



ADVISORY CIRCULAR

43-16A

AVIATION MAINTENANCE ALERTS



BY



JULY 2008

NUMBER

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

AVIATION MAINTENANCE ALERTS

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

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

AIRPLANES

BOMBARDIER

Bombardier: CL600; "Stick-Pusher" Capstan Failure; ATA 2730

(Most all airmen understand foreign aviation directives are not binding on U.S.-registered aircraft, but those who fly pay close attention nonetheless. Several such admonitions are found in this month's publication. The following Airworthiness Directive from Transport Canada is published as received; as always, thank-you for the "heads-up.")



Transport Transports Canada

TP 7245E

1/2 CF-2008-12 8 February 2008

AIRWORTHINESS

This AD has been issued by the Continuing Airworthiness Division (AARDG), Aircraft Certification Branch, Transport Canada, Ottawa, telephone 613 952-4357.

Number:

CF-2008-12

Subject:

Stick Pusher Capstan Shaft Failure

Effective:

25 February 2008

Applicability:

Applies to the following Bombardier Inc. CL-600 aircraft:

CL-600-1A11 (CL-600) - Serial numbers 1004 through 1085 CL-600-2A12 (CL-601) - Serial numbers 3001 through 3066 CL-600-2B16 (CL-601-3A/3R) - Serial numbers 5001 through 5194 CL-600-2B16 (CL-604) - Serial numbers 5301 through 5665

Compliance:

As indicated below, unless already accomplished

Background:

There have been several Stick Pusher Capstan Shaft failures causing the dormant loss or severe degradation of the stick pusher function. This directive is issued to revise the first flight of the day check of the stall protection system to detect a degradation of the stick pusher function. It also introduces a new periodic maintenance task to check the structural integrity of the stick pusher capstan shaft.

Corrective Actions:

Within 30 days of the effective date of this directive accomplish the following:

Part I - Aircraft Flight Manual (AFM) Changes

1. Amend all copies of the AFM by incorporating the following applicable Temporary Revision (TR):

CL-600-1A11 (CL-600):

PSP 600 DOT PSP 600-1 DOT

TR 600/24 dated Jan 30/07 TR 600-1/20 dated Jan 30/07

CL-600-2A12 (CL-601):

PSP 601-1A DOT PSP 601-1A-1 DOT PSP 601-1B DOT PSP 601-1B-1 DOT

TR 601/28 dated Jan 30/07 TR 601/16 dated Jan 30/07 TR 601/20 dated Jan 30/07 TR 601/15 dated Jan 30/07

CL-600-2B16 (CL-601-3A/3R):

PSP 601A-1 DOT PSP 601A-1-1 DOT

TR 601/27 dated Jan 30/07 TR 601/28 dated Jan 30/07

CL-600-2B16 (CL-604):

PSP 604-1 DOT

TR 604/22 dated Jan 30/07

Pursuant to CAR 202.51 the registered owner of a Canadian aircraft shall, within seven days, notify the Minister in writing of any change of his or her name or address.

To request a change of address, contact the Civil Aviation Commust Place de Ville, Ottawa, Ontario K1A 0N8, or 1-800-305-2059, or www.tc.gc.ca/civilaviation/communications/centre/address.asp

24-0022 (01-2005)

Canad'ä

No. CF-2008-12 2/2

This AD is applicable to all Challenger 600, 601, 601-3A/3R, and 604 models. If the operator has an AFM that is not listed above, consult Bombardier Aerospace.

2. Advise all flight crews on the changes introduced through the AFM TR.

Part II - Airworthiness Limitations Change

Amend the Transport Canada approved maintenance schedule by incorporating new inspection task as introduced by the following applicable Temporary Revisions:

A/C Model	TLMC Section	Chapter 5 task No.	Status
CL - 604	5-10-40	27-35-10-101	TR 5-2-32
CL - 601 3A/3R	5-10-30	27-39-00-104	TR 5-239
CL - 601	5-10-30	27-39-00-104	TR 5-226
CL - 600	5-10-30	27-39-00-104	TR 5-138

Authorization: For Minister of Transport, Infrastructure and Communities

Derek Ferguson

Acting Chief, Continuing Airworthiness

Contact: Mr. Gordanko Jeremic, Continuing Airworthiness, Ottawa, telephone 613-952-4379, facsimile 613-996-9178 or e-mail jeremig@tc.gc.ca or any Transport Canada Centre.

Part Total Time: (n/a).

DIAMOND

Diamond: DA40; Cracked Rear Door Hinge; ATA 5210

(The following submission combines two short M or D reports describing separate defects on the same model but <u>different</u> N-numbered aircraft, and on different dates. The next two Alert entries also contain combined discrepancy reports, providing a total of six reports—all referencing the same defect.)

A mechanic writes the same description for two different reports. "The rear hinge (can be seen) developing cracks in the (laminate) fibers under normal operating conditions. A probable cause: the rear hold-open cylinder is causing stress on the hinge point." (Rear door P/N: D41-5221-00-00. Scary pictures can be found further down—keep reading.)

Part Total Times: 984.0 and 991.0 hours (respectively).

Diamond: DA40; Door Separation from Aircraft; ATA 5210

(The following combines two short M or D reports describing separate incidents on the <u>same</u> airplane, but on different dates. Closely related to this description, the next Alerts' entry also provides enhanced information...and pictures!)

An FAA inspector notes for an operator, "While taxiing into take-off position on the runway, the aft passenger door departed the airframe." Approximately 7 months later of this airplane he again writes, "On take-off climb out, the aft passenger door departed the airframe." (Door P/N: DA4-5221-00-00-2. Airframe is pulled by a Lycoming IO-360-M1A.)

Part Total Times: 225.3 and 536.0 hours, (respectively).

Diamond: DA40; Door Separation from Aircraft; ATA 5210

(Two related discrepancy reports are combined here—again concerning a single airplane—but on different dates. The abbreviated descriptions are followed by relevant discussion and photographs as provided by submitting Aviation Safety Inspectors Michael Brown and Arthur Steffes from the Scottsdale Flight Standards District Office. Contact information is found at the discussion's end, and appreciation for their effort provided up front: thank-you, gentlemen—Ed.)

The first incident report states, "On take-off roll (at rotation speed), the aft passenger door departed the airframe." (Door P/N: DA4-5221-00-00-2; part total time: 615.0 hours.) The second report says, "Cracks were found in the aft door hinge." (P/N: DA4-5221-00-00-2; part total time: 628.0 hours.)

Inspector Steffes expands the two discrepancies in supplemental correspondence stating, "In June of 2008 a Diamond DA40 aircraft operated by a flight school had the rear passenger door depart the aircraft, narrowly missing the tail plane and rudder. The door was later recovered. The aft hinge was broken off and the forward hinge damaged. Investigation revealed the hinge had cracked (then broke), due in part to the materials used in part fabrication and the high pressure placed upon it by the door opening strut (gas spring: Diamond P/N DA4-9052-00-11; vendor P/N G8-19-200-1-389-GZ10-400N). The door and hinge are one assembly made of a composite type material. The hinge is approximately ¾ inch wide. The strut is attached near the rear hinge. It exerts approximately 90 pounds of force near the hinge attach point. Even though the door employs a safety latch handle, when the aft hinge fails the door flexes enough to slide past the stop.

"An inspection of another aircraft in this (*operator's*) fleet found it too had recently had doors separate in flight under similar circumstances. This same aircraft showed signs of cracking at the rear hinge on the replacement door. This (*door separation defect*) is the third such occurrence this operator has experienced."

(The following photographs have been slightly compressed in the vertical dimension to conserve space—Ed.)









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(For further information contact Aviation Safety Inspector Arthur Steffes; Scottsdale Flight Standards District Office, 17777 N. Perimeter Dr., Suite 101, Scottsdale, AZ, 85255; phone 405-419-0330 ext. 254.)

Part Total Times: 615.0 and 628.0 hours (respectively).

Diamond: DA42; Cracked Clutch Springs; ATA 8510

(The following is a Service Information letter issued by Diamond Aircraft on this defect topic. The referenced European Emergency AD is located further down, under "engines": see Thielert.)



Diamond Aircraft Industries G.m.b.H N.A. Otto-Straße 5 A-2700 Wiener Neustadt DAI SI 42-077 Page 1 of 1 30-May-2008

SERVICE INFORMATION NO. SI 42-077

NOTE:

Sl's are used only:

1) To distribute information from DAI to our customers.

2) To distribute applicable information / documents from our suppliers to our customers with additional

Tracination

Typically there is no revision service for Si's. Each new information or change of that will be send along with a new St.

I. TECHNICAL DETAILS

1.1 Airplanes affected:

All DA 42 airplanes and all DA 42 M airplanes equipped with TAE 125-02-99 engines, having the clutch assembly P/N 05-7211-K000304 installed

1.2 Subject:

EASA EAD No. 2008-0106-E ATA-Code: 72-00

1.3 Reason:

The EASA has issued an Emergency Airworthiness Directive concerning the TAE Service Bulletin TM TAE 125-1006 P1 - Clutch, Revision 1, which requires replacement of the clutch in accordance with the mentioned Thielert Service Bulletin.

1.4 Information:

For detailed technical information see the mentioned EASA EAD which is applicable without any further additions or restrictions.

II. OTHERS

The EASA EAD No. 2008-0106-E is attached to this SI.

In case of doubt contact Thielert Aircraft Engines GmbH or Diamond Aircraft Industries GmbH.

Part Total Time: (n/a).

HELICOPTERS

ROBINSON

Robinson: R22; Broken T/R Pedal Bearing Block Support; ATA 6720

A submitting technician states, "(*This aircraft was conducting*) a training flight—the instructor and student were practicing autorotation. On the third autorotation (with the aircraft settling to ground) the student was "inputting right pedal" to compensate for torque loss when a loud "snap" was heard. It came from the pilot side tail rotor pedal area. The (*control*) pedals became bound in place. After "shut-down" inspection (*found*) the bearing block support (*P/N A359-2*) for the pilot's side pedals had broken...." (*This helicopter is powered by a Lycoming O-320B2C.*)

Part Total Time: 13,078.0 hours.

SIKORSKY

Sikorsky: S-76C+; Repetitive Landing Gear Lamp Failures; ATA 3340

An operator for this type helicopter describes an expensive, on-going light-bulb saga (*P/N SB-4580*) with a healthy suspicion that "...the manufactured parts are not meeting design specifications. The (*source*) manufacturer is of unknown origin (generic), and (*neither the box nor the bulbs reveal manufacturing information*). There is less than 7 flight hours average per (*nose/main gear*) lamp, from their installation to replacement. (*We*) have replaced at least 5 lamps (*in our*) two aircraft in less than 30 flight hours each. No circuit breakers are popping, and trouble shooting reveals no discrepancies on either aircraft. (*Search light assembly P/N: 76550-02005104; Landing light assembly P/N: D-6490-3. An attached receipt indicates a box of 10 bulbs sells for \$276.00.)*

Part Total Time: 7.0 hours (average).

POWERPLANTS

CONTINENTAL

Continental: GTSIO-520-H; Missing Alternator Drive Parts; ATA 8520

An unidentified repair station submitter states, "This (Cessna 421B) engine was removed in August due to a cracked engine case. It was sent to Ram Aircraft for repair. The engine was returned in September and reinstalled back on the aircraft. During a November night flight the pilot experienced an alternator failure (which) he reported the next day. Upon inspection of the alternator it was found in pieces, with the mount housing still attached to the engine. The inside of the alternator installation hole was inspected, revealing the attach bolts on the alternator face gear had no tab lock plates installed (P/N 641909; item number 20). (Conclusion:) the attach bolts came loose and damaged the engine and alternator. Ram Aircraft was notified of the problem. It is (my) recommendation to inspect for missing parts in the alternator attach hole before engine installation. This engine had 65.6 hours since the previous installation."

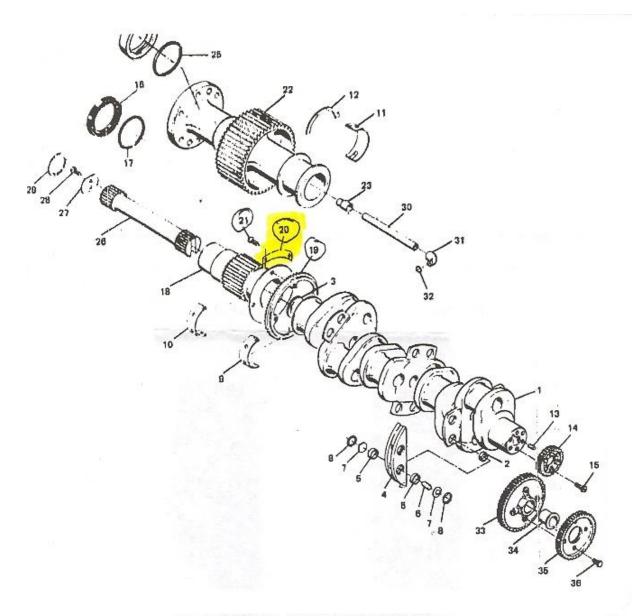


FIGURE 4. CRANKSHAFT GROUP

O Supersades 837674. Prop Shaft 637674 may be used in place of 641483 by using sleeve (24) and "O" Ring (25). Do Not use sleeve and "O" Ring with Prop Shaft P/N 633906. If P/N is not legible, 637674 may be identified by a 5-1/4 inch flange dia compared to a 4-7/8 inch flange dia on the 633908. This distinction is important since both gears have a 2-1/4 inch pilot dis.

