



ADVISORY CIRCULAR

43-16A

AVIATION MAINTENANCE ALERTS



ALERT NUMBER 355



FEBRUARY 2008

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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 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

BEECHCRAFT

Beechcraft: B300; Cracked Windscreen; ATA 5610

A repair station submission reads, "At an altitude of 17,000 feet (and an outside temperature of minus 6 degrees Celsius) the right windshield cracked (about 2 inches outboard of the center post), from the top to the bottom in the outer pane. The aircraft returned to the departing airport without any problems (and) the windshield (P/N 101-384025-24) was replaced. There was no known cause for this part to have cracked."

(Reference also the following Alerts: December 2004, for two such reports; January 2005, for another. The full part number returns 12 such reports from the FAA Service Difficulty Reporting System (SDRS) data base. Truncating this number from the right one digit at a time for successive searches yields the following results—almost all within the 5610 ATA code: -1 returns, 113 entries since 1998; -2 returns, 209 since 1995; -3 returns, 218 since 1995; -4 returns, 229 since 1995; -5 begins mixing codes. Readers are reminded the SDRS search tool found at: http://av-info.faa.gov/isdr/default.asp requires all part numbers to be entered WITHOUT dashes—Ed.)



Part Total Time: 728.0 hours.

CESSNA

Cessna: 310L; Cracked Wheel; ATA 3246

A mechanic writes, "Upon changing a tire on a Cleveland wheel assembly on this aircraft, it was discovered the wheel half holding the bearing race was cracking. It had cracked over 180 degrees around the opening, which eventually could have (*led*) to a serious accident."

Contact with the aircraft owner provided additional discussion and two excellent photos. Don Higgins writes, "Some tips for owners and mechanics: we noticed the first indication of this problem as uneven tire wear. When we had (our mechanics) turn the tire 180 degrees to even out the wear, they found the loose race—(prompting) them to look further. The wheel crack was (then) found, (having progressed) more than 180 degrees around the axle hole. My suggestion is anytime a wheel is off the axle, not only do the bearings need to be checked, but also the races. If the race is loose the tire needs to be pulled apart and checked to see if there is a crack causing the race to loosen up."

"Cessna 310's touch down in the 90 knot range. To have a wheel assembly fail (as this one was working up to) would render the aircraft uncontrollable and easily cause injury or death to the pilot/passengers." (*Provided wheel P/N's are 199-64 and/or 40-40A*.)





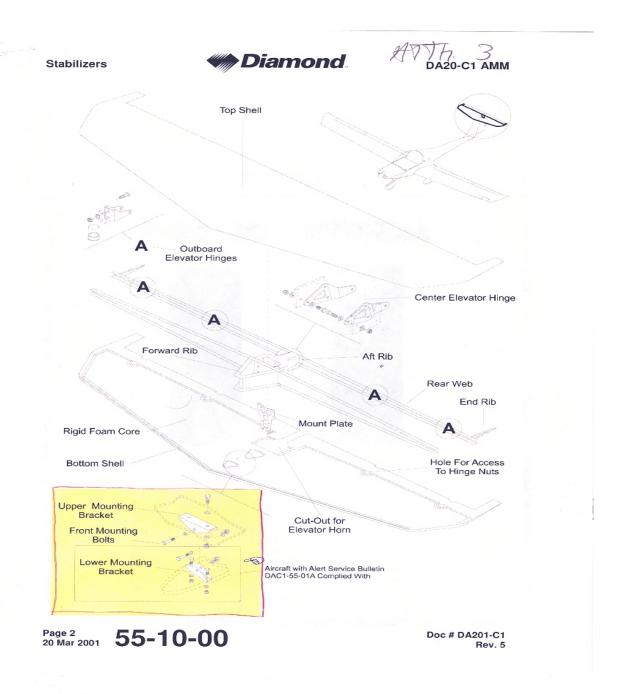
(Thanks Don, for the time and trouble. Your effort might well cause other owner/operators to pay careful attention for this defect—Ed.)

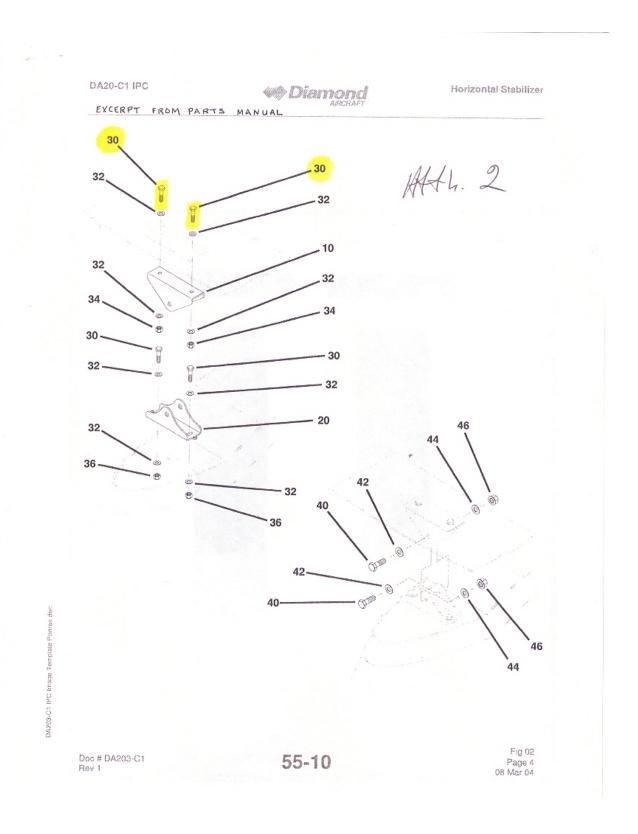
Part Total Time: 2,200.0 hours.

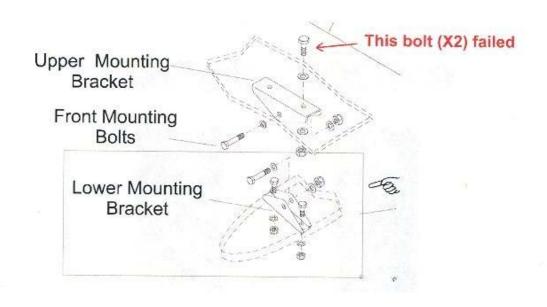
DIAMOND

Diamond: DA-20; Broken Horizontal Stabilizer Bolts; ATA 5551

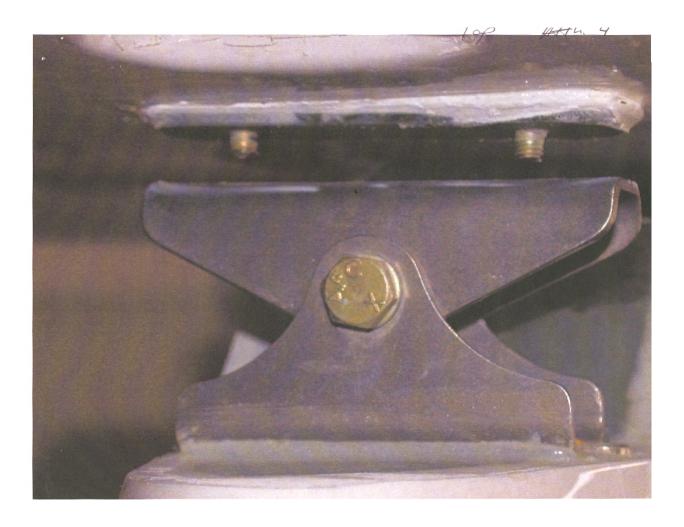
A technician for a flight training school writes, "(*This aircraft*) returned from flight with both horizontal stabilizer mount bolts broken (*P/N AN3-11A*)." "We removed the rudder and horizontal stabilizer to inspect the entire area. The aft mount plate and forward mount bracket were replaced, along with all new bolts, washers, and nuts. We also inspected our other (*DA-20*) aircraft and replaced all of their (*horizontal stabilizer mounting*) bolts. No other issues were found on our aircraft. Diamond Aircraft has been briefed and they are working with the NTSB (*National Transportation Safety Board*)."











(Thank you for the submission effort—it would be terrific if you would send me an article describing the results of the structural analysis—Ed.)

Part Total Time: 189.9 hours.

MOONEY

Mooney: M20J; Corroded Cowling Rivets; ATA 7110

A technician for a repair station writes, "The owner brought (his aircraft's) cowlings in for repair because the through-skin rivets were corroding and shearing off at the manufacturer's-head as exhibited by blistering paint at the rivet locations. Inspection revealed most of the AD (composition code 2117) rivets were severely corroded because the cowlings are constructed with a hybrid composite laminate of e-glass and carbon graphite plies. It is standard industry practice to use corrosion resistant fasteners such as Monel rivets through carbon graphite structure—it is unknown why aluminum rivets are used in this case." (No part numbers were provided with this submission.)

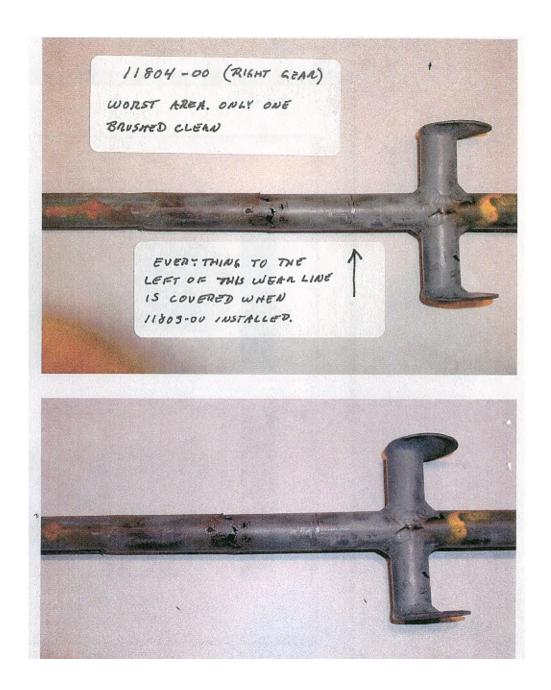
Part Total Time: (unknown).

PIPER

Piper: PA17; Corroded Strut Tubes; ATA 3230

A mechanic holding an IA (*inspection authorization*) says, "When changing shock cords on this aircraft, I noticed a discoloration of the inner strut tube (the longer tube—P/N 11804-00). I removed it from the outer tube (the shorter tube—P/N 11803-00). One of these inner strut tubes was corroded approximately 50 per cent (*around*) its circumference. The other inner strut had multiple corrosion holes through out (*the part*). Both outer short tubes showed oval elongation at the ends, indicating flexing/bending of this assembly during landings and takeoffs. I believe only the relatively new bungees kept this gear from final failure and (*the predictable*) ground loop.

"Installed bungee cords cover this (*corrosion*) area and they also (usually) have a cloth or aluminum fairing over them. Detection of this (*defect*) requires removal of the fairings at a minimum, and (*preferably*) removal of the bungees to clearly see the outer tube's circumference. To inspect the area that failed, it is necessary to disassemble the unit (P/N 11803-00) and view the inner and outer pieces separately. I would recommend whenever bungees are changed, the pieces should be removed from the aircraft, disassembled, and inspected for corrosion."





Part Total Time: 2,500.0 hours.

Piper: PA31-350; Failed Main Gear Bolt; ATA 3230

A mechanic writes, "Our aircraft had a 'gear unsafe light' and no 'left down and locked' indication light. The gear handle (also) would not return to neutral position. The aircraft landed with out incident. We believe the upper bolt retaining the main gear retraction arm broke due to fatigue. This allowed the main gear actuator to bind on the upper section of the drag leg, breaking the main gear actuator ball end out of the main shaft of the actuator.

"There is a Piper Service Letter Number 1092 (dated June 15, 2005) that requires the Main Gear Retraction Arms (P/N's 42042-000 or 42042-002) to be inspected (at 1500 hours) using a 10 power magnifying glass and liquid penetrant. Thereafter (this inspection is performed) at each 250 hours until the part reaches retirement at 6,000 hours.

"There is no requirement for the bolts (P/N AN6-17) that retain the main gear retraction arms to be inspected or replaced. These bolts are (*given a cursory*) inspection during retraction arm removal by a visual check for wear and corrosion. We believe these bolts need to also have a life limit or be magnaflux inspected. These bolts showed little wear. The bolt that failed appears it may have been cracked for sometime before it failed completely, but it was not detected during the last compliance with SL-1092." *The FAA Service Difficulty Reporting System (SDRS)* data base returns 14 similar entries for the base part number 42042 with ATA 3230.)

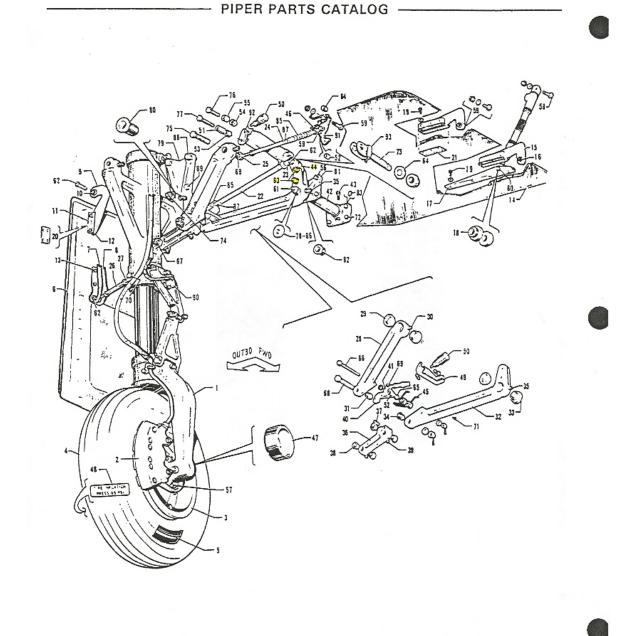


Figure 39. Main Landing Gear Installation

REVISED: MAY 1984 PA-31-350

Part Total Time: 24,842.9 hours.

RAYTHEON

Raytheon: 400A; Partial Nose Gear Up-lock Engagement; ATA 3230

A repair station technician states, "The flight crew reported the red (colored) landing gear handle warning light stayed illuminated after gear retraction. The gear was cycled several times—the handle warning light stayed illuminated. (Inspection) found the nose gear landing up-lock was not fully engaging. (We) adjusted the up-lock as required per the Beechjet 400 series maintenance manual: landing gear retract/extension checks were okay; no faults (observed). We have noted this (up-lock adjustment defect) on low-time Beechjet 400A series aircraft on several occasions, particularly during cold weather operation. Up-lock adjustment faults usually show up in the (maintenance manual) 32-00-00 functional low pressure/low flow tests."

Part Total Time: 243.4 hours.

HELICOPTERS

AEROSPATIALE

Aerospatiale: AS350B3; Broken Oil Filter Mount Bracket; ATA 7261

A repair station technician states, "During a 100 hour inspection, the mechanic reached to unscrew the oil filter and the bracket broke off in his hand (*P/N N325400A*). This part was replaced. The entire break looked fresh—even with 10 power magnification. It (*appears to be*) a pot-metal bracket."



Part Total Time: 480.6 hours.

POWERPLANTS

HONEYWELL

Honeywell: TPE331-14GR-801Z; Obstructed Fuel Filter; ATA 7310

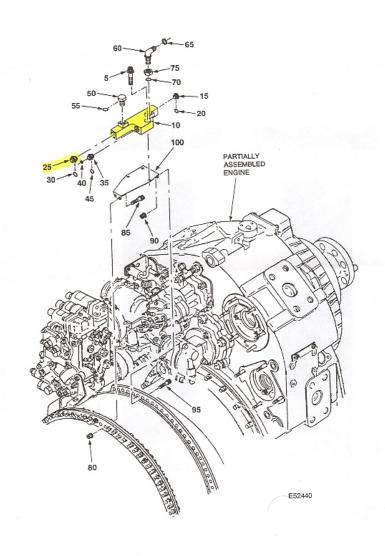
(The following discrepancy report references a Grumman/Marsh S2F3AT airplane.)

A lead quality control inspector for this repair station writes, "During this aircraft's 200 hour progressive inspection of the L/H engine fuel manifold (P/N 3105455-1), the in-line 40 micro fuel filter (P/N 337-541-9106) was removed to inspect for fuel limitation issues. The filter screen was found to be clogged and collapsed. This filter is not referenced in the Honeywell Illustrated Parts Catalog (73-20-40 page 0) and it is not required to be inspected and/or cleaned during routine or special inspections. This filter needs to be removed, inspected, and cleaned every 200 flight hours until a suitable solution to this issue is found by the engine manufacturer. A collapsed filter could lead to fuel limitation and performance issues—and improper troubleshooting by maintenance technicians.

"Honeywell technical representatives have been contacted and (*they*) are aware of this (*problem*). Since then several filters have been found clogged and collapsed on other, same type aircraft and engines. Other, similar engine installations could (*also*) have this manifold/filter installed."



ILLUSTRATED PARTS CATALOG GARRETT TPE331-14 (REPORT NO. 72-04-10)

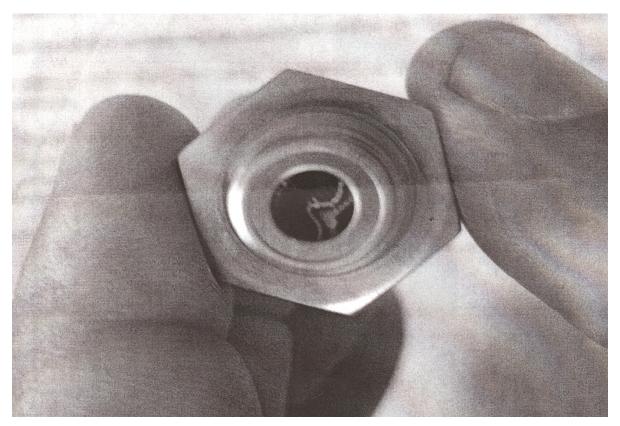


Flow Control Manifold Installation Figure 1

73-20-40 Page 0 Dec 24/98

GEG70-2A





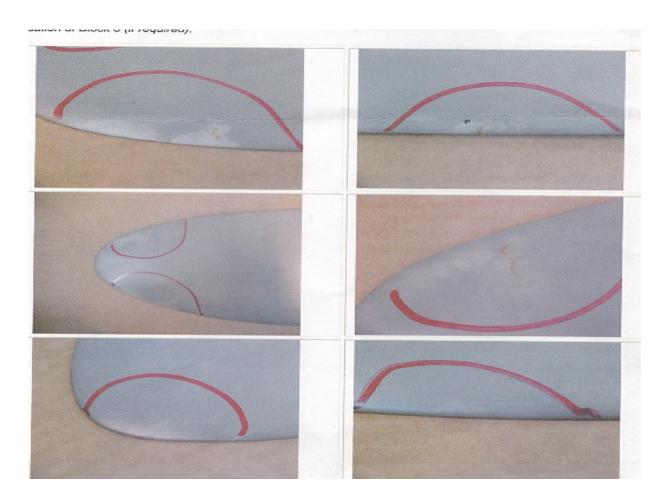
Part Total Time: 949.0 hours.

ACCESSORIES

HARTZELL PROPELLER

Hartzell Propeller: HC-C3YR-1RF; Unapproved Repair; ATA 6111

A repair station manager submits this defect report. He states, "Two of three propeller blades (on this unit) were previously repaired using an unapproved weld method in several locations on the blade airfoil. The blades have been scrapped—pending disposition instructions from Hartzell Propellers, Inc. The customer has been contacted for historical records." (P/N's for the propeller blades are F8483.)



Part Total Time: (unknown).

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, 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/isdr/.

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:

Pennie Thompson Service Difficulty Reporting System, Program Manager Aviation Data Systems Branch, AFS-620 P.O. Box 25082 Oklahoma City, OK 73125

Oklahoma City, OK 73125 Telephone: (405) 954-1150

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 processed 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.

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
2007FA0001076			CONT	DISTRIBUTOR GEAR	LOOSE
12/15/2007				10357586	MAGNETO
LOOSE ON SHAF	T AND WORN TO T	HE POINT OF FA		HIS IS THE SECOND	CRIMPED WASHER TIME THIS CONDITION
2007FA0001077			CONT	DISTRIBUTOR GEAR	LOOSE
12/15/2007				10357586	MAGNETO
SHAFT AND WOR		OF FALLING OFF	GEAR. THIS IS THE S		PED WASHER LOOSE ON CONDITION HAS BEEN
FCPR200700118				CARBURETOR	NO TEST
12/27/2007				10603511	ENGINE
CARBURETOR FA FURTHER EVALU		LE TEST, FOUND	TO BE ACCELERATO	OR CIRCUIT. PART I	RETURNED TO MFG FOR
FPFC20070113				CARBURETOR	NO TEST
12/26/2007				10603511	
	AILED THE STUMBI FURTHER EVALUA		DEFECTIVE ACCELE	ERATOR CIRCUIT. P	ART RETURNED TO
2008FA0000005				CABLE	WRONG PART
12/20/2007					ESCAPE SLIDE
INCORRECT PULL HANDLE CABLE (FIRING CABLE) DEPLOYMENT CABLE WAS SECURED WITH TAPE WHICH HINDERED DEPLOYMENT OF SLIDE. INCORRECT HANDLE AND CABLE ASSEMBLY FITTED. CABLE NOT THREADED TROUGH GROMMET DUE TO INCORRECT FIRING CABLE ASSEMBLY. CMM 25-61-10, STEPS 26 PAGE 50 WAS NOT FOLLOWED. 8130-3 TRACKING NR SBP-5473, SO NR 287413, PO NR R9246, DATED 10/23/2007, MO 0598171.					
FCPR200700125				CARBURETOR	NO TEST
12/27/2007				10603511	ENGINE
CARBURETOR FA		LE TEST, FOUND	TO BE ACCELERATO	OR CIRCUIT. PART I	RETURNED TO MFG FOR
2008FA0000026				CARBURETOR	FAILED
12/27/2007				10603511	ENGINE
	AILED THE STUMBI		TO BE ACCELERATO	OR CIRCUIT. PART I	RETURNED TO

ROTOL

BLADE

CRACKED

PRECISION FOR FURTHER EVALUATION. (K)

2008FA0000030

12/11/2007 6607132886 PROPELLER

BLADE RECEIVED FROM CUSTOMER WITH A CRACKED ROOT END OUTERSLEEVE. NO REPAIR AVAILABLE. PART HAS BEEN REMOVED FROM FURTHER SERVICE. (K)

2007FA0001111 CONT THRU BOLT BROKEN

12/17/2007 IO520C SA6419311075 CRANKCASE

INSTALLING ALL NEW SA641931-10.75 LOT NR K070059179, REV E THRU BOLTS IN ENGINE. AFTER TORQUE, WITHIN A FEW HOURS THE THRU BOLT SNAPPED, AT THE OIL RING GROOVE. THIS IS THE THIRD THRU BOLT THAT HAS SNAPPED AFTER TORQUE, AND SETTING. PROBABLE CAUSE, IS IMPROPER HEAT TREATING DURING OR AFTER PLATING. (K)

<u>DSC4331DL6292</u> GARRTT RETAINER SEAL CRACKED
1/10/2008 TPE33110R 31022811 ENGINE

NO GEARCASE NEGATIVE PRESSURE INDICATED DURING ENGINE TEST STAND FUNCTIONAL TESTING. TROUBLESHOOTING FOUND CRACKS IN SEAL RETAINER. SUBJECT RETAINER IS MADE WITH ALUMINUM. OLDER PN 693905-10 IS MADE WITH STEEL. SB 72-0224 AUTHORIZED INSTALLATION OF ALUMINUM RETAINER.

2007FA0001108 RROYCE BEARING DAMAGED

10/29/2007 RB211535E4 ENGINE

DAMAGE FOUND ON STRIP. HP AND IP SHAFTS SEIZED, HP/IP BEARING DAMAGED, ALSO LP VISIBLE COUPLINGS AND SEAL ARM. DESIGN ORGANIZATION AND UK CAA HAVE BEE NOTIFIED. THE ENGINE WAS BEING OPERATED BY AA AT TIME OF IN-FLIGHT SHUTDOWN. THE ENGINE WAS RECEIVED IN OCTOBER, 2007 FOR REPAIR. (MEMS D070108) (K)

2007FA0001107 RROYCE TURBINE BLADES CRACKED

11/29/2007 RB211TRENT89 ENGINE

DURING INSPECTION, A CRACKED FIRTREE POST HAS BEEN HIGHLIGHTED. THE DISC HAS BEEN SCRAPPED OFF AND THIS ISSUE HAS BEEN FORWARDED TO MFG. THE DISC HAS BEEN SENT TO LAB FOR ANALYSIS. REF NR: MEM5 D070133. (K)

<u>CA071024009</u> AEROSP PWA TIE BOLT BROKEN
10/13/2007 ATR42300 PW120 MS2125006038 MLG WHEEL

(CAN) MAINTENANCE CREWS NOTED A BROKEN MAIN WHEEL TIE BOLT. THE MAIN WHEEL ASSEMBLY AND BRAKE ASSEMBLY WERE REPLACED. (TC NR 20071024009)

<u>CA071031009</u> AIRBUS CFMINT WIRE HARNESS BROKEN 10/21/2007 A319114 CFM565A1 EH19565 CABIN

(CAN) AN APPARENT NOTICEABLE ELECTRICAL ODOR WAS DETECTED IN VICINITY OF SEATS 19 DEF BY IN FLIGHT CREW AND PASSENGER. ODOR PERSISTED FOR APPROX 5 MIN AND STOPPED AT THE TIME WHEN INFLT VIDEO SYSTEM WAS SHUTDOWN. FOUND BROKEN WIRE IN THE HARNESS THAT RUNS FROM UNDER SEATS 18 DEF TO UNDER THE FLOOR. BROKEN WIRE CAPPED AND STOWED INSIDE HARNESS CONNECTOR. THIS APPEARS TO BE AN INSTALLATION ERROR. THE WHITE WIRE APPEARS TO HAVE BEEN INSTALLED UNDER TOO MUCH TENSION, AND WAS PULLED FROM THE BACK OF THE CONNECTOR. (TC NR 20071031009)

<u>CA070316002</u> AIRTRC PWA LINE BROKEN
3/16/2007 AT802 PT6A67A BLEED AIR

(CAN) DURING ANNUAL INSPECTION, THE BLEED AIR LINE FOR THE CABIN HEATER WAS FOUND UNSECURED UNDER THE COCKPIT FLOOR. FURTHER INVESTIGATION FOUND THE MUFFLER FOR THE LINE BROKEN IN (2) PIECES AT THE FWD END. THE PARTS WERE REPLACED. THE REMAINING AIRCRAFT IN THE FLEET WERE INSPECTED. ONE ADDITIONAL AIRCRAFT WAS FOUND WITH THE SAME DEFECT. THE PARTS WERE REPLACED WITH SERVICEABLE UNITS. (TC# 20070316002)

CA070921004 AVIAT LYC SEAL LOOSE

9/21/2007 A1B O360A1P INDUCTION SYS

(CAN) REFERENCED TO SDR NR 20070917013 AFTER FINDING COWLING SEAL LODGED IN THE CARB VENTURI. THE PILOT/OWNER OF THIS AIRCRAFT WAS REQUESTED TO CHECK THE CONDITION OF THE COWLING SEAL, IT WAS FOUND TO BE LOOSE AND DETERIORATED AS WELL. ALL OF THE SEAL WAS REMOVED FROM THE COWLING. (TC NR 20070921004)

CA071029003 AYRES PWA CYLINDER CRACKED

10/19/2007 S2RHGT65 R1340AN1 399357 NR 7

(CAN) PILOT REPORTED FAILURE OF ENGINE TO MAINTAIN FULL POWER AT THE TAKEOFF SETTING. AIRCRAFT RETURNED TO THE RAMP. COMPRESSION TEST REVEALED CYLINDER NR 7, WAS LOW ON COMPRESSION AND LEAKING VIA A CRACK IN THE EXHAUST PORT AREA OF THE CYLINDER. THE OFFENDING CYLINDER WAS REMOVED AND AN OVERHAULED CYLINDER WAS INSTALLED. AIRCRAFT RETURNED TO FLIGHT STATUS. (TC NR 20071029003)

FAA010808001 AYRES PWA BREATHER TUBE COLLAPSED

1/8/2008 S2RT15NORMAL PT6* MILH60001 ENGINE

ENGINE BREATHER HOSE SWELLED ON INSIDE FROM THE ORIGINAL 1INCH DIAMETER TO .3750 INCH DIAMETER FROM HOT OIL FUMES. THRUSH ADDRESSED THE SAME PROBLEM ON THE MFG POWERED LINE. THIS IS NOT AN ISOLATED INCIDENT. THE CONDITION NOTED CAN ONLY BE FOUND AFTER HOSE REMOVAL. EXTERIOR OF HOSE LOOKS OK. SUGGEST A SCHEDULE OF REPLACEMENT EVERY 2000 HOURS.

<u>CA071108007</u> BAG LYC LINK UNSERVICEABLE

11/7/2007 BAE146200A ALF502R5 200915254 MLG

(CAN) IT HAS BEEN DISCOVERED DURING INSPECTION OF THE ABOVE MENTIONED PART THAT IT IS IN AN UNSERVICEABLE CONDITION. WHILE ON JACKS THE COMPONENT WAS INSPECTED AND MOVEMENT COULD BE FELT BETWEEN THE ROD ASSY AND EYE END. THE EYE END IS THREADED INTO THE ROD FOLLOWED BY A JAMB NUT AND SAFETY ASSY. NO MOVEMENT IS PERMITTED. THERE IS EVIDENCE OF CORROSION DEPOSITS LEACHING THROUGH THE SEALANT. THIS IS THE SUSPECTED CAUSE. (TC NR 20071108007)

 FAA010208003
 BBAVIA
 CONT
 VALVE
 DAMAGED

 12/19/2007
 7EC
 O200A
 SAS6250
 OIL TANK

INSTALLED OIL QUICK DRAIN VALVE PN SG250 ON NEW AIRCRAFT/ ENGINE. AIRCRAFT FLEW APPROX 1 HOUR. OIL LEAK NOTICED FROM DRAIN VALVE. REMOVED VALVE TO FIND VALVE SNAP RING IN OIL DRAINED FROM ENGINE AND VALVE O-RING DAMAGED. ONE CUT THROUGH AND THE OTHER NICKED. INVESTIGATION REVEALED OIL DRAIN VALVE CONTACTED THE EDGE OF THE OIL PICK-UP TUBE CAUSEING DAMAGE. SUBJECT VALVE IS NOT COMPATABLE WITH THE O200A66B ENGINE. (K)

 CA061120006
 BBAVIA
 LYC
 RUDDER PEDAL
 CRACKED

 11/20/2006
 7GCBC
 O320A2D
 41621L
 COCKPIT

(CAN) DURING REPLACEMENT OF THE FUEL SHUTOFF VALVE THE LT FRONT RUDDER/BRAKE PEDAL WAS FOUND CRACKED BETWEEN THE BRAKE PEDAL UPRIGHT AND THE OB PEDAL HINGE. THE DEFECT APPEARS TO BE CAUSED BY BRAKING FORCES APPLIED BY THE FLIGHT INSTRUCTOR IN THE REAR SEAT, THE LINK ROD AND BELLCRANK ON THE FRONT PEDAL TWIST THE PEDAL TO ACTUATE THE MASTER CYLINDERS, LOCATED FORWARD OF THE FRONT PEDALS. THE TWISTING BENDS AND CRACKS THE PEDAL. THIS IS THE OLD-STYLE PEDAL. THE NEWER STYLE IS PLATE-SHAPED RATHER THAN TEE-SHAPED AND SHOULD BE MORE RESISTANT TO THE TWISTING FORCES. (TC NR 20061120006)

 CA071214006
 BEECH
 PWA
 LINE
 CRACKED

 12/12/2007
 100BEECH
 PT6A28
 3011847
 ENGINE

(CAN) AFTER DEPARTURE DURING CLIMB, THE PILOT NOTICED SLIGHT POWER LOSS ON THE LT ENGINE WHICH SLOWLY DECAYED UNTIL TORQUE WAS AT 100LBS AT WHICH TIME THE PROP WAS FEATHERED. THE CREW ELECTED TO LEAVE THE ENGINE RUNNING AS ALL OTHER INDICATIONS WERE GREEN AND THEY WANTED THE GENERATOR RUNNING AS ICING CONDITIONS WERE FORECAST. UPON INSPECTION BY MAINTENANCE, IT WAS DISCOVERED THE PY LINE FROM THE PROP GOVERNOR TO THE FCU WAS CRACKED. THE LINE WAS REPLACED

GROUND RUNS CARRIED			<u> </u>	(TO ND 00074044000)
) ()	AIRLRAFI WAS F	4 F T T I R M F D T L O S F R M C F	· ((N R / / / / / / / / /

TAS07003	BEECH	CAP	CRACKED

11/16/2007 1900 1FA100433 MLG ACTUATOR

MLG ACTUATOR WAS RECEIVED DUE TO INDICATIONS FOUND IN THE END CAP DURING ULTRASONIC TESTING. ACTUATOR WENT THROUGH A PRELIMINARY INSPECTION AND A COMPLETE FUNCTIONAL TEST WITH NO EXTERNAL EVIDENCE OF LEAKING OR CRACKING. AFTER DISASSEMBLY, A CRACK IN THE INTERNAL RADIUS OF THE END CAP WAS CONFIRMED BY A FLUORESCENT PENETRANT INSPECTION.

