# **ASRS Database Report Set**

# **Commuter and GA Icing Incidents**

Report Set Description	A sampling of aircraft icing encounter reports from GA and Commuter flight crews.
Update Number	14.0
Date of Update	December 4, 2008
Number of Records in Report Set	50
Number of New Records in Report Set	5
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.

# **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

Lenda J Connell

#### 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.



ACN: 810005 (1 of 50)

# Synopsis

FLT CREW OF EA50 INADVERTENTLY ENTER AREA OF MODERATE ICING AND TURBULENCE.

ACN: 803234 (2 of 50)

# **Synopsis**

A HIGH PERFORMANCE EXPERIMENTAL SMALL AIRCRAFT PILOT REPORTED UNRELIABLE AIRSPEED AND PITCH INFORMATION WHEN HE FLEW INTO CLOUDS AT 21000 FT. HE WAS UNABLE TO MAINTAIN HIS ALTITUDE ACCURATELY AND ASKED FOR A LOWER, WARMER ALT.

ACN: 789414 (3 of 50)

### **Synopsis**

KING AIR PLT ON APCH TO RWY 26 AT DEN IN VMC IS INSTRUCTED TO CIRCLE TO RWY 17L. RWY 16L IS SIGHTED INITIALLY CAUSING A CIRCUITOUS ROUTE TO LAND 17L.

ACN: 785530 (4 of 50)

### **Synopsis**

A VFR M20 PILOT ENCOUNTERED IMC ENROUTE AND BEGAN PICKING UP ICE. ATC DECLARED AN EMERGENCY FOR HIM AND VECTORED HIM TO A SAFE LANDING.

ACN: 784659 (5 of 50)

### **Synopsis**

LOW TIME PRIVATE PLT WITH INSTRUMENT RATING RELATES A HARROWING TALE OF THEIR FIRST ACTUAL IMC FLT.

ACN: 784322 (6 of 50)

### Synopsis

FLT CREW OF EA50 ALTER COURSE TO AVOID ICING CONDITIONS AT FL280 WITHOUT CLRNC.

ACN: 770828 (7 of 50)

#### **Synopsis**

BE40 CAPT REPORTS NOT BEING ABLE TO OBTAIN A BRAKING ACTION REPORT FOR MDW PRIOR TO LANDING WITH SNOW FALLING.

ACN: 764193 (8 of 50)

### **Synopsis**

SA226 FLT CREW HAS RWY INCURSION ON RWY 32 AT PIT AFTER SKIDDING ON ICY TXWY. ACR JET IS DEPARTING ON RWY 32 AT THE TIME AND NARROWLY MISSES THE SA226.

## ACN: 760888 (9 of 50)

### **Synopsis**

A BE400A EXPERIENCED FAILURE OF HORIZONTAL TAIL DE-ICE AFTER TAKEOFF. FLT CREW ELECTED TO DIVERT, ENCOUNTERED A TAIL STALL, AND ELECTED TO HAVE CFR STANDING BY. THE APCH AND LNDG WERE EXECUTED AT A HIGHER AIRSPEED THAN NORMAL AND WERE CONCLUDED SUCCESSFULLY.

### ACN: 754379 (10 of 50)

### **Synopsis**

EA50 FLT CREW RPTS ENTERING ICING CONDITIONS AT FL260 WITH AN ACFT THAT IS NOT CURRENTLY CERTIFIED FOR ICING. FLT CREW QUICKLY DSNDS TO WARMER ALT.

# ACN: 749437 (11 of 50)

### Synopsis

C 560XL IS UNABLE TO MAINTAIN ALT WHILE DEVIATING AROUND TSTMS. FLT IS FORCED TO DESCEND PRIOR TO RECEIVING CLRNC IN ORDER TO MAINTAIN AIRSPEED.

# ACN: 748856 (12 of 50)

#### Synopsis

C414 SNGL PLT ON TRANS--ATLANTIC FERRY FLT LOSES RADIO CONTACT AND DEVELOPS POWER LOSS ON RIGHT ENGINE. DECLARES EMERGENCY AND LANDS AT NEAREST SUITABLE ARPT.

### ACN: 741991 (13 of 50)

#### Synopsis

AN M20K PILOT REPORTS A TRACK DEV FOR TSTM ONLY TO ENTER IMC AND ENCOUNTER MODERATE TO SEVERE TURB WITH AN 800 FT ALT LOSS.

# ACN: 740818 (14 of 50)

# **Synopsis**

AN IMC LANCAIR ACCUMULATED ICE IN CLOUD BASES AND EXPERIENCES ACFT CTL PROBLEMS. CLEARANCE TO A LOWER ALT REMOVED THE ICE.

# ACN: 738205 (15 of 50)

# **Synopsis**

A FALCON 20'S AILERON CTL LEVERS IN THE ACFT'S FUSELAGE BECAME FROZEN WITH MELTED GALLEY ICE APPARENTLY UNABLE TO DRAIN FROM A FROZEN DRAIN MAST.

ACN: 737370 (16 of 50)

### **Synopsis**

C206 PLT, EXPERIENCING ICING CONDITIONS, INITIATED CLB WITHOUT CLEARANCE. LATER IN FLT, DEPARTED ASSIGNED ALT AGAIN, FORGETTING HE WAS ON IFR FLT PLAN.

ACN: 735523 (17 of 50)

### **Synopsis**

BE36 PLT ON AN IFR FLT PLAN ENCOUNTERS ICING AND IS UNABLE TO MAINTAIN ALT. ATC NOT IMMEDIATELY RESPONSIVE.

ACN: 735096 (18 of 50)

### **Synopsis**

IN NEAR FREEZING CONDITIONS, SMT AMPHIBIAN EXPERIENCES TWO BLOWN TIRES ON LNDG DUE TO FROZEN BRAKES. EVENT FOLLOWED WATER OPERATIONS FOR A SEAPLANE RATING CURTAILED DUE TO EVIDENT WING ICING.

ACN: 733192 (19 of 50)

### **Synopsis**

THE PILOT OF A BE55, NOT EQUIPPED FOR FLIGHT INTO KNOWN ICING, ENCOUNTERS ICING CONDITIONS IN ZDV AIRSPACE AT 14000 FEET ON A CROSS COUNTRY FLIGHT.

ACN: 732580 (20 of 50)

#### Synopsis

A C525 CLEARED THE RUNWAY AFTER LANDING BY TURNING ONTO ANOTHER ACTIVE RUNWAY, CAUSING AN AIRCRAFT THAT WAS CLEARED FOR TAKEOFF TO ABORT.

ACN: 731960 (21 of 50)

#### Synopsis

TURBO COMMANDER 690C FLT CREW REPORTS DOUBLE ENGINE FAILURE ON SHORT FINAL. BOTH ENGINES ARE FEATHERED AND A SUCCESSFUL POWER OFF LANDING ENSUES.

ACN: 730304 (22 of 50)

### **Synopsis**

INSTRUMENT RATED PRIVATE PLTS ON IFR PRACTICE FLT DEVIATE FROM CLRNC AT WILL DUE TO WX AND TURBULENCE CONCERNS. ATC TAKES ISSUE WITH THEIR FAILURE TO OBTAIN CLRNCS PRIOR TO DEVIATIONS.

ACN: 728976 (23 of 50)

# **Synopsis**

A C172 INSTRUCTOR AND STUDENT DEVIATED FROM THEIR IFR ALT AND TRACK CLEARANCE IN UNFORECAST TURBULENCE, ICE AND SNOW.

ACN: 728727 (24 of 50)

### **Synopsis**

WW24 CREW ENCOUNTERS SEVERE TURB AND ICING AT 14000 FT.

ACN: 728605 (25 of 50)

### Synopsis

CHALLENGER CL601 FLT CREW HAS AN ALT DEV DURING THE TEB 5 DEP.

ACN: 728155 (26 of 50)

### **Synopsis**

A B200 STRUCK A SNOW RIDGE LEFT BY A SNOW PLOW, EXITED THE RWY, BROKE THE NOSE GEAR OFF AND STRUCK THE PROPS ON THE GND.

ACN: 727371 (27 of 50)

### **Synopsis**

IA 1125 CREW EXPERIENCES ENG ICING CLBING TO FL410 WHICH INITIALLY GOES UNDETECTED AND CAUSES PWR DEFICIT.

ACN: 727073 (28 of 50)

### **Synopsis**

A B1900 DEPARTED MBL WITHOUT A CURRENT WT AND BALANCE.

ACN: 726815 (29 of 50)

### **Synopsis**

A BE35 AT 3500 FT NOTED DROP IN OIL PRESSURE. ADVISED ATC AND ADVISED TO DSND TO 2000 FT. ON DSCNT LOST DIRECTIONAL GYRO AND AUTOPLT. ADVISED TO DSND TO 600 FT AND BROKE OUT OF CLOUDS AND PROCEEDED TO ARPT.

ACN: 725889 (30 of 50)

### **Synopsis**

STUDENT PLT AND INSTRUCTOR EXPERIENCE A RWY EXCURSION AFTER LANDING AT CMI. APPARENT CAUSE IS ICE ACCUMULATION ON LEFT BRAKE ASSEMBLY DISCOVERED ON INSPECTION.

ACN: 725702 (31 of 50)

### **Synopsis**

CESSNA 210 PLT HAS A RWY EXCURSION AT AMA.

ACN: 724906 (32 of 50)

### **Synopsis**

C172 PLT ENCOUNTERS WX ENRTE AND IS VFR IN IMC CONDITIONS.

ACN: 724890 (33 of 50)

### **Synopsis**

EMB145 FLT CREW HAS FLAP MALFUNCTION AND NAV EQUIP PROB, DECLARES EMER AND LANDS AT ZZZ.

ACN: 724269 (34 of 50)

### **Synopsis**

FOLLOWING A HASTY PREFLT A C402 DEPARTED ONLY TO HAVE THE CARGO DOOR OPEN AFTER TKOF REQUIRING A CLOSE IN RETURN TO LAND.

ACN: 724077 (35 of 50)

### **Synopsis**

A PC12 LANDED FAST AND LONG ON AN ICY RWY. DURING LANDING ROLL THE ACFT SLID OFF THE RWY WITH A BLOWN TIRE.

ACN: 723957 (36 of 50)

### **Synopsis**

PA28 PLT ENCOUNTERS ICING CONDITIONS AND HAS DIFFICULTIES LNDG DUE TO ICE ON THE WINDSCREEN.

ACN: 716534 (37 of 50)

### **Synopsis**

CRJ200 FLT CREW HAS AN ANTI-ICING VALVE FAILURE DURING DSCNT INTO CVG.

ACN: 712103 (38 of 50)

### **Synopsis**

A C182 PLT LANDED ON A WET GRASS STRIP AND SLID OFF THE END INTO A DITCH, DAMAGING THE PROP AND NOSE GEAR.

ACN: 707774 (39 of 50)

# **Synopsis**

A BE90 PLT RPTS ENCOUNTERING HVY RAIN AND TURB ON FINAL TO SRR. AFTER LNDG HAIL DAMAGE WAS DISCOVERED.

ACN: 703793 (40 of 50)

### **Synopsis**

PA46 MALIBU PLT ENTERS IMC WHILE FLYING VFR.

ACN: 702139 (41 of 50)

### **Synopsis**

C172 PLT HAS AN ENG MALFUNCTION AND PERFORMS AN OFF-FIELD LNDG.

ACN: 695601 (42 of 50)

# **Synopsis**

C172 FLT INSTRUCTOR AND STUDENT ENCOUNTER SEVERE ICING CONDITIONS. UNABLE TO MAINTAIN ALT, DECLARE EMER AND RECEIVE VECTORS TO LOWER ALT.

ACN: 695306 (43 of 50)

### Synopsis

AN M20E IN CRUISE AT 15000 FT INCURRED LOSS OF PWR DUE TO SNOW CLOGGING INTAKE AND IMPACT TUBES OF THE FUEL SERVO. DSCNT TO 12000 FT REGAINED PWR.

ACN: 692024 (44 of 50)

#### Synopsis

INTREPID PLT OF M20P ON A LONG IFR XCOUNTRY ENCOUNTERS FREEZING MOISTURE WHICH CAUSES A PARTIAL LOSS OF PWR AND A DIVERSION TO A SAFE LNDG.

ACN: 689501 (45 of 50)

### **Synopsis**

F900 ROLLS OFF END OF RWY AFTER LNDG.

ACN: 689182 (46 of 50)

### **Synopsis**

DURING A POSTFLT INSPECTION A C208 PLT FOUND PROP DAMAGE RESULTING FROM CONTACT WITH SNOW AND ICE DRIFTS DURING TAXI FOR TKOF AT EWR.

ACN: 689060 (47 of 50)

# **Synopsis**

SMA UNCTLABLY DEPARTS RWY AT FVE.

ACN: 688890 (48 of 50)

# Synopsis

PLT OF SMA CONTINUES VFR INTO DETERIORATING WX.

ACN: 688719 (49 of 50)

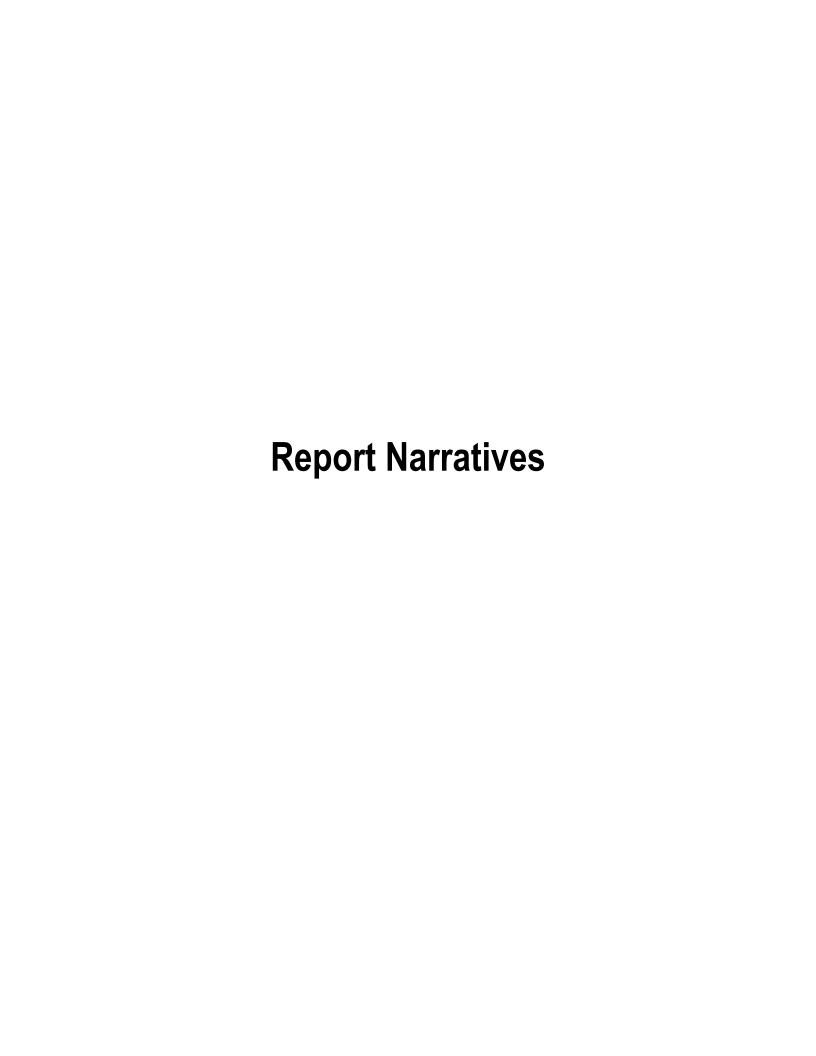
# **Synopsis**

BE36 PVT PLT ENCOUNTERS IMC WHILE OPERATING VFR.

ACN: 688060 (50 of 50)

### **Synopsis**

CE501 CREW UTILIZED THE WRONG SID ON DEP OUT OF DAL RESULTING IN A PLTDEV.



# Time / Day

Date: 200810

Local Time Of Day: 1801 To 2400

#### **Place**

Locale Reference.Navaid: DKK.VOR

State Reference: NY

Altitude.MSL.Single Value: 15000

#### **Environment**

Flight Conditions: Mixed Weather Elements: Ice Weather Elements: Rain Weather Elements: Snow

Weather Elements : Thunderstorm Weather Elements : Turbulence Weather Elements : Windshear

Weather Elements. Other

Light : Night

# Aircraft: 1

Controlling Facilities.ARTCC: ZOB.ARTCC
Operator.General Aviation: Corporate
Make Model Name: Eclipse 500

Operating Under FAR Part: Part 91

Flight Phase.Descent: Intermediate Altitude

### Component: 1

Aircraft Component: Autopilot

### Person: 1

Affiliation.Company: Corporate Function.Flight Crew: Captain

Function.Oversight: PIC

Experience.Flight Time.Last 90 Days: 150

Experience.Flight Time.Total: 8000 Experience.Flight Time.Type: 250

ASRS Report: 810005

#### **Events**

Anomaly. Aircraft Equipment Problem: Less Severe

Anomaly.Inflight Encounter: Turbulence Anomaly.Inflight Encounter: Weather

Anomaly. Non Adherence: FAR

Independent Detector.Other.Flight CrewA: 1

Resolutory Action. Aircraft: Equipment Problem Dissipated Resolutory Action. Flight Crew: Exited Adverse Environment

### **Assessments**

Problem Areas: Aircraft

Problem Areas: Flight Crew Human Performance

Problem Areas: Weather

### **Narrative**

IN DESCENT, WHILE ON VECTORS INADVERTENTLY ENTERED INTO MOD ICING AND MOD TURBULENCE SITUATION ON A NON-FLT INTO KNOWN ICING EA50 AROUND 15000 FT MSL FOR LESS THAN 5 MINUTES. LOST AUTOPILOT DUE TO MOD TURBULENCE. FIRST OFFICER (PNF) ATTEMPTED TO RE-ENGAGE AUTOPILOT NUMEROUS TIMES WITHOUT SUCCESS. AUTOPILOT DID NOT RE-ENGAGE UNTIL WELL CLEAR OF ANY TURBULENCE. WX WAS CAVU 95% OF THE TRIP UNTIL DESCENT INTO DESTINATION. CANCELLED NEXT DAY'S EARLY AM FLT DUE TO ICING ALONG ENTIRE ROUTE.

# **Synopsis**

FLT CREW OF EA50 INADVERTENTLY ENTER AREA OF MODERATE ICING AND TURBULENCE.

# Time / Day

Date: 200808

Local Time Of Day: 1801 To 2400

#### **Place**

Locale Reference.Navaid: ZZZ.VORTAC

State Reference: US

Altitude.MSL.Bound Lower: 19000 Altitude.MSL.Bound Upper: 21000

#### **Environment**

Flight Conditions : Mixed Weather Elements : Ice

Weather Elements: Turbulence

Light: Daylight

#### Aircraft: 1

Controlling Facilities.ARTCC: ZZZ.ARTCC Operator.General Aviation: Personal Make Model Name: Experimental Operating Under FAR Part: Part 91

Flight Phase.Cruise: Level

### Component: 1

Aircraft Component: Pitot-Static System

#### Person: 1

Affiliation.Other: Personal

Function.Flight Crew: Single Pilot

Qualification.Pilot: ATP

Qualification.Pilot : Commercial Qualification.Pilot : Flight Engineer Qualification.Pilot : Instrument Qualification.Pilot : Private

Experience.Flight Time.Last 90 Days: 50 Experience.Flight Time.Total: 5000 Experience.Flight Time.Type: 35

ASRS Report: 803234

#### **Events**

Anomaly. Aircraft Equipment Problem: Critical

Anomaly. Altitude Deviation: Excursion From Assigned Altitude

Anomaly.Inflight Encounter: Weather

Independent Detector.Other.Flight CrewA: 1

Resolutory Action.Controller: Issued New Clearance

#### Assessments

Problem Areas : Aircraft Problem Areas : Weather

### **Narrative**

IFR FLT. FL210 CLR, BUT WITH MULTIPLE TSTMS AND DEVELOPING CONVECTIVE AIR EITHER SIDE OF FLT PATH. FLEW INTO CLOUD LAYER AT FL210. PITOT HEAT ON. UNRELIABLE AIRSPD AND PITCH ATTITUDE INFO. TURBULENT AIR. MULTIPLE ALT EXCURSIONS. ASKED FOR LOWER ALT FOR WARMER AIR AND TO GET VMC. ALSO ASKED ATC FOR BLOCK ALT AS UNABLE TO MAINTAIN ALT RELIABLY. FLT PATH MARKER SLOWLY PRECESSING +/-10 DEGS IN ATTITUDE. SUSPECT WATER IN SYS OR DAMAGE FROM PREVIOUS FLT WHERE ICING WAS ENCOUNTERED. PITOT SYS SEEMED TO WORK MORE RELIABLY AT LOWER ALT WITH WARMER TEMP, BUT STILL NOT COMPLETELY ACCURATE.

# **Synopsis**

A HIGH PERFORMANCE EXPERIMENTAL SMALL AIRCRAFT PILOT REPORTED UNRELIABLE AIRSPEED AND PITCH INFORMATION WHEN HE FLEW INTO CLOUDS AT 21000 FT. HE WAS UNABLE TO MAINTAIN HIS ALTITUDE ACCURATELY AND ASKED FOR A LOWER, WARMER ALT.

# Time / Day

Date: 200806

Local Time Of Day: 1201 To 1800

#### **Place**

Locale Reference. Airport : DEN. Airport

State Reference: CO

#### **Environment**

Flight Conditions: VMC

Light : Daylight

#### Aircraft: 1

Controlling Facilities.TRACON: D01.TRACON

Operator.General Aviation: Personal

Make Model Name: Super King Air 200 HDC

Operating Under FAR Part: Part 91

Navigation In Use.ILS.Localizer & Glide Slope: 26

Flight Phase.Descent: Approach Route In Use.Approach: Circling

#### Person: 1

Affiliation.Other: Personal

Function.Flight Crew: Single Pilot

Qualification.Pilot : ATP Qualification.Pilot : CFI

Qualification.Pilot: Multi Engine

Experience.Flight Time.Last 90 Days: 75 Experience.Flight Time.Total: 6500 Experience.Flight Time.Type: 1500

ASRS Report: 789414

### **Events**

Anomaly.Inflight Encounter: Turbulence Anomaly.Inflight Encounter: Weather Anomaly.Non Adherence: Clearance Anomaly.Other Spatial Deviation

Independent Detector.Other.Flight CrewA: 1

Resolutory Action.Controller: Issued New Clearance Resolutory Action.Flight Crew: Became Reoriented

Resolutory Action. Flight Crew: Returned To Original Clearance

### **Assessments**

Problem Areas: ATC Human Performance

Problem Areas: Flight Crew Human Performance

#### **Narrative**

I WAS A LITTLE SHAKY AFTER BEING VECTORED AROUND SOME THUNDERSTORMS THAT INCLUDED MODERATE TO SEVERE TURBULENCE AND MODERATE ICING. I WAS GIVEN A VECTOR TO INTERCEPT ILS RWY 26 AT DEN. SHORTLY AFTER THE LOC INTERCEPT I WAS IN VMC WITH 6000 FT VISIBILITY AND THE ARPT IN SIGHT, BUT WINDSHEAR WAS CONTINUOUS. I CALLED THE FIELD IN SIGHT AND WAS TOLD TO CONTINUE. SOMEWHERE INSIDE THE MARKER I WAS GIVEN A CIRCLE TO LAND TO RWY 17L. I CALLED RWY IN SIGHT AND WAS TOLD IT WAS OKAY TO WIDEN TO THE N, BUT I GUESS I SAW RWY 16, NOT RWY 17. AFTER NOTICING MY MISTAKE I ASKED FOR A VECTOR, BUT DIDN'T HEAR ANYTHING. I ASKED AGAIN AND WAS TOLD TO TURN E. AT THAT TIME I SAW RWY 17L AND WAS CLEARED TO LAND. NO MENTION WAS MADE OF ANYTHING, BUT I FEEL I SHOULD WRITE THIS BECAUSE THE TWR GAVE ME A CIRCLING INSTRUCTION AT THE LAST MINUTE AND I DIDN'T REALLY HAVE TIME TO GET ORGANIZED. I SAW A S RWY, BUT IT WAS THE WRONG RWY. I SAW RWY 16, NOT RWY 17. AFTER THE PREVIOUS THUNDERSTORMS AND TURBULENCE, AS WELL AS A LONG DAY, AND THE FACT THAT I WAS SINGLE PLT, I'M GLAD I'M STILL HERE, AND I'M GLAD IT WASN'T NIGHT AND IMC. IN THE FUTURE I'LL CONCENTRATE MORE ON THE ARPT DIAGRAM, AS WELL AS A BETTER PREFLT BRIEFING. THE BUSIER ARPTS ARE CHALLENGING SINGLE PLT.

### **Synopsis**

KING AIR PLT ON APCH TO RWY 26 AT DEN IN VMC IS INSTRUCTED TO CIRCLE TO RWY 17L. RWY 16L IS SIGHTED INITIALLY CAUSING A CIRCUITOUS ROUTE TO LAND 17L.

# Time / Day

Date: 200805

Local Time Of Day: 1801 To 2400

#### **Place**

Locale Reference.Navaid: ZZZ.VOR

State Reference: US

Altitude.MSL.Single Value: 11500

#### **Environment**

Flight Conditions: VMC

Light : Daylight

### Aircraft: 1

Controlling Facilities.ARTCC: ZZZ.ARTCC
Operator.General Aviation: Personal
Make Model Name: M-20 J (201)
Operating Under FAR Part: Part 91
Navigation In Use.Other.VORTAC

Flight Phase.Cruise: Level

#### Person: 1

Affiliation.Other: Personal

Function.Flight Crew: Single Pilot

Qualification.Pilot: Private

Experience.Flight Time.Last 90 Days: 21

Experience.Flight Time.Total: 770 Experience.Flight Time.Type: 245

ASRS Report: 785530

### **Events**

Anomaly.Inflight Encounter: VFR In IMC Anomaly.Inflight Encounter: Weather

Independent Detector.Other.Flight CrewA: 1

Resolutory Action.Controller: Issued New Clearance

Resolutory Action.Flight Crew: Exited Adverse Environment

Resolutory Action.Other

#### Assessments

Problem Areas : Flight Crew Human Performance

Problem Areas: Weather

#### Narrative

SHORTLY BEFORE DEP, I CALLED FSS AND RECEIVED A WX BRIEFING. AFTER DEP, I CONTACTED APCH FOR FLT FOLLOWING TO ZZZ1, WHILE CRUISING AT 11500 FT JUST N OF ZZZ2, I ENCOUNTERED SOME WIDELY SCATTERED CUMULO NIMBUS

AND STRATUS WHICH WAS EASILY NAV'ED AROUND WITH AMPLE VFR CLRNC. AROUND THIS TIME CTR CALLED AND ADVISED ME ZZZ1 WAS 2500 FT OVCST. I INFORMED THEM I WOULD CONTINUE TO ZZZ3 WHICH WAS CLR AND 10 AND WOULD ADD 20 MINS TO THE FLT. AS THE FLT PROGRESSED, VISIBILITY REDUCED TO APPROX 6 MI IN HAZE AND THE NUMBER OF CUMULO NIMBUS INCREASED, MAKING IT MORE DIFFICULT TO REMAIN ON COURSE. NE OF THE ZZZ VOR, I CALLED CTR AND INITIATED A CLB TO REMAIN CLR OF CLOUDS BUT SOON FOUND MYSELF UNABLE TO CONTINUE CLBING OR MANEUVERING TO REMAIN VFR AS TOWERING CUMULO NIMBUS WERE BUILDING IN EVERY DIRECTION. JUST BEFORE CLOUD PENETRATION, I LEVELED THE NOSE AND INFORMED CTR I WOULD NOT BE ABLE TO MAINTAIN VFR. UPON ENTERING THE CLOUD, MY ACFT IMMEDIATELY BEGAN TO ACCUMULATE ICE SO I ASKED FOR A DSCNT TO 6000 FT. THE CTLR QUERIED ME ON MY ABILITY THEN DECLARED AN EMER ON MY BEHALF AND CLRED ME TO 9000 FT. I WAS HANDED OFF TO APCH CTL AND CLRED LOWER AND GIVEN DIRECT ZZZ4 WHICH WAS RPTING VFR. I BROKE OUT OF THE CLOUDS AT 4100 FT 3 MI SE OF ZZZ5. AFTER A FEW MI IN VFR, I SPOTTED ZZZ4, THANKED THE CTLR, AND LANDED SAFELY. JUST PRIOR TO ENTERING CLOUD, I FELT THE SAFEST ACTION WAS TO LOWER THE NOSE, STABILIZE THE ACFT, AND TELL ATC WHAT IS HAPPENING, WHEN ICE BEGAN TO FORM MY THOUGHT WAS TO DSND TO WARMER AIR. UPON ENCOUNTERING MORE THAN SCATTERED CLOUDS, I SHOULD HAVE COMPLETED A 180 DEG TURN TOWARDS BETTER WX. 2 DAYS AFTER THE EVENT, I CONTACTED MY FLT INSTRUCTOR TO BEGIN TRAINING FOR THE INST RATING.

# **Synopsis**

A VFR M20 PILOT ENCOUNTERED IMC ENROUTE AND BEGAN PICKING UP ICE. ATC DECLARED AN EMERGENCY FOR HIM AND VECTORED HIM TO A SAFE LANDING.

