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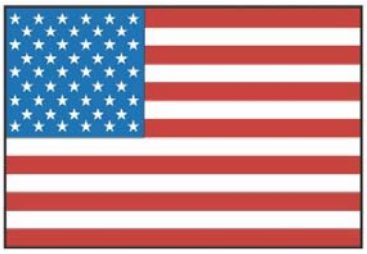
Federal Aviation Administration

AFS-600
Regulatory Support Division

ADVISORY CIRCULAR

43-16A

AVIATION MAINTENANCE ALERTS



ALERT NUMBER 398

SEPTEMBER 2011

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

AVIATION MAINTENANCE ALERTS

The Aviation Maintenance Alerts provides the aviation community with an economical means to exchange service experiences and to assist the FAA in improving aeronautical product durability, reliability, and safety. We prepare this publication from information operators and maintenance personnel who maintain civil aeronautical products pertaining to significant events or items of interest. At the time we prepared this document, we have not fully evaluated the material. As we identify additional facts such as cause and corrective action, we may publish additional data in subsequent issues of the Alerts. This procedure gives Alerts' readers prompt notice of conditions reported to the FAA Service Difficulty Reporting System (SDRS). We welcome your participation, comments, and suggestions for improvement. Send to: FAA; ATTN: Aviation Data Systems Branch (AFS-620); P.O. Box 25082; Oklahoma City, OK 73125-5029.

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

AIRPLANES

Boeing: 767-200; Broken Bleed-Air Duct; ATA 3610

A pilot's report states, "During takeoff, the EICAS *(Engine Indicating and Crew Alert System)* gave a 'Left Bleed Duct' message, followed by 'Leading Edge Slat Asymmetry'. After 45 minutes of flight, the aircraft returned to *(base)*. Ground inspection found the L/H wing, fixed leading-edge lower panel (511KB) missing, the L/H wing leading-edge air supply duct (and support clamp) dented and broken, *(a second)* support clamp *(missing)*, the left wing *(number one)* engine thrust pulley broken, and the left wing duct leak-loop support channel *(also)* broken. This aircraft was declared 'aircraft on ground—no spare parts in stock'. The rupture of the ducts caused the 'bleed air' and 'slat asymmetry' *(warning)* messages. *(Maintenance)* performed dye penetrant inspections to all ducts of the pneumatic system to find cracks. No *(other)* cracks were found."


6 2:56


6 2:54

Part Total Time: 86,482 hours (aircraft)

Cessna: T337G; Wing Structure Damage; ATA 5710

A repair station technician writes, "This aircraft was brought in for inspection per SAIB *(Special Airworthiness Information Bulletin)* CE10-20, and an Annual Inspection. The aircraft is equipped with Aviation Enterprises extended range fuel STC *(Supplemental Type Certificate)*, and Aviation Enterprises winglet wing tip STC. The aircraft is also equipped with *(this company's)* Stall Fence STC, and Boom to Vertical fairings. An inspection in accordance with the SAIB was performed.

"Compression bulges of the *(wing's)* internal stringers *(on the)* upper surface were noted on both wings between WS *(wing station)* 192 and WS 177. At the installation point of the long range fuel tank (WS 222), approximately half of all the 8-32 *(installation)* screws had no washers or nuts installed. (The structure looks to have been tapped for threads.) The L/H upper surface wing skin between WS 77 and WS 192 had 'smoking' rivets, and compression was evident in the skin. The R/H wing between WS 177 and WS 192 had compression bulging, 'smoking rivets', and cracks in the skin at WS 177.

"At WS 222.0, a 2 inch section of the lower part of the end rib was cut down from the lightening hole in an unacceptable fashion in both wings. The R/H wing at WS 55.0 (outboard of the boom) had a compression buckle in the upper surface wing skin.

"The stall fences (at the time of removal) were installed at WS 132. It was *(observed)* these fences had been previously located at three *(different)* areas in each wing. At WS 120, WS 90, and WS 81 the attachment *(fasteners)* at each location were 8-32 machine screw holes—these drilled and tapped through both the forward and rear spar caps for a total of 16 additional holes in each wing's upper spar caps.

"At R/H WS 121, the upper aft spar cap has one hole with no edge distance—this broken through the edge of the cap. Additionally (and unexplained) this same cap has 10 counter-sink holes *(hand-bored)* too deep (and oblong) for number 30 rivets.

"The *(remainder)* of the aircraft shows no evidence of structural overstress. My Chief Inspector has been involved with hundreds of Cessna 337 aircraft in his 32 year career—he has owned 42 *(such models)*. He has seen the effects of overstressed Skymaster wings many times. This stress appears in the upper leading edge skin just forward of the tank top at a 45 degree angle pattern (relevant to the leading edge), from WS 66 and/or WS 79.6—sometimes extending to WS 93.6. Additionally, the counter-sunk 10-32 screws in the fuel tank top covers often pull through the outer skin in cases of repetitive stress—with high total time cracks generally appearing at the tank top cover screw locations.

"STC's: 1) Wing tip fuel tanks: STC CA02055AT, 2) Aviation Enterprises Lightening Wing Tip: STC SA01094AT, 3) Tail to Boom fairings: STC SA01093AT.

"These three STC's were installed at Hobbs time 1,071.5 *(for a total)* 899.5 hours." *(Aircraft total time: 2,778.5 hours. Thank-you for taking time to itemize this mechanical disaster. Had you included photographs I would have needed "chalk" to settle my stomach—Ed.)*

Part(s) Total Time: 899.5 hours

Swearingen: SA227AC; Burned Deice Boot Wires; ATA 6112

"During a routine service check inspection," says a Chief Inspector, "two of the four propeller deice boot leads (P/N SMR23692) were found to have broken and burned ground wires. The ground wires were broken in the exact same place and showed small signs of burned or singed insulation at the point where the wire separates." *(Rotol propeller model R321482F8.)*

Part Total Time: 18,835.0 hours (prop time)

HELICOPTERS

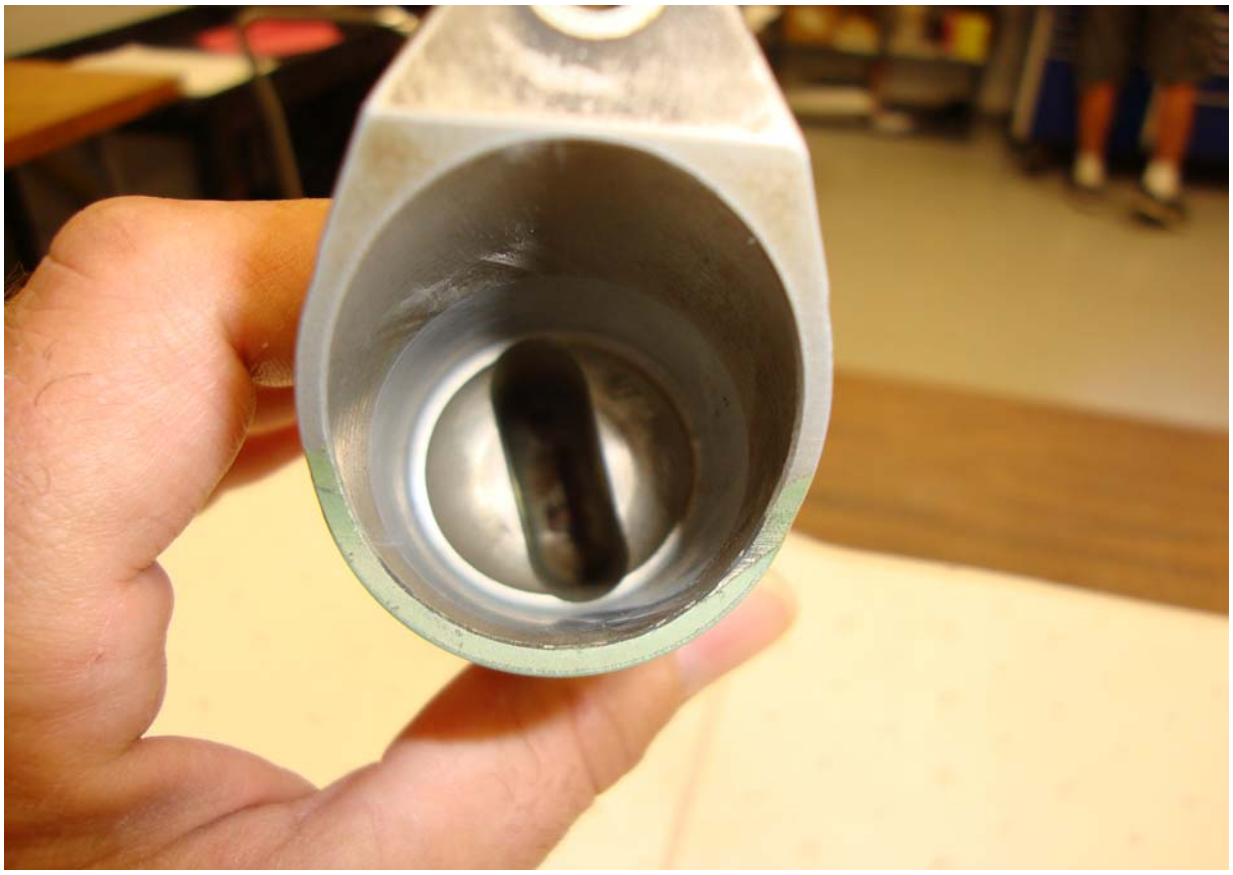
Bell: 47G-3B1; Loose Fuel Control Pneumatic Line; ATA 7320

A technician states, "The pneumatic *(control)* line (Pc) came loose at the fuel control unit, causing the engine to spool down in flight. Numerous Allison (now Rolls Royce) Commercial Service Letters have been issued on this topic—but they seem not to have been followed. An AD *(Airworthiness Directive)* should be considered to enforce compliance with *(this)* line security. The pneumatic system lines on these series engines are a known and continuing problem. *(When)* a pneumatic line to the engine fuel control comes loose on this series of engine, it causes loss of engine power control." *(Allison engine model: 250C10D; Line P/N: 6870035. The SDRS database lists five of these pneumatic control lines.)*

Part Total Time: 2,256.0 hours

Eurocopter: EC135T1; De-bonded Tail Rotor Blades; ATA 6410

A helicopter technician says, "While performing a 1200 hour/36 month inspection of the tail rotor assembly, *(I)* found three tail rotor blade (P/N L642A2002101) balance weight pockets de-bonded from the blades. One is cracked and has a piece missing. These three blades were installed together 696.5 hours ago."



Part Total Time: 696.5 hours

Eurocopter: AS350BA; Failed Hydraulic Pump; ATA 2913

A submission from a Part 135 operator states, "The hydraulic pump failed in flight. *(Our)* pilot made a run-on landing and shut down without damage. The hydraulic pump (P/N A50226780) was removed and replaced . Splines on the pump drive coupling were found worn. *(We)* replaced this pump with a new, 0.0 TSN *(time since new)* pump (P/N 704A34310006) and a serviceable drive coupling." *(Pump manufacturer: Hydroperfect International. The SDRS database finds the "new" pump with 23 entries—Ed.)*

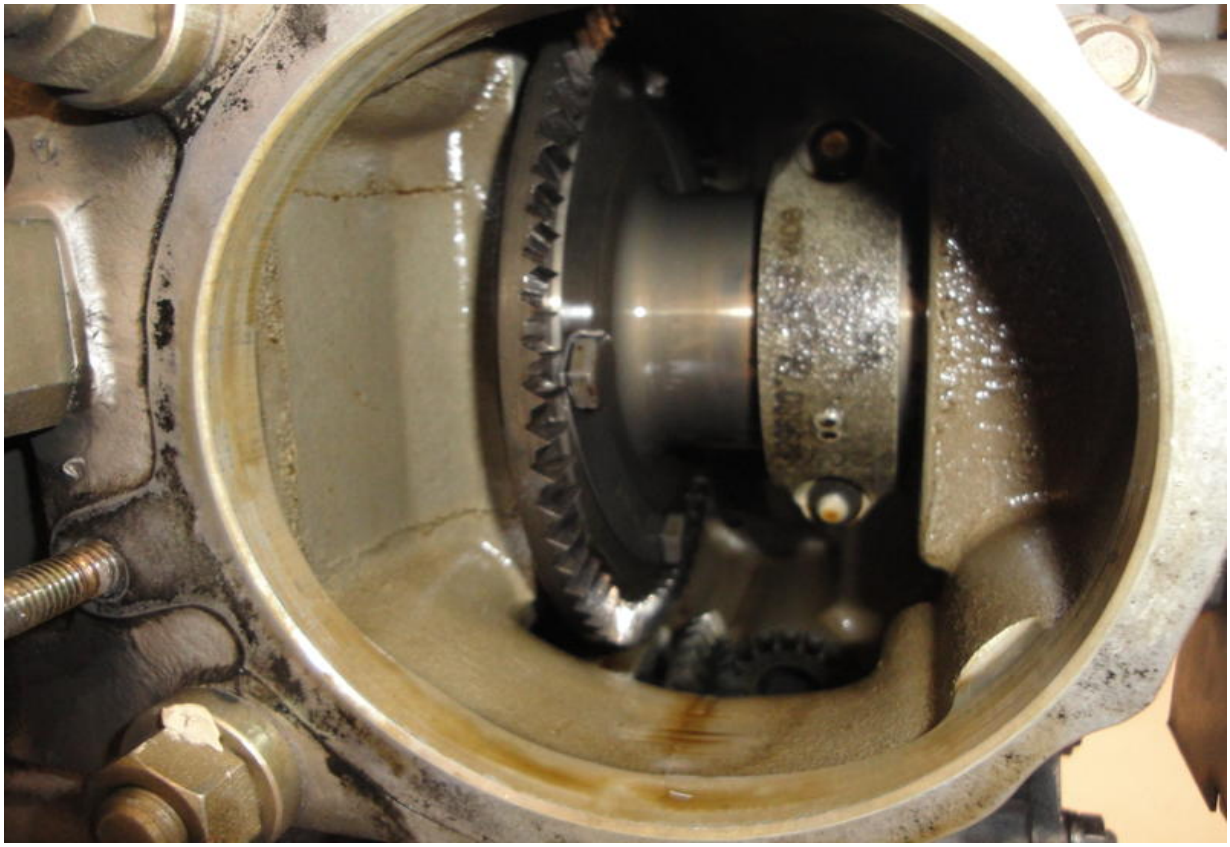
Part Total Time: (unknown)