G. a	PART		1		C	W/	\N1	rit	1		
IDEX	NUMBER	DESCRIPTION	C	D	F	H	K	L	M	N	
4	635104	Crankshaft and Damper Assembly	1	1	1	1	1	1	1	1	
	635105	Crankshaft Assembly	NS	NS	NS	NS	NS	NS	NS	NS	
-1	635832	Crankshaft and Tube Assembly	NS	NS	NS	NS	NS	NS	NS	NS	
-2	628975	† Bushing, Crankshaft Damper	12	12	12	12	12	12	12	12	
-3	832094	Plug, Hubbard	1	1			1	1	1	1	
	629757	Tube, Crankshaft Oil Transfer	6	6			6	6	6	6	
	631810	. Counterweight Assembly, 3rd Order	6	6	1 -	_	-	8	6	6	
-4	631806	. Counterweight, Crankshaft		NS						- 1	
-			4	4		4	4	4	4	4	
-5	628978	Bushing, Damper Counterweight									
-6	630261-34	. Pin, Damper Counterweight		12							
-7	631808	. Plate, Damper Counterweight		24							
-8	629004	Ring, Retaining	24	24	24	24	24	24	24	24	
-9	634503	† \$ Bearing, Crankshaft Front Main,									
		Rear and Intermediate	8	8	-	8	8	В	8	8	
-10	630571	† \$ Bearing, Prop Driver Gear	4	4	4	4	4	4	4	4	
-11	530386	† \$ Bearing, Prop Shaft	4	4	4	4	4	4	4	4	-
-12	628957	\$ Washer, Prop Shaft Thrust	4	4	4	4	4	4	4	4	
-13	536563	† Dowel	1	1	1	1	1	1	1	1	
-14	631871	Gear, Crankshaft	1	1	1	1	1	1	1	1	
17	20.0.	ATTACHING PARTS	1	1	1	1	1		1		
-15	536379	Screw, 5/16 - 24 x 7/8 Inch long	6	6	6	6	6	6	6	6	
-16	641250	Seal Assembly, Nose	1	1	1	1	1	1	1	1	
-17	641306	. Spring		1	1	1	1	1	1	1	
-18	630640	Gear, Prop Driver		1 .	1.	١.	1.	11.	1	1	1
-18	633265	Gear, Prop Driver		1	1	1	11	1	1	1	1
-19	632018	Gear, Face, Alternator			li	1	li		1	li	l
-19	632018	ATTACHING PARTS		T,	l'	L] .	ľ		Ι.	
-20	641909 634080	Plate, Tab Lock Screw, 5/16 - 24 x 13/32 inch long	2						4	_	1
-21	634060	3016W, 5/16 - 24 x 13/32 Inch long	"	1	1	1	"	1	-	"	
-22	630637	Shaft Assembly, Propeller						1	1		
-22	633908	Shaft Assembly, Propeller		1	1	1	1				1
-22	641483	O Shaft Assembly, Propeller		1	1		1			1	
	No Number	. Shaft, Propeller	. N	SN:	SINS	SNS	SN:	SN:	SINS	SINE	4
-23	629296	† . Sieeve, Oil Transfer Tube		1	11	1	1	11	1	1	1
-24	640392	O Sleeve, Prop Shaft	. 1	1	1	1	1	1	1	1	1
-25	MS28775-140	0 "0" Ring		1	1 1	1	1	1 1	1	1	}
-28	632174	Shaft, Quill, Prop Driver Gear				1	1	1	11	11	
-27	628935	Plate, Quill Shaft		-	1			-	-	-	
-28	21346	ATTACHING PARTS Screw, 1/4 - 28 x 7/18 inch long	. 2	2 2	2 2	2	2	2 2	2	2	1
									1.		
-29		Ring, Retaining		1 1]	1	1
-30		Tube, Oll Transfer		1 1			- 1	! []	1	Π.	-1
-31	632751	Adapter, Prop Governor Oil Transfer		1 1			- 1				- 1
-32	AN123862	\$ "O" Ring		1 1	1	1	1 1	1 1	1	1	
-33	632795	Gear Assembly, Idler		1 1	1	1	1 1	1 1	1	1 1	
	632794	. Gear, Idler		SN	SIN	SN	SN	SN	SN	ЯN	s
-34		. Bushing, idler Gear	. .	1 .	1 1	1	11.	1 :	1	1 1	
-35		Gear, Idler Accessory Drive				- 1			1		
	F07040	ATTACHING PARTS			1	1					
-38	537019	Screw, Orilled Hex Head, 5/16 - 24 x 17/32 Inch long		4	4			4	1	1 4	

Part Total time: (unknown).

LYCOMING

Lycoming: TIGO-541-E1A; Incorrect Exhaust Gaskets; ATA 7810

(This engine report relates to a Piper PA31P and an ensuing accident. It's not often submitters will include such details of their "thinking processes" as can be found here, lending high instructive value otherwise missing from a collection of facts. "Thank-you" for the extra effort—Ed.)

An aircraft mechanic states, "I found melted wiring at the number 6 cylinder—and behind it. The P-lead for the R/H magneto was melted, and when tested found to be shorted out. This (*incapacitated*) the right magneto. The number 6 bottom plug wire was hanging loose and the nut attaching the lead to the plug was melted off. Several other plug wires were burnt as well. The cause of this damage was a blown-out exhaust gasket on the number 6 cylinder. When this gasket failed, hot exhaust was allowed (*to escape*), burning up the plug wires and the R/H magneto P-lead." "The number 6 bottom plug wire was from the L/H magneto. The bottom number 4 wire's protective coating was also burnt off. So, now (at best) we have one magneto working and only firing on 5 cylinders—plus a large exhaust leak which will lower manifold pressure.

"I performed a high tension lead test on the R/H side of the right engine; number 6 tested bad—the rest were okay. No continuity test was done at this time. (*Next...*) the original R/H propeller was removed and a test propeller installed. The engine was started...but idled very rough. It would not take throttle or make any power above idle. The R/H magneto was disconnected and the engine started again: it idled much better and would take throttle, although it ran poorly.

"The lower plugs were removed to facilitate the exhaust removal—they showed signs of a rich mixture or incomplete burn. When I disassembled the R/H exhaust stack on the right engine (cylinders 2, 4, and 6) the following was found:

- (a) "On the number 2 cylinder all exhaust nuts were loose—each about 2 turns. The exhaust gaskets were intact, but they appeared to be a copper gasket (P/N 76048). The parts book (specifies) a steel gasket (P/N 78056).
- (b) "The number 4 cylinder's inboard forward nut, inboard aft nut, and outboard forward nut were all found loose. The outboard aft nut was tight. The exhaust gaskets were intact and appeared to be the copper type (P/N 76048).
- (c) "The number 6 cylinder exhaust stack had a gap between the stack and the cylinder where the exhaust gasket was blown out. There were three small pieces of gasket left that appeared to be the remains of a copper gasket (P/N76048)."

"The end result (of this defect) was an off-field landing after the right engine failed. The aircraft landed up-right with the gear up, flaps up, cowl flap closed, magneto switches on, fuel pumps on, fuel selectors on inboard tanks, and the R/H engine feathered. The L/H propeller (sustained) three bent blades, the R/H just one. (There was) significant damage to the R/H wing, both lower cowls, and the aircraft's belly. The pilot did not receive any serious injury."

Part Total Time: (unknown).

THIELERT

Thielert: TAE 125-02-99; Cracked Clutch Springs; ATA 8510

(The following Airworthiness Directive was issued by the European Aviation Safety Agency, EASA. It is published as received—having particular relevance to this issue's Diamond DA42 Aircraft reports.)

EASA AD No.: 2008-0106-E

EASA EMERGENCY AIRWORTHINESS DIRECTIVE AD No.: 2008-0106-E Date: 30 May 2008 Note: This Emergency Airworthiness Directive (AD) is issued by EASA, acting in accordance with Regulation (EC) No 216/2008 on behalf of the European Community, its Member States and of the European third countries that participate in the activities of EASA under Article 66 of that Regulation This AD is issued in accordance with EC 1702/2003, Part 21A.3B. In accordance with EC 2042/2003 Annex I, Part M.A.301, the continuing airworthiness of an alrcraft shall be ensured by accomplishing any applicable ADs. Consequently, no person may operate an aircraft to which an AD applies, except in accordance with the requirements of that AD unless otherwise specified by the Agency [EC 2042/2003 Annex I, Part M.A.303] or agreed with the Authority of the State of Registry [EC 216/2008, Article 14(4) exemption]. Type Approval Holder's Name: Type/Model designation(s): Thielert Aircraft Engines GmbH TAE125-02-99 engines TCDS Number : EASA E.055 Foreign AD: Not applicable Supersedure: This Airworthiness Directive (AD) supersedes AD 2008-0100-E dated 23 May 2008. ATA 72 Engine - Clutch Assembly - Replacement Manufacturer(s): Thielert Aircraft Engines GmbH All TAE125-02-99 (commercial designation Centurion 2.0) engines having the clutch assembly P/N 05-7211-K000304 installed. These engines are known to be installed on, but not limited to, Cessna 172 and Applicability: (Reims-built) F172 series (EASA STC Nr. EASA.A.S.01527), Piper PA-28 series (EASA STC Nr. EASA.A.S.01632), APEX (Robin) DR 400 series (EASA STC Nr. EASA.A.S.01380) and Diamond DA40 and DA42 aircraft. In-flight engine shutdown incidents have been reported on aircraft equipped with TAE125-02-99 engines. Preliminary investigations showed that it was mainly the result of cracked disc springs in the clutch. This condition, if not corrected, could result in further cases of engine in-flight shutdown and the consequent loss of control of the aircraft. To address this unsafe condition, AD 2008-0100-E was published to mandate repetitive inspections until a new clutch P/N 05-7211-K006001 is installed. Reason: Since that publication, data collected from the performed inspections revealed that sole the clutch assembly P/N 05-7211-K000304 was subject to failure. For the reasons stated above, this EASA AD supersedes AD 2008-0100-E and requires the removal of the affected clutch assemblies P/N 05-7211-K000304 on all TAE125-02-99 engines and their replacement by new clutches of an improved design.

EASA Form 111

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EASA AD No.: 2008-0106-E

Effective Date:	03 June 2008
	Required as indicated, unless accomplished previously:
	(1) For engines that have accumulated, on the effective date of this AD, less than 50 Flight Hours (FH) since the last clutch inspection:
	Upon the accumulation of 50 FH since last clutch inspection, replace the clutch in accordance with the instructions of Thielert Aircraft Engines Service Bulletin TM TAE 125-1006 P1, Revision 1.
Required action(s) and Compliance	(2) For engines that have accumulated, on the effective date of this AD, between 50 FH and 300 FH since the last clutch inspection:
Time(s):	Before further flight, replace the clutch in accordance with the instructions of Thielert Aircraft Engines Service Bulletin TM TAE 125-1006 P1, Revision 1.
	For the purpose of this AD, one Ferry Flight to a Maintenance Station is allowed to accomplish the engine clutch replacement required by paragraph (1) and (2) of this AD. The maximum flight duration shall be not more than 2 hours and be limited to VFR conditions.
2.42.11	Thielert Aircraft Engines GmbH SB TM TAE 125-1006 P1 Revision 1 dated 30 May 2008.
Ref. Publications:	The use of later approved revisions of this document is acceptable for compliance with the requirements of this AD.
	If requested and appropriately substantiated, EASA can approve Alternative Methods of Compliance for this AD.
	The safety assessment has requested not to implement the full consultation process and an immediate publication and notification.
Remarks :	 Enquiries regarding this AD should be referred to the Airworthiness Directives, Safety Management & Research Section, Certification Directorate, EASA; E-mail: <u>ADs@easa.europa.eu</u>.
	 For any questions concerning the technical content of the requirements in this AD, please contact: Thielert Aircraft Engines, Platanenstraße 14, D-09350 Lichtenstein, Federal Republic Germany; telephone +49-37204-696-0; fax +49-37204-696-55; E-mail info@centurion-engines.com

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Part Total Time: (n/a).

AIR NOTES

INTERNET SERVICE DIFFICULTY REPORTING (iSDR) WEB SITE

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

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

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

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

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

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

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

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

The SDRS and iSDR web site point of contact is:

Pennie Thompson Service Difficulty Reporting System, Program Manager Aviation Data Systems Branch, AFS-620 P.O. Box 25082

Oklahoma City, OK 73125 Telephone: (405) 954-1150

SDRS Program Manager e-mail address: 9-AMC-SDR-ProgMgr@faa.gov

IF YOU WANT TO CONTACT US

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

Editor: Daniel Roller (405) 954-3646 FAX: (405) 954-4570 or (405) 954-4655 E-mail address: Daniel.Roller@faa.gov

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

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

AVIATION SERVICE DIFFICULTY REPORTS

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

FAA

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

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

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

Federal Aviation Administration

Service Difficulty Report Data

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

Control Number	Aircraft Make	Engine Make	Component Make	Part Name	Part Condition
Difficulty Date	Aircraft Model	Engine Model	Component Model	Part Number	Part Location
CA080319005				DRIVE SYSTEM	SEIZED
3/19/2008				EBB131A	STARTER

STARTER RECEIVED DUE TO DRIVE ASSEMBLY FAILURE. ENGINE COULD NOT BE STARTED BECAUSE DRIVE WOULD NOT ENGAGE. WHEN INSPECTED THE DRIVE COULD NOT BE TURNED OUT OR SPUN BY HAND TO EXTEND THE GEAR SECTION OF THE DRIVE. STARTER WAS RETURNED TO KELLY AEROSPACE FOR WARRANTY REPLACEMENT. (TC NR 20080319005)

<u>CA080304004</u>	ENCODER	DAMAGED
3/3/2008	5035PP41	ALTIMETER

WHEN RECEIVED FOUND WITH TIN BETWEEN CASE AND PIN ON CONNECTION RECEPTACLE.

