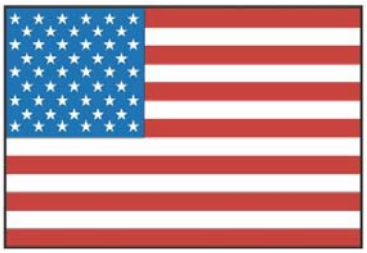
U.S. Department of Transportation
Federal Aviation Administration

AFS-600
Regulatory Support Division

ADVISORY CIRCULAR

43-16A

AVIATION MAINTENANCE ALERTS



ALERT NUMBER 393

APRIL 2011

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

AVIATION MAINTENANCE ALERTS

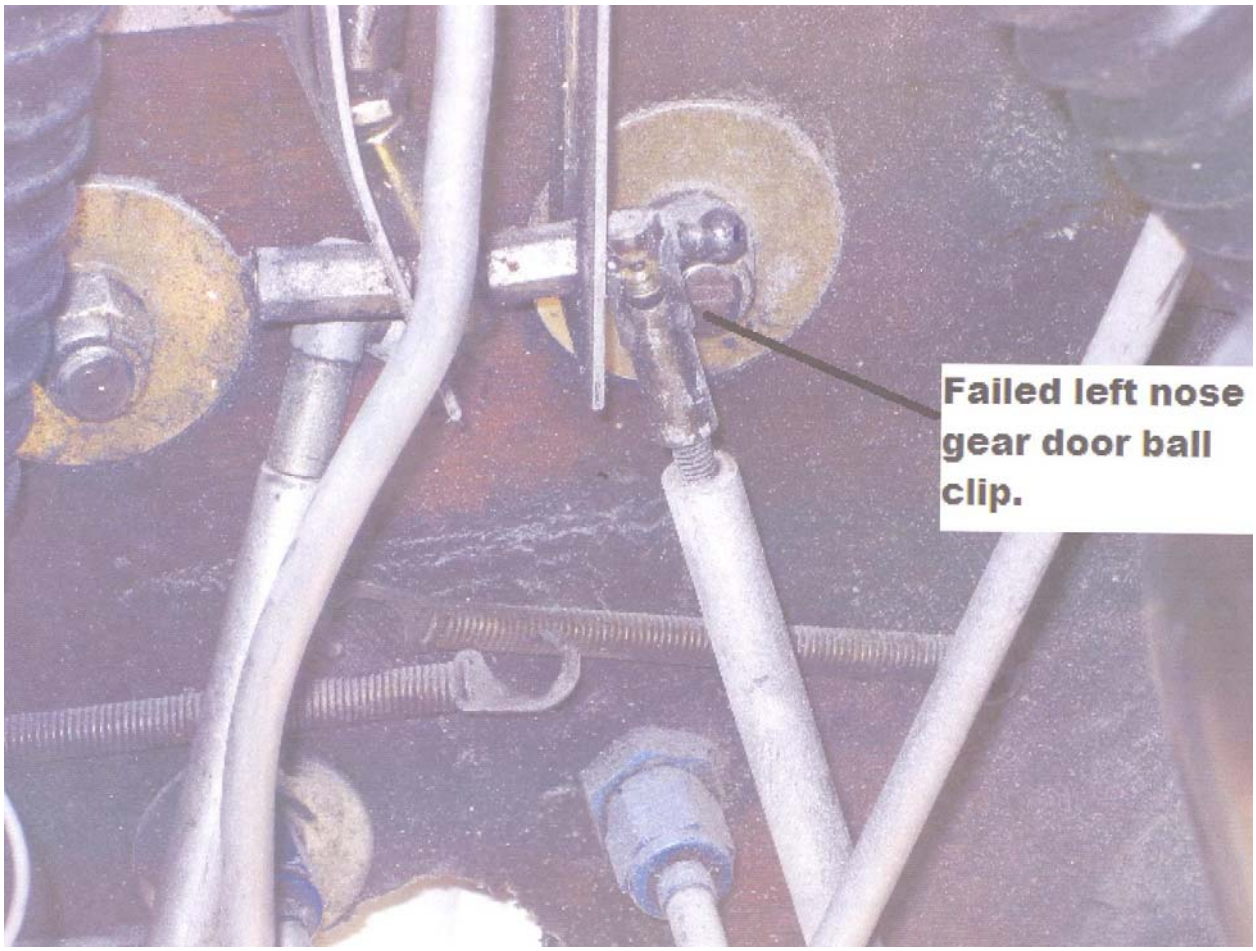
The Aviation Maintenance Alerts provides the aviation community with an economical means to exchange service experiences and to assist the FAA in improving aeronautical product durability, reliability, and safety. We prepare this publication from information operators and maintenance personnel who maintain civil aeronautical products pertaining to significant events or items of interest. At the time we prepared this document, we have not fully evaluated the material. As we identify additional facts such as cause and corrective action, we may publish additional data in subsequent issues of the Alerts. This procedure gives Alerts' readers prompt notice of conditions reported to the FAA Service Difficulty Reporting System (SDRS). We welcome your participation, comments, and suggestions for improvement. 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

***(Amateur)*: Velocity SRG; Nose Gear Failure; ATA 3231**

An unknown submitter states, "The left nose gear door would not open to let the nose gear come down. After landing with the nose gear up, *(I)* found that the linkage had come off in flight and jammed the door closed. After removing an inspection cover, I was able to free the linkage and drop the nose gear while a fireman held the *(aircraft)* nose up. An online *(search)* found a recommendation to modify the doors so they spring open if the linkage failed. Minimum damage *(occurred to this experimental aircraft)* , and was limited to the nose gear door area."

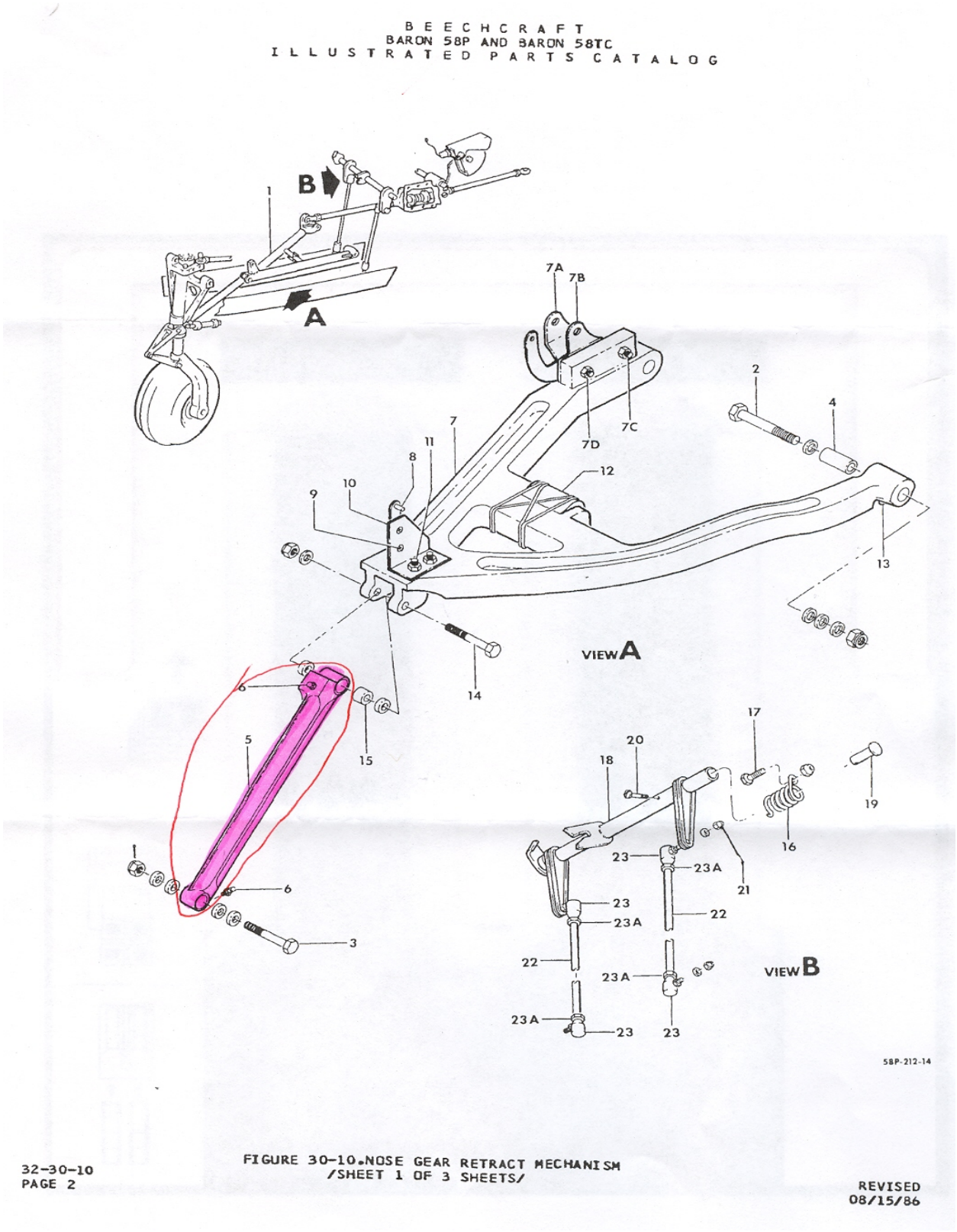


(No part numbers were provided with this report.)

Part Total Time: 451 hours

Beechcraft: 58P; Failed Nose Gear Drag Leg; ATA 3230

An FAA inspector says, "*(This aircraft)* landed with the nose landing gear in the unlocked position. The pilot reported on take off the aircraft had a severe vibration at (approximately) 85 knots. He continued the flight, *(allowing)* a second aircraft to verify the nose landing gear was 'flopping around'. The pilot burned off fuel, and then landed with crash response at the airport. The aircraft nose settled upon landing, remaining on runway center. Damage was minor. The nose landing gear drag leg assembly had failed at the top end of the casting (P/N 002-820017-1). The metal broke apart—with indications it had been cracked for some time. This *(area)* cannot be inspected with the part on the aircraft."



Part Total Time: (unknown)

Diamond: DA42; Unsecured Nose Landing Gear Pin; ATA 3233

"During a routine annual inspection," says this writer, "the technician noticed the aft nose landing gear actuator attach pin (P/N D60-3223-00-33) had migrated to the right. Approximately one-half inch of the retaining pin had come loose (P/N DIN471-10-ZP) and fallen from the assembly, leaving the pin unsecured. This clip *(retaining ring)* is item number 030 for figure 32-30 'hydraulic actuator'."

Part Total Time: 1,598.0 hours

Fairchild: SA227AC; Cracked Hydraulic Accumulator; ATA 2911

(An operator from our southern neighbor in Lima, Peru provides this report.)

An A&P mechanic says, "During a Lima-Huánuco flight this aircraft *(developed)* a hydraulic leak from a cracked accumulator *(P/N 22300-2).* The aircraft returned to Lima and performed emergency *(landing)* procedures without any problem.

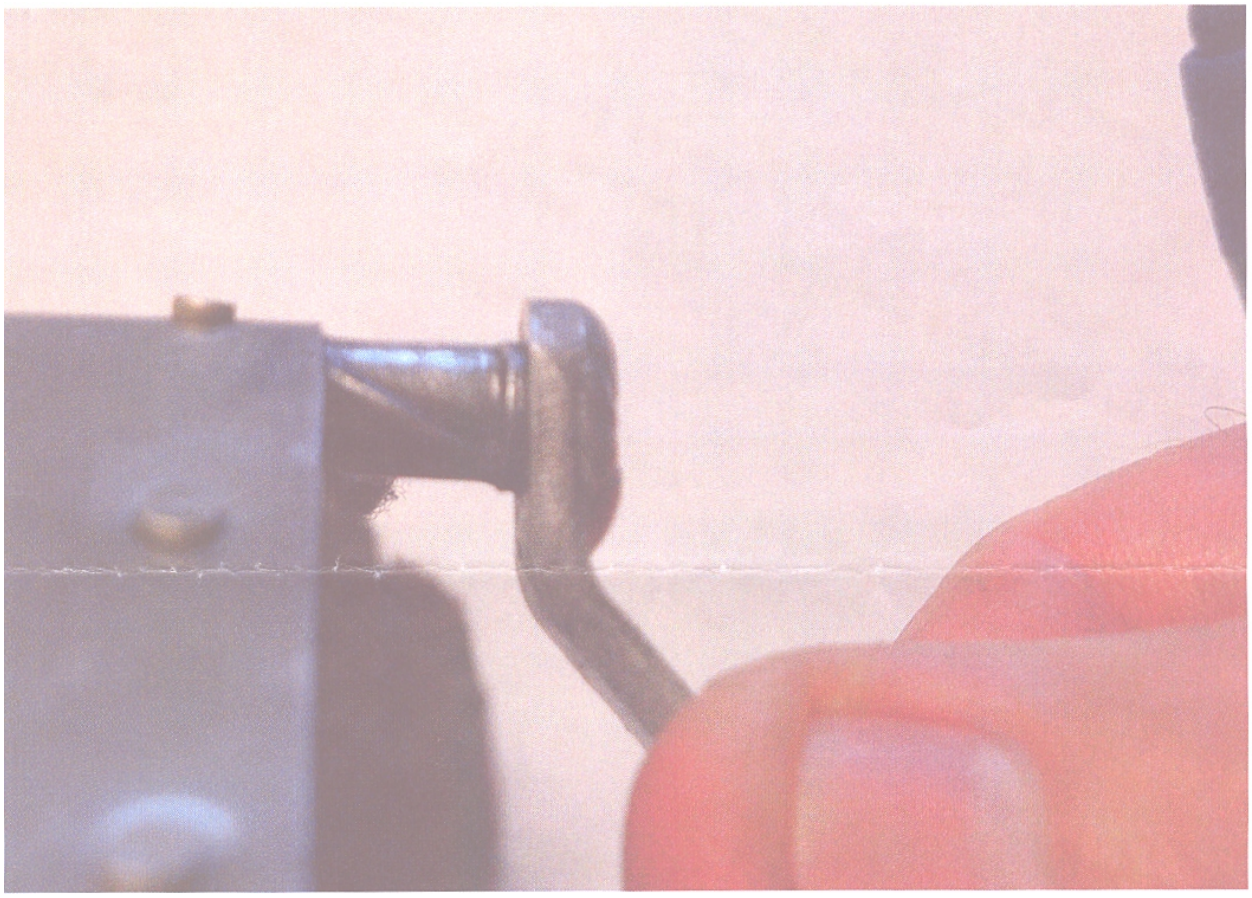
"This hydraulic accumulator is an 'on-condition' component; *(the cause of the crack)* unknown. We are investigating this problem."

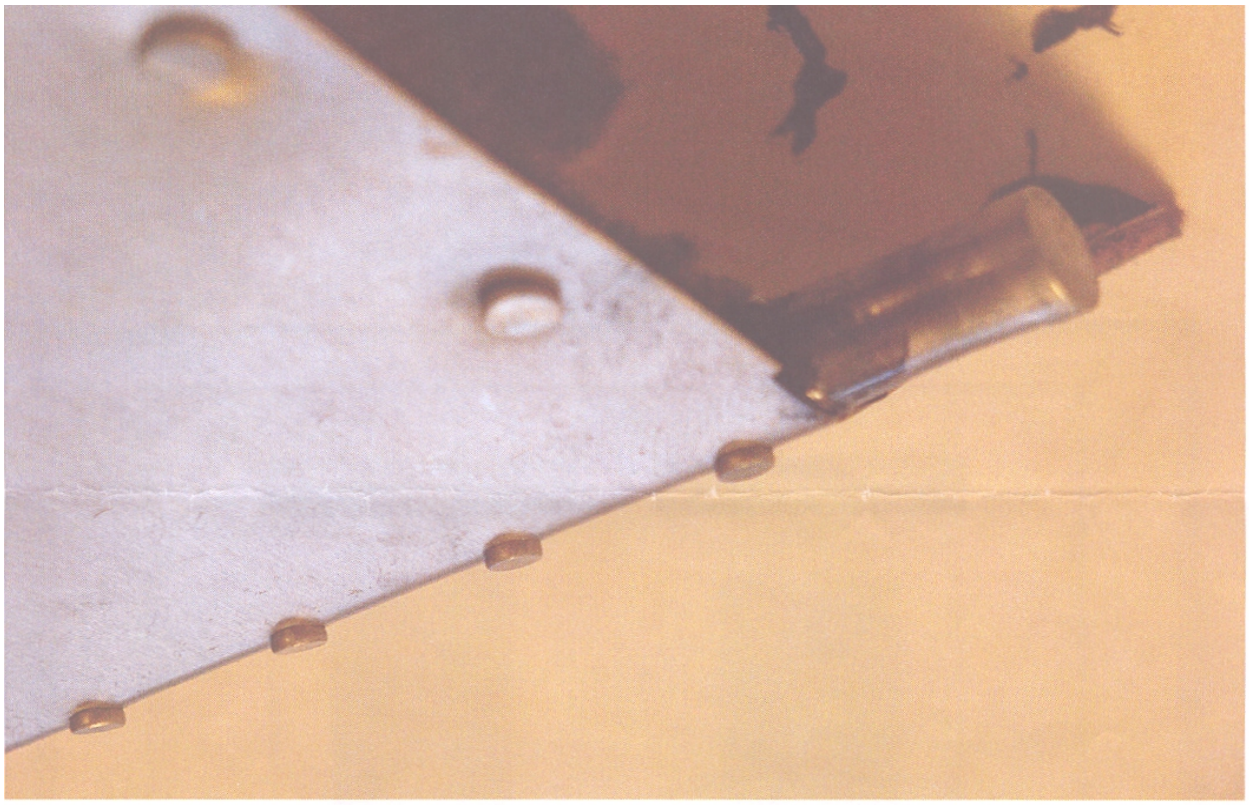
"For preventative maintenance, *(we have)* accomplished inspections of all the hydraulic accumulators and hydraulic lines in the fleet for hidden damage." *(The accumulator manufacturer listed is Airight, Inc. This P/N is reflected in nine separate defect reports. Thank-you for participating in the SDRS system—Ed.)*

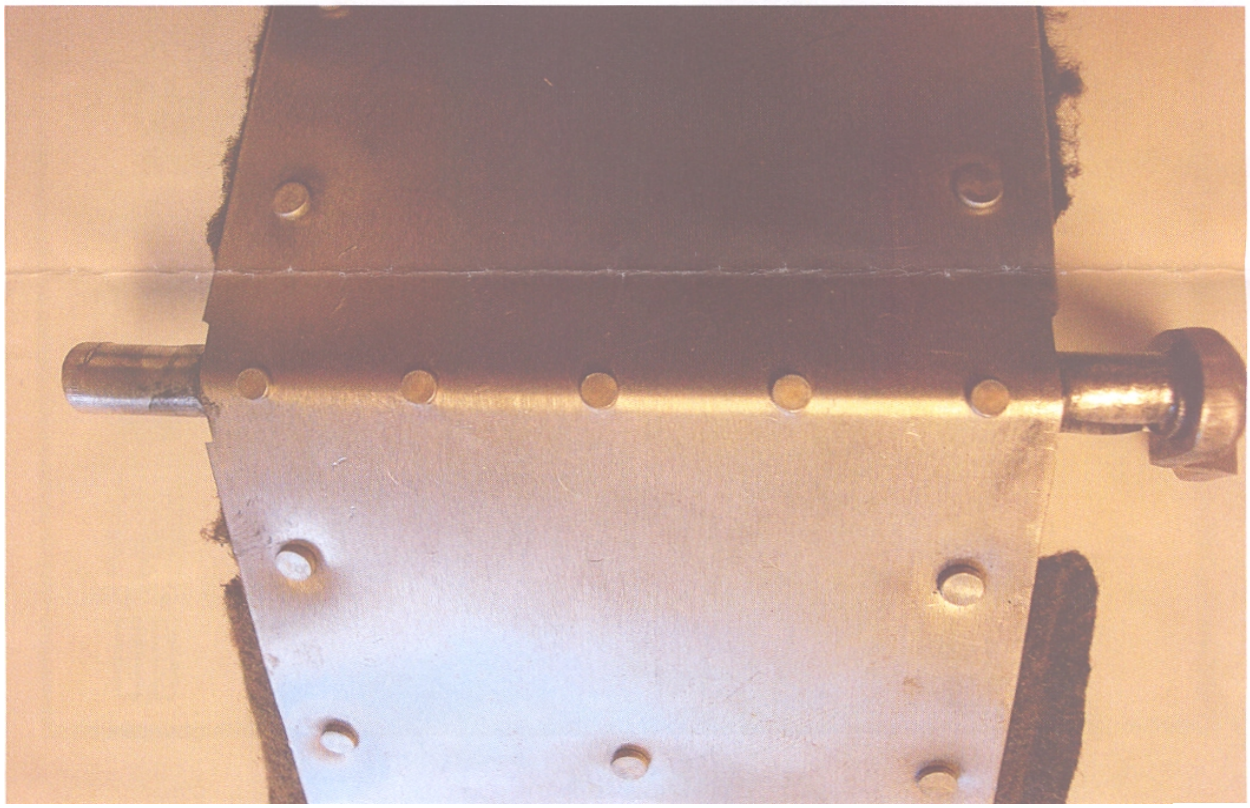
Part Total Time: (unknown)

Piper: PA28-161; Carburetor Heat Valve Shaft Damage; ATA 7160

"Both grommets *(failed)* and damaged the carburetor heat valve shaft," states this mechanic. These Teflon bushings *(became)* worn out in approximately 2,000 hours of operation and *(subsequently)* damaged the pivot shaft. This aircraft was manufactured in 2008." *(Carburetor heat valve P/N: 87327-002.)*







Part Total Time: 2,000 hour (approximate)

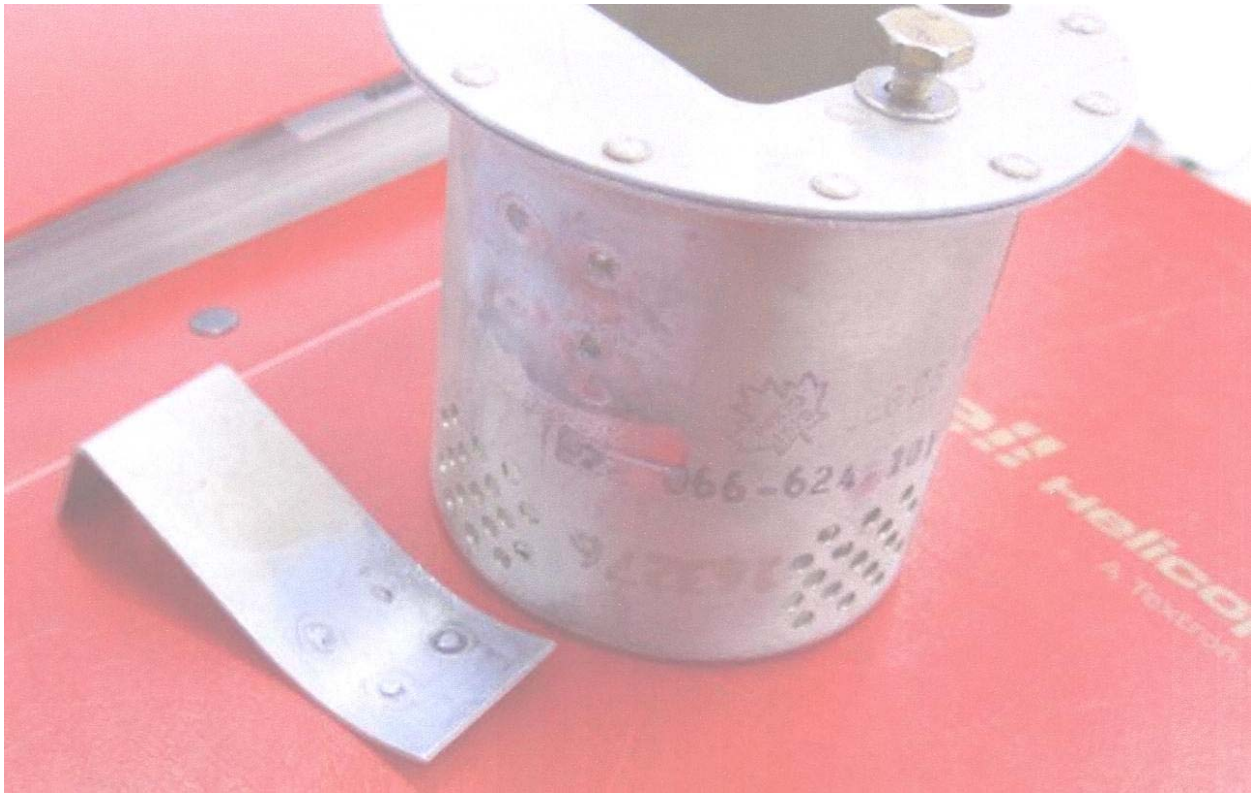
HELICOPTERS

Bell: 430; Broken Fuel Screen Mounting Bracket; ATA 2821

A repair station submitter says, "A broken fuel screen mounting bracket was discovered by inspection when installing the fuel cell (ref. item 66; figure 28-1003; BHT-430-MM-4; P/N 222-066-624-101).

"This mounting bracket is a two part *(assembly)* and is attached to the screen housing by spot welding. These spot welds on one part of the bracket completely failed—the remaining spot welds on the second part of the bracket appear to have cracks in the area of the welds. This bracket and housing hold the engine fuel supply hose in place. Complete failure of the bracket could allow the supply line inlet to drift up in the fuel cell and lead to engine flame-out.

"The probable cause is *(either)* the design or bad welds. Recommendations are to be determined after review."


366-624-301
Bell Helicopter
A Textron

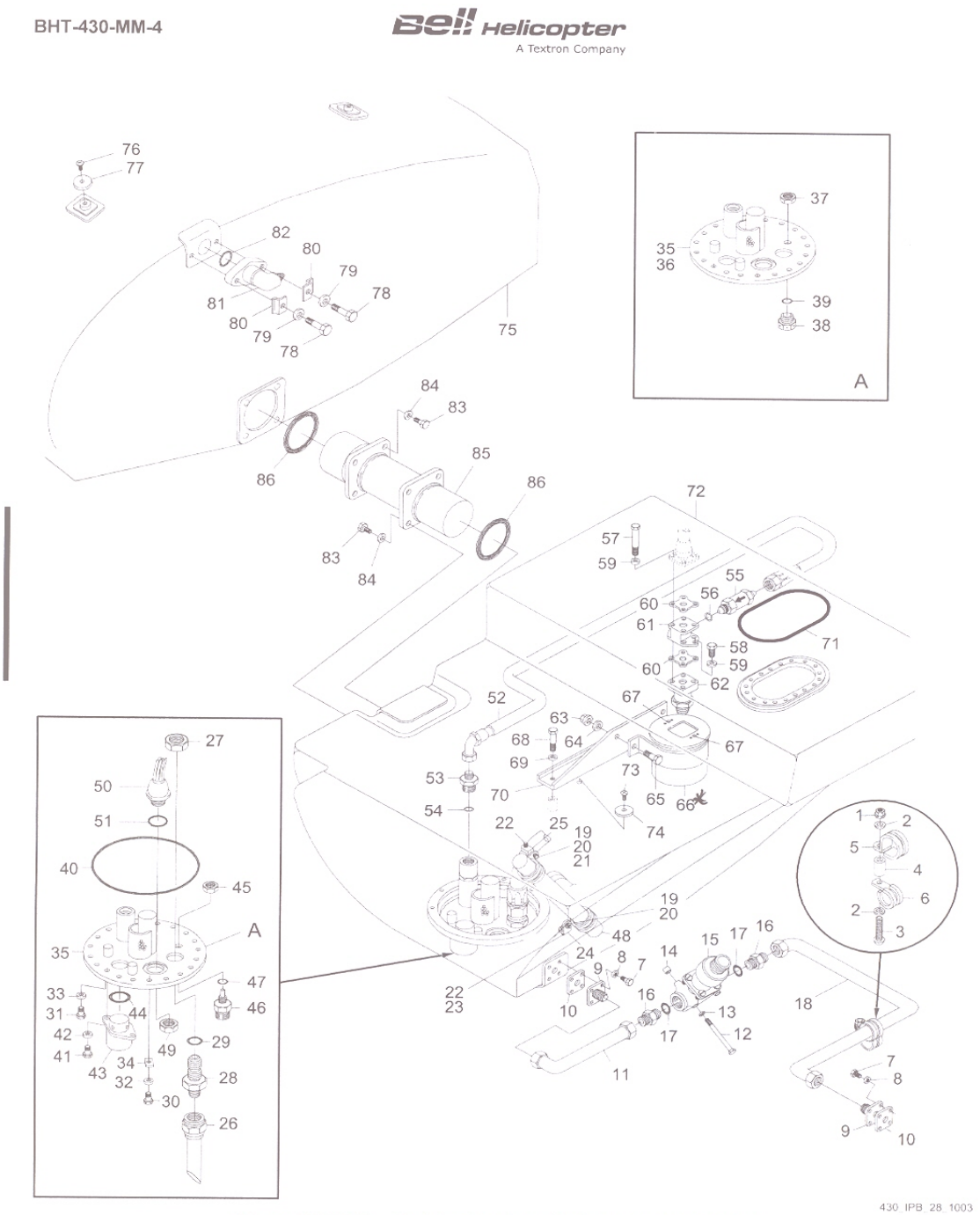


Figure 28-1003. Fuel System Installation and RH Fuel Cell

28-99-00
Page 12 Rev. 17 1 SEP 2009 ECCN EAR99
BUY BELL PARTS, BUY BELL VALUE

Part Total Time: (unknown)

Eurocopter: EC135T2; Damaged Floor Paneling; ATA 5321

"The aircraft floor has multiple dents and crushed honeycomb core," say this submitter. "This aircraft was altered with the Metro Aviation EC135 EMS (Kit Number 135M-100). *(I)* suspect...the medical floor palate (P/N EC135M-2000-1) is inadequate to support the stretcher assembly when loaded with a patient, *(resulting)* in the front wheels crushing the floor. *(We)* are awaiting a repair from American Eurocopter engineering." *(Floor Assembly P/N: L533M1015102.)*

Part *(aircraft)* Total Time: 2,438 hours

Hughes: 269C; Improper Lower Pulley Shaft/bearing Assembly; ATA 6320

A mechanic states, "During a preflight, it was noted the lower pulley shaft retaining locknut had completely backed off from the shaft. Upon removing the lower pulley and analyzing the discrepancy, it was discovered the bearings installed (P/N 269A5050-85—which supersedes bearings 269A5050-57) have a wider thickness, and therefore prevented the locking mechanism from engaging the threads properly.

"Further research showed (upon replacing the bearings with the upgraded bearings) the shaft should have been replaced as well (upgraded P/N 269A5498-5). *(In this part...)* the bearing retaining nut has been removed and the bearings are press-fit into the shaft.

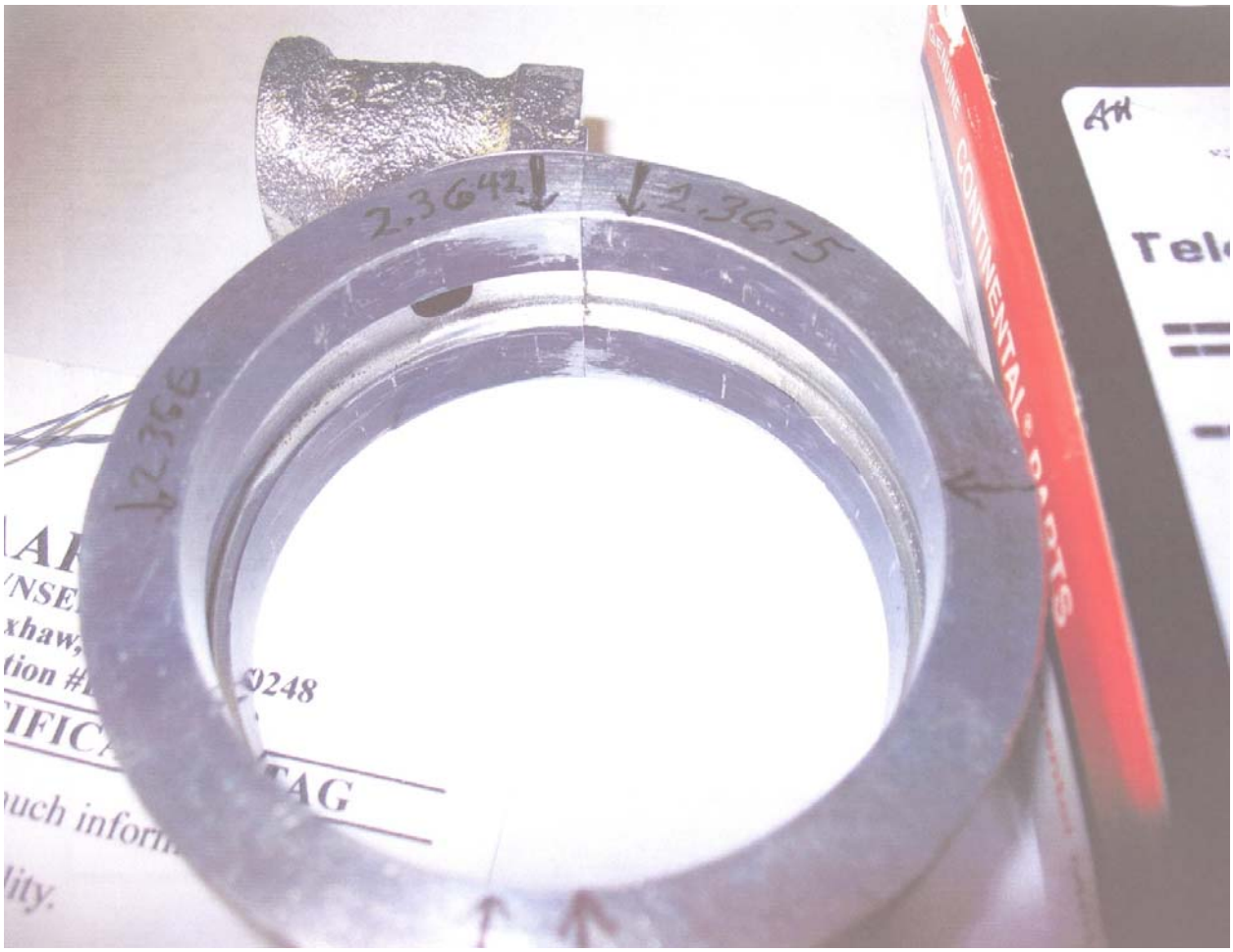
"To prevent this from occurring, it is my recommendation a note be incorporated into the Handbook of Maintenance Instruction manual (HMI) and in the Illustrated Parts Catalog (IPC) to specify the applicability of the correct shaft/bearing combination to be used when assembling or replacing the lower pulley assembly." *(Shaft Assembly P/N 269A5510-903; Pulley Assembly P/N 269A5497-9.)*

Part Total Time: (unknown)

POWERPLANTS

Continental: TSIO520; Damaged Transfer Collar; ATA 8500

A technician says, "This TCM Transfer Collar (P/N 626739M010) seems to have been damaged after it was *(machined)*. One side of the split line does not line up—you can catch a fingernail on it. When installed it is tight, and rubs at the point shown by the rubbed-off Magic Marker. When the diameter is measured with a bore gauge on each side of the split, there is a difference of 0.0033 inches. The maximum clearance on the shaft is 0.0018. This part was returned to the vendor for warranty replacement."



Part Total Time: 0.0 hours

ACCESSORIES

Ignition Switch: ACS/Gerdes; AD Compliance Admonition; ATA (N/A)

(The following discussion is provided by Aerospace Engineer Ivonne Droz from the Propulsion Branch of the Los Angeles Aircraft Certification Office. Contact information follows this article.)

Our office was notified by a field inspector's safety report of some confusion regarding the applicability of Airworthiness Directive (AD) 93-05-06. A number of Cessna 172 aircraft (and potentially other general aviation aircraft) having the ACS or Gerdes ignition switches may not be in compliance with this AD because of the way some readers have interpreted the directive's wording.

AD 93-05-06 was written against ignition switches manufactured by ACS Product Company and Gerdes Product Company. These ignition switches are installed in various general aviation aircraft. To prevent failure of the ignition switch, this AD requires inspection and lubrication of the ignition switches in accordance with ACS Service Bulletin SB92-01 (dated August 15, 1992), or Cessna Service Bulletin SEB91-5 Revision 1 (dated June 14, 1991), or later FAA approved revisions. If corrosion is detected, the switch must be replaced prior to further flight. The inspection and lubrication must be repeated at intervals not to exceed 2,000 flight hours—including new switches if installed. Please read the AD for complete details.

Aircraft owners, Airworthiness Inspectors, and mechanics need be aware AD 93-05-06 applies to any aircraft having ACS or Gerdes ignition switches, regardless of whether their aircraft model and/or serial number is listed. The list is not inclusive and the AD clearly states this under the "Applicability" section. This AD applies to all installed ACS Product Company or Gerdes Product Company ignition switches, regardless their date of production. For example, this directive applies to switches produced after the AD issue date.

In conclusion, aircraft having the ACS or Gerdes ignition switches not in compliance with this AD could experience a complete failure of the magneto system and subsequent loss of engine power.

(Readers can find AD 93-05-06 under "Regulations and Policies" through the FAA's website:

http://www.faa.gov/regulations_policies/airworthiness_directives/

For related Service Bulletin references register at the manufacturer's websites, or call:

ACS Product Support:	*928-855-8613.*
Cessna Aircraft Customer Care:	*800-423-7762.*

For further information regarding this article contact Aerospace Engineer Ivonne Droz, FAA Los Angeles ACO, 3960 Paramount Blvd., Lakewood, CA. 90712; phone 562-627-5264.)

Part Total Time: (N/A)

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) database 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/sdrx/Query.aspx.

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 database 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 following address.

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
Telephone: (405) 954-5313
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 System (SDRS) database. This is not an all-inclusive listing of Service Difficulty Reports. For more information, contact the FAA, Regulatory Support Division, Aviation Data Systems Branch, AFS-620, located in Oklahoma City, Oklahoma. The mailing address is:

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

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

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

Federal Aviation Administration

Service Difficulty Report Data

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

Control Number	Aircraft Make	Engine Make	Component Make	Part Name	Part Condition
Difficulty Date	**Aircraft Model**	**Engine Model**	**Component Model**	**Part Number**	**Part Location**
CA100725007				COMPRESSOR	DAMAGED
7/14/2010					APU ENGINE

POTENTIAL HAZARD:- DURING INSPECTION THE COMPRESSOR CASE WAS OBSERVED TO HAVE A SMALL HOLE IN IT. APU ENGINE WILL BE REMOVED 16 JULY AND SENT TO SHOP FOR INVESTIGATION. MFG WILL INVESTIGATE TO ESTABLISH ROOT CAUSE AND SUPPLEMENT THE REPORT ONCE THE INFORMATION IS AVAILABLE.

CA100708004	SPACER	MISMANUFACTURED
7/8/2010		SOLENOID HOUSING

UPON DISASSEMBLY, FOUND A SPACER THAT HOLDS THE SOLENOID TO THE SIDE PLATE, TO BE A HOMEMADE PART HELD TOGETHER WITH ALUMINUM TAPE. THE PART WAS NOT A MFG PART, IT WAS MADE OF 2 NAS SPACERS TO ACHIEVE THE SAME LENGTH. THE CORRECT PN IS 11280-1. UPON LOOKING AT THE CHR AND PREVIOUS AUTHORIZED RELEASE, SAW THAT THE COMPANY THAT O/H THE HOOK LAST WAS USING AN OUT DATED MANUAL, THE CURRENT MANUAL IS TD-00-014, REV A.

CA100806006	MOUNT	CRACKED
8/5/2010		MAGNETO

WHILE INVESTIGATING AN OIL LEAK - IT WAS FOUND TO BE THE MAGNETO MOUNTING RING. BASE WAS CRACKED. MAGNETO WAS REPLACED WITH AN O/H UNIT AND ACFT WAS RETURNED TO SERVICE.

