

ALERT BULLETIN

AB 2006:39/1-4
7/25/06
696498, 676263, 632788

TO: Bombardier Inc. Canadair

INFO: FAA (AFS-230, AFS-200, AFS-300, AFS-900, ANM-100, SEA-AEG), AASC, ASAP, AMFA, AIA, ALPA, APA, ATA, GAMA, IAM, ICASS, IFALPA, NATA, NTSB, PAMA, RAA, TWU

FROM: Linda J. Connell, Director
NASA Aviation Safety Reporting System

SUBJ: CRJ200 ODOR AND HAZE IN CABIN/COCKPIT

We recently received an ASRS report describing a safety concern which may involve your area of operational responsibility. We do not have sufficient details to assess either the factual accuracy or possible gravity of the report. It is our policy to relay the reported information to the appropriate authority for evaluation and any necessary follow-up. We feel you should be aware of the following:

The first officer reported that on climb out, after bleeds transfer, "...an unfamiliar odor, acrid in nature began and quickly intensified...." The odor and haze filled the cabin and cockpit. A return to the departure airport was initiated with post landing inspections by CFR detecting no fire, but confirming the odors, as described. The reporter indicated that the flight attendant lost her voice from inhaling the odor, adding, the cockpit members requested medical tests for possible skydrol exposure. The first officer claims the flight was the first for this particular aircraft after maintenance completed repairs to the hydraulic system.

The following enclosed ASRS data base records reference similar incidents: ACN's 676263, 632788.

(Keywords: Odor in Cabin/Cockpit)

To properly assess the usefulness of our FYI service, we would appreciate it if you would take the time to give us your feedback on the value of the information that we have provided. Please contact Harvey Hartmann or Don Purdy at (408) 541-2800 or email at hhartmann@mail.arc.nasa.gov, dpurdy@mail.arc.nasa.gov.



Aviation Safety Reporting System
385 Moffet Park Dr · Suite 200 · Sunnyvale · CA · 94089



ACN: 696498

Time

Date : 200605

Day : Thu

Local Time Of Day : 1201 To 1800

Place

Locale Reference.Airport : ZZZ.Airport

State Reference : US

Altitude.MSL.Single Value : 6000

Environment

Flight Conditions : IMC

Aircraft / 1

Controlling Facilities.TRACON : ZZZ.TRACON

Make Model : Regional Jet 200 ER&LR

Person / 1

Function.Flight Crew : First Officer

ASRS Report : 696498

Person / 2

Function.Oversight : PIC

Function.Flight Crew : Captain

ASRS Report : 696699

Person / 3

Function.Flight Attendant : On Duty

Events

Anomaly.Aircraft Equipment Problem : Critical

Anomaly.Maintenance Problem : Improper Maintenance

Anomaly.Non Adherence : FAR

Anomaly.Non Adherence : Published Procedure

Anomaly.Other Anomaly : Fumes

Independent Detector.Other.Flight CrewA : 1

Independent Detector.Other.Flight CrewB : 2

Resolatory Action.Other : Return To Dep Arpt

Consequence.Other : Maintenance Action

Narrative

ON CLBOUT WE TRANSFERRED THE BLEEDS PER THE CLB CHKLIST. UPON TRANSFER, AN UNFAMILIAR ODOR, ACRID IN NATURE, BEGAN AND QUICKLY INTENSIFIED. UPON CALLING THE FLT ATTENDANT IN THE BACK, IT WAS DISCOVERED THAT THE ODOR WAS VERY STRONG AS WELL AND A HAZE HAD DEVELOPED. THE DECISION WAS MADE TO RETURN TO ZZZ. AN EMER WAS NOT DECLARED ALTHOUGH A PRECAUTIONARY LNDG WAS PERFORMED AND THE CFR TRUCKS ACTIVATED. UPON LNDG, WE TAXIED OFF THE RWY AND STOPPED ON THE TXWY. CFR PERSONNEL BOARDED THE ACFT TO SEARCH FOR POSSIBLE FIRE. ODOR WAS STILL VERY STRONG AND THE CFR PEOPLE ALL SMELLED IT, TOO. NO FIRE WAS DETECTED AND THE PAX WERE DEPLANED ON THE TXWY. MANY WERE CHKED OUT BY MEDICAL PERSONNEL. THE PAX WERE THEN BUSSED TO THE TERMINAL AND THE CREW STAYED WITH THE ACFT WHILE IT WAS TOWED TO THE REMOTE PARKING AREA. THE ACFT WAS PUT BACK IN SVC JUST BEFORE WE TOOK IT OVER FOR THIS FLT. IT HAD COME FROM MAINT WHERE HYDRAULIC PROBS HAD BEEN FIXED. THE MAINT PERSONNEL THAT INSPECTED THE ACFT AFTER OUR LNDG SAW THAT IT WAS WET UNDER THE HYDRAULIC RESERVOIR #1. IT IS BELIEVED, AT THIS POINT, THAT WE ALL INHALED AND HAVE BEEN AFFECTED BY SKYDROL HYDRAULIC FLUID. THE FLT ATTENDANT IS COUGHING AND LOST HER VOICE. THE CAPT AND MYSELF WILL GET CHKED OUT FOR EXPOSURE TO SKYDROL.

