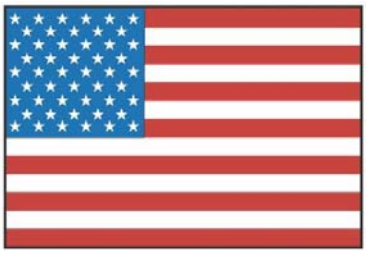
U.S. Department of Transportation
Federal Aviation Administration

AFS-600
Regulatory Support Division

ADVISORY CIRCULAR

43-16A

AVIATION MAINTENANCE ALERTS



ALERT NUMBER 412

NOVEMBER 2012

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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

Beechcraft: A36; Failed Landing Light Switch; ATA 3340

"The landing light circuit breaker switch failed," says a mechanic. "This switch was replaced by AD2008-13-17 IAW SB24-3807. It is the third or fourth switch to fail since being installed in our fleet of Bonanza and Baron aircraft, a total of nine *(planes)*. This AD has caused a higher failure rate of our circuit breaker switches since compliance with this AD. *(I believe)* this new switch called for in the AD is inferior to the switch it has replaced." *(Switch P/N: 35-380132-103. The SDRS database reflects this switch 74 times—see also the next Alerts article. It would have been helpful had you indicated an estimated average time experienced from the old switch—Ed.)*

Part Total Time: 2,497.9 hours

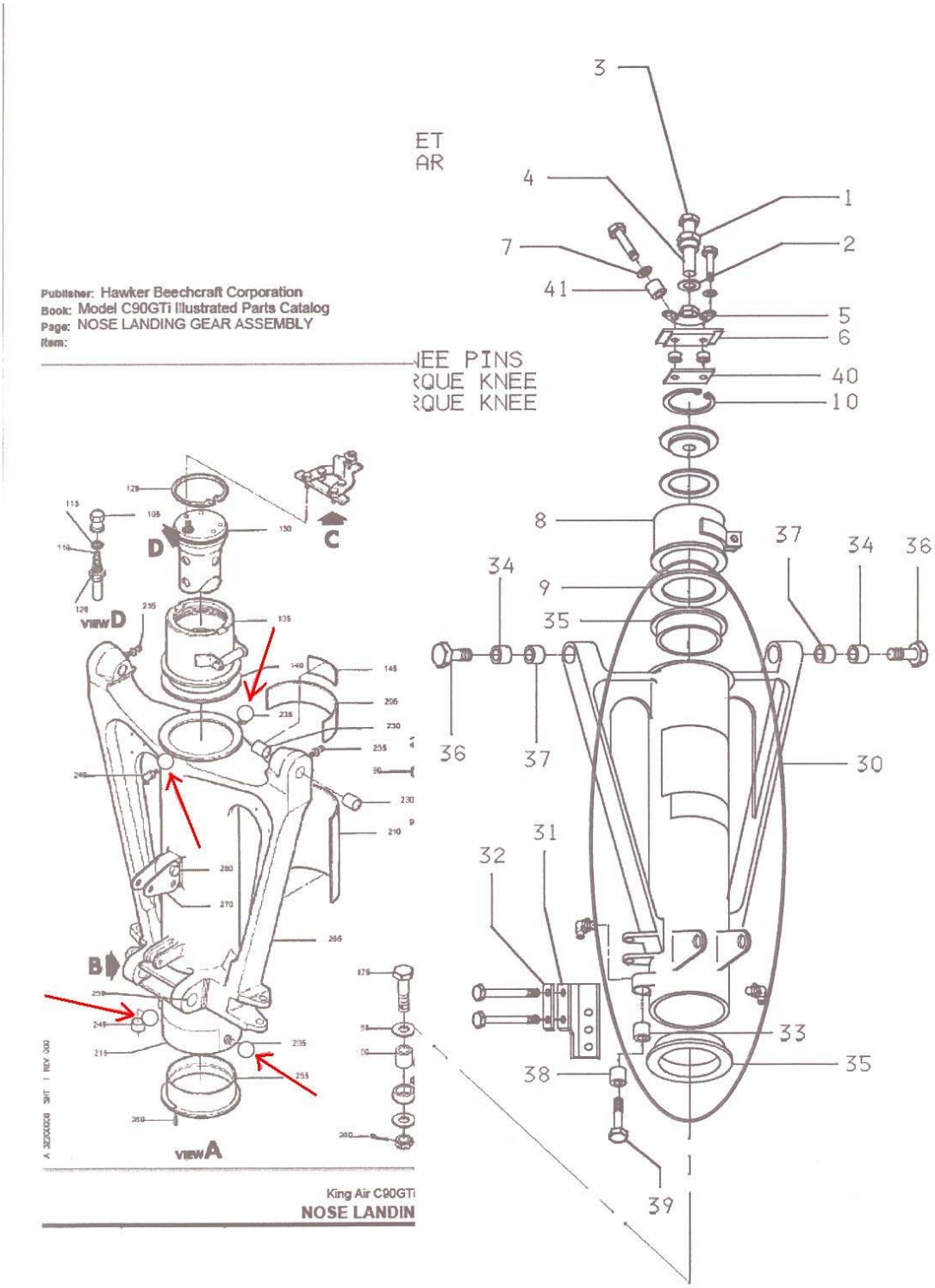
Beechcraft: A36; Failed Strobe Light Switch; ATA 3340

Another mechanic writes about the same switch discussed in the above article. "During a routine inspection, it was noted the strobe lights would remain on after the switch was selected 'off'. Troubleshooting revealed the switch to be defective. Once replaced (per AD2008-13-17), the *(original)* switch was disassembled. *(I observed)* the solder joint holding the braided wire had broke, and welded itself to the line post." *(Switch P/N: 35-380132-103. The SDRS database reflects this switch 74 times.)*

Part Total Time: 516.0 hours

Beechcraft: C90GTX; Failed Nose Wheel Steering; ATA 3250

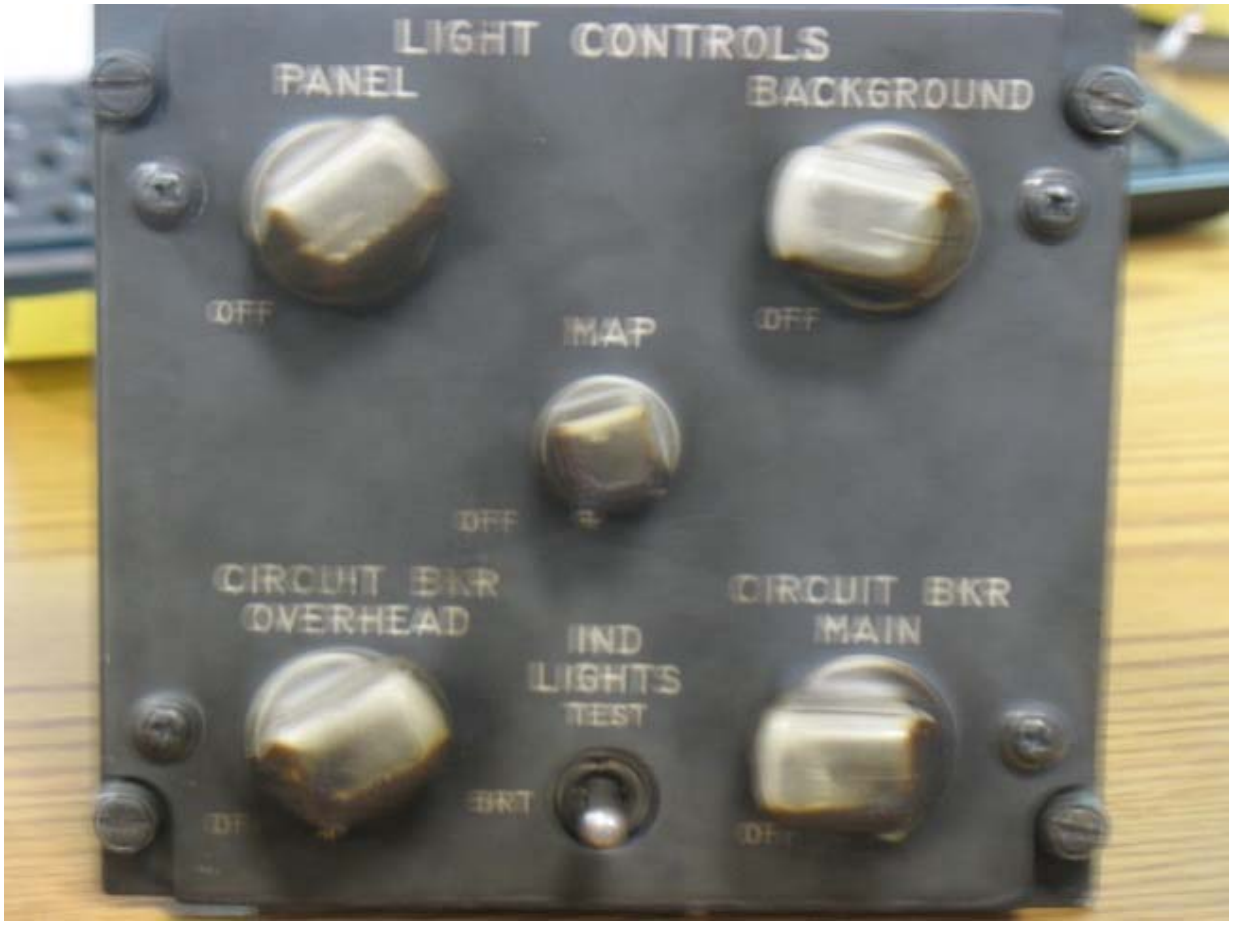
A repair station technician states, "Coming from the taxi holding bay, the aircraft went out of the runway—the nose wheel steering was *(apparently)* inoperative. Investigation and inspection performed by maintenance found a lack of grease on the steering brace (P/N 101-820024-15). No other findings or problems were detected on the steering *(assembly).* After grease *(application)*, operational and functional tests performed smoothly. Recommendation: the steering brace must be greased with the aircraft both on and off jacks to guarantee full *(lubrication).*"

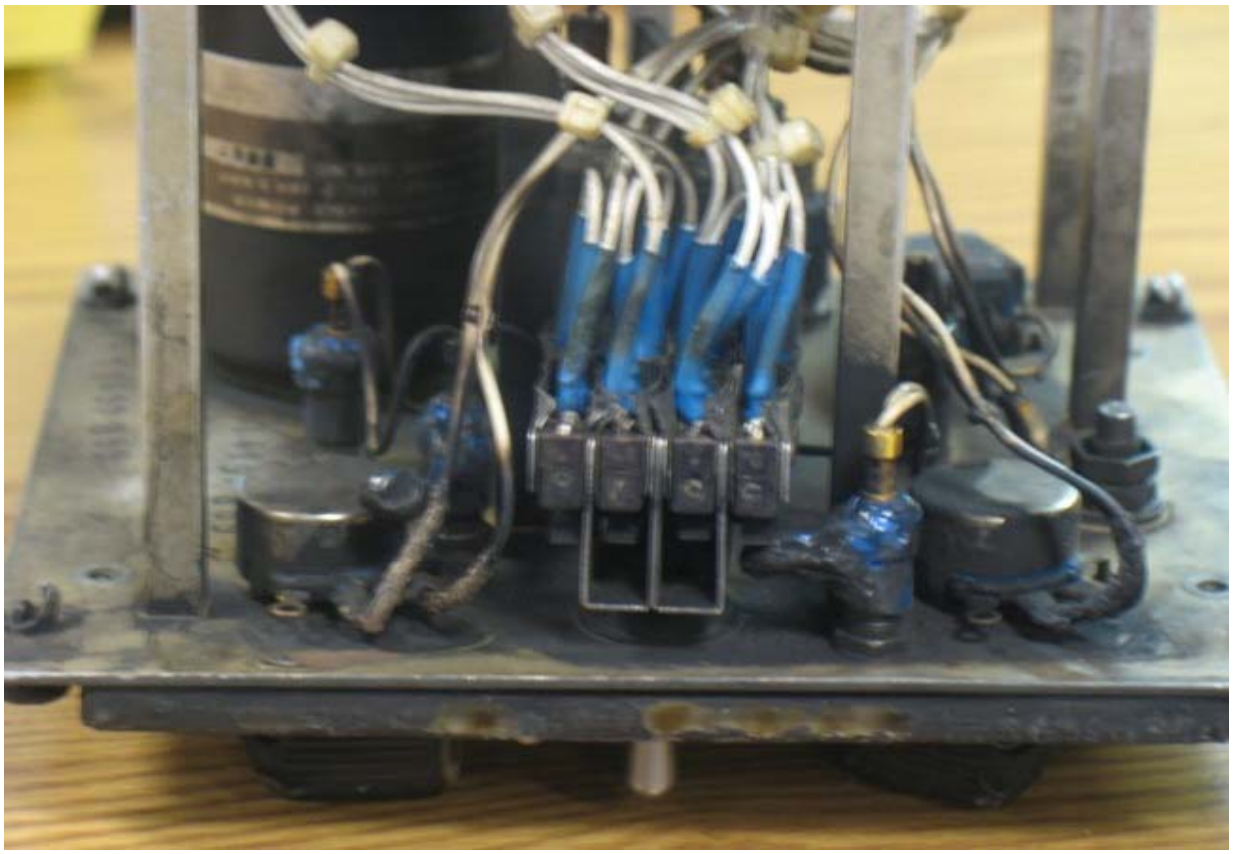


Part Total Time: (unknown)

Boeing: 747; Burned Light Controls; ATA 3300

"A *(foreign)* airline sent P/N 69B46111-10 *(control panel)* to our repair station, " says this submitter. This panel is badly burned. Either is was the cause of a fire, or it was burned when an adjacent panel caught fire. We have contacted the airline to find out if an incident was reported, and to *(determine)* if other panels have been sent to our repair station that may have been *(similarly)* exposed. They have not responded *(at this time)."*





Part Total Time: (unknown)

Embraer: 120ER; Worn MLG Actuator Rod-end; ATA 3230

An air carrier submission states, "After takeoff, the L/H main landing gear 'red' indication light remained illuminated after the gear was up. The crew selected 'gear down'—all gear extended and locked down. The aircraft returned to *(base)* and landed without incident.

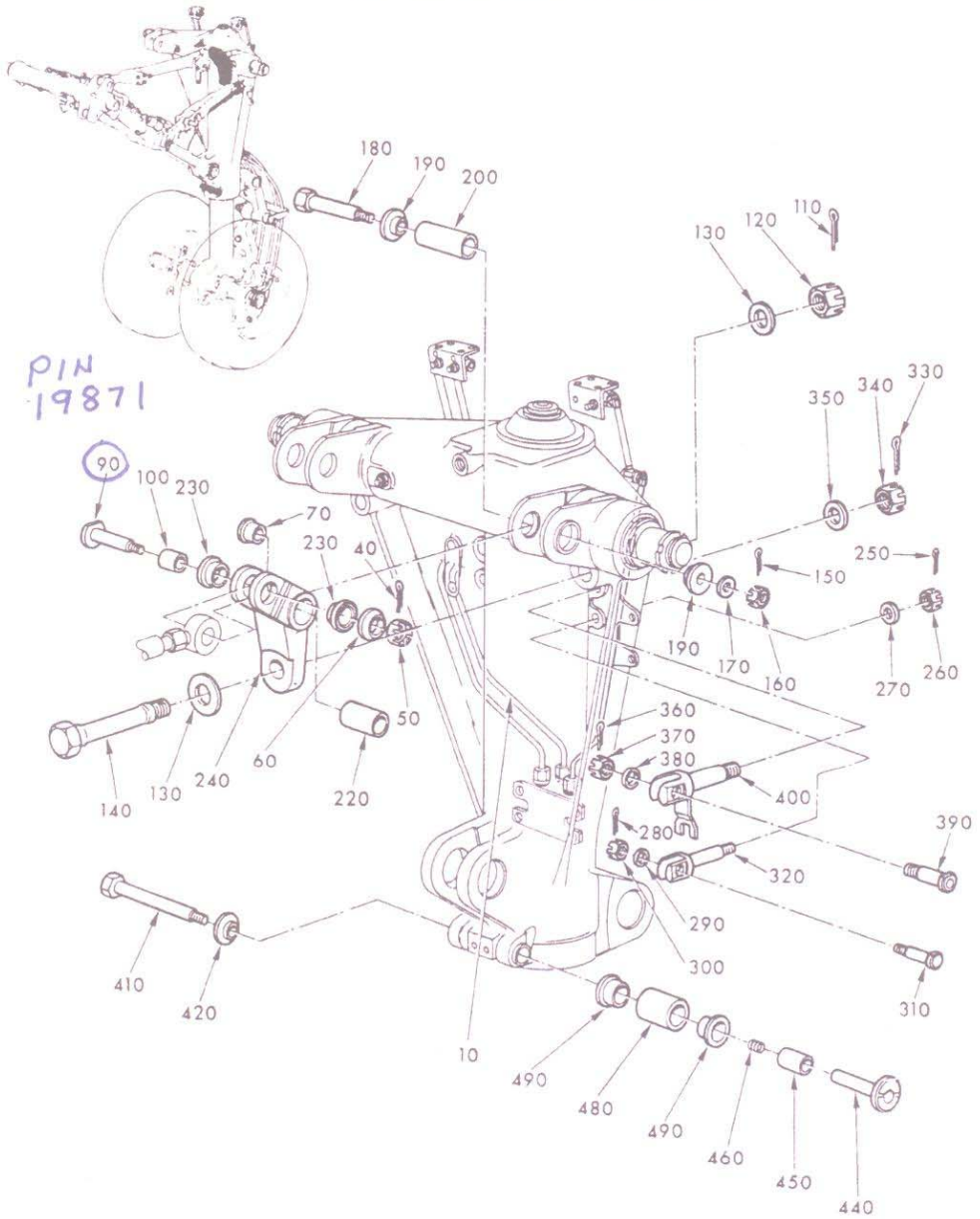
"Maintenance found the left gear was not retracting fully up and locking into position. The problem was *(determined)* to be excess play in the retract actuator rod-end (P/N 21126-000-00). This rod-end bearing (swivel) was found seized to the attaching pin that secures the actuator to the MLG leg. This caused the rod-end to pivot on the OD *(outside diameter)* of the pin—instead of the bearing rotating on the rod-end bearing race. The pin *(P/N 19872)* was found worn 0.064 inches deep approximately 210 degrees around the OD circumference. The actuator, pin, and bushings were replaced. The landing gear system checked 'good' and the aircraft was returned to service." *(This particular rod-end P/N is found four times in the SDRS database.)*

2012

ERAM

01 of 04

COMPONENT MAINTENANCE MANUAL
RH-LH MAIN LEG ASSEMBLY 19705-001-03



LH-RH MAIN LEG ASSEMBLY
JAMBE PRINCIPALE EQUIPEE GAUCHE, DROITE
FIGURE 2

32-12-01

Page 1002-0
JUN 30/88 R

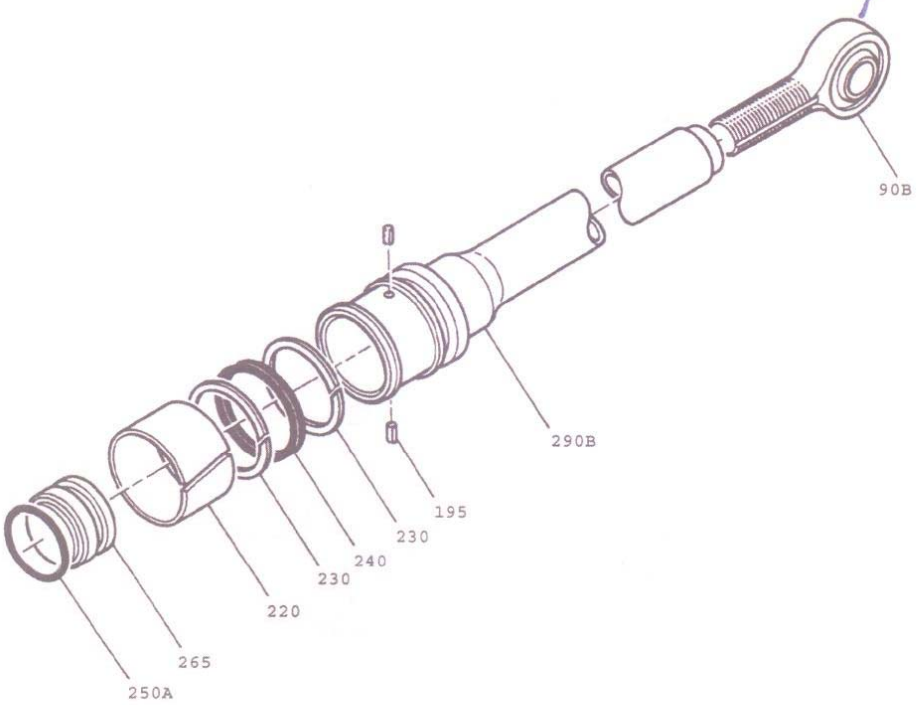
MESSIER-DOWTY

Messier–Dowty SA

19595–000–07 COMPONENT MAINTENANCE MANUAL

2012
03 OF 04

ROD END SWIVEL
21126-000-00

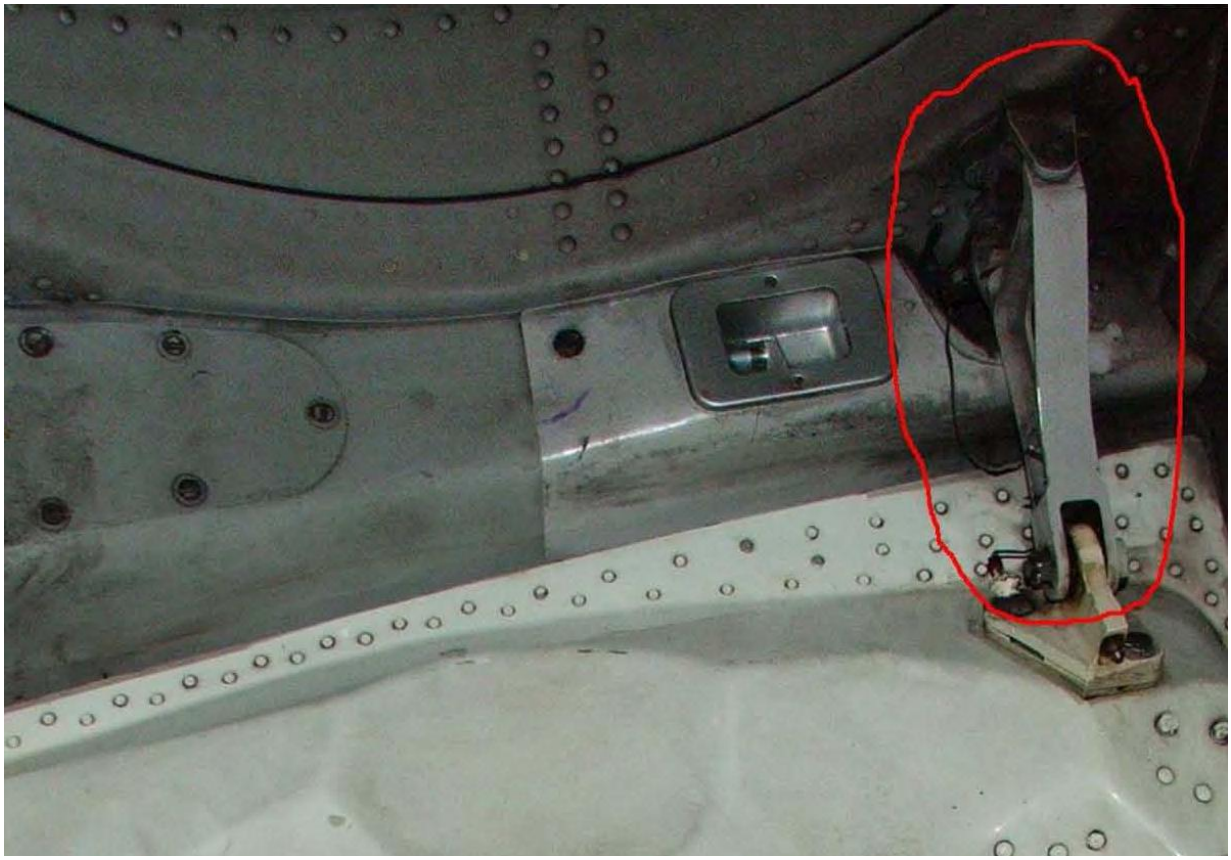


Retraction actuator
Figure 2A

Part Total Time: (unknown); Total cycles: 6,841

Hawker: 800XP; Cracked MLG Door Bracket; ATA 5280

A general aviation submitter writes, "During base maintenance, *(we)* found the R/H main landing gear door support cracked *(P/N 25FC5804)*."