# Time / Day

Date: 200805

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 Weather Elements: Ice Weather Elements: Rain

Weather Elements: Turbulence

Light: Daylight

#### Aircraft: 1

Controlling Facilities.ARTCC: ZSE.ARTCC Controlling Facilities.TRACON: S46.TRACON

Operator. General Aviation: Personal Make Model Name: Cessna 152 Operating Under FAR Part: Part 91 Flight Phase.Climbout: Initial Flight Phase.Cruise: Level Flight Phase.Descent: Approach

Flight Phase.Landing: Roll

#### Component: 1

Aircraft Component: GPS & Other Satellite Navigation

### Person: 1

Affiliation.Other: Personal

Function.Flight Crew: Single Pilot Qualification.Pilot: Instrument Qualification.Pilot: Private

Experience. Flight Time. Last 90 Days: 10

Experience.Flight Time.Total: 250

ASRS Report: 784659

### Person: 2

Affiliation.Government: FAA Function.Controller: Local

Qualification.Controller: Non Radar

### **Events**

Anomaly. Altitude Deviation: Excursion From Assigned Altitude

Anomaly. Inflight Encounter: Weather Anomaly. Non Adherence: Clearance

Anomaly. Non Adherence: Published Procedure

Anomaly. Other Anomaly

Anomaly. Other Anomaly: Speed Deviation
Anomaly. Other Anomaly: Unstabilized Approach

Anomaly. Other Spatial Deviation

Independent Detector.Other.ControllerA: 2
Independent Detector.Other.Flight CrewA: 1
Resolutory Action.Controller: Issued Advisory
Resolutory Action.Controller: Issued Alert

Resolutory Action.Controller: Issued New Clearance Resolutory Action.Controller: Provided Flight Assist

Resolutory Action.Flight Crew: Diverted To Another Airport

Resolutory Action.Flight Crew: Executed Go Around Resolutory Action.Flight Crew: Regained Aircraft Control Consequence.FAA: Reviewed Incident With Flight Crew

#### **Narrative**

THIS IS MY FIRST TIME PLANNED-FOR ACTUAL IMC FLT. I CALLED THE DELIVERY CLRNC ON THE GND AT NE RAMP PARKING OF ZZZ AND WAS GIVEN A SQUAWK, ZZZ1 DEP CLRNC WITH OTHER ITEMS: ...35(?)/...119.2/...3000/...ADVISED CTLR IFR DEP ON REQUEST FOR TKOF. I REPEATED THE SQUAWK, ZZZ1 (?), 35/3000/119.2/ADVISE CTLR IFR DEP. WHEN READING THE ZZZ1 PLATE BEFORE TAXIING, I NOTICED THAT I NEEDED TO KEEP RWY HDG AND MAINTAIN 2000 FT UNTIL FURTHER CLRNC. WHEN THE CTLR ADVISED ME TO CONTACT APCH AND APPROVED FOR FREQ CHANGE, I THOUGHT THAT I COULD APPLY THE REST OF THE CLRNC FOR 350 DEG HDG AND 3000 FT ALT. I GOT INTO IMC AT APPROX 650 FT DESPITE THE FORECASTED OVCST AT 1100 FT. I EXECUTED A CLBING TURN AND RPTED TO THE APCH MY CURRENT ALT (I RECALL SOMETHING MORE THAN 1000 FT BUT NOT QUITE SURE NOW) CLBING 3000 FT, HDG 350 DEGS. I WAS CONFUSED ABOUT THE 350 DEG HDG AND THE HDG SW OF MY FLT DIRECTION TO ZZZ2, SO I HALTED AT 150 DEG HDG BUT CONTINUE TO CLB. WHEN APCH ASKED WHAT WAS MY HDG, I REPLIED 150 DEGS. I WAS REPRIMANDED TO KEEP RWY HDG, WHICH I IMMEDIATELY CORRECTED. I COMPLIED WITH THE ATC INSTRUCTION TO CLB TO 4000 FT, WHICH WAS THE ALT I FILED FOR, BUT DECLINED THE INSTRUCTIONS OF CLBING TO 5000 FT A FEW TIMES BECAUSE I WAS AFRAID OF GETTING INTO ICING CONDITIONS DUE TO THE FREEZING LEVEL OF 5000 FT I GOT FROM THE WX BRIEFING AND THE VISIBLE MOISTURE (IT WAS RAINING AT THE TIME). THE ATC CTLR GAVE ME 2 CHOICES OF VECTORING AND GPS APCH FOLLOWING THE OLM VOR. I CHOSE THE SECOND CHOICE BECAUSE THE PLANE HAS THE GPS DEVICE (WHICH I WAS MISTAKENLY FILED AS /A INSTEAD OF /G) AND I HAD SET IT UP FOR A GPS APCH TO RWY 16 AT ZZZ2. HOWEVER, I WAS CONFUSED ON THE SECOND PART OF THE CLRNC TO FOLLOW THE OLM VOR, WHICH I DIDN'T HAVE THE FREQ FOR. I WAS VERY BUSY LOOKING UP THE FREQ FOR THE OLM VOR ON THE IFR LOW LEVEL CHART AND FINDING A WAY TO SET IT UP ON THE GPS THAT HAD ALREADY BEEN SET FOR THE APCH. IN ACTUAL IMC WITH CLOUDS OF MULTIPLE SHADES AROUND ME, I GOT INTO ADVERSE CONDITIONS AND I WAS IN SOME SORT OF A DIVE. I NOTICED THE ATTITUDE WENT HAYWIRE, THE ENG SOUNDED LOUDER, AND THE AIRSPD INDICATOR WENT TO THE YELLOW ARC. I DROPPED EVERYTHING AND TRIED TO CURE THE SITUATION, I FORGOT TO RESPOND TO THE ATC CALLS. I DO NOT

RECALL HOW MANY TIMES, BUT I KNOW THAT IT MUST HAVE BEEN MORE THAN ONCE BECAUSE I GOT INTO THAT ADVERSE SITUATION AT LEAST TWICE. IN ADDITION, ADDED TO ALL THE CONFUSION, I NOTICED THAT THE GPS SCREEN WAS NOT WHAT I EXPECTED AND I COULD NOT FIND A WAY TO KNOW WHERE I WAS ON THE SCREEN. AT THE END, THE ATC CTLR OFFERED TO DIVERT ME TO ANOTHER ARPT, ZZZ3, WHERE I COULD LAND VISUALLY. THE APCH ADVISED ME TO CALL HIM THROUGH THE ZZZ3 CTLR, WHICH I DID. I WAS ADVISED THAT FSDO WILL GIVE ME A CALL LATER ON. AFTER REFUELING THE PLANE, I DECIDED TO RETURN TO THE ACFT BASE AT ZZZ AND TERMINATED THE FLT. I FILED FOR AN IFR SHORT FLT WITH AN ILS RWY 13R APCH FROM ZZZ3 TO ZZZ BECAUSE THE IMC WAS STILL IN EFFECT AND THE BASE OF CLOUDS WAS ONLY ABOUT LESS THAN 1000 FT, AND BECAUSE I COULD NOT STAY IN THE PLANE WITH MY WRECKING NERVE AFTER THE CALL. I HAD WANTED TO GO HOME VERY BADLY. I EXECUTED THE FLT ALRIGHT UNTIL THE ATC CTLR GAVE ME THE L-TURN FINAL CUT TO JOIN THE LOC 13. I DID TURN L BUT WHEN I HEARD THE ATC CTLR REPEATED THE CLRNC 'L-TURN TO 15 JOIN THE LOC, I THOUGHT I TURNED IN A WRONG DIRECTION, SO REVERSED THE DIRECTION OF MY TURN TO THE R AND REPEATED 'L-TURN TO 15 TO JOIN.' I SPECULATE, NOW, THAT THE SECOND CALL WAS BECAUSE I DID NOT REPEAT THE 'L-TURN' INSTRUCTION, NOT BECAUSE I DID IT WRONG THE FIRST TIME. AFTER 40 OR 50 DEGS INTO THE TURN, THE ATC CTLR CALLED TO TELL ME MY MISTAKE OF EXECUTING THE R-TURN INSTEAD OF THE INSTRUCTED (AND REPEATED) L-TURN. AT THE TIME, MY WORKLOAD WAS TO THE MAX DUE TO MY INABILITY TO CHANGE THE GPS DEVICE TO CONNECT TO THE GS AND LOC INST (I DID MENTION TO THE ATC CTLR DURING THIS TIME THAT I MIGHT NOT BE ABLE TO USE THE ILS APCH AND ASKED FOR LOC APCH INSTEAD, BUT I WAS DECLINED DUE TO THE HVY IMC WX AT THE TIME). I FOUND OUT AND USED THE BACK-UP INST FOR THE APCH AND CONFIRMED WITH ATC THAT I WOULD CONTINUE WITH THE ILS APCH. I FEEL THAT THERE ARE A FEW THINGS THAT CAN HELP WITH THIS INCIDENCE. FIRST, I NEED TO BE VERY FAMILIAR WITH THE GPS DEVICE ON BOARD AND SHOULD HAVE SET ALL THE DEVICES UP INSTEAD OF RELYING ON ONE INST (IT WOULD HELP IF I ASKED FOR THE VOR FREQ INSTEAD OF LOOKING IT UP MYSELF). SECONDLY, I FEEL THAT IT WOULD HELP ME TREMENDOUSLY IF THE CLRNC WERE NOT SO WORDY. DESPITE THE FACT THAT THE ATC CTLR WANTED TO BE HELPFUL AND TRIED TO POINT OUT ALL THE STEPS, THERE IS ONLY SO MUCH INFO A PERSON CAN DIGEST AND TRULY REGISTER -- ESPECIALLY WHEN THE WX PLAYS A ROLE. I WISH I COULD HAVE CLRNCS WITH FEWER WORDS AND DELIVERED IN A SLOWER SPD. THIRDLY, IF THE ATC CTLRS CAN KEEP THEIR COOL, IT WOULD HELP A LOT. IN THE IMC, PLTS ALREADY FEEL SCARED. I DID! I ACTUALLY FEEL SCARED OF THE ATC CTLRS MORE THAN THE WX, ALTHOUGH I KNOW THAT I NEED THEIR HELP.

# **Synopsis**

LOW TIME PRIVATE PLT WITH INSTRUMENT RATING RELATES A HARROWING TALE OF THEIR FIRST ACTUAL IMC FLT.

# Time / Day

Date: 200804

Local Time Of Day: 0601 To 1200

#### **Place**

Locale Reference.Airport: ZZZ.Airport

State Reference: US

Altitude.MSL.Single Value: 28000

#### **Environment**

Flight Conditions: VMC

Light : Daylight

### Aircraft: 1

Controlling Facilities.ARTCC: ZZZ.ARTCC Operator.General Aviation: Corporate Make Model Name: Eclipse 500

Operating Under FAR Part: Part 91

Flight Phase.Cruise: Level

### 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: 80 Experience.Flight Time.Total: 4250 Experience.Flight Time.Type: 475

ASRS Report: 784322

### **Events**

Anomaly.Inflight Encounter: Weather

Anomaly. Non Adherence: FAR Anomaly. Other Spatial Deviation

Resolutory Action.Controller: Issued New Clearance Consequence.FAA: Reviewed Incident With Flight Crew

#### Assessments

Problem Areas: ATC Human Performance

Problem Areas: Aircraft

Problem Areas: Flight Crew Human Performance

Problem Areas: Weather

#### **Narrative**

I WAS IN AN ECLIPSE 500. WE WERE TRACKING OUTBOUND ON THE DEPARTURE FROM ZZZ AT FL280. THE OTHER PILOT WAS FLYING. THE AIRCRAFT IS NOT CERTIFIED FOR FLIGHT INTO KNOWN ICING AND WE WERE APPROACHING A BUILDUP THAT WE FELT MAY CONTAIN ICE. I ADVISED ATC THAT WE WOULD NEED TO DEVIATE AND WE MADE SLIGHT TURN TO THE SOUTH TO AVOID THE BUILDUP DEVIATING ABOUT 1/2 DOT FROM THE RADIAL AND IMMEDIATELY REJOINED THE DEPARTURE. AT 60 TO 70 MILES FROM ZZZ WE WERE APPROACHING ANOTHER LINE OF WEATHER THAT WE WOULD NOT BE ABLE TO NAVIGATE AROUND AND THE PILOT REQUESTED A TURN TO THE SOUTH TO AVOID POTENTIAL ICING CONDITIONS. THE CENTER CONTROLLER SEEMED TO BE UNSURE OF WHAT HE WAS REQUESTING SO HE EXPLAINED AGAIN THAT WE WOULD LIKE TO TURN TO THE SOUTH AND CONTINUE ON THAT HEADING FOR A WHILE BEFORE RETURNING TO ZZZ. HE TURNED TO A HEADING OF 180 AND WE CONTINUED ON THAT HEADING FOR ABOUT 10 MILES AND REQUESTED A TURN BACK TO ZZZ. THE CONTROLLER NOTIFIED US THAT WE HAD MADE BOTH OF THE PRIOR TURNS WITHOUT RECEIVING CLEARANCE TO DO SO AND THEN ISSUED US A CLEARANCE TO RETURN TO ZZZ. BOTH THE OTHER PILOT AND MYSELF FELT THAT STAYING CLEAR OF THE POTENTIAL ICING CONDITIONS WAS OUR FIRST PRIORITY FOR THE CONTINUED SAFETY OF THE FLIGHT, HOWEVER IN THE FUTURE I WILL ENSURE THAT ATC FULLY UNDERSTANDS WHAT IS BEING REQUESTED AND WHY AND THAT PROPER CLEARANCE HAS BEEN RECEIVED PRIOR TO DEVIATING.

# **Synopsis**

FLT CREW OF EA50 ALTER COURSE TO AVOID ICING CONDITIONS AT FL280 WITHOUT CLRNC.

# Time / Day

Date: 200801

Local Time Of Day: 1201 To 1800

#### **Place**

Locale Reference.Airport : MDW.Airport

State Reference: IL

Altitude.AGL.Single Value: 0

#### **Environment**

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

Light : Daylight

### Aircraft: 1

Controlling Facilities.Tower: MDW.Tower Operator.General Aviation: Corporate Make Model Name: Beechjet 400 Operating Under FAR Part: Part 91

Flight Phase.Landing: Roll

# Person: 1

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

Qualification.Pilot: ATP

Qualification.Pilot : Commercial Qualification.Pilot : Instrument Qualification.Pilot : Multi Engine

Experience.Flight Time.Last 90 Days: 100 Experience.Flight Time.Total: 16000 Experience.Flight Time.Type: 1500

ASRS Report: 770828

#### **Events**

Anomaly. Other Anomaly. Other

Independent Detector.Other.Flight CrewA: 1

Resolutory Action.None Taken: Detected After The Fact

#### Assessments

Problem Areas: ATC Human Performance

Problem Areas: Airport

#### **Narrative**

BEFORE DEPARTING FOR A REPOSITIONING LEG I CHECKED THE WEATHER FOR MDW, WHICH WAS IFR AND EXPECTED TO STAY THAT WAY. I WAS CONCERNED ABOUT BRAKING ACTION AS SNOW HAD BEEN FALLING FOR SEVERAL HOURS. NONE WAS AVAILABLE FROM THE TELEPHONE ASOS, SO I CALLED AIRPORT OPERATIONS. I RECEIVED NO OFFICIAL REPORT, BUT WAS TOLD THE RUNWAY WAS 90% BARE AND DRY WITH SOME PATCHES OF ICE AND SNOW. NO OFFICIAL BRAKING ACTION REPORT WAS ISSUED, BUT I WAS TOLD THAT ONE WOULD BE ISSUED WITH MU VALUES SHORTLY. I WATCHED FOR THESE ON STANDARD NOTAM INFORMATION SOURCES (WSI, DUATS) BUT NONE APPEARED EVEN UP TO MY DEPARTURE TIME. WEATHER AT MDW ON ARRIVAL WAS AS FORECAST (IFR WITH LOW CEILINGS AND VISIBILITY IN SNOW), HOWEVER, THE ATIS GAVE NO MENTION OF BRAKING ACTION REPORTS, JUST THAT ADVISORIES WERE IN EFFECT. THE ONLY BRAKING ACTION ADVISORY WE RECEIVED WAS A REPORT OF 'FAIR' BY A PREVIOUSLY-LANDED AIRCRAFT. WE TOUCHED DOWN ON RUNWAY 31C IN THE TOUCHDOWN ZONE. OUR LANDING WEIGHT WAS SLIGHTLY HEAVIER THAN NORMAL. WE WERE INSTRUCTED TO TURN LEFT AT TAXIWAY A. WE APPLIED MODERATE THRUST REVERSERS AND MODERATE BRAKING BUT BEGAN TO FEEL THE OPERATION OF THE ANTISKID SYSTEM. WE WERE UNABLE TO TURN AT TAXIWAY A, NORMALLY QUITE EASY, AND CONTINUED TO TAXIWAY B, WHERE WE EXITED THE RUNWAY. WE DETERMINED THAT THE BRAKING ACTION WAS MARGINALLY FAIR, ALMOST POOR, BUT DID NOT ISSUE A REPORT IMMEDIATELY DUE TO THE HIGH VOLUME OF RADIO TRAFFIC. AN AIRCRAFT IMMEDIATELY FOLLOWING US, AN AIRBUS, HOWEVER, REPORTED THE BRAKING ACTION AT THE NORTH END OF THE RUNWAY TO BE POOR. THE CONTROLLER ACKNOWLEDGED THE REPORT. DURING OUR LENGTHY TAXI TO THE FBO, HOWEVER, WE NEVER HEARD THE REPORT GIVEN TO OTHER ARRIVING AIRCRAFT, NOR WAS IT EVER HEARD ON THE ATIS DURING THE FOLLOWING HOUR WHEN WE WERE PREPARING FOR OUR NEXT FLIGHT. NO MU VALUES WERE EVER GIVEN AT ANY TIME. I WAS VERY SURPRISED AT THIS. I HAD NOT OPERATED FROM MDW FOR QUITE SOME TIME IN POOR CONDITIONS AND HAD EXPECTED THAT MU VALUES AND BRAKING ACTION REPORTS WOULD NOW BE ROUTINELY AND RIGOROUSLY DISSEMINATED. THE HIGH VOLUME OF LARGE AIRCRAFT OPERATING INTO RELATIVELY SHORT RUNWAYS WOULD SEEM TO MANDATE THIS. NONETHELESS, I FOUND RUNWAY CONDITION REPORTS ARRIVING AT MDW TO BE VERY DIFFICULT TO OBTAIN AND NOT PARTICULARLY ADEQUATE OR RELIABLE WHEN RECEIVED. WHAT LITTLE INFORMATION WAS AVAILABLE WAS RARELY GIVEN TO ARRIVING AIRCRAFT. THE WHOLE THING SEEMED LIKE A BIG CRAP SHOOT: 'WELL, THE GUY AHEAD OF ME MADE IT, IT MUST BE OKAY.' AGAIN, I WAS ESPECIALLY SURPRISED AT THIS.

# **Synopsis**

BE40 CAPT REPORTS NOT BEING ABLE TO OBTAIN A BRAKING ACTION REPORT FOR MDW PRIOR TO LANDING WITH SNOW FALLING.

# Time / Day

Date: 200712

Local Time Of Day: 0601 To 1200

#### **Place**

Locale Reference.Airport: PIT.Airport

State Reference: PA

Altitude.AGL.Single Value: 0

#### **Environment**

Flight Conditions : Mixed Weather Elements : Ice Weather Elements : Snow

Light : Daylight

### Aircraft: 1

Controlling Facilities.Tower: PIT.Tower Operator.Common Carrier: Charter Make Model Name: Merlin IV A Operating Under FAR Part: Part 135

Flight Phase.Ground: Taxi

# Person: 1

Affiliation.Company: Charter Function.Flight Crew: Captain Function.Oversight: PIC Qualification.Pilot: CFI

Qualification.Pilot : Commercial Qualification.Pilot : Instrument Qualification.Pilot : Multi Engine

Experience. Flight Time. Last 90 Days: 130

Experience.Flight Time.Total: 6600 Experience.Flight Time.Type: 3500

ASRS Report: 764193

# Person: 2

Affiliation.Company: Air Taxi
Function.Flight Crew: First Officer
Qualification.Pilot: Commercial
Qualification.Pilot: Instrument
Qualification.Pilot: Multi Engine

Experience.Flight Time.Last 90 Days: 120

Experience.Flight Time.Total: 700 Experience.Flight Time.Type: 107

ASRS Report: 764197

#### **Events**

Anomaly.Conflict: Ground Critical Anomaly.Incursion: Runway

Anomaly. Non Adherence: Clearance

Anomaly. Other Anomaly

Independent Detector.Other.Flight CrewA: 1

Resolutory Action.Flight Crew: Regained Aircraft Control Consequence.FAA: Reviewed Incident With Flight Crew

Miss Distance. Horizontal: 35

#### **Assessments**

Problem Areas : Aircraft Problem Areas : Airport

Problem Areas: Flight Crew Human Performance

### **Narrative**

I FLEW THE APCH AND LNDG INTO PIT. CONDITIONS AT THE TIME WERE BEING RPTED AS 1 MI VISIBILITY WITH SNOW, INDEFINITE 900 FT CEILINGS, AND MU'S IN THE MID 20'S. RWY CONDITIONS DURING APCH WERE SEEN TO BE CONTAMINATED WITH LIGHT SNOW. DURING THE LNDG ROLL ON RWY 10R, THE ACFT SKID SLIGHTLY ON ICE, DIRECTIONAL CTL WAS MAINTAINED WITH SLIGHT DIFFERENTIAL PWR. WE SLOWED THE ACFT WITH THE THRUST REVERSERS ONLY AND DID NOT USE THE BRAKES TO CLR THE RWY. THE TXWYS WERE COVERED BY A LAYER OF SNOW MAKING IDENT OF ANY OTHER POSSIBLE HAZARDS OR CONTAMINANTS DIFFICULT. THE LAYER OF SNOW ALSO MADE SEEING THE TXWY CTRLINE AND MARKINGS DIFFICULT. WE EXITED THE RWY AT TXWY F3, AND WERE INSTRUCTED TO TAXI VIA TXWYS F AND R AND TO HOLD SHORT OF RWY 10C ON TXWY R. BEFORE REACHING THE HOLD SHORT LINE, WE WERE CLRED TO TAXI VIA TXWY R AND HOLD SHORT OF RWY 14/32. WE THEN ASKED FOR A DIFFERENT ROUTING VIA TXWY E. TWR THEN CLRED US VIA THE ROUTING, BUT ADVISED TO HOLD SHORT OF RWY 14/32. WE WERE TAXIING AT A SLIGHTLY SLOWER THAN NORMAL SPD. AS WE APCHED THE HOLD SHORT LINES THE ACFT'S BRAKES WERE APPLIED, BUT THE ACFT STARTED TO SKID ON THE ICE. MAX BRAKING WAS THEN APPLIED AND THE ACFT STILL WAS UNRESPONSIVE. THEN THE THRUST REVERSE SYS WAS APPLIED TO MAX REVERSE, BUT THE ACFT CONTINUED TO SLIDE FORWARD ON THE ICE. THE ACFT FINALLY CAME TO REST WITH APPROX 70% OF THE ACFT PAST THE HOLD SHORT LINE, WITH THE NOSE OF THE ACFT NEAR THE SIDE OF THE RWY. THE ACFT ALSO VEERED APPROX 20 DEGS R DURING THE SKID. IMMEDIATELY AS THE ACFT CAME TO A STOP, A HVT PASSED IN FRONT OF OUR ACFT AND ROTATED FOR FLT. THE HVT ACFT'S WINGTIP PASSED IN FRONT OUR ACFT BY APPROX 30-50 FT. THIS HAPPENED IN SUCH A SMALL AMOUNT OF TIME, THAT NOTIFICATION OF ATC THAT WE WERE SKIDDING WAS IMPOSSIBLE. ONCE THE HVT ROTATED AND BEGAN FLYING ATC ASKED IF WE WERE HOLDING SHORT OF THE RWY. WE IMMEDIATELY ADVISED THEM THAT WE HAD SKID THROUGH THE HOLD SHORT LINE. ATC THEN CLRED US TO CROSS THE RWY. THEY ALSO ADVISED US OF A PHONE NUMBER TO CONTACT THE TWR UPON SHUTDOWN. ONCE OUR ACFT WAS SHUT DOWN AND SECURED, I CALLED AND SPOKE WITH THE TWR SUPVR AND ADVISED HIM OF WHAT HAD HAPPENED. I THEN CONTACTED MY DIRECTOR OF OPS AND DIRECTOR OF INSPECTIONS AND INFORMED THEM OF THE SITUATION AND ASKED IF THERE WAS ANYTHING WE COULD CHK ON OUR ACFT. WE PROCEEDED WITH THE CHKS THAT WERE OUTLINED TO US, AND PROCEEDED TO CONTINUE WITH OUR DAY.

# **Synopsis**

SA226 FLT CREW HAS RWY INCURSION ON RWY 32 AT PIT AFTER SKIDDING ON ICY TXWY. ACR JET IS DEPARTING ON RWY 32 AT THE TIME AND NARROWLY MISSES THE SA226.

# Time / Day

Date: 200711

Local Time Of Day: 1801 To 2400

#### **Place**

Locale Reference.Airport: ZZZ.Airport

State Reference: US

Altitude.MSL.Bound Lower: 3000 Altitude.MSL.Bound Upper: 6000

#### **Environment**

Flight Conditions: IMC

Light: Night

### Aircraft: 1

Controlling Facilities.TRACON: ZZZ.TRACON

Operator.General Aviation: Corporate Make Model Name: Beechjet 400 Operating Under FAR Part: Part 91 Navigation In Use.Other: FMS or FMC Flight Phase.Climbout: Vacating Altitude

Route In Use.Departure.SID: ZZZ

#### Aircraft: 2

Route In Use.Departure.SID: ZZZ

### Component: 1

Aircraft Component: Switch

#### Person: 1

Affiliation.Company : Corporate Function.Flight Crew : Captain

Function.Oversight: PIC Qualification.Pilot: ATP Qualification.Pilot: CFI

Experience.Flight Time.Total: 7000

ASRS Report: 760888

#### **Events**

Anomaly. Aircraft Equipment Problem: Critical

Independent Detector. Aircraft Equipment. Other Aircraft Equipment: EICAS

Independent Detector.Other.Flight CrewA: 1

Resolutory Action.Flight Crew: Diverted To Another Airport Resolutory Action.Flight Crew: Landed In Emergency Condition

#### **Assessments**

Problem Areas: Aircraft

#### **Narrative**

WHILE CLIMBING OUT ON THE DEP AND THE SUBSEQUENT VECTORS. I ATTEMPTED TO ENGAGE MY AUTOPILOT AT 3000 FT. I HAD OBSERVED AN 'AUTOPILOT MISTRIM' ANNUNCIATOR APPEAR AND THE AUTOPILOT DISENGAGED. I NOTED THE TRIM POSITIONS AND THEY WERE ALL NORMAL. I ATTEMPTED TO RE-ENGAGE THE AUTOPILOT AND THE ANNUNCIATOR REAPPEARED FOLLOWED BY A HORIZONTAL TAIL DE-ICE FAIL LIGHT. WE COMPLIED WITH THE APPROPRIATE CHECKLISTS AND REQUESTED A RETURN TO ZZZ. AFTER CALCULATING OUR LNDG PERFORMANCE I ELECTED TO DIVERT TO ZZZ1 BECAUSE OF THE LONGER RWYS, WET CONDITIONS AND OUR HIGH LNDG SPEED SINCE OUR SITUATION NECESSITATED A FLAPS 10 LNDG. WHILE LINING UP FOR THE ILS AT ZZZ1 I ENCOUNTERED A TAIL STALL WHICH I WAS ABLE TO RECOVER FROM BUT NEEDED A VERY HIGH APCH SPEED TO MAINTAIN ACFT CTL. AT THAT POINT I HAD MY SIC INFORM ATC TO HAVE CFR STANDING BY AS A PRECAUTION. ONE NOTE OF INTEREST: WE WERE FOLLOWING AN ACR ACFT FOR THE ILS AND WITH OUR HIGH APCH SPEED WE WERE CLOSING IN ON SEPARATION MINIMA. ATC INFORMED US AND WE INFORMED THEM THAT DUE TO OUR SITUATION WE COULD NOT SLOW DOWN OR EXECUTE A GAR MANEUVER. ATC KEPT THE ACR ACFT ON APCH WITH DISREGARD FOR OUR SITUATION WHICH I BELIEVE WAS ALSO A DISTRACTION. THE LNDG WAS EXECUTED WITHOUT INCIDENT. ALL DE-ICE AND ANTI-ICE EQUIPMENT WAS CHECKED AND FUNCTIONING NORMALLY PRIOR TO DEP FROM ZZZ. THIS IS A COMMON PROBLEM WITH THE BE400 AND I BELIEVE THIS WAS A SIMPLE SYSTEM FAILURE THAT CAN HAVE SERIOUS CONSEQUENCES. I ALSO BELIEVE THAT ACTING ON THE SITUATION WITH NO DELAY AND UTILIZING THE TRAINING PROVIDED BY OUR EMPLOYER WAS KEY TO A SAFE OUTCOME. CALLBACK CONVERSATION WITH RPTR REVEALED THE FOLLOWING INFO: RPTR STATED THAT APPARENTLY THE AIR/GROUND STRUT SWITCH FAILED, WHICH CUTS THE POWER TO THE HORIZONTAL TAIL ELECTRIC ANTI-ICE MATS. THEY HAD NO OTHER SYMPTOMS OF THE STRUT SWITCH FAILURE, SO THEY BELIEVE THE SWITCH FAILED AFTER TAKEOFF. THE RPTR FEELS THE TAIL DE-ICE SYSTEM IS OVERLY COMPLICATED AND PRONE TO FAILURE.

### **Synopsis**

A BE400A EXPERIENCED FAILURE OF HORIZONTAL TAIL DE-ICE AFTER TAKEOFF. FLT CREW ELECTED TO DIVERT, ENCOUNTERED A TAIL STALL, AND ELECTED TO HAVE CFR STANDING BY. THE APCH AND LNDG WERE EXECUTED AT A HIGHER AIRSPEED THAN NORMAL AND WERE CONCLUDED SUCCESSFULLY.

# Time / Day

Date: 200709

Local Time Of Day: 1801 To 2400

#### **Place**

Locale Reference.Airport: ZZZ.Airport

State Reference : US

Altitude.MSL.Single Value: 26000

#### **Environment**

Flight Conditions: IMC Weather Elements: Ice Weather Elements: Rain

Light: Night

### Aircraft: 1

Controlling Facilities.ARTCC: ZZZ.ARTCC
Operator.Common Carrier: Charter
Make Model Name: Eclipse 500
Operating Under FAR Part: Part 135

Flight Phase.Cruise: Level

Route In Use.Enroute: On Vectors

#### Person: 1

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

Qualification.Pilot: Commercial Qualification.Pilot: Multi Engine

Experience.Flight Time.Last 90 Days: 83 Experience.Flight Time.Total: 9256 Experience.Flight Time.Type: 102

ASRS Report: 745379

#### **Events**

Anomaly.Inflight Encounter: Weather

Anomaly. Non Adherence: FAR

Independent Detector.Other.Flight CrewA: 1

Resolutory Action.Controller: Issued New Clearance

#### Assessments

Problem Areas: Aircraft

Problem Areas: Flight Crew Human Performance

Problem Areas: Weather

#### Narrative

THE FLT WAS PLANNED TO CRUISE AT FL260. THE PREFLT PLANNING SHOWED SOME LIGHT PRECIP MIDWAY ALONG THE RTE OF FLT WITH THE EXPECTATION OF BEING ABLE TO CLB ABOVE THE WX IN VMC AND THEN A VMC DSCNT TO THE DEST. FREEZING LEVEL WAS AROUND 15000 FT MSL. THE CLB WAS INDEED IN VMC. 5 MINS AFTER LEVELOFF AT FL260 WE FOUND OURSELVES IN PRECIP WITH LIGHT RIME ICE BUILDING ON THE WING. WE REQUESTED DSCNT AND DURING THE DSCNT WE FOUND THAT THE STANDBY AIRSPD INDICATOR SHOWED ERRATIC AIRSPD. THE ICE ON THE WINGS CLRED AT ABOUT FL190, STILL IN IMC. THE STANDBY AIRSPD INDICATOR RETURNED TO NORMAL INDICATIONS AT 12000 FT. APCH AND LNDG AT THE DEST WAS UNEVENTFUL. THE ECLIPSE 500 IS NOT CERTIFIED FOR FLT INTO KNOWN ICE. THE ECLIPSE 500 ALSO DOES NOT HAVE WX RADAR INSTALLED. THE FACT THAT THIS FLT WAS OPERATED AT NIGHT CONTRIBUTED TO THE LACK OF SITUATIONAL AWARENESS ABOUT THE ACTUAL METEOROLOGICAL CONDITIONS OF THE FLT. THE LACK OF FUNCTIONING WX RADAR AND ICE PROTECTION MAKES IT VERY DIFFICULT TO OPERATE THE ECLIPSE IN IMC, IN THE ENVIRONMENT IN WHICH TURBOJETS ARE MOSTLY USED, NAMELY HIGHER ALT FLT. UNTIL THE ACFT IS FULLY CERTIFIED FOR FLT INTO KNOWN ICE AND UNTIL A FUNCTIONING WX RADAR IS INSTALLED, EXTREME VIGILANCE IS NEEDED BEFORE OPERATING THIS ACFT AT ANY ALTS WHERE ICING MIGHT OCCUR.

# **Synopsis**

EA50 FLT CREW RPTS ENTERING ICING CONDITIONS AT FL260 WITH AN ACFT THAT IS NOT CURRENTLY CERTIFIED FOR ICING. FLT CREW QUICKLY DSNDS TO WARMER ALT.

# Time / Day

Date: 200708

Local Time Of Day: 1801 To 2400

#### **Place**

Locale Reference.Intersection: FLANN

State Reference: NY

Altitude.MSL.Bound Lower: 41000 Altitude.MSL.Bound Upper: 43000

#### **Environment**

Flight Conditions : IMC Weather Elements : Ice

Weather Elements: Thunderstorm

Light : Daylight

#### Aircraft: 1

Controlling Facilities.ARTCC: ZNY.ARTCC Operator.General Aviation: Corporate Make Model Name: Citation Excel Operating Under FAR Part: Part 91

Flight Phase.Cruise: Level Route In Use.Enroute: Atlantic

Route In Use. Enroute. Airway: G432. Airway

### Person: 1

Affiliation.Company : Corporate Function.Flight Crew : Captain

Qualification.Pilot: ATP

Experience.Flight Time.Last 90 Days: 100

Experience.Flight Time.Total: 8750 Experience.Flight Time.Type: 300

ASRS Report: 749437

### Person: 2

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

Qualification.Pilot: ATP

Experience.Flight Time.Last 90 Days: 48 Experience.Flight Time.Total: 351

Experience.Flight Time.Total: 351
Experience.Flight Time.Type: 48

ASRS Report: 749669

### **Events**

Anomaly. Altitude Deviation: Excursion From Assigned Altitude

Anomaly.Inflight Encounter: Weather

Independent Detector.Other.Flight CrewA: 1
Independent Detector.Other.Flight CrewB: 2

Resolutory Action. Aircraft: Automation Overrode Flight Crew

#### **Assessments**

Problem Areas: Flight Crew Human Performance

Problem Areas: Weather

#### **Narrative**

ON IFR FLT PLAN CRUISING AT FL430 BTWN TARGA INTXN AND FLANN INTXN ON HF FREQ 6577. INITIAL OAT (RAT) -45 DEGS C, HAD REQUESTED FROM ATC TO CLB TO FL450. REQUEST DENIED, HAD WX APPROX 60 MI AHEAD, SO ASKED FOR 30 NM (R) OF CRS. WAS IN VMC, WHILE DEVIATING (R) OF LARGEST CELLS, ENTERED IMC AT MACH .73 ONLY OCCASIONAL LIGHT TURB IN SOME FROZEN PRECIP. STARTED TO NOTICE RAPID AIRSPD DECREASE, ADVANCED THRUST TO TKOF THRUST, STILL AIRSPD DECREASING RAPIDLY NOW TO 150 KIAS, REQUESTED LOWER. ATC WAS VERY BUSY, NO REPLY FROM ATC, HAD NO CHOICE BUT TO START DSCNT AS A STALL WAS 'IMMINENT' CO-CAPT WAS ABLE TO NOTIFY ATC WE WERE IN A DSCNT TO FL410, WAS ABLE TO MAINTAIN 150 BUT NOT INCREASING IN DSCNT, HAD ALL (WING, ENG) ANTI-ICE ON PRIOR TO ENTERING IMC, DID NOT HAVE TAIL DE-ICE ON BECAUSE OF BOOT TEMP LIMIT, INSIDE CELL TEMP RAPIDLY CHANGED TO -20 DEGS. AT THAT POINT AT FL410 MANUALLY ACTIVATED TAIL BOOTS, MAINTAINED TKOF THRUST TO LIMIT. SHORTLY AFTER EXITED CELL, AND AIRSPD BEGAN SLOW INCREASE BACK TO MACH .73 AT CLB PWR. 50 OR SO MI MORE W WAS ABLE TO MAINTAIN MACH .73 WITH NORMAL PWR SETTINGS. CALLBACK CONVERSATION WITH RPTR REVEALED THE FOLLOWING INFO: RPTR STATED THAT AN EMER WAS NOT DECLARED, AND ATC APPROVED FL410 AS CRUISE ALT FOR REMAINDER OF FLT. NO AIRFRAME ICING WAS VISIBLE WHILE THE AIRSPD WAS RAPIDLY DECREASING.

