PA to Los Angeles, CA (USA), was enroute at FL340 about

80nm north of Phoenix,AZ (USA) when the crew reported an unusual odour on

board of the aircraft and decided to divert to Phoenix for a safe landing

about 20 minutes later.

The remainder of the flight was cancelled, the passengers were rebooked onto other flights.

The cause of the odour is being investigated.

http://avherald.com/h?article=4608ce3d

20130410184748:20130410000000

Incident: China Eastern A320 near Hangzhou on Apr 10th 2013, smoke

in cabin

A China Eastern Airbus A320-200, flight MU-5211 from Hangzhou to Guangzhou

(China) with 146 passengers and 8 crew, was climbing out of Hangzhou about

10 minutes into the flight when a strong burning smell became noticeable

in the aft cabin shortly followed by visible smoke. The crew stopped the

climb and returned to Hangzhou for a safe landing about 25 minutes after

departure. Emergency services found no trace of fire or heat.

A replacement Airbus A320-200 reached Guangzhou with a delay of 5.5 hours.

Passengers reported on Weibo the tail of the aircraft was on fire.

The airline said, there was no fire. A malfunction of the air conditioning

system is suspected as cause of the odour and smoke, the examination of

the aircraft is ongoing.

http://avherald.com/h?article=46057711

20130406160907:20130405000000

Incident: Copa E190 over Caribbean Sea on Apr 5th 2013, odour on

board

A Copa Airlines Embraer ERJ-190, flight CM-103 from Port-au-Prince (Haiti)

to Panama City (Panama) with 93 passengers and 5 crew, was enroute over

the Caribbean Sea when an odour of ammonium developed in the cabin causing

breathing problems, suffocation and eye irritation to passengers. The crew

diverted the aircraft to the nearest airport in Barranquilla (Colombia)

for a safe landing, 7 passengers needed medical treatment.

Authorities quickly identified a passenger, described as a shaman

and voodoo

healer, had carried various bottles with liquids claimed to be medicine,

one of those bottles was leaking releasing the smell of ammonium. None of

the substances was prohibited however.

All passengers including the shaman continued the journey on the aircraft,

that departed Barranquilla about 75 minutes after landing and reached Panama

City with a delay of 3 hours.

Media in Panama and Colombia widely report the flight was CM-102 from Panama

City to Port au Prince landing in Barranquilla at 19:35L (00:35Z Apr 6th),

that flight however departed Panama City at 11:51L (16:51Z) and landed in

Port au Prince at 15:23L (19:23Z). CM-103 left Port au Prince at 18:56L

(22:56Z) and was estimated to reach Panama City at 20:20L (01:20Z) (the

airline's website actually states in flight status provided by an external

service that the aircraft landed in Panama City at that time).

http://avherald.com/h?article=46024767

20130402180843:20130401000000

Incident: Swiss A333 near Zurich on Apr 1st 2013, odour in cabin

A Swiss Airbus A330–300, registration HB-JHJ performing flight LX-154 from $\,$

Zurich (Switzerland) to Mumbai (India), was climbing out of Zurich's runway

16 when the crew stopped the climb at FL120 due an electrical odour developing

in the cabin. The aircraft returned to Zurich for a safe landing on runway

14 about 50 minutes after departure.

A replacement Airbus A330-300 registration HB-JHE reached Mumbai with a delay of 3.5 hours.

The airline reported one of four ventilators of the air conditioning systems had failed.

http://avherald.com/h?article=4600b3b4

20130331185737:20130330000000

Accident: Aer Lingus A320 enroute on Mar 30th 2013, smell sickens 4

passengers

An Aer Lingus Airbus A320-200, registration EI-DEC performing flight EI-765

from Tenerife Sur Reina Sofia, CI (Spain) to Dublin (Ireland) with 179 passengers

and 6 crew, was in flight when an odour developed in the cabin causing four

passengers to feel unwell. The aircraft continued to Dublin for a safe landing,

four passengers reported ill with one requiring medical attention.

The airline confirmed 4 passengers reported feeling ill as result of some

smell, one of them needed medical attention. The causes of the illnesses are unknown.

A listener on frequency reported the crew requested medical services

meet the aircraft upon arrival and requested ground staff be available to

carry out a deep cleaning of the aft toilets before dispatching the aircraft again.

http://avherald.com/h?article=45ff0005

20130329170852:20130328000000

Accident: Condor B753 enroute on Mar 28th 2013, poor ventilation of cabin

A Condor Boeing 757-300, registration D-ABOL performing flight DE-5439 from

Hurghada (Egypt) to Stuttgart (Germany) with 245 passengers and 9 crew,

was enroute when a number of passengers began to complain about headache

and nausea. The flight was continued to Stuttgart for a safe landing on $% \left(1\right) =\left(1\right) +\left(1\right) +\left($

runway 25.

Germany's BFU opened an investigation into the occurrence and dispatched investigators to Stuttgart.

The airline reported that cabin crew noticed poor ventilation of the cabin

about two hours prior to landing in Stuttgart, a few passengers began to

complain about headache and nausea, the flight crew was not affected. No

odour was noticed at any time of the flight. Following safe landing the

aircraft is being examined, first results suggest a malfunction of parts

of the air conditioning systems.

http://avherald.com/h?article=45fa1f5b

20140318140718:20130322000000

Accident: Condor B753 near Las Palmas on Mar 22nd 2013, odour on

board causes 2 flight attendants to pass out

A Condor Boeing 757-300, registration D-ABOC performing flight DE-5944 from

Hamburg (Germany) to Las Palmas, CI (Spain) with 242 passengers and 8 crew,

was descending towards Las Palmas when an odour on board caused three flights

attendants to feel unwell, the first officer donned his oxygen masks. The

aircraft continued for a safe landing.

The airline confirmed the odour on board and reported that three flight

attendants felt unwell, the first officer donned his oxygen masks on approach

to Las Palmas' Gran Canaria Airport. The other crew members and passengers

did not report feeling unwell. After landing the crew activated the APU

to determine the cause of the odour, following the activation the odour

re—intensified causing two flight attendants to become temporarily unconscious.

The flight attendants and first officer were taken to a hospital in Las

Palmas, released, and are on the way home. The aircraft had undergone a

C-Check in March 2013. Spanish and German Authorities are investigating.

The German BFU confirmed they were informed about the event as described,

Spain's CIAIAC is investigating the occurrence with the assistance of the $\ensuremath{\mathsf{BFU}}_{\:\raisebox{1pt}{\text{\circle*{1.5}}}}$

Passengers described a strong odour of oil fumes throughout the flight,

they felt unwell with head aches and dizziness.

The return flight DE-5945 was postponed to the next day, a replacement Boeing

767-300 registration D-ABUC was dispatched to Las Palmas and reached Hamburg

with a delay of 19 hours.

The occurrence aircraft resumed service on Mar 26th 2013.

On Apr 17th 2013 the Spanish CIAIAC reported that the aircraft had undergone

de-icing before departure from Hamburg. Departure and cruise had been uneventful.

during the approach at about 6000 feet the flight crew noticed a strong

smell in the cockpit that seemed to originate from the air conditioning

outlets. Immediately after the purser called the cockpit reporting that

the strong smell was perceived in the cabin, too. About 2 minutes later

the first officer indicated he felt unwell with dizziness, the captain recommended

to use the oxygen mask, the first officer donned his oxygen mask and felt

immediate improvement. The landing was continued without further incident,

the first officer removed the oxygen mask during taxi. After the passengers

had disembarked, preparations for the return flight began, company dispatch

instructed to have the engines checked for bird ingestion and verify hydraulic

and oil quantity levels, check the waste water lines and the air conditioning

particle filters, no anomalies were identified in these tests. An engine

run near the threshold of runway 03L was coordinates with tower, the aircraft

was towed to the runway, only the APU was running at that time, on board

was flight and cabin crew as well as a maintenance technician and a company

operator. Near the threshold the crew connected the APU bleed with

the left

hand air conditioning system, which right away resulted in a strong smell,

two cabin crew suffered from physical problems. The air conditioning system $% \left(1\right) =\left(1\right) \left(1\right) +\left(1\right) \left(1\right) \left(1\right) +\left(1\right) \left(1\right) \left(1\right) \left(1\right) +\left(1\right) \left(1\right) \left(1\right) \left(1\right) \left(1\right) +\left(1\right) \left(1\right) \left$

and APU bleed air was disconnected, all aircraft doors opened to ventilate

the aircraft, oxygen was provided to the two flight attendants and paramedics

called in who took the flight attendants to the hospital, where they stayed

over night. 2 CIAIAC inspectors were dispatched to Las Palmas who together

with company technicians examined the aircraft however without finding any

anomaly. An aerotracer device found traces of glycol and Pattex (adhesive)

in the cabin air. Another repeat of the tests performed by the crew near

the runway threshold did not produce any smells, all tests remained negative.

The only finding remained about 5 liters of glycol spilled in the APU compartment,

remnants of the de-icing in Hamburg, which were removed before the aircraft

returned to service.

On Mar 18th 2014 the CIAIAC released an interim statement stating: "In April

2013 the health of one of the flight attendants who had been onboard during

the flight of 22 March 2013 worsened, requiring hospitalization. The symptoms

presented were overall muscle fatigue, in particular proximal of the lower

limbs, difficulty walking, sensory disorder, trouble concentrating and general

fatigue. She was released from the hospital and continued treatment on an

out-patient basis. The symptoms persisted and her health did not show improvement, $% \left(1\right) =\left(1\right) \left(1\right$

even worsening at times to the point where she had to be hospitalized. As

of the date of this interim report, she still has not been able to return

to work. Although the tests performed on her have not been able to identify

the cause of the symptoms afflicting her, the medical report from the hospital

indicated poisoning caused by some type of neurotoxin."

The CIAIAC reported that airline technicians in the presence of two CIAIAC

inspectors exhaustively examined the aircraft at Las Palmas but did

not

find any anomaly. The tests were repeated with crew on board again with

no findings, the crew did not smell anything and suffered no physical alteration,

the aerotracers used during that test did not register anything abnormal.

Another test with all combinations of possible configurations of air conditioning

systems also did not detect any anomaly. The engines, air conditioning ducts,

hydraulic lines, APU etc. were checked, the only noticeable finding was

about 5 liters of glycol spilled into the APU compartment. The glycol was removed.

On Mar 26th 2013 the aircraft was ferried to Frankfurt, all test equipment

and the technicians were on board that flight, the aerotracer was operational

throughout the flight.

About 100 minutes into the flight the aircraft encountered light turbulence

during which intense smell filled the cabin prompting the flight crew to

don their oxygen masks. Nonetheless, the first officer as well as the purser

felt their tongues going numb and their throat being irritated. The turbulence

stopped after about 10 minutes and the smell dissipated. The crew removed

the oxygen masks, the irritations and numbness ceased.

While descending towards Frankfurt the odour returned, the pilots again

donned their oxygen masks. The purser felt her fingers going numb. The smell

and symptoms ceased when the aircraft descended through 6000 feet.

The operator requested assistance by the aircraft manufacturer who deployed

a specialist team to Frankfurt. Samples were taken during flights and analysed

in laboratory without finding any anomaly.

The CIAIAC concluded the interim factual report: "A blood sample taken from

the flight attendant was sent to a laboratory in the United States that

specializes in neurotoxin poisoning, specifically in devising methods to

identify the presence of damage to the nervous system that is

usually caused

by these substances. The analysis of the sample concluded that it exhibited

characteristics consistent with damage to the nervous system."

The CIAIAC stated the next steps of the investigation will be:

- Continue monitoring the physical condition of the two FAs who have not

been able to return to work so as to determine the cause of their ailments.

- Investigation into the analytical methods used to identify toxins.
- Investigation to determine the source of the odor.
- Joint identification and review of similar cases with the German accident investigation authority (BFU).

http://avherald.com/h?article=45f7b263

20130320170221:20130319000000

Incident: Fedex A306 at Fort Lauderdale on Mar 19th 2013, smoke in cockpit

A Fedex Federal Express Airbus A300-600, registration N676FE performing

freight flight FX-1677 from Fort Lauderdale, FL to Indianapolis, IN (USA)

with 2 crew and hazardeous goods on board (Lithium batteries), was climbing

out of Lauderdale's runway 09L when the crew reported smoke in the cockpit,

stopped the climb at FL250 and returned to Fort Lauderdale. On approach $% \left(1\right) =\left(1\right) \left(1\right) +\left(1\right) \left(1\right) \left(1\right) +\left(1\right) \left(1\right)$

the crew reported they had received a fire indication for the avionics bay

and had observed a light odour in the cockpit, the indication had extinguished

in the meantime, they were carrying lithium batteries in the cargo. The

aircraft landed safely on runway 09L about 24 minutes after departure and

stopped on the runway. Emergency services reported seeing no smoke around

the aircraft, they also did not detect any hot spots. The aircraft subsequently

taxied to the cargo apron with the emergency services in trail.

Due to the emergency arriving traffic was sent into holds around Fort Lauderdale for up to 30 minutes.

http://avherald.com/h?article=45f6c7ec

20130319143922:20130319000000

Incident: KLM A332 near Amsterdam on Mar 19th 2013, odour on board

A KLM Airbus A330-200, registration PH-AOL performing flight KL-437 from

Amsterdam (Netherlands) to Abu Dhabi (United Arab Emirates), had just reached

cruise level 350 about 150nm eastsoutheast of Amsterdam when the crew decided

to return to Amsterdam due to a strong odour on board. The aircraft landed

safely on Amsterdam's runway 18R about one hour after departure, vacated

the runway and stopped on taxiway P7 near the runway where passengers disembarked

via stairs. Measurements by emergency services did not find anything abnormal.

A replacement Airbus A330-200 registration PH-A0I is estimated to reach

Abu Dhabi with a delay of 4:15 hours.

http://avherald.com/h?article=45f64b4e

20130318233007:20130317000000

Incident: Skywest E120 near Monterey on Mar 17th 2013, haze and odour in cabin

A Skywest Embraer EMB-120 on behalf of United, registration N308SW performing

flight 00-5303/UA-5303 from Bakersfield, CA to San Francisco, CA (USA) with

 $27\ passengers$ and $3\ crew$, was enroute at FL220 about $35\,nm$ south of Monterey,CA

(USA) when the crew reported light haze and an odour in the cabin and decided

to divert to Monterey for a safe landing about 15 minutes later.

The airline reported the air conditioning system was identified as cause

of the odour. The passengers were taken to San Francisco by road.

Emergency services reported a smoke detector in a lavatory activated.

http://avherald.com/h?article=45f399a9

20130315141805:20130314000000

Incident: Lufthansa A321 near Prague on Mar 14th 2013, odour in cabin

A Lufthansa Airbus A321-100, registration D-AIRH performing flight LH-2466

from Munich (Germany) to Helsinki (Finland) with 160 passengers and 6 crew,

was enroute at FL350 about 20nm northeast of Prague (Czech Republic) when

the crew decided to return to Munich due to a strange odour in the cabin.

The aircraft landed safely back on Munich's runway 26R about 35 minutes later.

A replacement Airbus A321-200 registration D-AIDU reached Helsinki with a delay of 4 hours.

The airline confirmed a strange smell on board prompted the return to Munich, the cause of the smell has not yet been determined.

A number of passengers described the smell as electric/electronic, others

characterised the smell similiar to oil fumes. The smell was light but clearly detectable.

http://avherald.com/h?article=45f6ce1e

20130330162559:20130302000000

Incident: Lufthansa B735 at Frankfurt and Graz on Mar 2nd 2013, odour in cockpit

A Lufthansa Boeing 737-500, registration D-ABIL performing flight

LH-1260

from Frankfurt/Main (Germany) to Graz (Austria) with 58 passengers and 5

crew, was climbing out of Frankfurt's runway 18 when the crew observed a

strong smell of "old socks" in the cockpit, which dissipated a short time

later. The flight was continued to Graz. On approach to Graz the smell re-appeared

prompting the crew to don their oxygen masks. The aircraft landed safely

on runway 35C and taxied to the gate.

Medical services reported that the captain suspecting intoxication wanted

blood and urine sampling of all crew members while on the ground in Graz,

however, this would have required the crew to go to the university clinics

downtown. The captain thus decided to perform the return flight on schedule

without sampling.

The aircraft departed for flight LH-1261 on schedule and reached Frankfurt on time.

The aircraft remained on the ground in Frankfurt for 6 hours before resuming service.

Austria's VERSA (Civil Aviation Safety Investigation Authority) have opened an investigation into the incident.

On Mar 25th 2013 Lufthansa confirmed to Austrianwings, that the left hand

engine (CFM56) was replaced after landing in Frankfurt. It was determined

that anti-ice fluid had caused the odour.

On Mar 30th 2013 the NTSB reported that the odour of old socks was present

immediately after takeoff for about 3 minutes and again about 5 minutes

prior to landing again for 3 minutes. Both flight crew donned their oxygen

masks while the smell was present in the cockpit and front galley. Austria's

VERSA is investigating the occurrence, the NTSB have appointed an accredited

representative to the investigation.

http://avherald.com/h?article=45e71874

20130228122055:20130226000000

Incident: Virgin Australia B738 at Melbourne on Feb 26th 2013, odour in cabin

A Virgin Australia Boeing 737-800, registration VH-VUZ performing flight

DJ-823 from Melbourne, VI to Sydney, NS (Australia) with 129 passengers, was

climbing out of Melbourne's runway 34 when the crew stopped the climb at

5000 feet reporting an unusual odour in the cabin and decided to return

to Melbourne for a safe landing on runway 34 about 10 minutes after departure.

The flight was cancelled, the passengers were rebooked onto other flights.

http://avherald.com/h?article=45e4c708

20130225172155:20130223000000

Incident: Delta A320 at Salt Lake City on Feb 23rd 2013, haze in cabin

A Delta Airlines Airbus A320-200, registration N356NW performing flight

DL-1158 from Salt Lake City,UT to Orlando,FL (USA) with 151 people on board,

was climbing out of Salt Lake City's runway 34R with low visibility procedures

in effect when an acrid odour as well as haze developed in the cabin prompting

the crew to don their oxygen masks and stop the climb at 11,000 feet indicating

they wanted to return to Salt Lake City without mentioning the problem however.

About 4 minutes later the crew reported they had smoke in the cockpit, which

had started to dissipate at that point. The aircraft returned to Salt Lake

City for a safe landing on runway 34L (3500 feet RVR) about 20 minutes after departure.

A replacement Airbus A320-200 registration N375NC reached Orlando

with a delay of 4.5 hours.

Passenger photo in the cabin (Photo: Blake Scarbrough):

http://avherald.com/h?article=45e84591

20130301212712:20130222000000

Incident: Westjet B737 near Toronto on Feb 22nd 2013, electrical

odour in cockpit

A Westjet Boeing 737-700, registration C-GWJE performing flight WS-2600

from Toronto, ON (Canada) to Kingston (Jamaica) with 131 people on board.

was climbing out of Toronto when the crew stopped the climb at 16,000 feet

reporting an electrical burning smell in the cockpit that became noticeable

in the cabin as well. The aircraft returned to Toronto for a safe landing

on Toronto's runway 06L about 25 minutes after departure. Attending emergency

services found no trace of fire or heat.

The Canadian TSB reported that maintenance replaced the coalescer bags on

both air conditioning systems, ground run the engines with no smell detectable

after 10 minutes and returned the aircraft to service. The airline filed

a service difficulty report and is monitoring the aircraft on further flights.

http://avherald.com/h?article=45e32b82

20130223184503:20130222000000

Incident: Lufthansa A388 near Bermuda on Feb 22nd 2013, electrical odour in cabin and cockpit

A Lufthansa Airbus A380-800, registration D-AIMJ performing flight

LH-463

from Miami,FL (USA) to Frankfurt/Main (Germany), was enroute at FL380 about

220nm northwest of Bermuda (Bermuda) about 90 minutes into the flight when

the crew decided to return to Miami due to an electrical odour in cockpit

and cabin. The aircraft landed safely on Miami's runway 09 about 65 minutes

later and taxied to the apron.

The flight was postponed to the next day and is currently estimated to depart

Miami with a delay of 20 hours.

A passenger reported the odour was similiar to an overheated hair dryer.

http://avherald.com/h?article=45d658a2

20130706155532:20130206000000

Incident: LAN A343 near Madrid on Feb 6th 2013, odour of tear gas and smoke in cockpit

A LAN Airlines Airbus A340–300, registration CC–CQE performing flight LA–705 $\,$

from Madrid, SP (Spain) to Santiago (Chile), was climbing through FL250 out

of Madrid when the crew donned their oxygen masks and decided to return

to Madrid due to smoke in the cockpit. The aircraft landed safely back on

Madrid's runway 32R about 60 minutes after departure.

Passengers tweeted that they didn't know why the aircraft returned, gossip

running amongst the passengers was smoke in the cabin.

The airline reported the crew received a maintenance alarm prompting the

return to Madrid. The passengers were taken to hotels over night and are

estimated to depart the following day.

On Mar 4th 2013 the French BEA reported in their weekly bulletin that during

climb the crew noticed smoke in the cockpit, donned their oxygen masks,

declared emergency and returned to Madrid. There was no damage to the aircraft,

Spanish Authorities are investigating the serious incident.

On Jul 5th 2013 the CIAIAC reported, that the aircraft had departed runway

36L and was climbing through FL270 when the crew noticed an odour similiar

to tear gas entering the cockpit followed by smoke. The crew donned their

oxygen masks, declared emergency and requested an immediate return to Madrid's

Barajas Airport. Flight attendants confirmed the presence of smoke in the

cabin, too. With the engines at idle during the descent the crew received

a "PACK 1 REGULATOR AIR FAULT. PACK 1 IN BYPASS MODE." ECAM message and

the smoke began to dissipate. The crew notified ATC that the situation has

been brought under control and advised they were going to make an overweight

landing. The aircraft landed safely on runway 32R, emergency services checked

the landing gear, the aircraft taxied to the gate with emergency services

in trail, the passengers disembarked normally. The emergency was cancelled

56 minutes after the crew called Mayday.

http://avherald.com/h?article=45dc02a3

20130214223050:20130204000000

Incident: Westjet B737 near Vancouver on Feb 4th 2013, chicken or tyre?

A Westjet Boeing 737-700, registration C-GWBN performing flight WS-434 from

Vancouver, BC to Edmonton, AB (Canada), was climbing out of Vancouver when

the crew observed an odour in the cabin and suspected a tyre had blown on

departure. The flight was continued to Edmonton, about 180nm before Edmonton

the crew advised ATC of the suspected blown tyre and requested emergency

services on stand by. The aircraft landed safely about 30 minutes after

advising ATC, emergency services found no anomaly with the tyres.

The Canadian TSB reported a maintenance inspection revealed the left hand

engine had ingested a bird, which became source of the odour.

http://avherald.com/h?article=45d154de

20130201164701:20130131000000

Accident: Transavia B738 near Amsterdam on Jan 31st 2013, pungent

odour

A Transavia Boeing 737–800, registration PH-HSG performing flight HV-6146

from Alicante, SP (Spain) to Amsterdam (Netherland), was on approach to Amsterdam

when a pungent odour occurred on board of the aircraft. The crew maintained

routine communication and continued for a safe landing on Amsterdam's runway

27. 6 people were taken to a hospital.

Dutch Military Police reported that after landing 4 passengers and 2 cabin

crew reported feeling unwell and were taken to a hospital, where all could

be released after receiving medical treatment.

The airline confirmed a pungent odour on board, the cause of which is still

unknown and under investigation.

http://avherald.com/h?article=45cc536c

20130128175136:20130126000000

Incident: Lufthansa B744 near Munich on Jan 26th 2013, wild west oven

A Lufthansa Boeing 747-400, registration D-ABVS performing flight LH-756

from Frankfurt/Main (Germany) to Mumbai (India), was enroute at FL350 about

35nm southeast of Linz (Austria) when the crew decided to divert to Munich

(Germany) due to a galley oven emitting smoke. The aircraft descended towards

Munich when the crew stopped the descent at FL140 and climbed again to return

to Frankfurt, climbing through FL210 the crew declared emergency reporting

smell of smoke in the cockpit and diverted to Munich for a safe landing

on runway 08R about 10 minutes after stopping the climb at FL220 and about

45 minutes after the first decision to divert. Emergency services needed

to cool the left main gear brakes.

The smoke signalling oven was replaced and the aircraft departed again after

about 130 minutes on the ground. The aircraft is currently estimated to

reach Mumbai with a delay of 4 hours.

The airline reported a blocked fan in the convection oven was identified

as source of an electrical odour.

http://avherald.com/h?article=45c919e0

20130122213336:20130121000000

Incident: Jazz DH8A near Toronto on Jan 21st 2013, smoke indication
and odour

A Jazz de Havilland Dash 8-100, registration C-GTBP performing flight QK-7791

from Toronto, ON to Sault Ste. Marie, ON (Canada) with 34 people on board,

was climbing out of Toronto when the crew received a smoke indication followed

by an odour in cockpit and cabin. The crew stopped the climb at 14,000 feet,

actioned the relevant checklists closing the bleed air valves and shutting

the recirculation fans down and returned to Toronto. During the descent

the smoke indication ceased. The aircraft landed safely on Toronto's runway

15L about 15 minutes later.

The Canadian TSB reported maintenance is still investigating to identify

the source of the odour.

http://avherald.com/h?article=45c377c5

20140925220555:20130116000000

Accident: ANA B788 near Takamatsu on Jan 16th 2013, battery problem and burning smell on board (including JAL Boston, Ethiopian London and JAL Tokyo events)

An ANA All Nippon Airways Boeing 787-800, registration JA804A performing

flight NH-692 from Ube to Tokyo Haneda (Japan) with 129 passengers and 8

crew, was climbing through FL330 out of Ube about 35nm west of Takamatsu

(Japan) when the crew received indications of battery problems, at the same

time a burning smell developed on board. The crew decided to divert to Takamatsu

where the aircraft landed about 14 minutes later. The aircraft vacated the

runway, stopped past the hold short line and was evacuated via slides. One

passenger received a serious, two passengers minor injuries during the evacuation.

All Nippon Airways and Japan Airlines have grounded their Dreamliners as

result of the recent inflight incidents, see Incident: United B788 near

New Orleans on Dec 4th 2012, electrical problems causing concerns of electrical

heat on board, Incident: Qatar B788 near Doha on Dec 8th 2012, generator

failure as well as an APU battery fire that occurred on board of Boeing

787-800 at Boston, MA (USA) on Jan 7th 2013.

The airline reported the crew received a fault indication within the battery

system followed by a smoke detector indication inside one of the electrical

compartments, there was no smoke visible in cockpit or cabin. The battery,

same type as the one involved in the ground incident in Boston on Jan 7th

2013, was found discoloured and leaking, the battery obviously had developed

high temperatures.

Japan's Tranportation Safety Board JTSB opened an investigation and dispatched

three investigators on site. The NTSB dispatched an accredited representative

to Japan to join the investigation.

The JTSB reported on Jan 17th 2013, that the crew received indication of

a battery malfunction while climbing through FL300, in addition an odour

occurred on board. The crew diverted to Takamatsu as a result, the aircraft

was evacuated via slides after landing. The occurrence was rated a serious

incident.

On Jan 23rd 2013 the JTSB released a preliminary report in Japanese reporting

that a passenger received a sprained wrist and two other passengers minor

injuries in the evacuation. The aircraft had been climbing through FL320

out of Ube when the crew received indication of failure of the battery and

an odour appeared in the cockpit. Due to the odour the crew decided to divert

to Takamatsu, where the crew landed on runway 26, vacated the runway onto

taxiway T4 and initiated an emergency evacuation. Attending emergency services

found no trace of fire, however traces of smoke released from the electric

compartment were found on the outside of the fuselage. Investigators found

the main battery, a lithium ion battery same type as the APU battery, had

buckled at the upper cover and was leaking, the inside showed hydrocarbons.

The main battery was removed from the aircraft on Jan 17th, the undamaged

APU battery was removed from the aircraft on Jan 18th, following a first

examination of the main battery on Jan 20th the battery has been dispatched

for detailed examination on Jan 22nd.

On Feb 5th 2013 the JTSB released a second progress report in Japanese reporting

that all 8 cells of the damaged battery, nominal voltage 29.6V, 75 Ah capacity

at 28.5kg/63 lbs, showed thermal damage before the thermal runaway, particularly

cells 3 and 6 are damaged. The positive electrode of cell 3 shows substantial

damage and a hole, the internal wiring has melted down.

On Feb 20th 2013 the JTSB released another progress report in Japanese reporting,

that the aircraft had no history of being hit by lightning. The positive

electrode of cell number 3 had become so hot, that the material melted,

the positive terminal of cells 1, 2, 6, 7 and 8 were damaged supposedly

because of reaching the melting point of the terminal's material aluminium.

The grounding wire of the battery container was broken most likely because

of currents flowing through the container. The flight data recorder revealed

that the battery voltage reduced from 31V to 11V within 10 seconds followed

by voltage drops of about 1V every two seconds, prior to that a measured

voltage of 32V indicated the battery was at nearly full charge. The investigation

of why the voltage drops occurred is still underway, specific attention

is given to the strobe navigation lights however, that were turned on during

the encounter. The investigation is ongoing.

On Mar 27th 2013 the JTSB released another interim report in Japanese summarizing,

that a "smoking gun" has still not been identified, the investigation so

far has not yet led to "elucidation of the underlying cause". The JTSB reported

that the puzzle about the navigation strobe lights has been solved however

(see sketch below), with both APU and main batteries showing balanced voltages

neither relay would be powered with the related switches off, however, with

the main battery's voltage dropping to 1V a current flow from the APU battery

via both relays to ground became possible, both relays activated and the

wing tip and strobe lights activated despite being switched off. The wire

connecting the battery case to ground was broken and showed evidence of

having been blown (editorial note: implicitely suggesting prior to the battery

event), however, the aircraft had no history of a lightning strike. There

is no evidence, that battery charger, bus power control unit, generator

control unit or battery diode module did not perform to specifications.

Battery cells 1-8, especially 3 and 6, showed extensive internal damage,

there is no evidence that a large current flow occurred on the output of

the battery towards the hot battery bus.

The NTSB is currently investigating the APU battery fire that occurred on

board of JAL Japan Airlines' Boeing 787-800 registration JA829J in Boston

on Jan 7th 2013 after the passengers and crew had disembarked at the gate.

The NTSB reported on Jan 20th 2013 that a first examination of the flight

data recorder of JA829J showed the nominal battery voltage of 32V has never

been exceeded. The battery, powering the APU for APU startup, has been disassembled

into its 8 cells for detailed examination and documentation, 3 of the cells

were selected for further disassembly and examination of cell internal components.

On Jan 24th 2013 the NTSB reported that examinations including CT scans

identified traces of electric short circuiting on an electrode (see photo

below) as well as signs of thermal runaway on JA829J's APU battery. There

was fire present.

On Feb 7th 2013 the NTSB reported: "After an exhaustive examination of the $\ensuremath{\mathsf{NTSB}}$

JAL lithium—ion battery, which was comprised of eight individual cells,

investigators determined that the majority of evidence from the flight data

recorder and both thermal and mechanical damage pointed to an initiating

event in a single cell. That cell showed multiple signs of short circuiting,

leading to a thermal runaway condition, which then cascaded to other cells.

Charred battery components indicated that the temperature inside the battery

case exceeded 500 degrees Fahrenheit." Mechanical impact damage as well

as external short circuiting have been ruled out as causes, deformations

and arcing were the result of a battery malfunction. The NTSB continued

that Boeing conducted a risk assessment during the certification process

which did not identify any possibility of a cell to cell propagation or

of fire, both of which however occurred in the battery fire events at Boston.

Boeing further assessed that a smoke release event would occur one time

in 10 million flight hours, however, the two events at Boston and Takamatsu

bring the balance to two events in 100,000 flight hours well above the failure

rate predicted in the certification process. The NTSB concluded: "the possibility

that a short circuit in a single cell could propagate to adjacent cells

and result in smoke and fire must be reconsidered."

On Mar 7th 2013 the NTSB released an interim report reporting the APU of $\,$

JA829J (169 flight hours/22 flight cycles since new) had been started at

15:04Z while the aircraft was taxiing to the gate. The aircraft reached

the gate at 15:06Z, the passengers disembarked by 15:15Z and the crew left

at 15:20Z. Cleaning personal entered the cabin. According to the flight

data recorder the voltage of the APU battery, a Lithium Cobalt based battery

rated at 75Ah/29.6V capable of delivering up to 1000A and typically 450A

over 45 seconds for up to three APU start attempts, began to fluctuate at

15:21:01Z, failed at 15:21:15Z with the voltage dropping and reached 28V

at 15:21:30Z. At 15:21:37Z the APU automatically shut down, the battery

voltage reached OV. A mechanic in the aft cabin noticed the power had been

lost and went to the cockpit, recognized the APU had automatically shut

down and went back to the aft cabin but smelled and saw smoke and notified

the maintenance manger, who in turn asked the mechanic to check the aft

electronic bay. The mechanic found heavy smoke and observed two distinct

flames of about 3 inches at the APU battery. The mechanic attempted to extinguish

the fire using a dry chemical fire extinguisher but flames and smoke did

not stop. At 15:37Z emergency services were alerted, the first vehicle arrived

less than a minute later. Multiple attempts by emergency services to extinguish

the fire were unsuccessful, the battery appeared to rekindle. A pop sound $% \left(1\right) =\left(1\right) +\left(1\right) +$

was heard followed by hissing sounds, a firefighter received a minor burn

at the neck when the battery popped. It was decided to remove the battery,

about 80 minutes after the begin of the event the battery was moved out

of the aircraft, 100 minutes after the begin of the event the situation

was pronounced under control. The battery had weighed 61.8lbs/28kg when

it was installed and weighed 56 lbs/25kg when it was removed from the aircraft

mainly due to the loss of electrolyte. Examination of the cells and battery

revealed a number of protusions on cell 5, which were determined to the

result of arcing between between the cell 5 case and battery case, the protusions

were outward and the cell case had expanded outward, the arcing was the

result of the cell expansion leading to the breach of the battery case.

Tests of the battery monitoring unit were not possible due to the damage

received during the fire, the battery control unit passed all tests (except

that it inhibited charging already above the permitted minimum temperature

of 5 degrees F). Boeing had assessed the risk of a battery cell venting

at one in 10 million flight hours and the risk of the battery spilling flammable

fluid at one in 1 billion flight hours, however, only 52,000 flight hours

had been accumulated in operation of the B787 so far and two batteries had

vented/spilled. The only scenario, that Boeing had identified, that could

lead to the battery venting with fire was overcharge, the design requirements

made it highly improbable that an overcharge could occur. The investigation

is continuing.

The incidents prompted the FAA to conduct a review of the Boeing 787 design,

manufacturing and quality assurance processes, the US Department of Transport

and the FAA are convinced, that the aircraft is safe reporting they spent

more than 200,000 man hours during certification of the aircraft.

In the evening of Jan 16th 2013 the FAA released an emergency airworthiness

directive requiring all operators of Boeing 787-800 with immediate effect

to modify the battery system or take another FAA approved action before

further flights, which effectively grounds the aircraft. The FAA argued:

"This emergency AD was prompted by recent incidents involving lithium ion

battery failures that resulted in release of flammable electrolytes, heat

damage, and smoke on two Model 787-8 airplanes. The cause of these failures

is currently under investigation. These conditions, if not corrected, could

result in damage to critical systems and structures, and the potential for

fire in the electrical compartment."

On Mar 12th 2013 the FAA announced they approved a plan to certificate an

improved battery system provided by Boeing. An improved containment of the

battery, and improved venting system, a redesign of battery components to

reduce the risk of short circuits inside the battery and better insulation

of cells are parts of that plan, the FAA has also approved limited test

flights to two Boeing 787-800s, the FAA said: "The purpose of the flight

tests will be to validate the aircraft instrumentation for the battery and

battery enclosure testing in addition to product improvements for other

systems." The AD remains in effect until the tests conclude successfully,

the FAA did not provide any estimates on the time line.

On Apr 26th 2013 the FAA released a new airworthiness directive 2013-08-12

superseding the emergency airworthiness directive of Jan 16th 2013 permitting

the Boeing 787-800 to resume service after following steps have been taken:

"Install main battery and auxiliary power unit (APU) battery enclosures

and environmental control system (ECS) ducts; and replace the main battery,

APU battery, and their respective battery chargers; in accordance with the

Accomplishment Instructions of Boeing Alert Service Bulletin B787-81205-SB500003-00,

Issue 001, dated April 19, 2013." As result of this new airworthiness directive

a first Boeing 787-800 registration ET-AOP of Ethiopian Airlines took the

skies on Apr 27th 2013 flying passengers from Addis Ababa (Ethiopia) to

Nairobi (Kenya) as flight ET-801.