CA070907004	BEECH	PWA	FUEL LINE	CHAFED
071070007001			. 022 212	0

9/6/2007 1900C PT6A65B 3040637 **ENGINE BAY**

(CAN) FUEL LINE ASSY WAS FOUND TO HAVE BEEN CHAFED BY THE STARTER GENERATOR VENT HOSE. CAUSING A VERY SMALL PIN HOLE IN THE RIGID STAINLESS FUEL LINE, RESULTING IN A FUEL LEAK. (TC NR 20070907004)

DOWNLOCK **BEECH PWA** CA071102006

SWITCH

INOPERATIVE

10/31/2007 1900C 1CH25 MLG PT6A65B

(CAN) UNABLE TO GET NLG (GREEN LIGHT) ON APPROACH. RECYCLED 3 TIMES AND GREEN LIGHT OBTAINED. NLG DRAG LINK DOWN AND LOCK SWITCH REPLACED. GEAR SWINGS COMPLETED. NO FURTHER FAULTS AT THIS TIME. (TC NR 20071102006)

CA070528009 **BEECH PWA** LINE CHAFED

5/27/2007 1900C PT6A65B 3032791 LT ENG FUEL

(CAN) FUEL FLOW TRANSMITTER LINE P/N 3032791 FOUND CHAFED. NEW PART ON ORDER. (TC NR 20070528009)

CA071105001 BEECH **PWA ENGINE** MALFUNCTIONED

11/1/2007 1900D PT6A67D

(CAN) CREW OBSERVED LOW OIL PRESSURE WARNING, FOLLOWED BY SMOKE IN THE CABIN. ELECTION WAS MADE TO PERFORM AN INFLIGHT ENGINE SHUTDOWN. MFG WILL INVESTIGATE THE EVENT AND ADVISE OF ROOT CAUSE ONCE ESTABLISHED. FULL ENGINE SN GAS GENERATOR MODULE: 114283 POWER SECTION MODULE: 114135 (TC NR 20071105001)

BEECH PWA CABLE SHEARED CA071023003 1900D PT6A67D 1013800005 LT FLAP DRIVE 10/15/2007

(CAN) ON APPROACH, PILOTS SELECTED APPROACH FLAP. FLAPS STOPPED MOVING JUST PRIOR TO 17 DEGREES APPROACH FLAP POSITION. THE FLAP ASYMMETRY SWITCH WAS ACTIVATED. UPON INSPECTION THE LT OB FLAP DRIVE CABLE WAS CEASED. THE FLAP DRIVE CABLE WAS REMOVED AND REPLACED WITH A SERVICEABLE UNIT. FURTHER INSPECTION OF THE CABLE REVEALED IT WAS SHEARED AT APPROXIMATELY 85 INCHES OB OF FLAP MOTOR AND TRANSMISSION ASSEMBLY. EVIDENCE OF CORROSION AND MOISTURE WERE FOUND IN THE FLAP DRIVE SHEATHING AND CABLE WHICH LIKELY CONTRIBUTED TO THE CABLE FAILURE. (TC NR 20071023003)

CA071010008 **BEECH PWA ACTUATOR** SEIZED

10/3/2007 1900D PT6A67D 1295210325 LT AILERON TRIM

(CAN) DURING A 50 HOUR ROUTINE INSPECTION MAINTENANCE PERSONEL DISCOVERED THAT THE AILERON TRIM WAS NOT MOVING. UPON INSPECTION OF THE SYSTEM IT WAS DISCOVERED THAT THE AILERON TRIM ACTUATOR WAS SEIZED. THE ACTUATOR WAS REMOVED AND DISSASSEMBLED. THERE WAS INTERNAL RUST IN THE TRIM ACTUATOR HOUSING AND ONE BEARING WAS SEIZED. (TC NR 20071010008)

WSA12262007 **BEECH BOLT MISMANUFACTURED**

12/26/2007 200BEECH 998100611 MLG

HAVE ORDERED FROM MFG THE LANDING GEAR DRAG LEG BOLTS TWICE AND HAVE RECEIVED (2) DEFECTIVE BOLTS EACH TIME. THE COTTER PIN HOLE WAS MISDRILLED AND WOULD COULD NOT GET THE HOLES TO LINE UP WITH THE NUT CASTELLATION. (2) OF THE BAD BOLTS WERE DATE TAGGED 12/2/2006. THE ACTUAL BOLT

MANUFACTURER IS UNKNOWN ALTHOUGH THEY WERE SOURCED FROM AC MFG. IT IS BELIEVED THAT AC MFG HAS PULLED THESE FROM THEIR INVENTORY AFTER OUR PROBLEM.

CA060804009	BEECH	PWA	DOUBLER	DAMAGED
8/2/2006	200BEECH	PT642A	50420066281	FUSELAGE

(CAN) DURING PHASE 2 INSPECTION AND WHILE PERFORMING SPECIAL INSPECTION ON NR 25 (INSPECTION OF UPPER AND LOWER WINDSHIELD CORNERS), DAMAGE TO THE DOUBLER BELOW THE WINDSCREEN WAS FOUND. THE PN OF THE DOUBLER IS 50-420066-281 LOCATED BETWEEN FS 94.00AND FS 100.50. THE DAMAGE WAS CAUSED FROM THE ITT HARNESSES CHAFFING INTO THE DOUBLER. THE DAMAGE IS LOCATED BETWEEN 1.5 TO 5.5 LT OF THE WINDSCREEN CENTER POST, THE DOUBLER THICKNESS IS .100, THE CHAFFING DAMAGE RANGES FROM .010 TO .069 IN DEPTH. THE DAMAGED AREA HAS BEEN MAPPED, AND THE INFORMATION SENT TO MFG REPAIR DESIGN OFFICE FOR ASSESSMENT. A FOLLOW UP REPORT SHALL BE SUBMITTED. (TC NR 20060804009)

CA070504008	BEECH	PWA	BEECH	PUMP	MALFUNCTIONED
5/3/2007	200BEECH	PT6A41		1013640867	FUEL TRANSFER

(CAN) RT FUEL PUMP RUNNING EVEN AFTER MASTER SWITCH OFF. (TC NR 20070504008)

<u>CA071029011</u>
BEECH PWA CONTROL CABLE CHAFED

10/27/2007 200BEECH PT6A41 AILERONS

(CAN) GRINDING NOISE UNDER PILOT FLOOR WHEN AILERONS ARE MOVED. CONTROL CABLE FOUND CHAFING ON STEEL BRAIDED NITROGEN LINE. APPROX 3 INCH DEFLECTION OF CONTROL CABLE CAUSED, DUE TO INCORRECT ROUTING OF NITROGEN LINE. NITROGEN PRESSURE LINE REROUTED. AILERON CABLE HAS 1 BROKEN STRAND WITHIN ACCEPTABLE LIMITS IAW AMM CH20-04-00-201 (TC NR 20071029011).

CA070528011	BEECH	PWA	WINDSHIELD	CRACKED
5/28/2007	200BEECH	PT6A41	PPG10138402522	LT COCKPIT

(CAN) CO-PILOTS WINDSCREEN CRACKED UNDER PRESSURIZED CONDITION. AIRCRAFT RETURNED TO BASE FOR WINSHEILD REPLACEMENT. UNABLE TO INDICATE CORRECT MFG. (NOT IN LIST) (TC NR 20070528011)

<u>CA071107002</u> BEECH PWA BLADES FAILED

11/5/2007 200BEECH PT6A41 COMPRESSOR

(CAN) PILOTS OBSERVED SPARKS COMING OUT RT ENGINE EXHAUST ON LANDING. MAINTENANCE INSPECTION FOUND COMPRESSOR BLADES LAYING IN THE ENGINE BAY. (TC NR 20071107002)

<u>2008FA0000064</u> BEECH PWA STARTER GEN FAILED 11/19/2007 300BEECH PT6A60A 23085001

THE NR 1 BEARING FAILED RESULTING IN A CATASTROPHIC FAILURE AND AN IN FLIGHT SHUTDOWN. THE ENGINE WAS REMOVED AND SENT FOR REPAIR. DURING THE FAILURE INVESTIGATION, ELECTRICAL ARCING WAS FOUND ON THE NR 1 BEARING, INPUT SHAFT, AND STARTER/GENERATOR DRIVE GEAR. SD ADVISORY NR AV-2007-05 ISSUED THAT STATES ACCUMULATION OF BRUSH DUST CAN CAUSE STARTER GENERATOR ARMATURE LEAKAGE. OUR RESEARCH DOES NOT SHOW ANY PREVENTATIVE MAINTENANCE ACTIONS THAT MAY BE PERFORMED TO THE STARTER GENERATOR TO CHECK FOR ELECTRICAL DISCHARGE. (K)

 102N07110026
 BEECH
 LYC
 CABLE
 CHAFED

 10/15/2007
 56TC
 TIO541*
 OXYGEN SYSTEM

ISSUE WITH THE FIXED OXYGEN SYSTEM DISPLAY FOR STC SA01078SE WHERE THE DISPLAY (NOT IN CONTACT WITH OXYGEN) RIBBON CABLE CHAFED AND CREATED A SHORT TO GROUND WHERE THE RIBBON CABLE SMOKED BUT DID NOT FAIL, THE INDICATOR LIGHT OF THE SYSTEM, NOR FAILED TO OPERATE. ISSUE WAS NOTED DURING ANNUAL INSPECTION AND NOT REPORTED AT THE TIME OF INCIDENT. MFG HAS BEEN IN CONTACT WITH THE ACO AND IS ISSUING A SERVICE BULLETIN.

RC2R130L	BEECH	CONT		PILOT VALVE	BROKEN
1/23/2008	58	IO520CB	B210800REVJ	5221220F	GOVERNOR
PROPELLER WEN	NT TO FEATHER IN	FLIGHT AND WA	S UNABLE TO UNFE	ATHER. AFTER REC	EIVING THE GOVERNOR

FOR INSPECTION IT WAS DISCOVERED THAT THE BOTTOM END OF THE PILOT VALVE (P/N 5221-220) HAD BROKEN OFF AND WAS MISSING. IT WAS PRESUMED THAT IT EXITED THE BOTTOM END OF THE DRIVE GEAR AND ENTERED THE ENGINE SUMP. THE OPERATOR WAS NOTIFIED AND THE MISSING PIECE WAS RETRIEVED.

2007FA0001088	BEECH	CONT	BEECH	RIB	CRACKED
11/9/2007	95B55	IO520E		3516505084	T/E FLAP
AT ANNUAL INSP	ECTION FOUND C	RACK ON FLAP R	IB. (FLAP ROD ATTA	CH POINT) BOTH LT	AND RT FLAPS. (K)
CA071024010	BEECH	PWA		TORQUE KNEE	CRACKED

10/21/2007 A100 PT6A28 50810323 LANDING GEAR

(CAN) AFTER LANDING, UPON DECELERATING THROUGH 60 KIAS THE AIRCRAFT BEGAN TO VIOLENTLY SHAKE, SHUDDER AND APPEAR TO SKIP WHILE VEERING TOWARD THE LT SIDE OF THE RUNWAY. CONTROL WAS

SHUDDER AND APPEAR TO SKIP WHILE VEERING TOWARD THE LT SIDE OF THE RUNWAY. CONTROL WAS MAINTAINED AND THE AIRCRAFT WAS BROUGHT TO A SLOW TAXI AT WHICH TIME THE CONDITIONS CEASED. UPON EXAMINATION OF THE AIRCRAFT, IT WAS DISCOVERED THAT THE LT MAIN GEAR LOWER TORQUE KNEE HAD FAILED. THE TORQUE KNEE WAS REPLACED AND THE AIRCRAFT RETURNED TO SERVICE. THIS PART,4 YEARS SINCE INSPECTION, DUE EVERY 8000 LANDING OR 6 YEARS. (TC NR 20071024010)

CA071022011	BEECH	PWA	ENGINE	MAKING METAL
10/19/2007	A100	PT6A28		RIGHT

(CAN) RT ENGINE CHIP DETECTOR LIGHT CAME ON IN FLIGHT SO WE SHUTDOWN THE RT ENGINE. ENGINE BEING REMOVED AND SENT TO ENGINE O/H FACILITY FOR REPAIR. LOANER ENGINE TO BE INSTALLED. (TC NR 20071022011)

CA071030002	BEECH	PWA	FLAP TRACK	CRACKED
10/25/2007	A100	PT6A28	501600183	TE FLAPS

(CAN) ON MAINTENANCE WALKAROUND THE RT OB FLAP HAD MORE PLAY THAN USUAL. FLAP WAS REMOVE AND THE OB FLAP TRACK WAS FOUND TO BE CRACKED ON THE REAR TIP. TRACK REPLACED AND AIRCRAFT RETURNED TO SERVICE. (TC NR 20071030002)

2007FA0001086	BEECH	CONT	NOSE RIB	CRACKED
11/9/2007	A36	IO550B	3516505084	T/E FLAP
AT ANNUAL INODERTION FOUND BOTHLET AND DE ELAD ATTACH BOINT DIDO ORACICED. (1/)				

AT ANNUAL INSPECTION FOUND BOTH LT AND RT FLAP ATTACH POINT RIBS CRACKED. (K)

2008FA0000052	BEECH	LYC	ВООТ	SEPARATED	
1/16/2008	A60	TIO541*		PROPELLER	

A PROPELLER CAME IN FOR REPAIRS WHICH NECESSITATED THE INSTALLATION OF NEW DEICE BOOTS ON ALL 3 BLADES. THE PROP WAS LATER INSTALLED BY THE OWNER'S MECHANIC. 1 OF THE 3 BOOTS CAME OFF RESULTING IN A DENT ON THE AIRCRAFT FUSELAGE, REPORTED AFTER ABOUT 7 HOURS OF FLYING. QUESTIONING OF OUR TECH THAT INSTALLED THE BOOTS REVEALED NO DEVIATIONS IN PROCEDURES OCCURRED DURING THE INSTALLATION. IT WAS DETERMINED THAT THE GLUE USED FOR THE INSTALLATION WAS RECEIVED BY OUR FACILITY ON 8/23/07 WITH AN EXPIRATION DATE OF 9/30/08. MM 202A LISTS THE SHELF LIFE OF 1300L ADHESIVE AS 15 MONTHS. AS A PRECAUTION, THE ADHESIVE WAS REMOVED FROM USE EVEN THOUGH NO DISCREPANT CONDITION COULD BE FOUND. FACILITY VISITED LOCATION OF AC AND INSTALLED A NEW DEICE BOOT ON PROP. IT WAS OBSERVED THAT THE ADHESIVE ADHERED TO THE AREA OF THE BLADE WHERE BOOT CAME OFF, THE ADHESIVE DID NOT SEPARATE FROM THE BLADE. THE BOOT WAS NOT RECOVERED AND COULD NOT BE INSPECTED. THE BOOTS ON THIS PROP ARE LONG STRAP BOOTS. THE BOOT STRAP, ON THIS TYPE OF INSTALLATION, MUST BE POSITIONED WITHIN THE SPINNER SUCH THAT THE CENTRIFUGAL FORCES DURING OPERATION DO NOT PUSH THE STRAP THROUGH THE GAP BETWEEN THE SPINNER CUT OUT AND THE PROP BLADE. SHOULD THE STRAP BE IMPROPERLY POSITIONED DURING SPINNER INSTALLATION, IT IS POSSIBLE FOR THE STRAP TO COME OUT OF THIS GAP, WHICH RESULTS IN SEPARATION OF THE BOOT FROM THE BLADE. WHEN PROPERLY POSITIONED THE STRAP REMAINS CONTAINED WITHIN THE SPINNER. SIMILARLY, SHOULD THE PROP BE RUN UP ON THE GROUND WITHOUT THE SPINNER INSTALLED, THE BOOTS CAN SEPARATE FROM THE BLADE. SINCE THE 2 REMAINING BOOTS ARE ATTACHED TIGHTLY, IT IS LIKELY THAT THE BOOT STRAP WAS NOT POSITIONED PROPERLY DURING SPINNER INSTALLATION WHICH RESULTED IN THE BOOT SEPARATING FROM THE BLADE. (K)

<u>CA071011001</u> BEECH GARRTT MOTOR UNSERVICEABLE 9/14/2007 B100 TPE3316252B 1153800025 LANDING GEAR

(CAN) IN DESCENT FOR LANDING, THERE WERE ONLY 2 GREEN GEAR DOWN INDICATION LIGHTS INSTEAD OF THREE. AFTER RECYCLING THE GEAR, THE PROBLEM PERSISTED. THE EMERGENCY LANDING GEAR SYSTEM WAS DEPLOYED AND THE 3 GREEN LIGHTS WERE ON AS REQUIRED. AIRCRAFT LANDED WITHOUT INCIDENT. FURTHER INSPECTION REVEALED THE LANDING GEAR MOTOR WAS UNSERVICEABLE. (TC NR 20071011001)

<u>CA070827006</u> BEECH GARRTT SAFT CONNECTOR MELTED 7/27/2007 B100 TPE3316252B MS33491 BATTERY

(CAN) WHILE IN FORMATION FLIGHT, THE LT (BATTERY CHARGE) LIGHT CAME ON AND STAYED ON FOR 15 MINUTES AND THEN EXTINGUISHED. AFTER LANDING AND ENGINES SHUTDOWN, THERE WAS NO MORE POWER COMING FROM THE BATTERIES. AN INSPECTION WAS CARRIED OUT AND THE LT BATTERY WAS DISCOVERED (TOASTED) INCLUDING THE BATTERY COMPARTMENT. THE CAUSE WAS DETERMINED TO BE A BAD CONTACT ON THE NEGATIVE POLE. (TC NR 20070827006)

<u>CA071029005</u> BEECH PWA CLEVELAND BOLT MISSING 10/27/2007 B200 PT642A 10310300 TORQUE PLATE

(CAN) DURING MAINTENANCE ON AIRCRAFT, NR 4 MAIN TIRE WORN TO LIMITS. DURING NR 4 MAIN WHEEL AND TIRE CHANGE, FOUND 3 OUT OF 6 BRAKE TORQUE PLATE ATTACH BOLTS MISSING AND REMAINING ATTACH BOLTS LOOSE. A LOOSE BOLT WAS FOUND LODGED IN WHEEL BETWEEN A WHEEL HALF TIE BOLT HEAD AND THE BRAKE DISC. 3 NEW BOLTS WERE INSTALLED AND ALL 6 BOLTS WERE INSTALLED AND TORQUED TO MFG SPECS. OTHER 3 BRAKE INSTALLATIONS AND 4 BRAKE INSTALLATIONS VISUALLY VERIFIED NO BOLTS MISSING. HAVE CONTACTED MFG TO PURSUE THE USE OF DRILLED AND LOCKWIRED BOLTS. (TC NR 20071029005)

<u>CA071025006</u> BEECH PWA ENGINE MAKING METAL

10/11/2007 B200 PT642A

(CAN) 15 MINUTES INTO FLIGHT, THE ENGINE CEASED OPERATION AND SIMUTANEOUSLY ILLUMINATED THE CHIP DETECTOR INDICATOR. THE CHIP DETECTOR CIRCUIT BREAKER WAS THEN REPORTED TO HAVE 'POPPED'. AIRCRAFT RETURNED TO POINT OF DEPARTURE. POST FLIGHT INSPECTION REVEALED SUBSTANTIAL INTERNAL ENGINE DISTRESS. THE CHIP DETECTOR HAD 'POPPED' ON THE PREVIOUS FLIGHT AND HAD BEEN RESET. MFG WILL INVESTIGATE THE EVENT AND ADVISE OF ROOT CAUSE ONCE ESTABLISHED.

<u>CA071025007</u> BEECH PWA BEECH ROLLER SEIZED

10/24/2007 B200 PT642A RT TE FLAP

(CAN) ON APPROACH WHEN FLAPS WERE SELECTED DOWN, THE RT WING BECAME HEAVY. AILERON CONTROL WAS REDUCED AND FELT DIFFERENT THAN NORMAL. THE PILOT LANDED WITHOUT FURTHER INCIDENT AND SELECTED FLAPS UP. THE FLAPS DID NOT MOVE WHEN SELECTED UP, SPLIT-FLAP SAFETY MECHANISM WAS ACTUATED. THE RT OB FLAP, IB AFT ROLLER APPEARS TO HAVE SEIZED AND TORE OUT OF THE FLAP BRACKET. WHEN THE AMO DRILLED APART THE FLAP FOR REPAIR, THEY NOTED THAT THE BRACKET WAS WORN THIN FROM THE ROLLER. THIS, WOULD ONLY BE VISIBLE ONCE THE ROLLER WAS REMOVED. THE MM DOES NOT SPECIFICALLY REQUIRE REMOVAL OF FLAPS OR ROLLERS FOR INSPECTION OR LUBRICATION. A REGULAR REMOVAL OF ALL FLAPS TO INSPECT CONDITION OF ROLLERS AND FLAP BRACKETS WOULD LIKELY HAVE CAUGHT THIS PROBLEM BEFORE IT FAILED. (TC NR 20071025007)

<u>CA071106007</u> BEECH PWA INDICATOR LEAKING
11/6/2007 B200 PT642A 9536830 HYD SYSTEM

(CAN) WE HAD A PRESSURE GAUGE THAT HAD A SMALL LEAK SO WE PURCHASED A NEW GAUGE FROM MFG AND INSTALLED IT ON THE AIRCRAFT. WHEN SYSTEM WAS BROUGHT UP TO THE PROPER PRESSURE THE NEW GAUGE LEAKED WORSE THAN THE ORIGINAL GAUGE. THE GAUGE WAS SENT BACK TO BEECH AND WE ARE WAITING FOR A REPLACEMENT. THIS IS A QUALITY CONTROL ISSUE. (TC NR 20071106007)

<u>CA071024008</u> BEECH PWA ENGINE FAILED

10/4/2007 B200 PT642A

(CAN) AT FL260, ITT INCREASED TO NEAR MAXIMUM. POWER WAS REDUCED TO FLIGHT IDLE HOWEVER ITT

REMAINED HIGH. HEAVY SMOKE WAS OBSERVED COMING FROM EXHAUST. CREW ELECTED TO SHUTDOWN ENGINE AND PERFORM SINGLE ENGINE LANDING. POST FLIGHT INSPECTION REVEALED OIL DRIPPING FROM EXHAUST AND SEIZED PROPELLER SHAFT. MFG WILL INVESTIGATE THE EVENT AND ADVISE OF ROOT CAUSE ONCE ESTABLISHED.

CA070826000	BEECH	PWA	MICHEL	TUBE	DETACHED

8/25/2007 B200 PT642A TIRE

(CAN) ON TAKEOFF THE CREW NOTICED A STRONG VIBRATION. THEY DECIDED TO CANCEL THE FLIGHT AND LAND BACK AT AIRPORT. FOUND THE NOSE TIRE BALANCE PATCH (FACTORY INSTALLED) HAD COME DISCONNECTED AND WAS TUMBLING LOOSE INSIDE THE TIRE. (TC NR 20070826000)

T4OR4765001	BEECH	PWA	LEVER	TWISTED
12/21/2007	B200	PT6A42	5043004315	CABIN DOOR

WHILE TRYING TO RIG THE CABIN DOOR UPPER LATCH HOOKS FOR PROPER OVERCENTER, IT WAS FOUND PROPER OVERCENTER COULD NOT BE OBTAINED WITHOUT THE ADJUSTING ROD END WITNESS HOLES BEING EXPOSED. CLOSER EXAMINATIONS SHOWED THE FWD AND AFT DOOR ACTUATION LEVER ASSEMBLIES, PN 50-430043-15 (FWD) AND 50-430043-17 (AFT) WERE TWISTED, CHANGING THE RELATIVE ANGLE BETWEEN THE LATCH HOOK AND ROD END ATTACH POINT. NORMALLY THE ANGLES BETWEEN THE LATCH HOOK AND LATCH ROD ATTACH POINT IS ABOUT 90 DEGREES. THE PARTS IN THIS DOOR WERE SOMEWHAT LESS THAT 90 DEGREES, CLOSER TO 75 DEGREES DUE TO THE TWIST. WITH THIS CONDITION, THE PUSHROD FOR THE UPPER HOOK OVERCENTER ADJUSTMENT WOULD NEED TO BE EXTENDED FARTHER THAN DESIGNED, EXPOSING THE ROD END WITNESS HOLES IN THE PUSHRODS.

CA071015005	BEECH	PWA	IGNITION LEAD	DAMAGED
10/12/2007	B300	PT6A60A	CH5339906	ENGINE

(CAN) WHILE CARRYING OUT A FUEL NOZZLE REPLACEMENT, FOUND A DAMAGED INSULATOR ON THE IGNITER END OF THE IGNITION LEAD. REPLACED IGNITION LEAD AND TESTED SERVICEABLE. (TC NR 20071015005)

CA071011010	BEECH	PWA	ACTUATOR	BYPASSING
5/14/2007	B300	PT6A60A	11013880141	MLG

(CAN) WHILE CONDUCTING A LANDING, THE PILOTS NOTED THAT WHILE SELECTING THE GEAR DOWN THE GEAR MOTOR RAN LONGER THAN NORMAL. THEY THEN NOTED THAT THE RT GEAR INDICATION LIGHT HAD FAILED TO SHOW A DOWN AND LOCKED POSITION. THEY TRIED AN EMERGENCY GEAR EXTENSION WITH NO LUCK. THEY FLEW THE AC TO A BIGGER CENTER WHERE EMERGENCY SERVICES WHERE AVAILABLE. CONDUCTED A FLYBY AND THE GEAR WAS VERIFIED TO BE IN THE DOWN AND LOCKED POSITION. THE AIRCRAFT LANDED WITH NO INCIDENT. MAINTENANCE CREW FLEW NORTH TO INVESTIGATE. DURING THIS TIME IT WAS NOTED BY THE ENGINEERS THAT THE GEAR ACTUATOR WAS BY-PASSING INTERNALLY, FAILING TO BUILD SUFFICIENT PRESSURE TO COMPLETELY LOCK THE GEAR SYSTEM. THE AIRCRAFT WAS FLOWN BACK SOUTH ON A FLIGHT PERMIT AND ACTUTOR REMOVED AND SENT TO MFG FOR FURTHER INVESTIGATION. (TC NR 20071011010)

CA071116002	BEECH	PWA	REGULATOR VALVE	INOPERATIVE
11/15/2007	B300	PT6A60A	1013800273	PNEUMATIC PRESS

(CAN) WHILE IN CRUISE FLIGHT AT FL230 THE FLIGHT CREW OBSERVED THE PNEUMATIC PRESSURE GUAGE RAPIDLY FLUCTUATING BETWEEN 18 AND 23 PSI. THERE WAS AN ASSOCIATED CHATTERING HEARD IN THE AIRFRAME, IN CONJUNCTION WITH THE FLUCTUATING INDICATOR. FLIGHT CREW DECIDED TO RETURN TO BASE AND PNEUMATIC INDICATIONS RETURNED TO NORMAL DESCENDING THROUGH 15,000 FEET AND REMAINED THAT WAY TO LANDING. MAINTENANCE REPLACED PNEUMATIC PRESSURE VALVE/REGULATOR PN 101-380027-3

(PN 1H75-12). (TC NR 20071116002)

2007FA0001084	BEECH	LYC	NOSE RIB	CRACKED
11/9/2007	B95	O360A1A	3516505084	T/E FLAP

IN-FLIGHT, PILOT LOWERED FLAPS AND AIRCRAFT STARTED TO ROLL TO THE RT. PILOT NOTICED RT FLAP WAS RETRACTED, HE THEN RETRACTED FLAP HANDLE. AIRCRAFT LANDED SAFELY, WITHOUT INCIDENT. UPON INSPECTION, FOUND RT FLAP ROD ATTACH BRACKET BROKEN AND FLAP NOSE RIB NUTPLATE FLANGE TORN.

INSPECTED LT SIDE AND FOUND NOSE RIB FLANGE AND WEB CRACKED. (K)

2007FA0001085

BEECH

CONT

CA071031008	BEECH	PWA	BEECH	BEARING	FAILED
10/30/2007	B99	PT6A28		950476	MAIN WHEEL

(CAN) ON TAKEOFF THE CREW NOTED THAT THEY FELT A SLIGHT VIBRATION, BUT FELT THAT IT WAS LIKELY THE RAISED RUNWAY LIGHTS. AFTER TAKEOFF THEY WERE ADVISED THAT THEY HAD LOST A TIRE. THE AIRCRAFT WAS LANDED WITHOUT INCIDENT. MAINTENANCE FOUND THAT ONE OR BOTH WHEEL BEARINGS HAD FAILED. THIS ALLOWED THE WHEEL TO DEPART FROM THE AXLE. INSPECTION SHOWED NO DAMAGE TO ANY OTHER PART OF THE AIRCRAFT, INCLUDING AXLE AND BRAKE. THE WHEEL ASSY. INCLUDING BEARINGS WERE REPLACED AND THE AIRCRAFT WAS RELEASED TO SERVICE. (TC NR 20071031008)

IG0R200751070	BEECH	PWA	HNYWL	BELLOWS	DAMAGED
12/19/2007	C90	PT6A21	DPF2	2523631	FCU

ENGINE WENT TO IDLE IN FLIGHT. FAILED BELLOWS BENCH TEST. BELLOWS BREACHED. UPON FURTHER INSPECTION THERE WAS NO PHYSICAL DAMAGE TO THE BELLOWS HOWEVER THERE WAS CORROSION ON THE TOP OF THE BELLOWS AND AT THE FIRST CONVOLUTION. REPLACED BELLOWS AND RECALIBRATED FUEL CONTROL UNIT.

FAA20080118	BEECH	PWA	ACTUATOR	CRACKED
1/18/2008	C90	PT6A21	505212234	ZONE 600

RT OB FLAP ACTUATOR ASSY, PISTON TUBE CRACKED 100 PERCENT IN DEPTH, 100 PERCENT ENTIRE LENGTH OF TUBE. CRACK RUNS PARALLEL TO TUBE .

2007FA0001097	BEECH	PWA	BUMPER BLOCK	
12/12/2007	C90A	PT6*	509800913	RT MLG

COMMUNIQUE NR 2000-04 ANNOUNCED THAT STARTING LJ-1088 AND AFTER THAT LANDING GEAR BUMPER BLOCK WILL BE BONDED TO THE MAIN SPAR WHERE IT CROSSES INSIDE THE LANDING GEAR WHEEL WELLS. THIS AC FOUND THE RT LANDING GEAR BUMPER BLOCK ON THE FLOOR OF HIS HANGER. NOT KNOWING WHAT THIS PART WAS THE OWNER ALMOST THREW IT IN THE TRASH. LUCKILY HE KEPT IT FOR AT OUR NEXT PHASE INSPECTION, WE FOUND THAT IT WAS MISSING AND TOLD THE OWNER, WHO REMEMBER STORING THIS UNKNOWN PART IN A LOCKER AT THIS HANGER. CLEANED THE AREA AND ATTACHED THE BUMPER BY APPLYING THE EC2216 EPOXY IAW THE COMMUNIQUE. THIS BLOCK ON EARLIER AC WERE BOLTED ONTO THE SPAR. THIS METHOD WAS MOST LIKELY DISCONTINUED BECAUSE ELIMINATION OF APPLYING EXTRA HOLES INTO SPAR. PERFORMING MANY STRUCTURAL INSPECTIONS , HAVE NEVER SEEN A CRACK ORIGINATE FROM THIS AREA OF THE SPAR. (K)

	20011710001000	DELOTT	00111		NOOL NID	OTTOTALD
	11/9/2007	D55	IO520C		3516505084	T/E FLAP
	AT ANNUAL INSPE	ECTION, FOUND C	RACKED FLAP RO	DD ATTACH POINT R	RIB. RT FLAP ONLY. ((K)
	2007FA0001089	BEECH	CONT	BEECH	RIB	CRACKED
	11/9/2007	F33A	IO550B		3516505084	T/E FLAP
AT ANNUAL INSPECTION, FOUND BY FLAP BOD ATTACH POINT BIB CRACKED. (K)						

NOSE RIB

CRACKED

FAA122808001	BEECH	PWA	BOLT	SHEARED
12/28/2007	H18	R985*	AN7520	NLG

DURING THE INVESTIGATION. IT WAS DISCOVERED THAT THE REMAINDER OF THE BOLT FOR NOSE GEAR RETRACT PUSH PULL TUBE TO CANTILEVER ARM FOR DRAG BRACE HAD SHEARED ON (2) DIFFERENT OCCASIONS FOR REASONS UNDETERMINED. THE OPERATOR ALSO OPERATES (2) OTHER VOLPAR TRICYCLE GEARED AC, A BOLT FROM ONE OF THOSE AC WAS REMOVED TO FIND SCORE MARKS IN THE SHANK OF THE BOLT IN THE SAME VICINITY OF THE SHEAR POINTS OF THE INCIDENT AIRCRAFT BOTH AIRCRAFT HAVE SIMILAR AIRFRAME TT. IT WAS DISCUSSED WITH THE OPERATOR ON TECHNIQUES AND MISTAKES MADE DURING LANDING AND IT WAS DISCOVERED THAT IF THE AIRCRAFT IS EMPTY/LIGHT AND THE PILOT ALLOWS THE NOSE TO SETTLE TOO SOON IF COULD INDUCE A PORPOSING EFFECT THAT COULD PUT LARGE SHEAR LOADS ON THIS BOLT AS

THE NOSE GEAR BOUNCES DOWN THE RUNWAY. THE OPERATOR HAS REPLACED ALL NOSE GEAR PUSH/PULL TUBE TO DRAG BRACE CANTILEVER ARM ATTACH BOLTS IN THEIR FLEET.

