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Federal Aviation Administration

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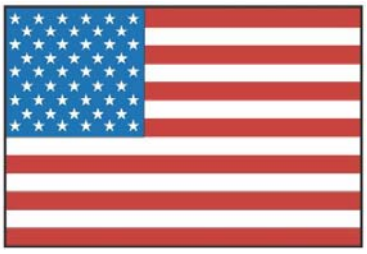
Regulatory Support Division

ADVISORY CIRCULAR

43-16A

AVIATION MAINTENANCE ALERTS



ALERT NUMBER 349

AUGUST 2007

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

AVIATION MAINTENANCE ALERTS

The Aviation Maintenance Alerts provide a common communication channel through which the aviation community can economically interchange service experience, cooperating in the improvement of aeronautical product durability, reliability, and safety. This publication is prepared from information submitted by those who operate and maintain civil aeronautical products. The contents include items that have been reported as significant, but have not been evaluated fully by the time the material went to press. As additional facts such as cause and corrective action are identified, the data will be published in subsequent issues of the Alerts. This procedure gives Alerts' readers prompt notice of conditions reported via a Malfunction or Defect Report (M or D) or a Service Difficulty Report (SDR). Your comments and suggestions for improvement are always welcome. Send to: FAA; ATTN: Aviation Data Systems Branch (AFS-620); P.O. Box 25082; Oklahoma City, OK 73125-5029.

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

AIRPLANES

BELLANCA

Bellanca: 7ECA; Shorting Ammeter Wire; ATA 2497

"While in flight," states a technician, "the pilot reported he could smell something burning—he landed as soon as was practical. Investigation revealed the wire from the alternator to the ammeter (P/N 112) had shorted against the firewall...." "Wires 112, 114, the master relay, starter relay, voltage regulator, and alternator were all replaced."

Part Total Time: 1,568.0 hours.

CESSNA

Cessna: 340A; Leaking Fuel Lines; ATA 2820

A repair station technician states, "During aircraft maintenance a strong fuel odor was observed in the cabin of the aircraft. This aircraft *(has been)* idle on the ramp for at least 10 months. The exterior of the aircraft was inspected for obvious fuel leaks—none were detected. By this time the fuel smell in the cabin had cleared up...*(we decided to start the engines)*. During part of this operation the mechanic ran the engines in the fuel cross-feed position—again the strong fuel odor was noticed. The aircraft was returned to the hanger and the floor panels were taken up in the area of the cross-feed lines (where they pass through the cabin area). It was observed a heater duct was running perpendicular to the cross-feed lines and was in contact with *(these)* lines, causing corrosion to form. *(This action)* resulted in pin holes *(developing)* in both lines."

(Fuel line P/N's included are: 5300108-53 and -54. A search of the FAA Service Difficulty Reporting System (SDRS) data base reflects four similar entries).

Part Total Time: 5,275.4 hours.

LEARJET

Learjet: 45; Collapsing Nose Gear; ATA 3233

A submitter writes, “During a maintenance visit at our facility, a technician discovered a leaking nose landing gear actuator *(P/N 6632201000-005).* The facility gained access, removed and reinstalled the actuator with a repaired unit, and returned the aircraft to service.

“During an attempt to begin normal towing operations (positioning the aircraft for departure), the nose landing gear began to retract. We immediately ceased the towing operation and we were able to place a jack underneath the aircraft to support it, preventing damage.”

“...an integral mechanism holds the actuator down and locked until hydraulic pressure is applied. We suspect failure of *(this)* integral locking mechanism.”

(*A search of the FAA Service Difficulty Reporting System (SDRS) data base revealed two similar entries for this part number.)*

Part Total Time: (unknown).

HELICOPTERS

BELL

Bell: 206B3; Tail Rotor Blade Weight Separation; ATA 6410

An Airframe and Powerplant mechanic writes, “The center tip weight swung out of the subject tail rotor blade during flight, causing a violent vibration. This vibration caused three of the tail rotor gearbox studs to shear before the aircraft could auto-rotate to the ground.

“If the helicopter had not made the ground (when it did) the other stud would have sheared and the tail rotor gear box would have left the aircraft—the results would have been disastrous.

“I recommend the tip blocks *(rotor blade P/N 206-016-201-127M)* be manufactured from a material that can withstand the centrifugal forces applied to the tip weights during flight. ...*(These)* tail rotor tip blades *(should)* be inspected as soon as possible and at every 100 hour inspection.”

(*A search of the FAA Service Difficulty Reporting System (SDRS) data base revealed 22 entries for this part number.)*

Part Total Time: (unknown).

BOLKOW

Bolkow: BO-105-LSA3; Sheared Tail-Rotor Coupling Bolts; ATA 6520

“During the course of an accident investigation,” writes an FAA inspector, “that resulted in one fatality, it was noted the bolts connecting the tail rotor drive shaft to the input ‘Thomas Coupling’ (on the intermediate gear box) were sheared. The shearing took place just below the grip length area of the bolt. The sheared bolts were still in the flange of the gear-box Thomas coupling. The threaded portions of the bolts were recovered (with the nuts installed) from the wreckage, along with other hardware. It was noted the bolt holes in the flange on the tail rotor drive shaft were elongated. This would seem to indicate an under-torque condition which—if gone unnoticed—could likely lead to shearing of *(these)* bolts. This would result in loss of tail rotor control and an accident.

I suggest a one time inspection of these bolts for proper torque. If any bolts are found to be under-torqued, an inspection of the bolts for signs of metal fatigue would be in order." *(Bolt P/N: LN9082-8X18. Intermediate gearbox P/N: 4639002001).*

Part Total Time: 3,988.2 hours.

ACCESSORIES

FACET CARBURETOR

Facet Carburetor: 10-6019 mod HA-6; Leaking Float; ATA 7322

A repair station technician states, "Engine idle and low power performance were erratic. Upon engine shutdown fuel was noted dripping from the carburetor/induction air box. The carburetor was disassembled and inspected. *(I)* found the plastic hollow float ½ full of fuel. The float assembly top piece appeared to have partially de-bonded from the lower section, allowing fuel to begin leaking into the assembly. As the float lost its buoyancy it could no longer restrict the fuel source. A poor running engine and a fire hazard were the results. *(I)* recommend the manufacturing process (bonding) of this float be improved. In the meantime, all floats manufactured in the same batch should be removed from service."

(A search of the FAA Service Difficulty Reporting System (SDRS) data base revealed four similar entries referencing float defects.)

Part Total Time: 400.0 hours.

LAMAR

Lamar: PM2401 Starter; Commutator Separation; ATA 8011

(A repair station technician provides a short description of a failed starter for a 320 Lycoming on a Cessna 172. His pictures speak volumes.)

"A segment of the commutator came off during starting, completely destroying the brushes on the inside of the starter."

(A search of the FAA Service Difficulty Reporting System (SDRS) data base revealed 20 entries for this ATA code and model starter.)

Part Total Time: 1,198.9 hours.

PRECISION

Precision Airmotive: MA45 Carburetor; Leaking Float; ATA 7322

"The carburetor was taken into my repair station for overhaul," states the submitter. "When disassembled it was found the float *(P/N 30802)* had taken on fuel and was sunk. It is recommended all polymer floats produced by Precision Airmotive be recalled, an AD issued, and the new Composite float be installed as soon as possible. The polymer floats have a significantly reduced wear life of only about 500 hours instead of 2,000 hours for the carburetors this float is installed in. This instance was not a first for this repair station."

(Carburetor's model number of MA45 includes a sub-component number: 104404. A search of the FAA Service Difficulty Reporting System (SDRS) data base revealed 19 entries for this unit, two specifically dealing with floats.)

Part Total Time: 300.0 hours.

SUPERIOR

Superior: Compression Ring; Incorrect Bevel Shape; ATA 8530

(An Airframe and Powerplant mechanic describes difficulties with Lycoming GO-480-B1C overhaul.)

"Superior compression rings (P/N 74673) were installed during overhaul. After 3.0 hours of running, a bore-scope inspection revealed strange blackening of the cylinder walls. A cylinder was removed to investigate. The top two compression rings only showed contact on the bottom half *(of these respective rings)*, indicating the bevel on the face of the ring was facing the wrong way for a compression ring (/\ versus \/). After comparing this Superior ring to an original equipment Lycoming ring, it appears the Superior *(part)* is defective *(and/or)* is numbered wrong. It does not match the shape of the Lycoming ring *(or the)* information obtained from Lycoming technical support. *(Therefore)*, all cylinders have been removed *(from this engine)* to replace these rings.

"I recommend all rings from Superior (SL 74673) be recalled from the system for safety of flight reasons. Abnormal and sudden loss of *(engine)* power will result *(with incorrect rings)*."

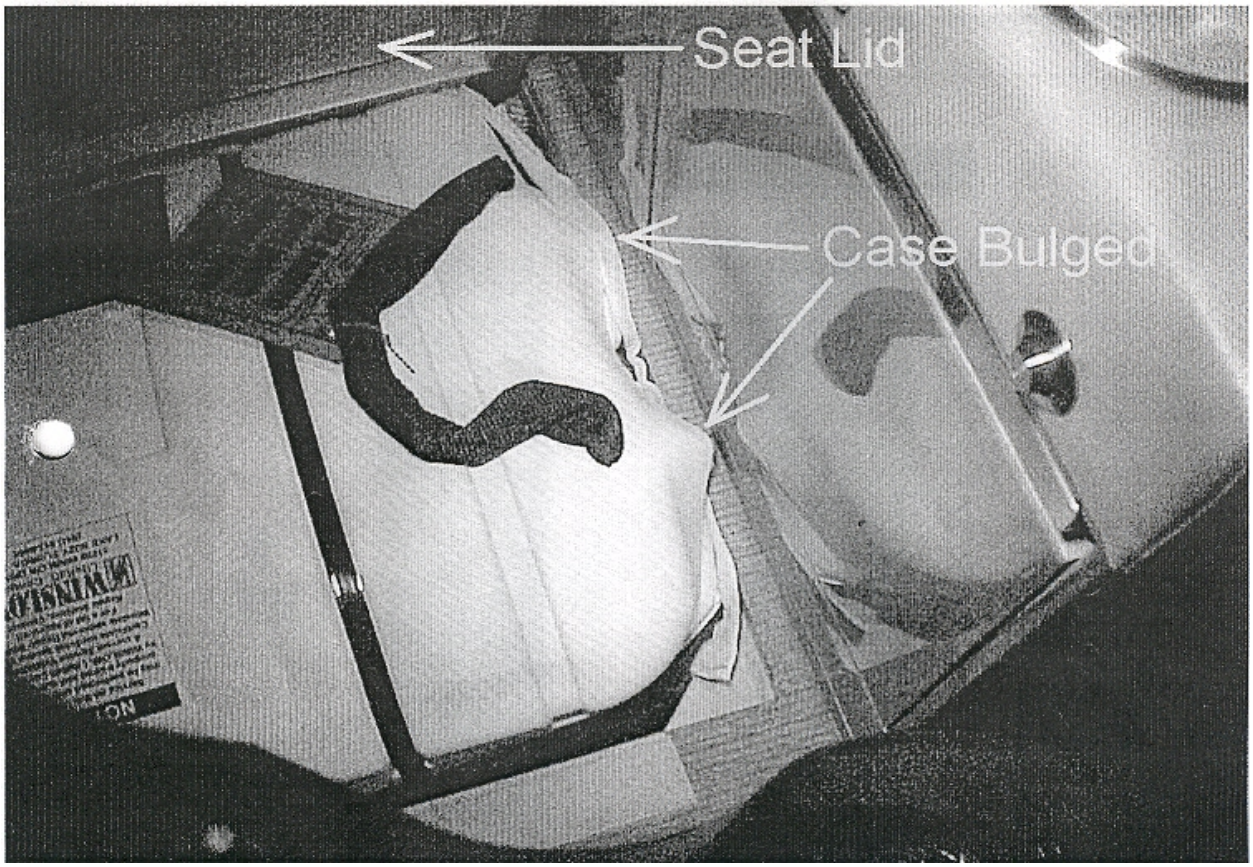
Part Total Time: 3.0 hours.

