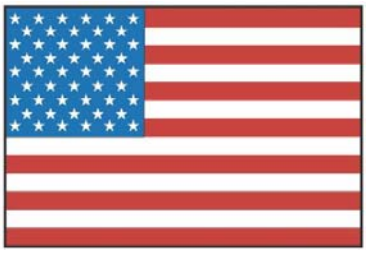
U.S. Department of Transportation
Federal Aviation Administration

AFS-600
Regulatory Support Division

ADVISORY CIRCULAR

43-16A

AVIATION MAINTENANCE ALERTS



ALERT NUMBER 332

MARCH 2006

CONTENTS

AIRPLANES

BEECH 1
CESSNA 4
IAI 5
PIPER 5
RAYTHEON (BEECH) 6

HELICOPTERS

AEROSPATIALE 9
BELL 10
SCHWEIZER 10

POWERPLANTS

CONTINENTAL 11
LYCOMING 13

AIR NOTES

ELECTRONIC VERSION OF FAA FORM 8010-4, MALFUNCTION OR DEFECT REPORT 13
PAPER COPY OF FAA FORM 8010-4, MALFUNCTION OR DEFECT REPORT 13
INTERNET SERVICE DIFFICULTY REPORTING (iSDR) WEB SITE 13
IF YOU WANT TO CONTACT US 14
AVIATION SERVICE DIFFICULTY REPORTS 15

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 Mechanical Reliability Report (MRR), 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.

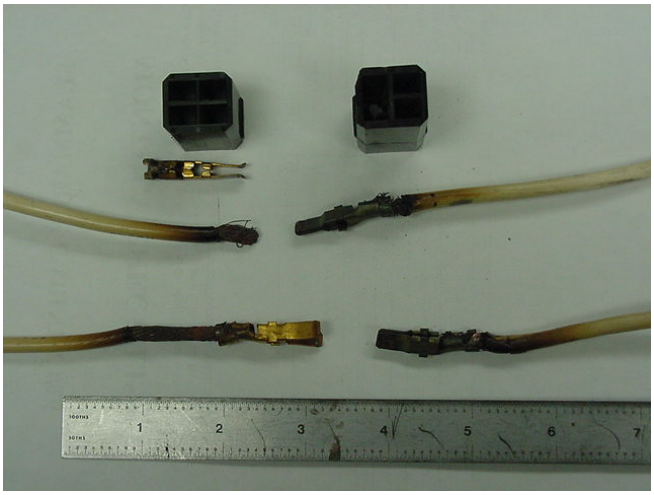
(Editor's notes are provided for editorial clarification and enhancement within an article. They will always be recognized as italicized words bordered by parentheses.)

AIRPLANES

BEECH

Beech; 200; Arcing Windshield Heat Connectors; ATA 3040

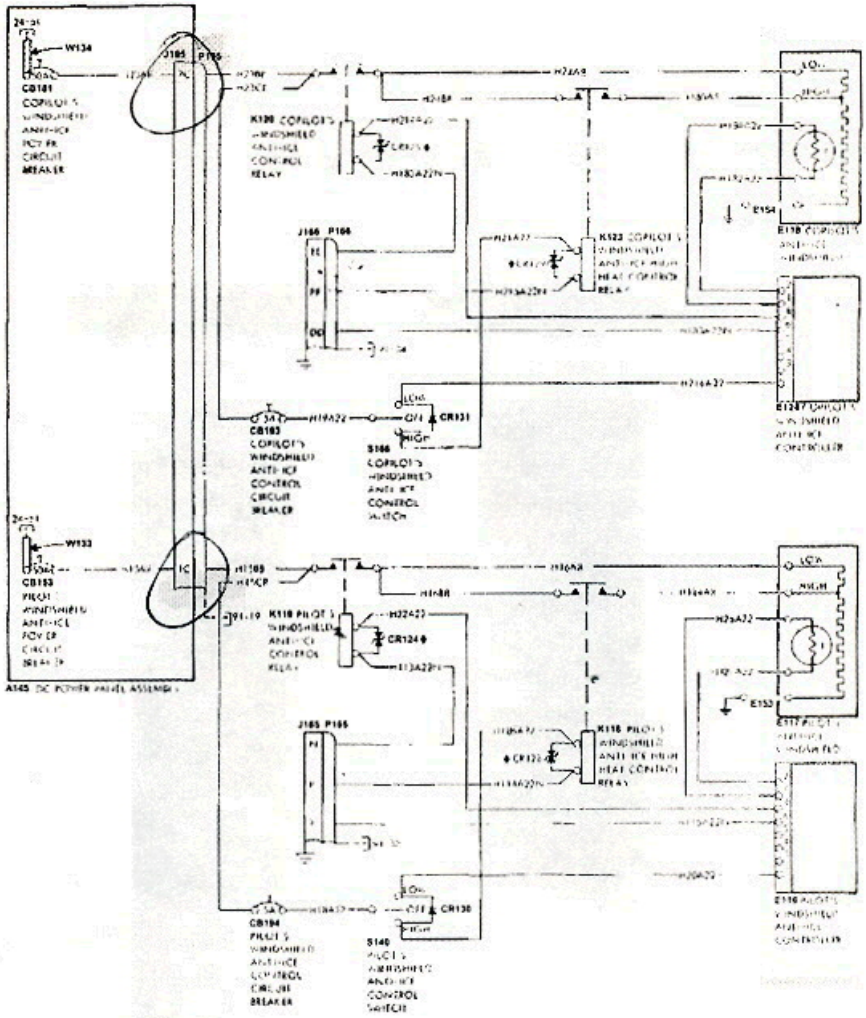
An FAA safety inspector submitted this defect report in conjunction with a repair station's manager. A customer's complaint of inoperative windshield heat led to a more significant finding of a connection fault at the DC power distribution panel. "Using REPS Beech Super King Air 20-0 wiring diagram (30-40-02 figure 1) the connections at junction 195 and plug 195 had been subjected to excessive heating...." and burned as result of loose connections. "The strain relief for the plug does not ensure a secure connection for the 8 AWG wire to maintain a positive contact. The end result is the connections work loose and begin to arc. This arcing generates heat to the point of burning the wire and causing the socket connection (P/N 66257) and pin (P/N 66259) to become brittle and weak. Eventually the wire and socket connection failed. This failure of the connection renders the windshield heat system inoperative. The heat generated from connection failure creates a potential fire hazard for the aircraft." Suggestions to fix this defect include "...eliminating the connections at plug 195 (1c and 2c) for the pilot's and co-pilot's windshield heat." The windshield heat wires H15A8 and H158B8, H23A8, and H23B8 could be butt-spliced, completely bypassing the junction and its possibility for loose connections.



REPS
raytheon electronic publication system

Beech Super King Air 200 and 200T Wiring Diagram Manual

Windows, Windshields and Doors-Anti-Ice, BB-35 and After; BT-1 and After



30-40-02

Figure 1

Printed from REPS King Air 200 Series REPS Revision 24 - November 2005

P/N 101-590010-39 Revision 04 - February 26, 1999

REPS
raytheon electronic publication system

Beech Super King Air 200 and 200T Wiring Diagram Manual

Windows, Windshields and Doors-Anti-Ice, BB-35 and After; BT-1 and After

REFERENCE DESIGNATOR	PART NUMBER	DESCRIPTION	INSTL ZONE	USABLE ON CODE
A145		PANEL ASSY,DC POWER/SEE CHAPTER 24/	143	1
CB153	507-250-101	· CIRCUIT BREAKER,PILOT'S WINDSHIELD ANTI-ICE	143	1
CB181	507-250-101	· CIRCUIT BREAKER,COPILOT'S WINDSHIELD ANTI-ICE	143	1
W133		· BUS BAR/SEE CHAPTER 24/	143	1
W134		· BUS BAR/SEE CHAPTER 24/	143	1
J195		· RECEPTACLE,DC POWER/SEE CHAPTER 91/	143	1
CB193	7277-2-5	CONTROL,COPILOT'S WINDSHIELD ANTI-ICE	221	1
CB194	7277-2-5	CIRCUIT BREAKER,PILOT'S WINDSHIELD ANTI-ICE CONTROL	221	1
CR124	1N4005	DIODE/TYPICAL CR124,CR125,CR128 AND CR129/	221	2
	100-361045-1	TRANSZORB ASSY/TYP CR124,CR125, CR128 & CR129/	221	3
CR130	1N4005	DIODE	245	2
	100-361045-3	DIODE ASSY	245	3
CR131	1N4005	DIODE	245	2
	100-361045-3	DIODE ASSY	245	3
E116	100-364295-1	CONTROLLER,PILOT'S WINDSHIELD ANTI-ICE /SUPERSEDES HYLZ8882-1 AND HYLZ8882/	221	1
E117	101-384025-1	WINDSHIELD,PILOT'S ANTI-ICE	251	1
E153	MS25083-1BB10	· JUMPER,PILOT'S ELECTRO-THERMAL WINSHLD GRD	251	1
E118	101-384025-2	WINDSHIELD,COPILOT'S ANTI-ICE	252	1
E154	MS25083-1BB10	· JUMPER,COPILOT'S ELECTRO-THERMAL WINSHLD GRD	252	1
E124	100-364295-1	CONTROLLER,COPILOT'S WINDSHIELD ANIT-ICE /SUPERSEDES HYLZ8882-1 AND HYLZ8882/	221	1
J165		RECEPTACLE,LH SUBPANEL GROUND/SEE CHAPTER 91/	231	1
J166		RECEPTACLE,RH SUBPANEL GROUND/SEE CHAPTER 91/	232	1
K118	MS24166D1	RELAY,PILOT'S WINDSHIELD ANTI-ICE HI HEAT CONTR	221	1
K119	MS24166D1	RELAY,PILOT'S WINDSHIELD ANTI-ICE CONTROL	221	1
K120	MS24166D1	RELAY,COPILOT'S WINDSHIELD ANTI-ICE CONTROL	221	1
K123	MS24166D1	RELAY,COPILOT'S WINDSHIELD ANTI-ICE HI-HEAT	221	1
P165		PLUG,LH SUBPANEL GROUND/SEE CHAPTER 91/	231	1

REPS
raytheon electronic publication system

Beech Super King Air 200 and 200T Wiring Diagram Manual

Windows, Windshields and Doors-Anti-Ice, BB-35 and After; BT-1 and After

REFERENCE DESIGNATOR	PART NUMBER	DESCRIPTION	INSTL ZONE	USABLE ON CODE
P166		PLUG,RH SUBPANEL GROUND/SEE CHAPTER 91/	232	1
P195		PLUG,DC POWER PANEL/SEE CHAPTER 91/	143	1
S140	MS24658-21L	SWITCH,PILOT WINDSHIELD ANTI-ICE CONTROL	245	1
S166	MS24658-21L	SWITCH,COPILOT'S WINDSHIELD ANTI-ICE CONTROL	245	1

CODES OF EFFECTIVITY

1 BB-35 AND AFTER; BT-1 AND AFTER
2 BB-35 THRU BB-452; BT-1 THRU BT-4
3 BB-453 AND AFTER; BT-5 AND AFTER

Part Total Time: (unknown).

CESSNA

Cessna: 172S; Worn Aileron Control Cable; ATA 2710

During a 100-hour inspection, a mechanic found a “flat spot” on the L/H aileron crossover cable. The defect occurred at the aileron cable abrasion strip attached to the rib assembly at wing station 71.19. Further investigation found the cable beginning to fray. This defect’s cause is determined to be from wearing on the abrasion strip. “To solve this problem, I think the abrasion strip should be lowered or a pulley installed.” *(The abrasion strip P/N is 0523233-3. The stainless steel control cable P/N is 0510105-364.)*

Part Total Time: 2,065.8 hours.

Cessna: 172S; Worn Aileron Control Cable; ATA 2710

Storm damage prompted the mechanic in the previous discrepancy to inspect this aircraft: again a “flat spot” was found on the aileron crossover cable. As above, the wear position corresponds to the abrasion strip attached to a rib assembly at wing station 71.19. This cable was also beginning to fray. His recommendation is the same: lower the strip or install another pulley. *(The abrasion strip P/N is 0523233-3. The stainless steel control cable P/N is 0510105-364.)*

Part Total Time: 1,445.8 hours

Cessna: 402C; Worn Aileron Control Cable; ATA 2710

The submitting mechanic writes, "Wear from blending *(on this cable)* is due to softer material used in these new style cables (corrosion resistant)." The blending was found at "...the wing pulley": no further location description was provided. *(The aileron cable P/N is listed as 5000008-95CR. Premature wear and/or short life on these stainless cables is an increasingly frequent defect—Ed.)*

Part Total Time: (unknown).

Cessna: 402C; Worn Aileron Control Cable; ATA 2710

"Cable is blended at pulley," states the mechanic. "The probable cause is the softer, new style stainless steel cable material. The service life is only a fraction of the old style steel cables." The blending defect was found on the forward cable (P/N 5000008-95CR) of the L/H wing at the middle pulley.

Part Total Time: (unknown).

IAI

IAI: Astra; Failed Engine Bearing; ATA 7250

(The following description pertains to the Honeywell TFE-731-40R-200G.)

The aircraft crew describes departing Cibao International in the Dominican Republic, heading for New Jersey. At 36,000 feet the DEEC (digital engine electronic control) tripped to manual mode, "...followed by the loss of the N1 GGE *(gas equivalent)* indication. The flight continued normally, then experienced a R/H engine vibration which climbed to 0.8 on the vibration indicator. Power was reduced on the R/H engine to 75%. The vibration stopped. The aircraft was flown at reduced power and diverted to West Palm Beach for maintenance, where the aircraft landed safely without incident. The crew did not declare an emergency.

"The engine was sent to Garrett Aviation in Agusta, Georgia for repair—a 150 hour and core repair was performed. It was determined the number 6 bearing failed due to oil starvation. The number 6 bearing was replaced along with other components and the engine was returned to service...." *(The number six bearing P/N as listed: 358750-2.)*

Part Total Time: 800.2 hours.

PIPER

Piper: PA28-181; Worn Aileron Cables; ATA 2710

The technician states, "The left and right primary aileron cables are severely worn at the wing pulleys (P/N 41001-010) located at wing station 49.25. These cables have approximately 4,725.4 hours total time. This defect is not a result of binding pulleys, but most probably due to sub-standard cable used during manufacture, especially the stainless steel cable. Although service bulletin 1048 is accomplished at each 100 hour and annual inspection, it by no means solves this problem. It is recommended that all stainless steel cables be eliminated and galvanized steel cables be installed." *(The aileron cable P/N is 62701-099. The SDRS data base reflects an additional 21 worn/frayed cable related entries.)*

Part Total Time: 4,725.4 hours.

Piper: PA28-181; Worn Rudder Cables; ATA 2720

The left forward rudder cable was found worn at the fairlead passing through the center wing spar at fuselage station 108.17. “The cable became worn due to continuous chafing on the phenolic fairlead,” states the mechanic. “The cable is not centered in the fairlead opening—either through improper positioning of the fairlead or from improper positioning of the pulley quadrants during aircraft assembly. The remedy for this defect would be to increase the opening by which the cable passes through—thereby allowing sufficient clearance for the cable and elimination of the chafing *(action)*.” *(The listed rudder cable P/N is 62701-100. Twenty-one additional entries for worn cables can be found in the SDRS data base.)*

Part Total Time: (unknown).

RAYTHEON (BEECH)

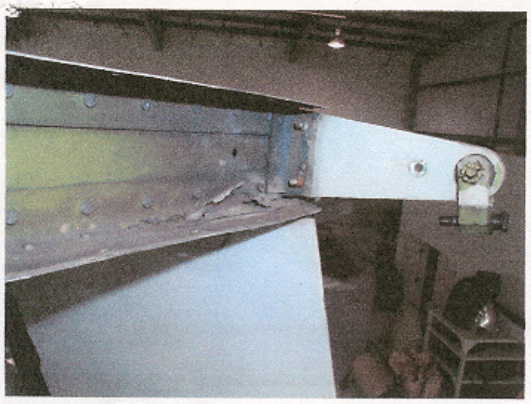
Raytheon (Beech): 200; Shattered Windshield; ATA 5610

The submitter describes the aircraft at cruise with the windshield heat on when the inner layer shattered. Altitude at the time of occurrence was 22,000 feet, clear weather, and -35 degrees Celsius. *(The windshield P/N given: 101-384025-18. The SDRS data base records 18 shattered windshield entries, 2 of which are the exact same part numbers.)*

Part Total Time: 4,636.1 hours.