CALLBACK CONVERSATION WITH RPTR REVEALED THE FOLLOWING INFO: A VERY ACRID ODOR WAS EXPERIENCED AFTER SWITCHING PNEUMATIC BLEED FROM THE AUX POWER UNIT TO THE ENG BLEED SYSTEM. CABIN ATTENDANT REPORTED ODOR VERY STRONG AND A HAZE HAD FILLED THE CABIN. THE FLT WAS DIVERTED TO THE DEP STATION AND MET BY CFR. ON THE GND, THE ODOR WAS STILL PRESENT.

Synopsis

A CRJ200 ON CLBOUT AT 6000 FT. WHEN THE PNEUMATIC BLEEDS WERE SWITCHED FROM AUX POWER UNIT TO ENGS, A STRONG ODOR AND HAZE FILLED THE CABIN AND COCKPIT. DIVERTED TO DEP ARPT.

ACN: 676263

Time

Date : 200510

Day : Tue

Local Time Of Day : 1801 To 2400

Place

Locale Reference.Airport : ZZZ.Airport

State Reference : US

Environment

Flight Conditions : IMC

Aircraft / 1

Controlling Facilities.TRACON : ZZZ.TRACON

Make Model : Regional Jet 200 ER&LR

Person / 1

Function.Oversight : PIC

Function.Flight Crew : Captain

ASRS Report : 676263

Person / 2

Function.Flight Crew : First Officer

Person / 3

Function.Controller : Departure

Events

Anomaly.Aircraft Equipment Problem : Critical

Anomaly.Other Anomaly : Fumes

Independent Detector.Other.Flight CrewA : 1

Independent Detector.Other.Flight CrewB : 2

Resolatory Action.Other : Shutoff #1 Bleed System

Consequence.Other : Maintenance Action

Narrative

WITH THE BLEED XFER. AFTER DEP FROM ZZZ WE GOT A STRONG ODOR IN THE COCKPIT. THE ODOR DID NOT DISSIPATE AND AFTER A SHORT PERIOD OF TIME WE WERE EXPERIENCING HEADACHES AND BURNING EYES. WE ISOLATED THE PROB IN THE #1 ENG BLEED AND PACK (UNKNOWN EXACT AS WE CLOSED BOTH VALVES). CONTINUED THE FLT AT FL240. A MAINT WRITE-UP WAS COMPLETED AND MAINT IN ZZZ1 WAS NOTIFIED. CALLBACK CONVERSATION WITH RPTR REVEALED THE FOLLOWING INFO: THE RPTR STATED THE CAUSE OF THE STRONG ODOR WAS ISOLATED TO THE #1 ENG BUT THE EXACT COMPONENT FAILURE IS UNKNOWN. THIS WAS NOT THE FIRST FLT OF THE DAY AND WAS NOT RELATED TO THE BEARING SEAL LEAKAGE ON NEWER ENGS WITH OVERNIGHT LAYOVERS. BUT THE STRONG ODOR WAS HOT OIL ON HOT DUCTING.

Synopsis

A CRJ200 CAPT RPTS STRONG ODOR IN COCKPIT ISOLATED TO #1 ENG AND L PACK. CAUSE UNKNOWN.

