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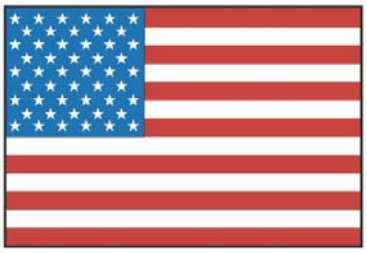
AVIATION MAINTENANCE ALERTS



ALERT NUMBER 316

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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 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.

AIRPLANES

AMERICAN GENERAL

American General; Model AG-5B; Improper Seatbelt Plate Installation; ATA 2520

While replacing the rear passenger seatbelts, a technician discovered the reinforcement plate (P/N 5102330-6) had been installed on the forward side of the aft seat bulkhead under the seatbelt attach bracket. The –6 plate should have been installed on the aft side of the bulkhead in accordance with AGAG drawing 5102299. Furthermore, MS20364-1032 (thin sheer nut) was used to secure the AN3-5A retaining bolts. MS20365-1032 or MS21042-3 nuts should have been installed as indicated on the drawing.

According to the submitter, this arrangement resulted in reduced seatbelt attachment strength when compared with the design configuration. He reported the aircraft appeared to have the original seatbelts installed, and it is likely this improper installation was accomplished during assembly. He recommended that owners of AG-5B aircraft manufactured by American General Aircraft should have the rear seat seatbelt outboard attach brackets inspected for proper installation of the 5102330-6 plate and the attach hardware prior to carrying rear seat passengers.

Part total time: 1,960 hours.

BEECH

Beech; Model F33A; Autopilot Bridle Cable; ATA 2210

The submitter found one side of the bridle cable broken at the capstan pin. The other side of the bridle cable had back lashed and tangled in the capstan bridle cable guard pins, which caused restriction to the up-elevator control.

This problem was addressed in the Century Flight Systems Service Bulletin CSB 2003-01. This Service Bulletin can be found at the following website: http://www.centuryflight.com/services/frame/services.htm.

The website article stated: "It has come to the attention of Century Flight Systems that a situation occurred involving a bridle cable that came loose from the servo capstan and caused some control wheel friction. Upon investigation it was determined that the locking pin on the bridle cable had not been secured by the set screw

located on the front side of the capstan. The cable guard was also “clocked” wrong and the bridle cable was not wound and attached to the main pitch cable correctly. This particular installation was about two years old and the aircraft had been through a recent annual. The aircraft pilot was performing a high-speed taxi test and noticed the increased friction of the control wheel. Century Flight Systems recommends a physical examination of the set screw and locking pin on any Roll, Pitch and Rudder Servo to insure locking pin is secure in the capstan. Also check the bridle cable wrap on the capstan and travel when the control wheel is moved from mechanical limit to limit.”

The submitter feels that an Airworthiness Directive would possibly ensure compliance.

Part total time: unknown.

BOEING

Boeing; Model 727-200; Trailing Edge Flap Torque Tube Detached; ATA 2750

While removing the number 2 trailing edge transmission assembly, the technician discovered the inboard torque tube drive gear was not positively attached to the flap transmission assembly splines. He removed the transmission and discovered the gear/spline attachment roll pin (P/N NAS 561P3-8) was missing.

While rigging the trailing edge flaps, in accordance with maintenance manual 27-51-11, the number 4 transmission drive gear became detached from its associated torque tube. A closer inspection revealed that the roll pin had sheared. He inspected the transmission and replaced the roll pin. He inspected the remaining torque tubes for security of attachment and did not find any more defects. Functional checks of the flap transmission were found to be satisfactory.

Part total time: unknown.

CESSNA

Cessna; Model 172 Series (Model years 1956 through 1981) and Model 175 Series (Model years 1958 through 1962); Horizontal Stabilizer Forward Spar; ATA 5510, 5511

The following article is published as it was received.

Maintenance technicians have found cracks in the forward horizontal stabilizer spar on Cessna 172 /175 series airplanes.

A search of the FAA Service Difficulty Reporting System database revealed 76 separate reports of these occurrences during the past 30 years.

Cessna Mandatory Service Bulletin No. SEB94-8 was released on April 29, 1994. The following quote is from the Purpose of this service bulletin:

“Service experience indicates the possibility of cracks/buckles developing in the area aft of the center lightening hole in the horizontal stabilizer forward spar. An inspection for cracks/buckles in this area should be conducted. If a crack or buckle is found, the spar shall be repaired or replaced depending upon the extent of crack propagation. To assist in preventing this condition from occurring, a new strengthened one-piece forward spar reinforcement is available. Non-compliance with this service bulletin may result in failure of the horizontal stabilizer.” Cessna models 172R and 172S airplanes, built since 1996, incorporate the front spar reinforcement. NOTE: Improper ground handling can cause cracking and deformation of the horizontal stabilizer structure. It is recommended that

a tow/steering bar be used whenever the airplane is to be manually positioned on the ground. Do not steer the airplane by pushing down on the horizontal stabilizer."

In addition, the Cessna service manual for 172 series airplanes states: "Caution: do not push on control surfaces or outboard empennage surfaces."

The service manual also specifies inspection of the horizontal stabilizer spars each 100 hours for "cracks, wrinkles, loose rivets, corrosion or other damage".

Adherence to Cessna Mandatory Service Bulletin No. SEB94-8 and to the Cessna Service Manual for 172 series airplanes is strongly recommended. Avoid steering these airplanes on the ground using the empennage.

Cessna; Model 177-RG; Nose Landing Gear Malfunction; ATA 3230

The nose landing gear failed to extend during approach. The cockpit indicator and the wing-mounted mirror confirmed the nose gear was not extended. The pilot made several attempts to extend the landing gear normally and manually as provided by the emergency checklist; however, all attempts were unsuccessful. He declared an emergency and landed the aircraft with the nose gear retracted.

When the aircraft was lifted, the nose gear doors fell open, and the gear was pumped down using the emergency gear pump in the cockpit. According to the submitter, no obvious cause factor for the incident could readily be determined.

The submitter indicated that a similar incident with this aircraft had occurred in July of 2000 at Lansing Municipal Airport in Lansing, Illinois. The mode of failure for the prior incident is very similar to this incident. No single cause was ever identified for the extension malfunction. The aircraft was repaired and had been flown for approximately 700 hours until this latest incident occurred.

Cessna; Models 300/400; Improper Attachment of the Elevator Trim Tab Actuator; ATA 2731

The FAA Aircraft Certification Office (ACO) located in Wichita, Kansas, provided the following article.

Several reports of control failures on Cessna 300 and 400 series airplanes have been brought to the attention of the Small Airplane Directorate. The root cause of each accident/incident, involves the elevator trim tab actuator.

To ensure the integrity of the flight control system, 30 years ago, Cessna switched from a self-locking nut to a castellated nut with a cotter pin. In each of the six accidents/incidents highlighted, the actuator for the elevator trim tab was not connected. In five of six reports, the probable cause was determined to be maintenance errors. The sixth incident lists the cause as undetermined, although 3 days prior to the accident the elevator trim actuator was overhauled.

These reports indicate the maintenance personnel failed to properly secure the trim tab actuator. More specifically, there appears to be a failure to install the required cotter pin to secure the assembly, or the use of a self-locking nut instead of the castellated nut and cotter pin called for in the maintenance manuals. Additionally, the flightcrews were faulted in several instances for not discovering the loose connection during preflight inspections.

This article is to highlight to the aviation community, the need to follow the maintenance manual, and to doublecheck all work.

Cessna; Model 525A; Broken Brake Line; ATA 3240

This aircraft was on a ferry flight with the landing gear locked in the down position due to a damaged landing gear door. Upon landing, the aircraft had no brakes and hydraulic fluid was streaming from the left wheel well.

An inspection revealed the hard brake line (P/N 6317013-39) in the left wheel well had broken in half.

The submitter states this is the second occurrence of this kind of failure on this model aircraft.

Part total time: 1,281.9 hours.

MOONEY

Mooney; Model M20M; Landing Gear No-Back Spring Slippage; ATA 3233

The landing gear cycled on and off at 5-10 second intervals in the down position. The technician discovered the no-back clutch spring was “slipping” when the gear was under preload in the up or down position.

After complying with Mooney Service Bulletin M20-282 and the corresponding Eaton SI 102000-1-901, revision 2, by installing a new no-back clutch spring, the mechanism was still allowing the actuator to “back up” under normal loads. Excessive friction between the input/driven gear assemblies causes them to “lock” together and rotate simultaneously. Under this condition the no-back clutch spring will slip and not lock properly.

The submitter discovered excessive friction was caused when: (1) the point of contact between the two drive gear assemblies is at the larger diameter hubs instead of the smaller diameter gear shafts, or (2) the gear shaft assembly is preloaded to the maximum acceptable limit as defined in the two previously mentioned bulletins.

A search of the FAA Service Difficulty Reporting System database revealed one other report with this same type of problem. A part number was not provided on either report.

Part total time: 145 hours.

PIPER

Piper; Model PA-28-140; Propeller Spinner Bulkhead Chafed; ATA 6113

During an annual inspection, the technician discovered the aft spinner bulkhead (P/N TCB35323-011 TCB Composite Company, Inc.) was chafing against the propeller blades. He removed the chafed part and discovered material transfer from the bulkhead to the propeller. There was corrosion on the propeller hub.

The submitter indicated, the aft spinner bulkhead had been compressed, which reduced the torque on the mounting bolts.

Piper; Model PA-28R-201; Loose Wing Attach Bolt; ATA 5740

During a scheduled inspection, the technician discovered the left wing attach bolt (P/N NAS8206-6X) was loose.

One year earlier, the technician replaced the same bolt in accordance with an engineering order issued by the manufacturer.

The submitter indicated three other aircraft in the fleet had similar problems. He notified the manufacturer, and they are working on a repair.

Part total time: 773.7 hours.

HELICOPTERS

EUROCOPTER

Eurocopter; Model AS350B2; Tail Rotor Blade Spar Cracked; ATA 6410

During a turn-around check, the pilot found a 5-inch span wise crack in the tail rotor spar (P/N 355A12-0040-08).

The technician replaced the entire tail rotor blade with a serviceable unit.

According to the submitter, this is a persistent condition on this model helicopter and part number component.

A search of the FAA Service Difficulty Reporting System database revealed 14 cracked tail rotor blade spars. The aircraft models and dates for the related occurrences are as follows (identified by part number):

AS350B	AS350BA	AS350B2	AS355F1
12/03/1997	7/16/2001	3/22/1995	7/12/1995
5/23/1998	5/16/2002	8/17/1999	10/8/2002
	7/23/2003	8/24/2001	
	10/16/2003	7/23/2003	
	3/2/2004	11/9/2003	

Part total time: 2,191.8 hours.

AMATEUR, EXPERIMENTAL, AND SPORT AIRCRAFT

SONEX

Sonex; Canopy Opening In Flight; ATA 5610

During a climb-out, between 300 and 400 feet above ground level, the canopy came open and shattered the plexiglass bubble. The pilot made an emergency landing in a muddy field and damaged the landing gear.

The owner concluded the canopy sliding latch mechanism vibrated rearward and caused the canopy to open. He is installing a secondary safety pin to prevent this from happening again.

The EAA maintenance counselor has been advised of this problem and it will be addressed through EAA chapter 289.

POWERPLANTS AND PROPELLERS

ALLISON ENGINES

Allison Engines; Model 250-C20B; Compressor Adapter Sheared; ATA 7230

During flight, the pilot heard a muffled bang and experienced yawing of the fuselage with a related high turbine outlet temperature (TOT) indication on the number 2 engine. He shut the engine down and performed an emergency landing.

An investigation revealed minor debris on the accessory gearbox chip detector. The accessory drives did not rotate when the compressor/power turbine was hand rotated. The engine modules were separated, and the compressor adapter (P/N 23039791-1) was sheared.

The submitter indicates CEB-A-1392 alert bulletin had not been accomplished on this engine. He suggests Rolls Royce may want to set an operator time limit on this item if this is a common occurrence.

A search of the FAA Service Difficulty Reporting System database revealed 14 reports concerning this part number.

AIRCRAFT PART NUMBER TREND BY YEAR:

YEAR	REPORTS
1996	3
1997	4
1998	0
1999	1
2000	0
2001	4
2002	0
2003	2
2004	0 (January through November)

LYCOMING

Lycoming; Model O-235-L2C; Crankshaft Broke; ATA 8520

The engine crankshaft was found broken in half. There was a lateral break across the throw in front of the middle journal and behind the number 1 and 2 crank pins. The engraved markings on the crankshaft are “W5340 B$ N50, R19119-1, and 91660-1.”

According to the submitter, the lower end of the engine had been overhauled. However, the engine times were not submitted.

A search of the FAA Service Difficulty Reporting System database revealed one report with a separated crankshaft. The submitter also states the engine had experienced two previous propeller strikes.

Part total time: unknown.

Lycoming; Model O-360-A1H6; Fractured Intake Valve; ATA 8530

During cruise flight, the pilot experienced surging manifold pressure on the left hand engine and a vibration was noticed on final approach.

An inspection revealed the number 2 cylinder intake valve was fractured with pieces in the number 2 and 3 combustion chambers. The cylinder head and piston tops were damaged from contact with broken valve pieces.

Part total time: 1,521.6 hours.

SLICK

Slick; Model 6310; Impulse Coupling Failure; ATA 7414

During an engine run for a 50-hour aircraft inspection, the right hand magneto was inoperative.

A technician found the magneto lying on top of the engine with a broken mounting flange. He also found the impulse coupling had come apart during the engine run, seizing the magneto, and then breaking the flange.

The submitter indicates the magneto had 125 hours since the last 500-hour inspection. At that time, the impulse couplings were within specifications as indicated in the Slick maintenance and overhaul manual.

A search of the FAA Service Difficulty Reporting System database revealed 9 other reports of magneto failure. They are as follows:

	(Installed on Continental)	
Impulse coupling broke, breaking the mounting flange	IO-520-F	July 1995
Left and right impulse couplings failed	O-470-R	November 2001
Impulse coupling failed, magneto case broke at mount pad, metal contamination to engine	O-470-U	May 2002
Impulse coupling failed, magneto separated from the engine, metal contamination to engine	IO-520	July 2002
Impulse coupling disintegrated, metal contamination to engine	IO-550-C	November 2002
Impulse coupling failed, magneto separated from engine	IO-520-L	July 2003
Impulse coupling broken	IO-550-C	September 2004
Impulse coupling failed, breaking the magneto housing	O-470-S	September 2004

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/isdr

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) database that is maintained by the Aviation Data Systems Branch, AFS-620, in Oklahoma City, Oklahoma. The iSDR web site supports the Flight Standards Service (AFS), Service Difficulty Program by providing the aviation community with a voluntary and electronic means to conveniently submit in-service reports of failures, malfunctions, or defects on aeronautical products. The objective of the Service Difficulty Program is to achieve prompt correction of conditions adversely affecting continued airworthiness of aeronautical products. To accomplish this, 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/isdr/.

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

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

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

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

The SDRS database contains records dating back to 1974. At the current time, we are receiving approximately 45,000 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 between September 23, 2004, and November 18, 2004, which have been entered into the FAA Service Difficulty Reporting (SDR) System database. This is not an all inclusive listing of Service Difficulty Reports. For more information, contact the FAA, Regulatory Support Division, Aviation Data Systems Branch, AFS-620, located in Oklahoma City, Oklahoma. The mailing address is:

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

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

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

Federal Aviation Administration

Service Difficulty Report Data

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

Control Number / Difficulty Date	Aircraft Make / Aircraft Model	Engine Make / Engine Model	Component Make / Component Model	Part Name / Part Number	Part Condition / Part Location
2004FA0000726				BLADE	CRACKED
8/26/2004				84334	PROPELLER
BLADE CRACKED .7500 AROUND RETENTION AREA. PROP IS BEING USED ON S OR V MODEL.					
CA040928015		ALLSN		CHECK VALVE	MISINSTALLED
9/28/2004		250B*			ENGINE OIL
(CAN) OIL CHECK VALVE P/N: 6871667 INSTALLED BACKWARDS RESULTING NR 8 BEARING FAILURE.					
CA040726003		GARRTT		BEARING CAGE	WORN
7/23/2004		TPE33110UA		31070367	ENGINE
(CAN) UPON RECEIVING A REQUEST, FROM WEAR CHECK, DUE TO A BAD ENGINE OIL SAMPLE, A TEAR DOWN OF THE SUSPECT ENGINE REVEALED THAT THE HIGH SPEED PINION BEARING AND CAGE WERE WORN AND THE SILVER COATING FLAKINGOFF OF THE COMPONENTS. THE PINION HAS BEEN REPLACED. TWO SIMILAR SDR'S HAVE BEEN ISSUED WITH THIS SAME PROBLEM BY PERIMETER.					
CA040901007		LYC		SUMP	LEAKING
7/19/2004		IO540L1A5		77517	ENGINE
(CAN) AT A RECEIVING INSPECTION OF A NEW, ZERO TIME ENGINE, NUMEROUS VOIDS IN THE CASTING WERE DISCOVERED ON THE ENGINE SUMP. PORT SIDE NEAR PLUG AREA. THE TWO BIGGER ONES HAD A DEPTH MEASUREMENT OF .110 AND .070 RESPECTIVELY. ENGINE MANUFACTURER WAS CONTACTED AND IT WAS DETERMINED TO REPLACE THE SUMP PRIOR TO ENGINE BEING INSTALLED. A NEW SUMP WAS OBTAINED FROM THE MANUFACTURER AND INSTALLED IAW APPLICABLE MANUAL INSTRUCTIONS. NOTE: THERE WAS NO VISUAL EVIDENCE OF CASTING VOIDS ON THE INTERNAL WALLS OF THE OIL SUMP CASE.					
CA040722005		PWA	PWA	BOLT	FAILED
7/13/2004		PT6A65AR		MS949034	RGEARBOX
(CAN) THE ENGINE WAS IN FLIGHT WHEN IT SUFFERED A FAILURE. THE ENGINE WAS SHUTDOWN AND THE AIRCRAFT LANDED. AN INVESTIGATION FOUND THAT THE BOLT HEAD OF A 1ST STAGE CARRIER MACHINE HEX BOLT HAD FAILED. IT WAS INGESTED BY THE 1ST STAGE PLANETARY GEAR SYSTEM. THE SUBSEQUENT FAILURE ON THE 1ST STAGE SUN GEAR AND 1ST STAGE PLANETARY GEARS CAUSED EXCESSIVE VIBRATION AND AN OVERSPEED CONDITION.					
CA040818003		PWA	PWA	SHAFT	SHEARED
8/18/2004		R2800*		260483	REDUCTION GEAR
(CAN) TWO PINION SHAFTS FOUND SHEARED WHEN REDUCTION GEAR SECTION REMOVED. ALL BROKEN PARTS FOUND AND ENGINE CLEANED FOR REASSEMBLY. GEAR SECTION SENT TO OVERHAUL SHOP FOR REPAIR.					
CA040806008	AEROSP	ALLSN		PLANETARY GEAR	SPALLED
8/30/2003	AS355F1	250C20F		350A32108203	EPI CYCLIC
(CAN) EPI CYCLIC WAS MAKING METAL. SOURCE WAS THE PLANET GEAR INNER RACE WAS SPALLING AND MAKING METAL.					
CA040806005	AEROSP	ALLSN		BUSHING	LOOSE
5/17/2004	AS355F2	250C20R			STARFLEX
(CAN) ALL 3 BUSHINGS FOUND LOOSE ON D.I. STARFLEX WAS REPLACED.					
I7LA0002736	AGUSTA	TMECA		TRUNNION	LOOSE
8/20/2004	A109K2	ARRIEL1		109013105115	TAIL ROTOR
UPON DAILY INSPECTION, MECHANIC NOTED EXCESSIVE PLAY IN TAIL ROTOR HUB AT TRUNION AREA. TAIL ROTOR HUB WAS REMOVED FOR INSPECTION A SOFT FACE MALLET WAS REQUIRED TO FREE THE TRUNION FROM TAIL ROTOR GEARBOX OUTPUT SHAFT. REMOVAL OF TRUNION NOTED SIGNS OF EXCESSIVE HEAT DISCOLORATION OF ENAMAL PAINT/ COATING. THE TRUNION BUSHINGS/ RACES WERE LOOSE AND SLIDE .5 WAY OFF TRUNION WITH NO MECHANICAL MEANS.					
I7LA0002725	AGUSTA	TMECA		TRUNNION	OVERHEATED
8/5/2004	A109K2	ARRIEL1		109013105115	TAIL ROTOR
UPON 25 HOUR INSPECTION, TRUNION SHOWS SIGNS OF EXCESSIVE HEAT, DISCOLORED (BROWN) COATING. ENAMEL PAINT.					
2004FA0000748	AGUSTA	PWA		MOUNT	DAMAGED
8/3/2004	A119	PT6*		032452,032470	SPOT LIGHT
AT 25 HR INSPECTION, MECH HEARD A RATTLING NOISE WHEN INSPECTING NIGHTSUN II. LENS WAS REMOVED, REFLECTION WAS REMOVED. FOUND BOTH MOUNTING PLATES (PN032452, PN 032470) REV X1 BROKEN COMPLETELY OFF AT REFLECTOR BUT STILL SCREWED TO MOUNT. ALSO, BULB SET SCREWS MISSING AND GOUND WIRE TO BULB LOOSE AT ATTACHMENT SCREW. AIRCRAFT IS IN TRACK AND BALANCE, BUT AIR FRAME STILL HAS HIGH LEVEL OF 4 IAW VIBRATION. (EA13200406110)					
CA040412BBB	AIRBUS	CFMINT		LINE	LEAKING
4/12/2004	A320211	CFM565A1		3371535030	ENGINE OIL
(CAN) AFTER T/O FROM YYJ NO.1 OIL QUANTITY FELL TO 2.5 QT. REDUCED TO IDLE THRUST,QUANTITY ROSE TO 4.0 AND THEN STARTED TO FELL AGAIN. SHUT ENGINE DOWN AT 10,000 FT ON APP TO YVR. ACTION: FOUND OIL LINE FITTING LOOSE. OIL LINE LOCATED IN BETWEEN GEAR BOX AND REAR BEARING. FITTING RE-TIGHTENED,ENG. IDLE RUN CARRIED OUT FOR 5 MINS NIL LEACKS FOUND, CONSIDERED SERVICEABLE.					
CA040924004	AIRBUS	RROYCE		LINE	LEAKING
9/19/2004	A330*	RB211TRENT77		FK20824	LP FUEL

(CAN) FUEL LEAK DISCOVERED IN THE AREA COVERED BY AD (CAMPAIGN) NR 9-0065.

CA040908001	AIRBUS	RROYCE	CONNECTOR	BURNED
9/4/2004	A330243	RB211TRENT77		POWER UNIT

(CAN) DURING DESCENT, FLIGHT ATTENDANT HAS REPORTED SPARK COMING OUT OF THE FASTEN SEAT BELT/NO SMOKING SIGN AT ROW 31 DEF. AFTER INVESTIGATION, FOUND THE READING LIGHT POWER UNIT BURNED AT ROW 31 DEF. POWER UNIT WAS DEACTIVATED AND REPLACED AT NEXT MAINTENANCE STATION. DURING INVESTIGATION, FOUND A LOT OF CONDENSATION IN THE CABIN CEILING ABOVE THE POWER UNIT. INSULATION WAS ALSO FOUND WET. PROBLEM IS UNDER REVIEW WITH ENGINEERING AND MFG.

CA040405AAA	AIRBUS	RROYCE	DUCT	RUPTURED
4/2/2004	A330342	RB211TRENT77	F212529300000	AIR CON

(CAN) FLIGHT CREW REPORTED A RUMBLE NOISE HEARD FROM COCKPIT AND CABIN CONTINUOUSLY WITH BLEED AIR / AIR CONDITIONING. UNABLE TO ISOLATE WITH AIR CONDITIONING PACKS. DURING INVESTIGATION, MAINTENANCE FOUND THE GROUND AIR CONDITIONING DUCT (COMPOSITE) RUPTURED AT THE AIR CONDITIONING PLENUM. DUCTING ASSEMBLY REPLACED.AT THIS TIME WE RE UNABLE TO DETERMINE IF DUCT WAS DAMAGE DURING PREVIOUS INSTALLATIONOR COMPOSITE MATERIAL FAILURE. DUCTING WILL BE SENT TO AIRBUS FOR EVALUATION.

2004FA0000759	AIRPTS	LYC	LINE	LEAKING
8/20/2004	A9B	IO540*	18586	FUEL SYSTEM

IT APPEARS THAT THE FUEL LINE WAS LEAKING FUEL AT THE ATTACH POINT OF THE STEEL BRAIDED LINE TO THE FITTING. THE FUEL LINE IS ATTACHED AT THE FIRE WALL AND GOES TO THE INLET SIDE OF THE ENGINE DRIVEN FUEL PUMP. (CE07200416055)

2004FA0000784	AIRTRC	PWA	CRANKSHAFT	CRACKED
5/15/2004	AT301	R1340AN1	270458	ENGIEN

AC WAS ON FERRY FLIGHT, PILOT REPORTED GETTING OIL ON WINDSHIELD. OIL BEGAN TO GET WORSE; REDUCED POWER, AC STARTED VIBRATING SEVERELY. POWER WAS REDUCED FURTHER AND VIBRATION ALSO REDUCED. PILOT LANDED AC IN UNPLANTED FIELD. AC SKIPPED OVER TERRACE AS SLOWED TO STOP. TAIL CAME UP AND AC WENT OVER ON NOSE. PROP STRUCK GROUND AND SEPARATED FROM ENGINE. CRANKSHAFT HAD BROKEN IN PROP THRUST BEARING AREA. EXAM OF CRANKSHAFT SHOWS FATIGUE CRACKING. BLADES DAMAGED APPROX 25 INCHES FROM TIPS. PROP WAS INSTALLED AFTER BEING O/H. ENGINE RUN AND GROUND CHECKS COMPLETED. PROP WAS IN SERVICE .5 HOUR BEFORE FAILURE OF CRANKSHAFT. (CE07200414081)

PAZR20041011	AMD	GARRTT	HOSE	FAULTY
10/14/2004	FALCON10	TFE73121C	FAL1005D	ANTI ICE SYS

DURING ENGINE RUN-UP, PHYSICALLY CHECKED LEADING EDGE FOR HEAT AND FOUND COLD. RT IB ANTI-ICE FLEXHOSE WAS REMOVED AND VISUALLY INSPECTED. FOUND THE INNER LINING HAD COLLAPSED, THUS, BLOCKING AIRFLOW THROUGH HOSE. HOSE WAS REPLACED WITH NEW. THIS FLEX HOSE, P/N FAL1005D, IS REFERENCED IN MFG SB NR F10-A246.

PAZR20041015	AMD	GARRTT	HOSE	FAULTY
10/14/2004	FALCON10	TFE73121C	FAL1005D	ZONE 600

DURING ENGINE RUN-UP, PHYSICALLY CHECKED LEADING EDGE FOR HEAT AND FOUND COLD. RT IB ANTI-ICE FLEXHOSE WAS REMOVED AND VISUALLY INSPECTED. FOUND THE INNER LINING HAD COLLAPSED, BLOCKING AIRFLOW THROUGH HOSE. HOSE WAS REPLACED WITH NEW. THIS FLEX HOSE, PN FAL1005D, IS REFERENCED IN SB F10-A246.

CA040827007	AMD	GE	MOTOR	MALFUNCTIONED
12/4/2003	FALCON20	CF7002D2	27529030	VALVE

(CAN) THE AIRCRAFT HAD BEEN THROUGH A MAJOR INSPECTION AT CONTRACTOR 4 MONTHS PREVIOUS. THE VALVE HAD BEEN REMOVED FOR ACCESS TO OTHER AREAS. THE PILOT REPORTED CIRCUIT BREAKER POPPED DURING TAXI. PILOT RETURNED TO HANGAR. INVESTIGATION FOUND RODS CONNECTED TO VALVES WERE MISRIGGED, RESULTING IN JAMMING OF RODS, RESULTING IN OVERLOADING OF MOTOR, CAUSING CIRCUIT BREAKER TO POP. VALVE ASSEMBLY REPLACED, RODS RIGGED IAW MM, FUNCTION CHECKED NORMAL.

CA040907006	AMD	GARRTT	ENGINE	LEAKING
9/7/2004	FALCON900	TFE7315BR		

(CAN) FOLLOWING INSPECTION (OVERHAUL) OF ENGINES, OIL WAS SEEN DRIPPING FROM THE BREATHER VENT AFTER ENGINES SAT FOR 3-4 DAYS. AT REQUEST OF OVERHAUL AGENCY AND THE MFG, A PROCEDURE WAS FOLLOWED TO ENSURE CORRECT OIL LEVELS IN ENGINES. ENGINES WERE FOUND TO BE SERVICED TO CORRECT LEVEL BUT PROBLEM PERSISTED. THE OIL LOSS CAN BE SUBSTANTIAL (UP TO 500 ML. OVERNIGHT IAW ENGINE) AND POSSIBLE PROBLEMS DUE TO THE FLOODING OF THE GEARBOX WITH OIL PRIOR TO ENGINE START, HAVE NOT BEEN ASSESSED. INFORMED BY THE MFG THAT AT LEAST 10 ENGINES HAVE SEEN PROBLEM BUT TO DATE NO COMMON THREAD HAS BEEN IDENTIFIED TYING THEM TOGETHER, IE. SAME REPAIR AGENCY, SAME DATE OF REPAIR, MOD STATUS.

2004FA0000713	AMRGEN	LYC	CARBURETOR	BINDS
9/16/2004	AA5B	O360*	HA6	ENGINE

ON FINAL APPROACH TO THE AIRPORT, REDUCED POWER AND LOWERED THE FLAPS. TRIED TO ADD POWER, THE THROTTLE BOUND. REMOVED THE THROTTLE CABLE AND IT'S MOVEMENT WAS FREE. THEN ACTUATED THE THROTTLE ARM ON THE CARBURETOR AND BINDING COULD BE FELT ON THE LAST .333 OF THE MOVEMENT. CALLED THE FACTORY AND THEY SAID THERE WERE OTHER OCCURRENCES OF THIS PROBLEM WITH THIS MODEL CARBURETOR. THIS IS A NEW AIRPLANE WITH A NEW CARBURETOR.

2004FA0000714	AMRGEN	LYC	CARBURETOR	BINDS
9/16/2004	AA5B	O360*	HA6	ENGINE

ON FINAL APPROACH TO THE AIRPORT THE REDUCED POWER AND LOWERED THE FLAPS. WHEN HE TRIED TO ADD POWER, THE THROTTLE BOUND. REMOVED THE THROTTLE CABLE AND IT'S MOVEMENT WAS FREE. ACTUATED THE THROTTLE ARM ON THE CARBURETOR AND BINDING COULD BE FELT ON THE LAST .333 OF THE MOVEMENT. REPORTED THAT THE FACTORY AND THEY SAID THERE WERE OTHER OCCURRENCES OF THIS PROBLEM WITH THIS MODEL CARBURETOR. THIS IS A NEW AIRPLANE WITH A NEW CARBURETOR.