### Synopsis

C 560XL IS UNABLE TO MAINTAIN ALT WHILE DEVIATING AROUND TSTMS. FLT IS FORCED TO DESCEND PRIOR TO RECEIVING CLRNC IN ORDER TO MAINTAIN AIRSPEED.

# Time / Day

Date: 200707

Local Time Of Day: 0601 To 1200

### **Place**

Locale Reference.ATC Facility: ZZZZ.ARTCC

State Reference : FO

Altitude.MSL.Single Value: 19000

#### **Environment**

Flight Conditions: VMC

Light : Daylight

### Aircraft: 1

Controlling Facilities.ARTCC: ZZZZ.ARTCC
Operator.General Aviation: Corporate

Make Model Name: Chancellor 414A & C414

Operating Under FAR Part: Part 91

Flight Phase.Cruise: Level

### Component: 1

Aircraft Component: Communication Systems

### Component: 2

Aircraft Component : Turbine Engine

### Person: 1

Affiliation.Company: Corporate Function.Flight Crew: Single Pilot Qualification.Pilot: Instrument Qualification.Pilot: Multi Engine Qualification.Pilot: Private

Experience.Flight Time.Last 90 Days: 50 Experience.Flight Time.Total: 468

Experience.Flight Time.Type: 48

ASRS Report: 748856

### **Events**

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

Resolutory Action.Flight Crew: Declared Emergency Resolutory Action.Flight Crew: Landed As Precaution

#### Assessments

Problem Areas: Aircraft

Problem Areas: Environmental Factor

#### Narrative

AT THE TIME OF THE EVENT I WAS THE PIC IN A SINGLE PLT OP FROM ZZZZ TO ZZZZ1. THE PURPOSE OF THE FLT WAS FERRYING THE ACFT FROM ZZZZ TO ZZZZ1. AT THE RELEVANT TIME I WAS CRUISING AT FL190 WHEN I NOTICED THAT I HEARD NO COM FOR SEVERAL MINS AND I SUSPECTED RADIO COM FAILURE. I ATTEMPTED TO ESTABLISH RADIO COM BY CALLING ON THE LAST ASSIGNED FREQ, THE PREVIOUS ASSIGNED FREQ, 121.5 MHZ AND 123.45 MHZ WITH NO SUCCESS. WHILE I WAS ATTEMPTING TO FIND THE CAUSE OF THE RADIO PROB I NOTICED THE R ENG OPERATING ROUGH AND RAPIDLY LOSING PWR. AFTER GOING THROUGH THE EMER PROCS CHKING FUEL SITUATION AND ENSURING THAT THE FUEL PUMPS ARE ON, TESTING THE MAGNETOS FOR CORRECT OP AND SWITCHING TO ALTERNATE AIR SOURCE WITH NO IMPROVEMENT I CONCLUDED I HAD FUEL ICING CONDITION. I WAS IN VMC AND FEARING A TOTAL LOSS OF THE R ENG WITH A VERY HIGH POSSIBILITY THAT THE L ENG WILL SOON DEVELOP A SIMILAR PROB I DECLARED AN EMER ON 121.5 AND COMMENCED DSND TO FL170. DURING THE DSCNT I FURTHER ATTEMPTED TO RESTORE RADIO COM AND EVENTUALLY AFTER RESETTING BOTH COM AND AUDIO PANEL THE RADIOS CAME BACK ALIVE AND I MANAGED TO MAINTAIN 2 WAY COM WITH NO FURTHER PROB.

### **Synopsis**

C414 SNGL PLT ON TRANS--ATLANTIC FERRY FLT LOSES RADIO CONTACT AND DEVELOPS POWER LOSS ON RIGHT ENGINE. DECLARES EMERGENCY AND LANDS AT NEAREST SUITABLE ARPT.

## Time / Day

Date : 200706 Day : Sun

Local Time Of Day: 1201 To 1800

### **Place**

Locale Reference.Navaid: GQO.VORTAC

State Reference: TN

Altitude.MSL.Bound Lower: 14000 Altitude.MSL.Bound Upper: 16000

### **Environment**

Flight Conditions: IMC
Weather Elements: Ice
Weather Elements: Rain
Weather Elements: Turbulence

Light : Daylight

### Aircraft: 1

Controlling Facilities.ARTCC: ZTL.ARTCC
Operator.General Aviation: Personal
Make Model Name: M-20 K (231)
Operating Under FAR Part: Part 91
Navigation In Use.Other.VORTAC

Flight Phase.Cruise: Level

Route In Use.Enroute: On Vectors

### Person: 1

Affiliation.Other: Personal

Function.Flight Crew: Single Pilot Qualification.Pilot: Instrument Qualification.Pilot: Private

Experience.Flight Time.Last 90 Days: 43

Experience.Flight Time.Total: 650 Experience.Flight Time.Type: 419

ASRS Report: 741991

### **Events**

Anomaly. Altitude Deviation: Excursion From Assigned Altitude

Anomaly.Inflight Encounter: Turbulence Anomaly.Inflight Encounter: Weather

Anomaly. Other Anomaly

Anomaly. Other Spatial Deviation

Independent Detector.Other.Flight CrewA: 1

Resolutory Action.Flight Crew: Exited Adverse Environment Resolutory Action.Flight Crew: Regained Aircraft Control

### **Assessments**

Problem Areas: ATC Human Performance

Problem Areas: Flight Crew Human Performance

Problem Areas : Weather

### Narrative

BEING VECTORED AROUND A CELL BUILDUP. REQUESTED DEV L 20-30 DEGS, THEN REQUESTED IMMEDIATE CLB TO 16000 FT. ENTERED IMC AND BECAME SUBJECT TO RAPID CONVECTIVE ACTIVITY OF CELL. THIS CAUSED THE ACFT TO EXPERIENCE MODERATE TO SEVERE TURB AND ULTIMATELY A DIVING L-HAND TURN. EMERGED FROM CLOUD WITH LIGHT, CLR ICE. LOST 800 FT, TURNED L FROM APPROX 330 DEG HDG TO 180 DEGS.

## **Synopsis**

AN M20K PILOT REPORTS A TRACK DEV FOR TSTM ONLY TO ENTER IMC AND ENCOUNTER MODERATE TO SEVERE TURB WITH AN 800 FT ALT LOSS.

## Time / Day

Date: 200705 Day: Fri

Local Time Of Day: 1201 To 1800

### **Place**

Locale Reference.ATC Facility: ZZZZ.ARTCC

State Reference: FO

Altitude.MSL.Single Value: 6000

### **Environment**

Weather Elements: Ice

Light : Daylight

### Aircraft: 1

Controlling Facilities.ARTCC: ZZZZ.ARTCC Operator.General Aviation: Personal Make Model Name: Experimental Operating Under FAR Part: Part 91

Flight Phase.Cruise: Level

### Person: 1

Affiliation.Other: Personal

Function.Flight Crew: Single Pilot Qualification.Pilot: Instrument Qualification.Pilot: Private

Experience.Flight Time.Last 90 Days: 20

Experience.Flight Time.Total: 744 Experience.Flight Time.Type: 286

ASRS Report: 740818

### **Events**

Anomaly. Altitude Deviation: Excursion From Assigned Altitude

Anomaly.Inflight Encounter: Weather Anomaly.Non Adherence: Clearance Anomaly.Non Adherence: FAR

Anomaly. Non Adherence: Published Procedure

Anomaly. Other Anomaly

Independent Detector.Other.Flight CrewA: 1

Resolutory Action.Controller: Issued New Clearance

Resolutory Action.Flight Crew: Exited Adverse Environment

### **Assessments**

Problem Areas : Aircraft

Problem Areas: Flight Crew Human Performance

Problem Areas: Weather

### **Narrative**

IFR FLT ZZZ-ZZZZ. BROKEN CLOUDS 3500 FT UP TO 6000 FT. FILED AT 6000 FT. TURBULENT AIR WITH S-TEC AUTOPLT NOT ADEQUATELY HOLDING ALT DUE TO TURB OR MALFUNCTION. TRIED TO SEE IF AUTOPLT WOULD CORRECT BUT WOULD TURN OFF +/-200 FT. NOT SURE WHY IT COULD NOT HOLD ADEQUATE ALT. FINALLY SWITCHED TO MANUAL FLYING. SHORTLY THEREAFTER NOTICED SIGNIFICANT DECREASE IN MANEUVERABILITY AND SLIGHT LOSS OF SPD. NOTICED SIGNIFICANTLY MIXED ICE ON LEADING EDGE OF WINGS. WAS JUST AT BASES, DROPPED OUT OF CLOUDS. ATC WAS CALLED. I INFORMED THEM OF MY CONDITION, ASKED FOR LOWER. INFORMED 350 FT BELOW ASSIGNED ALT. STAYED OUT OF CLOUDS. ICE EVENTUALLY MELTED, FLEW OFF. LANDED WITHOUT PROB. 1) SHOULD HAVE FLOWN ABOVE THE CLOUDS: VMC. 2) WHEN HAVING TROUBLE WITH AUTOPLT, SHOULD HAVE INFORMED ATC AND ASKED FOR A BLOCK ALT. 3) WITH ICE SHOULD HAVE DECLARED EMER TO ATC, IF NOT ABLE TO GIVE IMMEDIATE LOWER ALT. 4) WAS AT FLYING CAMP IN CANADA FOR 1 WK, OTHERWISE WOULD HAVE FILED EARLIER.

### **Synopsis**

AN IMC LANCAIR ACCUMULATED ICE IN CLOUD BASES AND EXPERIENCES ACFT CTL PROBLEMS. CLEARANCE TO A LOWER ALT REMOVED THE ICE.

## Time / Day

Date: 200705 Day: Wed

Local Time Of Day: 1801 To 2400

### **Place**

Locale Reference. Airport: ZZZZ. Airport

State Reference: FO

Altitude. AGL. Single Value: 5000

### **Environment**

Flight Conditions: Mixed

Light : Night

### Aircraft: 1

Controlling Facilities.ARTCC: ZZZZ.ARTCC Operator.General Aviation: Corporate

Make Model Name: Falcon 20FJF/20C/20D/20E/20F

Operating Under FAR Part: Part 91 Navigation In Use.Other: FMS or FMC Flight Phase.Descent: Approach Route In Use.Arrival: On Vectors

## Component: 1

Aircraft Component: Waste Water Disposal System

#### Person: 1

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

Experience.Flight Time.Last 90 Days: 50 Experience.Flight Time.Total: 7600 Experience.Flight Time.Type: 2000

ASRS Report: 738205

### **Events**

Anomaly. Aircraft Equipment Problem: Critical

Anomaly. Other Anomaly

Independent Detector.Other.Flight CrewA: 1

Resolutory Action.Flight Crew: Declared Emergency

Resolutory Action. Flight Crew: Landed In Emergency Condition

Consequence. Other

### **Assessments**

Problem Areas : Aircraft

Problem Areas: Environmental Factor

### **Narrative**

ON A TRANS OCEANIC FLT OUR AILERON CONTROLS FROZE UP. DURING CRUISE THE AILERON TRIM ANNUNCIATOR LIGHT KEPT COMING ON. TOWARDS THE END OF THE CROSSING AND DURING THE DSCNT AUTOPILOT TRACKING BECAME UNRELIABLE WITHOUT AILERON TRIM ASSISTANCE. IT WAS DURING VECTORS TO APCH THAT A LEFT HAND TURN EXCEEDED 30 DEGS BANK WHEREUPON I DISCONNECTED THE AUTOPILOT AND REALIZED THAT WE HAD FROZEN AILERONS. THE BANK ANGLE AT THE TIME OF DISCONNECT WAS ABOUT 45 DEGS AND REQUIRED WINGS LEVEL RECOVERY WITH RUDDER. BOTH PILOTS WORKING TOGETHER COULD NOT ACHIEVE ANY AILERON AUTHORITY. AN EMER WAS DECLARED AT THIS POINT. ALL REMAINING TURNS WERE ACCOMPLISHED USING RUDDER ONLY INCLUDING ILS INTERCEPT AND LNDG. NO DAMAGE TO ACFT, PAX, OR CREW. CAUSE SEEMS TO BE A QUANTITY OF WATER ACCUMULATING DURING THE FLT AND FREEZING IN THE BELLY, EVENTUALLY BUILDING UP TO THE POINT OF BINDING THE AILERON CONTROL SYSTEM. I BELIEVE THAT THE SHORT DURATION OF THE TWO STOPS WERE NOT LONG OR WARM ENOUGH TO ALLOW THAWING OF THE ACCUMULATED ICE INSIDE THE ACFT, WHICH KEPT BUILDING UP AS WE FLEW. THE ACTUAL SOURCE OF THE WATER IS STILL BEING INVESTIGATED. ALSO APPARENTLY WE HAD A FAILURE OF THE AUTOMATIC DRAIN ON THE BELLY. DURING THE DESCENT WE THOUGHT THE AUTOPILOT SERVO OR AILERON TRIM TO BE THE PROBLEM, POSSIBLY FREEZING OR STICKING, AS WE COULD ASSIST WITH TRIM INPUTS TO HELP WITH TRACKING. I DID DISCONNECT ONCE AT ALTITUDE AND THE AILERON CONTROLS FELT STIFF BUT FREE. THINKING IT WAS STILL AN ICING VALVE OR STICKY ACTUATOR I TURNED ON THE BLEED AIR WING HEAT FOR THE DESCENT HOPING TO HELP THAW WHATEVER THE PROBLEM WAS. IT MADE NO NOTICEABLE IMPROVEMENT. THIS OCCURRENCE WAS AT THE END OF A LONG DAY FOR THE CREW. CALLBACK CONVERSATION WITH RPTR REVEALED THE FOLLOWING INFO: THE RPTR STATED THAT AN ICE BLOCK WAS FOUND ON AN AILERON CTL ARM COMMON TO BOTH THE HYDRAULICALLY BOOSTED AND MANUAL REVERSION CTL OF THE AILERONS. THE ACFT HAD MADE TWO PREVIOUS STOPS DURING THE LONG INTERNATIONAL FLT AND AT EACH STOP ICE IN THE 2 REFRESHMENT COOLING DRAWERS WAS REPLENISHED. BECAUSE THE UNDER FUSELAGE DRAIN MAST USUALLY ALLOWS THAWED LIQUID TO DRAIN FROM THE REFRESHMENT DRAWER AREA, THERE WAS NOTHING UNUSUAL NOTED AT EITHER STOP, HOWEVER, IT IS NOW SUSPECTED THAT THE DRAIN MAST HAD BECOME CLOGGED WITH FROZEN MATERIAL. DURING THE FINAL FLT ENOUGH FLUID HAD ACCUMULATED AROUND THE AILERON CTL ROD BECAUSE OF THE ACFT'S NORMAL 5 DEG NOSE UP FLT ATTITUDE, THAT UPON FREEZING AND BEING UNABLE TO DRAIN IN THE FROZEN DRAIN MAST, THE ICE LOCKED THE AILERONS.

# **Synopsis**

A FALCON 20'S AILERON CTL LEVERS IN THE ACFT'S FUSELAGE BECAME FROZEN WITH MELTED GALLEY ICE APPARENTLY UNABLE TO DRAIN FROM A FROZEN DRAIN MAST.

# Time / Day

Date: 200705 Day: Sun

Local Time Of Day: 0601 To 1200

### **Place**

Locale Reference.Navaid: MAD.VOR

State Reference: CT

Altitude.MSL.Bound Lower: 5000 Altitude.MSL.Bound Upper: 7000

### **Environment**

Flight Conditions: IMC Weather Elements: Ice

Light: Daylight

### Aircraft: 1

Controlling Facilities.ARTCC: ZNY.ARTCC Operator.General Aviation: Personal

Make Model Name: Cessna Stationair/Turbo Stationair 6

Operating Under FAR Part: Part 91 Navigation In Use.Other.VORTAC

Flight Phase.Cruise : Level Route In Use.Enroute : Direct

### Person: 1

Affiliation.Other: Personal

Function.Flight Crew: Single Pilot Qualification.Pilot: Instrument Qualification.Pilot: Private

Experience.Flight Time.Last 90 Days: 10 Experience.Flight Time.Total: 375 Experience.Flight Time.Type: 20

ASRS Report: 737370

### Person: 2

Affiliation.Government : FAA Function.Controller : Radar

### **Events**

Anomaly. Altitude Deviation: Excursion From Assigned Altitude

Anomaly.Inflight Encounter: Weather Independent Detector.Other.ControllerA: 2 Independent Detector.Other.Flight CrewA: 1

Resolutory Action.Controller: Issued New Clearance

Resolutory Action.Flight Crew: Exited Adverse Environment Consequence.FAA: Reviewed Incident With Flight Crew

### **Assessments**

Problem Areas: Flight Crew Human Performance

Problem Areas: Weather

#### **Narrative**

I HAD PLANNED A NICE VFR FLT AROUND THE HPN-BDR-POU AREA WITH A FRIEND WHO'S TRANSITIONING TO FIXED WING. I'D GOTTEN VFR WX FOR ALL THREE AND IT WAS RPTING GOOD VFR CONDITIONS. BASICALLY CLR (FEW AT 7000 FT) A BIT WINDY 15 KTS GUSTING 20 KTS. BUT LOOKED LIKE IT WAS GOING TO BE A NICE FLT. AT 7500 FT OVER BDR HE REMARKED THAT THERE WERE CLOUDS AT 7000 FT OVER THE SOUND. HE'D NEVER BEEN IN IMC AND WAS CURIOUS. NOT HAVING PLANNED TO GO IFR, NOT HAVING CHKED AIRMETS, ICING FORECASTS OR EVEN WX OVER LONG ISLAND, I CALLED NY APCH AND ASKED FOR AN IFR CLRNC TO BROOKHAVEN. WE WERE CLRED TO DSND THROUGH THE LAYER, CANCELED ON THE OTHER SIDE AND MADE A NICE VFR LNDG. ON THE WAY BACK WE FILED AN IFR FLT PLAN TO MMK. ON CLBOUT WE WERE CLRED TO MAD AT 5000 FT. DURING THE CLBOUT MY COPLT REMARKED THAT IT WAS GETTING COLDER OUT. (2 DEGS C ON THE OAT.) I HADN'T EVEN THOUGHT OF ICE, AS IT WAS NICE IN CT. I WAS WEARING A SHORT SLEEVE SHIRT EVEN! WE WERE IN THE CLOUDS SO I STARTED KEEPING AN EYE OUT FOR ICE ON THE STRUTS. AT 5000 FT THE TEMP DROPPED BELOW ZERO AND WE KEPT WATCH. AT SOME POINT WE STARTED TO HIT A LITTLE PRECIP AND THERE WAS A LITTLE BIT OF BUILD-UP. WHILE THINKING ABOUT MY OPTIONS WE FLEW INTO WHAT MUST HAVE BEEN SOME MUCH STRONGER PRECIP. IT FELT LIKE WE FLEW THROUGH A WALL OF ICE. SUDDENLY THE WINDSHIELD WAS COVERED. AND I COULD SEE SOME RIME BUILDING UP ON THE LEADING EDGES, PERHAPS 1/8 INCHES. I CALLED NY AND ASKED FOR HIGHER. (PROBABLY A BIT OF PANIC IN MY VOICE, THIS WAS THE FIRST TIME I'D EVER SEEN ANYTHING LIKE THIS KIND OF ICE IN PERSON.) BUT I GOT STEPPED ON. IN THE NEXT 30 SECONDS OR SO I DECIDED TO START CLBING OUT, EVEN THOUGH I'D NOT GOTTEN A CLRNC FOR HIGHER. I CALLED BACK AGAIN 20 SECONDS LATER AND WAS CLRED TO 7000 FT, BUT WITH AN ADMONISHMENT FOR BUSTING MY ALT. I WAS ALREADY AT 5500 FT OR SO. WE WERE ON TOP AT 7000 FT AND THE ICE MELTED OFF. I HAVE TO SAY I WAS A BIT SHAKEN -- THOUGH MY COPLT DIDN'T SEEM TO NOTICE. ON DSCNT TO MERIDEN I WAS STILL A BIT SHAKEN, AND SEEMED TO FORGET I WAS ON AN IFR PLAN. ONCE WE HAD THE FIELD IN SIGHT I STARTED A VFR DSCNT WITHOUT CANCELING MY CLRNC OR RPTING THE FIELD IN SIGHT. AGAIN BUSTING A CLRNC -- IN FACT I ONLY REMEMBERED WHEN THE CTLR QUERIED MY ALT. I CLRLY HADN'T GOTTEN MY COMPOSURE BACK. THAT WAS ENOUGH OF A REMINDER AND THE REST OF THE FLT STAYED VFR AND UNEVENTFUL. I'D SAY THIS WAS PURELY HUMAN FACTORS AT WORK, NAMELY MY POOR PLANNING AND POOR DECISION MAKING THAT LED ME TO FILE IFR RIGHT THROUGH SOME ICING CONDITIONS. EVEN WHILE I HAD NEXRAD, XM WX AND EVEN IF I'D PUT 2 AND 2 TOGETHER TO LOOK AT 'CLOUDS' AND '-2 C' I SHOULD HAVE REALIZED WHAT I WAS GETTING INTO. I'VE NOT LOOKED IN MY LOGBOOK YET, BUT IT'S EVEN POSSIBLE I WASN'T CURRENT IFR (SINCE IT'S THE END OF THE SPRING, IT MIGHT HAVE LAPSED IN THE LAST MONTH). CONTRIBUTING WAS PROBABLY MY DETERMINATION TO NOT DISAPPOINT A FRIEND. SOMETHING THAT SHOULD DEFINITELY NOT CLOUD MY JUDGEMENT. LESSON LEARNED I HOPE.

# Synopsis

C206 PLT, EXPERIENCING ICING CONDITIONS, INITIATED CLB WITHOUT CLEARANCE. LATER IN FLT, DEPARTED ASSIGNED ALT AGAIN, FORGETTING HE WAS ON IFR FLT PLAN.

# Time / Day

Date: 200704 Day: Sun

Local Time Of Day: 1201 To 1800

### **Place**

Locale Reference.Intersection: NELLO

State Reference: GA

Altitude.MSL.Single Value: 8000

### **Environment**

Flight Conditions : Mixed Weather Elements : Ice

Weather Elements: Windshear

Light: Daylight

### Aircraft: 1

Controlling Facilities.ARTCC: ZTL.ARTCC Operator.General Aviation: Personal Make Model Name: Bonanza 36 Operating Under FAR Part: Part 91

Flight Phase.Cruise: Level

#### Person: 1

Affiliation.Other: Personal

Function.Flight Crew: Single Pilot

Qualification.Pilot : ATP Qualification.Pilot : CFI

Qualification.Pilot : Flight Engineer Qualification.Pilot : Instrument Qualification.Pilot : Multi Engine

Experience.Flight Time.Last 90 Days: 55 Experience.Flight Time.Total: 8200 Experience.Flight Time.Type: 300

ASRS Report: 735523

### Person: 2

Affiliation.Government : FAA Function.Controller : Radar

### **Events**

Anomaly. Altitude Deviation: Excursion From Assigned Altitude

Anomaly. Inflight Encounter: Weather

Anomaly. Other Anomaly

Independent Detector.Other.Flight CrewA: 1

Resolutory Action.Flight Crew: Exited Adverse Environment

Resolutory Action.Flight Crew: Regained Aircraft Control

Resolutory Action.Flight Crew: Took Precautionary Avoidance Action

### **Assessments**

Problem Areas: ATC Human Performance

Problem Areas: Aircraft

Problem Areas: Flight Crew Human Performance

Problem Areas: Weather

### **Narrative**

THE FLT HAD ENCOUNTERED LIGHT RIME ICE IN CLOUDS. THE CEILING WAS BROKEN AND THE ACFT WAS RARELY IN THE CLOUDS. THE ICE WAS MELTING IN THE CLR. UPON ENTERING A CLOUD LAYER THE ACFT RAPIDLY LOST AIRSPD. I IMMEDIATELY WENT TO MAX PWR AND DISCONNECTED THE AUTOPLT. THE ACFT WAS STILL LOSING AIRSPD. I TOLD ZTL THAT I WAS UNABLE TO MAINTAIN ALT AND WAS BEGINNING A DSCNT. THE CTLR TOLD ME TO 'STAND BY.' I RESTATED THAT I WAS UNABLE TO MAINTAIN ALT AND WAS DSNDING. THE CTLR AGAIN TOLD ME TO STAND BY, THAT THEY WERE CHANGING CTLRS. I BEGAN A DSCNT AND THE CTLR EVENTUALLY CLRED ME TO 6000 FT MSL. AFTER INITIATING THE DSCNT THE LIGHT TRACE OF ICE THAT HAD BUILT UP ON THE ACFT BEGAN TO MELT AND THERE WAS NO MORE WINDSHEAR ENCOUNTERED IN THE CLOUDS. THERE WERE NO TFC CONFLICTS IN THIS SIT. IN RETROSPECT, I SHOULD HAVE RADIOED 'PAN, PAN, PAN' TO THE CTLR TO GET HIS ATTN AND LET HIM KNOW THAT I NEEDED IMMEDIATE ASSISTANCE.

## **Synopsis**

BE36 PLT ON AN IFR FLT PLAN ENCOUNTERS ICING AND IS UNABLE TO MAINTAIN ALT. ATC NOT IMMEDIATELY RESPONSIVE.

# Time / Day

Date: 200704 Day: Wed

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 Weather Elements: Ice

Light: Daylight

### Aircraft: 1

Controlling Facilities.Tower: ZZZ.Tower Operator.General Aviation: Instructional

Make Model Name: Grumman Corp Undifferentiated or Other Model

Operating Under FAR Part: Part 91

Flight Phase.Landing: Roll

## Component: 1

Aircraft Component: Normal Brake System

### Person: 1

Affiliation.Other: Instructional Function.Flight Crew: Captain Function.Oversight: PIC Qualification.Pilot: CFI

Qualification.Pilot : Commercial Qualification.Pilot : Instrument Qualification.Pilot : Multi Engine

Experience.Flight Time.Last 90 Days: 35 Experience.Flight Time.Total: 4200 Experience.Flight Time.Type: 10

ASRS Report: 735096

### Person: 2

Affiliation.Government: FAA Function.Other Personnel.Other

### **Events**

Anomaly. Aircraft Equipment Problem: Critical Independent Detector. Other. Flight Crew A: 1 Independent Detector. Other. Flight Crew B: 2

Resolutory Action.Flight Crew: Diverted To Another Airport

Resolutory Action. None Taken: Unable Consequence. Other: Aircraft Damaged

### Assessments

Problem Areas : Aircraft Problem Areas : Weather

### **Narrative**

I WAS ON AN FAA RATING RIDE IN A G111, GRUMMAN ALBATROSS. MYSELF AND ANOTHER PLT WERE TESTING THAT MORNING, AND WE SWITCHED SEATS ON THE WATER AT THE LAKE FOR MY PORTION OF THE SEAPLANE RATING. AFTER THE TKOF RUN, I NOTICED DECREASED PERFORMANCE AND THE PRESENCE OF ICE ON THE WING. ALL OF THE PLTS ABOARD DETERMINED THAT WE WOULD TERMINATE THE RATING RIDE AND PROCEED TO ZZZ, JUST IN CASE THE WATER HAD FROZEN IN THE GEAR, OR CAUSED ANY OTHER PROBS. ON LNDG, THE BRAKES 'FROZE' UP AND WE EXPERIENCED 2 FLAT TIRES. NO DAMAGE OCCURRED, NOR WAS ANYONE HURT. IT TOOK APPROX 1 1/2 HRS TO LOCATE THE PROPER EQUIP TO TOW THE ACFT OFF THE RWY FOR A TIRE CHANGE. THE EXAMINER DISAPPEARED AFTER LNDG.

## **Synopsis**

IN NEAR FREEZING CONDITIONS, SMT AMPHIBIAN EXPERIENCES TWO BLOWN TIRES ON LNDG DUE TO FROZEN BRAKES. EVENT FOLLOWED WATER OPERATIONS FOR A SEAPLANE RATING CURTAILED DUE TO EVIDENT WING ICING.

# Time / Day

Date: 200703 Day: Sat

### **Place**

Locale Reference.ATC Facility: ZDV.ARTCC

State Reference : CO

Altitude.MSL.Single Value: 14000

### **Environment**

Flight Conditions : Mixed Weather Elements : Ice

Light: Daylight

### Aircraft: 1

Controlling Facilities.ARTCC: ZDV.ARTCC Operator.General Aviation: Personal Make Model Name: Baron 55/Cochise Operating Under FAR Part: Part 91

Flight Phase.Cruise: Level

### Person: 1

Affiliation.Other: Personal

Function.Flight Crew: Single Pilot Qualification.Pilot: Instrument Qualification.Pilot: Multi Engine Qualification.Pilot: Private

Experience.Flight Time.Last 90 Days: 25

Experience.Flight Time.Total: 1025 Experience.Flight Time.Type: 81

ASRS Report: 733192

### **Events**

Anomaly.Inflight Encounter: Weather Anomaly.Inflight Encounter.Other Anomaly.Non Adherence: FAR

Independent Detector.Other.Flight CrewA: 1

Resolutory Action.Controller: Issued New Clearance

Resolutory Action. Flight Crew: Took Precautionary Avoidance Action

### **Assessments**

Problem Areas: Aircraft

Problem Areas: Flight Crew Human Performance

Problem Areas: Weather

### **Narrative**

THIS ACFT IS NOT APPROVED FOR FLT INTO KNOWN ICING. ONCE AIRBORNE, I IMMEDIATELY ENCOUNTERED BUILDING CLOUDS THAT WERE ROUGH, SO I ASKED FOR AND RECEIVED CLRNC TO 12000 FT. I REMAINED AT THIS ALT UNTIL ROUGHLY LAMAR, CO, AT WHICH TIME THE UNDERCAST HAD BUILT TO JUST BELOW MY ALT. ENJOYING A NICE TAILWIND AND NOT INTERESTED IN FINDING ROUGH AIR AGAIN, I ASKED FOR AND RECEIVED CLRNC TO 14000 FT. ALSO AT THIS TIME, READING THE XM WX DISPLAY AND SEEING CLOUD TOPS AT ABOUT MY ALT AT 10 O'CLOCK POS. I CHANGED MY ROUTING TO GO DIRECT TO SEARLE VOR (SAE) RATHER THAN SNY, AS THE EASTWARD TURN WOULD KEEP ME FURTHER AWAY FROM THE CLOUDS. I ALSO SAW A GAP BTWN GREEN DEPICTED WX THAT LAY ON THE RTE FROM SAE TO 6S8, AND WANTED TO GO THROUGH THAT RATHER THAN THROUGH THE GREEN DEPICTED WX NW OF SNY. AT SAE, I TURNED NW ON COURSE. I COULD SEE OVER THE UNDERCAST THAT WAS BEFORE ME, SO I ELECTED TO MAINTAIN MY ALT RATHER THAN TO DSND INTO THE CLOUDS. THE OUTSIDE AIR TEMP WAS -8 DEGS C. I HAD NO RPTS OF TEMPS AT LOWER ALTS, BUT I HADN'T ASKED EITHER. I DID GET AN UPDATE ON THE AIRMETS FROM DENVER FLT WATCH BEFORE MY TURN AND FOUND THEM UNCHANGED FROM THOSE I HAD BEEN BRIEFED. I NEITHER ASKED FOR NOT RECEIVED PIREPS AT MY LOCATION. ABOUT 15 MINS INTO THIS COURSE, THE UNDERCAST ROSE TO MEET ME. A FEW MINS MORE AND I WAS ENVELOPED BY CLOUD. I HAD EITHER MISJUDGED THE LEVEL OF THE TOPS OR THEY ROSE TO MEET ME. I WATCHED THEM AS I APCHED AND DIDN'T THINK THEY WERE BUILDING (PERHAPS I MISJUDGED THAT) AND I COULD SAFELY GO OVER THE TOP SO AS TO REMAIN TOTALLY CLR OF CLOUD. ALMOST IMMEDIATELY ICE CRYSTALS BEGAN TO FORM ON MY WINDSHIELD. DUE TO THE PRINCIPAL COLOR OF MY FUSELAGE AND WINGS, IT TOOK A MIN OR TWO FOR ME TO SEE THE BEGINNINGS. OF ICE ACCUMULATION ON MY WINGS. AS SOON AS I DID, I CONTACTED ZDV AND ASKED TO 'MAKE A 180 DEG TURN TO GET CLR OF THE CLOUDS. AS I WAS BEGINNING TO PICK UP LIGHT RIME ICE.' THE CTLR CLRED ME FOR A TURN TO 180 DEGS. I CALLED BACK AND TOLD HIM 'NO, I WANT TO REVERSE MY COURSE TO GET CLR OF THE CLOUDS.' HE THEN ASKED ME MY INTENTIONS. I RESPONDED 'FIRST, I WANT TO TURN AROUND AND THEN I'LL WORK THAT OUT AND GET BACK TO YOU.' HE CLRED ME FOR THE COURSE REVERSAL, WHICH I EXECUTED. HE ASKED THE REASON FOR THE DEV AND I TOLD HIM I WAS BEGINNING TO COLLECT LIGHT RIME ICE. ABOUT THAT TIME A BONANZA CAME ON THE FREQ. AND VOLUNTEERED THAT HE WAS AT 8000 FT AND WAS IN ABOVE FREEZING AIR AND WAS ICE FREE. I ASKED THE CTLR FOR HIS LOCATION AND WAS TOLD HE WAS ABOUT 25 MI W OF THE CHADRON VOR (CDR), ABOUT 70 NM NW OF MY POS. AT THAT TIME, I CALLED AND TOLD THE CTLR MY INTENTIONS WERE TO RETURN TO SAE, DSND, AND ONCE BELOW THE FREEZING LEVEL, TURN BACK ON COURSE TO 6S8. I ASKED FOR AND WAS CLRED TO 8000 FT. I SET UP A 700 FPM DSCNT AND STARTED LOSING ICE AT AROUND 10000 FT. AT NO TIME DID I EVER HAVE MORE THAN A 1/2 INCH BEAD OF ICE ON MY LEADING EDGES. AS THE OUTSIDE AIR TEMP WAS THEN 0 DEGS C AND RISING, I ASKED FOR AND RECEIVED CLRNC FOR ANOTHER COURSE REVERSAL TO RETURN TO 'DIRECT 6S8' AND CONTINUED THE DSCNT. WHEN I CROSSED THROUGH 9000 FT THE CTLR TOLD ME I'D BE OUT OF RADAR COVERAGE AT 8000 FT IN A FEW MI BUT I COULD CONTINUE. HE ASKED ME TO TELL HIM WHEN I COULD ACCEPT HIGHER. I TOLD HIM I WAS IN ABOVE FREEZING AIR AT 9000 FT AND COULD REMAIN THERE IF HE WAS ABLE. HE CLRED ME FOR THAT AND I STAYED AT 9000 FT. AFTER 30-40 MINS, I BEGAN TO BREAK THROUGH THE NORTHERN EDGE OF THE CLOUD COVER AND WAS ABLE TO RETURN TO 10000 FT. AFTER ANOTHER 15 MINS OR SO, I WAS ABLE TO RETURN TO 12000 FT AS I WAS COMPLETELY IN THE CLR. THE BALANCE

OF THE TRIP WAS UNEVENTFUL. CONTRIBUTING FACTORS: 1) MY DESIRE TO REMAIN AT AN ALT I KNEW TO BE TURB FREE (14000 FT). 2) MY POOR ASSESSMENT OF THE ALT OF THE CLOUD TOPS BEFORE ME AS I TURNED NW AND/OR MY MISREADING OF THE STABILITY OF THOSE CLOUD TOPS. CORRECTIVE ACTION: 1) FINDING MYSELF IN THE SITUATION I DID, I RESPONDED WITHOUT HESITATION AND, I THINK CORRECTLY. HUMAN PERFORMANCE CONSIDERATIONS: HAD I KNOWN BEFORE WHAT I LEARNED ABOUT THE CONDITIONS, I SHOULD HAVE DSNDED TO AN ABOVE FREEZING ALT BEFORE MAKING MY TURN TO THE NW AND ENTERING THE CLOUDS. DOING SO WOULD HAVE AVOIDED THIS ENCOUNTER ALTOGETHER. I BELIEVE I REMAINED AT 14000 FT FOR 2 REASONS: 1) I KNEW, DUE TO THE AIRMET, TURB WAS POSSIBLE AND I WANTED TO REMAIN WHERE I KNEW IT TO BE SMOOTH. 2) I KNEW, DUE TO THE AIRMET, ICING WAS POSSIBLE AND I WANTED TO REMAIN CLR OF CLOUD ALTOGETHER IF I COULD. I ELECTED THE COURSE REVERSAL RATHER THAN CONTINUING WHILE DSNDING BECAUSE I KNEW THERE WAS CLR AIR BEHIND ME AND I THOUGHT I'D HAVE TO DSND SEVERAL THOUSAND FT THROUGH ICING CONDITIONS IF I FLEW STRAIGHT AHEAD. THERE WERE NO ABNORMAL OR OUTSIDE FACTORS, SUCH AS FATIGUE, DARKNESS, OR ANYTHING ELSE THAT AFFECTED MY PERFORMANCE. GIVEN THE SAME SET OF CIRCUMSTANCES, I WOULD MAKE THIS FLT AGAIN, BUT I WOULD NOT ALLOW MYSELF TO GET TRAPPED ABOVE THE FREEZING LEVEL IN CLOUDS. I LEARNED A LOT FROM THIS TRIP WHICH, FORTUNATELY, ENDED WITHOUT INCIDENT.