2007FA0001087	BEECH	CONT	BEECH	RIB	CRACKED
11/9/2007	V35B	IO520BA		3516505084	T/E FLAP
AT ANNUAL INSP	ECTION FOUND R	T FLAP ROD ATT	ACH POINT RIB CRA	· /	
CA071029006	BELL	LYC		CIRCUIT BREAKE	R ODOR
10/25/2007	205B	T5317BLYC		MS2524475	
(CAN) SMOKE AN	D ODOR IN CABIN	. LANDED BACK A	AT PAD. (TC NR 2007	71029006)	
CA071026001	BELL	ALLSN		STARTER GEN	DEFECTIVE
10/12/2007	206B	250C20		150SG117Q	
INVESTIGATION I		TER GEN REQUIF			E BAY AREA. FURTHER VAS REPLACED FOR NO
CA070703003	BELL	ALLSN	AIRBORNE	CARTRIDGE	UNSERVICEABLE
7/1/2007	206B	250C20		1C27	BOOST PUMP
INSPÉCTED FWD		O BE NOT OPERA	TING. CARTRIDGE	OST PUMP FAILURE CHANGED OUT WITI	
CA070917001	BELL	ALLSN		PIN	BRINELLED
9/14/2007	206B	250C20		30000556001	CYCLIC SERVO
MOVÉMENT OF S OF BRINELLING A	SHOULDER PIN ON AND THE POSSIBIL	LT LATERAL SEF ITY OF PLATING	RVO. PIN REMOVED WHICH HAS BEEN A	AND INSPECTED RE	T SENSATION DURING EVEALING INDICATIONS CF95-11 R2 (ASB 206-95- 1)
CA071102003	BELL	ALLSN	BELL	BOOT	DETERIORATED
10/29/2007	206B	250C20		000040070404	
(CAN) DRIVE SHAFT WAS RECENTLY INSPECTED, GREASED AS REQUIRED AT MFG. OLD BOOTS WERE SERVICEABLE, BUT AGE WAS NOT KNOWN SO REPLACEMENT WAS ELECTED AS A SAFETY PRECAUTION. NEW BOOTS INSTALLED AND DRIVE SHAFT SERVICED. 21.1 HOURS AFTER REPACK GREASE LEAK WAS DETECTED BY PILOT AND DRIVE SHAFT REMOVED. AS A SERVICEABLE DRIVE SHAFT WAS AVAILABLE THE LEAKING ONE IN QUESTION WAS (RED TAGGED). UNSERVICEABLE DRIVE SHAFT DISASSEMBLED AND BOOT FOUND DETERIORATED, ALMOST TO A DISSOLVED STATE, RUBBER SEEMS MORE LIKE A PLASMA THEN RUBBER STATE. BOOT INFO SKF BO201 SKF BCO-BO-7206 MFG 1/19/07. (TC NR 20071102003)				206040272101	DRIVE SHAFT
SERVICEABLE, B BOOTS INSTALLE PILOT AND DRIVE QUESTION WAS (DETERIORATED,	AFT WAS RECENTL UT AGE WAS NOT ED AND DRIVE SHA E SHAFT REMOVEI (RED TAGGED). UN ALMOST TO A DIS	LY INSPECTED, G KNOWN SO REP AFT SERVICED. 2 D. AS A SERVICE. ISERVICEABLE D SOLVED STATE,	LACEMENT WAS EL 1.1 HOURS AFTER F ABLE DRIVE SHAFT PRIVE SHAFT DISAS: RUBBER SEEMS MO	RED AT MFG. OLD B ECTED AS A SAFET REPACK GREASE LE WAS AVAILABLE TH SEMBLED AND BOO DRE LIKE A PLASMA	OOTS WERE Y PRECAUTION. NEW AK WAS DETECTED BY IE LEAKING ONE IN T FOUND
SERVICEABLE, B BOOTS INSTALLE PILOT AND DRIVE QUESTION WAS (DETERIORATED,	AFT WAS RECENTL UT AGE WAS NOT ED AND DRIVE SHA E SHAFT REMOVEI (RED TAGGED). UN ALMOST TO A DIS	LY INSPECTED, G KNOWN SO REP AFT SERVICED. 2 D. AS A SERVICE. ISERVICEABLE D SOLVED STATE,	LACEMENT WAS EL 1.1 HOURS AFTER F ABLE DRIVE SHAFT PRIVE SHAFT DISAS: RUBBER SEEMS MO	RED AT MFG. OLD B ECTED AS A SAFET REPACK GREASE LE WAS AVAILABLE TH SEMBLED AND BOO DRE LIKE A PLASMA	OOTS WERE Y PRECAUTION. NEW AK WAS DETECTED BY IE LEAKING ONE IN T FOUND
SERVICEABLE, B BOOTS INSTALLE PILOT AND DRIVE QUESTION WAS (DETERIORATED, BOOT INFO SKF B	AFT WAS RECENTL UT AGE WAS NOT ED AND DRIVE SHA E SHAFT REMOVEI (RED TAGGED). UN ALMOST TO A DIS BO201 SKF BCO-BO	LY INSPECTED, G KNOWN SO REP AFT SERVICED. 2 D. AS A SERVICE. ISERVICEABLE D SOLVED STATE, D-7206 MFG 1/19/	LACEMENT WAS EL 1.1 HOURS AFTER F ABLE DRIVE SHAFT PRIVE SHAFT DISAS: RUBBER SEEMS MO	RED AT MFG. OLD B ECTED AS A SAFET REPACK GREASE LE WAS AVAILABLE TH SEMBLED AND BOO DRE LIKE A PLASMA 2003)	OOTS WERE Y PRECAUTION. NEW AK WAS DETECTED BY IE LEAKING ONE IN T FOUND THEN RUBBER STATE.
SERVICEABLE, B BOOTS INSTALLE PILOT AND DRIVE QUESTION WAS (DETERIORATED, BOOT INFO SKF E CA071024005 10/23/2007 (CAN) PLAY NOTE	AFT WAS RECENTL UT AGE WAS NOT ED AND DRIVE SHA E SHAFT REMOVEI (RED TAGGED). UN ALMOST TO A DIS BO201 SKF BCO-BO BELL 206B	LY INSPECTED, G KNOWN SO REP AFT SERVICED. 2 D. AS A SERVICE, NSERVICEABLE D SOLVED STATE, D-7206 MFG 1/19/ ALLSN 250C20	LACEMENT WAS EL 1.1 HOURS AFTER F ABLE DRIVE SHAFT PRIVE SHAFT DISAS: RUBBER SEEMS MO 07. (TC NR 20071102	RED AT MFG. OLD B ECTED AS A SAFET REPACK GREASE LE WAS AVAILABLE TH SEMBLED AND BOO DRE LIKE A PLASMA 2003) SERVO 41103750017	OOTS WERE Y PRECAUTION. NEW AK WAS DETECTED BY IE LEAKING ONE IN T FOUND THEN RUBBER STATE. WORN
SERVICEABLE, B BOOTS INSTALLE PILOT AND DRIVE QUESTION WAS (DETERIORATED, BOOT INFO SKF E CA071024005 10/23/2007 (CAN) PLAY NOTE	AFT WAS RECENTL UT AGE WAS NOT ED AND DRIVE SHA E SHAFT REMOVEI (RED TAGGED). UN ALMOST TO A DIS BO201 SKF BCO-BO BELL 206B ED IN CYCLIC CON	LY INSPECTED, G KNOWN SO REP AFT SERVICED. 2 D. AS A SERVICE, NSERVICEABLE D SOLVED STATE, D-7206 MFG 1/19/ ALLSN 250C20	LACEMENT WAS EL 1.1 HOURS AFTER F ABLE DRIVE SHAFT PRIVE SHAFT DISAS: RUBBER SEEMS MO 07. (TC NR 20071102	RED AT MFG. OLD B ECTED AS A SAFET REPACK GREASE LE WAS AVAILABLE TH SEMBLED AND BOO DRE LIKE A PLASMA 2003) SERVO 41103750017	OOTS WERE Y PRECAUTION. NEW AK WAS DETECTED BY IE LEAKING ONE IN T FOUND THEN RUBBER STATE. WORN HYDRAULIC SYS
SERVICEABLE, B BOOTS INSTALLE PILOT AND DRIVE QUESTION WAS (DETERIORATED, BOOT INFO SKF E CA071024005 10/23/2007 (CAN) PLAY NOTE FOUND WORN BE	AFT WAS RECENTL UT AGE WAS NOT ED AND DRIVE SHA E SHAFT REMOVEI (RED TAGGED). UN ALMOST TO A DIS BO201 SKF BCO-BO BELL 206B ED IN CYCLIC CON EYOND LIMITS. (TO	LY INSPECTED, G KNOWN SO REP AFT SERVICED. 2 D. AS A SERVICE. ISSERVICEABLE D ISSOLVED STATE, D-7206 MFG 1/19/ ALLSN 250C20 ITROL. ONCE INV	LACEMENT WAS EL 1.1 HOURS AFTER F ABLE DRIVE SHAFT PRIVE SHAFT DISAS: RUBBER SEEMS MO 07. (TC NR 20071102	RED AT MFG. OLD BECTED AS A SAFET REPACK GREASE LE WAS AVAILABLE THE SEMBLED AND BOODRE LIKE A PLASMA 2003) SERVO 41103750017 LOT VALVE LINKAGE	OOTS WERE Y PRECAUTION. NEW AK WAS DETECTED BY IE LEAKING ONE IN T FOUND THEN RUBBER STATE. WORN HYDRAULIC SYS
SERVICEABLE, B BOOTS INSTALLE PILOT AND DRIVE QUESTION WAS (DETERIORATED, BOOT INFO SKF B CA071024005 10/23/2007 (CAN) PLAY NOTE FOUND WORN BE CA071023005 10/22/2007	AFT WAS RECENTLUT AGE WAS NOTED AND DRIVE SHAES SHAFT REMOVED (RED TAGGED). UN ALMOST TO A DISBO201 SKF BCO-BEBELL 206B ED IN CYCLIC CONEYOND LIMITS. (TO BELL 206B) BELL 206B ENGINE OIL PRESS	LY INSPECTED, G KNOWN SO REP AFT SERVICED. 2 D. AS A SERVICE. ISSERVICEABLE D SOLVED STATE, D-7206 MFG 1/19/ ALLSN 250C20 ITROL. ONCE INV ONR 20071024005 ALLSN 250C20B	LACEMENT WAS EL 1.1 HOURS AFTER F ABLE DRIVE SHAFT PRIVE SHAFT DISAS: RUBBER SEEMS MO 07. (TC NR 20071102	RED AT MFG. OLD B ECTED AS A SAFETY REPACK GREASE LE WAS AVAILABLE TH SEMBLED AND BOO DRE LIKE A PLASMA 2003) SERVO 41103750017 LOT VALVE LINKAGE OIL SYSTEM	OOTS WERE Y PRECAUTION. NEW AK WAS DETECTED BY IE LEAKING ONE IN T FOUND THEN RUBBER STATE. WORN HYDRAULIC SYS E ON RT CYCLIC SERVO LOW PRESSURE
SERVICEABLE, B BOOTS INSTALLE PILOT AND DRIVE QUESTION WAS (DETERIORATED, BOOT INFO SKF B CA071024005 10/23/2007 (CAN) PLAY NOTE FOUND WORN BE CA071023005 10/22/2007 (CAN) LOSS OF E	AFT WAS RECENTLUT AGE WAS NOTED AND DRIVE SHAES SHAFT REMOVED (RED TAGGED). UN ALMOST TO A DISBO201 SKF BCO-BEBELL 206B ED IN CYCLIC CONEYOND LIMITS. (TO BELL 206B) BELL 206B ENGINE OIL PRESS	LY INSPECTED, G KNOWN SO REP AFT SERVICED. 2 D. AS A SERVICE. ISSERVICEABLE D SOLVED STATE, D-7206 MFG 1/19/ ALLSN 250C20 ITROL. ONCE INV ONR 20071024005 ALLSN 250C20B	LACEMENT WAS EL 1.1 HOURS AFTER F ABLE DRIVE SHAFT PRIVE SHAFT DISAS: RUBBER SEEMS MO 07. (TC NR 20071102	RED AT MFG. OLD B ECTED AS A SAFETY REPACK GREASE LE WAS AVAILABLE TH SEMBLED AND BOO DRE LIKE A PLASMA 2003) SERVO 41103750017 LOT VALVE LINKAGE OIL SYSTEM	OOTS WERE Y PRECAUTION. NEW AK WAS DETECTED BY IE LEAKING ONE IN T FOUND THEN RUBBER STATE. WORN HYDRAULIC SYS E ON RT CYCLIC SERVO LOW PRESSURE ENGINE

(CAN) FCU SN 304536 REMOVED FOR OVERHAUL(RUNNING NORMAL)FCU SN 308210 TSO 0 INSTALLED (FROM SAE)AND REQUIRED MAXIMUM ADJUSTMENTS, START DERICH AND START ACCEL.TO GET ENGINE TO START. AFTER 7.3HRS, OUR AME DEEMED IT NECESSARY TO CHANGE IT FOR A BETTER ONE. A LOANER FCU WAS RECEIVED AND SN 308210 WAS REMOVED AND SN 87041003 WAS INSTALLED AGAIN FROM SAE. THIS UNIT WOULD NOT EVEN START THE AC EVEN AFTER ALL ADJUSTMENTS. ANOTHER FCU WAS RECEIVED FROM ESSENTIAL TURBINES SN BR54951 AND IT WAS INSTALLED WHICH STARTED NORMALLY WITH LITTLE ADJUSTMENT. NEEDS TO CHECK ITS FLOW BENCH FOR CALIBRATION. (TC NR 20071015006)

CA071030004	BELL	ALLSN	ALLSN	CARBON SEAL	DAMAGED
10/29/2007	206B	250C20B		6898607	NR 1

(CAN) DURING AN OIL LEAK WAS DISCOVERED BY THE BLEED VALVE. NR 1 BEARING CARBON SEAL FOUND DAMAGED, THE BEARING WAS REMOVED AND UPON INSPECTION FOUND UNSERVICEABLE. THE BEARING WHEN TURNED HAD A ROUGH, COURSE FEELING TO IT. (TC NR 20071030004)

CA071030010	BELL	ALLSN	HOUSING	MISMANUFACTURED
10/30/2007	206B	250C20B	6899246	OIL FILTER

(CAN) DUE TO A INTERNAL CASTING DEFECT INSIDE THE OIL FILTER HOUSING, THE PRESSURE REGULATING POPPET CANNOT FULLY BOTTOM OUT WHEN INSTALLED. THIS THEN GIVES A FALSE INDICATION OF PROPER POSITION OF THE POPPET WHEN (BACKED OUT) 5.5 TURNS FOR INITIAL ADJUSTMENT FOLLOWING OVERHAUL. THE MFG WAS ADVISED AND RECOMMENDS THAT AN APPROVED FACILITY MACHINE THE INTERNAL SURFACE OF THE HOUSING TO REMOVE THE DEFECT. (TC NR 20071030010)

CA071029004	BELL	ALLSN	HOUSING	CRACKED
8/9/2007	206L	250C20R2		M/R TRANSMISSION

(CAN) OIL FOUND ON TRANSMISSION DECK AFTER BRIEF DAILY INSPECTION, OIL LEAK FOUND FROM THE BOTTOM OF THE TRANSMISSION. UPON FURTHER INVESTIGATION TRANSMISSION REMOVED AND BOTTOM CASING FOUND TO BE CRACKED AT LOWER MAST SUPPORT BRG. (TC NR 20071029004)

CA071023004	BELL	ALLSN	BELL	NUT	FAILED
10/22/2007	206L4	250C30P		206040078103	MAST BEARING
(CAN) WHILE INVE	STIGATION MAST	REARING PLAY	LINARI E TO REMOV	/F NUT (REARING TO	OROLIE) MAST

(CAN) WHILE INVESTIGATION MAST BEARING PLAY, UNABLE TO REMOVE NUT (BEARING TORQUE). MAST ASSEMBLY SENT TO MFG FOR INVESTIGATION. NEW MAST ASSEMBLY PROVIDED BY MFG. (TC NR 20071023004)

CA071023002	BELL	ALLSN	BELL	NUT	LOOSE
10/22/2007	206L4	250C30P		206040078103	MAST ASSY

(CAN) WHILE INVESTIGATING MAST BEARING PLAY. UNABLE TO REMOVE NUT (BEARING TORQUED). MAST ASSY SENT TO MFG FOR INVESTIGATION. NEW MAST ASSY PROVIDED BY MFG (TC NR 20071023002).

CA071026003	BELL	PWA	CYCLIC STICK	CORRODED
10/25/2007	212	PT6T3	204001363015	

(CAN) PILOTS CYCLIC STICK DISASSEMBLED FOR PAINT AND REFURBISH. STEEL RING PN 204-001-369-001 IS RIVETED ON THE CYCLIC STICK. THE STEEL RING IS USED FOR APPLICATION OF FRICTION. THE STEEL RING WAS REMOVED AND EXTREME CORROSION PITTING WAS FOUND IN THE CYCLIC STICK. IF THE CORROSION DEPTH COULD BE MEASURED ACCURATELY IT WOULD BE 40-50 PERCENT OF THE TUBE THICKNESS. PULLED A USED CYCLIC STICK ASSY OUT OF OUR STOCK INVENTORY DISASSEMBLED IT ONLY TO FIND IT CORRODED AS WELL NOT QUITE AS BAD BUT BEYOND SERVICEABLE. FINDING 2 HAS PROMPTED US TO CONSIDER THIS TO BE MORE THAN A ONE OF ISSUE CORROSION ISSUE. (TC NR 20071026003)

2007FA0001098	BELL	PWA	ATTACH FITTING	GOUGED
12/19/2007	412	PT6*		CYCLIC STICK

DURING INSPECTION FOR BHT ASB-412-07-127 (CYCLIC STICK BEARING INSPECTION) IT WAS FOUND THAT THE LATERAL CONTROL TUBE PN 412-001-307-101 FIXED (OB) CLEVIS PN 212-001-059-001 OR -103 HAD GOUGED THE CYCLIC LEVER ASSEMBLY BEYOND REPAIRABLE LIMITS AND THE BEARING GREASE SEAL RETAINER WAS DISLODGED. THIS DAMAGE WAS CAUSED BY ANGULAR MISSALIGNMENT OF THE FIXED CLEVIS WITH RELATION

TO THE ADJUSTABLE (IB) CLEVIS. IT WAS ALSO NOTED THAT BOTH CLEVIS'S WERE A DIFFERENT DESIGN THAN THE OTHER CLEVIS'S INSTALLED ON THE CYCLIC OF THIS AND OTHER 412 AIRCRAFT AVAILIABLE FOR INSPECTION. THIS DESIGN WAS A STRAIGHT (TUNNING FORK) DESIGN AS APPOSED TO THE OTHER CLEVIS DESIGN WITH AN ELONGATED (C) SHAPE WHICH ALLOWED FOR MORE CLEARANCE. MFG SUPPORT WAS CONTACTED TO VERIFY THIS DESIGN CLEVIS WAS APPROVED FOR USE IN THIS LOCATION. REPLACED LEVER ASSEMBLY, REALIGNED CLEVIS AND FOUND ASSEMBLY TO HAVE MINIMAL TO NO CLEARANCE AT EXTREME CYCLIC STOPS.

 CA071030001
 BELL
 CHECK VALVE
 OBSTRUCTED

 10/24/2007
 412EP
 204076437003
 HYD SYSTEM

(CAN) DURING GROUND RUN, FIRST START OF THE DAY, BOTH HYDRAULIC SYSTEMS NR 1 AND NR 2 INDICATED GOOD PRESSURE AND BOTH HYDRAULIC CAUTIONS WERE EXTINGUISHED. THE FORCE TO DISPLACE PEDALS WAS NOTED TO BE ABNORMALLY HIGH. TO CONFIRM SYSTEM NR 1 WAS FUNCTIONING CORRECTLY, SYSTEM NR 2 WAS SELECTED OFF. A TOTAL LOSS OF HYDRAULICS WAS ENCOUNTERED TO BOTH CYCLIC AND COLLECTIVE. THE AIRCRAFT WAS IMMEDIATELY SHUTDOWN. DURING INVESTIGATION, FOD WAS FOUND OBSTRUCTING THE CHECK VALVE. ORIGIN OF FOD IS UNKNOWN AND UNDER INVESTIGATION. (TC NR 20071030001)

<u>CA071026006</u> BELL LYC BLADE BROKEN
10/24/2007 47G2 VO435A1D 4711012050 MAIN ROTOR

(CAN) DURING NORMAL TRAINING FLIGHT, VIBRATION WAS FELT AND AUTOROTATION LANDING CARRIED OUT. UPON SHUTDOWN AND INSPECTION OF BLADES, A FIVE (5) FOOT SECTION OF BLADE COVERING WAS DISCOVERED MISSING FROM THE UNDERSIDE OF THE BLADE FROM THE TIP EXPOSING THE WOOD BLADE CORE CAUSING THE ABNORMAL VIBRATION. BLADES WERE REMOVED AND AIRCRAFT TRANSPORTED BACK TO THE MAINTENANCE FACILITY. NTSB WERE ON SITE SHORTLY AFTER AND REQUESTED THAT THE BLADES BE SHIPPED OFF FOR A DETAILED EXAMINATION. (TC NR 20071026006)

<u>CA070504002</u> BELL LYC BELL TUBE CRACKED
5/3/2007 47G2 VO435A1D 471401241 STABILIZER BAR

(CAN) ON NORMAL WALK AROUND PILOT NOTICED STABILIZER BAR TUBE CRACKED AT SLEEVE AT IB END OF TUBE. STAB BAR ASSEMBLY WAS REPLACED AND MACHINE RETURNED TO SERVICE. AD 74-08-02 COVERS THIS ISSUE ON SOME OF THE LATER MODEL STAB BARS BUT NOT THE EARLIER MODELS OF STAB BARS. ALTHOUGH WE CHECK THIS AS PART OF OUR NORMAL PREFLIGHT CHECK AND THIS IS HOW IT WAS FOUND. (TC NR 20070504002)

<u>CA071102013</u> BELL LYC BELL BEARING CAGE MAKING METAL

11/1/2007 47G2 VO435A1E 476206283 M/R TRANSMISSION

(CAN) DURING ROUTINE INSPECTION, SMALL AMOUNT OF BRASS WAS FOUND IN OIL SCREEN, THE TRANSMISSION WAS DISASSEMBLED TO LOCATE THE FAILED ITEM AND IT WAS FOUND TO BE ONE OF THE BEARING CAGES IN THE DUPLEX BEARING THAT THE UPPER SUN GEAR GOES THROUGH, THIS IS THE NEW AND IMPROVED BEARING INSTALLED IAW TB 47-75-4 (TC NR 20071102013)

<u>2008FA0000031</u> BELL LINER WORN 12/5/2007 UH1B 2040012741 COLLECTIVE

PILOT EXPERIENCED COLLECTIVE BOUNCE ON TAKEOFF. INSPECTION OF COLLECTIVE LINERS SHOWED A SUFFICIENT AMOUNT OF LINER REMAINING IN THE WEAR AREA. WITH FURTHER INSPECTION, THE MINIMUM COLLECTIVE FRICTION WAS TOO LOW. INSPECTION ON NR 3 AND NR 6 PHASE IAW TM 55-1520-219-PMS, PAGE 6, ITEM NR 2.14 REQUIRES TO INSPECT COLLECTIVE FRICTION LINERS FOR WEAR. ADJUSTMENT OF MINIMUM COLLECTIVE FRICTION SHOULD ALSO BE INCLUDED IN THE PHASE INSPECTION CHECKLIST ALONG WITH VISUAL INSPECTION OF THE LINERS. (K)

<u>2007FA0001109</u> BOEING BRACKET CRACKED 12/24/2007 727233 SB727570112 BS 760

RT PREVENTATIVE MODIFICATION FWD IB ANGLE CRACKED AT BS 760.95. REPAIRED CRACK AT RT BL 70.5, BS 760.95, UPPER AND LOWER MOST FORWARD HOLES. OVERSIZED CRACKED HOLE IAW 57-112. NDT PERFORMED TO CONFIRM CRACK TERMINATION. COMPLIED WITH TERMINATION REPAIR IAW SB 727-57-0112. REMOVED RT

PREVENTATIVE MODIFICATION FWD IB ANGLE BRACKET. (K)

CA071029009	BOEING	CFMINT	SHAFT	CONTAMINATED
10/27/2007	737*	CFM567B22	273A45141	NLG

(CAN) THE FLIGHT CREW REPORTED THAT AFTER TAKEOFF, (THE NOSE GEAR INDICATES DOWN IN THE UP POSITION. WHEN GEAR HANDLE PUT IN THE OFF POSITION, THE NOSE GEAR CAME DOWN.) THE FLIGHT RETURNED TO BASE AND MADE AN UNEVENTFUL LANDING. MANUAL EXTENSION ARM FOUND IN THE EXTEND POSITION AND WOULD NOT RELEASE. PAINT FOUND ON THE P/N 273A4514-1 SHAFT. PAINT REMOVED, MICARTA BUSHINGS CLEANED AND SHAFT REINSTALLED IAW OHM 32-35-05 AND SOPM 20-50-01. NOSE GEAR RETRACT TEST C/W IAW AMM 32-33-00 WITH NO FAULT FOUND. HAVE ADVISED MFG OF THE EVENT AND THE REPORT OF PAINT FOUND ON THE SHAFT ASSEMBLY. (TC NR 20071029009)

CA071106012 BOEING PWA CIRCUIT BREAKER FAILED

11/4/2007 737* JT8D17A BACC18AE35

(CAN) ENROUTE AT FL300, THE CREW EXPERIENCED AN AUTO PILOT DISENGAGEMENT AS WELL AS THE LOSS OF THE FOLLOWING, YAW DAMPER, MACH TRIM, CAPTS. PITOT STATIC, NR 1 ENG ANTI ICE, RADAR ALTIMETER, NO 2 EGT AND SEVERAL OTHERS. THE CREW ATTEMPTED A RESET OF THE NR 1 NORMAL TRANSFER BUS CIRCUIT BREAKER, WHICH FAILED. THE AIRCRAFT WAS DIVERTED AND LANDED WITHOUT FURTHER INCIDENT. MAINTENANCE REPLACED THE CIRCUIT BREAKER AND THE AIRCRAFT HAS RETURNED TO SERVICE WITHOUT FURTHER PROBLEM. (TC NR 20071106012)

<u>CA071130008</u> BOEING FLOORBEAM CORRODED

11/30/2007 737790 146A75035 AFT CARGO PIT

(CAN) AFT CARGO PIT FLOORBEAM RAIL CORRODED AT BS 767+6 LBL 8 AND REPAIRED IAW CUSTOMER EA LEVEL 2 CORROSION (TC NR 20071130008)

CA071130009 BOEING FLOORBEAM CORRODED

11/30/2007 737790 147A55047 BS 947

(CAN) AFT CABIN FLOOR SUPPORT BEAM AT BS 947 LBL 53 CORRODED AND REPAIRED IAW CUSTOMER EA LEVEL 2 CORROSION (TC NR 20071130009)

<u>CA071130010</u> BOEING SKIN CHAFED 11/30/2007 737790 112A410210 RWS 240

(CAN) RT WING LWR SKIN AT AFT EDGE CHAFFING DAMAGE FROM CONTACT WITH NACELLE STRUT AFT FAIRING INBD BLADE SEAL AT APPROX. WS 240 REPAIRED IAW CUSTOMER EA (TC NR 20071130010)

<u>CA071130011</u> BOEING SKIN CHAFED 11/30/2007 737790 112A41029 LWS 260

(CAN) LT WING LWR SKIN CHAFFING DAMAGE FOUND FROM CONTACT WITH NACELLE STRUT AFT FAIRING OB BLADE SEAL AT APPROX WS 260 REPAIRED IAW CUSTOMER EA (TC NR 20071130011)

CA071030006 BOEING SKIN PANEL CHAFED

10/30/2007 737790 112A41029 LWS 260 & 240

(CAN) LT WING LWR SKIN PANEL CHAFFING DAMAGE FROM CONTACT WITH NACELLE STRUT AFT FAIRING BLADE SEAL APPROX WSTA 260, 240 REPAIRED IAW EA 5720-01337, (TC NR 20071030006)

<u>CA071030007</u> BOEING SKIN PANEL CHAFED 10/30/2007 737790 112A410210 RWS 240,260

(CAN) RT WING LWR WING SKIN PANEL CHAFFING DAMAGE FROM CONTACT WITH NACELLE STRUT AFT FAIRING BLADE SEAL APPROX WSTA 240,262 REPAIRED IAW EA 5720-01338. (TC 20071030007)

<u>CA071026009</u> BOEING FLOORBEAM CORRODED 10/26/2007 737790 147A55067 BS 986.5

(CAN) AFT CABIN BS 986.5 BEAM UPPER CAP CORRODED AT LBL24, LBL18, RBL10, RBL, RBL32, RBL28, RBL22,
RBL17 REPAIRED IAW CUSTOMER EA. (TC NR 20071026009)

CA071026011	BOEING		STRIP	CORRODED
10/26/2007	737790		453A26113	BS 847-947
		RIP BETWEEN BS 847 AND BS		
CA071130013	BOEING		SKIN	CHAFED
11/30/2007	737790		112A410210	RWS 260
		FFING DAMAGE FROM CONTA AIRED IAW EA.(TC NR 20071130		T FAIRING OB BLADE
CA071202002	BOEING		SKIN	CHAFED
12/1/2007	737990		112A4101209	RWS 260
	ONTACT WITH	CK,HEAVY MAINTENANCE. RT NACELLE STRUT AFT FAIRING 2002)		
CA071202003	BOEING		SKIN	CHAFED
12/1/2007	737990		112A4101209	LWS 240
	CT WITH NACEL	ECK HEAVY MAINTENANCE. LT LLE STRUT AFT FAIRING IB BL 3)		
CA071106003	BOEING		SKIN	SCRATCHED
11/6/2007	737990		146A323110	BS 777-830 RBL26
(CAN) SCRATCH IAW CUSTOMER		GE SKIN BELOW AFT CARGO 071106003)	PIT LOWER SILL BS 777 TO E	SS 830, RBL 26 REPAIRED
CA071106004	BOEING		SKIN	CHAFED
11/6/2007	737990		112A4102209	LWS 240
(CAN) LT WING L (TC NR 20071106		ANEL CHAFFING AT WSTA 240,	IB OF BLADE SEAL. REPAIR	ED IAW CUSTOMER EA
CA071106005	BOEING		SKIN	CHAFED
11/6/2007	737990		112A4102209	LWS 260
(CAN) LT WING L CUSTOMER EA (ANEL CHAFFING DAMAGE AT V 6005)	VSTA 260, OB OF BLADE SEA	L FAIRING. REPAIRED IAW
CA071106006	BOEING		SKIN	CHAFED
11/6/2007	737990		112A4102210	RWS 240
(CAN) RT WING I (TC NR 20071106		HAFING DAMAGE AT WSTA 24), IB OF FAIRING SEAL REPA	IRED IAW CUSTOMER EA
CA071108005	BOEING	RROYCE	LINE	CHAFED
11/5/2007	75728A	RB211535E437	LJ35801	NR 1 ENGINE
		W NOTICED THAT NR1 ENGIN AIRPORT. WITH DECREASING		

2007FA0001091 **BOEING** FRACTURED MANIFOLD

CONDUCTED. ALL PARAMETERS NORMAL. AIRCRAFT RETURNED TO SERVICE. (TC NR 20071108005)

