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Federal Aviation Administration

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Regulatory Support Division

ADVISORY CIRCULAR

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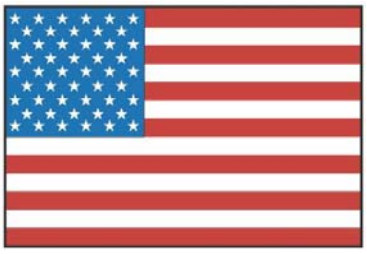
AVIATION MAINTENANCE ALERTS



ALERT NUMBER 343

FEBRUARY 2007

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U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION
WASHINGTON, DC 20590

AVIATION MAINTENANCE ALERTS

The Aviation Maintenance Alerts provide a common communication channel through which the aviation community can economically interchange service experience, cooperating in the improvement of aeronautical product durability, reliability, and safety. This publication is prepared from information submitted by those who operate and maintain civil aeronautical products. The contents include items that have been reported as significant, but have not been evaluated fully by the time the material went to press. As additional facts such as cause and corrective action are identified, the data will be published in subsequent issues of the Alerts. This procedure gives Alerts' readers prompt notice of conditions reported via a Mechanical Reliability Report (MRR), a Malfunction or Defect Report (M or D), or a Service Difficulty Report (SDR). Your comments and suggestions for improvement are always welcome. Send to: FAA; ATTN: Aviation Data Systems Branch (AFS-620); P.O. Box 25082; Oklahoma City, OK 73125-5029.

(Editor's notes are provided for editorial clarification and enhancement within an article. They will always be recognized as italicized words bordered by parentheses.)

AIRPLANES

BEECH

Beech: *(1900—1900D);* Burned Blower Resistors; ATA 2121

(Not specified in the report, these Beech models are indicated in the referenced airworthiness directive.)

A repair station technician lists three observations concerning a Beech blower unit, P/N 114-380028-5 (ElectroMech P/N EM-630-201-2). "1) The resistor's ends are blown out into their covers. 2) Insulation is burned off the wiring: (there is) severe burning and melting of insulation material around the low speed resistors. 3) AD2004-01-13 was issued to prevent this problem. (This AD) appears to have been complied with correctly." (Reference the September 2006 Alerts for a Cessna 550 having a similar problem. A search of the FAA Service Difficulty Reporting System data base entries revealed 23 additional reports for this part number since 1999.)

Part Total Time: (unknown).

CESSNA

Cessna: 172N; Nonconforming Leading Edge Skin; ATA 5730

A Designated Airworthiness Representative (DAR) for an aircraft repair station submitted this defect report. "During a receiving inspection of a new, Cessna R/H, O/B, L/E skin it was found to have been drilled-up incorrectly. None of the nose ribs would line up, and this setup would have left insufficient edge distance on the lower, main wing spar rivet line. This *(is)* the second time we have received this same part *(P/N 0523029-4)*. We have asked for this part not to be put back into Cessna stock since the part is non-conforming. *(It should be noted...)* this part came with an FAA Form 8130-3 Airworthiness Approval Tag. *(I)* recommend Cessna perform *(more thorough)* conformity inspections of *(their)* parts."

Part Total Time: 0.00 hours.

Cessna: 421A; Shorting Starter Cable; ATA 8011

"During starting of the left engine," writes a submitter, "smoke was observed coming from the louvers on the top of the left engine. The engine was shut down and the smoke subsided. Inspection revealed the *(number...)* two gauge starter and alternator power cables were burned in half near the turbocharger. Fourteen other wires in the same bundle were also burned in half, or severely heat damaged. The electrical fire was a result of the starter cable shorting to ground on the turbo support bracket (P/N 5155101-20). The electrical bundle had been resting on this bracket for some time until the wire insulation was chaffed through. Inspection of the other engine revealed similar chaffing and the possibility of a short."

(Listen...one can almost hear cowlings popping open from distant airports. It would seem to be an easy defect to look for and to correct. Forget the nightmare-flight scenario for a moment—how much money could be saved with a quick, 15-minute inspection? The submitter missed the opportunity to immortalize the concept with one good photo...just reading it makes one cringe!)

Part Total Time: 4,801.0 hours.

ERCOUPE

Ercoupe: A1; Sheared Landing Gear Bolts; ATA 3211

A mechanic states, "These bolts are located at the top of the landing gear. Three of these bolts hold the spring gear on—all three failed. *(I)* recommend these *(NAS146-35)* bolts in both main gear be replaced each 1000 hours of time in service."

Part Total Time: 1,515.01 hours.

PIPER

Piper: PA23-250; Chafed Hydraulic Line; ATA 2900

An unidentified source writes, "An annual inspection was completed in January 2006. Complete interior refurbishing was done at the same time. About 100 hours after the aircraft was returned to service, the nose and left main gear would not lock down and the pilot landed with only the right gear extended. Hydraulic fluid was dripping from the belly, and upon investigation, an aluminum hydraulic line was found chaffed through by an aileron cable in front of the main spar and under the cabin door sill. It is suspected after the aircraft was inspected, when discrepancies were being cleared and the interior work was being done, personnel getting in and out of the airplane inadvertently stepped on, leaned on, or somehow bent the line down to where it contacted the cable. When the interior panel is removed under the door, these hydraulic lines are very exposed and have little support in this area, with very little clearance betweens lines and cables. The lines and cables on the left side of the cabin are less likely to be disturbed as the autopilot roll servo protects them.

"My recommendation is—any time this side panel is removed, an inspection of line-to-cable clearance be made prior to reinstalling the side panel."

(No part number for the specific line was provided with this description.)

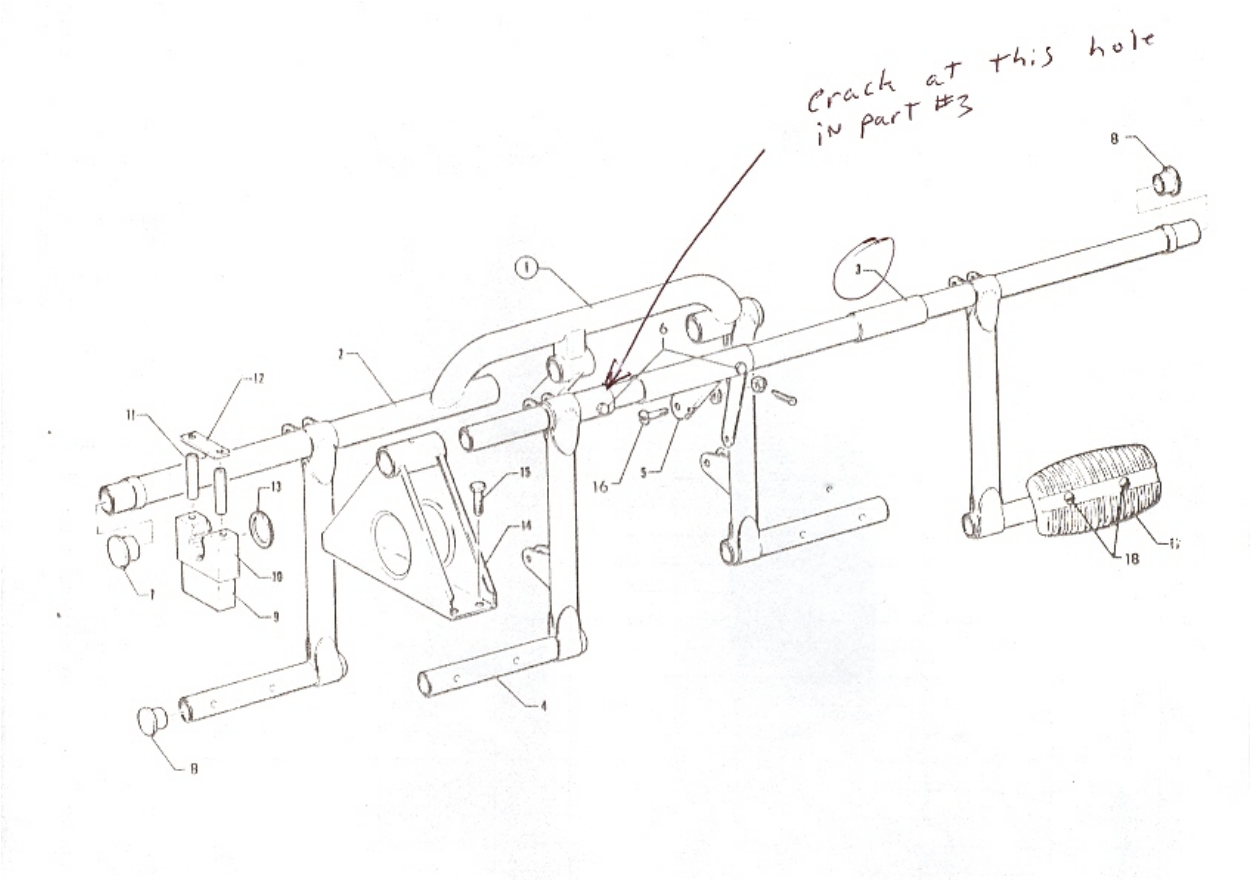
Part Total Time: 8,803.2 hours.

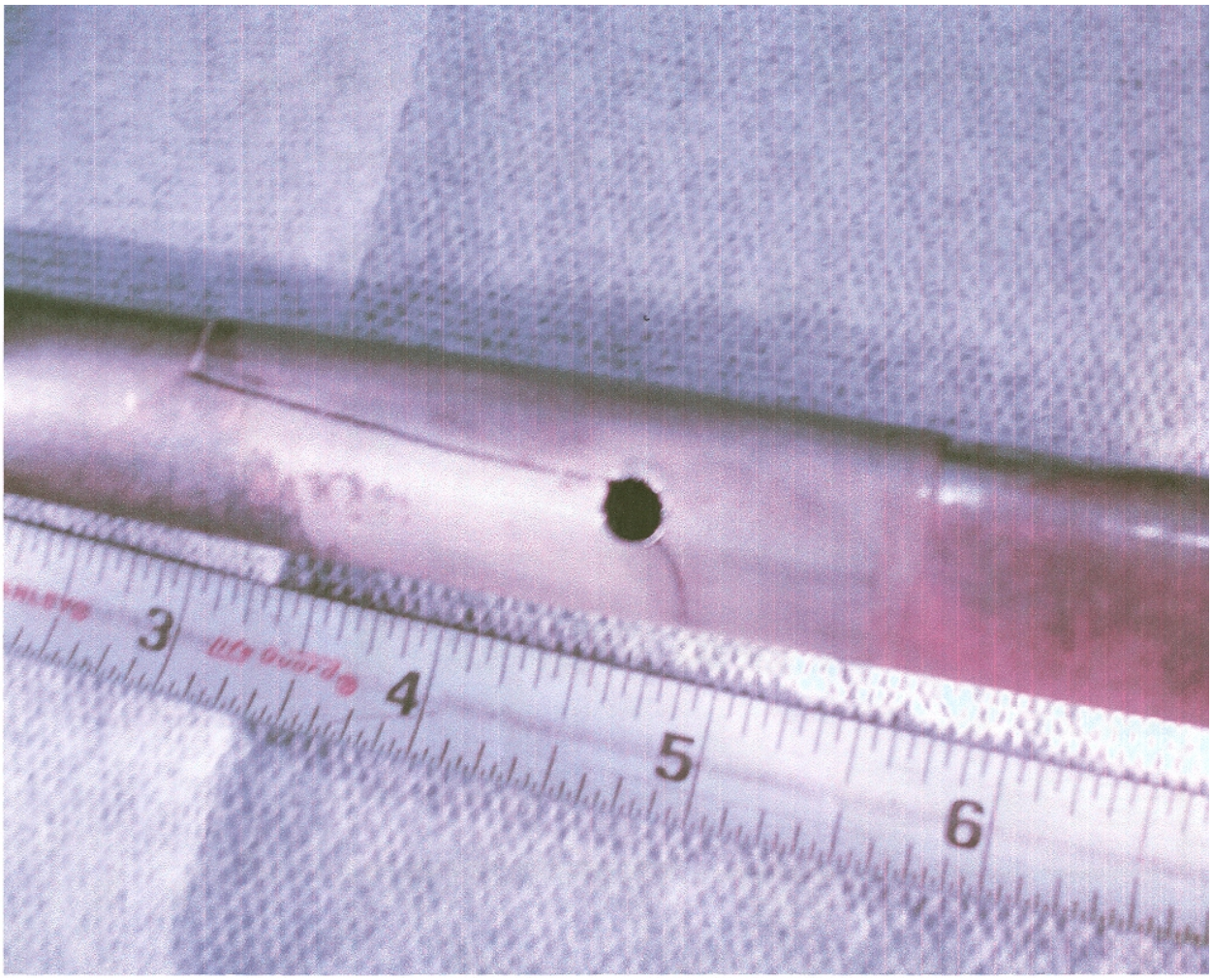
Piper: PA32-300; Cracked Rudder Bar; ATA 2720

A technician for a commuter service states, "Upon removal and disassembly of the rudder pedal assembly *(P/N 63419-02)*, a crack was found approximately two inches long, extending out from the center bolt *through-hole. (I)* have found two other assemblies cracked in the same area. These cracks could be caused by

steering pressures applied while turning on the ground. All of these effected aircraft have had more than 10,000 hours total time. Other aircraft inspected (as the Cherokee 6) were *(also)* found to have elongated bolt holes.

"This part cannot be inspected in any way except for removal from the aircraft—a time consuming endeavor. *(I)* would suggest arbitrary replacement of this part at or about 10,000 hours."





(Thanks for the pictures, the effort, and your most rational admonition!—Ed.)

Part Total Time: 17,018.3 hours.

HELICOPTERS

EUROCOPTER

Eurocopter: AS350-B2; Oil Chip Annunciation; ATA 7930

Illumination of an oil chip annunciation light prompted both a precautionary landing and this discrepancy report from the helicopter's operator. "*(There was)* an uneventful landing at the departure airport, *(sustaining)* no damage to the aircraft or property. Maintenance investigated and found no chips on the chip detector. *(However)*, some chips were found in the oil and in the vicinity of the chip detector plugs. The engine was removed from service for repair teardown inspection.

"Probable cause *(is suspected to be)* deterioration of an internal oil wetted engine component. The chip light may have been triggered by non-ferrous chips circulating in the oil system from a deteriorating internal component *(this, to be determined at teardown)*."

(No part number accompanied this report.)

Part Total Time: 11,374.0 hours.

MD

MD: 902; Deteriorated Bleed-Air Line Insulation; ATA 7500

"On a training flight the right engine fire light came on," says an air taxi operator. "The pilot immediately complied with the emergency procedures, then shut the R/H engine down and discharged the engine fire bottle. He then landed the aircraft and the fire light went out. The aircraft was checked for fire inside the engine compartment; none *(to his relief...)* was found and there was no evidence of flame...." "The maintenance department checked out the aircraft and found no faults in the fire loop or the fire detection system—nor did they find fuel or bleed air leaks. There was, *(however...)*, a bleed air line *(traveling)* from the engine deck to the flow control shut-off valve missing some of its insulation. This line *(P/N 900P2250205-109)* runs close to the fire loop and may have caused the loop to overheat. This line was replaced with one that had the insulation intact; the fire bottle was also replaced. The engine was ground run and tested okay."

"*(I recommend)* the insulation on this bleed air line should be made of more durable material. The cowlings (P/Ns 900P2250205-109 and 900F26115400-107) need to have an inspection door in them for ease of inspection. This *(suggestion)* should be made to the airframe manufacturer."

Part Total Time: 1,069.19 hours.

POWERPLANTS

ECI

ECI: Cylinder; Blown Cylinder Head; ATA 8530

(A Cessna 402 airplane is "attached" to this TSIO-520E Continental engine.)

An A&P mechanic writes, "The number three cylinder on the left engine cracked completely around the head, approximately 1.25 inches above the base of the head. The crack was completely around the circumference of the head, and allowed the head to slip off the barrel half and inch. *(Having occurred during flight...)*, the prop was feathered, the engine shut down, and a safe landing was made. There was no other damage to the engine or aircraft. This cylinder was on its third run. It had been previously re-barreled and bored .010 oversize at the last overhaul (*Cylinder P/N ECI 87721-06)*.

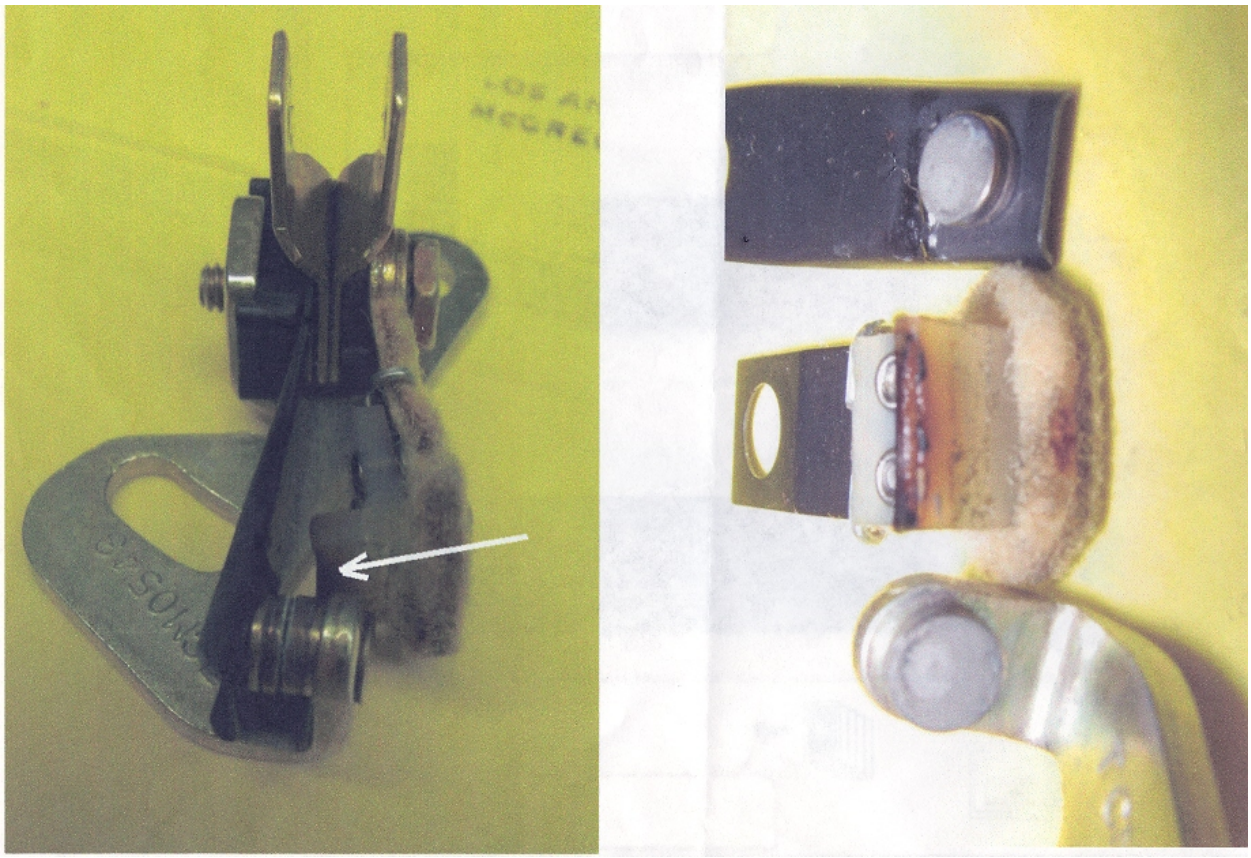
Part Total Time: 625.5 hours.

ACCESSORIES

TCM

TCM Magneto: S6LSC-25; Melted Cam Follower; ATA 7414

A mechanic states this magneto's point set only had 9.3 hours when misfiring began to occur. Inspection revealed the plastic portion of the cam follower had melted, causing the misfire.



Part Total Time: 9.3 hours.

AIR NOTES

INTERNET SERVICE DIFFICULTY REPORTING (iSDR) WEB SITE

The Federal Aviation Administration (FAA) Internet Service Difficulty Reporting (iSDR) web site is the front-end for the Service Difficulty Reporting System (SDRS) data base that is maintained by the Aviation Data Systems Branch, AFS-620, in Oklahoma City, Oklahoma. The iSDR web site supports the Flight Standards Service (AFS), Service Difficulty Program by providing the aviation community with a voluntary and electronic means to conveniently submit in-service reports of failures, malfunctions, or defects on aeronautical products. The objective of the Service Difficulty Program is to achieve prompt correction of conditions adversely affecting continued airworthiness of aeronautical products. To accomplish this, Mechanical Reliability Reports (MRRs), Malfunction or Defect Reports (M or Ds), or Service Difficulty Reports (SDRs) as they are commonly called, are

collected, converted into a common SDR format, stored, and made available to the appropriate segments of the FAA, the aviation community, and the general public for review and analysis. SDR data is accessible through the "Query SDR data" feature on the iSDR web site at: http://av-info.faa.gov/sdrx/.

In the past, the last two pages of the Alerts contained a paper copy of FAA Form 8010-4, Malfunction or Defect Report. To meet the requirements of *Section 508, this form will no longer be published in the Alerts; however, the form is available on the Internet at: http://forms.faa.gov/forms/faa8010-4.pdf. You can still download and complete the form as you have in the past.

*Section 508 was enacted to eliminate barriers in information technology, to make available new opportunities for people with disabilities, and to encourage development of technologies that will help achieve these goals.

A report should be filed whenever a system, component, or part of an aircraft, powerplant, propeller, or appliance fails to function in a normal or usual manner. In addition, if a system, component, or part of an aircraft, powerplant, propeller, or appliance has a flaw or imperfection, which impairs or may impair its future function, it is considered defective and should be reported under the Service Difficulty Program.

The collection, collation, analysis of data, and the rapid dissemination of mechanical discrepancies, alerts, and trend information to the appropriate segments of the FAA and the aviation community provides an effective and economical method of ensuring future aviation safety.

The FAA analyzes SDR data for safety implications and reviews the data to identify possible trends that may not be apparent regionally or to individual operators. As a result, the FAA may disseminate safety information to a particular section of the aviation community. The FAA also may adopt new regulations or issue airworthiness directives (ADs) to address a specific problem.

The iSDR web site provides an electronic means for the general aviation community to voluntarily submit reports, and may serve as an alternative means for operators and air agencies to comply with the reporting requirements of 14 Title of the Code of Federal Regulations (CFR) Section 121.703, 125.409, 135.415, and 145.221, if accepted by their certificate-holding district office. FAA Aviation Safety Inspectors may also report service difficulty information when they conduct routine aircraft maintenance surveillance as well as accident and incident investigations.

The SDRS data base contains records dating back to 1974. At the current time, we are receiving approximately 40,000 records per year. Reports may be submitted to the iSDR web site on active data entry form or submitted hardcopy to the address below.

The SDRS and iSDR web site point of contact is:

Tom Marcotte
Service Difficulty Reporting System, Program Manager
Aviation Data Systems Branch, AFS-620
P.O. Box 25082
Oklahoma City, OK 73125
Telephone: (405) 954-6500
SDRS Program Manager e-mail address: 9-AMC-SDR-ProgMgr@faa.gov

IF YOU WANT TO CONTACT US

We welcome your comments, suggestions, and questions. You may use any of the following means of communication to submit reports concerning aviation-related occurrences.

Editor: Daniel Roller (405) 954-3646
FAX: (405) 954-4570 or (405) 954-4655

E-mail address: Daniel.Roller@faa.gov

Mailing address: FAA, **ATTN: AFS-620 ALERTS**, P.O. Box 25082, Oklahoma City, OK 73125-5029

You can access current and back issues of this publication from the internet at: http://av-info.faa.gov/. Select the General Aviation Airworthiness Alerts heading.

AVIATION SERVICE DIFFICULTY REPORTS

The following are abbreviated reports submitted for the previous month, which have been entered into the FAA Service Difficulty Reporting (SDR) System data base. This is not an all-inclusive listing of Service Difficulty Reports. For more information, contact the FAA, Regulatory Support Division, Aviation Data Systems Branch, AFS-620, located in Oklahoma City, Oklahoma. The mailing address is:

FAA
Aviation Data Systems Branch, AFS-620
PO Box 25082
Oklahoma City, OK 73125

To retrieve the complete report, click on the Control Number located in each report. These reports contain raw data that has not been edited. Also, because these reports contain raw data, the pages containing the raw data are not numbered.

If you require further detail please contact AFS-620 at the address above.

Federal Aviation Administration

Service Difficulty Report Data

Sorted by aircraft make and model then engine make and model. This report derives from unverified information submitted by the aviation community without FAA review for accuracy.

Control Number	Aircraft Make	Engine Make	Component Make	Part Name	Part Condition
Difficulty Date	**Aircraft Model**	**Engine Model**	**Component Model**	**Part Number**	**Part Location**
2006FA0001109				BRAKE ASSY	MISREPAIRED
10/16/2006				50030967	LANDING GEAR

SPACER TUBES (PN 5012942) WERE MISSING FROM ASSEMBLY. INCORRECT PRESSURE PLATE INSTALLED ON BRAKE ASSY. SHOULD PN 5006890, INSTALLED WAS PN 5005117. PN 5006890 MEASURES .240 INCH THICK, PN 5005117 MEASURES .210 INCH THICK. INCORRECT WEAR PAD WAS INSTALLED ON PRESSURE PLATE. SHOULD BE PN 5007328, INSTALLED WAS 5005119. YOU CAN TELL THE DIFFERENCE BECAUSE PN 5007328 DOES NOT HAVE A MILLED OUT AREA FOR STRUT CLEARANCE. INCORRECT STATIONARY DISK INSTALLED ON BRAKE ASSY. SHOULD BE PN 5006892, INSTALLED WAS PN 9544028. PN 5006892 MEASURES .240 INCH THICK, PN 9544028 MEASURES .210 INCH THICK. INCORRECT INSULATORS WERE INSTALLED IN PISTONS. SHOULD BE PN 50068951. (K)

2006FA0001106				BRAKE ASSY	MISREPAIRED
10/16/2006				50030967	LANDING GEAR

SPACER TUBES (PN 5012942) WERE MISSING FROM ASSEMBLY. INCORRECT RETURN PINS WERE INSTALLED. SHOULD BE PN 5001421, INSTALLED WERE PN 9535044. SWAGE ADJUSTER ASSEMBLIES WERE INCORRECTLY SET FOR THIS SERIES OF BRAKE. THE SWAGES WERE SET AT A DEPTH OF 0.18 INCH BELOW FLUSH, THEY SHOULD HAVE BEEN SET FLUSH WITH THE TOP OF THE ADJUSTER TUBE. (K)

2006FA0001107				BRAKE ASSY	MISREPAIRED
10/16/2006				50030964	LANDING GEAR

UPON CONDUCTING REPAIR TO REPLACE THE MISSING RETURN SPRING ASSEMBLY. FOUND THAT THE SPACER TUBES (PN 5012941) WERE MISSING FROM THE REMAINING 3 RETURN SPRING ASSEMBLIES. (K)

2006FA0001104				BRAKE ASSY	MISREPAIRED
10/16/2006				50030967	LANDING GEAR

SPACER TUBES (PN 5012942) WERE MISSING FROM ASSEMBLY. INCORRECT RETURN PINS WERE INSTALLED. SHOULD BE PN 5001421, INSTALLED WERE PN 9535044. SWAGE ADJUSTER ASSEMBLIES WERE INCORRECTLY SET FOR THIS SERIES OF BRAKE. THE SWAGES WERE SET AT A DEPTH OF 0.18 INCH BELOW FLUSH, THEY SHOULD HAVE BEEN SET FLUSH WITH THE TOP OF THE ADJUSTER TUBE. (K)

2006FA0001105				BRAKE ASSY	MISREPAIRED
10/16/2006				50030967	LANDING GEAR

SPACER TUBES (PN 5012942) WERE MISSING FROM ASSEMBLY. INCORRECT RETURN PINS WERE INSTALLED. SHOULD BE PN 5001421, INSTALLED WERE PN 9535044. SWAGE ADJUSTER ASSEMLIES WERE INCORRECTLY SET FOR THIS SERIES OF BRAKE. THE SWAGES WERE SET AT A DEPTH OF 0.18 INCH BELOW FLUSH, THEY SHOULD HAVE BEEN SET FLUSH WITH THE TOP OF THE ADJUSTER TUBE. (K)

AFASVRA335			DORNEMARGLN	G SWITCH	FAILED
12/1/2006					ELT

ANNUAL INSPECTION TESTING OF ELT IAW AC 43.13-1B, CHAPTER 12, PARA 12-22C. THE G-SWITCH WOULD NOT ACTIVATE. THE NORMAL ON FUNCTIONED SATISFACTORY. WHEN THE ELT WAS AT ROOM TEMPERATURE, G-SWITCH FUNCTIONED PROPERLY BUT WHEN COLD SOAKED IN THE HANGER IT WOULD NOT ACTIVATE. TRIED THE G-SWITCH NUMERIOUS TIMES AND IT WOULD NOT ACTIVATE WHEN COLD. BATTERY EXPIRATION DATE MAR

2007.

2007FA0000015	VALVE	LEAKING
12/14/2006	4357B	OXYGEN SYS

OXYGEN VALVE HAD A FUNCTIONAL TEST, ON 06/07/2006. THE WORK WAS ACCOMPLISHED ON WO 06-5301. THIS COMPONENT LEAKED OXYGEN WHEN INSTALLED. (K)

2006FA0001065	LIFE RAFT	UNWANTED DEPLOY
9/18/2006	46FASA631201	CABIN

LIFE RAFT PARTIALLY INADVERTENTLY DEPLOYED IN CUSTOMERS AIRCRAFT CABIN AREA (UNDER SEAT CUSHION) WHICH COULD HAVE POSSIBLY CAUSED SEVERE DAMAGE TO THE AIRCRAFT, INJURY TO PERSONS OR LOSS OF AIRCRAFT CONTROL HAD LIFE RAFT COMPLETELY INFLATED IN-FLIGHT. THE LIFE RAFT WAS REMOVED FROM THE AIRCRAFT CABIN BY THE OPERATOR BEFORE IT HAD COMPLETELY INFLATED MINIMIZING THE POSSIBILITY OF SEVERE DAMAGE. (K)

2006FA0001228	CLAMP	CRACKED
12/22/2006	D68315A	PROPELLER BLADE

DURING A ROUTINE PRE-FLIGHT INSPECTION OF PROPELLER ASSY, A CRACK WAS IDENTIFIED ON BLADE CLAMP PN D-6831-5A, REV K, SN 3194A. PROP WAS REMOVED FROM AC FOR FURTHER INSPECTION. INSPECTION CONFIRMED OPERATOR IDENTIFIED DEFECT AND PART FORWARDED FOR FURTHER EVALUATION. THIS PART IS A TERMINATING ACTION FOR AD NOTE 97-18-02. (K)

2007FA0000016	VALVE	LEAKING
12/14/2006	4357B	OXYGEN SYSTEM

OXYGEN VALVE HAD A FUNCTIONAL TEST ON 09/25/2006. THE WORK WAS ACCOMPLISHED ON WO 06-5970. THIS COMPONENT LEAKED OXYGEN WHEN INSTALLED. (K)

2007FA0000019	VALVE	LEAKING
12/14/2006	29909256B	OXYGEN SYSTEM

OXYGEN VALVE HAD A FUNCTIONAL TEST ON 06/07/2006. THE WORK WAS ACCOMPLISHED ON WO 06-5775. THIS COMPONENT LEAKED OXYGEN WHEN INSTALLED. (K)

2007FA0000020	VALVE	LEAKING
12/14/2006	4357B	OXYGEN SYSTEM

OXYGEN VALVE WAS INSPECTED ON 10/09/2006. THE WORK WAS ACCOMPLISHED ON WO 066023. THIS COMPONENT LEAKED OXYGEN WHEN INSTALLED. (K)

2007FA0000061	STARTER	LEAKING
12/28/2006	ES6462751	ENGINE

STARTER LEAKING OUT OF REAR OF STARTER PLATE. (K)

FCPR20070001	ALTIMETER	BROKEN
1/5/2007	5934PA1	COCKPIT

BAROMETRIC SCALE DOES NOT MOVE WITH DIAL INDICATION RESULTING IN INACCURATE READINGS THROUGH OUT THE ENTIRE RANGE. ALLOWS GEARS TO DISENGAGE INTERNALLY. PART IS REMOVED FROM AIRCRAFT AT DISCOVERY.

CA070111010	PROPELLER	DAMAGED
1/8/2007	HCB4MP3A	

(CAN) PROPELLER WAS RECEIVED FOR COMPLIANCE WITH AD 2006-24-07. PROPELLER PREVIOUSLY OVERHAULED ON SEPTEMBER 20, 2000. THE PROPELLER WAS DISSASSEMBLED AND THE FOLLOWING FINDINGS WERE CORRECTED. (4) LOW STOP RODS WERE CORRODED BEYOND REPAIR. (4) BLADE CLAMP ASSEMBLIES WERE REPLACED DUE TO CORROSION AND LACK OF PLATING. PISTON HAD A CORROSION PIT IN FELT RING

GROOVE. HUB WAS REPLACED DUE TO CORROSION/RUST IN PILOT TUBES. NR 4 BLADE HAD WATER IN BLADE BORE BEHIND GREASE BUT NO EVIDENCE OF CORROSION. COUNTERWEIGHT BOLTS WERE ALL RUSTED AND WATER WAS FOUND IN BLADE CLAMP COUNTERWEIGHT BOLT HOLES. (TC NR 20070111010)

CA070115005	ELT	FAILED
1/15/2007	E01G1	CABIN

(CAN) OVER THE LAST YEAR, HAVE HAD SEVERAL ACK ELTS E-01 WITH FAULTY (G) SWITCHES. FAULTS INCLUDE: INTERMITTENT ACTIVATION, LIGHT ACTIVATION, NO ACTIVATION ACK HAS NO PUBLISHED DATA ON ACTIVATION BUT USES SIMILAR (G) SWITCH TO THE ELT WHICH HAS A PUBLISHED ACTIVATION OF 2 (GS). HAVE ALSO SEEN SIMILAR FAULTS WITH ELTS. (TC NR 20070115005)

2007FA0000073	STARTER	LEAKING
1/26/2007	ES6462751	ENGINE

SUBMITTED TO SLC-FSDO BY (WS9R). STARTER LEAKING OUT OF REAR OF STARTER PLATE.

2007FA0000067	MONITOR	MALFUNCTIONED
5/1/2006	1302046100	CABIN

POTENTIAL FOR SMOKE IN THE CABIN CAUSED BY FAILURE OF ELECTRONIC COMPONENT WITHIN IFE SCREENS. WHILE CARRYING OUT THE REPAIR OF 6.4 LCD IN ARM AND SEAT BACK UNITS, WORKSHOP TECHNICIANS NOTED DAMAGE TO A CAPACITOR (LABELED AS C100) ON THE CIRCUIT CARD ASSY (CCA) WITHIN THE LCD. ALTHOUGH THE UNIT WAS NOT REMOVED FROM AC FOR THIS DEFECT AND THE FAILURE OF THE COMPONENT DOES NOT APPEAR TO HAVE DETRIMENTAL AFFECT TOT HE PERFORMANCE OF THE UNIT, IT IS CONSIDERED THAT THE DAMAGE TO THE CCA IS CONSIDERED A ONE-OFF INCIDENT AND THE WHOLE CCA WAS CHANGED. THE CCA PN AFFECTED 1302160-102 AND 1302160-103. NO DETAILED CIRCUIT DIAGRAMS OF THE CCA ARE AVAILABLE AS IT IS DEEMED TO BE A NON REPAIRABLE ITEM BY THE OEM. AS A RESULT OF FURTHER SUCH INCIDENTS, THE ISSUE HAS BEEN RAISED WITH THE OEM. THE TOTAL NR OF SUCH INCIDENTS TO DATE IS ESTIMATED TO BE AT LEAST SIX. (K)

2007FA0000082	SLICK	DISTRIBUTOR BLK	MELTED
1/19/2007	6314	K3823	MAGNETO

DURING TEARDOWN INSPECTION OF 2 SLICK 6314 MAGNETOS THE DISTRIBUTOR BLOCK AND GEAR ASSY PN K3823 WAS FOUND TO BE MELTED TO THE POINT OF EMANATE FAILURE. THE MAGS WERE FROM 2 SEPARATE AIRCRAFT BUT WITH NEAR IDENTICAL TOTAL TIMES ONE AT 493.3 HRS AND THE OTHER AT 498.8.THE MANUFACTURE WAS CONTACTED AND THEY REQUESTED THE MAGS FOR EVALUATION.

2007FA0000066	MONITOR	MALFUNCTIONED
5/1/2006	1302045100	CABIN

POTENTIAL FOR SMOKE IN THE CABIN CAUSED BY FAILURE OF ELECTRONIC COMPONENT WITHIN IFE SCREENS. WHILE CARRYING OUT THE REPAIR OF 6.4 LCD IN ARM AND SEAT BACK UNITS, WORKSHOP TECHNICIANS NOTED DAMAGE TO A CAPACITOR (LABELED AS C100) ON THE CIRCUIT CARD ASSY (CCA) WITHIN THE LCD. ALTHOUGH THE UNIT WAS NOT REMOVED FROM AC FOR THIS DEFECT AND THE FAILURE OF THE COMPONENT DOES NOT APPEAR TO HAVE A DETRIMENTAL AFFECT TO THE PERFORMANCE OF THE UNIT, IT IS CONSIDERED THAT THE DAMAGE TO THE CCA IS SEVERE ENOUGH TO POTENTIALLY CAUSE SMOKE IN THE CABIN. AT THE TIME IT WAS CONSIDERED A ONE-OFF INCIDENT AND THE WHOLE CCA WAS CHANGED. THE THE CCA PN AFFECTED 1302160-102 AND 1302160-103. NO DETAILED CIRCUIT DIAGRAMS OF THE CCA ARE AVAILABLE AS IT IS DEEMED TO BE A NON REPAIRABLE ITEM BY THE OEM. AS A RESULT OF FURTHER SUCH INCIDENTS, THE ISSUE HAS BEEN RAISED WITH THE OEM. THE TOTAL NUMBER OF SUCH INCIDENTS TO DATE IS ESTIMATED TO BE AT LEAST SIX. (K)

CA070114002	CFMINT	CFMINT	BOLT	CRACKED
1/12/2007	CFM563B2	CFM563	GEJ818P060A	FAN DISK

(CAN) ENGINE WAS INDUCTED INTO SHOP FOR SCHEDULED MAINTENANCE. DURING THE SHOP VISIT THE FAN DISK WAS REMOVED FROM THE FAN ASSEMBLY AND ROUTED FOR OVERHAUL. THE DISK ATTACH BOLTS (QTY 30) WERE ROUTED FOR NDT INSPECTION. FPI DETECTED ONE FAN DISK ATTACH BOLT WAS CRACKED FROM THE HEAD AND EXTENDING AXIALLY INTO THE SHANK. FURTHER INSPECTION WITH A 10X MAGNIFYING GLASS REVEALED THAT THE CRACK HAD PROPAGATED FROM A FAINT AXIAL LINE ON THE SIDE OF THE HEAD THAT

INITIALLY APPEARS TO BE A MFG DEFECT. A SECOND BOLT (NOT CRACKED) WAS FOUND WITH THE IDENTICAL AXIAL LINE (SAME DIMENSION AND ANGLE) IN THE BOLT HEAD. REMAINING 28 BOLTS HAD NO DEFECTS NOTED. ALL BOLTS INITIALLY APPEARED IN GOOD CONDITION WITH NO EVIDENCE OF TOOLING MARKS FROM IMPROPER INSTALLATION OR REMOVAL. (TC NR 20070114002)

CA061220007	CFMINT	BEARING	FAILED
12/18/2006	CFM567B22		MLG WHEEL

(CAN) ON DECEMBER 18, THE CREW REPORTED THAT SOME SLIGHT DRAG WAS FELT IN BRAKING UPON ARRIVAL. INVESTIGATION REVEALED WHAT APPEARS TO BE A NR 4 WHEEL, IB BEARING FAILURE. AN INVESTIGATION INTO THE ROOT CAUSE OF THE FAILURE HAS BEEN INITIATED AND THIS ITEM WILL BE UPDATED ONCE THOSE RESULTS ARE AVAILABLE (TC NR 20061220007)

CA070109007	CONT	PISTON RING	SEPARATED
12/6/2006	O470*	AEC648009PL	ENGINE

(CAN) MATERIAL FROM THE FACE OF THE TOP COMPRESSION RING HAD FLAKED AWAY ON CYLINDER NR 2 (TC NR 20070109007).

2006FA0001118	GARRTT	ENGINE	FIRE
11/16/2006	ATF36		

ENGINE FIRE DURING MAINTENANCE GROUND RUN ON 10/2/2006, PERFORMED TO DETERMINE THE CAUSE OF FLUCTUATING OIL PRESSURE. PROBABLE CAUSE OF FIRE FOUND TO BE MISSING ROLL PIN FROM ATOMIZER, FUEL, INTEGRAL FLOW DIVIDER. MISSING PIN PERMITTED ATOMIZER SHROUD TO MOVE, DEFLECTING FUEL FLOW AWAY FROM COMBUSTION CHAMBER UPSTREAM IN THE ATOMIZER. HOT GASSES FROM COMBUSTION CHAMBER WERE PERMITTED TO FLOW INTO THE CAVITY BETWEEN ATOMIZER AND ATOMIZER SHROUD CAUSING FUEL TO IGNITE IN THE ATOMIZER. FIRE BURNED THROUGH FUEL ATOMIZER PILOT DIAMETER AND THROUGH THE COMBUSTOR CASE. MISSING ROLL PIN LOCATION IN THE ENGINE ASSY IS FULLY CAPTURED BY FUEL ATOMIZER SLEEVE PN 3002830-1. NO EVIDENCE OF THE MISSING WAS FOUND DURING DISASSEMBLY OF THE ENGINE. MANIFOLD ASSY WAS REPAIRED AND SHIPPED 1/6/2006. REASON FOR REPAIR ONE ATOMIZER FAILED FOR LOW PRIMARY. REPAIR INCLUDED REPLACEMENT OF ONE PN 3002976-18 ATOMIZER. MANIFOLD ASSY PN 300297720 INCLUDES EIGHT ATOMIZERS PN 300207618 ATOMIZER. MANIFOLD ASSY 300297720 INCLUDES EIGHT ATOMIZERS PN 300207618. UNABLE TO DETERMINE WHICH ATOMIZER ON THE ASSY WAS REPLACED DURING REPAIR. NO RECORD OF MISSING PIN FROM ASSY NOTED AT LAST REPAIR. (K)

CA061212007	GARRTT	TURBINE WHEEL	DAMAGED
10/30/2006	TPE33110U	310210610	NR 2

(CAN) FOUND UPON DOING A HSI INSPECTION THAT THE NR 2 ROTOR THE RIVETS WERE FOUND LOOSE TO THE POINT THAT THEY WERE GOING TO START COMING OUT. THIS WHEEL IN QUESTION ONLY HAD 1409 CYCLES TOTAL ON IT. (TC NR 20061212007)

CA061212008	GARRTT		TURBINE WHEEL	DAMAGED
12/12/2006	TPE33110UA	310210610	310210610	ENGINE

(CAN) FOUND UPON INSPECTION AT THE HSI INSPECTION THAT THE RIVETS WERE LOOSE AND DEFORMED TO THE POINT THAT THE RIVETS WERE GOING TO COME OUT AND POSSIBLY WOULD CAUSE MORE DAMAGE INSIDE THE ENGINE. (TC NR 20061212008)

CA070115011	GARRTT	PLANETARY GEAR	DAMAGED
11/26/2006	TPE33110UG	3586763	ENGINE

(CAN) UPON DOING A OIL SAMPLE, METAL WAS NOTED IN THE OIL FILTER. THE ENGINE P-63235C WAS REMOVED. ENGINE WAS FORWARDED TO THE ENGINE SHOP FOR INSPECTION OF THE METAL AND FOUND THAT 1 PLANETARY GEAR WITH THE INNER RACE PEELING METAL AND 3 PLANETARY GEARS WITH PITTING ON THE GEAR TEETH. ALL 4 PLANETARY GEARS HAVE 205.9 HRS SINCE O/H. (TC NR 20070115011)

2006FA0001184	GE	WOODWARD	SPRING	BROKEN
11/29/2006	CF650*			GOVERNOR

COMPRESSOR DISCHARGE PRESSURE RESTORING SPRING P/N 3018-248 HAS FRACTURED CLOSE TO THE

SPRING SEAT 9.