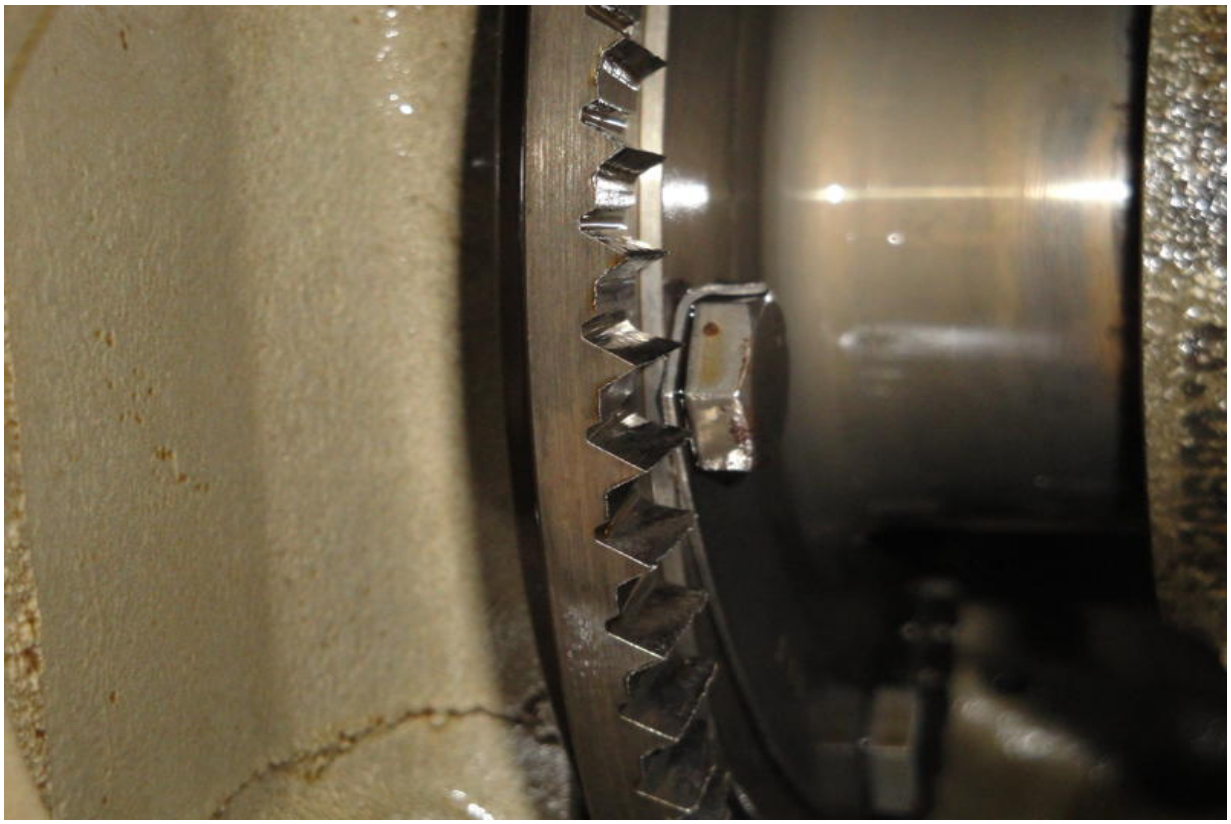
POWERPLANTS

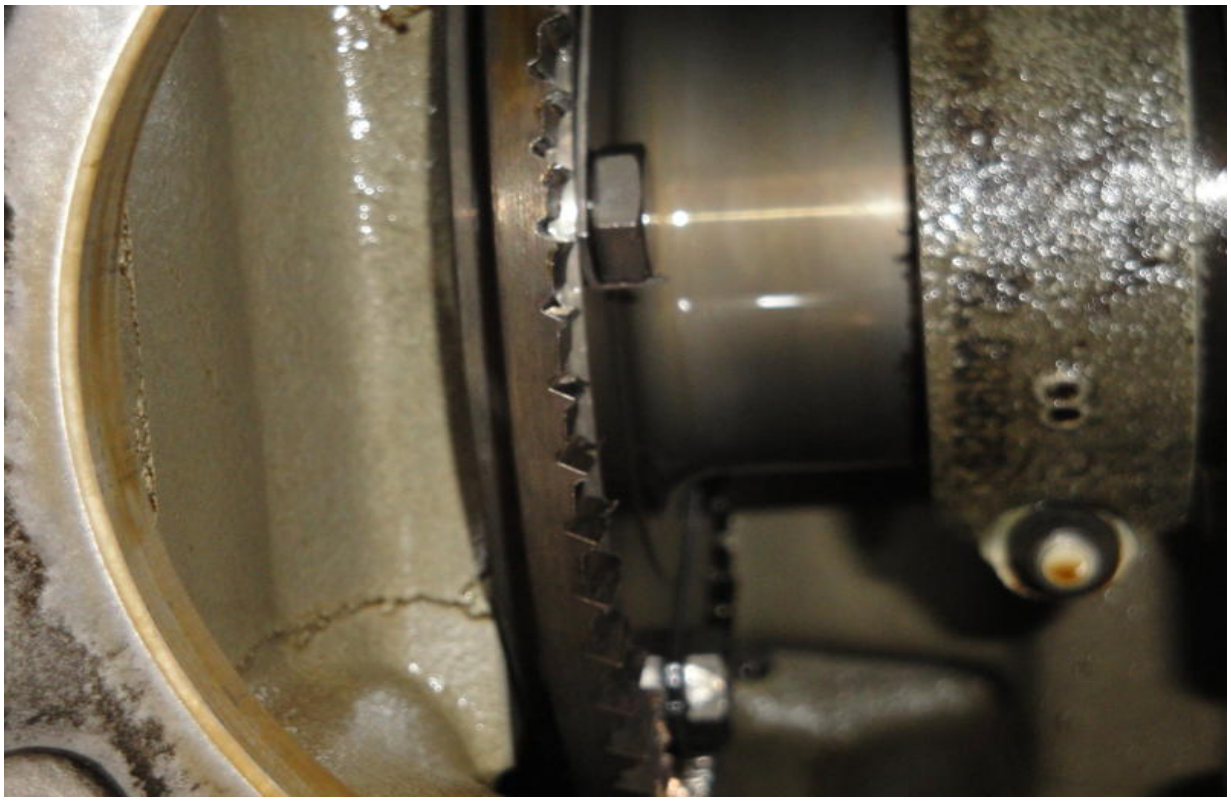
Continental: IO550N; Worn Crankshaft Gear; ATA 8520

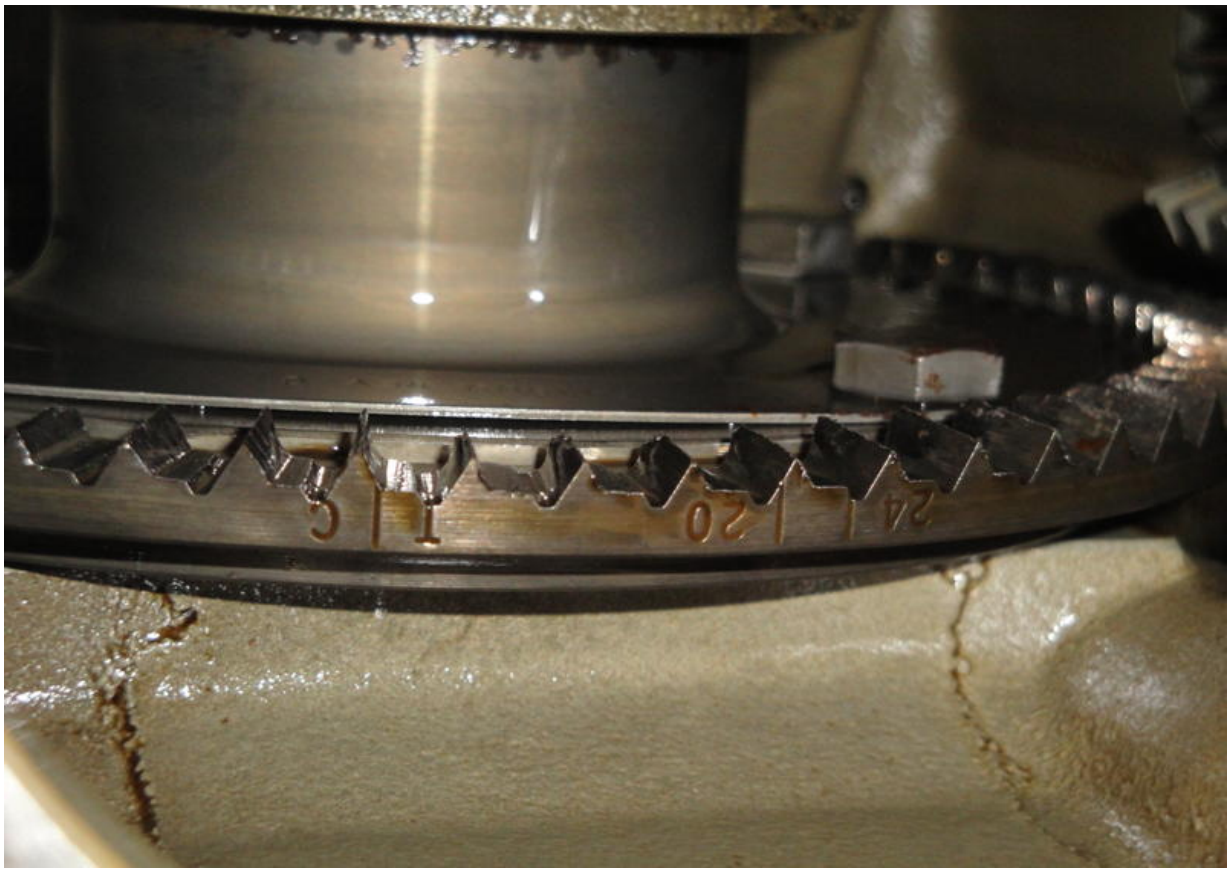
(This report references at Cessna R172K aircraft.)

"While performing an Annual Inspection of the engine," says this submitter, "*(I)* noticed the alternator housing was loose. I *(also noted)* the 500 hour alternator inspection was due. So, upon removal of the alternator for inspection, I *(observed)* all of the teeth on the crankshaft gear face were either missing or severely worn. There was no indication of alternator failure prior to this discovery. On the incoming engine run-up, oil pressure was *(seen)* to be on the lower side of the green band. However, the magnetic drain plug was covered with filings. Cutting open the oil filter found the paper element was covered in silver—*(but)* with no debris. If there wasn't a 500 hour inspection due on the alternator this problem would not have been found." *(Crankshaft gear P/N: 632018. The SDRS database reflects this part number eight times.)*







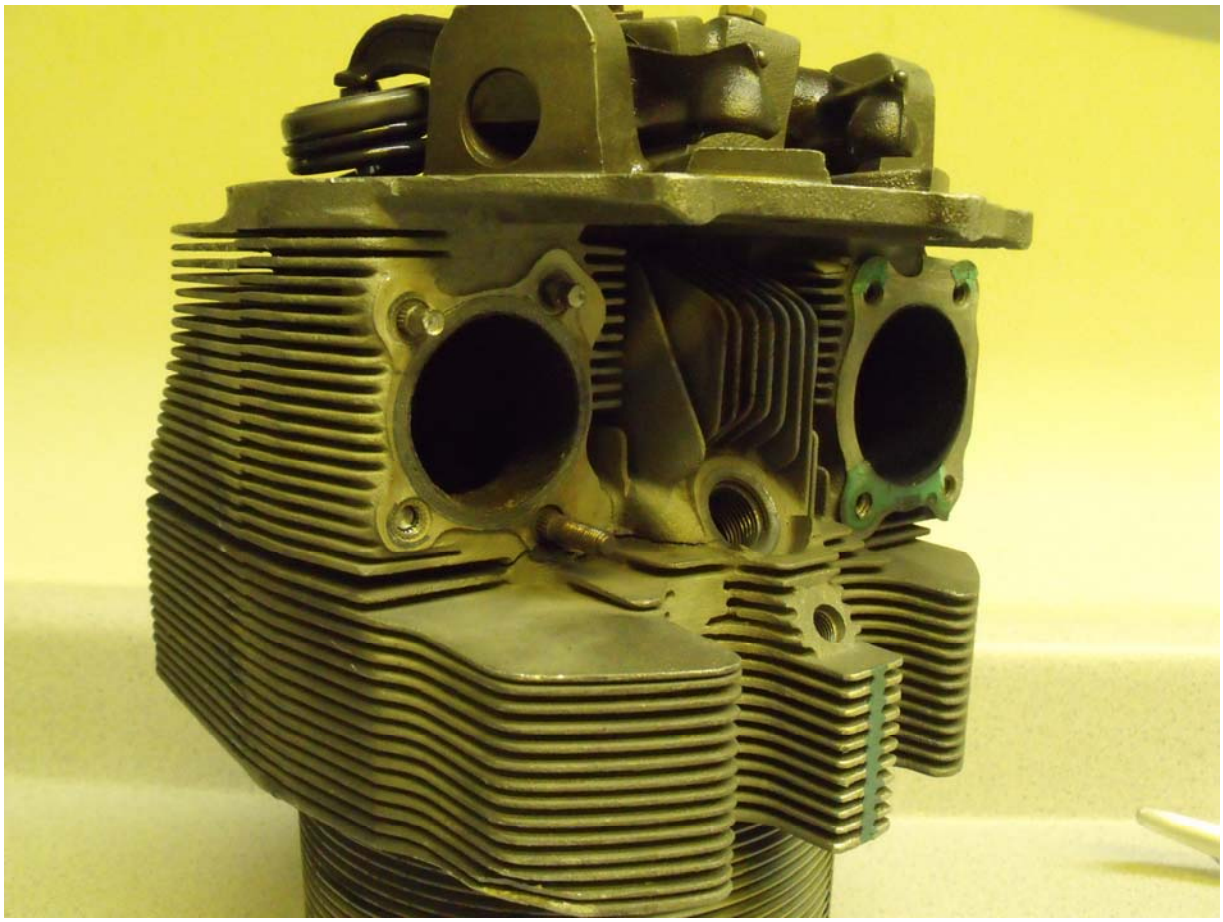

24 120 1C

(These are great photos—and you have most excellent eyeballs. There should be mandatory steak dinners for stuff like this—Ed.)

Part Total Time: 1,150.0 hours

ECI Cylinder: ECC712CN; Cracked Head; ATA 8530

A technician states, "On initial climb-out the pilot noticed a vibration, and elected to return for landing. The number two cylinder was found cracked—from the spark plug past the exhaust valve, *(continuing)* approximately three-fourths *(the distance)* around the cylinder's head. This cylinder *(P/N ECC712CN)* had good compression two months *(ago)*, after being repaired."