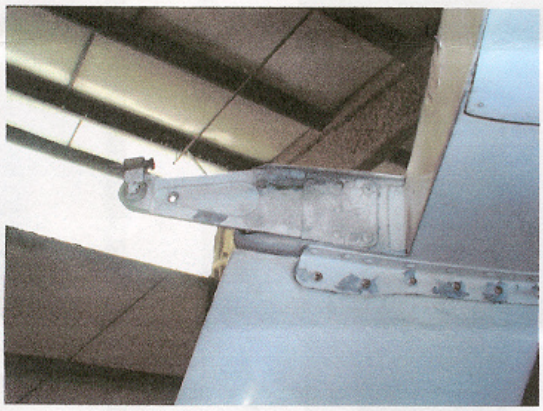
Raytheon (Beech): 1900C; Horizontal Stabilizer Corrosion; ATA 5510

An airframe and powerplant mechanic writes, “During a return from lease inspection, the following areas of the horizontal stabilizer were found to have corrosion and were repaired or replaced....” Noted areas included the L/H and R/H lower aft spar cap, L/H outboard hinge (P/N 101-620011-1), R/H outboard hinge (P/N 101-620011-1), the R/H center hinge (P/N 101-620013-1), the L/H elevator trim tab pushrod tightening device (P/N 101-524095-1), and the R/H elevator trim tab horn. *(The SDRS data base records an additional three entries having similar corrosion difficulties.)*

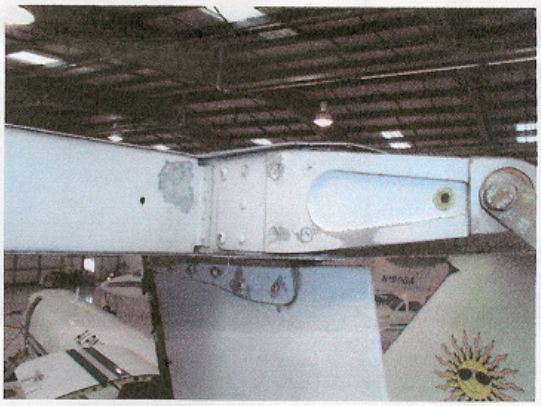


RH HorStab lower aft spar cap

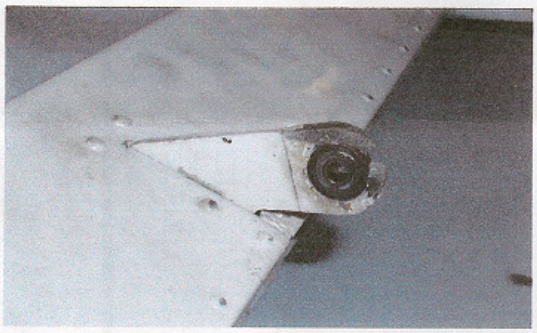
LH HorStab lower aft spar cap



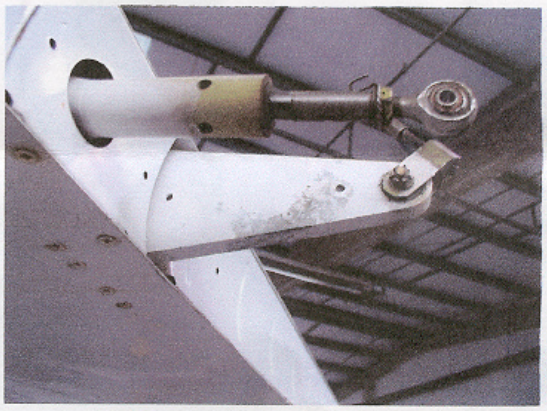
RH OB Elevator hinge



LH OB Elevator Hinge



RH Elevator Trim Tab horn

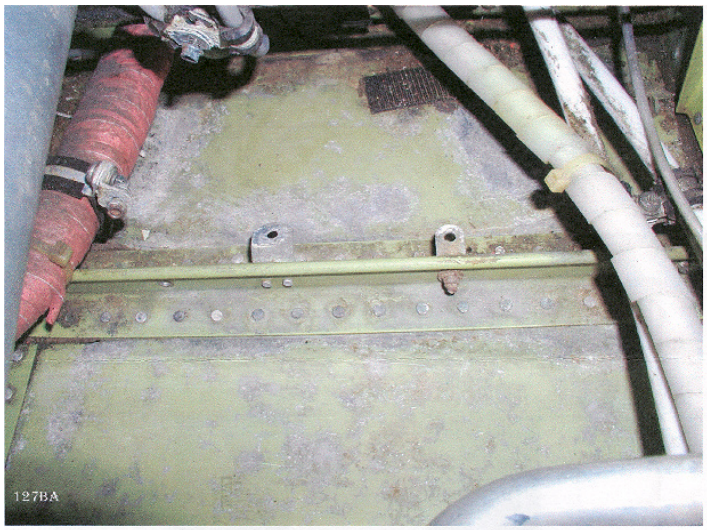


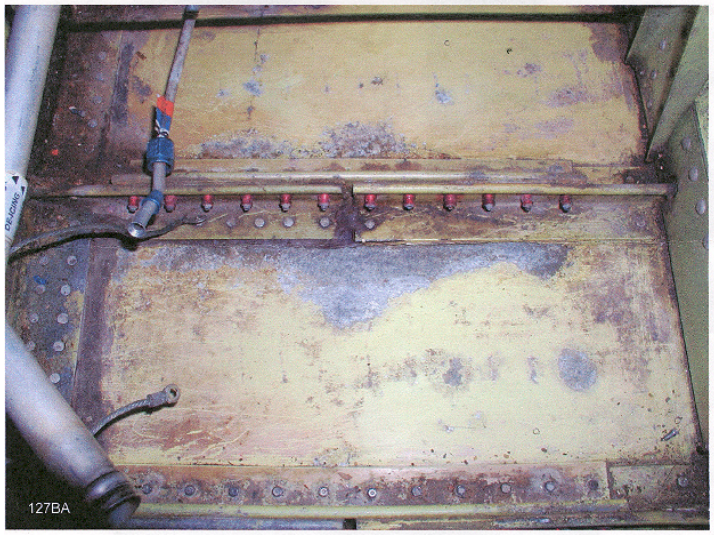
RH Center Elevator Hinge

Part Total Time: 22,418.9.

Raytheon (Beech): 1900; Skin Corrosion; ATA 5330

Another Beech 1900 has corrosion problems, this time on lower fuselage skins at stations 243-273 and stringers 14L, 15R, and 15L. *(This carrier's submission offered no other data. Two of four pictures are shown below. The SDRS data base records 12 similar entries.)*

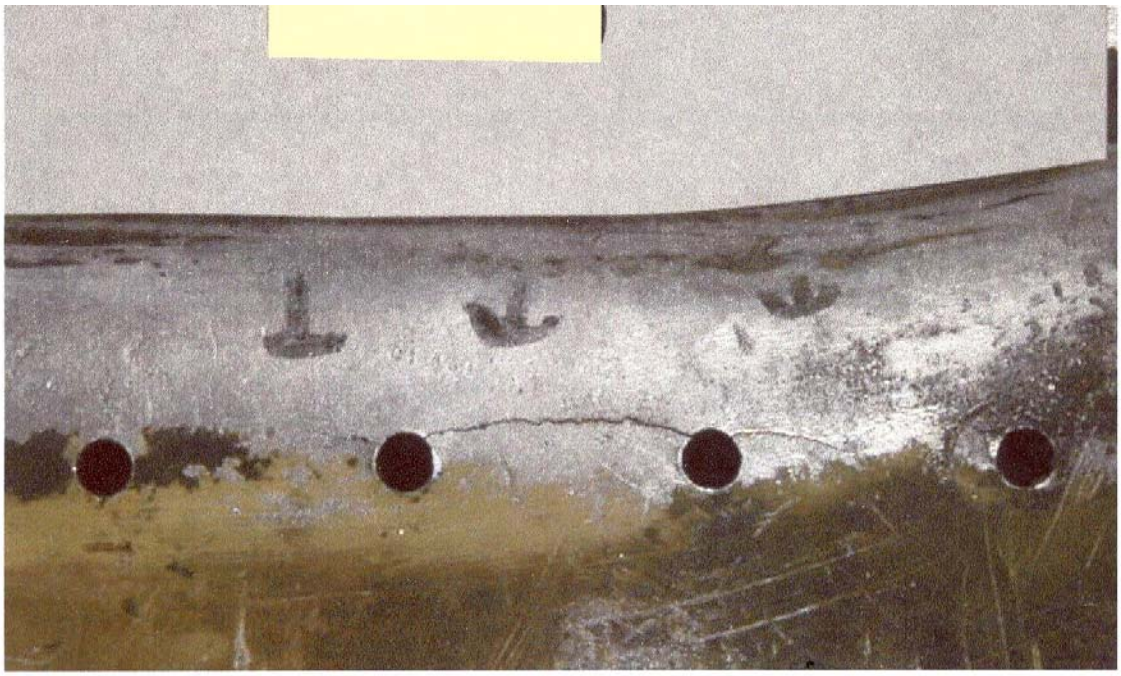




Part Total Time: 22,419.0 hours.

Raytheon (Beech): 1900C; Cracked Doorframe; ATA 5210

A submitter writes, "Several rivets holding the hinge to the air-stair door assembly had pulled through the lower closure reinforcement. The reinforcement...had been installed 1,374 hours earlier as part of Raytheon designed field repair FR-CO-J01063." *(Field Repair Reinforcement kit P/N 114-4023-3; reinforcement P/N 101-430142-64).* "A number of the rivets securing the air stair door hinge to the fuselage were found to be 'working'. Further investigation found cracks in the doorframe between the rivet holes in the upper line of rivets towards the aft end of the hinge." *(Doorframe P/N is listed as 114-420034-1. Two additional entries of this description can be found in the SDRS data base.)*



Part Total Time: 28, 191.0 hours.

HELICOPTERS

AEROSPATIALE

Aerospatiale: AS 350 B2; Failed Air-conditioning Belt; ATA 2100

"The air-conditioner drive belt was found shredded on the engine deck," states the submitting technician. "This air-conditioning belt has failed several times in the history of the aircraft. Our mechanic replaced the air-conditioning compressor and dryer assembly, thinking *(there may have been a…)* compressor seizure when hot. The belt part number (taken from the Eurocopter internal parts catalog page 21-51-12, figure number 3) shows a (P/N) 451400003 belt required, and the Eurocopter maintenance manual (chapter 21-51-10) shows 30 pounds of tension required. A belt was installed to these specifications and was operated for a length of time on the ground, then—as the flight manual specifies—the *(air-conditioner…)* was turned off for take-off. When the air-conditioner was reactivated in flight, the pilot reported a burning smell and the *(conditioned)* air was warm. The aircraft returned to the heliport where the belt was again found shredded.

"The air-conditioner manufacturer was contacted and in accordance with Supplemental Type Certificate number SH3509W (kit number 350-031HP), drive belt number 060018 was ordered and installed. The tensioning, according to the STC installation manual, is 50 pounds. The *(STC)* states the drive belt and tensioning procedure listed in the Eurocopter maintenance manual is not the correct belt or tension. They also advise that the requirement to deactivate the air-conditioner for take-off is removed. This prevents trying to start the compressor against system pressures, resulting in belt skidding or slippage/failure. Furthermore, the manual does not list or alert the user *(to the fact)* that a different belt and tension is required for the integrated flight systems STC'd compressor installed on the aircraft.

"We are fortunate the belt failures we have experienced resulted in only loss of the air-conditioning operation. The compressor drive belt is on the same drive pulley as the hydraulic pump belt and is separated by a small ridge. If the failed *(air-conditioner)* belt had contacted the hydraulic pump belt and caused *(it to fail…)*, then we

would have experienced a hydraulic pressure failure as well. We feel the manufacturer could provide a notice in the manual that would alert the user to the STC requirements. We understand a user is required to know the STC'D items on their aircraft and the parts for them. However, we also know other STC'D items are listed in the manufacturer's parts manuals as well."

Part Total Time: (unknown).

BELL

Bell: 47-G3B2; Cracked Tail Rotor Blades; ATA 6410

An FAA safety inspector provided the following defect report of cracked tail rotor blades. "During *(this helicopter's)* accident investigation, evidence was found of a fatigue fracture on *(one)* tail rotor blade (P/N 047-642-117-105).

The opposing blade was fractured due to apparent overload. Both blades were sent to Bell Helicopter Labs under NTSB escort. The teardown report indicates both blades had progressive fatigue *(cracks)* emanating from pitting of internal blade skins. *(This)* pitting was traced to pre-bonding etching processes during manufacture. Bell labs reports this condition as being investigated for other blades manufactured around the same dates. No final analysis is available."

Part Total Time: 1,723.2 hours.

Bell: 206B; Damaged Main Rotor Blade; ATA 6210

The submitter states, "A ground crew cloth-safari hat blew off in high winds in the Everglades and went through the main rotor. No vibrations or apparent damage was felt in the aircraft—*(the flight was…)* smooth returning to the airport. *(Postflight inspection…)* found dents top and bottom at stations 141 to 145, inboard of the outboard trim tabs." "…the blade was removed and sent to Rotor Blades, Inc. for *(repair)* evaluation. Factory engineering condemned the blade—the top dent was too deep for repair." *(The main rotor blade P/N is 206-010-200-133. The SDRS data base records 47 blade damage reports.)*

Part Total Time: 831.0 hours.

SCHWEIZER

Schweizer: 269C-1; Door Hinge Pin Failure; ATA 5210

(The following combines two identical submissions from the same writer, describing the same defect on two different aircraft.)

This mechanic writes, "The door pin portion of the hinge, which is responsible for retaining the door, failed. This leaves the door connected at only one point and an in-flight failure could potentially allow the door to separate from the aircraft." *(Door hinge P/N is: 269A4755-11. No suggestion for elimination of this defect was offered.)*

Part Total Time: 292.0 and 367.6 hours (respectively).

Schweizer: 269C-1; Door Hinge Pin Failure; ATA 5210

The writer of the previous defect report submits a third door pin discrepancy. "The door pin portion of the hinge, which is responsible for retaining the door, broke in flight, and the door was unsecured at the lower connecting point. The flight crew landed *(…the helicopter)*, the door was secured temporarily, and the aircraft then returned to the maintenance facility." *(The door hinge P/N given as 269A4755-11.)*

Part Total Time: 304.1 hours.