2006FA0001185	GE	WOODWARD	SPRING	BROKEN
11/29/2006	CF650*			GOVERNOR

COMPRESSOR DISCHARGE PRESSURE RESTORING SPRING P/N 3018-248 HAS FRACTURED CLOSE TO THE SPRING SEAT 9.

CA061214004	GE	GE	BLADE	MISSING
12/14/2006	CT581402	5012T75624	5009T34P01	COMPRESSOR

(CAN) RECEIVED THIS ENGINE WITH A DEFECT OF LOW POWER. IT WAS RUN ON THE TEST STAND TO CONFIRM THE POWER OUTPUT WHICH WAS 1440 SHP. WHEN THE ENGINE WAS DISASSEMBLED THEY FOUND THAT A BLADE WAS MISSING FROM THE COMPRESSOR 4TH STAGE. THERE WAS NO DAMAGE TO THE FIRST 3 SECTIONS BUT IT RESULTED IN DAMAGING THE DOWNSTREAM BLADES AND VANES. THE 4TH STAGE BLADES ARE CURRENTLY AT INVESTIGATIION. THIS ENGINE IS OWNED BY OPERATOR AND A COPY OF THIS SDR WILL BE SUBMITTED. THERE IS MORE INFORMATION TO FOLLOW. THE OWNER OF THE ENGINE IS HELI-ONE AND IT WAS BEING OPERATED ON A POWER BY THE HOUR PROGRAM. (TC NR 20061214004)

CA061204006	PWA	BLADES	CRACKED
12/4/2006	PT6A114A		ENGINE

(CAN) SEE REPORT ATTACHED CRACK INDICATIONS WERE FOUND ON THE CT BLADES AT OVERHAUL. CRACKS WERE FATIGUE RELATED ON ALL THE CT BLADES. HOWEVER, THE ATTACHED REPORT STATES THAT THE CT BLADES DID NOT FAIL IN CREEP AS DETAILED IN MFG SILS, DUE TO OVERTEMP OR EXCEEDING ENGINE LIMITATIONS. FAILURE APPEARS TO BE DUE TO FLAP MODE VIBRATIONS. PLEASE REFER TO ATTACHED ENGINEERING REPORT FOR DETAILS. (TC NR 20061204006)

CA070110001	PWA	ENGINE	FAILED
1/10/2007	PT6A34		

(CAN) (IFSD WITH MAJOR INTERNAL DAMAGE). THE ENGINE SUFFERED SEVERE DISTRESS WITH COMPLETE LOSS OF ALL TURBINE BLADES AND ASSOCIATED STATIC COMPONENTS. THE GG CASE AND EXHAUST DUCT WERE SUBJECTED TO SEVERE TORQUE LOADS AND WERE FOUND DISTORTED. ENGINE WAS CONVERTED STC SE96-02. DURING FLIGHT AND FOLLOWING A LOUD BANG FROM THE ENGINE, AN ENGINE SHUTDOWN WAS CARRIED OUT. CSN: 48301, CSO 10087 TSHSI: 64, CSHSI 25. THIS ENGINE CONVERTED VIA STC SE96-02 (TC NR 20070110001).

CA061219011	AEROSP	PWA	LINE	FRACTURED
11/7/2006	ATR42*	PW120		P3

(CAN) DURING A MAINTENANCE TEST FLIGHT A LOUD NOISE WAS HEARD ACCOMPANIED BY AN ENGINE FIRE WARNING. THE ENGINE WAS SHUTDOWN IN FLIGHT AND FIRE BOTTLES DISCHARGED. SUBSEQUENT INSPECTION REVEALED A FRACTURED ENGINE P3 BLEED AIR TUBE. (TC NR 20061219011)

CA061222006	AEROSP	PWA	INDICATOR	MALFUNCTIONED
12/9/2006	ATR42300	PW120	567775080	TORQUE

(CAN) ENROUTE THE CREW OBSERVED DRAMATIC FLUCTUATION IN THE NR 2 ENGINE TORQUE INDICATOR. THE AIRCRAFT RETURNED TO POINT OF DEPARTURE WITHOUT INCIDENT. AFTER TROUBLE SHOOTING MAINTENANCE REPLACED THE NR 1 TORQUE INDICATOR AND THE SYSTEM WAS CHECKED SERVICEABLE. (TC NR 20061222006)

CA070111014	AEROSP	PWA	SYMBOL GENERATOR	FAILED
12/30/2006	ATR42300	PW120	7004544713	NR 1

(CAN) THE CAPTAINS EFIS SCREEN CIRCUIT BREAKER TRIPPED. THE BREAKER WAS RESET AND TRIPPED AGAIN AND THE AIRCRAFT RETURNED TO POINT OF DEPARTURE. MAINTENANCE REPLACED THE NR 1 SYMBOL GENERATOR UNIT (SGU)THE AIRCRAFT WAS RETURNED TO SERVICE AFTER SATISFACTORY FUNCTION CHECK COMPLETED. (TC NR 20070111014)

CA061219024	AEROSP	PWA	TURBINE BLADES	DAMAGED

11/26/2006	ATR42500	PW127		ENGINE

(CAN) ON TAKE-OFF, THE ENGINE FIRE WARNING ACTIVATED AND THE CREW SHUT THE ENGINE DOWN IN FLIGHT AND DISCHARGED THE FIRE BOTTLES. THE AIRCRAFT DIVERTED TO POINT OF DEPARTURE. SUBSEQUENT INSPECTION REVEALED DAMAGED POWER TURBINE BLADES AND METAL IN THE ENGINE OIL. MFG WILL INVESTIGATE THE EVENT AND ADVISE OF ROOT CAUSE ONCE DETERMINED. (TC NR 20061219024)

CA061227001	AIRBUS	GE	WIRE	BURNED
12/19/2006	A310300	CF680C2*	34440058	AIR COLLISION

(CAN) ON ARRIVAL, FLIGHT CREW REPORTED TCAS AND RA FAILURE FLAGS ON BOTH IVSI'S DURING FLIGHT. WHILE TROUBLESHOOTING TCAS FAILURE, SEVERAL BURNED WIRES WERE DISCOVERED IN A BUNDLE LOCATED BEHIND THE ATC1 AND TCA RACK (500VU). THE WIRE SUSPECTED OF CAUSING THE DAMAGE IS THE TCAS POWER SUPPLY WIRE 3444-0058 BETWEEN CONNECTOR 221VC AND TERMINAL BOARD 1487VT MODULE AND PIN A. (REF A-310 AWM 34-44-01 PG 003 SHEET 1). ALL DAMAGED WIRES WERE REPLACED, CONNECTORS VERIFIED AND AS PRECAUTION AND MFG RECOMMENDATION THE TCAS PROCESSOR AND TCAS POWER SUPPLY CIRCUIT BREAKER WERE REPLACED. (TC NR 20061227001)

2007FA0000037	AIRBUS	GE	CFMINT	SHAFT	SEIZED
9/15/2006	A320211	CFM565A		3360097050	LP TURBINE

ENGINE WAS REMOVED FROM AC, ENG POSITION 1 FOR A SUSPECTED LPT SHAFT FAILURE. ENG FAILED ON 9/15/2006 AND WAS REMOVED ON 12/3/2006. ENG WAS INPUT ON 1/2/2007 FOR DISASSEMBLY. ON RECEIPT OF ENG, IT WAS NOT POSSIBLE TO CARRY OUT A BORESCOPE INSP OF CORE AS IT WAS SEIZED AND WAS UNABLE TO ROTATE. ON ROTATION OF FAN LPC SYSTEM IT WAS FOUND THAT LPT SYSTEM WAS NOT ROTATING. DUE TO EXTENT OF DEBRIS FOUND IN LPT FROM FAILED LPT ROTOR BLADES AND VANES, IT WAS ALSO NOT POSSIBLE TO ROTATE IT INDEPENDENTLY. ENG HAD SUFFERED MAJOR FAILURES ON FOLLOWING COMPONENTS: LPT SHAFT, NR 4 BRG, CENTER VENT TUBE, HPT BLADES, LPT STAGE 1 VANES, LLPT ROTOR BLADES AND VANES ALL STAGES. FURTHER DISASSEMBLY OF MODULES WILL EXPOSE FULL EXTENT OF DAMAGE AND ESTABLISH CAUSE OF FAILURE. BORESCOPE PORTS ON HPC STAGE 5 AND 9 WERE REMOVED JUST TO VIEW ROTOR BLADE ADJACENT TO BORESCOPE PORTS. BLADE TIP WEAR WAS VISIBLE BUT NO BLADE DAMAGE OR LIBERATION COULD BE SEEN. IGNITOR PLUGS WERE REMOVED FROM COMBUSTION OUTER CASE AND IT WAS FOUND THAT PORTS WERE PARTIALLY BLOCKED BY EITHER DEFORMATION OF COMBUSTION OUTER CASE AND IT WAS FOUND THAT PORTS WERE PARTIALLY BLOCKED BY EITHER DEFORMATION OF COMBUSTION OUTER LINER OR ROTATION OF THE OUTER LINER. THE MAGNETIC CHIP DETECTORS AND SCREENS WERE INDIVIDUALLY REMOVED FROM THE LUBE UNIT. HEAVY CONTAMINATION WAS FOUND ON THE FWD SUMP (NR 1, 2 AND 3 BEARING) MCD/SCREEN LOCATION BUT VERY LITTLE CONTAMINATION WAS FOUND ON AGB, TGB AND REAR SUMP (NR 4 AND NR 5 BEARING) LOCATION. ON REMOVAL OF FLAME ARRESTOR, IT COULD BE SEEN INTERNALLY WITHIN LPT SHAFT THAT CENTER VENT TUBE HAD FRACTURED AT A LOCATION CLOSE TO INTERFACE BETWEEN REAR OF CORE AND FRONT OF LPT MAJOR MODULE. FURTHER DISASSEMBLY AND PREPARATION TO REMOVE LPT MAJOR MODULE, INDICATED THAT REAR SUMP OIL SUPPLY AND SCAVENGE LINES AT THEIR CONNECTIONS OUTSIDE OF TRF AND TO OIL INLET COVER TO REAR SUMP REVEALED OIL TUBES TO HAVE A LITTLE OR NO OIL WETTING PRESENT. ON REMOVAL OF AIR/OIL SEPARATOR, SOME OIL WETTING WAS PRESENT. LPT MAJOR MODULE WAS REMOVED AND WAS CONFIRMED THAT LPT SHAFT HAD FRACTURED OVER A FULL 360 DEGREE CIRCUMFERENCE AND WAS A (CLEAN CUT). THERE WAS SLIGHT BURRING TO INTERNAL BORE OF SHAFT WITH NOTHING EVIDENT ON EXTERNAL DIAMETER A FRACTURE LOCATION. NR 4 BRG HAD ALSO FAILED WITH ALL ROLLERS HAVING FLATTENED ON OUTER CIRCUMFERENCE OF BRG. IT WAS NOT POSSIBLE TO ROTATE INDIVIDUAL ROLLERS DUE TO EXTENT OF DAMAGE PRESENT . CENTER VENT TUBE HAD ALSO FRACTURED AT SAME AXIAL LOCATION AS LPT SHAFT BUT THERE WAS EVIDENCE OF A (SHEAR OR TORSION) FAILURE AT THAT LOCATION. CENTER VENT TUBE SUPPORT FROM FWD SUPPORT LOCATION HAD MOVED REARWARDS ALONG SHAFT TO FAILURE ZONE. AT THIS STAGE IT IS DIFFICULT TO ESTABLISH CAUSE OF FAILURE. MFG WAS CONSULTED AND ASSISTING WITH INVESTIGATION. FURTHER DISASSEMBLY WILL BE CARRIED OUT ON ENG ON INSTRUCTION OF MFG SO THAT (ROOT CAUSE) OF FAILURE CAN BE ESTABLISHED. (K)

CA070103002	AIRBUS	CFMINT	WINDSHIELD	CRACKED
12/29/2006	A320214	CFM565B4P	66642023	COCKPIT

(CAN) WINDOW HEAT CONTROLLER MALFUNCTIONED CAUSING CAPT WINDSHIELD OUTER PLY TO CRACK. (TC NR 20070103002)

CA061222003	AIRBUS	IAE	ELEMENT	LEAKING

12/14/2006	A320232	V2527A5	0725185	0725145	REFUEL COUPLING

(CAN) WHILE REFUELING, IT WAS NOTICED THAT FUEL WAS LEAKING FROM THE ELEMENT ASSY. INITIALLY IT WAS THOUGHT THAT THE COUPLING HAD BEEN DAMAGED BUT ON INSPECTING THE PART IT WAS DETERMINED THAT THE 8 SECURING SCREWS HAD ROTATED APPROX A HALF TURN LOOSE. (TC NR 20061222003)

2007FA0000021	AIRBUS		PIN	MISMANUFACTURED
11/27/2006	A340*			

TWO OCCURRENCES OF A RETAINING PIN HOLDING THE UNIVERSAL-JOINT TOGETHER, HAVING INSUFFICIENT PEENING TO RETAIN THE PIN, HAS BEEN IDENTIFIED IN BUILD OF THE UNIT BY THE ACTUATOR/DRIVE SHAFT MFG. THE PIN IS THEREFORE NOT SUFFICIENTLY RETAINED AND MAY WALK OUT OF THE UNIVERSAL JOINT UNDER ACTUATION LOADS. THREE POTENTIALLY HAZARDOUS CONDITIONS HAVE BEEN IDENTIFIED. 1) THERE WILL BE A NR OF METAL PARTS FREE IN THE FUEL TANK- LIGHTNING STRIKE. 2) THE JOINT WILL FAIL AND PREVENT TRANSMISSION OF DRIVE THROUGH THE SHAFT TO THE ACTUATED VALVE. THE ACTUATED VALVE WILL FAIL TO OPERATE, BUT A POSITIVE ACTUATION WILL BE INDICATED TO THE FLIGHT CREW. MONITORING OF THE FUEL CONTENTS WILL BE REQUIRED TO VERIFY THAT THE COMMANDED TRANSFER IS NOT BEING ACCOMPLISHED. THUS THERE IS THE POTENTIAL FOR AN UNUSABLE QUANTITY OF FUEL FAR IN EXCESS OF THE STATED UNUSABLE FUEL. 3) WITH THE UNIVERSAL JOINT FAILED, ONE END OF THE DRIVE-SHAFT WILL BE FREE AND MAY FAIL UNDER OPERATION, POTENTIALLY DAMAGING OTHER ITEMS IN THE FUEL TANK, OR THE FUEL TANK WALL. (K)

CA061208005	AIRBUS	CFMINT	COMPRESSOR	STALLED
12/3/2006	A340313	CFM565C4	9324M70G06	ENGINE

(CAN) IN CRUISE, 2 HOURS FROM DESTINATION THE ENGINE STALLED AND EGT WAS RISING. WHEN EGT REACHED 1010 DEG. C, THE ENGINE WAS SHUTDOWN. THE OIL PRESSURE WENT TO ZERO AND BOTH N1 AND N2 ROTORS WERE ROTATING. DFDR DATA SHOWS: N2 VIBRATION WAS HIGH (3.5 TO 5.5 UNITS) AFTER THE STALL, RAPIDLY REDUCED TO 2.O UNITS AND THEN SLOWLY REDUCED TO ZERO BEFORE ENGINE SHUTDOWN. N1 VIBRATION WAS LOW AFTER THE STALL (0.5-2 UNITS) AND RAPIDLY INCREASED AFTER STALL TO 5-5.5 UNITS AND STAYED THERE. N1, N2, FUEL FLOW HAD A RAPID DECREASE AFTER THE STALL AND RECOVERED SLIGHTLY, THEN SLOWLY DECREASED WITH EGT RISING. AFTER AIRCRAFT LANDED, BASE MAINTENANCE CARRIED OUT A VISUAL INSPECTION WITH THE FOLLOWING FINDINGS: NO DAMAGE ON FAN BLADES AND BOOSTER INLET, STAGE 5 LPT BLADES NO DAMAGE, SHINY METAL PIECES IN THE EXHAUST MIXER IN THREE PLACES AND OIL IN THE EXHAUST. N1 ROTOR WAS SEIZED. (TC NR 20061208005)

2006FA0001203	AIRPTS	LYC	STRUT	FAILED
10/7/2006	A9B	TIO540*	109152	MLG

THIS PART FAILED AT THE WELD THAT ATTACHES PN 12020(UNIVERSAL) TO THE LANDING GEAR SHOCK STRUT. THIS PART IS LOCATED AT THE POINT WHERE THE SHOCK STRUT ATTACHES TO THE LANDING GEAR TO FUSELAGE SUPPORT TUBE AT THE FRONT OF THE RT WING MAIN SPAR. THIS PART FAILED DURING A NORMAL TAKEOFF. THE PART BROKE AT THE WELD BREAKING THE WELD ON ONE SIDE. THE WELD DID NOT APPEAR TO HAVE COMPLETE PENETRATION. INTERNAL CORROSION MAY HAVE BEE A FACTOR. THIS PART APPEARS TO BE THE WEAKEST PART OF THE ENTIRE SHOCK STRUT SYSTEM. I WOULD RECOMMEND THAT THIS PART BE MADE OF THICKER MATERIAL UTILIZING A MORE EXTENSIVE WELD WITH GOOD PENETRATION. (K)

CA060929003	AMBLP	ROTAX	SCREW	BROKEN
9/20/2006	A150	ROTAX914	941521	GEARBOX

(CAN) PROP WOULD NOT CHANGE PITCH DURING RUN-UP. GEARBOX WAS REMOVED AND THE SCREW HOLDING THE GOVENOR DRIVE COUPLING TO THE DRIVE GEAR WAS FOUND BROKEN. THE SCREW APPEARED TO HAVE FAILED FROM TORQUE OVERLOAD. THE SCREW, DRIVE COUPLING AND GEAR WERE REPLACED AND ENGINE RETURNED TO SERVICE. NO FOD NOTED. THE ENGINE HAS 577 HRS SINCE OVERHAUL. (TC NR 20060929003)

CA061207002	AMD		WINDOW FRAME	CORRODED
12/7/2006	FALCON10		F10A212107	WINDOW

(CAN) REMOVED FRONT WINDSHIELDS TO COMPLY WITH COCKPIT WINDOW FRAME INSPECTION REQUIREMENT OF THE C2 INSPECTION. FOLLOWING REMOVAL OF PILOT'S WINDSHIELD, SEVERE EXFOLIATION CORROSION WAS FOUND ON LOWER FRAME APPROX. 16 INCHES FROM OUTER RAIL OVER AN 8 INCH WIDTH ON THE FRAME. (TC

NR 20061207002)

CA061106011	AMD	GARRTT	HOSE	COLLAPSED
11/2/2006	FALCON10	TFE7312	FAL1007	LT SLAT

(CAN) AFTER LANDING THE PILOTS NOTICED THAT THE LT IB SLAT HAD A SMALL TRACE OF ICE FORMED. AFTER INSPECTION IT WAS FOUND THAT THE LT IB SLAT ANTI-ICE HOSE INNER WALL HAD COLLAPSED. THE HOSE WAS REPLACED AND ALL OTHER SLAT ANTI-ICE HOSES WERE INSPECTED AND FOUND SERVICEABLE. (TC NR 20061106011)

CA061220002	AMD		TRANSDUCER	UNSERVICEABLE
11/27/2006	FALCON2000		30C2083	OIL PRESS TRANSD

(CAN) ENGINE OIL PRESSURE INDICATION FLUCTUATED IN FLIGHT AND FELL BELOW 35 PSI. AS A PRECAUTION, THE ENGINE WAS SHUTDOWN IN FLIGHT. SUBSEQUENT INVESTIGATION REVEALED A FAULTY MAIN OIL PRESSURE TRANSDUCER. (TC NR 20061220002)

CA070103005	AMD		SEAL	LEAKING
12/3/2006	FALCON2000	PW308C		FUEL CONTROL

(CAN) ENGINE OIL PRESSURE WAS REPORTED TO FLUCTUATE AND GRADUALLY DECREASE IN CRUISE. THE ENGINE WAS SHUTDOWN IN FLIGHT. SUBSEQUENT INSPECTION REVEALED A LEAKING FUEL CONTROL DRIVE SEAL. (TC NR 20070103005)

2006FA0001180	AMD	PWA	TRANSDUCER	FALSE INDICATION
12/7/2006	FALCON2000	PW306B	30C208301	RT ENGINE OIL

RT ENGINE OIL TRANSDUCER FAILURE WHICH GAVE FALSE ENGINE OIL INDICATION WHICH CAUSED BY AIRCRAFT OPERATIONS MANUAL CHECK LIST ENGINE SHUTDOWN AND SINGLE ENGINE LANDING.

DJSA20061202	AMD	GARRTT	ENGINE	FAILED
12/2/2006	FALCON20C5	TFE7315BR	TFE7315BR2C	

UNCONTAINED ENGINE FAILURE DURING CLIMB AT 600 FEET AGL. AIRCRAFT RETURNED, MAKING AN UNEVENTFUL LANDING. ENGINE HAS BEEN RETURNED TO MANUFACTURER FOR TEARDOWN AND EVALUATION TO DETERMINE CAUSE OF FAILURE.

2007FA0000049	AMD	GARRTT	MICROTURBO	SEAL	DETERIORATED
1/4/2007	FALCON20F5	TFE731*		MY20240035005A3	APU EXHAUST

DETERIORATED APU EXHAUST DUCT SEAL BETWEEN THE DUCT FLANGE AND AIRCRAFT SKIN ALLOWED HOT EXHAUST GASSES TO ENTER THE TAILCONE AREA RESULTING IN HEAVY SOOT BUILDUP AND HEAT DAMAGE TO WIRE BUNDLES AND ELECTRICAL CONNECTORS AND STRUCTURAL COMPONENTS ADJACENT TO THE APU EXHAUST OPENING. ULTRASOUND INSPECTION REVEALED HEAT DAMAGE TO THE AC SKIN ABOVE THE EXHAUST OPENING. THE APU EXHAUST OPENING DOUBLER AND STRINGERS ADJACENT TO THE OPENING. PERIODIC INSPECTION OF THE APU INSTALLATION, INCLUDING THIS SEAL, IS REQUIRED EVERY A-CHECK IAW MM. (K)

2007FA0000091	AMRGEN	LYC	PUMP	LEAKING
1/18/2007	AA5	O320E2G	AC40295	ENGINE

AT ANNUAL FUEL STAINS WERE FOUND ON ENGINE LOWER COWLING. IN AN ATTEMPT TO FIND THE LEAK THE ELECTRIC FUEL PUMP WAS TURNED ON TO PRESSURIZE THE FUEL SYSTEM BUT NO LEAKAGE WAS FOUND. WHILE TURNING ENGINE OVER BY HAND DURING THE COMPRESSION CHECK A LARGE FLOW OF GAS WAS FOUND LEAKING OUT THE SIDE OF THE FUEL PUMP ABOVE THE OUTLET PORT BETWEEN THE DIAPHRAGM AND PUMP CASTINGS. REPAIR STATION WAS CONTACTED AND THY INDICATED THAT THE SCREWS THAT HOLD THE PUMP TOGETHER ARE ASSEMBLED AT 25 INCH LBS TORQUE + OR - 5 INCH LBS . PUMP SCREWS WERE CHECKED AND THEY WERE FOUND TO BE TIGHTENED TO ONLY 2-3 INCH LBS OF TORQUE. ALL OF THE SCREWS HAD TORQUE PUTTY ON THEM WHICH INDICATED THE SCREWS HAD NOT BACKED OUT. GUESS IS THAT THE DIAPHRAGM MATERIAL HAS SHRUNK OR THE SPLIT TYPE LOCK WASHERS HAVE LOST THEIR COMPRESSION CAUSING THE SCREWS TO LOSE THEIR REQURIED TORQUE. THIS IS THE SECOND TIME IN 2 YEARS THAT WE HAVE OBSERVED LOW TIME LEAKING FUEL PUMPS AS A RESULT OF LOOSE SCREWS THAT WERE O/H. CHECKED 5 OTHER FRESH O/H PUMPS FROM O/H HAVE FOUND ALL OF THE SCREWS LOOSE ALSO. ALL OF THESE OTHER PUMPS WERE O/H

OVER THE LAST FEW YEARS AND WERE OF VARYING PN. (K)

2007FA0000050	AMRGEN	LYC		ATTACH ANGLE	CRACKED
1/10/2007	AA5A	O320*		510229615	STABILIZER

DURING INSPECTION, ANGLE PN 5102296-15 AND PN 5102296-16, WERE FOUND CRACKED IN THE UPPER END OF THE ANGLE AS INSTALLED. CAUSE OF CRACKING IS BELIEVED TO BE DUE TO HIGHT STRESS LOADS IN THIS AREA. (K)

2007FA0000059	AMRGEN	LYC		ATTACH ANGLE	CRACKED
1/10/2007	AA5B	O360*		510229615	STABILIZER

DURING INSPECTION, ANGLE PN 5102296-15 AND PN 5102296-16, WERE FOUND CRACKED IN THE BEND RADIUS OF THE UPPER END OF THE ANGLE AS INSTALLED. CAUSE OF CRACKING IS BELIEVED TO BE DUE TO HIGH STRESS LOADS IN THIS AREA. (K)

2006FA0001134	AMRGEN	LYC	FACET	FLOAT	DAMAGED
11/20/2006	AA5B	O360*			CARBURETOR

ENGINE IDLE AND LOW POWER PERFORMANCE WAS ERRATIC. UPON ENGINE SHUTDOWN FUEL WAS NOTED DRIPPING FROM CARB/INDUCTION AIRBOX. CARB WAS DISASSEMBLED AND INSPECTED. FOUND PLASTIC TO HAVE PARTIALLY BECOME UNBONDED FROM LOWER SECTION ALLOWING FUEL TO BEGIN LEAKING INTO ASSEMBLY. AS THE FLOAT LOST ITS BOUYANCY IT COULD NO LONGER RESTRICT FUEL SOURCE. POOR RUNNING ENGINE AND A FIRE HAZZARD WERE THE RESULTS. RECOMMEND THE MFG PROCESS (BONDING) OF THE FLOAT BE IMPROVED. IN THE MEANTIME, ALL FLOATS MFG IN THE SAME BATCH SHOULD BE REMOVED FROM SERVICE. (K)

2007FA0000056	AMRGEN	LYC		ATTACH ANGLE	CRACKED
1/10/2007	AG5B	O360*		510229615	STABILIZER

DURING INSPECTION, ANGLE PN 5102296-15 AND PN 5102296-16, WERE FOUND CRACKED IN THE BEND RADIUS OF THE UPPER END OF THE ANGLE AS INSTALLED. CAUSE OF CRACKING IS BELIEVED TO BE DUE TO HIGH STRESS LOADS IN THIS AREA. (K)

2006FA0001189	AMTR	LYC		OIL COOLER	LEAKING
12/12/2006	ALARUSCH2T	O235*		P010904	

OWNER REPORTED THAT AFTER FLYING AIRCRAFT, THERE APPEARED TO BE OIL LEAKING FROM UNDER COWLING. OIL LEVEL WAS CHECKED AND FOUND TO BE DOWN TO ONLY 3 QUARTS LT. AFTER REMOVAL OF COWLING AND INSPECTION, IT WAS FOUND THAT MOST OF THE OIL LEAKAGE APPEARED TO BE AROUND THE OIL COOLER. OIL COOLER LINES WERE DISCONNECTED AND OIL COOLER WAS PRESSURIZED WITH ABOUT 30 PSI OF AIR PRESSURE. A SMALL HOLE WAS FOUND IN THE UPPER RT EDGE OF OIL COOLER AT A WELD SEAM. THIS AIRCRAFT HAS ONLY ABOUT 60 HOURS TOTAL TIME SINCE NEW. AN ANNUAL INSPECTION ABOUT 2 HOURS AGO DID NOT REVEAL ANY OIL LEAKAGE. IT APPEARS THAT THE CAUSE WAS A DEFECTIVE WELD IN THE MANUFACTURING OF THE OIL COOLER.

CA061006014	AMTR	PWA		BLADE	DAMAGED
9/19/2006	ALPHA	PW306B			ENGINE

(CAN) ON CLIMB, THE ENGINE EMITTED A LOUD NOISE AND FLAMED OUT. SUBSEQUENT INSPECTION REVEALED HPT1 BLADE DAMAGE. P&WC WILL INVESTIGATE THE EVENT AND WILL ADVISE OF ROOT CAUSE ONCE ESTABLISHED. (TC NR 20061006014)

CA061018007	AMTR	CONT		PISTON	CRACKED
10/11/2006	CUBYACROTNER	O200*			NR1 CYLINDER

(CAN) ENGINE WAS TORN DOWN FOR INSPECTION DUE TO SMALL AMOUNT NON FERROS METAL IN FILTER. ENGINE TIME 2,707 HOUR. FRONT BEARING SLIGHT WEAR AND FLAKING (NORMAL FOR HIGH TIME ENGINE). NR 1 PISTON SKIRT CRACKED AT 1,100 HOURS. NOTE: THIS IS THE 4TH PISTON THAT I HAVE SEEN. RANGING FROM 1,100 HOURS TO 2,100 HOURS. ACTION ON ENGINE - PISTON REPLACED NEW MAIN BEARINGS INSTALLED. (TC NR 20061018007)

2007FA0000028	AMTR	CONT	DIPSTICK	SEPARATED
12/29/2006	LC41550FG	TSIO550C	6566161	ENGINE

THE OIL GAGE ASSEMBLY (DIPSTICK) SEPARATED AT THE UPPER SWEDGED JOINT. (K)

2006FA0001076	AMTR		CONNECTING ROD	FAILED
10/30/2006	ROTORWAY162F			ENGINE

ENGINE FAILED ON CIRCLING CLIMB FROM AIRPORT. ROD CAME THRU ENGINE BLOCK. (INCIDENT ISW1107003) (K)

2006FA0001197	AYRES		TRUSS	BROKEN
9/18/2006	S2R			MLG

UPPER TRUSS TO SHOCK STRUT BROKE OFF GEAR LEG, ALLOWING LANDING GEAR TO COLLAPSE. THIS AIRCRAFT HAS BEEN USED FOR FUEL HAULING AND IS LANDING WITH HEAVY LOADS. IT APPEARS A SMALL CRACK IN 1 TRUSS TUBE DEVELOPED AND EVENTUALLY FAILED, CAUSING TOTAL FAILURE OF THE LANDING GEAR LEG. RECOMMEND DYE PENETRANT INSPECTION OF GEAR LEGS ON AIRCRAFT CONSISTANTLY LANDING WITH HEAVY LOADS EVERY 200 TO 300 HOURS. (K)

2006FA0001206	AYRES	PWA	NUT	DAMAGED
12/6/2006	S2RRESTD	R1340*	202394	WING SPAR

WHILE PERFORMING (SPLICE BLOCK) MAINTENANCE A NEW TUBE NUT HAD ITS THREADS PULLED OUT BEFORE REACHING TORQUE. THE FOLLOW ON PART WAS EXAMINED AND WAS FOUND TO BE LOOSE ON THE BOLT, EVEN THE USED TUBE NUT WAS TIGHTER. SUSPECT PANTS HAVE NO PN OR STAMP, ALSO NO INDENTATIONS ON FACE OF THE NUT (NOT VISIBLE WHEN INSTALLED). ALMOST MADE TORQUE. (K)

CA061219014	BAG	PWA	SEAL	LEAKING
11/9/2006	ATP	PW126A		PROPELLER SHAFT

(CAN) DURING CRUISE, THE ENGINE OIL PRESSURE BEGAN TO FLUCTUATE IN THE RED BAND. THE ENGINE WAS SHUTDOWN IN FLIGHT AND THE AIRCRAFT RETURNED TO POINT OF DEPARTURE. SUBSEQUENT INSPECTION REVEALED A LEAK AT THE PROP SHAFT OIL SEAL. MFG WILL INVESTIGATE THE EVENT AND ADVISE OF ROOT CAUSE ONCE ESTABLISHED. (TC NR 20061219014)

CA070111017	BAG	GARRTT	STRUCTURE	UNBONDED
1/4/2007	JETSTM3212	TPE33112UHR		FUSELAGE

(CAN) CREW REPORTED THAT WHEN THE AIRCRAFT ENTERED INTO A CLOUD, THE RADIOS BECAME UNREADABLE. ALL RADIO NAVIGATION EQUIPMENT BECAME UNRELIABLE AS WELL AS THE GPS SYSTEM. AIRCRAFT ARRIVED AT MTC. BASE AND AVIONICS STATIC SPECIALIST CONTRACTED. P-STATIC TEST CARRIED OUT AND FOUND BONDING ISSUES ON MULTIPLE AIRFRAME COMPONENTS. REPAIRS CARRIED OUT AND P-STATIC TEST CARRIED OUT AGAIN. NO FURTHER FAULTS. (TC NR 20070111017)

CA061220001	BBAVIA		CABLE	FRAYED
12/20/2006	8GCBC		21903	FLAP HANDLE ASSY

(CAN) CABLE FOUND FRAYED AT FWD END WHERE CABLE BENDS HARD OFF OF HANDLE TRACK TO FWD CABLE ATTACH POINT. (TC NR 20061220001)

CA061215002	BEECH	GARRTT	BEECH	HINGE	DAMAGED
12/12/2006	100BEECH	TPE3316252B		115520219	ELEVATOR

(CAN) DURING PHASE NR 2 INSPECTION, IT WAS NOTICED THAT THE LT ELEVATOR WAS LOOSE AT THE OB HINGE. AREA INSPECTED AND FOUND THAT THE 4 BOLTS THAT ATTACH THE HINGE TO THE HORIZONTAL STAB WERE LOOSE. THE HINGE WAS REMOVED AND FOUND THAT THE HOLES WERE ELONGATED. THE HINGE AND ATTACHING STRUCTURE WERE REPLACED.

CA061220004	BEECH	PWA	ENGINE	MALFUNCTIONED
11/28/2006	1900C	PT6A65B		

(CAN) THE ENGINE EMITTED A LOUD NOISE ON TAKE-OFF ROLL. TAKE-OFF WAS ABORTED AND THE ENGINE SHUTDOWN. MFG WILL MONITOR INVESTIGATION OF THE EVENT AND ADVISE OF ROOT CAUSE ONCE ESTABLISHED. (TC NR 20061220004)

CA070111013	BEECH	PWA	FUEL LINE	CHAFED
1/8/2007	1900C	PT6A65B		ENGINE

(CAN) THE FLIGHT CREW REPORTED FUEL LEAKAGE FROM THE RT ENGINE AREA AFTER SHUTDOWN. THE ENGINE COWLING WAS REMOVED AND INVESTIGATION HAD SHOWN THAT THE ENGINE DRIVEN FUEL PUMP TO FCU LINE HAD CHAFED AN THE BACK EDGE OF THE FCU. THE LINE IS ON CONDITION AND NOT A TIMED UNIT. A FLEET CAMPAIGN AND TECHNICAL INFORMATION BULLETIN WAS RELEASED TO ENSURE CORRECT ROUTING OF THE LINE AND ADEQUATE PROTECTION. ANY SUSPECT LINES REPLACED. (TC NR 20070111013)

R021692	BEECH	PWA	BEARING	BROKEN
1/17/2007	1900D	PT6*	D7745	PROPELLER BLADE

ON 12/14/06 REPORTED AIRCRAFT VIBRATIONS FROM STBD ENGINE. INSPECTION OF PROPELLER ON GROUND REVEALED EXCESSIVE RADIAL PLAY OUT OF LIMIT OF NR 3 BLADE. PROPELLER REMOVED FROM AIRCRAFT FOR FURTHER INVESTIGATION. SERVICE CENTER NOTES: BLADE NR 3 CAM FOLLOWER BROKEN, PRELOAD PLATE GOUGED, BLADE SIDE D-7745 BEARING CRACKED RADIALLY AND PIECE MISSING. RETAINING WASHER ATTACHED TO PC KNOB. BLADE NR 3 FORK SLOT WORN 0.028, OTHER 3 SLOTS WORN 0.015-0.021, CIRCUMFERENTIAL WEAR IN FORK SEAT. BLADE NR 3 RETENTION SHOULDER HEIGHT MEASURED 0.914 - 0.974, UNABLE TO PERFORM OPTICAL COMPARATOR INSPECTION OF RADIUS DUE TO SHOULDER HEIGHT DIMENSION BELOW 0.972. SEE S/B 287.

SJ3R021444	BEECH	PWA	HARTZL	BEARING	BROKEN
11/18/2006	1900D	PT6*	HCE4A3J	D7745	PROPELLER BLADE

BLADE POSITION 4, S/N 1091 THRUST BEARING BROKEN. DAMAGE TO PROPELLER HUB BLADE SOCKET NR 4 IS BEYOND REPAIRABLE LIMITS. MFG SB 287 HAS NOT BEEN PERFORMED ON THIS PROPELLER.

CA061127002	BEECH	PWA	UNKNOWN	UNKNOWN
11/26/2006	1900D	PT6A67D		MLG

(CAN) AIRCRAFT DEPARTED, DURING CLIMB THE LANDING GEAR RED UNSAFE LIGHT ILLUMINATED. GEAR WAS CYCLED AND LIGHT WOULD NOT EXTINGUISH. GEAR WAS SELECTED DOWN AND (3) GREEN ILLUMINATED WITH NO RED HANDLE. CREW ELECTED TO RETURN TO MAINTENANCE. MAINTENANCE INSPECTED AND SWUNG GEAR WITHOUT FAULT. AIRCRAFT OPERATING WITHOUT FURTHER INSTANCE. WEATHER EXTREMELY COLD ON DAY OF OCCURRENCE. (TC NR 20061127002)

CA061220005	BEECH	PWA	BOLT	SHEARED
10/10/2006	1900D	PT6A67D		1ST STAGE CARRIE

(CAN) IN CRUISE FLIGHT, ENGINE OIL PRESSURE WAS SEEN TO FLUCTUATE AND THEN DECAY TO ZERO. THE ENGINE WAS SHUTDOWN IN FLIGHT. SUBSEQUENT INVESTIGATION REVEALED A SHEARED 1ST STAGE REDUCTION GEAR BOX CARRIER BOLT. (TC NR 20061220005)

2006FA0001140	BEECH	PWA	FIRE LOOP	MALFUNCTIONED
11/7/2006	1900D	PT6A67D	24412886	RT ENGINE

ON 10/4/2006, AFTER DEPARTING, APPROXIMATELY 30 MINUTES INTO THE FIRST LEG OF THE DAYS TRIP, THE PILOT REPORTED GETTING A RT ENGINE FIRE INDICATION. FOLLOWING PROCEDURE, THE PILOT PULLED THE T-HANDLE AND BLEW THE FIRE BOTTLE, SHUTTING DOWN THE ENGINE. THE PILOT DIVERTED TO AIRPORT AND LANDED SAFELY. THE PILOT STATED THAT HE HAD NOT NOTICED ANY UNUSUAL READINGS FROM ANY OF THE GAUGES. A MAINTENANCE CREW WAS SENT TO INVESTIGATE AND FOUND THAT THERE WERE APPROXIMATELY 3 QUARTS OF OIL LEFT IN THE ENGINE. IT WAS DECIDED TO PULL THE ENGINE AND SEND IT FOR TESTING. IT WAS ASSUMED THAT AN OIL SEAL HAD MALFUNCTIONED AND THE SUBSEQUENT OIL LOSS CAUSED THE ENGINE TO OVERHEAT AND ACTIVATE THE ENGINE FIRE DETECTION LOOP. AT THE TESTING FACILITY, NO ABNORMALITIES COULD BE FOUND. THE ENGINE WAS TEST RAN AND PERFORMED WITHIN ALL OPERATING PARAMETERS AND WAS RETURNED FOR REINSTALL ON THE AIRCRAFT. DURING THE TIME THAT THE ENGINE WAS BEING TESTED, A RENTAL ENGINE WAS INSTALLED ON THE AIRFRAME . DURING THE INSTALL OF THE RENTAL ENGINE IT WAS

DETERMINED THE RT ENGINE FWD FIRE LOOP WAS FAULTY AND WAS REPLACED. IT HAS BEEN DETERMINED THAT THE RT ENGINE FWD FIRE LOOP FAILED CAUSING AN ERRONEOUS FIRE INDICATION. THE LACK OF OIL IN THE ENGINE WAS CAUSED BY WINDMILLING OF THE ENGINE AFTER IT HAD BEEN SHUTDOWN POST FIRE INDICATION. (K)

CA061113001	BEECH	PWA	ENGINE	MALFUNCTIONED
11/5/2006	1900D	PT6A67D	PT6AD	

(CAN) .5 HRS AFTER A SCHEDULED REPLACEMENT OF THE NR 3 AND NR 4 BEARING ASSY AND THE NR 1 AND NR 2 POWER TURBINE DISC`S DUE TO CYCLE LIFE LIMIT BEING REACHED, THE ENGINE LOST OIL PRESSURE AND WAS SHUTDOWN AND AIRCRAFT RETURNED TO DEPARTURE FIELD WITHOUT FURTHER INCIDENT. AWAITING TEAR DOWN REPORT FOR ADDITIONAL DETAILS. (TC NR 20061113001)

CA070118005	BEECH	PWA	SENSE LINE	BROKEN
1/3/2007	200BEECH	PT6A41	3027791	ENGINE

(CAN) P3 TUBE SUDDENLY BROKEN WHILE AIRCRAFT WAS IN CLIMB. ENGINE FAIL TO IDLE, ENGINE WAS SHUTDOWN BY THE CREW. AIRCRAFT RETURN TO DEPARTURE AIRPORT WITHOUT OTHER DIFFICULTY. (TC NR 20070118005)

CA061219026	BEECH	PWA	TURBINE BLADES	FAILED
11/28/2006	200BEECH	PT6A41		ENGINE

(CAN) IN CRUISE THE ENGINE EMITTED A LOUD NOISE AND FLAMED OUT. SUBSEQUENT INSPECTION REVEALED FRACTURED TURBINE BLADES AND VANES AND A PUNCTURED GAS GENERATOR CASE. LIGHT IMPACT DAMAGE WAS FOUND ON THE AIRCRAFT WING LEADING EDGE AND FUSELAGE WINDOWS. MFG WILL INVESTIGATE THE EVENT AND WILL ADVISE OF ROOT CAUSE ONCE ESTABLISHED. (TC NR 20061219026)

CA061116006	BEECH	PWA	SKIN	CRACKED
11/16/2006	200BEECH	PT6A41	1014302051	BS 251

(CAN) CABIN BOTTOM SKIN FOUND CRACKED ADJACENT TO ROTATING BEACON DOME MOUNTING. REPAIR DRAWING REQUESTED. (TC NR 20061116006)

2006FA0001143	BEECH		DOWNLOCK SWITCH	INOPERATIVE
11/9/2006	300BEECH		1CH25	MLG

INVESTIGATED RED WARNING LIGHT ILLUMINATED IN LANDING GEAR CONTROL HANDLE WITH LANDING GEAR DOWN AND LOCKED. FOUND NLG DOWNLOCK SWITCH. S508 INOPERATIVE PN 101-3646289, MICROSWITCH-FREEPORT PN 1CH25. REPLACED SWITCH AND ADJUSTED IAW MM. LANDING GEAR POSITION/WARNING SYSTEM FUNCTIONAL TESTS NORMAL. (K)

CA061216002	BEECH	PWA	VALVE	FALSE INDICATION
12/15/2006	300BEECH	PT6A60A	1013810127	LANDING GEAR

(CAN) NEW VALVE WAS INSTALLED. LANDING GEAR VALVE FAILS TO INDICATE THAT IT IS OPEN WHEN SELECTED. VALVE WORKS CORRECTLY, BUT FAILS TO INDICATE TO CREW THAT IT IS WORKING. SEEMS TO BE JUST AN ISSUE WITH THE INDICATION SIDE OF THE VALVE AND NOT THE ACTUAL MECHANICS. (TC NR 20061216002)

2006FA0001100	BEECH		FUEL TANK	DEBONDED
10/25/2006	400A		128920185609	AUX

INVESTIGATED REPORTS OF IN-FLIGHT POPPING NOISES FROM UNDER FLOOR AREA ADJACENT TO CABIN DOOR. FOUND FORWARD LT AUXILLARY TANK STRUCTURE UNDERSIDE HONEYCOMB PANELS DISBONDED FROM TANK STRUCTURE SHEETMETAL. NO CORROSION NOTED, HONEYCOMB MATERIAL APPEARS TO HAVE SEPARATED FROM SHEETMETAL AT ADHESIVE BOND LINE. SLIGHT DEFORMATION OF CURVED UNDERSIDE OF FUEL TANK STRUCTURE NOTED. INFORMATION FORWARDED TO MFG FOR FOLLOW-UP INVESTIGATION. POSSIBLE CAUSE IS VACUUM IN FUEL TANK DUE TO VENTING PROBLEM CAUSING TANK DEFORMATION AND/OR HONEYCOMB ADHESIVE FAILURE. (K)

2006FA0001204	BEECH	PWA	RELEASE CABLE	FRAYED

11/18/2006	400A	JT15D5	12838002115	LT MLG

DURING SCHEDULE (A) AND (B) INSPECTION FOUND LT MLG EMERGENCY UPLOCK RELEASE CABLE ASSY. SEVERLY FRAYED AND CABLE FUNCTION COMPROMISED AT UPLOCK ATTACH CLEVIS END. THIS SB 32-3200. SB 32-3200 IS A RECOMMENDED SB ONLY, COMPLIANCE RECOMMENDED WHEN CABLE ASSY REPLACEMENT REQUIRED. NO RECORD OF PREVIOUS COMPLIANCE ON THIS AIRCRAFT. (K)

2006FA0001205	BEECH	PWA	RIB	CRACKED
11/20/2006	400A	JT15D5	45A21104012	HORIZONTAL STAB

DURING AN A, B, AND C INSPECTION, FOUND THE HORIZONTAL STABILIZER MOUNTING FACES NOT PARALLEL WITH THE VERTICAL STABILIZER, HORIZONTAL STABILIZER ROLLER CLEARANCE CHECKS IAW MM 27-40-00 OUT OF SERVICE LIMITS. INSPECTED STABILIZER IAW MFG COMMUNIQUÉ NR 70 AND FOUND RT HORIZONTAL STABILIZER RIB, PN 45A21104012, CRACKED. REPLACED RIB AND REINSTALLED STABILIZER, HORIZONTAL STABILIZER ROLLER CLEARANCE CHECKS NOW WITHIN SERVICE LIMITS. IAW COMMUNIQUÉ NR 70, ROLLER GAP DIMENSIONS OUT OF SERVICE LIMITS MAY BE CONTRIBUTING TO PROBLEM. AFFECTED STRUCTURE HAS NOT YET BEEN INCLUDED IN SCHEDULED INSPECTIONS GUIDE. (K)

CA061219016	BEECH	PWA	HEATER	LEAKING
11/16/2006	400BEECH	JT15D5	311705601	FUEL

(CAN) DURING FLIGHT ENGINE FUEL PRESSURE BEGAN TO FLUCTUATE FOLLOWED BY AN UNCOMMANDED POWER REDUCTION. THE ENGINE WAS SHUTDOWN IN FLIGHT AND THE AIRCRAFT DIVERTED TO POINT OF DEPARTURE. MFG WILL INVESTIGATE THE EVENT AND ADVISE OF ROOT CAUSE ONCE DETERMINED. (TC NR 20061219016)

CA061219021	BEECH	PWA	ENGINE	MALFUNCTIONED
11/20/2006	400BEECH	JT15D5	JT5D5	

(CAN) THE ENGINE OIL FILTER BYPASS INDICATOR ACTIVATED IN DESCENT AND THE ENGINE WAS SHUTDOWN IN FLIGHT. MFG WILL INVESTIGATE THE EVENT AND ADVISE OF ROOT CAUSE ONCE DETERMINED.