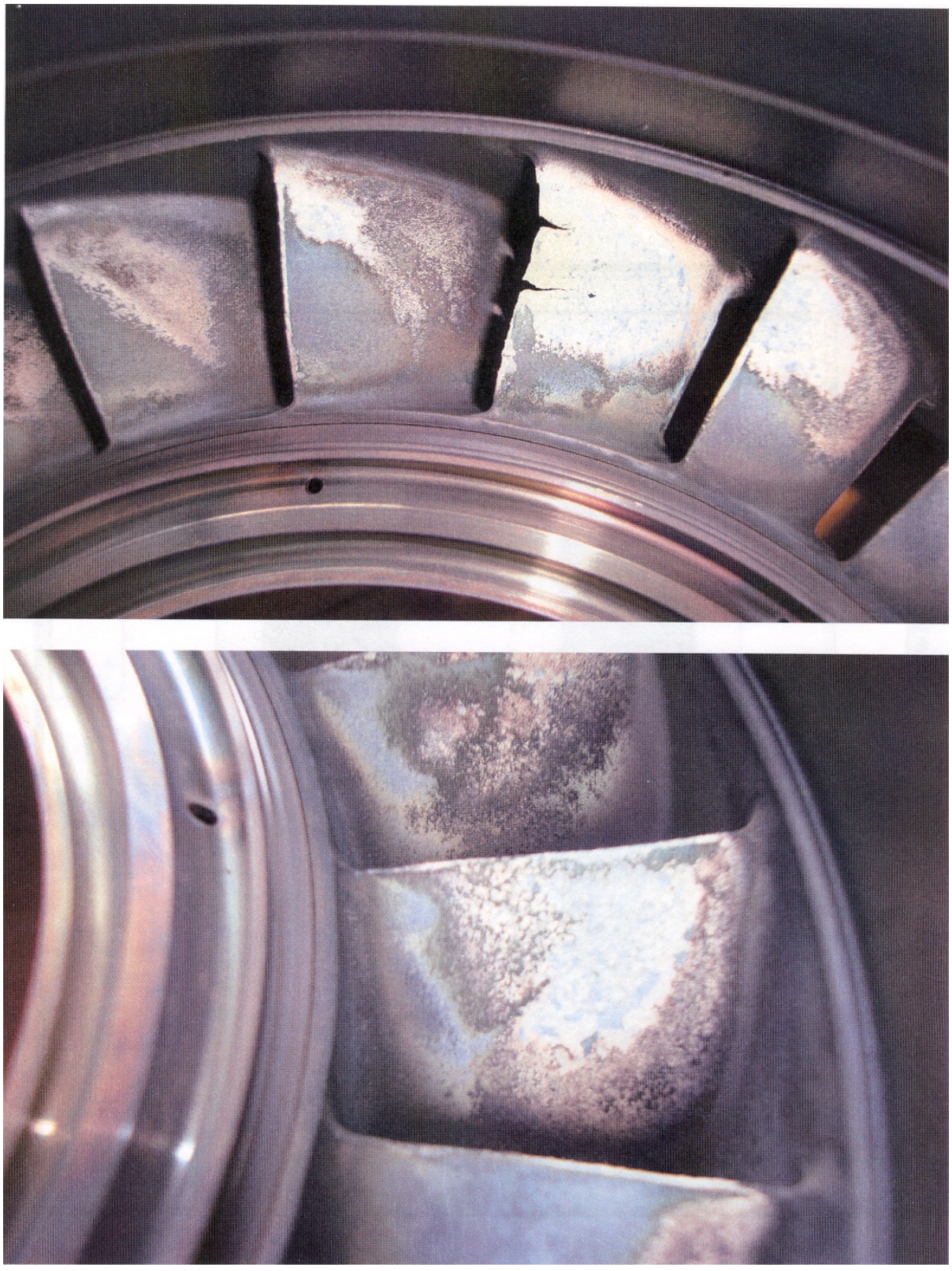
(Nice...ugly photos. Thanks—Ed.)

Part Total Time: 372 hours (since overhaul)

Turbomeca: Arriel 1D1; Cracked Nozzle Guide Vane; ATA 7250

(This report references a Eurocopter AS350B2 helicopter.)

"While performing modification TU347 to module 3," states this engine technician, "we discovered the second stage nozzle guide vane eroded and cracked. We reassembled module 3 and are sending it to a Turbomeca level 4 repair center for repair." *(Nozzle guide vane; P/N 2292401800.)*



Part Total Time: 1,439.0 hours

ACCESSORIES

Slick Magneto: 6310; Fractured Housing; ATA 7414

(This magneto belongs to a Continental 520 on a Beech 58.)

An unidentified submitter says, "The impulse coupling came apart and fractured the magneto housing." *(The impulse coupling P/N: M3050 has 14 entries in the SDRS database. Magneto 6310 has 36 entries.)*

Part Total Time: 1,376.0 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**
3HCR7720111				BEARING	ROUGH
7/7/2011			DPV1	2543734	FUEL CONTROL
BASIC INSPECTION OF UNIT: FOUND DRIVE BEARINGS VERY ROUGH.					
2011FA0000455		WILINT		BLADE	FAILED
7/11/2011		FJ442A			ENGINE
THE PILOT REPORTED A LOUD BANG AT 40K FT. DURING THE NEXT START, AT 15-20 PERCENT N2, THERE WAS A VIBRATION AND START ABORTED. AFTER WAITING 15-20 MINS, ANOTHER START ATTEMPTED, SOME VIBRATIONS AT 40 PERCENT N2, ENGINE STABILIZED. 40 MINS INTO FLT WAS ANOTHER LOUD BANG AND SOME VIBRATIONS FOR 1-2 SECONDS. PAX REPORTED AN FUMES IN CABIN, ALTHOUGH CREW DID NOT NOTICE. FLT CONTINUED WITHOUT INCIDENT. ON NEXT TAKEOFF, ITT WENT INTO AMBER FOR LESS THAN A SECOND. ENGINE RETURNED TO REPAIR STATION AND BORESCOPE INSPECTED UPON RECEIPT WITH NO UNUSUAL FINDING. ENGINE INSTALLED INTO TEST CELL FOR AN "AS RECEIVED" ATP. APPROX 1 HOUR INTO THE ATP, AFTER STABILITY & ACCELERATION CHECKS, ENGINE SURGED NEAR TAKEOFF POWER. DISASSEMBLY OF ENGINE REVEALED A FAILED 2ND STAGE IP BLADE. NO EVIDENCE OF FOREIGN OBJECTS WERE NOTED IN THE DISASSEMBLY PROCESS.					
2011FA0000529	AEROSP	ALLSN		SKIN	CRACKED
8/4/2011	AS355F2	250C20		355A1405220302	TAILBOOM
DURING INSPECTION, A LARGE CRACK WAS FOUND ON UPPER VERTICAL FIN NEAR THE FWD ATTACHMENT POINT. CRACK IS LOCATION ON L/E EXTENDING FROM RT SIDE TO LT SIDE OF ACFT IN THE AREA ABOVE THE FWD REINFORCEMENT. TOTAL LENGTH OF CRACK IS 8 INCHES. COULD BE IMPROPER SHIMMIN OF VERTICAL FIN OR FATIGUE OVER TIME.					
B62R20110714	AIRBUS	CFMINT		OXYGEN BOTTLE	LEAKING
7/14/2011	A340*	CFM565C4			MEDICAL
THERE ARE 6 MEDICAL OXYGEN CYLINDERS LOCATED IN THE SIDEWALL OF THE FORWARD CARGO AREA, OUTSIDE OF THE GILLINER. THESE HAVE BEEN REPORTED BY THE OPERATOR HAS HAVING "LEAKED OUT" AND ARE DEPLETED. THE MEDICAL OXYGEN SYS IS A MISCELLANEOUS NON-REQUIRED SYS, USED FOR A PASSENGER LOCATED IN THE MASTER BEDROOM; IT IS NOT REQUIRED FOR FLIGHT AND IS NOT CONNECTED TO THE PASSENGER OR FLIGHT CREW OXYGEN SYSTEM PROVIDED BY THE OEM. THIS MEDICAL OXYGEN SYS MAY BE ISOLATED/INOPERATIVE AND THE ACFT DISPATCHED IAW THE MASTER EQUIPMENT LIST. THE RATE OF LEAK AND SPECIFIC CAUSE OF LEAK IS NOT YET KNOWN. IT HAS BEEN COMMUNICATED TO THE OPERATOR A RECOMMENDATION TO TURN OFF THE MEDICAL OXYGEN SYS BY PULLING AND TAGGING OUT-OF-SERVICE THE ASSOCIATED CIRCUIT BREAKER AND BY CLOSING THE OXYGEN CYLINDERS; WHILE TROUBLESHOOTING OCCURS AND THE PROBLEM IS IDENTIFIED AND SOLVED.					
2011FA0000424	AIRTRC	PWA		ENGINE	FAILED
6/28/2011	AT502	PT6A15AG			
AG AIRCRAFT DUMPED A LOAD AND WAS RETURNING TO LAND WHEN THE PILOT LOST ENGINE POWER. EXECUTED A CRASH LANDING IN A WHEAT FIELD WITH SUBSTANTIAL DAMAGE TO THE AIRCRAFT. NO INJURIES TO THE SINGLE PILOT OCCUPANT.					

UVVR2010060900015	AMD	STRUCTURE	CORRODED
6/27/2011	FALCON2000	F50B118002001B5	ZONE 500

EXTERNAL WING SUPPORT STRUCTURE CASTING CORRODED ON NUMEROUS AREAS,LOCATED AT LT SPAR ADJACENT TO THE LT MLG ACTUATOR CYLINDER, FOUND DURING C INSPECTION.

UVVR2011062900016	AMD	SHROUD	CORRODED
6/29/2011	FALCON2000	F2MA214510300	E/E BAY FAN

NOSE SECTION AVIONICS COOLING FAN PROTECTOR CORRODED ON THE AFT SIDE OF FRAME 0.

ZY8R20110722001	AMD	UNKNOWN	NOISY
8/19/2009	FALCON2000		

EXPERIENCED AUDIBLE NOISE APPROX 2 HOURS IN TO ACOUSTIC ANALYSIS TEST FLIGHT THAT WAS BOTH HEARD AND DETECTED. THE NOISE RESONATED BETWEEN 70 AND 80 DECIBELS. AFTER REDUCING ENGINE POWER AND DESCENDING TO A LOWER ALTITUDE, THE NOISE WAS NO LONGER PRESENT.

2011FA0000480	AMTR	ROTAX	BELT	BROKEN
6/29/2011	CHALLENGERII	ROTAX582		COOLING FAN

COOLING FAN BELT BROKE IN FLIGHT CAUSING THE ENGINE TO OVERHEAT AND THEN SEIZED.

2011FA0000481	AMTR	ACTUATOR	MALFUNCTIONED
6/26/2011	COZYMKIV	NL1	NLG

EE ACFT COZY MK IV PHASE I FLIGHT, CB POPPED TWICE, ACFT LANDED NOSE GEAR UP. ACFT HAS 1 HR FLIGHT TIME. ACTUATOR (NOSE LIFT) INSTALLED NEW BUT HAS SET FOR 10 YRS WHILE ACFT WAS BEING BUILT.

2011FA0000440	AMTR	AMTR	ROTOR	MELTED
7/6/2011	KITFOXIV	SUBARU*	D571Z	DISTRIBUTOR

AN IN FLIGHT ENGINE FAILURE RESULTED FROM THE DISTRIBUTOR ROTOR CONTACT (AUTOMOTIVE ENGINE) BECOMING LOOSE AND COMING OFF IN FLIGHT. THE ACFT RECEIVED A CONDITION INSPECTION 2 FLIGHT HOURS PRIOR TO THE FAILURE. THE INSPECTION PROGRAM USED FOR THE ENGINE DID NOT CONTAIN SUFFICIENT INFORMATION TO DETECT THE LOOSE CONTACT.

2011FA0000423	ARONCA	FUEL TANK	CORRODED
6/27/2011	15AC		ZONE 600

CORROSION FOUND ADJACENT TO THE FUEL SUMP DRAIN IN THE WELD HEAT AFFECTED ZONE. CORROSION PIT CAUSED LEAK. NO FIRE DANGER. METAL FUEL TANKS IAW STC SA82CH.

2011FA0000477	BBAVIA	STRUT	CRACKED
7/14/2011	7ECA	5442	WING

NEW REPLACEMENT REAR WING STRUT RECEIVED FROM MFG. WHEN RECEIVED THERE WERE 2 LONGITUDINAL CRACKS IN THE STRUT IN THE ELECTRICALLY WELDED SEAM OF THE SEAMLESS WELDED STRUT TUBING. LOCATION OF THE CRACKS ARE 1 FT FROM THE UPPER WING STRUT FITTING IN A VIRGIN TUBE AREA UNAFFECTED BY END FITTING WELDMENTS. THE DEFECT IS OBVIOUSLY DUE TO THE TUBING MFG PROCESS AND NOT BY SECONDARY OPERATIONS AND WELDMENTS. IT IS LIKELY THE ENTIRE BATCH OF THE RAW TUBING HAS MULTIPLE DEFECTS AND SHOULD BE LOCATED AND INSPECTED. IT IS ALSO LIKELY THIS BATCH OF TUBING WAS DISSEMINATED TO MULTIPLE CUSTOMERS IN ADDITION TO MFG.

2011FA0000478	BEECH	MOTOR	FAILED
7/6/2011	1900C	571302	HYD POWER PACK

REPORTED THAT AT APPROX 0130 IN THE MORNING PILOT HAD TO MANUALLY EXTEND THE LANDING GEAR PRIOR TO LANDING. THE PILOT SELECTED GEAR DOWN AND IT DID NOTHING. HE FOUND THE LANDING GEAR RELAY CIRCUIT BREAKER HAD POPPED. HE THEN MANUALLY PUMPED THE GEAR DOWN AND IT INDICATED DOWN AND LOCKED, SO HE CONTINUED THE LANDING. HE COMPLETED THE LANDING WITH NO INCIDENTS AND SHUTDOWN AT THE END OF THE RUNWAY, IAW THE CHECKLIST AND CALLED FOR A TUG TO PULL THE PLANE TO

THE RAMP. MX FOUND A SCREW IN THE HYD POWER PACK THAT APPEARED TO HAVE BEEN MELTED. BELIEVE THE MOTOR INTERNALLY SHORTED OUT.

V0DR2011012	BEECH		BEARING	FAILED
6/24/2011	1900D	EM630	M4000AC3	VENT BLOWER

UPON DISASSEMBLY, VENT BLOWER FOR O/H, TECH NOTICED 1 BEARING HAD FAILED. THE BEARING IS A SEALED UNIT. 1 SIDE OF THE BEARING SEAL HAD FALLEN OUT ALONG WITH PIECES OF THE BEARING'S ROLLER CAGE DURING REMOVAL FROM THE END BELL.