AND A NORMAL LANDING WAS PERFORMED. FOUND P1 LINE CHAFED THROUGH. LINE REPLACED. TEST FLIGHT

5/25/2007 767* 252T13021 SPOILERS

MANIFOLD CRACKED IN THE FILTER BOWL AS DESCRIBED IN BETWEEN WHAT IS DESCRIBED IN THE SERVICE LETTER AND THIS UNIT FRACTURED COMPLETELY. VISUAL INSPECTION APPEARS TO SHOW THAT THE CRACK ORIGINATED IN THE THREAD ROOT AT THE THINNEST AREA OF THE HOUSING. THE CRACK PROPAGATED UNTIL THERE WAS DUCTILE OVERLOAD FAILURE OF THE HOUSING. (K)

CA071023006	BOLKMS	ALLSN	GEARBOX	MAKING METAL
10/3/2007	BO105S	250C20B	6894171	NR 1 ENGINE

(CAN) APPROXIMATELY 5 MILES FROM DESTINATION, MAG NR1 LIGHT ILLUMINATED. PULSED OFF AND 2 MINUTES LATER LIGHT BACK ON. NR1 THROTTLE ROTATED TO IDLE, CONTINUED APPROACH TO DESTINATION, CRASH TRUCK ADVISED. ON FINAL, NR1 THROTTLE ADVANCED AND NORMAL LANDING CARRIED OUT. ENGINE SHUTDOWN AND MAINTENANCE ADVISED. UPON INSPECTION OF UPPER MAG PLUG, 7 SLIVERS OF METAL WERE FOUND AND THE LOWER PLUG WAS COVERED WITH MANY PARTICLES AND FUZZ. THE ESCAPED OIL WAS CAPTURED AND METAL PARTICLES WERE VISIBLE IN THE OIL. OIL TANK DRAINED, N1 CAP FILTER REPLACED, GEARBOX OIL FILTER INSPECTED AND SCAVEMGE LINE FLUSHED. GEARBOX REPLACE WITH OVERHAULED UNIT (TC NR 20071023006)

CA071025001	BOLKMS	ALLSN	SPRING	MISMANUFACTURED
10/23/2007	BO105S	250C20B	V40G3911AA	FJECTOR

(CAN) POOR METAL COMPOSITION IN PART CAUSES CRACKING. THESE PARTS WILL CRACK WITHOUT BEING SUBJECT TO FLIGHT. ONE BATCH HAS BEEN DISPOSED OF AND THE NEXT BATCH HAS THE SAME ISSUE. THE MFG HAS BEEN NOTIFIED. REF MBB-BO-105 IPC 60-00-00 FIG 8 ITEM NR 440. (TC NR 20071025001)

CA071022006	BOLKMS	ALLSN	GEARBOX	MAKING METAL
10/3/2007	BO105S	250C20B	6894171	NR1 ENGINE

(CAN) APPROXIMATELY 5 MILES FROM AIRPORT, MAGI NR1 LIGHT ILLUMINATED. PULSED OFF AND 2 MINUTES LATER LIGHT ILLUMINATED AGAIN. AN EMERGENCY LANDING WAS CARRIED OUT. BOTH NR1 AND NR2 MAGNETIC PLUGS CHECKED AND FOUND CONTAMINATED WITH METAL. THE GEARBOX WAS REPLACED AND THE AIRCRAFT RETURNED TO SERVICE. (TIC NR 20071022006)

CA071112001	BOMBDR	PWC	WIRE HARNESS	FAILED
11/11/2007	DHC8400	PW150A	473901	NLG

(CAN) AFTER TAKEOFF, NOSE GEAR UNSAFE ILLUMINATED. CREW PERFORMED NORMAL EXTENSION AND THE NLG DOORS DID NOT OPEN. ALSO, NLG NOT SHOWING DOWN AND LOCKED. SECOND ATTEMPT FOR EXTENSION, NOSE DOOR AMBER LIGHT ILLUMINATED. CREW PERFORMED ALTERNATE EXTENSION AND LANDED WITHOUT FURTHER INCIDENTS. MAINTENENCE DISCOVERED PSEU REPORTED FAULT, NLG LOCK PROX 1. NOSE LOCK SENSOR REPLACED AND AIRCRAFT RETURNED TO SERVICE. (TC NR 20071112001)

CA071113001	BOMBDR	PWC	CONTROLLER	MALFUNCTIONED
11/10/2007	DHC8400	PW150A	699018002	PROPELLER

(CAN) DURING FLIGHT, CREW REPORTED A NR 2 PEC CAUTION LIGHT ILLUMINATED FOLLOWED BY THE NR 2 ENGINE NP SURGE. THE QRH CONSULTED AND THE NR 2 ENGINE WAS SHUTDOWN. EMU DOWNLOAD C/O, FAULT ISOLATION C/O FOR CODES 236 AND 260 IAW TASK 61-20-05-810-822, 61-20-06-810-818. SERVO VALVE CONNECTORS RT J26 AND J27 CLEANED AND TREATED WITH STABILANT. PEC CONNECTORS 20 AND 21 CLEANED AND TREATED WITH STABILANT. AUTO FEATHER AND UP TRIM CHECKED SERVICEABLE FOR RETURN TO SERVICE IAW TASK 61-20-00-710-801. FURTHER FAULT CODE 131 DISPLAYED IN CDS. RT PEC REPLACED IAW AMM 61-20-36 AND C/O IAW AMM 71-00-00, NIL FAULTS EVIDENT. (TC NR 20071113001)

CA071102010	BOMBDR	PWC	SENSOR	FALSE INDICATION	
10/17/2007	DHC8400	PW150A		CARGO DOOR	

(CAN) AIRCRAFT WAS ALREADY UNDER MEL 52-10-05 DUE FORWARD BAGGAGE DOOR GIVES A FALSE (OPEN) INDICATION IN THE COCKPIT. AIRCRAFT COULD FLY PRESSURIZED BUT PRESSURIZATION SYSTEM MUST BE CONTROL IN MANUAL MODE. AIRCRAFT SUFFERED A DEPRESSURIZATION AT 20,000 FT. ALL SYSTEM CHECK AND NO FAULT WAS FOUND IN MANUAL AND AFTER DOOR SENSOR WAS REPAIR SYSTEM WORK ALSO IN AUTO MODE.

STILL UNDER INVESTIGATION. (TC NR 20071102010)

CA071102011	BOMBDR	PWC	ENGINE	NOISY
10/31/2007	DHC8400	PW150A		LEFT

(CAN) AROUND 20000 FT, AFTER HEARING A STRANGE SOUND THAT SEEM TO COME FROM THE LT ENGINE, PILOT NOTICED THAT THE LT ENGINE SUDDENLY STOPPED BY ITSELF. PILOT WAS ABLE TO FEATHER THE PROP. EMERGENCY WAS DECLARED. A/C LANDED WITHOUT OTHER PROBLEM. NO ONE INJURED. UNDER INVESTIGATION (TC 20071102011)

<u>CA071101002</u> BOMBDR PWC ENGINE POWER LOSS

10/31/2007 DHC8400 PW150A

(CAN) DURING FLIGHT, A LOUD NOISE WAS HEARD FOLLOWED BY A LOSS OF POWER RESULTING IN AN INFLIGHT SHUTDOWN OF THE ENGINE. POST FLIGHT EXAMINATION REVEALED SEVERE INTERNAL DAMAGE. MFG WILL INVESTIGATE THE EVENT AND ADVISE OF ROOT CAUSE ONCE ESTABLISHED (TC NR 20071101002)

<u>CA071109001</u> BOMBDR PWA BATTERY FAILED 11/5/2007 DHC8402 PW120A 4011769 MASTER

(CAN) DURING ENGINE NR 2 START UP, THE NR STALLED AT 20 NR AND THE ITT INDICATOR REACHED 800 DEGREES CELSIUS. THE ENGINE START WAS ABORTED FOLLOWING BY A LOUD BANG FROM THE NOSE COMPARTMENT. MAINTENANCE WAS CALLED IN AND THEY FOUND THE MAIN BATTERY TOP COVER POPPED OUT. NO STRUCTURAL DAMAGE WAS OBSERVED. THE MAIN AND AUXILIARY BATTERIES WERE REPLACED. THE AIRCRAFT WAS RELEASE AND RETURNED INTO SERVICE. (TC NR 20071109001)

CA071016021 BRAERO GARRTT FLOAT VALVE STUCK

10/16/2007 BAE125800A TFE7315R 257PV6589A VENTRAL TANK

(CAN) DURING REFUELLING USING SINGLE-POINT SYS & FILLING BOTH MAIN (WINGS) & VENTRAL TANK. AS VENTRAL TANK REACHED 1.5 TO 3 QUARTERS CAPACITY FUEL WOULD FLOW THROUGH VENT SYS INTO LT SURGE TANK & SHUTDOWN BY CLOSING MAIN VALVE. COMPLETION OF REFUELLING COULD ONLY RESUME ONCE SURGE TANK EMPTIED & VENTRAL TANK FUELED VIA FUELING CAP. ON REMOVAL OF VENTRAL TANK, DISCOVERED RT VENT FLOAT INADVERTENTLY GLUED TO VALVE BODY & NEEDLE HARD TO OPERATE. BOTH CONDITIONS LEFT RT VENT VALVE OPEN DURING ALL CONDITIONS CAUSING FUEL TO ENTER VENT PIPING THOUGH NONE EXISTED. FLOAT REMOVED & NEW NEEDLE INSTALLED, OPS OF VALVE CHECKED FOR SMOOTHNESS & PROPER SEALING OF NEEDLE TO SEAT. MODIFICATION (25G137A) EMBODIED TO INCORPORATE AN ACCESS PANEL FOR EASE OF INSTALLATION OF VENT VALVE ASSY & ENSURE PROPER SEALING & INSPECTION OF AREA. INTEGRITY OF VENT SYS LEAK CHECKED. COMPONENTS WERE INSTALLED & VENTRAL TANK CHECKED FOR LEAKS & PROPER REFUELLING. ALL SYSTEMS SATISFACTORY.

<u>CA071106011</u> BRAERO GARRTT TUBE CHAFED

10/25/2007 HS125700A TFE7313R1H 30733341 FUEL SYSTEM

(CAN) ON A PREFLIGHT INSPECTION, MAINTENANCE DISCOVERED THE FIRE DETECTOR (P/N 3001-31-900-400-17) AGAINST THE FUEL TUBE ASSEMBLY (P/N P-84417). UPON REPOSITIONING THE FIRE DETECTOR INTO POSITION, A CHAFED MARK ON THE NR 1 ENGINE FUEL TUBE ASSEMBLY WAS DISCOVERED. THE FUEL TUBE ASSEMBLY WAS ORDERED AND REPLACED. AN ENGINE RUN WAS CARRIED OUT FOR A LEAK CHECK INSPECTION. (TC NR 20071106011)

 CA071112003
 BRAERO
 RROYCE
 FIRE LOOP
 FAULTY

 11/9/2007
 HS7482A
 DART5342
 NR 1 NACELLE

(CAN) AFTER TAKEOFF, ENGINE NR 1 FIRE-WARNING ALARM WENT OFF. THE FLIGHT CREW INFORMED TOWER AND RETURNED TO AIRPORT. A HOLE WAS FOUND IN THE FLEXIBLE DUCT AT THE SUPERCHARGER OUTLET. ALSO, (2) FIRE DETECTION LOOPS WERE REPLACED BECAUSE THEY FAILED THE RESISTANCE CHECK LIMITS FOUND IN THE HS 748 MM. (TC NR 20071112003)

 CA071102005
 CESSNA
 LYC
 ROCKER BOSS
 CRACKED

 10/26/2007
 152
 O235L2C
 LW167035C
 CYLINDER HEAD

(CAN) ON CYLINDER NR 3 THE ROCKER SHAFT RT BOSS HAS BEEN FOUND BROKEN (SPLIT) IN THE MIDDLE
SECTION. THE BROKEN PART/ALL AND REST JUST BESIDE THE EXHAUST VALVE. (TC NR 20071102005)

2007FA0001075	CESSNA	CONT	ADAPTER	WORN
12/12/2007	172E	O300*	053200135	LT ELEVATOR
LT ELEVATOR TORQUE TUBE ARM ADAPTER RIVET HOLES WERE WORN POSSIBLY DUE TO UNSECURED CONTROLS IN GUSTY WINDS.				
CA071019002	CESSNA	LYC	NUT PLATE	MISREPAIRED

NAS680A08

FUEL TANK BAYS

(CAN) UPON INSPECTING THE FUEL TANKS, FOUND SEVERAL NUTPLATES PREVIOUSLY DAMAGED. UPON FURTHER INSPECTION FOUND THAT AT A PREVIOUS TIME, SOME SCREWS BROKE OFF IN THE NUTPLATES AND RATHER REPAIR/REPLACE THE NUTPLATES, IT APPEARS THE DAMAGED NUTPLATES WERE DRILLED AND SHEET METAL SCREWS WERE INSTALLED WHERE STRUCTURAL SCREWS SHOULD HAVE BEEN. THE REPAIR WAS SIMPLE, DRILL OUT THE OLD NUTPLATES AND NEW NUTPLATES INSTALLED. AS THE FUEL TANK COVERS ARE A STRUCTURAL PART OF THE WING I RECOMEND KEEPING THIS AREA IN GOOD REPAIR. (TC# 20071019002)

FAA122707001	CESSNA	LYC	CYLINDER HEAD	CRACKED
11/11/2007	172P	O320D2J	AEL65102SN041	ENGINE

HEAD CAME OFF BARRELL OF CYLINDER P/N AEL65102 SN0.41 S/N 20255-13 1083.3 HOURS ON CYLINDER SINCE INSTRUCTION OF 10/5/04 (HEAD, BARRELL SEPARATED).

ZB0R20080002	CESSNA	LYC	SENSOR	INTERMITTENT		
1/11/2008	172S	IO360A1A	S35942	FUEL QTY		
RT FUEL QUANTITY INTERMITTENT AT HIGH FUEL LEVELS.						
ZB0R20080001	CESSNA	LYC	SENSOR	INTERMITTENT		
1/11/2008	172S	IO360A1A	S35942	FUEL QTY		
DT FUEL GUANTITY INTERNITTENT AT UIGH FUEL I FVELO						

RT FUEL QUANTITY INTERMITTENT AT HIGH FUEL LEVELS.

10/19/2007

172K

2007FA0001112 CESSNA LYC CIRCUIT BREAKER FAILED

11/30/2007 172S IO360L2A 727755

O320E2D

CIRCUIT BREAKER WILL RESET AFTER BEING TRIPPED BY ROTATING THE KNOB. THIS RESULTS IN A BREAKER THAT IS RESET WHILE BEING IN THE TRIPPED POSITION. THIS BREAKER WILL PRODUCE THIS RESULT EVERY TIME THAT THIS PROCEDURE IS TRIED. THIS PARTICULAR BREAKER WAS INSTALLED IN THE AUTOPILOT SYSTEM. THE CIRCUIT BREAKER IN QUESTION IS ATTACHED. (K)

CA071102012	CESSNA	LYC	BUSHING	SEPARATED
11/2/2007	172S	IO360L2A	05412024	MLG

(CAN) THE MAIN GEAR LEG BUSHINGS ARE A STEEL OUTER TUBE, WITH A THICK INNER URETHANE CENTER. DURING PROGRESSIVE CARE OPERATION NR 4, INSPECTION OF THE LT MAIN GEAR LEG REVEALED THAT THAT THE URETHANE INNER BUSHING MATERIAL HAD DEPARTED FROM THE OUTER STEEL BUSHING (P/N 0541202-4). IT HAD MOVED LOOSELY ALONG THE TUBULAR GEAR LEG TOWARDS THE CENTER OF THE AIRCRAFT. THIS ALLOWED THE TUBULAR GEAR LEG TO RATTLE ON THE INSIDE OF THE STEEL OUTER BUSHING. THE STEEL OUTER BUSHING IS HELD IN PLACE WITH 2 (C) CLIPS, HOWEVER THE URETHANE INNER PART OF THE BUSHING LOOKS TO BE ONLY A PRESS FIT. (TC NR 20071102012)

2008FA0000018	CESSNA	LYC	YOKE	MISINSTALLED
1/8/2008	177R	O360*		

WHILE DOING AN ANNUAL, FOUND LOOSENESS IN THE YOKE FOR AND AFT MOVEMENT. AFTER MUCH CHECKING, FOUND THE LOOSENESS TO BE BETWEEN THE YOKE LEVER ASSY 1767033-7 AND 1767037-2 WHICH IS THE SHAFT. ALSO THERE WAS LOOSENESS BETWEEN THE SHAFT 1767037-2 AND THE QUADRANT 1767024-1. FURTHER INVESTIGATION FOUND STANDARD AN4 BOLTS INSTEAD OF THE NAS464P4-17 CALLED FOR IN THE PARTS

MANUAL CONNECTING THESE PARTS. THE DIFFERENCE IN DIAMETER OF THE BOLTS CAUSED THE LOOSENESS. PARTS MANUAL, FIGURE 63.

2008FA0000027	CESSNA	CONT	BRACKET	CRACKED
12/12/2007	185A	IO470F	109033	ALTERNATOR

INSTALLED PLANE POWER ALTERNATOR CONVERSION KIT, STC SA 10682SC ON AC. DURING OIL CHANGE FOUND ALTERNATOR BRACKET CRACKED TOTOALLY IN HALF. ALTERNATOR HAD ONLY BEEN IN USE 3 WEEKS AND APPROX 45 HRS. (K)

CA071102002	CESSNA	PWA	SWITCH	OVERHEATED
10/31/2007	208B	PT6A114A	CM358930	AVIONICS 2

(CAN) SHORTLY AFTER DEPARTURE THE PILOT BECAME AWARE OF A BURNING ODOR. HE NOTICED THAT THE AVIONICS 2 SWITCH WAS HOT TO TOUCH. THE PILOT RETURNED TO BASE. INVESTIGATION FOUND THAT THE AVIONICS 2 SWITCH HAD OVERHEATED TO THE POINT OF FAILURE. A NEW SWITCH P/N 7270-5-30 WAS INSTALLED. (REF CAB97-8) (TC NR 20071102002)

CA071113003	CESSNA	PWA	ENGINE	POWER LOSS	
11/6/2007	208B	PT6A114A			

(CAN) SHORTLY AFTER TAKEOFF WHILE PERFORMING A LOW LEVEL TURN, THE ENGINE REPORTEDLY LOST POWER. EMERGENCY POWER LEVER WAS ACTIVATED WITH NO RESPONSE. AIRCRAFT LANDED ON A STREET, NO FATALITIES. INITIAL INVESTIGATION REVEALED NO EVIDENCE OF PRE-IMPACT ANOMALIES. FUEL SYSTEM COMPONENTS WILL BE INVESTIGATED. MFG WILL CONTINUE INVESTIGATING THE EVENT AND ADVISE OF ROOT CAUSE ONCE ESTABLISHED (TC NR 20071113003)

CA071109007	CESSNA	PWA	CESSNA	GEAR	BROKEN
10/13/2007	208B	PT6A114A		C1450046	TRANSMISSION

(CAN) THE PILOT WAS ON DECENT AND WENT TO SELECT FLAPS AND THE CIRCUIT BREAKER POPPED AFTER THE FLAPS WERE AT ABOUT 10 DEGREES. HE THEN LANDED THE AIRCRAFT NORMALLY. MAINTENANCE FOUND THE FLAP TRANSMISSION TO BE MAKING NOISE OUT OF THE NORM. THE INTERNAL GEAR THAT DRIVES THE TRANSMISSION JACK SCREW WAS FOUND TO HAVE CHIPS OUT OF A FEW TEETH. THE TRANSMISSION WAS REPLACED AND SYSTEM FUNCTIONED NORMAL. (TC NR 20071109007)

		WARNING SYSTEM MALFUNCTIONED
0007540004070		
2007FA0001072		
20011 70001012	CLOCINA	

12/8/2007 310K T/E FLAP

AC EXPERIENCED FLAP ASYMMETRIC LIGHT IN CRUISE FLIGHT CREW DIVERTED TO ATL LIGHT WENT OUT AND FLAPS WORKED PROPERLY FOR AN UNEVENTFUL LANDING. PROBLEM COULD NOT BE DUPLICATED SO BOTH FLAP FOLLOW UPS WERE REPLACED IAW THE MM. AIRCRAFT OPS CHECK GOOD.

<u> </u>	2008FA0000065	CESSNA	WHEEL HALF	CRACKED
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TSIO520N

10/1/2007

414

8/24/2007 310L LANDING GEAR

UPON CHANGING A TIRE ON A CLEVELAND WHEEL ASSEMBLY ON ABOVE AIRCRAFT IT WAS DISCOVERED THAT THE PORTION OF THE WHEEL HALF THAT HOLDS THE BEARING RACE WAS CRACKING. IT HAD CRACKED OVER 180 DEGREES AROUND THE AXLE OPENING. WHICH COULD HAVE EVENTUALLY HAD A SERIOUS ACCIDENT

180 DEGREES AROUND THE AXLE OPENING, WHICH COULD HAVE EVENTUALLY HAD A SERIOUS ACCIDENT.					
CA071004006	CESSNA	CONT	CABLE	BROKEN	

991027114

MIXTURE CONTROL

(CAN) DURING THE ENGINE RUN-UP, THE RT ENGINE DID NOT RESPOND TO MIXTURE CONTROL. THE MIXTURE CONTROL CABLE WAS FOUND BROKEN UNDER THE ENGINE CONTROL PEDISTAL. THE BRAKE WAS INSIDE THE CONTROL CABLE HOUSING AND COULD NOT BE SEEN WITH ANY INSPECTION. (TC NR 20071004006)

			`	,
0001	CESSNA	CONT	CYLINDER	CRACKED
9/25/2007	414A	TSIO520NB	AEC631397	RT ENGINE

PILOT WAS INFORMED BY LINE PERSONNEL DURING TAXI TO TIE DOWN, THAT ENGINE WAS MAKING A LOUD (AIR

PULSING) SOUND. PILOT COULD ONLY HEAR THE SOUND AFTER REMOVING NOISE CANCELLING HEAD SET. PILOT THEN SHUTDOWN ENGINE. INSPECTION REVEALED THE NR 4 CYLINDER TO BE CRACKED AT THE PARTING SURFACE. EXHAUST WAS ESCAPING FROM THE CRACK CAUSING THE (AIR PULSING) SOUND.

FAA010208002	CESSNA	PWA	O-RING	DISINTEGRATED
11/2/2007	425	PT6A60A	MS28775218	NLG ACTUATOR

AN EMERGENCY LANDING MADE, DID NOT GET A GREEN DOWN AND LOCK INDICATION FOR MLG. MADE SAFE LANDING. FOUND RT MLG NOT DOWN AND FULLY LOCKED. DISCOVERED BLOW DOWN BOTTLE FULLY DISCHARGED, DISCOVERED HYDRAULIC RESERVOIR EMPTY. JACKED ACFT & ATTEMPTED TO MANUAL EXTEND RT MLG BY HAND. DISCOVERED THAT RT MLG WAS HYDRO-LOCKED. BLED OFF HYDRAULIC PRESSURE FROM ACTUATOR, ABLE TO ENGAGE DOWNLOCK., JACKED ACFT AND TRIED TO CYCLE GEAR SYSTEM. GEAR WOULD NOT CYCLE UP OR DOWN. TROUBLESHOT AND DISCOVERED NLG ACTUATOR, PISTON O-RINGS HAD COME APART AND WENT THRU THE ENTIRE MLG AND PLUGGED SYSTEM. PRIOR TO FLIGHT, FWD SEALS ON ACTUATOR HAD BEEN REPLACED DUE TO EVIDENCE OF HYD LEAK. AFTER SEALS HAD BEEN REPLACED, PERFORMED A PHASE 8 HYDRAULIC PRESSURE CHECK. NO LEAKS OR MALFUNCTION DETECTED. AFTER FINDING THE DISINTEGRATED PISTON O-RINGS IN THE NLG ACTUATOR, FLUSHED SYSTEM AND OVERHAULED NLG ACTUATOR. REINSTALLED ACTUATOR & PERFORMED FUNCTIONAL TEST RE-RIGGING INSPECTION ON MLG SYSTEM, WHILE PERIODICALLY CHECKING SYSTEM FILTERS FOR ANY OTHER FOREIGN OBJECTS. SUCCESSFULLY TESTED SYSTEM THRU A TOTAL OF 65 FAULT CYCLES. TEST FLEW AC AND SYSTEM WORKED CORRECTLY. (K)

2007FA0001082	CESSNA	GARRTT	BRACKET	CRACKED	
9/26/2007	441	TPE331*			
FOUND BROKEN T-BRACKET DURING ROUTINE 2, 3, D INSPECTION. (K)					
2007FA0001083	CESSNA	GARRTT	TAIL CONE	CRACKED	
9/27/2007	441	TPE331*	581201412		
FOUND CRACK DURING ROUTINE 2,3,D PHASE INSPECTION. (K)					
FAA012408001	CESSNA		CABLE	WORN	
1/24/2008	550		556536118	AILERON	

DURING A PHASE 5 IT WAS FOUND THAT THE AILERON CABLES WERE LOCATED IN THE WRONG GROVES OF THE FUSELAGE SECTOR, CAUSING GROOVES TO BE WORN INTO THE SECTOR BY THE CABLES. THERE IS A SPECIAL "NOTE" IN THE MAINTENANCE MANUAL 27-11-08 SECTION 7 FOR THE AILERON LEFT WING CONTROL CABLE REMOVAL/INSTALLATION, STATING CABLES 8 AND 9 ROUTE AROUND THE SECTOR ASSEMBLY IN THE LOWER GROOVE. THIS IS THE FIRST INSPECTION OF THIS SINCE THE AIRCRAFT WAS NEW AND THE IMPROPER ROUTING WAS DONE AT THE FACTORY. CORRECTIVE ACTION WAS TO REPLACE THE PART.

CA071109002	CESSNA	PWA	LEVER	INOPERATIVE
11/7/2007	550	JT15D4	55657544	TRIM WHEEL

(CAN) PILOT ABORTED TAKEOFF. UPON INSPECTION FOUND ELEVATOR TRIM TAB WAS ALMOST ON FULL NOSE DOWN TRIM POSITION. TRIM INDICATION IN THE COCKPIT WAS AT TAKEOFF. FOUND THAT THE INDICATOR LEVER HAD JUMPED ON THE CONTROL WHEEL TO GIVE THE WRONG INDICATION. TRIM CONTROL WHEEL AND INDICATOR LEVER REPLACED AND INDICATION SYSTEM RIGGED IAW AMM. (TC NR 20071109002)

CA071107003	CESSNA	PWA	LEVER	WORN
11/7/2007	550	JT15D4	55657544	TRIM INDICATOR

(CAN) PILOT ABORTED TAKEOFF DUE TO NO RESPONSE TO CONTROL COLUMN INPUT. UPON INSPECTION FOUND ELEVATOR TRIM TAB WAS ALMOST ON FULL NOSE DOWN POSITION AND TRIM INDICATION IN COCKPIT WAS AT TAKEOFF. FOUND INDICATOR LEVER AND CONTROL WHEEL WORN, INDICATOR LEVER HAD JUMPED ON CONTROL WHEEL TO GIVE WRONG INDICATION. TRIM CONTROL WHEEL AND INDICATOR LEVER REPLACED AND INDICATION SYSTEM RIGGED IAW AMM AIRCRAFT WAS RETURNED TO SERVICE. (TC NR 20071107003)

2008FA0000056	CESSNA	PWA	ATTACH BOLT	UNDERTORQUED
1/23/2008	560CESSNA	JT15*		HORIZONTAL STAB

DURING A ROUTINE PHASE INSPECTION WE FOUND 50 PERCENT OF THE HORIZONTAL STABILIZER AFT ATTACH BOLTS TO BE UNDERTORQUED, AND CAUSING SOME MOVEMENT AND A POPPING NOISE WHEN THE STABILIZER WAS PUSHED UP AND DOWN AT THE OB TIP. WE RE-TORQUED ALL BOLTS AND THE NOISE AND MOVEMENT WENT AWAY. SOME OF THE BOLTS REQUIRED 180 DEGREE ROTATION TO OBTAIN PROPER TORQUE. PERFORMED HIDDEN DAMAGE INSPECTION, NO DEFECTS WERE NOTED.

CA071113005	CESSNA	PWA	FUEL CONTROL	FAILED
11/6/2007	560CESSNA	JT15D5	32448809	ENGINE

(CAN) DURING APPROACH, ENGINE SPEED DESCENDED TO SUBNORMAL VALUE. NO/SLOW RESPONSE FROM THRUST LEVER. CONDITION WAS REPEATABLE ON GROUND FOLLOWING THE INCIDENT. FUEL CONTROL CHANGED AS PART OF TROUBLESHOOTING. (TC NR 20071113005)

CA071108004	CESSNA	PWC	EEC	DEFECTIVE
10/25/2007	680CE	PW306C	8228224004	ENGINE

(CAN) DURING FLIGHT, THE CREW RECIEVED A YELLOW, HIGH TEMPERATURE, (WARNING LIGHT). THE POWER WAS REDUCED AND THE FLIGHT WAS DIVERTED. TROUBLESHOOTING REVEALED A DEFECTIVE ELECTRONIC ENGINE CONTROL. (TC NR 20071108004)

CA071011002	CESSNA	CONT	MUFFLER	CRACKED
10/3/2007	A185E	IO520D		ENGINE
(CAN) MUFFLER	CRACKED AROUN	D PIPE AFTER BACKFIRE. (TC NR 200	71011002)	

2008FA0000066	CESSNA	LYC	FITTING	FAILED
1/22/2008	T206H	O360E1A6D		STATIC SYS

PRIOR TO COMPLIANCE WITH FAR 91.411, A STATIC SYSTEM CHECK WAS CONDUCTED. UNDER TEST SYSTEM SHOWED APPROXIMATELY 100 FPM DESCENT RATE. INSPECTION REVEALED THE 90 DEGREE PLASTIC FITTINGS (ONE ON EACH SIDE OF THE FORWARD FUSELAGE) FOR STATIC SYSTEM PLUMBING WERE MADE OF MOLDED PLASTIC AND INCLUDED A TINY RIDGE (MOLD LINE) ALONG THE THREADED AREA. ADDITIONALLY MFG INSTALLED THE PART WITHOUT THE USE OF PIPE SEALING COMPOUND MAKING AT LEAST PARTIAL FAILURE INEVITABLE.

CA071101005	CESSNA	ALLSN	MAGNETIC SEAL	LEAKING
10/29/2007	U206G	250C20	78023061	PROP RGB

CONT

CA071031005

CIRRUS

(CAN) ONE OF THE PILOTS NOTICED A SMALL ENGINE OIL LEAK ON BOTTOM OF ENGINE COWLING. REMOVED THE ENGINE COWLING AND FOUND LEAK ON PROP REDUCTION GEARBOX INPUT SEAL AREA. REMOVED PROP REDUCTION GEARBOX, INPUT QUILL ASSY AND REPLACED MAGNETIC SEAL. UNDER 10X MAGNIFYING GLASS, A SCRATCH AT 90 DEGREE ACROSS THE CARBON SEALING SURFACE WAS FOUND. AIRCRAFT GROUND RUN, NO LEAKS, RETURN TO SERVICE. DEFECTIVE MAGNETIC SEAL RETURN TO MFG. (TC NR 20071101005)

TUBE

DAMAGED

			_	_	
10/23/2007	SR20	IO360E	50339001	CYLINDER INTAKE	
(CAN) INTAKE PIPI	E ON NR 1 CYLIND	ER FLANGE DAMAGED. (TC NR 2007	1031005)		
CA071031004	CIRRUS	CONT	TUBE	DETERIORATED	
6/21/2007	SR20	IO360ES	6552241	CYLINDER INTAKE	
(CAN) INTAKE TUBE AT FLANGE TO CYLINDER DETERIORATED. NEW INTAKE PIPE 655224-1 AND GASKET 554227					

INSTALLED (NR 3 CYLINDER). (TC NR 20071031004)

<u>CA071031002</u> CIRRUS CONT INTAKE PIPE DETERIORATED
4/17/2007 SR20 IO360ES 6552241 ENGINE

(CAN) INTAKE PIPE FLANGE DETERIORATED AND AIR LEAK OCCURRED. ENGINE IDLE INCREASED AND ENGINE RUNS SLIGHTLY ROUGH. INSTALLED NEW INTAKE PIPE P/N 655224-1 AND GASKET 554227 (NR 3 CYLINDER) (TC NR 20071031002)

FAA010208001	CIRRUS	CONT	UNKNOWN	MALFUNCTIONED
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11/30/2007 SR22 IO550* PFD

PFD AND GPS/NAV1 BOTH REBOOTED AT THE SAME TIME. RESTARTED WITHOUT GOING THROUGH EITHER ITS STANDARD INITIALIZATION OR ITS FAST START ROUTINE. THE AUTOPILOT SEEMED TO BE STILL ENGAGED BUT THE VS SELECTION, QNH, ALTITUDE PRE-SELECT AND HEADING WERE RESET AND THESE RESET VALUES APPEARED TO BE PASSED TO THE AUTOPILOT. THIS OCCURRED AT LOW LEVEL, IN THE CLIMB, IN IMC WITH HEADING AND ALTITUDE ACQUIRE SET ON THE AUTOPILOT. THERE WAS SOME ELECTRICAL ACTIVITY WITHIN 10 MILES. THE AIRCRAFT WAS FLOWN SAFELY BACK TO THE DEPARTURE FIELD USING BACKUP INSTRUMENTS. ENGINEERS SUSPECT EITHER A SPIKE FROM ALTERNATOR 2 OR MFG BELIEVES THIS COULD BE A BONDING ISSUE AND WAS CAUSED BY STATIC. MFG INCIDENT REF: 871500HQ. ENGINEERS SUSPECT THAT THE AHRS DID NOT REBOOT, BUT THIS WAS NOT APPARENT TO THE PILOT.

