

## ASRS Database Report Set

# Multi-Engine Turbojet Aircraft Upsets Incidents

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Report Set Description.....A sampling of reports concerning turbojet uncommanded control surface movement and unusual aircraft attitudes.

Update Number.....14.0

Date of Update .....September 24, 2008

Number of Records in Report Set.....50

Number of New Records in Report Set .....49

Type of Records in Report Set.....For each update, new records received at ASRS will displace a like number of the oldest records in the Report Set, with the objective of providing the fifty most recent relevant ASRS Database records. Records within this Report Set have been screened to assure their relevance to the topic.

TH: 262-7

**MEMORANDUM FOR: Recipients of Aviation Safety Reporting System Data**

**SUBJECT: Data Derived from ASRS Reports**

The attached material is furnished pursuant to a request for data from the NASA Aviation Safety Reporting System (ASRS). Recipients of this material are reminded of the following points, which must be considered when evaluating these data.

ASRS reports are submitted voluntarily. The existence in the ASRS database of reports concerning a specific topic cannot, therefore, be used to infer the prevalence of that problem within the National Airspace System.

Reports submitted to ASRS may be amplified by further contact with the individual who submitted them, but the information provided by the reporter is not investigated further. Such information represents the reporting of a specific individual who is describing their experience and perception of a safety related event.

After preliminary processing, all ASRS reports are de-identified. Following de-identification, there is no way to identify the individual who submitted a report. All ASRS report processing systems are designed to protect identifying information submitted by reports, such as, names, company affiliations, and specific times of incident occurrence. There is, therefore, no way to verify information submitted in an ASRS report after it has been de- identified.

The National Aeronautics and Space Administration and its ASRS contractor, Booz Allen Hamilton, specifically disclaim any responsibility for any interpretation which may be made by others of any material or data furnished by NASA in response to queries of the ASRS database and related materials.



Linda J. Connell, Director  
Aviation Safety Reporting System

## CAVEAT REGARDING STATISTICAL USE OF ASRS INFORMATION

Certain caveats apply to the use of ASRS statistical data. All ASRS reports are voluntarily submitted, and thus cannot be considered a measured random sample of the full population of like events. For example, we receive several thousand altitude deviation reports each year. This number may comprise over half of all the altitude deviations that occur, or it may be just a small fraction of total occurrences.

Moreover, not all pilots, controllers, air carriers, or other participants in the aviation system, are equally aware of the ASRS or equally willing to report to us. Thus, the data reflect **reporting biases**. These biases, which are not fully known or measurable, may influence ASRS statistics. A safety problem such as near midair collisions (NMACs) may appear to be more highly concentrated in area “A” than area “B” simply because the airmen who operate in area “A” are more supportive of the ASRS program and more inclined to report to us should an NMAC occur.

One thing that can be known from ASRS statistics is that they represent the **lower measure** of the true number of such events that are occurring. For example, if ASRS receives 881 reports of track deviations in 1999 (this number is purely hypothetical), then it can be known with some certainty that at least 881 such events have occurred in 1999. Because of these statistical limitations, we believe that the **real power** of ASRS lies in the **report narratives**. Here pilots, controllers, and others, tell us about aviation safety incidents and situations in detail. They explain what happened, and more importantly, **why** it happened. The values of these narrative reports lie in their qualitative nature. Using report narratives effectively requires an extra measure of study, but the knowledge derived is well worth the added effort.

# **Report Synopses**

**ACN: 798019** (1 of 50)

**Synopsis**

A G4 AT FL320 FOLLOWING A B777 BY NINE MILES EXPERIENCED WAKE VORTEX UPSET WITH A 45 DEG ROLL AND 200-300 FT ALT LOSS.

**ACN: 788817** (2 of 50)

**Synopsis**

AN A320 FLT CREW ON APCH TO DEN ENCOUNTERED WINDSHEAR AND EXECUTED A GO AROUND. WHILE STILL IN WINDSHEAR RECOVERY MODE, ATC ISSUED A TURN TO THEM TO CLEAR ANOTHER AIRCRAFT.

**ACN: 787185** (3 of 50)

**Synopsis**

A320 FLT CREW ON MAINTENANCE ACCEPTANCE TEST FLIGHT REPORT SPOILER ECAMS FOR CREW AWARENESS ONLY. DURING LANDING FLARE ACFT ROLLS HARD LEFT CAUSING WINGTIP STRIKE AND GAR. SECOND LANDING ATTEMPT IS SUCCESSFUL.

**ACN: 785866** (4 of 50)

**Synopsis**

EMB 145 CAPT EXPERIENCES A NOSEWHEEL STEERING FAILURE ON LANDING, AND AFTER ENGAGING THE TILLER, EXPERIENCES A HARD RIGHT TURN. THE ASSOCIATED EICAS MESSAGE DID NOT FULLY REGISTER WITH REPORTER FOR A VARIETY OF REASONS TO INCLUDE: HIGH WORKLOAD, MEMORY ITEM CONFUSION, AND COMMONLY RECEIVING A VARIETY OF CAUTION MESSAGES UPON LNDG.

**ACN: 777696** (5 of 50)

**Synopsis**

B737-700 ENCOUNTERED WAKE TURB AT CRUISE ALT. ACFT ROLLED AND LOST 500 FT BEFORE DSCNT WAS ARRESTED.

**ACN: 774313** (6 of 50)

**Synopsis**

A WING TANK FILL VALVE POSITION ERROR TRANSFERRED FUEL OUT OF A DC8 WING TANK UNTIL IT WAS EMPTY. THE ASSOCIATED ENG FLAMED OUT DURING THE TKOF ROLL.

**ACN: 770866** (7 of 50)

**Synopsis**

A CRJ200 PILOT REPORTS A REJECTED TKOF FOLLOWING DEICING DUE TO STIFF AILERONS.

**ACN: 762258** (8 of 50)

**Synopsis**

G200 VEERED LEFT AFTER TOUCHDOWN, AND DIRECTIONAL CONTROL COULD NOT BE MAINTAINED BY RUDDER OR BRAKE APPLICATION. ACFT DEPARTED THE RWY.

**ACN: 761749** (9 of 50)

**Synopsis**

A PILOT ON HIS SECOND IOE FLT OVERCORRECTED FOR A WIND GUST AND STRUCK A WINGTIP AND OUTBOARD FLAP.

**ACN: 757853** (10 of 50)

**Synopsis**

A LEAR-60 FLIGHT WAS INTERRUPTED BY A RUDDER TRIM MALFUNCTION AT CRUISE FLIGHT. EMERGENCY DECLARED. LANDED SAFELY. CREW AND PASSENGERS OK.

**ACN: 756008** (11 of 50)

**Synopsis**

MD80 ENCOUNTERED WAKE TURB FOLLOWING B757. ACFT ROLLED LEFT AND RIGHT, DISENGAGING AUTOPILOT.

**ACN: 755370** (12 of 50)

**Synopsis**

B767-300 THROTTLES RETARDED WITHOUT THE FLT CREW'S AWARENESS. THE AIRSPEED DECREASED, STICK SHAKER ACTIVATED, AND THE ACFT LOST APPROX 1300 FT WHILE AIRSPEED WAS REGAINED.

**ACN: 752811** (13 of 50)

**Synopsis**

AN A319 HARD LANDING OCCURRED AFTER THE ACFT DROPPED DURING AN APPARENTLY NORMAL LNDG FLARE. APCH AND LNDG SPDS WERE OBSERVED.

**ACN: 752210** (14 of 50)

**Synopsis**

A B757 EXPERIENCED FLT GUIDANCE ANOMALIES AT FL380, 25 DEG - 30 DEG UNCOMMANDED ROLL AND AUTOTHROTTLE DISCONNECT.

**ACN: 750761** (15 of 50)

**Synopsis**

AN A319 NOSEWHEEL STEERING DEVELOPED LARGE AMPLITUDE L AND R MOTIONS AFTER LNDG ROLL ON A WET RWY. FLT CREW HAD THE ACFT TOWED TO THE GATE.

**ACN: 747650** (16 of 50)

**Synopsis**

EMB-145 DRIFTED UNCONTROLLABLY TO THE LEFT AFTER TOUCHDOWN, STRIKING A RWY LIGHT BEFORE CONTROL WAS REGAINED.

**ACN: 735194** (17 of 50)

**Synopsis**

DA20 CAPTAIN REPORTS BRAKE MALFUNCTION THAT CAUSES ACFT TO VEER OFF THE RWY DURING ROLL OUT.

**ACN: 700413** (18 of 50)

**Synopsis**

A300 EXPERIENCES LOSS OF CTL IN TURB OVER THE BAHAMAS.

**ACN: 676549** (19 of 50)

**Synopsis**

A B737-400 IN CLB AT 2000 FT, FLAPS RETRACTING FROM 5 TO 1 UNITS, EXPERIENCED UNCOMMANDED NOSE DOWN ATTITUDE WITH CLB POWER. A FLAP OVERSPD OF 8 KTS WAS EXPERIENCED.

**ACN: 668912** (20 of 50)

**Synopsis**

AN ACR MECHANIC RPTS THAT A CONTRACT PUSHBACK CREW FAILED TO INSTALL A PIN CONNECTING THE TUG TO THE ACFT TOWBAR, WHICH CAUSED THE ACFT TO ROLL TOWARDS THE GATE UNCOMMANDED AS THE TUG SLOWED.

**ACN: 654099** (21 of 50)

**Synopsis**

A B737-300 EXPERIENCED SEVERE TURB APCHING SLC RESULTING IN A GAR. ATC GAVE NO WARNING THAT PREVIOUS ACFT WENT AROUND FOR TURB.

**ACN: 625993** (22 of 50)

### **Synopsis**

AFTER PORPOISING OF THE ACFT WHILE ON FINAL APCH A B737 PIC FILES A RPT ON THE VIOLATION OF THE ILS HOLD SHORT AREA FOR RWY 26L.

**ACN: 611901** (23 of 50)

### **Synopsis**

B757-200 FLT CREW EXPERIENCES LATERAL CTL DIFFICULTY ON XWIND LNDG AT TPA.

**ACN: 610477** (24 of 50)

### **Synopsis**

PHL CTLR EXPRESSED CONCERN REGARDING WAKE TURB EVENT AND INTERSECTING RWY OPS.

**ACN: 609856** (25 of 50)

### **Synopsis**

ENCOUNTER WITH WAKE TURB AND SUBSEQUENT LOSS OF ACFT CTL EXPERIENCED BY A DC9-83 FLT CREW WHEN ON APCH TO RWY 22R AT ORD, IL.

**ACN: 609477** (26 of 50)

### **Synopsis**

FLT CREW OF A320 ENCOUNTER MOUNTAIN WAVE OVER ROCKY MOUNTAINS, GAIN 800 FT DURING OVERSPD PROTECTION MANEUVER AND THEN LOSE 2000 FT TO PREVENT STALL ON BACK SIDE OF WAVE.

**ACN: 602335** (27 of 50)

### **Synopsis**

DC8-70 CREW HAD AN UNSTABILIZED APCH, AND HARD LNDG, AFTER THE FO WAS UNABLE TO CORRECT ACFT DRIFT IN A XWIND.

**ACN: 600743** (28 of 50)

### **Synopsis**

C550 ON ILS RWY 2L APCH TO DPA IS UNABLE TO MAINTAIN ALT DURING ILS ATTEMPT DUE TO WX.

**ACN: 599525** (29 of 50)

### **Synopsis**

RWY EXCURSION AFTER AN APCH AND LNDG AT MINIMUMS WHEN A G-2 FLT CREW DRIFT OFF THE R SIDE OF RWY 23 ON THE ROLLOUT.



**ACN: 599451** (30 of 50)

**Synopsis**

A CITATION C650G ON LNDG EXPERIENCED A RWY EXCURSION CAUSED BY LOSS OF ALL HYDRAULIC SYSTEMS. HYDRAULIC LOST FROM GND PACK COOLING FAN LINE.

**ACN: 597740** (31 of 50)

**Synopsis**

A CANADAIR CL65 ON TKOF ROLL. AT 20 KTS THE ACFT MOVED HARD R FROM THE RWY CTRLINE. TKOF ABORTED. SECOND ATTEMPT AFTER CHKLISTS COMPLETED RESULTED IN HARD R TRACKING. TKOF ABORTED.

**ACN: 588124** (32 of 50)

**Synopsis**

AN A300 FLT CREW ENCOUNTERS WINDSHEAR RESULTING IN +6000 FT THROUGH -3000 FT ALTDEVS DURING APCH TO HSV.

**ACN: 587317** (33 of 50)

**Synopsis**

AN MU300 FLT HAS A BRAKE FAILURE ON ROLLOUT AND ENDS UP 15 FT INTO THE OVERRUN OFF RWY 14 AT APF, FL.

**ACN: 585405** (34 of 50)

**Synopsis**

B737-700 CREW RPTED A SWERVE ON TKOF ROLL AT DFW WAS DUE TO A XWIND GUST OR JET BLAST.

**ACN: 585365** (35 of 50)

**Synopsis**

FLT CREW OF B733 RPTS 2 INCIDENCES OF UNCOMMANDED ROLL WHILE OPERATING ON B AUTOPLT.

**ACN: 582298** (36 of 50)

**Synopsis**

BE40 AUTOPLT MALFUNCTIONED ON ILS APCH TO GSO. ACFT LOST 350 FT BEFORE RECOVERY.

**ACN: 581573** (37 of 50)

### **Synopsis**

A CL65 FLT CREW EXPERIENCED A VIBRATION, THEN LATER HAD THE ACFT VIOLENTLY ROLL TO THE R 2 TIMES.

**ACN: 581428** (38 of 50)

### **Synopsis**

A B747-200 CARGO FLT CREW EXPERIENCES A HARD LNDG AFTER A VISUAL WITH ILS BACKUP TO RWY 25L AT LAX, CA.

**ACN: 575189** (39 of 50)

### **Synopsis**

A CL65 FO EXPERIENCES AN ALTDEV WHEN DISCONNECTING THE AUTOPLT AFTER RECEIVING AN AUTOPLT NOSE DOWN TRIM WARNING WHILE LEVELING AT 8000 FT S OF CAK, OH.

**ACN: 574066** (40 of 50)

### **Synopsis**

CL60 CREW LOST ACFT CTL AFTER LNDG AND WENT OFF THE R SIDE OF THE RWY. THE NOSE STEERING SYS WAS MEL'ED INOP.

**ACN: 571473** (41 of 50)

### **Synopsis**

CL60 FLC, TESTING A VFR COMPANY DESIGNED APCH PROC TO AN ARPT IN MOUNTAINOUS TERRAIN, HAS A RWY EXCURSION WHEN PIC APPARENTLY BECOMES FIXATED WITH THE 'I CAN MAKE IT' MENTALITY.

**ACN: 569082** (42 of 50)

### **Synopsis**

A320 CREW HAD FLT ATTENDANT INJURIES AFTER ENCOUNTERING SEVERE TURB AND AN UNCOMMANDED SPD BRAKE DEPLOYMENT.

**ACN: 568987** (43 of 50)

### **Synopsis**

B757-200 CREW HAD UNCOMMANDED RUDDER OSCILLATIONS AFTER DEP.

**ACN: 564773** (44 of 50)

### **Synopsis**

CRJ2 DSNDING INTO MSP ENCOUNTERED SEVERE WAKE TURB WHILE 14 MI INTRAIL TO A B757 ALSO DSNDING INTO MSP.

**ACN: 564140** (45 of 50)

**Synopsis**

CL65 FLC ENCOUNTERS WAKE TURB DURING APCH TO LAX.

**ACN: 563451** (46 of 50)

**Synopsis**

B737-300 CREW RPTED THE STICK SHAKER ACTIVATED WHILE ON VECTORS FOR THE APCH AT BNA.

**ACN: 561452** (47 of 50)

**Synopsis**

AN MD88 FLC EXPERIENCED WINDSHEAR ON FINAL APCH AT ATL AND PERFORMED A MISSED APCH. ON THAT CLBOUT WINDSHEAR WAS STILL PREVAILING, WHICH CREATED AN ALT OVERSHOOT WITH A SUBSEQUENT DIVERSION OF THE FLT.

**ACN: 561204** (48 of 50)

**Synopsis**

POSSIBLE OVERTEMP OF ENGS DURING A HARD LNDG AND RESULTING GAR IS EXPERIENCED BY THE FLC OF A LNDG MD88 ON RWY 4 AT LEX, KY.

**ACN: 554112** (49 of 50)

**Synopsis**

B757-200 CREW ENCOUNTERED UNCTABLE R TURN ON TKOF ROLL ON RWY 4L AT EWR.

**ACN: 551915** (50 of 50)

**Synopsis**

AN A320 CREW, UPON LNDG AT DEN, EXPERIENCED A PITCH-UP WHEN THE AUTOBRAKES WERE DISENGAGED.

# **Report Narratives**

**ACN: 798019**

## **Time / Day**

Date : 200807  
Local Time Of Day : 1201 To 1800

## **Place**

Locale Reference.Airport : ZZZ.Airport  
State Reference : US  
Altitude.MSL.Single Value : 32000

## **Environment**

Flight Conditions : VMC  
Light : Daylight

## **Aircraft : 1**

Controlling Facilities.ARTCC : ZZZ.ARTCC  
Operator.General Aviation : Corporate  
Make Model Name : Gulfstream IV  
Operating Under FAR Part : Part 91  
Flight Phase.Cruise : Level

## **Aircraft : 2**

Controlling Facilities.ARTCC : ZZZ.ARTCC  
Operator.Common Carrier : Air Carrier  
Make Model Name : B777 Undifferentiated or Other Model  
Operating Under FAR Part : Part 121  
Flight Phase.Cruise : Level

## **Person : 1**

Affiliation.Company : Corporate  
Function.Flight Crew : Captain  
Function.Oversight : PIC  
Qualification.Pilot : ATP  
Qualification.Pilot : CFI  
Qualification.Pilot : Commercial  
Qualification.Pilot : Flight Engineer  
Qualification.Pilot : Instrument  
Qualification.Pilot : Multi Engine  
Experience.Flight Time.Last 90 Days : 60  
Experience.Flight Time.Total : 8200  
Experience.Flight Time.Type : 1400  
ASRS Report : 798019

## **Events**

Anomaly.Altitude Deviation : Excursion From Assigned Altitude  
Anomaly.Conflict : Airborne Less Severe  
Anomaly.Inflight Encounter : Wake Turbulence

Anomaly.Other Anomaly

Independent Detector.Other.Flight CrewA : 1

Resolatory Action.Flight Crew : Exited Adverse Environment

Resolatory Action.Flight Crew : Regained Aircraft Control

Consequence.FAA : Reviewed Incident With Flight Crew

## **Assessments**

Problem Areas : Airspace Structure

Problem Areas : Environmental Factor

## **Narrative**

WE WERE LEVEL AT CRUISE FL320 APPROX 40 MINUTES AFTER BLOCKING OUT FROM ZZZ. WX WAS NOT A FACTOR. WE SUDDENLY EXPERIENCED AN ABRUPT ROLL TO THE R TO APPROX 45 DEGS AND THEN AN ABRUPT TURN TO THE L, AUTOPILOT DISENGAGED AND WE AGAIN ROLLED BACK TO THE R WHERE I WAS THEN ABLE TO CTL THE ACFT. I DID NOT TAKE SPECIFIC NOTE OF THE EXACT ALTITUDE LOSS SINCE I WAS MORE CONCERNED WITH GETTING THE ACFT UPRIGHT BUT IT WAS NOT SIGNIFICANT APPROX 200-300 FT. I RPTED IT TO CENTER AND WAS TOLD THEY DSNDED A B777 9 MILES IN FRONT OF US. WINDS WERE 230/50 (45 KT DIRECT HEADWIND). WE WERE EVENTUALLY SWITCHED TO THE NEXT SECTOR (STILL CENTER) AND DSNDED TO FL280 (NOT SURE EXACT ALTITUDE) WHEN ABOUT 15-20 MINUTES AFTER THE FIRST ENCOUNTER WE AGAIN EXPERIENCED THE SECOND EPISODE OF WAKE TURBULENCE. THIS TIME I TOOK CTL OF THE ACFT AND PROCEEDED ON AN OFFSET TO THE R OF COURSE. I INFORMED CENTER AND WAS CLEARED FOR A 5 MILES OFFSET. THE WINDS THIS TIME WERE 31 KTS DIRECT HEADWIND. I SPOKE WITH THE CENTER CHIEF. I DID RECEIVE A CALL FROM THE CENTER SAFETY OFFICE AND SPOKE WITH HIM AT GREAT LENGTH ABOUT THE INCIDENT. THEY INFORMED ME THEY ALSO HAD ANOTHER INCIDENT WITH A GIV AND B747 WITHIN A FEW DAYS OF OUR ENCOUNTER. I SUSPECT MANY OF THESE ENCOUNTERS ARE NOT BEING RPTED. WE WERE FORTUNATE NO ONE WAS INJURED ON OUR ACFT, BUT UNDER DIFFERENT CIRCUMSTANCES THEY COULD HAVE BEEN.

## **Synopsis**

A G4 AT FL320 FOLLOWING A B777 BY NINE MILES EXPERIENCED WAKE VORTEX UPSET WITH A 45 DEG ROLL AND 200-300 FT ALT LOSS.

**ACN: 788817**

## Time / Day

Date : 200805  
Local Time Of Day : 1201 To 1800

## Place

Locale Reference.Airport : DEN.Airport  
State Reference : CO  
Altitude.MSL.Single Value : 7000

## Environment

Weather Elements : Turbulence  
Weather Elements : Windshear

## Aircraft : 1

Controlling Facilities.Tower : DEN.Tower  
Operator.Common Carrier : Air Carrier  
Make Model Name : A320  
Operating Under FAR Part : Part 121  
Flight Phase.Landing : Go Around

## Person : 1

Affiliation.Company : Air Carrier  
Function.Flight Crew : Captain  
Function.Oversight : PIC  
Experience.Flight Time.Last 90 Days : 150  
Experience.Flight Time.Total : 20000  
Experience.Flight Time.Type : 6000  
ASRS Report : 788817

## Events

Anomaly.Inflight Encounter : Turbulence  
Anomaly.Inflight Encounter.Other  
Anomaly.Other Anomaly  
Independent Detector.Other.Flight CrewA : 1  
Resolatory Action.Controller : Issued New Clearance  
Resolatory Action.Flight Crew : Executed Go Around  
Resolatory Action.Flight Crew : Exited Adverse Environment

## Assessments

Problem Areas : ATC Human Performance  
Problem Areas : Weather

## Narrative

TURB AND GUST APCHING LIMITS FOR WINDSHEAR AVOIDANCE PREVAILED DURING FINAL APCH. OVER THE LIGHTS A SUDDEN LOSS OF SPD AND RESULTANT PITCH UP TO MAINTAIN FLT PATH EXCEEDED WINDSHEAR LIMITS AND A

RESULTANT 'WINDSHEAR' GAR WAS INITIATED. TWR WAS UTILIZING AN INTERSECTING RWY ARRANGEMENT WITH US LNDG ON RWY 16L AND ANOTHER ACFT WAS EITHER ON TKOF OR GAR FROM RWY 25 (OR POSSIBLY IN THE TURN FROM A RWY 17 DEP). WHILE RECOVERING FROM THE LOW ENERGY STATE OF THE WINDSHEAR AVOIDANCE ATC ISSUED A 90 DEG TURN TO US (THE COMPROMISED ACFT). I WOULD SUGGEST THAT ATC ISSUE ANY INITIAL CHANGE TO THE UNCOMPROMISED ACFT UNTIL WE ADVISE THEM THAT WE ARE CLR OF THE EVENT -- TREAT US MUCH LIKE THE TRANSGRESSORS IN PRM APCHS, ASSUME THAT WE ARE UNABLE AND CLR THE OTHER ACFT.

### **Synopsis**

AN A320 FLT CREW ON APCH TO DEN ENCOUNTERED WINDSHEAR AND EXECUTED A GO AROUND. WHILE STILL IN WINDSHEAR RECOVERY MODE, ATC ISSUED A TURN TO THEM TO CLEAR ANOTHER AIRCRAFT.



**ACN: 787185**

## **Time / Day**

Date : 200805  
Local Time Of Day : 1201 To 1800

## **Place**

Locale Reference.Airport : ZZZ.Airport  
State Reference : US  
Altitude.AGL.Single Value : 20

## **Environment**

Flight Conditions : VMC  
Light : Daylight

## **Aircraft : 1**

Controlling Facilities.Tower : ZZZ.Tower  
Operator.Common Carrier : Air Carrier  
Make Model Name : A320  
Operating Under FAR Part : Part 91  
Flight Phase.Descent : Approach

## **Component : 1**

Aircraft Component : Speedbrake/Spoiler

## **Person : 1**

Affiliation.Company : Air Carrier  
Function.Flight Crew : Captain  
Function.Oversight : PIC  
Qualification.Pilot : ATP  
Qualification.Pilot : Commercial  
ASRS Report : 787185

## **Person : 2**

Affiliation.Company : Air Carrier  
Function.Flight Crew : First Officer  
Qualification.Pilot : ATP  
Qualification.Pilot : Commercial  
ASRS Report : 787186

## **Events**

Anomaly.Aircraft Equipment Problem : Critical  
Anomaly.Non Adherence : FAR  
Anomaly.Other Anomaly  
Independent Detector.Other.Flight CrewA : 1  
Resolutive Action.Flight Crew : Executed Go Around  
Consequence.Other : Aircraft Damaged  
Consequence.Other

## **Assessments**

Problem Areas : Aircraft

Problem Areas : Maintenance Human Performance

## **Narrative**

TEST FLT WAS PERFORMED ON ACFT AFTER MAINT WAS DONE. DURING THE TEST, WE EXPERIENCED TROUBLE WITH 2 SPOILERS. WE HAD SEVERAL ECAM WARNINGS OF THIS CONDITION BUT WERE CREW AWARENESS ONLY. I WAS THE PF AND NOTICED SEVERAL TIMES DURING THE FLT THE RUDDER TRIM WAS GOING OUT OF RANGE MAKING THE AUTOPLT HAVE TROUBLE HOLDING THE ACFT STABLE. AT THIS POINT I DISCONNECTED THE AUTOPLT, RE-TRIMMED THE ACFT AND HAND FLEW IT THE REST OF THE TEST WITH NO ADVERSE HANDLING CONDITIONS. DURING APCH, I NOTICED THE ACFT WAS SLOPPY AND SLUGGISH ON THE CTLS. DURING FLARE AT ABOUT 20 FT, THE ACFT ROLLED HARD L WITH FIRM TOUCHDOWN AND BOUNCE. AT THIS POINT WE WENT TO TOGA AND GAR. UNKNOWN TO US AT THE TIME THE LOWER PART OF THE L WINGTIP HAD HIT THE GND AND TOOK OFF A SMALL PART OF THE TIP ALONG WITH A STATIC WICK. NO ADVERSE HANDLING CONDITIONS WERE EXPERIENCED ON THE GAR AND ON RETURN WE USED FLAPS 3 DEGS WITH A HIGHER SPD (VREF +25) WHICH APPEARED TO MAKE THE ACFT MORE CTLABLE BUT IT STILL TRIED TO ROLL L IN THE FLARE. I DO BELIEVE THE EXTRA AIRSPD AND FLAPS 3 DEGS HAD A POSITIVE EFFECT ON THE OUTCOME. CALLBACK CONVERSATION WITH RPTR REVEALED THE FOLLOWING INFO: POST FLIGHT INSPECTION REVEALED DAMAGE TO THE LEFT WINGTIP AND TWO SPOILERS ON THE LEFT WING WERE FOUND IN THE MAINTENANCE POSITION. THE MAINTENANCE POSITION IS ESSENTIALLY DISCONNECTED FROM THEIR ACTUATORS. THIS ALLOWS THE SPOILERS TO FLOAT IN FLIGHT AND PREVENTS THEM FROM REVEALING THEIR TRUE POSITION ON THE ECAM F/CTL DISPLAY. MAINTENANCE NEVER RETURNED THESE TWO PANELS TO THE FLIGHT POSITION PRIOR TO RELEASING THE ACFT FOR FLIGHT.

## **Synopsis**

A320 FLT CREW ON MAINTENANCE ACCEPTANCE TEST FLIGHT REPORT SPOILER ECAMS FOR CREW AWARENESS ONLY. DURING LANDING FLARE ACFT ROLLS HARD LEFT CAUSING WINGTIP STRIKE AND GAR. SECOND LANDING ATTEMPT IS SUCCESSFUL.

**ACN: 785866**

## **Time / Day**

Date : 200805

## **Place**

Locale Reference.Airport : ZZZ.Airport  
State Reference : US  
Altitude.AGL.Single Value : 0

## **Environment**

Flight Conditions : VMC

## **Aircraft : 1**

Controlling Facilities.Tower : ZZZ.Tower  
Operator.Common Carrier : Air Carrier  
Make Model Name : EMB ERJ 145 ER&LR  
Operating Under FAR Part : Part 121  
Flight Phase.Ground : Taxi  
Flight Phase.Landing : Roll

## **Person : 1**

Affiliation.Company : Air Carrier  
Function.Flight Crew : Captain  
Function.Oversight : PIC  
Experience.Flight Time.Last 90 Days : 131  
Experience.Flight Time.Type : 2100  
ASRS Report : 785866

## **Person : 2**

Affiliation.Company : Air Carrier  
Function.Flight Crew : First Officer

## **Events**

Anomaly.Aircraft Equipment Problem : Less Severe  
Anomaly.Other Anomaly  
Independent Detector.Other.Flight CrewA : 1  
Resolatory Action.Flight Crew : Overcame Equipment Problem  
Resolatory Action.Flight Crew : Regained Aircraft Control  
Consequence.Other

## **Assessments**

Problem Areas : Aircraft  
Problem Areas : Flight Crew Human Performance

## **Narrative**

UPON LANDING, SOMETIME AFTER HAVING THE FO HOLD THE YOKE, WE RECEIVED AN EICAS CAUTION MESSAGE. I AM NOT SURE WHAT SPD EXACTLY WE

WERE TRAVELING AT THE TIME BUT IT WAS RIGHT AROUND 60 KTS AND WE WERE ACTIVELY BRAKING THE ACFT. I MADE A QUICK REACTIONARY GLANCE AND RETURNED MY ATTENTION TO THE ROLLOUT. AS IT TURNED OUT, AS I LATER ANALYZED THE SITUATION, I HAD RECEIVED A 'STEERING INOP' MESSAGE. BEFORE I HAD EVEN RECOGNIZED AND PROCESSED THE INFO I HAD PLACED MY HAND ON THE TILLER TO BEGIN MY TRANSFER OF STEERING CONTROL FROM THE RUDDER PEDALS TO THE TILLER. SOMETIME AFTER I DID SO, THE STEERING REENGAGED AND CAUSED AN UN-COMMANDED TURN TO THE RIGHT (THE TILLER WAS STRAIGHT AHEAD AND NOT TO THE RIGHT.) FORTUNATELY THIS OCCURRED JUST AS WE WERE COMING UP ON THE TXWY. I IMMEDIATELY RELEASED THE TILLER AND DISENGAGED THE STEERING AND WAS ABLE TO CONTROL THE AIRPLANE USING RUDDERS AND BRAKES. WHEN I HAD SLOWED, I WAS FACING TOWARDS THE TXWY AND ROLLED OFF THE RWY AND STOPPED ON THE TXWY. AFTER WE STOPPED AND THE STEERING ENGAGED NORMALLY, WE PROCEEDED TO THE GATE, CALLED MAINT AND WROTE UP THE OCCURRENCE. THE MECHANIC THAT CAME OUT FOUND THAT THE CONNECTOR ABOVE THE NOSEWHEEL WAS LOOSE. HE REPRODUCED THE EVENT AT THE GATE BY LOOSENING THE CONNECTOR FOR ME AND THEN TIGHTENED IT BACK DOWN. WHEN THE CONNECTION WAS MADE THE STEERING ENGAGED AND MADE THE NOSEWHEEL TURNED TO THE RIGHT WITH NO ONE TOUCHING THE TILLER. I AM WRITING THIS REPORT BECAUSE AFTER RUNNING THIS THROUGH MY HEAD NUMEROUS TIMES IT IS A PLAUSIBLE SCENARIO THAT I MAY HAVE CAUSED SWERVING BY NOT RECOGNIZING TO NEED TO RUN A MEMORY ITEM. DUE TO THE SPD AT WHICH THIS ALL OCCURRED I DID NOT PERCEIVE AND PROCESS FAST ENOUGH THE INDICATIONS REQUIRING THE USE OF THE STEERING SYSTEM INOP OR UN-COMMANDED SWERVING ON THE GROUND MEMORY ITEM, WHICH ONE OF THE FIRST STEPS IS TO NOT USE THE TILLER. BY NOT QUICKLY RECOGNIZING THIS, I MAY HAVE IN FACT CAUSED THE SWERVING TO HAPPEN. I AM NOT SURE COMPLETELY THOUGH BECAUSE THE MECHANIC GOT THE NOSEWHEEL TO TURN BY JUST TIGHTENING DOWN ON THE CONNECTOR AND NO ONE WAS TOUCHING THE TILLER. FOR THE SAKE OF ANALYZING, ASSUMING IT WAS MY RESPONSE, I HAVE TRIED TO FIGURE OUT HOW I COULD HAVE PREVENTED THIS FROM HAPPENING. 1) THE OBVIOUS ANSWER IS TO HAVE BEEN ABLE TO IN A SPLIT SECOND PERCEIVE, PROCESS, AND REACT. THE PROBLEM I FACE IS THAT DURING LANDING IT SEEMS THERE IS A CERTAIN TYPE OF HYPER CONCENTRATION OR TUNNEL VISION THAT SEEMS TO HAPPEN WHERE YOUR SOLE ATTENTION SEEMS TO BE LOCKED ON THE RWY AHEAD. I WAS UNABLE TO DIAGNOSE THE SITUATION FAST ENOUGH TO OVERCOME THE MOTOR MEMORY OF PUSHING DOWN ON THE TILLER AS I PLANNED TO EXIT THE RWY. 2) THERE IS ANOTHER FACTOR, THAT WHILE IS NOT AN EXCUSE, IT IS OFTEN THE CASE UPON LANDING. WE ALWAYS GET A CAUTION MESSAGE AFTER LANDING ABOUT NO TO DATA, SO TO HEAR A CAUTION MESSAGE IS NOT OUT OF THE REALM OF NORMALCY. ALSO, WE FREQUENTLY GET OTHER CAUTION MESSAGES LIKE 'LG AIR FAIL' IF THE LANDING WAS VERY SOFT, SO ONCE AGAIN A CAUTION MESSAGE IS NOT UNUSUAL. 3) ONE SUGGESTION I GUESS WOULD BE TO STRESS IN TRAINING A TARGET SPD WHEN TO ENGAGE THE TILLER. 4) ANOTHER FACTOR THAT MAY HAVE BEEN IN PLAY IS THE CHKLIST MEMORY ITEM ITSELF. I EQUATED THAT MEMORY ITEM WITH WHAT MUST BE DONE ONCE THE ACFT HAS ALREADY BEGUN TO SWERVE, NOT AS A CHKLIST TO PREVENT A SWERVE FROM HAPPENING. IT MAY BE BENEFICIAL TO SEPARATE THE TWO SO THAT A STEERING INOP MESSAGE WOULD TRIGGER A MEMORY ITEM OF NOT TO USE THE TILLER. 5) AS A MAINTENANCE SUGGESTION, SOME SORT OF LOCKING MECHANISM FOR THIS CONNECTOR COULD BE OF GREAT USE.