CA100811008	DISTRIBUTOR BLK	CRACKED
8/11/2010	ES10682054	MAGNETO

MAG WAS RECEIVED FOR 500 HR INSP. WHEN DISASSEMBLED THE ELECTROSYSTEMS MFG DISTRIBUTOR BLOCK WAS FOUND CRACKED NEAR THE BEARING, AROUND THE ELECTRODES AND AT THE HOLES BETWEEN THE ELECTRODES. UNKNOWN HOW MANY HOURS ON PART, THE DIST BLOCK WAS REPLACED, THE 500 HR INSP WAS CARRIED OUT AND THE MAG RETURNED TO SERVICE. ANOTHER BLOCK MFG BY ELECTROSYSTEMS HAS BEEN FOUND CRACKED AND A SEPARATE SDR WILL BE FILED.

CA100811009	DISTRIBUTOR BLK	CRACKED
5/25/2010	ES10682054	MAGNETO

(CAN) MAG WAS RECEIVED FOR O/H. WHEN DISASSEMBLED THE ELECTROSYSTEMS MFG DISTRIBUTOR BLOCK WAS FOUND CRACKED AT THE BRG LOCATION. IT IS UNKNOWN HOW MANY HRS ARE ON THE PART. THE BLOCK WAS REPLACED AND THE MAG WAS RETURNED TO SERVICE. ANOTHER ELECTROSYSTEMS BLOCK HAS BEEN FOUND CRACKED AND SDR20100811008 WAS FILED.

2011FA0000079	FLOAT	MISREPAIRED
1/26/2011	109090015	MLG

RECEIVED SEVERAL EMERGENCY FLOATATION SYS USED ON THE HELICOPTERS. DURING INSP/ EVALUATION, UNAPPROVED REPAIRS WERE FOUND TO HAVE BEEN INCORPORATED ONTO THESE EMERGENCY FLOAT ASSEMBLIES. IAW COMPONENT (CMM 25-61-01) SEC 6, D REPAIRS "USE NO MORE THAN 3 PATCHES PER FLOAT" THE FLOATS RECEIVED HAD UP TO 11 AND AS LITTLE AS 7 PATCHES ON EACH FLOAT. THE FLOAT STOWAGE PACKBOARD/ METALLIC STRUCTURES HAD BEEN MODIFIED WITH AN UNAPPROVED COATING/ PAINT. THE RETURN TO SERVICE DOCUMENTATION DATED 04/24/2009, REF TECH DATA THAT WAS OUT OF REVISION, CMM

25-61-01, REV 01. CMM 25-61-01, REV 3 WAS ISSUED MARCH 2004. ALL OF THESE ITEMS WERE RETURNED TO SERVICE BY OTHER REPAIR STATION.

2011FA0000083	GCU	WRONG PART
1/31/2011	51538001B	

RECEIVED A GENERATOR CONTROL UNIT, PN 51538-001B, SN 1883, IN WHICH THE PN HAD BE OVERSTRUCK WITH A LETTER STAMP IT IDENTIFY IT AS A 51538-001A. DISASSEMBLY OF THE GCU VERIFIED THAT IT WAS INDEED A -001B, DUE TO THE COMPONENTS INSTALLED. THE 51538-001B WAS USED ON ACFT WHICH HAS BEEN REMOVED FROM SERVICE, RENDERING THIS PN TO BE OF LITTLE VALUE. THE 51538-001A IS USED ON THE ACFT. WHILE SIMILAR IN OPERATION, THEY SHOULD NOT BE INTERCHANGED. ACCORDING TO THE MFG, THERE ARE NO DOCUMENTS TO SUPPORT THE MODIFICATION FROM A -001B TO A -001A.

CA100823002	HUB	LEAKING
8/20/2010		PROPELLER

PROP LEAKING RED DYE (OIL) FROM HUB AREA. PROP REMOVED AND SENT FOR REPAIR. PROP REINSTALL AFTER REPAIRED AND GROUND RUN AND CHECK SERVICEABLE.

CA100818003	CLAMP	CRACKED
8/15/2010		ELT

THE CTR SECTION OF THE ELT BODY, CALLED THE "H-CLAMP" IS CRACKING ACROSS THE END ON A MOLDING SEAM LINE, APPROX 2 INCHES LONG. THIS ASSY HAS A MAIN BODY PART DESIGNATED AS "H-CLAMP" WHICH IS BLACK AND HAS A GROOVE AROUND EACH FACE TO HOLD A SEALING O-RING WHICH IS COMPRESSED WHEN THE EDGE OF THE BATTERY CASE CONTACTS THE O-RING IN THE GROOVE. THE MFG INSISTS THE THE DEFECT IS CAUSED BY OVERTIGHTENING OF THE CASE SCREWS, BUT THIS NEVER OCCURED IN EARLIER MODELS WITH THE SAME CONSTRUCTION, AND THE SCREWS MATE WITH INTERNAL STANDOFFS WHICH INTERFACE WITH MOLDED BOSSES IN THE BATTERY CASE. NO TORQUE SPECIFICATION IS GIVEN IN THE MM. MANUAL STATES "TIGHTEN SCREWS SECURELY". THIS FAULT DOES NOT AFFECT ELT OPERATION UNLESS THE UNIT HAPPENED TO BE SUBMERGED.

CA100818004	ARTEX	CLAMP	CRACKED
8/14/2010	G4064		ELT

BACK END OF THE H-CLAMP IS CRACKING/SEPARATING FROM THE BODY OF THE ITEM. MAY BE CAUSED BY COMPRESSION OF THE O-RING SEAL WHICH IS COMPRESSED WHEN THE EDGE OF THE BATTERY CASE MEETS WITH THE O-RING AS THE BATTERY IS ASSEMBLED TO THE UNIT AND THE 4 ATTACHING SCREWS ARE SECURED. HOWEVER THE CRACKS ARE ONLY SHOWING ON THE END PORTION WHEREAS THE O-RING RUNS THE FULL LENGTH OF THE MATING SURFACE BETWEEN THE BATTERY CASE AND THE H-CLAMP. NO TORQUE SPECIFICATION IS GIVEN FOR THE BATTERY MOUNTING SCREWS WHICH GO THRU MOLDED BOSSES IN THE BATTERY CASE AND INTO METAL STANDOFFS IN THE H-CLAMP. MANUAL INSTRUCTIONS SAY TO "TIGHTEN SCREWS SECURELY". THE BOSSES IN THE BATTERY CASE INTERFACE WITH THE END OF THE METAL STANDOFFS AND SHOULD PREVENT EXCESSIVE FORCE BEING APPLIED TO THE O-RING IF THE TOLERANCES ARE CORRECT IN THE CASES.

CA100818005	ARTEX	CLAMP	CRACKED
8/13/2010	G4064		ELT

THE AFT END OF THE BLACK PLASTIC H-CLAMP IS SEPARATING FOR APPROX 2 IN ALONG THE MOLDING PARTING LINE. IT APPEARS TO BE CAUSED BY OVER COMPRESSION OF THE O-RING SEAL WHICH SITS IN THE GROOVE OF THE H-CLAMP AND INTERFACES WITH THE EDGE OF THE BATTERY CASE. BATTERY CASE IS SECURED TO THE BODY OF THE ELT BY 4 SCREWS WHICH GO THRU MOLDED BOSSES IN THE BATTERY CASE INTO THE END OF METAL STANDOFFS. THE DESIGN APPEARS TO BE THAT THE SCREWS HOLD THE BOSSES SECURELY IN CONTACT WITH THE STANDOFFS PREVENTING EXCESSIVE COMPRESSION ON THE O-RING. INCORRECT TOLERANCES IN THE ASSOCIATED PARTS MAY BE CAUSING THE CASE TO COMPRESS THE O-RING MORE THAN EXPECTED FORCING THE OUTER EDGE OF THE RETAINING GROOVE TO PART FROM THE BODY. THIS IS 1 OF 5 OCCURANCES FOUND TO DATE IN THIS OPERATOR`S FLEET. THE OCCURANCES SO FAR ONLY AFFECT A NARROW RANGE OF SN, WITH IDENTICAL UNITS OF HIGHER SN SO FAR NOT AFFECTED.

CA100818006	CLAMP	CRACKED

8/13/2010 ELT

(CAN) OUTER FACE OF H-CLAMP IS CRACKED ALONG A 2 IN LENGTH OF THE MOLDING SEPARATION LINE AND SEPARATED FROM THE BODY OF THE ASSY. IT APPEARS TO BE CAUSED BY COMPRESSION OF THE O-RING SEAL WHICH IS BETWEEN THE BODY OF THE ELT AND THE EDGE OF THE BATTERY CASE. THIS IS NR 4 IN THIS OPERATOR`S FLEET.

CA100818007 CLAMP CRACKED

8/12/2010 ELT

H-CLAMP IS CRACKING/SEPARATING AT THE BACK END. IT APPEARS TO BE CAUSED BY THE COMPRESSION OF THE O-RING SEAL BY THE EDGE OF THE BATTERY CASE. EITHER PARTS ARE OUT OF TOLERANCE CAUSING OVER COMPRESSION OF THE O-RING, OR THE MATERIAL OF THE BLACK H-CLAMP IS NOT AS STRONG AS IT USE TO BE AND NEEDS TO BE. WE DID NOT HAVE PROBLEMS WITH EARLIER MODELS OF THE SAME CONSTRUCTION EG THE 110-4, AND HAVE NOT SEEN THIS PROBLEM IN THE C406-2HM UNITS INSTALLED TO DATE. THIS PROBLEM HAS SO FAR EVIDENCED ITSELF IN A NARROG SN GROUP OF THIS MODEL (YELLOW CASE). 5 UNITS CRACKED IN THIS FLEET SO FAR.

CA100818008 CLAMP CRACKED

8/10/2010 ELT

H-CLAMP IS CRACKING/SEPARATING OTBD FROM THE BODY OF THE H-CLAMP. IT APPEARS TO BE CAUSED BY THE COMPRESSION OF THE O-RING SEAL THAT IS IN THE GROOVE OF THE H-CLAMP BETWEEN THE EDGE OF THE BATTERY CASE AND THE BODY OF THE H-CLAMP. THE DESIGN OF THE CASE SHOULD PREVENT OVERCRUSH OF THE O-RING BECAUSE THE BATTERY CASE HAS MOLDED IN BOSSES WHICH CONTACT THE STANDOFFS INTO WHICH THE BATTERY CASE SCREWS THREAD. IT WOULD APPEAR THAT FOR WHATEVER REASON THE DIMENSIONS OF THE CASE ARE INCORRECT ALLOWING EXCESSIVE FORCE TO BE APPLIED TO THE O-RING WHEN THE SCREWS ARE TIGHTENED, OR THE MATERIAL OF THE H-CLAMP IS SUBSTANDARD AND UNABLE TO WITHSTAND THE FORCES GENERATED WHEN THE BATTERY IS SECURED TO THE BODY OF THE ELT.

CA101006010 MAGNETO MISMANUFACTURED

10/4/2010 6310 ENGINE

ENGINE WAS SENT TO CUSTOMER WHO REPORTED ISSUES WITH MAG TIMING AND OPERATION. CUSTOMER INSTALLED AN OLDER SERVICEABLE MAG AND ISSUES WERE RECTIFIED BUT UPON FURTHER EXAMINATION, ENGINE COMPONENTS WERE FOUND DAMAGED. MFG HAS INFORMED US OF MACHINING ISSUES WITH MAGS "BUILT TO THE HIGH END OF THEIR MACHINING TOLERANCES". THIS MAG (BUILT 7TH MONTH OF 2009) HAD THE IMPULSE COUPLING BODY FACE EXTENDING 0.576 INCHES FROM THE MOUNTING FLANGE SURFACE. A CHECK OF THE REPLACEMENT MAGNETO, SN 02050194 (BUILT 5TH MONTH OF 2002) GAVE A DISTANCE FROM FACE TO MOUNTING FLANGE OF 0.523". THIS MEANS THE IMPULSE COUPLING SAT APPROX 0.050" FURTHER INTO THE CRANKCASE AND PUSHED AGAINST THE RUBBER DRIVE CUSHIONS, PN 638172. THIS PRESSURE WAS TRANSFERRED TO THE MAG DRIVE GEAR PN 641728, WHICH PUSHED AGAINST THE THRUST SURFACE OF THE BUSHING PN 632330 AND FLARED OVER THE THRUST SURFACE OF THE BUSHING. THIS PRESSURE ALSO OVERHEATED THE MAG DRIVE GEAR. MFG HAS BEEN CONTACTED ABOUT THE DAMAGE INCURRED AND WE ARE APPLYING FOR WARRANTY CONSIDERATIONS.

CA101014003 TUBE MISMANUFACTURED

9/23/2010 ENGINE MOUNT

DURING BUILD-UP OF ENGINE AS A SPARE FOR A "QUICK CHANGE" THE TECH NOTICED THE ADEL CLAMPS WOULD NOT HOLD SECURELY TO THE MOUNT. FURTHER INVESTIGATION REVEALED THAT 2 TUBES THAT WERE REPLACED AT O/H WERE IN FACT UNDER THE MINIMUM MFG DIMENSIONS. THE MOUNT WILL BE RETURNED TO THE VENDOR FOR CORRECTION.

CA101020004 G SWITCH FAILED

10/19/2010 ELT

DURING ROUTINE MX OF THE ME406HM ELT, PN 453-6604, SN 14872, IT WAS DISCOVERED THAT THE "G" SWITCH HAD FAILED. THE FAILED "G" SWITCH HAS ALSO BEEN NOTED ON 3 OTHER ELT UNITS, SN`S 08405. 09462, 09231.

CA101019016 ALLSN SUPPORT BROKEN

9/15/2010	250C47B	23007196	COMPRESSOR

COMPRESSOR RECEIVED FOR GENERATING METAL. FOUND PORTIONS OF REAR SUPPORT BROKEN OFF AT NR 2 BEARING RETAINING RING GROOVE.

2011FA0000060	CONT	SHAFT	BROKEN
11/19/2010	TSIO520NB		TURBOCHARGER

TURBOCHARGER FAILED. THE CENTER SHAFT BROKE.

CA101014002	GARRTT	TURBINE BLADES	CRACKED
10/5/2010	TPE33111U	31081251	NR 1

3101520-3 NR1 T-WHEEL COOLING HOLE CRACKS. REMOVED, WAS FORWARDED TO THE TURBINE SHOP FOR A SCHEDULED INSP. UPON TEARING THE ENG DOWN FOR INSP AND FORWARDING THE NR1 T-WHEEL TO THE NDT DEPARTMENT FOR THE FPI INSP. IT WAS NOTICED THAT ON THE VERY TIP OF THE ROTOR BLADE BY THE COOLING HOLE THERE WERE CRACKS PROPAGATING FROM THIS COOLING HOLE. MFG WAS NOTIFIED OF THIS AND THE T-WHEEL WAS FORWARDED TO THEM FOR FURTHER INVESTIGATION OF THIS TYPE OF DAMAGE.

CA080305007	LYC	EXHAUST RISER	CRACKED
2/28/2008	AEIO360A1B6		NR 3 CYLINDER

RT AFT EXHAUST RISER (NR 3 CYL) WAS FOUND CRACKED ALONG WELD DURING REGULARLY SCHEDULED MAINTENANCE.

CA100624001	LYC	DISTRIBUTOR GEAR	BROKEN
6/23/2010	AEIO360A1B6	K3822	MAGNETO

THE DISTRIBUTOR FINGER ON THE DISTRIBUTOR GEAR ASSEMBLY WAS OBSERVED LOOSE/BROKEN DURING A 500 HOUR INSP OF THE MAGNETO.

CA100624002	LYC	COIL	BURNED
6/23/2010	AEIO360A1B6		MAGNETO

THIS MAGNETO HAD BEEN REMOVED SERVICEABLE AND PLACED INTO INVENTORY. A VERIFICATION CHECK PRIOR TO INSTALLATION REVEALED A BURNED SPOT ON THE COIL AND ON THE INSIDE OF THE MAGNETO CASING.

CA080305009	LYC	BAFFLE	CRACKED
1/8/2008	AEIO360A1B6		EXHAUST SILENCER

INTERNAL BAFFLE WAS FOUND CRACKED DURING REGULARLY SCHEDULED MX.

CA100817021	LYC	CHAMPION	POINTS	LOOSE
8/17/2010	IO360L2A	4371	M3081	MAGNETO

DURING INSP CYCLE, MAGNETO TIMING NOTED TO BE ADVANCED 3 DEGREES (ENGINE TO MAG TIMING FOUND AT 28 DEGREES). PREVIOUS COMPLIANCE WITH SB2-08B CONFIRMED. CAPACITOR COVER REMOVED FOR INSP, WAS FOUND THAT MAIN POINT BRASS ASSY SCREW WAS LOOSE. THIS CAUSED THE SPRING STEEL ARTICULATION ARM TO MOVE OUT OF POSITION AND AFFECT MAGNETO TIMING. ARTICULATION ARM RE-ALIGNED AND SCREW TORQUED TO 25 IN LBS. NO WEAR FOUND ON CAM PADDLE OR CARBON BRUSH. MAGNETO RE-ASSEMBLED IAW L1363E.

2011FA0000030	LYC	BEARING	DAMAGED
1/18/2011	LTS101750B1	430203802	ENGINE

ENGINE, PREVIOUSLY O/H BY THIS REPAIR STATION AT ENGINE TIME 2351 TSN IN NOV 2009. ENG WAS RETURNED

FOR WARRANTY CLAIM OF IT "MAKING METAL". UPON DISASSEMBLY OF THE ENG DISCOVERED THE PT RETENTION BEARING FOUND TO BE THE SOURCE OF METAL GENERATION. DAMAGE SEEMS TO HAVE ORIGINATED FROM ONE OF THE 10 BALLS. DAMAGED BALL IS GOUGED HEAVILY AND IT ALSO CAUSED MEDIUM TO HEAVY WEAR TO THE INNER/OUTER RACES AND BEARING CAGE. THIS PART HAS 168.5 HOURS SINCE O/H AND IT WAS INSTALLED DURING THE LAST SHOP VISIT IN NOV 2009. THIS BEARING WAS REMOVED FROM ANOTHER ENGINE WITH SOME TIME IN SERVICE, SO THE TOTAL TSN IS GREATER THAN 168.5 HOURS. INVESTIGATION IS ON-GOING AND THE RESULTS WILL BE DOCUMENTED IN THIS REPAIR STATION'S CORRECTIVE AND PREVENTIVE ACTION SYS.

CA100712002	PWA	TURBINE BLADES	FRACTURED
7/8/2010	JT15D4		ENGINE

POWER LOSS DURING FLIGHT, THE CREW EXPERIENCED A HIGH VIBRATION ISSUE RESULTING IN ENGINE POWER LOSS. THE ACFT LANDED SAFELY AT DESTINATION. POST FLIGHT BORESCOPE INSP FOUND FRACTURED 1ST HIGH TURBINE BLADES.

CA100712003	PWA	OIL SYSTEM	LOW PRESSURE
7/7/2010	JT15D4		ENGINE

LOW OIL PRESSURE/IFSD DURING FLIGHT THE PILOT OBSERVED A LOW OIL PRESSURE WARNING AND ELECTED TO SHUTDOWN THE ENGINE. AN UNEVENTFUL SINGLE ENGINE LANDING FOLLOWED. TROUBLESHOOTING IS ON-GOING: THE OPERATOR HAS REQUESTED ASSISTANCE (AS THEY PERFORMED THE LAST O/H).

CA100903010	PWA	ENGINE	FAILED
7/24/2010	PT6A114A		

ACCIDENT DURING A CARGO FLIGHT, 50 MIN AFTER TAKEOFF THE AGB CHIP DETECTOR WARNING ANNUNCIATED. PILOT MONITORED ENGINE AND AFTER 5 MIN. HE FELT AND HEARD A BANG AND ENGINE STARTED TO LOSE POWER. PILOT USED THE EPL TO RECOVER POWER WITH NO SUCCESS. PILOT ELECTED TO LAND IN A RIVER. BOTH PILOT AND MECHANIC SURVIVED WITH NO INJURIES. ENGINE WAS RECOVERED AND SENT TO TURBINE SERV SHOP AND INVESTIGATED BY AUTHORITIES WITH PARTICIPATION BY THE LOCAL MFG FIELD REP. INVESTIGATION THUS FAR REVEALED A DISTRESSED NR 1 BRG. SUSPECT HARDWARE IS BEING RETURNED TO MFG FOR FURTHER EXAMINATION.

CA101005003	PWA	COMPRESSOR BLADE	MISSING
4/3/2010	PT6A27	3013602	ENGINE

ENGINE WAS REMOVED FROM ACFT ON APRIL 03, 2010 DUE TO PROPELLER STRIKE & SUDDEN STOPPAGE INCIDENT. DURING DISASSEMBLY OF THE COMPRESSOR STACK, THE 2ND STAGE COMPRESSOR DISK WAS NOTED WITH MISSING QTY 1 COMPRESSOR BLADE (NOT INSTALLED AT PREVIOUS BUILD) . THE ENGINE WAS PREVIOUSLY O/H IN DECEMBER 20, 2006.

CA100726001	PWA	ENGINE	POWER LOSS
7/9/2010	PT6A34		

ACCIDENT: WHILE CONDUCTING AGRICULTURAL SPRAYING OPERATIONS, THE ACFT EXPERIENCED AN UNCOMMANDED RETURN TO FLIGHT IDLE OF THE ENGINE THAT WAS UNRECOVERABLE RESULTING IN THE ACFT CRASHING INTO A DITCH EMBANKMENT LINED BY TREES THAT SEPARATED 2 FIELDS. MFG WILL INVESTIGATE TO ESTABLISH ROOT CAUSE AND SUPPLEMENT THE REPORT ONCE THE INFORMATION IS AVAILABLE.

CA100726008	PWA	ENGINE	POWER LOSS
6/3/2010	PT6A34AG		

(CAN) ACCIDENT DURING A SPRAYING RUN PILOT REPORTED ENGINE LOST POWER AND ACFT HIT POWER LINES THEN IMPACTED A CORN FIELD. THE AIRCRAFT SUSTAINED SUBSTANTIAL DAMAGE. THE PILOT WAS NOT INJURED. ACFT WILL BE RECOVERED AND MOVED TO WHERE AFT PRELIMINARY EXAMINATION WILL TAKE PLACE. MFG ASSISTANCE HAS BEEN OFFERED TO AND ACCEPTED BY NTSB. ARRANGEMENTS ARE BEING MADE FOR A MFG FIELD REP TO BE PRESENT AND PARTICIPATE IN ENGINE VISUAL EXAMINATION. UPDATE: NR 1 ENGINE EXAMINATION TOOK PLACE 20 JULY WITH MFG INVESTIGATOR PRESENT. NO MECHANICAL ANOMALIES EVIDENT. THE FUEL CONTROL UNIT, FUEL PUMP AND PROPELLER GOVERNOR ARE BEING RETURNED TO MFG FOR

INVESTIGATION. ENGINE TIME ADDED.

CA100817006	PWA	ENGINE	POWER LOSS
8/4/2010	PT6A34AG		

ACCIDENT, NTSB CALLED AND REPORTED THE ACCIDENT. PILOT REPORTED ENGINE POWER LOSS. ACFT SUSTAINED SUBSTANTIAL DAMAGE. SERVICE INVESTIGATION INVESTIGATOR IN CONTACT WITH THE NTSB. AWAITING FURTHER INFORMATION.

CA100817010	PWA	ENGINE	POWER LOSS
8/4/2010	PT6A34AG		

ACCIDENT, NTSB CALLED AND REPORTED THE ACCIDENT. PILOT REPORTED ENGINE POWER LOSS. ACFT SUSTAINED SUBSTANTIAL DAMAGE. SERVICE INVESTIGATION INVESTIGATOR IN CONTACT WITH THE NTSB. ACFT WAS RECOVERED AND TAKEN TO THE OPERATOR BASE. NTSB WILL DETERMINE WITH FAA LOCAL INSPECTOR TO PERFORM THE INVESTIGATION, OR SEND IT TO MFG.

CA100913002	PWA	OIL SYSTEM	LEAKING
8/31/2010	PT6A36		ENGINE

LOW OIL PRESSURE/IFSD DURING TAXI, THE OIL PRESSURE DROPPED ACCOMPANIED BY A LOW OIL PRESSURE WARNING. THE PILOT SHUT THE ENGINE DOWN AND RETURNED TO THE RAMP. POST EVENT INSP FOUND THE COMPRESSOR LOCKED, THE OIL TANK EMPTY AND RUBBER LIKE MATERIAL IN THE OIL FILTER. THE ENGINE WILL BE REMOVED AND SENT FOR REPAIRS.

CA101006003	PWA	TURBINE BLADES	FAILED
8/8/2010	PT6A67A		ENGINE

(CAN) IFSD (SINGLE ENGINE) DURING T/O ROLL, A LOUD NOISE WAS HEARD, THE PROPELLER SEIZED AND FLAMES CAME OUT OF THE EXHAUST. THE T/O WAS ABORTED AND THE ACFT STOPPED SAFELY ON THE STRIP. THE ENGINE WAS REMOVED AND FORWARDED FOR REPAIRS WHERE FRACTURED 2ND STAGE POWER TURBINE BLADES WAS FOUND. THE AFFECTED HARDWARE IS BEING RETURNED TO P&WCMFG FOR INVESTIGATION.

CA100615002	PWA	BOLT	FAILED
6/10/2010	PT6A67A	MS949034	ENGINE

ENGINE WAS REMOVED, SUBSEQUENT TO POWER SECTION CHIP DETECTOR FLAG ILLUMINATION DURING FLIGHT. AFTER FLIGHT CHECK, PILOT FOUND THAT PROPELLER WAS DIFFICULT TO TURN MANUALLY. THE CHIP DETECTOR AND MAIN OIL FILTER WAS NOTED FULL OF METAL DEBRIS. DURING DISMANTLE, INVESTIGATION OF THE POWER SECTION AND 1 ST STAGE REDUCTION CARRIER ASSY, QTY 2 OF 6 MACHINE HEX BOLTS (IPC PN 3072154, CH. 72-10-00, FIG 4, ITEM 200, PN MS9490-34) WERE FOUND WITHOUT THE BOLT HEAD ATTACHED. THE CARRIER HEX BOLTS SECURE THE 1ST STAGE CARRIER AND THE 1ST STAGE REDUCTION SPLINED ADAPTER. THERE ARE A QTY OF 6 HEX BOLTS INSTALLED WITH KEYWASHERS AND ARE TORQUED 65 TO 85 IN. LB. ENGINE O/H RECORDS INDICATE THAT QTY 6 BOLTS WERE REPLACED WITH NEW ONES DURING ENGINE O/H.

CA100804004	PWA	ENGINE	OVERTEMP
7/26/2010	PT6A67D		NR 2

HIGH ITT, IFSD DURING CLIMB, THE NR 2 ENGINE TEMP STARTED CLIMBING AND CONTINUED TO DO SO AFTER THE PILOTS PULLED THE POWER BACK. THE ENGINE WAS SHUTDOWN AND THE PLANE LANDED SAFELY, SINGLE ENGINE AT THE POINT OF DEPARTURE. POST LANDING INSP FOUND THE PROPELLER HARD TO ROTATE. THE ENGINE WILL BE REPLACED. MFG WILL INVESTIGATE TO ESTABLISH ROOT CAUSE AND SUPPLEMENT THE REPORT ONCE THE INFORMATION IS AVAILABLE.

CA100702006	PWA	LINE	CRACKED
6/25/2010	PT6A67R		ENGINE P3

UNCOMMANDED POWER CHANGE DURING CRUISE, THE ENGINE HAD AN UNCOMMANDED DECELERATION. THE FLIGHT WAS DIVERTED AND THE ACFT LANDED SAFELY. GROUND ENGINEERS FOUND A FRACTURED P3 LINE WHICH WAS REPLACED BEFORE THE ACFT WAS RETURNED TO SERVICE. MFG WILL INVESTIGATE TO ESTABLISH ROOT CAUSE AND SUPPLEMENT THE REPORT ONCE THE INFORMATION IS AVAILABLE.

CA100622016	PWA	WARNING LIGHT	ILLUMINATED
1/30/2010	PT6A68		ENGINE OIL

EMERGENCY LANDING FOLLOWING AREA MANEUVERS AND APPROX 1.2 HRS INTO FLIGHT, THE CHIP DETECTOR WARNING LIGHT ILLUMINATED. THE CREW EXECUTED THE EMERGENCY CHECKLIST PROCEDURES, AND FLEW AN EMERGENCY LANDING PATTERN (ELP) INTO THE AIRFIELD . THE ELP AND LANDING WERE UNEVENTFUL AND THE CREW SHUTDOWN ON THE RUNWAY.

CA100525001	PWA	FCU	FAILED
5/5/2010	PT6T3		ENGINE

UNCOMMANDED POWER CHANGE FOLLOWING A MAJOR HELO INSP, WHILE PERFORMING A COMPASS HEADING CHECK IN HOVER, THE NR 1 ENGINE WENT TO 111 PERCENT N1 UNCOMMANDED. THE ACFT CLIMBED 10 FT AND WAS IMMEDIATELY BROUGHT BACK TO THE GROUND AS THE MAIN ROTOR SPEED KEPT CLIMBING TO A MAX OF 132.6 PERCENT. THE THROTTLES WERE RETARDED WHICH HAD NO EFFECT ON THE ENGINE AT WHICH TIME THE FUEL VALVES WERE SHUT OFF. TROUBLESHOOTING IS FOCUSING ON THE AUTOMATIC FUEL CONTROL. THE ENGINE WILL NEED REMOVAL AS A RESULT OF THE EXEEDANCE.

CA100702003	PWA	ENGINE	MALFUNCTIONED
6/22/2010	PW121		

UNCOMMANDED POWER CHANGE AFTER TAKEOFF, DURING A REVENUE FLIGHT, THE CREW FELT VIBRATIONS AND NOTICED ALL ENGINE PARAMETERS INCREASING. THE CREW ELECTED TO DIVERT. DURING APPROACH, POWER WAS REDUCED AND VIBRATIONS DISAPPEARED. AN UNEVENTFUL LANDING WAS ACCOMPLISHED. TROUBLESHOOTING IS ONGOING. MFG WILL INVESTIGATE TO ESTABLISH ROOT CAUSE AND SUPPLEMENT THE REPORT ONCE THE INFORMATION IS AVAILABLE.

CA100817016	PWA	SEAL	FAILED
8/6/2010	PW121		FUEL DIST

IFSD DURING FLIGHT, PILOT EXPERIENCED LOW OIL PRESSURE MESSAGE. PILOT SHUTDOWN THE ENGINE AND DIVERTED TO THE NEAREST AIRPORT. CUSTOMER HAD AN UNEVENTFUL LANDING. ONCE ON GROUND THE TECHS DETERMINED THAT THE LEAK WAS DUE TO A PACKING. PACKING WAS REPLACED AND ACFT RETURNED TO SERVICE.

CA100903007	PWA	OIL SYSTEM	PRESSURE LOSS
8/27/2010	PW121		ENGINE

LOW OIL PRESSURE/IFSD DURING CLIMB, A LOW OIL PRESSURE OCCURRED AND THE ENGINE WAS SHUTDOWN. THE ACFT RETURNED TO THE POINT OF DEPARTURE FOR AN UNEVENTFUL SINGLE ENGINE LANDING. DURING SUBSEQUENT GROUND RUN, THE OIL PRESSURE DID NOT REGISTER AND THE RUN ABORTED. FURTHER INSP REVEALED OIL IN THE EXHAUST. THE ENGINE IS BEING REPLACED.

CA100702002	PWA	PROPELLER	MALFUNCTIONED
6/20/2010	PW123		

AUTOFEATHER/IFSD DEPARTING AIRPORT, THE CREW EXPERIENCED AN UNCOMMANDED PROPELLER FEATHERING OF THE ENGINE AT TAKEOFF POWER. THE PILOT FOLLOWED EMERGENCY PROCEDURES AND SHUT THE ENGINE DOWN BEFORE RETURNING TO THE DEPARTURE AIRPORT WHERE AN UNEVENTFUL SINGLE ENGINE LANDING WAS MADE. TROUBLESHOOTING IS ON-GOING. MFG WILL INVESTIGATE TO ESTABLISH ROOT CAUSE AND SUPPLEMENT THE REPORT ONCE THE INFORMATION IS AVAILABLE.

CA100603002	PWA	TURBINE	DAMAGED
6/3/2010	PW123		ENGINE

ENGINEERING INVESTIGATION REPORT EIR PW100 2010-036. TREND MONITORING DETECTED SIGNIFICANT ENGINE PERFORMANCE DEGRADATION CAUSED BY HEAVY TIP RUB ON HP TURBINE.

CA100622003	PWA	TURBINE BLADES	FRACTURED
6/6/2010	PW125B		ENGINE

ABORTED TAKEOFF, DURING T/O ROLL, A LOUD NOISE WAS HEARD FOLLOWED BY ENGINE FLAMEOUT AND A SHORT DURATION FIRE WARNING. THE T/O WAS ABORTED. POST EVENT INSP FOUND METALLIC DEBRIS IN THE EXHAUST AND A SUBSEQUENT BORESCOPE INSP REVEALED HIGH PRESSURE BLADE FRACTURE. THE ENGINE WILL BE REMOVED AND FORWARDED TO MFG FOR REPAIRS.

CA100521001	PWA	CONNECTOR	CONTAMINATED
3/22/2010	PW127		ENGINE

IFSD DURING CRUISE, NP SPEED INCREASED SUDDENLY, WITH CORRESPONDING TORQUE DECREASE. ACFT LANDED IMMEDIATELY, UNEVENTFUL LANDING. SOME CONNECTORS WERE FOUND LOOSE AND FULL OF OIL. ON A SUBSEQUENT FLIGHT, THE SAME HAPPENED (HIGH NP, LOW TQ) BUT THIS TIME THE CREW ELECTED TO SHUTDOWN THE ENGINE AND CONTINUED TO THE PLANNED DESTINATION. SHORTLY BEFORE LANDING, A FIRE WARNING ANNUNCIATED, ACFT LANDED UNEVENTFULLY. PRELIMINARY INSP REVEALED NO EVIDENCE OF FIRE.

CA100817014	PWA	PROPELLER	MALFUNCTIONED
8/9/2010	PW127		FEATHERING SYS

UNCOMMANDED FEATHER DURING CRUISE WITH CLEAR ATMOSPHERIC CONDITIONS, THE ENGINE HAD AN UNCOMMANDED FEATHER. THE ENGINE WAS SHUTDOWN AND SUBSEQUENTLY WAS RESTARTED SUCCESSFULLY. CREW ELECTED TO RETURN TO ORIGIN AND DECLARED EMERGENCY. ACFT LANDED WITH BOTH ENGINES RUNNING NORMALLY.

CA100702001	PWA	ENGINE	POWER LOSS
6/17/2010	PW305A		

POWER ROLLBACK DURING TAKEOFF, THE PILOT REPORTED A LOSS OF TEMPERATURE AND RPM INDICATIONS. ALSO HEARD THE ENGINE LOSING POWER AND RECOVERING BY ITSELF. THE ACFT RETURNED TO THE DEPARTURE AIRPORT AND AN UNEVENTFUL LANDING WAS MADE. THE EVENT HAPPENED CLIMBING THROUGH FL180 INTO CLOUDS. THE ENGINE POWER ROLLED BACK TO APPROX 30 PERCENT N1 BEFORE RECOVERING. TROUBLESHOOTING IS ON-GOING. MFG WILL INVESTIGATE TO ESTABLISH ROOT CAUSE AND SUPPLEMENT THE REPORT ONCE THE INFORMATION IS AVAILABLE.

CA100622005	PWA	FUEL CONTROL	FAULTY
6/6/2010	PW530A		ENGINE

IFSD ON FINAL APPROACH, AS THE PILOTS REDUCED POWER, THE NR 2 ENGINE SHUT ITSELF DOWN. RE-LIGHT ATTEMPTS WERE NOT SUCCESSFUL AND AN UNEVENTFUL SINGLE ENGINE LANDING WAS PERFORMED AT DESTINATION. POST FLIGHT TROUBLESHOOTING FOUND A FAULTY FUEL CONTROL WHICH WILL BE REPLACED.

CA100817008	PWA	ENGINE	MALFUNCTIONED
8/6/2010	PW530A		LEFT

INABILITY TO MODULATE THRUST IT WAS REPORTED THAT THE LT ENGINE HAD NO RESPONSE TO THROTTLE MOVEMENT FROM IDLE.

CA100622007	PWA	COMPRESSOR	STALLED
6/8/2010	PW545A		ENGINE

INABILITY TO MODULATE THRUST DURING INITIAL APPROACH, AS THE PILOT INCREASED POWER FROM IDLE, THE LT ENGINE HAD COMPRESSOR STALLS. THE CREW WAS NOT ABLE TO MODULATE THRUST AND AN UNEVENTFUL LANDING WAS PERFORMED WITH THE AFFECTED ENGINE AT IDLE. TROUBLESHOOTING IS FOCUSING ON THE TORQUE MOTOR.

CA100622008	PWA	WIRE HARNESS	DAMAGED
5/11/2010	PW545A		ENGINE

INABILITY TO MODULATE POWER ON BOTH CLIMBING, BOTH ENGINES DECREASED ENGINES DURING REVENUE FLIGHT, WHILE BY 5 PERCENT N1 UNCOMMANDED. THERE WAS NO RESPONSE TO THROTTLE ADVANCEMENT. THROTTLES WERE RETARDED TO CRUISE SETTING AND AGAIN THERE WAS NO RESPONSE TO THROTTLE ADVANCEMENT. THE EECS WERE SET TO MANUAL MODE AND ENGINES RESPONDED NORMALLY. THE TRIP WAS COMPLETED AND AFTER A/C POWER RESET, THE ENGINES MADE POWER IN BOTH MANUAL AND AUTO MODES.

N1 ROLLBACK COULD NOT BE DUPLICATED ON GROUND. PILOT STATED HE WILL FLY ACFT BACK TO HOME BASE WHERE THE ENGINES DCU`S WILL BE DOWNLOADED. UPDATE NR1: DCU DOWNLOAD INDICATED LT ENGINE TEMPERATURE SIGNAL INPUT (T0) TO EEC SHIFTED AT THE TIME OF N1 ROLLBACK. SISTER ENGINE ROLLED BACK BECAUSE ENGINES WERE SYNCHED. T0 PROBES WERE SWAPPED BUT A/C EXPERIENCED ANOTHER N1 ROLLBACK DURING TEST FLIGHT. ENGINE HARNESS HAS BEEN REPLACED AND ACFT HAS BEEN FLYING SINCE WITH NO ANOMALIES REPORTED. ENGINE AND A/C DATA ADDED.

CA100525002	PWA	EEC	MALFUNCTIONED
5/11/2010	PW545A		

INABILITY TO MODULATE POWER ON BOTH ENGINES DURING REVENUE FLIGHT, WHILE CLIMBING, BOTH ENGINES DECREASED BY 5 PERCENT N1 UNCOMMANDED. THERE WAS NO RESPONSE TO THROTTLE ADVANCEMENT. THROTTLES WERE RETARDED TO CRUISE SETTING AND AGAIN THERE WAS NO RESPONSE TO THROTTLE ADVANCEMENT. THE EEC`S WERE SET TO MANUAL MODE AND ENGINES RESPONDED NORMALLY. THE TRIP WAS COMPLETED AND AFTER AN A/C POWER RESET, THE ENGINES MADE POWER IN BOTH MANUAL AND AUTO MODES. N1 ROLLBACK COULD NOT BE DUPLICATED ON GROUND. PILOT STATED HE WILL FLY ACFT BACK TO HOME BASE WHERE THE ENGINES DCU`S WILL BE DOWNLOADED.