 2007FA0001106
 CIRRUS
 CONT
 WIRE HARNESS
 DAMAGED

 12/22/2007
 SR22
 IO550*
 ALTERNATOR

ALTERNATOR FAILED ON FIRST FLIGHT AFTER INSTALLATION FROM OVERHAUL. FOUND FIELD WIRE RIPPED OUT OF FIELD BRUSH AND BARE WIRE DEBRIS INSIDE ALTERNATOR CASE. SUSPECT WIRE EPOXY HOLD DOWN VIBRATED LOOSE ALLOWING ROTOR ASSEMBLY TO SNAG WIRE.

<u>CA071026002</u> CNDAIR PWA SPAR CAP CRACKED 10/24/2007 CL2151A10 CWASP 215003268 WS 50.0

(CAN) WHILE PERFORMING AD 92-26R1 IAW SB 215-A454 REV 3, NO DEFECTS WERE FOUND IAW OUTLINED ULTRASONIC INSPECTION PROCEDURES. THE NDI TECH NOTED THAT HE WAS PICKING UP WHAT HE THOUGHT WAS A SUSPECTED CRACK OUTSIDE THE AREA OUTLINED IN THE SB AND PROCEEDED TO ENQUIRE ABOUT THE SURROUNDING STRUCTURE WITH A COMPANY AME. FS 434.8 REAR SPAR WS 50.0 THE SUSPECTED CRACK ON THE ULTRASOUND WAS SHOWN TO THE AME AND A LINEAR MEASUREMENT WAS MADE AS TO THE SCALE ON THE INSTRUMENT. IT WAS BELIEVED THAT THE CRACK WOULD BE AT APPROXIMATELY LT WING WS 50.0 IN LINE WITH THE REAR OUTER VERTICAL PICK-UP ANGLE TO REAR SPAR CAP ATTACHMENT VIA LOCK FASTENER. NR 2 FUEL CELL AND FUEL BAY LINERS WERE REMOVED AND A CRACK IN THE PAINT PRIMER WAS NOTICED AT THE FIRST LOCK FASTENER ABOVE THE SPAR CAP ATTACHMENT AT WS 50.0. THE AREA WAS PAINT STRIPPED AND A VISUAL CRACK WAS CONFIRMED USING A MAGNIFYING GLASS. CRACKS WERE ALSO DETECTED ON THE VERTICAL EDGE OF THE SPAR CAP AND THE LOWER HORIZONTAL EDGE OF THE CAP, BELIEVING THAT THE CAP IS CRACKED ALL THE WAY THROUGH. THIS AC HAD UNDERGONE A SPAR CAP REPAIR, WITH SPAR WEB SPLICE REPLACEMENT IN THE WINTER OF 06/07 ON THE RT SIDE. A CRACK INDICATION WAS PICKED UP IN THE FALL OF 06 DURING NDI TESTING AT RWS 51.0, F.S. 434.8 (REAR SPAR). UPON REMOVAL OF THE SPAR CAP FAIL SAFE STRAP PN 215-10032-76, ANOTHER CRACK WAS FOUND AT APPROXIMATELY WS 49.5 ON THE SPAR CAP. AGAIN THESE CRACKS FOUND WERE OUTSIDE THE INSPECTION AREA OUTLINED IN SB 215-A454 REV 3, A FURTHER NOTE TO TAKE INTO CONSIDERATION IS THAT IN THE WINTER OF 2000/01 A CRACK WAS DETECTED ON THE RT REAR SPAR CAP AT WS 51.0 OF AC SN 1044 AND UPON REMOVAL OF FUEL TANK NR 2 AND LINERS A VISUAL CRACK AS DESCRIBED ON SN 1068 WAS FOUND ON THE REAR SPAR WEB. UPON REMOVAL OF FAIL SAFE STRAP. THE SPAR CAP WAS FOUND BROKEN ALL THE WAY THRU AT APPROXIMATE WS 49.5.THIS IS THE 3RD OCCURRENCE OF THIS TYPE.

<u>CA071029007</u> CNDAIR PWA BEARING DAMAGED 10/29/2007 CL2156B11215 PW123 DAT4864A RUDDER

(CAN) RUDDER BEARING FOUND DAMAGED ON C-CHECK. THE BEARING WAS INCORPORATED BY SB ON WINTER WORK 2005-2006 AND CUMULATE 421 HOURS SINCE INSTALLATION. A/C HOURS 2141 CYCLES 1316 DROPS 11678 (TC NR 20071029007)

 2008FA0000033
 CNDAIR
 ACTUATOR
 FAILED

 10/15/2007
 CL6002B16
 21207008
 PITCH TRIM

PITCH TRIM ACTUATOR, PN 21207-008, SN 344: CONNECTOR P5CD- PINS A, B AND D ARE SHORTED TO PIN E. THE SHORT IS LESS THAN 1. PIN C HAS A 25 SHORT TO PIN E. FLEXING THE CONNECTOR CAUSES THE SHORT TO COME AND GO. (K)

CA071029010	CNDAIR	GE	GRIMES	HOUSING	DAMAGED
10/28/2007	CL6002B19	CF343A1		63E951	FUEL FILTER

(CAN) JUST BEFORE PUSHBACK, THE RAMP CREW OBSERVED A FUEL LEAK COMING FROM THE APU AREA. CAPTAIN PERFORMED RAPID PASSENGER DEPLANEMENT WITH EMERGENCY CREWS ON STAND-BY. MAINTENANCE FOUND THE FUEL LEAK COMING FROM THE NR 2 ENGINE- FUEL FILTER HOUSING, BY THE FUEL FILTER IMPENDING BYPASS PLUG. IN THIS AREA, THE FUEL FILTER HOUSING AND THE SQUARE PLUG WERE FOUND GROOVED AND THE SQUARE PLUG SEAL WAS FOUND DAMAGED AS WELL. MAINTENANCE REPLACED THE ALL FUEL FILTER ASSY. (TC NR 20071029010)

<u>CA071102001</u> CNDAIR GE ACTUATOR FAILED 10/29/2007 CL6002B19 CF343A1 852D10019 TE FLAPS

(CAN) DURING APPROACH, THE CREW RECEIVED A FLAP FAIL CAUTION MESSAGE WHEN THE FLAPS WERE SELECTED FROM 0 TO 8 DEGREES. THE EICAS FLIGHT CONTROL PAGE WAS INDICATING 0 DEGREE ON BOTH SIDES. THE CREW CONTINUED THE APPROACH AND COMPLETED A FLAPLESS LANDING WITHOUT INCIDENT. NO EMERGENCY WAS DECLARED. THE SYSTEM WAS RESET, THE FLAPS SET TO 8 DEGREES AND THE AC WAS FERRIED FOR MAINTENANCE. ALL FLAP ACTUATORS WERE REMOVED AND SENT TO THE SHOP. THE LT NR1 FLAP ACTUATOR FAILED THE -60 DEGREES TORQUE CHECK. DECISION WAS MADE TO REPLACE ALL FLAP ACTUATORS. FLAP ACTUATORS WERE REPLACED, ADJUSTED, TESTED AND THE AIRCRAFT WAS RELEASED. A SUCCESSFUL TEST FLIGHT WAS CONDUCTED AND THE AIRCRAFT RETURNED INTO SERVICE. (TC NR 20071102001)

<u>CA071102009</u> CNDAIR GE ACTUATOR FRACTURED 10/30/2007 CL6002B19 CF343A1 601R107022 SPOILERON

(CAN) DURING SHORT FINAL, THE FLAPS WERE SELECTED TO 45 DEGREES AND THE AIRCRAFT ROLLED TO THE RT. FULL AILERON TRIM AND A LITTLE BIT OF AILERON WAS REQUIRED TO KEEP THE AIRCRAFT LEVEL. THE EICAS FLIGHT CONTROL PAGE WAS REVIEWED AND THE RT SPOILERON WAS SHOWING UP. THE AIRCRAFT LANDED WITHOUT INCIDENT. MAINTENANCE DISCOVERED THAT THE RT SPOILERON OB ACTUATOR ATTACHMENT HAS FRACTURED. THE RT SPOILERON ASSY AND BOTH ACTUATORS WERE REPLACED, ADJUSTED AND THE SYSTEM TESTED SERVICEABLE. THE AIRCRAFT WAS RELEASED AND RETURNED INTO SERVICE. (TC NR 20071102009)

<u>CA071103001</u> CNDAIR GE HONEYWELL ECU FAULTY
11/1/2007 CL6002B19 CF343A1 21188002 APU

(CAN) FLIGHT RETURNED DUE TO APU OIL PRESSURE MESSAGE CAUSING THE APU TO FAIL. AIRCRAFT WAS ALREADY OPERATING WITH 1 IDG GENERATOR UNSERVICEABLE. MAINTENANCE CHECKED THE SYSTEM AND FOUND AN ECU FAULT MESSAGE. THE APU ECU WAS REPLACED AND THE A/C WAS CHECKED SERVICEABLE. NR 1 IDG WAS ALSO REPLACED AT THIS TIME AND CHECKED SERVICEABLE CLEARING THE MEL. CYCLES SINCE OVERHAUL:4860 (TC NR 20071103001)

<u>CA071214004</u> CNDAIR GE ACTUATOR UNSERVICEABLE 12/13/2007 CL6002B19 CF343A1 852D10019 TE FLAPS

(CAN) FLAP FAIL ON DESCENT, WHEN FLAP SELECTED FROM 0 DEG TO 8 DEG. FLAPLESS LANDING CARRIED OUT WITHOUT FURTHER INCIDENT. TROUBLESHOOTING IN PROGRESS. WILL UPDATE WHEN MORE INFORMATION IS AVAILABLE (TC NR 20071214004)

<u>CA071105004</u> CNDAIR GE WINDOW BROKEN 10/30/2007 CL6002B19 CF343B1 601R3303312 COCKPIT

(CAN) OUTBOUND THE FO'S SIDE WINDOW BROKE GOING THROUGH 20,000 FT. MX REPLACED SIDE WINDOW (TC NR 20071105004)

<u>CA071105005</u> CNDAIR GE ENGINE FAILED 10/26/2007 CL6002B19 CF343B1 601R6000267 NR 1

(CAN) AFTER TAKEOFF, THE CREW SENT ACARS INDICATING THAT THE LT ENGINE HAD A HIGH VIB. AFTER FOLLOWING THE QRH. THEY REDUCED POWER TO ACCOMMODATE THE VIB IN THE GREEN. IN SEPARATE ACARS, THEY HAD ANTI SKID MESSAGE. THEY CONTINUED AND ONCE ON THE GROUND DISCOVERED THAT THE NR 2 MAIN TIRE HAD SHREDDED AND PART OF THE DEBRI WENT INTO THE NR 1 ENGINE. 2 FAN BLADES WERE BENT AND 2 STATORS WERE CRACKED. THE NOSE COWL HAS A DENT THAT IS OUT OF LIMITS. THE REMAINING MAIN WHEEL TIRE PRESSURES WERE ALL ABOVE 200 PSI. PARTS REPLACED: STATOR SPACER PN 5128T05G01 NSN,

FAN BLADE C-25 PN 6018T30P06 SN KLAJ6586 FAN BLADE L-11 PN 6018T30P06 SN KGAR3406 FAN BLADE C-22 PN 6018T30P14 SN KGACR870 FAN BLADE L-8 PN 6018T30P14 SN KGACR950 NOSE COWL PN 228-50020S SN RJNA4C0476 (TC NR 20071105005)

CA071031006	CNDAIR	GE	RADOME	DAMAGED
10/30/2007	CL6002B19	CF343B1	600330061	FUSELAGE

(CAN) FLIGHT ON CLIMB OUT THE CREW HEARD A LOUD BANG IN THE NOSE AND SAW A BIRD TRAVEL PAST THE COCKPIT WINDOW. ALL FLIGHT SYSTEMS WERE NORMAL AND FLIGHT CONTINUED. UPON ARRIVAL MAINTENANCE MET THE AIRCRAFT AND FOUND A HOLE IN THE RADOME AS WELL AS A DAMAGE TO THE LT FUSELAGE AFT OF PITOT HEAD. DAMAGE ASSESSMENT IS UNDER WAY AND IT WILL BE UPDATED AS SOON AS MORE INFOMATION IS AVAILABLE. (TC NR 20071031006)

CA071025011	CNDAIR	GE	COWLING	LOOSE

10/17/2007 CL6002B19 CF343B1 22850080 THRUST REVERSER

(CAN) ACTUALLY WE HAVE A AOG A/C AT PRG. DURING THRUST REVERSER OPERATING AFTER TOUCHDOWN AT PRG WE'RE LOSING THE UPPER AND LOWER RT ENGINE COWLINGS. ONE OF THE COWLINGS HIT THE A/C AT FS 700 IN BETWEEN STR 5 TO 7 AND DAMAGED THE FUSELAGE AND ALSO THE FRAME FS STN 700. (TC NR 20071025011)

CA071025002	CNDAIR	GE	BPSU	FAILED
10/20/2007	CL6002B19	CF343B1	855D1009	TE FLAPS

(CAN) DURING APPROACH, AIRCRAFT RECEIVED A FLAPS FAIL MESSAGE WITH FLAPS AT 30 DEGREES. FLAPS WERE NOT RESELECTED. RECTIFICATION: RT BRAKE POSITION SENSOR UNIT (BPSU) FOUND TO BE AT FAULT. BPSU REPLACED AND RIGGED IAW AMM. (TC NR 20071025002)

CA071118002	CNDAIR	GE	WINDSHIELD	CRACKED
11/8/2007	CL6002C10	CF348C5B1	NP13932113	COCKPIT

(CAN) IN FLIGHT LT WINDSHIELD CRACKED, AIRCRAFT CONTINUED TO DESTINATION. NO FURTHER REPORTED DETAILS. (TC NR 20071118002)

CA071118001	CNDAIR	GE	MENASCO	ROD END	BROKEN	
11/15/2007	CL6002D24	CF348C5	510009	510009	PCU	

(CAN) REPORT FROM AIR ONE: REF /A/ - AIPC 27-33-01, FIG 1 WHILE PERFORMING TASK CARD 000-27-220-010 - OPERATIONAL TEST OF THE ELEVATOR PCUS, AIR ONE FOUND THAT WITH HYD 1 ONLY, THE ELEVATOR WOULD NOT MOVE. AFTER INSPECTION, THEY FOUND THAT PCU 1 ROD END (ON THE ELEVATOR ATTACHING LUG) WAS BROKEN IN (2) PIECES AT THE PCU PISTON THREADS. PRIOR REMOVING ANYTHING, IT WAS NOTICED THAT THE ROD END SEEMED JAMMED (UNABLE TO TURN THE ROD END AROUND THE BOLT) ON ITS ATTACHING BOLT (REF /A/ ITEM 275) WHILE ATTEMPTING TO REMOVE THE BROKEN ROD END, THE ATTACHING NUT (REF /A/, ITEM 295) WAS EASILY REMOVABLE. HOWEVER, IT WAS NOT POSSIBLE TO TURN OR REMOVE THE BOLT (REF /A/, ITEM 275) FROM THE ELEVATOR PCU FITTING (REF SRM 55-21-02, ITEM 114, P/N AV670-24142-007) (TC NR 20071118001)

CA071026004	CVAC	ALLSN	ACTUATOR	MALFUNCTIONED
10/23/2007	440	501D13D		NLG STEERING

(CAN) DURING APPROACH WHEN LANDING GEARS SELECTED DOWN, THE LANDING GEARS UNLOCK LIGHT CAME ON, HOWEVER, NO NOSE WHEEL DOWN LIGHT CAME ON. THE CREW CONFIRMED VISUALLY GEAR NOT DOWN. AFTER A FEW CYCLES GEAR UP AND GEAR DOWN AND EMERGENCY UPLATCH RELEASE TO NO AVAIL. AFTER TURNING NOSE GEAR STEERING THE NOSE GEAR CAME DOWN AND LOCKED NORMALLY. THE NOSE GEAR STEERING ACTUATOR FOUND TO BE CREEPING TO THE RT ON ITS OWN INTERMITTENTLY. SUBSEQUENT INSPECTION FOUND THAT THE UPPER PIVOT POINT WAS WORN. STEERING ASSY REMOVED AND SENT TO OVERHAUL SHOP FOR INVESTIGATION AND OVERHAUL.

2008FA0000042	DHAV	PWA	CYLINDER HEAD	CRACKED			
12/12/2007	DHC2*	R985AN14B		ENGINE			
CYLINDER CRACI	CYLINDER CRACKED IN THE AREA OF EXHALIST VALVE						

CA071214003	DHAV	PWA		CABLE	CORRODED
12/14/2007	DHC2MK1	R985*		C2CE523A	FUEL SELECTOR
	ECTOR CABLE VER ABLE. (TC NR 2007		DDED, CABLE FA	AILED WHEN REMOVE	D. NO LOG BOOKS OR
CA071214005	DHAV	PWA		HINGE BRACKE	T CRACKED
0/4/2007	DHC2MKI	R985AN14B		C2FS1253A	CARGO DOOR
CAN) TOP HINGE	BRACKET CRAC	KED ON FWD FAC	CE OF HINGE. (T	C NR 20071214005)	
CA071024006	DHAV	PWA		SHUTOFF VALVI	E LEAKING
0/4/2007	DHC2MKI	R985AN14B		PV332010	FUEL SYSTEM
				ND FUEL SHUTOFF VAI OR LEAKS. AIRCRAFT	LVE WAS LEAKING. SERVICEABLE. (TC NR
CA071026010	DHAV	PWA		LINK ASSY	CORRODED
0/26/2007	DHC2MKI	R985AN14B		C2US1285A	AT SKI ATTACH
DISASSEMBLE OF	F SKI, NOT A NOR	MAL PRACTICE. S	SKIS APPEAR TO	HAVE BEEN OILED IA	APPARENT DURING FUL AW ENGINEERING DWG, ER LINK ASSY. (TC NR
	DHAV	PWA	DHAV	ATTACH FITTING	G CRACKED
CA071108003 11/2/2007	DHC2MKI	R985AN14B			LIFT STRUTS
CA071108003 1/2/2007 CAN) WHILE ACC OF BOTH WING L WERE .7500 INCH STRUT P/N C2W1 YEAR AGO WITH CORROSIVE ENV	DHC2MKI COMPLISHING THE IFT STRUTS. IN BO I LONG LT STRUT 104A S/N 0113 WA NO FAULTS FOUN	R985AN14B E REQUIREMENTS OTH CASES THE P/N C2W1103A, S AS CRACKED ON ND AT THAT TIME	S OF SB 2/55, CF CRACKS WERE S/N 0140 WAS CF THE FWD FACE . THE AC OPERA	RACKS WERE DETECT LOCATED ON THE IB F RACKED ON THE AFT F OF THE AFT LUG. S. B ATES EXCLUSIVELY OF	LIFT STRUTS FED ON THE LOWER LUGFACE OF THE LUG AND FACE OF THE FWD LUGF 5. 2/41 WAS COMPLETED
CA071108003 1/2/2007 CAN) WHILE ACCOME BOTH WING LIVERE .7500 INCHOTRUT P/N C2W1 YEAR AGO WITH CORROSIVE ENVITAT 18060.1 (TC N	DHC2MKI COMPLISHING THE IFT STRUTS. IN BO I LONG LT STRUT 104A S/N 0113 WA NO FAULTS FOUN /IRONMENT. BOTH	R985AN14B E REQUIREMENTS OTH CASES THE P/N C2W1103A, S AS CRACKED ON ND AT THAT TIME	S OF SB 2/55, CF CRACKS WERE S/N 0140 WAS CF THE FWD FACE . THE AC OPERA	RACKS WERE DETECT LOCATED ON THE IB F RACKED ON THE AFT F OF THE AFT LUG. S. B ATES EXCLUSIVELY OF	LIFT STRUTS FED ON THE LOWER LUG FACE OF THE LUG AND FACE OF THE FWD LUG F 5. 2/41 WAS COMPLETED N FLOATS IN A
CA071108003 1/2/2007 CAN) WHILE ACCOPE BOTH WING LIVERE .7500 INCHOTRUT P/N C2W1/CEAR AGO WITH CORROSIVE ENV	DHC2MKI COMPLISHING THE IFT STRUTS. IN BO I LONG LT STRUT 104A S/N 0113 WA NO FAULTS FOUN (IRONMENT. BOTH NR 20071108003)	R985AN14B E REQUIREMENTS OTH CASES THE P/N C2W1103A, S AS CRACKED ON ND AT THAT TIME I STRUTS WERE	S OF SB 2/55, CF CRACKS WERE S/N 0140 WAS CF THE FWD FACE . THE AC OPERA	RACKS WERE DETECT LOCATED ON THE IB F RACKED ON THE AFT F OF THE AFT LUG. S. B ATES EXCLUSIVELY OF THE AIRCRAFT WAS F	LIFT STRUTS TED ON THE LOWER LUGFACE OF THE LUG AND FACE OF THE FWD LUGF S. 2/41 WAS COMPLETED N FLOATS IN A RETURNED TO SERVICE.
CAN) WHILE ACCOPE BOTH WING LEVERE .7500 INCHETRUT P/N C2W1 CEAR AGO WITH CORROSIVE ENVERT 18060.1 (TC NO CAN) DURING RUCK CAN) DURING RUCK CAN DURING RUCK CAN CASE WAS	DHC2MKI COMPLISHING THE IFT STRUTS. IN BO I LONG LT STRUT 104A S/N 0113 WA NO FAULTS FOUN IRONMENT. BOTH NR 20071108003) DHAV DHC2MKI UNUP AFTER INSE	R985AN14B E REQUIREMENTS OTH CASES THE P/N C2W1103A, S AS CRACKED ON ND AT THAT TIME I STRUTS WERE PWA R985AN14B PECTION, INVEST R AN ENGINE THR	S OF SB 2/55, CF CRACKS WERE 6/N 0140 WAS CF THE FWD FACE . THE AC OPERA REPLACED AND	RACKS WERE DETECT LOCATED ON THE IB F RACKED ON THE AFT F OF THE AFT LUG. S. B ATES EXCLUSIVELY OF THE AIRCRAFT WAS F CRANKCASE 16475 HINOR OIL LEAK REVER THE BASE OF NR 2 CY	LIFT STRUTS FED ON THE LOWER LUG FACE OF THE LUG AND FACE OF THE FWD LUG F S. 2/41 WAS COMPLETED N FLOATS IN A RETURNED TO SERVICE CRACKED ENGINE ALED THAT THE ENGINE
CAN) WHILE ACCOPE BOTH WING LEVERE .7500 INCHITRUT P/N C2W1 CORROSIVE ENVAT 18060.1 (TC NO CAN) DURING RUCK ANKCASE WAS IR 2 AND NR 3. T	DHC2MKI COMPLISHING THE JIFT STRUTS. IN BO I LONG LT STRUT 104A S/N 0113 WA NO FAULTS FOUN JIRONMENT. BOTH NR 20071108003) DHAV DHC2MKI UNUP AFTER INSE S CRACKED NEAR	R985AN14B E REQUIREMENTS OTH CASES THE P/N C2W1103A, S AS CRACKED ON ND AT THAT TIME I STRUTS WERE PWA R985AN14B PECTION, INVEST R AN ENGINE THR	S OF SB 2/55, CF CRACKS WERE 6/N 0140 WAS CF THE FWD FACE . THE AC OPERA REPLACED AND	RACKS WERE DETECT LOCATED ON THE IB F RACKED ON THE AFT F OF THE AFT LUG. S. B ATES EXCLUSIVELY OF THE AIRCRAFT WAS F CRANKCASE 16475 HINOR OIL LEAK REVER THE BASE OF NR 2 CY	LIFT STRUTS FED ON THE LOWER LUG FACE OF THE LUG AND FACE OF THE FWD LUG IS 5. 2/41 WAS COMPLETED N FLOATS IN A RETURNED TO SERVICE CRACKED ENGINE ALED THAT THE ENGINE YLINDER, BETWEEN CYLS
CA071108003 1/2/2007 CAN) WHILE ACCOPE BOTH WING LIVERE .7500 INCHORD TO THE CORROSIVE ENVERT 18060.1 (TC NOT 18060.1) CA071109004 0/5/2007 CAN) DURING RUCH CORNOSIVE ENVERT 18060.1 CANNICASE WAS IR 2 AND NR 3. TO CA041222018	DHC2MKI COMPLISHING THE IFT STRUTS. IN BO I LONG LT STRUT 104A S/N 0113 WA NO FAULTS FOUN IRONMENT. BOTH NR 20071108003) DHAV DHC2MKI UNUP AFTER INSE S CRACKED NEAR THE ENGINE WAS	R985AN14B E REQUIREMENTS OTH CASES THE P/N C2W1103A, S AS CRACKED ON ND AT THAT TIME I STRUTS WERE PWA R985AN14B PECTION, INVEST R AN ENGINE THR	S OF SB 2/55, CF CRACKS WERE 6/N 0140 WAS CF THE FWD FACE . THE AC OPERA REPLACED AND	RACKS WERE DETECT LOCATED ON THE IB F RACKED ON THE AFT F OF THE AFT LUG. S. B ATES EXCLUSIVELY OF THE AIRCRAFT WAS F CRANKCASE 16475 IINOR OIL LEAK REVER THE BASE OF NR 2 CY	LIFT STRUTS TED ON THE LOWER LUG FACE OF THE LUG AND FACE OF THE FWD LUG IS EVEL 2/41 WAS COMPLETED IN FLOATS IN A RETURNED TO SERVICE CRACKED ENGINE ALED THAT THE ENGINE YLINDER, BETWEEN CYLS
CAN) WHILE ACCOPE BOTH WING LIVERE .7500 INCHOTRUT P/N C2W1 (CAR AGO WITH CORROSIVE ENVEAT 18060.1 (TC NO CAN) DURING RICHARICASE WAS IR 2 AND NR 3. TO CAN) SLIDE ACT SWITCH BRACKE	DHC2MKI COMPLISHING THE LIFT STRUTS. IN BO I LONG LT STRUT 104A S/N 0113 WA NO FAULTS FOUN (IRONMENT. BOTH NR 20071108003) DHAV DHC2MKI UNUP AFTER INSE S CRACKED NEAR THE ENGINE WAS DHAV DHC6 UATOR MANUFAC ET P/N C6E1060-3.	R985AN14B E REQUIREMENTS OTH CASES THE P/N C2W1103A, S AS CRACKED ON ND AT THAT TIME H STRUTS WERE PWA R985AN14B PECTION, INVEST R AN ENGINE THR REPLACED. (TC N	S OF SB 2/55, CF CRACKS WERE S/N 0140 WAS CF THE FWD FACE THE AC OPERA REPLACED AND GRATION OF A MEDICATION OF	CRANKCASE 16475 THE BASE OF NR 2 CY ACTUATOR PDMC6E101729 SLIDE ACTUATOR WILL 1017-29 IS .1300 +/0005	LIFT STRUTS TED ON THE LOWER LUG FACE OF THE LUG AND FACE OF THE FWD LUG F S. 2/41 WAS COMPLETED N FLOATS IN A RETURNED TO SERVICE. CRACKED ENGINE ALED THAT THE ENGINE 'LINDER, BETWEEN CYLS' MISMANUFACTURED SLIDE L NOT FIT ONTO BETA 5. GROOVE ON SLIDE
CAN) WHILE ACCOPE BOTH WING LIVERE .7500 INCHOTRUT P/N C2W1 (CAR AGO WITH CORROSIVE ENVIOLATION 18060.1 (TC NOT CAN) DURING RUCK CAN) DURING RUCK CAN CASE WAS IR 2 AND NR 3. TO CAO41222018 2/22/2004 CAN) SLIDE ACT SWITCH BRACKE (ROM J.A.S. PDM	DHC2MKI COMPLISHING THE LIFT STRUTS. IN BO I LONG LT STRUT 104A S/N 0113 WA NO FAULTS FOUN (IRONMENT. BOTH NR 20071108003) DHAV DHC2MKI UNUP AFTER INSE S CRACKED NEAR THE ENGINE WAS DHAV DHC6 UATOR MANUFAC ET P/N C6E1060-3.	R985AN14B E REQUIREMENTS OTH CASES THE P/N C2W1103A, S AS CRACKED ON ND AT THAT TIME H STRUTS WERE PWA R985AN14B PECTION, INVEST R AN ENGINE THR REPLACED. (TC N	S OF SB 2/55, CF CRACKS WERE S/N 0140 WAS CF THE FWD FACE THE AC OPERA REPLACED AND GRATION OF A MEDICATION OF	CRANKCASE 16475 THE BASE OF NR 2 CY ACTUATOR PDMC6E101729 SLIDE ACTUATOR WILL 1017-29 IS .1300 +/0005	LIFT STRUTS TED ON THE LOWER LUG FACE OF THE LUG AND FACE OF THE FWD LUG F S. 2/41 WAS COMPLETED N FLOATS IN A RETURNED TO SERVICE. CRACKED ENGINE ALED THAT THE ENGINE 'LINDER, BETWEEN CYLS' MISMANUFACTURED SLIDE L NOT FIT ONTO BETA 5. GROOVE ON SLIDE
CA071108003 1/2/2007 CAN) WHILE ACCOF BOTH WING LEVERE .7500 INCHORD	DHC2MKI COMPLISHING THE LIFT STRUTS. IN BO I LONG LT STRUT 104A S/N 0113 WA NO FAULTS FOUN (IRONMENT. BOTH NR 20071108003) DHAV DHC2MKI UNUP AFTER INSE S CRACKED NEAS THE ENGINE WAS DHAV DHC6 TUATOR MANUFAC ET P/N C6E1060-3.	R985AN14B E REQUIREMENTS OTH CASES THE P/N C2W1103A, S AS CRACKED ON ND AT THAT TIME I STRUTS WERE PWA R985AN14B PECTION, INVEST R AN ENGINE THR REPLACED. (TC N	S OF SB 2/55, CF CRACKS WERE S/N 0140 WAS CF THE FWD FACE THE AC OPERA REPLACED AND GRATION OF A MEDICATION OF	CRACKS WERE DETECT LOCATED ON THE IB FOR ACKED ON THE AFT FOR THE AFT LUG. S. BATES EXCLUSIVELY OF THE AIRCRAFT WAS FOR THE AIRCRAFT WAS FOR THE BASE OF NR 2 CY	LIFT STRUTS FED ON THE LOWER LUG FACE OF THE LUG AND FACE OF THE FWD LUG F S. 2/41 WAS COMPLETED N FLOATS IN A RETURNED TO SERVICE CRACKED ENGINE ALED THAT THE ENGINE /LINDER, BETWEEN CYLS MISMANUFACTURED SLIDE L NOT FIT ONTO BETA 5. GROOVE ON SLIDE 150. (TC NR 20041222018)
CA071108003 1/2/2007 CAN) WHILE ACCOPE BOTH WING LIVERE .7500 INCHORD TO THE CORROSIVE ENVERT 18060.1 (TC NOT THE CORROS	DHC2MKI COMPLISHING THE IFT STRUTS. IN BO I LONG LT STRUT 104A S/N 0113 WA NO FAULTS FOUN (IRONMENT. BOTH NR 20071108003) DHAV DHC2MKI UNUP AFTER INSE S CRACKED NEAR THE ENGINE WAS DHAV DHC6 EUATOR MANUFAC ST P/N C6E1060-3. 1 C6E1017-29 IS .12 DHAV DHC6	R985AN14B E REQUIREMENTS OTH CASES THE P/N C2W1103A, S AS CRACKED ON ND AT THAT TIME I STRUTS WERE PWA R985AN14B PECTION, INVEST R AN ENGINE THR REPLACED. (TC N CTURED TO INCOME GROOVE FOR SL 200 +/0005. TRA PWA PT6A28 13635 ONTO NOZ	S OF SB 2/55, CF CRACKS WERE S/N 0140 WAS CF THE FWD FACE THE AC OPERA REPLACED AND GOUGHBOLT AT NR 20071109004 RRECT LIMITS. S LIDE ON A C6E10 CK ON BETA SV	CRACKS WERE DETECT LOCATED ON THE IB FOR ACKED ON THE AFT FOR THE AFT LUG. S. BATES EXCLUSIVELY OF THE AIRCRAFT WAS FOR THE AIRCRAFT WAS FOR THE BASE OF NR 2 CY DETECTION OF THE BASE OF NR 2 CY DETECTION OF THE BASE OF THE	LIFT STRUTS TED ON THE LOWER LUG FACE OF THE LUG AND FACE OF THE FWD LUG F S. 2/41 WAS COMPLETED IN FLOATS IN A RETURNED TO SERVICE. CRACKED ENGINE ALED THAT THE ENGINE 'LINDER, BETWEEN CYLS' MISMANUFACTURED SLIDE L NOT FIT ONTO BETA 5. GROOVE ON SLIDE '50. (TC NR 20041222018) SHEARED
CA071108003 1/2/2007 CAN) WHILE ACCOPE BOTH WING LIVERE .7500 INCHORD TO THE CORROSIVE ENVERT 18060.1 (TC NOT THE CORROS	DHC2MKI COMPLISHING THE IFT STRUTS. IN BO I LONG LT STRUT 104A S/N 0113 WA NO FAULTS FOUN (IRONMENT. BOTH NR 20071108003) DHAV DHC2MKI UNUP AFTER INSE S CRACKED NEAR THE ENGINE WAS DHAV DHC6 EUATOR MANUFACE ET P/N C6E1060-3. I C6E1017-29 IS .12 DHAV DHC6 IG NOZZLE PN 301	R985AN14B E REQUIREMENTS OTH CASES THE P/N C2W1103A, S AS CRACKED ON ND AT THAT TIME I STRUTS WERE PWA R985AN14B PECTION, INVEST R AN ENGINE THR REPLACED. (TC N CTURED TO INCOME GROOVE FOR SL 200 +/0005. TRA PWA PT6A28 13635 ONTO NOZ	S OF SB 2/55, CF CRACKS WERE S/N 0140 WAS CF THE FWD FACE THE AC OPERA REPLACED AND GOUGHBOLT AT NR 20071109004 RRECT LIMITS. S LIDE ON A C6E10 CK ON BETA SV	CRACKS WERE DETECT LOCATED ON THE IB FOR ACKED ON THE AFT FOR THE AFT LUG. S. BATES EXCLUSIVELY OF THE AIRCRAFT WAS FOR THE AIRCRAFT WAS FOR THE BASE OF NR 2 CY DETECTION OF THE BASE OF NR 2 CY DETECTION OF THE BASE OF THE	LIFT STRUTS TED ON THE LOWER LUG FACE OF THE LUG AND FACE OF THE FWD LUG F S. 2/41 WAS COMPLETED N FLOATS IN A RETURNED TO SERVICE. CRACKED ENGINE ALED THAT THE ENGINE YLINDER, BETWEEN CYLS MISMANUFACTURED SLIDE L NOT FIT ONTO BETA 5. GROOVE ON SLIDE 150. (TC NR 20041222018) SHEARED ENGINE