ACN: 632788

Time

Date : 200409

Day : Mon

Local Time Of Day : 1201 To 1800

Place

Locale Reference.Airport : LGA.Airport

State Reference : NY

Altitude.AGL.Bound Lower : 0

Altitude.AGL.Bound Upper : 13000

Environment

Flight Conditions : VMC

Aircraft / 1

Controlling Facilities.TRACON : N90.TRACON

Controlling Facilities.Tower : LGA.Tower

Make Model : Regional Jet 200 ER&LR

Person / 1

Function.Oversight : PIC

Function.Flight Crew : Captain

ASRS Report : 632788

Person / 2

Function.Flight Crew : First Officer

Person / 3

Function.Flight Attendant : On Duty

Events

Anomaly.Aircraft Equipment Problem : Critical

Anomaly.Other Anomaly : Fumes

Independent Detector.Other.Flight CrewA : 1

Independent Detector.Other.Flight CrewB : 2

Resolatory Action.Flight Crew : Overrode Automation

Resolatory Action.Other : Closed Off Valves

Consequence.Other : Company Review

Consequence.Other.Other : Hypoxia

Narrative

AFTER DEP AND UPON BLEED XFER, WE RECEIVED FUMES IN THE COCKPIT. THIS WOULD BE THAT ODOR THAT YOU FREQUENTLY REFER TO AS OIL FUMES BUT I HAVE ALWAYS SAID SMELLS CHEMICAL. THE FO WAS THE PF. I CALLED THE FLT ATTENDANT AND SHE SAID THAT SHE DID NOT DETECT ANY ODORS IN THE CABIN. AFTER MUCH TROUBLESHOOTING, I DETERMINED THAT THE FUMES WERE COMING FROM THE R PACK. THE DECISION WAS MADE TO CONTINUE TO LGA SINGLE PACK AS WE BELIEVED THE PROB TO BE ISOLATED. I ADVISED THE FLT ATTENDANT OF OUR INTENTION AND REQUESTED THAT SHE LET US KNOW RIGHT AWAY IF ANYTHING CHANGED IN THE CABIN. APPROX 1/2 HR BEFORE LNDG, I WALKED THROUGH THE CABIN AND DID NOT DETECT ANY ODOR. AT SOME POINT BELOW FL180 BUT ABOVE 13000 FT AND CLRED FOR THE KORRY 3 ARR INTO LGA, WE BEGAN TO GET THE ODOR IN THE COCKPIT AGAIN. IT WAS STRONG THIS TIME. I CONSULTED WITH THE FLT ATTENDANT WHO RPTED THAT SHE STILL DID NOT NOTICE ANY ODOR IN THE CABIN. MY EFFORTS TO ISOLATE THE PROB CONTINUED UNTIL WE WERE INSIDE THE FAF FOR ILS 4, AT WHICH POINT I CLOSED BOTH BLEEDS. THE ODOR APPEARED TO DISSIPATE AND WE LANDED SAFELY. MY FO AND I ESTIMATE THAT THE ENTIRE EVENT LASTED 10 MINS OR LESS. INASMUCH AS THE FLT ATTENDANT CONTINUED TO RPT THAT SHE DID NOT NOTICE ANY ODOR IN THE CABIN, AND WE DID NOT FEEL THAT WE HAD BEEN AFFECTED BY THE FUMES, I ELECTED NOT TO HAVE THE PARAMEDICS MEET THE PLANE AS I BELIEVED THAT THIS EVENT, LIKE SO MANY MECHANICAL ISSUES IN THE PAST, WAS NON THREATENING. SHORTLY AFTER LNDG, AND AFTER OUR 8 PAX HAD DEPLANED, MY FO AND I DID EXPERIENCE SIDE EFFECTS FROM THE FUMES, AT WHICH TIME THE PARAMEDICS WERE CALLED AND OXYGEN WAS ADMINISTERED. THE PARAMEDICS EXPRESSED CONCERN OVER OUR HYPOXIA SYMPTOMS: BLUE FINGERS, DIFFICULTY BREATHING, HIGH BLOOD PRESSURE, NAUSEA, AND DIZZINESS. THEY INSISTED THAT WE BE TAKEN TO THE HOSPITAL AND EXAMINED BY THE DOCTORS WHO WOULD ALSO DO THE NECESSARY BLOOD TESTS. OUR PARAMEDICS BELIEVED THAT WE WOULD HAVE 'BLOOD GASES' TEST DONE AT THE HOSPITAL, HOWEVER, TO MY KNOWLEDGE, THIS SPECIFIC TEST WAS NOT DONE IN LGA. ALL THE MEDICAL PROFESSIONALS HAVE BEEN TOLD THAT THIS WAS AN EXPOSURE TO FUMES FROM OIL FOR ABOUT 10 MINS. IN TRUTH, I HAVE NO IDEA WHAT FUMES WE WERE EXPOSED TO, NOR DO I KNOW FOR SURE THAT THE SINGLE PACK OP TRULY ISOLATED THE SOURCE AND THAT THE EXPOSURE WAS ONLY FOR THE LAST 10 MINS. FOR THIS REASON I AM NOT SURE IF THE FO WAS SUFFERING FROM EXPOSURE RECEIVED DURING THE FLT OR IF HER EXPOSURE CAME LATER WHEN SHE WENT TO RETRIEVE OUR BAGS FROM THE PLANE BEFORE WE WENT TO THE HOSPITAL. AS A CREW, I DO NOT SEE WHAT WE COULD HAVE DONE TO PREVENT THIS EVENT FROM OCCURRING. I DO KNOW THAT SIMPLE CARBON MONOXIDE AND CARBON DIOXIDE DETECTORS IN THE COCKPIT WOULD GO A LONG WAY TO HELPING CREWS DETECT ANY ODORLESS FUMES LONG BEFORE THE EXPOSURE WAS OVERWHELMING. IF THE SULFUR DIOXIDE IN OIL IS THE ONLY REASON THAT WE COULD EVER DETECT THE FUMES AT ALL AND THEY ONLY BECOME KNOWN IN STRONG OR HVY VOLUME, THEN WE NEED A WAY TO DETERMINE IF WE ARE OPERATING OUR ACFT SAFELY.

Synopsis

CARJ FLT CREW EXPERIENCES POSTFLT SYMPTOMS OF HYPOXIA AFTER EXPOSURE TO FUMES POSSIBLY ASSOCIATED WITH THE AIR CONDITIONING AND PRESSURIZATION SYS.