CA100725002	PWA	ENGINE	MALFUNCTIONED
6/6/2010	PW545A		

DURING DESCENT, WHILE REDUCING POWER THE N1 AND ITT WERE INCREASING. ENGINE REVERTED TO MANUAL, BUT THERE WAS NO CHANGE IN CONTROL. ENGINE WAS SECURED AND AN UNEVENTFUL LANDING WAS MADE AT DESTINATION. THE FUEL CONTROL UNIT IS BEING REPLACED. MFG WILL INVESTIGATE TO ESTABLISH ROOT CAUSE AND SUPPLEMENT THE REPORT ONCE THE INFORMATION IS AVAILABLE.

CA100703001	PWA	PROBE	CRACKED
6/24/2010	PW545A		ENGINE TEMP

(CAN) TEMP EXCURSION/IFSD DURING DESCENT, THE ENGINE TEMP SPIKED AND THE PILOT TRIED TO CONTROL TEMP WITH THROTTLE SETTINGS TO NO AVAIL. THE ENGINE WAS SHUT DOWN AND THE ACFT LANDED SAFELY SINGLE ENGINE. THE PROBLEM WAS CAUSED BY A FAULTY TEMP INDICATION RESULTING FROM A CRACKED T1 TEMP PROBE, WHICH WAS REPLACED BEFORE THE ACFT WAS RETURNED TO SERVICE. MFG WILL INVESTIGATE TO ESTABLISH ROOT CAUSE AND SUPPLEMENT THE REPORT ONCE THE INFORMATION IS AVAILABLE.

CA100525005	PWC	TURBINE BLADES	FRACTURED
5/16/2010	PW127E		ENGINE

(CAN) IFSD AT FL100, AN ENGINE SURGE OCCURRED FOLLOWED BY FLAME OUT. THE ENGINE WAS SECURED AND THE ACFT RETURNED TO THE POINT OF ORIGIN WHERE AN UNEVENTFUL SINGLE ENGINE LANDING WAS PERFORMED. GROUND INSP FOUND FRACTURED POWER TURBINE BLADES.

CA100525006	PWC	OIL SYSTEM	EMPTY
5/18/2010	PW127F		ENGINE

IFSD DURING APPROACH, THE CREW OBSERVED ENGINE PARAMETERS FLUCTUATIONS FOLLOWED BY UNCOMMANDED SHUTDOWN. AN UNEVENTFUL SINGLE ENGINE LANDING WAS PERFORMED AT DESTINATION. POST FLIGHT INSP FOUND EMPTY OIL TANKS, OIL FILTER BYPASS INDICATOR ACTIVATED. TROUBLESHOOTING IS ON-GOING.

CA100703005	PWC	TURBINE	FAILED
6/29/2010	PW127F		NR 1 ENGINE

FIRE WARNING/IFSD DURING CLIMB, AT FL80, THE NR 1 ENGINE FIRE WARNING ACTIVATED. THE ENGINE SHUTDOWN AND FIRE EXTINGUISHER BOTTLES DISCHARGED. THE ACFT RETURNED TO POINT OF ORIGIN WHERE AN UNEVENTFUL SINGLE-ENGINE LANDING WAS PERFORMED. GROUND INSP FOUND FRACTURED POWER TURBINE BLADES AND FRACTURED NR 6 AND NR 7 BEARING VENT TUBE. ENGINE ROTORS COULD NOT BE TURNED. ENGINE LIKELY TO GO TO MFG FOR INVESTIGATION AND REPAIRS. MFG WILL INVESTIGATE TO ESTABLISH ROOT CAUSE AND SUPPLEMENT THE REPORT ONCE THE INFORMATION IS AVAILABLE.

CA100703003	PWC	ENGINE	MALFUNCTIONED

6/28/2010	PW127F		NR 1

IFSD APPROX 15 MINUTES INTO THE FLIGHT, A LOUD NOISE WAS HEARD FROM THE NR 1 ENGINE. THE PILOT SHUTDOWN AND SECURED THE ENGINE AND RETURNED TO THE DEPARTURE POINT WHERE AN UNEVENTFUL SINGLE ENGINE LANDING WAS MADE. TROUBLESHOOTING IS ON GOING. MFG WILL INVESTIGATE TO ESTABLISH ROOT CAUSE AND SUPPLEMENT THE REPORT ONCE THE INFORMATION IS AVAILABLE.

CA100609001	PWC	ENGINE	POWER LOSS
6/3/2010	PW127F		

FOLLOWING TAKEOFF FROM AIRPORT AND CLIMBING TO APPROX 6000FT, FLIGHT CREW FELT THE ACFT YAW FOLLOWED BY AN ENGINE POWER DROP THEN SHUTDOWN. ACFT DIVERTED AND LANDED SAFELY. TROUBLESHOOTING IS ON GOING. ACFT FDR REVIEW IS PLANNED.

CA100623001	PWC	ENGINE	VIBRATION
6/9/2010	PW150A		

SMOKE IN CABIN DURING REVENUE FLIGHT, CREW NOTED VIBRATION AND NOISE FROM LT ENGINE, FOLLOWED BY DETERIORATION OF ALL PARAMETERS AND AN IMMEDIATE SMELL OF SMOKE IN THE CABIN. THE CREW ELECTED TO SHUTDOWN THE ENGINE AND ACCOMPLISHED AN UNEVENTFUL SINGLE-ENGINE LANDING. TROUBLESHOOTING IS ONGOING.

CA100712001	PWC	FIRE WARNING	ILLUMINATED
7/5/2010	PW150A		

IN-FLIGHT FIRE WARNING AFTER DEPARTURE, THE NR1 ENGINE FIRE WARNING ILLUMINATED. THE FIRST FIRE BOTTLE WAS DISCHARGED AND THE CREW ELECTED TO RETURN TO POINT OF DEPARTURE. EN ROUTE BACK TO DEPARTURE, THE FIRE WARNING AGAIN ILLUMINATED AND THE SECOND FIRE BOTTLE WAS DISCHARGED. AT THIS TIME IT IS NOT KNOWN IF THE ENGINE WAS SHUTDOWN. AN UNEVENTFUL LANDING WAS MADE. TROUBLESHOOTING IS ON-GOING.

CA100817001	PWC	ENGINE	SHUTDOWN
7/29/2010	PW150A		

PILOT INDUCED IFSD DURING REVENUE FLIGHT, THE FLIGHT CREW NOTICED SOME TECHNICAL PROBLEMS AND SUBSEQUENTLY ELECTED TO SHUTDOWN AN ENGINE. THE ACFT RETURNED TO DEPARTURE AND MADE AN UNEVENTFUL SINGLE ENGINE LANDING.

CA100525003	PWC	ENGINE	FLAMED OUT
4/28/2010	PW307A		

(CAN) FLAMEOUT ON GROUND, AN ENGINE FLAME OUT OCCURRED ON GROUND ON APRIL 28 BASED ON RECENT INTERROGATION OF ENGINE DCU. EVENT WAS NOT REPORTED TO MFG AT THAT TIME. DCU DATA WAS FORWARDED TO MFG FOR ANALYSIS.

CA100831007	PWC	ENGINE	FLAMED OUT
8/17/2010	PW308C		

IFSD DURING REVENUE FLIGHT, ACFT DIVERTED FROM FINAL DESTINATION. THE CREW REPORTED AN ENGINE FLAME OUT AND A LOUD NOISE. ENGINE WAS RE-LIGHTED AND ACFT LANDED SAFELY WITH NO INJURIES.

CA100804005	PWC	OIL SYSTEM	LOW PRESSURE
7/26/2010	PW545B		ENGINE

ABORTED T/O. DURING T/O ROLL, THE ENGINE MASTER CAUTION ILLUMINATED AS THE OIL PRESSURE DROPPED IN THE YELLOW BAND. THE T/O WAS ABORTED AND THE ACFT RETURNED TO RAMP. POST EVENT INSP FOUND NO OIL ON THE SIGHT GLASS. TROUBLESHOOTING IS ONGOING. MFG WILL INVESTIGATE TO ESTABLISH ROOT CAUSE AND SUPPLEMENT THE REPORT ONCE THE INFORMATION IS AVAILABLE.

CA100525004	PWC	ENGINE	POWER LOSS
5/13/2010	PW615FA		

DUAL ENGINE ROLLBACK DURING REVENUE FLIGHT, ON INITIAL CLIMB THROUGH FL300, CREW EXPERIENCED A DOUBLE ENGINE POWER ROLLBACK OF 4.6 PERCENT. ONCE OUT OF ICING, ENGINES RETURNED TO NORMAL OPERATION. ENGINE DOWNLOAD WAS PERFORMED. TEMP PROBES AND ENGINE HARNESS ARE FOCUS OF INVESTIGATION.

CA100622006	PWC	ENGINE	POWER LOSS
6/7/2010	PW615FA		

POWER ROLLBACK WHILE IN CRUISE FLIGHT AT FL370, BOTH ENGINES ROLLED BACK APPROX 20 PERCENT. ANTI-ICE WAS SWITCHED OFF AND ENGINES RECOVERED, UNEVENTFUL FLIGHT TO DESTINATION FOLLOWED. THE ACFT IS STILL IN SERVICE, HOWEVER, TROUBLESHOOTING IS ON-GOING ON THE AIRFRAME SIDE.

CA100621001	AEROSP	TMECA	PULLEY	WORN
6/18/2010	AS355*	ARRIEL2B1	350A35109221	HYDRAULIC DRIVE

DURING A POST FLIGHT INSP OF THE PULLEY DRIVE ASSY, THE PULLEY DRIVE SYS WAS INSPECTED AND FOUND TO BE LOOSE. FURTHER INSP FOUND THE PULLEY ASSY, INNER BEARING SHAFT OF THE PULLEY WORN, .040", BEARING WOBBLED ON THE SHAFT.

EE4Y20110001	AIRBUS	AIRBUS	PANEL	DELAMINATED
1/5/2011	A318111			RUDDER

VERTICAL STABILIZER, RUDDER PN: D5547100300000, SN: TS-3706, LT AND RT SIDE PANEL WITH FLUID INDICATION (WATER INGRESS) IAW THERMOGRAPHY INSP AROUND HOISTING POINTS . LT SIDE PANEL FLUID INDICATION COMMON TO HOISTING POINT NR 1 & 3 AND RT SIDE PANEL FLUID INDICATING COMMON TO HOISTING POINT NR 2 NOTE: THE DAMAGE REQUIRES A MAJOR REPAIR.

EE4Y20110003	AIRBUS	HOUSING	DELAMINATED
1/7/2011	A318111		AIR CON PLENUM

AIR CONDITIONING BAY, RT PLENUM'S HSG WITH FIBERGLASS DAMAGE (DELAMINATED & BROKEN). THE HOUSING DAMAGE AREA REQUIRES A MAJOR REPAIR.

EE4Y20110007	AIRBUS	INLET	CRACKED
1/9/2011	A318111		APU MUFFLER

APU MUFFLER-EXHAUST, DUCT INLET AND TUBE ASSY-FELT METAL WITH DENTS, CRACKS AND PUNCTURE. NOTE: INLET AND FELT METAL DENTS, CRACKS AND PUNCTURE REQUIRE MAJOR REPAIR.

EE4Y20110008	AIRBUS	SUPPORT ANGLE	CRACKED
1/10/2011	A318111	D5795031224600	RT WING

RT WING T/E CAVITY, HYD LINE WITH SUPPORT ANGLE CRACKED AT STA 3250.

EE4Y20110009	AIRBUS	SEAL	WORN
1/10/2011	A318111	23804049	NR 2 PYLON

NR 2 ENGINE CORE NOZZLE INNER AND OUTER PYLON SEAL WITH WEAR.

EE4Y20110010	AIRBUS	SKIN	DAMAGED
1/10/2011	A318111	D53112163202	ZONE 200

UPPER FUSELAGE FWD PAX/ CREW DOOR RT UPPER CORNERS CUTOUT EXTERNAL SURFACE WITH MARKS.

EE4Y20110030	AIRBUS	STOP FITTING	WORN
1/15/2011	A318111	D53479541202	ZONE 100

LOWER FUSELAGE AFT CARGO COMPARTMENT DOOR CUT OUT LOWER JAM, FOUND STOP FITTING WITH WEAR AT FR59 RT.

EE4Y20110031	AIRBUS	STOP FITTING	WORN
1/15/2011	A318111	D53230785200	ZONE 100

LOWER FUSELAGE FWD CARGO COMPARTMENT DOOR CUT OUT LOWER JAM, STOP FITTING WITH WEAR AT FR 26RH.

EE4Y20110033	AIRBUS		FRAME	CRACKED
1/18/2011	A318111		D5358541820201	TAIL CONE

EMPENNAGE TAIL CONE, FRAME 86 LOWER CTR SECTION WITH CRACK. THE FRAME CRACK REQUIRES A MAJOR REPAIR.

EE4Y20110082	AIRBUS	AIRBUS	TUBE	CRACKED
2/3/2011	A318111		D49885057000	APU EXHAUST

APU EXHAUST, FELT METAL TUBE WELD WAS REPORTED WITH CRACKS.

EE4Y20110083	AIRBUS		SKIN	DAMAGED
2/3/2011	A318111			ZONE 100

LOWER FUSELAGE FR: 60, STR 30R AND STR 34R DOOR CUTOUT WITH EXISTING BLEND OUTS.

EE4Y20110084	AIRBUS		PANEL	DELAMINATED
2/3/2011	A318111		D5453005701500	ZONE 400

ENGINE NR 2 AFT SECTION PANEL NR 486 ARE DELAMINATED.

EE4Y20110085	AIRBUS	AIRBUS	SKIN	DENTED
2/4/2011	A318111			NR 1 SLAT

RT WING, NR 1 SLAT L/E LOWER SKIN WITH DENT AND CRACK.

EE4Y20110086	AIRBUS		ACCESS PANEL	CRACKED
2/4/2011	A318111			NR 2 NACELLE

NR 2 ENGINE PYLON NR 423DL ACCESS PANEL WITH CRACKS AT SEVERAL PLACES.

EE4Y20110079	AIRBUS		FLOOR SUPPORT	CORRODED
2/4/2011	A318111		D53471124203	ZONE 200

UPPER FUSELAGE, PAX CABIN BETWEEN FR 69 AND FR 70 -Y 1200 FLOOR CHANNEL WITH CORROSION.

EE4Y20110078	AIRBUS		FLOOR SUPPORT	CRACKED
2/4/2011	A318111		D53921419200	ZONE 100

LOWER FUSELAGE FWD CARGO COMPARTMENT AT FR 29 +Y 28, FLOOR CHANNEL CRACKED.

EE4Y20110087	AIRBUS		FITTING	WORN
2/4/2011	A318111			CARGO DOORWAY

AFT AND FWD CARGO DOORS LOWER CUTOUT SECTION CAM- CENTRAL FITTINGS WITH WEAR.

EE4Y20110088	AIRBUS		SKIN	DENTED
2/4/2011	A318111			HORIZONTAL STAB

HORIZONTAL STABILIZER LT AND RT LOWER SKIN WITH DENTS.

EE4Y20110099	AIRBUS		SKIN	DENTED
2/9/2011	A318111			ZONE 100

LOWER FUSELAGE FR24-FR25, STR 11LT DENT ON STRINGER EVALUATION.

EE4Y20110002	AIRBUS	CFMINT	SKIN	CRACKED
1/5/2011	A318111	CFM565B8P		NR 1 PYLON

ENGINE NR 1 & NR 2, ENGINE PYLON, PRECOOLER FAIRING SKIN WITH CRACKS (ID ACCESS PANEL NR 413DL & NR

423DL). THE SKIN CRACKS REQUIRE A MAJOR REPAIR.

EE4Y20110064	AIRBUS	FLOOR SUPPORT	CORRODED
2/1/2011	A319132	D5347219620000	ZONE 200

UPPER FUSELAGE PAX CABIN AFT ENTRANCE AREA STA 2977, +Y16 FLOOR SUPPORT WITH CORROSION. DAMAGED PART IS GOING TO BE REPLACED IAW SRM 51-72-11, PARA 4 AND 6.

EE4Y20110065	AIRBUS	FLOOR SUPPORT	CORRODED
2/1/2011	A319132	D5347218820400	ZONE 200

UPPER FUSELAGE PAX CABIN AFT ENTRANCE AREA FROM STA 2870 TO STA 2940, +Y116 FLOOR SUPPORT WITH CORROSION. DAMAGED PART IS GOING TO BE REPLACED IAW SRM 51-72-11, PARA 4 AND 6.

EE4Y20110066	AIRBUS	FLOOR SUPPORT	CORRODED
2/1/2011	A319132	D5347217220400	ZONE 200

UPPER FUSELAGE PAX CABIN AFT ENTRANCE AREA FROM STA 2800 TO STA 2870 BETWEEN +Y116 AND +Y129 FLOOR SUPPORT WITH CORROSION. DAMAGED PART IS GOING TO BE REPLACED IAW SRM 51-72-11, PARA 4 AND 6.

EE4Y20110067	AIRBUS	FLOOR SUPPORT	CORRODED
2/1/2011	A319132	D5347219320000	ZONE 200

UPPER FUSELAGE PAX CABIN AFT ENTRANCE AREA FROM STA 2835 TO STA 2884, -Y76 FLOOR SUPPORT WITH CORROSION. DAMAGED PART IS GOING TO BE REPLACED IAW SRM 51-72-11 PARA 4 AND 6.

EE4Y20110068	AIRBUS	FLOOR SUPPORT	CORRODED
2/1/2011	A319132	D5347217220500	ZONE 200

UPPER FUSELAGE PAX CABIN AFT ENTRANCE AREA FROM STA 2800 TO STA 2870 BETWEEN -Y116 AND -Y129 FLOOR SUPPORT WITH CORROSION. DAMAGED PART IS GOING TO BE REPLACED IAW SRM 51-72-11, PARA 4 AND 6.

EE4Y20110069	AIRBUS	FLOOR SUPPORT	CORRODED
2/1/2011	A319132	D5347217320000	ZONE 200

UPPER FUSELAGE PAX CABIN AFT ENTRANCE AREA STA 2884, +Y16 FLOOR SUPPORT WITH CORROSION. DAMAGED PART IS GOING TO BE REPLACED IAW SRM 51-72-11, PARA 4 AND 6.

EE4Y20110070	AIRBUS	SKIN	CORRODED
2/1/2011	A319132		NR 2 NACELLE

NR 2 ENGINE PYLON AFT LOWER FAIRING INBD AND OTBD SKIN WITH CORROSION. REPLACED NR 2 ENGINE PYLON AFT LOWER FAIRING INBD AND OTBD SKIN SECTION IAW SRM 51-72-11, PARA 4 AND 6.

EE4Y20110071	AIRBUS	SKIN	CORRODED
2/1/2011	A319132		NR 1 NACELLE

NR 1 ENGINE PYLON AFT LOWER FAIRING INBD AND OTBD SKIN WITH CORROSION. REPLACED NR 1 ENGINE PYLON AFT LOWER FAIRING INBD AND OTBD SKIN PANEL IAW SRM 51-72-11, PARA 4 AND 6.

EE4Y20110072	AIRBUS	ANCHOR	CORRODED
2/2/2011	A319132	D57259162000	ZONE 500

LT WING REAR SPAR AREA, MACHINING JACK ANCHORAGE WITH CORROSION AROUND THE BORE UPPER, LOWER SURFACE AND AT THE BORE INNER SURFACE. THE CORROSION REQURED MAJOR REPAIR IAW INSTRUCTIONS.

EE4Y20110073	AIRBUS	ANCHOR	CORRODED
2/2/2011	A319132	D57259162001	ZONE 600

RT WING REAR SPAR AREA, MACHINING JACK ANCHORAGE WITH CORROSION AROUND THE BORE UPPER,

LOWER SURFACE AND AT BORE INNER SURFACE. THE CORROSION REQUIRED MAJOR REPAIR IAW MFG INSTRUCTIONS.

EE4Y20110075	AIRBUS	BFGOODRICH	DUCT	CORRODED
2/2/2011	A319132			THRUST REVERSER

NR 2 ENGINE THRUST REVERSER C-DUCT INNER BARREL LOWER BIFURCATION PANEL CORRODED. DAMAGED AREA REQUIRES A MAJOR REPAIR IAW REPAIR INSTRUCTIONS.

EE4Y20110089	AIRBUS	IAE	FLOORBEAM	CORRODED
2/6/2011	A319132	V2524A5	D53472188204	ZONE 200

UPPER FUSELAGE PAX CABIN, FLOORBEAM UPPER CHORD WITH CORROSION FROM STA X39510 TO STA X400030, +Y116. DAMAGE PART IS GOING TO BE REPLACED IAW SRM 51-72-11, PARA 4 AND 6.

EE4Y20110090	AIRBUS	IAE	FLOORBEAM	CORRODED
2/6/2011	A319132	V2524A5	D53472172204	ZONE 200

UPPER FUSELAGE PAX CABIN, FLOORBEAM UPPER CHORD WITH CORROSION FROM STA X39019 TO STA 39510, +Y116. DAMAGED PART IS GOING TO BE REPLACED IAW SRM 51-72-11, PARA 3 AND 4.

EE4Y20110091	AIRBUS	IAE	FLOORBEAM	CORRODED
2/6/2011	A319132	V2524A5	D53472172205	ZONE 200

UPPER FUSELAGE PAX CABIN, FLOORBEAM UPPER CHORD WITH CORROSION FROM STA X39019 TO STA 39510, -Y116. DAMAGED PART IS GOING TO BE REPLACED IAW SRM 51-72-11, PARA 4 AND 6.

EE4Y20110092	AIRBUS	IAE	FLOORBEAM	CORRODED
2/6/2011	A319132	V2524A5	D53472193200	ZONE 200

UPPER FUSELAGE PAX CABIN, FLOORBEAM UPPER CHORD WITH CORROSION FROM STA X39019 TO STA X39510, -Y76. DAMAGED PART IS GOING TO BE REPLACED IAW SRM 51-72-11, PARA 4 AND 6.

EE4Y20110093	AIRBUS	IAE	SEAT TRACK	CORRODED
2/6/2011	A319132	V2524A5	D53472133206	ZONE 200

UPPER FUSELAGE PAX CABIN, SEAT TRACK WITH CORROSION FROM STA X38600 TO STA X39400, +Y1292. DAMAGED PART IS GOING TO BE REPLACED IAW SRM 51-72-11, PARA 4 AND 6.

EE4Y20110094	AIRBUS	IAE	ANCHOR FITTING	CORRODED
2/6/2011	A319132	V2524A5	D57259162000	LT WING

LEFT OUTER WING REAR SPAR AFT FACE RETRACTION JACK ANCHORAGE FITTING CORRODED AROUND THE BORE UPPER AND LOWER AND IN THE BORE INNER SURFACE. DAMAGED PART IS GOING TO BE REPAIRED FOLLOWING REPAIR INSTRUCTIONS.

2011F00020	AIRBUS	BFGOODRICH	RESTRAINT	SHEARED
1/5/2011	A330202		3A255910410	L4 DOOR SLIDE

L4 DOOR SLIDE NOT FULLY DEPLOYED DURING ROUTINE CHECK (OPS CHECK - CABIN ESCAPE FACILITIES DEPLOYMENT) ON A6 CHECK, MX REPLACED THE SLIDE. PRELIMINARY FINDING IS THE 410 LB RESTRAINT HAS NOT BEEN SHEARED WHICH CAUSED THE SLIDE NOT DEPLOYED AT LAST STAGE.

CA100903006	AIRTRC	PWA	ENGINE	FAILED
8/28/2010	AT402B	PT6A15AG		

ACCIDENT DURING TAKEOFF FROM AIRPORT, THE PILOT REPORTED SMOKE FROM THE EXHAUST DUCT. HE CLIMBED 10 TO 15 FEET AGL, AND REALIZED THE AIRPLANE WAS NOT ACCELERATING OR DECELERATING AND BEGAN TO MUSH. THE AIRPLANE TOUCHED DOWN ON GRASS BEYOND THE DEPARTURE END OF RUNWAY NEAR THE AIRPORT PERIMETER FENCE, AND WHILE ON THE GROUND COLLIDED WITH THE FENCE AND BUSHES/TREES CAUSING THE LT MLG TO SEPARATE AND DAMAGE TO THE LT WING. THE AIRPLANE CAME TO REST IN A PARKING LOT UPRIGHT WITH THE RT WING ELEVATED. ACFT IS 9.7 HRS SINCE NEW. ACFT HAS BEEN RECOVERED AND

PLACED IN A HANGAR. ENG MFG ASSISTANCE HAS BEEN REQUESTED BY THE NTSB WHO ARE CONDUCTING A FULL INVESTIGATION. ON SITE EXAMINATION IS PLANNED FOR THIS WEEK. ENG MFG WILL PROVIDE ON SITE SUPPORT.

CA100903001	AIRTRC	PWA		ENGINE	FAILED
7/25/2010	AT602	PT6A60A		PT6A60	

ACCIDENT THE ACFT CRASHED IN A FIELD UNDER UNKNOWN CIRCUMSTANCES. THE NTSB HAS REQUESTED ENG MFG ASSISTANCE DUE TO A POSSIBLE ENGINE POWER LOSS. UPDATE NR1: ENGINE EXAMINATION TOOK PLACE. THE ENGINE DISPLAYED CONTACT SIGNATURES TO THE INTERNAL COMPONENTS CHARACTERISTIC OF THE ENGINE BEING UN-POWERED AND SPOOLING DOWN FROM HIGH POWER, OR BEING POWERED IN A SUB-IDLE ROLL-BACK CONDITION AT THE TIME IMPACT. THERE WERE NO INDICATIONS OF ANY PRE-IMPACT MECHANICAL ANOMALIES OR DYSFUNCTION TO ANY OF THE COMPONENTS OBSERVED, OR ANY OTHER CONDITIONS OBSERVED THAT WOULD CONTRIBUTE TO A LOSS OF POWER. FUEL PUMP, FCU, PROPELLER GOVERNOR, AND PROPELLER OVERSPEED GOVERNOR ARE BEING RETURNED TO MFG FOR FURTHER INVESTIGATION.

CA101008003	AIRTRC	PWA	AIRTRC	SENSOR	CHAFED
10/4/2010	AT802A	PT6A67	DWG606003	AN83330	DAAM SYSTEM

THE AIR FILTER PRESSURE DIFFERENTIAL (PRE-FILTER) SENSOR FOR THE DAAM SYS IS CHAFING ON THE LOWER ENGINE COWL. UPON FURTHER INVESTIGATION ALL ACFT WITH DAAM SYS INSTALLED HAVE THIS ISSUE.

CA101007006	AIRTRC	PWA		SEAL	LEAKING
10/4/2010	AT802A	PT6A67A		1001996	FLOAT

INBD MAIN WHEEL SEALS ON FLOATS LEAK EXCESSIVE AMOUNTS OF GREASE. IF GREASE IS NOT REMOVED FREQUENTLY IT CAN LEAK ON TO BRAKES CAUSING A FIRE. GREASE IS LEAKING FROM BETWEEN M/W HUB AND SEAL DUE TO A LOOSE FIT. UPON FURTHER INVESTIGATION, ALL AMPHIB FLOATS FOUND TO HAVE THIS ISSUE.

2011FA0000074	AMD	PWC		POWER SUPPLY	SHORTED
2/8/2011	FALCON2000	PW308C		400138101	MICROWAVE OVEN

F/A SMELLED SMOKE AND SAW SMOKE COMING FROM BEHIND THE MICROWAVE OVEN. ON FEB. 4, 2011, THE ARTICLE IN QUESTION WAS RECEIVED AT REPAIR STATION. INVESTIGATION FOUND THAT A WIRE INSIDE THE METAL POWER SUPPLY BOX HAD CHAFED ON AN ADJACENT COMPONENT. THE METAL POWER SUPPLY BOX IS CONTAINED INSIDE THE METAL MICROWAVE ENCLOSURE. PREVENTIVE ACTION IS TO SECURE ALL THE WIRING WITHIN THE MICROWAVE TO PREVENT CHAFING.

2011FA0000056	AMD	PWC	AMD	CARD	CORRUPTED
1/10/2011	FALCON2000	PW308C		AE2315CE01	DATA MGMT UNIT

NAVIGATIONAL CHART INFORMATION RESIDES ON A PCMCIA CARD (PLUG IN HARD DISK), WHICH IS STORED IN SLOT OF DATABASE MANAGEMENT UNIT (DMU). TROUBLESHOOTING REVEALED THAT THE PCMCIA CARD WAS CORRUPTED WITH THE "RECYCLER VIRUS". IN ADDITION TO THE PCMCIA CARD, THE MX LAPTOP, USED TO LOAD NAVIGATIONAL DATABASES, CHART DATABASES, OPERATIONAL SOFTWARE AND MULTIPLE OTHER FORMS OF SOFTWARE, WAS FOUND TO HAVE THE "RECYCLER VIRUS" INSTALLED. FURTHER INVESTIGATION REVEALED THAT THE VIRUS HAD BEEN ON THE MX LAPTOP PRIOR TO DELIVERY OF THE NEW ACFT FROM MFG. IT IS ALSO BELIEVED THAT THE VIRUS WAS ON THE PCMCIA CARD AS WELL, BUT DUE TO TROUBLESHOOTING, AND EFFORTS TO FORMAT THE CARD, INFORMATION RELATING TO THE DATE CREATED AND DATE MODIFIED SECTIONS OF THE VIRUS WERE NOT AVAILABLE. THE ACFT WAS RETURNED TO SERVICE AFTER THE DMU WAS REPLACE, THE PCMCIA CARD WAS REPLACED, THE MX LAPTOP WAS REPLACED, AND THE CURRENT NAVIGATIONAL CHARTS SOFTWARE UPLOADED TO THE PCMCIA CARD. IN ADDITION TO THIS, THE AVIONICS MFG STATED THAT SOFTWARE VALIDITY CHECKS "WILL PREVENT ANY VIRUS FROM ENTERING THE EPIC SOFTWARE". NOTE:"EPIC" IS THE AVIONICS PLATFORM THAT HOSTS THE MAJORITY OF THE SOFTWARE REQUIRED FOR AIRCRAFT OPERATION. BOTH (AIRCRAFT MFG) WERE ON SITE WHILE REPAIRS WERE BEING PERFORMED. CSR MX PERFORMED ALL REQUIRED HANDS ON MX AND ISSUED AN AIRFRAME LOG ENTRY DETAILING THE REPAIRS.

2011F00008	AMD	GARRTT		SKIN	CORRODED
12/24/2010	FALCON50MYST	TFE731*			FUSELAGE

CORROSION FOUND ON RT AFT UPPER FUSELAGE TO OUT OF LIMITS. REPAIR TO BE PERFORMED UNDER A FORM 337 IAW DWG F50B246001A2, DATED 01/20/11.

CA100415003	AMTR	LYC	NUT	BROKEN
3/10/2010	RV4	O320E2D	AN3103	RT RUDDER

1 TAKE-OFF ROLL WITH CONSIDERABLE RT RUDDER BEING APPLIED (NORMAL FOR ACFT TYPE) PEDAL RELEASED FROM CABLE AND FLIPPED FWD. RT BRAKE AND RUDDER CONTROL WAS LOST. DUE TO SPACE CONSTRAINTS THE DESIGNER USED A DOME HEAD SCREW WITH THE NUT ON THE INSIDE FACING THE PILOT`S SHOE WHICH CONSTANTLY CHAFS THE CASTLE NUT AND COTTER PIN THAT SECURES IT. THERE IS A 1996 SB THAT ADDRESSES THE PROBLEM AND OFFERS SEVERAL POSSIBLE SOLUTIONS INCLUDING FREQUENT INSP. CHOSE TO ENCASE THE COTTER PIN IN STRUCTURAL EPOXY WHICH WORKED WELL FOR OVER A DECADE AND 1000 HOURS BUT IT WAS DIFFICULT TO INSPECT THE COTTER PIN AS IT COULD BE BROKE BUT THE ENDS HELD IN PLACE BY EPOXY. THE ACCIDENT COULD LIKELY HAVE BEEN AVOIDED BY SECURING THE CASTLE NUT WITH HEAVY LOCKNUT WIRE OR POSSIBLY USING A STAINLESS STEEL COTTER PIN AS THEY SEEM TO BE MORE DIFFICULT TO BEND. THE APPLICATION FOR (LOCTITE) ON THE THREADS MAY HAVE HELPED. THE PART IS DIFFICULT TO CHECK VISUALLY AND A GOOD INSP REQUIRES REMOVING THE CONTROL STICK AND FRONT SEAT TO CRAWL INTO THE AREA OF THE FOOT WELLS. POSSIBLY THE BEST SOLUTION WOULD BE TO ENLARGE THE HOLE IN THE PEDAL AND USE A SPACER SO A SELF LOCKING NUT COULD BE USED.

2011FA0000054	AMTR	CONT	SHAFT	FAILED
1/28/2011	RV7	IO360*		MAGNETO

MAG SHAFT COMPLETELY SEPARATED FROM THE MAG AS THE SHAFT EXITED THE MAG. CAUSING INOPERATIVE SYS, LOSS OF 1/2 ENGINE IGNITION AND ASSOCIATED WARNING LIGHTS IN THE COCKPIT.

CA100603001	BBAVIA	LYC	GASKET	LEAKING
6/3/2010	7ECA	O235K2C		CARBURETOR

BLUE FUEL STAINS VISIBLE ALONG GASKET LINE ON OUTSIDE OF CARBURETOR AND ALONG GASKET LINE IN AIRFLOW BORE. BOWL SCREWS CHECKED SECURE. SUSPECT POROUS GASKET OR WARPED CARB BODY MATING FACES.

CA100816003	BBAVIA	LYC	MOUNT	CRACKED
8/9/2010	8GCBC	O360C2E	41663	ENGINE

(CAN) THE ENGINE MOUNT WAS FOUND CRACKED ON THE LT SIDE ON THE ARM GOING FROM THE FIRE WALL TO THE UPPER LORD MOUNT JUST ABOVE THE WELD LOCATED AT THE FIRE WALL END.

CA100812004	BBAVIA	LYC	CYLINDER	CRACKED
8/11/2010	8KCAB	AEIO320E2B	AEC631397	ENGINE

APPROX 2 INCH CRACK VISUALLY FOUND BETWEEN FINS JUST ABOVE INTAKE PIPE.

E81RJT229291	BEECH		SWITCH	SHORTED
1/21/2011	400A		45AS6101519	SPEED BRAKE

INVESTIGATED FLIGHT CREW REPORT OF THE SPEEDBRAKE CNTRL SYS CIRCUIT BREAKER TRIPPING AND NOT RESETTING. DURING TROUBLESHOOTING FOUND AN INTERNAL SHORT IN THE RT FLAP FOLLOW-UP SWITCH ASSY. REPLACED THE RT FOLLOW-UP SWITCH ASSY WITH AN O/H REPLACEMENT EXCHANGE UNIT AND ADJUSTED IAW THE MM. OPS TESTS OF THE SPOILER AND SPEEDBRAKE SYS WERE NORMAL.

E81RJW304141	BEECH		DOOR	OUT OF RIG
2/3/2011	400A			MLG

AFTER DEPARTURE, FLIGHT CREW NOTED RED WARNING LIGHT IN LANDING GEAR CONTROL HANDLE REMAINED ILLUMINATED AFTER LANDING GEAR RETRACTION. FLIGHT CREW RETURNED TO DEPARTURE, LANDING NORMAL. DURING TROUBLESHOOTING OF RETRACTION/EXTENSION SYS, AT REDUCED (950 PSI) PRESSURE NOTED NLG DOORS RIGGED EXCESSIVELY TIGHT. RE-ADJUSTED THE NOSE GEAR DOORS RIGGING IAW THE HBC SERIES MM 32-20-00 AND NOTED LANDING GEAR RETRACTION/EXTENSION SYS OPS NORMAL. RECOMMEND NOSE GEAR AND DOORS RIGGING BE DONE CLOSELY AS NOTED IN THE MM AS COLD WEATHER AND WINTER OPERATIONS SEEM

TO AGGRAVATE ANY LANDING GEAR MISRIGGING.

E81RJW304203	BEECH		PCB	INTERMITTENT
2/11/2011	400A		1283641227	ROLL TRIM

INVESTIGATED FLIGHT CREW REPORT OF ROLL TRIM NOT RESPONDING TO SELECTED INPUTS AFTER 10 DEGRESS FLAPS SELECTED ON APPROACH. ROLL TRIM OPERATING NORMAL AFTER LANDING. FOUND INTERMITTENT OPERATION OF A194 ROLL TRIM PC BOARD ASSY. REPLACED A194 PC BOARD WITH NEW PN BOARD, OPS NORMAL. RECOMMEND MFG INVESTIGATE WHETHER ANY CERTAIN PN OR MFG DATE RANGE CAUSING HIGHER THAN NORMAL SIMILAR FAILURES IN THIS SYS.

2011FA0000038	BEECH	CONT	COUPLING	MISMANUFACTURED
1/20/2011	58	IO550*		MAGNETO

RADIO INTERFERENCE FROM RT MAGNETO ON THE LT ENGINE. ELECTED TO REPLACE BOTH MAGNETOS. ORDERED 2 NEW 6310 REV R MOD C MAGNETOS. BOTH NEW MAGS (SN NOT RECORDED BUT MFG IN AUG '10) HAD IMPELLER COUPLE SHAFTS APPROX .0937" LONGER THAN THE ORIGINALS. THE NEW MAGS COULD BE INSTALLED, BUT WHEN TIGHTENING ENOUGH TO SEAL THE MAGNETO TO THE ENGINE BLOCK,THE IMPELLER COUPLING BINDS AGAINST THE HOUSING. THUS IT WILL NOT TURN WHEN SETTING THE TIMING. REJECTED THESE 2 MAGS, AND ASKED FOR NEW ONES TO BE SHIPPED OUT. THESE LATEST MAGS (SN 10101354 AND 10101352 BOTH MFG ON 10/29/2010) HAD THE IDENTICAL PROBLEM. MFG WAS INFORMED OF THIS PROBLEM ON JULY 30, 2010 BY THE A&P/IA WITH SUPPORTING PHOTO EVIDENCE. SUPPLIER IS BRINGING IN A SET OF DECEMBER MAGS FOR REPLACEMENT. INSTALLATION OF THE NON CONFORMING 6310 MAGNETOS WILL RESULT IN ENGINE FAILURE.

2011FA0000039	BEECH	CONT	MOUNT	DAMAGED
1/3/2011	58P	TSIO520*	1029100261	RT ENGINE

UPON REMOVAL, AN INSPECTION OF THE MOUNT WAS PERFORMED. DAMAGE WAS FOUND ON THE INBD MAIN SUPPORT CHANNEL. APPROX 10-12 INCHES FWD OF WHERE THE MOUNT ATTACHES TO THE FIREWALL. DAMAGE WAS ON THE INSIDE UPPER PART OF CHANNEL WITH A GROVE WORN APPROX .2500" INTO THE CHANNEL. ENG MOUNT REMOVED AND SENT FOR STRUCTURAL REPAIR. DAMAGE WAS CAUSED BY STAINLESS EXHAUST HEAT SHROUD THAT HAD MIGRATED ON INBD EXHAUST TUBING (FROM CYLINDERS 2,4, AND 6). HEAT SHROUD HAD COME INTO CONTACT WITH MOUNT AND CAUSED CHAFE DAMAGE. AFTER REPAIR AND RE-INSTALLATION OF MOUNT AND ENGINE, THE EXHAUST SHROUD WAS INSTALLED AND LOCATED 3WITH THE MAXIMUM POSSIBLE DISTANCE BETWEEN THE MOUNT AND SHROUD, APPROX .5 TO .7500 OF INCH. MX WAS FAMILIAR WITH CAUSE OF DAMAGE. INSP OF OTHER MOUNTS (TJ-371) REMOVED FROM SERVICE DUE TO AD 2007-21-02. REVEALED SIMILAR DAMAGE. ISSUING OF SB OR AD WOULD BE RECOMMENDED.