(CAN) PILOTS HAD TO SHUTDOWN RT ENGINE. MAINTENANCE INSPECTION FOUND PROP WOULDN'T TURN,
EXPECT POWER SECTION FAILURE. (TC NR 20071107001)

EXPECT POWER	SECTION FAILURE	E. (TC NR 20071107001)	TOTAL CONDITION	WOOLDIN I TOTAL	
CA071107005	DHAV	PWA	CABLE	CHAFED	
10/12/2007	DHC6300	PT6A27	TBC6CF11461	ELEVATORS	
(CAN) WHILE INSPECTING THE CONTROL CABLES IAW TRANSPORT, ALERT (SDA) AL-2007-03, THE ELEVATOR CABLE WAS FOUND CHAFED AT THE PULLEYS AT STA 262.0. THE LOCATION OF THE WEAR ON THE CABLE, IS DIRECTLY OVER THE PULLEYS WHEN THE CONTROL LOCKS ARE IN. (TC NR 20071107005)					
CA071115011	DHAV	PWA	PLATE	CRACKED	
11/14/2007	DHC6300	PT6A27	C6TFM102527	VERTICAL STAB	
(CAN) CRACK IND 454. (TC NR 2007		N A CORROSION PIT IN THE AFT ATT	ACH PLATE WHEN I	NSPECTING IT IAW SB	
CA041216003	DHAV	PWA	BOLT	SHEARED	
12/16/2004	DHC6300	PT6A27	CSP28229	ENG MOUNT	
		HE 4 TOP ENGINE MOUNT BOLTS PN TELY 3/1 - 1.25 TURN(S) OF THE BOL			
CA041216004	DHAV	PWA	BOLT	SHEARED	
12/16/2004	DHC6300	PT6A27	CSP28229	ENGINE MOUNT	
(CAN) AT ENGINE REMOVAL, ONE OF THE TOP ENGINE MOUNT BOLTS P/N CSP282-29 BOLT FAILED. THE HEADS SHEARED OFF AFTER APPROXIMATELY A .7500 TURN OF THE BOLT. REVIEWED (TC NR 20041216004)					
2007FA0001094	DHAV	PWA	SEAT BACK	BROKEN	
12/11/2007	DHC6300	PT6A27		SEAT	
BOTH LOWER SE THE SEAT BOTTO		BROKE JUST ABOVE THE WELDS, A	BOVE WHERE THE F	FLANGE BOLTS ON TO	
CA071018004	DHAV	PWA	ADAPTER	MISINSTALLED	
10/15/2007	DHC6300	PT6A27	C6FSM181421		
(CAN) WHILE REMOVING ATTACHMENT ADAPTER P/N C6FSM1814-21, IT WAS NOTED THAT THE RIVETS INSTALLED IN THE VERTICAL WEBS TO ADAPTER WERE THE INCORRECT TYPE. THE RIVETS REMOVED FROM THIS ADAPTER PLATE WERE A.D. RIVETS. THE CORRECT RIVET WOULD HAVE BEEN D.D. ADAPTER SHOWS SIGNS OF FRETTING CORROSION CAUSED BY SLIGHT MOVEMENT.					
CA071115010	DHAV	PWA	RIB	CRACKED	
11/12/2007	DHC6300	PT6A34	C6W11509	WING	
	(CAN) RIB FLANGE FOUND CRACKED ON IB SIDE WHERE IT IS RIVETED TO THE TOP SKIN CORRUGATIONS. CRACKING FOUND WHEN INSPECTING RIBS 8-22 IAW MFG STRUCTURAL LIFE LIMITS. (TC NR 20071115010)				
CA071025005	DHAV	PWA	O-RING	FAILED	
10/6/2007	DHC6300	PW123		OIL PRESSURE	
SHUTDOWN. FLIC	HT WAS DIVERTE	I DROP IN OIL PRESSURE AND ELEC D. GROUND INSPECTION REVEALED JNIT) ASSEMBLY. (TC NR 2007102500	A DEFECTIVE O-RI		
CA071025003	DHAV	PWA	OIL CAP	MISINSTALLED	

(CAN) DURING CLIMB, THE LOW OIL PRESSURE WARNING ILLUMINATED. THE CREW ELECTED TO PERFORM AN INFLIGHT SHUTDOWN OF THE ENGINE AND RETURN TO POINT OF DEPARTURE. GROUND INSPECTION REVEALED THAT THE OIL FILLER CAP HAD BEEN IMPROPERLY INSTALLED, AND THAT THE SEALING FUNCTION OF THE POST-SB 21150 FILLER NECK CHECK VALVE HAD BEEN RENDERED INEFFECTIVE THROUGH FLATTENING OF THE O-RING

PT08001A01

OIL FILLER

PW120A

10/4/2007

DHC8*

AND MECHANICAL	DAMAGE	(TC: NR	20071025003)
	DAINAUL.		2001 10230031

<u>CA071025008</u> DHAV PWC OIL SYSTEM LOW PRESSURE

10/22/2007 DHC8* PW150A ENGINE

(CAN) DURING CRUISE, THE LOW OIL PRESSURE WARNING WAS ACTIVATED FOLLOWED BY SURGING AND UNCOMMANDED SHUTDOWN. THE FLIGHT WAS DIVERTED. MFG WILL INVESTIGATE THE EVENT AND ADVISE OF ROOT CAUSE ONCE ESTABLISHED. (TC NR 20071025008)

CA071024004 DHAV PWA LINE SEVERED

10/23/2007 DHC8102 PW120A 82920010265 SELECTOR VALVE

(CAN) THE NR 2 HYDRAULIC ISOLATION VALVE CAUTION LIGHT ILLUMINATED APPROXIMATELY 27 NAUTICAL MILES AFTER TAKEOFF. SHORLTY FOLLOWING THIS, THE NR2 SYSTEM HYDRAULIC FLUID DEPLETED. THE CREW CARRIED OUT THE APPLICABLE QRH PROCEDURES AND RETURNED TO BASE. MAINTENANCE FOUND A SEVERED HYDRAULIC TUBE AT THE LANDING GEAR SELECTOR VALVE. THE HYDRAULIC TUBE WAS REPLACED AND THE AIRCRAFT RETURNED TO SERVICE. (TC NR 20071024004)

<u>CA071025009</u> DHAV PWA ACCESSORY UNIT DAMAGED

10/20/2007 DHC8201 PW123 ENGINE

(CAN) THE ENGINE WAS REPORTED TO HAVE HAD AN IFSD. GROUND INSPECTION REVEALED THE POWER TURBINES DID NOT TURN FREELY AND THE ACCESSORY DRIVE WAS DAMAGED. MFG WILL INVESTIGATE THE EVENT AND ADVISE OF ROOT CAUSE ONCE ESTABLISHED (TC NR 20071025009)

CA071024011 DHAV PWA OIL SYSTEM LOW PRESSURE

9/21/2007 DHC8202 PW123D ENGINE

(CAN) DURING CLIMB, LOW OIL PRESSURE WARNING ANNUNCIATED. PILOT INITIATED SHUTDOWN PROCEDURES AND SINGLE ENGINE LANDING. ENGINE WAS REMOVED FOR INVESTIGATION. MFG WILL INVESTIGATE THE EVENT AND ADVISE OF ROOT CAUSE ONCE ESTABLISHED (TC NR 20071024011)

<u>CA071115008</u> DIAMON CONT DIAMON BEARING SEIZED 10/31/2007 DA20C1 IO240B HF3M ROD END

(CAN) PILOT REPORTED MIXTURE STICKING DIFFICULT TO MOVE. INSPECTION REVEALED MIXTURE CONTROL ROD END AT MECHANICAL FUEL PUMP SEIZED. ROD END WAS REPLACED WITH NEW UNIT. THIS ROD END IS OF THE SAME PN WHICH SEIZED ON ANOTHER AIRCRAFT'S THROTTLE CONTROL WHICH RESULTED IN AN OFF AIRPORT LANDING AND DAMAGE TO THE AIRCRAFT BACK IN FEB. 2005. HOPING TO HAVE THE BEARING ANALYZED BY A LAB. (TC NR 20071115008)

<u>CA071102004</u> DIAMON CONT TUBE DAMAGED 10/31/2007 DA20C1 IO240B 30200530001110 MLG TIRE

(CAN) DURING A SPECIAL INSPECT TO THE MAIN AND NOSE WHEEL ASSEMBLIES, DEFECTS WERE NOTED IN THE TIRE-TUBES INSTALLED INTO BOTH MAIN AND THE NOSE WHEELS. REPORTS HAVE BEEN MADE OF TIRE-TUBES FAILING WITH VERY LOW TIME. AFTER RECEIVING THESE REPORTS AN INSPECTION WAS PERFORMED ON ALL 3 WHEEL ASSEMBLIES ON 2 AIRCRAFT ALL TIRE-TUBES INSPECTED WERE DEFECTIVE, SHOWING THE SAME DEFECTS AS REPORTED. PHOTOGRAPHS OF THE REPORTED TIRE-TUBES FAILURES ARE ATTACHED TO THIS SDR. THE TUBES INSPECTED ARE IDENTICAL IN APPEARANCE. SEVERAL TUBES P/N 5.00-5 TR 67 AND 30200530001110 HAVE BEEN FOUND WITH SIMILAR DISCREPANCIES (TC NR 20071102004)

2008FA0000035 DIAMON LYC CONTROL ARM BROKEN

12/18/2007 DA40 O360* CARB HEAT

CARBURETOR HEAT CONTROL ARM BROKE OFF OF CARB AIR BOX CAUSING UNCONTROLLED SELECTION OF CARB HEAT VS RAM (COLD) AIR INTAKE. RECOMMEND INSTALLED THINKER MATERIAL ON CARB HEAT CONTROL ARM LEVER, DIFFERENT WELDING PROCESS, OR DIFFERENT ATTACHMENT PROVISION ALTOGETHER. (K)

<u>2007FA0001090</u> DIAMON LYC CONTROL ARM BROKEN 11/26/2007 DA40 O360A4M AIRBOX CARBURETOR HEAT CONTROL ARM BROKEN OFF OF CARB AIR BOX CAUSING UNCONTROLLED SELECTION OF CARB HEAT VS RAM (COLD) AIR INTAKE. RECOMMEND INSTALLED THICKER MATERIAL ON CARB HEAT CONTROL ARM LEVER. DIFFERENT WELDING PROCESS, OR DIFFERENT ATTACHMENT PROVISION ALTOGETHER. (K)

2007FA0001078DIAMONDIAMONRETAINING CLIPMISSING12/14/2007DA42PNDIN47108VELT MLG

DURING PREFLIGHT THE PILOT NOTICED THAT THE LMG DOWNLOCK PIN (P/N-D60-3237-11-34) HAD NO RETAINING CLIP(P/N-DIN471-08-VERZ) AND HAD SHIFTED AFT. THE FORWARD DOWNLOCK HOOK WAS COVERING ONE HALF OF THE HOLE SINCE THERE WAS NO PIN TO STOP ITS MOVEMENT. THE REMAINING CLIP BROKE IN HALF WHEN IT WAS REMOVED. IT APPEARED TO BE BRITTLE. A NEW PIN WAS INSTALLED WITH NEW CLIPS. THOSE CLIPS HAD MORE SPRING TO THEM. ALSO, THE GROOVES IN THE PIN ARE VERY SHALLOW.

2007FA0001079DIAMONDIAMONRETAINING CLIPMISSING12/14/2007DA42PNDIN47108VELT MLG

DURING PREFLIGHT THE PILOT NOTICED THAT THE LMG DOWNLOCK PIN (P/N-D60-3237-11-34) HAD NO RETAINING CLIP(P/N-DIN471-08-VERZ) AND HAD SHIFTED AFT. THE FORWARD DOWNLOCK HOOK WAS COVERING ONE HALF OF THE HOLE SINCE THERE WAS NO PIN TO STOP ITS MOVEMENT. THE REMAINING CLIP BROKE IN HALF WHEN IT WAS REMOVED. IT APPEARED TO BE BRITTLE. A NEW PIN WAS INSTALLED WITH NEW CLIPS. THOSE CLIPS HAD MORE SPRING TO THEM. ALSO, THE GROOVES IN THE PIN ARE VERY SHALLOW.

2008FA0000036 DIAMON RETAINING CLIP MISSING

1/14/2008 DA42 DIN47108VERZ DOWNLOCK PIN

DURING PREFLIGHT THE PILOT NOTICED THAT THE MLG DOWNLOCK PIN (PN-D60-3237-11-34) HAD NO RETAINING CLIPS(PN-DIN471-08-VERZ). THE GROOVES IN THE PIN ARE VERY SHALLOW AND ALLOW THE CLIPS TO MIGRATE OFF.

<u>2007FA0000864</u> DIAMON THIELT CYLINDER HEAD FAILED 8/9/2007 DA42 TAE12501 02722001002R1 ENGINE

ENGINE BEGAN LOSING COOLANT BY PRESSURIZING THE COOLING SYSTEM WITH COMBUSTION PRESSURE AND BLOWING COOLANT OVERBOARD. WHEN CYLINDER HEAD WAS REMOVED, EACH CYLINDER HAD A CRACK BETWEEN THE GLOW PLUG AND EXHAUST VALVE RECESS. THE ENGINE HAD PASSED A COMPRESSION CHECK AND IT IS SUSPECTED THAT THE CRACKS WOULD ONLY LEAK WHEN THE ENGINE WAS WARMED TO OPERATING TEMPERATURE. THE RESULTANT COOLANT LOSS ONLY INCREASES THE PROBABILITY OF FURTHER TEMPERATURE EXCURSIONS. A PROBABLE CAUSE WOULD BE INADEQUATE DISTANCE IN THE CASTING OF THE CYLINDER HEAD BETWEEN THE EXHAUST VALVE RECESS AND THE GLOW PLUG. ALTERNATE CAUSES INCLUDE INADEQUATE COOLING PROVIDED BY THE AIRFRAME MFG, INADEQUATE WATER JACKETING IN THE ENGINE RESULTING IN HOT SPOTS WHICH COULD LEAD TO CRACKING, AND ENGINE RUNNING AT A HIGHER RPM THAT THE COOLING SYSTEM COULD HANDLE. RECOMMENDATION INCLUDE MANDATORY CYLINDER HEAD REPLACEMENT AT EACH 300 HOURS TIS OR IMMEDIATE GROUNDING OF ENTIRE DA42 FLEET WHEN 400 HOURS TT ENGINE IS REACHED, ALLOWING 10 HOURS TO REACH A SUITABLE REPAIR FACILITY. ALSO AN IMMEDIATE UPGRADE TOT HE 2.0 DIESEL ENGINE, WHEN APPROVED FOR US INSTALLATIONS, OR DIVERGE FROM THE DIESEL AND INSTALL FADEC CONTROLLED POWERPLANTS. (K)

 2007FA0000865
 DIAMON
 THIELT
 CYLINDER HEAD
 FAILED

 8/9/2007
 DA42
 TAE12501
 02722001002R1
 ENGINE

ENGINE BEGAN LOSING COOLANT BY PRESSURIZING THE COOLING SYSTEM WITH COMBUSTION PRESSURE AND BLOWING COOLANT OVERBOARD. WHEN CYLINDER HEAD WAS REMOVED, EACH CYLINDER HAD A CRACK BETWEEN THE GLOW PLUG AND EXHAUST VALVE RECESS. THE ENGINE HAD PASSED A COMPRESSION CHECK AND IT IS SUSPECTED THAT THE CRACKS WOULD ONLY LEAK WHEN THE ENGINE WAS WARMED TO OPERATING TEMPERATURE. THE RESULTANT COOLANT LOSS ONLY INCREASE THE PROBABILITY OF FURTHER TEMPERATURE EXCURSIONS. A PROBABLE CAUSE INCLUDE INADEQUATE COOLING PROVIDED BY THE AIRFRAME MFG, INADEQUATE WATER JACKETING IN THE ENGINE RESULTING IN HOT SPOTS WHICH COULD LEAD TO CRACKING, AND ENGINE RUNNING AT A HIGHER RPM THAN THE COOLING SYSTEM COULD HANDLE.

2007FA0000871 DIAMON THIELT CYLINDER HEAD DAMAGED

8/9/2007 DA42 TAE12501 02722001002R1 ENGINE

ENGINE BEGAN LOSING COOLANT BY PRESSURIZING THE COOLING SYSTEM WITH COMBUSTION PRESSURE AND BLOWING COOLANT OVERBOARD. WHEN THE ENGINE WAS REMOVED AND THE OIL DRAINED, COOLANT WAS FOUND IN THE OIL AND FILLING UP CYLINDER NR 3. IT IS SUSPECTED THAT IF THE CYLINDER HEAD WOULD HAVE BEEN REMOVED, EACH CYLINDER WOULD HAVE HAD A CRACK BETWEEN THE GLOW PLUG AND EXHAUST VALVE RECESSES. THE ENGINE HAD PASSED A COMPRESSION CHECK AND IT IS SUSPECTED THAT THE CRACKS WOULD ONLY LEAK WHEN THE ENGINE WAS WARMED TO OPERATING TEMPERATURE. THE RESULTANT COOLANT LOSS ONLY INCREASES THE PROBABILITY OF FURTHER TEMPERATURE EXCURSIONS. A PROBABLE CAUSE WOULD BE INADEQUATE DISTANCE IN THE CASTING OF THE CYLINDER HEAD BETWEEN THE EXHAUST VALVE RECESS AND THE GLOW PLUG. ALTERNATE CAUSES INCLUDE INADEQUATE COOLING PROVIDED BY THE AIRFRAME MFG, INADEQUATE WATER JACKETING IN THE ENGINE RESULTING IN HOT SPOTS WHICH COULD LEAD TO CRACKING, AND ENGINE RUNNING AT A HIGHER RPM THAN THE COOLING SYSTENM COULD HANDLE. (K)

<u>CA071031007</u> DOUG PWA CYLINDER HEAD CRACKED 10/29/2007 C54EDC R20007M2 FUSELAGE

(CAN) CRACK DISCOVERED AT SPARK PLUG HOLE, RETURNED TO BASE AND REPLACED CYLINDER AND A/C RETURNED TO SERVICE. (TC NR 20071031007)

<u>CA071016007</u> DOUG PWA BEARING FAILED 9/8/2007 MD900 PW206A 311608001 ENGINE

(CAN) THE ENGINE CHIP DETECTOR ACTIVATED, ACCOMPANIED BY VIBRATION AND A TEMPERATURE INCREASE, AND THE ENGINE WAS SHUTDOWN IN FLIGHT. SUBSEQUENT INVESTIGATION REVEALED A DAMAGED NR3 BEARING AND RESULTANT TURBOMACHINERY DAMAGE. (TC NR 20071016007)

<u>FAA2007121001</u> EMB ALLSN ACTUATOR SHORTED 12/10/2007 EMB135BJ AE3007A SYLC518361 RAM AIR

WHILE IN FLIGHT THE AIRCRAFT EXPERIENCED AND NR1 PAC OVLD INDICATION WITH SUBSEQUENT NR1 PAC AUTO SHUTDOWN AS A RESULT THE FLIGHT CREW MADE AN IN-FLIGHT DIVERSION AND UNSCHEDULED LANDING. PERFORMED DOWNLOAD OF THE CENTRAL MAINTENANCE COMPUTER WHICH REVEALED 1 OCCURRENCE OF NR1 PAC OVERTEMP AND 63 OCCURRENCES OF NR2 PAC OVERTEMP. TROUBLESHOOTING REVEALED THAT THE LT AND RT PAC OVERTEMP SWITCHES FAILED BENCH CHECK. BOTH SWITCHES WERE REPLACED WITH NEW SWITCHES. DURING THE PERFORMANCE OF THE PAC SYSTEM OPERATIONAL TEST IT WAS DISCOVERED THAT THE RT RAM AIR ACTUATOR HAD AN ELECTRICAL SHORT CAUSING THE CIRCUIT BREAKER TO (POP). REPLACED THE RT RAM AIR ACTUATOR AND PERFORMED PAC SYSTEM OPERATIONAL TESTS. DURING THE ABOVE CENTRAL MAINTENANCE COMPUTER DOWNLOAD, 17 OCCURRENCES OF A NR1 PRECOOLER TEMP CONTROL SYSTEM FAIL MESSAGE WAS NOTED. ACCESSED FAN AIR TEMPERATURE THERMOSTATS FOR TROUBLESHOOTING AND UPON REMOVAL IT WAS NOTED THAT THE AMBIENT AIR TEMPERATURE PORTS ON EACH THERMOSTAT HAD SHIPPING PLUGS IN THEM. REMOVED THE SHIPPING PLUGS AND SWAPPED THERMOSTATS FOR TROUBLESHOOTING. PERFORMED CENTRAL MAINTENANCE COMPUTER DOWNLOAD AFTER THERMOSTAT INSTALLATION WITH NO FAIL MESSAGES NOTED.

 GW4R237272
 EMB
 ALLSN
 ACTUATOR
 SHORTED

 11/29/2007
 EMB135BJ
 AE3007A
 SYLC518361
 RT RAM AIR

WHILE IN FLIGHT THE AC EXPERIENCED AND NR1 PAC OVLD INDICATION WITH SUBSEQUENT NR1 PAC AUTO SHUTDOWN AS A RESULT THE FLIGHT CREW MADE AN IN-FLIGHT DIVERSION AND UNSCHEDULED LANDING. DOWNLOAD OF THE COMPUTER REVEALED 1 OCCUR OF NR1 PAC OVERTEMP AND 63 OF NR2 PAC OVERTEMP. LT AND RT PAC OVERTEMP SWITCHES FAILED BENCH CHECK. BOTH SWITCHES WERE REPLACED. DURING THE PAC SYSTEM OPS TEST, THE RT RAM AIR ACTUATOR HAD AN ELECTRICAL SHORT CAUSING THE CIRCUIT BREAKER TO POP. REPLACED THE RT RAM AIR ACTUATOR AND PERFORMED PAC SYSTEM OPERATIONAL TESTS. DURING THE COMPUTER DOWNLOAD, 17 OCCURRENCES OF A NR1 PRECOOLER TEMP CONTROL SYSTEM FAIL MESSAGE WAS NOTED. ACCESSED FAN AIR TEMPERATURE THERMOSTATS FOR TROUBLESHOOTING AND UPON REMOVAL IT WAS NOTED THAT THE AMBIENT AIR TEMPERATURE PORTS ON EACH THERMOSTAT HAD SHIPPING PLUGS IN THEM. REMOVED THE SHIPPING PLUGS AND SWAPPED THERMOSTATS FOR TROUBLESHOOTING. PERFORMED CENTRAL MAINTENANCE COMPUTER DOWNLOAD AFTER THERMOSTAT INSTALLATION WITH NO FAIL MESSAGES NOTED.

<u>GW4R237272NR1</u> EMB ALLSN SWITCH FAILED 11/29/2007 EMB135BJ AE3007A SYLC518361 A/C PACK

IN FLIGHT AC EXPERIENCED AND NR1 PAC OVLD IND WITH NR1 PAC AUTO SHUTDOWN. FLT CREW MADE AN INFLIGHT DIVERSION AND UNSCHEDULED LANDING. DOWNLOAD OF THE COMPUTER REVEALED 1 OCCUR OF NR1 PAC OVERTEMP AND 63 NR2 PAC OVERTEMP. LT AND RT PAC OVERTEMP SWITCHES FAILED BENCHCHECK. BOTH SWITCHES WERE REPLACED. DURING THE PAC SYSTEM OPS TEST DISCOVERED THE RT RAM AIR ACTUATOR HAD AN ELEC SHORT CAUSING THE CB TO POP. REPLACED THE RT RAM AIR ACTUATOR AND PAC SYSTEM OPS TESTS. DURING THE COMPUTER DOWNLOAD, 17 OCCURRENCES OF A NR1 PRECOOLER TEMP CONTROL SYSTEM FAIL MESSAGE WAS NOTED. ACCESSED FAN AIR TEMPERATURE THERMOSTATS FOR TROUBLESHOOTING AND UPON REMOVAL IT WAS NOTED THAT THE AMBIENT AIR TEMPERATURE PORTS ON EACH THERMOSTAT HAD SHIPPING PLUGS IN THEM. REMOVED THE SHIPPING PLUGS AND SWAPPED THERMOSTATS FOR TROUBLESHOOTING. PERFORMED CENTRAL MAINTENANCE COMPUTER DOWNLOAD AFTER THERMOSTAT INSTALLATION WITH NO FAIL MESSAGES NOTED.

<u>GW4R200700001</u> EMB ALLSN ACTUATOR FAILED 12/10/2007 EMB135BJ AE3007A SYLC518361 RAM AIR

DURING FLIGHT, AIRCRAFT EXPERIENCED AND NR 1 PACK OVLD INDICATION WITH SUBSEQUENT NR 1 PACK AUTO SHUTDOWN AS A RESULT MADE AN IN-FLIGHT DIVERSION AND UNSCHEDULED LANDING. PERFORMED DOWNLOAD OF THE CENTRAL MAINTENANCE COMPUTER WHICH REVEALED 1 OCCURRENCE OF NR 1 PACK OVERTEMP AND 63 OCCURRENCES OF NR 2 PACK OVERTEMP. TROUBLESHOOTING REVEALED THE LT AND RT PACK OVERTEMP SWITCHES FAILED BENCH CHECK. BOTH SWITCHES WERE REPLACED. DURING PERFORMANCE OF PACK SYSTEM OPS TEST, IT WAS DISCOVERED THAT THE RT RAM AIR ACTUATOR HAD AN ELECTRICAL SHORT CAUSING THE CIRCUIT BREAKER TO TRIP. REPLACED THE RT RAM AIR ACTUATOR AND PERFORMED PAC SYSTEM OPS TESTS. DURING THE ABOVE CENTRAL MAINTENANCE COMPUTER DOWNLOAD, 17 OCCURRENCES OF A NR 1 PRECOOLER TEMP CONTROL SYSTEM FAIL MESSAGE WAS NOTED. ACCESSED FAN AIR TEMPERATURE THERMOSTATS FOR TROUBLESHOOTING AND UPON REMOVAL IT WAS NOTED THAT THE AMBIENT AIR TEMPERATURE PORTS ON EACH THERMOSTAT HAD SHIPPING PLUGS IN THEM. REMOVED THE SHIPPING CONNECTORS AND SWAPPED THERMOSTATS FOR TROUBLESHOOTING. PERFORMED CENTRAL MAINTENANCE COMPUTER DOWNLOAD AFTER THERMOSTAT INSTALLATION WITH NO FAIL MESSAGES NOTED.

2007FA0001113 EMB ALLSN BOLT BROKEN

12/14/2007 EMB145LR AE3007A EWD0420839 BEARING CAP

NEW BOLT BROKEN DURING TORQUE. TORQUE VALUE NEVER OBTAINED BEFORE THE BOLT BROKE. THIS BOLT HOLDS THE BEARING CAP IN PLACE THAT HOLDS THE MAIN LANDING GEAR ON THE AIRCRAFT. (K)

<u>CA071029002</u> EMB GE CLAMP LOOSE

8/15/2007 ERJ170200SU CF348E5A1 MS21919WDG9 COLUMN ROD

(CAN) PRIOR TO PUSHBACK, WHEN TOE BRAKES WERE PRESSED TO RELEASE PARK BRAKE, THE CONTROL COLUMN YOKE MOVED AFT APPROX 1 INCH. REF: LOAD CELL INSTALLATION. THE CLAMP IS INSTALLED ON THE CONTROL COLUMN ROD ASSY ON THE TAPERED SECTION OF THE ROD. THE CLAMP CANNOT BE PROPERLY TIGHTENED DUE TO THE ANGLE IN THE ROD AND EVENTUALLY BECOMES LOOSE. WHEN THE CLAMP IS FREE TO MOVE ALONG THE ROD, IN CERTAIN CONDITIONS, THE CLAMP CAN INTERFERE WITH CONTROL COLUMN MOVEMENT. MFG HAS CORRECTED THE PROBLEM ON OTHER AC, NOT ON THIS AC, THUS A MODIFICATION IS REQUIRED. (TC NR 20071029002)

CA071025010 EMB GE CABLE BROKEN

10/15/2007 ERJ170200SU CF348E5A1 PARKING BRAKE

(CAN) AFTER PUSHBACK, PARKING BRAKE CABLE BROKE. EMERGENCY PARKING BRAKE CABLE ASSY REPLACED IAW AMM 32-44-03 (TC NR 20071025010)

<u>CA071107004</u> EMB GE SCREW WRONG PART 11/7/2007 ERJ190100IGW CF3410E5A1 MS24693C273 P-ACE RACK

(CAN) RETAINING SCREW FOR THE P-ACE (PRIMARY- ACTUATOR CONTROL ELECTRONICS) LT AND RT RACKS WERE THE WRONG SIZE (DIAMETER AND LENGTH TOO SMALL). THE RT P-ACE AND RACK WERE FREE FLOATING

IN THE SLOT. THE LT P-ACE AND RACK WERE SECURED WITH THE WRONG HARDWARE. THE CORRECT P/N OF THE RETAINING SCREW IS MS24693C273. (TC NR 20071107004)

CA071025004 EMB GE HOSE LEAKING

10/15/2007 ERJ190100IGW CF3410E5A1 FUEL SYSTEM

(CAN) APU FUEL FEED LINE LEAK WITHIN THE HYDRAULIC SERVICE COMPARTMENT. FUEL LEAKS FROM HOSE CORE AND SOAKS FABRIC BRAID. LEAK IS IN THE AREA OF SECOND AND THIRD SUPPORTING CLAMPS. SUGGEST THAT THIS MAY BE A MATERIAL SPECIFICATION PROBLEM. SUPPORT CLAMPS ARE INTACT AND DO NOT APPEAR TO BE CHAFFING LINE. (TC NR 20071025004)

<u>CA071105003</u> FOKKER PWA TRANSDUCER DEFECTIVE

10/24/2007 F27MK50 PW125B ECU

(CAN) TAKEOFF WAS ABORTED DUE TO UNCOMMANDED POWER CHANGES OBSERVED ON GAUGES IN CONCERT WITH AIRCRAFT YAWING MOTION. TROUBLESHOOTING DETERMINED THAT THE PT TRANSDUCER IN THE ELECTRONIC CONTROL WAS DEFECTIVE. PN AND SN TO BE SUPPLIED IN DUE COURSE. (TC NR 20071105003)

 2007FA0001110
 FRCHLD
 SKIN
 CRACKED

 12/27/2007
 FH227D
 16920
 ELEVATOR

A SMALL CRACK WAS FOUND UNDERNEATH ELEVATOR STATIC WICK BASES APPROX. BL 84.0 ON BOTH LTAND RT ELEVATOR CONTROL SURFACES. A SECOND AIRCRAFT IN THE FLEET REVEALED A SIMILIAR CRACK UNDERNEATH THE STATIC BASE ON THE RT ELEVATOR ONLY. SUSPECT THE CRACK WAS CAUSED BY VIBRATION ON STATIC WICK IN THE SLIPSTREAM OF THE ENGINES. REPAIRED IAW SRM 51-90-04 REPAIR SCHEME NR 6.

