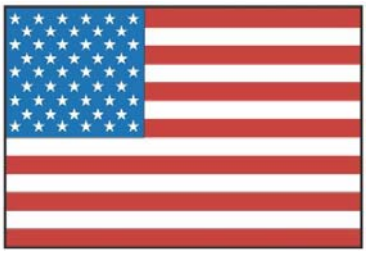
U.S. Department of Transportation
Federal Aviation Administration

AFS-600
Regulatory Support Division

ADVISORY CIRCULAR

43-16A

AVIATION MAINTENANCE ALERTS



ALERT NUMBER 395

JUNE 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): SS-D1; Elevator Water Accumulation; ATA 2730

A repairman for this Volkswagen powered experimental homebuilt states, "The left elevator filled with water from an over night rain, making the control surface unbalanced. Severe elevator flutter was encountered during takeoff climb, *(causing)* the aircraft to make an emergency landing.

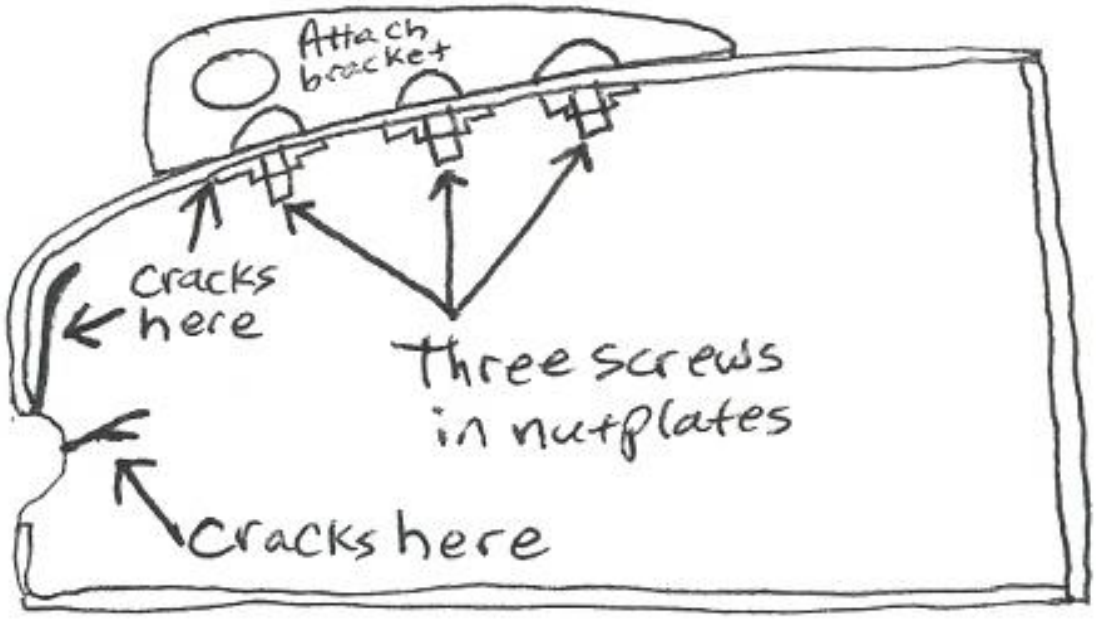
"Better sealing of the fabric covering at the control horn—and use of more and larger water drain holes in the trailing edge could have prevented the water accumulation. This *(admonition)* could apply to most fabric covered aircraft."

(An added note on the 8010-4 hard copy defect report indicates the submitter found no drain holes in the elevator!)

Part *(aircraft)* Total Time: 289.0 hours

Beechcraft: A36; Cracked Flap Nose Rib; ATA 5753

"During an Annual Inspection," says this repair station technician, "one nose rib was found cracked in the right flap. It is the rib located directly beneath the attach bracket mounted on the skin." *(R/H flap P/N: 35-165050-79; nose rib P/N: 35-165050-84. The SDRS database reflects 17 of these ribs.)*



(One could not ask for a better road map! See the next entry for a similar report. Thanks for the artwork—far better than I can produce—Ed.)

Part Total Time: 4,069.2 hours

Beechcraft: 58; Cracked Flap Nose Rib; ATA 5753

The previous report's repair station technician again describes a cracked nose rib for a different airplane. "During an inspection (prior to purchase) the left flap nose rib was found cracked through the leading edge relief cut out in the upper flange bend radius. *(It continued)* through the actuator attach bracket nut plate rivet holes. This is a very difficult area to access and inspect. The addition of a small opening in the bottom flap skin would be advisable for inspecting this area. *(I)* suspect this *(rib crack)* is caused by flaps being extended at higher than designed airspeeds, or incorrect up-stop bumper rigging. My research *(found)* no Beech service information addressing this common failure item." *(L/H Flap P/N: 35-165050-78; Nose Rib P/N: 35-165050-84: the same P/N as previous entry.)*

Part Total Time: 6,158.0 hours

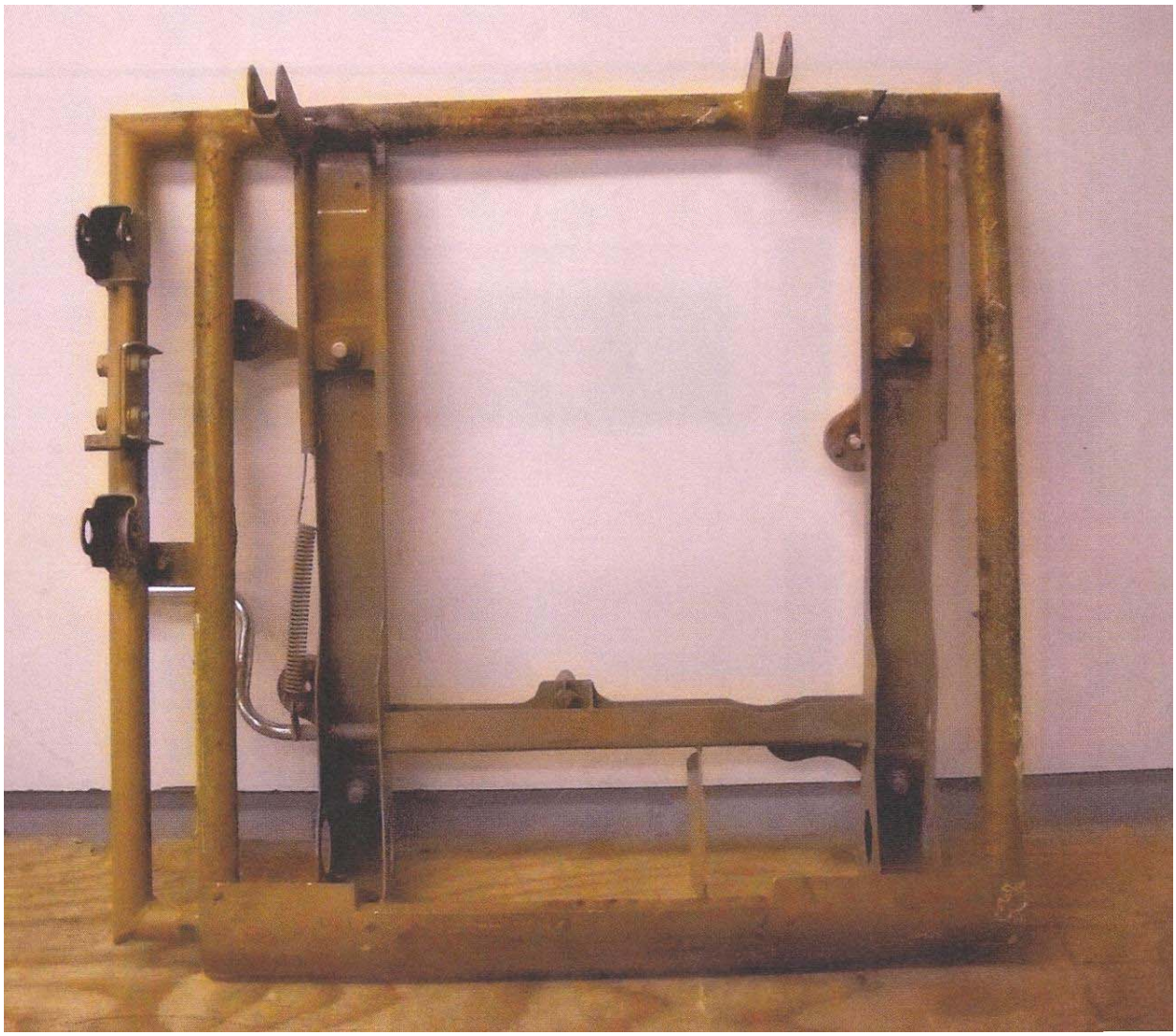
Cessna: 340; Chafed Oil Pressure Tube; ATA 7931

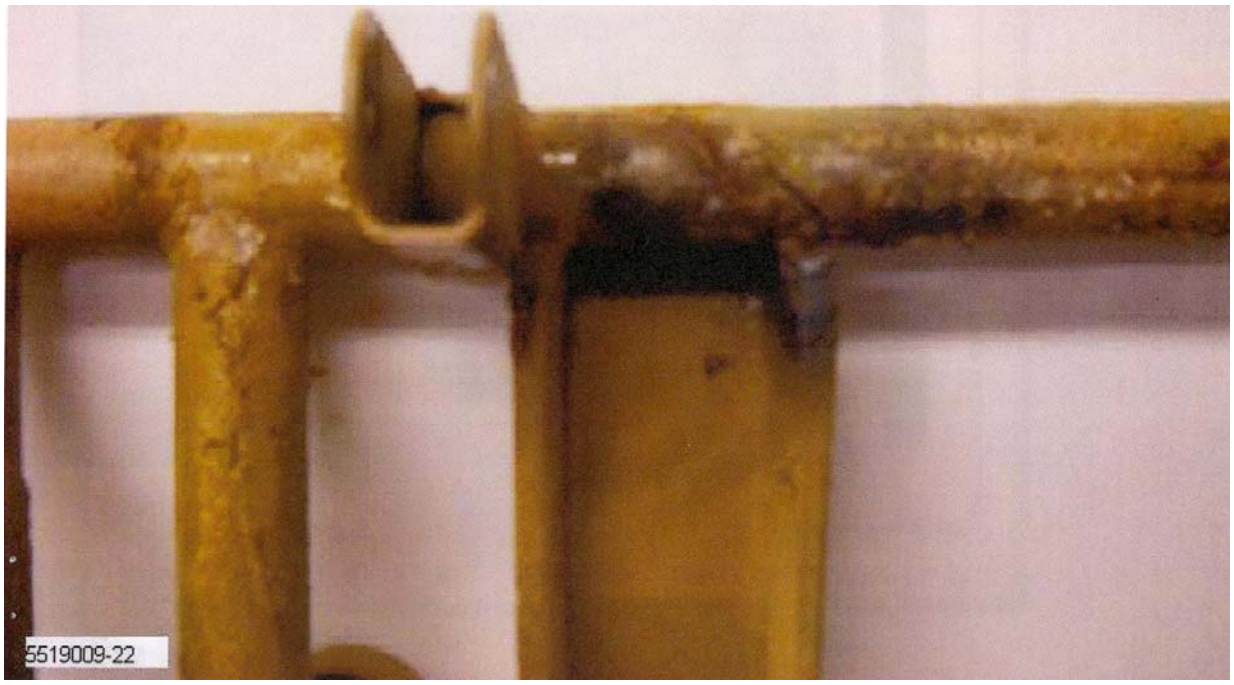
"I ran the *(TSIO 520)* engine to check the magneto drop," says this A&P mechanic. *"(Subsequently),* engine oil was observed dripping out of the port side wing root. I removed the inspection plates and found the ¼ inch aluminum tubing (P/N 5600107-11) routed over the top of the three inch SCAT *(flexible air tubing)*. The wire in the SCAT tubing chafed a hole in this ¼ inch aluminum oil pressure line that runs from the engine to the cockpit. The starboard line was also routed the same way—*(it too)* was rerouted to prevent chafing."

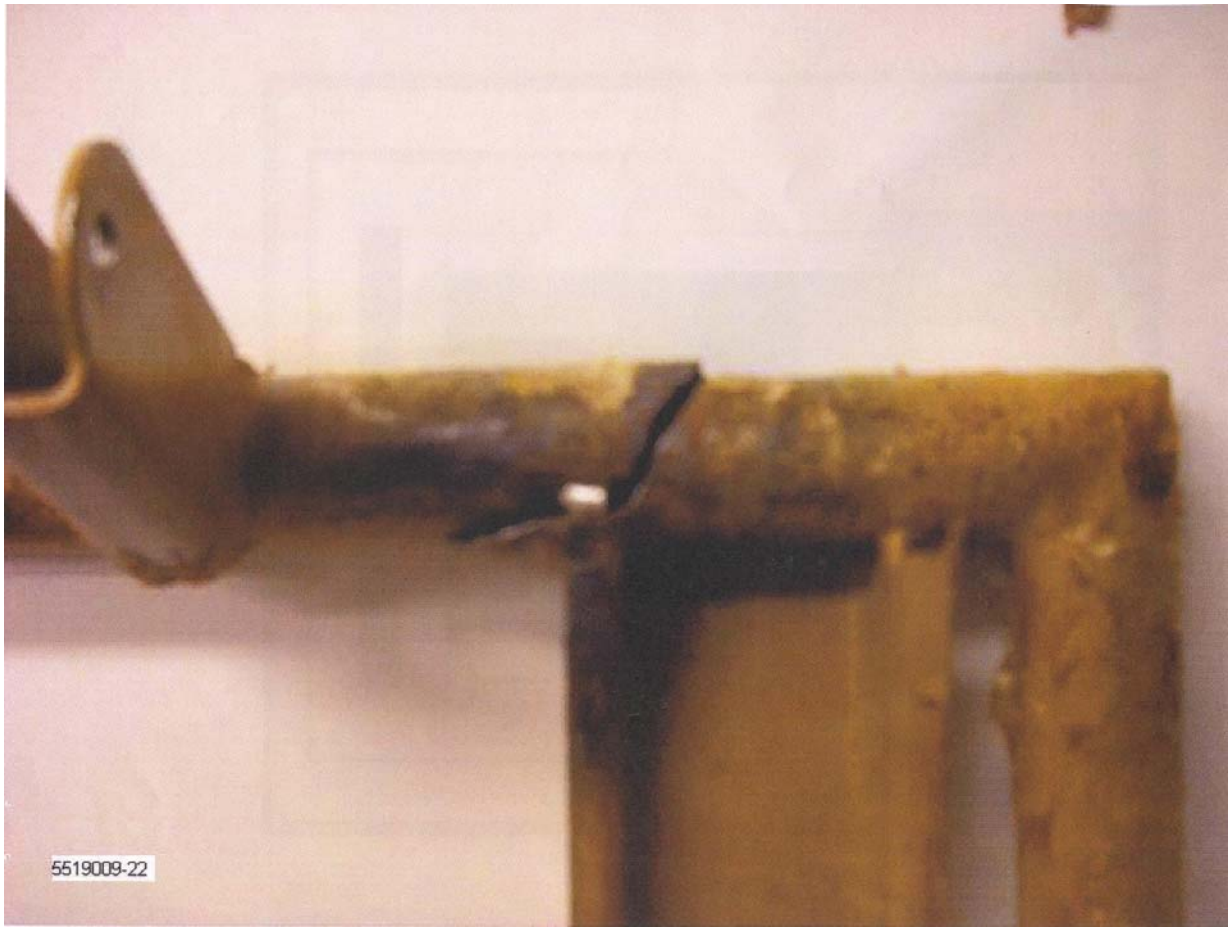
Part Total Time: 3,765.0 hours

Cessna: 551: Cracked Seat Base Assembly; ATA 2510

A repair station provides this brief defect report concerning a seat frame. "The upper seat base assembly is cracked at the chair back attach points. *(I speculate)* stress on the chair back and metal fatigue as the probable cause. A previous, inappropriate repair *(has been observed on this frame).* This chair was repaired in accordance with AvFab STC STO1043WI, P/N 42-0312K, and drawing D-10394, Revision 'A'." *(Seat assembly P/N: 5519015-16; Seat base P/N: 5519009-22. The Alerts profiled these seats four separate times in 2005: reference July, September, November, and December—all with attached photos. The SDRS database reflects eleven of the -22 part numbers.)*



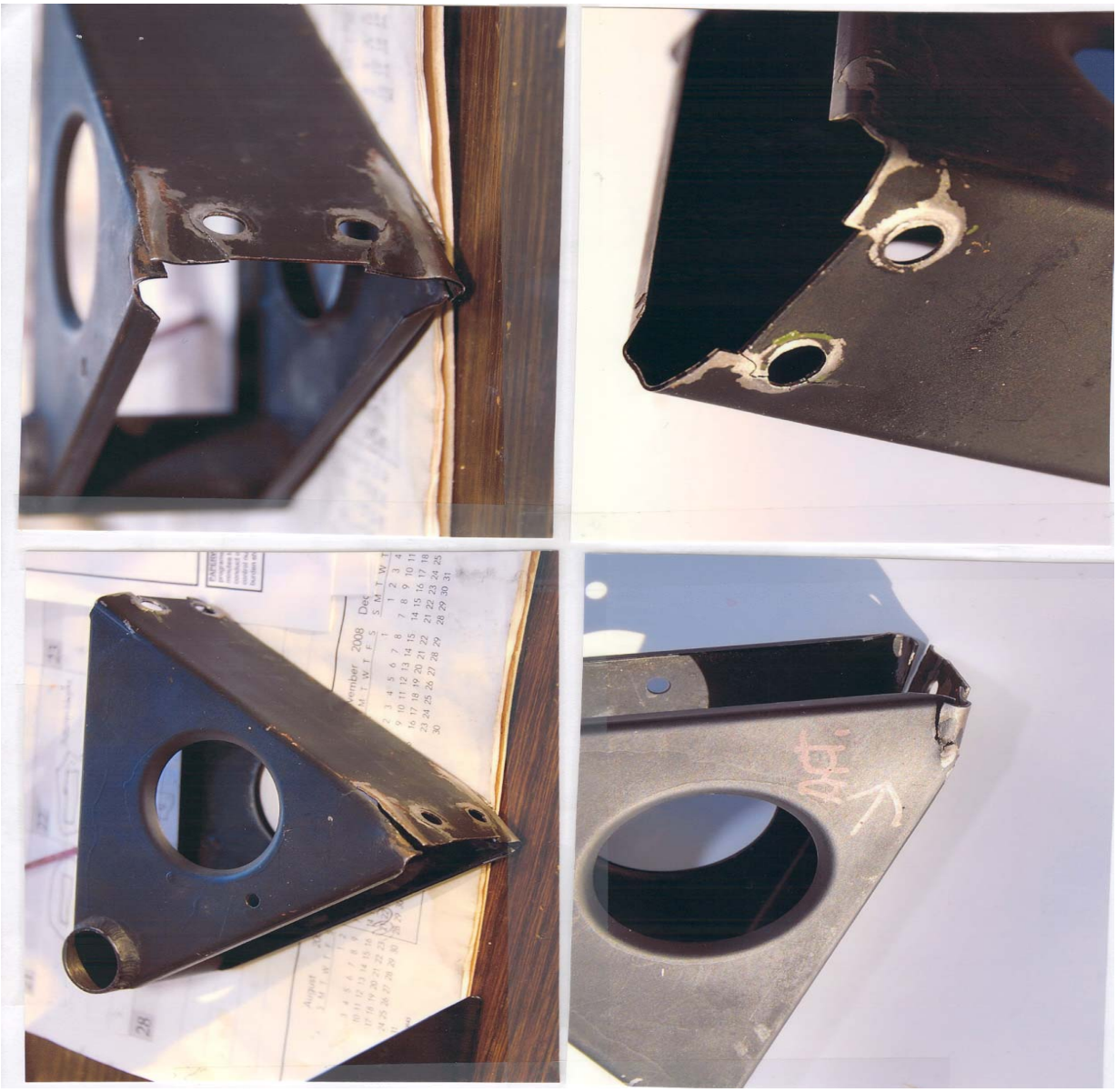




Part Total Time: (unknown)

Piper: PA28-235; Cracked Rudder Bar Support; ATA 2720

An Aviation Inspector says, "*(This support assembly...)* should have AN960 washers under the four AN3-4L bolts to spread the load on the *(support)* assembly *(P/N 63451-00)*. There are no washers shown in the parts list."



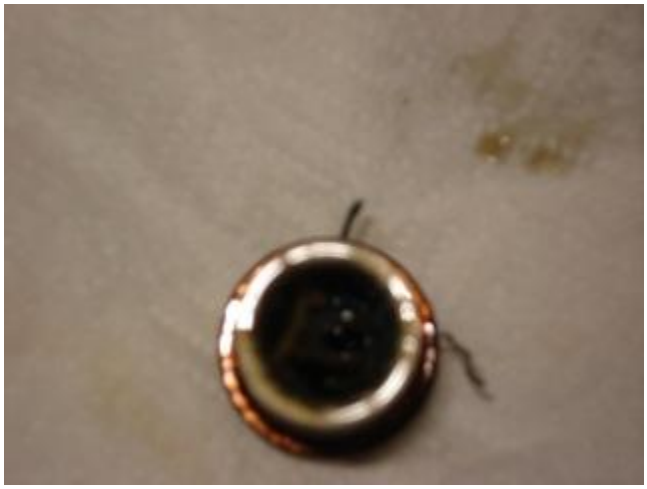
(Reference February Alerts 2009 for a similar report. SDRS has six entries.)