## **Synopsis**

EMB 145 CAPT EXPERIENCES A NOSEWHEEL STEERING FAILURE ON LANDING, AND AFTER ENGAGING THE TILLER, EXPERIENCES A HARD RIGHT TURN. THE ASSOCIATED EICAS MESSAGE DID NOT FULLY REGISTER WITH REPORTER FOR A VARIETY OF REASONS TO INCLUDE: HIGH WORKLOAD, MEMORY ITEM CONFUSION, AND COMMONLY RECEIVING A VARIETY OF CAUTION MESSAGES UPON LNDG.

**ACN: 777696**

## **Time / Day**

Date : 200803  
Local Time Of Day : 1201 To 1800

## **Place**

Locale Reference.Navaid : ELP.VORTAC  
State Reference : TX  
Altitude.MSL.Single Value : 39000

## **Environment**

Flight Conditions : VMC  
Light : Daylight

## **Aircraft : 1**

Controlling Facilities.ARTCC : ZAB.ARTCC  
Operator.Common Carrier : Air Carrier  
Make Model Name : B737-700  
Operating Under FAR Part : Part 121  
Flight Phase.Cruise : Level

## **Aircraft : 2**

Controlling Facilities.ARTCC : ZAB.ARTCC  
Operator.Common Carrier : Air Carrier  
Make Model Name : B777 Undifferentiated or Other Model  
Operating Under FAR Part : Part 121  
Flight Phase.Climbout : Vacating Altitude

## **Person : 1**

Affiliation.Company : Air Carrier  
Function.Flight Crew : Captain  
Function.Oversight : PIC  
Experience.Flight Time.Last 90 Days : 194  
Experience.Flight Time.Total : 25000  
Experience.Flight Time.Type : 18000  
ASRS Report : 777696

## **Person : 2**

Affiliation.Company : Air Carrier  
Function.Flight Crew : First Officer  
Experience.Flight Time.Last 90 Days : 270  
ASRS Report : 777689

## **Events**

Anomaly.Inflight Encounter : Wake Turbulence  
Anomaly.Non Adherence : Clearance  
Anomaly.Other Anomaly

Independent Detector.Other.Flight CrewA : 1  
Independent Detector.Other.Flight CrewB : 2  
Resolatory Action.Controller : Issued New Clearance  
Resolatory Action.Flight Crew : Regained Aircraft Control

## **Assessments**

Problem Areas : ATC Human Performance  
Problem Areas : Environmental Factor

## **Narrative**

ENRTE TO HOUSTON EAST OF EL PASO WE ENCOUNTERED MODERATE TURBULENCE WITH A HARD L ROLL THAT EXCEEDED THE CAPABILITY OF THE AUTOPLT. I IMMEDIATELY DISCONNECTED THE AUTOPLT AND RECOVERED TO WINGS LEVEL ATTITUDE. DURING THE RECOVERY I INITIALLY LOST ABOUT 200 FT OF ALTITUDE IN TURBULENCE BEFORE REACHING SMOOTH AIR. WE CONTINUED TO LOSE AN ADDITIONAL 300 FT BEFORE ARRESTING THE DSCNT. OUR TOTAL LOSS OF ALTITUDE WAS 500 FT (FL385). DURING THE PROCESS, THE FO ADVISED ATC OF THE TURBULENCE AND AT THAT TIME THEY NOTICED THE DSCNT AND TOLD US TO MAINTAIN FL390. I TOLD THE FO THAT I WAS UNABLE TO MAINTAIN ALTITUDE AND TO ASK FOR AN IMMEDIATE LOWER ALTITUDE. AFTER ABOUT 30 SECONDS, I WAS ABLE TO RECOVER ABOUT 200 FT OF ALTITUDE BEFORE ABQ CLRED US TO FL370. THE REMAINDER OF THE FLT WAS UNEVENTFUL. DURING THE PRECEDING MOMENTS OF THE FLT, I NOTICED AN AIRPLANE THAT WAS CLBING OFF OF OUR L SIDE. HE LEVELED AT FL370; HE WAS FASTER THAN WE WERE AND WHEN HE WAS ABOUT 12 MILES AHEAD OF US, HE WAS ISSUED FL390. OUR COURSES CONVERGED E OF EL PASO AND THAT WAS WHERE THE UPSET OCCURRED. AFTER THE EVENT I ASKED THE CTLR WHAT TYPE OF AIRPLANE HE HAD CLBED IN FRONT OF US, HE RELUCTANTLY ADMITTED THAT IT WAS ANOTHER CARRIER B777. THE ONLY ACTION THAT COULD HAVE PREVENTED THIS EVENT WOULD BE FOR THE CTLR WHO ISSUED THE CLB TO HAVE CONSIDERED THE EFFECT WAKE TURBULENCE HAS (ESPECIALLY HEAVY WIDEBODY AIRPLANES) ON OTHER ACFT AND ALLOW SUFFICIENT ROOM BETWEEN THEM. AS PLTS, WE ALL UNDERSTAND THAT THE EFFECTS OF WAKE TURBULENCE CAN BE FELT FOR 30 MILES OR MORE BEHIND HEAVY ACFT. YOU WOULD THINK THAT CTLRS WOULD HAVE ACCESS TO THE SAME INFO!

## **Synopsis**

B737-700 ENCOUNTERED WAKE TURB AT CRUISE ALT. ACFT ROLLED AND LOST 500 FT BEFORE DSCNT WAS ARRESTED.

**ACN: 774313**

## **Time / Day**

Date : 200802  
Local Time Of Day : 1801 To 2400

## **Place**

Locale Reference.Airport : ZZZ.Airport  
State Reference : US  
Altitude.AGL.Single Value : 0

## **Environment**

Flight Conditions : VMC  
Light : Night

## **Aircraft : 1**

Controlling Facilities.Tower : ZZZ.Tower  
Operator.Common Carrier : Air Carrier  
Make Model Name : DC-8F  
Operating Under FAR Part : Part 121  
Flight Phase.Ground : Takeoff Roll

## **Component : 1**

Aircraft Component : Fuel Distribution System

## **Person : 1**

Affiliation.Company : Air Carrier  
Function.Flight Crew : Captain  
Function.Oversight : PIC  
Experience.Flight Time.Last 90 Days : 60  
Experience.Flight Time.Type : 108  
ASRS Report : 774313

## **Events**

Anomaly.Aircraft Equipment Problem : Less Severe  
Anomaly.Excursion : Runway  
Anomaly.Non Adherence : Company Policies  
Anomaly.Non Adherence : Published Procedure  
Anomaly.Other Anomaly  
Independent Detector.Other.Flight CrewA : 1  
Resolatory Action.None Taken : Detected After The Fact  
Resolatory Action.None Taken : Insufficient Time  
Resolatory Action.None Taken : Unable

## **Assessments**

Problem Areas : Aircraft  
Problem Areas : Flight Crew Human Performance



## **Narrative**

THE FLT WAS ROUTINE UP TO TAXI OUT. ATIS INDICATED RWY X FOR DEP, BUT UPON CONTACT WITH GND WE WERE GIVEN RWY Y. THIS RESULTED IN A SHORT TAXI RTE. WE WERE AT THE HOLD SHORT POINT FOR RWY Y RUNNING THE BEFORE TKOF CHKLIST WHEN TWR CALLED AND CLRED US FOR TKOF. IN RESPONSE TO RECEIVING CLRNC, I CALLED FOR BELOW THE LINE EVEN THOUGH A FEW ITEMS ABOVE THE LINE STILL REMAINED. IN RETROSPECT, I REALIZE THIS PRESSURED THE SO TO HURRY, AND I FAILED TO SCAN HIS PANEL BEFORE STARTING TO TAXI ONTO THE RWY. THE BEFORE TKOF CHKLIST WAS COMPLETED AS WE TAXIED INTO POS. I STOPPED THE ACFT AND PERFORMED A STATIC TKOF, SPOOLING ALL 4 ENGS TO 50% N1 BEFORE RELEASING BRAKES, ADVANCING THE THROTTLES AND CALLING FOR TKOF THRUST. PRIOR TO THE 80 KT CALL, IN THE VICINITY OF THE 1000 FT MARKERS, THE ACFT VEERED HARD R. I USED FULL L RUDDER, BUT THERE WAS NO REACTION. I SAID SOMETHING LIKE, 'WHAT HAPPENED,' AS I PULLED THE THROTTLES TO IDLE, BUT DID NOT HEAR ANY RESPONSE. WE WERE NOW RAPIDLY HEADING TOWARDS THE EDGE OF THE RWY. IN A LAST DITCH EFFORT TO STAY ON THE RWY, I GRABBED THE TILLER AND STEERED L BUT AGAIN GOT NO REACTION. AT THE SAME TIME THE FO SAID ABORT AND RAISED THE REVERSE LEVERS BUT WE WERE OFF THE RWY BY THE TIME THEY ACTUATED. AFTER THE EVENT THE SO NOTED THE #4 MAIN TANK QUANTITY INDICATED ZERO, WHICH HAD PROBABLY CAUSED #4 ENG TO FLAME OUT. I COULD HAVE PREVENTED THE EVENT HAD I THOROUGHLY SCANNED THE PANEL PRIOR TO TKOF. A POSSIBLE MECHANICAL FIX WOULD BE DIFFERENT FILL VALVE SWITCHES THAT ARE EASIER TO VISUALLY IDENT AS BEING OPENED OR CLOSED TO PREVENT INADVERTENT FUEL XFER. AS FAR AS FATIGUE IS CONCERNED, BOTH THE FO AND SO HAD BACK-TO-BACK EXTENDED DUTY PERIODS THE FIRST 2 NIGHTS OF THE PAIRING AND WERE ALMOST 1 HR LATE THE THIRD NIGHT.

## **Synopsis**

A WING TANK FILL VALVE POSITION ERROR TRANSFERRED FUEL OUT OF A DC8 WING TANK UNTIL IT WAS EMPTY. THE ASSOCIATED ENG FLAMED OUT DURING THE TKOF ROLL.

**ACN: 770866**

## **Time / Day**

Date : 200801  
Local Time Of Day : 1801 To 2400

## **Place**

Locale Reference.Airport : ZZZ.Airport  
State Reference : US  
Altitude.AGL.Single Value : 0

## **Environment**

Flight Conditions : IMC  
Weather Elements : Ice  
Weather Elements : Snow  
Light : Night

## **Aircraft : 1**

Controlling Facilities.Tower : ZZZ.Tower  
Operator.Common Carrier : Air Carrier  
Make Model Name : Regional Jet 200 ER&LR  
Operating Under FAR Part : Part 121  
Flight Phase.Ground : Takeoff Roll

## **Component : 1**

Aircraft Component : Aileron Control System

## **Person : 1**

Affiliation.Company : Air Carrier  
Function.Flight Crew : Captain  
Function.Oversight : PIC  
Experience.Flight Time.Last 90 Days : 70  
Experience.Flight Time.Total : 23000  
Experience.Flight Time.Type : 15500  
ASRS Report : 770866

## **Events**

Anomaly.Aircraft Equipment Problem : Critical  
Anomaly.Other Anomaly  
Independent Detector.Other.Flight CrewA : 1  
Resolatory Action.Flight Crew : Rejected Takeoff  
Consequence.Other

## **Assessments**

Problem Areas : Aircraft  
Problem Areas : Weather

## **Narrative**

AFTER DEICING, WE TAXIED TO RWY 36R FOR TKOF. ON THE TKOF ROLL, AT FIRST, EVERYTHING APPEARED NORMAL. RIGHT AFTER 100 KIAS, SOMETHING DIDN'T QUITE FEEL RIGHT WITH THE ACFT, FELT MUSHY AND WANTED TO GO RIGHT. I CORRECTED THE PULLING RIGHT AND BETWEEN 100 KIAS AND V1/VR, THE AILERON CONTROL BECAME STIFFER AND STIFFER. AT THE POINT OF V1/VR, THE AILERON CONTROL WAS ALMOST NON-MOVABLE. HIGH SPEED ABORT WAS PERFORMED, AND I NEVER HAD A DOUBT THAT I WOULD BE ABLE TO STOP DUE TO THE LENGTH OF THE RWY. NO WAY WAS I GOING AIRBORNE WITH LOW ALTITUDE AND NO AILERON. WE TAXIED OFF THE RWY TWO TXWYS BEFORE THE END. PERFORMED ALL CHECKLISTS AND RETURNED TO THE GATE. IF NOTHING IS FOUND WRONG WITH THE ACFT WHEN INVESTIGATION IS OVER, I BELIEVE THE ACFT WAS NOT DEICED PROPERLY AND THE AILERON FROZE. WE WERE IN THE DEICING PAD A SHORT TIME FOR TYPE II & IV APPLICATION. CALLBACK CONVERSATION WITH RPTR REVEALED THE FOLLOWING INFO: THE REPORTER STATED THAT HIS ACFT WAS OUT OF SVC FOR SEVERAL DAYS FOLLOWING THIS EVENT. WHAT WAS DISCOVERED WAS THAT THE HYDRAULIC PUMP SUPPLYING PRESSURE TO THE LEFT AILERON WAS LOWER THAN THE RIGHT SIDE AND ADDITIONALLY SOME GROMMETS THROUGH WHICH CONTROL CABLES RAN WERE LOOSE. HOWEVER MAINTENANCE SAID NEITHER OF THESE SHOULD HAVE CAUSED A BINDING. THE RIGHT AILERON AND SPOILERON BOTH RESPONDED EQUALLY WHEN STATICALLY TESTED BY MAINTENANCE AFTER THE ACFT WAS RETURNED TO THE GATE. HOWEVER, THE LEFT SPOILERON DELAYED RESPONDING COMPARED TO THE LEFT AILERON LEADING MAINTENANCE TO BELIEVE ICING WAS CAUSING THE LAG, BUT THERE WAS NO HARD INFORMATION SUPPORTING THAT. IN THE END THERE WAS NO DETERMINATION ABOUT THIS EVENT'S CAUSE. THE CREW DID HAVE THE OPPORTUNITY TO DEMONSTRATE THIS EXACT SCENARIO IN A SIMULATOR, THE ACFT CRASHED AT THE END OF THE RWY. THE CREW CONCLUDED THAT THEY WERE AT MAX PERFORMANCE UNDER THESE ICING CONDITIONS.

## **Synopsis**

A CRJ200 PILOT REPORTS A REJECTED TKOF FOLLOWING DEICING DUE TO STIFF AILERONS.

**ACN: 762258**

## **Time / Day**

Date : 200711

## **Place**

Locale Reference.Airport : ZZZ.Airport  
State Reference : US  
Altitude.AGL.Single Value : 0

## **Environment**

Flight Conditions : VMC  
Light : Night

## **Aircraft : 1**

Operator.General Aviation : Corporate  
Make Model Name : Gulfstream 200 [G200] (IAI 1126 Galaxy)  
Operating Under FAR Part : Part 91  
Flight Phase.Landing : Roll

## **Component : 1**

Aircraft Component : Nose Gear

## **Component : 2**

Aircraft Component : Brake System

## **Person : 1**

Affiliation.Company : Corporate  
Function.Flight Crew : First Officer  
Qualification.Pilot : ATP  
Experience.Flight Time.Last 90 Days : 118  
Experience.Flight Time.Total : 21000  
Experience.Flight Time.Type : 225  
ASRS Report : 762258

## **Events**

Anomaly.Aircraft Equipment Problem : Critical  
Anomaly.Excursion : Runway  
Anomaly.Ground Encounters : FOD  
Anomaly.Other Anomaly  
Independent Detector.Other.Flight CrewA : 1  
Resolutive Action.Flight Crew : Regained Aircraft Control  
Consequence.Other : Aircraft Damaged

## **Assessments**

Problem Areas : Aircraft

## **Narrative**

I WAS SIC AND PF OF A GULFSTREAM 200, THAT EXPERIENCED A RWY EXCURSION WHILE LNDG. VFR CONDITIONS EXISTED, WITH WINDS 33010. A VISUAL APCH BACKED UP BY THE ILS WAS CONDUCTED TO RWY 24. THE ACFT WAS STABILIZED THROUGHOUT ALL PHASES OF THE APCH TO TOUCHDOWN. NORMAL BRAKING WAS APPLIED AND THE ACFT VEERED L, I RELEASED THE L BRAKE AND APPLIED R RUDDER TRYING TO BRING THE ACFT BACK ON TRACK WITH NEGATIVE RESULTS. MORE R RUDDER AND R BRAKING WAS APPLIED, HOWEVER, THE ACFT CONTINUED ON ITS L TRACK. I THEN CALLED OUT FOR HELP AND SIMULTANEOUSLY FELT THE CAPT'S FEET ON THE R RUDDER AND R BRAKE, WHICH I HAD NOW PUSHED FULL TRAVEL. THE ACFT CONTINUED TO PULL L AND EXITED THE RWY. ONCE ON THE GRASS, WE WERE ABLE TO REGAIN DIRECTIONAL CTL USING THE RUDDER AND RETURNED THE ACFT TO THE RWY TO COMPLETE THE ROLLOUT. THRUST REVERSERS WERE NOT DEPLOYED, BECAUSE DIRECTIONAL CTL WAS THE PRIORITY IMMEDIATELY AFTER TOUCHDOWN. ALL SYS APPEARED TO BE WORKING AND THE ACFT WAS TAXIED TO PARKING. THE ACFT WAS INSPECTED AND DAMAGE TO THE R KRUGER FLAP, R FLAP AND PUNCTURE TO THE R WING LEADING EDGE ABOVE THE KRUGER FLAP WAS FOUND. INSPECTION OF THE RWY BY AN ARPT EMPLOYEE, FOUND THAT A TAXI SIGN HAD APPARENTLY BEEN HIT DURING THE DEV. AFTER MUCH THOUGHT I SUSPECT THAT THE L BRAKE FAILED TO RELEASE WHEN COMMANDED, HOWEVER I MUST STATE THAT THIS IS PURE SPECULATION. THE ACFT ALSO WAS VERY CLOSE TO MAX LNDG WT, REF WAS 140 KTS, WHICH UNDER NORMAL CONDITIONS WOULD NOT HAVE BEEN A PROB, HOWEVER, WT AND MOMENTUM WITH THE SUDDEN PULL TO THE L, MAY HAVE CONTRIBUTED TO THE LACK OF EFFECTIVE RUDDER CTL. CALLBACK CONVERSATION WITH RPTR REVEALED THE FOLLOWING INFO: REPORTER STATED THAT THERE WAS NO OBSTRUCTION TO RUDDER OR BRAKE PEDAL MOVEMENT WHILE THE PLTS WERE ATTEMPTING TO REGAIN CONTROL. MANUFACTURER'S INSPECTION REVEALED A BRAKE DEFECT ON THE ACFT. THE NOSE GEAR WAS FOUND TO BE OUT OF ALIGNMENT, ALTHOUGH THIS COULD HAVE BEEN CAUSED BY THE EXCURSION.

## **Synopsis**

G200 VEERED LEFT AFTER TOUCHDOWN, AND DIRECTIONAL CONTROL COULD NOT BE MAINTAINED BY RUDDER OR BRAKE APPLICATION. ACFT DEPARTED THE RWY.

**ACN: 761749**

## Time / Day

Date : 200711  
Local Time Of Day : 1201 To 1800

## Place

Locale Reference.Airport : ZZZ.Airport  
State Reference : US

## Environment

Flight Conditions : VMC  
Light : Daylight

## Aircraft : 1

Controlling Facilities.Tower : ZZZ.Tower  
Operator.Common Carrier : Air Carrier  
Make Model Name : Regional Jet CL65, Undifferentiated or Other Model  
Operating Under FAR Part : Part 121  
Flight Phase.Descent : Approach

## Person : 1

Affiliation.Company : Air Carrier  
Function.Flight Crew : Captain  
Function.Instruction : Instructor  
Function.Oversight : PIC  
Qualification.Pilot : ATP  
ASRS Report : 761749

## Person : 2

Affiliation.Company : Air Carrier  
Function.Flight Crew : First Officer  
Function.Instruction : Trainee  
Qualification.Pilot : Commercial  
Experience.Flight Time.Total : 1000  
Experience.Flight Time.Type : 15  
ASRS Report : 761748

## Events

Anomaly.Inflight Encounter : Turbulence  
Anomaly.Non Adherence : Company Policies  
Anomaly.Other Anomaly  
Independent Detector.Other.Flight CrewA : 1  
Independent Detector.Other.Flight CrewB : 2  
Resolatory Action.None Taken : Detected After The Fact  
Consequence.Other : Aircraft Damaged  
Consequence.Other

## Assessments

Problem Areas : Environmental Factor  
Problem Areas : Flight Crew Human Performance  
Problem Areas : Weather

## **Narrative**

I WAS CONDUCTING IOE ON A FLT FROM ZZZ1 TO ZZZ2. IT WAS THE FO'S 4TH FLT AND ONLY HIS 2ND AS PF. THE ATIS BEFORE LNDG WAS CALLING FOR GUSTY WINDS FROM THE NW. THE LAST WIND CALLOUT BEFORE LNDG WAS ABOUT 310 DEGS 18 KTS WITH NO GUSTS CALLED. THE APCH WAS STABILIZED AND THINGS APPEARED NORMAL UNTIL THE MOMENT OF FLARE -- XWIND CORRECTION. IT APPEARED THE FO NEEDED HELP WITH THE FLARE. AS I BEGAN TO HELP HIM, DUE TO POSSIBLE CHANGING WINDS AND/OR AILERON INPUT FROM THE FO, THE L WING DROPPED CONSIDERABLY AS THE AIRPLANE HAD A MODERATELY HARD LNDG. I DIDN'T IMMEDIATELY THINK THAT THE WINGTIP HAD STRUCK THE GND, BUT WHILE TAXIING IN I MENTIONED TO THE FO THAT IT MIGHT BE A POSSIBILITY. I INSPECTED THE L WING DURING THE WALKAROUND AND DISCOVERED AN ABRASION ON THE UNDERSIDE. THE FO HAS OBVIOUSLY LIMITED EXPERIENCE IN THE AIRPLANE. DUE TO HIS CTL INPUTS SO CLOSE TO THE GND AND THE XWIND CONDITIONS, I WAS UNABLE TO CORRECT THE AIRPLANE'S ATTITUDE QUICK ENOUGH. CALLBACK CONVERSATION WITH RPTR REVEALED THE FOLLOWING INFO: THE REPORTER STATED THAT THE PILOT RECEIVING IOE WAS GRADED AS GOOD AFTER FLYING TWO DAYS WITH ANOTHER INSTRUCTOR. THE IOE PILOT'S FLYING SKILLS WITH THIS REPORTER WAS SAID TO BE GOOD AND SO HE WAS SURPRISED BY THIS RESPONSE TO A FAIRLY LIGHT GUST. THE INSTRUCTOR STATED THAT THE ACFT HAD FLOATED SLIGHTLY DURING THE FLARE AND JUST PRIOR TO TOUCHDOWN WAS AFFECTED BY A GUST SO SLIGHT THAT THE REPORTER IS NOT SURE HOW MUCH IT ACTUALLY CHANGED THE ACFT'S FLT PATH. THE IOE PILOT HAD ABOUT 1000 HOURS TOTAL TIME, ABOUT 300 HOURS MULTIENGINE TIME IN LIGHT TWINS AND ABOUT 15 HOURS IN THE CL65. HIS LACK OF EXPERIENCE CAUSED HIM TO OVER-REACT. THE REPORTER STATED THAT HE IS CONCERNED ABOUT THE LEVEL OF EXPERIENCE IN THIS ACR'S NEW HIRES, SOME OF WHOM HAVE 300 HOURS TOTAL TIME.

## **Synopsis**

A PILOT ON HIS SECOND IOE FLT OVERCORRECTED FOR A WIND GUST AND STRUCK A WINGTIP AND OUTBOARD FLAP.

**ACN: 757853**

## **Time / Day**

Date : 200710  
Local Time Of Day : 1201 To 1800

## **Place**

Locale Reference.Airport : ZZZ.Airport  
State Reference : US  
Altitude.MSL.Single Value : 21000

## **Environment**

Flight Conditions : VMC  
Light : Daylight

## **Aircraft : 1**

Controlling Facilities.ARTCC : ZZZ.ARTCC  
Operator.General Aviation : Corporate  
Make Model Name : Learjet 60  
Operating Under FAR Part : Part 91  
Navigation In Use.Other : FMS or FMC  
Flight Phase.Cruise : Level

## **Component : 1**

Aircraft Component : Rudder Trim System

## **Person : 1**

Affiliation.Company : Corporate  
Function.Flight Crew : First Officer  
Qualification.Pilot : ATP  
Qualification.Pilot : CFI  
Qualification.Pilot : Multi Engine  
Experience.Flight Time.Last 90 Days : 70  
Experience.Flight Time.Total : 4000  
Experience.Flight Time.Type : 900  
ASRS Report : 757853

## **Person : 2**

Affiliation.Company : Corporate  
Function.Flight Crew : Captain  
Function.Oversight : PIC

## **Events**

Anomaly.Aircraft Equipment Problem : Critical  
Anomaly.Other Anomaly  
Independent Detector.Aircraft Equipment.Other Aircraft Equipment : Autopilot Red Light  
Resolatory Action.Flight Crew : Declared Emergency



Resolatory Action.Flight Crew : Diverted To Another Airport  
Resolatory Action.Flight Crew : Landed In Emergency Condition  
Resolatory Action.Flight Crew : Overcame Equipment Problem  
Resolatory Action.Flight Crew : Regained Aircraft Control  
Consequence.Other

## Assessments

Problem Areas : Aircraft

## Narrative

WE WERE ON AN IFR FLT PLAN. OUR FLT WAS INTERRUPTED BY A RUDDER TRIM MALFUNCTION AT CRUISE FLT. ON THIS DAY THE FLT CREW MET THE DIRECTOR OF MAINT AT THE MAINT REPAIR SHOP LOCATED AT ZZZ. THE ACFT HAD BEEN IN MAINT TO REPAIR A FLOW CTL VALVE IN THE PRESSURIZATION SYS. ALSO, THE COPLT'S PANEL HAD BEEN REMOVED TO REPAIR A RELAY FOR THE R PFD. THE WORK HAD BEEN COMPLETED IN THE EARLY AFTERNOON HRS. AFTER A THOROUGH PREFLT OF THE ACFT EXTERIOR AND INTERIOR THE FLT CREW ACCEPTED THE ACFT AND THE RETURN OF ACFT LOGS WITH APPROPRIATE LOGBOOK ENTRIES. THE FLT DEPARTED WITH ONLY THE FLT CREW ON BOARD. THE ENTIRE FLT WENT WELL, WITHOUT INCIDENT AND WE HAD A SUCCESSFUL TEST FLT AT ALT OF ALL SYS THROUGH ALL PHASES OF FLT. THE ACFT ARRIVED AT ZZZ1. AT ZZZ1 WE PUT ON 200 GALS OF JET-A WHILE WAITING 1 HR FOR THE PAX WHICH WERE RETURNING FOR A PART 91 FLT. ON THE RETURN TRIP I WAS FLYING FROM THE R SEAT ON AN IFR FLT PLAN. ON DEP WE NOTICED, ONCE WE ACTIVATED THE AUTOPLT AT 2000 FT MSL, THERE WAS AN AMBER E ON THE R SIDE PFD. I DISENGAGED THE AUTOPLT AND ACKNOWLEDGED THE PITCH FAULT FROM THE AUTOPLT. I THEN HAND FLEW THE ACFT AND CALLED FOR THE ABNORMAL CHKS. WE PROCEEDED TO CONTINUE PAST 10000 FT AND THEN BEGAN TO TROUBLESHOOT DURING THE CRUISE CLB. AFTER REACHING A CRUISE ALT AT FL210 WE CONCLUDED ALL CHKLISTS. AFTER VERIFYING ALL TRIM INDICATIONS AND TRIM POS I REENGAGED THE AUTOPLT TO SEE IF THE ACFT HAD BEEN RE-TRIMMED PROPERLY. AFTER RE-ENGAGING WE GOT THE AMBER E ON THE COPLT MFD AND THE RED TRIM LIGHT ON THE AUTOPLT. WE DISCONNECTED AGAIN THEN TRIED DUPLICATING WITH AN AUTOPLT XFER TO THE PLT SIDE. THE PROB DID NOT DUPLICATE THIS TIME. WE CONTINUED TO HAND FLY AND I TOOK THE CTLS BACK AND FLEW FROM THE COPLT SIDE. WHILE ON A VECTOR TO THE ARR AND FLYING WITH THE AUTOPLT OFF I NOTICED THE PLANE WAS TRIMMED BUT WAS INDICATING A SLIGHTLY OUT OF TRIM YAW INDICATION. I PROCEEDED TO DISENGAGE THE YAW DAMPENER AND APPLY A VERY SLIGHT INPUT TO YAW THE NOSE SLIGHTLY R. UPON ENGAGING THE RUDDER TRIM CTL PANEL THE ACFT WENT TO 60% L TRIM, YAWING THE ACFT L, CAUSING ME TO IMMEDIATELY GO TO THE MSW (MASTER THUMB SWITCH) AND HOLD THE CTL SWITCH DOWN WHICH TEMPORARILY DISCONNECTED. THE CAPT THEN TOOK THE CTLS IN THE PLT SEAT AND WE ACKNOWLEDGED WE WERE COMPLETELY OUT OF TRIM. TO CONFIRM THE SITUATION THE CAPT MOMENTARILY RELEASED THE MSW SWITCH WHILE WE BOTH KEPT HVY PRESSURE ON THE R RUDDER PEDAL AND HIS L-HAND HELD THE YAW TRIM CIRCUIT BREAKER. HE CONFIRMED THE RUDDER CTL PANEL HAD BEEN IN THE CTR POS, BUT WHEN HE RELEASED THE MSW THE PLANE CONTINUED TO YAW FURTHER AND THEN HE REPRESSED THE MSW SWITCH AND SIMULTANEOUSLY PULLED THE YAW TRIM CIRCUIT BREAKER. WE HAD VERIFIED CTL OF THE ACFT AND DECLARED AN EMER ADVISING WE ARE PAN-PAN WITH RUDDER TRIM MALFUNCTION, HAVE REGAINED

CTL AND NEEDED ALT DISCRETION AND VECTORS TO ZZZ2 DUE TO WX. WE SLOWED DOWN THE ACFT AND WENT THROUGH THE EMER CHKLST. WE MANAGED TO ISOLATE ALL ISSUES TO THE RUDDER TRIM AND DECIDED TO FIX IN ORDER TO AVOID LNDG WITH AN ASYMMETRIC THRUST OR IN A SEVERE SLIP CONDITION. WHILE DSNDRG WE PUSHED THE YAW TRIM BREAKER AND REAPPLIED THE RUDDER TRIM CTLR TO CTR THE YAW TRIM FORCES. THIS WORKED AND THEN WE DISENGAGED THE YAW TRIM BREAKER AND MONITORED ALL TRIM FUNCTIONS CLOSELY WHILE THE CAPT HAND FLEW THE ACFT. WE LANDED SAFELY AT ZZZ2 WITH ALL PAX AND CREW OK. I BELIEVE THE DETERMINING FACTOR THAT ALLOWED THIS FLT CREW TO RESPOND QUICKLY AND ACCURATELY CAME FROM GOOD SIMULATOR TRAINING AND GOOD CRM IN AN EMER SITUATION. THIS LED TO EFFICIENT TROUBLESHOOTING AND CORRECTIONS. THERE WAS COMPLETE AGREEMENT FROM BOTH CREW MEMBERS ON THE EMER SITUATION FOLLOWED BY THE CORRECTIVE ACTION. THIS IS AN INCREDIBLE LEARNING EXPERIENCE AND WE ALL HOPE TO NEVER HAVE TO DUPLICATE IN ACTUAL FLT CONDITIONS. CALLBACK CONVERSATION WITH RPTR REVEALED THE FOLLOWING INFO: REPORTER STATED THAT LEAR ACFT USES THE TERMINOLOGY 'YAW TRIM ' AND 'YAW TRIM CONTROLLER' INSTEAD OF 'RUDDER TRIM' OR 'RUDDER TRIM CTL.' THE TERMS ARE USED INTERCHANGEABLY IN THE TEXT OF HIS REPORT AND APPLY TO THE SAME SYSTEM, WHICH IS TRIM CONTROL OF THE RUDDER. THIS RUDDER SYSTEM HAS AN ELECTRIC CONTROLLED RUDDER TRIM TAB ON THE LOWER PART OF THE RUDDER. PRESSING THE RED MASTER THUMB BUTON SWITCH (MSW) LOCATED ON BOTH YOKE CONTROL WHEELS WILL DISCONNECT THE AUTOPILOT SYSTEM, THE YAW DAMPER AND ALL ELECTRIC INPUTS TO THE ACFT TRIM CONTROL SURFACES, EXCEPT FOR THE AILERONS. PRESSING THE RED MSW BUTON MOMENTARILY STOPS ANY FURTHER MOVEMENT (RUNAWAY) OF THE TRIM SURFACE(S) FROM ELECTRIC INPUT. THIS MSW DISCONNECT 'MASTER SWITCH' WILL NOT BRING ANY OF THE TRIM POSITIONS BACK TO NEUTRAL OR CENTER THE TAB POSITION(S) WHILE BEING PRESSED OR AFTER BEING RELEASED. SO MANUAL RIGHT RUDDER PEDAL INPUT WAS REQUIRED FROM BOTH PILOTS, TO COMPENSATE FOR THE UNCOMMANDED LEFT (YAW) RUDDER TRIM WHEN THE CO-PILOT ATTEMPTED TO CORRECT THE EARLIER YAW BY USING THE RUDDER ELECTRIC TRIM SWITCH ON THE CENTER CONTROL PEDESTAL. AT THE SAME TIME, THE CAPTAIN WAS ALSO PRESSING THE MSW SWITCH ON THE CONTROL WHEEL AND PULLING THE RUDDER (YAW) TRIM CIRCUIT BREAKER TO DISCONNECT THE RUDDER ELECTRIC TRIM MOTOR AND PREVENT ANY FURTHER MOVEMENT OF THE TRIM TAB. ON DESCENT, THEY DID PUSH THE C/B FOR THE RUDDER TRIM BACK IN AND WERE ABLE TO CENTER THE RUDDER TRIM YAW USING THE RUDDER TRIM CONTROLLER SWITCH THAT EARLIER APPEARS TO HAVE CAUSED THE HARD LEFT YAW. THEY DID RE-PULL THE RUDDER TRIM CONTROL C/B AFTERWARDS TO PREVENT ANY FURTHER UNCOMMANDED INPUTS. THE REPORTER ALSO REITERATED THE BENEFITS OF THEIR RECENT RECURRENT SIMULATOR TRAINING IN HELPING THEM DEAL WITH THE UNCOMMANDED RUDDER TRIM INPUT.