### **Synopsis**

THE PILOT OF A BE55, NOT EQUIPPED FOR FLIGHT INTO KNOWN ICING, ENCOUNTERS ICING CONDITIONS IN ZDV AIRSPACE AT 14000 FEET ON A CROSS COUNTRY FLIGHT.

# Time / Day

Date: 200703 Day: Sat

Local Time Of Day: 1201 To 1800

### **Place**

Locale Reference.Airport: ZZZ.Airport

State Reference : US Altitude.AGL.Single Value : 0

### **Environment**

Weather Elements : Ice Weather Elements : Snow

### Aircraft: 1

Controlling Facilities.Tower: ZZZ.Tower Operator.General Aviation: Personal Make Model Name: Citationjet, C525/C526

Operation Under FAD Deat Deat Of

Operating Under FAR Part: Part 91

Flight Phase.Landing: Roll

### Aircraft: 2

Controlling Facilities. Tower: ZZZ. Tower

Make Model Name: Any Unknown or Unlisted Aircraft Manufacturer

Flight Phase.Ground: Takeoff Roll

#### Person: 1

Affiliation.Other: Personal Function.Flight Crew: Captain Function.Oversight: PIC

Qualification.Pilot : Commercial Qualification.Pilot : Instrument Qualification.Pilot : Multi Engine

Experience.Flight Time.Last 90 Days: 75 Experience.Flight Time.Total: 3370 Experience.Flight Time.Type: 590

ASRS Report: 732580

### Person: 2

Affiliation.Government: FAA Function.Controller: Local

### **Events**

Anomaly.Conflict: Ground Critical Anomaly.Incursion: Runway

Anomaly. Non Adherence: Clearance

Independent Detector.Other.ControllerA: 2

Resolutory Action.Controller: Issued New Clearance

Resolutory Action. Other

Consequence.FAA: Reviewed Incident With Flight Crew

### **Assessments**

Problem Areas: ATC Human Performance

Problem Areas: Flight Crew Human Performance

### **Narrative**

THE INCIDENT OCCURRED AS I WAS ROLLING TO A STOP AFTER LNDG ON RWY X AT ZZZ, WHICH IS AN ARPT I HAD NOT VISITED RECENTLY. AS I APCHED THE POINT WHERE RWY X CROSSES RWY Y, I AM ADVISED THAT I RECEIVED THE FOLLOWING INSTRUCTION FROM ATC, 'CONTINUE THROUGH THE INTXN, SAY FBO.' I INTERPRETED THIS INSTRUCTION, AS I GAVE THE FBO NAME TO THE CTLR, TO MEAN, 'TAKE THE NEXT INTXN OFF THE RWY AND PROCEED TO THE FBO.' UNFORTUNATELY, THE NEXT INTXN, INTO WHICH I TURNED, WAS RWY Y ON WHICH AN ACFT HAD JUST BEEN CLRED TO TAKE OFF. THE CONFLICT THUS GENERATED CAUSED THE INCIDENT. I RECOLLECT HEARING THE CTLR TELLING THE OTHER ACFT TO ABORT BUT NOT THE XMISSION TELLING THE OTHER ACFT THAT IT WAS CLRED FOR TKOF. I WAS AWARE THAT BOTH RWYS X AND Y WERE IN USE. AS SOON AS I TURNED LOFF RWY X I REALIZED THAT I WAS ON RWY Y, BUT BY THIS TIME IT WAS TOO LATE TO TURN BACK AND, IN ANY EVENT, I THOUGHT MY INSTRUCTIONS WERE TO PROCEED IN THIS WAY, VACATING RWY X AS SOON AS POSSIBLE. CONTRIBUTING FACTORS TO THIS INCIDENT WERE DIFFICULT WX CONDITIONS AT ZZZ. THE ARPT HAD BEEN CLOSED THE PREVIOUS DAY AS A RESULT OF HVY SNOW AND AS A RESULT IT WAS EXCEPTIONALLY BUSY. WHEN I ARRIVED, THERE WAS A GUSTY WIND WHICH MADE LNDG RELATIVELY AWKWARD, AS A RESULT OF WHICH I USED RATHER MORE OF RWY X FOR THE LNDG ROLL THAN I WOULD NORMALLY HAVE DONE. THERE WAS STILL A LARGE AMOUNT OF SNOW AND ICE ON THE GND, INCLUDING ON MANY OF THE TXWYS, MAKING IT HARDER THAN USUAL TO DISTINGUISH BTWN TXWYS AND RWYS. THERE WAS A SUBSTANTIAL AMOUNT OF ACTIVITY ON THE FIELD AND NON-STOP USE OF THE TWR FREQ. ONCE I HAD TURNED OFF RWY X, THE TWR CTLR EVIDENTLY REALIZED PROMPTLY THAT THERE WAS A POTENTIAL CONFLICT AS A RESULT OF MY ACFT BEING ON RWY Y. I WAS TOLD BY THE CTLR TO VACATE THE RWY ASAP AND TO CONTACT THE TWR BY PHONE AS SOON AS I COULD DO SO TO DISCUSS WHAT HAD HAPPENED AND TO INITIATE ANY RPTING ACTION WHICH MIGHT BE NECESSARY. I SPOKE TO THE SUPVR WHO WAS EXCEPTIONALLY COURTEOUS AND HELPFUL. WHAT COULD HAVE BEEN DONE BETTER TO AVOID THIS SIT OCCURRING? I APPRECIATE THAT THE TWR CTLR WAS VERY BUSY, BUT I DO BELIEVE THAT THE INSTRUCTION I WAS GIVEN WHICH LED TO MY TURNING ONTO RWY 1 WAS VERY AMBIGUOUS. THERE ARE 7 INTXNS ALTOGETHER ON RWY X, THE 5TH BEING RWY Y. IT WAS NOT AT ALL CLR THAT 'CONTINUE THROUGH THE INTXN,' THE INSTRUCTION WHICH I RECEIVED WHEN I WAS AT ABOUT INTXN L, REFERRED SPECIFICALLY TO THE INTXN BTWN RWY X AND RWY Y AND NOT TO INTXNS GENERALLY, WHICH USUALLY INVOLVE TURNING OFF THE ACTIVE RWY. I AM SURE THAT THE INCIDENT WOULD NOT HAVE HAPPENED IF THE INSTRUCTION I HAD RECEIVED HAD BEEN 'CONTINUE TO THE END OF THE RWY' OR 'CROSS RWY Y BEFORE VACATING RWY X.' AGAIN, I UNDERSTAND THE PRESSURE WHICH EVERYONE WAS UNDER AT ZZZ AT THE TIME OF THE INCIDENT, BUT IT ALSO SEEMS TO ME TO HAVE BEEN WRONG TO HAVE CLRED THE ACFT ON RWY Y FOR

TKOF BEFORE I WAS CLR OF THE NORTHERN END OF THIS RWY. A FEW MOMENTS' DELAY WOULD HAVE BEEN ENSURED THAT I WOULD NOT HAVE BEEN ON RWY Y, EITHER AS A RESULT OF MY XING IT HAVING BEEN COMPLETED AS THE CTLR OBVIOUSLY INTENDED SHOULD HAPPEN, OR MY TAXIING OFF RWY Y ONTO TXWY B, WHICH WOULD HAVE TAKEN ONLY A FEW SECONDS LONGER.

# **Synopsis**

A C525 CLEARED THE RUNWAY AFTER LANDING BY TURNING ONTO ANOTHER ACTIVE RUNWAY, CAUSING AN AIRCRAFT THAT WAS CLEARED FOR TAKEOFF TO ABORT.

# Time / Day

Date: 200703 Day: Tue

Local Time Of Day: 1201 To 1800

### Place

Locale Reference. Airport: ZZZ. Airport

State Reference: US

Altitude. AGL. Single Value: 200

### **Environment**

Flight Conditions: VMC Weather Elements: Ice

Light: Daylight

### Aircraft: 1

Operator.General Aviation: Corporate

Make Model Name: Turbo Commander 690C

Operating Under FAR Part: Part 91 Flight Phase. Descent: Approach

## Component: 1

Aircraft Component: Turbine Engine

### Person: 1

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: 50 Experience.Flight Time.Total: 2000 Experience.Flight Time.Type: 15

ASRS Report: 731960

### Person: 2

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

Qualification.Pilot : ATP

Experience.Flight Time.Last 90 Days: 60 Experience.Flight Time.Total: 2500 Experience.Flight Time.Type: 1400

ASRS Report: 731959

### **Events**

Anomaly. Aircraft Equipment Problem: Critical

Anomaly. Inflight Encounter: Weather

Anomaly.Non Adherence : Published Procedure Independent Detector.Other.Flight CrewA : 1

Resolutory Action.Flight Crew: Landed In Emergency Condition

### **Assessments**

Problem Areas: Aircraft

Problem Areas: Flight Crew Human Performance

Problem Areas: Weather

### **Narrative**

PRIOR TO THE EVENT WE HAD USED DEICE, AND ANTI-ICING EQUIP WHILE ENRTE, AND FOR THAT PORTION OF THE DSCNT WHILE IN ICING CONDITIONS. ICING WAS ESTIMATED TO BE LIGHT TO MODERATE CLR, CHANGING TO RIME THROUGH THE DSCNT. ENG INLET HEATS WERE NOT TURNED ON AT ANY TIME DURING THE FLT. AFTER BREAKING OUT OF THE BASES AND ACQUIRING VISUAL CONTACT WITH THE ARPT, WE WERE CLRED FOR THE VISUAL AND SUBSEQUENTLY CANCELED OUR IFR CLRNC. DSCNT, APCH AND BEFORE LNDG CHKS WERE COMPLETED. ACFT WAS CONFIGURED PER SOP AND WE WERE ESTABLISHED ON FINAL APCH. AT APPROX 1/4 - 1/2 MI FINAL, THE R ENG STOPPED PRODUCING PWR, FOLLOWED ALMOST IMMEDIATELY BY THE L ENG. THE CAPT IDENTED BOTH ENGS HAD FAILED AND PULLED THE CONDITION LEVERS INTO THE EMER SHUTOFF/FEATHER POS. I CALLED OUT AIRSPDS AND THE CAPT CONTINUED TO FLY THE ACFT ONTO THE RWY. THE ACFT TOUCHED DOWN APPROX ON THE NUMBERS AND WE ROLLED TO A STOP JUST OFF THE RWY WITH BOTH ENGS STOPPED/FEATHERED. IN SPEAKING WITH ONE OF THE PAX, THEY NOTED ICE BUILDUP ON A VENT ORIFICE PROTRUDING FROM ONE OF THE HEATED INLETS. I AM NOT CERTAIN IF THIS WAS BOTH ENGS OR JUST ONE. CONSIDERING THE SURFACE TEMP WAS 10 DEGS C, AND THE FACT THE ENG INLET HEAT WAS NOT TURNED ON DURING THE FLT, A POSSIBLE CAUSE OF THE FLAMEOUTS WAS MELTING ICE BEING INGESTED INTO EACH ENG. PROPER PROC WILL BE ADHERED TO IN THE FUTURE WITH REGARD TO USE OF ENG INLET HEAT. PROPER PROC IS TO TURN ENG IGNITIONS ON FOLLOWED BY ENG INLET HEAT PRIOR TO ENTERING ICING CONDITIONS. UPON EXITING ICING CONDITIONS, ENG INLETS ARE TURNED OFF FIRST, FOLLOWED BY ENG IGNITIONS. IF ICE REMAINS ON THE ACFT STRUCTURE, IGNITIONS ARE TO BE LEFT ON FOR THE DURATION OF THE FLT UNTIL THE ACFT IS ON THE GND.

## **Synopsis**

TURBO COMMANDER 690C FLT CREW REPORTS DOUBLE ENGINE FAILURE ON SHORT FINAL. BOTH ENGINES ARE FEATHERED AND A SUCCESSFUL POWER OFF LANDING ENSUES.

# Time / Day

Date: 200702 Day: Wed

Local Time Of Day: 1201 To 1800

### **Place**

Locale Reference.ATC Facility: NCT.TRACON

State Reference : CA

Altitude. AGL. Single Value: 4500

### **Environment**

Flight Conditions: Mixed

Light: Daylight

### Aircraft: 1

Controlling Facilities.TRACON: NCT.TRACON

Operator.General Aviation: Personal

Make Model Name: SR22

Operating Under FAR Part: Part 91

Flight Phase.Cruise: Level

Flight Phase.Descent: Approach

### Person: 1

Affiliation.Other: Personal

Function.Flight Crew: Single Pilot Qualification.Pilot: Instrument Qualification.Pilot: Private

Experience. Flight Time. Last 90 Days: 40

Experience.Flight Time.Total: 650 Experience.Flight Time.Type: 650

ASRS Report: 730304

## Person: 2

Affiliation.Government : FAA Function.Controller : Approach

### **Events**

Anomaly. Altitude Deviation: Excursion From Assigned Altitude

Anomaly.Inflight Encounter: Turbulence Anomaly.Inflight Encounter: Weather Anomaly.Non Adherence: Clearance

Anomaly. Non Adherence: Published Procedure

Anomaly. Other Spatial Deviation

Independent Detector.Other.ControllerA: 2

Resolutory Action. None Taken: Detected After The Fact

Consequence.FAA: Assigned Or Threatened Penalties

Consequence.Other: Emotional Trauma

### **Assessments**

Problem Areas : ATC Human Performance Problem Areas : Environmental Factor

Problem Areas: Flight Crew Human Performance

Problem Areas: Weather

### **Narrative**

THE INCIDENT BELOW DESCRIBES TO THE BEST OF KNOWLEDGE AN EXCHANGE BTWN ATC AND THE PLTS DURING A TRAINING IFR FLT. NO NEAR MISSES OCCURRED BUT ATC WAS ANNOYED AT PLT DECISIONS DURING ADVERSE WX CONDITIONS IN PARTIAL IMC. STANDARD WX BRIEFING INCLUDED AN AIRMET FOR TURB, ICING AND OBSCURATION. IFR CLRNC WAS VIA LVK1, V244 ECA DIRECT, MAINTAIN 4000 FT EXPECT 5000 FT IN 10 MINS, DEP FREQ 125.35. ATIS WAS 280 AT 6, VISIBILITY 10, CEILING 3500 FT SCATTERED, 4700 FT BROKEN, ALTIMETER 30.12. FSS RPTED POSSIBLE ICING BELOW FL180, AIRMET FOR TURB. REACHED ALTAM INTXN (LVK1 DEP) JUST BELOW CLOUD LAYER AT 4000 FT. ON TURNOUT TO ECA LARGE DARK CUMULUS CLOUD IN BUILD STAGE TOPS TO +7000 FT IN DIRECT PATH. OAT 36 DEGS F HIGH PROBABILITY OF ICING IN CLOUD. ATC WAS VERY BUSY ON RADIOS WITH OTHER TFC, PROBABLY TO DO WITH VECTORING AROUND WX CLOSE TO THE LIVERMORE HILLS. TO AVOID CLOUD AND HVY POSSIBILITY OF ICING TURNED SE TOWARDS TRACY ARPT. TEMP 35 DEGS F. TRACY COULD SERVE AS AN ALTERNATE ARPT TO LAND IF NECESSARY AND IS THE MISSED FOR LVK. REACHED ATC 2-3 MINS AFTER TURN AT 4000 FT AND INFORMED ATC OF CHANGE FOR SAFETY AND THE ACFT IS NOT PERMITTED INTO ICING CONDITIONS. ATC WAS VERY ANNOYED AT THIS LATE NOTIFICATION, BUT WE DID CONTACT THEM AT FIRST OPPORTUNITY. ATC CLRED US TO ECA FOR PRACTICE ILS APCHS ONCE WE CLRED DANGER. ATC ASKED US IF WE WANTED TO CLB TO 5000 FT OR STAY AT 4000 FT. WE INFORMED ATC WE WOULD CLB TO 5000 FT. WE THOUGHT WE COULD CLR ANOTHER SMALL CELL AT 5000 FT. CLBED TO 5100 FT IN MODERATE TURB. ALT IN AUTOPLT +/-150 FT DUE TO TURB. ON WAY TO ECA IT BECAME APPARENT WE COULD NOT CLR THE CLOUD SO WE STARTED A DSCNT TO 4000 FT. WE BELIEVE ATC WAS BUSY AND WE INFORMED THEM AS SOON AS THE AIRPLANE WAS OUT OF TURB AND ATC WAS NOT BUSY. THIS TOOK PLACE AT 4300-4500 FT AGL. ATC INFORMED US THAT WE WERE FLYING AT 3500 FT. WE HAD 2 PLTS AND 4 INSTS CAPABLE OF PROVIDING ALT AND ALL SAID WE NEVER DSNDED BELOW 4000 FT, OUR INITIAL ALT. THE CTLR WAS VERY AGITATED WITH US AND WE BELIEVE HE HAD SIMILAR EXPERIENCE WITH OTHER PLTS AND HIS HVY WORKLOAD. WE WENT ON TO FLY 4 PERFECT ILS AND VOR APCHS WITHOUT INCIDENT IN VFR CONDITIONS. ATC TOLD US TO LAND AND CALL THE CTR FOR PLTDEV AND WE COMPLIED. WE BELIEVE THE PIC HAS THE ABILITY TO CHANGE ATC INSTRUCTIONS IF IT IS BELIEVED THE SAFETY OF THE FLT IS IN DANGER, WHICH WE DID. THE ATC CTLR WAS UNAWARE OF THE FLT CONDITIONS IN THAT PARTICULAR AREA OF FLT AND WAS IN OVERLOAD CONDITIONS WITH OTHER FLTS. WE WENT ON TO CONTACT 4 PERFECT APCHS WITH ANOTHER CTLR. WE CONTACTED ATC WHEN WE WERE CAPABLE AND WHEN WE WOULD NOT STEP OVER OTHER XMISSIONS. ATC SHOULD HAVE DECREASED HIS WORKLOAD OR ASKED FOR ASSISTANCE DURING THIS SIT. THE CTLR WAS AGGRAVATED DURING THE FLT AND ANOTHER PLT COMMENTED THAT HE (ATC) WAS DOING FINE. APPARENTLY DUE TO ANOTHER FLT SIT.

# **Synopsis**

INSTRUMENT RATED PRIVATE PLTS ON IFR PRACTICE FLT DEVIATE FROM CLRNC AT WILL DUE TO WX AND TURBULENCE CONCERNS. ATC TAKES ISSUE WITH THEIR FAILURE TO OBTAIN CLRNCS PRIOR TO DEVIATIONS.

# Time / Day

Date : 200702 Day : Sun

Local Time Of Day: 1201 To 1800

### **Place**

Locale Reference.Navaid: HQM.VORTAC

State Reference: WA

Altitude.MSL.Single Value: 5000

### **Environment**

Flight Conditions: Mixed
Weather Elements: Ice
Weather Elements: Snow
Weather Elements: Turbulence
Weather Elements: Windshear

Light: Daylight

### Aircraft: 1

Controlling Facilities.ARTCC: ZSE.ARTCC Operator.General Aviation: Personal

Make Model Name: Skyhawk 172/Cutlass 172

Operating Under FAR Part: Part 91

Flight Phase.Cruise: Level

### Person: 1

Affiliation.Other: Instructional Function.Instruction: Instructor

Qualification.Pilot: ATP Qualification.Pilot: CFI

Qualification.Pilot: Multi Engine

Experience.Flight Time.Last 90 Days: 120 Experience.Flight Time.Total: 26850 Experience.Flight Time.Type: 400

ASRS Report: 728976

### Person: 2

Affiliation.Other: Instructional Function.Instruction: Trainee

### Person: 3

Affiliation.Government : FAA Function.Controller : Radar

### **Events**

Anomaly. Altitude Deviation: Excursion From Assigned Altitude

Anomaly.Inflight Encounter: Turbulence Anomaly.Inflight Encounter: Weather Anomaly.Non Adherence: Clearance Anomaly.Other Spatial Deviation

Independent Detector.Other.Flight CrewA: 1 Independent Detector.Other.Flight CrewB: 2

Resolutory Action.Flight Crew: Exited Adverse Environment

Consequence.Other: Emotional Trauma

### **Assessments**

Problem Areas: Environmental Factor

Problem Areas: Flight Crew Human Performance

Problem Areas: Weather

### **Narrative**

THIS WAS A TRAINING FLT WHERE I WAS INSTRUCTING AN INST STUDENT ON HIS FIRST INST XCOUNTRY. WE HAD FLOWN INTO HQM 1 HR BEFORE AND HAD BRIEFLY FOUND A TRACE OF ICE AT 4000 FT BUT HAD A SMOOTH RIDE IN AND OUT OF MIXED CLOUD TYPES. WE WERE NOW GOING TO RETURN TO ZZZ AND RECEIVED A WX BRIEFING, FILED A FLT PLAN AND PICKED UP OUR CLRNC ON THE GND AT HQM VIA FSS. THIS TOOK A BIT MORE TIME THAN PLANNED AS THE STUDENT'S NATIVE LANGUAGE WAS NOT ENGLISH. WHILE HE IS VERY SMART, HIS ACCENT SOMETIMES CONFUSES THE CTLRS, FSS PERSONNEL, ETC. WX WAS FORECAST FOR RAIN SHOWERS WITH CEILINGS AT ABOUT +/-1500 FT AND A FREEZING LEVEL OF ABOUT 6000 FT. ANY ADVERSE WX WAS NOT FORECAST FOR THE NEXT FEW HRS. I ADVISED THE STUDENT TO REQUEST EITHER THE MEA OR 4000 FT, HOWEVER, WE WERE ASSIGNED 5000 FT. WE DEPARTED VFR AND CLBED IN GOOD VFR FOLLOWING THE DEP PROC TO 5000 FT AND TURNED FOR V27. MY STUDENT AND I DISCUSSED THAT IF WE FOUND ANY ICING WE WOULD REQUEST A DSCNT TO MEA BY SHN WHERE WE KNEW WE WOULD BREAK OUT INTO VFR CONDITIONS AND COULD CONTINUE THE FLT IN VMC. AHEAD WE NOTICED AN AREA OF 2 BUILDUPS OF MODERATE HEIGHT ON OUR COURSE THAT WEREN'T THERE ON THE ARR. THERE APPEARED TO BE EITHER VIRGA OR SNOW FALLING FROM THEM. AS WE GOT CLOSER IT WAS APPARENT THE SNOW WAS VERY THIN, HOWEVER, I ADVISED THE STUDENT WE PROBABLY SHOULD GET A CLRNC FOR LOWER, AS I DIDN'T WANT US TO FIND ANY ICE. HOWEVER, CTR WAS WORKING WITH OTHER ACFT AND WE COULDN'T GET A WORD OUT. BY THEN, WE HAD ENTERED THE SNOW AREA BUT IT WAS NOT STICKING, WITH THE OUTSIDE AIR TEMP FLUCTUATING FROM 0 TO -2 DEGS, AND THE RIDE WAS SMOOTH, THEN IT GREW VERY DARK -- VERY QUICKLY -- AND IN A MOMENT WE WERE HIT BY A COMBINATION OF MODERATE OR GREATER TURB IN THE FORM OF A DECISIVE DOWNDRAFT THAT DROPPED US ABOUT 500 FT AND HVY SLEET OR WET HAIL. MY STUDENT WAS VERY SHOCKED BY THIS (ME TOO!), YET HE STARTED TO SET UP VA SPD, BUT BECAME DISORIENTED IN THE TURB. I TOOK CTL OF THE ACFT AND STABILIZED IT AT 4500 FT CONCURRENTLY I NOTICED A VERY LIGHT AREA TO MY STARBOARD (R) AND SINCE I WAS STARTING TO ACCRUE ICE AT A CONSIDERABLE RATE I BANKED TOWARD THE LIGHT AREA. I ASKED MY STUDENT TO CALL CTR AND TELL THEM WHAT WAS GOING ON, BUT THE POOR GUY WAS TONGUE TIED AND WHITE AS A SHEET. SO I PUSHED THE BUTTON AND GAVE THEM OUR ALT (4500 FT) AND SAID WE HAD DEVIATED TO THE R TO GET OUT OF THIS 'HAIL SHAFT' AND WANTED LOWER -- NOW. BY THEN WE FLEW OUT OF THE

SHAFT AND I GAVE THE CTLS BACK TO THE STUDENT, HOWEVER, HE CONTINUED TO TURN R AND I AGAIN TOOK BACK THE CTLS AND STARTED US IN A L TURN BACK TO COURSE. BY NOW MY STUDENT WAS SAYING PRAYERS. THE CTR CTLR WAS UNHAPPY WITH OUR DEV AND ALT LOSS AS THERE WAS TFC BEHIND US AT 4000 FT, HOWEVER, HE DID 'SPIN' THAT TFC BACK TOWARD HQM AND THEN GAVE US THE MEA AS WE CAME BACK ON COURSE. I WAS ABLE TO COACH THE STUDENT AND HE RESUMED CTL OF THE ACFT AND WE STARTED OUR DSCNT TO 3200 FT. ANY ICE THAT HAD ACCUMULATED STARTED MELTING OFF AS WE LEFT. 4500 FT, AND BY 3200 FT WE WERE AT AN OUTSIDE AIR TEMP OF 4 DEGS AND ONLY LIGHT INTERMITTENT CHOP. IN A FEW MINS WE WERE IN VMC, HOWEVER, I PUT THE HOOD ON THE STUDENT AND HE 'WORKED' HIS WAY BACK TO ZZZ, WITH A RENEWED RESPECT FOR THE WX. THE CTR CTLR ASKED THAT I CALL THE FACILITY, WHICH I DID. THIS WAS NOT A FUN FLT FOR US. IT WAS THE FIRST ACTUAL INST TIME THE STUDENT HAD EXPERIENCED. THE WX INTENSIFIED QUICKER THAN EXPECTED. WE WERE IN AN AIRPLANE THAT WAS NOT EQUIPPED FOR ICING CONDITION (OTHER THAN PITOT HEAT) AND THERE WAS A PERIOD WHERE THERE WERE SEVERAL EXCHANGES OF THE CTLS TO STABILIZE THE AIRPLANE. I WAS COMPLETELY SURPRISED OF THE INTENSITY OF THE DOWNDRAFT AND CONCURRENT SLEET FROM SUCH A MODEST BUILDUP. AND THIS IS AFTER FLYING 35 YRS FOR THE AIRLINES. I DID NOT WISH TO DEVIATE FROM THE AIRWAY, HOWEVER, I CONSIDERED IT THE BEST COURSE OF ACTION CONSIDERING THE MESS WE (I) HAD STUMBLED INTO.

### **Synopsis**

A C172 INSTRUCTOR AND STUDENT DEVIATED FROM THEIR IFR ALT AND TRACK CLEARANCE IN UNFORECAST TURBULENCE, ICE AND SNOW.