2011FA0000014	BEECH	PWA		SENSOR	CRACKED
12/16/2010	99	PT6A27	EFD1000C3	91000003001	EFIS

ACFT EXPERIENCED "CROSS CHECK ATTITUDE" INDICATION ON AVIONICS PRIMARY FLIGHT DISPLAY (EFIS) AND HEADING INDICATIONS OF UP TO 90 DEGREES OFF LT AND RT WHILE IN CRUISE FLIGHT.

2011FA0000044	BEECH	CONT	OIL COOLER	CRACKED
1/20/2011	A36	IO550B	635996	ENGINE

AFTER AN OIL CHANGE, THE CUSTOMER COMPLAINED OF OIL ON TOP OF THE NOSE GEAR WELL AREA BEHIND & BELOW ENGINE. ENGINE COMPARTMENT CLEANED, GROUND RUN & ENGINE COMPARTMENT INSPECTED FOR LEAKS. NONE NOTED. CUSTOMER CONTACTED SHOP THE FOLLOWING WEEK AFTER FLYING OVER WEEKEND WITH SAME COMPLAINT. ENGINE COMPARTMENT CLEANED AGAIN & PILOT INSTRUCTED TO FLY THE PLANE JUST AROUND PATTERN & RETURN TO SHOP. A FEW DROPS OF FRESH OIL NOTED. AN OIL HOSE REMOVED TO INSPECT OIL COOLER WHERE IT IS BOLTED TO ENGINE CORE. THERE APPEARED TO BE A SMALL CRACK IN THIS AREA AROUND AFT LOWER MOUNTING BOLT HOLE. COOLER REMOVED & A MUCH LARGER CRACK WAS DISCOVERED THAT COULD NOT BE SEEN AS MOUNTED TO ENGINE. IT APPEARS TO THIS INSPECTING MECHANIC THAT THE COOLER COULD HAVE DEVELOPED THE CRACK IN ONE OF TWO WAYS. THERE COULD HAVE BEEN A CASTING FLAW IN THE METAL AT THE TIME OF MFG OR O/H. ALSO DISCOVERED A WAY TO CREATE STRESS IN THIS AREA AT THE TIME OF INSTALLATION. IF THE BOTTOM THREE MOUNTING NUTS ARE TIGHTENED ON THE STUDS BEFORE THE TOP TWO ARE FULLY INSTALLED, THE TOP NUTS WILL BOTTOM OUT ON THE MOUNTING FLANGE AND CREATE A BENDING MOTION AT THE BOTTOM OF THE COOLER IN THE AREA OF THE DISCOVERED

CRACK. CARE SHOULD BE TAKEN DURING INSTALLATION TO TURN THE TOP NUTS ALL THE WAY DOWN BEFORE THE BOTTOM ONES.

CA100811006	BEECH	LYC	ALTERNATOR	FAILED
5/27/2010	B19	O320E2C	D0FF1300J	

SUSPECTED NOISE ON INITIAL CLIMB-OUT. AMMETER CHARGE LOST (-). BACK ON GROUND FOLLOWING THE LANDING CIRCUIT.

2011FA0000033	BEECH		UNIVERSAL JOINT	BINDING
1/20/2011	B300B350C			CONTROL WHEEL

PILOT CONTROL WHEEL "U" JOINT WAS BINDING ON THE SUCK LINE FOR THE PRESSURIZATION CONTROL, RESTRICTING CONTROL WHEEL MOVEMENT. THIS WAS FOUND BY THE PILOT DURING PRE-FLIGHT INSPECTION.

2011FA0000034	BEECH		UNIVERSAL JOINT	BINDING
1/20/2011	B300B350C			CONTROL WHEEL

PILOT CONTROL WHEEL "U" JOINT WAS BINDING ON THE SUCK LINE FOR THE PRESSURIZATION CONTROL, RESTRICTING CONTROL WHEEL MOVEMENT. THIS WAS FOUND BY THE PILOT DURING PRE-FLIGHT INSPECTION.

FCPR20110001	BEECH		LINE	CHAFED
1/3/2011	C90		905800881	HYDRAULIC SYS

LT AND RT RUDDER CABLES CHAFING ON TOP OF FILL LINE, PN 90-580088-1,TO HYD RESERVOIR AT FUSELAGE STA 150.0 AND 15" LT OF FUSELAGE CTR LINE.

1HYR20110202	BEECH		FRAME	WORN
1/25/2011	C90		50410012249	MLG ATTACH

DURING A PHASE INSP, IT'S BEEN NOTED THAT THE NLG HAD SIGNIFICANT "FOR AND AFT" PLAY AT THE UPPER DRAG STRUT ATTACH POINT. FURTHER INSP REVEALED THAT THE DRAG LEG BEAM FRAME ASSY PN 50-410012-249 WAS SHOWING MOVEMENT ALONG THE ROW OF FASTENERS THAT SECURE THIS TO THE NOSE STRUCTURE SKIN PANELS AT FS 57.50. UPON REMOVAL OF THE BEAM AND ASSOCIATED STRUCTURE, IT WAS DISCOVERED THAT THE FASTENER HOLES IN THE NOSE STRUCTURE SKIN PANEL WERE WORN OBLONG "FOR AND AFT". MFG HAS DECIDED TO REPLACE THE DRAG LEG BEAM ASSY AND ADJACENT LT AND RT INTERCOSTAL FRAMES PN 50-410012-313 AND 50-410012-254. WITH THE REPLACEMENT OF THESE PARTS, ACFT MFG HAS AUTHORIZED A FIELD REPAIR, FR-KA-03977, TO OVERSIZE THE FASTENER HOLES WHERE THE BEAM FASTENS TO THE SKIN PANELS AND MAINTAIN NOMINAL HOLES AT THE ADJACENT STRUCTURE. IN ADDITION, MFG HAS AUTHORIZED ALTERNATE FASTENERS FOR INSTALLATION. THERE HAVE NOT BEEN ANY PILOT COMPLAINTS FROM THIS ISSUE.

2011FA0000047	BEECH	PWA	BUSS BAR	ARCED
1/11/2011	C90	PT6A135A	101364084219	HEAT SWITCH

PILOT COMPLAINED OF INTERMITTENT POPPING OF STALL WARNING, RT PITOT HEAT, RECOGNITION LIGHT AND STROB LIGHT CIRCUIT BREAKER SWITCHES ON REMOVAL OF LT SUBPANEL REVEALED THAT THE BUSS BAR PN 101364084-219 WAS PHYSICALLY ATTACH TO THE STALL WARNING HEAT SWITCH. THE MAIN FEEDER WIRE PN P260A8 WAS ATTACHED TO THE SWITCH. THE BUS BAR WAS FOUND LAYING ON TOP OF THE SWITCH ATTACH SCREW AND EVENTUALLY STARTED ARCING AND POPPING THE CIRCUIT BREAKER SWITCHES DOWNSTREAM FOR IT. THE STALL WARNING HEAT SWITCH PN 7270-5-15 AND BUS BAR PN 101-364084-219 WERE REPLACED AND INSTALL PROPERLY.

2011FA0000048	BEECH	PWA	BRACE	LACK OF LUBE
1/13/2011	C90	PT6A135A	10182002415	NLG STEERING

COMING FROM THE TAXI HOLDING BAY, ACFT WENT OUT OF THE RUNWAY DUE TOO NOSE WHEEL STEERING INOP. INVESTIGATION AND INSP PERFORMED BY MX, FOUND A LACK OF GREASING ON THE STEERING BRACE PN 101-820024-15. NO OTHER FINDINGS OR PROBLEMS DETECTED ON THE STEERING. OPS AND FUNCTIONAL TEST PERFORMED, FOUND SMOOTH AND NORMAL AFTER GREASING. BRACE PN 101-820024-15 MUST BE GREASE WITH ACFT ON JACKS AND WITH ACFT OFF JACKS TO GUARANTEE THIS IS FULLY GREASED.

2011FA0000035	BEECH	CONT	CIRCUIT BREAKER	ODOR

1/21/2011	F33A	IO520BB	35380132103	ZONE 100

PILOT REPORTED A BURNED ELECTRICAL ODOR. ODOR WENT AWAY WHEN LIGHTS WERE TURNED OFF. TECH DISCOVERED THE LANDING LIGHT/ CIRCUIT BREAKER TO BE AT FAULT. AD 2008-13-17 HAD BEEN COMPLETED 1345 FLIGHT HOURS PRIOR AND ESTIMATED 21520 CYCLES.

2011FA0000041	BEECH	CONT	CIRCUIT BREAKER	FAILED
1/25/2011	F33A	IO520BB	35380132103	TAXI LIGHT

PILOT REPORTED TAXI LIGHT INOP. ON TROUBLESHOOTING TECH FOUND CIRCUIT BREAKER/SWITCH TO BE AT FAULT. CIRCUIT BREAKER/SWITCH HAD BEEN REPLACED 500 FLIGHT HOURS PRIOR AND ESTIMATED 2000 CYCLES.

2011FA0000057	BEECH	CONT	CIRCUIT BREAKER	FAILED
1/30/2011	F33A	IO520BB	35380132103	STROBE LIGHTS

PILOT REPORTED STROBE LIGHTS INOP. ON TROUBLESHOOTING, TECH FOUND CIRCUIT BREAKER/SWITCH TO BE AT FAULT AD 2008-13-17 HAD BEEN COMPLETED 1720 FLIGHT HOURS PRIOR. NO PROBABLE CAUSE OR RECOMMENDATIONS AT THIS TIME.

2011FA0000058	BEECH	CONT	CIRCUIT BREAKER	FAILED
1/31/2011	F33A	IO520BB	35380132103	STROBE LIGHT

PILOT REPORTED STROBE LIGHTS STAYED ON WHEN SWITCH WAS IN THE OFF POSITION. ON TROUBLESHOOTING TECH FOUND THE CIRCUIT BREAKER/SWITCH TO BE AT FAULT. AD 2008-13-17 HAD BEEN COMPLETED 1505 FLIGHT HOURS PRIOR. NO PROBABLE CAUSE OR RECOMMENDATIONS AT THIS TIME.

2011FA0000117	BEECH		STRUCTURE	CRACKED
2/18/2011	M35		35165050606	RT WING TE FLAP

PERFORMED INSP IAW MFG SAFETY COMUNIQUE NR 313 / FAA SAIB CE-11-21. FOUND RT FLAP L/E CRACKED (ABOUT 1.5 IN LONG) IN THE VICINITY OF THE "FLAP ACTUATOR BRACKET". FURTHER FOUND NOSE RIB CRACKED AS WELL. REMOVED FLAP FOR REPAIRS.

CA100607005	BELL	BELL	BEARING	ROUGH
6/2/2010	204B		P9103PPFS381A	BLOWER ASSY

NEW BEARING (PN P9103PPFS381A) PURCHASED FROM MFG, FOUND UNSERVICABLE, DUE TO LACK OF LUBRICATION AND ROUGH OPERATION. PART SCRAPPED AND WARRANTY RECEIVED FROM MFG. NOTE: THIS BEARING IS PART OF A BLOWER ASSY.

CA100707007	BELL	ALLSN	BEARING	SPALLED
6/25/2010	206B	250C20		COMPRESSOR

THE 21/2 BEARING AND RACE WERE SPALLING AND CAUSED SEVERAL CHIP LIGHTS. THE GEARBOX AND COMPRESSOR PN 6890550, REPLACED.

CA100517005	BELL	ALLSN	BOX BEAM	CRACKED
5/14/2010	206B	250C20	206031200019	FUSELAGE

ACFT INSPECTED IAW AWD CF-91-35 - CRACK FOUND IN LT AFT MOST HOLE OF BOX BEAM BASE SKIN. ENGINEERING CONSULTED FOR REPAIR SCHEME.

2011FA0000084	BELL	ALLSN	ENGINE	MAKING METAL
1/12/2011	206B	250C20		OIL SYS

ENGINE CHIP LIGHT ILLUMINATED DURING FLIGHT. ENG OIL SYS REVEALED METAL CONTAMINATION BEYOND SERVICEABLE LIMITS. COMPRESSOR, TURBINE, AND GEARBOX MODULES WERE REPLACED WITH SERVICEABLE UNITS.

CA100622017	BELL	ALLSN	FLOOR PANEL	CORRODED
6/3/2010	206B	250C20B	206031313115	CARGO BAY

DURING A 100 HR/ANNUAL INSP, BAGGAGE FLOOR PROTECTIVE PANEL WAS REMOVED TO INSPECT THE BAGGAGE FLOOR PANEL. CORROSION WAS NOTED AROUND AN INSERT AREA AND FURTHER INVESTIGATION FOUND THAT CORROSION HAD PENETRATED THE UPPER SKIN, AND WAS MOVING INTO THE HONEYCOMB STRUCTURE. THE PANEL WAS REPLACED WITH AN O/H PANEL. THE PANEL WAS ORIGINAL TO THE ACFT.

CA100702008	BELL	ALLSN	ACCUMULATOR	CRACKED
6/28/2010	206B	250C20J	6875224	TURBINE GOVERNOR

PILOT REPORTED M/R DROOPING OFF WHEN POWER IS APPLIED. RECORDS SHOWED GOVERNOR NEAR T/X FOR O/H. SUSPECT GOVERNOR WAS REPLACED, GROUND RUN AND LEAK TESTS WERE PREFORMED ALONG WITH A SATISFACTORY TEST FLIGHT, ACFT WAS RELEASED, RETURN TO SERVICE, 1.5 HRS LATER THE PILOT AGAIN REPORTED M/R DROOPING. MX RETURNED AND CHECKED FOR ANY CRACKED OR BROKEN AIR LINES, INSP FOUND NO ANOMALIES. ACFT WAS THEN STARTED AND THE SYS WAS SNOOPED CHECKED FOR AIR LEAKS, A LEAK WAS DETECTED AT AN ACCUMULATOR THAT IS BOLTED TO THE TURBINE FIRESHIELD. ACCUMULATOR WAS INSPECTED AND A SMALL CRACK WAS FOUND ON THE BOTTOM SIDE OF WHERE THE FITTING IS ATTACHED TO THE ACCUMULATOR. THE ACCUMULATOR WAS REPLACED AND THE ACFT WAS RETURNED TO SERVICE.

CA100514005	BELL		SUPPORT	MISMANUFACTURED
5/14/2010	206BELL		206033412001S	TAIL ROTOR

NEW SUPPORT ORDERED FROM MFG HAS TWISTED FWD AND AFT EARS. THE PART ALSO HAS LOW EDGE DISTANCE ON BEARING HANGER MOUNTING HOLES. PART RETURNED TO MFG FOR WARRANTY. PART WAS MFG INCORRECTLY. T/R BEARING HANGAR PARTS.

CA100621003	BELL	ALLSN	DRIVE SHAFT	BENT
6/18/2010	206L1	250C28B	206040325017	TAIL ROTOR

DURING GROUND RUNS, A NOISE AND VIBRATION FELT IN THE AFT BAGGAGE COMPARTMENT, INVESTIGATION FOUND THE SHORT STEEL SHAFT TO BE BENT .007" AT THE AFT COUPLING END, A REPLACEMENT SHAFT INSTALLED AND VIBRATION ELIMINATED. CAUSE OF SHAFT OUT OF TOLERENCE UNKNOWN.

CA100617006	BELL	BELL	IMPELLER	MISMANUFACTURED
6/16/2010	212		2660162401	OIL COOL BLOWER

IMPELLER ON OIL COOLER BLOWER ASSY MANUFACTURED INCORRECTLY FROM MFG. CTR SPLINED HUB MACHINED TOO HIGH, CAUSING IMPELLER TO RUB ON OUTER STATOR HSG. PART RETURNED TO MFG FOR WARRANTY.

CA100505007	BELL	PWA	TRANSMISSION	FAILED
8/14/2009	212	PT6T3B	212040001059	MAIN ROTOR

DURING FLIGHT, PILOT HAD TRANSMISSION CHIP LIGHT AND RETURNED TO HANGAR TO LAND, ON SHUTDOWN UNUSUAL NOISE WAS HEARD COMING FROM THE TRANSMISSION, CHIP PLUGS AND INTERNAL OIL FILTER WERE REMOVED AND INSPECTED, LARGE CHIPS WERE NOTED ON THE CENTER AND LOWER CHIP PLUG AND IN OIL FILTER ASSY TRANSMISSION WAS REMOVED AND SENT FOR TEAR DOWN AND REPAIR.

CA100603003	BELL		BLADE	DELAMINATED
5/26/2010	222U		2220156001XX	MAIN ROTOR

THE PILOT AND CO-PILOT WERE THE ONLY 2 PERSONS ONBOARD THE ACFT DURING A TRAINING FLIGHT. AT APPROX 11,000`, PA AND 110 KIAS THE PILOTS NOTICED AN UNUSUAL VIBRATION AND ELECTED TO MAKE A PRECAUTIONARY LANDING. POST FLIGHT INSP BY A MX REVEALED DELAMINATION BETWEEN THE BLADE SKIN AND HONEYCOMB ON THE BOTTOM OF 1 BLADE, APPROX 10 IN, WIDE BY 3.5 FEET LONG. THE DELAMINATION WAS MID-SPAN AND MID-CORD.

CA100622020	BELL		YOKE	MISMANUFACTURED
6/22/2010	407		406012102109	TAIL ROTOR

TAIL ROTOR YOKE PN 406-012-102-109, SN HBFS821, HAS BEEN MFG INCORRECTLY. THE AREA WHERE THE FLAPPING STOP CONTACTS THE YOKE SHOULD BE MACHINED FLAT. THE YOKE IN QUESTION HAS TOO MUCH

MATERIAL REMOVED, CAUSING A RIDGE TO BE FORMED AND RESULTS IN THE FLAPPING STOP NOT MAKING FULL CONTACT WITH THE YOKE. IN ADDITION TO THIS, THE YOKE IS BELOW MINIMUM THICKNESS DUE TO IMPROPER MACHINING. MFG HAS BEEN NOTIFIED AND THE PART HAS BEEN RETURNED FOR WARRANTY.

CA100612001	BELL	ALLSN	CROSSTUBE	CRACKED
6/9/2010	407	250C47B	D407667205	MLG

PILOT LANDED ON A LOG PAD IN A MARSHY AERA TO FACILITATE A CREW CHANGE. THE ACFT WAS SPOOLED BACK TO FLIGHT IDLE AND THE CREW MEMBERS DEPARTED AND THE OTHER CREW BORDED THE ACFT. AS PILOT WAS ROLLING THE THROTTLE BACK UP TO 100 PERCENT, THE PILOT HEARD A LOUD CRACK AND THE ACFT TILTED AFT AND LT. THE PILOT SHUTDOWN ENGINE AND PILOT AND CREW DEPARTED THE ACFT UNINJURED. UPON INSP IT WAS FOUND THAT THE AFT CROSSTUBE HAD BROKE IN TWO. VISUAL INSP OF THE CRACK DOES NOT SHOW ANY SIGN THAT THE CROSSTUBE WAS CRACKED PRIOR TO THE FAILURE. BATCH NR OF FAILED TUBE IS B19109.

CA100907009	BELL	ALLSN	HOSE	LEAKING
9/6/2010	407	250C47B	23063412	ENGINE OIL

HOSE WAS FOUND ON DI TO TO WEEPING. CONTINUED TO GET WORSE TO THE POINT WHERE IT WAS BEYOND LIMITS AND GROUNDED THE ACFT.

CA100818002	BELL	ALLSN	YOKE	DAMAGED
8/9/2010	407	250C47B	406012102109	TAIL ROTOR

DURING HIS WALK AROUND, THE PILOT DISCOVERED A HAIRLINE CRACK IN THE PAINT OF THE FWD EDGE OF THE TAIL ROTOR HUB (IN LINE WITH THE AXIS OF OUTPUT SHAFT OF THE TAIL ROTOR GEARBOX) AND ON THE ORANGE BLADE SIDE. AME 1 WASN`T HAPPY WITH THE WAY IT LOOKED ON PRELIMINARY VISUAL INSP SO HE REMOVED A SMALL BIT OF THE PAINT FINISH AND LOOKED FURTHER WITH A MAGNIFYING GLASS. THERE WAS AN INDICATION OF A FAULT WHEN EXAMINED IN THIS MANNER. AME 1 ASKED AME 2 TO LOOK AT IT WITH HIS YOUNGER EYES AND SEE WHAT HE THOUGHT. HE TOO WAS CONVINCED THAT "SOMETHING" WAS AMISS WITH THE YOKE AND IT APPEARED CRACKED TO HIM ALSO. AT THAT TIME AME 1 ADVISED THE FLIGHT CREW THAT THE HELICOPTER WAS NOT GOING TO BE AVAILABLE UNTIL FURTHER INSP IN THE FORM OF A NDT TEST WAS CARRIED OUT. BEFORE REMOVING THE FINISH IN THE AREA, A PICTURE (PIC 1) WAS TAKEN TO SHOW THE FINE CRACK IN THE PAINT, IE. IT WAS NOT SCRATCHED THROUGH THE PAINT. THEN, THE PAINT WAS REMOVED AND MORE PICTURES WERE TAKEN. WITH THE PAINT REMOVED, ALL WHO LOOKED AT THE AREA WERE STILL CONVINCED IT WAS CRACKED. SEE PICS 2 AND 3. A MAGNETIC PARTICAL INSP WAS COMPLETED ON AUG. 12, 2010 AND THE FAULT WAS DEEMED NOT TO BE A CRACK, BUT LIKELY WAS CAUSED MECHANICALLY BEFORE THE COMPONENT WAS PAINTED. MFG HAS SUPPLIED NEW YOKE FOR INSTALLATION.

CA100707002	BELL	ALLSN	BLADE	DELAMINATED
7/5/2010	407	250C47B	407015001117	MAIN ROTOR

PILOT REPORTED VIBRATION FELT. LANDED AND FOUND LOWER SURFACE OF BLADE SKIN DELAMINATED AND CURLED BACK FROM THE L/E. ACFT IS GROUNDED WAITING FOR A REPLACEMENT BLADE.

CA100607006	BELL	ALLSN	BELL	BEARING	FAILED
5/22/2010	407	250C47B		406040036107	MAST

MAIN ROTOR CHIP LIGHT CAME ON, TRANSMISSION REMOVED AND SENT FOR REPAIR, MAST BEARING FOUND UNSERVICEABLE AND REPLACED.

CA100602001	BELL	PWA	LINE	CRACKED
5/31/2010	412	PT6T3	212076433001	HYDRAULIC SYS

WHILE ON A TRAINING MISSION, THE PILOT EXPERIENCED LOSS OF NR 1 HYD SYS PRESSURE. THE ACFT RETURNED TO BASE AND LANDED WITHOUT INCIDENT. MX DISCOVERED A CRACKED RIGID HYD LINE, BETWEEN THE CUTOFF BLOCK AND THE 3 WAY SHUTOFF VALVE. CRACK DEVELOPED UNDER A SWAGED FERRULE FITTING.

CA100810003	BELL	PWA	CROSSTUBE	CRACKED
5/14/2010	412EP	PT6T3	D412664203	MLG

REPORTED AN INCIDENT OF A CRACK/BROKEN D412-664-203 CROSSTUBE AT THE CTR SUPPORT. THE INCIDENT TOOK PLACE IMMEDIATELY FOLLOWING LANDING ON AN OIL RIG PLATFORM.

CA100723007	BNORM	LYC	SLICK	IMPULSE COUPLING	BROKEN
7/23/2010	BN2A26	O540E4C5	6351	M3333	MAGNETO

MAG WAS RECEIVED DUE TO SEIZED CONDITION. UNKNOWN WHEN IT OCCURRED DURING ENG OPERATION. 1 IMPULSE FLYWEIGHT WAS FOUND BROKEN AWAY FROM IMPULSE ASSY AND WEDGED BETWEEN THE OTHER FLYWEIGHT AND THE MAG HOUSING. THE IMPULSE COUPLING WAS REMOVED AND THE RIVET THAT HOLDS THE FLYWEIGHT TO THE ASSY WAS FOUND WORN AND BROKEN, ONE HALF STILL IN THE IMPULSE ASSY AND THE OTHER HALF IN THE FLYWEIGHT. THE RIVET APPEARS TO HAVE BEEN LOOSE FOR SOME TIME DUE TO WEAR AROUND THE DIAMETER OF THE RIVET AND WEAR IN THE IMPULSE PLATE WHERE THE RIVET IS CONTAINED. THE ALUMINUM HOUSING WAS SCORED AND THE MAG ROTOR WAS FOUND TO BE DIFFICULT TO TURN. THE MAG WAS EXCHANGED FOR A NEW UNIT AND THE CUSTOMER WARNED OF POSSIBLE METAL CONTAMINATION TO THE ENGINE.

FOTR20217842	BOEING	FITTING	CORRODED
1/25/2011	727223		BS 740

FUSELAGE EXTERIOR BS 740 PRESSURE FITTING IS CORRODED BETWEEN STR 27L-28L. REMOVED FITTING FROM STA 740 IAW SRM 51-30-2, FORMED FITTING FROM 7075-0, 7.2" X 10.7" .190" PO 2905745 IAW SRM 51-20-1, FIG 7. HEATED TREATED FITTING TO 7075T6 IAW ENG REPORT 2-37153-801A. LOCATED AND DRILLED FITTING IAW SRM 51-30-5, 51-30-6 A, D DWG 69-43695. INSTALLED FITTING IAW IAW SRM 51-30-2.

FOTR2021700212	BOEING	ATTACH BRACKET	CRACKED
1/26/2011	727223		SLAT ACTUATOR

LT WING NR 2 SLAT ACTUATOR, INBD ATTACH BRACKET IS CRACKED. SLAT STA 291.0 REMOVED SLAT ACTUATOR SUPPORT STRUCTURE IAW SRM 51-30-2. FABRICATED NEW STIFFENER FROM BAC1503-100145 PO NR 20217147 DIM 9" X 4.5" AND SHIM FROM 7075T6 .032" PO NR 9006027 DIM 5" X 1.3" IAW SB 727-57-0130, REV 3 INSTALLED REPAIR PARTS IAW SRM 51-30-2 AND SB 727-57-0130, REV 3.

FOTR2021700623	BOEING	STRINGER	DAMAGED
1/26/2011	727223		BS 540 S18R

STA 540 AT STR 18R HAS HOLE DRILLED THRU RADIUS OF STRINGER. CUT OUT DAMAGED STRINGER DIM 19.5" LONG FROM STR 18R. FABRICATED NEW STRINGER SECTION FROM BAC1498-141 FROM 7075T6, PO 20041102, DIM 19.5", FABRICATED NEW TOP HAT FROM BAC1498-131, PO 90010803, DIM 13" LONG. LOCATED AND DRILLED HOLES AND STRINGER TIE PN 65-57222-3, PO 20217130. INSTALLED REPAIR PARTS IAW SRM 53-10-3, FIG 1, 51-30-5, 51-30-6, 51-10-2 AND 51-30-2.

FOTR2021700544	BOEING	SKIN	CORRODED
1/26/2011	727223		HORIZONTAL STAB

CORROSION ON LT HORIZ STAB UPPER SKIN AT NR 4 ELEVATOR HINGE CUTOUT. REMOVED CORROSION ON LT HOR STAB T/E SKIN BEAM AT NR 4 HINGE CUTOUT. MEASURED .040" MATERIAL LOSS FOUND TO BE OUT OF LIMITS IAW SRM 51-10-1, 51-10-6 AND 55-10-1. REMOVED LT HORIZ STAB T/E BEAM AND REPAIRED IAW SRM 51-30-2, FABRICATED PLATE FROM 7075T6 .125" DIM. 11.5" X 2.75" PO NR 9009566 AND PLATE NR 2 FROM 2024T3 .100 PO NR 900964 DIM 11.6" X 1.8" AND BAR STOCK FROM 2024T3 PO NR 2014763 DIM .5 X .5 X 11" IAW SRM 55-10-6, 51-20-1. INSTALLED BEAM AND REPAIR PART IAW SRM 55-10-6 AND 51-30-2.

FOTR2021700257	BOEING	ANGLE	CRACKED
1/26/2011	727223		ZONE 100

RT WHEELWELL VERTICAL ANGLE IS CRACKED AT BS 870, RBL 8 BELOW LOAD CONTROL VALVE. REMOVED SUPPORT STRUCTURE AND VERTICAL ANGLE AT BS 870, RBL 8 FOR REPAIR IAW SRM 51-30-2. REPAIRED BS 870 WEB IAW SRM 53-10-9, FIG 5. FABRICATED 4 EA REPAIR FILLERS FROM 2024T3 .090" AND .071" PO 90010841 AND PO 201554 DIM 5.7500" X 4.8750" IAW SRM 53-10-9, FIG 5 FABBED 3 EA DOUBLERS FROM 15-SPH .050 PO 29120127, DIM 21" X 18.2500", 13.1250" X 9.5", 11.1250" X 10.7500" IAW SRM 53-10-9, FIG 5 INSTALLED REPAIR PARTS AND SUPPORT STRUCTURE IAW SRM 51-30-2 AND 53-10-2.

FOTR2021700137	BOEING	HINGE	CRACKED
1/26/2011	727223		PAX DOOR

UPPER HINGE AFT MOST SEGMENT HAS AFT LOBE CRACKED. REMOVED AFT HINGE SEGMENT IAW SRM 51-30-2 AND 200F MM CH 52, FIG 5210B. FABRICATED NEW HINGE SEGMENT FROM MS20001-16-7200 PO 2021728 DIM 18" LONG. INSTALLED NEW HINGE SEGMENT IAW SRM 51-30-2 AND 51-10-2 AND 200F MM, CH 52, FIG 5201B.

FOTR2021700540	BOEING	SKIN	CORRODED
1/26/2011	727223	65245712	HORIZONTAL STAB

CORROSION ON RT HORIZ STAB UPPER T/E SKIN AT NR 3 ELEVATOR HINGE CUTOUT. REMOVED CORROSION ON RT HORIZ STAB T/E BEAM WITH 100 PERCENT MATERIAL LOSS, FOUND TO BE OUT OF LIMITS IAW SRM 51-10-1 AND 55-10-1. FITTED NEW BEAM PN 65-24571-2, SN BN574 AND LOCATED HOLES IAW SRM 51-10-1. INSTALLED NEW BEAM IAW SRM 51-30-2.

FOTR/2021700365	BOEING	FAIRING	GOUGED
1/25/2011	727223		RT WING TE FLAP

RT WING, OTBD FLAP, MID FLAP OTBD FAIRING HAS 2 EA GOUGES AND 1 EA LOOSE FASTENER. CUTOUT DAMAGED AREA DIM 1.5" X .6" IAW SRM 57-20-4, FIG 1. FABRICATED 2 EA REPAIR DOUBLERS FROM 2024-T3 .050" PO 90010715 DIM 5.6250" X 2.7500" AND 4.7" X 2". FABBED REPAIR FILLER FROM 2024-T3 .040' DIM. 1.5" X .6" PO 90010895, FABBED CLOSEOUT BRACKET FROM 2024T3 .040" PO 90010895 DIM 5.7" X 8.3" IAW SRM 57-20-4, FIG 1, 57-20-2 FIG 5 AND 51-20-1. FABED STIFFENER FROM 7075-0 .040" PO 9009504 DIM 14.5" X 5" IAW SRM 51-20-2, FIG 5. HEAT TREATED STIFFENER TO 7075T6 IAW ENG REPORT 2-37153-801A. TREATED, PRIMED AND INSTALLED ALL REPAIR PARTS IAW SRM 51-10-2, 57-20-4 FIG 1, 57-20-2 FIG 5 AND 51-30-2.

FOTR202220165	BOEING	SEAT TRACK	CRACKED
2/1/2011	727230		BS 760

STA 760.95, LBL 45 SEAT TRACK SUPPORT ANGLE BOTTOM SIDE CRACKED. REMOVED DAMAGED SECTION OF SEAT TRACK SUPPORT IAW SRM 51-30-2. FABRICATED NEW SEAT TRACK SUPPORT FROM BAC1506-1108-7075T6, DIM 110" LONG PO 20222108 IAW SRM 53-10-2, FIG 7. INSTALLED SEAT TRACK SUPPORT IAW SRM 51-30-2.

FOTR2022201980	BOEING	SEAT TRACK	CORRODED
2/2/2011	727230	BAC15207927178T6	ZONE 200

STATION 950, RBL 44, FLANGE CORRODED ON SEAT TRACK. REMOVED DAMAGED SEAT TRACK BS 950+10 TO BS 1030, RBL 45.5, LOCATED AND DRILLED NEW SEAT TRACK AND TRIMMED NEW SEAT TRACK PN BAC1520-792-7178-T6511. PO 90010776, DIM 11' 57.5" LONG, FABRICATED 2 EA ANGLE SPLICES FROM BAC1503-100122-7178-T6511 PO 90010929, DIM 14" X 2.5" EACH, AND FABRICATED STRAP 7075T6 .205" PO 9009647, DIM 1" X 6.5", INSTALLED SEAT TRACK, SPLICE, AND 2 EA ANGLES ALL IAW SRM 51-30-2 53-10-2, FIG 7, 53-10-5 FIG 1, 50-30-5 AND 51-30-6.

FOTR2022202022	BOEING	SEAT TRACK	CORRODED
2/2/2011	727230	BAC15207927178T6	ZONE 200

STA 1130 AT RBL 24 SEAT TRACK FLANGE CORRODED TOP AND BOTTOM. REMOVED DAMAGED SEAT TRACK AT STA 1020 TO 1130, RBL 24 IAW SRM 51-30-2. FABRICATED NEW SEAT TRACK FROM BAC1520-792-7178-T6511, PO 90010746, DIM 115" IAW SRM 53-1-5, FIG 1. INSTALLED NEW SEAT TRACK RBL 24, STA 1020 TO 1130 IAW SRM 53-10-5, FIG 1.

FOTR2022201943	BOEING	SEAT TRACK	DAMAGED
2/2/2011	727230	AE727206317	ZONE 200

SEAT TRACK FLANGE HOLES DRILLED ON EDGE OF FLANGE BETWEEN STA 360-380 BL-0-. REMOVED SEAT TRACK STRAP FROM BL-O STATION 360-440 IAW SRM 51-30-2. LOCATED AND DRILLED, AND INSTALLED NEW STRAP PN AE727-2-063-17, REF 16816 DIM 3.2500" X 6.6 FT IAW DWG AE727-2-063, REV P.

FOTR2022201405	BOEING	BULKHEAD	CRACKED
2/2/2011	727230		ZONE 100

LT MLG WHEEL WELL BS 870 BULKHEAD CRACKED OTBD SIDE. REMOVED DAMAGED WEB FROM BS 870

BULKHEAD IAW SRM 51-30-2. FABRICATED NEW UPPER WEB FROM 7075T6 .050" PO 90010289 DIM. 12" X 7" IAW DWG 65-25370. FABRICATED NEW CHORD FROM BAC1505-100617 PO 90010656 14" X 4" IAW DWG 65-25370, FABRICATED ANGLE DIM 3" X 2" FROM 7075T6 .063 PO 90010605 IAW DWG.65-25370. INSTALLED UPPER WEB, CHORD AND ANGLE IAW SRM 51-30-2, 51-30-5 AND 51-30-6.

FOTR2022201925	BOEING		FRAME	GOUGED
2/2/2011	727230			ZONE 100

AFT CARGO STA 1070, STR 27R FRAME GOUGED IN RADIUS. REMOVED DAMAGED PORTION OF FRAME ANGLE IAW SRM 51-40-2, FABRICATED REPAIR ANGLE DIM. 8" X 1" AND FILLER 1" X 1" FROM 7075T6 .090 PO 9009762 IAW SRM 51-40-2. INSTALLED REPAIR ANGLE AND FILLER IAW SRM 51-40-2 AND 51-30-2.

FOTR2022202046	BOEING		FRAME	ELONGATED
2/2/2011	727230			BS 188

3 EA ELONGATED HOLES ON BS 188 AROUND STR 27L. CUTOUT DAMAGED CHORD AT BS 188 BETWEEN STR 26L AND 28R, DIM. 10.75", CUT DAMAGED WEB AT BS 188, STR 27 DIM. 1" X 2.75" IAW SRM 51-40-2, FIG 1 AND 51-40-3, FIG 1. FABRICATED DOUBLER FROM 7075T6 .032" PO 9008186 DIM. 1.9" X 3.8" AND FABBED FILLER FROM 7075T6 .025" PO 90010605 DIM 1.3" X .8" IAW SRM 51-40-2, FIG 1. FABRICATED NEW CHORD FROM 7075T6 .063 PO AT 9009533 DIM. 10.7" X 2.2" AND FABBED 2 EACH ANGLE SPLICES FROM 7075T6 .071" PO 90010351 DIM 6.2" X 1.8" AND 6.6" X 2" IAW SRM 51-40-3, FIG 1 AND 53-10-2, FIG 1. INSTALLED ALL REPAIR PARTS IAW SRM 51-30-2.

FOTR2022201865	BOEING	PWA	FRAME	CRACKED
2/4/2011	727230	JT8D		ZONE 200

STATION 800, STRINGER 14R FRAME CRACKED. CUTOUT DAMAGED AREA DIM .8" X 1" IAW SRM 51-40-4 FIG 1, FABRICATED REPAIR ANGLE FROM 7075-0 .090" DIM. 9" X 1.9" IAW SRM 51-40-4 FIG 1 PO 9009880. HEAT TREATED REPAIR ANGLE 7075T6 IAW ENGINEERING REPORT 2-37153-801 REV A. INSTALLED REPAIR ANGLE IAW SRM 51-40-4, FIG 1.

FOTR2022201989	BOEING	PWA	FRAME	DENTED
2/8/2011	727230	JT8D		ZONE 200

STA 1166, STR 16R FRAME DENTED. CUTOUT DAMAGED AREA AT STA 1166, STR 16R, DIM.1.6" X 1.75" IAW SRM 51-40-3, FIG 1. FABRICATED DOUBLER FROM 7075T6 .063" DIM 4" X 9" IAW SRM 51-40-3, FIG 1, PO 90010179. INSTALLED FRAME REPAIR AT BS 1166, STR 16R IAW SRM 51-40-3, FIG 1.

FOTR2022201811	BOEING	PWA	HINGE	BROKEN
2/10/2011	727230	JT8D*		CARGO DOOR

EXTERNAL FUSELAGE MAIN CARGO DOOR AFT FUSLEAGE HINGE HAS AFT LOBE BROKEN OFF. REMOVED HINGE SECTION IAW SRM 51-30-2. FABRICATED AND INSTALLED NEW SECTION OF HINGE FROM MS20001-16-7200, PO 2022248 DIM 22.6250" IAW SRM 51-30-2 AND ACI FMM CH 52, PAGE 15 THRU 19.

FOTR2022201970	BOEING	PWA	FRAME	CRACKED
2/2/2011	727230	JT8D15		BS 1166

PREVIOUS REPAIR ON BS 1166 FRAME CRACKED ABOVE STR 27L. REMOVED CRACKED REPAIR FROM BS 1166 FRAME ABOVE STR 17L IAW SRM 51-30-2. FABRICATED REPAIR DOUBLER FROM 7075-0 .063' PO 90010605, DIM 10.5" X 6" IAW SRM 53-10-2 FIG 5. HEAT TREATED DOUBLER TO 7075-T6 IAW FASI ENG REPORT 2-37153-801, REV A, INSTALLED REPAIR TO FRAME AT BS 1166 ABOVE STR 17L IAW SRM 53-10-2, FIG 5 AND SRM 51-40-3, FIG 1.

FOTR2022201962	BOEING	PWA	RIB	CRACKED
2/2/2011	727230	JT8D15	611729413	NR 3 SLAT

NR 3 SLAT RIB IS CRACKED ON INBD SIDE OF ACTUATOR FWD MOUNT. REMOVED NR 3 SLAT RIB IAW SRM 51-30-2. LOCATED AND DRILLED FASTENER HOLES IN NEW RIB PN 61-17294-13 PO 20222111 IAW SRM 51-20-1. INSTALLED NEW RIB IAW SRM 51-30-2.