## **Synopsis**

A LEAR-60 FLIGHT WAS INTERRUPTED BY A RUDDER TRIM MALFUNCTION AT CRUISE FLIGHT. EMERGENCY DECLARED. LANDED SAFELY. CREW AND PASSENGERS OK.

**ACN: 756008**

## **Time / Day**

Date : 200709  
Day : Sat  
Local Time Of Day : 1801 To 2400

## **Place**

Locale Reference.Airport : BOS.Airport  
State Reference : MA  
Altitude.MSL.Single Value : 24000

## **Environment**

Light : Night

## **Aircraft : 1**

Controlling Facilities.ARTCC : ZBW.ARTCC  
Operator.Common Carrier : Air Carrier  
Make Model Name : MD-80 Series (DC-9-80) Undifferentiated or Other Model  
Operating Under FAR Part : Part 121  
Flight Phase.Descent : Intermediate Altitude  
Route In Use.Arrival.STAR : GDM

## **Aircraft : 2**

Controlling Facilities.ARTCC : ZBW.ARTCC  
Operator.Common Carrier : Air Carrier  
Make Model Name : B757 Undifferentiated or Other Model  
Operating Under FAR Part : Part 121  
Flight Phase.Descent : Intermediate Altitude  
Route In Use.Arrival.STAR : GDM

## **Person : 1**

Affiliation.Company : Air Carrier  
Function.Flight Crew : Captain  
Function.Oversight : PIC  
ASRS Report : 756008

## **Events**

Anomaly.Inflight Encounter : Wake Turbulence  
Anomaly.Other Anomaly  
Independent Detector.Other.Flight CrewA : 1  
Resolatory Action.Flight Crew : Exited Adverse Environment  
Resolatory Action.Flight Crew : Regained Aircraft Control

## **Assessments**

Problem Areas : Environmental Factor

## **Narrative**

DESCENDING ON THE GDM3 INTO BOS WE ENCOUNTERED WAKE TURB WHICH ROLLED ACFT AROUND 15 TO 20 DEGS LEFT AND RIGHT WITH THE CORRESPONDING 'SHUDDER.' AUTOPLT KICKED OFF. LEVELED OFF SLIGHTLY AND FLEW OUT OF IT. CHKED ON CABIN, ALL WAS WELL. INQUIRED WITH ZBW AND WAS TOLD IT WAS A B757. HE WAS 12 MILES AHEAD, SAME ARR AND A LITTLE OVER 2000 FT BELOW. SURPRISED THAT WE ENCOUNTERED IT SO FAR BEHIND HIM. IF I REMEMBER CORRECTLY WE HAD A LEFT TO RIGHT QUARTERING TAILWIND OF 30 KTS.

### **Synopsis**

MD80 ENCOUNTERED WAKE TURB FOLLOWING B757. ACFT ROLLED LEFT AND RIGHT, DISENGAGING AUTOPILOT.

**ACN: 755370**

## **Time / Day**

Date : 200709  
Local Time Of Day : 1801 To 2400

## **Place**

Locale Reference.ATC Facility : SBBS.ARTCC  
State Reference : FO  
Altitude.MSL.Single Value : 30000

## **Environment**

Flight Conditions : VMC  
Light : Night

## **Aircraft : 1**

Controlling Facilities.ARTCC : SBBS.ARTCC  
Operator.Common Carrier : Air Carrier  
Make Model Name : B767-300 and 300 ER  
Operating Under FAR Part : Part 121  
Flight Phase.Cruise : Level

## **Component : 1**

Aircraft Component : Autothrottle/Speed Control

## **Person : 1**

Affiliation.Company : Air Carrier  
Function.Flight Crew : Captain  
Function.Oversight : PIC  
ASRS Report : 755370

## **Person : 2**

Affiliation.Company : Air Carrier  
Function.Flight Crew : First Officer  
ASRS Report : 755366

## **Person : 3**

Affiliation.Company : Air Carrier  
Function.Flight Crew : Relief Pilot  
ASRS Report : 755387

## **Events**

Anomaly.Aircraft Equipment Problem : Less Severe  
Anomaly.Altitude Deviation : Excursion From Assigned Altitude  
Anomaly.Non Adherence : Clearance  
Anomaly.Other Anomaly  
Independent Detector.Other.Flight CrewA : 1  
Independent Detector.Other.Flight CrewB : 2

Resolatory Action.Flight Crew : Regained Aircraft Control  
Resolatory Action.Flight Crew : Returned To Assigned Altitude

## **Assessments**

Problem Areas : Aircraft  
Problem Areas : Flight Crew Human Performance

## **Narrative**

SHORTLY AFTER THE TOP OF CLB AT FL300, THE STICK SHAKER ACTIVATED. AT FIRST, I THOUGHT THAT IT MIGHT BE AN ERRONEOUS ACTIVATION, BECAUSE THE ACFT ATTITUDE LOOKED NORMAL, WE WERE IN LEVEL FLT, AND I HAD NOT NOTICED ANY CHANGE IN ACFT WIND NOISE, PITCH ANGLE, OR TRIM. I NOTED THAT MY AIRSPD WAS APPROX 220 KIAS. I CALLED OUT TO THE FO, WHO WAS PF, THAT IT MIGHT BE A FALSE STICK SHAKER. I THEN NOTED HIS AIRSPD, WHICH WAS ALSO VERY LOW. I CALLED OUT LOWER THE NOSE, BUT BY THIS TIME HE HAD ALREADY ADVANCED THE THROTTLES, DISCONNECTED THE AUTOPLT AND BEGUN A DSCNT. WE ALSO HAD INOP EEC'S TO CONSIDER. I INFORMED BRASILIA CTR OF THE SITUATION, AND THEY CLRED US INTO AIRSPACE FROM 280 TO 300. WE REGAINED AIRSPD AND RETURNED TO NORMAL CRUISE. OUR LOWEST ALT WAS APPROX 28700 FT. AS WE WERE DISCUSSING WHAT MIGHT HAVE HAPPENED, THE AUTOTHROTTLES STARTED TO PULL THE THROTTLES BACK FOR NO REASON. AT THIS POINT, WE DISCONNECTED THEM. THIS ACFT HAD A RECENT HISTORY OF AUTOTHROTTLE MALFUNCTIONS, MOST OF WHICH DESCRIBED UNCOMMANDED DISCONNECT. HOWEVER, THERE WAS ONE DESCRIBING AN AUTOTHROTTLE MALFUNCTION LIKE WE HAD, BUT I WAS NOT AWARE OF IT BECAUSE IT WAS FURTHER BACK THAN I HAD REVIEWED. I AM GUESSING THAT THE AUTOTHROTTLES HAD RETARDED FROM CLB TO A BELOW CRUISE PWR SETTING, AND IN THE DARK WE DID NOT DETECT THE THROTTLE POS. AT ABOUT THIS TIME, I WAS PREPARING MY CHARTS FOR POS RPTS, AND THE FO WAS EDITING THE FMS. ALTHOUGH I ALWAYS ATTEMPT TO MAKE SURE ONLY 1 PLT IS HEADS DOWN AT A TIME, I CANNOT SAY FOR SURE WHAT HAPPENED IN THIS CASE. IN RETROSPECT, I PROBABLY SHOULD NOT HAVE ACCEPTED THIS TRIP, WHICH STARTED OUT IN ZZZ1 AND REQUIRED ME TO DEADHEAD ON VERY SHORT NOTICE TO ZZZ2 AND FLY THE ALL-NIGHTER TO SBGL. I WAS AWAKE FOR ALMOST 30 HRS, FOLLOWED BY A 34 HR LAYOVER AND ANOTHER ALL-NIGHTER, DURING WHICH THIS EVENT HAPPENED. OBVIOUSLY, I WAS NOT PERFORMING AT MY BEST.

## **Synopsis**

B767-300 THROTTLES RETARDED WITHOUT THE FLT CREW'S AWARENESS. THE AIRSPEED DECREASED, STICK SHAKER ACTIVATED, AND THE ACFT LOST APPROX 1300 FT WHILE AIRSPEED WAS REGAINED.

**ACN: 752811**

## **Time / Day**

Date : 200709  
Local Time Of Day : 1201 To 1800

## **Place**

Locale Reference.Airport : ZZZ.Airport  
State Reference : US

## **Environment**

Flight Conditions : VMC

## **Aircraft : 1**

Controlling Facilities.Tower : ZZZ.Tower  
Operator.Common Carrier : Air Carrier  
Make Model Name : A319  
Operating Under FAR Part : Part 121  
Flight Phase.Descent.Other

## **Component : 1**

Aircraft Component : PMC, Performance/Thrust Management Computer

## **Person : 1**

Affiliation.Company : Air Carrier  
Function.Flight Crew : Captain  
Function.Oversight : PIC  
Qualification.Pilot : ATP  
ASRS Report : 752811

## **Events**

Anomaly.Aircraft Equipment Problem : Less Severe  
Anomaly.Other Anomaly  
Independent Detector.Other.Flight CrewA : 1  
Resolatory Action.Flight Crew : Overcame Equipment Problem  
Consequence.Other

## **Assessments**

Problem Areas : Aircraft

## **Narrative**

FIRST LNDG WITH THIS ACFT: I LANDED IN ZZZ1 USING MANAGED SPD AND AUTOTHURST. I NOTED THAT THE ACFT SEEMED TO SUDDENLY 'PAY OFF EARLY' IN THE FLARE TO LNDG. I PULLED BACK A LITTLE MORE ON THE STICK TO AVERT A HARD LNDG, RESULTING IN A SLIGHTLY HIGHER THAN NORMAL TOUCHDOWN ATTITUDE AND A SLIGHTLY FIRMER THAN NORMAL TOUCHDOWN. I WOULDN'T HAVE PULLED BACK ANY MORE FOR FEAR OF A TAIL STRIKE. I REMARKED TO THE FO THAT THE HOT DAY AND THE LIGHT, BUT HIGHLY VARIABLE WINDS, OR

PERHAPS THE ACFT LOADING, MUST HAVE CONTRIBUTED SOMEHOW TO THE EARLY PAYOFF. SECOND LNDG WITH THIS ACFT: THE FO'S LNDG IN ZZZ2. I RECOMMENDED TO HIM DURING THE APCH BRIEFING TO BE ALERT FOR AN 'EARLY PAYOFF,' JUST IN CASE. HE FLEW A TEXTBOOK APCH, PULLED THE PWR OFF FOR TOUCHDOWN AND THE ACFT JUST FELL OUT FROM UNDER US. I DON'T BELIEVE THAT THE TOUCHDOWN WAS QUITE HARD ENOUGH TO REQUIRE A MECHANICAL INSPECTION, BUT IT WAS PRETTY CLOSE. I CALLED MAINT CTL AND OUTLINED THE SITUATION, STATING THAT I WASN'T CERTAIN WHETHER IT WAS PLT TECHNIQUE OR SOME UNKNOWN PROB WITH THE ACFT. I DID STATE THAT IF IT APPEARED TO ME THAT THE ACFT WAS MISBEHAVING IN ANY WAY ON OUR NEXT APCH, THEN I WOULD ENTER SOME TYPE OF HARD WRITE-UP IN THE ACFT LOGBOOK USING OUR BEST OBSERVATIONS. THIRD LNDG WITH THIS ACFT: MY LNDG BACK IN ZZZ1. I NOTED THAT THE 'BOX' SPDS WERE: VAPP=131 AND VLS=126, WHICH SEEMED REASONABLE. I NOTED THAT THE PFD SPDS ON BOTH SIDES WERE: VAPP=131 AND VLS (TOP OF 'FISHHOOK')=129. I FLEW THE LNDG USING SELECTED SPD ABOUT 135 AND MANUAL THRUST. THIS LNDG APPEARED NORMAL. I ENTERED A HARD WRITE-UP IN THE ACFT LOGBOOK OUTLINING OUR OBSERVATIONS. FLT CREW IDENT/NARRATIVE: THE ACFT 'PAID OFF EARLY' TWICE IN A ROW WITH 2 DIFFERENT PLTS AT 2 DIFFERENT ARPTS CAUSED US TO DEVOTE AN EXTRA AMOUNT OF ATTN TO POSSIBLE REASONS. A POSSIBLE REASON WAS UNCOVERED, WITH ADDITIONAL TECHNICAL WORK NECESSARY TO VERIFY. CONSULTED WITH MAINT, OVERRODE AUTOMATION ON NEXT LNDG, AND ENTERED HARD WRITE-UP IN ACFT LOGBOOK. THERE APPEARS TO BE A TECHNICAL MALFUNCTION OF UNKNOWN ORIGIN. CALLBACK CONVERSATION WITH RPTR REVEALED THE FOLLOWING INFO: REPORTER STATED THAT SEVERAL DAYS AFTER THIS EVENT THE AIRCRAFT WAS STILL IN SERVICE BUT MAINTENANCE CONTINUED SEARCHING FOR POSSIBLE CAUSES. THE BEST THEORY ABOUT THE CAUSE WAS A COMPUTER ERROR GENERATED BY AN ANGLE OF ATTACK VANE RIGGING ERROR. THE AIRBUS LNDG SPD CALCULATIONS ARE PRODUCED IN TWO DIFFERENT COMPUTERS AND IN A NO WIND CONDITION A 5 KNOT DIFFERENCE IS CALCULATED BETWEEN THE APCH SPD AND THE LANDING SPD. IF THE ANGLE OF ATTACK VANE IS MIS-RIGGED, THE ACFT IS HEAVIER THAN DISPLAYED OR A COMPUTER ERROR IS MADE THE SAME SPD CALCULATION ERROR CAN OCCUR WITH THE END RESULT BEING THE 'BOTTOM DROPPING OUT' DURING THE LANDING FLARE.

## **Synopsis**

AN A319 HARD LANDING OCCURRED AFTER THE ACFT DROPPED DURING AN APPARENTLY NORMAL LNDG FLARE. APCH AND LNDG SPDS WERE OBSERVED.



**ACN: 752210**

## **Time / Day**

Date : 200709  
Day : Sun  
Local Time Of Day : 0001 To 0600

## **Place**

Locale Reference.Airport : ZZZ.Airport  
State Reference : US  
Altitude.MSL.Single Value : 38000

## **Environment**

Flight Conditions : VMC  
Light : Night

## **Aircraft : 1**

Controlling Facilities.ARTCC : ZZZ.ARTCC  
Operator.Common Carrier : Air Carrier  
Make Model Name : B757-200  
Operating Under FAR Part : Part 121  
Flight Phase.Cruise : Level

## **Component : 1**

Aircraft Component : FMS/FMC

## **Person : 1**

Affiliation.Company : Air Carrier  
Function.Flight Crew : Captain  
Function.Oversight : PIC  
Experience.Flight Time.Last 90 Days : 200  
Experience.Flight Time.Total : 12500  
Experience.Flight Time.Type : 2500  
ASRS Report : 752210

## **Events**

Anomaly.Aircraft Equipment Problem : Critical  
Anomaly.Other Anomaly  
Independent Detector.Other.Flight CrewA : 1  
Resolatory Action.Flight Crew : Overrode Automation  
Resolatory Action.Flight Crew : Regained Aircraft Control

## **Assessments**

Problem Areas : Aircraft

## **Narrative**

AIRCRAFT IN CRUISE AT FL380 CLEAR. EXECUTED A RAPID, UNCOMMANDED RIGHT BANK OF 25-30 DEGREES. AUTO PILOT WAS DISCONNECTED BY THE

CAPTAIN AND AIRCRAFT WAS ROLLED WINGS LEVEL MANUALLY. RIGHT AND LEFT AUTOPILOTS OPERATED NORMALLY FOR THE REMAINING 2 HOURS OF THE 4 HOUR FLIGHT. THE EVENT HAPPENED PREVIOUSLY AND A MAINTENANCE BITE TEST FOUND NO FAULTS. CAPTAIN DISCUSSED WITH DISPATCH AND MAINT AND CONTINUED TO DESTINATION USING EITHER THE LEFT OR RIGHT AUTOPLT AS AGREED. LATER IN THE FLIGHT THE AUTO THROTTLE DISCONNECTED AND WAS RESELECTED.

## **Synopsis**

A B757 EXPERIENCED FLT GUIDANCE ANOMALIES AT FL380, 25 DEG - 30 DEG UNCOMMANDED ROLL AND AUTOTHROTTLE DISCONNECT.

**ACN: 750761**

## **Time / Day**

Date : 200708  
Local Time Of Day : 1201 To 1800

## **Place**

Locale Reference.Airport : IAD.Airport  
State Reference : VA  
Altitude.AGL.Single Value : 0

## **Environment**

Weather Elements : Rain

## **Aircraft : 1**

Controlling Facilities.Tower : IAD.Tower  
Operator.Common Carrier : Air Carrier  
Make Model Name : A319  
Operating Under FAR Part : Part 121  
Flight Phase.Ground : Taxi

## **Component : 1**

Aircraft Component : Nosewheel Steering

## **Person : 1**

Affiliation.Company : Air Carrier  
Function.Flight Crew : Captain  
Function.Oversight : PIC  
Experience.Flight Time.Last 90 Days : 185  
Experience.Flight Time.Total : 10000  
Experience.Flight Time.Type : 1800  
ASRS Report : 750761

## **Events**

Anomaly.Aircraft Equipment Problem : Less Severe  
Anomaly.Other Anomaly  
Independent Detector.Other.Flight CrewA : 1  
Resolatory Action.Other

## **Assessments**

Problem Areas : Aircraft  
Problem Areas : Environmental Factor

## **Narrative**

AFTER AN UNEVENTFUL LNDG ROLLOUT TO THE HIGH SPD TXWY, I TRANSITIONED LATERAL CTL OF THE ACFT FROM THE RUDDER PEDAL STEERING TO THE NOSEWHEEL TILLER. IT HAD BEEN RAINING AND THE FO AND I SAW SOME STANDING WATER ON THE TXWYS. THE FO NOTICED THAT IT FELT LIKE THE ACFT

ANTISKID WAS 'WORKING' AS WE WENT THROUGH A SMALL PUDDLE BECAUSE INDEED THE SMALL BUMP THAT WE BOTH FELT IN THE SEAT OF OUR PANTS DID FEEL LIKE ANTISKID CYCLING. WHEN I STRAIGHTENED OUT THE ACFT ONTO THE PARALLEL TXWY AND RETURNED THE TILLER TO THE NEUTRAL POS, THE ACFT BEGAN JERKY UNCOMMANDED R AND L STEERING MOTIONS. IT WAS VERY SMALL AT FIRST AND WE THOUGHT MAYBE WE HAD BLOWN A TIRE. BUT AS I ROLLED FORWARD A LITTLE MORE I ASSESSED THAT THE NOSEWHEEL STEERING WAS THE PROB. I TAXIED FURTHER AND WE BOTH NOTICED THAT THE TRANSIENT UNCOMMANDED L AND R MOTION OF THE ACFT BECAME LARGER IN AMPLITUDE. IT WAS AT THAT TIME (AT THE ENTRANCE TO THE MIDFIELD RAMP FOR PARKING) THAT WE ELECTED TO STOP AND ASK FOR A TOW IN TO OUR GATE. WE ACCOMPLISHED THE TOW-IN CHKLIST.

### **Synopsis**

AN A319 NOSEWHEEL STEERING DEVELOPED LARGE AMPLITUDE L AND R MOTIONS AFTER LNDG ROLL ON A WET RWY. FLT CREW HAD THE ACFT TOWED TO THE GATE.

**ACN: 747650**

## **Time / Day**

Date : 200707

Local Time Of Day : 1801 To 2400

## **Place**

Locale Reference.Airport : ZZZ.Airport

State Reference : US

Altitude.AGL.Single Value : 0

## **Environment**

Flight Conditions : VMC

Light : Night

## **Aircraft : 1**

Controlling Facilities.Tower : ZZZ.Tower

Operator.Common Carrier : Air Carrier

Make Model Name : EMB ERJ 145 ER&LR

Operating Under FAR Part : Part 121

Flight Phase.Landing : Roll

## **Component : 1**

Aircraft Component : Nose Gear

## **Person : 1**

Affiliation.Company : Air Carrier

Function.Flight Crew : First Officer

Qualification.Pilot : Commercial

ASRS Report : 747650

## **Person : 2**

Affiliation.Company : Air Carrier

Function.Flight Crew : Captain

Function.Oversight : PIC

Qualification.Pilot : ATP

ASRS Report : 747649

## **Events**

Anomaly.Aircraft Equipment Problem : Critical

Anomaly.Excursion : Runway

Anomaly.Ground Encounters.Other

Anomaly.Other Anomaly

Independent Detector.Other.Flight CrewA : 1

Independent Detector.Other.Flight CrewB : 2

Resolutive Action.Flight Crew : Regained Aircraft Control

## **Assessments**

Problem Areas : Aircraft

Problem Areas : Flight Crew Human Performance

## **Narrative**

I BEGAN THE DAY WITH A ZZZ1 TURN, THEN THE ZZZ LEG. THE ZZZ1 TURN HAD WX ENRTE, BUT WAS UNEVENTFUL. THE ZZZ LEG HAD WX ON DEP, BUT WAS GOOD THE REMAINDER OF THE FLT. UPON OUR INITIAL DSCNT INTO THE ZZZ AREA, AN ADVISORY EICAS MESSAGE, HYD 1 LOW QUANTITY, APPEARED. THE AOM VOLUME #1 WAS REFED AND CHKLST ACCOMPLISHED. THE HYD PAGE WAS MONITORED WITH NO CHANGES. I THEN LISTENED TO THE ATIS. THE CAPT AND I DISCUSSED THE CALM WINDS AND THAT WE WOULD USE RWY XX AND USE FLAPS 22 DEGS. AT GEAR EXTENSION, THE EICAS MESSAGE EXTINGUISHED. THE CAPT FLEW A STABILIZED APCH AND MADE A SMOOTH LNDG IN THE TOUCHDOWN ZONE. THE NOSEWHEEL SMOOTHLY TOUCHED DOWN ON THE RWY AT WHICH TIME THE ACFT BEGAN DRIFTING TO THE L. THE CAPT WAS UNABLE TO MAINTAIN THE RWY CTRLINE. AFTER THE ACFT SLOWED AND DIRECTIONAL CTL WAS REGAINED, THE CAPT EXITED THE RWY. WE THEN CONTACTED THE TWR AND NOTIFIED THEM OF A POSSIBLE RWY LIGHT STRIKE. WE PERFORMED THE AFTER LNDG CHKLST AND SHUT DOWN BOTH ENGS WITH THE APU RUNNING. THE CAPT SPOKE WITH THE FLT ATTENDANT AND PAX TO INFORM THEM OF THE SITUATION AND ENSURE NO ONE WAS INJURED. DISPATCH, MAINT, AND ZZZ OPS WERE THEN ALL CONTACTED. WE WAITED ON THE TXWY UNTIL CONTRACT MAINT COULD CONFIRM IT WAS SAFE TO BE TOWED IN. WE WERE TOWED TO THE GATE, DEPLANED OUR PAX AND PERFORMED THE PARKING AND TERMINATING CHKLSTS. THE CAPT MADE THE MAINT LOG ENTRY. I CONDUCTED A POSTFLT INSPECTION. THE FRONT TIRES WERE BALD AND THE #2 TIRE WAS DAMAGED AND THE WHEEL WELL CONTAINED FOD. WE THEN SUBMITTED TO THE ALCOHOL TESTS. CALLBACK CONVERSATION WITH RPTR REVEALED THE FOLLOWING INFO: REPORTER STATED THAT RUNWAY INSPECTION REVEALED NOSEWHEEL SKID MARKS ON RWY CENTERLINE, THEN VEERING TO THE LEFT TOWARD RWY EDGE. THE PLT WAS ABLE TO MAINTAIN CENTERLINE UNTIL RUDDER EFFECTIVENESS WAS LOST AS SPEED WAS REDUCED. AS THE ACFT APPROACHED THE RWY EDGE, DIFFERENTIAL BRAKING BECAME MORE EFFECTIVE AND DIRECTIONAL CONTROL WAS REGAINED. APPARENTLY, THIS ACFT TYPE EXHIBITS AN ANOMALY WHEREBY THE NOSEWHEEL STEERING INITIATES AN UNCOMMANDED TURN. A PROCEDURE FOR 'UNCOMMANDED SWERVING' IS DETAILED IN THE PLT'S HANDBOOK.

## **Synopsis**

EMB-145 DRIFTED UNCONTROLLABLY TO THE LEFT AFTER TOUCHDOWN, STRIKING A RWY LIGHT BEFORE CONTROL WAS REGAINED.

**ACN: 735194**

## **Time / Day**

Date : 200704  
Local Time Of Day : 0601 To 1200

## **Place**

Locale Reference.Airport : ZZZ.Airport  
State Reference : US  
Altitude.AGL.Single Value : 0

## **Environment**

Flight Conditions : VMC  
Light : Daylight

## **Aircraft : 1**

Operator.General Aviation : Personal  
Make Model Name : Falcon 20FJF/20C/20D/20E/20F  
Operating Under FAR Part : Part 91  
Flight Phase.Landing : Roll

## **Component : 1**

Aircraft Component : Brake System

## **Person : 1**

Affiliation.Other : Personal  
Function.Flight Crew : Captain  
Function.Oversight : PIC  
Qualification.Pilot : ATP  
Experience.Flight Time.Last 90 Days : 60  
Experience.Flight Time.Total : 9500  
Experience.Flight Time.Type : 600  
ASRS Report : 735194

## **Events**

Anomaly.Aircraft Equipment Problem : Critical  
Anomaly.Excursion : Runway  
Anomaly.Other Anomaly  
Independent Detector.Other.Flight CrewA : 1  
Resolatory Action.None Taken : Unable

## **Assessments**

Problem Areas : Aircraft

## **Narrative**

NORMAL TOUCHDOWN ON CTRLINE AT 1000 FT MARKER. I LOWERED THE NOSEWHEEL AND CALLED FOR SPD BRAKES. COPLT EXTENDED SPD BRAKES. I STARTED TO APPLY BRAKING AND ACFT STARTED TO SLOW. THERE ARE NO

THRUST REVERSERS ON THIS ACFT. SEVERAL SECONDS LATER, AS ACFT WAS SLOWING, ACFT VEERED TO THE L. I APPLIED FULL R RUDDER AND FULL R BRAKE AND RELEASED ALL PRESSURE TO THE L BRAKE AND RUDDER. I GRABBED THE STEERING TILLER AND TRIED TO TURN IT TO THE R. I COULDN'T MOVE IT. WE EXITED THE RWY AND WENT ONTO THE GRASS. THE SKID MARKS ON THE RWY SHOW THAT THE L OUTBOARD WHEEL LOCKED AND WHEN THE ACFT LEFT THE RWY, BOTH WHEELS WERE LOCKED AND DUG UP THE DIRT FOR ABOUT 20 FT BEFORE RELEASING AND ROLLING ON THE GRASS. PLEASE NOTE THAT DURING THIS WHOLE OCCURRENCE, I WAS PUSHING AS HARD AS I COULD ON THE R BRAKE BUT IT WOULD NOT RESPOND. SKID MARKS SHOW THAT THE L SIDE WAS REALLY DRAGGING AND LOCKED UP. I COULD NOT GET ANYTHING FROM THE R BRAKE OR VERY LITTLE, IF ANY. THERE WAS NO DAMAGE TO THE ACFT OTHER THAN THE R NOSE TIRE, WHICH BROKE THE BEAD AND WENT FLAT. IT DID NOT COME OFF THE RIM. THERE WERE NO INJURIES TO ANY PERSON, AND THERE WAS NO OTHER DAMAGE TO THE ACFT. ALSO, THERE WAS NO DAMAGE TO THE RWY OR RWY LIGHTS. CALLBACK CONVERSATION WITH RPTR REVEALED THE FOLLOWING INFO: THE ACFT WAS EQUIPPED WITH ANTI-SKID BUT SHOWED NO FAULTS DURING THIS EVENT. POST FLIGHT REVEALED THAT THE LEFT BRAKE LOCKED WHILE THE ACFT WAS ON CENTERLINE, THE RIGHT BRAKE NEVER SHOWED ANY SIGN OF BRAKING OR SKIDDING. THE NOSEWHEEL SHOWED SIGNS OF STEERING SKID MARKS AS THE ACFT DEPARTED THE RWY. SHORTLY BEFORE THE ACFT CAME TO A STOP ON THE GRASS THE LEFT BRAKE RELEASED. NO DAMAGE WAS DONE TO THE ACFT HOWEVER NO MAINTENANCE HAS BEEN PERFORMED TO INVESTIGATE THE PROBLEM.

## **Synopsis**

DA20 CAPTAIN REPORTS BRAKE MALFUNCTION THAT CAUSES ACFT TO VEER OFF THE RWY DURING ROLL OUT.



**ACN: 700413**

### **Time / Day**

Date : 200606  
Day : Mon  
Local Time Of Day : 1201 To 1800

### **Place**

Locale Reference.Intersection : RINNY  
State Reference : FL  
Altitude.MSL.Single Value : 35000

### **Environment**

Flight Conditions : IMC  
Light : Daylight

### **Aircraft : 1**

Controlling Facilities.ARTCC : ZMA.ARTCC  
Operator.Common Carrier : Air Carrier  
Make Model Name : A300  
Operating Under FAR Part : Part 121  
Flight Phase.Cruise : Level

### **Aircraft : 2**

Controlling Facilities.ARTCC : ZMA.ARTCC  
Operator.Common Carrier : Air Carrier  
Make Model Name : Any Unknown or Unlisted Aircraft Manufacturer  
Operating Under FAR Part : Part 121  
Flight Phase.Cruise : Level

### **Person : 1**

Affiliation.Company : Air Carrier  
Function.Flight Crew : Captain  
Function.Oversight : PIC  
ASRS Report : 700413

### **Person : 2**

Affiliation.Company : Air Carrier  
Function.Flight Crew : First Officer  
ASRS Report : 700481

### **Person : 3**

Affiliation.Company : Air Carrier  
Function.Flight Crew : Captain  
Function.Oversight : PIC

### **Events**

Anomaly.Altitude Deviation : Excursion From Assigned Altitude

Anomaly.Inflight Encounter : Turbulence

Anomaly.Other Anomaly

Independent Detector.Other.Flight CrewA : 1

Independent Detector.Other.Flight CrewB : 2

Resolatory Action.Flight Crew : Exited Adverse Environment

Resolatory Action.Flight Crew : Regained Aircraft Control

## **Assessments**

Problem Areas : Environmental Factor

## **Narrative**

WHILE ENRTE, WE ENCOUNTERED SEVERE TURB AT FL350 AT RINNY INTXN THAT RESULTED IN AN ALT LOSS OF APPROX 8000 FT. WE WERE IMC AT THE START OF THE DSCNT AND WERE UNABLE TO CTL THE DSCNT UNTIL WE BROKE OUT IN THE CLR. WE WERE USING WX RADAR, HOWEVER, WE WERE NOT PAINTING ANY WX. ABOUT 10 MINS PRIOR TO THIS TURB WE ASKED ZMA FOR A RIDE RPT AND WERE TOLD THAT NO ONE HAD COMPLAINED. WE WERE UNABLE TO CONTACT ZMA DIRECTLY DURING THE ALT LOSS BUT WE DID RELAY OUR SITUATION VIA AN ACRY FLT.