2004FA0000734	AMTR	CONT	PANEL	MISSING
9/22/2004	LANCAIRLEGAY	IO550*		WING

DURING A LT TURN IN A PLEASURE FLIGHT; THE TOP LT IB PANEL FLEW OFF AND THERE WAS LOSS OF LIFT IN LT WING. IN TRYING TO LAND, HAD TO MAINTAIN HIGH AIRSPEED, MADE A HARD LANDING. NOSE WHEEL BROKE OFF, PROPELLER WAS DAMAGED. MISSING PANEL IS JUST OB OF THE FUSELAGE, APPROX. 3 FEET BY 3 FEET, JUST ABOVE THE LT MAIN LANDING GEAR. PANEL IS A CARBON PILE MATERIAL ATTACHED TO STRUCTURE BY THE BONDING OF EPOXY GLUE. PILOT/ BUILDER/ OWNER REPORTED EPOXY WAS A JEFFCO EPOXY, 3176, 30 MINUTES. PANEL ON RT WING WAS FINISHED WITHIN A COUPLE WEEKS OF THE LT WING. IAW OWNER, NO REPAIRS WILL BE STARTED UNTIL LANCAIR HAS INSPECTED THE AIRCRAFT. AS OF THIS DATE THE MISSING PANEL HAS NOT BEEN LOCATED.

AUS20040463	BAC	LYC	WIRE	BURNED
5/31/2004	146100A	ALF502R5		WINDSHIELD HEAT

(AUS) RT WINDSHIELD HEATING SYSTEM WIRING CABLE DAMAGED AND SHORTING TO EARTH IN AREA NEAR TERMINAL BLOCK.

AUS20040501	BAG		FIREWALL	CRACKED

6/10/2004	BAE146300A			FUSELAGE

(AUS) APU FIREWALL CRACKED AT 7 O'CLOCK POSITION. FOUND DURING INSPECTION IAW AD/BAE146/053.

AUS20040512	BAG	LYC	RIB	CRACKED
6/15/2004	BAE146300A	ALF502R5	HC546J0032	NACELLE/PYLON

(AUS) NR 1, NR 3 AND NR 4 PYLONS HAD NR 4 RIB CRACKED IN THE LOWER FLANGE RADIUS. PYLON NR 1, CRACK LENGTH 22.86MM (0.9IN) PYLON NR 3, CRACK LENGTH 12.7MM (0.5IN) PYLON NR 4, CRACK LENGTH 20.32 (0.8IN).

AUS20040379	BAG	LYC	SEAT TRACK	CORRODED
5/5/2004	BAE146300A	ALF502R5		FUSELAGE

(AUS) CABIN FLOOR STRUCTURE CONTAINED LEVEL 2 CORROSION IN THE FOLLOWING AREAS: PN HC536H1063-001 RT OB SEAT TRACK END ON UPPER SURFACE. AREA OF CORROSION MEASURED 38.1MM (1.5IN) IN LENGTH BY 12.7MM (0.5IN) IN WIDTH WITH A DEPTH OF 2.54MM (0.10IN). CORROSION LOCATED IN ZONE 222 AT FRAME 18 BETWEEN STATIONS 216.6 AND 240 RT BL43 RT. REPORTED CAUSE OF DAMAGE LAVATORY/GALLEY SPILL. PN HC536H1063-002 LT OB SEAT TRACK ON UPPER SURFACE AT FORWARD END. AREA OF CORROSION MEASURED 25.4MM (1IN) IN LENGTH BY 6.35MM (0.250IN) IN WIDTH WITH A DEPTH OF 1.066MM (0.042IN). CORROSION LOCATED IN ZONE 221 ON FRAME 18 AT BL 42 LT. REPORTED CAUSE OF DAMAGE LAVATORY/GALLEY SPILL.

AUS20040482	BAG	GARRTT	ENGINE	OVERTEMP
5/18/2004	JETSTM3201	TPE33112UHR	310338025	LEFT

(AUS) LT ENGINE EGT ROSE TO APPROXIMATELY 720 DEGREES WITH A REDUCTION IN TORQUE AND FUEL FLOW. DUE TO THE EXCESSIVE EGT THE ENGINE WAS REMOVED FOR AN OVERTEMP INSPECTION. NO RESULTS TO DATE.

2004FA0000788	BALWKS		PULLEY	STICKING
5/1/2004	FIREFLY11			ENVELOPE

DEFLATION CWE PULLEY CATCHES ON ENVELOPE THROAT WEBBING AND NOMEX SKIRT CAUSING DEFLATION PANEL TO REMAIN OVEN DURING DESCENTS AND CAUSES DIFFICULTY RETURNING TO LEVEL FLIGHT WHEN HEATING ENVELOPE. THE PULLEY EVENTUALLY FREES ITSELF WHEN ENOUGH HEAT IS APPLIED AND MORE TENTION IS ADDED TO THE LINE. THE PULLEY RELEASES WITH A SNAP WHICH ALSO JOLTS THE AIRCRAFT AND PASSENGERS.

2004FA0000766	BALWKS		VALVE	DAMAGED
8/8/2004	FIREFLY8B15		F8B15	VALVE WINDOWS

NOTICED DURING PREFLIGHT INSPECTION 2 OF 4 VALVE WINDOWS SHOWED CRACKING ON EDGES AND CRACKS. TRANSVERSE PASSED SEAMS INTO FLIGHT LOAD AREA. FLIGHT ABORTED.

2004FA0000765	BALWKS		VALVE	DESTROYED
8/2/2004	FIREFLY9		F9B15	BALLOON

DURING FLIGHT, 3 OF 4 VALVE WINDOWS FAILED BY SEPARATING AT SEAMS. UPON SEPARATION, REMAINING WINDOW MATERIAL MELTED AWAY, THUS CREATING 3 LARGE HOLES IN THE TOP OF THE BALLOON, WHICH RAISED INTERNAL TEMP, AND CAUS HIGH (EXTREME) FUEL CONSUMPTION AND RENDERED THE AIRCRAFT UNCONTROLABLE AND UNAIRWORTHY. ALL ABOVE WITHIN 42 MINUTES OF FLIGHT.

CA040817006	BBAVIA	LYC	ATTACH FITTING	CHAFED
8/16/2004	7ECA	O235K2C	31692	WING

(CAN) THE STRUT ATTACH FITTING ON FORWARD SPAR OF THE RH WING WAS CHAFED BY THE LEADING EDGE SKIN, WHICH HAD NOT BEEN TRIMMED ADEQUATELY DURING MANUFACTURE. THE CHAFING LEFT A SMALL DIMPLE THAT COULD LEAD TO CRACKING OF THE FITTING.

2004FA0000773	BBAVIA	LYC	LINE	CHAFED
6/27/2004	7GCBC	O320*		FUEL SYSTEM

IN COMPLIANCE WITH MFG SL NR 419. FOUND FUEL LINE CHAFED OVER .5000 WAY THROUGH TUBE WALL. CAUSED BY FLAP ACTUATOR. CHAFE WAS NOT VISIBLE. FOUND BY FEELING. RECOMMEND MFG RUN LINE STRAIGHT THROUGH FUSELAGE WALL THEN ROUTE AFT. ALSO RECOMMEND MAKING INTO AN AD.

CA040816001	BBAVIA	LYC	CONTROL CABLE	FRAYED
8/16/2004	8GCBC	O360C2E	19023	FLAP CONTROL

(CAN) LT AND RT CABLES FRAYED AT WING ROOT PULLEYS. CABLES REPLACED WITH GALVANIZED.

AUS20040474	BEECH	PWA	CIRCUIT BOARD	FAULTY
5/25/2004	1900C	PT6A65B	10136458211	AIRFOIL ANTI-ICE

(AUS) AIRFRAME DE-ICE SYSTEM PRINTED CIRCUIT BOARD (PCB) TIMER INOPERATIVE.

CA040722004	BEECH	PWA	PWA	TURBINE BLADES	MISMANUFACTURED
7/13/2004	1900D	PT6A67D	PT6A67D	311899101	HOT SECTION

(CAN) THE ENGINE HAD LANDED AFTER A FLIGHT AND WAS LOADED WITH FREIGHT. AFTER AN UNSUCCESSFUL START ATTEMPT (ONLY 5 PERCENT NG REACHED), A STARTER-GENERATOR WAS REPLACED. THE ENGINE WOULD NOT START SINCE IT WAS SEIZED. A SUBSEQUENT INVESTIGATION SHOWED THAT THE AFT SIDE OF THE CT DISK HAD RUBBED AGAINST THE CT STATOR AIR SEAL. THE ROOT CAUSE WAS BELIEVED TO BE TIGHT CLEARANCES BETWEEN THE TWO COMPONENTS DUE TO A STEP AT THE INTERFACE OF THE FIR TREE AND THE BLADE PLATFORM. THE STEP APPEARS TO BE MATERIAL LEFT OVER FROM AN INCOMPLETE MACHINING PROCESS DURING MANUFACTURE. OTHER BLADES OF THE SAME PN DO NOT HAVE THE STEP. CT BLADE PN 3118591-01 IS ALSO BELIEVED TO BE AFFECTED.

CA040824005	BEECH	PWA	TRANSCEIVER	UNSERVICEABLE
8/24/2004	1900D	PT6A67D	6226152001	NR 1 COMMS

(CAN) AFTER CLEARING RUNWAY AND PROCEEDING WITH AFTER LANDING CHECKS COMM NR 1 STARTED TO SMOKE. CAPTAIN STOPPED THE AIRCRAFT AND CALLED FROM ELECTRICAL SMOKE CHECKLIST. LIST COMPLETED, THE AVIONICS WAS SHUT DOWN, AND THE SMOKE CEASED. COMM NR 1 ISOLATED BY PULLING THE CIRCUIT BREAKER AND THE AVIONICS WAS RESTORED TO CONTACT ATC. EMERGENCY VEHICLES ESCORTED A/C TO GATE.

CA040506004	BEECH	PWA	CLEVELAND	RIVET	BROKEN
5/4/2004	200BEECH	PT6A41	30162	10500900	BRAKE PAD

(CAN) DURING INSPECTION IT WAS NOTICED THAT ONE OF THE RIVETS THAT RETAIN THE BRAKE PAD ON TO THE BRAKE ASSEMBLY WAS BROKEN, THE BRAKE ASSEMBLY WAS REPLACED AND THE AIRCRAFT RETURNED TO SERVICE. THIS IS THE THIRD OCCURRENCE IN THE LAST FEW MONTHS, (SDR 20030925005 AND 20040224003) ALL HAPPENED ON NEW BRAKE ASSEMBLIES SUPPLIED BY THE SAME MANUFACTURER. SUSPECT THAT THEY MAY HAVE A BAD BATCH OF RIVETS, AS A PRECAUTION WILL BE REPLACING THE RIVETS IN THE REMAINING BRAKE ASSEMBLIES WITH S/N ABOVE 1500.

CA040901009	BEECH	PWA	MOTOR	FAILED
9/16/2004	200BEECH	PT6A41	100384040	TE FLAPS

(CAN) SHORTLY AFTER AIRCRAFT DEPARTURE, THE AIRCRAFT RETURNED DUE TO FLAP PROBLEMS. THE FLAP MOTOR WAS REPLACED AND THE AIRCRAFT WAS RETURNED TO SERVICE.

CA040819004	BEECH	PWA	SCREW	BENT
8/7/2004	200BEECH	PT6A41	NAS51733	DOOR LATCH

(CAN) WHILE IN CRUISE OF FL270 THE PILOT HEARD A BANG AND EXPERIENCED A PARTIAL LOSS OF PRESSURIZATION. HE INITIATED AN EMERGENCY DESCENT AND LANDED AT DESTINATION WITHOUT INCIDENT. UPON INVESTIGATION IT WAS NOTED THAT THE FORWARD UPPER LATCH PLATE HAD SHIFTED AND THAT ONE OF THE FOUR ATTACH SCREWS WAS MISSING. THE REMAINING THREE SCREWS, ONE WAS BENT. THERE WERE NO VISIBLE IDENTIFICATION MARKINGS ON THE REMAINING SCREWS BUT THEY APPEAR TO BE AN507 SCREWS RATHER THAN THE REQUIRED NAS517. THE FORWARD UPPER LATCH HOOK BELLCRANK, P/N 50-430031-15, WAS ALSO DAMAGED.

AUS20040490	BEECH	PWA	WINDSHIELD	CRACKED
5/29/2004	200BEECH	PT6A41		COCKPIT

(AUS) PILOTS WINDSHIELD CRACKED ON INSIDE LAMINATE. OUTER LAMINATE WAS INTACT.

AUS20040504	BEECH	PWA	SEAL	LEAKING
6/10/2004	200BEECH	PT6A42	3022376	ENGINE

(AUS) ENGINE STARTER-GENERATOR OIL SEAL LEAKING.

2004FA0000791	BEECH	BEECH	SKIN	CRACKED
10/1/2004	58		96610006617	ELEVATOR

ELEVATOR SKIN CRACKED WHERE CENTER RIB AND TRIM TAB HINGE BRACKET INTERSECT. THESE SKINS ARE MADE FROM MAGNESIUM AND ARE PRONE TO CRACKING IN THIS AREA. THIS REPAIR STATION HAS REPLACED NUMEROUS SKINS DUE TO THIS DEFECT.

AUS20040470	BEECH	LYC	LANDING GEAR	COLLAPSED
5/31/2004	76	IO360A1G6		NOSE

(AUS) DURING INSPECTION OF NOSE LANDING GEAR FOR A NOSE LANDING GEAR FAULT, THE NLG COLLAPSED, TRAPPING THE AME BETWEEN THE NOSE CONE AND THE GROUND. DUE TO THE QUICK REACTION OF WORKMATES, THE AME WAS RELEASED FROM BENEATH THE AIRCRAFT AND ADMITTED TO HOSPITAL WITH MINOR INJURIES. THE REASON FOR THE NLG COLLAPSE IS STILL BEING INVESTIGATED.

2004FA0000563	BEECH	CONT	CLIP	FAILED
5/4/2004	95A55	IO470*	RA1039C	THROTTLE CONTROL

LT THROTTLE CONTROL LEVER FAILED TO CHANGE POWER DURING CHANGE FROM TAKE-OFF TO CRUISE POWER SETTING. IT WAS DISCOVERED THT THE CRIMPING HAS FAILED ON THE CLIP THROTTLE CONTROL PN RA1039C WHICH IS PART OF THE THROTTLE CABLE ASSY PN 50-389012-15. THIS CLIP IS LOCATED ON THE ENGINE SIDE OF THE CONTROL CABLE AND IS ATTACHED TO BRAKE THROTTLE CONTROL PN 96-940021.

2004FA0000753	BEECH	CONT	VIBRATOR	BURNED
7/23/2004	95B55	IO470L	10357487242	MAGNETO

JUST AFTER DEPARTURE A BURNING ODOR WAS NOTICED FROM THE FRONT OF THE AIRCRAFT. A STANDARD FLIGHT PATTERN BACK TO RUNWAY WAS EXPEDITED. LATER FINDING THE IGN VIBRATOR HAD STARTED A FIRE IN THE FRONT PILOTS LOWER FIREWALL PANEL. A GEAR UP LANDING BECAME THE RESULT OF THE ELECTRICAL BURN UP. THE FINAL PART OF THE FLIGHT WAS CONDUCTED AS AN EMERGENCY. (WP11200403343)

2004FA0000768	BEECH	CONT	VIBRATOR	BURNED
7/23/2004	95B55	IO470L	10357487242	LT CTR FIREWALL

PILOT DEPARTED ON MAINT TEST FLIGHT ON CROSS WIND. PILOT NOTICED BURNING ODOR AS PILOT TURNED BASE LEG TO LAND ON DEPARTURE RUNWAY, AC HAS SMOKE IN COCKPIT. AC WAS LANDED GEAR UP. AFTER AREA OF PILOT SIDE RUDDER PEDALS WAS NOTICED AND PUT OUT. ON FURTHER INVESTIGATION IT WAS FOUND THAT IGNITION VIBRATOR (10-357487-242) HAD SHORTED OUT AND CAUSED FIRE THAT BURNED BEHIND INSTRUMENT PANEL. BEEN DETERMINED FROM AC SRM THAT SN TC1 THRU TC1028 HAVE NO CIRCUIT PROTECTION IN IGNITION CIRCUIT. IGNITION VIBRATOR HAS 28V ON IT AT ACC TIMES AND SWITCH PROVIDES GROUND TO COMPLETE CIRCUIT. ANY MALFUNCTION OF SWITCH OR SHORT IN WIRING WOULD CAUSE POINTS TO CLOSE AND IGNITION VIBRATOR TO BE ENGAGED. (WP11200403343)

HN8R200400001	BEECH	CONT	CONNECTING ROD	BENT
10/5/2004	95B55	IO520C	646778	RT ENGINE

DURING DIFFERENTIAL COMPRESSION CHECK FOUND NR 6 CYLINDER 20/80. REMOVED CYLINDER AND DISCOVERED THE CONNECTING ROD BENT. REPLACED THE ENGINE.

CA040723007	BEECH	PWA	SWITCH	STUCK
7/22/2004	99	PT6A28	V31	RT POWER LEVER

(CAN) ON CLIMB THE PILOT REPORTED THE GEAR IN TRANSIT LIGHT WAS ON. LANDING GEAR WAS EXTENDED WITH NO DIFFICULTIES AND MAINTENNACE WAS CONTACTED. AIRCRAFT RETURNED TO BASE. AIRCRAFT WAS PUT ON JACKS AND THE RT POWER LEVER 70 PERCENT SWITCH WAS FOUND STUCK. SWITCH WAS REPLACED AND GEAR SWINGS CHECKED SERVICIBLE.

CA040805010	BEECH	PWA	WARNING LIGHT	ILLUMINATED
8/31/2004	99A	PT6A28		LT ENGINE

(CAN) ON START-UP, THE LT FIRE WARNING LIGHT ILLUMINATED BEFORE FUEL WAS INTRODUCED TO THE ENGINE. PILOT ABORTED START. MAINTENANCE CHECKED ALL APPLICABLE SYSTEMS AND FOUND NO FAULTS. NO EVIDENCE OF FIRE WAS FOUND. MULTIPLE STARTS WERE CARRIED OUT AND NO FAULTS FOUND. A/C WAS RETURNED TO SERVICE.

2004FA0000741	BEECH	CONT	BEARING	STICKING
8/16/2004	A36	IO550*	805241051	CONROL YOKE

PILOT REPORTS THAT THE AILERON CONTROL LOCKS UP AND WILL NOT TURN IN EITHER DIRECTION AND THEN RELEASES AND RETURNS TO NORMAL. UPON INSPECTION OF AILERON SYSTEM, IT WAS FOUND THAT THE CONTROL YOKE CONNECTION BEARING WAS STICKING AND WOULD NOT RELEASE UNTIL THE YOKE WAS MOVED EITHER FORWARD OR AFT. MFG TECH SUPPORT, WHO STATED THAT THE BEARING IS A 100 HOUR LUBRICATION ITEM AND THAT LUBRICATION SHOULD CLEAR UP THE PROBLEM. THE PART WAS LUBRICATED AND NO BINDING OF THE CONTROL COLUMN WAS FOUND. AC RETURNED FOR REPLACEMENT OF BEARING.

2004FA0000798	BEECH	CONT	CYLINDER	CRACKED
9/1/2004	A36	IO550B		ENGINE

PERFORMED ROUTINE ENGINE CYLINDER COMPRESSION CHECKS AS REQUIRED IAW ANNUAL INSPECTION PROCEDURES. FOUND NR 1 AND 3 CYLINDERS PASSED COMPRESSION

MINIMUMS IAW MFG SPEC, IE: NR1 66/80, NR3 51/80. DURING COMPRESSION CK, THE TECH OBSERVED AIR ESCAPING FROM CYL AT AREA OF FUEL INJECTORS AT EACH CYLINDER. UPON FURTHER INSP THE TECH VISUALLY FOUND CRACKS BETWEEN THE BARREL AND THE HEAD OF THE CYLINDERS BETWEEN TWO COOLING FINS. COMPRESSION CHECKS FOR ALL OTHER CYLINDERS PASSED AND NO EXTERNAL LEAKS NOTED. RESEARCH BY INSPECTION FOUND THAT THIS ENGINE SN WAS NOT COVERED BY AD, WHICH CONTAINS FAILURES VERY SIMILAR TO THIS FAILURE. AD COVERS SN UP TO 675278, WHICH DOES NOT INCLUDE THIS SN OF 675303.

2004FA0000750	BEECH	CONT	BOLT	INCORRECT
8/3/2004	A36TC	TSIO520*		LT WING

AFT UPPER LT WING ATTACH BOLT FOUND INSTALLED AND PRESUMABLY TORQUED WITHOUT CHAMFERED WASHER UNDER HEAD. DAMAGE TO BATHTUB FITTING UNKNOWN AT THIS TIME.

2004FA0000794	BEECH	PWA	INDICATOR	MALFUNCTIONED
10/8/2004	B200	PT6*	ST3400	TAWS/RMI

THE TAWS/RMI SHOWS SIGNIFICANT BEARING ERRORS ON HEADINGS GREATER THAN 350 DEGREES OR LESS THAN 0 DEGREES. THIS PROBLEM WAS DISCOVERED IN FLIGHT AND VALIDATED THROUGH GROUND TESTING OF NUMEROUS UNITS. PROBABLE CAUSE OF MALFUNCTION IS SOFTWARE. THE ST3400 TAWS/RMI IS NOT RECOMMENDED FOR NAVIGATION AT THIS TIME.

2004FA0000738	BEECH	PWA	TURBINE	SHIFTED
9/9/2004	B200	PT6A41	3053094	HOT SECTION

NEW STYLE PN SEGMENT INSTALLED AT HSI 258 HOURS PRIOR. THIS NEW STYLE SEGMENT SHIFTS AFT RESULTING IN HOT SECTION FAILURE. VERY COMMON WITH THIS PN SEGMENT, MFG NEEDS TO CHANGE DESIGN.

CA040805016	BEECH	PWA	SENSOR	FAULTY
8/4/2004	B200	PT6A42	3001129	FIRE DETECTOR

(CAN) UPON REGULAR PHASE INSPECTION, THE FIRE DETECTION SYSTEM FAILED TO TEST CORRECTLY ON RT ENGINE. TROUBLESHOT AND FOUND SENSOR AT FAULT. REPLACED SENSOR, OPERATION RESTORED TO NORMAL.

CA040805017	BEECH	PWA	CROSS TIE	CRACKED
8/5/2004	B300B350C	PT6A60A	97430000150	FUSLEAGE

(CAN) UPON REMOVING THE LT EMERGENCY EXIT FOR UNRELATED ROUTINE MAINTENANCE, PERSONNEL DISCOVERED A CRACK IN THE LT FUSELAGE CROSSTIE AT STATION 201.775. THE CRACK LOCATION IS NEAR THE LOWER AFT CORNER OF THE LT EMERGENCY EXIT HATCH. CRACK IS APPROX .375 INCH IN LENGTH AND TRAVELS FROM THE MATERIAL EDGE TO THE NEAREST RIVET HOLE AND SLIGHTLY PAST. CROSSTIE TO BE REPLACED.

CA040806003	BEECH	PWA	WINDSHIELD	BROKEN
8/5/2004	B300B350C	PT6A60A	1013840212	COCKPIT

(CAN) AT CRUISE ALTITUDE THE LT WINDSHIELD SHATTERED. FLIGHT CREW DESCENT TO 16000 FEET ALTITUDE AND LANDED AT SAFELY. WINDSHIELD ASSY WILL BE REPLACED.

CA040809006	BEECH	PWA	HINGE	CRACKED
8/9/2004	B300B350C	PT6A60A	50430043547	PAX DOOR

(CAN) INSPECTION OF THE CABIN DOOR HINGE REVEALED CRACKING OF THE DOOR HALF AFT TWO SECTIONS. FUSELAGE HINGE HALF UNDAMAGED. DOOR HINGE HALF AND PIN TO BE REPLACED NEW.

CA040723001	BEECH	PWA		BEARING	FAILED
7/22/2004	B300B350C	PT6A60A	23085001		STARTER GEN

(CAN) WITH AIRCRAFT IN CRUISE FLIGHT A (LT GEN TIE OPEN) ANNUNCIATOR LIGHT CAME ON. GENERATOR TIE RESET AS IAW CHECK LIST. SHORTLY THEREAFTER THE (LT GEN TIE OPEN) CAME ON FOLLOWED BY THE (LT GEN FAIL) LIGHT ANNUNCIATOR. AIRCRAFT SECURED IAW CHECK LIST AND AIRCRAFT RETURNED TO BASE. SHORTLY BEFORE LANDING THE AIRCRAFT EXPERIENCED LT ENGINE VIBRATION AND TORQUE FLUCTUATIONS AT LOW POWER SETTINGS. AIRCRAFT LANDED UNEVENTFUL. MAINTENANCE REMOVED SUSPECT GENERATOR AND FOUND END BEARING FAILED. GENERATOR REPLACED WITH OVERHAULED UNIT. AIRCRAFT GROUNDRUN, VIBRATION AND TORQUE APPEARED NORMAL. AIRCRAFT RETURNED TO SERVICE.

2004FA0000797	BEECH	LYC	LYC	VALVE	BROKEN
7/23/2004	B60	TIO541*		60009	CYLINDER

WITHIN THE LAST 3 TO 3.5 HOURS OF FLIGHT, THE PILOT NOTED THE ENGINES WERE RUNNING ROUGH AND FLEW TO OUR FACILITY FOR DISCOVERED THAT THE INTAKE VALVE KEEPER KEYS WERE BROKEN, THE NR 6 CYLINDER HAD A STUCK EXHAUST VALVE. THE PILOT REPORTED HAVE THE NR 6 CYLINDER REPLACED WITH A REMANUFACTURED UNIT AT ANOTHER FACILITY FAIRLY RECENTLY. ON THE LT ENGINE, THE NR 4 INTAKE VALVE STEM WAS DISCOVERED TO BE BROKEN.

CA040816009	BEECH	PWA	BEARING	FAILED
8/12/2004	B99	PT6A28	950476	MLG WHEEL

(CAN) LT IB WHEEL ASSY INNER BEARING FAILED, ALLOWING WHEEL TO MOVE SUFFICIENT TO ALLOW CONTACT OF THE INNER RIM TO NON ROTATING BRAKE COMPONENTS DAMAGING INNER HALF OF WHEEL ASSY.

2004FA0000735	BEECH	PWA	WHEEL	CRACKED
9/7/2004	C90	PT6*	40170A	MLG

INNER WHEEL HALF OF WHEEL ASSEMBLY PN 40-170A, SN 10, HEAT LOT NR 283 WAS REJECTED DURING EDDY CURRENT INSPECTION FOR CRACKS IN EXCESS OF 0.010 INCH. INDICATIONS WERE FOUND IN THE AREA OF BEAD SEAT OF THE INNER HALF OF THE WHEEL ASSEMBLY ONLY, NO INDICATIONS WERE FOUND ON THE OUTER WHEEL HALF OF THE ASSEMBLY.

CA040917004	BEECH	PWA	SWITCH	FAILED
8/30/2004	C90A	PT6A21	1013841377	CONTROL HANDLE

(CAN) LANDING GEAR FAILED TO EXTEND WHEN SELECTED DUE TO FAILURE OF SWITCH IN LANDING GEAR CONTROL HANDLE.

2004FA0000715	BEECH	CONT	RELAY	FAILED
8/26/2004	F33A	IO520*	SM50D7	MLG

LANDING GEAR WOULD NOT RETRACT IN FLIGHT. AIRCRAFT WAS PLACED ON JACKS AND THE LANDING GEAR CYCLED IAW MM. INSPECTION OF THE SYSTEM FOUND THAT THE DYNAMIC RELAY WOULD STICK IN THE DOWN POSITION. A NEW DYNAMIC RELAY WAS INSTALLED AND THE SYSTEM CHECKED NORMAL. SUGGEST REPLACING RELAY WITH SOLID STATE BOARD.

2004FA0000718	BEECH	CONT	STARTER	FAILED
7/27/2004	F33A	IO520BB	65556624V	ENGINE

DURING ATTEMPTING TO START THE ENGINE, THE STARTER WOULD NOT TURN ENGINE TO START. MAINTENANCE TECHNICIAN FOUND THAT THE STARTER WOULD NOT START THE ENGINE.

REPLACED STARTER AND ENGINE STARTED.

2004FA0000719	BEECH	CONT	OIL FILTER	TORN
7/28/2004	F33A	IO520BB	ES48109	ENGINE

WHILE THE MECHANIC WAS INSPECTING THE FILTER ELEMENT FOR METAL PARTICLES, NOTICED THE FILTER WAS TEARING AT THE SEAMS. PROBABLE CAUSE UNKNOWN, MFG HAS BEEN NOTIFIED.

2004FA0000776	BEECH	CONT	IMPULSE COUPLING	BROKEN
7/13/2004	F33A	IO520BB	M3050	LT MAGNETO

PILOT REPORTED EXCESSIVE DROP ON LT MAGNETO ON ENGINE RUN UP. ON FURTHER INVESTIGATION THE MECHANIC FOUND THE IMPULSE COUPLING SPRING BROKEN. PROBABLE CAUSE AT THIS TIME IN UNKNOWN, AND THERE IS NO RECOMMENDATIONS AT THIS TIME EITHER.

2004FA0000805	BEECH	PWA	BLOWER	OVERHEATED
10/1/2004	F90	PT6A60	903840311	CABIN AIR

SMOKE COMING FROM UNDER PILOTS FLOORBOARDS. UPON INVESTIGATION FOUND ENVIRONMENTAL BLOWER MOTOR TOO HOT TO TOUCH. AIRCRAFT LANDED SAFE WITH FIRE DEPARTMENT FOLLOWING. INSPECTION FOUND NO TIME LIMIT ON BLOWER OR MOTOR. (EA23200410155)

2004FA0000742	BEECH	CONT	NUT	CRACKED
1/9/2001	V35B	IO520BA		RUDDER

ON ANNUAL INSPECTION OF RUDDERS AT THE CENTER ATTACH FITTING AFT SPAR MOUNT, SLIGHT RUST WAS NOTED. FURTHER INSPECTION REVEALED 5 OUT OF THE 8 ATTACH NUTS ON THE SPAR ATTACH WERE CRACKED THROUGH TO THE BOLT THREADS. THESE NUTS ARE CRACKED ONLY O THE BOTTOM AREA OF NUT. LOOKING DOWN AT THE ATTACH NUTS WILL NOT SHOW CRACKS. TELL TALE RUST ON THE BOLT THREADS IS THE ONLY TOP SIDE INDICATOR. RECOMMEND THAT NAS679A NUT BE INSPECTED OR REPLACED WITH MS21042 OR MS21083N. THESE NUTS ARE USED IN OTHER LOCATIONS ON THE PLANE. EXPOSED NUTS ARE MORE SUSCEPTIBLE TO CRACKING.

CA040901003	BELL	LYC	BLADE	CRACKED
7/4/2004	204B	T5313B	204011250113	MAIN ROTOR

(CAN) MAIN ROTOR BLADE FOUND CRACKED ON THE TOP SURFACE 90 INCHES FROM THE TIP. ABOUT 70 HOURS BEFORE, A CRACK ON THE BLADE PAINT WAS FOUND, AT THAT TIME NO CRACK WAS FOUND IN THE BLADE SKIN. IAW ASB204-49-96 PT I AND II, THE BLADE WAS INSPECTED DAILY (PART I) AND EACH 25 HOURS (PART II). 8 FLIGHT HOURS BEFORE THE BLADE WAS FOUND SERVICEABLE WITH NO APPARENT CHANGE. THE PILOT REPORTED, FLEW IN TURBULENT CONDITIONS THAT DAY. IN THE DAILY INSPECTION THE HAIRLINE CRACK ON THE PAINT WAS EXTENDED ALMOST ALL ACROSS THE BLADE.