<u>CA080407002</u> WIRE HARNESS MISINSTALLED 3/31/2008 472011 NLG WOW

AN OPERATOR FOUND THAT DURING INSTALLATION OF MOD SUM 4-125401, FINDING THE NEW HARNESSES PN.47201-1 THREE OUT OF SIX HARNESSES PULLED FROM STOCK WERE MISS WIRED. ON CONNECTOR 3261-P32 PINS A-B AND D-E WERE WIRED REVERSED. HARNESSES APPROPRIATELY REPAIRED IAW MANUFACTURER PROVIDED DATA AND RETURNED TO STOCK. TO ADDRESS THIS ISSUE, SERVICE LETTER DH8-SL-32-014A ADVISING OF POSSIBLE MANUFACTURING FAULTS WAS RAISED.

CA080411002	WOODWARD	PILOT VALVE	DAMAGED
4/9/2008		210332	GOVERNOR

THE GOVERNOR WAS MANUFACTURED BY ONTIC, ONTIC HAS THE MANUFACTURING RIGHTS TO THE FORMER WOODWARD GOVERNOR COMPANY PISTON ENGINE GOVERNORS. THE GOVERNOR WAS RECEIVED FROM THE AIRCRAFT MANUFACTURE, DIAMOND AIRCRAFT INDUSTRIES, FOR REPAIR IN APRIL 2008. ACCORDING TO A CUSTOMER CLAIM/RETURN AUTHORIZATION FORM RECEIVED FROM DIAMOND, THE GOVERNOR WAS REMOVED FROM AIRCRAFT SERIAL NR 40.438 ON OR ABOUT SEPTEMBER 21, 2005, WITH AIRCRAFT TTSN OF 96.9 HOURS. WITH ORIGINAL COMPLIANT OF ENGINE OVERREVED DURING FLIGHT, COULD NOT CONTROL PROPELLER. THE NAME PLATE ON THE GOVERNOR GIVES A ASSY DATE OF 08/04 DURING INSPECTION OF THE GOVERNOR IN OUR SHOP, AFTER REMOVAL OF THE TOP COVER, IT WAS FOUND THAT THE HEAD END HAD SEPARATED FROM THE TUBULAR PORTION OF THE PILOT VALVE ASSEMBLY. IT WAS ALSO NOTED THAT THE BEARING RETAINER PART NR 180231 HAD BEEN DAMAGED AND 10 OF THE 11, 0.125 INCH BALL BEARINGS HAD BEEN RELEASED FROM THE CAGE, FOUR WERE FOUND INSIDE OF THE GOVERNOR HOUSING, AND FIVE WERE FOUND INSIDE OF THE SHIPPING COVER FOR THE GOVERNOR, ONE HAS NOT BEEN FOUND. ATTACHED IS A COPY OF WOODWARD SERVICE BULLETIN 33571C ORIGINALLY ISSUED IN JULY 1979 THAT ADDRESSES THIS ISSUE, WE HAVE NEVER SEEN THESE PILOT VALVES COME APART BEFORE. IT APPEARS THAT THE SET SCREW RETAINS THE HEAD END TO THE TUBULAR PORTION HAS BACKED OUT OF ITS LOCATION, THERE IS NO VISUAL EVIDENCE OF THE REQUIRED EPOXY ON THE SET SCREW. WHEN THE HEAD END SEPARATED FROM THE TUBULAR PORTION OF THE PILOT VALVE ALL PITCH CHANGE CONTROL OF THE PROPELLER IS LOST.

CA080304006	STARTER	FAILED
3/4/2008		ENGINE

AFTER INSTALLATION TEST FOR FUNCTIONAL START, THE ENGINE LIGHT STAY ON IN THE COCKPIT. FOUND BY OUR TECHNICIAN THAT THE RECEPTACLE PLUG ON THE STARTER PIN B GROUNDED ALL THE TIME. (TC NR

20080304006)

CA080414009 DISPLAY INOPERATIVE

4/14/2008 7003652631 COCKPIT

FAIL AT INSTALLATION, AND CAME BACK OUT WITH THE SAME PROBLEM THAT WE SENT FOR REPAIR. DISPLAY BLANK OUT AFTER POWER UP O 5800145883, DATE REPAIR MARCH 14 2008.

CA080328005 DISTRIBUTOR GEAR WORN

3/28/2008 10357586 MAGNETO

MAG WAS RECEIVED TIME EXPIRED FOR OVERHAUL. WHEN DISASSEMBLED THE WASHER THAT RETAINS THE NYLON GEAR ON THE SHAFT WAS FOUND LOOSE AND HAD ALMOST WORN TO THE POINT THAT IT COULD HAVE COME OFF THE END OF THE SHAFT AND RUBBED AGAINST THE COIL TAB OR CARBON BRUSH. THIS CONDITION HAS BEEN NOTICED IN MANY OTHER MAGS AND IN CONVERSATION WITH TCM WE HAVE BEEN TOLD TO PUT THE GEAR IN A PRESS AND FLARE THE END OF THE SHAFT OVER MORE TO RETAIN THE WASHER IF IT IS FOUND LOOSE. THE WASHER IN THIS CASE WAS WORN AND THIS PROCEDURE COULD NOT BE ACCOMPLISHED. THE DATE CODE (BATCH CODE) ON THE GEAR WAS `94`. THE GEAR WAS REPLACED DURING THE OVERHAUL AND THE MAG WAS RETURNED TO SERVICE. (TC NR 20080328005)

CA080328006 DISTRIBUTOR GEAR WORN

3/28/2008 10357586 MAGNETO

MAG WAS RECEIVED TIME EXPIRED FOR OVERHAUL. WHEN DISASSEMBLED THE WASHER THAT RETAINS THE NYLON GEAR ON THE SHAFT WAS FOUND LOOSE AND HAD ALMOST WORN TO THE POINT THAT IT COULD HAVE COME OFF THE END OF THE SHAFT AND RUBBED AGAINST THE COIL TAB OR CARBON BRUSH. THIS CONDITION HAS BEEN NOTICED ON MANY OTHER MAGS AND IN CONVERSATION WITH TCM WE HAVE BEEN TOLD TO PUT THE GEAR IN A PRESS AND FLARE THE END OF THE SHAFT OVER MORE TO RETAIN THE WASHER IF IT IS FOUND LOOSE. THE WASHER IN THIS CASE WAS WORN AND THIS PROCEDURE COULD NOT BE ACCOMPLISHED. THE DATE CODE (BATCH CODE) ON THE GEAR WAS '94'. THE GEAR WAS REPLACED DURING THE OVERHAUL AND THE MAG WAS RETURNED TO SERVICE. (TC NR 20080328006)

CA080319003 GARRTT NOZZLE DAMAGED

3/11/2008 TPE33111U 31038294 FUEL

THE A/C CAME INTO THE HANGER FOR A ROUTINE FUEL NOZZLE AND BOROSCOPE INSPECTION. DURING THE BOROSCOPE INSPECTION OUR NIGHT MAINTENANCE FOUND SOME DISCREPANCIES IN THE ENGINE. FURTHER INSPECTION FROM THE TURBINE SHOP IT WAS NOTED THAT THE NOZZLE SEGMENTS THAT MAKE UP THE NR 1 STATOR ASSEMBLY HAD SOME DAMAGE TO THEM. THE NOZZLE SEGMENTS WERE OVERHAULED FROM SOUTHWEST TURBINE. THE ENGINE WAS REPLACED AND FORWARDED TO THE ENGINE SHOP FOR FURTHER REPAIR. (TC NR 20080319003)

CA080414005 PWA DUCT DAMAGED

4/11/2008 PT6A27 3012060

METAL SWARF FOUND INSIDE COOLING PASSAGES OF DUCT ASSY.

CA080221007 PWA ENGINE MALFUNCTIONED

2/8/2008 PT6A68 PT6A68

(CAN) DURING A TRAINING MISSION, THE PILOT REPORTED HIGH ITT, VIBRATION AND FLAME FROM THE ENGINE EXHAUST AND ELECTED TO SHUTDOWN THE ENGINE. LANDED WITHOUT INCIDENT. ENGINE WILL BE REMOVED AND RETURNED FOR INVESTIGATION. MFG WILL CONTINUE INVESTIGATING THE EVENT AND ADVISE OF ROOT CAUSE ONCE ESTABLISHED (TC NR 20080221007)

CA080415006 TMECA BLADE DAMAGED

4/11/2008 ARRIEL1B TURBINE WHEEL

1ST STAGE TURBINE WHEEL BLADE LEADING EDGE DAMAGE IN ZONE 2 ON A TOTAL OF 8 BLADES. THE DAMAGE WAS CAUSED BY THE SEMI-CONDUCTOR OF THE IGNITER, P/N 9550175400, THAT DISLODGED ITSELF FROM THE HOUSING. THIS WAS FOUND DURING A SCHEDULED 100/150 HR ENGINE INSPECTION. THE AFFECTED MO3 HAS

BEEN SEND TO MANUFACTURER FOR FUTURE INVESTIGATION. SUBSEQUENTLY ALL OTHER ENGINE IGNITER WHERE INSPECTED AND REMOVED FROM SERVICE DO TO LOOSENESS OF THE SEMI-CONDUCTOR. PICTURES WERE TAKEN AND SEND TO MANUFACTURER.

<u>CA080402005</u> AEROSP PWA TANK LEAKING 3/14/2008 ATR42* PW120 ENGINE OIL

DURING DESCENT, OIL MIST WAS NOTED IN THE CABIN FOLLOWED BY A LOW OIL PRESSURE WARNING INDICATION. THE ENGINE WAS SHUT DOWN BY THE CREW. TROUBLESHOOTING REVEALED LOW OIL LEVEL IN THE TANK, AND SIGNS OF EXTERNAL OIL LEAKAGE. THE ENGINE IS TO BE REMOVED FOR INVESTIGATION. P&WC WILL CONTINUE INVESTIGATING THE EVENT AND ADVISE OF ROOT CAUSE ONCE ESTABLISHED. (TC NR 20080402005)

CA080402010 AEROSP PWA EEC MALFUNCTIONED

3/16/2008 ATR72 PW124B ENGINE

DURING TAKEOFF ROLL, THE ENGINE TORQUE INDICATED 75 PERCENT. THE TAKEOFF WAS ABORTED AND AIRCRAFT TAXIED BACK TO THE RAMP. THE EEC WAS REPLACED AND AIRCRAFT RETURNED TO SERVICE. THE REMOVED UNIT WILL BE RETURNED FOR INVESTIGATION AND UPDATES PROVIDED TO TC. (TC NR 20080402010)

CA080402014 AEROSP PWA ENGINE POWER LOSS

3/21/2008 ATR72 PW127

DURING CLIMB, ENGINE POWER WAS LOST ACCOMPANIED BY A LOUD NOISE. THE ENGINE WAS SECURED AND THE AIRCRAFT RETURNED TO BASE. INITIAL INVESTIGATION REVEALED SEVERE ENGINE DAMAGE INCLUDING FRACTURE OF THE 2ND STAGE POWER TURBINE BLADES. P&WC WILL CONTINUE INVESTIGATING THE EVENT AND ADVISE OF ROOT CAUSE ONCE ESTABLISHED. (TC NR 20080402014)

CA080402019 AEROSP PWA ENGINE DAMAGED

4/1/2008 ATR72 PW127

THE CREW HEARD A LOUD NOISE ACCOMPANIED BY AN AIRCRAFT YAW. UPON POWER REDUCTION, THE ENGINE SHUT DOWN BY ITSELF. INITIAL INVESTIGATION REVEALS SEVERE INTERNAL ENGINE DAMAGE. THE ENGINE WILL BE INVESTIGATED AND UPDATES WILL BE PROVIDED. (TC NR 20080402019)

<u>CA080221011</u> AEROSP PWA GOVERNOR LEAKING
2/17/2008 ATR72 PW127 PROPELLER

(CAN) DURING CRUISE, THE LOW OIL PRESSURE WARNING WAS ACTIVATED. THE CREW ELECTED TO SHUTDOWN THE ENGINE AND DIVERT THE AIRCRAFT TO AN ALTERNATE LANDING SITE. INITIAL INVESTIGATION REVEALED SIGNIFICANT EXTERNAL OIL LEAKAGE FROM THE PROPELLER OVERSPEED GOVERNOR AREA. THE COMPONENT WAS REPLACED. MFG WILL CONTINUE INVESTIGATING THE EVENT AND ADVISE OF ROOT CAUSE ONCE ESTABLISHED (TC NR 20080221011)

<u>CA080402017</u> AEROSP PWA ENGINE MAKING METAL

3/27/2008 ATR72201 PW124B

THE OIL PRESSURE INDICATION REDUCED TO ZERO FOLLOWED BY A LOUD NOISE, OIL MIST AND ODOR IN THE CABIN. THE ENGINE THEN FLAMED OUT. INITIAL INSPECTION REVEALED A CONTAMINATED CHIP DETECTOR AND THE PROPELLER DIFFICULT TO TURN. THE ENGINE IS TO BE REMOVED FOR INSPECTION AND UPDATES WILL BE PROVIDED.

DT1R200800001 AGUSTA LEVER DAMAGED

5/8/2008 A109S 1090020477 YAW TRIM SYSTEM

OPENED THE ACCESS PANEL UNDER THE CO-PILOT'S SEAT, FOUND THE YAW TRIM LEVER (PN 109-0020-47-7 NSN) DETACHED FROM THE YAW TRIM MOTOR SHAFT. NO DAMAGE NOTED TO THE MOTOR SHAFT. THE LEVER WAS INTACT BUT DAMAGED AT THE POINT WHERE IT CONTACTS THE SHAFT, BUT HAD THE CORRECT HARDWARE AND COTTER PIN INSTALLED. THE APPLICABLE PUSH-ROD END (ATTACHED TO THE LEVER) WAS ALSO LOOSE. INSPECTED AND RETORQUED THE ROD-END. REPLACED AND TORQUED THE LEVER, REINSTALLED TO THE YAW TRIM MOTOR SHAFT, AND COMPLETED OPERATIONAL CHECK WITH NO DEFECTS NOTED.