## **Synopsis**

A300 EXPERIENCES LOSS OF CTL IN TURB OVER THE BAHAMAS.

**ACN: 676549**

## **Time / Day**

Date : 200510  
Day : Mon  
Local Time Of Day : 0601 To 1200

## **Place**

Locale Reference.Airport : ZZZ.Airport  
State Reference : US  
Altitude.MSL.Single Value : 2000

## **Environment**

Flight Conditions : VMC  
Light : Night

## **Aircraft : 1**

Controlling Facilities.Tower : ZZZ.Tower  
Operator.Common Carrier : Air Carrier  
Make Model Name : B737-400  
Operating Under FAR Part : Part 121  
Flight Phase.Climbout : Initial

## **Component : 1**

Aircraft Component : Horizontal Stabilizer Trim Motor  
Aircraft Component : Horizontal Stabilizer Trim Motor

## **Component : 2**

Aircraft Component : Horizontal Stabilizer Control

## **Person : 1**

Affiliation.Company : Air Carrier  
Function.Flight Crew : First Officer  
Experience.Flight Time.Last 90 Days : 230  
Experience.Flight Time.Type : 3670  
ASRS Report : 676549

## **Person : 2**

Affiliation.Company : Air Carrier  
Function.Flight Crew : Captain  
Function.Oversight : PIC  
Experience.Flight Time.Last 90 Days : 250  
ASRS Report : 676550

## **Events**

Anomaly.Aircraft Equipment Problem : Critical  
Anomaly.Other Anomaly  
Independent Detector.Other.Flight CrewA : 1

Independent Detector.Other.Flight CrewB : 2  
Resolatory Action.Aircraft : Equipment Problem Dissipated  
Resolatory Action.Flight Crew : Overcame Equipment Problem  
Resolatory Action.Flight Crew : Overrode Automation  
Consequence.Other : Company Review  
Consequence.Other

## **Assessments**

Problem Areas : Aircraft  
Problem Areas : Environmental Factor  
Problem Areas : Flight Crew Human Performance

## **Narrative**

ON CLBOUT AT APPROX 2000 FT MSL, FLAPS 5 BEING RETRACTED TO FLAPS 1, ACFT ACCELERATING, THE ACFT WENT INTO AN UNCOMMANDED NOSE DOWN ATTITUDE WITH CLB POWER SELECTED. NOSE UP TRIM SELECTED BUT SLOW TO RESPOND WITH A HVY CTL YOKE TO BRING ACFT TO LEVEL AND CLB ATTITUDE. AS THE ACFT BEGAN GRADUAL DSCNT, AIRSPD INCREASED RAPIDLY BEFORE PF COULD DISENGAGE AUTOTHROTTLES, FLAPS 1 OVERSPD OCCURRED BY APPROX 8 KTS (258 KTS INDICATED). ONCE AIRSPD DECREASED AND FLAPS RETRACTED, NO OTHER FLT CTL PROBS WERE EVIDENT AND NO OTHER ABNORMAL INDICATIONS WERE PRESENT. FLT CONTINUED TO ZZZ WITH NORMAL DSCNT APCH AND LNDG. CALLBACK CONVERSATION WITH RPTR REVEALED THE FOLLOWING INFO: THE RPTR STATED THE UNCOMMANDED NOSE DOWN ATTITUDE CHANGE WAS CAUSED BY THE AUTOPLT STABILIZER TRIM. THE FLT RECORDER WAS REMOVED AND ESTABLISHED THAT A 700 FT PER MIN DSCNT WAS INITIATED. THE RPTR STATED THE AUTOPLT AND AUTOTHROTTLE SYSTEMS WERE SWITCHED OFF, BUT A FLAP OVERSPD OCCURRED BY 8 KTS. ONCE AIRSPD WAS DECREASED AND FLAPS RETRACTED, ALL FLT CTLS WERE NORMAL. MAINT ACTION WAS REPLACEMENT OF STABILIZER TRIM SWITCH AND THE LOW SPD JACKSCREW ACTUATOR.

## **Synopsis**

A B737-400 IN CLB AT 2000 FT, FLAPS RETRACTING FROM 5 TO 1 UNITS, EXPERIENCED UNCOMMANDED NOSE DOWN ATTITUDE WITH CLB POWER. A FLAP OVERSPD OF 8 KTS WAS EXPERIENCED.

**ACN: 668912**

## **Time / Day**

Date : 200508

Day : Fri

## **Place**

Locale Reference.Airport : ZZZ.Airport

State Reference : US

Altitude.AGL.Single Value : 0

## **Aircraft : 1**

Operator.Common Carrier : Air Carrier

Make Model Name : MD-80 Series (DC-9-80) Undifferentiated or Other Model

Operating Under FAR Part : Part 121

Flight Phase.Ground : Pushback

## **Person : 1**

Affiliation.Company : Air Carrier

Function.Maintenance : Technician

ASRS Report : 668912

## **Person : 2**

Affiliation.Other : Contracted Service

Function.Other Personnel.Other

## **Person : 3**

Affiliation.Company : Air Carrier

Function.Other Personnel.Other

## **Person : 4**

Affiliation.Company : Air Carrier

Function.Flight Crew : Captain

Function.Oversight : PIC

## **Person : 5**

Affiliation.Company : Air Carrier

Function.Flight Crew : First Officer

## **Events**

Anomaly.Other Anomaly

Anomaly.Other Anomaly.Other

Independent Detector.Other.Flight CrewA : 5

Independent Detector.Other.Flight CrewB : 6

Resolatory Action.Flight Crew : Regained Aircraft Control

## **Assessments**

Problem Areas : Company

## **Narrative**

WE WERE SITTING AT GATE X AFTER BRINGING AN ACFT UP FROM THE HANGAR. AN ACFT WAS BEING PUSHED BACK FROM GATE Y BY A CONTRACT CREW FOR A FLT AT ABOUT XA:25. ONE OF THE GUYS IN OUR TRUCK NOTICED THAT THE STEEL PIN THAT CONNECTS THE TOWBAR TO THE TUG WASN'T IN AND AS HE WAS POINTING IT OUT TO US, THE TUG DRIVER TURNED THE WHEEL AND SLIGHTLY LET OFF THE GAS. THE TUG SLOWED DOWN BUT THE AIRPLANE ROLLED ON WITHOUT IT. THE TUG DRIVER, WHO NORMALLY HAS HEADSET COMMUNICATIONS WITH THE COCKPIT, DIDN'T HAVE THE HEADSET AT THIS TIME, A GUY WALKING ALONG SIDE THE PLANE DID. THE TUG DRIVER WAS UNABLE TO GET HIS ATTENTION FOR SEVERAL SECONDS WHILE THE AIRPLANE CONTINUED TO ROLL TOWARD THE GATES ALL BY ITSELF. IT APPEARED THE COPLT NOTICED THAT SOMETHING WAS WRONG BEFORE THE GUY ON THE HEADSET CONTACTED THEM. THE CREW WAS ABLE TO BRING THE ACFT TO A SMOOTH STOP SO WITH ANY LUCK, NOBODY ELSE ON BOARD NOTICED ANYTHING WRONG. I ESTIMATE THE PLANE ROLLED 25 TO 30 FT BY ITSELF. LUCKILY, NO INJURY OR DAMAGE OCCURRED, BUT THERE WAS A LOT OF POTENTIAL FOR BOTH JUST BECAUSE SOMEONE FORGOT TO PUT THE PIN IN.

## **Synopsis**

AN ACR MECHANIC RPTS THAT A CONTRACT PUSHBACK CREW FAILED TO INSTALL A PIN CONNECTING THE TUG TO THE ACFT TOWBAR, WHICH CAUSED THE ACFT TO ROLL TOWARDS THE GATE UNCOMMANDED AS THE TUG SLOWED.

**ACN: 654099**

## **Time / Day**

Date : 200504  
Day : Fri

## **Place**

Locale Reference.Airport : SLC.Airport  
State Reference : UT  
Altitude.MSL.Bound Lower : 8000  
Altitude.MSL.Bound Upper : 7500

## **Environment**

Weather Elements : Turbulence

## **Aircraft : 1**

Controlling Facilities.TRACON : S56.TRACON  
Operator.Common Carrier : Air Carrier  
Make Model Name : B737-300  
Operating Under FAR Part : Part 121  
Flight Phase.Descent : Approach

## **Person : 1**

Affiliation.Company : Air Carrier  
Function.Flight Crew : First Officer  
Experience.Flight Time.Last 90 Days : 250  
Experience.Flight Time.Total : 10000  
Experience.Flight Time.Type : 2500  
ASRS Report : 654099

## **Person : 2**

Affiliation.Company : Air Carrier  
Function.Flight Crew : Captain  
Function.Oversight : PIC  
Experience.Flight Time.Last 90 Days : 200  
Experience.Flight Time.Total : 22000  
Experience.Flight Time.Type : 5000  
ASRS Report : 654108

## **Person : 3**

Affiliation.Government : FAA  
Function.Controller : Approach

## **Person : 4**

Affiliation.Company : Air Carrier  
Function.Flight Attendant : On Duty

## **Events**

Anomaly.Inflight Encounter : Turbulence  
Anomaly.Inflight Encounter : Weather  
Anomaly.Other Anomaly  
Independent Detector.Other.Flight CrewA : 1  
Independent Detector.Other.Flight CrewB : 2  
Resolatory Action.Flight Crew : Executed Go Around  
Resolatory Action.Flight Crew : Exited Adverse Environment  
Resolatory Action.Flight Crew : Regained Aircraft Control  
Consequence.Other

## **Assessments**

Problem Areas : ATC Facility  
Problem Areas : Weather

## **Narrative**

RPT OF SEVERE TURB WITH POSSIBLE FLAP OVERSPD. INBOUND TO SLC CONDITIONS: 160 BROKEN, 10 SM VISIBILITY, WINDS 280 DEGS AT 24 KTS GUSTING TO 41 KTS. FRONT OVER ARPT RESULTING IN WIND SHIFT FROM S TO NW IN ABOUT A 30 MIN TIME FRAME. WINDSHEAR ADVISORIES IN EFFECT. VECTOR AT 15000 FT TO JOIN ILS RWY 34R ABOUT 20 MI. ALT 15000 FT TO ABOUT 9500 FT CONTINUOUS LIGHT CHOP. AT 9500 FT, TURB SUDDENLY TURNED SEVERE. AIRPLANE SHAKEN VIOLENTLY AND AIRSPD +/-20 KTS. AT THAT TIME, FLAPS AT 5 DEGS AND AIRSPD ABOUT 190 KTS. ATTEMPTED TO CONTINUE LOWER FOR POTENTIAL SMOOTHER AIR. INFORMED ATC. THEY SAID 'ROGER.' DOWN TO ABOUT 8000 FT AND BEGAN GAR. SEVERE TURB CONTINUED TO ABOUT 10000 FT THEN WENT TO MODERATE. VECTORED FOR ABOUT 10 MINS UNTIL CONDITIONS IMPROVED. CONCLUSION: WE WERE UNAWARE OF THE SEVERE TURB. WE PREPARED FOR POSSIBLE WINDSHEAR AND MODERATE TURB, HOWEVER, ATC NEVER INFORMED US THAT ACFT HAD ALREADY EXECUTED GAR'S THE LAST 20 OR SO MINS FOR THE SAME REASON. HAD THEY SAID SO, WE WOULD NOT HAVE ATTEMPTED SUCH APCH. RPT FILED FOR THE LACK OF ATC COM PRIOR TO THE APCH AND THE POSSIBLE FLAP OVERSPDS THAT MAY HAVE OCCURRED MOMENTARILY ALTHOUGH WE COULD NOT CONFIRM DURING FLT. ALSO FLT ATTENDANTS IN THE REAR JUMPSEAT SAY THEY MAY HAVE SLIGHT BACK INJURIES AS JUMPSEAT BOUNCED THEM UP AND DOWN. MAINT ALSO NOTIFIED AND IN THE LOG FOR SEVERE TURB.

## **Synopsis**

A B737-300 EXPERIENCED SEVERE TURB APCHING SLC RESULTING IN A GAR. ATC GAVE NO WARNING THAT PREVIOUS ACFT WENT AROUND FOR TURB.



**ACN: 625993**

### **Time / Day**

Date : 200407  
Day : Tue  
Local Time Of Day : 0601 To 1200

### **Place**

Locale Reference.Airport : ZZZ.Airport  
State Reference : US  
Altitude.MSL.Single Value : 4000

### **Environment**

Flight Conditions : IMC  
Light : Daylight

### **Aircraft : 1**

Controlling Facilities.TRACON : ZZZ.TRACON  
Operator.Common Carrier : Air Carrier  
Make Model Name : B737-800  
Operating Under FAR Part : Part 121  
Navigation In Use.ILS.Localizer & Glide Slope : 26L  
Flight Phase.Descent : Approach  
Route In Use.Approach : Instrument Precision

### **Aircraft : 2**

Controlling Facilities.Tower : OR9.Tower  
Controlling Facilities.Tower : ZZZ.Tower  
Make Model Name : Any Unknown or Unlisted Aircraft Manufacturer  
Flight Phase.Ground : Holding

### **Component : 1**

Aircraft Component : ILS/VOR

### **Person : 1**

Affiliation.Company : Air Carrier  
Function.Flight Crew : Captain  
ASRS Report : 625993

### **Person : 2**

Affiliation.Company : Air Carrier  
Function.Flight Crew : First Officer

### **Person : 3**

Function.Flight Crew : Captain  
Function.Oversight : PIC

### **Person : 4**

Affiliation.Government : FAA  
Function.Controller : Approach

## **Person : 5**

Affiliation.Government : FAA  
Function.Controller : Local

## **Events**

Anomaly.Altitude Deviation : Excursion From Assigned Altitude  
Anomaly.Incursion : Runway  
Anomaly.Inflight Encounter : Weather  
Anomaly.Non Adherence : FAR  
Anomaly.Other Anomaly  
Anomaly.Other Anomaly : Speed Deviation  
Anomaly.Other Anomaly : Unstabilized Approach  
Anomaly.Other Anomaly.Other  
Independent Detector.Aircraft Equipment.Other Aircraft Equipment : ILS Glideslope Indicator  
Independent Detector.Other.Flight CrewA : 1  
Independent Detector.Other.Flight CrewB : 2  
Resolatory Action.None Taken : Anomaly Accepted

## **Assessments**

Problem Areas : ATC Human Performance  
Problem Areas : Flight Crew Human Performance  
Problem Areas : Navigational Facility

## **Situations**

ATC Facility.Procedure Or Policy : ZZZ.Tower  
Airport.Procedure Or Policy : ZZZ.Airport  
Chart.Airport : ZZZ.Airport

## **Narrative**

ACFT WAS CLRED FOR ILS 26L APCH IN IMC. AUTOPLT ON, ESTABLISHED ON THE LOC/GS, AND CLRED TO LAND. GS SUDDENLY JUMPED UP AND THEN DOWN ABOUT 1/2 DOT WITH THE AUTOPLT STAYING CONNECTED. THE OSCILLATIONS WERE SUCH AS TO ALARM THE CREW. I REPORTED THE PROB TO THE TWR BEFORE LNDG AND THEY INDICATED THE PROB MIGHT BE DUE TO XING ACFT ON THE APCH END OF 26L. AFTER LNDG I CALLED THE TWR TO FURTHER EXPLAIN THE AUTOPLT UPSET AND THE IMPACT ON PAX. I NOTED TO THEM THERE WAS AN ACFT STOPPED INSIDE THE ILS PROTECTED AREA WHEN WE FLEW OVER THE APCH END OF THE RWY, AND THAT THERE WERE ALSO SEVERAL ACFT SEEN XING THE APCH END OF THE RWY, WHEN WE WERE ON SHORT FINAL AFTER BREAKING OUT OF THE CLOUDS. THE TWR CTRLR I SPOKE WITH INDICATED HE HAD NO IDEA WHICH ACFT WERE ON ILS APCHS AND WHICH WERE ON VISUAL APCHS DURING THE TIME OF THE OCCURRENCE. THIS SIT NEEDS ATTN SINCE WE ARE ONLY IN THE FIRST MONTH OF OP WITH RWY 26L AFTER CONSTRUCTION. WHEN ACFT ARE CLRED FOR AN ILS IN IMC CONDITIONS, THE ILS PROTECTED AREA SHOULD BE JUST THAT, PROTECTED. AT THE VERY LEAST AIRCREWS SHOULD BE NOTIFIED OF ANY ENCROACHMENT OF ACFT WHICH MAY AFFECT THE PERFORMANCE OF THE ILS SYS.

## **Synopsis**

AFTER PORPOISING OF THE ACFT WHILE ON FINAL APCH A B737 PIC FILES A RPT ON THE VIOLATION OF THE ILS HOLD SHORT AREA FOR RWY 26L.

**ACN: 611901**

## **Time / Day**

Date : 200403  
Day : Wed  
Local Time Of Day : 1201 To 1800

## **Place**

Locale Reference.Airport : TPA.Airport  
State Reference : FL  
Altitude.AGL.Single Value : 0

## **Environment**

Flight Conditions : VMC  
Weather Elements : Windshear

## **Aircraft : 1**

Controlling Facilities.Tower : TPA.Tower  
Operator.Common Carrier : Air Carrier  
Make Model Name : B757-200  
Operating Under FAR Part : Part 121  
Flight Phase.Landing : Roll

## **Person : 1**

Affiliation.Company : Air Carrier  
Function.Flight Crew : Captain  
Function.Oversight : PIC  
Qualification.Pilot : ATP  
Experience.Flight Time.Last 90 Days : 200  
Experience.Flight Time.Total : 24000  
Experience.Flight Time.Type : 5000  
ASRS Report : 611901

## **Person : 2**

Affiliation.Company : Air Carrier  
Function.Flight Crew : First Officer  
Qualification.Pilot : Commercial  
Qualification.Pilot : Instrument  
Qualification.Pilot : Multi Engine  
Experience.Flight Time.Last 90 Days : 180  
Experience.Flight Time.Total : 8000  
Experience.Flight Time.Type : 1500  
ASRS Report : 612145

## **Person : 3**

Affiliation.Government : FAA  
Function.Controller : Local

## **Events**

Anomaly.Other Anomaly  
Independent Detector.Other.Flight CrewA : 1  
Independent Detector.Other.Flight CrewB : 2  
Consequence.Other : Company Review

## Assessments

Problem Areas : Aircraft  
Problem Areas : Flight Crew Human Performance  
Problem Areas : Weather

## Narrative

ON FINAL APCH, TWR RPTED WINDS 008 DEGS AT 16 KTS. NO GUSTS OF WINDSHEAR RPTED. REF SPD FOR 188000 LBS WAS 128 KTS. SET TARGET OF 136 KTS AND ADDED ABOUT 4-5 EXTRA KTS TILL CLOSE TO FLARE. ALL NORMAL XWIND LNDG SOP'S FOLLOWED. ABOUT 4 FT ABOVE RWY, ACFT ROLLED L, BOUNCED OFF L MAIN THEN ROLLED R, BOUNCED OFF R MAIN, THEN ROLLED L AND L MAIN TOUCHED AGAIN BEFORE ALL WHEELS ON RWY. WHOLE TIME I WAS REACTING INSTINCTIVELY BUT WAS UNABLE TO ARREST ROLL. IT FELT LIKE WE WERE IN A VORTEX BUT NO WAKE TURB WAS RPTED AHEAD OF US. ACFT STAYED ON CTRLINE. RPTED WINDSHEAR TO TWR. ON GND, TALKED TO STATION MGR. LATER CALLED FLT OPS DUTY MGR, DISPATCH AND MAINT. AN INSPECTION OF ACFT WAS ORDERED BY MAINT. IN OVER 3 DECADES OF FLYING, AND WITH MUCH EXPERIENCE WITH HIGH, GUSTY XWINDS, I'VE NEVER ENCOUNTERED A LOSS OF ROLL CTL LIKE THIS. SUPPLEMENTAL INFO FROM ACN 612145: ON FINAL, WE DECIDED TO ADD 8 KTS TO REF BECAUSE OF A STEADY 30-40 DEG R XWIND OF 17 KTS. ON SHORT FINAL, TWR CTRLR AGAIN RPTED A STEADY 16 KT WIND AT 030 DEGS. CAPT CARRIED ABOUT 5 EXTRA KTS MOST OF THE WAY DOWN FINAL AND THE WINDS DID NOT SEEM TO BE GUSTING. WE COULD TELL THE WINDS WERE STRONG FROM OUR CRAB HDG OFF THE LOC HDG. VERY SUDDENLY AS WE STARTED TO GET INTO THE FLARE, THE WING DIPPED TOWARD THE RWY. CAPT COUNTERED WITH AILERON IMMEDIATELY. THE WINGS ROCKED BACK AND FORTH APPROX 2 MORE TIMES AS THE WHEELS TOUCHED SEPARATELY ONE AFTER THE OTHER WITH A BOUNCE AND THEN 2 MORE TOUCHES BY BOTH MAINS. THE ENCOUNTER HAPPENED SO CLOSE TO THE GND THERE WAS NO TIME TO GO AROUND. CAPT KEPT THE ACFT ALIGNED WITH THE CTRLINE THE ENTIRE TIME. AFTER DISCUSSION, WE DIDN'T THINK IT WAS A HARD LNDG, HOWEVER, DEFINITELY FIRM.

## Synopsis

B757-200 FLT CREW EXPERIENCES LATERAL CTL DIFFICULTY ON XWIND LNDG AT TPA.

**ACN: 610477**

### **Time / Day**

Date : 200403

Day : Thu

### **Place**

Locale Reference.Airport : PHL.Airport

State Reference : PA

Altitude.AGL.Single Value : 400

### **Environment**

Flight Conditions : VMC

Light : Daylight

### **Aircraft : 1**

Controlling Facilities.Tower : PHL.Tower

Operator.Common Carrier : Air Carrier

Make Model Name : MD-88

Operating Under FAR Part : Part 121

Flight Phase.Climbout : Initial

Flight Phase.Climbout : Takeoff

### **Aircraft : 2**

Controlling Facilities.Tower : PHL.Tower

Operator.Common Carrier : Air Carrier

Make Model Name : A319

Operating Under FAR Part : Part 121

Flight Phase.Climbout : Initial

Flight Phase.Climbout : Takeoff

### **Person : 1**

Affiliation.Government : FAA

Function.Controller : Local

Qualification.Controller : Radar

Experience.Controller.Radar : 13

Experience.Controller.Time Certified In Position1 : 13

ASRS Report : 610477

### **Person : 2**

Affiliation.Company : Air Carrier

Function.Flight Crew : Captain

Function.Oversight : PIC

Qualification.Pilot : ATP

Qualification.Pilot : Instrument

Qualification.Pilot : Multi Engine

Experience.Flight Time.Last 90 Days : 120

Experience.Flight Time.Total : 13800

Experience.Flight Time.Type : 6000  
ASRS Report : 610493

### **Person : 3**

Affiliation.Company : Air Carrier  
Function.Flight Crew : First Officer

### **Person : 4**

Affiliation.Company : Air Carrier  
Function.Flight Crew : Captain  
Function.Oversight : PIC

### **Events**

Anomaly.Inflight Encounter : Wake Turbulence  
Anomaly.Other Anomaly  
Anomaly.Other Anomaly.Other  
Independent Detector.Other.ControllerA : 1  
Independent Detector.Other.Flight CrewA : 2  
Resolatory Action.Flight Crew : Exited Adverse Environment  
Resolatory Action.Flight Crew : Regained Aircraft Control

### **Assessments**

Problem Areas : Airport  
Problem Areas : Airspace Structure  
Problem Areas : Cabin Crew Human Performance  
Problem Areas : FAA  
Problem Areas : Flight Crew Human Performance

### **Situations**

ATC Facility.Procedure Or Policy : PHL.Tower

### **Narrative**

I WAS WORKING LCL CTL ON A RWY 9 AND RWY 17 OP. I WAS WORKING THE LCL CTL E POS. MY PRIMARY RESPONSIBILITIES ARE TO GET THE DEPS OFF OF RWY 9L WITH ARRS LNDG RWY 17. RWY 9L AND RWY 17 CROSS, SO TIMING IS VERY IMPORTANT! MOST OF MY DEPS OFF OF RWY 9L WERE 2 MI INCREASING TO 3 MI. I HAD AN AIRBUS DEPART OFF RWY 9L AND MY NEXT ACFT FOR DEP WAS AN MD80. I GAVE ACFT X A TKOF CLRNC WHEN THE AIRBUS WAS 2 MI AHEAD. WHEN ACFT X WAS ABOUT 1 1/2 MI OFF THE DEP END THE SUPVR IN CHARGE MADE A STATEMENT LIKE 'OH MY GOD.' WHEN I LOOKED OUT THE WINDOW THE MD80 WAS IN A SEVERE 'R BANK' AND THEN OVER-CORRECTED TO A L BANK AND THEN STRAIGHTENED OUT. IT SEEMED TO 'SHIMMY' FOR THE NEXT 1/2 MI AND THEN LOOKED NORMAL. ACFT X THEN ASKED ME WHAT TYPE ACFT DEPARTED IN FRONT OF THEM BECAUSE THEY EXPERIENCED WAKE TURB. THE WIND WAS AROUND 110 DEGS AT 5 KTS. I CAN'T REMEMBER SEEING ANYTHING LIKE THAT IN THE 13 YRS AT PHL. MANY CTLRS WITNESSED THIS INCIDENT AND I BELIEVE IT WAS DOCUMENTED AT OUR FACILITY. HOWEVER, THIS IS NOT WHY I AM WRITING ABOUT THIS SIT. A RWY 9 AND RWY 17 OP IS VERY STRESSFUL AND COMPLICATED. THERE IS A LOT OF COORD INVOLVED IN THIS OP. GND CTL AND LCL W ASK FOR RWY XINGS. RWY 9R ARRS MUST CROSS THE DEP RWY 9L. GND CTL ASKS FOR XINGS ON RWY 17 TO REACH RWY 8 WITH PROP DEPS. LCL E TYPICALLY GIVES THE RWY 9L DEP SEQUENCE TO ALL THE DEPS. THE MOST

STRESSFUL FUNCTION IS TO GET THE DEPS OFF RWY 9L IN BTWN THE RWY 17 ARRS. THE TRACON TRIES TO GIVE A 7 MI GAP ON RWY 17 ARRS. SOMETIMES YOU ONLY GET A 3-4 MI GAP. SO AS A LCL E CTLR, I WILL TRY TO GET AS MANY DEPS OFF RWY 9L BEFORE THE RWY 17 ARR REACHES THE THRESHOLD. WHEN A DH8 LANDS RWY 17, MOST EXIT AT TXWY K AND SOME USE TXWY H, FEW WILL USE TXWY G. I HAVE NEVER SEEN A DH8 ROLL THROUGH THE INTXN. THERE IS A LOT OF TIME BTWN A 1/2 MI FINAL AND WHEN THEY EXIT ONTO TXWY K. THIS TENDS TO BACK UP THE RWY 9L DEPS AND WE GET A LOT OF DELAYS ON THIS RWY OP. MY SOLUTION IS TO ALLOW THE DH8'S TO HOLD SHORT OF RWY 9L. THIS WAS ALLOWED IN THE PAST. IT WOULD ALLOW FOR A SMOOTH OP WITHOUT A LOSS OF SAFETY. IT WOULD REDUCE DELAYS. IT WOULD ALLOW A CTLR NOT TO FEEL AS THEY NEED TO 'PUMP' THE ACFT OFF RWY 9L. I DON'T KNOW THE RAMIFICATIONS OF TRYING TO CHANGE THIS RULE. IT MAY BE 'MOOT' ANYWAY WITH THE RJ'S TAKING OVER THE PROP'S RTES. HOWEVER MY LINE OF THOUGHT IS LOGICAL. SUPPLEMENTAL INFO FROM ACN 610493: ON TKOF, WE ENCOUNTERED THE WAKE VORTEX OF A PRECEDING AIRBUS 319 AT 400 FT AGL. OUR ACFT BEGAN AN UNCOMMANDED ROLL TO THE R. I APPLIED AILERON AND RUDDER TO COUNTERACT THE ROLL, BUT WAS UNABLE TO STOP THE ROLLING TENDENCY UNTIL WE HAD REACHED APPROX 45 DEGS OF R BANK. AT THIS POINT I HAD NEARLY FULL OPPOSITE RUDDER AND AILERON APPLIED. WE RECOVERED TO WINGS LEVEL BRIEFLY BEFORE THE ACFT BEGAN TO ROLL L. THIS WAS A MINOR ROLL TO ABOUT 15 DEGS OF BANK. IT WAS FOLLOWED BY ANOTHER R ROLL TO ABOUT 25 DEGS OF BANK. ALL ROLLING MOMENTS WERE VERY SMOOTH WITH NO TURB ENCOUNTERED. THE ACFT REMAINED IN TKOF CONFIG (THE LNDG GEAR WAS UP), FLAPS EXTENDED 11 DEGS AND TKOF PWR THROUGHOUT THE EVENT. THE ACFT CONTINUED TO CLB IN SPITE OF THE ROLLING TENDENCIES, SO I DID NOT ADD ANY ADDITIONAL PWR. WHEN THE RECOVERY WAS COMPLETE, THE FO MADE A PIREP TO PHL TWR ABOUT THE EVENT. TWR COMMENTED THAT THEY HAD OBSERVED THE EVENT AND CONFIRMED THAT WE WERE FOLLOWING AN A319.

## **Synopsis**

PHL CTLR EXPRESSED CONCERN REGARDING WAKE TURB EVENT AND INTERSECTING RWY OPS.