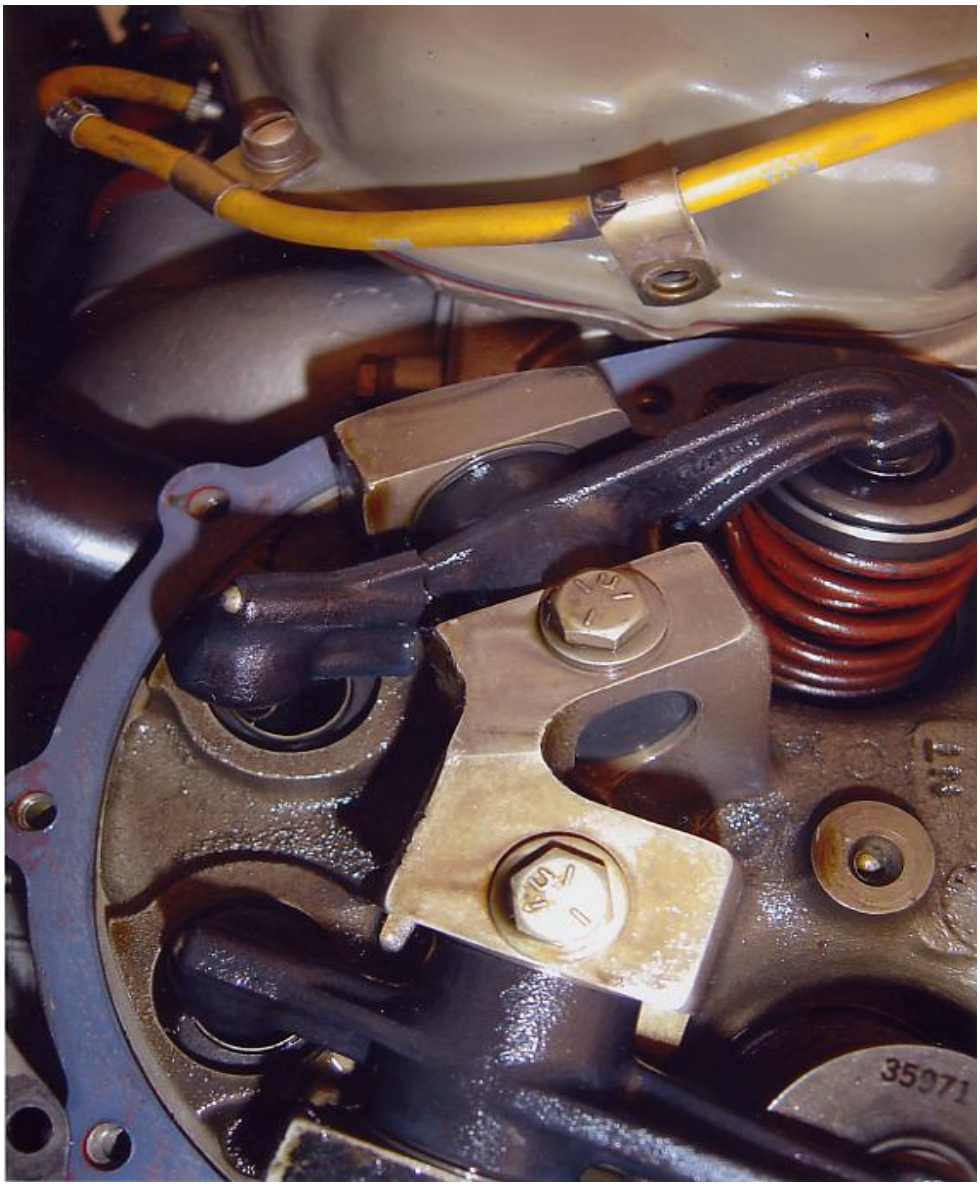
POWERPLANTS

CONTINENTAL

Continental: IO-470-L; Failed Rocker Arm; ATA 8530

(This defect has long since been entered into the SDRS data base, but the attached photo is too good to pass over.)

"On take-off roll the pilot lost power to the left engine," wrote this repair station technician. "Investigation revealed the number five cylinder exhaust valve rocker arm was broken. Additional inspection revealed damage to the number five push rod, housing, and hydraulic lifter assembly. The engine was manufactured on 7/23/01 and has a total time 110.6 hours. Inspection and repair was completed in accordance with instructions from a TCM tech representative. The broken rocker arm was sent to TCM for warranty, per their request and the owner's approval." *(Part number for the rocker arm given as 652130. Even at the scanner's lowest resolution, this photo remains the best of all submissions over the last year. Thank-you!)*



Part Total Time: 110.6 hours.

Continental: TSIO-520-P5B; Failed Check Valve; ATA 8120

This mechanic states, "I received the turbo-charger check valve (P/N AN6249-6) and installed in the correct orientation. *(I)* ran the engine and the turbo-charger cavitated due to loss of oil supply. Further investigation revealed the new check valve was backwards internally: the check valve was at the opposite end of the fitting and the flow arrow compared to the original check valve. I would recommend all check valves be examined to verify proper physical flow direction and properties."

Part Total Time: 0.0 hours.

LYCOMING

Lycoming: LTIO 540-J2; Failed Exhaust Stud; ATA 8520

"The forward exhaust stud became loose and was forced out of position by the effects of exhaust pressures working against it," writes the submitter. "When the threads were completely destroyed, both on the stud and in the cylinder head, the exhaust was allowed to exit the head from a position directly under the exhaust valve pushrod housing. The resulting heat burned a hole in the tube, allowing oil to escape and create a lot of smoke. The flight was not interrupted as the smoke was not detected until landing, at which time the engine was secured and the passengers deplaned. *(I)* recommend at each 50 hour and/or oil change the torque be tested on these studs." *(The aircraft is a Piper PA31-350. The Lycoming cylinder part number included is LW-12966.)*

Part Total Time: (unknown).

AIR NOTES

ELECTRONIC VERSION OF FAA FORM 8010-4, MALFUNCTION OR DEFECT REPORT

One of the recent improvements to the Flight Standards Service Aviation Information Internet web site is the inclusion of FAA Form 8010-4, Malfunction or Defect Report. This web site is still under construction and further changes will be made; however, the site is now active, usable, and contains a great deal of information.

Various electronic versions of this form have been used in the past; however, this new electronic version is more user friendly and replaces all other versions. You can complete the form online and submit the information electronically. The form is used for all aircraft except certificated air carriers who are provided a different electronic form. The Internet address is: http://av-info.faa.gov/SDRX

When the page opens, select "M or D Submission Form" and, when complete, use the "Add Service Difficulty Report" button at the top left to send the form. Many of you have inquired about this service. It is now available, and we encourage everyone to use this format when submitting aviation, service-related information.

PAPER COPY OF FAA FORM 8010-4, MALFUNCTION OR DEFECT REPORT

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.

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, Mechanical Reliability Reports (MRRs), 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/.

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:

John Jackson
Service Difficulty Reporting System, Program Manager
Aviation Data Systems Branch, AFS-620
P.O. Box 25082
Oklahoma City, OK 73125
Telephone: (405) 954-6486
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 submitted 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**
SJ3R018954			HARTZL	BEARING	BROKEN
1/28/2006			HCE4A3I	D7745	PROPELLER HUB
OPERATOR FAILED PROPELLER FOR BLADE END PLAY IAW SB HC-SB-61-283 AND SERVICE LETTER HC-SL-61-215. AFTER DISASSEMBLY, INSPECTION REVEALED ONE BROKEN D-7745 BLADE THRUST BEARING INSTALLED ON BLADE S/N 288MA LOCATED IN HUB SOCKET NR 3.					
R018909			HARTZL	O-RING	WRONG PART
1/28/2006			HC-C2YR-4CF		PROPELLER BLADES
PROP LEAKING GREASE FROM BLADES. INSPECTION REVEALED INCORRECT BLADE SEALS INSTALLED. SRM 113B REQUIRES ITEM 540, B-3883-4339 QUAD RING WITH NO ALTERNATE. SEALS REMOVED FROM PROPELLER ARE O-RINGS.					
2006FA0000103				PLATE	FAILED
1/9/2006				C30031	SPINNER
SPINNER SUPPORT PLATES RECEIVED BROKEN WITH BOLTS STILL INSTALLED ON HUB, NO OTHER BROKEN PARTS OF THIS SUPPORT PLATE ASSY WERE FOUND ON THIS PROPELLER. (K)					
2006FA0000110				MAGNETO	INOPERATIVE
1/23/2006				BL6006061	ENGINE
METAL IN MAGNETO. (K)					
R018683			HARTZL	PLATE	GOUGED
1/20/2006					PROPELLER HUB
C-459 PRELOAD PLATE. GOUGE IS APPROXIMATELY 1.120 INCH LONG BY 0.050 INCH WIDE.					
R018276			HARTZL	PLATE	GOUGED
1/20/2006				C459	PROPELLER HUB
C-459 PRELOAD PLATE. THREE PRELOAD PLATES FOUND TO BE DAMAGED BEYOND REPAIRABLE LIMITS. GOUGE IS LOCATED OPPOSITE OF THE WINDOW AND IS APPROXIMATELY 0.030 WIDE BY 1 INCH LONG BY 0.020 DEEP.					
CA051028004		PWA	PWA	SEGMENT	DISTORTED
10/26/2005		PT6A114A	PT6A114A	311074102	TURBINE
(CAN) REPAIR DUE TO SHIFTING OF CT SHROUD SEGMENTS, HEAVY RUB ON CT BLADES/SEG. EXCESS GAP BETWEEN CT SHRD SEG, CT SHRD HSG MATING SURFACES WERE NOTED. CT SHRD SEG-RETAIN RING WAS OF POST SB, CT SHRD SEG WERE PRE SB 1628. RUB SPOTS WERE NOTED ON ALL (QTY 9) CT SHRD SEG, CT BLADES. CT SHRD SEG-RETAIN RING WAS FOUND DISTORTED, COMPLETELY DISENGAGED FROM RETAIN GROOVE OF CT SHRD HSG. CMM INSP OF CT SHRD HSG WAS DONE, ROUNDNESS OF ALL CRITICAL DIA NOTED WITHIN MM LIMIT. CT SHROUD SEG RETAINING RING WAS FOUND DISTORTED, COMPLETELY DISENGAGED FROM CT SHROUD HSG RETAINING GROOVE. PROBLEM DUE TO PREMATURE FAILURE OF CT SHROUD SEG RETAINING RING. NEW CONFIGURATION PARTS INTENDED TO PREVENT THIS PROBLEM.					

CA051117003	AIRBUS	CFMINT	SEAT	UNSECURE
11/15/2005	A319112	CFM565B6	TAAI233PE01	CAPT SEAT ASSY

(CAN) CAPTAIN SEAT WILL NOT LOCK INTO PLACE.

2006FA0000107	AIRBUS		PUMP	INOPERATIVE
1/20/2006	A320*		568127202	FUEL SYS

ONE FUEL PUMP WAS RETURNED FOR INSPECTION/REPAIR DUE TO A FAULT AND ASSOCIATED CB TRIP FOR LT WING TANK PUMP 2. ONE OF TWO NUTS HOLDING THE HOUSING BERING ASSY TO THE STATOR CAP BECAME LOOSE. THE ASSOCIATED SCREW DROPPED INTO THE STATOR WINDING, CAUSING ARCING. THE FLAME TRAP WAS BREACHED. DUE TO THE HOLE LEFT IN THE STATOR HOUSING BY THE MIGRATION OF THE SCREW. THIS LEFT A DIRECT PATH TO THE FUEL. THE MFG HAS ALSO BEEN INFORMED. (K)

CA051116009	AIRBUS	RROYCE	RROYCE	ENGINE	SHUTDOWN
11/11/2005	A330243	RB211TRENT77		TRENT772B60	LT WING

(CAN) AFTER APPLYING TO POWER AND STARTING TO ROLL (APPROX 35KTS), NR 1 ENGINE SHUTDOWN WITH RELATED ECAM MESSAGE ENGINE FAIL . AIRCRAFT CAME BACK TO THE GATE. THERE WAS NO OBVIOUS DAMAGE TO THE ENGINE INTAKE AND EXHAUST. THE EEC WAS INTERROGATED AND MCDU AND REPORTED NO FAULT. ATTEMPTED ENGINE RUN BUT ENGINE NEVER REACHES IDLE. DURING START CYCLE IT RAPIDLY WENT FROM 7 PERCENT TO 63 PERCENT (APPROX 2 SEC.) WITH ECAM MESSAGE ENG CONT. FAULT AND ENGINE SHUTDOWN PROCEDURES. PERSONNEL ON GROUND REPORTED A BIG OIL LEAK FROM ENGINE COWLING AND C DUCT AREA. TROUBLESHOOTING INSPECTION REVEALED METAL PARTICLES IN OIL FILTER AND MCD. ENGINE WAS REPLACED.

CA051111001	AIRBUS	RROYCE	ENGINE	BIRD INGESTION
11/11/2005	A330342	RB211TRENT77		NR 2

(CAN) EVIDENCE OF BIRD STRIKE AT FAN BLADES. NO SIGNS OF BIRD REMAINS OR DAMAGE ON CORE OF ENG FAN BLADES, LP/IP SPLITTER FAIRING, OGV'S AOHE AIR INLET IDG OIL COOLER INLET INSPECTED. (A) DUE TO ENG SURGE OUT OF AIRPORT ON 01/09/2005. BOROSCOPE INSPECTION CARRIED OUT IAW MM 71-00-00-200-808. SOME DAMAGED BLADES FOUND AT HP COMPRESSOR STAGE 3 TIP CURL, BENDS AND TEAR. COMPRESSOR SURGE MARGIN TEST CARRIED OUT. NR2 ENG STALL FOLLOWED BY ENG 2 FAIL. POWER BEING ADVANCED FROM 1.03 EPR AT 1.05 EPR. ENG INSPECTED WITH NO FAULT FOUND IAW AMM 71-00-00-200-808, ENG RUN CARRIED OUT WITH NIL FAULT: ON TAXI IN, ENG ANTI ICE SELECTED OFF, ENG 2 FAILED, THRUST AT IDLE. NR 2 ENG REPLACED IAW J/C 9-371A.

2006FA0000127	AMD	GARRTT	PLATE	CRACKED
1/10/2006	FALCON900	TFE731*	F50B134000191B3	OB SLATS

SEAL CLAMPING PLATE IS CRACKING AND BREAKING OFF AT THE 6TH AND 7TH SCREWS, (FROM IB TO OB) ON THE INSIDE OF THE OB SLATS. SUBSEQUENT FOD DAMAGE TO THE NUT AND SAFETY WIRE OF THE BLEED AIR TUBE, AND ALSO THE LEADING EDGE OF THE WING BEHIND THE SLAT IS OCCURING DURING SLAT RETRACTION. (K)

2006FA0000128	AMD	GARRTT	PLATE	CRACKED
1/10/2006	FALCON900	TFE731*	F50B144000191B3	OB SLOTS

SEAL CLAMPING PLATE IS CRACKING AND BREAKING OFF AT THE 6TH AND 7TH SCREWS, (FROM IB TO OB) ON THE INSIDE OF THE OB SLOTS. SUBSEQUENT FOD DAMAGE TO THE NUT AND SAFETY WIRE OF THE BLEED AIR TUBE, AND ALSO THE LEADING EDGE OF THE WING BEHIND THE SLAT IS OCCURRING DURING SLAT RETRACTION. (K)

2006FA0000106	AMTR	LYC	SEAL	LEAKING
1/23/2006	SMITHMINIPLA	TIO540J2BD		PUMP SHAFT

WITH THE ENGINE OFF AND THE FUEL BOOST PUMP ON , A STEADY STREAM OF FUEL CAME OUT THE ENGINE DRIVEN FUEL PUMP SHAFT SEAL DRAIN HOSE. THE FUEL CONTINUED TO FLOW OUT THE DRAIN HOSE AFTER THE ENGINE WAS STARTED. THIS IS NOT THE FIRST INSTANCE OF LEAKS WITH THIS MODEL PUMP. THIS IS A RELATIVELY NEW DESIGN PUMP. PUMP WAS RETURNED TO THE MFG FOR WARRANTY. (K)

2006FA0000143	AYRES	AYRES	CABLE	BINDING
2/6/2006	S2RHGT65	S2RGHT65		TAIL WHEEL

AIRCRAFT TAIL WHEEL LOCKING / UNLOCKING MECHANISM NOT SATISFACTORY IAW PILOT'S REPORT. ANGLE OF CABLE AT POINT WHERE IT ATTACHES TO THE TAILWHEEL INTRODUCES BINDING. CABLE CLAMP USED DURING MANUFACTURE PINCHES END OF TELEFLEX CABLE AT MOUNTING POINT AND RESTRICTS MOVEMENT OF THE LOCK PIN ASSY. ATTENTION SHOULD BE PAID IN THE ASSEMBLY OF THE CABLE TO THE TAILWHEEL AS WELL AS IN THE DESIGN OF THE ATTACHING BRACKET ANGLES FOR PROPER CABLE RUN W/O BINDING.