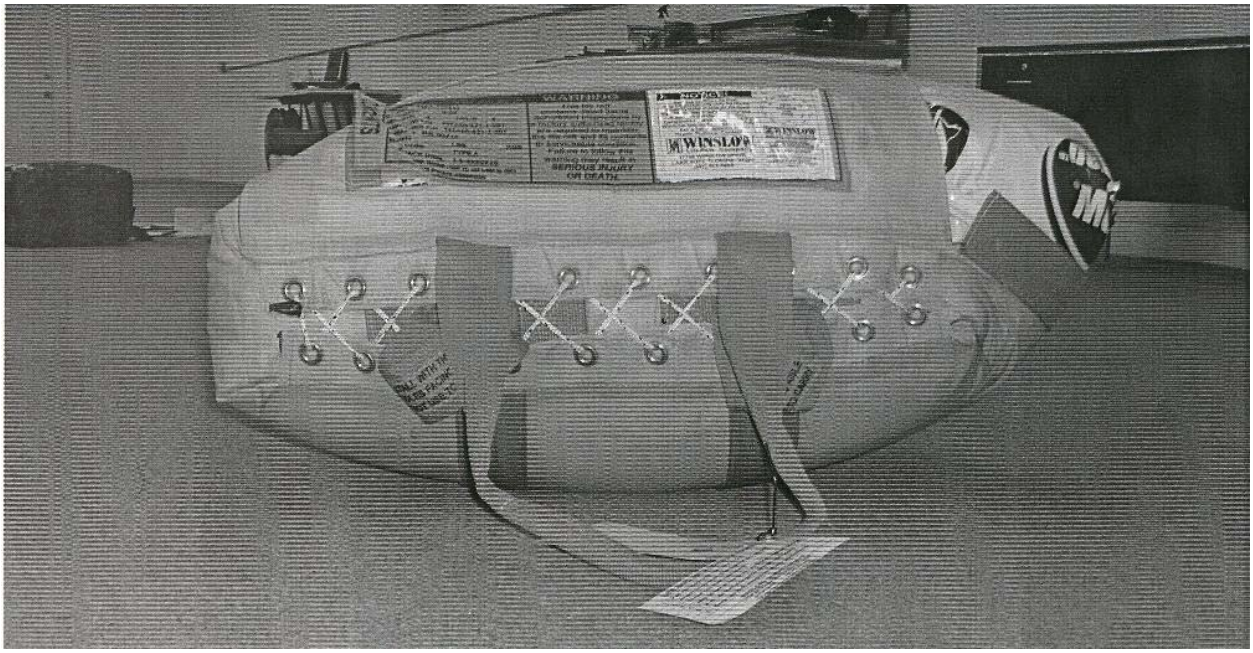
WINSLOW

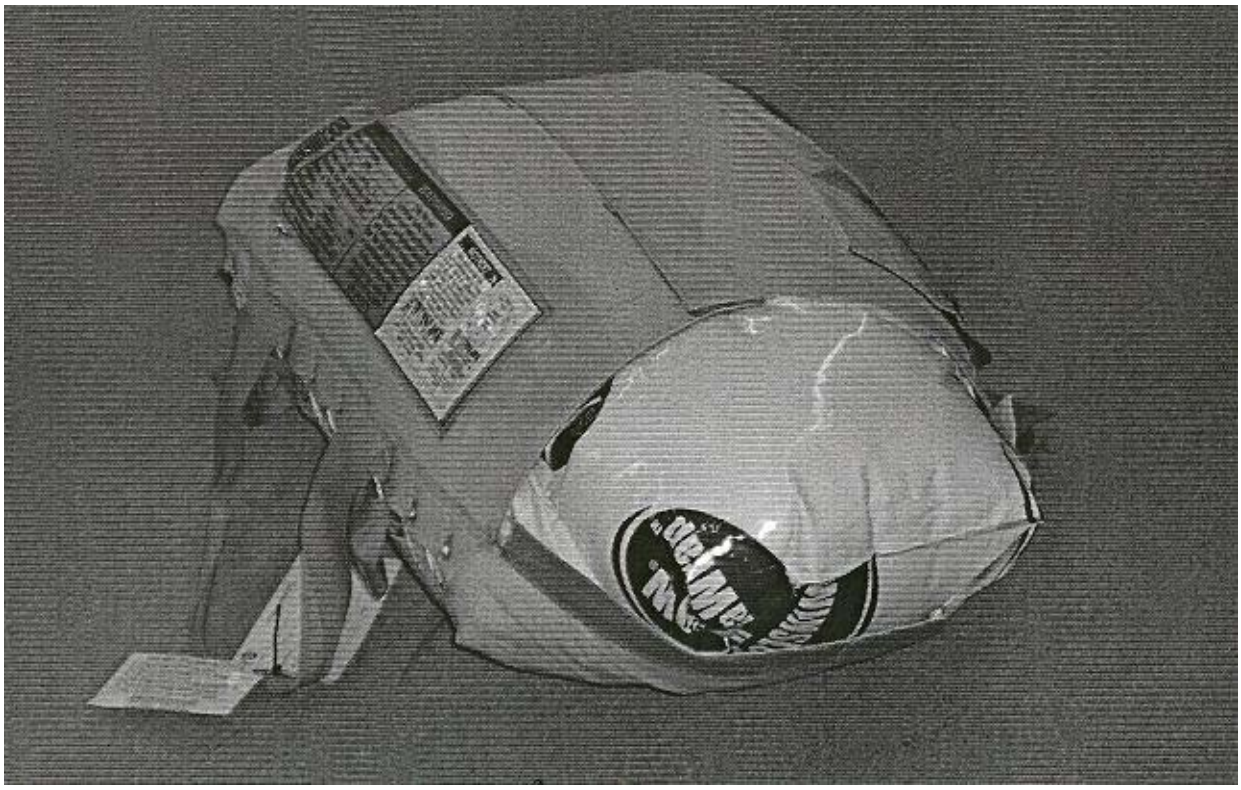
Winslow: Life Raft; 46FA-AV (SA); Partial Inflation; ATA 2564

(A repair station technician provides two reports in a span of 8 days. Both describe the same defect on the same model raft, though specific aircraft application information was not included. Here, both reports have been combined. Winslow's Director of Quality Assurance Steven Saunders provided their previously distributed service letter addressing an O-ring lubrication procedure. It follows this article.)

"The life raft partially (and inadvertently) inflated in the customer's aircraft...." "This 'under the seat cushion' *(installation)* could have possibly caused damage to the aircraft, injury to persons, or loss of aircraft control had the life-raft completely inflated in flight. This raft was removed from the aircraft cabin by the operator before it had completely inflated, minimizing the possibly of severe damage." *(The part number for both reports is 46FASA-230-603.)*


Seat Lid
Case Bulged





WINSLOW LifeRaft Company
11700 Winslow Drive, Lake Suzy, FL 34269 (941) 613-6666 Fax (941) 613-6677 www.winslowliferaft.com E-mail: rafts@winslowliferaft.com

SERVICE INFORMATION LETTER – SIL001STS

November 15, 2005 (as Amended January 25, 2006)

OEM's, End-users, all other users

Dear Sir/Madame:

It has come to our attention, that in a very few instances, some WINSLOW model 46FASA (all dashes except -604), 46FAUL (all dashes possible), and 57FASA (only dash numbers -101, -102, -103, & -353) life rafts manufactured since March 2004, have experienced a slight dimensional deformation. These are life rafts with rated capacities of 4 and 5 persons and no other life rafts are affected.

A Quality Investigation was immediately conducted in order to determine the cause of the deformations, the extent of those life rafts that might be impacted, as well as the corrective action necessary to alleviate the issue.

The model 46FASA, 46FAUL, and 57FASA life rafts manufactured since March 2004 use a unique and specific cylinder-to-cylinder head interface. It has been determined that in those rare instances in which pack deformation occurred, the cause was due to a minute passing of cylinder gas, past the cylinder-to-cylinder head "port seal" interface, and into the vacuum pack itself. An inadequacy of a special lubricant that is applied to the surfaces of those components that comprise the seal has been determined to be responsible for these rare deformations. Even the slightest escape of a gas in an otherwise evacuated environment can cause noticeable deformations.

It should be emphasized that in no case was any life raft affected to the extent that it would not have deployed properly, or that it would not have provided anything less than 100% of its designed capabilities.

It is recommended that the models list above, manufactured between March 2004 and September 2005, be inspected for pack deformation every three months or until the next re-servicing of life raft. An obvious increase in pack size may merit further inspection at WINSLOW. Additionally, WINSLOW encourages you to contact us at any time with any questions one might have regarding this very limited issue. Any 46FASA, 46FAUL, and 57FASA life rafts that may be discovered to have dimensionally changed should be brought to our attention so that appropriate remedial action may be provided. The expense of any remedial care will, of course, be paid for by WINSLOW LifeRaft Company.

WINSLOW LifeRaft Company
11700 Winslow Drive, Lake Suzy, FL 34269 (941) 613-6666 Fax (941) 613-6677 www.winslowliferaft.com E-mail: rafts@winslowliferaft.com

SERVICE INFORMATION LETTER – SIL001STS

We apologize in advance for any inconvenience this may impose upon any of our customers. We appreciate your business, along with your faith and reliance on our life saving appliances. We will always do only that which will serve to justify your loyalty to us as a Company.

As the Director of Quality Assurance for WINLSOW, I encourage you to contact me at any time with any concerns or questions you may have.

Best regards,

Steven T. Saunders
Director of Quality Assurance
stevens@winslowliferaft.com

Part(s) Total Time: (unknown).

AIR NOTES

INTERNET SERVICE DIFFICULTY REPORTING (iSDR) WEB SITE

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

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

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

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

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

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

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

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

The SDRS and iSDR web site point of contact is:

Tom Marcotte
Service Difficulty Reporting System, Program Manager
Aviation Data Systems Branch, AFS-620
P.O. Box 25082
Oklahoma City, OK 73125
Telephone: (405) 954-6500
SDRS Program Manager e-mail address: 9-AMC-SDR-ProgMgr@faa.gov

IF YOU WANT TO CONTACT US

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

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

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

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

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

AVIATION SERVICE DIFFICULTY REPORTS

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

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

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

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

Federal Aviation Administration

Service Difficulty Report Data

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

Control Number	Aircraft Make	Engine Make	Component Make	Part Name	Part Condition
Difficulty Date	**Aircraft Model**	**Engine Model**	**Component Model**	**Part Number**	**Part Location**
2007FA0000532			BEECH	TORQUE KNEE	MISMANUFACTURED
6/20/2007			T34	608200185	NLG

PURCHASED BRAND NEW PART. DURING ASSEMBLY IT WAS FOUND THAT THE TORQUE ARM PIN LUGS ARE OF DIFFERENT THICKNESSES. THEY ARE SUPPOSED TO BE THE SAME. THIS DEFECT CAUSED THE HOLES IN THE HOUSING AND THE TORQUE PIN TO NOT ALIGN.

2007FA0000589				GEAR	DAMAGED
6/22/2007				1068256013	MAGNETO

REPAIR STATION RECEIVED MAGNETO FOR REPAIR. WHEN THE UNIT WAS DISASSEMBLED IT WAS NOTED BOTH DISTRIBUTOR GEARS TCM PN 10-682016 WERE MISSING TEETH. IT WAS NOTED THAT A PATTERN OF TEETH THAT WERE MISSING COULD BE SEEN. A TOTAL OF 5 TEETH WERE MISSING FROM BOTH GEARS. WHAT SEEMS TO HAPPEN IS WHEN THE IMPULSE SNAPS THE IMPULSE SNAPS THAT TOOTH OFF THE GEAR? WHEN ASSEMBLED TO VIEW THE GEAR POSITION IT WAS NOTED THAT ONE TOOTH WAS MISSING WITH FIVE EACH OF THE SIX TOTAL ENGAGEMENTS OF THE IMPULSE. ITEMS THAT COULD CONTRIBUTE TO THIS PROBLEM CAN BE FOUND IN SB658. IT IS RECOMMENDED TO FOLLOW SB658 AND TO INSPECT THE DISTRIBUTOR GEARS ON ALL IMPULSE D-3000 OR D-2000 UNITS FOR WEAR AT EVERY 100 HRS BY REMOVING THE MAGNETO VENT PLUGS IAW APPLICABLE MAINTENANCE PROCEDURES. FINDING DAMAGED GEARS COULD PREVENT A POSSIBLE ENGINE SHUTDOWN IN FLIGHT.

2007FA0000590		CONT		CONTACTOR	MELTED
5/27/2007		IO360A	D4LN2021	10382585	MAGNETO

AIRCRAFT HAD DEPARTED FOR A SIGHT SEEING TRIP. ON THE RETURN, ALL ENGINE POWER WAS LOST, THE AIRCRAFT WAS LANDED IN A MEADOW WITH MINIMAL DAMAGE TO THE AIRCRAFT. UPON INSPECTION OF THE ENGINE, FOUND THAT THE MFG DUAL MAGNETO D4LN-2021 WAS NOT FUNCTIONAL ON EITHER MAG. UPON FURTHER INVESTIGATION IT WAS DETERMINED THAT THE CAM FOLLOWERS OF THE POINTS HAD GOTTEN TOO HOT AND MELTED TO A POINT THAT RENDERED THE CONTACT ASSEMBLY INOPERATIVE, CAUSING A DUAL FAILURE OF THE MAG. IT WAS NOTED THAT THE SCREW THAT HOLDS THE POINTS CAM IN PLACE HAD A TORQUE CHECK PAINTED ON IT AND HAD TURNED BLACK FROM HEAT. DUE TO THE FACT THAT THE DUAL MAG HAS MORE POSSIBILITIES TO PRODUCE MORE HEAT JUST FROM THE ELECTRICAL PART OF MAG AND IN A HOT ENVIRONMENT. A BLAST TUBE FOR COOLING BE DIRECTED ON THE HOUSING OF THE MAG. A BETTER SOLUTION WOULD BE FOR A HIGHER TEMPERATURE RESISTANT CAM FOLLOWER.

CA070618007		PWA		WIRE HARNESS	DAMAGED
6/18/2007		PT6A27		311792401	ENGINE

(CAN) ACCESSORIES SERVICES PLANT 2. DURING BENCH CHECKING ACTIVITIES THE PART WAS EXHIBITING AN UNKNOWN CONFIGURATION. UNABLE TO DETERMINE THE MANUFACTURING SOURCE. THE PART WAS REPLACED WITH GENUINE PART. THIS PART WILL BE KEPT FOR 1 MONTH FOR EXAMINATION. (TC NR 20070618007)

CA070613001		RROYCE		DUCT	MISREPAIRED
6/12/2007		SPEY55515P		JR21756A	ENGINE BYPASS

(CAN) ENGINE FRONT BYPASS DUCT FOUND AT INSPECTION WITH NON STANDARD REPAIR OUTSIDE OEM LIMITATION. PATCH REPAIR ON OUTSIDE WALL 8 INCH LONG BY 2.5 INCH WIDE OUTSIDE SCOPE OF XRS3025. PART REJECTED AND REMOVED FROM ENGINE. (TC NR 20070613001)

CA070605001	AEROSP	PWA	FCU	INOPERATIVE
6/3/2007	ATR42300	PW120		NR 2 ENGINE

(CAN) DURING CLIMB AFTER DEPARTURE, THE CREW OBSERVED A SLOW DECREASE IN TORQUE ON THE NR 2 ENGINE AND WITH REDUCED FUEL FLOW. THE AIRCRAFT RETURNED TO POINT OF DEPARTURE AND LANDED WITHOUT FURTHER PROBLEM. MAINTENANCE REPLACED THE NR 2 FUEL CONTROL UNIT (FCU) AND RETURNED THE AIRCRAFT TO SERVICE AFTER SATISFACTORY GROUND RUN. (TC NR 20070605001)

CA070608009	AIRBUS	CFMINT	VALVE	FAILED
6/7/2007	A319114	CFM565A1	D22AA1022	FUEL RETURN

(CAN) DUE TO A LT ENGINE STALL MESSAGE ON ECAM, THE FLIGHT CREW SHUTDOWN THE NR 1 ENGINE AS A PRECAUTION. MAINTENANCE FOUND FUEL RETURN VALVE AT FAULT DURING AN ENGINE MOTORING TEST, UNIT REPLACED IAW AMM 73-11-50. (TC NR 20070608009)

UE5R02	AIRTRC	PWA	GEARBOX	CORRODED
7/5/2007	AT602	PT6A60	310825401	

PT6A-60AG REDUCTION GEAR REAR HOUSING P/N 3106854-01 HAS SEVERE CORROSION ON OUTER SURFACE OF HOUSING. DEEP PITTING, SOME AREAS UP TO .125 INCH DEEP. CORRODED AREAS EXTEND THE ENTIRE CIRCUMFERENCE OF HOUSING, PRIMARILY NEXT TO MATING FLANGE FOR FWD HOUSING.