On Jul 12th 2013 an Ethiopian Airlines Boeing 787-800 registration ET-AOP

was parked at London Heathrow Airport with no occupants, when smoke began

to billow from the rear of the aircraft prompting emergency services to

respond and both runways to be closed. The aircraft was foamed and the fire

extinguished. The cause of the fire is unknown at this time. The aircraft

had arrived in Heathrow as flight ET-700 at 06:30L (05:30Z) and was scheduled

to depart for the return flight ET-701 at 21:00L (20:00Z). On Jul 13th 2013

the AAIB reported that there had been smoke throughout the fuselage causing

extensive heat damage in the upper portion of the rear of the fuselage and

stated: "However, it is clear that this heat damage is remote from the area

in which the aircraft main and APU (Auxiliary Power Unit) batteries are

located, and, at this stage, there is no evidence of a direct causal relationship."

On Jul 18th 2013 the AAIB reported in their special bulletin with respect

to ET-AOP, that fire fighters encountered a fire above the ceiling panels

close to the rear of the cabin, a halon extinguisher was not effective,

only after a panel was moved and the fire was doused with water and

the fire was extinguished. The origin of the fire coincided with the emergency

locator transmitter (ELT), with no other systems in the vicinity storing

sufficient energy to initiate a fire. The ELT is powered by a set of Lithium

Manganese Dioxide Batteries, which showed disruptions of cells. It is unclear

however whether the combustion started as result of energy release within

the battery cells or by an outside event like a short circuit. Some 6000

units of this transmitter have been produced, ET-AOP is the only such incident

so far. The AAIB recommended to the FAA to "inert" (deactivate) the

ELTs

in Boeing 787s until appropriate airworthiness actions can be taken and

to conduct a safety review of all Lithium battery powered ELTs on all aircraft types.

On Jan 14th 2014 a JAL Japan Airlines Boeing 787-800, registration JA834J,

was parked at the apron of Tokyo's Narita airport and was being prepared

for departure for flight JL-707 to Bangkok (Thailand) scheduled about two

hours later, when white smoke was observed from the aircraft's main battery,

the battery was found overheated, its safety valve opened and electrolyte

fluid leaking from the battery. No further damage is being reported, the

aircraft was removed from service. A replacement Boeing 787-800 registration

JA829J operated the flight departing with a delay of 7 minutes and arriving

on schedule. Boeing tweeted that the aircraft was in maintenance, a single

cell vented resulting in a smoke event, the new safe guards worked as planned.

The battery suffered a fault in the charger and battery. The airline stated:

"A maintenance personnel in the cockpit found that the white smoke was wafting

outside of the window and that the message which indicated the possibility

of main battery system failure was displayed on the cockpit display during

departure preparation. The inspection of the battery case inside the battery

enclosure revealed that the safety pressure relief valve (which opens in

case that the cell inside pressure rises) of one cell of the eight cells

opened. JAL707 departed by another Boeing 787 almost on time." This new

ground incident comes a few days after both NTSB and JTSB announced the

investigations into the thermal runaways of the APU and main battery in

Takamatsu and Boston have been finished and the final reports are being

prepared for release later in 2014.

On Jun 18th 2014 the British AAIB provided a special bulletin reporting

the investigation into the Ethiopian ET-AOP event in London so far

determined,

that the ELT battery had suffered a thermal runaway with all of its 5 cells

showing severe damage consistent with the thermal runaway. The ELT battery's

internal wires were found improperly installed, "in that they had been crossed

and pinched together between the battery cover-plate and the ELT case, adjacent

to one of the cover-plate fasteners." It was likely that the wires were

improperly installed during production assembly of the ELT.

The AAIB reported: "The nature of the battery failure was such that much

of the battery material was consumed, and that which remained was extremely

fragile. Therefore, despite extensive forensic examination and CT scanning

of the battery and the individual cells, it has not been possible to determine

with certainty the sequence of cell failures within the battery or the pre-failure

state of the safety features in the circuit."

The AAIB released five safety recommendations to the FAA as result of the

investigation into ET-AOP so far.

The faulty wiring of ET-AOP (Photo: AAIB):

Schematics of battery and damage of ANA main battery (Graphics: AVH/JTSB):

The grounding wire of battery case (Graphics: JTSB):

The electrical path activating wing tip lights despite switched off (Graphics: JTSB):

Battery diagram (Graphics: NTSB):

The damaged electrode of cell 3 (Photo: JTSB):

Traces of smoke exiting the fuselage (Photo/Graphics: JTSB):

Main battery left, undamaged APU battery right (Photos: JTSB):

Hole in an electrode of JA829J indicative of short circuit (Photo: NTSB):

The burned battery of JA829J, Boston Jan 7th 2013 (Photo: NTSB):

http://avherald.com/h?article=45c317be

20130115173431:20130115000000

Incident: Cathay A333 at Tokyo on Jan 15th 2013, smoke in cabin

A Cathay Pacific Airbus A330-300, flight CX-501 from Tokyo Narita (Japan)

to Hong Kong (China) with 127 people on board, was climbing out of Tokyo's

Narita Airport when a smoke detector in a lavatory activated prompting the

crew to return to Narita Airport for a safe landing on runway 34L. Attending

emergency services reported seeing no fire or smoke, the aircraft taxied

to the gate on its own power.

Japan's Ministry of Transport reported that a burning odour was observed

near the lavatory immediately after takeoff, later the smoke detector activated.

An inflight entertainment system's display set in front of a passenger seat

near the toilet is suspected as cause of the smell.

http://avherald.com/h?article=45bfd41d

20130111212131:20130108000000

Incident: Air Canada E170 at Toronto on Jan 8th 2013, acrid odour and haze on board

An Air Canada Embraer ERJ-175, registration C-FEJD performing flight AC-764

from Toronto,ON (Canada) to Newark,NJ (USA) with 46 people on board, was

climbing out of Toronto's runway 24R when the crew stopped the climb at

5000 feet reporting an acrid odour and light haze on board of the aircraft.

The aircraft returned to Toronto for a safe landing on runway 24L about

20 minutes after departure.

The Canadian TSB reported that maintenance replaced both recirculation filters, the aircraft returned to service without reoccurrences.

http://avherald.com/h?article=45b8e286

20130103163658:20121214000000

Incident: TAP A319 at Copenhagen on Dec 14th 2012, smoke in cockpit

A TAP Air Portugal Airbus A319-100, registration CS-TTK performing flight

TP-754 from Lisbon (Portugal) to Copenhagen (Denmark), was on approach to

Copenhagen's runway 04R when the crew detected a burning smell in the cockpit

and spotted light haze. The crew requested priority and continued for a

safe landing on runway 04R about 5 minutes later.

Denmark's HCL reported the crew did not don their oxygen masks. After rollout,

while taxiing the crew discovered the source of the odour was a cockpit

display. After the aircraft had reached the gate an ECAM message indicated

a fan in the rear cargo bay. Emergency services therefore inspected the

rear cargo bay but did not find any trace of fire, heat, smoke or smell.

Maintenance removed the cockpit display in question but found no fault,

only some dust. The HCL believes that an electrical source covered with $% \left(1\right) =\left(1\right) +\left(1\right) +\left($

dust at the cockpit display in question may have been the cause of the odour/haze.

http://avherald.com/h?article=45b22b73

20130315193504:20121214000000

Incident: Lufthansa A321 near Frankfurt on Dec 14th 2012, smoke in cabin and cockpit

A Lufthansa Airbus A321-100, registration D-AIRR performing flight LH-1246

from Frankfurt/Main (Germany) to Vienna (Austria) with 157 people on board.

was climbing out of Frankfurt's runway 18 when the crew reported smell.

then smoke in both cockpit and cabin, stopped the climb at FL110 and returned

to Frankfurt for a safe landing on runway 25C about 18 minutes after departure.

The French BEA reported there were no injuries, the German BFU is investigating the serious incident.

On Mar 15th 2013 the German BFU reported in their monthly bulletin that

both pilots noticed a "rotten" smell in the cockpit, a few seconds later

the first officer showed first symptoms prompting both pilots to don their

oxygen masks and return to Frankfurt. The odour was also noticed in the

cabin. The aircraft returned to Frankfurt for a safe landing about 20 minutes

after departure, all members of the crew were taken to a hospital for checks.

http://avherald.com/h?article=45a5cafa

20121211143824:20121210000000

Incident: Alaska B738 near Sacramento on Dec 10th 2012, electrical
smell in cabin

An Alaska Airlines Boeing 737–800, registration N525AS performing AS-606 $\,$

from Seattle,WA to Las Vegas,NV (USA) with 152 passengers and 6 crew, was

enroute at FL370 about 125nm northeast of Sacramento, CA (USA) when the crew

reported an electrical smell in the cabin and decided to divert to Sacramento,

where the aircraft landed safely about 22 minutes later.

A replacement Boeing 737-800 registration N516AS reached Las Vegas with

a delay of 6:15 hours.

The airline confirmed some slight electrical odour on board of the aircraft,

the source of the odour is under investigation, there was no fire or smoke.

http://avherald.com/h?article=45a43649/0000

20130315160351:20121209000000

Incident: Condor A320 near Stuttgart on Dec 9th 2012, smoke on board

The German BFU reported in their monthly bulletin that the aircraft was

enroute at FL350 when an eletrical odour was observed that changed into

smell of plastics. Shortly afterwards white smoke appeared in the cockpit,

the crew donned their oxygen masks and decided to divert to Stuttgart for

an overweight landing (68 tons) on runway 25. Although the smoke in the

cockpit had dissipated, the crew worked the checklists for an emergency

evacuation including crew on stations and "ENG MASTER SW", emergency services

reported seeing no smoke or fire, so that the crew decided to not evacuate

and have passengers disembark via stairs and were bussed to the terminal.

No injuries occurred.

Post flight examination revealed the radar tranceiver located in the front

area of the avionics compartment had been cause of the smells and smoke.

It was removed from the aircraft and taken a special laboratory for further

examination.

The radar tranceiver with minor traces of soot (Photo: BFU):

http://avherald.com/h?article=45a3b15a

20121208215044:20121209000000

Incident: Cathay B773 near Wuhan on Dec 9th 2012, smell in cockpit

A Cathay Airlines Boeing 777-300, registration B-KPP performing flight CX-251

(dep Dec 8th) from Hong Kong (China) to London Heathrow, EN (UK) with 238

passengers and 18 crew, was enroute near Wuhan (China) when the crew decided

to divert to Wuhan due to some odour in the cockpit. The aircraft landed

safely in Wuhan (500nm north of Hong Kong) about 105 minutes after departure

from Hongkong.

The flight is currently estimated to reach London with a delay of 16 hours.

http://avherald.com/h?article=45a2f6a7

20121207233307:20121206000000

Incident: Jetblue E190 at New York on Dec 6th 2012, smell of smoke in cabin

A Jetblue Embraer ERJ-190, registration N178JB performing flight B6-1111

from New York JFK, NY to Raleigh/Durham, NC (USA) with 95 people on

was on a Breezy Point climb out of New York's runway 31L when the crew requested

to level off at 6000 feet reporting cabin crew had just reported a

odour in the back of the cabin. The crew requested to return to New

to check the smell out, on approach the crew reported the smell had subsided

and the aircraft landed safely on runway 31L about 15 minutes after departure.

http://avherald.com/h?article=45a2e6b5

20121207213913:20121204000000

Incident: Westjet B737 near Regina on Dec 4th 2012, generator

failure and odour on board

A Westjet Airlines Boeing 737-700, registration C-GWAZ performing flight

WS-475 from Winnipeg, MB to Calgary, AB (Canada) with 127 people on board,

was enroute at FL400 about 135nm east of Regina, SK when the right hand generator

(engine CFM56) failed. A short time later, after the crew had completed

the relevant checklist, a strong burning electrical smell was noticed throughout

the aircraft. The crew declared emergency and diverted to Regina for a safe

landing about 30 minutes later.

The Canadian TSB reported there was no visible smoke. Maintenance found

the generator control unit had burned out. The unit was replaced.

http://avherald.com/h?article=45a133eb

20121205173845:20121203000000

Incident: Ryanair B738 near London on Dec 3rd 2012, odour in cabin

A Ryanair Boeing 737-800, registration EI-DHY performing flight FR-2404

from London Stansted, EN (UK) to Memmingen (Germany), stopped the climb out

of London at FL150 and returned to Stansted Airport for a safe landing on

runway 22 about 35 minutes after departure.

A passenger reported a distinct smell of exhaust fumes in the cabin. The

crew announced technical problems and returned to Stansted Airport.

A replacement Boeing 737-800 registration EI-EPG reached Memmingen with a delay of 2 hours.

The incident aircraft was able to resume service about 10 hours after landing.

http://avherald.com/h?article=45b23cec

20121226173747:20121127000000

Incident: Ukraine B733 at Liege on Nov 27th 2012, cargo fire
indications

A Ukraine International Airlines Boeing 737-300, registration UR-FAA performing

flight PS-31R from Liege (Belgium) to Vienna (Austria), was climbing through

FL277 to FL350 out of Liege when the crew received multiple main deck cargo

fire indications. The crew donned their oxygen masks, worked the cargo fire

checklist and descended the aircraft to FL100. After levelling off at FL100

the fire indication disappeared, the crew could not notice any smoke/haze

or smell any unusual odour. The crew nonetheless decided to return to Liege

for a safe landing.

Ukraine's Ministry of Transport reported in their monthly bulletin that

a faulty smoke detector was identified and replaced, in addition traces

of frost were detected on a panel of the main cargo deck that could have

triggered a false smoke indication. The investigation determined the fire

indications were false after dry ice transported by the aircraft evaporated

and triggered the smoke detectors, one of the smoke detectors was faulty.

http://avherald.com/h?article=45951936

20121120141924:20121120000000

Incident: KLM Cityhopper F70 near Amsterdam on Nov 20th 2012, odour in cabin

A KLM Cityhopper Fokker 70, registration PH-KZU performing flight WA-1873/KL-1873

from Amsterdam (Netherlands) to Stuttgart (Germany), was climbing out of

Amsterdam when the crew stopped the climb at FL290 about 80nm eastsoutheast

of Amsterdam due to a strange odour and unuusal noises in the cabin, the

crew suspecting the odour might be the result of a bird strike during departure.

The aircraft returned to Amsterdam for a safe landing on runway 18C

about

40 minutes after departure, the crew indicated no further assistance was

needed and taxied to the apron.

The flight was cancelled.

http://avherald.com/h?article=45c8fe7e

20130122183250:20121111000000

Accident: Condor B753 near Frankfurt on Nov 11th 2012, pungent odour on board

A Condor Boeing 757-300, registration D-ABOE performing flight DE-7982 from

Frankfurt/Main (Germany) to Las Palmas,CI (Spain), was accelerating through

130 KIAs for takeoff from Frankfurt's runway 18 when a pungent odour was

noticed on the flight deck, due to the speed the crew decided to continue

takeoff however. During the climb the odour was also observed in the cabin,

both pilots felt tickles in their limbs and gums prompting them to don their

oxygen masks, stop the climb at FL250 and return to Frankfurt for a safe

landing on runway 25L about 23 minutes later.

The German BFU reported in their monthly bulletin that emergency services

checked the aircraft on the taxiway, however no anomaly and no abnormal

oil reservoirs had been overfilled by two quarts. A number of flight attendants

suffered from symptoms of tickling legs/arms as well, all 9 crew members

were taken to a hospital for medical assistance and assessment, urine and

blood samples were taken.

http://avherald.com/h?article=45c8fbff

20130122181600:20121108000000

Incident: Lufthansa B733 near Frankfurt on Nov 8th 2012, blue haze

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A Lufthansa Boeing 737-300, registration D-ABEW performing flight LH-1186

from Frankfurt/Main (Germany) to Zurich (Switzerland), was enroute at FL230

about 77nm south of Frankfurt, 25nm west of Stuttgart (Germany) and 78nm

north of Zurich (Switzerland) when the crew decided to don their oxygen

masks and to turn around and return to Frankfurt after a flight attendant

in the forward galley observed blue haze and a pungent chemical odour near

the ceiling of the galley, confirmed by other flight attendants. The flight

attendant working in the forward galley felt unwell. At the time of the

haze and odour the ovens were not in use and the galley lighting had been

dimmed down to about 50%. The aircraft landed safely back on Frankfurt's

runway 25C about 25 minutes later.

The German BFU reported in their monthly bulletin that emergency services

checked the aircraft after landing, measurements did not identify any anomaly.

A technical check of the aircraft did not identify the source or cause of

the haze and smell. All crew members went to a hospital for a medical assessment.

http://avherald.com/h?article=458634ab

20121102140530:20121101000000

Incident: TUIFly B738 at Munich on Nov 1st 2012, fumes in cabin

A TUIFly Boeing 737-800, registration D-AHFW performing flight $X3-2158\ \text{from}$

Munich (Germany) to Palma Mallorca, SP (Spain), was climbing out of Munich's

runway 26L with a delay of about 90 minutes when the crew decided to stop

the climb at FL070 due to fumes in the cabin. The aircraft landed safely

back on Munich's runway 26L about 20 minutes after departure.

The aircraft was able to depart again after about 4 hours on the ground

and reached Palma Mallorca with a delay of 5:45 hours.

The airline confirmed a light odour on board of the aircraft prompting the return and reported an engine wash had been conducted the night prior to the flight.

http://avherald.com/h?article=458084b7

20121026140536:20121026000000

Incident: Jetstar A320 near Christchurch on Oct 26th 2012, smokey

odour in cockpit

A Jetstar Airbus A320-200, registration VH-VFD performing flight JQ-288

from Christchurch to Wellington (New Zealand), was climbing out of Christchurch

about 13 minutes into the flight when the crew stopped the climb at FL230

and returned to Christchurch due to a smokey odour in the cockpit. The aircraft

landed safely on Christchurch's runway 02 about 30 minutes after departure.

The flight was subsequently cancelled, the passenger were rebooked onto other flights.

The airline confirmed the aircraft returned due to engineering difficulties.

Passengers said a flight attendant noticed a strange odour in the cabin

which prompted the crew to return to Christchurch. The odour was very faint $% \left(1\right) =\left(1\right) +\left(1\right)$

like burning fabric.

Emergency services said they were told there was smoke in the cockpit.

http://avherald.com/h?article=45c2e2e2

20130115115030:20121021000000

Incident: Lufthansa A321 near London on Oct 21st 2012, strong odour

in cockpit and cabin

A Lufthansa Airbus A321-200, registration D-AISL performing flight LH-902

from Frankfurt/Main (Germany) to London Heathrow, EN (UK), was descending

through FL120 towards London when the first officer noticed a strong worrying

smell in the cockpit combined with irritation of eyes and throat as well

as nausea prompting both flight crew to don their oxygen masks, declare

PAN and perform a safe priority landing on Heathrow's runway 09L about 20

minutes later.

Germany's BFU reported in their monthly bulletin that the odour was noticed

also in the cabin, a number of passengers also complained about irritations

of eyes and throats and nausea. After vacating the runway the aircraft stopped

on the adjacent taxiway, the air conditioning systems and engines were shut

down, the air on board rapidly improved. Both pilots and all 4 cabin crew

went to medical checks to a hospital in London, returned to Frankfurt as

passengers and underwent a medical examination at a hospital in Frankfurt.

The medical examination found no anomaly. The aircraft departed London after

about 90 minutes on the ground, positioned back to Frankfurt with airline

technicians on board taking measurements, amongst them electronic air quality

measurement and video borescopic examination of the engines but also did

not detect any anomaly.

Following arrival in Frankfurt the aircraft resumed service one hour after

landing in Frankfurt and about 4 hours after landing in London.

http://avherald.com/h?article=457d4685/0000

20130509152651:20121021000000

Incident: Lufthansa A321 at London on Oct 21st 2012, fumes in cabin

The United Kingdom's AAIB released their bulletin into the serious incident

releasing following summary:

The investigation was inconclusive in that a source of the apparent contamination

of the cabin and flight deck air was not found, despite the detailed analysis

of residues and the medical examinations of the affected members of the

crew. This event thus joins a growing number of cases in which there has

been a similar lack of conclusive evidence as to the cause(s) of aircraft

cabin air quality issues.

The AAIB reported the first officer noticed a strong odour in the cockpit

accompanied by eye and throat irritation when the aircraft descended through

FL120 on approach to Heathrow Airport. The commander checked with cabin

crew who also confirmed an odour in the cabin. The first officer started

to feel dizzy and nauseous prompting both flight crew to don their oxygen

masks and request a priority landing into Heathrow. The aircraft touched

down within 10-15 minutes after the onset of smell, vacated the runway and

stopped on the adjacent parallel taxiway, where engines and air conditioning

systems were shut down. After engine shut down the situation in the cabin

improved, a few passengers reported minor throat irritation. The first officer

was still dizzy and nauseous, all crew members complained about eye and

throat irritation, all were taken to a hospital and released a couple of

hours later after blood tests revealed no medical findings. The crew returned

to Frankfurt and again went to a hospital, where further tests also revealed no findings.

The aircraft underwent extensive tests for traces of oil, salts, sulphur

with just minor findings which compared to findings on another aircraft

of similiar operating hours with no odour, flight deck and cabin lights

were checked for function and odour with no findings, the circulation fans,

recirculation and avionices filters were checked again without any finding

out of the ordinary. Equipment in galleys and lavatories was checked again

without identfying anything out of the ordinary.

During the subsequent ferry flight to Frankfurt cabin air was measured by

an analyser with no findings, after landing in Frankfurt the engines were

checked with borescopes which revealed an old bird strike debris in the

compressor stages 3 and 4 of the right hand engine unrelated to the fumes

event however and no other findings.

The AAIB concluded their bulletin: "In the United Kingdom, a Civil Aviation

Authority analysis of Mandatory Occurrence Reports (MORs) indicated that

ëfume eventsí occur on approximately 0.05% of all commercial passenger and

cargo flights. In most cases the effects on aircrew take the form of ëacuteí

symptoms, such as eye and throat irritation, as experienced by the crew

of D-AIRX, although long term health issues have been recorded. However,

inconsistent reporting is thought to have affected the quality of the evidence.

It is also worth noting that in tests where measurements of contaminants

have been taken, the concentration is invariably well below internationally

agreed levels for occupational exposure."

http://avherald.com/h?article=457d4685

20130509152722:20121021000000

Incident: Lufthansa A321 at London on Oct 21st 2012, fumes in cabin

A Lufthansa Airbus A321-100, registration D-AIRX performing flight LH-900

from Frankfurt/Main (Germany) to London Heathrow, EN (UK) with 139 passengers

and 6 crew, was in a hold waiting for arrival at Heathrow Airport when the

flight crew donned their oxygen masks and declared PAN reporting fumes in

the cabin near the forward galley. The aircraft was vectored for an immediate

approach to Heathrow's runway 09L and landed safely. All crew,

including

flight and cabin crew, were taken to a hospital.

The AAIB is investigating.

The airline confirmed the crew requested a priority landing in Heathrow

due to an indefinable odour in the cabin and landed safely about 20 minutes

later. All cabin and flight crew were medically examined, the examinations

were without findings. No passenger reported feeling unwell. The cause of

the fumes is unclear.

http://avherald.com/h?article=457b95e0

20121020141719:20121020000000

Incident: Transavia B738 near Zagreb on Oct 20th 2012, odour in cabin

A Transavia Boeing 737-800, registration PH-HSB performing flight HV-578

(dep Oct 19th) from Sharm el Sheikh (Egypt) to Amsterdam (Netherlands) with

189 passengers and 6 crew, was enroute at FL360 about 130nm south of Zagreb

(Croatia) when the crew decided to divert to Zagreb due to a pungent odour

of melting plastics on board. The aircraft landed safely on Zagreb's runway

05 about 30 minutes later. Emergency services found no trace of fire. Two

passengers required medical attention, were treated by a doctor at the airport

and recovered quickly.

The passengers were taken to hotels.

The airline confirmed the diversion due to a pungent smell on board, all occupants are well.

A replacement Boeing 737-800 registration PH-HZE has been dispatched to Zagreb.

http://avherald.com/h?article=4595ffe9

20121121160500:20121018000000

Incident: Enter B734 at Kiev on Oct 18th 2012, rejected takeoff

An Enter Air Boeing 737-400, registration SP-ENA performing flight OF-946P

from Kiev (Ukraine) to Katowice (Poland), rejected takeoff at high speed

(about 110 knots) when the crew smelled strong odour of oil in the cockpit.

The aircraft slowed safely and returned to the apron.

Ukraine's Ministry of Transport reported in their monthly bulletin that

the cause of the smell was identified to be oil entering the right hand

engine's bleed air system.

http://avherald.com/h?article=457d75d7

20121022210308:20121018000000

Incident: Westjet B737 near Calgary on Oct 18th 2012, burning odour in cabin

A Westjet Boeing 737-700, registration C-FWBX performing flight WS-167 from

Calgary, AB to Edmonton, AB (Canada) with 116 people on board, was climbing

out of Calgary#s runway 16 when the purser detected a burning smell and

haze in the mid cabin. The flight crew levelled off at about 8000 feet.

declared emergency reporting smoke in the cockpit and returned to Calgary

for a safe landing on runway 28 about 10 minutes later.

The Canadian TSB reported that maintenance identified a problem with the

Live TV system, further troubleshooting is underway.

Accident: Air Berlin B738 at Munich and Berlin on Oct 17th 2012, odour on board sickens all 4 cabin crew

An Air Berlin Boeing 737-800, registration D-ABKP performing flight AB-6192

from Munich to Berlin Tegel (Germany), was climbing out of Munich when a

strong odour developed in cockpit and cabin. All four cabin crew began to

complain about tickle in the throat, nausea and tickle of arms and legs.

One flight attendant vomitted and was unable to continue duties for the

remainder of the flight. Enroute the odour subsided but returned during

the descent towards Berlin. The aircraft landed without further incident

on Tegel's runway 26R about 45 minutes after departure from Munich.

Germany's BFU reported in their monthly bulletin that all crew went for

a medical checkup after landing. A technical examination of both engines

revealed no anomaly.

http://avherald.com/h?article=457aeef9

20121019192526:20121017000000

Incident: Air Canada B773 at Vancouver on Oct 17th 2012, bird strike

An Air Canada Boeing 777-300, registration C-FIVR performing flight AC-7 $\,$

from Vancouver, BC (Canada) to Hong Kong (China) with 368 people on board,

was just rotating for takeoff from Vancouver's runway 08R when the crew

observed a heron and believed it had struck the aircraft. There were no

abnormal indications, the crew therefore decided to continue the flight.

During the climb cabin crew however reported intermittent burning odour

in the cabin. The crew thus reported smoke in the cockpit, dumped fuel and

returned to Vancouver for a safe landing on runway 08R about one hour after departure.

The Canadian TSB reported 40 tons of fuel were dumped, the aircraft

landed

safely, brakes temperatures remained normal and the aircraft taxied to gate.

Maintenance found significant damage to the right hand engine's (GE90) acoustic

tiles, that is being assessed by powerplant engineering. Feathers were recovered

from the engine and have been forwarded for identification.

http://avherald.com/h?article=45769045

20121014130903:20121013000000

Incident: Lufthansa A321 near Munich on Oct 13th 2012, odour in cabin

A Lufthansa Airbus A321-200, registration D-AISL performing flight LH-1300

from Frankfurt/Main (Germany) to Istanbul (Turkey) with 187 passengers and

7 crew, was enroute at FL350 about 10nm north of Munich (Germany) when the

crew decided to divert to Munich due to an unusual odour on board of the

aircraft. The aircraft landed safely on Munich's runway 08L about 25 minutes later.

A replacement A321-200 registration D-AIDT reached Istanbul with a delay of 3:15 hours.

The airline reported an examination of the aircraft identified some cargo

in the hold, but not passenger luggage, as cause of the odour.

http://avherald.com/h?article=456e6d4b

20121004151446:20121004000000

Incident: Qantas B744 near Darwin on Oct 4th 2012, burning smell in cabin

A Qantas Boeing 747-400, registration VH-OJC performing flight QF-5 from

Sydney, NS (Australia) to Singapore (Singapore) with 305 passengers,

was

enroute at FL360 about 120nm southwest of Darwin,NT (Australia) when

crew decided to divert to Darwin due to a burning smell in the cabin. The

aircraft landed safely on Darwin's runway 29 about 25 minutes later.

The flight was postponed to the next day, the passengers were taken to hotels.

The airline reported a burning plastics or electrical smell was detected

in the cabin. The smell dissipated about 10 minutes after it was detected.

Passengers reported the captain announced he was getting concerned about

a possible electrical fault and diverted to Darwin.

http://avherald.com/h?article=45c27245

20130114230319:20121001000000

Accident: Ryanair B738 near Bremen and Vilnius on Oct 1st 2012, both flight crew partially incapacitated

A Ryanair Boeing 737-800, registration EI-EBP performing flight FR-7602

from Bremen (Germany) to Vilnius (Lithuania), was climbing out of Bremen.

when a pungent odour and patches of haze came out of the air conditioning

vents in the cockpit. About 5 minutes into the flight both flight crew felt

severe headache, the forward portion of the cabin noticed the odour. The

haze and odour dissipated during further climb, the crew recovered and continued

the flight to Vilnius. During the descent the odour and haze returned causing

again severe headache to both pilots. The aircraft continued for a safe

landing at Vilnius.

Following sufficient recovery the crew decided to carry out the return flight

FR-7601, too. During departure from Vilnius the odour and haze again occurred

to a much lesser extent than during departure at Bremen, the crew continued

the flight. During the approach to Bremen, while descending through

FL060,

the odour and haze appeared again causing again severe headache to both

pilots, the first officer, pilot monitoring at that time, also suffered

from dizziness. The crew continued the landing without donning oxygen masks and landed safely.

Germany's BFU reported that both pilots complained about persistent health

problems following the flight and became unfit to fly in the following days.

http://avherald.com/h?article=456db93a

20121003194846:20121001000000

Incident: Air Canada A320 near Toronto on Oct 1st 2012, fuming oven

An Air Canada Airbus A320-200, registration C-FDQV performing flight AC-272

from Winnipeg, MB to Toronto, ON (Canada) with 112 people on board, had just

begun the descent towards Toronto when a forward galley oven emitted an

acrid odour. The power to the galley was turned off, the flight crew declared

PAN. The aircraft continued for a safe landing on Toronto's runway 23 and

taxied to the gate.

The Canadian TSB reported maintenance replaced the oven and controller.

h++--- / /---h-----1-l ----- /b2---+--1-- 4500410

http://avherald.com/h?article=45694106

20120928124946:20120925000000

Incident: LIAT DH8C near St. Maarten on Sep 25th 2012, burning smell
in cockpit

A LIAT de Havilland Dash 8-300, flight LI-368 from Antigua (Antigua) to

Anguilla (Anguilla), was enroute near Saint Maarten when the crew detected

a burning odour in the cockpit and decided to divert to St. Maarten for

a safe landing.

The airline reported maintenance identified an electronic component had

failed resulting in the odour. The component was replaced.

http://avherald.com/h?article=4554f709

20121203170131:20120903000000

Accident: XL Airways B738 at Cologne on Sep 3rd 2012, injuries after malfunction of air conditioning system

An XL Airways Germany Boeing 737-800, registration D-AXLF performing flight

G1-110 from Hanover to Cologne/Bonn (Germany) with 186 passengers, 10 infants

and 6 crew, had safely landed on Cologne's runway 24 and was taxiing towards

the terminal, when smoke appeared in the cabin seemingly originating from

the air conditioning vents. The occupants rapidly deplaned via stairs. 11

passengers needed treatment by medical services at the airport.

Passengers reported the smell of kerosene on board, then smoke appeared

in the cabin.

Airport Authorities reported the aircraft was evacuated (editorial note:

photos of the scene show no evacuation slides deployed, but stairs at the

aircraft), 7 passengers were treated for minor smoke inhalation, 4 passengers

were taken to a hospital. The cause of the smoke was unknown, Airport police

confirmed however that passengers reported the smell of kerosene.

The airline reported that upon touch down smoke exited the air conditioning

vents for a couple of seconds, the cause being unclear. The following day

(Sep 4th) the airline added that a defective hydraulic check valve near

the wheel well was found. There was no smoke but vapour of hydraulic fluid

that produced a pungent odour.

Cologne Fire services reported 11 people were taken to local hospitals with

irritations of respiratory tract. 5 passengers received serious, 6 minor

injuries.

The BFU responded to the occurrence and sent investigators on site, cockpit

voice and flight data recorders were downloaded. First investigation results

suggest a malfunction of the air conditioning system emitted steam, there

was no evidence of smoke.

The aircraft bound for Gaziantep (Turkey) had earlier returned to Hanover

already, after the crew had levelled off at FL110 due to an odour on board.

The aircraft landed back in Hanover about 45 minutes after departure. Following

maintenance the aircraft departed Hanover for Cologne about 5:40 hours after

landing back.

A replacement Atlas Air Airbus A321-200 registration TC-ETF reached Gaziantep

with a total delay of 24 hours.

In their September Bulletin released on Dec 3rd 2012 Germany's BFU reported

that cabin crew believed to have observed some unusual smell during climb

and informed the commander. The flight was continued. During touchdown on

runway 24 a flight attendant observed smoke and odour coming from one of

the over wing emergency exits, she could not determine whether it was smoke,

steam or mist, the odour was "horrible and caustic, which hit her lungs".

9 seconds after "slightly positive touchdown", vertical acceleration 1.4G.

while airspeed decayed through 100 knots, the captain, pilot flying, noticed

black smoke invading the cockpit through the air conditioning vents

turned off both air conditioning systems and observed the smoke decreased.

The first officer noticed gray smoke from the air conditioning vents which

decreased after the captain had turned off both packs. After the aircraft

vacated the runway he opened his side window to release the rest of the

smoke. In the meantime the passengers became agitated, some passengers boxed

the overhead panels opening the oxygen mask containers, multiple annoncements

by flight attendants weren't able to calm the passengers. The captain continued

taxi to the park position, both packs were activated again during taxi about

3 minutes prior to reaching the parking position, the doors were opened

at the assigned parking position. The disembarkment of passengers however

was disorderly, cabin crew perceived the passengers as highly emotional

and aggressive. 11 passengers were taken to hospital but were able to continue

to Gaziantep the following day. Maintenance found hydraulic fluid along

the full length of the tubing to the pneumatic manifold, the contamination

began at the connector to the hydraulic reservoir pressurization system,

in the tube and filter to the hydraulic A-system considerable amounts of

hydraulic fluid were found. The needle showing the filling level was near

the full state, however could not be exactly determined due to the glass

being steamed up, the indicator of the B system was beyond full. Boeing

customer support had warned in 2004, that filling the hydraulic reservoirs

beyond full would result in hydraulic fluid entering the pneumatic system

and air conditioning systems.

http://avherald.com/h?article=454bb4f3

20121120160750:20120823000000

Accident: Lufthansa Cityline E190 near Linz on Aug 23rd 2012, pungent odour on board

A Lufthansa Cityline Embraer ERJ-195, registration D-AEBB performing flight

CL-1705/LH-1705 from Sofia (Bulgaria) to Munich (Germany) with 115 passengers,

was enroute at FL340 about 130nm south of Linz over Slovenia when a pungent

odour developed on board, a number of passengers and cabin crew began to

complain about headache prompting the crew to divert to Linz (Austria) where

the aircraft landed safely on runway 26 about 33 minutes later. The occupants

complaining about headache received ambulant treatment at the airport by medical staff.

The remainder of the flight was cancelled, the passenger were taken to Munich by bus.

On Aug 30th it became known the pungent odour was caused by old cooking oil.