<u>CA080409003</u> AIRBUS GE OUTFLOW VALVE MALFUNCTIONED

4/7/2008 A310300 CF680C2* CABIN PRESSURE

AFTER 30 MIN IN CRUISE, CAB PRESSURE REG NR 2 FAULT, FOLLOWED BY CAB PRESSURE REG NR 1 FAULT. UNABLE TO CONTROL IN MANUAL. EMERGENCY DESCENT AND QAR PROCEDURES FOLLOWED. PAX MASK SYSTEM ACTIVATED IN AUTO. FLIGHT RETURNED TO STATION AT FL 10,000 FT. ACFT WAS REMOVED FROM SERVICE FOR INVESTIGATION.

CA080304005 AIRBUS GE LINE SPLIT

2/27/2008 A310304 CF680C A3248021101100 HYD SYSTEM

WHILE AIRCRAFT WAS UNDER MAINTENANCE IN THE HANGAR, THE HYDRAULIC RETURN LINE FOR YELLOW SYSTEM ALTERNATE BRAKE FAILED WITH A SPLIT IN THE TUBING APPROX 1.5 INCHES IN LENGTH. AT THE TIME OF THE FAILURE THERE WAS NO HYDRAULIC PRESSURE OR OPERATION OF THE SYSTEM. THE LINE WAS REPLACED AND SYSTEM TESTED SERVICEABLE. LINE WAS SENT TO AIRBUS FOR ANALYSIS. (TC NR 20080304005)

<u>CA080305001</u> AIRBUS GE PRESSURE SWITCH MALFUNCTIONED

3/3/2008 A310304 CF680C ENGINE OIL

DURING CLIMB AT 18000 FEET, NR 1 ENGINE OIL FILTER CLOGGED LIGHT CAME ON. AS PER QRH, NR 1 ENGINE WAS SHUT DOWN. AIRCRAFT RETURNED TO STATION WITH NO FURTHER PROBLEM. THE OIL FILTER WAS REPLACED. NO SIGNIFICANT CONTAMINATION WAS NOTICED. THE OIL SYSTEM WAS DRAINED AND SERVICED AS PER MM. THE OIL DIFFERENTIAL PRESSURE SWITCH WAS REPLACED. A TEST FLIGHT WAS PERFORMED AND THE ENGINE OIL INDICATION SYSTEM WAS NORMAL. AIRCRAFT WAS RETURN TO SERVICE.

<u>CA080409001</u> AIRBUS GE WIRE BURNED

3/25/2008 A310304 CF680C2* 40900011 COFFEEMAKER

IN CRUISE AFT GALLEY RT COFFEEMAKER BURNED. ALL C/B'S WERE PULLED. HALON FIRE EXTINGUISHER WAS USED AS A PRECAUTIONARY MEASURE. C/B ON COFFEE MAKER FOUND POPPED. FOUND WIRES TO PRESSURE SWITCH BURNED AND DISCONNECTED. NO OTHER WIRING DAMAGE ON THE COFFEE MAKER. COFFEE MAKER REPLACED AND ROUTED TO SHOP FOR REPAIR.

<u>CA080403007</u> AIRBUS CFMINT BEARING OVERHEATED 3/19/2008 A319112 CFM565B6 RECIRC FAN

NEAR TOP OF CLIMB, COCKPIT ODOR OF ACRID BURNING SMELL NOTICED. NO ECAM OR VISUAL CUES. DURING CRUISE CHECK NOTICED FAN IN AMBER DISPLAYED ON COND PAGE. RECYCLED CAB FAN AND SMELL REOCCURRED IMMEDIATELY. RETURNED TO AIRPORT. THE SHOP REPORT INDICATED THAT THE REAR BEARING SEIZED, THE FRONT BEARING WAS DRY, THE FAN OVERHEATED BUT THE STATOR WAS ELECTRICALLY NORMAL. THE FAN WAS DIRTY AND SMELLED OVERHEATING.

CA080314008 AIRBUS GE ENGINE FAILED

3/13/2008 A319114 CFM565A

DURING CLIMB A LOUD BANG AND VIBRATION WAS FELT, FOLLOWED BY ENG 2 FAIL ON ECAM AT 8300 FT AND CLIMBING. LANDED SAFELY WITH NO ISSUE WITH LANDING. AFTER LANDING DEBRIS WAS FOUND IN ENGINE EXHAUST AND AFT CENTER BODY WAS DAMAGED. INVESTIGATION INTO CAUSE OF ENGINE FAILURE IS ON GOING AND SDR WILL UPDATED ACCORDINGLY. ENGINE HAS BEEN CHANGED. (TC NR 20080314008)

<u>CA080228001</u> AIRBUS GE UPLOCK FAILED 1/19/2008 A319114 CFM565A C247300016 NLG

AFTER TAKEOFF, THE CREW COULD NOT RETRACT THE NOSE GEAR. THE GEAR WAS RECYCLED WITH NO SUCCESS. THE CREW RETURNED TO LAND AT DEPARTURE AIRPORT. THE NLG UPLOCK ASSEMBLY WAS REPLACED AND A LANDING GEAR SWING CARRIED OUT. DESCRIPTION/ROOT CAUSE, THE UNIT WAS SENT FOR REPAIR WITH THE REQUEST FOR A TEARDOWN REPORT. THE UNIT WAS PRE-TESTED AND FAILED THE LOCKING TEST. THE LOCK MECHANISM INSIDE THE UNIT FAILED TO LOCK THE HOOK. THE REPAIR FACILITY CONCLUDED THAT THE DRIED GREASE CAUSED THE LOCKING MECHANISM TO HANG UP AND PREVENTED THE HOOK FROM LOCKING THE NOSE LANDING GEAR. THE WEAR TO THE UNIT WAS NORMAL AND NO OTHER MECHANICAL DIFFICULTIES WERE OBSERVED. AT TIME OF THIS REPORT THE REPAIR ORGANIZATION WAS AWAITING

INSTRUCTIONS TO PROCEED WITH REPAIR AND OR OVERHAUL. (TC NR 20080228001)

4/14/2008

CA080222007 **AIRBUS CFMINT BOLT** CORRODED

2/15/2008 MLG A321211 CFM565B3P 201660001010

(CAN) CORRODED FAIL SAFE BOLTS THAT SECURE MAIN LANDING GEAR SIDE STAY ATTACH PINS TO UPPER AND LOWER CARDAN PINS. BOLTS ARE ITEMS 290 AND 296 IN A321 IPC 32-11-18-02E. ITEM 290 IS AN AN6-56A AND ITEM 295 IS AN AN6-62. THE LOWER BOLT ITEM 295 IS HEAVILY CORRODED. (TC NR 20080222007)

310718501

ENGINE

PJ6G20080147 **AIRTRC PWC GAS GENERATOR ERODED** PT6A67AG AT802

'C' FLANGE EROSION AT SCAVENGE TUBE OIL COUPLING WITH ASSOCIATED PARTIALLY SEVERED 'T' BOLT.

CA080414006 **AIRTRC PWA** STATIC LINE DETERIORATED 4/7/2008 AT802A PT6A67A 08071 **AUTO PILOT SYS**

DURING RE-ACTIVATION OF THE AIRCRAFT, THE MAINTENANCE CREW NOTICED THAT THE STATIC LINE FOR THE AUTO PILOT ALTITUDE HOLD P/N 0807-1 WAS DETERIORATED AND CRACKED. THE LINE WAS REPLACED WITH A SERVICEABLE PART. ALL OTHER AIRCRAFT IN THE FLEET WILL BE INSPECTED FOR SERVICEABILITY.

2008FA0000324 BBAVIA **DISPLAY** DEFECTIVE

5/7/2008 7DC 011097203 **INSTRUMENT PANEL**

PRIMARY FLIGHT DISPLAY PANEL HAS A MALFUNCTION IN THE COARSE/BAROMETRIC PRESSURE ADJUSTMENT KNOB. THE DESIGN INCORPORATES A DUAL FUNCTION TYPE CONTROL KNOB. THE CENTER KNOB ADJUSTS THE DESIRED NAVIGATIONAL COARSE DISPLAYED ON THE HSI NAV DISPLAY. THE OUTER KNOB ADJUSTS THE PRIMARY ALTIMETER BAROMETRIC PRESSURE SETTING. AT TIMES DURING FLIGHT ADJUSTMENT OF THE INNER COARSE KNOB RESULTS IN AN INADVERTENT CHANGE IN THE BAROMETRIC PRESSURE. THIS MALFUNCTION CAN BE QUITE DANGEROUS, ESPECIALLY WHEN SHOOTING AN INSTRUMENT APPROACH, PILOT CHANGES COARSE HEADING DURING AN APPROACH AND MAY, WITHOUT KNOWING, CHANGE THE BAROMETRIC PRESSURE THUS CAUSING THE ALTITUDE DISPLAY TO BE INACCURATE.

LYC **SLEEVE** 2008FA0000323 BBAVIA **CRIMPED**

5/4/2008 7GCBC O320A2D 183M **RUDDER CABLE**

RIGHT RUDDER CABLE SEPARATED AT RUDDER BELLCRANK DURING RECOVERY OF INTENTIONAL LEFT SPIN. CABLE APPARENTLY PULLED OUT OF NICOPRESS SLEEVE, AIRPLANE WAS LANDED AT KCHA, WITHOUT INCIDENT, AFTER DECLARING AN EMERGENCY.

CA080402018 BEECH **PWA GOVERNOR MISRIGGED** 1900C PT6A67B **PROPELLOR** 3/17/2008

TAKEOFF WAS ABORTED WHEN THE ENGINE WOULD NOT PRODUCE FULL POWER. INVESTIGATION REVEALED IMPROPER RIGGING OF THE PROP GOVERNOR.

2008FA0000326 BEECH SPAR CAP CRACKED

4/25/2008 E90 00011001316 WING

THE CRACK EMANATES FROM THE 5TH RIVET OUTBOARD OF THE LOWER FORWARD WING BOLT FITTING, 4TH RIVET FROM END OF SPAR CAP, IN THE FRONT ROW OF RIVETS, AND EXTENDS TO THE LEADING EDGE OF CAP. THE A/C PASSED 2-400 HOUR WING SIRM INSPECTIONS. 181 HRS INTO NEXT INTERVAL WAS WHEN CRACK WAS DETECTED DURING ROUTINE MAINTENANCE, BEECH HAS REDUCED INTERVAL FOR EDDY CURRENT INSP OF SPAR CAP TO 200 HRS DUE TO RECURRENCE OF THIS PROBLEM REF 8110-4 FOR N692M FOR SIMILAR DETAILS. A/C IS ON USFS CONTRACT.

CA080303005 **BELL ALLSN FUEL CONTROL LEAKING** 250C20 3/2/2008 206B 23034702 **ENGINE**

AFTER INSTALLING THE FCU, IT WAS NOTED THAT FUEL WAS LEAKING FROM LOWER THROTTLE ARM HOUSING. FCU WAS REMOVED. (TC NR 20080303005)

<u>CA080221004</u> BELL PWA GEARBOX MISMANUFACTURED

2/9/2008 212 PT6T3B PT6T3B MAIN ROTOR

(CAN) MAINT WAS TROUBLESHOOTING OIL PRESSURE PROBLEMS. THE POWER SECTION ALWAYS APPEARED THAT IT HAD LOTS OF OIL. VISUAL INDICATION. THE OIL PRESSURE FLUCTUATIONS OCCURRED FEB. 5TH. IN THE TROUBLESHOOTING PROCESS A LITTLE OIL WAS BEING DRAINED AND YET THE VISUAL INDICATION THERE WAS LOTS OF OIL. ON FEB. 9TH THE PWR SECTION WAS REMOVED DUE TO LOSS OF OIL PRESSURE. A TECH REP WAS BROUGHT TO THE BASE AND IT WAS NOTICED THAT THE LOWER HOLE INTO THE GEARBOX OF THE OIL LEVEL INDICATOR WAS NOT DRILLED INTO THE CASE. SINCE THE OIL COULD NOT DRAIN OUT OF THE VISUAL INDICATOR THE OIL LEVEL APPEARED FULL. (TC NR 20080221004)

<u>CA080411006</u> BELL ALLSN TURBINE DAMAGED 4/9/2008 407 250C47B 23063354 ENGINE

ON THE THIRD MAIN ROTOR STROBING FLIGHT OF THE MORNING AND WHILE ACCELERATING FROM 100KTS TO 120KTS, A LOW HOWLING NOISE WAS HEARD WHICH INTENSIFIED RAPIDLY AND WAS FOLLOWED IMMEDIATELY BY AN ENGINE CHIP LIGHT. A FORCED LANDING WAS MADE TO A FIELD. AN EXTERNAL INSP INCH BY 4 INCH PIECE OF SHEET METAL WAS FOUND BROKEN AWAY FROM THE AFT RIGHT SIDE OF THE EXHAUST STACK. AFTER REMOVAL OF THE OUTER COMBUSTION CASE MAJOR VISIBLE DAMAGE WAS FOUND TO THE 1ST AND 2ND STAGE TURBINE BLADE TIPS. TURBINE SECTION IS BEING SENT TO STANDARD AERO LTD FOR INSPECTION WITH ROLLS ROYCE PARTICIPATION. 1ST AND 2ND TURBINE WHEEL CYCLES ARE 2004, 3RD AND 4TH STAGE CYCLES ARE 4977. ENGINE DATA COULD NOT BE DOWNLOADED FROM THE ECU, INDICATING MAJOR INTERNAL DAMAGE. SEVERE VIBRATION IS SUSPECTED TO HAVE CAUSED THE EXHAUST STACK DAMAGE.