CA040901005	BELL	LYC	VOLT REGULATOR	FAILED
7/18/2004	204B	T5313B	15891F	ELECTRICAL

(CAN) VOLTAGE REGULATOR DELIVERING OVER 30 VOLTS. THE AIRCRAFT WAS READY TO TAKE OFF WHEN THE PILOT SMELLED A STRONG ODOR IN THE COCKPIT. ASSUMING IT WAS THE BATTERY, HE SHUT DOWN THE ENGINE. IN THE INSPECTION THE BATTERY WAS FOUND TOO HOT AND THE VOLTAGE DELIVERED BY THE VOLTAGE REGULATOR WAS OVER 30 VOLTS. THIS HIGH VOLTAGE MADE THE INVERTER NR 1 FAIL TO (WAS DELIVERING OVER 150 VOLTS). WITH THIS HIGH VOLTAGE IN BOTH SYSTEMS (28VDC AND 115VAC) THE AUDIO BOX WAS BURNED OUT, THE BATTERY HAD THE VOLTAGE BUT NOT THE CAPACITY AND THE RMI FAILED. NO CIRCUIT BREAKER STRIPPED AT THE TIME.

CA040817007	BELL	ALLSN	PUMP	MALFUNCTIONED
8/7/2004	206B	250C20	68992253	FUEL SYSTEM

(CAN) ON STARTUP OF THE ENGINE THERE WAS A HOWLING NOISE COMING FROM THE ENGINE. THE NOISE WOULD ONLY BE ON STARTUP AND WOULD GO AWAY ONCE THE ENGINE WAS RUNNING. IT WAS DETERMINED THAT THE NOISE WAS COMING FROM THE FUEL PUMP AND WAS REPLACED.

CA040917005	BELL	ALLSN	MOUNT	MISALIGNED
8/31/2004	206B	250C20		LOWER BASE

(CAN) LOWER MOUNTING BASE WAS FOUND TO BE INSTALLED 90 DEGREES FROM CORRECT ALIGNMENT TO ALLOW ENGAGEMENT OF LOCK PIN.

CA040819002	BELL	ALLSN	BELL	RESTRAINT	DELAMINATED
8/8/2004	206B	250C20B		206011139001	ROTOR HEAD

(CAN) DURING DAILY INSPECTION IT WAS NOTED THE FLAP RESTRAINT HAD BECOME DELAMINATED AT BEARING HOUSING.

CA040817001	BELL	ALLSN	LINE	CRACKED
12/5/2003	206L	250C20B	6859177	FUEL SYSTEM

(CAN) FOUND A CRACK ON FLARE OF FCU SUPPLY LINE FROM FUEL PUMP. REPLACED LINE ON SITE WITH REMOVED SERVICEABLE UNIT FROM ANOTHER AIRCRAFT. LEAK CHECK C/O AND AIRCRAFT RETURNED TO SERVICE.

CA040727008	BELL	ALLSN	BELL	WASHER	MISSING
6/3/2004	206L	250C20R2		AN9601016	CARRIAGE ROLLERS

(CAN) AFTER FINDING MISSING CARRIAGE ROLLER WASHERS ON ANOTHER LONG RANGER, INSPECTED AND FOUND IT TO BE THE SAME, NO WASHERS.

CA040806007	BELL	ALLSN	FITTING	MISINSTALLED
4/17/2004	206L	250C20R2	206063110001	GEARBOX MOUNT

(CAN) AFTER A VISUAL INSPECTION, ENGINE GB MOUNT FITTING 206-063-110-003 (RT) AND FITTING 206-063-110-001 (BOTTOM) WERE FOUND INTERMIXED. BOTTOM FITTING IS 0.4 INCH LONGER THAN THE SIDE ONES. REINSTALLED THE FITTINGS PROPERLY AFTER INSPECTION OF THE A/F ENGINE MOUNT ATTACHMENT POINTS (VISUAL WITH BOROSCOPE). NO CRACK OR DAMAGE FOUND. ALSO INSPECTED THE SHORT STEEL SHAFT TOMMAS COUPLINGS. NO DAMAGE FOUND. A/C RETURNED TO SERVICE, MAINTENANCE LOG ENTRY.

CA040727005	BELL	ALLSN	ALLSN	RETAINING RING	BROKEN
7/22/2004	206L3	250C30P		23059594	NR1 BRG HSG

(CAN) DURING COMPRESSOR DISASSEMBLY ONE PIECE OF NR 1 BEARING HOUSING RETAINING RING WAS FOUND. IMPELLER ASSEMBLY WAS BADLY DAMAGED DUE TO FOD.

CA040902003	BELL	ALLSN	BELL	FITTING	CRACKED
8/12/2004	206L4	250C30		206031403001	TAILBOOM

(CAN) TAIL BOOM FITTINGS P/N 206-031-403-001 AND 206-032-409-001 LT SIDE TOP AND BOTTOM CRACKED.

CA040901008	BELL	PWA	PANEL	CRACKED

9/29/2004	212	PT6T3	2050328193	TAILBOOM

(CAN) DURING ROUTINE INSPECTION AME DISCOVERED A CRACK SURROUNDING ELEVATOR CONTROL SUPPORT (P/N 205-001-920-001) IN A FWD AND AFT SKIN OF TAILBOOM PANEL (205-032-819-3). PANEL REPLACED, A/C RETURNED TO SERVICE.

CA040726009	BELL	PWA	SUPPORT	CRACKED
6/24/2004	212	PT6T3		PYLON DAMPER

(CAN) PILOT REPORTED THAT THE AIRCRAFT WOULD ENTER INTO PYLON ROCK VERY EASILY. TRANSMISSION MOUNTS AND FRICTION DAMPERS WERE BEING REPLACED WHEN IT WAS FOUND THAT THE FRICTION DAMPER MOUNT SUPPORTS WERE CRACKED AND AS A RESULT NOT ATTACHED TO THE AIRFRAME. SUPPORTS WERE REPLACED, NEW MOUNTS AND DAMPERS INSTALLED. A/C TEST FLOWN, PYLON ROCK WAS NO LONGER PRESENT, A/C RETURNED TO SERVICE.

CA040831005	BELL	PWA	ENGINE	FAILED
8/19/2004	212	PT6T3		POWER SECTION

(CAN) DURING HIGH HOVER (LONG LINE) TO PICK UP LOAD, NR1 POWER SECTION FAILED. INITIAL COMPRESSOR INLET INSPECTION (PLENUM AREA) REVEALED MOLTEN PARTICLES. FURTHER INVESTIGATION ON POWER SECTION REMOVAL/TEARDOWN INSPECTION. (ACTSN - 6421.0)

CA040928016	BELL	PWA	LINE	BROKEN
7/19/2004	212	PT6T3	3017393	AFCU

(CAN) UNCOMANDED DECEL TO IDLE. PART CHANGED, ENGINE RETURNED TO NORMAL OPS.

CA040816007	BELL	ALLSN	COMBUSTION LINER	CRACKED
4/6/2004	407	250C47B	23064570	ENGINE

(CAN) CRACK FOUND IN COMBUSTION LINER WHEN REMOVED FOR TURBINE INSPECTION. NO CRACKS ALLOWED IN THIS AREA.

CA040816008	BELL	ALLSN	COMBUSTION LINER	CRACKED
1/27/2004	407	250C47B	23030911	ENGINE

(CAN) CRACKS FOUND IN OUTER COMBUSTION CASE ARMPIT AREA ON NORMAL DAILY INSPECTION. NO CRACKS ALLOWED IN THIS AREA.

CA040831002	BELL	ALLSN	WIRE HARNESS	FAILED
8/24/2004	407	250C47B	23065805	FADEC

(CAN) PRIOR TO FINAL APPROACH, FADEC FAIL WARNING HORN AND LIGHTS ACTIVATED. ENGINE AUTOMATICALLY REVERTED TO MANUAL MODE. PILOT SELECTED AUTO/MANUAL SWITCH TO SILENCE WARNING HORN, RETARDED THROTTLE TO PREVENT NP OVERSPEED. CONTINUED APPROACH, LANDING IN MANUAL MODE WITHOUT INCIDENT. ANALYSIS USING MAINT TERMINAL SOFTWARE INDICATED (AUTO/MANUAL SOLENOID FAULT) (AMSOLFIT). TRACED DEFECT TO DEGRADED CIRCUIT CONTINUITY IN ENG HARNESS ASSY P/N 23065805. HARNESS WAS REPLACED P/N 23072014. TEST USING MAINT TERMINAL SHOWED ALL FAULTS CLEARED. SATISFACTORY START, GROUND RUN, MANUAL MODE TEST, AUTOMATIC MODE SHUTDOWN AND FADEC INDICATION CHECK COMPLETED WITH NO ANOMALIES OR DEFECTS. AIRCRAFT RETURNED TO SERVICE.

CA040726001	BELL	ALLSN	HYDROMECH UNIT	INOPERATIVE
7/19/2004	407	250C47B	23072725	ENGINE

(CAN) DURING ADVANCING THROTTLE TO 100 PERCENT FOR TAKEOFF, N2 DECREASED.

CA040726002	BELL	ALLSN	TRANSMISSION	MAKING METAL
7/6/2004	407	250C47B	407040006	MAIN ROTOR

(CAN) TRANSMISSION CHIP LIGHT, TRANSMISSION SENT TO OVERHAUL SHOP.

CA040816004	BELL	ALLSN	COMBUSTION LINER	CRACKED
4/27/2004	407	250C47B	23064570	ENGINE

(CAN) CRACK FOUND DURING REMOVAL FOR UNRELATED SCHEDULED MAINTENANCE.

CA040816005	BELL	ALLSN	COMBUSTION LINER	CRACKED
3/4/2004	407	250C47B	23064570	ENGINE

(CAN) COMBUSTION LINER FOUND CRACKED DURING TURBINE REMOVAL. NO CRACKS ALLOWED IN THIS AREA.

21200003EAI	BELL	PWA	AIRCOM	BEARING	FAILED
9/23/2004	412EP	PT6T3		35BD219DUM	ACM

DURING FIRST GROUND RUN AFTER INSTALLATION OF AIRCOM CABIN AIR CONDITIONING SYSTEM (P/N 412AC-106-2 - STC SR00066DE) A MECHANIC INSPECTING THE SYSTEM NOTICED THE IDLER PULLY ON P/N 412AC-3036-1 SHAFT ASSEMBLY WAS NO LONGER IN ALIGNMENT WITH THE MAIN DRIVE PULLY & COMPRESSOR. AFTER ENGINE SHUTDOWN AND FURTHER INSPECTION IT WAS DETERMINED THAT THE IDLER PULLEY BEARING ASSEMBLY HAD FAILED WITH THE BEARING SEAL AND MOST OF THE BALL BEARINGS MISSING. AFTER REMOVAL AND INSPECTION THERE WAS NO EVIDANCE OF ANY INTERNAL BEARING LUBRICATION. LESS THAN 5 BALL BEARINGS WERE RECOVERED (ON THE AIRCRAFT ROOF AND ON THE GROUND AROUND THE AIRCRAFT). AFTER FURTHER INSPECTION THERE WAS NO EVIDANCE OF FOD DAMAGE TO THE ENGINES OR MAIN ROTOR BLADES.

AUS20040502	BNORM	LYC	LYC	WASHER	MISSING
6/1/2004	BN2A26	O540E4C5		SP126E	POWER LEVER

(AUS) THROTTLE QUADRANT FRICTION ADJUSTER WASHER MISSING. FOUND DURING INSPECTION IAW AD/BN2/69 AND SB 272.

AUS20040480	BNORM	LYC	CONTROL ROD	CORRODED
6/2/2004	BN2B20	IO540K1B5	NB451803	ELEVATOR

(AUS) ELEVATOR CONTROL ROD CORRODED ON INTERNAL THREADS. FOUND DURING INSPECTION IAW SB 303 AND AD/BN2/082.

CA040902001	BOEING	RROYCE	TURBINE	FAILED
9/2/2004	717200	BR700715A130		HPC

(CAN) ENGINE WAS REMOVED DUE TO TURBINE AND HPC FAILURE. THIS ENGINE IS BEING ROUTED CANADA (MONTREAL) MFG FOR INVESTIGATION AND REPAIR. EVENT: 8/22/04, AIRCRAFT, NR 2 POSITION. WHILE SPOOLING THE ENGINES UP FOR THE TAKOFF ROLL, A LOUD BANG WAS HEARD FROM THE REAR OF THE AIRCRAFT. AN AIRCRAFT BEHIND IMMEDIATELY REPORTED FLAMES COMING FROM NR 2 ENGINE TAILPIPE. THE ENGINE WAS SHUTDOWN ON THE RUNWAY AND TAKEOFF ABORTED. MCD WAS CHECKED AND FOUND CLEAN. THE N1 ROTOR WAS SPUN AND SPUN FREELY. THE N2 ROTOR COULD NOT BE TURNED BY HAND CRANKING. INSPECTION OF THE TAILPIPE REVEALED METAL PARTICLES AND DAMAGE TO LPT 3RD STAGE BLADES.

CA040827001	BOEING	PWA	DOOR	OUT OF ADJUST
8/26/2004	727223	JT8D15		MAIN CARGO

(CAN) IN CRUISE, CREW NOTICED THE MAIN CARGO DOOR UNSAFE LIGHT ILLUMINATED. IAW CHECKLIST, CREW DEPRESSURIZED AND DESCENDED INTO NEAREST AVAILABLE MAINTENANCE BASE. DOOR WAS VISUALLY INSPECTED AND A/C RETURNED TO SERVICE. UPON COMPLETION OF FINAL LEG, MAINTENANCE CHECKED AND ADJUSTED RIGGING OF DOOR SAFETY LOCK/SWITCHES.

CA040827002	BOEING	PWA	WINDOW	DISLODGED
8/27/2004	727227	JT8D9A		CABIN

(CAN) AT TOP OF CLIMB, A LENGTH OF WINDOW SEALANT FROM THE R1 WINDOW BECAME DISLODGED AND BEGAN SLAPPING THE GLASS. CREW ELECTED TO RETURN, WHERE THE WINDOW WAS INSPECTED AND LOOSE SEALANT REMOVED. A/C RETURNED TO SERVICE AND WINDOW WAS RESEALED AT THE NEXT MAINTENANCE FACILITY.

CA040902002	BOEING	PWA	ACCESSORY UNIT	FAILED
9/2/2004	727227	JT8D9A	656021132	LANDING GEAR

(CAN) UPON SELECTION OF GEAR UP, CREW NOTICED THE RT MLG INDICATION SHOWED BOTH (DOWN AND LOCKED) (GREEN LIGHT) AND (UNSAFE) (RED LIGHT) AT THE SAME TIME. FOLLOWING THEIR CHECKLIST, THE CREW DUMPED FUEL AND RETURNED TO BASE WHERE THE GEAR WAS INSPECTED, THE LANDING GEAR ACCY UNIT WAS REPLACED AND THE A/C RETURNED TO SERVICE.

CA040907007	BOEING	PWA	PITOT TUBE	CONTAMINATED
8/29/2004	727227	JT8D9A		PITOT STATIC SYS

(CAN) F/O'S AIRSPEED INDICATED 0 KNOTS DURING TAKEOFF ROLL. UPON RETURN TO RAMP, MAINTENANCE INSPECTED F/O PITOT TUBE AND FOUND DEBRIS INSIDE. LINE AND TUBE BLOWN OUT WITH DRY NITROGEN. PITOT STATIC TESTS CARRIED IAW M/M. AIRCRAFT DECLARED SERVICEABLE.

CA040913007	BOEING	PWA	BEARING	SEPARATED
9/5/2004	727233	JT8D15A		SLAT ACTUATOR

(CAN) DURING DEPARTURE, THE CREW OBSERVED A CONTINUOUS SLAT PROBLEM INDICATION. THE AIRCRAFT RETURNED TO POINT OF DEPARTURE. MAINTENANCE FOUND THE NR 5 SLAT ROD END BEARING SEPARATED FROM THE PISTON, AND THE SLAT DAMAGED BY THE PISTON. THE ACTUATOR AND SLAT ASSYS WERE REPLACED AND THE AIRCRAFT RETURNED TO SERVICE. THE ATTACH POINT OF THE ROD END BEARING TO THE PISTON ON THIS UNIT WAS ENCLOSED IN SHRINK SLEEVE AND THE CONDITION WAS NOT READILY EVIDENT. A FLEET INSPECTION HAS BEEN INITIATED.

AUS20040484	BOEING	GE	FLAP TRACK	FOD
5/13/2004	737*	CFM567B24		LT WING

(AUS) PASSENGER REPORTED RAG SEEN IN WING TRAILING EDGE. INVESTIGATION FOUND RAG LOCATED ON AREA OF LT WING REAR SPAR ABOVE NR 3 FLAP TRACK. THE RAG WAS NOT INTERFERING WITH ANY AIRCRAFT SYSTEM. FOD PERSONNEL/MAINTENANCE ERROR.

AUS20040489	BOEING	GE	MODULE	FAULTY
6/7/2004	737*	CFM567B24	285A18408	DC GENERATING

(AUS) ELECTRICAL METERS BATTERY AND GALLEY POWER MODULE FAULTY.

AUS20040498	BOEING	GE	ACTUATOR	FAULTY
6/6/2004	737*	CFM567B24	6355B000103	STAB TRIM

(AUS) HORIZONTAL STABILIZER TRIM ACTUATOR FAULTY.

CA040831013	BOEING	PWA	LINE	LEAKING
8/29/2004	737204	JT8D15		HYDRAULIC SYS

(CAN) LOST (A) SYSTEM HYDRAULICS. FOUND RT MLG UPLOCK HYDRAULIC LINE LEAKING AT ACTUATOR. LINE REPLACED IAW AMM 32-32-11 P/N BACH8A0LEE0260T. RT MLG UPLOCK LINE PRESSURIZED AND LEAK CHECKED SERVICEABLE. NR 1,2 ENG PRESS FILTERS CHECK OK IAW MM 29-11-71 NR 1 ENG CASE DRAIN FILTER CHECKED OK NR 2 ENGINE CASE DRAIN FILTER FOUND CONTAMINATED. LINE FLUSHED IAW MM 29-11-0 FILTER REPLACED IAW 29-11-41. NR 2 ENGINE HYDRAULIC PUMP REPLACE IAW MM 29-11-31 PN ON/OFF 55098-08 S/N OFF 101752A S/N ON 124354K8G HJKYZ. NR 1, 2 ENGINE PRESSURE FILTERS AND CASE DRAIN FILTER LEAK CHECKED, NO LEAKS NOTED. CASE DRAIN FILTERS REPLACED IAW MM 29-11-41 P/N ON 65-90305-12. NO LEAKS NOTED.

CA040819003	BOEING	PWA	FITTING	CRACKED
7/29/2004	737275	JT8D17	69378776	MLG ACTUATOR

(CAN) CRACKED FITTING FOUND DURING CPCP INSPECTION. RT MAIN LANDING GEAR ACTUATORS WING LINK FORWARD ATTACH FITTING (TO WING REAR SPAR ATTACH).

AUS20040494	BOEING	CFMINT	BOLT	SHEARED
5/26/2004	737376	CFM563B1US		MLG

(AUS) RT MAIN LANDING GEAR OB STABILIZING FITTING OB LOWER ATTACHMENT BOLT SHEARED ALONG THE SHANK IN AN AREA COINCIDING WITH THE WING REAR SPAR.

AUS20040457	BOEING	CFMINT	LIMITER	FAULTY
3/30/2004	737376	CFM563B2		AUTOPILOT SYSTEM

(AUS) AUTOPILOT TORQUE LIMITER FAULTY.

AUS20040487	BOEING	CFMINT	BEARING	FAULTY
6/3/2004	737476	CFM563C	BACB10BW21	CONTROL COLUMN

(AUS) FIRST OFFICER'S CONTROL WHEEL BEARING NOTCHY.

AUS20040493	BOEING	CFMINT	WINDOW	CRACKED
6/6/2004	737476	CFM563C	5717623097	COCKPIT

(AUS) CAPTAIN'S NR 2 SLIDING WINDOW OUTER PANE CRACKED IN UPPER FORWARD CORNER.

AUS20040500	BOEING	CFMINT	OVEN	FAULTY
6/6/2004	737476	CFM563C	GENM2585015	BUFFET/GALLEYS

(AUS) FORWARD GALLEY OVEN FAILED. FIRE EXTINGUISHED DISCHARGED INTO OVEN.

AUS20040479	BOEING	CFMINT	LIGHT	FAULTY
5/23/2004	737476	CFM563C		MLG

(AUS) RT MAIN LANDING GEAR DOWN LIGHT FAILED TO ILLUMINATE ON GEAR SELECTION. INVESTIGATION FOUND A FAULTY LOCK MECHANISM IN THE LAMP LENS CAP.

AUS20040456	BOEING	CFMINT	INDICATOR	FAULTY
4/12/2004	737476	CFM563C	2061141	TE FLAPS

(AUS) FLAP POSITION INDICATOR FAULTY.

CA040831015	BOEING	CFMINT	ENGINE	MALFUNCTIONED
8/30/2004	737724	CFM567B22	CFM567B22	NR 2

(CAN) AIRCRAFT RETURNED TO GATE. NR 2 ENGINE FAULT 77-10852 (749.5) SENSOR OUT OF RANGE. CARRIED OUT FIM TASK 77-21 TASK 802. PERFORMED EEC TEST IAW 73-21-00-700-804-FO FAULT IS NOT ACTIVE, MEASURED 7.852 AT CONNECTOR DP0909. CLEANED CONNECTORS DP0909 AND DP0913. SYSTEM TESTS SERVICEABLE. DMI CLEARED. ENGINE NR 2 HAD FLASHING WHITE EGT BOX ON STARTUP. ABORTED ENGINE START. FIM TASK 77-21 T. 801 CARRIED OUT. LONGTIME EGT FAULT 77-10852 INDICATED. DEFERED TO MCC N/R TO BE RECTIFIED WITHIN 42.5 HOURS.

AUS20040467	BOEING	GE	VALVE	FAILED
5/29/2004	737724	CFM567B24	125334D1	FUEL SELECTOR

(AUS) NR 1 ENGINE SPAR VALVE FAILED TO OPEN. INVESTIGATION COULD FIND NO FAULT WITH THE VALVE.

AUS20040468	BOEING	GE	VALVE	DAMAGED
6/1/2004	737724	CFM567B24	EM56203	HYDRAULIC SYSTEM

(AUS) NR 2 ENGINE HYDRAULIC SHUTOFF VALVE ELECTRICAL CONNECTOR D764 CROSS THREADED CAUSING DAMAGE TO CONNECTOR AND VALVE. FOUND DURING INSPECTION IAW SB 737-24A1148.

AUS20040483	BOEING	GE	ENGINE	BIRD STRIKE
5/14/2004	7377Q8	CFM567B24	CFM567B	NR 2

(AUS) NR 2 ENGINE BIRDSTRIKE. INSPECTION FOUND EVIDENCE OF BIRD REMAINS IN BOOSTER.

AUS20040503	BOEING	GE	PUMP	LEAKING
6/11/2004	7377Q8	CFM567B24	66087	HYDRAULIC SYS

(AUS) NR 2 ENGINE DRIVEN HYDRAULIC PUMP LEAKING.

AUS20040514	BOEING	GE	ACTUATOR	FAULTY
6/14/2004	7377Q8	CFM567B24	273A210102	MLG

(AUS) LT MAIN LANDING GEAR ACTUATOR LOCKNUT LOOSE AND LOCKWIRE BROKEN.

AUS20040472	BOEING	GE	SEAL	FAILED
5/30/2004	737800*	CFM567B24	QF45085	BRAKE

(AUS) LT MAIN LANDING GEAR NR 1 BRAKE PISTON SEAL PARTIALLY FAILED ALLOWING BRAKE FLUID TO LEAK ONTO BRAKE ROTORS.

AUS20040465	BOEING	GE	BRAKE	FAILED
5/30/2004	737832	CFM567B24	26123121	MLG

(AUS) NR 3 BRAKE ASSEMBLY, BRAKE PADS SEPARATED AND JAMMED THE BRAKE ONTO THE WHEEL.

AUS20040464	BOEING	GE	CONNECTOR	LOOSE
5/28/2004	7378Q8	CFM567B24	DP1011	ENGINE EGT/TIT

(AUS) NR 1 ENGINE EGT BOTTOM RT PROBE NOT CONNECTED. NO EVIDENCE OF LOCKWIRE. TOP RT PROBE LOOSE AND NOT LOCKWIRED. ELECTRICAL CONNECTOR DP0911 LOOSE. PERSONNEL/MAINTENANCE ERROR.

AUS20040459	BOEING	RROYCE	BOTTLE	INOPERATIVE
5/27/2004	747438	RB211524*	60020019	PAX DOOR

(AUS) DOOR 4L EMERGENCY POWER SUPPLY (EPS) BOTTLE TRIGGER LOCKED BY FITMENT OF A TEMPORARY SAFETY BOLT IN THE TRIGGER MECHANISM. THIS SAFETY BOLT WOULD HAVE PREVENTED FIRING OF THE BOTTLE TO OPEN THE DOOR IN AN EMERGENCY SITUATION. PERSONNEL/MAINTENANCE ERROR.

AUS20040458	BOEING	RROYCE	PIPE	WORN
5/25/2004	767*	RB211524*	272T3100321	HYDRAULIC SYSTEM

(AUS) LT HYDRAULIC SYSTEM PIPE WORN THROUGH BY BROKEN CLAMP LOCATED IN LT PYLON. LOSS OF HYDRAULIC FLUID.

AUS20040510	BOEING	GE	WIRE HARNESS	WORN
6/11/2004	767338	CF680C2*		PSU

(AUS) PASSENGER SERVICE UNIT (PSU) LOOM WORN AND SPARKING. PSU LOCATED AT SEAT 44JK.

AUS20040488	BOEING	GE	VALVE	FAULTY
5/25/2004	767338	CF680C2*	8021704	PNEUMATIC DIST

(AUS) RT ENGINE BLEED SYSTEM PRESSURE REDUCING VALVE (PRV) SUSPECT FAULTY. LIMITED INFORMATION PROVIDED.

AUS20040495	BOEING	GE	OXYGEN MASK	MISINSTALLED
6/4/2004	767338	CF680C2*	174080142	PASSENGER OXYGEN

(AUS) PASSENGER OXYGEN MASKS INCORRECTLY PACKED INTO PASSENGER SERVICE UNITS (PSU). OXYGEN MASK HOSES CAUGHT BETWEEN DOOR AND MASK HOUSING CAUSING HOSES

TO BECOME KINKED AND THE DOORS TO BULGE WHEN CLOSED. UNITS AFFECTED WERE LOCATED AT 39DEF , 37DEF,5JK, 1EF, 48DEF, 45DEF AND 40DEF. TOTAL NUMBER OF MASKS 14. PERSONNEL/MAINTENANCE ERROR.

AUS20040477	BOEING	GE	THRUST REVERSER	FAULTY
5/25/2004	767338	CF680C2*	CF680C2	LT ENGINE

(AUS) LT ENGINE THRUST REVERSER FAILED TO OPERATE ON SELECTION DURING LANDING. INVESTIGATION AND ENGINE GROUND RUN COULD NOT FAULT SYSTEM. SUSPECT CAUSED BY ICING.

AUS20040478	BOEING	GE	THERMOSTAT	FAILED
2/28/2004	767338	CF680C2*	45618380	AIR SUPPLY

(AUS) POTABLE WATER COMPRESSOR OVERHEATING. INVESTIGATION FOUND THAT THE COMPRESSOR MOTOR HAD SEIZED DUE TO THE OVERHEAT THERMOSTAT (THERMAL PROTECTOR) PN 45618-380 FAILING IN A CLOSED POSITION CAUSING THE MOTOR TO CONTINUALLY OPERATE AND FINALLY SEIZE.

AUS20040461	BOEING	GE	DOOR	STICKING
5/30/2004	767338	CF680C2*		EMERGENCY EXITS

(AUS) LT OVERWING EMERGENCY DOOR PREVENTED FROM COMPLETELY OPENING BY THE TARGET FOR THE LT SLIDE COMPARTMENT DOOR CLOSED SENSOR (S218) CATCHING ON THE TAIL OF A SCREW NUT INSTALLED ON THE PACKBOARD. FURTHER INSPECTION REVEALED THAT THE LATCH CONTROL ROD THE TARGET IS MOUNTED TO HAD BEEN TWISTED AT THE FIXED CLEVIS END ALLOWING THE TARGET TO DROP INTO THE PATH OF THE SCREW INSTALLED ON THE PACKBOARD.

CA040726005	BOLKMS	ALLSN	CONNECTOR	DEBONDED
7/19/2004	BO105S	250C20B	103871501	EXCITER BOX

(CAN) THE FLIGHT CREW WAS UNABLE TO START NR 1 ENGINE. NR 1 IGNITION EXCITER UNIT WAS DETERMINED TO HAVE FAILED. UPON INVESTIGATION IT WAS FOUND THAT THE CONNECTOR PLUG ATTACHMENT ON THE EXCITER BOX HAD DEBONDED CAUSING THE FAILURE. THE UNIT WAS REPLACED.

CA040923001	BOMBDR	PWC	CONTROL UNIT	FAILED
6/27/2004	DHC8400	PW150A	699018002	AUTO FEATHER

(CAN) AUTO FEATHER SYSTEM FAILED TO ARMED WHEN TAKE-OFF POWER WAS APPLIED. TAKE-OFF ABORTED AT APPROX 60 KTS. RETURNED TO GATE. AC GROUNDED. RT PROPELLER ELECTRONIC CONTROL UNIT (PECU) REPLACED IAW AMM 61-20-36.

CA040816002	BOMBDR	PWC	ENGINE	FAILED
8/16/2004	DHC8400	PW150A	PW150A	NR 1

(CAN) ON TAKE-OFF FROM BASE, AT 1000 FT, THE NR 1 ENGINE OIL PRESSURE CAUTION LIGHT CAME ON, THE PILOT WENT FOR MANUAL AND BEFORE GETTING TO IT THE NR 1 ENGINE OIL TEMP BEGAN TO RISE RAPIDLY SO HE IMMEDIATELY STARTED TO PERFORM THE EMERGENCY SHUT DOWN PROCEDURE. BUT BEFORE HE COULD PERFORM THE TASK THERE WAS A LOUD BANG AND FLAMES SHOT OUT OF THE INTAKE AND THE ENGINE SHUT DOWN. THE PILOT DECLARED AN EMERGENCY AND LANDED. UPON LANDING THERE WAS A CDS MESSAGE FOR NL SHAFT SHEARED AND ALL THE CHIP DETECTORS WERE FLAGGED.

CA040805003	BOMBDR	PWC	WHEEL	CRACKED
7/15/2004	DHC8400	PW150A		MLG

(CAN) AN OPERATOR HAS EXPERIENCED CRACKING OF THE 32-INCH MAIN LANDING GEAR WHEEL ASSEMBLY P/N 3-1575. THE CRACKS START AT THE WHEEL BOLT HOLES (FAYING SURFACE) AND EXTEND TO THE CUT-OUTS. THE CAUSE OF THE CRACKING IS NOT KNOWN AND IS CURRENTLY UNDER INVESTIGATION BY MANUFACTURERS. AOM NR 133 HAS BEEN ISSUED.

CA040831010	BOMBDR	PWC	ATTACH BRACKET	MISSING
8/30/2004	DHC8400	PW150A		ACTUATOR

(CAN) DURING DELIVERY FLIGHT FROM THE AIRCRAFT MANUFACTURER, TECHNICAL LOG ENTRY FOR THIS AIRCRAFT STATED (FLAP POWER CAUTION LIGHT ON) DURING TAXI IN WHEN FLAPS SELECTED ZERO. FLAPS STOPPED AT ABOUT 8 DEGREES. ON FURTHER INVESTIGATION OUTER RT FLAP SEEN TO BE AT ABNORMAL ANGLE. RT FLAP ACTUATOR NR 4 (PN C148661-2) WAS FOUND TO HAVE MIGRATED REARWARDS. FURTHER INVESTIGATION REVEALED THE ACTUATOR UPPER ATTACHMENT BRACKET IS MISSING.