2006FA0001193	BEECH	CONT	JANITROL	PUMP	BURNED OUT
12/18/2006	58	IO550*	B4500	70893	HEATER

SMOKE IN THE COCKPIT, AND ELECTRICAL BURNING SMELL WERE OBSERVED AFTER TAKEOFF, AFTER THE GEAR WAS RETRACTED. THE HEATER HAD BEEN IN OPERATION APPROXIMATELY 30 MINUTES BEFORE TAKEOFF, WITH NO SMOKE OR SMELL OBSERVED. THE HEATER WAS TURNED OFF, AND THE SMOKE DISSIPATED. THE AIRCRAFT RETURNED TO LAND. THE HEATER FUEL PUMP, LOCATED IN THE NOSE GEAR WELL, WAS FOUND TO BE CHARRED. WHEN THE GEAR IS RETRACTED AND THE GEAR DOORS ARE CLOSED, THERE WOULD BE DIFFERENT AIR-FLOW IN THE GEARWELL, POSSIBLY CAUSING A HIGHER PRESSURE IN THE GEARWELL AND FORCING AIR INTO THE CABIN, PAST THE BOOTS FOR THE NOSE GEAR RETRACT ROD AND STEERING LINKAGES. THIS IS AT LEAST THE THIRD OCCURRENCE OF A BURNED PUMP IN A FLEET OF 11 LIKE SERIAL NUMBERED AIRCRAFT.

CA061120002	BEECH	CONT	GOVERNOR	SEPARATED
9/30/2006	58	IO550C	5038901029	ENGINE

(CAN) SNAS: ENGINE GOVERNOR CONTROL NO RESPONSE. FOUND LT GOVERNOR CABLE END, SEPARATE FROM CRIMPED END FILET ATTACHED TO ROD END. (TC NR 20061120002)

2006FA0001212	BEECH	LYC	BELLCRANK	CRACKED
11/22/2006	65B80	IO720A1B	50524414	RT ELEVATOR

A CRACK WAS FOUND ON THE RT BELLCRANK SUPPORT ASSY. DURING A MANDITORY 5 YEAR INSPECTION IAW MSB 2231 REV 1. (K)

2007FA0000033	BEECH	LYC	STARTER	INTERMITTENT
12/19/2006	76	O360A1G6D	MZ4220	ENGINE

REPEATED TRYS, BENDIX FAILED TO ENGAGE. LUBRICATED AND INSPECTED BENDIX, FAILS TO ENGAGE EVERY OTHER TIME. IT STARTS (1) TIME THEN FAILS. (K)

CA061108006	BEECH	LYC	CONNECTOR	CONTAMINATED
11/5/2006	76	O360A1G6D	KG102A	REMOTE GYRO

(CAN) DURING TRAINING IN IMC CONDITIONS, ATC REPORTED TO STUDENT THAT HE WAS WAY OFF TRACK, PILOT CONFIRMED THAT HSI SYSTEM HAD FAILED. AIRCRAFT RETURNED TO BASE WITH HELP FROM ATC WITH NO OTHER INCIDENCE. MAINTENANCE DUPLICATED DEFECT, HSI SYSTEM INSPECTED AND FOUND WATER ON CONNECTOR TO REMOTE GYRO. CONNECTOR DRIED AND CLEANED, OPS CHECKED SYSTEM OK. GYRO IS LOCATED IN NOSE COMPARTMENT. CLOSE OUT PANEL CAN LET IN SMALL AMOUNTS OF WATER IF PANEL IS NOT FIT PROPERLY BEFORE TIGHTENING THE SCREWS. THERE IS NO SEAL ON THIS PANEL. PANEL FIT AND INSTALLED CORRECTLY. (TC NR 20061108006)

2007FA0000030	BEECH	CONT	JANITROL	VALVE	FAILED
12/15/2006	95B55	IO470*		83D59	CABIN HEATER

FOUND THERMOSTAT WORKING, BUT FUEL SOLENOID NOT STOPPING FUEL DELIVERY EVEN WITH POWER TO VALVE DISTUPTED. CABIN HEATER ONLY SHUTDOWN WHEN OVERHEAT SWITCH OPENED. VALVE INFO: MODEL NR 4400B.

CA061127001	BEECH	PWA	CONTROLLER	UNSERVICEABLE
11/23/2006	A100	PT6A28	MC815AS1	MLG

(CAN) FLIGHT CREW REPORTED LANDING GEAR WOULD NOT RETRACT AFTER TAKE-OFF. AFTER TROUBLESHOOTING THE MOTOR CONTROLLER WAS FOUND UNSERVICEABLE. MOTOR CONTROLLER WAS REPLACED, GEAR SWINGS COMPLETED AND THE AIRCRAFT RETURNED TO SERVICE. THIS UNIT HAD 928 LANDINGS SINCE OVERHAUL; INSPECTION REQUIREMENTS ARE 8000 LANDING OVERHAUL AND 1000 LANDING POINT CHECK.

CA061221002	BEECH	PWA	LATCH	BROKEN
12/18/2006	A100	PT6A28	5043003211	PAX DOOR

(CAN) DURING FLIGHT THE CREW NOTICED AIR LEAKING OUT THE PASSENGER DOOR AND THE AIRCRAFT BEGAN TO DEPRESSURIZE. THE CREW DESCENDED TO 9000 FT FOR THE REMAINDER OF THE FLIGHT AND LANDED WITHOUT FURTHER INCIDENT. UPON LANDING THEY NOTICED THE LT UPPER DOOR HOOK WAS UNSERVICEABLE. FURTHER INSPECTION BY MAINTENANCE REVEALED THAT THE AFT CABIN DOOR HOOK LATCH BRACKET ATTACHMENT PIN P/N MS20392-2C35 HAD FAILED. THIS FAILURE RENDERED THE DOOR HOOK UNSERVICEABLE. THE DAMAGED WAS NOT LIMITED TO THE CLEVIS PIN IT WAS ALSO FOUND THAT THE MOUNTING BRACKET WAS BENT AND THE BUSHING WAS LOOSE. THE FRAME, THE BUSHING AND THE PIN WERE REPLACED AND THE AIRCRAFT RETURNED TO SERVICE. (TC NR 20061221002)

CA061218005	BEECH	PWA	CIRCUIT BOARD	MALFUNCTIONED
7/24/2006	A100	PT6A28	903640143	ANNUNCIATOR PANE

(CAN) ANNUNCIATOR PANEL SHOWED A FALSE WARNING INDICATION FOR MASTER CAUTION LIGHT. SYSTEM TROUBLESHOOTING CARRIED OUT AND FOUND FAULT WARNING CIRCUIT BOARD UNSERVICEABLE AND FAULT WARNING CIRCUIT BOARD REPLACED.

2006FA0001131	BEECH		RUDDER PEDAL	LOOSE
10/30/2006	A36		002524040	RUDDER

UPON INVESTIGATING LOOSE RUDDER PEDALS, THE ASSEMBLY WAS DISASSEMBLED AND IT WAS NOTED THAT THE SHAFT HAD BEEN DOUBLE DRILLED WITH THE HOLES OVERLAPING. THE AIRCRAFT WAS CERTIFICATED JANUARY 2002; THE AIRCRAFT NOW HAS 1015.4 HOURS, TIME IN SERVICE. (K)

2006FA0001132	BEECH	GARRTT	ENGINE	FAILED
10/26/2006	B100	TPE3316	TPE3316	RIGHT

DURING GROUND RUN FRO A POSSIBLE GENERATOR PROBLEM. WITH THE ENGINE AT FLIGHT IDLE AND SPEED LEVERS FORWARDTHE RT ENGINE HAD A UNCONTAINED ENGINE FAILURE. 2 PIECES OF THE ENGINE PENETRATED THE RT FUSELAGE SKIN ADJACENT TO THE CO PILOT POSITION. (K)

CA061222007	BEECH	PWA	SEAL	LEAKING

12/20/2006	B200	PT642A	3022376	ENGINE

(CAN) PILOT NOTICED OIL PRESSURE FLUCTUATIONS IN CRUISE FLIGHT. ENGINE LIMITS NOT EXCEEDED AND THE AIRCRAFT LANDED AT DESTINATION. ENGINE OIL WAS LOST THROUGH A LEAKING STARTER GENERATOR DRIVE GARLOC SEAL. SEAL REPLACED WITH NEW PN 3059046-01 IAW MFG CATEGORY 8 (OPTIONAL) SB 3420. GROUND RUNS C/O SATISFACTORY AND AIRCRAFT RETURNED TO SERVICE. (TC NR 20061222007)

BIOR061211001	BEECH	PWA	FAIRING	CORRODED
12/11/2006	B200	PT6A42	101420024438	

DURING A PHASE 4 INSPECTION PAINT BLISTERS WERE NOTED ON THE LT AND RT WING ROOT FAIRING LOWER AFT PANELS P/N 101-420024-43 AND 101-420024-8. UPON FURTHER INSPECTION BOTH PANELS WERE FOUND TO BE CORRODED THRU IN SEVERAL PLACES FROM THE INSIDE OUT. AFTER REMOVING THE PANELS IT WAS DISCOVERED THAT THE ACOUSTIC FOAM HAD BECOME SOAKED WITH WATER OVER TIME. THIS SET UP CORROSION OVER THE ENTIRE AREA OF THE INSIDE OF BOTH PANELS. ALSO WHERE THIS MATERIAL CONTACTED THE FUSELAGE ON THE LT SIDE IT CAUSED CORROSION THRU THE PRESSURE VESSEL. MFG HAS BEEN NOTIFIED AND SUPPLIED WITH PHOTO DOCUMENTATION.

2007FA0000001	BEECH	PWA	LINE	CHAFED
1/2/2007	B200	PT6A42	10092004115	FUEL SYSTEM

DURING A SCHEDULED PHASE INSPECTION P/N 100-920041-15 ALUMINUM MAIN FUEL LINE WAS FOUND CHAFED IN THE LT MAIN LANDING GEAR WHEEL WELL WHERE IT ENTERS INTO THE BACK OF THE WING. THE EDGES OF THE HOLE THAT THE LINE PASSES THROUGH WAS PROTECTED WITH PLASTIC ANTI CHAFE MATERIAL THAT WE CALL TANK TRACKS, OR RAILROAD TRACK, AND HAS A PN MS21266-1N. THIS ANTI CHAFE MATERIAL WAS INSTALLED AT THE FACTORY. THIS ANTI CHAFE MATERIAL CAUSED P/N 100-920041-15 ALUMINUM MAIN FUEL LINE TO BE CHAFED ALMOST THROUGH ITS .030 INCH SIDEWALL THICKNESS. THERE ARE OTHER AC THAT HAVE CHAFED FUEL LINES DUE TO THE CLOSE TOLERANCE OF THE FUEL LINES PASSING THROUGH THE STRUCTURE IN THE MAIN LANDING GEAR WHEEL AREA.

2007FA0000086	BEECH	PWA	DOWNLOCK SWITCH	FAILED
1/26/2007	B200	PT6A60A	1003810061	LANDING GEAR

NOSE LANDING GEAR DID NOT HAVE A DOWN AND LOCKED INDICATION GEAR WARNING SYSTEMS ACTIVATED (LIGHT IN SELECTOR HANDLE AND GEAR HORN). AN UNEVENTFUL LANDING HAS MADE VISUAL CHECK OF NOSE GEAR SHOWED TO BE IN THE DOWN AND LOCKED POSITION. SWITCH REMOVED AND REPLACED WITH A NEW UNIT AND THE SYSTEM CHECKED NORMAL.

2006FA0001128	BEECH		TUBE	CRACKED
11/8/2006	C90		10991004933	DUCT

THE LIP-ASSY IS CRACKED AROUND THE WELDS FOR THE INLET AND OUTLET TUBES. REQUIRES REMOVAL OF INLET LIP ASSY AND REPAIR OF CRACKED WELDS. (K)

2006FA0001133	BEECH	PWA	DRAG BRACE	MISMANUFACTURED
11/14/2006	C90	PT6*	508100398	MLG

UPPER DRAG BRACE PN 50-8100398 RUBBED AGAINST THE LOWER DRAG BRACE PN 508100404 AT THE KNUCKLE. THIS REMOVED ABOUT .0625 OF AN INCH OF METAL ABOUT .0625 OF AN INCH LONG ON THE TOP SIDE OF BOTH ENDS OF THE KNUCKLE. THE CAUSE IS IMPROPER MACHINING OF THE PART AT MANUFACTURE. PARTS AFFECTED MUST BE REPLACED. (K)

2006FA0001142	BEECH	PWA	CONTROL CABLE	KINKED
11/15/2006	C90	PT6*	NAS302665170	ELEVATOR TRIM

INVESTIGATED ELEVATOR TRIM OPERATIONS COMPLAINT. FOUND FORWARD ELEVATOR TRIM CABLE, PN NAS302-66-5170, LOOSE AND OFF PULLEYS UNDER LT CABIN FLOOR AREA. CABLE ASSY DAMAGED BY KINKING AND FRAYING FROM CONTACT WITH PULLEY SUPPORTS AND ADJACENT STRUCTURE. ALSO FOUND PN 4000524-8508 ELEVATOR TRIM SERVO DAMAGED AND OPERATIONS ERRATIC. MAINTENANCE RECORDS NOT MADE AVAILABLE, UNABLE TO DETERMINE PREVIOUS MAINTENANCE HISTORY FOR ELEVATOR TRIM SYSTEM. HAVE

NOTED SIMILAR DAMAGE IN OTHER SERIES AIRCRAFT. USUALLY CAUSED BY CABLE MISROUTING OR LOW CABLE TENSION FOR AN EXTENDED PERIOD OF OPERATIONS. (K)

2006FA0001082	BEECH	PWA	TUBE	CRACKED
11/8/2006	C90A	PT6A21	10991004933	INLET

THE TUBES ARE CRACKING ALONG THE WELDS, WHICH CONNECT THEM TO THE INLET LIP ASSEMBLY. REQUIRES REMOVAL OF INLET LIP ASSY AND REPAIR OF THE CRACKED WELDS. (K)

CA061108003	BEECH	PWA	FLOOR SUPPORT	CRACKED
9/19/2006	C90A	PT6A21	5042002815	FUSELAGE

(CAN) FLOOR SUPPORT ANGLE P/N UNKNOWN FOUND CRACKED. ANGLE IS PART OF BULKHEAD ASSY. P/N 50420028-15. ANGLE IS LOCATED UNDER CENTRE FLOOR PANEL. (TC NR 20061108003)

FAA061214001	BEECH	LYC	MOTOR	SHORTED
12/14/2006	D95A	IO360A1A	963800225	LAND GEAR

LANDING GEAR MOTOR CIRCUIT BREAKER BLEW WHEN GEAR WAS RETRACTED ON TAKEOFF. AT THE SAME TIME THE ALTERNATORS DROPPED OFFLINE. PILOT SWITCHED TO THE OTHER VOLTAGE REGULATOR AND THE ALTERNATORS CAME BACK ONLINE. AIRCRAFT WAS FLOWN FOR AN HOUR OR MORE TO BURN OFF FUEL. PRIOR TO LANDING. AN EMERGENCY WAS DECLARED. PILOT WAS ABLE TO CRANK THE GEAR DOWN AND LAND WITHOUT INCIDENT. DISCOVERED THAT THE FIELD IN THE EXTEND SIDE OF THE LANDING GEAR MOTOR WAS SHORTED. REPLACED MOTOR WITH OVERHAULED EXCHANGE PART. FUNCTIONALLY CHECKED OK.

CA061025007	BEECH	LYC	CONTROL CABLE	DEFECTIVE
9/30/2006	E95	IO360B1B		RT PROP

(CAN) AFTER A ROUTINE TRAINING FLIGHT THE PILOT REPORTED THAT THE RT PROP CONTROL WAS VERY STIFF AND SPRINGY AND THE PROP WAS SLOW TO FEATHER. THE CONTROL WAS DISCONNECTED FROM THE GOVERNOR AND THE DEFECT WAS CONFIRMED TO BE THE CONTROL CABLE. THE TTSN FOR THE ENGINE CONTROL CABLES WERE UNKNOWN. ALL LT AND RT ENGINE CONTROL CABLES WERE REPLACED WITH NEW CONTROLS. (TC NR 20061025007)

2007FA0000090	BEECH	CONT	CONTROL CABLE	BROKEN
1/2/2007	V35	IO520*	355246516	ELEVATOR SYS

FOUND BROKEN STRANDS ON ELEVATOR CABLE BEHIND INSTRUMENT PANEL ABOUT 10 INCHES ABOVE THE (PN 535521242-13) BOBWEIGHT. (K)

2006FA0001207	BEECH	CONT	CASE	DAMAGED
11/22/2006	V35	IO520BA		ENGINE

ENGINE LT CASE, MALT DEVELOPED HOLE APPROX 6 INCHES X 4 INCHES AS ROD-PISTON APPEARS TO BE MISSING FOR NR 4 CYLINDER. ENGINE OPERATED: (104 HOURS - 2004), (14 HOURS - 2005), (12 HOURS - 2006). PROPELLER RECENTLY SHIMMED BLADE NR 3, RED DYE AROUND PROP SEAL. (K)

2006FA0001229	BEECH	CONT	LINE	BROKEN
11/22/2006	V35	IO520BA	LPMILH50555	ENGINE OIL

STARFLEX 193, LOW PRESSURE HOSE, LP MIL-H-50555 WAS USED TO CONNECT OIL COOLER TO FIREWALL FITTING. OIL PRESSURE WILL RUN BETWEEN 50-100 PSI IN LINE. HOSE BROKE AT FITTING AT OIL COOLER OUTLET, ALL OIL WAS PUMPED OUT OF ENGINE CAUSING ROD TO BE RAMMED THROUGH LT CASE HALF. (NORMAL TSO AS1072 HOSE IS INSTALLED IN THIS POSITION. STARFLEX 2650). (K)

CA061124010	BELL	BELL	CASE	CRACKED
11/20/2006	205A1		204040353023	TRANSMISSION

(CAN) CRACKING AT INPUT QUILL BOSS OF MAIN ROTOR TRANSMISSION. (TC NR 20061124010)

2006FA0001088	BELL	LYC	ADAPTER	DAMAGED
11/19/2006	205A1	T5313B	2040408123	MAIN ROTOR

DURING INSPECTION AND REGREASE OF THE M/R TRANS DRIVE SHAFT, A CHECK OF THE TORQUE OF THE DRIVE SHAFT ADAPTOR BOLT WAS ACCOMPLISHED AND IT WAS DISCOVERED THAT THERE WAS NO TORQUE, THAT THE BREAKER BAR`S WEIGHT BROKE THE BOLT LOOSE, REMOVED THE ADAPTOR AND FOUND WEAR ON THE ADAPTOR FLANGE AND IT WAS BEYOND LIMITS IAW TECH BULLETIN. REPLACED PART. (K)

CA061121002	BELL	ALLSN	MAGNETIC SEAL	LEAKING
8/26/2006	206B	250C20	206040156101	M/R GEARBOX

(CAN) MAIN ROTOR GEARBOX MAGNETIC SEAL HAS EXCESSIVE LEAKAGE FROM MAIN INPUT SEAL. (TC NR 20061121002)

CA061122002	BELL	ALLSN	BEARING	FAILED
11/3/2006	206B	250C20	03600923	STARTER GEN

(CAN) CUSTOMER REPORTED BEARING FAILURE ON MAIN SHAFT OF STARTER/GENERATOR. BEARING CAGE CAME APART. UPON INSPECTION. IT WAS FOUND THE BEARING CAGE WAS NON-EXISTANT. WE CONTACTED OUR SUPPLIER. (TC NR 20061122002)

CA061115007	BELL	ALLSN	SKIN	CRACKED
11/1/2006	206B	250C20B		FUSELAGE

(CAN) DURING SCHEDULED MAINTENANCE, IN COMPLIANCE WITH CF-91-35 (CABIN ROOF BOXBEAM INSPECTION), A CRACK WAS DISCOVERED IN THE BOXBEAM LOWER SKIN ORIGINATING FROM AN INSPECTION PANEL CUT-OUT RIVET HOLE. THIS SKIN WAS CRACKED ACROSS THE RIVET HOLE ABOUT 1.25 INCHES IN EACH DIRECTION. (TC NR 20061115007)

CA061117001	BELL	ALLSN	TRANSDUCER	READS LOW
11/3/2006	206L	250C20R2	2060615357	FUEL PRESSURE

(CAN) UNDER READING FUEL PRESSURE. REMOVED AND INSTALLED REPLACEMENT PRESSURE TRANSDUCER PN BSE 206-30G SN2617-1-251 (TC NR 20061117001)

CA061120001	BELL	ALLSN	SWITCH	LEAKING
11/4/2006	206L	250C20R2	205061635005	FUEL FLOW

(CAN) REMOVED LT FUEL FLOW SWITCH DUE TO LEAKING. INSTALLED FUEL FLOW SWITCH PN 205-061-635-005 SN 9607 (TC NR 20061120001).

CA061124011	BELL	ALLSN	COLLECTOR	CRACKED
11/14/2006	206L1	250C28B	23008052	ENGINE EXHAUST

(CAN) DURING ENGINE MAINTENANCE, THE HORIZONTAL FIRESHIELD WAS REMOVED AND (2) CRACKS WERE NOTED AT THE 5 O`CLOCK AND 7 O`CLOCK POSTION IN THE EXHAUST COLLECTOR. TURBINE REMOVED REPAIRED RE-INSTALLED. (TC NR 20061124011)

CA061207004	BELL	ALLSN	OIL COOLER	LEAKING
12/7/2006	206L1	250C28B	8543909	ENGINE

(CAN) ON AIRCRAFT RETURNING TO BASE IT WAS NOTED THAT THERE WAS OIL ON THE TAILBOOM. ON INVESTIGATION THE SOURCE OF THE OIL WAS FOUND TO BE THE OIL COOLER. COOLER CHANGED. (TC NR 20061207004)

CA070105004	BELL	ALLSN	ALLSN	COMBUSTION CASE	CRACKED
1/5/2007	206L1	250C28B	250C28B	6899237	ENGINE

(CAN) DURING A 200 HR INSPECTION A CRACK WAS FOUND IN THE ARM PIT AREA OF THE OUTER COMBUSTION CASE. CASE REPLACED. (TC NR 20070105004)

2007FA0000068	BLANCA	LYC	SPRING	WEAK
5/21/2006	1731A	IO540K1E5	194652	NLG

AFTER AN INFLIGHT LANDING GEAR POWER PACK FAILURE, THE PILOT WAS UNABLE TO PERFORM AN EMERGENCY NOSE GEAR EXTENSION EVEN THOUGH THE MAIN GEAR WAS SAFELY EXTENDED. DURING LANDING ROLLOUT, THE NOSE GEAR FOLDED CAUSING DAMAGE TO THE PROPELLER AND ENGINE. AN UNSAFE NOSE GEAR INDICATION WAS SHOWN IN THE COCKPIT PRIOR TO LANDING. PILOT STATES HE DID NOT DO (SHARP PULLUPS) AS CALLED OUT IN THE FLIGHT MANUAL IN AN ATTEMPT TO DOWNLOCK THE GEAR. A NEW POWER PACK WAS INSTALLED, THE AIRCRAFT WAS PLACED ON JACKS AND NUMEROUS NORMAL AND EMERGENCY EXTENSIONS WERE PERFORMED, ALL WITHOUT INCIDENT, A COMPLETE CHECK WAS MADE OF THE GEAR RIGGING AND WAS FOUND CORRECT IAW MM. THE NOSE GEAR EXTENSION SPRING WAS REMOVED AND THE SPRING FREE LENGTH WAS MEASURED AT 10 INCHES. A NEW SPRING WAS ORDERED AND IT WAS MEASURED AT 12.125 INCHES. MM STATES: THE NOSE GEAR EXTENSION SPRING OVER COMES THE AERODYNAMIC DRAG OF THE FWD GEAR DOOR AND THE TIRE TO ENSURE THAT THE NOSE GEAR WILL FREE FALL AND LOCK DURING AN EMERGENCY EXTENSION. A SUSCESSFUL EMERGENCY GEAR EXTENSION IN THE SHOP ON JACKS DOES NOT PROVE THAT THE GEAR WILL EMERGENCY EXTEND DURING FLIGHT AND DOWN LOCK. IT IS SUGGESTED THAT DURING ANNUAL INSPECTIONS, THE NOSE GEAR EXTENSION SPRING BE REMOVED FROM THE EXTENSION ASSY AND ITS FREE LENGTH MEASURED TO ENSURE IT COMPARES TO A NEW SPRING. THE MFG MM DOES NOT ADDRESS THIS. (K)

CA061219003	BOEING	PWA	DISC	DETACHED
11/22/2006	727223	JT8D15		BRAKE ASSY

(CAN) WHILE TOWING AIRCRAFT TO LINE IT WAS REPORTED THAT NR 1 BRAKE WAS TRYING TO LOCK UP. UPON REMOVAL OF BRAKE ASSEMBLY THE DISC RING WAS FOUND DETACHED FROM THE ASSEMBLY. A RIVET WAS FOUND SHEARED AND THE DISC RING CAME APART. FURTHER TO FOLLOW AFTER STRIP REPORT IS RECEIVED FROM OVERHAUL FACILITY. (TC NR 20061219003)

CA061219002	BOEING	PWA	WINDOW	CRACKED
11/16/2006	727223	JT8D15A	58935733	COCKPIT

(CAN) DURING SERVICING THE L4 WINDOW WAS FOUND CRACKED. WINDOW REPLACED IAW MM 56-11-31, FUNCTION CHECKED SERVICEABLE WITH NO FURTHER FAULTS REPORTED. (TC NR 20061219002)

CA061218013	BOEING	PWA	SWITCH	MALFUNCTIONED
11/29/2006	727223	JT8D15A	H1010153	MLG

(CAN) NOSE GEAR GREEN LIGHT DID NOT ILLUMINATE WITH LANDING GEAR SELECTED DOWN. VISUALLY INSPECTED TO ENSURE NOSE GEAR WAS DOWN AND LOCKED THROUGH VIEWPORT AND CONFORMED NOSE GEAR WAS DOWN AND LOCKED. AS A PRECAUTIONARY ACTION NOSE GEAR LOCK SWITCH REMOVED AND REPLACED ALONG WITH CONNECTOR D298 IAW MM 32-61-71. FUNCTION CHECKED SERVICEABLE. NO FURTHER OCCURRENCE REPORTED. (TC NR 20061218013)

CA061219001	BOEING	PWA	DUCT	DISCONNECTED
11/26/2006	727225	JT8D15A	655881313	BLEED AIR SUPPLY

(CAN) LOWER AFT BODY HEAT WARNING LIGHT ILLUMINATED IN FLIGHT. FLIGHT CREW FOLLOWED EMERGENCY CHECKLIST AND LIGHT EXTINGUISHED WHEN NR 3 BLEED AND THRUST LEVER CLOSED. UPON INVESTIGATION MAINTENANCE DISCOVERED SUPPLY DUCT FORWARD OF STA 1183 DISCONNECTED AND DUCT DAMAGED. DUCT AND CLAMPS REPLACED, ENGINE RUNS AND LEAK CHECKS CARRIED OUT. NO FURTHER PROBLEMS NOTED. (TC NR 20061219001)

CA061219028	BOEING	PWA	ROD	BENT
12/13/2006	727227	JT8D9A	6557204520	CARGO DOOR

(CAN) ON ROTATION, NR 2 CARGO DOOR LIGHT ILLUMINATED. NR 3 ENGINE SURGED AND A SHUTDOWN PROCEDURE WAS CARRIED OUT. THE A/C LANDED SAFELY, WHERE A LEVEL 1 BORESCOPE INSPECTION WAS CARRIED OUT, WITH NO FOD DAMAGE FOUND. UPON INSPECTION, THE CARGO DOOR WAS FOUND TO BE OPEN BUT IN THE LATCHED POSITION. THE CARGO DOOR WOULD NOT CLOSE. FURTHER INSPECTION FOUND 4 BENT DOOR HINGE ROD ARMS. THE NR 2 CARGO DOOR, HINGE ARMS AND POSITIONING SWITCH WERE REPLACED. THE ASSEMBLY FUNCTIONED PROPERLY AND THE A/C WAS RETURNED TO SERVICE. (TC NR 20061219028)

CA061216003	BOEING		LINE	LEAKING

12/12/2006	727243		BACH8C08NN0290	HYD SYSTEM

(CAN) AFTER T/O DURING CLIMB (B) PUMP LOW PX LITE ILLUMINATED WITH FLUID QTY DROP. RETURNED TO DEPARTURE, HYD LINE REPLACED IN B COMPT. (TC NR 20061216003)

2007FA0000053	BOEING	SARGENT	HOUSING	CRACKED
11/28/2006	737*		4I29R12	STEERING VAVLE

(REF NR: 213227/FXS) BODY CRACKED IN CHECK VALVE PORT. OVERPRESSURE/ CYCLIC STRESS, REDESIGN BODY. (K)

2006FA0001083	BOEING		HOUSING	CRACKED
10/2/2006	737*		65446924	MLG VALVE

REF (211263/KS2) HOUSING CRACKED IN VALVE BORE. CYCLIC STRESS. REDESIGN HOUSING. (K)

SROM200600022	BOEING	PWA	CARRIAGE	CRACKED
12/27/2006	737201	JT8D15		SPINDLE

DURING ROUTINE ACCOMPLISHMENT OF ULTRASOUND INSPECTION OF THE SPINDLES ON THE OB FLAPS IAW AD 2003-24-08 FOUND THE RT IB SPINDLE TO SHOW A CRACK INDICATION. LAST ULTRASONIC INSPECTION PERFORMED 46 CYCLES AGO. REPLACED SPINDLE AND CARRIAGE ASSEMBLY WITH NEW P/N 65C80736-712.

SROM200700001	BOEING	PWA	DUCT	RUPTURED
1/5/2007	737201	JT8D15	65544709	A/C PACK

UPON TAKEOFF A POP WAS WAS HEARD FOLLOWED BY PERCEIVED SMOKE (DUST) IN THE CABIN. PACS WERE SELECTED TO OFF AND A IMMEDIATE LANDING MADE AT THE DEPARTURE AIRPORT. ALL COCKPIT INDICATIONS NORMAL. FOUND LT AIR CONDITIONING PAC MIXING CHAMBER AND HOT AIR SUPPLY DUCT SEPARATED/ DAMAGED ALLOWING HOT CONDITIONED AIR TO ENTER CABIN THROUGH RETURN GRILLS, THUS CREATING DUST. APPEARS TO HAVE EXPERIENCED INTERNAL DAMAGE RESULTING IN BACK PRESSURE WHICH CAUSED THE DUCT/FLANGE FAILURE. NO OTHER DAMAGE NOTED. REPLACED MIXING AND HOT AIR DUCTS.

SROM200600021	BOEING	PWA	LANDING GEAR	CONTAMINATED
12/21/2006	737205	JT8D17A		NLG

UPON DEPARTURE DURING HEAVY SNOW CONDITIONS WITH GRAVEL SKI EQUIPPED AIRCRAFT THE NOSE GEAR UNLOCK LIGHT REMAINED ON AFTER LANDING GEAR RETRACTION. LANDING GEAR EXTENDED AND AIRCRAFT RETURNED TO DEPARTURE AIRPORT WITH NORMAL LANDING. UPON INSPECTION FOUND GRAVEL DEFLECTOR TO BE CONTAMINATED WITH SNOW AND ICE. REMOVED SNOW AND ICE, JACKED AIRCRAFT AND SWUNG GEAR WITH NO DEFECTS NOTED. VERY HEAVY SNOW CONDITIONS ALLOWED FOR SNOW BUILD UP ON DEFLECTOR DURING TAXI OUT. DEFLECTOR WAS DEICED PRIOR TO TAXI.

CA070110002	BOEING	PWA	WINDOW	CRACKED
12/17/2006	737210C	JT8D9A		COCKPIT

(CAN) DURING DEPARTURE THE RT NR 3 FLT DECK WINDOW SHATTERED. THE AIRCRAFT RETURNED TO POINT OF DEPARTURE WITHOUT FURTHER PROBLEM. THE AIRCRAFT MOVED TO MAINTENANCE BASE UNDER MEL AUTHORITY WHERE A REPLACEMENT WINDOW WAS INSTALLED. (TC NR 20070110002)

CA060421005	BOEING		SKIN	GOUGED
4/20/2006	737290C			FUSELAGE

(CAN) BS 867 AT STR 19R SKIN GOUGED AND REPAIRED IAW CUSTOMER EA. (TC NR 20060421005)

CA060421006	BOEING		FLOORBEAM	CRACKED
4/20/2006	737290C			FUSEAGE

(CAN) FLOORBEAM AT BS 767 LBL 24.5 CRACKED AND REPAIRED IAW CUSTOMER EA. (TC NR 20060421006)

CA060421007	BOEING		STRUCTURE	CORRODED
4/20/2006	737290C			FUSELAGE

(CAN) STR 26L BS 380 CORRODED AND REPAIRED IAW CUSTOMER EA. (TC NR 20060421007)

CA060421008	BOEING		ATTACH ANGLE	CORRODED
4/20/2006	737290C			VERICAL STAB

(CAN) VERTICAL STAB LT TRAILING EDGE AT RUDDER STATION 174, PANEL ATTACH ANGLE CORRODED AND REPAIRED IAW CUSTOMER EA (TC NR 20060421008)

COOSDR060032	BOEING	GE	RIB	CRACKED
8/24/2006	737301	CFM56*		RT WING

RT WING AT WBL 114 RIB UPPER CHORD CRACKED NEAR STR-2. (K)

2006FA0001102	BOEING	CFMINT	BOLT	LOOSE
9/4/2006	737322	CFM563C1	69738243	SLAT TRACK

(REF NR: ATC0712) DURING AN A-CHECK INSPECTION OF RT WING LEADING EDGES. THE OB TRACK ATTACHMENT BOLT ON THE NR 6 SLAT WAS FOUND TO BE LOOSE AND ALSO THE SPLIT PIN WAS MISSING. A NON ROUTINE CARD, WO 3956/06 HAS BEEN RAISED TO FIT THE SPLIT PIN AND RECTIFY THE DEFECT. A CONFIDENCE CHECK HAS BEEN CARRIED OUT ACROSS ALL THE LEADING EDGE ATTACHMENTS FOR THE FLAP TRACKS. IN ADDITION ALL FLYING CONTROLS AND TRAILING EDGE FLAPS HAVE BEEN INSPECTED FOR CORRECT LOCKING AND FITMENT. NO OTHER LOCKING OR ASSY DEFECTS WERE FOUND. (K)

CA061130005	BOEING	CFMINT	APU	DAMAGED
11/26/2006	737522	CFM563C	APS2000	APU BAY

(CAN) MFG WAS GETTING READY TO DEPART. ON ATTEMPTING TO START THE APU, THE FAULT LIGHT CAME ON AND THE APU FAILED TO START. THE ITEM WAS DEFERRED TO (MEL) MINIMUM EQUIPMENT LIST AND THE FLIGHT CONTINUED TO ITS DESTINATION. ON INVESTIGATION THERE WAS CONSIDERABLE DAMAGE TO THE GEARBOX AND STARTER SHAFT. THIS UNIT WAS REMOVED FOR A SIMILAR PROBLEM 82 HOURS PREVIOUSLY AND HAD BEEN OVERHAULED. ONCE A TEARDOWN REPORT IS RECEIVED, A FOLLOW UP WILL BE SUBMITTED. (TC NR 20061130005)

CA061211009	BOEING	CFMINT	WINDOW	CRACKED
12/9/2006	73776N	CFM567B22	141A481014	COCKPIT

(CAN) WINDOW FLT COMPARTMENT DELAMINATED, CRACKED NR 2 LT DESCENDED TO FL210 + INC CABIN ALT TO 9000 FT, WHICH GAVE US A CABIN DIFF OF 3.6 PSI. CAPT`S NR 2 SLIDING WINDOW REPLACED IAW AMM 56-12-11, GND CHECKED SERVICABLE. COCKPIT WINDOW FAILURES ARE PART OF A SAFETY RELATED SERVICE PROBLEM SRP 56-0018 WITH MFG. ICA ISSUANCE IS AWAITED FOR PERMANENT RECOMMENDED ACTION. (TC NR 20061211009)

2006FA0001198	BOEING	GE	RUDDER	DAMAGED
9/12/2006	73776N	CFM56*	173A01038	

RUDDER DAMAGED DUE TO LIGHTENING STRIKE WHILE AIRCRAFT WAS ON GROUND. DETAILED INFORMATION CONCERNING THIS REPAIR CAN BE FOUND ON (NR 10981-3600-0001). (K)

COOSDR060034	BOEING	CFMINT	BALLAST	OVERHEATED
8/25/2006	7377Q8	CFM563B2	S283U00816	CABIN

PAX CABIN LIGHT BALLAST OVERHEATED BURNING INSULATION BLANKET AT BS 328, STR 1. (K)

CA061220008	BOEING	RROYCE	PUMP	FAILED
12/16/2006	757236	RB211535E437	623303	HYD SYSTEM

(CAN) LT ACMP LEAKING FLUID CAUSING LOSS OF HYDRAULIC QUANTITY AND SYSTEM PRESSURE. AIRCRAFT LANDED AND WAS TOWED OFF THE RUNWAY DUE TO NO NOSE WHEEL STEERING. (TC NR 20061220008)

CA070117001	BOMBDR	RROYCE	SERVO	MALFUNCTIONED
12/16/2006	BD7001A10	BR700710A220	4015373823	AUTOPILOT SYS

(CAN) THE OPERATOR REPORTED AILERON CONTROL DIFFICULTIES AT FL470 WHILE ENROUTE. THE AIRCRAFT DEPARTED IN HEAVY RAIN. THE PILOT-IN-COMMAND (PIC) DISCONNECTED THE AUTOPILOT AFTER AN AP TRIM IS LWD CAS MESSAGE WAS ANNUNCIATED AND NOTED THAT THE AILERON CONTROL WHEELS WOULD NOT ROTATE WHEN ATTEMPTED BY HAND. THE CREW OVERPOWERED THE CONDITION AND THEN ELECTED TO DESCEND TO A LOWER ALTITUDE. THE PIC STATED THAT AT APPROXIMATELY FL440 THE CONTROL WHEEL LOCKED UP AGAIN AND THE CONDITION WAS OVERPOWERED BY THE CREW. THE FORCE APPLIED TO OVERPOWER THE CONTROL WHEEL FOR BOTH OCCURRENCES WAS APPROXIMATELY 20 LBS. THE PIC ALSO STATED THAT THE AILERON CONTROL SYSTEM WAS BACK TO NORMAL FOR THE DURATION OF THE FLIGHT WHEN THE AIRCRAFT DESCENDED BELOW FL350. THE OPERATOR ELECTED TO DIVERT INSTEAD AND LANDED UNEVENTFULLY. MAINTENANCE PERSONNEL REPLACED THE AUTOPILOT AILERON SERVO P/N 4015373-823 S/N 0053800. MFG IS INVESTIGATING THIS OCCURRENCE AND WILL UPDATE AS SOON AS MORE INFORMATION BECOMES AVAILABLE. (TC NR 20070117001)

CA070111016	BOMBDR	RROYCE	FAN BLADE	SEPARATED
12/19/2006	BD7001A10	BR700710A220	FW34114	LT ENGINE

(CAN) DURING CLIMB AT APPROXIMATELY 35,000 FEET, THE CREW HEARD A LOUD BANG AND THE LT ENGINE SHUTDOWN. THE CREW DECLARED AN EMERGENCY AND LANDED UNEVENTFULLY. AN INSPECTION OF LT ENGINE REVEALED ONE FAN BLADE HAD FRACTURED JUST ABOVE THE ROOT. THE BLADE ROOT WAS STILL ATTACHED AND THE FRACTURED PORTION WAS RECOVERED. DAMAGE WAS ALSO FOUND ON THE INSIDE OF THE INLET, TO SOME OF THE OTHER FAN BLADES AND TO THE GUIDE VANES. THE FAILURE WAS COMPLETELY CONTAINED AND NO DAMAGE WAS FOUND ON THE EXTERIOR OF THE NACELLE OR AIRCRAFT STRUCTURE. (TC NR 20070111016)

CA070103004	BOMBDR	PWC	PCU	DAMAGED
12/26/2006	DHC8400	PW150A	3906001007	RT ELEVATOR

(CAN) MAINTENANCE NOTICE RT ELEVATOR DROOP WHEN PARKED. FURTHER INVESTIGATION FOUND BROKEN NR 3 RT PCU. ELEVATOR PCU FAILURE CAUSED DAMAGE TO THE HORIZONTAL STABILIZE STRUCTURE. (TC NR 20070103004)

CA061221001	BOMBDR	PWC	PUMP	FAILED
12/16/2006	DHC8400	PW150A	6617303	HYD SYSTEM

(CAN) DURING DESCENT NR 1 ENG HYD PUMP CAUTION LIGHT ILLUMINATED. CONTINUED TO DESTINATION AIRPORT FOR LANDING WITH OUT INCIDENT. MAINTENANCE CONFIRMED NR 1 ENG DRIVEN PUMP INTERNAL FAILURE. CASE DRAIN AND PRESSURE FILTERS CONTAMINATED WITH METAL. (TC NR 20061221001)

CA061212003	BOMBDR		SWITCH	FAILED
12/11/2006	DHC8402		8209074	RT NACELLE

(CAN) NR 2 BLEED HOT CAUTION LIGHT COME ON 4 MILES OUT. CDS INTEROGATION FAULT CODES 7005, 7001 AND 1701. (TC NR 20061212003)

2007FA0000054	BRAERO	GARRTT	LUCAS	BEARING	FAILED
1/2/2007	BAE125800A	TFE731*	23080005		STARTER GEN

FORWARD BEARING FAILED

2007FA0000072	BRAERO	GARRTT	BEARING	FAILED
1/2/2007	BAE125800A	TFE731*		STATER GEN

FORWARD BEARING FAILED.