CA080409006 BELL PWA BLADES FAILED

3/30/2008 412 PT6T3 COMPRESSOR TURB

ON APPROACH, THE CREW NOTED ENGINE TEMP AT APPROX 900 DEGREES FOLLOWED BY SOME NOISES. THE ENGINE WAS SHUTDOWN AND THE AIRCRAFT LANDED. INITIAL INVESTIGATION REVEALED LOSS OF COMPRESSOR TURBINE BLADE MATERIAL AND SHROUD SEGMENT MATERIAL, THE ENGINE WAS SENT FOR REPAIR.

<u>CA080407007</u> BELL LYC BELL GEAR SET SHEARED
4/5/2008 47G4 VO540B1B3 4762060025 R476204971 COOLING FAN

APPROX 100 HRS AGO TRANSMISSION WAS O/H AND NEW PMA GEAR SET WAS INSTALLED S/N GR586A FROM HELICOPTER TECH DURING FLIGHT PILOT HEARD AND FELT NOISE AND MADE A PRECAUTIONARY LANDING AND FOUND COOLING FAN DRIVE PULLEY AND APPROX 1.25 INCHES OF THE DRIVE SHAFT WAS MISSING. WE ARE SENDING IN REMAINING SHAFT SEGMENT WHERE IT SHEARED FOR METALLURGICAL ANALYSIS.

<u>CA080411004</u> BOEING PWA LINE LEAKING 4/8/2008 727223 JT8D15 6517840330 HYD SYSTEM

AFTER TAKEOFF WHEN GEAR SELECTED UP, HYDRAULIC SYSTEM "A" LOW LEVEL LIGHT ILLUMINATED AND HYDRAULIC QUANTITY DROPPED TO 2.0 GAL. FLIGHT CREW DECLARED AN EMERGENCY AND RETURNED FOR APPROACH. PER FLIGHT CREW CHECKLIST GEAR WAS MANUALLY LOWERED HOWEVER FLIGHT CREW WAS UNABLE TO MANUALLY LOWER THE LT GEAR. TWO ATTEMPTS WERE MADE AND THEN THE FLIGHT CREW SELECTED ON ONE "A" SYSTEM HYDRAULIC PUMP TO GET THE LT GEAR DOWN AND LOCKED. THE PUMP WAS THEN TURNED OFF AGAIN. THE AIRCRAFT LANDED SUCCESSFULLY WITH NO ADDITIONAL FAULTS. MAINTENANCE PERSONNEL FOUND A PIN HOLE LEAK ON THE A SYSTEM HYDRAULIC RETURN LINE RETURNING FROM THE A SYSTEM HEAT EXCHANGER. A PERMANENT REPAIR WAS CARRIED OUT BY THE INSTALLATION OF A PERMASWAGE FITTING OVER THE DAMAGED AREA. A LEAK CHECK WAS PERFORMED AND THE REPAIR CHECKED SERVICEABLE. THE AIRCRAFT WAS THE JACKED AND A GEAR SWING AND MANUAL GEAR EXTENSION WAS CARRIED OUT. THE FREE FALL EXTENSION CHECK WAS PERFORMED AND THE GEAR CRANKING FORCE REQUIRED TO RELEASE THE LANDING GEAR WAS WITHIN THE LIMITS PUBLISHED IN THE MANUFACTURERS MAINTENANCE MANUAL. NO ADDITIONAL FAULTS WERE FOUND. THE AIRCRAFT WAS RELEASED FOR SERVICE.

<u>CA080219004</u> BOEING PWA SKID DEFECTIVE 2/18/2008 727227 JT8D9A 65715611 TAIL SKID

(CAN) UPON GEAR RETRACTION, TAIL SKID LIGHT REMAINED ILLUMINATED. A/C RETURNED TO STATION WHERE SKID TIP WAS REPLACED, SWITCH CONTACT CONFIRMED AND A/C RETURNED TO SERVICE. (TC NR 20080219004)

<u>CA080401010</u> BOEING ARM CRACKED

4/1/2008 737490 65C330325 MLG ACTUATOR

WHILE PERFORMING CUSTOMER T/C (AD 99-10-12) INSPECTION OF MLG ACTUATOR BEAM ARM, UT INSPECTION FINDS THAT RT MLG ACTUATOR BEAM ARM IS CRACKED CYCLES/TSN ARE AIRFRAME. NO EVIDENCE THAT THIS PART HAS BEEN REPLACED SINCE A/C MANUFACTURE. (TC NR 20080401010)

<u>CA080304003</u> BOEING CFMINT DIODE OPEN

2/29/2008 737522 CFM563C1 IN3311B

EN ROUTE, AFTER SHUTTING OFF CENTER TANK BOOST PUMPS, LEFT CENTER, LEFT AFT AND RIGHT FORWARD LOW PRESSURE LIGHTS DID NOT ILLUMINATE. WINDOW HEAT LIGHTS FOR THE LEFT SIDE WINDOW AND RIGHT FORWARD WINDOW WERE NOT ILLUMINATED. INITIALLY NO MASTER CAUTION, THEN ANTI-ICE MASTER CAUTION. THERE WAS NO LE DEVICES INDICATION. ON DOWNWIND FOR LANDING, THE PRESSURIZATION WENT FROM AUTO TO STANDBY AND DUMPED PRESSURE. UPON LOWERING GEAR, NO GREEN LIGHTS. THE CREW OVERSHOT AND USED THE GEAR VIEWERS AND A FLY BY TO DETERMINE THE GEAR STATUS. AFTER SPEAKING WITH DISPATCH, THE LIGHTS WERE CYCLED THROUGH BRIGHT/DIM/TEST AND THE GEAR INDICATION RETURNED. THE AIRCRAFT WAS LANDED WITHOUT FURTHER INCIDENT. MAINTENANCE WAS DISPATCHED TO THE SITE AND EXAMINED THE AIRCRAFT. THE DIMMING SYSTEM WAS FOUND TO WORK ONLY IN THE BRIGHT POSITION FOR THE ABOVE MENTIONED SYSTEMS. MEL 33-23 WAS APPLIED AND THE AIRCRAFT WAS FLOWN TO A MAINTENANCE BASE FOR REPAIR. ON EXAMINATION, THE DIODE THAT SUPPLIES DIMMING POWER FOR THE ABOVE SYSTEMS WAS FOUND UNSERVICEABLE AND REPLACED. THE MASTER DIM CIRCUIT CARD FOR THE RELATED DIM CIRCUIT WAS REPLACED AS WELL. THE ANTI-ICE MASTER CAUTION AND THE PRESSURIZATION SWITCH TO STANDBY WERE ANOMALOUS EVENTS AND COULD NOT BE DUPLICATED. SYSTEMS CHECKED SERVICEABLE. (TC NR 20080304003)

<u>CA080408003</u> BOEING RROYCE CABIN PRESSURE MALFUNCTIONED

4/4/2008 75728A RB211535E437

AIRCRAFT C-GTDX DEPARTING FROM YYZ ON APRIL 4TH 2008, AROUND 7000 FT AN EICAS MSG AUTO PRESSURIZATION SYS 1 AND 2, AIRCRAFT RETURNED BACK TO YYZ AND REQUESTED FIRE TRUCKS ON ARRIVAL DUE TO OVERWEIGHT LANDING. TROUBLESHOOTING CARRIED OUT, BOTH PRESSURIZATION CONTROL UNITS AND STBY ALTIMETER REPLACED AS PRECAUTIONARY MEASURE. FLIGHT TEST CARRIED OUT SUCCESSFULLY. INVESTIGATION IS ON GOING.

<u>CA080225007</u> BOEING RROYCE MONITOR MALFUNCTIONED

2/21/2008 75728A RB211535E437 6009580001 CABIN

(CAN) CREW REPORTED A BURNING SMELL IN THE CABIN JUST BEFORE LANDING. IN-FLIGHT ENTERTAINMENT WAS SELECTED OFF AND SMELL DISSIPATED. MAINTENANCE DETERMINED THAT THE SMELL WAS COMING FROM THE NR 7 MONITOR. (TC NR 20080225007)

<u>CA080407004</u> BOMBDR HNYWL LEVER LOOSE 4/4/2008 BD1001A10 AS90711A 1760A000004 MLG

AFTER TAKEOFF, IT WAS REPORTED THAT THE CREW WERE UNABLE TO RETRACT THE FLAPS FROM THE 10 DEGREE POSITION TO THE 0 DEGREE POSITION. PRELIMINARY REPORT STATES THAT A LOOSE SCREW WAS FOUND INSIDE THE FLAP LEVER GUARD. THE FORWARD RIGHT SCREW LOCATED INSIDE THE GUARD WAS FOUND TO BE PROTRUDING SUFFICIENTLY TO PREVENT THE LEVER FROM MOVING FROM THE 10 DEGREE POSITION TO THE 0 DEGREE POSITION. ALL THREE REMAINING SCREWS WERE FOUND TO BE SECURE. A VISUAL AND TACTILE INSPECTION CAN BE PERFORMED TO ENSURE THAT ALL 4 SCREWS LOCATED INSIDE THE FLAP LEVER GUARD ARE SLIGHTLY COUNTERSUNK AND DO NOT SHOW ANY SIGNS OF LOOSENESS (REFER TO FIGURE1). PLEASE REPORT ANY ANOMALIES FOUND DURING THIS INSPECTION.

CA080404004BOMBDRPWCPUMPFAILED4/2/2008DHC8400PW150A6617303HYDRAULIC SYSDURING CRUISE FL 120, NR 2 ENG HYD PRES CAUTION LIGHT ILLUMINATED. HYD NR 2 PRESS - 0 PSI - AFTER

PERFORMING ABNORMAL CHECKLIST WITH PTU ON, PRESS 3000 PSI. UNEVENTFUL LANDING. MAINTENANCE CREW REPLACED THE NR 2 ENGINE DRIVEN HYDRAULIC PUMP.

CA080313004	BRAERO	RROYCE	ENGINE	MALFUNCTIONED
3/11/2008	HS7482A	DART5342		NR 2

DURING APPROACH IN ICING CONDITIONS AND HEAVY PRECIPITATION, WHEN THE PILOT THROTTLED BACK, ENGINE NR 2 FLAMED OUT AND AUTO FEATHERED. THE PILOT DID NOT ATTEMPT TO RE-LIGHT AND LANDED WITH ONE ENGINE OPERATING. MAINTENANCE CHECKED THE OIL SCREEN, FUEL SCREEN AND FUEL TANK SUMPS. NO CONTAMINATION WAS FOUND. MAINTENANCE CONDUCTED HIGH AND LOW POWER ENGINE RUNS AS WELL AS AUTO-FEATHER CHECKS AND FOUND NO PROBLEM WITH THE ENGINE. ROLLS-ROYCE NOTICE TO OPERATES NO. 1142 IS DIRECTED TO THE FLIGHT CREWS TO "SWITCH ON THE ENGINE IGNITION SWITCHES WHEN MODERATE OR SEVERE ICING IS ENCOUNTERED". THE PILOT DID NOT HAVE THE ENGINE IGNITION SWITCHES SELECTED TO "ON" DURING THIS EVENT. THE PILOTS HAVE BEEN REMINDED OF THIS "NOTICE TO OPERATORS" TO ENSURE THIS PROCEDURE IS FOLLOWED. A CONFIDENCE FLIGHT WITH CREW ONLY WILL BE ACCOMPLISHED PRIOR TO THE AIRCRAFT RETURNING TO REVENUE FLIGHTS. (TC# 20080313004)

CA080318002	CESSNA	LYC	STUD	BROKEN
2/26/2008	152	O235L2C		CYLINDER

DURING WALK AROUND, PILOT NOTICED ENGINE OIL COVERING LT SIDE OF FUSELAGE AND EMPENNAGE.
MAINTENANCE INSPECTED ENGINE AND FOUND ON NR 2 CYLINDER, ONE BROKEN THROUGH STUD. OIL WAS
RUNNING DOWN THROUGH STUD AND EXITING CYLINDER BASE WHERE ATTACH NUT USED TO BE. OIL LEAK WAS
NOT DISCOVERED DURING OR AFTER PREVIOUS NIGHT FLIGHT. (TC NR 20080318002)

CA080320010	CESSNA	LYC	SWITCH	BROKEN
3/7/2008	172M	O320E2D	S16612	TE FLAPS

INTERNAL RETURN SPRING OF SWITCH BROKEN. TOGGLE NOT RETURNING TO NEUTRAL POSITION. SWITCH REPLACED WITH NEW. (TC NR 20080320010)

CA080404009	CESSNA	LYC	CABLE	OUT OF ADJUST	
4/4/2008	172N	O320H2AD		PILOT SEAT	

FLIGHT CREW DISCREPANCY, PILOTS SEAT DOES NOT SLIDE BACK INTERMITTENTLY. SEAT REMOVED AND VISUALLY INSPECTED. REEL ASSEMBLY CABLE ADJUSTED AND SEAT FUNCTION TESTED WITH NO DEFECTS FOUND. SEVERAL AIRCRAFT IN OUR FLEET OF CESSNA 100 SERIES AIRCRAFT HAVE EXPERIENCED SIMILAR DISCREPANCIES, AND THE PASSENGER SEATED WAS UNABLE TO EXIT THE CABIN.