<u>CA071106008</u> FRCHLD GARRTT RETAINER CRACKED

10/25/2007 SA227CC TPE33111U 31025731 PROP SHAFT

(CAN) WHILE ENGINE WAS BEING REPLACED MAINTENANCE NOTICED FATIQUE CRACKS EMINATING FROM THE (PROP SHAFT) RETAINING BOLT AREA. (TC NR 20071106008)

<u>CA071010009</u> FRCHLD GARRTT ACCUMULATOR CRACKED 10/5/2007 SA227DC TPE33112UHR 223002 HYD SYSTEM

(CAN) AIRCRAFT WAS INBOUND WHEN CREW REPORTED THE AIRCRAFT HAD LOST ALL HYDRAULIC PRESSURE. EMERGENCY GEAR EXTENSION WAS USED AND AIRCRAFT LANDED WITHOUT INCIDENT. MAINTENANCE DISCOVERED A 6 CENTIMETER CRACK LOCATED ON THE TOP SHOULDER AREA OF THE HYDRAULIC ACCUMULATOR CAP. (TC NR 20071010009)

<u>CA071029008</u> GROB LYC FRAME DAMAGED 10/26/2007 G120A AEIO540D4D5 120A6050 OIL COOLER

(CAN) FLIGHT DEPARTED AT 1344 FOR AT TRAINING FLIGHT TO THE WEST PRACTICE AREA. APPROXIMATELY 5 MINUTES OUT WHILE CRUISING AT 4000 FT AND 120 KTS THE INSTRUCTOR OBSERVED (ALT OFF) ANNUNCIATION. A SCAN OF INTEGRATED ENGINE DISPLAY REVEALED (AMPS) TO BE READING -24A AND VOLTAGE READING 24.7V. THE INSTRUCTOR THEN OBSERVED (VOLT) ANNUNCIATION. THE INSTRUCTOR FOLLOWED EMERGENCY CHECKLIST AND SELECTED (ALTERNATOR) SWITCH OFF AND REMOVED NON-ESSENTIAL ELECTRICAL LOADS. THIS RESULTED IN A REDUCED NEGATIVE LOAD OF -9A. INSTRUCTOR THEN BRIEFLY CONFIRMED FAULT BY RETRYING (ALTERNATOR) SWITCH ON - LOAD WENT BACK TO -24A, (ALTERNATOR) SWITCH WAS IMMEDIATELY SELECTED OFF AGAIN, THE INSTRUCTOR MADE (PAN) CALL AND RETURNED. THE EMERGENCY CHECKLIST WAS COMPLETED INCLUDING EMERGENCY L/G EXTENSION. AFTER SHUTDOWN AND CONFIRMATION FROM FIRE DEPARTMENT THAT THE A/C WAS SAFE TO APPROACH WE NOTED THAT A HOLE HAD BEEN BURNED THROUGH THE BOTTOM OF THE ENGINE COWL AT THE RT FORWARD CAMLOCK FASTENER WHICH SECURES THE OIL COOLER HOUSING TO THE COWL. WHEN WE REMOVED THE LOWER COWL, OBSERVED THAT THE ALTERNATOR WIRING INSULATION HAD BEEN ABRADED DUE TO CONTACT WITH THE TOP OF THE OIL COOLER HOUSING WHICH EXPOSED THE WIRE CONDUCTOR TO THE CARBON FIBER MATERIAL OF THE OIL COOLER HOUSING. THE BOTTOM CAMLOCK FASTENER WHERE THE OIL COOLER HOUSING ATTACHES TO THE ENGINE COWL IS WHERE THE ELECTRICAL LOAD FOUND GROUND TO THE COWL, BURNING AWAY SOME MATERIAL IN DOING SO. THE COWLING AND OIL COOLER HOUSING WERE INSPECTED TO ENSURE THAT NO OTHER AREAS SHOW EVIDENCE OF DAMAGE FROM CURRENT FLOW THROUGH THE MATERIAL. WE ALSO IMMEDIATELY INSPECTED THE OTHER A/C IN OUR

G120A FLEET AND REROUTED ALTERNATOR WIRING BY EMPLOYING CUSHIONED (P) CLAMPS. MFG HAS BEEN ADVISED OF THE INCIDENT AND OUR CORRECTIVE ACTIONS TO DATE.

CA071106001	GULSTM	WINDSHIELD	BROKEN
10/17/2007	200	NP17820110	COCKPIT

(CAN) PILOT REPORTED RT WINDSHIELD CRACKED ON RETURN. C/O INSPECTION ON RT WINDSHIELD AND COULD NOT FAULT THE WINDSHIELD. THE AIRCRAFT WAS RELEASE FOR RETURN TO SERVICE. THE AIRCRAFT MADE (3) OTHER TRIPS. THE PILOTS REPORTED THE SAME CRACK ON THE RT WINDSHIELD. AGAIN C/O THE INSPECTION ON THE RT WINDSHIELD AND COULD NOT FAULT. PILOTS REPORTED THEY COULD ONLY SEE THE CRACK WHEN THE AIRCRAFT IS AT ALTITUDE. SPOKE TO MFG AND DECIDED TO REPLACE THE WINDSHIELD. THE UNIT REMOVED WILL BE SENT BACK TO MFG AND THEY WILL REPORT ON THE FAILURE OF THE WINDSHIELD. THE NEW RT WINDSHIELD WAS INSTALLED AND THE AIRCRAFT HAD SEVERAL FLIGHTS WITH NO FURTHER REPORTS. (TC NR 20071106001)

2008FA0000013	GULSTM	LYC	MAGNETO	WORN		
1/2/2008	500S	IO540E1B5	6393	ENGINE		
CAM LOBE INSIDE MAG THAT OPENS AND CLOSES POINTS WORN OUT.						

CA071010011	GULSTM	GARRTT	SHAFT	CRACKED
10/5/2007	690	TPE3315251K	750069501	NLG

(CAN) DURING ANNUAL INSPECTION. THE SHAFT THAT PIVOTS THE NOSE GEAR UPPER LINK ASSY P/N ES10107 WAS FOUND CRACKED. THE CRACK IS LOCATED ON THE IB END OF THE SHAFT IN THE NOSE WHEEL WELL, WHERE IT IS FLUSH WITH THE EDGE OF THE HOLE IN THE UPPER LINK ASSEMBLY. THE CRACK IS APPROXIMATELY .5 INCH IN LENGTH AND PROGRESSES TO THE THRU BOLT HOLE. THE PIECE WILL BE REPLACED WITH A SERVICEABLE PART. (TC NR 20071010011)

CA071109006	GULSTM	GARRTT	INDICATOR	UNSERVICEABLE
11/8/2007	690A	TPE3315	850568503	ITT

(CAN) DURING CRUISE THE NR2 ENGINE ITT INDICATION BECAME ERRATIC, THEN CLIMBED THROUGH THE RED LINE. THE FLIGHT CREW SHUTDOWN THE ENGINE AND FEATHERED THE PROP. THE AIRCRAFT RETURNED TO AIRPORT. MAINTENANCE TESTED THE ITT SYSTEM AND FOUND THE INDICATOR TO BE AT FAULT. THE ITT INDICATOR WILL BE REPLACED WITH A SERVICEABLE UNIT AND THE AIRCRAFT WILL BE RETURNED TO SERVICE. (TC NR 20071109006)

CA071022005	GULSTM	GARRTT	BOLT	CRACKED
10/18/2007	695A	TPE33110	7500761	DRAG BRACE

(CAN) DURING DISASSEMBLY OF NOSE LANDING GEAR FOR ITS 5 YEAR INSPECTION/OVERHAUL, BOLT P/N 750076-1 OF THE NOSE LANDING GEAR DRAG BRACE-NOSE LANDING GEAR STRUT WAS FOUND BENT WITH VISIBLE CRACK. CRACK WAS CONFIRMED BY NDT(LPI AND MPI). THIS WAS THE AIRCRAFT'S FIRST OVERHAUL OF ITS LANDING GEAR SINCE COMPANY PURCHASED AIRCRAFT 2 YEARS AGO. RECORDS CHECK INDICATED MINIMAL PARTS REPLACEMENT DURING PREVIOUS 5 YEAR OVERHAULS (TC NR 20071022005)

120107	GULSTM	RROYCE	ENGINE	VIBRATION
12/17/2007	G1159	SPEY511*		LEFT

AFTER LANDING, TEMP.AROUND -12C, FREEZING FOG, CREW ELECTED TO TURN OFF ANTI-ICE AFTER LND. AIRCRAFT SAT FOR 1 HR,ENG'S STARTED. LT ENG HAD VIBRATION HUMMING, RT ENG WAS STABLE.TAXIED OUT W/ANTI-ICE ON THRUOUT. A/C TOOKOFF, IT SEEMED TO BE SMOOTH ON THE ROLL AND INITIAL CLIMB, HOWEVER, OUT OF 10,000 FT LT ENG VIB WAS AROUND 1.5 MILS, ABNORMAL FOR THIS AIRPLANE. CREW ELECTED TO DIVERT (MAINT.BASE). LANDING WAS UNEVENTFUL. BOTH ENG'S HAD VISUAL CKS, NOTHING NOTED. CONCLUSION IT MUST HAVE BEEN AN ICING/MELTING PROBLEM.

FAA011808001	GULSTM	RROYCE	FUEL CONTROL	INOPERATIVE
1/4/2008	GIV	TAY6118	CASC514	ENGINE
ON APPROACH TO TTN THE AUTO THROTTLES DISENGAGED. THE RT LEVER KNOB WAS ONE KNOB AFT OF THE				

LT. WHEN RT LEV	ER WAS ADVANCE	ED FORWARD THE	RT ENGINE DID NO	OT RESPOND TO TH	IROTTLE MOVEMENT.
FAA011808002	GULSTM	RROYCE		OIL SYSTEM	LOW PRESSURE
1/10/2008	GIV	TAY6118			ENGINE
30 MINUTE INTO THE FLIGHT OIL PRESSURE DROPPED TO 7 PSI. NO ASSOCIATED CAS MESSAGE. OIL TEMP WAS SLIGHTLY HIGHER THAN LT ENGINE. FUEL TEMP WAS 19 DEGREES HIGHER THAN LT. DURING DESCENT OIL PRESSURE CAME BACK TO 47 PSI.					
2007FA0001092	GULSTM	RROYCE		OVEN	FAILED
11/30/2007	GVSPG550	BR700710A110		243185502	GALLEY
					VAS COMING FROM WITH A NEW UNIT. (K)
CA070909001	HUGHES	LYC		BRACKET	BROKEN
9/8/2007	269C1	HIO360*		LW10382	ALTERNATOR
				6. ALTERNATOR BEI INVESTIGATION. (T	LT TENSION LOSS AND TC NR 20070909001)
CA070523007	HUGHES	ALLSN	HUGHES	PIN	BROKEN
5/21/2007	369A	250C20B			M/R BLADE
(CAN) PIN FOUND	BROKEN AT FIRS	T THREAD / SHAN	K. NUT WAS CAPTU	JRED IN THE HANDL	E CLIP.
CA070924002	HUGHES	ALLSN		DRIVE GEAR	BROKEN
9/11/2007	369D	250C20		369D2512311	M/R TRANSMISSION
HELIĆOPTERS CC	MPONENT OVERH	HAUL SHOP FOR F	REPAIR. UPON DISM	MANTLE IT WAS DISC	IISSION RETURNED TO COVERED THAT THE I/P . (TC NR 20070924002)
CA071112002	HUGHES	ALLSN		BRACKET	BROKEN
10/26/2007	369D	250C20B		369A75058	RUDDER PEDELS
(CAN) RUDDER PEDALS WERE FOUND TO BE LOOSE IN MOUNTS ON FURTHER INVESTIGATION IT WAS FOUND THE BRACKET THAT THE RUDDER PEDALS MOUNT IN WAS BROKEN ON (3) OF THE (4) MOUNTING BOLT EARS. (TC NR 20071112002)					
CA071026007	ISRAEL	GARRTT		BRAKE ASSY	FAILED
10/18/2007	1124	TFE73131G		50028053	RT MLG
(CAN) A-CHECK INSPECTION COMPLETED AT AIRCRAFT. FOLLOWING INSPECTION A TEST FLIGHT WAS COMPLETED, ON RETURN TO BASE, IT WAS NOTED THAT THE RT BRAKE WAS DRAGGING. MAINTENANCE FOUND TOP AFT GRIP AND TUBE OUT OF ADJUSTMENT. REMOVED AND RESET ASSEMBLY TO NEUTRAL POSITION, OPS CHECK BRAKE SERVICEABLE. AC DEPARTED, UPON LANDING THE PILOT NOTED THAT THE BRAKE WAS DRAGGING, AND FOUND THE RT BRAKE WAS NOT FULLY RELEASING. MAINTENANCE WAS CALLED IN, REMOVED RT BRAKE ASSEMBLY (PN: 5002805-3 S/N: S-MAR88-2), AND INSTALLED OVERHAULED BRAKE ASSEMBLY (PN: 5002805-3 S/N: OCT 85-522) PER MM 32-43-01. AIRCRAFT RETURNED TO SERVICE. UNSERVICEABLE BRAKE ASSEMBLY RETURNED TO VENDOR (TSO: 2.7 HRS, 2 LANDINGS).REQUESTING VENDER TO SUPPLY FOLLOW UP REPORT. (TC NR 20071026007)					

CA071026005	ISRAEL	GARRTT	ACTUATOR	FAILED
10/16/2007	1124	TFE73131G	793500501	RUDDER TRIM

(CAN) WHILE PERFORMING AN A-CHECK, THE RUDDER TRIM ACTUATOR (PN: 793500-501) FAILED THE FREE PLAY CHECK IAW MM 5-20-06 PARA: 1.F.(4) AND MM 27-20-00 PAGE 503 PARA: 4.A. A NEW RUDDER TRIM LOWER ACTUATOR (PN: 793500-501) (ALTERNATE PN:1092AS100-3) WAS ORDERED. WHEN RECEIVED, THE NEW ACTUATOR 8130-3 RELEASE FORM STATED THAT THE UNIT WAS OVERHAULED. THE PART HAD 3 DISCREPANCIES, BOTH ROD ENDS WERE WORN, CORRODED, SCORED, ALSO THE ELECTRICAL LEAD, CONNECTOR PLUG WAS CORRODED. THE UNIT WAS RETURNED TO VENDOR. (TC NR 20071026005)

2008FA0000053	LEAR	GARRTT		PRESSURE SENSOR	MALFUNCTIONED
1/17/2008	35A	TFE731*		1303687	AFT BAGGAGE
LOSS OF CABIN F	PRESSURE AT 25k	FT. PRESSURE SENS	OR MALFUNCT	TONED	
CA071030005	LEAR	GARRTT		CONNECTOR	TRANSPOSED
10/16/2007	35A	TFE73122B			STALL WARNING
WHEN CHECK WAS DISCOVERE REVERSED. CON	AS CARRIED OUT, ED THAT CONNEC ^T INECTORS SWITCI	THE STALL WARNING	SYSTEM FAILE 4 (FORM PIN D WARNING SYS	ED. WHEN SYSTEM O AND PIN F RESPEC STEM FUNCTIONED	
CA050303006	LEAR	GARRTT		COMPUTER	WRONG PART
3/1/2005	35A	TFE73122B		5226703002	FLIGHT COMPUTER
(CAN) ON OCTOBER 15, 2004 A FLIGHT COMPUTER (FC) WAS REPLACED ON AIRCRAFT. THE REMOVED FC WAS THEN SENT FOR REPAIR. IT WAS DETERMINED THAT THE FC PN WAS NOT RECOGNIZED. IT WAS THEN SENT TO THE MFG FOR FURTHER INVESTIGATION. MFG CONFIRMED THAT THE INSTALLED ID PLATE WAS NOT THEIR OWN. THE PART WAS THEREFORE CLASSIFIED AS UNAPPROVED. ONCE NOTIFIED OF THE DISCREPANCY, SKYSERVICE PROCEEDED IN A TECHNICAL RECORD REVIEW TO DETERMINE THE ORIGIN OF THE SUBJECT PART. THE AIRCRAFT COMPONENT REPLACEMENT HISTORY HAS BEEN REVIEWED (STARTING BEGINNING OF 2000). NO FC REPLACEMENT HAS BEEN FOUND. (TC NR 20050303006)					
CA071106002	LEAR	GARRTT		TIRE	DELAMINATED
11/5/2007	45LEAR	TFE7312		226K084	MLG
ON THE TIRE, EA	(CAN) DURING AN INSPECTION, A BULGE WAS NOTICED ON THE NR 2 TIRE. THIS BULGE WAS NOTICED IN 3 SPOTS ON THE TIRE, EACH EXTENDING FOR ABOUT 3 INCHES. THE BULGE STARTED AT THE CORNER OF THE TREAD AND EXTENDED TO THE SIDEWALL AND. THE TIRE WAS REPLACED. (TC NR 20071106002)				
CA070828005	MOONEY	LYC		BLOCK	CORRODED
7/26/2007	M20C	O360A1D		240014901	FLAP HINGE BLOCK
TO HAVE STARTE	ED IN THE PORTIC HIS HINGE BLOCK	GE BLOCK HAD SERIO ON OF THE BLOCK THA (WAS INSTALLED, (AF	T IS USED AS A	A STOP. THE STOP I	
CHI08CA035	MOONEY	LYC LYC	C	NUT	BACKED OUT
11/1/2007	M20E	IO360A1A			CONNECTING ROD
	NR 3 PISTON CONNECTING ROD SEPARATED FROM THE CRANKSHAFT. PISTON SHEARED MOUNTING STUDS OF CYLINDER HOUSING AT ENGINE CASING. CYLINDER HOUSING SEPARATED FROM ENGINE CASING. ENGINE SHUTDOWN.				
2007FA0001096	PIAGIO	PWA		MOUNT	CHAFED
11/21/2007	P180	PT6*		80446101403	ENGINE
OIL COOLER RETURN LINE CHAFED AGAINST ENGINE MOUNT. DID NOT SHOW SIGNS OF CHAFING STATICALLY DURING ROUTINE INSPECTIONS, WAS CHAFING DURING FLIGHT. INSTALLED REDESIGNED OIL LINE THAT CANNOT COME IN CONTACT WITH MOUNT. MFG DID NOT INFORM OPERATORS ABOUT REDESIGNED OIL LINE, P/N MS8000M300JF, SAID USE AS SPARE IN ILLUSTRATED PARTS CATALOG. ALSO INSTALLED NEW ENGINE MOUNT.					
CA071105002	PILATS	PWA		HOSE	FAILED
11/2/2007	PC1245	PT6A67B		9433772104	LT MAIN GEAR
		THE NEW LINE IT WOU ENT ON WITH NO PROP			NEW HOSES AND WHEN NUT FITTING ON NEW

HOSE. (TC NR 20071105002	2)
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HOSE. (TC NR 20	071105002)				
CA071119001	PILATS	PWA		CONTROL MODU	LE INOPERATIVE
11/6/2007	PC1245	PT6A67B		065008617	EADI
			CONTROL. ALTITUDE EENS. (TC NR20071		DRMAL WITH ALT
CA071119002	PILATS	PWA		CONNECTOR	DAMAGED
11/15/2007	PC1245	PT6A67B			OAT INDICATOR
(CAN) OAT INDICATION ON EIS ERRACTIC. ONE OF THE PINS IN OAT CONNECTOR FOUND LOOSE. NEW CONNECTOR INSTALLED WITH 2 NEW PINS. SYSTEM NORMAL. (TC NR 20071119002)					
CA071119003	PILATS	PWA		DISPLAY	INTERMITTENT
11/15/2007	PC1245	PT6A67B		0660312525	EADI
	ADI DISPLAY REPO BLE UNIT. (TC NR 2		JZZY) AND INTERMI	TTENTLY GOING BL	ANK. ED462 REPLACED
2008FA0000028	PIPER	LYC		CLAMP	LOOSE
12/26/2007	PA22150	O320*		MS21919DG3	HEAT BOX
ENGINE DID NOT RESPOND WHEN POWER APPLIED ON A LOW FLY BY AND CAUSED THE PLANE TO LAND NEXT TO RUNWAY IN SNOW, DAMAGING ACFT. FOLLOWING PROBLEMS WERE FOUND ON POST INCIDENT INSPECTION OF ENGINE AND EITHER ONE CAN CONTRIBUTE TO LOSS OF LITTLE ALONE BOTH TOGETHER. FOUND CARBURETOR HEAT CABLE CLAMP LOOSE ON CABLE HOUSING. WRONG CLAMP INSTALLED ON CARBURETOR HEAT CABLE HSG AT REAR OF AIR BOX. AND MUFFLER END WITH THE CARB HEAT SHROUD HAS A SUBSTANTIAL EXHAUST LEAK INTO THE CARB HEAT SHROUD. THE INSIDE OF THE CARB HEAT SHROUD, SCAT HOSE AND AIR BOX ARE VERY SOOTY FROM EXHAUST GASSES. THE EXHAUST MUFFLER CLAMP LEAKING. THIS WILL CAUSE A POWER LOSS DUE TO THE HOT INDUCTION AIR, (K)					CIDENT INSPECTION OF R. FOUND CARBURETOR RETOR HEAT CABLE HSG NTIAL EXHAUST LEAK ID AIR BOX ARE VERY
FCPR20070110	PIPER	LYC	ROMEC	DIAPHRAGM	FAILED
12/8/2007	PA23250	TIO540C1A	RG179801M	RB15985	FUEL PUMP
PUMP VALVE RE	GULATOR DIAPHR	AGM FAILED AT	GUIDE PIN, PUMP W	OULD NOT FUNCTION	ON.
CA070314006	PIPER	LYC		STRUCTURE	CRACKED
3/7/2007	PA28140	O320E3D			RT WING ROOT
(CAN) RT FORWA	RD WING WALK A	SSEMBLY, P/N 62	2061-002. RT ROOT \	WAS CRACKED. (TC	NR 20070314006)
2008FA0000034	PIPER	LYC		SUPPORT	CRACKED
10/12/2007	PA28181	O360*		63451000	RUDDER BAR
FOUND CRACKED AFT ZEE ASSY PN 62664-000. THE ZEE ASSY IS RIVETED TO THE TOP FWD END OF TUNNEL PLATE PN 62601-003 AND AS AN ATTACHMENT POINT FOR THE RUDDER BAR SUPPORT ASSY PN 63451-000 USING 4 STANDARD AN3-4A BOLTS, WHICH ARE SECURED THROUGH NUTPLATES THAT ARE RIVETED ON BOTH FORE AND AFT ZEE ASSEMBLIES. CRACKING POSSIBLY CAUSED BY LOOSENESS IN TOE BRAKE SUPPORT BRACKETS PN 63468-000 ON BOTH PILOT AND CO-PILOTS SIDE. THE STANDARD AN3-13A BOLTS USED TO ATTACH THESE TOE BRAKE SUPPORT BRACKETS LOOSEN OVER TIME AND CAUSE LOSS OF SUPPORT TO THE RUDDER PEDAL BAR ASSY PN 63420-000. EXCESS MOVEMENT IN RUDDER BAR SUPPORT ASSY. THIS FLEXING TRANSFERS DOWN TO THE ZEE ASSEMBLIES CAUSING METAL FATIGUE AND SUBSEQUENT CRACKING. RECOMMEND PERIODIC RETORQUING OF TOE BRAKE SUPPORT BRACKET BOLTS. (K)					
2008FA0000032	PIPER	LYC		STARTER	INOPERATIVE
12/12/2007	PA28181	O360A4M		MHB4016	ENGINE
THE STARTER FI	ELD CASE HAD SE	PARATED FROM	GEAR HOUSING. A	DETAILED INSPECT	PECTION, FOUND THAT TION OF THE FIELD CASE ES WERE FLONGATED

SCREW HOLES REVEALED THAT MOST OF THE THREADS WERE STRIPPED OUT AND HOLES WERE ELONGATED.

WOULD RECOMMEND THAT AT EACH 100 HR/ANNUAL INSPECTION, PERFORM TORQUE CHECK OF GEAR HOUSING TO CASE ATTACH SCREWS AND REPAIR AS REQUIRED. (K)

<u>2007FA0001080</u> PIPER LYC CYLINDER FAILED 11/15/2007 PA28181 O360A4M 653319004 RT MLG

RT M/G CYLINDER FAILED AT THE UPPER TORQUE LINK ATTACH LUGS WHILE TAXIING FROM THE ACTIVE RUNWAY: THE AIRCRAFT (SINCE NEW) IS USED FOR FLIGHT TRAINING IN A 141 FLIGHT SCHOOL. THE PREMATURE FAILURE OF THE CYLINDER WAS PROBABLY CAUSED BY A HARD LANDING. (K)

 2008FA0000041
 PIPER
 LYC
 MOUNT
 CRACKED

 1/9/2008
 PA28R201
 IO360A1A
 LT ENGINE

ENGINE MOUNT FOUND CRACKED AT BOTTOM LT WHERE SHOCK MOUNT ATTACHES. (K)

2008FA0000057 PIPER LYC THROTTLE CABLE INFLT SEPARATION

1/18/2008 PA28R201 IO360A1A 455322

DURING FLIGHT, THE CREW EXPERIENCED A SEPARATION OF THE THROTTLE CABLE. THE POWER SETTING ALLOWED THEM TO MAINTAIN ALTITUDE PLUS A SLIGHT CLIMB. THE CREW POSITIONED THE AIRCRAFT FOR A LANDING ON A RUNWAY THAT HAD AMPLE LENGTH. AN UNEVENTFUL LANDING WAS MADE. THE THROTTLE CABLE WAS REMOVED AND INSPECTED AND FOUND TO BE BROKEN A FEW INCHES INSIDE THE OUTER HOUSING JUST AFT OF THE FUEL SERVO. THERE IS NO TIME/LIFE LIMIT ON THESE CABLES, HOWEVER THE OPERATOR WILL NOW CHANGE THE CABLES DURING EACH ENGINE CHANGE.

<u>CA071030008</u> PIPER LYC INDICATOR ERRATIC 10/25/2007 PA31 TIO540A2C 41506 OIL TEMP

(CAN) DURING RUN-UP, OIL TEMP INDICATOR DROPPED OFF SCALE. THEN WENT BACK TO NORMAL INDICATION. THE ERATIC OPERATION COULD BE INDUCED BY ENERGIZING DIFFERENT ELECTRICAL EQUIPMENT. HOURS IN USE, NONE AT THIS TIME.

 CA071015001
 PIPER
 LYC
 SEAT BELT
 BROKEN

 9/28/2007
 PA31350
 LTIO540J2BD
 010816811
 COCKPIT

(CAN) AFTER STARTUP THE CAPTAIN WENT TO ATTACH AND TENSION HIS LAPBELT. AT THAT POINT THE LAP BELT DISCONNECTED FROM THE SEAT. CLOSER INSPECTION SHOWED CORROSION IN THE AREA OF THE BOLT HOLE OF THE FEMALE SIDE. THE SEATS ARE PROVIDED WITH A COVER OVER THIS AREA FOR COSMETIC REASONS. IT MAKES THE AREA DIFFICULT TO INSPECT UNLESS THE BOLT IS REMOVED AND THE COVER ALSO REMOVED. DURING FOLLOWUP INSPECTIONS WITH OTHER SEATS IN THIS AC, MORE CORROSION WAS FOUND ON THE ATTACHMENT BRACKETS OF THE SEAT BELTS. IN ALL 3 SETS OF SEAT BELTS WERE REPLACED ON THE AIRCRAFT. A FLEETWIDE INSPECTION OF SEAT BELTS IN THIS AREA IS BEING CARRIED OUT. AS WELL ALL COSMETIC COVERS THAT MAY INTERFERE WITH A PROPER INSPECTION HAVE BEEN REMOVED PERMANENTLY. (TC NR 20071015001)

<u>2008FA0000062</u> PIPER LYC PUMP INOPERATIVE 1/2/2008 PA31350 TIO540* 2B664 FUEL SYSTEM

ON 1/2/2008 THE PILOT WAS DEPARTING WHEN HE REPORTED THAT HE LOST SUBSTANTIAL POWER TO THE LT ENGINE JUST AFTER TAKEOFF AND THE LT LOW PRESSURE FUEL BOOST PUMP LIGHT ON THE AC ANNUNCIATOR PANEL ILLUMINATED. PILOT LANDED AT AIRPORT AND CALLED AC TECH. AIRCRAFT TECH ON LOCATION COULD NOT FIND ANY PROBLEMS WITH THE ENGINE DURING RUN UP OTHER THAN THE ELECTRIC LOW PRESSURE FUEL BOOST PUMP NOT SUPPLYING RATED PRESSURE. THE ELECTRIC IN-LINE LOW PRESSURE BOOST PUMP IS INTENDED FOR FLIGHT ABOVE 15,000 FT MSL AND CAN BE DEFERRED IAW PART 91 MEL. AC WENT TO DEPART AIRPORT AND THE LT ENGINE LOST POWER AGAIN DURING THE TAKEOFF ROLL AT ABOUT 40 KNOTS OF AIRSPEED. TROUBLESHOOTING OF ENGINE FUEL PUMP, FUEL NOZZLES REVEALED NO PROBLEMS. THE IN-LINE LOW PRESSURE FUEL PUMP REMOVED AND DISCOVERED THAT THE BYPASS VALVE ASSY IN THE PUMP HAD DISLOGED FROM THE PUMP BODY AND ACTED AS A FUEL RESTRICTION GOING TO THE EMERGENCY ELECTRIC FUEL PUMP. (K)

CA070314001 PIPER LYC ACTUATOR BROKEN

3/14/2007 PA31350 TIO540J2BD WTC21151 MLG

(CAN) ACTUATOR BROKEN, FOUND DURING REPAIRS TO AIRCRAFT. (TC NR 20070314001)

CA070817001 PIPER LYC CONNECTOR BURNED

7/18/2007 PA31350 TIO540J2BD E321A CONTROL PANEL

(CAN) SMOKE WAS REPORTED FROM THE OVERHEAD SWITCH PANEL WHEN TAXIING FOR TAKEOFF. THE CONNECTOR BEHIND THE PANEL WAS FOUND IN A BURNED CONDITION. THE CONNECTOR WAS REPLACED BY REMOVING THE BURNED WIRING AND SPLICING IN A NEW CONNECTOR. (TC NR 20070817001)

CA071102008 PIPER LYC DOOR DEPARTED

10/31/2007 PA31350 TIO540J2BD

(CAN) UPPER DOOR ASSEMBLY DEPARTED THE AIRCRAFT WHILE IN FLIGHT, UPPER DOOR REPLACED AND DAMAGED STRUCTURE REPAIRED. THINK THE PROBLEM AROSE WITH THE FACTORY PIPER SLIDING LOCK. WE SUSPECT THAT IT WAS WORN THOUGH THERE WAS NO PRIOR INDICATION. (TC NR 20071102008)

2007FA0001103 PIPER BRACKET CORRODED

12/20/2007 PA32R301 99271000 ACCONDENSOR

DOOR DOOR

AIR CONDITIONING CONDENSOR DOOR P/N 99271-000 FAILED IN FLIGHT WHILE DEPLOYED. THE SMALL EXTRUDED ANGLE BRACKET ON THE RT SIDE OF DOOR WHERE THE BEARING ASSY P/N 99561-000 CONNECTS TO THE DOOR CORRODED WHERE THE TWO MEET. THIS CONDITION IS IMPOSSIBLE TO INSPECT UNLESS THE MECHANIC DROPS THE CONDENSOR DOOR DOWN. THE LT SIDE WAS IN PERFECT CONDITION. THE MAIN CAUSE OF THE CORROSION IS THE FACT THAT THAT THE ENGINE EXHAUST TRAVELS DOWN THE RT SIDE OF THE BOTTOM OF THE AIRCRAFT. THIS PORTION OF THESE LOW WING PIPERS ALWAYS SHOW MORE SURFACE CORROSION ON THE RT SIDE OF THE BELLY.