CA040824004	BOMBDR	PWC	PROXIMITY SENSOR	OPEN
5/19/2004	DHC8400	PW150A	401020101	NLG

(CAN) AFTER GEAR UP SELECTION PILOTS RECEIVED BOTH SAFE AND UNSAFE LIGHTS (GREEN/RED) ON GEAR INDICATION PANEL BUT NO DOOR LIGHTS (ORANGE). AFTER ONE RECYCLE PILOTS LEFT THE GEAR DOWN WITH 3 GREEN LIGHTS AND PROCEEDED TO DESTINATION. PROXIMITY SENSOR ELECTRONIC UNIT (PSEU) CONSULTED FOR FAULTS. (NWCENT PROX SENSOR OPEN) FOUND PRESENT. NOSE WHEEL CENTERING PROXIMITY SENSOR REPLACED ACC AMM 32-61-06.

CA040824003	BOMBDR	PWC	SENSOR	FAILED
5/12/2004	DHC8400	PW150A	401020101	NLG LOCKED

(CAN) ON GROUND, WHILE PREPARING FOR THE RETURN FLIGHT WITH ENGINES OFF AND GPU CONNECTED, GEAR UNSAFE LIGHT FOR NOSEWHEEL AND LANDING GEAR SELECTOR LIGHTS FLASHED ONCE OR TWICE AND WENT OUT. NOSE GEAR WAS EXAMINED DURING PFI WITH NO REMARKS. DURING START UP NOSE GEAR ADVISORY LIGHT AND GEAR UNSAFE LIGHT CAME ON INTERMITTENTLY SEVERAL TIMES AND WE COULD HEAR THE GEAR DOORS OPEN AND CLOSE. THIS WAS CONFIRMED BY THE GROUND PERSONAL. NOSE GEAR LOCK NR 1 SENSOR REPLACED ACC AMM 32-61-06.

CA040824001	BOMBDR	PWC	WIRE HARNESS	DAMAGED
4/27/2004	DHC8400	PW150A	461515	MLG

(CAN) UNABLE TO RETRACT NOSE GEAR AFTER TAKE OFF. GEAR RECYCLED, WITH UNSUCCESSFUL RESULT. NO AMBER GEAR DOOR LIGHT PRESENT FOR NOSE GEAR DOORS WHEN GEAR IN TRANSITION. HARNESS ASSY WOW NR 2/CENTER REPLACED ACC AMM 32-21-11. OPERATIONAL TEST OF THE LANDING GEAR SYSTEM PERFORMED ACC 32-31-00-710-801.

CA040824002	BOMBDR	PWC	SELECTOR VALVE	MALFUNCTIONED
5/5/2004	DHC8400	PW150A	483001	LANDING GEAR

(CAN) AFTER TAKEOFF WHEN SELECTING GEAR UP, ALL GEAR INDICATIONS WAS TRANSIT, RED AND YELLOW. GEAR SELECTED DOWN, GAVE 3 GREEN SAFE INDICATIONS. GEAR SELECTED UP AGAIN GAVE MAIN GEAR UP INDICATIONS, BUT NOSE GEAR WAS STILL SHOWING TRANSIT, RED AND YELLOW. GEAR WAS AGAIN SELECTED DOWN, GIVING 3 SAFE INDICATIONS, AND A/C RETURNED TO BASE FOR NORMAL LANDING. TAXI TO GATE REVEALED NO UNUSUAL INDICATIONS. LANDING GEAR SELECTOR VALVE REPLACED ACC AMM 32-31-06.

CA040818005	BRAERO	RROYCE	LEVER	OBSTRUCTED
5/11/2004	HS7482A	DART5342	UC702322	NLG

(CAN) THE NOSE U/C INDICATOR LIGHT REMAINED GREEN DURING ALL PHASES OF U/C OPERATION. INVESTIGATION REVEALED A SMALL STONE WEDGED UNDER THE SWITCH OPERATING LEVER. WITH THE STONE REMOVED THE INDICATION SYSTEM WORKED NORMALY.

CA040818006	BRAERO	RROYCE	CLAMP	LOOSE
5/17/2004	HS7482A	DART5342	AGS6056	SUPERCHARGER

(CAN) AN INTERMITTENT BURNING SMELL WAS NOTICED BY THE FLIGHT CREW. INVESTIGATION REVEALED THE RT AIR CONDITIONING SUPERCHARGER OUTLET DUCT SLEEVE CLAMP WAS LOOSE. SINCE THE CLAMP WAS RESECURED THERE HAVE BEEN NO FURTHER REPORTS OF BURNING ODORS IN THE COCKPIT.

2004FA0000751	CESSNA	CONT	WINDSHIELD	DEPARTED
8/3/2004	150G	O200*	0413419200	COCKPIT

SECTION OF WINDSHIELD DEPARTED AIRCRAFT IN FLIGHT. WINDSHIELD HAD BEEN REPAIRED 7/15/00 IAW AC43.131B CHAPTER 3 SECTION 4, BUT NO REINFORCEMENT WAS EVIDENT ON PART REMAINING IN AIRCRAFT. HOW WINDSHIELD INSTALLED. THIS COULD HAVE BEEN PREVENTED IF NEW WINDSHIELD WAS INSTALLED IAW AC 43.13 .

CA040914008	CESSNA	CONT	FLANGE	CORRODED
9/8/2004	150J	O200A		PROPELLER

(CAN) PROPELLER REMOVED FOR CORROSION INSPECTION UNDER CAR 625, APPENDIX C, PARA 5. MOUNTING FLANGE CORRODED BEYOND REPAIR.

2004FA0000777	CESSNA	LYC	VALVE	STUCK
9/14/2004	150K	O320E2D	LW19001	CYLINDER HEAD

POWER LOSS ON TAKE OFF. UPON INSPECTION, FOUND PUSHROD TUBE BENT. INDICATES STUCK VALVE. DEVELOPMENT NEEDED TO AVOID EXHAUST AND/OR INTAKE VALVES FROM STICKING. (WP07200421112)

CA040907001	CESSNA	CONT	RIB	CRACKED
9/1/2004	150L	O200A	0432001646	EMPENAGE

(CAN) PN 0432001-46 AND 0432001-6 LEADING EDGE RIB ASSEMBLIES (FIGURE 18, ITEM 18 AND 17 MFG PARTS MANUAL) ARE VERY DIFFICULT TO SEE. THE USE OF A MIRROR THROUGH THE HORIZONTAL SPAR AND RIB LIGHTNING HOLES IS THE ONLY WAY TO SEE THE CRACKS ALONG THE TABS. RIBS ARE CRACKING DUE TO IMPROPER GROUND HANDLING. THE PRACTICE OF PUSHING THE AIRCRAFT TAIL DOWN BY ITS SPAR IN ORDER TO ROTATE THE AIRCRAFT IN POSITION MAY BE DAMAGING THESE RIBS. BOTH RIBS WERE REPLACED WITH NEW. THE TAIL SURFACES WERE REMOVED AND RE-INSTALLED.

CA040830001	CESSNA	CONT	EXHAUST VALVE	ERODED
8/27/2004	150M	O200A	646612	ENGINE

(CAN) ENGINE PLACED ON (PISTON ENGINE ON CONDITION PROGRAM). DURING ON-CONDITION 100 HOUR INSPECTION, THE NR 2 CYLINDER COMPRESSION TEST WAS LOW AND LEAKING FROM VALVES. ON FURTHER INSPECTION, EXHAUST VALVE STEM WAS FOUND TO BE ERODED TO ABOUT HALF OF DIAMETER OF STEM. THE OTHER 3 CYLINDERS WERE INSPECTED AND FOUND EXHAUST VALVE STEMS TO BE ERODED AS WELL. OPERATOR OF THIS AIRCRAFT, HAS A STANDARD PRACTICE TO LEAN THE AIRCRAFT DURING TAXI AND IN FLIGHT. THIS MAY HAVE LEAD TO THIS FAULT FROM IMPROPER LEANING PROCEDURES FROM STUDENT PILOT'S. INSTRUCTORS HAVE BEEN MADE AWARE OF PROPER LEANING PROCEDURES. THE ENGINE WAS OPERATED 282.5 HOURS BEYOND TBO. AIRCRAFT WAS REMOVED FROM SERVICE.

2004FA0000542	CESSNA	LYC	MASTER SWITCH	FAILED
6/3/2004	152	O235*	S199411	INSTRUMENT PANEL

LOWER CONNECTION ON MASTER SWITCH CONTAINS TWO TERMINALS, ONE THAT IS NOT USED. THIS CONTACT THAT IS NOT USED IS THE LOWEST ONE ON THE SWITCH AND CAN COM INTO CONTACT WITH THE INSTRUMENT PANEL CAUSING SEVERE ARCING AND POTENTIAL FIRE HAZARD IF HIT WITH NEE OR OTHER MEANS OF CONTACT UNDER THE PANEL. RECOMMENDED CORRECTION: CHECK FOR SATISFACTORY CLEARANCE AT INSTRUMENT PANEL AND INSULATE TERMINAL END FROM CONTACT. POSSIBLE INSPECTION RECURRING AD DUE TO CLOSE PROXIMITY TO FULL PRIMER AND LINE.

CA040809001	CESSNA	LYC	LINE	CRACKED
8/3/2004	152	O235L2C		FUEL SYSTEM

(CAN) APPROXIMATELY 1-5 INCH CRACK ALONG FLANGE. FUEL STAINING NOTED IN AREA. ROUGH RUNNING ENGINE. PIPE ASSEMBLY REPLACED.

CA040825001	CESSNA	CONT	BRACKET	CRACKED
8/17/2004	170B	O300A	04112816	ENGINE MOUNT

(CAN) CHANGED LT UPPER ENGINE RAIL BRACKET. PN 0411281-6 REPLACED WITH NEW PART. NEW HARDWARE USED.

CA040723005	CESSNA	CONT	SPRING	BROKEN
7/10/2004	172	O300A	M3590	RT MAGNETO

(CAN) NO POWER TO RT MAGNETO DUE TO BROKEN IMPULSE SPRING RETARDING TIMING.

2004FA0000744	CESSNA	LYC	CESSNA	CAP	CLOGGED
9/23/2004	172	O360A1A		C1560030101	FUEL TANK

PILOT EXPERIENCED FUEL INTERUPTION. MADE EMERGENCY LANDING IN SOYBEAN FIELD. NO INJURIES OR DAMAGE TO AC. REMOVED AC FROM FIELD TO LOCAL AIRPORT. DRAINED ALL FUEL FROM WING TANKS. FOUND WHILE DRAINING FUEL WITH FUEL CAPS ON THAT DRAINING FUEL WAS SLOW. REMOVED FUEL CAP, QUICKENED FLOW RATE AT FUEL DRAIN. AFTER CLOSE INSP, FOUND VENT HOLES CLOGGED WITH HARD MUD TYPE SUBSTANCE. ALSO FOUND THE VENT TUBE IN THE LT WING WAS RESTRICTED. BLOWING NITROGEN THROUGH TUBE FREED BLOCKAGE. FRESH FUEL WAS INSTALLED, FUEL CAPS WERE REPLACED WITH NEW. LENGHTY RUNUP WAS PERFORMED WITH NO DEFECTS NOTED. FLIGHT WAS MADE WITHOUT INCIDENT. AFTER ARRIVING, OWNER REQUESTED TO REPLACE THE FUEL SELECTOR AS PRECAUTIONARY MEASURE.

CA040819001	CESSNA	CONT	CARBURETOR	FAILED
6/10/2004	172H	O300D	MA3SPA	ENGINE

(CAN) ENGINE REPORTED RUNNING INTERMITTENTLY. MIXTURE OPERATES ONLY THROUGH LIMITED RANGE. INSPECTION REVEALS LARGE MOUSE NEST IN AIR BOX AND CARBURETOR AS FAR AS VENTURI. SEVEN DEAD INFANT MICE FOUND IN NEST. ENTRY TO CARB THROUGH CABIN HEATER DUCTING. AIRCRAFT LAST FLOWN APRIL 3, 2004. SOLUTION: ENSURE CABIN HEAT CONTROL IN CLOSED POSITION.

CA040827003	CESSNA	LYC	RAIL	CRACKED
8/25/2004	172K	O320E2D	05131323	LT ENGINE

(CAN) THE LT UPPER ENGINE RAIL WAS FOUND TO BE CRACKED DURING SCHEDULED MAINTENANCE. PN 0513132-3 WAS REPLACED WITH NEW PART. NEW HARDWARE WAS INSTALLED.

2004FA0000771	CESSNA	LYC	CYLINDER HEAD	FAILED
7/16/2004	172L	O320E2D	AEL65102ST041	ENGINE

STUDENT AND INSTRUCTOR WERE FLYING, HEARD LOUD BANG. AC SHUTTERED, OIL PRESSURE STABLE, RPM DROPPED TO BOTTOM OF GREEN ARC, OIL PRESSURE STARTED DROPPING ON A PRECAUTIONARY APPROACH. NORMAL LANDING, SHUT ENGINE DOWN AT SOUTH BAY AVIATION. UPON INSP OF ENG IT WAS DETERMINED. NR3 CYLINDER HEAD SEPARATED FROM

CYLINDER. REPLACED NR 3 CYLINDER ASSY.

CA040809004	CESSNA	LYC		SPACER	LOOSE
8/2/2004	172M	O320E2D			CONTROL YOKE BRG

(CAN) YOKE FOUND TO HAVE EXCESSIVE MOVEMENT DURING INSPECTION. SOURCE DETERMINED TO BE LACK OF WELDING AT LT SIDE OF LOWER BEARING CONTROL YOKE SPACER ASSEMBLY TO THE CONTROL YOKE SHAFT ITSELF. MFG HAS PROVIDED APPROPRIATE DATA TO COMPLETE THE WELDMENTS.

CA040806004	CESSNA	LYC		BOLT	FAILED
7/22/2004	172M	O320E2D	SL78027	SL78027	CONECTING ROD

(CAN) THE PILOT DEPARTED AIRPORT: AT 2100 FT AND 4 MILES SOUTH OF DEPARTED AIRPORT, ENGINE STARTED TO RUN ROUGH, PARTIAL POWER LOSS. THE PILOT LANDED AT SAME AIRPORT WITHOUT ANY DIFFICULTY. UPON INVESTIGATION OF ENGINE, FOUND THAT THE CONNECTING ROD BOLTS P/N SL78027 FAILED AND SEPARATION OF CONNECTING ROD CUP. ENGINE SENT FOR FURTHER INVESTIGATION.

CA040809005	CESSNA	LYC	CESSNA	ROD END	WORN
8/2/2004	172N	O320H2AD		C109	STEERING ARM

(CAN) ON GROUND ROLL, THE PILOT WAS UNABLE TO TURN THE AIRCRAFT TO THE RT. AFTER INSPECTION OF THE STEERING SYSTEM, DISCOVERED A STEERING ARM DISCONNECTED IN LOCATION OF THE PEDALS. THE ROD END THAT ATTACHES TO THE PEDALS WAS WORN, WHICH CAUSED THE STEERING ARM TO DISCONNECT. THE ROD END WAS REPLACED.

CA040823007	CESSNA	LYC		MAGNETO	MIGRATED
8/10/2004	172N	O320H2AD		D4RN3000	ENGINE

(CAN) ATTACH NUTS ON CLAMP BLOCK WERE TIGHT. MAGNETO ROTATED TO CAUSE RPM DROP. THE MAGNETO HAD 386.6 HOURS SINCE LAST REMOVAL.

2004FA0000745	CESSNA	LYC		AIR BOX	DAMAGED
4/24/2004	172N	O320H2AD		05521644	CARBURETOR

DURING RUN-UP, BEFORE DEPARTURE, THE CARBURETOR HEAT WAS CHECKED AT 1000 AND 1700 RPM WITH ABOUT 75 RPM DROP. DURING THE FLIGHT BACK, IN CRUISE FLIGHT, THE CARB HEAT WAS CHECKED AGAIN AT VARIOUS POWER SETTINGS, WORKING NORMALLY WITH ABOUT A 100 RPM DROP. AFTER ARRIVAL, THE CARBURETOR AIR BOX WAS REMOVED FOR INSPECTION. UPON INSPECTION, 2 EA .7500 IN PIECES OF THE FLAPPER VALVE SEAL WERE FOUND MISSING ON TWO CORNERS OF THE FLAPPER VALVE. OTHERWISE, THE CARBURETOR AIR BOX ASSY WAS INTACT.

2004FA0000786	CESSNA	LYC	BENDIX	BEARING	OVERHEATED
8/16/2004	172N	O320H2AD		10382971	MAGNETO

DURING FLIGHT, ENGINE BEGAN TO LOOSE POWER, AND AIRCRAFT EXPERIENCED AN OFF-FIELD LANDING. UPON INVESTIGATION INTO THE FAULT, IT WAS DISCOVERED THAT THE MAGNETO BREAKER POINTS WERE NOT OPENING. DISASSEMBLY OF THE MAGNETO REVEALED THAT BEARING PN 1038297 INSTALLED IN BENDIX MAGNETO PN 10-682555-14, HAD OVERHEATED DUE TO APPARENT INSUFFICENT LUBRICATION CAUSING RAPID WEAR OF THE BREAKER POINTS CAM FOLLOWERS. (CE03200402198)

2004FA0000760	CESSNA	LYC		CYLINDER HEAD	CRACKED
8/11/2004	172P	O320D2J		7580213	ENGINE

CYLINDER CRACKED FROM LOWER SPARK PLUG HOLE AROUND OUTSIDE OF EX SEAT TO TOP SPARK PLUG HOLE. JUST LIKE ALL THE OTHER ONES.

2004FA0000543	CESSNA	LYC		FLOAT	STICKING
6/6/2004	172P	O320D2J			CARBURETOR

ON SHORT FINAL THE ENGINE LOST POWER. A DECISION WAS MAKE TO MAKE AN OFF FIELD LANDING IN A CORNFIELD. FOLLOW-UP STATIC RUN SHOW NO PROBLEMS AND TEST FLIGHT WAS SCHEDULED. DURING THE TEST FLIGHT ENGINE POWER LOSS TOOK PLACE ON SHORT FINAL. CARBURETOR WAS REMOVED AND INSPECTED FINDING MARKS ON THE FLOAT AND CARBURETOR BODY INDICATING THE FLOAT WAS STICKING CAUSING FUEL STARVATION. RECOMMEND SPECIAL EMPHASIS BE PLACE ON CENTERING THESE FLOATS IN THE CARBURETOR BODY TO PREVENT STICKING AND POSSIBLE FUEL STARVATION. (GL03200409863)

CA040831012	CESSNA	LYC		TAPPET	CRACKED
6/18/2004	172P	O320D2J		LW72877	ENGINE

(CAN) HEAD OF CAM FOLLOWER (TAPPET BODY) CRACKED OFF AND FELL INTO SUMP. VALVE COULD NOT ACTIVATE, SO LOST POWER FROM THAT CYLINDER. ON ENGINE TEAR DOWN, 3 OTHER FOLLOWERS WERE FOUND PARTIALLY CRACKED OR PIECES MISSING.

2004FA0000746	CESSNA	LYC		SPAR	DAMAGED
8/2/2004	172R	IO360L2A		24320004	HORIZONTAL STAB

DURING INSP, HORIZONTAL STABILIZER WAS FOUND TO BE LOOSE AT BOTH FORWARD SPAR MOUNT HOLES. ENTIRE EMPENNAGE WAS REMOVED FROM AIRFRAME FOR DETAILED INSP. BOTH HOLES AT STABILIZER SPAR AND FORWARD BULKHEAD WERE FOUND TO BE ELONGATED .316 INCH TO .319 INCH. BOTH SHIMS BETWEEN STAB AND BULKHEAD WERE EXTREMELY ELONGATED AND APPEAR TO HAVE BEEN COUNTERSUNK PRIOR TO INSTALLATION AT FACTORY. BOTH SHIMS REMOVED WERE A THICKNESS OF .080 INCH. BOLTS REMOVED FROM FWD SPAR MOUNTS WERE AN5-6A, WHICH IS CORRECT HARDWARE IAW MM. BOLTS INSTALLED FROM MFG DID NOT HAVE SUFFICIENT GRIP LENGTH TO SUPPORT TOTAL MATERIAL THICKNESS. RECOMMEND REAMING ALL 4 HOLES TO .371 IN TO .374 IN AND INSTALLING AN6-10A BOLTS.

AUS20040505	CESSNA	LYC		CONTROL ROD	BENT
6/14/2004	172R	IO360L2A		05232182	AILERON CONTROL

(AUS) RT AILERON PUSH-PULL ROD BENT.

CA040916010	CESSNA	LYC		SWITCH	WORN
9/16/2004	172R	IO360L2A		CM35895	LANDING LIGHT

(CAN) WHILE PERFORMING ROUTINE MAINTENANCE ON THE AIRCRAFT, IT WAS NOTED THAT THE LANDING LIGHT SWITCH WAS FUNCTIONING INTERMITTENTLY. PREVIOUS EXPERIENCE WITH THIS TYPE OF DEFECT URGED US TO REPLACE THE SWITCH WITH A NEW PART. THE OLD SWITCH WAS OPENED UP TO DETERMINE THE CAUSE OF THE MALFUNCTION WHICH REVEALED ONE OF THE COPPER BRAIDS SEPARATED FROM ITS POINT OF ATTACHMENT. THIS DEFECT HAS PROBABLY OCCURRED TWO OR THREE TIMES WITH THIS ORGANIZATION.

2004FA0000725	CESSNA	LYC		PIVOT ASSY	CRACKED
9/21/2004	172RG	O360*		24411001	MLG

IN FLIGHT THE LT LANDING GEAR WOULD NOT COME DOWN. THE PILOT WAS ABLE TO MANUALLY GET THE GEAR DOWN AND LOCKED FOR LANDING. UPON INVESTIGATION IT WAS DISCOVERED THAT THE LT MAIN LANDING GEAR PIVOT ASSEMBLY SHAFT WHERE THE ACTUATOR ATTACHES HAD BROKEN AND WHEN THE GEAR WAS SELECTED TO THE DOWN POSITION THE ACTUATOR COULD NOT MOVE THE LT GEAR. IT APPEARS THAT THE SHAFT TO CRACK HALF WAY AROUND THE CIRCUMFERENCE OF THE SHAFT OVERTIME WHICH CAUSED THE FINAL FAILURE OF THE SHAFT. AT SOME POINT AND TIME THERE SHOULD BE A REQUIREMENT FOR THE GEAR TO BE REMOVED FOR A DETAILED INSPECTION. THE AREA IN WHICH THE FAILURE OCCURRED ON THIS PIVOT ASSY COULD ONLY HAVE BEEN SEEN WITH LANDING GEAR REMOVED.

2004FA0000804	CESSNA			AUDIO PANEL	SMOKE
10/13/2004	172S			KMA-26-0201	COCKPIT

THE AUDIO CONTROL PANEL EMITTED SMOKE AND STOPPED OPERATING DURING TAXI PRIOR TO FLIGHT. AIRCRAFT RETURNED TO BASE, MAINTENANCE REMOVED THE UNIT FROM AIRCRAFT AND VERIFIED AIRCRAFT BUS BAR VOLTAGE WITH ALTERNATOR OPERATING. A WORKING KMA-26 WAS INSTALLED, OPERATION WAS VERIFIED IAW MM AND AIRCRAFT WAS RETURNED TO SERVICE. THE AIRCRAFT/AUDIO CONTROL PANEL HAD NOT COMPLIED RECOMMEND MFG SB03-23-01 AND SB KMA26-5. THE BULLETINS REQUIRE THAT POWER MODULE INSIDE THE KMA-26 BY REPLACED WITH A UPDATED PART NUMBER. THE KMA-26 HAD BOARD TRACE DAMAGE, BELIEVED TO BE CAUSED BY POWER MODULE FAILURE.

N827SP1	CESSNA	LYC		INDICATOR	INOPERATIVE
8/9/2004	172S	IO360A1A		S32778	EGT

EGT/FUEL FLOW INDICATOR BECAME INOPERATIVE DURING FLIGHT.

2004FA0000739	CESSNA	LYC		CONTROLLER	FAILED
8/12/2004	172S	IO360L2A		AC2101	ALTERNATOR

ALTERNATOR VOLTAGE WENT OVER VOLT. OV PROTECTION FAILED AND BUSS VOLTAGE WENT WAY HIGH BURNING UP EVERTHING THAT WAS TURNED ON INCLUDING NAV LIGHTS, LANDING AND TAXI LIGHTS, ALL RADIOS, MOST INSTRUMENT LIGHTS AND ALL ELEC INSTRUMENTS, ANNUNCIATOR PANEL, INTERCOM. (GL11200413843)

CA040907002	CESSNA	LYC		ALTERNATOR	DAMAGED
8/25/2004	172S	IO360L2A		X660007	ENGINE

(CAN) ALTERNATOR CHARGING SYSTEM WOULD NOT COME ONLINE. TROUBLESHOOTING REVEALED THAT EVERYTHING SHOULD BE WORKING NORMALLY. HOWEVER SYSTEM WOULD NOT CHARGE. ALL VOLTAGES (IAW M.M.) APPEARED TO BE NORMAL BUT STILL THE CHARGING SYSTEM WAS SHOWING A DISCHARGE. VOLTAGE WAS CHECKED AT THE OUTPUT SIDE OF THE ALTERNATOR CONTACTOR AND WAS FOUND TO BE NORMAL. HOWEVER THERE WAS LITTLE TO KNOW CURRENT FLOW. ASSUMED THAT THE CONTACTOR (INTERNALLY) HAD A BUILT UP LAYER OF CARBON FROM ARCHING. REPLACED THE ALTERNATOR CONTACTOR X66-0007 AND THE SYSTEM BEGAN TO OPERATE WELL WITH-IN ITS OPERATING RANGE. CHECKS OK. WE ALLOWED THE AIRCRAFT TO FLY A FEW DAYS AND IT CONTINUED TO CHARGE NORMALLY.

2004FA0000752	CESSNA	LYC		BRACKET	CRACKED
9/3/2004	175	O360A1D		051313211	ENGINE MOUNT

THE FUSELAGE UPPER ENGINE MOUNT BRACKETS WERE DISCOVERED TO BE CRACKED AT MOUNTING HOLES. PN 0513132-11 FOR UPPER LT AND UPPER RT. NEW REPLACEMENT PARTS WERE NOTED TO BE SLIGHTLY THICKER AND MADE FROM SAME MATERIAL. SUGGEST ENGINE MOUNT REMOVAL FOR INSPECTION PERIODICALLY.

2004FA0000724	CESSNA	LYC		BEARING	DISLODGED
8/30/2004	177	O320*			AILERON CONTROL

IN FLIGHT, NOTICED THAT LOSS OF AILERON CONTROL INPUT HAD OCCURRED, AND UPON ADDED FORCE TO CONTROL YOKE, DETERMINED THAT TOTAL SEIZURE OF THE AILERONS HAD OCCURRED. LANDED WITH RUDDER CONTROL ONLY. REMOVED TUBE ASSY FROM FIREWALL AND FOUND SHAFT AND BEARING TO BE SEVERELY WORN, APPARENT NEEDLE BEARING DISLODGING CAUSED INABILITY TO ROTATE YOKE FOR AILERON CONTROL INPUT.

041403	CESSNA	LYC		AIR FILTER	WRONG PART
10/5/2004	177	O320E2D		BA5710	ENGINE

DURING TROUBLESHOOTING FOR EXCESSIVE MAGNETO DROP, FOUND FACE OF AIR FILTER ELEMENT DETERIORATED. THE INSTALLATION IS FOR A BRACKETT FILTER. REMOVED ELEMENT AND FOUND THAT ELEMENT WAS AN UNAPPROVED PART. THE (FILTER) WAS HAND CUT FROM A PIECE OF GREEN FOAM .6250 INCH THICK. IT APPEARS THE FACE OF THE FOAM WAS PAINTED BLACK SO AS TO LOOK LIKE A GENUINE BRACKETT FILTER. HAD THE FILTER DETERIORATED, INGESTION IN THE CARBURETOR COULD HAVE CAUSED A LOSS OF ENGINE POWER WITH POTENTIAL FATAL RESULTS. THIS PRESENTS A SERIOUS SAFETY PROBLEM AND REPRESENTS A LACK OF REGARD FOR SAFETY. NO LOGBOOK ENTRY COULD BE FOUND FOR RECENT INSTALLATION OF FILTER. ANNUAL INSPECTION WAS SIGNED OFF IN AUGUST OF 2004.

041403A	CESSNA	LYC	BENDIX	GEAR	BROKEN
10/5/2004	177	O320E2D	S4LN21	10357586	MAGNETO

LOST POWER ON TAKEOFF. VERIFIED PROBLEM OF LT MAGNETO INOPERATIVE. INSPECTED AND FOUND MAGNETO DISTRIBUTOR GEAR MISSING SEVERAL TEETH. GEAR WAS LOOSE ON SHAFT WHICH PROBABLY CONTRIBUTED TO BREAKAGE. SUSPECT CAUSE WAS LACK OF PROPER MAINTENANCE OVER LIFE OF MAGNETO. ANNUAL INSPECTION WAS SIGNED OFF IN AUGUST 2004.

2004FA0000756	CESSNA	CONT		GEAR	FAILED
7/19/2004	180	O470K			CAMSHAFT

THIS ENGINE HAD A COMPLETE FAILURE IN FLIGHT, PILOT WAS ABLE TO GLIDE TO AIRPORT. INITIAL INSPECTION FOUND DAMAGE TO CRANKSHAFT AND CAMSHAFT DRIVE GEARS INSIDE ACCESSORY GEARBOX. INSPECTION WAS NOT COMPLETE TO FIND OUT WHY THIS HAPPENED, DUE TO THE TIME AND AGE OF ENGINE. DECISION MADE TO JUST REPLACE ENGINE. LAST OVERHAULED APRIL 1968. (WO M8766)

CA040723006	CESSNA	CONT		MOUNT	CRACKED
6/28/2004	180C	O470L		075100125	ENGINE

(CAN) A SMALL CRACK (LESS THAN 2MM) WAS DISCOVERED ON THE ENGINE MOUNT DURING SERVICING. THE CRACK IS LOCATED ON THE LT SIDE, ON THE UPPER TUBING WHICH RUNS FORE AND AFT IN BETWEEN THE FORWARD AND REAR ENGINE MOUNT PADS. THE EXACT LOCATION IS ONE INCH FORWARD OF THE GUSSET PLATE FOR THE REAR MOUNT PAD.

CA040825003	CESSNA	CONT		BRACKET	CRACKED
5/6/2004	180H	O470R		07321014	HORIZONTAL STAB

(CAN) TAIL REMOVED TO CHANGE BROKEN BRACKETS. PN 0712302-1 LT BRACKET AND 0732101-4 REINFORCEMENT REPLACED WITH NEW PARTS. ADJACENT RIVETS REPLACED. TAIL REASSEMBLED AND DUAL INSPECTED.

CA040915010	CESSNA	CONT	CESSNA	TUBE	CRACKED
9/2/2004	180J	O470*			ENGINE MOUNT

(CAN) ENGINE MOUNT LT LONGITUDINAL TUBE CRACKED AND DEFORMED AT THE REAR ATTACH CLUSTER. DAMAGE CONSISTENT WITH THAT FOUND AFTER A HARD LANDING, AIRFRAME AND ENGINE INSPECTED FOR RELATED DAMAGE AND NONE FOUND. NO REPORT OF A HARD LANDING FORTH COMING FROM FLIGHT OPERATIONS.