**ACN: 609856**

### **Time / Day**

Date : 200403  
Day : Mon  
Local Time Of Day : 1201 To 1800

### **Place**

Locale Reference.Airport : ORD.Airport  
State Reference : IL  
Altitude.MSL.Bound Lower : 4600  
Altitude.MSL.Bound Upper : 5000

### **Environment**

Flight Conditions : VMC  
Weather Elements : Turbulence  
Light : Daylight

### **Aircraft : 1**

Controlling Facilities.TRACON : C90.TRACON  
Operator.Common Carrier : Air Carrier  
Make Model Name : MD-83  
Operating Under FAR Part : Part 121  
Navigation In Use.ILS.Localizer & Glide Slope : 22R  
Flight Phase.Descent : Approach  
Route In Use.Approach : Instrument Precision

### **Aircraft : 2**

Controlling Facilities.TRACON : C90.TRACON  
Operator.Common Carrier : Air Carrier  
Make Model Name : B737 Undifferentiated or Other Model  
Operating Under FAR Part : Part 121  
Navigation In Use.ILS.Localizer & Glide Slope : 22R  
Flight Phase.Descent : Approach  
Route In Use.Approach : Instrument Precision

### **Person : 1**

Affiliation.Company : Air Carrier  
Function.Flight Crew : First Officer  
Qualification.Pilot : ATP  
Qualification.Pilot : CFI  
Qualification.Pilot : Commercial  
Qualification.Pilot : Multi Engine  
Experience.Flight Time.Last 90 Days : 241  
Experience.Flight Time.Total : 7382  
Experience.Flight Time.Type : 2177  
ASRS Report : 609856

### **Person : 2**

Affiliation.Company : Air Carrier  
Function.Flight Crew : Captain  
Function.Oversight : PIC

### **Person : 3**

Affiliation.Company : Air Carrier  
Function.Flight Crew : Captain  
Function.Oversight : PIC

### **Person : 4**

Affiliation.Government : FAA  
Function.Controller : Approach

### **Events**

Anomaly.Altitude Deviation : Excursion From Assigned Altitude  
Anomaly.Inflight Encounter : Turbulence  
Anomaly.Inflight Encounter : Wake Turbulence  
Anomaly.Other Anomaly  
Anomaly.Other Anomaly : Speed Deviation  
Anomaly.Other Spatial Deviation  
Independent Detector.Other.Flight CrewA : 1  
Independent Detector.Other.Flight CrewB : 2  
Resolatory Action.Flight Crew : Exited Adverse Environment  
Resolatory Action.Flight Crew : Regained Aircraft Control  
Resolatory Action.Flight Crew : Returned To Assigned Altitude  
Resolatory Action.Flight Crew : Returned To Original Clearance  
Resolatory Action.Other  
Consequence.FAA : Reviewed Incident With Flight Crew

### **Assessments**

Problem Areas : ATC Human Performance  
Problem Areas : Airspace Structure  
Problem Areas : Flight Crew Human Performance

### **Narrative**

WHILE LEVEL AT 5000 FT AT AN ASSIGNED SPD OF 180 KTS AND HAVING INTERCEPTED THE RWY 22R LOC FOR ORD, WE WERE CONFIGURED WITH THE FLAPS AT 15 DEGS AND SLATS AT FULL EXTEND. SHORTLY AFTER THIS INTERCEPT WE WERE CLRED FOR THE ILS RWY 22R APCH. AS THE PF, I ARMED THE ILS MODE ON THE FLT GUIDANCE CTL PANEL AND NOTED THAT WE WERE STILL GREATER THAN 15 MI FROM THE ARPT. ALTHOUGH THE SURFACE WINDS WERE RPTED TO BE GUSTY (180 DEGS AT 21 KTS GUSTING 28 KTS) OUR RIDE CONDITIONS WERE STILL SMOOTH. JUST AS THE GS WAS ABOUT TO CAPTURE (APPROX 13.7 DME FROM ORD) I NOTICED A LIGHT AERODYNAMIC BUFFET, THAT I RECOGNIZED TO BE ASSOCIATED WITH WAKE TURB. IMMEDIATELY FOLLOWING THIS THE ACFT BEGAN TO ROLL L AND THE AUTOPLT COUNTERACTED WITH R AILERON AND NOSE DOWN INPUTS AS THE GS HAD ALSO CAPTURED. I THEN QUICKLY PLACED MY HANDS ON THE CTL YOKE IN THE EVENT OF AUTOPLT DISENGAGEMENT. AT THAT INSTANT THE AUTOPLT DID IN FACT DISENGAGE AND I CONTINUED TO MANUALLY COMMAND R AILERON. THE ROLL TO THE L REACHED APPROX 25-30 DEGS AND THEN CHANGED DIRECTIONS WITH AN UNCOMMANDED ROLL TO THE R. AGAIN, I COUNTERACTED WITH L AILERON INPUTS AND INCREASED FORWARD

PRESSURE ON THE YOKE. I BELIEVE THE ACFT ROLLED TO APPROX 35-40 DEGS BEFORE AGAIN CHANGING DIRECTIONS AND ROLLING L. AS THE ACFT BEGAN THE SECOND UNCOMMANDED ROLL TO THE L I IMMEDIATELY PUSHED BOTH THROTTLES UP AND HELD THE NOSE DOWN TO INCREASE PERFORMANCE AND EXIT WHAT I BELIEVED TO BE WAKE TURB. AS THE ACFT ROLLED L THE HDG ALSO CHANGED TO THE L BY APPROX 5-10 DEGS, WHICH I FELT WAS POSITIVE, AS THIS WOULD ASSIST IN TRACKING UPWIND OF THE DISTURBANCE THAT WE HAD ENCOUNTERED. AS THE ACFT ROLLED TO THE L I HAD NEAR FULL AILERON DEFLECTION TO THE R AND CONSIDERABLE NOSE DOWN PRESSURE. AFTER THE ACFT REACHED APPROX 45-50 DEGS OF ROLL TO THE L THE ACFT THEN EXITED THE DISTURBANCE AND ALL CTL FORCES AND INPUTS WERE AGAIN NORMAL. I NOTED THAT WE WERE AT APPROX 4600 FT AND JUST SLIGHTLY L OR S OF THE LOC. AT THAT MOMENT, I VOICED TO THE CAPT THAT I WOULD CONTINUE TO HAND FLY THE REMAINDER OF THE APCH, AND THEN TURNED BACK TO THE R TO REESTABLISH ON THE LOC CTRLINE (ALTHOUGH WE HAD ONLY DEVIATED JUST SLIGHTLY S OF THE LOC CTRLINE). ADDITIONALLY, I CLBED APPROX 150 FT TO REGAIN THE GS. SHORTLY AFTER THIS THE CAPT QUESTIONED ATC AS TO THE ACFT THAT WE HAD BEEN FOLLOWING AND EXPRESSED THAT WE HAD A WAKE TURB ENCOUNTER EARLIER ON THE LOC. ATC REPLIED WITH A 'BOEING 737' AND ALSO ADDED THAT HE HAD RECEIVED A NUMBER OF RPTS OF WINDSHEAR. HE THEN INSTRUCTED US TO SLOW TO 170 KTS. THE CAPT THEN RPTED THAT THIS WAS NOT JUST WINDSHEAR AND THE ATC, WHILE CHKING, REPLIED WITH SOMETHING ALONG THE LINE OF, IT BEING JUST A LITTLE B737. OTHER THAN THE TURB AND WINDSHEAR ASSOCIATED WITH THE GUSTY SURFACE CONDITIONS THE REMAINDER OF THE APCH WAS FLOWN WITHOUT INCIDENT AND NOTHING ABNORMAL WAS NOTED. DURING THE ENTIRE EVENT, THE ONSET AND RATE OF ROLL BOTH TO THE L AND THE R WERE SLOW IN NATURE AND IMPOSED NO APPARENT STRESS ON THE ACFT AND THEREFORE, NO AERODYNAMIC OR OTHER ACFT LIMITATIONS WERE EXCEEDED. ADDITIONALLY, THE B737 THAT WE WERE SEQUENCED BEHIND BEGAN THEIR APCH FROM AN ALT GREATER THAN OUR ALT OF 5000 FT THAT WE HAD INTERCEPTED THE LOC FROM. THIS POSSIBLY COULD HAVE BEEN THE CAUSE FOR OUR WAKE TURB ENCOUNTER.

## **Synopsis**

ENCOUNTER WITH WAKE TURB AND SUBSEQUENT LOSS OF ACFT CTL EXPERIENCED BY A DC9-83 FLT CREW WHEN ON APCH TO RWY 22R AT ORD, IL.

**ACN: 609477**

### **Time / Day**

Date : 200402  
Day : Thu  
Local Time Of Day : 0001 To 0600

### **Place**

Locale Reference.Navaid : ALS.VORTAC  
State Reference : CO  
Altitude.MSL.Bound Lower : 32200  
Altitude.MSL.Bound Upper : 33800

### **Environment**

Weather Elements : Turbulence  
Weather Elements : Windshear  
Weather Elements.Other  
Light : Night

### **Aircraft : 1**

Controlling Facilities.ARTCC : ZDV.ARTCC  
Operator.Common Carrier : Air Carrier  
Make Model Name : A320  
Operating Under FAR Part : Part 121  
Navigation In Use.Other : FMS or FMC

### **Person : 1**

Affiliation.Company : Air Carrier  
Function.Flight Crew : Captain  
Function.Oversight : PIC  
Qualification.Pilot : ATP  
Experience.Flight Time.Last 90 Days : 48  
Experience.Flight Time.Total : 11000  
Experience.Flight Time.Type : 24  
ASRS Report : 609477

### **Person : 2**

Affiliation.Company : Air Carrier  
Function.Flight Crew : First Officer  
Qualification.Pilot : Commercial  
Qualification.Pilot : Instrument  
Qualification.Pilot : Multi Engine  
Experience.Flight Time.Last 90 Days : 230  
Experience.Flight Time.Total : 7500  
Experience.Flight Time.Type : 1000  
ASRS Report : 609480

### **Person : 3**

Affiliation.Government : FAA  
Function.Controller : Radar

## Events

Anomaly.Altitude Deviation : Excursion From Assigned Altitude  
Anomaly.Inflight Encounter : Turbulence  
Anomaly.Non Adherence : Clearance  
Anomaly.Other Anomaly  
Anomaly.Other Anomaly : Speed Deviation  
Independent Detector.Other.Flight CrewA : 1  
Independent Detector.Other.Flight CrewB : 2  
Resolatory Action.Aircraft : Automation Overrode Flight Crew  
Resolatory Action.Flight Crew : Exited Adverse Environment  
Resolatory Action.Flight Crew : Overrode Automation  
Resolatory Action.Flight Crew : Regained Aircraft Control  
Resolatory Action.Flight Crew : Returned To Assigned Altitude  
Consequence.FAA : Reviewed Incident With Flight Crew  
Consequence.Other : Company Review  
Consequence.Other

## Assessments

Problem Areas : Aircraft  
Problem Areas : Environmental Factor  
Problem Areas : Flight Crew Human Performance  
Problem Areas : Weather

## Narrative

AIRFRAME OVERSPD WITH RESULTANT ALTDEV. WE WERE LEVEL AT FL330, 30 MI E OF THE ALS VOR. THE FLT HAD BEEN SMOOTH, THE SEATBELT SIGN WAS OFF. ATC HAD BEEN QUERIED AS TO RIDE CONDITIONS AND THE RESPONSE WAS JUST OCCASIONAL LIGHT CHOP AT OUR ALT. THE FMA'S WERE MACH, ALT, CRUISE, NAV. I WAS USING SELECTED SPD, VARYING THE MACH BTWN .76 AND .80 AS WE HAD EXPERIENCED SOME LIGHT MOUNTAIN WAVE AND A CAT RPT WAS IN EFFECT FOR MOUNTAIN WAVE IN OUR SECTOR. THE COCKPIT LIGHTS WERE TURNED DOWN, AND I FELT I WAS CLOSELY MONITORING THE SPD IN AN EFFORT TO BAL THE WAVE ACTIVITY WITH TRYING TO MAINTAIN OUR FLT PLAN MACH NUMBER OF .80. WE WERE 25 MINS LATE DUE TO A MECHANICAL PROB PRIOR TO LEAVING. WITHOUT WARNING, WE EXPERIENCED A SEVERE TURBULENT JOLT AND MOUNTAIN WAVE, ACCELERATING 20-25 KTS, AT LEAST 10 KTS INTO THE OVERSPD RANGE. THE ACFT PITCHED UP AND GAINED ALMOST 1000 FT. INSTINCTIVELY (FROM MY BOEING DAYS), I DISCONNECTED THE AUTOPLT AND THEN THE AUTOTHURST SYS. I BROUGHT THE THRUST TO IDLE AND TRIED TO HOLD THE ACFT STEADY SO AS NOT TO EXCEED WHAT LOOKED TO BE A CRITICAL PITCH ANGLE. AT SOME POINT, THE ACFT LOST ENERGY AND STARTED DECELERATING TOWARDS VLS. I PITCHED THE NOSE DOWN, EVENTUALLY LOSING ALMOST 2000 FT. BEFORE WE HAD A CHANCE TO CALL ATC, ATC ASKED US HOW OUR RIDE WAS. WE MADE THE SEVERE TURB/MOUNTAIN WAVE RPT WITH THEM AS WE WERE CLBING BACK TO FL330. ALL THE PAX (IT WAS A FULL FLT) WERE SEATED AT THE TIME OF THE INCIDENT, BUT 2 FLT ATTENDANTS WERE STANDING IN THE AFT GALLEY. THEY WERE ABLE TO GRAB AND HOLD ON TO THE HANDLES LOCATED NEAR THE DOORS. THE CONTENTS OF THE GALLEY WERE DISTRIBUTED ACROSS THE GALLEY FLOOR. NEITHER OF THEM WERE HURT (THANK GOODNESS).

THE OTHER 2 FLT ATTENDANTS WERE SEATED IN THEIR JUMPSEATS. WE RPTD THE INCIDENT TO DISPATCH AND WROTE UP THE OVERSPD AND THE SEVERE TURB ENCOUNTER IN THE LOGBOOK. I HAVE 3 QUESTIONS: 1) I FEEL AS THOUGH I MIGHT HAVE EXACERBATED THE SIT BY GETTING RID OF THE AUTOFLT SYS. WITH MY LEVEL OF EXPERIENCE IN THE AIRPLANE, I WAS VERY NARROWLY FOCUSED ON THE ADI, AND USED WHAT I FEEL THIS MORNING WERE ABRUPT MOVEMENTS TO TRY TO COUNTERACT THE FORCES. SHOULD I HAVE LEFT THE AUTOPLT ON AND LET THE AIRPLANE PROTECT ITSELF? 2) WHAT CRITERIA CONSTITUTES A SEVERE MOUNTAIN WAVE ENCOUNTER? 3) IS THE IMPLICATION OF STRUCTURAL DAMAGE IN A SEVERE TURB ENCOUNTER A REASON TO GIVE MORE CONSIDERATION THAN I DID TO A POSSIBLE DIVERSION? I HOPE WE CAN HELP ANSWER SOME OF THESE QUESTIONS WITH THE INFO. THIS SEEMS TO BE A BIT TRICKIER THAN RIDING CAMELS! SUPPLEMENTAL INFO FROM ACN 609480: THE CAPT WAS ACTING AS THE PF AS REQUIRED FOLLOWING IOE. THE CAPT DID EXACTLY WHAT I WOULD HAVE DONE IF I WERE THE PF. HOWEVER, IT IS WORTH DISCUSSING WHETHER PLT ACTIONS MIGHT HAVE EXAGGERATED THE SIT. NOTE: THIS IS THE SECOND OVERSPD SIT I HAVE EXPERIENCED ON THE AIRBUS. BOTH INSTANCES OCCURRED SUDDENLY, WITH LITTLE WARNING, AND NO REACTION TIME TO FIX THE SIT. CALLBACK CONVERSATION WITH RPTR ACN 609477 REVEALED THE FOLLOWING INFO: THE CAPT ADVISED THAT THE ACR IS GIVING THIS EVENT SIGNIFICANT SCRUTINY. INVESTIGATION OF THE DFDR AND THE QUALITY ASSURANCE RECORDER DETERMINED THAT DESPITE THE DISCONNECT OF THE AUTOPLT BY THE CAPT, THE ACTUAL CLB WAS INITIATED BY THE OVERSPD PROTECTIVE MECHANISM OF THE FMGC. THE SUBSEQUENT DSCNT WAS AT A SPD ABOVE THE 'ALPHA' PROTECTION FLOOR AND WAS THE RESULT OF MANUAL PLT INPUT RESPONDING TO RAPIDLY DECAYING AIRSPD IN THE DOWNWARD FLOW SIDE OF THE WAVE. IT IS CERTAIN THAT, HAD THE CREW NOT INTERVENED, THE ALPHA PROTECTION MECHANISM WOULD HAVE PRODUCED A RESULT NOT UNLIKE THE PLT INPUT SINCE DSCNT AND MAX THRUST WOULD HAVE BEEN NECESSARY IN SOME COMBINATION TO ARREST THE DECAYING AIRSPD. THE CAPT AND THE COMPANY ARE CONCERNED REGARDING THE IMPLICATIONS OF THESE SORTS OF FMS DRIVEN AUTOMATIC RECOVERY MECHANISMS IN THE FUTURE WHEN RVSM AIRSPACE REDUCES SEPARATION AT FLT LEVELS CONSISTENT WITH SEVERE MOUNTAIN WAVE PROBABILITY TO ONLY 1000 FT. RPTR SUGGESTED THAT CONSIDERATION OUGHT TO BE TAKEN TO RESTRICTING RTES WITH KNOWN MOUNTAIN WAVE ISSUES SO AS TO NOT ALLOW RVSM SEPARATION CRITERIA.

## **Synopsis**

FLT CREW OF A320 ENCOUNTER MOUNTAIN WAVE OVER ROCKY MOUNTAINS, GAIN 800 FT DURING OVERSPD PROTECTION MANEUVER AND THEN LOSE 2000 FT TO PREVENT STALL ON BACK SIDE OF WAVE.

**ACN: 602335**

### **Time / Day**

Date : 200312  
Day : Thu  
Local Time Of Day : 0601 To 1200

### **Place**

Locale Reference.Airport : DTW.Airport  
State Reference : MI  
Altitude.AGL.Single Value : 0

### **Environment**

Flight Conditions : VMC  
Weather Elements.Other  
Light : Night

### **Aircraft : 1**

Controlling Facilities.Tower : DTW.Tower  
Operator.Common Carrier : Air Carrier  
Make Model Name : DC-8 70  
Operating Under FAR Part : Part 121  
Flight Phase.Descent : Approach  
Flight Phase.Landing : Roll

### **Person : 1**

Affiliation.Company : Air Carrier  
Function.Flight Crew : First Officer  
Qualification.Pilot : ATP  
Qualification.Pilot : Military  
Qualification.Pilot : Multi Engine  
Experience.Flight Time.Last 90 Days : 70  
Experience.Flight Time.Total : 6500  
Experience.Flight Time.Type : 40  
ASRS Report : 602335

### **Person : 2**

Affiliation.Company : Air Carrier  
Function.Flight Crew : Captain  
Function.Oversight : PIC

### **Person : 3**

Affiliation.Company : Air Carrier  
Function.Flight Crew : Second Officer

### **Person : 4**

Affiliation.Government : FAA  
Function.Controller : Local

## Events

Anomaly.Inflight Encounter : Weather  
Anomaly.Non Adherence : Company Policies  
Anomaly.Non Adherence : FAR  
Anomaly.Non Adherence : Published Procedure  
Anomaly.Other Anomaly  
Anomaly.Other Anomaly : Unstabilized Approach  
Independent Detector.Other.Flight CrewA : 1  
Independent Detector.Other.Flight CrewB : 2  
Resolatory Action.None Taken : Insufficient Time  
Consequence.Other : Aircraft Damaged  
Consequence.Other

## Assessments

Problem Areas : Company  
Problem Areas : Flight Crew Human Performance  
Problem Areas : Weather

## Situations

### Narrative

WINDS AT DTW WERE 300 DEGS AT 13 KTS. WE PLANNED TO LAND ON RWY 27R AT DTW, BUT APCH GAVE US RWY 3R. WE WERE RUSHED ON APCH. WE MADE A QUICK DIVE TO RWY 3R FINAL, BUT WERE UNSTABLE ON THE APCH. I WAS VERY BEHIND THE AIRPLANE, AND ON THE LNDG (WINDS WERE RIGHT AT MY LEGAL LIMIT), I STARTED TO DRIFT, AND CORRECTED THE DRIFT WITH BANK, BUT DID NOT ARREST THE SINK RATE. I CONTACTED THE RWY IN L BANK AND EXCESSIVE SINK, RESULTING IN THE #1 ENG POD CONTACTING THE RWY. THE ROOT CAUSE OF THE PROB WAS, 1) MY INEXPERIENCE IN TYPE, AND 2) BEING RUSHED ON THE APCH, CAUSING ME NOT TO BE MENTALLY READY TO LAND IN XWINDS. WHAT WE SHOULD'VE DONE TO AVOID THE PROB: 1) ASK FOR RWY 27L, 2) USE AN AUTOPLT COUPLED APCH TO ALLOW ME TO HAVE TIME TO MENTALLY 'CATCH UP WITH THE AIRPLANE,' 3) DO A BETTER JOB OF RUDDERING OUT THE CRAB, AND PICK THE NOSE UP MORE TO ARREST THE SINK RATE. ANY OF THESE THINGS WOULD'VE PROBABLY KEPT THE #1 ENG FROM CONTACTING THE RWY. THE NET EFFECT OF BEING RUSHED AND INEXPERIENCED IN TYPE MADE THE LNDG MORE THAN I COULD HANDLE.

### Synopsis

DC8-70 CREW HAD AN UNSTABILIZED APCH, AND HARD LNDG, AFTER THE FO WAS UNABLE TO CORRECT ACFT DRIFT IN A XWIND.



**ACN: 600743**

## **Time / Day**

Date : 200311  
Day : Sun  
Local Time Of Day : 1201 To 1800

## **Place**

Locale Reference.Airport : DPA.Airport  
State Reference : IL  
Altitude.MSL.Bound Lower : 3000  
Altitude.MSL.Bound Upper : 4000

## **Environment**

Flight Conditions : IMC  
Weather Elements : Thunderstorm  
Weather Elements : Turbulence  
Weather Elements : Windshear  
Light : Daylight

## **Aircraft : 1**

Controlling Facilities.TRACON : C90.TRACON  
Operator.General Aviation : Corporate  
Make Model Name : Citation II S2/Bravo  
Operating Under FAR Part : Part 91  
Navigation In Use.ILS.Localizer & Glide Slope : 2L  
Flight Phase.Descent : Approach  
Route In Use.Approach : Instrument Precision  
Route In Use.Arrival : On Vectors

## **Person : 1**

Affiliation.Company : Corporate  
Function.Flight Crew : First Officer  
Qualification.Pilot : ATP  
Experience.Flight Time.Last 90 Days : 120  
Experience.Flight Time.Total : 12800  
Experience.Flight Time.Type : 120  
ASRS Report : 600743

## **Person : 2**

Affiliation.Company : Corporate  
Function.Flight Crew : Captain

## **Person : 3**

Affiliation.Government : FAA  
Function.Controller : Approach

## **Events**

Anomaly.Altitude Deviation : Excursion From Assigned Altitude  
Anomaly.Inflight Encounter : Weather  
Anomaly.Other Anomaly  
Independent Detector.Other.ControllerA : 1  
Resolatory Action.Controller : Issued New Clearance  
Resolatory Action.Flight Crew : Exited Adverse Environment  
Resolatory Action.Flight Crew : Overrode Automation  
Resolatory Action.Flight Crew : Regained Aircraft Control  
Resolatory Action.Flight Crew : Took Precautionary Avoidance Action  
Consequence.FAA : Reviewed Incident With Flight Crew

## **Assessments**

Problem Areas : Weather

## **Narrative**

OUR CITATION JET WAS BEING VECTORED FOR THE ILS RWY 2L AT DPA ARPT BY CHICAGO APCH. AFTER RECEIVING A CLRNC TO SHOOT THE APCH, WE ENCOUNTERED SEVERE CONVECTIVE ACTIVITY OUTSIDE THE FAF AND WERE UNABLE TO MAINTAIN ALT. WE ENTERED HVY RAIN AND EXPERIENCED MODERATE TO OCCASIONALLY SEVERE TURB. A SUDDEN INCREASE IN AIRSPD WAS NOTED AND THE PLANE BEGAN TO CLB UNCONTROLLABLY EVEN THOUGH THE APPROPRIATE PITCH AND PWR CHANGES WERE BEING MADE TO CORRECT THE CLB. ATC ASKED US WHY WE CLBED TO 4000 FT, AND I RESPONDED THAT WE WERE IN A CELL. ATC DIRECTED US TO MAINTAIN 3000 FT, AND I INFORMED THE CTLR THAT WE WERE UNABLE TO CTL THE ACFT AND REQUESTED AN IMMEDIATE TURN. WE WERE GIVEN A TURN OFF COURSE AND REQUESTED ANOTHER 90 DEG TURN TO EXIT THE WX. WE WERE EVENTUALLY VECTORED TO THE W SIDE OF THE LINE OF WX AND WERE ABLE TO SUCCESSFULLY SHOOT ANOTHER APCH TO RWY 2L. ATC DID NOT INFORM US OF ANY TFC CONFLICT AND NONE WAS NOTED ON THE TCASII. CONTRIBUTING FACTORS: ALTHOUGH WE HAD ONBOARD RADAR WE WERE UNAWARE OF THE SEVERITY OF THE LINE OF WX ENCROACHING ON THE FINAL APCH COURSE. IT APPEARED TO BE A VERY NARROW BAND, BUT THE SCALE OF THE RADAR DISPLAY PROBABLY SHOULD HAVE BEEN ON A LOWER SETTING TO BETTER DEPICT THE CELL AND ITS POS RELATIVE TO THE ILS FINAL APCH COURSE (THE DISPLAY MAY HAVE BEEN SET ON 25 MI INSTEAD OF 12.5). ALSO, ATC GAVE NO INDICATION OF ANY CONVECTIVE ACTIVITY ALONG THE FINAL APCH COURSE.

## **Synopsis**

C550 ON ILS RWY 2L APCH TO DPA IS UNABLE TO MAINTAIN ALT DURING ILS ATTEMPT DUE TO WX.

**ACN: 599525**

### **Time / Day**

Date : 200311  
Day : Wed  
Local Time Of Day : 0601 To 1200

### **Place**

Locale Reference.Airport : MMU.Airport  
State Reference : NJ  
Altitude.AGL.Single Value : 0

### **Environment**

Flight Conditions : IMC  
Light : Night

### **Aircraft : 1**

Operator.General Aviation : Corporate  
Make Model Name : Gulfstream II  
Operating Under FAR Part : Part 91  
Flight Phase.Landing : Roll

### **Component : 1**

Aircraft Component : Normal Brake System

### **Person : 1**

Affiliation.Company : Corporate  
Function.Flight Crew : First Officer  
Qualification.Pilot : ATP  
Experience.Flight Time.Last 90 Days : 100  
Experience.Flight Time.Total : 7000  
Experience.Flight Time.Type : 2000  
ASRS Report : 599525

### **Person : 2**

Affiliation.Company : Corporate  
Function.Flight Crew : Captain  
Function.Oversight : PIC  
Qualification.Pilot : ATP  
Qualification.Pilot : Instrument  
Qualification.Pilot : Multi Engine  
Experience.Flight Time.Last 90 Days : 150  
Experience.Flight Time.Total : 10500  
Experience.Flight Time.Type : 1400  
ASRS Report : 599265

### **Person : 3**

Affiliation.Government : FAA  
Function.Controller : Local

## Person : 4

Affiliation.Other : Personal  
Function.Observation : Passenger

## Events

Anomaly.Excursion : Runway  
Anomaly.Inflight Encounter : Weather  
Anomaly.Other Anomaly  
Anomaly.Other Spatial Deviation  
Independent Detector.Other.Flight CrewA : 1  
Independent Detector.Other.Flight CrewB : 2  
Resolatory Action.Flight Crew : Regained Aircraft Control  
Consequence.FAA : Reviewed Incident With Flight Crew  
Consequence.Other : Company Review

## Assessments

Problem Areas : Flight Crew Human Performance  
Problem Areas : Weather

## Narrative

I WAS R SEAT IN THE G2 AND WE SHOT THE ILS APCH TO RWY 23 AT MMU. THE APCH WAS UNEVENTFUL. WE BROKE OUT JUST ABOVE MINIMUMS AND LANDED ON THE CTR OF THE RWY. WE STARTED TO DRIFT R OF CTRLINE AND I TOLD THE CAPT, YOUR DRIFTING R. PLANE KEPT GOING R AND I YELLED 'YOU'RE DRIFTING.' AT THAT POINT THE R MAIN AND NOSE WERE IN THE GRASS AND MUD. I YELLED AT THE CAPT TO GET THE ACFT BACK ON THE RWY AND I HAD FULL L RUDDER AND BRAKING TO HELP ASSIST IN GETTING ACFT BACK ON RWY. NO DAMAGE TO THE ACFT OR THE ARPT PROPERTY. SUPPLEMENTAL INFO FROM ACN 599265: THIS WAS A PART 91 FLT WITH THE OWNERS OF THE ACFT ON BOARD. THE WX AT THE ARPT WAS BEING RPTED AT MINIMUMS AS PUBLISHED ON THE APCH CHARTS. THE APCH WAS NORMAL AND AFTER SEEING THE RWY LIGHTS AT MINIMUMS WE CONTINUED TO THE SURFACE AND MADE A NORMAL TOUCHDOWN. AFTER TOUCHDOWN THE ACFT STARTED TO DRIFT TO THE R AND I MADE WHAT I THOUGHT TO BE A NECESSARY CORRECTION WITH THE RUDDER TO THE L. THE ACFT CONTINUED TO DIVERT TO THE R AND DRIFTED OFF THE HARD SURFACE INTO THE GRASS WITH THE R MAIN WHEEL. CONTINUING TO HOLD L RUDDER, THE ACFT CAME BACK ONTO THE HARD SURFACE AND A NORMAL DECELERATION WAS MADE TO TAXI SPD AND THE ACFT RESPONDED NORMAL TO ALL BRAKE, RUDDER, THRUST REVERSER AND TILLER INPUTS. AFTER INSPECTING THE ACFT, NO DAMAGE WAS FOUND. AFTER NOTIFYING THE MORRISTOWN TWR AND OPS, THEY FOUND NO DAMAGE TO THE RWY LIGHTS OR SIGNAGE. THE OPS PEOPLE AT MORRISTOWN SAID BEING THAT THERE WAS NO DAMAGE TO EITHER THE ACFT OR THE ARPT PROPERTY, THEY WERE GOING TO ELECT TO NOT FILE A RPT ON THE SUBJECT.

## Synopsis

RWY EXCURSION AFTER AN APCH AND LNDG AT MINIMUMS WHEN A G-2 FLT CREW DRIFT OFF THE R SIDE OF RWY 23 ON THE ROLLOUT.

**ACN: 599451**

### **Time / Day**

Date : 200311  
Day : Wed  
Local Time Of Day : 1801 To 2400

### **Place**

Locale Reference.Airport : ZZZ.Airport  
State Reference : US  
Altitude.AGL.Single Value : 0

### **Environment**

Flight Conditions : VMC  
Light : Night

### **Aircraft : 1**

Controlling Facilities.Tower : ZZZ.Tower  
Operator.General Aviation : Corporate  
Make Model Name : Citation III, VI, VII  
Operating Under FAR Part : Part 91  
Flight Phase.Landing : Roll  
Route In Use.Approach : Visual

### **Component : 1**

Aircraft Component : Hydraulic Main System

### **Component : 2**

Aircraft Component : Hydraulic Syst Reservoir Tank

### **Person : 1**

Affiliation.Company : Corporate  
Function.Flight Crew : Captain  
Function.Oversight : PIC  
Qualification.Pilot : ATP  
Qualification.Pilot : Multi Engine  
Experience.Flight Time.Last 90 Days : 100  
Experience.Flight Time.Total : 13000  
Experience.Flight Time.Type : 300  
ASRS Report : 599451

### **Person : 2**

Affiliation.Company : Corporate  
Function.Flight Crew : First Officer  
ASRS Report : 598849

### **Person : 3**

Affiliation.Government : FAA  
Function.Controller : Local

## Events

Anomaly.Aircraft Equipment Problem : Critical  
Anomaly.Excursion : Runway  
Anomaly.Other Anomaly  
Independent Detector.Other.Flight CrewA : 1  
Independent Detector.Other.Flight CrewB : 2  
Resolutive Action.Flight Crew : Took Evasive Action  
Consequence.FAA : Investigated  
Consequence.Other : Aircraft Damaged  
Consequence.Other

## Assessments

Problem Areas : Aircraft  
Problem Areas : Chart Or Publication

## Situations

### Narrative

LNDG ON RWY 5 IN ZZZ, VISUAL APCH CLR SKIES. OPERATING PART 91. COPLT WAS FLYING, SHOOTING VISUAL APCH GEAR DOWN FLAPS FULL WITH CHKLIST COMPLETE. COPLT LANDED ON SPEED IN THE TOUCHDOWN AREA, DEPLOYED SPEED BRAKES, SPOILERS AND THRUST REVERSERS, I COMMENTED WE WERE NOT SLOWING ENOUGH AND TOLD THE COPLT TO APPLY MORE REVERSE THRUST. I THEN TOLD THE COPLT I HAVE CONTROL OF THE ACFT, I ESTIMATE WE WERE HALF TO THREE QUARTERS DOWN THE 5000 FOOT RWY AND I IMMEDIATELY APPLIED FULL THRUST AND APPLIED THE BRAKES. THERE WAS NO RESPONSE WITH THE BRAKES AND REALIZED WE HAD ZERO BRAKES. IT WAS NIGHTTIME AND THE EMER BRAKE HANDLE IS LOCATED IN FRONT OF THE CAPT'S YOKE BENEATH THE INSTRUMENT PANEL. I CAN'T BE SURE IF I ACTUALLY WAS ABLE TO PULL THE HANDLE OR NOT BECAUSE WE WERE ALMOST AT THE END OF THE RWY. I THEN CONCERNED MYSELF WITH SHUTTING DOWN THE ENGINES BEFORE HITTING THE GRASS. I GOT THE R ENG SHUTDOWN BUT NOT THE L. ESTIMATE WE WERE MOVING BETWEEN 50 TO 60 KTS. UPON ENTERING THE RUNOFF AREA, I KICKED THE RUDDER TO THE R IN ORDER TO DIG THE MAINS INTO THE DIRT AND SLOW THE ACFT. IT WORKED BUT WE CAUGHT A WINGTIP (LEFT) IN THE PROCESS TEARING OFF ABOUT 1 1/2 FT OF THE WINGTIP. I NOTIFIED THE TWR AND EMER RESPONSE CREWS WERE DISPATCHED. WE HAD NO PAX AND NEITHER MYSELF OR THE COPLT WERE INJURED. UPON INSPECTING THE ACFT I DISCOVERED HYDRAULIC FLUID DRIPPING NEAR THE REAR OF THE L WING. THE FLUID WAS RUNNING OUT OF THE L ENGINE PYLON (WHERE IT CONNECTS TO THE FUSELAGE) AND RUNNING DOWN THE FUSELAGE WHERE I FIRST SAW THE DRIPS. WE OPENED THE BAGGAGE COMPARTMENT AND DISCOVERED HYDRAULIC FLUID PRETTY MUCH EVERYWHERE, INCLUDING OUR LUGGAGE. WE HAVE ANOTHER C650 THAT HAD THE SAME PROB, FORTUNATELY THEY WERE TAXIING. AN FAA MAINT INSPECTOR VIEWED THE ACFT AND AFTER SEEING ALL THE LEAKED FLUID, RELEASED THE ACFT TO THE MAINT TECH PEOPLE. THEY FOUND A CHAFFED HYDRAULIC LINE GOING TO THE FANS THAT COOL THE AIR CONDITIONING PACKS WHILE ON THE GND. I SUSPECT THAT AS SOON AS WE TOUCHED DOWN CLOSING THE SQUAT SWITCHES, THE FANS WHICH COOL THE PACKS KICKED ON AND THAT IS WHEN I SUSPECT WE LOST ALL HYDRAULIC FLUID. THE TROUBLING FACT IS

THAT THE SYSTEM IS DESIGNED TO LEAK DOWN ONLY TO THE EMER FLUID RESERVOIR LEVEL AND THEN STOP, LEAVING ENOUGH FLUID FOR ROLL SPOILERS AND BRAKES. OBVIOUSLY THIS DID NOT HAPPEN. SO A CHK VALVE OR SOMETHING ELSE MUST HAVE ALSO FAILED. WE WON'T KNOW UNTIL THE ACFT IS COMPLETELY INSPECTED BY THE MAINT PEOPLE. I FIND IT VERY UNSETTLING THAT WE HAVE NOW HAD THIS FAILURE ON TWO OUT OF THREE CITATIONS WE OPERATE. THIS PACK COOLING SYSTEM WAS INSTALLED ON THE FIRST 105 (OR ABOUT) C650'S BUILT. THE ONLY WAY TO TRULY PREVENT THIS FROM HAPPENING AGAIN (WHILE LNDG), IS TO TURN BOTH PACKS OFF PRIOR TO LNDG. NOT EXACTLY HOW IT WAS DESIGNED, TO LAND UNPRESSURIZED FROM FINAL APCH. MY EXPERIENCE IN FLYING HAS BEEN AS AN AIRLINE PLT. I HAVE BEEN THROUGH MANY FORMAL FLT TRAINING EVENTS, ON SEVERAL DIFFERENT ACFT AND FEEL I HAVE AT LEAST A BETTER THAN AVERAGE UNDERSTANDING OF ACFT SYSTEMS. SINCE WE GOT NO INDICATION OF A HYDRAULIC LEAK (GAUGES OR ANNUNCIATOR PANEL) PRIOR TO LNDG, I CAN THINK OF NOTHING I COULD HAVE DONE DIFFERENTLY, EXCEPT APPLY EMER BRAKES BY PULLING THE 'VERY HARD TO FIND' HANDLE IN THE DARK. HAD WE HAD AN INDICATOR PRIOR TO LNDG, I WOULD HAVE FLOWN TO ZZZ1 WHERE THERE ARE RWYS TWICE THE LENGTH OF THAT AT ZZZ. CALLBACK CONVERSATION WITH RPTR REVEALED THE FOLLOWING INFO: THE RPTR STATED THIS WAS THE SECOND INCIDENT OF COMPLETE HYDRAULIC SYSTEM FAILURE IN THE FLEET OF THREE CESSNA CITATION C650 G MODELS. THE RPTR SAID IN THE FIRST INCIDENT THE AIRPLANE WAS TAXIING AND NO LOSS OF CONTROL WAS INVOLVED. THE RPTR STATED IN BOTH INCIDENTS THE HYDRAULIC PWRED GND COOLING FANS WERE THE CAUSE OF THE LOSS OF HYDRAULIC PRESSURE AND QUANTITY. THE RPTR SAID IN THIS INCIDENT A CHAFFED HYDRAULIC LINE DUMPED ALL THE FLUID ON TOUCHDOWN CAUSING FAILURE OF THE GND SPOILERS TO DEPLOY, THRUST REVERSERS AND NORMAL BRAKING FAILURE. THE RPTR STATED GREAT CONCERN OVER THE LOCATION OF THE EMER BRAKE HANDLE AND THE FLT OPS MANUAL STATED A STAND PIPE IN THE HYDRAULIC RESERVOIR WILL ENSURE GND SPOILERS, THRUST REVERSERS AND NORMAL BRAKING WITH LOSS OF RESERVOIR FLUID. THE RPTR SAID THE AIRPLANE IS STILL BEING REPAIRED WITH THE ENGINES REMOVED AND WING TIP REPAIR HALTED FOR PARTS. THE RPTR STATED MAINT HAS NOT RELEASED FINDINGS ON THE RESERVOIR STAND PIPE FLUID NOT OP AS ADVERTISED. CALLBACK CONVERSATION WITH RPTR ACN 598849 REVEALED THE FOLLOWING INFO: THE RPTR STATED TWO SYSTEM FAILURES ACCOUNTED FOR THIS INCIDENT, THE HYDRAULIC SYSTEM LOSS OF PRESSURE AND QUANTITY FROM THE GND FAN HYDRAULIC LINE FAILURE AND THE FAILURE OF THE EMERGENCY FLUID LEVEL FEATURE. THE RPTR SAID THE EMER FLUID LEVEL FEATURE SENSES LOW HYDRAULIC FLUID LEVEL AND ISOLATES THE SYSTEM. THEN STARTS THE ELECTRICAL AUXILIARY PUMP TO PROVIDE PRESSURE TO CRITICAL SYSTEMS (BRAKES). THE RPTR STATED THIS SYSTEM DID NOT FUNCTION.