2011FA0000155	BOEING	GE	OIL SYSTEM	CONTAMINATED
2/28/2011	767241	CF680C2B2		RT ENGINE

FLT 601 RT ENGINE OIL QUANTITY ZERO, ENGINE OIL PRESSURE WAS LOW. RT ENGINE SHUTDOWN WAS DIRECTED BY CHECKLIST. INFLIGHT RT ENGINE SHUTDOWN WAS PERFORMED. OIL PRESS WAS ALWAYS ABOVE 10PSI. FLIGHT DIVERTED. PERFORMED FIM 71-05-00 FIG 119 BLOCK 1 TO 6 AND 25, FOUND TGB SCREEN BLOCKED BY OTHER MATERIAL AND NO DEBRIS FOUND. REMOVED TGB SCREEN CONTAMINATION. ACCOMPLISHED OILS SYSTEM CONTAMINATION INSPECTION IAW B767 AMM 72-00-00 PAG 682Z ITEM J. PERFORMED FLUSHING THE OIL SYSTEM IAW AMM 79-11-00 PAGE 309 TO 311 AND OIL SYSTEM INSPECTED FOR CONTAMINATION. PERFORMED INSPECTION POST-WINDMILLING IAW AMM 72-00-00 PAG 682Z ITEM I. ALL NORMAL. PERFORMED ENG RUN UP TEST 3 IAW AMM 71-00-00 PAG 521 TO 524 TEST OK.

ET3D02042011001	BOEING	SLIDE	MISINSTALLED
1/14/2011	777	5A31092	

DURING PRELIMINARY INSP OF EVACUATION RAMP/SLIDE THE FOLLOWING DISCREPANCIES WERE NOTED; THE (MAIN) PACK COVER WAS INSTALLED BACKWARDS. THE PROPER PACK CONTOUR (DIMENSIONS) WERE NOT ACHIEVED. SLIDE PACK RELEASE CABLES WERE INCORRECTLY ROUTED. ROUGHLY 80 PERCENT OF THE CORROSION RESISTANT COATINGS WERE MISSING FROM THE ALUMINUM RELEASE ROD ASSY. A LENGTH OF ROUND BLACK CORD WAS DISCOVERED WRAPPED AROUND THE INFLATABLE INSIDE THE SLIDE PACK. THIS BLACK CORD WAS DRAWN TIGHT AROUND THE INFLATABLE FOLDS AND SECURELY TIED-OFF. IT IS BELIEVED THAT THE BLACK CORD WAS USED AS A FOLDING AID DURING SLIDE PACKING. WITH THESE CONDITIONS PRESENT, IT IS NOT LIKELY THAT THIS EVACUATION RAMP/SLIDE WOULD HAVE BEEN ABLE TO FUNCTION AS DESIGNED IN THE EVENT OF AN EMERGENCY. THIS EVACUATION RAMP/SLIDE WAS LAST SERVICED (O/H) IN DECEMBER OF 2010.

2011FA0000013	BOEING	RELEASE SYSTEM	CORRODED
1/4/2011	77735EER	61988101	L4 DOOR SLIDE

(B16709) FAILED DEPLOY THE L4 DOOR SLIDE DURING A12 CHECK WHEN PERFORMED JOB CARD NR 252400001X (TO DEPLOY THE L4 DOOR SLIDE), MX REPLACED THE L4 DOOR SLIDE. SHOP REPORT THE FAILED REASON IS THE RELEASE ASSY CORRODED, PREVENTION ACTION IS NEEDED TO INCORPORATE THE SB 777 107-25-30.

CA100810007	BOLKMS	LYC	FCU	CONTAMINATED
8/10/2010	BK117B2	LTS101750B1	430128308	ENGINE

DURING SCHEDULED REPLACEMENT OF ENGINE DRIVEN FUEL PUMP FOR 600 HR INSP. PUMP/FCU WAS REMOVED IAW MM REMOVAL/DISASSEMBLY CAUTION INSTRUCTIONS (73-20-01, PG 2) TO PREVENT BLUE GREASE CONTAMINATION. BLUE GREASE WAS DISCOVERED ON THE ATTACHED FCU INTERFACE TO PUMP. FCU AND PUMP REPLACED.

2011FA0000032	BOMBDR	CLAMP	CRACKED
1/19/2011	BD7001A10	GX47300951	HYD PUMP

DURING ROUTINE INSP OF THE VFG OIL SUPPLY LINES, FOUND THE V BAND CLAMPS CRACKED ON THE NR 1 AND NR 2 ENG DRIVEN HYD PUMPS. TODATE THIS MAKES 5 CRACKED CLAMPS.

CA100809009	CESSNA	CONT	BRACKET	CRACKED
7/16/2010	150M	O200A	0411289102371	ELEVATOR

WHILE PILOT COMPLETED PRE-FLIGHT WALK AROUND, HE NOTICED THE ELEVATOR CONTROL NOT RESPONDING NORMALLY. FOUND BRACKET CRACKED.

CA100625006	CESSNA	LYC	HOUSING	CRACKED
6/23/2010	152	O235L2C	5578642	FILTER ADAPTER

ACFT WAS SNAGGED BY PILOT DURING WALK AROUND, DUE TO OIL LEAKING FROM THE BOTTOM OF THE ENGINE COWL. THE COWL WAS REMOVED BY MX AND THE SUSPECTED CAUSE OF THE OIL LEAK WAS TRACED TO THE OIL FILTER ADAPTER HSG. THE HSG WAS REMOVED AND INSPECTED AND NO DEFECTS WERE FOUND. THE HSG WAS INSTALLED USING NEW GASKETS AND DURING THE GROUND RUN (AFTER INSTALLATION), THE ACFT CONTINUED TO LEAK OIL. THE OIL LEAK WAS STILL APPARENT AT THE ADAPTER HSG. THE ENGINE WAS REMOVED FROM THE ACFT TO ALLOW A CLOSER INSP OF THE HSG AND ACCESSORY CASE. WITH THE ENGINE REMOVED AND THE ADAPTER HSG BOLTS STILL TORQUED, A HAIRLINE CRACK WAS VISIBLE ABOVE THE RT LOWER ATTACHMENT BOLT. ONCE THE TORQUE ON THE BOLTS WAS REMOVED, THE CRACK WAS NO LONGER

VISIBLE. THERE IS NO MX RECORD OF THIS PART BEING REMOVED SINCE THE ENGINES LAST O/H. ALTHOUGH THE CRACK APPEARED SMALL ON THE LAST GROUND RUN WHICH MAY A BEEN 1 MINUTE IN DURATION THE ACFT LOST APPROX 3 QTS OF OIL.

CA100831015	CESSNA	LYC	MAIN BEARING	FAILED
8/29/2010	152	O235L2C	18D23137	CRANKSHAFT

MAIN CRANKSHAFT BEARING FAILURE.

CA100528010	CESSNA	LYC	ACTUATOR	MALFUNCTIONED
5/18/2010	152	O235N2C		TE FLAPS

(CAN) ON A WALKAROUND, IT WAS DISCOVERED THAT THE WING FLAPS WERE EXTENDING VERY SLOWLY WITH AN AUDIBLE GRINDING NOISE. UPON INSP, IT WAS FOUND THAT THE FLAP ACTUATOR HAD A WORN INPUT SHAFT AND FAILED COUPLER TO THE ELECTRIC MOTOR. THE ACFT WAS SNAGGED AND ACTUATOR REPLACED IMMEDIATELY.

CA100602004	CESSNA	CONT	ELT	FAILED
6/2/2010	172C	O300D	ELT10	CABIN

WHEN TESTING ELT IAW CAR 571, APPENDIX G, THERE WAS NO TRANSMITTED POWER AND NO AUDIO MODULATION. ELT UNIT REPLACED WITH A SERVICEABLE UNIT.

CA100806009	CESSNA	LYC	YOKE	MISMANUFACTURED
3/4/2010	172M	O320E2D	0560014	CONTROL YOKE

DURING MX INSP TO COMPLY WITH SEB 01-3 THE INSP HOLE WAS FOUND DRILLED IN THE INCORRECT LOCATION. (HIGHER AND 90 DEGREES OUT OF PLACE) THAT IS SPECIFIED IN THE SEB 01-3. CONTROL YOKE R & R WITH A SERVICEABLE ASSY.

CA100806004	CESSNA	LYC	CASE HALF	CRACKED
6/3/2010	172M	O320E2D	78206	LT ENGINE

DURING SCHEDULED INSP, OIL LEAK WAS FOUND ON LT ENGINE CASE. FURTHER INSPECTION REVEALED A 1-INCH CRACK BELOW THE FWD OIL PRESSURE FITTING. ENGINE WAS REMOVED AND SENT OUT FOR SERVICING OR REPAIR.

CA100806008	CESSNA	LYC	CARBURETOR	MALFUNCTIONED
6/16/2010	172M	O320E2D	105217	ENGINE

ON START UP, IDLE JUMPED TO 900 RPM FROM STANDARD 625 RPM FOR NO REASON, TURNED IDLE DOWN TO 700 RPM ENGINE RAN ROUGH. REPEATED CARBURETOR WITH O/H UNIT, PROBLEM WENT AWAY.

CA100910003	CESSNA	LYC	CESSNA	BRACKET	CRACKED
9/10/2010	172M	O320E2D	053100681	053101812	RUDDER

DURING 100 HR INSP, BOTTOM HINGE ASSY ON RUDDER WAS FOUND CRACKED. TOP AND BOTTOM HINGE PN 0531018-1 AND 0531018-2 OF RUDDER WERE REPLACED.

CA100621013	CESSNA	LYC	SWITCH	OVERHEATED
6/4/2010	172M	O320E3D	C9065	EXTERIOR LIGHTS

UNKNOWN CYCLES, TSN AND PART TSO -AT PRESENT- HOWEVER WE CHANGED OUT COUPLE OF YEARS AGO DUE AMENDED LIFE LIMIT PARTS. THE SWITCH APPEARS TO HAVE OVERHEATED AND WELDED ACROSS CONTACTS, CONNECTIONS SHOWING BURNING, SWITCH TOGGLE CANNOT BE SWITCHED. APPEARS SWITCH MAT NOT HAVE THE CAPABILITY OF WITH STANDING CURRENT REQUIREMENTS.

CA100617012	CESSNA	LYC	ROTOR	UNSERVICEABLE
6/2/2010	172M	O360A4M	M3548	MAGNETO

ONE OF THE SHAFT TANG SHEARED THUS ALLOWING SLIPPAGE OF THE TIMING TO OUT OF RANGE.

CA100621017	CESSNA	LYC	BEARING	FAILED
6/20/2010	172N	O320D2J		ALTERNATOR

ACFT PULLED OUT OF HANGAR FOR MORNING FLIGHT, WOULD NOT START - BATTERY DEAD. AME REMOVED BATTERY FOR CHARGING. CHECKED ELEC SYS, FOUND THAT THE ALTERNATOR BELT HAD FLIPPED OVER ON THE RING GEAR AND WHEN PROP WAS MOVED, ALTERNATOR PULLEY DID NOT MOVE. ALTERNATOR REMOVED, FRONT BEARING HAD FAILED AND SHAFT WOULD NOT TURN. NEW ALTERNATOR INSTALLED AND NEW ALTERNATOR BELT INSTALLED.

CA100806003	CESSNA	LYC	BENDIX	POINTS	SEPARATED
2/10/2010	172N	O320H2AD			MAGNETO

SCREW HOLDING POINT HALVES TOGETHER BACKED OUT CAUSING POINT HALVES TO SEPERATE AND FAIL.

2011FA0000024	CESSNA	LYC	LIFTER	SPALLED
1/13/2011	172N	O320H2AD	LW16812	ENGINE

ACFT WAS IN FOR INSP AND THE MECHANIC CUT THE OIL FILTER OPEN TO CHECK FOR METAL, THERE WAS METAL IN THE OIL FILTER. THE ENGINE WAS SENT TO US FOR A METAL CONTAMINATION INSP, UPON OUR FINDINGS THERE WERE SEVERAL LIFTER BODIES THAT WERE BADLY SPALLED.

2011FA0000022	CESSNA	LYC	LIFTER	SPALLED
1/13/2011	172N	O320H2AD	LW16812	ENGINE

THE ENGINE HAD A CYLINDER ISSUE, THE MECHANIC CHECKED THE ENGINE FOR METAL IN THE OIL FILTER. THE FILTER HAD METAL IN IT, THE ENGINE WAS SENT TO OUR FACILITY FOR A TEARDOWN INSP. UPON THE TEARDOWN INSP OUR FINDINGS WERE THAT: 4 LIFTERS WERE BADLY SPALLED WHICH CREATED A METAL CONTAMINATION.

CA100629001	CESSNA	LYC	BULKHEAD	CRACKED
6/29/2010	172P	O320D2J	05503215	PROPELLER

FWD PROPELLER SPINNER BULKHEAD FOUND CRACKED IN MULTIPLE PLACES AROUND BOLT HOLES. FOUND ON ROUTINE INSP. THIS IS BECOMING A COMMON PROBLEM.

CA100805003	CESSNA	LYC	VOLT REGULATOR	UNSERVICEABLE
5/1/2010	172P	O320D2J	DG3	ALTERNATOR

SUSPECT THE VOLT CONTROL WENT U/S AND ALLOWED THE FULL VOLT CARGO OF THE ALTERNATOR TO OVERCHARGE THE SYS SHORTING OUT THE MAIN ALTERNATOR C/B CAUSING SMOKE IN THE COCKPIT.

CA100615009	CESSNA	LYC	SHAFT	BROKEN
5/27/2010	172P	O320D2J		CYLINDER PISTON

ON LANDING, THE LT BRAKE PEDAL ROTATED FORWARD AND THERE WAS NO BRAKING ACTION. ONCE ON THE RAMP IT WAS DISCOVERED THAT THE MASTER CYLINDER PISTON SHAFT BROKE AT THE THREADS, FLUSH WITH THE END OF THE CLEVIS FITTING.

CA100607007	CESSNA	LYC	BULKHEAD	CRACKED
5/17/2010	172P	O320D2J	05503215	SPINNER

BULKHEAD CRACKED PERPENDICULAR TO PROPELLER BOLT HOLES.

CA101006013	CESSNA	LYC	MUFFLER	UNSERVICEABLE
10/5/2010	172P	O320D2J	S000127B3	ENGINE

DURING ROUTINE 100 HR INSP, THE EXHAUST MUFFLER WAS SUSPECTED UNSERVICEABLE BY AD CF90-03R2, PART I, VISUALLY AND SO IT WAS REMOVED FOR PRESSURE TEST AND FAILED OUT THE SMALL HOLE BY THE EXIT STACK. THIS AREA IS VERY HARD TO VISUALLY INSPECT.

CA100713005	CESSNA	LYC	PUMP	LEAKING

7/6/2010	172R	IO360L2A	LW15493	FUEL SYSTEM

FUEL PUMP FOUND LEAKING PAST DIAPHRAGM, OUT THE VENT.

2011FA0000086	CESSNA		RIB	CRACKED
12/17/2010	172RG		63587002	RT TRIM TAB

DURING 100 HR INSP OF ACFT, SEVERAL RT AND LT STABILATOR TRIM TAB INBD RIBS HAVE BEEN FOUND CRACKED. THE CRACKS ARE LOCATED AT THE RIB BOTTOM FWD CORNER, NEAR THE CONTROL ARM ASSY ATTACH NUTPLATE. SEPARATE THE RT AND LT TRIM TABS BY REMOVAL OF THE CONTROL ARM ASSY, PERMITTING A GOOD VISUAL INSP OF THE RIBS AT INSP TIME. REPLACE RIBS WITH NEW AS NEEDED.

CA100817018	CESSNA	LYC	PIVOT	CRACKED
8/16/2010	172RG	O360F1A6	24411001	MLG

LT MLG PIVOT FOUND TO BE CRACKED BETWEEN SPLINE DRIVE SECTION AND ACTUATOR CAP BUSHING SECTION. CRACK ORIGINATED AT BRAKE LINE CHANNEL INSIDE PIVOT.

2011FA0000006	CESSNA	LYC	TORQUE TUBE	CRACKED
1/4/2011	172RG	O360F1A6	24670012	RUDDER CONTROL

DURING LANDING ROLLOUT, WITH CROSSWIND, THE ACFT DRIFTED RT. HARD LT RUDDER WAS APPLIED BY BOTH STUDENT AND INSTRUCTOR AT WHICH TIME A "POP" WAS HEARD/FELT. ACFT CONTROL WAS MAINTAINED WITH BRAKING AND NOSE STEERING. INSP REVEALED A CRACK IN THE RT RUDDER TORQUE TUBE. THIS CRACK IS LOCATED JUST LT OF THE SECTOR GEAR/TRIM-STEERING BUNGEE ATTACH POINT, WITH THE TORQUE TUBE LOCATED IN THE CTR FLOOR SECTION, FWD OF THE CTR CONSOLE. THE FAILURE RESULTED IN THE RT AND LT TORQUE TUBE SECTOR GEARS MOVING OUT OF UNISON AND ALLOWED LOSS OF TENSION IN THE RUDDER CONTROL CABLES.

CA100805006	CESSNA	LYC	GASKET	WRONG PART
5/26/2010	172S	IO360L2A		ENG OIL DISTR

THE PILOT, WHILE IN CRUISE, GOT AN INDICATION OF A VACUUM PUMP FAILURE, AND AS THESE MODELS HAVE 2 VACUUM PUMPS, HE RETURNED TO DEPARTURE. UPON INSP, AT FIRST APPEARED TO BE A ROUTINE VACUUM PUMP REPLACEMENT, BUT MX DECIDED TO REMOVE THE DRIVE HSG FROM THE ENGINE AND THEN IT WAS DISCOVERED THAT THE DRIVE HSG HAD FAILED AND THE SHAFT HAD SEIZED AND THE DRIVE GEAR TEETH WERE STRIPPED OFF. SO THE OIL SUMP AND THE ACCESSORY CASE WERE REMOVED TO REPLACE THE DAMAGED PARTS. FURTHER INVESTIGATION BY THE ENGINE O/H SHOP REVEALED THAT AN INCORRECT GASKET HAD BEEN INSTALLED AT OVERHAUL. (THE GASKET COVERED THE OIL PORT, WHICH FED PRESSURE OIL TO THE SHAFT, THE CORRECT GASKET LOOKS THE SAME BUT HAS A HOLE IN THE GASKET TO ALLOW OIL TO FLOW THROUGH.)

CA100830006	CESSNA	LYC	WIRE	DAMAGED
8/30/2010	172S	IO360L2A		SENDING UNIT

FUEL CAP ATTACH CHAIN BECAME DISCONNECTED FROM THE TAB ON THE FILLER NECK ALLOWING THE LOOSE END TO FALL INTO THE TANK STILL ATTACHED TO THE CAP. THE LOOSE END OF THE CHAIN WRAPPED AROUND THE FINE WIRE ON THE FUEL SENDING UNIT. THIS CAUSED THE WIRE TO BECOME DISLODGED WHICH OPENED THE ELECTRICAL CIRCUIT CAUSING AN "EMPTY" READING ON THE FUEL QUANTITY GAUGE AND THE "LOW FUEL ANNUNCIATOR" TO ILLUMINATE.

CA101006008	CESSNA	LYC	CABLE	BROKEN
10/2/2010	172S	IO360L2A	SPL19251	SEAT

AFTER LANDING THE PILOT PULLED THE HANDLE TO MOVE HIS SEAT BACK. THE CABLE BROKE AND THE PILOT HAD DIFFICULTY EXITING THE ACFT.

CA100813011	CESSNA	LYC	MUFFLER	CRACKED
8/13/2010	172S	IO360L2A	99541009REVE	ENGINE

EXHAUST MUFFLER WAS BROUGHT IN AFTER CRACKS WERE DISCOVERED. CRACK LOCATED AT CONNECTION WITH PART 9954100-7. PART 9954100-7 IS SUSPECT TO BE EITHER SHORT OR LONG. PART 9954100-7 IS REPLACED 4:1. CRACK WILL BE WELDED UP IAW AC43.13 AND PRESSURE TESTED FOR OTHER DEFECTS. REPLACEMENT PDA

MUFFLER 9954100-9AWL WAS PROVIDED TO OPERATOR.

2011FA0000015	CESSNA	LYC	IGNITION SWITCH	FAILED
1/6/2011	172S	IO360LYC*	A5109C292501107	

THE IGNITION SWITCH HAS NEVER BEEN INSPECTED IAW SEB91-5R1 TO COMPLY WITH AD 93-05-06. UPON DISASSEMBLY OF THE SWITCH, THE CIRCUIT BOARD PLATE WAS FOUND TO BE SEVERLY WORN AND 1 CONTACT POINT WAS BURNED. 1 CONTACT CUP WAS BURNED COMPLETELY THROUGH CREATING A HOLE IN THE CONTACT POINT. THE SCREW HEADS HOLDING THE BODY OF THE SWITCH TO THE TERMINAL BOARD ASSY WERE PAINTED RED AS REQUIRED BY SEB91-5R1 AND AS DESCRIBED BY IDENTIFICATION OF A FACTORY NEW SWITCH; HOWEVER THERE WAS NO VISIBLE GREASE ON THE CUPS OR CIRCUIT BOARD. DISCUSSIONS WITH OTHER MECHANICS AND INSPECTORS LEADS ME TO BELIEVE THAT THIS AD IS OVERLOOKED DUE IN PART TO MECHANICS ASSUMING THAT NO AD EXISTS FOR SWITCHES MFG AFTER 1993. THE TEXT OF THE AD AS WELL AS THE TEXT IN SEB91-5R1 AND ACS SB92-01 DO NOT SUPPORT THIS ASSUMPTION.

CA100622023	CESSNA	CONT	BARREL	CRACKED
6/18/2010	180	O470K	50384	PROP HUB

DUE TO SUSPECTED PROPELLER STRIKE OR ABNORMAL LOADS, THE PROPELLER HUB CRACKED NEAR THE BLADE RETENTION RADIUS. AS A RESULT OF THIS, INTERNAL PARTS WERE DAMAGED INCLUDING ONE BLADE THRUST WASHER. PROPELLER TO BE O/HD.

CA100706011	CESSNA	CONT	SUPPORT	CRACKED
7/2/2010	182B	O470*	05411211	MLG

LT MLG OTBD SUPPORT ASSY (PRIMARY STRUCTURE) FOUND CRACKED DURING ANNUAL INSP. CRACK PROPOGATED THROUGH SUPPORT FITTING AND U-BOLT HOLE. CRACK VISUAL TO NAKED EYE. LOCATED AT AFT END OF CUTOUT FOR L/G SPRING.

CA100810002	CESSNA	CONT	CONNECTING ROD	FAILED
8/6/2010	182E	IO550F		ENGINE

CATASTROPHIC ENGINE FAILURE, CONNECTING RODS CAME THROUGH CASE AND COWL.

CA100809026	CESSNA	LYC	EXHAUST VALVE	STUCK
8/6/2010	182S	IO540AB1A5		NR 3

ACFT DEPARTED FOR LOCAL FLIGHT OVER CITY, ON TAKEOFF EVERYTHING NORMAL, IN CLIMB ENGINE STARTED TO RUN ROUGH. PILOT LEVELED OUT AT 1000 FT AND RETURNED TO AIRPORT. LANDED WITH OUT ANY PROBLEMS. ACFT WAS RUN UP NEXT MORNING STILL RUNNING ROUGH AND MIXTURE WAS VERY RICH. ENGINE SHUTDOWN. ACFT PULLED INTO HANGAR, COWLS REMOVED. IT WAS FOUND ON VISUAL INSP THAT NR 3 EXHAUST VALVE PUSH ROD & SHROUD TUBE BENT. CYLINDER WAS REMOVED. IT WAS NOTED THAT THE EXHAUST VALVE WAS STUCK WIDE OPEN AND IT COULD NOT BE PUSHED BACK IN. LIFTERS CHECKED NO PROBLEMS. NEW CYLINDER WILL BE INSTALLED. CAUSE OF THE STICKY VALVE IS MORE THAN LIKELY FROM LOW POWER SETTINGS IN CRUISE. PILOTS WILL BE TOLD TO RUN ACFT HARDER IN CRUISE.

2011FA0000037	CESSNA		CAPACITOR	FAILED
11/1/2010	206H		C1289	NAV/COMM RADIO

ON 10/30/2010 AT APPROX 1600 HRS, WHILE FLYING TRAFFIC SUPPORT. SMOKE OBSERVED COMING FROM BEHIND GPS & NR 1 RADIO FACE AREA. PILOT IMMEDIATELY LANDED & SHUTDOWN ACFT. MX CALLED & INSPECTED ACFT, IT WAS DETERMINED TO BE AIRWORTHY. AFTER FERRY PERMIT WAS ISSUED, GPS & BOTH NAV/COMM RADIOS WERE SENT FOR INSPECTION. PROBLEM FOUND IN NR1 NAV/COMM RADIO. A BURNED CAPACITOR REPLACED & RADIO RETURNED TO SERVICE. AFTER REMOVING ALL OF RADIOS, IT WAS DETERMINED THAT AVIONICS COOLING DUCT HOSES WERE NOT INSTALLED ON BACK OF RADIO RACKS & HOSES EXTREMELY STIFF. ALL 3 HOSES REPLACED & SECURED TO GPS & RADIO RACKS. CAPACITOR POSSIBLY COULD HAVE BURNED OUT DUE TO LACK OF COOLING AIR OR AGE. RECOMMENDATION WOULD BE TO CHECK AVIONICS COOLING FAN HOSES FOR PROPER CONNECTION AT RADIO RACKS AT TIME RADIOS ARE REMOVED FOR REPAIR & AT ANNUAL INSP.

CA100525014	CESSNA	CONT	LIFTER	SPALLED

4/14/2010	207	IO550F	653888	ENGINE

UPON DISASSEMBLY, DISCOVERED LIFTERS AND CAMSHAFT SPALLED AND CHIPPED. THE INTAKE LIFTER 653888 (CHANGED NOV 16, 2009 DUE TO SB09-07 & AD2009-24-52, APPROX 180 HRS TTSN) WERE ALL DESTROYED. THE CAMSHAFT WAS ALSO DESTROYED.

2011FA0000065	CESSNA	CONT	GASKET	LEAKING
1/22/2011	207A	IO520*	653191	ROCKER COVER

PILOT REPORTS BURNING OIL SMELL IN COCKPIT. FOUND NR1 CYLINDER ROCKER COVER GASKET LEAKING ONTO RT EXHAUST. REPLACED NR 1 CYLINDER ROCKER COVER GASKET.

2011FA0000145	CESSNA	PWA	SPAR	CRACKED
2/11/2011	208	PT6A114A	26300038	HORIZONTAL STAB

ACTC=4354, DURING PHASE 10 INSP, FOUND HORIZONTAL STAB FWD SPAR BENT AND CRACKED, IN THE CENTER WEB AREA, IN BETWEEN THE FWD ATTACH POINTS. MFG CUSTOMER SERVICE AND ENGINEERING WERE CONTACTED AND SENT PHOTOS. OPERATOR SUSPECTS ACFT CLEANING PERSONNEL STANDING ON TOP OF HORIZ STAB DURING CLEANING OPERATION. THIS PRACTICE WILL NO LONGER BE ALLOWED. ALSO, LARGE RED "NO STEP" PLACARDS WILL BE OPSITIONED ON TOP OF LT AND RT HORIZ STAB OF THESE ACFT.

2011FA0000052	CESSNA	PWA	SHAFT	FAILED
1/7/2011	208B	PT6A114A	26012672	DRIVE GEAR

NOTICING HIGH FAILURE RATE BETWEEN SHAFT PN 2601267-2 AND GEAR PN 3100450-01.

WUMR2011001	CESSNA		ACTUATOR	FALSE ACTIVATION
10/28/2010	210L			MLG DOWNLOCK

DURING FLIGHT THE LT GEAR "DOWNLOCK ACTUATOR" FAILED WHILE THE GEAR WAS IN THE "UP" POSITION. THE DOWNLOCK HAS AN INTERNAL FAILURE WHICH ALLOWED IT TO COLLAPSE INTO THE "LOCKED" POSITION. THE NEXT TIME THE PILOT SELECTED "GEAR DOWN", THE LT GEAR WAS UNABLE TO FULLY EXTEND TO IT'S "DOWN" POSITION BECAUSE THE DOWNLOCK WAS BLOCKING THE PATH. THE SYS IS DESIGNED SO THAT THE DOWNLOCK IS NOT SUPPOSED TO "LOCK" UNTIL AFTER THE GEAR HAS REACHED IT'S FULL DOWNWARD TRAVEL. SINCE THE LOCK COLLAPSED INTO IT'S "LOCKED" POSITION BEFORE THE GEAR WAS DOWN, THIS CAUSED THE LT GEAR TO BE OUT OF SEQUENCE. THE RESULT WAS THAT THE PILOT FOLLOWED THE FLIGHT MANUAL PROCEDURE OF PUMPING THE GEAR FULLY UP AND THEN MAKING AN EMERGENCY GEAR UP LANDING.

CA100809007	CESSNA	CONT	HEATER	CORRODED
5/13/2010	310R	IO520MB	0800400238	FUEL LINE

PILOTS REPORT SMELL OF RAW FUEL ON DESCENT/APPROACH FROM HEATER. MX CHECKED VARIOUS TIMES BUT COULD NOT DUPLICATE. INSP REVEALED FUEL LINE RUNNING DOWN RT WALL AT CO-PILOT FEET AREA AND VENT SEEPING FUEL OUT OF AREA OF CORROSION ON LINE.

CA100805001	CESSNA	CONT	CRANKCASE	CRACKED
6/4/2010	337G	IO360C	6492863	ENGINE

DURING A ROUTINE INSP, DISCOVERED A 2.5" CRACK IN THE ENGINE CASE RUNNING FWD FROM NR 5 C4L BASE TO THE FRONT BEARING AREA. THE CRANK WAS ALLOWING ENGINE OIL SEEPAGE AT THE CRACK AREA. THE ENGINE WAS REMOVED FROM SERVICE AND SENT TO O/H.

CA100608014	CESSNA	CONT	DRIVE GEAR	WORN
6/1/2010	337H	IO360GB	630525	MAGNETO DRV GEAR

ON INSP OF OIL SCREEN METAL WAS FOUND AND INSP WAS CARRIED OUT AND FOUND THAT THE MAGNETO DRIVE GEAR WAS MISSING SEVERAL TEETH AND THE REST OF THE TEETH WHERE WORN DOWN TO ALMOST A KNIFE EDGE. IT IS ALMOST LIKE THE GEAR WAS NOT HARDENED PROPERLY.

2011FA0000050	CESSNA	CONT	BEARING	FAILED

12/17/2010	414A	TSIO520NB		TURBOCHARGER

(VA1R) TURBOCHARGER FAILED IN FLIGHT. BEARING FAILURE DUE ASSY ISSUE.

2011FA0000069	CESSNA	WILINT	GYRO	MALFUNCTIONED
1/14/2011	525	FJ44	KG102A060001501	NOSE AVIONICS SH

DRIVES COMPASS CARD +10 DEGREES. FOUND ON INITIAL POWER UP AFTER INSTALLATION OF REPLACEMENT.

2011FA0000070	CESSNA	WILINT	GYRO	MALFUNCTIONED
1/14/2011	525	FJ44	KB102A060001501	

DRIVES COMPASS CARD +15 DEGREES. FOUND ON INITIAL POWER UP AFTER INSTALLATION/ REPLACEMENT.

2011FA0000071	CESSNA	WILINT	GYRO	MALFUNCTIONED
1/14/2011	525	FJ44	KB102A060001501	

DRIVES COMPASS CARD +70 DEGREES. FOUND ON INITIAL POWER UP AFTER INSTALLATION/ REPLACEMENT.

E81RJT229431	CESSNA		ELEMENT	SHORTED
1/31/2011	550			ENG ANTI ICE SYS

INVESTIGATED REPORTED ENGINE ANTI-ICE SYS FAIL INDICATION. FOUND (1) HEATING ELEMENT OPEN IN RT INBD WING L/E ANTI-ICE PANEL. ALSO NOTED FAULT IN RT WING L/E ANTI-ICE JUNCTION BOX CURRENT SENSOR CS10. FURTHER TROUBLESHOOTING REVEALED THE WIRING TERMINALS, ATTACHING HARDWARE, AND ADJACENT WIRING FOR THE RT INBD WING ANTI-ICE SEVERELY CORRODED AND DAMAGED AT THE AIRFRAME GROUND POINTS GND076 AND GT006. REQUIRED REPAIR/REPLACEMENT OF THE AIRFRAME GROUND POINTS AND WIRING, REPLACEMENT OF THE CS10 CURRENT SENSOR, AND REPLACEMENT OF THE RT INBD WING L/E PANEL. DUE TO FINDINGS INSPECTED THE LT WING INBD ANTI-ICE WIRING AIRFRAME GROUND CONNECTIONS GND75 AND GND79 AND FOUND CORRODED ALSO, TO A LESSER EXTENT. REPLACED THE WIRING TERMINALS AND ATTACHING HARDWARE AS REQUIRED AT GND75 AND GND79 LT WING L/E ANTI-ICE WIRING GROUNDING CONNECTIONS. INTEGRATED ENGINE ANTI-ICE/INBD WING ANTI-ICE SYS CHECKS SATISFACTORY FOLLOWING REPAIRS. THE PHASE 5 3-YEAR/1200 HR. INSP GUIDE ITEM A531003 REQUIRES A GENERAL INSP OF TAILCONE WIRING IAW THE MM TASK CODE 53-20-04-210. THE AREAS INVOLVED ARE NOT EASILY ACCESSIBLE FOR INSPECTIONS OR REPAIRS. RECOMMEND MFG INVESTIGATE IF AN ISOLATED OCCURRENCE OR WHETHER AN ADDITIONAL SPECIFIC INSP GUIDE ITEM FOR THE INBD L/E ANTI-ICE WIRING NEEDS TO BE ADDED TO THE PHASE 5 INSP GUIDE OR INSPECTED MORE FREQUENTLY.

2011FA0000073	CESSNA	PWA	LAMP	FAILED
2/8/2011	560CESSNA	JT15D5	1986	EXTERIOR LIGHT

RT RECOGNITION LAMP DISCOVERED FAILED DURING POST FLIGHT INSP. REPLACED LAMP AND DISCOVERED FAILED LAMP WAS DEFECTIVE. LAMP SOLDER JOINT FAILURE AT MOUNTING FLANGE. CAUSED FAILURE OF LAMP ASSY, ARCING, OVERHEATING, AND DISPLACEMENT OF LAMP CORE. FAILURE APPEARS TO BE CAUSED BY LACK OF POTTING COMPOUND, "SOLDER". INSP OF REPLACEMENT PART AND STOCK REVEALED SIMILAR QUALITIES. RECOMMEND INSP OF CTR LEAD FOR COMPLETE INSULATION COVERING TO PREVENT COMPLETE CIRCUIT FAILURE, ELECTRICAL FIRE, OR EXPLOSION IF FUEL VAPORS ARE PRESENT.

CNQ82011001	CESSNA		ACTUATOR	FROZEN
12/26/2010	560XL		66601611113	TRIM SYSTEM

PILOT REPORTS ON CLIMB OUT ABOUT 41K FT RECEIVED A TRIM MISCOMPARE. ELECTRIC AND MANUAL TRIM INOP. ON DESCENT AT ABOUT 20K FT TRIM BEGAN TO WORK AGAIN.

2011FA0000008	CESSNA		DISPLAY	FAILED
1/4/2011	560XL		702346005001	COCKPIT

MFD (DU1080) INOP: REMOVED CTR MDF DISPLAY (DU1080) AND INSTALLED SERVICEABLE REPAIRED DU1080 DISPLAY IN MFD POSTION; (UNIT REPAIRED AND RETURNED TO SERVICE). WORK PERFORMED IAW AMM 34-26-00. MX PRACTICES PARA 10. THIS ACTION TERMINATES RESTRICTION OF MMEL ITEM 34-12.

2011FA0000009	CESSNA	PWC	ISOLATION VALVE	SLUGGISH

1/4/2011	560XL	PW545B	4222	THRUST REVERSER

CREW NOTED THAT AFTER LANDING THE LT THRUST REVERSER SEEMED SLOW TO DEPLOY: REMOVED ISOLATION VALVE DUE TO LT T/R SLOW TO DEPLOY. REMOVED THRUST REVERSER LOCKOUT PINS AND ENABLED THE THRUST REVERSER SYS. THRUST REVERSER SYS OPS CHECK AND LEAK CHECK GOOD IAW MM 78-31-00.

2011FA0000007	CESSNA	PWC	DISPLAY	FAILED
1/4/2011	560XL	PW545B		COCKPIT

WHILE IN CRUISE, CO-PILOTS PFD WENT BLANK. CREW REVERTED DISPLAY TO MFD (CTR) SCREEN AND CONTINUED TO DESTINATION WITHOUT INNCIDENT. REMOVED CTR MDF DISPLAY (DU1080) AND INSTALLED IN NR 2 (COPILOTS) PFD POSITION. REMOVED NR 2 (CO-PILOTS) PFD DISPLAY (DU1080) UNIT FAILED ENROUTE) AND INSTALLED IN MFD POSTION. WORK PERFORMED IAW AMM 34-26-00 MX PRACTICES PARA 10. MMEL 34-12 CTR DISPLAY INOPERATIVE-CAT C ITEM: RELIEF EXPIRES 01/07/2011.

2011FA0000090	CESSNA		CONNECTOR	DAMAGED
1/11/2011	680CE			FUEL SYSTEM

WHILE PERFORMING THE 2B INTERNAL WING INSP, FOUND THAT THE LT AND RT ELECTRICAL CONNECTOR BLANKING PINS WERE FALLING OUT BECOMING FOD IN THE CTR FUEL TANK. CONNECOTRS ARE LOCATED IN FUEL ACCESS PANELS 175AB AND 176AB, ON THE FWD WALL.

2011FA0000089	CESSNA	PWC	CONNECTOR	DAMAGED
1/11/2011	680CE	PW306C		FUEL PANELS

WHILE PERFORMING THE 2B INTERNAL WING INSP, FOUND THAT THE LT & RT ELECTRICAL CONNECTOR BLANKING PINS WERE FALLING OUT, BECOMING FOD IN THE CTR FUEL TANK. CONNECTORS ARE LOCATED IN THE FUEL BAYS OF PANEL 175AB AND 176AB, ON THE FWD WALL.

CWQR201104	CESSNA	CESSNA	ATTACH BRACKET	CRACKED
1/31/2011	750			ENGINE INLET

MANIFOLD ATTACH BRACKETS (3 OF 5) WERE FOUND CRACKED DURING THE DISASSEMBLY OF ENGINE INLET ASSY FOR OTHER CRACKS THAT WERE FOUND DURING A SCHEDULED INSP.

CA100525017	CESSNA	LYC	TRANSPONDER	ODOR
5/22/2010	R182	O540J3C5	414200026	

WHILE IN FLIGHT THE PILOT SAW SOME SMOKE COMING OUT FROM UNDER THE DASH NEARBY THE TRANSPONDER. THE PILOT RETURN TO THE BASE WITHOUT ANY PROBLEM. AFTER INVESTIGATION THE TRANSPONDER WAS SMELLING LIKE SMOKE, LIKE SOMETHING THAT BURNED INSIDE. SERVICEABLE TRANSPONDER INSTALLED ACFT RETURN TO SERVICE.

CA100723008	CESSNA	LYC	KELLY	DRIVE GEAR	WORN
7/21/2010	R182	O540J3C5	MHB6016		STARTER

A WHISTLING NOISE WAS NOTED BY GROUND PERSONNEL DURING TAXI. AFTER SHUTDOWN, A VISUAL CHECK REVEALED THAT THE STARTER DRIVE HAD NOT FULLY RETRACTED AND THE DRIVE GEAR`S TEETH HAD BEEN WORN BY THE ENGINE RING GEAR. DISASSEMBLY OF THE STARTER FOUND GREASE ON DRIVE ASSY SPIRAL SPLINES, AND THIS GREASE HAD BECOME SLUDGE AND MADE DRIVE RELUCTANT TO RETRACT AND LATCH INTO THE RETRACTED POSITION. MFG OF THE STARTER SPECIFIES THAT OIL AND GREASE NOT BE USED ON THESE DRIVES, ONLY DRY SILICONE SPRAY LUBE IS PERMITTED DUE TO THE TENDENCY OF WET LUBRICANTS TO ATTRACT DUST AND FORM SLUDGE.