Part Total Time: (unknown)

POWERPLANTS

Continental: IO360KB; Contaminated Oil Pump; ATA 8550

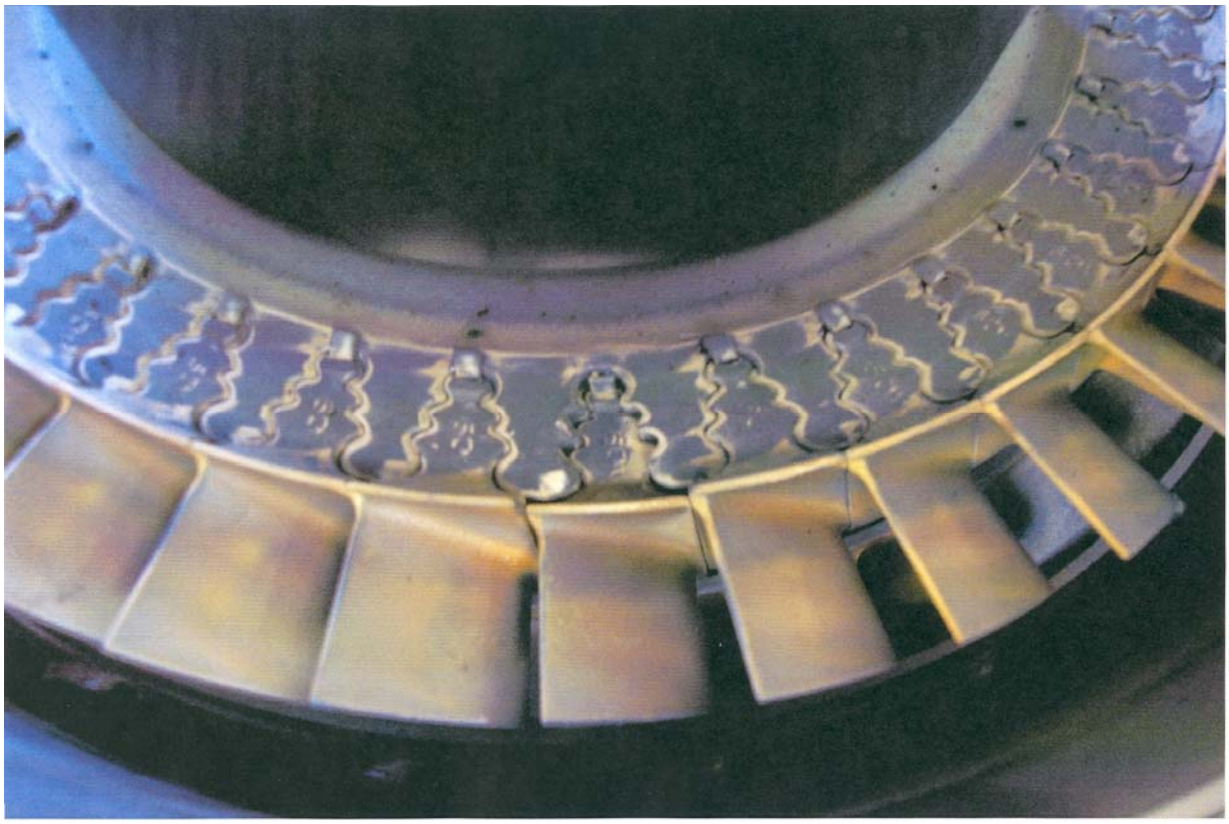
"*(I)* removed the engine oil pump suction screen as part of a 100 hour inspection," states this technician. "I found the old style suction screen with FOD: *(this debris includes)* a ¼ inch AN flat washer; two springs, such as those used in Garlock seals (these had partially penetrated the suction screen about ¾ inch); small pieces of plastic grommet, as used where the dipstick meets baffling; and approximately ½ teaspoon of silicone globules. I cut *(open)* and inspected the oil filter—no debris was found. *(Next)* the oil pan and accessory case were removed to gain access to the oil pump. I found scoring in the oil pump housing consistent with FOD being run through the pump. The oil pump drive gear marked with P/N 634010A and impeller P/N 633602B were found installed with Woodruff key in the slot. These parts were subject to AD 81-13-10R1—I was unable to verify compliance with this AD. The overhaul facility specifically stated in their log book endorsement they had complied with TCM Service Bulletin 97-6 which required replacement of the oil pump gears with new style parts (IAW SB 96-4) and replacement of the suction screen with an improved design. This was not done, as old style parts were found in the engine. I removed the engine and sent it to *(an overhaul facility)* for a complete teardown inspection and repair. It is likely had SB 97-6 been complied with at overhaul, the new style screen would have prevented the damage to the oil pump."

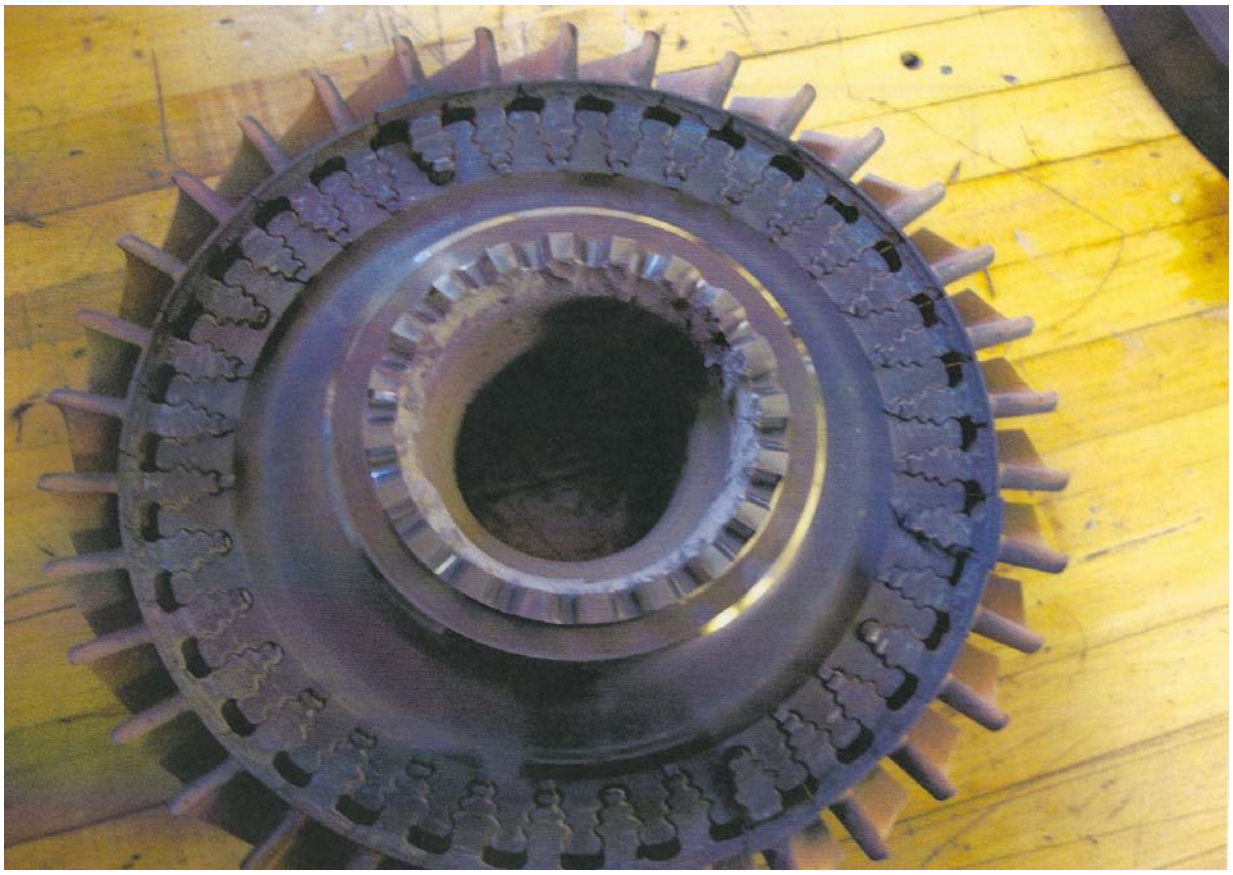


Part Total Time: 1,823.0 hours

Turbomeca: Arrius 2B2; Failed Turbine Disk; ATA 7250

A technician from a corporate operator describes the difficulty with this EC135T2 helicopter engine. "While performing a borescope inspection (and rotating the engine) a noise was heard, and then the N1 section of the engine locked up. *(I)* removed the engine and disassembled module 1 from module 2, and waited for Turbomeca Support to come and disassemble module 2. Upon disassembly of module 2, *(we)* found the HP *(high pressure)* turbine disc had three shifted blades—and *(these)* were rubbing into the HP nozzle guide vane. Turbomeca Support is going to replace the HP turbine wheel and nozzle guide vane." *(HP turbine disk P/N: 0319218520.)*





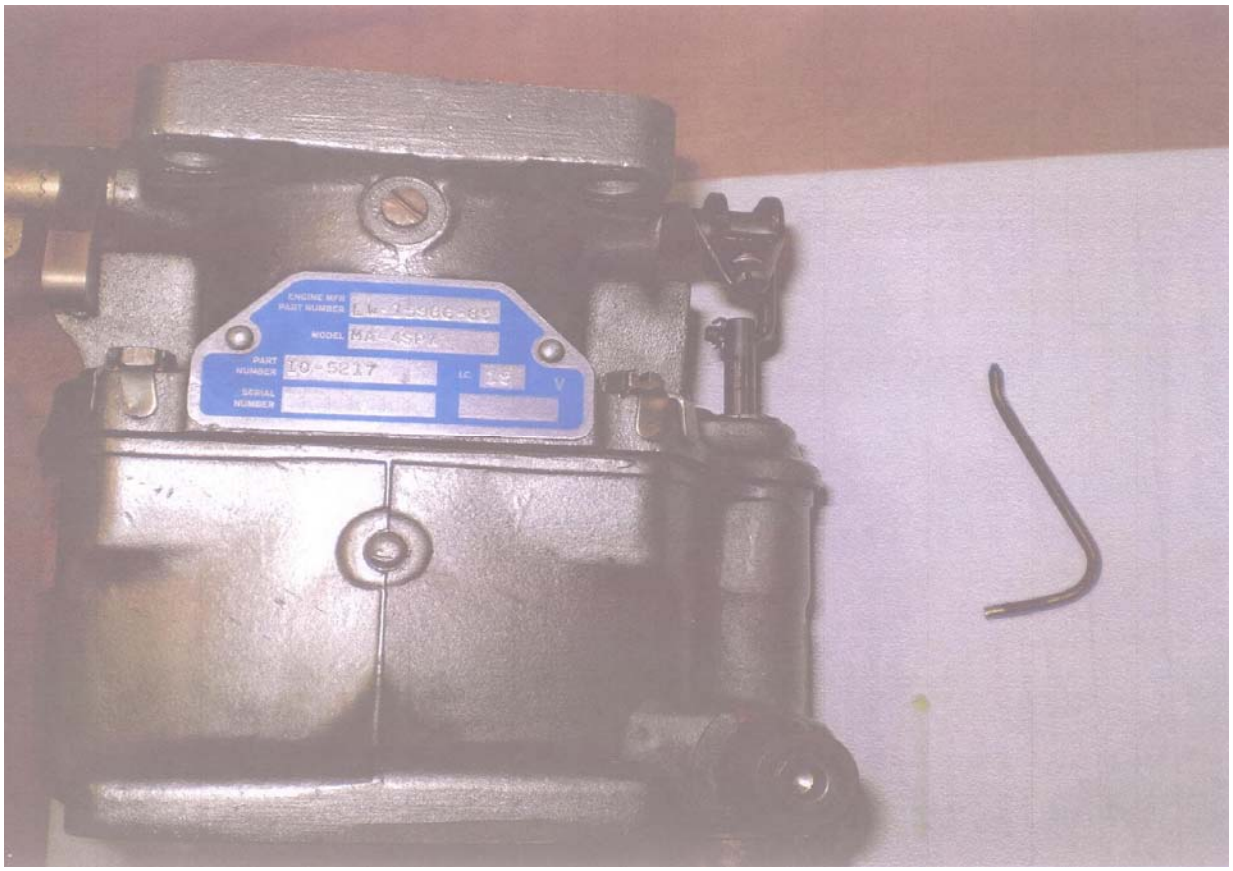
Part Total Time: 2,042.0 hours

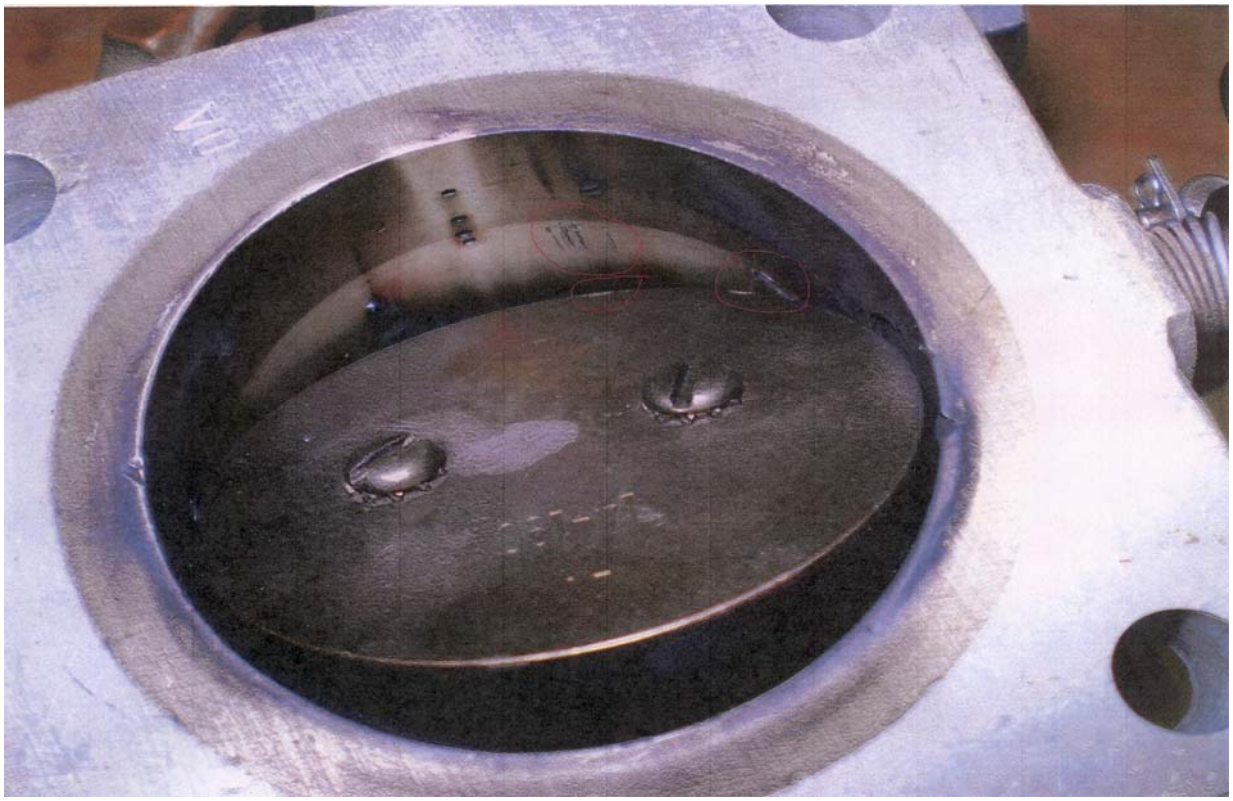
ACCESSORIES

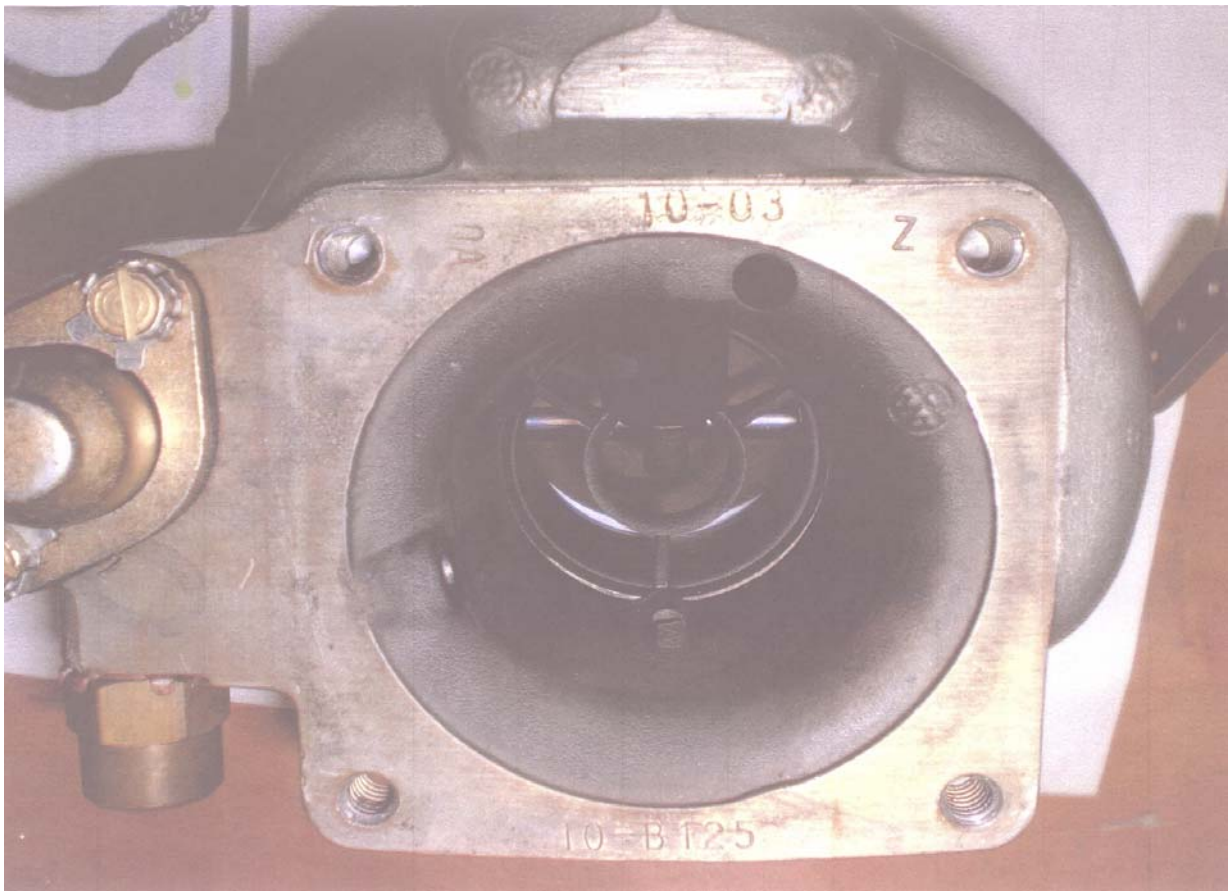
Marvel-Schebler: MA-4SPA; Loose Discharge Pump Tube; ATA 7322

(This report references a Cessna 172P sporting a Lycoming O-320-D2J.)

"The pilots made a precautionary landing," says this A&P mechanic, "as they were unable to retard the engine throttle below 2100 RPM. In order to land, the mixture was moved to the idle cut off prior to the landing flare. An off-base airport was selected as a landing site due to the large runway available, and the *(presence)* of ARFF *(Aircraft Rescue and Firefighting).* Off-field maintenance personnel inspected and found the accelerator pump discharge tube had detached from the boss, then lodged between the throttle plate and the carburetor throat—inhibiting throttle movement. The accelerator tube was found bent at the tip, depressions were found in the side of the throttle plate, and scratches were observed in the throat of the carburetor consistent with the discrepancy. (Note: this carburetor was shipped with an overhauled Lycoming Engine directly from Lycoming. The carburetor was supplied to Lycoming Engines from Precision Airmotive.)" *(Carburetor P/N: 10-5217. Time since overhaul: 1,203.7 hours.)*


ENGINE MFR PART NUMBER
MODEL
PART NUMBER
10-5217
LC
SERIAL NUMBER




10-03
Z
10-B T2-5

(Yes—this carburetor does have a serial number, but in the first photo it fell victim to my art practice, and all four views are skillfully "squashed." Note the SDRS database has 19 reports for this carburetor. Thank-you for the submission effort—Ed.)

Part Total Time: 1,203.7 hours (since overhaul)

Slick Magneto(s): 4370/4373; Loose Distributor Gear Arm; ATA 7414

(The following description combines five reports from the same source; four referencing model 4370, one on a 4373. All five are identical in wording.)

A mechanic says, "The distributor arm *(has come)* loose from the gear. When *(this happens)* it causes wear on the arm center *(hole)*, and when this diameter wears larger the arm flies out—closing the gap and grinding into the contacts of the distributor block. The magneto ran normal. This *(defect)* was found during an inspection."

(Of the five magnetos the times ranged from 1,402-1,743 hours. All were mounted to Lycoming O-360-A4M engines. Distributor gear P/N: K3822; SDRS database entries: 17.)

Part Total Time: 1,572.5 hours (average)

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 / Difficulty Date	Aircraft Make / Aircraft Model	Engine Make / Engine Model	Component Make / Component Model	Part Name / Part Number	Part Condition / Part Location
2011FA0000293				SUSPENSION LINE	BROKEN
4/21/2011					PARACHUTE

JUMPER REPORTED HE COULD NOT LOCATE MAIN CANOPY HANDLE AND DEPLOYED INTERACTION BETWEEN HEAD DOWN POSITION. IT IS SUSPECTED THERE WAS INTERACTION BETWEEN THE DEPLOYING RESERVE CANOPY AND JUMPERS BODY/EQUIP RESULTING IN 3 BROKEN A, B LINES. JUMPER LANDED WITH NO INJURIES. INSP OF RESERVE AND LINES REVEAL NO REASON FOR THE BROKEN LINES DUE TO QUALITY OF MATERIALS OR WORKMANSHIP. THE BROKEN LINES ARE INDICATIVE OF INTERACTION BETWEEN THE JUMPER AND THE DEPLOYING RESERVE. IT IS IMPORTANT FOR JUMPERS TO MAINTAIN FLAT FACE TO EARTH BODY POSITION DURING DEPLOYMENT OF PARACHUTES.

2011FA0000324				CAMSHAFT	MISMANUFACTURED
5/4/2011				LW19340	ENGINE

GOVERNOR GEAR NOT CUT CORRECTLY.

CA110127002				NUT	DEFORMED
12/15/2010				MS210423	

(CAN) THESE STRUCTURAL SPACE-SAVER NUTS SEEM VERY DEFORMED BEYOND WHAT IS NORMAL FOR THIS TYPE OF FRICTION NUT. AME WAS UNABLE TO FIT A NORMAL BOX END WRENCH ON THE NUTS FOR TIGHTENING DUE TO DEFORMITY. WE CONSIDER THE MANUFACTURE OF THE NUTS TO BE SUBSTANDARD. POSSIBLE VENDOR QUALITY CONTROL ISSUES? AME COMMENDED FOR IDENTIFYING POSSIBLE DISCREPANCY AND STORES STAFF FOR BRINGING IT TO MY ATTENTION. STORES HAD ALREADY REMOVED THE AFFECTED NUTS FROM INVENTORY AND QUARANTINED THEM AND CONTACTED THE SUPPLIER. SAMPLE OF NUTS, ALONG WITH OUR AMO`S UNAPPROVED/BOGUS PARTS FINDINGS FORM, SENT TO LOCAL TRANSPORT CANADA REGIONAL OFFICE FOR ANALYSIS. (TC# 20110127002)

CA101214008		CONT		PISTON ROD	MISMANUFACTURED
12/14/2010		IO360G		D5170	PROPELLER

(CAN) PISTON ROD PURCHASE (NEW) AND RECEIVED - VISUALLY ACCEPTABLE. PISTON ROD MACHINED INCORRECTLY FROM MCCAULEY - WHEN TRYING TO INSTALL BETA TUBE THREW THE PISTON ROD IT WILL NOT ALLOW THE TUBE ALL THE WAY IN. THE PISTON ROD INSIDE DIAMETER IS TOO SMALL AND DOES NOT ALLOW THE INSTALLATION OF THE BETA ROD. WE CHECKED OUR (NEW) INVENTORY AND FAILED A SECOND ROD WITH THE SAME ISSUES. (TC# 20101214008)

2011FA0000290		CONT		CRANKSHAFT	CRACKED
4/20/2011		O200A		530199	ENGINE

FOUND CRACK INDICATION DURING MAG-PARTICLE INSP ON CRANKSHAFT FLANGE AREA.

2011FA0000194		GARRTT		DRIVE SHAFT	STRIPPED
10/21/2010		TPE331101B		3598037AND349905	FUEL CONTROL

PILOT REPORTED HIGH FUEL FLOW AND EGT IN FLIGHT. POWER REDUCTION NOT OBTAINABLE WITH POWER LEVER MOVEMENT. PILOT COMMANDED IN-FLIGHT SHUTDOWN AND LANDED WITHOUT INCIDENT. NOTE: ACFT OPERATED IN AND OUT OF MEXICO. LOW FUEL LUBRICITY SUSPECTED. TIME SINCE NEW IS UNKNOWN SO THE

TIME SINCE O/H WAS INPUT. THE CYCLES LISTED ARE ESTIMATED.