2011FA0000469	BEECH		SUPPORT	FAILED
7/7/2011	300BEECH		1014200131122	FS 227-125

INSPECTION OF SIDEWALL STRUCTURE REVEALED FAILED CROSSTIE AT FS 227-125. THIS STRUCTURAL TIE IS SITUATED BETWEEN THE NR3 AND NR4 RT CABIN WINDOWS VERTICALLY FROM THE LOWER SIDEWALL TO OVERHEAD THE PAX SEAT. THE PART HAS CRACKED FULLY IN 2 AND IS DEFORMED FROM ITS ORIGINAL "FLAT" SHAPE IN APPARENT COMPRESSION. (2) RIVETS IMMEDIATELY ABOVE THE BREAK HAVE FAILED. NO OTHER CROSSTIES DISPLAY ANY DEFORMATION, CRACKING OR EVIDENCE OF PRELOAD.

2011FA0000441	BEECH	CONT	CYLINDER	CRACKED
7/6/2011	A36	IO550B	ECC712CN	ENGINE

ON INITIAL CLIMB OUT PILOT NOTICED A VIBRATION AND ELECTED TO RETURN FOR LANDING. THE NR2 CYLINDER WAS FOUND CRACKED FROM THE SPARK PLUG, PAST THE EXHAUST VALVE AND APPROXIMATELY 75 PERCENT AROUND THE HEAD / CYLINDER. THE CYLINDER HAD GOOD COMPRESSION (72/80) 2 MONTHS PRIOR. THIS CYLINDER WAS INSTALLED 9-2008 AFTER BEING REPAIRED.

FCPR20110005	BEECH	SKIN	CRACKED
7/1/2011	C90A		AILERON

DURING SHOP VISIT FOR OTHER MX, FOUND RT AILERON CRACKED ON TOP NEAR TRAILING, APPROX 2 FEET OTBD OF INBD TIP.

FCPR20110006	BEECH	TORQUE KNEE	CRACKED
7/1/2011	C90A	81029529	NLG

DURING 6 YEAR INSPECTION OF LANDING GEAR, FOUND INDICATION OF CRACK ON TORQUE KNEE.

XA1R0711110001	BEECH	PWA	BLOWER	SEIZED
7/2/2011	C90A	PT6*	903840311	CABIN AIR

CABIN VENTILATION BLOWER MOTOR SEIZED CAUSING SMOKE IN COCKPIT AND MELTING OF OUTER HYD BRAKE LINE PLASTIC CHAFE PROTECTION SLEEVING; LINE FOUND RESTING ON MOTOR. CIRCUIT PROTECTION (CURRENT LIMITER-30 AMP) DID NOT OPEN POSSIBLY DUE TO BLOWER SELECTED TO "LOW" POSITION.

2011FA0000473	BEECH	HORN	CRACKED
6/13/2011	D17S		RUDDER

DURING AN ANNUAL INSP, CRACKS WERE NOTED IN THE WELDED AREA OF THE RUDDER HORN ON BOTH THE LT AND RT SIDES.

2011FA0000425	BEECH	CONT	CIRCUIT BREAKER	FAILED
6/28/2011	F33A	IO520*	35380132103	STROBE

PILOT REPORTED STROBE LIGHTS INOP. ON TROUBLESHOOTING TECH FOUND CIRCUIT BREAKER/SWITCH TO BE AT FAULT. AD 2008-13-17 HAD BEEN COMPLETED 1830 FLIGHT HOURS PRIOR.

2011FA0000426	BEECH	CONT	CIRCUIT BREAKER	FAILED
6/28/2011	F33A	IO520*	35380132103	STROBE

PILOT REPORTED STROBES LIGHT'S INOP. ON TROUBLESHOOTING TECHNICIAN FOUND CIRCUIT BREAKER / SWITCH TO BE AT FAULT. AD 2008-13-17 HAD BEEN COMPLETED 2300 FLIGHT HOURS PRIOR, ESTIMATED CYCLES

9200. NO PROBABLE CAUSE OR RECOMMENDATIONS AT THIS TIME.

2011FA0000445	BEECH	CONT	PUMP	FAILED
7/7/2011	F33A	IO520BB	AA3216CW	ENGINE

PILOT REPORTED GYRO WARNING LIGHT CAME ON IN FLIGHT. TROUBLESHOOTING, THE MECHANIC NOTICED ON INITIAL RUN UP PRESSURES WERE WITHIN LIMITS, AFTER ENGINE STARTED TO WARM UP THE PRESSURE STARTED TO DROP BELOW LIMITS. INSTALLED NEW AIR PUMP SYS WORKED NORMAL. NO PROBABLE CAUSE OR RECOMMENDATIONS AT THIS TIME.

2011FA0000470	BEECH	CONT	STROBE	FAILED
7/17/2011	F33A	IO520BB	35380132103	ZONE 100

PILOT REPORTED STROBE LIGHTS INOPERATIVE. ON TROUBLESHOOTING, TECH FOUND CIRCUIT BREAKER/SWITCH TO BE AT FAULT. AD 2008-13-17 HAD BEEN COMPLETED 1952 FLIGHT HOURS PRIOR, ESTIMATED CYCLES 7808. NO PROBABLE CAUSE OR RECOMMENDATIONS AT THIS TIME.

2011FA0000475	BEECH	CONT	PUMP	FAILED
7/21/2011	F33A	IO520BB	64621238A	FUEL SYSTEM

FUEL PUMP FAILED TO HOLD ANY PRESSURE SETTINGS. SENT IN FOR WARRANTY.

2011FA0000471	BELL	PWA	WINDSHIELD	CRACKED
7/18/2011	212	PT6T3	212030466003	COCKPIT

HEATED WINDSHIELD WAS FOUND CRACKED WHEN ACFT LANDED.

FOTR2111712446	BOEING		STRUCTURE	CRACKED
7/13/2011	727			VERTICAL STAB

VERTICAL STAB, L/E HAS CRACKED DOUBLER TOP OF FWD SPAR CHORD CENTER, JUST AFT OF ELEVATOR CONTROL CABLE QUADRANT. REPAIRED ON FASI WO 21117, NR 12446.

FOTR2111712661	BOEING		FRAME	DENTED
7/25/2011	727223			BS 1010 S25L

AFT. CARGO COMPARTMENT- DENT ON FRAME AT STA 1010 AT STR 25L. REPAIRED ON FASI WO 21117, NR 12661.

FOTR2111712350	BOEING		MOUNT BRACKET	CRACKED
7/25/2011	727223		65172944013	ZONE 600

NR 6 SLAT ACTUATOR ATTACHED MOUNT BRACKET, ON SLAT INBD SIDE IS CRACKED, WS519.0. REPAIRED ON FASI WO 21117, NR 12350.

FOTR2111712782	BOEING		TAB	DELAMINATED
7/27/2011	727223			LT ELEVATOR

LT ELEVATOR CONTROL TAB HAS A SMALL AREA OF DELAMINATION, REPAIRED ON FASI WO 21117, NR 12782.

FOTR2111712657	BOEING		FRAME	DENTED
7/25/2011	727223			ZONE 100

AFT CARGO COMPARTMENT- DENT ON FRAME STA 1030 BETWEEN STR 25R AND 24R. REPAIRED ON FASI WO 21117, NR 12657.

FOTR2111712809	BOEING		SKIN	DEBONDED
8/1/2011	727223			LT WING FLAP

LT INBD FOREFLAP T/E HAS AREA OF DEBONDED JUST INBD OF PREVIOUS REPAIR WBL 135.0. REPAIRED ON FASI WO 21117, NR 12809.

FOTR2111712341	BOEING		FRAME	DENTED

7/25/2011	727223		BS 520 S23L

FWD CARGO COMPARTMENT-DENT AT STA 520 LT, STR 23L. REPAIRED ON FASI WO 21117, NR 12341.

FOTR2111712669	BOEING	SKIN	BENT
7/25/2011	727223		AIRSTAIR DOOR

AFT AIRSTAIRS RT EXTERIOR SKIN SURFACE, AFT CORNER IS BENT, SEPARATING, AND PULLED FASTENERS STA 1383. REPAIRED ON FASI WO 21117, NR12669.

FOTR2111712154	BOEING	RIB	CRACKED
7/25/2011	727223	6517276	NR 4 SLAT

NR 4 SLAT INBD ACTUATOR ROD END ATTACH RIB IS CRACKED, WS383. REPAIRED ON FASI WO 21117, NR12154.

FOTR2111712656	BOEING	FRAME	DENTED
7/25/2011	727223		BS 1010

AFT CARGO COMPARTMENT HAS DENTS AT STA 1010 BETWEEN STR 25R AND 24R. REPAIRED ON FASI WO 21117, NR 12656.

FOTR2111712633	BOEING	STRINGER	CORRODED
7/29/2011	727223		BS 450

CORROSION ON OTBD SIDE OF STRINGER 28L AT BS 450. REPAIRED ON FASI WO 21117, NR 12633.

FOTR2111712345	BOEING	BRACKET	CRACKED
7/25/2011	727223	65173104	NR 7 SLAT

NR 7 SLAT ACTUATOR MOUNT INBD BRACKET ON SLAT IS CRACKED. REPAIRED ON FASI WO 21117, NR 12345.

FOTR21113111280	BOEING	SKIN	DENTED
6/28/2011	737*		NR 8 SPOILER

RT WING NR8 SPOILER UPPER SURFACE HAS 1 DENT BEYOND ALLOWABLE LIMITS. REPAIRED ON WORK ORDER 21113 NR 111280. SUPPLEMENTAL.

FOTR2111311122	BOEING	SKIN	DENTED
7/23/2011	737*		NR 1 SPOILER

LT WING NR1 SPOILER UPPER SURFACE HAS 8 EACH DENTS BEYOND ALLOWABLE LIMITS. REPAIRED ON WORK ORDER 21113 NR 11122.

FOTR2111311127	BOEING	SKIN	DENTED
7/23/2011	737*		NR 7 SPOILER

RT WING NR 7 SPOILER HAS 1 DENT BEYOND ALLOWABLE LIMITS ON LOWER SURFACE. REPAIRED ON WORK ORDER 21113 NR 11127.

FOTR2111311124	BOEING	SKIN	DENTED
7/23/2011	737*		NR 4 SPOILER

LT WING NR 4 SPOILER UPPER SURFACE HAS 1 DENT BEYOND ALLOWABLE LIMITS. REPAIRED ON WORK ORDER 21113 NR 11124.

FOTR2111311123	BOEING	SKIN	DENTED
7/23/2011	737*		NR 3 SPOILER

LT WING NR3 SPOILER UPPER SURFACE HAS 3 EACH DENTS BEYOND ALLOWABLE LIMITS. REPAIRED ON WORK ORDER 21113 NR 11123.

FOTR2111311088	BOEING	SKIN	DEBONDED
7/6/2011	737*		RT WING TE FLAP

RT OTBD AFT FLAP, INBD UPPER SURFACE IS DEBONDED. REPAIRED ON WORK ORDER 21113 NR 11088.

FOTR2111311129	BOEING	SKIN	DENTED
7/23/2011	737*		NR 10 SPOILER

RT WING NR10 SPOILER UPPER SURFACE HAS 1 DENT BEYOND ALLOWABLE LIMITS. REPAIRED ON WORK ORDER 21113, NR 11129.

2011FA0000476	BOEING	CFMINT	SEAL	MISSING
7/14/2011	737*	CFM563C		TURBINE SECTION

ENGINE DAMAGE WAS IDENTIFIED ON THE LLPT STAGE, 4 BLADES AND VANES, DURING AN ACFT DAILY INSP. 42 CYCLES WERE COMPLETED POST LAST SHOP VISIT. PRE-INPUT, ENGINE BOROSCOPE WAS CARRIED OUT AT REPAIR STATION AND IT WAS NOTED THAT THE STAGE 4 INNER STAGE HONEYCOMB SEAL AND RETAINING NUTS WERE MISSING. MODULE WILL BE INDUCTED INTO WORKSHOP AND DISASSEMBLED FOR INVESTIGATION AND FAULT RESOLUTION. THE RESULTS WILL THEN BE FORMATED AND RELEASED.

SROM2011001	BOEING	CHANNEL	CORRODED
7/19/2011	737205		FUSELAGE

CORRODED AFT LAVATORY FORWARD PARTITION WALL FLOOR HAT-SECTION AT BS 990 LBL 17-30 AROUND TWO CLIPNUT HOLES (AFT SIDE) AND CORROSION ON FORWARD SIDE OF HAT-SECTION AT BS 990 LBL 50-60. REPAIRED BY FABRICATION AND REPLACEMENT IN ACCORDANCE WITH BOEING 737-200 STRUCTURAL REPAIR MANUAL (SRM) REV 103, DATED MAR 10, 2011, SECTION 51-30-2 AND BOEING DRAWING NR 65-67311. REFERENCE KELOWNA FLIGHTCRAFT NON-ROUTINE WORK ORDER NR 1014092, DATED 24 JUNE 2011.

SROM2011002	BOEING	SILL	CORRODED
7/19/2011	737205	6517688U165	FUSELAGE

L1 DOOR SILL CHORD CORRODED BEYOND LIMITS IN ACCORDANCE WITH BOEING 737-200 STRUCTURAL REPAIR MANUAL (SRM), REV 103, DATED MAR 10, 2011, SECTION 53-10-1. REPLACED CHORD WITH NEW P/N 65-17688U165 FROM BS 277 - BS370 LT, LBL65 IN ACCORDANCE WITH BOEING 737-200 STRUCTURAL REPAIR MANUAL (SRM) REV 103, DATED MAR 10, 2011, SECTION 51-10-1, PARAGRAPH 7, 51-30-2 AND BOEING DRAWING NR 65-17668. REFERENCE KELOWNA FLIGHTCRAFT NON-ROUTINE WORK ORDER NR 1014113, DATED 5 JULY 2011.

SROM2011003	BOEING	BULKHEAD	DENTED
7/19/2011	737205		FUSELAGE

DENT ON FORWARD FACE OF AFT PRESSURE BULKHEAD 3 ABOVE S-5R REPAIRED IN ACCORDANCE WITH MESSAGE NOS KFC-ATR-11-0001-01C, DATED JUNE 21, 2011, KFC-ATR-11-0001-05B, DATED JUNE 28, 2011, KFC-ATR-11-0001-06C, DATED JULY 7, 2011, AND BOEING APPROVED FAA FORM 8100-9, DATED JULY 12, 2011. UT THICKNESS CARRIED OUT IN ACCORDANCE WITH BOEING 737 NDT MANUAL D6-37239, PART 4, 51-00-00, FIGURE 3 ON BLEND-OUT AREA OF AFT PRESSURE BULKHEAD 3 ABOVE S-5R, NOMINAL OF 0.032, LOWEST READING 0.026 (NDT11-0787). HFEC OPEN HOLE INSPECTION OF ALL FASTENER HOLES COMMON TO THE REPAIR IN ACCORDANCE WITH BOEING 737-200 STRUCTURAL REPAIR MANUAL (SRM), REV 103, DATED MAR 10, 2011, SECTION 53-30-3 AND BOEING 737 NDT MANUAL D6-37239, PART 5, 51-00-00, FIGURE 16. NO DEFECTS EVIDENT. HFEC INSPECTION OF CUT OUT EDGES IN ACCORDANCE WITH BOEING 737-200 STRUCTURAL REPAIR MANUAL (SRM), REV 103, DATED MAR 10, 2011; SECTION 53-30-3 AND BOEING 737 NDT MANUAL D6-37239, PART 5, 51-00-00, FIGURE 23. NO DEFECTS EVIDENT (NDT11-0846). REFERENCE NON-ROUTINE WORK ORDER NR 1014172, DATED 12 JULY 2011.