VIBR20110119001	CESSNA		STRINGER	CORRODED
11/19/2010	S550		6511015194	ZONE 100

DURING A MODIFICATION TO THE ACFT, THE INTERIOR AND FLOOR WAS REMOVED AND UPON INSP, STRINGER WAS FOUND CORRODED FROM FS 206.0 TO FS 287.0, RBL 7.60 STRINGER AND STRINGER SPLICES WERE REPLACED WITH NEW PARTS.

CA100805004	CESSNA	LYC	ANTENNA	FAILED

5/31/2010	T182T	TIO540AK1A	CI2580200	GPS

WAAS/GPS/COMM COMBINATION ANTENNA NO LONGER ABLE TO RECEIVE GPS SATELLITE INFORMATION. COMM FUNCTIONALITY UNAFFECTED.

CA100812017	CESSNA	LYC	SEAL	LEAKING
8/12/2010	T206H	TIO540AJ1A		FUEL PUMP

FOUND FUEL PUMP DRIVE SEAL LEAKING. THE FUEL PUMP DRIVE CAVITY DRAIN LINE IS ROUTED ABOVE THE HEIGHT OF THE FUEL PUMP PREVENTING LEAKING FUEL FROM DRAINING FROM THE CAVITY AND FLOODING THE PUMP MOTOR.

CA100920001	CESSNA	LYC	SHROUD	CHAFED
9/19/2010	T206H	TIO540AJ1A	12550841	CYLINDER

WHILE CONDUCTING A PHASE 2 INSP, EXCESSIVE EXHAUST DUCT WAS NOTED AROUND THE NR 2 CYLINDER EXHAUST ATTACH STUDS. 2 STUDS WERE PULLED LOOSE FROM THE CYLINDER. EXHAUST GASES WERE LEAKING INTO THE UNDER COWL AREA WITH BURN MARKS ON THE CYL COOLING FINS. THE CYLINDER WAS REMOVED AND 2 NEW STUDS WERE INSTALLED. SB 10-21-01 ADDRESSES THIS ISSUE WITH A NEW STYLE OF FRESH AIR INLET INTO THE EXHAUST HEATER. THE CYL NR 2 WAS REINSTALLED AND THE KIT REFERRED TO IN THE SB HAS BEEN ORDERED.

CA100913011	CESSNA		AIR BOX	CRACKED
9/13/2010	U206F		U20603117	ENGINE

INDUCTION AIR BOX SENT IN FOR REPAIR. AD 85-10-02 APPLIES TO THIS UNIT. UNIT HAS .040" THICK SKIN AS OUTLINED IN AD AND IS STILL CRACKED WITH LARGE PIECES MISSING. UNIT WILL BE REPAIRED IAW AC 43.13-1A AND AC43.13-2A USING MATERIAL .050" THICK. AD 85-10-02 INDICATES TERMINATING ACTON OF THE AD AS MODIFICATION IAW PARA B. HOWEVER SEVERAL AIRBOXES HAVE BEEN SENT IN WITH 2 PRIOR CONFORMING REPAIRS AND CONTINUED CRACKING.

CA100616005	CESSNA	CONT	CASE HALF	LOOSE
6/14/2010	U206G	IO520F	DOFF10300BR	ALTERNATOR

DURING A 50 HR INSP, THE ALTERNATOR CASE HALVES WERE FOUND LOOSE. THE THROUGH BOLT LOCKWIRE WAS STILL INTACT. ALTERNATOR TT SINCE O/H WAS 99.7 HRS. THE ALTERNATOR WAS REMOVED AND INSPECTED. NO FURTHER DEFECTS WERE FOUND. THROUGH BOLTS WERE RETIGHTENED AND SAFETIED. THEN THE ALTERNATOR WAS REINSTALLED.

CA100507003	CIRRUS	CONT	SEAL	LEAKING
4/10/2010	SR22	IO550N	4663040003	TURBO CHARGER

SEAL ON RT TURBO LEAKING OIL INTO HEAT MUFF, CAUSING SMOKE IN COCKPIT.

CA100730003	CIRRUS	CONT	MOUNT	MALFUNCTIONED
7/29/2010	SR22	IO550N	011923461T30	A/P COMPUTER

LOSS OF GLIDESLOPE FUNCTION ON S-TEC 55X. ACFT HAS BEEN TO 2 DIFFERENT AMO`S THAT CONCLUDED THAT THE AUTOPILOT COMPUTER WAS AT FAULT. THE UNIT WAS SENT AWAY TWICE AND TESTED BY THE MFG WITH NOT FAULTS FOUND. IT WAS FOUND THAT TRACKING OF THE AUTOPILOT COMPUTER WAS THE FAULT. ONCE THE UNIT IS RESEATED WITH SUBSTANTIAL FORCE IT BECOMES FULLY OPERATIONAL. THIS COULD BE QUITE PROBLEMATIC BECAUSE IF THE A/P IS REMOVED FOR ACCESS FOR ANOTHER MX ACTIVITY OR IT IS MOVED BECAUSE OF ANOTHER RADIO REMOVAL, IT COULD CAUSE THE A/P NOT TO FUNCTION WHEN NEEDED IN IMC CONDITIONS. THERE IS NO FAILURE INDICATION ON THE A/P SELF TEST START UP AND UNLESS THE A/P IS FULLY FUNCTION TESTED THE AUTOPILOT WILL START AND APPEAR TO BE WORKING NORMALLY. THE PROBLEM WITH THE TRAY RACKING IS A KNOWN PROBLEM.

2011FA0000097	CIRRUS	CONT	SEAL	FAILED
1/19/2011	SR22	IO550N	CR8017	ENGINE

THE ENGINE SEAL THAT SEALS ENGINE OIL OUT OF ALTERNATOR NR2 FAILED. THE RESULT WAS ENGINE OIL PASSING INTO THE ALTERNATOR AND DOWN THE BELLY OF THE ACFT. THE REMEDY IS TO REPLACE THE SEAL

AND REBUILD THE ALTERNATOR.

2011FA0000098	CIRRUS	CONT	SENSOR	INACCURATE
1/19/2011	SR22	IO550N	12635001	MANIFOLD PRESS

THE MANIFOLD PRESSURE SENSOR WOULD GIVE ERRONEOUS READINGS IN FLIGHT, BUT ON THE GROUND WOULD BE ACCURATE. THE REMEDY IS TO REPLACE THE SENSOR.

2011FA0000099	CIRRUS	CONT	GEAR	FRACTURED
1/19/2011	SR22	IO550N	656991	CRANKSHAFT

WHILE THE ACFT WAS IN FOR MX, WHILE ATTEMPTING TO START THE ENGINE, A METAL GRINDING NOISE WAS HEARD BY THE MECHANIC. SUBSEQUENT REMOVAL OF THE STARTER ADAPTER REVEALED AT LEAST 2 TEETH MISSING ON THE CRANKSHAFT GEAR AND MARRED TEETH ON THE ADAPTER. THIS CONSTITUTES AND INTERNAL ENGINE FAILURE. THE THEORY IS THAT THE STARTER INDUCED A STRESS FATIGUE FRACTURE ON THE CRANKSHAFT GEAR.

2011FA0000095	CIRRUS	CONT	CHECK VALVE	FAILED
1/19/2011	SR22	IO550N	FS167	OIL SYSTEM

OIL FOUND IN INTAKE MANIFOLD. REMEDY WAS TO REPLACE TURBO INLET CHECK VALVE.

2011FA0000096	CIRRUS	CONT	CONTROLLER	FAILED
1/19/2011	SR22	IO550N	6533538A1E	ENGINE THROTTLE

UNABLE TO SET ENGINE IDLE AND MIXTURE SETUP. REMEDY WAS TO REPLACE THROTTLE CONTROLLER.

2011FA0000091	CIRRUS	CONT	EXHAUST DUCT	CRACKED
1/19/2011	SR22	IO550N	ETISR221001	ENGINE

THE RT EXHAUST SYS DEVELOPED GUSSET CRACKS AROUND 250 HRS TT. THE MFG SAID THE CRACKS WERE "NON SAFETY CONCERNS" AND DID NOT ADDRESS THEM AT THE TIME. AT 432 HRS TT THE EXHAUST CRACKED IN 2 DIFFERENT WELD JOINTS ON THE COLLECTORS LEADING FROM 2 CYLINDERS. REMEDY WAS TO REPLACE THE RT EXHAUST SYS. OLD PN ETI-SR22-100-1, NEW PN 22-6180002.

2011FA0000092	CIRRUS	CONT	SUPPORT BRACKET	CHAFED
1/19/2011	SR22	IO550N	ETI621031	ENGINE

THE VERTICAL SUPPORT ROD SUPPORTING THE TURBOS WAS BEING CHAFED BY THE SUPPORT BRACKET. THE SUPPORT BRACKET CHANGED PN OLD: ETI-62-103-1, NEW: 22-625-0006 AND 22-625-0005. THE VERTICAL SUPPORT ROD DID NOT CHANGE PN, HOWEVER BOTH LT AND RT RODS WERE REPLACED AS WITH THE BRACKETS.

2011FA0000093	CIRRUS	CONT	MODULE	FAILED
1/19/2011	SR22	IO550N	100N21281	OXYGEN SYS

THE OXYGEN SYS WOULD NOT TURN ON IN FLIGHT BUT WORKED ON THE GROUND. REMEDY WAS TO REPLACE THE SWITCH, WIRE HARNESS, AND LOGIC MODULE.

2011FA0000094	CIRRUS	CONT	ADAPTER	FAILED
1/19/2011	SR22	IO550N	6420831A2	STARTER

STARTER ADAPTER WAS SLIPPING. AS A RESULT THE ENGINE WOULD BARELY TURN OVER WHEN STARTING. THE REMEDY WAS TO REPLACE THE STARTER AND STARTER ADAPTER. THESE STARTERS HAVE A LONG HISTORY OF TEARING UP STARTER ADAPTERS. THESE STARTERS WILL NOT RELEASE THE ADAPTER ONCE THE ENGINE FIRES (CAUSING THE ADAPTER SPRING TO FAIL, HENCE BARELY TURNING ENGINE OVER) NOR WILL THEY ALLOW FOR THE ENGINE TO TURN BACKWARDS WHEN STARTING. BY NOT ALLOWING THE ENGINE TO TURN BACKWARDS, STRESSES ARE IMPOSED ON THE CRANKSHAFT GEAR, STARTER ADAPTER, AND STARTER. USUALLY THE ADAPTER WILL FAIL. ACFT ARE MORE PRONE TO FAILURES IN THE STARTER/ADAPTER/CRANKSHAFT GEAR DUE TO THE USE OF COMPOSITE PROPELLER USED. THE COMPOSITE PROP DOES NOT HAVE THE ROTATION INERTIA TO CARRY THE ENGINE THROUGH A STARTING ROTATION WITHOUT THE ENGINE TURNING BACKWARDS WHILE STARTING.

FCPR20110003	CIRRUS	CONT	PRESSURE SENSOR	FAILED
2/3/2011	SR22	TSIO550A	12635002	ENGINE OIL

LOW OIL PRESSURE WARNING IN FLIGHT. READ ZERO. OIL PRESSURE SENSOR FOUND INOPERATIVE.

V0XR413Y020811001	CNDAIR	GE	FLOORBEAM	CORRODED
2/8/2011	CL6002C10	CF348C5B1		ZONE 100

STA 280 FLOORBEAM CORRODED. ACCOMPLISHED REPLACEMENT OF FLOORBEAM AT FS 280.00 IAW REO 670-53-11-351-A.

V0XR413Y020811002	CNDAIR	GE	FLOORBEAM	CORRODED
2/8/2011	CL6002C10	CF348C5B1		ZONE 100

FLOOR SUPPORT 280 LBL 9 TO RBL 9 IS CORRODED. R & R FLOOR CHANNEL SUPPORT FS 280.00 LBL 9 TO RBL 9 IAW SRM 53-11-10/ 51-42-06.

V0XR413Y020811003	CNDAIR	GE	ANGLE	CORRODED
2/8/2011	CL6002C10	CF348C5B1		ZONE 200

PASSENGER DOOR THRESHOLD KICK ANGLE CORRODED. R & R NEW PAX DOOR THRESHOLD KICK PLATE IAW SRM 51-25-01, 51-42-06, 51-42-21, 51-23-00, 51-24-38, 51-45-00.

V0XR413Y020811004	CNDAIR	GE	CAP	CORRODED
2/8/2011	CL6002C10	CF348C5B1		PAX DOOR

PASSENGER DOOR MID CAP IS CORRODED. REMOVED AND INSTALLED NEW PAX DOOR MID CAP, FABRICATED SAME, TRANSFERRED HOLES FROM OLD TO NEW PART. HOLES GOT TO BE DRILLED TO MATCH OLD PART.

V0XR413Y020811005	CNDAIR	GE	SILL	CORRODED
2/8/2011	CL6002C10	CF348C5B1		ZONE 100

RT SILL FS 280 CORRODED. R & R SILL FS 280-319.17 RT IAW REO 670-53-21-642, SRM 51-42-06.

V0XR413Y020811006	CNDAIR	GE	ATTACH ANGLE	CORRODED
2/8/2011	CL6002C10	CF348C5B1		ZONE 100

SERVICE DOOR LOWER THRESHOLD ATTACH ANGLE CORRODED. SERVICE DOOR LOWER THRESHOLD REMOVED CORRODED ANGLE AND REPLACED WITH SERVICEABLE NEW ANGLE.

V0XR413Y020811007	CNDAIR	GE	SILL	CORRODED
2/8/2011	CL6002C10	CF348C5B1		ZONE 200

AFT CARGO PIT DOOR THRESHOLD LWR SILL CORRODED. R & R SILL IAW SRM 51-25-04, SRM 51-21-16, SRM 51-23-00, SRM 51-42-10, SRM 51-42-06.

V0XR413Y020811008	CNDAIR	GE	BULKHEAD	CORRODED
2/8/2011	CL6002C10	CF348C5B1		BS 280

STA 280 RT LWR BULKHEAD PANEL CORRODED. R & R RT LWR BULKHEAD IAW SRM 53-11-10/ REO 670-53-11-052.

V0XR413Y020811009	CNDAIR	GE	BULKHEAD	CORRODED
2/8/2011	CL6002C10	CF348C5B1		ZONE 200

STA 280, LT LWR BULKHEAD PANEL CORRODED. R & R LT LWR BULKHEAD PANEL IAW SRM 53-11-10/ REO 670-53-11-052.

2011FA0000043	COLUMB	CONT	ADAPTER	MALFUNCTIONED
1/26/2011	LC42550FG350	IO550N	R6420871A5	STARTER

STARTER ADAPTER FAILURE. THIS IS THE SECOND ON THIS ACFT. ACFT PREVIOUSLY HAD A ACFT MFG SUPPLIED

STARTER, AFTER THIS STARTER ADAPTER FAILURE, REPLACED WITH M-DRIVE STARTER.

MV1R336K11024	CVAC	ALLSN	CIRCUIT BREAKER	FAILED
1/24/2011	440	501D13D	D6760135	HYD SYSTEM

ON START UP, THE FLIGHT CREW APPLIED AC POWER TO ACFT AND TURNED AC HYD PUMP SWITCH ON. A SMALL FLASH, THEN SMOKE EMITTED AT THE CIRCUIT BREAKER. THE FORWARD FACE DISINTEGRATED INTO FRAGMENTS.

CA101008005	DHAV		FITTING	CRACKED
5/8/2009	DHC2MK3		VALTBS12441	MLG

MFG NOTIFIED BY OPERATOR, THE FITTING WAS CRACKED. CURRENTLY REVIEWING THE DESIGN.

CA100914007	DHAV	PWA	VOLT REGULATOR	FAILED
9/2/2010	DHC2MKI	R985AN14B	J12M24SP	

O/H VOLTAGE REGULATOR INSTALLED FOR ACFT TESTING. VOLTAGE REGULATOR OVERCHARGING, FAULT = NO RESISTANCE AT FIELD CONNECTION. UNIT RETURNED TO SUPPLIER FOR INSP AND REPLACEMENT.

CA100817020	DHAV	PWA	SHOCK ABSORBER	CORRODED
7/30/2010	DHC2MKI	R985AN14B	C2UF1015A	MLG

DURING AN INSP THE AME FOUND FWD PLATEN (C2UF1219) CORROSION CRACKED, COMPLETED SHOCK ASSY, REPLACED.

CA100525019	DHAV	PWA	DOUBLER	CRACKED
5/22/2010	DHC2MKI	R985AN14B	C2TE9ND	ELEVATOR RIB

DURING ROUTINE MX WITH THE ELEVATOR OFF, A CRACK WAS NOTED ON THE BUTT RIB DOUBLER PN C2-TE-9ND. CF80-25 REQUIRES A INSP OF THE AREA EVERY 400 HOURS, THE CRACK WAS NOTICED WITH 278.2 HOURS SINCE THE LAST INSP.

CA100525020	DHAV	PWA	CYLINDER HEAD	CRACKED
5/22/2010	DHC2MKI	R985AN14B	399353CA1	ENGINE

ACFT WAS BROUGHT IN FOR INSP WITH NO DEFECTS NOTED BY PILOT. INVESTIGATION OF A LOW CYLINDER COMPRESSION DURING THE DIFFERENTIAL COMPRESSSION INSP, REVEALED A CRACK THAT STARTED AT THE FWD SPARK PLUG HOLE AND ENDED AT THE EXHAUST VALVE SEAT. THE CYLINDER ASSY WAS PREVIOUSLY OVERHAULED, O/H FACILITY HAS TRADITIONALLY PUT OUT A GOOD O/H CYLINDER, THIS IS THE FIRST CRACK THAT THIS AIRLINES HAS HAD IN MANY YEARS OF OPERATING THESE CYLINDER ASSEMBLIES.

CA100629002	DHAV	PWA	BEARING	FAILED
6/25/2010	DHC2MKI	R985AN14B	21401100	MAIN WHEEL

UPON DISSASSEMBLY, THE RT INBD BEARING WAS FOUND TO HAVE COMPLETELY FAILED. THE BEARING TIMES ARE UNKNOWN BUT ARE MOST LIKELY LESS THAN 500 HOURS. THE BEARING WAS FOUND TO BE WELL LUBRICATED BUT SUFFERED SOME SORT OF STRUCTURAL FAILURE. THE CAGE AND ROLLERS WERE SIGNIFICANTLY DAMAGED. IT SHOULD BE NOTED THAT THIS IS A NEW STYLE WHEEL FOR USE WITH AMPHIBIOUS FLOATS AS LISTED IN THE MFG IPC. HOWEVER THE NEW BRG ASSY IS APPROX 40 PERCENT THINNER (THE DIAMETER REMAINS THE SAME) AND THE REDUCED SURFACE AREA MAY HAVE CONTRIBUTED TO THE PREMATURE FAILURE.

CA100726013	DIAMON	ROTAX	LEG ASSY	FAILED
7/21/2010	DA20A1	ROTAX912F3	2032200201	NLG

AFTER START-UP ON THE GRASS APRON, THE ACFT NLG FAILED AT THE AXLE WHILE TAXIING, 1 BLADE OF PROPELLER STRUCK GROUND AND TIP SEPARATED.

CA100907006	DIAMON	ROTAX	BOLT	MISSING
6/11/2010	DA20A1	ROTAX912F3	2057000120	RT WING SPAR

DURING ANNUAL INSP, DISCOVERED EXCESSIVE FORE AND AFT PLAY IN RT WING, PN 22-5708-00-00WIP. MX RECORD REVIEW INDICATED THAT THE RT WING WAS REPLACED ON 4/25/09. REMOVED WING TO INSPECT. DISCOVERED SPAR, MAIN BOLT, BUSHING, PN 20-5700-01-20 WAS NOT INSTALLED WITH NEW WING. ACFT FLEW FROM 4/25/09 TO 6/11/10 FOR A TOTAL OF 308.4 FLIGHT HRS WITH SPAR, MAIN BOLT, BUSHING MISSING AND IS CONSIDERED TO BE A FLIGHT SAFETY CRITICAL ISSUE. REVIEW OF MM INSTALLATION PROCEDURES DID NOT INCLUDED ADDITIONAL INSTRUCTION FOR INSTALLING THE SPAR, MAIN BOLT, BUSHING WHEN INSTALLING A NEW WING. SUSPECT THAT MM INSTRUCTIONS FOR REMOVAL AND REPLACEMENT OF THE WING WERE WRITTEN FOR REMOVAL AND REPLACEMENT OF AN EXISTING WING ONLY. RECOMMENDED THAT THE SPECIAL INSTRUCTIONS FOR INSTALLING A BUSHING FOR THE SPAR, MAIN BOLT WITH A NEW WING BE INCLUDED IN THE MM.

CA100817009	DIAMON	CONT	SUPPORT BRACKET	CRACKED
8/13/2010	DA20C1	IO240B	2055450500	RUDDER

RUDDER TOWER SUPPORT BRACKET FOUND CRACKED DURING 100 HR-INSPECTION, REMOVED, REPLACED NEW.

CA100817003	DIAMON	CONT	SUPPORT BRACKET	CRACKED
8/13/2010	DA20C1	IO240B	2055450500	RUDDER

RUDDER SUPPORT BRACKET FOUND CRACKED ON LOWER LT SIDE DURING 100-HR INSP, BRACKET REMOVED, NEW INSTALLED.

CA100727003	DIAMON	CONT	SUPPORT BRACKET	CRACKED
7/9/2010	DA20C1	IO240B	2055450500	RUDDER MOUNT

(CAN) DURING 200 HR INSP, THE RUDDER SUPPORT BRACKET WAS FOUND CRACKED ON BOTTUM, LT CORNER, BRACKET REPLACED. TYPE 3 BRACKET.

CA100727004	DIAMON	CONT	SUPPORT BRACKET	CRACKED
7/9/2010	DA20C1	IO240B	2055450500	RUDDER MOUNT

(CAN) DURING 100 HR INSP THE RUDDER SUPPORT BRACKET WAS FOUND CRACKED ON LOWER LT CORNER, BRACKET REPLACED.

CA100528013	DIAMON	CONT	THRU BOLT	LOOSE
5/28/2010	DA20C1	IO240B	203220080	NLG

PILOT REPORTED EXCESSIVE NOSE WHEEL VIBRATION ON LANDING AND SUBSEQUENTLY ACFT PULLED TO THE LT. INVESTIGATION FOUND NOSE TIRE WORN AND WITH FLAT SPOTS AND AXLE THROUGH BOLT SLIGHTLY LOOSE DUE TO NUT NOT FULLY TIGHT. NOSE WHEEL ASSY LAST REPLACED, 660 HOURS PREVIOUS.

CA100609004	DIAMON	CONT	WINDSHIELD	DEBONDED
6/2/2010	DA20C1	IO240B	2056111501	COCKPIT

DURING 100-HOUR INSP, THE WINDSHIELD WAS FOUND TO BE POORLY BONDED & ONLY ATTACHED IN LOWER-LT CORNER & UPPER RT REAR. BONDING AGENT WAS PRESENT ON THE FRAME BUT DID NOT APPEAR TO BE ON THE GLASS (PLASTIC). WINDSHIELD WAS PREPPED AND RE-BONDED.

CA100621004	DIAMON	CONT	FRAME	CRACKED
6/4/2010	DA20C1	IO240B	2231116300	FUSELAGE

DURING ROUTINE CABLE REPLACMENT THE FRAME HOLDING THE THROTTLE WAS FOUND CRACKED. MFG HAS BEEN MADE AWARE AND THE PART WAS REPLACED.

2011FA0000059	DIAMON	LYC	PUMP	FAILED
1/31/2011	DA40	IO360M1A	5100009	FUEL SYSTEM

ELECTRIC FUEL PUMP FAILED DURING STARTUP. R & R FUEL PUMP. LIFE OF THE PUMP WAS 523 HOURS, HOWEVER SINCE THE PUMP IS ONLY USED ON TAKEOFF AND LANDING, THE PUMP FAILED AFTER LESS THAN 25 HOURS OF TOTAL USE.

CA100819002	DIAMON		FUEL TANK	CRACKED
8/19/2010	DA42		D6028141200	

(CAN) FUEL WAS FOUND TO BE LEAKING FROM THE RT AUX FUEL TANK ONTO HANGAR FLOOR. A CRACK APPROX 1 INCH LONG WAS FOUND ON LOWER SKIN ADJACENT TO ONE OF SEVERAL BUTTON WELDS BY A RIB. CONVERTED TO AUSTRO-ENGINE POWERED ACFT.

2011FA0000012	DIAMON		FUEL TANK	CRACKED
1/5/2011	DA42		D6028281411020	LEFT

LT AUX FUEL TANK LEAKS AT MULTIPLE SPOT WELDS. THIS IS THE FOURTH CRACKED AND LEAKING AUX TANK (LT OR RT) WE HAVE CHANGED IN OUR FLEET.

CA100712006	DIAMON	DIAMON	MOTOR	FAILED
7/9/2010	DA42	D6027331200	IMD32430A50	ARMITURE

STICK LIMITER REPLACED DUE TO NOISY/INTERMITTENT OPERATION. UNIT WAS DISASSEMBLED AND MOTOR BRUSHES FOUND CONTAMINATED WITH GREASE. GREASE IS PASSING THROUGH SEAL FROM MECHANICAL SECTION OF LIMITER TO THE ELECTRICAL SIDE OF UNIT.

N3XR00007	DIAMON		RETAINING RING	MISSING
1/20/2011	DA42		DIN47110ZP	NLG ACTUATOR

DURING A ROUTINE ANNUAL INSPECTION, THE TECHNICIAN NOTICED THAT THE AFT NLG ACTUATOR ATTACH PIN(IPC P/N: D60-3223-00-33) HAD MIGRATED TO THE RIGHT, APPROXIMATELY 1/2 INCH THE RETAINING RING (IPC P/N: DIN471-10-ZP) HAD COME LOOSE AND FALLEN FROM THE ASSEMBLY, LEAVING THE PIN UNSECURED. THIS CLIP IS ITEM NR 030 FIGURE 32-30 HYDRAULIC ACTUATOR.

CA100715003	DIAMON	LYC	LIMITER	FAILED
7/15/2010	DA42	IO360M1A	IMD32430A50	ELEVATOR STOP

STICK LIMITER (VARIABLE ELEVATOR STOP) WAS NOISY DURING OPERATION. IN-FLIGHT THE CAS MESSAGE DISPLAYED AND STICK LIMITER FAILED. PART DISASSEMBLED AND GREASE MIGRATION OBSERVED IN ELECTRIC MOTOR. PART R & R.

CA100713001	DIAMON	LYC	FUEL TANK	CRACKED
7/9/2010	DA42	IO360M1A	D6028140100	

FUEL DRIPPING FROM CRACK IN TANK, R & R.

CA100628001	DIAMON	LYC	FUEL TANK	CRACKED
6/25/2010	DA42	IO360M1A	D6028141200	LOWER/AFT

FUEL TANK DEVELOPED A SMALL CRACK EMANATING FROM A SMALL WELD.

CA100708002	DIAMON	LYC	CONTROL CABLE	FRAYED
7/6/2010	DA42	IO360M1A	DSCA13190	RUDDER

AFT RUDDER CABLE PARTIALLY FRAYED WHERE IT EXITS TEFLON TUBE BY RUDDER TOWER, PARTS REPLACED.

CA100707003	DIAMON	THIELT	CONTROL CABLE	FRAYED
7/2/2010	DA42	TAE12502114	DSCA13190	RUDDER

RUDDER CONTROL CABLE WAS FOUND FRAYED WHERE IT EXITS TEFLON TUBE.

EE4Y20110032	DOUG		SKIN	DENTED
1/18/2011	DC982			ZONE 200

FUSELAGE SKIN DENTED FROM STA Y197.25 TO STA Y200, BTWN LONG 15R AND LONG 16R. DENTED SKIN WAS REPAIRED.

EE4Y20110005	DOUG		SUPPORT FITTING	CORRODED

1/10/2011	DC982	3936595515	ZONE 300

LOWER FUSELAGE AFT CARGO COMPARMENT YSTA 1250 BETWEEN LONGERON 27RT AND 27LT SUPPORT FITTING CORRODED.

EE4Y20110006	DOUG	SUPPORT	CORRODED
1/10/2011	DC982	595127315	ZONE 100

LOWER FUSELAGE FROM STA 1003 TO 1015 BETWEEN +X15 AND -X15 FILLET FAIRING, ANGLES AND SUPPORTS WITH CORROSION.

EE4Y20110034	DOUG	DOOR	DELAMINATED
1/24/2011	DC982	5919572512	LT WING

LT WING T/E BUTE DOOR P/N: 5919572-512 DELAMINATED. DELAMINATED BUTE DOOR WAS REPAIRED BY LOCAL DER.

EE4Y2011011	DOUG	SKIN	DENTED
1/11/2011	DC982		ZONE 200

REPORT UPPER SKIN WITH DENT AT STA Y52, +Z6, RT SIDE.

EE4Y20110012	DOUG	LONGERON	CORRODED
1/11/2011	DC982		ZONE 100

REPORT LONGERON 23L CORRODED BTWN STA Y1022 AND STA Y1041. CORRODED LONGERON WAS REPAIRED IAW SRM 53-02, FIG 18.

EE4Y20110013	DOUG	LONGERON	CORRODED
1/11/2011	DC982		ZONE 100

REPORT LONGERON 25L CORRODED BTWN STA Y1022 AND STA Y1041. CORRODED LONGERON WAS REPAIRED IAW SRM 53-02, FIG 18

EE4Y20110076	DOUG	DOUBLER	CORRODED
2/2/2011	DC982	5911412309	ZONE 100

REPORTED LOWER FUSELAGE MID CARGO COMPARMENT FROM Y STA 636 TO Y STA 655 BETWEEN LONG 29-30 LT INTERNAL DOUBLER WITH CORROSION.

EE4Y20110077	DOUG	DOUBLER	CORRODED
2/3/2011	DC982	591141255	ZONE 100

REPORTED LOWER FUSELAGE MID CARGO COMPARMENT FROM Y STA 598 TO Y STA 617 BETWEEN LONG 29-30 LT INTERNAL DOUBLER WITH CORROSION.

EE4Y20110080	DOUG	FRAME	CRACKED
2/3/2011	DC982	3920341504	ZONE 200

UPPER FUSELAGE, OVERWING FRAME WITH ANGLE CRACKED, AT STA 905 +X61 -Z6. REPLACED ANGLE.

EE4Y20110081	DOUG	FRAME	CRACKED
2/3/2011	DC982	3920341504	BS 845

UPPER FUSELAGE, OVERWING FRAME WITH ANGLE CRACKED, AT STA 845 -X -Z6. REPLACED ANGLE.

EE4Y20110104	DOUG	SKIN	CORRODED
2/10/2011	DC982		ZONE 500

DURING THE INSPECTION, WING CTR SECTION, FOUND THE UPPER SKIN BETWEEN XCW 42 AND XCW 58.688 AND BETWEEN STR 6 AND 9 LT SKIN CORRODED.

EE4Y20110101	DOUG	DOUBLER	CORRODED

2/9/2011	DC982		59360431	BS 651-659

REPORTED MID CARGO COMPARMENT AT Y STA 655, LOWER CUTOUT SKIN AREA, INTERNAL DOUBLER WITH CORROSION.

EE4Y20110102	DOUG		LONGERON	CORRODED
2/9/2011	DC982		59360531	ZONE 100

DURING THE INSP, FOUND THE LONGERON 30 CORRODED FROM 588 TO 664. REPAIRED WITH FAA DER.

EE4Y20110103	DOUG		LONGERON	CORRODED
2/9/2011	DC982		59360501	ZONE 100

DURING THE INSP, FOUND THE LONGERON 30 CORRODED FROM 1993 TO 1241.

EE4Y20110038	DOUG	PWA	SPAR	DAMAGED
1/20/2011	DC982	JT8D219	593571112	NACELLE

THE FRONT SPARS ENGINES 1 AND 2, ENGINE MOUNTING HOLES WITH LIGHT NOTCHES.

EE4Y20110100	DOUG		BEAM	CORRODED
2/9/2011	DC983		59360381	ZONE 100

REPORTED MID CARGO COMPARTMENT LOWER JAMB BEAM WITH CORROSION AT SEVERAL PLACES.

EE4Y1101034	DOUG		ACCESS PANEL	CORRODED
2/2/2011	DC983			ZONE 500

LT WING L/E SECTION , LOWER ACCESS PANEL NR 1144C UPPER SUFACE CORRODED. THE DAMAGE REQUIRED REPAIR APPROVAL.

2011FA0000019	DOUG		UNKNOWN	ODOR
1/10/2011	MD83			CABIN

FLIGHT 487, SEATS 36D AND 36E. SEATS ARE LOCATED NEXT TO THE ENGINE. THERE WAS A STRONG SMELL OF FUEL IN THE CABIN RESULTING IN A HEADACHE.

V0XR201102140005	EMB		GUSSET	CORRODED
2/14/2011	EMB145EP		14522460013	ZONE 100

CENTER GUSSET AT FR 18 - 23 IS CORRODED BEYOND LIMITS. R & R GUSSET.

V0XR201102210001	EMB		BEAM	CORRODED
2/21/2011	EMB145EP		14521713005	ZONE 100

RT HAT CHANNEL BEAM AT FR 18 - 25 IS CORRODED BEYOND LIMITS. R & R BEAM.

V0XR201102210002	EMB		FLOOR SUPPORT	DAMAGED
2/21/2011	EMB145EP		14520600003	ZONE 100

CARBON FIBER FLOOR SUPPORT AT FR 20 IS DAMAGED BEYOND LIMITS. R & R SUPPORT.

V0XR201102210003	EMB		FLOOR SUPPORT	DAMAGED
2/21/2011	EMB145EP		14532636401	ZONE 100

LEFT OMEGA BEAM AT FR 24 IS DAMAGED BEYOND LIMITS. R & R BEAM.

V0XR201102210004	EMB		ATTACH FITTING	CRACKED
2/21/2011	EMB145EP		14572167004	ZONE 100

RIGHT AFT WING-BODY ATTACHMENT CRACKED. R & R STRIP.

V0XR201102210005	EMB		BUSHING	CORRODED

2/21/2011	EMB145EP	PE64042H8016075	ATTACH FITTING
HORIZONTAL ACTUATOR ATTACHMENT HARDWARE IS CORRODED BEYOND LIMITS. R & R (4) BUSHINGS.			
V0XR201102210006	EMB	BUSHING	CORRODED
2/21/2011	EMB145EP	PE64042H8016036	ATTACH FITTING
HORIZONTAL ACTUATOR ATTACHMENT HARDWARE IS CORRODED BEYOND LIMITS. R & R (2) BUSHINGS.			
V0XR201102210007	EMB	SILL	CORRODED
2/21/2011	EMB145EP	14525422003	ZONE 100
RIGHT SILL AT FR 60-65 IS CORRODED BEYOND LIMITS. R & R SILL.			
V0XR201102220001	EMB	SEAT TRACK	CORRODED
2/22/2011	EMB145EP	14532606011	ZONE 100
SEAT TRACK A ROW NR1 CORRODED BEYOND LIMITS. R & R SEAT TRACK.			
V0XR201102220002	EMB	SEAT TRACK	CORRODED
2/22/2011	EMB145EP	14530658007	ZONE 100
SEAT TRACK C ROW NR4 CORRODED BEYOND LIMITS. R & R SEAT TRACK.			
V0XR201102220006	EMB	SEAT TRACK	CORRODED
2/22/2011	EMB145EP	14530659003	ZONE 100
SEAT TRACK B ROW NR 3 FR 30-35 IS CORRODED BEYOND LIMITS. R & R SEAT TRACK.			
V0XR201102220007	EMB	SEAT TRACK	CORRODED
2/22/2011	EMB145EP	14530659001	ZONE 100
SEAT TRACK B ROW NR2 FR 24-29 IS CORRODED BEYOND LIMITS. R & R SEAT TRACK.			
V0XR201102220008	EMB	SEAT TRACK	CORRODED
2/22/2011	EMB145EP	14530658001	ZONE 100
SEAT TRACK C ROW NR1 FR 24-30 IS CORRODED BEYOND LIMITS. R & R SEAT TRACK.			
V0XR201102220009	EMB	SEAT TRACK	CORRODED
2/22/2011	EMB145EP	14532606003	ZONE 100
SEAT TRACK A ROW NR3 FR 30-350 IS CORRODED BEYOND LIMITS. R & R SEAT TRACK.			
V0XR201102220010	EMB	SEAT TRACK	CORRODED
2/22/2011	EMB145EP	14532606011	ZONE 100
SEAT TRACK A ROW NR4 FR 36-45 IS CORRODED BEYOND LIMITS. R & R SEAT TRACK.			
V0XR201102220011	EMB	SEAT TRACK	CORRODED
2/22/2011	EMB145EP	14532606017	ZONE 100
SEAT TRACK A ROW NR5 FR 47-53 IS CORRODED BEYOND LIMITS. R & R SEAT TRACK.			
V0XR201102220012	EMB	ROLLER	CORRODED
2/22/2011	EMB145EP	14568306403	RT WING TE FLAP
FLAP ROLLERS AND PLUNGERS WORN BEYOND LIMITS. R & R (6) FLAP ROLLERS.			
V0XR201102140001	EMB	BULKHEAD	CRACKED
2/14/2011	EMB145EP		RT MLG WW
RT AFT WHEEL WELL BULKHEAD CRACKED. R & R RIB.			

V0XR201102140002	EMB	STRUCTURE	BROKEN
2/14/2011	EMB145EP	14571561405	WNG-BDY FAIRING

LEFT PAX EXHAUST DUCT ON BODY FAIRING BROKEN. R & R GRATE ASSY.

V0XR201102140003	EMB	SILL	CORRODED
2/14/2011	EMB145EP	14521725013	ZONE 100

RIGHT SILL FWD OF SERVICE DOOR AT FR 18-20 IS CORRODED BEYOND LIMITS. R & R SILL.

V0XR201102140004	EMB	PROFILE	CORRODED
2/14/2011	EMB145EP	14524196001	ZONE 100

LEFT PROFILE AT FR 22 LY-479.0 - OTBD LT SILL IS CORRODED BEYOND LIMITS. R & R PROFILE.

V0XR201102140006	EMB	STRUCTURE	CORRODED
2/14/2011	EMB145EP	2024T3	ZONE 100

SHAPE AT LY-479.0 FR 16 IS CORRODED BEYOND LIMITS. R & R SHAPE.

V0XR201102140007	EMB	PARTITION	CORRODED
2/14/2011	EMB145EP	14525991004	ZONE 100

RIGHT LOWER PARTITION IS CORRODED BEYOND LIMITS. R & R PARTITIAN.

V0XR201102060001	EMB	GUSSET	CORRODED
2/16/2011	EMB145EP	14530633005	ZONE 100

GUSSET AT LY 479.00 FR 29-35 IS CORRODED BEYOND LIMITS. R & R GUSSET.

V0XR201102060003	EMB	SILL	CORRODED
2/16/2011	EMB145EP	14520609007	ZONE 100

SILL AT RY 780.0 FR 29-35 IS CORRODED BEYOND LIMITS. R & R SILL.

V0XR201102060004	EMB	GUSSET	CORRODED
2/16/2011	EMB145EP	14530633003	ZONE 100

GUSSET AT Y0.0 FR 24-29 IS CORRODED BEYOND LIMITS. R & R GUSSET.