Part Total Time: 4,196.0 hours; Total Cycles: 2,819

POWERPLANTS

Continental: IO550N; Cracked Exhaust; ATA 7810

A repair station mechanic says, "This aircraft has a Tornado Alley Turbo normalizing system, installed under STCs SA10588SC and SE10589SC. When the cowling was removed for an unrelated issue, the right tail pipe was found cracked completely in half along the forward edge of the cabin heat exchanger weldment. It is not rare for cracks to be found along the heat exchanger in this type of tail pipe design. Undetected, the crack will eventually propagate around the tube. There is also potential for the crack to compromise the heat exchanger, possibly allowing exhaust gasses to enter the environmental system. Complicating this failure, this aircraft also had a major fuel leak, as detailed under report number 2012FA0000689. This fuel leak could have been ignited by the exhaust gasses entering the cowling from the fracture. Note: there is an improved designed tail pipe available from Tornado Alley—it is recommended any cracked tail pipes not be welded (as has been seen on other aircraft). The (tail pipes) should be replaced with the new design."

Part Total Time: 678.0 hours

IAE: V2533A5Q03; Spalled Bearing; ATA 7200

A corporate technician states, "This bearing *(assembly?)* was sent to *(a)* repair station for inspection and possible repair. The *(repair station's)* inspector observed severe spalling on one of the bearing balls." *(Ball bearing P/N: SA7968. Alright—I confess! Were it not for this incredibly trick photograph I probably would have selected a different submission—Ed.)*

Part Total Time: (unknown)

Lycoming: TIO540AE2A; Broken TIT Probe; ATA 7722

(This report references a Piper PA46-350P aircraft.)

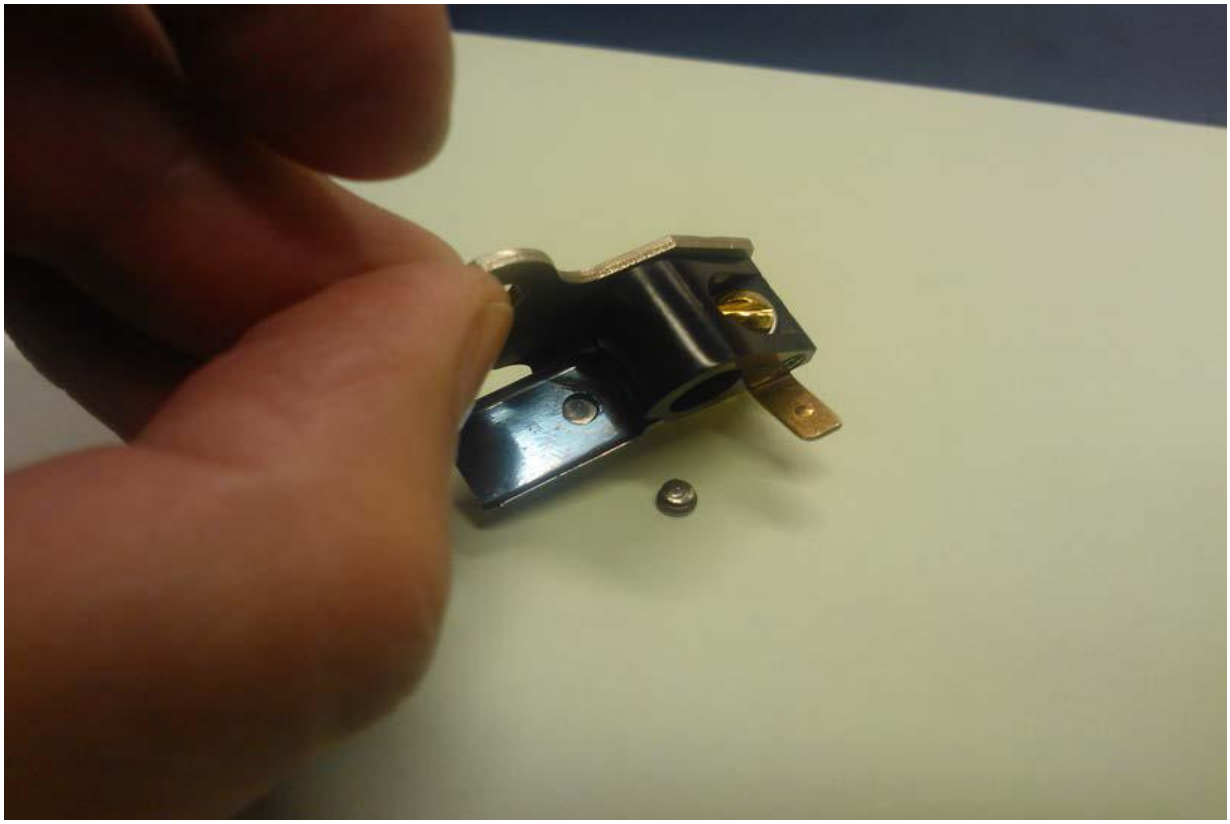
"While troubleshooting a 'No TIT' indication," says this mechanic, "the TIT probe *(turbine inlet temperature)* was found split open at its end. This probe was replaced 6 months (21 hours) ago to comply with AS2011-06-10." *(Probe P/N: 686216.)*

Part Total Time: 21.0 hours

ACCESSORIES

Slick Magneto: 6310; Failed Contact Points, ATA 7414

"With only 16 hours of use, " says this mechanic, "the contactor pointer on the magneto separated from the contact points." *(Point assembly P/N M3081 is found in the SDRS database 23 times. Magneto number 6310 is found 36 times.)*



Part Total Time: 16.0 hours

AIR NOTES

INTERNET SERVICE DIFFICULTY REPORTING (iSDR) WEB SITE

The Federal Aviation Administration (FAA) Internet Service Difficulty Reporting (iSDR) web site is the front-end for the Service Difficulty Reporting System (SDRS) database that is maintained by the Aviation Data Systems Branch, AFS-620, in Oklahoma City, Oklahoma. The iSDR web site supports the Flight Standards Service (AFS), Service Difficulty Program by providing the aviation community with a voluntary and electronic means to conveniently submit in-service reports of failures, malfunctions, or defects on aeronautical products. The objective of the Service Difficulty Program is to achieve prompt correction of conditions adversely affecting continued airworthiness of aeronautical products. To accomplish this, Malfunction or Defect Reports (M or Ds) or Service Difficulty Reports (SDRs) as they are commonly called, are collected, converted into a common SDR format, stored, and made available to the appropriate segments of the FAA, the aviation community, and the general public for review and analysis. SDR data is accessible through the “Query SDR data” feature on the iSDR web site at: http://av-info.faa.gov/sdrx/Query.aspx.

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

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

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

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

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

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

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

The SDRS and iSDR web site point of contact is:

Pennie Thompson
Service Difficulty Reporting System, Program Manager
Aviation Data Systems Branch, AFS-620
P.O. Box 25082
Oklahoma City, OK 73125
Telephone: (405) 954-5313
SDRS Program Manager e-mail address: 9-AMC-SDR-ProgMgr@faa.gov

IF YOU WANT TO CONTACT US

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

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

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

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

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

AVIATION SERVICE DIFFICULTY REPORTS

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

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

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

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

Federal Aviation Administration

Service Difficulty Report Data

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

Control Number	Aircraft Make	Engine Make	Component Make	Part Name	Part Condition
Difficulty Date	Aircraft Model	Engine Model	Component Model	Part Number	Part Location
2012FA0000526				ADHESIVE	SEPARATED
8/1/2012			KSE35L8		LIFE VEST
ADHESIVE SEPARATION BETWEEN ORAL INFLATION TUBE AND CELL OF LIFE VEST.					
2012FA0000539				BLADE	DAMAGED
8/2/2012				F7666A2	PROPELLER
PROPELLER LOST APPROXIMATELY 5.5 INCHES FROM TIP IN FLIGHT.					
2012FA0000567			SWITLIK	CYLINDER	CRACKED
8/14/2012			AV35		LIFE PRESERVER
LIFE PRESERVER CYLINDER HOLDER CRACKED.					
2012FA0000597				LIFE VEST	FAILED
8/27/2012				PO201105	
SINGLE CELL INDIVIDUAL FLOTATION DEVICE WOULD NOT PASS THE CMM CELL PRESSURE TEST. CAUSE UNKNOWN. DOM: JULY 1988.					
2012FA0000665				LIFE VEST	LEAKING
9/29/2012				PO101103	
LIFE PRESERVER CELL LEAKAGE BEYOND ALLOWABLE LIMITS.					
2012FA0000666				LIFE VEST	LEAKING
9/29/2012				PO701121	
LIFE PRESERVER CELL LEAKAGE BEYOND ALLOWABLE LIMITS. DOM JULY 1984.					
2012FA0000667				LIFE VEST	LEAKING
9/29/2012				PO101	
LIFE PRESERVER CELL LEAKAGE BEYOND ALLOWABLE LIMITS. DOM: MAY 1982					
2012F00143		CFMINT		RING	FRACTURED
7/30/2012		CFM567B262		1318M20G03	COMPRESSOR
IGV ACTUATION RING FRACTURED AND SUBSEQUENT HPC BLADE LIBERATION, CAUSING SIGNIFICANT DOWNSTREAM DAMAGE. APPEARS ENGINE CONTINUED OPERATION WITHOUT ADEQUATE COOLING AIR TO DOWNSTREAM COMPONENTS (HPT/LPT) THIS IS A WELL-KNOWN CFMI EVENT AND CFMI ISSUED A SB 72-0825 (ON WING INSPECTION OF PRE-CFM56-7B S/B 72-0811 ACTUATION COMPRESSOR STATOR INLET GUIDE VANE RING ASSEMBLIES) AND RECENTLY CHANGED THE THRESHOLD FOR HOURS INSTEAD OF CYCLE.ENGINE WAS DISASSEMBLED AND SEVERE DAMAGE FROM THE COMPRESSOR DOWNSTREAM WAS CONFIRMED.DAMAGE ON COMPRESSOR WAS CAUSED BY FRACTURED IGV ACTUATION RING CAUSING THE VANES TO BE OFF-SCHEDULE. THE OFFSCHEDULE VANES SET UP A ONE-PER-REV STIMULUS WHICH THEN CAUSED A BLADE FAILURE. DAMAGE ON HPT SECTION WAS CAUSED BY HIGH TEMPERATURE, MISSING MATERIAL, & LACK OF COOLING AIR. DAMAGE ON LPT SECTION WAS CAUSED BY OVERTEMPERATURE AND MISSING MATERIAL.					

2012FA0000594		CONT	SLICK	POINTS	BROKEN
8/10/2012		TSIO550A			MAGNETO

IN FLIGHT, ENGINE BEGAN TO RUN POORLY. ON LANDING AND FURTHER INSPECTION, IT WAS DISCOVERED THAT THE LT MAGNETO WAS INOPERATIVE. THE MAGNETO WAS REMOVED, DISASSEMBLED AND INSPECTED. POINTS DISCOVERED BROKEN. FOLLOWER ARM FOR THE POINTS HAD SEPARATED AND WAS LAYING IN THE TOP OF THE MAGNETO. THE RT MAGNETO WAS REMOVED FOR INSPECTION AND CORROSION WAS SEEN ON THE FOLLOWER ARM IN THE AREA WHERE THE STIFFENER SECTION STOPS.

2012FA0000669		IAE	BEARING	SPALLED
10/2/2012		V2533A5	SA7968	ENGINE

ENGINE BEARING HAS SEVERE SPALLING OF ONE OF THE BEARING BALLS.

EE4Y2012092400287	AIRBUS		SKIN	CORRODED
9/18/2012	A319132			RT WING

RIGHT WING LOWER SURFACE T/E AREA, STRAP WITH LIGHT CORROSION AT SEVERAL PLACES. DAMAGED AREAS WERE REPAIRED IAW MESSAGE 70567430/007 DTD SEP 23,2012 AND TD-J1-S2-21150-2012 ISSUE A, UNDER THE NON ROUTINE ITEM WO: A1A232, SUBJOB: 6, ITEM: 19.

EE4Y2012092600288	AIRBUS	AIRBUS	STRUCTURE	CORRODED
9/19/2012	A319132			RUDDER

RUDDER LT AND RT SIDE WITH CORROSION AT THE TIP AREA. DAMAGED AREA WAS REPAIRED IAW MESSAGE 70567398/006.

EE4Y2012092800289	AIRBUS		SLEEVE	CORRODED
9/19/2012	A319132			THRUST REVERSER

NR 1 ENGINE LT THRUST REVERSER C-DUCT EXTERNAL SURFACE SKIN WITH SPOT CORROSION AT AFT MID SECTION. DAMAGED AREA WAS REPAIRED IAW CV12-4525 DTD SEP 25, 2012 UNDER NON ROUTINE ITEM, WO A1A232, SUBJOB: 4, ITEM: 111.

EE4Y2012092000286	AIRBUS	IAE	RUDDER	CONTAMINATED
9/16/2012	A319132	V2524A5	D5547100400000	ZONE 300

VERTICAL STABILIZER RUDDER HOISTING POINTS 1LT, 2LT, 3LT AND 3RT WITH TRAPPED FLUID. DAMAGED AREAS WERE REPAIRED IAW MESSAGE 70567288/006 DTD SEP 19, 2012 AND TD-K4-S2-39630-2012, ISSUE A, UNDER THE NON ROUTINE ITEM, WO: A1A232, SUBJOB: 3, ITEM: 1.

EE4Y2012090500271	AIRBUS	IAE	STRUCTURE	CONTAMINATED
9/1/2012	A319132	V2524A5		RUDDER

VERTICAL STABILIZER RUDDER HOISTING POINTS 1, 2, 3 AT RT SIDE AND 2 AND 3 AND LT SIDE WERE FOUND WITH TRAPPED FLUID. REPAIRED IAW DISPOSITION TD K4S2394852012, ISSUE A,.

EE4Y2012091100285	AIRBUS	IAE	RUDDER	CONTAMINATED
9/7/2012	A319132	V2524A5	D5547100400000	ZONE 300

EMPENNAGE VERTICAL STABILIZER RUDDER HOISTING POINTS 2LH, 2RH AND 3RH WITH TRAPPED FLUID. DAMAGED AREA WAS REPAIRED IAW MESSAGE 70566931/006 DTD SEP 10, 2012 AND TDK4S2395272012, ISSUE A.

2012FA0000650	AMRGEN	CONT	MOUNT BRACKET	CRACKED
9/26/2012	AG5B	IO360ES	657046	ALTERNATOR

CRACK DISCOVERED IN ALTERNATOR MOUNTING BRACKET, PN 657046. THIRD OCCURANCE OF THIS PROBLEM. REF 2012FA0000649.

2012FA0000630	AMTR	LYC	UNKNOWN	FIRE
6/26/2012	LANCAIR235M	O320*		COCKPIT

ACFT WAS COMPLETELY DESTROYED AS A RESULT OF AN IN-FLIGHT FIRE AND RESULTING POST CRASH FIRE. THE FIRE APPEARS TO HAVE STARTED IN THE COCKPIT FROM AN UNKNOWN IGNITION SOURCE AND FED BY GASOLINE.

2012FA0000551	AMTR	BOLT	BROKEN
7/16/2012	SH2R	AN311A	NLG FORK

THE NLG FORK ATTACH BOLTS BROKE DURING LANDING ROLLOUT, CAUSING THE NOSE GEAR TO SHIMMY. THE SHIMMY HAPPENED SHORTLY AFTER LANDING AND THE VIBRATIONS CAUSED THE NOSE WHEEL CASTER ASSY TO DEPART THE ACFT WHEN THE ATTACH BOLTS FAILED. THE ACFT NOSE CAME DOWN ONTO THE NOSE GEAR STRUT AND THE ACFT SKIDDED TO A STOP, EXPERIENCING A PROPELLER STRIKE AND SUDDEN ENGINE STOPPAGE. SERVICE BULLETIN, SB75, REV A, ADVISING OWNERS TO DRILL OUT THE NOSE FORK ATTACHMENT HOLES FROM .1875" TO .2500" DIAMETER AND REPLACE THE 3 EACH, AN3-11A AND THE 3 EACH, AN3-10A BOLTS WITH AN4-11A AND AN4-10A BOLTS. IT IS RECOMMENDED THAT THIS SB BE COMMUNICATED TO OWNERS AND OPERATORS, ADVISING THEM TO COMPLY WITH THE INSTRUCTIONS IN THE SB TO PREVENT FUTURE INCIDENTS INVOLVING FAILURE OF THE NOSE GEAR FORK ATTACHMENT BOLTS.

2012FA0000622	BEECH	RESISTOR	MALFUNCTIONED
5/21/2012	1900D	RH502	BLOWER

ACFT VENT BLOWER WAS REPLACED BEFORE SCHEDULED MAINTENANCE PERIOD. INTERNAL MALFUNCTION OF THE VENT BLOWER RESISTOR FOUND TO BE THE PROBLEM OF COMPONENT FAILURE. REMOVED AND REPLACED RESISTOR.

2012FA0000623	BEECH	PWA	RESISTOR	MALFUNCTIONED
8/11/2012	1900D	PT6A67D	RH502	BLOWER

ACFT VENT BLOWER WAS REMOVED BEFORE SCHEDULED MAINTENANCE PERIOD. FOUND THAT THE RESISTORS HAD GONE BAD UPON FURTHER INSPECTION OF VENT BLOWER ASSY. RESISTORS REMOVED AND REPLACED.

2012FA0000624	BEECH	PWA	RESISTOR	MALFUNCTIONED
8/22/2012	1900D	PT6A67D	RH502	BLOWER

ACFT AFT VENT BLOWER ASSY REMOVED BEFORE SCHEDULED MAINTENANCE PERIOND. FOUND THAT RESISTORS HAD GONE BAD DURING THE OPS CHECK. REMOVED AND REPLACED RESISTORS.

2012FA0000625	BEECH	PWA	RESISTOR	MALFUNCTIONED
4/20/2012	1900D	PT6A67D	RH502	BLOWER

ACFT VENT BLOWER REPLACED BEFORE SCHEDULED MAINTENANCE PERIOD. INTERNAL MALFUNCTION OF THE VENT BLOWERS RESISTORS FOUND TO BE THE PROBLEM OF COMPONENT FAILURE. REMOVED AND REPLACED RESISTORS.

2012FA0000618	BEECH	PWA	RESISTOR	FAILED
6/14/2012	1900D	PT6A67D	RH502	VENT BLOWER

ACFT FWD VENT BLOWER ASSY WAS REPLACED BEFORE SCHEDULED MAINT PERIOD. INTERNAL MALFUNCTION OF THE VENT BLOWER ASEMBLIES RESISTORS FOUND TO BE PROBLEM OF COMPONENT FAILURE. REMOVAL AND REPLACEDMENT OF VENT BLOWER ASSY WAS THE COURSE OF ACTION TO BE TAKEN DUE TO COMPONENT FAILURE. ASSY RESISTORS NEED TO BE UPGRADED TO BETTER OR INTERNALLY MODIFIED SO AS TO MEET REQUIRED EXPIRATION TIME.