## **Synopsis**

A CITATION C650G ON LNDG EXPERIENCED A RWY EXCURSION CAUSED BY LOSS OF ALL HYDRAULIC SYSTEMS. HYDRAULIC LOST FROM GND PACK COOLING FAN LINE.

**ACN: 597740**

### **Time / Day**

Date : 200310  
Day : Sat  
Local Time Of Day : 1801 To 2400

### **Place**

Locale Reference.Airport : ZZZ.Airport  
State Reference : US  
Altitude.AGL.Single Value : 0

### **Environment**

Flight Conditions : VMC  
Light : Night

### **Aircraft : 1**

Controlling Facilities.Tower : ZZZ.Tower  
Operator.Common Carrier : Air Carrier  
Make Model Name : Regional Jet CL65, Undifferentiated or Other Model  
Operating Under FAR Part : Part 121  
Flight Phase.Ground : Takeoff Roll

### **Component : 1**

Aircraft Component : Nosewheel Steering

### **Person : 1**

Affiliation.Company : Air Carrier  
Function.Flight Crew : Captain  
Function.Oversight : PIC  
Qualification.Pilot : ATP  
Qualification.Pilot : Commercial  
Qualification.Pilot : Instrument  
Qualification.Pilot : Multi Engine  
Experience.Flight Time.Last 90 Days : 220  
Experience.Flight Time.Total : 23000  
Experience.Flight Time.Type : 800  
ASRS Report : 597740

### **Person : 2**

Affiliation.Company : Air Carrier  
Function.Flight Crew : First Officer  
Experience.Flight Time.Type : 100

### **Person : 3**

Affiliation.Government : FAA  
Function.Controller : Local



## Events

Anomaly.Aircraft Equipment Problem : Critical  
Anomaly.Other Anomaly  
Independent Detector.Other.Flight CrewA : 1  
Independent Detector.Other.Flight CrewB : 2  
Resolatory Action.Flight Crew : Rejected Takeoff  
Consequence.Other : Company Review  
Consequence.Other

## Assessments

Problem Areas : Aircraft  
Problem Areas : Flight Crew Human Performance

## Narrative

AS INITIAL TKOF ROLL COMMENCED (FO'S TKOF) ALL ENG INSTS APPEARED NORMAL. AT APPROX 20 KTS, ACFT STARTED TO MOVE HARD R FROM RWY CTRLINE. FO MADE COMMENT AS TO ACFT TRACKING. ABORT WAS CALLED. I TOOK OVER ACFT AND NOTED IT TOOK HARD FULL L RUDDER TO KEEP ACFT ON RWY. XWIND WAS 7 KTS. EXITED RWY. AFTER LNDG CHKS COMPLETED, NO UNUSUAL SETTINGS NOTED. CTL CHK REDONE. IT WAS EVERYTHING NORMAL. SECOND TKOF ATTEMPT STARTED. AT SAME POINT ACFT BEGAN HARD R TRACKING TAKING FULL L RUDDER AND MY BRAKE TO CTL HDG. TKOF ABORTED. RETURNED TO GATE. ACFT TURNED OVER TO MAINT. ON TAXI BACK TO GATE, PAX TOLD OF ACFT TRACKING PROB AND WOULD BE RETURNING TO GATE FOR MAINT. REBOARDED ALL PAX LATER ON ANOTHER ACFT AND THEY SEEMED HAPPY TO BE GOING TO ZZZ1. ADDITIONAL: AFTER FIRST TKOF ATTEMPT, I OBSERVED NO MECHANICAL DISCREPANCIES, MALFUNCTIONS OR ABNORMALITIES REGARDING THE ACFT CTLS, INCLUDING STEERING. THEREFORE, I CONCLUDED MAYBE THE FO MISAPPLIED THE CTLS/BRAKES DURING THE FIRST TKOF ATTEMPT. CALLBACK CONVERSATION WITH RPTR REVEALED THE FOLLOWING INFO: THE RPTR STATED THE CAUSE OF THE ACFT TRACKING PROB IS UNKNOWN, AS MAINT DID NOT ADVISE THE CREW OF THE CORRECTIVE ACTION.

## Synopsis

A CANADAIR CL65 ON TKOF ROLL. AT 20 KTS THE ACFT MOVED HARD R FROM THE RWY CTRLINE. TKOF ABORTED. SECOND ATTEMPT AFTER CHKLISTS COMPLETED RESULTED IN HARD R TRACKING. TKOF ABORTED.

**ACN: 588124**

## **Time / Day**

Date : 200306  
Day : Wed  
Local Time Of Day : 1201 To 1800

## **Place**

Locale Reference.Airport : HSV.Airport  
State Reference : AL  
Altitude.MSL.Bound Lower : 7000  
Altitude.MSL.Bound Upper : 16000

## **Environment**

Flight Conditions : IMC  
Weather Elements : Ice  
Weather Elements : Rain  
Weather Elements : Turbulence  
Weather Elements : Windshear  
Weather Elements.Other

## **Aircraft : 1**

Controlling Facilities.TRACON : MEM.TRACON  
Operator.Common Carrier : Air Carrier  
Make Model Name : A300  
Operating Under FAR Part : Part 121  
Route In Use.Arrival : On Vectors

## **Person : 1**

Affiliation.Company : Air Carrier  
Function.Flight Crew : Captain  
Function.Oversight : PIC  
Qualification.Pilot : ATP  
Experience.Flight Time.Last 90 Days : 158  
Experience.Flight Time.Total : 5500  
Experience.Flight Time.Type : 1800  
ASRS Report : 588124

## **Person : 2**

Affiliation.Company : Air Carrier  
Function.Flight Crew : First Officer

## **Person : 3**

Affiliation.Company : Air Carrier  
Function.Maintenance : Technician

## **Person : 4**

Affiliation.Government : FAA  
Function.Controller : Approach

## Events

Anomaly.Altitude Deviation : Excursion From Assigned Altitude  
Anomaly.Inflight Encounter : Turbulence  
Anomaly.Inflight Encounter : Weather  
Anomaly.Other Anomaly  
Independent Detector.Other.Flight CrewA : 1  
Resolatory Action.Controller : Issued Advisory  
Resolatory Action.Flight Crew : Overrode Automation  
Resolatory Action.Flight Crew : Regained Aircraft Control  
Resolatory Action.Flight Crew : Took Evasive Action  
Consequence.Other

## Assessments

Problem Areas : Aircraft  
Problem Areas : Flight Crew Human Performance  
Problem Areas : Weather

## Narrative

I WAS IN COMMAND OF AN A300 OPERATING FROM MIAMI, FL, TO HUNTSVILLE, AL. ALL OUR DSCNT TO LAND AT HUNTSVILLE ARPT WAS MADE UNDER IMC AND WE REQUESTED DEVS FROM OUR TRACK DUE TO ADVERSE WX CONDITIONS. WE RECEIVED CLRNC TO DEVIATE AND WE WERE INFORMED BY THE AIR TFC CTLR THAT IN ABOUT 10 NM AHEAD, WE WOULD FIND BETTER WX CONDITIONS. THIS INFO WAS IN ACCORDANCE WITH THE CONDITIONS OBSERVED IN OUR AIRBORNE WX RADAR. WE WERE ABOUT 20 NM FROM HUNTSVILLE ARPT MAINTAINING 10000 FT AND THE AUTOPLT WAS ENGAGED. INITIALLY, WE FOUND LIGHT TO MODERATE TURB AND THEN HVY HAIL. SUDDENLY, WE WERE AFFECTED BY A STRONG DSNDING VERT WINDSHEAR AND THE ACFT STARTED AN UNCOMMANDED LOST OF ALT. I WAS ACTING AS PF AND MY FIRST REACTION WAS TO DISCONNECT THE ALT HOLD MODE IN ORDER TO HAVE MANUAL CTL OF THE PITCH ATTITUDE WITH THE COLUMN CTL AND STOP DSND. FINALLY, I STOPPED THE UNCOMMANDED DSCNT AT 7000 FT, BUT IMMEDIATELY WE WERE NOW AFFECTED BY A STRONG ASCENDING VERT WINDSHEAR AND THE ACFT STARTED AN UNCOMMANDED CLB UP TO NEAR 16000 FT. DURING THIS PERIOD, THE AIR TFC CTLR CALLED US A FEW TIMES ASKING FOR OUR STATUS AND INTENTIONS, BUT WE WERE NOT ABLE TO ANSWER BECAUSE OUR FIRST PRIORITY WAS TO CTL THE ACFT. ONCE THE ACFT WAS FULLY IN CTL AFTER THE WINDSHEAR PROC WAS COMPLETED, WE ANSWERED THE AIR TFC CTLR THAT OUR INTENTIONS IN CASE OF NO IMPROVEMENT OF WX CONDITIONS IN HSV AND BHM, WE WILL PROCEED TO MEMPHIS. ATC ASKED US TO STOP THE CLB AND MAINTAIN 16000 FT WHILE WE ALREADY HAD THE ACFT LEVELED OFF. BY THAT TIME, THE SQUALL LINE WAS LEFT S AND WE REGAINED VMC CONDITIONS, SO WE DECIDED TO REQUEST CLRNC TO CONTINUE THE APCH TO HUNTSVILLE ARPT. WE WERE CLR TO DSND AND RECEIVED VECTORS FOR THE APCH. SINCE WE HAD STABLE WX CONDITIONS, I PERSONALLY CALLED ATC AND GAVE DETAILS ABOUT THE WINDSHEAR CONDITIONS. DURING THE REST OF THE APCH AND LNDG AT HUNTSVILLE ARPT, WE DID NOT FIND ANY FURTHER ADVERSE WX CONDITIONS. IT IS IMPORTANT TO INFORM YOU THAT THE PARAMETERS OF THE ENGS WERE NEVER EXCEEDED. ALSO, DURING THE UNCOMMANDED DSCNT AND CLB OF THE

ACFT, THE MMO/VMO, STICK SHAKER OR INITIAL BUFFET WERE NEVER REACHED, FOUND OR FELT. FINALLY, DURING THE 3 HRS XSIT THAT THE ACFT REMAINED ON THE GND AT HUNTSVILLE ARPT, OUR MECH ON BOARD, PERFORMED A THOROUGH INSPECTION ACCORDING TO THE COMPANY MAINT MANUAL. THIS INSPECTION WAS PERFORMED WITH NO FINDINGS.

### **Synopsis**

AN A300 FLT CREW ENCOUNTERS WINDSHEAR RESULTING IN +6000 FT THROUGH -3000 FT ALTDEVS DURING APCH TO HSV.

**ACN: 587317**

### **Time / Day**

Date : 200307  
Day : Tue  
Local Time Of Day : 1201 To 1800

### **Place**

Locale Reference.Airport : APF.Airport  
State Reference : FL  
Altitude.AGL.Single Value : 0

### **Environment**

Flight Conditions : VMC  
Light : Daylight

### **Aircraft : 1**

Controlling Facilities.Tower : APF.Tower  
Operator.General Aviation : Personal  
Make Model Name : MU-300 Diamond 1/1A  
Operating Under FAR Part : Part 91  
Flight Phase.Landing : Roll  
Route In Use.Approach : Visual

### **Component : 1**

Aircraft Component : Antiskid System

### **Person : 1**

Affiliation.Other : Personal  
Function.Flight Crew : Captain  
Function.Oversight : PIC  
Qualification.Pilot : ATP  
Experience.Flight Time.Last 90 Days : 210  
Experience.Flight Time.Total : 5000  
Experience.Flight Time.Type : 1200  
ASRS Report : 587317

### **Person : 2**

Affiliation.Other : Personal  
Function.Flight Crew : First Officer  
Qualification.Pilot : Commercial  
Qualification.Pilot : Instrument  
Qualification.Pilot : Multi Engine  
Experience.Flight Time.Last 90 Days : 320  
Experience.Flight Time.Total : 1800  
Experience.Flight Time.Type : 1000  
ASRS Report : 587269

### **Person : 3**

Affiliation.Other : Contracted Service  
Function.Controller : Local

## Events

Anomaly.Aircraft Equipment Problem : Critical  
Anomaly.Excursion : Runway  
Anomaly.Other Anomaly  
Independent Detector.Other.Flight CrewA : 1  
Resolatory Action.None Taken : Unable  
Consequence.Other

## Assessments

Problem Areas : Aircraft

## Narrative

LNDG AT NAPLES, FL (APF), THE ACFT HAD A BRAKE FAILURE AND CAME TO STOP IN THE OVERRUN APPROX 15 FT. DAY, VMC CONDITIONS, FLT ORIGINATED AT FLL. CLRED FOR A VISUAL APCH AT APF. LNDG WT 12700 LBS. USED A VREF OF 108 WHICH IS COMPUTED FOR 13000 LBS. HELD AN APCH SPD OF 120 KTS ON FINAL UNTIL OVER THE APCH END OF RWY 14. TOUCHED DOWN APPROX 800 FT PAST APCH END, LEAVING 4200 FT TO BRING ACFT TO A STOP. COMPUTED STOPPING DISTANCE WAS 2800 FT. TOUCHED DOWN AT VREF (108) CALLED FO TO APPLY SPD BRAKES, MADE A GOOD BRAKES CALL. INITIALLY ACFT MADE A HARD DECELERATION, SO I EASED UP ON THE BRAKE PRESSURE IN ORDER TO CARRY SOME FORWARD MOTION TO EXIT OFF THE RWY AT THE VERY END. REAPPLIED BRAKE PRESSURE AT APPROX HALF WAY POINT AND BRAKES FAILED. ACFT LEFT RWY AND CAME TO STOP 15 FT IN OVERRUN. NO ACFT DAMAGE, NO INJURIES TO PAX. INSPECTION OF RWY REVEALED R BRAKE LOCKED UP WITH SKID MARK, AND NO L BRAKE SKID MARK. ANTI-SKID WAS ON, AND TESTED OK PRIOR TO FLT. SUPPLEMENTAL INFO FROM ACN 587269: BRAKE PRESSURE WAS RELEASED TO ROLL TO END OF RWY 14 TO MAKE A L TURN OFF AT THE END OF RWY 14 -- PIC WENT TO APPLY BRAKES TO NEARLY STOP ACFT TO MAKE 90 DEG TURN OFF OF RWY 14 AND HAD NO BRAKES. AS THE SIC, I PLACED MY FEET ON BRAKES AFTER HE ANNOUNCED TO TWR THAT WE HAD A BRAKE FAILURE AND THERE WAS NO BRAKE PRESSURE AT ALL. AT THIS TIME AIRSPD INDICATOR IS NOT REGISTERING. WE WERE TRAVELING APPROX 8-10 KTS, NOT VERY FAST AT ALL BUT TOO FAST TO MAKE A 90 DEG TURN TO THE L TO EXIT THE RWY ONTO TXWY.

## Synopsis

AN MU300 FLT HAS A BRAKE FAILURE ON ROLLOUT AND ENDS UP 15 FT INTO THE OVERRUN OFF RWY 14 AT APF, FL.

**ACN: 585405**

## **Time / Day**

Date : 200306  
Day : Thu

## **Place**

Locale Reference.Airport : DFW.Airport  
State Reference : TX  
Altitude.AGL.Bound Lower : 0  
Altitude.AGL.Bound Upper : 33000

## **Environment**

Light : Daylight

## **Aircraft : 1**

Controlling Facilities.Tower : DFW.Tower  
Operator.Common Carrier : Air Carrier  
Make Model Name : B737-700  
Operating Under FAR Part : Part 121  
Flight Phase.Climbout : Intermediate Altitude  
Flight Phase.Climbout : Takeoff  
Flight Phase.Cruise : Level  
Flight Phase.Ground : Takeoff Roll  
Route In Use.Departure.SID : N/S

## **Person : 1**

Affiliation.Company : Air Carrier  
Function.Flight Crew : Captain  
Function.Oversight : PIC  
Qualification.Pilot : ATP  
ASRS Report : 585405

## **Person : 2**

Affiliation.Company : Air Carrier  
Function.Flight Crew : First Officer

## **Person : 3**

Affiliation.Company : Air Carrier  
Function.Other Personnel : Dispatcher  
Qualification.Other : Dispatcher

## **Person : 4**

Affiliation.Company : Air Carrier  
Function.Other Personnel.Other

## **Person : 5**

Affiliation.Government : FAA  
Function.Controller : Local

## **Person : 6**

Affiliation.Government : FAA  
Function.Controller : Local

## **Events**

Anomaly.Other Anomaly  
Anomaly.Other Spatial Deviation  
Independent Detector.Other.Flight CrewA : 1  
Independent Detector.Other.Flight CrewB : 2  
Resolatory Action.Flight Crew : Landed In Emergency Condition  
Resolatory Action.Flight Crew : Regained Aircraft Control  
Resolatory Action.Other  
Consequence.Other : Company Review  
Consequence.Other

## **Assessments**

Problem Areas : Environmental Factor  
Problem Areas : Weather

## **Narrative**

UNCOMMANDED SWERVE ON TKOF. ON THE TKOF ROLL AROUND 100 KTS THE ACFT SWERVED SLIGHTLY R. THE SIDE LOAD PLACED ON THE TIRES MADE A SOUND THAT SOUNDED LIKE A POSSIBLE TIRE FAILURE. A SCAN OF ALL ENG INSTRUMENTS INDICATED THEY WERE NORMAL. AS THE ACFT STRAIGHTENED UP AND CONTINUED DOWN THE RWY ALL INDICATIONS AND SOUNDS RETURNED TO NORMAL. A NORMAL TKOF AND CLB TO CRUISE ALT FOLLOWED. ONCE AT CRUISE ALT A REVIEW OF THE ACFT LOGBOOK REVEALED A WRITE-UP FROM DAYS BEFORE THAT THE TREAD ON THE R MAIN GEAR TIRE WAS LOW AND REQUIRED INSPECTION. THIS WAS SIGNED OFF AS WITHIN LIMITS. TAKING THESE TWO TOGETHER, I CONCLUDED IT WOULD BE A GOOD IDEA TO HAVE DISPATCH CONTACT DFW AND REQUEST THEY INSPECT THE RWY FOR POSSIBLE TIRE FOD. I ALSO REQUESTED THAT ARFF MEET THE ACFT UPON LNDG AT OUR DEST. AFTER LNDG WE STOPPED THE ACFT ON THE RWY WHILE ARFF PERSONNEL INSPECTED THE TIRES. NO DAMAGE WAS FOUND AND WE TAXIED TO THE GATE. A POST FLT INSPECTION DID NOT REVEAL ANY TIRE DAMAGE OR OTHER POSSIBLE CAUSE FOR THE SWERVE. CONCLUSION, A XWIND GUST OR POSSIBLE JET-BLAST CAUSED THE TEMPORARY SWERVE DURING TKOF.

## **Synopsis**

B737-700 CREW RPTED A SWERVE ON TKOF ROLL AT DFW WAS DUE TO A XWIND GUST OR JET BLAST.



**ACN: 585365**

### **Time / Day**

Date : 200306  
Day : Tue  
Local Time Of Day : 1801 To 2400

### **Place**

Locale Reference.Airport : ZZZ.Airport  
State Reference : US  
Altitude.MSL.Single Value : 26000

### **Environment**

Flight Conditions : VMC  
Weather Elements : Turbulence  
Light : Night

### **Aircraft : 1**

Controlling Facilities.ARTCC : ZZZ.ARTCC  
Controlling Facilities.TRACON : ZZZ1.TRACON  
Operator.Common Carrier : Air Carrier  
Make Model Name : B737-300  
Operating Under FAR Part : Part 121  
Flight Phase.Cruise : Level  
Flight Phase.Descent : Approach  
Flight Phase.Descent : Vacating Altitude

### **Component : 1**

Aircraft Component : Aileron

### **Person : 1**

Affiliation.Company : Air Carrier  
Function.Flight Crew : Captain  
Function.Oversight : PIC  
Qualification.Pilot : ATP  
Qualification.Pilot : Commercial  
Qualification.Pilot : Instrument  
Qualification.Pilot : Multi Engine  
ASRS Report : 585365

### **Person : 2**

Affiliation.Company : Air Carrier  
Function.Flight Crew : First Officer  
Qualification.Pilot : ATP  
ASRS Report : 585366

### **Person : 3**

Affiliation.Government : FAA  
Function.Controller : Radar

#### **Person : 4**

Affiliation.Government : FAA  
Function.Controller : Approach

#### **Person : 5**

Affiliation.Company : Air Carrier  
Function.Maintenance : Technician

#### **Person : 6**

Affiliation.Company : Air Carrier  
Function.Other Personnel.Other

#### **Person : 7**

Affiliation.Company : Air Carrier  
Function.Flight Crew : Captain  
Function.Oversight : PIC

#### **Events**

Anomaly.Aircraft Equipment Problem : Critical  
Anomaly.Inflight Encounter : Turbulence  
Anomaly.Inflight Encounter : Wake Turbulence  
Anomaly.Other Anomaly  
Independent Detector.Other.Flight CrewA : 1  
Independent Detector.Other.Flight CrewB : 2  
Resolatory Action.Flight Crew : Overcame Equipment Problem  
Resolatory Action.Flight Crew : Overrode Automation  
Resolatory Action.Flight Crew : Regained Aircraft Control  
Consequence.Other : Company Review  
Consequence.Other

#### **Assessments**

Problem Areas : Aircraft  
Problem Areas : Company  
Problem Areas : Flight Crew Human Performance

#### **Narrative**

SMOOTH AIR FL260, AIRSPD 320 KTS, VERT SPD MODE 2000 FPM DOWN, LNAV ENGAGED, AUTOPLT B ENGAGED. ACFT BANKED 30 DEGS L AT MEDIUM TO RAPID RATE, FOLLOWED BY CTL WHEEL STEERING R, SHORTLY AFTER FO DISCONNECTED AUTOPLT AND AUTOTHROTTLES. NO YAW FELT AND RUDDER PEDALS CTRED. ACFT WAS SLOWED TO 280 KTS. HEADING SELECT AND B AUTOPLT WERE REENGAGED AFTER 2 ATTEMPTS. CAPT ASKED ATC FOR RIDE RPTS AND CENTER SAID SMOOTH. HOWEVER, 10 MINS PRIOR PLTS OVERHEARD UNKNOWN ACFT RPT MODERATE TURB, AT FL310 AREA UNKNOWN. THEN AT XA22Z OVER ZZZZZ INTXN, LEVEL FLT 11000 FT, 280 KTS, SMOOTH AIR, ACFT BANKED 15 DEGS L AT A MEDIUM RATE FOR 4 SECONDS, WHILE AT THE SAME TIME ACFT ENCOUNTERED A RHYTHMIC LIGHT CHOP. NO YAW FELT AND RUDDER PEDALS WERE CTRED. AUTOPLT B WAS LEFT ON THROUGHOUT. CAPT ASKED FOR RIDE RPTS, APCH REPLIED SMOOTH. AUTOPLT B REMAINED ON UNTIL 3000 FT.

APCH AND LNDG WERE NORMAL. CONCLUSION: DIFFICULT TO TELL IF THE UNCOMMANDED BANK WAS CAUSED BY TURB, WAKE TURB, OR SOME KIND OF AUTOPLT OR CTL PROB. CALLBACK CONVERSATION WITH RPTR REVEALED THE FOLLOWING INFO: THE CAPT ON THE FLT ADVISED THAT, NOT SURPRISINGLY, THE COMPANY MAINT AND FLT SAFETY DEPTS TOOK THIS INCIDENT VERY SERIOUSLY AND, AMONG OTHER CHKS, INVESTIGATED EVIDENCE FROM THE FLT DATA RECORDER. IN CONCERT WITH THE RPTS OF THE PLTS, THE RECORDER INDICATED ONLY ROLL INPUTS AND NOTHING IN THE YAW AXIS. TO THE BEST OF THE CAPT'S CURRENT KNOWLEDGE THE FIX FOR THEIR WRITE-UP WAS TO REPLACE WHAT SHE REMEMBERED AS THE 'AUTOPLT AILERON LIMITER.'  
SUPPLEMENTAL INFO FROM ACN 585366: ATC ASKED AN RJ ON ARR AHEAD OF US HOW HIS RIDE HAD BEEN IN DSCNT. HE SAID SMOOTH ALL THE WAY. ON BOTH EVENTS, NO ABNORMAL ENG READINGS NOTED. YAW DAMPER INDICATIONS NORMAL. ALL FLT CTL INDICATIONS NORMAL. ALL HYD FLUID LEVELS NORMAL. NO FLAP SETTING CHANGES. NO GEAR CHANGES. NO SPD BRAKE CHANGES. NO THROTTLE ALIGNMENT PROBS OR CHANGES NOTED. NO YAW NOTED. NO RUDDER PEDAL OR DISPLACEMENT NOTED. NO LARGE ACFT IN AREA NOTED (VISIBILITY GOOD ON) OR POINTED OUT BY ATC. ONLY TFC POINTED OUT BY ATC WAS RJ ON ARR AHEAD AND BELOW US. NO ADVERSE TURB RPTS NOTED BY ATC OR ANY OTHER ACFT IN AREA FROM 26000 FT AND BELOW. NO CHANGE IN WIND DIRECTION OR SPD OR SHEARS NOTED ON DSCNT (WIND DIRECTION AND SPD ON EFIS DISPLAY).

## **Synopsis**

FLT CREW OF B733 RPTS 2 INCIDENCES OF UNCOMMANDED ROLL WHILE OPERATING ON B AUTOPLT.

**ACN: 582298**

## **Time / Day**

Date : 200305  
Day : Fri  
Local Time Of Day : 0601 To 1200

## **Place**

Locale Reference.Airport : GSO.Airport  
State Reference : NC  
Altitude.MSL.Bound Lower : 1850  
Altitude.MSL.Bound Upper : 2200

## **Environment**

Flight Conditions : IMC  
Light : Daylight

## **Aircraft : 1**

Controlling Facilities.TRACON : GSO.TRACON  
Operator.General Aviation : Corporate  
Make Model Name : Beechjet 400  
Operating Under FAR Part : Part 91  
Navigation In Use.ILS.Localizer & Glide Slope : 23  
Navigation In Use.Other : FMS or FMC  
Flight Phase.Descent : Approach

## **Component : 1**

Aircraft Component : Altitude Hold/Capture

## **Person : 1**

Affiliation.Company : Corporate  
Function.Flight Crew : Captain  
Function.Oversight : PIC  
Qualification.Pilot : ATP  
Qualification.Pilot : CFI  
Qualification.Pilot : Multi Engine  
Experience.Flight Time.Last 90 Days : 140  
Experience.Flight Time.Total : 25000  
Experience.Flight Time.Type : 1100  
ASRS Report : 582298

## **Person : 2**

Affiliation.Company : Corporate  
Function.Flight Crew : First Officer

## **Person : 3**

Affiliation.Government : FAA  
Function.Controller : Approach

## Events

Anomaly.Aircraft Equipment Problem : Critical  
Anomaly.Altitude Deviation : Excursion From Assigned Altitude  
Anomaly.Non Adherence : Clearance  
Anomaly.Other Anomaly  
Independent Detector.Other.Flight CrewA : 1  
Resolatory Action.Controller : Issued Advisory  
Resolatory Action.Flight Crew : Overcame Equipment Problem  
Resolatory Action.Flight Crew : Overrode Automation  
Resolatory Action.Flight Crew : Regained Aircraft Control

## Assessments

Problem Areas : Aircraft

## Narrative

AUTOPLT BEGAN UNCOMMANDED ABRUPT PITCH DOWN. LOST 350 FT BEFORE MANUAL RECOVERY. CALLBACK INFO FROM RPTR REVEALED THE FOLLOWING INFO: RPTR STATED THAT AUTOPLT WAS IN THE ALT HOLD MODE, PROPERLY ANNUNCIATED, AND THE INCIDENT HAPPENED PRIOR TO GS CAPTURE. GSO APCH ALERTED THEM OF THE DEV ABOUT THE SAME TIME THEY TOOK ACTION TO TAKE MANUAL CTL. MAINT INSPECTED AND TESTED THE SYS AND WAS UNABLE TO DUPLICATE. ACFT IS BACK IN SVC.

## Synopsis

BE40 AUTOPLT MALFUNCTIONED ON ILS APCH TO GSO. ACFT LOST 350 FT BEFORE RECOVERY.