2011FA0000246	LYC	CRANKSHAFT	BROKEN
4/12/2011	O360E1A6	LW1722670	ENGINE

DURING A FLIGHT TRAINING FLIGHT THE INSTRUCTOR SAID THEY WERE COMMING OUT OF A STALL AND THE ENGINE LOST POWER AND STOPPED RUNNING. AFTER LANDING, REMOVED COWL AND SPARK PLUGS NOTED THAT CYLINDERS 3 AND PISTONS MOVED AND CYLINDERS 1 AND 2 PISTONS DID NOT MOVE.

CA101222011	PWA	BEARING	FAILED
11/17/2010	PT6*		ENGINE

(CAN) ENGINEERING INVESTIGATION REPORT EIR PT6A 2010-087 ENGINE, SERIAL NUMBER , WAS SENT TO VECTOR ATLANTIC AFTER THE OPERATOR REPORTED OIL PRESSURE DROP DURING FLIGHT AND FOLLOWED BY FINDING METAL CHIPS (BRONZE) IN THE MAIN OIL PRESSURE FILTER DURING SUBSEQUENT INVESTIGATION.

CA101213005	PWA	ENGINE	POWER LOSS
12/7/2010	PT6T3		NR 2

(CAN) POWER LOSS FIRE DEPARTMENT, PT6T-3D, S/N TH0360, TTSN 2102, TCSN 3040 DURING A CHECK FLIGHT FOLLOWING RGB 2500HRS INSPECTION, WHILE FLYING LEVEL AT 500` THE NR 2 ENGINE TORQUE DROPPED TO IDLE UNCOMMANDED. THE OTHER POWER SECTION TOOK THE FULL TORQUE WITH NO EXCEEDANCES AND THE PILOT WAS ABLE TO SWITCH THE NO. 2 TO MANUAL. THE ENGINE PERFORMED NORMALLY IN MANUAL FOR THE REST OF THE FLIGHT. SUBSEQUENT GROUND TESTS IN AUTOMATIC FOUND THE ENGINES WORKING NORMALLY, TROUBLESHOOTING IS ON-GOING.

CA101206001	PWC	FILTER	CONTAMINATED
11/18/2010	PW610FA		FUEL SYSTEM

ABORTED T/O DURING T/O ROLL, THE ABOVE ENGINE WAS MUCH SLOWER TO ACCELERATE THAN THE OTHER. THE PILOT ABORTED T/O AND RETURNED TO THE RAMP WHERE TROUBLESHOOTING FOUND BLUE PACKING DEBRIS IN THE HIGH PRESSURE FUEL FILTER AS WELL AS CORROSION DEBRIS IN THE PY LINE AT THE FUEL CONTROL END. FUEL CONTROL AND FUEL PUMP WILL BE REPLACED.

CA101206008	PWC	POWERPLANT	POWER LOSS
11/29/2010	PW610FA		

THE CREW REPORTED A POWER LOSS SHORTLY AFTER T/O. THEY PERFORMED AN EMERGENCY LANDING ON AIRPORT PREMISES BUT ON GRASS. ENGINE WAS STILL RUNNING UPON TOUCHDOWN. SIGNIFICANT DAMAGE OCCURRED TO THE FRONT OF THE ACFT AND LANDING GEAR. THE CREW RECEIVED MINOR INJURIES. MFG ASSISTANCE HAS BEEN OFFERED.

CA101206009	PWC	OIL SYSTEM	LOW PRESSURE
12/1/2010	PW610FA		

LOW OIL PRESSURE DURING FLIGHT, THE PILOT NOTICED A LOW OIL PRESSURE AND ELECTED TO SHUT THE ENGINE DOWN. AN UNEVENTFUL SINGLE ENGINE LANDING FOLLOWED. TROUBLESHOOTING IS ON-GOING AND FOCUSING ON INDICATION ISSUES.

CA110124013	PWC	ENGINE	STALLED
1/1/2011	PW610FA		

ABORTED T/O IFSD DURING EARLY T/O ROLL CLOSE TO FULL POWER, LOUD NOISES (SUSPECTED COMPRESSOR STALLS) WERE HEARD FROM 1 (OR BOTH) ENGINES. THE T/O WAS ABORTED. POST FLIGHT INSP FOUND NO DAMAGE ON THE ENGINES AND NO CAUSES WERE IDENTIFIED FOR THE NOISES. GROUND RUNS WERE SATISFACTORY AND THE ACFT WAS RETURNED TO SERVICE.

CA110124016	PWC	PRESSURE SWITCH	FAILED
12/30/2010	PW610FA		OIL PRESSURE

OIL PRESSURE WARNING/IFSD DURING FLIGHT, THE CREW REPORTED AN OIL PRESSURE WARNING AND ELECTED TO SHUTDOWN THE ENGINE. THE ACFT DIVERTED FROM THE INTENDED DESTINATION AND LANDED

SAFELY. THE PROBLEM WAS TRACED BACK TO A FAULTY OIL PRESSURE SWITCH WHICH WILL BE REPLACED BEFORE THE ACFT IS RETURNED TO SERVICE.

CA110124017		PWC	POWERPLANT	FAILED
1/3/2011		PW610FA		

INABILITY TO ACHIEVE THRUST DURING REPOSITIONING FLIGHT, ON DESCENT AT 37K THE PILOT HEARD RUMBLING NOISE FROM THE RENTAL ENGINE. POWER WAS REDUCED TO STOP THE REPORTED NOISE GOING DOWN TO 30K. PILOT REPORTED AN OVERTEMP AND ELECTED TO SHUTDOWN THE ENGINE. ACFT SAFETY LANDED.

CA110125016		PWC	ENGINE	FAILED
1/18/2011		PW610FA		

(CAN) ON GROUND EVENT DURING OVERSPEED GOVERNOR CHECK PRIOR TO T/O, THE PILOT HEARD A LOUD NOISE AND SAW MATERIAL COMING OUT OF THE EXHAUST. THE ENGINE WAS SHUT DOWN. POST EVENT INSPECTION FOUND PUNCTURE DAMAGE FROM DEBRIS ON THE WINGS. THE ENGINE WILL BE SENT FOR INVESTIGATION .

CA110125015	AEROSP	PWA	ENGINE	FAILED
1/20/2011	ATR72202	PW124B		

(CAN) UNCOMMANDED AUTOFEATHER/IFSD DURING CRUISE, THE PROPELLER FEATHERED UNCOMMANDED. THE PILOT COULD NOT MODULATE POWER EITHER IN AUTOMATIC OR MANUAL MODE. THE ENGINE WAS SHUT DOWN AND AN UNEVENTFUL SINGLE ENGINE LANDING FOLLOWED. TROUBLESHOOTING IS ON-GOING.

CA110125014	AEROSP	PWA	OIL SYSTEM	LOW PRESSURE
1/20/2011	ATR72212A	PW127		NR 2 ENGINE

(CAN) OIL PRESSURE LOSS/IFSD DURING FLIGHT, THE NR 2 ENGINE LOW OIL PRESSURE WARNING CAME ON. THE ENGINE WAS SHUT DOWN AND AN UNEVENTFUL SINGLE ENGINE LANDING FOLLOWED. GROUND INSPECTION FOUND NO OIL LEVEL VISIBLE IN THE SIGHT GLASS, OIL WAS FOUND INSIDE THE ENGINE COWL. TROUBLESHOOTING IS ON-GOING TO IDENTIFY THE SOURCE OF THE LEAK.

CA110208011	AEROSP	PWA	ENGINE	FAILED
1/27/2011	ATR72212A	PW127		LEFT

(CAN) ABORTED TAKE-OFF CREW REPORTED SLUGGISH BEHAVIOR ON LT ENGINE AND RH ENGINE TORQUE FLUCTUATION DURING TAKE-OFF ROLL AND ROTATION. THE AIRCRAFT RETURNED TO POINT OF DEPARTURE AND TROUBLESHOOTING IS ONGOING WITH MANUFACTURER ASSISTANCE.

DT1R20110328001	AGUSTA	PWA	WIRE	MISREPAIRED
3/22/2011	AW139	PT6A67		ZONE 100

DURING THE INSPECTION, CUSTOMER FOUND 63 OUT OF 92 SOLDER SPLICES INSTALLED ON THE ACFT WERE BAD. ALL THE SPLICES HAD FAILED FOR THE SAME REASON, SOLDER HAD NOT FLOWED TO THE STUB WIRE SIDE OF THE CONNECTION. OF THE FAILURES THE NR 2 MAU, THE NR 2 MRC, THE PILOT'S AND COPILOT'S AUDIO PANELS, AND ALL 4 PITCH AND ROLL SAS LINEAR ACTUATORS HAD EVERY ONE OF THEIR SOLDER SPLICES FAIL.

2011FA0000271	AIRBUS	CFMINT	SKIN	DAMAGED
3/31/2011	A320214	CFM565B4		FUSELAGE

INSTALLED DOUBLER REPAIR AT LOWER SKIN BETWEEN STRINGER 39L AND 39R FROM FRAME 21 TO FRAME 23. MATERIAL USED 2024T3 .080" PO 1062499. DIMENSIONS 22.5" X 30" IAW REPAIR DESIGN APPROVAL SHEET 70541148/019/2011 ISSUE: A, DATED 31/03/2011. THIS REPAIR IS CLASSIFIED: MAJOR, CAT B. INSTALLED CROSS BEAM PN D53910678200 IAW CARD EC5310.000010.

MU1Z2011020200005	AIRBUS		SKIN	DENTED
3/30/2011	A320233			FUSELAGE

FUSELAGE SKIN - DENT LOCATED IN RT SIDE BETWEEN FR 2 AND FR 3 AND STR Z508.

MU1Z2011020200003	AIRBUS	IAE	FRAME	DENTED
3/14/2011	A320233	V2527EA5		FUSELAGE

FUSELAGE DENT BETWEEN FR 6 AND FR 7 APROX 6.5" DOWN RT SIDE STRINGER. DEPTH 1.57MM A= 21.97MM.

CA110207002	AIRTRC		BULKHEAD	CRACKED
2/3/2011	AT802A		1002680	FUSELAGE

(CAN) THE LH FLOAT, AFT CLOSING BULKHEAD, IS CRACKED JUST UNDER THE WATER RUDDER ATTACH PLATE IN THE BEND RADIUS. THE CRACK RUNS ABOUT 2 INCHES LEFT AND RIGHT FROM LOWER CENTER POINT OF THE BULKHEAD. (TC# 20110207002)

CA110119005	AIRTRC	PWC	FILTER	FAILED
1/18/2011	AT802A	PW610FA	905310	HYD SYSTEM

BOTH OF THE SCOOP (UP AND DOWN), HYD PRESSURE FILTERS WERE FOUND DURING INSP WITH THE ENDS OF THEM BLOWN OUT AND MISSING PIECES. BOTH FILTERS WERE FOUND TO HAVE BEEN INSTALLED CORRECTLY IAW MM AND DWGS. HOWEVER, THIS APPEARS TO BE CONTRADICTORY TO THE INSTRUCTIONS PRINTED ON THE FILTER BODY BY THE FILTER MFG.

2011FA0000272	AMTR	CONT	CYLINDER HEAD	CRACKED
3/28/2011	LANCAIR4P	TSIO550B	653119A1	ENGINE

WHILE PERFORMING A CONDITION INSPECTION ON THE ENGINE, A CRACK WAS FOUND IN THE AREA OF THE INTAKE VALVE ON NR 6 CYLINDER. CYLINDER AND PISTON ARE ORIGINAL TO THE ENGINE. CAUSE OF MALFUNCTION, UNKNOWN.

2011FA0000273	AMTR	CONT	PISTON	CRACKED
3/28/2011	LANCAIR4P	TSIO550B		ENGINE

WHILE PERFORMING A CONDITION INSPECTION OF THE ENGINE, A CRACK WAS FOUND ON NR 6 INTAKE AREA. AFTER REMOVAL OF CYLINDER, THE PISTON WAS FOUND TO HAVE A LARGE PART OF THE SKIRT MISSING, PLUS A BROKEN OIL CONTROL RING AND CRACKS NEAR THE PISTON PIN AREA. METAL WAS FOUND IN THE OIL FILTER. ENG WILL BE DISASSEMBLED. CAUSE UNKNOWN

2011FA0000197	AMTR	LYC	CYLINDER	CRACKED
7/1/2010	RV7	AEIO360*		NR 2

UPON INSP OF THE ENGINE DURING CONDITION INSPECTION, A VERY LIGHT AMOUNT OF OIL SEEPAGE WAS OBSERVED ON THE ENGINE CRANKCASE NEAR THE NR 2 CYLINDER STUD. CLOSER INSP WITH DYE PENETRANT REVEALED A HAIRLINE CRACK EMENATING FROM THE TOP LT THROUGHBOLT ON THE NR 2 CYLINDER. ENGINE WAS REMOVED FOR CRANKCASE REPAIR. CRANKCASE WAS REPAIRED SUCCESSFULLY.

2011FA0000230	AMTR		BOLT	SHEARED
3/15/2011	TALON*		MS24694S97	M/R DRIVE

HELICOPTER DEPARTED ON A TRAINING FLIGHT. 30 MINUTES INTO THE FLIGHT, INSTRUCTOR FELT A JOLT OF ACFT FOLLOWED BY A LOUD BANGING. ENGINE PARAMETERS ALSO ERRATIC. INSTRUCTOR ELECTED TO REDUCE POWER & ENTER AN AUTOROTATION. SELECTED A CLEAR AREA AND SET UP FOR LANDING. UPON TOUCHDOWN HELICOPTER SKIDS SETTLED INTO SOFT SANDY TERRAIN UNTIL THE TIPS OF THE SKIDS DUG IN CAUSING THE HELICOPTER TO PITCH SLOWLY FWD WHERE THE MAIN ROTOR BLADES CONTACTED THE GROUND AND SEVERED THE TAILBOOM. HELICOPTER CAME TO REST ON IT'S LT SIDE WITH SUBSTANTIAL DAMAGE. HARDWARE ATTACHING THE DRIVE PULLEY ASSY TO ENGINE FLYWHEEL ASSY FAILED CAUSING THE SEPARATION OF THE PULLEY ASSY FROM THE FLYWHEEL. PULLEY ASSY THEN JAMMED & CAUSED ENGINE TO BECOME ERRATIC AND FINALLY LOSE POWER FORCING THE PILOT TO INITIATE THE AUTOROTATION. UPON TOUCHDOWN, THE SLIGHT FWD MOTION OF ACFT AND SOFT SANDY TERRRAIN CAUSED THE HELICOPTER TO PITCH FWD, RESULTING IN SUBSTATIAL DAMAGE TO ACFT. DRIVE PULLEY, FLYWHEEL ASSY & ATTACHING HADWARE FRAGMENTS HAVE BEEN SENT TO THE NTSB FOR FURTHER ANALYSIS.

CA110204004	BBAVIA	LYC	REMOTE SWITCH	FAILED
2/3/2011	8GCBC	O360C2E	345619604	ELT

(CAN) DURING A FUNCTION TEST IT WAS DISCOVERED THAT THE LED LIGHT FAILED TO WORK. AS WELL WHEN THE SWITCH WAS TURNED TO THE ON POSITION, THE ELT ACTIVATED PROPERLY. BUT WHEN TURNED BACK TO "ARM" THE ELT FAILED TO RESET. A MANUAL RESET WAS POSSIBLE AT THE UNIT ITSELF. TROUBLESHOOTING REVEALED THAT THE LED PROBLEM WAS WITH THE SWITCH ITSELF, BUT FAILED TO IDENTIFY THE OTHER PROBLEM DUE TO A SECOND SWITCH FAILURE. THE REPLACEMENT OF THE SWITCH WITH A NEW SWITCH IDENTIFIED THE SWITCH TO BE THE CAUSE OF THE PROBLEM WITH THE RESET FAILURE AS WELL. THE SWITCH IS BEING RETURNED TO THE MANUFACTURE FOR EVALUATION.

CA110204005	BBAVIA	LYC	ARTEX	REMOTE SWITCH	FAILED
2/3/2011	8GCBC	O360C2E		345619604	ELT

(CAN) DURING THE TROUBLESHOOTING OF ANOTER ELT SYSTEM. IT WAS DISCOVERED THAT THE ELT REMOTE SWITCH WOULD TURN THE ELT ON PROPERLY BUT WOULD NOT RESET THE SYSTEM WHEN SWITCHED BACK TO "ARM". THE REPLACEMENT OF THE ORIGINAL PROBLEM SWITCH WITH A NEW ONE IDENTIFIED THE SWITCH TO BE THE PROBLEM. FURTHER TESTING CONFIRMED THAT THIS SWITCH WAS DEFECTIVE. THE SWITCH IS BEING RETURNED TO THE MANUFACTURE FOR TESTING.

CA110126006	BEECH	AMPLIFIER	FAILED
1/25/2011	1900C	407	AUDIO CONTROL

(CAN) ON CLIMB-OUT A BURNING ODOR WAS NOTICED IN THE CABIN, THE PILOTS HEADSET THEN CUT-OUT. AN UNEVENTFUL EMERGENCY LANDING WAS CARRIED OUT. UPON INSPECTION THE AUDIO CONTROL AMPLIFIER WAS FOUND TO HAVE FAILED INTERNALLY CAUSING THE SMOKE ODOR.

CA101209003	BEECH	RELAY	UNSERVICEABLE
12/2/2010	1900C	MS24171D1	MLG

(CAN) THIS AIRCRAFT HAS BEEN OFF-LINE AND UNDERGOING MAINTENANCE FOR SEVERAL WEEKS DUE TO A SNAG WITH THE MAIN LANDING GEAR EXTENSION SYSTEM. THE AIRCRAFT HAS BEEN EXPERIENCING PROBLEMS EXTENDING THE MAIN LANDING GEAR, ESPECIALLY AFTER EXTENDED FLIGHT AT ALTITUDE. THE GEAR WOULD EXTEND WITH THE MANUAL HAND PUMP WITH NO ISSUES. ALSO, IF DURING THE FLIGHT, THE GEAR SELECTOR WAS LEFT IN THE `DOWN` POSITION FOR OVER A MINUTE, THE GEAR WOULD EVENTUALLY EXTEND AS IT SHOULD, ELECTRICALLY. AFTER MUCH TROUBLESHOOTING IT WAS DISCOVERED THAT WATER HAD ACCUMMULATED IN THE MAIN LANDING GEAR RELAY P/N MS24171-D1, THE WATER WOULD FREEZE AT ALTITUDE, NOT ALLOWING THE RELAY TO MOVE WHEN THE CONTROL CUIRCUIT WAS ENERGIZED. EVENTUALLY, AS THE RELAY HEATED UP WHEN IT WAS POWERED, IT WOULD MELT THE ICE AND ALLOW THE GEAR TO EXTEND ON IT`S OWN. THE MAINTENANCE SCHEDULE FOR THESE AIRCRAFT HAS BEEN REVISED TO PERIODICALY CHECK THE MLG RELAY`S FOR MOISTURE OR ACCUMMULATED WATER. PERIODIC CHECKS ARE ALSO BEING CARRIED OUT ON THE SUBJECT AIRCRAFT TO DETERMINE THE SOURCE OF THE WATER.

V0DR2011006	BEECH	MEGGITT	KEYWAY	MISMANUFACTURED
4/8/2011	1900D		50067611	MAIN WHEEL

KEYWAY LINERS WHERE BEING R & R DURING MX ON 5006028-5 MAIN WHEEL ASSY. THE TECH, AFTER COMPLETING OTHER MX WAS IN THE PROCESS OF INSTALLING NEW KEYWAY LINERS. THE TECH NOTICED THAT 1 OF THE KEYWAY LINERS WAS LOOSE WHEN PUT INTO POSITION ONTO THE WHEEL HALF (NOT FORMED PROPERLY FROM THE MFG). THE TECH REPLACED THE SUPECT PART WITH ANOTHER FROM STOCK AND NOTED THE PART FITTED PROPERLY. THE SUSPECT PART AND THE REMAIN STOCK WAS INSPECTED A TOTAL OF 3 KEYWAY LINERS WERE REMOVED FROM SERVICE.

CA101216002	BEECH	DRIVE SHAFT	UNSERVICEABLE
12/15/2010	1900D	503890571	PROP TACH

(CAN) THE PROP INDICATION WENT TO "0" IN FLIGHT - THE DRIVE SHAFT ON THE TACH GENERATOR WAS FOUND TO BE WORN TO THE POINT WHERE IT WAS SPINNING INSIDE THE ENGINE DRIVE.

CA110131010	BEECH	AAP	CHAFED
1/27/2011	1900D	1181000195	LT WING

(CAN) ACM LOUVERED EXHAUST PLENUM REMOVED TO CARRY OUT "F" CHECK PROCEDURE. NOTED AFTER REMOVAL OF LOUVERED PLENUM THAT THE PLENUM WAS CHAFING INTO THE LOWER MAIN SPAR CAP FORWARD

FLANGE AT LWS 35-LWS 40. LWS 35 SPAR CAP FLANGE CHAFED TO 0.06 INCH AND DECREASED TO 0 INCHES AT APPROX LWS 40. CHAFE DAMAGE REPAIRED IAW RAYTHEON AIRCRAFT STANDARD REPAIR DRAWING #SR-CO-00018 REV. A. AREA OF LOUVERED PLENUM REMOVED SO NO FURTHER CONTACT WITH SPAR CAP CAN OCCUR. (TC# 20110131010)

V0DR2011009	BEECH	ROD END	MISMANUFACTURED
4/14/2011	1900D	1317666M	PAX DOOR

THE TECH DURING ASSY OF A AIRSTAIR DOOR STRUT NOTED THAT A TIE ROD WOULD NOT THREAD ON TO THE SHAFT. FURTHER TROUBLESHOOTING REVEALED THE NEW TIE ROD WAS A LT THREAD INSTEAD OF A RT THREAD. THE REST OF THE STOCK WAS INSPECTED AND A TOTAL OF (3) WERE FOUND TO HAVE LT THREADS AND REMOVED FROM SERVICE.

V0DR20011008	BEECH	STRUT	BINDING
4/14/2011	1900D	12951410637	PAX DOOR

A TECH REPORTED THAT DURING THE DRY FITTING OF PARTS (PRECHECK FOR BINDING) FOR A AIRSTAIR DOOR STRUT THAT A NEW SHAFT WOULD NOT MOVE FREELY WITHIN THE TUBE. AFTER TROUBLESHOOTING, IT WAS NOTED THAT ONE AREA OF THE SHAFT WAS SLIGHTLY LARGER. A NEW SHAFT WAS INSTALLED AND AGAIN THE PARTS WERE DRY FITTED AND THE PROBLEM WENT AWAY. NO FURTHER PROBLEMS WITH OTHER PISTON SHAFTS IN STOCK WERE FOUND. THE ONE PISTON SHAFT WAS REMOVED FROM SERVICE.

CA110126004	BEECH	CLAMP	MISREPAIRED
1/26/2011	200BEECH	C13019S	PROPELLER BLADE

(CAN) DURING PREVIOUS SERVICE WHEN THE A304 LINK PINS WERE INSTALLED AND LOCKED THE LOCK PIN HOLES WERE DRILLED TO 0.720",MAXIMUM DEPTH IS 0.045". DRILL BIT WENT COMPLETELY THROUGH THE LINK HOLE AND PENETRATED THE OPPSITE SIDE WALL OF THE BLADE CLAMP. UNDER THE ADVICE OF THE MANUFACTURER ALL 3 BLADE CLAMPS ARE TO BE RETIRED FROM SERVICE.