CA040915008	CESSNA	CONT		STRAP	CORRODED
4/30/2004	180J	O470S		16449	FLOAT

(CAN) SLIGHT BULGE WAS NOTED ON EDGE OF STRAP (PN 16449) EXTERIOR OF FLOAT SKIN. FURTHER INVESTIGATION INVOLVED REMOVING STRAP ASSY FROM FLOAT SKIN, INVESTIGATION REVEALED EXTENSIVE CORROSION, TO POINT THAT FLOAT HULL SKIN WAS SEVERELY DEFORMED(BEING PUSHED INWARD FROM CORROSION PROCESS HAPPENING UNDER STRAP). VERY FEW VISUAL CLUES WERE PRESENT ON EXTERIOR OF FLOAT. ONLY WAY POSITIVE ID WAS PREFORMED WAS TO REMOVE SPREADER BARS FROM FLOATS AND CONDUCT DETAILED VISUAL INSP ON UNDER SIDE OF STRAP ATTACHING POINTS. RECOMMEND THIS DETAILED INSP AT TIME OF MAJOR OVERHAUL. NOTE: THIS SET OF FLOATS HAD

OPERATED FOR MOST OF THEIR LIFE IN FRESH WATER ENVIRONMENT, FOR LAST 8 YEARS HAVE BEEN OPERATED IN SALTWATER.

2004FA0000677	CESSNA	CONT	CYLINDER	CRACKED
7/31/2004	182A	O470L	64680A7	NR 3

NR 3 CYLINDER CRACKED CIRCUMFERENTIALLY APPROXIMATELY 4 INCHES BELOW THE HEAD. THE RESULTANT VIBRATION MADE A PRECAUTIONARY LANDING PRUDENT. UPON REMOVAL AND INSPECTION, THE CRACK APPEARED TO VARY BETWEEN 0.060 INCH AND 0.030 INCH (APPROXIMATE) AS IT PROPAGATED AROUND THE CYLINDER.

CA040917006	CESSNA	CONT	LEG ASSY	BROKEN
9/3/2004	182E	IO470D	07416011	LT MLG

(CAN) WHEN TURNING TO ALIGN AIRCRAFT FOR TAKEOFF ON THE GRASS STRIP AT CPE7 THE LT MAIN LANDING GEAR LEG SNAPPED OFF AT THE OB CHANNEL. THE AIRCRAFT COLLAPSED, THE ENGINE WAS STOPPED WITHOUT A PROP STRIKE BUT THE WING EXTENSION AND TIP WERE DAMAGED AS WELL AS THE TAIL PLANE. NO PREVIOUS EVIDENCE OF CRACKING OR CORROSION IN THIS AREA.

2004FA0000758	CESSNA	CONT	BULKHEAD	CRACKED
8/27/2004	182N	O470*	07126167	RT RUDDER STOP

BULKHEAD FOUND CRACKED DURING ANNUAL INSPECTION AT RT RUDDER STOP BOLT. THIS BULKHEAD REQUIRES 1000 HR INSPECTIONS IAW AD72-07-09, WHICH WAS NOT DUE AT THIS TIME. SUSPECT WIND DAMAGE FROM REPEATEDLY STRIKING STOP. (SO05200410568)

2004FA0000787	CESSNA	CONT	VALVE GUIDE	WORN
8/12/2004	182P	O470*	648014	CYLINDER HEAD

ON DOING A COMPRESSION CHECK, 3 OUT OF 6 CYLINDERS HAD VALVES LEAKING. WHEN REMOVED FOR REPAIR, DISCOVERED GUIDES WORN BEYOND MAX SERVICE LIMIT. (NM09200412745)

2004FA0000743	CESSNA	CONT	CYLINDER	CRACKED
8/27/2004	182Q	O470U	654650	NR 6

ON TAKEOFF AT CLIMB OUT, PILOT HEARD LOUD BANG FOLLOWED BY ROUGH ENGINE, DECLARED EMERGENCY AND LANDED WITHOUT FURTHER PROBLEMS. WITH OIL LEAKING FROM COWL, VISUAL INSPECTION NOTED HEAD SEPARATED FROM NR 6 CYLINDER. WITH COWL REMOVED AND CYLINDER OFF, IT WAS OBVIOUS THE CYLINDER HAD BEEN PARTIALLY CRACKED FOR SOME TIME. (SO05200410648)

CA040723004	CESSNA	CONT	HUB	CORRODED
7/23/2004	185C	IO470F	A4716	PROPELLER

(CAN) PROPELLER RECIEVED FOR 10 YR O/H. UPON REMOVAL OF PAINT FROM THE EXTERIOR OF THE HUB, CORROSION WAS FOUND THAT WAS BEYOND REPAIR.

FTW04LA214	CESSNA	CONT	SWITCH	DEFECTIVE
8/16/2004	188CESSNA	TSIO520T	S116052	EMER FUEL PUMP

AIRCRAFT LOST POWER ON LANDING. CRASHED SHORT OF FIELD. DETERMINED (HI-SIDE) OF EMERGENCY FUEL PUMP SWITCH STUCK IN THE HI POSITION.

CA040904001	CESSNA	CONT	DOUBLER	CRACKED
8/20/2004	207	IO520F	12120031	HS BULKHEAD

(CAN) THE BULKHEAD DOUBLER REINFORCES THE HOLE WHERE THE HORIZONTAL STAB ATTACHES. DOUBLER SPLIT IN TWO THROUGH ANCHOR NUT RIVET HOLE. THIS DOUBLER ONLY FOUND ON THE FIRST MODELS. LATER MODELS HAD TWO DOUBLERS. OLDER MODELS HAVE THE SAME SINGLE DOUBLER INSTALLED.

HYTA2004007	CESSNA	PWA	SPAR	CHAFED
8/2/2004	208B	PT6*		WINGS

LOWER SURFACE OF LT AND RT FORWARD WING SPARS AND LIFT STRUT ATTACH FITTINGS HAVE BEEN CHAFED BECAUSE OF CONTACT WITH THE LIFT STRUT UPPER FAIRING/COVER. WORST DAMAGE WAS LESS THEN .005 INCH IN DEPTH AND WAS EASILY BLENDED OUT. APPLIED VINYL CHAFE TAPE TO SPAR AND STRUT FITTINGS TO PREVENT REOCCURRENCE. CAB02-2 REV 1 ADDRESSES THIS CONDITION BUT DOES NOT INCLUDE THIS S/N AIRPLANE. IT APPEARS THAT MFG CHANGED THE RIVET PATTERN IN THIS FAIRING/COVER ASSEMBLY, P/N 2621012-54 AND 55 ON LATER S/N AIRPLANES TO AVOID DAMAGE CAUSED BY RIVET HEADS. BUT FURTHER REDESIGN MAY BE NECESSARY TO ELIMINATE THE PROBLEM. APPLICATION OF CHAFE TAPE EFFECTIVELY PREVENTS DAMAGE. (M)

CA040818008	CESSNA	PWA	SEGMENT	SHIFTED
8/12/2004	208B	PT6A114A	305309CL1	COMPRESSOR TURB

(CAN) WHILE INCREASING POWER FOR CLIMB, THE PILOT NOTICED AN ITT OVERTEMP INDICATION. AIRCRAFT RETURNED TO AIRPORT UNDER REDUCED POWER TO REMAIN BELOW MAXIMUM CONTINUOUS ITT. MAINTENANCE SPLIT THE ENGINE AND FOUND THAT A SHROUD SEGMENT HAD SHIFTED AND CONTACTED THE COMPRESSOR TURBINE BLADES CAUSING CONSIDERABLE LOSS OF BLADE TIP MATERIAL AND DISCOLORATION. ENGINE REMOVED FOR OVERHAUL AND FURTHER INVESTIGATION.

CA040923002	CESSNA	CONT	CYLINDER	CRACKED
9/16/2004	402CESSNA	TSIO520E	AEC631397ST712B	ENGINE

(CAN) AT THE 50 HRS INSPECTION OF THE AIRCRAFT, DURING ENGINE CYLINDER COMPRESSION TEST, MADE ENGINE SB M91-6, AND THE TEST FAILED BECAUSE FOUND AIR LEAK AT THE JUNCTION OF THE CYLINDER BARREL AND THE TOP CYLINDER HEAD (BETWEEN FINS). THE ENGINE AND CYLINDER HAD ONLY 90.5 HRS. REPLACED CYLINDER AND RETURNED AIRCRAFT TO SERVICE AFTER THE INSPECTION.

AUS20040507	CESSNA	CONT	BEARING	FAILED
6/2/2004	404CESSNA	GTSIO520M	A20028	PROP GOVERNOR

(AUS) LT ENGINE PROPELLER GOVERNOR FAULTY. INVESTIGATION FOUND OIL PUMP GEAR PN A20107 WORN, PIVOT PIN PN A20026 EXTREMELY WORN AND BEARING PN A20028 DESTROYED. THE HOUSING WAS GOUGED TO A DEPTH OF APPROXIMATELY 3.175MM (0.125IN) IN THE BEARING AREA AND THE PUMP WALL WERE BADLY SCORED. METAL CONTAMINATION OF ENGINE OIL SYSTEM.

2004F00391	CESSNA	CONT	WHEEL	SEPARATED
8/26/2004	414A	TSIO520*	4040A	MLG

ON TAKEOFF, LT OB HALF OF WHEEL, TIRE AND TUBE SEPARATED FROM AC. THE IB HALF OF WHEEL STAYED ON THE AXLE AS WELL AS THE AXLE NUT, BEARING CONE AND INNER RACE FOR OUTER HALF. DUE TO HIGH SPEED AT THE TIME OF INCIDENT THE TIRE AND TUBE HAVE NOT BEEN LOCATED. THE OUTER WHEEEL HALF WAS LOCATED. THE WHEEL HALVES AND REMAINING HARDWARE WERE INSPECTED. NO EVIDENCE WAS FOUND TO INDICATE IMPROPER ASSY. IMPROPER INSTALLATION, OR IMPROPER HARDWARE INSTALLATION. AT THIS TIME CAUSE OF WHEEL SEPARATION IS UNKNOWN. (CE07200416204)

O05R200400117	CESSNA		BLADE	SCRATCHED

6/17/2004	425		93KB0	PROPELLER

PROPELLER BLADE HAS A SCRATCH IN SHOTPEEN ON SHANK.

O05R2004117	CESSNA		BLADE	SCRATCHED
6/17/2004	425		93KBO	PROPELLER

SCRATCH IN SHOTPEEN ON SHANK. AMMENDED SERIAL NO IN BOX 5 (D) BF024

O05R200400118	CESSNA		BLADE	SCRATCHED
6/17/2004	425		93KB0	PROPELLER

SCRATCH IN SHOTPEEN ON SHANK.

CA040624009	CESSNA	WILINT	COUPLING	FAILED
5/13/2004	525	FJ441A	W99124CE	BLEED AIR SYS

(CAN)A/C HAD BEEN MODIFIED AT FACTORY TO REMOVE FLEX COUPLING AND TUBE ARRANGEMENT OF S/N 0001 THRU 0129 BLEED AIR SYSTEMS (REF. IPC36-10-00-01 SHEET 1 OF 4 DETAIL B) AND INSTALL FLEX COUPLING AND TUBE ARRANGEMENT OF S/N'S 0130 THRU 0184. THIS UPGRADED ARRANGEMENT HAS SOME INHERENT ALIGNMENT DIFFICULTIES. ON TWO OCCASIONS (ONCE ON LT ENGINE AND SECOND ON RT ENGINE) COUPLING P/N W991-24CE FAILED TO REMAIN LATCHED AND JOINT SPREAD OPEN RESULTING IN A BLEED AIR LEAK. PILOT NOTICED A SHARP INCREASE IN ITT WITH POWER LEVER ADVANCES. ON BOTH OCCASIONS THE FAILURE OCCURRED DURING THE PREFLIGHT RUN UP. INSPECTION OF THE COUPLINGS DID NOT REVEAL SIGNIFICANT WEAR. COUPLINGS AND SEALS WERE REPLACED WITH NEW PARTS.

CA040816006	CESSNA	PWA	WIRE HARNESS	DAMAGED
8/11/2004	550	JT15D4		ADI

(CAN) WHILE CARRYING OUT COMPANY CAMPAIGN NOTICE 851-34-10-24, FOUND NO DAMAGE ON THE WIRE BUNDLE FOR THE HSI. HOWEVER THERE WAS DAMAGE FOUND ON THE ADI WIRE BUNDLE. SEVERAL WIRES IN THE BUNDLE SHOWED EVIDENCE OF SHIELD DAMAGE AND ONE SINGLE WIRE SHOWED EXPOSED CORE. ALL NECESSARY WIRES WERE REPAIRED AND THE AIRCRAFT WAS RETURNED TO SERVICE.

CA040726004	CESSNA	PWA	WIRE HARNESS	CHAFED
7/4/2004	550	JT15D4	RMU850	NR 1 RMU

(CAN) THE PILOT REPORTED THAT THE NR 1 RMU FLASHED RED AND THAT THEY COULD SMELL SOMETHING BURNING WITH NO VISIBLE SMOKE. THE NR 1 RMU WAS REMOVED AND INSPECTED WITH NOTICEABLE DAMAGE APPARENT. AN INSPECTION OF THE WIRE BUNDLE CONNECTING THE UNIT WAS CARRIED OUT AND TWO DC POWER WIRES WERE FOUND CHAFED THROUGH THE INSULATION. THE REQUIRED REPAIRS WERE CARRIED OUT AND THE AIRCRAFT WAS RETURNED TO SERVICE.

CA040929005	CESSNA	PWA	MANIFOLD	LEAKING
7/23/2004	550	PW530A	31J251302	FUEL SYSTEM

(CAN) INVESTIGATION OF AN UNCOMMANDED ENGINE IFSD REVEALED FUEL LEAKAGE AT THE ENGINE FUEL MANIFOLD. THE MANIFOLD IS UNDER INVESTIGATION AT MFG. THIS REPORT WILL BE SUPPLEMENTED TO PROVIDE ROOT CAUSE, ONCE ESTABLISHED.

CA040805018	CESSNA	ALLSN	PCU	LEAKING
8/26/2004	750	AE3007C	991444014	RUDDER

(CAN) DURING SCHEDULED MAINTENANCE, A SMALL LEAK WAS NOTICED COMING FROM THE RUDDER.

CA040728003	CESSNA	CONT	B-NUT	SEPARATED
7/26/2004	A185F	IO520D		HYDRAULIC LINE

(CAN) PILOT WAS UNABLE TO HAVE GEAR DOWN INDICATION WITH BOTH ELECTRIC AND MANUAL EXTENSION. WHEEL RETRACTED BACK INSIDE WHEEL WELL ON LANDING. INSPECTION FOUND HYDRAULIC LINE INSIDE THE AIRFRAME BELLY TO RT FLOAT HAD BROKEN OFF FROM THE B-NUT. IT APPEARED THE FLARE IS WORN TO PAPER THIN CAUSING THE FLARE TO FAIL WHILE PRESSURIZED.

CA040825002	CESSNA	CONT	BRACKET	CRACKED
4/6/2004	A185F	IO520D	07321014	HORIZONTAL STAB

(CAN) REPAIRED HORIZONTAL STABILIZER. AFT ATTACHMENT POINT REINFORCEMENT BRACKETS 0732101-4 AND 0732106 REPLACED WITH NEW PARTS. ADJACENT RIVETS REPLACED. TAIL REASSEMBLED.

CA040921005	CESSNA	CONT	CYLINDER	CRACKED
9/3/2004	A185F	IO520D	CNF71ER	ENGINE

(CAN) CYLINDER ASSEMBLY FOUND CRACKED FROM SPARK PLUG HOLE.

2004FA0000785	CESSNA	CONT	PCU	FROZEN
8/27/2004	R172K	IO360*	C299506B0104	PROPELLER

NEW PROP CONTROL INSTALLED IAW SRM, CONTROL OPERATED FINE, AIRCRAFT WAS FLOWN ONCE AFTER COOL DOWN. PROP CONTROL WAS FROZEN, WAS ABLE TO BREAK FREE, INSTALLATION AND RIGGING CHECKED, PROP GOVERNOR CHECKED, AIRCRAFT FLOWN AGAIN, PROP CONTROL FROZEN AGAIN AFTER COOL DOWN, WAS ABLE TO BREAK CONTROL FREE, INSTALLED SECOND NEW CONTROL FROM MFG, THE SAME ABOVE OCCURRED WITH THE SECOND NEW CONTROL. CONTROL SENT TO MFG FOR INSPECTION, CUSTOM CONTROL WAS PURCHASED, FIELD APPROVAL IN PROGRESS.

AUS20040499	CESSNA	CONT	PISTON	FAILED
4/18/2004	R172K	IO360K	630687P015	ENGINE

(AUS) PISTON FAILED. SUSPECT FAULTY INJECTOR. LIMITED INFORMATION PROVIDED.

2004FA0000712	CESSNA		CLAMP	INCORRECT
6/9/2004	S550		AN737TW107	ACM

CLIMBING THROUGH FL27, POP WAS HEARD FROM REAR COMPARTMENT OF AIRCRAFT. INSTANTLY CABIN RATE OF CLIMB WENT TO 4K FPM UP. CLEARED, AIRCRAFT DESCENDED TO FL10 AND CONTINUED ON TO LAND AT ITS INTENDED DESTINATION. INVESTIGATION FOUND THAT CLAMP THAT SECURES COUPLING P/N 65153165-202 TO PRESSURE SIDE OF AIR CYCLE MACHINE WAS INCORRECTLY PLACED, TORQUED AND INSPECTED DURING JUST COMPLETED INSPECTION, ALLOWING DUCT TO PART, CAUSING CABIN TO VENT TO ATMOSPHERE. AIRCRAFT WAS REPAIRED AND RETURNED TO SERVICE WITH NO FURTHER COMPLICATIONS. A REVIEW OF THIS INCIDENT HAS RESULTED IN A MORE AGGRESSIVE INSPECTION AND TRAINING PROGRAM FOCUSING ON SELF INSPECTION, MORE THROUGH INSPECTION BY THE TECH AND INSPECTORS. (M)

2004FA0000770	CESSNA	CONT	PLATE	SEPARATED

6/3/2004	T210M	TSIO520R		ALT AIR DOOR

ENGINE ALTERNATE AIR DOOR IS HELD CLOSED WITH A MAGNETIC LATCH ORIGINAL PN 1250938-8. THE MAGNETIC LATCH HAS 2 STEEL SMALL PLATES BONDED TO THE MAGNET THAT MAKE CONTACT WITH THE ALTERNATE AIR DOOR. ONE STEEL PLATE CAME DEBONDED FROM AGE VIBRATION. PLATE WAS INJESTED INTO THE TURBOCHARGER. THE TURBO WAS DESTROYED IN SECONDS CAUSING TOTAL BOOST LOSS AND A RETURN LANDING. THE METAL FROM THE TURBO WAS PASSED THRU THE INDUCTION SYSTEM AND OIL SYSTEM CAUSING MAJOR DAMAGE. HAVE FOUND 2 ADDITIONAL AC WITH THE LATCH ALMOST READY TO FAIL. MFG HAS NEW IMPROVED LATCH THAT WILL NOT ALLOW ANY PARTS TO FALL INTO THE INDUCTION.

2004FA0000807	CESSNA	CONT	EXHAUST VALVE	BURNED
10/17/2004	T210M	TSIO520R	6557718	ENGINE

EXHAUST VALVE LEAKAGE ON COMPRESSION CHECK. BURNED VALVE VERIFIED BORESCOPE INSPECTION. VALVE STEM AND GUIDE WORN BEYOND SERVICE LIMITS.

2004FA0000800	CESSNA	CONT	LATCH	FAILED
6/3/2004	T210M	TSIO520R	12509388	ALT AIR DOOR/BOX

DURING THE ANNUAL INSPECTION, FOUND THE PN 1250938-8, MAGNET LATCH ON THE ALTERNATE AIR DOOR WITH ONE OF ITS STEEL BONDED PLATES LOOSE AND READY TO FALL INTO THE TURBO, COULD CAUSE INFLIGHT FAILURE. INSTALLED THE NEW IMPROVED CATCH PN C100200. RECOMMEND MANDITORY REPLACEMENT OF THE OLD TYPE MAGNETIC LATCH IF TT IS ABOVE 1500 HOURS.

CA040723003	CESSNA	CONT	WIRE	FAILED
7/12/2004	T310R	TSIO520B		WARNING HORN

(CAN) TAKEOFF, LANDING GEAR FAILED TO RETRACT. GEAR CB POPPED IMMEDIATELY ON SELECT UP, CAUSED 3 GREEN (SAFE GEAR) LIGHTS TO GO OUT. THE CB WAS RESET, IMMEDIATELY RE-POPPED. MOMENTARY 3 GREEN INDICATION OF LIGHTS WHEN BREAKER WAS RESET INDICATING GEAR WAS STILL DOWN, LOCKED. VISUAL, INDICATED DOWN, LOCKED. VISUAL INSP OF BOTH MAIN, NOSE GEAR WITH IT INDICATED GEAR WAS DOWN, LOCKED. THERE WAS AN ELECTRICAL FAULT WITH GEAR,COULD NOT BE RESOLVED IN FLIGHT. GEAR NEVER RETRACTED FROM INITIAL GEAR UP SELECT. FLYBY DETERMINED GEAR LOOKED DOWN, LOCKED, LANDED. ONE OF CRIMPED CONNECTOR ENDS HAD COME LOOSE FROM WIRING CAUSING ELECTRICAL FAULT. NEW END WAS ATTACHED TO GEAR HORN, PROBLEM RECTIFIED, SERVICEABLE.

MAGMARTINSEPT	CESSNA	CONT	MAGNETO	LOOSE
9/8/2004	TU206*	TSIO520M	103493504	ENGINE

UPON INSPECTION OF THE MAGNETO INTERIOR, FOUND THAT THE (STRIP-FISH PAPER) (P/N 10-349326) HAD COME LOOSE FROM THE SIDE OF THE CASE AND BECOME INGESTED IN THE DRIVE AND DISTRIBUTOR BLOCK GEARS. ADDITIONALLY, THE CARBON BRUSH SHOWED EXCESSIVE SIDE LOAD WEAR. WERE LOOKING FOR A PROBLEM RELATED TO RF NOISE IN THIS MAGNETO. HOLD MFG ACCOUNTABLE FOR ERRORS. BELIEVE WE NEED TO EITHER WORK DIRECTLY WITH MFG PERSONNEL OR THE FAA TO MAKE SURE QUALITY CONTROL ISSUES LIKE THIS ARE NOTICED AND FIXED.

MAGSENTANI	CESSNA	CONT	MAGNETO	LOOSE
9/8/2004	TU206*	TSIO520M	103493504	ENGINE

UPON INSPECTION OF THE MAGNETO INTERIOR, FOUND THAT THE (STRIP-FISH PAPER) (P/N 10-349326) HAD COME LOOSE FROM THE SIDE OF THE CASE AND BECOME INGESTED IN THE DRIVE AND DISTRIBUTOR BLOCK GEARS. ADDITIONALLY, THE CARBON BRUSH SHOWED EXCESSIVE SIDE LOAD WEAR. LOOKING FOR A PROBLEM RELATED TO RF NOISE IN THIS MAGNETO. HOLD MFG ACCOUNTABLE FOR ERRORS. SERIOUSLY BELIEVE WE NEED TO EITHER WORK DIRECTLY WITH MFG PERSONNEL OR THE FAA TO MAKE SURE QUALITY CONTROL ISSUES LIKE THIS ARE NOTICED AND FIXED.

2004FA0000749	CESSNA	CONT	DUCT	LOOSE
7/28/2004	TU206F	TSIO520C		TURBOCHARGER

SCAT 16 NOSE FROM AIRBOX TO TURBOCHARGER AIR INLET, WIRE INSIDE SCAT 16 NOSE WAS 1 INCH FROM TURBOCHARGER COMPRESSOR WHEEL. WIRE MUST BE SECURED TO OUTSIDE OF AIR DUCTS WITH OEM CLAMPS.

CA040805002	CESSNA	CONT	GEAR	BROKEN
8/4/2004	TU206G	TSIO520M	539785	STARTER ADAPTER

(CAN) THE AIRCRAFT COMPLETED ITS FIRST FLIGHT OF THE DAY WITHOUT INCIDENT. ON THE SECOND START OF THE DAY THE PILOT HEARD THE STARTER MOTOR RUNNING BUT THE ENGINE WAS NOT ROTATING. INSPECTION AND TROUBLESHOOTING PROCEDURES WERE CARRIED OUT. THE MECHANIC FOUND THE STARTER ADAPTER GEAR P/N 539785 BROKEN AND SOME DAMAGE INSIDE THE ADAPTER HOUSING. THE ENGINE OIL FILTER WAS REMOVED AND INSPECTED WITH NO INDICATION OF METAL CONTAMINATION. THE ENGINE OIL WAS CHANGED AND A NEW FILTER INSTALLED AS A PRECAUTIONARY MEASURE.

CA040823005	CESSNA	CONT	FITTING	CRACKED
8/20/2004	U206B	IO520D	1216012	RT MLG

(CAN) DURING THE 100 HOUR INSPECTION THE RT MAIN GEAR OB FITTING WAS FOUND CRACKED AT THE UPPER AFT RADIUS OF THE FITTING OPENING. THE FITTING WAS REPLACED IAW MFG RECOMMENDATIONS (OBTAINED FROM MFG) WITH A USED SERVICEABLE CUSTOMER SUPPLIED UNIT AFTER NDT INSPECTION.

2004FA0000566	CIRRUS	CONT	CONTROL CABLE	CHAFED
5/24/2004	SR20	IO360*		MIXTURE CONTROL

MIXTURE CONTROL AND ALTERNATOR BATTERY AND CABLE ARE TIED TOGETHER. CONTROL AND CABLE CHAFED INSULATION OFF CABLE AND SHORTED TO MIXTURE CABLE, CAUSING MIXTURE CABLE TO FREEZE UP AT ITS CURRENT SETTING. WHEN TYING WIRES AND CABLE AND LINES OR HOSE TOGETHER USE A STAND OFF FOR SEPARATION BETWEEN THEM.

22010904	CIRRUS	CONT	CIRRUS	BOLT	CHAFED
10/4/2004	SR22	IO550N		AN334	ALT AIR DOOR

DURING REMOVAL AND REPLACEMENT OF THE P/N 15708-001 INDUCTION DUCT ASSY. IT WAS NOTED THAT THE INDUCTION DUCT WAS CRACKED IN AREA OF AN3-34 BOLT WHICH SERVES AS HINGE POINT FOR ALTERNATE AIR DOOR. AFTER REMOVING BOLT IT WAS FOUND TO HAVE A GROOVE WORN INTO BOLT SHANK ALL THE WAY AROUND (360 DEGREES). IT APPEARS THAT INDUCTION DUCT SUPPORT BRACKET P/N 15671-002, MADE OF STAINLESS STEEL, IS WEARING INTO BOLT. IT IS VERY DIFFICULT TO TELL IF THERE IS CRACKING ON DUCT (CRACKING LOCATED AT BOTTOM OF DUCT) WITHOUT REMOVING IT. THE CONDITION OF THE BOLT CANNOT BE VERIFIED UNLESS IT IS REMOVED. THIS MODEL AIRCRAFT, WITH THE PLASTIC TYPE INDUCTION DUCTS SHOULD BE INSPECTED FOR THIS CONDITION AS SOON AS POSSIBLE.

CA040727004	CNDAIR	PWA	GASKET	LEAKING
7/24/2004	CL2151A10	CWASP	125754	MAIN OIL SCREEN

(CAN) AC WAS ON A ROUTINE FLIGHT, WHEN SHORTLY AFTER TAKE OFF, CREW NOTICED THE RT ENGINE OIL PRESSURE DROPPING AND OIL QUANTITY INDICATION SHOWING A RAPID LOST OF ENGINE OIL. VISUAL CONFIRMATION OF A MASSIVE OIL LEAK FROM NACELLE VENT LINE WAS MADE BY THE ENGINEER ON BOARD. CREW SHUT DOWN AND SECURED THE ENGINE AND RETURNED TO DEPARTURE AND LANDED WITHOUT INCIDENT. AN INSPECTION OF THE RT ENGINE REVEALED THAT THE MAIN OIL SCREEN GASKET HAD RUPTURED WHICH CAUSED THE LARGE OIL LEAK. THE SCREEN WAS REMOVED AND INSPECTED WITH NO FAULT FOUND. THE OLD GASKET WAS REMOVED AND THE SURROUNDING AREA AND COVER WAS INSPECTED. A NEW GASKET WAS INSTALLED AND ENGINE GROUND RUNS CARRIED OUT. THE ENGINE WAS CHECKED SERVICEABLE.

CA040722006	CNDAIR	PWA	NOSE COWL	FAILED
7/22/2004	CL2151A10	R2800CA3	519593	ENGINE

(CAN) AIRCRAFT WAS ON CLIMB OUT AFTER WATERSCOOPING OPERATION. THE RT ENGINE OVERSPED BEYOND 3400 RPM AT 20.

CA040816003	CNDAIR	GE	VALVE	FAILED
7/1/2004	CL6002B19	CF343A1	750006000	NLG

(CAN) THE NOSE GEAR WOULD NOT RETRACT AFTER TAKEOFF ACCOMPANIED BY A (GEAR DISAGREE) WARNING. NOSE LANDING GEAR DOOR SELECTOR VALVE REPLACED LANDING GEAR OPERATION CHECK SERVICE.

CA040814002	CNDAIR	GE	FASTENER	WORN
8/13/2004	CL6002B19	CF343B1	40G15160S	CAMLOCK

(CAN) UPON INSP OF AC DURING ROUTINE MAINTENANCE, THE RT ENGINE FORWARD LOWER COWL WAS FOUND TO HAVE 3 CAMLOCK FASTENERS PULLED THROUGH THE COWL WHILE STILL LOCKED IN THEIR RECEPTACLES, ON THE IB TRAILING EDGE. THE COWL WAS REMOVED, INSPECTED, AND THE THREE AS WELL AS OTHER CAMLOCKS, AND GROMMETS WERE REPLACED. CLOSER INSPECTION REVEALED GROMMETS TO BE WORN, WHICH ALLOWED THE CAMLOCKS TO PULL THROUGH. THE COWL WAS REINSTALLED AND THE AIRCRAFT WAS RETURNED TO SERVICE. AIRCRAFT HOURS: 11489, CYCLES: 8993

CA040814001	CNDAIR	GE	CAMLOCK	WEAK
8/13/2004	CL6002B19	CF343B1	40S16111AA	COWL

(CAN) UPON INSPECTION OF AIRCRAFT DURING ROUTINE MAINTENANCE, THE LT ENGINE FORWARD LOWER COWL WAS FOUND TO HAVE 3 CAMLOCK FASTENERS UNDONE ON THE FORWARD IB SIDE. THE COWL WAS REMOVED, INSPECTED AND THE THREE CAMLOCKS (ONE LONG PN:40S5-11, THE REST SHORT PN: 40S161-1-1AA) AND GROMMETS AS WELL AS SELECTED OTHERS WERE REPLACED, AS THEY WERE FOUND TO WORN OUT. THE COWL WAS REINSTALLED AND THE AIRCRAFT WAS RETURNED TO SERVICE. AIRCRAFT HOURS: 8758, CYCLES: 6474.