Germany's BFU reported in their August bulletin released in November 2012.

that a strong odour occurred in the cabin shortly after departure. After

cabin crew and passengers began to complain about sudden headaches,

first officer left his seat to check the situation in the cabin and

return also complained about headache and donned his oxygen mask,

prompted the captain to also leave his seat and check the situation

cabin. A short time after his return he too felt unwell, donned his

mask, declared emergency and diverted the aircraft to Linz. All 5 crew members

went to a hospital for checks.

http://avherald.com/h?article=454a179c

20120821225138:20120821000000

Incident: Lufthansa B735 near Dusseldorf on Aug 21st 2012, bird strike, smoke in cockpit

A Lufthansa Boeing 737-500, registration D-ABIC performing flight LH-3386

from Dusseldorf (Germany) to London Heathrow, EN (UK), was climbing

Dusseldorf's runway 23L when the crew stopped the climb at FL250 about 120nm

west of Dusseldorf reporting smoke in the cockpit and returned to Dusseldorf

for a safe landing on runway 05L in opposite direction of active runways

23. The aircraft taxied to the apron with emergency services in trail.

An observer on the ground reported after the aircraft had reached the apron

emergency services remained in attendance for 25 more minutes before the

fire trucks returned to their bases.

The flight was cancelled, the passengers were rebooked onto other flights.

The airline reported the odour prompting the return was identified to be

the result of an engine (CFM56) ingesting a bird during departure.

http://avherald.com/h?article=45490864

20120820145357:20120819000000

Incident: United B752 near Newark on Aug 19th 2012, unusual odour on board

A United Boeing 757-200, flight UA-409 from Newark,NJ to Seattle,WA (USA).

was climbing through 14,000 feet out of Newark when the crew decided to

return to Newark reporting smoke in the cockpit. During descent back to

Newark the crew reported the smoke appeared to be going down and indicated

they would be able to vacate the runway. The aircraft landed safely on Newark's

runway 04L about 20 minutes after departure and vacated the runway.

The airline said the aircraft returned to Newark due to an unusual odour

aboard which was later linked to the air conditioning system.

A replacement Boeing 757-200 registration N553UA reached Seattle with a

delay of 4:15 hours.

http://avherald.com/h?article=45474a4a

20120818105822:20120816000000

Incident: Vietnam A321 near Ho Chi Minh City on Aug 16th 2012, burning odour on board

A Vietnam Airlines Airbus A321-200, registration VN-A349 performing flight

VN-1308 from Ho Chi Minh City to Da Nang (Vietnam), was enroute about 30

minutes into the flight when a burning odour developed on board prompting

the crew to return to Ho Chi Minh City for a safe landing.

The flight was cancelled, the passengers were rebooked onto the next flight.

The odour was identified to be caused by a malfunction of the air conditioning system.

Passengers reported the aircraft carried numerous Cambodian writings, airline staff explained the aircraft had been leased out to Cambodia.

http://avherald.com/h?article=45427768

20120905191655:20120811000000

Incident: US Airways B762 near Boston on Aug 11th 2012, smoke in cockpit

A US Airways Boeing 767-200, registration N251AY performing flight US-750

from Philadelphia, PA (USA) to Brussels (Belgium), was enroute at FL370 about

200nm east of Boston,MA when the crew reported smoke in the cockpit and

decided to divert to Boston. On approach to Boston the crew reported visibility

in the cockpit was good again, there was still intermittent smell of smoke

however. The aircraft landed safely on Boston's runway 22L about 40 minutes

later, vacated the runway and taxied straight to the apron.

A replacement Boeing 767-200 registration N245AY reached Brussels with a delay of about 9 hours.

On Aug 13th 2012 NAV Canada reported the crew reported an electrical smell and possible smoke in the cockpit.

On Sep 5th 2012 the Canadian TSB reported maintenance identified an inoperative

avionics recirculation fan as source of the odour. The incident

positioned to Philadelphia under minimum equipment list requirements

to the fan remaining inoperative, the fan was replaced in Philadelphia.

http://avherald.com/h?article=454167e2

20120815153404:20120811000000

Incident: ANZ A320 near Auckland on Aug 11th 2012, unusual odour

prompts return

An ANZ Air New Zealand Airbus A320-200, registration ZK-OJC performing flight

NZ-703 from Auckland (New Zealand) to Sydney, NS (Australia), had just reached

cruise level 320 when the crew decided to return to Auckland due to an unusual

smell that was observed on board of the aircraft. The aircraft turned around

and landed safely on Auckland's runway 05R about 50 minutes after departure.

The flight was cancelled, the passengers were rebooked onto other flights.

On Aug 15th the airline reported that the incident was unrelated to

fault 3 days later, see Incident: ANZ A320 near Auckland on Aug 14th 2012,

air conditioning fault. The unusual smell was identified to have been caused

by a zonal dryer, similiar to a dehumidifier.

http://avherald.com/h?article=453e3e79

20120807172318:20120805000000

Incident: Delta B744 at Osaka on Aug 5th 2012, burning odour in

cabin

A Delta Airlines Boeing 747-400, registration N662US performing flight DL-278

from Osaka Kansai (Japan) to Honolulu, HI (USA) with 382 people on board,

was climbing out of Kansai Airport's runway 24L when a burning odour developed

in the cabin prompting the crew to level off at FL110 and returned to Kansai

for a safe landing about 20 minutes after departure.

Passengers reported that after the burning smell developed the cabin lights went out temporarily.

Japan's Ministry of Transport reported that nothing was found wrong with

the aircraft, the fumes were identified as vapour from the air conditioning system.

The aircraft departed again after about $3.5\ \text{hours}$ on the ground and reached

Honolulu with a delay of 3:20 hours.

http://avherald.com/h?article=45354ecf

20120727163548:20120727000000

Incident: Georgian B190 at Syracuse on Jul 27th 2012, odour in cabin

An Air Georgian Beech 1900D on behalf of Air Canada, registration C-GMGA

performing flight ZX-7401/AC-7401 from Syracuse,NY (USA) to Toronto,ON (Canada)

with 4 people on board, was climbing out of Syracuse when the crew reported

an odour on board of the aircraft however no other indication, and requested

to return to Syracuse for a safe landing on runway 28 about 10 minutes after

departure. The aircraft vacated the runway and taxied to the apron.

The airport reported a battery operated smoke detector issued an alarm.

http://avherald.com/h?article=45281147

20120711172329:20120710000000

Accident: US Airways A333 near Boston on Jul 10th 2012, odour sickens five cabin crew

A US Airways Airbus A330-300, registration N276AY performing flight US-720

from Charlotte, NC (USA) to Rome Fiumicino (Italy) with 177 passengers and

12 crew, was enroute at FL370 about 160nm east of Boston, MA (USA) when the

crew advised air traffic control that they needed a new destination Philadelphia, PA

(USA). The aircraft was cleared to FL360, turn around and divert to Phialdelphia.

The crew subsequently reported they were diverting due to an odour in the

cabin, and on the way to Philadelphia reported medical issues. The aircraft

landed safely on Philadelphia's runway 27R about 65 minutes after turning

around. 5 cabin crew were taken to a hospital.

The airline reported 5 cabin crew were taken to a hospital feeling nauseous

as result of fumes in the cabin. A replacement crew operated the flight to Rome.

A replacement Airbus A330-300 registration N270AY departed Philadelphia

about 4 hours after landing and reached Rome with a delay of 6:15 hours.

The FAA confirmed on Jul 11th that 4 persons on board received

due to fumes on board of the aircraft, 13 others declined treatment.

http://avherald.com/h?article=45227bec

20120704152208:20120702000000

Incident: Vision B734 near Gulfport on Jul 2nd 2012, odour in

cockpit and cabin

A Vision Airlines Boeing 737-400, flight V2-709 from Gulfport, MS to Saint

Petersburg, FL (USA) with 128 people on board, was climbing out of Gulfport

when a strong odour developed on board prompting the crew to return to Gulfport's

Biloxi Regional Airport for a safe landing about 10 minutes after

departure and taxied to the gate.

A postflight inspection identified residue of chemicals following an engine wash as cause of the odour.

The aircraft was able to depart again after about 6 hours after landing

and reached Saint Petersburg with a delay of 6.5 hours.

http://avherald.com/h?article=4521e338

20120703212109:20120702000000

Incident: Air Canada B763 near Buenos Aires on Jul 2nd 2012, strong burning odour on board

An Air Canada Boeing 767–300, registration C-GDUZ performing flight AC-92

from Santiago (Chile) to Buenos Aires Ezeiza, BA (Argentina), was enroute

more than half way towards Buenos Aires when a strong burning smell developed

on board prompting the crew to declare emergency. The aircraft continued

for a safe landing on Ezeiza's runway 11, no trace of fire or smoke was

detected, and taxied to the gate, where the passengers disembarked.

The aircraft was able to depart for the return flight AC-93 from Ezeiza

to Toronto,ON (Canada) via Santiago with a delay of 2.5 hours. The complete

scheduled rotation AC-92/93 is Toronto-Santiago-Ezeiza-Santiago-Toronto.

http://avherald.com/h?article=452122a5

20120712152219:20120702000000

Incident: Swiss RJ1H near Zurich on Jul 2nd 2012, loss of cabin pressure

A Swiss Avro RJ-100, registration HB-IXW performing flight LX-456 from Zurich (Switzerland) to London City, EN (UK), was climbing through FL250 about 100nm

west of Zurich when the crew initiated an emergency descent and the passenger

oxygen masks were released. The aircraft descended to FL100 and returned

to Zurich for a safe landing on runway 14 about 40 minutes later.

The flight was cancelled, the passengers were rebooked onto the next flights.

A passenger reported that cabin crew were just serving drinks when the aircraft

began a steep descent causing the service carts to roll off. During the

descent the passenger oxygen masks were released and smoke of whitish/blueish

colour appeared in the cabin obviously coming from where the passenger oxygen

masks were released from. The smoke became dense enough to make it difficult

to see the flight attendant in the front of the cabin, the eyes were burning.

After the aircraft levelled off at low altitude the flight attendants tore

the oxygen masks including tubing from the cabin ceiling, a number of tubes

had melted.

The airline confirmed a gradual loss of cabin pressure reporting there had

been no smoke and no overheating/burning generator, no damage had occurred

to the oxygen masks/tubing and the aircraft received no damage. There was

some odour as result of the oxygen generators working however.

On Jul 12th the airline added that they are now able to confirm reduced

visibility in the cabin in addition to the odour, apologizing that

information had not been available to the press department last week when

issuing the first statement. During operation of the chemical oxygen generators

located above the passenger seats heat and an odour of iron are being generated

which can also reduce visibility in the cabin. These conditions do not endanger

safety of flight however.

The Swiss BFU reported on Jul 11th that the air conditioning system #1 had

been disengaged for technical reasons. About 25 minutes into the flight

air conditioning system #2 shut down automatically resulting in a

rapid

climb of cabin altitude. The flight crew donned their oxygen masks and initiated

an emergency descent, the passenger oxygen masks were automatically released

and used by passengers. The aircraft returned to Zurich. The BFU rated the

occurrence a serious incident and have opened an investigation.

http://avherald.com/h?article=4510cd75

20120612225707:20120612000000

Incident: American Eagle E135 near Shreveport on Jun 12th 2012,

electrical odour

An American Eagle Embraer ERJ-140, registration N844AE performing flight

MQ-2871 from Jackson, MS to Dallas Ft. Worth, TX (USA) with 44 people and

3 crew, was enroute at FL280 about 40nm southeast of Shreveport,LA when

the crew reported an electrical odour on board and decided to divert to

Shreveport for a safe landing about 15 minutes later.

The remainder of the flight was cancelled, the passengers were rebooked onto other flights.

http://avherald.com/h?article=4510b53b

20120612201919:20120612000000

Incident: Southwest B737 at Oakland on Jun 12th 2012, fumes in cockpit

A Southwest Airlines Boeing 737–700, registration N713SW performing flight

WN-508 from Oakland, CA to Burbank, CA (USA) with 137 passengers and 5 crew.

was climbing through 8000 feet out of Oakland's runway 29 when the crew

reported fumes in the cockpit, declared a precautionary emergency and returned

to Oakland for a safe landing on runway 29 about 13 minutes after

departure.

A replacement Boeing 737–700 registration N453WN reached Burbank with a delay of 2 hours.

The airline reported a strong odour was observed in the cabin prompting the return.

http://avherald.com/h?article=450e3d6e

20120609210039:20120609000000

Incident: Condor B753 near Nuremberg on Jun 9th 2012, burning smell
on board

A Condor Boeing 757-300, registration D-ABOC performing flight DE-6512 from

Dusseldorf (Germany) to Antalya (Turkey) with 234 people on board, was enroute

at FL350 about 45nm northwest of Nuremberg (Germany) when the crew reported

a burning odour on board and diverted to Nuremberg for a safe landing on $% \left(1\right) =\left(1\right) +\left(1\right) +\left$

runway 28 about 15 minutes later. Responding emergency services found no

trace of fire or smoke, however confirmed an abnormal smell in the cockpit

and a source of heat.

A replacement Boeing 757–300 registration D-ABOH is estimated to reach Antalya with a delay of 6 hours.

http://avherald.com/h?article=454c4cce

20120824122950:20120603000000

Incident: Lufthansa A319 at Frankfurt and Hanover on Jun 3rd 2012,
oil fumes on board

A Lufthansa Airbus A319-100, registration D-AILT performing flight LH-58

from Frankfurt/Main to Hanover (Germany), was climbing out of Frankfurt

shortly after takeoff when the captain noticed oil fumes in the cockpit.

The first officer, pilot flying, donned his oxygen masks as a precaution.

The odour of oil was subsequently also reported from the front of the cabin

but seemed to subside enroute. During the descent the odour intensified

again, both pilots now used their oxygen masks and continued for a safe

landing in Hanover.

The German BFU reported in their monthly bulletin that all crew went for

a medical check after landing as a precaution. An inspection of both engines

identified no anomaly or source of smell. During a following ground

the odour reappeared after the APU had been activated. The BFU opened an $\hfill \hfill$

investigation.

http://avherald.com/h?article=44f70c6e

20120512151610:20120512000000

Incident: Lufthansa A321 at Prague on May 12th 2012, odour in cabin

A Lufthansa Airbus A321-100, registration D-AIRN performing flight LH-1403

from Prague (Czech Republic) to Frankfurt/Main (Germany) with 120 passengers,

was in the initial climb out of Prague's runway 24 when an unusual odour

was observed in the cabin prompting the crew to level off at 7000 feet and

return to Prague for a safe landing on runway 24 about 15 minutes after departure.

A replacement Lufthansa Cityline Avro RJ-85 registration D-AVRR positioned

from Munich (Germany) to Prague and delivered the passengers to Frankfurt

with a delay of 2:45 hours.

The incident aircraft positioned to Frankfurt later the day departing Prague about 7 hours after landing.

http://avherald.com/h?article=44eded0c

20120501195445:20120501000000

Incident: Delta B764 over Atlantic on May 1st 2012, smokey odour in

cabin

A Delta Airlines Boeing 767-400, registration N841MH performing flight DL-19 $\,$

from London Heathrow, EN (UK) to Detroit, MI (USA), was enroute over the Atlantic

Ocean about one hour into the crossing when the crew reported a smokey odour

in the cabin, turned around and diverted to Shannon (Ireland). On approach

the crew advised they didn't need any assistance. The aircraft landed safely

on runway 06 about 70 minutes after turning around.

The aircraft was able to continue the journey after 2 hours on the ground

and is estimated to reach Detroit with a delay of 3.5 hours.

N841MH in Shannon:

http://avherald.com/h?article=44f6882b

20120511233531:20120429000000

Incident: Westjet B737 at Calgary on Apr 29th 2012, blast of hot air from rudder pedals

A Westjet Boeing 737-700, registration C-FIBW performing flight WS-447 from

Calgary, AB to Vancouver, BC (Canada) with 122 people on board, was in the

initial climb out of Calgary's runway 28 when immediately after rotation

a strong smell of fumes along with a blast of hot air from the rudder pedals

was noticed in the cockpit. Before the aircraft reached 1000 feet AGL the

purser contacted the flight deck reporting a smokey odour in the cabin.

The crew declared emergency, levelled off at 5000 feet and returned to Calgary

for a safe landing on Calgary's runway 34 about 8 minutes after departure

and stopped on the runway. Emergency services found no trace of fire or heat.

The Canadian TSB reported prior to the departure maintenance had prepared

the left hand engine for a borescopic inspection within an E2 check. The

borescopic inspection plug had been removed, but then it was determined

that the borescopic inspection could not proceed due to the tight tolerances

on the new engine. Anti-seize compound was applied to plug and the plug

was re-installed. As the borescopic inspection had not been conducted the

engine run required after such an inspection was not performed. It is believed

that heated residual anti-seize compound on and around the borescope inspection

plug caused the smoke.

A replacement Boeing 737-700 registration C-FXWJ reached Vancouver with

a delay of 2.5 hours.

http://avherald.com/h?article=451cc736

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20120627161535:20120426000000

Incident: Lufthansa A321 at Moscow on Apr 26th 2012, fumes on board

A Lufthansa Airbus A321-200, registration D-AIRT performing flight LH-1447

from Moscow Domodedovo (Russia) to Frankfurt/Main (Germany), was climbing

out of Moscow when shortly after becoming airborne and activation of the

air conditioning system a strong odour developed on board. The flight crew

assessed the circumstances and decided to continue the flight using their

oxygen masks. The aircraft continued for a safe landing in Frankfurt about

3:10 hours later.

Germany's BFU reported in their monthly bulletin that crew described the

strong smell as "musty-oily" and like "a hot foehn". None of the

flight

and cabin crew complained about any abnormal symptoms, however all crew

went to a precautionary laboratory check to the airport clinics. Maintenance

inspected and ground run engines and APU with no findings and without any smell developing.

The incident aircraft resumed service about 12 hours after landing.

http://avherald.com/h?article=44e8aecf

20120425193015:20120425000000

Incident: Ryanair B738 at Bergamo on Apr 25th 2012, strong odour in cabin

A Ryanair Boeing 737-800, registration EI-EVA performing flight FR-4001

from Milan Bergamo (Italy) to Lanzarote, CI (Spain) with 179 passengers,

was in the initial climb out of Bergamo's Orio al Serio Airport's runway

28 when a strong acrid smell was noticed in the cabin. The crew levelled

off at 4000 feet and returned to Bergamo's runway 28 for a safe landing

about 12 minutes after departure.

A replacement Boeing 737-800 registration EI-EKV reached Lanzarote with a delay of $2.5\ hours$.

http://avherald.com/h?article=44e87f7d

20120425135017:20120425000000

Incident: KLM MD11 near Shannon on Apr 25th 2012, smoke in cockpit

A KLM McDonnell Douglas MD-11, registration PH-KCC performing flight KL-758

from Panama City (Panama) to Amsterdam (Netherlands) with 272 passengers

and 13 crew, was enroute at FL370 about 140nm south of Shannon (Ireland)

when the crew reported smoke in the cockpit and diverted to Shannon for

a safe landing on runway 06 about 35 minutes later. Responding emergency

services found no trace of fire or smoke.

The airline reported an unusual odour in the cabin prompted a precautionary

diversion. A replacement aircraft is going to continue the flight.

PH-KCC at the gate in Shannon:

http://avherald.com/h?article=44e723f9

20120423204728:20120422000000

Incident: Delta MD88 at New York on Apr 22nd 2012, odour on board

A Delta Airlines McDonnell Douglas MD-88, registration N938DL performing

flight DL-2019 from New York La Guardia,NY to Minneapolis,MN (USA) with

156 people on board, was climbing out of La Guardia Airport when the crew

reported a smoky odour on board, stopped the climb at about 17,000 feet

and decided to divert to New York's JFK Airport. On final approach to runway

04L the crew went around and positioned for another approach to runway 04L

for a safe landing about 40 minutes after departure and 10 minutes after

going around.

A replacement MD-88 reached Minneapolis with a delay of 6 hours.

http://avherald.com/h?article=44e62ccf

20120422151444:20120422000000

Incident: UPS B763 near Boston on Apr 22nd 2012, odour, smoke in cockpit and cargo fire indication

A UPS Boeing 767-300, registration N332UP performing flight 5X-209 from

Philadelphia, PA (USA) to Cologne (Germany), was enroute at FL330 about 40nm

northnortheast of Boston, MA (USA) when the crew reported an odour in the

cockpit, followed by smoke in the cockpit from the center pedestal possibly

right radio. The crew decided to divert to Boston where the aircraft landed

overweight and safely on runway 33L about 13 (!) minutes later and stopped

on the runway reporting they had hot brakes and now also had a fire indication

at the upper cargo deck containing hazmat, they believed however the fire

indication was false. The crew shut the aircraft down and requested emergency

services to use thermal imaging, a quick check of the cargo bay by them

had not shown any trace of fire. Emergency services found no trace of fire.

The aircraft was subsequently towed to the cargo apron.

http://avherald.com/h?article=44e30b5e

20120420110703:20120418000000

Incident: Lufthansa B744 near Ufa on Apr 18th 2012, smoke in cabin

A Lufthansa Boeing 747-400, registration D-ABVS performing flight LH-729

from Shanghai (China) to Frankfurt/Main (Germany) with 311 passengers, was

enroute at FL340 about 80nm northeast of Ufa (Russia) when the crew reported

smoke in the cabin and diverted to Ufa for a safe landing about 20 minutes

later. Responding emergency services found no trace of fire, the smoke was

identified as electrical as result of some faulty wires. No injuries were

reported.

The airline's website estimated the flight to depart Ufa at 04:45L Apr 19th

and continue to Moscow Domodedovo (Russia), those flights were all cancelled

on Apr 19th. The website then did not show how the passengers would get

to Frankfurt.

Lufthansa dispatched two Airbus A320-200, registration D-AIZJ and D-AIQB,

from Moscow to Ufa as flights LH-9875 and LH-9879, which arrived in Ufa

around 11:30L (05:30Z), the aircraft are currently enroute as flights LH-9877

and LH-9881 obviously heading for Germany, current position (11:00Z) already

over Belarus 270nm west of Moscow. D-AIZJ landed on Frankfurt's runway 25C

at 15:08L (13:08Z) and D-AIQB on runway 25C at 15:21L (13:21Z) delivering

the passengers to Frankfurt with a total delay of about 20.5 hours.

The incident aircraft positioned to Germany on Apr 20th leaving Ufa about

44 hours after landing.

The airline reported the aircraft diverted because of an unusual odour on

board adding later that the source of the smell was identified to be

overheating lamp in the crew rest bunk.

http://avherald.com/h?article=44de6eb5

20120412220046:20120412000000

Incident: Luxair E145 at Munich on Apr 12th 2012, burning odour

A Luxair Embraer ERJ-145, registration LX-LGW performing flight LG-9732

from Munich (Germany) to Luxembourg (Luxembourg) with 29 passengers

3 crew, was climbing out of Munich when the crew reported a burning odour

in the cockpit, levelled off at FL100 and returned to Munich for a

landing about 20 minutes after departure. Responding emergency services

confirmed a burning smell in the cockpit, but could not locate the origin.

The passengers were rebooked onto the next flight LG-9730 and reached Luxembourg with a delay of 3 hours.

The airline reported a maintenance technician was flown to Munich and determined

the charger of a cockpit torch had suffered a short circuit developing the

burning smell as result.

The incident aircraft was able to resume service about 8 hours after landing.

http://avherald.com/h?article=44f887e7

20120514122334:20120316000000

Accident: Air Berlin B737 at Munich on Mar 16th 2012, rotten odour

on board

An Air Berlin Boeing 737-700, registration D-ABLF performing flight AB-6112

from Munich to Cologne (Germany), was departing Munich and in the initial

climb when a strong rotten smell developed on board, which slowly dissipated

during cruise. The aircraft continued for a safe landing at Cologne.

Germany's BFU reported in their monthly bulletin that during the flight

one cabin crew member already complained about severe headache, after landing

the entire crew complained about nausea and went to see the airport's doctor.

An investigation has been opened.

http://avherald.com/h?article=44c554c9

20120312235739:20120312000000

Incident: Arkefly B763 near Brussels on Mar 12th 2012, electrical odour in cockpit and electrical problems

An Arkefly Boeing 767-300 on behalf of Jetairfly, registration PH-OYJ performing

flight TB-103 from Brussels (Belgium) to Santo Domingo (Dominican Republic),

was climbing through about FL110 out of Brussels when the crew declared

PAN PAN PAN reporting an electrical odour and requesting to return to Brussels.

The aircraft levelled off at FL120, the crew reported they had electrical

problems as well, and returned to Brussels for a safe landing about 30 minutes

after departure.

The aircraft was able to depart again after about 7 hours on the ground

and is currently estimated to reach Santo Domingo with a delay of 8 hours.

http://avherald.com/h?article=44bf47fd

20120307122041:20120305000000

Incident: Air France A343 over Atlantic on Mar 5th 2012, smoke

caused by short circuit

An Air France Airbus A340-300, registration F-GLZJ performing flight AF-422

from Paris Charles de Gaulle (France) to Bogota (Colombia) with 274 passengers

and 14 crew, was enroute over the Atlantic northwest of the Azores Islands

when the crew received a smoke indication for the lower mobile deck, crew

rest area. The flight crew decided to divert to Lajes Airport on Terceira

Island, Azores (Portugal) for a safe overweight landing. The passengers

disembarked via mobile stairs.

Examination revealed the smoke indication was caused by smoke emanating

from a short circuit.

A replacement Airbus A340-300 registration F-GLZR was dispatched to Lajes

on Mar 6th, departed Terceira Island at 15:40L Mar 6th (16:40Z) and reached

Bogota with a delay of 26.5 hours.

The airline's press office said, the fire indication was false, there was

no smoke, an investigation is underway to determine why the alarm went off

for no reason.

Passengers reported an unusual burning odour shortly after takeoff, that

had been delayed by about 30 minutes due to some technical issue. About

3 hours into the flight the odour intensified and smoke became visible in

the cabin, seemingly emanating from a lavatory. The aircraft dumped fuel

while descending towards the Azores Islands.

Passenger Alessandro Colombo was seated in the front row of premium voyager

class and told The Aviation Herald, that he could not notice any smoke,

unusual odour or unusual sounds from his seat, however, he noticed something

was going on in the left aft part of the cabin. The aircraft was northwest

of the Azores Islands when it turned to divert to Lajes, the captain announced

they had a smoke alert, would divert to Lajes and would dump fuel on the

way to Lajes. The aircraft, while dumping fuel, descended normally to 3000

feet (according to map/flight progress display on the entertainment system),

continued at that altitude, still dumping fuel, for about 20 minutes straight

towards Lajes and landed safely. Alessandro described the scenario on board

as calm with no panic whatsoever, four fire trucks awaited the aircraft

at Lajes, 2 firemen entered the cabin in full safety equipment, the passengers

disembarked quietly over airport stairs with all their belongings.

Disembarking the aircraft in Lajes (Photo: Alessandro Colombo):

http://avherald.com/h?article=44baa216

20120229121020:20120228000000

Incident: Frontier A319 near Nashville on Feb 28th 2012, odour in cockpit

A Frontier Airlines Airbus A319-100, registration N947FR performing flight

F9-427 from Atlanta, GA to Denver, CO (USA) with 99 passengers, was enroute

at FL360 about 50nm southeast of Nashville,TN when the crew donned their

oxygen masks due to an unusual odour in the cockpit and decided to divert

to Nashville, where the aircraft landed safely on runway 20R about 25 minutes later.

A replacement Airbus A319-100 registration N945FR reached Denver

with a delay of 5.5 hours.

http://avherald.com/h?article=44bbcd4b

20120301205124:20120226000000

Incident: First AT42 at Yellowknife on Feb 26th 2012, smoke just

prior to takeoff

A First Air Avion de Transport Regional, registration C-FIQU performing

flight 7F-852 from Yellowknife,NT to Cambridge Bay,NU (Canada) with 21 people

on board, was lined up on runway 34 preparing for departure when the

received an aft smoke indication and decided to return to the apron. While

taxiing along the runway a strong odour of electrical fumes was detected,

the crew stopped the aircraft about 1550 feet down the runway and evacuated the aircraft.

The Canadian TSB reported maintenance found the circuit breaker for

"ground cooling fan #2" tripped and the Pack 2 Overheat mimic trip indicator

was showing. The ground cooling fan #2 was replaced, following function

checks the aircraft was returned to service.

http://avherald.com/h?article=44cbabc3

20120320174937:20120113000000

Incident: Air Berlin A332 near Bangkok on Jan 13th 2012, burning

odour and smoke in cabin

An Air Berlin Airbus A330-200, registration D-ABXB performing flight AB-7151

from Bangkok (Thailand) to Dusseldorf (Germany), was climbing out of Bangkok

when a burning odour became noticeable in the aft cabin followed by visible

smoke. Near the door L3 rumbling and whimpering sounds were heard.

Subsequently

white smoke associated with a burned smell appeared from the air conditioning

outlets in the cabin ceiling. Smell and smoke was not noticeable in the

cockpit nor was any warning indication in the cockpit. After cabin crew

had informed the flight crew an emergency was declared and the crew set

course to return to Bangkok. While descending, with the engines at idle

and while working the smoke checklists, the smoke began to lighten, the

aircraft landed safely but overweight back in Bangkok. The passengers disembarked normally via stairs.

The BFU reported in their monthly bulletin that the rotor of an air cycle

machine, usually rotating at 35000 revolutions per minute to prepare engine

bleed air for use in the air conditioning system, had seized. The turbine

had overheated and unprocessed, humid engine bleed air had entered the cabin.

Later a valve closed automatically preventing such bleed air to enter the

air conditioning system.

http://avherald.com/h?article=4496ec87

20120117223332:20120113000000

Incident: Porter DH8D near Quebec on Jan 13th 2012, smoke in cockpit

A Porter Airlines de Havilland Dash 8-400, registration C-GLQQ performing

flight PD-512 from Quebec,QC to Toronto,ON (Canada) with 68 people on board,

was climbing through FL180 out of Quebec when the crew detected a burning

smell in the cockpit and shortly afterwards saw wisps of smoke followed

by an "ENG ADPT HEAT 1" caution message. The crew performed the smoke drill,

donned oxygen masks and goggles, declared emergency and returned to Quebec

for a safe landing on Quebec's runway 06 about 45 minutes after departure.

Responding emergency services found no trace of fire or heat, however still

observed the smell of smoke. The aircraft taxied to the gate where passenger disembarked normally.

Emergency services again inspected the aircraft at the gate, the smell was

still noticeable, however, no source of heat was found.

The Canadian TSB reported maintenance found a damaged and overheated Engine

Intake Heater Adapter Assembly which caused the odour to develop and distribute

through the engine intake via the bleed air and the air conditioning

into the aircraft. The Heater Adapter Assembly was replaced.

http://avherald.com/h?article=449110c5

20120110174744:20120110000000

Incident: American B738 at New York on Jan 10th 2012, electrical

odour

An American Airlines Boeing 737-800, registration N829NN performing

AA-487 from New York JFK,NY (USA) to San Juan (Puerto Rico) with 154 people

on board, was climbing through 13,000 feet when the crew reported an electrical

smell in the area of the forward galley, levelled off at 13,000 feet and

returned to New York for a safe landing on runway 31L about 20 minutes after departure.

The aircraft was able to depart again after about 2 hours on the

and reached San Juan with a delay of an hour.

http://avherald.com/h?article=4493ab21

20120113230333:20120108000000

Incident: Air Wisconsin CRJ2 at Ottawa on Jan 8th 2012, smoke in

cockpit

An Air Wisconsin Canadair CRJ-200 on behalf of US Airways, registration

N434AW performing flight ZW-3837/US-3837 from Ottawa,ON (Canada) to Philadelphia,PA

(USA), was climbing out of Ottawa when the crew reported smoke in the cockpit,

the airfield was in sight. The aircraft was cleared for an "absolutely unrestricted"

visual approach" to runway 25, levelled off at about 4000 feet and landed

safely on runway 25 about 5 minutes after departure.

The Canadian TSB reported the odour (smoke) was attributed to ingestion

of anti-ice fluid that had been applied prior to departure.

http://avherald.com/h?article=448e8b96

20120107154547:20120106000000

Incident: Korean A333 near Komatsu on Jan 6th 2012, odour on board

A Korean Air A330-300, registration HL7550 performing flight KE-766 from

Sapporo (Japan) to Seoul (South Korea) with 242 passengers, was enroute

at FL380 about 120nm northeast of Komatsu (Japan) when a strong odour on

board prompted the crew to divert to Komatsu for a safe landing. Emergency

services found no trace of fire, heat or smoke.

The passengers were taken to hotels. The aircraft was examined and released

for flight the following day after 20 hours on the ground. The aircraft

reached Seoul with a delay of 20 hours.

Passengers reported the odour smelled like burned wires.

The airline reported the odour was caused by an anomaly in the air conditioning system.

http://avherald.com/h?article=448a8c92

20120102232753:20111231000000

Incident: American B772 near Beijing on Dec 31st 2011, smell of

smoke in cabin

An American Airlines Boeing 777-200, registration N756AM performing flight

AA-186 from Beijing (China) to Chicago O'Hare, IL (USA), was enroute about

30 minutes into the flight when smell of smoke was detected in the cabin

prompting the crew to return to Beijing for a safe landing about 60 minutes

after departure. No traces of fire, heat or smoke were found.

The aircraft was able to depart the following day and reached Chicago with a delay of 26 hours.

Passengers reported they smelled a strong odour of smoke on board, shortly

afterwards the captain announced they had technical problems and were returning to Beijing.

http://avherald.com/h?article=4483bc24

20111225142035:20111221000000

Incident: Wisconsin CRJ2 near Ottawa on Dec 21st 2011, smoke on

board

An Air Wisconsin Canadair CRJ-200 on behalf of US Airways, registration

N434AW performing flight ZW-3757/US-3757 from Ottawa,ON (Canada) to Charlotte,NC

(USA) with 52 people on board, was in the initial climb out of Ottawa when

the crew reported smoke in the cockpit, levelled off at 3000 feet and returned

to Ottawa for a safe overweight landing about 20 minutes after departure.

Responding emergency services found no trace of fire, heat or smoke.

The Canadian TSB reported that the aircraft had been de-iced prior to departure,

de-icing fluid entered the air conditioning system and caused the odour

and smoke.

http://avherald.com/h?article=4477d21b

20111211140845:20111208000000

Incident: Air Berlin A332 over Atlantic on Dec 8th 2011, odour on

board

An Air Berlin Airbus A330-200, registration D-ALPE performing flight AB-7451

from New York JFK,NY (USA) to Dusseldorf (Germany), was enroute at FL370

about 130nm west of St. John's, NL (Canada) when the crew reported an unidentifyable

odour on board, turned around and requested to divert to Bangor,MA (USA).

The crew subsequently decided to return to New York's JFK Airport for a

safe landing on runway 31R with emergency services on stand by about 2:40

hours later.

The incident aircraft was able to depart again after about 17 hours on the

ground in New York and reached Dusseldorf with a total delay of 22 hours.

http://avherald.com/h?article=446f0c3b

20111130231449:20111126000000

Incident: Air Canada A320 near Vancouver on Nov 26th 2011, acrid

smell on board

An Air Canada Airbus A320-200, registration C-FTJP performing flight AC-162

(scheduled dep Nov 25th) from Vancouver, BC to Toronto, ON (Canada) with 152

people on board, was climbing through 10,000 feet out of Vancouver when

the crew reported an acrid smell in the cabin and returned to Vancouver

declaring urgency with ATC due to overweight landing and possibly hot brakes.

The aircraft landed safely in Vancouver about 15 minutes later.

A replacement Airbus A320-200 reached Toronto with a delay of 2.5 hours.

The Canadian TSB reported the source of the odour is believed to be

auxiliary power unit's (APU) bleed. Maintenance conducted an engine

with the APU off, the smell dissipated. The APU bleed valve was deactivated

according to minimum equipment list requirements, an overweight landing

inspection could be skipped because touchdown occurred at less than 360

fpm and the aircraft returned to service without further incident.

http://avherald.com/h?article=44619c2d

20111114162946:20111113000000

Incident: American B752 near Nassau on Nov 13th 2011, smell of smoke

An American Airlines Boeing 757-200, registration N616AA performing fliaht

AA-1830 from Punta Cana (Dominican Republic) to Miami, FL (USA), was enroute

at FL360 about 115nm southsoutheast of Nassau (Bahamas) when the crew reported

smell of smoke on board and diverted to Nassau for a safe landing about

30 minutes later.

A replacement Boeing 757-200 reached Miami with a delay of 5 hours.

A left hand bleed duct overheat was identified as cause of the odour.

http://avherald.com/h?article=445f5876

20111111232114:201111111000000

Incident: Delta DC95 at Fargo on Nov 11th 2011, smoke in cabin

A Delta Airlines Douglas DC-9-50, registration N677MC performing flight

DL-1246 from Fargo,ND to Minneapolis,MN (USA) with 76 passengers, was climbing

out of Fargo's runway 18 when the crew reported smoke in the cabin and returned

to Fargo's runway 18 for a safe landing about 10 minutes after departure.