CA101216004	BEECH	BRACE	CRACKED
12/8/2010	200BEECH	9981002827	MLG

(CAN) WHILE THE AME WAS TROUBLE SHOOTING FOR A BLEED AIR SYSTEM LEAK HE NOTICED A HAIRLINE CRACK ON A MLG ASSY. AFTER INVESTIGATION, THE PRESENCE OF A CRACK WAS CONFIRMED. THE SECOND MLG ASSY WAS INSPECTED AND CONFIRMED CRACKED AS WELL. ALL THE COMPANY KING AIR FLEET WAS INSPECTED AND ANOTHER MLG ASSY WAS FOUND CRACKED ALL THOSE 3 UNITS HAD TO BE REPLACED. THE CRACKED ASSY WERE FOUND ON A/C S/N BB-10 AND BB-99. THE OTHER TWO A/C WITH S/N HIGHER THAN 500 WHERE FOUND WITH A DIFFERENT MODEL OF MLG ASSY AND NO CRACKS WHERE FOUND.

2011F00065	BEECH	LINE	OBSTRUCTED
3/21/2011	200BEECH		FUEL SYSTEM

ENROUTE, EXPERIENCED AN ENGINE ROLL BACK AND FLAMEOUT ON THE RT ENGINE AT 21,000 FT. NO ATTEMPT WAS MADE TO RESTART. EMERGENCY DECLARED AND ENGINE SECURED ACCORDING TO CHECKLIST. ACFT DIVERTED AND MADE A SUCCESSFUL LANDING. MX FOUND SUPPLY LINE FLOW FROM THE MAIN TANK WAS IMPEDED. GRAVITY FEED LINE INFLOW ORIFICE ACCESSED AND A MX INSTRUCTION PAPER TAG WAS FOUND PARTIALLY BLOCKING THE ORIFICE. THE OBSTRUCTION WAS REMOVED AND THE FLOW TO THE NACELLE TANK WAS RETURNED TO NORMAL.

2011FA0000248	BEECH	CONT	DUCT	CHAFED
4/11/2011	58	IO520*	11516CXZ060845	ZONE 400

DURING ANNUAL INSP FOUND THE LT ENGINE FUEL METERING UNIT BLAST DUCT CHAFING ON ENGINE MOUNT TUBE. FOUND THAT THE METAL WIRE IN THE BLAST DUCT HAD WORN THROUGH THE BLAST DUCT AND WORE INTO THE ENGINE MOUNT TUBE REQUIRING THE ENGINE MOUNT TO BE REMOVED FOR REPAIR.

2011FA0000269	BEECH	CONT	LEG ASSY	BROKEN
3/31/2011	58P	TSIO520*	0028200171	NLG

ACFT LANDED WITH NOSE LANDING GEAR IN THE UNLOCKED POSITION. THE PILOT REPORTED ON TAKEOFF

THAT THE ACFT HAD A SEVERE VIBRATION AT APPROX 85 KNT, CONTINUED FLIGHT AND A SECOND ACFT VERIFIED THAT THE NLG WAS "FLOPPING AROUND", CONTINUED THE FLIGHT TO BURN OFF FUEL AND LANDED WITH CRASH RESPONSE AT THE AIRPORT. THE ACFT NOSE SETTLED UPON LANDING, THE ACFT REMAINED ON RUNWAY CENTER. DAMAGE WAS MINOR. THE NOSE LANDING GEAR DRAG LEG ASSY PN 002-820017-1 FAILED AT THE TOP END OF THE CASTING. THE METAL BROKE APART WITH INDICATIONS THAT IT HAD BEEN CRACKED FOR SOME TIME, THIS AREA CAN NOT BE INSPECTED WITH THE PART ON THE ACFT.

YHLR20109012	BEECH		DISPLAY	FAILED
6/30/2010	76		91000001001	INSTRUMENT PANEL

ASPEN EFD-1000PRO DISPLAY SHOWS "PITOT FAIL". VERIFIED SQUAWK. DISPLAY ALSO "X'D" OUT. REPLACED DISPLAY AS REQUIRED. PERFORMED SYS OPS CHECKS IAW INSTALLATION MANUAL 900-00003-001.

CA101207004	BEECH	PWC	RESISTOR	BURNED
11/3/2010	99	PW610FA	W20538100	WINDSHIELD WIPER

(CAN) AFTER LANDING AND DURING TAXI TO THE RAMP, THE CREW NOTICED SMOKE IN THE COCKPIT. MAINTENANCE DETERMINED THE DROPPING RESISTOR FOR THE WINDSHIELD WIPER MOTER HAD OVERHEATED (TC# 20101207004)

CA101213009	BEECH		LIMIT SWITCH	MALFUNCTIONED
12/11/2010	A100		BZ7RWT822	TE FLAPS

(CAN) ON APPROCH, THE PILOTS SELECTED APPROACH FLAP. THE FLAPS DID A UNCOMANDED TRAVEL TO FULL FLAP. THE AIRCRAFT WAS LANDED WITH OUT INCIDENT. A SPECIAL INSPECTION WAS CARRIED OUT AS PER 27-50-00 ON THE STRUCTURE AND THE COMPONENTS, NO DEFECT FOUND. THE APPROCH LIMIT SWITCH WAS REMOVED AND REPLACED, SYSTEM GROUND FUNCTION CHECKED SERVICABLE WITH OUT FURTHER INCIDENT. (TC# 20101213009)

CA101222004	BEECH		SUPPORT BRACKET	CRACKED
12/8/2010	A100		1156100181	RUDDER

(CAN) ON CONDUCTING NDT LPI INSPECTION IAW S/B 2145, THE SUPPORT BRACKET AND WAS FOUND TO BE CRACKED AT TAPER PIN HOLE, NUT END.

CA101216005	BEECH		BEARING	FAILED
12/16/2010	B200		13889	WHEEL

(CAN) TODAY DECEMBER 16/2010 13:00 HRS ON A ROUTINE FLIGHT FROM GRAND PRAIRIE TO HIGH LEVEL WITH KING AIR C-FPQQ (MEDEVAC NOR-ALTA 912). CENTER CONTACTED THEM EN ROUTE AND ASKED THEM IF THEY HAD LOST A WHEEL FROM THE AIRCRAFT. THE CREW TOTALLY UNAWARE OF THIS LOOKED OUT THE WINDOW WHILE CYCLING THE GEAR TO VERIFY THAT YES INDEED THE OUT BOARD WHEEL RIGHT SIDE HAD DEPARTED THE AIRCRAFT. THE CREW DECLARED AN EMERGENCY AND LANDED IN HIGH LEVEL WITH OUT INCIDENT. INSPECTION OF THE LANDING GEAR REVEALED THAT THE WHEEL BEARINGS FAILED CAUSING THE WHEEL TO DEPART THE AXLE ON ROTATION (THE WHEEL NUT AND COTTER PIN WERE STILL PRESENT AND NOT DAMAGED) NO OTHER DAMAGE WAS NOTED ON THE AIRCRAFT. AN SMS AND SDR REPORT HAS BEEN FILED AND AN INVESTIGATION HAS UNDER GONE WITH IN THE COMPANY TO REVEAL THE ROOT CAUSE. BUT AN INITIAL INVESTIGATION LOOKS LIKE THE BEARING HAD JUST FAILED WITH NO FAULT TO ANY PROCEDURES OR PRACTICES OF THE COMPANY. THE BEARINGS WERE GREASED LESS THAN 200 HRS AGO AND THE WHEELS/BEARINGS HAVE ONLY HAD TWO TIRE CHANGES SINCE NEW (APPROX 975 HRS).

CA110201007	BEECH		KEEL	CRACKED
1/19/2011	B200		1014100529	FUSELAGE

(CAN) VISUAL INSPECTION OF THE NOSE KEEL RIBS P/N 101-410052-9 AND 101-410079-1 REVEALED CRACKS AT UPPER FWD CORNERS OF THE FORWARD GEAR DOOR HINGE CUTOUTS.

CA110201008	BEECH		SKIN	CRACKED
1/19/2011	B200		10011006815	WINGS

(CAN) VISUAL INSPECTION REVEALED CRACKED OUTBOARD SKINS P/N 100-110068-15 AND 16. THESE ARE THE OUTER SKINS ON THE OUTER WINGS LH AND RH. CRACKS WERE LOCATED AT ABOUT 12 O`CLOCK POSITION OF THE OUTBOARD FUEL CAPS. CRACKS UNDOUBTEDLY RELATED TO ABNORMAL LOADS APPLIED TO UPPER WING SURFACE BY FUEL NOZZLES AND FUEL HOSES DURING FE-FUELING OPERATIONS.

CA110201010	BEECH	MOUNT	LOOSE
1/27/2011	B200	509800891	ENGINE

(CAN) VISUAL MOVEMENT CHECK REVEALED LOOSENESS OF ENGINE MOUNT FITTINGS P/N 50-980089-1. THERE ARE 4 PER NACELLE. THE LOWER PAIR WHERE FOUND LOOSE.

CA110125025	BEECH	COVER	CRACKED
1/13/2011	B200	1013644623	BUSS

(CAN) DURING SCHEDULED PHASE INSPECTION, MAINTENANCE DISCOVERED THE HOT BUSS (CIRCUIT BREAKER) PLASTIC COVER AND SUPPORT ASSEMBLY CRACKING AT VARIOUS POINTS. A REVIEW OF OTHER B200`S IN THE FLEET SHOW THIS PART HAVING BEEN REPLACED IN THE PAST FOR THE SAME REASON. RECOMMEND A CLOSE INSPECTION OF THIS PART BE DONE EACH PHASE INSPECTION.

CA110207008	BEECH	STATIC INVERTER	FAILED
2/5/2011	B200	PC17	NR 1

(CAN) ON A ROUTINE FLIGHT, THE NR 1 STATIC INVERTER FAILED, THE PILOT SELECTED NR 2 STATIC INVERTER AND THE FLIGHT CONTINUED WITH OUT INCODIENT. THE NR 1 STATIC INVERTER WAS REPLACED WITH OUT FURTHER INCOIDENT.

2011FA0000249	BEECH	CROSS TIE	DAMAGED
4/15/2011	B300		BS 201

FOUND 2 SHEARED RIVETS IN GUSSET ON FRAME AT FS 201.775 AND STRINGER/CROSS TIE 7R. DISCREPANCY FOUND DURING SCHEDULED INSP, THIS AREA WAS RECENTLY INCLUDED IN THE INSPECTION GUIDE. THE SIDEWALLS MUST BE REMOVED TO INSPECT CROSS TIES. THE LT SIDE HAD PREVIOUSLY BEEN REPAIRED.

2011FA0000212	BEECH	PWA	DIPSTICK	BROKEN
3/30/2011	B300	PT6A6	310079004	ENGINE

OIL DIPSTICK SEPARATED AT OIL CAP, STEM AND FELL INTO OIL TANK. THE STICK AND STEM WERE NOT ASSEMBLED CORRECTLY. THE STICK WAS NOT PUSHED FAR ENOUGH IN THE STEM SO THE RETENTION PIN DID NOT ENGAGE.

2011FA0000209	BEECH	BULKHEAD	CHAFED
3/17/2011	B300C		BS 412.5

DURING THE FIRST PHASE INSPECTION OF BUNO 168204 (FM-27), IT WAS DISCOVERED THAT THE ELEVATOR TRIM CABLE AND TURNBUCKLE WAS RUBBING ON A BULKHEAD AT STATION 412.5. THE ADDITIONAL 5 AIRCRAFT WERE INSPECTED, AND A TOTAL OF 5 AIRCRAFT OUT OF THE FLEET OF 6 EXHIBITED THE SAME DEFECT.THE BULKHEAD AT STATION 412.5 WAS INSTALLED AS PART OF STC SA00047MC. THE DESIGN AND INSTALLATION DOES NOT CONFORM TO THE REQUIREMENTS OF 23.685 OR STANDARD PRACTICES ESTABLISHED IN AC 43.13-1B FOR CABLE OPERATED CONTROLS.

2011FA0000182	BEECH	CONTROL CABLE	BINDING
3/17/2011	B300C		ELEVATOR

ACFT WAS MODIFIED IAW STC SA00047MC BY A REPAIR STATION ON MAY 28, 2010. DURING THE FIRST PHASE INSP AT 200 HRS, IT WAS DISCOVERED THAT THE ELEVATOR TRIM CABLE TURNBUCKLE WAS DRAGGING ON THE BULKHEAD INSTALLED AT STA 414 AS PART OF THIS STC. THIS REPORT IS TO MAKE KNOWN THAT THERE IS A DESIGN DEFICIENCY WITH THIS STC, AND THAT THE REPAIR STATION THAT INSTALLED THE STC OVERLOOKED THIS DEFICIENCY AND RETURNED THE ACFT TO SERVICE WITH THE POTENTIAL FOR THE ELEVATOR TRIM SYS TO JAM. AC 43.13-1B CLEARLY STATES THAT CONTROL CABLE SPLICES ARE TO REMAIN AT LEAST 2 INCHES FROM FAIRLEADS OR PULLEYS. WHILE NOT A FAIRLEAD IAW SE, RIDING ON THE BULKHEAD STRUCTURE COULD BE CONSIDERED A FAIRLEAD. THE MM ALSO STATED IN CHAP 20 THAT CONTROL CABLES ARE NOT SUPPOSED TO

HAVE INTERFERENCE WITH ACFT STRUCTURE. ONCE THIS DEFICIENCY WAS IDENTIFIED, 5 ADDITIONAL ACFT WERE INSPECTED FOR THIS CONDITION, AND AN ADDITIONAL 4 SHOWED THE SAME DISCREPANCY.

2011FA0000247	BEECH	CONT	DUCT	CHAFED
4/8/2011	D55	IO520C	11516CXZ060845	NACELLE

DURING ANNUAL INSP, FOUND THE RT ENGINE FUEL METERING UNIT BLAST DUCT CHAFING ON ENGINE MOUNT TUBE. FOUND THAT THE METAL WIRE IN THE BLAST DUCT HAD WORN THROUGH THE BLAST DUCT AND WORE INTO THE ENGINE MOUNT TUBE REQUIRING THE ENGINE MOUNT TO BE REMOVED FOR REPAIR.

2011FA0000243	BEECH	CONT	CIRCUIT BREAKER	FAILED
4/13/2011	F33A	IO520BB	35380132103	TAXI LIGHT

PILOT REPORTED TAXI LIGHT INOP. ON TROUBLESHOOTING TECH FOUND CIRCUIT BREAKER/ SWITCH TO BE AT FAULT. AD 2008-13-17 HAD BEEN COMPLETED 923 FLIGHT HOURS PRIOR AND ESTIMATED CYCLES 3692. NOTICED NEW CIRCUIT BREAKER MFG. NO PROBABLE CAUSE OR RECOMMENDATIONS AT THIS TIME

2011FA0000244	BEECH	CONT	CIRCUIT BREAKER	FAILED
4/13/2011	F33A	IO520BB	35380132103	STROBE

PILOT REPORTED STROBE LIGHT'S INOP. ON TROUBLESHOOTING, TECH FOUND CIRCUIT BREAKER/ SWITCH TO BE AT FAULT. AD 2008-13-17 HAD BEEN COMPLETED 1611 FLIGHT HOURS PRIOR AND ESTIMATED CYCLES 6444. NOTICED NEW CIRCUIT BREAKER MFG. NO PROBABLE CAUSE OR RECOMMENDATIONS AT THIS TIME.

2011FA0000238	BEECH	CONT	CIRCUIT BREAKER	FAILED
4/9/2011	F33A	IO520BB	35380132103	LANDING LIGHT

PILOT REPORTED LANDING LIGHT INOP. ON TROUBLESHOOTING, TECH FOUND CIRCUIT BREAKER/SWITCH TO BE AT FAULT. AD 2008-13-17 HAD BEEN COMPLETED 1900 FLIGHT HOURS PRIOR AND ESTIMATED CYCLES 7600. NOTICED NEW CIRCUIT BREAKER MFG. NO PROBABLE CAUSE OR RECOMMENDATIONS AT THIS TIME.

2011FA0000239	BEECH	CONT	CIRCUIT BREAKER	FAILED
4/9/2011	F33A	IO520BB	35380132103	TAXI LIGHT

PILOT REPORTED TAXI LIGHT INOP. ON TROUBLESHOOTING, TECH FOUND CIRCUIT BREAKER/SWITCH TO BE AT FAULT AD 2008-13-17 HAD BEEN COMPLETED 2163 FLIGHT HOURS PRIOR AND ESTIMATED CYCLES 8652. NOTICED NEW CIRCUIT BREAKER MFG. NO PROBABLE CAUSE OR RECOMMENDATIONS AT THIS TIME.

2011FA0000240	BEECH	CONT	CIRCUIT BREAKER	FAILED
4/9/2011	F33A	IO520BB	35380132103	TAXI LIGHT

PILOT REPORTED TAXI LIGHT INOP. ON TROUBLESHOOTING, TECH FOUND CIRCUIT BREAKER/SWITCH TO BE AT FAULT. AD 2008-13-17 HAD BEEN COMPLETED 1471 FLIGHT HOURS PRIOR AND ESTIMATED CYCLES 5884. NOTICED NEW CIRCUIT BREAKER MFG. NO PROBABLE CAUSE OR RECOMMENDATIONS AT THIS TIME.

2011FA0000189	BEECH	CONT	PUMP	FAULTY
3/21/2011	F33A	IO520BB	AA3216CW	INSTRUMENT AIR

PILOT REPORTED INSTRUMENT AIR PRESSURE WAS LOW AT 1700 RPM. UP ON TROUBLESHOOTING THE MECHANIC NOTICED ON INITIAL RUN UP PRESSURES WERE WITHIN LIMITS, AFTER ENGINE STARTED TO WARM UP THE PRESSURE STARTED TO DROP BELOW LIMITS. INSTALLED NEW PUMP, SYS WORKED NORMAL. NO PROBABLE CAUSE OR RECOMMENDATIONS AT THIS TIME.

2011FA0000185	BEECH	CONT	CIRCUIT BREAKER	FAILED
3/19/2011	F33A	IO520BB	35380132101	NAV LIGHTS

PILOT REPORTED NAV LIGHTS INOP. ON TROUBLESHOOTING, TECH FOUND CIRCUIT BREAKER / SWITCH TO BE AT FAULT. AD 2008-13-17 HAD BEEN COMPLETED 1776 FLIGHT HOURS PRIOR AND ESTIMATED CYCLES 7104. NOTICED NEW CIRCUIT BREAKER MFG. NO PROBABLE CAUSE OR RECOMMENDATIONS AT THIS TIME.

2011FA0000202	BEECH	CONT	PUMP	FAULTY
3/25/2011	F33A	IO520BB	AA3216CW	AIR

PILOT REPORTED INSTRUMENT AIR PRESSURE WAS LOW AT 1700 RPM. UP ON TROUBLESHOOTING THE MECHANIC NOTICED ON INITIAL RUN UP PRESSURES WERE WITHIN LIMITS, AFTER ENGINE STARTED TO WARM UP THE PRESSURE STARTED TO DROP BELOW LIMITS. INSTALLED NEW PUMP, DURING GROUND RUN MECHANIC NOTICED AFTER ENGINE STARTED TO WARM UP OUTPUT PRESSURE STARTED TO DROP. INSTALLED ANOTHER AIR PUMP SYSTEM WORKED NORMAL. NO PROBABLE CAUSE OR RECOMMENDATIONS AT THIS TIME.

2011FA0000203	BEECH	CONT	PUMP	FAULTY
3/25/2011	F33A	IO520BB	AA3216CW	ENGINE

PILOT REPORTED INSTRUMENT AIR PRESSURE WAS LOW AT 1700 RPM. UPON TROUBLESHOOTING THE MECHANIC NOTICED ON INITIAL RUN UP PRESSURES WERE WITHIN LIMITS, AFTER ENGINE STARTED TO WARM UP THE PRESSURE STARTED TO DROP BELOW LIMITS. INSTALLED NEW AIR PUMP SYS WORKED NORMAL. NO PROBABLE CAUSE OR RECOMMENDATIONS AT THIS TIME.

2011FA0000204	BEECH	CONT	PUMP	INOPERATIVE
3/25/2011	F33A	IO520BB	AA3216CW	ENGINE

AIR PUMP WILL NOT SUSTAIN REQUIRED PRESSURE WHEN ENGINE BECOMES HOT. UPON TROUBLESHOOTING THE MECHANIC NOTICED ON INITIAL RUN UP PRESSURES WERE WITHIN LIMITS, AFTER ENGINE STARTED TO WARM UP THE PRESSURE STARTED TO DROP BELOW LIMITS. REPLACED AIR PUMP WITH A NEW UNIT. PERFORMED AN OPS CHECK AND FOUND TO BE NORMAL. NO PROBABLE CAUSE OR RECOMMENDATIONS AT THIS TIME.

2011FA0000224	BEECH	CONT	MAGNETO	FAILED
4/3/2011	F33A	IO520BB	BL5005561	ENGINE

PILOT REPORTED ON RUN UP, SELECTED LT MAGNETO POSITION, HAD EXCESSIVE RPM DROP AND BACKFIRED. ON TROUBLESHOOTING TECH FOUND MAGNETO TO BE AT FAULT. INSTALLED SERVICEABLE MAGNETO, OPS CHECKED OK. NO PROBABLE CAUSE OR RECOMMENDATIONS AT THIS TIME.

2011FA0000223	BEECH	CONT	CIRCUIT BREAKER	FAILED
4/2/2011	F33A	IO520BB	35380132101	NAV LIGHTS

PILOT REPORTED NAV LIGHTS INOP. ON TROUBLESHOOTING, TECH FOUND CIRCUIT BREAKER/ SWITCH TO BE AT FAULT. AD 2008-13-17, HAD BEEN COMPLETED 2423 FLIGHT HOURS PRIOR AND ESTIMATED CYCLES 9692. NO PROBABLE CAUSE OR RECOMMENDATIONS AT THIS TIME.

2011FA0000225	BEECH	CONT	CIRCUIT BREAKER	FAILED
4/4/2011	F33A	IO520BB	35380132103	TAXI LIGHT

PILOT REPORTED TAXI LIGHT INOP. ON TROUBLESHOOTING TECH FOUND CIRCUIT BREAKER/ SWITCH TO BE AT FAULT. AD 2008-13-17 HAD BEEN COMPLETED, 1187 FLIGHT HOURS PRIOR AND ESTIMATED CYCLES 4748. NOTICED NEW CIRCUIT BREAKER MFG. NO PROBABLE CAUSE OR RECOMMENDATIONS AT THIS TIME.

2011FA0000241	BEECH	CONT	CIRCUIT BREAKER	FAILED
4/11/2011	F33C	IO520BB	35380132103	TAXI LIGHT

PILOT REPORTED TAXI LIGHT INOP. ON TROUBLESHOOTING, TECH FOUND CIRCUIT BREAKER/SWITCH TO BE AT FAULT. AD 2008-13-17 HAD BEEN COMPLETED 819 FLIGHT HOURS PRIOR AND ESTIMATED CYCLES 3276. NOTICED NEW CIRCUIT BREAKER MFG. NO PROBABLE CAUSE OR RECOMMENDATIONS AT THIS TIME.