# Time / Day

Date: 200702 Day: Thu

Local Time Of Day: 1801 To 2400

### **Place**

Locale Reference. Airport: ZZZ. Airport

State Reference: US

Altitude.MSL.Single Value: 14000

### **Environment**

Flight Conditions : Mixed Weather Elements : Ice

Weather Elements: Turbulence

Light : Night

### Aircraft: 1

Controlling Facilities.ARTCC: ZZZ.ARTCC Operator.Common Carrier: Charter

Make Model Name: IAI1124/1124A/Westwind

Operating Under FAR Part: Part 91 Navigation In Use.Other: FMS or FMC

Flight Phase.Cruise: Level

### Person: 1

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

Qualification.Pilot: CFI

Qualification.Pilot : Commercial Qualification.Pilot : Instrument Qualification.Pilot : Multi Engine

Experience.Flight Time.Last 90 Days: 75 Experience.Flight Time.Total: 2500 Experience.Flight Time.Type: 450

ASRS Report: 728727

### Person: 2

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

Person: 3

Affiliation.Government : FAA Function.Controller : Radar

### **Events**

Anomaly. Aircraft Equipment Problem: Less Severe

Anomaly. Altitude Deviation: Excursion From Assigned Altitude

Anomaly.Inflight Encounter: Turbulence Anomaly.Inflight Encounter: Weather

Anomaly. Other Anomaly

Independent Detector.Other.Flight CrewA: 1 Independent Detector.Other.Flight CrewB: 2

Resolutory Action.Flight Crew: Exited Adverse Environment Resolutory Action.Flight Crew: Regained Aircraft Control Resolutory Action.Flight Crew: Returned To Assigned Altitude

Resolutory Action. Flight Crew: Returned To Intended or Assigned Course

Consequence.Other: Physical Injury

### **Assessments**

Problem Areas: Aircraft

Problem Areas: Flight Crew Human Performance

Problem Areas: Weather

#### **Narrative**

UPON LEVELING OFF THE AUTOPLT WAS NOT MAINTAINING THE 14000 FT AS SELECTED. AT 14100 FT I RESELECTED 14000 FT AND IT CORRECTED BACK DOWN. WITHIN SECONDS WE WERE AT 14400 FT WHEN I SAID TO THE CAPT 'WHAT IS WRONG WITH THE AUTOPLT, HOW COME IT WON'T HOLD ALT?' THE CAPT THEN DISCONNECTED THE AUTOPLT AND PITCHED DOWN TO CORRECT FOR THE UNCOMMANDED CLB. THE RIDE THEN WENT FROM SMOOTH TO VIOLENT. I PULLED BOTH THROTTLES TO IDLE AS SOON AS I WAS ABLE. IT WAS SO ROUGH THAT IT WAS IMPOSSIBLE TO CTL YOUR ARMS AND LEGS AT TIMES. BOTH OF US HIT OUR HEADS ON THE BREAKER PANEL ABOVE, WHICH RUNG OUR BELL SO TO SPEAK. INITIALLY I HEARD A HISSING SOUND AND THOUGHT DECOMPRESSION AND MASK. THEN NO MASK WE ARE ONLY 14000 FT. THE HISSING WAS A BURST BEVERAGE CONTAINER OR MY MASK OUT OF ITS HOLSTER AND PURGING, I DON'T KNOW FOR SURE. THE CAPT HAD A SEVERE CUT ON HIS HEAD AND WAS BLEEDING. HE CONTINUED TO FLY AND CLAIMED TO BE OK. THE AIRFRAME WAS COVERED WITH ICE AND A GENERATOR WAS OFFLINE. WE RPTED OUR STATUS WITH CTR AND I BELIEVE THEY DECLARED US AN EMER ACFT. AS PNF I ACTIVATED THE ACFT'S ICE PROTECTION WHICH WORKED WELL. WE BEGAN LOAD REDUCTION. I RAN THE APPROPRIATE CHKLIST FOR THE GENERATOR OFF AND IT WAS RESTORED. THE REMAINING FLT WAS UNREMARKABLE. I REVIEWED THE FLT LOG AND IT INDICATED A MAX ALT LOSS OF 2000 FT. THIS IS MY BIGGEST CONCERN. MAINTAINING WINGS LEVEL WAS A FULL TIME JOB DURING THIS EVENT WITH SEVERE TURB AND I COMMEND MY CAPT. I THINK GOOD CRM PROBABLY SAVED OUR LIVES. DURING THIS EVENT I FOUND MYSELF DOING ONLY THE THINGS THAT HAVE BEEN 'OVER-LEARNED.' IN THE FUTURE I WILL PIPE UP AND ASK FOR DEVS AROUND ALL CLOUDS WHEN POSSIBLE AND IF ANYONE IS EVER INJURED INFLT I WILL SUGGEST THE USE OF OXYGEN. WE MAY NEED ALL THE HELP WE CAN GET.

### **Synopsis**

WW24 CREW ENCOUNTERS SEVERE TURB AND ICING AT 14000 FT.

# Time / Day

Date: 200702 Day: Tue

Local Time Of Day: 1201 To 1800

### Place

Locale Reference. Airport: TEB. Airport

State Reference: NJ

Altitude.MSL.Bound Lower: 6000 Altitude.MSL.Bound Upper: 6400

### **Environment**

Flight Conditions : Mixed Weather Elements : Ice

Light: Daylight

### Aircraft: 1

Controlling Facilities.TRACON: N90.TRACON
Operator.General Aviation: Corporate
Make Model Name: Challenger CL601
Operating Under FAR Part: Part 91
Navigation In Use.Other: FMS or FMC

Flight Phase.Climbout: Intermediate Altitude

Route In Use.Departure.SID: TEB

### Person: 1

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

Qualification.Pilot: ATP Experience.Flight Time.Last 90 Days: 100

Experience.Flight Time.Total: 18000
Experience.Flight Time.Type: 3000

ASRS Report: 728605

## Person: 2

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

### Person: 3

Affiliation.Government : FAA Function.Controller : Departure

### **Events**

Anomaly. Altitude Deviation: Overshoot Anomaly. Inflight Encounter: Weather

Anomaly. Non Adherence : Clearance

Independent Detector.Other.ControllerA: 3
Resolutory Action.Controller: Issued Advisory

Resolutory Action.Flight Crew: Returned To Original Clearance

Consequence.FAA: Reviewed Incident With Flight Crew

### **Assessments**

Problem Areas: Flight Crew Human Performance

Problem Areas: Weather

### **Narrative**

WE WERE TOLD TO TURN TO 220 DEGS AND CLB TO 6000 FT. I WAS THE PF AND MISSED PART OF THE RADIO CALL FROM CTL AS I WAS TURNING AND CLBING AND LOOKING FOR TFC. MY FO READ BACK TO THE CTLR CLB TO FL220 AND TURNED THE ALTITUDE PRE SELECT TO 22000 FT. I THOUGHT WE HAD BEEN CLRED TO THAT ALT AND STARTED A RAPID CLB TO GET OUT OF THE ICING CONDITIONS AS SOON AS POSSIBLE. AS WE WERE CLBING THROUGH 6000 FT THE CTLR CALLED AND ASKED US WHAT ALT WE WERE CLBING TO AND THE FO SAID FL220. THE CTLR ASKED US WHERE WE GOT THAT CLRNC AND HE REPLIED THAT IS WHAT HE HEARD AND THAT IS WHAT HE READ BACK WITH NO NEGATIVE REPLY SO WE CLBED. THE CTLR AT THAT POINT TOLD US TO LEVEL AT 6000 FT BUT I WAS ALREADY AT 6200 FT AND CLBING. I IMMEDIATELY LEVELED OFF AND STARTED A DSCNT BACK TO 6000 FT. AS FAR AS WE KNOW THERE WAS NO CONFLICT WITH OTHER TFC AND THE HIGHEST I WAS WHEN LEVELING OFF WAS 6400 FT BEFORE STARTING DESCENT. THIS WAS A TOTAL FAILURE TO COM AND TO QUESTION A CLRNC LIKE NONE OTHER WE HAD EVER RECEIVED OUT OF TEB. LEARNED THAT WHEN THINGS ARE NOT AS THEY NORMALLY ARE OUESTION AND CHECK BEFORE PROCEEDING.

### **Synopsis**

CHALLENGER CL601 FLT CREW HAS AN ALT DEV DURING THE TEB 5 DEP.

## Time / Day

Date: 200702 Day: Sat

Local Time Of Day: 0001 To 0600

### **Place**

Locale Reference. Airport: ZZZ. Airport

State Reference : US Altitude.AGL.Single Value : 0

### **Environment**

Flight Conditions : Marginal Weather Elements : Ice Weather Elements : Snow

Light : Night

### Aircraft: 1

Operator.General Aviation: Corporate

Make Model Name: Super King Air 200 HDC

Operating Under FAR Part: Part 91

Flight Phase.Landing: Roll

### Person: 1

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

Qualification.Pilot: CFI

Qualification.Pilot : Commercial Qualification.Pilot : Instrument Qualification.Pilot : Multi Engine

Experience.Flight Time.Last 90 Days: 19 Experience.Flight Time.Total: 1297 Experience.Flight Time.Type: 72

ASRS Report: 728155

### Person: 2

Affiliation.Company : Corporate Function.Flight Crew : Captain

Function.Oversight: PIC Qualification.Pilot: ATP Qualification.Pilot: CFI

Qualification.Pilot : Commercial Qualification.Pilot : Instrument Qualification.Pilot : Multi Engine

Experience.Flight Time.Last 90 Days: 82

Experience.Flight Time.Total: 5637

Experience.Flight Time.Type: 1546

ASRS Report: 728609

### **Events**

Anomaly. Excursion: Runway Anomaly. Ground Encounters. Other

Anomaly. Other Anomaly

Independent Detector.Other.Flight CrewA: 1 Independent Detector.Other.Flight CrewB: 2 Resolutory Action.None Taken: Unable

Consequence.FAA: Investigated

Consequence.Other: Aircraft Damaged

#### **Assessments**

Problem Areas : Airport Problem Areas : Weather

#### **Narrative**

AFTER COMPLETING A LOC RWY APCH INTO ZZZ AT APPROX XA20 LCL TIME. I SET UP FOR A NORMAL LNDG. WE HAD THE ARPT IN SIGHT AT APPROX 2 MI OUT. AT THIS POINT IN TIME THE LNDG GEAR WERE DOWN AND LOCKED AND FULL FLAPS WERE SET AND AIRSPD WAS 121 KIAS. I CROSSED OVER THE NUMBERS AT 105 KIAS AND NOTICED THE RWY WAS COVERED WITH SNOW. MY PLAN WAS TO LAND AS SLOW AS POSSIBLE TO AVOID USE OF THE BRAKES AS MUCH AS POSSIBLE AS BRAKING ACTION WAS UNKNOWN AT THE TIME AND I ASSUMED THE RWY WAS SLICK. I MADE A NICE SOFT FULL STALL LNDG ON CTRLINE AT APPROX 75-80 KIAS. AS WE BEGAN TO SLOW AND AS THE NOSEWHEEL CAME INTO CONTACT WITH THE RWY THE CAPT ADVISED ME TO USE CAUTION WHEN GOING INTO REVERSE, (PWR SETTING AT THIS TIME WAS IDLE). I ADVISED HIM THAT I WASN'T GOING TO USE REVERSE AND WAS GOING TO JUST COAST AND ALLOW THE PLANE TO SLOW. THE PLANE THEN BEGAN TO DRIFT TO THE L, THE CAPT INFORMED ME THAT WE WERE DRIFTING L AND I RESPONDED THAT I WAS CORRECTING (I WAS USING RUDDER ONLY AT THIS POINT). I NOTICED HIM ASSISTING ME IN THE USE OF R RUDDER AND BEFORE WE COULD TAKE ANY MORE EVASIVE ACTIONS THE PLANE SNAPPED SIDEWAYS TO THE L AND I YELLED AT THE CAPT AND ASKED WHY HE USED THE BRAKES! HIS RESPONSE WAS THAT HE DIDN'T TOUCH THE BRAKES. THE PLANE THEN VEERED OFF THE L OF THE RWY SNAPPING THE NOSEWHEEL OFF AND THE PROPS STRUCK THE GND. THE PLANE CAME TO A STOP IN A DITCH AND WE MADE AN EMER SHUTDOWN OF THE ENGS, HIT THE MASTER SWITCH (GANG BAR) AND SHOUTED TO THE PAX TO GET OUT! THE EVAC WAS SUCCESSFUL AND NO ONE WAS INJURED. AFTER MAKING SURE EVERYONE WAS OK THE CAPT BEGAN TO MAKE PHONE CALLS TO OUR OPS TO ACTIVATE OUR DISASTER PLAN. I REENTERED THE AIRPLANE AND CONTACTED ZZZ CLRNC TO TELL THEM ABOUT THE ACCIDENT AND REQUESTED HELP. I BEGAN TO WALK THE RWY LOOKING FOR CLUES AS TO WHAT HAPPENED, THE RWY WAS COVERED WITH APPROX 1/8 INCH OF DRY SNOW WITH PATCHY ICE UNDERNEATH AND WAS DIFFICULT TO WALK ON WITHOUT SLIPPING. I WALKED BACK TO THE NUMBERS AND NOTICED THAT MY WHEEL TRACKS DID START ON CTRLINE JUST SLIGHTLY L OF CTR AND SHOWED A STRAIGHT LINE TRACK DRIFTING TO THE L. AT THE POINT WHERE THE AIRPLANE SNAPPED SIDEWAYS I NOTICED THAT IT LOOKED LIKE A SNOW PLOW HAD PLOWED SNOW FROM THE TXWY ONTO THE RWY HEADING IN THE SAME DIRECTION THAT WE WERE LNDG LEAVING BEHIND A

SNOW BANK THAT I DIDN'T NOTICE ON LNDG BECAUSE EVERYTHING WAS COATED WITH A FRESH COAT OF SNOW AND THERE WERE NO CONTRASTING COLORS TO ALLOW ME TO SEE THE SNOW BANK. I THEN CONCLUDED THAT THIS WAS THE POINT WHEN I YELLED AT THE CAPT FOR HITTING THE BRAKES, IT WAS IN FACT THE SNOW BANK THAT CAUSED US TO SNAP SIDEWAYS. A POLICE OFFICER THAT WAS INVESTIGATING POINTED OUT THAT OUR TRACKS STOPPED AND STARTED AGAIN AT THAT SAME POINT INDICATING THAT WE WENT AIRBORNE FOR A SPLIT SECOND AFTER HITTING THE SNOW BANK. I STILL DO NOT KNOW WHAT CAUSED ME TO DRIFT TO THE L, THE WINDS WERE FROM THE L AND WOULD HAVE PUSHED ME R IF I WERE NOT CORRECTING PROPERLY. IT DID SEEM TO GO L MORE AND MORE AS WE SLOWED AND RUDDER WAS NOT EFFECTIVE TO BRING US BACK TO THE R. I NOTICED THAT ALL THE CTLS WERE PEGGED R INDICATING THAT I WAS DOING EVERYTHING I COULD TO GET THE PLANE TO GO BACK TO THE R. I NOTICED THAT WHEN THEY WERE TOWING THE AIRPLANE OUT OF THE DITCH THAT THE L WHEELS WERE LOCKED UP AND I POINTED IT OUT TO THE FAA PERSON ON SITE AND HE TOOK VIDEO TO SHOW THAT THE WHEELS WERE IN FACT LOCKED. SUPPLEMENTAL INFO FROM ACN 728609: THE PLANE IMMEDIATELY BEGAN TO DRIFT TO THE L. WHICH I MENTIONED TO THE FO. HE SAID HE WAS CORRECTING. WE WERE ONLY USING RUDDER ONLY AT THIS POINT. I STARTED TO SHADOW HIM WITH MY FOOT HOVERING OVER THE R RUDDER. BEFORE WE COULD TAKE EVASIVE ACTIONS THE PLANE SNAPPED SIDEWAYS TO THE L. THE FO YELLED 'WHY DID YOU HIT THE (EXPLETIVE) BRAKES.' I SAID I DIDN'T TOUCH THE BRAKES. THE PLANE VEERED OFF TO THE L OF THE RWY SNAPPING THE NOSEWHEEL OFF AND THE PROPS STRUCK THE GND. THE PLANE CAME TO A STOP IN A DITCH AND WE MADE AN EMER SHUTDOWN OF THE ENGS, HIT THE MASTER SWITCH (GANG BAR), AND SHOUTED TO THE PAX TO GET OUT! THE EVAC WAS SUCCESSFUL AND NO ONE WAS INJURED.

## **Synopsis**

A B200 STRUCK A SNOW RIDGE LEFT BY A SNOW PLOW, EXITED THE RWY, BROKE THE NOSE GEAR OFF AND STRUCK THE PROPS ON THE GND.

## Time / Day

Date: 200702 Day: Tue

Local Time Of Day: 1201 To 1800

### **Place**

Locale Reference.ATC Facility: ZZZ.ARTCC

State Reference: US

Altitude.MSL.Single Value: 40500

### **Environment**

Flight Conditions: VMC Weather Elements: Ice

Light: Daylight

## Aircraft: 1

Controlling Facilities.ARTCC: ZZZ.ARTCC
Operator.General Aviation: Corporate
Make Model Name: IAI1125 (Astra)
Operating Under FAR Part: Part 91
Navigation In Use.Other: FMS or FMC

Flight Phase.Climbout: Intermediate Altitude

## Component: 1

Aircraft Component: Turbine Engine

#### Person: 1

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

Qualification.Pilot : Commercial Qualification.Pilot : Multi Engine

Experience.Flight Time.Last 90 Days: 90 Experience.Flight Time.Total: 20000 Experience.Flight Time.Type: 140

ASRS Report: 727371

#### Person: 2

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

## Person: 3

Affiliation.Government : FAA Function.Controller : Radar

#### **Events**

Anomaly. Aircraft Equipment Problem: Less Severe

Anomaly.Inflight Encounter: Weather Anomaly.Inflight Encounter.Other

Anomaly.Non Adherence: Published Procedure
Anomaly.Other Anomaly: Speed Deviation
Independent Detector.Other.Flight CrewA: 1
Resolutory Action.Controller: Issued Advisory
Resolutory Action.Flight Crew: Declared Emergency
Resolutory Action.Flight Crew: Regained Aircraft Control

#### **Assessments**

Problem Areas : Aircraft

Problem Areas: Flight Crew Human Performance

Problem Areas: Weather

#### **Narrative**

DURING CLB TO FL410, I NOTICED THE TGT WAS LOWER THAN NORMAL AND THAT I HAD TO KEEP DECREASING THE CLB RATE. THE MACH NUMBER CONTINUED TO DECREASE EVEN WITH THE DECREASED RATE OF CLB. I HAD THE THROTTLE FULL FORWARD AND WAS ONLY GETTING 770 DEGS C. USUALLY GET ABOUT 900 DEGS. I HAD TO LEVEL AT FL405, BUT WHEN I LEVELED OFF I STARTED TO GET A SLIGHT VIBRATION AND THE ANGLE OF ATTACK INDICATOR WAS OUT OF THE GREEN AND AT THE EDGE OF THE YELLOW ARC. TOLD THE COPLT TO REQUEST LOWER AND EASED THE NOSE OVER SLIGHTLY INTENDING TO MAINTAIN FL400. THE CTLR SAID HE WAS UNABLE TO GIVE US LOWER DUE TO TFC. I ASKED FOR A VECTOR TO GET LOWER AND WAS TOLD UNABLE. AT FL400 THE BUFFET CONTINUED AND I DECLARED AN EMER. THE CTLR CLRED US TO FL360 THEN LATER ASKED IF WE COULD MAINTAIN FL370, CORRECT FOR DIRECTION OF FLT. WE WERE ABLE TO MAINTAIN FL370, WHEN LEVEL I APPLIED ENG ANTI-ICE AND THE ENG REGAINED FULL PWR. WHEN HANDED OFF TO THE NEXT CTLR, WE CLBED TO FL410 NORMALLY. THERE WERE SHOWERS AND CLOUDS IN THE AREA. BUT I DID NOT NOTICE ANY ICE ON THE WINDSHIELD OR BOOTS DURING CLB SO ENG ANTI-ICE WAS NOT USED. USE OF ENG ANTI-ICE IN THE CLOUDS WOULD PROBABLY HAVE PREVENTED THIS PROB. I WILL BE USING ENG ANTI-ICE IN THE FUTURE EVEN IF NO OTHER ICING IS APPARENT.

## **Synopsis**

IA 1125 CREW EXPERIENCES ENG ICING CLBING TO FL410 WHICH INITIALLY GOES UNDETECTED AND CAUSES PWR DEFICIT.

## Time / Day

Date: 200702 Day: Tue

### **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 : Daylight

## Aircraft: 1

Operator.Common Carrier: Air Taxi Make Model Name: Beech 1900 Operating Under FAR Part: Part 135 Flight Phase.Ground: Preflight

## Person: 1

Affiliation.Company: Air Taxi Function.Flight Crew: First Officer Qualification.Pilot: Commercial

ASRS Report: 727073

#### Person: 2

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

## Person: 3

Affiliation.Other: Contracted Service Function.Flight Crew: Load Master

#### **Events**

Anomaly. Non Adherence: Company Policies

Anomaly. Non Adherence: FAR

Anomaly.Non Adherence: Published Procedure Independent Detector.Other.Flight CrewA: 2

Resolutory Action. None Taken: Detected After The Fact

#### Assessments

Problem Areas: Flight Crew Human Performance

Problem Areas: Weather

#### **Narrative**

NOT REALLY SURE WHY A NEW WEIGHT AND BALANCE WAS NOT DONE. NOT REALLY SURE IF ONE WAS REQUIRED AT THIS TIME. COMPOUNDING THIS WAS WEATHER AND GROUND EQUIPMENT NOT BEING AVAILABLE/WORKING WERE FACTORS IN NOT FILLING OUT THE APPROPRIATE PAPERWORK. DISCUSSIONS WITH RAMPER AND GOING OVER THE DE-ICE PROCESS, INFORMING PASSENGERS. THE THOUGHT OF ANOTHER WEIGHT AND BALANCE NEVER ENTERED THE PICTURE. SINCE CAPT PEN AND INKED THE FIRST RELEASE. WERE WE BEING RE-RELEASED? OR DOES ACCEPTANCE OF THE SECOND RELEASE WHICH MATCHED THE FIRST ONE THAT WAS PEN AND INKED CONSTITUTE A NEW RELEASE? NOTHING ABOUT THE FLIGHT HAD BEEN CHANGED, OTHER THAN THE ADDITION OF THE ALTERNATE, WHICH WAS PEN AND INKED OFF THE FIRST ONE. THE LACK TYPE 4 ANTI-ICE FLUID IN ZZZ. THE TUG NOT WORKING TO DE-ICE AT THE SIDE OF A RUNWAY WITH TYPE 1. NO RADIO IN THE TUG TO COMMUNICATE WITH FLIGHT CREWS DURING REMOTE DE-ICING. NO PROCEDURE FOR REMOTE DE-ICE OPERATIONS IN ZZZ. RAMP HAD ONLY DONE THIS ONE TIME BEFORE. ON THE AFTERNOON OF 2/2007, INBOUND FLIGHT DELAYED. WAS SNOWING, WE HAD TO DE-ICE. ONLY TYPE 1 AVAILABLE IN ZZZ. WX COMBINED WITH THE SNOW, ONLY HAD HOLDOVER TIME OF 2 TO 4 MINUTES. AFTER DE-ICE, STARTED UP AND TAXI TO RUNWAY 27. ABOUT HALF WAY TO THE END OF RWY 27 ACCUMULATION OF SNOW ON THE WINGS. ZZZ OPERATIONS CALLED TO TELL US THAT DISPATCH WANTED TO GIVE US A NEW ALTERNATE. WHILE TALKING WITH OPERATIONS WE CAME TO CONCLUSION WE HAD TO DE-ICE AT THE END OF THE RUNWAY. OPERATIONS INFORMED US THAT THEY WERE HAVING PROBLEMS STARTING THE TUG. CAPTAIN CALLED DISPATCH AND TOLD THEM OF TUG ISSUE. DISPATCH HAD A NEW RELEASE AND CAPT PEN AND INKED FIRST RELEASE WITH NEW ALTERNATE AND WX. ZZZ COULD NOT DE-ICE US AS REQUESTED. CAPT CALLED DISPATCH, TOLD THEM WE WERE GOING TO HAVE TO GO BACK TO THE GATE, DE-ICE AND GET NEW RELEASE. TAXIED BACK. CAPT GOT NEW RELEASE AND HANDED NEW TOP SHEET TO OPS. ABOUT 5 MINUTES LATER ZZZ GOT TUG STARTED. GAME PLAN SET UP FOR DE-ICE AT THRESHOLD OF RUNWAY 27. HAD TO COME UP WITH GAME PLAN BEFORE TAXI AS TUG HAD NO RADIO. DE-ICED AT THE END OF THE RUNWAY, AND DEPARTED. NEW WEIGHT AND BALANCE NOT MADE WITH NEW RELEASE. GOT A CALL FROM THE CAPTAIN THAT HE DIDN'T DO A NEW WEIGHT AND BALANCE SHEET WITH THE NEW RELEASE THAT HE ACCEPTED. HE STATED THAT WE MAY HAVE NEEDED TO DO THAT AS WE HAD TWO OUT TIMES SINCE WE HAD TO TAXI BACK TO THE TERMINAL. AS I SAID ABOVE, I'M NOT TOO SURE IF INDEED A NEW WT AND BAL SHEET IS REQUIRED. SPOKE TO A MANAGER THE OTHER DAY AND DISCUSSED HOW NOT ALL THE RELEASE IS COVERED IN INITIAL/RECURRENT ON THE FO SIDE. BASICS ARE USUALLY COVERED AND A FEW NOTABLE EXCEPTIONS. ALSO FOUND OUT THAT A LOT OF THINGS THAT NEED TO BE DONE CONCERNING THE RELEASE ARE USUALLY FOUND OUT 'ON THE JOB TRAINING' SIDE. IT'S MOST LIKELY IMPOSSIBLE TO GO OVER EVERY SCENARIO, HOWEVER, I WOULD THINK THAT TRAINING DEPARTMENT COULD PLACE MORE EMPHASIS IN EITHER INITIAL OR THE CAPTAIN UPGRADE CLASS. NOT HAVING UPGRADED TO CAPTAIN I DON'T KNOW IF THEY DO THAT ALREADY. PUT SOME FRIGGIN TYPE 4 DE-ICE FLUID AT ALL AIRPORTS WITHIN 5 MILES OF LAKE MICHIGAN, OR ANY OTHER GREAT LAKE FOR THAT MATTER. THERE'S THIS THING CALLED LAKE FRONT EFFECT SNOW/ICE/FOG. APPARENTLY THE COMPANY'S NEVER HEARD OF THIS. I WOULD THINK THAT THEY WOULD WANT THAT AT THEIR AIRPORTS SO THAT MORE THAN A 2 TO 4 MINUTE HOLDOVER TIME WOULD EXIST.

# Synopsis

A B1900 DEPARTED MBL WITHOUT A CURRENT WT AND BALANCE.

## Time / Day

Date: 200702 Day: Fri

Local Time Of Day: 1201 To 1800

## **Place**

Locale Reference. Airport: ZZZ. Airport

State Reference: US

Altitude.MSL.Single Value: 2000

### **Environment**

Flight Conditions : IMC Weather Elements : Ice

Light: Daylight

## Aircraft: 1

Controlling Facilities.TRACON: ZZZ.TRACON

Operator.General Aviation: Personal Make Model Name: Bonanza 35
Operating Under FAR Part: Part 91
Flight Phase.Descent: Approach
Route In Use.Arrival: On Vectors

## Component: 1

Aircraft Component: Oil Pump

### Component: 2

Aircraft Component: Navigational Equipment and Processing

#### Person: 1

Affiliation.Other: Personal

Function.Flight Crew: Single Pilot Qualification.Pilot: Instrument Qualification.Pilot: Private

Experience.Flight Time.Last 90 Days: 21 Experience.Flight Time.Total: 1377 Experience.Flight Time.Type: 801

ASRS Report: 726815

## Person: 2

Affiliation.Government : FAA Function.Controller : Approach

#### **Events**

Anomaly. Aircraft Equipment Problem: Critical

Anomaly. Altitude Deviation: Excursion From Assigned Altitude

Anomaly.Inflight Encounter: Weather

Anomaly. Maintenance Problem: Improper Maintenance

Anomaly. Non Adherence: FAR

Anomaly. Non Adherence: Published Procedure

Anomaly. Other Spatial Deviation

Independent Detector. Aircraft Equipment. Other Aircraft Equipment: Oil Press Ind.

**Heading Deviation** 

Independent Detector.Other.Flight CrewA: 1

Resolutory Action.Flight Crew: Diverted To Another Airport Resolutory Action.Flight Crew: Overcame Equipment Problem

Consequence. Other

## **Maintenance Factors**

Maintenance.Performance Deficiency: Inspection Maintenance.Performance Deficiency: Repair

### **Assessments**

Problem Areas: Aircraft

Problem Areas: Chart Or Publication

Problem Areas: Maintenance Human Performance

Problem Areas: Weather

#### **Narrative**

IN THE MORNING I RECEIVED AN FSS BRIEFING AND ALSO LOOKED AT NOAA WX ON-LINE. THE TRIP ORIGINATED AT ZZZ, US, WITH A STOP AT ZZZ1, US, ON AN IFR FLT PLAN. ON THIS LEG I QUICKLY PICKED UP ICE WHEN BRIEFLY ENTERING THE CLOUDS. AFTER DEPARTING ZZZ1 I ELECTED NOT TO PICK UP MY IFR FLT PLAN AND STAY UNDER THE CLOUD CEILING OF 3500 FT. FORECAST CEILINGS IN THE ZZZ2 AREA WERE 1300-2500 FT. I COULD NOT PICK UP ZZZ2 ATIS OR ZZZ2 AWOS UNTIL ABOUT 20 MI FROM ZZZ VOR. AT THIS TIME I HEARD OF CEILINGS OF 500-600 FT. I CLBED TO 3500 FT AND CALLED ZZZ2 APCH AND REQUESTED THE ILS. AT THIS TIME I BECAME AWARE OF A DROP IN OIL PRESSURE. ZZZ APCH GAVE ME AN INITIAL HDG OF 170 DEGS AND DSND TO 2000 FT. ON ENTERING THE CLOUDS THE DIRECTIONAL GYRO SEEM TO FIRST SWING OFF HDG AND MY AUTOPLT WOULD NOT HOLD THE HDG. I RECYCLED MY AUTOPLT, BUT IT WOULD STILL NOT HOLD THE HDG. WHILE TRYING TO SET MY DIRECTIONAL GYRO TO THE COMPASS I FELL BELOW 2000 FT. AFTER THE CTLR RADIOED THAT I HAD A POSSIBLE DIRECTIONAL GYRO PROB I STARTED TO RELY ON MY COMPASS AND GPS TO NAV. ATC INSTRUCTED ME TO GET LOWER TILL I BROKE OUT OF THE CLOUDS. I THEN WAS INSTRUCTED TO PROCEED TO ZZZ4 ARPT. THE NEXT MORNING I WENT BACK TO ZZZ4 ARPT TO POSSIBLY BRING MY PLANE TO ITS HOME ARPT. UPON CRANKING THE ENG I HAD NO OIL PRESSURE INDICATED AND NO DROP WHEN FEATHERING THE PROP. MY ACFT REMAINS AT ZZZ4. I HAVE ALREADY TOLD MY MECH THAT I'LL WANT ANOTHER DIRECTIONAL GYRO. CALLBACK CONVERSATION WITH RPTR REVEALED THE FOLLOWING INFO: THE AIRPLANE HAD MAJOR ENG WORK AND WAS OPERATED FOR 11 HRS UNTIL THE DROP AND LOSS OF OIL PRESSURE INCIDENT. HAD A TECHNICIAN CHK THE ENG OVER AND IT WAS DISCOVERED THE OIL PRESSURE RELIEF VALVE WAS JAMMED. OPEN BY BITS OF BRASS SAFETY WIRE. CLEANED EVERYTHING AND THE ENG OPERATED NORMALLY. A NEW DIRECTIONAL GYRO CORRECTED THE INSTRUMENTATION AND AUTOPLT PROB.

## Synopsis

A BE35 AT 3500 FT NOTED DROP IN OIL PRESSURE. ADVISED ATC AND ADVISED TO DSND TO 2000 FT. ON DSCNT LOST DIRECTIONAL GYRO AND AUTOPLT. ADVISED TO DSND TO 600 FT AND BROKE OUT OF CLOUDS AND PROCEEDED TO ARPT.

## Time / Day

Date: 200702 Day: Sun

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 Weather Elements: Ice

Light: Daylight

## Aircraft: 1

Controlling Facilities. Tower: ZZZ. Tower Operator. General Aviation: Instructional

Make Model Name: PA-28 Cherokee/Archer II/Dakota/Pillan/Warrior

Operating Under FAR Part: Part 91

Flight Phase.Landing: Roll

## Component: 1

Aircraft Component : Brake System

#### Person: 1

Affiliation.Other: Instructional Function.Instruction: Instructor

Qualification.Pilot: CFI

Qualification.Pilot : Commercial Qualification.Pilot : Instrument Qualification.Pilot : Multi Engine

Experience.Flight Time.Last 90 Days: 30

Experience.Flight Time.Total: 320

ASRS Report: 725889

### Person: 2

Affiliation.Other: Personal

Function.Flight Crew: Single Pilot Function.Instruction: Trainee Qualification.Pilot: Private Qualification.Pilot: Student

Experience. Flight Time. Last 90 Days: 32

Experience.Flight Time.Total: 66
Experience.Flight Time.Type: 60

ASRS Report: 725883

## Person: 3

Function.Maintenance: Technician

#### **Events**

Anomaly. Aircraft Equipment Problem: Critical

Anomaly. Excursion: Runway Anomaly. Other Anomaly

Independent Detector.Other.Flight CrewA: 1
Independent Detector.Other.Flight CrewB: 2
Resolutory Action.None Taken: Unable

Consequence.Other

#### **Assessments**

Problem Areas : Aircraft

Problem Areas: Flight Crew Human Performance

Problem Areas: Weather

#### **Narrative**

MY STUDENT HAD LANDED ON RWY 32R AT CHAMPAIGN, IL. AT THE TIME WINDS WERE 290 DEGS AT 19 KTS. THE STUDENT'S TOUCHDOWN WAS SMOOTH WITH A FULL STALL LNDG. ON THE LNDG ROLLOUT THE STUDENT APPLIED BRAKES AND THE L BRAKE LOCKED. THE ACFT VEERED SHARPLY TO THE L. AT THAT POINT I TOOK OVER CTL OF THE ACFT, RELEASED ANY BRAKING AND APPLIED FULL NOSE-UP ELEVATOR AND FULL R RUDDER IN AN ATTEMPT TO KEEP THE PLANE ON THE RWY. THE L BRAKE REMAINED LOCKED AND WHEN IT WAS APPARENT THE ACFT WOULD DEPART THE SIDE OF THE RWY I SHUT DOWN THE ENG TO PREVENT A PROP STRIKE. THE ACFT STOPPED APPROX 20 FT OFF THE L SIDE OF THE RWY. MISSING ANY OBSTRUCTIONS. NO DAMAGE WAS DONE TO THE ACFT OR THE ARPT FACILITIES. AFTER GETTING THE ACFT BACK TO THE PAVEMENT IT WAS INSPECTED AND WITH APPROVAL FROM THE MAINT DEPT WAS FLOWN HOME. FACTORS CONTRIBUTING TO THIS INCIDENT WERE THE COLD CONDITIONS AND POSSIBLY ICE ON THE BRAKES. NEXT TIME I FLY IN THAT TYPE OF WX I WILL DELAY BRAKE APPLICATION UNTIL AT A LOWER SPD TO HOPEFULLY MAINTAIN CTL OF THE ACFT SHOULD THE BRAKES LOCK, OR NOT APPLY BRAKES AT ALL. SUPPLEMENTAL INFO FROM ACN 725883: AFTER A QUICK INSPECTION OF THE ACFT, A CHUNK OF ICE FROZEN ONTO THE L BRAKE PAD WAS DISCOVERED. ICING ON THE L BRAKE WAS THE PROBABLE FACTOR IN THE RWY EXCURSION.