SROM2011004	BOEING	STRINGER	CRACKED
7/19/2011	737205	69353526	FUSELAGE

REPLACED CRACKED STRINGER CLIP AT BS 907 S-9R IN ACCORDANCE WITH BOEING 737-200 STRUCTURAL REPAIR MANUAL (SRM), REV 103, DATED MAR 10, 2011, SECTION 51-30-2, PAGE 5, CH 7 AND 51-10-1, PAGE 9 CH 7. REFERENCE NON-ROUTINE WORK ORDER NR 1014192, DATED 25 JUNE 2011.

SROM2011005	BOEING	SKIN	GOUGED
7/19/2011	737205		LT WING

GOUGE IN LT UPPER INSPAR WING SKIN UPPER SURFACE ABOVE AFT SPAR AT WBL 77L REPAIRED IN ACCORDANCE WITH MESSAGE NOS. KFC-ATR-11-0002-01C, DATED JUNE 23, 2011, KFC-ATR-11-0002-07B, DATED JUNE 29, 2011, KFC-ATR-11-0002-08C, DATED JULY 4, 2011 AND BOEING APPROVED FAA FORM 8100-9, DATED JULY 6, 2011. UT THICKNESS CARRIED OUT IN ACCORDANCE WITH BOEING 737 NDT MANUAL D6-37239, PART 4, 51-00-00, FIGURE 3. LT WING NOMINAL OF 0.175, LOWEST READING 0.157 (NDT11-0799). REFERENCE NON-ROUTINE WORK ORDER NR. 1014369, DATED 04 JULY 2011.

SROM2011006	BOEING	SKIN	GOUGED
7/19/2011	737205		RT WING

GOUGE IN RT UPPER INSPAR WING SKIN UPPER SURFACE ABOVE AFT SPAR AT WBL 77R REPAIRED IN ACCORDANCE WITH MESSAGE NOS. KFC-ATR-11-0003-01C, DATED JUNE 23, 2011, KFC-ATR-11-0003-05B, DATED JUNE 29, 2011, KFC-ATR-11-0003-06C, DATED JULY 4, 2011 AND BOEING APPROVED FAA FORM 8100-9, DATED JULY 6, 2011. UT THICKNESS CARRIED OUT IN ACCORDANCE WITH BOEING 737 NDT MANUAL D6-37239, PART 4, 51-00-00, FIGURE 3. RT WING NOMINAL OF 0.175, LOWEST READING 0.147 (NDT11-0800). REFERENCE NON-ROUTINE WORK ORDER NR 1014370, DATED 11 JULY 2011.

SROM2011007	BOEING	SKIN	NICKED
7/19/2011	737205		FUSELAGE

NICK ON FUSELAGE SKIN AT BS 847 S-25R REPAIRED IN ACCORDANCE WITH MESSAGE NOS. KFC-ATR-11-0004-01C, DATED JUNE 24, 2011, KFC-ATR-11-0004-05B, DATED JUNE 29, 2011, KFC-ATR-11-0004-06C, DATED JULY 13, 2011 AND BOEING APPROVED FAA FORM 8100-9, DATED JULY 14, 2011. UT THICKNESS CARRIED OUT IN ACCORDANCE WITH BOEING 737 NDT MANUAL D6-37239, PART 4, 51-00-00, FIGURE 3 ON BLEND-OUT AREA OF FUSELAGE SKIN AT BS 847 S-25R, NOMINAL OF 0.036, LOWEST READING 0.022 (NDT11-0819). HFEC INSPECTION OF OPEN HOLES COMMON TO THE REPAIR IN ACCORDANCE WITH BOEING 737-200 STRUCTURAL REPAIR MANUAL (SRM), REV 103, DATED MAR 10, 2011; SECTION 53-30-3, FIGURE 46 AND BOEING 737 NDT MANUAL D6-37239, PART 6, 51-00-00, FIGURE 16. NO DEFECTS EVIDENT (NDT11-0854). HFEC INSPECTION OF CUT OUT EDGES IN ACCORDANCE WITH BOEING 737-200 STRUCTURAL REPAIR MANUAL (SRM), REV 103, DATED MAR 10, 2011; SECTION 53-30-3, FIGURE 46 AND BOEING 737 NDT MANUAL D6-37239, PART 6, 51-00-00, FIGURE 23. NO DEFECTS EVIDENT (NDT11-0853). REFERENCE NON-ROUTINE WORK ORDER NR. 1014377, DATED 14 JULY 2011.

SROM2011008	BOEING	SKIN	NICKED
7/20/2011	737205		FUSELAGE

NICK ON FUSELAGE SKIN AT BS 867 S-25L REPAIRED IN ACCORDANCE WITH BOEING 737-200 STRUCTURAL REPAIR MANUAL (SRM), REV 103, DATED MAR 10, 2011, SECTION 53-30-3, FIGURE 48. HFEC OPEN HOLE INSPECTION OF ALL FASTENER HOLES COMMON TO THE REPAIR IN ACCORDANCE WITH BOEING 737-200 STRUCTURAL REPAIR MANUAL (SRM), REV 103, DATED MAR 10, 2011, SECTION 53-30-3 AND BOEING 737 NDT MANUAL D6-37239, PART 5, 51-00-00, FIGURE 16. NO DEFECTS EVIDENT. HFEC INSPECTION OF CUT OUT EDGES IN ACCORDANCE WITH BOEING 737-200 STRUCTURAL REPAIR MANUAL (SRM), REV 103, DATED MAR 10, 2011; SECTION 53-30-3 AND BOEING 737 NDT MANUAL D6-37239, PART 5, 51-00-00, FIGURE 23. NO DEFECTS EVIDENT (NDT11-0845). REFERENCE NON-ROUTINE WORK ORDER NR 1014379, DATED 5 JULY 2011.

SROM2011009	BOEING	WINDOW FRAME	CORRODED
7/20/2011	737205		FUSELAGE

CORROSION ON LT FLIGHT WINDOW FRAME JUST ABOVE THE NR 2 SLIDING WINDOW REPAIRED BY REMOVING AND REPLACING THE WINDOW FRAME WITH A NEW FRAME FROM APPROXIMATELY BS 217 TO BS 236 IN ACCORDANCE WITH BOEING DRAWING NOS 05-71773 AND 65-45800. FASTENERS INSTALLED IN ACCORDANCE WITH BOEING 737-200 STRUCTURAL REPAIR MANUAL (SRM), REV 103, DATED MAR 10, 2011; SECTION 51-30-02 AND 51-30-04. REFERENCE NON-ROUTINE WORK ORDER NR 1014393, DATED 13 JULY 2011.

SROM2011010	BOEING	PWA	CASE	CRACKED
7/20/2011	737205	JT8D17A	786269	NR 1 ENGINE

REPLACED NR 1 ENGINE FAN INLET CASE DUE TO CRACKED FLANGE B WELD WITH OVERHAULED ASSEMBLY; FAN CASE P/N 786269, S/N DX6417, NR 1 BEARING HOUSING P/N 765471, S/N JU7622 AND REAR SUPPORT P/N 5003534-01, S/N LX9712 IN ACCORDANCE WITH PRATT AND WHITNEY MAINTENANCE MANUAL 72-20-00, MNT PRAC-00. REFERENCE NON-ROUTINE WORK ORDER NR 1014975, DATED 15 JULY 2011. CARRIED OUT VIBRATION

ANALYSIS IN ACCORDANCE WITH PRATT & WHITNEY JT8D EMM 72-00-00. DATA PEAKS ARE EXHAUST 1.20 MILS, INLET 1.05 MILS USING N1 REFERENCE SPEED AND EXHAUST 1.14 MILS AND INLET 1.09 MILS USING N2 REFERENCE SPEED; ARE WITHIN LIMITS. REFERENCE NON-ROUTINE WORK ORDER NR 1015018, DATED 16 JULY 2011.

DU4R2011005	BOEING	FRAME	CORRODED
7/21/2011	737524		BS 767 S29L

AFT PIT CORROSION ON FRAME AT BS 767, STR 29L, FWD FACE.

DU4R2011009	BOEING	SKIN	DAMAGED
6/26/2011	737524		BS 203-482

REPAIRED SKIN FROM BS 203 TO BS 243, FROM 8.0" TO 13.0" ABOVE STR. 24L, BS 311.75 TO BS 343.5 FROM 1.5" TO 3.0" ABOVE STR. 23L, BS 400 4.5" ABOVE STR. 22L, BS 416.5 TO BS 440 FROM ON STR. 21L TO 3.0" ABOVE STR. 21L AND BS 456 TO BS 482 FROM ON STR. 20L TO 2.24" ABOVE STR. 20L BY INSTALLING SOLID PERMANENT REPAIR FASTENER IAW SRM 53-00-01. REPAIR 19, SECTION II.

DU4R2011013	BOEING	SKIN	CORRODED
7/18/2011	737524		BS 727C-747

FOUND CORROSION IN AFT CARGO COMPT BILGE AREA INNER SKIN SURFACE APPROX BETWEEN BS 747 TO STA. 727C.

DU4R2011008	BOEING	SKIN	DAMAGED
7/16/2011	737524		BS 891 S23L

LIGHTNING STRIKE ON LT FUSELAGE SKIN AT BS 891 AND .75" BELOW STR 23L.

DU4R2011010	BOEING	SKIN	DAMAGED
6/26/2011	737524		BS 773-927

REPAIRED LIGHTNING STRIKES AT BS 773.5 TO BS 786.5 FROM S-28L TO S-28R, BS 798 TO BS 807 FROM 2.0" TO 2.75" ABOVE S-22L, BS 859.5 TO BS 937 1.5" BELOW S-21R TO 4.5" ABOVE S-21R, BS 861 4.0" ABOVE S-23L, BS 927 3.0" ABOVE S-24L AND BS 1016 BETWEEN S-23 AND S-24R BY INSTALLING SOLID RIVET PERMANENT REPAIRS IAW SRM 53-00-01 REPAIR 19, SECTION II.

DU4R2011006	BOEING	FRAME	CORRODED
7/21/2011	737524		BS 787 S29L

AFT PIT BS 787 AT STR 29L AFT LOWER SIDE OF FRAME WEB CORRODED.

P7UR201126001	BOEING	CFMINT	B-NUT	LEAKING
7/25/2011	7377*	CFM567B26B1	272A31517	HYD LINE

WHEN PERFORMING AN INSPECTION OF THE ACFT, A HYD LEAK WAS NOTED ABOVE THE PYLON ON NR1 ENGINE. UPON FURTHER INVESTIGATION, A LOOSE B-NUT WAS FOUND ON THE HYD A SYSTEM PRESSURE LINE. SKYDROL WAS FOUND LAYING IN THE ENGINE STRUT TORQUE BOX AREA BETWEEN NAC STA 274.40 AND NAC STA 242.93. THE PN 311A2340 FRAME FITTING NR 4, THE AFT ENGINE MOUNT BULKHEAD FITTING PN 311A2261 AND THE MID STRUT BULKHEAD FITTING PN 311A2230 (ALL TITANIUM PARTS) HAD THE PAINT AND COATING DISOLVED TO THE BARE METAL BY THE CHEMICAL ACTION OF SKYDROL.

2011F00162	BOEING	MOUNT	CRACKED
7/7/2011	7472B5F		NR 3 ENGINE

DURING EDDY CURRENT CHECK, PYLON NR 3 REAR ENGINE MOUNT BULKHEAD OTBD UPPER AFT FRAME FOUND WITH CRACK. CRACK LENGTH APPROX 10MM. FINDING DISCOVERED DURING 'C1 & C2' CHECK. (OPEN)

UOHR2011009	BOLKMS	SPAR	CRACKED
3/8/2011	BK117B1	105304061	TAIL BOOM

DURING MAJOR INSPECTIONS A CRACK WAS DISCOVERED ON THE TAILBOOM AT THE 10L FRAME ON THE

SUPPORT ANGLE (PN 105-30251.44) SPLICE DOUBLER. THERE IS ALSO A CRACK IN THE VERTICAL FIN SPAR AT THE CAM LOC FASTENER. A TRAY IN THE VERTICAL FIN IS ALSO CRACKED AT THE FASTENER HOLE.

2011FA0000483	BOMBDR	HNYWL	ACTUATOR	LEAKING
7/5/2011	BD1001A10	AS90711A	1002720025009	RUDDER

UPPER ACTUATOR LEAKING FLUID. SUSPECT SEALS.

2011FA0000482	BOMBDR	HNYWL	ACTUATOR	LEAKING
7/5/2011	BD1001A10	AS90711A	1002720025009	RUDDER

LOWER ACTUATOR LEAKING FLUID.

2011FA0000484	BOMBDR	HNYWL	ACTUATOR	LEAKING
7/5/2011	BD1001A10	AS90711A	C47100004	HORIZONTAL STAB

HORIZONTAL STAB ACTUATOR WAS LEAKING.

2011FA0000446	BOMBDR		JACKSCREW	SPALLED
7/1/2011	BD7001A10			SLATS

SCREW THREADS ON HORIZ STABLIZER PITCH TRIM JACKSCREW HAVE SPALLING EXCEEDING AMM 27-41-09 LIMITS.

2011FA0000474	CESSNA	CONT	SLICK	IMPULSE COUPLING	FAILED
7/20/2011	150A	O200A		M3007	MAGNETO

TOTAL FAILURE OF IMPULSE COUPLING. CAUSE TO BE DETERMINED BY FURTHER INSPECTION.

2011FA0000492	CESSNA		SHUTOFF VALVE	FAILED
7/20/2011	162		72CA0279	FUEL SYSTEM

JULY 16,2011 AS ACFT WAS DOING A GROUND RUN CHECK, THE ACFT SUDDENLY QUIT. THEY FAILED TO RESTART THE ACFT. IN TROUBLESHOOTING, WENT OUT AND RAN THE ACFT AND HAD NO TROUBLES. THIS ACFT WAS IN THE WINDOW FOR A 100 HR INSP. IN INSPECTING THE FUEL SYS, HAVE FOUND THA THE FUEL SHUTOFF CABLE GOING TO FUEL SHUTOFF VALVE WAS LOOSE, CAUSING THE CABLE TO SOMETIMES SLIDE THRU THE SWIVEL BOLT AND THAT THE ARM WOULD BE IN THE SHUTOFF POSITION EVEN THOUGH THE HANDLE WAS I THE "ON" POSITION. IN THE MM 28-20-00, PARA 3 A-D, FIG 202 SHOWS THE ARM AND HARDWARE SECURING THE CABLE. THIS WAS LOOSE. ADJUSTED THE ARM AND SECURED BY TIGHTENING THE HARDWARE. THE BOLT STILL PIVOTS WHEN ARM IS TURNED. THIS HAS BEEN A CONCERN AND WOULD HOPE THAT THIS IS JUST A FLUKE INCIDENT.