2006FA0000152	BEECH	PWA	SKIN	DELAMINATED
1/24/2005	1900D	PT6*		VENTRAL FIN

BOTH LT AND RT VENTRAL FINS SHOWED AREAS OF DELAMINATION ON FWD TOP CORNERS. DELAMINATION WAS BEYOND REPAIR LIMITS IAW SRM AND REQUIRED DER APPROVAL. FOUND INNER CORE MATERIAL WET DAMAGE WAS APPARENTLY CAUSED BY FREEZE CYCLES. WATER WAS FOUND ALONG TOP OF FIN BETWEEN FIN AND FUSELAGE ATTACH ANGLES. AC HAD BEEN RECENTLY REPAINTED. REPLACED SEALANT AT LEADING AND TRAILING EDGES OF FIN TO PRECLUDED WATER INGRESS. SUGGEST CLOSE VISUAL INSPECTION OF FIN/FUSELAGE FOR BREAKS IN SEALING AT AFT FUSELAGE DETAILED INSPECTION AND AFTER STRIPPING/ PAINTING HAS BEEN ACCOMPLISHED. AREA OF DISBOND WAS MAPPED OUT USING TAP TESTING HOWEVER ADDITIONAL CORE MATERIAL WAS REMOVED DUE TO ENTRAPPED WATER. (K)

2006FA0000149	BEECH	PWA	STRUCTURE	CORRODED
2/7/2005	1900D	PT6*	1294000339	FUSELAGE

AIR STAIR DOOR LOWER CLOSURE, MFG FROM 4130 STEEL, WAS CORRODED THRU UNDER FOLDING STEP. THIS CLOSURE HAD BEEN PREVIOUSLY REPAIRED BY REMOVING CORROSION, TREATING AND A DOUBLER INSTALLED. REMOVED CLOSURE DUE TO CORROSION AND DISBOND FROM DOOR CORE MATERIAL. INSTALLED FACTORY NEW ALUMINUM REPLACEMENT CLOSURE. RECOMMEND FREQUENT INSPECTIONS OF THIS AREAS, ESPECIALLY AFTER OPERATIONS IN WET CONDITIONS, AND IMMEDIATE TREATEMENT OF CORROSION. (K)

2006FA0000137	BEECH		NUT	FAILED
12/15/2005	200BEECH		MS21042L3	LT WING ROOT

NUT, PN MS21042L3 (PN130909N29) FAILED AND TAPERED PIN PN AN 38629A CAME OUT OF ADAPTER NP 1158110473 IN LT WING ROOT. THE ADAPTER DISENGAGED FROM THE TORQUE TUBE SHAFT PN 1018100211, THE LT MAIN GEAR COULD NOT LOCK DOWN. THE NUT HAD ONLY 160.4 HOURS ON IT FROM NEW. THE NUT IS EXPOSED TO HIGH TENSION LOADS DUE TO THE CENTRIFUGAL FORCE FROM THE TORQUE TUBE SPINNING. (K)

2006FA0000145	BEECH	PWA	SWITCH	OVERTEMP
2/2/2006	400A	JT15D5	SPS321135	CABIN VIP SEAT

CREW SMELLED SMOKE/ODOR IN THE CABIN DURING FLIGHT. FOUND SLIGHT DISCOLORATION OF DUCT DUE TO AN OVERTEMP. NO DELAMINATION NOTED AND NO OTHER SIGN OF WIRING OR COMPONENT DAMAGE. WHILE TROUBLESHOOTING FOUND RELAY INSIDE OF VIP CABIN TEMP SWITCH PANEL THAT WAS DEFECTIVE, NOT ALLOWING COCKPIT CONTROL OF CABIN TEMP IN THE AUTO POSITION. PILOTS HAD TO SWITCH TO MANUAL MODE TO OVERRIDE VIP TEMP SWITCH PANEL. (K)

8862	BEECH	PWA	WHEEL	MISOVERHAULED
1/15/2006	400A	JT15D5	50107201	LT MLG

LT MAIN TIRE DISINTEGRATED ON T/O ROLL. AFTER REMOVING WHEEL ASSY, DISCOVERED WHEEL HALVES O-RING EXPOSED BY VALUE STEM. UPON INVESTIGATION DISCOVERED WHEEL WAS NOT OVERHAULED IAW A/C BRAKING SYSTEMS COMPONENT MM. INBOARD WHEEL HALF WAS NOT REMARKED IAW TEMPORARY REVISION NO. 32-6 TO COMPONENT MM MAIN WHEEL ASSY 5010720. UPON INVESTIGATION DISCOVERED THAT THE OTHER MAIN WHEEL INBOARD WHEEL WAS NOT REMARKED EITHER. THE SPARE WHEEL WHICH WAS OVERHAULED BY THE SAME REPAIR STATION WAS NOT MARKED EITHER.

2006FA0000088	BEECH	PWA	WINDOW	CRACKED
1/24/2006	400A	JT15D5	45AS3101011	COCKPIT

DURING INSPECTION, THE PILOTS SIDE WINDOW WAS FOUND TO BE CRACKED THROUGH THE OUTER PANE

CONNECTING 5 BOLT HOLES ALONG THE TOP OF WINDOW.

2006FA0000141	BEECH	CONT	PUMP	MALFUNCTIONED
1/26/2006	58	IO550C	6467672A1	FUEL SYS

FUEL PUMP FAILED AFTER LANDING. ENGINE QUIT ON ROLL OUT. PUMP WOULD NOT PRODUCE ENOUGH PRESSURE TO SUSTAIN AN ENGINE RPM ABOVE IDLE. (K)

2006FA0000150	BEECH	CONT	LIFTER	SPALLED
1/26/2005	58	IO550C		ENGINE

METAL FOUND IN OIL FILTER DURING INSP WAS LATER DETERMINED TO BE FROM FAILED LIFTERS. CONDITION WAS STARTING TO DAMAGE CAM LOBES. SID 05-1 STATES THAT MINOR IMPERFECTIONS CAN (HEAL OVER) BUT WE HAVE NOT FOUND THIS TO BE CASE, JUST OPPOSITE IS TRUE. ONCE LIFTER BEGINS TO SPALL IT CREATES A (CHEESE GRATER) EFFECT BETWEEN CAM AND LIFTER. W/O PROPER METALLURGICAL LAB, CAUSE CANNOT BE DETERMINED. SPECULATED THAT MATERIAL IS EITHER IMPROPERLY HEAT TREATED OR SUBSTANDARD MATERIAL IS USED. TO PREVENT THIS FROM RECURRING MFG SHOULD INSPECT ALL LIFTER BODIES BEFORE INSTALLATION FOR GRANULAR DEFECTS OF METAL. THIS CAN BE ACCOMPLISHED USING X-RAY EXAM, NDT WHICH WOULD INCLUDE USE OF A SPECIAL MICROSCOPE. (K)

CA051103003	BEECH	PWA	BULKHEAD	CRACKED
11/1/2005	A100	PT6A28		AFT PRESS BLKHD

(CAN) DURING A SPECIAL INSPECTION AFTER FINDING DAMAGE ON 4 OTHER AIRCRAFT, (SDR 20050829003, 20050928001, 20051013007 AND 20051025004) THE AFT PRESSURE BULKHEAD WAS FOUND CHAFFED BY BOTH THE CENTER INTERCOSTAL AND THE OB INTERCOSTAL ADJACENT TO THE TAIL ACCESS DOOR. NDT WAS COMPLETED AND A CRACK FOUND AT THE OB LOCATION.

2005FA0001642	BEECH	LYC	STARTER	FAILED
12/8/2005	A23	IO320A2B	MZ4218	ENGINE

STARTER BENDIX FAILED, DAMAGED STARTER SHAFT, DAMAGED TEETH ON RING GEAR SUPPORT.

2006FA0000121	BEECH	CONT	ARM	WORN
1/10/2006	A36	IO550*	0025240121	RUDDER PEDAL

TROUBLESHOT STIFF RUDDER PEDAL STEERING AND REPLACED PILOTS RT ARM ASSY. PN 002-524012-1 WITH NEW IAW MM. APPEARS ARM ASSY ROLLER BEARING WAS NEVER LUBED DURING BUILD OF AIRCRAFT. THE ROLLER BEARING WEAR CAUSED THE ARM TO SEIZE ON THE RUDDER PEDAL TORQUE TUBE AT RANDOM TRAVEL POSITIONS. (K)

2006FA0000109	BEECH	CONT	ADAPTER	WRONG PART
1/18/2006	A36	IO550B	642087A64	STARTER ADAPTER

AIRCRAFT CAME TO OUR SHOP WITH SMOKE AND OIL COMING OUT OF TAIL PIPE. 4 HOURS PRIOR, THE AIRCRAFT ANNUAL INSP WAS COMPLETED AND AT THAT TIME THE STARTER ADAPTOR WAS REPLACED WITH THE WRONG PART. THIS AC HAD BEEN MODIFIED BY STC WITH TORNADO ALLEY TURBO CHARGER SYS. THE STC REQUIRED THAT STARTER ADAPTER ASSEMBLY BE CHANGED TO PN 642087A63 THAT INCLUDES A OIL SCAVENGE PUMP. PN A2087A64 DOES NOT HAVE A SCAVENGE PUMP INSTALLED. THE REPLACEMENT PART WAS ORDERED BY ENGINE SN NOT BY STC MODIFIED PARTS LIST. IT WOULD BE RECOMMENDED THAT WHEN ORDERING PARTS FOR STC MODIFIED AIRCRAFT THAT THE STCC HOLDER BE CONTACTED FOR PARTS.

2006FA0000151	BEECH	PWA	SKIN	CRACKED
1/24/2005	B200	PT6*	115430100661A	EMERGENCY EXIT

DURING PHASE 1-4 INSPECTION, EMERGENCY EXIT HATCH OUTER SKIN WAS FOUND CRACKED AT THE IB SURFACE, THROUGH THE ENTIRE 90 DEGREES RADIUS OF THE LOWER AFT CORNER OF SKIN ASSY 115430100-661A. CRACK LENGTH APPROX 6 INCHES. (K)

2006RC02001	BEECH	PWA	BEECH	BULKHEAD	CRACKED
10/12/2005	B200	PT6A42	B200	9744001967	FUSELAGE

(CAN) PRESSURIZATION ERRATIC IN THE AIR. THE AIRCRAFT WAS TESTED ON THE GROUND AND LEAK WAS DETECTED WITH A 6 INCH CRACK LT OF THE OUTFLOW VALVE. A REPAIR DESIGN WAS CARRIED OUT.

CA051109007	BEECH	PWA	ENGINE	FLUCTUATES
11/7/2005	C99	PT6A36	PT6A36	WING

(CAN) INFLIGHT SHUTDOWN FROM TORQUE FLUCTUATIONS INDICATED IN CONJUNCTION WITH OIL PRESSURE FLUCTUATIONS. NO CHIP DETECTER LIGHT, NO OIL PRESSURE LIGHT. ENGINE SECURED BEFORE LOSS OF OIL PRESSURE MAINTENANCE CHECKED CHIP DETECTER, CLEAN. MAINTENANCE CHECKED MAIN OIL SCREEN, METAL (FUZZ), NONE MAGNETIC. ENGINE REMOVED FROM A/C FOR FURTHER INVESTIGATION.

2006FA0000111	BEECH	CONT	RELAY	INTERMITTENT
1/19/2006	F33A	IO520*	SM50D7	MLG

PILOT REPORTED AFTER PUTTING THE GEAR SELECTOR IN THE DOWN POSITION THE GEAR WOULDN`T EXTEND, AFTER CYCLING GEAR SELECTOR GEAR WENT DOWN, AIRCRAFT RETURNED TO BASE. ON TROUBLESHOOTING THE MECHANIC SELECTED DOWN AND IT FAILED TO EXTEND, AFTER TAPPING ON TOP OF RELAY THE GEAR WENT DOWN. PROBABLE CAUSE AT THIS TIME UNKNOWN. INSTALLED NEW AND IMPROVED RELAY IAW DATE CODE. (K)

YTRR106626	BELL		SUPPORT FITTING	BROKEN
10/6/2005	206B3		206031417007005	VERTICAL FIN

FOUND BOTH SUPPORTS FOR VERTICAL FIN ASSEMBLY BROKEN THROUGH LOWER MOUNTING HOLES.

YTRR106627	BELL	ALLSN	FUEL CONTROL	HOT START
11/3/2005	206B3	250C20B	23057344	ENGINE

FUEL CONTROL FAILED TO HIGH-SIDE DURING LIGHT OFF. REPLACED FUEL CONTROL ASSEMBLY.

ALGA106654	BELL		PITCH LINK	BINDING
10/29/2005	407		406310	MAIN ROTOR

BINDING AND AXIAL PLAY BEYOND MAX. / REPLACED BY FIELD MAINTENANCE.

YTRR106621	BELL		BEARING	WORN
9/16/2005	407			UNIVERSAL JOINT

UNIVERSAL BEARING ASSEMBLY FOUND WORN. REPLACED BEARING ASSY.

YTRR106622	BELL		BEARING	WORN
9/16/2005	407			UNIVERSAL JOINT

UNIVERSAL BEARING ASSEMBLY FOUND WORN. REPLACED BEARING ASSY.

YTRR106624	BELL		BEARING	WORN
10/14/2005	407			UNIVERSAL JOINT

UNIVERSAL BEARING ASSEMBLY FOUND WORN. REPLACED PART.

YTRR106625	BELL		BEARING	WORN
10/15/2005	407		406310405101	MAIN ROTOR

M/R PC LINK BEARING AXIAL AND RADIAL MOVEMENT BEYOND LIMITS

YTRR106607	BELL		BEARING	WORN
11/4/2005	412		412310400105	ROD END

BEARING WORN. REPLACED ROD-END BEARING ASSEMBLY.

YTRR106608	BELL		BEARING	WORN
11/1/2005	412		412310400103	ROD END

BEARING FOUND WORN. REPLACED ROD END ASSY.

YTRR106609	BELL		BEARING	WORN
11/1/2005	412		412310400103	ROD END

ROD END BEARING FOUND WORN. REPLACED ASSEMBLY.

YTRR106610	BELL		BEARING	WORN
11/1/2005	412		412310400103	ROD END

ROD END BEARING FOUND WORN. REPLACED ASSEMBLY.

CA051027004	BOEING	PWA	BOLT	SHEARED
10/21/2005	727225	JT8D9A	BACB30MT10HT13	MLG WHEEL

(CAN) DURING A ROUTINE WHEEL CHANGE, IT WAS FOUND THAT 2 OF THE 3 BRAKE RETAINING BOLT HEADS HAD SHEARED. THE BROKEN BOLT HEADS HAD BECOME TRAPPED BETWEEN THE BRAKE AND WHEEL INNER HALF CAUSING SCORING DAMAGE TO THE WHEEL. IT IS SUSPECTED THAT THE COUNTERSUNK WASHERS MAY NOT HAVE BEEN INSTALLED CORRECTLY OR NOT INSTALLED AT ALL UNDER THE BOLT HEAD DURING INSTALLATION OF THE BRAKE. THIS POSSIBLY CAUSING OVERSTRESSING OF THE BOLT WHEN TORQUED. THIS IS DIFFICULT TO PROVE DUE TO LOSS OF THE WASHERS. THE BRAKE WAS INSTALLED IN JUNE 2005. THE BRAKE CHANGE TASK CARD DOES CONTAIN A WARNING NOTE REGARDING THE CORRECT INSTALLATION OF THE WASHERS.

CA051110002	BOEING	PWA	ENGINE	SURGES
11/10/2005	727247	JT8D15	JT8D15AQM	TOP AFT FUSELAGE

(CAN) AIRCRAFT EXPERIENCED NR 2 ENGINE SURGE DURING TAKEOFF ROLL. SEVERE CROSSWINDS WERE EXPERIENCED WHICH WILL CAUSE THIS ENGINE SURGE. DUE TO THE CROSSWINDS AND THEN INTERRUPTION OR DISTURBANCE OF AIRFLOW THRU THE AIR INTAKE.

CA051118001	BOEING	CFMINT		TURBINE BLADES	FAILED
11/8/2005	737*	CFM567B22	1319B	38403031	APU

(CAN) APU AUTO SHUTDOWN WITH LOSS OF OIL OUT DRAIN MAST REFERENCE ADDITIONAL WORKSHEET ITEM NR2 AND NR3. C/B CLOSED AT P91. APU REPLACED IAW AMM 49-11-00 THIS CLEARS MEL 49-1 AND MDDR 3227. PLACARD REMOVED. OFF APU PN 3800702-1SN P-6654 UNIT WAS ORIGINAL INSTALLATION FROM AIRCRAFT MFG. TSN IN APU OPERATING HOURS = 2256:30APU START CYCLES CSN = 2923 DAYS SINCE NEW = 562FOUR ADDITIONAL APU REMOVALS HAVE OCCURRED YEAR TO DATE ATTRIBUTED TO THE SAME CAUSE OF TURBINE BLADE WALKING. OEM SB131-49-7860 REFERS. ADDITIONAL OEM DEVELOPMENT IN PROGRESS FOR LONG TERM CORRECTIVE ACTION PLAN.