2012FA0000619	BEECH	PWA	RESISTOR	MALFUNCTIONED
8/22/2012	1900D	PT6A67D	RH502	BLOWER

ACFT FWD VENT BLOWER ASSY REMOVED BEFORE SCHEDULED MAINTENANCE PERIOD. FUNT THAT RESISTOR(S) HAD GONE BAD DURING THE OPS CHECKS OF SAID ASSY. THE REMOVAL AND REPLACEMENT OF ASSY WAS THE END RESULT OF C/A. BLOWER ASSY RESISTOR(S) NEED TO BE UPGRADED OR MODIFIED TO BETTER RESISTOR(S) TO ENSURE CORRECT OPS EXPIRATION TIME IS REACHED.

2012FA0000620	BEECH	PWA	RESISTOR	MALFUNCTIONED

8/6/2012	1900D	PT6A67D	RH502	BLOWER

ACFT FWD VENT BLOWER ASSY REMOVED BEFORE SCHEDULED MAINTENANCE PERIOD. INTERNAL RESISTORS HAD MALFUNCTIONED CAUSING COMPONENT FAILURE. THE REMOVED AND REPLACEDE BLOWER ASSY.

2012FA0000546	BEECH		FRAME	CRACKED
8/3/2012	300BEECH		504200131122	BS 227

DURING SCHEDULED INSPECTION, NOTED RIGHT FRAME WEB, WAS CRACKED INTO 2 PIECES. THE WEB WAS LOCATED ON FRAME FS 227.0 AT STRINGER NR 7. INSPECTION OF THIS AREA HAS RECENTLY BEEN ADDED AS AN INSPECTION ITEM, BUT HAS BEEN MOVED BETWEEN THE INSPECTION GUIDE AND THE TIME ITEM SECTION OF THE MM. THE AREA OF INSPECTION IS NOT CLEARLY DEFINED AND IS DIFICULT TO ACCESS AS THE SIDEWALLS MUST BE REMOVED.

2012FA0000588	BEECH		RELAY	FAILED
8/12/2012	400BEECH		1303583	CABIN PRESSURE

CREW REPORTED THAT AFTER TAKEOFF AND DURING CLIMB OUT PASSING 5000 FT, NOTICED THE ACFT WOULD NOT PRESSURIZE. SELECTED MANUAL MODE AND ACFT STILL WOULD NOT PRESSURIZE. DISCONTINUED CLIMB AND DIVERTED. AFTER TROUBLESHOOTING ACFT PRESSURIZATION SYSTEM, FOUND THAT THE PRESSURIZATION MODULE CONTROL SYSTEM VACUUM RELAY HAD FAILED. R & R THE VACUUM RELAY, MX PERFORMED AN OPS CHECK WITH NO DEFECTS NOTED. ACFT WAS RETURN TO SERVICE.

2012FA0000674	BEECH	CONT	GASKET	FAILED
10/5/2012	58	IO550C	655528	ZONE 400

ACFT HAD A MAJOR OIL LEAK EMENATING FROM THE ROCKER BOX COVER GASKETS. ON INSPECTION, FOUND 5 OUT OF 6 GASKETS HAD FAILED CAUSING LEAKAGE. GASKETS SHRANK BETWEEN THE BOLTS LEAVING A GAP FOR OIL TO COME OUT.

PAI520121408991	BEECH	CONT	WIRE	ARCED
8/14/2012	58	IO550G		ELECTRICAL

PILOT REPORTED LT ALTERNATOR INTERMITTENT. MX FOUND THE B+ POWER WIRE CHAFED AT THE ENGINE INTAKE MANIFOLD, APPROX 6" BELOW ALTERNATOR. FOUND A SMALL HOLE ARCED THROUGH THE INTAKE MANIFOLD. WIRING WAS NOT SECURED PROPERLY IN THIS AREA. ENGINE TSO 438.4

2012FA0000657	BEECH	CONT	FUEL CELL	DEBONDED
7/18/2012	58P	TSIO520*	26573	

FLOATS AND FUEL CELLS, NEWLY MFG INBD L/E TANK , REPLACES OEM CELL PN 60-921057-3. NEWLY INSTALLED 1-6-12. LOW POINT DRAIN NIPPLE INTERNAL REINFORCEMENT DEBONDED, ALLOWING COMPLETE DRAINING OF LT WING FUEL LOAD. ACFT WAS ON GROUND AT TIME OF INCIDENT. RECOMMEND MFG PROCESS BE REVIEWED.

2012FA0000568	BEECH		SPAR	CORRODED
8/15/2012	76			ELEVATOR

LEFT AND RIGHT ELEVATORS, DISASSEMBLED FOR REPAIR. WHEN INBD FLANGE, WAS REMOVED, EXFOLIATING CORROSION WAS FOUND ON SPAR. CORROSION IS LOCATED UNDER FLANGE ATTACH TO SPAR. THIS IS NOT VISIBLE UNTIL PARTS ARE DISASSEMBLED. THIS IS NOT A FLIGHT TIME ISSUE, BUT IS A CALENDER TIME ISSUE.

2012FA0000540	BEECH	CONT	MOTOR	FAILED
6/30/2012	95B55	IO470*	963800225	MLG

LANDING GEAR MOTOR WOULD TRIP CIRCUIT BREAKER DURING ALL ATTEMPTS AT LOWERING LANDING GEAR. EMERGENCY PROCEDURES FOR LANDING GEAR EXTENSION FAILURE AND MANUAL GEAR EXTENSION UNSUCCESSFUL RESULTING IN A GEAR-UP LANDING. ON INSPECTION OF LANDING GEAR COMPONENTS AND ATTEMPT TO LOWER THE LANDING GEAR ON THE GROUND, LANDING GEAR MOTOR CONTINUED TO TRIP THE CIRCUIT BREAKER EVEN AFTER BEING RESET. IT WAS OBSERVED THAT THE MLG ACTUATOR ARMS WENT OVER-CENTER. ARMS WERE PRIED APART TO MANUALLY EXTEND THE GEAR. IT IS SUSPECTED THAT THE RELAY IN THE LANDING GEAR MOTOR IS DEFECTIVE AND CAUSED THE LANDING GEAR EXTENSION FAILURE DUE TO ITS INABLILITY TO ACT AS A BRAKING MECHANISM FOR THE MLG ACTURATOR ARMS AND THE SUBSEQUENT OVER-

CENTER SITUATION LOCKING THE ARMS AND PREVENTING A SUCCESSFUL LANDING GEAR EXTENSION.

2012FA0000640	BEECH	CONT	CHECK VALVE	OBSTRUCTED
9/11/2012	A36	IO520B	340100	TURBOCHARGER

AT 15,000 FT IN CRUISE, PILOT EXPERIENCED DROP IN ENGINE OIL PRESSURE AND DROP IN MANIFOLD PRESSURE. ON LANDING, FOUND ENGINE EXHAUST COATED WITH ENGINE OIL AND DRIPPING FROM TAIL PIPE. INSPECTION OF TURBOCHARGER INSTALLATION REVEALED LOWEST CHECK VALVE TO HAVE BROKEN DOOR FROM HINGE. IN FLIGHT LOOSE DOOR COVERED CHECK VALVE OIL OUTLET TO ENGINE OIL SUMP PUMP CAUSING TURBO CHARGER BEARING CAVITY TO OVERFLOW WITH OIL OUT ENGINE EXHAUST.

2012FA0000586	BEECH	CONT	GEAR	MAKING METAL
8/21/2012	A36	IO520BB		ENGINE

CHANGING OIL DURING ANNUAL INSPECTION, FOUND STEEL AND RED RUBBERY PIECES IN FILTER. REMOVE ALTERNATOR, METAL COMING FROM DRIVING GEAR ON CRANKSHAFT AND ALTERNATOR DRIVEN GEAR. RUBBER COMING FROM ALTERNATOR DRIVE COUPLER. FOUR BOLTS HOLDING CRANKSHAFT GEAR TO CRANK WERE LOOSE ALLOWING GEAR TO SLOP AROUND AND CAUSE WEAR OF GEARS AND COUPLER. LOCKING PLATES THAT SECURE 4 BOLTS WERE MISSING.

2012FA0000681	BEECH	CONT	WIRE	DETACHED
6/10/2012	A36	IO550*		STROBE SWITCH

DURING A ROUTINE INSPECTION, NOTED THAT THE STROBE LIGHTS WOULD REMAIN ON AFTER THE SWITCH WAS SELECTED OFF. TROUBLESHOOTING REVEALED THE SWITCH TO BE DEFECTIVE. REMOVED SWITCH AND DISASSEMBLED AND IT WAS FOUND THAT THE SOLDIER JOINT HOLDING THE BRAIDED WIRE WAS BROKEN AND WELDED ITS SELF TO THE LINE POST. SWITCH WAS REPLACED IAW AD2008-13-17 IN MAY 2009.

2012FA0000671	BEECH	CONT	CYLINDER HEAD	SEPARATED
9/19/2012	A36	IO550B	AEC631397	NR 1 CYLINDER

DURING CLIMB OUT, PILOT HEARD A BANG/POP SOUND FORWARD OF COCKPIT. LOST SOME POWER AND RPM. NOTICED DROP IN NR 1 CYLINDER TEMP ON ENGINE INDICATING SYS. RETURN TO FIELD, NORMAL LANDING. ACFT SHUTDOWN. POST FLIGHT INSPECTION REVEALED A HEAD TO BARREL SEPARATION OF THE NR 1 CYLINDER.

2012F00162	BEECH		UPLOCK SWITCH	SHORTED
8/10/2012	B300			MLG

ON LOWERING LANDING GEAR. CIRCUIT BREAKER TRIPPED. LANDING GEAR HAD TO BE MANUALLY LOWERED FOR LANDING. ACFT LANDED WITHOUT INCIDENT. FOUND SAFETY WIRE PIGTAIL, WHICH SAFETIED THE LT UP-LATCH SWITCH, HAD CHAFED INTO AN ADJACENT WIRE BUNDLE, SHORTING OUT THE GEAR CONTROL POWER WIRE.

2012FA0000544	BEECH		SUPPORT	CRACKED
6/12/2012	B90		50820107	LT MLG ACTUATOR

DISCOVERED THE LANDING GEAR SUPPORT ASSY FOR THE LEFT MLG ACTUATOR HAD CRACKS THAT HAD GONE UNDETECTED. THE FAILURE OF THIS SUPPORT BRACKET WHILE THE LANDING GEAR WAS BEING EXTENDED, ALLOWED THE LANDING GEAR TO EXTEND ENOUGH TO PROVIDE A DOWN AND LOCKED INDICATION WITHOUT THE GEAR ACTUALLY BEING DOWN AND LOCKED. ON ROLL OUT AFTER TOUCH DOWN, LT MLG COLLAPSED.

2012FA0000679	BEECH	PWA	RAYTHN	BRACKET	BROKEN
10/9/2012	C90A	PT6A21		501600183	FLAP TRACK

DURING PHASE INSPECTION, THE RT OTBD, INBD FLAP TRACK BRACKET, BROKEN AT UPPER AFT END OF AFT TRACK. FLAP ATTACH POINTS WERE UNDAMAGED. BRACKET REPLACED AND ACFT RETURNED TO SERVICE.

2012FA0000668	BEECH	LYC	TUBE	SPLIT
10/2/2012	D95A	IO540C4B5	5005	MLG TIRE

FAILURE OF TUBE WHILE ACFT SAT ON RAMP. FOUND SMALL SPLIT IN SIDE OF TUBE. 5TH FAILURE OF RUBBER

TUBES EXPERIENCED WITH NO EVIDENCE OF UNDER OR OVER INFLATION.

2012FA0000584	BEECH	CONT	CIRCUIT BREAKER	FAILED
8/20/2012	F33A	IO520*	WAPI1000510	VENT BLOWER

PILOT REPORTED VENT BLOWER NOT WORKING. DURING TROUBLESHOOTING, THE TECH FOUND THE CIRCUIT BREAKER AT FAULT. INSTALLED A NEW CIRCUIT BREAKER. OPS CHECK NORMAL.

2012FA0000585	BEECH	CONT	CIRCUIT BREAKER	FAILED
8/20/2012	F33A	IO520*	35380132103	TAXI LIGHT

PILOT REPORTED TAXI LIGHT NOT WORKING. DURING TROUBLESHOOTING THE TECHNICIAN FOUND THE CIRCUIT BREAKER AT FAULT. INSTALLED A NEW CIRCUIT BREAKER. OPS CHECK NORMAL. NO PROBABLE CAUSE OR RECOMMENDATIONS AT THIS TIME.

2012FA0000547	BEECH	CONT	SWITCH	FAILED
8/4/2012	F33A	IO520BB	35380132103	BEACON

DURING FUCTIONAL CHECK, THE PILOT REPORTED THAT THE BEACON LIGHT WAS INOPERATIVE. DURING TROUBLESHOOTING, FOUND THAT THE BEACON LIGHT BREAKER SWITCH WAS TO BE A FAULT. R & R THE SWITCH AND OPS CHECKED GOOD.

2012FA0000525	BEECH	CONT	SWITCH	FAILED
8/1/2012	F33A	IO520BB	35380132103	BEACON

DURING OPS CHECK OF THE BEACON LIGHT, PILOT REPORTED THAT THE LIGHT WAS INOPERATIVE. DURING TROUBLESHOOTING, IT WAS FOUND THAT THE BEACON LIGHT SWITCH HAD FAILED. SWITCH HAS 2617.3 HOURS TSN AND AN ESTIMATED 10469.2 CYCLES. R & R BEACON LIGHT SWITCH AND THE LIGHT OPS CHECKED GOOD.

2012FA0000676	BEECH	CONT	CIRCUIT BREAKER	FAILED
10/5/2012	F33A	IO520BB	35380132103	TAXI LIGHT

PILOT REPORTED TAXI LIGHT NOT WORKING. AFTER TROUBLESHOOTING, FOUND THE CIRCUIT BREAKER TO BE AT FAULT. INSTALLED A NEW CIRCUIT BREAKER, OPS CHECKED NORMAL.

2012FA0000677	BEECH	CONT	CIRCUIT BREAKER	FAILED
10/5/2012	F33A	IO520BB	35380132103	TAXI LIGHT

PILOT REPORTED TAXI LIGHT NOT WORKING. AFTER TROUBLESHOOTING, THE TECH FOUND THE CIRCUIT BREAKER TO BE AT FAULT. INSTALLED A NEW CIRCUIT BREAKER. OPS CHECKED NORMAL.

2012FA0000595	BEECH	CONT	CIRCUIT BREAKER	FAILED
8/24/2012	F33A	IO520BB	35380132101	NAVIGATION LIGHT

PILOT REPORTED NAVIGATION LIGHTS INOPERATIVE. ON TROUBLESHOOTING, THE TECH FOUND THE CIRCUIT BREAKER AT FAULT. INSTALLED NEW CIRCUIT BREAKER. OPS CHECKED OK. SWITCH THAT FAILED WAS INSTALLED TO COMPLY WITH AD 2008-13-17. THIS ACFT HAS HAD 6 OF THE IMPROVED CIRCUIT BREAKER FAIL IN THE LAST 2600HRS OF OPERATION.

2012FA0000662	BEECH	CONT	CIRCUIT BREAKER	FAILED
9/27/2012	F33A	IO520BB	35380132101	NAV LIGHTS

PILOT REPORTED NAVIGATION LIGHTS NOT WORKING. AFTER TROUBLESHOOTING, FOUND THE CIRCUIT BREAKER TO BE AT FAULT. INSTALLED A NEW CIRCUIT BREAKER. OPS CHECKED NORMAL.

2012FA0000658	BEECH	CONT	ROD BOLT	DAMAGED
9/27/2012	T42A	IO470*		NR 5 CYLINDER

ENGINE FAILURE APPEARS TO HAVE BEEN CAUSED BY 1 ROD BOLT WITH INDICATIONS OF BEACH MARKS.

2012FA0000577	BELL	ALLSN	STATOR VANE	FAILED
8/19/2012	206B3	250C20B	6890550	ENGINE

WHILE IN FLIGHT, ENGINE LOST POWER WHICH RESULTED IN AUTO ROTATION ENDING IN HARD LANDING. FOUND THIRD STAGE EITHER STATOR OR 3RD STAGE WHEEL VANE FAILED CAUSING STAGES 4, 5, 6, 7 TO FAIL. THESE FAILURES FURTHER EXTENDED INTO COMBUSTION CAN AND TURBINE. ALL 3 MODULES OF ENGINE ARE TO BE SENT TO A MFG SERVICE FACILITY FOR FURTHER DISASSEMBLY. COMPRESSOR PARTS WILL BE SENT TO FACTORY FOR FURTHER ANALYSIS FOR ROOT CAUSE OF FAILURE.

2012FA0000654	BELL	LYC	GRIP	MISINSTALLED
9/17/2012	UH1H	T53L13B	204011121113	MAIN ROTOR YOKE

DURING A PHASE 1 INSPECTION, MAIN ROTOR GRIP HAD BEEN IMPROPERLY ASSEMBLED AND INSTALLED ON THE MAIN ROTOR YOKE CAUSING DAMAGE TO THE NEEDLE BEARING AND RACE.

2012FA0000655	BELL	LYC	SCISSORS	MISINSTALLED
9/17/2012	UH1H	T53L13B	20401140111	MAIN ROTOR

DURING A PHASE 1 INSPECTION, SCISSOR HAD BEEN IMPROPERLY ASSEMBLED AND INSTALLED ON THE SLEEVE CAUSING DAMAGE TO THE SLEEVE.

2012FA0000656	BELL	LYC	BLADE	MISINSTALLED
9/17/2012	UH1H	T53L13B		TAIL ROTOR

DURING A PHASE 1 INSPECTION, TAIL ROTOR BLADE CLEARANCE FROM VERTICAL STABILIZER WAS INSUFFICIENT AS IT HAD BEEN IMPROPERLY SHIMMED AND INSTALLED ON THE 90 DEGREE GEAR BOX.

2012FA0000558	BNORM	CALIPER	LEAKING
7/17/2012	BN2A26	3023C	MLG BRAKE

LEFT MAIN LANDING GEAR INBD BRAKE CALIPER, LEAKING.

SPUY20120820035	BOEING	STIFFENER	CORRODED
8/22/2012	727233		RT WING

DURING ROUTINE C CHECK INSPECTION, RIGHT WING FRONT SPAR AREA - STIFFENER CORRODED AT FS 232.0 REF NR 0133.

SPUY20120820036	BOEING	SKIN	CRACKED
8/22/2012	727233		LE SLAT

DURING ROUTINE C CHECK INSPECTION, LEFT WING SLAT NR 3 LWR SKIN CRACKED 5/16 INCH APPROX AT SLAT STA 135.0 REF NR 0170.

SPUY20120820037	BOEING	SKIN	CRACKED
8/22/2012	727233		LE SLAT

DURING ROUTINE C CHECK INSPECTION, RIGHT WING L/E SLAT NR 6 INTERNAL SKIN CRACKED 1 INCH AT SLAT STA 1674.0 REF NR 0379.

SPUY20120820038	BOEING	FRAME	CRACKED
8/22/2012	727233		FUSELAGE

DURING ROUTINE C CHECK INSPECTION, AIR CONDITIONING DISTRIBUTION BAY - FRAME HAS A 1 INCH CRACK AT BS 740 STRINGER 20 – 21L REF NR 0442.

SPUY20120820039	BOEING	SPAR	CORRODED
8/22/2012	727233		LT WING

DURING ROUTINE C CHECK INSPECTION, LEFT WING LOWER REAR SPAR CORRODED AT WBL 90 REF NR 0582.

SPUY20120820040	BOEING	STRINGER	CORRODED
8/22/2012	727233		FUSELAGE

DURING ROUTINE C CHECK INSPECTION, ELECTRONIC COMPARTMENT STRINGER 26R CORRODED AT BS 460 REF

NR 0973.

SPUY20120820041	BOEING	SPAR	CORRODED
8/22/2012	727233		CENTER WING

DURING ROUTINE C CHECK INSPECTION, WING CENTER SECTION REAR SPAR WEB CORRODED AT STA 870 LBL 30 REF NR 1099.

SPUY20120820042	BOEING	FRAME	CORRODED
8/22/2012	727233		FUSELAGE

DURING ROUTINE C CHECK INSPECTION, LOWER NOSE COMPT - FRAME WEB CORRODED AT BS 351.2 LBL 9 RBL 18 REF NR 1292.

SPUY20120820025	BOEING	SKIN	NICKED
8/20/2012	727233		RT AILERON

DURING ROUTINE C CHECK INSPECTION, RIGHT WING OUTBOARD AILERON UPPER SURFACE SHOWS NICKS BETWEEN STA WBL 492.5 AND 602.5 REF NR 0127.

SPUY20120820026	BOEING	SPAR	CORRODED
8/20/2012	727233		HORIZ STAB

DURING ROUTINE C CHECK INSPECTION, RIGHT HORZ STAB - REAR SPAR AND SKIN LOWER CHORD CORRODED STAB STA 180 REF NR 0637.

SPUY20120820028	BOEING	BEAM	WORN
8/20/2012	727233		HORIZ STAB

DURING ROUTINE C CHECK INSPECTION, LEFT HORIZONTAL STABILIZER TRAILING EDGE UPPER BEAM WORN STAB STA 54 REF NR 0639.

SPUY20120820029	BOEING	SKIN	CORRODED
8/20/2012	727233		HORIZ STAB

DURING ROUTINE C CHECK INSPECTION, RIGHT HORIZONTAL STABILIZER REAR SPAR AND SKIN LOWER CHORD SHOWS CORROSION STAB STA 152 REF NR 0640.

SPUY20120820030	BOEING	SHIM	CORRODED
8/20/2012	727233		HORIZ STAB

DURING ROUTINE C CHECK INSPECTION, RIGHT HORIZONTAL STABILIZER TRAILING EDGE UPPER BEAM SHIM CORRODED STAB STA 62 REF NR 0641.

SPUY20120820031	BOEING	TORQUE BOX	CORRODED
8/20/2012	727233		VERTICAL STAB

DURING ROUTINE C CHECK INSPECTION, VERTICAL FIN - TORQUE BOX INBOARD CHORD LEFT CORRODED STA 1342 FIN STA 0 AND FWD REAR SPAR CHORD REF NR 0642.