CA061219029	BRAERO	RROYCE	FUEL	CONTAMINATED
12/10/2006	HS7482A	DART5342		FUEL SYSTEM

(CAN) PILOT OBSERVED ENGINE NR 1 FUEL FILTER DE-ICING WARNING LIGHT ILLUMINATED IN CRUISE FLIGHT. SHORTLY AFTER APPLYING FUEL HEAT, ENGINE NR 1 QUIT. PILOT FEATHERED PROPELLER AND LANDED UNEVENTFUL. MAINT REMOVED ENGINE NR 1 LOW PRESSURE FUEL FILTER AND FOUND A LACK OF FUEL. MAINT THEN DRAINED CONTENTS OF NR 1 FUEL COLLECTOR TANK INTO A BUCKET AND OBSERVED .5 LITER OF WATER

PRESENT IN FUEL. MAINT FILLED AND DRAINED TANK 3 MORE TIMES TO ENSURE ALL WATER CONTAMINATION HAD BEEN REMOVED. NR 1 ENGINE FUEL SYS WAS RESTORED IAW MM. ENGINE WAS RUN AND TESTED SERVICEABLE. MAINT CHECKED FOR WATER CONTAMINATION IN THE LT WING SUMP, RT WING SUMP AND NR 2 FUEL COLLECTOR TANK AND FOUND NO EVIDENCE OF WATER. OPERATOR CHECKED FUEL TRUCK THAT PROVIDED FUEL PRIOR TO THE FLIGHT AND FOUND NO EVIENCE OF WATER. OPERATOR CHECKED PRE-FLIGHT CHECK SHEET AND FOUND THAT IT WAS MISSING THE REQUIRED STEP TO DRAIN THE COLLECTOR TANK SUMPS AND CHECK FOR PRESENCE OF WATER. THIS STEP WAS IMEDIATELY ADDED TO THE OPERATORS PRE-FLIGHT CHECK SHEETS. DUE TO THE AIRCRAFT BEING PARKED FOR A NUMBER OF MONTHS, IT APPEARS THE WATER MAY HAVE COME FROM CONDENSATION WHICH FORMED IN THE FUEL TANK WHEN THE AIRCRAFT WAS PARKED. (TC NR 20061219029)

CA070119003	BRAERO	RROYCE	INDICATOR	LEAKING
1/9/2007	HS7482A	DART5342	AIR45428	HYDRAULIC SYS

(CAN) ENROUTE, THE CREW OBSERVED BOTH HYD SYSTEMS INDICATING APPROXIMATELY 1200 PSI WITH LOW FLOW LIGHTS ON. THE CREW CONTINUED WHERE ON APPROACH THE HYDRAULIC PRESSURE RECOVERED AND THE FLOW LIGHTS EXTINGUISHED. THE AIRCRAFT LANDED WITHOUT FURTHER PROBLEM. MAINTENANCE FOUND THE HYDRAULIC FLOW INDICATION VALVE LEAKING WHICH WAS REPLACED PRIOR TO THE AIRCRAFT RETURNING TO SERVICE. (TC NR 20070119003)

CA070111012	BRAERO	RROYCE	WINDOW	CRACKED
1/11/2007	HS7482A	DART5342		COCKPIT

(CAN) DURING CLIMB THE FIRST OFFICERS MAIN WINDOW CRACKED. THE AIRCRAFT RETURNED TO POINT OF DEPARATURE WITHOUT FURTHER PROBLEM. MAINTENANCE REPLACED THE WINDOW AND THE AIRCRAFT WAS RETURNED TO SERVICE. (TC NR 20070111012)

200700114	CASA	GARRTT	STIFFENER	CRACKED
1/30/2007	C212	TPE33110R	2121151091	LT WING

WHILE PERFORMING CASA COM LETTER 212-224 AND CASA SB 212-57-57-30, A CRACK WAS NOTED FROM THE 4TH RIVET TO THE 5TH RIVET FROM THE BOTTOM, ON THE VERTICAL STIFFINER LOCATED ON THE LT WING AT STA 4700, AFT SPAR WEB.

CA061017007	CESSNA	CONT	BULKHEAD	CRACKED
10/17/2006	150H	O200A	04500391791	PROPELLER

(CAN) ON PILOT WALK AROUND THE SPINNER ASSY WAS NOTED TO BE LOOSE. UPON INSPECTION IT WAS OBSERVED THAT THE FWD SPINNER BULKHEAD WAS CRACKED. THIS WAS MOST LIKELY CAUSED BY PILOTS PUSHING ON THE SPINNER WHEN GROUND HANDLING THE AIRCRAFT. (TC NR 20061017007)

CA070114001	CESSNA	CONT	EXHAUST VALVE	LEAKING
1/9/2007	150M	O200A		ENGINE

(CAN) DURING ENGINE PERFORMANCE GROUND RUN AFTER INSPECTION, ENGINE WAS RUNNING ROUGH. ENGINE COMPRESSION CHECK CARRIED OUT AND CYLINDER NR 3 FAILED COMPRESSION CHECK AND AIR WAS LEAKING FROM THE EXHAUST. ROUGH RUNNING DURING TAKEOFF WAS ALSO REPORTED BY PILOT PREVIOUSLY WHICH COULD NOT BE CONFIRMED DURING GROUND-RUN AT THAT TIME AND AIRCRAFT WAS TEST FLOWN SATISFACTORY. (TC NR 20070114001)

CA061219009	CESSNA	CONT	RELAY	STUCK
9/13/2006	150M	O200A	S1991A1	STARTER

(CAN) POWER ON STARTER WITH WHEN MASTER SWITCH ON. FOUND MASTER RELAY STUCK IN POSITION. NEW RELAY S-1991-A1 INSTALLED.

CA061030005	CESSNA	LYC	ARM	BENT
10/23/2006	152	O235L2C	05430223	NLG STEERING

(CAN) DURING INSPECTION OF STERRING SYSTEM LT STEERING ARM TUBE FOUND BENT ON THE TUBE ASSY. NEW PART ORDERED AND INSTALLED. (TC NR 20061030005)

2007FA0000027	CESSNA	LYC	PISTON	INOPERATIVE
12/4/2006	152	O235N2C		NR 3 CYLINDER

NR 3 CYLINDER PISTON DOES NOT MOVE IN CYLINDER WHEN YOU TURN PROPELLER. (K)

2006FA0001234	CESSNA	LYC	PISTON	STUCK
12/2/2006	152	O235N2C		NR 3 CYLINDER

ENGINE QUIT IN FLIGHT, FOUND NR 3 CYLINDER PISTON NOT MOVING IN CYLINDER WHEN TURNING PROP. (K)

2007FA0000048	CESSNA		STRINGER	CRACKED
1/5/2007	170B		0511282	WING

CRACKED AT FORWARD END AND PROGRESSES AFT. PROP STRIKE, OUT OF BALANCE PROP. (K)

2007FA0000047	CESSNA	CONT	STRINGER	CRACKED
1/5/2007	170B	O300*	0511282	WING

CRACKED AT FWD END AND PROGRESSES AFT. PROP STRIKE, OUT OF BALANCE PROP? AIRCRAFT HAS A HISTORY OF WING REPAIRS FROM GROUND LOOPS BUT HAS SINCE HAD A ENGINE UPGRADE TO MFG. (K)

2007FA0000046	CESSNA	CONT	STRINGER	CRACKED
1/5/2007	170B	O300*	05112821	WING

CRACKED AT FORWARD END AND PROGRESSES AFT. PROP STRIKE, OUT OF BALANCE PROP. EXAMPLE FROM C-170B WITH THE ENGINE INSTALLED. (K)

CA070110003	CESSNA	LYC	TORQUE LINK	CRACKED
12/20/2006	172D	O360A1A	05430358	NLG

(CAN) PRIOR TO INSTALLATION ON AIRCRAFT, NOSE GEAR SHOCK STRUT ASSEMBLY WAS THOROUGHLY INSPECTED. SEVERAL CRACKS WERE FOUND ON UPPER TORQUE LINK. NEW MFG PART WAS INSTALLED. (TC NR 20070110003)

CA061027001	CESSNA	LYC	CONTROL CABLE	MISROUTED
10/23/2006	172M	O320E2D	0510105338	RUDDER SYSTEM

(CAN) WHILE CARRYING OUT A 100 HOUR INSPECTION IT WAS DISCOVERED THAT WHEN TENSION WAS PLACED ON THE RT RUDDER PEDAL, IT WAS RUBBING AGAINST THE RT AILERON DIRECT CABLE PULLEY CLEVIS PULLEY GUARD IN THE FORWARD TUNNEL SECTION OF THE FUSELAGE. THE RUBBING WAS SUFFICIENT ENOUGH TO CAUSE 6 WIRES TO BREAK. THE CABLE WAS IMPROPERLY ROUTED OVER THE AILERON DIRECT PULLEY CLEVIS PIN CABLE GUARD AND SHOULD HAVE PASSED UNDERNEATH. THE CABLE WAS FRAYED APPROXIMATELY 7 INCH AFT OF THE ATTACHMENT TO THE AFT RUDDER BAR. THE FRAYED WIRE CAN ONLY BE SEEN BY REMOVAL OF THE PLASTIC CENTER CONSOLE AND VIEWED THROUGH THE TUNNEL SECTION WITH AN INSPECTION MIRROR AND TENSION APPLIED TO THE RT RUDDER. NO RECORD OF THE CABLE EVER BEING REMOVED OR REPLACED WAS ENTERED IN THE LOGBOOK. THE SERVICE MANUAL SECTION 1, PARA. 1-14 2(B) STATES THAT INDIVIDUAL BROKEN WIRES ARE ACCEPTABLE IN PRIMARY AD SECONDARY CONTROL CABLES AT RANDOM LOCATIONS WHEN THERE ARE NO MORE THAN SIX BROKEN WIRES IN ANY GIVEN 10-INCH CABLE LENGTH. (TC NR 20061027001)

CA060903001	CESSNA	LYC	WIRE	IMPROPER
6/24/2006	172M	O320E2D		ELECTRICAL SYS

(CAN) OVERVOLTAGE LIGHT FOUND WIRED TO SYSTEM WITH UNAPPROVED AUTOMOTIVE WIRING. THIS WIRING DISCONNECTED, AND CAUSED A DEAD SHORT TO THE SYSTEM. (TC NR 20060903001)

CA061227003	CESSNA	LYC	ENGINE	MAKING METAL
12/22/2006	172M	O320E2D		

(CAN) DURING SCHEDULED MAINTENANCE, AT A 200HR. INSPECTION, METAL FOUND IN OIL. METAL TURNED OUT TO BE FROM NR 3 CYLINDER CONNECTING ROD, LOWER BEARING. (TC NR 20061227003)

CA061227004	CESSNA	LYC		ENGINE	MAKING METAL
12/21/2006	172M	O320E2D			

(CAN) DURING 50 HR. OIL CHANGE, HEAVY BRASS-LIKE MATERIAL WAS NOTED IN THE OIL FILTER. CYLINDER WAS REMOVED TO INSPECT ENGINE CORE. CRANKSHAFT CENTER JOURNAL BEARING WAS FOUND TO BE DISINTEGRATING. ENGINE REMOVED FROM SERVICE. (TC NR 20061227004)

2007FA0000063	CESSNA			SKIN	MISMANUFACTURED
1/10/2007	172N			05230294	RT WING

DURING AN RECEIVING INSPECTION OF NEW RT OB LEADING EDGE SKIN, IT WAS FOUND TO HAVE BEEN DRILLED UP INCORRECTLY SINCE NONE OF THE NOSE RIBS WOULD LINE UP AND THE SET UP WOULD HAVE LT INSUFFICIENT EDGE DISTANCE ON THE LOWER MAIN WING SPAR RIVET LINE. THIS IS ZND TIME WE HAVE RECEIVED THIS SAME PART. WE ASKED THAT THE PART NOT BE PUT BACK INTO MFG STOCK SINCE PART IS NON-CONFORMING. THE PART CAME WITH 8130-3 AIRWORTHINESS APPROVAL TAG. RECOMMEND MFG PERFORM CLOSE CONFORMITY INSPECTION OF PARTS. (K)

2007FA0000025	CESSNA	LYC		SEAT BACK	BROKEN
7/25/2006	172N	O320*		07140593	COCKPIT

INSPECTED SEATS IAW AD 87-20-03R2 FOUND PILOTS SEAT BOTTOM ASSY BROKEN AT LEFT FWD ATTACH POINT AND RT FWD CRACKED. (K)

CA061218019	CESSNA	LYC		BULKHEAD	CRACKED
12/18/2006	172N	O320D2J		05503214	SPINNER

(CAN) THIS AIRCRAFT HAS HAD ALL THE AFT BULKHEAD AND HEAVIER SPINNER UPGRADES AND HAS HAD IT ALL ASSEMBLED IAW THE LATEST SB. THE (FORWARD SPINNER BULKHEAD) IS CRACKED AGAIN WITH LESS THEN 50 HOURS TSN, CRACKS RADIATING .2500 TO 1 INCH FROM 3 OF THE 6 HOLES. YOU HAVE TO LOOK VERY CARFULLY AS THE CRACKS RADIATING FROM THE PROP BOLT HOLES ARE VERY FINE AND HIDE UNDER THE FACTORY PRIMER. (TC NR 20061218019)

2006FA0001226	CESSNA			STARTER	LOCKED
9/24/2006	172S			PM2401	ENGINE

STARTER STUCK ENGAGED AND LOCKED PROP.

2006FA0001219	CESSNA			STARTER	MALFUNCTIONED
12/21/2006	172S				ENGINE

STARTER WOULD NOT ENGAGE.

2006FA0001216	CESSNA			STARTER	MALFUNCTIONED
12/21/2006	172S			PM2401	ENGINE

STARTER SPINS BUT WILL NOT ENGAGE.

2007FA0000034	CESSNA	LYC	LAMAR	DRIVE GEAR	FAILED
11/24/2006	172S	IO360A1A		9301001	STARTER

STARTER WAS REMOVED AFTER THE DRIVE GEAR BROKE INTO PIECES AND JAMMED STARTER FROM TURNING. COMPLETE STARTER WAS REPLACED WITH REBUILT ASSEMBLY. SUB-PART (BENDIX DRIVE) IS PN 9301001. THIS MECHANIC HAS SEEN THIS FAILURE 4 TO 5 TIMES. BOTH 12 AND 24 VOLT UNITS. (K)

CA061129005	CESSNA	LYC		LINE	WORN
11/29/2006	172S	IO360L2A		050011849	FUEL RETURN

(CAN) A FUEL LEAK WAS NOTED ON THE AIRCRAFT. UPON INSPECTION THE FUEL LINE BETWEEN THE FCU AND FUEL RESERVOIR WAS FOUND WORN. THE NOSE WHEEL STEERING ROD HAD BEEN RUBBING INTO THE LINE, AND WORN A GROOVE DEEP ENOUGH TO ALLOW FUEL TO LEAK. THE FUEL LINE IS ALUMINIUM, AND THE STEERING ROD IS STEEL. NO DAMAGE WAS NOTED ON THE STEERING ROD. (2) OF THESE TYPE OF AIRCRAFT

ARE OPERATED, AND THE SECOND WILL BE INSPECTED FOR THE SAME TYPE OF PROBLEM. (TC NR 20061129005)

2006FA0001217	CESSNA	LYC	STARTER	SPINNING
8/10/2006	172S	IO360L2A	PM2401H	ENGINE

STARTER FAIL, WOULD NOT ENGAGED.

2006FA0001218	CESSNA	LYC	STARTER	SPINNING
12/7/2006	172S	IO360L2A	PM2401H	ENGINE

STARTER WOULD NOT ENGAGED.

2006FA0001214	CESSNA	LYC	STARTER	STUCK
12/21/2006	172S	IO360L2A	PM2401	ENGINE

STARTER STUCK IN ENGAGED MODE

2006FA0001215	CESSNA	LYC	STARTER	SPINNING
3/6/2006	172S	IO360L2A	PM2401	ENGINE

STARTER WILL NOT STAY ENGAGED.

2006FA0001220	CESSNA	LYC	STARTER	SPINNING
10/20/2006	172S	IO360L2A	PM2401	ENGINE

STARTER SPINS BUT WILL NOT ENGAGE.

2006FA0001221	CESSNA	LYC	STARTER	SPINNING
9/9/2006	172S	IO360L2A	PM2401	ENGINE

STARTER SPINS BUT WILL NOT ENGAGE.

2006FA0001213	CESSNA	LYC	STARTER	FAILED
4/7/2006	172S	IO360L2A	PM2401H	ENGINE

STARTER WOULD NOT STAY ENGAGED. STARTER ONLY HAS 23.4 HR.

2006FA0001223	CESSNA	LYC	STARTER	FAILED
12/21/2006	172S	IO360L2A	PM2401	ENGINE

STARTER BENDIX FAILED.

2006FA0001225	CESSNA	LYC	STARTER	SPINNING
10/3/2006	172S	IO360L2A	PM2401H	ENGINE

STARTER WOULD NOT ENGAGED.

2006FA0001227	CESSNA	LYC	STARTER	SPINNING
12/12/2006	172S	IO360L2A	PM2401H	ENGINE

STARTER WOULD NOT ENGAGED.

RDA113006	CESSNA		AMMETER	FAILED
11/30/2006	175		VA100	

AEROSPACE LOGIC VA-100 DIGITAL VOLT/AMMETER AMP FUNCTION FAILED. AMP READING VARIES FROM -12 TO -18.5 AMPS, THIS INDICATION IS PRESENT WITH NO LOAD ON SYSTEM OR WITH ENGINE OPERATING AND GENERATOR OPERATING NORMALLY. VOLT FUNCTION OPERATES NORMALLY AND VOLTAGE READING IS NORMAL. CONSULTED WITH MANUFACTURER AND TROUBLESHOT IAW THEIR PROCEDURE TO VERIFY THAT GAUGE HAS MALFUNCTIONED. A REVIEW OF THE MANUFACTURER'S ON-LINE FORUM HAS REPORTS OF SIMILAR FAILURES OF THE VA-100.

2007FA0000083	CESSNA		SEAL	MISSING

1/23/2007	180J		07520161011	INTAKE

INTAKE SEALS FOUND MISSING. AD 77-04-05 PERTAINING TO THIS DEFECT HAD BEEN PREVIOUSLY ACCOMPLISHED IN 1977. DUE TO THE AGE OF THE FLEET I BELIEVE THAT THE ONE TIME INSPECTION IAW THIS AD IS INSUFFICIENT. AS THIS IS NOT THE FIRST TIME I HAVE FOUND THE SAME CONDITION ON OTHER AIRCRAFT I WOULD CONSIDER UPDATING THE AD TO INCLUDE REPETITIVE INSPECTIONS AT ANNUAL/100 HOUR INTERVALS.

2006FA0001222	CESSNA	LYC	STARTER	MALFUNCTIONED
12/21/2006	182T	IO540*	PM2401	ENGINE

STARTER STUCK IN ENGAGED MODE.

2006FA0001235	CESSNA	LYC	VALVE GUIDE	STUCK
12/27/2006	182T	IO540AB1A5	LW19001	

PERFORMED COMPRESSION CHECK ON ENGINE AND HAD 5/80 PSI ON NR 6 CYL, STAKED EXHAUST VALVE AND GOT 78/80. PERFORMED SB 388C AND HAD TO REAM VALVE GUIDES TO GET WITH-IN LIMITS OF SB. IT WAS ONLY 200 HRS SINCE LAST SB COMPLIANCE.

CA070109006	CESSNA	CONT	PISTON RING	SEPARATED
1/9/2007	206CESSNA	IO520F	AEC648005PL	ENGINE

(CAN) MATERIAL FROM THE FACE OF THE TOP COMPRESSION RING HAD FLAKED AWAY ON PISTONS NR1, NR2, NR4, AND NR6 (TC NR 20070109006).

2007FA0000081	CESSNA		TUBE	DAMAGED
1/19/2007	208B		850X1000	TIRE

RIGHT MAIN GEAR TIRE REPORTED LOW. REMOVED TIRE TO CHECK THE TUBE. THE TUBE APPEARED TO LOOK OLD AND CHECKED. TECHNICIAN REPLACED WITH NEW TUBE. ONE WEEK LATER TIRE REPORTED LOW AGAIN ON SAME POSITION. REMOVED THE TIRE AND INSPECTED THE TUBE. THE TUBE LEAKING ON ONE SIDE AND ALMOST WORN THRU ON THE OPPOSITE SIDE. AFTER FURTHER INVESTIGATION DETERMINED THAT THE STICKERS INSIDE THIS 8.50 X 10.00 FC III P/N 850T86-2 S/N 62570185 TIRE HAD CAUSED THE FAILURE. THIS WAS THE SECOND FAILURE ON THE SAME GEAR POSITION WITH THE SECOND NEW TUBE WITHIN 7 WEEKS. AFTER CONTACTING MANUFACTURER TIRE PRODUCT SUPPORT, SENT A NOTE AND PICTURES ABOUT THE PROBLEM AND THE FAA PMI FROM THE FARGO FSDO. THE MANUFACTURER RESPONDED BY EXPLAINING THAT THE STICKERS ARE PUT IN ALL OF THE TUBELESS TIRES AND THAT YOU CAN GO ON THEIR WEBSITE AND FIND INFORMATION THAT EXPLAINS THE STICKERS CAN BE REMOVED FOR USE WITH A TUBE.

2007FA0000078	CESSNA		TUBE	WORN
1/19/2007	208B		850X1000	LANDING GEAR

RT MAIN GEAR TIRE REPORTED LOW. REMOVED TIRE TO CHECK THE TUBE. THE TUBE APPEARED TO LOOK OLD AND CHECKED. TECHNICIAN REPLACED WITH NEW TUBE. 1 WEEK LATER TIRE REPORTED LOW AGAIN ON SAME POSITION. WE REMOVED THE TIRE AND INSPECTED THE TUBE. THE TUBE LEAKING ON ONE SIDE AND ALMOST WORN THRU ON THE OPPOSITE SIDE. AFTER FURTHER INVESTIGATION WE DETERMINED THAT THE STICKERS INSIDE THIS 8.50 X 10.00 FC III PN 850T86-2 S/N 62570185 TIRE HAD CAUSED THE FAILURE. THIS WAS THE SECOND FAILURE ON THE SAME GEAR POSITION WITH THE SECOND NEW TUBE WITHIN 7 WEEKS. AFTER CONTACTING MFG WHO GAVE ME AN E-MAIL FOR THEIR PRODUCT SUPPORT CONTACT WE GOT INFORMATION VERY QUICKLY. SENT HIM A NOTE AND PICTURES ABOUT THE PROBLEM AND SO DID OUR LOCAL FAA PMI FROM THE FSDO. RESPONDED TO US WITH AN E-MAIL EXPLAINING THAT THE STICKERS ARE PUT IN ALL OF THE TUBELESS TIRES AND THAT YOU CAN GO TO THE MANUFACTURERS WEB SITE FOR INFORMATION IN THE MFG CARE AND MM THAT EXPLAINS THE FACT THAT THE STICKERS CAN BE REMOVED FOR USE WITH A TUBE. HOPE THAT THIS INFORMATION WILL HELP OTHERS IN THE FIELD SO THEY DO NOT EXPERIENCE THE SAME PROBLEMS.

CA061102004	CESSNA		RUDDER	STIFF
11/2/2006	208B		2613017202	

(CAN) AIRCRAFT WAS BEING TAXIED TO THE RAMP FROM THE HANGER. THE PILOT NOTICED THAT THE RUDDER CONTROLS FELT STIFF. THE PILOT DECIDED TO RETURN TO THE HANGER AND ADVISE MAINTENANCE. THE AIRCRAFT IS BEING EXAMINED AT THIS TIME AND WILL UP-DATE THIS SDR WHEN A CAUSE OF THIS FAULT IS

FOUND. (TC NR 20061102004)

2007FA0000079	CESSNA	PWA	TUBE	WORN
1/19/2007	208B	JT8D17	850X1000	LANDING GEAR

RT MAIN GEAR TIRE REPORTED LOW. REMOVED TIRE TO CHECK TUBE. TUBE APPEARED TO LOOK OLD AND CHECKED. TECH REPLACED WITH NEW TUBE. 1 WEEK LATER TIRE REPORTED LOW AGAIN ON SAME POSITION. WE REMOVED THE TIRE AND INSPECTED THE TUBE. THE TUBE LEAKING ON ONE SIDE AND ALMOST WORN THRU ON THE OPPOSITE SIDE. AFTER FURTHER INVESTIGATION WE DETERMINED THAT THE STICKERS INSIDE THIS 8.50 X 10.00 FC III P/N 850T86-2 S/N 62570185 TIRE HAD CAUSED THE FAILURE. THIS WAS SECOND FAILURE ON SAME GEAR POSITION WITH SECOND NEW TUBE WITHIN 7 WEEKS. AFTER CONTACTING MFG REP WHO GAVE ME AN E-MAIL FOR THEIR PRODUCT SUPPORT CONTACT, WE GOT INFORMATION VERY QUICKLY. I SENT HIM A NOTE AND PICTURES ABOUT PROBLEM AND SO DID OUR LOCAL FAA PMI FROM THE FSDO. RESPONDED TO US WITH AN E-MAIL EXPLAINING THAT STICKERS ARE PUT IN ALL OF THE TUBELESS TIRES AND THAT YOU CAN GO TO THE MANUFACTURERS WEB SITE FOR INFORMATION IN THE MFG CARE AND MAINTENANCE MANUAL THAT EXPLAINS THE FACT THAT THE STICKERS CAN BE REMOVED FOR USE WITH A TUBE. I HOPE THAT THIS INFORMATION WILL HELP OTHERS IN THE FIELD SO THEY DO NOT EXPERIENCE THE SAME PROBLEMS.

2007FA0000080	CESSNA	PWA	TUBE	WORN
1/19/2007	208B	JT8D17	850X1000	LANDING GEAR

RT MAIN GEAR TIRE REPORTED LOW. REMOVED TIRE TO CHECK TUBE. TUBE APPEARED TO LOOK OLD AND CHECKED. TECH REPLACED WITH NEW TUBE. 1 WEEK LATER TIRE REPORTED LOW AGAIN ON SAME POSITION. WE REMOVED TIRE AND INSPECTED THE TUBE. TUBE LEAKING ON ONE SIDE AND ALMOST WORN THRU ON OPPOSITE SIDE. AFTER FURTHER INVESTIGATION WE DETERMINED THAT STICKERS INSIDE THIS 8.50 X 10.00 FC III P/N 850T86-2 S/N 62570185 TIRE HAD CAUSED THE FAILURE. THIS WAS THE SECOND FAILURE ON THE SAME GEAR POSITION WITH THE SECOND NEW TUBE WITHIN 7 WEEKS. AFTER CONTACTING, WHO GAVE ME AN E-MAIL FOR THEIR PRODUCT SUPPORT CONTACT WE GOT INFORMATION VERY QUICKLY. I SENT HIM A NOTE AND PICTURES ABOUT THE PROBLEM AND SO DID OUR LOCAL FAA PMI FROM THE FSDO. RESPONDED TO US WITH AN E-MAIL EXPLAINING THAT THE STICKERS ARE PUT IN ALL OF THE TUBELESS TIRES AND THAT YOU CAN GO TO THE MANUFACTURERS WEB SITE FOR INFORMATION IN THE MFG CARE AND MAINTENANCE MANUAL THAT EXPLAINS THE FACT THAT THE STICKERS CAN BE REMOVED FOR USE WITH A TUBE. I HOPE THAT THIS INFORMATION WILL HELP OTHERS IN THE FIELD SO THEY DO NOT EXPERIENCE THE SAME PROBLEMS.

2007FA0000084	CESSNA	PWA	TUBE	WORN
1/19/2007	208B	JT8D17	850X1000	LANDING GEAR

RT MAIN GEAR TIRE REPORTED LOW. REMOVED TIRE TO CHECK THE TUBE. THE TUBE APPEARED TO LOOK OLD AND CHECKED. TECHNICIAN REPLACED WITH NEW TUBE. 1 WEEK LATER TIRE REPORTED LOW AGAIN ON SAME POSITION. WE REMOVED THE TIRE AND INSPECTED THE TUBE. THE TUBE LEAKING ON ONE SIDE AND ALMOST WORN THRU ON THE OPPOSITE SIDE. AFTER FURTHER INVESTIGATION WE DETERMINED THAT THE STICKERS INSIDE THIS 8.50 X 10.00 FC III P/N 850T86-2 S/N 62570185 TIRE HAD CAUSED THE FAILURE. THIS WAS THE SECOND FAILURE ON THE SAME GEAR POSITION WITH THE SECOND NEW TUBE WITHIN 7 WEEKS. AFTER CONTACTING MFG WHO GAVE ME AN E-MAIL FOR THEIR PRODUCT SUPPORT CONTACT WE GOT INFORMATION VERY QUICKLY. I SENT HIM A NOTE AND PICTURES ABOUT THE PROBLEM AND SO DID OUR LOCAL FAA PMI FROM THE FSDO. RESPONDED TO US WITH AN E-MAIL EXPLAINING THAT THE STICKERS ARE PUT IN ALL OF THE TUBELESS TIRES AND THAT YOU CAN GO TO THE MANUFACTURERS WEB SITE FOR INFORMATION ON CARE AND THE MM THAT EXPLAINS THE FACT THAT THE STICKERS CAN BE REMOVED FOR USE WITH A TUBE. I HOPE THAT THIS INFORMATION WILL HELP OTHERS IN THE FIELD SO THEY DO NOT EXPERIENCE THE SAME PROBLEMS.

CA070105003	CESSNA	PWA	PWC	TURBINE BLADES	FRACTURED
12/14/2006	208B	PT6A114A	PT6A114A		ENGINE

(CAN) THE ENGINE SUFFERED AN INFLIGHT SHUTDOWN IN CRUISE. SUBSEQUENT INSPECTION REVEALED THE AIRFRAME INLET AIR BOX PARTIALLY OPEN WITH A FASTENING PIN MISSING. THE ENGINE COMPRESSOR WAS FOUND STIFF TO ROTATE WITH DAMAGE EVIDENT TO THE SECOND STAGE STATOR AND THE POWER TURBINE BLADES WERE FOUND FRACTURED. MFG WILL MONITOR INVESTIGATION OF THE INCIDENT AND ADVISE OF ROOT CAUSE ONCE ESTABLISHED. (TC NR 20070105003)

CA061219012	CESSNA	PWA	ENGINE	UNKNOWN

10/22/2006	208B	PT6A114A		

(CAN) IN FLIGHT A LOUD NOISE WAS HEARD AND THE WINDSHIELD BECAME COVERED IN OIL. A FORCED LANDING FOLLOWED RESULTING IN AIRFRAME DAMAGE. MFG WILL INVESTIGATE THE EVENT AND ADVISE OF ROOT CAUSE ONCE DETERMINED.

CA061019003	CESSNA	CONT	BOLT	SHEARED
10/18/2006	310R	IO520M	AN517A	NLG

(CAN) ON LANDING THE MAIN GEAR CAME DOWN AND LOCKED BUT THE NOSE GEAR STAYED UNLOCKED. THE AN5-17A BOLT CONNECTING THE DRAG LINK ASSY TO THE DRAG BRACE TRUSS ASSY. HAD FAILED CAUSING THE NOSE GEAR STRUT ASSY TO JAM AGAINST THE TRUSS ASSY HOLDING THE GEAR FROM COLLAPSING ON LANDING. (TC NR 20061019003)

CA061128003	CESSNA	CONT	RIB	WRONG PART
11/16/2006	340A	TSIO520NB	20062	RT WING

(CAN) DURING A ROUTINE INSPECTION DISCOVERED LT AND RT WING RIBS AT STATION 117.48 TO BE CONFLICTING WITH THE FLAP RIB AT SIMILAR LOCATION WHEN FLAPS ARE RETRACTED. AFTER INSPECTION FOUND THAT THE SPOILER DOUBLER INSTALLED IN 1995 WAS THE WRONG DIMENSION ALLOWING WING RIB TO BE POSITIONED INCORRECTLY. UPON FARTHER INVESTIGATION FOUND THE TEMPLATE NR 8005T AND THE INSTALLATION INSTRUCTIONS NR SP8000 SUPPLIED WITH THE STC SA4948NM TO BE CONTRADICTING EACH OTHER IN RESPECT TO THE NEW LOCATION OF THE WING RIB. THIS COULD BE VERY SERIOUS, IF ONE OF THE FLAPS BECAME INOPERATIVE DUE TO THE FACT THAT THE RIBS HOOKED ON EACH OTHER. (TC NR 20061128003)

2006FA0001192	CESSNA	CONT	CYLINDER	CRACKED
12/13/2006	340A	TSIO520NB	TISN712BCA221	ENGINE

COMPLIANCE WITH ENGINE COMPONENTS, INC. MANDATORY SB06-2 DISCLOSED CRACKED CYLINDER IN RT ENGINE WITH OBVIOUS LEAKAGE.

PAI52007S4448	CESSNA	CONT	STUD	BROKEN
1/30/2007	414A	TSIO520NB		NR 4 CYLINDER

DURING ANNUAL INSPECTION FOUND 5 BROKEN HOLD DOWN STUDS ON NR 4 CYLINDER. ENGINE WAS MODIFIED IAW RAM STC SE3630SW AND SE3631SW AT PREVIOUS OVERHAUL.

2006FA0001178	CESSNA	CONT	CLAMP	CRACKED
12/12/2006	421	GTSIO520N	227450	TURBOCHARGER

DURING PROGRESSIVE INSPECTION FOUND LT ENGINE TURBOCHARGER TO TAILPIPE CLAMP CRACKED ALONG CIRCUMFERENCE, APPROX. 4 INCH CRACK. FOUND SAME PN CLAMP ON THE RT ENGINE OF THIS AIRCRAFT TO BE CRACKED 7 HOURS PREVIOUSLY.

2006FA0001111	CESSNA	CONT	CLAMP	CRACKED
11/21/2006	421C	GTSIO520N	227450	TAIL PIPE

PN 2274-50 (ALSO PN NH1000897-50) CLAMP HOLDING TAILPIPE TO THE TURBO CRACKED LENGTHWISE ALONG THE CIRCUMFERENCE OF THE CLAMP. TOTAL LENGTH OF THE CRACK IS 3 INCHES.

2006FA0001196	CESSNA	PWA	CESSNA	LINE	CORRODED
11/29/2006	500CESSNA	JT15D1		90E551701064	BRAKE ASSY

INVESTIGATING SOFT BRAKE CONDITION IT WAS NOTED THAT BRAKE FLUID WAS LEAKING FROM AROUND THE BELLY BEACON AND THE BEACON LENS WAS FULL OF FLUID. REMOVED THE INTERIOR AND THE CENTER AISLE FLOOR PANELS. HYDRAULIC FLUID WAS NOTED DRIPPING FROM RIDGE BRAKE LINE TO THE RT BRAKE. PN 90E5517010-64 AT FS248.1. MFG INSTALLED AIR-CONDITIONING COLD AIR DUCT IS TY-RAPED TO THE BRAKE FLUID LINES. BELLY BEACON IS DIRECTLY BELOW THE CORROSION AND THE BRAKE FLUID LEAKAGE. THE AIRCRAFT IS NOT EQUIPPED WITH BELLY DRAINS. THE CONDENSATION LIES IN THE BELLY OF THE AIRCRAFT AND THE BEACON CREATES HEAT AND THE HUMIDITY CAUSES CORROSION ON COMPONENT PARTS IN THE UNDER FLOOR AREA. MFG PROBABLY SHOULD ENGINEER A DRAINAGE SYSTEM OR SOME OTHER METHOD OF ELIMINATING THE HUMIDITY FROM THE UNDER FLOOR AREA. (K)

2007FA0000070	CESSNA	PWA	CESSNA	ATTACH FITTING	CRACKED
1/8/2007	500CESSNA	JT15D1		5514551129	CABIN

UPPER CHAIR BASE ASSEMBLY CRACKED AT CHAIR BACK ATTACH POINTS. CHAIR WAS REPAIRED IAW STC ST01042WI STRUCTURAL SEAT REPAIR. (K)

FCPR20060027	CESSNA	WILINT	HEATER	BURNED
12/15/2006	525A	FJ44	105881	ZONE 100

AFT TOILET RELIEF TUBE HEATER ELEMENT FAILED WITH EXTERNAL POWER APPLIED BURSTING INTO FLAMES. IPC REFERENCE 38-30-00 FIG 3 ITEM 16.

CWQR200701	CESSNA		PUSHROD	MISMANUFACTURED
1/22/2007	550		55653426	ELEVATOR

DURING THE REPAIR STATION PRELIMINARY INCOMING PARTS INSPECTION, IT WAS OBSERVED THAT ONE OF THE NEW ELEVATOR PUSHROD CLEVIS ENDS WERE ATTACHED WITH ALUMINUM RIVETS. ANOTHER NEW UNIT AND THE OLD PUSHRODS USED MONEL RIVETS. A CALL TO MFG CONFIRMED THAT MONEL RIVETS SHOULD BE INSTALLED. THE PART WAS REJECTED, TAGGED AND RETURNED TO MFG. ASKED MFG TO CHECK THEIR STOCK FOR THIS CONDITION. AN SCR HAS BEEN SUBMITTED TO MFG UNDER NR 271980.

CA061114005	CESSNA	PWA	GUARD	CRACKED
11/10/2006	550	JT15D4	656530128	ELEVATOR

(CAN) WHILE COMPLYING WITH COMPANY CAMPAIGN NOTICE CN 851-27-20-035, BOTH ELEVATOR CABLE GAURDS WERE FOUND CRACKED ADJASENT TO THE CLAMPS. THE TUBES WERE FOUND WITH .5 INCH LONGITUDINAL CRACKS. ADDITIONALLY ONE OF THE ATTACH CLAMPS WAS FOUND TO HAVE THE WRONG PN MS 21919WH10 INSTEAD OF MS 21919WDG10. MAINTENANCE ENTRIES WERE MADE WITH RESPECT TO THE WORK ACCOMPLISHED IN THE CONDITION AND CORRECTION SHEET ASD MP-01-860-10-30-01. (TC NR 20061114005)

2006FA0001148	CESSNA	PWA	SEAT FRAME	CRACKED
10/30/2006	550	JT15D4	551900921	COCKPIT

UPPER CHAIR BASE ASSY CRACKED AT CHAIR BACK ATTACH POINTS. STRESS ON CHAIR BACK AND METAL FATIGUE PROBABLE CAUSE. CHAIR WAS REPAIRED IAW STCC ST01042W STRUCTURAL SEAT REPAIR. (K)

CA061207001	CESSNA	PWA	WIRE	DAMAGED
12/6/2006	550	JT15D4		FUEL CELL

(CAN) THE FUEL TANKS SHOW EVIDENCE OF LOCALIZED DISCOLORATION AND VARIOUS NICKS ON OUTER JACKETS OF FUEL QUANTITY PROBE WIRING. THERE IS ALSO DISCOLORATION ON THE TERMINALS OF THE VARIOUS FUEL PROBES. THIS DAMAGE IS PROBABLY CAUSED BY IMPROPER USE OF THE TYRAP TOOL MOST LIKELY AT THE FACTORY LEVEL. THIS IS THE SECOND TIME THIS TYPE OF DAMAGE HAS BEEN FOUND ON A COMPANY AIRCRAFT. (TC NR 20061207001)

2007FA0000051	CESSNA	PWA	DOOR	OPEN
1/7/2007	560CESSNA	JT15D5		CARGO BAY

RT BAGGAGE DOOR POPPED OPEN ON ROLLOUT WITHOUT WARNING. COULD NOT DUPLICATE CIRCUMSTANCES, SUGGEST INSPECTING LATCHES AND DOOR WARNING. ON A MORE REGULAR BASIS. AIRCRAFT RETURNED WITHOUT PROBLEM. (K)

FCPR20060026	CESSNA	PWA	RING	CRACKED
12/13/2006	560CESSNA	PW535A	65526022	RT ENGINE

RT ENGINE INLET SUPPORT RING CRACKED.

JEMA11302006A	CESSNA	PWA	WINDSHIELD	CRACKED
11/30/2006	560CESSNA	PW545A	991438010	COCKPIT

AIRCRAFT HAD DEPARTED, HAD LEVELED OFF AT 37,000 FEET, ENROUTE. CREW NOTICED A RT WINDSHIELD FAULT WARNING LIGHT. IAW AFM PROCEDURES RT WINDSHIELD HEAT WAS TURNED OFF. APPROX 3-4 MINUTES

LATER CO-PILOT SAW FLASH AND RT WINDSHIELD SPIDER WED CRACKED. FLIGHT CREW MADE A PRECAUTIONARY LANDING AT AIRPORT, WITH NO FURTHER INCIDENTS.