CA051123009	BOEING	CFMINT	WIRE	SHORTED
11/18/2005	737522	CFM563C1	W32200518	SPOILER SYS

(CAN) DURING FLIGHT, CIRCUIT BREAKER FOR THE SPOILER SHUTOFF VALVES POPPED. AFTER LANDING, MAINTENANCE COULD NOT DUPLICATE THE SNAG. BOTH A AND B SYSTEMS WERE FUNCTION CHECKED SERVICEABLE. ON THE NEXT FLIGHT, THE CB POPPED AGAIN. THE AIRCRAFT WAS OPERATED ON A FERRY PERMIT TO RETURN FOR FURTHER MAINTENANCE. THE WIRE, W322-00 5-18 WAS FOUND SHORTED TO GROUND FROM CONNECTOR D758 TO CONNECTOR D4842P. THE WIRE WAS REPAIRED IAW STANDARD WIRING PRACTICES MANUAL.

2005AP02001	BOEING		SUPPORT FITTING	CRACKED
12/26/2005	747*			NLG

NOSE WHEEL WELL AREA, LT AND RT TRUNNION SUPPORT FITTING UPPER PART, AFT OF AFT BOLT HOLE WITH CRACK.

2005AP02002	BOEING	RROYCE	GUIDE VANE	CRACKED
12/26/2005	747100	RB211*		NR 1 ENGINE

ENGINE NR 3 LP TURBINE STAGE 3, NOZZLE GUIDE VANE APPROX 6:10 O'CLOCK POSITION ROOT AREA WITH

CRACK.

CA051111002	BOEING	GE		RADIO	INTERMITTENT
11/11/2005	767383	CF680C2B6F		6225272001	HF RADIOS

(CAN) FAULT: WHEN ATTEMPTING TO TUNE NR 1 HF (LT) STRONG ACRID ODOR/HEATING SMELL RT HF INTERMITTENT FOR TRANSMITTING BOTH HF'S SELECTED OFF C/B'S FOR BOTH HF'S PULLED SMELL DISSIPATED FLT OP ADVISED ACTION: LT HF T/R REPLACED IAW AMM 23-11-03-406 RT HF T/R REPLACED IAW AMM23-11-03-406

CA051114001	BOMBDR	PWC		ACTUATOR	UNKNOWN
11/12/2005	DHC8400	PW150A		03994001011	PITCH TRIM ACTOR

(CAN) DURING CLIMB, PITCH TRIM CAUTION LIGHT, AUTO TRIM FAIL MESSAGE ILLUMINATED. PITCH TRIM INDICATOR SHOWED FULL NOSE UP POSITION. FLIGHT CREW ELECTED TO RETURN TO DEPARTURE AIRPORT. MAINTENANCE: FCECU PRESENT FAULTS FOUND 63, 67, E3, AND E7. RESET FCECU CIRCUIT BREAKERS THEN THE CAUTION LIGHT CLEARED AND OPERATION CHECK NORMAL. REPLACED PITCH TRIM ACTUATOR AS PRECAUTION.

CA051115003	BOMBDR	PWC		ECU	OVERSPEED
11/14/2005	DHC8400	PW150A		699018002	PROP ECU

(CAN) AN AIRCRAFT EXPERIENCED A NR1 ENGINE OVERSPEED NP, COMMANDED INFLIGHT SHUTDOWN. ENGINE OVERSPEED NP IN FLIGHT (FAULT CODE 161) FOUND. PROPELLER ELECTRONIC CONTROL UNIT REPLACED. AIRCRAFT RETURNED TO SERVICE.

CA051116001	BOMBDR	PWC	BFGOODRICH	HARNESS	INOPERATIVE
11/16/2005	DHC8400	PW150A			NLG

(CAN) AFTER TAKEOFF, THE LANDING GEAR DID NOT RETRACT AFTER GEAR UP SELECTION, AIRCRAFT RETURNED TO BASE AND MADE A NORMAL LANDING. A CHECK OF THE PSEU SHOWED THAT THE PROX SENSOR FOR NWCENT WAS INDICATING DASHES. HARNESS ASSY (P/N: 47151-5) REPLACED IAW AMM 32-61-00. AIRCRAFT RTS.

CA051114005	CESSNA	LYC		DRIVE GEAR	FAILED
11/13/2005	172M	O320E2D	MZ6222		STARTER

(CAN) STARTER DRIVE GEAR FAILED.

CA051026009	CESSNA	LYC		CONTACTOR	SEIZED
7/22/2005	172M	O320E2D		111138D	STARTER

(CAN) RECURRING DEFECT, STARTER CONTACTOR COILS FUSED TOGETHER DUE TO EXCESSIVE HEAT WHICH RESULTED IN STARTER GETTING STUCK (ON). AFTER 9 ATTEMPTS, AFTER BEING MISLED BY MFG THAT THEY HAD FAULTY CONTACTORS, FOUND MAIN POWER WIRE FROM CONTACTOR TO STARTER HAD CORRODED TERMINALS WHERE CRIMPED TO WIRE. THIS WAS NOT VISIBLE UNTIL CUT OPEN. THE CORROSION LED TO A HIGHER CURRENT DRAW THAN NORMAL PASSING ACROSS THE CONTACTOR WHICH MELTED THE COIL WIRED IN THE CONTACTOR.

2006FA0000142	CESSNA	LYC		VENT LINE	CHAFED
1/6/2006	172N	O320*		05160167	IB RT/LT RIB

DEFECT WAS NOTED DURING SEB04-4, WHICH REQUIRED INSP OF FUEL HOSES IN OLDER PRODUCTION AC. IN ORDER TO INSPECT ALL LINES, HEADLINER IS REQUIRED TO BE PULLED. LINES IN QUESTION ARE LOCATED ABOVE DOORS IB OF LT AND RT FUSELAGE RIB. PROBLEM WAS CHAFING OF FUEL VENT LINE AGAINST REAR CABIN VENT HOSE. METAL IN CABIN HOSE RUBBED SURFACE OF FUEL VENT LINE TO PRODUCE 2 WEAR SPOTS, WHICH WHEN GENTLY PROBED WITH A SCRIBE PIERCED TUBING. POTENTIAL FOR THIS PROBLEM TO OCCUR IS ONLY ON AC THAT HAVE DUCTING FOR REAR VENTILATION. WEAR OF LINE COULD CAUSE FUMES TO ENTER CABIN AREA. ACCOMPLISHMENT OF SEB04-4 TO INCLUDE CHECKING FOR POSSIBLE CHAFING OF FUEL VENT LINE AGAINST REAR CABIN VENT HOSE OR OTHER COMPONENTS. (K)

CA051123002	CESSNA	LYC		BEARING	STIFF

11/23/2005	172P	O360A4M	4371	M3006	MAGNETO

(CAN) ROTOR BEARINGS ROUGH AND SHAFT HARD TO TURN. MAGNETO WOULD NOT TURN FAST ENOUGH TO START ENGINE.

2006FA0000087	CESSNA	LYC	LYC	POPPET VALVE	STICKING
1/20/2006	172S	IO360L2A	63323440 ASY		ENGINE

AIRCRAFT WOULD NOT START. ENGINE & FUEL COLD SOAKED (JUST AT BELOW 32 DEG. F). THE FLOW DIVIDER POPPET VALVE WOULD STICK CLOSED AND PREVENT FUEL FLOW. AFTER TROUBLSHOOTING DETERMINED THAT UNIT WOULD STICK IN CLOSED AND OPEN POS. THE CLOSED POS. PREVENTS FUEL FLOW TO NOZZLES. FOUND IF UNIT WAS COOLED ON THE BENCH WITHOUT FUEL IN THE DIVIDER THE POPPET VALVE WOULD STILL STICK. SUSPECT MFG TOLERANCES BAD ON POPPET ASSY. TRIED DUPLICATING ON AN AIRCRAFT 1 1/2 YEARS OLDER. COULD NOT DUPLICATE. HOWEVER, COULD DUPLICATE ON AN AIRCRAFT WHO'S SERIAL NUMBER IS IN CLOSE TO THE SQUAWKED AIRCRAFT. APPEARS TO BE A SPECIFIC LOT NUMBER OF EFFECTED PARTS. HEAT FROM RUNNING ENGINE RUNNING KEEPS VALVE MOVING FREELY.

2006FA0000156	CESSNA	CONT	CESSNA	ATTACH BRACKET	CRACKED
2/13/2006	175	GO300*		051313211	FUSELAGE

FOUND THE LT UPPER ENGINE MOUNT ATTACHMENT BRACKET CRACKED THROUGH ON THE IB SIDE. CRACK APPEARS TO HAVE ORIGINATED AT OUTER RADIUS OF WASHER THEN PROGRESSED UP AND DOWN THROUGH BRACKET. THIS INSPECTION WAS PROMPTED AFTER REPORTED FAILURE OF SAME BRACKET, SAME MAKE AND MODEL OF AIRCRAFT, THAT SUFFERED A PARTIAL ENGINE/FIREWALL SEPARATION DURING LANDING.

2006FA0000134	CESSNA	CONT		ATTACH BRACKET	BROKEN
1/31/2006	175	IO360*		051313211	ENGINE MOUNT

THE AC EXPERIENCED A HARD LANDING. DURING THE LANDING THE 2 TOP ENGINE MOUNT ATTACH BRACKETS FAILED BEHIND THE FIREWALL, ALLOWING THE TOP HALF OF THE FIREWALL TO FAIL, PULLING FORWARD AND DOWN ABOUT 18 INCHES. PN 051313211 ENGINE MOUNT ATTACH BRACKET FITS ONTO THE FRONT OF HAT CHANNELS ITEM 6 AND 7. PN 051213211 WHICH HAS A HOLE IN IT FOR THE ENGINE MOUNT BOLT TO GO THROUGH, HAD FAILED (BROKEN IN 2 PIECES) SOME TIME AGO ON THE PILOTS TOP SIDE WITH RUST ON BOTH BRAKES. THE BRACKET ON THE CO-PILOTS TOP SIDE HAD AN EXISTING CRACK IN THE CENTER THIRD OF IT AT THE BOLT HOLE, RUST WAS ALSO ON THIS CRACK. (K)

2006FA0000108	CESSNA	LYC		CONTROL CABLE	CHAFED
1/16/2006	182T	IO540AB1A5			AFT FUEL SELECT

AT AC STA 22 LWS 3 INCHES, 3.75 INCHES BELOW CABIN FLOOR, ELEVATOR TRIM CONTROL CABLES CHAFING HARD ON BOTTOM SURFACE OF .2500 DIA FUEL TUBE AT LEFT AND AFT OF AIRCRAFT FUEL SELECTOR. IF LEFT CONTROL CABLE WILL CUT THRU FUEL TUBE (CAUSE) NOT SEEN AT FACTORY. REPOSITIONED FUEL TUBE UP AWAY FROM CONTROLS. (NE03200606762) (K)

CA051111003	CESSNA	CONT	CONT	CYLINDER	CRACKED
11/11/2005	207	IO550F	IO550F	TIST760CA	ENGINE

(CAN) CYLINDER NR 4 HAD LARGE CRACK ACROSS CYLINDER, BELOW TOP SPARK PLUG HOLE. A CYLINDER DIFFERENTIAL CHECK CONFIRMED CYLINDERS 2, 6, AND 3 TO HAVE CRACKS IN THE SAME GENERAL LOCATION. ALL 6 CYLINDER ASSEMBLIES WHERE REMOVED. 6 NEW CYLINDER ASSEMBLIES P/N 655471A4. NOTE: THIS MAKES 16 I0-520 AND I0-550 CYLINDER ASSEMBLIES REPLACED DUE TO THE SAME PROBLEM SINCE MAY 2005 ON A FLEET OF 6 AC OPERATED BY 2 INDEPENDENT COMPANYS.

2006FA0000124	CESSNA	CONT		TRANSCEIVER	MALFUNCTIONED
12/26/2005	207A	IO520*		4306081100000	COCKPIT

DURING POST INSTALLATION CHECKS, FOUND THE GDL90 UAT REPORTING CONTINUOUS GPS FAILURE. REPLACEMENT OF THE UNIT CORRECTED THE ERROR. (K)

CA051123004	CESSNA	PWA		INDICATOR	STUCK
11/23/2005	208B	PT6*		C6610640237	AIRSPEED IND

(CAN) AIRCRAFT WAS DEPARTING RUNWAY AND THE PILOT NOTICED ON TAKEOFF ROLL THAT THE RT AIRSPEED INDICATOR HAS STUCK AT THE 50KT INDICATION. THE PILOT DECIDED TO ABORT THE TAKEOFF AND RETURNED TO THE RAMP. MAINTENANCE INSPECTED THE SYSTEM AND MEL THE SYSTEM IAW MFG C208 MEL. FLIGHT CONTINUED WITHOUT ANY FURTHER PROBLEMS. NOTE: NO OTHER PITOT OR STATIC INSTUMENTS WERE EFFECTED BY THIS FAULT. INDICATOR TO BE REPLACED WHEN THE AIRCRAFT RETURNS.

CA051115002	CESSNA	CONT	CONT	CLUTCH	BROKEN
11/7/2005	210R	IO520L	IO520L13B	643259A18	STARTER

(CAN) WHILE ATTEMPTING FIRST START OF DAY, PROP ROTATED THEN STOPPED. ON SUBSEQUENT ATTEMPTS THE PROPELLOR FAILED TO ROTATE. IT WAS DETERMINED THAT THE STARTER ADAPTER CLUTCH FAILED.

CA051123007	CESSNA	CONT	CONT	CYLINDER	CRACKED
11/15/2005	402B	TSIO520E	TSIO520E	AEC631397	ENGINE

(CAN) AT THE 50 HRS INSPECTION OF THE AIRCRAFT, AT CYLINDER COMPRESSION TEST, MFG ENGINE SB M91-6, AND THE TEST FAILED FOR CYLINDER NR 4 DUE TO A LEAK FOUND BETWEEN FINS AT CYLINDER HEAD (THE SIDE OF THE EXHAUST EXIT). THE CYLINDER REPLACED AND AIRCRAFT RETURN TO SERVICE AFTER THE INSPECTION.

CA051123008	CESSNA	CONT	CONT	CYLINDER	CRACKED
11/17/2005	402CESSNA	TSIO520E	TSIO520E	AEC631397	NR 4 CYL

(CAN) AT THE 200 HRS INSPECTION OF THE AIRCRAFT, AT ENGINE CYLINDER COMPRESSION TEST, MFG SB M91-6, AND THE TEST FAILED FOR CYLINDER NR 4 DUE TO LEAK FOUND BETWEEN FINS AT CYLINDER HEAD. THE CYLINDER REPLACED AND AIRCRAFT RETURN TO SERVICE AFTER THE INSPECTION.

2006FA0000132	CESSNA	CONT	WINDSHIELD	BLEW OUT
1/30/2006	421C	GTSIO520F	5111604200	COCKPIT

DURING PRESSURIZED FLIGHT, AT 17000 FEET, THE RT SIDE WINDSHIELD CRACKED AND A MAJOR PORTION BLEW OUT. THE GLARESHIELD IS A ONE PIECE ASSY AND STAYED INTACT; THE RT SIDE REMAINED ATTACHED TO THE INSTRUMENT PANEL WHILE THE FASTENERS ON THE RT SIDE FAILED AND ALLOWED THE THAT HALF OF THE GLARESHIELD TO BE PULLED OUTSIDE.