SPUY20120820033	BOEING	FRAME	DEFORMED
8/20/2012	727233		FUSELAGE

DURING ROUTINE C CHECK INSPECTION, FWD CARGO COMPT FRAME DEFORMED BS 560 STR 25L REF NR 0797.

SPUY20120820034	BOEING	FRAME	DEFORMED
8/20/2012	727233		FUSELAGE

DURING ROUTINE C CHECK INSPECTION, FWD CARGO COMPT- FRAME DEFORMED BS 580 STR 25L REF NR 0798.

SPUY20120905043	BOEING	FITTING	CORRODED
9/5/2012	727233		NLG

DURING ROUTINE C CHECK INSPECTION: NOSE LANDING GEAR - FITTING SHOWS CORROSION AT BS 351 REF N/R 1395.

SPUY20120905044	BOEING	SKIN	CORRODED
9/5/2012	727233		RUDDER

DURING ROUTINE C CHECK INSPECTION, UPPER RUDDER LEFT SIDE SKIN SHOWS CORROSION STA 230 REF N/R 1397.

SPUY20120907045	BOEING	BEAM	CRACKED
9/7/2012	727233		FUSELAGE

DURING ROUTINE C CHECK INSPECTION, MAIN CARGO COMPT - VERTICAL BEAM FWD FLANGE HAS A 1.5 INCH APPROX CRACK AT BS 1183 LBL 22 WL 222.20 REF N/R 1327.

SPUY20120907046	BOEING	FLOORBEAM	CORRODED
9/7/2012	727233		FUSELAGE

DURING ROUTINE C CHECK INSPECTION, MAIN CARGO COMPARTMENT, FLOORBEAM UPPER HORIZONTAL CHORD SHOWS CORROSION AT BS 870 RBL 3 REF N/R 1357.

SPUY20120907047	BOEING	SKIN	CORRODED
9/7/2012	727233		RT HORIZ STAB

DURING ROUTINE C CHECK INSPECTION, RIGHT HORIZONTAL STABILIZER LOWER SKIN CORRODED AT STAB STA 152 REF N/R 1369.

SPUY20120907048	BOEING	WINDOW FRAME	CORRODED
9/7/2012	727233		CABIN

DURING ROUTINE C CHECK INSPECTION, MAIN CARGO COMPT - WINDOW FRAME SHOWS CORROSION (BS 720C - 720D, S-1213L) REF N/R 1411.

SPUY20120820027	BOEING	BEAM	CORRODED
8/20/2012	727233		LT HORIZ STAB

DURING ROUTINE C CHECK INSPECTION, LEFT HORIZONTAL TRAILING EDGE BEAM SHOWS CORROSION STAB STA 128 REF NR 0638.

SPUY20120820032	BOEING	FRAME	DEFORMED
8/20/2012	727233		FUSELAGE

DURING ROUTINE C CHECK INSPECTION, FWD CARGO COMPT FRAME DEFORMED, BS 540 STR 24L REF NR 0796.

Z6WR00182012	BOEING	GE	BOEING	RING	WORN
9/26/2012	737	CFM567B24		315A22225	THRUST REVERSER

INSPECTION FOUND TWO LOOSE, BOLTS. AREAS OF MATERIAL DISPLACEMENT AND CRACKING IN THE LOWER OTBD SURFACE OF THE CASCADE RING.

2012FA0000617	BOEING	BRAKE	FAILED
8/31/2012	737*	214745	ZONE 700

ACFT EXPERIENCING ADJUSTER PIN COMPONENT FAILURE THAT INCLUDES EJECTION OF ADJUSTMENT PIN HOUSING, PIN AND NUT FROM BRAKE ASSY. CLIP THAT RETAINS ADJUSTER PIN AND NOTED BY OPERATOR TO BE MISSING AND POSSIBLY CONTRIBUTED TO PIN FAILURE.

2012FA0000601	BOEING	CFMINT	PIN	MISINSTALLED
8/14/2012	7374B7	CFM563B2		L2 DOOR SLIDE

DURING C-CHECK, AN ATTEMPT TO OPS CHECK L2 DOOR ESCAPE SLIDE SYS, WITH THE SLIDE PLACE AND THE GIRT BAR INSTALLED THE DOOR WAS OPENED BUT THE SLIDE FAILED TO INFLATE. UPON INVESTIGATION OF THE

SLIDE IT WAS FOUND TO HAVE THE SAFETY PIN STILL INSTALLED, AFTER REMOVAL OF THE SAFETY PIN THE SLIDE OPERATED/INFLATED NORMAL.

Z6WR201208220015	BOEING	RING	WORN
8/22/2012	7377H4	315A229594	THRUST REVERSER

CMM 78-31-37 REV 24 01JUL2012 SB 737-78-1072 REV 00 16JUN2005 INSPECTION FINDING OF 1 MISSING BACB30LE6K29 BOLT (FIGURE 12, ITEM 100) COMMON TO THE LOWER AFT HOLE OF THE 315A2222-5 CASCADE RING AND THE 315A2402-6 BEAM ASSY AND 1 EA BACB30LE6K29 COMMON TO THE FWD HOLE OF THE CASCADE SUPPORT RING AND THE LATCH BEAM IS LOOSE. THE 2 .375/.379 HOLE LOCATIONS FOR BACB30LE6K29 BOLTS C/T THE 315A2222-5 CASCADE RING ASSY ARE ELONGATED. CORRESPONDING .375 / .379 HOLE LOCATION FOR THE FWD MOST BACB30LE6K29 BOLT C/T THE 315A2402-6 LATCH BEAM FITTING (FIG 22, ITEM 325C) IS ELONGATED. ALSO A DEEP AREA OF WEAR AROUND THE FWD HOLE LOCATION C/T THE -6 BEAM INBOARD SURFACE. CORRESPONDING .4040 / .4160 HOLE LOCATION FOR THE AFT MOST BACB30LE6K29 BOLT C/T THE 315A2402-6 LATCH BEAM FITTING IS ELONGATED. THERE IS ALSO A DEEP AREA OF WEAR AROUND THE FWD HOLE LOCATION C/T THE -6 BEAM INBOARD SURFACE.

2012FA0000560	BOEING	GE	BULKHEAD	CRACKED
7/12/2012	74748EF	CF680C2B1F		NLG WW

(ACFT NR HL7420) CRACKS AT 2 LOCATIONS ARE DETECTED DURING C16 CHECK ON ACFT. CRACK 1, AT STA 400, LBL 0, AFT BULKHEAD OF NLG WHEEL WELL, CRACK ABOUT 0.25" IS DETECTED. CRACK 2, AT STA 282, LBL 33, LEFT BULKHEAD OF NLG WW, CRACK ABOUT 2.7" IS DETECTED.

E8VY2012FA0000641	BOEING	GE	BULKHEAD	CRACKED
7/12/2012	74748EF	CF680C2B1F		NLG WW

CRACKS AT TWO LOCATIONS ARE DETECTED DURING C16 CHECK. CRACK 1: AT BS 282 AND 400, LBL 0, AFT BULKHEAD OF NLG WHEEL WELL, CRACK APPROX 0.25".

2012F00178	BOEING	ACTUATOR	FAILED
9/7/2012	767224	284T08658	ESCAPE SLIDE

LEFT SLIDE DID NOT DEPLOY WHILE PERFORMING CARD NR 25-031-00-01, OPS CHECK OF THE SLIDE SYS ON A SAMPLING BASIS. UPON FURTHER INVESTIGATION FOUND LT OVERWING SLIDE AUTO ARM AND FIRE SWITCHES DID NOT TRIP. MEASURED CLEARANCE BETWEEN ACTUATOR AND STRIKER PIN, B767 AMM 25-65-15, CLEARANCE LIMITS ARE .01-.04", FOUND CLEARANCE TO BE 0.095 AND OUT OF LIMITS IAW AMM 25-65-15. ADJUSTED CLEARANCE IAW AMM 25-65-15. PERFORMED OVERWING ESCAPE HATCH EMERGENCY PULL HANDLE, CHECKED GOOD.

ABXR2012080700056	BOEING	SKIN	DENTED
8/7/2012	767328	141T32301	BS 355

DENT FOUND AT APPROX BS 355 BETWEEN S36-37L. OUT OF LIMITS IAW SRM 53-00-01. REPAIRED IAW SRM 53-00-01, REPAIR 12 AND REA 47013REA03.

ABXR2012080700057	BOEING	RIB	CRACKED
8/7/2012	767328	174T120511	VERTICAL STAB

VERTICAL L/E RIB AT FSS 417.69 ON VERTICAL STAB , CRACKED AT RT ATTACH POINT. REMOVED CRACKED RIB AND REPAIRED IAW SRM 55-30-09.

ABXR2012080700058	BOEING	FRAME	BENT
8/7/2012	767328	43T10581	ZONE 100

LEFT FRAME BENT FWD LOWER CARGO AT BS 456 S31L. REPAIRED FRAME IAW SRM 53-30-07 REPAIR 3 AND REA 47013REA01.

ABXR201208070059	BOEING	FITTING	CRACKED
8/7/2012	767328	311T21141	ZONE 400

NR 2 PYLON FWD UPPER INBD ATTACH FITTING ABOVE FWD ENGINE MOUNT BULKHEAD FITTING CRACKED .5

INCHES NAC STA 204. INSTALLED NEW FITTING IAW DWG 311T2210 AND SRM 52-40-2.

ABXR2012080700060	BOEING	ROLLER TRAY	CORRODED
8/7/2012	767328	451T15056	ZONE 100

ROLLER TRAY AT SAT 1400 CORRODED AT BOTTOM OF TRAY. FABRICATED NEW TRAY IAW DWG 451T1503.

ABXR2012080700061	BOEING	FRAME	CORRODED
8/7/2012	767328	143T12158	ZONE 100

FWD LOWER CARGO FRAME FS 764 S39L CORRODED ON FWD SIDE BELOW AIT MIXER. REPAIRED FRAME IAW ERA 4701REA05.

ABXR2012080700062	BOEING	SWIRLER	CRACKED
8/7/2012	767328	213T44122	ZONE 100

SWIRL FIXTURE IN LOWER SECTION OF ACFT MIXER CRACKED. R & R SWIRL VANE IAW SRM 51-40-05 AND 51-40-02 AND AMM 20-11-00.

2012FA0000528	CESSNA	CONT	BLOCK	CORRODED
8/2/2012	150B	O200A	0523524	ZONE 500

CORROSION FOUND ON FORWARD AND AFT WING SPARS UNDER FUEL TANK SPACER BLOCKS, IN FUEL TANK MOUNTING BAY. PROBLEM DISCOVERED WHEN FUEL TANKS WERE REMOVED FOR REPAIR. NO VISUAL CORROSION INDICATIONS NOTED AROUND SPACERS WHEN MOUNTED. SPACERS REMOVED ON A "HUNCH" THAT UNDERLYING CORROSION MAY EXIST. CONDITION EXISTED IN BOTH WINGS.

2012FA0000602	CESSNA	LYC	CIRCUIT BREAKER	INOPERATIVE
8/15/2012	172N	O320*	S13605L	NR 3 RADIO

NOTED A CLICKING ACCOMPANIED BY AMMETER INDICATING A HEAVY DISCHARGE. PROBLEM ISOLATED TO A CIRCUIT BREAKER THAT WASN`T TRIPPING THE INDICATOR BUTTON AND WAS WORKING AS AN AUTO RESET BREAKER. A SHORT WAS LOCATED WITHIN THE ALREADY PLACARDED " INOP" ADF. THE OWNER COMMENTED HE THOUGHT THE ISSUE WAS THE NORMAL OPS FOR THE PULSELIGHT SYSTEM.

2012FA0000573	CESSNA	LYC	SENDING UNIT	MISINSTALLED
8/8/2012	172N	O320*	05235671	FUEL TANK

FUEL SENDERS, SERVICED, LEAK FUEL THROUGH THE MOUNTING FLANGE, WHICH IS BOLTED, OUTSIDE OF TANK, TO THE TOP OF THE FUEL TANK.

2012FA0000682	CESSNA	SEAT	CRACKED
8/15/2012	172P	05141823	COCKPIT

PILOT SEAT BOTTOM MOUNTING POINTS TO SEAT ADJUSTING PEDESTAL ARE CRACKING.

2012FA0000631	CESSNA	HOSE	FAILED
8/27/2012	172RG	AE3663231E0105	HYD SYSTEM

HOSE ASSY FROM GEAR MOTOR TO NOSE GEAR ACTUATOR FAILED AT THE HOSE FITTING. REPLACES ASSY WITH BRAIDED STAINLESS STEEL HOSE. GEAR SWINGS CHECKED GOOD. NO LEAKS. MANUAL GEAR EXTENSION SYS FUNCTION CHECKED GOOD. ACFT TEST FLOWN, CHECKED GOOD. LANDING GEAR CYCLED SEVERAL TIMES UP/DOWN DURING FLIGHT. FUNCTIONED GOOD.

2012FA0000565	CESSNA	LYC	ALTERNATOR	DEFECTIVE
8/13/2012	172RG	O360F1A6	991059111	

PILOT REPORTED LOW VOLTAGE OF 22 VOLTS AND PERFORMED AN EMERGENCY LANDING. GROUND CHECK OF ALTERNATOR IDENTIFIED IT DEFECTIVE. ALTERNATOR WAS REPLACED.

2012FA0000561	CESSNA	STRUT	DAMAGED
8/10/2012	172S	07436311	NLG

DURING SCHEDULED INSPECTION, INNER NOSE STRUT TUBE UPPER CAP RIVETS WERE FOUND TO BE MIGRATING.

NX4R201208200033	CESSNA	CONTROL CABLE	FRAYED
8/20/2012	172S	0560059364	AILERONS

DURING A ROUTINE INSPECTION, THE LT AILERON "DIRECT" CABLE WAS FOUND WORN WITH BROKEN STRANDS.

NX4R2012082000034	CESSNA	CONTROL CABLE	FRAYED
8/20/2012	172S	0560059363	AILERONS

DURING A ROUTINE INSPECTION, THE AILERON PRIMARY CABLE WAS FOUND WORN AND FRAYED AT FS 65.33.

2012FA0000583	CESSNA	CAP	MIGRATED
8/20/2012	172S	07436311	NLG STRUT

DURING SCHEDULED INSPECTION INNER NOSE STRUT TUBE UPPER CAP RIVETS WERE FOUND TO BE MIGRATING. INNER STRUT TUBE REPLACED WITH OLD STYLE TUBE.

2012FA0000610	CESSNA	STRUT	DAMAGED
9/7/2012	172S	07436311	NLG

DURING SCHEDULED INSPECTION, INNER NOSE STRUT TUBE UPPER CAP RIVET WERE FOUND TO BE MIGRATING.

2012FA0000683	CESSNA	LYC	BOLT	BACKED OUT
9/21/2012	172S	IO360L2A		STARTER

PILOT HEARD A GRINDING NOISE WHEN TRYING TO START ACFT. REMOVED STARTER, FOUND THE STARTER BOLTS FOR MOTOR AND STARTER GEAR ASSY WERE BACKING OUT. LOCK ASSY WERE STILL IN PLACE.

2012FA0000552	CESSNA	LYC	GASKET	NOT SEATED
8/9/2012	177B	O360A1F6D	CFO1001	OIL FILTER

DURING REPLACEMENT OF THE CANISTER-TYPE OIL FILTER AT THE TIME OF OIL CHANGE, IT IS DIFFICULT TO ACHIEVE A GOOD SEAL OF THE CANISTER AGAINST THE SEAT THROUGH THE FILTER GASKET THAT IS SUPPLIED WITH THE CFO100-1 FILTER KIT. THE GASKET VERY EASILY SLIPS INSIDE THE CANISTER DURING TIGHTENING OF THE CANISTER RETAINING BOLT TO THE RECOMMENDED TORQUE VALUE. EXTREME CARE MUST BE TAKEN TO ENSURE THAT IT DOES NOT SLIP INSIDE. IF IT DOES SLIP INSIDE, THERE IS A STRONG OIL LEAK DURING THE RUN-UP CHECK. THIS FAILURE OF THIS GASKET SEALING HAS HAPPENED ON SEVERAL OCCASIONS. REMOVING, CLEANING AND DRYING OF THE GASKET, AND REINSTALLATION HAS RESULTED IN A GOOD SEAL.

2012FA0000543	CESSNA	LYC	HUB	CRACKED
7/31/2012	177RG	IO360A1B6	D30259	LT MLG WHEEL

LEFT BRAKE REPORTED AS SOFT, REQUIRING REPEATED APPLICATIONS TO ENGAGE. CLOSE INSPECTION OF BRAKE AND WHEEL ASSY REVEALED A LARGE CRACK ON THE INSIDE OF THE WHEEL HUB. WHEEL DISASSEMBLED AND CRACKS WERE DISCOVERED IN THE AREA OF 4 OF THE 6 MOUNTING BOLTS. THE CRACKS WERE PARALLEL TO THE BOLT HOLE CENTERLINE AXIS APPROXIMATELY ONE INCH LONG AND WERE CONNECTED BY CRACKS ALONG THE OUTER CIRCUMFERENCE OF THE WHEEL HUB. CRACKS HAD EXPANDED TO APPROX .0625 WIDE AND CONTINUED INTO THE WHEEL WEB STRUCTURE. THE RIGHT WHEEL ASSY WAS DISASSEMBLED AND CRACKS WERE FOUND PARALLEL TO THE CENTERLINE OF TWO MOUNTING BOLTS. NO SIGNIFICANT SEPARATION WAS FOUND ON THIS WHEEL.

2012FA0000609	CESSNA	TUBE	SPLIT
9/7/2012	182T	302246400	MLG TIRE

AIRCRAFT EXPERIENCED A FAILED LT MAIN TIRE INNER-TUBE ON TOUCHDOWN AND EXITED THE RUNWAY. ACFT STOPPED IN THE GRASS WITH NO DAMAGE TO AIRCRAFT. THIS WAS THE 15TH INNER TUBE FAILURE ON OUR FLEET OF AFT IN THE PAST 18 MONTHS. IN AUGUST 2012 1 OF OUR ACFT, EXPERIENCED 2 TUBE FAILURES WHILE TAXIING ON 2 SUCCEEDING DAYS; A NOSE INNER-TUBE FAILURE AND A MAIN INNER-TUBE FAILURE. ALL TUBES EXHIBITED 1 OR 2 CLEAN .2500" CUTS ON THE SIDEWALL OF THE INNER-TUBE. ALL ACFT THAT HAVE BEEN

INVOLVED ARE G1000-EQUIPPED LOW-TIME ACFT OF MODEL YEARS 2009, 2010 AND 2011, WITH ORIGINAL FACTORY TUBES INSTALLED. ACFT HAD 985 HOURS TT WHEN INNER-TUBE FAILURE OCCURRED. SOME ACFT HAD UNDER 300 HOURS WHEN THE INNER-TUBES FAILED. FAILURES HAVE OCCURRED IN COLD AND HOT WEATHER. OBVIOUSLY THESE INNER-TUBES ARE HIGH FAILURE COMPONENTS.

JRUR201208140006	CESSNA	LYC		EXHAUST VALVE	STUCK
8/14/2012	182T	IO540AB1A5		LW19001	NR 3 CYLINDER

DURING START, PILOT NOTICED THE ENGINE RAN VERY ROUGH. SHUTDOWN ENGINE AND RESTARTED IT. ENGINE RUNNING SMOOTHER, BUT A VIBRATION WAS NOTED. ENGINE SHUTDOWN AND MECHANIC INVESTIGATED. A COMPRESSION CHECK WAS TAKEN AND NR 3 CYLINDER COMPRESSION WAS 0/80 WITH ALL THE AIR LEAKING PASSED THE EXHAUST VALVE. MECHANIC ATTEMPTED TO PERFORM SB388C ON NR 3 CYLINDER. EXHAUST VALVE TO GUIDE CLEARANCE COULD NOT BE MEASURED DUE TO THE VALVE BEING STUCK. THIS CYLINDER IS NOT SERVICEABLE AT THIS TIME.

E07A20120925206	CESSNA			LINE	CHAFED
9/25/2012	206CESSNA			12009045	FUEL SYSTEM

FUEL LINE CHAFED BY CONTROL CABLE.

2012FA0000563	CESSNA	CONT	HARTZL	HUB	CRACKED
8/10/2012	206CESSNA	IO520F		E71542R	PROPELLER

CRACK DISCOVERED ON ENGINE SIDE OF PROPELLER HUB. DISCOVERED WHEN PILOT EXPERIENCED A GREASE LEAK AND REMOVED SPINNER TO INVESTIGATE.

2012FA0000591	CESSNA	PWA	BLADE	DAMAGED
8/7/2012	208	PT6A114A		TURBINE SECTION

PILOT REPORTED INFLIGHT ENGINE SHUTDOWN DUE TO LOSS OF POWER DURING CLIMB AT 5,000 FEET ALTITUDE. AIRCRAFT LANDED SAFELY. ALL ENGINE INDICATION INDICATES NORMAL DURING TAKEOFF AND CLIMB UP TO 5,000 FEET ALTITUDE. MECHANIC ON DUTY, PERFORMED ENGINE BOROSCOPE AND FOUND HOT SECTION TURBINE BLADES HAS SEVERE DAMAGE. REMOVED ENGINE, ENGINE AWAITING REPAIR.

2012FA0000590	CESSNA	PWA	PWA	COMPRESSOR BLADE	DAMAGED
7/17/2012	208B	PT6A42			ENGINE

PILOT REPORTED A BANGING NOISE DURING TAXI COMING FROM THE ENGINE. PILOT THEN TAXIIED TO THE HANGAR AND BROUGHT IT TO MECHANIC ON DUTY THAT DAY. MECHANIC THEN BOROSCOPE ENGINE AND FOUND FIRST STAGE COMPRESSOR HAS MINOR NORMAL WEAR AND TEAR, FIRST STAGE COMPRESSOR GUIDE VANES ARE PARTIALLY MISSING AND SECOND STAGE COMPRESSOR SEVERELY DAMAGED. ENGINE WAS SENT FOR INVESTIGATION, REPAIR AND WARRANTY.