The airline reported a smokey odour was observed in the cabin prompting the return.

The aircraft was able to depart again and reached Minneapolis with a delay of 6:15 hours.

http://avherald.com/h?article=44822517

20111223154955:20111020000000

Accident: TUIFly B737 at London and enroute on Oct 20th 2011,

captain and two cabin crew unwell

A TUIFly Boeing 737-700 in Air Berlin colours, registration D-AHIA performing

flight AB-8597 from London Gatwick, EN (UK) to Nuremberg (Germany), had used

a ground power unit for electric supply as well as the APU's bleed air for

air conditioning while on the ground in Gatwick. A strong odour developed

on board of the aircraft which the crew accounted to come from the bleed

air of the APU, the APU was kept operating however due to the low outside

temperature of +2 degrees C (36 degrees F). While the aircraft taxied for

departure the smell reduced so that the crew decided to depart. The smell

reduced further during the initial climb, then began to intensify again.

Passengers attempted to identify the smell but did not approach cabin crew.

Enroute the captain left the cockpit to inspect the cabin, two flight attendants

complained about tingling arms and legs, headache, dizziness, lack of power

of concentration, stinging eyes and difficulty swallowing. Upon

returning

to the cockpit the captain detected unusual bodily symptoms on himself.

too. Both flight crew discussed the situation considering a diversion to

the closer Frankfurt (Germany), but decided to continue the flight to destination.

During the descent the captain repeatedly used his oxygen mask. The aircraft

landed safely in Nuremberg.

The German Bureau for Aviation Accident Investigation (BFU) reported in

their monthly bulletin all three crew members, captain and two cabin crew,

were unable to perform duties for 1.5 weeks following the accident flight.

A technical examination of the aircraft in the next two days revealed no

anomaly on both engines, the APU and the air conditioning systems.

A chemical analysis of the cabin air sampled on Oct 20th after landing did not reveal any anomalies.

http://avherald.com/h?article=4448a8f1

20111017152420:20111014000000

Incident: Austrian F70 near Vienna on Oct 14th 2011, odour on board

An Austrian Airlines Fokker 70, registration OE-LFJ performing flight OS-615

from Vienna (Austria) to Sochi (Russia), was climbing through FL280 out

of Vienna when the crew decided to return to Vienna due to a stale odour

on board. The aircraft entered a holding at FL100 to burn off fuel and landed

safely back about 90 minutes after departure.

The airline reported the cause of the stale odour on board is being investigated,

causes like contamination through bleed air, cleaning materials or condensation

in the air conditioning are being looked at.

Following the examination the airline reported the cause of the odour was

identified an obstruction in the air conditioning system, therefore cooling

water in the air conditioning system became brackish and started to

smell

when it heated up, the smell being similiar to an air conditioning system

that had been used for a longer period of time.

http://avherald.com/h?article=444e75ef

20111022134541:20111012000000

Incident: TAP A332 near Gran Canaria on Oct 12th 2011, odour on

board

A TAP Air Portugal Airbus A330-200, registration CS-T0I performing flight

TP-151 from Lisbon (Portugal) to Recife, PE (Brazil), was enroute at FL380

about 90nm south of Gran Canaria, CI (Spain) two hours into the flight when

the crew turned around to return to Lisbon due to an unusual odour on board.

The aircraft landed safely on Lisbon's runway 03 about 110 minutes after

turning around.

A replacement Airbus A330-200 registration CS-TOM reached Recife with a delay of 6.5 hours.

http://avherald.com/h?article=44457995

20111011201811:20111011000000

Incident: Skyways F50 at Kristianstad on Oct 11th 2011, electrical

fumes on board

A Skyways Fokker 50, registration SE-LIT performing flight JZ-466 from Kristianstad

to Stockholm Arlanda (Sweden), was climbing out of Kristianstad when

crew reported an electrical odour on board of the aircraft and decided to

return to Kristianstad for a safe landing about 15 minutes after departure.

The flight was subsequently cancelled, the passengers were bussed to Vaxjo

(about 125 road km north of Kristianstad) to catch flight JZ-448 which reached

Stockholm with a delay of 2:20 hours.

http://avherald.com/h?article=46c79b49

20131204170904:20111009000000

Accident: Lufthansa A388 at Frankfurt and San Francisco on Oct 9th

2011, fumes permanently injure flight attendant

A Lufthansa Airbus A380-800, registration D-AIMB performing flight IH-454

from Frankfurt/Main (Germany) to San Francisco, CA (USA) with an unknown

number of passengers and 24 crew, was climbing out of Frankfurt when a strong

chemical odour of dirty socks was observed in cockpit and cabin. The flight

crew contacted dispatch who told the flight crew that one of the engines

had been washed prior to departure, the bleed air suppy was deactivated

on that engine and the odour dissipated. The aircraft continued the flight

to San Francisco. During the descent towards San Francisco the odour re-appeared

even stronger than on departure despite the bleed air still being deactivated

on the washed engine. The aircraft landed safely in San Francisco.

As a precaution following the fumes events two of the flight attendants

went to see the San Francisco's doctor assigned by Lufthansa to seek advice,

but the doctor wasn't available, only a sign indicating on the door that

he'd be back shortly, however, the doctor didn't return the entire afternoon.

The two joined the crew for their scheduled return flight and worked normally

on the return flight.

Arriving at home immediately after the return flight one of the two flight

attendants seeking medical advice in San Francisco felt very sick. During

subsequent medical checks it turned out that the flight attendant had received

serious injuries, that are still seriously affecting the flight attendant's

health more than two years later rendering the flight attendant unable to

work due to headache, permanent tiredness, lack of concentration, lack of energy, burning eyes and related shortcomings.

The Aviation Herald learned of the accident through the family of the injured

flight attendant in October 2013. The family stated that a laboratory test

by a US university had proven an intoxication with TriCresyl Phosphate (TCP).

The report on research laboratory tests conducted in January 2012 produced

by the Medical Center of the University of Nebraska confirmed: "Sample [number

omitted] was positive for exposure to tri-o-cresyl phosphate."

Tri-o(rtho)-cresyl phosphate (ToCP) is one of the 10 isomers of tri-cresyl-phosphate

(TCP), a substance belonging to the chemical family of organophosphates,

which are used for special aviation lubricants. One of the widely known

members of the family of organo-phosphates is the nerve agent Sarin.

The family reported, that this report was not recognized by Germany's Authorities

like "Árbeitsmedizinischer Dienst" (occupational health service), health

insurance, Luftfahrtbundesamt (LBA, Civil Aviation Authority), the airline

or the related cabin crew association, hence the medical status of the flight

attendant was not acknowledged as work accident resulting from the occurrence

flight. Necessary treatment to overcome the intoxication was thus not available

to the flight attendant. Quite the opposite, the family told The Aviation

Herald, the Medical Center of the University of Nebraska was "advised"

to not conduct those tests anymore.

A second medical examination in Germany conducted in October 2013 by the

Medical Center of Tagesklinikum Cham reported a lot of medical values identifying

degradation products of organo-phospates and related antibodies. The report

states: "Es liegt jetzt schon eine signifkant eingeschr%nkte F
%higkeit des

Organismus vor mit Toxinen umzugehen, die bei einem Fumes Event freigestellt

werden." (Translation: Already now a significantly reduced capacity

of the

organism exists to handle toxins that are being released during a fumes event.)

The medical expertise concludes: "Das gefundene Abbauprodukt stammt eindeutig

von einem prim‰ren Organophosphat. In Bezug auf das stattgehabte Fume event

kommt nur das Trikresylphosphat als Prim‰rsubstanz zum Tragen. Somit ist

der Kontakt und die klinische Bedeutung, die f r den Zustand [name omitted]

verantwortlich ist, gesichert." (Translation: The found degradation product

undisputably originates from a primary organophosphate. With respect to

the happened fumes event only tri-cresyl phosphate takes effect as primary

substance. Hence contact and clinical significance, responsible for

status of [name omitted], are verified.)

The expertise recommends a number of therapies to help the flight attendant's

body to get rid of the intoxication and recover from Neuropathy.

Associates of the flight attendant stated the flight attendant was healthy

and in good spirit the day before departure to San Francisco. After

return from the rotation they nearly could not recognize the flight attendant,

who was pale, weak and apathetic, the status has not noticeably improved since.

Lufthansa's press department refused to comment on questions like whether

there was a doctor accredited in San Francisco and why that doctor wasn't

available, or whether they were able to identify any cause of the smell/fumes

on board of D-AIMB stating that they won't disclose any personal data of

their employees. When The Aviation Herald queried, that absolutely no personal

data of the flight attendants involved were asked for, Lufthansa spokesman

Michael Lamberty stated: "aus unterschiedlichen Granden, kannen wir abschlieflend

keine Fragen entdecken, auf die wir n‰her eingehen k^nnten" (translation:

for a number of reasons and in conclusion we can not detect any

questions, that we could respond to).

Germany's Luftfahrtbundesamt (LBA, Civil Aviation Authority) stated on Oct

15th 2013, that they were not aware of the occurrence.

Germany's BFU (accident investigation board) told The Aviation Herald, that

they received a written report about the flight of Oct 9th 2011 on Oct 23rd

2011, the narration of events in that report prompted the BFU to rate the

occurrence not as accident or serious incident, an investigation was not

opened as result. The BFU said, new evidence presented by The Aviation Herald

and the family of the flight attendant is being assessed, might change the

classification of the occurrence and thus prompt an investigation, a decision

is pending.

The United States NTSB reported, they were not aware of the occurrence,

the responsibility for the investigation would be with Germany's BFU however.

The responsible German federal "Amt f,r Versorgung und Soziales" (Department

for Care and Social Services) issued a ruling in March 2013, that the flight $\,$

attendant was handicapped to a degree (GdB) of 50 (signifying severe disability),

and argued, that the flight attendant had been intoxicated by TCP and suffered

from reduced capacity, Polyneuropathy and reduction of brain capacity as

well as depressive disturbances.

Germany's Berufsgenossenschaft f_r Transport und Verkehrswirtschaft (Professional

Association for Transport and Traffic) rejected any compensation claims

in May and October 2013 ruling, that a concrete proof of TCP or other related

harmful substances affecting the flight attendant's health was not presented.

hence a work accident did not occur. The Association acknowledged however

that the captain of the flight immediately suspected intoxication by TCP.

http://avherald.com/h?article=44466577

20111012222302:20111009000000

Incident: Lufthansa A321 near Linz on Oct 9th 2011, odour in cockpit

A Lufthansa Airbus A321-100, registration D-AIRX performing flight LH-1239

from Vienna (Austria) to Frankfurt (Germany), was enroute at FL230 about

20nm west of Linz (Austria) when two circuit breakers popped followed by

some odour that prompeted the crew to divert to Munich (Germany) for a safe

landing on runway 26L about 20 minutes later.

The remainder of the flight was cancelled, the passengers were rebooked onto other flights.

http://avherald.com/h?article=44410faa

20111006161407:20111003000000

Incident: Westjet B738 near Calgary on Oct 3rd 2011, burning odour
in cabin

A Westjet Boeing 737-800, registration C-GWSX performing flight WS-425 from

Calgary, AB to Vancouver, BC (Canada) with 134 people on board, was in the

initial climb through 1000 feet AGL out of Calgary's runway 16 when the

crew reported smoke in the cabin. The aircraft levelled off at around 8400

feet and returned to Calgary's runway 16 for a safe landing about 12 minutes

after departure.

The Canadian TSB reported, that it was actually a burning smell in the cabin.

The smell dissipated until landing and the aircraft taxied to the apron

with the APU shut down. The APU had received maintenance the previous day,

during which the fan blades were lubricated. It is believed the burning

smell originated from the excess lubricant burning off.

http://avherald.com/h?article=443e0efb

20111002223835:20111002000000

Incident: Delta B752 near Sioux Falls on Oct 2nd 2011, electrical

fumes in cabin

A Delta Airlines Boeing 757-200, flight DL-1550 from Las Vegas, NV to Minneapolis, MN

(USA), was enroute at FL370 about 50nm west of Sioux Falls,SD (USA) when

the crew reported an electrical odour in the cabin and diverted to Sioux

Falls for a safe landing about 20 minutes later.

The FAA reported the crew requested to divert to Sioux Falls because of

electrical fumes on board.

http://avherald.com/h?article=4439c964/0000

20120313173121:20110926000000

Incident: United Airlines B752 at Denver on Sep 26th 2011, bird

strike

The NTSB have released their final report concluding the probable cause was:

The initial damage to the fan blades was caused by the ingestion of a Red-Tailed

Hawk that resulted in the fracture of one or more fan blades, which then

struck the fan case and caused it to bulge. The bulged fan case moved into

the path of the other passing fan blades producing various sized blades

fragments that creating a cascading effect of collateral impact damage to

the other fan blades, the fan case, and the inlet cowl.

The NTSB reported the aircraft had just touched down on runway 35R, full

reverse thrust had been applied, when the flight crew observed two

hawks

at the center line of runway 35R shortly followed by impact on the fuselage

and hot odour in the cockpit. After vacating the runway engine #1 rolled

down on its own, an oil pressure light followed by a low oil pressure indication

came on. A flight attendant observed smoke from the tail pipe of the engine,

the flight crew shut the engine down using the "engine fire, severe damage

or separation" checklist. Emergency services were called but found no trace

of fire. The aircraft was subsequently towed to the gate.

The aircraft sustained minor gouging of the fuselage and underside of the

left wing, a passenger window was nicked and the left main gear forward

tyre was slashed but not deflated.

The left hand engine showed multiple impacts on its inner barrel of the

inlet cowl, gouges and through holes through the outer skin of the inlet

at two locations. All fan blades were extensively damaged with three blades

fractured across the airfoil. No penetrations or breaches were observed

in the engine cases, the fan case however showed several bulges corresponding

to hard impacts, fan blade rub strip material was missing.

The right hand engine showed minor fan blade leading edge damage to a number of blades.

The remains of the whole bird as well as fragments of a second bird were

recovered from runway 35R and identified as remains of juvenile Red-Tailed Hawks.

http://avherald.com/h?article=443e9a61

20111129180153:20110925000000

Accident: Air Berlin A332 near New York and Berlin on Sep 25th and Sep 26th 2011, odour causes all crew feel unwell

An Air Berlin Airbus A330-200, registration D-ALPI performing flight AB-7249

from New York JFK,NY (USA) to Berlin Tegel (Germany) with 254

passengers

and 10 crew, was climbing through 2500 feet out of New York when an unusual

odour of wet pullovers was observed in the cockpit and cabin, especially

in the forward area of the cockpit. The crew identified the smell as oil

fumes and continued the climb to FL380 where the odour reduced to bearable

intensity. Several cabin crew reported headache resulting from the fumes,

cockpit crew members complained about dizziness and tumb fingers causing

difficulty to operate the MCDU. Medical services contacted via radio refused

service arguing the oil fumes event was "political" because of the involved

TCP ("TriCresyl Phosphate") problems. After monitoring the oil consumption

over the first 4 hours of the flight the crew identified a loss of 4 quarts

of oil for the left hand engine (PW4168) with the right hand engine's oil

consumption remaining normal. During the approach to Berlin, while descending

through FL070 the smell increased in intensity again. The aircraft continued

for a safe landing on Tegel's runway 26R about 7 hours after departure from

New York. The purser received serious injuries.

All flight and cabin crew delivered blood samples. The purser was in hospital

care for more than 2 days. The flight crew complains about lasting impact $% \left(1\right) =\left(1\right) +\left(1\right) +$

on their health like dizziness and tumb fingers.

Maintenance reported the carbon seals at the left engine's spinner were

leaking substantial amounts of oil.

Germany's Civil Aviation Authority (LBA) reported they received an occurrence

report by Air Berlin and are investigating.

Germany's Bureau for Aviation Accident Investigation (BFU) confirmed the

BFU have initiated an investigation.

On Nov 29th 2011 the BFU reported in their monthly bulletin, that all crew

complained about headache, cough, hoarseness, lack of powers of concentration,

dizziness, difficulty in swallowing as well as slightly numb finger

tips.

Air Berlin confirmed that the flight experienced short term odours during

climb and descent, which were noticed by both cockpit and cabin crew but

dissipated quickly. The airline is currently not able to provide further

details due to the ongoing investigation.

In a new statement Air Berlin reported on Oct 4th, that an occurrence report

was immediately submitted to the LBA. The airline did not see any necessity

to submit a report to the BFU arguing the events did not constitute a serious

incident, however, submitted a report on Sep 28th stating they wanted authorities

have the final assessment. Immediately after landing the members of the

crew received medical care and were examined by

"Berufsgenossenschaftlicher

und Arbeitsmedizinischer Dienst" (BAD – trade associations' and industrial

medical service), who did not find a causal link between the odour and the

symptoms suffered by the members of the crew. The purser, who had been submitted

to hospital care, was released with normal values in the meantime. The technical

logs showed, that the oil consumption of the left engine was well below

limits, nonetheless, the engine was replaced without technical necessity.

A similiar occurrence spanning multiple flights had occurred with another

Air Berlin A332 earlier this year, see Incident: Air Berlin A332 at Bangkok

on Apr 11th 2011, departed with engine required to be changed, Incident:

Air Berlin A332 near Munich on Apr 9th 2011, strong smell of oil on board

and Incident: Air Berlin A332 near Munich on Apr 8th 2011, smell of oil

on board.

The theory, that oil fumes by the nature of the ingredient TriCresyl Phosphate

entering the cabin through the bleed air system may cause toxic symptoms

(named Aerotoxic Syndrome), has been consequently denied by the industry

over decades arguing that no scientific evidence of a causal link

between

TCP and the Aerotoxic Syndrome could be produced. In the recent years scientific

studies however proved a causal link between TCP in form of oil fumes via

bleed air and the Aerotoxic Syndrome. These results led to a court verdict

in Australia in 2010 awarding compensation to a flight attendant, who had

been exposed to fumes leading to an Aerotoxic Syndrome. The results of this

recent scientific research are currently being discussed in the national

parliaments of a number of countries with the expectation of rules changing.

Additional filters for the bleed air systems promising to substantially

reduce oil fumes are available, these filters however have not been applied

to Air Berlin's aircraft as of current.

Newest aircraft designs, for example the Boeing 787, no longer supply the

cabin air conditioning systems with engine bleed air.

http://avherald.com/h?article=443426bb

20110920203548:20110916000000

Incident: United Airlines B772 near Halifax on Sep 16th 2011, smoke detector could not be silenced

A United Airlines Boeing 777-200, registration N218UA performing flight

UA-976 from Washington Dulles,DC (USA) to Dubai (United Arab Emirates) with

262 people on board, was enroute at FL310 about 55nm southeast of Halifax,NS

(Canada) when the crew received a smoke detector indication, cabin crew

also received Lower Lobe Area Rest (LLAR) red cabin lights and chime announciations

at their stations. No odour, smoke, heat or fire was observed in or near

the LLAR, however, none of the indications could be silenced. The flight

crew declared emergency, returned to Washington's Dulles Airport, dumped

fuel on the way back and landed safely about 2 hours after turning

around.

The Canadian TSB reported maintenance replaced a number of electronic boards,

the LLAR smoke detector and returned the aircraft to service.

http://avherald.com/h?article=442302d3

20110831154802:20110830000000

Incident: Ryanair B738 near Nantes and London on Aug 30th 2011,

odour on board

A Ryanair Boeing 737-800, registration EI-DHC performing flight FR-9803

from Girona, SP (Spain) to London Stansted, EN (UK), was enroute at FL380

about 32nm south of Nantes (France) when the crew decided to divert to Nantes

squawking emergency after a passenger complained about smell of smoke on

board. The aircraft landed safely on Nantes runway 03 about 15 minutes later.

Ryanair reported that engineers were flown to Nantes, nothing was found,

and the aircraft was released for flight about 5.5 hours later.

When the aircraft was enroute at FL280 over the Channel about 75nm south

of London's Gatwick Airport, EN (UK), the crew decided to divert to Gatwick

squawking emergency again after there were again passenger complaints about

fumes. The aircraft landed safely in Gatwick about 20 minutes later.

Ryanair reported that a passenger complained about fumes in the rear galley

prompting another diversion to the nearest airport Gatwick. The passengers

were taken to Stansted Airport by coach. The aircraft was taken out of service

for inspection.

By Aug 31st 15:45Z the aircraft is still out of service, although it was

positioned to Stansted Airport around noon Aug 31st.

http://avherald.com/h?article=4422f853

20110831144207:20110830000000

Incident: Virgin America A320 near Houston on Aug 30th 2011, smell

of smoke in cabin

A Virgin America Airbus A320-200, registration N835VA performing flight

VX-315 from Orlando,FL to Los Angeles,CA (USA), was enroute at FL360 about

60nm east of Houston,TX (USA) when the crew reported smoke in the cabin

and diverted to Houston. The aircraft landed safely on Houston's runway

27 (runways 08 and 09 active) about 17 minutes later.

A passenger tweeted the flight diverted because of an odour on board.

A replacement Airbus A319-100 registration N524VA reached Los Angeles with a delay of 8 hours.

http://avherald.com/h?article=44206481

20110906193952:20110827000000

Incident: United Airlines B763 over Atlantic on Aug 27th 2011, electrical smell on board

A United Airlines Boeing 767-300, registration N657UA performing flight

UA-948 from Washington Dulles,DC (USA) to London Heathrow,EN (UK) with 169

passengers and 12 crew, was enroute over the Atlantic when the crew decided

to divert to Keflavik (Iceland) due to an electrical smell on board. The

airplane landed safely in Keflavik.

The remainder of the flight was cancelled, the passengers were rebooked onto other flights to London.

The Canadian TSB reported on Sep 6th that the electrical smell was noticed

in the forward galley area. The galley equipment and lighting was switched

off and the smell dissipated. Later in the flight there was a report an

interior side wall panel was warm to touch with no abnormal smell. A short

time later, about 650nm southwest of Keflavik the flight crew noticed an

intermittent odour in the cockpit. The crew consulted the quick reference

handbook, shut down the utility busses, declared emergency and diverted

to Keflavik. Company maintenance reported, that they were unable to detect

an odour after landing and while testing were unable to reproduce the smell

on the ground, there were no smell related events in the previous 200 hours

of flight. In the absence of discrepancies the aircraft was returned to

service.

http://avherald.com/h?article=441192fb

20110810225337:20110809000000

Incident: US Airways B752 near Orlando on Aug 9th 2011, odour on board, engine shut down

A US Airways Boeing 757-200, registration N206UW performing flight US-1719

from Charlotte, NC to Orlando, FL (USA) with 149 people on board, was on approach

to Orlando when the crew declared emergency reporting they had an odour

in the cockpit probably coming off the left hand engine (RB211). The engine

was still running but would be shut down upon landing. The crew continued

for a safe landing on runway 18R, secured the left hand engine while turning

off the runway and stopped on taxiway E for an inspection of the left hand

engine by emergency services.

http://avherald.com/h?article=441180ec

20110810205311:20110804000000

Incident: Westjet B737 near Quebec City on Aug 4th 2011, electrical smell in cabin

A Westjet Boeing 737-700, registration C-FWCN performing flight WS-340 from

Toronto,ON to Quebec City,QC (Canada) with 109 people on board, was on approach

to Quebec City about 95nm west of Quebec City, when the crew declared emergency

reporting an electrical smell in the rear of the cabine and requesting emergency

services on stand by. The aircraft continued for a safe landing on Quebec

City's runway 06 about 17 minutes later and stopped on the runway.

The Canadian TSB reported attending fire fighters found no anomaly. Maintenance

examined the aircraft, found no problem and returned the aircraft to service.

NAV Canada that after an external visual examination of the aircraft the

aircraft vacated the runway and taxied to the apron. The odour was identified

in the aft area of the cabin, examinations of rear ceiling panels, rear

compartments and rudder were without result. The runway was closed for 4 minutes.

http://avherald.com/h?article=443aaef8

20110928202110:20110731000000

Incident: European Air Transport B752 near Leipzig on Jul 31st 2011, fumes in cockpit

A European Air Transport (DHL) Boeing 757-200, registration D-ALEA performing

freight flight QY-6241 from Leipzig (Germany) to Milan Bergamo (Italy) with

2 crew, was in the climb out of Leipzig when both crew noticed a strong

odour and a burning feel in eyes and throat. Both crew donned their oxygen

masks, levelled off at FL230 and returned to Leipzig for a safe

landing about 30 minutes after departure.

The BFU is investigating.

http://avherald.com/h?article=440aa8ee

20110802152255:20110728000000

Incident: Martinair B763 near Miami on Jul 28th 2011, odour in

cockpit

A Martinair Boeing 767-300, registration PH-MCI performing flight MP-639

from Amsterdam (Netherlands) to Cancun (Mexico) with 274 passengers,

enroute at FL380 about 140nm eastnortheast of Miami, FL (USA) when the crew

reported they needed to divert to Miami however did not require any assistance.

The aircraft landed safely in Miami about 25 minutes later.

The passengers were taken to hotels. The aircraft was able to continue to

Cancun the following day and reached Cancun with a delay of 25.5 hours.

Passengers reported crew told them about a strange smell in the cockpit.

Gossip the next day was a fuse had tripped.

http://avherald.com/h?article=44042d90

20110725203019:20110722000000

Incident: American MD82 at Memphis on Jul 22nd 2011, bird strike

An American Airlines McDonnell Douglas MD-82, flight AA-1193 from Memphis, TN

to Dallas Ft. Worth, TX (USA) with 54 people on board, was in the initial

climb out of Memphis when the crew reported an electrical odour and vibrations

requiring them to return to Memphis. While on final approach to runway 36L

the crew declared emergency for electrical fumes and vibrations

reporting

no other abnormal indications. The aircraft landed safely on runway 36L

about 10 minutes after departure.

The FAA reported the left hand engine ingested birds on takeoff causing

minor damage to the aircraft.

http://avherald.com/h?article=43ffa20c

20110720104650:20110719000000

Incident: American Eagle E135 near Hayden on Jul 19th 2011,

electrical odour in cockpit

An American Eagle Embraer ERJ-135, flight MQ-3822 from Denver,CO to Los

Angeles,CA (USA) with 36 passengers and 3 crew, was enroute at FL360 about

30nm northwest of Hayden's Yampa Valley Airport, CO when the crew reported

a strong electrical odour in the cockpit and diverted to Yampa Valley Airport

for a safe landing about 25 minutes later. Attending emergency services

found no trace of fire, heat or smoke.

The airline said, the cause of the odour is under investigation. The passengers

were bussed back to Denver and rebooked onto other flights.

http://avherald.com/h?article=43e4cd37

20110617104815:20110615000000

Accident: US Airways A319 at Pittsburgh on Jun 15th 2011, fumes on

board

A US Airways Airbus A319-100, flight US-630 from Phoenix,AZ to Pittsburgh,PA

(USA) with 106 passengers and 5 crew, was on approach to Pittsburgh's runway

10L descending through 5000 feet when the crew reported they were on oxygen

due to fumes in the cockpit and requested emergency services

available at

the gate. The crew continued for a safe landing on runway 10L about

later. While taxiing to the gate still on oxygen the crew requested paramedics

at the gate reporting they had burning fumes in the cockpit and some

in the cabin, the flight crew was suffering from burning eyes and a burning

in the nose. One of the flight crew was subsequently taken to a local hospital.

The airline reported mechanics have not yet identified the source of the fumes.

http://avherald.com/h?article=43cf4989

20110522102554:20110521000000

Incident: Delta DC95 near Green Bay on May 21st 2011, odour in forward galley

A Delta Airlines Douglas DC-9-50, registration N766NC performing

DL-1476 from Detroit,MI to Minneapolis,MN (USA) with 81 passengers

crew, was enroute at FL280 about 15nm east of Green Bay,WI when the crew

reported a strange odour/smell of smoke in the forward galley and decided

to divert to Green Bay for a safe landing about 17 minutes later. Emergency

services found no trace of fire, heat or smoke.

The passengers were rebooked onto other flights.

http://avherald.com/h?article=43caa3e6

20110516220053:20110516000000

Incident: Allegiant MD83 at Mesa on May 16th 2011, hot odour on

board

An Allegiant McDonnell Douglas MD-83, flight G4-174 from Mesa,AZ to Pasco,WA

(USA) with 147 passengers and 5 crew, was climbing out of Mesa when the

crew reported smoke in the cockpit and decided to return to Mesa's Phoenix—Mesa

Gateway Airport. The aircraft levelled off at 15,000 feet and landed safely

at Mesa about 25 minutes after departure.

The airline reported there was no smoke but fumes and heat in the cabin.

A replacement MD-88 reached Pasco with a delay of 4 hours.

http://avherald.com/h?article=43c7fd93

20110513152509:20110513000000

Incident: American Eagle E145 near Toronto on May 13th 2011,

electrical odour in cabin

An American Eagle Embraer ERJ-145, registration N611AE performing flight

MQ-4349 from Montreal,QC (Canada) to Chicago O'Hare,IL (USA) with 49 passengers

and 3 crew, was enroute at FL360 about 65nm north of Toronto, ON (Canada)

when the flight attendant reported a hot electrical odour in the cabin prompting

the flight crew to divert to Toronto for a safe landing on runway 05 about

20 minutes later. The aircraft taxied to the apron where passengers disembarked normally.

The airline reported the flight attendant noticed a hot electrical smell in the cabin.

http://avherald.com/h?article=43c7d617

20110513110301:20110512000000

Incident: SAS B738 near Oslo on May 12th 2011, smoke in cockpit,

cracked windshield

A SAS Scandinavian Airlines Boeing 737-800, registration LN-RCN performing

flight SK-4031 from Oslo to Stavanger (Norway) with about 70 passengers,

was climbing through FL270 out of Oslo when the crew donned their oxvaen

masks reporting smoke in the cockpit and decided to return to Oslo.

the descent a windshield cracked. The airplane landed safely about 20 minutes later.

The airline reported, that a defective windshield heating element caused

an electrical odour and smoke prompting the captain to turn the windshield

heating off, which in turn caused one of 17 layers of the windshield

crack. The defective heating element is being investigated.

http://avherald.com/h?article=43c25d2a

20110506233859:20110506000000

Incident: American Eagle E135 near Fresno on May 6th 2011, odour on board

An American Eagle Embraer ERJ-135, flight MQ-3024 from Los Angeles CA to

Reno, NV (USA) with 41 people on board, was enroute at FL340 about 55nm southeast

of Fresno,CA (USA) when the crew reported an electrical odour on board and

diverted to Fresno for a safe landing about 15 minutes later. The airplane

was able to taxi to the apron where passengers disembarked normally.

The airline reported the crew noticed a hot, electrical ozone odour.

20110506145907:20110505000000

Incident: American B738 at Fort Lauderdale on May 5th 2011, odour on

http://avherald.com/h?article=43c20b4f

board

An American Airlines Boeing 737-800, registration N801NN performing flight

AA-2285 from Fort Lauderdale, FL (USA) to Port au Prince (Haiti) with 75

people on board, was in the initial climb out of Fort Lauderdale's runway

13 when the crew reported a smell of fuel throughout the entire cabin and

cockpit and decided to return to Fort Lauderdale, where the aircraft landed

safely on runway 13 with emergency services on stand by about 13 minutes

after departure.

The flight was subsequently cancelled.

http://avherald.com/h?article=43c0ffb9

20110505102809:20110504000000

Incident: Southwest B735 near El Paso on May 4th 2011, electrical odour in cockpit and cabin

Oxygen masks dropped (Photo: Josh Myers) A Southwest Airlines Boeing 737-500,

registration N525SW performing flight WN-31 from Houston Hobby,TX to Phoenix,AZ

(USA) with 138 people on board, was enroute at FL360 about 50nm west of

El Paso,TX (USA) when the crew reported an electrical odour in the cockpit

and cabin and decided to divert to El Paso. The crew indicated they intended

to vacate the runway. The airplane landed safely on El Paso's runway 22

about 18 minutes later and vacated the runway. The passengers disembarked normally.

Passengers reported the oxygen masks were released.

A replacement Boeing 737-300 reached Phoenix with a delay of 3.5 hours.

The airline said, the incident aircraft is being ferried to Dallas Love,TX

for examination of what caused the electrical smell.

http://avherald.com/h?article=43bde96b

20110501233748:20110501000000

Incident: Delta B752 near Tampa on May 1st 2011, smell of smoke in

cockpit

A Delta Airlines Boeing 757-200, flight DL-1147 from Atlanta,GA to West

Palm Beach,FL (USA) with 182 passengers, was enroute at FL390 about 70nm

north of Tampa, FL (USA) when the crew decided to divert to Tampa due to

a smokey odour in the cockpit. The airplane landed safely on Tampa's runway

01L about 15 minutes later.

The airline said, the airplane has been taken out of service. The passengers

are offered to being bussed to or rebooked onto other flights to West Palm
Beach.

http://avherald.com/h?article=43bb32d9

20110428200626:20110428000000

Accident: Continental B738 at San Antonio on Apr 28th 2011, chemical odour in cabin

A Continental Airlines Boeing 737-800, registration N11206 performing flight

CO-7 from San Antonio,TX to Houston International,TX (USA) with 152 people

on board, was climbing through 14,000 feet out of San Antonio's runway 12R

when the crew reported they had some sort of chemical odour in the aft cabin,

declared emergency and returned to San Antonio for a safe landing on runway

12R about 13 minutes later. Emergency services in hazmat suits

entered the

aircraft. One person was taken to a local hospital, 4 people needed to be

treated for respiratory problems on site.

Passengers complained about burning eyes and respiratory problems.

Emergency services said there was an unknown substance on board.

http://avherald.com/h?article=43b28370

20110421153454:20110411000000

Incident: Air Berlin A332 at Bangkok on Apr 11th 2011, departed with engine required to be changed

An Air Berlin Airbus A330-200, registration D-ALPD performing flight AB-7151

from Bangkok (Thailand) to Dusseldorf (Germany) with passengers on board,

had experienced issues with oil smells on board on the previous two sectors,

see: Incident: Air Berlin A332 near Munich on Apr 8th 2011, smell of oil

on board and Incident: Air Berlin A332 near Munich on Apr 9th 2011, strong

smell of oil on board. Thai Airways' Maintenance in Bangkok had found oil

leaking through various parts of the #2 engine (PW4168) consistent with

a seal having failed, had recommended to replace the engine and did NOT

sign the aircraft off for flight. The airplane departed Bangkok following

some repairs and release by Air Berlin's specialists and completed a safe

landing in Dusseldorf.

Sources tell The Aviation Herald, that engine #2 had not been replaced in

Bangkok, the engine replacement took only place in Dusseldorf after arrival

of flight AB-7151. The crew report of smell of oil following the flight

from Mombasa was not contained in the tech log of the aircraft. A local

Bangkok maintenance team while conducting the inspection of the aircraft

and engines arrived at the Airbus Trouble Shooting Manual's (TSM)

task 71-00-61-810-801,

subtask 71-00-61-810-050-A fault isolation, identified oil leaking from

the inlet cones, anti-ice vent holes, fan blades, 2.5 bleed vent areas of

the #2 engine and identified puddles of oil at the bottom of the fan case

of engine #2 as well as on the floor underneath engine #2, consistent with

the failure of the no. 1 carbon bearing seal of the right engine. Subtask

71-00-61-810-050-A fault isolation clearly states in conclusion a) without

granting any discretion: "a) If there was oil wetting in one or more of

these areas, do these steps: 1) replace the engine, 2) replace the no #1

bearing carbon seal on the engine that you removed".

The German BFU confirmed the incident stating, that they have received a

relevant report from the crew to Bangkok, they do not know however whether

the smell of oil during the flight from Mombasa was noted in the relevant

aircraft logs. Investigators just shook their heads in disbelief over the

event, but due to current legal requirements are not going to investigate

the incident. The case has been forwarded to the German Luftfahrtbundesamt

(civil aviation authority) for further proceedings.

The German Luftfahrtbundesamt (LBA) is investigating whether the flight

was illegally conducted with a defective engine.

The LBA added, that in general terms there are no regulations and no discretion

permitting to go beyond limits set in the manufacturer's manuals. However,

in case of conflicting diagnoses by different maintenance teams it is the

responsibility of the operator to decide how to proceed. The results of

all (different) diagnoses are to be documented.