2006FA0000119	CESSNA	WILINT	SUPPORT BRACKET	CRACKED
1/30/2006	525	FJ44	631221160	DOOR

DURING INSPECTION FOUND THE RT ATTENUATOR PIVOT SUPPORT BRACKET CRACKED. THERE IS A SB (SB525-78-03 R1) THAT ADDRESSES THIS PROBLEM HOWEVER IT IS ONLY FOR SN PRIOR TO AND INCLUDING -0135. HAVE BEEN FINDING THIS CONDITION ON ALL 525S EVEN IF THE SB HAS BEEN ACCOMPLISHED. RECOMMEND THAT THE OEM REEVALUATES THIS AREA AND RE-ISSUE A SB TO CORRECT THE CONDITION.

2006FA0000138	CESSNA	PWA	MOTOR	FAILED
2/2/2006	550	JT15D4	99100554	TE FLAPS

THE FLAP MOTOR EXPERIENCED AN OUT OF BOX FAILURE IMMEDIATELY AFTER INSTALL. THE MOTOR`S INTERNAL BRAKE MECHANISM MALFUNCTIONED IN A WAY TO NOT ALLOW IT TO RELEASE. THE PART WAS IN NO WAY AIRWORTHY AND MALFUNCTION SHOULD HAVE BEEN NOTICED AT THE REPAIR STATION DURNING THE FUNCTIONAL CHECK WHICH WAS SIGNED OFF BY THEM .

2006FA0000159	CESSNA		WATER SEPARATOR	SEPARATED
1/30/2006	650		728802	A/C BAY

EXPERIENCED AN ABRUPT CABIN PRESS FLUCTUATION DURING FLT. FLT CREW REPORTED, ABLE TO MAINTAIN CABIN ALT WITHIN LIMITS AFTER NOTICED PROBLEM. AFTER THIS A/C LANDED MX PERSONNEL DISCOVERED ONE OF THE ENVIRONMENTAL CONTROL SYS WATER SEPARATOR UNITS HAD SEPARATED DURING FLT. AFFECTED WATER SEPARATOR IS MANUF WITH A CLAMP FLANGE (WHERE THE MAIN V-BAND THAT ALLOWS DISASSEMBLY OF THE UNIT FOR SERVICING IS INSTALLED) THAT IS BONDED TO FWD AND AFT SECTIONS OF UNIT. BONDING MAT`L HAD APPARENTLY LOST ABILITY TO KEEP FLANGE ADHERED TO BODY OF UNIT ALLOWING UNIT TO SEPARATE AND CAUSE LOSS OF PRESS..

ZN3R556712	CESSNA	GARRTT	STATOR	SEPARATED
1/3/2006	650	TFE7313C	3074555-7	

ENGINE 4TH LPC STATOR HAD INNER RING FRACTURE, LEADING TO A SINGLE VANE SEPARATING FROM THE STATOR ASSEMBLY. THE VANE CAUSED DAMAGE TO THE HPC AREA OF THE ENGINE. AIRCRAFT DID NOT EXPERIENCE ANY PROBLEMS WITH ENGINE DURING FLIGHT, AND PERFORMED SCHEDULED LANDING WITHOUT INCIDENT.

2006FA0000040	CESSNA	LYC	ALTIMETER	ERRATIC
1/13/2006	T206H	TIO540*		INSTRUMENT PANEL

AT TAKEOFF POWER (2500 RPM) AND CRUISE OVER 2390 RPM, THE STANDBY ALTIMETER MAY OSCILLATE 20 FT TO 100 FT (3500 FT CRUISE ALTITUDE).AT CRUISE, THE AUTOPILOT UNCOUPLED ITSELF THREE TIMES.DESCENT AND APPROACH (BELOW 2390 RPM) OSC. WAS 20 TO 40 FEET. BELOW 2300 RPM THE ALT. WAS STEADY.GARMIN 1000 EFIS INSTALLATION HAS THE STNBY ALTIMETER HARD MOUNTED TO A LARGE INSTRUMENT PANEL WITH NO VIBRATION DAMPENING MECHANISM. DURING CRUISE, WHEN THE ALTIMETER WAS OSCILLATING THE GREATEST, APPLYING MODERATE HAND PRESSURE (APPX. 10 LBS.) TO THE INSTRUMENT PANEL LESSENED THE AMOUNT OF OSCILLATION.THE AUTOPILOT CONTROL PANEL (HARD MOUNTED BELOW THE STANDBY ALTIMETER) CONTAINS AN ANEROID SIMILAR TO ONE IN THE STANDBY ALTIMETER.

2006FA0000154	CESSNA	LYC	PUMP	FAILED
1/26/2005	T206H	TIO540*	A1005B	AUX FUEL PUMP

THIS FUEL PUMP IS LOCATED UNDERT HE PILOTS SIDE FLOORBOARDS AND IS AN ELECTRICLY DRIVE AUX FUEL PUMP. THE AC ORIGINAL FUEL PUMP A10055B FAILED AFTER 53 HOURS IN SERVICE ON MARCH OF 2005. IT FAILED IN A WAY TO ALLOW FUEL TO ENTER THE ELECTRIC SIDE OF THE MOTOR. THAT WAS A MAJOR FIRE HAZZARD. THE PUMP THAT REPLACED WAS A LIKE PN, SN 111810 WHICH IS THE ONE FILED IN THIS REPORT, LASTED 112.3 HOURS IN SERVICE WHEN IT BEGAN TO MAKE HIGH PITCHED NOISES ON SHUTDOWN. IT SOUNDED AS IF A BEARING WAS RUNNING DRY. (K)

CA051101006	CESSNA	CONT	ALTERNATOR	FAILED
8/9/2005	U206F	IO520F	DOFF1300J	ENGINE

(CAN) REMOVED ALTERNATOR S/N D120708 SEPARATED AT 545.2 TSO AND 12 MONTHS LATER INSTALLED S/N 032530 AT 9 AUG. 05 AND REMOVED IT 11 SEPT.05 156.6 HOURS SINCE REBUILD, SEPERATED AGAIN AND GOT WARRANTY ON IT. THIS PROBLEM IS MORE COMMON THAN NOT IN THE INDUSTRY.

2006FA0000123	CESSNA	CONT	MOUNT	CRACKED
1/13/2006	U206F	IO550*	543003	POWERPLANT

DURING SCHEDULED INSPECTION FOUND THE FUEL FLOW TRANSDUCER MOUNT CRACKED COMPLETELY ACROSS ON ONE END. (K)

CA051116006	CESSNA	CONT	CONT	FCU	LEAKING
10/14/2005	U206G	IO520F	IO520F	6297032	ENGINE

(CAN) ON THE INSPECTION THE FUEL CONTROL ASSY WAS FOUND LEAKING.

CA051031003	CESSNA	CONT	CYLINDER	MALFUNCTIONED
10/21/2005	U206G	IO520F		ENGINE

(CAN) 7 HOURS ON OH ENG, MTCE WAS NOTIFIED VIA RADIO RELAY THAT AC WAS HAVING ENG TROUBLE. JUST ABLE TO MAINT ALTITUDE, AROUND 2500 FT, ENG WAS SURGING, SPUTTERING. NOTHING PILOT DID RECTIFIED PROBLEM. CONFIRMING FUEL, PUMPS MADE NO DIFFERENCE, MTCE, OPS INSTRUCTED PILOT TO MAKE IMMEDIATE LANDING. 2 ENGINEERS FOUND NR 6 CYL W/ NO COMPRESSION, BENT PUSH RODS. CYL, PUSH RODS WERE SENT NEXT DAY, UPON REMOVAL OF CYL IT WAS FOUND EXHAUST VALVE HAD BUSTED ON STEM, HAMMERED ITSELF INTO VALVE SEAT, PISTON. SERV CYL PISTON, RODS INSTALLED, AC WAS FLOWN BACK TO BASE, ON APPROACH ENG BEGAN TO RUN ROUGH W/ UNEVENTFUL LANDING. IT WAS FOUND THAT RODS HAD BENT AGAIN W/ NO DAMAGE TO CYL OR VALVES. ENG REMOVED FROM SERV.

2006FA0000198	CIRRUS	CONT		ELECTRICAL BOX	FAULTY
2/10/2006	SR22	IO550N			ELECTRICAL SYS

OPERATOR REPORTS THREE CASES OF UNCOMMANDED ENGINE STARTER ENGAGEMENT. IN TWO CASES, STARTER ENGAGED WHEN THE BATTERY MASTER WAS TURNED ON. IN THE THIRD CASE, OPERATOR STATES THAT THE SHIP'S BATTERY CAME ON LINE UNCOMMANDED AND THAT STARTER CONCURRENTLY ENGAGED UNCOMMANDED. IN ALL THREE CASES, REPLACEMENT OF THE AIRCRAFT POWER DISTRIBUTION BOX RECTIFIED THE PROBLEM.

CA051112001	CNDAIR	GE		WINDOW	CRACKED
11/11/2005	CL6002B19	CF343B1		601R3303311	CAPT SIDE WINDOW

(CAN) CAPTAINS SIDE WINDOW CRACKED, WINDOW REPLACED.

CA051112002	CNDAIR	GE	GE	THRUST REVERSER	BROKEN
11/2/2005	CL6002B19	CF343B1			RT ENGINE

(CAN) AC WAS BEING FERRIED SOUTH TO BASE WITH MISSING BLOCKER DOOR, WITH T/R BEING DEFERRED IAW MEL IN ORDER TO BE REPAIRED, DIDN'T HAVE BLOCKER DOOR IN STOCK. ON ITS WAY TO DESTINATION, CREW HEARD A LOUD BANG DURING DESCENT, RT ENGINE FLAMED OUT ON ITS OWN. CREW RAN QRH PROCEDURES FOR SINGLE ENGINE LANDING AND LANDED AT DESTINATION W/O ANY INCIDENT. IN BASE HANGAR, FIRST LOOK AT THIS ENGINE SHOWED THAT THERE WERE AT LEAST 1 OR 2 STAGE 2 GUIDE VANES, LEVER ARMS THAT GOT LOOSE OR DISCONNECTED FROM ACTUATING RING AND THEN GOT SWALLOWED BY ENGINE, ALONG WITH VANES. FURTHER INSP ALSO REVEALED THAT STAGE 9 WAS COMPLETELY GONE. ENGINE WAS REMOVED AND REPLACED, AC IS BACK IN SERVICE. (SEE ALSO: US #2005110900025)

CA051117001	CNDAIR	GE		WINDSHIELD	CRACKED
11/15/2005	CL6002B19	CF343B1		NP13932112	COPLT WINDSHIELD

(CAN) AT 33000 FT DURING DESCENT, THE COPILOT'S WINDSHIELD SHATTERED. THE LANDING WAS UNEVENTFUL. MAINTENANCE WAS DISPATCHED TO REPLACE THE WINDSHIELD AND THE AIRCRAFT RETURNED TO SERVICE.

CA051121001	CNDAIR	GE	GE	FUEL HEATER	CRACKED
11/21/2005	CL6012A12	CF341A	CF343A	5023T57P02	FUEL HEATER SYS.

(CAN) FUEL LEAK AS BEEN FOUND ON SEVEN DAYS INSPECTION, TECHNICIAN HAS FOUND A CRACK IN A SOLDERED JOINT ON FUEL HEATER. THE FUEL HEATER HAS BEEN REPLACED AND THE AIRCRAFT RETURNED TO SERVICE.

CA051114002	DHAV	PWA	HARTZL	PLATE	CRACKED
11/1/2005	DHC2*	R985AN14B			PROP BACK PLATE

(CAN) PART INSTALLED DEC 03, FOUND CRACKED AT REMOVAL FOR ENGINE CHANGE.

2006FA0000122	DHAV	PWA		TRANSCEIVER	MALFUNCTIONED
12/15/2005	DHC2MK1	R985*		4306081100000	COCKPIT

DURING POST INSTALLATION CHECKS, FOUND THE GDL90 UAT REPORTING CONTINUOUS EXTERNAL FAULT ERROR. NO EXTERNAL FAULTS FOUND. REPLACEMENT OF THE UNIT CORRECTED THE ERROR. (K)

CA051116007	DHAV	PWA		RESERVOIR	CRACKED
11/6/2005	DHC6300	PT6A27		C6HF10571	FILLER NECK

(CAN) FLUID WAS DRIPPING FROM THE HYD AREA.OPON INSPECTION IT WAS NOTICED THAT THE TANK WAS CRACKED ALONG THE FILLER NECK.

CA051027006	DHAV	PWA		WINDSHIELD	CRACKED
10/7/2005	DHC7102	PT6A50		06422	COCKPIT

(CAN) AC, WHILE IN LIGHT ICING CONDITIONS, ENCOUNTERED A MALFUNCTION OF CAPTAIN'S (LT SIDE)

WINDSHIELD. ENTERING ICING CONDITIONS, NORMAL MODE WAS SELECTED. CAPTAIN NOTICED DISCOLORATION IN LWR PORTION OF WINDSHIELD, VERBALIZED IT TO F/O. CAPTAIN OBSERVED DISCOLORATION SPREADING AND SELECTED WINDSHIELD HEAT SWITCH TO WARMUP, THEN TO OFF TO SUSPEND DISCOLORATION GROWTH. AT THE SAME TIME, CRACKS WERE OBSERVED DEVELOPING ALONG AND AROUND DISCOLORED AREA. CREW THEN CHANGED COURSE. UNEVENTFUL LANDING WAS EXECUTED AND MAINTENANCE STAFF PROCEEDED TO WORK ON THE AIRCRAFT. AT THIS TIME, SPARE PART PROCUREMENT AND TROUBLESHOOTING ARE ONGOING AND THE AIRCRAFT IS EXPECTED TO RETURN TO SERVICE.

CA051116008	DHAV	PWA	ENGINE	FAILED
10/31/2005	DHC7103	PT6A50	3031200	NR 3

(CAN) ON OCTOBER 31, 05, THE PILOTS WHEN APPROACHING, WERE TOLD TO RETURN TO DEPARTURE, BECAUSE THE AIRPORT WAS CLOSED. UPON LANDING AFTER SLOWING THE AIRCRAFT, THE PILOT TRIED TO BRING THE POWER LEVERS TO FLT IDLE, BUT THE NR 3 ENGINE WOULD NOT MOVE. MAINTENANCE WAS CALLED TO INSPECT THE CAUSE OF POWER LEVER ON NR 3 ENGINE JAMMED. IT WAS CONFIRMED BY THE AME THAT THE POWER LEVER CONNECTION ON THE ENGINE WAS JAMMED, AND THE ENGINE NEEDS TO BE REPLACED. THE AIRCRAFT INSPECTED IAW FERRY FLIGHT PERMIT AUTHORIZATION PROCEDURES, AND AIRCRAFT FLIGH T MANUAL PROCEDURES.

CA051115001	DHAV	PWA	FLEX LINE	RUPTURED
11/9/2005	DHC8*	PW120A	DSC252B40124	NLG ACTUATOR

(CAN) CREW REPORTED NR 2 HYDRAULIC (HYD ISOL VALVE) ILLUMINATED IN CRUISE. AIRCRAFT RETURNED TO BASE. ON ARRIVAL, MAINTENANCE DISCOVERED A FLUID TRAIL AFT FROM THE NOSE LANDING GEAR WHEEL WELL. FURTHER INVESTIGATION DETERMINED THAT ONE OF THE NOSE LANDING GEAR ACTUATOR FLEXIBLE HYDRAULIC LINES HAD RUPTURED. THE LINE WAS REMOVED AND A SERVICEABLE LINE WAS FITTED AND TESTED IAW THE APPLICABLE AIRCRAFT MM. THE AIRCRAFT WAS RETURNED TO SERVICE. THIS ISSUE IS RELATED TO SERVICE DIFFICULTY ALERT AL-2003-11.

CA051116002	DHAV	PWA	VICKERS	RELIEF VALVE	STICKING
11/1/2005	DHC8102	PW120A	3810040103	3811208102	HYD RESERVOIR

(CAN) HYDRAULIC QUANTITY NR 1 READ ZERO. OVERFOW CAN FULL. THIRD REOCCURANCE. FOUND RESERVOIR LOW PRESSURE RELIEF VALVE STICKING OPEN WHEN RELIEF. ABLE TO DUPLICATE BY TRANSFERRING HYDRAULIC FLUID FROM SYSTEM 2 TO SYSTEM 1 WITH BRAKE AND PARK BRAKE. RESERVOIR EMPTIED IN LESS THAN 5 SEC. HYDRAULIC RESERVOIR REPLACED.