CA061220006	CESSNA	PWA	INDICATOR	CHAFED
12/14/2006	560XL	PW545A	66082813	FUEL SYSS

(CAN) LT FUEL QUANTITY CAUTION LIGHT ILLUMINATES DURING DESCENT. FAULT CODE INDICATES PROBES NR 3 DEFECTIVE. PROBE NR 3 REPLACED AND FURTHER INVESTIGATION REVEALED THAT THE WIRING IN LT TANK FOUND CHAFING AT (2) PLACES (WS 116.0) ON TOP OF FUEL PILOT VALVE LINE DUE HARNESS ASSEMBLY WAS NOT SUPPORTED PROPERLY DURING THE PRODUCTION ASSEMBLY PROCESS. NO CHAFING WAS FOUND IN RT FUEL TANK, BUT SIMILAR DEFECTIVE ATTACHMENT WAS FOUND. A SERVICE CONDITION REPORT (SCR NR 268343) WAS DONE TO AIRCRAFT. (TC NR 20061220006)

CA061219017	CESSNA	PWA	MANIFOLD	LEAKING
11/15/2006	560XL	PW545A		FUEL SYSTEM

(CAN) ON DESCENT THE ENGINE FIRE WARNING ACTIVATED AND THE ENGINE WAS SHUTDOWN IN FLIGHT. POST FLIGHT INSPECTION REVEALED LEAKAGE FROM THE ENGINE FUEL MANIFOLD AND EVIDENCE OF BURNING OF THE ENGINE INNER BYPASS DUCTING. (TC NR 20061219017)

CWQD200701	CESSNA	ALLSN	HOSE	LEAKING
12/25/2006	750	AE3007C	AE1011888G0106	HYD SYSTEM

DURING FINAL APPROACH THE GEAR WAS SELECTED DOWN AND THE (A) HYDRAULIC QTY FELL TO 6 PERCENT WITH (HYD VOL LOW) CAS MESSAGE. JACKED AIRCRAFT, REMOVED PANEL 184DB AND FOUND THE RT GEAR MLG ACTUATOR RETRACT HOSE ASSY HAD A HOLE IN IT.

2006FA0001233	CESSNA	ALLSN	CONNECTOR	SHORTED
12/9/2006	750	AE3007C	AE776L845	MAIN BATTERY

BATTERY OVERTEMP INDICATED R-RED CAS MESSAGE IN FLIGHT. FOUND SPLICE AT THE BATTERY TEMP SENSOR CONNECTOR PY044 BROKEN. ALSO CONNECTOR WAS FOUND BADLY CORRODED INSIDE OF CONNECTOR. REPLACED CONNECTOR PY044 AND REPLACED WIRES IAW CE750 WIRING MANUAL 20-10-06. THE INCIDENT WAS AN INDICATION PROBLEM ONLY AND BOTH AIRCRAFT BATTERIES WERE FOUND TO BE NORMAL (AIRWORTHY) WITH NO ACTION REQUIRED. (K)

2006FA0001163	CESSNA	CONT	CABLE	BROKEN
8/23/2006	T210M	TSIO520*	12115041	PAX DOOR STEP

THE PILOT EXTENDED THE LANDING GEAR PRIOR TO LANDING, AND THE NOSEGEAR WOULD NOT EXTEND INTO THE DOWN-AND-LOCKED POSITION (THE MAINS LOCKED). DURING LANDING, THE NOSEGEAR COLLAPSED. POST INCIDENT INSPECTION SHOWED THAT THE PASSENGER STEP CABLE BROKE AT THE FORWARD PULLEY AND INTERTWINED WITH THE NOSE GEAR LINKAGE, NOT ALLOWING IT TO LOCK.

2006FA0001201	CESSNA	CONT	TURBOCHARGER	FAILED
6/30/2006	T210N	TSIO520*	C2950010101	ENGINE

NEW TURBO ASSY WAS INSTALLED 3/27/2006. (3) MONTHS LATER ON 6/30/06 (32 HOURS TT) THE TURBO SHAFT TIGHTENED UP ENOUGH TO NOT PRODUCE TAKEOFF POWER ON NEXT FLIGHT. OIL PRESSURE AND OIL VOLUME DELIVERED TO TURBO BEARINGS WAS VERIFIED TO BE ADEQUATE. CUSTOMER PROCEDURES FOR COOL DOWN/ SPOOL DOWN OF TURBO AFTER TAXI WERE VERIFIED TO BE CONSISTENT WITH MFG POH RECOMMENDED PROCEDURES. NEW TURBO WAS INSTALLED AND (4) MONTHS (41 HOURS TURBO TT) LATER IT DID THE SAME THING. M OR D REPORT SUBMITTED THIS DATE ALSO. (K)

2006FA0001202	CESSNA	CONT	TURBOCHARGER	FAILED
10/6/2006	T210N	TSIO520*	C2950010101	

NEW TURBO ASSY WAS INSTALLED 6/30/06. FOUR MONTHS LATER ON 10/6/06 (41 HOURS TT) THE TURBO SHAFT TIGHTENED UP ENOUGH TO NOT PRODUCE TAKEOFF POWER ON NEXT FLIGHT. OIL PRESSURE AND OIL VOLUME DELIVERED TO TURBO BEARINGS WAS VERIFIED TO BE ADEQUATE. CUSTOMER PROCEDURES FOR COOL DOWN/SPOOL DOWN OF TURBO AFTER TAXI WERE VERIFIED TO BE CONSISTENT WITH POH RECOMMENDED PROCEDURES. THIS IS THE (2ND) TURBO IN 7 MONTHS TO DEVELOP THIS PROBLEM. MFG HAS NUMEROUS

REPORTS OF THIS SAME PROBLEM. IT WOULD SEEM APPROPRIATE TO RE-EVALUATE THE ENGINEERING AND OR MFG OF THE SHAFT, BEARINGS, CLEARANCES, ETC OF THE TURBO. (K)

2007FA0000055	CESSNA	LYC	HYDRAULIC LINE	FAILED
12/12/2006	TR182	O540*	1114174S0102	NLG

HYDRAULIC HOSE ON RETRACT SIDE OF NOSE GEAR ACTUATOR FAILED AS AIRCRAT WAS ON APPROACH AND GEARDOWN WAS SELECTED. RESULTED IN AIRCRAFT MAKING AN EMERGENCY GEARUP LANDING. AFTER AC WAS RECOVERED, INSPECTION OF HYDRAULIC SYSTEM REVEALED; TEFLON HYDRAULIC HOSE HAD COMPLETELY BLOW-OUT OF SWEDGED FITTING. NO SIGNS OF HOSE LEAKING PRIOR TO INCIDENT. (K)

CA061218014	CESSNA	CONT	SEAL	LEAKING
12/18/2006	TU206G	TSIO520M	A163395	PROPELLER

(CAN) BLADE GREASE SEAL FAILED. GREASE LEAVING HUB. PROP REMOVED AND SENT TO REPAIR FACILITY WHERE NEW SEALS WERE INSTALLED. PROP REINSTALLED AND A/C SERVICEABLE (TC NR 20061218014).

2007FA0000036	CESSNA	CONT	LIFTER	DETERIORATED
1/2/2007	U206C	IO520F		NR 6 CYLINDER

AFTER DRAINING OIL AND INSPECTING FILTER, LARGE FLAKES OF METAL WERE FOUND. DISASSEMBLED VALVE TRAIN AND FOUND SPALLING ON CYLINDER NR 6 INTAKE LIFTER. DAMAGE OCCURRED TO THE CORRESPONDING CAM LOBE AND CLYINDER NR 5 INTAKE LIFTER DUE TO DETERIORATION OF CYLINDER NR 6 INTAKE LIFTER. UPON INSPECTION IT WAS DETERMINED THAT THE LIFTER HAS BAD METALLURGY. ALL OTHER LIFTERS NOT NOTED, SHOWED PROPER WEAR, AND HARDNESS TESTING MARKS. THE CAM SHOWED DAMAGE ON CORRESPONDING LOBE, NOT DETERIORATION, AND OTHER LOBES SHOWED PROPER WEAR. THE ENGINE HAS 228.06 HOURS SINCE FACTORY REMANUFACTURE. MFG WAS CONTACTED ABOUT SITUATION, AND NO INTEREST WAS NOTED ON POSSIBLE PROBLEMS. ENGINE WAS SENT TO LOCAL REPAIR STATION FOR REPAIR. (K)

CA061218003	CESSNA	CONT	SLICK	DISTRIBUTOR GEAR	BURNED
11/6/2006	U206F	IO520F		K3823	MAGNETO

(CAN) DURING RUNUP AND PRE-TAKE OFF THE PILOT OBSERVED LARGE MAG DROPS AND POWER FLUCTUATIONS. THE AIRCRAFT WAS BROUGHT INTO THE SHOP. THE MAGNETOS WERE REMOVED AND INSPECTED. UPON INSPECTION, IT WAS DISCOVERED BOTH DISTRIBUTOR BLOCK AND GEAR HOUSINGS WERE BURNED THRU AT THE BRUSH HOLDER. ONE BRUSH WAS MISSING. THE COIL WAS ARCING THRU TO THE MAGNET. INVESTIGATION DETERMINED THE BUSHINGS AND DISTRIBUTOR GEAR BRUSH HAS WORN ABNORMALLY. THE BUSHINGS GOT VERY LOOSE CAUSING THE SECONDARY BRUSH TO WEAR AND ARC. THE DISTRIBUTOR GEAR AND HOUSING ARE PLASTIC. THE PLASTIC MELTED AND BOTH MAGS WERE ABOUT TO TOTALLY FAIL, DO NOT KNOW HOW IT KEPT RUNNING.

2007FA0000010	CIRRUS	CONT	BATTERY	LEAKING
12/18/2006	SR22	IO550*		ELT

DURING ANNUAL INSPECTION, FOUND BATTERY COMPARTMENT CONTAMINATED BY LEAKAGE FROM D CELLS AND BATTERY TERMINALS CORRODED. BATTERIES FOUND DEAD. BATTERIES WERE INSTALLED MARCH 2004 AND HAVE A EXPIRATION DATE OF MARCH 2008. THE MODEL ELT IS CERTIFIED BY THE MFG TO USE THE BATTERY EXPIRATION DATES FOR SERVICE RATHER THAN A LIMITED CALENDAR TIME SUCH AS THE TYPICAL 24 MONTHS. THIS INSPECTOR HAS RECENTLY FOUND OTHER ELTS OF THE SAME TYPE IN THE SAME CONDITION. RECOMMENDATION THA THE SERVICE LIFE OF THE BATTERIES BE LIMITED TO 24 MONTHS. (K)

2007FA0000009	CIRRUS	CONT	DRIVE ASSY	CRACKED
12/18/2006	SR22	IO550N	642083	STARTER

STARTER DRIVE WAS REMOVED FROM AIRCRAFT DUE TO SLIPPING. INSPECTION AFTER REMOVAL FOUND A CRACK EMANATING FROM THE STUD BOSS LOCATED AT APPROXIMATELY THE 7:00 POSITION. (K)

CA061114012	CNDAIR	PWA	BRACKET	CRACKED
11/14/2006	CL2151A10	CWASP	2155101681	FIRE WARNING

(CAN) DURING INSPECTION OF PN 215-51016-816 RELAY BRACKET ASSY, (IPC 26-10-00 FIG 2 PAGE 4) 3 OF THE

RELAY BASES (ITEM 35) WERE FOUND CRACKED. THE MOUNTING HARDWARE (ITEM 36) WAS INCORRECT FROM NEW, ACCORDING TO THE DIAGRAM AND INCOMPATIBLE WITH THE RELAYS, 4 OF ON THIS ASSY. 2 OTHER AIRCRAFT WERE INSPECTED AND ONE RELAY BASE WAS FOUND CRACKED ON EACH OF THEM. THESE RELAYS ARE PART OF THE FIRE WARNING, LANDING GEAR INDICATION AND WATER DOOR SYSTEM. THE RELAY BASES WILL BE REPLACED WITH SERVICEABLE UNITS. WE WOULD LIKE TO SUGGEST OTHER OPERATORS INSPECT THESE RELAY BASES FOR CRACKS. (TC NR 20061114012)

CA061204005	CNDAIR		TIRE	SEPARATED
12/1/2006	CL600*		362K821	NR 3

(CAN) NR 3 TIRE HAS THROWN A TREAD. CREW INSPECTED FLAP/ GEAR FOR DAMAGE, NO DAMAGE FOUND JUST RUBBER TRANSFER. SUSPECT IT HAPPENED ON ARRIVAL LAST NIGHT. BUT NOT DISCOVERED UNTIL IN THE AM. (TC NR 20061204005)

CA061225001	CNDAIR	GE	CONNECTOR	SHORT
12/23/2006	CL600*	CF34*	2572152545A	RT ENGINE

(CAN) FLIGHT CREW REPORTED ENGINE VIBRATION. MAINTENANCE INSPECTION REVEALED A TAR LIKE SUBSTANCE ON ENGINE FAN BLADES. SUBSTANCE ALSO FOUND ON UNDERSIDE OF FLAPS BEHIND MAIN WHEELS. SUBSTANCE WAS CLEANED OFF AND FAN LUBE AND RUNS WERE CARRIED OUT, NO FIX VIBES STILL FLUCTUATING BETWEEN .2 AND 5.7 AT IDLE. N1 SENSORS SWAPPED STILL NO FIX. AFTER FURTHER INSPECTION ENGINE CONNECTOR J554 FOR THE RT ENGINE LOCATED BEHIND THE AFT CARGO BULKHEAD WAS FOUND TO HAVE AN INTERNAL SHORT. CONNECTOR REPLACED AND AIRCRAFT FOUND SERVICEABLE. (TC NR 20061225001)

2007FA0000000	CNDAIR	GE	ENGINE	FAILED
12/1/2006	CL6002A12	CF341A		RIGHT

RT ENGINE FAILURE AT T/O. ALL INDICATIONS WERE NORMAL ON ENGINE START AND TAXI. UPON THRUST ADVANCEMENT FOR TAKEOFF, AT APPROXIMATELY 60 PERCENT N1 WE HEARD AND FELT A COMPRESSOR STALL. THE THRUST LEVER WAS IMMEDIATELY RETARDED TO IDLE AND TEMPERATURES WERE NOTED TO BE IN THE RED(APPROX 950 DEGREESC). WE SHUT DOWN THE ENGINE AND OBSERVED THE TEMPERATURES REMAINING IN THE RED FOR APPROXIMATELY 6 TO 8 SECONDS AFTER SHUTDOWN. WE TAXIED BACK TO BOMBARDIER AND REPORTED THIS INCIDENT. SUBSEQUENT EXAMINATION REVEALED DAMAGE IN THE FORWARD AND AFT SECTIONS OF THE ENGINE. ENGINE REMOVED & ROUTED TO FOR REPAIR.

2007FA0000038	CNDAIR	ROTOL	SEAL	POROUS
1/15/2007	CL6002B16		2953310095200	ACTUATOR PISTON

GREEN TWEED SEAL P/N 295-33100-952-0050 INSTALLED ON PISTON ASSEMBLY IN MFG SIDE BRACE ACTUATOR P/N: 6500-3 HAVE BEEN FOUND WITH VOIDS ON THE INNER RAISED SURFACE CAUSING FLUID LEAK. THESE VOIDS ARE UNDETECTED AT INSTALLATION OF NEW SEAL AS THE VOIDS ARE NOT ON THE SURFACE AND DO NOT BECOME VISIBLE UNTIL AFTER MONTHS OF OPERATION. SEAL CONDITION NOTED DURING WARRANTY REPAIR. SUBJECT ACTUATOR RETURNED FOR WARRANTY REPAIR AFTER 11 MONTHS OPERATION.

CA061218017	CNDAIR	GE	GEARBOX	STIFF
11/17/2006	CL6002B16	CF343A1	2100140003	THROTTLE

(CAN) PILOT REPORTED LT POWER LEVER STIFF TO MOVE AS COMPARED TO RT. TROUBLESHOOTING REVEALED THAT INPUT SHAFT ON GEARBOX ATTACHED, (COULD BARELY BE RETACTED BY HAND). SB601-0583 (TC NR 20061218017)

CA061130004	CNDAIR		RELEASE CABLE	DISLODGED
11/28/2006	CL6002B19			MLG LEVER

(CAN) DURING OF OPERATIONAL TEST OF THE LANDING GEAR MANUAL RELEASE SYSTEM THE NLG HAS NOT BEEN EXTENDED.AFTER INVESTIGATION FOUND THAT NLG RELEASE CABLE IS OUT OF PULLEY INSTALLED INSIDE OF THE LEVER P/N 600-85015-29. SEVERAL DAYS LATER INSPECTING ANOTHER AIRCRAFT. A SIMILAR SNAG HAS BEEN DETECTED. BOTH CABLES WERE REINSTALLED AND ADJUSTED IAW AMM,OPERATIONAL TEST CARRIED OUT AND FOUND SERVICEABLE. SEE ATTACHMENTS: LEVER AFFECTED IS ITEM NR 225 AND PULLEY IS ITEM NR 155.

CA061213002	CNDAIR		SWITCH	JAMMED
12/8/2006	CL6002B19		13739002	EXTINGUISHER

(CAN) BOTH CARGO FIRE X-BOTTLES DISCHARGED WHEN , NORMAL CARGO SMOKE PUSH) SWITCH-LIGHT ACTUATED TO ARM THE DISCHARGE SQUIBS. AFTER INVESTIGATION FOUND THAT BOTTLE ARMED (PUSH TO DISCHARGE) SWITCH-LIGHT JAMMED IN THE (PUSH) POSITION. (TC NR 20061213002)

CA070106001	CNDAIR		RECEPTACLE	FAULTY
12/27/2006	CL6002B19		BC10065005	CABIN

(CAN) DURING CLIMBOUT PASSENGER ALERTED FA TO SMOKE SMELL IN REAR OF CABIN , SMOKE WAS THEN VISIBLY OBSERVED BY PASSENGERS AND FA. FLIGHT RETURNED TO DEPARTURE AIRPORT AND ERS WAS REQUESTED. AIRCRAFT WAS APPROX. 2000 LBS OVERWEIGHT BUT LANDED AND TAXIED TO THE GATE WITHOUT FURTHER INCIDENT. MAINTENANCE DETERMINED THAT THE SIDEWALL LIGHTING ASSEMBLY AT SEAT 6F TO BE AT FAULT. RECEPTACLE FOR LIGHT APPEARED PITTED AND MAY HAVE CAUSED LIGHT ASSEMBLY TO SHORT OUT. LIGHT ASSEMBLY WAS REPLACED IAW AMM 05-51-01 PAGE 601 (TC NR 20070106001)

CA070109003	CNDAIR		HOUSING	CRACKED
12/27/2006	CL6002B19		H341935	ESCAPE HATCH

(CAN) ESCAPE HATCH OUTER HANDLE HOUSING WAS FOUND CRACK DURING AN AFTER STORAGE RETURNED TO SERVICE. INVESTIGATION IS IN PROGRESS. (TC NR 20070109003)

CA061211002	CNDAIR		WINDOW	CRACKED
12/3/2006	CL6002B19		601R3303311	COCKPIT

(CAN) LT SIDE WINDOW SHATTERED. (TC NR 20061211002)

CA061211004	CNDAIR	CNDAIR	PLUG	MISSING
12/7/2006	CL6002B19	ASB1810617	601370541	LT ENGINE

(CAN) DURING OF C-CHECK INSPECTION FOUND THAT PLUG ASSY P/N 60137054-1 IS NOT INSTALLED AT THE AFT ENGINE TRUST FITTING P/N ASB18106-17 OF LT ENGINE. TO INSTALL THE PLUG ENGINE NEED TO BE REMOVED. (TC NR 20061211004)

CA061213003	CNDAIR	BOMBDR	LIGHT	INTERMITTENT
12/8/2006	CL6002B19	601R5107083	13739002	FIRE WARNING

(CAN) DUE TO INCIDENT, CARGO FIREX PANEL TESTED AND FOUND THAT (NORMAL BOTTLE ARMED PUSH TO DISCH) SWITCH-LIGHT IS INTERMITTENT OR JAMMED IN THE CLOSE POSITION. (TC NR 20061213003)

CA061213004	CNDAIR	CNDAIR	LIGHT	INTERMITTENT
12/8/2006	CL6002B19	601R5107083	13739002	FIRE WARNING

(CAN) DUE TO INCIDENT ON AC N639BR, CARGO FIREX PANEL TESTED AND FOUND THAT (NORMAL BOTTLE ARMED PUSH TO DISCH) SWITCH-LIGHT IS INTERMITTENT OR JAMMED IN CLOSE POSITION. (TC NR 20061213004)

CA070104001	CNDAIR		WINDOW	UNKNOWN
12/24/2006	CL6002B19		NP13932200	COCKPIT

(CAN) MAINTENANCE REPLACED SIDE WINDOW. (TC NR 20070104001)

CA070104002	CNDAIR	GE	FCU	MALFUNCTIONED
12/24/2006	CL6002B19	CF343A1	6078T39P03	LT ENGINE

(CAN) (DIVERTED, WITH ENGINE PROBLEMS, CREW CALLED WHEN ON GROUND. ON APPROACH, THE LT ENGINE WOULD NOT IDLE BACK BELOW 79 PERCENT N1. IT WOULD RESPOND TO INPUTS ABOVE 79 PERCENT. CREW ELECTED TO SHUTDOWN THE ENGINE, AND DIVERT.) MX WAS UNABLE TO DUPLICATE THIS PROBLEM, WHILE INITIATING START, N1 RAN AWAY SHORTLY AFTER LIGHT OFF. MX REPLACED FCU. (TC NR 20070104002)

CA070105001	CNDAIR	GE	RADOME	BIRD STRIKE

12/30/2006	CL6002B19	CF343A1		FUSELAGE

(CAN) AFTER DEPARTURE CREW WITNESSED A BIRD STRIKE ON THE NOSE OF THE AIRCRAFT. CREW ELECTED TO RETURN TO DEPARTURE AIRPORT AND LAND OVERWEIGHT (ESTIMATED AT 49200 LBS). AIR TRAFFIC CONTROL WAS NOTIFIED BUT EMERGENCY EQUIPMENT WAS NOT REQUIRED. MAINTENANCE INSPECTION DISCOVERED A DEAD SEAGULL WHICH HAD PENETRATED THE RADOME DAMAGING THE WEATHER RADAR ANTENNA AND THE NOSE BULKHEAD. FDR REMOVED FOR READING. FURTHER OVERWEIGHT LANDING INSPECTION NOT REQUIRED IAW FDR READOUT AND AMM 05-51-01 PAGE 609, SUBTASK 05-51-01-970-004 FOR IMPACT SPEED OF 120 FT/MIN. THE FOLLOWING PART REPLACEMENTS WERE COMPLETED: FDR P/N S800-20000-00. ULB DK120. RADOME P/N 4926-201. WEATHER RADAR ANTENNA P/N 622-9302-003. DAMAGE TO BULKHEAD AT FS 169.00 REPAIRED IAW REO601-53-11-1117. DAMAGE TO LT AND RT FUSELAGE SKIN AND ON SKIN ANGLE BETWEEN FS169.00 173.00 AND WL 79.55-97.5 REPAIRED PER REO601R-53-11-1118. DAMAGE TO LT TRU DOOR STIFFENER REPAIRED IAW REO601R-53-11-1119. A.F.T.T. 25526, CYCLES 20853. (TC NR 20070105001)

CA061205002	CNDAIR	GE	FLAP	MALFUNCTIONED
12/4/2006	CL6002B19	CF343A1		WING

(CAN) AT APROX 2500-3000 FT ON FINAL APPROACH THE CREW RECEIVED A FLAP FAIL MESSAGE. THE QRH WAS FOLLOWED AND THE FLAPS WERE INDICATING AT 30 DEGREES. THE CREW LANDED WITHOUT INCIDENT AND PERFORMED A CIRUIT BREAKER REST AND THE FLAPS RETURNED TO ZERO. FLT TO WHERE THE FLAPS OPERATED NORMALLY. (TC NR 20061205002)

CA061229002	CNDAIR	GE	RECEPTACLE	DAMAGED
12/27/2006	CL6002B19	CF343A1	BC10065003	CABIN

(CAN) DURING CLIMB, PASSENGER ALERTED FA TO SMOKE SMELL IN REAR OF CABIN. SMOKE WAS THEN VISIBLY OBSERVED BY PASSENGERS AND FA. FLIGHT RETURNED TO DEPARTURE AIRPORT AND ERS WAS REQUESTED. AIRCRAFT WAS APPROX 2000 LBS OVERWEIGHT BUT LANDED AND TAXIED TO THE GATE WITHOUT FURTHER INCIDENT. TROUBLESHOOTING BY MAINTENANCE DETERMINED THAT THE SIDEWALL LIGHTING ASSEMBLY AT SEAT 6F TO BE AT FAULT. RECEPTACLE FOR LIGHT APPEARED PITTED AND MAY HAVE CAUSED LIGHT ASSEMBLY TO SHORT OUT. LIGHT ASSEMBLY WAS REPLACED WITH NO FURTHER EVIDENCE OF SMOKE OR ELECTRICAL SMELL. IAW AMM 05-51-01 PAGE 601 AND FIG 601 NO FURTHER OVER WEIGHT INSPECTIONS REQUIRED. AFTT 26345, TOTAL CYCLES 21861. (TC NR 20061229002)

CA070111006	CNDAIR	GE	FLAP	FROZEN
1/10/2007	CL6002B19	CF343A1		WING

(CAN) FLAP FAIL AT 20. ON APPROACH, ON FLAP EXTENSION, THEY FROZE AT 20 DEGREES. OAT WAS ABOUT -25 DEGREES C AT THE TIME, ALTHOUGH THEY WERE ABOUT 1 HOUR AND 10 MINUTES IN FLIGHT AT ABOUT -50 DEGREES FOR MOST OF THE FLIGHT. AIRSPEED WAS 170 KNOTS AT THE TIME OF THE FAILURE. (TC NR 20070111006)

CA070111003	CNDAIR	GE	FLAP SYSTEM	JAMMED
1/9/2007	CL6002B19	CF343A1		WING

(CAN) FLAPS FAILED ON APPROACH WHEN SELECTED TO 8 DEGREES, FLAPS DID NOT MOVE AND FLAP FAIL EICAS MESSAGE, OAT WAS -30 DEGREES ON APPROACH, DURING CRUISE -58 DEGREES C, FAULTS CODES BEING RETRIEVED AND AIRCRAFT BEING PREPARED FOR FERRY FOR FOLLOW UP. (801573 1/9/2007 19:04) RESET FLAP SYSTEM AND SELECT FLAPS TO 8 DEGREES FOR FERRY FLIGHT, REFERENCE RJ-SL-27-077 (801573 1/9/2007 20:14). FLAPS RESET. AIRCRAFT FERRIED (803789 1/10/2007 07:29) (TC NR 20070111003).

CA070111011	CNDAIR	GE	FLAP	OBSTRUCTED
1/10/2007	CL6002B19	CF343A1		WING

(CAN) FLAPS FAILED ON RETRACTION AFTER LANDING L 5 DEG, R 6 DEG. AFTER LANDING, FOUND SNOW COMPACTED, ALL SNOW REMOVED, FLAPS CYCLED. (TC NR 20070111011)

CA061214001	CNDAIR	GE	FLAP SYSTEM	MALFUNCTIONED
12/13/2006	CL6002B19	CF343A1		TE FLAPS

(CAN) ON APPROACH THE CREW SELECTED FLAP 40 AND THE FLAPS FAILED AT 20 DEGREES. THE AIRCRAFT

LANDED WITHOUT INCIDENT AND WAS LATER FERRIED WHERE IT IS CURRENTLY UNDERGOING INSPECTION. (TC NR 20061214001)

CA061211006	CNDAIR	GE	HONEYWELL	LINE	BROKEN
12/3/2006	CL6002B19	CF343A1		38301552	FUEL MANIFOLD

(CAN) RT AIR CONDITIONING PACK WAS DEFERRED AND CREW HAD TO SHUTDOWN APU ON APPROACH BECAUSE OF OIL/FUEL ODOR IN THE CABIN. CREW REPORTED A PRESSURE BUMP WHEN APU WAS SHUTDOWN. APU WAS SUSPECTED TO BE OVER SERVICED, BUT EVEN AFTER DRAINING A LITRE OF OIL APU WOULD NOT RE-START. FURTHER TROUBLESHOOTING FOUND THE PRIMARY FUEL MANIFOLD LINE BROKEN. ONCE REPLACED APU OPERATED SERVICEABLE. (TC NR 20061211006)

CA061212004	CNDAIR	GE	WINDSHIELD	CRACKED
12/2/2006	CL6002B19	CF343A1	NP13932111	COCKPIT

(CAN) DURING CRUISE CAPTAIN'S FRONT WINDSHIELD SHATTERED. (NO PRESSURIZATION LOSS). CREW DECLARED EMERGENCY AND DESCENDED TO 10000 FT AND DIVERTED TO NEAR BY ALTERNATE AIRPORT. MAINTENANCE REPLACED WINDSHIELD AND AIRCRAFT RETURNED TO SERVICE. (TC NR 20061212004)

CA061206001	CNDAIR	GE	FLAP SYSTEM	MALFUNCTIONED
10/11/2006	CL6002B19	CF343A1		TE FLAPS

(CAN) ON APPROACH FLAPS SELECTED TO 8 DEG, FLAP DID NOT TRAVEL AND (FLAP FAIL) MESSAGE DISPLAYED. NORMAL FLAP ZERO LANDING . AFTER LANDING , FLAP CIRCUIT BREAKER RESET PROCEDURE CARRIED OUT . FLAPS INSPECTED AND NO FAULTS FOUND. FLAPS CYCLED WITH NO FAULTS FOUND. (TC NR 20061206001)

CA061206002	CNDAIR	GE	BOLT	MISINSTALLED
12/2/2006	CL6002B19	CF343A1	NAS620413D	LT ELEVATOR

(CAN) LT ELEVATOR, FOUND NUT/BOLT COMBINATION INCORRECTLY INSTALLED ON LT NR 1 PCU JAM TOLERANT MECHANISM. AIRFRAME HOURS: 25355:05. CYCLES: 20701. (TC NR 20061206002)

CA061206003	CNDAIR	GE	BLADES	DAMAGED
12/2/2006	CL6002B19	CF343B1		LT ENGINE

(CAN) UNUSUAL NOISE AND VIBRATION FROM LT ENGINE. FOUND FAN BLADES NRS: 8,9,10,11,22,23,24 AND 25 BENT AND DAMAGED. AIRFRAME HOURS=5306:19. CYCLES=3929. (TC NR 20061206003)

CA061206004	CNDAIR	GE	FLAP SYSTEM	MALFUNCTIONED
12/6/2006	CL6002B19	CF343B1		TE FLAPS

(CAN) (FIRST FLIGHT OF DAY, AIRCRAFT HAD BEEN OUTSIDE ON GATE OVERNIGHT, OAT AT -20DEG OR LOWER) DURING TAXI FROM GATE UPON SELECTING FLAP TO 8DEG POSITION, (FLAPS FAIL) MESSAGE AND FLAPS FAILED TO EXTEND. AIRCRAFT RETURNED TO GATE. FLAP CIRCUIT BREAKER RE-SET PROCEDURE CARRIED OUT UNSUCCESSFUL. AIRCRAFT COMPLETELY POWERED DOWN. UPON POWER UP, FLAPS FUNCTIONED NORMAL. FLAP VISUAL INSPECTED AND FUNCTIONED SEVERAL TIMES. AIRCRAFT DEPARTED AS SCHEDULED FLIGHT. UPON FLAP SELECTION AT DESTINATION AIRPORT, FLAPS FAILED TO EXTEND, FLAP (O) LANDING CARRIED OUT. AIRCRAFT TO BE FERRIED TO MAIN MAINTENANCE BASE FOR INSPECTION. (TC NR 20061206004)

CA061205004	CNDAIR	GE	FLAP SYSTEM	MALFUNCTIONED
12/4/2006	CL6002B19	CF343B1		TE FLAPS

(CAN) THE CREW REPORTED THAT ON APPROACH THEY RECEIVED THE (FLAP FAIL) CAUTION MESSAGE. ON APPROACH INTO. CIRCUIT BREAKER RESET OF 1F4 AND 2F4 THE FLAPS RETURNED TO NORMAL FOR FLIGHT CONDITION. UPON ARRIVAL THE FLAPS WERE AT 0 DEGREES AND INSPECTED FOR BINDING OR TWISTING WITH NO FAULT FOUND. CYCLED TO 45 DEGREES WITH NFF. FECU LOG FAULT CODE FOR LEG ARE 5 1B, 5 2B, 171A, 172B, 25BC, 33 PC, FLAPS SYSTEM TESTED SERVICEABLE WITH OAT -7 DEGREES. AIRCRAFT RELEASED INTO SERVICE. (TC NR 20061205004)

CA061205007	CNDAIR	GE	FLAP SYSTEM	MALFUNCTIONED
12/1/2006	CL6002B19	CF343B1		TE FLAPS

(CAN) DURING APPROACH WHEN FLAPS SELECTED, FLAPS REMAINED RETRACTED (0 DEG). AIRCRAFT DID FLAPLESS LANDING. ON GROUND FLAP CIRCUIT BREAKER RE-SET CARRIED OUT, FLAPS FUNCTIONED NORMALLY. AIRCRAFT DEPARTED FOR MAINTENANCE BASE FOR ADDITIONAL INSPECTIONS (TC NR 20061205007)

CA061212009	CNDAIR	GE	FLAP SYSTEM	MALFUNCTIONED
11/21/2006	CL6002B19	CF343B1		TE FLAPS

(CAN) ON APPROACH WHEN FLAPS SELECTED, (FLAP FAIL) MESSAGE AND FLAPS REMAINED AT ZERO DEG., FLAPLESS LANDING. ON GROUND FLAP CIRCUIT BREAKERS RESET PROCEDURE CARRIED OUT, FLAPS FUNCTION CHECKED NORMAL. (TC NR 20061212009)

CA061218001	CNDAIR	GE	BPSU	FAILED
12/16/2006	CL6002B19	CF343B1	855D1009	TE FLAPS

(CAN) THE CREW REPORTED THAT CLIMBING THROUGH FL220 (FLAP FAILED) MESSAGE CAME ON. THE CREW ELECTED TO CONTINUE AND THE FLIGHT LANDED WITHOUT FURTHER INCIDENT. LINE MAINTENANCE FOUND THE FOLLOWING FAULT CODES 1-12-2B RH BPSU. FECU TEST CARRIED OUT NFF. WIRING BETWEEN FECU AND BPSU COMPLETED. BPSU REMOVED, NEW ONE INSTALLED AND RIGGED IAW AMM 27-51-10 FLAPS FUNCTION CHECKED SEVERAL TIMES AIRCRAFT RELEASED FOR SATISFACTORY TEST FLIGHT THEN RELEASED INTO SERVICE.

CA070111004	CNDAIR	GE	FLAP SYSTEM	JAMMED
1/10/2007	CL6002B19	CF343B1		WING

(CAN) CREW REPORTED ON SHORT FINAL, WHEN SELECTING FLAPS TO 8 DEGREE THE FLAP FAIL MESSAGE APPEARED AND THE FLAPS DID NOT MOVE OUT OF 0 DEGREE. MAINTENANCE UNABLE TO GET CODES. A/C FERRIED FOR FURTHER INVESTIGATION AND TROUBLESHOOTING. (TC NR 20070111004)

CA070111005	CNDAIR	GE	FLAP SYSTEM	JAMMED
1/10/2007	CL6002B19	CF343B1		WING

(CAN) FLAPS SELECTED TO 8 DEGREES, NO ISSUES, THEN SELECTED TO 20 DEGREES, NO ISSUES, FLAPS 30 SELECTED NO ISSUES, UPON SELECTION TO 45 DEGREES, FLAP FAIL AND THE FLAPS LOCKED AT 30 DEGREES, OAT -30 IN FLIGHT, - 15 DEGREES OPN APPROACH, TEMP WAS -15. HAS OBTAINED FAULT CODES AND THEY HAVE BEEN FORWARDED TO TECH OPS (803789 1/10/2007 17:14). A/C GROUNDED FOR FURTHER INVESTIGATION AND TROUBLESHOOTING. (TC NR 20070111005)

CA070115003	CNDAIR	GE	FLAP SYSTEM	JAMMED
1/13/2007	CL6002B19	CF343B1		WING

(CAN) FLAPS FAILED UPON SELECTION TO 8 DEGREES, THEY DID NOT MOVE FROM 0 DEGREES, OAT -46 AT ALTITUDE, - 15 DEGREES ON APPROACH. AIRCRAFT LANDED FLAPS ZERO. (TC NR 20070115003)

CA070102004	CNDAIR	GE	ACTUATOR	EXCESS PLAY
12/19/2006	CL6002B19	CF343B1		T/E FLAP

(CAN) ON APPROACH (FLAPS FAIL) CAUTION MESSAGE APPEARED WHEN THE CREW SELECTED FLAPS FROM 30 - 45 DEG. ON LANDING. MAINTENANCE INSPECTED THE A/C FLAP SYSTEM AND FOUND RT AND LT IB FLAP (O/B ACTUATORS HAD EXCESSIVE SIDE PLAY OVER 0.015) IAW AMM 27-53-01-400-801, ALSO RT NR3 AND NR5 FLEX DRIVES FOUND DEFECTIVE. ALL COMPONENTS WERE REPLACED AND THE A/C WAS RETURNED TO SERVICE UPON A SATISFACTORY TEST FLIGHT . FLAPS FAILED ON FINAL APPROACH AT 30 DEG. FURTHER INSP. WAS CARRIED OUT ON THE FLAP SYSTEM AND THE IB NR1 FLAP ACTUATORS WERE REPLACED DUE TO EXCESSIVE FORE AND AFT PLAY AND THE FLAP DRIVE UNIT WAS REPLACED. THE FLAP SYSTEM WAS RIGGED IAW AMM 27-53-00 AND GROUND/FUNCTION CHECKED SERVICEABLE. THE A/C WAS RETURNED TO SERVICE UPON A SATISFACTORY TEST FLIGHT. (TC NR 20070102004)

CA061205003	CNDAIR	GE	BPSU	OUT OF RIG
12/1/2006	CL6002B19	CF343B1		T/E FLAP

(CAN) ON APPROACH THE CREW REPORTED THAT THE FLAPS WERE FAILED AT 4 DEGREES. THE AIRCRAFT WAS FERRIED WITH THE FLAPS AT 4 DEGREES. LINE MAINTENANCE COMPLETED TASK 27-51-10-830-801(RIGGING OF THE BPSU`S). BOTH WERE FOUND OUT OF RIG ALSO THE NR 7 DFECU POTENTIOMETER OUT OF RIG. ALSO THE

FOLLOWING TASKS WERE COMPLETED 000-27-160-001, 000-27-160-103, 000-27-580-103, 000-27-590-001, 000-27-59-104, 000-27-680-001, 000-27-680-103,000-27-690-001 & 000-27-690-104. LT FLEX DRIVE CORE NR 1 FOUND DAMAGED AND WAS REPLACED. ALL RT AND LT FLAP ACTUATORS WERE REMOVED AND COLD SOAKED/TORQUE CHECK IAW 27-53-00-750-8011 AND SL RJ-SL-27-036. ALL ACTUATORS FOUND SERVICEABLE AND RE-INSTALLED IAW AMM 27-53-01 & 27-53-05, FUNCTION CHECK CARRIED OUT AND THE AIRCRAFT RELEASED INTO SERVICE. (TC NR 20061205003)

CA061201006	CNDAIR	GE	FLAP SYSTEM	MALFUNCTIONED
11/4/2006	CL6002B19	CF343B1		WING

(CAN) DURING APPROACH WHEN FLAPS SELECTED TO 45 DEG , FLAPS REMAINED AT 30DEG AND (FLAP FAIL) MESSAGE ON EICAS, CONTINUED APPROACH AND NORMAL LANDING WITH FLAPS AT 30 DEG EXTENSION. MAINTENANCE CLEANED AND LUBRICATED FLAP DRIVE SHAFTS, FLAP ACTUATORS GREASED/PURGED. NO WATER INDICATIONS NOTED. FLAPS CYCLED NUMEROUS TIMES, NORMAL OPERATION AIRCRAFT RETURNED TO SERVICE. (TC NR 20061201006)

CA061201007	CNDAIR	GE	FLAP SYSTEM	MALFUNCTIONED
11/1/2006	CL6002B19	CF343B1		WING

(CAN) DURING APPROACH FLAPS 20DEG SELECTED AND FLAPS AT 20DEG, WHEN 30DEG SELECTED FLAPS REMAINED AT 20DEG. NORMAL LANDING WITH FLAPS AT 20DEG. MAINTENANCE UNABLE TO DUPLICATE FAULT ON GROUND. AIRCRAFT FERRIED TO MAINTENANCE BASE. MAINTENANCE CARRIED OUT TORQUE CHECK OF FLAP DRIVE, NO FAULTS FOUND. OPERATIONAL TEST OF FLAPS CARRIED OUT WITH NO FAULTS FOUND. (TC NR 20061201007)

CA070108003	CNDAIR	GE	FAIRLEAD	WORN
1/8/2007	CL6002B19	CF343B1	TA3050052403	HYDRAULIC SYS

(CAN) DURING MAINTENANCE INSPECTION, FOUND FAIRLEAD (CLAMP) ON NR 1 HYDRAULIC SYSTEM LINES FAIRLEAD IN AFT FUSELAGE (APU COMPARTMENT) WORN. [IPC 29-11-00 FIG 15 (H) ITEM 395. BLOCK HAS 3 HOLES FOR CLAMPING HYDRAULIC LINES AND CENTER HOLE (PRESSURE LINE) MATERIAL WORN THROUGH TO CASE DRAIN LINE HOLE, ALLOWING PRESSURE LINE AND CASE DRAIN LINE TO START CHAFFING. SEVERAL SIMILAR CLAMPS IN THIS AREA ALSO EXHIBITING SIMILAR SIGNS OF WEAR. FAIRLEAD (CLAMP BLOCK) ASSEMBLY REPLACED. AIRCRAFT RETURNED TO SERVICE. (TC NR 20070108003)

CA070108005	CNDAIR	GE	FCU	LEAKING
12/28/2006	CL6002B19	CF343B1	388273010	APU

(CAN) DEC 28/06, AERO CALLOUT 061228/01, ON PUSHBACK, A RAMP AGENT NOTICED A PUDDLE OF FUEL ON THE GROUND AT THE BACK OF THE AIRCRAFT. APPARENTLY, FUEL WAS LEAKING FROM THE APU. THE CAPTAIN CHECKED THE LEAK AS F/O CALLED APRON. THE FIRE TRUCKS WERE CALLED AS WELL AS CONSOLIDATED FUELERS TO CLEAN UP THE AREA. THE PASSENGERS WERE DEPLANED AS A PRECAUTION. MAINTENANCE CONFIRMED THAT THE LEAK WAS FROM THE APU FCU DRAIN LINE, THEY THEN DEFERRED THE APU AND THE A/C DEPARTED WITHOUT INCIDENT. THE FCU WAS REPLACED AND LEAK CHECKS WERE CARRIED OUT. TEARDOWN REPORT TO FOLLOW. (TC NR 20070108005)

CA061211001	CNDAIR		WINDSHIELD	CRACKED
12/3/2006	CL6002C10		NP13932100	COCKPIT

(CAN) RT SIDE WINDSHIELD SHATTERED (TC NR 20061211001)

CA061208001	CNDAIR	GE	ACTUATOR	CRACKED
12/6/2006	CL6013A	CF343A	20222788	T/E FLAP

(CAN) DURING SCHEDULE LUBRICATION OF THE FLAP ACTUATORS, THE TECHNICIAN NOTICED GREASE WAS OOZING OUT OF A CRACKED WELD ON THE HOUSING OF THE LT OB FLAP ACTUATOR JACK SCREW. (TC NR 20061208001)

CA061227006	CNDAIR	GE	WINDSHIELD	BROKEN
12/27/2006	CL6013A	CF343A	6003303026	COCKPIT

(CAN) RT WINDSHIELD FACE PLY BROKEN IN FLIGHT. APPROX. 7000 INCH ON APPROACH. FOD INSPECTION

CARRIED OUT ON ENGINE INTAKE AND WINDSHIELD REPLACED. A/C HOURS; 6836 A/C CYCLES; 7326 (TC NR 20061227006)

CA061218015	CNDAIR	GE	PUMP	DAMAGED
12/18/2006	CL6013A	CF343A		HYDRAULIC SYS

(CAN) LOST OF NR 3 SYSTEM HYDRAULIC FLUID IN FLIGHT. THE NR 3B PUMP HAS FAILED ON FLANGE GASKET. THE PUMP HAS BEEN REPLACED AND A\C RETURNED TO SERVICE. A/C HOURS: 6816:27 A/C CYCLES ; 7302 (TC NR 20061218015)

CA061221005	CNDAIR	GE	HOSE	RUPTURED
12/21/2006	CL604	CF343B1	AE7010000N130	FUEL SYS

(CAN) UPON SHUTDOWN ON THE RAMP, CREW NOTICED A STRONG SMELL OF FUEL WHEN MAIN CABIN DOOR WAS OPENED. LT MAIN GEAR WAS SITTING IN A PUDDLE OF FUEL. FOUND ENGINE FUEL FEED AUX TANK LINE RUPTURED. (IPC 28-21-16 NR 285) (TC NR 20061221005)

CA070109001	CNDAIR	GE	TUBE	BLOCKED
12/7/2006	CL604	CF343B1	600624623	FUEL SYSTEM

(CAN) AUTO SHUTOFF DID NOT OCCUR DURING PRESSURE REFUELING OPERATIONS RESULTING IN FUEL SPILL ON RAMP. OPERATOR REPORTED SIMILAR PROBLEMS SINCE TAKING DELIVERY OF NEW AIRCRAFT. IT WAS FOUND THAT A NUMBER OF LT AND RT WING TRANSFER AND BALANCING PIPES (TUBES) HAD BEEN PARTIALLY OBSTRUCTED AT THE CONNECTING JOINTS BY SEALANT. AIRCRAFT OEM FIELD SERVICE REPRESENTATIVES WERE ON SITE FOR RECTIFICATIONS. (TC NR 20070109001)

CA070115009	CNDAIR	GE	FUEL LINE	TORN
12/17/2006	CL604	CF348E5A1	AE7010000N0130	ENGINE

(CAN) FUEL LEAK WAS FOUND FROM HOSE ASSEMBLY P/N AE7010000N0130 ON THE SECOND ENGINE RUN AFTER THAT HOSE WAS REPLACED. NOTE: THIS LINE WAS REPLACED AS REQUESTED BY MFG (DISCLOSURE LETTER), BATCH RECALL DUE TO DEFECTIVE HOSE (BATCH NR 840850). (TC NR 20070115009)

CA061222002	CNDAIR	GE	HOSE	TORN
12/17/2006	CL604	CF348E5A1	AE7010000N0130	FUEL SYSTEM

(CAN) FUEL LEAK WAS FOUND FROM HOSE ASSY P/N AE7010000N0130 AFTER THE SECOND ENGINE RUN. NOTE: PRIOR RUN, LINE WAS REPLACED IAW (DISCLOSURE LETTER), BATCH RECALL DUE TO DEFECTIVE HOSE (BATCH NR 8740850) (TC NR 20061222002)

CA061221006	DHAV	PWA	CABLE ASSY	INCORRECT
12/18/2006	DHC6	PT6A27	C6R1806135	FLT CONTROLS

(CAN) WHEN AN OPERATOR TRIED TO INSTALL ONE OF THESE CABLE ASSEMBLIES HE FOUND THAT THE END THAT ENGAGES THE SERVO CAPSTAN WOULD NOT FIT PROPERLY SO THAT THE LOCK SCREW COULD BE INSTALLED. UPON INVESTIGATION IT WAS FOUND THAT THE ORIGINAL DRAWING FOR THE CABLE ASSEMBLY PICTORIALLY SHOWED THIS CABLE END SWAGED ON INCORRECTLY. THE DRAWING HAS BEEN CORRECTED AND A SERVICE LETTER WILL BE ISSUED TO CHECK FOR ANY INCORRECTLY INSTALLED CABLE ASSEMBLIES OR SPARES ON HAND THAT MAY BE AFFECTED. (TC NR 20061221006)

CA061219020	DHAV	PWA	ENGINE	FAILED
11/15/2006	DHC6200	PT6A27		

(CAN) DURING TAXI, THE ENGINE EMITTED A NOISE AND LOST POWER. SUBSEQUENT INSPECTION REVEALED INTERNAL ENGINE DAMAGE. MFG WILL INVESTIGATE AND ADVISE OF ROOT CAUSE ONCE ESTABLISHED.