Air Berlin said in a first statement of Apr 15th sent to the German radio

station NDR Info, that there was only some "unusual odour" shortly after

takeoff from Munich. The odour quickly dissipated. As a precaution a special

inspection of the aircraft was performed in Bangkok which showed a

minor

oil leakage in the right hand engine, the oil consumption however had remained

in the normal range specified by the manufacturer. After "adjustment of

the leakage" the aircraft was released for flight. After return from Bangkok

the engine was replaced as a precaution. The Luftfahrtbundesamt (civil aviation

authority) has been properly notified of the occurrence.

After The Aviation Herald published the initial story Air Berlin replied

to The Aviation Herald first asking for more time to answer the questions,

then followed up with updated statements on Tuesday (Apr 19th) and Wednesday

(Apr 20th), but did not respond to further attempts to clarify issues.

In the updated statements Air Berlin said, that the crew of flight AB-7362

from Munich to Mombasa on April 8th 2011 identified unusual smells shortly

after takeoff from Munich, the smells however dissipated quickly. The smells

reoccurred during the approach to and landing in Mombasa. A subsequent inspection

of the aircraft was without result and the aircraft was released for flight.

Flight AB-7363 returning from Mombasa to Munich on Apr 9th went without

incident. On flight AB-7152 from Munich to Bangkok on Apr 9th there were

unusual smells again shortly after takeoff which dissipated prompting the

crew to continue the flight to Bangkok. A specialist team of Air Berlin

maintenance was flown to Bangkok to assess the right hand engine, found

a static leak (according to Air Berlin's statement leaking oil only while

the engine was NOT operating), determined that the oil consumption had remained

within the range approved by the manufacturer, and released the aircraft

for flight. The aircraft flew passengers to Dusseldorf as flight AB-7151

without incidents. The engine was changed in Dusseldorf as a precaution.

Air Berlin did not explain the quick turn around times in Mombasa (less

than 120 minutes at the gate although Air Berlin claims the aircraft

was

inspected to determine the source of the smells) and Munich (less than 130 minutes at the gate).

Air Berlin did not clarify how the smell of oil, that by Air Berlin's statement

appeared during approach to and landing in Mombasa, was possible if

leak was static indeed and oil therefore exited the engine only while not

operating and any residue had already been blown out by the operating engine

evident by the dissipation of the smell of oil shortly after takeoff as

reported by Air Berlin.

Air Berlin also did not explain, how it was possible that the local Bangkok

maintenance team of Thai Airways while conducting the inspection of the

aircraft and engines arrived at the Airbus Trouble Shooting Manual's (TSM)

task 71-00-61-810-801, subtask 71-00-61-810-050-A fault isolation, identified

oil leaking from the inlet cones, anti-ice vent holes, fan blades, 2.5 bleed

vent areas of the #2 engine and identified puddles of oil at the bottom

of the fan case of engine #2 as well as on the floor underneath engine #2,

consistent with the failure of the no. 1 carbon bearing seal of the right

engine. Subtask 71-00-61-810-050-A fault isolation clearly states in conclusion

a) without granting any discretion: "a) If there was oil wetting in one

or more of these areas, do these steps: 1) replace the engine, 2) replace

the no #1 bearing carbon seal on the engine that you removed".

Air Berlin further did not explain, how it was possible that the Thai Airways'

maintenance team and Air Berlin's specialist team arrived at very different

results in their investigations and how it was possible that Air Berlin's

maintenance team released the aircraft for a flight carrying passengers.

Air Berlin also did not explain the picture of the oil leak on the spinner

(see below) that clearly shows the oil exited under the influence of sufficient

airflow pressing the oil against the spinner, which entirely elimited the

influence of gravity, and the spinner turning at speed, making absolutely

clear the oil leaked while the engine was turning. The picture suggests

by the visible distribution of oil that the picture was taken immediately

after engine shut down.

Oil leaks on the spinner:

Oil at the bottom of the fan case:

http://avherald.com/h?article=43ad6939

20110412132236:20110411000000

Incident: Delta MD88 near Raleigh/Durham on Apr 11th 2011,

electrical odour on board

A Delta Airlines McDonnell Douglas MD-88, registration N934DL performing

flight DL-1415 from New York JFK,NY to Fort Lauderdale,FL (USA) with 94

passengers and 5 crew, had stopped climb out of New York at FL240 and was

enroute at FL240 about 110nm eastnortheast of Raleigh/Durham,NC when the

crew decided to divert to Raleigh/Durham reporting an electrical odour in

the forward galley, cabin crew complaining about feeling unwell. The airplane

landed safely about 25 minutes after the decision to divert and about 60

minutes after levelling off at FL240. Nobody needed medical attention after landing.

A replacement MD-88 reached Fort Lauderdale with a delay of 105 minutes.

20110407211344:20110403000000

Incident: Air Canada A319 at Toronto on Apr 3rd 2011, instrument

failure and acrid smell

An Air Canada Airbus A319-100, registration C-GBIN performing flight

from Toronto, ON (Canada) to Aruba (Aruba) with 69 people on board, was accelerating

for takeoff from runway 23 when the lower ECAM and the first officers primary

flight display and navigation display failed accompanied by an acrid smell.

The crew continued the takeoff, declared emergency in the initial

reporting smoke and electrical smell, stopped the climb at 3000 feet

returned to Toronto's runway 23. On downwind the crew indicated they'd need

to stop on the runway but did not expect an evacuation, reaffirming on final

that they did not expect an evacuation but needed a tow. The crew performed

a safe landing about 13 minutes later, the airplane was towed to the gate.

The Canadian TSB reported maintenance found two circuit breakers tripped

(for the bus2 electrical supply and the Brake and Steering Control

(BSCU)). The BSCU did not show any malfunction, abnormal odour or signs

of overheating/burning. The #2 transformer rectifier unit was replaced,

systems checked operative thereafter and the airplane returned to service.

http://avherald.com/h?article=43a5da63

20110403135718:20110330000000

Incident: American MD82 near Jacksonville on Mar 30th 2011, smell of smoke in cabin

An American Airlines McDonnell Douglas MD-82, registration N510AM performing

flight AA-555 from Fort Myers, FL to Dallas Ft. Worth, TX (USA), was enroute

at FL300 about 70nm northwest of Tampa, FL and 135nm southwest of

Jacksonville, FL

when the crew reported an odour of smoke without any visible smoke in the

cabin and due to a thunderstorm front in their south decided to divert to

Jacksonville. During the approach to Jacksonville the crew reported the

odour was dissipating. The aircraft landed safely on Jacksonville's runway

07 (active runway 32) about 23 minutes later, the airplane stopped on the

runway and was checked by emergency services before continuing to the apron

after about 5 minutes.

A replacement McDonnell Douglas MD-83 reached Dallas with a delay of 2.5 hours.

Metars Tampa:

KTPA 310215Z 18009KT 9SM -RA SCT050 0VC110 21/19 A2987 RMK A02 TSE15 P0004

\$

KTPA 310153Z 20010KT 7SM -TSRA SCT050CB 0VC110 21/18 A2987 RMK A02 TSB0054

SLP116 FRQ LTGICCC NE-SE MOV E P0012 T02110178 \$

KTPA 310059Z COR 13006KT 9SM -TSRA FEW025CB 0VC080 21/18 A2985 RMK A02 TSB54

FRQ LTGICCC W TS W MOV E P0000

KTPA 310053Z 14005KT 10SM -RA 0VC080 21/18 A2986 RMK A02 SLP109 P0003 T02060183

KTPA 302353Z 11003KT 9SM -RA SCT040 0VC070 21/18 A2987 RMK A02 RAE19B36

SLP115 P0003 60009 T02110183 10272 20206 56010

KTPA 302253Z 28003KT 4SM -RA BKN040 BKN055 0VC070 21/17 A2988 RMK A02 RAB23

SLP118 P0006 T02060172

KTPA 302153Z COR 32007KT 10SM BKN055 0VC080 23/16 A2988 RMK A02 VCSH NW

SLP117 T02280161

Metars Jacksonville:

KJAX 310156Z 29003KT 10SM SCT009 BKN014 0VC024 18/18 A2977 RMK A02 SLP081

T01830183

KJAX 310121Z 28003KT 10SM SCT009 BKN014 0VC024 18/18 A2976 RMK A02 KJAX 310056Z 26004KT 10SM BKN009 0VC024 18/18 A2975 RMK A02 SLP076 T01830178

KJAX 310028Z 26003KT 10SM SCT009 0VC024 18/18 A2974 RMK A02

KJAX 302356Z 25003KT 10SM FEW005 BKN012 BKN030 18/18 A2974 RMK A02 SLP070

60126 T01830178 10244 20178 51035
KJAX 302331Z 00000KT 10SM SCT005 BKN012 0VC024 18/18 A2973 RMK A02
KJAX 302256Z 32003KT 10SM BKN005 0VC021 18/18 A2972 RMK A02 SLP064
T01830178

http://avherald.com/h?article=439dadfd

20110324210602:20110315000000

Incident: Air Canada A320 at Los Angeles on Mar 15th 2011, bird

strike

An Air Canada Airbus A320-200, registration C-FDST performing flight AC-790

from Los Angeles, CA (USA) to Toronto, ON (Canada) with 146 people on board,

was climbing through 400 feet AGL out of Los Angeles' runway 24L in instrument

meteorological conditions (low visibility procedures were in effect at LAX)

when the left hand engine (CFM56) surged repeatedly in rapid succession

accompanied by compressor stalls. The engine rolled back to about $80\%\ N1$

with substantial yawing of the aircraft. The engine automatically recovered

about 3-5 seconds later with no ECAM warning, an acrid odour developed in

the cabin. Due to the weather conditions the crew decided to divert to ${\tt Ontario}{\tt, CA}$

(USA), both engines appeared to be operating normally with no unusual vibration.

The aircraft landed safely in Ontario about 30 minutes after departure,

stopped on the runway and shut both engines down. After inspection by emergency

services the right hand engine was started and the aircraft taxied to the apron.

The Canadian TSB reported a visual inspection revealed evidence of a bird

strike in the #1 engine fan cone and showed damage to the guide vanes aft

of the N1 fan. Bird remains were on the engine cowling and several engine

components. A borescopic inspection showed damage to the low and high pressure

compressors. The engine was replaced.

Metars:

KLAX 151641Z 11005KT 3SM BR FEW003 BKN140 14/13 A3009 RMK A02

KLAX 151623Z 11005KT 1 1/2SM BR SCT003 BKN140 14/13 A3009 RMK A02

KLAX 151610Z VRB04KT 1/2SM R25R/P6000FT FG BKN003 14/12 A3010 RMK A02 VIS

1/4V3/4

KLAX 151553Z VRB03KT 3/4SM R25R/P6000FT BR 0VC003 14/13 A3010 RMK A02 SLP192

VIS 1/2V1 T01390128

KLAX 151530Z 33003KT 1/2SM R25R/1400VP6000FT FG 0VC001 13/12 A3010 RMK A02

KLAX 151522Z 29004KT 1/4SM R25R/1200V2000FT FG VV001 13/12 A3010 RMK A02

KLAX 151509Z 28006KT 1/4SM R25R/1800V3500FT FG VV001 13/12 A3010 RMK A02

KLAX 151453Z 18003KT 1/2SM R25R/1200V3500FT FG 0VC001 13/12 A3009 RMK A02

SLP188 VIS 1/4V3/4 FG 0VC001 T01280122 53005

KLAX 151431Z 08003KT 3/4SM R25R/1800VP6000FT BCFG BR BKN001 BKN130 13/12

A3009 RMK A02 FG BKN001

KLAX 151426Z 15004KT 1/2SM R25R/3000VP6000FT FG BKN001 13/12 A3009 RMK A02

FG BKN001

KLAX 151421Z 11004KT 1 1/2SM R25R/3000VP6000FT BCFG BR SCT001 SCT010

13/12 A3009 RMK A02 VIS 1V2 FG SCT001

KLAX 151353Z 11005KT 2 1/2SM BCFG BR FEW002 SCT200 SCT250 13/12 A3007 RMK

A02 SLP181 VIS 2 1/2V4 ASOS VIS 5 T01280117

KLAX 151326Z 10007KT 4SM BCFG BR BKN003 13/12 A3007 RMK A02 VIS S-SW 2 1/2

ASOSVIS 7

KONT 151653Z 00000KT 9SM FEW150 BKN250 17/09 A3009 RMK A02 SLP183 T01720094

KONT 151553Z 00000KT 10SM FEW150 BKN250 16/09 A3009 RMK A02 SLP183

KONT 151453Z 07003KT 10SM FEW150 BKN250 12/09 A3008 RMK A02 SLP181 T01220089

53003

KONT 151353Z 00000KT 10SM FEW150 SCT250 11/08 A3007 RMK A02 SLP177 T01110078

http://avherald.com/h?article=438502c1

20110223114224:20110222000000

Incident: Delta MD88 near Greensboro on Feb 22nd 2011, odour in

cockpit

A Delta Airlines McDonnell Douglas MD-88, registration N987DL performing

flight DL-1014 from Atlanta, GA to Richmond, VA (USA) with 113 passengers

and 5 crew, was enroute at FL310 about 80nm southwest of Greensboro,NC when

the crew reported smoke in the cockpit and diverted to Greensboro for a

safe landing about 13 minutes later.

Delta reported a suspicious odour was noticed in the cockpit area.

A replacement MD-88 reached Richmond with a delay of 6 hours.

http://avherald.com/h?article=43839d00

20110221221253:20110221000000

Incident: Chautauqua E145 near Indianapolis on Feb 21st 2011, strong

odour on board

A Chautauqua Airlines Embraer ERJ-145 on behalf of American Airlines, flight

RP-5061/AA-5061 from Louisville, KY to Chicago O'Hare (USA) with 39 people

on board, was enroute at FL230 about 36nm southeast of Indianapolis, IN when

the crew observed a strong odour on board similiar to wires or electronics

overheating and decided to divert to Indianapolis. The airplane landed safely

about 15 minutes later and taxied to the apron.

http://avherald.com/h?article=43824aea

20110220122123:20110219000000

Incident: Continental B752 near Boston on Feb 19th 2011, burning

odour on board

A Continental Airlines Boeing 757-200 in United colours,

registration N17139

performing flight CO-24 from Newark, NJ (USA) to Shannon (Ireland) with 191

people on board, was enroute at FL350 about 160nm east of Boston when the

crew reported a burning smell on board and decided to turn around and divert

to Boston. The airplane landed safely on Boston's runway 33L about 35 minutes later.

The cause of the smell is under investigation, the onward flight to Shannon was cancelled.

http://avherald.com/h?article=43809819

20110218143145:20110218000000

Incident: Republic E170 near Washington on Feb 18th 2011, electrical odour in cabin

A Republic Airlines Embraer ERJ-175 on behalf of US Airways, registration

N127HQ performing flight RW-3116/US-3116 from Manchester,NH to Washington

National,DC (USA) with 60 passengers and 4 crew, was on the Potomac River

Approach into Washington's Ronald Reagan National Airport runway 19 when

a flight attendant noticed an electrical smell in the forward galley and

pulled the circuit breakers prompting the flight crew to declare emergency

about 8nm before touchdown however without requiring assistance. The aircraft

landed safely on runway 19 about 4 minutes later and turned off onto taxiway

F. Responding emergency services found no trace of fire, heat or smoke.

The approach clearance for the aircraft next in sequence for landing was cancelled.

http://avherald.com/h?article=4377815f

20110217181108:20110207000000

Incident: Delta B764 over Labrador Sea on Feb 7th 2011, fumes in

cockpit

A Delta Airlines Boeing 767-400, registration N833MH performing flight DL-40 $\,$

from Minneapolis,MN (USA) to London Heathrow,EN (UK), was enroute above

the Labrador Sea when the crew reported fumes in the cockpit and decided

to divert to Goose Bay, NL (Canada), where the airplane landed safely about

100 minutes later. Emergency services found no trace of fire, heat or smoke.

NAV Canada reported that a local maintenance facility checked the aircraft,

identified and fixed the problem and released the aircraft to continue the flight.

The aircraft reached London with a delay of 6 hours.

The Canadian Transportation Safety Board (TSB) said the crew received an

indication the left hand recirculation fan had failed and noticed an electrical

odour. After declaring emergency the crew actioned the smoke removal checklist

and diverted to Goose Bay. Maintenance discovered the left recirculation

fan had failed and released the aircraft to service according to Minimum

Equipment List (MEL) requirements.

http://avherald.com/h?article=43747cab

20110204103935:20110203000000

Incident: Southwest B737 near Omaha on Feb 3rd 2011, odour on board

A Southwest Airlines Boeing 737–700, registration N202WN performing flight

WN-154 from Denver,CO to Philadelphia,PA (USA) with 106 people on board,

was enroute at FL390 about 130nm west of Omaha, NE (USA) when the crew decided

to divert to Omaha due to an unusual smell on board. The aircraft landed $% \left(1\right) =\left(1\right) \left(1\right) +\left(1\right) \left(1\right) \left(1\right) +\left(1\right) \left(1\right)$

safely on Omaha's runway 14R about 25 minutes later.

The flight reached Philadelphia with a delay of 5.5 hours.

http://avherald.com/h?article=4364dd4a

20110121224424:20110115000000

Incident: Cathay Pacific B773 at Vancouver on Jan 15th 2011, odour

on board prompts two returns

A Cathay Pacific Boeing 777-300, registration B-KPH performing flight CX-888

from Vancouver, BC (Canada) to New York JFK, NY (USA) with 184 people on board,

was climbing out of Vancouver's 08R when a smell of smoke was detected on

board prompting the flight crew to level off at 9000 feet and return to

Vancouver for a safe landing on runway 08R about 25 minutes after departure.

The aircraft was examined and released for flight again. The aircraft departed

a second time from runway 08R after about 110 minutes on the ground, however

the smell was observed again prompting the crew to level off at 10000 feet

and return a second time again landing safely on runway 08R about 20 minutes

after second departure.

The flight was subsequently cancelled.

The airline confirmed there was a strong odour on board prompting the first

return. The aircraft departed again however the smell was still detected

in the cabin prompting the second return. Emergency services were on stand

by for both landings. The flight was cancelled, the passengers put into

hotels. The aircraft is currently being examined, the Canadian Transportation

Safety Board is expected to investigate.

The Canadian TSB reported on Jan 21st that maintenance could not determine

the source of the smell of burning plastics observed on board. The

aircraft

was released to flight again, but returned a second time when the smell

of burning plastics re-appeared. Maintenance again could not determine the

source of the smell. The airplane was subsequently released for a ferry

flight to New York with an engineering manager on board to observe.

The second return (first return not available on flightaware):

http://avherald.com/h?article=4360a379

20110111161843:20110111000000

Incident: Danish Air Transport AT42 near Bergen on Jan 11th 2011, smell of smoke in cabin

A Danish Air Transport Avions de Transport Regional ATR-42-300, flight DX-54

from Bergen to Floro (Norway), returned to Bergen after smell of smoke was

noticed in the cabin. The airplane landed safely about 20 minutes after departure.

The airline said, a short circuit in one of the passenger reading lights

is suspected to have caused the odour. The incident was undramatic.

http://avherald.com/h?article=435cceca

20110106213638:20110106000000

Incident: Continental B737 near El Paso on Jan 6th 2011, smell of smoke

A Continental Airlines Boeing 737-700, registration N15712 from Santa Ana,CA

to Houston Intercontinental, TX (USA) with 127 people on board, was enroute

at FL370 about 35nm westnorthwest of El Paso,TX when the crew reported smell

of smoke in the cockpit and decided to divert to El Paso for a safe landing

on El Paso's runway 22 about 15 minutes later. Responding emergency services

found no trace of fire, heat or smoke.

The cause of the odour is under investigation.

http://avherald.com/h?article=435c5cd8

20110106080651:20110105000000

Incident: Cayman B733 near Grand Cayman on Jan 5th 2011, smell of

smoke on board

A Cayman Airways Boeing 737-300, registration VP-CAY performing flight KX-113

from Miami, FL (USA) to Grand Cayman Island (Cayman Islands), was enroute

overhead Cuba about half way into the flight when a smell of smoke developed

on board. The crew accelerated the approach and landing into Grand Cayman's

Owen Roberts International Airport, landed safely and taxied to the gate,

where passengers disembarked normally.

The airline said, that the crew elected to begin the descent into Grand

Cayman early after the smell of smoke developed on board.

Maintenance identified

a ventilation fan that had developed a defect resulting in the odour. The

fan was replaced.

http://avherald.com/h?article=435a7b02

20110103212919:20110103000000

Incident: United Airlines A320 near Denver on Jan 3rd 2011, odour on board

A United Airlines Airbus A320–200, registration N487UA performing flight

UA-243 from Denver,CO to Las Vegas,NV (USA) with 144 passengers and 5 crew,

was climbing out of Denver about 60nm into the flight when an unusual odour

was observed in the cockpit and cabin of the aircraft. The crew decided

to return to Denver for a safe landing about 30 minutes after departure.

A replacement aircraft reached Las Vegas with a delay of 2.5 hours.

The FAA reported a smell of smoke.

The airline reported an unusual odour but did not confirm smell of smoke.

http://avherald.com/h?article=435b422d

20110104213321:20101225000000

Accident: Jazz DH8C near Port Hardy on Dec 25th 2010, engine change

after mist and acrid smell

An Air Canada Jazz de Havilland Dash 8-300, registration C-GKTA performina

flight QK-8560 from Vancouver, BC to Smithers, BC (Canada) with 34

on board, was enroute about 160nm north of Vancouver near Port Hardy, BC

in moderate icing conditions when mist and an acrid smell entered the cabin.

The crew declared emergency and diverted to Port Hardy. The airport closed

all runways to accomodate the aircraft. The airplane landed safely and taxied

to the apron, where passengers disembarked normally.

NAV Canada reported that one passenger was taken to a local hospital with

unknown injuries. Following a check for foreign objects the runway was reopened

about 45 minutes later.

The Canadian TSB reported that an engine fault (PW123) was determined as

cause of the mist and odour, the engine was replaced.

http://avherald.com/h?article=434f6da7/0000

20120229192031:20101221000000

Incident: Ryanair B738 at Kerry on Dec 21st 2010, smoke during roll

out

The Irish Air Accident Investigation Unit (AAIU) released their final report

concluding the probable cause of the occurrence was:

Ingestion of granular urea while using reverse thrust.

Contributory Factor(s)

A prolonged spell of cold weather resulted in granular urea being used to

anti-ice the runway after normal de-icing fluid stocks had been exhausted.

The newly assigned first officer (CPL, 322 hours total, 2.5 hours on type)

was pilot flying on his first flight with passengers, the captain (ATPL,

13,000 hours total, 6,100 hours on type) was pilot monitoring also holding

an instructors rating, a safety pilot (ATPL, 2,600 hours total, 2,300 hours

on type) occupied the observer's seat.

The crew had been advised on approach, that the runway was dry and had been

cleared to land on runway 26. Slowing through 60 knots the captain took

control of the aircraft in compliance with company standard operating procedures.

When the aircraft slowed through 50 knots the safety pilot reported smoke

at the right hand side of the cockpit followed by a call from the cabin

supervisor when the aircraft turned off the runway that there was smoke

in the cabin too.

The captain observed the smoke to thicken and instructed the first officer $\ensuremath{\mathsf{S}}$

to don his oxygen mask. Following the call from the cabin the captain instructed

the safety pilot to open the cockpit door to view the cabin and could not

see the back of the cabin due to "grey/blue slightly acrid smoke". He decided

to immediately evacuate the aircraft, shut down the engines without starting

the APU and invoked the evacuation procedures.

The safety pilot called PAN to ATC, emergency services responded promptly.

Cabin crew commenced evacuation through all exits upon hearing the

captain's

instruction via PA, one passenger however was unable to open the overwing

exit which therefore was not used for evacuation. A good number of passengers

took along their carry on items, it was difficult to control them without

disrupting the evacuation flow.

The AAIU reported no injuries occurred.

The AAIU reported that the month prior to the event it had been unusually

cold depleting the supplies of runway de-icing fluid at the airport. As

snow was expected to fall during the day, the airport therefore had used

an alternative to keep the runway free of ice, urea granulates.

Urea granulates are colourless, odourless with a melting point of 132.7

degrees C. The AAIU collected samples of the urea granulate from the runway

and heated them using hot air. The granulate initialted melted to a clear

fluid, which subsequently began to boil releasing a pungent and acrid smell

and some grey hue. The AAIU annotated that ammonia was being released upon

contact with the water vapour in the air).

The AAIU reported that a similiar incident had occurred on another Ryanair

airframe upon arrival in Girona. The cause of that event could not be clarified.

The AAIU analysed, that although snow fall was expected during the day and

the runway had been prepared with granular urea, there had been no snow.

As a result the urea had not dissolved and remained in granular form on

the runway, which remained bare and clear of snow.

Revserse thrust was used after touchdown, it was therefore probable that

urea was lifted from the runway and ingested into the engines, where the

urea rapidly heated by the engine compression before being dispensed through

flight deck and cabin by the air conditioning system.

The AAIU analysed: "The first priority is the safety of passengers and crew;

if they can be evacuated safely it is critical that this is done as soon

as possible. Therefore when faced with acrid smoke in both the cockpit and

cabin from an unknown source and possibly a fire, the Commander correctly

decided to shut the engines down and order an evacuation."

While urea was commonly used on runway and taxiways in history it is currently

rarely used so that flight crews affected for the first time by urea won't

recognize its fumes and smell. The AAIU therefore issued a safety recommendation

to advise flight crew accordingly when urea is being used on run— or taxiways.

An additional safety recommendation was issued regarding the cockpit voice

recorder continuing recording for 10 minutes even after power failure, a

third safety recommendation addressed ICAO to examine the issue of passengers

taking their carry on items along during an evacuation.

http://avherald.com/h?article=434f5f94

20101221122203:20101220000000

Incident: Southwest B737 near St. Louis on Dec 20th 2010, haze in cabin

A Southwest Airlines Boeing 737-700, flight WN-718 from Chicago Midway,IL

to San Jose,CA (USA) with 109 people on board, was departing Chicago Midway

when haze developed in the cabin. The crew aborted the climb and prepared

for a possible return, but were able to clear the haze and identify by the

smell that de-icing fluid had entered the air conditioning system. The crew

therefore decided to continue the flight and climbed the aircraft to FL300

before they decided to divert the aircraft to Saint Louis, MO (USA), where

the aircraft landed safely about 50 minutes after departure.

The airline reported that following the distinct odour immediately identified

as de-icing fluid by the flight crew the crew decided to divert to Saint

Louis as a precaution. The airplane was able to continue but needed

to do

another stop at Dallas Love, TX (USA) to change crew due to crew duty time

issues before continuing to San Jose.

The airplane reached San Jose with a delay of 5.5 hours.

http://avherald.com/h?article=434e753b/0000

20120927231051:20101219000000

Accident: Germanwings A319 near Cologne on Dec 19th 2010, smoke in cockpit, both pilots nearly incapacitated

The German BFU released their preliminary report in German stating, that

both flight crew became partially incapacitated within seconds following

a strong burning electrical smell on base leg and during intercept of the

localizer. The captain's oxygen level in his blood fell substantially below

80%, the first officer's oxygen level below 80% (normal value 95-98%). The

first officer was in sick leave for 6 months following the event.

The flight had been delayed due to heavy snowfall in Cologne. The aircraft

finally departed Vienna with a delay of 3 hours, the flight was uneventful

until the aircraft turned onto the left base leg for Cologne's runway 14L

when both flight crew smelled a strong electrical burning odour. Upon query

the purser reported no smell in the cabin. The odour seemed to subside after $% \left(1\right) =\left(1\right) +\left(1\right$

a brief moment.

While the aircraft turned to intercept the localizer the first officer reported

he felt seriously sick close to vomiting (German "kotz_bel"), he smelled

a strong electrical sweet odour and would don his oxygen mask. Alerted by

that remark the captain noticed his legs and arms were tickling, his senses

were literally vanishing and his sight abruptly reduced to a tunnel view.

He too donned his oxygen mask. The first officer needed two attempts

to

don his oxygen masks. After both flight crew had donned their oxygen masks,

the captain improved slightly, while the first officer's condition continued

to deteriorate.

The captain (35, ATPL, 7,864 hours total, 3,107 on type) instructed the

first officer (26, CPL, 720 hours total, 472 hours on type) to advise approach

they would immediately contact tower and to declare Mayday on tower. While

the first officer was communicating with tower declaring emergency and reporting

strong smell in the cockpit the tower instructed an aircraft ahead of the

A319 to go around, the aircraft established on the glide path, the captain,

pilot flying, selected flaps 1 himself and disengaged the autopilot now

flying manually. The aircraft was flying too fast (around 220 KIAS),

captain therefore deployed spoilers, instructed the first officer therefore

to lower the gear and later to select flaps 2.

At that point the first officer felt overwhelmed, he could no longer overview

the scenario, could no longer process the arriving information and had difficulty

to focus on single aspects of the scenario. The captain felt that while

manually flying the aircraft he was at the upper limit of what he was capable

to do in his bad bodily shape.

After the crew managed to configure the aircraft for landing, the aircraft

was still too fast, the captain decided that a go-around was not possible

and thus cancelled the stability criteria (gate at 1000 feet), their only

option was to put the aircraft down as quickly as possible.

The first officer described the time between 1800 feet and touchdown as

an eternity, he was however able to recognize that the aircraft had reached

and was maintaining correct approach speed and realized they had not worked

the landing checklist. He thus processed the landing checklist which required

all his efforts, it was difficult to process the checklist, it was

difficult

to concentrate and think.

Both pilots reported that just prior to landing they perceived their situation

as surreal and like in a dream.

The aircraft touched down on the runway, the automatic brakes slowed the

aircraft to about 40 knots, the captain subsequently applied manual brakes,

the aircraft began to skid, the captain however managed to slow the aircraft

to taxi speed and vacate the runway via taxiway A3. He then joined taxiway

A and handed controls to the first officer to be able to talk to emergency

services. The first officer totally focussed on steering the aircraft that

he did not get anything that happened around him.

The captain in the meantime was talking to emergency services, tower

not want them taxi to the gate but to a remote stand away from the buildings,

following that decision the captain took over again and taxied the aircraft

to the stand. Shortly before arriving on stand the first officer noticed

they had not yet run the after landing checklist, the checklist was now

executed. After reaching the stand and applying park brake both crew realised

the APU had not yet been started, the APU was started.

The first officer wanted to open his side window, but needed three attempts

to do so. After the window was open he removed his oxygen masks, but immediately

noticed the acrid smell again and donned his oxygen mask again.

Emergency services subsequently entered the cockpit, the first officer needed

assistance to get off the aircraft, while the captain remained in the cockpit

until all passengers had disembarked. Emergency services measured oxygen

levels in the blood of both pilots and found the captain substantially below

80% (at about 70%) and the first officer below 80%, paramedics commented

both pilots were close to faint.

The BFU stated the events in the cockpit remained unnoticed in the

cabin

until after landing.

Following landing the aircraft was checked by airline maintenance who identified

de-icing fluid as source of the smell. The technicians reported that they

could clearly detect the odour even 15 minutes after landing. Maintenance

replaced cooling fans for cockpit instrumentation, no pollution was detected.

The engines were checked, washed and ground run with no findings, the flight

crew oxygen supply and masks replaced, and a 45 minutes test flight undertaken

with no odours, the aircraft was thus returned to service on Dec 20th 2010.

A C-Check 13 months later also did not identify any possible causes of the smell.

The BFU reported that their initial information received from emergency

services had been smoke in the cockpit, both pilots were treated in ambulances,

it was suspected they were suffering from smoke poisoning. Subsequently

the airline told the BFU, that there had been no smoke but only smell, maintenance

had identified de-icing fluid as cause of the smell, the crew had been released

from hospital, the crew did not suffer from any poisoning. Following that

information the BFU decided to not open an investigation.

Only a year later the BFU received additional information which prompted

the BFU to open an investigation.

The BFU reported that medical services at the airport already measured the

blood oxygen levels of both pilots and found the values below and well below

80%. Both pilots were subsequently taken to a hospital for further diagnosis.

During the drive to the hospital one pilot recovered to the point where

he commented he could clearly think again. After two hours in the hospital

both pilots were discharged without blood analysis.

The first officer went to the hospital again the following day for a detailed

analysis of his health condition. A blood analysis detected two conspicuous

values in the area of clinical chemistry, the first officer was not fit

for duty for 6 months.

The BFU did not release any safety recommendations so far.

In a similiar event involving the very same Germanwings A319 the Irish AAIU

concluded "The probable cause of the adverse symptoms reported by the aircraft

crew and some passengers could not be determined", see Accident: Germanwings

A319 at Dublin on May 27th 2008, pressurization problems.

Two more aircraft had similiar issues within 8 days prior to this accident,

see Incident: Germanwings A319 at Cologne on Dec 11th 2010, smoke in cockpit

and Incident: Germanwings A319 near Cologne on Dec 16th 2010, smell of smoke.

http://avherald.com/h?article=44f65038

20120511170151:20101217000000

Report: Sun-Air D328 at Billund on Dec 17th 2010, smoke in cockpit and cabin

A Sun-Air Dornier D-328-300, registration OY-NCL performing flight EZ-8211

from Billund (Denmark) to London Stansted, EN (UK) with 26 passengers and

3 crew, was originally destined for London City, EN (UK) but due to a delay

needed to head for Stansted Airport. The aircraft departed Billund's runway

09 and was climbing through 800 feet AGL when the crew noticed a chemical

odour and smoke like haze around the map and instrument lights. At the same

time the flight attendant called the flight deck reporting smoke and odour

in the cabin. At the same time a smoke indication for the rear toilet illuminated.

The crew declared emergency, stopped the climb and decided to return to

Billund. While positioning for runway 09 the crew worked the relevant checklists

which required the #2 air conditioning system to be shut down after which

the smoke and odour began to dissipate. The aircraft landed safely

back

on runway 09 about 8 minutes after departure.

Denmark's Havarikommission (HCL) released their final report in Danish concluding

the probable cause of the incident was a worn and slightly damaged

seal in the right hand engine.

The HCL reported that as result of the haze dissipating after shutting the

#2 air conditioning system down maintenance conducted a borescopic inspection

of the right hand engine immediately after landing and found the compressor

stage #2 contaminated with engine oil. With the compressed air that oil

was then transferred to the air conditioning systems and in turn caused

the smell and haze. The engine was removed from the aircraft and sent to

the manufacturer for further examination, which revealed a carbon seal at

the #2 bearing was worn and slightly damaged.

The HCL assessed that occurrences of this sort had been very few worldwide,

it was the first such event in Denmark. The board therefore concluded it

was a unique event which does not require further action like engine modification.

http://avherald.com/h?article=434ad15e

20101215201219:20101214000000

Incident: Austrian Arrows DH8D at Vienna on Dec 14th 2010, odour on board

An Austrian Arrows de Havilland Dash 8-400, registration OE-LGA performing

flight OS-913 from Vienna to Innsbruck (Austria) with 57 passengers,

in the initial climb out of Vienna when the crew decided to return to Vienna

due to an acid smell on board. The airplane landed safely about 10 minutes

after departure and taxied to the gate, where passengers disembarked normally.

A replacement Dash 8-400 registration OE-LGC reached Innsbruck with

a delay of 2 hours.

The airline reported, that the airplane returned to Vienna due to an unpleasant smell on board, the crew requested priority for the landing.

http://avherald.com/h?article=4349fc6d

20110416083222:20101213000000

Incident: Webjet B733 near Rio de Janeiro on Dec 13th 2010, loss of cabin pressure

A Webjet Boeing 737-300, registration PR-WJO performing flight WH-6708 from

Rio de Janeiro, RJ to Salvador, BA (Brazil) with 132 people on board, was

already enroute near Rio de Janeiro when the crew released the passenger

oxygen masks and initiated an emergency descent. The crew returned to Rio

de Janeiro for a safe landing about 90 minutes after departure.

Passengers complained about a strong burning odour on board.

The airline said, that the crew noticed cabin pressure problems, released

the passenger oxygen masks and returned to Rio de Janeiro. The airplane

was removed from service for inspections. The passengers were rebooked onto other flights.