2012FA0000600	CESSNA	CONT	GEAR	DAMAGED
8/30/2012	310G	IO470*	08940004	MLG

WEAR IN THE LAST 13 TEETH OF THE HELICAL GEAR ON THE RETRACT END OF GEAR. THERE IS A .02 TO .035 STEP ON THE THRUST SIDE OF THE GEAR. THIS IS ENOUGH TO JAMB THE WORM DRIVE RENDERING GEAR INOPERATIVE TO NORMAL EXTENSION OR HAND CRANK. PROBLEM APPEARS TO BE ASSOCIATED WITH THE MAIN GEAR TIRE HITTING THE UNDER SURFACE OF THE WHEEL WELL PRIOR TO THE DUST CAP TOUCHING THE BUMPER IN THE WHEEL WELL. TOE IN IS WITHIN SPEC. TIRE IS OF PROPER SIZE AND PLY. INFLATION PRESSURE IS IAW MFG. WEAR ON HELICAL GEAR CORRESPONDS TO GEAR POSITION WITH TIRE AGAINST UPPER SURFACE OF WHEEL WELL.

2012FA0000596	CESSNA	CONT	CLAMP	CRACKED
8/24/2012	421B	GTSIO520C	NH100089750	TURBOCHARGER

TURBOCHARGER TURBINE TO TAILPIPE V BAND CLAMP, FOUND TO HAVE A 3" LONG CRACK ALONG THE OUTER PERIMETER OF THE V BAND. CRACK SEPARATION WAS LESS THAN .0625" AT THE WIDEST POINT. THIS IS NOT A MULTI-SEGMENT V BAND. NO EXHAUST LEAK EVIDENT. DISCOVERED DURING COMPLIANCE WITH AD 2000-01-16

PARAGRAPH (G) INSPECTION.

YWYR201209158826	CESSNA	CONT	SPARK PLUG	CRACKED
11/8/2011	421B	GTSIO520H	RHB32S	

PILOT REPORTED HIGH RPM DROP DURING MAGNETO DROP OFF CHECK. ISOLATED PROBLEM TO NR 5 CYLINDER BY USE OF GRAPHIC ENGINE MONITOR. REMOVED ALL SPARK PLUGS AND FOUND 1 SPARK PLUG ON NR 5 CYLINDER HAD CRACKED INSULATOR TIP. INSTALLED NEW SPARK PLUG. GROUND RUN UP AND MAGNETO DROP OFF CHECK WAS NORMAL.

2012FA0000664	CESSNA	CABLE ASSY	BROKEN
8/6/2012	421C	511723964	MLG

LANDING GEAR WOULD NOT RETRACT AFTER TAKEOFF, OR EXTEND WHEN GEAR DOWN WAS SELECTED. THE EMERGENCY GEAR EXTENSION HANDLE WAS PULLED, AND IT BROKE OFF IN THE PILOT'S HAND. THE ACFT LANDED WITH THE GEAR UP. TROUBLESHOOTING REVEALED THAT THE CABLE BROKE AT THE BASE OF THE HANDLE.

2012FA0000663	CESSNA	DIODE	SHORTED
8/6/2012	421C	1N4003	MLG

THE LANDING GEAR WOULD NOT FULLY RETRACT AFTER TAKEOFF, OR EXTEND WHEN GEAR DOWN WAS SELECTED. THE EMERGENCY EXTENSION SYS ALSO FAILED, SO THE ACFT WAS FORCED TO LAND WITH THE GEAR UP. TROUBLESHOOTING DETERMINED THAT DIODE CR32 HAD SHORTED, CAUSING THE LANDING GEAR CIRCUIT BREAKER TO OPEN. ONCE THE DIODE WAS REPLACED, THE SYS OPERATED NORMALLY.

2012FA0000653	CESSNA	CONT	GOVERNOR	FAILED
9/21/2012	421C	GTSIO520L	DCFS290D9T6	PROPELLER

AFTER TAKEOFF, THE RT ENGINE PROPELLER WENT INTO A FULL FEATHER. ENGINE SHUTDOWN AUTOMATICALLY AND ONE ATTEMPT TO RESTART WAS MADE WITH NO SUCCESS. A LANDING WAS EXECUTED WITHOUT INCIDENT. SUBSEQUENT GROUND INSPECTION REVEALED AN OIL LEAKAGE AROUND PROPELLER BLADES. PROPELLER AND PROPELLER GOVERNOR WERE REMOVED AND SENT OUT FOR INSPECTION. ON INITIAL INSPECTION AFTER REMOVAL BY IA MECHANIC, GOVERNOR WAS FOUND TO HAVE INTERNAL FAILURE AND DETAILS TO BE DETERMINED AFTER REPAIR FACILITY INSPECTION.

2012FA0000626	CESSNA	PWA	FRAME	BROKEN
8/27/2012	501	JT15D1A	5519006911	SEAT BASE

FOUND SEAT BASE BROKEN.

2012FA0000647	CESSNA	PWC	DUCT	DELAMINATED
9/26/2012	510	PW615FA	35C296701	ENGINE BYPASS

AFT BYPASS DUCT WAS FOUND DELAMINATED DURING A SCHEDULED INSPECTION.

2012FA0000652	CESSNA	PWC	FERRULE	CRACKED
9/26/2012	510	PW615FA	991434459	FLAP SHAFT

DURING A SCHEDULED INSPECTION, THE FERRULE ON THE RT FLAP FLEX SHAFT OUTER HOUSING WAS FOUND CRACKED. CRACK WAS ON THE END WHERE THE CABLE ATTACHES TO THE FLAP ACTUATOR.

CNQR2012080886796	CESSNA	CESSNA	PIN	BACKED OUT
7/17/2012	525C		71410212	TRUNNION

RIGHT MLG COLLAPSED WHILE ACFT WAS TAXING IN FROM LANDING. AFT TRUNNION PIN WAS INSTALLED INCORRECTLY, THE AN3-42 RETAINING BOLT WAS NOT THROUGH THE PIN AS NEEDED TO RETAIN THE TRUNNION PIN IN THE TRUNNION ASSY. A REVIEW OF ACFT ONSITE AT THE REPAIR STATION AND FACTORY REVELED ONE PRE-AW AIRCRAFT WITH THE SAME CONDITION AND NO ADDITIONAL AT THE REPAIR STATION. *MANDATORY ALERT SERVICE LETTER ASL525C-32-01 WAS ISSUED ON JULY 19TH, 2012 FOR A FLEET WIDE REVIEW AND IS REFERENCED BELOW. *ALERT SERVICE LETTER ASL525C-32-01: TITLE: LANDING GEAR - AFT MAIN LANDING GEAR TRUNNION PIN INSPECTION EFFECTIVITY- MODEL SN: 525C (CJ4) -0001 THRU -0005, -0007 THRU -0017, -0019 THRU

-0041, -0043 THRU -0045, -0047 THRU -0064, -0066 THRU -0073, -0075 THRU -0081, -0083, -0084, -0086 THRU -0094. THE EQUIVALENT OF THIS SERVICE LETTER HAS BEEN INCORPORATED ON PRODUCTION AIRPLANES -0006, -0018, -0042, -0046, -0065, -0074, -0082, -0085, AND -0095 AND ON. REASON: THE AFT MAIN LANDING GEAR TRUNNION PIN MAY NOT BE CORRECTLY INSTALLED. THIS SERVICE LETTER CONTAINS INSTRUCTIONS TO DO AN INSPECTION OF THE AFT MAIN LANDING GEAR TRUNNION PIN. COMPLIANCE MANDATORY: THIS SERVICE LETTER MUST BE ACCOMPLISHED PRIOR TO NEXT FLIGHT. THE AFT MAIN LANDING GEAR TRUNNION PIN MUST BE CORRECTLY INSTALLED BEFORE THE AIRPLANE IS FLOWN, TAXIED, TOWED, OR OTHERWISE MOVED.

2012FA0000642	CESSNA	PWA	SEAT	BROKEN
9/13/2012	550	JT15D4	551900931	

SEAT BASE BROKEN.

2012FA0000627	CESSNA	PWA	WIRE	CHAFED
8/16/2012	550	PW530A		SWITCH

THROTTLE QUADRANT EMITTING SPARKS WITH LT POWER LEVER AT TAKEOFF. FOUND T/R DEPLOY/STOW MICROSWITCH WIRES CHAFED THROUGH. POOR POSITIONING OF PLASTIC PASSTHRU CONDUIT CAUSED WIRES TO RUB HARD ON QUADRANT MECHANISM NEAR THE TAKEOFF POSITION. POSSIBLE T/R DEPLOYMENT ON TAKEOFF COULD HAVE HAPPENED IF CHAFED WIRES CONTACTED EACH OTHER.

2012FA0000678	CESSNA	DOOR	LACK OF LUBE
10/8/2012	560CESSNA	651126626	EMERGENCY EXIT

WHILE ATTEMPTING TO OPEN EMERGENCY EXIT FOR INSPECTION, FOUND HATCH TO BE STUCK IN POSITION. VERIFIED LATCH IS OPERATING, WHICH IT WAS. DOOR EVENTUALLY WAS FORCED OPEN USING 2 MEN PUSHING ON THE DOOR FROM THE OUTSIDE OF THE ACFT. INSPECTED EMERGENCY EXIT, DOOR SEAL, FRAME AND LATCH WITH NO DAMAGE FOUND. THE DOOR WAS FOUND TO BE STUCK IN PLACE DUE TO BEING PREVIOUSLY SEALED WITH LITTLE OR NO RELEASE AGENT APPLIED. APPLIED RELEASE AGENT AND OPERATIONALLY CHECKED DOOR TO BE IN WORKING ORDER.

DXTR20120808001	CESSNA	PULLEY BRACKET	CRACKED
8/8/2012	560XL	66611542	ZONE 100

RUDDER AUTOPILOT CABLE BRACKET, AT AFT CANTED BULKHEAD IS CRACKED ON INBD RIVET LINE. R & R RUDDER AUTOPILOT CABLE BRACKET IAW SRM 51-40-03 AND MM 22-11-01.

DXTR20120808002	CESSNA	DRUM	CRACKED
8/8/2012	560XL	62112975	COUNTERBALANCE

CABIN DOOR FWD COUNTERBALANCE CABLE DRUM CRACKED AT HUB.

2012FA0000660	CESSNA	GARRTT	ACTUATOR	FAILED
9/17/2012	650	TFE731*	497D1009	TRIM SYS

DURING PREFLIGHT, PRIMARY AND SECONDARY TRIM TESTS WERE DONE AND BOTH TESTS SUCCESSFUL. FLIGHT NORMAL UNTIL TOP OF DESCENT. DURING DESCENT PASSING FLIGHT LEVEL 370, PRIMARY TRIM FAILED LIGHT CAME ON WITH AUTOPILOT ENGAGE. WHEN AUTOPILOT DISCONNECTED, ACFT DID A NOSE DOWN MOVEMENT. WHEN SECONDARY TRIM TURNED ON, PRIMARY TRIM FAILED LIGHT REMAINED ON. SECONDARY TRIM SWITCHES ACTIVATED SEVERAL TIMES TRYING TO MOVE TRIM TO NOSE UP WITHOUT ANY RESPONSE. ABOUT 30 SECONDS AFTER ACTIVATION, SECONARY TRIM FAULT LIGHT CAME ON. NO SATISFACTORY TRIM MOVEMENT WITH BOTH SYSTEMS, & PROBLEM WASN`T RELATED WITH A RUNAWAY. RESET BOTH CIRCUIT BREAKERS, PRIMARY TRIM ACTIVATED WITHOUT ANY MOVEMENT TO NOSE UP POSITION, WITH A LITTLE TOUCH TO NOSE DOWN, TRIM ACTIVATED IMMEDIATELY. TRIED SEVERAL TIMES IN NOSE UP WITHOUT ANY RESPONSE. TRIED SECOND TIME WITH SECONDARY AND TRIM DIDN`T MOVE NOSE UP. RETURNED ALL SWITCHES TO NORMAL POSITION AND STARTED APPROACH TO LAND WITHOUT FLAPS DUE TO THE TRIM WAS IN 0 DEGREES. IN APPROACH, TRIED TO MOVE 1 MORE TIME, PRIMARY TRIM & RECEIVED MOVEMENT TO NOSE UP POSITION ABOUT 12000 FT AND 230 KNOTS. TRIMMED ONE TIME UNTIL NORMAL VALUES TO LAND WITH FLAPS 20 AND LEFT IN THAT POSITION,

2012FA0000571	CESSNA	GARRTT	ANNUNCIATOR	FALSE INDICATION

8/15/2012	650	TFE7313C	629808827	

AT FL170, CREW RECEIVED A FUEL LOW PRESSURE, HYD PRESSURE LOW, FUEL F/W SHUTOFF, AND AN EMERGENCY PRESSURE INDICATIONS. IN ADDITION, THE MASTER WARNING SWITCH LIGHT CAPSULES ILLUMINATED AND COULD NOT BE CANCELED OR RESET. CREW NOTED NORMAL FUEL FLOW, HYD PRESSURE, AND PRESSURIZATION INDICATIONS. CREW ELECTED TO PROCEEDED ON TO THE DESTINATION AND MADE AN UNEVENTFUL LANDING. ON INITIAL POWER UP INDICATIONS ON THE MASTER WARNING PANEL APPEARED NORMAL. ROTARY TEST SWITCH WAS SELECTED TO "ANNUN" AND MAINTENANCE OBSERVED THAT ONLY ROUGHLY 1/3 OF THE 44 SWITCH CAPSULES ILLUMINATED. A REPLACEMENT ANNUNCIATOR PANEL WAS PROCURED AND INSTALLED. FUNCTIONAL TESTS WERE SUCCESSFULLY COMPLETED, RESTORING AIRCRAFT OPERATION. REMOVED UNIT HAD BEEN INSTALLED 2 WEEKS AND 11 HOURS PRIOR TO ADDRESS AN INTERMITTENT MASTER WARNING TRIGGER THAT WAS NOT CANCELABLE, THAT WAS NOT ASSOCIATED WITH ANY ANNUNCIATOR ILLUMINATION.

2012FA0000599	CESSNA	GARRTT	STEERING UNIT	OUT OF LIMITS
8/30/2012	650	TFE7313C	658505ALT9914080	ZONE 700

CREW REPORTED THAT NOSEWHEEL STEERING SEEMED "SLOPPY" AROUND NEUTRAL THAN PREVIOUS. INSPECTED ACFT. FUNCTIONAL TESTED NOSE WHEEL STEERING WITH NO OBVIOUS DISCREPANCIES. DURING INSPECTION IAW MM 32-50-00 FOUND NORMAL DEAD ZONE AT NEUTRAL TO BE EXCESSIVE. MEASURED OVERALL PLAY AT +/-10 DEGREES. MM LIMITS ARE 7 DEGREES (3.5 A SIDE). BLED ACTUATOR REPEATEDLY IAW MM INSTRUCTIONS. CONDITION DID NOT IMPROVE. AS A NOTE, UNIT HAD BEEN PREVIOUSLY CONFIRMED IN RIG AT A SERVICE CENTER AFTER TENSIONING OF THE NWS CABLES. RIG REQUIRED INPUT SECTOR ALIGNMENT HOLE TO BE OFFSET TO RESULT IN STRAIGHT AHEAD TAXI/CENTERING OF DEAD ZONE. CONTACTED ACFT SUPPORT TO TRY AND DETERMINE IF INTERFACE BETWEEN NWS ACTUATOR AND STRUT COULD BE SOURCE OF INCREASED PLAY AT CENTER. NO REPORTS OF THAT CONDITION. ORDERED AND INSTALLED EXCHANGE NWS ACTUATOR. DURING REMOVAL, INSPECTED INTERFACE BETWEEN STRUT AND ACTUATOR AND FOUND NO CAUSE FOR INCREASED LEVEL OF PLAY. BLED O/H UNIT IAW MM. NOTED DEAD ZONE AT CENTER TO BE +/-6 DEGREES - WITHIN LIMITS. ADJUSTED CABLES SLIGHTLY TO CENTER ZONE (3 DEGREES L AND R). RIG PIN HOLE AT SECTOR INPUT WAS SLIP FIT WITH DEAD ZONE CENTERED. TAXI TEST CONFIRMED RIG. NO ADJUSTMENTS REQ'D.

CWQR20120906048	CESSNA	PWC	TUBE	CRACKED
9/6/2012	680CE	PW306C	69553007	APU BAY

DURING A SCHEDULED MX CHECK, FOUND THIS TUBE ASSY CRACKED ABOUT HALF WAY AROUND THE FIREWALL FLANGE AT THE WELD.

DXTR20120918001	CESSNA		SKIN	PUNCTURED
9/18/2012	750			HORIZONTAL STAB

DURING PRELIMINARY INSPECTION, FOUND PUNCTURE IN LOWER SKIN OF RT HORIZONTAL STAB. PUNCTURE INCLUDED A DENT .030" DEEP WITH A TEAR AT THE BOTTOM OF THE DENT LOCATED AT SS 68 & 11.125 AFT OF THE FORWARD SPAR AND THE TEAR IS APPROX .375" LONG. PERMANENT REPAIR ACCOMPLISHED IAW STS ENGINEERING SOLUTIONS EA 12-2012-294.

2012FA0000684	CESSNA	CONT	BOLT	SHEARED
9/13/2012	A185F	IO520*	AN511	ACTUATOR

AFT HYDRAULIC ACTUATOR BOLT WAS FOUND TO BE SHEARED IN HALF AND DISPLACED FROM ITS DESIGNED LOCATION. THE FAILURE OCCURRED DURING SKI ACTUATION WHILE AIRBORNE, FOLLOWING USE ON HARD/BREAKABLE CRUST SNOW SURFACES DURING PREVIOUS FLIGHTS. FURTHER INSPECTION OF THE BOLT REVEALED SIGNS OF A STRESS CRACK AND DISTORTION PRIOR TO SHEARING. RECOMMENDED REGULAR REMOVAL AND INSPECTION OF BOLT FOR FATIGUE AT REGULAR INTERVALS (100 HOUR/ANNUAL) OR MORE FREQUIENLY UNDER EXTREME USE CONDITIONS.

2012FA0000536	CESSNA		DOWNLOCK SWITCH	FAILED
8/3/2012	S550		1EN1186	NLG

NOSE GEAR DOWN AND LOCK INDICATOR DID NOT ILLUMINATE WHEN GEAR WAS EXTENDED.

YWYR201209159368	CESSNA		MASTER SWITCH	DAMAGED
9/7/2012	T182T		S327211	

PILOT REPORTED THAT ACFT MASTER SWITCH WOULD NOT ACTUATE ACFT POWER ON SEVERAL OCCASIONS. IF THE MASTER SWITCH WAS CYCLED ON AND OFF SEVERAL TIMES IT WOULD EVENTUALLY TURN ACFT POWER ON. NEW MASTER SWITCH INSTALLED AND OPERATION WAS NORMAL.

2012FA0000542	CESSNA	LYC	BRACKET	MISSING
7/26/2012	T182T	TIO540AK1A	07125241	FS 230.187

DURING A SCHEDULED INSPECTION, IT WAS NOTED THAT THE RIVETS ATTACHING HORIZONTAL STABILIZER LT AND RT ATTACH BRACKETS TO THE TAILCONE BULKHEAD WERE NOT INSTALLED. FURTHER INSPECTION REVEALED THAT THE BRACKET CLIPS HAD PILOT HOLES BUT WERE NOT DRILLED TO MATCH THE CORRESPONDING HOLE IN THE TAILCONE BULKHEAD.

2012FA0000672	CESSNA	CONT	ENGINE	POWER LOSS
10/2/2012	T210M	GTSIO520*		

DURING A FINAL APPROACH, PILOT APPLIED THROTTLE TO ARREST HIS SINK RATE BUT THE ENGINE DID NOT RESPOND. POST ACCIDENT INVESTIGATION REVEALED AT LEAST 5 GALLONS WAS AVAILABLE IN EACH WING TANK.

UVVR2012081500024	CESSNA	CESSNA	ARM	CORRODED
8/15/2012	U206F		0411307	ZONE 100

WHILE PERFORMING AN ANNUAL INSPECTION ON THIS ACFT EVIDENCE OF RUST WAS OBSERVED ON THE OPENING IN THE TOP OF THE PILOTS LEFT RUDDER PEDAL MECHANISM TUBE BEHIND THE RUDDER PEDAL. THE RUDDER PEDAL ATTACHES TO AND PIVOTS (FOR BRAKING PURPOSES) ON THIS TUBE. DISASSEMBLY REVEALED THAT THE THROUGH BOLT THAT ATTACHES THIS TUBE TO THE RUDDER BAR ASSY BELOW THE FLOOR WAS SEVERELY RUSTED AND IN DANGER OF IMMINENT FAILURE. THE RUDDER PEDAL TUBE WAS CLEANED AND FOUND TO HAVE SEVERE PITTING ON THE INSIDE, APPROX 50 PERCENT OF THE WALL THICKNESS. THE RUDDER BAR ASSY WAS ALSO CLEANED AND ALSO FOUND TO HAVE SEVERE PITTING ON THE INSIDE, APPROX 50 PERCENT OF THE WALL THICKNESS. IT APPEARS THAT THIS HOLLOW TUBE THAT THE RUDDER PEDAL ATTACHES TO HAS BEEN FILLING WITH WATER FROM A LEAK IN THE CABIN AIR VENT SYS. WATER STAINS WERE OBSERVED ON THE BOTTOM OF THE SCAT TUBING WHERE IT ATTACHES TO THE AIR DISTRIBUTION MANIFOLD NEAR THE FIREWALL WHICH IS DIRECTLY ABOVE THIS RUDDER PEDAL TUBE. THE ONLY VISIBLE EVIDENCE OF A PROBLEM WAS LIGHT SURFACE RUST IN THE INSIDE OF THE TOP OF THE RUDDER PEDAL TUBE. ONLY AFTER DISASSEMBLY WAS THE SEVERITY OF THE PROBLEM REVEALED.