CA061220003	DHAV	PWA	TURBINE BLADES	DAMAGED
10/22/2006	DHC6300	PT6A27		ENGINE

(CAN) DURING CRUISE THE ENGINE EMITTED A LOUD NOISE ACCOMPANIED BY A DECAY ON ENGINE PARAMETERS. THE ENGINE WAS SHUTDOWN IN FLIGHT. SUBSEQUENT INSPECTION REVEALED DAMAGE TO COMPRESSOR AND POWER TURBINE BLADES. MFG WILL MONITOR INVESTIGATION OF THE EVENT AND ADVISE

OF ROOT CAUSE ONCE DETERMINED.

CA061218020	DHAV	PWA		PRESSURE SWITCH	FAILED
11/24/2006	DHC6300	PT6A27		8190026	AUTOFEATHER

(CAN) ON INVESTIGATION OF THE REPORTED AUTOFEATHER DEFECT, THE LT ENGINE PRESSURE SWITCH, PN 8190026, WAS FOUND TO BE DEFECTIVE. REPLACEMENT OF THE COMPONENT CURED THE PROBLEM WHICH IS CONSIDERED TO BE AN ISOLATED RANDOM FAILURE. (TC NR 20061218020)

CA070115010	DHAV	PWA	PWC	TURBINE	DISINTEGRATED
12/16/2006	DHC6300	PT6A27	PT6A27	3013102	ENGINE

(CAN) DURING CRUISE FLIGHT, THE CREW NOTICED OIL PRESSURE ON THE NR 2 ENGINE FLUCTUATING BETWEEN 60-70 PSI, WITHIN SECONDS THE TQ PRESSURE STARTED TO FLUCTUATE. THE ENGINE MADE 3 BIG BANGS AND SHUTDOWN. THE CREW LANDED THE AIRCRAFT AT THE NEAREST AIRPORT WITHOUT INCIDENT. MAINTENANCE FOUND METAL IN THE OIL FILTER AND IN THE RGB. MOST OF THE PT BLADES EXITED THE EXHAUST. ENGINE SENT TO OVERHAUL SHOP FOR INVESTIGATION. (TC NR 20070115010)

CA070115016	DHAV	PWA		CONTROL CABLE	BROKEN
1/12/2007	DHC6300	PT6A27		C6CF14053	ELEVATOR TRIM

(CAN) TRIM CABLE WAS FOUND BROKEN AND WAS REPLACED. THE BROKEN CABLE IS BEING ANALYZED AT THEIR LOCAL AIRWORTHINESS AUTHORITY AND WE AWAIT THE RESULTS. (TC NR 20070115016)

CA070117005	DHAV	PWA		CABLE	DAMAGED
1/17/2007	DHC6300	PT6A27		C6CF14043	

(CAN) NEW CABLE, THE BALL END OF THE TRIM CABLE IS OUT OF ROUND AND WILL NOT FIT INTO THE TRIM JACK ASSEMBLY. WHERE THE CABLE MEETS THE BALL END IT HAS BEEN BRAZED AND THE CABLE HAS NOW FRAYED AFTER ATTEMPTING TO INSTALL IT INTO HTE TRIM JACK ASSEMBLY. (TC NR 20070117005)

CA070103011	DHAV	PWA		TURBINE BLADES	FRACTURED
1/4/2007	DHC6300	PT6A27			ENGINE

(CAN) ENGINE OIL PRESSURE AND TORQUE WERE SEEN TO FLUCTUATE IN FLIGHT FOLLOWED BY A LOUD NOISE AND AN ENGINE FLAMEOUT. SUBSEQUENT INSPECTION REVEALED METAL IN THE ENGINE OIL AND FRACTURED POWER TURBINE BLADES. MFG WILL MONITOR THE INVESTIGATION OF THE EVENT AND ADVISE OF ROOT CAUSE ONCE ESTABLISHED. (TC NR 20070103011)

CA070105002	DHAV	PWA		TURBINE BLADES	FRACTURED
12/16/2006	DHC6300	PT6A27			ENGINE

(CAN) ENGINE OIL PRESSURE WERE REPORTED TO FLUCTUATE IN CRUISE FOLLWED BY A LOUD NOISE AND AN UNCOMMANDED ENGINE SHUTDOWN. SUBSEQUENT INSPECTION REVEALED METAL DEBRIS IN THE ENGINE OIL AND FRACTURED POWER TURBINE BLADES. MFG WILL MONITOR INVESTIGATION OF THE EVENT AND ADVISE OF ROOT CAUSE ONCE ESTABLISHED. (TC NR 20070105002)

CA061205006	DHAV	PWA	HAMSTD	SHIM	BROKEN
11/14/2006	DHC7*	PT6A50	24PF309		PROP BLADE

(CAN) AFTER LANDING, A POST-FLIGHT INSPECTION REVEALED AN OIL LEAK IN THE NR1 PROP. FURTHER INVESTIGATION SHOWED THAT THE BLADE SHIMS HAD BEEN INSTALLED ON THE WRONG SIDE OF THE BLADE RETAINING RING. THE SHIMS HAD BROKEN AND DAMAGED THE OIL SEALS. THE OTHER 3 PROPS WERE CHECKED AND THE SAME PROBLEM WAS FOUND ALONG WITH MORE DAMAGED SEALS. (TC NR 20061205006)

CA061219013	DHAV	PWA		TUBE	FRACTURED
11/3/2006	DHC7103	PT6A50		3035279	FCU

(CAN) ENGINE POWER ROLLED BACK UNCOMMANDED DURING CLIMB. THE ENGINE WAS SHUTDOWN IN FLIGHT AND THE AIRCRAFT DIVERTED TO POINT OF DEPARTURE. SUBSEQUENT INSPECTION REVEALED A FRACTURED P3 PRESSURE LINE TO THE FUEL CONTROL UNIT. (TC NR 20061219013)

CA061204007	DHAV	PARKERHANFIN	O-RING	FAILED
12/1/2006	DHC8*	9451693	MS219134	HYDRAULIC SYS

(CAN) WHILE ON APPROACH AT 10,000 FEET CREW NOTICED NR 2 HYD QTY WAS LOW. SHORTLY AFTER THAT THE NR 2 HYD ISO VLV CAUTION LIGHT CAME ON. ALTERNATE LANDING GEAR EXTENSION CARRIED OUT. FOUND THE O-RING FOR THE NR 4 PLUG-BLANKING ON THE NR 2 HYDRAULIC SYSTEM MANIFOLD-FILTER HAD FAILED. (TC NR 20061204007)

CA070102002	DHAV	PWA	WINDSHIELD	CRACKED
12/25/2006	DHC8*	PW120A	NP15790112	COCKPIT

(CAN) F/O WINDSHIELD SHATTER IN FLIGHT AT FL20. NO EVIDENCE OF ANY IMPACT. AIRCRAFT RETURNED TO BASE AND LANDED WITHOUT ANY FURTHER INCIDENT. WINDSHIELD ASSEMBLY WAS REPLACED AND AIRCRAFT RETURNED TO SERVICE. (TC NR 20070102002)

CA061205005	DHAV	PWA	BEARING	FAILED
11/30/2006	DHC8*	PW123	314802OPT4	MLG

(CAN) WHEN THE AC ARRIVED TO THE PARKING POSITION, A BIG HYDRAULIC LEAKAGE WAS NOTED ON THE RUNWAY. AT THE SAME TIME, MLG WHEEL NR 3 WAS FOUND TO BE DISPLACED FROM ITS NORMAL POSITION. THE WHEEL OUTER BEARING WAS FOUND DAMAGED. RT MLG SHOCK STRUT AND WHEEL ASSY REPLACED. (TC NR 20061205005)

CA061211003	DHAV	PWA	ADC	MALFUNCTIONED
12/10/2006	DHC8*	PW123	7000700940	NR 2

(CAN) DURING CRUISE, THE F/O ALTIMETER OFF FLAG CAME INTO VIEW ON NUMEROUS OCCASSIONS. THE EGPWS FAULT LIGHT ALSO ILLUMINATED. PILOT ELECTED TO PERFORM AN AIR TURN BACK. NR 2 DIGITAL AIR DATA COMPUTER REPLACED. (TC NR 20061211003)

CA070109002	DHAV	PWC	SIERRACIN	INSULATION	OUT OF POSITION
1/8/2007	DHC8*	PW150A	80260007		WINDSHIELD HEAT

(CAN) INVESTIGATING SMELL OF SMOKE IN COCKPIT AFTER CREW TURNED ON WINDSHIELD HEAT. FOUND THE LUG ON 3041-TB1 POSITION L2 HAD INSULATION BETWEEN THE SCREW HEAD AND THE LUG. REMOVED THE INSULATION FROM UNDER THE HEAD OF THE SCREW. (TC NR 20070109002)

CA061218018	DHAV		ROD	MISINSTALLED
12/18/2006	DHC8102		82740191053	AILERON

(CAN) DURING C-CHECK, A INSPECTOR FOUND THE AILERON INPUT ROD NOT PROPERLY INSTALLED ON BOTH SIDE LT AND RT AILERON. THE ROD END WAS FABRICATED WITH A CUT OUT FOR AVOID THE CONTACT BETWEEN THE ROD END AND THE QUADRANT SHAFT. ON THE SAME A/C, WE FOUND THE BOTH ROD DIRECTLY IN CONTACT WITH THE SHAFT IN FULL TRAVEL POSITION. ATTACH 2 VERY CLEAR PICTURES WITH THIS FDR. (TC NR 20061218018)

CA061212006	DHAV	PWA	SEQUENCE VALVE	RUPTURED
12/12/2006	DHC8102	PW120A	54C546349	MLG

(CAN) UPON RETRACTION OF THE LANDING GEAR THE CREW HEARD A STRANGE NOISE FOLLOWED BY HYDRAULIC FLUID QUANTITY LOSS IN THE NR 2 SYSTEM. THE CREW CARRIED OUT THE APPLICABLE PROCEDURES TO EXTEND THE LANDING GEAR BUT WERE NOT ABLE TO GET THE NOSE LANDING GEAR TO EXTEND. THE CREW FLEW THE AIRCRAFT FOR SEVERAL HOURS TO BURN OFF FUEL AND TRY TO GET THE NOSE GEAR TO EXTEND BUT WERE UNSUCCESSFUL AND COMPLETED A NOSE GEAR RETRACTED LANDING ON A SNOW PACKED RUNWAY. THE AIRCRAFT WAS SUBSEQUENTLY DAMAGED IN THE NOSE LANDING GEAR DOOR AND RADOME AREAS. UPON INITIAL INVESTIGATION BY MAINTENANCE IT WAS FOUND THAT THE LT MLG DOOR SEQUENCING SOLENOID VALVE WAS RUPTURED CAUSING THE LOSS OF THE NR 2 HYDRAULIC SYSTEM FLUID. IT IS NOT KNOWN AT THIS TIME WHY THE NOSE GEAR WOULD NOT EXTEND IN THE ALTERNATE EXTENSION MODE. (TC NR 20061212006)

CA061211007	DHAV	PWA	HONEYWELL	COMPUTER	FAULTED

12/9/2006	DHC8102	PW120A	7003974730	FLIGHT GUIDANCE

(CAN) LEVELING OFF AT 4000 FT, AFCS FAILED, ID802 SHOWED LINES, YD AND FLIGHT DIRECTOR FAILED, CAPT AND F/O ADI`S FLAGGED OFF. AIRCRAFT RETURNED TO ORIGINATING AIRPORT FOR NORMAL LANDING. MAINTENANCE INSPECTION OF FLIGHT FAULT SUMMARY SHOWED FAILURE OF RIGHT FLIGHT GUIDANCE COMPUTER. COMPUTER REPLACED AND FUNCTION CHECKED. AIRCRAFT RETURNED TO SERVICE. (TC NR 20061211007)

CA061213005	DHAV	PWA	OIL COOLER	CRACKED
12/10/2006	DHC8102	PW120A	28E997	ENGINE

(CAN) OIL COOLER SEAM WELD CRACKED DURING FLIGHT ALLOWING LEAKAGE AND LOW ENGINE OIL PX. (TC NR 20061213005)

CA061204008	DHAV	PWA	HYDRAULIC LINE	DAMAGED
11/30/2006	DHC8102	PW120A	82950010273	HYDRAULIC SYS

(CAN) SMALL PIN HOLE IN BEND RADIUS OF NR DIAMETER 4 TUBE ASSY, NR 1 GROUNDING ITEM IS THE HYDRUALIC LINES ON THE DASH 8`S. (TC NR 20061204008)

CA070112004	DHAV	PWA	RELAY	FAULTY
1/10/2007	DHC8102	PW120A		PROPELLER DE-ICE

(CAN) WHEN AIRCRAFT POWER APPLIED, BLADES NR 2 AND NR 4 ON LT PROP HEATED AND BURNED OUT THE HEATER ELEMENTS. FOR PRECAUTION RELAYS P/N KC-D4N AND E-387-C1 WERE REPLACED AND AIRCRAFT WAS TESTED WITH NO FAULTS FOUND. AIRFRAME HOURS=44789:11. CYCLES=48426. (TC NR 20070112004)

CA070108006	DHAV	PWA	MESSIER	NUT	BROKEN
12/27/2006	DHC8106	PW121	8800121	88295	NLG

(CAN) SUSPECT CAP NUT SHEARED UPON TAKEOFF DUE TO THE UNEVEN RUNWAY. REF ATTACHED PILOTS REPORTS AND PHOTO`S OF DAMAGED CAP NUT. (TC NR 20070108006)

CA070111015	DHAV	PWA	FUEL LINE	CHAFED
1/11/2007	DHC8202	PW123D	3035987	ENGINE

(CAN) FUEL LEAK AT ENGINE FIREWALL PRESSURE LINE. THE LINE WAS DAMAGED BY CHAFFING ON COLLAR (P/N 3043536-01A) AND RETAINING PLATE (P/N 3043535-01). POST SB21460. 2 OTHER LINES COVERED BY THE SAME SB (INCORPORATED IN DEC.2001) SHOWED SAME DAMAGE AND NEEDS REPLACEMENT. (TC NR 20070111015)

CA061205001	DHAV	PWA	YOKE	CRACKED
12/4/2006	DHC8301	PW123	10300555	RT MLG

(CAN) DURING SCHEDULED A CHECK, RT MLG YOKE WAS FOUND TO HAVE A CRACKED FITTING AT THE AUX ACTUATOR ATTACH POINT. (TC NR 20061205001)

CA061211005	DHAV	PWA	BEARING RACE	FRACTURED
12/7/2006	DHC8301	PW123	14SF23	NR 1 PROP

(CAN) LIGHT TO MODERATE PROP VIBRATION IN CRUISE, AS POWER WAS REDUCED FOR DESCENT VIBRATION BECAME EXCESSIVE. AS A RESULT THE NR 1 PROP (CONDITION LEVER) WAS SELECTED TO START FEATHER (VIBRATION STOP) AND THEN NR 1 ENGINE WAS SHUTDOWN. ALL ENGINE PARAMETERS WERE NORMAL PRIOR TO SHUTDOWN. FOLLOWING THE IFSD AS DESCRIBED ABOVE, MAINTENANCE PERFORMED A LOW POWER RUN TO VERIFY THE VIBRATION AS REPORTED. THE VIB WAS CONFIRMED AND THE ENGINE SHUTDOWN. OIL WAS THEN NOTED DRIPPING FROM THE VICINITY OF THE NR 1 PROP. INITIAL INVESTIGATION HAS REVEALED THAT THE NR 1 PROP, NR 4 BLADE BEARING RACE HAS FRAGMENTED INTO SEVERAL PARTS. (TC NR 20061211005)

CA070119004	DHAV	PWA	FASTENER	LOOSE
1/18/2007	DHC8311	PW123		NLG TRUNNION

(CAN) NLG TRUNNION FITTING FASTENERS FOUND LOOSE. REFERENCE IPC 53-20-00; FIGURE 25; ITEM 190. BOTH SIDES (LT AND RT) AFT ROW OF BOLTS. RE-TORQUED NUTS IAW SB8-53-49. (TC NR 20070119004)

CA061214002	DIAMON	CONT	SEAL	LEAKING
12/7/2006	DA20C1	IO240B		FUEL PUMP

(CAN) AIRCRAFT BROUGHT IN FOR 50 HR.MAINTENANCE CHECK FOUND FUEL ON BOTTOM OF COWL AND IT WAS TRACED BACK TO THE ENGINE DRIVEN FUEL PUMP. THE SEALS IN THE FUEL PUMP HAD STARTED TO FAIL OR HAD FAILED AROUND THE MIXTURE CONTROL LEVER ASSY. THE TOP COVER ALSO WAS LEAKING FUEL. FUEL PUMP WAS REMOVED AND SENT FOR REPAIRS. UNIT REPAIRED AND RELEASED ON 24-0078 NR A47159 (TC NR 20061214002).

CA061115001	DIAMON	CONT	UNKNOWN	UNKNOWN
11/15/2006	DA20C1	IO240B		ENGINE

(CAN) REPORTED DEFECT, ON APPLICATION OF FULL POWER, ENGINE WOULD ALMOST CUT-OUT, THEN CATCH AND ACHIEVE FULL POWER. THE AIRCRAFT HAD PREVIOUSLY BEEN SNAGGED FOR QUITING SHORTLY AFTER LANDING, ON OCT. 17TH, AT WHICH TIME THE FUEL SYSTEM HAD BEEN INSPECTED, AND ADJUSTED IAW SID 97-3C AND RELEASED. THEREFORE MFG WAS CONTACTED AND ELECTED TO SEND A TECH REP TO OUR FACILITIES AND REPLACED MECHANICAL FUEL PUMP, THROTTLE BODY, FUEL MANIFOLD, WITH NEW UNITS. COMPLETE FUEL SYSTEM WAS FLUSHED AND FUEL INJECTOR NOZZLES CLEANED. FUEL SYSTEM SET UP IAW SID97-3C AND AIRCRAFT RELEASED. (TC NR 20061115001)

2007FA0000057	DIAMON		ATTACH FITTING	BENT
1/5/2007	DA40			AFT CABIN DOOR

AFT CABIN DOOR ASSY SEPARATED FROM AC DURING FLIGHT. CONTROL OF THE AC WAS MAINTAINED AND LANDED SAFELY AT DEPARTURE AIRPORT. DOOR WAS EVENTUALLY RECOVERED AND UPON VISUAL INSPECTION OF THE DOOR, THE AFT DOOR LATCH PIN WAS NOT ENGAGED. THE FRONT DOOR LATCH PIN WAS PROPERLY ENGAGED AND THE DOOR LATCH WAS CLOSED. NO (DOOR OPEN) ANNUNCIATION WAS INDICATED BECAUSE THE DOOR OPEN SWITCH IS ACTUATED FROM THE FRONT DOOR LATCH PIN. UPON DISASSEMBLY OF THE DOOR, THE AFT DOOR LATCH ROD WAS DETACHED FROM THE LATCH MECHANISM. THE ATTACHMENT CLIP, (PN AND NAME NOT GIVEN; NR 215 IN THE PARTS BOOK) WAS BENT ALLOWING THE ROD TO BECOME SEPARATED FROM THE LATCH. A MUCH STRONGER MATERIAL IS RECOMMENDED FOR THE ATTACHMENT CLIP OR A DUAL SWITCH SET-UP TO INDICATE THAT BOTH PINS ARE POSITIVELY ENGAGED BEFORE FLIGHT. (K)

2007FA0000058	DIAMON	LYC	GEARSHAFT	SEIZED
1/5/2007	DA40	O360A4M	61098	ENGINE

REMOVED VACUUM DRIVE ASSEMBLY AND FOUND DRIVE GEAR SHAFT SEIZED AND (3) TEETH BROKEN OFF OF DRIVE GEAR. FURTHER INSPECTION REVEALED NO LUBRICATION PORT FOR PRESSURIZED ENGINE OIL TO LUBRICATE THE DRIVE GEAR SHAFT. ALL (3) TEETH WER FOUND IN THE OIL PUMP INLET SCREEN. (K)

CA061107008	DORNER	PWA	TRIM PANEL	SHORTED
11/1/2006	DO328100	PW119C	3280080	COCKPIT

(CAN) ENROUTE THE PILOT REPORTED A STRONG SMELL AND A FLASH OF LIGHT FROM CENTER CONSOLE AREA. THEY TURNED THE INTERIOR DOME LIGHT ON A CONFIRMED THAT A PLASTIC LIGHTING PANEL WAS MELTING ON THE RUDDER LIMITER AND STANDBY ELEVATOR BUTTONS. HE POKED THE SPOT WITH A PEN WHICH RESULTED IN FURTHER ARCING AND SMOKE. HE REQUESTED A LOWER ALTITUDE AND LANDED. MAINTENANCE WAS CONTACTED AND DISPATCHED TO THE AIRCRAFT. MAINTENANCE FOUND THE LIGHTING PANEL FOR THE TRIM HAD SHORTED. IT WAS DISABLED AND THE INTERIOR LIGHTING TESTED WITH NO FURTHER PROBLEMS. THE ITEM WAS DEFERRED AND THE AIRCRAFT RETURNED TO SERVICE. THE PILOT REPORTED THAT THE CB DID NOT POP AND THAT HE HAD A HARD TIME IN LOCATING THE CORRECT CB TO ISOLATE THE SYSTEM. HE ALSO REPORTED THAT NO LIQUIDS HAD BEEN SPILT IN THIS AREA AS THE PANEL REPAIR STATION HAS STATED THAT LIQUID CONTAMINATION IS THE MOST COMMON CAUSE FOR AN INSTANCE OF THIS NATURE. (TC NR 20061107008)

CA070103006	DORNER	PWA	CARBON SEAL	LEAKING
12/7/2006	DO328300	PW306B	30B336201	ENGINE

(CAN) DURING DESCENT THE ENGINE LOW OIL PRESSURE WARNING ACTIVATED AND THE ENGINE WAS SHUTDOWN IN FLIGHT. SUBSEQUENT INSPECTION REVEALED A LEAKING CARBON SEAL AT THE FUEL CONTROL DRIVE PAD. (TC NR 20070103006)

QKPR06009	DOUG	HONEYWELL	FUEL CONTROL	LEAKING
9/18/2006	A4D	GTCT36150RR	38828406	APU

FUEL PRESSURE IN THE DIFFERENTIAL PRESSURE VALVE IS CAUSING SEVERE PITTING INSIDE THE FCU HOUSING. THIS PITTING EVENTUALLY BECOMES A PIN HOLE IN THE HOUSING. THIS PIN HOLE ALLOWS A STREAM OF FUEL, AT IDLE AND WHEN PRESSURE IS APPLIED, TO EXIT THE FCU. POTENTIALLY, IF THIS PROBLEM IS NOT CORRECTED IT COULD CREATE A FIRE HAZARD. * REMOVE AIRCRAFT INFORMATION.

QKPR06007	DOUG	HONEYWELL	FUEL CONTROL	LEAKING
8/15/2006	A4D	GTCT36150RR	38828406	APU

FUEL PRESSURE IN THE DIFFERENTIAL PRESSURE VALVE IS CAUSING SEVERE PITTING INSIDE THE FCU HOUSING. THIS PITTING EVENTUALLY BECOMES A PIN HOLE IN THE HOUSING. THIS PIN HOLE ALLOWS A STREAM OF FUEL, AT IDLE AND WHEN PRESSURE IS APPLIED, TO EXIT THE FCU. POTENTIALLY, IF THIS PROBLEM IS NOT CORRECTED IT COULD CREATE A FIRE HAZARD. * REMOVE AIRCRAFT INFORMATION. REPORT ORIGINALLY SUBMITTED ON 8/15/01 UNDER R/S NR PIDR318B.

QKPR06008	DOUG	HONEYWELL	FCU	LEAKING
5/13/2004	A4D	GTCT36150RR	38828406	APU

FUEL PRESSURE IN THE DIFFERENTIAL PRESSURE VALVE IS CAUSING SEVERE PITTING INSIDE THE FCU HOUSING. THIS PITTING EVENTUALLY BECOMES A PIN HOLE IN THE HOUSING. THIS PIN HOLE ALLOWS A STREAM OF FUEL, AT IDLE AND WHEN PRESSURE IS APPLIED, TO EXIT THE FCU. POTENTIALLY, IF THIS PROBLEM IS NOT CORRECTED IT COULD CREATE A FIRE HAZARD. * REMOVE AIRCRAFT INFORMATION.

CA070102003	DOUG	PWA	ENGINE	MAKING METAL
12/23/2006	C54EDC	R20007M2	R20007M2	

(CAN) ENGINE BEGAN TO RUN ROUGH, DECREASE IN OIL PRESSURE, ENGINE WAS SHUTDOWN AND FEATHERED. OIL SCREEN PULLED, MODERATE AMOUNT OF ALUMINUM FILINGS, ENGINE REMOVED AND SENT FOR OVERHAUL. NOTE: SUSPECT LINK PIN (TC NR 20070102003)

2006FA0001181	DOUG		HOUSING	CRACKED
12/12/2006	MD83		3617712	STARTER

STARTER HOUSING FOUND CRACKED DURING DYE PENETRANT INSPECTION.

CA061219015	EMB	PWA	ENGINE	DAMAGED
11/1/2006	EMB110*	PT6A34		

(CAN) ON TAKEOFF, ENGINE OIL PRESSURE WAS SEEN TO FLUCTUATE. THE FIGHT CONTINUED AND ON DESCENT ENGINE OIL PRESSURE FELL TO ZERO RESULTING IN A PROPELLER AUTOFEATHER. THE ENGINE WAS SHUTDOWN IN FLIGHT. GROUND INSPECTION REVEALED INTERNAL ENGINE DAMAGE. MFG WILL INVESTIGATE THE EVENT AND ADVISE OF ROOT CAUSE ONCE ESTABLISHED.

CA070103010	EMB	PWA	ENGINE	FLAMED OUT
9/11/2006	EMB110*	PT6A34	PT6A34	

(CAN) THE ENGINE FLAMED OUT IN FLIGHT ACCOMPANIED BY A LOUD NOISE. MFG WILL INVESTIGATE THE INCIDENT AND ADVISE OF ROOT CAUSE ONCE ESTABLISHED. (TC NR 20070103010)

CA070103009	EMB	PWA	TURBINE BLADES	FRACTURED
12/10/2006	EMB110P1	PT6A34		ENGINE

(CAN) DURING CRUISE ENGINE POWER REDUCED UNCOMMANDED, ACCOMPANIED BY A LOUD NOISE AND FLAMES EXITING THE EXHAUST. SUBSEQUENT INSPECTION REVEALED FRACTURED POWER TURBINE BLADES AND A SEIZED REDUCTION GEARBOX. MFG WILL MONITOR INVESTIGATION OF THE EVENT AND ADVISE OF ROOT CAUSE ONCE ESTABLISHED. (TC NR 20070103009)

CA061212005	EMB	PWA	PUMP	FAILED
12/10/2006	EMB110P1	PT6A34	65WE002241	HYDRAULIC

(CAN) (5) MINUTES AFTER AN ENGINE FAILURE OF THE RT ENGINE (SDR 20061212001) THE HYDRAULIC LIGHT CAME ON EVEN THOUGH THE LT ENGINE WAS OPERATING NORMALLY. THE CREW ATTEMPTED TO EXTEND THE LANDING GEAR NORMALLY BUT IT WOULD NOT LOCK. THE GEAR WAS THEN SUCCESSFULLY HAND PUMPED DOWN. A FAILURE OF THE LT ENGINE DRIVEN HYDRAULIC PUMP IS SUSPECTED TO BE THE CAUSE OF NOT BEING ABLE TO EXTEND THE LANDING GEAR NORMALLY. THE HYDRAULIC PUMP WILL BE REMOVED AND SENT OUT FOR A TEARDOWN. (TC NR 20061212005)

CA061212001	EMB	PWA		ENGINE	FAILED
12/10/2006	EMB110P1	PT6A34			RIGHT

(CAN) SHORTLY AFTER COMPLETING THE DESCENT CHECKS FOR A LANDING (WITH ENGINES OPERATING NORMALLY, ENGINE INSTRUMENTS IN THE GREEN, THE CREW HEARD A LOUD NOISE FOLLOWED BY A SUDDEN LOSS OF POWER ON THE RT ENGINE. IMMEDIATELY FOLLOWING THE SUDDEN LOSS OF POWER THE RT ENGINE CAUGHT ON FIRE. THE PROCEDURES FOR AN IN-FLIGHT ENGINE FIRE WERE CARRIED OUT AND THE FIRE WAS EXTINGUISHED. AFTER INITIAL INSPECTION THE CAUSE OF THE ENGINE FAILURE WAS DUE TO AN INTERNAL FAILURE OF THE ENGINE. ITEMS NOTICED DURING INITIAL INSPECTION ARE AS FOLLOWS: POWER SECTION SEIZED, OIL VISIBLE IN BOTH EXHAUST STACKS, NO EXTERNAL INDICATION OF FIRE DAMAGE TO ENGINE VISIBLE (FIRE WAS LIMITED TO EXHAUST STACKS DUE TO OIL LOSS FROM INTERNAL ENGINE FAILURE), ALL DAMAGE WAS CONTAINED WITHIN THE ENGINE (NO EXTERNAL DAMAGE VISIBLE), COMPRESSOR DISC INSPECTED WITH NO EVIDENCE OF FOD FOUND). THE ENGINE WAS REMOVED AND WILL BE SENT OUT FOR A TEAR DOWN.

CA061207003	EMB	GE		PLATE	BENT
12/3/2006	ERJ170100	CF348E5A1	17040236407	17040238003	CARGO DOOR

(CAN) ACFT WAS TAXIING TO DE-ICING BAY, WHERE THE DEICING PERSONNEL NOTICED THAT THE C1 CARGO DOOR WAS AJAR BY 2 INCHES. MAINTENANCE WAS CALLED IN, AND THEY NOTICED THAT BOTH HANDLES WERE STOWED. THE DOOR WAS OPENED TO CHECK FOR OBSTRUCTIONS, AND FOUND THE COVER PLATE TO BE BENT. NO OTHER DAMAGE WAS NOTED, AND THE DOOR WAS CLOSED NORMALLY. THE GREEN INDICATION ON THE DOOR WINDOW WAS APPARENT. THIS INFO WAS THEN PASSED ON TO THE F/O. ALSO, THE COCKPIT INDICATION DID NOT SHOW DOOR TO BE OPENED. CREW DID NOT REALIZE DOOR WAS OPENED. IT IS SUSPECTED THAT THE MIDWAY LATCH WAS ROTATED BY A BENT PLATE, WHICH THEN ALLOWED THE HANDLES TO BE STOWED WITHOUT THE LATCH CAMS ENGAGED AROUND THE LATCH PINS. (TC NR20061207003)

CA061213001	EMB	GE		DOOR	DISLODGED
12/10/2006	ERJ190100IGW	CF34*		19017111401	COCKPIT

(CAN) FLIGHT DECK DOOR CAME FREE ON FRAME WHEN OPENED FROM CABIN SIDE IN FLIGHT. BOTTOM LOCATING PIN FOUND BENT AND TEMPORARILY FIXED. TOP PIN DOES NOT REMAIN IN FRAME BRACKET. DOOR SERVICEABLE FOR REMAINDER OF FLIGHT ONLY. (TC NR 20061213001)

2006FA0001183	EXTRA	LYC		BRACKET	CRACKED
12/8/2006	EA300	AEIO540*		76201113	SEAT BACKREST

DURING A ROUTINE INSPECTION IT WAS NOTICED THE 76201.113 TOUNGE BRACKETS LT AND RT WHICH ATTACH THE REAR SEAT BACKREST TO THE LOWER SEAT ASSEMBLY WERE CRACKED THRU THE BOLT HOLES ATTACHING TO THE BACKREST. FURTHER CLOSE EXAMINATION (REMOVED UPHOLSTERY)OF THE REMOVED BACKREST ASSEMBLY REVEALED THE SEAT BACK WAS SIGNIFICANTLY CRACKED IN THE AREA OF THE UPPER BACKREST WHERE THE SEAT BACKREST ANGLE CAN BE ADJUSTED. RECOMMEND CLOSER INSPECTION OF THE AFFECTED PARTS BE ADDED TO THE 100HR AND 1000HR INSPECTION CHECKLISTS.

CA061219023	FOKKER	PWA		ENGINE	MALFUNCTIONED
11/23/2006	F27MK50	PW125B			

(CAN) IN CRUISE THE ENGINE EXPERIENCED TORQUE FLUCTUATIONS ACCOMPANIED BY INCREASED ITT TEMPERATURES. THE ENGINE WAS SHUTDOWN IN FLIGHT AND THE AIRCRAFT DIVERTED TO POINT OF DEPARTURE. MFG WILL MONITOR INVESTIGATION OF THE EVENT AND ADVISE OF ROOT CAUSE ONCE ESTABLISHED. (TC NR 20061219023)

CA070109005	FOKKER	RROYCE		VALVE	MALFUNCTIONED
11/8/2006	F28MK0100	TAY65015		1608565	FUEL SYSTEM

(CAN) DATE OF DELAY NOV 8, 2006 CADORS NR: 2006C2915. THE FLIGHT CREW WAS NOTIFIED THAT DURING TAXI FOR DEPARTURE FUEL WAS LEAKING FROM LT WING. AIRCRAFT TAXIED OFF RUNWAY BY WHICH TIME THE LEAK HAD STOPPED. FLIGHT CREW IN CONTACT WITH MAINTENANCE CONTROL AGREED THAT THE LEAK WAS FROM THE WING TANK VENTING SYSTEM. AFTER THE SPILL WAS CLEANED, AC DEPARTED. FOLLOW UP ACTION, THIRD OCCURRENCE OF FUEL LEAK FROM THE VENT SYSTEM ON THIS AIRCRAFT. THE FIRST EVENT WHICH OCCURRED OCT 28 WAS RECTIFIED WITH REPLACEMENT OF THE SUCTION RELIEF VALVE. SNAG RETURNED NOV 3 AT WHICH TIME MAINTENANCE REFUEL AND DE-FUEL THE AIRCRAFT SEVERAL TIMES AND COULD NOT FAULT THE SYSTEM. IN FOLLOW UP TO THIS LATEST SNAG, WE HAVE AN ENGINEER FLING WITH THE AIRCRAFT TO INVESTIGATE THIS SNAG FURTHER. DEPENDING ON HIS FINDINGS, WE PLAN ON OPENING BOTH WING MAIN TANKS AND INSPECTING ALL PLUMBING AND VENT VALVES IN THE SYSTEM. DATE OF DELAY DEC 20, 2006 CADORS NR: 2006C3292, FLIGHT CREW REPORT: ON DEPARTURE WE WERE INFORMED BY ATC THAT WE WERE LEAKING FUEL FROM THE RT WING. WE CALLED THE FA'S TO CHECK THE LEAK AND BY THAT TIME (ABOUT 3 MINS AFTER DEPARTURE) THE LEAK HAD STOPPED. WE ELECTED TO CONTINUE. TALKED TO TOWER AFTER ARRIVAL AND THEY SAID THAT THE LEAK STARTED AT ROTATION AND CONTINUED TO AT LEAST 7000 FT ASL. THE LATEST EVENT'S TROUBLESHOOTING HAS REVEALED A HARD FAULT OF THE OVER FLOW VALVE. THE ENGINEER SIMULATED COLD SOAKING OF THE VALVE DURING REFUEL BY COLD SPRAYING THE VALVES. ONCE THE REFUELING WAS COMPLETED, THE FLOW VALVE SHOULD CLOSE UNDER SPRING PRESSURE BUT REMAINED IN THE OPEN POSITION. THE AIRCRAFT WAS RELEASE UNDER MEL TO LIMIT THE FUEL IN THE WINGS TO 7500LBS IAW SIDE UNTIL THE NO FLY WEEKEND WHEN THE OVERFLOW VALVE REPLACEMENT CAN BE COMPLETED. (TC NR 20070109005)

CA070110005	FOKKER	RROYCE		WARNING SYSTEM	MALFUNCTIONED
10/9/2006	F28MK0100	TAY65015	6225342001		COCKPIT

(CAN) THE REFERENCED AIRCRAFT AN EVENT INVOLVING THE AUTOMATIC SILENCING OF CABIN CHIMES. NORMALLY THE FLIGHT CREW WILL ADVISE THE FLIGHT ATTENDANTS TO TAKE THEIR POSITIONS FOR LANDING WITH 3 CHIMES SELECTED MANUALLY IN THE COCKPIT. IT APPEARS HOWEVER IN LANDING CONFIGURATION THAT THE CHIMES ARE SILENCED AND STORED UNTIL THE NR 1 ENGINE IS SHUT DOWN. THE CHIMES ARE INHIBITED AT CERTAIN FLIGHT PHASES. AS INDICATED MAINTENANCE WAS ABLE TO DUPLICATE THE FAULT. BY PUTTING THE AIRCRAFT INTO FLIGHT MODE. ONCE THE AIRCRAFT WAS PUT BACK INTO GROUND MODE (ENGINES NOT RUNNING) THE STORED CHIMES SOUNDED. WE HAVE POSED THIS ISSUE TO MFG. WE HAVE REVIEWED THE SB'S SL' AND SED'S BUT FOUND NO INFORMATION PERTAINING TO THIS ANOMALY WE SUSPECT THE FAULT LIES WITH THE INHIBITION CIRCUIT AS DESCRIBED IN THE CAPTAINS E MAIL THAT FOLLOWS. OUR CONCERNS LIE IN THE FACT THAT THE CHIMES ARE USED AS A MEANS OF COMMUNICATION BETWEEN THE FLIGHT DECK AND CABIN. THEREFORE WE ARE CONCERNED THAT THE CREWS ARE BECOMING DESENSITIZED DUE TO THIS ANOMALY. MFG HAS BEEN QUESTIONED ON THIS ISSUE. (TC NR 20070110005)

2007FA0000087	FOKKER	PITOT HEAD	OBSTRUCTED
11/11/2003	F28MK4000		PITOT/STATIC SYS

FLIGHT NR 7, STAGE OF FLIGHT: TAKEOFF ROLL, 2ND ATTEMPT, CAPTAINS AIR SPEED INDICATOR INOPERATIVE. REMOVED CAPTAINS AIRSPEED INDICATOR QUICK DISCONNECTS, PURGED WITH NITROGEN, FOUND BLOCKAGE AT PITOT HEAD, REMOVED BLOCKAGE RECONNECTED QUICK DISCONNECTS. OPS CHECK GOOD, ALL WORK DONE IAW AMM, CHP 34. (K)

2007FA0000089	FOKKER	O-RING	LEAKING
7/6/2004	F28MK4000	1075010	AILERON TAB

AT 1004Z, AIRCRAFT DEPARTED, APPROX 30 MIN INTO FLIGHT, PILOTS CALL PTK OPS RADIO AND REPORTED TOTAL LOSS OF NR 2 HYD SYSTEM FLUID. AIRCRAFT RETURNED TO DEPARTURE. AFTER ARRIVING, THE FLIGHT MECHANIC INSPECTED THE AIRCRAFT AND FOUND THE RT AILERON TAB LOCK OUT ACTUATOR FILTER O-RING HAD RUPTURED. (K)

2007FA0000088	FOKKER	DRAIN LINE	OBSTRUCTED
11/11/2003	F28MK4000		PITOT/STATIC SYS

FLIGHT NR 7, STAGE OF FLIGHT: TAKEOFF ROLL, CAPTAINS AIR SPEED INDICATOR DID NOT WORK. REMOVED PITOT DRAIN LANE, PURGED WITH AIR, RECONNECTED QUICK DISCONNECT. OPS CHECK OK IAW F28, CHP 34. (K)

CA061218002	FOUND	LYC	SLICK	BRUSH BLOCK	WORN

11/26/2006	FBA2C	IO540*	K3823	MAGNETO

(CAN) THE DISTRIBUTOR GEAR BRUSH WAS EXCESSIVELY WORN FOR HAVING 587.2 HOURS ON IT IN A COMPONENT DESIGNED WITH A 2000 HOUR TBD. BRUSH BUSHING AND MOUNT OF POOR QUALITY WHICH IF LEFT UNDETECTED WOULD RESULT IN FAILURE IN 2 OR 300 MORE HOURS IF BEARING AND BUSHING AND BRUSH. (TC NR 20061218002)

CA070108009	FRCHLD	GARRTT	ENGINE	DAMAGED
1/5/2007	SA227CC	TPE33112UA	TPE33111U6	LEFT

(CAN) UPON SHORT FINAL A "POP" WAS HEARD SIMILAR TO THE SOUND OF A DOOR SEAL. THE AIRCRAFT YAWED A BIT YET NOT ENOEGH TO ALERT THE FLIGHT CREW THAT IT WAS ANYTHING MORE THAN TURBULENCE. OIL PRESSURE WAS NOTED TO BE DROPPING. AN ENGINE FAILURE OCCURED ON THE LH SIDE. ENGINE WAS SHUT DOWN ON THE RUNWAY AND NOT IN THE AIR. UPON MAINTENANCE INITIAL REVIEW MOST OF THE DAMAGE WAS AT THE BACK OF THE ENGINE. THERE WAS NO NOTED DAMAGE AT THE FRONT, GEARBOX, OF THE ENGINE. FURTHER INVESTIGATION WIL BE CARRIED WHEN ENGINE ARRIVES AT THE OEM. MORE DETAILS THEN. (TC# 20070108009)

CA061204003	FRCHLD	GARRTT	ENGINE	MAKING METAL
12/4/2006	SA227DC	TPE33112UHR	TPE33112UHR	

(CAN) DURING ENGINE MAINTENANCE, IT WAS NOTICED THAT THE ENGINE OIL FILTER BYPASS PIN HAD POPPED. THE OIL FILTER WAS REMOVED AND INSPECTED. METAL CONTAMINATION WAS FOUND AND A SOAP SAMPLE WAS TAKEN. (TC NR 20061204003)

CA061220009	FRCHLD	GARRTT	LINE	CRACKED
12/19/2006	SA227DC	TPE33112UHR	2762026311	BLEED AIR

(CAN) DURING CLIMB, THE ENGINE FIRE WARNING LIGHT ILLUMINATED. THE ENGINE WAS SHUTDOWN. THE FIRE LIGHT EXTINGUISHED, WHEN THE STOP FEATHER LEVERS WERE PULLED BACK. THE CREW BLEW A FIRE BOTTLE, DECLARED AN EMERGENCY AND LANDED. A DAMAGED FIRE DETECTOR (1000 DEG F) P/N 17343-61-600 WAS FOUND AND A CRACKED BLEED AIR LINE P/N 27-62026-311 (TC NR 20061220009)

HN8R200700001	GIPPLD	LYC	SCREEN	CONTAMINATED
12/23/2006	GA8	IO540K1A5		ENGINE OIL SUMP

FOUND 2 PIECES OF METAL IN THE OIL SUMP SUCTION SCREEN DURING ANNUAL INSPECTION. ONE PIECE LOOKS LIKE A DRILLED OUT HELI COIL .5 INCH LONG X .25 WIDE AND THE OTHER LOOKS LIKE A PIECE OF CASTING .2 LONG X .125 WIDE. THE ENGINE WILL BE REMOVED AND SENT OUT FOR TEARDOWN AND INSPECTION.