**ACN: 581573**

### **Time / Day**

Date : 200305  
Day : Thu  
Local Time Of Day : 1201 To 1800

### **Place**

Locale Reference.Airport : ZZZ.Airport  
State Reference : US  
Altitude.MSL.Single Value : 17500

### **Environment**

Flight Conditions : VMC  
Light : Daylight

### **Aircraft : 1**

Controlling Facilities.ARTCC : ZZZ.ARTCC  
Operator.Common Carrier : Air Carrier  
Make Model Name : Regional Jet 200 ER&LR  
Operating Under FAR Part : Part 121  
Navigation In Use.Other : FMS or FMC  
Flight Phase.Climbout : Intermediate Altitude

### **Component : 1**

Aircraft Component : Aileron Control System

### **Person : 1**

Affiliation.Company : Air Carrier  
Function.Flight Crew : Captain  
Function.Oversight : PIC  
Qualification.Pilot : ATP  
Qualification.Pilot : Multi Engine  
Experience.Flight Time.Last 90 Days : 265  
Experience.Flight Time.Total : 4400  
Experience.Flight Time.Type : 960  
ASRS Report : 581573

### **Person : 2**

Affiliation.Company : Air Carrier  
Function.Flight Crew : First Officer

### **Person : 3**

Affiliation.Company : Air Carrier  
Function.Flight Attendant : On Duty

### **Person : 4**

Affiliation.Company : Air Carrier  
Function.Other Personnel.Other

## **Person : 5**

Affiliation.Government : FAA  
Function.Controller : Radar

## **Events**

Anomaly.Aircraft Equipment Problem : Critical  
Anomaly.Other Anomaly  
Independent Detector.Other.Flight CrewA : 2  
Independent Detector.Other.Flight CrewB : 1  
Resolatory Action.Flight Crew : Declared Emergency  
Resolatory Action.Flight Crew : Diverted To Another Airport  
Resolatory Action.Flight Crew : Landed In Emergency Condition  
Resolatory Action.Flight Crew : Overrode Automation  
Resolatory Action.Flight Crew : Regained Aircraft Control  
Resolatory Action.Flight Crew : Took Precautionary Avoidance Action  
Consequence.Other

## **Assessments**

Problem Areas : Aircraft

## **Narrative**

CLBING THROUGH APPROX 5000 FT, FO AND I NOTICED A CYCLICAL VIBRATION IN THE AIRFRAME. THE ACFT WOULD VIBRATE EVERY 45 SECONDS TO 1 MIN FOR APPROX 1-2 SECONDS. THE VIBRATION WAS VERY DEEP (LOW) FREQ. CLBING THROUGH 10000 FT, I CALLED MY FLT ATTENDANT TO SEE IF SHE NOTICED ANY VIBRATION. SHE DID NOT. FO ENGAGED THE AUTOPLT AND I CONTACTED COMPANY MAINT. WE BEGAN TROUBLESHOOTING THE PROB, BUT COULD NOT FIND ANY OBVIOUS CULPRIT. ENG VIBRATION WAS STEADY, ALL HYD INDICATIONS WERE NORMAL AND NO EICAS WARNING MESSAGES OR STATUS MESSAGES WERE PRESENT. I ASKED THE FO TO DISENGAGE THE AUTOPLT AT APPROX 16500 FT TO SEE IF HE COULD FEEL VIBRATION IN THE CTLS. AT APPROX 17500 FT, THE ACFT ROLLED VIOLENTLY TO THE R. WITHIN 15-30 SECONDS, THE ACFT ROLLED AGAIN. I TOLD CTR THAT WE NEEDED AN IMMEDIATE RETURN TO ZZZ1. AS WE BEGAN THE TURN, I RECOGNIZED THAT ZZZ WAS WITHIN 50 MI. I TOLD CTR WE NEEDED ZZZ. I HAD MY FLT ATTENDANT PREPARE THE CABIN FOR AN EMER LNDG. WE LANDED ZZZ UNEVENTFULLY.

## **Synopsis**

A CL65 FLT CREW EXPERIENCED A VIBRATION, THEN LATER HAD THE ACFT VIOLENTLY ROLL TO THE R 2 TIMES.

**ACN: 581428**

### **Time / Day**

Date : 200305  
Day : Fri  
Local Time Of Day : 1801 To 2400

### **Place**

Locale Reference.Airport : LAX.Airport  
State Reference : CA  
Altitude.AGL.Bound Lower : 0  
Altitude.AGL.Bound Upper : 100  
Altitude.AGL.Single Value : 0

### **Environment**

Flight Conditions : VMC  
Light : Night

### **Aircraft : 1**

Controlling Facilities.Tower : LAX.Tower  
Operator.Common Carrier : Air Carrier  
Make Model Name : B747-200  
Operating Under FAR Part : Part 121  
Flight Phase.Landing : Roll  
Route In Use.Approach : Visual  
Route In Use.Arrival.STAR : Sadde

### **Component : 1**

Aircraft Component : Elevator

### **Person : 1**

Affiliation.Company : Air Carrier  
Function.Flight Crew : Captain  
Function.Oversight : PIC  
Qualification.Pilot : ATP  
Qualification.Pilot : Commercial  
Qualification.Pilot : Instrument  
Qualification.Pilot : Multi Engine  
Qualification.Pilot : Private  
Experience.Flight Time.Last 90 Days : 190  
Experience.Flight Time.Total : 10569  
Experience.Flight Time.Type : 2957  
ASRS Report : 581428

### **Person : 2**

Affiliation.Company : Air Carrier  
Function.Flight Crew : First Officer

### **Person : 3**



Affiliation.Company : Air Carrier  
Function.Flight Crew : Second Officer

## Person : 4

Affiliation.Government : FAA  
Function.Controller : Local

## Events

Anomaly.Ground Encounters.Other  
Anomaly.Non Adherence : Published Procedure  
Anomaly.Other Anomaly  
Anomaly.Other Anomaly : Unstabilized Approach  
Anomaly.Other Anomaly.Other  
Independent Detector.Other.Flight CrewA : 3  
Resolatory Action.Flight Crew : Regained Aircraft Control  
Resolatory Action.None Taken : Insufficient Time  
Resolatory Action.Other  
Consequence.Other : Company Review  
Consequence.Other

## Assessments

Problem Areas : Flight Crew Human Performance

## Narrative

THE FLT WAS DISPATCHED FROM ANC TO LAX. THE CAPT WAS THE PNF. THE FO WAS THE PF. ENRTE, THE CREW BRIEFED FOR AN APCH AND ARR TO RWY 25L. THE FLT WAS CLRED FOR THE SADDE 6 ARR AND RECEIVED RADAR VECTORS FOR THE VISUAL APCH TO RWY 25L. THE LOC FREQ WAS TUNED AND THE MCP WAS CONFIGURED FOR THE RWY 25L ILS APCH FOR COURSE AND GS GUIDANCE, AS BRIEFED. THE WX WAS GOOD AND NOT A FACTOR. THE ACFT WAS CONFIGURED WITH 30 DEG FLAPS AND MINIMUM AUTOBRAKES WERE SELECTED. DURING THE APCH, COURSE, GS, AND AIRSPD CTL WRE MAINTAINED WITHIN LIMITS. HOWEVER, DURING THE LNDG PHASE, THE SINK RATE INCREASED AND WAS NOT ARRESTED BEFORE TOUCHDOWN. THE ACFT CONTACTED THE RWY ON THE MAIN LNDG GEAR MUCH FIRMER THAN NORMAL, BOUNCED, AND THEN SETTLED BACK ONTO THE RWY. DURING THE BOUNCE, THE PITCH WAS ARRESTED TO PREVENT THE NOSE GEAR AND TAIL FROM IMPACTING THE RWY. ROLL, PITCH, AND YAW CTL WERE MAINTAINED TO ALLOW THE ACFT TO SETTLE ONTO THE MAIN GEAR AND COMPLETE A NORMAL ROLLOUT. THE FLAPS WERE LEFT IN THE EXTENDED POS AS A PRECAUTIONARY MEASURE. UPON BLOCK-IN, MAINT WAS ADVISED, A LOGBOOK ENTRY WAS MADE, AND OPS NOTIFIED. A WALKAROUND INSPECTION BY THE CREW DID NOT REVEAL ANY NOTICEABLE DAMAGE. THE CREW DEBRIEFED AND DISCUSSED WAYS TO PREVENT THIS FROM HAPPENING AGAIN. SOLUTIONS DISCUSSED: THE PF STATED THAT HE 'CHASED' THE FLT DIRECTOR BELOW 100 FT AGL (HE DSNDED ONTO IT) AND THE FE STATED THAT HE SAW 1100 FPM RATE OF DSCNT PASSING 50 FT AGL. 1) USE THE CUES (COURSE/GS, ETC) AVAILABLE TO GET AIRSPD AND RATE OF DSCNT STABILIZED EARLY ON THE APCH AND MAKE A SMOOTH TRANSITION TO LNDG. IF THE ACFT DRIFTS ABOVE THE GS, DETERMINE IF THE ACFT CAN STILL LAND WITHIN THE DESIRED TOUCHDOWN ZONE. IF NOT, EXECUTE A GAR. 2) IF A CREW MEMBER OBSERVES SOMETHING THAT IS NOT RIGHT, SUCH AS A HIGH RATE OF DSCNT, SPEAK UP SO CORRECTIVE ACTION CAN BE TAKEN IMMEDIATELY. 3) THE PNF COULD HAVE

DONE A BETTER JOB OF MONITORING THE PF'S PROGRESS, OBSERVING AN INCREASED RATE OF DSCNT BELOW 100 FT AND TAKING CORRECTIVE ACTION.

### **Synopsis**

A B747-200 CARGO FLT CREW EXPERIENCES A HARD LNDG AFTER A VISUAL WITH ILS BACKUP TO RWY 25L AT LAX, CA.

**ACN: 575189**

## **Time / Day**

Date : 200303  
Day : Sat  
Local Time Of Day : 1201 To 1800

## **Place**

Locale Reference.Airport : CAK.Airport  
State Reference : OH  
Altitude.MSL.Bound Lower : 8000  
Altitude.MSL.Bound Upper : 8400

## **Environment**

Flight Conditions : IMC  
Light : Daylight

## **Aircraft : 1**

Controlling Facilities.TRACON : CAK.TRACON  
Operator.Common Carrier : Air Carrier  
Make Model Name : Regional Jet 200 ER&LR  
Operating Under FAR Part : Part 121  
Navigation In Use.Other : FMS or FMC  
Flight Phase.Climbout : Intermediate Altitude

## **Component : 1**

Aircraft Component : Autopilot

## **Person : 1**

Affiliation.Company : Air Carrier  
Function.Flight Crew : First Officer  
Qualification.Pilot : Commercial  
Experience.Flight Time.Last 90 Days : 100  
Experience.Flight Time.Total : 6000  
Experience.Flight Time.Type : 80  
ASRS Report : 575189

## **Person : 2**

Affiliation.Company : Air Carrier  
Function.Flight Crew : Captain  
Function.Oversight : PIC

## **Person : 3**

Affiliation.Government : FAA  
Function.Controller : Departure

## **Events**

Anomaly.Aircraft Equipment Problem : Less Severe  
Anomaly.Altitude Deviation : Excursion From Assigned Altitude  
Anomaly.Altitude Deviation : Overshoot  
Anomaly.Non Adherence : Clearance  
Anomaly.Other Anomaly  
Anomaly.Other Anomaly.Other  
Independent Detector.Aircraft Equipment.Other Aircraft Equipment : AP Warn Sys  
Independent Detector.Other.Flight CrewA : 1  
Resolatory Action.Controller : Issued Advisory  
Resolatory Action.Flight Crew : Overrode Automation  
Resolatory Action.Flight Crew : Regained Aircraft Control  
Resolatory Action.Flight Crew : Returned To Assigned Altitude

## **Assessments**

Problem Areas : Aircraft

## **Narrative**

AFTER DEP FROM RWY 23 WE WERE CLRED RWY HDG TO 3000 FT SUBSEQUENTLY, THEN CLRED DIRECT BSV AFTER ESTABLISHED IN THE TURN, THEN CLRED TO 8000 FT. THE AUTOPLT WAS ENGAGED ABOUT 7000 FT AND BEGAN A LEVELOFF AT 8000 FT. THE ACFT THEN BEGAN A SUDDEN DSCNT WITH AN AUTOPLT NOSE DOWN TRIM WARNING. I DISCONNECTED THE AUTOPLT AND BEGAN A RECOVERY. THE ACFT, AT THE POINT OF AUTOPLT DISCONNECT, WAS NOSE HIGH TRIM POS THAT CAUSED THE ACFT TO BALLOON PAST 8000 FT TO 8400 FT. I MADE IMMEDIATE CORRECTIONS TO 8000 FT. ATC NOTICED THE DSCNT AND CLB AND ASKED IF WE NEEDED ASSISTANCE. THE CAPT ADVISED 'NO' AND FURTHER ADVISED WE HAD EXPERIENCED AN AUTOPLT PROB WITH A NOSE DOWN TRIM WARNING. NO FURTHER ACTION WAS TAKEN.

## **Synopsis**

A CL65 FO EXPERIENCES AN ALTDEV WHEN DISCONNECTING THE AUTOPLT AFTER RECEIVING AN AUTOPLT NOSE DOWN TRIM WARNING WHILE LEVELING AT 8000 FT S OF CAK, OH.

**ACN: 574066**

### **Time / Day**

Date : 200302  
Day : Sun  
Local Time Of Day : 1201 To 1800

### **Place**

Locale Reference.Airport : UGN.Airport  
State Reference : IL  
Altitude.AGL.Single Value : 0

### **Environment**

Flight Conditions : VMC  
Light : Night

### **Aircraft : 1**

Controlling Facilities.Tower : UGN.Tower  
Operator.General Aviation : Corporate  
Make Model Name : Challenger CL600  
Operating Under FAR Part : Part 91  
Flight Phase.Landing : Roll

### **Component : 1**

Aircraft Component : Nosewheel Steering

### **Person : 1**

Affiliation.Company : Corporate  
Function.Flight Crew : Captain  
Function.Oversight : PIC  
Qualification.Pilot : ATP  
Experience.Flight Time.Last 90 Days : 150  
Experience.Flight Time.Total : 4500  
Experience.Flight Time.Type : 1100  
ASRS Report : 574066

### **Person : 2**

Affiliation.Company : Corporate  
Function.Flight Crew : First Officer  
Qualification.Pilot : ATP  
Experience.Flight Time.Last 90 Days : 160  
Experience.Flight Time.Total : 4500  
Experience.Flight Time.Type : 400  
ASRS Report : 573898

### **Person : 3**

Affiliation.Other : Contracted Service  
Function.Controller : Local

## Events

Anomaly.Aircraft Equipment Problem : Critical  
Anomaly.Excursion : Runway  
Anomaly.Other Anomaly  
Independent Detector.Other.Flight CrewA : 1  
Independent Detector.Other.Flight CrewB : 2  
Resolatory Action.None Taken : Insufficient Time  
Consequence.Other : Company Review  
Consequence.Other

## Maintenance Factors

Maintenance.Contributing Factor : Schedule Pressure  
Maintenance.Performance Deficiency : Repair

## Assessments

Problem Areas : Aircraft  
Problem Areas : Company  
Problem Areas : Flight Crew Human Performance

## Narrative

AFTER FLYING A NORMAL APCH TO LNDG AT WAUKEGAN REGIONAL (UGN), I DEPLOYED SPOILERS AND THRUST REVERSERS TO SLOW THE ACFT. AFTER THE ACFT SLOWED FROM 126 KTS (VREF) TO ABOUT 100 KTS, THE ACFT BEGAN TO TURN FROM R TO L. I TRIED TO CTL THE ACFT'S UNCOMMANDED TURNS WITH DIFFERENTIAL BRAKING, AS THE NOSEWHEEL STEERING WAS INOP AND MEL'ED. HOWEVER, I WAS UNABLE TO REGAIN CTL AND THE ACFT DEPARTED THE R SIDE OF RWY 5 AT UGN, ABOUT 3000 FT FROM THE APCH END. WX AT UGN WAS 040 DEGS AT 13 KTS, GUSTING TO 18 KTS, CLR AND 10 SM VISIBILITY, ALTIMETER 30.28. UNDER THESE CONDITIONS AND COMPLYING WITH ALL MEL REQUIREMENTS, LNDG WAS BELIEVED TO BE SAFE. ALTHOUGH I DON'T BELIEVE THE NOSEWHEEL STEERING INOP WAS THE CAUSE OF THE INCIDENT, I DO BELIEVE IT LIMITED MY ABILITY TO REGAIN CTL OF THE ACFT. THERE WAS NO DAMAGE TO ACFT OR PROPERTY. NO ONE WAS INJURED. SUPPLEMENTAL INFO FROM ACN 573898: AFTER TOUCHDOWN AT UGN, THE CAPT AND I WERE USING STANDARD COMPANY CALLS WITH THE SPOILERS BEING DEPLOYED AND THE THRUST REVERSERS BEING DEPLOYED. THE FIELD CONDITIONS WERE DRY AND CLR. WE HAD TO ADD AN ADDITIONAL 2% TO THE LNDG DISTANCE DUE TO THE NOSEWHEEL STEERING BEING MEL'ED. ALL FACTORS WERE BRIEFED AND VERIFIED TO LNDG WITH NO NOSE STEERING. I THINK THE FACTORS THAT CONTRIBUTED TO THIS INCIDENT WERE THE NOSEWHEEL BEING MEL'ED AND THE UNEXPLAINABLE REASON IT STARTED TO SWAY UNCTLABLY.

## Synopsis

CL60 CREW LOST ACFT CTL AFTER LNDG AND WENT OFF THE R SIDE OF THE RWY. THE NOSE STEERING SYS WAS MEL'ED INOP.

**ACN: 571473**

### **Time / Day**

Date : 200301  
Day : Fri  
Local Time Of Day : 1201 To 1800

### **Place**

Locale Reference.Airport : ZZZ.Airport  
State Reference : US  
Altitude.AGL.Single Value : 0

### **Environment**

Flight Conditions : VMC  
Light : Daylight

### **Aircraft : 1**

Controlling Facilities.ARTCC : ZZZ.ARTCC  
Controlling Facilities.Tower : ZZZ.Tower  
Operator.General Aviation : Corporate  
Make Model Name : Challenger Jet Undifferentiated or Other Model  
Operating Under FAR Part : Part 91  
Navigation In Use.Other : FMS or FMC  
Flight Phase.Descent : Approach  
Flight Phase.Landing : Roll

### **Person : 1**

Affiliation.Company : Corporate  
Function.Flight Crew : Captain  
Function.Oversight : PIC  
Qualification.Pilot : ATP  
Qualification.Pilot : Multi Engine  
Experience.Flight Time.Last 90 Days : 55  
Experience.Flight Time.Total : 7000  
Experience.Flight Time.Type : 170  
ASRS Report : 571473

### **Person : 2**

Affiliation.Company : Corporate  
Function.Flight Crew : First Officer  
Qualification.Pilot : ATP  
Qualification.Pilot : Commercial  
Qualification.Pilot : Instrument  
Qualification.Pilot : Multi Engine  
Experience.Flight Time.Last 90 Days : 17  
Experience.Flight Time.Total : 10545  
Experience.Flight Time.Type : 345  
ASRS Report : 571622

## Person : 3

Affiliation.Government : FAA  
Function.Controller : Radar

## Person : 4

Affiliation.Government : FAA  
Function.Controller : Local

## Events

Anomaly.Excursion : Runway  
Anomaly.Non Adherence : FAR  
Anomaly.Non Adherence : Published Procedure  
Anomaly.Other Anomaly  
Anomaly.Other Anomaly : Unstabilized Approach  
Independent Detector.Other.Flight CrewA : 2  
Resolatory Action.Aircraft : Automation Overrode Flight Crew  
Resolatory Action.Aircraft : Evacuated  
Resolatory Action.Flight Crew : Overrode Automation

## Assessments

Problem Areas : Airport  
Problem Areas : Company  
Problem Areas : Flight Crew Human Performance

## Narrative

BEING VECTORED TO LOC APCH TO ZZZ, ATC VECTORED US DIRECT TO ABCDE WHILE AT FL250. UNABLE TO GET THROUGH TO ATC TO REQUEST LOWER, WE WERE THEN ALLOWED TO GET WITHIN APPROX 12 MI OF ABCDE STILL AT FL250. FINALLY GETTING THROUGH TO ATC TO REQUEST LOWER THEY STATED, 'SORRY, I FORGOT YOU' AND CLRED US FOR THE APCH. DUE TO RAPID DSCNT, WE WERE FAST ON FINAL APCH, TOUCHED DOWN LONG ON THE RWY AND WENT OFF OF END BEFORE STOPPING. THERE IS NO KNOWN DAMAGE TO ACFT OR OTHER PROPERTY. HUMAN FACTORS INCLUDED ATC 'FORGETTING' US AND PLT ACTION TO CONTINUE LNDG WHEN NOT ON STABILIZED APCH ON SHORT FINAL. SUPPLEMENTAL INFO FROM ACN 571622: OUR COMPANY IS DEVELOPING PROCS FOR GOING INTO ZZZ AT NIGHT. THE CAPT DECIDED TO TEST THE PROC WHILE COMPLETING A BUSINESS TRIP. OUR PROCS BASICALLY FOLLOW THE VOR-DME APCH, BUT WE REQUIRE HIGHER VISIBILITY REQUIREMENTS SO THAT WE CAN CREATE A GS USING THE VPATH FEATURE IN OUR FMS. WE FLY A VPATH TO A 1.5 MI FIX E OF THE THRESHOLD. UPON REACHING THE 1.5 FIX, WE ARE AT AN ALT TO INTERCEPT TO THE PAPI AND CONTINUE THE APCH TO LNDG USING THE PAPI. THIS IS NOT AN INST APCH, IT IS TO BE USED ONLY IN VFR CONDITIONS WITH THE VPATH BEING USED AS A REF TO ARRIVE AT THE 1.5 MI FIX FROM THE RWY AND THEN COMPLETE A NORMAL DSCNT RATE TO LNDG. OUR PROCS CALL FOR XING THE ABCDE INTXN FULLY CONFIGURED (GEAR DOWN AND FULL FLAPS). DUE TO TFC BELOW US WE WERE HELD AT FL250 UNTIL 10 MI FROM ABCDE AND THEN CTR CLRED US TO CROSS ABCDE AT 14000 FT MSL AND CLRED FOR THE APCH. THE CAPT HAD BEEN SLOWING THE ACFT ON MANUAL SPD TO CONFIGURE THE ACFT, BUT WITH THE STEEP DSCNT RATE TO LOSE 11000 FT IN 10 MI WE COULDN'T GET SLATS OR FLAPS OUT UNTIL WE LEVELED AT 14000 FT. DURING THIS PERIOD, THE AUTOPLT WAS ENGAGED AND WE WERE FLYING FMS



WAYPOINTS WHICH OVERLAID THE APCH AND VPATH WAS ALSO COUPLED. AT THE ABCDE INTXN, THE GEAR WAS EXTENDED AND THE BEFORE LNDG CHKLST COMPLETED EXCEPT FOR FINAL FLAPS. JUST AFTER ABCDE, I BELIEVE THE AUTOPLT WAS DISCONNECTED AND THE CAPT WAS FLYING THE ACFT MANUALLY. HE EXTENDED FULL SPOILERS AND CONTINUED TO FOLLOW THE VPATH INDICATIONS, BUT HE COULD NOT GET THE ACFT SLOWED DOWN TO EXTEND FULL FLAPS. HE BRIEFED THAT UPON REACHING THE 1.5 MI FIX, HE WOULD LEVEL OFF TO SLOW THE ACFT TO FINAL FLAP SPD. AT THE 1.5 MI FIX HE LEVELED OFF BUT THE ACFT SEEMED TO ACCELERATE. WE GOT A GPWS BECAUSE WE WERE NOT AT FULL FLAPS. HE CALLED FOR FULL FLAPS, THEN SAID 'DON'T, BECAUSE WE ARE ABOVE THE FINAL FLAP SPD.' I SAID WE WERE NOT CONFIGURED AND WE SHOULD GO AROUND, BUT HE CALLED FOR FULL FLAPS. I EXTENDED FULL FLAPS. THIS CANCELED THE GPWS, BUT NOW WE GOT A FLAP OVERSPD WARNING. THE ACFT STILL WAS NOT SLOWING DOWN. WE CROSSED OVER THE THRESHOLD OF THE RWY AT VREF PLUS AT LEAST 20 KTS AND I LOOKED DOWN AT THE PWR LEVERS AND SAW THAT THEY WERE FORWARD AT ALMOST FULL THRUST. I POINTED THIS OUT TO HIM AND HE PULLED BACK ON THE PWR LEVERS AND REDUCED THEM TO IDLE. BY THIS TIME WE WERE 1/2 WAY DOWN THE RWY AND I CALLED FOR HIM TO GO AROUND, BUT HE SAID 'I CAN GET IT DOWN.' HE CONTINUED TO TRY TO PUT THE ACFT DOWN BUT WE WERE SO FAST THAT WE WERE USING UP A LOT OF RWY. WHEN ABOUT 1/3 OF THE RWY REMAINED, I CALLED AGAIN FOR HIM TO GO AROUND AGAIN AND WAS REACHING FOR THE PWR LEVERS TO TAKE OVER THE ACFT AND GO AROUND WHEN HE FORCED THE ACFT TO THE RWY AND APPLIED HARD BRAKING AND FULL THRUST REVERSE. AT THIS POINT WE HAD AROUND 2000 FT OF RWY REMAINING. HE CONTINUED STRAIGHT AHEAD, BRAKING HARD, BUT WE WENT PAST THE END OF THE RWY AND THE RWY OVERRUN AND CONTINUED IN THE DIRT ABOUT 365 FT PAST THE OVERRUN. AFTER INSPECTION, THE ACFT WAS TOWED OFF THE CLRWAY TO THE FBO. OUR FLT DEPT DOESN'T FLY A LOT OF HRS AND DURING THAT TIME I HAVE ACCUMULATED AROUND 300 HRS AND THE CAPT HAS AROUND 200 HRS. WE HADN'T FLOWN THE ACFT IN CLOSE TO 30 DAYS. IT IS MY THEORY THAT HE MIGHT HAVE LEFT THE SPD CTL IN MANUAL SETTING INSTEAD OF FMS SPD WHICH WOULD HAVE SLOWED US DOWN TO VREF, ALTHOUGH AS FAST AS WE WERE GOING AT THE 1.5 FIX, I DON'T THINK WE COULD HAVE SLOWED TO VREF ANYWAY. I AM ALSO CONFUSED BY THE CAPT'S TOTAL LACK OF JUDGEMENT BY TRYING TO LAND AN ACFT OF THIS SIZE WITH ONLY 2000 FT OF RWY REMAINING AND IGNORING AT LEAST 3 'GAR' COMMANDS BY ME. IN RETROSPECT, I SHOULD HAVE TAKEN COMMAND OF THE ACFT AT AN EARLIER POINT. WITH ALL THE TECHNOLOGY IN THESE NEWER ACFT (EFIS, FMS, AUTOTHROTTLES, VNAV, ETC) IT IS VERY EASY IN A HIGH WORKLOAD ENVIRONMENT TO FORGET TO SWITCH SPD CTL FROM MANUAL BACK TO FMS. IF YOU ARE BELOW 10000 FT MSL AND 250 KTS, YOU HAVE TO PUT THE SPD CTL IN MANUAL TO SLOW THE ACFT TO THE FIRST SLAT AND FLAP SETTING AT 220 KTS. ONCE SLAT AND FLAPS ARE EXTENDED, THEN YOU HAVE TO GO BACK TO FMS SPD AND THEN THE ACFT CAN FLY EASILY ON FMS PROGRAMMED SPD. DURING HIGH WORKLOADS, I HAVE SEEN MANY TIMES PEOPLE FORGETTING TO SWITCH FROM MANUAL BACK TO FMS SPD CTL.

## **Synopsis**

CL60 FLC, TESTING A VFR COMPANY DESIGNED APCH PROC TO AN ARPT IN MOUNTAINOUS TERRAIN, HAS A RWY EXCURSION WHEN PIC APPARENTLY BECOMES FIXATED WITH THE 'I CAN MAKE IT' MENTALITY.

**ACN: 569082**

### **Time / Day**

Date : 200212  
Day : Wed  
Local Time Of Day : 0001 To 0600

### **Place**

Locale Reference.Navaid : BWZ.VOR  
State Reference : NJ  
Altitude.MSL.Single Value : 34000

### **Environment**

Flight Conditions : VMC  
Weather Elements : Turbulence  
Weather Elements.Other  
Light : Dawn

### **Aircraft : 1**

Controlling Facilities.ARTCC : ZNY.ARTCC  
Operator.Common Carrier : Air Carrier  
Make Model Name : A320  
Operating Under FAR Part : Part 121  
Navigation In Use.Other : FMS or FMC  
Navigation In Use.Other.VORTAC  
Flight Phase.Cruise : Enroute Altitude Change  
Flight Phase.Cruise : Level

### **Component : 1**

Aircraft Component : Speedbrake/Spoiler

### **Person : 1**

Affiliation.Company : Air Carrier  
Function.Flight Crew : Captain  
Function.Oversight : PIC  
Qualification.Pilot : ATP  
Experience.Flight Time.Last 90 Days : 150  
Experience.Flight Time.Total : 7800  
Experience.Flight Time.Type : 912  
ASRS Report : 569082

### **Person : 2**

Affiliation.Company : Air Carrier  
Function.Flight Crew : First Officer  
Qualification.Pilot : ATP  
Experience.Flight Time.Last 90 Days : 150  
Experience.Flight Time.Total : 4500

Experience.Flight Time.Type : 1147  
ASRS Report : 569081

### **Person : 3**

Affiliation.Company : Air Carrier  
Function.Flight Attendant : On Duty

### **Person : 4**

Affiliation.Company : Air Carrier  
Function.Other Personnel.Other

### **Person : 5**

Affiliation.Company : Air Carrier  
Function.Other Personnel : Dispatcher

### **Person : 6**

Affiliation.Government : FAA  
Function.Controller : Radar

## **Events**

Anomaly.Aircraft Equipment Problem : Critical  
Anomaly.Cabin Event.Other  
Anomaly.Inflight Encounter : Turbulence  
Anomaly.Inflight Encounter : Weather  
Anomaly.Other Anomaly  
Anomaly.Other Anomaly.Other  
Independent Detector.Aircraft Equipment.Other Aircraft Equipment : Ecam Flt Ctl  
Spd Brk Fault  
Independent Detector.Other.Flight CrewA : 1  
Independent Detector.Other.Flight CrewB : 2  
Resolatory Action.Flight Crew : Exited Adverse Environment  
Resolatory Action.Flight Crew : Overrode Automation  
Resolatory Action.Flight Crew : Regained Aircraft Control  
Consequence.Other  
Consequence.Other : Physical Injury

## **Assessments**

Problem Areas : Aircraft  
Problem Areas : Weather

## **Narrative**

WHILE DSNDRG THROUGH FL340 FOR FL180, I, THE PF, DISCONNECTED THE AUTOPLT DUE TO RAPIDLY INCREASING AIRSPD TOWARDS VMO. WHILE GRADUALLY APPLYING AFT STICK FORCE, A LOUD JOLT-SEVERE BUFFET AND RAPID INCREASE IN PITCH ALT WAS OBSERVED ALONG WITH A SPOILER FAULT ECAM. AFTER REGAINING CTL OF THE ACFT AND COMPLETING THE ECAM, I WAS ADVISED OF 2 FLT ATTENDANT INJURIES IN THE AFT CABIN. THE REMAINDER OF THE FLT WAS UNEVENTFUL. SUPPLEMENTAL INFO FROM ACN 569081: WHILE DSNDRG FROM FL370 TO FL180, I WAS THE PNF. ACFT OSCILLATED: INCREASE IN AIRSPD, PITCH UP, AND THEN A PUSH OVER TO NEARLY LEVEL FLT. ECAM: FLT CTL SPD BREAK FAULT. NOTIFIED OF FLT ATTENDANT'S INJURIES. COORDINATED WITH DISPATCH, ATC, AND MAINT CTLR. UNEVENTFUL APCH AND LNDG AT EWR.

## **Synopsis**

A320 CREW HAD FLT ATTENDANT INJURIES AFTER ENCOUNTERING SEVERE TURB AND AN UNCOMMANDED SPD BRAKE DEPLOYMENT.

**ACN: 568987**

## **Time / Day**

Date : 200212  
Day : Fri  
Local Time Of Day : 0601 To 1200

## **Place**

Locale Reference.Airport : DFW.Airport  
State Reference : TX  
Altitude.MSL.Bound Lower : 3000  
Altitude.MSL.Bound Upper : 4000

## **Environment**

Light : Daylight

## **Aircraft : 1**

Controlling Facilities.TRACON : D10.TRACON  
Operator.Common Carrier : Air Carrier  
Make Model Name : B757 Undifferentiated or Other Model  
Operating Under FAR Part : Part 121  
Navigation In Use.Other : FMS or FMC  
Flight Phase.Climbout : Intermediate Altitude  
Route In Use.Departure : On Vectors

## **Component : 1**

Aircraft Component : Rudder Control System

## **Person : 1**

Affiliation.Company : Air Carrier  
Function.Flight Crew : First Officer  
Qualification.Pilot : ATP  
ASRS Report : 568987

## **Person : 2**

Affiliation.Company : Air Carrier  
Function.Flight Crew : Captain  
Function.Oversight : PIC  
Qualification.Pilot : ATP

## **Person : 3**

Affiliation.Company : Air Carrier  
Function.Flight Attendant : On Duty

## **Person : 4**

Affiliation.Government : FAA  
Function.Controller : Departure

## Events

Anomaly.Aircraft Equipment Problem : Critical  
Anomaly.Other Anomaly  
Anomaly.Other Anomaly.Other  
Independent Detector.Other.Flight CrewA : 1  
Independent Detector.Other.Flight CrewB : 2  
Resolatory Action.Controller : Issued New Clearance  
Resolatory Action.Flight Crew : Diverted To Another Airport  
Resolatory Action.Flight Crew : Landed As Precaution  
Resolatory Action.Other  
Consequence.Other : Company Review  
Consequence.Other

## Assessments

Problem Areas : Aircraft  
Problem Areas : Chart Or Publication  
Problem Areas : Company  
Problem Areas : FAA

## Situations

### Narrative

CAPT WAS PF. AFTER FLAP RETRACTION, 3000 TO 4000 FT MSL, 250 KIAS, ATC INSTRUCTED R TURN HDG 280 DEGS. UPON ENTERING TURN, ACFT BEGAN TO OSCILLATE/SHIMMY 2 TIMES PER SECOND, RATHER VIOLENTLY, SIMILAR TO WAKE ENCOUNTER, DECREASED SLIGHTLY, THEN INCREASED AGAIN AND CONTINUED TO FISHTAIL PER AFT FLT ATTENDANT FOR ABOUT 30 SECONDS. ACFT RETURNED TO NORMAL FLT. DECIDED TO MAKE PRECAUTIONARY RETURN TO DFW. ON VERY SHORT FINAL, ACFT BEGAN SIMILAR FISHTAILING, BUT NOT AS SEVERE AS FIRST ENCOUNTER. THIS WAS BELOW 50 FT AGL RIGHT BEFORE TOUCHDOWN. HAD REVIEWED OVERWT LNDG IN QRH BEFORE LNDG. LANDED FLAPS 25 DEGS, 217500 LBS WT, VERY SOFT TOUCHDOWN AT ABOUT 50 FPM DSCNT. RETURNED TO GATE AND BRIEFED MAINT ON OSCILLATION AND OVERWT LNDG. CALLBACK CONVERSATION WITH RPTR REVEALED THE FOLLOWING INFO: THE PLT RPTS THEY DID NOT HAVE TIME TO DEACTIVATE THE YAW DAMPER SYS. THEY DO NOT KNOW WHETHER THIS HAD ANYTHING TO DO WITH THE PROB OR NOT. THE RPTR INSPECTED THE ACFT MAINT LOGS. ALL 3 RUDDER PWR CTL UNITS WERE REPLACED. THE ACFT WAS THEN TEST FLOWN, WITH NO REPEAT OF THE PROB. THE B757 HAS NO ABNORMAL OR EMER PROC FOR UNCOMMANDED RUDDER ACTUATION THAT SOME OTHER ACFT HAVE.