2011FA0000463	CESSNA	LYC	EXHAUST RISER	DAMAGED
6/1/2011	172F	O360A4M	1727603141	ENGINE

EXHAUST SYS WAS INSTALLED IN CONJUNCTION WITH 180 HP CONVERSION. THE NR1 EXHAUST RISER WAS FOUND TO BE COMPLETELY SEVERED APPROX .3750 -.5 INCH BELOW THE WELD LINE AT THE CYLINDER FLANGE.

2011FA0000428	CESSNA	LYC	PUSHROD	BROKEN
6/30/2011	172N	O320H2AD	LW15315	ENGINE

CYLINDER NR 3 EXHAUST VALVE PUSH ROD BROKE, DUE TO A STUCK VALVE IN THE CLOSED POSITION. THE VALVE WAS NOT STUCK AT THE TIME OF THE INVESTIGATION. NO MARKS WERE SEEN ON THE TOP OF THE PISTON AS VIEWED THROUGH A BORESCOPE. THE SPARK PLUGS HAD ONLY SLIGHT BLACK SOOTY APPEARANCE WITH LEAD FOWLING DEEP IN THE INSULATOR. OTHER SPARK PLUGS HAD A TAN APPEARANCE. THE LIFTER CAME APART AS A RESULT OF THE BROKEN PUSH ROD BUT APPEARS TO HAVE BEEN OPERATING PROPERLY PRIOR TO THE EVENT.

2011FA0000429	CESSNA	LYC	PUSHROD	BROKEN
6/30/2011	172N	O320H2AD	LW15315	ENGINE

CYLINDER NR3 EXHAUST VALVE PUSH ROD BROKEN, DUE TO A STUCK VALVE IN THE CLOSED POSITION. THE VALVE WAS NOT STUCK AT THE TIME OF THE INVESTIGATION. NO MARKS WERE SEEN ON THE TOP OF THE PISTON AS VIEWED THROUGH A BORESCOPE. THE SPARK PLUGS HAD ONLY SLIGHT BLACK SOOTY APPEARANCE WITH LEAD FOWLING DEEP IN THE INSULATOR. OTHER SPARK PLUGS HAD A TAN APPEARANCE. THE LIFTER CAME APART AS A RESULT OF THE BROKEN PUSH ROD BUT APPEARS TO HAVE BEEN OPERATING PROPERLY PRIOR TO THE EVENT.

2011FA0000430	CESSNA	LYC	COIL	DEFECTIVE
6/30/2011	172R	IO360L2A		MAGNETO

300RPM MAG DROP DURING RUN UP, DEFECTIVE COIL. COIL HAVE BEEN FAILING MORE THEN NORMAL .

2011FA0000431	CESSNA		ALTERNATOR	FAILED
6/16/2011	172S		991059111	ENGINE

COMPLETE ELECTRICAL FAILURE IN CRUISE WITHOUT ANY INDICATION OR WARNING. PROBLEM TRACED TO FAULTY ALTERNATOR.

NX4R000014	CESSNA		CONTROL CABLE	FRAYED
6/28/2011	172S		0510105364	AILERONS

THE AILERON CABLE PN-0510105-364 WAS FRAYED AND WORN SHOWING BROKEN STRANDS AT FUSELAGE STATION 65.33 WHERE THE CABLES PASS THOUGH THE 3 CEILING MOUNTED NYLON PULLEYS.

NX4R000015	CESSNA		CONTROL CABLE	FRAYED
6/21/2011	172S		0510105360	AILERONS

DURING A ROUTINE INSP THE AILERON RT DIRECT CABLE PN-0510105-364 WAS FOUND FRAYED WITH MANY BROKEN STRANDS WHERE IS PASSES THROUGH THE NYLON PULLEY (S394) IN THE CENTER CEILING AT FS 65.33.

NX4R000017	CESSNA		CONTROL CABLE	FRAYED
6/30/2011	172S		0510105308	ELEVATOR

DURING A ROUTINE INSP, THE TECH DISCOVERED THAT THE FORWARD ELEVATOR CONTROL CABLE PN-0510105-308 WAS FRAYED AND WORN AT FS 65.33.

NX4R000018	CESSNA		CONTROL CABLE	FRAYED
6/21/2011	172S		0510105360	AILERON

DURING A ROUTINE INSP, THE AILERON LT DIRECT CABLE WAS FOUND FRAYED WITH MANY BROKEN STRANDS WHERE IS PASSES THROUGH THE NYLON PULLEY (S394) IN THE CENTER CEILING AT FS 65.33.

NX4R000019	CESSNA		CONTROL CABLE	FRAYED
6/14/2011	172S		0510105364	AILERONS

DURING A ROUTINE INSP THE AILERON RT DIRECT CABLE PN-0510105-364 WAS FOUND FRAYED WITH MANY BROKEN STRANDS WHERE IS PASSES THROUGH THE NYLON PULLEY (S394) IN THE CENTER CEILING AT FS 65.33.

NX4R000020	CESSNA		CONTROL CABLE	FRAYED
6/22/2011	172S		0510105360	AILERONS

DURING A ROUTINE INSP, THE AILERON RT DIRECT CABLE, PN-0510105-360 WAS FOUND FRAYED WITH MANY BROKEN STRANDS WHERE IS PASSES THROUGH THE NYLON PULLEY (S394) IN THE CENTER CEILING AT FS 65.33.

BGSR20110628001	CESSNA		CABLE	FRAYED
6/23/2011	172S		MC0510105364365	AILERON

COMPLIED WITH SAIB: CE-11-36 (5-31-2011) ON FRAYED AILERON CABLES AND NOTED THAT AILERON BALANCE CABLE WAS WEARING AND FEW BROKEN STRANDS OF CABLE. REMOVED DEFECTIVE CABLE AND SERVICED WITH NEW PN: MC0510105-364 AND MC0510105364365 CABLE ASSEMBLIES IAW CHAPTER 27-10-00, 6. OF AMM.

MNGR18728	CESSNA		TUBE	LEAKING

7/8/2011	172S		302246401	MAIN TIRE

MAIN TIRE WENT FLAT SHORTLY AFTER LANDING. FOUND TUBE TO HAVE A SMALL TEAR ACROSS FROM THE VALVE STEM. THE TEAR AT FIRST APPEARED TO BE A CUT BUT FURTHER INVESTIGATION REVEALED THAT THIS SAME FAILURE HAS BEEN SEEN ON OVER 6 TUBES RECENTLY. INVESTIGATION REVELED A THIN SECTION TO THE TUBE DIRECTLY ACROSS FROM THE VALVE STEM AFTER CUTTING A SECTION OF THE FAILED TUBE A MARK THAT APPEARS TO BE LEFT FROM THE MFG PROCESS WAS NOTED AND THE TEAR WAS ALONG THE EDGE OF THIS MARK. SEVERAL OTHER TUBES WERE PULLED FROM STOCK AND EXHIBITED SIMILAR DEFECTS AS WERE NOTED IN THE OTHER FAILED TUBES. WE HAVE PULLED ALL SUSPECT TUBES FROM STOCK AND QUARANTINED THEM UNTIL A DETERMINATION CAN BE MADE ON THE SERVICEABILITY OF THE TUBES.

NX4R000021	CESSNA		CONTROL CABLE	FRAYED
6/2/2011	172S		0510105360	AILERONS

DURING A ROUNTINE INSPECTION, THE LT AILERON PRIMARY CABLE, PN-0510105-360 WAS FOUND WORN AND FRAYED IN THE CABIN CEILING WHERE IT PASSES ACROSS THE 3 SMALL NYLON PULLEYS AT FS 65.33.

OG5R20110714001	CESSNA	LYC	TIRE	DEFLATED
6/17/2011	172S	IO360L2A	606C668	ZONE 700

LT MAIN TIRE WENT FLAT ON TAXI. RECURRING PROBLEM.

OG5R20110601001	CESSNA	LYC	TIRE	DEFLATED
6/1/2011	172S	IO360L2A	505C665	NLG

FLAT NOSE WHEEL DURING TAXI.

OG5R20110610001	CESSNA	LYC	TIRE	DEFLATED
6/10/2011	172S	IO360L2A	505C665	NLG

NOSE LANDING GEAR TIRE FLAT ON TAXI.

2011FA0000417	CESSNA		SPRING ASSY	BROKEN
6/23/2011	182F		07416011	LT MLG

LEFT MAIN GEAR SPRING BROKE ON TAXI TO TAKEOFF. CRACK WAS LOCATED INSIDE THE SADDLE AREA WHICH PREVENTED ABILITY TO SEE CRACK THROUGH THE ACCESS PANNELS. THE ONLY WAY TO INSPECT THIS SPRING STRUT IS TO REMOVE THE GEAR STRUT FROM THE ACFT AND VISUALLY OR NDT AREA.

2011FA0000447	CESSNA	LYC	RESISTOR	BURNED OUT
6/18/2011	182T	IO540AB1A5		DIMMER SWITCH

DURING CRUSE, HAD A RESISTOR AND A ZENER DIODE (WHICH IS PART OF THE RADIO DIMMER SWITCHING CIRCUIT) FAILED IN FLIGHT. THIS FAILURE CAUSED A LARGE AMOUNT OF SMOKE IN THE CABIN THE PILOT LANDED THE ACFT AT THE AIRPORT. THIS SWITCH IS PART OF STC SA01216WI. THE CAP AND THE STC HOLDER WERE CONTACTED ABOUT THIS ISSUE. BOTH THE CAP AND THE STC HOLDER WAS AWARE OF THIS PROBLEM AND THEY INCORPORATED A REPAIR FOR THIS BY REQUIRING A LARGER RESISTOR AND DIODE.

2011F00158	CESSNA	PWA	MASTER CYLINDER	MALFUNCTIONED
6/30/2011	208B	PT6A114A	26820011	BRAKES

PILOT REPORTED ON TAXI LT BRAKE PEDAL WENT TO THE FLOOR, SUBSEQUENT BRAKE ACTIONS THE BRAKES OPERATED NORMALLY. THE LT BRAKE MASTER CYLINDER WAS R & R AS A PRECAUTION. BLED BRAKES. OPS CHECK GOOD. TAXI AND STEERING CHECKS GOOD.

JDWA864SF001	CESSNA	PWA	ACTUATOR	MALFUNCTIONED
7/18/2011	208B	PT6A114A	26612151	ELEVATOR TRIM

ELEVATOR TRIM STIFF.

2011FA0000456	CESSNA	CONT	MOTOR	FAILED
6/22/2011	320E	TSIO520UB	3638002735	A/C SYSTEM

AIR-CONDITIONING VENT BLOWER MOTOR FAILED INTERNALLY. SHORTED-OUT AND FILLED THE COCKPIT/CABIN WITH SMOKE. REPLACED WITH NEW UNIT. OPS CKD OK.

RJWR002	CESSNA	CONT	DRIVE SHAFT	SHEARED
7/29/2011	414A	TSIO520NB		STARTER

AFTER LANDING, PILOT REPORTED SUBSTANTIAL OIL LEAK. FOUND STARTER DRIVE/ SCAVENGE PUMP ASSY PN R-642085A17 HAD A SHEARED DRIVE SHAFT. THIS CAUSED EXCESSIVE OIL TO GO TO AIR OIL SEPERATOR AND OVERBOARD DUE TO SEPERATOR COULD NOT RETURN THE VOLUME OF OIL COMING TO IT TO RETURN TO ENGINE SUMP. DISCOVERED SHEARED SHAFT AT REMOVAL OF SCAVENGE PUMP STARTER DRIVE ASSY. REPLACED AND FUNCTIONAL CHECKS GOOD. STARTER DRIVE HAD 101.1 TSOH

2011FA0000467	CESSNA	PWA	SERVO DRIVE	STICKING
7/15/2011	550	JT15D4	4006719906	AUTO PILOT

DURING LEVEL FLIGHT AT 17,500 FT, WITH THE AUTOPILOT ENGAGED THE ACFT STARTED AN UNCOMMANDED RT BANK TURN WHICH CONTINUED UNTIL THE PILOT OVERRODE THE AUTOPILOT BY FORCE. THE AUTOPILOT DISCONNECT HAD LIMITED EFFECT AND THE ACFT CONTINUED TO REQUIRE LT AILERON INPUT TO MAINTAIN LEVEL FLIGHT. UPON LANDING (THE PILOT STATED UPON FURTHER DEBRIEF THAT THE CONTROLS FREED-UP UPON LANDING, NOT IN HIS INITIAL WRITE-UP), MX INSPECTED THE AILERON CONTROL SYS TO INCLUDE BINDING AND TENSIONS WITH NO DEFECTS NOTED. REPLACED THE AUTOPILOT AILERON SERVO MOTOR AND CAPSTAN WITH REPAIRED UNITS. IT WAS NOTED THAT THE REMOVED SERVO MOTOR AND CAPSTAN APPEARED TO BE ORIGINAL (NOTE: THESE ITEMS ARE "ON-CONDITION", NOT LIFE LIMITED PARTS)BASED ON THE DATE STAMP OF 1979 AND MOD LEVEL OF NONE. THE NEXT FLIGHT WAS FOUND TO BE SATISFACTORY. IT IS BELIEVED THAT THE SERVO DRIVE, PN 4006719-906 WAS THE FAULTY PART BASED ON THE CLUTCH AND FEEDBACK ARE PART OF IT'S FUNCTION. THE CAPSTAN PN 4005842 WAS REPLACED DUE TO WORN BEARINGS.

2011FA0000462	CESSNA		PUSHROD	LOOSE
7/1/2011	560XL		666016116	ELEV TRIM ACT

OPERATOR FOUND ELEVATOR TRIM PUSHROD ASSY LOOSE BETWEEN FORWARD TUBE AND FORWARD JAM NUT. ALL SAFETY WIRE WAS IN PLACE BETWEEN FORWARD AND AFT JAM NUT. ALSO NOTICED SLIGHT BOW IN TUBE NEAR FORWARD CLEVIS. CAUSE UNDETERMINED. OPERATOR REPLACED ASSY.