2012F00147	CESSNA	CONT	CYLINDER	CRACKED
7/23/2012	U206F	IO520F	AEC63197	NR 5

ON FIRST RUN UP OF THE DAY PILOT NOTED ACFT RAN ROUGH AND SOUNDED DIFFERENT. MX PERSONAL PERFORMED A VISUAL INSPECTION OF CYLINDERS AND FOUND NR 5 CYLINDER MISSING SEVERAL COOLING FINS AND A HOLE THE SIZE OF A PENCIL IN THE AREA OF THE EXHAUST PORT ON THE TOP OF THE CYLINDER HEAD. AFTER REMOVING CYLINDER A CRACK WAS NOTED FROM EXHAUST PORT ACROSS TOP SPARK PLUG BOSS TO INJECTOR PORT AND THOUGHT INTAKE PORT. ON THE INSIDE OF CYLINDER A CRACK PROPAGATED FROM TOP SPARK PLUG BOSS TO BOTH INTAKE AND EXHAUST SEATS. PN AEC63197, SN 20356-B, PART TT 1127.8, AD 2004-08-10 ADDRESSES SAME PN CYLINDER BUT LOWER SN THAN EFFECTED PART.

2012FA0000639	CESSNA	CONT	CONNECTING ROD	FAILED
8/9/2012	U206F	IO520F	646778	ENGINE

INFLIGHT LOSS OF POWER AND LOSS OF OIL DURING CLIMB CAUSING AIRCRAFT UNSCHEDULED LANDING. VISUALLY INSPECTED ENGINE AND FOUND CRANKCASE WAS PUNCTURED BY A CONNECTING ROD CAUSING OIL TO LEAK.

2012FA0000603	CIRRUS	CONT	STARTER	BURNED
8/24/2012	SR20	IO360ES	C24ST3	ENGINE

AFTER ENGINE START THE MAP, ENGINE PERCENT POWER AND FUEL FLOW INDICATIONS BECAME INOPERATIVE.

ACFT WAS NOT FLOWN. FLIGHT CREW SQUAWKED PROBLEM AND BROUGHT ACFT AND TIN TO MX. GROUND RUN-UP PERFORMED AND AMT WAS ABLE TO DUPLICATE PROBLEM. ACFT ENGINE COWLING WAS REMOVED TO DISCOVER THE MAP/FUEL FLOW INDICATION WIRE/ LOOM ASSY CHARRED AND BURNED. THE HOT SPOT WAS ATTRIBUTED TO A DEFECTIVE STARTER (MODEL C24ST3) THAT SHOWED EVIDENCE OF AN INTERNAL ELECTRICAL ARCH THAT HAD BURNED A HOLE ENTIRELY THROUGH THE STARTER HOUSING. THE EXCESSIVE AMOUNT OF HEAT, SPARK AND POSSIBLE FIRE DUE TO THE DEFECTIVE STARTER HAD MELTED THE WIRE LOOM AND COMPROMISED THE FUNCTIONALITY OF THE INDICATOR WIRE BUNDLE. STARTER REMOVED FROM ACFT.

2012FA0000649	CIRRUS	CONT	BRACKET	CRACKED
9/26/2012	SR20	IO360ES	657046	ALTERNATOR

CRACK DISCOVERED IN ALTERNATOR MOUNTING BRACKET, PN 657046. THIRD OCCURANCE OF THIS PROBLEM.

2012FA0000582	CIRRUS	CONT	SPARK PLUG	CRACKED
1/20/2012	SR20	IO360ES	REM38E	ZONE 400

ENGINE RAN ROUGH. PRECAUTIONARY LANDING. FOUR SPARK PLUGS, FOUND CRACKED AND SOME MISSING INSULATORS.

2012FA0000570	CIRRUS	CONT	COMMUTATOR	SHORTED
7/7/2012	SR20	IO360ES		STARTER

AFTER START UP, CREW NOTED THAT THE RT IFD WENT BLANK. MAINTENANCE CREW SUSPECTED A BAD BATTERY/LOW VOLTAGE AND INSTALLED A NEW BATTERY. WHEN THE NEGATIVE WIRE WAS INSTALLED, THERE WAS A LARGE SPARK. THE BATTERY 1 RELAY WAS FOUND TO BE STUCK. AFTER REPLACING THE RELAY AND BATTERY, THE ENGINE WOULD NOT START. THE STARTER WAS REPLACED AND DURING RUN UP, ALL CONDITIONS WERE NORMAL. IFD DATA WAS DOWNLOADED AND REVIEWED, AND THE STARTER WAS DISASSEMBLED. MAINTENANCE CREW DETERMINED THAT A DEAD SHORT TO GROUND CAUSED BY A SECTION OF THE COMMUTATOR COMING LOOSE HAD CAUSED BATTERY 1 TO RAPIDLY DISCHARGE AND THUS CAUSED THE RELAY TO STICK IN THE CLOSED POSITION.

2012FA0000527	CIRRUS	CONT	TRANSDUCER	LOOSE
8/2/2012	SR20	IO360ES	12635002	OIL PRESSURE

OIL PRESSYRE INDICATION IN YELLOW RANGE CAUSED BY LOOSE OR DIRTY CONTACT PIN AT OIL PRESSURE TRANSDUCER AND AIRFRAME WIRE HARNESS.

2012FA0000581	CIRRUS	CONT	SPARK PLUG	FAILED
8/10/2012	SR22	IO550*	RHB32S	ENGINE

ENGINE RUNNING ROUGH REPORTED. REMOVED SPARK PLUG AND FOUND MISSING INSULATOR. MATERIAL INJESTED INTO ENGINE.

2012FA0000614	CIRRUS	CONT	SPARK PLUG	DEFECTIVE
9/10/2012	SR22	IO550*	RHB32S	ENGINE

DURING NORMAL ENGINE OPERATION WAS NOT ABLE TO RUN ENGINE LOP CONTINUOUSLY. REMOVED SPARK PLUGS, RHB32S, MEASURED RESISTANCE AND FOUND: 1 WAS ABOUT 820 OHMS, 1 WAS 2.3M OHMS, 2 WERE ABOUT 2K AND 8 PC WERE BETWEEN 30 AND 40 KHOM. REPLACED RHB32S WITH URHB32S SPARK PLUGS AND EVERYTHING RETURNED BACK TO NORMAL.

2012FA0000578	CIRRUS	CONT	SPARK PLUG	CRACKED
5/19/2012	SR22	IO550N	RHB32S	ENGINE

ENGINE START NORMAL. MAGNETO CHECK ON RUNUP REVEALED ROUGH RUNNING AND MAG CHECK FAILED ON SEVERAL CYLINDERS. REMOVED THE PLUGS - CRACKS FOUND ALL AROUND THE INSULATOR. RHB32S IS CURRENTLY IN THE ENGINE. HAVE BEEN FINDING SEVERAL OF THESE ON MULTIPLE AIRCRAFT - BOTH NA AND TURBO. THE ISSUE IS ISOLATED TO THE BRAND.

2012FA0000659	CIRRUS	CONT	NUT	FAILED
9/7/2012	SR22	IO550N		TURBOCHARGER

ENGINE UNABLE TO MAINTAIN MANIFOLD PRESSURE IN THE CLIMB. ON GROUND RUNS THE MECHANIC REPORTED THAT THE LT TURBOCHARGER AUDIBLY HAD A DIFFERENT PITCH THAN BEFORE. REMOVAL OF THE INDUCTION SYS REVEALED THAT THE LT TURBOCHARGER COMPRESSOR WHEEL RETAINING NUT WAS MISSING AND THE COMPRESSOR BLADES WERE BADLY DAMAGED. THE RETENTION NUT WAS LATER FOUND ATTACHED TO THE ALTERNATE INDUCTION AIR-BOX DOOR MAGNET. IT WAS FURTHER FOUND THAT THE NUT WOULD ROTATE FREELY BY HAND WHEN THREADED BACK ONTO THE COMPRESSOR SHAFT, INDICATION LACK OF OR LOSS OF ANY LOCKING FEATURE.

2012FA0000632	CIRRUS	CONT	BEARING	FAILED
9/7/2012	SR22	IO550N		STARTER ADAPTER

NOTICED WHEN TURNING PROP OVER TO DO COMPRESSION TEST THAT THERE WAS A CLUNKING AND TICKING NOISE COMING FROM THE MOTOR. TRACED IT TO THE STARTER ADAPTER. REMOVED ADAPTER AND FOUND THAT THE BEARING ON THE DRIVE SHAFT THAT GOES INTO THE ENGINE IS VERY ROUGH AND JERKY. THIS IS THE SECOND OCCURANCE OF THIS TYPE OF ISSUE ON TWO DIFFERENT ACFT. BOTH WITH VERY LOW TIME ON THE STARTER ADAPTERS.

2012F00146	CNDAIR		INTERCOSTAL	CRACKED
7/31/2012	CL6002B16		604310412	

DURING AN 800 HOUR INSPECTION, WHILE PERFORMING THE INSPECTION TASK 32-34-00-720-801 "FUNCTIONAL TEST OF THE LANDING GEAR EMERGENCY-EXTENSION SYSTEM", STEP 2.D.4 "VISUAL CHECK OF THE MLG UPLOCKS, A CRACKED SUPPORT INTERCOSTAL WAS FOUND IN THE RIGHT HAND MAIN LANDING GEAR WHEEL WELL. THE CRACK WAS ALONG THE AFT FLANGE OF THE INTERCOSTAL AND WAS APPROXIMATELY 2.5 INCHES IN LENGTH. THE CRACKED INTERCOSTAL WAS REPLACED PART FOR PART.

2012FA0000545	CNDAIR	GE	TIRE	WORN
7/12/2012	CL6002B16	CF343A2	256K433	NR 2 MLG

AFTER LANDING, CREW FOUND THAT THE NR 2 MLG TIRE HAD LOST MOST OF THE TIRE TREAD. THE TIRE ONLY HAD 131 LANDINGS, WITH .1562 TREAD REMAINING.

2012FA0000556	CNDAIR	GE	TIRE	WORN
9/27/2010	CL6002B16	CF343A2	266K433	NR 2 MLG

AFTER LANDING, CREW FOUND THA THE NR 2 MLG TIRE HAD LOST MOST OF THE TIRE TREAD. TIRE HAD 113 LANDINGS WITH .1562 TREAD REMAINING.

2012FA0000557	CNDAIR	GE	TIRE	WORN
12/8/2010	CL6002B16	CF343A2	256K433	NR 3 MLG

AFTER LANDING, THE CREW FOUND THAT THE NR3 MLG TIRE HAD LOST MOST OF THE TIRE TREAD. THE TIRE HAD 115 LANDING ON IT WITH .1562 TREAD REMAINING.

2012FA0000580	CNDAIR	GE	SKIN	CRACKED
8/20/2012	CL6002B19	CF343B1		ZONE 100

A 1 INCH PRESSURE SKIN CRACK WAS FOUND BETWEEN THE LOWER BEACON AND THE NR 2 VHF ANTENNA. LOCATED AT FS 409+32, STR 26L TO STR 26R. REPAIRED WITH REO 601R-53-31-759.

V0XR20120927J0105	CNDAIR		SILL	CORRODED
9/26/2012	CL6002C10		SH670319963	ZONE 100

GALLEY SERVICE DOOR SILL IS CORRODED FROM FS 319 TO 349. R & R SERVICE DOOR SILL IAW SRM 53-21-23,51-11-00,51-21-06, AND 51-42-06.

V0XR20120927J0107	CNDAIR		FLOOR SUPPORT	CORRODED
9/26/2012	CL6002C10		SH670321723	BS 280-319

FLOOR SUPPORT AT FS 280 TO 319 IS CORRODED . R & R FLOOR SUPPORT IAW SRM 51-42-06 AND 51-42-13.

V0XR20120927J0108	CNDAIR		FITTING	CORRODED

9/26/2012	CL6002C10	SH670318403	THRESHOLD

PASSENGER DOOR THRESHOLD FORWARD CLOSING FITTING IS CORRODED. R & R FORWARD CLOSING FITTING IAW SRM 51-42-06,51-40-11, 51-42-21, AND 51-21-11.

V0XR20120927J0111	CNDAIR	FLOORBEAM	CORRODED
9/26/2012	CL6002C10	CC670341757S	ZONE 100

FS 280.0 FLOORBEAM IS CORRODED. R & R FLOORBEAM IAW REO 670-53-11-493, SRM 51-42-06, 51-42-10, 51-42-21, AND 51-40-11.

V0XR20120927J0112	CNDAIR	ANGLE	CORRODED
9/26/2012	CL6002C10	SH670318753S	ZONE 100

PASSENGER DOOR THRESHOLD KICKPLATE ANGLE IS CORRODED. R & R PASSENGER DOOR THRESHOLD KICKPLATE ANGLE IAW SRM 51-40-11, 51-42-06, AND 51-42-20.

V0XR20120927J0113	CNDAIR	SEAT TRACK	CORRODED
9/26/2012	CL6002C10	S62957075T76511	BS 349-389

SEAT TRACK HAS CORROSION FROM FS 349 TO 389. R & R RT SEAT TRAC IAW SRM 51-21-49, 53-00-49, 51-21-11,51-24-36, AND 51-41-02.

V0XR20120927J0114	CNDAIR	SUPPORT	CORRODED
9/26/2012	CL6002C10	CC670321793	BS 265-280

LT FORWARD JACK SUPPORT, BS 265 TO 280 AT S27L CORRODED. R & R LT FORWARD JACK SUPPORT IAW SRM 51-42-06 AND 51-42-21.

V0XR20120927J0115	CNDAIR	SUPPORT	CORRODED
9/26/2012	CL6002C10	CC670321794	ZONE 100

FORWARD JACK SUPPORT AT S27R, BS 265 TO 280 CORRODED. R & R RT FORWARD JACK SUPPORT IAW SRM 51-42-06 AND 51-42-21.

V0XR20120927J0116	CNDAIR	FRAME	CORRODED
9/26/2012	CL6002C10	CC670341041	ZONE 100

FRAME AT FS 265 IS CORRODED. R & R FRAME IAW SRM 51-42-06 AND 51-42-21.

V0XR20120927J0121	CNDAIR	INTERCOSTAL	CORRODED
9/27/2012	CL6002C10	SH670320754	ZONE 100

INTERCOSTAL AT FS 364.0 STR. 26R IS CORRODED. R & R INTERCOSTAL IAW SRM 51-42-06, 51-40-11, AND 51-25-11.

V0XR20120927J0122	CNDAIR	INTERCOSTAL	CORRODED
9/27/2012	CL6002C10	SH670320753	ZONE 100

INTERCOSTAL AT FS 369.0, STR 27L IS CORRODED. R & R INTERCOSTAL IAW SRM 51-42-06, 51-40-11, AND 51-25-01.

V0XR20120927J0123	CNDAIR	STRINGER	CORRODED
9/27/2012	CL6002C10	SH670313724S	ZONE 100

STRINGER 26R, FS 364.0 HAS BUBBLING PAINT. R & R STRINGER IAW SRM 51-42-06,51-40-11, AND 51-25-01.

V0XR20120927J0117	CNDAIR	INTERCOSTAL	CORRODED
9/27/2012	CL6002C10	SH670320774	BS 364 S27R

INTERCOSTAL AT FS 364.0, STR 27R IS CORRODED. R & R INTERCOSTAL AT FS 364.0, STR 27R IAW SRM 51-42-06, 51-40-11, AND 51-25-11.

V0XR20120927J0118	CNDAIR	STRINGER	CORRODED

9/27/2012	CL6002C10	SH670321034	ZONE 100

STRINGER 25R IS CORRODED AT FS 333.0 TO FS 364.0. R & R STRINGER IAW SRM 51-42-06,51-40-11, AND 51-25-01.

V0XR20120927J0119	CNDAIR	STRINGER	CORRODED
9/27/2012	CL6002C10	SH670312122	BS 280-333

STRINGER 25R IS CORRODED AT FS 280 TO 333. R & R STRINGER IAW SRM 51-42-06,51-40-11, AND 51-25-01.

V0XR201210040128	CNDAIR	FITTING	CORRODED
10/3/2012	CL6002C10	SH670321493	ZONE 100

RT INBD INTERCOSTAL FLOOR MOUNT MACHINE FITTING IS CORRODED. R & R RT INBD INTERCOSTAL FLOORMOUNT MACHINE FITTING IAW SRM 51-42-21.

V0XR20121004J0129	CNDAIR	FLOOR SUPPORT	CORRODED
10/3/2012	CL6002C10	CC6703329213S	ZONE 100

FS 279.0, BL 0.0 FLOOR SUPPORT IS DAMAGED. R & R FS 279.0 BL 0.0 FLOOR SUPPORT IAW SRM 51-42-21,51-42-06, 51-45-00.

V0XR201210040130	CNDAIR	CABLE	BROKEN
10/3/2012	CL6002C10	NAS322C110151	PAX DOOR

PASSENGER DOOR, BOTTOM CABLE ASSY IS BROKEN. R & R PASSENGER DOOR, BOTTOM CABLE ASSY IAW AMM 52-11-13.

V0XR20121004J0131	CNDAIR	STRIKER	CORRODED
10/4/2012	CL6002C10	SH670314123	SERVICE DOOR

SERVICE DOOR THRESHOLD LOWER SEAL STRIKER IS CORRODED. REMOVED SERVICE DOOR PROTECTOR PLATE IAW AMM 53-21-23, REMOVED SEAL STRIKER IAW SRM 51-42-06, INSTALLED NEW SEAL STRIKER IAW SRM 51-42-06. INSTALLED SERVICE DOOR PROTECTOR PLATE IAW AMM 53-21-23.

V0XR20121004J0132	CNDAIR	ANGLE	CORRODED
10/4/2012	CL6002C10	SH670319963	ZONE 100

GALLEY SERVICE DOOR SILL MOUNTING ANGLE IS CORRODED. R & R SERVICE DOOR SILL MOUNTING ANGLE IAW SRM 53-21-23,51-11-00, 51-21-06, AND 51-42-06.

V0XR20120927J0120	CNDAIR	STRINGER	CORRODED
9/27/2012	CL6002C10	SH670316342	ZONE 100

STRINGER 26R IS CORRODED AT FS 280.0 TO FS 333.0. R & R STRINGER 26R AT FS 280.0 TO FS 333.0 IAW SRM 51-42-06,51-40-11, AND 51-25-01.

V0XR201210010127	CNDAIR	ATTACH FITTING	CORRODED
9/30/2012	CL6002C10	SH670321483	BS 290

STORAGE CLOSET FLOOR FITTING AT BS 290 LT OTBD SIDE IS CORRODED. R & R STORAGE CLOSET FLOOR FITTING IAW SRM 51-42-21.

V0XR201209270124	CNDAIR	FRAME	CORRODED
9/27/2012	CL6002C10	SH670320909	ZONE 100

FRAME AT BS 364 IS CORRODED FROM STR 27 LT TO STR 25 RT ON BOTTOM FORWARD FLANGE. R & R FRAME IAW SRM 51-25-01, 51-40-11, 51-42-06, 51-42-21, AND REO 670-53-21-889.

V0XR201209270125	CNDAIR	FRAME	CORRODED
9/27/2012	CL6002C10	SH670324294	ZONE 100

FRAME AT BS 364 IS CORRODED FROM STR 27 LT TO STR 25 RT ON BOTTOM FORWARD FLANGE. R & R FRAME IAW SRM 51-25-01, 51-40-11, 51-42-06, 51-42-21, AND REO 670-53-21-889.

V0XR201209270126	CNDAIR		FRAME	CORRODED
9/27/2012	CL6002C10		S614413	ZONE 100

FRAME AT BS 364 IS CORRODED FROM STR 27 LT TO STR 25 RT ON BOTTOM FORWARD FLANGE. R & R FRAME IAW SRM 51-25-01, 51-40-11, 51-42-06, 51-42-21, AND REO 670-53-21-889.

WVER20120930011	CNDAIR		SILL	CORRODED
9/30/2012	CL6002C10		MM67035655003	CARGO DOORWAY

CARGO DOOR LOWER SILL IS CORRODED BEYOND ALLOWABLE LIMITS IN SEVERAL AREA. REPLACED CARGO DOOR LOWER SILL IAW SRM 51-40-11-001-001-A01, 51-42-06-001-001-A01, 51-42-21-001-001-A01, AND 51-45-06-001-001-A01.

WVER2012100150514	CNDAIR		RAMP	CORRODED
10/1/2012	CL6002C10		CC670386011	PAX DOOR

DOOR DRAIN RAMP CORRODED. PERFORM EO CRJ7/9-52-0032, AD 2010-23-14 PASSENGER DOOR DRAINAGE RAMP.

V0XR20120912J0094	CNDAIR	GE	STRIKER	SCRATCHED
9/10/2012	CL6002C10	CF348C1	SH670318853	ZONE 200

LT SIDE STRIKER PLATE ON PASSENGER DOOR HAS A SCRATCH ABOUT 75 PERCENT OF THE WAY UP, THE ENTRANCE. BLENDED LT SIDE STRIKER PLATE ON PASSENGER DOOR IAW SRM 53-21-23. REMOVED 0.008 FROM STRIKER, THICKNESS 0.100 WITHIN 10 PERCENT LIMIT.

V0XR20120912J0095	CNDAIR	GE	STRINGER	CRACKED
9/10/2012	CL6002C10	CF348C1	SH67031811	ZONE 200

LINTEL STRINGER 3 LT MAIN PASSENGER DOOR IS CRACKED. REPAIRED LINTEL STR. 3 LT MAIN PASSENGER DOOR AS REQUIRED IAW SB670BA-53-040, REO 670-53-21-493, REV C, AND RIL 2883 REV A, NDT COMPLIED WITH.