CA040818002	CNDAIR	GE	COMPUTER	INOPERATIVE
7/21/2004	CL6002B19	CF343B1	3995100208	STALL WARNING

(CAN) DURING APPROACH AT 2500 FEET, THE STICK SHAKER AND STICK PUSHER WERE ENGAGED SIMULTANEOUSLY, FOLLOWING BY THE DE-CONNECTION OF THE AUTOPILOT. THIS INDUCED A LITTLE VARIATION OF THE AIRCRAFT NOSE DOWN. THE FIRST OFFICER IMMEDIATELY COMPENSATED THIS VARIATION. THE FLIGHT CREW PROCEEDED WITH THE LANDING WHICH OCCURRED WITHOUT FURTHER INCIDENT. STALL COMPUTER WAS REPLACED.

CA040829002	CNDAIR	GE	WIRE	BURNED
8/26/2004	CL6002B19	CF343B1	MS220735	PRSOV

(CAN) IN DESCENT THROUGH 20-25, 000A STRONG TOXIC SMELL WAS PRESENT. SIMULTANEOUSLY, NR 1 JET OVHT FAIL CAUTION MESSAGE APPEARED FOR 10 SECONDS AND DISAPPEARED. ECS PAGE WAS SELECTED, IT WAS NOTICED THAT NR 1 PACK WAS NOT OPERATING. NR 1 PACK WAS SELECTED OFF AND SMELL DISSIPATED. MAINT FOUND CIRCUIT BREAKER AT POSITION J1 ON PANEL CB1 BURNED (LT AIR COND UNIT). CIRCUIT BREAKER WAS REPLACED BUT WOULD NOT RESET. FURTHER INVESTIGATION REVEALED 4 DAMAGED WIRES AT LT ENGINE PYLON CLOSE TO THE NR 1 PRSOV TWO WIRES WERE CHAFFED, TWO WIRES WERE SHORTED OUT ON THE LT PRESSURE TRANSDUCER P2H6 AND P7H6 HARNESS, WIRES WERE REPAIRED. AC WAS RETURNED TO SERVICE.

CA040915001	CNDAIR		LIMITER	MALFUNCTIONED
9/13/2004	CL6002C10		SDBA6709340001	RUDDER

(CAN) RUDDER LIMITER CAUTION MESSAGE POSTED IN FLIGHT WITH FLAP AT 1 220 KNOTS WHILE CONDUCTING RUDDER LIMITER CHECK IAW MANUFACTURING FUNCTIONAL TEST PROCEDURE ,RTL REDUCED TO .1250 BEFORE OPENING FULLY.

CA040830015	CNDAIR	GE	BLADE	DAMAGED
8/8/2004	CL6002C10	CF348C1		COMPRESSOR WHEEL

(CAN) DURING TAKEOFF ROLL, CREW NOTED VIBRATION FROM NR 2 ENGINE, FOLLOWED BY ENGINE SURGE AND UNCOMMANDED POWER ROLL-BACK. THE NR 1 ENGINE WENT INTO APR MODE AND THE TAKEOFF WAS ABORTED. BORESCOPE INSPECTION OF THE NR2 ENGINE COMPRESSOR REVEALED MOST BLADES BETWEEN 1ST AND 5TH STAGES TO BE DAMAGED, POSSIBLE BY FOD ALTHOUGH THIS HAS NOT BEEN ESTABLISHED. THE NR 2 ENGINE HAS BEEN REPLACED, THE FDR REMOVED FROM THE AC FOR ANALYSIS AND THE AIRCRAFT RETURNED TO SERVICE.

CA040815001	CNDAIR	GE	WINDOW	CRACKED
8/8/2004	CL6002C10	CF348C1	601R330311	LT SIDE

(CAN) PILOT'S SIDE WINDOW CRACKED DURING CRUISE. SIDE WINDOW WAS REMOVED AND REPLACED.

CA040918002	CNDAIR	GE	CONTROL UNIT	FAILED
9/16/2004	CL6002D24	CF348C1	70744	MACH TRIM

(CAN) WHILE CLIMBING THROUGH 7200 FEET, THE CAPTAIN WAS MAKING SMALL INPUTS TO STAB TRIM. MACH TRIM CAUTION MESSAGE APPEARED FOLLOWED RIGHT AFTER BY A STAB TRIM CAUTION. THE STAB WAS NOT RESPONDING TO INPUTS. PILOT TRIED TO RE-ENGAGE THE STAB AND NEITHER CHANNEL WOULD. AIRCRAFT RETURNED TO BASE. THE LANDING WAS UNEVENTFUL. FOLLOWING TROUBLESHOOTING, MAINTENANCE REPLACED THE MCU AND THE NR 1 SSCU. AIRCRAFT RETURNED TO SERVICE. PARTS REPLACED: MCU, P/N 7074-4, S/N 12. SSCU, P/N C13045BA03, S/N 481.

CA040817008	CNDAIR	GE	CNDAIR	STRUCTURE	FRAYED
8/11/2004	CL604	CF343B1		600151103	WINGLET TIP

(CAN) DURING THE POST FLIGHT INSPECTION THE RT AND LT WINGLET TIPS WERE FOUND TO BE DAMAGED BY STATIC DISCHARGE. THE RESIN MATERIAL WAS WAS BLOWN AWAY EXPOSING THE CARBON FIBERS AND LEAVING THE TRAILING EDGE FRAYED. CREW DID NOT EXPERIENCE LIGHTNING ON THE LAST TRIP BUT DID FLY IN LIGHT PRECIPITATION. THE STATIC WICKS TESTED SERVICEABLE. THE TIPS HAD EXTRA STATIC WICKS INSTALLED PREVIOUSLY IAW SB 23-006.

CA040728001	CNDAIR	GE	CHARGER	FAILED
7/19/2004	CL604	CF343B1	601R593251	MAIN BATTERY

(CAN) MAIN BATTERY CHARGER FAILED, NO FAULT CODES, REPAIRED UNIT, INSTALLED F/T OK.

CA040728002	CNDAIR	GE	CONTROL UNIT	FAILED
7/27/2004	CL604	CF343B1	6229852124	RADIO TUNING

(CAN) DISPLAY BLANK. REPAIRED UNIT, INSTALLED F/T, OK(RADIO TUNING UNIT).

CA040818004	CVAC	ALLSN	DOOR	OPEN
8/17/2004	340CVAC	501D13D		C1 CARGO

(CAN) AFTER TAKEOFF, CREW NOTICED A (CARGO DOOR UNSAFE) LIGHT AND THE A/C WAS NOT PRESSURIZING. THE A/C RETURNED TO THE AIRPORT WHERE THE UPPER FWD CARGO DOOR WAS FOUND UNLOCKED. DOOR WAS LOCKED AND A/C CONTINUED ON FLIGHT.

CA040806001	CVAC	ALLSN		ACTUATOR	FAILED
8/3/2004	440	501D13D		315341	OIL COOLER DOOR

(CAN) DURING CRUISE THE FLIGHT CREW NOTICED THAT THE OIL TEMPERATURE ON THE LT ENGINE WAS CLIMBING. THE CREW TRIED TO MANUALLY CONTROL THE OIL TEMP BUT WAS UNSUCCESSFUL. THE ENGINE WAS SHUT DOWN AND THE PROP WAS FEATHERED AS A PRECAUTION. THE AIRCRAFT RETURNED TO BASE. OIL COOLER DOOR ACTUATOR WAS REPLACED WITH A SERVICEABLE UNIT, AND THE AIRCRAFT WAS RETURNED TO SERVICE.

CA040823002	CVAC	ALLSN		CIRCUIT BREAKER	STICKING
8/19/2004	440	501D13D		D6752110	OIL COOLER DOOR

(CAN) DURING CRUISE THE OIL TEMPERATURE ON THE LT ENGINE CLIMBED TO LIMITS. THE OIL COOLER DOOR WAS NOT OPERATING. THE ENGINE WAS SHUT DOWN AND THE PROPELLER WAS FEATHERED AS A PRECAUTION. THE AIRCRAFT RETURNED TO BASE. UPON INVESTIGATION BY MAINTENANCE THE CIRCUIT BREAKER WAS EXERCISED AND THE SYSTEM OPERATED NORMALLY. A CIRCUIT BREAKER WAS SHIPPED AND THE BREAKER WAS REPLACED. THE AIRCRAFT WAS RETURNED TO SERVICE.

CA040831003	DHAV	PWA		RIB	CRACKED
8/13/2004	DHC2*	R985AN14B		C2TE29ND	ELEVATOR

(CAN) DURING REGULAR 100 HOUR INSPECTION AD CF-80-25 COMPLETED AND CRACK FOUND ON LT ELEVATOR IB RIB AT ATTACHMENT BOLT. CRACK WAS LARGER AND MORE VISIBLE ON DOUBLER. REMOVAL OF DOUBLER REVEALED CRACK ON RIB AS WELL. RIB REPLACED AND DOUBLER TOO. RIB - P/N C2TE29ND/C2TE9ND

CA040915009	DHAV	PWA	DHAV	GUSSET	CRACKED
8/26/2004	DHC2*	R985AN14B			LT ELEVATOR

(CAN) LT TOP ELEVATOR TIP GUSSET (LOCATED BETWEEN ELEVATOR TIP SKIN AND ELEVATOR SPAR) WAS FOUND CRACKED DURING INSPECTION. NOTE: THE PROPELLER WAS REMOVED AND OVERHAULED, AFTER 30.0 HRS SMOH,THE PROPELLER WAS REMOVED FOR REBALANCING DUE TO VIBRATION ISSUES. BELIEVE THAT THIS WAS A MAJOR CONTRIBUTING FACTOR IN THIS INCIDENT.

AUS20040486	DHAV		HONEYWELL	LIGHT	FAILED
6/8/2004	DHC8*			40598501	ALTIMETER, BAROM

(AUS) ALTIMETER LAMP FAILED. FOUND DURING INSPECTION IAW AD/RAD/43.

CA040901004	DHAV	PWA		SWITCH	HUNG UP
8/30/2004	DHC8101	PW121		682015	RUDDER TRIM

(CAN) DURING FLIGHT, CREW REPORTED HAVING A RUDDER TRIM ACTUATOR RUNAWAY CONDITION. CREW FOLLOWED THE ABNORMAL PROCEDURES CHECKLIST AND CONTINUED THE FLIGHT WITHOUT FURTHER INCIDENT. MAINTENANCE FOUND THE RUDDER TRIM SWITCH TO BE HANGING UP WHEN SELECTED TOWARDS THE LT POSITION. SWITCH WAS REMOVED AND REPLACED. SYSTEM WAS OPERATIONAL CHECKED. ALL CHECKS GOOD. AIRCRAFT RETURNED TO SERVICE.

CA040829001	DHAV	PWA		ENGINE	MAKING METAL
8/27/2004	DHC8102	PW120A			NR 1

(CAN) DURING ENGINE START, THE PILOT WAS UNABLE TO START THE NR 1 ENGINE. A RUMBLING NOISE WAS HEARD FROM THE ENGINE AND IT WOULD NOT SPOOL GREATER THAN 16 PERCENT NH. MAINTENANCE REPLACED THE STARTER GENERATOR WITH NO FIX. FURTHER INVESTIGATION REVEALED THE NR 1 ENGINE OIL TANK CHIP DETECTOR FLAGGED. THE CHIP DETECTOR AND OIL PUMP SCREEN WERE REMOVED AND CATEGORY 2 DEBRIS (LARGE FUZZ), AND CATEGORY 3 DEBRIS (LARGE CHIPS AND FLAKES) WERE DISCOVERED. THE ENGINE WAS REMOVED FROM SERVICE AND RESULTS FROM TEAR DOWN REPORTS WILL BE SUBMITTED WHEN AVAILABLE.

AUS20040469	DHAV	PWA		WIRE	WORN
6/1/2004	DHC8202	PW123D			OIL PRESS TRANS

(AUS) LT ENGINE OIL PRESSURE TRANSMITTER CONNECTOR WIRING HAD WORN INSULATION.

AUS20040466	DHAV	PWA		LINE	CRACKED
5/31/2004	DHC8202	PW123D		82920010363	HYDRAULIC SYS

(AUS) NR 2 HYDRAULIC SYSTEM, HYDRAULIC PIPE CRACKED INTERNALLY.

AUS20040513	DHAV	PWA		SOCKET	FAILED
6/11/2004	DHC8202	PW123D			CABIN

(AUS) FRONT RT CABIN FLOUROSCENT LAMP HOLDER ARCING AND SMOKING.

CA040823006	DHAV	PWA		LINE	FAILED
7/9/2004	DHC8301	PW123			HYD SYSTEM

(CAN) AFTER ENGINE SHUT DOWN AT THE GATE, HYDRAULIC FLUID WAS NOTED LEAKING FROM THE NOSE GEAR AREA. NOSE GEAR DRAG STRUT ACTUATOR HOSE REPLACED DUE TO LEAKING P/N DSC252B40124. DAMAGE FOUND TO BRAIDING JUST AFT OF THE COLLAR DEFECT NR 416542. GEAR RETRACTION CHECKS COMPLETED AND NO LEAKS DETECTED. AIRCRAFT RETURNED TO SERVICE.

CA040907003	DHAV	PWA		OIL COOLER	LEAKING
9/6/2004	DHC8311	PW123		10750F	ENGINE

(CAN) THICK WHITE SMOKE COMING FROM THE RT ENGINE BREATHER TUBE. ENGINE OIL FOUND CONTAMINATED BY FUEL. FUEL COOLED OIL COOLER (PN 10750F SN 440) REPLACED IAW MM GROUND RUNS CARRIED NO AICRAFT RETURNED TO SERVICE.

CA040907004	DHAV	PWA		OIL COOLER	LEAKING
9/6/2004	DHC8311	PW123		10750F	ENGINE

(CAN) AFTER ENGINE START THICK WHITE SMOKE NOTICED COMING FROM THE ENGINE NR 2 BREATHER TUBE. OIL FOUND CONTAMINATED WITH FUEL. FUEL COOLED OIL COOLER (PN 10750F SN 440) REPLACED IAW MM AIRCRAFT RETURNED TO SERVICE.

2004FA0000596	DIAMON			SHAFT	MISPINNED
6/16/2004	DA40			EA2UJD	FUEL SELECTOR

THIS FLEET OPERATOR OPERATES AIRCRAFT. THERE WAS A PILOT REPORT OF THE FUEL SELECTOR NOT FUNCTIONING PROPERLY, AND NOT ALLOWING THE PILOT TO SELECT THE OTHER TANK. A FLEET INSPECTION WAS INITIATED, AND THIS AIRCRAFT WAS FOUND TO HAVE THE SELECTOR SHAFT UNIVERSAL JOINTS WITH LOOSE OR MISSING ATTACH PINS.

2004FA0000597	DIAMON			SHAFT	MISPINNED

6/16/2004	DA40			EA2UJD	FUEL SELECTOR

THERE WAS A PILOT REPORT OF THE FUEL SELECTOR NOT FUNCTIONING PROPERLY, AND NOT ALLOWING THE PILOT TO SELECT THE OTHER TANK. A FLEET INSPECTION WAS INITIATED, AND THIS AIRCRAFT WAS FOUND TO HAVE THE SELECTOR SHAFT UNIVERSAL JOINTS WITH LOOSE OR MISSING ATTACH PINS.

2004FA0000598	DIAMON			SHAFT	MISPINNED
6/16/2004	DA40			EFS20X2	FUEL SELECTOR

THERE WAS A PILOT REPORT OF THE FUEL SELECTOR NOT FUNCTIONING PROPERLY, AND NOT ALLOWING THE PILOT TO SELECT THE OTHER TANK. A FLEET INSPECTION WAS INITIATED, AND THIS AIRCRAFT WAS FOUND TO HAVE THE SELECTOR SHAFT UNIVERSAL JOINTS WITH LOOSE OR MISSING ATTACH PINS.

2004FA0000599	DIAMON			SHAFT	MISPINNED
6/16/2004	DA40			EFS20X2	FUEL SELECTOR

THERE WAS A PILOT REPORT OF THE FUEL SELECTOR NOT FUNCTIONING PROPERLY, AND NOT ALLOWING THE PILOT TO SELECT THE OTHER TANK. A FLEET INSPECTION WAS INITIATED, AND THIS AIRCRAFT WAS FOUND TO HAVE THE SELECTOR SHAFT UNIVERSAL JOINTS WITH LOOSE OR MISSING ATTACH PINS.

2004FA0000606	DIAMON	LYC		SHAFT	MISPINNED
6/16/2004	DA40	IO360A1A		EA2UJD	FUEL SELECTOR

THIS FLEET OPERATOR OPERATES 10 DA40 AIRCRAFT. THERE WAS A PILOT REPORT OF THE FUEL SELECTOR NOT FUNCTIONING PROPERLY, AND NOT ALLOWING THE PILOT TO SELECT THE OTHER TANK. A FLEET INSPECTION WAS INITIATED, AND THIS AIRCRAFT WAS FOUND TO HAVE THE SELECTOR SHAFT UNIVERSAL JOINTS WITH LOOSE OR MISSING ATTACH PINS.

2004FA0000679	DOUG	GE		ATTACH FITTING	CORRODED
8/6/2004	DC1030F	CF650C2		ANB73111	WING ROOT

LOWER AFT WING TO CENTER BOX ATTACH SKATE FITTING IS EXFOLIATED, LT WHEEL WELL, FUSELAGE STATION 1366 TO 1381. REFERENCE NON-ROUTINE NR 39431.

2004FA0000678	DOUG	GE	DOUG	FUSE PIN	SHEARED
8/6/2004	DC1030F	CF650C2			DROOP MECHANISM

RT WING OB SLAT CONTROL MECHANISM HAS ANTI-DROOP FUSE PIN SHEARED. REFERENCE NON-ROUTINE 39501.

CA040818009	DOUG	PWA		LEAD	BROKEN
8/17/2004	DC6B	CWASP	R2800CB3	10878451	ENGINE

(CAN) DURING TAKEOFF FOR A PRACTICE, NR 2 ENGINE BACKFIRED. THE LOAD OF WATER WAS JETTISONED, THE ENGINE WAS SHUTDOWN AND THE PROPELLER WAS FEATHERED. THE AIRCRAFT RETURNED TO BASE. UPON INVESTIGATION BY MAINTENANCE CREW, A BROKEN LOW TENSION IGNITION LEAD WAS FOUND. THE LEAD WAS REPLACED. THE AIRCRAFT WAS RETURNED TO SERVICE.

CA040831011	DOUG	PWA		FAN BLADE	DAMAGED
8/29/2004	DC983	JT8D219			ENGINE

(CAN) DURING CRUISE, NR 1 ENGINE HAD VIBRATION AND SURGE. AIRCRAFT LANDED BACK TO DEPARTURE AIRPORT WITH ENGINE RUNNING AT IDLE. FOUND SPINNER AND 3 FAN BLADES DAMAGED BY FOD. THERE WAS NO TRACE OF BLUE ICE OR BIRD STRIKE. ENGINE HAS BEEN REPLACED.

CA040727007	DOUG	PWA		PUMP	INOPERATIVE
7/23/2004	DC983	JT8D219		AS664114S666	HYD SYS

(CAN) DURING CLIMB, RT HYDRAULIC SYSTEM PRESSURE DECREASED TO ZERO WITH APPROPRIATE EOHP ANNUNCIATOR LIGHT ILLUMINATED. AIRCRAFT LANDED BACK TO THE STATION. THE RT HYDRAULIC SYSTEM FILTERS REMOVED AND INSPECTED. NO CONTAMINATION FOUND. AIRCRAFT DISPATCHED IAW MEL 29-5. THE RT EDP WAS REPLACED ON THE FOLLOWING DAY TO RECTIFY THE DEFECT.

CA040831006	DOUG	PWA		WINDSHIELD	CRACKED
8/29/2004	DC983	JT8D219		5912290506	COCKPIT

(CAN) DURING CRUISE, AIRCRAFT HAD TO TURNED BACK TO DEPARTURE DUE TO F/O WINDSHIELD CRACKED. WINDSHIELD HAS BEEN REPLACED AND THE WINDOW HEAT CONTROLLER WAS REPLACED AS PRECAUTIONARY.

CA040805012	DOUG	PWA		CONTROL UNIT	MALFUNCTIONED
8/4/2004	DC983	JT8D219			TE FLAPS

(CAN) FLAPS WERE SELECTED AT 24, FOR TAKE OFF ON RUNWAY 24 (6150 FT). WHEN FLAPS WERE INITIALLY SELECTED, THE SLATS EXTENDED TO LAND. THE FLAPS WERE CYCLED AND 24/24 TAKE OFF WAS DISPLAYED. WHEN THROTTLES WERE ADVANCED FOR T/O, THE SLATS EXTENDED TO LAND AND THE CHIME WAS HEARD. THE T/O WAS ABORTED AT LESS THEN 60 KNOTS. THE FLAPS WERE CYCLED AGAIN AND THE THROTTLES WERE ADVANCED SLIGHTLY TO ENSURE THE SLATS REMAINED AT TAKE OFF. THROUGH 90 KNOTS THE SLATS EXTENDED AND THE TAKE OFF WAS REJECTED. MAINTENANCE ADJUSTED THE FLAP SWITCH (S1-467) IAW THE AMM AND CHECKED SERVICEABLE. ALSO AN AUTOPILOT CHECK CARRIED OUT IAW AMM 22-10-00. AIRCRAFT WAS RELEASED WITH NO FURTHER FAULTS.

CA040805005	DOUG	PWA		ENGINE	ODOR
8/4/2004	DC983	JT8D219			

(CAN) AUGUST 04, AIRCRAFT, EN ROUTE, DIVERTED TO NEAREST ALTERNATE AIRPORT. WHEN THE CABIN CREW REPORTED A BURNING SMELL (PLASTIC) IN THE AFT RT CABIN NEAR THE LAVATORY. MAINTENANCE PERSONNEL OPENED THE AISLE CEILING, REMOVED THE TOILET SHROUD (BOLSTER), OPENED THE LAVATORY CEILING AND THEN CARRIED OUT A HIGH POWER RUN WITH PACKS ON, IN ORDER TO DUPLICATE THE SMELL, NO BURNING SMELL WAS DETECTED. AS A PRECAUTIONARY MEASURE A TECHNICIAN BOARDED THE AIRCRAFT FOR THE REMAINDER OF THE FLIGHT. NO FINDINGS WERE REPORTED.

CA040823003	DOUG	PWA		ACM	SEIZED
8/20/2004	DC983	JT8D219		20495055	LEFT

(CAN) FLOW LIGHT (PRESSURIZATION) CAME ON AFTER TAKEOFF. AIRCRAFT LANDED BACK FROM DEPARTURE. MAINTENANCE FOUND ONE CLAMP NOT PROPERLY INSTALLED ON OUTLET OF LT ACM. ACM WAS PREVIOUSLY REPLACED FOLLOWING DISCREPANCY. CLAMP HAS BEEN SECURED FOLLOWED WITH PRESSURIZATION TEST AND AIRCRAFT DISPATCHED SERVICEABLE. A SECOND AIR TURNBACK HAPPENED THE FOLLOWING DAY FOR THE SAME REASON (PRESSURE FLOW LIGHT ON). MAINTENANCE FOUND THE LT ACM SEIZED. ACM HAS BEEN REPLACED. ACM IS UNDER INVESTIGATION.

2004FA0000801	DOUG	PWC		HUB	CRACKED
4/13/2004	MD900	PW207E		900R2101006107	MAIN ROTOR

DURING ACCOMPLISHMENT OF AD 2002-10-05, MAIN ROTOR UPPER HUB INSP. FOUND (3) OUT OF (10) BOLT HOLES CRACKED AS DEPICTED IN SB 900-072. CRACKS START IN BOLT HOLE CHAMFER. PART TOTAL TIME: 102.0 HRS.

2004FA0000802	DOUG	PWC	DRIVE SHAFT	WORN
10/12/2004	MD900	PW207E	900D2436530101	MAIN ROTOR

DURING ACCOMPLISHMENT OF A 300 HR INSPECTION FOUND MAIN ROTOR DRIVE SHAFT UPPER DRIVE SPLINES WORN BEYOND MAINTENANCE MANUAL LIMITS. PART TOTAL TIME: 1478.9 HRS. REPLACED DRIVE SHAFT WITH NEW PART.

CA040827006	EMB	PWA	BOLT	LOOSE
7/9/2004	EMB110P1	PT6A34	AN33A	FLAP DEFECTOR

(CAN) ON A WALK AROUND INSPECTION ONE OF FOUR BOLTS FOR THE OB LT FLAP DEFECTER WAS FOUND TO HAVE BACKED OFF.

AUS20040485	FOKKER	RROYCE	REGULATOR	STICKING
5/10/2004	F27MK500	DART*	8500341403	ELEVATOR CONTROL

(AUS) ELEVATOR CABLE TENSION REGULATOR STICKY IN OPERATION.

AUS20040509	FOKKER	RROYCE	VALVE	FAULTY
6/11/2004	F28MK0100	TAY65015	3925308	PNEUMATIC DISTRI

(AUS) LT BLEED AIR VALVE FAULTY.

CA040827005	FOKKER	RROYCE	CONNECTOR	MISINSTALLED
8/23/2004	F28MK0100	TAY65015		FUEL PILOT VALVE

(CAN) DURING TAKE OFF, TOWER REPORTED VAPOR TRAILING FROM WING. AC BACK FROM DEPARTURE. APROX 2000 LBS OF FUEL LOST. MAINT FOUND AUTO FEED SYS IN FAULT, CAUSING FUEL FROM CENTER TANK TRANSFERRED TO WING. A CONNECTOR AT REAR SPAR FOR PILOT VALVE FOUND NOT PROPERLY INSTALLED. ALSO SUSPECT THAT POWER SWITCH AT FUEL CONTROL PANEL KEPT ENERGIZED WITH ACCESS PANEL CLOSED, (SWITCH SHOULD BE FLIPPED OFF BY A CAM AT ACCESS DOOR IF SWITCH NOT MANUALLY PUT OFF IN ORDER TO PREVENT FUEL SPILLAGE FROM WINGS DURING TAKE OFF, IAW SL). THE SAME EVENT REOCCURRED ON AUG 27. TAKE OFF WAS REJECTED. THE FUEL CONTROL PANEL WAS REPLACED FOR TROUBLESHOOTING AND AS PRECAUTIONARY MEASURE, AUTO FUEL FEED SYSTEM WAS DEACTIVATED.

CA040826001	FOKKER	RROYCE	FRAME	CRACKED
8/24/2004	F28MK0100	TAY65015		FUSELAGE

(CAN) DURING INSPECTION, AD 2001-21-04 WAS PERFORMED ON FUSELAGE FRAME STRIPS AT STA 3820 THRU STA 3870 AT THE AFT SIDE OF THE NLG BAY IAW NDTM PART 6 AND AD2001-21-04. 2 CRACKS WERE FOUND, RT 0.650 LONG AND LT 0.600 LONG.

CA040914007	FOKKER	RROYCE	LANDING GEAR	OUT OF POSITION
9/13/2004	F28MK0100	TAY65015		

(CAN) MAIN GEAR UNSAFE APPEARED ON MFDS AFTER GEAR RETRACTION. AIRCRAFT LANDED BACK TO DEPARTURE AIRPORT. MAINTENANCE FOUND THE LANDING HYDRAULIC TEST VALVE LT IN (GROUND ONLY) POSITION. THE VALVE WAS LEFT IN THAT POSITION FOLLOWING A GEAR RETRACTION/EXTENSION TEST AND WAS OMITTED TO BE RE-POSITIONED TO NORMAL. THE (GROUND ONLY) POSITION RESTRICTS THE HYDRAULIC FLOW FOR A SAFE GROUND OPERATION.

AUS20040380	FOKKER	RROYCE	ROLLER	MISMANUFACTURED
5/10/2004	F28MK0100	TAY65015	D26323007	MLG DOOR

(AUS) MAIN DOOR LOCKING ROLLER INTERNAL DIAMETER WAS TOO SMALL TO FIT OVER THE STEEL STUD IN THE DOOR FRAME. ROLLER WAS A NEW ITEM AND WAS BEING FITTED TO THE DOOR. SUSPECT FAULTY MANUFACTURE.

2004FA0000720	GROB	LYC	STARTER	INTERMITTENT
7/27/2004	G120A	AEIO540*	31B22101	ENGINE

PILOT REPORTED STARTER WOULD NOT ENGAGE, PROBABLE CAUSE AT THIS TIME UNKNOWN.

2004FA0000717	GROB	LYC	IGNITION SWITCH	INTERMITTENT
7/27/2004	G120A	AEIO540*	103570101	CABIN

AFTER INSTALLING IGNITION SWITCH, THE MECHANIC NOTICE THE SWITCH WAS HARD TO PUSH IN AND INTERMITTENT AT THE START POSITION. NO PROBABLE CAUSE OR RECOMMENDATIONS AT THIS TIME.

2004FA0000762	GULSTM	LYC	CYLINDER	SEIZED
9/22/2004	500B	IO540B1A5	LW13870	NR 1 POSITION

NR CYLINDER ON LT ENGINE SEPARATED BETWEEN CYLINDER BASE AND FIRST SET OF STEEL COOLING FINS. THE CONNECTING ROD WAS TORN FROM THE CRANKSHAFT. THE SEPARATION ALLOWED THE CYLINDER TO MIGRATE OUTWARD ABOUT 2 INCHES. THE FUEL INJECTION LINE WAS TORN OFF AT FUEL INJECTOR. BOTH PUSH ROD TUBES FELL OUT AND INTAKE TUBE WAS PULLED OUT. PROBABLE CAUSE IS CYLINDER AND PISTON SEIZED TOGETHER.

121JW	GULSTM		FIREWALL	CRACKED
6/22/2004	690A		66000111,12	ZONE 400

THE LT AND RT ENGINE ALUMINUM FIREWALLS (P/N 660001-11 / -12 CHANNEL) HAVE DEVELOPED VERTICAL CRACK INDICATIONS AT THE LOWER SHEAR CLIP ATTACHMENT TAB. BOTH THE LT AND RT ENGINE IB LOWER TABS ARE COMPLETELY SHEARED AT THE FLANGE RADIUS.

2004FA0000608	GULSTM	RROYCE	LINE	LOOSE
6/25/2004	GV	BR700710A110		SENSE LINE

AT FL 410 RECEIVED A CABIN PRESSURE LOW (RED) MESSAGE ON YTHE CAS. AIRCRAFT INITIATED EDM APPROX. FL 380 CAS MESSAGE EXTINGUISHED LEVELED OFF AT FL 200. UNDECLARED AN EMERGENCY. APPROX. 10 MIN LATER RECEIVED ANOTHER CABIN PRESSURE LOW MESSAGE, DECLARED AN EMERGENCY DIVERTED, LANDED WITHOUT INCIDENT. INSPECTED AIRCRAFT IAW MFG M/M. FOUND PRESSURE REFERENCE SENSE LINE (B) NUT AND FITTING LOOSE. REMOVED AND REPLACED CPCS IAW M/M 21-31-01.

CA040825013	HUGHES	ALLSN	SHAFT	BROKEN
8/25/2004	369D	250C20B	369D25430	TAIL ROTOR

(CAN) PILOT REPORTED THAT WHEN DESCENDING RAPIDLY, COLLECTIVE BOTTOMED OUT AND RT PEDAL INPUT, THE PEDALS WOULD VIBRATE AND THE AIRFRAME WOULD VIBRATE AND WITH A LITTLE COLLECTIVE INPUT AND LT PEDAL THE VIBRATION WOULD GO AWAY. THE SAME COULD BE INDUCED ON THE GROUND WITH RT PEDAL INPUT AND NR BEEPED TO MAX. UPON INVESTIGATION OF TAIL ROTOR GEARBOX THE OUTPUT SHAFT HAD BROKE OFF WHERE THE INNER RACE FOR THE ALIGNMENT ROLLER BEARING IS PRESSED ONTO THE IB END OF THE OUTPUT SHAFT.