WTXR23926.2.15	CESSNA	CESSNA	HINGE BRACKET	CORRODED
6/29/2011	750		6731009467310089	RUDDER

THE UPPER AND MIDDLLE RUDDER HINGE BRACKETS WERE FOUND TO BE SEVERLY CORRODED. BRAKET PN'S: 6731009-4 & 6731008-8. CORROSION FOUND DURING THE PAINT PROCESS. BRACKETS WERE REPLACED WITH NEW UPON DISCOVERY. STRUCTURAL DAMAGE REPORT WAS SUBMITTED TO MFG.

2011FA0000458	CESSNA	CONT	GEAR	WORN
7/14/2011	R172K	IO550N	632018	CRANK SHAFT

WHILE PERFORMING AN ANNUAL INSP OF THE ENGINE, NOTICED ALTERNATOR HSG LOOSE. 500HR ALTERNATOR INSP WAS DUE. SO UPON REMOVAL OF ALTERNATOR FOR INSP IT WAS DISCOVERED THAT ALL OF THE TEETH ON THE CRANKSHAFT GEAR FACE WERE EITHER MISSING OF SEVERLY WORN. THERE WAS NO INDICATION OF ALTERNATOR FAILURE PRIOR TO THIS DISCOVERY. ON THE INCOMING RUN-UP ENGINE OIL PRESSURE WAS ON THE LOWER SIDE OF THE GREEN BAND. HOWEVER THE MAGNETIC OIL DRAIN PLUG WAS COVERED WITH FILINGS. CUTTING OPEN THE OIL FILTER FOUND THE PAPER ELEMENT WAS COVERED IN SILVER WITH NO DEBRIS. IF THERE WASN'T A 500 HR INSP DUE ON THE ALTERNATOR THIS PROBLEM WOULDN'T HAVE BEEN FOUND.

2011FA0000479	CESSNA	LYC	SLICK	IMPULSE COUPLING BENT
7/22/2011	T206H	TIO540AJ1A	M3333	MAGNETO

DURING 500 HR MAGNETO INSPECTION, FOUND IMPULSE COUPLINGS OUT OF SPEC. POSSIBLY PAWL INTERFERENCE WITH WOODRUFF KEY DURING DISASSEMBLY CAUSING PAWL TO BEND PAWL RIVET AND INCREASE PAWL BOSS CLEARANCE.

2011FA0000437	CESSNA		CONTACTOR	INOPERATIVE
7/2/2011	T210M		S15801	BATTERY

BATTERY CONTACTOR FAILED TO OPEN WHEN DEENERGIZED BY MASTER SWITCH.

P7UR201122001	CNDAIR		DOOR	DEPARTED
7/19/2011	CL6002B19		22850080802	NACELLE

THE PLANE ENCOUNTERED THUNDERSTORMS WITH CONSIDERABLE TURBULANCE AND A SUDDEN DOWNBURST. THE CREW HEARD A LOUD NOISE AND NOTICED A PIECE OF THE NR 2 ENGINE COWLING MISSING VIA THE EXTERIOR CAMERA AND INTERIOR DISPLAY MONITOR. THE ACFT MADE AN UNSCHEDULED LANDING TO HAVE THE SITUATION EVALUATED AND REPAIRED.

LEJM2011FA0000422	CNDAIR	GE	O-RING	FAILED
6/27/2011	CL6002B19	CF343A1		IDG

ON APPROACH, THE CREW RECIEVED A "IDG 2" CAS MESSAGE. THE CREW LANDED WITHOUT INCIDENT. I NSP OF THE GENERATOR FOUND THAT THE FILTER DELTA P INDICATOR O-RING HAD FAILED RESULTING IN TOTAL FLUID LOSS. OPS WERE CONTINUED IAW MEL.

LEJM2011FA0000421	CNDAIR	GE	O-RING	FAILED
6/27/2011	CL6002B19	CF343B1		IDG

DURING AN UNRELATED MX GROUND RUN, THE NR1 IDG OVERHEATED, A BOLT AND A O-RING ON THE GENRERATOR MODULE FAILED, AND THE LUBRICATING OIL SPRAYED UNDER HIGH PRESSURE ONTO THE CORE OF AN OPERATING ENGINE. THE ENGINE WAS IMMEDIATELY SHUTDOWN. THERE WAS A LARGE SMOKE CLOUD BUT NO FIRE NOTED VISUALLY OR BY INDICATION.

JR2R2011070700274	CNDAIR		STRAP	CORRODED
7/7/2011	CL6002D24		PL69053212057	BS 333

TIE STRAP CORRODED AT FS 333. FROM STRINGER 25R TO 26R.

JR2R2011070700275	CNDAIR		FRAME	CORRODED
7/7/2011	CL6002D24		SH670313565	ZONE 100

FRAME CORRODED AT FS 333 FROM STRINGER 26R TO 26R.

JR2R2011070700276	CNDAIR		FRAME	CORRODED
7/7/2011	CL6002D24		SH670320909	BS 364

FS 364 FRAME HAS CORROSION AT FASTENERS.

JR2R2011071800302	CNDAIR		STRINGER SPLICE	CORRODED
7/18/2011	CL6002D24		SH670324293	FUSELAGE

STR 25R SPLICE CORRODED AT FS 333. REMOVED AND REPLACED SPLICE IAW CRJ 900 SRM 51-42-06 AND 51-42-21.

JR2R2011071800310	CNDAIR		BRACKET	CRACKED
7/18/2011	CL6002D24		CC670756043	HYDRAULIC BAY

FWD NOSE HYD COMPARTMENT FWD ACCUMULATOR BRACKETS CRACKED. REMOVED AND REPLACED 2 EA FWD NOSE HYDRAULIC COMPARTMENT FWD ACCUMULATOR BRACKETS IAW CRJ 900 SRM 51-42-21.

V0XR2011006280001	DHAV	PWA	WEB	DAMAGED
6/28/2011	DHC8202	PW123	2024T3	ZONE 100

REPAIRED DAMAGED GROUND STUD ON FLIGHT DECK WEB.

2011FA0000427	DIAMON		FORK	BROKEN
6/29/2011	DA20C1		2032200800	NLG

NLG FORK BROKE ABOUT 2 INCHES IN FORWARD OF THE NOSE WHEEL AXLE. WHEEL STRUCK PROP AND BROKE ONLY BLADE COMPLETELY OFF. ENGINE VIBRATED SEVERALLY PILOT SHUT ENGINE DOWN.

2011FA0000472	DIAMON		BRACKET	CRACKED
7/20/2011	DA42			STEERING UNIT

DURING A PREFLIGHT INSP, THE CREW NOTICED THE STEERING BRACKET PN-D60-3223-19-00, WAS CRACKED.

2011FA0000460	EMB	PWC	FUEL FILTER	MISSING
7/9/2011	EMB500	PW617FE		ENGINE

DURING THE FIRST SCHEDULED INSP (600HR/12 MONTH) THE RT ENGINE FUEL FILTER WAS FOUND TO HAVE NEVER BEEN INSTALLED AT THE FACTORY. THE MFG WAS NOTIFIED AND THEY REQUESTED AN ENGINE HOT SECTION BOROSCOPE INSP BE PERFORMED. NO ENGINE DISTRESS WAS OBSERVED AND CONTINUED OPERATION WAS AUTHORIZED FOLLOWING INSTALLATION OF A FILTER A 30 MINUTE PERFORMANCE RUN AT 80 PERCENT POWER. NO DISCREPANCIES WERE NOTED. SEVERAL DAYS LATER, THE MFG CONTACTED THE OPERATOR AND REQUESTED THE FUEL CONTROL BE REMOVED FOR INSPECTION. AN EXCHANGE FCU WAS PROVIDED AND INSTALLED ON THE ENGINE.

2011FA0000453	GROB	LYC	PUMP	FAILED
7/9/2011	G120A	AEIO540D4D5	RG9570K1M	FUEL SYSTEM

PILOT REPORTED LOW FUEL PRESSURE AT 700 RPM, 10-12 PSI. INSTALLED ANOTHER PUMP RAN ACFT OPS CHECKED OK. NO PROBABLE CAUSE OR RECOMMENDATIONS AT THIS TIME.

AMCR201105	GULSTM	RROYCE	TIRE	BLISTERED
8/1/2011	GIVG400	TAY6118	349K823	ZONE 700

AFTER FLIGHT, POSTFLIGHT INSPECTION REVEALED A BLISTER ON THE SIDEWALL OF THE NR1 MAIN TIRE. THIS TIRE HAS ONLY 4 LANDINGS ON IT SINCE NEW. BLISTER WAS APPROX .5"D AND PROTUDING .7500", ABOUT 1" DOWN PAST THE CROWN OF THE SIDEWALL.

GR4D20110802001	GULSTM		STRUCTURE	CORRODED
8/2/2011	GIVX			ZONE 500

LEFT WINGLET CORRODED.

GR4D20110802002	GULSTM		STRUCTURE	CORRODED
8/2/2011	GIVX			WINGLET

RIGHT WINGLET CORRODED.

2011FA0000444	GULSTM	RROYCE	WIRE HARNESS	DEFECTIVE
6/29/2011	GIVXG450	TAY6118	08ND783625	THRUST REVERSER

DURING DESCENT, THE RED AND YELLOW WARNING MESSAGES DISPLAY: "L THRUST REVERSER DEPLOY" AND "LT THRUST REVERSER UNLOCK". AFTER LANDING VISUAL INSPECTION, THE LT THRUST REVERSER WAS AUTO MOVING BACK AND CAN NOT DEPLOY. DURING TROUBLESHOOTING, THE LT THRUST REVERSER INBD AND OTBD HARNESS WERE FOUND DEFECTIVE AND BEEN REPLACED. OPS CHECKS WERE DONE, NONE MESSAGES AFTER REPLACEMENT OF THE HARNESS.

2011FA0000443	GULSTM	RROYCE	HOSE	LEAKING
6/25/2011	GV	BR700710A110		HYD SYSTEM

LEFT HYD SYS OIL LEAKAGE WAS DETECTED ON THE SYNOPTIC DISPLAY. AT FL410 AND 1.5 HOURS OUT THE PIC ELECTED TO TURN BACK TO DEPARTURE. WITH 0.5 GALLONS OF HYD FLUID REMAINING, THE ACFT LANDED WITHOUT INCIDENT. MX DETECTED FLUID LEAKAGE FROM THE LT PYLON. UPON EXPOSURE THE LT ENGINE DRIVEN PUMP CASE DRAIN FLEXIBLE HOSE WAS FOUND TO BE LEAKING AT THE FLEX HOSE SECTION. THE LEAKAGE WAS CAUSED BY CHAFING ACTION BETWEEN THE HOSE AND PYLON BULKHEAD FS767 PORTHOLE. EVIDENCE OF ADDITIONAL CHAFING WAS FOUND AT BULKHEAD FS782 BUT NOT SUFFICIENT TO CAUSE LEAKAGE. THE PRIMARY FAILURE MODE WAS LOOSE HOSE STAND OFF CLAMPS THAT CAUSED THE HOSE TO SWING INTO

CONTACT WITH THE BULKHEADS. PLEASE REF MFG IPC 29-00-02, FIG 5 PAGE 0. FLEX HOSE IS ITEM 85. CLAMP IS ITEM 95.

2011FA0000438	LANCAR	CONT	STARTER	SHORTED
6/20/2011	LC40550FG	IO550N	6462382	ENGINE

LAST NOVEMBER 2010, INSTALLED A REBUILT STARTER ADAPTER. MFG'S WARRANTEE REQUIRED A O/H STARTER, SO I SENT MY STARTER FOR OVERHAUL. LAST WEEK, ON START, VOLTAGE WAS OK BUT THE PROP TURNED ABOUT 10 DEGREES & STOPPED. THEN SMELLED A BURNING ODOR, COULD NOT SHUT OF THE BATTERY. THE BURNING ODOR GOT STRONGER, REMOVED THE COWLING & COULD NOT TOUCH THE BATTERY BOX DUE TO HIGH TEMPT. WITH GLOVES, DISCONNECTED THE BATTERY. THE STARTER HAD A SHORT IN THE FIELD COILS. THERE IS NO PROTECTION BETWEEN THE STARTER & BATTERY SO THE STARTER & BATTERY SOLENOID/RELAY STUCK CLOSED, COULD NOT SHUTOFF THE BATTERY WITH THE BATTERY SWITCH. OVERHAULED STATER FAILED AFTER 44 STARTS. VERY DANGEROUS DUE TO A FIRE HAZARD.

2011FA0000457	LEAR	GOODYEAR	WHEEL HALF	FAILED
7/10/2011	55C		50049145	ZONE 700

PRIOR TO LIFTOFF, THE OUTER RIM OF THE RIGHT INBD MAIN WHEEL SEPARATED FROM THE WHEEL ASSEMBLY. THE FLIGHT CREW WAS NOTIFIED BY RADIO THAT A "TIRE BLEW" DURING TAKEOFF. THE ACFT RETURNED TO BASE AND MADE AN UNEVENTFUL LANDING. BOTH RT MAIN WHEEL ASSEMBLIES WERE REPLACED WITH NEW UNITS.

2011FA0000439	LET		CONTROL CABLE	FRAYED
7/5/2011	L23SUPERBLAN			RUDDER

RUDDER CABLES FRAYED AT 471.8 TIS. SHOULD LAST 1000 HRS IAW MFG.

2011FA0000464	MOONEY	LYC	TORQUE TUBE	BROKEN
6/29/2011	M20F	IO360A1A	720005501	RUDDER

RUDDER TORQUE TUBE ASSY BROKE AT POINT WHERE BELCRANK IS ATTACHED TO TORQUE TUBE CAUSING LOSS OF STEERING CONTROL.

2011FA0000468	NAMER	PCKARD	PISTON	UNSERVICEABLE
7/5/2011	F51D	V16507	MERLINV16507	ENGINE

ACFT MADE A PRECAUTIONARY LANDING DUE TO POWER LOSS AND VIBRATION IN POWERPLANT ON JUNE 15, 2011. A COMPRESSION CHECK SHOWED ZERO ON CYLINDER A4. UPON REMOVING THE CYLINDER BANK, THE PISTON WAS FOUND TO HAVE EXCESSIVE CARBON ON THE SIDES OF THE PISTON WITH THE TOP RING STUCK ON ONE SIDE AND FLUTTERING WITH .025" SIDE PLAY CLEARANCE AT THE GAP AREA OF THE RING. PISTONS A3 AND B1 ALSO HAD THE TOP RING STUCK. THE PISTON IS NOT CONRTOLING THE AMOUNT OF OIL THAT GETS TO THE TOP OF THE PISTON. THE OIL IS CAUSING CARBON BUILD UP IN THE TOP RING GROOVE. THE CARBON IS CAUSING THE RING TO STICK WHICH SEEMS TO BE CAUSING THE RING ENDS TO FLUTTER WHICH INCREASES THE CLEARANCE IN THE GROOVE. PISTONS ARE A NEW DESIGN WITH 2 YEARS SERVICE TIME. A NEWER DESIGN PISTON IS NOW AVAILABLE. THIS DESIGN PISTON SHOULD BE REPLACED BEFORE 140 HRS OF OPERATION. AN INTERIM COMPRESSION CHECK SHOULD BE MADE AS SOON AS POSSIBLE. FOLLOW UP CHECKS EVERY 25 HOURS (NORMAL INSP ON THIS ENGINE). REPLACEMENT AT 125 HRS WOULD GIVE A CUSHION OF SAFETY.