2007FA0000569	AMD	GARRTT	TRANSMITTER	READS LOW
5/17/2007	FALCON900EX	TFE73160	642795431	ENGINE

THE AIRCRAFT WAS CLIMBING AND THE NR 3 ENGINE OIL PRESSURE INDICATION STARTED TO DROP. AT 46 PSI IT WENT RED AND THE PILOT SHUTDOWN THE ENGINE AND LANDED THE AIRCRAFT. THE OIL LEVEL WAS IN LIMITS AND NO EXTERNAL LEAKS WERE FOUND. A DIRECT READING PRESSURE GAGE WAS INSTALLED AND SHOWED GOOD OIL PRESSURE AND THAT THE INDICATOR WAS READING LOW. A NEW OIL PRESSURE TRANSMITTER WAS INSTALLED AND CORRECTED THE LOW READING PROBLEM. (K)

2007FA0000555	AMERAC	LYC	EXHAUST VALVE	BENT
6/16/2007	S1AAMERAC	O235C2C		ENGINE

EXHAUST VALVE WAS FOUND STUCK IN THE OPEN POSITION ON TEARDOWN OF THE ENGINE. VALVE STEM HAD A SLIGHT BEND. ENGINE TEARDOWN WAS DUE TO AN AIRCRAFT ACCIDENT.

CA070615003	BAG	GARRTT	SWITCH	FAILED
6/13/2007		TPE33110UG	622800200	MLG

(CAN) DURING APPROACH, THE CREW EXPERIENCED A LANDING GEAR FAILURE AND OBSERVED THE CIRCUIT BREAKER HAD POPPED. THEY PROCEEDED WITH AN EMERGENCY LANDING GEAR EXTENSION AND LANDED WITHOUT INCIDENT. THE FAULT WAS TRACED TO THE LT UPLOCK MICROSWITCH. WHEN THE MICROSWITCH WAS ACTIVATED THE FAULT DISAPPEARED AND WAS UNABLE TO BE RE-CREATED. THE SWITCH WAS REPLACED. (TC NR 20070615003)

CA070615004	BAG	GARRTT	BOLT	FAILED
6/13/2007	JETSTM3101	TPE33110UG	A1026EAND9E	NLG

(CAN) SCHEDULE INSPECTION AD UK 024-05-87 / SB53A-JA870510R1, WE NOTICE THE 2 UPPER BOLT OF THE NLG JACK MOUNTING BRACKET WERE SHEARED AND THE 2 LOWER ONES WERE LOOSE. ACCOMPLISHED PART A OF THE SB C/OUT(ALL 4 BOLTS AND NUTS REPLACED), PARTS INSPECTED AND AIRCRAFT RETURNED TO SERVICE. (TC NR 20070615004)

CA070607009	BEECH	PWA	HARTZL	BLADE	CRACKED
6/4/2007	1900D	PT6A67D		E10950PK	PROPELLER

(CAN) DURING ROUTINE MAINTENANCE, THE LT PROPELLER BLADE NR 1 WAS FOUND CRACKED. THE CRACK RAN CHORD WISE APPROXIMATELY 2.3750 INCH FROM THE BLADE ROOT WITH A LENGTH OF APPROXIMATELY 1 INCH. THE PROPELLER HAS BEEN REPLACED AND WILL BE SENT FOR REPAIR AS WELL AS A STRIP REPORT. (TC NR20070607009)

2007FA0000507	BEECH	PWA	BEECH	NUT	LOOSE
5/15/2007	400A	JT15D5		AN8186D	TUBE

CREW REPORTED PRESSURIZATION CONTROL INEFFECTIVE, CABIN RATE CLIMBING AND DESCENDING, WHILE DESCENDING IN AUTOMATIC MODE. STABILIZED BRIEFLY WHILE IN MANUAL MODE. TROUBLESHOT IAW FIM 21-30-00, EXCESSIVE LEAK RATE NOTED AT TEST PORT 2. FOUND LOOSE (B) NUT ON CONTROL LINE TUBE ASSY. AT TEE FITTING FOR MANUAL CONTROL VALVE. CORRECTED LOOSE FITTING AND SYSTEM TESTS OK. RESTORED AC TO NORMAL CONFIGURATION, PRESSURIZATION SYSTEM TESTS SATISFACTORY ON GROUND RUN-UP. UNKNOWN IF PREVIOUS MAINTENANCE PERFORMED IN THIS AREA. (K)

2007FA0000559	BEECH	PWA	DOUBLER	CRACKED
5/25/2007	400BEECH	JT15D5	45A303794	MLG DOOR

FLIGHT CREW REPORTED RED GEAR UNSAFE INDICATION LIGHT AFTER GEAR EXTENSION FOR APPROACH, ALL (3) LANDING GEARS INDICATING DOWN AND LOCKED. PERFORMED ALTERNATE GEAR EXTENSION IAW CHECKLIST. AIRCRAFT FERRIED WITH LANDING GEAR DOWN IAW PERMIT TO FACILITY FOR REPAIRS. AFTER NORMAL LANDING, RT MLG FUSELAGE DOOR UNLATCHED AND DRAGGED ON TAXIWAY DURING TAXI-IN. FOUND DOUBLER UNDER RT FUSELAGE DOOR FORWARD HINGE BRACKET CRACKED, ALSO CRACK IN PN 45A30314-6 FRAME (U-CHANNEL) AT FORWARD HINGE AREA. SUSPECT CRACKED AREA ALLOWED ENOUGH PLAY IN DOOR ASSY FOR DOOR UPLOCK NOT TO FULLY ENGAGE. DOOR ASSY APPEARS TO HAVE BEEN REPAIRED PREVIOUSLY. (K)

2007FA0000567	BEECH	CONT	LINE	LEAKING
6/29/2007	58	IO550C	9696001123	PROPELLER

BAD OIL LEAK: DETERMINED METAL ID PLATE ON MP HOSE WORE HOLE INTO PROP UNFEATHERING ACCUMULATOR TUDE. NOTE: THIS IS THE SUBJECT OF AD 2007-06-07 AND MANDATORY SB 61-3806 BUT DOES NOT COVER THIS AC SN. (K)

2007FA0000613	BEECH		BATTERY	MELTED
7/13/2007	B300			EMERGENCY LIGHT

AIRCRAFT WAS IN MAINTENANCE FOR AN INSPECTION AND 12 MONTH EMERGENCY LIGHT BATTERY CHANGE. FOUND BATTERIES SEVERELY CORRODED AND HEAT DAMAGED. BATTERIES INSTALLED WERE P/N MN1400. THESE BATTERIES HAVE A TEST STRIP EFFECTIVELY SHORTS THE BATTERY TO CHECK THE CHARGE CONDITION. THE BATTERY HOLDER IN THE EMERGENCY LIGHT ASSEMBLY CLAMPS THE BATTERY. THE BATTERIES WERE INSTALLED SO THE TEST STRIP WAS CLAMPED SHORTING THE BATTERIES CAUSING THE BATTERIES TO MELT AND CORROD IN THE HOLDERS, DESTROYING THE LIGHT ASSEMBLIES. THE P/N FOR THE BATTERIES FOR THE EMERGENCY LIGHT IS 14A, BATTERIES WHICH HAVE NO TEST STRIP. USE THE CORRECT P/N BATTERIES.

2007FA0000574	BEECH	PWA	TIRE	UNBALANCED
6/29/2007	B300	PT6*	265F868	NLG

PILOT REPORTED A NOSE SHIMMY, UPON INVESTIGATION IT WAS DETERMINED THAT THE MFG BALANCE WEIGHT HAD COME LOOSE. THIS IS THE SECOND OCCURRENCE OF THIS TYPE FOR THE OPERATOR. (K)

2007FA0000576	BEECH	PWA	STRUCTURE	MISINSTALLED
6/11/2007	B300	PT6A60A		FUSELAGE

THE AIRCRAFT ARRIVED NEW FROM THE FACTORY FOR AVIONICS MODIFICATIONS AND DURING OUR INCOMING INSPECTION A TECH NOTED MISSING RIVETS IN (2) STRINGER CLIPS. THE CLIPS ARE LOCATED AT FS 386 ON THE RT NR3 AND RT NR 5 STRINGERS AS NOTED USING THE UPPER CENTERLINE STRINGER AS STRINGER NR 1. EACH CLIP WITH (6) RIVETS EACH WERE EITHER MISSING RIVETS AND/OR THE RIVETS WERE NOT BUCKED SITTING IN THE HOLES. ADVISED MFG OF DISCREPANCY. (K)

2007FA0000537	BEECH	PWA	PWA	FCU	MALFUNCTIONED
5/31/2007	B300	PT6A60A		312064401	LT ENGINE

ENGINE POWER LOSS AT ALTITUDE. ENGINE ROLLED BACK FROM 50 PERCENT. MFG TECH SUPPORT RECOMMENDS FCU REPLACEMENT. CAUSE UNKNOWN AT THIS TIME. (K)

2007FA0000506	BEECH	LYC	SKIN	CRACKED
5/17/2007	B60	TIO541*	95160000XX	LT TE FLAP

BOTH FLAPS CRACKED AT ACTUATOR ATTACH POINT. LT FLAP SKIN AND RIB CRACKED. RT FLAP RIB CRACKED. RIGGING WAS OK, PROBABLY AN OPERATOR INDUCED PROBLEM. BELIEVE THE FLAPS HAVE BEEN LOWERED AT TOO HIGH AN AIRSPEED. (K)

CA070612005	BELL	ALLSN	BEARING	FAILED
6/10/2007	206B	250C20B	23034787	ENGINE

(CAN) FOUND METAL ON BOTH CHIP PLUGS AND THEN FOUND THAT THE 2.5 BEARING HAD STARTED TO FAIL. REPLACED BEARING AND INNER RACE OF SPUR ADAPTER. NO FURTHER PROBLEMS. (TC NR 20070612005)

CA070604002	BELL	ALLSN	FADEC	MALFUNCTIONED
5/18/2007	407	250C47B		

(CAN) DURING A FLIGHT ON MAY 18 AT 6755.9 TAT, THE PILOT EXPERIENCED A CONTROLLED ENGINE OVERSPEED CONDITION. THE PILOT WAS NOT GIVEN AT INDICATION IAW MFG FM CRITERIA. LATER THE PILOT REPORTED THE CONDITION TO THE AME. THE AME DOWN LOADED THE FADEC INFORMATION AND THE FOLLOWING WERE NOTED. 38060 NP AND 53.3 PERCENT Q. WHICH IS ACTUALLY 80 RPM BELOW THE POINT WHERE THE PILOT WOULD GET A LIGHT BUT OVER THE LIMITS IN MM 72-00-00 AND 77-50-00. THE AIRCRAFT WAS REMOVED FROM SERVICE AND RETURNED TO THE MAIN MAINTENANCE BASE UNDER A TC FLIGHT PERMIT. THE ENGINE HAS BEEN REMOVED AND SENT TO MFG FOR INSPECTION. (TC NR 20070604002)

2007FA0000588	BOEING		BRAKE DISC	MALFUNCTIONED
4/13/2007	727200			LT MLG

(REG NR: HP1610) DURING PREFLIGHT INSPECTION, FOUND MAIN TIRE NR 2 WITH FLAT SPOT. ON THIS AIRCRAFT OP SPECS APPROVED BY THIS DGAC, OPERATING BY DHL OF GUATEMALA UNDER THEM. REMOVED AND REPLACED MWA AND BRAKE ASSY. NR 2 DUEL TO DAMAGED , ALSO MAIN WHEEL ASSY NR 1 WAS REPLACED , BECAUSE IT RAN WITH THE TIRE NR 2 DEFLATED. (K)

CA070608007	BOEING	PWA	BYPASS VALVE	FAILED
6/4/2007	727233	JT8D15	10607102	HYD SYSTEM

(CAN) ON ARRIVAL, THE IB FLAPS FAILED TO EXTEND WHEN LANDING, CONFIGURATION SELECTED. THE CREW ELECTED TO DIVERT. THE AIRCRAFT COMPLETED A NORMAL LANDING. MAINTENANCE WAS UNABLE TO DUPLICATE THE PROBLEM AND INSPECTED THE SYSTEM FOR LEAKS AND ANOMALIES. THE FLAP POSITION INDICATOR WAS REPLACED AS PRECAUTION AND THE AIRCRAFT WAS RETURNED TO SERVICE. THE AIRCRAFT SUBSEQUENTLY REPOSITIONED WITHOUT FURTHER PROBLEM. HOWEVER DURING DEPARTURE THE CREW OBSERVED LOW HYDRAULIC QUANTITY ON THE A SYSTEM AFTER SELECTING GEAR AND FLAPS UP. THE AIRCRAFT DIVERTED AND LANDED WITHOUT FURTHER PROBLEM. MAINTENANCE REPLACED A FAILED IB FLAP BYPASS VALVE. BOTH A SYSTEM PUMPS AND THE RESPECTIVE CASE DRAIN FILTERS WERE REPLACED NO CONTAMINATION WAS EVIDENT. THE AIRCRAFT WAS RETURNED TO SERVICE AFTER SATISFACTORY GROUND RUN.