HN8R200600001	GIPPLD	LYC	SERVO	DEFECTIVE
12/7/2006	GA8	IO540K1A5	065001782400	AUTOPILOT

NOSE DOWN AUTO TRIM INOP WAS REPORTED BY PILOT. TROUBLESHOOTING REVEALED THE AUTOPILOT COMPUTER WAS NOT RECEIVING INPUT CALLING FOR NOSE DOWN TRIM FROM THIS PITCH SERVO.

2007FA0000006	GROB	LYC	SHAFT	BROKEN
9/26/2006	G120A	AEIO540*	1U478	AIR PUMP

DURING ENGINE START, SUCTION PRESSURE WAS READING ZERO, DURING FURTHER TROUBLESHOOTING, TECH FOUND THE ENGINE DRIVEN DRIVEN DRY AIR PUMP HAD A BROKEN SHAFT. PROBABLE CAUSE COULD BE FROM VIBRATION OR HARD START. NO RECOMMENDATION AT THIS TIME. (K)

2007FA0000032	GROB	LYC	PUMP	WORN
10/30/2006	G120A	AEIO540*	1U478	ENGINE

DURING FLIGHT, SUCTION PRESSURE READING DROPPED TO ZERO, DURING FURTHER TROUBLESHOOTING TECH FOUND THE ENGINE DRIVEN DRY AIR PUMP WAS NOT PRODUCING ENOUGH SUCTION. PROBABLE CAUSE COULD BE FROM PISTON WEARING INSIDE OF PUMP. RECOMMENDATION AT THIS TIME IS FOR THE MFG TO INVESTIGATE WHY PUMP PISTON IS FAILING. (K)

2007FA0000003	GROB	LYC	PUMP	OUT OF LIMITS

11/10/2006	G120A	AEIO540*	1U478003	ENGINE

PILOT REPORTED SUCTION INDICATOR WAS BELOW LIMITS, AC RETURNE TO BASE. UPON TROUBLESHOOTING, THE MECHANIC REMOVED THE AIR PUMP AND NOTICED THE SHAFT WAS VERY EASY TO ROTATE, HAD NO RESISTANCE TO IT. NO PROBABLE CAUSE OR RECOMMENDATIONS AT THIS TIME. (K)

2007FA0000005	GROB	LYC	PUMP	WORN
9/22/2006	G120A	AEIO540*	1U478	VACUUM SYSTEM

DURING FLIGHT SUCTION PRESSURE READING DROPPED TO ZERO, DURING FURTHER TROUBLESHOOTING TECHICIAN FOUND THE ENGINE DRIVEN DRY AIR PUMP SHAFT HAD BROKEN. PROBABLE CAUSE COULD BE FROM ENGINE VIBRATION OR POOR PARTS. RECOMMENDATION AT THIS TIME IS FOR THE MFG TO INVESTIGATE WHY PUMP IS FAILING SO EARLY. (K)

2007FA0000007	GROB	LYC	PUMP	WORN
10/30/2006	G120A	AEIO540*	1U478	VACUUM SYS

DURING FLIGHT SUCTION PRESSURE READING DROPPED TO ZERO, DURING FURTHER TROUBLESHOOTING, TECH FOUND THE ENGINE DRIVEN AIR PUMP WAS NOT PRODUCTING ENOUGH SUCTION. PROBABLE CAUSE COULD BE FROM PISTION WEARING INSIDE OF PUMP. RECOMMENDATION AT THIS TIME IS FOR THE MFG TO INVESTIGATE WHY PUMP PISTON IS FAILING. (K)

2007FA0000004	GROB	LYC	PUMP	WEAK
10/26/2006	G120A	AEIO540D4D5	1U478	VACUUM SYS

IN FLIGHT, THE INSTRUMENT VACUUM SYSTEM WOULD NOT PUT OUT PROPER SUCTION AND CAUSED THE ATTITUDE INDICATOR TO TUMBLE. THE AC RETURNED TO MAINTENANCE AND AN INSPECTION OF THE SYSTEM FOUND THAT THE PUMP WAS WEAK. PUMP WAS REMOVED AND A NEW PUMP INSTALLED. OPERATIONAL CHECK OF THE SYSTEM CHECKED NORMAL. (K)

CA070103007	GULSTM	PWC	PUMP	MALFUNCTIONED
12/11/2006	200	PW306A		ENGINE

(CAN) ENGINE OIL PRESSURE WAS REPORTED TO GRADUALLY DECREASE AND THE ENGINE WAS SHUTDOWN IN FLIGHT. THE AIRCRAFT DIVERTED FOR AN UNSCHEDULED LANDING. THE ENGINE OIL PRESSURE PUMP WAS SUBSEQUENTLY REPLACED. (TC NR 20070103007)

CA061124007	GULSTM	GARRTT	SPAR CAP	CRACKED
11/24/2006	690	TPE3315251K	410009505	VERTICAL STAB

(CAN) CRACK FOUND IN LT HAND SPAR CAP 1.5 IN. FROM BOTTOM. (TC NR 20061124007)

2006FA0001186	GULSTM		TURBINE WHEEL	SEIZED
12/13/2006	GIV			ACM

AIR CYCLE MACHINE TURBINE WHEEL HAS SEIZED CAUSING INOPERATIVE AIR CONDITIONING SYSTEM.

2006FA0001170	HUGHES	LYC	HUGHES	BRACKET	BROKEN
11/17/2006	269C	HIO360C1A		269A5472	FUSELAGE

ONE OF THE BELT DRIVE CLUTCH ACTUATION SYSTEM CABLE PULLEY BRACKETS (1 OF 2 P/N 269A5472) BROKE CLEAN ACROSS BETWEEN THE PULLEY AND ITS FRAME MOUNT HOLES DURING THE PROCESS OF ENGAGING THE ROTOR SYSTEM. DURING THE SUBSEQUENT ATTEMPTED TAKEOFF THE OPERATOR NOTED THAT ROTOR RPM WOULD BLEED OFF RAPIDLY DUE TO DRIVE BELT SLIPPAGE WHEN THE COLLECTIVE CONTROL WAS RAISED. THE OPERATOR ABORTED THE TAKEOFF ATTEMPT, SHUTDOWN THE AIRCRAFT, AND INVESTIGATED THE PROBLEM THEN NOTIFIED REPAIR PERSONNEL. THE BRACKET AND THE PULLEY (P/N MS20219-4) WERE THE ONLY PARTS DAMAGED IN THIS ASSEMBLY AS A RESULT OF THIS FAILURE.

2006FA0001085	HUGHES	ALLSN	ALLSN	BEARING	SPALLED
11/3/2006	369D	250C20B		23034787AL	GEARBOX

VISIBLE LINE FOUND ON 2.5 BEARING ROLLERS MATCHING SPALLING FOUND ON SAG SHAFT (SDR DATED

3/NOV/2006). GEARBOX INSTALLED 6/SEPT/2006. TIME IN SERVICE FOR GEAR BOX, 105.1 HOURS. 2.5 BEARING INSTALLATION TIMES NUT SHOWN ON ENGINE CARDS. 2.5 BEARING IS A PMA PART ALCOR. (K)

2006FA0001086	HUGHES	ALLSN		SUPPORT	CORRODED
10/4/2006	369D	250C20B		369A75058	ANTITORQUE PEDAL

DURING ANNUAL INSPECTION PEDAL SUPPORT WAS FOUND WITH CORROSION ON LOWER BOLT PADS BEYOND REPAIRABLE LIMITS. REPLACED SUPPORT BRACKET WITH SERVICEABLE PART. (K)

2006FA0001087	HUGHES	ALLSN	ALLSN	SHAFT	SPALLED
11/3/2006	369D	250C20B		E23031922C	COMPRESSOR ASSY

FOUND SPALLING ON BEARING RACE AT 2.5 BEARING CONTACT POINT. FOUND VISIBLE LINE ON 2.5 BEARING ROLLERS MATCCHING SPALL LINE ON SAG SHAFT. COMPRESSOR ASSY INSTALLED ON AC 6/SEPT/2006, TIME IN SERVICE SINCE INSTALLATION OF COMPRESSOR ASSY 105.1 HOURS, 220 CYCLES. INSTALLATION TIMES NOT SHOWN ON ENGINE CARDS FOR SAG SHAFT. SAG SHAFT IS A PMA PART-EXTEX. (K)

2007FA0000062	ISRAEL	GARRTT	RETAINER	SEPARATED
10/4/2006	ASTRASPX	TFE73140	30606852	TURBINE

ON 10/4/2006, 4TH AIRCRAFT EXPERIENCED A LT ENGINE EXHAUST FIRE AFTER ENGINE START AND PRIOR TO DEPARTURE. ENGINE WAS REMOVED AND RETURNED TO MFG FOR REPAIR. ENGINE WAS DISASSEMBLED IAW LMM 72-03-06, REV 8 FOR ENGINEERING INVESTIGATION. DISASSEMBLY FINDINGS REVEALED PINS SECURING THE DEFLECTOR SHROUD TO THE RETAINER RING OF THE LPT2 STAGE NOZZLE RETAINER BECAME DISLODGED AND EXHIBITED CONTACT FRETTING WITH MATERIAL LOSS ON THE OUTER RETAINER. THE ENGINE FIRE MAY HAVE RESULTED FROM THE LPT2 STAGE RETAINER PINS DISLODGING WHICH MAY HAVE LOCCKED UP THE N1 ROTATING GROUP AND PREVENTED THE N1 GROUP FROM OBTAINING GROUND IDLE WITH EXCESSIVE RAW FUEL. SB INCORPORATED IMPROVED HARDWARE AND PROVIDES INSTRUCTIONS FOR REPLACING THE LPT2 STAGE RETAINER AND LPT2 STAGE SHROUD SEGMENTS. (K)

2007FA0000012	ISRAEL	LIFE RAFT	MISRIGGED
12/20/2006	GALAXY	57FASA2321325	CABIN

THIS RAFT WAS INSTALLED ON AC BUT MAY BE INSTALLED ON OTHER SIMILAR AC. MOORING THE LINE (FIRING LINE) WAS FOUND RIGGED WRONG. LINE WAS TIED TO LIFE RAFT FIRST AND THEN TO THE PULL CABLE. THE LINE SHOULD BE TIED TO THE PULL CABLE FIRST AND THEN TO THE LIFE RAFT. RIGGED THIS WAY THE LIFE RAFT WOULD NOT DEPLOY BECAUSE THE PULL CABLE WOULD NOT BE ABLE TO BE FIRED. (K)

2007FA0000013	ISRAEL	LIFE RAFT	MISRIGGED
12/20/2006	GALAXY	57FASA2321315	

THIS RAFT WAS INSTALLED ON AC BUT MAY BE INSTALLED ON OTHER SIMILAR AC. MOOORING LINE (FIRING LINE) WAS FOUND RIGGED WRONG. LINE WAS TIED TO THE RAFT FIRST AND THEN TO PULL CABLE. THE LINE SHOULD BE TIED TO THE PULL CABLE FIRST AND THEN TO THE LIFE RAFT. RIGGED THIS WAY THE LIFE RAFT WOULD NOT DEPLOY BECAUSE THE PULL CABLE WOULD NOT BE ABLE TO BE FIRED. (K)

2007FA0000014	ISRAEL	LIFE RAFT	MISRIGGED
12/20/2006	GALAXY	57FASA2321315	

THIS RAFT WAS INSTALLED ON AC BUT MAY BE INSTALLED ON OTHER SIMILAR AC. MOORING LINE (FIRING LINE) WAS FOUND RIGGED WRONG. LINE WAS TIED TO LIFE RAFT FIRST AND THEN TO THE PULL CABLE. THE LINE SHOULD BE TIED TO THE PULL CABLE FIRST AND THEN TO THE LIFE RAFT. RIGGED THIS WAY THE LIFE RAFT WOULD NOT DEPLOY BECAUSE THE PULL CABLE WOULD NOT BE ABLE TO BE FIRED. (K)

2006FA0001230	LEAR	WIRE	MISINSTALLED
12/14/2006	35A	501122804	

CELL DIP SWITCH INSTALLED 180 DEGREES OUT. CELL WIRING MISROUTED AND IMPROPER GAUGE WIRE. MULTIPLE COLD CRACKED SOLDER JOINTS BROKEN AND POORLY REPAIRED TRACES. BATTERY T3 AND P3 ARE BROKEN. UNIT SENT BACK, AS CORE SEEMS TO BE A WORKMANSHIP ISSUE. (K)

CA070105007	LEAR	GARRTT	SHAFT	SHEARED

1/3/2007	35A	TFE73122B	66082019	GENERATOR

(CAN) LT GENERATOR CAME OFF LINE .5 HR BEFORE LANDING . THE INDICATOR SHOWED 0 AMPS, A RESET WAS ATTEMPED BUT DID NOT COME ONLINE. WHEN MAINTENANCE REMOVED THE GENERATOR FOR INSPECTION, THE GENERATOR SHAFT WAS FOUND SHEARED. THE GENERATOR WAS INSPECTED FURTHER AND ROTATED FREELY. CAUSE OF SHEARED SHAFT IS UNKNOWN. (TC NR 20070105007)

CA061205008	LEAR	GARRTT	NUT	CRACKED
12/5/2006	35LEAR	TFE7312	AN6289D6	LT MLG ACTUATOR

(CAN) NUT ON HYDRAULIC LINE LEADING TO LT MAIN LANDING ACTUATOR FOUND CRACKED DURING DAILY INSPECTION. THE NUT WAS REPLACED, GEAR SWINGS CARRIED OUT, AIRPLANE IS NOW SERVICEABLE. (TC NR 20061205008)

2007FA0000044	LEAR	GARRTT	ADC	DEFECTIVE
11/9/2006	35LEAR	TFE73122B	702490031304	COCKPIT

DURING PREFLIGHT THE PILOTS ALTIMETER WAS FLAGGED. THE ADC WAS FOUND TO BE DEFECTIVE AND REPLACED. THE SYSTEM WAS TESTED AND INSPECTED AND FOUND TO COMPLY WITH FAR 91 AND TO REMAIN RVSM COMPLAINT. THERE HAS BEEN ONE PRIOR FAILURE REPORTED ON THIS SYSTEM REPORTED ON 11-11-2005. (K)

2007FA0000035	LEAR	GARRTT	RHEOSTAT	SHORTED
12/3/2006	36LEAR	TFE731*	645402500	COCKPIT

SOON AFTER TAKEOFF, THE CREW DETECTED A AN ELECTRICAL SMELL. AFTER ATTEMPTING AND FAILING TO ISOLATE SOURCES. THEY ELECTED TO RETURN TO DEPARTURE. AIRPORT, AND LANDED UNEVENTFULLY. THERE WAS NO EMERGENCY DECLARED. MAINTENANCE REPLACED EL RHEOSTAT IAW MM. (K)

2007FA0000097	LEAR	GARRTT	ELEVATOR	SEPARATED
12/1/2006	36LEAR	TFE731*	243400018	RIGHT

RT ELEVATOR DEPARTED THE AIRCRAFT AS THE AIRCRAFT EXPERIENCED AND APPROXIMATELY 70 DEGREE BANK, 50-60 DEGREE NOSE DOWN TURN. THE PILOT WAS FLYING IN A FORMATION AND WAS BLINDED BY THE SUN AND TURNED AWAY FROM OTHER AIRCRAFT. AS THE ELEVATOR CAME OFF OF THE HORIZONTAL STABILIZER IT TOOK BOTH HINGE BRACKETS AND THE BELLCRANK ASSY WHERE THE PUSHROD TUBE ATTACHES. BOTH THE HORIZONTAL SKIN AT THE OB END AND THE VERTICAL CAP WHERE BELLCRANK ASSY IS LOCATED ARE TORN AND DAMAGED. FURTHER INVESTIGATION IS IN PROGRESS INCLUDING AN ALIGNMENT AND SYMMETRY INSPECTION OF THE AIRCRAFT. STRESS WILL BE EVALUATING THESE NR TO DETERMINE THE CAUSE AND THE VIABILITY OF THE AIRFRAME FOR REPAIR. ATTACHED IS THE IRREGULARITY REPORT DOCUMENTING THE INCIDENT. AC ISUNBELIEVABLE BUT TRUE, AC FLEW FOR OVER AN HOUR WITHOUT ELEVATOR. (K)

2007FA0000011	LEAR	GARRTT	RETAINER	CORRODED
9/29/2006	45LEAR	TFE731*	30606852	LPT 2

MATERIAL LOSS ON THE LPT2 NOZZLE RETAINER WITH DISLODGED PINS THAT LIKELY LED TO DOWN STREAM LPT3 BLADE MID SPAN FRACTURES AND DISPLACED MATERIAL IN THE FORM OF IMPACT DAMAGE. THIS ENGINE WAS PRESERVICE BULLETIN 72-5165 AND ADDRESSES THIS ISSUE. (K)

CA061206005	LEAR	GARRTT	HOSE	LEAKING
11/24/2006	45LEAR	TFE7312	244224152	FUEL SYSTEM

(CAN) AFTER AIRCRAFT WAS PARKED OVERNIGHT WITH FULL FUEL, A MINOR FUEL SEEP WAS DISCOVERED COMING FROM RT FUSELAGE FUEL TANK TO WING FLEX HOSE ASSY. DURING REPLACEMENT OF RT HOSE WITH FULL LT WING FUEL IT WAS DISCOVERED THE LT FUSELAGE TO WING FUEL FLEX HOSE ALSO HAD A MINOR SEEP. THIS IS ONLY NOTICEABLE WHEN THE AIRCRAFT IS SITTING FOR A FEW HOURS WITH FULL FUEL IN THE WINGS. ON INVESTIGATION OF OUR OTHER AIRCRAFT IT WAS DISCOVERED THE RT FLEX HOSE HAD THE SAME PROBLEM. THESE ARE P/N 244224151 AND 244224152 FLEX HOSE ASSEMBLIES. (TC NR 20061206005)

DELR200700001	LEAR	ALIDSG	BOLT	SHEARED
1/4/2007	55LEAR	TFE7313AR	2652002	ZONE 400

AFTER REMOVAL OF SAFTY WIRE TO REMOVE BOLT, THE MOUNT BOLT WAS FOUND SHEARED AT THE NECK OF THE BOLT. THREADED SECTION OF BOLT WAS REMOVED WITH AN EASYOUT IAW CHAPTER 5 THIS ITEM IS LIFE LIMITED AT 20,000.00 HOURS.

2006FA0001147	LEAR	GARRTT	WIRE	SHORTED
11/12/2006	55LEAR	TFE7313		PITCH SERVO

AIRCRAFT ABORTED TAKEOFF DUE TO BOTH STALL WARNINGS ILLUMINATED ON DEPARTURE ROLL. C/B LEFT AND RIGHT STALL C/B POPPED. AUTOPILOT, FLIGHT DIRECTOR AND PRIMARY YAW DAMPER INOPERATIVE. (K)

2007FA0000045	LEAR	PWA	ADC	MALFUNCTIONED
11/16/2006	60LEAR	PW305	8220839429	LT AFT AVIONICS

THE FLIGHTCREW REPORTED INTERMITTENT LOSS OF ADC INFORMATION ON THE CAPTAIN`S PFD. THE PRIMARY AIR DATA COMPUTER WAS FOUND TO BE DEFECTIVE AND WAS REPLACED. THE SYSTEM WAS TESTED AND INSPECTED IAW MM AND WAS FOUND TO COMPLY WITH FAR 91.411, PART 43 AND RVSM ADC INSPECTIORS. THE AIRCRAFT REMAINS RVSM COMPLAINT. (K)

CA070103008	LEAR	PWA	ENGINE	FIRE
12/9/2006	60LEAR	PW305A	PW305A	

(CAN) ON START, FLAMES WERE SEEN EXITING THE ENGINE EXHAUST. THE START WAS ABORTED. MFG WILL INVESTIGATE THE INCIDENT AND ADVISE OF ROOT CAUSE ONCE ESTABLISHED. (TC NR 20070103008)

CA070111001	LKHEED	ALLSN	SWITCH	MALFUNCTIONED
12/24/2006	382G	501D22A		RT MLG

(CAN) DURING DEPARTURE THE RT MLG CONTINUED TO INDICATE DOWN AND LOCKED AFTER THE GEAR WAS SELECTED UP. THE AIRCRAFT CONTINUED TO DESTINATION, ENROUTE THE GEAR WAS CONFIRMED UP. THE GEAR WAS VISUALLY CONFIRMED AND THE AIRCRAFT LANDED WITHOUT FURTHER PROBLEM. MAINTENANCE REPLACED THE RT MLG FORWARD MICROSWITCH AFTER A SATISFACTORY GEAR SWING THE AIRCRAFT WAS RETURNED TO SERVICE. (TC NR 20070111001)

CA061228002	LKHEED	ALLSN	GASKET	FAILED
12/15/2006	382G	501D22A		NR 1 ENGINE

(CAN) AFTER DEPARTING AND CLIMBING THROUGH 10K FEET THE CREW OBSERVED A LOW OIL QUANTITY CONDITION ON NR 1 ENGINE. VISUAL CONFIRMATION OF OIL LOSS ACCOMPLISHED AND NR 1 ENGINE SHUTDOWN. THE AIRCRAFT RETURNED WITHOUT INCIDENT TO POINT OF DEPARTURE. MAINTENANCE REPLACED THE NR 1 ENGINE SCAVENGE PUMP AND FILTER. ALSO REPLACED THE GASKET ON THE OIL TANK ACCESS PANEL FOR THE QUANTITY TRANSMITTER. THE AIRCRAFT WAS GROUND RUN AND RETURNED TO SERVICE. (TC NR 20061228002)

CA061212002	LKHEED	ALLSN	PROPELLER	DAMAGED
11/12/2006	382G	501D22A		NR 4

(CAN) IN CRUISE AT FL240 AFTER DEPARTURE THE CREW OBSERVED LOW OIL QTY ON NR 2 ENGINE. THE ENGINE WAS SHUTDOWN AND THE AIRCRAFT CONTINUED TO DESTINATION. SHORTLY AFTER RE-ESTABLISHING CRUISE AT FL220 THE CREW OBSERVED LOW OIL QTY ON NR 4 PROPELLER. THE PROP WAS SELECTED TO MECHANICAL GOVERNING AND THE AIRCRAFT CONTINUED TO DESTINATION. THE NR 4 ENGINE WAS SHUTDOWN ON DESCENT TO PRECLUDE PROP OVERSPEED. THE AIRCRAFT ARRIVED WITHOUT FURTHER PROBLEMS. MAINTENANCE REPLACED THE NR 2 ENGINE SCAVENGE FILTER AND THE NR 4 PROPELLER ASSY. AIRCRAFT SATISFACTORILY GROUND RUN AND RETURNED TO SERVICE.

CA061222005	LKHEED	ALLSN	OIL SYSTEM	LEAKING
12/8/2006	382G	501D22A		NR 2 ENGINE

(CAN) ENROUTE THE CREW OBSERVED LOW OIL QUANTITY ON THE NR 2 ENGINE. FLUID WAS OBSERVED DEPARTING THE DRAIN MAST. THE ENGINE WAS SHUTDOWN AND THE AIRCRAFT RETURNED TO POINT OF DEPARTURE WITHOUT FURTHER PROBLEM. MAINTENANCE FOUND AN AIR LEAK OCCURING AT THE OIL QUANTITY TRANSMITER ACCESS PANEL ON THE OIL TANK. FOAMING RESULTED DUE TO LOSS OF PNEUMATIC HEAD

PRESSURE CAUSING THE SYSTEM TO VENT. THE ACCESS PANEL BOLTS WERE RETORQUED ENGINE OIL REPLENISHED. THE AIRCRAFT WAS GROUND RU AND RETURNED TO SERVICE.

CA061215001	LKHEED	ALLSN	FILTER	UNKNOWN
12/2/2006	382G	501D22A		SCAV PUMP

(CAN) ON DEPARTURE, THE CREW OBSERVED NR 2 ENGINE OIL LEVEL DROPPING TO 2.75 GAL. WITH A LOW OIL LIGHT ILLUMINATED. THE AIRCRAFT RETURNED TO POINT OF DEPARTURE. MAINTENANCE REPLACED THE NR 2 SCAVENGE OIL FILTER AND REPLENISHED THE OIL QUANTITY TO 10 GAL. THE AIRCRAFT WAS FOUND SATISFACTORY AND RETURNED TO SERVICE. (TC NR 20061215001)

CA061218006	LKHEED	ALLSN	DRAIN MAST	LEAKING
12/5/2006	382G	501D22A		NR 2 ENGINE

(CAN) ENROUTE AFTER MISSED APPROACH AT SNAP LAKE THE CREW OBSERVED A FUEL LEAK AT THE DRAIN MAST ON NR 2 ENGINE. THE ENGINE WAS SHUTDOWN AND THE AIRCRAFT CONTINUED TO DESTINATION WITHOUT FURTHER PROBLEM. MAINTENANCE DETERMINED THE LEAK SOURCE TO BE FROM THE MANIFOLD DRAIN COLLECTOR. THE MANIFOLD WAS CAPPED AND THE AIRCRAFT COMPLETED A SATIFACTORY GROUND RUN BEFORE RETURN TO SERVICE. (TC NR 20061218006)

2006FA0001149	MAULE	LYC	HOSE	MISMANUFACTURED
11/1/2006	M7235C	IO540*	21A09000204	HYD SYSTEM

AIRCRAFT CAME IN FOR FIRST ANNUAL AFTER CERTIFICATION. ON INSPECTION HYDRAULIC FLUID WAS FOUND TO BE COMING FROM THE FORWARD FUSELAGE DRAIN. UPON REMOVAL OF THE FLOOR THE INSULATION WAS FOUND TO BE SATURATED WITH HYDRAULIC FLUID. THE SYSTEM WAS REFILED AND TROUBLESHOT, THE LEAK WAS TRACKED TO A HOSE. INSPECTION OF THE HOSE REVEALED THAT THE HOSE END WASN`T PROPERLY INSTALLED RESULTING IN THE FLUID LEAK. THIS WAS A RESULT OF IMPROPPER ASSEMBLY OF THE HOSE BY MFG AND SHOULD HAVE BEEN CAUGHT DURING PRESSURE TESTING AFTER INITIAL ASSY. (K)

2006FA0001144	MAULE	LYC	MUFFLER	CRACKED
11/10/2006	M7235C	IO540*		ENGINE

AIRCRAFT CAME IN FOR FIRST ANNUAL AFTER CERTIFICATION. UPON VISUAL INSPECTION FOUND A CRACK ADJACENT TO THE WELD ON THE GUSSET/DOUBLER LOCATED ON THE LOWER PORTION OF THE MUFFLER AT THE EXHAUST OUTLET. THE MUFFLER WAS PRESSURIZED AND VERIFIED THAT THE CRACK HAD EXTENDED INTO THE CAN. MOST LIKELY CAUSED BY THE NORMAL FLEX AND ROTATION OF ENGINE OPERTATIONS. COUPLED WITH THE METHOD OF ATTACHMENT OF THE EXHAUST PIPE. (K)

2006FA0001146	MAULE	LYC	FUEL TANK	LEAKING
11/1/2006	M7235C	IO540*	2117X16	RT WING

AIRCRAFT CAME IN FOR FIRST ANNUAL AFTER CERTIFICATION, THE OWNER OPERATOR REPORTED FUEL STAINING ON THE RT WING, ON INSPECTION THE FUEL TANK WAS FOUND TO BE LEAKING. THE TANK WAS REMOVED AND UPON CLOSER INSPECTION 2 PIN HOLES WERE FOUND IN THE WELD SEAM, ONE BEING A LIGHT SEEP, THE OTHER LARGE ENOUGH TO PRODUCE A VISIBLE STAIN. RECOMMEND THAT ALL FUEL TANKS BE PRESSURIZED AND LEAK CHECKED , AND THAT AN INSPECTOR PLACE THEIR (STAMP) INDICATING COMPLIANCE. (K)

2006FA0001145	MAULE	LYC	DRAG LINK	MISINSTALLED
11/1/2006	M7235C	IO540*	30A04000091	RT MLG

AIRCRAFT CAME IN FOR FIRST ANNUAL AFTER INSTALLATION. ON INSPECTION FOUND MAIN GEAR DRAG LINK HAD NOT BEEN PROPERLY SEALED AT THE LOWER END ALLOWING WATER TO ENTER THE ASSEMBLY. BECAUSE OF THE SEALANT WE ARE UNABLE TO TELL IF THE INSIDE OF THE TUBE HAS SOME SORT OF CORROSION PROTECTION. MAY WANT TO CONSIDER DOING AWAY WITH THE SEALANT AND APPLYING A CORROSION PREVENTATIVE COMPOUND COUPLED WITH RECURRENT INSPECTION AND REAPPLICATION OF CPC. (K)

2007FA0000024	MOONEY	LYC	BEARING	FROZEN
11/30/2006	M20G	O360A1D	F3114	ELEVATOR ROD END

ELEVATOR PUSH ROD END BEARING (PHF31-14, FOUND TO BE FROZEN FROM RUST AND GRIME. ROD END

BEARING BROKE AT THREADED PORTION DUE TO LACK OF MOVEMENT. AD 73-21-01 ADDRESSES LUBRICATION OF ALL CONTROL AND LANDING GEAR ROD END BEARINGS BUT DOES NOT ADDRESS INSPECTION OF OPERATION AND FREEDOM OF MOVEMENT. SERVICE INSTRUCTION M20-106 GIVES A GOOD INSPECTION OF PRIMARY FLIGHT CONTROL/ JOINTS. THAT SHOULD BE INCORPORATED INTO THE INSPECTION MANUAL AND/OR AD. (K)

2006FA0001200	MTSBSI	GARRTT	ACCESS PANEL	CORRODED
12/5/2006	MU2B60	TPE331*	030A326633	FUSELAGE

DRAIN HOLE IN COVER NOT BEING LOCATED PROPERLY CAUSES WATER TO LAY IN AFT. FLANGE OF NEXT FRAME FWD CAUSING CORROSION. (DRAIN HOLE NEEDS TO BE IN FRAME RADIUS. (PRIMARY STRUCTURE). (K)

2007FA0000065	PARTEN	LYC	ACTUATOR	SEIZED
1/3/2007	P68C	IO360A1A		PITCH TRIM

(REF NR: PT202781) AIRCRAFT ARRIVED WITH PITCH TRIM ACTUATOR SEIZED IN FULL NOSE UP POSITION. ACTUATOR IS DRIVEN BY TRIM CABLE LOOPED OVER ACTUATOR PULLEY WITH NO MEANS OF PREVENTING CABLE FROM SLIPPING ON THE PULLEY. IT IS POSSIBLE TO RUN TRIM TO FULL TRAVEL ALLOWING ACTUATOR TO BIND. WHEN TRIM CONTROL IS REVERSED THE CABLE CAN SLIP OVER PULLEY WITH OUT MOVING ACTUATOR IF PROPER CABLE TENSION IS NO PRESENT. SUGGEST REVISION TO POH/AFM ADVISING CREW TO VISUALLY CHECK OPERATION OF PITCH TRIM SYSTEM PRIOR TO FLIGHT. (K)

CA061020001	PILATS	PWA	FLAP	OBSTRUCTED
10/18/2006	PC1245	PT6A67B	527521213	WING

(CAN) ICE BUILD UP INTO THE IB FLAP COVER CAUSED THE FLAPS TO NOT GO FULL UP. IT TRIPPED THE FLAP CIRCUIT BREAKER. THE ICE CAUSED THE ROD TO BEND FROM THE STRESS OF TRYING TO MOVE THE FLAP UP. IT WAS NOTICE BY SEEING A 50 AMP DRAW FROM THE FLAP MOTOR. ROD REPLACED, ICE MELTED AND AIRCRAFT RETURNED TO SERVICE. (TC NR 20061020001)

CA061017004	PILATS	PWA	RELAY	BURNED
10/16/2006	PC1245	PT6A67B	9740926112	HYDRAULIC SYS

(CAN) FOLLOWING LANDING OF AIRCRAFT AMBER (HYD). ANNUNCIATOR ILLUMINATED. INSPECTION OF HYDRAULIC MOTOR POWER RELAY MAIN CONTACTS INDICATED THE CONTACTS WERE SEVERLY BURNED. NEW RELAY INSTALLED ,FUNCTION TEST OF LANDING GEAR SYSTEM PERFORMED SATISFACTORY. (TC NR 20061017004)

CA061204004	PILATS	PWA	CONTROL VALVE	MALFUNCTIONED
11/28/2006	PC1245	PT6A67B	9599020135	CABIN TEMP

(CAN) AIRCRAFT WAS ON CLIMBOUT GOING THROUGH 6000 FEET WHEN ECS LIGHT CAME ON AND CABIN STARTED TO DE-PRESSURIZE. AIRCRAFT RETURNED TO RANKIN INLET WHERE MAINTENANCE DISCOVERED THAT TCA VALVE WAS STUCK IN THE FULL OPEN POSITION AND EXCESS HEAT TRIPPED THE SYSTEM OFF. TCA VALVE WAS REPLACED AND ECS SYSTEM CHECKED OK. (TC NR 20061204004)

CA061218012	PILATS	PWA	OIL SYSTEM	CONTAMINATED
12/15/2006	PC1245	PT6A67B		ENGINE

(CAN) NON ALLOWABLE DEBRIS FOUND IN OIL SYSTEM, CONFIRMED BY OIL ANALYSIS REPORT. ENGINE SENT BACK TO MANUFACTURER FOR INVESTIGATION. ENGINE EXCHANGED, WILL NOT BE SENT BACK TO THE OPERATOR. ENGINE TSO 214.7 TSN 8330.9 (TC NR 20061218012)

CA061214003	PILATS	PWA	BOOT	SPLIT
11/29/2006	PC1245	PT6A67B		DEICE SYSTEM

(CAN) AIRCRAFT RETURNED FROM FLIGHT TO ARCTIC. ALL DE-ICE BOOTS ON AIRCRAFT WERE FOUND SPLIT ALONG CHORD AND HAD TO BE REPLACED. THE PRESSURE REGULATOR WAS TESTED AND FOUND TO BE FUNCTIONING NORMAL. WE WERE UNABLE TO DETERMINE THE CAUSE OF THE FAILURE. THE PILOT REPORTED IT WAS COLD AT ALTITUDE AND NOT SURE IF THE BOOTS WERE ACTIVATED. (TC NR 20061214003)

2006FA0001177	PIPER		STRUT	CORRODED

11/30/2006	J3			RIGHT WING

RT STRUT WAS DAMAGED FROM LOWERING A BI-FOLD HANGER DOOR ON THE WING TIP. THE STRUT WAS MANUALLY SEPARATED WERE EXTENSIVE CORROSION WAS FOUND INSIDE THE WING STRUT. THE PLANE HAS SET IDLE FOR 3 YEARS OUT OF ANNUAL INSPECTION. THE LAST ANNUAL INSPECTION PERFORMED INCLUDED COMPLYING WITH AD 99-01-05 WITH NO DISCREPANCIES NOTED.

2006FA0001210	PIPER	LYC	TURBOCHARGER	LEAKING
10/10/2006	PA23250	TIO540C1A	RG179803M	LT ENGINE

FUEL LEAKING OUT TURBOCHARGER AIR LINE TO FUEL PUMP. (K)

2006FA0001211	PIPER	LYC	LINE	LEAKING
10/10/2006	PA23250	TIO540C1A	RG17980JM	FUEL SYSTEM

FUEL LEAKING OUT TURBOCHARGER AIR LINE TO FUEL PUMP. (K)

2006FA0001208	PIPER	LYC	LINE	LEAKING
10/10/2006	PA23250	TIO540C1A		ENG FUEL

FUEL LEAKING, TURBOCHARGER AIR LINE TO FUEL PUMP. (K)

2006FA0001209	PIPER	LYC	LINE	LEAKING
10/10/2006	PA23250	TIO540C1A	RG17980YM	TURBOCHARGER

FUEL LEAKING OUT TURBOCHARGER AIR LINE TO FUEL PUMP. (K)

2006FA0001199	PIPER	LYC	SCREW	FAILED
10/3/2006	PA24250	O540A1A	STD21C7	IDLR GEAR

A POST ACCIDENT INVESTIGATION IDENTIFIED THAT THE CRANKSHAFT IDLER GEAR WAS MISSING SEVERAL TEETH. FURTHER EXAMINATION REVEALED THAT THE SCREWS HOLDING THE CRANKSHAFT IDLER GEAR SHAFT HAD FAILED. (K)

2007FA0000008	PIPER	LYC	SPAR	LOOSE
12/14/2006	PA28140	O320*	6207006	LT MLG

DURING AN ANNUAL INSPECTION OF THE LT MAIN LANDING GEAR ASSY PN 35644-902, IT WAS FOUND TO BE LOOSE IN THE MAIN WING SPAR. THE LT MAIN LANDING GEAR WAS REMOVED FOR FURTHER INSPECTION OF THE LT MAIN WING SPAR ASSY GEAR ATTACHING BOLT HOSES AND ATTACH POINTS. CLOSE INSPECTION FO THE WING SPAR SHOWED THAT THE LOWER (4) BOLT HOLES HAD BEEN ELONGATED. IT APPEARED THAT ALL BOLTS WERE TIGHT AND THIS CONDITION HAD BEE LOOSE FOR SOME TIME. RECOMMEND CLOSE INSPECTION OF LANDING GEAR ATTACH POINTS DURING ALL INSPECTIONS. (K)

2007FA0000064	PIPER	LYC	CYLINDER	DAMAGED
1/9/2007	PA28140	O320*	6531904	LT MLG

DURING AN ANNUAL INSPECTION FO THE LT MLG CYLINDER ASSY PN 6531904, IT WAS FOUND TO BE LOOSE IN THE MAIN WING SPAR. THE LT MLG WAS REMOVED FOR FURTHER INSPECTION OF THE LT MAIN WING SPAR ASSY GEAR ATTACHING BOLT HOSES AND ATTACH POINTS. CLOSE INSPECTION FO THE WING SPAR SHOWED THAT THE LOWER (4) BOLTS HOLES HAD BEEN ELONGATED. THE HOLES IN THE LT LANDING GEAR CYLINDER WERE FOUND TO BE ELONGATED ALSO. IT APPEARED THAT ALL BOLTS WERE TIGHT AND THIS CONDITION HAD BEEN LOOSE FOR SOME TIME. AIRCRAFT WING SPAR WS REPAIRED AND THE LT MLG CYINDER WAS REPLACE WITH A LATER MODEL CYLINDER ASSY FROM MFG SINCE THE ORIGINAL PART WAS NO LONGER AVAILABLE. RECOMMEND CLOSE INSPECTION OF LANDING GEAR ATTACH POINTS DURING ALL INSPECTIONS. (K)

2007FA0000031	PIPER	LYC	CRANKSHAFT	CORRODED
1/3/2007	PA28161	O320D3G	13B37024	ENGINE

THE ENGINE CURRENTLY UNDERGOING ITS FIRST OVERHAUL SINCE NEW. THE CRANKSHAFT WAS CLEANED, URETHABOND 104 COATING REMOVED AND CORROSION PITTING WAS DISCOVERED BENEATH COATING. THE PITTING EXCEEDED (SERVICEABLE LIMITS) AS STATED IN SB NR 505B. THIS CAUSED THE CRANKSHAFT THE BE

REMOVED FROM SERVICE. THE ENGINE AVERAGED 39.5 HOURS/ MONTH SINCE IT WAS NEW. MFG AD COVERS THIS SUBJECT WITH THE COMPLIANCE WITH FAR, BEING TERMINATING ACTION FOR THE REPETITIVE INSPECTION. THE CRANKSHAFT (FROM THE FACTORY) HAD THE COATING AND (PID) STAMPING. NOTE: DUE TO THE URETHABOND 104 COATING, THIS SHOULD HAVE PREVENTED THE CORROSION PITTING WHICH IS A CONCERN OF THIS AD. THE ENGINE OVERHAULER STATED THE COATING WAS NOT WELL AND/OR CORRECTLY APPLIED BY THE FACTORY, WHICH ALLOWED THE CORROSION TO EXCEED TOLERANCES (SERVICE LIMITS). (K)

2007FA0000026	PIPER	LYC	STARTER	BROKEN
12/11/2006	PA28161	O320D3G	MZ6222	ENGINE

WHEN STARTING AIRCRAFT, MADE LOUD NOISE AT STARTER. INSPECTED AND FOUND BENDIX SHATTERED. (K)

2007FA0000029	PIPER	LYC	BOLT	CORRODED
12/19/2006	PA28161	O320D3G	AN411A	MLG

WHILE WASHING AC, SCRUB BRUSH NOCKED OFF NUT AND ENGAGED PORTION OF ONE OF THE (AN4-11A) BOLTS THAT SECURES THE RT MLG ASSY TO THE RT WING. BOLT WAS CORRODED ALL THE WAY ACROSS ITS CROSS SECTION. SUGGESTIONS: PERIODICALLY CHECK TORQUE ON THESE BOLTS TO ENSURE BOLT NOT CORRODED THROUGH LIKE THIS ONE. REPLACE THES BOLTS PERIODICALLY TO PRECLUDE CORROSION FAILURE. (K)

2006FA0001078	PIPER	LYC	STRUT	DEPARTED
10/31/2006	PA28161	O320D3G	65489000	MLG

WHILE PRACTICING TAKEOFF AND LANDINGS, THE TOWER INFORMED PILOT THERE WAS A PROBLEM WITH LEFT LANDING GEAR. THE INSTRUCTOR ELECTED TO RETURN TO TAKEOFF AIRPORT. UPON LANDING THE BRAKEHOSE SEPARATED, AND THE WHEEL, BRAKE ASSY, STUB AXEL AND OLEO PISTON DEPARTED WHEN LANDING WAS MADE ON BOTTOM OF LT GEAR CYLINDER. PROBABLE CAUSE IS NUMEROUS HARD LANDINGS WITH STUDENTS FLYING. (K)

2007FA0000074	PIPER	LYC	BULKHEAD	CORRODED
1/23/2007	PA28180	O360A3A	624403	FUSELAGE

THE BULKHEAD, BRACKETS, AND DOUBLERS AT STA. 228.3 WERE SEVERELY CORRODED. THIS BULKHEAD IS THE FRONT SUPPORT FOR THE VERTICAL STABILIZER/RUDDER ASSEMBLY. THE CORROSION COVERED AN AREA APPROXIMATE THE SIZE OF THE FRONT RUDDER ATTACHMENT BRACKET THAT IS PART OF THIS BULKHEAD ASSEMBLY. THE CORROSION WAS FOUND DURING AN ANNUAL INSPECTION AND WAS ONLY VISIBLE, WITHOUT DISASSEMBLY, AS SLIGHT BUBBLING OF THE METAL ON THE BRACKETS FACING REARWARD THAT ARE ATTACHED TO THE AFORE MENTIONED BULKHEAD ASSEMBLY.