The American NTSB reported on Apr 16th 2011, that the airplane was climbing

to FL330 when the crew noticed the cabin pressurization system was not properly

working and stopped the climb. The cabin's rate of climb was indicated at

500+ feet per minute, the cabin altitude index was 8.0 and increased to

10.0 a few seconds later, the pressure differential was 5.0. The crew actioned

the relevant checklists, donned their oxygen masks and released the passenger

oxygen masks and returned to Rio de Janeiro. The investigation is conducted

by Brazil's CENIPA.

http://avherald.com/h?article=433d3d98

20101124153718:20101123000000

Incident: Lufthansa A343 near Munich on Nov 23rd 2010, odour on

board

A Lufthansa Airbus A340-300, registration D-AIGO performing flight LH-424

from Munich (Germany) to Boston, MA (USA), was climbing through 5000 feet

when a strong oily odour on board convinced the crew to return to Munich.

The airplane levelled off at 6000 feet and performed a safe landing about

30 minutes after departure.

A replacement Airbus A340-600 registration D-AIHR reached Boston with a delay of 2:45 hours.

Gossip is that D-AIGO had received a new inboard left hand engine (CFM56)

and was about to conduct its first flight following the engine change.

http://avherald.com/h?article=433a21f4

20101119134411:20101119000000

Incident: Virgin Blue B737 at Melbourne on Nov 19th 2010, odour in cabin

A Virgin Blue Boeing 737-700, flight DJ-807 from Melbourne, VI to Sydney, NS

(Australia) with 122 passengers and 6 crew, was in the initial climb when

the crew noticed an abnormal odour on board prompting the return to Melbourne.

The airplane landed safely less than 30 minutes after departure.

A passenger said, it smelt like burning plastics. The captain announced

that an engine had been changed on the aircraft and may be the source of the smell.

http://avherald.com/h?article=4333c185

20101109194406:20101109000000

Incident: Jazz CRJ1 near Washington on Nov 9th 2010, odour in cabin

An Air Canada Jazz Canadair CRJ-100, registration C-FVMD performing flight

QK-7651/AC-7651 from Washington National, DC (USA) to Montreal, QC (Canada)

with 12 passengers and 3 crew, was climbing through FL220 when the crew

reported an odour in the rear of the aircraft cabin and decided to return

to Washington's Ronald Reagan Airport. The airplane landed safely about

20 minutes later.

The flight was cancelled, the passengers were rebooked onto other flights.

The airline said first results of the examination of the aircraft suggest

a passenger service unit (overhead light and air vent) may have malfunctioned.

http://avherald.com/h?article=43322ee9

20101107213357:20101106000000

Incident: Airtran B712 near Memphis on Nov 6th 2010, smoke in cabin

An Airtran Boeing 717-200, registration N921AT performing flight FL-619

from New Orleans, LA to Milwaukee, WI (USA) with 65 people on board, was enroute

at FL330 almost overhead Memphis, TN (USA) when the crew reported an odour

and some smoke in the cabin. The crew diverted to Memphis for a safe landing

20 minutes later.

Airtran reported passengers and crew noticed an odour and a small amount $% \left(1\right) =\left(1\right) +\left(1\right) +\left$

of smoke in the cabin.

http://avherald.com/h?article=432ae90d

20101028205353:20101025000000

Incident: United Airlines B772 near Winnipeg on Oct 25th 2010, smoke in cockpit

A United Airlines Boeing 777-200, registration N226UA performing flight

UA-835 from Chicago O'Hare, IL (USA) to Shanghai (China) with 194 passengers,

was enroute at FL340 about 210nm north of Winnipeg,MB (Canada) when the

crew reported smoke in the cockpit and decided to divert to Winnipeg, where

the aircraft landed safely about 45 minutes later.

A replacement Boeing 777-200 registration N219UA was dispatched from Chicago

O'Hare to Winnipeg as flight UA-9945 and reached Shanghai with a delay of 28 hours.

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The Canadian TSB reported on Oct 28th that the crew detected an odour in

the cockpit about 2 hours into the flight and turned the recirculation

fans off. About 5 minutes later the crew received an EICAS warning "Smoke

Crew Rest AFT/FD" and a master caution. The crew opened the flight deck

door and noticed a haze in the companionway and a rumbling underneath the

forward galley floor. The crew donned their oxygen masks, declared emergency

and diverted to Winnipeg. The crew continued to use the oxygen masks for

about 20 minutes, dumped fuel and completed a safe landing. Attending emergency

services using thermal imaging found no trace of smoke, heat or fire, the

cargo holds were opened but no trace of fire, smoke or heat were found there.

too. Maintenance troubleshooting could not identify the source of smoke.

After completing an overweight landing inspection the aircraft was ferried

to San Francisco with engineering pilots and maintenance personnel on board

performing system tests. No EICAS messages appeared during that ferry flight,

however during the descent towards San Francisco an oil odour became noticeable.

Troubleshooting is continuing with the focus on how oil is entering the

pneumatic system.

http://avherald.com/h?article=4327c7e9

20101021194346:20101019000000

Incident: Air Canada E190 at Edmonton on Oct 19th 2010, flock of

birds

An Air Canada Embraer ERJ-190, registration C-FHON performing flight AC-255

from Edmonton, AB to Vancouver, BC (Canada) with 79 people on board, was climbing

through 2000 feet AGL out of Edmonton's runway 30 when the airplane encountered

multiple bird strikes impacting the left inboard slats, the right hand windshield

and the left hand engine (CF34). The crew observed a slight fluctuation

in the #1 engine parameters, subsequently a strong odour developed in the

cabin. The crew declared emergency and returned to Edmonton for a safe landing

on runway 02 about 10 minutes later.

The Canadian TSB reported, that maintenance found damage to the left hand

engine, cowling as well as right hand wing components. The birds are suspected

to have been Canada geese.

http://avherald.com/h?article=431f0f97

20101008193334:20100930000000

Incident: Air Canada E190 near St. Pierre on Sep 30th 2010,

autoflight system failure, smell of smoke in cabin

An Air Canada Embraer ERJ-190, registration C-FHKI performing flight AC-1197

from St. John's,NL to Toronto,ON (Canada), was enroute at FL340 near St.

Pierre (Territorial Collectivity of Saint Pierre and Miquelon, France) when

the crew requested to descend below RVSM due to the failure of the autoflight

system. The airplane was cleared to FL280 and descended to that level. Following

the descent the crew reported they were investigating a report of smoke

in the cabin. A short time later the crew reported there was an electrical

odour near a rear galley oven. The circuit breaker for the oven was manually

tripped and the smell dissipated. The crew continued the flight to destination

for a safe landing 2:40 hours later.

The Canadian TSB reported, that maintenance personnel reset the circuit

breakers and selected the rear galley ovens and coffeemakers on, but

problem could not be reproduced. The airplane was since returned to service.

http://avherald.com/h?article=4314d727

20100923134336:20100923000000

Incident: Delta Airlines B764 over Irish Sea on Sep 23rd 2010, smell
of smoke in cockpit

A Delta Airlines Boeing 767-400, registration N840MH performing flight DL-250 $\,$

(dep Sep 22nd) from New York JFK,NY (USA) to Athens (Greece) with 231 passengers

and 12 crew, was enroute at FL340 overhead the Irish Sea when the crew decided $\ensuremath{\mathsf{C}}$

to divert to Manchester, EN (UK) due to a smell of smoke in the cockpit.

The airplane landed safely about 20 minutes later.

The flight is expected to continue the following day (Sep 24th) and reach

Athens with a delay of 28 hours. The passengers were taken to local hotels.

Delta Airlines said, the crew reported a smokey odour in the cockpit and

diverted to Manchester as a precaution. The passengers disembarked normally,

the airplane was examined by maintenance and cleared for departure.

However,

due a strike of ATC personnel in France the crew ran out of maximum duty

hours, so that the flight had to be cancelled. The flight will now depart

Manchester as DL-9858 on Friday at 8am BST (07:00Z).

http://avherald.com/h?article=430ab24f

20100908181321:20100908000000

Incident: Etihad A320 near Kuwait on Sep 8th 2010, odour in cabin

An Etihad Airways Airbus A320-200, registration A6-EIK performing flight

EY-543 from Abu Dhabi (United Arab Emirates) to Damascus (Syria), diverted

to Kuwait (Kuwait) after an odour of fuel was observed on board. The airplane

landed safely.

It turned out that a passenger had taken a fuel container on board, that

started leaking.

The airplane reached Damascus with a delay of 4 hours.

http://avherald.com/h?article=43095e51

20100906112201:20100906000000

Incident: Mount Cook AT72 near Invercargill on Sep 6th 2010, odour in cabin

A Mount Cook Airlines Aerospatiale ATR-72-500 on behalf of Air New Zealand,

flight NZ-5062 from Invercargill to Christchurch (New Zealand) with 43 passengers,

diverted to Dunedin (New Zealand) after a smell of fuel developed in the

cabin. The airplane landed safely. All occupants were checked by medical

services, one crew member was taken to a hospital as a precaution.

http://avherald.com/h?article=43099f63

20100906222559:20100905000000

Incident: Jetblue E190 near Washington on Sep 5th 2010, burning

odour and haze in cabin

A Jetblue Embraer ERJ-190, registration N266JB performing flight B6-331

from Washington Dulles,DC to Orlando,FL (USA), was in the initial climb

out of runway 30 when the crew reported a burning odour and haze in the

cabin. ATC cleared the aircraft to land on runway 01L or 01C, the crew selected

01L at first and explained they had some sort of a bleed air issue, then

decided to go for runway 01C. The airplane landed safely on runway 01C about

4 minutes after takeoff and was checked out by emergency services before

continuing to the apron.

The incident airplane was later able to perform the flight and reached Orlando with a delay of 5:15 hours.

http://avherald.com/h?article=43056a0a

20100831195041:20100827000000

Incident: Jazz DH8A near Timmins on Aug 27th 2010, smoke in cockpit

An Air Canada Jazz de Havilland Dash 8-100, registration C-GJIG performing

flight QK-7829 from Toronto, ON to Timmins, ON (Canada) with 38 people on

board, was enroute about 60nm from Timmins, when the crew observed smoke

coming from the #2 transponder panel. The crew pulled the circuit breaker,

the smoke dissipated, a toxic odour remained however. The crew declared

emergency and continued to Timmins for a safe landing.

The Canadian TSB reported, that an electronic circuit board was found burnt

in the #2 transponder. Maintenance replaced the #2 transponder and the TCAS

control panel, that was found adrift.

http://avherald.com/h?article=42f438fb

20100806155614:20100805000000

Incident: Comair CRJ1 near Nashville on Aug 5th 2010, odour sickens

passenger

A Comair Canadair CRJ-100 on behalf of Delta Airlines, flight OH-6399/DL-6399

from New York JFK,NY to Nashville,TN (USA) with 49 passengers, was on approach

to Nashville when a passenger became sick due to some pungent odour on board

of the aircraft. The crew continued for a safe landing in Nashville, where

the passenger recovered.

Delta Airlines said, the pungent odour was identified to come from another $% \left(1\right) =\left(1\right) \left(1\right) +\left(1\right) \left(1\right) \left(1\right) +\left(1\right) \left(1$

passenger's carry on-bag which contained some sort of a cactus.

http://avherald.com/h?article=42f34582

20100805070106:20100804000000

Incident: American B762 near Albuquerque on Aug 4th 2010, unruly passenger

An American Airlines Boeing 767–200, registration N324AA performing flight

AA-117 from New York JFK,NY to Los Angeles,CA (USA) with 168 passengers

and 11 crew, was enroute at FL380 about 135nm northnorthwest of Albuquerque,NM

when the crew decided to divert to Albuquerque reporting a male unruly passenger

onboard. The airplane landed safely about 30 minutes later, the unruly passenger

was taken into custody by the FBI.

All passengers deboarded, the airplane was searched, no suspicious/ hazardeous

items were found. The airplane reached Los Angeles with a delay of 5:40

hours.

The Transportation Security Administration said that the passenger was allegedly

smoking on board. As as abundance of caution sniffer dogs were searching

the airplane, no traces of explosives were found.

Passengers reported, that they smelled an odour like matches and then cigarettes

from a lavatory, cabin crew found a few burned matches and questioned the

man, who then was detained by police after landing in Albuquerque.

http://avherald.com/h?article=42ee4168

20100728134701:20100727000000

Incident: United Airlines B752 near Charleston on Jul 27th 2010, smoke in cockpit

N564UA comes to a stop (Photo: Yeager Airport) A United Airlines Boeing 757-200,

registration N564UA performing flight UA-229 from Washington Dulles,DC to

San Diego,CA (USA) with 178 passengers, was enroute at FL360 about 25nm

north of Charleston, WV when the crew reported smoke in the cockpit and decided

to divert to Charleston's Yeager Airport. The airplane landed safely 14

minutes later.

A replacement Boeing 757-200 registration N573UA was dispatched to Charleston,

continued the flight and reached San Diego via Chicago O'Hare,IL with a

delay of 6.5 hours.

The airport said, the crew declared emergency reporting smoke in the cockpit.

Passengers reported, that smell of smoke was noticed in the back of the cabin.

The cause of the smoke is under investigation, initial findings suggest

a hydraulic leak submitted odour to the cabin through the air conditioning.

http://avherald.com/h?article=42ee46d3

20100728151919:20100726000000

Incident: Lufthansa B744 near Bergen on Jul 26th 2010, strange odour

in cabin

A Lufthansa Boeing 747-400, registration D-ABTB performing flight LH-454

from Frankfurt/Main (Germany) to San Francisco, CA (USA), was enroute at

FL330 off the coast of Norway near Bergen (Norway) when the crew decided

to return to Frankfurt due to a strange odour in the cabin. The airplane

landed safely back in Frankfurt about 130 minutes later (and about 4 hours

after departure).

A replacement Boeing 747-400 registration D-ABVY departed Frankfurt about

140 minutes after landing and reached San Francisco with a delay of hours.

http://avherald.com/h?article=42e35858

20100713071324:20100712000000

Incident: American B763 near Casper on Jul 12th 2010, smell of smoke in cockpit

An American Airlines Boeing 767-300, registration N343AN performing flight

AA-24 from San Francisco, CA to New York JFK, NY (USA) with 193 passengers

and 9 crew, was enroute at FL370 about 100nm southwest of Casper,WY when

the crew noticed an electrical smokey smell in the cockpit and decided to

divert to Casper. The airplane landed safely about 25 minutes later.

Maintenance identified one of the computer screens as source of the odour,

disabled the screen and released the aircraft to continue the flight

after

about 5:20 hours on the ground. The airplane reached New York with a delay

of 6:15 hours.

http://avherald.com/h?article=42ea6ff1

20100722195827:20100705000000

Incident: Porter DH8D near Newark on Jul 5th 2010, smoke in cockpit

A Porter Airlines de Havilland Dash 8-400, registration C-GLQJ performing

flight PD-122 from Newark,NJ (USA) to Toronto City,ON (Canada) with 67 people

on board, was climbing through 10000 feet when the crew noticed smoke and

a strong odour of burning plastic. The crew declared emergency and returned

to Newark for a safe landing, the aircraft was deplaned on an adjacent taxiway.

No injuries occured.

The Canadian TSB reported, that maintenance identified a recirculation fan as source of the smoke.

http://avherald.com/h?article=42dba325

20100706193747:20100701000000

Incident: Air Canada A320 near Toronto on Jul 1st 2010, smoke in cockpit

An Air Canada Airbus A320, registration C-FKCO performing flight AC-1153

from Toronto,ON to Calgary,AB (Canada), had just reached FL330 when the

crew reported smoke in the cockpit and returned to Toronto
requesting runway

05. The airplane landed safely on runway 05 22 minutes later and stopped

on the runway.

After emergency services checked the aircraft the airplane vacated the runway

20 minutes after landing.

A replacement Airbus A320-200 registration C-FTJO reached Calgary with a delay of 5:45 hours.

The Canadian TSB reported on Jul 6th, that the crew observed traces of smoke

in the cockpit while the airplane climbed through FL300 and actioned

according checklists. The smoke dissipated somewhat but a residual odour

remained prompting the crew to return to Toronto. The cause of the

is still under investigation.

http://avherald.com/h?article=42d2e45c

20100620104623:20100620000000

Incident: Malev B737 at Budapest on Jun 20th 2010, smell of smoke on board

A Malev Hungarian Airlines Boeing 737-700, registration HA-LOR performing

flight MA-660 from Budapest (Hungary) to Amsterdam (Netherlands) with 102

passengers, departed Budapest's runway 31L when the crew reported

of smoke in the cabin, levelled off at 3000 feet and returned to Budapest

for a safe landing on runway 31R about 12 minutes later.

The airline said, that passengers observed smell of smoke on board prompting

the crew to return to the airport. The source of the odour was identified

to be residual engine cleaning fluid. The flight was cancelled, the passengers

rebooked onto the next flight.

http://avherald.com/h?article=42cd0326

20100612085753:20100611000000

Incident: Continental B764 near Boston on Jun 11th 2010, smell of

smoke in cabin

A Continental Airlines Boeing 767-400, registration N76062 performing flight

CO-104 from Newark,NJ (USA) to Athens (Greece) with 220 passengers and 13

crew, was enroute at FL310 about 130nm east of Boston, when the crew reported $\ensuremath{\mathsf{E}}$

a bit developing smoke in the cabin, declared emergency and decided to dump

fuel, turn around and divert to Boston. The airplane landed safely 50 minutes

later.

A replacement Boeing 767–400 registration N68061 continued the flight and $\,$

is estimated to reach Athens with a total delay of 7 hours.

Continental Airlines said, that some odour of unknown origin had appeared in the cabin.

http://oubanald.com/b2antiala_42a1560

http://avherald.com/h?article=42c15682

20100527165832:20100527000000

Incident: Delta Airlines MD88 at Boston on May 27th 2010, burning odour

A Delta Airlines McDonnell Douglas MD-88, flight DL-1373 from Boston,MA

to New York La Guardia, NY (USA) with 83 people on board, was departing Boston

maintaining 14000 feet, when the crew reported a burning odour in the back

of the aircraft, declared emergency and requested to return to Boston. The

airplane returned to land on runway 04R 12 minutes after emergency was declared,

the airplane turned off the runway onto runway 33R where emergency services

checked the airplane.

Emergency services found no trace of fire, smoke or heat.

About one hour earlier another fire alert had kept Boston's emergency services

busy, see: Incident: American B738 at Boston on May 27th 2010, fire alert.

http://avherald.com/h?article=42c15318

20100527165807:20100527000000

Incident: American B738 at Boston on May 27th 2010, fire alert

An American Airlines Boeing 737-800, flight AA-1875 from Boston,MA to Chicago

O'Hare,IL (USA) with 166 people on board, was climbing from 8000 to 14000

feet out of Boston, when the crew (quite agitated) declared emergency due

to a possible fire on board and requested to return to one of Boston's runways

22. The airplane levelled off at 10000 feet, the crew donned their oxygen

masks, a few minutes later the crew requested runway 04R. About 12 minutes

after the crew declared emergency the airplane landed safely on runway $\ensuremath{\text{04R}}$

and stopped on the runway.

Emergency services found no trace of fire, smoke or heat. The runway was closed.

About one hour later Boston had to handle another emergency, see Incident:

Delta Airlines MD88 at Boston on May 27th 2010, burning odour.

http://avherald.com/h?article=42b9ab97/0000

20110315065805:20100516000000

Incident: United Airlines B752 near Washington on May 16th 2010, small fire in cockpit

The NTSB released their final report concluding the probable causes of the incident were:

The ignition of the J5 power terminal located on the captainís No. 1 windshield

due to a loose electrical connection between the terminal connector lug

and its respective terminal block. The loose connection resulted from a

missing lock washer that allowed the resistance in the electrical path to

increase sufficiently to generate high enough temperatures to ignite

terminal block.

Contributing to the probable cause was the lack of instructions to ensure

the lock washer was installed in the J5 power terminal block in the Boeing

757 aircraft maintenance manual (AMM).

Additionally, contributing to the incident was the deferral of the related

maintenance write-up before the incident, which resulted from information

in the United Airlines AMM that stated, iWhen bus bar(s) show signs of blackening

or burning, the condition is acceptable for continued service, although

the window must be replaced within 50 flight-hours.

The captain's windshield had been installed on Jan 29th 2007 according to

the maintenance manual by United Airlines, that was in agreement with the

Boeing manual. Both manuals lacked information to alert the maintenance

engineers that a lock washer must be installed at all power and sensor terminal

block installation. The information was added by Boeing on May 16th 2010,

United added the modification to their manual subsequently.

Sufficient clues about an electric anomaly were available to United maintenance

personnel. Electrical odours in the cockpit had been reported in two of

the three flights prior to the incident. The captain conducting the flight

immediately prior to the incident flight reported that his #1 windshield

lower outboard power connector appeared burnt and was hot on touching.

The lead mechanic thought the power terminal block was part of the bus bar

and referred to the United Airlines maintenance manual that stated

the window should be replaced within 50 hours following the

discolouration

of the bus bar. Following discussion with another maintenance engineer they

decided to defer the maintenance write up for 50 hours. While the United

Airlines manual showed that defer option, the Boeing manual did not, United

Airlines adapted their manual to clarify the troubleshooting instructions

and removed the deferral option.

United Airlines had been aware of the Service Bulletin (SB) dated April

19th 2010, the actions mentioned in the SB however had not yet been implemented,

nor were they required to be implemented by the FAA. The NTSB annotated

that had the actions of the SB been performed it was likely the anomaly

on the terminal block would have been detected and the fire prevented.

http://avherald.com/h?article=42a51965

20100419090347:20100419000000

Accident: Virgin Blue B738 near Adelaide on Apr 19th 2010, several passengers suffer from breathing difficulties

A Virgin Blue Boeing 737-800, registration VH-VOT performing flight DJ-558

from Perth,WA to Sydney,NS (Australia) with about 150 passengers, was enroute

near Adelaide, when a number of passengers started to complain about breathing

difficulties. A short time earlier cabin crew had noticed an unusual odour

on board. The flight crew decided to divert to Adelaide, where the airplane

landed safely. One female passenger (50) needed to be taken to hospital,

8 more passengers were treated by medical personnel at the airport, all

passengers were screened for possible carbon monoxide poisoning.

Adelaide Airport reported, that the cause of the illnesses has not yet been

established. Engineers checked the aircraft but found nothing unusual.

http://avherald.com/h?article=4291a518

20100324102856:20100323000000

Incident: Jazz CRJ1 at Montreal on Mar 23rd 2010, unusual smell on

board

An Air Canada Jazz Canadair CRJ-100, flight QK-8862 from Montreal,QC to

Halifax,NS (Canada) with 47 passengers and 3 crew, was climbing through

7000 feet when the crew decided to return to Montreal reporting an unusual

odour on board. The airplane landed safely 15 minutes after departure.

A replacement Canadair CRJ-200 registration C-GOJA reached Halifax with

a delay of 4:15 hours.

The airline reported, that the crew was advised to return to Montreal following

their report of the smell. Both flight crew and the flight attendant were

taken to a hospital as a precaution. In a subsequent inspection of the airplane

the source of the smell was identified as remains of a cleaning fluid in

the engines following an engine wash.

http://avherald.com/h?article=429117e0/0000

20110411140318:20100323000000

Accident: Air Canada A320 at Toronto on Mar 23rd 2010, steering problem and smell of smoke

The Canadian TSB released their final report concluding:

Findings as to Causes and Contributing Factors

- A leak from the number 1 yaw damper caused fluid to be ingested into the
auxiliary power unit and sent through the air conditioning system

auxiliary power unit and sent through the air conditioning system, resulting

in smoke entering the cabin.

 When the crew ordered the evacuation as a result of the smoke, several persons received minor injuries while exiting the aircraft via the emergency slides.

Finding as to Risk

- Several passengers deplaned from the aircraft through the emergency exits while in possession of their carry-on baggage. This has the potential to increase evacuation time and risk of injuries, and possibly block emergency exits.

Other Finding

- The extensive delay between Transport Canada's acceptance of this Board recommendation and actual regulatory change permits identified safety deficiencies to persist.

In the overnight maintenance prior to the flight 6 liters of hydraulic fluid had been added to the green hydraulic system, the tech log of the aircraft contained an instruction to monitor the fluid level.

When the flight crew began their preflight preparations and started the APU, an odour was noticed in the cabin. The crew used to such odours on startup, which may result from engine washes or residue in the air conditioning system, increased the air flow in the cabin and reduced the temperature, the smell dissipated.

Shortly after takeoff the odour appeared again, the crew again increased air flow and reduced cabin temperature, the smell again dissipated.

While approaching the top of climb the crew attempted to locate the source

of the smell, but soon received an ECAM message indicating a low fluid quantity

level for the green hydraulic system. The crew actioned the relevant checklists

and turned off the power transfer unit and the green engine driven hydraulic

pump. At that time the aircraft was about halfway into the flight, weather

conditions at Toronto were more favourable than in Montreal so that the

crew decided to continue to Toronto.

Due to the green hydraulic system being shut down a number of systems were

not available including nose gear steering, normal brakes, normal gear extension

and engine #1 thrust reverser. The crew advised ATC, emergency services

were put on standby. The crew alternatively extended the gear and performed

an otherwise normal landing on runway 05, stopped on the runway, started

the APU and shut down both engines and waited for maintenance personnel

and a tow truck to arrive.

When the tow truck arrived, the driver requested all doors to be closed

as required by company procedures. Due to the manual extension of the gear

the gear doors had remained open, the extension of the gear however

returned some fluid to the green hydraulic reservoir which now showed normal

fluid level. In consultation with maintenance it was decided to reenergize

the green hydraulic system, the crew therefore turned the electric pump

and the power transfer unit on about 21 minutes after landing.

Almost immediately, smoke began to enter the cabin. The electric pump and

the power transfer unit were shut down again, both left forward doors (L1

and L2) were disarmed and opened in order to clear the smoke, the smoke

however did not dissipate and continued to enter the cabin through the air

vents. The passengers increasingly grew uneasy. After the flight attendants

informed the captain about the situation the captain ordered the evacuation.

Both L1 and L2 doors were closed and armed. All doors including the overwing

exits were subsequently opened. Although cabin crew instructed passengers

to leave the aircraft without any hand luggage, a number of passengers exited with their luggage.

The evacuation was finished within 2 minutes, during the end of the evacaution $\ \ \,$

the slides became damp due to light rain causing higher speeds arriving

at the end of the slide. Two passengers, who exited with the luggage, received

minor injuries. Two cabin crew exiting last and carrying emergency equipment

also hurt their backs.

The TSB analysed that no leakage had been detected during maintenance the

night before the flight, however, it was possible that some fluid had accumulated

before the APU intake causing the odour upon starting the APU.

In flight the manual gear extension caused enough fluid to return to the

hydraulic reservoir that the fluid level appeared normal again. When the

crew re—assessed the system status and attempted to close the gear door

by re-energizing the green hydraulic system, high pressure fluid leaked

from the #1 yaw damper actuator. This fluid, with no airflow to drive it

away from the aircraft, flowed down along the side of the fuselage until

it reached the APU intake and caused the smoke in the cabin. When the crew

disabled the pump, the leak stopped, however sufficient fluid had already

exited and continued to be ingested by the APU.

The evacuation time was not significantly increased by the closing, arming

and re-opening the L1 and L2 (forward) doors.

http://avherald.com/h?article=4288969b

20100312122308:20100311000000

Incident: Jetstar A320 enroute on Mar 11th 2010, chemical odour causes nausea

A Jetstar Airbus A320-200, registration VH-VQL performing flight JQ-882

from Brisbane,QL to Mackay,QL (Australia) with 182 people on board,

enroute near top of descent when passengers started to complain about a

chemical chlorine like smell on board. Later six passengers and as well

as four cabin crew felt light headed and complained about nausea. Two doctors

on board monitored their health status. The flight crew continued to ${\sf MacKay}$

for a safe landing, where medical services were awaiting the aircraft. Passengers

and cabin crew were checked by the medical services, however noone needed

treatment or hospitalization.

The airplane was removed from service, the airline reported, the cause of

the smell being a mystery and being under investigation.

http://avherald.com/h?article=4285ed54

20100308230627:20100308000000

Incident: Thomas Cook A320 near Athens on Mar 8th 2010, unusual

odour on board

A Thomas Cook Airlines Airbus A320-200, registration 00-TCN performing flight

FQ-1756 from Brussels (Belgium) to Taba (Egypt) with 180 passengers,

enroute at FL350 overhead the Aegean Sea about 80nm northeast of

(Greece), when passengers reported an unsual smell on board prompting the

crew suspecting a technical defect to divert to Athens. The airplane landed safely.

A replacement Airbus A320-200 registration 00-TCI was dispatched to Athens

and is estimated to reach Taba with a delay of 10 hours.

http://avherald.com/h?article=427d7ff6

20100226110051:20100225000000

Incident: Chautauqua E145 at New York on Feb 25th 2010, smokey odour on board

A Chautauqua Airlines Embraer ERJ-145 on behalf of Delta Airlines, flight

RP-6054/DL-6054 from New York La Guardia, NY to Columbus, OH (USA)

passengers, was in the initial climb out of La Guardia Airport, when

crew reported a smokey odour on board, levelled off at 2500 feet and returned

to La Guardia for a safe landing 7 minutes after departure.

An earlier flight, RP-6020 from La Guardia to Columbus, already had to be

cancelled because of a smokey odour on board while the aircraft taxied to

the runway for departure.

The airline reported, that both aircraft had been de-iced, the de-icing

fluid possibly playing a role in the odour on board of both aircraft. Both

aircraft have been removed from service and undergo an examination to determine

the cause of the smell.

The airline's flight schedule between La Guardia and Columbus was seriously disrupted for the remainder of the day.

http://avherald.com/h?article=427de0b9

20100226223747:20100222000000

Incident: Air Canada A320 at Montreal on Feb 22nd 2010, glycol smell, then smoke alert

An Air Canada Airbus A320-200, registration C-FLSU performing flight AC-944

from Montreal,QC (Canada) to Orlando,FL (USA) with 158 people on board,

was climbing through 1000 feet out of Montreal, when a stronger than normal

smell of glycol (de-icing fluid) was observed on board. When the airplane

climbed through 2000 feet, the smoke detector for the aft cargo bay went

off. The crew carried out the according checklists, emptied both fire bottles

into the cargo bay, declared emergency and returned to Montreal. While on

approach, the crew cancelled the emergency, but continued back to Montreal

for a safe landing.

The Canadian TSB reported, that no traces of smoke or fire were detected

in the cargo area. Current assumption is, that the glycol fumes caused the

smoke detector to trigger. The fire bottles were replaced, the engines were

ground run to ensure no residual odour remained and the airplane was returned to service.

http://avherald.com/h?article=4277db4a

20100218233848:20100218000000

Incident: British Airways B752 near Barcelona on Feb 18th 2010,

strange odour in cockpit

A British Airways Boeing 757-200, registration G-CPEO performing flight

BA-487 from Barcelona, SP (Spain) to London Heathrow, EN (UK), was climbing

out of Barcelona, when the crew donned their oxygen masks reporting fumes

in the cockpit and returned to Barcelona for a safe landing about 20 minutes

after departure.

A passenger reported, that shortly after liftoff the flight crew asked the

cabin purser to the cockpit, then all flight attendants got busy checking

the cabin. The captain finally announced, that they had an unusual smell

in the cockpit and were returning to Barcelona. Flight attendants indicated

that the cockpit crew were wearing their oxygen masks.

The flight was cancelled.

http://avherald.com/h?article=4270ba32

20100209142222:20100209000000

Incident: TNT B733 near Liege on Feb 9th 2010, suspicious odour

A TNT Airways Boeing 737-300, registration 00-TNJ performing freight flight

3V-135R from Barcelona, SP (Spain) via Marseille (France) to Liege (Belgium),

was descending through FL310 in its intial descent towards Liege about 25

minutes prior to estimated arrival, when the crew donned their

oxygen masks

and reported a suspicious odour causing irritations. The airplane landed

safely about 25 minutes later and taxied to the stand, where the crew immediately

exited the airplane.

The airport reported, that a first hazmat unit entered the aircraft and

confirmed presence of an unusual substance in the air leading to invocation

of the "red plan" 26 minutes after the airplane arrived at the stand. Medical

services arrived and checked the crew out with no abnormal findings. A special

chemical hazmat unit arrived about 40 minutes after the airplane arrived

at the stand, identified two leaking barrels of chemical canisters, put

them into intact containers and removed them from the aircraft. The other

freight proved intact, the hazmat unit exited the aircraft about 4 minutes

later. The red plan was terminated about 30 minutes later. Analysis of the

two leaking canisters revealed they contained apple powder for the cosmetics industry.

http://avherald.com/h?article=426af309

20100202092828:20100201000000

Incident: American B752 near Denver on Feb 1st 2010, acid odour

An American Airlines Boeing 757-200, flight AA-2229 from Dallas Ft. Worth, TX

to Hayden,CO (USA) with 49 passengers, was enroute at FL400 about 10nm southeast

of Denver International Airport, CO, when the crew reported an acid smell

on board and decided to divert to Denver for a safe landing 40 minutes later.

The airline reported, that no mechanical defects were found, the cause could

be oil producing the smell through the air conditioning system.

The remainder of the flight was cancelled, the passengers were bussed to Hayden.

http://avherald.com/h?article=42668a3d

20100127212524:20100127000000

Incident: Comair CRJ1 near Myrtle Beach on Jan 27th 2010, smell of

smoke

A Comair Canadair CRJ-100 on behalf of Delta Airlines, flight OH-6435/DL-6435

from New York La Guardia, NY to Charleston, SC (USA) with 16 passengers and

3 crew, was enroute at FL320 about 110nm northnortheast of Myrtle Beach, SC

(USA), when the crew reported a smokey odour on board and decided to divert

to Myrtle Beach. The airplane landed safely in Myrtle Beach about 21 minutes

later. Attending emergency services found no trace of fire or heat.

The remaineder of the flight was cancelled. The airline offered ground transportation $% \left(1\right) =\left(1\right) +\left(1$

like taxi or rental cars to the passengers.

A passenger reported, that there was a bit of smoke visible in the cabin.

http://avherald.com/h?article=425f6a41

20100311144457:20100117000000

Incident: US Airways B762 near St. Thomas on Jan 17th 2010, odour on board

A US Airways Boeing 767–200, registration N255AY performing flight US-1041

from Saint Thomas (US Virgin Islands) to Charlotte, NC (USA) with 174 passengers,

was on approach to Charlotte, when the crew reported a number of passengers

and cabin crew had noticed some odour on board shortly after takeoff

were now suffering from headache and nausea raising the alert of a possible $% \left(1\right) =\left(1\right) \left(1\right) +\left(1\right) \left(1\right) \left(1\right) +\left(1\right) \left(1\right) \left($

carbon monoxide poisoning. The airplane continued for a safe landing on

Charlotte's runway 23 and was received by about a dozen ambulances at the

gate. 8 passengers were checked and treated on scene by medical staff, but

were able to catch their connecting flights, 7 crew members were taken to

a local hospital as a precaution.

US Airways reported, that the initial suspect of carbon monoxide did not

verify, the cause of the odour and nausea is under investigation. The airplane

has been taken out of service.

In March US Airways confirmed, that engine oil had leaked through a faulty seal into the bleed air supplying the air conditioning system.

http://avherald.com/h?article=4288e1ec/0000

20131227121321:20091217000000

Incident: Jett8 B742 at Singapore on Dec 17th 2009, uncontained engine failure

Singapore's Air Accident Investigation Bureau (SAAIB) released their final

report concluding the probable causes of the serious incident was:

- The uncontained engine failure was a result of the circumferential fracture

of the S3 LPT disk forward spacer arm. The failure is consistent with the

engine having sustained vibration due to HP rotor imbalance.

 The operatorís documentation system, as regards its evaluation of its

EHM contractorís maintenance-related recommendations, was such that its

decision making process was not always clearly recorded.

 $\boldsymbol{\mathsf{-}}$ The operator did not update the engine manufacturer on changes to the

names and contact details of the persons within the operatoris organisation

responsible for liaising with the engine manufacturer on safety information.

- It was not a practice of the engine manufacturer to ascertain

whether

the operators indeed received the pertinent safety information that it had

sent out to them.

The SAAIB reported the aircraft departed Singapore's runway 02C and was

cleared to climb to FL240 when at about 7000 feet the crew heard a muffled

bang and noticed the odour of oil in the cockpit. The flight engineer (67,

FEL, 14,600 hours total, 11,500 hours on type) noticed the oil pressure

and oil quantity rapidly reduced on engine #4, the N1 and N2 rotor speeds

reduced but did not drop to zero, the EGT remained within permitted limits.