2011FA0000325	BEECH		DRIVE SHAFT	SHEARED
5/11/2011	K35			VACUUM PUMP

PUMP DRIVE SHAFT SHEARED RENDERING PUMP INOPERATIVE. THIS IS A SINGLE DRIVE, DUAL VACUUM PUMP. BOTH PUMPS INOPERATIVE.

2011FA0000306	BEECH	CONT	HUB	CRACKED
5/6/2011	M35	IO520A	C6447C23	PROPELLER

THE PROPELLER WAS INSPECTED FOR COMPLETE O/H AND THE HUB WAS FOUND TO HAVE A CRACKED BLADE RETENTION THREADS. THIS MODEL OF PROPELLER HAS A HISTORY OF CRACKING AND THE MFG HAS ADDED

APROVISION TO RED DYE OIL, FILL THE PROPELLER FOR EARLY CRACK DETECTION, THE DYE WILL ONLY WORK IF THE CRACK IS ALL THE WAY THROUGH THE PART AND AT THAT POINT IT WOULD FAIL AND THE DYE WOULD NOT HAVE MADE A DIFFERENCE, THIS MODEL HAS BEEN FOUND TO HAVE MAJOR INTERMAL CRACKING STARTED WITH NO DYE LEAKAGE AND WILL EVENTUALLY HAVE A MAJOR FAILURE AS AGE AND FATIGUE TAKES ITS TOLL ON THE HUB ASSEMBLIES. PREVENTION OF A MAJOR FAILURE COULD BE PREVENTED WITH A MANDATORY 5 YEAR INSP OF THE HUB ASSEMBLY AND WOULD NOT REQUIRE COMPLETE O/H OF THE PROPELLER, THEREBY NOT CAUSING UNDO COST TO THE OWNER BUT STILL KEEPING THE PROPELLER SAFE. IT WOULD BE UNFORTUNATE TO HAVE A FATALITY TO HAVE TO START INSP ENFORCEMENT.

2011FA0000289	BELL	SCREEN	FAILED
4/27/2011	430	222066624101	FUEL SYSTEM

BROKEN FUEL SCREEN MOUNTING BRACKET, DISCOVERED BY INSP WHEN INSTALLING FUEL CELL, REF ITEM 66 OF FIG 28-1003, BHT 430-MM-4, PN 222-066-624-101. THE MOUNTING BRACKET IS 2 PART AND ATTACHED TO THE SCREEN HOUSING BY SPOT WELDING, THE SPOT WELDS ON THE SECOND PAR OF THE BRACKET APPEAR TO HAVE CRACKS IN THE AREA OF THE SPOT WELDS AS WELL. 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. PROBABLE CAUSE: DESIGN OR BAD WELD.

FOTR2105317127	BOEING	STRINGER	CORRODED
4/6/2011	727230	65583872	ZONE 100

STRINGER S8R HAS HEAVY CORROSION DAMAGE AT STATION 950E+5. REMOVED DAMAGED STR 28R FROM BS 950 TO 1010 IAW SRM 51-30-2 LOCATED AND DRILLED NEW STR 28R SECTION PN 65-58387-2, PO 2105315 IAW SRM 51-30-5. INSTALLED STR 28R IAW SRM 51-30-2 AND DWG 65-58387.

FOTR2102212508	BOEING	PWA	SKIN	DEBONDED
3/18/2011	7272A1	JT8D17R		RT ELEVATOR

RT ELEVATOR TAB T/E IS DISBONDED. REMOVED DAMAGED AREA DIM 6.5" X 6.5" IAW SRM 51-40-20, PAGE 12-14, PARA 7. FABRICATED REPAIR FILLER 6.5" X 6.5" AND DOUBLER DIM 10.5" X 6.5" USING 2024T3 PO 9003621 IAW SRM 51-40-20, PAGE 14-16, PARA 8 AND SRM 55-20-2, PAGE 1 FIG 1. BONDED REPAIR PARTS IAW SRM 51-40-20, PAGE 42-62, PARA 14-21. WEIGHT OF TAB POST REPAIR IS 10.5 LBS ABD IS WITHIN LIMITS IAW 51-80-9, PAGE 10, FIG 2.

FOTR2102212391	BOEING	PWA	SKIN	DEBONDED
3/18/2011	7272A1	JT8D17R		NR 13 SPOILER

RT WING T/E NR 13 SPOILER UPPER SKIN IS DISBONDED. REMOVED DAMAGED AREA DIM 12" X 7.75" IAW SRM 51-40-20, PARA 7,11,14,15 AND FABRICATED FILLER DIM 12" X 7.75" AND DOUBLER DIM 13.5" X 9.25" FROM 7075T6 .025 PO 90010605 IAW SRM 57-50-6, PAGE 14, 17 AND 51-40-20 PARA 8. HOT BONDED REPAIR PARTS IAW SRM 51-40-20, PARA 20. CLEANED SEALED AND FINISHED REPAIR IAW SRM 51-40-20, PARA 22.

FOTR2102212390	BOEING	PWA	SKIN	DEBONDED
3/18/2011	7272A1	JT8D17R		NR 11 SPOILER

RT WING T/E NR 11 SPOILER UPPER SKIN IS DEBONDED OTBD END. REMOVED DAMAGED AREA DIM 10" X 6.25" IAW SRM 51-40-20 PARA 7,11,14,15 AND FABRICATED FILLER DIM 10" X 6.25" AND DOUBLER DIM 12" X 8" FROM 7075T6 .025 PO 90010605 IAW SRM 57-50-6 PAGE 14, ITEM 4 AND 51-40-20 PARA 8. HOT BONDED REPAIR PARTS IAW SRM 51-40-20, PARA 20. CLEANED SEALED AND FINISHED REPAIR IAW SRM 51-40-20, PARA 22.

FOTR2020815697	BOEING	SHEAR TIE	CRACKED
3/31/2011	7374S3		ZONE 200

MAIN CABIN HAS CRACKED SHEAR TIE AT BS 500E, STRINGER 10L. CUTOUT DAMAGED AREA DIM 6" X 1" IAW SRM 53-00-07, REPAIR 7, FIG 201. FABRICATED SHEAR TIE REPAIR FROM PN 7075-0 .050 PO 90010501, DIM 9.5" X 6.75" IAW SRM 53-00-07. HEAT TREATED MATERIAL TO 7075T6 IAW FAS REPORT 2-37153-801 REV A INSTALLED REPAIR PARTS IAW SRM 51-40-2 AND 53-00-07.

FOTR2020815494	BOEING	FRAME	CRACKED
3/31/2011	7374S3		ZONE 100

FWD CARGO COMPARTMENT, BS 500G FRAME HAS CRACK INDICATION BETWEEN STRINGERS 20R AND 21R AT 1.04 IN POWER FEEDER WIRE PENETRATION HOLE. CUT OUT CRACK AT WIRE PENETRATION HOLE .250 IAW SRM 53-00-07, FIG 202. FABRICATED REPAIR ANGLES FROM .050 7075-O PO 9001187 DIM 3" X 11", AND .063 7075-O PO 90011223 DIM 3" X 10". HEAT TREATED MATERIAL TO 7075T6 IAW FAS REPORT 2-37153-801 REV A. INSTALLED REPAIR ANGLES IAW SRM 53-00-07 REPAIR 13.

FOTR2020815451	BOEING	SKIN	CRACKED
3/31/2011	7374S3		BS 727F

LT SIDE OF FUSELAGE HAS A CRACK IN THE SKIN AT BS 727F+10. CUT OUT DAMAGED AREA 3.75" X .5" IAW SKETCH CGP-CGP-10-0070. FABRICATED REPAIR TRIPLER FROM 2024T3 .050 PO 90010715, DIM 16.5" X 11.5" IAW SKETCH CGP-CGP-10-0070 AND FILLER FROM 2024T3 .071 PO 90010541 DIM 18.5" X 4" IAW SKETCH CGP-CGP-10-0070. INSTALLED REPAIR PARTS IAW REPAIR SKETCH CGP-CGP-10-1070.

FOTR2020815678	BOEING	SHEAR TIE	CRACKED
3/31/2011	7374S3		ZONE 200

FRAME SHEAR TIE IS CRACKED AT BS 500F STRINGER 10L. CUTOUT DAMAGED AREA DIM 5.3750" X .3750" IAW SRM 53-00-07. FABRICATED SHEAR TIE REPAIR FROM 7075-0 .050 PO 90010501 DIM 6.7500" X 4.5" IAW SRM 53-00-07. HEAT TREATED MATERIAL TO 7075T6 IAW FAS REPORT 2-37153-801, REV A. INSTALLED REPAIR PARTS IAW SRM 51-40-2 AND 53-00-07.

FOTR2020815677	BOEING	FRAME	CRACKED
3/31/2011	7374S3		ZONE 200

CABIN INTERIOR FRAME CRACKED AT BS 500E, STR 10L. CUTOUT DAMAGED AREA 2" X 1" IAW SRM 53-00-07. FABRICATED Z FRAME REPAIR CHANNELS FROM 7075-0 .050 DIM 3.5" X 15" PO 90010501 IAW SRM 53-00-07. HEAT TREATED MATERIAL TO 7075T6 IAW FAS REPORT 2-37153-801, REV A, INSTALLED REPAIR PARTS IAW SRM 53-00-07 AND 51-40-02.

FOTR2020815666	BOEING	CUSP WEB	CORRODED
3/31/2011	7374S3		ZONE 200

RT MAIN CABIN STRINGER 17 RT, CUSP WEB UPPER SURFACE HAS AREAS OF CORROSION BETWEEN BS 727D AND BS 727E. REMOVED CORROSION AND FOUND OUT OF LIMITS IAW SRM 53-00-04. FABRICATED NEW WEB FROM 7075T6 .032 PO 9009201 DIM 20.6250" X 7.0312" IAW SRM 53-60-13 FIG 1 AND 51-30-1. INSTALLED NEW WEB IAW SRM 51-40-02.

FOTR2020815653	BOEING	CUSP WEB	CORRODED
3/31/2011	7374S3		ZONE 200

MAIN CABIN RT SIDE, STR 17 CUSP WEB UPPER SURFACE HAS AREAS OF CORROSION BETWEEN BS 787 AND BS 807. REMOVED CORROSION AND FOUND OUT OF LIMITS IAW SRM 53-00-04 AND 53-60-13 FIG 101. FABRICATED NEW WEB FROM 7075T6 .040 PO 90010492 DIM 12" X 7" IAW SRM 53-60-13 AND 51-70-13. INSTALLED NEW WEB IAW SRM 51-40-02.

FOTR2020815495	BOEING	FRAME	CRACKED
3/31/2011	7374S3		ZONE 100

FWD CARGO COMPARTMENT, BS 520 FRAME HAS CRACK INDICATION BETWEEN STR 20R AND 21R AT 1.04 INCH WIRE PENETRATION HOLE. CUT OUT CRACK AT WIRE PENETRATION HOLE .250 IAW SRM 53-00-07, FIG 202. FABRICATED REPAIR ANGLES FROM 7075-0 .050 PO 9001187, DIM 3" X 11" AND 7075-0 .063 PO 90011223 DIM 3" X 11" IAW SRM 53-00-07, REPAIR 13. HEAT TREATED MATERIAL TO 7075T6 IAW FAS REPORT 2-37153-801 REV A. INSTALLED REPAIR ANGLES IAW SRM 53-00-07.

DU4R2011003	BOEING	STRINGER	BENT
3/16/2011	737524		BS 1064-1088

DURING SCHEDULED INSP, FOUND BENT STRINGER FLANGE, STR 17 LT BETWEEN BS 1064 & BS 1088.

DU4R2011004	BOEING	SKIN	DELAMINATED

3/23/2011	737524			NR 4 SPOILER

DURING SCHEDULED INSP, FOUND NR 4 SPOILER UPPER SKIN HAS DELAMINATION AREA AT 36.5", 40.5" FROM INBD EDGE ON LT WING.

DU4R2011001	BOEING	GE	THRESHOLD	CORRODED
3/11/2011	737524	CFM56*	6545855U122	BS 900-996

DURING SCHEDULED INSP, FOUND R-2 DOOR THRESHOLD FLOOR ATTACH ANGLE HAS SURFACE CORROSION.

DU4R2011002	BOEING	GE	SKIN	DENTED
3/16/2011	737524	CFM56*		RT WING TE FLAP

DURING SCHEDULED INSP, FOUND RT OTBD FLAP, OTBD UPPER SKIN DENTED, CREASED DENTS.

UNFR2011040200001	BOLKMS	LYC	SWASHPLATE	OUT OF ADJUST
3/29/2011	BK117B2	LTS101*	11741904	MAIN ROTOR

PREFORMING GROUND RUNS AND BALANCING OF M/R BLADES AND ON ADJUSTING OF LINKS FOUND PLAY IN THE SWASHPLATE ASSY. REMOVED SWASHPLATE AND RETURNED TO VENDOR WHERE PREVIOUSLY REPAIRED UNIT. THERE A SHIMMING WASHER WAS DISCOVERED MISSING.

KGBR110411338A	CASA		SPAR	CORRODED
4/11/2011	C212			RT WING

RIGHT WING, REAR SPAR WEB HAS CORROSION, WS 5940 AFT SIDE AT BOTTOM SPAR CAP (MARKED).

CA110202001	CESSNA	CONT	OIL SYSTEM	LOW PRESSURE
10/27/2010	150M	O200A		RT ENGINE

(CAN) IFSD RT ENGINE OIL PRESSURE INDICATION DROPPED TO THE YELLOW AREA. PILOT REDUCED POWER AND IT CONTINUED TOWARDS THE RED. THE PILOT SHUTDOWN ENGINE AND LANDED WITHOUT INCIDENT. TROUBLESHOOTING IS ONGOING.

CA101125004	CESSNA	LYC	BELLCRANK	MISINSTALLED
11/25/2010	172K	O320E2D	05341221	ELEVATOR

BELL-CRANK FOUND INSTALLED UPSIDE DOWN. JOGGLE CAUSES INTERFERENCE WHEN INSTALLED UPSIDE DOWN. LOWER CLEVIS RUBS AFT BULKHEAD CLEARANCE OPENING. PARTS CATALOGUE DOES NOT SHOW ORIENTATION OF JOGGLE ON THE BELL-CRANK.

CA101207002	CESSNA		LEG ASSY	CRACKED
11/23/2010	172M			PILOT SEAT

(CAN) PILOT FRONT SEAT ASSEMBLY INFINITE ADJUST, FRONT LEFT SUPPORT LEG CRACKED AND NO LONGER ATTACHED TO FRAME. (TC# 20101207002)

2011FA0000322	CESSNA	LYC	LYC	SPRING	BROKEN
5/15/2011	172M	O320E2D		LW14995	ROCKER ARM

UPON INVESTIGATING AN OIL LEAK ON NR 3 CYLINDER, REMOVED VALVE COVER AND FOUND BROKEN PUSH ROD TUBE SPRING, ALLOWING PUSH ROD TO BACK OUT OF SEALING POSITION. REMOVED ALL VALVE COVERS AND FOUND ALL PUSH ROD TUBE SPRINGS BROKEN. THIS REALLLY NEEDS TO BE ADDRESSED. INSTALLED ALL NEW PUSH ROD SPRINGS AND WILL MONITOR THEM CLOSELY. NOTE: THIS ENG ONLY HAD 42 HOURS SINCE O/H.

CA110201005	CESSNA	LYC	OIL FILTER	DAMAGED
1/31/2011	172M	O320E2D	AA4810	ENGINE

(CAN) THE FILTER WOULD NOT SCREW INTO THE ENGINE`S RECEPTACLE. EXAMINATION REVEALED SEVERAL DAMAGED THREADS ON THE MOUNTING SPUD. THE FILTER HAD COME DIRECTLY FROM A SEALED BAG WITHIN THE FACTORY SIX-PACK.

CA110125030	CESSNA	LYC	SUPPORT	CRACKED

10/5/2010	172N	O320H2AD		MUFFLER SHROUD

(CAN) MUFFLER SHROUD SUPPORT CRACKED AWAY FROM MUFFLER.

CA110125031	CESSNA	LYC	CONDENSER	FAILED
10/14/2010	172N	O320H2AD	10400574NE	MAGNETO

(CAN) RPM DROP ON RUNUP. TROUBLESHOT PROBLEM. CONDENSER U/S.

CA110125035	CESSNA	LYC	SCREW	LOOSE
1/11/2011	172N	O320H2AD		CARBURETOR

(CAN) DURING INSPECTION OF CARB THROTTLE BODY SCREWS IAW SEB 07-11R, THROTTLE BODY SCREWS FOUND LOOSE. CARB REPLACED.

CA110201012	CESSNA		PISTON	BROKEN
1/31/2011	172P		98820125	MASTER CYLINDER

(CAN) DURING TAXI, THE LEFT BRAKE MASTER CYLINDER PISTON SNAPPED OFF AT THE RUDDER PEDAL CONNECTION JUST BELOW THE JAMB NUT. THE AIRCRAFT RETURNED TO IT`S PARKING SPOT. THE PILOT INFORMED MAINTENANCE THAT THE BRAKE WAS "LOOSE". MAINTENANCE REPLACED THE PISTON AND THE AIRCRAFT WAS RETURNED TO SERVICE.

2011FA0000186	CESSNA	LYC	SWITCH	SPARKS
3/21/2011	172RG	IO360F1A		ZONE 100

PILOT REPORTED SPARKING/ARCHING INTERNALLY WITHIN TAXI LIGHT SWITCH ASSY WHILE ACTIVATING TAXI LAMP CIRCUIT. INSPECTION GUIDE INDICATES LIFE LIMITED PART REPLACEMENT OF SWITCH ASSY EVERY 5 YEARS. PREMATURE FAILURE OCCURED AT SWITCH LIFE OF 24 MONTHS (3-6-2009 UNTIL 3-21-2011, 764.6 HRS SINCE NEW).

NX4R000010	CESSNA		SHAFT	WORN
4/11/2011	172S		05600595	YOKE

DURING AN INSPECTION, THE TECH NOTICED AN INDENTATION IN THE PILOT'S YOKE SHAFT. ALTHOUGH SMOOTH, IT WAS NOTICED THAT A SUBSTANTIAL AMOUNT OF THE WALL THICKNESS WAS WORN AWAY. IF SITTING IN THE CO-PILOT'S SEAT, THE WEAR WOULD BE LOCATED AT THE 6 O'CLOCK POSITION OF THE SHAFT WEAR IT RESTS ON THE PANEL BEARINGS DURING NORMAL OPERATION. AFTER DISCUSSING THE ISSUE WITH THE MFG, A TOTAL WEAR OF .009" WAS ALLOWED. THIS WEAR WAS .017". THE SHAFT WAS REPLACED. ALTHOUGH THIS IS IN A VERY EASY PLACE TO INSPECT, THE SMOOTH FEEL OF THE WEAR MAY HIDE THE SERIOUSNESS OF THE PROBLEM.

NX4R00009	CESSNA		SHAFT	WORN
4/11/2011	172S		05600595	YOKE

DURING A PHASE INSP, THE TECH NOTICED A WORN AREA ON PILOT'S YOKE SHAFT AT THE 6 O'CLOCK POSITION WHERE THE SHAFT RIDES ON THE INSTRUMENT PANEL BEARING AREA. THE MFG STATES THAT A MAXIMUM WEAR OF .009" IS ALLOWED. THIS WEAR WAS ABOUT .019". IT IS A SUBSTANTIAL AMOUNT OF THE WALL THICKNESS DIMENSION

NX4R00008	CESSNA		SHAFT	WORN
3/25/2011	172S		05600595	YOKE

DURING INSPECTION THE TECH NOTICED AN INDENTATION IN THE CO-PILOT'S YOKE SHAFT. ALTHOUGH SMOOTH, IT WAS NOTICED THAT A SUBSTANTIAL AMOUNT OF THE WALL THICKNESS WAS WORN AWAY. IF SITTING IN THE CO-PILOT'S SEAT, THE WEAR WOULD BE LOCATED AT THE 6 O'CLOCK POSITION OF THE SHAFT WEAR IT RESTS ON THE PANEL BEARINGS DURING NORMAL OPERATION. AFTER DISCUSSING THE ISSUE WITH THE MFG A TOTAL WEAR OF .009" WAS ALLOWED. THIS WEAR WAS .030". THE SHAFT WAS REPLACED. ALTHOUGH THIS IS IN A VERY EASY PLACE TO INSPECT, THE SMOOTH FEEL OF THE WEAR MAY HIDE THE SERIOUSNESS OF THE PROBLEM.

2011FA0000191	CESSNA	LYC	SCREW	LOOSE

3/20/2011	172S	IO360L2A	MS35207256	PILOT'S SEAT

DURING TRAINING FLIGHT STUDENT PILOT REPORTED HIS SEAT WOULD NOT LOCK IN POSITION. ACFT RETURNED TO BASE WITHOUT INCIDENT. UPON TROUBLESHOOTING OF PROBLEM MX FOUND THE ATTACHMENT SCREWS OF THE LT AND RT SEAT STOP PINS HAD BACKED OUT ALLOWING THEM TO BE DETACHED AND BECOME INEFFECTIVE. CHECK OF OTHER ACFT IN FLEET FOUD 6 OTHER ACFT THAT HAD LOOSE ATTACHMENT SCREWS. ALL LOOSE SCREWS WERE REMOVED, INSPECTED AND REINSTALLED WITH LOC-TITE 242 IAW MFG.

2011FA0000237	CESSNA		BRACKET	BROKEN
4/8/2011	177RG		204303112	MLG

NLG FAILED TO EXTEND WHEN GEAR WAS LOWERED FOR LANDING AND NOSE GEAR UP LANDING WAS MADE. EXAMINATION REVEALED THE UPLOCK BELLCRANK, PN 2043031-12, FWD ARM THAT ACTIVATES AND DISENGAGES THE UPLOCK ROLLER FROM THE UPLOCK HOOK, WAS FOUND BENT AND CRACKED OVER 90 PERCENT WHICH WOULD NOT ALLOW THE UPLOCK TO DISENGAGE. ALSO, THE ENGINE/NOSE GEAR MOUNT WAS FOUND WARPED OUT OF ALIGNMENT WHICH WAS REMOVED AND REPAIRED BY A REPAIR STATION. PROBABLE CAUSE DUE TO SEVERE SIDE LOADING DURING LANDING AT UNKNOWN TIME. NEW PART WAS INSTALLED AND A GEAR RIGGING CHECK WAS MADE IAW MM AND NO OTHER PROBLEM WAS NOTED.

5ASR2011324002	CESSNA		ADC	OUT OF TOLERANCE
3/24/2011	206CESSNA		962831A1S8	ZONE 100

ROUTINE INSPECTION FOUND ALTITUDE DATA OUT OF TOLERANCE.

CA110208002	CESSNA	PWA	ENGINE	FAILED
1/20/2011	208B	PT6A114		

(CAN) IFSD/FORCED LANDING SHORTLY AFTER T/O, THE PILOT FELT VIBRATIONS IN HIS CONTROL COLUMN FOLLOWED BY A LOSS OF POWER. THE THROTTLE WAS RETARDED AND THE VIBRATION REDUCED. RE-ADVANCING THE THROTTLE RESULTED IN A MOMENTARY INCREASE OF POWER BEFORE EVERYTHING WENT TO ZERO. USE OF THE EMERGENCY POWER LEVER HAD NO EFFECT. THE ACFT THEN MADE A FORCED LANDING IN A FIELD EVENTUALLY HITTING A DITCH AT THE END OF LANDING ROLL. THE NOSE GEAR BROKE AND THE PROPELLER HIT THE GROUND. NO ONE ON BOARD WAS INJURED AND NO OTHER APPARENT DAMAGE TO THE ACFT WAS NOTED. THE ENGINE WILL BE REMOVED.