V0XR20120924J0104	CNDAIR	GE	FLOOR SUPPORT	CORRODED
9/23/2012	CL6002C10	CF348C1	CC6703329213	ZONE 100

FS 279 FLOOR SUPPORT CORRODED AT BL 0 BEYOUND SERVICEABLE LIMITS. R & R FLOOR SUPPORT AT FS 279 BL 0 IAW SRM 51-42-06.

V0XR201209180097	CNDAIR	GE	STRINGER	CRACKED
9/17/2012	CL6002C10	CF348C1	SH67031811	PAX DOOR

LINTEL STRINGER 3 OF THE MAIN PASSENGER DOOR IS CRACKED. COMPLIED WITH MFG SB 670BA-53-040, INSPECTION AND REINFORCEMENT OF LINTEL STRINGER 3 OF THE MAIN PASSENGER DOOR, HAVING SB REV A, AND SPECIFIC TO SB CONTENT PARA (PART B) METHOD, TECHNIQUES AND PRACTICES. AND IAW REO PL 670-53-21-493.

V0XR20120905J0072	CNDAIR	GE	FITTING	CORRODED
9/4/2012	CL6002C10	CF348C1	SH670318403	THRESHOLD

PASSENGER DOOR THRESHOLD FORWARD CLOSING FITTING IS CORRODED. R & R FORWARD CLOSING FITTING IAW SRM 51-42-06, 51-40-11,51-42-21, AND 51-21-11.

V0XR20120905J0075	CNDAIR	GE	FLOORBEAM	CORRODED
9/4/2012	CL6002C10	CF348C1	CC670341757S	BS 280

FS 280.0 FLOORBEAM IS CORRODED. R & R FS 280.0 FLOORBEAM IAW REO 670-53-11-047, REO 690-53-11-032, SRM 51-42-21,51-42-10, AND 51-42-06.

V0XR20120905J0080	CNDAIR	GE	ANGLE	CORRODED
9/4/2012	CL6002C10	CF348C1	SH670318214	THRESHOLD

PASSENGER DOOR THRESHOLD AFT CAP IS CORRODED. R & R PASSENGER DOOR AFT CAP IAW SRM 51-42-06

AND 51-25-01.

V0XR20120905J0081	CNDAIR	GE	SHAFT	BENT
9/4/2012	CL6002C10	CF348C1	6003804019	DOOR HANDLE

PASSENGER INNER DOOR HANDLE ROLLER SHAFT IS BENT (DETENT SHAFT). R & R PASSENGER INNER DOOR HANDLE ROLLER SHAFT (DETENT SHAFT) IAW AMM 52-11-02.

V0XR20120906J0082	CNDAIR	GE	ANGLE	CORRODED
9/6/2012	CL6002C10	CF348C1	SH670318757	PAX DOOR

PASSENGER DOOR KICK ANGLE IS CORRODED. R & R PASSENGER DOOR KICK ANGLE IAW SRM 51-42-06, 51-40-11, 51-25-01, 52-70-04, AND 52-11-04.

V0XR20120906J0083	CNDAIR	GE	FLOOR SUPPORT	CORRODED
9/6/2012	CL6002C10	CF348C1	67053618942	ZONE 100

AFT CARGO BAY RT FLOOR SUPPORT BETWEEN FS 1030.0 AND 1051.0. REMOVED THE CORROSION, MAPPED AND MEASURED DAMAGE IAW SRM 51-21-06 AND REO 670-53-61-894. AN EDDIE CURRENT INSPECTION COMPLIED WITH IAW NDTM 51-20-006 NO REJECTABLE INDICATIONS, ALODINED, PRIMED, AND PAINTED IAW SRM 51-25-06.

V0XR20120906J0084	CNDAIR	GE	DIAPHRAGM	CRACKED
9/6/2012	CL6002C10	CF348C1	SH670392901	WING TO BODY

CRACK IN LT WING TO FUSELAGE DIAPHRAGM AT BS 909.0. REPAIRED IAW REO 670-53-82-436, AN EDDY CURRENT INSPECTION WAS COMPLIED WITH AND NO REJECTABLE INDICATIONS IAW NDTM 51-20-06, REO 670-52-35-127, SRM 51-21-11,51-22-00, AND 51-42-06.

V0XR20120906J0085	CNDAIR	GE	FRAME	CORRODED
9/6/2012	CL6002C10	CF348C1	CC670341041	BS 265

FRAME FS 265.0 CORRODED BETWEEN STR 26L AND 26R. R & R FRAME IAW SRM 51-42-06 AND 51-42-21.

V0XR20120912J0091	CNDAIR	GE	STRINGER	CRACKED
9/10/2012	CL6002C10	CF348C1	670BA53040K2A	ZONE 200

LINTEL STRINGER 3L FS 280 OF MAIN PAX DOOR CRACKED. REPAIRED LINTEL STRINGER IAW SB 670BA-53-040 AND REO 670-53-21-493, REV C, RIL 2883, REV A.

V0XR20120912J0092	CNDAIR	GE	SEAT TRACK	CORRODED
9/10/2012	CL6002C10	CF348C1	SH670358643	BS 693-827

RT SEAT TRACK HAS COROSION FS 693-827. R & R SEAT TRACK IAW REO 670-53-00-074 AND SRM 53-21-11, 53-41-49.

V0XR20120912J0093	CNDAIR	GE	SEAT TRACK	CORRODED
9/10/2012	CL6002C10	CF348C1	SH670374205	ZONE 200

SEAT TRACK HAS COROSION AT FS 893 AND 923. REMOVED CORROSION FOUND TO BE WITH IN LIMITS IAW SRM 53-51-51, 51-25-06, 51-21-11.

V0XR2012091288	CNDAIR	GE	FITTING	CORRODED
9/10/2012	CL6002C10	CF348C1	SH670321493	ZONE 100

INTERCOSTAL FLOOR MOUNT FITTING CORRODED. LT OTBD FITTING STA 282. R & R FLOOR MOUNT FITTING LT OTBD FITTING STA 282 IAW SRM 51-40-11, 51-42-06, 51-42-21.

V0XR20120912J0089	CNDAIR	GE	FITTING	CORRODED
9/10/2012	CL6002C10	CF348C1	SH670321493	ZONE 100

RT INTERCOSTAL FLOOR MOUNT FITTING STA 282 CORRODED. R & R FLOOR MOUNT FITTING RT INBD FITTING BS 282 IAW SRM 51-40-11, 51-42-06, 51-42-21.

N6WA2012091701	CNDAIR	GE	LIGHT	UNSECURE
9/17/2012	CL6002C10	CF348C5B1		CABIN

FLOOR LIGHTING STRIP AT 12C & 12D IS LOOSE. OP'S CHECKED GOOD, SECURED IAW AMM 33-51-01.

2012FA0000593	CVAC	PWA	LINE	RUPTURED
7/19/2012	LB30	R1830*	GK32F5703389	HYDRAULIC SYS

A HYD SYSTEM FAILURE AND SUBSEQUENT INCIDENT WAS CAUSED BY THIS RUPTURED HYD HARD LINE ON THE EXIT SIDE OF THE SYS PRESSURE UNLOADER VALVE. FAILURE WAS APPARENTLY DUE TO FATIGUE AND TIGHT BEND RADIUS. EDDY CURRENT INSPECTIONS ARE NOT ACCOMPLISHED ON TUBING: UNFEASIBLE AND UNREALISTIC TO DO SO. AN UPDATED & STRUCTURALLY STRONGER TUBE WAS MFG AND INSTALLED.

2012FA0000555	CZAWSP	ROTAX	LEG ASSY	BROKEN
7/12/2012	SPORTCRUISER	ROTAX912ULS	SG0270N	NLG

AFTER COMPLETING THREE SUCCESSFUL TOUCH AND GO LANDINGS, PILOT WAS ATTEMPTING A FOURTH WHEN THE NOSE GEAR COLLAPSED CAUSING THE PROPELLER TO IMPACT THE RUNWAY. SUBSEQUENT INVESTIGATION REVEALED THE NLG NOSE LEG WAS COMPLETELY BROKEN AT THE UPPER ATTACH POINT GUSSET.

2012FA0000628	DHAV	PWA	STUD	SHEARED
8/30/2012	DHC6	PT6A34		NLG STEERING

NOSE GEAR ASSEMBLY REMOVED FOR A SCHEDULED INSPECTION. A STUD THAT IS PART OF THE STEERING COLUMN WAS FOUND SHEARED.

2012FA0000548	DHAV		ANGLE	CRACKED
8/6/2012	DHC8102		85730404108	RT WING ROOT

RIGHT WING ROOT FAIRING ATTACHMENT ANGLE CRACKED. R & R RIGHT WING ROOT FAIRING ATTACHMENT ANGLE.

EE4Y2012080100266	DOUG		SKIN	CRACKED
7/30/2012	DC982			ZONE 100

LOWER FUSELAGE AT Y STA 68.5-Z13RH SECTION SKIN WITH CRACKED. THE SKIN WAS REPAIRED IAW EO COO-9-53-197-12 WITH APPROVAL. UNDER NON ROUTINE ITEM; WO:A1A163,SUBJOB:1,ITEM:303.

7AHR20120914001	DOUG		MOUNT BRACKET	CORRODED
9/14/2012	DC983		39361901AND2	GIRT BAR

R1 DOOR, FORWARD AND AFT GIRT BAR MOUNTING BRACKETS ARE CORRODED. REMOVED CORROSION FROM THE R1 DOOR FORWARD AND AFT GIRT BAR MOUNTING BRACKET. AFTER EVALUATION IT WAS DETERMIND THE CORROSION ON THE BRACKETS WAS OUT OF LIMITS. REPLACED THE FORWARD AND AFT GIRT BAR FITTINGS IAW SRM 51-10-4.

7AHR20120914004	DOUG	PWA	FLOOR SUPPORT	CORRODED
9/14/2012	DC983	JT8D219		ZONE 200

CORROSION ON FLOOR SUPPORT STRUCTURE AT BODY STATION 208 AT LBL6 LT. REMOVED CORROSION FROM THE LT INBD FLOOR SUPPORT AT BODY STATION 208 LBL 6 IAW SRM 51-10-3 PARA 26. SUPPORT FOUND TO BE OUT OF LIMITS. RECEIVED REPLACEMENT EXTRUSION, LOCATED AND DRILLED IAW SRM 51-10-04. INSTALLED REPAIR EXTRUSION AT FLOOR SUPPORT IAW SRM 51-30-1, PAGE 13.

2012FA0000604	ECLIPS	PWC	ACTUATOR	FALSE ACTIVATION
8/8/2012	ECLIPSEEA500	PW610FA	EM411512	ZONE 700

ACFT STARTED TO GET AN INTERMITTENT CAS MESSAGE FOR LANDING GEAR FAIL DURING MX TAXI /ENGINE RUN. ACFT WAS SHUTDOWN AND PULLED INTO THE HANGER TO TROUBLESHOT ACFT. WHEN ACFT POWER WAS REAPPLIED DURING A WALK AROUND TO INSPECT LANDING GEAR ACTUATORS WHILE UNDER THE ACFT INSPECTING THE NOSE GEAR ACTUATOR. THE NOSE GEAR ACTUATOR CAME ON UNCOMMANDED AND

RETRACTED THE NOSE GEAR WHILE THE MX PERSONNEL WAS UNDER THE AIRCRAFT. NOTE AIRCRAFT WAS ON THE GROUND WITH 3 GREEN PRIOR TO UNCOMMANDED RETRACTION, WAS ABLE TO MOVE OUT OF THE WAY BEFORE THE GEAR COLLAPSED FULLY CAUSING DAMAGES TO BOTH GEAR DOORS. THE ACFT WAS JACKED AFTER THE GEAR COLLAPSED AND WHILE ON JACKS THE PROBLEM WAS DUPLICATED SEVERAL TIMES. THE NOSE GEAR AFTER ABOUT 5 SECS WITH POWER ON RETRACTS ON ITS OWN. THE PROBLEM WAS TRACED TO A FAULTY NLG ACTUATOR BY THE MFG. THIS INCIDENT COULD HAVE KILLED OR ENDANGERED MANY PEOPLE LIVES IF WE HAD BEEN FLYING THAT DAY.

2012FA0000606	ECLIPS	PWC	FIRE BOTTLE	FAILED
5/23/2012	ECLIPSEEA500	PW610FA	261231271001	RT NACELLE

RT ENGINE FIRE BOTTLE DISCHARGED INSIDE ENGINE PYLON. THIS IS THE SECOND BOTTLE FAILURE OF THE NEW DESIGN IN LESS THAN 6 MONTHS ON THIS ACFT. THE FIRE BOTTLE AGENT IS HIGHLY CORROSIVE AND CAN CAUSE STRUCTURAL DAMAGES TO ENGINE STRUCTURE IF NOT FOUND QUICKLY. THE LEAKAGE OF THE BOTTLE WAS NOTED COME OUT BY THE SQUIB. .

2012FA0000648	GULSTM	FLAP TRACK	CORRODED
9/26/2012	GIV	1159WM20052106	ZONE 600

RIGHT "C" FLAP TRACK CORRODED, R & R IAW BP1159W40119.

2012FA0000529	GULSTM	TRACK	CORRODED
8/3/2012	GIV	1159WM200514	UNKNOWN

RIGHT "B" TRACK CORRODED.

2012FA0000530	GULSTM	TRACK	CORRODED
8/3/2012	GIV	1159WM200523	UNKNOWN

LEFT "C" TRACK CORRODED.

2012FA0000531	GULSTM	FLAP TRACK	CORRODED
8/3/2012	GIV	1159WM200524	ZONE 600

RIGHT "C" FLAP TRACK CORRODED.

2012FA0000532	GULSTM	RIB	CORRODED
8/3/2012	GIV	1159WM2002331	ZONE 500

LEFT SPONSON RIB CORRODED, REPAIRED IAW BP SE45732901 REV F.

2012FA0000537	GULSTM	STRUCTURE	CORRODED
8/3/2012	GIV	1159W407015	LT WING

LEFT WINGLET ATTACH HOLES CORRODED, REF BP SE35809903, REV C FOR REPAIR.

2012FA0000538	GULSTM	STRUCTURE	CORRODED
8/3/2012	GIV	1159W407016	RT WING

RIGHT WINGLET ATTACH HOLES CORRODED, REFERENCE BP SE5809903 REV. C FOR REPAIR.

2012FA0000541	GULSTM	FLAP TRACK	CORRODED
8/3/2012	GIV	1159WM200514	ZONE 600

RT "B" FLAP TRACK CORRODED, REF BP SE45811104, REV B FOR REPAIR.

2012FA0000535	GULSTM	FLAP TRACK	CORRODED
8/3/2012	GIV	1159WM200513	ZONE 500

LT "B" FLAP TRACK CORRODED, REF BPSE45811104-3, REV B FOR REPAIR.

2012FA0000533	GULSTM	RROYCE	TRUNNION	CORRODED

8/3/2012	GIV	TAY6118	1159WM2002332	ZONE 600

RIGHT SPONSON RIB TRUNION CORRODED, REPAIRED IAW BP SE45732901.

2012FA0000651	GULSTM	RROYCE	RIB	CORRODED
9/26/2012	GIV	TAY6118	1159WM2002331	ZONE 500

LEFT SPONSON RIB TRUNNION HAS CORROSION IN FORWARD AND AFT LUG, REFERENCE W/O 2129.21.28 AND 21.28.

G1FR20120918001	GULSTM	RROYCE	HYDRAULIC LINE	MISINSTALLED
9/18/2012	GIV	TAY6118		

DURING THE RT MLG INSTALLATION AFTER O/H, THE HYDRAULIC LINES AT THE RT UPPER SWIVEL WERE CROSSED RESULTING IN TIRE FAILURE DURING LANDING ROLL. IT WAS FOUND THAT THE SPECIFIC MM PROCEDURES FOR THIS ACFT OMITTED OPS CHECKS WHICH WOULD HAVE DISCOVERED THE CROSSED LINES. NO NOTES OR WARNINGS WERE INCLULDED TO INDICATE A POTENTIAL PROBLEM. AFTER TROUBLESHOOTING THE CROSSED LINES WERE FOUND AND CORRECTED.

2012F00172	GULSTM	RROYCE	WINGLET	CORRODED
10/5/2012	GIV	TAY6118	1159W407016	ZONE 600

RIGHT WINGLET CORRODED IN ATTACH BORE, REF W/O 2142.23.3-23.6 FOR REPAIR.

2012FA0000670	GULSTM		SKIN	DELAMINATED
10/2/2012	GV			RT SPOILER

RT GROUND SPOILER ASSY IS DELAMINATED BEYOUND LIMITS. SEE W/O SC2193.19.1 AND 18.6.3.

2012FA0000629	HAWBEE	PWC	MODULE	FAULTED
8/31/2012	4000	PW308A	426000015	THROTTLE

ON CLIMBOUT, FADEC FAULT INDICATED, AT 15000 FT ALTITUDE ENGINE NR 1 (LT) ROLLED BACK TO IDOL WITH FADEC FAIL INDICATION. PILOTS WERE UNABLE TO GET CONTROL OF ENGINE. DECLARED AN EMERGENCY AND LANDED WITH LT ENGINE AT IDLE. CONTROL OF RT ENGINE WAS NORMAL. REPLACED THROTTLE MODULE ASSY AND ACFT RETURNED TO BASE. NO INJURIES REPORTED.

2012FA0000550	HILLER	ALLSN	FLEX COUPLING	SEPARATED
8/7/2012	1100	250C18	19E1011D	T/R DRIVE SHAFT

FLEX COUPLING FAILED AT OUTPUT OF INTERMEDIATE GEARBOX. SUBSTATIAL DAMAGE OCCURED DURING HARD LANDING.

2012FA0000608	HUGHES	ALLSN	BLADES	DAMAGED
8/16/2012	369E	250C20B		TURBINE SECTION

ROTORCRAFT TOOK OFF FROM HELIPORT, AT 2-3 MINUTES INTO FLIGHT AND 1500FT MSL A LOUD NOISE WAS HEARD. PILOT HAD LOSS OF POWER, INITIATED AUTOROTATION, PUT ROTORCRAFT DOWN IN AN INTERSECTION. UPON EXITING ROTORCRAFT, FIRE WAS SPOTTED IN ENGINE COMPARTMENT. FIRE EXTINGUISHER WAS USED. DURING FURTHER INVESTIGATION NOTED THAT NR 4 TURBINE BLADE SECTION SHOWED DAMAGE AND BLADE MISSING. A LOUD EXPLODING NOISE COMING FROM THE REAR OF THE ACFT. THE EXPLOSION WAS FOLLOWED BY A LONG SUSTAINED WHINING NOISE COMING FROM THE ENGINE, WITH A CONSTANT SOUND OF A WARNING TONE IN THE BACKGROUND. INSTANTLY, THE PILOT OBSERVED THE N1 AND N2 NEEDLES FALLING RAPIDLY. THE PILOT IMMEDIATELY IDENTIFIED THE SITUATION AS AN ENGINE FAILURE AND ENTERED AN AUTOROTATION.

YWYR201209158126	LANCAR	CONT	SPARK PLUG	CRACKED
10/26/2010	LC41550FG	TSIO550C	RHB32S	

DURING ANNUAL INSPECTION, 5 OF THE 12 ACFT SPARK PLUGS WERE FOUND TO HAVE CRACKS IN THE ELECTRODE INSULATORS. ENGINE CYLINDERS WERE INSPECTED USING BORESCOPE AND NO DEFECTS WERE FOUND. REPLACED DEFECTIVE SPARK PLUGS WITH NEW.

YWYR201209158048	LANCAR	CONT	SPARK PLUG	CRACKED
9/13/2010	LC41550FG	TSIO550C	RHB32S	

DURING AN ANNUAL INSPECTION, ONE OF TWELVE SPARK PLUGS WERE FOUND TO HAVE A CRACKED ELECTRODE INSULATOR. SPARK PLUG WAS REPLACED WITH NEW PART.

YWYR201209157151	LANCAR	CONT	SPARK PLUG	CRACKED
5/21/2009	LC41550FG	TSIO550C	RHB32S	

DURING ANNUAL INSPECTION, 1 OF THE 12 ENGINE SPARK PLUGS WAS FOUND TO HAVE A CRACKED ELECTRODE INSULATOR.

YWYR201209149366	LANCAR	CONT	SPARK PLUG	CRACKED
9/7/2012	LC42550FG	IO550N	RHB32S	ENGINE

PILOT REPORTED THAT WHILE IN CRUISE FLIGHT, HE FELT AN OCCASSIONL VIBRATION AND SURGE IN POWER. PILOT ALSO NOTICED THAT HIS NR 3 CYLINDER EGT WOULD FLUCTUATE ABOUT 20 DEGREES AND ENGINE RPM WOULD FLUCTUATE BY APPROXIMATELY 30 RPM. CHANGES IN FUEL MIXTURE, PROP CONTROL, OR POWER SETTINGS DID NOT AFFECT THE CONDITION. PILOT LANDED ACFT WITHOUT INCIDENT. UPON INSPECTION OF ENGINE, 3 OF THE 12 RHB32S WERE FOUND TO HAVE CRACKED INSULATORS. WE HAVE SEEN THESE PN SPARK PLUGS CRACKED QUITE FREQUENTLY. ALL SPARK PLUGS WERE REPLACED WITH MASSIVE ELECTRODE SPARK PLUGS IAW SIL03-2B. ENGINE OPERATION POST SPARK PLUG REPLACEMENT WAS NORMAL.

NI6R20120913007	LKHEED	WRIGHT	CYLINDER	FAILED
9/6/2012	P2V5F	R335034	433419	LT ENGINE

DURING CRUISE FLIGHT, THE LT RADIAL ENGINE NR 2 CYLINDER SUFFERED A CATASTROPHIC FAILURE. BOTH FRONT AND REAR OIL SUMP CHIP DETECTOR WARNING LIGHTS ILLUMINATED SIMULTANEOUSLY AND THE ENGINE EXPERIENCED SUDDEN STOPPAGE. THE CREW COMPLETED THE EMERGENCY SHUTDOWN CHECKLIST, FEATHERED THE PROPELLER, AND DECLARED AN IN-FLIGHT EMERGENCY. LANDING WAS UNEVENTFUL. UPON INITIAL INSPECTION, THE NR 2 CYLINDER WAS FOUND TO HAVE SEPARATED FROM ITS SEAT AND THE PISTON WAS FOUND TO HAVE EXITED THE CYLINDER TO THE RIGHT. ALL ENGINE COMPONENTS REMAINED WITH THE ACFT. COMPLETE ENGINE TEARDOWN IS REQUIRED.