The crew decided to shut the engine down and advised ATC. The captain (56,

ATPL, 11,200 hours total, 2,450 hours on type), so far pilot monitoring,

assumed role as pilot flying, the first officer (37, ATPL, 3,495 hours total,

418 hours on type) became pilot monitoring. The aircraft returned to Singapore

for a safe landing on runway 02C. A post flight inspection revealed engine

#4 had suffered an uncontained failure, there was no evidence of fire.

Further examination showed engine inlet and low pressure compressor were

intact, there was no indication of foreign object damage/ingestion.

The high pressure compressor stage 1 to stage 8 showed damage consistent

with stator case rubbing. One blade at stage 9 was missing from about one

inch from the blade platform, two stage 10 blades were missing half of the

airfoil, too. Heavy impact damage was observed on stage 10 to stage 14 high

pressure compressor blades.

The combustion chambers appeared intact.

2 of the high pressure turbine stage 1 blades were missing more than half

of their airfoils, thirteen other stage 1 blades were found with nicks,

oxidation and cracks. 79 stage 2 blades were found broken.

The low pressure turbine's stage 3 nozzle guide vane was exposed, the whole

of the low pressure turbine rotor, all blade sections and the aft of the

turbine rotor were missing from the engine. The stage 1 and 2 blades showed

damage consistent with stator case outer shroud rubbing.

A number of turbine blade debris was recovered from both halves of the engine

cowl and engine pylon, the bulk cargo door and the right side of the vertical

stabilizer was punctured, there were multiple dents and punctures on the

underside of the right hand wing, an underwing fuel tank control panel was

punctured causing some fuel leakage.

The SAAIB analyzed that a circumferential fracture of the stage 3 low pressure

turbine disk forward spacer arm led to the uncontained failure of the engine

and continued: "A number of previous S3 LPT disk failures were attributed

to vibration due to HP rotor imbalance caused by HPT rotor blade airfoil

material loss. The investigation team believes that the S3 LPT disk failure

in the 17 December 2009 occurrence is consistent with the engine having

sustained vibration due to HP rotor imbalance. The vibration and rotor imbalance

aspects of this and other similar S3 LPT disk failure cases are being investigated $% \left(1\right) =\left(1\right) +\left(1\right)$

in detail by the engine manufacturer and the NTSB."

With respect to engine health monitoring the SAAIB analyzed that increasing

exhaust gas temperatures and fuel flow were typical indications of deterioration

and performance loss of the high pressure rotor, e.g. loss of air blade

material or blade surface contamination. The SAAIB stated: "The initial

shifting of No.4 engine EGT upwards without increase in fuel flow had probably

led the operator to believe that it could be a case of EGT indication fault.

However, one would expect that the repeated recommendations by the EHM contractor

for a BSI made on 3, 5 and 10 December 2009 should be sufficient to alert

the operator that there was an engine problem. Although the operator eventually

scheduled for the EGT indication check and BSI as recommended by its EHM

contractor and engineering handling agent, these maintenance actions were

postponed subsequently. The operator considered that the EHM contractorís

recommendations were not mandatory. However, it is unclear how the operator

evaluated the risk of engine-related failures if the EHM contractorís recommendations were not carried out."

The SAAIB continued: "The operator said it was in compliance with the procedures

approved by the regulatory authority. However, in the course of the investigation,

the investigation team had asked the operator for information pertaining

to its system of reviews of maintenance action recommendations made by the

EHM contractor, i.e. its system defining how and by whom the recommendations

were processed and the follow-up decisions made. The investigation team

was not provided with clear documented evidence pertaining to the operatorís

review system. With the current emphasis on safety management system, an

air operator is expected to have a robust safety management system, including

comprehensive documentation on its various maintenance programmes (including,

for example, EHM)."

As safety action the NTSB issued an urgent safety recommendation in $\ensuremath{\mathsf{May}}$

2010, see NTSB issues urgent safety recommendations regarding CF6 engines,

the engine manufacturer introduced a new design stage 3 low pressure turbine

disk, the FAA followed up with Airworthiness Directives in March 2010, June

2010, February 2011, August 2011 and January 2012 introducing increased

monitoring and inspection as well as reducing life limits of the old design

low pressure turbine stage 3 rotor and introduced a draw plan to remove

old design disks from service.

3 additional safety recommendations to improve documentation and information

flow were issued as result of the investigation.

The damaged engine, intact engine in overlay (Photos: SAAIB):

The puncture of the vertical stabilizer (Photo: SAAIB):

http://avherald.com/h?article=424322d8

20091214224641:20091214000000

Incident: Avianca F100 near Bucaramanga on Dec 14th 2009, chemical

odour

An Avianca Fokker 100, registration HK-4443X performing flight AV-8455 from

Cucuta to Bogota (Colombia) with 70 passengers, diverted to Bucaramanga

60nm southwest of Cucuta when passengers started to complain about a strange

smell and irritation of their eyes and mucous membranes. Several passengers

felt dizzy. The airplane landed safely about 20 minutes after departure

with emergency services including 4 ambulances on stand by.

Police reported, that a passenger carried 3 gallons of a chemical fluid

on board in his hand luggage without reporting the chemical. Within a few

minutes after takeoff the first passengers started to feel dizzy. Emergency

services treated the passengers at the airport, no actual injuries occured.

Two plastic cans containing the chemical were recovered by trained personnel.

http://avherald.com/h?article=4230992c

20091120231322:20091013000000

Incident: Delta Airlines B763 near Atlanta on Oct 13th 2009, odour prompts return

A Delta Airlines Boeing 767-300, flight DL-101 from Atlanta, GA to Buenos

Aires, BA (Argentine), was enroute at FL310 about 120nm south of Atlanta

30 minutes into the flight, when the crew reported smoke in the cabin and

decided to return to Atlanta. The airplane landed safely in Atlanta about

20 minutes later.

A replacement Boeing 767-300 registration N154DL reached Buenos Aires with a delay of 5 hours.

Passengers on board reported, that following a normal departure — dinner

service was just about to commence — the cabin went dark, the inflight entertainment

system stopped working and just the emergency lights at the floor illuminated

about 30 minutes into the flight. A flight attendant was observed reporting

"smoke in the cabin" via phone obviously to the flight deck. Other flight

attendants later claimed when asked, however, that the passenger had misheard

and there was no mention of smoke. The airplane turned around and started

to descend in a hurry, when the captain announced they had experienced an

electrical failure and needed to return to Atlanta. The passengers and cabin

were prepared for an emergency landing, however no brace position was ordered.

The airplane landed safely and stopped on the runway to have the brakes

inspected, a lot of emergency services surrounded the airplane. Later the

captain told the passengers in private talks, that he viewed the events

similiar to Swissair flight 111 (editorial note: which crashed near Halifax,

Canada on Sep 2nd 1998 following an electrical short circuit igniting insulation

material) mentioning Swissair several times and he added the incident would

certainly make the headlines in all US newspapers. Delta Airlines and the

FAA did not respond to the passengers' inquiries over the next month, when

they tried to clarify what had really happened.

The NTSB told The Aviation Herald, that an unusual odour was detected on

board which prompted the crew to return to Atlanta. Maintenance identified

a problem in the air conditioning system, serviced the system and returned

the airplane to service. The occurrence is not reportable to the NTSB and

is therefore not being investigated by the NTSB, the FAA may however conduct

their own investigation.

The Aviation Herald did not receive any replies from Delta Airlines

the FAA within 24 hours after sending inquiries.

http://avherald.com/h?article=41d11ef0

20090722202826:20090717000000

Incident: Air Canada A320 near Toronto on Jul 17th 2009, strong ammonia odour

An Air Canada Airbus A320-200, registration C-FDQQ performing flight AC-1172

from Calgary, AB to Toronto, ON (Canada) with 155 people on board, was

approach to Toronto, when a strong noxious ammonia smell developed causing

nausea to some cabin crew and passengers. The airplane landed safely about

30 minutes later.

The Canadian TSB reported, that maintenance replaced both recirculating

filters and carried out other checks without finding the source of the ammonia

fumes. A flight test was carried out with multiple climbs and descents without

odours, so that the airplane was returned to service.

http://avherald.com/h?article=41c45529

20090706192526:20090706000000

Incident: American MD83 near Lafayette on Jul 6th 2009, smoke in cabin

An American Airlines McDonnell Douglas MD-83, flight AA-1243 from Fort Lauderdale,FL

to Dallas Ft. Worth,TX (USA) with 151 passengers, diverted to Lafayette's

Regional Airport, LA when a smokey odour was noticed in the cabin. The airplane

landed safely about 35 minutes later after the crew considered to

divert

to New Orleans, LA or Houston, TX.

http://avherald.com/h?article=41c1cd60

20090707143716:20090703000000

Incident: Tatarstan B734 near Volgograd on Jul 3rd 2009, smell of

smoke in cabin

A Tatarstan Boeing 737-400, registration VQ-BDB performing flight U9-? from

Kazan (Russia) to Antalya (Turkey) with 150 passengers and 8 crew, diverted

to Volgograd (Russia) due to smell of smoke in the cabin. The airplane landed $\,$

safely about one hour after departure from Kazan.

Attending emergency services did not find any source of heat or fire. The

airline suspected, that somebody smoked on the toilet causing the smell.

An investigation has been initiated by Russian Authorities.

A replacement Orenburg Airlines Boeing 737 has been dispatched to continue

the flight as flight R2-9455.

The airline reported on Monday (Jul 6th), that the electronics controlling the cockpit door lock mechanism was identified to have been the

the cockpit door lock mechanism was identified to have been the origin of the odour.

http://avherald.com/h?article=41b6a977

20090619201915:20090617000000

Incident: Chautauqua E145 at Toronto on Jun 17th 2009, smoke in

cockpit

A Chautauqua Airlines Embraer ERJ-145, registration N292SK performing flight

RP-7860 from Washington,DC (USA) to Toronto Pearson,ON (Canada) with

people on board, was on final approach to Toronto's runway 06L about

8nm

before touchdown, when the crew declared emergency reporting a smokey odour

in the cockpit. The crew continued the approach for a safe landing and taxied to the gate.

The Canadian TSB reported, that the #1 windshield heat system was the source

of the smell of smoke, no smoke or flames were present.

http://avherald.com/h?article=41b11361

20090613131716:20090612000000

Incident: Northwest A333 over Atlantic on Jun 12th 2009, smoke in cabin, later second diversion due to weather

The crew of a Northwest Airlines Airbus A330-300, registration N811NW performing

flight NW-821/DL-821 from Rome Fiumicino (Italy) to Atlanta, GA (USA) with

285 people on board, reported smoke in the cabin about 10 minutes after

passing south of the southwest corner of Ireland at FL360, declared emergency

and diverted to Shannon, where the airplane landed safely on runway 06 30

minutes later. Attending fire services sprayed the right hand main gear after landing.

Shannon Airport reported, that there was a smokey odour in the forward galley

prompting the diversion. The passengers disembarked normally at the gate.

The airplane was examined and declared airworthy, so that the aircraft resumed

the journey after 6.5 hours on the ground in Shannon. While approaching

Atlanta still at FL350 about 120nm before Atlanta around 20:58L (0:58Z),

the flight was sent into a holding due to weather related traffic congestion

at Atlanta prompting the crew to divert to Cincinnati Northern Kentucky, KY

about 250nm from their present position, where the crew performed a safe $\,$

automatic landing onto runway 36R.

No landings had occured at Atlanta between 19:57L (23:57Z) and 20:49L (00:49Z)

and no departures from 19:56L (23:56Z) to 20:20 (00:20Z) due to weather.

Metars Atlanta:

KATL 130452Z 27006KT 6SM -RA BR BKN055 BKN100 0VC150 22/21 A2997 RMK A02

TSE18RAB13 SLP137 FRQ LTG DSNT SE TS DSIPTD P0002 T02170206 403170206

KATL 130419Z 30013G25KT 6SM -RA BR FEW030 BKN050 0VC080 22/20 A2999 RMK

A02 TSE18RAB13 FRO LTG DSNT S-SW TS DSIPTD P0000

KATL 130352Z 33003KT 10SM TS FEW030CB SCT070 BKN150 0VC200 22/21 A2997 RMK

A02 TSE07B52RAE14 SLP139 OCNL LTGICCG W-NW CONS LTG DSNT SW TS W-NW AND

DSNT SW MOV SE P0010 T02170206

KATL 130307Z 03006KT 9SM -RA SCT035 BKN050 BKN070 0VC150 22/20 A2997 RMK

A02 TSE07 FRQ LTGICCGCA DSNT NE-SE TS MOV SE P0010

KATL 130252Z 34003KT 10SM -TSRA FEW030CB BKN045 BKN070 0VC150 22/19 A2997

RMK A02 PK WND 35034/0209 RAB00 SLP139 CONS LTGICCGCA NE-SE TS NE-SE MOV

SE P0022 60087 T02170194 53011

KATL 130221Z 36012G31KT 7SM -TSRA FEW020 SCT035CB BKN070 0VC150 22/18 A2995

RMKA02 PK WND 35034/0209 RAB00 FRQ LTGICCGCA NE-SE-S TS NE-SE-S MOV SE P0022

KATL 130214Z 01022G34KT 2 1/2SM +TSRA BR FEW020 BKN035CB 0VC070 21/18 A2995

RMKA02 PK WND 35034/0209 RAB00 FRQ LTGICCGCA OHD-ALQDS TS OHD-ALQDS MOV

SE P0016

KATL 130210Z 35026G34KT 3/4SM R09R/4000VP6000FT +TSRA BR SCT020 0VC035CB

22/20 A2994 RMK A02 PK WND 35034/0209 RAB00 FRQ LTGICCGCA OHD-ALQDS TS OHD-ALQDS

MOV SE

KATL 130208Z 35017G29KT 1SM R09R/4500VP6000FT +TSRA BR FEW020 BKN035CB 0VC070

22/21 A2996 RMK A02 PK WND 01029/0208 RAB00 FRQ LTGICCGCA OHD-ALQDS TS OHD-ALQDS

М

KATL 130152Z VRB03KT 10SM TS BKN035CB BKN070 0VC150 24/21 A2994 RMK A02

RAE21 SLP129 FRQ LTGICCGCA N-NE AND W-N TS N-NE AND W-N MOV SE P0026 T02440206

KATL 130052Z 24021G29KT 4SM R09R/4500VP6000FT TSRA SCT030CB BKN045 BKN080

0VC150 23/20 A2993 RMK A02 PK WND 04032/2354 WSHFT 2348 PRESRR SLP126 FRQ

LTGICCG S-SW-NW AND DSNT NE TS S-SW-NW AND DSNT NE MOV SE P KATL 130007Z 08011G31KT 8SM -TSRA FEW020 SCT040CB BKN070 0VC150 24/20 A2990

RMKA02 PK WND 04032/2354 WSHFT 2348 PRESFR FRQ LTGCGIC NE-OHD-S TS NE-OHD-S

MOV SE

KATL 122352Z COR 03028G34KT 3/4SM R09R/P6000FT +TSRA SQ FEW020 BKN040CB

OVC060 26/21 A2994 RMK A02 PK WND 03034/2351 TSB39RAB41 PRESRR SLP128 FRQ

LTGCGIC OHD-ALQDS TS OHD-ALQDS MOV SE P0020 60020 T02610206 1 KATL 122349Z 03020G27KT 3/4SM R09R/P6000FT +TSRA FEW020 BKN040CB 0VC060

28/21 A2993 RMK A02 PK WND 04027/2349 TSB39RAB41 PRESRR FRQ LTGCG OHD-ALODS

TS OHD-ALQDS

KATL 122339Z 27006KT 10SM TS SCT045CB BKN060 BKN110 BKN250 29/20 A2989 RMK

A02 TSB39 FRQ LTGCG W-NW TS W-NW MOV SE

KATL 122252Z 27010KT 10SM SCT045 SCT060 BKN250 31/19 A2989 RMK A02 SLP110

CB DSNT NE AND S-SW TCU DSNT NW T03060194

KATL 122152Z 28012G17KT 10SM SCT045 BKN060 BKN250 31/21 A2988 RMK A02 SLP108

CB DSNT NE TCU DSNT E AND NW T03110206

KATL 122052Z 26011G17KT 10SM SCT045 SCT200 31/21 A2989 RMK A02 SLP108 CB

DSNT NE TCU DSNT W & N T03110206 58010

http://avherald.com/h?article=41aebf88/0000

20100629122947:20090605000000

Accident: Virgin Blue B737 near Gold Coast on Jun 5th 2009, fumes sicken 4 flight attendants

The ATSB released their final report stating, that it was impossible to

identify the source of the fumes.

The aircraft was about 40 minutes into the flight, when cabin crew working

in the rear section of the cabin noticed an intermittent strong smell similiar

to acetane, butane or liquid petroleum gas in the last 5 seat rows, the

smell apparently coming from the air conditioning vents above seats 24D,E

and F. The captain was informed of the smell by the purser, the passengers

in the last seat rows did not report any dangerous goods when asked, an

inspection by cabin crew did not detect any dangerous goods or source of

smell. The first officer was sent back to the cabin in the later stage of

the cruise but could not detect any smell.

One rear cabine flight attendant, who had not smelled anything, became momentarily

debilitated upon entering the rear cabin area. Both rear cabin flight attendants

subsequently showed symptoms like stinging red eyes, distended lips, bright

red face, red blotchy

skin on the upper chest with white spots, rash, dizziness, tightness in

chest, tiredness, nausea, and headaches. Both were administered oxygen by

one of the forward cabin flight attendants and recovered.

About 15 minutes prior to touch down the flight crew informed the airport

of the smell in the cabin and the two flight attendants feeling unwell,

oxygen had been used and requested emergency services on stand by.

On descent through 5000 feet one of the forward cabin crew members briefly

smelled the odour, both forward flight attendants began to also show symptoms

like the other two flight attendants.

The four flight attendants and the flight crew were taken to a hospital

for examination, which however could not identify the source of the symptoms.

Ground crew had been advised of the medical issues on board however not

of the possibility of fumes. A luggage handler noticed strong fumes from

an air vent in the forward cargo hold while unloading the luggage and reported

his observation to one member of the emergency services, the information

however was not immediately relayed to the captain or emergency services

supervisor. Emergency services were sweeping the aircraft from the back

to the front using a gas detector but came up with no findings. By the time

the airport finally realised that the fumes report could also impede the

safety/health of ground staff, the airplane had already been completely

unloaded. The luggage handlers did not detect any smell from passenger luggage.

The airplane had not undergone any recent maintenance activity which could explain the fumes.

The filters of the air conditioning system were removed and analysed with no findings.

http://avherald.com/h?article=41a81ef1/0071

20120705171830:20090601000000

Crash: Air France A332 over Atlantic on Jun 1st 2009, aircraft entered high altitude stall and impacted ocean

The BEA have released their third preliminary report in French, on Aug 4th 2011 the BEA released their English translation.

While it doesn't appear there have been additions to the factual part already

released in report #2, report number #3 contains first analysis of the crash.

In there the BEA reported, that the aircraft departed Rio de Janeiro with

the captain in the left hand seat, the first first officer in the right

hand seat and the second first officer in the observer seat.

At 01:55Z the captain left his seat in order to take his rest, the second

first officer took the captain's seat. The first first officer (in the right

hand seat) became pilot flying (PF), the second first officer pilot monitoring (PNF).

The captain was observing the briefing the two first officers conducted.

The PF pointed out there was a little bit of turbulence ahead according

to weather radar's image but they couldn't climb, pointing out the FMS indication

of maximum possible cruise level of 375. Subsequently the captain left without

leaving any instructions with the first officers, especially not assigning

tasks. This absence of formal framework later led to a breakdown of optimal

crew cooperation between the two first officers.

The turbulence increased, at 02:08Z the PF decided to turn left by 12 degrees

selecting heading mode into the autopilot. The PF remarked he would prefer

to climb to FL360. Intensive weather radar observations followed however

were interrupted by a sensation of quick temperature increase and the appearance

of an odour that distracted the crew for more than a minute. The PNF finally

identified the smell as ozone.

Discussions in the cockpit did not suggest any malfunctions.

At 02:09:46Z the background noise on the cockpit voice recorder significantly

changed, the BEA analysed the sound was consistent with the characteristics

of presence of ice crystals, the change in sounds getting the attention

of the first officers who had not experienced this before. The PNF takes

action and suggests to slow down to Mach 0.8 and engages engine anti-ice on.

At 02:10:05Z a sharp drop of airspeed indications occurred likely due to

obstruction of the pitot probes by ice crystals. The autopilot and autothrust

systems disengaged as result. The presence of turbulence led to the aircraft

rolling right to a bank angle of 8 degrees, the nose pitches up to 11 degrees

nose up within 10 seconds. The PF announces "I have control" and makes a

quick left nose up input almost to the mechanical stops of the side stick.

The nose pitches further up and at 02:10:10Z the stall warning activates.

Between 02:10:18Z and 02:10:25Z the PNF reads various ECAM messages, then

attracts the attention of the PF to the loss of speed. At that time both

left hand and ISIS airspeeds were below 100 knots, the aircraft was

climbing

by 7000 feet/min and the aircraft rolls left and right, with the bank angle

remaining between -10 and +10 degrees of bank, as result of PF inputs. Both

first officer recognized the loss of airspeed indications, however none

called for the unreliable airspeed procedures. Comparing the three airspeed

indications the PNF urges the PF multiple times to lower the nose. The aircraft

was climbing through FL370 and continued to climb.

At 02:10:34Z the left airspeed sharply rose to 215 KIAS and became valid

again, the speed indication of the stand by instrument (ISIS) remained wrong.

The BEA analysed that the loss of speed was 60 knots from the point of autopilot

disengaging until that time, the 60 knots loss of speed being consistent

with the aircraft climbing 2000 feet in that configuration.

At 02:10:47Z the thrust levers were moved to about 2/3 of travel resulting

in 85% N1. The climb rate reduced to 100 feet/min, the angle of attack reduced

to about 3 degrees and the roll is controlled. The first officers now attempt

to call the captain back to the cockpit. The BEA analyses that after a quick

trim and levelling off as result of PF inputs the trajectory of the aircraft

appeared controlled again, however the initial increase in altitude was

excessive and should have been pointed out by the PNF. However, none of

the pilots called out speeds, vertical speeds, pitch angles or altitude.

At 02:10:51Z the stall warning activated again, the pitch angle had increased

to about 6 degrees nose up. As result of PF inputs the pitch angle increased

from 6 to 13 degrees and the angle of attack increased to 10 degrees. Rapid

onset of buffeting occurred. 5 seconds later the thrust levers are placed

into the TOGA detent. The BEA analysed that was about the point where the

aircraft went out of control.

The PF maintains inputs to keep the nose up between 11 and 23 degrees nose

up with the angle of attack being betwen +11 and +18 degrees.

At 02:11:07Z the ISIS airspeed becomes valid at 183 KIAS, and all three

indicated airspeeds agree. The PF selected ADR3 as input for his primary

flight display. The vertical speed drops through 0 and becomes highly negative

(around 4000 feet/minute sink rate), the airspeed reduces further to 160 KIAS.

At 02:11:20Z the PF states twice he has lost control of the aircraft.

At 02:11:37Z the PNF pushes the priority button and provides a large left

input in reaction to a high right bank, calling "controls on the left".

He almost instantly released the priority button and ceased control inputs

again without required calls.

At 02:11:42Z the captain entered the cockpit, just before the stall warning

stops, the airplane was at 35800 feet MSL, 9100 feet/min sink rate, airspeeds

below 100 KIAS, pitch 12 degrees nose up and engines at 102% N1. Neither

first officer provides an account to the captain what is happening. The

BEA analysed that when the stall warning stopped all three AoA computations

had become invalid due to too low an airspeed. Airspeeds are no longer displayed on both PFDs.

At 02:12:04Z the PF remarked he believed they were in overspeed, the BEA

assumes because of the excessive background noise in the cockpit. None of

the two other pilots supported that hypothesis which was in contradiction

to instrument indications, high pitch angle and high rate of descent.

Until impact now the stall warning activates when the nose is lowered and

silences when the pitch angle increases. FDR data suggest that as soon as

the stall warning activates the pilots react with nose up inputs which cause

the stall warning to silence again.

The BEA analysed that none of the three pilots ever worked out which indications to trust and which not.

The BEA analysed that both first officers had been trained unreliable airspeed emergency maneouvers at low altitude which required them to disengage flight directors and autoflight systems, then adopt an attitude between 10 and 15 degrees nose up. At altitude however the stall warning would activate at an angle of attack just above +4 degrees.

The BEA listed following findings:

- The Captainís departure occurred without clear operational instructions
- The crew composition was in accordance with the operatoris procedures
- There was no explicit task-sharing between the two copilots
- The weight and balance of the airplane were within operational limits
- The crew had noticed returns on the weather radar
- The crew made a heading change of 12∞ to the left of its route
- The AP disconnected while the airplane was flying at upper limit of a slightly turbulent cloud layer
- There was an inconsistency between the measured speeds, likely as a result of the obstruction of the Pitot probes in an ice crystal environment
- At the time of the autopilot disconnection, the Captain was resting
- Even though they identified and announced the loss of the speed indications, neither of the two copilots called the procedure "Unreliable IAS"
- The copilots had received no high altitude training for the "Unreliable IAS" procedure and manual aircraft handling
- No standard callouts regarding the differences in pitch attitude and vertical speed were made

- There is no CRM training for a crew made up of two copilots in a situation with a relief Captain
- The speed displayed on the left PFD remained invalid for 29 seconds
- The approach to stall was characterised by the triggering of the warning,
 then the appearance of buffet
- A short time after the triggering of the stall warning, the PF applied
 TO/GA thrust and made a nose-up input
- In less than one minute after the disconnection of the autopilot, the airplane was outside its flight envelope following the manual inputs that were mainly nose-up
- Until the airplane was outside its flight envelope, the airplaneis longitudinal movements were consistent with the position of the flight control surfaces
- Neither of the pilots made any reference to the stall warning
- Neither of the pilots formally identified the stall situation
- The invalidity of the speed displayed on the ISIS lasted 54 seconds
- The Captain came back into the cockpit about 1 min 30 after the autopilot disconnection
- The angle of attack is the parameter that enables the stall warning to be triggered; if the angle of attack values become invalid, the stall warning stops
- By design, when the speed measurements were lower than 60 kts, the 3 angle of attack values became invalid
- Each time the stall warning was triggered, the angle of attack exceeded its theoretical trigger value
- The stall warning was triggered continuously for 54 seconds
- The airplaneis angle of attack was not directly displayed to the

pilots

- Throughout the flight, the movements of the elevator and the THS were consistent with the pilotís inputs
- The engines were working and always responded to the crewis inputs
- No announcement was made to the passengers

Air France commented: "It should be noted that the misleading stopping and

starting of the stall warning alarm, contradicting the actual state of the

aircraft, greatly contributed to the crewis difficulty in analyzing the

situation. During this time, the crew, comprising both First Officers and

the Captain, showed an unfailing professional attitude, remaining committed

to their task to the very end. Air France pays tribute to the courage and

determination they showed in such extreme conditions. At this stage, there

is no reason to question the crewis technical skills."

The French BEA released new safety recommendations mainly recommending to

introduce an AoA indication on the cockpit instruments, introducing additional

training for manual aircraft control at altitude, additional definitions

for the role of a relief captain to ensure proper task sharing in the cockpit

as well as recommendations regarding flight data recorders.

Translated Transcript (PIC: Captain, PF: Pilot Flying, PNF: Pilot monitoring):

TimeSource 02:00:33PF Well a bt of turbulence which you just sawÖ

we will $\ddot{\text{O}}$ we should find it again before, in fact we are in the cloud layer

unfortunately as we can not climb too much for the moment because of the

temperatue which is sinking less than expected. This is reducing the RFC

MAX for us a little lower to go for 37 (FL370)02:06:44PFThe ITC, there it

is between SALPU and TASIL02:06:54PFMinus 42, we are not going to use the

anti ice it is still there02:07PFYou see we are really on the limit of the

cloud layer.02:08:07PNFCan you maybe turn a bit to the left? I agree
that

- we are in manual, right?02:08:19PNFWhat I call manual means we are not in
- managed mode (Nav)02:09:54PNFHere, Iill reduce the speed a bit for you.
- 02:10:03PFDo you want to switch to Ignition Start?02:10:06PFI have control02:10:09PFIgnition
- Start02:10:11PNFWhat is this? 02:10:14PFWe donít have a goodÖ We donít have
- a good indication of $\ddot{\text{O}}$.02:10:17PNFWe have lost the speeds, engine thrust
- A T H R engine lever thrust02:10:18PFÖ speed02:10:22PNFAlternate Law Protections02:10:24PNFWait,
- we are about to loose02:10:25PNFWing Anti-Ice02:10:27PNFWatch your speed,
- Watch your speed PFOk, ok, I will descend back PNFYou are stabilizing PFYeah PNFYou
- are descending back02:10:33PNFAccording to the three you are climbing, now
- you are descending. 02:10:35PFAgreed02:10:36PNFYou are atÖ descend back PFIt
- is going, we are descending back02:10:39PNFIíll put you on A T T (*) (Selecteur
- ATT /HDG is put in position F/O on 3)02:10:42PFWe are, yes we are in climb02:10:49PNFWhere
- is he, eh?02:10:56PFT0GA02:11PNFTry to use the lateral controls as few as
- possible hey!02:11:03PFI am in TOGA02:11:06PNFÖ is he coming or not02:11:21PNFWe
- have certainly the engines, what is happening?02:11:32PFI donít have control
- of the aircraft, I donít have control of the aircraft at all02:11:38PNFCommand
- to the left (taking control)02:11:41PFI have the impression that we have
- speedÖ. (we are in speed)02:11:43PICHey, what are you doing? PNFWhat
- is happening, I donít know, I donít know what is happening02:11:53PICOk,
- take, take this02:11:58PFhave a problem, I have no more vertical speed
- here PICAgreed PFI have no indication at all. 02:12:04PFI have
- the impression that we have a crazy speed, no, what do you think? [Speedbrakes
- are deployed]02:12:07PNFNO, donít extend them! Certainly not. 02:12:13PNFWhat
- do you think, what doyou think, what do we have to do?02:12:15PICI donít
- know, it descends. 02:12:10PFHere, that is good, we have wings level, no
- it doesnít want. PICWings to level, the horizon, the backup horizon.
- PNFThe horizon (secondary)02:12:26PNFThe speed?02:12:27PNFYou are

climbing, VSStall Stall PNFYou are descending, descending
descending02:12:30PFI

am descending? PNFDescend!02:12:32PICNo, you are

climbing02:12:33PFHere,

I am climbing, okay, right so lets descend (or okay we are descending) (unclear)02:12:42PFOK,

we are in TOGA02:12:42PFOn the altitude where are we?

02:12:44PICthis is

not possible02:12:45PFOn alti(tude) we are where?02:12:45PNFWhat do vou

mean on altitude? PFYes, yes, yes, I am descending there, no? PNFYes,

you are descending. PICHey, you are inÖ. put the wings level, PNFPut

the wings level! PFThat is what I am trying to do PICPut the wings

level02:12:59PFI am at the limit of, with the warping PICThe rudder02:13:25PFWhat,

how is it that we are continuing to descend at the limit there? 02:13:28PNFTry

to find what you can do with the controls up there, The primaries e.t.c.02:13:32PFAt

level 10002:13:36PF9000 ft02:13:38PICCarefull with the rudder! 02:13:39PNFClimb.

climb. Climb, climb02:13:40PFBut I am at the limit of the nose since a while PICNo,

no, no, donít climb PNFSo descend02:13:45PNFSo, give me the controls,

to me the controls. PFGo ahead, you have the controls, we are still

on TOGA 02:14:05PICCareful, you are nose high (cabres?) PNFI am nose

high? PFWell, we need to, we are at 4000 ft02:14:18PICGo, Pull PFGo,

Pull pullpull02:14:26PICTen degrees pitch

Editorial note: at 02:12:04Z the transcript mentions the speedbrakes have

been deployed, the FDR graphics as well as the remainder of the report do

not mention at all whether the speedbrakes have been extended or not.

http://avherald.com/h?article=416108fb

20090306173117:20090306000000

Incident: Emirates A345 near Perth on Mar 6th 2009, false report of smoke in cabin

According to Australian media and French aviation sources an Emirates Airbus

A340-500, registration A6-ERH performing flight EK-425 from Perth,WA (Australia)

to Dubai (United Arab Emirates) with 120 passengers, returned to Perth because

of supposed smoke in the cabin. The media say, that witnesses on the ground

saw smoke escape the cabin when the doors opened around 8:45 local (Mar

5th 23:45Z), a radio station however reports, that passengers calling in

said no smoke was observed on board. A leading Australian newspaper reports

a massive deployment of emergency services. According to the reports the

airplane had taken off on schedule around 7:00 local (Mar 5th 22:00Z), the

crew declared emergency at 07:50 local and landed safely back to Perth at

08:45 local.

However, radar track, Emirates' flight status, both airports' live flight

information as well as independent sources show the airplane arrived in

Dubai on time. Actually, all flights of Emirates from Perth to Dubai during

the last 7 days reached their destination on time. Aviation sources in Perth

are entirely silent on any such incident at Perth Airport as well.

The source of this seems to be an article published by the Sydney Morning

Herald (or of its sources), which was published on October 16h 2008, see

This report reappeared today with exactly the same wording all around the

Australian Media and French Aviation Sources. The Aviation Herald had reported

the real incident at Incident: Emirates A345 near Learmonth on Oct 16th

2008, chemical odour in cabin.

http://avherald.com/h?article=4148321e

20090204215703:20090131000000

Incident: Jazz CRJ9 near Vancouver on Jan 31st 2009, smoke in lavatory

An Air Canada Jazz Canadair CRJ-705, registration C-GJAZ performing flight

QK-8320 from Vancouver, BC to Calgary, AB (Canada) with 45 people on board,

had just taken off Vancouver, when the crew smelled an odour and received

a smoke indication for the aft lavatory. Flight attendants told the flight

crew, that the smoke detector in the aft lavatory had activated, they could

smell smoke and could see smoke. The pilots decided to return to Vancouver,

where the airplane landed safely about 10 minutes after departure. The crew

did not declare emergency, however emergency services met the aircraft

after landing.

http://avherald.com/h?article=4373dc36

20110203162949:20090127000000

Report: HiFly A333 near Darwin on Jan 27th 2009, smoke alert on board

A HiFly Airbus A330-300 on behalf of the Australian Defense Force, registration

CS-TMT performing a flight from Darwin,NT (Australia) to Male (Maldives)

with 64 passengers and 11 crew, had just reached FL370 when the crew received

a smoke alert for a lavatory, then a failure message for the right air conditioning

system (PACK #2) and a fault message for the cabin pressure controller #1

(CPC, left hand air conditioning system). The crew was able to reset the

CPC, but needed to turn PACK #2 off. The smell became stronger nonetheless

prompting the crew to return to Darwin for a safe landing about 2 hours

later. After landing 3 cabin crew and a number of passengers reported feeling

unwell and were administered oxygen, medical staff considering the symptoms

common and non-serious. The three crew members were taken to a hospital

for further checks and quickly released.

Portugal's Gabinete de Prevencao e Investigacao de Acidentes com Aeronaves

(GPIAA) released their final report concluding:

 Lavatory Smoke Detection Warning, as well the strong odor felt by crew and pax, was caused by oil particles vaporization vented through the Bleed

ducts from the APU to the Packs and, thus, to the passenger cabin.

 "PACK #2 OVERHEAT" was caused by defective two duct sections sealing downstream

Pack #2), which allowed inducing air leak;

- "CPC1 FAULT" warning was triggered by pack #1 instability originated by

the absence of the related plenum.

The GPIAA reported that prior to departure the occupants already noticed

a foul odour on board similiar to a dead animal rotting. An examination

of the airframe concluded the smell was caused by external atmosphere pollution.

When the aircraft had just reached FL370 the crew received a "SMOKE LAV"

indication with a visual inspection of the lavatory finding everything normal.

The smell on board however became stronger, 10 minutes after the "SMOKE

LAV" the crew received a "PACK #2 OVERHEAT" message prompting the crew to

shut the right hand air conditioning system down for the remainder of the

flight shortly followed by a "CPC #1 FAULT" indication. The CPC was successfully

reset. The smell still became stronger although no cause, no smoke and no

burning or toxic fumes were discovered by an extensive search of cabin crew.