CA070607010	BOEING		LINE	LEAKING
6/7/2007	777*		012152130010	HYD SYSTEM

(CAN) ON TRAINING FLIGHT RT HYDRAULIC QUANTITY REDUCED. HYDRAULIC LEAK FOUND IN RIGHT ENGINE PYLON AREA. HYDRAULIC SUPPLY PIPE FOUND LEAKING AT FLEXIBLE AREA, THIS FLEXIBLE AREA IS COVERED BY A RUBBER SHEATH. PEN INDICATES AREA FLUID WAS LEAKING FROM (TC NR 20070607010)

CA070611002	BOMBDR	PWC	TIRE	FAILED
6/10/2007	DHC8400	PW150A	DR0231T	NR 4

(CAN) DURING A NORMAL AND SMOOTH TAKEOFF ROLL, CREW NOTICE A VIBRATION (120KNTS,V1=134KNTS). AT VR ROTATED INTO SMOOTH CLIMB AND REQUESTED GEAR UP WITH POSITIVE CLIMB. SHORTLY AFTERWARDS CABIN CREW CALLED TO SAY PASSENGERS REPORTED A WHEEL CAME OFF DURING TAKEOFF. AIRCRAFT COMPLETED AN UNEVENTFUL LANDING. NR 4 MAINWHEEL TIRE WAS FOUND SHREDDED WITH MAINWHEEL ASSY STILL IN PLACE. (TC NR 20070611002)

CA070620003	BOMBDR	PWC		UNKNOWN	UNKNOWN
6/7/2007	DHC8400	PW150A			

(CAN) WHEN REFUELING AIRCRAFT GROUND CREW NOTICED THAT WHEN THE REFUEL PANEL DOOR WAS OPEN THAT THEY HAD LIGHTS ON THE PANEL THAT SHOULD NOT HAVE BEEN ON. (TC NR 20070620003)

CA070608004	CESSNA	LYC	MCAULY	UNKNOWN	CRACKED
5/24/2007	152	O235L2C	1A103		PROPELLER

(CAN) PROPELLER RECEIVED FOR INSPECTION IAW AD 2003-12-05. INSPECTION FOUND CRACK INDICATIONS IN PREVIOUSLY REPAIRED AREAS. PROPELLER HAS BEEN REMOVED FROM SERVICE IAW THIS AD AND ASB 221C. (TC NR 20070608004)

2007FA0000592	CESSNA	CONT	CYLINDER	SEPARATED
7/3/2007	172E	O300D	SA10203	NR 5

CYLINDER BARREL SEPARATED APPROXIMATELY 2 NR ABOVE THE CYLINDER BASE FLANGE.

2007FA0000564	CESSNA	LYC	ARM	BROKEN
5/19/2007	172M	O320E2D	4370	POINTS

POINTS ARM BROKE IB OF POINTS AFTER ONLY 133.1, TIME SINCE INSTALLATION. (K)

CA070625001	CESSNA	LYC	CYLINDER	CRACKED
6/6/2007	172N	O320H2AD	O320H2AD	ENGINE

(CAN) INSTRUCTOR RETURNED FROM A FLIGHT WHERE HE EXPERIENCED A ROUGH ENGINE AND LOSS OF POWER FOR A FEW MOMENTS, AFTER WHICH THE ENGINE RAN NORMALLY AGAIN. WHEN MAINTENANCE REMOVED THE COWLING TO CHECK OVER THE ENGINE, A LOT OF OIL WAS NOTICED IN THE COWL, FURTHER INSPECTION AND CLEANING FOUND A 2 INCH LONG CRACK IN THE CRANKCASE FROM CYLINDER NR 2 MOUNTING PAD AND FORWARD. (TC NR 20070625001)

2007FA0000505	CESSNA	LYC	ATTACH FITTING	CRACKED
5/4/2007	172RG	O360*	24130023	NLG ACTUATOR

L/W SEB 93-8 ON NOSE GEAR ACTUATOR ATTACH FITTING AND SOUND CRACK ON LT, LOWER, IB BOLT HOLE OF FITTING. ALSO, BOLT HOLES IN LOWER SKIN WERE IN EXCESS OF .030. REPLACED ATTACH FITTING, LOWER SKIN AND DOUBLER IAW SK 172-142 AND SK 172-159.

2007FA0000618	CESSNA	LYC	CESSNA	ANCHOR	WORN
7/17/2007	172S	IO360L2A		07136242	MASTER CYLINDER

ANCHOR PN 0713624-2, FOUND WORN ALMOST THROUGH BY THE STEEL PIN USED TO HOLD MASTER CYLINDER. ANCHOR IS ALUMINUM WHICH WAS QUICKLY WORN OUT BY THE STEEL PIN. IF PIN BREAKS FREE FROM THE ANCHOR THE MASTER CYLINDER CAN STOP MOVEMENT OF THE RUDDER PEDAL.

2007FA0000543	CESSNA	CONT	NEEDLE VALVE	MISSING
6/25/2007	182Q	O470U		CARBURETOR

AT THE END OF THE FLIGHT, PILOT REPORTED THAT THE ENGINE WOULD NOT IDLE. DURING INSPECTION OF THE CARBURETOR, MECHANIC FOUND THE MIXTURE ADJUSTMENT NEEDLE VALVE MISSING. CARBURETOR WAS REMOVED AND SENT BACK FOR REPAIR.

2007FA0000573	CESSNA	PWA	PIN	UNSERVICEABLE
6/6/2007	208B	PT6*	25137911	RUDDER PEDAL

ON A ROUTINE INSPECTION, A MECHANIC FOUND THAT THE PILOTS RT RUDDER PEDAL PIN WAS ABOUT TO FALL OUT OF THE RUDDER PEDAL. FURTHER INSPECTION FOUND THAT THE ROLL PIN PN: NAS561C318 HAD FALLEN OUR OF ITS HOLE CAUSING THE RUDDER PEDAL PIN TO MIGRATE FROM ITS POSITION. INSPECTION OF RUDDER PEDAL ASSY FOUND THAT THE ROLL PIN HOLE IN THE RUDDER PEDAL HAD BECOME ENLARGED, DUE TO AN UNKNOWN REASON. RECOMMENDATION TO PREVENT RECURRENCE: ATTENTION TO ROLL PIN INSTALLATION

FOR ADEQUATE PRESS FIT AND ADDITIONAL ATTENTION OF ROLL PIN ON ROUTINE INSPECTION. (K)

2007FA0000584	CESSNA	CONT	ROD END	FAILED
5/21/2007	310P	IO470*	HM4	NOSE GEAR DOOR

ROD END FAILED, ALLOWING NOSE GEAR DOOR TO PARTIALLY CLOSE IN FLIGHT. WHEN GEAR WAS RETRACTED, JAMMED NOSE GEAR ASSY ALONG WITH GEAR DOOR UP IN GEAR WELL. (K)

2007FA0000550	CESSNA	CONT	BELLCRANK	BROKEN
6/21/2007	310R	IO520*	50410015	ZONE 700

LT MAIN GEAR BELLCRANK ASSY BROKE IN MARCH OF 2007. THE PART WAS REPLACED BY A USED SERVICABLE PART WHICH LASTED APPROXIMATLY 58 HRS. THEN FAILED AT THE SAME LOCATION ON THE PART.

2007FA0000629	CESSNA		NUT PLATE	LOOSE
7/18/2007	340A			SPAR

WHILE UNDERGOING A ANNUAL INSPECTION INVESTIGATION OF NOISE FROM THE LANDING GEARBOX, IT WAS DISCOVERED THAT THE (4) AN3-6A BOLTS THAT ATTACH THE PN 5011013-3 (BRACKET ACTUATOR MOUNTING) AND GEARBOX TO THE FRONT SPAR WAS LOOSE. AN ATTEMPT AT TIGHTEN THEM REVEALED THAT THE NUT PLATES BUILT INSIDE THE SPAR WERE STRIPPED. ALLOWED THE GEARBOX TO MOVE BACK FROM THE SPAR BY .1250 INCH AND REAR BULKHEAD FLEXING THE .1250 INCH.

CA070622006	CESSNA	PWA	PUMP	CRACKED
6/19/2007	425	PT6A112	025323150	FUEL SYSTEM

(CAN) DURING AN INSPECTION THE INLET FILTER WAS REMOVED. THE FILTER COVER (CAP) WAS FOUND CRACKED UNDER THE O-RING LOCATION ALL THE WAY AROUND. IT APPEARS TO HAVE BEEN OVER TORQUED. IT WAS NOT LEAKING AT THIS TIME. THE INLET FILTER ASSEMBLY WAS REPLACED. (TC NR 20070622006)

2007FA0000536	CESSNA	CONT	LINE	CORRODED
5/30/2007	441	GTSIO520*	510010746	OVERHEAD CABIN

DURING INSPECTION, HEARD A FAINT GAS LEAK IN OVERHEAD. PULLED O2 OUTLETS IN SUSPECTED AREA, AND CHECKED B-NUTS, ALL SECURE. PULLED HEADLINER FOR A CLOSER INSPECTION. FOUND O2 LINE JUST FWD OF THE CABIN DOOR CORRODED AND LEAKING. CORROSION ON THE LINE OCCURRED WHERE THE DUCTING PASSED UNDER IT. EVERYWHERE THIS DUCTING TOUCHED AN O2 LINE THERE WAS CORROSION. THE LINES & FLEX DUCTING WAS REPLACED WITH NEW. (K)

2007FA0000566	CESSNA	WILINT	FUEL	CONTAMINATED
6/8/2007	525	FJ44		

PERFORMED AN EMERGENCY LANDING, DUE TO A FUEL BYPASS LIGHT COMING ON IN FLIGHT. THE AIRCRAFT LANDED AND TAXIED TO THE SERVICE CENTER WITHOUT INCIDENT. THE CAUSE OF THE LIGHT HAS BEEN DETERMINED TO BE THE FUEL ITSELF. THE FUEL IS CONTAMINATED WITH VISIBLE DEBRIS AND HAS A CLOUDY TINT TO IT. THE CAUSE OF THE BYPASS LIGHT IS FROM THE PARTICLES IN THE FUEL CLOGGING THE ENGINE FILTERS. THE FUEL FILTERS ON BOTH THE LT AND THE RT ENGINES HAVE BEEN REPLACED IAW MM. THE AIRCRAFT HAS BEEN RETURNED TO SERVICE. NOTE: THE FUEL WAS NOT PURCHASED FROM SERVICE CENTER. (K)

2007FA0000565	CESSNA	WILINT	VALVE	LEAKING
6/6/2007	525A	FJ44	41344	HYD SYSTEM

PERFORMED AN EMERGENCY LANDING DUE TO LOSS OF HYDRAULIC PRESSURE. THE EMERGENCY BOTTLE WAS USED TO LOWER THE GEAR AND LAND WITHOUT INCIDENT. THE CAUSE HAS BEEN DETERMINED TO BE THE HYDRAULIC LOADING VALVE (PN 4134-4, SN 781) FAILING IN CLOSED POSITION, RESULTING THE HYDRAULIC FLUID IN THE SYSTEM TO BE DUMPED OUT THE VENT TUBE CAUSING THE LOSS OF HYDRAULIC PRESSURE. IT IS ALSO SUSPECTED THAT THE LOADING VALVES FAILURE, CAUSED THE PCB N2108 (CIRCUIT BOARD) TO FAIL AS WELL. THE PCB 2108 WAS REPLACED. THE AIRCRAFT HYDRAULIC SYSTEM HAS BEEN LEAK CHECKED, OPS CHECKED AND HAS BEEN RETURNED TO SERVICE WITH NO FURTHER INCIDENTS.

2007FA0000570	CESSNA	PWA	FRAME	DAMAGED

5/29/2007	550	JT15D4	5511118200	FUSELAGE

FUSELAGE FRAME WEB DAMAGED BY DRILL BIT FROM THE BEND RADIUS OF THE OUTER (SKIN) FLANGE. REPLACEMENT REQUIRED SRM, CHAPTER 53-12-27. PROBABLE CAUSE: INCORRECTLY DRILLED AT AIRCRAFT MFG. (K)

2007FA0000538	CESSNA	PWA	FLOOR SUPPORT	CRACKED
6/4/2007	550	JT15D4		FS 151

CABIN FLOOR SUPPORT WEB CRACKED AND BROKEN, FUSELAGE STATION 151. FOUND CRACK DURING PHASE INSPECTION. UNABLE TO FIND PN IN MFG PARTS CATALOG. (K)

2007FA0000511	CESSNA	PWA	PANEL	DELAMINATED
5/30/2007	550	JT15D4	552275563	WING

DURING COMPLETION OF MFG PROGRAM PHASE 5 INSPECTION, NOTICEABLE DEPRESSION WAS OBSERVED IN UPPER SURFACE OF LT AND RT WING SKINS IN AREA OF MLG UPLOCK HOOK ASSY ATTACHMENT. DURING COMPLETION OF LANDING GEAR OPERATIONAL CHECK, IT WAS NOTED THAT DEPRESSION AREA SIZE GREW WHILE MLG WAS IN UP AND LOCKED POSITION. USING THE COIN TAP TEST METHOD CONFORMATION WAS MADE THAT BOTH BONDED PANELS WERE DELAMINATED. IAW TECH SUPPORT, NO DELAMINATION IS ALLOWED ON THESE PANELS. OPTIONS AVAILABLE FOR REMEDY WERE REMOVED AND REPLACED, POSSIBLE REPAIR DEFINITION AND ASSOC 8110FORM, OR POSSIBLE TEMPORARY REPAIR WITH FLIGHT EXTENSION. (K)

2007FA0000512	CESSNA	PWA	PANEL	DELAMINATED
5/30/2007	550	JT15D4	552277564	LT WING

DURING COMPLETION OF MFG PROGRAM PHASE 5 INSPECTION, NOTICEABLE DEPRESSION WAS OBSERVED IN UPPER SURFACE OF LT AND RT WING SKINS IN AREA OF MLG UPLOCK HOOK ASSY ATTACHMENT. DURING COMPLETION OF LANDING GEAR OPERATIONAL CHECK, IT WAS NOTED THAT DEPRESSION ARE SIZE GREW WHILE MLG WAS IN UP AND LOCKED POSITION. USING THE COIN TAP TEST METHOD. CONFORMATION WAS MADE THAT BOTH BONDED PANELS WERE DELAMINATED. IAW TECH SUPPORT, NO DELAMINATION IS ALLOWED ON THESE PANELS. OPTIONS AVAILABLE FOR REMEDY WERE REMOVED AND REPLACED, POSSIBLE REPAIR DEFINITION AND ASSOC 8110 FORM, OR POSSIBLE TEMPORARY REPAIR WITH FLIGHT EXTENSION. (K)

2007FA0000617	CESSNA	PWA	ACTUATOR	WORN
7/18/2007	550	JT15D4	556545098	RT STAB

AT THE PHASE 5 INSPECTION THE ELEVATOR FAILED THE FREE PLAY CHECK. A OVERHAULED UNIT P/N 5565450-98 S/N 0320-63 WAS INSTALLED AND COULD NOT GET THE UP AND DOWN LIMITS TO COME IN TO SPECS. ON CLOSER INSPECTION IT WAS FOUND THAT THE PRIMARY DRIVE GEAR HAS 16 TEETH AND THE ORIGINAL UNIT HAS 14 TEETH. THIS UNIT WAS OVERHAULED 6/8/2007. AS OF THIS WRITING WE ARE IN THE PROCESS OF INSTALLING ANOTHER UNIT WITH THE CORRECT NUMBER OF TEETH.