CA080320004	CESSNA	LYC	GASKET	LOOSE
3/14/2008	172R	IO360L2A	365533	SERVO PLUG

SERVO PLUGS FOUND LOOSE UPON INSPECTION. SERVO PLUG SEALS REPLACED WITH NEW AS PER THE CONVERSATION WITH PRECISION AIRMOTIVE REPRESENTATIVE. ENGINE REMANUFACTURE DATE OF JULY 14, 2004 DOES NOT FALL WITHIN THE DATES SPECIFIED THAT ARE AFFECTED BY THE AIRWORTHINESS DIRECTIVE. HOWEVER, THE SERVO PLUGS WERE LOOSE. (TC NR 20080320004)

CA080320005	CESSNA	LYC	PRECISIONWND	GASKET	LOOSE
3/14/2008	172S	IO360L2A		365533	FCU

AD2008-06-51 FUEL INJECTION SERVO PLUGS, SERVO PLUGS FOUND LOOSE UPON INSPECTION. SERVO PLUG SEALS REPLACED WITH NEW AS PER THE CONVERSATION WITH PRECISION AIRMOTIVE REPRESENTATIVE.ENGINE REMANUFACTURE DATE OF SEPT. 8, 2005 DOES NOT FALL WITHIN THE DATES SPECIFIED THAT ARE AFFECTED BY THE AIRWORTHINESS DIRECTIVE. HOWEVER, THE SERVO PLUGS WERE LOOSE. RIGHT MAGNETO P-LEAD WIRE BROKEN. (TC NR 20080320005)

CA080320006	CESSNA	LYC	PRECISIONWND	GASKET	LOOSE
3/14/2008	172S	IO360L2A		365533	FCU
CEDVO DI LICC FOUND LOOCE LIDON INCRECTION, CEDVO DI LIC CEALC DEDI ACED WITH NEW AC DED THE					

SERVO PLUGS FOUND LOOSE UPON INSPECTION. SERVO PLUG SEALS REPLACED WITH NEW AS PER THE CONVERSATION WITH PRECISION AIRMOTIVE REPRESENTATIVE. ENGINE REMANUFACTURE DATE OF AUG 18,

2005 AND THE FUEL SERVO WAS REPAIRED JULY 28, 2006 AND BOTH DO NOT FALL WITHIN THE DATES SPECIFIED THAT ARE AFFECTED BY THE AIRWORTHINESS DIRECTIVE. HOWEVER, THE SERVO PLUGS WERE LOOSE. (TC NR 20080320006)

2008FA0000320	CESSNA	LYC	BEARING	FAILED
4/25/2008	177RG	IO360A1B6	S34691	ACTUATOR

WHERE THE ROD END BEARING ATTACHES TO THE LATERAL BOLT, FWD. THIS BEARING (S34691 FAILED AT THE BEARING END. THIS BEARING IS UNDER EXTREEM TENSION LOAD AND WAS ORIGINAL. AGE WAS A FACTOR IN FAILING. REPLACING THIS BEARING AT 1000 HR INTERVALS IS NECESSARY. DATE OF THE ACTUATOR WAS 10/77. (K)

CA080320007	CESSNA	LYC	PRECISIONWND	GASKET	LOOSE
3/14/2008	182T	IO540AB1A5		365533	FCU

AD2008-06-51 FUEL INJECTION SERVO PLUGS, SERVO PLUGS FOUND LOOSE UPON INSPECTION. SERVO PLUG SEALS REPLACED WITH NEW AS PER THE CONVERSATION WITH PRECISION AIRMOTIVE REPRESENTATIVE. ENGINE REMANUFACTURE DATE OF SEPT 8, 2004 DOES NOT FALL WITHIN THE DATES SPECIFIED THAT ARE AFFECTED BY THE AIRWORTHINESS DIRECTIVE. HOWEVER, THE SERVO PLUGS WERE LOOSE. (TC NR 20080320007)

CA080320013	CESSNA	PWA	TUBE	FAILED
3/19/2008	208	PT6A114A	891250	TIRE

ON TAXI PILOT FELT AIRCRAFT PULLING TO ONE SIDE AND DISCOVERED FLAT TIRE. TIRE WAS CHANGED AND FLOWN BACK TO BASE. TIRE ASSY WAS DISASSEMBLED AND TUBE WAS FOUND BLOWN WITH ABOUT A FOUR INCH SPLIT IN IT. THE TUBE WAS ALSO FUSED TO THE INSIDE OF THE TIRE IN THE AREA OF THE BALANCE PATCH. THIS WAS THE ORIGINAL TIRE INSTALLED AT CESSNA FACTORY WHEN AIRCRAFT WAS DELIVERED. I AM REPORTING THIS DUE TO AN ABNORMAL NUMBER OF TUBES THAT WE HAVE HAD LET GO IN THE LAST MONTH. TALKING TO OTHER OPERATORS HAS INDICATED THAT OTHERS ARE HAVING THE SAME PROBLEM. I HAVE BEEN TOLD BY A TIRE COMPANY THAT THE BUTYL RUBBER TUBES ARE NOT WORKING WELL IN OUR COLDER CLIMATE. (TC NR 20080320013)

CA080314011	CESSNA	PWA	BRUSHES	FAILED
3/6/2008	208B	PT6A114A	200SGL119Q2	STARTER
SLOW SPOOLING	OVER ENGINE,	ENGINE STARTER BRUSHES WORN	OUT (TC NR 200803140	011)

CA080305014	CESSNA	PWA	ENGINE	STOPPED
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12/20/2007 208B PT6A114A

DURING FLIGHT AT 12000 FEET ENGINE POWER WAS LOST. THE AIRCRAFT WAS FORCED TO DITCH 25 MILES OFF COAST. CREW WAS RESCUED. INVESTIGATION REVEALED THAT THE ENGINE WAS MAKING NO POWER AT TIME OF IMPACT. THE FUEL PUMP DRIVE SHAFT REVEALED WORN AND FRACTURED DRIVE SPLINES. INVESTIGATION IS ONGOING, UPDATES WILL BE PROVIDED.

CA080328003	CESSNA	CONT	BRACKET	CRACKED
3/19/2008	210J	IO520J	12326231	HORIZONTAL STAB

DURING THE ANNUAL INSPECTION REINFORCEMENT BRACKET (P/N 12 32623-1) WAS FOUND TO HAVE A CRACK RUNNING FROM THE BOTTOM BOLT HOLE TO THE EDGE OF THE BRACKET. THE BRACKET IS ATTACHED TO THE REAR SPAR OF THE LT HORIZ STABILIZER. AFFECTED PART REPLACED. (TC NR 20080328003)

CA080328004	CESSNA	CONT	DOUBLER	CRACKED
3/19/2008	210J	IO520J	12120031	BULKHEAD

DURING THE ANNUAL INSPECTION A CRACK WAS DETECTED RUNNING FROM THE ANCHOR NUT RIVET HOLE TO THE EDGE OF THE DOUBLER PLATE, THIS BRACKET IS ATTACHED TO THE REAR FRAME AT STN 209, P/N 12120402-3. AFFECTED PART REPLACED. (TC NR 20080328004)

3. AFFECTED PART REPLACED. (TC NR 20080328004)					
CA080328007	CESSNA	CONT	ARM	BROKEN	

3/27/2008 401B TSIO520EB 150450018 MLG DOOR

DURING PILOT WALKAROUND THE RT MAIN GEAR DOOR WAS HANGING SLIGHTLY DOWN FROM RETRACTED POSITION. MAINTENANCE TO REPLACE PART. (TC NR 20080328007)

 CA080410009
 CESSNA
 CONT
 CYLINDER HEAD
 CRACKED

 3/12/2008
 414
 TSIO520N
 AEC631397SN2B22
 ENGINE

PILOT FLYING IN CRUISE FLIGHT, WHEN HE HEARD A POP AND EXPERIENCED LOSS OF ENGINE POWER. FEATHERED PROPELLER AND LANDED AT NEAREST AIRPORT. ENGINE CYLINDER REPLACED.

<u>CA080411007</u> CESSNA PWA TUBE LEAKING 4/7/2008 425 PT6A112 0923150 NLG WHEEL

NOSE TIRE FOUND LOW ON POST FLIGHT INSPECTION BY 10 PSI. NOSE WHEEL ASSY REMOVED FOR TEAR DOWN AND INVESTIGATION. SPARE BUILT-UP WHEEL ASSY INSTALLED. TEAR DOWN SHOWED INNER TUBE HAD PIN HOLE IN OUTER CIRCUMFERENCE AT ONE END OF A FOLD MARK. NO OTHER FAULTS FOUND WITH TIRE OR TUBE.

CA080402002CESSNAPWABLEED VALVEMALFUNCTIONED3/5/2008560XLPW545ACOMPRESSOR

THE CREW EXPERIENCED ENGINE VIBRATIONS, FOLLOWED BY AN EEC MANUAL LIGHT. ENGINE POWER INCREASED AS EXPECTED, BUT THE CREW WAS UNABLE TO FURTHER MODULATE POWER BY MOVING THE THRUST LEVER. THE ENGINE WAS SHUT DOWN AS A RESULT AND THE FLIGHT CONTINUED TO PLANNED DESTINATION. THE COMPRESSOR BLEED VALVE ASSEMBLY WAS REPLACED AND THE AIRCRAFT RETURNED TO SERVICE. THE COMPONENT WILL BE INVESTIGATED AND RESULTS FORWARDED FOR REVIEW. (TC NR 20080402002)

2008FA0000319 CESSNA LYC UNKNOWN UNKNOWN

12/25/2007 R182 O540J3C5

INFLIGHT FAILURE OF PART OR PARTS UNKNOWN WITH NO SYMPTOMS FROM WITHIN COCKPIT, IE: OIL PRESSURE, OIL TEMPERATURE, AND CYLINDER HEAD TEMPERATURES WERE ALL INDICATING WITHIN NORMAL RANGES. OUTWARD MANIFESTATIONS WERE EXCESSIVE BLOW-BY OIL ON BELLY OF THE AIRPLANE. OTHER MANIFESTATIONS WERE: AN INTERRUPTION IN THE SMOOTH MOVEMENT OF THE PROP (WHEN ROTATING BY HAND) AT THE SAME LOCATION IN THE ROTATION ON EVERY OTHER COMPLETE ENGINE ROTATION, IE: RELATED TO THE CAMSHAFT (720 DEGREES OF ROTATION). A CRACK IN THE LT SIDE OF THE ENGINE CASE OVER THE BASE OF THE NR 5 CYLINDER WHERE THE ENGINE CASE FARES INTO THE INTAKE VALVE PUSHROD TUBE. A CRACK IN THE RT SIDE OF THE ENGINE CASE FARES INTO THE INTAKE VALVE PUSHROD TUBE. METAL DEBRIS WAS FOUND IN THE SUMP FILTER SCREEN AND IN THE SUMP. THE LARGEST PIECE OF DEBRIS MEASURED APPROXIMATELY A .2500 INCH CUBE. (K)

 CA080409008
 CNDAIR
 PISTON
 CRACKED

 4/9/2008
 CL2151A10
 33130131
 ACTUATOR

ANOTHER OPERATOR INFORMED OUR QUALITY ASSURANCE DEPARTMENT OF THEIR FINDING CRACKS IN THE ACTUATOR THREADED PORTION IN 5 OUT OF 7 ACTUATORS. INSPECTED ALL 14 OF OUR FLEET ACTUATORS AND FOUND 4 TO BE CRACKED ALSO.

 CA080403008
 CNDAIR
 PWA
 SHAFT
 SHEARED

 4/1/2008
 CL2151A10
 CA3
 100243
 ENGINE OIL

(CAN) JUST BEFORE TURNING BASE LEG FOR LANDING THE RT BMEP GAUGE FELL TO ZERO. NO OIL WAS OBSERVED LEAKING FROM ENGINE ALTHOUGH THE OIL QUANTITY WAS SLOWLY FALLING. LANDING WAS CARRIED OUT NORMALLY. ON ROLL OUT QUANTITY WAS READING 8 GALLONS, SO THE RT ENGINE WAS SHUT DOWN. MAINTENANCE DISCOVERED THAT THE SCAVENGE PUMP HAD INGESTED A PIECE OF A CASTLE NUT WHICH HAD BROKEN OFF ONE OF THE NUTS P/N 542 FROM ONE OF THE REDUCTION PINION GEAR SHAFTS. THIS HAD CAUSED THE FAILURE OF THE GEAR/SHAFT P/N 100243 IN THE ACCESSORY DRIVE CASE.

CA080408002 CNDAIR GE CONTROL UNIT FAILED

3/29/2008 CL600* CF348C5 70745 TE FLAP MOTOR

PRIOR TO DEPARTURE FLIGHT CREW COMPLETED A STAB TRIM RESET. SHORTLY AFTER FLAP RETRACTION ON TAKEOFF, FLIGHT CREW RECEIVED AN AP TRIM IS ND ASSOCIATED WITH AN AP PITCH TRIM 'CAUTION MESSAGE. SUBSEQUENTLY CREW RECEIVED A ELEVATOR SPLIT' CAUTION MESSAGE. CREW FOLLOWED QRH, CIRCLED TO BURN OFF FUEL AND LANDED BACK AT DEPARTURE AIRPORT WITHOUT INCIDENT. MAINTENANCE CHECKED ELEVATOR TRIM POSITION FULL NOSE DOWN, NEUTRAL AND FULL NOSE UP OK. AUTO PILOT ELEVATOR SERVO OPERATION CHECKED OK. ELEVATOR SPLIT MESSAGE TROUBLESHOT PER FIM TASK OK. PROBLEM ISOLATED AS MDC DISPLAYED AN INTERNAL FAULT OF THE MOTOR CONTROL UNIT CHANNEL 2 INTERNAL HOLD ON RELAY. MOTOR CONTROL UNIT REPLACED. OPERATIONAL TESTS OF THE SSCU, STABILIZER TRIM, AND AUTOPILOT SYSTEMS CARRIED OUT SERVICEABLE.

<u>CA080410005</u> CNDAIR GE BPSU UNSERVICEABLE 4/8/2008 CL6002B19 CF343A1 855D1009 RT FLAP SYS

ON DESCENT, CREW SELECTED AND RECEIVED FLAPS 8 DEGREES, WHEN THEY ATTEMPTED TO PROCEED TO FLAPS 20 CREW RECEIVED A FLAP FAIL MESSAGE. FLIGHT LANDED WITHOUT INCIDENT. FECU MESSAGE POINTED TO THE RT BPSU AS THE FAULT. THE RT BPSU WAS REPLACED, FLAP SYSTEM RIGGED AND FUNCTION CHECKED SERVICEABLE. THE A/C RETURNED TO SERVICE WITH NO FURTHER FAULTS.