2011FA0000267	CESSNA	CONT	MAGNETO	SEIZED
4/8/2011	421C	GTSIO520L	BL3492204	LEFT

PILOT REPORTED THE LT ENGINE WAS RUNNING RUFF. THE LT ENGINE WOULD NOT START WHEN TRYING TO TROUBLESHOOT. THE LT MAG HAD SEIZED UP AND DAMAGED THE RUBBER MAG DRIVE BUSHINGS AND MAG DRIVE GEAR RETAINER.

CA110202002	CESSNA	PWC	OIL SYSTEM	LOW PRESSURE
10/29/2010	510	PW615FA		ENGINE

(CAN) IFSD DURING A REPOSITIONING FLIGHT, THE PILOT OBSERVED LH ENGINE OIL PRESSURE DROP INTO THE YELLOW BAND. PILOT REDUCED POWER AND IT CONTINUED INTO THE RED. THE PILOT SHUTDOWN ENGINE AND LANDEDWITHOUT INCIDENT. TROUBLESHOOTING IS ONGOING.

VQMA20110314001	CESSNA	PWA	ACTUATOR	MALFUNCTIONED
3/14/2011	550	JT15D4	556545098	ELEVATOR TRIM

ON CLIMB OUT, PILOT REPORTED ELEVATOR TRIM JAMMED AND WOULD NOT MOVE. PILOT RETURNED ACFT BACK TO DEPARTURE AND DIFFERENT ACFT DEPARTED. MX INSPECTED ACFT AND FOUND ELEVATOR TRIM ACTUATOR WORN AND CHAIN ON ACTUATOR VERY LOOSE AND BINDING WHENEVER TRIM UP WAS SELECTED. CHAIN WOULD RELEASE WHEN DOWN WAS SELECTED AND LOCK UP AGAIN WHEN UP WAS AGAIN SELECTED. MX REPLACED ELEVATOR TRIM ACTUATOR AND PERFOMED ALL OPS CHECKS-ALL CHECKED NORMAL AND ACFT WAS RETURNED TO SERVICE.

2011FA0000208	CESSNA		HOSE	CRACKED
3/28/2011	560CESSNA		CM29446600	PITOT STATIC SYS

WHILE COMPLING WITH PITOT-STATIC LEAK CHECK, FOUND EXCESSIVE LEAKAGE IN THE SYS THAT WE TRACED TO THE FLEXIBLE HOSES USED IN THE PITOT-STATIC PLUMBING. THE HOSES ARE FABRICATED FROM LOW PRESSURE HOSE. UPON CUTTING OPEN THE HOSES, FOUND THE INNER LINING WITH NUMEROUS CRACKS AND BROWN STAINING. THESE HOSES ARE ROUTED NEAR THE COCKPIT HEATING DUCTS. SUSPECT THE HOSE WILL NOT TOLERATE THE HEAT. THE MFG PN CM2944-6-6.00.

SW4R20110426001	CESSNA		CONTROL QUADRANT	MISRIGGED
4/25/2011	560CESSNA			ZONE 400

TEST AIRCRAFT EXPERIENCED DUAL ENGINE FLAMEOUT DURING CLIMB AFTER TAKE OFF. PILOT RE-STARTED ENGINES AND COMPLETED FLIGHT. 25 DAYS LATER, PILOT EXPERIENCED ENGINE FLAME OUT ON GROUND. TROUBLESHOOTING DETERMINED THAT ENGINE POWER CONTROL LEVER RIGGING TO ENGINE FUEL CONTROL WAS INCORRECT AS PER CESSNA 560 SERIES MAINTENANCE MANUAL, WORK PACKAGE 71-00.

CA110131006	CESSNA		FUEL LINE	CHAFED
1/31/2011	560CESSNA		652635631	

(CAN) DURING INSPECTION, IT WAS DISCOVERED THE THE RT FUEL CROSS FEED LINE WAS CHAFED WHERE IT CAME THROUGH THE TOP OF THE WING (UNDER THE WING TO BODY PANEL). FEED LINE WAS ADJUSTED AND INSPECTED SERVICABLE BUT IF NOT ADDRESSED COULD HAVE BEEN A LOT MORE SERIOUS. (TC# 20110131006)

2011F00000A	CESSNA	PWA	INDICATOR	FAILED
2/12/2011	560CESSNA	JT15D5	991214715	ITT

THE ENGINE ITT GAUGE FAILED AND A REPLACEMENT WAS INSTALLED THIS UNIT WAS O/H REF WO 0363688. AFTER 122.4 HOURS THE UNIT STARTED TO CAUSE THE ASSOCIATED "RT ITT" CIRCUIT BREAKER TO TRIP. THE FAULT WAS DETERMINED TO BE BEING CAUSED BY THE UNIT.

2011F00076	CESSNA	PWA	LIGHT	INOPERATIVE
4/22/2011	560CESSNA	JT15D5		ITT INDICATOR

ORDERED IN A SECOND WARRANTY EXCHANGE UNIT FROM ACFT MFG AND WERE SENT A REPLACEMENT GAUGE 4/23/2011, SN 346KA. THE UNIT WAS O/H REF W/O 0372457 BUT WHEN INSTALLED NONE OF THE BACKLIGHTING WORKED AND THE FAULT WAS IN THE UNIT.

2011F00077	CESSNA	PWA	LIGHT	INOPERATIVE
4/23/2011	560CESSNA	JT15D5		ITT INDICATOR

ITT INDICATOR BACKLIGHT INOPERATIVE, REMOVED AND REPLACED INDICATOR.

2011F00075	CESSNA	PWA	INDICATOR	INOPERATIVE
4/21/2011	560CESSNA	JT15D5	991214715	COCKPIT

ORDERED IN A WARRANTY EXCHANGE UNIT FROM ACFT MFG AND WERE SENT A REPLACEMENT GAUGE 2/22/2011, SN 864BA. THIS UNIT WAS O/H REF WO 0364333 BUT WHEN INSTALLED, THE LOWER HALF OF THE BACKLIGHTING IAW INOPERATIVE. TROUBLESHOT THE BACKLIGHTING WIRING AND DETERMINED THAT THE FAULT WAS INTERNAL IN THE INSTRUMENT.

2011FA0000206	CESSNA		DOWNLOCK SWITCH	LEAKING
3/28/2011	560XL			MLG ACTUATOR

ACTUATOR LEAKING FROM DOWNLOCK SWITCH. PART (MFG PN 9912537-4 (VENDOR PN 1550000-6B), SN 1197B)SENT TO MFG FOR REPAIR. SAME PART WAS REPAIRED/MODIFIED IAW CMM WITH IPL AND RETURNED (REF MFG ICT WO 2-80089). PART REINSTALLED BY MFG SERVICE CENTER, FUNCTIONAL CHECK PERFORMED, SYS CHECKS OK FOR RETURN TO SERVICE.

2011FA0000196	CESSNA	PWC	SUPPORT BRACKET	DAMAGED
3/24/2011	560XL	PW545B	666105122	ZONE 100

DURING MX (PERFORMING MSG3 TASK 27-90-20-721 RUDDER AND RUDDER TRIM CONTROL SYSTEM FUNCTIONAL CHECK) IT WAS NOTED THAT THE FAIRLEAD TUBE PN 6661051-20 FOR THE RUDDER CABLES, WHICH PASSES THROUGH THE EXTERNAL FRAMES ON THE BOTTOM OF THE FUSELAGE AT LBL4.00 WAS TOO SHORT AND WAS NOT SUPPORTED BY THE CLAMP ON BRACKET PN 6661051-22, INBD AFT SUPPORT AT FS373.75 AS IT SHOULD HAVE BEEN. REPAIR WAS MADE -REPAIR DEFINITION 560XL5684/01RD-"CONTROL CABLE FAIRLEAD SUPPORT EXTENSION".

2011F00079	CESSNA	GARRTT	LINE	RUPTURED
4/1/2011	650	TFE731*		HYD SYSTEM

UPON TOUCHDOWN, LOST SPEEDBRAKES, SPOILERS, BRAKES, AND NOSE-WHEEL STEERING WHICH RESULTED IN HAVING TO USE EMERGENCY BRAKING. NO DAMAGE TO ACFT, NOR INJURIES TO CREW. PROBABLE CAUSE, HYD LINE FAILURE IN HELL-HOLE OR BAGGAGE COMPARTMENT. ACTUAL CAUSE DETERMINED TO BE FAILURE OF THE HYD SYS COOLING FAN AND LINES.

CA110125013	CESSNA	PWC	ENGINE	FLAMED OUT
1/19/2011	680SOV	PW306C		

(CAN) FLAMEOUT DURING DESCENT FROM FL400, THE PILOT NOTICED SOME VIBRATIONS AND AT APPROX. FL350, THE ENGINE FLAMED OUT. THIS WAS FOLLOWED BY AUTO RE-LIGHT AND THE ENGINE REGAINED NORMAL POWER. THE FLIGHT WAS COMPLETED AS SCHEDULED. TROUBLESHOOTING ONGOING.

5ASR2011323001	CESSNA		ADC	FAILED
3/11/2011	A185E		962831A1S8	ZONE 100

ADC FAILED, 2 YEAR INSPECTION OF ALTITUDE ACCURACY.

2011FA0000226	CESSNA	CONT	BULKHEAD	CRACKED
4/4/2011	P206E	IO520A	12128582	ZONE 100

DURING INSP IAW AD72-07-09, DATED 10/17/1974, AND SL SE72-3, THE AFT BULKHEAD WAS FOUND CRACKED IN BOTH RUDDER CABLE CUTOUTS. UPON REMOVAL OF AFT BULKHEAD THE LT AND RT STABILIZER ATTACH BRACKETS, PN 0712629-3 AND PN 0712629-4 WERE ALSO FOUND CRACKED.

2011FA0000323	CESSNA	CONT	CYLINDER	DELAMINATED
4/20/2011	P210N	TSIO520P	AEC631397	ENGINE

NICKLE PULLED AWAY FROM BARREL OF CYLINDER.

2011FA0000270	CESSNA	CONT	NUT	LOOSE
4/11/2011	TU206G	TSIO520M	646605	OIL COOLER

SHORTLY AFTER INSTALLATION, THE ENG BEGAN AN OIL LEAK, UP FRONT ON THE RT SIDE NEAR THE OIL COOLER. OIL COOLER WAS REMOVED, FOUND THAT THE NUTS THAT HOLD THE OIL COOLER ADAPTER WERE LOOSE AND COULD BE REMOVED BY HAND. THIS ENGINE HAD 39.1 HOURS TSN ON IT WHEN REMOVE THE OIL COOLER.

2011FA0000278	CESSNA	CONT	POINTS	CRACKED
4/18/2011	U206G	IO520F	M3081	MAGNETO

ACFT WAS DISCOVERED TO HAVE AN INOPERATIVE LT MAGNETO DURING A PILOT OPERATED ENG RUN. TROUBLESHOOTING FOUND THE FLAT SPRING PORTION OF THE CONTACT POINT ASSY HAD CRACKED THROUGH APPROX HALFWAY ALONG THE LENGTH OF THE SPRING AND ACROSS ITS ENTIRE WIDTH. THE BROKEN OFF HALF OF THE SPRING, WHICH CONTAINED THE CONTACT POINT, WAS FOUND FULLY SEPARATED INSIDE MAGNETO HOUSING. RECORDS SHOW THE POINTS HAD LAST BEEN INSPECTED DURING THE ACFT ANNUAL INSP, AT WHICH POINT THE MAG TT WAS 383.6 HRS. NO DEFECTS WERE NOTED AT THAT TIME.

2011FA0000227	CIRRUS	CONT	CRANKCASE	CRACKED
3/23/2011	SR20	IO360ES	64928610	ENGINE

DURING AN UNSCHEDULED INSP AFTER A PILOT REPORT OF AN OIL LEAK IT WAS DISCOVERED THAT THE

ENGINE'S RT SIDE CRANKCASE HAD A 4 IN CRACK EMANATING FROM THE ALTERNATOR 1 MOUNT STUD HOLE.

2011FA0000215	CIRRUS		TUBE	CUT
3/31/2011	SR22		TR20	LT MLG TIRE

LT MLG TIRE TUBE CUT ON LANDING, CAUSING ACFT TO NEED RESCUE/RECOVERY FROM ACTIVE RUNWAY. TUBE WAS TR20, AND HAD A .2500" X .2500" CUT IN THE SIDE OF THE TUBE. TIRE ITSELF SHOWED NO SIGNS OF FOD DAMAGE.

2011FA0000312	CIRRUS	CONT	ANTENNA	NOISY
3/24/2011	SR22	TSIO550A	12739001	

DIGITAL DATA NOISE IN HEADSETS. ACFT MODE S TRANSPONDER SYS. CURRENT ANTENNA LOCATION IS TOO CLOSE TO CABIN ENVIRONMENT.

CA110203005	CNDAIR		PLUNGER	MISINSTALLED
1/30/2011	CL600*		91111	MLG ACTUATOR

(CAN) FOLLOWING THE INCIDENT, FOUND THAT THE MM PROCEDURE PSP601-2 CHAP 32-30-57 P201 TO 203 FOR THE PLUNGER INSTALLATION WAS INCOMPLETE.

V0XR413Y040611011	CNDAIR		FLOORBEAM	CORRODED
4/6/2011	CL6002C10			BS 274.5

FS 274.5, LBL 12, FLOORBEAM CRACKED. REPAIRED AREA IAW REO 670-53-11-586.

V0XR413Y040611012	CNDAIR		ANGLE	CORRODED
4/6/2011	CL6002C10			ZONE 100

PASSENGER DOOR KICK ANGLE CORRODED AT LOWER THRESHOLD. R & R PASSENGER DOOR KICK ANGLE RT IAW SRM 51-42-06.

V0XR413Y040611013	CNDAIR		ANGLE	CORRODED
4/6/2011	CL6002C10			ZONE 100

STR 18L, STA 310 & 349 FWD & AFT ANGLE CAP CORRODED. R & R ANGLES FS310 & 349 FWD & AFT RT IAW SRM 51-42-06.

V0XR413Y040611014	CNDAIR		SILL	CORRODED
4/6/2011	CL6002C10			ZONE 200

AFT CARGO BAY DOOR LOWER SILL HAS EXFOLIATION CORROSION THROUGHOUT. R & R LOWER SILL IAW SRM 53-61-23, 51-41-02, 51-42-06, 51-46-11 & 51-42-13.

V0XR413Y040611015	CNDAIR		FLOORBEAM	CORRODED
4/6/2011	CL6002C10			BS 280

FLOORBEAM, STA 280 CORRODED. R & R 280 CROSSBEAM IAW REO 070-53-11-385 & SRM 53-11-10.

V0XR413Y040611016	CNDAIR		BULKHEAD	CORRODED
4/6/2011	CL6002C10			BS 280

STA280 LT LOWER BULKHEAD CORRODED. R & R LT LOWER BULKHEAD STA 280.00 IAW SRM 53-11-10.

V0XR413Y040611017	CNDAIR		BULKHEAD	CORRODED
4/6/2011	CL6002C10			BS 280

STA 280 RT LOWER BULKHEAD CORRODED. R & R RT LOWER BULKHEAD STA 280 IAW SRM 53-11-10 AND REO 670-53-11-587.

V0XR413Y040611018	CNDAIR		DOOR FRAME	CRACKED
4/6/2011	CL6002C10			BS 1047

FS 1047 AFT BAGGAGE COMPARTMENT, AFT DOOR JAM CHANNEL CRACKED. REMOVED CRACKED CHANNEL IAW SRM 51-42-06. BLENDED OUT CRACK IAW REO 670-53-61-713 & CSRM 51-12-60. NDT VERIFIED THAT CRACK NO LONGER EXISTS. TREATED & PRIMED IAW SRM 53-61-58. INSTALLED CHANNEL IAW SRM 51-42-06.

V0XR413Y040611010	CNDAIR	FLOORBEAM	CRACKED
4/6/2011	CL6002C10		ZONE 100

FS 274.5, RBL 12 FLOORBEAM IS CRACKED. REPAIRED AREA IAW REO 670-53-11-586.

V0XR413Y040611009	CNDAIR	FLOOR SUPPORT	CRACKED
4/6/2011	CL6002C10		BS 278

COCKPIT FLOOR SUPPORT, RBL11 CRACKED AT STA 278. R & R COCKPIT FLOOR SUPPORT RBL11 IAW SRM 51-42-06.

V0XR413Y040611005	CNDAIR	FLOORBEAM	CRACKED
4/6/2011	CL6002C10		BS 280

STA 280 FLOOR SUPPORT LBL9 TO RBL 9 IS CRACKED. R & R FLOOR SUPPORT ANGLE STA 280.00, LBL 9.00 TO RBL 9.00 IAW SRM 51-42-06.

V0XR413Y040611006	CNDAIR	FLOORBEAM	CORRODED
4/6/2011	CL6002C10		BS 280

STA 280 FLOOR SUPPORT ANGLE AT LBL 9 & RBL 9 ARE CORRODED. REMOVED CORROSION ORIGINAL THICKNESS .063, REMOVED .003 TO CLEAN UP CORROSION, REMAINING THICKNESS OF PART IS .060 IAW SRM 51-42-10.

V0XR413Y040611007	CNDAIR	FLOOR SUPPORT	CRACKED
4/6/2011	CL6002C10		ZONE 100

STA 280, FLOOR SUPPORT RBL 26 LOWER ANGLE IS CRACKED. FABRICATED & INSTALLED LOWER ANGLE RBL 26 FS 280 SRM 51-42-06.

V0XR413Y040611008	CNDAIR	FLOOR SUPPORT	CRACKED
4/6/2011	CL6002C10		ZONE 100

COCKPIT FLOOR SUPPORT, LBL 11 CRACKED AT STA 278. R & R IAW SRM 51-42-06-001-001-A01, COCKPIT FLOOR SUPPORT LBL11 AT STA 278.

V0XR413Y040611	CNDAIR	ANGLE	CORRODED
4/6/2011	CL6002C10		ZONE 100

SERVICE DOOR THRESHOLD KICK ANGLE CORRODED. R & R SERVICE DOOR THRESHOLD KICK ANGLE IAW 51-42-06, 51-42-06, 51-42-21, 51-40-11 & 51-23-00.

V0XR413Y040611002	CNDAIR	THRESHOLD	CORRODED
4/6/2011	CL6002C10		ZONE 100

SERVICE DOOR THRESHOLD MIDCAP CORRODED. R & R SERVICE DOOR THRESHOLD MIDCAP IAW SRM 51-42-06, 51-40-11 & 51-23-00.

V0XR413Y040611003	CNDAIR	THRESHOLD	CORRODED
4/6/2011	CL6002C10		ZONE 100

PASSENGER DOOR THRESHOLD MIDCAP CORRODED. REPLACED AND INSTALLED PASSENGER DOOR MID-CAP R/H IAW SRM 51-40-06.

JR2R2011042300155	CNDAIR	STRINGER	CORRODED
4/23/2011	CL6002C10	SH670313724	FUSELAGE

STRINGER 26R HAS CORROSION BETWEEM FRAMES 349 AND 333 IN FWD E&E BAY. REMOVED AND INSTALLED

NEW STRINGER IAW CRJ 700 51-42-06.

JR2R2011042300156	CNDAIR		STRINGER	CORRODED
4/23/2011	CL6002C10		SH670312122	FUSELAGE

STRINGER 24R HAS CORROSION BETWEEM FRAMES 349 AND 333 IN THE FWD E&E BAY. REMOVED AND INSTALLED NEW STRINGER IAW CRJ 700 SRM 51-42-21.

JR2R2011042300157	CNDAIR		WEB	CORRODED
4/23/2011	CL6002C10		SH670320041	FUSELAGE

WEB AT STRINGER 20R HAS CORROSION BETWEEN FRAMES 333 AND 349 IN THE FWD E&E BAY. REMOVED AND REPLACED WEB IAW CRJ 700 SRM 51-42-06.

V0XR413Y040611004	CNDAIR	GE	SILL	CORRODED
4/6/2011	CL6002C10	CF348C5B1		ZONE 100

RT SILL CORRODED STA 280-319. R & R RT SILL STA 280 TO 319 IAW SRM 51-42-06, REO 670-53-21-667.

V0XR413Y041111001	CNDAIR	GE	SILL	CORRODED
4/11/2011	CL6002C10	CF348C5B1	MM67035655023	ZONE 100

AFT CARGO DOOR LOWER SILL ASSY HAS EXFOLIATION CORROSION THRU-OUT. AFT CARGO DOOR FRAME / LOWER SILL ASSY R & R IAW SRM 53-61-23-001-001-A01.

V0XR413Y041111002	CNDAIR	GE	ANGLE	CORRODED
4/11/2011	CL6002C10	CF348C5B1	SH670318257	ZONE 100

FWD FUSELAGE FLOOR, NEXT TO FWD PASSENGER DOOR MID CAP ANGLE CORRODED. R & R PASSENGER DOOR MID CAP ANGLE AT FS 333.00.

JR2R2011051400201	CNDAIR		HINGE	WORN
5/15/2011	CL6002D24		SH670318T67601R3	PAX DOOR

PAX DOOR FUNCTIONAL CHECK PER CRJ 900 AMM 52-11-00-720-802-A01 DO TO WORN HINGE. TRANSFERRED TO LOG BOOK FOR A 1500HR FLY-ON IAW RD CRJ-52-0435.

2011FA0000277	CVAC		DOWNLOCK SWITCH	DEFECTIVE
3/7/2011	440			NLG

UPON LANDING GEAR DEPLOYMENT ON LANDING AT AIRPORT, NO GEAR SAFE LIGHT OBSERVED FOR NLG. INSP REVEALED DEFECTIVE MICRO SWITCH ON NLG DOWN LOCK. THIS SYS IS FUNCTION TESTED ON PERIODIC INSP.

CA110131005	DHAV	PWA	OIL COOLER	LEAKING
1/22/2011	DHC3	S3H1G	HH9617	

(CAN) OIL COOLER LEAKING.

CA110125017	DHAV	PWA	ENGINE	MALFUNCTIONED
1/21/2011	DHC8202	PW120		NR 2

(CAN) ABORTED TAKE-OFF DURING TAKEOFF ROLL, AN UNCOMMANDED AUTOFEATHER OF THE NR 2 ENGINE OCCURRED. T/O WAS ABORTED AND THE AIRCRAFT RETURNED TO THE RAMP WITHOUT FURTHER INCIDENT. TROUBLESHOOTING IS ON-GOING.

CA101215001	DHAV		SOLENOID	SEPARATED
12/9/2010	DHC8311		54C546347	VALVE SEQUENCE

(CAN) HYD SYSTEM 2 QTY DEPLEATED TO 1 IN FLIGHT. RUDDER ISO C/M.RETURNING TO YVR. (RESOLVED ON W/O: 265192 TASKCARD: NR-00001) FOUND L/H MAIN LANDING GEAR SOLENOID SEQUENCE VALVE LEAKING. SEQUENCE VALE REPLACED IAW DHC-8 32-10-51. MAINT IRREGULARITY REPORT. AIRCRAFT DEPARTED YVR,GEAR SELECTED UP. TWO SECONDS LATER RUDDER ISO LIGHT CAME ON. MOST OF HYD FLUID DEPARTED.