CWQR200703	CESSNA		ATTACH BRACKET	CRACKED
7/6/2007	560CESSNA		556560821	MASTER CYLINDER

DURING A PHASE 1-4 INSPECTION, FOUND THE MASTER CYLINDER ATTACH BRACKET MOUNT HOLES GOUGED DURING INSTALLATION AT THE FACTORY, UPON FURTHER INSPECTION FOUND A .7500 INCH CRACK IN THE FLANGE ATTACH LEG RADIUS. REPLACED WITH NEW BRACKET ASSY. SUBMITTED SCR TO MFR UNDER SCR NR 301844.

EWCR070700002	CESSNA	PWA	ENGINE	UNKNOWN
7/3/2007	560CESSNA	JT15D5		LEFT

FOLLOW UP REPORT AFTER PILOT REPORT TO FSDO OF (LARGE) BIRD STRIKE TO INLET AND INGESTION INTO LT ENGINE.

CA070614005	CESSNA	PWA	BOLT	LOOSE
3/7/2007	560XL	PW545A	MS955608	GAS GENERATOR

(CAN) DURING SCHEDULED MAINTENANCE ACTIVITIES, 3 OF THE MS9556-08 BOLTS LOCATED AT THE ENGINE GAS GENERATOR TO INTERMEDIATE CASE FLANGE WERE DETERMINED TO BE LOOSE. AN ADDITIONAL BOLT WAS

FOUND TO BE COMPLETELY MISSING. MFG WILL INVESTIGATE AND ADVISE ON ROOT CAUSE AND REMEDIAL MAINTENANCE ACTIONS. (TC NR 20070614005)

2007FA0000568	CESSNA	UPLOCK SWITCH	DEFECTIVE
6/29/2007	650	602EN6026	NLG

GEAR SELECTED UP AFTER TAKEOFF. UNSAFE LIGHT WOULD NOT GO OUT AND AIR NOISE FROM NOSE GEAR DOORS OPEN. 2 GEAR CYCLE ATTEMPTS WITH NO CHANGE. RETURNED TO GSO (PTI) AIRPORT, LANDED WITH NORMAL GREEN LIGHTS. AIRCRAFT TURNED OVER TO MFG SERVICE CENTER FOR REPAIR. NOSE GEAR UPLOCK SWITCH FOUND DEFECTIVE. REPLACED SWITCH OPERATION CHECKED NORMAL. (K)

2007FA0000548	CESSNA	CONTROL CABLE	MISINSTALLED
6/20/2007	680CE	S37794P2337M	SPOILER

ROLL SPOILER CABLE P/N S3779-4P233.7M WAS ROUTED INCORRECTLY OVER LOW FRICTION PULLEY. CABLE WAS FOUND ROUTED THROUGH TOOLING HOLE IN BRACKET P/N 6960236-17 RATHER THAN ENGAGING PULLEY. THE BRACKET TOOLING HOLE EXHIBITED WEAR FROM THE CABLE RIDING (CUTTING) INTO THE TOOLING HOLE.

2007FA0000578	CESSNA	ALLSN	BUSHING	GOUGED
6/5/2007	750	AE3007C	FMI32345010B	TRUNNION

BUSHINGS WHERE OLEO ATTACHES TO TRUNNION. OLEO ATTACH BOLT WAS SEIZED AND HARD TO REMOVE. INNER BORE OF BUSHINGS WERE GOUGED. NO MEANS TO LUBRICATE THESE BUSHINGS EXCEPT AT ASSY. SUGGEST USE OF ANT SEIZE COMPOUND DURING ASSY INSTEAD OF AEROSHELL 17. (K)

2007FA0000579	CESSNA	ALLSN	TRUNNION	MISALIGNED
6/5/2007	750	AE3007C	67410261	MLG

AFT TRUNNION ATTACH PIN LOCK PIN HOLE MISALIGNED. LOCK PIN HOLES DRILLED IN TRUNNION DO NOT LINE UP WITH HOLE DRILLED IN MOUNTING PIN. (K)

2007FA0000558	CESSNA	CONT	LINE	LOOSE
5/10/2007	A185F	IO520*		BRAKE

RT MAIN BRAKE FAILED ON AIRCRAFT ROLLOUT OF NORMAL CROSSWIND LANDING. BRAKE LINE B-NUT FOUND COMPLETELY LOOSE. (K)

2007FA0000580	CESSNA	LYC	STARTER	FAILED
4/27/2007	R182	O540*	MHB4016R	ENGINE

REMOVED THIS STARTER FROM AIRCRAFT DUE TO BENDIX FAILURE. TIME ON THIS STARTER IS UNKNOWN. (K)

2007FA0000581	CESSNA	LYC	STARTER	MALFUNCTIONED
5/18/2007	R182	O540*	MHB4016R	ENGINE

REMOVED THIS STARTER FROM SAME AIRCRAFT FOR THE 3RD TIME WITH 62.3 HRS SINCE OVERHAUL. STARTER BENDIX WOULD NOT ENGAGE ANYMORE DURING START UP. NO PROBLEM COULD BE FOUND WITH AIRCRAFT ELECTRICAL SYSTEM. (K)

2007FA0000582	CESSNA	LYC	STARTER	FAILED
4/30/2007	R182	O540*	MHB4016R	ENGINE

REMOVED THIS STARTER WITH 3.3 HOURS SINCE OVERHAUL. STARTER BENDIX STAYED ENGAGED DURING START UP. NO PROBLEM COULD BE FOUND WITH AIRCRAFT ELECTRICAL SYSTEM. (K)

2007FA0000583	CESSNA	LYC	STARTER	DEFECTIVE
5/24/2007	R182	O540*	MHB4016R	ENGINE

REMOVED THIS STARTER FROM SAME AIRCRAFT FOR THE 4TH TIME WITH 11.3 HOURS SINCE OVERHAUL. STARTER BENDIX WOULD NOT ENGAGE ANYMORE DURING STARTUP. NO PROBLEM COULD BE FOUND WITH AIRCRAFT ELECTRICAL SYSTEM. INSTALLED ON ANOTHER AIRCRAFT TO VERIFY PROBLEM AND FOUND THAT THE STARTER WAS DEFECTIVE. (K)

2007FA0000562	CESSNA	LYC	LINE	CRACKED
6/29/2007	T182T	TIO540A1A	AE366316 2J0230	ENGINE OIL

30 DEGREE FITTING HAS CRACK ON WRENCH FLAT. (K)

2007FA0000572	CESSNA		BEARING	BROKEN
5/25/2007	T210M		S16751	RUDDER PEDAL

WHILE PERFORMING RUN UP OF AIRCRAFT DURING ANNUAL INSPECTION IT WAS NOTICED THAT PILOT RT RUDDER PEDAL HAD AN UNUSUAL FEEL WHILE BRAKING. DURING THE INSPECTION OF THE RUDDER PEDALS IT WAS FOUND THT THE EACH OF THE PILOT SIDE S1675-1 RUDDER IB BEARING HALF HAD BROKEN INTO SEVERAL PARTS. THE S1675-1 BEARING HALFS ARE CONSTRUCTED OF PLASTIC, AND THE LIKELY REASON FOR BREAKING WOULD BE DUE TO THE AGING AND EMBRITTLEMENT OF THE PLASTIC. I WOULD RECOMMEND THAT THE BEARINGS BE CONSTRUCTED OF A MATERIAL OTHER THAN PLASTIC, OF HAVE A PART REPLACEMENT INTERVAL BEFORE BREAKAGE COULD OCCUR. (K)

2007FA0000625	CESSNA	CONT	BELLCRANK	FAILED
6/22/2007	T310Q	TSIO520*	08421022	MLG

FAILED DUE TO MECHANICAL OVERLOAD, NOSE GEAR JAMMED. (K)

2007FA0000554	CIRRUS	CONT	ANTENNA	DISCONNECTED
6/28/2007	SR20	IO360*	12744001	GPS

WHILE IN CRUISE FLIGHT THE NR 1 GPS STOPPED RECEIVING A SIGNAL. AFTER LANDING, REMOVED THE MFD AND FOUND THE GLUE HOLDING THE VELCRO TO THE GPS ANTENNA HAD COME UNDONE. BOTH GPS ANTENNAS ARE HELD IN PLACE WITH VELCRO STRIPS AND IN THE HEAT OF SUMMER, THE GLUE SOFTENS AND COMES UNDONE.

2007FA0000533	CIRRUS	CONT	STRUT	CRACKED
6/22/2007	SR20	IO360*	11907004	NLG

NOSE LANDING GEAR STRUT HAS A CRACK AT THE TOP. THE STRUT COMES UP TO A Y FOR MOUNT. AT THE YOKE OF THE Y IS A WELDED REINFORCEMENT, AND THE CRACK IS AT THE TOP WHERE THIS REINFORCEMENT MEETS THE LEGS OF THE Y.

2007FA0000530	CIRRUS	CONT	STRUT	CRACKED
6/22/2007	SR20	IO550N	11907005	NLG

NOSE LANDING GEAR STRUT HAS A CRACK AT THE TOP. THE STRUT COMES UP TO A Y FOR MOUNT. AT THE YOKE OF THE Y IS A WELDED REINFORCEMENT, AND THE CRACK IS AT THE TOP WHERE THIS REINFORCEMENT MEETS THE LEGS OF THE Y ON BOTH SIDES.

CA070613002	CNDAIR	PWA	FUEL CELL	LEAKING
6/13/2007	CL2156B11215	PW123	21564002	RT WING

(CAN) FUEL LEAK SUSPECTED ON RT WING. RT FUEL CELL NR 6 HAS BEEN FOUND LEAKING AFTER INVESTIGATION AND REPLACED. DROPS 9050 (TC NR 20070613002)

CA070423004	CNDAIR	GE	WIRE HARNESS	CHAFED
4/21/2007	CL6002B19	CF343A1	6015091017	RT ENGINE

(CAN) SHORTLY AFTER T/O, THE RT ENGINE VIBRATION INDICATOR FLUCTUATED ERRATICALLY THE WENT TO DASHES MOMENTARILY THEN RETURNED TO NORMAL OPERATION. FLIGHT RETURNED FOR MAINTENANCE TROUBLESHOOTING. AFTER CHANGING THE ENGINE ACCELEROMETER AND SIGNAL CONDITIONER WITH NO FIX, THE ENGINE VIBRATION HARNESS SHIELDED WIRE WAS FOUND CHAFFING AGAINST ENGINE CLOSE TO THE ENGINE DISCONNECT PLUG. THE VIBRATION HARNESS WAS REPLACED AND THE AIRCRAFT WAS FUNCTION CHECKED SERVICEABLE. (TC NR 20070423004)

CA070601004	CNDAIR	GE	WIRE	BURNED
5/29/2007	CL6002B19	CF343A1		TE FLAPS

(CAN) FLAP FAIL MESSAGE COME ON DURING CRUISE AT ALT FL330 WITH NO FLAP SELECTION MADE. AIRCRAFT RETURN TO ORIGINATING STATION, MAINTENANCE REPLACED THE BPSU AND FECU BUT NO FIX. FURTHER INVESTIGATION REVEALED SOME BURNED WIRES AT LT BPSU CONNECTOR. TEMPORARY REPAIRS CARRIED OUT AND AIRCRAFT FERRIED. AIRCRAFT IS NOW UNDERGOING A HEAVY CHECK AND THE SNAG IS STILL BEING WORKED ON. MORE SPECIFICS OF THE DEFECT RECTIFICATION TO FOLLOW. (TC NR 20070601004)

CA070601002	CNDAIR	GE	ADG	DEPLOYED
5/31/2007	CL6002B19	CF343B1	820465	

(CAN) ADG DEPLOYED AS THE LANDING GEAR WAS SELECTED UP. THE FLIGHT RETURNED WITHOUT INCIDENT. MAINTENANCE TROUBLESHOOTING WAS CARRIED OUT AND THE ADG AUTO DEPLOY CONTROLLER WAS REPLACED AND TESTED SERVICEABLE. THE ADG WAS INSPECTED VISUALLY IAW MFG AND IS TO HAVE FLUORESCENT PENETRANT CARRIED OUT WITHIN 3 CALENDAR DAYS. (TC NR 20070601002)