<u>CA080403002</u> CNDAIR GE BPSU MALFUNCTIONED 3/31/2008 CL6002B19 CF343A1 855D1009

THE POST MAINTENANCE TEST FLIGHT WAS UNSUCCESSFUL. THE CREW RECEIVED A FLAP FAIL CAUTION MESSAGE ON APPROACH WHEN THE FLAPS WERE SELECTED FROM 0 TO 8 DEGREES. THE FLAP ELECTRONIC CONTROL UNIT (FECU) CODES WERE RETRIEVED. THE RT BRAKE AND POSITION SENSOR UNIT (BPSU) WAS REPLACED AND RIGGED, THE LT BPSU WAS RE-RIGGED AND THE FECU WAS REPLACED FOR TROUBLESHOOTING. THE AIRCRAFT WAS RELEASED AND COMPLETED A SUCCESSFUL TEST FLIGHT. RT BPSU, P/N 855D100-9, S/N 372, TSN 24045:44, CSN 13150, TSR 20:02, CSR 12. FECU, P/N 601R93050-7, S/N 331, TSN 14405:58. CSN 10815. TSR 7938:28. CSR 6408. (TC NR 20080403002)

<u>CA080402007</u> CNDAIR GE WARNING LIGHT ILLUMINATED

4/2/2008 CL6002B19 CF343B1

AT THE TOP OF DESCENT WHEN PULLING BACK POWER, THE CREW GOT THE "LOW OIL PRES WARNING" ON THE LT ENG, SHORTLY FOLLOWED BY THE LOW OIL PRES INDICATION. ALL OTHER PARAMETERS NORMAL. CREW THEN ACTIONED EMERGENCY PROCEDURES AND SHUT DOWN LT ENG AND LANDED. (TC NR 20080402007)

 CA080320002
 CNDAIR
 GE
 CONNECTOR
 DAMAGED

 3/18/2008
 CL6002B19
 CF343B1
 MS27473T20B4
 FLUTTER DAMPER

TASK NR 27-34-05-710-801 WAS BEING PERFORMED ON THE ELEVATOR FLUTTER DAMPERS. IT FAILED THIS TASK FOR LOW FLUID LEVEL TRANSMITTER SWITCHES. THIS TASK WAS CALLED UP DURING THE AIRCRAFT`S PLANNED HEAVY INSPECTION. T HERE WERE NO REPORTED FAILURES WHILE THE AIRCRAFT WAS IN-SERVICE PRIOR TO THIS HEAVY MAINTENANCE VISIT. DURING THE COURSE OF TROUBLE SHOOTING, THE AME FOUND THE CONNECTORS P300 AND J300 CORRODED TO THE EXTENT THAT THE PINS M AND N BROKE OFF WHEN THEY WERE DISCONNECTED. SEVERAL OTHER PINS WERE ALSO FOUND DISCOLORED. CONNECTOR P/N MS27497T20B41S, BACKSHELL P/N HEX41-AB90-21A9-1, CONNECTOR P/N MS27473T20B41P AND BACKSHELL P/N HEX41-AB00-21A9-1 WERE REPLACED AND SYSTEM FUNCTION CHECKED "SERVICEABLE". AIRCRAFT RETURNED TO SERVICE. (TC NR 20080320002)

CA080409004 CNDAIR GE CONTROLLER OVERTEMP

3/30/2008 CL6002B19 CF343B1 601R3303313 WINDSHIELD TEMP

ON DESCENT THROUGH 21000 FEET INTO ARRIVAL AIRPORT, CAPTAIN'S LT WINDSCREEN SHATTERED. CREW DONNED OXYGEN MASKS AS A PRECAUTION. CREW DECLARED AN EMERGENCY WITH ATC AND MADE ANNOUNCEMENT TO THE PASSENGERS. FLIGHT LANDED WITHOUT INCIDENT. MAINTENANCE REPLACED THE WINDSHIELD ASSEMBLY P/N 601R33033-13, S/N 01057H1890, TIMES AND CYCLES SAME AS THE TEMPERATURE CONTROLLER. MAINTENANCE ALSO REPLACED THE LT WINDSHIELD TEMPERATURE CONTROLLER SUSPECTING THAT IT HAS CAUSED AN OVERHEAT CONDITION.

CA080407003 CNDAIR GE ACTUATOR UNSERVICEABLE

4/6/2008 CL6002B19 CF343B1 852D1001921 FLAP

ON APPROACH AT 4000 FT SELECTING FLAPS FROM 0 - 8 DEG, FLAP FAIL MSG APPEARED IMMEDIATELY WITH NO MOVEMENT OF FLAPS. AIRSPEED 215 AT THE TIME. A/C WAS AT -57 DEG FOR 1 HR IN CRUISE, GND -4. FECU INTERGRADED AND FOLLOWING FAULT CODES DISPLAYED AS FECU WAS LOOKED AT: (1) JAM (2) LEFT BPSU (3) 1 5 1B. TRIED TO GO FURTHER AFTER THE STEP OF 'GO' IN THE FIM AND IT WOULD GIVE THE FAULT CODE 1 5 1B CB 1-F4 AND CB 2-F4 AND SYSTEM RESET WITH NO FURTHER FAULTS. FERRY FLIGHT PAPERWORK COMPLETED. A/C FERRIED. TROUBLESHOOTING GOING ON, ACTION PLAN TO INSPECT AND LUBE ALL DRIVES AND CHANGE ALL FLAP ACTUATORS WITH NEWLY OVERHAULED UNITS SENT. INFORMATION WILL BE UPDATED WHEN AVAILABLE.

<u>CA080229001</u> CNDAIR GE WINDOW CRACKED 2/18/2008 CL6002B19 CF343B1 NP1393222 COCKPIT

FLT NR 6671 - FIRST OFFICER SIDE WINDOW CRACKED ON DESCENT INTO PSP. WINDOW REPLACED (TC NR 20080229001)

<u>CA080229002</u> CNDAIR GE ACTUATOR CRACKED 2/21/2008 CL6002D24 CF348C1 4129T17G04 LT ENGINE

"925 PWM, LT ENG FAILURE ON SHORT FINAL. ON SHORT FINAL (APPROX 1500 FT) CAPT REPORTED LT ENGINE FAILURE. N1 WENT TO 32 PERCENT AND EICAS DISPLAYED LT FADEC AND LT BLEED CAUTION ME PERCENT. CAPT SAW NO OTHER ENGINE RELATED ANOMALIES, IE NO PROBLEMS WITH FUEL FLOW, ITT, OIL PRESSURE OR WARNINGS. CVR AND FDR CIRCUIT BREAKERS HAVE BEEN PULLED. AIRCRAFT VERIFIED NOT IMPOUNDED BY THE NTSB. CONTRACT MX INTERROGATE MDC. MDC REVEALED LH PS3 SENSE LINE, L FMU FAILED AND VG CMD\POSN DISAGREE. MX INSPECT INLET FOR POSSIBLE INGESTION, NO FINDINGS. EXHAUST AREA LOOKED GOOD AS WELL. OPENED COWLING AND INSPECTED VG ACTUATORS AND AREA. MX THOROUGHLY INSPECTING AREA. WE HAVE SENT MM/IPC REFERENCES OF AREAS TO INSPECT. MX FOUND THE SHAFT ACTUATOR THAT OPERATES ALL THE GV LINKAGES BROKEN. P/N IS 4129T17G04. GOING AOG. ACTUATING SYSTEM LINKAGE ASSY P/N 4128T48G09 FROM PHX ETA 1528 HFPU" (TC NR 20080229002).

CA080402008 DHAV PWA BRUSHES WORN

3/14/2008 DHC2MK3 PT6A34 STARTER/GEN

STARTER WOULD NOT OPERATE TO START ENGINE. (TC NR 20080402008)

<u>CA080403009</u> DHAV PWA MAIN BEARING BROKEN

1/16/2008 DHC2MKI R985AN14B 128495 MASTER ROD

DURING INSPECTION METAL PIECES FOUND IN ENGINE SUMP. INVESTIGATION DETERMINED THEM TO BE PART OF FLANGE OF MASTER ROD BEARING. ENGINE REMOVED FOR OVERHAUL.

<u>CA080404001</u> DHAV PWA SPAR CORRODED 3/3/2008 DHC2MKI R985AN14B C2TP63ND FUSELAGE

WHEN REPLACING FRONT CENTER SPAR DUE CRACK. REAR CENTER SPAR DISCOVERED CORRODED BEHIND CENTER MOUNT BRACKET. SPAR REPLACED. THIS CORROSION WAS NOT VISABLE UNTIL ACCESS TO INSIDE OF TAILPLANE WAS GAINED (TC NR 20080404001)

CA080328002 DHAV PWA CYLINDER HEAD SEPARATED

3/9/2008 DHC2MKI R985AN14B 399353 NR 2

HEAD SEPERATED FROM NR 2 CYLINDER AFTER 4.9 HRS AIRTIME. CYLINDER HEAD SEPARATION OCCURRED DURING CRUISE FLIGHT. UNEVENTFUL LANDING CARRIED OUT. REPLACEMENT CYLINDER HEAD INSTALLED AND AIRCRAFT COMPLETED ITS MISSION. (TC NR 20080328002)

CA080414001 DHAV PWA SPAR CRACKED

4/7/2008 DHC2MKI R985AN14B WING

CRACKS FOUND WHILE COMPLYING WITH SB2/47. CRACKS JUST VISIBLE WITH FLUORESCENT PENETRANT INSPECTION. WHEN SPAR REMOVED CRACKS WERE VISIBLE TO NAKED EYE ON THE INTERIOR OF SPAR AND ON

GUSSET BETWEEN SPAR AND GUSSET.

<u>CA080404005</u> DHAV GARRTT SHUTOFF VALVE UNSERVICEABLE

3/31/2008 DHC3 TPE33110R 39423091 FUEL SYSTEM

ENGINE WOULD NOT SHUT DOWN USING NORMAL SHUT DOWN PROCEDURES. EMERGENCY SHUTOFF PROCEDURES USED. TROUBLESHOOTING FOUND FUEL SHUTOFF VALVE U/S (SOLENOID STICKING). REPLACED FUEL SHUTOFF VALVE. ENGINE RUN-UP AND SHUT DOWN NORMAL. AIRCRAFT RETURNED TO SERVICE.

CA080407005 DHAV PWA ENGINE STOPPED

4/3/2008 DHC6100 PT6A20 PT6A20

AFTER A NORMAL TAKEOFF, THE CREW WENT THROUGH POWER 1, FLAPS UP AND POWER 2 AND AFTER SETTING POWER 2 PRIOR TO CLIMB CHECKS, THE CREW HEARD A LOUD POP AND SCRAPPING NOISE FROM THE NUMBER ONE ENGINE. THE FLIGHT CREW OBSERVED THAT THE NUMBER ONE PROPELLER WAS STOPPED AND ALL ENGINE GAUGES WERE AT ZERO. EMERGENCY CHECKLIST WAS FOLLOWED AND THE AIRCRAFT LANDED SAFELY WITH ONE ENGINE RUNNING. ENGINE TO BE REMOVED FOR EVALUATION BY REPAIR FACILITY.

<u>CA080407010</u> DHAV PWA CABLE BROKEN

4/2/2008 DHC6200 PT6A20 STEERING

STEERING CABLE BROKE ON TAXI WHILE THE AIRCRAFT WAS PREPARING FOR TAKEOFF.

CA080401004 DHAV PWA ENGINE POWER LOSS

3/26/2008 DHC6200 PT6A20 LEFT

ON TAKEOFF, THE LEFT ENGINE LAGGED BEHIND NOT PRODUCING MAX. POWER, TROUBLE SHOOTING FOUND THE TEMPERATURE COMPENSATOR UNIT LEAKING P3 AIR. THE PART WAS REPLACED AND THE PROBLEM WAS FIXED. (TC NR 20080401004)

<u>CA080214007</u> DHAV PWA HYDRAULIC LINE CRACKED

1/21/2008 DHC8102 PW120 82970009325 HYDRAULIC SYS

(CAN) WHILE ENROUTE THE "IB ROLL SPL HYD" AND NR 1 "HYD ISO VLV" CAUTION LIGHTS ILLUMINATED. CHECKED THE HYD QUANTITY AND NOTICED NR 1 QUANTITY AT 1.0 AND DECREASING. COMPLETED THE QRH CHECKLIST AND THEN BRIEFED THE F/A AND PASSENGERS. MADE A VISUAL APPROACH AND LANDING WITHOUT ANY FURTHER EVENTS. MAINT INVESTIGATION DETERMINED THE LEAK TO BE FROM THE NR 1 HYD SYS PRESSURE MANIFOLD ENGINE DRIVEN PUMP INLET PRESSURE TUBE FLARE AND FITTING. THE FLARE WAS FOUND TO BE CRACKED AND THE FITTING HAD EVIDENCE OF PITTING CORROSION. THE TUBE AND FITTING WERE BOTH REPLACED IAW THE AIRCRAFT MM AND SUBSEQUENTLY TESTED SERVICEABLE. (TC NR 20080214007)

CA080414008 DHAV PWA BFGOODRICH BRAKE DISC WARPED

3/28/2008 DHC8102 PW120A MLG BRAKE ASSY

RAMP CREW NOTICED THAT RT INBOARD (NR 3) MAIN WHEEL WAS FLAT WHILE AIRCRAFT WAS PARKED AT GATE. MAINTENANCE DISCOVERED THE NR 3 BRAKE UNIT WITH A WARPED/OVERHEATED BRAKE DISKS WHICH CAUSED THE FUSE PLUGS ON THE NR 3 MAIN WHEEL TO BLOW. MAINTENANCE REPLACED THE NR 3 BRAKE UNIT AND THE NR 3 AND 4 MAIN WHEEL ASSEMBLIES. TAXI AND FUNCTION CHECKS OF THE BRAKING SYSTEM WERE COMPLETED WITH NO FURTHER FAULTS FOUND. WHEEL SHOP CONFIRMED BRAKE UNIT DID OVERHEAT AND THAT IT WAS NOT A FAULT WITH THE UNIT.