2006FA0000162	DIAMON	PIN	BACKED OUT
2/7/2006	DA20C1		MLG

ROLL PIN LOCKING THE NOSE STRUT ELASTOMERIC SPRING PLATE (PN 20-3220-05-02) TO THE SHOCK ABSORBER ROD (PN 20-3220-05-01) HAD WORKED OUT UNLOCKING THE ASSY.

2006FA0000042	DIAMON	AUDIO PANEL	BURNED
1/17/2006	DA20C1	0110040110	RADIO PANEL

AIRCRAFT HEADSET MICROPHONE JACKS ARE UNIQUILY WIRED FOR SENNHIESER ANR HEADSETS WITH AIRCRAFT SUPPLIED POWER FROM THE MICROPHONE JACK KEY TERMINAL. THIS IS WIRED DIFFERANTLY THAN SHOWN IN MFG GMA-340 INSTALLATION MANUAL. USE OF STANDARD AIRCRAFT HANDHELD MIC IN HEADSET JACKS CAUSED PRINTED CIRCUIT LANDS TO BURN OFF MAIN PRINTED CIRCUIT BOARD OF GMA-340 UNIT RESULTING IN A COMPLETE LOSS OF RADIO COMMUNICATIONS AND INTERCOM OPERATION. JACKS NOT PLACARDED BY MFGR AS (HEADSET MICROPHONE ONLY), OR (NO HAND MIC). ALSO, NO WARNING IN POH. EVEN IF PLACARDS WERE INSTALLED, USING A STANDARD MICROPHONE IN A STANDARD AIRCRAFT JACK, SHOULD NOT CAUSE TOTAL LOSS OF AC COMMUNICATIONS.

2006FA0000043	DIAMON	AUDIO PANEL	BURNED
1/17/2006	DA20C1	0110040110	RADIO PANEL

AC HEADSET MICROPHONE JACKS ARE UNIQUELY WIRED FOR SENNHIESER ANR HEADSETS WITH AIRCRAFT SUPPLIED POWER FROM THE MICROPHONE JACK KEY TERMINAL. THIS IS WIRED DIFFERENTLY THAN SHOWN IN GARMIN'S GMA-340 INSTALLATION MANUAL. USE OF STANDARD AIRCRAFT HANDHELD MIC. IN HEADSET JACKS

CAUSED PRINTED CIRCUIT LANDS TO BURN OFF MAIN PRINTED CIRCUIT BOARD OFN GMA-340 UNIT RESULTING IN COMPLETE LOSS OF RADIO COMMUNICATIONS AND INTERCOM OPERATION. JACKS NOT PLACARDED BY MFGR AS (HEADSET MICROPHONE ONLY), OR (NO HAND MIC). ALSO, NO WARNING IN POH. EVEN IF PLACARDS WERE INSTALLED, USING A STANDARD MICROPHONE IN A STANDARD AC JACK, SHOULD NOT CAUSE TOTAL LOSS OF AC COMMUNICATIONS.

2006FA0000044	DIAMON		AUDIO PANEL	BURNED
1/17/2006	DA20C1		0110040110	RADIO PANEL

AIRCRAFT HEADSET MICROPHONE JACKS ARE UNIQUILY WIRED FOR ANR HEADSETS WITH AIRCRAFT SUPPLIED POWER FROM THE MICROPHONE JACK KEY TERMINAL. THIS IS WIRED DIFFERANTLY THAN SHOWN IN MFG GMA-340 INSTALLATION MANUAL. USE OF STANDARD AIRCRAFT HANDHELD MIC IN HEADSET JACKS CAUSED PRINTED CIRCUIT LANDS TO BURN OFF MAIN PRINTED CIRCUIT BOARD OFN GMA-340 UNIT RESULTING IN COMPLETE LOSS OF RADIO COMMUNICATIONS AND INTERCOM OPERATION. JACKS NOT PLACARDED BY MFG AS (HEADSET MICROPHONE ONLY), OR (NO HAND MIC). ALSO, NO WARNING IN POH. EVEN IF PLACARDS WERE INSTALLED, USING A STANDARD MICROPHONE IN A STANDARD AIRCRAFT JACK, SHOULD NOT CAUSE TOTAL LOSS OF AIRCRAFT COMMUNICATIONS.

CA051115007	DORNER	GARRTT	ENGINE	UNKNOWN
11/13/2005	DO228202	TPE331*		RT WING

(CAN) RT ENG DID AN UNCOMMANDED INFLIGHT SHUTDOWN. TROUBLESHOOTING IN PROGRESS . WILL UPDATE FURTHER .

2006FA0000195	DORNER	PWA	HONEYWELL	POWER SUPPLY	FAILED
2/5/2006	DO328300	PW306B	DU870	7018704902	DISPLAY UNIT

HONEYWELL DU-870 EFIS DISPLAY UNIT FAILURE IN FLIGHT. HONEYWELL PN:7014300-902.

2006FA0000196	DORNER	PWA	HONEYWELL	POWER SUPPLY	FAILED
2/5/2006	DO328300	PW306B	DU870	7018704902	DISPLAY UNIT

HONEYWELL DU-870 EFIS DISPLAY UNIT FAILURE IN FLIGHT. HONEYWELL PN:7014300-902.

2006FA0000194	DORNER	PWA	HONEYWELL	POWER SUPPLY	FAILED
2/5/2006	DO328300	PW306B	DU870	7018704902	DISPLAY UNIT

HONEYWELL DU-870 EFIS DISPLAY UNIT FAILURE IN FLIGHT. HONEYWELL PN:7014300-902.

2006FA0000197	DORNER	PWA	HONEYWELL	POWER SUPPLY	FAILED
2/5/2006	DO328300	PW306B	DU870	7018704902	DISPLAY UNIT

HONEYWELL DU-870 EFIS DISPLAY UNIT FAILURE IN FLIGHT. HONEYWELL PN:7014300-902.

CA051121004	DOUG	PWA	PWA	CYLINDER	CRACKED
11/17/2005	C54ADC	R20007M2	R2007M2	153084	NR 2 ENGINE

(CAN) NR 2 ENGINE WAS PRECAUTIONARILY SHUTDOWN DUE TO SHAKE. IT WAS DISCOVERED THAT NR 10 CYLINDER WAS CRACKED AT THE EXHAUST EAR. THE CYLINDER ASSY WAS REPLACED AND AIRCRAFT RETURNED TO SERVICE.

CA051110003	FOUND	LYC	LUG	FAILED
11/10/2005	FBA2C	IO540D4A5	F343240	LT FUSELAGE

(CAN) DURING WALK-AROUND, LT REAR FLOAT FLY-WIRE WAS FOUND LOOSE. FURTHER INSPECTION REVEALED THE LT, AFT FLY-WIRE ATTACH LUG HAD FAILED APPROX 1/4 INCH FROM THE REAR FUSELAGE ATTACH POINT. REMAINING 3 FLY-WIRE ATTACH LUGS INSPECTED, NO FAULT FOUND. BROKEN SECTION OF THE LUG WAS INSPECTED, FAILURE APPEARED TO HAVE STARTED AT THE LUG TO FUSELAGE WELD.

2006FA0000155	GULSTM	LYC	LANDING GEAR	COLLAPSED
1/31/2005	114TC	TIO540*		NOSE

FIRST FLT AFTER ENG REFITMENT NLG FAILED TO EXTEND TO LANDING POS. ON FIRST FLT, GREEN NOSE WHEEL INDICATOR WOULD NOT ILLUMINATE. NLG WAS PARTIALLY EXTENDED TO ANGLE OF SOME 45 DEGREES. EMERGENCY EXTENSION PRECEDURES CARRIED OUT BY PILOT STILL FAILED TO EXTEND NLG BEYOND 45 DEGREES. PWROFF LANDING WAS EXECUTED WHERE UPON NLG COLLAPSED AND AC CAME TO REST ON 2 OF 3 PROP BLADES NOSE WHEEL BAY DOORS. AC NOSE WAS LIFTED. LANDING HAD PUSHED NLG BACK TOWARD RETRACTED POSITION BUT WITH PART OF TIRE PROTRUDING THROUGH PARTIALLY OPEN NOSE BAY DOORS. PIN ATTACHING NOSE GEAR ACT TO NOSE LEG WAS REMOVED. ENGINEERING INVESTIGATION IS BEING CARRIED OUT WHICH AT THIS TIME HAS FAILED TO DETERMINE CAUSE OF FAILURE. (K)

2006FA0000136	GULSTM	RROYCE	LINE	CHAFED
1/20/2006	GIV	TAY6118	1159SB42000044	PNEUMATIC SYS

DURING A ENGINE CHANGE A PYLON INSPECTION WAS BEING PERFORMED. SPIRAL WRAP WAS NOTICED WORN. FURTHER INVESTIGATION REVEALED CHAFF ON HIGH TEMPERATURE BLEED AIR LINE MORE THAN 50 PERCENT THROUGH. (K)

2006FA0000129	GULSTM	RROYCE	WINDSHIELD	CRACKED
1/25/2006	GIV	TAY6118	1159SCB51021	LT

AIRCRAFT WAS FLYING AT 41,000 FT WHEN WINDSHIELD FAILED BY OVERHEATING AND CRACKING. PROBABLE CAUSE, HEATING ELEMENT FAILED THEN WINDSHIELD OUTER PLY FAILED. NO RECOMMENDATION TO PREVENT FAILURE. (K)

2006FA0000105	GULSTM	RROYCE	SHUTOFF VALVE	CRACKED
11/27/2005	GIV	TAY6118	GAC1159SCH2463A	HYD SYSTEM

AIRCRAFT WAS ON A POSITION FLIGHT, ON DEPARTURE THE CREW RECEIVED A (CK HYD QUANTITY) EICAS CAUTION LIGHT. COCKPIT INDICATIONS REVEALED A LOSS OF COMBINED HYDRAULIC FLUID. THE FLIGHT CREW DECLARED AN EMERGENCY AND RETURNED TO DEPARTURE. MAINT INVESTIGATION REVEALED THE FLIGHT POWER SHUTOFF VALVE ASSY HOUSING WAS CRACKED. THIS IS THE SECOND INCIDENT OF A CRACKED HOUSING WITHIN OUR FLEET. AN UPGRADED 5 ASSY WAS PROCURED FROM MFG AND AC WAS RETURNED TO SERVICE. HAVE COMMUNICATED OUR CONCERNS TO AC MFG AND ENCOURAGED A PROACTIVE RESOLUTION TO A RATHER SEVERE SITUATION. (EA25200605366) (K)

2006FA0000104	GULSTM	RROYCE	COUPLING	FAILED
1/21/2006	GIV	TAY6118	J301300AR	BLEED AIR DUCT

WITH APU RUNNING AND BLEED AIR SELECTED ON, COUPLING FAILED CAUSING DUCT TO SEPARATE. PROBABLE CAUSE UNKNOWN. SUGGEST MORE AGGRESSIVE LOCKING MECHANISM. (K)

2006FA0000113	HUGHES	ALLSN	LINE	LEAKING
10/5/2005	369D	250C20B		

PILOT SAW TORQUE PRESS FLUCTUATE. TORQUE PRESS LINE TO GAUGE LEAKED AND ENGINE WAS STARVED OF OIL. THE AIRCRAFT HAD MADE A NORMAL LANDING AND SHUTOFF ENGINE SEIZED UP ON COASTDOWN, REPLACED ENGINE. (K)

2006FA0000114	HUGHES		SKIN	CRACKED
9/28/2005	369E			FUSELAGE

FOUND A CRACK ON THE (TURTLE BACK) SKIN ABOVE THE ENGINE BETWEENT THE ATTACHMENT STRINGERS OF THE TAILBOOM FARRING AND BETWEEN THE RIBS AT STA 146.62 AND STA 155.75 CRACK IS LOCATED ON THE RT SIDE AND RUNNING FROM STA 146.62 AFT 7.25 INCHES. REPAIRED CRACK WITH PATCH. (K)

2006FA0000115	HUGHES	ALLSN	COMBUST CHAMBER	CRACKED
10/6/2005	500N	250C20B	6870992	ENGINE

DURING AN INSPECTION FOR HIGH TOT THE OUTER COMBUSTION CAN WAS FOUND TO BE CRACKED IN THE LEFT (ARM PIT). (K)

CA051110001	ISRAEL	GARRTT	CABLE	FRAYED

11/8/2005	1124	TFE7313		503028533	NLG

(CAN) DURING ROUTINE NLG SERVICING THE FRAYED CABLE WAS NOTICED BETWEEN 2 PULLEYS. ONLY A FEW STRANDS REMAINED INTACT AND THE PROBLEM HAS BEEN THERE FOR QUITE SOMETIME IAW THE PART CONDITION. THE CREW HAD REPORTED THAT THE PLANE HAD A SLIGHT TENDANCY TO GO TO THE LT ON LANDING AND THOUGHT IT MAY HAVE BEEN TIRE PRESSURE RELATED. TT ON CABLE UNKNOWN.

2006FA0000125	ISRAEL	GARRTT		AILERON	DELAMINATED
1/11/2006	ASTRASPX	TFE731*		25W181001502	UPPER SURFACE

RT AILERON UPPER SKIN FOUND DELAMINATED FROM HONEYCOMB CORE. DELAMINATION COVERS MORE THAN 50 PERCENT OF UPPER SURFACE. AILERON REPLACED WITH SERVICEABLE UNIT. (K)

2006FA0000120	LEAR	GE		STATIC LINE	LOOSE
6/17/2005	25B	CJ6106			EQUIPMENT BAY

WHILE ENROUTE, CABIN ALTITUDE EXCEEDED 10,000 FT. THE FLIGHT CREW FOLLOWED EMERGENCY PROCEDURES BUT WAS UNABLE TO RETURN THE CABIN PRESSURIZATION WITHIN NORMAL PIRAMETERS. THE FLIGHT CREW DECIDED TO DIVERTED AND LANDED WITHOUT FURTHER INCIDENT. UPON INSPECTION MAINTENANCE CREW FOUDN A LINE LOOSE ON THE PRESSURIZATION JET PUMP. (K)

WTXR10549	LEAR			ATTACH BRACKET	CRACKED
2/8/2006	35A				FUSELAGE

FOUND CRACK AT LT AND RT FUSELAGE FRAME 20 AT THE WING ATTACH POINT. LT CRACK IS APPROX 1.0 INCHES IN LENGTH, RT CRACK IS APPROX .75 INCHES IN LENGTH.

AUCR200600001	LKHEED	ALLSN		PANEL	CRACKED
2/1/2006	P3A	T56A10		9006071	LT WING

LT WING, STA. 82, 2.9 IN. FRACTURE IN NR 7 PLANK FORWARD TANG. FRACTURE WAS LOCATED BY ULTRASONIC INSPECTION DURING EVALUATION OF FUEL STAIN AT ANNUAL INSPECTION. THERE EXISTS AN APPROVED REPAIR FOR THIS DAMAGE IN THE SRM.

10943282	MAULE	CONT		FRAME	CRACKED
1/20/2006	M5210C	IO360*			FUSELAGE

FOUND CRACK APPROXIMATELY .3750 INCH IN LENGTH ON RT FRAME 20 WING ATTACH POINT.

CA051114006	PILATS	PWA	BENDIX	ADAPTER	FAILED
11/9/2005	PC1245	PT6A67B		065001640100	PITCH TRIM ADAPT

(CAN) RED (PITCH TRIM) ANNUNCIATOR WOULD ILLUMINATE INTERMITTENTLY WHEN DESCENT COMMANDED. THIS WOULD SOMETIMES OCCUR AS THE AUTO PILOT WOULD ATTEMPT TO TRIM. AUTO PILOT WOULD NOT DISENGAGE. PITCH TRIM ADAPTER REPLACED 31.4 HRS PREVIOUS DUE TO A DIFFERENT DEFECT. ANOTHER TRIM ADAPTER WAS INSTALLED, PROBLEM RECTIFIED.

CA051116010	PILATS	PWA	PILATS	PDU	DEFECTIVE
11/14/2005	PC1245	PT6A67B	952D1005	952D1005	FLAP SYSTEM

(CAN) FLAP PDU FOUND U/S NEW PDU INSTALLED.