CA070607005	DHAV	PWA	RELAY	FAILED
5/28/2007	DHC2MKI	R985*	AN33711	STARTER

(CAN) JUST AFTER TAKEOFF, PILOT NOTICED FAINT SMOKE ODOR BUT UNSURE OF SOURCE, CONTINUED. DURING CLIMB WHITE SMOKE CAME IN AROUND RUDDER PEDALS SO PILOT SHUTDOWN ELECTRICS AND PROCEEDED TO LAND AIRCRAFT. AFTER LANDING PILOT NOTICED SMOKE COMING FROM THE ACCESSORY SECTION BUT IT DIMINISHED RAPIDLY AND THERE WERE NO SIGNS OF FIRE. UPON FURTHER INSPECTION BY MAINTENANCE STAFF, THE STARTER (PN 756-21C) SHOWED SIGNS OF OVERHEATING AND WAS REPLACED. THE STARTER RELAY (PN AN3371-1) WAS ALSO REPLACED. UPON EVALUATION OF THE RELAY THE FOLLOWING WAS NOTED: CLOSE AT 5 VDC OPEN AT 0 VDC TESTED COIL RESISTANCE 9.1 OHMS OILY UNDER COVER, SCREWS AND GASKETS CONTACT A1 SHOWS SIGNS OF RECENT STICKING CONTACT SHOWS ARCING ARMATURE SHOWS SIGNS OF CORROSION POSSIBLE INGESTION OF MOISTURE (TC NR 20070607005)

CA070612002	DHAV	PWA	ACTUATOR	BYPASSING
6/11/2007	DHC8102	PW120A	82970014009	RT MLG DOOR

(CAN) ON LANDING, GEAR DOWN SELECTION HEARD LOUD CLUNK, AND RT MAIN GEAR UNSAFE WARNING. CYCLED GEAR WITH SAME RESULT. ALTERNATE GEAR EXTENSION ACTIVATED, ALL GEAR INDICATED DOWN, NORMAL LANDING. MAINTENANCE INSPECTION FOUND RT AFT GEAR DOOR ACTUATOR SLOW TO OPEN DOORS DUE TO INTERNAL PRESSURE BYPASSING. RT AFT GEAR DOOR ACTUATOR REPLACED, LEAK AND FUNCTION CHECKS COMPLETED. AIRCRAFT RETURNED TO SERVICE. (TC NR 20070612002)

CA070605002	DHAV	PWA	LINE	CRACKED
5/12/2007	DHC8102	PW120A	3035381A	HMU-P3

(CAN) THE NR 2 ENGINE WAS SNAGGED AS NOT PRODUCING FULL POWER ON TAKEOFF AND IN FLIGHT. MAINTENANCE FOUND THAT THE P3 SENSE LINE WAS CRACKED AT THE HYDRO MECHANICAL UNIT. UPON REMOVAL, THE LINE BROKE. THE SENSE LINE WAS REPLACED AND THE AIRCRAFT RETURNED TO SERVICE. (TC NR 20070605002)

CA070614004	DHAV	PWA	CONNECTOR	BURNED
5/11/2007	DHC8102	PW120A		AC POWER MONITOR

(CAN) UPON GETTING IN A/C DISCOVERED AC POWER C/B`S POPPED UPON EXTERNAL PLUGGED INTO A/C ASSUME POPPED WHEN GSE PLUGGED IN PILOT ENTERED COCKPIT AND PUSHED ALL BREAKERS IN ON WALK AROUND EXITING A/C AND DOING WALKAROUND WENT BACK TO COCKPIT AND DISCOVERED SMOKE REMOVED POWER FROM A/C AND CALL MAINTENANCE UPON REMOVAL OF AC POWER MONITOR DISCOVERED BURNED CONNECTOR ON INDICATOR AND CONNECTOR, CONNECTOR AND INDICATOR /MONITOR REPLACED WITH NO FURTHER ISSUES.

CA070615001	DHAV	PWA	GENERATOR	INTERMITTENT
6/12/2007	DHC8301	PW123	23088008	NR 1

(CAN) AFTER SEVERAL SECTORS WITH INTERMITTENT NR 1 DC GEN PROBLEMS, CREW REPORTED ILLUMINATION OF DC BUS CAUTION LIGHT PLUS SEVERAL OTHER CAUTIONS: AUX INV, NR 1 DC GEN, RUD FULL PRESS, NR 2 RUD HYD, EPWS. THE QRH WAS ACTIONED BUT THEY WERE NOT ABLE TO RESTORE THE LOST BUSES. THE NR 1 DC GENERATOR WAS REPLACED AND THE SYSTEM TESTED NORMALLY. ON REMOVAL FROM THE A/C, THE DC

GENERATOR WAS NOTED TO HAVE SIGNIFICANT DAMAGE WITH SEVERAL LARGE METALLIC (CHUNKS) DROPPING OUT. (TC NR 20070615001)

CA070628001	DHAV	PWA	BOLT	SHEARED
6/25/2007	DHC8311	PW123	7826691	PROPELLER HUB

(CAN) DURING REINSTALLATION OF PROPELLER ASSEMBLY AFTER NR 2 ENGINE CHANGE, ONE OF THE MOUNTING BOLTS (P/N 782669-1) SHEARED. A DIFFERENT PROPELLER ASSEMBLY WAS INSTALLED. AFFECTED SHEARED BOLT TO BE REMOVED AND REPLACED IAW CMM P/N 802325-1, CH 61-13-06, HUB REPAIR 7-5, PAGES 601-602. TIMES AND CYCLES ARE FOR HUB ASSEMBLY. (TC NR 20070628001)

CA070608008	FOKKER	RROYCE	CONTROL CABLE	BROKEN
6/6/2007	F28MK0100	TAYMK65015		ELEVATOR

(CAN) FLIGHT CREW REPORTED DURING HEAD START CHECKS THAT THE FLIGHT CONTROL LOCK WOULD NOT LOCK THE ELEVATOR CONTROLS AND WAS VERY STIFF WHEN MOVING CONTROL LOCK TO FREE POSITION. RECERTIFICATION, FOUND THE FLIGHT CONTROL LOCK CABLE FCL1 SNAPPED AT AILERON FLIGHT CONTROL LOCK PULLEY. CABLE REPLACED AND ADJUSTMENT COMPLETED. OPERATIONAL TEST OF FLIGHT CONTROL LOCK SYSTEM COMPLETED. FOLLOW UP ACTION THE CABLE BROKE AT AN IDLER PULLEY AND APPEARED TO HAVE BEEN POSSIBLE FRAYED. ENTIRE ELEVATOR CONTROL LOCK CABLE RUN INSPECTED AND FOUND SERVICEABLE. IN FOLLOW UP A SPECIAL INSPECTION WILL BE ISSUED FOR AIRCRAFT TO INSPECT THE SAME AREA. (TC NR 20070608008)

CA070606003	FRCHLD	GARRTT	GARRTT	TURBINE BLADES	FAILED
6/5/2007	SA227DC	TPE33112UHR	TPE33112UHR		ENGINE

(CAN) THE AIRCRAFT WAS ON A SHORT REPOSITIONING FLIGHT. AFTER AN UNEVENTFUL TAKEOFF AND CLIMB, THE CREW LEVELED AT 9,000 FT AND REDUCED POWER TO 30 PERCENT. FIVE MINUTES LATER, THE RT ENGINE HAD A VIOLENT AND SUDDEN VIBRATION. THE CREW SHUTDOWN THE ENGINE IMMEDIATELY AND DECLARED AN EMERGENCY. THE AIRCRAFT MADE AN UNEVENTFUL LANDING. MAINTENANCE INSPECTED THE ENGINE AND FOUND THAT THE NR 3 TURBINE WHEEL HAD (4) BLADES MISSING LARGE SECTIONS. THE OIL FEED LINE WAS SEVERED AND IMPACT DAMAGE WAS FOUND ON THE EXHAUST CONE AND TAIL PIPE. THE LAST MAJOR INSPECTION ON THIS ENGINE WAS A HSI/GBI AT 3499.2 HOURS. (TC NR 20070606003)

2007FA0000547	GLASFL	CONT	PULLEY BRACKET	CHAFED
6/20/2007	H301LIBELLE	TSIO360E	69023617	SPOILER

ROLL SPOILER CABLE PN:S3779-4P233.7M WAS ROUTED INCORRECTLY OVER LOW FRICTION PULLEY P/N:S3504-4.5 (THROUGH A TOOLING HOLE) IN PULLEY BRACKET P/N:6960236-17. THIS CAUSED AN INTERFERENCE AND WEAR IN THE PULLEY BRACKET, AND FLAT AREAS TO THE CABLE. CABLE AND BRACKET WERE REPLACED WITH NEW.

2007FA0000599	GROB	CONTROL COLUMN	FRACTURED
6/16/2007	G103ATWINII	103B4411	COCKPIT

ON SECOND FLT OF DAY, & WHILE STILL ON AERO-TOW, PILOT WHO WAS FLYING FROM THE REAR SEAT WITH A NON-PILOT PASSENGER IN FRONT, NOTICED THAT IT REQUIRED APPROXIMATELY 20 DEGREES OF RT-STICK CORRECTION TO MAINTAIN LEVEL FLT. PILOT ALSO OBSERVED AILERONS TO BE IN A NEUTRAL POSITION WITH THIS RT-STICK CORRECTION. PILOT RELEASED FROM TOW, & RETURNED TO AIRPORT & EXECUTED A SUCCESSFUL, UNEVENTFUL LANDING USING MINIMAL, LIGHT CONTROL STICK INPUTS. POST FLT INSPECTION OF AFT CONTROL STICK REVEALED CONTROL COLUMN BASE UNIT TUBING STUB OVER WHICH DETACHABLE REAR CONTROL STICK MOUNTS, TO BE FRACTURED, APPROXIMATELY 80 PERCENT OF ITS TOTAL CIRCUMFERENCE. IT REQUIRED ONLY MINIMUM FURTHER (BENDING) OF THE CONTROL STICK TO ACHIEVE TOTAL SEPARATION. UPON DISASSEMBLY, THE STUB-TUBE WAS FOUND TO HAVE FRACTURED CIRCUMFERENTIALLY THROUGH THE STICK RETAINING BOLT HOLES. THE STUB-TUBE ALSO DISPLAYED (POLISHED AREAS) WITH ACCOMPANYING REDUCTION IN WALL THICKNESS ON BOTH LATERAL SIDES OF THE STUB-TUBE, WHICH IS SUGGESTIVE OF A HISTORY OF RELATIVE MOTION BETWEEN THE CONTROL STICK AND THE STUB-TUBE ON WHICH MOUNTED. DURING SUBSEQUENT COMMUNICATIONS WITH MFG, IT WAS LEARNED THAT IT IS MFG INTENT TO PUBLISH AN APPROPRIATE SB, WHICH WILL MANDATE AN ADDITIONAL INSPECTION OF THE REAR CONTROL STICK.

2007FA0000540	GULSTM	RROYCE	ALIDSG	RING	MISSING
6/25/2007	G1159A	SPEY*		M1213400	PRECOOLER

THE COMPONENT OEM (REPORT 4-193), THE MM (CHAPTER 36-02-00), IPC (CHAPTER 36-10-00) AND THE CMP WORK CARDS (364040, 364045) ARE MISSING THE REQUIREMENT TO INSPECT AND INSTALL GAMMA RING (PN) M1213-400 DURING THE INSTALLATION OF THE PNEUMATIC SYSTEM PRECOOLER. FAILURE TO INSTALL THE GAMMA RING COULD CAUSE THE HIGH PRESSURE DUCT TO SEPARATE FROM THE PRECOOLER AND CAUSE SIGNIFICANT HEAT DAMAGE TO THE AIRCRAFT SKIN AND STRINGERS.

2007FA0000610	GULSTM		TEE FITTING	CRACKED
7/10/2007	GIV		MS21911D6	HYD SYSTEM

FOUND CRACKED HYDRAULIC TEE FITTING, PN MS21911D6, IN AUXILIARY HYDRAULIC SYSTEM FILTER RETURN LINE. CRACK WAS FOUND AT THE MALE END WHERE END AND TEE BODY COME TOGETHER. REPLACED FITTING AND PRESSURIZED AND LEAK CHECKED SYSTEM. OP'S CHECK WAS GOOD, NO LEAKS NOTED.

2007FA0000604	GULSTM	RROYCE	TEE FITTING	CRACKED
7/10/2007	GIV	TAY6108	MS21911D6	HYD SYSTEM

FOUND CRACKED HYDRAULIC TEE FITTING, PN MS21911D6, IN AUXILIARY HYDRAULIC SYSTEM FILTER RETURN LINE. CRACK WAS FOUND AT THE MALE END WHERE END AND TEE BODY COME TOGETHER. REPLACED FITTING AND PRESSURIZED AND LEAK CHECKED SYSTEM. OP'S CHECK WAS GOOD, NO LEAKS NOTED.

2007FA0000605	GULSTM	RROYCE	TEE FITTING	CRACKED
7/10/2007	GIV	TAY6108	MS21911D6	HYD SYSTEM

FOUND CRACKED HYDRAULIC TEE FITTING, PN MS21911D6, IN AUXILIARY HYDRAULIC SYSTEM FILTER RETURN LINE. CRACK WAS FOUND AT THE MALE END WHERE END AND TEE BODY COME TOGETHER. REPLACED FITTING AND PRESSURIZED AND LEAK CHECKED SYSTEM. OP'S CHECK WAS GOOD, NO LEAKS NOTED.

2007FA0000608	GULSTM	RROYCE	TEE FITTING	CRACKED
7/10/2007	GIV	TAY6108	MS21911D6	HYD SYSTEM

FOUND CRACKED HYDRAULIC TEE FITTING, PN MS21911D6, IN AUXILIARY HYDRAULIC SYSTEM FILTER RETURN LINE. CRACK WAS FOUND AT THE MALE END WHERE END AND TEE BODY COME TOGETHER. REPLACED FITTING AND PRESSURIZED AND LEAK CHECKED SYSTEM. OP'S CHECK WAS GOOD, NO LEAKS NOTED.

2007FA0000609	GULSTM	RROYCE	TEE FITTING	CRACKED
7/10/2007	GIV	TAY6108	MS21911D6	HYD SYSTEM

FOUND CRACKED HYDRAULIC TEE FITTING, PN MS21911D6, IN AUXILIARY HYDRAULIC SYSTEM FILTER RETURN LINE. CRACK WAS FOUND AT THE MALE END WHERE END AND TEE BODY COME TOGETHER. REPLACED FITTING AND PRESSURIZED AND LEAK CHECKED SYSTEM. OP'S CHECK WAS GOOD, NO LEAKS NOTED.