2011FA0000502	PARTEN	LYC	HARTZL	BLADE	LOOSE
6/15/2011	P68	IO360A1B6		C7666A4	NR 1 PROPELLER

PROPELLER BLADE ON PROPELLER ASSY WAS DISCOVERED LOOSE ON PREFLIGHT INSPECTION. THIS PROPELLER HAD 47.6 HRS TSO, IT WAS OVERHAULED ON 12 MAY 2011. 1ST OF 2 PROPELLERS THAT HAVE DEVELOPED LOOSE PROPELLER BLADES AFTER BEING OVERHAULED.

2011FA0000501	PARTEN	LYC	BLADE	LOOSE
7/21/2011	P68	IO360A1B6	C7666A4	NR 2 PROP

PROPELLER BLADE ON PROPELLER ASSY PN HC-C2YR-2CUF/FC7666A-4 WAS DISCOVERED LOOSE ON PRE-FLIGHT INSPECTION. THIS PROPELLER HAD 240.2 HRS TSO, IT WAS OVERHAULED ON 28 MARCH 2011. THIS IS 2ND

OF 2 PROPELLERS THAT HAVE DEVELOPED LOOSE PROPELLER BLADES AFTER BEING O/H BETWEEN MARCH 2011 AND MAY 2011. RECOMMEND STRICT ADHERENCE TO O/H ASSY STEP INSP QA POLICIES.

5APR577Y73	PILATS	PWA	MOTOR	FAULTY
7/5/2011	PC1245	PT6A6	9603002104	MLG

HYD CAWS ILLUMINATED ON GEAR RETRACTION, LANDING GEAR DID NOT RETRACT. THE HYD POWER PACK MOTOR WAS FOUND TO BE FAULTY. THE MOTOR WAS R & R WITH A SERVICEABLE UNIT PN 960.30.02.104 IAW AMM 12-A-29-10-06-00A-920A-A. PERFORMED RETRACTIONS AND EXTENSIONS OF LANDING GEAR WITH NO FURTHER FAULTS NOTED,OPS CHECK GOOD IAW AMM 12-A-32-30-00-00A-903A-A.

5APR577Y75	PILATS	PWA	CONNECTOR	DAMAGED
7/26/2011	PC1245	PT6A67B		TORQUE INDICATOR

THE PILOT REPORTED TORQUE INDICATION DROPPED OFF TO 0.2 - 0.3 PSI IMMEDIATELY AFTER ROTATION. THE ACFT CONTINUED CLIMBOUT, THE CREW INFORMED ATC THEY WERE RETURNING TO DEPARTURE AND LANDED SAFELY. REMOVED, CLEANED AND REINSTALLED TORQUE PRESSURE TRANSMITTER CONNECTOR. PERFORMED FUNCTIONAL TEST OF TORQUE TRANSDUCER IAW AMM 12-A-77-40-03-00A-903A-A, OPS AND LEAK CHECK GOOD.

5APR577Y74	PILATS	PWA	UNKNOWN	ODOR
7/14/2011	PC1247	PT6A67B		COCKPIT

AFTER DEPARTING, THE PILOT'S EADI WENT OUT AND THE AUTO PILOT DICONNECTED. THERE WAS A SMELL OF ELECTRICAL SMOKE EMANATING FROM THE AUTO PILOT CONTROLLER AREA. O2 MASKS WERE DONNED AND DEPARTURE WAS NOTIFIED THAT THEY WERE RETURNING WITH SMOKE IN THE COCKPIT. 30-40 SEC LATER THE EADI AND THE A/P CAME BACK ON. THE ACFT LANDED SAFELY. THE CAUSE OF THE ELECTRICAL SMELL IS STILL BEING INVESTIGATED. THE EADI WAS R & R WITH A SERVICEABLE UNIT IAW PMM 12-A-34-26-03-00A-920A-A. AUTO PILOT CONTROLLER INSPECTED AND DETERMINED NOT TO BE THE SOURCE OF ELECTRICAL SMOKE ODOR. PERFORMED OPS CHECK OF AUTO PILOT SYS IAW 12-A-22-10-00-00A-903A-A. ALL CHECK SATISFACTORY.

5APR577Y72	PILATS	PWA	BRAKE DISC	CRACKED
7/3/2011	PC1247	PT6A67B	244759D	BRAKE

THE RT BRAKE WAS INSPECTED DURING A LINE CHECK AND FOUND TO HAVE A CRACKED ROTOR. THE RT BRAKE ASSY WAS R & R WITH A SERVICEABLE O/H UNIT OF THE SAME PN 959.56.01.512 IAW AMM 12-A-32-40-03-00A-920B-A.

2011F00153	PIPER		SHAFT	FAILED
7/11/2011	PA28161			CAM FOLLOWER

ACFT WAS WRITTEN UP FOR POWER LOSS. LT AND RT MAGS WERE PULLED. TACH TIME ON BOTH MAGS, 933.5. INSPECTION REVEALED LT MAG CAM FOLLOWER SHAFT BROKEN. BOTH MAGS HAD OIL GETTING PAST OIL SEAL AS A RESULT, POINTS WERE PITTED, MAG WERE REPLACED.

OG5R20110719001	PIPER	LYC	TIRE	DEFLATED
7/12/2011	PA28R201	IO360C1C6	505C665	ZONE 700

FLAT TIRE DURING LANDING ROLL OUT; WHILE TAXIING TO PARK THE ACFT.

OG5R20110714002	PIPER	LYC	TIRE	DEFLATED
6/9/2011	PA28R201	IO360C1C6	606C668	ZONE 700

LT MAIN TIRE WENT FLAT ON TAXI.

OG5R20110714003	PIPER	LYC	TIRE	DEFLATED
6/4/2011	PA44180	O360A1H6	505C665	ZONE 700

DURING TAXI, NOSE TIRE WENT FLAT.

2011FA0000432	PIPER	LYC	SLICK	DISTRIBUTOR BLK	DAMAGED
6/30/2011	PA44180	O360A1H6		K3822	MAGNETO

DURING 500HR INSPECTION ON MAGNETO, FOUND DISTIBUTOR GEAR FINGER LOOSE. REPLACED THE DISTRIBUTOR BLOCK PN K3822.

2011FA0000433	PIPER	LYC	SLICK	COIL	DEFECTIVE
6/30/2011	PA44180	O360A1H6			MAGNETO

DURING 500HR INSPECTION ON MAGNETO, FOUND DEFECTIVE COIL; IT WOULD NOT PASS THE OHM CHECK IN SRM.

2011FA0000434	PIPER	LYC	SLICK	GEAR	LOOSE
6/30/2011	PA44180	O360A1H6			MAGNETO

DURING 500HR INSPECTTION, FOUND DISTRIBUTOR GEAR FINGER LOOSE. REPLACED THE DISTRIBUTOR GEAR PN K3822.

2011FA0000435	PIPER	LYC	SLICK	GEAR	DAMAGED
6/30/2011	PA44180	O360A1H6			MAGNETO

DURING 500HR INSP ON MAGNETO, DISCOVER LOOSE FINGER ON DISTRIBUTOR GEAR PN K3822, REPLACED WITH NEW PART.

E81RJT230776	RAYTHN			WIRE	MISINSTALLED
7/15/2011	HAWKER800XP				ELEVATOR TRIM

DURING INVESTIGATION OF ELECTRIC ELEVATOR TRIM SYS, OPERATION NOTED TRIM RATE AS CONTROLLED BY THE PEDESTAL FLAP LEVER BAULK SWITCH BM TO OPERATE IN REVERSE. ELEVATOR TRIM OPERATES SLOW IN FAST-FLAPS DOWN MODE AND FAST IN SLOW-FLAPS UP MODE. FOUND WIRE RL1R CONNECTED TO SWITCH NO CONTACT AND WIRE RL2R CONNECTED TO NC CONTACT, OPPOSITE OF AS SHOWN IN WIRING PARTS CATALOG FIGURE 27-30-10-07. RECONNECTED WIRES TO CORRECT SWITCH CONTACTS, ELEVATOR ELECTRIC TRIM OPERATIONS FOUND NORMAL. TRANSIENT ACFT, MX HISTORY IN THIS AREA UNKNOWN.

UVVR2011072500018	RKWELL			ATTACH FITTING	CRACKED
7/25/2011	NA26565				BS 150

DURING COMPLIANCE OF CAMP CARD 52.006 (521040) INSPECT MAIN ENTRANCE DOOR FOR CORROSION. THE MAIN ENTRANCE DOOR FORWARD HANDRAIL ATTACH FITTING (L-ANGLE) WAS FOUND CRACKED.

LX5R2011072000001	SKRSKY	PARKERHANFIN		HYDRAULIC LINE	RUPTURED
7/20/2011	S76B			AE2463434G0165	ZONE 200

WHILE IN CRUISE FLIGHT, THE CREW NOTICED THE "NR2 SERVO SYSTEM" CAUTION LIGHT. THEY THEN NOTICED THE NR2 HYD PRESSURE GAGE WAS GOING TO ZERO PRESSURE. THEY PROCEEDED WITH THE EMERGENCY CHECK LIST AS REQUIRED. THEY THEN PROCEEDED TO AN ALTERNATE AIRPORT, THEY BLEW DOWN THE LANDING GEAR WITHOUT INCIDENT AND PROCEEDED TO LAND WITHOUT INCIDENT. UPON ENGINE SHUTDOWN IT WAS NOTED THAT THERE WAS HYD FLUID ON THE RT SIDE OF THE HELICOPTER AND SOME DRAINING OUT OF THE DRAIN TUBE ON THE BOTTOM OF THE HELICOPTER. THE MECHANIC ARRIVED AND AFTER SHORT INSP, FOUND THE NR2 HYD PUMP PRESSURE FLEX LINE HAD A SMALL HOLE IN IT. THERE WAS NO EVIDENCE OF CHAFING. THIS PART IS ON ORDER AND WILL BE REPLACED. THIS FLIGHT WAS CONDUCTED WITHOUT ACFT DAMAGE OR PERSONAL INJURY.

2011FA0000466	SNIAS	TMECA		COMPRESSOR	FAILED
6/18/2011	AS350B2	ARRIEL1D1		5AS35034	AIR CONDITIONER

AIR CONDITIONING SYSTEM WAS BLOWING HOT AIR INTO THE CABIN WITH A BURNED ODOR COMING FROM VENTS. AFTER PILOT LANDED, NOTICED AIR CONDITIONER BELT FRAYED AND MELTED TO COMPRESSOR. 2 MORE AIR CON COMPRESSORS WITH THE FOLLOWING SN WERE INSTALLED ON THE SAME ACFT AND HAD THE SAME PROBLEM. THEY WERE SN 2311 WHICH FAILED WITH 20.5 TTSN AND SN 2309 WHICH FAILED WITH 7.1 TTSN. THE PROBABLE CAUSE FOR ALL 3 AIR CON COMPRESSOR PROBLEMS POINTS TO THE AIR CON CLUTCH EITHER STAYING ENGAGED OR SLIPPING. A FRICTION BUILD-UP OCCURS THAT IS CAUSING SO MUCH HEAT THAT THE CLUTCH METAL IS DISCOLORED AND BLUED WHICH IN TURN MUST BE LITERALLY MELTING THE AIR CON BELTS OFF OF THE COMPRESSORS. ALL 3 COMPRESSORS, WHEN REMOVED, WERE NOT LOCKED UP WHN TURNED BY

HAND, BUT YOU CAN HEAR THE FRICTION BETWEEN THE PULLEY AND THE CLUTCH HOUSING WHERE THE 2 ARE CONTACTING. SENDING ALL 3 COMPRESSORS BACK TO MFG FOR INVESTIGATION.

2011FA0000465	SNIAS	TMECA	COMPRESSOR	FAILED
6/14/2011	AS350B2	ARRIEL1D1	5AS35034	CABIN AIR

AC SYSTEM WAS BLOWING HOT AIR INTO THE CABIN WITH A BURNED SMELL COMING FROM VENTS. AFTER PILOT LANDED, HE NOTICED A/C COMPRESSOR PROBLEM POINTS TO THE A/C CLUTCH EITHER STAYING ENGAGED OR SLIPPING. A FRICTION BUILD-UP OCCURRED. THE CLUTCH METAL ON THIS A/C COMPRESSOR WAS NOT DISCOLORED OR BLUED BUT THE A/C BELT DID GET HOT ENOUGH TO MELT AND BREAK OFF. THIS COMPRESSOR WHEN REMOVED WAS NOT LOCKED UP WHEN TURNED BY HAND BUT YOU CAN HEAR THE FRICTION BETWEEN THE PULLEY AND THE CLUTCH HOUSING WHERE THE 2 PARTS ARE CONTACTING. WE ARE SENDING THIS COMPRESSOR BACK TO MFG FOR INVESTIGATION.

2011FA0000436	SNIAS	TMECA	INDICATOR	FAILED
7/1/2011	AS350B2	ARRIEL1D1	535106	ENGINE TORQUE

LOSS OF ENGINE TORQUE INDICATION.

2011FA0000496	TCRAFT		SPAR	CRACKED
8/2/2011	BC12D			LT WING

FOUND SAFETY ISSUES WITH ALL FOUR WING SPARS ON THIS AIRCRAFT. THE WOODEN SPARS HAD SEVERAL CRACKS AND VARIOUS OTHER DEFECTS. I HAVE ALSO E-MAILED PICTURES OF SOME OF THE MORE NOTICEABLE AREAS. THIS AIRCRAFT WAS RECENTLY RESTORED AND NEW FABRIC WAS INSTALLED OVER THE OLD WOOD SPARS. I SUSPECT THAT THIS AIRCRAFT PROBABLY HAD A GROUND LOOP OR 2 IN IT'S PAST HISTORY WHICH CAUSED MOST OF THESE FAILURES. ORIGINAL SPAR DESIGN WITH REINFORCEMENT PLATES NEAR THE INBOARD WING ATTACH POINTS ARE OF POOR DESIGN BECAUSE OF THE WAY THE WOOD SPAR IS MILLED DOWN TO ALLOW FOR THE PLATES TO BE ATTACHED AND STILL MAINTAIN ORIGINAL MATERIAL THICKNESS. THIS IS A WEAK SPOT AND VERY HARD TO INSPECT PROPERLY.