GEAR WOULDN`T COME UP. FOR SAFETY, PILOTS DID ALTERNATE SELECTION DOWN.A/C RETURNED TO YVR HANGAR.IT WAS FOUND THAT THE TOP(SOLENOID) OF THE VALVE ALMOST FELL OFF. TWO SCREWS HAD SHEARED HAD SHEARED OFF.IN TURN LETTING THE HYD FLUID NR 2 SYSTEM TO LEAK OUT.

CA110125023	DIAMON	BEARING	DESTROYED
1/6/2011	DA20C1	60042RSDIN625	NOSE WHEEL

(CAN) WHILE DOING A WALK AROUND, THE PILOT NOTICED THAT THE NOSE WHEEL BEARINGS SEALS WERE COMING LOOSE. AFTER THE ASSEMBLY WAS REMOVED AND INSPECTED, IT WAS FOUND THAT THE TWO WHEELS HALF WERE NOT TOGETHER DUE TO THE TUBE BEING PINCHED. PRIOR CONVERSATION WITH THE TUBE MFG (GOOD-YEAR) HAVE BEEN DONE IN REGARDS TO THE 5.00X4 TUBES ARE A SQUARE SHAPE IN THE MIDDLE AND CAUSING A LOT OF ASSEMBLY PROBLEMS FOR THE OPERATORS. THIS PROBLEM ALSO CAUSED THE NOSE WHEEL BEARINGS TO BE DESTROYED AS THE RESULTS THE WHEELS BEING OFF CENTERED, NEW ASSEMBLY INSTALLED AND AIRCRAFT RETURNED TO SERVICED. (TC# 20110125023)

CA110120002	DIAMON	CONT	SHOCK ABSORBER	MISSING
1/17/2011	DA20C1	IO240B	2232200500	NLG

THE PILOT NOTICED EXCESSIVE VERTICAL MOVEMENT OF THE NOSE STRUT WHEN POSITIONING THE ACFT FOR STARTUP. THE PILOT CANCELLED THE FLIGHT AND REPORTED THE DEFECT TO MX. MX DISCOVERED THE LOWER "DONUT"/RUBBER DAMPER PN: DV2-9032-23-02 OF THE ASSY WAS MISSING. NO REMAINING PIECES WERE FOUND. MX RECORDS INDICATE THE PART WAS REPLACED WHEN THE ASSY WAS REPAIRED AND PLACED IN STORES ON FEB 2/2010. THE UNIT WAS INSTALLED ON THE ACFT ON MARCH 15,2010.

2011FA0000188	DIAMON	LATCH	DISENGAGED
3/16/2011	DA40		CABIN DOOR

THE ACFT WAS CONFIGURED FOR CRUISE FLIGHT AT 3500FT. THE STUDENT WAS INSTRUCTED TO REDUCE AIRSPEED TO MCA. AT ROUGHLY 90 KTS AIRSPEED, THE INSTRUCTOR HEARD A POPPING NOISE FROM BEHIND AND WITNESSED THAT THE PRIMARY LATCH FOR THE REAR DOOR HAD COME OPEN 50 PERCENT. HE RE-ENGAGED THE LATCH AND LANDED WITHOUT INCIDENT.

NX4R00007	DIAMON	CONTROL CABLE	FRAYED
3/21/2011	DA42	CA14060	RUDDER

DURING AN ANNUAL INSP, THE AFT RUDDER CABLE, PN-CA1-4060 WAS FOUND CHAFED AND WORN WERE IT EXITS THE PLASTIC TUBING BELOW THE RUDDER HINGE LINE. ON THIS OPERATORS FLEET OF 10 ACFT, THIS HAS BECOME A FREQUENT PROBLEM.

NX4R000010A	DIAMON	ADJUSTER	WORN
4/20/2011	DA42	DA427233300	RUDDER PEDAL

DURING A PRE-FLIGHT INSPECTION, THE PILOT WAS UNABLE TO ADJUST THE RUDDER PEDAL ASSEMBLY TO THE PROPER POSITION ON THE PILOT'S SIDE. UPON INSPECTION, THE TECHNICIAN DISCOVERED THAT THE LEFT RUDDER CABLE HAD WORN THROUGH THE "S" BEND AND BECOME JAMMED.

EE4Y20110177	DOUG	SKIN	CRACKED
4/7/2011	DC933F		ZONE 200

FUSELAGE SKIN CRACKED AT STA Y83.55 +Z42 +X10.

EE4Y1104004	DOUG	SKIN	DENTED
4/13/2011	DC983		ZONE 100

REPORTS LOWER EXTERNAL FUSELAGE FROM STA Y175.5 AND STA Y179.75 BTWN LONG 25L AND LONG 26L SKIN WITH DENTS.

V0XR201103110004	EMB	GUSSET	CORRODED
3/11/2011	EMB145EP	14522226003	ZONE 100

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

V0XR20110404013	EMB		SEAT TRACK	CORRODED
4/4/2011	EMB145LR		14532606011	BS 4154.5-7324

PASSENGER SEAT TRACK AT POSITION A, STA 4154.5 - 7324.0 CORRODED UNDER SCREW HEADS. R & R SEAT TRACK 'A' AT STATION 4154.5 TO 7324.0 IAW AMM 53-01-06.

V0XR201103300001	EMB		SILL	CORRODED
3/30/2011	EMB145LR		14520609005	ZONE 100

RT SILL AT FR 23-29 IS CORRODED BEYOND LIMITS. R & R SILL.

V0XR201103300002	EMB		SILL	CORRODED
3/30/2011	EMB145LR		14525422003	ZONE 100

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

V0XR201103300003	EMB		GUSSET	CORRODED
3/30/2011	EMB145LR		14522226003	ZONE 100

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

V0XR201103300004	EMB		PROFILE	CORRODED
3/30/2011	EMB145LR		14525994003	ZONE 100

RT PROFILE AT FR 61 IS CORRODED BEYOND LIMITS. R & R PROFILE.

2011FA0000213	EMB		STARTER GEN	FAILED
3/31/2011	EMB500		MG94F1	RT ENGINE

DURING CRUISE FLIGHT THE PILOT NOTICED AN INCREASING NOISE AND VIBRATION COMING FROM THE RT ENGINE. SHORTLY AFTER, THE NR 2 GENERATOR WENT OFF LINE AND COULD NOT BE RESET. BEFORE HE COULD MAKE A PRECAUTIONARY LANDING THE NOISE AND VIBRATION CONTINUED TO INCREASE, AFTER ABOUT 15 MINUTES HE HEARD AND FELT A BANG RESULTING IN A MOMENTARY YAW. AFTER THE BANG THE ENGINE INSTRUMENTS WERE ALL IN THE NORMAL RANGE, THE VIBRATION AND NOISE WERE GONE. AFTER THE PILOT LANDED IT WAS NOTICED THAT THE OUTSIDE OF THE NR 2 ENGINE COWLING HAD FIRE DAMAGE TO THE PAINT AFT OF THE STARTER/GENERATOR COOLING DUCT OUTLET. WITH COWL REMOVED IT WAS DISCOVERED THAT THE STARTER/GENERATOR HAD SUFFERED A CATASTROPHIC FAILURE. THE GENERATOR MOUNT RING WAS BROKEN COMPLETELY OFF OF THE GENERATOR HSG, IT WAS SECURED TO THE ENGINE BY THE WIRING AND THE COOLING INLET DUCT ONLY. AFTER REMOVING THE STARTER/GENERTOR IT WAS OBSERVED THAT IT WAS COMPLETELY DESTROYED INTERNALLY. THE ENGINE AGB HAD SUFFERED DAMAGE TO THE STARTER/GENERATOR DRIVE GEARS. NO FIRE DAMAGE INSIDE OF THE COWL WAS OBSERVED.

CA110201009	EMB	GE	BRACKET	BROKEN
1/31/2011	ERJ170200SU	CF348E5A1	4118T64P01	ENGINE

(CAN) ENGINE OIL DRAIN ATTACHMENT POINT BROKEN OFF.

2011FA0000320	GULSTM		SKIN	MISREPAIRED
5/10/2011	690B			WING

FOUND SB 237 IAW AD 2009-25-2 UPPER WING SKIN, STRAP INSP AND MODIFICATION DONE INCORRECTLY. HARDWARE AND FASTENERS WERE NOT CORRECTLY PLACED AND WERE SUBSTITUTED INCORRECTLY IAW SB 237. MFG WAS NOTIFIED AND AN ENGINEERING REPAIR AND AMOC WAS COMPLETED. ALTHOUGH MFG RECOMMENDS SB237 TO BE COMPLETED BY AN AUTHORIZED SERVICE CTR, PROPER FACTORY TRAINING OF SB 237 IS MANDATORY.

2011FA0000321	GULSTM	GARRTT	SCAVENGE PUMP	FAILED
5/17/2011	690C	TPE33110T	31082822	TURBINE SECTION

PILOT REPORTED THAT THE RT ENGINE RPM ACCELERATED UNCOMMANDED FROM 98 PERCENT TO APPROXIMATELY 103.5 PERCENT MOMENTARILY, A FEW SECONDS LATER IT DID IT AGAIN AND THE PILOT ELECTED TO SHUTDOWN THE ENGINE AND LAND THE ACFT SINGLE ENGINE, HE DID SO WITHOUT INCIDENT. MX

CHECKED THE ENGINE AFTER LANDING AND NOTED OIL COMING FROM THE EXHAUST PIPE. FURTHER INVESTIGATION FOUND THE SOURCE OF THE OIL TO BE THE TURBINE SEAL OF THE ENGINE. THE ENGINE WAS REMOVED AND DELIVERED TO REPAIR FACILITY FOR DISASSEMBLY. REMOVAL OF THE TURBINE SCAVENGE PUMP SHOWED THAT THE PUMP ASSY HAD FAILED AND SHEARED THE PUMP DRIVESHAFT AND CAUSED THE OIL RETURN PASSAGE TO BECOME COMPLETELY BLOCKED WITH DEBRIS. THE BLOCKAGE OF THE RETURN CAUSED THE TURBINE BEARING AREA TO BECOME OVER-PRESSURIZED CAUSING THE TURBINE SEAL TO FAIL ALLOWING OIL TO ENTER THE EXHAUST AREA. ADDITIONALLY THE REMAINING OIL IN THE ENGINE WAS FOUND TO BE BURNED DUE TO THE PUMP FAILURE, THE DECISION HAS BEEN MADE TO ACCOMPLISH AN ENGINE OIL OVER TEMPERATURE INSPECTION IAW THE MM IN ADDITION TOTHE REPAIR DUE TO THE PUMP FAILURE.

GR4D20110412002	GULSTM	WINGLET	CORRODED
4/12/2011	GIV	1159W407015	ZONE 500

LT WINGLET CORRODED.

GR4D20110412001	GULSTM	SKIN	CORRODED
4/12/2011	GIVX	1159W407016	ZONE 600

RT WINGLET CORRODED.

AMCR201103	GULSTM	MODULE	INOPERATIVE
4/4/2011	GV	102711	AUDIO/VIDEO

VIDEO FAILED IN CABIN ENTERTAINMENT SYS. UPON REMOVING THE AUDIO/VIDEO MODULE, THE MODULE HAD A DISTINCT BURNED ODOR TO IT. A REPLACEMENT MODULE WAS INSTALLED AND WAS INOPERATIVE. REPLACEMENT UNIT DISPLAYED CODE "NO" WHICH MEANS "NEVER ONLINE". A SECOND UNIT WAS PROCURED, REPAIRED REPAIR STATION, WHICH PERFORMED THE EXACT SAME WAY. DISCUSSIONS WITH THE ACFT MFG AND TECH REPS SUSPECT THERE IS A SOFTWARE ISSUE WITH MODULE. TEARDOWN REPORT OF BOTH REPLACEMENT MODULES SHOWS THERE WAS NO PROBLEMS WITH THE UNITS AS RECEIVED AND DURING THEIR TESTING, AND WAS RETURNED TO SERVICE AS IS. ACFT MFG IS AWARE OF THE PROBLEMS WITH THE REPAIRS.

AMCR201102	GULSTM	MODULE	SHORTED
4/4/2011	GV	194413	CABIN MANAGEMENT

ORIGINALLY, THE ACFT HAD A CABIN MANAGEMENT MODULE DEGRADATION IN WHICH THE GALLEY POWER WAS INTERMITTENT. THIS MODULE ALSO CONTROLS THE LAVATORY LIGHTING. THE REPLACEMENT COMPONENT, REPAIRED BY REPAIR FACILITY, IMMEDIATELY POPPED THE CIRCUIT BREAKER, WHICH RENDERED THE GALLEY AND LAVATORY COMPLETELY INOPERATIVE. THE TEARDOWN REPORT ON THE REPLACEMENT UNIT LISTED THE INCOMING SQUAWK AS "INTERMITTENT GALLEY POWER", WHICH WAS REPAIRED, TESTED, AND RELEASED FOR SERVICE. ACFT MFG KNOWS ABOUT THE QUALITY ISSUES FROM THIS REPAIR STATION. WE HAVE 2 OTHER COMPLAINTS ON OTHER COMPONENTS FROM THIS FACILITY.

2011FA0000183	HUGHES	LYC	TAIL ROTOR	DAMAGED
3/18/2011	269C	HIO360D1A		

ODOR OF BURNING LUBRICANT, EXCESSIVE VIBRATION, FORCED A SUCCESSFUL OFF AIRPORT LANDING. FOUND AFT "H" FRAME BEARING, PN 269A5050-56, SEIZED, OVERHEATED, DRIVESHAFT JAMMED FWD AGAINST BEARING, AFT BEARING SUPPORT BROKEN OFF FRAME, PN 269A5573-13, AND MISSING. THAT SEGMENT OF THE FRAME WAS NOT RECOVERED. TAIL ROTOR DRIVE COMPONENTS WHERE REMOVED AND DISASSEMBLED. FOUND NUT, PN 269A6029, HAD BACKED OUT OF TAIL ROTOR TRANSMISSION INPUT GEAR, PN 369A5425-3, AND HAD EXERTED FORCE AGAINST THE TAIL ROTOR DRIVESHAFT, PN 269A6040-7, REAR PLUG FORCING THE ENTIRE DRIVESHAFT ASSEMBLY FWD WITH SUFFICIENT FORCE TO PRESS THE DRIVESHAFT ATTACHING HARDWARE AGAINST THE AFT BEARING AND APPARENTLY LOCK THE BEARING INNER AND OUTER RACES TOGETHER. THE RESULTANT HEAT DESTROYED THE FRAME ASSY. THE DRIVESHAFT WAS BENT WELL BEYOND LIMITS. ALL OF THE FWD DRIVESHAFT ATTACHING COMPONENTS HAD EXCESSIVE HEAT DAMAGE AND REQUIRE REPLACEMENT. THE TAIL ROTOR TRANSMISSION HAS NOT BEEN INSPECTED AT THIS POINT, BUT IT IS POSSIBLE THAT THE NUT COMING LOOSE WOULD UNLOAD THE THRUST PROVISION OF THE TRANSMISSION FWD BEARING AND THE REARWARD FORCE GENERATED BY THE NUT LOOSENING AND ACTING AS A PRESS (EQUAL FORCE WOULD BE EXERTED FWD AND AFT) COULD HAVE CAUSED INTERNAL TRANSMISSION DAMAGE. SPECIFIC CAUSE OF FAILURE HAS NOT YET

BEEN DETERMINED.

CA101214007	HUGHES	BRACKET	BROKEN
12/10/2010	369D	369D2730411	FUSELAGE

(CAN) THE BEARING CAP THAT IS ATTACHED TO BRACKET ASSEMBLY WAS FOUND BROKEN AT ATTACHMENT POINT OF BEARING CAP. REMOVED FROM SERVICE (TC# 20101214007)

SSWR2011032900001	ISRAEL	FRAME	CRACKED
3/29/2011	1124	313003509	FS 174

THE FS 174.000 FRAME HAS A 2 INCH CRACK THRU THE INBD FLANGE AND INTO THE WEB LOCATED AT THE FLOOR LINE.

2011FA0000184	LANCAR	CONT	TORQUE TUBE	CORRODED
3/18/2011	LC41550FG	TSIO550A	LC552732001	ELEVATOR

ELEVATOR TORQUE TUBE HAS INTERNAL CORROSION INSIDE TORQUE TUBE WITH RUST CONCENTRATION AROUND WELDED AREAS. AMM CHAP 27-30-00, PAGE 3 ITEM 2(C)(3) STATES TO INSPECT EVERY 200 HRS OR ANNUAL FOR INTEGRITY, EXCESSIVE WEAR, AND CRACKS. INSPECT WELD FOR CRACKS. THE MM DOES NOT GIVE ANY SPECIFIC REPAIR OR ALLOWABLE LIMIT GUIDEANCE FOR CORROSION DEFECTS. WALL THICKNESS OF THE STEEL TUBE IS NOT THAT THICK SO REPAIR INSTRUCTIONS ARE NEEDED ON HOW TO REMOVE THE CORROSION, HOW TO MEASURE THE DEPTH OF THE DEFECTS INSIDE THIS TUBE, ETC. THIS TORQUE TUBE TUBE INTER-CONNECTS BOTH ELEVATORS AND IS CRITICAL FOR SAFE ACFT OPERATION. THE MAJOR CONCERN IS THE INTERNAL RUST THAT HAS TAKEN PLACE INSIDE THE TUBE, OPPOSITE OF THE WELDED BRACKETS ON THE OUTSIDE OF THE TORQUE TUBE. SINCE THIS TORQUE TUBE IS OVER 3 FT LONG, ITS IMPOSSIBLE TO GAUGE THE DEPTH OF THE INTERNAL RUSTING OF THE STEEL TUBE. ACFT HAS NOT PROVIDED ANY APPROVED DATA OR INSTRUCTIONS ON HOW TO ADDRESS THIS PROBLEM INSIDE THESE STEEL TOTQUE TUBES.

2011FA0000193	LEAR	ACTUATOR	LEAKING
3/22/2011	60LEAR	2327100030	LT MLG

ACFT LOST HYD PRESSURE DURING FLIGHT. LT MAIN GEAR ACTUATOR FOUND TO BE LEAKING FLUID.

CA110114004	MOONEY	CONT	DUCT	CRACKED
12/17/2010	M20	TSIO550G	654327	EXHAUST

PART WAS SENT IN WITH CRACK 85 PERCENT AROUND THE BODY. CRACK ORIGINATES FROM BALANCE TUBE ATTACHMENT TAB. SPOKE WITH MECHANIC BEFORE HE REMOVED THE PART AND HAD HIM CHECK FOR THIS ORIGIN OF THE CRACK. HAD ADVISED HIM OF SB10-1 AND HAD HIM REVIEW IT PRIOR TO REMOVING THE PART. ALL PARTS WERE REMOVED AND WERE INSTALLED WITH THE INSTALLATION INSTRUCTIONS IN SB10-1. ON 01/11/2011 THE SAME PART WAS SENT IN WITH A 100 PERCENT FAILURE IN THE PART. BOTH PARTS ARE 654327 REV E, HOWEVER TRANSITION DOES NOT HAVE FULLY ROUND SLIP JOINT TO THE CYL STUB. THERE IS A EXTENSIVE HISTORY WITH THESE PARTS BREAKING AT OR FROM THE BRAZED AREAS ON THE PARTS. SINCE BRAZE IS THEORETICALLY STRONGER THAN WELD, IT IS USED IN THE ASSY OF NEWER VERSIONS OF THIS PART. ORIGINAL VERSIONS DID NOT HAVE BRAZE AND WE HAVE NOT ENCOUNTERED A FLANGE FAILURE IN WELDED ASSEMBLIES. THE FAA SHOULD ISSUE AN (AD) ON ALL VERSIONS OF THIS PART, REQUIRING AN IMMEDIATE INSP OF THE EXHAUST AND A REPETITIVE INSP FOR CONDITION.

CA110114005	MOONEY	CONT	EXHAUST DUCT	FAILED
1/1/2011	M20	TSIO550G	654327	

ACFT MADE EMERGENCY/UNSCHEDULED DESCENT FOLLOWING LOSS OF MANIFOLD PRESSURE AND LOSS OF CABIN HEAT. THE RT TRANSITION FAILED AND SEPARATED AT THE TURBOCHARGER FLANGE. THE ENTIRE PART IS REGARDED AS FAILED. HAD THE PILOT NOT MADE THE DESCENT, IT IS POSSIBLE THAT THE TURBOCHARGER COULD HAVE OVERLOADED ITS SECONDARY SUPPORTING BRACKET AND FALLEN OFF. NTSB REPORTS LAX88FA060 AND DEN90FA027 INDICATE THAT THIS PROBLEM HAS BEEN AROUND FOR SOME TIME.

2011FA0000207	MOONEY	TUBE	BENT
3/28/2011	M20J	560244001	ZONE 100

UPON LANDING, THE LT LANDING GEAR COLLAPSED WITH NO GEAR UNSAFE INDICATION.

CA110125029	NAMER		COVER	MISSING
1/21/2011	T6G		245604212000	

(CAN) CUSTOMER REPORTED THE "IAC`S ARE NOT SYNCING PROPERLY". UNIT RETURNED FOR SERVICE. UPON DISSASSEMBLY, IT WAS DISCOVERED THAT THE FMS/GPS COVER PLATE WAS NOT INSTALLED. UPON TEST NO ELECTRICAL ANOMALIES DETECTED WITH UNIT AND ORIGINAL FAULT COULD NOT BE DUPLICATED. COVER REPLACED AND IAC VERIFIED IN ACCORDANCE WITH CMM AND RETURNED TO SERVICE. SERVICE DIFFICULTY REVIEW BOARD MEETING HELD BY AMO WITH MANUFACTURER (CMC). MANUFACTURER WILL VERIFY ASSEMBLY SHOP PROCEDURES TO DETERMINE EXTENT OF ESCAPE AND ANY OPERATIONAL IMPACTS. AIRCRAFT IS A HBC T6 TRAINER OPERATED BY THE US NAVY. (TC# 20110125029)

5APR577Y56	PILATS	PWA	BRAKE DISC	CRACKED
3/23/2011	PC1245	PT6A67B	244759D	ZONE 700

DURING ANNUAL INSP, THE RT MLG BRAKE WAS FOUND TO HAVE A CRACKED DISC. THE BRAKE ASSY WAS REMOVED AND A SERVICEABLE BRAKE ASSY WAS INSTALLED.

CA110127003	PILATS		CSU	ROUGH
1/25/2011	PC1247		8210137	BATA VALVE

(CAN) FOLLOWING A PROPELLER REVERSE SELECTION WITH THE POWER CONTROL LEVER, RESISTANCE WAS NOTED MOVING BACK INTO BETA AND FWD OF IDLE DETENT. WHEN THE POWER LEVER WAS FORCED BEYOND THE IDLE DETENT THE ENGINE AND PROP BEGAN TO ACCELERATE WHILE STILL IN REVERSE/BATA MODE. INVESTIGATION OF THE PROP AND ENGINE CONTROLS DID NOT REVEAL ANY DEFECTS HOWEVER THE CSU BATA VALVE ON THE ENGINE WAS NOTED TO HAVE RESISTANCE WHEN PUSHED INWARD. THE CSU WAS REPLACED AND ALL CHECKS WHERE NORMAL DURING GROUND RUNS.