2007FA0000601	GULSTM	RROYCE	FITTING	CRACKED
7/10/2007	GIV	TAY6108	MS21911D6	HYD LINE

FOUND CRACKED HYDRAULIC TEE FITTING, PN MS21911D6, IN AUXILIARY HYDRAULIC SYSTEM FILTER RETURN LINE. CRACK WAS FOUND AT THE MALE END WHERE END AND TEE BODY COME TOGETHER. REPLACED FITTING AND PRESSURIZED AND LEAK CHECKED SYSTEM. OP'S CHECK WAS GOOD, NO LEAKS NOTED.

2007FA0000602	GULSTM	RROYCE	FITTING	CRACKED
7/10/2007	GIV	TAY6108	MS21911D6	HYD LINE

FOUND CRACKED HYDRAULIC TEE FITTING, PN MS21911D6, IN AUXILIARY HYDRAULIC SYSTEM FILTER RETURN LINE. CRACK WAS FOUND AT THE MALE END WHERE END AND TEE BODY COME TOGETHER. REPLACED FITTING AND PRESSURIZED AND LEAK CHECKED SYSTEM. OP'S CHECK WAS GOOD, NO LEAKS NOTED.

2007FA0000603	GULSTM	RROYCE	FITTING	CRACKED
7/10/2007	GIV	TAY6108	MS21911D6	HYD LINE

FOUND CRACKED HYDRAULIC TEE FITTING, PN MS21911D6, IN AUXILLIARY HYDRAULIC SYSTEM FILTER RETURN

LINE. CRACK WAS FOUND AT THE MALE END WHERE END AND TEE BODY COME TOGETHER. REPLACED FITTING AND PRESSURIZED AND LEAK CHECKED SYSTEM. OP'S CHECK WAS GOOD, NO LEAKS NOTED.

2007FA0000611	GULSTM	RROYCE	FITTING	CRACKED
7/10/2007	GIV	TAY6108	MS21911D6	HYD LINE

FOUND CRACKED HYDRAULIC TEE FITTING, PN MS21911D6, IN AUXILIARY HYDRAULIC SYSTEM FILTER RETURN LINE. CRACK WAS FOUND AT THE MALE END WHERE END AND TEE BODY COME TOGETHER. REPLACED FITTING AND PRESSURIZED AND LEAK CHECKED SYSTEM. OP'S CHECK WAS GOOD, NO LEAKS NOTED.

2007FA0000561	HUGHES	LYC	BUSHING	WORN
5/25/2007	269C	HIO360D1A		THROTTLE LINKAGE

ENGINE MOUNTED THROTTLE LINKAGE BUSHINGS WORN. FOUND ON INSPECTION WITH EXCESSIVE PLAY. PROBABLY OCCURRED DUE TO EXCESSIVE VIBRATION OR LACK OF SUBRICATION. RECOMMENDATION TO PREVENT WOULD BE TO LUBRICATE MORE FREQUENTLY OR DIFFERENT DESIGN OF LINKAGE. (K)

2007FA0000539	ISRAEL	GARRTT	ACTUATOR	MISALIGNED
5/30/2007	1124	TFE731*	1391T1008	TE FLAPS

INSTALLED REBUILT FLAP ACTUATOR IN RT OB POSITION; PN 1391T1008, SN 387AB. FLAP OPERATION WAS NORMAL. WHILE CHECKING AILERON TRAVELS IT WAS DISCOVERED THAT AILERON TRAVELS WERE LIMITED BY THE REBUILT FLAP ACTUATOR. A COVER PLATE ON THE FLAP ACTUATOR HAD BEEN INDEXED INCORRECTLY AND WAS INTERFERING WITH THE AILERON BELLCRANK. PROBABLE CAUSE; INCORRECT ASSY OF FLAP ACTUATOR. (K)

2007FA0000593	ISRAEL	GARRTT	SUPPORT FITTING	DAMAGED
7/3/2007	1125	TFE731*	25W171124	AILERONS

AFTER REMOVAL OF AILERON AND SERVICE SUPPORT FITTING AT BL 9R FUSELAGE STATION 199.579. FOUND SEVERAL MISSED DRILLED/ELONGATED /FILLED FASTENER HOLES IN T CASTING P/N:25W17124, ANGLE P/N:25W171126 AND AILERON AND SERVICES SUPPORT FITTING CASTING P/N:25W353216

2007FA0000594	ISRAEL	GARRTT	SUPPORT FITTING	MISMANUFACTURED
7/3/2007	1125	TFE731*	25W171124	AILERON

AFTER REMOVAL OF AILERON AND SERVICE SUPPORT FITTING AT BL 9R FUSELAGE STATION 199.579. FOUND SEVERAL MISSED DRILLED/ELONGATED /FILLED FASTENER HOLES IN T CASTING P/N:25W17124, ANGLE P/N:25W171126 AND AILERON AND SERVICES SUPPORT FITTING CASTING P/N:25W353216

CA070514002	MTSBSI	GARRTT	HARTZL	LINK	TIGHT
5/9/2007	MU2B60	TPE33110	C23035L	A1464	PISTON UNIT

(CAN) AT THE AIRCRAFT 100 HOUR INSPECTION AND DURING THE REMOVAL OF THE PROP PITCH LINKS, IT WAS FOUND THAT THE PIVOT PIN WAS DIFFICULT TO REMOVE. AFTER REMOVAL, THE PISTON UNIT (THAT WAS REPLACED RECENTLY) WAS FOUND TO HAVE PAINT INSIDE THE PIVOT PIN HOLE CAUSING THE TIGHT FIT. PAINT WAS REMOVED PIVOT PIN REPLACED AND CHECKED SERVICEABLE. (TC NR 20070514002)

2007FA0000535	NANCNG	VEDENY	NIPPLE	UNKNOWN
5/1/2007	CJ6A	M14P	AN9113D	FUEL PUMP

FUEL INJECTION FUEL SUPPLY FROM FUEL PUMP FITTING THAT COMES OUT OF PUMP. FIX WOULD BE CHANGE TO STEEL AND SUPPORT LINE WITH BRACKET OR CHANGE TO FIREWALL MOUNT OF FUEL PRESSURE TRANSDUCER. (K)

2007FA0000612	PIAGIO	PWA	ACTUATOR	FAILED
7/11/2007	P180	PT6A66	EM40112	PITCH TRIM

ON APPROACH PITCH TRIM ACTUATOR FAILED TO MOVE. AIRCRAFT LANDED WITH PARTIAL FLAPS WITHOUT FURTHER INCIDENT. ONE HOUR LATER TRIM ACTUATOR GROUND TESTED REVEALING NO DEFECTS. ACTUATOR SENT TO MFG FOR INVESTIGATION.

2007FA0000627	PIPER	LYC		CONDUIT	SEPARATED
6/6/2007	PA24250	O540A1D5		455180	RT MLG

RT MLG EXTEND/RETRACT CONDUIT PUSH-PULL TUBING SEPARATED AT THE SWEDGE CONNECTION JUST OB OF THE LANDING GEAR CONTROL SUPPORT BRACKET. THERE WERE NO INDICATIONS OF IMPROPER INSTALLATION. (K)

2007FA0000623	PIPER	LYC		FUEL	CONTAMINATED
6/16/2007	PA25	O320A2B			UNKNOWN

WATER IN FUEL. (K)

CA070618002	PIPER	LYC		CRANKSHAFT	CORRODED
6/6/2007	PA28140	O320E2A			ENGINE

(CAN) ENGINE CONVERTED TO 160 HP IAW STC SE367CH. ENGINE NOW SIMILAR TO O-320-D2A. CRANKSHAFT INSPECTED IAW AD 98-02-08. PITTED FOUND, NO CRACKS. (TC NR 20070618002)

2007FA0000571	PIPER	CONT		BRACKET	FAILED
5/31/2007	PA28R200	IO360*		67107000	NOSE GEAR

THE PILOT STATED NOSE GEAR COLLAPSED ON LANDING. AFTER AIRCRAFT REMOVED FROM RUNWAY AND PUT ON JACKS. THE NOSE GEAR WOULD NOT EXTEND OR RETRACT. THE GEAR WAS EXTENDED BY EMERGENCY EXTENSION. THE NOSE GEAR ALIGNER BRACKET FELL OFF THE GEAR. AGAIN THE NOSE GEAR WAS EXTENDED AND RETRACTED SEVERAL TIMES. THE TT OF THE NOSE GEAR ALIGNER BRACKET COULD NOT BE DETERMINED. (K)

2007FA0000577	PIPER	CONT		DOWNLOCK	BROKEN
5/12/2007	PA28R200	IO360*		6715003	NLG

THE LOWER LATCH HOOK WAS BROKEN OFF ALLOWING THE NOSE GEAR TO COLLAPSE. (K)

CA070606006	PIPER	LYC	LYC	CYLINDER	DAMAGED
6/1/2007	PA31	TIO540A2C	TIO540A2C	LW12966	ENGINE

(CAN) LT ENGINE, NR 5 CYLINDER WAS FOUND TO HAVE LOW COMPRESSION DURING THE INSPECTION PROCESS. EXCESSIVE AIR WAS PASSING THE RINGS. CYLINDER WAS FOUND TO BE GLAZED. CYLINDER WAS REPLACED AND AIRCRAFT RETURNED TO SERVICE. WILL UPDATE WITH CYLINDER HOURS. (TC NR 20070606006)

CA070607003	PIPER	LYC	CYLINDER	CRACKED
5/11/2007	PA31350	TIO540J2BD	05K21108	ENGINE

(CAN) DURING A VISUAL INSPECTION OF THE ENGINE, A CRACK WAS FOUND UNDERNEATH THE PUSHROD TUBE. THE CRACK WAS RUNNING FROM THE BASE OF THE CYLINDER HEAD ALONG THE BOTTOM OF THE COOLING FINS TOWARDS THE HEAD. THE CRACK IS SIMILAR TO THAT FROM SDR 20070423005. (TC NR 20070607003)

CA070607004	PIPER	LYC	CYLINDER	CRACKED
5/15/2007	PA31350	TIO540J2BD	05K21108	ENGINE

(CAN) WHILE INSPECTING THE ENGINE, A CRACK WAS FOUND IN THE PUSHROD TUBE AREA OF THE NR 2 CYLINDER. IT WAS AT THE BASE OF THE COOLING FINS AND RAN FROM THE BOTTOM OF THE CYLINDER HEAD TOWARDS THE TOP OF THE CYLINDER. THE CRACK STARTS WHERE THE CYLINDER HEAD IS ATTACHED TO THE BARREL. THIS IS SIMILAR TO THE EVENTS IN SDR`S 20070607003 AND 20070423005. (TC NR 20070607004)

2007FA0000552	PIPER		HOSE	RUPTURED
6/22/2007	PA31T		177662	HYD SYSTEM

LT MLG IB GEAR DOOR ACTUATOR HYDRAULIC HOSE, HAD A PRESSURE FAILURE, THUS DRAINING HYDRAULIC FLUID IN FLIGHT, RESULTING IN FAILURE OF PROPER GEAR EXTENSION, EMERGENCY GEAR EXTENSION, AND CAUSING AIRCRAFT GEAR UP LANDING. HYDRAULIC HOSE P/N 17766-2 AND PIPER P/N 465-138. HOSE IS ORIGINAL EQUIPMENT INSTALL.

FAA20070618001	PIPER		HUB	FAILED
6/18/2007	PA34200			PROPELLER

ON JUNE 6,2007 PIPER SENECA N15156 WHILE IN CRUSE ON A TRAINING FLIGHT HAD A CATROSTRIFIC FAILRUE OF THE PROPELLER HUB CAUSING THE LOSS INFLIGHT OF ONE OF THE PROPELLER BLADES. THE FAILURE OF THE HUB WAS OF THE SAME KIND ADDRESSED IN AD2006-18-15 EXCEPT THE FAILURE IN THIS CASE PROPAGATED FROM THE AFT HALF OF THE HUB WHICH IS NOT PART OF THE AD'S REQUIRED INSPECTION. EDDY CURRENT INSPECTION IN ACCORDANCE WITH THE AD HAD BEEN PREFORMED 17 HOURS PRIOR TO THE FAILURE. INSPECTOR FOR HARTZELL PROPS CONFIRMED THIS INFORMATION AFTER INSPECTING THE HUB ALONG WITH FAA AND NTSB INVESTIGATORS ON JUNE 9TH, 2007.

2007FA0000620	PIPER	LYC		LINE	LEAKING
5/25/2007	PA44180	IO360E1A		MILH25579	FUEL SYSTEM

HOSE LEAK, ENGINE CAUGHT FIRE NOT DUE TO HOSE. FUEL FED FIRE OFTEN STARTING AT NR 1 EXHAUST PORT. (K)

CA070605003	PIPER	LYC	LYC	MAIN BEARING	FAILED	
6/1/2007	PA44180	O360E1A6	O360E1A6D	LW15328	ENGINE	

(CAN) MAIN BEARING FAILED DUE TO EXCESSIVE TSO. CRANKCASE DAMAGED BEYOND REPAIR. VERY CLOSE TO HAVING A COMPLETE ENGINE FAILURE. (TC NR 20070605003)

2007FA0000626	RAYTHN		VALVE	STICKING
6/6/2007	390		EM9159REVC	HYDRAULIC SYS

PILOT REPORTED RT HYDRAULIC SHUTOFF VALVE INITIALLY STUCK DURING PREFLIGHT TEST, THEN OPENED. REPLACED VALVE WITH NEW UNIT, FUNCTIONAL TESTS, OK. REMOVED VALVE ASSY, PN 39045AS65014-003, MANUFACTURED 11/2005. (K)

2007FA0000553	RAYTHN	GARRTT	ENGINE	BINDING	
6/26/2007	HAWKER800XP	TFE7315BR	30751604	NR 2	

IFSD OCCURRED ON JUNE 21ST 2007. AN EMERGENCY WAS DECLARED WHEN THE NR 2 ENGINE ITT CLIMBED TO 1066C FOR 5 SECONDS AT FL 260 AND A HIGH VIBRATION WAS FELT. THE PILOT SHUTDOWN THE ENGINE. ALL PARAMETERS WERE FINE UNTIL THIS EVENT. AN OVERWEIGHT LANDING INSPECTION WAS PERFORMED ON THE AIRCRAFT WITH NO ABNORMALITIES REPORTED. DISASSEMBLY FINDINGS OF THE ENGINE REVEALED LPC2 DISC POST SEPARATIONS AS LISTED IN SB TFE731-72-3711.