2008FA0000048 PIPER LYC WIRE FAILED

1/4/2008 PA32R301T TIO540* 153615 DOWNLOCK SWITCH

MAIN GEAR DOWN LOCK SWITCH WIRES PULL TIGHT ON STRUT ON RETRACTION AND PULL WIRE STRANDS APART TO BREAKING POINT. SILICONE TYPE WIRE COATING TENDS TO HOLD WIRE ENDS TOGETHER FOR INTERMITTENT CONTACT. NEEDS BETTER WIRE AND ROUTING. (K)

<u>EA25200802753</u> PIPER LYC FITTING CORRODED 12/18/2007 PA34200 IO360A1A 62522000 FUSELAGE

DURING WINDSHIELD REPLACEMENT, NOTED STEEL FITTINGS AND ATTACHING HARDWARE WERE SUBSTANTIALLY CORRODED. FUNCTION OF FITTINGS IS ATTACHMENT OF FUSELAGE OVERHEAD (A) PILLAR TO FUSELAGE STRUCTURE PROPER. OTHER THAN SOME RIVETS THROUGH THE SKINS, THESE FITTINGS ARE THE MAJOR STRUCTURAL ATTACHMENTS OF THE CABIN OVERHEAD TO THE FUSELAGE STRUCTURE. CAUSE OF CORROSION APPEARS TO BE FOAM INSULATION, HELD IN CONSTANT CONTACT WITH THE FITTINGS, BECOMING AND REMAINING WET THROUGH LEAKING WINDSHIELDS. COMPANY MECHANIC RECOMMENDS REMOVING PORTION OF INSULATION IN CONTACT WITH FITTINGS AND INSPECTING THIS AREA AT EACH 100 HOUR/ANNUAL INSPECTION. ACCESS IS GAINED THROUGH SIMPLE REMOVAL OF INTERIOR WINDSHIELD PILLAR TRIM PANELS. COMPANY MECHANIC FURTHER SUGGESTS AIRWORTHINESS DIRECTIVE DUE TO THE EXTENT OF THE CORROSION, PERCEIVED CRITICALITY OF THE PARTS AND AGE AND SIZE OF THE PA-34 FLEET. AIRCRAFT IS NOT PRESSURIZED. SUBMITTER IS WILLING TO BET THAT ALL OR MOST LOW WING ALL METAL AIRCRAFT USE A SIMILAR STRUCTURAL ARRANGEMENT IN THIS AREA. SUBMITTER HAS NO IDEA HOW MUCH STRESS THESE FITTINGS ARE UNDER NOR WHAT ROLE THEY PLAY IN THE OVERALL STRUCTURAL INTEGRITY OF THE FUSELAGE ASSEMBLY.

EA25200803022 PIPER LYC FITTING CORRODED

12/18/2007 PA34200 IO360A1A 68257000

DURING WINDSHIELD REPLACEMENT, MECHANIC NOTED STEEL FITTINGS AND ATTACHING HARDWARE WERE SUBSTANTIALLY CORRODED. FUNCTION OF FITTINGS IS ATTACHMENT OF FUSELAGE OVERHEAD A PILLAR TO FUSELAGE STRUCTURE PROPER. OTHER THAN SOME RIVETS THROUGH THE SKINS, THESE FITTINGS ARE THE

MAJOR STRUCTURAL ATTACHMENTS OF THE CABIN OVERHEAD TO THE FUSELAGE STRUCTURE. CAUSE OF CORROSION APPEARS TO BE FOAM INSULATION, HELD IN CONSTANT CONTACT WITH THE FITTINGS, BECOMING AND REMAINING WET THROUGH LEAKING WINDSHIELDS. MECHANIC RECOMMENDS REMOVING PORTION OF INSULATION IN CONTACT WITH FITTINGS AND INSPECTING THIS AREA AT EACH 100 HOUR/ANNUAL INSPECTION. ACCESS IS GAINED THROUGH SIMPLE REMOVAL OF INTERIOR WINDSHIELD PILLAR TRIM PANELS.

ZB0R20070009	PIPER	LYC	ROD END	SEPARATED
12/14/2007	PA34200	IO360C1E6	89307000	FUEL CONTROL

IN CRUISE, PILOT ATTEMPTED TO REDUCE POWER FOR MANEUVERS PRACTICE. LT ENGINE WAS UNRESPONSIVE. INSTRUCTOR IDENTIFIED LT ENGINE THROTTLE PROBLEM, ENGINE RPM WAS STABLE AT NEAR FULL POWER. RETURNED TO HOME BASE. PILOT FEATHERED AND SHUTDOWN LT ENGINE ON APPROACH. MAINTENANCE DISCOVERED LT ENGINE THROTTLE CONTROL ROD END AT FUEL CONTROL HAD SEPARATED.

2008FA0000004	PIPER	CONT	STRUT	CRACKED
1/2/2008	PA34220T	TSIO360RB	39489003	RT MAIN GEAR

DURING ANNUAL INSPECTION, IT WAS NOTED THAT A CRACK WAS FOUND ON THE RT MAIN GEAR LOWER FORK ASSEMBLY PN 39489-003. THE CRACK IS LOCATED IN THE MILLED SECTION OF THE CASTING AT THE 11 O'CLOCK AND 1 O'CLOCK POSITIONS. THIS MILLED SECTION IS USED TO BOLT THE TORQUE PLATE PN 451-786 TO THE MAIN LANDING GEAR ASSY. CONTACTED MFG THRU THERE DAS SYSTEM AND WAS TOLD THEY NEVER HEARD OF ANY PROBLEMS. REQUESTED FROM MFG TO BLEND CRACK AREA OUT AND REQUEST WAS DENIED. PROCEEDED TO CONTACT A DER FOR APPROVAL ON BLENDING CRACKED AREA OUT AND AGAIN REQUEST DENIED. FOUND ANOTHER LOWER STRUT IN A SALVAGE YARD WHICH WE PURCHASED ONLY TO FIND THIS STRUT ALSO WAS CRACKED IN THE EXACT SAME SPOT. THIS STRUT CAME OFF A MODEL PA34-220T SENICA IV AND HAD 1200 HRS TT ON THE PART. THESE STRUTS ARE THE SAME PN. ALSO I NOTED THAT THE CASTING VARY IN THICKNESS UPTO .020 DIFFERENCE ON THICKNESS TO EDGE OF MILLED AREA ON CASTING. WE HAVE PICTURES OF THE CRACKED AREAS WE CAN FORWARD TO YOU SHOWING MORE DETAIL AND LOCATIONS.

2008FA0000003	PIPER	CONT	STRUT	CRACKED
1/2/2008	PA34220T	TSIO360RB	39489003	RT MLG

DURING ANNUAL INSPECTION IT WAS NOTED THAT A CRACK WAS FOUND ON THE RT MAIN GEAR LOWER FORK ASSY PN 39489-003. THE CRACK IS LOCATED IN THE MILLED SECTION OF THE CASTING AT THE 11 O'CLOCK AND 1 O'CLOCK POSITIONS. THIS MILLED SECTION IS USED TO BOLT THE TORQUE PLATE PN 451-786 TO THE MLG ASSY. CONTACTED MFG THRU THERE DAS SYSTEM AND WAS TOLD THEY NEVER HEARD OF ANY PROBLEMS. REQUESTED FROM MFG TO BLEND CRACK AREA OUT AND REQUEST WAS DENIED. PROCEEDED TO CONTACT A DER FOR APPROVAL ON BLENDING CRACKED AREA OUT AND AGAIN REQUEST DENIED. FOUND ANOTHER LOWER STRUT IN A SALVAGE YARD WHICH WE PURCHASED ONLY TO FIND THIS STRUT ALSO WAS CRACKED IN THE EXACT SAME SPOT. ALSO I NOTED THAT THE CASTING VARY IN THICKNESS UPTO .020 DIFFERENCE ON THICKNESS TO EDGE OF MILLED AREA ON CASTING.

2007FA0001073	PIPER	TRUNNION	CRACKED
12/11/2007	PA44180	67042013	RT MLG

RT AFT MAIN TRUNNION CASTING, P/N 67042-013, FOUND TO BE CRACKED DURING INSPECTION. THIS IS A NEARLY IDENTICAL CRACK TO ONE FOUND AUGUST 2006 ON A SISTER SHIP.

LJER12102007	PIPER	ROTAX	CONTACTOR	DEBONDED
12/6/2007	PA44180	ROTAX*	106825515	MAGNETO

CONTACT POINT MATERIAL DEBONDED. POINTS WILL NOT CLOSE.

2007FA0001095	PIPER	GARRTT	DISPLAY	MISREPAIRED
12/18/2007	PA46500TP	TPF33111II	70000006003	COCKPIT

WE SENT IN BOTH AIRCRAFT PFD'S FOR REPAIR AND SB COMPLIANCE. BOTH UNITS WERE REPAIRED AND REINSTALLED. WE TRIED TO CALIBRATE THE ADHRS AND THE PILOT PFD CONTINUED TO GIVE AN ERROR. WE SPOKE WITH ANOTHER SHOP AND WERE TOLD THEY HAVE HAD THE SAME PROBLEM. IN FACT, WE WERE TOLD THEY NORMALLY HAVE PROBLEMS WITH REPAIRED UNITS (ABOUT 50 PERCENT OF THE TIME).

<u>2008FA0000011</u> RAYTHN WILINT STRUT LEAKING 1/4/2008 390 FJ442A 390810001 RT MLG

PILOT REPORTED LT AND RT MAIN LANDING GEAR STRUTS LEAKING HYDRAULIC FLUID. DISASSEMBLY LOWER LT MAIN LANDING GEAR STRUT, FOUND PAINT CHIPS CONTAMINATING SEALS. DISASSEMBLED RT LOWER MAIN LANDING GEAR STRUT, FOUND PAINT CHIPS CONTAMINATING SEALS AND METAL FILLINGS IN INNER BARREL OF STRUT.

<u>2008FA0000010</u> RAYTHN WILINT STRUT LEAKING 1/4/2008 390 FJ442A 390810001 LT MLG

PILOT REPORTED LT AND RT MAIN LANDING GEAR STRUTS LEAKING HYDRAULIC FLUID. DISASSEMBLY LOWER LT MAIN LANDING GEAR STRUT, FOUND PAINT CHIPS CONTAMINATING SEALS. DISASSEMBLED RT LOWER MAIN LANDING GEAR STRUT, FOUND PAINT CHIPS CONTAMINATING SEALS AND METAL FILLINGS IN INNER BARREL OF STRUT.

ODAA121907001 RAYTHN GARRTT ACCESS PANEL OUT OF ADJUST

12/19/2007 HAWKER800XP TFE731*

PILOT REPORTED RUDDER PEDALS BINDING FOUND DURING PREFLIGHT, WITH RT PEDAL FORWARD AND LT PEDAL AFT. AFTER APPLYING PRESSURE TO PEDALS WITH FEET, PEDALS BECAME UNBOUND WITH POPPING NOISE HEARD. INSPECTED RUDDER SYSTEM. FOUND RUDDER BINDING AT PANEL SCREW FOR LOWER CONTROL COLUMN ACCESS, FORWARD, DUE TO BEND IN PANEL. REMOVED SCREWS AND ADJUSTED PANEL FOR BETTER CLEARANCE. REPLACED SCREWS WITH SHORTER VERSION OF SAME. RUDDER SYSTEM OPERATED NORMALLY. REFERENCE MM, CHAPTER 27.

<u>CA070927004</u> RAYTHN GARRTT LINE CHAFED 9/26/2007 HAWKER850XP TFE7315BR 307481812 ENGINE

(CAN) DURING SCHEDULE INSPECTION FOUND 2 OIL LINES CHAFING. THE SAME PROBLEM WAS ON BOTH ENGINES. THE PROBLEM COMES FROM THE FACTORY SINCE THE AIRCRAFT IS NEW AND LOW TIME. THE AIRCRAFT HISTORY DOES NOT SHOW ANY MAINTENANCE ACTION BEING PERFORMED IN THAT AREA SINCE THE AIRCRAFT WAS DELIVERED NEW AND IS STILL UNDER WARRANTY. LINE PN 3074818-1 AND PN 3072083-2 (BOTH ENGINES ARE TFE731-5BR SERIES) (TC NR 20070927004)

2007FA0001081 ROBSIN LYC OIL COOLER CRACKED

9/26/2007 R22ALPHA O320B2C 20006A

AT A 100 HR INSPECTION ON HELICOPTER, INSTALLED A NEW OIL COOLER REPLACING THE ORIGINAL OIL COOLER. (NOVEMBER 5, 2007, HOUR METER 1042) WHILE FLYING, NOTICED THE OIL TEMPERATURE RISING AND THE OIL PRESSURE DROPPING. MADE AN UNSCHECULED LANDING AND DISCOVERED THE TAILBOOM COVER WITH ENGINE OIL. TRACED THE OIL BACK TO THE OIL COOLER, REMOVED OIL COOLER AND PRESSURE TESTED IT AND FOUND A .7500 INCH CRACK IN THE COOLER CORE. (TT 16.8 HOURS) (K)

<u>CA070704006</u> ROBSIN LYC FRAME CRACKED 6/27/2007 R22BETA O320B2C R2210152 RT DOOR

(CAN) DURING VISUAL INPECTION TO COMPLY WITH AWD 2005-16-05 RT DOOR ASSY WAS FOUND CRACKED. FUTHER INPECTION OF THE TECH-TOOL DOOR AND FRAME ASSY REVEALED ADDITIONAL CRACKS. DOOR FOUND TO BE UNSERVICEABLE AND REMOVED FROM A/C. (TC NR 20070704006)

<u>CA071018002</u> ROBSIN LYC ELT FAILED 11/13/2006 R22BETA O360J2A AK450 CABIN

(CAN) SENT 2 ELTS TO INLAND COMMUNICATIONS FOR SERVICING, BOTH ELTS HAD FAULTY G-SWITCHES AND COULD NOT BE REPAIRED. SENT CORE IN FOR NEW AK-450 S/N 485068 THAT WAS INSTALLED ON NOV 13/06, WENT OFF ON LANDING AND AGAIN IN FLIGHT. REMOVED ELT ON HOV 14/06. INSTALLED NEW AK-450-1 ELT S/N 485603 JAN 11/07, FAILED ON MAR 4/07 AND REMOVED. INSTALLED ANOTHER NEW AK-450-1 ELT S/N 484979 ON MAY 30/07 AND IS STILL SERVICE. (TC NR 20071018002)

CA070829002 ROBSIN LYC GOVERNOR INTERMITTENT

7/14/2007	R44	O540F1B5	D2781	ENGINE
(CAN) DURING CF	RUISE, THE GOVE	RNOR CONTROL SETTING BECAME F VERNOR WAS REPLACED AND NO IS	HIGHER. MAINTENAN	NCE INVESTIGATED AND
CA071109011	ROBSIN	LYC	CYLINDER	INOPERATIVE
11/8/2007	R44	O540F1B5	LW13870	ENGINE
(CAN) DURING A	ESSION TEST WA	TION, BOTTOM SPARK PLUG ON CYLI S CARRIED OUT AND CYLINDER NR (D BE VERIFIED. (TC NR 20071109011)	INDER NR 5 REVEAL 5 WAS NOTED TO H.	ED UNUSUAL AMOUNT
CA071109008	ROBSIN	LYC	PUMP	WEAK
11/3/2007	R44RAVENII	IO540AE1A5	LW15473	FUEL SYSTEM
(CAN) ENGINE DF 20071109008)	RIVEN PUMP FOUN	ID TO BE WEAK WILL NOT SUSTAIN E	ENGINE IDLE ON IT`S	S OWN. (TC NR
CA071109009	ROBSIN	LYC	PUMP	WEAK
11/3/2007	R44RAVENII	IO540AE1A5	D7431	FUEL SYSTEM
(CAN) ELECTRIC	AUX FUEL PUMP V	WEAK, MOTOR SOUNDED LIKE IT WA	S OVERWORKING. (TC NR 20071109009)
CA071109010	ROBSIN	LYC	FUEL CONTROL	INOPERATIVE
11/3/2007	R44RAVENII	IO540AE1A5	25766304	ENGINE
		OUND RUN, THE ENGINE WAS HESITA ONTROL NOT RESPONDING TO THRO		
CA070829001	ROBSIN	LYC	STARTER GEN	INTERMITTENT
8/19/2007	R44RAVENII	IO540AE1A5	BC3151004	ENGINE
		ART THE STARTER FUNCTION WAS IN IOTED. (TC NR 20070829001)	NTERMITTENT. STAF	RTER WAS REPLACED
CA071022007	ROBSIN	LYC	CLUTCH	SLIPPED
9/9/2007	R44RAVENII	IO540AE1A5	C0183	MAIN ROTOR
(CAN) CLUTCH RE 20071022007)	EMOVED DUE TO I	PROBLEMS AT HIGH POWER SETTING	GS. POSSIBLE CLUT	CH SLIPPAGE. (TC NR
CA071022008	ROBSIN	LYC	ARM	BINDING
10/9/2007	R44RAVENII	IO540AE1A5	25766304	FUEL CONTROL
(CAN) INTERMITTENT ROTOR DROOP. FOUND BINDING ARM ON FUEL CONTROL CAUSING ERRATIC GOVERNOR OPERATION. (TC NR 20071022008)				
CA071022009	ROBSIN	LYC	LINE	LEAKING
9/12/2007	R44RAVENII	IO540AE1A5		HYD PUMP
(CAN) PUMP REPLACED DURING TROUBLESHOOTING SMALL LEAK AT SPLIT LINE ON PUMP. (TC NR 20071022009)				
CA071022010	ROBSIN	LYC	RESERVOIR	VENTING
9/12/2007	R44RAVENII	IO540AE1A5	D2112	HYD SYSTEM
(CAN) HYDRAULIC RESERVOIR VENTING. (TC NR 20071022010)				
CA071030009	ROBSIN	LYC	PUMP	LEAKING
10/29/2007	R44RAVENII	IO540AE1A5	LW15473	FUEL SYS
(CAN) DURING AN INSPECTION, THE ENGINEER NOTED THAT THE ENGINE DRIVEN FUEL PUMP HAD EVIDENCE OF OIL LEAKAGE AROUND THE SEAL AREA (BODY). PUMP WAS REMOVED, REPLACED AND NO FURTHER ISSUES				

20071030009)	HERE HAS BEEN I	MANY OF THE THI	ESE PUMPS LATELY	/ WITH VARIOUS HR	S OF FAILURE. (TC NR
CA071030011	ROBSIN	LYC	LYC	DIAPHRAGM	LEAKING
10/8/2007	R44RAVENII	IO540AE1A5			FUEL PUMP
	ISPECTION, ENGI NR 20071030011		ED OIL LEAKAGE FR	OM VENT. SUSPEC	T DAMAGED
CA071004005	ROBSIN	LYC		SERVO	LEAKING
9/18/2007	R44RAVENII	IO540AE1A5		D2121	HYDRAULIC SYS
(CAN) DURING 50	0/100 HOUR INSPE	ECTION HYDRAUL	IC SERVO FOUND L	EAKING FROM PILC	T VALVE.
CA071019001	ROBSIN	LYC		SIGHT GLASS	LOOSE
10/17/2007	R44RAVENII	IO540AE1A5		B5631	TAIL ROTOR
GEAŔBOX SIGHT EXAMINED AND I BYPASS AND LEA	GLASS. THE PAR NOTED THE GLAS	RT WAS REMOVED S COULD ROTATE NO ISSUE OF THE	O AND REPLACED W E IN THE HOUSING,		
CA071024003	ROBSIN	LYC	LYC	DIAPHRAGM	TORN
10/23/2007	R44RAVENII	IO540AE1A5			FUEL PUMP
FAIL OVER THE L UPPER DIAPHRA SHOWED A DEFI THE MATERIAL C LEADS US TO WO	LAST 8 MONTHS. T IM HAD RUPTURE NITE INDICATION ON THE FUEL SIDE	THIS WAS THE FIF D. THE SIDE OF U OF DETERIORATI ESHOWS NO DET EL COMPATIBLE I	RST PUMP DIASSEM PPER DIAPHRAM M ON AND THE RUBB ERIORATION, EXCE	IBLED. IT WAS QUIT IATERIAL EXPOSED ER MATERIAL BREA	THESE FUEL PUMPS E EVIDENT THAT THE TO THE ENGINE OIL KING DOWN. WHEREAS PHRAM HAD TORN. THIS BLE WITH THE W80
CA070914019	SKRSKY	GE		BLADE	LEAKING
9/11/2007	S61N	CT581401		6117020201	MAIN ROTOR
· ,				WAS FOUND TO BE PROXIMATELY 80 D	.25 LBS BELOW AYS PREVIOUS. (TC NR
CA071016020	SKRSKY	ALLSN		HOSE	COLLAPSED
0/14/2007	S76A	250C30S		7630700701041	FUEL DIST
	E INTERNAL COLL	APSE (TC NR 200	71016020)		
CAN) FUEL HOS					
CAN) FUEL HOS CA071024007	SKRSKY	GE		BEACON	FAILED
,		GE CT78A		BEACON 50316	FAILED
0/22/2007 CAN) DURING FI	SKRSKY S92A ERRY FLIGHT (CR	CT78A ASH POSITION IN		50316 ED AIRCRAFT FOR N	FAILED NO APPARENT REASON. 92604-40331. (TC NR
0/22/2007 CAN) DURING FI JNIT DID NOT TR	SKRSKY S92A ERRY FLIGHT (CR	CT78A ASH POSITION IN		50316 ED AIRCRAFT FOR N	IO APPARENT REASON.

CA071115009 SNIAS TMECA TAIL ROTOR UNBALANCED

REPLACED. THE POTENTIAL FOR GIVING A FALSE READ TO THE PILOT DURING FLIGHT MAY HAVE OCCURED. AIRCRAFT WAS GROUNDED. SWITCH HAS BEEN REPACED AND A/C RETURN TO SERVICE. (TC NR 20070316001)

11/15/2007 AS350B2 ARRIEL1D1 355A12004008

(CAN) EXCESSIVE AMOUNT OF TIP BALANCE WEIGHT TO BALANCE TAIL ROTOR. (TC NR 20071115009)

CA070917009 SNIAS TMECA SERVO CONTROL LEAKING

9/1/2007 AS350B3 ARRIEL2B SC5083 MAIN ROTOR

(CAN) M/R SERVO REMOVED FROM RT POSITION DUE TO LEAKAGE. (TC NR 20070917009)

CA071022004 SNIAS TMECA SWITCH MALFUNCTIONED

10/18/2007 AS350B3 ARRIEL2B HMU

(CAN) DURING GROUND RUN THE FORCED IDLE FUNCTION OF THE TWIST GRIP WAS BEING TESTED WHEN IT WAS OBSERVED TO NOT ACCELERATE BACK TO FLIGHT IDLE WHEN RETURNED TO THE (VOL) POSITION. THIS FUNCTION IS USED TO SIMULATE ENGINE FAILURE DURING PRACTICE AUTOROTATION. SUCCESSIVE ATTEMPTS OF ROLLING THE THROTTLE FROM (VOL) TO (MIN) TO (VOL) PRODUCED ERRATIC RESULTS, THE ENGINE EITHER STAGNATED AT IDLE NG OR WAS SLOW TO RESPOND BACK TO FLIGHT IDLE, (NO ERROR CODES WERE RECORDED ON THE VEMD). THE FORCED IDLE MICRO SWITCH WAS TESTED IAW MFG ALERT SB NR 05.00.49, NO ANOMALIES WERE FOUND. THE SWITCH IN QUESTION PN DHS772-400.30 WAS REPLACED AS A TROUBLESHOOTING MEASURE. MFG MANDATORY SB A292 73 2814, INSPECTION AND LUBRICATION OF THE HMU ACCELERATION CONTROLLER AXEL WAS CARRIED OUT. A SECOND SET OF GROUND RUNS PRODUCED SIMILAR RESULTS, MFG WAS CONTACTED AND A REPLACEMENT HMU WAS INSTALLED RECTIFYING THE PROBLEM. (TC NR 20071022004)

<u>CA071116001</u> SWRNGN GARRTT SENSOR OVERHEATED

11/14/2007 SA226TC TPE33110UA WINDSHIELD TEMP

(CAN) THE FOLLOWING WAS REPORTED BY THE FLIGHT CREW FOLLOWING THE CO-PILOTS HEATED WINDSHIELD FAILURE: (WHILE ON THE ILS FO MENTIONED A BURNING SMELL, AND NOTICED IT AS WELL.) TOOK MY FLASHLIGHT OUT BUT COULD NOT NOTICE ANY DETECTABLE SMOKE IN THE CABIN OR COCKPIT. CONTINUED THE APPROACH WITH BLEED HEAT OFF AND FRESH AIR FAN RUNNING. BY THE TIME WE LANDED, THE SMELL WAS STRONGER BUT COULD NOT SEE ANY SMOKE. ON THE GROUND WE SHUTDOWN THE ELECTRONICS AS SOON AS POSSIBLE AND THEN SHUT DOWN THE AIRCRAFT. PASSENGERS NOTICED THE SMELL IN THE BACK AS WELL. IT WAS OBVIOUS THAT IT WAS AN ELECTRICAL SMELL, AND THERE WAS SMOKE EVIDENT WHEN WE TOOK OUT OUR FLASHLIGHTS AGAIN ON THE GROUND. UPON INSPECTION BY MAINTENANCE IT WAS DETERMINED THAT THE WINDSHIELD HEAT SENSOR HAD FAILED AND TERMINAL ENDS AND WIRES WERE FOUND BURNED/DAMAGED FROM OVERHEATING. THE WINDSHIELD HEAT WAS NO LONGER FUNCTIONAL. THE WINDOW IS UNDERGOING REPLACEMENT BY MAINTENANCE. (TC NR 20071116001)

CA071108001 SWRNGN ELECTRICAL SYS FAILED

11/5/2007 SA227AC

(CAN) A/C ENROUTE AT 6000 FT, EXPERIENCED TURBULENCE AND ST.ELMO`S FIRE. AFTER SOME TIME, LIGHTNING APPEARED AS A BLUE LIGHT (AS REPORTED BY PASSENGER. IMMEDIATELY AFTER, ALL ELECTRICAL POWER (BOTH BATTERIES AND GENERATORS) WAS LOST. AIRCREW RESET THE BATTERIES AFTER ESTABLISHING A SAFE FLIGHT ATTITUDE WITH THEIR PERSONAL FLASH LIGHTS. POWER WAS RESTORED AS SOON AS BATTERY RESET WAS ATTEMPTED. FLIGHT CONTINUED. MAINTENANCE WAS CONTACTED. AS THERE WAS NO OBVIOUS DAMAGE, ENTRIES WERE MADE IN THE JOURNEY LOG AND THE AIRCRAFT WAS RETURNED TO SERVICE. (TC NR 20071108001)

<u>CA071018003</u> SWRNGN GARRTT ACCUMULATOR INOPERATIVE 10/17/2007 SA227AC TPE331* 223003 HYD SYSTEM

(CAN) ACCUMULATOR WAS REMOVED FOR TROUBLESHOOTING HYDRAULIC LEAKS IN SYSTEM. IT WAS SUSPECTED THAT THE ACCUMULATOR WAS NOT DOING ITS JOB OF ABSORBING THE HYDRAULIC SHOCKS. UPON REMOVAL IT WAS NOTED THAT THE INTERNAL PISTON WAS INSTALLED BACKWARDS. THE -3 ACCUMULATOR DOES NOT SHOW UP IN THE PRESENT IPC. THE ACCUMULATOR WAS INSTALLED IN 2002 AND CAME INTO INVENTORY IN 1999 AND WAS CERTIFIED IN 1997. (TC NR 20071018003)

<u>CA071106010</u> SWRNGN GARRTT FUEL NOZZLE CRACKED

10/30/2007 SA227AC TPE3311 31032359 ENGINE

(CAN) FUEL NOTICED IN ENGINE COWL DURING INSPECTION. NOZZLE IN NR 3 POSITION FOUND CRACKED WHERE
PRIMARY/SECONDARY LINES HOOK UP TO NOZZLE. CRACK WAS 95 PERCENT THROUGH CIRCUMFERENCE. (TC
NR 20071106010)

CA071106009	SWRNGN	GARRTT	ARM	CRACKED
10/26/2007	SA227AC	TPE33111U	2752530001	NLG CENTER
(CAN) DOLLED BEADING OUTED CASE FOUND ORACKED COMPLETE VILIDOUGH, DEDLACED AND DETUDNED TO				

(CAN) ROLLER BEARING OUTER CASE FOUND CRACKED COMPLETLY THROUGH. REPLACED AND RETURNED TO SERVICE (TC NR 20071106009)

<u>2007FA0001104</u> UNIVAR SKIN CORRODED 12/19/2007 415C FUSELAGE

IAW AD2002-26-02,- CORROSION FROM WATER, DIRT AND ACID FROM BATTERY ATE THROUGH BOTTOM SKINS 415-13058-1,415-13047L AND R, RIBS 415-13016L AND R AND BOTTOMS OF SERVICE ASSEMBLY NR 5. AIRCRAFT HAD SAT SINCE 1977.

2008FA0000020 UROCOP TMECA ENGINE MAKING METAL

10/15/2007 EC120B ARRIU2F

ON GROUND RUN, ENGINE CHIP DETECTOR ILLUMINATED. BOTH DETECTORS HAD METAL SLIVERS. SAMPLES TAKEN, AND MFG CONDEMNED ENGINE. ENGINE REMOVED FROM SERVICE, AND RETURNED TO MFG FOR REPAIR.

2008FA0000029UROCOPTMECAWARNING LIGHTFALSE ACTIVATION12/30/2007EC120BARRIU2FCHIP DETECTOR

ENGINE CHIP LIGHT IN CRUISE FLIGHT. INSPECTED BOTH MAGNETIC PLUGS FOR FOREIGN MATERIAL, NONE WAS NOTED. INSPECTED AND TESTED MAGNETIC PLUG HEADS IAW 79-38-00-750-801, INSPECTION AND OPS CHECKS WERE GOOD. REMOVED AND REPLACED ENGINE OIL AND RETURN FILTER IAW 79-24-05-901-801-A01. OPS AND LEAK CHECKS GOOD. (K)

 CA071130012
 UROCOP
 TMECA
 BRAKE
 DAMAGED

 11/30/2007
 EC120B
 ARRIU2F
 C762C1004103
 ROTOR

(CAN) MECHANICAL DAMAGE TO ROTOR BRAKE GRID ASSEMBLY, DUE TO IMPROPER OPERATION. TRIGGER WAS NOT DEPRESSED PRIOR TO ENGAGING ROTOR BRAKE HANDLE CAUSING MECHANICAL DAMAGE TO GRID ASSEMBLY. NEW GRID ASSEMBLY INSTALLED (TC NR 20071130012)

2008FA0000024 UROCOP TMECA ENGINE MAKING METAL

10/19/2007 EC120B ARRIUS2F

ENGINE CHIP DETECTOR ILLUMINATED. BOTH CHIP DETECTORS HAD METAL CONTAMINATION. SAMPLES TAKEN, AND MFG CONDEMNED ENGINE. ENGINE REMOVED FROM SERVICE, AND RETURNED TO MFG FOR REPAIR.

<u>2008FA0000022</u> UROCOP TMECA OIL JET LEAKING 12/21/2007 EC120B ARRIUS2F ENGINE

ENGINE EXPERIENCING INTERNAL OIL LEAKAGE. MFG CONDEMNED ENGINE. ENGINE REMOVED SERVICE, AND RETURNED TO MFG FOR REPAIR.

 2008FA0000058
 UROCOP
 TMECA
 ENGINE
 MAKING METAL

 1/23/2008
 EC120B
 ARRIUS2F
 0319008000

ON 10, OCT. 2007 THE PILOT REPORTED THE ENGINE CHIP WARNING LAMP ILLUMINATED. THE AIRCRAFT WAS LANDED WITHOUT INCIDENT. THIS WAS THE FOURTH OCCURRENCE IN 10.9 HOURS. THE ENGINE WAS REMOVED

AND RETURNED TO MFG FOR EVALUATION AND REPAIR.

CA071109003 ZLIN LYC BAFFLE CRACKED

11/9/2007 Z242L AEIO360A1B6 L24266710000 EXHAUST SILENCER

(CAN) DURING A 100 HOUR INSPECTION, ONE INTERNAL BAFFLE OF THE PRIMARY EXHAUST SILENCER WAS

FOUND TO BE CRACKED 25 PERCENT OF THE ATTACHING WEL	ELD. SILENCER WAS SUBSEQUENTLY REPLACED. (TO
NR 20071109003)	

END OF REPORTS