## **Synopsis**

STUDENT PLT AND INSTRUCTOR EXPERIENCE A RWY EXCURSION AFTER LANDING AT CMI. APPARENT CAUSE IS ICE ACCUMULATION ON LEFT BRAKE ASSEMBLY DISCOVERED ON INSPECTION.

## Time / Day

Date : 200701 Day : Sun

Local Time Of Day: 1201 To 1800

## Place

Locale Reference. Airport: AMA. Airport

State Reference : TX Altitude.AGL.Single Value : 0

### **Environment**

Flight Conditions: VMC
Weather Elements: Ice
Weather Elements: Snow
Weather Elements: Windshear

Light: Daylight

## Aircraft: 1

Controlling Facilities.Tower: AMA.Tower Operator.General Aviation: Personal

Make Model Name: Cessna 210 Centurion / Turbo Centurion 210C, 210D

Operating Under FAR Part: Part 91

Flight Phase.Landing: Roll

#### Person: 1

Affiliation.Other: Personal

Function.Flight Crew: Single Pilot Qualification.Pilot: Instrument Qualification.Pilot: Private

Experience.Flight Time.Last 90 Days: 50 Experience.Flight Time.Total: 1500 Experience.Flight Time.Type: 1200

ASRS Report: 725702

### **Events**

Anomaly. Excursion: Runway Anomaly. Other Anomaly

Independent Detector.Other.Flight CrewA: 1 Resolutory Action.None Taken: Insufficient Time

### **Assessments**

Problem Areas : Airport

Problem Areas: Flight Crew Human Performance

Problem Areas: Weather

#### **Narrative**

CTR ADVISED AMA PLOWED, BRAKING GOOD (WIND 330-15 RWY 4 ONLY ONE OPEN). UPON APCH NOTICED JUST CTR OF RWY CLRED -- WAS LINED UP FOR CTR OF RWY AT APPROX 10 FT AGL, GUST OF WIND PUSHED ME TO THE E ONTO THE ICE/SNOW PACKED PORTION OF RWY. TOUCHED DOWN, APPLIED BRAKE. THE PLANE IMMEDIATELY WEATHERVANED INTO THE WIND AND SLIDE BACK ACROSS THE RWY AND STOPPED IN SNOWDRIFT APPROX 26 INCHES TALL. ASK TWR TO HAVE SOMEONE PULL US OUT. FBO PULLED US OUT, TOOK TO FBO.

## **Synopsis**

CESSNA 210 PLT HAS A RWY EXCURSION AT AMA.

## Time / Day

Date: 200701 Day: Sat

Local Time Of Day: 0601 To 1200

### **Place**

Locale Reference.ATC Facility: PIT.TRACON

State Reference: PA

Altitude.MSL.Single Value: 6500

### **Environment**

Flight Conditions: Marginal Weather Elements: Ice Weather Elements: Snow Weather Elements: Turbulence

Light: Daylight

## Aircraft: 1

Controlling Facilities.TRACON: PIT.TRACON

Operator.General Aviation: Personal

Make Model Name : Skyhawk 172/Cutlass 172

Operating Under FAR Part: Part 91

Flight Phase.Cruise: Level

#### Person: 1

Affiliation.Other: Personal

Function.Flight Crew: Single Pilot

Qualification.Pilot: Private

Experience.Flight Time.Last 90 Days: 50 Experience.Flight Time.Total: 105 Experience.Flight Time.Type: 95

ASRS Report: 724906

## Person: 2

Affiliation.Government : FAA Function.Controller : Approach

#### **Events**

Anomaly.Inflight Encounter: Turbulence Anomaly.Inflight Encounter: VFR In IMC Anomaly.Inflight Encounter: Weather

Anomaly. Non Adherence: FAR

Independent Detector.Other.Flight CrewA: 1
Resolutory Action.Controller: Provided Flight Assist

Resolutory Action.Flight Crew: Exited Adverse Environment

#### Assessments

Problem Areas: Flight Crew Human Performance

Problem Areas: Weather

### **Narrative**

I DEPARTED RDG. AFTER ABOUT 30 MINS AFTER TKOF I ENTERED HVY TURB. THE CURRENT CLOUDS WERE SCATTERED AT 4500 FT MSL. MY CURRENT ALT WAS 4000 FT MSL. I THOUGHT IT WAS NECESSARY TO TRY A DIFFERENT ALT TO TRY TO GET OUT OF THE TURB, I THEN CLBED TO 6500 FT MSL NO TURB WAS ENCOUNTERED, AS I WAS PROCEEDING ON COURSE THE LAYER BELOW ME DEVELOPED INTO OVCST, LOSING ALL REFS TO THE GND, HENCE BEING IN IMC OR VFR ON TOP. UNKNOWING THAT THIS WAS INDEED IFR I PROCEEDED AS WE WERE APCHING CLOSER TO THE ARPT I SAW A HOLE IN THE CLOUDS THAT WAS INDEED THE SIZE OF 1/4 MI I PROCEEDED TO DSND THROUGH THE HOLE TO TRY TO MAINTAIN VFR THINKING THIS MIGHT BE MY ONLY CHANCE TO GET THROUGH THE CLOUD LAYER WITHOUT DSNDING DIRECTLY THROUGH THEM. AFTER DSNDING THROUGH I ENCOUNTERED HVY SNOW BELOW ME AND WAS DEVELOPING ICING ON THE LEADING EDGE OF THE C172. I DID NOT HAVE ANY ARPTS THAT WERE CLOSE TO ME AT THIS TIME I THOUGHT THAT FOR THE SAFETY OF ME AND MY PAX THAT I NEEDED TO GET BACK UP ABOVE THE LAYER WHERE IT WAS CLR. I THEN BROKE VFR AND CLBED DIRECTLY THROUGH THE CLOUDS (I WAS CURRENTLY UNDER FLT FOLLOWING AND ASKED ATC PRIOR IF ANY TFC WAS ANYWHERE NEAR ME THEY SAID 'NO TFC WITHIN 30 MI OF CURRENT POS). AFTER SUCCESSFULLY CLBING ABOVE THE WX I KEPT PROCEEDING TO DEST. WHEN I WAS DIRECTLY ABOUT 20 NM N OF THE OUTER RING OF THEIR AIRSPACE I RECEIVED A XMISSION TELLING ME WX AT DEST WAS 1/4 MI VISIBILITY, 1100 FT OVCST, HE RECOMMENDED I DEVIATE, I AGREED. HE THEN STARTED TO GIVE ME VECTORS TO THE NEAREST ARPT (BVI) AT THIS TIME I THOUGHT IT WAS ABSOLUTELY NECESSARY FOR ME TO GET THIS AIRPLANE ON THE GND. WHILE GIVING ME VECTORS TO THE ARPT I WAS FORCED TO DSND DOWN THROUGH THE OVCST LAYER INTO ACTUAL IMC AFTER LOOKING AT THE SECTIONAL DETERMINING WHERE I WAS AT AND KNOWING THAT THERE WERE NO OBSTACLES IN THE AREA. AFTER THIS THEY HANDED ME OFF TO BVI TWR AND LANDED SAFELY THEN WAS FORCED TO STAY THE NIGHT IN BVI UNTIL THE NEXT MORNING AND WAS ON MY WAY BACK HOME (RDG).

## **Synopsis**

C172 PLT ENCOUNTERS WX ENRTE AND IS VFR IN IMC CONDITIONS.

## Time / Day

Date: 200701 Day: Thu

Local Time Of Day: 1201 To 1800

## **Place**

Locale Reference. Airport: ZZZ. Airport

State Reference: US

Altitude.MSL.Single Value: 3000

### **Environment**

Flight Conditions : IMC Weather Elements : Ice

Light: Daylight

## Aircraft: 1

Controlling Facilities.TRACON: ZZZ.TRACON

Operator.Common Carrier: Charter Make Model Name: EMB ERJ 145 ER&LR Operating Under FAR Part: Part 135

Navigation In Use.ILS.Localizer & Glide Slope: N/S

Route In Use.Arrival: On Vectors

## Component: 1

Aircraft Component: ILS/VOR

Aircraft Component: Positional / Directional Sensing

Aircraft Component: Flap Control (Trailing & Leading Edge)

#### Person: 1

Affiliation.Company: Charter Function.Flight Crew: Captain

Function.Oversight: PIC

Experience. Flight Time. Last 90 Days: 197

Experience.Flight Time.Type: 2190

ASRS Report: 724890

### Person: 2

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

Experience.Flight Time.Last 90 Days: 170

Experience.Flight Time.Type: 2700

ASRS Report: 724889

#### **Events**

Anomaly. Aircraft Equipment Problem: Critical

Anomaly.Inflight Encounter: Weather

Independent Detector.Aircraft Equipment.Other Aircraft Equipment: EICAS

Warning

Independent Detector.Other.Flight CrewA: 1
Independent Detector.Other.Flight CrewB: 2
Resolutory Action.Controller: Provided Flight Assist
Resolutory Action.Flight Crew: Declared Emergency
Resolutory Action.Flight Crew: Landed As Precaution

#### **Assessments**

Problem Areas : Aircraft
Problem Areas : Company
Problem Areas : Weather

#### **Narrative**

CTR LEFT US HIGH INTO ZZZ DUE TO ACTIVE MOA. SELECTED FLAPS 9 DEGS BELOW 250, RECEIVED FLAP FAIL EICAS. FLAPS FAILED AT ZERO. INFORMED ATC, RAN QRH AND DETERMINED PLANNED APCH/RWY WERE ACCEPTABLE. ENTERED IMC AT 5000 FT MSL AND ENCOUNTERED MODERATE RIME ICE. APPROX 6 MI N, CAPT AND FO NOTICED CONFLICTING COURSE INFO ON CDIS, DESPITE POSITIVE IDENT OF VOR. ADDITIONALLY FO AS PM HAD BEEN MONITORING VOR FOR APPROX 150 MI AS PM. ABORTED APCH AND REQUESTED VECTORS FOR ILS RWY X. NO IDENT OR COURSE INFO EVER RECEIVED FOR THIS APCH, AND WHEN WE RESELECTED THE VOR WE WERE ALSO UNABLE TO RECEIVE IT. CLBED OUT OF IMC TO ASSESS THE SITUATION, DETERMINED NO VHF NAV WAS OPERATIVE AND WX WAS THE SAME AT THE ALTERNATE. FUEL ON BOARD WAS 3000 LBS, DIVERTING TO ZZZ1 WOULD HAVE RESULTED IN 2000 LBS FOB WITH SAME WX. CEILING/VISIBILITY WERE ABOVE ASR MINIMUMS. WE DECLARED AN EMER DUE TO ASR NOT BEING LISTED IN OP SPECS, THEN LANDED USING THE ASR APCH.

## **Synopsis**

EMB145 FLT CREW HAS FLAP MALFUNCTION AND NAV EQUIP PROB, DECLARES EMER AND LANDS AT ZZZ.

## Time / Day

Date: 200601 Day: Wed

Local Time Of Day: 1201 To 1800

### **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: Daylight

## Aircraft: 1

Operator.Common Carrier: Air Taxi

Make Model Name: Cessna 402/402C/B379 Businessliner/Utiliner

Operating Under FAR Part : Part 135 Flight Phase.Ground : Preflight

## Component: 1

Aircraft Component: Cargo Door

#### Person: 1

Affiliation.Company: Air Taxi Function.Flight Crew: Single Pilot

Qualification.Pilot: ATP Qualification.Pilot: CFI

Experience. Flight Time. Last 90 Days: 170

Experience.Flight Time.Total: 2400 Experience.Flight Time.Type: 230

ASRS Report: 724269

#### **Events**

Anomaly. Non Adherence: Company Policies

Anomaly.Non Adherence: FAR

Anomaly.Non Adherence : Published Procedure Independent Detector.Other.Flight CrewA : 1

Resolutory Action.Other

#### **Assessments**

Problem Areas : Aircraft

Problem Areas: Flight Crew Human Performance

Problem Areas: Weather

#### Narrative

I WAS AWOKEN FROM A SOUND SLEEP BY DISPATCH AND TOLD THAT I NEEDED TO REPOSITION ASAP TO ZZZ1 FROM ZZZ2 AS WX APPEARED TO BE GOING DOWN AT ZZZ1. GND ICING CONDITIONS WERE PRESENT AT ZZZ2 IN THE FORM OF SNOW (STICKING TO THE ACFT) AND FREEZING FOG. IT TOOK OVER AN HR TO PREPARE THE ACFT FOR FLT WHICH ADDED TO THE URGENCY TO GET OFF THE GND. I HAD TO GET INTO THE NOSE BAGGAGE COMPARTMENT TO ACCESS A BRUSH THAT'S USED IN THE DEICING PROCESS. I DIDN'T DO A WALKAROUND BEFORE STARTING THE ENGS FOR TAXI AND TKOF, WHICH RESULTED IN NOT CATCHING THE NOSE BAGGAGE DOOR STILL UNLATCHED. JUST AFTER TKOF, THE BAGGAGE DOOR CAME OPEN AND I REQUESTED FROM TWR TO COME AROUND AND LAND. I WAS ASKED IF I COULD DO SO IN VFR CONDITIONS TO WHICH I REPLIED IN THE AFFIRMATIVE. (AT THE TIME, I TOOK THIS TO MEAN 'COULD I LAND VISUALLY?' WITHOUT LOSING SIGHT OF THE RWY.) I WAS CLRED TO MAKE L CLOSED TFC AND DID SO WITHOUT INCIDENT. I SUPPOSE I COULD HAVE DECLARED AN EMER IF I'D BEEN DENIED TO MAKE CLOSED TFC DUE TO THE LOW VISIBILITY, BUT THE SITUATION WAS UNDER CTL AND I WAS BUSY ENOUGH KEEPING TRACK OF THE ARPT AND MY AIRSPD, ETC. IT WAS MY BEST JUDGEMENT TO NOT FLY OFF INTO THE CLOUDS AND MAKE AN APCH WITH THE BAGGAGE DOOR OPEN FOR FEAR OF WHAT MIGHT HAPPEN DURING THE FLT WITH THE DOOR OPEN AT THE HIGHER SPDS THAT MIGHT BE OBTAINED DURING MANEUVERING AND THE APCH, NOT TO MENTION THE DURATION OF THE FLT WITH THE DOOR OPEN. BEING IN A HURRY IN ANY AVIATION SITUATION CAN LEAD TO DANGEROUS PERFORMANCE AND CRITICAL ITEMS BEING OVERLOOKED AS WAS THE CASE HERE. A WALK AROUND THE PLANE WOULD HAVE CORRECTED THIS SITUATION. I WAS LUCKY IN THAT THE WX WAS NOT WORSE THAN IT WAS AND THAT THE C402 IS NOT ADVERSELY AFFECTED IN FLT AT RELATIVELY LOW AIRSPDS WITH THE NOSE COMPARTMENT BAGGAGE DOOR OPEN. ON ANOTHER DAY, IN A DIFFERENT PLANE, THINGS MIGHT NOT HAVE TURNED OUT SO WELL.

## **Synopsis**

FOLLOWING A HASTY PREFLT A C402 DEPARTED ONLY TO HAVE THE CARGO DOOR OPEN AFTER TKOF REQUIRING A CLOSE IN RETURN TO LAND.

## Time / Day

Date: 200701 Day: Thu

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 Weather Elements : Ice

Weather Elements: Turbulence

Light: Daylight

## Aircraft: 1

Operator. General Aviation: Personal

Make Model Name: PC-12

Operating Under FAR Part: Part 91

Flight Phase.Landing: Roll

## Component: 1

Aircraft Component: Main Gear Tire

#### Person: 1

Affiliation.Other: Personal

Function.Flight Crew: Single Pilot

Qualification.Pilot: ATP

Experience. Flight Time. Last 90 Days: 200

Experience.Flight Time.Total: 6100 Experience.Flight Time.Type: 4100

ASRS Report: 724077

#### Person: 2

Affiliation.Other: Personal Function.Observation: Observer Function.Observation: Passenger

Qualification.Pilot: ATP Qualification.Pilot: CFI

Qualification.Pilot : Flight Engineer Qualification.Pilot : Multi Engine

Experience.Flight Time.Last 90 Days: 116

Experience.Flight Time.Total: 26100 Experience.Flight Time.Type: 116

ASRS Report: 724313

## Person: 3

### **Events**

Anomaly. Excursion: Runway

Anomaly.Non Adherence: Published Procedure Anomaly.Other Anomaly: Unstabilized Approach Independent Detector.Other.Flight CrewA: 1 Independent Detector.Other.Flight CrewB: 2 Resolutory Action.None Taken: Insufficient Time

Consequence. Other

### **Assessments**

Problem Areas : Airport

Problem Areas: Flight Crew Human Performance

Problem Areas : Weather

## **Narrative**

ENTERED TFC PATTERN TO LKP ON L DOWNWIND RWY 32. WIND AT 1500 FT AGL WAS 55 KTS FROM SW. FLAP SETTING WAS 40 DEGS ON FINAL (FULL FLAPS) DUE TO TERRAIN AND RWY LENGTH. I ELECTED TO STAY ABOUT 10-15 KTS FAST ON FINAL DUE TO WIND GUSTS. LANDED ABOUT 1/2 WAY DOWN RWY (AMPLE ROOM REMAINING). USED REVERSE AND MAX BRAKING AT START OF LNDG. LNDG WAS MADE ON CTRLINE AND SLID ON ICE TO L SIDE OF RWY. STOPPED BRAKING DUE TO SLIDING AND RECOVERED TO CTRLINE AND CONTINUED BRAKING. AGAIN VEERED TO L SIDE OF RWY 32 AND CAME TO STOP ON L SIDE OF RWY FACING L OF RWY HDG. TRIED TO BACK UP USING REVERSE PWR BUT ACFT WOULD NOT MOVE. SHUT DOWN ENG, WENT OUTSIDE AND NOTICED R MAIN TIRE BLOWN. CALLED FOR GND ASSISTANCE AND WAS TOWED OFF RWY.

## **Synopsis**

A PC12 LANDED FAST AND LONG ON AN ICY RWY. DURING LANDING ROLL THE ACFT SLID OFF THE RWY WITH A BLOWN TIRE.

## Time / Day

Date : 200701 Day : Sun

Local Time Of Day: 1201 To 1800

### **Place**

Locale Reference.ATC Facility: CAK.TRACON

State Reference : OH

Altitude.MSL.Single Value: 3000

### **Environment**

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

#### Aircraft: 1

Controlling Facilities.TRACON: CAK.TRACON

Operator.General Aviation: Personal

Make Model Name: PA-28 Cherokee/Archer II/Dakota/Pillan/Warrior

Operating Under FAR Part: Part 91 Flight Phase.Descent: Approach Route In Use.Arrival: On Vectors

#### Person: 1

Affiliation.Other: Personal

Function.Flight Crew: Single Pilot Qualification.Pilot: Instrument Qualification.Pilot: Private

Experience.Flight Time.Last 90 Days: 15 Experience.Flight Time.Total: 500 Experience.Flight Time.Type: 75

ASRS Report: 723957

#### Person: 2

Affiliation.Government : FAA Function.Controller : Approach

#### **Events**

Anomaly. Inflight Encounter: Weather

Anomaly.Non Adherence: FAR

Independent Detector.Other.Flight CrewA: 1

Resolutory Action.Controller: Issued New Clearance

Resolutory Action.Flight Crew: Executed Missed Approach
Resolutory Action.Flight Crew: Landed In Emergency Condition

Resolutory Action. None Taken: Detected After The Fact

#### Assessments

Problem Areas: Flight Crew Human Performance

Problem Areas: Weather

#### **Narrative**

WE WERE RETURNING FROM ZZZ. WE HAD FLOWN DOWN ON AN IFR FLT PLAN AND HAD NOT ENCOUNTERED ANY ICING DESPITE BEING IN THE CLOUDS. WE DID NOT OBTAIN A FULL WX BRIEFING PRIOR TO DEPARTING FOR OUR HOME ARPT. ON THE RETURN FLT, WE BEGAN TO ACCRETE TRACE ICING ON THE WINGS AND WINDSCREEN. WE WERE NOT ABLE TO DSND ANY LOWER AS WE WERE AT THE MINIMUM ALT IN THE AREA. SHORTLY, THE ICE BEGAN TO ENGULF MORE OF THE WINDSCREEN. WE FLEW THE GPS APCH INTO WADSWORTH, BUT DESPITE BREAKING OUT, THE ICE DID NOT SUBLIMATE FROM THE WINDSCREEN. WE HAD THE DEFROSTER ON HIGH, BUT IT WAS SIMPLY NOT PUTTING OUT SUFFICIENT WARMTH TO CAUSE THE ICE TO MELT. WE WENT MISSED, CONTACTED AKRON, AND RECEIVED VECTORS FOR THE ILS. WE FLEW THE ILS TO MINIMUMS AND LANDED BY PEERING OUT THE SIDE WINDOW AND THE BOTTOM CORNER OF THE FRONT OF THE WINDSCREEN. WE SHOULD HAVE OBTAINED A FULL WX BRIEFING BEFORE LEAVING FOR HOME AND VERIFIED THAT THERE WERE NO RPTS OF ICING IN THE AREA. WE SHOULD NOT HAVE ASSUMED THAT THE WX ON THE WAY DOWN WOULD BE THE SAME ON THE WAY BACK. WE ALSO NEED TO HAVE THE DEFROSTER EXAMINED TO MAKE SURE THAT IT DOES NOT NEED REPAIRS.

## **Synopsis**

PA28 PLT ENCOUNTERS ICING CONDITIONS AND HAS DIFFICULTIES LNDG DUE TO ICE ON THE WINDSCREEN.

## Time / Day

Date: 200611 Day: Mon

Local Time Of Day: 1801 To 2400

## **Place**

Locale Reference.Airport: CVG.Airport

State Reference: OH

Altitude.MSL.Single Value: 11000

### **Environment**

Flight Conditions : IMC Weather Elements : Snow

Light : Night

## Aircraft: 1

Controlling Facilities.TRACON: CVG.TRACON
Operator.Common Carrier: Air Carrier

Make Model Name: Regional Jet 200 ER&LR

Operating Under FAR Part: Part 91 Flight Phase.Descent: Approach Route In Use.Arrival.STAR: MOSEY.5

## Component: 1

Aircraft Component: Pneumatic Control Valves

#### Person: 1

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

Experience.Flight Time.Total: 13000 Experience.Flight Time.Type: 5000

ASRS Report: 716534

#### Person: 2

Affiliation.Company: Air Carrier Function.Flight Crew: First Officer Experience.Flight Time.Last 90 Days: 41 Experience.Flight Time.Total: 6900

Experience.Flight Time.Type: 15

ASRS Report: 716532

## Person: 3

Affiliation.Government : FAA Function.Controller : Approach

### **Events**

Anomaly. Aircraft Equipment Problem : Less Severe

Anomaly.Inflight Encounter: Weather Anomaly.Inflight Encounter.Other

Anomaly. Other Anomaly: Speed Deviation

Independent Detector. Aircraft Equipment. Other Aircraft Equipment: EICAS

Warning

Independent Detector.Other.Flight CrewA: 1
Independent Detector.Other.Flight CrewB: 2

Resolutory Action.Flight Crew: Exited Adverse Environment

#### **Assessments**

Problem Areas : Aircraft

Problem Areas: Flight Crew Human Performance

#### **Narrative**

DSNDING INTO CVG ON THE MOSEY FIVE ARR. WE TURNED OFF THE COWL ANTI-ICE WHILE BTWN LAYERS, AND GOT A COWL ANTI-ICE CAUTION MESSAGE. THE QRH CALLED FOR US TO LEAVE ICING CONDITIONS. IN THAT THERE WAS A LAYER OF RAIN/SNOW MIX FROM ABOUT 10500 FT DOWN TO 8000 FT, WE ELECTED TO AVOID ICING IN THE DSCNT BY CTLING TOTAL AIR TEMP WITH AIRSPD, MAINTAINING 300+ KTS UNTIL OUT OF THE PRECIP. WE COORDINATED THIS ACTION WITH ATC. THIS RESULTED IN OUR GETTING HEAD-OF-THE-LINE PRIVILEGES, AS ATC HAD TO BREAK OUT A PLANE OR TWO AHEAD OF US ON THE DOWNWIND. THE QRH PROC FOR THIS FAULT IS INADEQUATE TO THE POINT OF BEING A HAZARD.

## **Synopsis**

CRJ200 FLT CREW HAS AN ANTI-ICING VALVE FAILURE DURING DSCNT INTO CVG.

## Time / Day

Date: 200610 Day: Sun

Local Time Of Day: 1801 To 2400

### **Place**

Locale Reference. Airport: ZZZ. Airport

State Reference : US Altitude.AGL.Single Value : 0

## **Environment**

Weather Elements.Other

Light : Daylight

## Aircraft: 1

Operator.General Aviation: Personal

Make Model Name: Skylane 182/RG Turbo Skylane/RG

Operating Under FAR Part: Part 91

Flight Phase.Landing: Roll

## Person: 1

Affiliation.Other: Personal

Function.Flight Crew: Single Pilot

Qualification.Pilot: Private

Experience.Flight Time.Last 90 Days: 5 Experience.Flight Time.Total: 138 Experience.Flight Time.Type: 8

ASRS Report: 712103

### Person: 2

Function. Observation: Passenger

### **Events**

Anomaly.Excursion: Runway

Anomaly. Ground Encounters. Other

Anomaly. Other Anomaly

Independent Detector.Other.Flight CrewA: 1 Resolutory Action.None Taken: Unable Consequence.Other: Aircraft Damaged

### **Assessments**

Problem Areas : Airport

Problem Areas: Environmental Factor

Problem Areas: Flight Crew Human Performance

### **Narrative**

WENT OUT TO DO SOME SHORT FIELD TKOFS AND LNDGS WITH A COPLT WITH A LOT OF TIME IN MAKE AND MODEL. DID 4 LNDGS ON A GRASS STRIP THAT WAS APPROX 2500 FT. WAS STOPPING LESS THAN 1/2 OF RWY SO WENT TO ANOTHER STRIP THAT HAD A SIMILAR LAYOUT EXCEPT WAS 1400 FT. I FELT THAT TOUCHDOWN WAS EARLY ENOUGH SO STARTED TO APPLY BRAKES AND COULD FEEL TIRES SLIPPING ON GRASS WHICH WAS NORMAL AT FIRST. EXPECTING TIRES TO GET TRACTION AT ANY TIME, I HELD FIRM PRESSURE AND SLIPPED OFF END OF RWY INTO A DITCH BENDING MY PROP AND COLLAPSING NOSE GEAR. UPON REFLECTION AFTERWARDS, I NOTICED 2 DIFFERENCES IN THE STRIPS BESIDES LENGTH. GRASS WAS LONGER AND FIELD WAS SOFTER BECAUSE OF A SOD FIELD THAT WAS BEING IRRIGATED PROBABLY EVERY 2 DAYS ON FIRST STRIP, PROVIDING MUCH MORE DRAG ON PLANE SHORTENING STOPPING DISTANCE. SECOND STRIP HAD JUST BEEN MOWED VERY SHORT AND A HVY DEW HAD SETTLED IN MAKING WHAT SEEMED LIKE ICE. NO DOUBT I SHOULD HAVE DONE A GAR BUT WAITED TOO LONG, EXPECTING TIRES TO GRAB. NO ONE WAS INJURED THANK GOD, BUT I LEARNED THE HARD WAY TO PUT MORE THOUGHT ABOUT GRASS AND RWY CONDITIONS.

## **Synopsis**

A C182 PLT LANDED ON A WET GRASS STRIP AND SLID OFF THE END INTO A DITCH, DAMAGING THE PROP AND NOSE GEAR.

## Time / Day

Date: 200608 Day: Wed

Local Time Of Day: 1201 To 1800

## **Place**

Locale Reference. Airport: SRR. Airport

State Reference: NM

Altitude.MSL.Single Value: 10000

### **Environment**

Flight Conditions: Mixed Weather Elements: Rain

Weather Elements: Thunderstorm

Weather Elements.Other

Light: Daylight

## Aircraft: 1

Controlling Facilities.ARTCC: ZAB.ARTCC Operator.Common Carrier: Charter Make Model Name: King Air 100 A/B Operating Under FAR Part: Part 91

Navigation In Use.ILS.Localizer & Glide Slope: ISRR24

Flight Phase.Descent: Approach

Route In Use. Approach: Instrument Non Precision

#### Person: 1

Affiliation.Company : Charter Function.Flight Crew : Captain

Qualification.Pilot: ATP

Qualification.Pilot : Commercial Qualification.Pilot : Instrument Qualification.Pilot : Multi Engine

Experience. Flight Time. Last 90 Days: 200

Experience.Flight Time.Total: 3800 Experience.Flight Time.Type: 250

ASRS Report: 707774

#### Person: 2

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

Person: 3

Affiliation.Government : FAA Function.Controller : Radar

#### **Events**

Anomaly. Aircraft Equipment Problem: Less Severe

Anomaly.Inflight Encounter: Turbulence Anomaly.Inflight Encounter: Weather

Independent Detector.Other.Flight CrewA: 1

Resolutory Action. None Taken: Detected After The Fact

Consequence.Other: Aircraft Damaged

## **Assessments**

Problem Areas: ATC Human Performance

Problem Areas: Aircraft

Problem Areas: Flight Crew Human Performance

Problem Areas: Weather

#### **Narrative**

ON AUG/THU/06, I FLEW A CHARTER FOR ABC FBO IN THEIR BEECH C90B-24PS WITH FO X. THE RTE WAS FROM AIR PARK TO SAT THEN ALPINE, TX, AND RETURN MDD. THE FLT PLANS WERE FILED THE EVENING BEFORE AND I CHKED WSI WX IN THE MORNING BEFORE THE FLT AND AGAIN AT SAT. AN ADDITIONAL TRIP WAS SCHEDULED FOR LATER IN THE DAY TO RUIDOSO, NM, RETURNING TO MDD. WHEN WE FINISHED THE FIRST TRIP WE REFUELED FOR THE SECOND TRIP. FO ASKED FOR A DEP TIME AND WAS TOLD XA00. AFTER FUELING WE LOCKED THE PLANE AND WENT FOR A BURGER NEARBY. WE RETURNED ABOUT 20 MINS LATER. I STARTED ICING DOWN THE DRINK COOLERS AND DOING THE PREFLT. FO X GOT INVOLVED WITH LOOKING UP THE GND ACFT UNIT AND FILING THE FLT PLANS. THE PAX SHOWED UP EARLY AND I PROCEEDED TO LOAD BAGGAGE AND ASSIST IN BOARDING. FO X TOOK L SEAT THIS LEG AND ON TAXI OUT I ASKED IF HE HAD TIME TO FILE. HE SAID THAT BECAUSE OUR BOSS HAD HIM DOING OTHER THINGS HE HAD FORGOTTEN, SO I CONTACTED MIDLAND CLRNC AND OBTAINED OUR CLRNC AND CODE. WE DEPARTED GPS DIRECT SSR. WE WERE ABOVE THE CLOUDS AND HAD A SMOOTH RIDE. ABOUT 60 MI OUT ZAB ASKED US IF WE HAD THE SIERRA BLANCA WX AND I RESPONDED 'YES 2000 FT SCATTERED, 4000 FT SCATTERED, 7 MI VISIBILITY IN LIGHT RAIN.' A FEW MINS LATER, CTR CLRED US 'DIRECT REYOK 11000 FT.' SHORTLY THEREAFTER, '11000 FT DIRECT REYOK CLRED FOR THE APCH.' WHEN WE WERE JUST INSIDE REYOK WE GOT THE USUAL 'RADAR SVC TERMINATED, CHANGE TO ADVISORY, CANCEL THIS FREQ' CALL. THERE WAS NO MENTION OF SEVERE WX. WE WERE STILL AT 11000 FT AND SAW AN AREA OF MODERATE RAIN JUST S OF THE APCH COURSE THAT SHOWED UP CLRLY ON RADAR. WE CLIPPED THE EDGE OF THE RAIN, WHICH LASTED ABOUT 1 MIN. THERE WAS AN ADDITIONAL AREA OF MODERATE RETURNS AHEAD BUT THEY KEPT GETTING SMALLER AND SMALLER AS WE APCHED AND DSNDED. SINCE THE RETURNS GOT SMALLER WE ASSUMED THEY WERE DISSIPATING. THE CLOUDS WERE NOT DARK, WE WERE IN AND OUT OF IMC AND THE ATIS WAS STILL CALLING FOR LIGHT SHOWERS. I REMEMBER ASKING FO X IF HE WAS COMFORTABLE WITH THE SITUATION AND WE CONTINUED THE APCH. JUST BEFORE HUBOU WE HIT SOME HVY RAIN AND MODERATE TURB. WE WERE APCHING AT 140 KTS AND THE GS WAS JUST STARTING TO MOVE DOWN. THE RAIN ONLY LASTED 1/2 A MIN, BUT WAS VERY HVY. WE BROKE OUT AT 9500 FT AND THE FIELD WAS SPOTTED. I CANCELED OUR IFR FLT PLAN AND RPTED THE BASES AT 9500 FT. WE LANDED, DEPLANED THE PAX AND NOTICED THE HAIL DAMAGE. I CALLED THE OFFICE AND RPTED IT. THE PROB INITIALLY AROSE BECAUSE WE WERE DISTR FROM OBTAINING THE MOST RECENT WX BRIEFING. IT WAS EXACERBATED BY CTR ASKING US IF WE HAD THE WX AT SSR BUT NOT

MENTIONING THE WX ON THE APCH COURSE. THE INTERP OF THE ONBOARD RADAR DISPLAYS WERE INCORRECT. THE REDUCTION IN ECHO SIZE PROBABLY WAS ATTENUATION INSTEAD OF DISSIPATION. WE SHOULDN'T HAVE LET OUR RAMP TASKS OR MGMNT ASSIGNMENTS DETER US FROM GETTING THE MOST CURRENT BRIEFING. ENRTE WE SHOULD HAVE ASKED CTR OR FLT WATCH FOR THE AREA WX INSTEAD OF EXPECTING THEM TO INFORM US. WE SHOULDN'T HAVE DEPENDED ON OUR RADAR AND THE ATIS AS PREDICTORS OF THE PRESENCE OF SEVERE WX. BECAUSE WE DIDN'T HAVE ALL THE PERTINENT INFO ABOUT THE CONDITION IN THE AREA WE DIDN'T GIVE SUFFICIENT THOUGHT TO LNDG AT AN ALTERNATE ARPT.