V0XR201102060005	EMB	SILL	CORRODED
2/16/2011	EMB145EP	14525422001	ZONE 100

LEFT SILL FR 60-65 IS CORRODED BEYOND LIMITS. R & R SILL.

V0XR201102060006	EMB	SILL	CORRODED
2/16/2011	EMB145EP	14529495003	ZONE 100

LEFT SILL FR 59-60 IS CORRODED BEYOND LIMITS. R & R SILL.

V0XR201102060007	EMB	SILL	CORRODED
2/16/2011	EMB145EP	14529495004	ZONE 100

RIGHT SILL FR 59-60 IS CORRODED BEYOND LIMITS. R & R SILL.

V0XR201102060008	EMB	SILL	CORRODED
2/16/2011	EMB145EP	14530635001	ZONE 100

LEFT SILL FR 53-59 IS CORRODED BEYOND LIMITS. R & R SILL.

V0XR201102060009	EMB	GUSSET	CORRODED
2/16/2011	EMB145EP	14530635003	ZONE 100

RIGHT GUSSET FR 53-59 IS CORRODED BEYOND LIMITS. R & R SILL.

V0XR201102060010	EMB	GUSSET	CORRODED
2/16/2011	EMB145EP	14522460015	ZONE 100

HORSESHOE SHAPED GUSSET FR 16-18 IS CORRODED BEYOND LIMITS. R & R GUSSET.

V0XR201102060011	EMB	PLATE	CORRODED
2/16/2011	EMB145EP	1451721009	ZONE 100

FWD DIGITAL PLATE FR 14-16 IS CORRODED BEYOND LIMITS. R & R DIGITAL PLATE.

V0XR201102060012	EMB	FLOOR SUPPORT	CORRODED
2/16/2011	EMB145EP		ZONE 100

OMEGA BEAM REPAIR AT LY 479.0 FR 20 IS CORRODED BEYOND LIMITS. R & R REPAIRED BEAM.

V0XR201102060013	EMB	FLOOR SUPPORT	CORRODED
2/16/2011	EMB145EP	14522459003	ZONE 100

FLOOR SUPPORT ANGLE AT Y0.0 FR 18-20 IS CORRODED BEYOND LIMITS. R & R ANGLE.

V0XR201102060014	EMB	SILL	CORRODED
2/16/2011	EMB145EP	14525800010	ZONE 100

RIGHT SILL FR 36-41 IS CORRODED BEYOND LIMITS. R & R SILL.

V0XR201102060015	EMB	GUSSET	CORRODED
2/16/2011	EMB145EP	14530634001	ZONE 100

LEFT GUSSET FR 36-41 IS CORRODED BEYOND LIMITS. R & R GUSSET.

V0XR201102060016	EMB	GUSSET	CORRODED
2/16/2011	EMB145EP	14530634009	ZONE 100

LEFT GUSSET FR 46-52 IS CORRODED BEYOND LIMITS. R & R GUSSET.

V0XR201102060017	EMB	GUSSET	CORRODED
2/16/2011	EMB145EP	14530634011	ZONE 100

RIGHT CTR GUSSET FR 46-52 IS CORRODED BEYOND LIMITS. R & R GUSSET.

V0XR201102060018	EMB	GUSSET	CORRODED
2/16/2011	EMB145EP	14521699003	ZONE 100

LEFT FWD GUSSET FR 19-23 IS CORRODED BEYOND LIMITS. R & R GUSSET.

V0XR201102060019	EMB	PROFILE	CORRODED
2/16/2011	EMB145EP	14525140023	ZONE 100

LEFT PROFILE FR 17 - 18 IS CORRODED BEYOND LIMITS. R & R PROFILE.

V0XR2011020600209	EMB	PROFILE	CORRODED
2/16/2011	EMB145EP	14524199005	ZONE 100

LEFT PROFILE FR 16 INBD OF PAX DOOR CORRODED BEYOND LIMITS. R & R PROFILE.

V0XR2011020600021	EMB	SUPPORT BEAM	CORRODED
2/16/2011	EMB145EP	14532634403	ZONE 100

SUPPORT BEAMS AT Y0.0 AND RY 479.0 CORRODED BEYOND LIMITS. R & R BEAM.

V0XR201102170001	EMB	SILL	CORRODED

2/17/2011	EMB145EP	14525800009	ZONE 100
LEFT SILL AT FR 36-41 IS CORRODED BEYOND LIMITS. R & R SILL.			
V0XR201102170002	EMB	SILL	CORRODED
2/17/2011	EMB145EP	14525800013	ZONE 100
LEFT SILL AT FR 41-49 IS CORRODED BEYOND LIMITS. R & R SILL.			
V0XR201102170003	EMB	GUSSET	CORRODED
2/17/2011	EMB145EP	14530634005	ZONE 100
LEFT GUSSET AT FR 40-46 IS CORRODED BEYOND LIMITS. R & R GUSSET.			
V0XR201102170004	EMB	GUSSET	CORRODED
2/17/2011	EMB145EP	14530634007	ZONE 100
CENTER GUSSET AT FR 36-40 IS CORRODED BEYOND LIMITS. R & R GUSSET.			
V0XR201102170005	EMB	GUSSET	CORRODED
2/17/2011	EMB145EP	14530634003	ZONE 100
CENTER GUSSET AT FR 40-46 IS CORRODED BEYOND LIMITS. R & R GUSSET.			
V0XR201102170006	EMB	SILL	CORRODED
2/17/2011	EMB145EP	14525800014	ZONE 100
RIGHT SILL AT FR 41-48 IS CORRODED BEYOND LIMITS. R & R SILL.			
V0XR201102170007	EMB	SILL	CORRODED
2/17/2011	EMB145EP	14525800016	ZONE 100
RIGHT SILL AT FR 48-52 IS CORRODED BEYOND LIMITS. R & R SILL.			
V0XR201102170008	EMB	SILL	CORRODED
2/17/2011	EMB145EP	14525800015	ZONE 100
LEFT SILL AT FR 48-52 IS CORRODED BEYOND LIMITS. R & R SILL.			
V0XR201102170009	EMB	PROFILE	CORRODED
2/17/2011	EMB145EP	14525994001	ZONE 100
RIGHT INBD PROFILE AT FR 61 IS CORRODED BEYOND LIMITS. R & R PROFILE.			
V0XR201102170010	EMB	SUPPORT BRACKET	CORRODED
2/17/2011	EMB145EP	14526324001	CARGO DOOR
BAGGAGE COMPARTMENT DOOR ASSIST HANDLE SUPPORT BRACKET CRACKED. R & R SUPPORT.			
V0XR201102090001	EMB	ANGLE	CRACKED
2/9/2011	EMB145EP	14567290004	ZONE 600
RT NR 3 BOTTOM WING-BODY ANGLE CRACKED. R & R ANGLE.			
V0XR201102110001	EMB	SILL	CORRODED
2/10/2011	EMB145EP	14520609003	ZONE 100
SILL LY 780.0 AT FR 29-35 IS CORRODED BEYOND LIMITS. R & R SILL.			
V0XR201102110002	EMB	GUSSET	CORRODED
2/10/2011	EMB145EP	14522226003	ZONE 100
LEFT GUSSET AT FR 59-61 IS CORRODED BEYOND LIMITS. R & R GUSSET.			

V0XR201102110003	EMB	GUSSET	CORRODED
2/10/2011	EMB145EP	14522226003	ZONE 100

CENTER GUSSET AT FR 59-61 IS CORRODED BEYOND LIMITS. R & R GUSSET.

V0XR201102110004	EMB	GUSSET	CORRODED
2/10/2011	EMB145EP	14526437001	ZONE 100

RIGHT GUSSET AT FR 59-61 IS CORRODED BEYOND LIMITS. R & R GUSSET.

V0XR201102110005	EMB	GUSSET	CORRODED
2/10/2011	EMB145EP	14573504405	ZONE 100

LEFT L/E NR3 OTBD COMPOSITE BROKEN. R & R GUSSET.

V0XR20110211008	EMB	SILL	CORRODED
2/11/2011	EMB145EP	14521725013	ZONE 100

RT SILL FWD OF SERVICE DOOR AT FR 18-20 IS CORRODED OUT OF LIMITS. R & R SILL AT FR 18-20 IAW SRM 51-10-02, 51-20-03, 51-40-02.

V0XR20110211009	EMB	CHANNEL	CORRODED
2/11/2011	EMB145EP	14524131009	ZONE 100

"U" CHANNELS UNDER PASSENGER DOOR THRESHOLD ARE CORRODED BEYOND LIMITS. R & R "U" CHANNELS WITH NEW PARTS (PN'S 145-24131-009 AND -011) IAW SRM 51-10-02, 51-40-02, 51-20-03.

V0XR20110211010	EMB	SILL	CORRODED
2/11/2011	EMB145EP	14522178605	ZONE 100

SERVICE DOOR SILL IS CORRODED OUT OF LIMITS. R & R SERVICE DOOR SILL IAW SRM 51-10-02, 51-40-02.

V0XR20110211011	EMB	SILL	CORRODED
2/11/2011	EMB145EP	14521725001	ZONE 100

LT SILL AT FR 18-23 IS CORRODED OUT OF LIMITS. R & R LT SILL AT FR 18-23 IAW SRM 51-40-02, 51-20-03, 51-10-02.

V0XR20110211002	EMB	SILL	CORRODED
2/11/2011	EMB145EP	14520609005	ZONE 100

RT SILL FR 24-29 CORRODED BEYOND LIMITS. R & R RT SILL AT FR 24-29 IAW SRM 51-40-02.

V0XR20110211003	EMB	ANGLE	CORRODED
2/11/2011	EMB145EP	14529150009	ZONE 100

SCALLOPED ANGLE AT FR 24 AND Y 0.0 IS CORRODED BEYOND LIMITS. R & R ANGLE AT FR 24 AND Y 0.0 TO RY 780.0 IAW SRM 51-10-02, 51-20-03 AND 51-40-02.

V0XR20110211004	EMB	SILL	CORRODED
2/11/2011	EMB145EP	14529495001	ZONE 100

LT SILL AT FR 53-59 IS CORRODED OUT OF LIMITS. R & R LT SILL AT FR 53-59 IAW SRM 51-10-02, 51-40-02, 51-20-03.

V0XR20110211005	EMB	FLOOR SUPPORT	CORRODED
2/11/2011	EMB145EP	14521712005	ZONE 100

CENTER HAT CHANNEL BEAM AT FR 18-25 IS CORRODED OUT OF LIMITS. REMOVED, LOCATED, DRILLED AND REPLACED CTR OMEGA BEAM IAW SRM 51-40-07 AND 51-40-00.

V0XR20110211001	EMB	SILL	CORRODED
2/11/2011	EMB145EP	14520609001	ZONE 100

SILL CORRODED AT LY 780.0 FR 24-29. R & R SILL AT FRAME 24-29 AND LY 780.0, LH.

V0XR201102060002A	EMB		GUSSET	CORRODED
2/16/2011	EMB145EP		14530633006	ZONE 100

GUSSET AT Y0.0 FR 29-35 IS CORRODED BEYOND LIMITS. R & R GUSSET.

V0XR201102060002	EMB		SUPPORT BRACKET	CORRODED
2/16/2011	EMB145EP		14540752603	ZONE 100

CARGO DOOR TORSION BAR FWD BRACKET CRACKED. R & R SUPPORT ASSY.

V0XR201102220003	EMB		SEAT TRACK	CORRODED
2/22/2011	EMB145EP		14530658009	ZONE 100

SEAT TRACK C ROW NR 5 CORRODED BEYOND LIMITS. R & R SEAT TRACK.

V0XR20110211014	EMB		BULKHEAD	CRACKED
2/11/2011	EMB145EP			ZONE 100

AFT WHEEL WELL BULKHEAD LT SIDE CRACKED ON BOTTOM. R & R AFT WHEEL WELL BULKHEAD LT SIDE AND INSTALLED FASTENERS WET WITH SEALANT IAW SRM 51-40-02, 51-10-02, AND 51-40-09.

V0XR20110211006	EMB		DOUBLER	CORRODED
2/11/2011	EMB145EP		14522461011	ZONE 100

BOTH DOUBLERS AT FR 20 AND 22 RY 479.0 ARE CORRODED BEYOND LIMITS. REMOVED LOCATED, DRILLED, AND REPLACED 2 EA DOUBLERS IAW SRM 51-40-00 AND 51-40-07.

V0XR20110211007	EMB		SILL	CORRODED
2/11/2011	EMB145EP		14521725615	ZONE 100

RT SILL AFT OF SERVICE DOOR AT FR 22-23 IS CORRODED BEYOND LIMITS. R & R RT SILL AFT OF SERVICE DOOR AT FR 22-23 IAW SRM 51-40-02.

V0XR20110211012	EMB	ALLSN	PROFILE	CORRODED
2/11/2011	EMB145EP	AE3007A	14525994003	ZONE 100

LEFT OTBD PROFILE AT FR 61 IS CORRODED OUT OF LIMITS. R & R LT OTBD PROFILE AT FR 61 IAW SRM 51-10-02, 51-40-02, 51-21-04, 51-21-05.

V0XR20110211013	EMB	ALLSN	SHROUD	WORN
2/11/2011	EMB145EP	AE3007A	14568246001	LT WING TE FLAP

LT OTBD FLAP INBD AND OTBD FLAP DRIVERS ARE WORN OUT. R & R LT OTBD FLAP INBD AND O/D FLAP DRIVER SHROUDS IAW AMM 25-50-00. (PN'S 145-68246-001 AND 145-68249-001).

CA100824004	GROB	LYC	HANDLE	BINDING
8/24/2010	G120A	AEIO540*	GH115TAMODE	MLG

INSTRUCTOR AND STUDENT WERE CONDUCTING THEIR 11TH TAKEOFF WHILE PRACTICING LOCAL CIRCUITS WHEN THE STUDENT DISCOVERED THAT THE LANDING GEAR HANDLE COULD NOT BE SELECTED UP FOR THE CLIMB-OUT. THE INSTRUCTOR TOOK CONTROL OF THE ACFT AND VERIFED THAT THE HANDLE WAS LOCKED IN THE DOWN SELECTION AND COULD NOT BE MOVED TO RETRACT THE GEAR USING NORMAL FORCE. THE INSTRUCTOR INFORMED ATC OF THE PROBLEM AND ASKED FOR ARFF RESPONSE. THE ACFT WAS CONFIGURED FOR A T/O FLAPS LANDING AND DID SO WITHOUT FURTHER INCIDENT. MX WAS BRIEFED ON THE SNAG. PREVIOUS DIFFICULTIES WITH THE SELECTOR SUGGESTED THAT IT COULD BE THE SOURCE OF THE PROBLEM. THE ACFT WAS JACKED AND THE SNAG WAS CONFIRMED. REPLACEMENT OF THE SELECTOR ASSY SOLVED THE PROBLEM. LANDING GEAR "SWINGS" WERE CONDUCTED AND THE ACFT WAS RETURNED TO SERVICE.

CA101021009	GROB	LYC	WASHER	MISSING
10/20/2010	G120A	AEIO540D4A5 120A1001A	LN9025162ST60	WING ASSY

DURING A 200 HR INSP ON 2 OTHER ACFT, MSB 1121-109/1 WAS BEING CARRIED OUT AS REQUIRED WHEN IT WAS NOTED THAT THE WASHERS WERE MISSING. THE MFG WAS CONTACTED AND DETERMINED THAT THIS WAS A NON CONFORMANCE TO THE TYPE CERTIFICATE. IT WAS DECIDED THAT THE REMAINDER OF THE FLEET, (11 ACFT) BE INSPECTED TO DETERMINE THE STATUS OF THE ASSY. THE ENTIRE FLEET WAS INSPECTED AND ALL ACFT WERE FOUND TO BE IN NON COMPLIANCE AND SUBSEQUENTLY GROUNDED UNTIL THE PARTS ARE INSTALLED.

CA101021010	GROB	LYC		WASHER	MISSING
10/20/2010	G120A	AEIO540D4D5	120A1001A	LN9025162ST60	WING ASSY

DURING A 200 HR INSP ON 2 OTHER ACFT, MSB 1121-109/1 WAS BEING CARRIED OUT AS REQUIRED WHEN IT WAS NOTED THAT THE WASHERS WERE MISSING. THE MFG WAS CONTACTED AND DETERMINED THAT THIS WAS A NON CONFORMANCE TO THE TYPE CERTIFICATE. IT WAS DECIDED THAT THE REMAINDER OF THE FLEET, (11 ACFT) BE INSPECTED TO DETERMINE THE STATUS OF THE ASSY. THE ENTIRE FLEET WAS INSPECTED AND ALL ACFT WERE FOUND TO BE IN NON COMPLIANCE AND SUBSEQUENTLY GROUNDED UNTIL THE PARTS ARE INSTALLED.

CA101015004	GROB	LYC	BRAKE PADS	MISMARKED
10/13/2010	G120A	AEIO540D4D5	06610600	MLG

ACFT WAS IN FOR 100 HR CHECK. THE BRAKE LININGS WERE BEING REPLACED. MX RECEIVED NEW LININGS. AFTER INSTALLATION THE WHEEL WOULD NOT TURN. BRAKE LININGS WERE REMOVED AND IT WAS NOTED THAT 1 LINING WAS OF A DIFFERENT SIZE THAN THE OTHERS, BUT WAS STAMPED WITH THE CORRECT P/N AND HAD COME OUT OF THE SAME BOX AS ALL THE OTHER LININGS THAT HAD BEEN REPLACED. THE LINING WAS REPLACED WITHOUT INCIDENT AND THE MISSIZED LINING QUARANTINED.

CA101021002	GROB	LYC	WASHER	MISSING
10/20/2010	G120A	AEIO540D4D5	LN9025162ST60	AT FUSELAGE

DURING A 200 HR INSP ON 2 OTHER ACFT, MSB 1121-109/1 WAS BEING CARRIED OUT AS REQUIRED WHEN IT WAS NOTED THAT THE WASHERS WERE MISSING. THE MFG WAS CONTACTED AND DETERMINED THAT THIS WAS A NON CONFORMANCE TO THE TYPE CERTIFICATE. IT WAS DECIDED THAT THE REMAINDER OF THE FLEET (11 AIRCRAFT) BE INSPECTED TO DETERMINE THE STATUS OF THE ASSY. THE ENTIRE FLEET WAS INSPECTED AND ALL ACFT WERE FOUND TO BE IN NON CONFORMANCE AND SUBSEQUENTLY GROUNDED UNTIL THE PARTS ARE INSTALLED.

CA101021003	GROB	LYC	WASHER	MISSING
10/20/2010	G120A	AEIO540D4D5	LN9025162ST60	WING

DURING A 200 HR INSP ON 2 OTHER ACFT, MSB 1121-109/1 WAS BEING CARRIED OUT AS REQUIRED WHEN IT WAS NOTED THAT THE WASHERS WERE MISSING. THE MFG WAS CONTACTED AND DETERMINED THAT THIS WAS A NON CONFORMANCE TO THE TYPE CERTIFICATE. IT WAS DECIDED THAT THE REMAINDER OF THE FLEET, (11 ACFT) BE INSPECTED TO DETERMINE THE STATUS OF THE ASSY. THE ENTIRE FLEET WAS INSPECTED AND ALL ACFT WERE FOUND TO BE IN NON COMPLIANCE AND SUBSEQUENTLY GROUNDED UNTIL THE PARTS ARE INSTALLED.

CA101021006	GROB	LYC	WASHER	MISSING
10/20/2010	G120A	AEIO540D4D5	LN9025162ST60	WING ASSY

DURING A 200 HR INSP ON 2 OTHER ACFT, MSB 1121-109/1 WAS BEING CARRIED OUT AS REQUIRED WHEN IT WAS NOTED THAT THE WASHERS WERE MISSING. THE MFG WAS CONTACTED AND DETERMINED THAT THIS WAS A NON CONFORMANCE TO THE TYPE CERTIFICATE. IT WAS DECIDED THAT THE REMAINDER OF THE FLEET, (11 ACFT) BE INSPECTED TO DETERMINE THE STATUS OF THE ASSY. THE ENTIRE FLEET WAS INSPECTED AND ALL ACFT WERE FOUND TO BE IN NON COMPLIANCE AND SUBSEQUENTLY GROUNDED UNTIL THE PARTS ARE

INSTALLED.

CA101021007	GROB	LYC	WASHER	MISSING
10/20/2010	G120A	AEIO540D4D5	LN9025162ST60	WING ASSY

DURING A 200 HR INSP ON 2 OTHER ACFT, MSB 1121-109/1 WAS BEING CARRIED OUT AS REQUIRED WHEN IT WAS NOTED THAT THE WASHERS WERE MISSING. THE MFG WAS CONTACTED AND DETERMINED THAT THIS WAS A NON CONFORMANCE TO THE TYPE CERTIFICATE. IT WAS DECIDED THAT THE REMAINDER OF THE FLEET, (11 ACFT) BE INSPECTED TO DETERMINE THE STATUS OF THE ASSY. THE ENTIRE FLEET WAS INSPECTED AND ALL ACFT WERE FOUND TO BE IN NON COMPLIANCE AND SUBSEQUENTLY GROUNDED UNTIL THE PARTS ARE INSTALLED.

CA101021008	GROB	LYC	WASHER	MISSING
10/20/2010	G120A	AEIO540D4D5	LN9025162ST60	WING ASSY

DURING A 200 HR INSP ON 2 OTHER ACFT, MSB 1121-109/1 WAS BEING CARRIED OUT AS REQUIRED WHEN IT WAS NOTED THAT THE WASHERS WERE MISSING. THE MFG WAS CONTACTED AND DETERMINED THAT THIS WAS A NON CONFORMANCE TO THE TYPE CERTIFICATE. IT WAS DECIDED THAT THE REMAINDER OF THE FLEET, (11 ACFT) BE INSPECTED TO DETERMINE THE STATUS OF THE ASSY. THE ENTIRE FLEET WAS INSPECTED AND ALL ACFT WERE FOUND TO BE IN NON COMPLIANCE AND SUBSEQUENTLY GROUNDED UNTIL THE PARTS ARE INSTALLED.

CA101008004	GROB	LYC	CONTROL CABLE	CHAFED
7/9/2010	G120A	AEIO540D4D5	120A6121	PROPELLER

(CAN) ON A PRE START CHECK, THE PILOT NOTED THE PROP LEVER NOT FUNCTIONING PROPERLY. THE CABLES ARE KNOWN BY MX TO START CHAFING AND BINDING INTERNALLY JUST FWD OF THE PROP CONTROL LEVER CABLE HSG ATTACH POINT TO THE ACFT STRUCTURE. SOME CABLE HSG ARE SECURED IN THE CENTER CONSOLE AREA AT AN ANGLE WHICH ACCELERATES THE WEAR OF THE INTERNAL WIRE WITHIN THE CABLE HSG. THE WEAR CAN DETERIORATE TO A POINT WHERE THE CABLE BEGINS TO BECOME MORE DIFFICULT TO MOVE. WITH EXPERIENCE, MX WILL KNOW WHEN TO REPLACE THE CABLE PRIOR TO FAILURE.

2011FA0000156	GULSTM	LYC	RKWELL	SPAR	CRACKED
3/4/2011	114	IO540T4B5		4421110	ELEVATOR

DURING THE ACCOMPLISHMENT OF SL-114-17 A SMALL HAIRLINE CRACK WAS DISCOVERED. THE CRACK IS APPROX. 2.35" IN LENGTH, ON THE RT ELEVATOR SPAR, BELOW THE OUTBOARD ELEVATOR HINGE ATTACH POINT. THE AREA OF CONCERN IS LOCATED ON THE RH ELEVATOR 69.35 FROM C/L & FS 275.122.

AMCR201101	GULSTM		REGULATOR VALVE	LEAKING
1/24/2011	GIV		80578201	OXYGEN BOTTLE

ACFT EXPERIENCED EXCESSIVE 02 LOSS FROM CREW O2 SYS. MX FOUND THE O2 BOTTLE REGULATOR/VALVE ASSY LEAKING. ALSO FOUND THAT WITH THE REGULATOR VALVE IN THE OFF POSITION, OXYGEN WAS STILL LEAKING OUT THE LOW PRESSURE PORT FEEDING THE CREW'S O2 SYS.

2011F00026	GULSTM	RROYCE	PUMP	DAMAGED
1/31/2011	GIV	TAY6118	1159SCH20041	HYD SYSTEM

WHILE ON OUTBOUND FLIGHT, THE PILOT REPORTED LOSS OF THE COMBINED HYD PRESSURE AND FLUID; AUXILIARY PUMP TEMPORARILY FAILED, TOO. PILOT MADE UNSCHEDULED LANDING. ON GROUND, THE NR 1 ENGINE DRIVEN PUMP, FOUND WITH BLOWN-OUT GASKET CAUSING HYD LOSS AND DAMAGE TO THE PUMP. PUMP WAS REPLACED WITH AN O/H UNIT; REPLACED THE MAIN PRESSURE, BYPASS AND RETURN FILTERS; SERVICED WITH FLUID. PERFORMED HYD POWER SYS OPS CHECK AND FOUND SATISFACTORY.

GR4D20110207001	GULSTM		STRUCTURE	CORRODED
2/7/2011	GIVG400			WING

WING T/E CORRODED.

CA100824006	HILLER	ALLSN	HILLER	PIN	BROKEN
8/24/2010	UH12E	250C20B		51452	M/R HEAD

TENSION TORSION PIN BROKE OFF AT MAIN ROTOR HEAD WHERE DRAG BRACE ATTACHES TO PIN. ACFT WAS IN CRUISE FLIGHT PERFORMING AERIAL SPRAY APPLICATION. ACFT STARTED TO SHAKE AND VIBRATE. PILOT PERFORMED EMERGENCY LANDING IN SPRAY BLOCK ON A PREVIOUSLY CLEARED LANDING AREA. UPON ACFT SHUTDOWN TENSION TORSION PIN FAILURE WAS DISCOVERED. ACFT HAS BEEN INSPECTED BY A QUALIFIED ENGINEER AND NO OTHER DAMAGE HAS BEEN FOUND. THERE WAS NO INJURES REPORT BY THE PILOT. BOTH TENSION TORSION PINS ARE BEING REPLACED AND ACFT IS BEING FLOWN TO THE NEAREST ACCESSIBLE LANDING SITE TO BE LOADED ON TO TRAILER AND RETURNED TO OPERATORS HOME BASE.

CA100520002	HUGHES	ALLSN	LONGERON	CRACKED
5/17/2010	369D	250C20B	369D230723	FUSELAGE

UPPER LONGERON, PN 369D23072-3, CRACKED 2.5 AFT OF STA 131.0 BULKHEAD, CRACK ORIGINATED FROM A FASTENER HOLE AND ENDED AT THE EDGE OF THE HORIZ LEG OF THE EXTRUSION.

2011FA0000051	HUGHES		SPAR	CRACKED
10/1/2010	369HS			HORIZONTAL STAB

ON 10/1/10 ACFT EXPERIENCED AN INFLIGHT FAILURE AND SUBSEQUENT SEPARATION OF THE OTBD SECTION OF THE HORIZ STABILIZER DUE TO A CRACK IN THE SPAR AT STA 42.5. THE CRACKING OF THE SPAR APPEARS TO HAVE ALLOWED THE FLEXING OF THE STABILIZER AND SUBESEQUENT FAILURE OF THE UPPER AND LOWER STRINGERS RESULTING IN THE SEPARATION OF THE OTBD SECTION OF THE STABILIZER FROM THE ACFT. THE CRACKING OF THE STABILIZER APPEARS TO BE THE RESULT OF A FACTORY DEFECT AS THE PART HAD ONLY 205.2 HRS SINCE NEW. THE INSTALLATION OF THE NEW PART WAS FOLLOWED BY A COMPLETE BALANCE AND TRACKING CHECK WITH NO DEFECTS NOTED. THIS ACFT HAS BEEN HANGARED SINCE NEW AND HAS NEVER BEEN TRANSPORTED BY TRAILER. THE INSTALLATION OF THIS PART WAS ACCOMPLISHED AS THE RESULT OF A FAILURE AND SEPARATION OF THE PREVIOUSLY INSTALLED PART AT STA 56.0. NOTHING FILED SUBSEQUENT TO THAT UNIT`S FAILURE.

2011FA0000017	LANCAR	CONT	ADAPTER	FAILED
1/8/2011	LC40550FG	IO550N	642083A2	STARTER

SECOND STARTER ADAPTER FAILURE IN 1000 HOURS. THE FIRST STARTER ADAPTER FAILED AT 250 HOURS. THE FAILURE RATE ON THE STARTER ADAPTER IS UNACCEPTABILITY HIGH.

VIBR20110119002	LEAR		THROTTLE CABLE	STIFF
10/3/2010	35A		660032936	ZONE 100

ACFT FERRIED INTO MX WITH SQUAWK AND A TENSION CHECK WAS ACCOMPLISHED ON THE THROTTLES. THROTTLE CABLES WERE FOUND EXTREMELY STIFF AND WORN OUT. THROTTLE CABLES WERE REPLACED WITH THROTTLE CONTROL ASSY. REF ENGINEERING LETTER 35121-17741.

YRR82011020200001	LEAR	GARRTT	TURBINE BLADES	BROKEN
2/28/2011	35A	TFE73122B	30727122	NR 1 ENGINE

AT 400 FEET AGL AFTER TAKEOFF, CREW HEARD LOUD BANG FROM LEFT (NR 1) ENGINE AND ENGINE RPM WENT TO 'ZERO'. CREW CIRCLED AND MADE SAFE EMERGENCY LANDING. ENGINE WAS REMOVED AND SENT TO MRO FACILITY; DURING ENGINE TEARDOWN, FIVE (5) HP TURBINE ROTOR BLADES WERE FOUND BROKEN IMMEDIATELY UNDER THE BLADE PLATFORM AND SEPARATED FROM THE DISC. OUTER ENGINE CASES WERE NOT PENETRATED. CAUSE OF BLADES' FAILURE IS BEING INVESTIGATED BY ENGINE OEM AND MRO ORGANIZATION ENGINEERING STAFF.

VIBR20110119	LEAR	GARRTT	BYPASS VALVE	CRACKED
10/1/2010	45LEAR	TFE731*	30607822	ENGINE OIL

DURING THE OIL FILTER BYPASS VALVE INSP, IT WAS NOTED THAT THE END HSG WAS CRACKED AT THE ATTACHING PIN END CAP WITH MATERIAL MISSING. REMOVED THE RT OIL BYPASS CHECK VALVE PN 3060782-2,

SN 08-06451-08952 AND FOUND A CRACK ON THE END CAP. INSTALLED NEW VALVE PN 3060782-2, SN 10-06451-10589.

2011FA0000010	LEAR		WINDSHIELD	DELAMINATED
12/22/2010	60LEAR		66003941	ZONE 200

LT WINDSHIELD HAS EVIDENCE OF HEAT DAMAGE AND DELAMINATION. R & R WINDSHIELD WITH NEW. PERFORMED SATISFACTORY PRESSURE PROOF TEST. NO LEAKS NOTED AT THIS TIME.

2011FA0000076	LEAR		POST	MISMANUFACTURED
12/15/2010	60LEAR		541021511	WINDOW

LT WINDSHIELD WAS BEING CHANGED DUE TO HEAT ELEMENT FAILURE. DURING REMOVAL OF THE CENTER-POST, IT WAS DISCOVERED THE BOTTOM 2 HOLES IN THE CENTER-POST WERE OVER COUNTER BORED BY THE FACTORY. THIS CREATED A LIGHTNING HOLE AROUND THE FASTENERS, THUS PROVIDING ZERO SUPPORT FOR THE LOWER PORTION, (ABOUT 5 IN) OF THE CENTER-POST. THE ONLY FIX IS TO INSTALL AN NEW CENTER-POST FROM MFG. THE NEW PART COMES WITHOUT HOLES AND TAKES A FULL DAY TO DRILL AND FIT; IF YOU CAN GET A CENTER-POST FROM MFG.

2011FA0000011	LEAR	PWA	DEFOG SYSTEM	FAILED
12/22/2010	60LEAR	PW305	6018505001	ZONE 100

WINDSHIELD DEFOG FAILS FUNCTIONAL TEST. REMOVED AND INSTALLED REPAIRED WINDSHIELD DEFOG BOX ASSY. PERFORMED SATISFACTORY FUNCTIONAL TEST OF THE WINDSHIELD DEFOG CONTROL SYSTEM WITH NO DEFECTS NOTED.

SPOAN603SC001	LEAR	PWA	CHECK VALVE	FAILED
2/10/2011	60LEAR	PW305A	6097001804	BLEED AIR SYS

CREW EXPERIENCED SMOKE IN THE CABIN CLIMBING THROUGH 25,000FT ON A FLIGHT FROM HWD-HOU. CREW IMMEDIATELY LEVELED THE AIRCRAFT OFF AT 25,500FT. PERFORMED EMERGENCY PROCEDURE AND MEMORY ITEMS FOLLOWED BY CHECKLIST PROCEDURE FOR SMOKE IN THE CABIN, EMERGENCY DESCENT, AND NORMAL CHECKLIST. CREW DECLARED AN EMERGENCY AND RETURNED TO SAN JOSE.

2011FA0000078	LET		CONTROL STICK	OBSTRUCTED
2/10/2011	L23SUPERBLAN			BONDING STRAP

DURING A LANDING FLARE, THE PILOT NOTICED DIFFICULTY IN MOVING THE CONTROL STICK FORWARD. AFTER A POST FLIGHT INSP, IT WAS DISCOVERED THAT A BONDING STRAP SCREW HAD LOOSENED AND DISLODGED INTO THE CONTROL BRIDGE ASSY, CAUSING BINDING.

2011FA0000021	LET		CONTROL CABLE	FRAYED
1/12/2011	L23SUPERBLAN		A740254NA740255N	RUDDER

RUDDER CABLES FOUND FRAYED AT 494.3 HOURS. LIFE SB 1000 HRS IAW MFG. CHRONIC PROBLEM.

2011FA0000046	LUSCOM	CONT	NEEDLE	LOOSE
11/11/2010	8D	C75*		CARBURETTOR

AT SOME TIME UNKNOWN, IT APPEARS A NEW STEELE NEEDLE AND SEAT WAS INSTALLED AND THE SEAT BODY WAS NOT SAFTIED. FROM VIBRATION, IT CAME LOOSE AND CLOSED OFF FUEL FLOW INTO CARB, THEREFORE CAUSING ENGINE POWER LOSS.

2011FA0000100	MAULE		MUFFLER	CRACKED
10/11/2010	MXT7180A			EXHAUST

THE MUFFLER WAS SENT FOR O/H ON 10/11/10 BECAUSE IT WAS CRACKED.

2011FA0000101	MAULE		HEADER	CRACKED
7/16/2010	MXT7180A			EXHAUST

THE NR 3 EXHAUST HEADER WAS SENT FOR REPAIR 7/1610 BECAUSE IT WAS CRACKED.

2011FA0000067	MOONEY	LYC	HOUSING	FAULTY
1/13/2011	M20C	O360A1D	700117	ENGINE

REMOVED VERNATHERM HSG (PN 700117) WHICH WAS INSTALLED ON 04/19/1996 IAW MFG, STC SA4172NM (DATED 04/01/1993) AS ADAPTER FOR EXTERNAL OIL FILTER. ANNUAL INSP (DATED 01/13/2011) DISCOVERED 2 PROBLEMS RELATED TO THE ORIGINAL VERNATHERM HOUSING PN 700117: WEAR MARKS ON THE SEAT OF THE VALVE INDICATED THAT THE VERNATHERM WAS NOT CENTERED OVER THE PORT IN THE ACCESSORY CASE (WHICH PREVENTED THE VERNATHERM FROM FULLY CLOSING). IT APPEARED TO BE STRIKING THE SEAT ABOUT .065" OFF CENTER. THE PORT FOR OIL RETURNING FROM THE OIL COOLER WAS ABOUT 60 PERCENT OCCLUDED BY THE BASE OF THE VERNATHERM HSG. REQUESTED AN EXCHANGE HSG FROM MFG BUT MFG REFUSED TO EXCHANGE THE HSG, INSTEAD SELLING US A NEW HSG. THE NEW HSG IS THE SAME PN BUT HAS BEEN REDESIGNED WITH A RECESS MACHINED IN THE HSG TO ALLOW LESS RESTRICTION OVER THE PORT WHICH RETURNS OIL FROM THE OIL COOLER. THE NEW HSG WAS INSTALLED AND THE SEATING OF THE VERNATHERM CONFIRMED WITH THE USE OF PRUSSIAN BLUE DYE ON THE SEAT OF THE VALVE AND A TEST FLIGHT.

CA100909003	MORAVN	LYC	CONTROL CABLE	FRAYED
9/9/2010	Z242L	AEIO360A1B6	Z4243130000	TE FLAPS

FLAP CENTER CABLE FOUND FRAYED DURING 100 HR.

CA100608011	NAMER	PWA	FITTING	WORN
6/7/2010	HARVARD*	R1340*	77121021	HORIZONTAL STAB

DURING MX IN THE AREA, MOVEMENT WAS FOUND BETWEEN THE HORIZ STABILIZER REAR SPAR CONNECTOR FITTING, PN 77-121021(LWR) AND THE REAR SPAR. FURTHER MOVEMENT WAS ALSO FOUND AT PN 52-31107 (FITTING -FUSELAGE HORIZ STABILIZER REAR ATTACHING LT) WHERE IT MOUNTS TO PN 56-3115-2 (BULKHEAD-FUSELAGE REAR SECTION).

2011FA0000018	PILATS		DRIVE SHAFT	BINDING
1/10/2011	PC1245		9450202205	TE FLAPS

FLAP CIRCUIT BREAKER POPPED WHILE TRYING TO LOWER FLAPS. FOUND RT INBD FLEXIBLE FLAP DRIVESHAFT DAMAGED INTERNALLY AND BINDING, AND OVERLOADING DRIVE UNIT.

CA100813006	PIPER	LYC	ENGINE	MAKING METAL
8/11/2010	PA18150	O320A2B		

(CAN) DURING ROUTINE (50 HR) INSP OF THE ENGINE - METAL SHAVINGS WERE FOUND WHEN THE OIL SCREEN WAS CHECKED. METAL SHAVINGS WERE CONFIRMED BY A MAGNET TO BE STEEL. ENGINE WAS REMOVED - SERVICEABLE ENGINE WAS INSTALLED AND ACFT WAS RELEASED TO SERVICE.

CA100813004	PIPER	LYC	WARNING LIGHT	FAILED
7/15/2010	PA23250	IO540C4B5		MLG

ENGLISH VERSION AFTER THE MLG RETRACTION, THE "GEAR UP" LIGHT DID NOT LIGHT. THE ACFT RETURN TO LAND. DURING INSP, THE "DOWN LOCK" HOOK REMAINED WEDGED. THE GEAR CYLINDER WAS VERIFIED AND THE SETTING ADJUSTMENT WAS NOT ACCORDING TO THE MFG. THE SYS WAS REGULATED AND ADJUSTED ACCORDING TO THE MANUAL AND LUBRICATED. SEVERAL RETRACTIONS HAVE BEEN CARRIED OUT AFTERWARD WITHOUT ANY PROBLEM. THE ACFT WAS BACK ON SERVICE.

2011FA0000055	PIPER	LYC	BOLT	BROKEN
11/14/2010	PA23250	TIO540*	AN17727	LT MLG DRAG LK

THE BOLT ATTACHING THE LT MAIN GEAR UPPER DRAG LINK TO THE LOWER LINK ASSY BROKE AND THE LT MAIN GEAR STRUT ASSY FOLDED BACKWARDS IN THE LWR NACELLE STRUCTURE. THIS INCIDENT HAPPENED AFTER LANDING, DURING A ROLL-OUT AND TURN IN OFF RUNWAY.