### Synopsis

B757-200 CREW HAD UNCOMMANDED RUDDER OSCILLATIONS AFTER DEP.

**ACN: 564773**

## **Time / Day**

Date : 200211  
Day : Mon  
Local Time Of Day : 1201 To 1800

## **Place**

Locale Reference.Navaid : FCM.VORTAC  
State Reference : MN  
Altitude.MSL.Single Value : 17000

## **Environment**

Flight Conditions : VMC  
Light : Daylight

## **Aircraft : 1**

Controlling Facilities.TRACON : M98.TRACON  
Operator.Common Carrier : Air Carrier  
Make Model Name : B757 Undifferentiated or Other Model  
Operating Under FAR Part : Part 121  
Flight Phase.Descent : Approach  
Route In Use.Arrival.STAR : SKETR

## **Aircraft : 2**

Controlling Facilities.ARTCC : ZMP.ARTCC  
Operator.Common Carrier : Air Carrier  
Make Model Name : Regional Jet 200 ER&LR  
Operating Under FAR Part : Part 121  
Flight Phase.Descent : Approach  
Route In Use.Arrival.STAR : SKETR

## **Person : 1**

Affiliation.Government : FAA  
Function.Controller : Radar  
Qualification.Controller : Radar  
Experience.Controller.Radar : 14  
Experience.Flight Time.Total : 150  
ASRS Report : 564773

## **Person : 2**

Affiliation.Company : Air Carrier  
Function.Flight Crew : Captain  
Function.Oversight : PIC

## **Person : 3**

Affiliation.Company : Air Carrier  
Function.Flight Crew : Captain  
Function.Oversight : PIC

## Events

Anomaly.Inflight Encounter : Wake Turbulence  
Anomaly.Other Anomaly  
Independent Detector.Other.ControllerA : 1  
Independent Detector.Other.Flight CrewA : 4  
Resolatory Action.Flight Crew : Became Reoriented  
Resolatory Action.Flight Crew : Exited Adverse Environment  
Resolatory Action.Flight Crew : Regained Aircraft Control  
Resolatory Action.Flight Crew : Returned To Original Clearance

## Assessments

Problem Areas : Weather

## Narrative

ACFT X WAS APPROX 14 MI IN FRONT OF ACFT Y, BOTH INBOUND MSP ON THE SKETR 2 ARR. I SWITCHED ACFT X TO MSP APCH. ABOUT 2 MINS LATER, ACFT Y ASKED IF THERE WAS ANY TFC IN VICINITY. I ADVISED THE PLT THAT NO TFC WAS IN HIS IMMEDIATE AREA, AND ASKED IF HE SAW ANYTHING. THE PLT ADVISED HE SAW NO TFC EITHER VISUALLY OR ON TCASII, BUT HAD JUST ENCOUNTERED AN UNCOMMANDED ROLL OF 75 DEGS TO 90 DEGS, DIRECTION NOT RPTED. I TOLD HIM A B757 WAS AHEAD, AND DID A RANGE BEARING ON THE SCOPE, WHICH SHOWED 13.5 MI -- THE B757 WAS UNDER APCH, LEVEL, AND PROBABLY SLOWING DOWN. I FIGURED IN THE AREA THE INCIDENT OCCURRED, THE INTRAIL WAS MOST LIKELY MORE THAN 14.5. I ASKED IF THE PLT REQUIRED ANY ASSISTANCE. HE REPLIED NEGATIVE. TO MY EARS, IT SOUNDED LIKE A VERY ABRUPT ROLL. WE HAVE BEEN MADE AWARE OF WAKE TURB ISSUES WITH THE B757, BUT THIS IS THE FIRST TIME I HAVE HEARD OF OR HAD EXPERIENCE WITH THIS SIT AT THE ALT AND DISTANCE OF THIS OCCURRENCE.

## Synopsis

CRJ2 DSNDING INTO MSP ENCOUNTERED SEVERE WAKE TURB WHILE 14 MI INTRAIL TO A B757 ALSO DSNDING INTO MSP.



**ACN: 564140**

## **Time / Day**

Date : 200210  
Day : Wed  
Local Time Of Day : 1801 To 2400

## **Place**

Locale Reference.Airport : LAX.Airport  
State Reference : CA  
Altitude.MSL.Single Value : 2200

## **Environment**

Flight Conditions : VMC  
Light : Night

## **Aircraft : 1**

Controlling Facilities.TRACON : SCT.TRACON  
Controlling Facilities.Tower : LAX.Tower  
Operator.Common Carrier : Air Carrier  
Make Model Name : Regional Jet CL65, Undifferentiated or Other Model  
Operating Under FAR Part : Part 121  
Navigation In Use.ILS.Localizer & Glide Slope : 24R  
Navigation In Use.Other : FMS or FMC  
Flight Phase.Descent : Approach  
Route In Use.Approach : Instrument Precision  
Route In Use.Arrival : On Vectors

## **Aircraft : 2**

Controlling Facilities.Tower : LAX.Tower  
Operator.Common Carrier : Air Carrier  
Make Model Name : Commercial Fixed Wing  
Operating Under FAR Part : Part 121  
Flight Phase.Descent : Approach

## **Person : 1**

Affiliation.Company : Air Carrier  
Function.Flight Crew : Captain  
Function.Oversight : PIC  
Qualification.Pilot : ATP  
Qualification.Pilot : CFI  
Qualification.Pilot : Multi Engine  
Experience.Flight Time.Last 90 Days : 150  
Experience.Flight Time.Total : 5600  
Experience.Flight Time.Type : 400  
ASRS Report : 564140

## **Person : 2**

Affiliation.Company : Air Carrier  
Function.Flight Crew : First Officer

### **Person : 3**

Affiliation.Company : Air Carrier  
Function.Flight Crew : Captain  
Function.Oversight : PIC

### **Person : 4**

Affiliation.Government : FAA  
Function.Controller : Approach

### **Events**

Anomaly.Inflight Encounter : Wake Turbulence  
Anomaly.Other Anomaly  
Independent Detector.Other.Flight CrewA : 1  
Independent Detector.Other.Flight CrewB : 2  
Resolatory Action.Flight Crew : Regained Aircraft Control  
Consequence.FAA : Reviewed Incident With Flight Crew

### **Assessments**

Problem Areas : ATC Human Performance  
Problem Areas : Aircraft  
Problem Areas : Environmental Factor

### **Narrative**

'TURN R 220 DEGS, MAINTAIN 2200 FT, CLRED ILS RWY 24R.' WE HAD BEEN AT 2500 FT, BUT ATC DEFERRED US TO 2200 FT MSL BEFORE CLRING US FOR THE APCH. IF WE HAD BEEN AT 2500 FT, WE WOULD NOT HAVE HIT BOTH ACR AIRLINE'S WINGTIP AND/OR FLAP VORTEXES WHICH PRODUCES 2 DISTINCT AND RATHER VIOLENT ROLL INPUTS IN BOTH DIRECTIONS IN UNDER 2 SECONDS. OUR AUTOPLT CORRECTED THE FIRST UNCOMMANDED ROLL, BUT THE SECOND OPPOSITE ROLL IT COULD NOT HANDLE AND DISCONNECTED. I WAS ABOUT TO DISCONNECT THE AUTOPLT, BUT IT BEAT ME. ACR Y APCH PROFILES ARE UNACCEPTABLE TOWARDS INDUSTRY SAFETY. THEY FLY FAST AND END UP HIGH, WELL ABOVE THE GLIDE PATH OF THE ILS. WE CANNOT SAFELY FLY ABOVE THEIR PATH TO AVOID THEIR WAKE. SO, WE ARE STUCK IN A ROULETTE SIT. ATC FAILED TO UNDERSTAND MY INFLT RPT OF 'ROLL UPSET.' YET THEY ISSUE 'CAUTION WAKE TURB' OUT OF PRACTICALLY EVERY SENTENCE THEY SPEAK. THEY (ATC) CLRLY DO NOT UNDERSTAND THE DAILY THREATS I FLY AROUND IN AND OUT OF LAX IN PARTICULAR.

### **Synopsis**

CL65 FLC ENCOUNTERS WAKE TURB DURING APCH TO LAX.

**ACN: 563451**

### **Time / Day**

Date : 200210  
Day : Mon  
Local Time Of Day : 1201 To 1800

### **Place**

Locale Reference.Airport : BNA.Airport  
State Reference : TN  
Altitude.MSL.Single Value : 2100

### **Environment**

Flight Conditions : Mixed  
Light : Dusk

### **Aircraft : 1**

Controlling Facilities.TRACON : BNA.TRACON  
Operator.Common Carrier : Air Carrier  
Make Model Name : B737-300  
Operating Under FAR Part : Part 121  
Navigation In Use.ILS.Localizer & Glide Slope : 2R  
Navigation In Use.Other : FMS or FMC  
Flight Phase.Descent : Approach  
Route In Use.Approach : Instrument Precision

### **Component : 1**

Aircraft Component : Throttle/Power Level

### **Person : 1**

Affiliation.Company : Air Carrier  
Function.Flight Crew : Captain  
Function.Oversight : PIC  
Qualification.Pilot : ATP  
Experience.Flight Time.Last 90 Days : 225  
Experience.Flight Time.Total : 9000  
Experience.Flight Time.Type : 6000  
ASRS Report : 563451

### **Person : 2**

Affiliation.Company : Air Carrier  
Function.Flight Crew : First Officer  
Qualification.Pilot : ATP  
Experience.Flight Time.Last 90 Days : 180  
Experience.Flight Time.Total : 3500  
Experience.Flight Time.Type : 2000  
ASRS Report : 563452

### **Person : 3**

Affiliation.Company : Air Carrier  
Function.Observation : Company Check Pilot  
Function.Other Personnel.Other

## Person : 4

Affiliation.Government : FAA  
Function.Controller : Approach

## Events

Anomaly.Non Adherence : Company Policies  
Anomaly.Non Adherence : FAR  
Anomaly.Non Adherence : Published Procedure  
Anomaly.Other Anomaly  
Anomaly.Other Anomaly.Other  
Independent Detector.Aircraft Equipment.Other Aircraft Equipment : STICK  
SHAKER  
Independent Detector.Other.Flight CrewA : 1  
Independent Detector.Other.Flight CrewB : 2  
Resolatory Action.Flight Crew : Regained Aircraft Control  
Resolatory Action.Other  
Consequence.Other : Company Review

## Assessments

Problem Areas : Aircraft  
Problem Areas : Flight Crew Human Performance

## Narrative

STICK SHAKER DURING APCH. ILS RWY 2R APCH TO BNA IMC. APCH CTL REQUESTED EARLY SLOW AND 150 DEG TURN THROUGH FINAL COURSE FOR SEPARATION. FO NOTICED DECELERATION THROUGH TARGET AND I WENT FROM IDLE TO 80% N1 TO CORRECT. GOT STICK SHAKER AS DECELERATION CONTINUED, MAX N1 ON THROTTLE. LEVELED WINGS, DISCONNECTED AUTOPLT AND RECOVERED IN LESS THAN 5 SECONDS. CONTINUED APCH TO UNEVENTFUL LNDG. DEBRIEFED EVENTS WITH CHK AIRMAN DEADHEADING IN CABIN. HE SAID EVENT FELT LIKE INITIAL GAR, SMOOTH THROUGHOUT. PAX REACTION WAS MINIMAL. BUFFET OR STALL NEVER ENCOUNTERED. DISTR OF MULTIPLE EVENTS DREW APPROPRIATE ATTN AWAY FROM AIRSPD. PERSONAL SHOCK OF EVENT HAS IMPRESSED UPON ME THAT IMMEDIATE ACTION PROCS AND SIMULATOR TRAINING IS EFFECTIVE AND FOR ME TO DOUBLE MY ATTENTIVENESS DURING THIS PHASE OF FLT. SUPPLEMENTAL INFO FROM ACN 563452: IMC INST APCH TO RWY 2R ILS AT BNA. ATC FLEW US THROUGH THE LOC AND HAD US SLOW EARLY TO APCH SPD TO GAIN SPACING ON THE PRECEDING ACFT. DURING THE VECTOR BACK TO THE LOC, THE ACFT LEVELED OFF AT THE ASSIGNED INTERCEPT ALT. THE COMBINATION OF THE TURN AND LEVELOFF CAUSED THE ACFT TO DECELERATE THROUGH OUR TARGET SPD, SO I MADE AN 'AIRSPD' CALL. THE CAPT IMMEDIATELY ADDED PWR AND AT THE ONSET OF THE STICK SHAKER HE ROLLED WINGS LEVEL AND CONTINUED TO ADVANCE PWR TO MAX, WHILE DISCONNECTING THE AUTOPLT. THE ACFT SMOOTHLY FLEW OUT OF THE STICK SHAKER IN A FEW SECONDS. WE CORRECTED ONTO THE ILS AND LANDED UNEVENTFULLY. BUFFET OR LOSS OF ALT WAS NEVER ENCOUNTERED DURING THE RECOVERY.

## **Synopsis**

B737-300 CREW RPTED THE STICK SHAKER ACTIVATED WHILE ON VECTORS FOR THE APCH AT BNA.

**ACN: 561452**

### **Time / Day**

Date : 200209  
Day : Sat  
Local Time Of Day : 1801 To 2400

### **Place**

Locale Reference.Airport : ATL.Airport  
State Reference : GA  
Altitude.MSL.Bound Lower : 1400  
Altitude.MSL.Bound Upper : 4400

### **Environment**

Flight Conditions : IMC  
Weather Elements : Thunderstorm  
Weather Elements : Turbulence  
Weather Elements : Windshear  
Light : Night

### **Aircraft : 1**

Controlling Facilities.TRACON : A80.TRACON  
Operator.Common Carrier : Air Carrier  
Make Model Name : MD-88  
Operating Under FAR Part : Part 121  
Navigation In Use.ILS.Localizer & Glide Slope : 9R  
Navigation In Use.Other : FMS or FMC  
Flight Phase.Descent : Approach  
Flight Phase.Landing : Go Around  
Route In Use.Approach : Instrument Precision

### **Person : 1**

Affiliation.Company : Air Carrier  
Function.Flight Crew : Captain  
Function.Oversight : PIC  
Qualification.Pilot : ATP  
Qualification.Pilot : Flight Engineer  
Experience.Flight Time.Last 90 Days : 190  
Experience.Flight Time.Total : 10442  
Experience.Flight Time.Type : 3567  
ASRS Report : 561452

### **Person : 2**

Affiliation.Company : Air Carrier  
Function.Flight Crew : First Officer

### **Person : 3**

Affiliation.Government : FAA  
Function.Controller : Approach

## Events

Anomaly.Altitude Deviation : Overshoot  
Anomaly.Inflight Encounter : Turbulence  
Anomaly.Inflight Encounter : Weather  
Anomaly.Non Adherence : Clearance  
Anomaly.Other Anomaly  
Anomaly.Other Anomaly : Unstabilized Approach  
Independent Detector.Other.Flight CrewA : 1  
Independent Detector.Other.Flight CrewB : 2  
Resolutive Action.Controller : Issued New Clearance  
Resolutive Action.Flight Crew : Diverted To Alternate  
Resolutive Action.Flight Crew : Executed Go Around  
Resolutive Action.Flight Crew : Exited Adverse Environment  
Resolutive Action.Flight Crew : Overrode Automation  
Resolutive Action.Flight Crew : Regained Aircraft Control  
Consequence.Other : Company Review

## Assessments

Problem Areas : ATC Human Performance  
Problem Areas : Flight Crew Human Performance  
Problem Areas : Weather

## Narrative

ILS TO RWY 9R AT ATL. WX WAS OVER N PORTION OF ARPT, IMC, WITH MOSTLY SMOOTH RIDE. AS WE APCHED OM, THE ACFT AHEAD OF US RPTED +15 AND -10 KTS ON FINAL. WE ADJUSTED FINAL BUG SPD FOR WIND AND CONFIGURED FOR LNDG. APCHING GS, AIRSPD INCREASED TO ABOUT 190 KTS. FO (PF) ELECTED TO NOT REDUCE THRUST DUE TO RPTED AIRSPD FLUCTUATIONS. AT ABOUT 1400 FT AGL, AIRSPD BEGAN TO DECREASE, ACCOMPANIED BY A DECREASING PERFORMANCE WINDSHEAR WARNING. FO EXECUTED A STANDARD RECOVERY. ALT LOSS WAS ABOUT 200 FT, BUT IT TOOK SEVERAL SECONDS FOR CLB TO START, IN SPITE OF THE THRUST AND NOSE HIGH ATTITUDE. WE TOLD ATC WE ABANDONED APCH, AND THEY ASSIGNED A S HDG AND 3500 FT MSL. THE ACFT SUDDENLY BEGAN A RAPID CLB. WE WERE UNABLE TO STOP THE CLB UNTIL ABOUT 4400 FT MSL -- EVEN WITH THE NOSE PITCHED DOWN. ATC REASSIGNED 4000 FT MSL. FLT DIVERTED TO BHM.

## Synopsis

AN MD88 FLC EXPERIENCED WINDSHEAR ON FINAL APCH AT ATL AND PERFORMED A MISSED APCH. ON THAT CLBOUT WINDSHEAR WAS STILL PREVAILING, WHICH CREATED AN ALT OVERSHOOT WITH A SUBSEQUENT DIVERSION OF THE FLT.

**ACN: 561204**

### **Time / Day**

Date : 200209  
Day : Fri  
Local Time Of Day : 1801 To 2400

### **Place**

Locale Reference.Airport : LEX.Airport  
State Reference : KY  
Altitude.AGL.Bound Lower : 0  
Altitude.AGL.Bound Upper : 75

### **Environment**

Flight Conditions : VMC  
Weather Elements : Windshear  
Light : Daylight

### **Aircraft : 1**

Controlling Facilities.Tower : LEX.Tower  
Operator.Common Carrier : Air Carrier  
Make Model Name : MD-88  
Operating Under FAR Part : Part 121  
Navigation In Use.Other : FMS or FMC  
Flight Phase.Descent : Approach  
Flight Phase.Landing : Go Around  
Route In Use.Approach : Visual

### **Component : 1**

Aircraft Component : Throttle/Power Level

### **Person : 1**

Affiliation.Company : Air Carrier  
Function.Flight Crew : First Officer  
Qualification.Pilot : ATP  
Qualification.Pilot : Flight Engineer  
Qualification.Pilot : Multi Engine  
Experience.Flight Time.Last 90 Days : 140  
Experience.Flight Time.Total : 5500  
Experience.Flight Time.Type : 3428  
ASRS Report : 561204

### **Person : 2**

Affiliation.Company : Air Carrier  
Function.Flight Crew : Captain  
Function.Oversight : PIC  
Qualification.Pilot : ATP  
Experience.Flight Time.Last 90 Days : 163



Experience.Flight Time.Total : 14110  
Experience.Flight Time.Type : 4323  
ASRS Report : 561478

### **Person : 3**

Affiliation.Government : FAA  
Function.Controller : Local

### **Person : 4**

Function.Other Personnel : Dispatcher  
Qualification.Other : Dispatcher

### **Person : 5**

Affiliation.Company : Air Carrier  
Function.Oversight : Coordinator

### **Person : 6**

Function.Oversight : Supervisor

### **Events**

Anomaly.Conflict : Ground Critical  
Anomaly.Ground Encounters.Other  
Anomaly.Inflight Encounter.Other  
Anomaly.Other Anomaly  
Anomaly.Other Anomaly : Unstabilized Approach  
Independent Detector.Other.Flight CrewA : 2  
Resolatory Action.Flight Crew : Executed Go Around  
Resolatory Action.Flight Crew : Exited Adverse Environment  
Resolatory Action.Flight Crew : Regained Aircraft Control  
Resolatory Action.Other  
Consequence.Other : Company Review  
Consequence.Other

### **Assessments**

Problem Areas : ATC Human Performance  
Problem Areas : Airport  
Problem Areas : Environmental Factor  
Problem Areas : Flight Crew Human Performance  
Problem Areas : Weather

### **Situations**

Airport.Groundskeeping : LEX.Airport

### **Narrative**

THE INCIDENT INVOLVES A HARD LNDG FOLLOWED BY A GAR, VISUAL PATTERN BACK AROUND TO A FULL STOP LNDG. IT WAS STILL DAYLIGHT. THE CAPT BRIEFED THE ILS RWY 4 AND WAS THE PF. LEX APCH VECTORED US TO JOIN FINAL APPROX 10 NM OUT. VISIBILITY WAS CLR UNDERNEATH AND RWY WAS ACQUIRED AT APPROX 10 NM. APCH WAS UNEVENTFUL. ACFT WAS FULLY CONFIGURED AND ON SPD AT 1000 FT AFE. I NOTED WINDS ON FINAL BTWN 2000 FT AND 1000 FT MSL TO BE 20-30 KTS. NOTHING UNUSUAL OCCURRED

UNTIL APPROX 100 FT AFE, WHEN AN INCREASED SINK RATE DEVELOPED. PWR WAS ADVANCED UPON INITIAL INDICATION. VERY RAPID THEREAFTER, WHEN IT WAS APPARENT WE WERE NOT BREAKING THE SINK RATE, TOGA PWR WAS MANUALLY SELECTED. THE ACFT TOUCHED DOWN AND BOUNCED BACK INTO THE AIR. AT THIS POINT TOGA PWR HAD ALREADY BEEN SELECTED. AFTER THROTTLES WERE ADVANCED FOR THE GAR, I RECALLED SEEING A THROTTLE SETTING SLIGHTLY HIGHER THAN GAR EPR SETTING. I DID NOT RECALL SEEING ANY ENG INDICATIONS FLASHING TO INDICATE AN OVER-BOOST. GAR WAS ACCOMPLISHED, TWR WAS NOTIFIED AND CLRED US BACK AROUND FOR A VISUAL APCH TO RWY 4. I SPOKE WITH THE FLT ATTENDANTS AND MADE A PA TO THE PAX. THE CAPT MADE A VISUAL APCH. AT ABOUT THE SAME POINT OVER THE END OF THE RWY, THE ACFT DEVELOPED AN INCREASED SINK RATE, BUT THIS TIME WAS FULLY ARRESTED BY ADDING PWR. LNDG, ROLLOUT AND TAXI TO THE GATE WAS NORMAL. DURING THE TAXI-IN, I NOTIFIED TWR INFORMING THEM OF THE LOSS OF LIFT ON SHORT FINAL BUT NOTED WE DID NOT RECEIVE ANY WINDSHEAR WARNINGS. PARKED AT THE GATE. I PERFORMED A WALKAROUND. I SAW NOTHING ABNORMAL TO INCLUDE THE TAILSKID. THE CAPT COORDINATED WITH THE CHIEF PLT AND DUTY OFFICER. WE WERE CLRED TO CONTINUE WITH THE ROTATION. AN EQUIP SUBSTITUTION WAS MADE FROM AN INBOUND FLT IN ORDER FOR A HARD LNDG INSPECTION TO BE PERFORMED. SUPPLEMENTAL INFO FROM ACN 561478: WIND AT THE AIRFIELD WAS APPROX 7 KTS 30-40 DEGS OFF RWY HEADING. WE WERE FULLY CONFIGURED AND STABLE AT APPROX 1000 FT AGL AND AT 500 FT AGL, AS WELL. WE FLEW A VISUAL PATTERN AND MADE A NORMAL LNDG ON RWY 4, ALTHOUGH A SIMILAR SINK BEGAN TO DEVELOP OVER THE THRESHOLD JUST AS BEFORE. I ANTICIPATED THE SINK, HOWEVER, AND, CARRYING SLIGHTLY MORE SPD THAN ON THE FIRST APCH, WAS ABLE TO ARREST IT WITH APPLICATION OF PWR. THE TAILSKID WAS UNMARKED. I CONTACTED THE DISPATCHER AND MAINT. I RECOMMENDED A HARD LNDG INSPECTION AND MADE THE APPROPRIATE LOGBOOK ENTRY. I SPOKE WITH THE CHIEF PLT'S OFFICE THROUGH THE OCC DUTY PLT.

## **Synopsis**

POSSIBLE OVERTEMP OF ENGS DURING A HARD LNDG AND RESULTING GAR IS EXPERIENCED BY THE FLC OF A LNDG MD88 ON RWY 4 AT LEX, KY.

**ACN: 554112**

### **Time / Day**

Date : 200207  
Day : Sat  
Local Time Of Day : 1201 To 1800

### **Place**

Locale Reference.Airport : EWR.Airport  
State Reference : NJ  
Altitude.AGL.Single Value : 0

### **Environment**

Flight Conditions : VMC  
Light : Daylight

### **Aircraft : 1**

Controlling Facilities.Tower : EWR.Tower  
Operator.Common Carrier : Air Carrier  
Make Model Name : B757-200  
Operating Under FAR Part : Part 121  
Navigation In Use.Other : FMS or FMC  
Flight Phase.Ground : Takeoff Roll

### **Aircraft : 2**

Controlling Facilities.Tower : EWR.Tower  
Operator.Common Carrier : Air Carrier  
Make Model Name : Commercial Fixed Wing  
Operating Under FAR Part : Part 121  
Flight Phase.Landing : Roll

### **Person : 1**

Affiliation.Company : Air Carrier  
Function.Flight Crew : Captain  
Function.Oversight : PIC  
Qualification.Pilot : ATP  
Experience.Flight Time.Last 90 Days : 200  
Experience.Flight Time.Total : 15000  
Experience.Flight Time.Type : 1500  
ASRS Report : 554112

### **Person : 2**

Affiliation.Company : Air Carrier  
Function.Flight Crew : First Officer

### **Person : 3**

Affiliation.Company : Air Carrier  
Function.Flight Crew : Captain  
Function.Oversight : PIC

#### **Person : 4**

Affiliation.Government : FAA  
Function.Controller : Local

#### **Person : 5**

Affiliation.Company : Air Carrier  
Function.Flight Attendant : On Duty

#### **Events**

Anomaly.Ground Encounters.Other  
Anomaly.Inflight Encounter : Wake Turbulence  
Anomaly.Other Anomaly  
Independent Detector.Other.Flight CrewA : 1  
Independent Detector.Other.Flight CrewB : 2  
Resolatory Action.Flight Crew : Regained Aircraft Control  
Resolatory Action.Flight Crew : Rejected Takeoff  
Resolatory Action.Other  
Consequence.FAA : Investigated  
Consequence.Other : Company Review  
Consequence.Other  
Consequence.Other

#### **Assessments**

Problem Areas : ATC Human Performance  
Problem Areas : Airport  
Problem Areas : FAA

#### **Situations**

ATC Facility.Procedure Or Policy : EWR.Tower

#### **Narrative**

AT APPROX 120 KTS, ON THE TKOF ROLL, HAD WHAT APPEARED TO BE UNCOMMANDED R RUDDER INPUT. COULD NOT KEEP ACFT ON RWY CTRLINE, SO I ELECTED TO ABORT THE TKOF. ONCE ACFT WAS STOPPED ON THE RWY, WE RAN THE REJECTED TKOF CHKLIST. NO INJURIES OR DAMAGE TO ACFT. RPTED THE APPARENT MAINT PROB AS REQUIRED. CREW CRM BTWN FLT DECK AND CABIN CREW WAS GOOD. CALLBACK CONVERSATION WITH RPTR REVEALED THE FOLLOWING INFO: CREW WAS FLYING A B757-200 ACFT. THE ACFT WAS EXTENSIVELY CHKED BY MAINT. NO PROBS COULD BE FOUND. THE ACFT WAS THEN GIVEN A COMPLETE FLT TEST. AGAIN, NO PROBS COULD BE FOUND. THE FLT RECORDER WAS REMOVED AND READ. IT SHOWED AN INSTANTANEOUS LOSS OF 26 KIAS AND AT THE SAME TIME A R TURN BEGAN. IT SHOWED NO R RUDDER INPUT, AND ONLY L RUDDER TO COUNTERACT THE R TURN. THE ACFT THEN HAD AN INSTANTANEOUS INCREASE OF 12 KIAS, WHEN THE ABORT SEQUENCE STARTED. PLT RPTED HVY ACFT WERE LNDG ON RWY 4R AT THE TIME. THE COMPANY THINKS THE ACFT ENCOUNTERED THE WAKE VORTEX OF A LNDG ACFT, WHILE ON ITS TKOF ROLL, THE FAA PARTICIPATED IN THE INVESTIGATION AND CONCURS WITH THE CONCLUSION.

## **Synopsis**

B757-200 CREW ENCOUNTERED UNCTABLE R TURN ON TKOF ROLL ON RWY 4L AT EWR.

**ACN: 551915**

### **Time / Day**

Date : 200206  
Day : Mon  
Local Time Of Day : 1801 To 2400

### **Place**

Locale Reference.Airport : DEN.Airport  
State Reference : CO  
Altitude.AGL.Single Value : 0  
Altitude.MSL.Single Value : 0

### **Aircraft : 1**

Controlling Facilities.Tower : DEN.Tower  
Operator.Common Carrier : Air Carrier  
Make Model Name : A320  
Operating Under FAR Part : Part 121  
Flight Phase.Landing : Roll

### **Component : 1**

Aircraft Component : Elevator Control Column

### **Person : 1**

Affiliation.Company : Air Carrier  
Function.Flight Crew : Captain  
Function.Oversight : PIC  
Qualification.Pilot : ATP  
ASRS Report : 551915

### **Person : 2**

Affiliation.Company : Air Carrier  
Function.Flight Crew : First Officer  
Qualification.Pilot : ATP  
ASRS Report : 552189

### **Person : 3**

Affiliation.Government : FAA  
Function.Controller : Local

### **Events**

Anomaly.Non Adherence : Company Policies  
Anomaly.Non Adherence : Published Procedure  
Anomaly.Other Anomaly  
Anomaly.Other Anomaly.Other  
Independent Detector.Other.Flight CrewA : 1  
Independent Detector.Other.Flight CrewB : 2  
Resolatory Action.Flight Crew : Regained Aircraft Control

Consequence.Other : Company Review  
Consequence.Other

## **Assessments**

Problem Areas : Aircraft  
Problem Areas : Flight Crew Human Performance

## **Narrative**

ON APCH TO DEN WE MADE AN UNEVENTFUL APCH TO RWY 16. WE HAD ELECTED TO DO A COUPLED APCH WITH AUTOTHROTTLES ENGAGED AS FORECAST WAS POSSIBLE LLWS AND GUSTY CONDITIONS. WE WERE ON APCH WITH RWY IN SIGHT AND WINDS WERE CONSISTENT WITH SURFACE WINDS ABOUT 230 DEGS AT 18 KTS. AT APPROX 1200 FT AGL I ELECTED TO DISCONNECT AUTOPLT AND HAND FLY REMAINDER OF APCH. AUTOTHROTTLES WERE DISCONNECTED AT THE RETARD COMMAND AND ACFT TOUCHED DOWN NORMALLY. AUTOBRAKES WERE SET AT MEDIUM AND ACTIVATED. SUDDENLY ACFT PITCHED UP AT ABOUT A NORMAL ROTATION RATE AND FLOATED AIRBORNE A FEW FT. I RECOVERED THE ACFT AND MADE ANOTHER TOUCHDOWN. REST OF LNDG WAS UNEVENTFUL AND ACFT WAS TAXIED TO THE GATE. ON THE LNDG I DISCONNECTED AUTOBRAKES EARLY TO PRECLUDE HAVING HOT BRAKES. WE BLOCKED IN AT THE GATE AND NORMAL PARKING COMPLETED. NO ONE ONBOARD THE ACFT MADE ANY COMMENTS ABOUT HEARING ANYTHING UNUSUAL. SUPPLEMENTAL INFO FROM ACN 552189: AUTOTHROTTLES WERE ENGAGED UNTIL THE RETARD CALL WHEN THEY WERE DISCONNECTED AND PULLED TO IDLE. ALL 3 WHEELS WERE FIRMLY ON THE RWY AND THE AUTOBRAKES ACTIVATED NORMALLY. THE BRAKES WERE KICKED OFF TO AVOID A HOT BRAKE CONDITION, AND THE NOSE ROTATED UP. THE JET LIFTED FROM THE RWY SMOOTHLY IN A NOSE HIGH ATTITUDE. IT WAS FLOWN BACK TO THE RWY AND STOPPED NORMALLY. THE AUTOPLT WAS KICKED OFF AT ABOUT 1200 AGL AND HAND FLOWN BUT THE AUTOTHROTTLES REMAINED ON AS STATED.

## **Synopsis**

AN A320 CREW, UPON LNDG AT DEN, EXPERIENCED A PITCH-UP WHEN THE AUTOBRAKES WERE DISENGAGED.