## **Synopsis**

A BE90 PLT RPTS ENCOUNTERING HVY RAIN AND TURB ON FINAL TO SRR. AFTER LNDG HAIL DAMAGE WAS DISCOVERED.

## Time / Day

Date: 200607 Day: Thu

Local Time Of Day: 1201 To 1800

## **Place**

Locale Reference, Navaid: DAG, VORTAC

State Reference: CA

Altitude.MSL.Bound Lower: 17500 Altitude.MSL.Bound Upper: 20000

## **Environment**

Flight Conditions: Mixed Weather Elements: Ice Weather Elements: Rain

Weather Elements: Thunderstorm Weather Elements: Turbulence Weather Elements: Windshear

Light: Daylight

## Aircraft: 1

Controlling Facilities.TRACON: SCT.TRACON

Operator. General Aviation: Personal Make Model Name: PA-46 Malibu Operating Under FAR Part: Part 91 Flight Phase.Climbout: Initial

Flight Phase.Climbout: Intermediate Altitude

#### Person: 1

Affiliation.Other: Personal

Function.Flight Crew: Single Pilot Qualification.Pilot: Commercial Qualification.Pilot: Instrument Qualification.Pilot: Multi Engine

Experience.Flight Time.Last 90 Days: 70 Experience.Flight Time.Total: 3500 Experience.Flight Time.Type: 2400

ASRS Report: 703793

### Person: 2

Affiliation.Government: FAA Function.Controller: Departure

Person: 3

Affiliation.Government: FAA Function.Controller: Radar

#### **Events**

Anomaly.Inflight Encounter: Turbulence Anomaly.Inflight Encounter: VFR In IMC Anomaly.Inflight Encounter: Weather

Anomaly.Non Adherence: FAR

Independent Detector.Other.Flight CrewA: 1
Resolutory Action.Flight Crew: Became Reoriented

Resolutory Action.Flight Crew: Exited Adverse Environment Consequence.FAA: Reviewed Incident With Flight Crew

#### Assessments

Problem Areas: ATC Human Performance

Problem Areas: Flight Crew Human Performance

Problem Areas: Weather

#### Narrative

DEPARTED MYF SAN DIEGO RWY 28R VFR. REQUEST OF SOCAL FLT FOLLOWING DIRECT CARLSBAD DIRECT DAG. CLB REQUEST TO 17500 FT, HELD FOR 5 MI AT 11500 FT FOR TFC. NOTICE CLOUDS BUILDUP, ASK FOR 17500 FT. TO CLR TOLD TO SQUAWK 1200. CTL TOO BUSY, CALL LATER, 10 MI OR SO CALLING CTR ADVISE I NEED IFR TO CONTINUE. NEEDING TO CLB AND DIVERT COURSE TO STAY CLR. I WAS GIVEN A SQUAWK CODE BUT NO IFR CLRNC. I HAD NO OPTION BUT TO CLB AND STAY BTWN CELLS. CTLR WOULD NOT GIVE ME AN IFR CLRNC OR ALT. INSISTED I MAINTAIN VFR WHICH I COULD NO LONGER DO. CTLR THEN ASKED ME TO DO A 180 DEG TURN (I SHOULD HAVE NOT DONE SO). I RAN RIGHT INTO THE THICK OF IT, ALMOST LOST CTL OF THE ACFT, ICE, TURB, UPDRAFTS, DOWNDRAFTS, ALL THE WHILE ASKING FOR HELP, 'I NEED IFR CLRNC.' SHE REFUSED, 'CAN'T DO.' I HAD TO FLY THE ACFT AND GET OUT OF THAT BAD AREA, USING MY STORM SCOPE AND XM WX DISPLAY. IF SHE HAD ALLOWED ME AN IFR, ON THE HDG I WAS ON BTWN 2 CELLS BEFORE SHE GOT ME TO DO A 180 DEGS, I WOULD HAVE BEEN ALRIGHT THEN DIRECT TO DAG.

## **Synopsis**

PA46 MALIBU PLT ENTERS IMC WHILE FLYING VFR.

## Time / Day

Date: 200607 Day: Sat

#### **Place**

Locale Reference. Airport: ZZZ. Airport

State Reference: US

Altitude. AGL. Single Value: 2500

### **Environment**

Flight Conditions: VMC

Light : Daylight

## Aircraft: 1

Operator.General Aviation: Personal

Make Model Name: Skyhawk 172/Cutlass 172

Operating Under FAR Part: Part 91

Flight Phase.Cruise: Level

## Component: 1

Aircraft Component: Engine

#### Person: 1

Affiliation.Other: Personal

Function.Flight Crew: Single Pilot

Qualification.Pilot: Private

Experience.Flight Time.Last 90 Days: 30

Experience.Flight Time.Total: 300 Experience.Flight Time.Type: 250

ASRS Report: 702139

## **Events**

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

Resolutory Action.Flight Crew: Landed As Precaution

Consequence.Other

#### Assessments

Problem Areas: Aircraft

#### **Narrative**

I WAS COMING BACK DIRECT TO ZZZ. 20 MI NW OF ZZZ I ENCOUNTERED A PROB -- DECREASE OF FPM ENG RUNNING ERRATICALLY -- NOT NORMAL. I STARTED TO LOSE ALT AT THAT TIME. MY DECISION WAS TO FIND A SAFE PLACE TO LAND -- HWY WAS LOOKING VERY SAFE AT MY LOCATION, TFC WAS AT A MINIMUM. I MADE LNDG AND PULLED OFF THE ROAD TO THE MEDIAN. AFTER GETTING BACK

TO ZZZ MY MECH CHKED THE ACFT AND FOUND THAT I HAD EXTRA 8-1/2 GALLONS OF FUEL (AVGAS) WHICH WAS PLENTY TO MAKE THE FLT TO ZZZ, PLUS RESERVE FOR 30 MINS. WE SUSPECT THAT CARB ICE WAS THE CAUSE.

## **Synopsis**

C172 PLT HAS AN ENG MALFUNCTION AND PERFORMS AN OFF-FIELD LNDG.

## Time / Day

Date: 200604 Day: Sat

Local Time Of Day: 1201 To 1800

### **Place**

Locale Reference.Navaid: ZZZ.BCSTN

State Reference : US

Altitude.MSL.Bound Lower: 3500 Altitude.MSL.Bound Upper: 12000

## **Environment**

Flight Conditions: IMC
Weather Elements: Ice
Weather Elements: Rain
Weather Elements: Turbulence

Light: Daylight

## Aircraft: 1

Controlling Facilities.ARTCC: ZZZ.ARTCC Operator.General Aviation: Personal

Make Model Name : Skyhawk 172/Cutlass 172

Operating Under FAR Part: Part 91 Navigation In Use.Other: GPS Flight Phase.Cruise: Level

#### Person: 1

Affiliation.Other: Instructional Function.Instruction: Instructor

Qualification.Pilot: CFI

Qualification.Pilot : Commercial Qualification.Pilot : Instrument Qualification.Pilot : Multi Engine

Experience.Flight Time.Last 90 Days: 92 Experience.Flight Time.Total: 1018 Experience.Flight Time.Type: 432

ASRS Report: 695601

#### Person: 2

Affiliation.Other: Instructional Function.Instruction: Trainee

Person: 3

Affiliation.Government : FAA Function.Controller : Radar

#### **Events**

Anomaly.Inflight Encounter: Turbulence Anomaly.Inflight Encounter: Weather Anomaly.Inflight Encounter.Other

Anomaly. Other Anomaly

Anomaly. Other Spatial Deviation

Independent Detector.Other.Flight CrewA: 1
Resolutory Action.Controller: Provided Flight Assist
Resolutory Action.Flight Crew: Declared Emergency

Resolutory Action Flight Crew: Exited Adverse Environment Resolutory Action Flight Crew: Regained Aircraft Control Consequence FAA: Reviewed Incident With Flight Crew

Consequence.Other: Emotional Trauma

## **Assessments**

Problem Areas : Aircraft

Problem Areas: Environmental Factor

Problem Areas: Flight Crew Human Performance

Problem Areas: Weather

#### Narrative

MY STUDENT WAS FLYING AND WE CLBED THROUGH A FEW CLOUDS, ICE FREE, TO 10000 FT. AS WE WERE CRUISING TOWARD ZZZ WE WERE FLYING OVER WHAT APPEARED TO BE A STRATUS LAYER THAT WAS SLOWLY SLOPING UPWARD WITH CLR SKY ABOVE US. AT ZZZ THE TOPS APPEARED TO BE AROUND 9000 FT AND JUST PAST ZZZ THERE WERE A FEW AREAS IN THE STRATUS LAYER THAT HAD DEVELOPING CLOUDS PUSHING UP THROUGH THE STRATUS TO FORM WHAT LOOKED LIKE THE TOPS OF PUFFY CUMULUS CLOUDS. THE TOPS OF THE CUMULUS WERE HIGHER THAN WE WERE, BUT NOT BY MUCH. THIS MADE SENSE TO ME BECAUSE ZZZ IS OVER A MOUNTAIN RANGE THAT CONNECTS THE VALLEY WE WERE IN TO THE VALLEY WHERE WE WERE HEADING. I BELIEVED THAT THE TOPS OF THESE CLOUDS THAT WE WERE SEEING WERE THE RESULT OF THE AIR BELOW BEING FORCED UP ALONG THIS MOUNTAIN RIDGE. AS WE CROSSED ZZZ. I NOTICED THAT THERE WAS A CLOUD TOP ALONG OUR RTE THAT WAS SLIGHTLY HIGHER THAN WE WERE. JUST PAST THIS CLOUD AND THE FEW OTHER CLOUD TOPS THAT HAD FORMED WAS THE SAME FLAT STRATUS LAYER THAT WE HAD BEEN FLYING OVER PREVIOUSLY WITH NO CLOUDS PUSHING THROUGH. I THOUGHT THIS WOULD BE A GREAT OPPORTUNITY FOR MY STUDENT TO EXPERIENCE FLYING THROUGH A CLOUD AND SEE WHAT IT IS LIKE TO GO FROM VMC INTO IMC. I WANTED MY STUDENT TO EXPERIENCE THE 'WHOOSH' SENSATION AND DISORIENTATION THAT ONE CAN GET WHEN ENTERING A CLOUD AND TO TRUST THE INSTS AND NOT HER FEELINGS. I KNEW THAT THERE WAS A CHANCE THAT WE COULD ENCOUNTER ICE IN THE CLOUD, BUT I KNOW THAT WE WERE JUST AT THE TOP OF THE CLOUD AND WE COULD CLB OUT QUICKLY IF WE DID GET ICING. THE CLOUD WAS NOT VERY LARGE AND I KNEW WE WOULD PUNCH OUT THE OTHER SIDE IN A FEW MINS ANYWAY. I DIDN'T WANT TO ENCOUNTER ICE, BUT I ALSO KNEW THAT IF WE DID, WE COULD GET OUT QUICKLY, SAFELY, AND I COULD DEMONSTRATE TO MY STUDENT WHAT TO DO IF YOU DO ENCOUNTER ICING. AS WE ENTERED THE CLOUD, WE STARTED TO PICK UP TRACE AMOUNTS OF ICE ON THE WINDSCREEN. AS SOON AS I COULD SEE ICE ON THE WINDSCREEN. I CALLED APCH AND REQUESTED AN IMMEDIATE CLB DUE TO ICE AND LET HIM KNOW THAT WE COULD TAKE A HDG CHANGE. EVEN THOUGH IT WAS TRACE TO LIGHT ICE AND I KNEW WE WOULD BE OUT OF THE

CLOUD SOON AT THE CURRENT ALT, I WANTED TO BE OUT OF THE ICE AS QUICKLY AS POSSIBLE AND I WANTED MY STUDENT TO SEE WHAT YOU SHOULD DO AND SAY WHEN YOU ENCOUNTER ICING. WE WERE GIVEN 12000 FT AND SHE STARTED TO CLB. WE PUNCHED OUT THE SIDE OF THE CLOUD WHILE WE WERE STILL CLBING. WE PICKED UP LESS THAN 1/8 INCH OF ICE, BUT ENOUGH ICE THAT YOU COULD SEE IT ON THE WINDSCREEN, STRUTS, AND OTHER VARIOUS PARTS OF THE ACFT. WE WERE OVER A LARGE FLAT STRATUS LAYER THAT STRETCHED AS FAR AS YOU COULD SEE ALL AROUND US WITH NOTHING BUT BLUE SKY AND SUN IN FRONT OF AND ABOVE US. THE CLOUD TOPS LOOKED TO BE AROUND 9000-10000 FT. WE WERE CRUISING DIRECT AND THE LITTLE ICE WE HAD PICKED UP WAS NOT MELTING OR BREAKING OFF. I DIDN'T THINK THE STRATUS LAYER WOULD HAVE THE ICING THREAT THAT THE CUMULUS CLOUD WE ENCOUNTERED EARLIER BY THE MOUNTAIN RANGE HAD BECAUSE I THOUGHT THAT CUMULUS CLOUDS POSSESSED A HIGHER ICING THREAT THAN STRATUS CLOUDS. THE STRATUS LAYER TOP ALONG OUR RTE SLOWLY SLOPED UP OR CLBED UP TO OUR ALT. AS SOON AS WE ENTERED THE STRATUS LAYER, ICE BEGAN BUILDING ON THE WINDSCREEN AT AN INCREDIBLE RATE. I TOLD APCH THAT I NEEDED LOWER IMMEDIATELY DUE TO ICE AND WE GOT 8000 FT. I ASKED FOR LOWER BECAUSE WE COULD NOT CLB MUCH HIGHER IN THE C172 AND THE CLB WOULD BE AT A SLOW RATE BECAUSE OF THE ALT. I ALSO THOUGHT THAT IF I CHANGED MY ALT BY 3000 FT OR MORE, I SHOULD BE OUT OF THE ICING. TURNING AROUND WAS NOT AN OPTION BECAUSE I DIDN'T KNOW IF THE CLOUD TOPS BEHIND US HAD RISEN OR NOT, AND IF THEY HAD, WE WOULD STILL BE IN ICE. A DSCNT, IN MY JUDGEMENT WAS THE BEST OPTION AND WE DSNDED FAIRLY RAPIDLY, AROUND 1500 FPM. THERE WAS A LOT OF ICE ON THE WINDSCREEN AND SOLID CONTINUOUS MODERATE TURB IN THE DSCNT. THIS WAS UNUSUAL BECAUSE WE DIDN'T HAVE ANY TURB BEFORE, AND THIS WAS A STRATUS LAYER. I COULD HEAR THE ICE HITTING THE ACFT AS IT WAS ACCUMULATING. IT SOUNDED LIKE SAND HITTING THE ACFT. I DIDN'T LOOK OUTSIDE THE ACFT AT THIS TIME TO SEE HOW MUCH ICE THERE WAS BECAUSE I WAS ENGROSSED WITH WATCHING THE INSTS AS MY STUDENT WAS DSNDING BECAUSE MY STUDENT WAS FLYING AND THE IMC TURB WAS VERY DISORIENTING. I DID LOOK UP FROM TIME-TO-TIME AT THE WINDSCREEN. PART OF THE WAY DOWN IN THE DSCNT THE ICE HITTING THE ACFT BECAME LIQUID WATER. I HAVE FLOWN IN RAIN BEFORE, BUT NOT LIKE THIS. THERE WAS A LOT OF WATER. I DON'T KNOW IF WE WERE IN FREEZING RAIN, SLD, OR JUST RAIN, BUT WE HIT SOME FORM OF SEVERE ICE. ICE HAD ACCUMULATED AT AN INCREDIBLE RATE. I DON'T KNOW IF IT WAS FROM HAVING SOME ICE ON THE ACFT THAT GAVE THE LIQUID WATER A NUCLEATION SOURCE OR IF IT WAS FROM THE ACFT THAT HAD BEEN SUPER COLD AT THE HIGHER TEMP BUT WE WERE COVERED IN ICE. I DIDN'T REALIZE THIS UNTIL WE TRIED TO LEVEL OFF AT 8000 FT. IT ONLY TOOK US BTWN 2-3 MINS TO MAKE THE DSCNT AND I ASKED FOR LOWER AS SOON AS WE ENTERED THE CLOUD, SO ADD MAYBE 30 SECONDS FOR THE CALL TO THE DSCNT TIME AND THAT IS HOW LONG IT TOOK. IN THAT TIME WE WENT FROM LESS THAN 1/8 INCH OF ICE TO OVER 1 INCH OF CLR ICE CAPPING OVER THE RIME AND MIXED ICE. I SAY I DIDN'T REALIZE IT UNTIL 8000 FT BECAUSE THAT IS WHERE WE TRIED TO LEVEL OFF. FROM HERE I DON'T REMEMBER EXACTLY THE ORDER OF THE FACTS OF HOW THEY HAPPENED OR WHAT WAS SAID BTWN ME AND CTR, BUT THIS IS MY BEST MEMORY OF WHAT HAPPENED. AS WE GOT DOWN TO 8000 FT MSL, I NOTICED THAT THE TEMP WAS AT 0 DEGS C. IT LOOKED LIKE RAIN WAS HITTING US BECAUSE WATER WAS RUNNING OVER THE ICED-OVER WINDSCREEN. I NOTICED THAT WE WERE LOSING AIRSPD WITH FULL PWR AFTER THE LEVELOFF. I TOLD CTR THAT WE

NEEDED TO GET LOWER, TO A WARMER ALT FOR ICE. HE TOLD US THAT 7000 FT WAS HIS MVA. WE DSNDED FAST TO 7000 FT. AS WE TRIED TO LEVEL OFF, THE ACFT WAS LOSING AIRSPD. THE TEMP WAS STILL SHOWING 0 DEGS C AT 7000 FT. I TOLD CTR THAT I THOUGHT WE WERE GOING TO HAVE TO DECLARE AN EMER. I DON'T THINK I EVER ACTUALLY DECLARED AN EMER BY SAYING 'I'M DECLARING AN EMER, BUT I THINK THAT CTR TOOK CARE OF THAT FOR ME. (AFTER FIRST WRITING THIS RPT MY STUDENT TOLD ME THAT AFTER TELLING CTR THAT I THOUGHT WE WERE GOING TO HAVE TO DECLARE AN EMER THAT THEY ASKED ME IF WE WERE DECLARING AN EMER AND I SAID YES). CTR GAVE US A VECTOR FOR A LOWER ALT. AS WE TURNED TO THE HDG, MY STUDENT TOLD ME THAT THE CTLS FELT FUNNY. I TOOK FULL CTL OF THE ACFT AND NOTICED THE CTLS WERE VERY SLUGGISH AND NOT VERY RESPONSIVE. WE HAD FULL PWR AND THE ACFT WAS STILL LOSING AIRSPD. AT THIS POINT, THE WHOLE ACFT BEGAN TO VIOLENTLY BUFFET. I DON'T KNOW IF IT WAS FROM TURB CAUSED BY AIR FLOWING OVER THE ICE HORNS OR IF THE PROP HAD THROWN ICE FROM 1 BLADE AND NOT THE OTHER, OR IF THE ACFT WAS ABOUT TO STALL. ALL THAT MATTERED TO ME WAS NOT STALLING, SO I PUSHED THE NOSE OVER. THE BUFFET STOPPED. I KNEW WE WERE OVER A NARROW VALLEY BTWN MOUNTAIN RANGES FROM THE GPS. I ASKED CTR HOW SOON WE COULD GET LOWER AND HE TOLD ME 7 MI. I TOLD HIM WE COULD NOT MAINTAIN ALT AND THAT WE WERE DSNDING. HE TOLD ME WE WERE BELOW HIS MVA AND ASKED WHAT ALT WE COULD HOLD. I DIDN'T KNOW HOW TO ANSWER THE QUESTION. I TRIED TO LEVEL OFF AT 6500 FT AND SAID 6500 FT. WE GOT A NASTY BUFFET AGAIN FOLLOWED BY ME PUSHING THE NOSE OVER AGAIN. THIS WENT ON FOR A WHILE. I WOULD TRY AND LEVEL OFF AND TELL HIM WE WERE TRYING TO MAINTAIN ALT. WE WOULD HOLD ALT FOR A WHILE UNTIL THE AIRSPD GOT BTWN 80-70 KTS, A NASTY BUFFET, AND ME PUSHING THE NOSE OVER. EVERY NOW AND THEN THE CTLR WOULD ASK ME A QUESTION AND I WOULD ANSWER. I DON'T REMEMBER MUCH OF WHAT WAS SAID. I DO REMEMBER HIM ASKING ME THE QUESTION OF HOW MANY SOULS WERE ON BOARD, HOW MUCH FUEL, AND THE TYPE OF ICE. AT SOME POINT I LOOKED BACK AT THE ELT ANTENNA AND SAW THAT IT HAD OVER 1 INCH OF ICE COVERING IT. THE STRUT OUT MY SIDE WINDOW HAD WATER THAT HAD ROLLED BACK AND FROZEN TO THE ACFT IN THICK LINES OF ICE AND LARGE FROZEN DROPS AT THE ENDS OF THEM. THE LEADING EDGE OF THE STRUT HAD LARGE HORNS PROTRUDING AT A 45 DEG ANGLE OUT AND UP THAT WERE OVER 1 INCH LONG. ALL OF THIS ICE HAD OCCURRED IN 3 MINS TIME. I COULD NOT SEE THE LEADING EDGE OF THE WING, BUT I COULD SEE CLR ICE THAT HAD FLOWED BACK AND FROZEN UNDER THE WING. SOMEWHERE BTWN 4500-5000 FT, I COULD SEE THE GND UNDER THE ACFT, BUT WE WERE STILL IN THE CLOUDS. WE BROKE OUT AT SOME POINT AND WE COULD FINALLY HOLD ALT AROUND 3800 FT. I TOLD CTR THAT WE WERE VMC AND THAT WE COULD REMAIN VFR. WE STILL HAD FULL PWR, SLOW AIRSPD, AND A LOT OF ICE, BUT WE COULD HOLD ALT. THE TEMP WAS 6 DEGS C. IT TOOK A WHILE AT THAT ALT FOR THE ICE TO START TO COME OFF, MAYBE AS MUCH AS 10 MINS. AFTER IT STARTED COMING OFF, IT ALL CAME OFF QUICKLY. WHEN WE GOT THE BUFFET EARLIER IN THE FLT, IT WAS SO HARD THAT I WAS SURPRISED. THAT IT DIDN'T KNOCK OFF SOME OF ICE. FROM HERE WE WENT DIRECT TO ZZZ2 FOR LNG, BUT AS WE GOT CLOSER, WE REALIZED THAT WE COULD MAKE IT TO ZZZ3 VFR, SO WE DID.

## **Synopsis**

C172 FLT INSTRUCTOR AND STUDENT ENCOUNTER SEVERE ICING CONDITIONS. UNABLE TO MAINTAIN ALT, DECLARE EMER AND RECEIVE VECTORS TO LOWER ALT.

# Time / Day

Date: 200604 Day: Fri

Local Time Of Day: 1801 To 2400

## **Place**

Locale Reference. Airport: ZZZ. Airport

State Reference: US

Altitude.MSL.Single Value: 15000

### **Environment**

Flight Conditions : IMC Weather Elements : Snow

Light: Night

## Aircraft: 1

Controlling Facilities.ARTCC: ZOA.ARTCC Operator.General Aviation: Personal Make Model Name: M-20 E Super 21 Operating Under FAR Part: Part 91

Flight Phase.Cruise: Level

## Component: 1

Aircraft Component: Carburetor Heat Control

### Person: 1

Affiliation.Other: Personal

Function.Flight Crew: Single Pilot Qualification.Pilot: Instrument Qualification.Pilot: Private

Experience.Flight Time.Last 90 Days: 70 Experience.Flight Time.Total: 1000 Experience.Flight Time.Type: 800

ASRS Report: 695306

### Person: 2

Affiliation.Government: FAA Function.Controller: Radar

## **Events**

Anomaly. Aircraft Equipment Problem: Critical

Anomaly. Other Anomaly

Anomaly. Other Spatial Deviation

Independent Detector. Aircraft Equipment. Other Aircraft Equipment: Eng Tach -

RPM Ind.

Independent Detector.Other.Flight CrewA: 1

Resolutory Action.Aircraft: Equipment Problem Dissipated Resolutory Action.Flight Crew: Regained Aircraft Control

Resolutory Action. Flight Crew: Took Precautionary Avoidance Action

Consequence.Other

### **Assessments**

Problem Areas : Aircraft

Problem Areas: Environmental Factor

Problem Areas: Weather

### **Narrative**

INFLT AT 15000 FT, SNOW GOT INTO INTAKE AND IMPACT TUBES OF FUEL SERVO DUE TO GASKET DETERIORATION AROUND RAM-AIR INLET. DID NOT NOTICE ON PREFLT. LOSS OF FULL PWR AND HAD TO DSND. ENG REGAINED PWR UPON 3000 FT DSCNT TO 12000 FT. COULD HAVE DONE BETTER PREFLT BUT VERY DIFFICULT TO ASSESS RAM AIR DOOR GASKET. COULD HAVE NOT FLOWN IN SNOW BUT NO ICING FORECAST AND NO ICING OCCURRED INFLT. POH SAYS RAM AIR DOOR MUST BE CLOSED IN SNOW AND CLOUDS (VISIBLE MOISTURE).

## **Synopsis**

AN M20E IN CRUISE AT 15000 FT INCURRED LOSS OF PWR DUE TO SNOW CLOGGING INTAKE AND IMPACT TUBES OF THE FUEL SERVO. DSCNT TO 12000 FT REGAINED PWR.

# Time / Day

Date: 200603 Day: Wed

Local Time Of Day: 1801 To 2400

### **Place**

Locale Reference.ATC Facility: ZFW.ARTCC

State Reference: TX

Altitude.MSL.Single Value: 13000

### **Environment**

Flight Conditions: IMC Weather Elements: Snow

Light : Night

## Aircraft: 1

Controlling Facilities.ARTCC: ZFW.ARTCC Operator.General Aviation: Personal Make Model Name: M-20 F Executive 21 Operating Under FAR Part: Part 91

Flight Phase.Cruise: Level

## Component: 1

Aircraft Component: Engine

### Person: 1

Affiliation.Other: Personal

Function.Flight Crew: Single Pilot

Function.Oversight : PIC Qualification.Pilot : Instrument Qualification.Pilot : Private

Experience.Flight Time.Last 90 Days: 74 Experience.Flight Time.Total: 5505 Experience.Flight Time.Type: 5255

ASRS Report: 692024

### Person: 2

Affiliation.Government: FAA

Function.Other Personnel: FSS Specialist

## Person: 3

Affiliation.Government : FAA Function.Controller : Radar

Person: 4

Affiliation.Other: Contracted Service Function.Maintenance: Technician

### **Events**

Anomaly, Aircraft Equipment Problem: Critical

Anomaly. Inflight Encounter: Weather

Anomaly. Other Anomaly. Other

Independent Detector.Other.Flight CrewA: 1

Resolutory Action.Flight Crew: Diverted To Another Airport Resolutory Action.Flight Crew: Landed In Emergency Condition Resolutory Action.Flight Crew: Overcame Equipment Problem

#### **Assessments**

Problem Areas: Aircraft

Problem Areas: Flight Crew Human Performance

Problem Areas: Weather

#### **Narrative**

I DEPARTED LOS ALAMOS, NM, DESTINED FOR SHAWNEE, OK. I CALLED FSS TO RECEIVE A SECOND BRIEFING 1 HR BEFORE FLT TIME. THE INFO WAS GIVEN THAT THE TOPS OF THE CEILINGS WERE TO BE 10K TO 24K DEPENDING UPON LOCATIONS BTWN MY DEP POINT AND DEST. AFTER REQUESTING OPTIONS FROM FSS, IT WAS SUGGESTED THAT I CONSIDER FLYING TO ROSWELL, NM, THEN TO WICHITA FALLS AND THEN TO SHAWNEE, OK, AS THIS RTE MAY ALLOW ME TO KEEP ABOVE THE CLOUD LAYERS. I OPENED MY IFR FLT PLAN OVER SANTA FE IN VFR CONDITIONS 1 HR BEFORE DARK AND CLBED TO AN ALT WHICH WAS ABOVE THE CLOUDS. I REQUESTED AND STAYED WITH 11K BLOCKED TO 13K. ENRTE TO ROSWELL, I NOTICED THE CLOUDS WERE WELL BELOW ME AND SO I REQUESTED DIRECT TO LUBBOCK, TX. I WAS CONFIDENT THIS WOULD KEEP ME ABOVE THE CLOUDS AND AWAY FROM A SNOW STORM WHICH WAS TO BE NEAR AND N OF AMARILLO. THE CTLR ASKED WHY NOT DIRECTS SNL? I TOLD HIM I WANTED TO STAY S OF THE WX. HE STATED HE SAW NO MOISTURE. SO I THEN REQUESTED DIRECT SHAWNEE. NIGHTTIME FELL JUST BEFORE AMA. THE WERE REPORTING SNOW. AS I PROCEEDED ABOUT 40 MI E OF AMARILLO, I ENCOUNTERED A FOG-LIKE REFLECTION IN MY WINGTIPS, SO I CLBED TO 13000 FT. TEMP THERE WAS 2 DEGS F. EVERY 10 MINS I OBSERVED FOR ICE ON MY WINDSCREEN AND WING SURFACES. I SAW NO ICE THE ENTIRE FLT. I ESTIMATED I MUST BE BTWN LAYERS WITH LIGHT SNOW ABOVE ME WHICH WAS UNABLE TO FREEZE ON THE WINGS OR AIRFRAME. I CALLED CTR AND ASKED ABOUT MOISTURE AND WX APCHING OKLAHOMA CITY. HE SAID HE SAW NO MOISTURE WHERE I WAS AND THAT HIS WX WAS SOME 50 MINS OLD. I NOTICED MY EGT WAS BEGINNING TO INCREASE AND MY CYLINDER HEAD TEMP WAS DOWN 25-50 DEGS. I ENRICHED MY FUEL MIXTURE BUT THE TEMP CONTINUED TO INCREASE. THE EGT BEGAN TO FLASH INDICATING EXTREME LEANNESS. I THOUGHT I MIGHT HAVE CONTAMINATED FUEL AND SO I INFORMED ZFW I WAS EXPERIENCING SERIOUS TROUBLE. I REQUESTED IMMEDIATE DSCNT AND INFORMED THEM MY ENG WAS BEGINNING TO RUN ROUGH. I INFORMED CTR IT APPEARED I MAY BE ABOUT TO GO DEAD STICK. CTR SUGGESTED HINTON, OKLAHOMA, 208, AS THE NEAREST ARPT FOR ME. I USED THE GPS TO FLY DIRECT. BASED ON THE ENG ALTERNATOR TONES AND THE LIGHT DIMMING, I SUGGEST MY ENG MY HAVE BEEN NEAR A FULL STALL AS MANY AS 3 TIMES DURING MY DSCNT FROM 13K TO 4K. I WAS CLRED FOR 6K AND THEN 4K. ONCE OVER THE ARPT, I REMEMBER BEING ABOVE 3500 FT BUT

NOW WITH FULL PWR APPEARING TO HAVE BEEN RESTORED. I REMAINED AFRAID TO PULL THE PWR BACK FOR FEAR OF LOSING ENERGY THE ENTIRE DSCNT. AT SOME POINT GREATER THAN 4K I REMEMBER CTR SUGGESTING THAT I TURN THE LIGHTS ON AT THE ARPT AND ASKING OTHER PLTS TO ASSIST WITH LIGHT ACTIVATION. I WAS TOO BUSY CTLING THE ACFT TO RESPOND TO CTR OTHER THAN TO SAY THAT I REMEMBER THIS ARPT LEAVES THEIR LIGHTS ON ALL NIGHT. I MADE 3 APCHS TO THE ARPT BECAUSE I WAS UNABLE TO REDUCE MY AIRSPD SUFFICIENT TO LOWER GEAR OR FLAPS OR ACHIEVE LNDG SPDS. AFTER THE SECOND GAR, I WAS CONFIDENT THE ENG WAS OPERATING NORMALLY AS THE EGT AND CHT HAD RETURNED TO MORE NORMAL OPS. THE CEILING APPEARED TO BE ABOUT 2700 FT MSL WHEN I SAW GND. I LANDED NORMALLY WITHOUT INCIDENT OR ACCIDENT. NO ICE ON WINDSCREEN. SNOW WAS SEEN IN THE LNDG LIGHTS. RWY APPEARED BLACK. THIS WAS A REPEAT OF A SIMILAR EVENT. 6 YRS EARLIER WHICH I MISTAKENLY CONTRIBUTED TO POSSIBLE WATER IN THE GAS LINE. THE FOLLOWING DAY, I CALLED MY MECH TO ASK ABOUT THE CAUSES. HE INFORMED ME OF THE POSSIBILITIES OF MOISTURE ENTERING THE ENG PAST THE AIR INTAKE FILTER AND THE BOOST AIR INTAKE DOOR NEAR THE LNDG LIGHT. THIS MOISTURE ENCOUNTERED IN 2 DEGS TEMPS MIGHT CREATE THE PROBS I ENCOUNTERED. HE SUGGESTED AVOIDING MOISTURE OF THE NATURE I ENCOUNTERED FOR THE MAKE AND MODEL I OWN WHEN UNDER 32 DEGS. I DID NOT REALIZE THAT MOISTURE COULD FREEZE INSIDE THE ENG INTAKE AREA AND WILL AVOID FLYING INTO MOISTURE OF ANY KIND BELOW FREEZING. I WAS EXPECTING TO BE ABOVE THE CLOUD LAYER BASED ON MY WX BRIEFINGS AND SHOULD HAVE TURNED AROUND WHEN I SAW SNOW IN MY LNDG LIGHTS NEAR AMA. I WAS UNAWARE THAT SNOW STORM TOPS COULD EXCEED 12000 FT AGL.