2011FA0000082	PIPER	LYC	STRUT	FAILED
12/10/2010	PA28140	O320*	65319	MLG

AFTER LANDING ON 12/10/2010, THE UPPER LINK ATTACH POINT FAILED ON THE MLG STRUT CLYLINDER, PN 65319-002. THIS FAILURE CAUSED THE OLEO STRUT TO BE EJECTED FROM THE CYLINDER CAUSING MAJOR DAMAGE TO ACFT. SB 1311 ADDRESSES THIS ISSUE.

CA100811011	PIPER	LYC	BAFFLE	SEPARATED
8/6/2010	PA28140	O320E3D		MUFFLER

ON AUGUST, 2010, AT APPROX 20:00 PDT, RECEIVED A CALL FROM FLIGHT SCHOOL, INFORMING US THAT ACFT HAD MADE AN UNSCHEDULED LANDING FOLLOWING A PARTIAL POWER LOSS EVENT. ACFT WAS REMOVED FROM SERVICE PENDING INVESTIGATION. ON THE 9TH OF AUGUST, CONDUCTED AN INSP AND FOUND THAT THE MUFFLER INNER BAFFLE SEPARATED AND MAY HAVE PARTIALLY COVERED THE OUTLET FOR THE EXHAUST.

CA100813008	PIPER	LYC	HUB	CORRODED
8/13/2010	PA28180	O360A4A		PROPELLER

(CAN) PROPELLER RECEIVED FOR COMPLIANCE WITH CARS, PART 6, STANDARD 625, APPENDIX C. 6. FIRST THING NOTICED WAS WHITE CORROSION POWDER IN THE 6 BOLT HOLE COUNTERBORES. GLASS CLEANED THE AREA AND FOUND PITTING. PROPELLER TAGGED UNSERVICEABLE. REQUESTED TO CONTACT PROPELLER PRODUCT SUPPORT FOR REPAIR REQUEST. PROPELLER MFG ALLOWED US TO HONE THE BORE HOLE TO A MAXIMUM DIAMETER OF .756. THIS DID NOT CLEAN UP THE PITTING, PROPELLER WAS REJECTED. PROBABLE CAUSE, WATER BEING TRAPPED IN THE BORE AREA. NO AD OR SB APPLICABLE TO THIS. PROPELLER WAS PURCHASED NEW ABOUT 6 YEARS AGO FROM MFG OF PROPELLER. MFG DOES NOT PROVIDE ANY RECOMMENDATION TO REDUCE RECURRENCE.

2011FA0000075	PIPER		TUBE	BLEW OUT
12/23/2010	PA28RT201		3028060424	TIRE

THE ACFT LISTED IN THIS REPORT IS 1 OF SEVERAL LIGHT GENERAL AVIATION ACFT OPERATED BY A FLIGHT SCHOOL. WE HAVE EXPERIENCED 5 FAILURES OF TIRE TUBES, PN 302-246-40, WITHIN THE LAST SEVERAL MONTHS. THESE FAILURES HAVE OCCURED DURING LANDING AND POSE A SAFETY HAZARD. IN SPEAKING WITH OUR PARTS SUPPLIER, WE WERE TOLD THERE IS A MATERIAL PROBLEM WITH ACFT TIRE TUBES WHICH IS CAUSING THESE FAILURES.

2011FA0000023	PIPER	LYC	WASHER	BROKEN
10/15/2010	PA30	IO320B1A		FUEL EDP

DURING A ROUTINE OIL CHANGE, UPON INSP OF THE "FINGER" SCREEN IN THE CRANKCASE OIL SUMP APPROX HALF OF WHAT APPEARED TO BE AN AN-960 WASHER WAS FOUND. NO PART LIKE THIS IS INTERNAL TO THIS MODEL OF ENGINE, BASED ON THE MFG IPC. FURTHER INVESTIGATION REVEALED THAT THIS PART CAME FROM THE ENGINE DRIVEN FUEL PUMP (PN LW-15473). WHEN THE PUMP WAS REMOVED, THE OTHER HALF OF THIS WASHER WAS FOUND. THE WASHER IS CONNECTED TO THE TOP PART OF THE SHAFT THAT IS ACTIVATED BY THE PUMP ARM AND ACTUATES THE FUEL PUMP DIAPHRAGM. LOSS OF THIS WASHER GREATLY REDUCED THE PUMPING ACTION AND SUBSEQUENTLY THE FUEL VOLUME. NO PROBLEMS WERE REPORTED IN ALL PHASES OF PREVIOUS FLIGHTS ALTHOUGH TYPICALLY AN AIRFRAME BOOST PUMP IS ON DURING TAKEOFF AND LANDING.

MKHR0027	PIPER		CIRCUIT BREAKER	FAILED
1/10/2011	PA31350		454712	MAIN ALTERNATOR

MAIN RT 90 AMP ALTERNATOR CIRCUIT BREAKER FAILED. THE CIRCUIT BREAKER HAD BEEN REPLACED ONLY 6 MONTH AND 25 FLT HRS EARLIER. THE CIRCUIT BREAKER SHOWED CONTINUITY, HOWEVER IT FAILED WHEN A LOAD WAS APPLIED.

2011FA0000066	PIPER	LYC	TUBE	CRACKED
1/26/2011	PA31350	TIO540*	T4048	HEATER

HEATER FAILED PRESSURE DECAY TEST. CRACK IN BURNER TUBE, POSSIBLY CAUSED FROM TOO HIGH FUEL PRESSURE.

2011FA0000085	PIPER	LYC	STRUCTURE	CRACKED
1/26/2011	PA32R301	TIO540AH1A	38650005	AILERON

WHILE PERFORMING MANDATORY SB 1216A OF AILERON RIB INSP, THE MECHANIC FOUND A CRACK ON THE RT OTBD L/E AT COUNTER WEIGHT ATTACH POINT.

2011F00018	PIPER	CONT	CYLINDER	FAILED
1/16/2011	PA34200T	TSIO360EB	652955	ZONE 400

PILOT NOTED REDUCTION IN MANIFOLD PRESSURE AND OIL PRESSURE ON LT ENGINE. PILOT REDUCED POWER TO IDLE AND REQUESTED LANDING AT NEAREST AIRPORT. POST LANDING INSP OF ENGINE REVEALED CRACK IN CYLINDER WALL AND PART OF PISTON MISSING.

2011FA0000028	PIPER	LYC	PACKING	MALFUNCTIONED
1/17/2011	PA44180	O360A1H6	603A	ZONE 700

FIELD ENGINEER REPORTED A SAFETY HAZARD OF THE PARKING BRAKE VALVE ASSY. IT IS THAT WHEN THE PILOT TOES THE BRAKE PEDALS NORMALLY THE PARKING BRAKE VALVE WILL CLOSE ITSELF. AND THE SAME MALFUNCTION HAS OCCURRED MANY TIMES IN THE PAST YEARS. AFTER DISASSEMBLING AND INSPECTING THE VALVE PARTS, FOUND THIS MALFUNCTION IS CAUSED BY THAT THE DECREASED FRICTION OF THE CAM AND O-RINGS CAN'T MEET THE SPRING FORCE OF THE 2 CHECK VALVES AND THIS IS BECAUSE OF THE LONG USE TIME OF THIS PARKING BRAKE VALVE. BUT DO NOT KNOW WHEN THIS MALFUNCTION WOULD OCCUR.

2011FA0000087	PIPER		HOSE	LEAKING
1/26/2011	PA46350P		63901142	FUEL STRAINER

AFTER ANNUAL POST RUN-UP CHECKS, FOUND FUEL PRESSURE HOSE FROM ACFT FUEL FILTER HSG TO FUEL PRESSURE SWITCH LEAKING. DURING INSP IN THIS LOCATION NO LEAKS WERE NOTED ON HOSE. DURING PREFLIGHT WALK AROUND, CHECK FOR FUEL STAINS ON RT NOSE GEAR DOOR.

2011FA0000088	PIPER		HOSE	LEAKING
1/26/2011	PA46350P		63901142	FUEL SYSTEM

ACFT CAME IN FOR OTHER MX. FOUND FUEL STAINS ON RT NOSE GEAR DOOR. OPENED PANEL BY FUEL FILTER AND FOUND FUEL PRESSURE HOSE FROM ACFT FUEL FILTER HSG TO PRESSURE SWITCH LEAKING. DURING PREFLIGHT WALK AROUND CHECK FOR FUEL STAINS ON RT NOSE GEAR DOOR.

2011FA0000080	PIPER	LYC	PROBE	MISMANUFACTURED
1/25/2011	PA46350P	TIO540AE2A	400509	OIL TEMP

NEW INSTALLATION OF EDM-930 DIGITAL ENGINE MONITOR AS PRIMARY REPLACEMENT OF ALL FACTORY INSTALLED ENGINE INSTRUMENTATION IAW STC SA01435SE. FOUND NEW PN 400509 OIL TEMP PROBE SUPPLIED WITH KIT WILL NOT FIT ORIGINAL FACTORY OIL TEMP PROBE LOCATION ON ENGINE REAR ACCESSORY CASE. ORIGINAL FACTORY OIL TEMP PROB, PN 102-00002 AND IS EQUIPPED WITH 7/16-20 STRAIGHT THREADS. THE PN 400509, OIL TEMP PROBE IS EQUIPPED WITH 5/8-18 STRAIGHT THREADS. AN ALTERNATE OIL TEMP PROBE PN 400505 IS EQUIPPED WITH 3/8-24 PIPE THREADS AND ALSO FAILS TO FIT THIS INSTALLATION IN THE FACTORY OIL TEMP LOCATION. SUGEST MANUFACTURE OIL TEMP PROBES OF APPROPRIATE SIZE AND THREAD PITCH FOR INSTALLATION IN ACFT UNDER THEIR CURRENT AML OR GET APPROVAL FROM THE MFG TO SAMPLE OIL TEMP AS A PRIMARY INDICATION FROM AN ALTERNATE LOCATION ON THE ENGINE WHICH THEIR CURRENT PROBE WILL FIT.

CA100608008	PIPER	LYC	CONTROL CABLE	OBSTRUCTED
6/1/2010	PA60600	IO540K1J5		AILERONS

WHEN ELEVATOR CONTROL PULLED ALL THE WAY BACK THE AILERONS WERE LOCKED UP. HOSE CLAMP WAS HOLDING STRUCTURE CLOSER TO CONTROL COLUMN SHAFT. WHEN CONTROL COLUMN WAS PULLED OUT, A ROLLER ADJUSTMENT SCREW CONTACTED THE STRUCTURE, BINDING. THE AILERONS, AS HOSE CLAMP WAS LOOSENED, THE STRUCTURE RETURNED TO ITS NORMAL POSITION. HOSE CLAMP WAS RELOCATED AND SYS WAS FUNCTION CHECKED SERVICEABLE.

CA101006004	PROPJT	PWC	BLEED VALVE	FAILED
9/29/2010	200A	PW306A		ENGINE

LOW OIL PRESSURE/IFSD JUST AFTER LANDING, THE CREW OBSERVED A LOW OIL PRESSURE WARNING, HIGH

TEMP AND DECAYING ENGINE PARAMETERS. THE ENGINE WAS SHUTDOWN AND THE ACFT TAXIED TO THE RAMP. SUBSEQUENT GROUND RUN SHOWED THE ENGINE HANGING AT 25 PERCENT N2, CONFIRMING THE COMPRESSOR BLEED VALVES WERE CLOSED. THE BLEED VALVES AND SOLENOID WILL BE REPLACED.

CA101004009	PROPJT	PWC	ACTUATOR	FAILED
10/1/2010	200A	PW306A	40120000000	ELEVATOR FEEL

SEPTEMBER 30/2010 PILOTS REPORT ELEVATOR FEEL FAIL REPEATEDLY ILLUMINATION IN FLIGHT. TROUBLESHOT BY MFG, ACFT HYD SYS BLED AND ACFT RELEASE FOR RETURN TO SERVICED. OCTOBER 01/2010, PILOTS REPORT ELEVATOR FEEL FAIL BETWEEN 1-6 TIMES IN FLIGHT, TROUBLESHOT AND REPLACED THE SPCQ COMPUTER, PN 4AS8820004-007, SN ON 178, SN OFF 232 AND Q-FEEL SHUTOFF VALVE WAS REPLACED PN ON/OFF 6920-3, SN ON T1057, SN OFF 0343. REF: W/O SC-26825, ACFT RELEASE FOR RETURN TO SERVICE. OCTOBER 02/2010, PILOTS REPORT ELEVATOR FEEL FAIL LIGHT ILLUMINATION IN FLIGHT NUMEROUS TIMES. SYS IS STILL BEING TROUBLESHOT.

CA100730010	ROBSIN	LYC	BEARING	WORN
7/22/2010	R44	O540F1B5	D0622	TAIL ROTOR

TEETER BEARING FOUND WORN BEYOND LIMITS DURING INSP.

CA100608018	ROBSIN	LYC	STARTER	INTERMITTENT
6/5/2010	R44	O540F1B5	BC3151002	

STARTER INTERMITTENT, REPLACED WITH A SERVICEABLE STARTER.

CA100608019	ROBSIN	LYC	STARTER	FAILED
6/1/2010	R44	O540F1B5	BC3151002	

(CAN) STARTER PINION STUCK OUT DURING START. STARTER REPLACED.

CA100504010	ROBSIN	LYC	STARTER	INTERMITTENT
4/23/2010	R44	O540F1B5	BC3151002	

STARTER FOUND TO BE INTERMITTENT, STARTER REPLACED.

CA100602003	ROBSIN	LYC	MAGNETO	FAILED
5/27/2010	R44	O540F1B5	IO600646201	ENGINE

ENGINE RPM ERRATIC ON GUAGE, MAGNETO REPLACED, SERVICABLE.

CA100108004	ROBSIN	LYC	ENGINE	MAKING METAL
12/21/2009	R44RAVENII	IO540AE1A5		

DURING MX, RUBBER AND METAL WERE FOUND IN THE OIL SUCTION SCREEN FILTER. FURTHER INVESTIGATION FOUND METAL IN OIL FILTER. ENGINE WILL BE SENT TO ENGINE SHOP FOR FURTHER REVIEW.

CA100412008	ROBSIN	LYC	GOVERNOR	FAILED
4/6/2010	R44RAVENII	IO540AE1A5	B2475	ENGINE

GOVERNOR WAS INSTALLED 0.4 HRS AGO AND ENGINE SPEED WAS BEGINING TO DROP OFF. NEW GOVERNOR WAS INSTALLED AND NO FURTHER ISSUES WERE NOTED.

CA100616006	ROBSIN	LYC	MAGNETO	FAULTY
6/14/2010	R44RAVENII	IO540AE1A5	IO600646201	RIGHT

ACFT EXPERIENCED HIGH ENGINE RPM READING, TROUBLESHOOTING REVEALED FAULTY RT MAGNETO.

CA100625001	ROBSIN	LYC	GROUND WIRE	FAULTY
6/20/2010	R44RAVENII	IO540AE1A5		MAGNETO

PILOT FOUND NO DROP IN RPM DURING LT MAGNETO CHECK. THE GROUND WIRES WERE FOUND DEFECTIVE DURING TROUBLESHOOTING. MAGNETO REPLACED.

CA100504011	ROBSIN	LYC	SERVO	LEAKING
4/25/2010	R44RAVENII	IO540AE1A5	D2121REVH	FLIGHT CONTROL

SERVO FOUND LEAKING DURING INSP, REPLACED SERVICEABLE.

CA100510004	ROBSIN	LYC	STARTER GEN	FAILED
5/2/2010	R44RAVENII	IO540AE1A5	14924HT	ENGINE

THE STARTER BENDIX DRIVE WOULD STICK OUT AND GET STUCK ON RT WING GEAR AND WOULD NOT RETRACT. THE STARTER WOULD NOT TURN ENGINE OVER.

CA100422009	ROBSIN	LYC	PUMP	WARNING LIGHT
4/14/2010	R44RAVENII	IO540AE1A5	D8187	FUEL SYSTEM

AUX FUEL PUMP LIGHT WOULD NOT EXTINGUISH, PUMP REPLACED.

CA100422010	ROBSIN	LYC	ACTUATOR	FAILED
4/14/2010	R44RAVENII	IO540AE1A5	C0512	CLUTCH

THE ACFT WOULD NOT START, CLUTCH ACTUATOR FAILED, ACFT FERRIED ON FLIGHT PERMIT TO REPAIR FACILITY AND CLUTCH ACTUATOR REPLACED. ACFT RETURNED TO ORIGINAL C OF A.

CA100531004	ROBSIN	LYC	HOSE	KINKED
5/29/2010	R44RAVENII	IO540AE1A5	D20626	AUX FUEL TANK

UPON INSP A KINKED FUEL HOSE WAS FOUND COMING FROM THE FUEL PRESSURE RELIEF VALVE TO THE AUX FUEL TANK. HOSE IS OF POOR QUALITY MFG AND WAS POSSIBLE KINKED WHEN DOING A DI UP TOP BY STEPPING ON IT OR CLEANING UNDER GEARBOX.

CA100608020	ROBSIN	LYC	GASCOLATOR	LEAKING
6/7/2010	R44RAVENII	IO540AE1A5	B4023	

THE GOSCOLATOR TOP LEAKS AT THE INLET AND OUTLET FITTINGS, REPLACED, SERVICABLE.

CA100730008	ROBSIN	LYC	STARTER	FAILED
7/24/2010	R44RAVENII	IO540AE1A5	BC3151004	ENGINE

STARTER ELECTRICALLY UNSERVICEABLE. WHEN TURNING ON ACFT POWER THE STARTER WOULD ENGAGE.

CA100913012	ROBSIN	LYC	MUFFLER	MELTED
9/13/2010	R44RAVENII	IO540AE1A5	C16932	ENGINE

EXHAUST MUFFLER C169-32(C169-31 SUB ASSEMBLY) SENT IN FROM CUSTOMER AT 540.0 TTSN. MUFFLER HAS MASSIVE FAILURE AT THE TAILPIPE ATTACHMENT JOINT. OPERATOR IS AWARE THAT THESE FAIL. THERE IS NO AD ON THESE AND THERE REALLY SHOULD BE. AD CF-90-03R2 DOES NOT COME UP WHEN IN CAWIS. PRIOR TO OBTAINING PDA09-02, 98 INSTANCES WERE RECORDED BY US WITH IDENTICAL FAILURES. UNIT WILL BE REPLACED WITH C169-32AWL WHICH USES A HIGHER HEAT CAPACITY MATERIAL IN THIS AREA. A TOTAL OF 78 PDA UNITS ARE IN SERVICE WITH MANY HAVING 800+ HOURS WITHOUT SHOWING THIS DEFECT. THERE SHOULD BE A AD SPECIFICALLY ON C169-3 AND C169-32 UNITS. C169-3AWL AND C169-32AWL SHOULD BE INCLUDED BUT SHOULD HAVE A HIGHER INITIAL COMPLIANCE TIME.

CA101020006	ROBSIN	LYC	STARTER	FAILED
10/16/2010	R44RAVENII	IO540AE1A5	14924HT	ENGINE

STARTER MADE LOUD GRINDING NOISE AND WOULD NOT ENGAGE ENGINE RING GEAR.

CA100713006	ROBSIN	LYC	STARTER	FAILED
7/7/2010	R44RAVENII	IO540AE1A5	14924HTH	

ACFT WOULD NOT START, STARTER REPLACED, PROBLEM RECTIFIED.

CA100713007	ROBSIN	LYC	WARNING SYSTEM	FAILED

7/11/2010	R44RAVENII	IO540AE1A5	A5699	MAIN ROTOR

LOW ROTOR RPM WARNING UNIT REPLACED DUE TO NO WARNING DURING FUNCTIONAL CHECK.

CA100819007	ROBSIN	LYC	STARTER	FAILED
8/16/2010	R44RAVENII	IO540AE1A5	14924HT	

THE STARTER FAILED TO CRANK THE ENGINE. STARTER REPLACED.

CA100819008	ROBSIN	LYC	WIRE	FAILED
8/18/2010	R44RAVENII	IO540AE1A5		CLUTCH ACTUATOR

(CAN) THE CLUTCH ACTUATOR FAILED TO ENGAGE, FOUND BROKEN WIRES ON SWITCHES. CLUTCH ACTUATOR REPLACED.

CA100525010	ROBSIN	LYC	SWITCH	FAILED
5/12/2010	R44RAVENII	IO540AE1A5		CLUTCH ACTUATOR

THE SWITCH CAUSED THE STARTER TO CUT OUT OPERATION, CLUTCH ACTUATOR REPLACED.

CA100525011	ROBSIN	LYC	PUMP	FAILED
5/12/2010	R44RAVENII	IO540AE1A5	D8187B	AUX FUEL PUMP

AUX FUEL PUMP ELECTRICALLY FAILED. SERVICABLE PUMP INSTALLED.

CA100525012	ROBSIN	LYC	CONTROLLER	MALFUNCTIONED
5/17/2010	R44RAVENII	IO540AE1A5	D2782	GOVERNOR

ENGINE RPM WAS READING HIGH 104 PERCENT, GOVERNOR CONTROLLER REPLACED SERVICABLE.

CA100824002	ROBSIN	LYC	STARTER	UNSERVICEABLE
8/18/2010	R44RAVENII	IO540AE1A5	14924HT	

THE STARTER WAS FOUND ELECTRICALLY UNSERVICEABLE. REPLACED WITH SERVICABLE STARTER.

CA100323004	SKRSKY	PWA	ENGINE	FAILED
3/8/2010	S64E	JFTD12A4A		NR 2

ACFT WAS INVOLVED IN AERIAL TIMBER HARVESTING OPERATIONS . WHILE THE ACFT WAS DESCENDING TO THE LOG LANDING AT A RATE OF 200 TO 300 FT PER MINUTE AND AN AIRPSEED OF 20 KNOTS THE FLIGHT CREW HEARD A "SWOOSH" SOUND AND THEN WERE ALTERTED BY AN ENGINE LOW N1 RPM WARNING HORN AND CAUTION LIGHT. THE CREW INDENTIFIED THE NR 2 ENGINE AS THE PROBLEM AND INITIATED AN IN FLIGHT SHUTDOWN. THE LOAD WAS RELEASED AND THE ACFT RETURNED TO ITS SERVICE LANDING WITHOUT FURTHER INCIDENT. A POST FLIGHT INSP OF THE ENGINE REVEALED NO APPARENT EXTERNAL CAUSE OF THE ENGINE "ROLLBACK". A DOWN LOAD OF THE T5 TEMPERATURE RECORDING SYS REVEALED THE ENGINE HAD EXCEEDED NORMAL OPERATING LIMITS BY REACHING A TEMP OF 765 DEGREES C FOR 3 SECONDS. AT THE REQUEST OF MFG, THE ENTIRE ENGINE INCLUDING COMPRESSOR ASSY, FREE TURBINE ASSY, FCU AND N2 SPEED SENSE CABLE ASSY WAS REMOVED AND RETURNED FOR FURTHER TESTING AND EVALUATION IN THE TEST TEST CELL IN AN EFFORT TO DUPLICATE THE PROBLEM AND CONFIRM THE SPECIFIC CAUSE OF THIS "ROLLBACK".

CA100609007	SKRSKY	ALLSN	CIRCUIT BREAKER	SPARKS
6/7/2010	S76A	250C30S		AFCS CB PANEL

(CAN) ACFT WAS ON POSITIONING FLIGHT IN CRUISE AT 5500 FT, FL CREW NOTED SPARKS COMING FROM VICINITY OF AFCS CB PANEL IN THE CEILING AREA OF THE COCKPIT. THIS WAS FOLLOWED IMMEDIATLY BY FLAMES COMING FROM THE SAME AREA. PILOT INITIATED DECENT FOR A FIELD ON ISLAND. PILOT SAW FLAMES DIE OUT AND THEN FLARE UP AGAIN. COPILOT MADE A MAYDAY CALL TO TERMINAL 127.8. ACFT LANDED SAFELY IN A FIELD ON ISLAND. MX ENGINERERS WERE TRANSPORTED TO THE SITE. DURING INSP, FOUND A THROUGH HOLE GROMMET PROTECTING FEEDER WIRES IN AFCS CB PANEL HAVE DETERIORATED ALLOWING WIRES NR C5802A14 AND C5800A14 TO ARC AGAINST AFCS CB PANEL BOX. AFCS CB PANEL WAS REMOVED, THROUGH HOLE TRIMMED TO REMOVE DAMAGE AND NEW GROMMET WAS INSTALLED. REPLACED WIRE C5802A14 FROM CB 156 IN LOWER CB PANEL TO AFCS DC ESSENTIAL BUSS AND WIRE C5800A14 FROM CB 7 IN UPPER CB PANEL TO

AFCS NR 2 PRIMARY BUSS. GROUND RUN PERFORMED, SATISFACTORY.

CA100614003	SKRSKY	GE		BYPASS VALVE	DEFECTIVE
6/9/2010	S92A	CT78A	92351153100	9235115809102	GEARBOX

ACFT WAS IN CRUISE FLIGHT, HEADING OFFSHORE WITH PASSENGERS. CREW WERE ALERTED TO A MGB OIL BY-PASS INDICATION ON THE MULTI FUNCTION DISPLAY. AS THE SYS IS NOT AUTOMATIC, THE SWITCH WAS CHECKED AND CONFIRMED TO BE IN THE "NORM" AND NOT "TEST" POSITION. ACFT WAS TURNED AROUND TO RETURN TO BASE. DURING THE FLIGHT BACK THE INDICATION BECAME ERRATIC, COMING ON AND GOING OFF AT RANDOM. DURING POST LANDING TROUBLESHOOTING THE SWITCH, WHICH IS INTEGRAL TO THE BY-PASS VALVE, AND IS RESPONSIBLE FOR ACTIVATING THE COCKPIT WARNING THROUGH THE VALVE MOTION WHEN "BY-PASS" IS SELECTED IN THE COCKPIT, WAS METERED AND FOUND TO BE DEFECTIVE. RECTIFYING THIS REQUIRES REPLACEMENT OF THE ENTIRE BY-PASS VALVE.

CA100602002	SKRSKY	GE		WIRE HARNESS	CHAFED
6/1/2010	S92A	CT78A			ANTI ICE SYS

DURING CRUISE TO THE PRODUCTION PLATFORM, THE NR 1 ENG INLET FAIL CAPTION ILLUMINATED AND WOULD NOT RESET USING CHECKLIST PROCEDURES. AFTER CONSIDERING THE ENROUTE WEATHER, THE CREW ELECTED TO RETURN TO BASE. THE ACFT LANDED WITHOUT INCIDENT. MX CONDUCTED AN INVESTIGATION OF THE FAULT AND DURING TROUBLESHOOTING, FOUND THE ANTI-ICE WIRING HARNESSES FOR THE CROTCH ASSY AND ENGINE INLET WAS CHAFED. AN ANTI-ICE HARNESS ASSY HAS BEEN ORDERED. MFG HAS BEEN MADE AWARE OF THE PROBLEM THROUGH THE FIELD SERVICE REP.

2011FA0000031	SNIAS	TMECA		PULLEY	WORN
1/18/2011	AS350B2	ARRIEL1D1		350A35109222	HYD PUMP

DURING A SCHEDULED INSP, THE HYD PUMP DRIVE PULLEY BEARING WAS DETERMINED TO HAVE EXCESSIVE RADIAL PLAY (LOOSENESS). AT DISASSEMBLY, MINOR WEAR WAS DISCOVERED ON THE PULLEY BRG INNER RACE AND SEVERE WEAR WAS FOUND ON THE ADJACENT PULLEY JOURNAL OUTER DIAMETER. THIS PROBLEM HAS BEEN PREVIOUSLY ADDRESSED BY MFG WITH SB 63.00.17, ISSUED 08 OCT 2007. THE SB POINTS TO A DIMENSIONAL NON-CONFORMITY WITH THE PULLEY SHAFT. IT FURTHER STATES THE RECOMMENDED INSPECTIONS ARE NOTAPPLICABLE TO ACFT WITH MORE THAN 500-HOURS IN SERVICE OR THOSE DELIVERED AFTER 01 APR 2007. THIS ACFT WAS DELIVERED IN JANUARY 2008. THIS IS WELL AFTER THIS PROBLEM SHOULD HAVE BEEN CORRECTED.SUGGEST THAT OPERATORS CHECK FOR BEARING LOOSENESS AS PART OF THE 100-HOUR LUBRICATION OF THE HYD PUMP DRIVE SPLINE.

CA100610006	SNIAS	TMECA		CAP	SEPARATED
6/10/2010	AS350B2	ARRIEL1D1	704A34240015	10134002800	VALVE

WHILE CONDUCTING AN INSP ON THE ACCUMULATORS, THE VALVE CAPS WERE REMOVED. UPON DISASSEMBLY IT WAS NOTED THAT THE SEAL AND BRASS CUP HAD SEPARATED FROM THE CAP AND BECAME LODGED IN THE VALVE ASSY. THIS RESULTED IN LOSS OF PRESSURE IN THE ACCUMULATORS. THIS COULD BE A RESULT OF OVERTORQUING THE CAP, CUTTING THE SEAL AND BRASS CUP. THE PRESSURE WOULD HAVE PUSHED THE SEAL INTO THE VALVE ASSY, LEAKING OFF THE ACCUMULATOR PRESSURE. THE TORQUE IS 8.85 TO 10.62 LBF IN FOR THE CAP. THERE IS ALSO THE POSSIBILITY OF MULTIPLE USES CAUSING THE CAP TO BE TURNED DEEPER ONTO THE VALVE STEM. AS THE CAP MOVES FURTHER DOWN, THE SEAL AND BRASS CUP ARE ARE SEPARATED. IF THIS SHOULD OCCUR ON A MULITPLE SERVO SYS SOME ACCUMULATORS WOULD HAVE PRESSURE AND OTHERS NOT IN A HYD FAILURE SITUATION. ENGINEERS ARE TO BE AWARE OF THE TORQUE VALUE ON THE CAP AND ALSO THE IMPORTANCE OF INSPECTING INSIGNIFICANT PARTS. MM 29.10.10.302 STATES THAT TO REPLACE THE CAP IF THE CAP OR SEAL IS IN POOR CONDITION.

CA100415005	SNIAS	TMECA		BEARING	FAILED
4/12/2010	AS350B2	ARRIEL1D1			EPICYCLIC GEAR

ON REMOVAL OF THE BEVEL REDUCTION GEAR, 2 LARGE CHIPS WHERE FOUND ON THE UPPER INSIDE SURFACE. INSPECTED THE EPICYCLIC AND FOUND ONE OF THE GEARS BEARING HAD FAILED. THIS WAS A SUPRISE TO US AS WE DID NOT HAVE ANY INDICATION THE MGB WAS MAKING METAL. NO CHIP LIGHTS NOTED OR METAL ON THE CHIP PLUGS. BOTH THE MGB AND EPICYCLIC WHERE SENT FOR REPAIR/OVERHAUL.

CA100512003	SNIAS	TMECA		HOSE	LEAKING

5/11/2010	AS350B2	ARRIEL1D1	704A34412037	HYDRAULIC SYS

AFTER A SHORT (0.3 H) FIRST FLIGHT OF THE DAY, THE PILOT LANDS AND SHUTS DOWN NORMALLY THE ENGINE. AFTER GETTING OUT OF THE ACFT, HE DETECTS PRESENCE OF HYD OIL IN THE MAIN TRANSMISSION DECK AREA. OPENING THE COWLINGS, HE DISCOVERS A LOT OF HYD OIL ON THE EQUIPMENT. THE HYD LEVEL IN THE TANK IS BELOW THE MINIMUM. AFTER INVESTIGATION, IT IS DETERMINED THAT THE REF HYD HOSE IS LEAKING. THE HOSE IS REPLACED BY A NEW ONE, ACFT CLEANED, CHIP PLUS VERIFIED AND HYD FILTER VERIFIED AND REPLACED, NO DEFECT FOUND. LEAK CHECK OK, ACFT SERVICEABLE. THE HOSE IS INSPECTED, AND NO DEFECT CAN BE FOUND VISUALLY (NO CHAFING AND APPARENT GOOD CONDITION. DATE OF MFG IS THIRD QUARTER 2005 ON THE RING (OPERATING TIME NORMALLY 5000 H OR 12 YEARS. THE HOSE IS TESTED ON THE BENCH WITH SHOP AIR AND SOAP. LEAK COMES FROM A MICROSCOPIC HOLE ON THE HOSE BODY.

CA100505005	SNIAS	TMECA	STARTER GEN	FAILED
4/12/2010	AS350B2	ARRIEL1D1	150SG122Q	ENGINE

STARTER FAILED TO ROTATE ENGINE ON STARTUP PHASE. UNIT REMOVED AND SENT TO MFG FOR A TEAR DOWN REPORT AND METAL ANALYSIS.

CA100518001	SNIAS	TMECA	BEARING	UNSECURE
5/14/2010	AS350B2	ARRIEL1D1	593733	HYDRAULIC PUMP

(CAN) DURING SCHEDULED INSP OF HYD PUMP DRIVE ASSY, NEW BEARING WAS ABOUT TO BE INSTALLED. TECH NOTICED THAT THE NEW BEARING`S GREASE SEAL ROTATED ALONG WITH THE INNER RACE OF THE BEARING. PART WAS REJECTED AND REPLACED WITH ANOTHER SERVICEABLE BEARING.

CA100830003	SNIAS	TMECA	CROSSTUBE	CRACKED
8/30/2010	AS350B3	ARRIEL2B1	350A41108602	MLG

WHILE CARRING OUT A DAILY INSP, THE AME NOTICED A CRACK IN THE PAINT ON THE FWD CROSSTUBE LT SADDLE WHERE IT ATTACHES TO THE SKIDTUBE. PAINT REMOVED AND A CRACK IN THE CROSSTUBE SADDLE WAS VISIBLE.

CA100701005	SNIAS	LYC	FILTER	DAMAGED
6/28/2010	AS350BA	LTS101600A3	25847	THREADS

WHEN REMOVING THE P/C FILTER FOR A SCHEDULED 100 HR CLEANING THE THREADS ON THE FITTING WERE VERY TIGHT TO COME OFF. INSP OF THE THREADS ON THE FILTER HSG SHOWED THE THREADS WERE STRIPPED. LOG BOOK SHOWED THE P/C FILTER ASSY WAS INSTALLED NEW JUST 68 HR FOR THE SAME PROBLEM. PURCHASING A DIFFERENT PN/MFG FILTER HAS BEEN DONE TO HOPEFULLY TO FIX THIS PROBLEM.

CA100615010	SNIAS	LYC	O-RING	DAMAGED
6/11/2010	AS350BA	LTS101700D2		CHIP DETECTOR

(SECOND SDR ON SAME PROBLEM, PLEASE REVIEW SDR 20100615008.) BOTH ACFT (C-FXPM & C-FXED) ARE AT THE SAME LOCATION, WHEN THE CHIP PLUG HSG PROBLEM WAS DISCOVER ON ACFT C-FXPM (SDR 20100615008) THE SECOND ACFT WAS INSPECTED ON SITE TO FIND THE EXACT SAME PROBLEM. OUR COMPLETE FLEET HAVING THIS FILTER (9 ACFT) WAS INSPECTED FOR THE SAME ISSUE. 1 OTHER ACFT HAD A SIMILAR CONDITION WHERE THE O-RING WAS IN A VERY BAD CONDITION. NOTE : THIS O`RING CAN ONLY BE REPLACED BY THE MFG.

CA100615008	SNIAS	LYC	CHIP DETECTOR	DAMAGED
6/11/2010	AS350BA	LTS101700D2	2031	ENGINE

IN FLIGHT, THE LOSS OF ENGINE OIL PRESSURE RESULTED IN A EMERGENCY LANDING. THE CAUSE WAS FOUND TO BE THE ADC FILTER ASSY, P/N T2001-1, CHIP PLUG HSG, P/N 203-1, O-RING RETAINING THE "STOP PLUNGER" DAMAGE WAS FOUND ON THE FILTER ELEMENT. CHIP PLUG LOST IN FLIGHT CAUSING A DIRECT FLOW OUT OF THE SYS FOR THE ENGINE OIL.

CA100713011	SNIAS	LYC	O-RING	DAMAGED
7/10/2010	AS350BA	LTS101700D2	2031	CHIP DETECTOR

DURING INSP, FOUND DAMAGED O`RING ON ADC FILTER ASSEMBLY CHIP PLUG HSG ASSY. ACFT AOG. THIS O`RING CAN ONLY BE REPLACED BY MFR AS IT IS INTERNAL PART OF THE HOUSING. PLEASE REFER TO SDR

20100615010 AND 201006615008 FOR DETAILED PICTURES.

CA100805012	SOCATA	LYC	RELAY	BURNED
6/30/2010	TB20TRINIDAD	IO540C4D5	ZOON7733011024	TE FLAPS

(CAN) FLAP CIRCUIT BREAKER POP OUT, DURING TESTING FLAP OPERATION ON THE GROUND. DEFECT FOUND WAS BURNED CONTACT IN FLAP RELAY LOCATED UNDER ACFT BELLY RT SIDE.

CA100519008	STEMME	ROTAX	CRANKCASE	CRACKED
1/2/2010	S10VT	ROTAX914	886354	ENGINE

(CAN) OIL NOTED TO BE COMING FROM TOP CYLINDER STUD ON CYLINDER NR 1. CRANKCASE WAS DISASSEMBLED AND NDT SHOWED APPROX 1 IN CRACK ON INSIDE SURFACE OF CRANKCASE ACROSS THE AREA OF THE BLIND HOLE FOR THE CYL STUD. THE CRACK WAS NOTED TO BE APPROX ALIGNED WITH THE START OF THREADS IN THE BLIND HOLE. THE CYL STUDS HAVE A VERY LOW TORQUE VALUE (15 IN POUNDS), SO IT IS NOT KNOWN HOW THE CRACK DEVELOPED. THE TURBO CONTROL UNIT (TCU) MEMORY WAS READ AND NO OVERBOOSTS OR OVER RPM WERE EXPERIENCED. THE ENGINE IS IN A MOTORGLIDER AND HAS 300 HRS IN 15 YEARS OF SERVICE. CRANKCASE WAS REPLACED WITH NEW TYPE AND ENGINE RETURNED TO SERVICE.

2011FA0000042	UROCOP	TMECA	CONTROL UNIT	MISALIGNED
1/25/2011	EC120B	ARRIUS2F	C671C5020101	MIXER

FOUND MIXER UNIT MISALIGNED CAUSING THE CYCLIC STICK TO RISE UNCOMMANDED DURING GROUND CHECKS AND ALSO CAUSED THE STRESS OF OTHER FLIGHT CONTROL COMPONENTS IN THE SYS CAUSING RIVETS TO WORK WHEN THE ACFT WAS SHUTDOWN AND THE CYCLIC IN THE LOCKED POSTION.

CA100611001	UROCOP	TMECA	COMPRESSOR WHEEL	SEIZED
5/19/2010	EC130B4	ARRIEL2B1		ENGINE

ACFT LANDED AND START WAS ATTEMPTED WITH HIGH T4, START ABORTED, SECOND START WAS ATTEMPED WITH SAME RESULT ACFT REMAINED OVERNIGHT. DURING START ATTEMP THE FOLLOWING MORNING THE AXIAL COMPRESSOR WHEEL WAS FOUND SEIZED. ENGINE WAS REMOVED AND SENT FOR INVESTIGATION AND REPAIR. RENTAL ENGINE WAS INSTALLED AND ACFT RETURNED TO SERVICE. INTERNAL FAILURE REASON UNKNOWN AT THIS TIME.

CA100903008	UROCOP	PWA	ENGINE	POWER LOSS
8/28/2010	EC135P2	PW206B2		

POWER LOSS WHILE ENROUTE THE CREW NOTED A CHIP DETECTOR WARNING ON THE LT ENGINE FOLLOWED BY LOSS OF POWER. THE ENGINE DID CONTINUE TO RUN HOWEVER, AT LOWER POWER. PRIOR TO LANDING, THE CREW WAS ABLE TO INCREASE POWER BACK UP TO 100 PERCENT AND LANDED SAFELY. GROUND INSP FOUND METAL ON THE CHIP DETECTOR AND THE ENGINE IS BEING REPLACED.