5APR577Y57	PILATS	PWA	ATTACH FITTING	OUT OF ALIGNMENT
4/3/2011	PC1247	PT6A67B	5551012150	HORIZONTAL STAB

THE HORIZONTAL STABILIZER ATTACHMENT FITTING, WHERE THE PITCH TRIM ACTUATOR IS SECURED TO THE STABILIZER. EACH SIDE OF THE ATTACHMENT FITTING HAS 2 LUGS. ON THE LT SIDE, THESE 2 LUGS ARE SEPARATING. THE GAP WAS MEASURED WITH A FEELER GUAGE, AND FOUND TO BE .406MM. THERE IS NO EVIDENCE OF DAMAGE TO THE STABILIZER. THE BRACKET PN IS 555.10.12.150, ANGLE FITTING LT. THE ACFT MFG ISSUED A REAIR MEMO WITH STATEMENT OF APPROVED DESIGN DATA WITH THE FOLLOWING INSTRUCTIONS. CHECK THE LUGGED FACE OF THE PN 555.1.12.150 (ANGLE FITTING) FOR STRAIGHTNESS. IF WITHIN LIMITS, COMPLETE A VISUAL AND NDT INSP (DYE PENETRANT OR EDDY CURRENT) OF THE ANGLE FITTING AND THE BOLTS. IF NO CRACKS OR DEFECTS NOTED, REINSTALL THE FITTING, USING SEALANT.

5APR577Y58	PILATS	PWA	GOVERNOR	FAULTY
4/8/2011	PC1247	PT6A67B	210949C	PROPELLER

PROPELLER WOULD NOT FEATHER ON SHUTDOWN AFTER LANDING. THE FEATHERING SOLENOID IS ATTACHED TO THE OVERSPEED GOVERNOR. R & R OF OVERSPEED GOVERNOR AND ALL ASSOCIATED TESTS WERE ACCOMPLISHED TO RECTIFY THIS SITUATION. NO OTHER DEFECTS WERE NOTED WITH THE FEATHERING SYS.

5APR577Y55	PILATS	PWA	FITTING	OUT OF ALIGNMENT
3/20/2011	PC1247	PT6A67B	5551012150	ZONE 300

LT SIDE INNER AND OUTER LUG HAVE DEVELOPED A GAP OF .025" BETWEEN THEM. CHECKED LUGGED FACE OF PN 555.10.12.150 ANGLE FITTING FOR STRAIGHTNESS. ALL STEPS COMPLETED WITH NO CRACKS OR DEFECTS NOTED.

5APR577Y54	PILATS	PWA	BRAKE DISC	WARPED
3/20/2011	PC1247	PT6A67B	244759D	MLG

THE CREW REPORTED THAT THE LT BRAKE GRABS. DURING INSP, IT WAS DETERMINED THAT THE LT BRAKE HAD A ROTOR THAT WAS WARPED. TO CORRECT THE PROBLEM THE BRAKES AND WHEELS WERE CONVERTED USING STC SA01376CH.

2011FA0000228	PIPER	LYC	SPAR	CORRODED
4/6/2011	PA28140	IO320*	6207001	ZONE 600

CORROSION LOCATED ON RT WING SPAR AFT SIDE, WS 59-61, AT FUEL TANK FLEXIBLE ACCESS.

2011FA0000291	PIPER	LYC	VALVE	DAMAGED
4/26/2011	PA28161	O320D3G	87327002	CARB HEAT

BOTH GROMMETS DAMAGED CARB HEAT VALVE SHAFT. TEFLON BUSHING WORE AND DAMAGED PIVOT SHAFT IN APPROX 2000 HRS OF OPERATION. ACFT WAS MFG IN 2008.

2011FA0000275	PIPER	LYC	BATTERY	DISCHARGED
3/17/2011	PA28161	O320D3G	G243	

EXPERIENCING A HIGH FAILURE RATE OF G243 LEAD ACID BATTERIES. BELIEVE THIS IS DUE TO HIGH DEMAND (LOAD) ON LANDING. ON GLASS ACFT PFD, MFD DRAW 17.5 AMPS ALONE, PLUS LANDING LIGHTS, ETC. IN FLIGHT SCHOOL OPERATIONS, SHORT FLIGHTS, SHORT CHARGE CYCLES, DOES NOT ALLOW FOR BATTERIES TO FULLY CHARGE. THUS THE BATTERY OVERTIME REMAINS IN A DISCHARGE STATE AND LEADS TO A SHORT LIFE CYCLE. ON GLASS ACFT, AN IMPROVED BATTERY, DESIGNED FOR THIS WOULD HELP.

2011FA0000276	PIPER	LYC	DISPLAY	INOPERATIVE
4/20/2011	PA28161	O320D3G	562521	COCKPIT

MULTIFUNCTION DISPLAY (MFD) WILL NOT INITIALIZE SEVERAL TIMES. REPLACED MFD ON 10-28-2008. REPLACED FLASH CARD ON 1-21-2011, 02-22-2011, 3-21-2011 AND 04-20-2011.

2011F00083	PIPER	LYC	MAGNETO	FAILED
5/7/2011	PA28161	O320D3G	4371	LEFT

MAGNETO WAS INSTALLED WHEN ENGINE WAS O/H (JAN 20110) LT MAGNETO FAILED AND WAS REPLACED WITH IN 21.4 HOURS.

2011FA0000190	PIPER		CYLINDER	BROKEN
3/11/2011	PA28180		6531904	RT MLG

RT MLG LOWER STRUT FELL OFF WHEN ACFT LIFTED OFF THE RUNWAY AT 2H2. STUDENT PILOT FLEW AND LANDED RESULTING IN DAMAGE TO THE UPPER LANDING GEAR STRUT HSG. WHEN LOWER STRUT DEPARTED UPPER HSG, IT STRUCK THE FLAP, DAMAGING FLAP SKIN. RT MLG UPPER TORQUE LINK MOUNTING EARS BROKE OFF THE CYL ALLOWING LOWER GEAR LEG TO FALL OUT OF UPPER CYL AND DEPART ACFT. THIS CAST ALUMINUM CYL IS ORIGINAL. THE INBD EAR APPEARS TO HAVE BEEN PARTIALLY BROKEN FOR SOME TIME. ONCE IT BROKE ALL THE WAY, THE OTBD EAR COULD NOT SUPPORT THE TWISTING FORCES APPLIED DURING NORMAL TURNS DURING TAXI AND TORQUE DURING TAKEOFF. I FEEL THIS LED TO THE OTBD EAR BREAKING OFF, AND ON THE TAKEOFF, THE GEAR LEFT THE ACFT. THIS UPPER TORQUE LINK ATTACH POINT IS COVERED WITH A FAIRING, PREVENTING THE PILOT FROM SEEING ANY DEFECTS DURING PREFLIGHT.

2011FA0000279	PIPER	LYC	CONTROL CABLE	FAILED
4/7/2011	PA32300	IO540K1G5	6270127	ELEVATOR

DURING TOUCH AND GO`S, AFTER COMPLETING THE SECOND TOUCH AND GO, AND WITH FULL POWER IN A CLIMB AT AN ALTITUDE OF APPROX 15 FEET, THE NOSE OF THE ACFT PITCHED DOWN ABRUPTLY. THE ACFT NOSE GEAR CONTACTED THE RUNWAY VERY HARD, FOLLOWED IMMEDIATELY BY THE MAIN GEAR CONTACTING THE RUNWAY HARD AND BOUNCING ACFT APPROX 10 TO 15 BACK INTO THE AIR. THIS REPEATED SEVERAL TIMES IN SPITE OF ATTEMPT TO INITIATE A GO AROUND. THE ACFT WOULD NOT RESPOND TO ANY ELEVATOR CONTROL INPUTS, SO, REDUCED THE POWER ALL THE WAY IN ORDER TO ATTEMPT TO GET THE ACFT ON THE GROUND AND STOPPED. THE ACFT CAME TO A STOP JUST TO THE LT OF THE RUNWAY AFTER THE NOSE GEAR BROKE. INSPECTOR DISCOVERED THAT THE ELEVATOR CNTROL CABLE HAD BROKEN.

O7TR201103251	PIPER		TURBINE WHEEL	SEPARATED
3/9/2011	PA32R301T	TAO413	4464290001	TURBOCHARGER

MAJOR TURBO FAILURE DUE TO SEPARATION OF FACTORY NEW TURBINE WHEEL HEAD FROM SHAFT.

2011FA0000245	PIPER	PIPER	WIRE	BROKEN
3/22/2011	PA32R301T		G1BA20G1HA20	DOWNLOCK SWITCH

DURING ROLLOUT RT MLG COLLAPSED. PILOT REPORTED THAT THE MAIN GEAR INDICATION WAS DOWN AND LOCKED. DURING RETRACTION CHECK AND INSP, (2) WIRES WERE FOUND BROKEN ON LT MLG DOWNLOCK SWITCH CONNECTORS AND (1) WIRE BROKEN ON RT MLG DOWNLOCK SWITCH CONNECTOR. WHILE GROUND CHECKING LANDING GEAR EXTENSION IT WAS NOTED THAT LT MAIN GEAR LOCKED FIRST, NOSE GEAR LOCKED SECOND AND RT MAIN GEAR WOULD NOT FULLY EXTEND TO THE DOWN AND LOCKED POSITION. PLEASE NOTE THAT WIRE NRS WERE DETERMINED BY NRS DEPICTED IN THE WIRING DIAGRAM MANUAL LATEST REVISION, HOWEVER THE DIAGRAM LISTED FOR THIS MODEL ACFT DOES NOT APPEAR TO BE AN EXACT DEPICTION. THE NRS DEPICTED ON THE ACFT WIRES WERE ILLEGIBLE DUE TO AGE.

201100703	PIPER	LYC	STRUT	FRACTURED
4/16/2011	PA44180	LO360A1H6	67037004	RT MLG

UPON LANDING THE ACFT JUST AFTER TOUCHDOWN, THE RT MAIN GEAR STRUT FAILED AND COLLAPSED ALLOWING THE RT WING STRIKE THE GROUND. THE STEEL STRUT TUBE FRACTURED IN 2 SECTIONS, PROBABLY AT A STRESSED LOCATION. THE LANDING WAS DESCRIBED AS NORMAL WITH NO UNUSUAL LOADING ON THE ACFT. PROBABLE CAUSE: FRACTURE OF THE STEELE STRUT TUBE. RECURRENCE PREVENTION: CONTINUED DETAILED INSP OF THE UPPER STRUT ASSY.

2011FA0000192	PIPER	LYC	TURBINE WHEEL	WORN
3/22/2011	PA46R350T	TIO540AE2A		TURBOCHARGER

TURBOCHARGER WOULD NOT OBTAIN MANIFOLD PRESSURE AT CRITICAL ALTITUDE. TURBOCHARGER EXHIBITS NOTICEABLE RADIAL PLAY AND DRAGGING. THE COMPRESSOR OIL SEAL APPEARS TO BE DEFECTIVE. OIL IS BYPASSING THE SEAL BEING FORCED INTO ENGINE INDUCTION SYS. TURBINE WHEEL SHOWS CONSIDERABLE WEAR AND EROSION.

CA110208014	PROPJT	CONT	ENGINE	FAILED
2/1/2011	200INTRCP	O470M		

(CAN) ABORTED TAKEOFF DURING REVENUE FLIGHT, ON TAKE-OFF ROLL, FLIGHT WAS ABORTED WHEN CREW NOTICED LEFT AND RIGHT FADEC FAULT CAS MESSAGE. AIRCRAFT TAXIED BACK TO HANGAR. TROUBLESHOOTING ONGOING. MANUFACTURER WILL INVESTIGATE TO ESTABLISH ROOT CAUSE AND SUPPLEMENT THE REPORT ONCE THE INFORMATION IS AVAILABLE.

E81RJW304426	RAYTHN		CONTROLLER	INTERMITTENT
3/25/2011	390		E1499MOD2	PITCH TRIM

INVESTIGATED PILOT REPORT OF INTERMITTENT PITCH TRIM FAIL INDICATION ON CLIMBOUT WITH AUTOPILOT ENGAGED. OPERATIONS REPORTED NORMAL IN OTHER MODES. REPLACED PITCH TRIM CONTROLLER WITH A REPAIRED CONTROLLER. FUNCTIONAL TESTS OF PITCH TRIM SYS NORMAL, NO FAULTS INDICATED. ACFT HAS BEEN STORED ON AND OFF FOR LAST SEVERAL YEARS WITH INFREQUENT USEAGE.

CA101216001	RAYTHN		BEARING	CORRODED
12/15/2010	390		LM297749	NLG WHEEL

(CAN) DURING 200HRS SCHEDULE INSPECTION FOUND NOSE WHEEL BEARING CORRODED.

CA110125010	RAYTHN	PWA	ENGINE	FLAMED OUT
1/17/2011	400ARAYTHEON	JT15D5		NR 1

(CAN) FLAMEOUT ON LANDING ROLLOUT, WHILE STOWING THE THRUST REVERSERS, THE NR 1 ENGINE FLAMED OUT. WHILE TAXIING CLEAR OF RUNWAY, THE ENGINE RE-LIT WITHOUT INPUT FROM CREW. TROUBLESHOOTING IS ON-GOING.

2011FA0000274	RAYTHN	MOUNT	CHAFED
4/5/2011	G58RAYTHEON		AIR BOX

SCAT HOSE FOR AIRBOX CHAFING THROUGH ENG MOUNT INBD LOWER SIDE. COULD LEAD TO CATASTROPHIC MOUNT FAILURE.

2011FA0000305	RAYTHN		WINDOW	DELAMINATED
5/4/2011	HAWKER800XP		258FN35343A	COCKPIT

WINDOW DELAMINATING ON FWD L/E IN BETWEEN PLYS AT HANDLE.

2011FA0000214	RAYTHN		WINDSHIELD	DEFECTIVE
3/25/2011	HAWKER800XP		NF24016416	RT

CREW REPORTED "THE CO-PILOTS A SCREEN IS NOT HEATING IN A SECTION ABOUT 1.5" WIDE AND RUNNING VERTICAL FROM TOP TO BOTTTOM". THE RT A WINDSHIELD WAS INSTALLED AS NEW ON OCT 14, 2010 AND HAD 210.1 HRS AND 120 CYCLES AT THE TIME OF THIS DISCREPANCY. DEFECTIVE WINDSHIELD WAS R & R WITH NEW.

E81RJT229553	RAYTHN		PUMP	INOPERATIVE
3/16/2011	HAWKER800XP		2070C11	LT FUEL BOOST

INVESTIGATED PILOT REPORT OF LT FUEL BOOST PUMP INDICATION. FOUND LT FUEL BOOST PUMP INOPERATIVE. INSTALLED BOOST PUMP WAS O/H 2/04/2011. REPLACED LT BOOST PUMP WITH AN O/H, PN 2C40-2, BOOST PUMP AS ORIGINALLY INSTALLED, OPS CKS OK. PUMP FAILURE MODE UNKNOWN, RECOMMEND INVESTIGATION AT TEAR-DOWN BY O/H FACILITY. PN 2070C.11 BOOST PUMPS WERE REPLACED BY OTHER PN 2C40-2 BOOST PUMPS YEARS PREVIOUSLY AT MFG AND RETROFITTED TO EARLIER ACFT SB 28-88 AND MODIFICATION 253256A. THE ACFT PARTS DISTRIBUTION DIVISION SHOW PN 2070C.11 PUMPS AS INTERCHANGEABLE WITH 2C40-2 BOOST PUMPS.

CA101207003	ROBSIN	LYC	FRAME	BROKEN
12/5/2010	R44RAVENII	IO540AE1A5	C04623	FUSELAGE

(CAN) DURING A ROUTINE POST-FLIGHT INSPECTION BY MAINTENANCE PERSONNEL, THE LOWER FRAME ASSY WAS FOUND CRACKED AT THE UPPER L/H AFT ATTACHMENT POINT. THE BROKEN AREA DID NOT HAVE ANY EVIDENCE OF PRE-EXISTING CRACKS, AND APPEARED TO BE A CLEAN BREAK. THERE WAS NO REPORTED EXCESSIVE VIBRATIONS OR ANOMALIES BY THE PILOT WHO HAD FLOWN THE AIRCRAFT LAST.

2011FA0000187	SCHLER		INTERLOCK	GROOVED
3/21/2011	ASK21		AS21CAN120	CANOPY

CANOPY INTERLOCKS ARE FABRICATED FROM A NYLON OR DELRON SYNTHETIC MATERIAL THAT BECAME WORN IN AN UNSEEN LOCATION. THE WEAR IS FROM THE FORWARD CANOPY METAL LOCKING ROD CONTINUOUSLY PUSHING OVER THE PLASTIC INTERLOCK. THE WORN INTERLOCK EVENTUALLY DID NOT ALLOW THE REAR CANOPY LOCKING ROD TO ENGAGE INTO IT'S LOCKED POSITION. DURING TAKEOFF, THE AERODYNAMIC FORCES PULLED THE CANOPY OPEN AND BLEW OUT THE PLEXIGLASS AND BENT THE CANOPY SUPPORT STRUCTURE. CHECKED OTHER TWO AIRCRAFT OF SAME TYPE AND BOTH SHOWED THE SAME WEAR AND DEFECT. SUGGEST INTERLOCK PART BE MADE FROM A MORE RESILIENT MATERIAL.

2011FA0000210	UNIVAR	CONT	SPAR	CORRODED
3/29/2011	415C	C8512	41513102	CENTER WING

INSP OF WING CTR SECTION IAW AD 2002-26-02 INTER-GRANULAR CORROSION IN EXFOLIATION STAGE WAS DISCOVERED ON THE BOTTOM MAIN SPAR CAP, EXTREME REAR OTBD SECTIONS WHERE IT WAS MILLED TO ACCOMMODATE THE MLG TRUNNION AND JUST INBD. ALSO THE LT AND RT (WING WALK) INBD T/E RIBS WERE CORRODING AWAY AND CORROSION WAS FOUND ON THE SURFACE ON VARIOUS LOCATIONS ON THE CTR SECTION.

2011FA0000309	UROCOP	TMECA	STRUCTURE	CRACKED
5/3/2011	EC120B	ARRIU2F		TAILBOOM

DURING THE VALVE CHECK A MECHANIC NOTED A CRACK EXTENDING LONGITUDINALLY FROM THE LT FWD NAV/VOR ANTENNA MOUNT. MFG HAS PREVIOUS KNOWLEDGE OF THIS DEFECT AND HAS DEVISED A REPAIR SCHEME FOR THIS DEFECT. RDAS (REPAIR DESIGN APPLICATION SHEET) NR RDAS-AE11-0148, DATED 14 MARCH 2011. THIS DEFECT HAS HAD NO SPECIFIC INSP CRITERIA FOR ITS DETECTION. SUGGEST THIS AREA BE

IMPLEMENTED INTO MFG INSPECTION OR ICA CRITERIA NOT TO EXCEED 200 HOURS BETWEEN INSP.

2011FA0000311	UROCOP	TMECA	SKIN	CHAFED
5/3/2011	EC120B	ARRIUS2F		TAILBOOM

DURING THE INSTALLATION OF A TAIL BOOM ON THE SAME MODEL ACFT THAT HAD BEEN REPAIRED FOR CRACKING IN THE LT FWD VOR ANTENNA MOUNT THE MECHANIC NOTED CHAFING ALONG THE BOTTOM OF THE INNER TAIL BOOM SKIN UNDER THE WIRE HARNESSES. IN SOME CASES IT HAD PENETRATED THE COMPOSITE MATERIAL AND INTO THE HONEYCOMB. THIS ACFT WAS ALSO SUBJECTED TO THE SAME TYPE DAMAGE IN THIS AREA. MFG ISSUED REPAIR SHEET AE2010102 TO ADDRESS THE REPAIR OF THIS DEFECT. SUGGEST ADDING HOURS BETWEEN INSPECTIONS FOR ACFT NOT REPAIRED IAW THE ABOVE REPAIR SHEET.

2011FA0000308	UROCOP	TMECA	SKIN	CHAFED
5/3/2011	EC120B	ARRIUS2F		TAILBOOM

DURING THE INSTALLATION OF A TAILBOOM ON THE SAME MODEL ACFT THAT HAD BEEN REPAIRED FOR CRACKING IN THE LT FWD VOR ANTENNA MOUNT THE MECHANIC NOTED CHAFING ALONG THE BOTTOM OF THE INNER TAIL BOOM SKIN UNDER THE WIRE HARNESSES. IN SOME CASES IT HAD PENETRATED THE COMPOSITE MATERIAL AND INTO THE HONEYCOMB. THIS ACFT WAS ALSO SUBJECTED TO THE SAME TYPE DAMAGE IN THIS AREA. MFG ISSUED REPAIR SHEET AE2010-102 TO ADDRESS THE REPAIR OF THIS DEFECT. SUGGEST ADDING THIS AREA TO ITS INSPECTION OR ICA CHECKLIST NOT TO EXCEED 200 HOURS BETWEEN INSPECTIONS FOR AIRCRAFT NOT REPAIRED IAW THE ABOVE REF REPAIR SHEET.

2011FA0000310	UROCOP	TMECA	SKIN	CHAFED
5/3/2011	EC120B	ARRIUS2F		TAILBOOM

DURING THE INSTALLATION OF A TAIL BOOM ON THE SAME MODEL ACFT THAT HAD BEEN REPAIRED FOR CRACKING IN THE LT FWD VOR ANTENNA MOUNT THE MECHANIC NOTED CHAFING ALONG THE BOTTOM OF THE INNER TAIL BOOM SKIN UNDER THE WIRE HARNESSES. IN SOME CASES IT HAD PENETRATED THE COMPOSITE MATERIAL AND INTO THE HONEYCOMB. THIS ACFT WAS ALSO SUBJECTED TO THE SAME TYPE DAMAGE IN THIS AREA. MFG ISSUED REPAIR SHEET AE2010-102 TO ADDRESS THE REPAIR OF THIS DEFECT. SUGGEST ADDING THIS AREA TO ITS INSP OR ICA CKLIST NOT TO EXCEED 200 HOURS BETWEEN INSPECTIONS FOR ACFT NOT REPAIRED IAW THE ABOVE REPAIR SHEET.

2011FA0000307	UROCOP	TMECA	SKIN	CHAFED
5/3/2011	EC120B	ARRIUS2F		TAILBOOM

DURING THE INSTALLATION OF THE TAILBOOM THAT HAD BEEN REPAIRED FOR CRACKING IN THE LT FWD VOR ANTENNA MOUNT THE MECHANIC NOTED CHAFING ALONG THE BOTTOM OF THE INNER TAILBOOM SKIN UNDER THE WIRE HARNESSES. IN SOME CASES IT HAD PENETRATED THE COMPOSITE MATERIAL AND INTO THE HONEYCOMB. MFG ISSUED REPAIR SHEET AE2010-102 TO ADDRESS THE REPAIR OF THIS DEFECT. SUGGEST ADDING THIS AREA TO ITS INSP OR ICA CKLIST NOT TO EXCEED 200 HOURS BETWEEN INSP FOR ACFT NOT REPAIRED IAW THE ABOVE REF REPAIR SHEET.

QMLDMG2012	UROCOP		COVER PLATE	SEPARATED
3/22/2011	EC135T1		L533M1240104	FLOOR BOARD

THE COVER PLATE FWD RT ASSY WAS FOUND MECHANICALLY SEVERED IN THE CENTER SECTION, APPARENTLY FOR THE PURPOSE OF EASE OF REMOVAL AND REINSTALLATION IN THE COURSE OF MX.