2007FA0000075	PIPER	LYC	BULKHEAD	CORRODED
1/23/2007	PA28180	O360A3A	624403	FUSELAGE

THE BULKHEAD, BRACKETS, AND DOUBLERS AT STA. 228.3 WERE SEVERELY CORRODED. THIS BULKHEAD IS THE FRONT SUPPORT FOR THE VERTICAL STABILIZER/RUDDER ASSEMBLY. THE CORROSION COVERED AN AREA APPROXIMATE THE SIZE OF THE FRONT RUDDER ATTACHMENT BRACKET THAT IS PART OF THIS BULKHEAD ASSEMBLY. THE CORROSION WAS FOUND DURING AN ANNUAL INSPECTION AND WAS ONLY VISIBLE, WITHOUT DISASSEMBLY, AS SLIGHT BUBBLING OF THE METAL ON THE BRACKETS FACING REARWARD THAT ARE ATTACHED TO THE AFORE MENTIONED BULKHEAD ASSEMBLY.

2006FA0001182	PIPER	LYC	HUB	CRACKED
12/13/2006	PA28181	O360A4M		PROPELLER

DURING ANNUAL INSPECTION FOUND CRACK EXTENDING THROUGH THE HUB AT ONE OF THE MOUNTING BOLT HOLES. CRACK GOES COMPLETLEY THROUGH THE HUB TO THE INNER BORE OF THE HUB. NO HISTORY OF PROP STIKE OR ANY OTHER VISUAL DAMAGE TO THE PROPELLER. THIS PROPELLER INSTALLED WITH STC NR SA779NE. PROPELLER REMOVED FROM AIRCRAFT AND SENT FOR FURTHER STUDY IAW MFG REQUEST.

2007FA0000098	PIPER	LYC	SUPPORT BRACKET	CRACKED
11/30/2006	PA28R200	IO360A1A	6755000	RT AILERON

CRACKS IN AILERON BELLCRANK LOWER SUPPORTS BOTH LT AND RT. LOOK REAL CLOSE ON INSPECTION

BECAUSE NUT AND WASHER COVER AREAS. (K)

2007FA0000040	PIPER	LYC	CLEVIS BOLT	SHEARED
1/16/2007	PA28R201	IO360A1A	400872	NLG

DURING CRUISE FLIGHT, CREW REPORTED LOUD BANG FOLLOWED BY A NOSE GEAR DOWN AND LOCKED INDICATION. AIRCRAFT LANDED WITHOUT INCIDENT. UPON INSPECTION BY MX PERSONNEL NOSE GEAR ACTUATOR ROD END CLEVIS BOLT (AN23-21A) MISSING WITH EVIDENCE OF BOLT FAILURE.

2007FA0000041	PIPER	LYC	CLEVIS BOLT	SHEARED
1/16/2007	PA28R201	IO360A1A	400872	NLG

DURING CRUISE FLIGHT, CREW REPORTED LOUD BANG FOLLOWED BY A NOSE GEAR DOWN AND LOCKED INDICATION. AIRCRAFT LANDED WITHOUT INCIDENT. UPON INSPECTION BY MX PERSONNEL NOSE GEAR ACTUATOR ROD END CLEVIS BOLT (AN23-21A) MISSING WITH EVIDENCE OF BOLT FAILURE.

CA070118003	PIPER	CONT	PUMP	FAULTY
1/10/2007	PA28R201T	TSIO360F	6467582	ENGINE

(CAN) ENGINE DRIVEN FUEL PUMP OUTPUT IS LOW AT RATED RPM 2600. (TC NR 20070118003)

CA061217001	PIPER	LYC	TORQUE LINK	BROKEN
12/16/2006	PA31	TIO540A1B	4025700	RT MLG STRUT

(CAN) THE PILOT REPORTED NOTICING A VIBRATION DURING TAXI BUT ATTRIBUTED IT TO RUNWAY CONDITION. IN FLIGHT HE WAS UNABLE TO RETRACT THE LANDING GEAR. UPON LANDING HE WAS UNABLE TO EXECUTE TURNS. AFTER DEPLANING HE FOUND THE FORWARD LUG ON THE UPPER TORQUE LINK OF THE RT MLG BROKEN. THE TORQUE LINK ASSEMBLY WAS HELD IN PLACE ONLY BY THE BOTTOM TORQUE LINK ATTACH BOLT. THE BOLT THAT ATTACHES THE UPPER TORQUE LINK WAS MISSING ALONG WITH THE BROKEN LUG. A CAUSE COULD NOT BEEN DETERMINED. THE AIRCRAFT WAS TOWED TO THE HANGER. (TC NR 20061217001)

CA070118004	PIPER	LYC	PLATE	CRACKED
1/12/2007	PA31	TIO540A2B	B2222	PROPELLER

(CAN) PROPELLER RECEIVED FROM CUSTOMER FOR ROUTINE OVERHAUL. PROPELLER DISMANTLED, PARTS NDT INSPECTED AND CRACK FOUND. NO AD`S OR BULLETIN`S ON THAT PART. (TC NR 20070118004)

CA061114007	PIPER	LYC	THROTTLE CABLE	FAILED
11/10/2006	PA31325	TIO540F2BD	454253	COCKPIT

(CAN) RT ENGINE THROTTLE CABLE FAILURE: DURING A ROUTINE FLIGHT, THE PILOT, ENROUTE , NOTED THAT THE RT ENGINE THROTTLE CONTROL WAS STIFF ON APPROACH. THE AIRCRAFT EXPERIENCED A NORMAL LANDING, ONCE ON THE GROUND THE PILOT REPORTED THAT THE RT ENGINE WAS RUNNING AT IDLE AND WOULD NOT RESPOND TO THROTTLE MOVEMENTS. THE AIRCRAFT WAS TAXIED TO THE RAMP AND SHUTDOWN. THE RT ENGINE WAS INSPECTED, AND MAINTENANCE DETERMINED THE RT THROTTLE CABLE IN THE CABIN PEDESTAL HAD FAILED. THE THROTTLE CABLE WIRES HAD SEVERED APPROXIMATELY .2500 FROM THE SWAGED PORTION OF THE ROD END. UNFORTUNATELY ON A ROUTINE INSPECTION THIS PORTION OF THE CABLE IS COVER BY THE CABLE SLEEVE AND CANNOT BE INSPECTED. THE RT ENGINE THROTTLE CABLE P/N: 454-253 (ALT P/N: 24894-007) WAS REPLACED. THE AIRCRAFT RETURNED TO SERVICE. (TC NR 20061114007)

2006FA0001129	PIPER	LYC	KEEPER	BROKEN
11/14/2006	PA31350	LTIO540J2BD	MS139973	EXHAUST VALVE

FOUND VALVE KEEPER BROKEN ON ROUTINE VALVE INSPECTION IAW SB 388C. (K)

2006FA0001130	PIPER	LYC	KEEPER	BROKEN
11/14/2006	PA31350	LTIO540J2BD	72050	INTAKE VALVE

FOUND NR 6 CYLINDER VALVE KEEPER BROKEN ON ROUTINE VALVE INSPECTION IAW SB 388C. (K)

CA061218008	PIPER	LYC	SLEEVE	DAMAGED
12/16/2006	PA31350	TIO540J2BD	05K21108	CYLINDER

(CAN) DURING INSPECTION OIL WAS NOTED ON THE BOTTOM COWL OF ENGINE. UPON CLOSER INSPECTION, NR 4 CYLINDER WAS FOUND TO BE WET AT THE CYLINDER TO HEAD FLANGE. AFTER CLEANING, OIL WAS SEEN TO BE SEEPING FROM FLANGE AREA. THERE WAS NO VISIBLE CRACK SO DYE PENETRANT WAS CARRIED OUT, AT THIS TIME A PINHOLE WAS REVEALED. COMPRESSION WAS GOOD DURING THE INSPECTION, THE JUG WAS CHANGED OUT FOR A NEW ONE. (TC NR 20061218008)

2007FA0000039	PIPER	LYC		WIRE	WORN
1/16/2007	PA31350	TIO540J2BD			UNKNOWN

THE WIRING THAT PASSES THROUGH THE NOSE RIB GROMMETS HAVE WORN TO THE EXTENT THAT THE INSULATION IS GONE AT PLACES CAUSING THE METAL CONDUCTOR TO SHOW THROUGH. IT APPEARS THAT THIS IS WORSE WITH THE GREATER AMOUNT OF CABLES IN THE BUNDLE. BUNDLES OF ONLY 2 WIRES DO NOT HAVE THIS PROBLEM. APPARENTLY THE BUNDLE IS (SLAPPED) UP AND DOWN WITH VIBRATION. THIS IS CAUSE FOR CONCERN DUE TO SPARKING NEAR THE FUEL TANK.

CA061207005	PIPER	LYC		DRIVE GEAR	DESTROYED
12/6/2006	PA31350	TIO540J2BD	MHB4014R		STARTER

(CAN) WHILE AIRCRAFT WAS AWAY FROM BASE ON A SCHEDULED RUN THE CREW WAS ATTEMPTING TO STAR THE NR 2 ENGINE. THEY NOTED NO ENGAGEMENT OF THE STARTER (ENGINE DID NOT TURN OVER). A MAINTENANCE CREW WAS DISPATCHED TO REPAIR THE AIRCRAFT, WHEN THE COWLINGS WERE REMOVED SEVERAL PIECES OF METAL WERE OBSERVED. UPON REMOVAL OF THE STARTER IT WAS DISCOVERED THAT THE ENGAGEMENT GEAR ON THE BENDIX DRIVE HAD DISINTIGRATED, DAMAGING THE DRIVE HOUSING AS THE PIECES DEPARTED. THE STARTER WAS LESS THAN 80 HRS FROM OVERHAUL. AFTER DISCUSSION WITH THE CREW, THEY STATED THEY DID NOT DOUBLE TAP THE START SWITCH. AN INVESTIGATION IS STILL IN PROGRESS. (TC NR 20061207005)

CA070115007	PIPER	LYC	LYC	CYLINDER	SEPARATED
1/12/2007	PA31350	TIO540J2BD	LTIO540J2BD		ENGINE

(CAN) ON THE CLIMB OUT A LOSS OF POWER OCCURED ON THE RT ENGINE. THE MANIFOLD PRESSURE DROPPED FROM TAKEOFF POWER TO 30 INCHES. (TC NR 20070115007)

2007FA0000042	PIPER	LYC		WIRE	CHAFED
1/16/2007	PA31350	TIO540J2BD			ELECTRICAL SYS

THE WIRING THAT PASSES THROUGH THE NOSE RIB GROMMETS HAS WORN TO THE EXTENT THAT THE INSULATION IS GONE AT PLACES CAUSING THE METAL CONDUCTOR TO SHOW THROUGH. IT APPEARS THAT THIS IS WORSE WITH THE GREATER AMOUNT OF CABLES IN THE BUNDLE. BUNDLES OF ONLY 2 WIRES DO NOT HAVE THIS PROBLEM. APPARENTLY THE BUNDLE IS (SLAPPED) UP AND DOWN WITH VIBRATION. THIS IS CAUSE FOR CONCERN DUE TO SPARKING NEAR THE FUEL TANK.

CA061115006	PIPER	PWA	RIB	CRACKED
11/14/2006	PA31T	PT6A28	4653003	HORIZONTAL STAB

(CAN) DURING AN EVENT NR 1 INSPECTION THE LT HORIZONTAL STABILIZER OB RIB WAS FOUND CRACKED WHERE THE ELEVATOR OB HINGE ATTACH POINT IS. THE RIB WAS REPLACED. (TC NR 20061115006)

CA061122003	PIPER	PWA	TERMINAL	BURNED
11/21/2006	PA31T	PT6A28	2937102	DE ICE SYSTEM

(CAN) PILOT REPORTED PROP AND ENGINE INLET BOOTS DE-ICE SYSTEM U/S ON LT ENGINE. SYSTEM HAS BEEN INSPECTED. FOUND NO POWER FROM CB TO MAIN POWER RELAY. PLATE ASSEMBLY CIRCUIT PROTECTOR FORWARD MOUNTING LT REMOVED AND DISCOVERED THAT WIRE FROM CB BURNED OUT AT TERMINAL CONNECTION DUE OVERHEAT OF TERMINAL. OVERHEATING OF TERMINAL APPEARED TO BE DUE CORROSION OF TERMINAL AND LOST OF CONDUCTIVITY THAT INCREASE THE RESISTANCE AND GENERATE ADDITIONAL HEAT. (TC NR 20061122003)

2006FA0001179	PIPER	LYC	CONNECTING ROD	FAILED
12/5/2006	PA32RT300	IO540K1G5		ENGINE

INTERNAL ENGINE FAILURE, CYLINDERS 2 AND 4 CONNECTING RODS FAILED. ENGINE WAS ORIGINAL TO THE AIRCRAFT (1979).

CA061227005	PIPER	LYC	CRANKSHAFT	CRACKED
12/18/2006	PA34200	IO360C1E6		ENGINE

(CAN) LT ENGINE DEVELOPED AN OIL LEAK FROM CRANKSHAFT SEAL. DURING SEAL REPLACEMENT, IT WAS NOTICED THAT THE CRANKSHAFT FLANGE WHERE PROPELLER BOLTS ON, WAS CRACKED FROM ONE LIGHTNING HOLE TO THE OTHER. IT LOOKED AS IF THERE WAS AN INDENTATION ON THE BACK SIDE OF THE LIGHTNING HOLE. THIS IS THE POINT FROM WHICH THE CRACK APPEARED TO HAVE STARTED. THE MARK/INDENTATION APPEARS TO BE FROM A ROUND BAR BEING USED TO TURN THE CRANKSHAFT WHEN THE PROPELLER IS NOT INSTALLED. ENGINE IS BEING REMOVED FOR REPLACEMENT. (TC NR 20061227005)

2006FA0001141	PIPER	CONT	LINE	LEAKING
11/20/2006	PA34200T	TSIO520E	3716725	CABIN HEATER

PILOT REPORTED FUEL SMELL IN THE CABIN WHEN CABIN HEATER IS ON. FURTHER INVESTIGATION REVEALED A PIN HOLE CAUSED BY CORROSION IN THE CABIN HEATER FUEL LINE JUST AFT OF THE AFT SPAR CARRY THRU. (K)

2007FA0000076	PIPER	CONT	CONT	COUPLING	FAILED
1/17/2007	PA34220T	TSIO360KB		635796	ALTERNATOR

ALTERNATOR DRIVE COUPLING FAILED ON LT AND RT ALTERNATORS, IN IMC SIMULTANEOUSLY. 1 PIECE COUPLING WITH A RUBBER LORD BUSHING BONDED/INTERFERENCE FIT SLIPPED, CAUSING THE ALTERNATORS FAILURES. PILOTS LOST ELECTRICAL AND DESCENDED THROUGH ICE, UNABLE TO SHED MODERATE TIME ICE ACCUMULATION. TOTAL COMM AND AVIONICS FAILURE, PARTIAL PANEL WITH NO PITOT HEAT AVAILABLE.

2007FA0000077	PIPER	CONT	CONT	COUPLING	FAILED
1/17/2007	PA34220T	TSIO360KB		635796	ALTERNTOR

ALTERNATOR DRIVE COUPLING FAILED ON LT AND RT ALTERNATORS, IN IMC SIMULTANEOUSLY. 1 PIECE COUPLING WITH A RUBBER LORD BUSHING BONDED/INTERFERENCE FIT SLIPPED, CAUSING THE ALTERNATORS FAILURES. PILOTS LOST ELECTRICAL AND DESCENDED THROUGH ICE, UNABLE TO SHED MODERATE RIME ICE ACCUMULATION. TOTAL COMM AND AVIONICS FAILURE, PARTIAL PANEL WITH NO PITOT HEAT AVAILABLE.

2007FA0000085	PIPER	CONT	CONT	COUPLING	FAILED
1/17/2007	PA34220T	TSIO360KB		635796	ALTERNATOR

ALTERNATOR DRIVE COUPLING FAILED ON LT AND RT ALTERNATOR, IN IMC SIMULTANEOUSLY. COUPLING FAILURE RESULTED IN TOTAL ELECTRICAL FAILURE, RT ENGINE.

CA061122006	PIPER	LYC	TRUNNION	CRACKED
11/6/2006	PA44180	LO360E1A6	67042013	MLG

(CAN) AT INSPECTION NOTICED CRACK RIGHT THROUGH TRUNNION ASSY 67042-013.

2007FA0000060	PIPER	LYC	PUMP	INOPERATIVE
12/28/2006	PA44180	O360E1A6	HYC5005	HYDRAULIC SYS

UPON EXAMINATION OF THE AIRCRAFT IN QUESTION ON THE RUNWAY (AIRPORT MANAGER) TO TAKE PHOTOS OF THE INTERIOR OF THE AIRCRAFT SO AS TO RECORD THE POSITIONS OF ENGINE, GEAR AND CIRCUIT BREAKERS. PIC SO THEY COULD BE RECORDED BEFORE BEING REPOSITIONED FOR SAFETY PURPOSES. AFTER THAT WAS DONE, THE EMERGENCY GEAR KNOB AND PULLED THE LANDING GEAR HYDRAULIC CB. THE AC WAS THEN HOISTED UP BY CRANE AND SLING AND THE GEAR CAME DOWN. WHILE THE AC WAS HOISTED, EXAMINED THE LAND GEAR DOWN LOCKS. ALL (3) WERE IN THE (DOWN AND LOCKED) POSITION. THE AC WAS THEN TOWED TO OUR HANGER WITHOUT ANY PROBLEMS. JACKED UP AC AND REPOSITIONED THE CONTROLS FOR A RETRACT TEST OF THE LANDING GEAR. UPON S3WITCHING BATTERY POWER TO (ON), OBSERVED THAT THE (3) LANDING GEAR (DOWN AND LOCKED) LIGHTS WERE ON. THE RED (IN TRANSIT) WAS NOT ON. THE GEAR WAS DOWN AND LOCKED LIGHTS WERE (ON). THE RED (IN TRANSIT) WAS NOT ON. THE GEAR WAS DOWN AND LOCKED AND THE GEAR DID NOT RETRACT. THE PUMP DID NOT COME ON. WE DECIDED THAT THE HYDRAULIC PUMP IS

INOPERATIVE. THAT IS ALL OBSERVED SO FAR. (K)

CA061120003	PIPER	LYC	CONTROL CABLE	SEVERED
11/15/2006	PA44180	O360E1A6	62701153	STABILATOR

(CAN) PILOT REPORTED LOSS OF EFFECTIVE ELEVATOR CONTROL DURING ROUTINE TRAINING FLIGHT. AIRCRAFT RETURNED TO BASE WITH STABILATOR CONTROL MANAGED MAINLY BY STABILATOR TRIM SYSTEM. AIRCRAFT LANDED SAFELY. INITIAL INSPECTION OF STABILATOR SYSTEM CONFIRMED LIMITED RESPONSE TO CONTROL YOKE MOVEMENT. FURTHER INSPECTION OF CABLES REVEALED THAT THE SWAGED END OF THE AFT LOWER CABLE WAS BROKEN AND SYSTEM WAS HELD TOGETHER BY TURNBUCKLE SAFETY LOCK WIRE. AFFECTED CABLE HAS BEEN REMOVED FOR FURTHER INSPECTION AND REPLACEMENT. CABLE DEFECT LOCATED BETWEEN FUSELAGE STA: 156.00 AND 191.00. PART TOTAL TIME IS UNKNOWN. AIRCRAFT TOTAL TIME IS 6593.3 HRS. (TC NR 20061120003)

2006FA0001081	PIPER	LYC	SEAT BACK	CRACKED
11/1/2006	PA46350P	TIO540*	8994406	COCKPIT

CREW SEAT BACK FRAME CROSS SUPPORT BREAKS AT WELDED JOINT ON EITHER SIDE AND OR BOTH. (K)

CA070103003	PIPER	PWA	ENGINE	MALFUNCTIONED
12/1/2006	PA46500TP	PT6A42	PT6A42	

(CAN) THE ENGINE WAS REPORTED TO LOSE POWER SHORTLY AFTER TAKEOFF, RESULTING IN A FORCED LANDING AND DAMAGE TO THE AIRCRAFT. MFG WILL INVESTIGATE THE INCIDENT AND ADVISE OF ROOT CAUSE ONCE ESTABLISHED. (TC NR 20070103003)

2006FA0001125	PIPER		CONTROL UNIT	MALFUNCTIONED
11/1/2006	PA60602P			AUTOPILOT

AC WAS ACQUIRED IN AN OVERHAULED CONDITION FROM AUTO PILOTS CENTRAL. THIS UNIT WAS AN EXCHANGE UNIT WITH AN OVERHAUL DATE OF APPROX, JUNE 2004. THE KI-256 WAS INSTALLED AND MARRIED TO THE EXISTING FACTORY INSTALLED AUTOPILOT SYS IAW INSTALLATION/ SYS MM. AC WAS RETURNED TO SERVICE AFTER A SUCCESSFUL FLIGHT CHECK. ALL AUTOPILOT/ FLIGHT DIRECTOR MODES WERE CHECKED. SINCE THEN THIS FD/HORIZON HAS BEEN REMOVED AND RETURNED TO OVERHAULER NO LESS THAT 3 TIMES. HORIZON HAS BEEN RESPONSIBLE FOR AN ABRUPT AND ERRATIC PURPOSE. THIS UNIT HAS ALWAYS FAILED IN AUTOPILOT PITCH MODE. EACH TIME OVERHAULER FINDS A NEW PROBLEM IN PITCH CIRCUITS. THESE PROBLEMS ARE RELATED TO THE AUTOPILOT IN THE PITCH AXIS, BUT EACH TIME THE PROBLEM HAS BEEN IN A DIFFERENT FAILED COMPONENT OR COMPONENTS. (K)

2006FA0001231	RAYTHN	GARRTT	STATIC PORT	MISINSTALLED
11/30/2006	DH125	TFE731*	E420191	FUSELAGE

ROSEMOUNT STATIC PORTS DO NOT FIT CONTOUR OF AIRCRAFT SKIN. PORTS ARE NOT UNIFORM IN THICKNESS. CAN NOT INSTALL NEW PORT AND MATCH STEP HEIGHT TO MEET ORIGINAL RVSM CERTIFICATION. OTHER ISSUES: WHEN PORT IS INSTALLED, PORT CAUSE STRESS. AC SKIN DO TO CONTOUR FIT. INSTALLATION OF PORT ALSO PUTS STRESS ON PLATE TO HEATER BLOCK AND CAUSES CRACKING IN THE MATING SURFACE CAUSING PORT TO HAVE STATIC SYSTEM LEAK. (K)

2006FA0001110	RAYTHN	GARRTT	BLADE	DAMAGED
9/7/2006	HAWKER800XP	TFE7315BR	30607881	LPT3

THE INFLIGHT SHUTDOWN OCCURED ON SEPT 7, 2006, AFTER LEVELING OFF AT 30,000 FT THE CREW REPORTED A LOUD BANG FROM THE NR 2 ENGINE. THE CREW SECURED THE ENGINE, DIVERTED AND LANDED WITHOUT INCIDENT. VISUAL INSPECTION OF THE AC REVEALED DISPLACED MATERIAL ON THE AIRCRAFT NACELLE, DUCTING. ENGINE EXHAUST DUCT AND TURBINE SECTION IN THE FORM OF A UNCONTAINED MALFUNCTION. THE ENGINE WAS RETURNED TO MFG FOR DISASSEMBLY AND INSPECTION. DISASSEMBLY FINDINGS REVEALED MATERIAL LOSS ON THE LPT3 WHEEL BLADES IN THE FORM OF MID SPAN BLADE FRACTURES. (K)

2006FA0001171	ROBSIN	LYC	ROBSIN	BOOT	LEAKING
12/4/2006	R44	O540*		C1561	M/R BLADE

FLUID LEAKING FROM MAIN ROTOR BLADE PITCH BEARING HOUSING.

2006FA0001172	ROBSIN	LYC	ROBSIN	BOOT	LEAKING
12/4/2006	R44	O540*		C1561	M/R BLADE

FLUID LEAKING FROM MAIN ROTOR BLADE PITCH BEARING HOUSING.

2006FA0001173	ROBSIN	LYC	ROBSIN	BOOT	LEAKING
12/3/2006	R44	O540F1A5		C1561	M/R BLADE

FLUID LEAKING FROM MAIN ROTOR BLADE PITCH BEARING HOUSING.

2006FA0001174	ROBSIN	LYC	ROBSIN	BOOT	LEAKING
12/3/2006	R44	O540F1A5		C1561	M/R BLADE

FLUID LEAKING FROM MAIN ROTOR BLADE PITCH BEARING HOUSING.

2006FA0001175	ROBSIN	LYC	ROBSIN	BOOT	LEAKING
12/3/2006	R44	O540F1A5		C1561	M/R BLADE

FLUID LEAKING FROM MAIN ROTOR BLADE PITCH BEARING HOUSING.

2006FA0001161	ROBSIN	LYC	ROBSIN	BOOT	LEAKING
11/9/2006	R44RAVENII	IO540*		C1561	MAIN ROTOR BLADE

FLUID LEAKING FROM MAIN ROTOR BLADE PITCH BEARING HOUSING.

2006FA0001164	ROBSIN	LYC	ROBSIN	BOOT	LEAKING
12/4/2006	R44RAVENII	IO540*		C1561	MAIN ROTOR BLADE

FLUID LEAKING FROM MAIN ROTOR BLADE PITCH BEARING HOUSING.

2006FA0001165	ROBSIN	LYC	ROBSIN	BOOT	LEAKING
12/3/2006	R44RAVENII	IO540*		C1561	M/R BLADE

FLUID LEAKING FROM MAIN ROTOR BLADE PITCH BEARING HOUSING.

2006FA0001166	ROBSIN	LYC	ROBSIN	BOOT	LEAKING
11/4/2006	R44RAVENII	IO540*		C1561	M/R BLADE

FLUID LEAKING FROM MAIN ROTOR BLADE PITCH BEARING HOUSING.

2006FA0001168	ROBSIN	LYC	ROBSIN	BOOT	LEAKING
12/4/2006	R44RAVENII	IO540*		C1561	M/R BLADE

FLUID LEAKING FROM MAIN ROTOR BLADE PITCH BEARING HOUSING.

2006FA0001169	ROBSIN	LYC	ROBSIN	BOOT	LEAKING
12/4/2006	R44RAVENII	IO540*		C1561	M/R BLADE

FLUID LEAKING FROM MAIN ROTOR BLADE PITCH BEARING HOUSING.

2006FA0001167	ROBSIN	LYC	ROBSIN	BOOT	LEAKING
12/4/2006	R44RAVENII	IO540*		C1561	M/R BLADE

FLUID LEAKING FROM MAIN ROTOR BLADE PITCH BEARING HOUSING.

CA061216001	ROBSIN	LYC		IGNITION SWITCH	OBSTRUCTED
12/14/2006	R44RAVENII	IO540AE1A5		A6611	INSTRUMENT PANEL

(CAN) REPLACED IGNITION SWITCH DURING 2200 HR O/H AND REINSTALLED IN INSTRUMENT PANEL. THE SEATING OF THE SWITCH STOPPED THE CONSOLE FROM OPENING AGAIN. THE SWITCH WAS REMOVED AND RESEATED TO ALLOW TRAVEL PAST THE INSTRUMENT CONSOLE. WE COULD NOT ALIGN THE SWITCH TO

PREVENT THE TERMINAL (RT MAG CONNECTION) FROM CONTACTING THE SIDE WALL OF THE LOWER CONSOLE. THE TERMINAL ONLY MAKES CONTACT DURING THE TRANSITION FROM OPEN TO CLOSE AND VICE-VERSA. ONCE THE CONSOLE IS CLOSED THERE IS NO CONTACT OF THE TERMINAL, SIDEWALL OR LIP. WE ARE TALKING WITH MFG TO SEE IF THERE MAYBE A FIX. COULD BE IGNITION SWITCH MAYBE HAVE TO BE DESIGNED A LITTLE SMALLER OR MORE ROOM ON PANEL. (TC NR 20061216001)

20070125	ROBSIN	LYC	GEAR	WORN
1/24/2007	R44RAVENII	IO540AE1A5		ENGINE

DURING INSPECTION OF THE ENGINE WHILE REPLACING THE CRANKSHAFT IAW SB 569A, IT WAS OBSERVED THAT (PN 13519647) CRANKSHAFT GEAR WAS EXCESSIVELY WORN. THE GEAR WAS REPLACED WITH A NEW PART.

2006FA0001195	SKRSKY		DAMPER	BROKEN
11/28/2006	S64E		641026000042	

(REF: MDR06-093) DAMPER WAS REMOVED FROM THE AIRCRAFT DUE TO, THE PISTON PN 6410-26005-104, SN 550 FOUND BROKEN AFTER SHUTDOWN OF HELICOPTER. THE PISTON ROD BROKE NEAR THE FORK ASSEMBLY, PN 6410-26211-041 AND APPEARS TO BE BROKEN AT THREADS. DAMPER WAS INSTALLED ON MRH PN 6410-20004-033, SN A2-013. (K)

2006FA0001135	SKRSKY	PWA	BEARING	CRACKED
10/6/2006	S64E	JFTD12A4A	SB21511	M/R GEARBOX

(REF NR:MDR06-090) MAIN GEARBOX PN 6435-20400065, SN A6-011 WAS REMOVED DUE TO FINDINGS OF FERROUS METAL IN THE OIL SCREEN AND FILTER. UPON DISASSEMBLY AND TEAR DOWN, THE SOURCE OF THE FERROUS METAL WAS DISCOVERED TO BE COMING FROM GHE SECOND STAGE INPUT ALIGNMENT BEARING PN SB 2151-1, SN EAC18170. THE SB2151-1 BEARING CRACKED THROUGH THE ENTIRE INNER RACE AND CAUSED SUBSEQUENT CONTAMINATION OF THE MAIN GEARBOX, AND DAMAGE TO THE SECOND STAGE PINION PN 6435-20457-104, SN 333 ALIGNMENT BEARING JOURNAL. THE CRACKED INNER RACE WAS SENT TO THE MFG. PROBABLE CAUSE: UNKNOWN. (K)

2006FA0001136	SKRSKY	PWA	BEARING	CRACKED
10/6/2006	S64F	JFTD12A4A	SB21541	GEARBOX

(REF NR MDR06-089) THE IGB CHIP DETECTOR INDICATED A CHIP LIGHT. IGB WAS REMOVED AND THE INNER RACE WAS FOUND TO BE CRACKED THROUGH AND SPALLED. PROBABLE CAUSE: UNKNOWN. (K)

2006FA0001101	SNIAS	TMECA	FUEL CONTROL	MALFUNCTIONED
11/8/2006	AS350B2	ARRIEL1D1	0164248850	ENGINE

(4TH FLIGHT OF THE NIGHT) AFTER START UP, ALL SYSTEMS NORMAL, UPON LIFT OFF THE TURBINE AND ROTOR RPM SIMULTANEOUSLY DECREASED. PILOT REDUCED PITCH AND LANDED ON PAD WITHOUT INCIDENT RPM RETURNED TO 100 PERCENT. PILOT AND COPILOT CROSS CHECKED INSTRUMENTS AND CONTROLS POSITIONS, FOUND NORMAL. A SECOND ATTEMPT WAS MADE WITH THE SAME RESULTS. BOTH NEEDLES STAYED TOGETHER DURING EACH EVENT. THE TURBINE AND ROTOR SPEED RETURNED TOT HE NORMAL RANGE UPON THE COLLECTIVE BEING RETURNED TO THE LOCKED POSITION. AIRCRAFT WAS REMOVED FROM SERVICE. MAINTENANCE PERFORMED VISUAL INSPECTIONS AND GROUND/FLIGHT OPERATIONAL CHECKS AND FOUND NO DEFECTS COULD NOT DUPLICATE. MFC/GOV RETURNED TO MFG FOR EVALUATION. (K)

CA061120007	SNIAS	TMECA	COUPLING	CRACKED
11/17/2006	AS350B2	ARRIEL1D1	350A35105901	M/R DRIVESHAFT

(CAN) DURING 1000 HR INSPECTION DISC COUPLING FOUND CRACKED.

CA061218004	SNIAS	TMECA	ENGINE	MAKING METAL
11/20/2006	AS350B3	ARRIEL2B	0292005340	

(CAN) AIRCRAFT HAD AN INFLIGHT ENGINE CHIP LIGHT. PILOT LANDED AS SOON AS POSSIBLE. AIRCRAFT WAS LANDED UNDER ITS OWN POWER (NORMAL LANDING). PILOT THEN SHUT THE AIRCRAFT DOWN TO CHECK ALL ENGINE CHIP DETECTORS. HE FOUND METAL ON THE ELECTRIC CHIP PLUG, ENGINE OIL TANK CHIP PLUG AND THE ENGINE MOI CHIP PLUG. ENGINE WAS REMOVED AND SENT TO MFG. ANOTHER ENGINE WAS INSTALLED. (TC

NR 20061218004)

2007FA0000002	SNIAS	TMECA	DOUBLER	CRACKED
12/6/2006	AS350B3	ARRIEL2B		TAIL ROTOR

FOUND CRACKS 2 EA ON LT OUTSIDE DOUBLER ASSY. 2 RIVETS WERE POPED OUT. DAMAGE VISIBLE ONLY AFTER REMOVAL OF TAIL ROTOR GEARBOX COWLING. FOUND DURING 100 HR INSP. (K)

CA070115008	SNIAS	TMECA	ENGINE	FAILED
10/9/2006	AS350B3	ARRIEL2B	ARRIEL2B	

(CAN) AIRCRAFT FAILED POWER CHECK: ON INSPECTION ON WHY WE DID A BORESCOPE INSPECTION ON THE ENGINE AND FOUND THAT WE HAD A POSSIBLE TURBINE RUB. AS THIS ENGINE IS A RENTAL FROM MFG, WE CHANGED OUT THE MODULE 2 AND 3 AND SENT IT BACK TO THEM. THE NEW M02 AND M03 MODULES FIXED OUR FAILED POWER CHECK. WE DO NOT KNOW FOR SURE WHAT CAUSED OUR PROBLEM. (TC NR 20070115008)

2007FA0000069	SOCATA	LYC	RELAY	FAILED
12/26/2006	TB20TRINIDAD	IO540*	ZN7168752608	ELECTRICAL SYS

IT SEEMS THAT THE DEMAND OF THIS RELAY IN THE LANDING GEAR SYSTEM IS GREATER THAN THE DESIGNED LOAD USEAGE OF THE CURRENT RELAY. WOULD RECOMEND A HEAVIER DUTY RELAY, WHICH MFG HAS SINCE MADE AVAILABLE. (K)

2006FA0001188	SOCATA	CONT	RIVET	LOOSE
12/2/2006	TB9	C125*		VERTICAL STAB

DURING THE PRE-FLIGHT INSPECTION FOR A LOCAL TRAINING FLIGHT, THE BLIND RIVETS LOCATED HALFWAY UP VERTICAL FIN WERE FOUND TO BE MAKING ALUMINUM OXIDE (DIRT TRAILS) ON BOTH SIDES OF THE VERTICAL FIN. THIS CONDITION IS INDICATIVE OF A POTENTIALLY LOOSE RIVET OR CRACKED INNER RIB. MFG SB 10-083 REQUIRES THIS TYPE OF RIVET (CHERRY-MAX) AT THIS LOCATION. SUSPECT OTHER AIRCRAFT HAVE SAME ISSUE.

CA061219022	SOCATA	PWA	ENGINE	LEAKING
9/25/2006	TBM700	PT6A64	PT6A64	

(CAN) IN FLIGHT THE ENGINE OIL TEMPERATURE INCREASED ACCOMPANIED BY A LOSS OF OIL PRESSURE. THE ENGINE WAS SHUTDOWN IN FLIGHT. SUBSEQUENT INSPECTION REVEALED METAL CONTAMINATION OF THE OIL SYSTEM, INTERNAL OIL LEAKAGE AND SEIZURE OF THE REDUCTION GEAR BOX. MFG WILL INVESTIGATE THE EVENT AND ADVISE OF ROOT CAUSE ONCE DETERMINED.

2006FA0001190	SPHRTH		RIB	CRACKED
12/2/2006	CIRRUS			AILERON

DURING PRE-FLIGHT INSPECTION FOR TRAINING FLIGHT, IDENTIFIED CRACKS ON OUTER RIB CAPS ON BOTH AILERONS. CRACKS APPEAR TO BE ORIGINATING AT THE ATTACHMENT RIVETS LOCATED AT THE EDGE OF THE AILERONS.

CA061219025	SWRNGN	GARRTT	WINDSHIELD	FAILED
11/20/2006	SA226TC	TPE33110UA	2719442003	COCKPIT

(CAN) DURING FLIGHT THE LT COCKPIT HEATED WINDSHEILD SHATTERED BUT REMAINED INTACT. THE AIRCRAFT IMMEDIATLY RETURNED TO THE AIRPORT AND THE WINDOW WAS REPLACED BY MAINTENANCE. NO CAUSE COULD BE DETERMINED AS TO WHY THIS WINDOW SHATTERED. (TC NR 20061219025)

CA061219027	SWRNGN	GARRTT	WINDSHIELD	FAILED
12/15/2006	SA226TC	TPE33110UA	2719442004	COCKPIT

(CAN) DURING FLIGHT THE RT COCKPIT HEATED WINDSHEILD SHATTERED BUT REMAINED INTACT. THE FLIGHT CREW DECALRED AN EMERGENCY AND RETURNED TO THE AIRPORT UNEVENTFULLY. THE WINDOW WAS REPLACED BY MAINTENANCE. THE CREW EXPLAINED THAT PRIOR TO THE WINDOW SHATTERING A ELECTRICAL DISCHARGE WAS WITNESSED GOING ACROSS THE WINDSHIELD. OTHER THAN THE STATIC DISCHARGE, NO CAUSE FOR THE WINDOW TO SHATTER HAS BEEN DETERMINED. (TC NR 20061219027)

CA061219010	SWRNGN	GARRTT	INSERT	WORN
12/15/2006	SA227AC	TPE33111U	3108281	STARTER

(CAN) UPON START PROP STARTED TO ROTATE AND THEN STOPPED. STARTER CONTINUED TO TURN. TORLON INSERT WAS WORN ENOUGH THAT THE STARTER TURNED INSIDE THE TORLON INSERT. INSERT WAS REPLACED AND AIRCRAFT WAS RETURNED TO SERVICE. (TC NR 20061219010)

CA061211008	SWRNGN	GARRTT	TRANSDUCER	SPLIT
12/8/2006	SA227AC	TPE33111U	27191543	HYD PRESS TRANS

(CAN) AIRCRAFT LOST HYD PRESSURE ON LANDING. THERE WAS NO INDICATION OF PRESSURE ON GAUGE AND ON THE ANUNCIATOR PANEL. HYDRAULIC PRESSURE TRANSDUCER FOUND SPLIT AROUND HYDRAULIC FITTING END. TRANSDUCER AND SHUTTLE VALVE WERE REPLACED AND AIRCRAFT RETURNED TO SERVICE. (TC NR 20061211008)

CA061103014	SWRNGN	GARRTT	HYDRAULIC LINE	CRACKED
10/30/2006	SA227AC	TPE33111U	2781006025	LT MLG WW

(CAN) HYD FLUID LEAKING FROM LT WHEEL WELL. WHEN LT GEAR DOORS WERE OPENED TO INSPECT, ENTIRE GEAR BAY WAS COVERED WITH FLUID. AFTER CLEANING, REPLACING LINE AND PUTTING AIRCRAFT ON JACKS TO CHECK FOR FURTHER LEAKS ALL CHECKED WITHIN MANUFACTURERS LIMITATIONS. AIRCRAFT RETURNED OT SERVICE. (TC NR 20061103014)

END OF REPORTS