An engineer on board inspected the cargo holds finding nothing unusual.

The flight crew decided to return to Darwin where the aircraft burned off

fuel in the vicinity of the airport before landing safely.

The aircraft had just undergone maintenance in Jordan and was performing

its first revenue flight following that C-check and positioning flight to

Darwin. Following the incident flight HiFly engineers discovered oil at

the APU intake and inside the pneumatic ducts to both packs. An APU oil

leak was discovered above the bleed duct and APU air intake leading the

maintenance personnel to suspect an APU oil overfill.

Maintenance further discovered an incorrectly placed seal connecting two

duct sections of pack #2. A partially broken plenum was found on

pack #1, the missing part was not found.

Following repairs of these issues normal system performance was found, and the smell disappeared.

The GPIAA analysed that the oil at the APU intake travelled to the packs

and thus caused the lavatory smoke indication, the smell and the dizziness

of a number of occupants. The deficient seal between the two ducts of pack

#2 permitted hot air to escape and caused the duct overheat indication.

The missing part of the plenum of pack #1 caused instability of the

and resulted in the CPC #1 fault.

The broken plenum (Photo: GPIAA):

The deficient seal (Photo: GPIAA):

http://avherald.com/h?article=413ed69f

20090124214135:20090124000000

Incident: Air Malta A319 on Jan 24th 2009, unusual odour

The crew of an Air Malta Airbus A319-100, registration 9H-AEG performing flight KM-398 from Luga (Malta) to Amsterdam (Netherlands), requested priority due to an unusual odour while on approach to Amsterdam. The subsequent landing was safe.

The aircraft was examined by engineers and signed off for the return KM-399, which could depart with just 30 minutes delay and reached

Malta on time.

http://avherald.com/h?article=413b63af

20090120203050:20090114000000

Incident: Air Canada A321 near Calgary on Jan 14th 2009, smell of

smoke in cockpit

An Air Canada Airbus A321-200, registration C-GITY performing flight AC-133

from Toronto Pearson, ON to Calgary, AB (Canada) with 179 people on board,

was about 30 minutes before Calgary, when the crew noticed an avionics smoke

odour in the cockpit. No emergency was declared and no priority requested.

The airplane landed safely.

Maintenance replaced the audio management unit and returned the aircraft to service.

http://avherald.com/h?article=4120fdbd

20081221075634:20081219000000

Incident: Westjet B736 near Vancouver on Dec 19th 2008, electrical

fire odour in cabin

A Westjet Airlines Boeing 737-600, registration C-GPWS performing flight

WS-432 from Vancouver, BC to Edmonton, AB (Canada), returned to Vancouver

after an electrical fire odour developed in the passenger cabin. The overweight

landing was safe.

After technical examinations the airplane could resume the flight and reached

Edmonton with a delay of 5 hours.

http://avherald.com/h?article=41192c2c

20081220205239:20081211000000

Incident: Delta Airlines MD88 near Greenville on Dec 11th 2008,

smoke in cockpit

The crew of a Delta Airlines McDonnell Douglas MD-88, registration N924DL

flight performing DL1102 from Washington Dulles, DC to Atlanta, GA (USA) with

140 passengers and 5 crew, declared emergency reporting smoke in the cockpit

while enroute close to Greenville/Spartanburg. The airplane diverted

Greenville Aiport for an emergency landing on runway 22. The two right main

gear tyres blew on landing. The airplane exited the runway near the threshold

of runway 04 onto the taxiway, where the airplane was evacuated using slides.

Fire services started to foam the right hand main gear while the evacuation

was in progress.

A replacement MD-88 resumed the flight and reached Atlanta with a delay of 4 hours.

The FAA reported, that two tyres had blown on landing.

Passengers reported they were alerted by a smell of smoke about 10 minutes prior to landing.

Maintenance found an electrical component (a relais underneath the cockpit

floor) had overheated and gone up in smoke. Earlier the day tyre spacer

work had been done on the aircraft.

The NTSB reported in their preliminary statement (Dec 20th), that the crew

noticed smoke apparently coming from the first officer's glareshield and

noticed an electrical odour while about 150-170nm north of Atlanta.

flight crew donned oxygen masks and goggles, executed the smoke/ fumes checklist,

declared emergency and diverted to Greenville/Spartanburg, where an emergency

evacuation was performed.

http://avherald.com/h?article=40ec6f5f

20081023155320:20081023000000

Incident: Meridiana MD83 at Olbia on Oct 23rd 2008, odour in cabin

The crew of a Meridiana McDonnell Douglas MD-83, registration EI-CRH

performing

flight IG1112 from Rome Fuimicino to Olbia (Italy) with 65 passengers and

6 crew, reported a pungent odour in the cabin while on approach to Olbia

and requested priority. The airplane landed safely, no injuries have been

reported.

Local sources reported, that the airport was closed for 30 minutes to handle

the emergency and that 118 emergency staff were dispatched at and to the airport.

Meridiana confirmed, that the crew requested priority because of a sharp

odour in the cabin, also stating, that the airport was not closed due to

the incident. Maintenance engineers were looking into venting ducts as source

of the odour, but later reported, that no technical fault has been found

with the airplane.

http://avherald.com/h?article=40e636dc

20081016145057:20081016000000

Incident: Emirates A345 near Learmonth on Oct 16th 2008, chemical odour in cabin

An Emirates Airbus A340-500, registration A6-ERB performing flight EK425

from Perth, WA (Australia) to Dubai (United Arab Emirates) with 122 passengers,

returned to Perth after a chemical odour, also described as burning smell.

was detected in the cabin about 90 minutes into the flight. The crew declared

emergency and returned to Perth, where the airplane landed safely 2 hours

45 minutes after takeoff.

Passengers reported, that no smoke or haze was visible inside the cabin.

A flight attendant had smelled the odour in the back of the cabin.

The Civil Aviation Safety Authority (CASA) have indicated to open an investigation into the incident.

The passengers were rebooked onto the later Emirates flight today.

http://avherald.com/h?article=43054420

20100831143248:20080914000000

Report: Cathay A333 near Taipei on Sep 14th 2008, loss of cabin pressure

A Cathay Pacific Airbus A330-300, registration B-HLH performing flight CX-251

from Tokyo Narita (Japan) to Hong Kong (China) with 59 (fifty nine) passengers

and 13 crew, diverted to Taipei (Taiwan) due to a typhoon. The airplane

left FL400 to descend towards Taipei, when the bleed air system became intermittent

and the cabin began to climb until the master caution activated. The crew

donned their oxygen masks and initiated an emergency descent, the passenger

oxygen masks deployed. Cabin crew subsequently reported a strong burning

smell in the cabin. The airplane landed safely on Taipei's runway 24 about

30 minutes later and stopped on the adjacent taxiway, where the first officer

checked the cabin and confirmed the burning smell was produced by the chemical

oxygen generators supplying the passenger oxygen masks. Attending emergency

services did not find any trace of smoke, heat or fire.

Taiwan's Aviation Safety Council (ASC) released their final report concluding:

- 3.1 Findings related to probable causes
- 1. Giving the de-activated of the No.1 engine bleed air valve per MEL 36-11-02,

the no.2 engine bleed air was the only one compressed air source for the

two air conditioning systems. The no.2 engine bleed air valve operated in

a high demand status. During aircraft descent, the compressed air automatically

bled from high pressure stage which provided the compressed air with higher

pressure and higher temperature. This led the pre-cooler downstream temperature

air getting higher. Due to the THCís grid filter contaminated from which

to reduce the muscle air pressure to control fan air valve that resulted

in the fan air valve could not open properly to provide sufficient cooling

air to pre-cooler. The no.2 engine bleed air valve was shut down automatically

due to bleed air overheat. Both air conditioning systems lost the compressed

air source and thereby aircraft lost its pressurization capability. (2.5)

3.2 Findings related to risk

1. The repeated defects of the numerous dual bleed air system and number

one engine bleed air defects prior to the occurrence revealed the deficiency

of the bleed air systemí reliability and potential operation risk. (2.6)

2. The flight crew might have confused the similar call signs on the same

control frequency. The crew were distracted by the system failure when they

did not adhere to company communication procedures by inadvertently omitting

the CX521 flight number at the end of one of the transmissions, which contributed

to the premature change of frequency. (2.1.1)

3. The flight crew omission of the CX521 flight number the fact that the

transmission was stepped on resulted in a lost opportunity for the pilot

and the controller to correct the mistake and prevent the premature change

of frequency. (2.1.1)

4. Approach controller should be aware the existing similar call sign situation

and follow the ATMP regulation for pilotí distinguishing when the CX521

acknowledged instruction and read back frequency change incorrectly for

other aircraft. (2.1.1, 2.8.2)

5. The ATMP English version and Chinese version 2-4-15 regarding emphasizing

to aid in distinguishing between similar sounding aircraft are inconsistent:

English version is mandatory while the Chinese version is not. (2.782)

6. Approach controller did not acknowledge the CX521 distress message immediately

on Guard frequency until the second one one minute latter. (2.8.3.1)

7. The ATMP request controllers to provide maximum assistance and

first

priority to distress aircraft; consider pilot workload and human factor

of radio communication. The late information handling, frequent frequency

change instructions and instructed distress aircraft to follow speed restriction

were not in accordance with ATMP. (2.8.3.2)

8. Duplicated questions asking regarding ground assistance showed lack of

coordination and information exchange internally from both the TPE Tower

and the Approach controllers. (2.8.3.2)

9. All TACC controllers selected Mekong radio station which resulted in

TACC controllers failed to receive the CX521 ?Mayday? call at 1859:56 on

121.5 Frequency until 1900:52. (2.8.3.3)

10. Guard frequency 121.5 stations situated at Datum Mt and Mekong. The

two frequencies unable to cover each other due to the 140NM distance and

geographic influence. (2.8.3.3)

11. TACC North Sector guard frequency test omitted the occurrence neighbor

area waypoint SALMI. The omitted way point test may have resulted in TACC

controllers missing Mayday call from CX521. (2.8.4)

12. Some cabin crew members whose oxygen mask did not drop down, did

try to open their access panels or using portable oxygen bottle around their

seats. (2.9)

13. Some cabin crew members may not be familiar with the cabin masks design

features and operation with regard to pulling down on the cord to activate

oxygen flow and not be fully aware of the normal operation of the cabin

masks. (2.9)

14. Some cabin crew members who were not to or not able to use their oxygen

masks may have misled passengers into thinking that wearing the mask was

not required. (2.9)

15. These side effects of the chemical oxygen generators did not list in

any cabin related manual and training course. This may have increased the

injury risk if cabin crews unfastened their seat belt and tried to find

out the suspected fire source. (2.9)

3.3 Other findings

1. Both flight crew members were certified and qualified in accordance with

Hong Kong Civil Aviation Regulations. (2.1)

2. There was neither evidence indicate the crew have any physical or psychological

problems, nor usage of alcohol or drugs. (2.1)

3. The crew did not select the APU after interrupting the AIR DUAL BLEED

FAULT checklist to initiate the EMERG DESCENT checklist in response to the

CAB PR EXCESS CAB ALT message. (2.1.2.1)

4. The FDR data indicated that the cabin altitude never exceeded 14,000ft

during the occurrence, there was no requirement for the crew to manually

deploy the cabin masks. (2.1.2.2)

5. The ?CAB PR EXCESS CAB ALT? and ?EMER DESCENT? procedures were inconsistent

regarding the selection of 7700. (2.1.2.2)

6. According to ATC radar control video play back, there was no evidence

indicating that the flight crew had selected 7700 SSR on the transponder.

(2.1.2, 2.7)

7. It was deem necessary that the flight crew took the immediate action

and performed the emergency descent to a safer altitude when dual bleed

system fail. (2.2)

8. The highest cabin altitude aircraft experienced was within the airworthiness

standard during the emergency descent operation. (2.3)

9. The leakage rate of B-HLH was within the Aircraft Maintenance Manual

specification. (2.3)

10. The Operator complied with the MEL 36-11-02 prescriptions. (2.4)

11. Refer to the tear down inspection result of the no.1 PRV; the shop findings

also could not confirm the indication problem. (2.6)

12. The CVR revealed there were temporary communication, poor radio signal

quality, poor readability and difficulties during the 1903 to 1907 period.

No evidence showed the TACC VHF system had anomaly at the time of occurrence.

(2.7)

13. Some passengers were not wearing their oxygen masks revealed that some

passengers either not fully understand the instructions from the automatic

announcement or they did not follow the instructions. (2.9)

The airplane had been dispatched with the #1 (left hand) engine

bleed air

system inoperative in accordance with Minimum Equipment List (MEL) requirements.

The #1 bleed air valve was secured closed.

The airplane climbed to FL400 enroute. Due to a typhoon affecting Hong Kong

the aircraft headed to Taipei and had received descent clearance to FL140.

While descending through FL380 the crew received a "AIR ENG 2 BLEED FAULT".

The crew attempted to reset the #2 bleed switch without success, the cabin

began to climb (lose pressure). The pilot flying (first officer) selected

open descent into the flight management and guidance system and deployed

spoilers to increase descent. At that time Air Traffic Control handed another

flight CI5321 ("Dynasty five three two one") off to Taipei approach, the

captain of CX521 however acknowledged the call and selected the frequency.

A minute later the master caution activated with the ECAM message "EXCESS

CAB ALT", the cabin climbed through 9700 feet at that point, the aircraft

was descending through FL300. The crew donned their oxygen masks and initiated

an emergency descent. The passenger oxygen masks were deployed automatically,

the cabin reached a maximum altitude of 13400 feet. The captain, pilot monitoring,

transmitted three Mayday Calls on the Taipei Approach Frequency and one

on the guard frequency, then Taipei confirmed received the emergency call

and cleared CX-521 down to FL100.

5 minutes later cabin crew reported a strong burning smell in the cabin

prompting the airport to deploy all available emergency services. Following

the landing on runway 24 the airplane turned off the runway and stopped

on adjacent taxiway SP, where emergency services attended the aircraft without

finding any smoke. The first officer went to the cabin and checked the odour

near door #4 finding that the smell was produced by the passenger oxygen generators.

The ASC found repeated entries regarding "ENG 1 BLEED PRESSURE LOW"

in the

maintenance logs since Jul 29th 2008 as well as repeated entries of "ENG

1 BLEED NOT CLOSED" since Aug 19th 2008. on Sep 13th 2008 another maintenance

entry said, that engine #1 bleed air valve had not closed during engine

run down after the engine had been shut down. Following this entry maintenance

recorded, that the engine #1 bleed air valve was secured shut according

to MEL. Following this entry the airplane was dispatched for 6 more sectors

including the occurrence flight. None of these 6 sectors were ETOPS sectors.

Maintenance reported following the occurrence flight, that the engine #2

bleed air system had suffered a fault related to "THRM (5HA2)/FAN AIR-V"

(thermostat filter in the fan air valve control).

The ASC found that 56 of the 59 passenger oxygen masks had been activated,

several passengers however did not don their oxygen masks according to cabin

reports. Three oxygen masks for cabin crew did not deploy due to stuck panels,

and out of the remaining 8 cabin crew 3 thought their oxygen masks were

not working.

Examination of the #2 engine bleed air system showed the grid filter had

collected significant contamination causing a pressure reduction, that prevented

the valve to completely open and thus caused an overtemperature condition

of the #2 engine bleed air. The source of contamination was expected atmosperic

pollution going past the primary filter.

Tests of the #1 engine bleed air valve releaved some leakage and corrosion

degrading the actuator piston seal. The corrosion could be explained by

the humidity environment on the airline's Asian routes.

Air Traffic Control was struggeling with radar transmissions from CX-521

after the crew had switched to Taipei Approach prematurely due to mistaking

the call sign, the captain had read back the frequency but omitted the call

sign in the read back. The aircraft was more than 100nm outside the area

of responsibility of Taipei Approach, the aircraft was not visible on the

radar screen, and another Cathay CX-531 was on approach to Taipai in their

area of responsibility, controllers did not understand however why that

airplane at 5000 feet should call Mayday due to an emergency descent. Once

Taipei Approach identified the aircraft and its position, attempts to return

them to the correct frequency proved unsuccessful, Area Control completed

the hand off to Approach with Approach coordinating the clearance with Area

Control. 15 minutes after the crew had switched to the wrong frequency,

ATC was able complete the hand off to a discrete frequency dedicated to

flight CX-521. 18 minutes later the airplane touched down on runway 24.

The ASC identified three occasions during which call signs CI-5321, CX-521

and CX-531 were mixed up by either crew or air traffic controllers. CX-521

mistook instructions for CI-5321 twice, the first mistake was caught by

the air traffic controller who corrected the wrong readback. The second,

the frequency change, was not caught by air traffic control due to the missing

call sign in the read back. Later the controller mistook the emergency call

of CX-521 as coming from CX-531.

The occurrence crew, the ASC analysed, was distracted with the anomalies

on hand and did not pick up the wrong call sign as well as the premature hand off.

The ASC analysed, that the operator should dispatch the aircraft with care

if one bleed air system is inoperative.

The ASC released a number of safety recommendations regarding the Minimum

Equipment List with one bleed air system inoperative and also recommended

to rework the depressurization checklist in case of dual bleed air failure

to activate the APU which could have prevented the cabin pressure to

drop

to an altitude of 13400 feet. The ASC also issued a number of safety recommendations

to Taiwan's Civil Aviation Authority regarding response of Air Traffic Control

to emergency calls, especially also to prevent frequency changes for distress aircraft.

http://avherald.com/h?article=40c6c93b

20080908102949:20080907000000

Incident: China Southern A320 at Shenzhen on Sep 7th 2008,

hydraulics leak, odour

The crew of a China Southern Airlines Airbus A320-200, flight CZ3953 from

Shenzhen to Wuhan (China) with 114 passengers, noticed an hydraulics leak

shortly after takeoff from Shenzhen and decided to return to Shenzhen. While

the airplane burned off fuel, an oily smell developed in the cabin. The

airplane landed safely about 50 minutes after takeoff and had to be towed off the runway.

Passengers reported, that fluid ("like a child urinating") was dripping down from the wings and engines.

The airline confirmed a hydraulics leak, the fluid of which entered engines and air conditioning systems causing the smell on board.

A replacement aircraft resumed the flight and reached Wuhan with a delay of 2 hours.

http://avherald.com/h?article=40c1cb38

20080902175814:20080902000000

Incident: Jetblue Airways E190 at New York on Sep 2nd 2008, strange odour prompts return

A Jetblue Airways Embraer ERJ-190, flight B6-68 from New York JFK,NY to Syracuse,NY (USA) with 59 passengers, returned to New York JFK due

to a strange odour in the cabin. The airplane landed safely 20 minutes after takeoff.

http://avherald.com/h?article=40c1d826

20080902190634:20080831000000

Incident: Westjet B73G at Toronto on Aug 31st 2008, bird strike in both engines on landing

The crew of a Westjet Boeing 737-700, registration C-GWCN performing flight

WS1115 from Nassau (Bahamas) to Toronto, ON (Canada), was approaching runway

24R at Toronto, when the crew reported a bird strike at 200 feet AGL. The

landing was safe. A runway inspection was performed, which found 15 or more

starlings on the runway. Arriving aircraft sidestepped to 24L until 24R

was cleaned up.

Patrick Greenslade was passenger on the aircraft. He told The Aviation Herald,

that the aircraft was on final approach when it suffered bird strikes in

both engines. "There was a 'whump' sound, followed by a foul odour in the

cabin." The landing was normal and the airplane taxied to the gate under

its own power. "There were clearly visible blood stains on the left wing

and engine nacelle, and on the right nacelle."

http://avherald.com/h?article=40ac2c53

20080806132421:20080805000000

Incident: United Airlines B752 near Detroit on Aug 5th 2008, strong electrical odour

An United Airlines Boeing 757-200, registration N501UA performing flight UA824 from San Francisco, CA to Boston, MA (USA), diverted to

Detroit,MI due

to a strong electrical odour on board. The airplane landed safely.

A replacement aircraft resumed the flight and reached Boston with a delay

of 4 hours.

http://avherald.com/h?article=40a840b3/0002

20100610125023:20080801000000

Accident: Flybe E195 near Isle of Man on Aug 1st 2008, smell of

smoke in cockpit, evacuation

The British Air Accident Investigation Board (AAIB) released their bulletin

stating, that the airplane had been dispatched with the #2 (right hand)

air conditioning system inoperative according to Minimum Equipment List

requirements.

When the airplane climbed through FL240 both pilots smelled a sulphurous

burning odour similiar to a match being lit leading the flight crew to believe

a passenger might be smoking in the forward lavatory. Cabin crew was contacted

however found noone in the lavatory. Cabin crew reported haze was visible

at the rear of the cabin and some smell was noticeable in the cabin.

The intensity of the odour increased on the flight deck prompting the crew

to don their oxygen masks at about mid way between Manchester and Isle of

Man, winds made Isle of Man favourable. Communication with oxygen masks

proved so difficult, that the flight crew had to resort to shouting amongst

them while radio transmissions had to be repeated several times until air

traffic control was able to understand the messages.

Cabin crew tried to contact the flight crew through intercom. While the

flight crew heard the cabin crew, the flight attendants could not hear the

pilots. The purser therefore used the emergency procedure to enter

the flight

deck, where the captain indicated the intention to evacuate the aircraft

after landing, but did not indicate they were diverting to Isle of Man.

Due to the communication trouble the crew did not tell their intention to

evacuate the aircraft to air traffic control.

The crew performed a Surveillance Radar Approach (SRA) to Ronaldsway Airport

on the Isle of Man and established visual contact with the runway at

700 feet. The crew completed a visual approach and landing on runway 26

and stopped on the runway. The captain ordered an evacuation.

Passengers found the evacuation slides very steep and lacking a round out

delivering the passengers onto the runway at a high speed. This and the

attempts by passengers to slow their slide were the prime reason for the

injuries in the evacuation. The right hand overwing exit could not be opened.

Inspection of the aircraft revealed, that the #1 (left hand) air cycle machine's

rotor had seized, a further detailed analysis confirmed a turbine stage

2 blade failure similiar to the failure of the #2 air conditioning system

that had failed 4 days earlier. The imbalance of the rotor led to contact

between the blade tips and the housing producing hot fine metallic particles

that were released into the cabin air. Metallurgic examination of the failed

blades confirmed the blades suffered a fatigue crack close to the blade

root in an area known for high stress in turbine blade resonance.

The captain's microphone in the oxygen mask was found inoperative. Inspection

of other aircraft in the fleet found another captain's microphone inoperative,

that microphone however could be woken up by tapping it.

A consistent pattern was found with all oxygen mask's microphones, which

feature a cut out during breath inhalation. The microphone would correctly

mask out during inhalation, however remained in the cut out. Tapping the

microphone would then bring the microphone live again until the next inhalation.

With oxygen supply mode switch to purge, the microphone tended to hunt between

cut-out and live during speech producing a pattern similiar to that recorded and heard by ATC.

Product acceptance testers accustomed with the mask and speaking with the

mask on produced clear speech. Any user with less experience however produced

garbled sound as heard during the occurrence. Using the microphones required

training. The operator was advised, the manufacturer of the masks reviewed

and modified the design.

http://avherald.com/h?article=40a0edd2

20080723063835:20080722000000

Incident: Westjet B736 at Calgary on Jul 22nd 2008, strange odour on board

A Westjet Airlines Boeing 737-600, flight WS208 from Calgary, AB to Winnipeg, MB

(Canada), declared emergency and returned to Calgary shortly after takeoff,

when the crew reported smelling smoke in the cockpit. The airplane landed

safely, passengers disembarked normally.

The passengers were rebooked onto other flights.

Westjet said, the problem was a strange odour, not smoke. The airplane is

now being thoroughly checked to identify the source of the smell.

http://avherald.com/h?article=402d4d58

20080229132906:20080227000000

Incident: Jazz DH8A near Ottawa on Feb 27th 2008, strange odour

An Air Canada Jazz Dash8-100, flight JZA8048 from Ottawa to Boston with

30 people on board, returned to Ottawa about 20 minutes into the

flight

after a strange smell developed in the airplane.

http://avherald.com/h?article=41a59ae7

20090529094932:20080225000000

Report: Qantas B743 near Sydney on Feb 25th 2008, electrical smell in cockpit

A Qantas Boeing 747-300, registration VH-EBY performing flight OF-566 from

Perth,WA to Sydney,NS (Australia) with 374 passengers, was enroute at FL370

about 150nm westsouthwest of Sydney, when the flight crew detected a smell

that slowly increased in intensity. The crew donned their oxygen masks as

they could not identify the nature of the smell. The crew executed the flight

deck smoke/fumes evacuation and landing preparation checklists and confirmed,

that all aircraft systems were working correctly. Cabin crew reported no

smoke or smell in the cabin. The copilot declared PAN indicating, that the

crew expected a normal approach and landing, Sydney Airport invoked their

emergency plans. About 5 minutes later the crew initiated the descent to

Sydney, the captain announced the possibility of an emergency evacuation

to the passengers. The aircraft touched down safely about 30 minutes after

the onset of the smell, the flight crew requested an external inspection

of the airplane immediately after vacating the runway and requested the

fire trucks to follow the airplane to the gate, where the passengers disembarked normally.

The Australian Transportation Safety Board (ATSB) released their final report

stating, that maintenance could not find anything and could not reproduce

the odour, so that the operator decided to carry out an assessment flight.

While the aircraft taxied out for that flight, a faint smell became noticeable

on the flight deck. With the help of a particle counter it was established,

that the fume came from the lower left corner of the captain's windshield.

Subsequent examination revealed loose windshield heat element terminal

connections causing electrical arcing resulting in fumes.

The left windshield and the heat element were replaced and a second assessment

flight carried out without incident. The airplane was returned to service.

Due to previous similiar incidents Qantas as well as Boeing had developed

engineering instructions in 2006 calling for recurring inspection of the

connectors of the heat elements. The airframe had 751 hours to fly until

the next recurring inspection was required by the Boeing engineering instruction.

Boeing had also released a redesign of the windshield with a different electrical

connection, that removed the requirement for the recurring inspection.

About 17 flight hours prior to the incident the airplane underwent maintenance

at a contracted licensed facility during which the crash pad at the left

hand windshield had been removed and refitted.

The ATSB concluded, that the loose terminal connections to the left windshield

heat element increased the electrical resistance and resulted in electrical

arcing and fumes on the flight deck. Another safety factor was the inadvertent

disconnection of the captain's intercommunication system when the crew donned

their oxygen masks. The potential of the recent maintenance work in the

vicinity of the left windshield/crash pad/to have contributed to the insecurity

of the left windshield terminal connections could not be determined. The

redesign of the windshield by the manufacturer to improve the security of

the windshield heater wiring connection should address the risk of electrical

arcing in that component.

Windshield heat terminal block (Photo: ATSB):

http://avherald.com/h?article=402a7ba8/0000

20080226091311:20080225000000

Incident: Qantas B744 at Sydney on Feb 25th 2008, cockpit odour

speeds landing

ATSB report:

http://avherald.com/h?article=402a7ba8

20080225230750:20080225000000

Incident: Qantas B744 at Sydney on Feb 25th 2008, cockpit odour

speeds landing

A Qantas B747-400, registration VH-EBY performing flight QF566 from Perth

to Sydney with 374 passengers, was given priority on landing after the crew

reported an unknown odour in the cockpit. ATSB is investigating.

http://avherald.com/h?article=40253501

20080219141743:20080218000000

Incident: Qantas B763 at Perth on Feb 18th 2008, bad odour cancels flight

A Qantas B767-300, flight QF566 from Perth to Sydney, could not depart from

Perth after a strong foul smell was noticed on board, the source of which

could not be determined. The smell could also not be stopped with all variations of ventilation.

http://avherald.com/h?article=40d59a54

20080926135035:20071123000000

Report: Qantas B763 near Sydney on Nov 23rd 2007, fumes in cabin, passenger unconscious

A passengers on board of a Qantas Boeing 767-300, registration VH-0GG performing

flight QF439 from Sydney,NS to Melbourne,VI (Australia) with 255 passengers

and 9 crew, reported about 30 minutes into the flight, that he smelled fumes,

presumably from jet fuel, coming out of the air conditioning vent above

his seat 55E. The passenger fell unconscious and was administered oxygen.

He regained consciousness within seconds after receiving oxygen. A second

passenger seated in the area also reported nauseous.

The crew declared urgency and performed the "smoke or fumes air conditioning"

checklist. The aircraft continued to Melbourne, where the airplane landed

35 minutes later.

The final report by the Australian Transportation Safety Board into the

"serious incident" reveals, that the passenger reported the fumes to a flight

attendant and noted, that the smell made him "feel sick". The flight attendant

could not smell any odour despite putting her nose directly to the vent.

She turned the vent off and notified the customer service manager (CSM),

who in turn notified the flight crew.

About 5 minutes later the flight attendant checked the passenger again,

who reported that he felt much worse, sick and fuzzy headed, but no problems

with the stomach. The CSM perceived the passenger as "ashen", but could

again not perceive any odour while sticking the nose to the vent. The CSM

suggested the use of oxygen, to which the passenger agreed. While the CSM

went to the rear of the airplane to fetch the portable oxygen kit, the passenger

became unconscious, but recovered within second after oxygen was supplied.

Passengers in 55 D,E and F were moved to other seats. The passenger in 55F,

the sick passenger's wife, reported to feel nauseous as well, but did not

improve after supply of oxygen.

The airplane began descend towards Melbourne about 12 minutes after

the

onset, at which point the flight attendant originally attending the sick

passenger noticed a burning oil smell in the overwing area and notified

the flight crew. The crew declared PAN PAN and performed the "smoke or fumes

air conditioning" checklist.

The investigation could not determine, whether the impact on the two passengers

was caused by fumes from the aircraft or whether other unknown medical conditions

existed, that may have contributed to the symptoms exhibited by the two

passengers.

The full report by the ATSB is available at:

http://avherald.com/h?article=40d32216

20080923110317:20070805000000

Report: Rex SF34 at Sydney on Aug 5th 2007, curry fumes in cabin and cockpit

The Australian Transportation Safety Board (ATSB) considered the following incident to be serious.

The crew of a REX Regional Express Saab 340B, registration VH-RXX performing

flight ZL777 from Sydney,NS to Albury,NS (Australia) with 20 passengers

and 3 crew, noticed a light smell of curry on board, when they entered the

aircraft, started the engines and during taxi for takeoff. It was the first

flight of the aircraft that day and the first after a compressor wash. The

flight crew assumed, that the smell came from residual compressor wash fluid.

The subsequent takeoff was normal, however the odour became stronger and

pungent just before rotation until about 2 minutes after takeoff.
The flight

crew reported, that all engine and propeller indications were normal. The

crew activated the autopilot as soon as possible and donned their oxygen masks.

The flight attendant reported, that the fumes appeared in the cabin about

30-45 seconds after liftoff.

Approximately 60km from Sydney the fumes had diminished considerably but

was still present, the flight attendant confirming the smell had reduced

in the cabin as well, so that the flight crew decided to continue the flight.

The crew remained on oxygen as a precaution.

At about overhead Canberra the flight crew decided to divert to Wagga Wagga,NS,

as the airline had engineering facilities there and the oxygen system could

be replenished. The aircraft landed without incident at Wagga Wagga.

On the next sector from Wagga Wagga to Albury the airplane experienced icing

conditions while descending towards Albury, prompting the crew to

the high pressure engine bleed valves as part of the standard operating

procedure. The odour intensified again, although it did not become as strong

as after departure from Sydney.

The airplane was examined again after its return to Sydney, where engineers

reported a strong odour of compressor wash fluid in the right engine air

inlet.

Compressor wash, scheduled to occur every 200 hours of engine operation,

would normally be executed by introducing a cleaning solution into the engine,

left to soak to remove contaminants, and washed out with a hot water rinsing

solution followed by a second water rinse. The engine would then be run

at 80% of power during a "drying run".

The high power run was not possible at Sydney due to the night curfew. The

operator had therefore opted to do extended drying runs at ground idle.

The regular use of that procedure had not resulted in any previous problem

including fumes.

The ATSB concluded, that an odour like happened on this flight are a potential

distraction from the task of flying the aircraft during takeoff.

The fumes were very likely linked to the compressor wash the previous evening,

and the fumes very likely originated in the right hand engine. "A strong

influence on the pilotsí decision to continue the flight was their belief

that the fumes were from compressor wash fluid and were likely to dissipate.

Their monitoring of the situation, including aircraft systems indications,

cockpit air quality, and the flight attendantís reports of conditions in

the cabin confirmed that to be the case."

No safety recommendations have been made.

The full report is available at:

http://avherald.com/h?article=41b405b5

20090616123553:20070714000000

Report: Air Atlanta Icelandic B742 over Romania on Jul 14th 2007, strong odour in cockpit

An Air Atlanta Icelandic Boeing 747-200 freighter on behalf of Malaysia

Airlines, registration TF-ATX performing freight flight MH-6151 from Milan

Linate (Italy) to Dubai (United Arab Emirates) with 2 passengers and 3 crew,

was enroute overhead Romania, when an odour in the cabin appearing shortly

after takeoff became so strong, that the passengers complained about the

smell. The captain, who was aware the airplane carried some level 9 hazardeous

material (hazard to environment) sent the flight engineer to the cargo bay

to inspect the cargo. When the flight engineer returned to the cockpit,

he immediately donned his oxygen mask, then reported a piece of cargo just

underneath the cockpit, that leaked vapour or fumes. The flight engineer

felt dizzy and said, he was about to pass out. At this point the captain

noticed, that the first officer acted strangely and showed signs of hypoxia.

The first officer donned his oxygen mask, the captain used his oxygen mask

only occasionally as he did not feel any symptom other than the odour. Without

declaring emergency the captain decided to divert to the closest available

airport at Budapest and requested a technical landing reporting the odour

at 21:16LT (19:16Z). He decided to land as quickly as possible and opted

to not dump fuel, but perform an overweight landing. The aircraft landed

safely 25 minutes later.

The Hungarian Transportation Safety Board reported in their English report

released via the Icelandic "RannsÛknarnefnd flugslysa" (RNF), that the material

was a synthetic pharmaceutic raw material. That material was solid below

5 degrees Centigrade, at higher temperatures the material becomes fluid

and then intensively evaporates. During loading in Linate, which took several

hours, the outside temperature had been around 30 degrees Centigrade, the

temperature in the cargo bay had become even higher. Due to lack of cooling

in the cargo bay the material evaporated during the flight and leaked through

the non-airtight plastic barrels. The vapor caused nausea, the use of the

oxygen masks prevented a deterioration of the situation.

The Hungarian TSB concluded:

3.1 Direct causes of the occurrence

 The company that prepared the hazardous material BAL5287 for shipping

(Antibioticos S.P.A.) did not indicate on the shipping documentation and

on the storage containers the required temperature while in storage and

during shipping, and did not provide airtight containers.

— The cargo loader $\tilde{\mathsf{n}}$ while being aware of the fact that they were handling

dangerous goods $\tilde{\mathsf{n}}$ did not check the MSDS upon receipt (they did not open

the envelope containing the document) therefore the required storage temperature

of +5 C∞ was neither ensured nor noted on the NOTOC.

– The required temperature of +2Ö+8 $C\infty$ in the aircraft's cargo bay was not

provided for the 149 kgs of vaccination that was listed in the NOTOC and

was transported in JL position.

 The required cooling in the aircraftís cargo bay was not provided for

the 90 kgs of chocolate that was listed in the NOTOC and was transported $\,$

in QL position.

Due to lack of cooling, the crystallization of the material that

have prevented evaporation of dangerous vapours could not take place.

The cargo load inspector did not sign the NOTOC and the captain accepted

it without the signature.

3.2 Indirect causes of the occurrence

 The captain was aware of the procedures of the emergency manual for Category

Nine dangerous goods but he did not consider the use of oxygen mask mandatory

for himself.

3.3 Risk factors that cannot be linked to the occurrence

- There were several packages where the UN sign, the UN number, the PSN

number, or the sender's data were covered or otherwise not clearly visible.

The ULD identification tags contained the three-letter cargo IMP code,

in contradiction with the IATA DGR which requires the usage of ${\it Class/Division}$

Numbers.

- There were simultaneously Air Malaysia and Air France package ID labels

on the packages which is not allowed.

 The form for listing the non-radioactive dangerous goods was a 2006 edition,

and the answers given to questions No. 37 and No. 51 were incorrect.

- The medical check in the captain's pilot licence expired on 2 June 2007.