2012FA0000564	LKHEED	WRIGHT	SKIN	LOOSE
8/13/2012	P2V7	R3350*		ZONE 600

FOUND WING SKIN AT THE ATTACHING FASTENERS AT THE RT LOWER FWD SPAR CAP RUNNING FOR APPROX 20" TO HAVE WORKED LOOSE. SKIN CAN BE PUSHED UP AND DOWN APPROX .020". UPON REMOVAL OF THE L/E AND NACELLE PANEL, A 4" CRACK IN THE WING SKIN WAS DISCOVERED RUNNING AFT AT APPROX WS 120. CRACK RUNS FROM FWD EDGE OF SKIN THROUGH 2 FASTENERS. NO ADDITIONAL STRUCTURES WERE FOUND TO BE DAMAGED BY VISUAL INSP AND VERIFIED BY EDDY CURRENT.

2012FA0000534	MOONEY	LYC	BUNGEE	JAMMED
6/6/2012	M20J	IO360A3B6D	740188000	ELEVATOR

UPON PERFORMING A PREFLIGHT INSPECTION OF THE ELEVATOR FOR FREE AND CORRECT MOVEMENT THE ELEVATOR REMAINED STUCK IN THE FULL UP POSITION. PUSHING THE YOKE IN TOWARDS THE INSTRUMENT PANEL WAS NOT POSSIBLE, MINIMUM FORCE WAS USED TO TRY TO FREE THE CONTROL IN ORDER TO AVOID FURTHER DAMAGE OR BENDING OF CONTROL RODS. THE FLIGHT WAS ABORTED. AFTER FURTHER INVESTIGATION THE PROBLEM WAS NARROWED DOWN TO THE LEFT BUNGEE ASSY-TRIM ASSIST, PN 740188-000 WHICH WAS JAMMED.

2012FA0000661	MOONEY	LYC	GASKET	UNKNOWN
9/27/2012	M20J	IO360A3B6D		MAGNETO

ENGINE STARTED TO LEAK OIL. FOUND MAGNETO LOOSE TO ENGINE BUT HOLD DOWN BLOCKS WERE TIGHT TO THE ENGINE. THIS CAUSED DAMAGE TO THE MAGETO CASE. MEASURED A NEW GASKET AND ITS THICKNESS IS .034. THE NEW GASKETS, ARE THINNER THAN USED, WAS THE PROBLEM DUE TO THE HOLD DOWN BLOCKS NOT PROVIDING PROPER CLAMPING TENSION.

ESMR2012090401	PILATS	PWA	UNKNOWN	UNKNOWN
8/24/2012	PC1245	PT6A67B		ENGINE

POWER APPEARED TO BE NORMAL ON TAKEOFF AND THE INITIAL CLIMBOUT. CLIMBING THROUGH ABOUT 16,500 FT, OBSERVED THAT POWER CONTROL LEVER WAS UP AGAINST FORWARD STOP AND WERE BELOW BOTH MAXIMUM ITT AND TORQUE LIMITS. ALL OTHER PARAMETERS SEEMED NORMAL, ELECTED TO CONTINUE CLIMB TO 24,000 FT.

C41R727N	PILATS	PWA	YOKE	BINDING
9/27/2012	PC1247	PT6A67		NLG STEERING

ACFT WAS UNDERGOING AN ANNUAL INSPECTION. ACFT WAS PLACED ON JACKS TO COMPLETE CHECKLIST GEAR ITEMS. INSPECTING TECH NOTICED AN UNUSUAL NOISE FROM THE NLG AREA. ON FURTHER INVESTIGATION, DISCOVERED NLG STEERING YOKE ASSEMBLY BINDING. R & R RETAINING WASHER, BOLT, ROD END ASSY, D-RING, RING, AND CLEVIS PIN.

2012FA0000524	PIPER	LYC	ENGINE	POWER LOSS
7/23/2012	PA25235	O540B4B5	O540B4B5	ZONE 400

DURING BANNER TOW OPERATIONS, IN CRUISE FLIGHT AT APPROX 600' AGL, THE PILOT REPORTED THAT THE ENGINE STARTED TO SHUTTER VIOLENTLY AND SUBSEQUENTLY BEGAN TO RAPIDLY LOSE POWER. CARBURETOR HEAT WAS APPLIED WITH NO EFFECT. THE PILOT WAS FORCED TO PERFORM EMERGENCY DITCHING PROCEDURES.

2012FA0000549	PIPER	LYC	HOSE	FAILED
8/6/2012	PA28140	O320E2A	124F0018CR0460	OIL COOLER

PILOT REPORTED AFTER LANDING, DURING FUEL TOP OFF FOR NEXT FLIGHT, A POOL OF OIL UNDER THE ENGINE COWL, INVESTIGATION SHOWED ONE OF THE OIL COOLER HOSES HAD SPLIT AND DUMPED APPROX 6 QTS OF OIL , THESE 2 HOSES WHERE CHANGED 7.58 HOURS PRIOR TO THIS EVENT, BOTH HOSES WERE CHANGED AT THE LAST ANNUAL INSPECTION TO C/W AD95-26-13. OWNER REQUESTED THE OTHER HOSE BE CHANGED AS WELL AS THE DEFECTIVE ONE, HE SAID HE WAS CONCERNED ABOUT POSSIBLE DEFECTIVE HOSE MATERIAL BEING SHIPPED TO THE HOSE SHOP. AFTER REMOVAL FROM ENGINE OUTER FIRE SHIELD, MATERIAL FOUND SPLIT OPEN IN 3 PLACES, THE OUTER FIRE SHIELD WAS NOT REMOVED. THE PARTS WERE RETURNED FOR INVESTIGATION, NOTE: THE SUSPECT HOSE HAD 20PSI APPLIED TO IT AND A LARGE LEAK WAS NOTED IN 2 PLACES BLOWING THRU THE FIRE SHIELD.

2012FA0000575	PIPER	LYC	CARBURETOR	LEAKING
5/25/2012	PA28161	O320D3G	MA4SPA	ENGINE

AIRCRAFT HAD MULTIPLE STALLING ISSUES. INSPECTION REVEALED BLUE STAINS BETWEEN CARBURETOR BODY AND CARB BOWL. REMOVED CARBURETOR FOR O/H IAW SB 366B.

2012FA0000576	PIPER	LYC	CARBURETOR	MALFUNCTIONED
3/13/2012	PA28161	O320D3G	105217	ENGINE

AIRCRAFT HAD MULTIPLE STALLING ISSUES. CARBURETOR WAS REMOVED AND O/H.

2012FA0000592	PIPER	LYC	CYLINDER HEAD	CRACKED
8/24/2012	PA28161	O320D3G		ENGINE

CYLINDER HEAD CRACKED AT SPARK PLUG.

2012FA0000553	PIPER		DOWNLOCK SWITCH	CORRODED
8/9/2012	PA28RT201		3674214	MKLG

DURING LANDING GEAR EXTENSION, PILOT NOTED A FLICKERING RT MLG LIGHT. RECEIVED VISUAL REPORT OF HIS LANDING GEAR CONDITION FROM PILOTS ABOARD GROUND AND AIRBORNE AIRCRAFT, WHO INDICATED HIS LANDING GEAR WAS DOWN. DURING THE LANDING ROLLOUT, THE RT MLG COLLAPSED. INSPECTION OF LANDING GEAR MECHANICAL COMPONENTS REVEALED CORROSION AND LACK OF LUBRICATION. INSPECTION OF RT GEAR

DOWN LIMIT SWITCH REVEALED IT WAS RIGGED TO FULL UP POSITION, POSSIBLY MAKING CONTACT WITH RT DOWNLOCK HOOK PREMATURELY.

2012FA0000566	PIPER		BULKHEAD	CRACKED
8/13/2012	PA31350		44758004475801	ZONE 100

FOUND SMALL CRACKS IN THE LOWER SECTIONS OF BULKHEADS. LOCATED TWO SMALL AREA'S OF FRETTING CORROSION ON THE LOWER INBD SPAR CAPS OF BOTH WINGS. PERFORMED EDDY-CURRENT INSPECTION OF THESE AREA'S AND FOUND CRACK INDICATIONS.

2012FA0000636	PIPER		BULKHEAD	CRACKED
9/15/2012	PA31350			BS 317.75

UPON REMOVAL OF VERTICAL STABILIZER AND THE REINFORCEMENT PLATE FROM THE AFT FUSELAGE BULKHEAD AT FS STATION 317.75, FOUND A CRACK, APPROX .75" IN LENGTH AND LOCATED IN THE BEND RADIUS OF THE BULKHEAD JUST ABOVE THE LT UPPER ATTACHMENT BOLT HOLE. AD96-12-12 AND SB 636A ADDRESSES THIS ISSUE, BUT IS OUT OF OUR AIRCRAFT S/N RANGE. NOTE: THIS IS THE SECOND ACFT WE HAVE FOUND WITH THIS ISSUE AT THIS BULKHEAD LOCATION.

2012FA0000637	PIPER	LYC	ACCESS PANEL	CORRODED
9/15/2012	PA31350	TIO540*		LT WING

DURING AN ANNUAL INSPECTION, FOUND THAT THE ACCESS PANELS THAT COVER THE ACFT FUEL BOWLS, FUEL SELECTOR VALVES, AND ELECTRIC FUEL BOOST PUMPS HAVE CHAFED INTO THE WING SPAR REINFORCEMENT PLATES AND CAUSED FRETTING CORROSION. HAD A LEVEL 3 NDT TECH PERFORM A EDDY-CURRENT INSPECTION ON THESE AREA'S AND REPORTED PITTING CORROSION AND FATIGUE CRACKING ON THE RT LOWER SURFACE OF THE WING SPAR REINFORCEMENT PLATE IN EXCESS OF 0.020, AND THE LT WING SPAR REINFORCEMENT PLATE WITH PITTING CORROSION IN EXCESS OF 0.010.

2012FA0000635	PIPER	LYC	BULKHEAD	CRACKED
9/15/2012	PA31350	TIO540*	4475800	ZONE 100

FOUND THE LT WING FORWARD SPAR ATTACHMENT BULKHEAD ASSY, AND THE RIGHT ASSY, HAVE CRACKS IN THE LOWER SECTIONS OF THESE PARTS.

2012FA0000675	PIPER	LYC	BULKHEAD	CRACKED
10/5/2012	PA31350	TIO540*	4068208	ZONE 200

ON REMOVEL OF THE VERTICAL STABILIZER AND REINFORCEMENT PLATE FROM THE AFT FUSELAGE BULKHEAD AT FS 317.75, A CRACK APPROXIMATELY .75 INCHES IN LENGTH WAS LOCATED IN THE BEND RADIUS OF THIS BULKHEAD JUST ABOVE AND TO THE RIGHT OF THE UPPER LEFT VERTICAL STABILIZER ATTACHMENT HOLE.

2012FA0000673	PIPER	LYC	BULKHEAD	CRACKED
10/3/2012	PA31350	TIO540*	4475800	ZONE 100

THE LT WING FORWARD BULKHEAD ASSY FOUND WITH CRACKS IN THE LOWER SECTIONS, EMULATING IN THE BEND RADIUS AND TABS USED FOR ATTACHMENT TO THE ACFT FLOOR STRUCTURE. THIS BULKHEAD HAS CRACKS ON THE FORWARD AND AFT SECTIONS OF THE ASSY. THIS AREA DUFFICULT TO INSPECT DUE TO IT'S LOCATION WITH ACFT INTERIOR PANELS INSTALLED. SEE DWG, ITEM D.

2012FA0000587	PIPER	LYC	LINE	BROKEN
8/22/2012	PA31350	TIO540J2B	LW120980100	FUEL INJECTOR

ON DEPARTURE, THE PILOT REPORTED THAT ALL ENGINE INDICATIONS WERE NORMAL PRIOR TO ROTATION. CLIMBING OUT OF 4000 FT, THE RT ENGINE LOST POWER. PILOT PROCEEDED WITH THE ENGINE OUT PROCEDURES AND DETERMINED THAT THE RT ENGINE WAS ONLY PRODUCING 30 INCHES OF MANIFOLD PRESSURE AND THAT THE FUEL FLOW WAS 8 PSI. RETURNED TO DEPARTURE AND LANDED WITHOUT INCIDENT. WITH THE ENGINE STILL PRODUCING POWER DID NOT SHUTDOWN ENGINE. MX INSPECTED THE RT ENGINE AND FOUND THE NR 1 CYLINDER INJECTOR LINE BROKEN. AD2011-26-04 LAST COMPLIED WITH ON 05-24-2012 AIRCRAFT TT: 20555.3 TIME SINCE LAST INSPECTION 67.7 HOURS. NO DEFECTS WERE FOUND DURING THE INSPECTION.

2012FA0000638	PIPER	PWA	O-RING	DEFORMED
9/19/2012	PA31T1	PT6A60A	AS3209017	OIL SYSTEM

SECOND SEGMENT OIL PRESSURE TRANSFER TUBE AT "A" FLANGE BRACKET O-RING SEAL FAILURE. SEAL WAS ROLLED AND BROKE WHILE REMOVING. SEAL WAS INSTALLED 76.1 HRS. BEFORE AT HOT SECTION SERVICE. SEAL MAY NOT HAVE BEEN LUBED PRIOR TO INSTALLATION.

FQAR2012082305323	PIPER	EATON	WIRE	BROKEN
8/23/2012	PA44180			DOWNLOCK SWITCH

RIGHT MAIN LANDING GEAR DID NOT INDICATE DOWN AND LOCKED. FOUND DOWNLOCK SWITCH TO HAVE BROKEN WIRE AT THE POINT WHERE WIRES EXIT THE SWITCH. THIS WAS CAUSED BY REPEATED MOVEMENT OF THE WIRE DURING RETRACTION AND EXTENSION.

FQAR1210031206154	PIPER	ROD END	BROKEN
9/30/2012	PA44180	452729	MLG

AFTER TAKEOFF LANDING GEAR WAS RETRACTED. IMMEDIATELY AFTER INDICATION OF GEAR UP, A GEAR WARNING WAS THEN INDICATED. AFTER LANDING IT WAS FOUND THAT THE ROD END BEARING IN THE NOSE GEAR ACTUATOR HAD BROKEN. THIS ALLOWED THE NOSE GEAR TO EXTEND AND RETURN TO A DOWN AND LOCKED POSITION.

FQAR1210011206041	PIPER	ANGLE	CRACKED
10/1/2012	PA44180	886331003	LEFT NACELLE

DURING A SCHEDULED INSPECTION, A CRACK WAS FOUND IN THE NACELLE ANGLE. UPON FURTHER INVESTIGATION, IT WAS FOUND THAT THE CRACK WAS BETWEEN THE 2 RIVETS THAT EXTENDED THRU THE WING SKIN INTO CAP (PN 67097-002 OR -003 DEPENDENT ON SIDE) WHICH IS ATTACHED TO A WEB (PN 67079-000 OR 001 DEPENDENT ON SIDE) THAT THE MAIN GEAR AFT ATTACH POINT IS MOUNTED. IT IS SUSPECTED THAT THIS IS A FAILURE DUE TO FATIGUE.

FQAR1208231205324	PIPER	WIRE	BROKEN
8/23/2012	PA44180		DOWNLOCK SWITCH

RIGHT MAIN LANDING GEAR DID NOT INDICATE DOWN AND LOCKED. FOUND DOWNLOCK SWITCH TO HAVE BROKEN WIRE AT THE POINT WHERE WIRES EXIT THE SWITCH. THIS WAS CAUSED BY REPEATED MOVEMENT OF THE WIRE DURING RETRACTION AND EXTENSION.

2012FA0000579	PIPER	SCISSOR LINK	DETACHED
8/20/2012	PA46500TP	691334	NLG

AFTER TAKEOFF, LANDING GEAR RETRACTED, PILOT NOTED THAT THE "HYD PUMP" ANNUNCIATOR STAYED ON. ON ARRIVAL AT DESTINATION, PILOT SELECTED GEAR DOWN AND ALL THREE GREEN LIGHTS ILLUMINATED. SOMETHING DIDN'T FEEL RIGHT WITH THE ACFT AND A FLY-BY OF THE CONTROL TOWER REVEALED THAT THE NOSE WHEEL WAS POSITIONED SIDE-WAYS, NOT IN LINE WITH THE ACFT. PERFORMED AN EXTENDED RUNWAY LANDING, HOLDING THE NOSE UP AS LONG AS POSSIBLE TO REDUCE AIRSPEED. OPERATOR PERFORMED SAFE LANDING BUT NLG TIRE, TUBE, AND WHEEL WERE DAMAGED. ON INSPECTION IT WAS REVEALED THAT THE NOSE WHEEL CENTER SCISSORS BOLT FELL OUT IN FLIGHT. SUSPECT COTTER PEN FAILED DUE TO TOW STRAP INTERFERENCE DURING GROUND TOWING, CAUSING THE COTTER PEN TO WORK HARDER AND BREAK. REPLACING THE CASTELLATED NUT WITH ANOTHER CASTELLATED NUT WHICH INCORPORATES A FIBER-LOCKING FEATURE, IN ADDITION TO A COTTER PEN. ADVISE OPERATORS TO PAY EXTRA CLOSE ATTENTION TO THE NLG SCISSORS DURING PRE-FLIGHT INSPECTIONS.

2012FA0000685	PITTS	WHEEL	FAILED
9/24/2012	S2B	501D	TAIL

AFTER INSTALLATION OF A NEW TAIL WHEEL ASSY, ON FIRST LANDING WHICH PROGRESSED NORMALLY, THE RUBBER TREAD SEPARATED FROM THE ACFT. LANDING WAS NORMAL BUT TAXIED BACK ON THE REMAINING ALUMINUM HUB.

2012FA0000645	PITTS	TIRE	SEPARATED

9/25/2012	S2B	D501A	5350	TAIL WHEEL

A NEW D501A TAILWHEEL ASSEMBLY WAS INSTALLED AND AFTER THE FIRST LANDING, THE SOLID RUBBER TIRE SEPARATED FROM THE WHEEL ASSEMBLY.

2012FA0000559	RAYTHN		CONTROL SWITCH	MALFUNCTIONED
7/30/2012	C90GT		A4503M122	MLG

AFTER TAKEOFF, LANDING GEAR RETRACTED WITH THE LANDING GEAR CONTROL SWITCH IN THE DOWN AND LOCKED POSITION. THE LANDING GEAR RETRACTED UNCOMMANDED AS SOON AS THE ACFT ACHIEVED A WEIGHT-OFF-WHEELS CONFIGURATION DURING TAKEOFF ROLL.

2012FA0000680	RAYTHN	GARRTT	SUPPORT BRACKET	CRACKED
9/28/2012	HAWKER800XP	TFE7315BR	25FC5804	RT MLG DOOR

DURING BASE MAINTENANCE, FOUND CRACKED SUPPORT BRACKET, RT MLG DOOR.

2012F00087	RAYTHN		LEVER	CORRODED
4/6/2012	HAWKER850XP		S25CX1037	

COMPONENTS (LEVERS AND ASSOCIATED RODS) FOUND CORRODED. NO CORROSION PREVENTATIVE MATERIAL FOUND ON PARTS. CORROSION EXTENSIVE BUT ONLY ON THESE PARTS IN PARTICULAR. SURROUNDING AREAS IN BETWEEN THE WHEEL WELLS APPEAR TO BE CLEAN AND FREE FROM CORROSION. AFFECTED PARTS HAVE FLAKING WHITE POWDER BUILD UP AND DEEP PITTING ON THE ALUMINUM. ROD ENDS HAVE RUST AND STIFF RESISTANCE TO ROTATION. ATTACHING BOLTS AND COTTER PINS RUSTY AND PITTED WITH CORROSION. DISCUSSION WITH TECHS SUGGEST THAT CLEANING AND LUBRICATION AS REQUIRED BY THE MM AND INSPECTION INTERVALS DOES MUCH TO ALLEVIATE THIS SITUATION.

2012FA0000643	RKWELL		STIFFENER	CRACKED
9/17/2012	NA26560		26531204451	FUSELAGE

WHILE PERFORMING A ROUTINE INSPECTION, FOUND A CRACK IN THE LT STIFFENER. CRACK PROPAGATED FROM A CORROSION PIT IN THE HAT SECTION STIFFENER. REPLACED IAW SRM AND RETURNED TO SERVICE.

2012FA0000611	SNIAS	TMECA	BLADE	CRACKED
8/29/2012	AS350B2	ARRIEL1	355A12004008	TAIL ROTOR

TAIL ROTOR BLADE MAKING A POPPING NOISE COMING FROM THE SPAR WHEN FLEXED. FOUND BLADE SPAR CRACKED IN TWO PLACES, ONE APPORXIMATELY 48 MM OTBD FROM CENTER OF SPAR , 20 MM LONG FROM L/E TO CENTER OF SPAR ON TARGET BLADE AND ONE APPROX 51 MM LONG FROM L/E TO CENTER SPAR ON TARGET BLADE AND 1 APPROXIMATELY 51 MM OTBD FROM CENTER OF SPAR, 32 MM LONG FROM L/E TO CENTER OF SPAR, 32 MM LONG FROM L/E TO CENTER OF SPAR ON OPPOSITE BLADE. COULD BE CAUSED TO AGE OF BLADE. REPLACED THE ROTOR BLADE

2012FA0000612	SNIAS	TMECA	SWITCH	STUCK
8/28/2012	AS350B3	ARRIEL2B1		SERVO CONTROL

SERVO LIGHT DOES NOT EXTINGUISH WHEN SERVO TEST SWITCH IS PRESSED. . FOUND SWITCH ON SERVO STICKING