CA070616001	RAYTHN	GARRTT	ENGINE	MAKING METAL
5/27/2007	HAWKER800XP	TFE7315BR		LEFT

(CAN) DURING CRUISE, CREW NOTED ODOR IN CABIN AND VIBRATION, AND EXECUTED PRECAUTIONARY LANDING. LT ENGINE HAD HIGH VIBRATION ON LOW POWER GROUND RUN, ENGINE OIL FILTER WAS HEAVILY CONTAMINATED WITH BOTH FERROUS AND NON-FERROUS MATERIAL, ENGINE WAS REMOVED FOR REPAIR, SUSPECT BEARING AND/OR CARBON SEAL FAILURE, TEARDOWN REPORT PENDING. (TC NR 20070616001)

CA070612003	ROBSIN	LYC	BRUSHES	LOOSE
6/1/2007	R22BETA	O360J2A		ALTERNATOR

(CAN) ON BACK OF ALTERNATOR, POWER-OUT STUD FOUND LOOSE AND NYLON BUSHING FOUND MELTED. WIRE TERMINAL WAS FOUND MELTED AND BROKEN. PROBLEM HAS SINCE BEEN DETECTED ON TWO OTHER AIRCRAFT. (TC NR 20070612003)

2007FA0000563	SCWZER		SHAFT	ROUGH
5/7/2007	G164A			BRAKE

ON DISASSEMBLY, THE SHAFT WAS FOUND TO BE QUIET ROUGH, WHERE THE PARKING BRAKE TAB LEVER 149-1 ENGAGES WITH THE SHAFT. THIS IS NOT APPARENT UNTIL IT IS REMOVED AND TAKEN APART, AS SPRING 02-9 OBSCURES THE NEW OF IT. TO PREVENT REOCCURRED THE SHAFT SHOULD BE CHECKED AND SMOTHERED OR REPLACED. (K)

2007FA0000585	SCWZER	PWA	BOLT	BROKEN
5/7/2007	G164A	R1340AN1	AN837A	UNKNOWN

THE BOLTS FAILED DUE TO LANDING WITH WHEEL LOCKED. THINK THE BOLTS WERE FINE BEFORE THIS INCIDENT. (K)

2007FA0000621	SCWZER	GARRTT	SEAL	LEAKING
6/11/2007	G164B	TPE33143	31011607	COMPRESSOR

THE COMPRESSOR SEAL WAS LEAKING AND THE REAR SCAVENGE PUMP GEAR SHEARED OFF CAUSING IT TO FAIL. THIS CAUSED MAJOR OIL LOSS AND THE PROP TO FEATHER. HAVE REPLACED THE COMPRESSOR SEAL AND REAR PUMP TO PREVENT RECURRENCE. (K)

2007FA0000622	SCWZER	GARRTT	GEAR	SHEARED
6/11/2007	G164B	TPE33143B		SCAV PUMP

THE COMPRESSOR SEAL WAS LEAKING AND THE REAR SCAVENGE PUMP GEAR SHEARED OFF CAUSING IT TO FAIL. THIS CAUSED MAJOR OIL LOSS AND THE PROP TO FEATHER. HAVE REPLACED THE COMPRESSOR SEAL AND REAR PUMP TO PREVENT RECURRENCE. (K)

AMCR200700003	SKRSKY		BRAKE ASSY	BINDING
7/9/2007	S92A		C20497000	MLG

DURING WHEEL CHANGE (LT OB) COULD NOT REMOVE THE WHEEL OFF OF AXLE. FOUND ONE OF THE CENTER STATORS (A35579) OF THE BRAKE ASSY TO BE PROTRUDING OUT OF THE PACK. THE STATOR CUT INTO THE WHEEL PREVENTING THE REMOVAL. WE DID NOT TEARDOWN THE BRAKE BUT SUSPECT EITHER THE STATOR IS OUT OF ROUND OR HAS ID DAMAGE, OR THE TORQUE TUBE IS DAMAGED ALLOWING STATOR TO SHIFT BEYOND THE PACK CIRCUMFERENCE. P/N 78286/92250-00801-102.

2007FA0000560	SNIAS	TMECA	STRUCTURE	CRACKED
5/21/2007	AS350B2	ARRIEL1		TAIL BOOM

A CRACK APPROXIMATELY 170 MM LONG WAS FOUND ON THE LEADING EDGE, AFT OF FWD MOUNT POINT. (K)

2007FA0000606	SNIAS	TMECA	SHAFT	WORN
7/12/2007	AS350B3	ARRIEL2B	350A35109221	HYD PUMP

DURING DAILY INSPECTION DISCOVERED EXCESSIVE PLAY IN HYDRAULIC PUMP DRIVE PULLEY. HYDRAULIC PUMP DRIVE WAS THEN REMOVED FOR FURTHER INSPECTION. IT WAS DISCOVERED THAT THE DRIVE PULLEY SHAFT HAD WORN EXCESSIVELY WHERE THE DRIVE BEARING HAD BEEN SPINNING AROUND IT. THE DRIVE BEARING APPEARED TO BE FINE WITH NO BINDING NOTICED. IT APPEARS THAT THE FIT OF THE BEARING ONTO THE PULLEY WAS NOT TIGHT ENOUGH TO KEEP THE BEARING RACE FROM SPINNING.

2007FA0000607	SNIAS	TMECA	PULLEY	WORN
7/12/2007	AS350B3	ARRIEL2B	350A35109221	HYD PUMP

DURING DAILY INSPECTION DISCOVERED EXCESSIVE PLAY IN HYDRAULIC PUMP DRIVE PULLEY. HYDRAULIC PUMP DRIVE WAS THEN REMOVED FOR FURTHER INSPECTION. IT WAS DISCOVERED THAT THE DRIVE PULLEY SHAFT HAD WORN EXCESSIVELY WHERE THE DRIVE BEARING HAD BEEN SPINNING AROUND IT. THE DRIVE BEARING APPEARED TO BE FINE WITH NO BINDING NOTICED. IT APPEARS THAT THE FIT OF THE BEARING ONTO THE PULLEY WAS NOT TIGHT ENOUGH TO KEEP THE BEARING RACE FROM SPINNING.

AS350B3	SNIAS	TMECA	GEARBOX	WARNING LIGHT
6/28/2007	AS350B3	ARRIEL2B1	350A32031002	

MGB CHIP LIGHT CAME ON IN FLIGHT. REMOVED CHIP PLUGS FROM THE MGB AND THE MAST FOUND PARTICLES ON THE MGB PLUG LESS THAN LIMITS CALLED OUT IN AEC AS350B3 SPM 20.08.01.601 NOTHING ON THE MAST PLUG. PERFORMED 10 MIN. HOVER AND RECHECKED CHIP PLUGS IAW AEC AS350B3 MWC 05.53.00.608 NO MORE PARTICLES FOUND AND NO RE-OCCURRENCE OF THE CHIP LIGHT.

2007FA0000556	SNIAS	TMECA	GEARBOX	UNKNOWN

6/28/2007	AS350B3	ARRIEL2B1	305A32031002	

MGB CHIP LIGHT CAME ON IN FLIGHT. INSPECTED CHIP PLUGS IAW AEC MWC AND SPM. NO FURTHER ACTION REQUIRED.

2007FA0000557	SNIAS	TMECA	GEARBOX	UNKNOWN
6/28/2007	AS350B3	ARRIEL2B1	305A32031002	

MGB CHIP LIGHT CAME ON IN FLIGHT. INSPECTED CHIP PLUGS IAW AEC MWC AND SPM. NO FURTHER ACTION REQUIRED.

FAA070628001	SNIAS	TMECA	GEARBOX	MAKING METAL
6/28/2007	AS350B3	ARRIEL2B1	350A32031002	MAIN ROTOR

MGB CHIP LIGHT CAME ON IN FLIGHT. REMOVED CHIP PLUGS FROM THE MGB AND THE MAST FOUND PARTICALS ON THE MGB PLUG LESS THAN LIMITS CALLED OUT IN AEC AS350B3 SPM 20.08.01.601 NOTHING ON THE MAST PLUG.PERFORMED 10 MIN. HOVER AND RECHECKED CHIP PLUGS AS PER AEC AS350B3 MWC 05.53.00.608 NO MORE PARTICALS FOUND AND NO RE-ACCURANCE OF THE CHIP LIGHT.

CA070614003	SWRNGN	GARRTT	LINE	CRACKED
6/13/2007	SA226TC	TPE33110UA	2781032682	HYD SYSTEM

(CAN) CREW NOTICED A LARGE PUDDLE OF HYDRAULIC FLUID COMING FROM THE NOSE WHEEL WELL AREA. DETERMINED TO BE A CRACKED LINE ON A BEND RADIUS, WHICH WAS THE SUPPLY LINE TO THE NWS SYSTEM. THE SYSTEM WAS DISABLED AND PLACED ON AN MEL DEFERRAL, CLEANED AND LEAK TESTED, SERVICEABLE. AWAITING PARTS FOR REPAIR. (TC NR 20070614003)

CA070423008	SWRNGN	GARRTT	FUEL CONTROL	LEAKING
4/16/2007	SA227AC	TPE33111U	8978015	ENGINE

(CAN) NOTED LARGE FUEL LEAK UNDER THE AIRCRAFT IN THE HANGER. DETERMINED THE FUEL WAS COMING FROM AN ENGINE DRAIN. GROUND RAN THE ENGINE, FOUND THE FUEL CONTROL DRAIN LEAKING. REMOVED AND REPLACED THE FUEL CONTROL WITH AN OVERHAULED UNIT, NO FURTHER DEFECTS NOTED. (TC NR 20070423008)

2007FA0000619	UNIVAR	CONT	SKIN	CORRODED
7/17/2007	415C	A75*	F13147LR	CENTER WING

(5) MISSING AN426-3 RIVET HEADS ON LOWER CENTER SECTION SKINS PN F13147-L/-R PROMPTED INSPECTION HOLE INSTALLATION IAW SB-31 FOR REPAIR ACCESS. LIGHT SURFACE CORROSION WAS FOUND ON LOWER SKINS AND STIFFENERS. BOTH SIDES WERE CLEANED AND TREATED FOR CORROSION. DURING CLEANING FOUND A 2 INCH SKIN CRACK IN AFT SECTION OF F13147-L AND A .5 INCH CRACK AT THE LOWER FWD TAB OF RIB PN F13016L, BOTH REPAIRED IAW AC 43.13-1B GUIDELINES. FUEL TANKS WERE REMOVED IAW SB-31 REQUIREMENTS AND 4 SMALL PATCHES OF LIGHT SURFACE CORROSION WERE FOUND ON THE RT OB END OF FWD FACE OF MAIN SPAR. CORROSION CLEANED AND TREATED. INSPECTION HOLE INSTALLATION ALLOWS MUCH BETTER VISUAL ACCESS FOR THE INSPECTION OF THE CENTER SECTION THAN WING REMOVAL. PAINT STRIPPER RESIDUE, OVERSPRAY AND CORROSION WERE ALL PRESENT IN THIS CENTER SECTION, THE WING REMOVAL METHOD OF INSPECTION COULD HAVE CONTRIBUTED TO MISSING THIS CORROSION BY LIMITING VISUAL ACCESS.

2007FA0000575	UROCOP	TMECA	HMU	FAILED
6/2/2007	EC130B4	ARRIEL2B1	0292858360	ENGINE

THE PILOT REPORTED A LOUD THUD AND A SUBSEQUENT YAWING OF THE AC, WITH CONTINUED YAWING OF THE AC, AND NO INDICATION ON THE COCKPIT INSTRUMENTATION THAT HE NOTICED. THE PILOT DECLARED AN EMERGENCY AND PERFORMED AN AUTORATATIVE LANDING AT THE AIRPORT. THE VEHICLE AND ENGINE MULTIFUNCTION DISPLAY, DISPLAYED FAILURE OF CHANNEL A. THE EC130 IS EQUIPPED WITH A DUAL CHANNEL FADEC SYSTEM WITH A MECHANICAL BACKUP. IN THE FOLLOWING TROUBLESHOOTING PROCESS IT WAS FOUND THAT THE RESOLVER MOTOR ON THE FUEL CONTROL (HMU) HAD A RESISTANCE VALUE THAT WAS OUT OF TOLERANCE. A FIELD TECH WAS BROUGHT IN FROM MFG TO PERFORM FURTHER TESTING, SINCE THE FAILURE OF ONE CHANNEL OF THE FADEC AND THE SUBSEQUENT SWITCHING TO THE OTHER CHANNEL IS NOT

SUPPOSED TO BE NOTICED BY THE PILOT OF THE EC130 UNTIL THEY HAVE LANDED AND BROUGHT THE ENGINE TO IDLE, AT THAT TIME A YELLOW GOV LIGHT ILLUMINATES ON THE CAUTION PANEL. THE FIELD TECH CONFIRMED THE READINGS AND WAS ABLE TO OBTAIN FURTHER READINGS FROM THE DIGITAL ENGINE CONTROL UNIT, THAT INDICATED A STEPPER MOTOR HAD FAILED AND WAS VARYING THE FUEL FLOW TO THE ENGINE. THE (HMU) WAS REPLACED AND A BORESCOPE INSPECTION OF THE ENGINE WAS PERFORMED, WITH NO ANOMALIES, GROUND RUNS AND FLIGHT CHECKS FOR NORMAL OPERATION AND A CHECK OF THE BLEED VALVE PARAMETERS ALL WERE NORMAL. THE (HMU) UNIT WAS SHIPPED BACK TO MFG FOR FURTHER TESTING AND O/H. (K)

END OF REPORTS