NM09EDR001	HUGHES	ALLSN	MAST	CORRODED
9/13/2004	369D	250C20B	369D22014	MAIN ROTOR

DURING 100 HR INSPECTION, THE MAIN ROTOR DRIVESHAFT WAS REMOVED FOR INSPECTION. THE MECHANIC LOOKED DOWN THE MAST AND FOUND THE PAINT ON THE INSIDE DIAMETER WAS BLISTERED AND PEELING. THE MECHANIC ALSO NOTICED PAINT ON THE TOP OF THE MAIN TRANSMISSION SPLINES. THE MAIN ROTOR MAST WAS REMOVED AND IT WAS NOTICED THAT THE PAINT ON THE BOTTOM FLANGE WAS ALSO PEELING AND THE INSIDE WAS CORRODING. THE MAIN TRANSMISSION WAS REMOVED FOR CONTAMINATION AND INSPECTED. THE MAIN ROTOR MAST WAS REPLACED. THE MANUFACTURE WAS NOTIFIED. THE MAST WAS INSTALLED 11-13-2000.

CA040830003	HUGHES	ALLSN	COMPRESSOR	STALLED
8/16/2004	369E	250C20B		ENGINE

(CAN) AIRCRAFT WAS EQUIPPED WITH A MIST ELIMINATOR THAT WAS REMOVED IN THE SPRING OF 2003. WHAT REMAINED WAS THE WEATHER STRIPPING THAT SEALED THE MIST ELIMINATOR TO THE BACK OF THE PARTICLE SEPARATOR. THE WEATHER STRIPPING HAS A SELF ADHESIVE AND WAS ATTACHED TO THE BACK OF THE PARTICLE SEPARATOR. ON A 26 DEGREE CELSIUS DAY, SEVERE COMPRESSOR STALL WAS EXPERIENCED WHEN THE ENGINE INJESTED ABOUT A 1.5 METER LENGTH OF WEATHER STRIPPING. THE COMPRESSOR WAS GUMMED UP AND THE BLEED VALVE SLOT WAS PLUGGED.

2004FA0000733	HUGHES	ALLSN	MOUNT	OUT OF POSITION
8/11/2004	500N	250C20		NOTAR FAN

AIRCRAFT FOUND TO HAVE CONTACT WITH FAN CONTROL ROD AND FAN DRIVESHAFT. WHICH MAY HAVE BEEN THE CAUSE OF HIGH VIBRATION IN AIRFRAME. MFG CALLED TO CHECK THE ALIGNMENT OF THE FAN MOUNT. SECOND TIME WE HAD RUB WITH DRIVESHAFT SINCE AIRCRAFT WAS NEW. UPON REMOVAL FOUND PAINT INSIDE MAST BLISTERED AND FALLING DOWN INSIDE M/R GEARBOX. WE HAVE THIS PROBLEM NINE OTHER TIMES IN LAST 4 YEARS.

2004FA0000722	HUGHES	ALLSN	MOUNT	OUT OF ADJUST
7/15/2004	500N	250C20		NOTAR FAN G/B

AIRCRAFT OVERCOME WITH SEVERE VIBRATION ON THROTTLE ROLL UP FROM GROUND IDLE TO FLIGHT IDLE. FOUND FAN CONTROL ROD MADE CONTACT INSIDE FAN DRIVESHAFT. UPON FURTHER INSPECTION FOUND FAN TRANSMISSION MOUNT AT STATION 150 OUT OF ALIGNMENT. SENDING AIRCRAFT BACK TO MFG FOR REPAIR SECOND TIME WE HAD RUB WITH DRIVESHAFT SINCE AIRCRAFT WAS NEW.

CA040924002	HWKSLY		LEVER	CORRODED
9/8/2004	DH125400A		SP10CCH614301	TE FLAPS

(CAN) AFTER AIRCRAFT STRIPPED AND BEFORE PAINT, THIS INCIDENT OCCURRED. WHEN SELECTING FLAPS TO DUMP MODE WE FOUND THE FLAPS WOULD NOT MOVE AT ALL. INVESTIGATION FOUND THAT THE BAULK VALVE LATCH LEVER WOULD NOT MOVE. TECHNICIAN TOOK BAULK VALVE LATCH LEVER ATTACH PIN APART AND FOUND EXTENSIVE CORROSION UNDER CLEVIS PIN WASHER. WE DETERMINED THAT THE CORROSION PREVENTED THE BAULK LEVER FROM MOVING WHEN THE FLAPS WERE SELECTED TO DUMP MODE. THE PARTS WERE REMOVED, CLEANED, LUBRICATED AND REASSEMBLED BACK TO SERVICEABLE CONDITION.

2004FA0000793	LANCAR	CONT	STRUT	LOOSE
10/6/2004	LC42550FG	IO520*		NLG

DURING INSPECTION FOUND THE TWO BOLTS/NUTS THAT ATTACH NOSE STRUT TO THE ENGINE MOUNT VERY LOOSE. NOSE STRUT WOBBLES WITH AIRCRAFT ON JACKS. FOUND SIMILAR SITUATION ON TWO OTHER AIRCRAFT WITH LESS THAN 100 HOURS SINCE NEW.

2004FA0000792	LANCAR	CONT	WIRE	BROKEN
9/30/2004	LC42550FG	IO550*		ALTERNATOR

PILOT REPORTED LT ALTERNATOR INOPERATIVE. FOUND TERMINAL FOR B+ WIRE BROKEN OFF, WHICH RESULTED IN INTERMITTENT CONTACT CAUSING SEVERE ELECTRICAL ARCING BETWEEN ALTERNATOR AND WIRE TERMINAL END.

CA040818001	LEAR	GARRTT	TIRE	DAMAGED
8/13/2004	35A	TFE73122B	178K235	MLG

(CAN) PILOTS NOTICED ON THEIR WALK AROUND, DURING A FUEL STOP THAT THE RT IB MAIN TIRE HAD LOST ITS TREAD AROUND THE COMPLETE CIRCUMFERENCE OF THE TIRE AT THE SIDEWALL.

CA040918001	LEAR	GARRTT	TUBE	RUPTURED
9/16/2004	35A	TFE73122B	24192273	WHEEL WELL

(CAN) CLEAR FLUID WAS SEEN RUNNING FROM LT WHEEL WELL AFTER EXTENDED GROUND RUNNING WITH AIR CONDITIONING OPERATING. IT WAS DETERMINED TO BE WATER THAT WAS DRAINING FROM THE AIR CONDITIONING EVAPORATOR INTO WHEEL WELL INSTEAD OF THROUGH OVERBOARD DRAIN. CHECK/DRAIN VALVE WAS FOUND TO BE INOPERATIVE (FAILED CLOSED - CORRODED). THIS HAD ALLOWED CONDENSATION TO COLLECT IN ALUMINUM TUBE ASSY, WHICH HAD FROZEN AT ALTITUDE, RUPTURING TUBE IN TWO PLACES. THIS DRAIN TUBE IS OUTSIDE PRESSURE VESSEL, UPSTREAM OF CHECK/DRAIN VALVE WHICH IS NORMALLY CLOSED IN FLIGHT (OPEN ON GROUND WHEN A/C IS NOT PRESSURIZED). FAILURE OF TUBE RESULTS IN AN EXCESSIVE CABIN PRESSURIZATION LEAK. PARTS REPLACED WITH NEW.

AUS20040481	LEAR	GARRTT	MANIFOLD	CRACKED
5/20/2004	45LEAR	TFE7312	12945054V6001	PNEUMATIC

(AUS) LT BLEED AIR SPLITTER DUCT CRACKED AND LEAKING FROM THE MATING FLANGE RADIUS.

AUS20040492	LEAR	GARRTT	SHAFT	CRACKED
6/7/2004	45LEAR	TFE7312	4532103054003	MLG DOOR

(AUS) LT MAIN LANDING GEAR IB DOOR GIMBAL ASSEMBLY SHAFT CRACKED FOR APPROXIMATELY 75 PERCENT OF CIRCUMFERENCE.

2004FA0000692	LET		CONTROL CABLE	FRAYED
8/26/2004	L23SUPERBLAN		A740255N	RUDDER

NEW RUDDER CABLE ASSEMBLY, PURCHASED THRU US IMPORTER/DISTRIBUTOR, FOUND TO HAVE BROKEN AND/OR DISTORTED STRANDS IN NUMEROUS PLACES.

CA040929006	MAULE	CONT	MCAULY	HUB	UNSERVICEABLE
9/29/2004	M5210C	IO360D		D613276C0	PROPELLER

(CAN) PROPELLER WAS REMOVED FROM AIRCRAFT FOR 10 YR. CALENDAR O/H. UPON INSPECTION THE HUB WAS FOUND TO BE CORRODED EXTERNALLY BEYOND REPAIR LIMITS. BLADE S/N K32294YS WAS FOUND TO BE CORRODED IN THE BLADE THREADS IN A LOCATION WHERE NO REPAIR IS ALLOWED. THE MANUFACTURER RECOMMENDED CALENDAR O/H IS 60 MONTHS.

CA040929007	MAULE	CONT	HUB	UNSERVICEABLE
9/29/2004	M5210C	IO360D	D6132	PROPELLER

(CAN) PROPELLER WAS REMOVED FOR 10 YR. CALENDAR O/H. UPON INSPECTION THE HUB WAS FOUND TO BE CORRODED BEYOND REPAIRABLE LIMITS. ALSO DURING THIS INSPECTION BLADE M/N76C-0, S/N K32294YS WAS FOUND TO HAVE CORROSION BELOW THE BLADE THREAD PITCH LINE IN AN AREA WHERE NO REPAIR IS ALLOWED. THIS PROPELLER HAS EXCEEDED THE MANUFACTURERS RECOMMENDED CALENDAR TBO OF 60 MONTHS BY 60 MONTHS.

SWISSFAA	PILATS		CANOPY	BLOCKED
8/5/2004	P305			COCKPIT

TO OUR KNOWLEDGE, AT LEAST 11 N-REGISTERED P-3 HAVE BEEN MODIFIED UNDER 337 FIRLD APPROVALS WITH A ONE-PIECE COCKPIT CANOPY REPLACING THE MULTIPLE SHEET CANOPY INITIALLY INSTALLED. ON AN AIRCRAFT RETURNED TO SWITZERLAND AN UNSAFE CONDITION WAS DISCOVERED. THE EMERGENCY CANOPY JETTISON COULD NOT BE OPERATED SINCE THE MECHANISM WAS BLOCKED BY TWO RIVNUTS INSTALLED TO RETAIN THE NEW CANOPY. WE HAD THE FAULTY INSTALLATION MODIFIED TO MAKE IT WORK. WE LET YOU KNOW OF THIS DEFECT SINCE THERE ARE SOME MORE P-3S OPERATED UNDER FAA REGISTRY THAT MIGHT HAVE THE SAME UNSAFE CONDITION.

CA040831001	PILATS	PWA	RELAY	BURNED
8/23/2004	PC12	PT6A67B	9740926112	POWER PACK

(CAN) UPON APPROACH GEAR DOWN POSITION WAS SELECTED AND THE POWERPACK FAILED TO OPERATE THE MAIN GEAR EXTENDED FULLY AS DESIGNED AND THE NOSE GEAR FAILED TO GIVE A GREEN DOWN AND LOCKED POSITION INDICATION. THE APPROACH WAS ABORTED AND A GO AROUND WAS CARRIED OUT. THE MANUAL GEAR EXTENSION PUMP WAS USED TO EXTEND THE NOSE GEAR WITH SUCCESS. INSPECTION REVEALED THE POWER PACK RELAY HAD FAILED TO MAKE CONTACT DUE TO EROSION OF THE CONTACTS. A NEW UNIT WAS INSTALLED AND FUNCTION TESTED.

CA040817005	PILATS	PWA	SEAT	CRACKED
8/11/2004	PC1245	PT6A67B	9593001131	COCKPIT

(CAN) DURING INSPECTION OF THE CREW SEATS IAW MFG SB 25-031, THE SEAT PANS WERE FOUND TO BE CRACKED ON THE OB FWD CORNER AREA. MFG SL 072 COVERS REPAIRS OF THE SEAT PANS IN QUESTION BUT IN A DIFFERENT AREA FOR CRACKING. BOTH THE CAPTAINS AND CO-PILOTS SEATS WERE FOUND LIKE THIS PN 959.30.01.131 AND .132 RESPECTIVELY. VENDOR PN ARE 5PC41000-505 AND -506.

CA040831014	PILATS	PWA	TERMINAL BLOCK	SHORTED
8/28/2004	PC1245	PT6A67B	9714231712	AILERON TRIM SYS

(CAN) THE AILERON TRIM FUNCTIONED ONLY IN ONE DIRECTION. THE TERMINAL BLOCK ON THE ELECTRIC CIRCUIT WAS FOUND BURNED (SHORTED) AND WAS REPLACED. AN OPERATIONAL TEST WAS CARRIED OUT OLD PART WAS REPLACED BY A NEW PART AND THE SYSTEM WAS FOUND SATISFACTORY.

CA040726007	PILATS	PWA	BEARING	FAILED
7/19/2004	PC1245	PT6A67B		STARTER GEN

(CAN) GENERATOR HAD BEEN REPAIRED, WO NR 12585, MAR 18,2004. INSTALLED ON VKC WITH 442.9 TSO AND 0 HOURS SINCE REPAIR. APPARENT BEARING FAILURE. WOULD NOT ENGAGE/TURN ON, AN ATTEMPTED START.

CA040805004	PILATS	PWA	GENERATOR	DAMAGED
7/30/2004	PC1245	PT6A67B	23085024	AC SYSTEM

(CAN) GENERATOR WAS OVERHAULED AND INSTALLED ON THE AIRPLANE ON JULY 13TH 2004. ON JULY 30TH, (85.2) FLIGHT HOURS LATER THE STARTER DID NOT TURN DURING A ATTEMPTED ENGINE START AND AFTER TROUBLESHOOTING IT WAS DISCOVERED THAT THE STARTER HAD FAILED. THIS IS THE 2ND FAILURE IN LESS THEN A MONTH THAT WE HAVE HAD ON THIS TYPE OF GENERATOR OVERHAULED BY THIS FACILITY.

CA040927004	PILATS	PWA	BOOT	MALFUNCTIONED
9/22/2004	PC1245	PT6A67B	4E305110	PROPELLER DEICE

(CAN) CREW REPORTED PROP DEICE MALFUNCTION. ONE BOOT WAS FOUND FAILED. BOOT REPLACED AND AIRCRAFT RETURNED TO SERVICE.

AUS20040460	PIPER	LYC	SPAR	CRACKED
6/1/2004	PA23250	IO540C4B5	16010	WING

(AUS) LT AND RT FORWARD AUXILIARY SPARS CRACKED AT IB LOWER RAD II LOCATED AT STN 27. CRACKS EXTEND FOR APPROXIMATELY 12.7MM(0.5IN) OB OF THE END OF THE SPAR IN A HORIZONTAL PLANE.

2004FA0000790	PIPER	LYC	PUMP	FAILED
4/28/2004	PA23250	TIO540C1A	RG17980JM	ENGINE

FUEL LEAKING INTO MANIFOLD REFERENCE LINE. PILOT EXPERIENCED INFLIGHT ROUGH ENGINE WHEN AUXILIARY FUEL PUMP TURNED ON. FUEL CONTINUED TO RUN ON GROUND AFTER ENGINE SHUTDOWN. PROBABLE CAUSE: MFG DEFECT: LEAKING DIAPHRAGM.

2004FA0000789	PIPER	LYC	PUMP	FAILED
4/28/2004	PA23250	TIO540C1A	62D22569	FUEL SYSTEM

FUEL LEAKING INTO MANIFOLD REFERENCE LINE. PILOT EXPERIENCED INFLIGHT ROUGH ENGINE WHEN AUXILIARY FUEL PUMP WAS TURNED ON. FUEL CONTINUED TO RUN ONTO THE GROUND AFTER ENGINE SHUTDOWN.

2004FA0000780	PIPER	LYC	CARBURETOR	MALFUNCTIONED
9/23/2004	PA28140	O320*	MA4SPA	ENGINE

OVERHAULED ENGINE INSTALLED ON AIRFRAME APPROXMIATELY 75 HRS AND 4 MONTHS AGO,CARBURETOR SET AND ADJUSTED TO SPECS AT INSTALLATION. ENGINE BECAME ERRATIC AND NEAR STALL OUT CONDITION WITHIN THE LAST 1 HOURS. ATTEMPTED TO ADJUST RICH/LEAN SETTING AND IDLE. ENGINE WOULD NOT RESPOND AS NORMAL. REMOVED CARB, DISASSEMBLED, INSPECTED. ONE HALF OF FLOAT NEARLY FULL OF AV 100LL FUEL, SLIGHT SPLIT NOTED AT FLOAT BOND JOINT. FLOAT IS MADE FROM A PLASTIC MATERIAL, CARB SENT FOR REPAIRS.

2004FA0000803	PIPER	LYC	BULKHEAD	CHAFED
9/28/2004	PA28140	O320*	TCB35323011	SPINNER

UPON ANNUAL INSPECTION, FOUND AFT SPINNER BULKHEAD (PN TCB36323011) TO BE CHAFFING AGAINST PROPELLER BLADES. ONCE REMOVED, IT WAS ALSO EVIDENT THAT CORROSION HAD FORMED ON THE PROPELLER TUB. ALSO DISCOVERED WAS MATERIAL FROM THE BULKHEAD HAD TRANSFERRED TO THE PROPELLER. INSPECTION OF THE AFT SPINNER BULKHEAD SHOWED THAT THE BULKHEAD HAD BEEN COMPRESSED, WHICH HAD REDUCED THE TORQUE ON THE MOUNTING BOLTS. (WP27200407907)

2004FA0000778	PIPER	LYC	PREAIR	FLOAT	LEAKING
9/23/2004	PA28140	O320E3D			CARBURATOR

ENGINE STARTED FALTERING DURING POWER REDUCTION FOR DESCENT. ENGINE RAN FINE AT CRUISE POWER. UPON INSPECTION OF CARB, ONE OF THE PLASTIC FLOAT CELLS IS FULL OF FUEL. CARB LESS THAN 100 HOURS OUT OF OVERHAUL.

2004FA0000779	PIPER	LYC	PREAIR	FLOAT	LEAKING
9/23/2004	PA28140	O320E3D			CARBURATOR

ENGINE STARTED FALTERING DURING POWER REDUCTION FOR DESCENT. ENGINE RAN FINE AT CRUISE POWER. UPON INSPECTION OF CARB, ONE OF THE PLASTIC FLOAT CELLS IS FULL OF FUEL. CARB LESS THAN 100 HOURS OUT OF OVERHAUL.

2004FA0000814	PIPER	LYC	CYLINDER HEAD	DETACHED
10/16/2004	PA28151	O360A4M	AEL65102	NR 2 CYLINDER

WHILE ON CLIMB-OUT, AT A POINT ABOUT 3 MILES NORTH OF THE AIRPORT AND AT AN ALTITUDE OF ABOUT 2800 FT (1300 FT AGL), HEARD AND FELT LOUD BANG WITH RESULTING POWER LOSS. INITIATED 180 DEGREE TURN BACK TO AIRPORT WHILE ALERTING TOWER OF EMERGENCY. LANDED WITHOUT FURTHER INCIDENT ALTHOUGH WIND SCREEN WAS TOTALLY COATED WITH OIL PREVENTING FORWARD VISIBILITY.

2004FA0000808	PIPER	LYC	CYLINDER HEAD	DETACHED
10/16/2004	PA28151	O360A4M	AEL65102	NR2 CYLINDER

WHILE ON CLIMB-OUT, AT A POINT ABOUT 3 MILES NORTH OF THE AIRPORT AND AT AN ALTITUDE OF ABOUT 2800 FT (1300 FT AGL), HEARD AND FELT LOUD BANG WITH RESULTING POWER LOSS. INITIATED 180 DEGREE TURN BACK TO AIRPORT WHILE ALERTING TOWER OF EMERGENCY. LANDED WITHOUT FURTHER INCIDENT ALTHOUGH WIND SCREEN WAS TOTALLY COATED WITH OIL PREVENTING FORWARD VISIBILITY.

2004FA0000809	PIPER	LYC	CYLINDER HEAD	DETACHED
10/16/2004	PA28151	O360A4M	AEL65102	NR 2 CYLINDER

WHILE ON CLIMB-OUT, AT A POINT ABOUT 3 MILES NORTH OF THE AIRPORT AND AT AN ALTITUDE OF ABOUT 2800 FT (1300 FT AGL), HEARD AND FELT LOUD BANG WITH RESULTING POWER LOSS. INITIATED 180 DEGREE TURN BACK TO AIRPORT WHILE ALERTING TOWER OF EMERGENCY. LANDED WITHOUT FURTHER INCIDENT ALTHOUGH WIND SCREEN WAS TOTALLY COATED WITH OIL PREVENTING FORWARD VISIBILITY.

2004FA0000810	PIPER	LYC	CYLINDER HEAD	DETACHED
10/16/2004	PA28151	O360A4M	AEL65102	2 CYLINDER

WHILE ON CLIMB-OUT (0715 LOCAL TIME), AT A POINT ABOUT 3 MILE NORTH OF THE AIRPORT AND AT AN ALTITUDE OF ABOUT 2800' (1300' AGL), HEARD AND FELT LOUD BANG WITH RESULTING POWER LOSS. INITIATED 180 DEGREE TURN BACK TO AIRPORT WHILE ALERTING TOWER OF EMERGENCY. LANDED WITHOUT FURTHER INCIDENT ALTHOUGH WIND SCREEN WAS TOTALLY COATED WITH OIL PREVENTING FORWARD VISIBILITY.

2004FA0000811	PIPER	LYC	CYLINDER HEAD	DETACHED
10/16/2004	PA28151	O360A4M	AEL65102	NR2 CYLINDER

WHILE ON CLIMB-OUT, AT A POINT ABOUT 3 MILES NORTH OF THE AIRPORT AND AT AN ALTITUDE OF ABOUT 2800 FT (1300 FT AGL), HEARD AND FELT LOUD BANG WITH RESULTING POWER LOSS. INITIATED 180 DEGREE TURN BACK TO AIRPORT WHILE ALERTING TOWER OF EMERGENCY. LANDED WITHOUT FURTHER INCIDENT ALTHOUGH WIND SCREEN WAS TOTALLY COATED WITH OIL PREVENTING FORWARD VISIBILITY.

2004FA0000812	PIPER	LYC	CYLINDER HEAD	DETACHED
10/16/2004	PA28151	O360A4M	AEL65102	NR 2 CYLINDER

WHILE ON CLIMB-OUT, AT A POINT ABOUT 3 MILE NORTH OF THE AIRPORT AND AT AN ALTITUDE OF ABOUT 2800 FT (1300 FT AGL), HEARD AND FELT LOUD BANG WITH RESULTING POWER LOSS. INITIATED 180 DEGREE TURN BACK TO AIRPORT WHILE ALERTING TOWER OF EMERGENCY. LANDED WITHOUT FURTHER INCIDENT ALTHOUGH WIND SCREEN WAS TOTALLY COATED WITH OIL PREVENTING FORWARD VISIBILITY.

2004FA0000813	PIPER	LYC	CYLINDER HEAD	DETACHED
10/16/2004	PA28151	O360A4M	AEL65102	NR 2 CYLINDER

WHILE ON CLIMB-OUT, AT A POINT ABOUT 3 MILES NORTH OF THE AIRPORT AND AT AN ALTITUDE OF ABOUT 2800 FT (1300 FT AGL), HEARD AND FELT LOUD BANG WITH RESULTING POWER LOSS. INITIATED 180 DEGREE TURN BACK TO AIRPORT WHILE ALERTING TOWER OF EMERGENCY. LANDED WITHOUT FURTHER INCIDENT ALTHOUGH WIND SCREEN WAS TOTALLY COATED WITH OIL PREVENTING FORWARD VISIBILITY.

2004FA0000732	PIPER	LYC	CARBURETOR	BURNED
8/3/2004	PA28161	O320D3G	MA4105217	ENGINE

THIS AIRCRAFT ENGINE HAS EXPERIENCED TWO FIRES. BOTH OF WHICH WERE CARBURETOR FAILURE. THIS WAS CAUSED BY A SPLIT FLOAT THAT A PREVIOUS AD SHOULD HAVE SOLVED. THE NEW FLOAT SPLIT AND THE FLOAT FILLED WITH FUEL THIS CAUSED THE ENGINE TO QUIT. THE AIRCRAFT WAS BEING USED AS A INSTRUCTIONAL FLIGHT WITH TWO PILOTS ON BOARD. AT RESTART PROCEDURES WERE BEING CONDUCTED ON THE ACTIVE RUNWAY THE AIRCRAFT CAUGHT FIRE. (SO03200402575)

2004FA0000767	PIPER		CONTROL CABLE	BROKEN
6/25/2004	PA28181		67201104	STAB TRIM

TRIM CABLE BROKEN (STABILIZER TRIM). FRAYED AND BROKEN AT 2ND PULLEY FROM FRONT. (CLOSER INSPECTION UNDER BAGGAGE AREA).

2004FA0000747	PIPER	LYC	SUMP	CORRODED
6/28/2004	PA28R200	IO360C1C	75141	OIL SYSTEM

OWNER HAD OIL LEAK, UPON INSPECTION, FOUND OIL DRIPPING FROM OIL SUMP FWD OF RT INTAKE PORT. REMOVED OIL SUMP, FOUND AREA APPROX. 2.5 INCHES IN DIA. PITTED AND CORRODED. ONE AREA HAD PITTED THROUGH AND LEAKED. ENTIRE AREA WAS CLOSE TO PITTING THROUGH. IAW MFG TECH, WAS CAUSED BY TOO MUCH TIME ON OIL AND AIRCRAFT NOT FLOWN ENOUGH TO KEEP MOISTURE OUT OF OIL.

2004FA0000761	PIPER	LYC	STUD	FAILED
8/11/2004	PA28R200	IO360C1C		NR2 CYLINDER

NR 2 CYLINDER STUD, 8 O CLOCK POSITION, FAILED.

CA040831008	PIPER	LYC	BOLT	SEIZED
8/20/2004	PA31	TIO540A2B	AN546	DOWNLOCK

(CAN) WHEN THE PILOT SELECTED GEAR DOWN, THE RT GEAR LIGHT DID NOT ILLUMINATE.AFTER NUMEROUS RETRACTIONS AND EXTENSIONS NEAR THE AIRPORT, THE LIGHT NEVER CAME ON. AFTER LANDING THE RT DOWNLOCK HOOK WAS NOT COMPLETELY ENGAGED. WERE MOVED THE BOLT AND REPLACED WITH NEW AND LUBRICATED, CARRIED OUT RETRACTIONS AND EVERYTHING WAS SERVICEABLE.

CA040830014	PIPER	LYC	CONTROL ROD	CRACKED
8/24/2004	PA31	TIO540A2C	40599003	RT AILERON

(CAN) ON INSPECTION, FOUND THE RT AILERON CONTROL ROD CRACKED ON THE OUTER THREADED PORTION OF THE ROD WHERE THE ROD END THREADS INTO THE ROD. THE CRACK WAS APPROXIMATLEY 1 INCH IN LENGTH LONGITUDINALY WITH THE ROD.

AUS20040462	PIPER	LYC		PUMP	LEAKING
5/30/2004	PA31	TIO540A2C		62E23186	ENGINE FUEL

(AUS) RT ENGINE DRIVEN FUEL PUMP LEAKING EXCESSIVELY FROM PUMP BODY. A LARGE AMOUNT OF FUEL WAS SPRAYING ONTO THE TURBOCHARGER WITH A HIGH RISK OF ENGINE FIRE. THE PUMP WAS A NEW ITEM WITH NO SIGN OF DAMAGE TO THE PUMP AND ALL THE MFGS TAMPER WIRES ARE IN PLACE. THERE IS NO SIGN OF LOOSENESS TO THE FOUR ALLEN KEY BOLTS AND THEY APPEAR TIGHT.

AUS20040491	PIPER	LYC		VALVE	FAILED
5/31/2004	PA31350	LTIO540J2BD		53E22144A	ENGINE OIL TEMP

(AUS) ENGINE OIL TEMPERATURE REGULATING VALVE (VERNATHERM) BREAKING UP. METAL CONTAMINATION OF ENGINE OIL SYSTEM.

2004FA0000769	PIPER	LYC		PUMP	LEAKING
7/27/2004	PA31350	TIO540*		200F5003	ENGINE

INSTALLED AN O/H ENGINE ONTO THE RT POSITION. UPON PERFORMING AN OIL FILTER CHECK THE VERY NEXT DAY, AFTER AIRCAFT RUNS ON 7/27/04. FOUND THAT THE ENGINE DRIVEN FUEL PUMP HAD BLUE STAINS AROUND BODY HOUSING AND ALSO NOTICED FUEL LEAKING FROM DRAIN END OF THE DRIVE SECTION OF THIS FUEL PUMP. (SO05200410029)

CA040921003	PIPER	LYC		WHEEL	CRACKED
7/19/2004	PA31350	TIO540J2BD		40141	MLG

(CAN) LT TIRE WENT FLAT WHILE PARKED. FURTHER INVESTIGATION REVEALED A CRACKED WHEEL IN FLANGE AREA. WHEEL, TIRE AND TUBE WERE REPLACED.

CA040902004	PIPER	LYC	PRESTOLITE	BOLT	MISSING
8/23/2004	PA31350	TIO540J2BD			STARTER

(CAN) STARTER, ALL BOLTS LOOSE AND TWO MISSING.

CA040827008	PIPER	LYC		PUMP	FAILED
8/25/2004	PA31350	TIO540J2BD		1213HBG310A	HYDRAULIC

(CAN) THE PUMP FAILED OPERATIONAL CHECK, GEAR SELECT. HANDLE DID NOT RETURN TO NEUTRAL POSITION. PUMP WAS OVERHAULED RECENTLY, WAS IN SERVICE FOR 423.7 HRS.

AUS20040508	PIPER	LYC		ACTUATOR	FAULTY
6/8/2004	PA31350	TIO540J2BD		OAS29243	MLG DOOR

(AUS) LT MAIN LANDING GEAR DOOR HYDRAULIC RAM FAULTY. INVESTIGATION FOUND BRINNELLED LOCKING BALLS AND LOW SPRING PRESSURE ON LOCKPUCK.

CA040921004	PIPER	LYC		TORQUE LINK	CRACKED
7/4/2004	PA31350	TIO540J2BD		CH20261	MLG

(CAN) DURING ROUTINE INSPECTION THE MAIN LANDING GEAR TORQUE LINK WAS FOUND CRACKED. THESE P/N CH2026-1 TORQUE LINKS ARE PART OF BOUNDARY LAYER RESEARCH HEAVY LANDING GEAR KIT FOR STC NR SA00202SE.

CA040913008	PIPER	LYC	LYC	VALVE	WORN
9/10/2004	PA31350	TIO540J2BD		LW16740	CYLINDER

(CAN) DURING A CYLINDER CHANGE ON THE ENGINE THE EXHAUST RISERS WERE REMOVED TO ALLOW FOR INSTALLATION. WHILE CHECKING THE EXHAUST PORTS FOR FOD IT WAS NOTICED THAT THERE WAS ABNORMAL WEAR ON THE NR 3 EXHAUST VALVE JUST ABOVE THE MUSHROOM. FURTHER INSPECTION FOUND THAT THE EXHAUST VALVE ON THE NR 6 CYLINDER HAD THE SAME PROBLEM.