## **Synopsis**

INTREPID PLT OF M20P ON A LONG IFR XCOUNTRY ENCOUNTERS FREEZING MOISTURE WHICH CAUSES A PARTIAL LOSS OF PWR AND A DIVERSION TO A SAFE LNDG.

# Time / Day

Date: 200603 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

Weather Elements: Turbulence Weather Elements: Windshear

Light: Daylight

### Aircraft: 1

Controlling Facilities. Tower: ZZZ. Tower Operator. General Aviation: Corporate Make Model Name: Falcon 900

Make Model Name: Falcon 900 Operating Under FAR Part: Part 91

Flight Phase.Landing: Roll

## Component: 1

Aircraft Component: Brake System

#### Person: 1

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

Qualification.Pilot: ATP Qualification.Pilot: CFI

Experience.Flight Time.Last 90 Days: 100

Experience.Flight Time.Total: 6500 Experience.Flight Time.Type: 1200

ASRS Report: 689501

### Person: 2

Affiliation.Company: Corporate 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: 100

Experience.Flight Time.Total: 11000

Experience.Flight Time.Type: 1500

ASRS Report: 689404

Person: 3

Affiliation.Government : FAA Function.Controller : Local

#### **Events**

Anomaly. Aircraft Equipment Problem: Critical

Anomaly. Excursion: Runway

Anomaly.Other Anomaly: Unstabilized Approach Independent Detector.Other.Flight CrewA: 1 Independent Detector.Other.Flight CrewB: 2 Resolutory Action.None Taken: Unable Consequence.Other: Aircraft Damaged

### **Assessments**

Problem Areas : Aircraft Problem Areas : Airport

Problem Areas: Flight Crew Human Performance

Problem Areas: Weather

### **Narrative**

ACCORDING TO THE ATIS WE RECEIVED ENRTE, WE WERE EXPECTING TO LAND ON RWY 1. THE WX WAS GOOD VFR, HOWEVER, THE WINDS WERE GUSTY, BUT NOT OUTSIDE OF OUR NORMAL PARAMETERS. THE ATIS RPTED THE WINDS AT 320 DEGS AT 20 KTS GUSTING TO 25 KTS. THE TEMP WAS RPTED AS 0 DEGS C. LATER IN OUR FLT, WE WERE TOLD BY ATC THAT WE WERE TO EXPECT RWY 6 DUE TO RWY 1 NOW BEING CLOSED BECAUSE OF A DISABLED ACFT (BLOWN TIRE). WE ASKED WHAT THE BRAKING CONDITIONS WERE ON THAT RWY AND WERE TOLD A FEW MINS LATER BY ATC THAT BRAKING CONDITIONS WERE 'GOOD.' WHEN WE CONTACTED THE TWR WHILE ON THE ILS APCH WE WERE CLRED TO LAND ON RWY 6 AND TOLD THAT THE WINDS WERE NOT 290 DEGS AT 20 KTS GUSTING TO 25 KTS. SINCE THE WINDS HAD BECOME MORE OF A TAILWIND AT THIS POINT, WE ASKED IF WE COULD LAND ON THE OPPOSITE RWY, RWY 24, IN ORDER TO LAND WITH A HEADWIND COMPONENT WHICH WOULD REDUCE OUR LNDG DISTANCE. A FEW MOMENTS LATER, WE WERE TOLD TO FLY A L DOWNWIND PATTERN TO RWY 24 AND WE WERE THEN CLRED FOR A VISUAL APCH TO THE RWY. WHILE ON THE DOWNWIND LEG OF OUR VISUAL APCH TO RWY 24, WE WERE CLRED FOR LNDG AND TOLD THE WINDS WERE NOW RPTED AT 320 DEGS AT 10 KTS. WHILE ON FINAL APCH TO THE RWY, WE RECEIVED 1 FINAL WIND RPT FROM THE TWR WHICH WAS 290 DEGS AT 15 KTS GUSTING TO 20 KTS. THROUGHOUT THE APCH WE MAINTAINED NORMAL PROCS. THE ACFT WAS WITHIN NORMAL WT AND BAL LIMITATIONS. OUR CALCULATED LNDG SPD WITH FULL FLAPS WAS 120 KTS AND A LNDG DISTANCE OF APPROX 2760 FT FOR LNDG ON RWY 24 WHICH WAS 6013 FT. WE LANDED AT APPROX XA15. TOUCHDOWN ON THE RWY WAS IN A NORMAL LNDG AREA WHICH PROVIDED US WITH PLENTY OF DISTANCE TO STOP THE ACFT UNDER THE EXPECTED CONDITIONS. UPON TOUCHDOWN, I APPLIED BRAKES AND THRUST REVERSERS. DURING THE ROLLOUT, I REALIZED THAT WE WERE NOT ACHIEVING THE NORMAL DECELERATION THAT THE FALCON 900EX NORMALLY PROVIDES. IT FELT AS IF WE WERE SKIDDING ON AN ICY SURFACE OR HAD LIMITED BRAKING CAPABILITY.

ONCE I REALIZED WE WERE GOING TO BE UNABLE TO STOP BEFORE THE END OF THE RWY, I INFORMED THE OTHER PLT. I CONTINUED TO APPLY MAX BRAKE PRESSURE UNTIL THE ACFT STOPPED. I FOCUSED MY ATTN ON MAINTAINING CTL OF THE ACFT WHILE EXITING THE RWY AND ATTEMPTING TO MINIMIZE DAMAGE TO THE ACFT AND IMPROVING OUR CHANCES FOR SAFETY. WE MAINTAINED CTRLINE OF THE RWY UNTIL THE VERY END WHERE I AIMED TO MISS THE RWY END LIGHTS. NO LIGHTS WERE STRUCK. I THEN VEERED SLIGHTLY MORE TO THE R IN ORDER TO AVOID STRIKING THE APCH LIGHTING SYS FOR RWY 6. THE ACFT THEN CAME TO AN ABRUPT STOP IN THE MUD. AFTER WE STOPPED, I SHUT DOWN THE ENGS AND EVACUATED THE ACFT WITH THE PAX AND DIRECTED HER AWAY FROM THE ACFT IN THE EVENT OF A POST ACCIDENT FIRE. THE OTHER PLT REMAINED WITH THE ACFT AND PERFORMED THE EMER PROCS AND FOLLOWED BEHIND US VERY QUICKLY. AT THIS POINT, IT IS HARD TO SAY WHAT MAY HAVE CAUSED THIS INCIDENT. THERE IS A DEFINITE POTENTIAL OF A MECHANICAL FAILURE. ALSO, SINCE THE TEMP WAS EXACTLY 0 DEGS C, THE POSSIBILITY EXISTS THAT ANY MOISTURE ON THE RWY SURFACE MAY HAVE RECENTLY BECOME FROZEN. IN ADDITION, I DID NOT FEEL IT WAS APPROPRIATE FOR THE TWR TO ASSIGN US A RWY TO LAND ON WHERE WE HAD A GUSTY TAILWIND. THIS REQUIRED US TO MAKE A QUICK DECISION TO REQUEST A MORE APPROPRIATE RWY.

## **Synopsis**

F900 ROLLS OFF END OF RWY AFTER LNDG.

# Time / Day

Date: 200603 Day : Fri

Local Time Of Day: 0001 To 0600

## **Place**

Locale Reference.Airport: EWR.Airport

State Reference: NJ

Altitude.AGL.Single Value: 0

### **Environment**

Flight Conditions: VMC Weather Elements: Ice Weather Elements: Snow

Light: Night

## Aircraft: 1

Controlling Facilities. Tower: EWR. Tower Operator. General Aviation: Corporate Make Model Name: Caravan 1 208A Operating Under FAR Part: Part 91

Flight Phase.Ground: Taxi

#### Person: 1

Affiliation.Company: Corporate Function.Flight Crew: Captain

Function.Oversight: PIC

Qualification.Pilot: Commercial Qualification.Pilot: Instrument Qualification.Pilot: Multi Engine

Experience. Flight Time. Last 90 Days: 144

Experience.Flight Time.Total: 2205 Experience.Flight Time.Type: 200

ASRS Report: 689182

### Person: 2

Affiliation.Company: Air Carrier Function.Oversight: Supervisor

### Person: 3

Affiliation.Company: Air Carrier Function.Maintenance: Technician

### **Events**

Anomaly. Aircraft Equipment Problem: Critical

Anomaly. Ground Encounters: FOD

Anomaly. Ground Encounters. Other Anomaly. Other Anomaly. Other

Independent Detector.Other.Flight CrewA: 1

Resolutory Action.None Taken: Detected After The Fact

Consequence.Other: Aircraft Damaged

Consequence.Other

## **Assessments**

Problem Areas : Airport

Problem Areas: Environmental Factor

Problem Areas: Weather

### **Narrative**

AS I WAS TAXIING TO RWY 4L ON TXWY PD IN EWR, THE TXWY WAS OBSCURED BY ICE AND SNOW AND I COULDN'T SEE THE TXWY LINES OR LIGHTS. AS I WAS TAKING THE RWY FOR TKOF, I FELT A BUMP AS I PASSED OVER A PILE OF SNOW AND ICE. I DID NOT THINK MUCH OF IT BECAUSE I WAS IN A HURRY TO GET THE FREIGHT TO ZZZ AND I WAS HITTING ALL KINDS OF BUMPS AS I TAXIED OVER THE ICE AND SNOW. I TOOK OFF AND EVERYTHING SEEMED FINE THE ENTIRE FLT TO ZZZ. HOWEVER, WHEN I GOT TO ZZZ AND DID THE POSTFLT INSPECTION, I WAS SHOCKED WHEN I NOTICED THE PROP HAD NICKS IN IT. APPARENTLY THE PROP HAD HIT THE PILE OF SNOW AND ICE AND I HAD NO IDEA IT HAD HAPPENED. I IMMEDIATELY CALLED THE COMPANY AND THEY SENT OUT A MECH WHO GNDED THE AIRPLANE. I MUST ALSO NOTE THAT I WAS TAXIING AT A SPD LESS THAN 10 KTS (A PERSONAL RULE OF MINE ON AN ICY SURFACE). I THINK THIS UNFORTUNATE TURN OF EVENTS COULD HAVE BEEN AVOIDED IF I HAD BEEN MORE WORRIED ABOUT DODGING SNOW AND ICE PILES ON THE TXWY INSTEAD OF WORRYING ABOUT GETTING THE FREIGHT OUT IN A TIMELY MANNER. I ALSO THINK IF THE TXWYS IN EWR HAD THE BLUE LIGHTS AROUND THE EDGES IT WOULD INCREASE SITUATIONAL AWARENESS ON THE GND AT THAT ARPT.

## **Synopsis**

DURING A POSTFLT INSPECTION A C208 PLT FOUND PROP DAMAGE RESULTING FROM CONTACT WITH SNOW AND ICE DRIFTS DURING TAXI FOR TKOF AT EWR.

# Time / Day

Date : 200602 Day : Sun

Local Time Of Day: 1201 To 1800

### **Place**

Locale Reference.Airport: FVE.Airport

State Reference : ME Altitude.AGL.Single Value : 0

### **Environment**

Flight Conditions: VMC
Weather Elements: Snow
Weather Elements: Turbulence

Light: Daylight

## Aircraft: 1

Operator.General Aviation: Personal Make Model Name: Small Transport Operating Under FAR Part: Part 91

Flight Phase.Landing: Roll

### Person: 1

Affiliation.Other: Personal

Function.Flight Crew: Single Pilot

Qualification.Pilot : ATP Qualification.Pilot : CFI

Qualification.Pilot: Instrument Qualification.Pilot: Multi Engine

Experience.Flight Time.Last 90 Days: 63 Experience.Flight Time.Total: 6342 Experience.Flight Time.Type: 62

ASRS Report: 689860

### **Events**

Anomaly. Excursion: Runway

Independent Detector.Other.Flight CrewA: 1 Resolutory Action.None Taken: Anomaly Accepted

Consequence.Other: Aircraft Damaged

### **Assessments**

Problem Areas: Environmental Factor

Problem Areas: Flight Crew Human Performance

Problem Areas: Weather

### **Narrative**

AT THE OUTSET OF AN UNEVENTFUL 3 HR IFR/VMC FLT FROM IAD, I ACQUIRED THE FVE ARPT VISUALLY APPROX 15 MI OUT AND CANCELED IFR TO SWITCH TO UNICOM. I CONTINUED ON THE GPS RWY 32 APCH PATH TO GET ESTABLISHED ON A 10 MI FINAL. LAST ASOS WAS: 'WIND 340 DEGS, 18 KTS GUSTING TO 30 KTS, FEW 3500 FT, CEILING 4300 FT BROKEN, -16 DEGS/-24 DEGS, ALTIMETER 29.61 INCHES.' APCH WAS CONDUCTED WITH 20 DEG FLAPS AND SLIGHTLY HIGHER THAN NORMAL APCH SPD (95 KIAS) ON ACCOUNT OF THE LIGHT TURB AND GUSTS. TOUCHDOWN WAS SMOOTH IN A R XWIND. A SECOND OR TWO AFTER NOSEWHEEL TOUCHDOWN, THE AIRPLANE STARTED WXVANING TO THE R. I TRIED TO CORRECT WITH RUDDER AND AILERONS TO NO AVAIL AS R WHEEL WAS ON SNOWY PORTION OF RWY (WITH FRICTION) AND L WHEEL WAS ON WHAT APPEARED TO BE DRY PAVEMENT BUT TURNED OUT TO BE ICE. THE AIRPLANE EXITED THE SIDE OF THE RWY ONTO A SNOWY SURFACE (MISSING RWY LIGHTS) AND STOPPED IN APPROX 300 FT. VISIBLE DAMAGE: BENT PROP AS IT HIT A LOW SNOW DRAFT, AND DAMAGED MAIN LNDG GEAR DOORS DUE TO PLOWING THROUGH SNOW. AIRPLANE STOPPED 150 DEGS FROM THE DIRECTION OF LNDG. NO INJURIES OR VISIBLE STRUCTURAL AIRFRAME DAMAGE. COMBINATION OF WIND GUST FROM THE R AFTER TOUCHDOWN, ICE ON THE CTR PORTION OF THE RWY AND SNOW ON THE SIDE WERE INSTRUMENTAL IN THIS LOSS OF CTL INCIDENT.

## **Synopsis**

SMA UNCTLABLY DEPARTS RWY AT FVE.

# Time / Day

Date: 200602 Day: Mon

Local Time Of Day: 0601 To 1200

### **Place**

Locale Reference. Airport: ID69. Airport

State Reference: ID

Altitude.MSL.Single Value: 8500

### **Environment**

Flight Conditions: VMC

Light: Daylight

## Aircraft: 1

Operator.General Aviation: Personal

Make Model Name: Small Aircraft, High Wing, 1 Eng, Fixed Gear

Operating Under FAR Part: Part 91

## Person: 1

Affiliation.Other: Personal

Function.Flight Crew: Single Pilot

Qualification.Pilot: ATP

Experience. Flight Time. Last 90 Days: 100

Experience.Flight Time.Total: 1900 Experience.Flight Time.Type: 80

ASRS Report: 688890

### **Events**

Anomaly.Inflight Encounter: VFR In IMC Anomaly.Inflight Encounter: Weather Anomaly.Inflight Encounter.Other

Anomaly.Non Adherence : FAR

Independent Detector.Other.Flight CrewA: 1

Resolutory Action. Other

### **Assessments**

Problem Areas : Environmental Factor

Problem Areas: Flight Crew Human Performance

Problem Areas: Weather

#### **Narrative**

I RECEIVED A WX BRIEFING APPROX 1 HR BEFORE THE FLT. I UPDATED WITH WSI APPROX 1/2 HR BEFORE THE FLT. WX REMAINED UNCHANGED BTWN WX BRIEFINGS. WX APPEARED VFR. AT SUMMIT OF FRAIL CREEK PASS, I WAS FOLLOWING THE ROAD THAT GOES OVER THE PASS WHEN I HAD VISUAL

CONTACT WITH THE ROAD AND GND. I STILL HAD VISUAL OUT THE R WINDOW AND KNOWING THERE WAS STEEPLY-RISING TERRAIN 360 DEGS AROUND, I BEGAN A CLB INTO THE CLOUDS, CIRCLING AS I WENT. BEING INST CURRENT, I RELIED ON INSTS AND CLBED TO 11500 FT MSL. I THEN STARTED PICKING UP LIGHT RIME IN CLOUDS AND PUT IN DIRECT TO SUN VALLEY ON THE VFR GPS. AFTER PASSING SUN VALLEY, I BEGAN A SLOW DSCNT KNOWING ALL TERRAIN STOPPED AT 7500 FT MSL AND BROKE OUT AT 11000 FT MSL. THE FLT THEN CONTINUED VFR TO BOI AND COMPLETION. CONTRIBUTING FACTORS WERE GOING BEYOND THE POINT WHERE WE HAD AN OUT AND CONTINUING FLT INTO IMC. AS THE PLT FLYING THE ACFT, I RECOGNIZE AND ACCEPT FULL RESPONSIBILITY FOR THE ENTIRE EVENT. IN HINDSIGHT, I RECOGNIZE MY ATTITUDE WAS TO CONTINUE THE FLT RATHER THAN TURN AROUND WHEN I SHOULD HAVE. ENRTE AND PREVIOUS TO THE INCIDENT, THE WX TO THE E WAS CLRLY VFR AND THAT RTE COULD HAVE AND SHOULD HAVE BEEN FLOWN WITH MINIMAL TIME LOST. AS A CORRECTIVE ACTION, I WILL NEVER CONTINUE INTO DETERIORATING CONDITIONS WITHOUT AN OUT OF SOME SORT, AND WILL MAKE MY BEST ATTEMPT TO FLY TOWARDS AREAS OF BETTER WX, EVEN IF IT IS THE LONGER RTE.

## **Synopsis**

PLT OF SMA CONTINUES VFR INTO DETERIORATING WX.

# Time / Day

Date: 200602 Day: Fri

Local Time Of Day: 1201 To 1800

## Place

Locale Reference. Airport: ZZZ. Airport

State Reference : US

Altitude.MSL.Single Value: 10500

### **Environment**

Flight Conditions: IMC Weather Elements: Ice Weather Elements: Rain

Light: Daylight

## Aircraft: 1

Operator.General Aviation: Personal Make Model Name: Bonanza 36 Operating Under FAR Part: Part 91

Flight Phase.Cruise: Level

### Person: 1

Affiliation.Other: Personal

Function.Flight Crew: Single Pilot

Qualification.Pilot: Private

Experience.Flight Time.Last 90 Days: 3 Experience.Flight Time.Total: 1614 Experience.Flight Time.Type: 1483

ASRS Report: 688719

### Person: 2

Affiliation.Government: FAA Function.Controller: Approach

#### **Events**

Anomaly.Inflight Encounter: VFR In IMC Independent Detector.Other.Flight CrewA: 1

Resolutory Action.Controller: Provided Flight Assist Resolutory Action.Flight Crew: Declared Emergency

Resolutory Action.Flight Crew: Diverted To Another Airport Resolutory Action.Flight Crew: Exited Adverse Environment

### **Assessments**

Problem Areas: Flight Crew Human Performance

Problem Areas: Weather

#### Narrative

THE PURPOSE OF THIS FIRST SOLO FLT WAS TO REPOS THE AIRPLANE 35 NM TO MY HOME ARPT WHERE ATIS RPTED 2600 FT SCATTERED, 4000 FT BROKEN, AND 10 NM VISIBILITY AT 15 MINS PRIOR TO DEP. A FAST MOVING FRONT BLOCKED THE DIRECT RTE, SO I CLBED TO 10500 FT TO DIVERT AROUND THE FRONT AND OVER CLASS B AIRSPACE, WHICH AT THE TIME HAD CLR SUNSHINE AND GOOD VISIBILITY. WITHIN 8 NM OF THE DEST ARPT, I TURNED AROUND TO RETURN TO THE DEP ARPT BECAUSE ATIS WAS NOW RPTING 6000 FT OVCST. THIS IS WHEN IT STARTED TO GO BAD FOR THIS VFR ONLY PLT. CLOUDS WERE FORMING ALL AROUND ME AND MY WINDSCREEN BECAME COVERED WITH ICE. SQUAWKING 7700 AND REQUESTING HELP ON 121.5, ATC INSTRUCTED ME TO CLB ON TOP TO 14500 FT. THEY FOUND ONLY 2 VFR ARPTS, THE CLOSEST WAS 200 NM AWAY AND A SUCCESSFUL LNDG WAS MADE THERE. I LEARNED THAT I SHOULD HAVE TURNED AROUND SOONER TO RETURN TO THE DEP ARPT AFTER SEEING THAT THE DIRECT RTE WAS BLOCKED. BUT MORE IMPORTANT, I LEARNED THAT THE MIND STOPS FUNCTIONING WELL WHEN YOU BEGIN TO PANIC. ALTHOUGH I TURNED ON PITOT HEAT, I FORGOT TO ENGAGE THE AUTOPLT, WHICH I HAD PROMISED MYSELF I WOULD DO IF I EVER GOT INTO THIS KIND OF SITUATION. CONTRIBUTING FACTORS WERE LOW FLT EXPERIENCE HRS DURING THE PRIOR 5 1/2 MONTHS AND THE NEW AVIONICS.

## **Synopsis**

BE36 PVT PLT ENCOUNTERS IMC WHILE OPERATING VFR.

# Time / Day

Date : 200602 Day : Sun

Local Time Of Day: 0601 To 1200

## **Place**

Locale Reference. Airport: DAL. Airport

State Reference : TX

Altitude.MSL.Single Value: 1600

### **Environment**

Flight Conditions: IMC

Light: Daylight

## Aircraft: 1

Controlling Facilities.TRACON: D10.TRACON

Operator.General Aviation: Corporate Make Model Name: Citation I/SP Operating Under FAR Part: Part 91 Flight Phase.Climbout: Initial Flight Phase.Climbout: Takeoff Route In Use.Departure.SID: JPOOL

#### 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: 78 Experience.Flight Time.Total: 2676 Experience.Flight Time.Type: 636

ASRS Report: 688060

### Person: 2

Function.Flight Crew: Captain Function.Oversight: PIC Qualification.Pilot: ATP

Experience.Flight Time.Last 90 Days: 45 Experience.Flight Time.Total: 10300 Experience.Flight Time.Type: 510

ASRS Report: 688057

## Person: 3

Affiliation.Government : FAA Function.Controller : Departure

### **Events**

Anomaly. Non Adherence: Clearance

Anomaly. Non Adherence: Published Procedure

Anomaly. Other Spatial Deviation

Independent Detector.Other.ControllerA: 3
Resolutory Action.Controller: Issued Advisory
Resolutory Action.Controller: Issued New Clearance
Consequence.FAA: Reviewed Incident With Flight Crew

#### **Assessments**

Problem Areas: Chart Or Publication

Problem Areas: Flight Crew Human Performance

### **Narrative**

THE FLT ORIGINATED AT HOU WITH A STOP AT E38 TO PICK UP A PAX ENRTE TO DAL. I WAS ACTING AS SIC AND PF ON THE FIRST AND THIRD LEGS. THE GENERAL WX CONDITIONS WERE 1000 FT OVCST, 5-10 MI VISIBILITY, AND LIGHT WINDS ACROSS THE STATE (TX) AND CLR SKIES AT E38. THE FIRST LEG WAS UNEVENTFUL UNTIL GEAR EXTENSION AT E38. AN ERRONEOUS GEAR DOWN INDICATION WAS REMEDIED, AND THE LNDG WAS ROUTINE. THE SECOND LEG (E38 TO DAL) WAS A ROUTINE FLT WITH LIGHT CLR ICING ENCOUNTERED ON THE DSCNT INTO DAL. THERE WAS ONCE AGAIN AN UNSAFE GEAR DOWN INDICATION WHILE IMC ON THE ILS TO RWY 31L. THE GEAR WAS CYCLED ONCE AND THEN INDICATED NORMALLY, SO WE LANDED UNEVENTFULLY. WE STOPPED AT AN FBO TO DROP OFF PAX AND PURCHASE FUEL. FOR THE THIRD AND FINAL LEG I WAS FLYING THE JET AS SIC. THE PIC WAS PERFORMING PNF DUTIES. THE PIC REQUESTED OUR IFR CLRNC BACK TO HOU FROM CLRNC DELIVERY AND HAD DIFFICULTY COMMUNICATING DUE TO INTERFERENCE WE BELIEVE WAS CAUSED. BY BUILDINGS BTWN US AND TWR. AFTER SEVERAL BROKEN XMISSIONS WE COPIED THE CLRNC. WE COMPLETED OUR CHKLISTS,, PREPARED FOR TKOF, THEN TAXIED OUT. THERE WAS SOME ADDITIONAL CONFUSION WITH THE RADIOS (THE PIC CALLED CLRNC AGAIN INSTEAD OF GND) ON TAXI AFTER SWITCHING XMITTERS IN AN ATTEMPT TO COMMUNICATE CLRLY. WE THEN SUCCESSFULLY CONTACTED GND AFTER MOVING AWAY FROM THE FBO HANGARS AND TAXIED TO RWY 31L FOR TKOF. THE INITIAL PART OF OUR CLRNC WAS THE JPOOL 2 SID/ELLVR TRANSITION AND 5000 FT. THE PIC HANDED ME THE GOVT TERMINAL PROC PUB SC-2 OPENED TO THE JOE POOL 2 DEP. WE BOTH LOOKED AT THE PROC. AND I BRIEFED MY INTENDED ACTIONS FOR DEP. THE GRAPHIC DEPICTION INDICATED FOR 'RWY 31: CLB VIA HDG 309 DEGS TO 1600 FT BEFORE TURNING SBOUND.' THE TEXT READ, 'WHEN ENTERING CTLED AIRSPACE, FLY ASSIGNED HDG AND ALT, EXPECT VECTOR TO APPROPRIATE RTE...ELLVR TRANSITION...FROM OVER TTT VOR/DME VIA TTT 166 DEG RADIAL TO ELLVR INTXN.' AS I REMEMBER. THE TWR CLRED US FOR TKOF AS WE APCHED THE HOLD SHORT LINE. WE INFORMED HIM WE WERE NOT READY AND HELD SHORT OF THE RWY. AFTER COMPLETING BEFORE TKOF CHKLISTS, WE CALLED TWR READY FOR TKOF, AND WE RESPONDED 'CLRED FOR TKOF.' THE TKOF WAS UNEVENTFUL AND WE CLBED ON RWY HDG TO 1600 FT AND TURNED L FOR ELLVR. WE CONTACTED APCH AND WERE 'RADAR CONTACT.' AS OUR HDG APCHED S. THE DEP CTLR ASKED IF WE WERE IN A L TURN TO THE S. THE PIC AFFIRMATIVELY RESPONDED THAT WE WERE FLYING THE SID. HE THEN GAVE US A VECTOR TO 130 DEGS. I BELIEVE WE WERE THEN GIVEN HDG 150 DEGS, A CLB TO 15000 FT, AND A FREQ CHANGE. THE NEXT CTLR GAVE US MORE VECTORS AND ALTS AND EVENTUALLY

DIRECT TO ELLVR. WE WERE THEN INFORMED OF A POSSIBLE PLTDEV AND GIVEN A NAME AND NUMBER TO CONTACT AFTER LNDG. THE PIC CALLED IMMEDIATELY AFTER LNDG AND WAS INFORMED A RPT WAS TO BE FILED. ONCE SAFELY AT OUR CRUISE ALT WE DISCUSSED WHAT HAD GONE WRONG. AFTER LOOKING OVER THE SID, WE REALIZED WHAT HAPPENED. WE HAD FLOWN THE CORRECT DEP, BUT FOR THE WRONG ARPT. WE HAD OPENED SC-2 TO THE JPOOL2 FOR DALLAS EXECUTIVE (RDB) INSTEAD OF OUR DEP ARPT DALLAS LOVE FIELD (DAL). THE SIMPLE FACT WAS THAT WE DID NOT REF THE CORRECT DEP PROC. THERE WERE. HOWEVER, NUMEROUS FACTORS I BELIEVE CONTRIBUTED TO OUR MISTAKE. OUR DAY STARTED EARLIER THAN NORMAL WHICH MAY HAVE DECREASED OUR ALERTNESS. THE WX WAS IFR AND THERE WAS IN-CLOUD ICING, WHICH DID NOT DIRECTLY AFFECT OUR FLT BUT ADDED TO THE WORKLOAD. WE HAD AN ISSUE WITH ERRONEOUS GEAR INDICATIONS THAT WE ASSESSED SAFE FOR OUR FLT HOME, BUT WE CHANGED OUR PROCS TO EXTEND THE GEAR EARLY TO ENSURE PLENTY OF TIME TO TROUBLESHOOT IF NEEDED. WEAK RADIO RECEPTION, BROKEN XMISSIONS, AND A FRAGMENTED READBACK CAUSED AN UNCLR EXCHANGE OF INFO WITH CLRNC DELIVERY. TWR'S EARLY TKOF CLRNC HASTENED OUR HABIT PATTERNS AND GAVE US THE PERCEPTION OF BEING PUSHED BEFORE WE WERE READY. SC-2 HAS 3 SEPARATE JPOOL2.TTT DEPS FROM DALLAS ARPTS (DAL, RBD, DFW) THAT HAVE RWY 31. THERE ARE VALUABLE LESSONS TO BE LEARNED FROM OUR MISTAKE: CRM WAS NOT EFFECTIVELY UTILIZED DURING PREPARATION FOR TKOF. I DON'T BELIEVE EITHER OF US WERE 100% SURE OF THE CLRNC BUT DID NOT SPEAK UP AND ASK FOR CLARIFICATION IN THE COCKPIT OR FROM ATC. I ASSUMED THE PIC COPIED AND UNDERSTOOD THE CLRNC, SO I DID NOT QUESTION IT. I SHOULD HAVE TAKEN THE TIME TO ASK THE QUESTION AND RESOLVE ANY DOUBT. SEVERAL FACTORS CREATED A DISRUPTION OF OUR NORMAL FLOW AND CAUSED US TO CHANGE OUR HABIT PATTERNS. CONFUSION ON THE RADIOS, A SHORT TAXI DISTANCE, AND THE FEELING OF BEING RUSHED BY TWR PUSHED US PHYSICALLY BEYOND THE POINT WE WERE MENTALLY READY TO ACCEPT. IN A HURRIED STATE, WE RUSHED OUR DEP BRIEFING AND HAD POOR ATTN TO DETAIL. HAD WE TAKEN AN EXTRA MIN TO COMPLETELY BRIEF THE SID, ONE OF US WOULD HAVE REALIZED WE WERE LOOKING AT THE WRONG JPOOL2 PROC.

# Synopsis

CE501 CREW UTILIZED THE WRONG SID ON DEP OUT OF DAL RESULTING IN A PLTDEV.