2006FA0000117	PIPER	LYC		FLANGE	BROKEN
1/20/2006	PA28161	O320D3G			ENGINE

BOTH FORWARD BOLT ATTACHMENT FLANGES WERE CRACKED OFF OF STARTER ATTACHMENT FLANGE ASSEMBLY. THIS CAUSED THE STARTER TO DROOP DOWNWARD WITH ONLY THE AFT BOLTS SUPPORTING THE STARTER. AS A RESULT, THE STARTER RING GEAR AND STARTER BENDIX WOULD NOT PROPERLY ENGAGE. THIS RESULTED IN THE TEETH OF THE BENDIX TO BREAK APART. THE STARTER FLANGE WAS CRACKED OFF ON BOTH THE FWD LT SIDE AND FWD RT SIDE AT A 45 DEGREE ANGLE.

2006FA0000133	PIPER	LYC	LYC	CRANKCASE	BROKEN

1/20/2006	PA28161	O320D3G	0320D3G		ENGINE

BOTH FORWARD BOLT ATTACHMENT FLANGES WERE CRACKED OFF OF STARTER ATTACHMENT FLANGE ASSEMBLY. THIS CAUSED THE STARTER TO DROOP DOWNWARD WITH ONLY THE AFT BOLTS SUPPORTING THE STARTER. AS A RESULT, THE STARTER RING GEAR AND STARTER BENDIX WOULD NOT PROPERLY ENGAGE. THIS RESULTED IN THE TEETH OF THE BENDIX TO BREAK APART. THE STARTER FLANGE WAS CRACKED OFF ON BOTH THE FWD. LT SIDE AND FWD RT SIDE AT A 45 DEGREE ANGLE.

YHLR200500001	PIPER	LYC		GPS	INOPERATIVE
11/23/2005	PA28181	O360*		0100013911	COCKPIT

CUSTOMER STATED THAT THE GNS-430 DISPLAY WAS NO LONGER WORKING AND THAT THE CDI WAS PEGGED LT AT ALL TIMES. SENT UNIT OUT FOR REPAIR. ALSO FOUND UPON INSPECTION OF THE GNS-430 INSTALLATION, IT WAS NOTED THAT REPAIR STATION HAD NOT INSTALLED AN AVIONICS COOLING FAN IAW THE INSTALLATION MANUAL. AN AVIONICS COOLING FAN WAS INSTALLED UPON RECEIVING THE GNS-430 BACK FROM REPAIR. THE PROBLEM WITH THE GNS-430 WOULD HAVE BEEN PREVENTED IF AN AVIONICS FAN HAD BEEN INSTALLED IAW THE REQUIREMENTS FOR COOLING AS STATED IN THE INSTALLATION MANUAL.

CA051117007	PIPER	LYC	CONT	DISTRIBUTOR GEAR	BROKEN
11/16/2005	PA28R200	IO360C1C	S4LN1209		MAGNETO

(CAN) MAGNETO FAILED SHORTLY AFTER TBO. (80 HOURS), DAMAGING THE DISTRIBUTOR GEAR.

2006FA0000139	PIPER	LYC		BOLT	WORN
1/19/2006	PA28R201	IO360A1A		402915	LT WING

DURING PHASE INSPECTION LT AFT WING ATTACH BOLT WAS FOUND LOOSE. UPON FURTHER INSP IAW MFG SL 1087 THE HOLE WAS FOUND TO BE ELONGATED AND BOLT SHANK WORN. SL 1087 DOES NOT COVER THIS SN BUT DOES COVER MODEL.

2006FA0000161	PIPER	LYC		FUEL	CONTAMINATED
2/9/2006	PA28R201	IO360C1C6			FUEL TANK

BROWNISH FUEL WAS DETECTED FROM THE FUEL GASCOLATOR. AFTER TROUBLESHOOTING IT WAS DETERMINED THAT THE BROWNISH FUEL COLOR PRESENT IN THE FUEL SYSTEM.

2006FA0000146	PIPER	LYC		SKIN	BENT
1/19/2006	PA30	IO320*			HORIZONTAL STAB

DURING INSP OF HORIZ STAB, FWD SPAR AND CTR SECTION SKIN WAS FOUND BENT, DISTORTED AT CENTER LIGHTENING HOLE. SKIN AND SPAR BOTH SHOWED SIGNS OF WRINKLING AND DEFORMATION. CLOSE INSP OF PARTS DID NOT SHOW ANY CRACKS. SPAR HAD BEEN REINFORCED WITH SPAR REINFORCEMENT AS REQUIRED BY SEB. STAB WAS REPAIRED USING A NEW FWD SPAR ASSY WITH REINFORCEMENT NEW CTR SECTION SKIN AND COMPLYING WITH SEB. PROBABLE CAUSE IS OVER STRESSING STAB BY FORCING TAIL DOWN TO MOVE AC ON GROUND. RECOMMEND PERSONNEL BE BRIEFED ON PROPER PROCEDURES FOR MOVING AC, MECHANICS CLOSELY INSPECT THIS AREA FOR DAMAGE. ALSO, RECOMMEND THAT SEB INSP OF FWD SPAR LIGHTENING HOLE AND SB INSP OF BOLT HOLES BE COMPLIED WITH AT NEXT ANNUAL INSP.

CA051114003	PIPER	LYC	PIPER	CHANNEL	CRACKED
11/28/2005	PA31	IO540M1A5	4752933	46357000	WING

(CAN) DURING ROUTINE MAINTENANCE A CRACK WAS NOTICED EXTENDING FROM THE BOLT HOLE. THIS IS THE BRACKET THAT IS RIVETED TO THE WING AND THE DOOR ACTUATOR ATTACH POINT. SUSPECT THAT THE FLAW WAS A RESULT OF THE DOOR BEING RIGGED TOO TIGHT FOR SOMETIME. THE BRACKET HAD A PATCH FROM A PREVIOUS REPAIR. TT ON PART APPEARS TO BE 6465 HOURS.

2006FA0000102	PIPER	PWA		TRUNNION	CRACKED
1/24/2006	PA31T	PT6A60A		40288000	RT MLG

DURING 100 HOUR INSPECTION FOUND CRACK IN WEB OF AFT MLG TRUNNION ASSY AIRCRAFT. (K)

2006FA0000118	PIPER	LYC		MAGNETO	INOPERATIVE

1/30/2006	PA44180	O360A1H	4302	

ON ENGINE INSPECTION RUN-UP MAGNETO RPM DROP NORMAL. WHEN MECHANIC ATTEMPTED TO CHECK TIMING, FOUND TIMING 20 DEGREES LATE. REMOVED AND DISASSEMBLED MAGNETO. FOUND DISTRIBUTOR CARBON BRUSH MISSING AND ROTOR SHAFT BROKEN AT BASE OF SLOT FOR POINT CAM. ALSO FOUND EXTENSIVE BURNING DAMAGE TO DISTRIBUTOR BLOCK CROSSBEAM AND ARCING DAMAGE TO COIL AND DISTRIBUTOR GEAR SHAFT.

2006FA0000148	RAYTHN	GARRTT	CONNECTOR	DIRTY
10/27/2005	HAWKER800XP	TFE731*		AUTOPILOT

PILOTS REPORT AIRCRAFT (PORPOISING) IN LEVEL FLIGHT AT FL 380 WITH AUTOPILOT ENGAGED. TROUBLESHOT IAW COMMUNIQUE NR 22-07; FOUND HIGH RESISTANCE AT AUTOPILOT FLAP COMPENSATOR TRANSMITTER (FT) CONNECTOR FT-1B. CLEANED AND REINSTALLED CONNECTOR, CHECKED RESISTANCES NOW WITHIN COMMUNIQUE NR22-07 SERVICE LIMITS. RECOMMEND INVESTIGATION OF POSSIBLE REPLACEMENT AP FLAP COMPENSATOR TRANSMITTER CONNECTOR OR INSTALLATION WITH IMPROVED ENVIRONMENTAL SEALING CHARACTERISTICS. (K)

2006FA0000147	RAYTHN	GARRTT	SEAL	TORN
10/26/2005	HAWKER800XP	TFE731*	1002268815	FUEL LINE

DURING REFUELING OF RT WING, FUEL WOULD EXIT OUT OF NACA VENT BEFORE TANK TOPPED OFF. RT FUEL QUANTITY INDICATION WOULD SHOW TANKS NOT FULL YET. FOUND VENT SYSTEM INTERCONNECTING TUBING SEALS TORN/MISSING BETWEEN SURGE TANK AND NACA SCOOP. REPLACED SEALS AS REQUIRED AND REASSEMBLED VENT SYSTEM INTERCONNECTING TUBING. NO FAULTS NOTED ON REFUELING. (K)

CA051101005	ROBSIN	LYC	WELDON	PUMP	LOW PRESSURE
10/25/2005	R44RAVENII	IO540AE2A	D7431	B8187B	ELEC FUEL PUMP

(CAN) PUMP WAS NOT PROVIDING ENOUGH FUEL TO PRIME THE ENGINE. ELECTRIC PUMP ASSEMBLY REPLACED.

CA051102002	SKRSKY	PWA	PWA	FUEL CONTROL	FAILED
10/27/2005	S64E	JFTD12A4A			NR 2 ENGINE

(CAN) PILOT ELECTED TO BACK AC OUT AWAY FROM LOG LANDING. AS AC STARTED ITS REARWARD DESCENT DOWN TO LOGGING BLOCK, PILOT HEARD WHOOSH SOUND FOLLOWED BY AN ENG LOW RPM AUDIO WARN HORN. NR 2 ENG WAS IN ROLLBACK CONDITION W/DECREASING N1 SPEED, INCREASING T5 TEMP. AFTER VERIFICATION FROM COMMAND PILOT, CO-PILOT EXECUTED SHUTDOWN OF NR 2 ENG. IT IS TO BE NOTED THAT T5 TEMP LIMITS WERE NOT EXCEEDED. WITH ENG MOTORING PROCED COMPLETE, AC RETURNED, MADE SINGLE ENG LANDING. FOLLOWING AN ENG ROLL, FCU AND FUEL PRESSURIZING AND DUMP (PD) VALVE WERE REPLACED, RETURNED FOR INTERNAL EVAL. A REPLACEMENT FCU AND PD VALVE WERE INSTALLED AND AFTER A COMPLETE GROUND CK OF ENG, AC WAS RETURNED TO SERVICE.

CA051102003	SKRSKY	PWA	ENGINE	FAILED
10/29/2005	S64E	JFTD12A4A		NR 1

(CAN) AFTER SLIGHT REDUCTION IN PWR SETTING PILOT HEARD A WHOOSH SOUND FOLLOWED BY N1 LOW RPM AUDIO WARNING HORN. CO-PILOT IDENTIFIED NR1 ENG IN A ROLLBACK CONDITION WITH A DECREASING N1 SPEED AND AN INCREASING T5 TEMP. AFTER VERIFICATION, EXECUTED A SHUTDOWN OF NR 1 ENG. FOLLOWED BY ENGAGEMENT OF ENG STARTER TO MOTOR ENG IN ORDER TO COOL DOWN T5 OVER-TEMP CONDITION OF 805 DEGREES C. WITH ENG TEMP IN AN ACCEPTABLE RANGE, MOTORING PROCEDURES DISCONTINUED, AC RETURNED, MADE A SINGLE ENG LANDING. A REPLACEMENT ENG, FREE TURBINE, FCU AND P&D VALVE WERE INSTALLED. ENG WAS GROUND TESTED AND AC WAS RETURNED TO SERVICE. AS A RESULT OF HAVING 2 ENGINE ROLL BACKS, FUEL SAMPLES WERE TAKEN FROM AC AND SENT FOR ANALYSIS.

B3OR20060125	SNIAS	DRIVE SHAFT	MISOVERHAULED
1/26/2006	AS350B2	350A34021006	TAIL ROTOR

DURING ROUTINE TBO REPLACEMENT OF TAIL ROTOR DRIVESHAFT; IT WAS DISCOVERED THAT THE FORWARD END OF THE RECENTLY OVERHAULED REPLACEMENT WAS UNPAINTED CAUSING THE NR 5 BEARING FIT

TOLERANCES TO BE TOO LOOSE. MFG TECHNICAL REPRESENTATIVES VERIFIED THAT THE DRIVESHAFT IS SUPPOSED TO BE PAINTED UP TO THE SPLINES. PART WAS RETURNED FOR FURTHER REWORK.

2006FA0000116	SNIAS		BELLCRANK	ELONGATED
11/11/2005	AS350B2		355A2700720001	T/R CONTROLS

DURING 500 HOUR INSPECTION AND REMOVAL OF T/R SERVO OVERCENTERING MECHANISM, IT WAS DISCOVERED THAT THE MAIN SUPPORT BOLT AND THE BELLCRANK PIVOT BOLT WERE VERY DIFFICULT TO REMOVE. THE BELLCRANK PIVOT BOLT WAS OBVIOUSLY HAMMERED IN BY EVIDENCE OF THE RAISED METAL AND ELONGATED HOLE. REPLACED BELLCRANK AND BOTH BOLTS. (K)

2006FA0000112	SNIAS	TMECA	ENGINE	MAKING METAL
10/1/2005	AS350B2	ARRIEL1D1	ARRIEL1D1	FUSELAGE

DURING FLIGHT, THE CHIP LIGHT ILLUMINATED, CHIPS WERE FOUND AND BEFORE 30 MINUTE GROUND RUN WAS COMPLETED ANOTHER LIGHT OCCURRED. CHIPS WERE OF SUFFICIENT SIZE THAT REQUIRED REMOVING THE ENGINE. (K)

2006FA0000126	SOCATA	PWA	FLAP	EXCESS PLAY
1/26/2006	TBM700	PT6A64	T700A5755001000	IB FLAP END RIB

FLAP SN SC279 WAS REMOVED FROM SERVICE FOR LOOSE ATTACHMENT INSERTS ON THE IB END RIB. THE FLAP ATTACH CARRIAGE WAS DISCOVERED LOOSE DURING A ROUTINE DAILY PPOST FLIGHT INSPECTION, WHERE PLAY WAS NOTED BETWEEN THE FLAP ATTACH CARRIAGE AND THE IB FLAP END RIB. IT SHOULD BE NOTED THAT ALL OPERATORS SHOULD PERFORM AN INSP IN FLAP ATTACH AREA BEFORE OPERATING AC. (K)

2006FA0000135	UNIVAR	CONT	BOLT	BROKEN
1/30/2006	A2ALON	C90*	NAS14635	MLG

BOLT LOCATED TOP OF SPRING OF LANDING GEAR, 3 OF THESE BOLTS HOLD THE SPRING GEAR ON. ALL 3 BOLTS FAILED, RECOMMEND ALL 3 BOLTS IN BOTH MAIN GEAR REPLACED EACH, 1000 HRS TIME IN SERVICE. (EA13200602813) (K)

2006FA0000153	UROCOP	TMECA	CHIP DETECTOR	FALSE INDICATION
1/20/2005	EC130B4	ARRIEL2B		ENGINE OIL

PRECAUTIONARY LANDING, DUE TO ENG OIL CHIP LIGHT ANNUNCIATION IN FLT. UNEVENTFUL LANDING. MAINT INVESTIGATED, FOUND ONE SMALL HAIR LIKE DARK CHIP. PLUG WAS CLEANED, ENG WAS TEST RUN FOR 10 MIN. ENG RUN-DOWN TIME WAS CHECKED. NO ADDITIONAL CHIPS FOUND. RUN DOWN TIMES WERE NML. AC WAS FLOWN EMPTY BACK TO MAINT BASE. CHIP PLUG WAS RE-INSPECTED FOR ADDITIONAL CHIPS. NO CHIPS NOTED AT THAT TIME. IAW MFG INSTRUCTION, PLUG IS TO BE REINSPECTED AFTER FIRST FLIGHT OF DAY FOR NEXT 25 HOURS. CHIP DETECTOR, SUPPORTING SYS WORKED PROPERLY, ALERTING PILOT OF A POTENTIAL PROBLEM. FALSE INDICATION BECAUSE OF CHIP DETECTORS INABILITY TO DIFFERENTIATE 1 VERSES CHIPS .

END OF REPORTS