CA040806009	PIPER	PWA		HOUSING	CRACKED
8/10/2004	PA31T2	PT6A135		4032705	DRAG BRACE

(CAN) DURING A WALKAROUND, THE PILOT NOTICED THE LT OLEO WAS LOWER THAN THE RT. AT THE MAINTENANCE BASE THE AME INSPECTED THE LT OLEO WHICH WAS COMPLETELY FLATNOW. UPON FURTHER INSPECTION BY THE AME, FOUND HYDRAULIC FLUID IN THE WHEEL WELL AND DOWN THE GEAR LEG. IT WAS ALSO FOUND A 6 INCH VERTICAL CRACK ALONG SIDE THE DRAG BRACE ATTACHMENT POINT. THE AME CLEANED THE PAINT OFF TO MAKE SURE IT WAS A CRACK IN THE HOUSING AND NOT IN THE PAINT. NITROGEN WAS ADDED BUT LEAKED OUT THROUGH THE CRACK. A SERVICEABLE HOUSING WAS INSTALLED AND THE AIRCRAFT WAS PUT BACK IN SERVICE.

2004FA0000763	PIPER	LYC		STUD	FAILED
8/11/2004	PA32300	IO540K1A5			NR 3 CYLINDER

NR 3 CYLINDER DECK STUDS FAILED AND CYLINDER DEPARTED ENGINE.

2004FA0000775	PIPER	LYC		CRANKCASE	CRACKED
7/14/2004	PA32301	IO540K1A5		IO540	ENGINE

CRANK IN CRANKCASE JUST BELOW CYLINDER NR 3 BETWEEN THE BOTTOM CYLINDER HOLD DOWN STUDS AND ROCKER DRAIN NIPPLES. CRACK IS APPROX 2.5 INCHES LONG. (AL03200418212)

O05R200400115	PIPER			HUB	UNKNOWN
6/17/2004	PA32R300			D22013	PROPELLER

ELIMINATED AD 2001-23-08 COMPLIANCE REQUIREMENT.

2004FA0000772	PIPER	LYC		STARTER	BURNED
7/14/2004	PA32R300	IO540K1A5		MZ6222	ENGINE

STARTER WAS INSTALLED BY FACTORY DURING ENGINE OVERHAUL. STARTER HAS STEADILY WEAKENED SINCE INSTALLATION OF THE ENGINE ON THE AIRCRAFT. OPENED STARTER AND FOUND BRUSHES AND COMMUTATOR SEVERELY BURNED. IT IS THE SUBMITTERS OPINION THAT THIS PERMANENT MAGNET STARTER IS UNDER DESIGNED TO TURN AN ENGINE WITH 12 VOLTS.

2004FA0000737	PIPER	CONT		BATTERY CABLE	OVERHEATED
8/16/2004	PA34200T	TSIO360*			BATTERY BAY

LT ENGINE HARD STARTING. EXCESSIVE AMPERAGE DRAW THROUGH BATTERY CABLES CAUSING HOT CABLES AND SUBSEQUENT BATTERY FIRE. REPLACED BATTERY POSITIVE AND NEGATIVE CABLES, RT AND LT STARTER CABLES, ENGINE (STARTER) TO GROUND CABLES, MASTER SOLENOID TO TERMINAL CABLE, AND TERMINAL TO STARTER SOLENOID CABLES. CABLE KIT IS A COMPLETE STC AND CONVERTS FROM ALUMINUM TO COPPER WIRE. OPERATIONAL CHECK AFTER CABLE REPLACEMENT SHOWS ENGINES TURN OVER MUCH FASTER THAN BEFORE. (SO19200418338)

2004FA0000774	PIPER	CONT	HOUSING	BROKEN
6/29/2004	PA34200T	TSIO360*	640756	SCAVANGE PUMP

DURING SEARCH FOR OIL LEAK ONTO ALTERNATOR FOUND. OIL SCAVENGE PUMP HOUSING HAD BROKEN MOUNT LUG. REPLACED WITH NEW PART. CAUSE OF FAILURE BELIEVED TO BE WEAK CONSTRUCTION. AIRCRAFT FREON COMPRESSOR MOUNTS HERE. AIRCRAFT HAS HAD DYNAMIC PROP BALANCES. SECOND FAILURE THIS ENGINE WITHIN 400 HOURS. EXTRA WEIGHT OF FREON COMPRESSOR COULD BE FACTOR. THE RT ENGINE WITHOUT COMPRESSOR HAD NO FAILURES YET.

2004FA0000627	PIPER	CONT	CRANKCASE	CRACKED
1/16/2002	PA34200T	TSIO360EB		ENGINE

THE TURBOCHARGER ATTACHES TO THE ENGINE RT CRANKCASE, THROUGH A 21 INCH MOUNTING BRACKET, WHICH ATTACHES TO THE RT AFT ENGINE MOUNT. DURING A ROUTINE 100 HR INSPECTION, A .75 INCH CRACK WAS FOUND ON THE RT CRANKCASE HALF, RT AFT ENGINE MOUNT ATTACH. IT APPEARS THAT OVER TIME, THE FLEXING OF THE TURBOCHARGER INSTALLATION PRODUCES A STRESS CRACK ON THE CASE HALF AROUND THE FWD STUD. IT IS POSSIBLE THAT THIS PROBLEM IS DUE TO HIGH TIME CRANKCASE HALVES AND THE DESIGN OF THE TURBOCHARGER MOUNTING. IT APPEARS AS THOUGH THIS CRACK HAS BEEN PREVIOUSLY WELDED. ENGINE HAS 146.6 HRS SINCE FACTORY REMAN.

CA040830002	PIPER	CONT	NUT	FAILED
8/26/2004	PA34200T	TSIO360EB		RT FWD TRUNNION

(CAN) DISCOVERED RT FWD TRUNION FITTING ATTACH BOLT ANCHOR NUT NOT RETAINING TORQUE DURING INSPECTION OF LANDING GEAR. LANDING GEAR REMOVED TO FACILITATE ANCHOR NUT REPLACEMENT. ALL ANCHOR NUTS REPLACED ON BOTH MLG FWD FITTINGS. ALSO FOUND HEAVY CORROSION ON INNER BORE OF LT AND RT RETAINER ASSEMBLIES (P/N 67502-00). BOTH WERE REPLACED.

2004FA0000755	PIPER		MOUNT	BROKEN
8/9/2004	PA44180			ENGINE

ENGINE MOUNT TUBE BROKEN BELOW TOP RT ISOLATOR. DISCOVERED DURING 100 HR INSPECTION. (WP07200420174)

SD92004F00000	PIPER		MOUNT	BROKEN
8/9/2004	PA44180		8936102	RT ENGINE

ENGINE MOUNT TUBE BROKEN BELOW RT ISOLATOR. DISCOVERED DURING 100 HOUR INSPECTION.

2004FA0000754	PROPJT	CONT	DOOR	BROKEN
8/6/2004	200D	IO520*		ALTERNATE AIR

PILOT COMPLAINED OF STUCK THROTTLE ON GROUND. FOUND ALTERNATE AIR DOOR BROKEN OFF AND WEDGED IN THROTTLE BODY. HINGE APPEARED TO HAVE WORN COMPLETELY THROUGH.

2004FA0000781	RAYTHN		CIRCUIT BREAKER	WRONG PART
9/23/2004	390		33CB15	WING ICE LIGHT

REPORTED THAT THE WING ICE LIGHT C/B SWITCH TRIPS AFTER BEING IN (ON) POSITION FOR 3-4 MINUTES. TROUBLESHOOTING REVEALED THAT A 3 AMP C/B HAD BEEN INSTALLED IN A 7 AMP CIRCUIT AT POSITION 33CB15. INSPECTING THE OTHER C/B SWITCHES REVEALED THAT POSITION 33CB6, 33CB11 AND 33CB32 WERE ALL WRONG AMPERAGE C/B. THE C/B WERE REMOVED AND REPLACED IN THEIR CORRECT RESPECTIVE CIRCUITS AND THE SYSTEMS OPERATIONAL CHECKED. RESEARCH OF RECORDS REVEALED NO WORK HAD BEEN ACCOMPLISHED ON THE AFFECTED CIRCUITS AT ANY TIME SINCE THE AIRCRAFT WAS NEW. LEADING TO THE CONCLUSION THAT THE C/B WERE INCORRECTLY INSTALLED DURING PRODUCTION. MFG TECHNICAL SUPPORT WAS NOTIFIED AND IS CONDUCTING AND INVESTIGATION AT THIS TIME.

2004FA0000607	RAYTHN	GARRTT	DUNLOP	NUT	SPLIT
7/21/2004	HAWKER800XP	TFE731*		FN22A524	NR 4 WHEEL

WHILE CLEANING AIRCRAFT DISCOVERED NR 4 MAIN WHEEL 1 EACH TIE-BOLT NUT SPLIT IN HALF. REPLACED ALL WHEEL TIE BOLTS P/N: EWB22-5-16 AND NUTS P/N: FN22A524 WITH NEW PARTS. TIME ON PART SINCE REPAIR UNKNOWN.

AUS20040496	REIMS	PWA	TRUSS	CORRODED
6/7/2004	F406	PT6A112	60510021	ENGINE MOUNT

(AUS) LT ENGINE LOWER LT ATTACHMENT TRUSS CORRODED.

AUS20040506	ROBSIN	LYC	BLADE	CORRODED
6/12/2004	R22BETA	O320B2C	A0162	MAIN ROTOR

(AUS) MAIN ROTOR BLADE CORRODED ON BLADE TIP.

CA040809003	ROBSIN	LYC	BUCKLE	CRACKED
8/2/2004	R44	O540F1B5	C6284	PILOT SEAT

(CAN) DURING A 100 HOUR INSPECTION, ENGINEER FOUND CRACKS PROPAGATED FROM TWO RIVETS UNDER BUCKLE. PLASTIC COVER WAS MOVED BACK AND FURTHER CRACKS WERE FOUND ALONG RIVET LINE OF THE STAINLESS ADAPTER TO PIVOT POINT OF THE BELT ASSEMBLY. TWO OTHER CASES HAVE BEEN FOUND SINCE. THE CAUSE COMES FROM WHEN PILOTS TRY TO INSERT TONGUE IN TO BUCKLE ASSY. BUCKLE ASSY IS FLEXED TO ACCOMPLISH THE FASTENING OF THE SEAT BELT. OVER TIME THE STAINLESS ADAPTER IS STRESSED AND CRACKS OCCUR. PARTICULAR CARE HAS BEEN TAKEN REGARDING INSPECTION CRITERIA. A LETTER HAS BEEN SENT TO MFG, HOPING TO GET SOME INPUT/CHANGE TO ACCESSIBILITY TO BUCKLE ASSEMBLY.

CA040809002	ROBSIN	LYC	IGNITION SWITCH	OVERHEATED
8/2/2004	R44	O540F1B5	A1661	INSTRUMENT PANEL

(CAN) DURING APPROACH, AN ENGINEER ONBOARD SMELLED ODOR OF BURNING ELECTRICAL WIRES. THE AIRCRAFT LANDED WITHOUT FURTHER INCIDENT. FURTHER INVESTIGATION FOUND IGNITION SWITCH WAS THE CULPRIT. THE CONTACTS OVERHEATED CAUSING THE PLASTIC TO SLIGHTLY BURN. ONE MAG CONTACT WAS FOUND GROUNDED DURING FUNCTION TEST OF SWITCH. THE SWITCH WAS REPLACED AND NO FURTHER DEFECTS WERE NOTICED, FLIGHT CONTINUED. THE COMPANY HAS NOTIFIED MFG AND INCORPORATED AN INSPECTION ON THE IGNITION SWITCHES. IGNITION SWITCH P/N A166-1, ALT P/N 10-357200-1.

AUS20040473	SAAB	GE	SOCKET	BURNED
5/28/2004	340B	CT79B	BV033020205	CABIN

(AUS) WINDOW LIGHT LOCATED AT ROW 10 GAVE A BURNING SMELL. INVESTIGATION FOUND THE A BURNT FLUORESCENT LAMP HOLDER AND LAMP. CAUSE OF THE BURNING WAS AN

INCORRECTLY INSTALLED LAMP WHICHCAUSED ARCING AT THE LAMP HOLDER. PERSONNEL/MAINTENANCE ERROR.

CA040805015	SAAB	GE	HUB	CRACKED
7/26/2004	SF340A	CT75A2	660710840	RT PROPELLER

(CAN) ON LANDING, PILOTS FELT A LIGHT VIBRATION ON THE RT PROPELLER WHEN FEATHERING. AFTER INVESTIGATION FOUND PROPELLER HUB MATING FACE AND PGB FLANGE WITH A LIGHT PLAY. 6 ATTACH BOLTS OUT OF 12 WERE FOUND TO BE 1 TURN LOOSE ALTHOUGH THE SAFETY WIRE WAS STILL INTACT. SOME BOLTS WERE JAMMED AND COULD NOT BE REMOVED. PROPELLER REMOVED AND FOUND STRETCHED THREADS IN HOLES AND ALSO 3 CRACKS FOUND BY NDT AROUND DOWEL PIN HOLE. WE ARE ASSUMING THAT THE HUB BOLT HOLES STRETCHED, THERE ARE SOME SB'S REGARDING THIS ISSUE THAT WERE ALREADY ACCOMPLISHED. NOTE THAT THIS HUB WAS NEW AND INSTALLED AT LAST OVERHAUL.

2004FA0000764	SCWZER	PWA	BUSHING	OBSTRUCTED
7/2/2004	G164A	R1340*		ENGINE

ENGINE LOST POWER ON TAKE-OFF. PILOT LANDED IN BOG AND FLIPPED OVER. PRELIMINARY INSPECTION SHOWED DAMAGE TO INDUCTION IMPELLER. TEARDOWN REVEALED IMPELLER SHAFT SUPPORTED BY TWO BRONZE BUSHINGS WHICH ARE LUBRICATED BY AN .1250 INCH HOLE ON BOTH BUSHINGS AND BY A .0625 INCH HOLE ON BOTH BUSHINGS AND BY A .0625 INCH HOLE ON ONE BUSHING. THE .0625 INCH HOLE WAS BLOCKED, UNABLE TO DETERMINE IF BLOCKAGE WAS CAUSE OR CONSEQUENCE OF THE FAILURE, ATTRIBUTED TO LACK OF LUBRICATION.

CA040909006	SKRSKY	ALLSN	BEARING	SPALLED
6/11/2004	S76A	250C30S	SB1562101	M/R SWASHPLATE

(CAN) DURING ROUTINE 3 YEAR INSPECTION OF THE MAIN ROTOR SWASHPLATE DUPLEX BEARING AME DISCOVERED ONE OF THE BALLS TO BE SEVERELY SPALLED, BEARING WAS REPLACED AND A/C RETURNED TO SERVICE. SUBSEQUENTLY THE OUTER RACE WAS CUT OPEN REVEALING NO OTHER DAMAGE TO EITHER THE INNER OR OUTER RACES.

CA040914009	SKRSKY	ALLSN	SERVO	LEAKING
9/10/2004	S76A	250C30S	7665005801112	TAIL ROTOR

(CAN) AIRCRAFT IS CURRENTLY ON THAI REGISTRY BUT WE HAVE SUBMITTED THIS SDR AS THIS IS THE SECOND OCCURRENCE OF THIS TYPE IN THE PAST 2 YEARS. A/C RETURNED TO BASE REPORTING HYDRAULIC SYSTEM LIGHT. INVESTIGATION REVEALED TGB (OVERFILLED) IT WAS CONCLUDED THAT TAIL ROTOR SERVO HAD MASSIVE INTERNAL LEAK THAT CONSEQUENTLY FILLED UP TGB. TAIL ROTOR SERVO WAS REPLACED. QUICK RIGGING CHECK WAS CARRIED OUT AIRCRAFT WAS TEST FLOWN SATISFACTORY AND RETURNED TO SERVICE.

AUS20040511	SKRSKY	TMECA	ENGINE	MAKING METAL
6/7/2004	S76A	ARRIEL1S	ARRIEL1S1	

(AUS) ENGINE CHIP DETECTORS AND OIL FILTER CONTAMINATED WITH METAL. ENGINE WAS REPLACED.

CA040823004	SLNSBY	LYC	CARBURETOR	FAILED
8/20/2004	T67C	O320D2A	MA4SPA	ENGINE

(CAN) DURING A LOCAL FLIGHT, PILOT REPORTED THAT THE THROTTLE WAS BINDING. AIRCRAFT LANDED SAFELY. THE MAINTENANCE INVESTIGATION INDICATED THAT THE CARBURETOR BUTTERFLY VALVE WAS EXTREMELY STIFF. THIS CARBURETOR WAS INSTALLED PRIOR TO THIS FLIGHT AND UPON RUN UP SHOWED NO STIFFNESS OR BINDING. THE CARBURETOR IN QUESTION AND THE ONES IN STORES FROM THE SAME REPAIR/OVERHAUL SHOP WERE SENT BACK FOR INVESTIGATION AND CONFIRMATION OF AIRWORTHINESS. WE WILL SUBMIT AN ATTACHMENT TO THIS SDR, AS SOON AS WE GET THE RESULTS FROM THE REPAIR/OVERHAUL SHOP.

CA040805009	SNIAS	TMECA	LINE	SPLIT
3/8/2004	AS350B	ARRIEL1B		FUEL CONTROL

(CAN) OVERHAULED FUEL CONTROL RECEIVED FROM MFG ON PS CC/F01782. FOUND TO BE LEAKING AT HOUSING SPLIT LINE HALVES DURING GROUND RUN/ LEAK CHECK. PART REMOVED AND RENTAL UNIT REINSTALLED.

CA040805011	SNIAS	TMECA	CASTING	CRACKED
8/1/2004	AS350B	ARRIEL1B		

(CAN) CRACK FOUND ON WEB CASTING DURING A 100 HOUR INSPECTION. (BUTTERFLY) PLATE VERY LOOSE (WORN OUT END BUSHINGS).

CA040805013	SNIAS	TMECA	RELAY	FAULTY
7/27/2004	AS350B	ARRIEL1B	350A67511001	STARTER

(CAN) WHEN START BUTTON PRESSED THE STARTER RELAY WOULD ONLY CHATTER. TROUBLESHOOTING DETERMINED A FAULTY RELAY 23K. PRINTED CIRCUIT BOARD REPLACED.

CA040726010	SNIAS	TMECA	BOWL	LEAKING
6/11/2004	AS350B	ARRIEL1B	222366621101	FUEL FILTER

(CAN) BOWL ASSEMBLY LEAKING FROM ELECTRICAL CONNECTOR AT TOP OF BOWL. REPLACED WITH NEW BOWL ASSEMBLY.

CA040727009	SNIAS	TMECA	BYPASS SWITCH	STUCK
5/28/2004	AS350B	ARRIEL1B		BOOST PUMP

(CAN) A FILTER ASSEMBLY PN 222-366-621-101 WAS RECEIVED ON CHL PO NR 514815 AND INSTALLED. DURING TESTING IT WAS DISCOVERED THE BYPASS LIGHT WAS ON ALL THE TIME. TROUBLESHOOTING DETERMINED THE BYPASS SWITCH IS STUCK CLOSED. AS WELL THE DRAIN VALVE WAS LEAKING UNDER NORMAL BOOST PUMP PRESSURE.

CA040727012	SNIAS	TMECA	PRESSURE VALVE	UNSERVICEABLE
4/23/2004	AS350B2	ARRIEL1D1	0174025120	ENGINE FUEL

(CAN) FUEL ENTERING WHEEL EARLY, VALVE CHANGED. LIGHT OFF OCCURING NOW AT 17 PERCENT NG. (NORMAL)

CA040727013	SNIAS	TMECA	BLEED VALVE	UNSERVICEABLE
5/20/2004	AS350B2	ARRIEL1D1	9550161210	ENGINE

(CAN) PILOT REPORTED BLEED VALVE APPEARED TO BE CLOSING LATE. SNAG CONFIRMED WHEN PLOTTED IN THE 1D1 MAINTENANCE MANUAL. BLEED VALVE REPLACED.

CA040727014	SNIAS	TMECA	SPHERICAL STOP	UNSERVICEABLE
7/15/2004	AS350B2	ARRIEL1D1	LB412311	ELASTIMERIC

(CAN) SEPARATION OF ELASTAMERIC NOTICED VISUALLY DURING (S) TYPE INSPECTION. VERY TOP MOST OB LAMINATION OF THE SHERICAL STOP WAS NOTED TO EXCEED PUBLISHED LIMITS. NO MENTION OF INFLIGHT VIBRATIONS. THE PART WAS REPLACED.

CA040805014	SNIAS	TMECA	TRANSMITTER	INOPERATIVE

6/28/2004	AS350B2	ARRIEL1D1	642790041	OIL PRESSURE

(CAN) NO OIL PRESSURE INDICATION ON DASH GAUGE (ENGINE PRESSURE WARNING LIGHT GOES OUT).

CA040817004	SNIAS	TMECA	SPLINE	WORN
8/12/2004	AS350B2	ARRIEL1D1	S40	HYD PUMP

(CAN) NO LUBRICATION FOUND ON PUMP SPLINES. PUMP SPLINES WORN . NO SPLINES FOUND INSIDE THE S40 PUMP DRIVE DUE TO POOR LUBRICATION. HYDRAULIC PUMP AND S 40 DRIVE REPLACED.

CA040805006	SNIAS	TMECA	ACCUMULATOR	UNSERVICEABLE
5/10/2004	AS350B2	ARRIEL1D1 AC67246		ROTOR SERVO

(CAN) CYCLIC OSCILLATION WHEN ACCUMULATORS BLED DOWN.

CA040805007	SNIAS	TMECA	INJECTOR	MALFUNCTIONED
4/9/2004	AS350B2	ARRIEL1D1	0283317500	ENGINE

(CAN) POOR STARTS REPORTED. SPRAY PATTERN ON START INJECTORS FOUND POOR. NEW INJECTORS INSTALLED AND SHIMMED.

CA040805008	SNIAS	TMECA	BEARING	WORN
3/17/2004	AS350B2	ARRIEL1D1	350A3321501	SWASHPLATE

(CAN) WHILE PERFORMING A 100 HOUR INSPECTION THE TAIL ROTOR SPIDER WAS DISCONNECTED FROM THE INPUT BELLCRANK TO CHECK THE SPIDER SWASHPLATE BEARING. NOTICED THAT THE BALL END BEARING ON THE SWASHPLATE INPUT WAS WORN OUT. (IPC 65.20.30 FIG 1A ITEM 95) MEASUREMENT WITH A DIAL INDICATOR SHOWED AN AXIAL PLAY OF APPROXIMATELY 1.4MM.

CA040726008	SNIAS	TMECA	STARFLEX	UNSERVICEABLE
7/18/2004	AS350B2	ARRIEL1D1	350A31191600	MAIN ROTOR HEAD

(CAN) STARFLEX ARM END BUSHING ON YELLOW BLADE ARM BECAME LOOSE AROUND ADHESIVE JOINT OF CARBIDE BUSH AND A GAP, BEYOND SERVICEABLE LIMITATIONS, DEVELOPED. STARFLEX REPLACED WITH NEW PART IAW AS 350MWC.

CA040910006	SNIAS	TMECA	FILTER	DEBONDED
8/27/2004	AS350BA	ARRIEL1B	P1110	HYD SYSTEM

(CAN) DURING A SCHEDULED INSPECTION AME ATTEMPTED TO REMOVE HYDRAULIC FILTER ELEMENT. THE SREW IN PLUG PORTION SEPARATED FROM THE FILTER ELEMENT THAT REMAINED IN THE FILTER BOWL. THE SYSTEM WAS FLUSHED, FILTER REPLACED AND A/C RETURNED TO SERVICE.

CA040723002	SNIAS	TMECA	TRACK	DEPARTED
7/19/2004	AS350BA	ARRIEL1B	350902001	WINDOW

(CAN) FORWARD LT WINDOW SLIDER DEPARTED WHILE AIRCRAFT IN FLIGHT. THE FELT ON THE SLIDER WINDOW WAS WORN OR MISSING, WHICH CAUSES AN EXCESSIVE GAP BETWEEN THE SLIDER WINDOW AND THE TRACK. THE SLIDER WINDOW, NOW LOOSE, VIBRATES WHILE IN FLIGHT AND CAUSES THE LOWER PORTION OF THE SLIDER WINDOW TRACK TO FRACTURE. THE SLIDER WINDOW MIGRATES OUT THROUGH THE CRACKED TRACK AND DEPARTS THE AIRCRAFT.

CA040817002	SNIAS	TMECA	SWITCH	INOPERATIVE
7/30/2004	AS350BA	ARRIEL1B		BLEED VALVE

(CAN) BLEED VALVE LIGHT MICROSWITCH CAME APART. THE BROKEN PIECES OF THE ROLLER JAMMED BETWEEN THE PLUNGER AND HOUSING PREVENTING SMOOTH BLEED VALVE BUTTERFLY OPENING AND CLOSING. BUTTERFLY WAS FOUND PARTIALLY CLOSED CAUSING COMPRESSOR STALL WHEN ATTEMPTING THROTTLE INCREASE. BUTTERFLY WAS OPENING ENOUGH FOR BLEED VALVE LIGHT TO BE ON INDICATING IT WAS FULLY OPEN.

CA040817003	SNIAS	TMECA	BLADE	CRACKED
7/14/2004	AS350BA	ARRIEL1B	355A11002009	MAIN ROTOR

(CAN) DURING A 100 HOUR INSPECTION A 5.500 INCH (138MM) CRACK WAS DISCOVERED ON THE UPPER SURFACE IN ZONE C OF ONE MAIN ROTOR BLADE. THE CRACK WAS BEYOND THE LIMIT OF 100 MM FOR THIS AREA.

CA040727010	SNIAS	TMECA	PRESSURE VALVE	UNSERVICEABLE
4/28/2004	AS350BA	ARRIEL1B	174025120	FUEL SYSTEM

(CAN) FUEL LEAKING INTO FUEL WHEEL LINE WITH BOOST PUMP PRESSURE. ENGINE LIGHTING OFF FUEL WHEEL. VALVE REPLACED , NOW LIGHTS OFF AT NEAR 17 PERCENT NG.

CA040727011	SNIAS	TMECA	FUEL CONTROL	UNSERVICEABLE
4/1/2004	AS350BA	ARRIEL1B	0164448430	ENGINE

(CAN) NG FLUCTUATIONS OF 2 PERCENT. FUEL CONTROL REPLACED.

CA040809007	SNIAS	TMECA	PINION GEAR	VIBRATION
8/7/2004	AS350BA	ARRIEL1B		TRANSMISSION

(CAN) AIRCRAFT HAD 3 PER VIBRATION APPEAR DURING FORWARD FLIGHT. PILOT LANDED AT DESTINATION AND PHONED IN FOR A PRECAUTIONARY MEASURE. COMPANY DISPATCHED ANOTHER AIRCRAFT AND ENGINEER TO ACCESS THE PROBLEM. TRANSMISSION WAS CHANGED AND AIRCRAFT WAS RETURNED TO SERVICE.

CA040806010	SNIAS	TMECA	SUPPORT	CRACKED
8/5/2004	AS350BA	ARRIEL1B	350A35101700	PUMP

(CAN) HYDRAULIC PUMP SUPPORT HOUSING HAD A CRACK ON FLANGE, CAUSING PUMP AND BEARING ASSEMBLY TO VIBRATE. HYDRAULIC BEARING (704A33-651-206) FOR THE POLY (V) BELT WAS REPLACED AT THIS TIME TO ENSURE THAT NO DAMAGE MAY HAVE BEEN CAUSED TO THIS BEARING DUE TO VIBRATION. AIRCRAFT RETURNED TO SERVICE.

2004FA0000736	SOCATA	PWA	FORK	BENT
9/13/2004	TBM700	PT6A6	792200200,N7134	RUDDER PEDAL

LT RUDDER PEDAL WENT TO FLOOR ON TAXI OUT. FOUND FORK END SHEARED AT JAM NUT. WHEN BOLT AND CASTLE NUT WERE REMOVED, CASTLE NUT WAS EXTREMELY TIGHT AND BOLT COULD NOT ROTATE. THIS COULD BE CAUSE OF THE PROBLEM. RUDDER PEDAL NUT AND BOLT ON OTHER RUDDER PEDAL WAS LOOSE ENOUGH TO ROTATE. OTHER CAUSE COULD BE MFG DEFECT OR FOR SOME REASON THE ROD ON FORK END WAS POSSIBLY BENT.

AUS20040378	STBROS	PWA	CONNECTOR	CORRODED
5/3/2004	SD360	PT6A67R	51224133	FIRE DETECTOR

(AUS) LT ENGINE FIRE WIRE CONNECTOR CORRODED. CONNECTOR IS LOCATED AT THE REAR FIREWALL POSITION.

AUS20040476	SWRNGN	GARRTT	DRAG BRACE	CRACKED
6/3/2004	SA226TC	TPE33110UA	55010021	MLG

(AUS) LT IB LOWER MAIN LANDING GEAR DRAG BRACE CRACKED IN AREA ADJACENT TO GREASE FITTING. FOUND DURING INSPECTION IAW AD/SWSA226/89 AND SB226-32-068.

AUS20040471	SWRNGN	GARRTT	BLADE	BIRD STRIKE
6/2/2004	SA227*	TPE33112UHR	31032523	COMPRESSOR

(AUS) RT ENGINE FIRST STAGE COMPRESSOR BLADE BENT DUE TO BIRDSTRIKE.

AUS20040497	SWRNGN	GARRTT	PEDAL	CRACKED
6/10/2004	SA227AC	TPE33111U	2672003	RUDDER CONTROL

(AUS) PILOTS RT RUDDER PEDAL CRACKED. CRACK LENGTH 4MM (0.147IN). FOUND DURING INSPECTION IAW SB 227-27-049.

2004FA0000540	UNIVAR	CONT	ATTACH FITTING	CORRODED
1/3/2004	415C	A75*		AILERON

FOUND SEVERE GALVANIC CORROSION BETWEEN THE AILERON ATTACH BRACKETS AND REAR SPAR IN SEVERAL LOCATIONS. STEEL HAD ORIGINALLY BEEN CADIMUM PLATED. THIS WAS CRITICAL AS IT COULD ALLOW THE AILERON TO DEPART THE AIRPLANE. COULD NOT FIND A PN IN THE CATALOG AS THIS IS CALLED THE REAR BEAM ASSEMBLY. THE REAR AILERON ATTACH POINTS ARE REINFORCED WITH STEEL PLATES. THE CORROSION WAS LOCATED BETWEEN THE PLATES AND THE ALUMINUM BEAM. (GL19200404422)

CA040831009	ZLIN	LYC	SPRING	BROKEN
8/31/2004	Z242L	AEIO360A1B6	Z4242170001	NLG STEERING

(CAN) DURING TAXI A STUDENT PILOT NOTICED THAT THE AIRCRAFT WAS DIFFICULT TO STEER. IT WAS ALSO NOTICED THAT THE RUDDER PEDALS FELT DIFFERENT. MAINTENANCE WAS NOTIFIED AND IT WAS FOUND THAT THE RT STEERING SPRING WAS BROKEN. THE SPRING WAS REPLACED IAW THE MM WITH THE PROPER GAP BETWEEN THE SPRINGS. THE STUDENTS WERE REMINDED OF THE PROPER TAXI TECHNIQUES WITH THE AIRCRAFT, STARTING THE ROLL BEFORE TURNING THE NOSE GEAR TO REDUCE STRESS ON THE SPRINGS.

END OF REPORTS