<u>CA080402001</u> DHAV PWA HEATER SMOKE

3/31/2008 DHC8311 PW123 WINDSHIELD

(CAN) DURING CLIMB, THE CREW OBSERVED SMOKE IN THE COCKPIT AND QUICKLY NOTICED THAT THE SMOKE WAS COMING FROM THE LT WINDSHIELD ELECTRICAL TERMINALS. THE WINDSHIELD HEATING SYSTEM WAS TURNED OFF AND THE SMOKE STOPPED. DECISION WAS MADE TO TURN BACK AND THE AIRCRAFT LANDED WITHOUT FURTHER INCIDENT. LINE MAINTENANCE DISCOVERED THAT THE LT WINDSHIELD L1 TERMINAL WIRE NR 3041-48B12C WAS BURNT. THE RT WINDSHIELD TERMINALS WERE INSPECTED AND THE L2 TERMINAL WIRE NR 3041-40A12NA WAS FOUND WITH BURNT MARKS. BOTH WIRES WERE REPLACED AND THE SYSTEM TESTED

SERVICEABLE. THE AIRCRAFT WAS RELEASED AND A VERIFICATION FLIGHT WAS CONDUCTED. (TC NR 20080402001)

<u>CA080408004</u> DHAV PWA UPLOCK ROLLER SEIZED 3/30/2008 DHC8311 PW123 101655 RH MLG

RT MLG FAILED TO EXTEND ON LANDING GEAR SELECTION, CREW PERFORMED GO-AROUND AND USED ALTERNATE GEAR EXTENSION. ALL LANDING GEAR EXTENDED AND NORMAL LANDING CARRIED OUT. MAINTENANCE INSPECTION FOUND RT MLG UPLOCK ROLLER SEIZED, ROLLER REPLACED, GEAR SWINGS COMPLETED AND AIRCRAFT RETURNED TO SERVICE. TIMES PROVIDED ARE SHOCK STRUT TIMES, ROLLER IS NOT SERIALIZED AND NOT TRACKED FOR ACTUAL TIMES.

CA080314007 EMB ALLSN ENGINE LEAKING

3/12/2008 EMB135ER AE3007A

OIL IMPENDING BYPASS INDICATION ILLUMINATED ALONG WITH OIL TEMPERATURE RISING TO 141 DEGREES. THE PILOT COMMANDED THE SHUT DOWN OF THE ENGINE DUE TO OIL TEMPERATURE AND QUANTITY INDICATING THREE QUARTS. AIRCRAFT RETURNED TO CMH WITHOUT INCIDENT. MAGNETIC INDICATING PLUGS WERE FOUND CLEAN. A SMALL PUDDLE OF OIL IN FAN SECTION AND A LOT OF OIL IN THE EXHAUST WAS REPORTED. THE OIL FILTER WAS FILLED WITH CARBON DEBRIS. ENGINE HAS ACCUMULATED 0.8 HOURS SINCE LAST REPAIR AND THIS WAS THE 1ST FLIGHT SINCE REPAIRS. ENGINE UNDER INVESTIGATION, FURTHER REPORT WILL BE SUBMITTED AFTER ENGINE TEARDOWN. (TC NR 20080314007)

<u>CA080314009</u> EMB ALLSN BEARING FAILED 3/10/2008 EMB145LR AE3007A NR 4

ENGINE REMOVED FOR ITT EXCEEDANCE, AUTO IFSD, SMOKE IN COCKPIT/CABIN, OIL DEBRIS ON ALL CHIP DETECTORS. TEARDOWN OF ENGINE REVEAL NR 4 BEARING FAILURE AND ALSO NR 3 BEARING FAILURE. EXCESSIVE DAMAGE IN COMPRESSOR AREA DUE TO BOTH SUPPORTING BEARING FAILURE. FAILED COMPONENTS WILL BE SENT TO THE OEM FOR INVESTIGATION. (TC NR 20080314009)

CA080402011 EMB PWA ENGINE POWER LOSS

3/4/2008 EMB312 PT6*

DURING TRAINING MANEUVERS, THE PILOT REPORTED A LOSS OF ENGINE POWER. PILOT ATTEMPTED TO RECOVER WITHOUT SUCCESS, AND EJECTED SAFELY. AIRCRAFT CRASHED IN AN EMPTY FIELD. MANUFACTURER WILL CONTINUE INVESTIGATING THE EVENT AND ADVISE OF ROOT CAUSE ONCE ESTABLISHED.

<u>CA080222010</u> EMB GE FLOORBEAM CORRODED 2/21/2008 ERJ170200SU CF348E5A1 FUSELAGE

(CAN) CORROSION FOUND ON FLOORBEAM LOCATED AT Y = 272.0 AND Z = -490.0 JUNCTION WITH FRAMES 16, 17, 18 AND ON FLOORBEAM LOCATED AT Y = -272.0 AND Z = -490.0 AND ON FRAME NR 14 AT Y = -337.0 AND Z = -490.0 ALSO (3) SILL PLATES CORRODED BEYOND LIMITS. CORROSION WAS ALSO FOUND ON FRAME 87, 88, 89 AND 90 UNDER THE AFT RT GALLEY ATTACHMENT POINT AT FLOOR STRUCTURE. REFERENCE: PICTURE, AFT FUSELAGE, FORWARD FUSELAGE DUE TO NO ALLOWABLE REWORK LIMITS AVAILABLE IN THE SRM (STRUCTURAL REPAIR MANUAL), ALL AFFECTED PARTS WHERE REPLACED OR REPAIRED AS MFG INSTRUCTION. THE ROOT CAUSE SEEMS TO BE THE LACK OF FLOOR PROTECTION UNDER THE FWD AND AFT GALLEYS. (TC NR 20080222010)

<u>CA080303002</u> EMB GE CONTROL CABLE DAMAGED 2/28/2008 ERJ170200SU CF348E5A1 17005825401 AILERONS

DURING CONTROL CABLES INSPECTION ON LT AND RT WINGS, FOUND AILERON CABLES (LT P/N 170-05825-401) WORN AND WITH WIRES BROKEN AT FAIRLEADS, LOCATED AT LT WINGS INB OF THE RIB 17. THE WORN AREAS AND BROKEN STRANDS ARE LOCATED UNDER NYLON GROMMETS (P/N PE49068-501) MOUNTED ON THE FAIRLEAD. EMBRAER HAVE BEEN ADVISED (TC NR 20080303002)

CA080401005 EMB GE PIN MISINSTALLED

4/1/2008 ERJ170200SU CF348E5A1 NLG

DURING INSPECTION, FOUND NUT ON LOWER DRAG BRACE ATTACHEMENT HINGE PIN NOT SAFETIED WITH

CUTTER PIN AND PRC ADRIFT SEE ATTACHEMENT. NO EVIDENCE OF WORK PREVIOUS ACCOMPLISHED ON THE NOSE GEAR.

<u>CA080401008</u> EMB GE STRUT LEAKING 3/13/2008 ERJ190100IGW CF3410E5A1 2821A000003 LT MLG

DURING THE SERVICING OF THE LEFT MAIN GEAR IT AT BEEN NOTICE THAT THE AIR KEPT COMING OUT FROM THE OIL VENT VALVE. AS PER EMBRAER, TO FIX THE PROBLEM THE MAIN GEAR AS TO BE CHANGE AIR CANADA FLEET AS BEEN ADVISED AND SEEMS TO BE A KNOWN CONDITION (TC NR 20080401008).

CA080404006 EMB GE GENERATOR FAULTED

3/31/2008 ERJ190100IGW CF3410E5A1 1701320 APU

ON FIN 309 WHILE T/S A LONG HISTORY FAULT OF APU GEN FAULT. ARCING WAS FOUND AT THE LUG T3 ATTACH POINT WITH THE APU GENERATOR. APU GENERATOR WAS REPLACED.

<u>CA080222008</u> EMB GE CONTROL CABLE WORN 2/22/2008 ERJ190100IGW CF3410E5A1 19004209401 AILERON

(CAN) DURING CONTROL CABLES INSPECTION ON LT AND RT WINGS, FOUND AILERON CABLES (LT P/N 190-04212-401, P/N 190-04209-401, RT P/N 190 -05551-401, P/N 190-04209-401) WORN AND WITH SEVERAL WIRES BROKEN AT FAIRLEAD, LOCATED AT LT AND RT WINGS RIB 4A WS -3025.80 MIL. SPAR 2 IN MLG WHEEL WELL. THE WORN AREAS AND BROKEN STRANDS ARE LOCATED UNDER NYLON GROMMETS (P/N PE49068-501) MOUNTED ON THE FAIRLEAD. MFG WILL COME UP WITH AN SB END OF MARCH (TC NR 20080222008)

<u>CA080319004</u> EMB GE SUPPORT CRACKED 3/7/2008 ERJ190100IGW CF3410E5A1 19093649001 MLG WW

ON AIRCRAFT A CRACK WAS FOUND TO MLG WELL BULKHEAD SUPPORT. THE CRACK STARTS AROUND ONE OF THE ATTACHMENT HOLES AND GOES UP TO THE MIDDLE OF DISTANCE BETWEEN THE TWO ATTACHMENT HOLES. THE BULKHEAD IS ALSO FLEXING AND CONTACTING THE LOWER SECTOR OF THE AILERON CONTROL QUADRANT. PROBLEM ALSO FOUND ON THE FOLLOWING A/C FIN NUMBER: 307, 309, 311, 313, 315, 317, 318, 319, 320, 322, 323, 324, 326, 332 (TC NR 20080319004)

CA080404007 GULSTM RROYCE APU LEAKING

3/29/2008 GIV TAYMK6118 GTCP36150G

APU AUTO SHUT DOWN WITH LOW OIL PRESSURE FAULT. OIL QTY RE-ADJUSTED AND APU STILL SHUT DOWN FOR LOW OIL PRESSURE. REPLACED OIL PRESSURE SWITCH AND APU STILL SHUT DOWN INTERMITTENTLY. AFTER TROUBLE SHOOTING WITH DIRECT OIL PRESSURE GAUGE FOUND OIL PRESSURE DELIVERY WITH INTERMITTENT LOW OIL PRESSURE READING. SUSPECTING OIL PUMP OR PRESSURE REGULATOR. LOANER APU INSTALLATION IN PROGRESS, MORE INFO WILL BE GIVEN WHEN REPORT OF REPAIR SHOP WILL BE GIVEN.

<u>2008FA0000333</u> ISRAEL INDICATOR INOPERATIVE 4/25/2008 1124 OXYGEN MASK

PASSENGER OXYGEN MASK FLOW INDICATOR INOPERATIVE. THIS UNIT CAME FROM LOT LC 0521 K OR LOT LC 0526K

CA080319008 PAC PWA ENGINE POWER LOSS

3/6/2008 CRESCO PT6A34AG

DURING TAKEOFF ROLL, A NOISE WAS HEARD ACCOMPANIED BY LOSS OF ENGINE POWER. THE TAKEOFF WAS ABORTED. INITIAL INSPECTION REVEALED FRAGMENTS SIMILAR TO COMPRESSOR BLADE MATERIAL DISTRIBUTED THROUGHOUT THE INLET. TEARS IN THE INLET SCREEN WERE NOTED. THE ENGINE HAS BEEN REMOVED AND WILL BE INVESTIGATE ROOT CAUSE ONCE ESTABLISHED.

2008FA0000330 PILATS PWA BFGOODRICH BRAKE DISC BROKEN

5/2/2008 PC12 PT6A67B 244755

WHILE REMOVING RIGHT MAIN WHEEL ASSEMBLY DISCOVERED THE OUTBOARD BRAKE DISC OF THE RIGHT BRAKE BROKEN INTO TWO PIECES. REPLACED RIGHT BRAKE ASSEMBLY.

2008FA0000331 PILATS **PWA BFGOODRICH BRAKE DISC** BROKEN 5/6/2008 PC12 PT6A67B 244755 FLIGHT CREW REPORTS RIGHT BRAKE GRABBING. REMOVED RIGHT MAIN TIRE ASSEMBLY AND DISCOVERED THE OUTBOARD BRAKE DISC WAS BROKEN INTO TWO PIECES. REPLACED THE RIGHT BRAKE ASSEMBLY. **PWA** CA080225006 **PILATS HARTZL HUB LEAKING** 2/21/2008 PC1245 PT6A67B HCE4A3D PROPELLER (CAN) PROPELLER REMOVED DUE TO EXCESSIVE GREASE LEAK FROM BLADE CLAMPS. (TC NR 20080225006) **PWA** 2008FA0000332 PILATS **BFGOODRICH BRAKE DISC** BROKEN 5/6/2008 PC1245 PT6A67B 244755 **BRAKE ASSY** FLIGHT CREW REPORTS LEFT BRAKE GRABBING. REMOVED LEFT MAIN TIRE ASSEMBLY TO INVESTIGATE DISCREPANCY AND DISCOVERED THE OUTBOARD BRAKE DISC BROKEN INTO THREE PIECES. REPLACED THE LEFT BRAKE ASSEMBLY. ATTACH FITTING CA080408001 **PILATS PWA CRACKED** 4/8/2008 PC1245 PT6A67B 4030082SRS PAX SEAT DURING 100 HOUR INSPECTION PASSENGER SEAT RECLINE HYDRAULIC MOUNT ATTACHMENT FOUND CRACKED. SEAT MANUFACTURER IS ERDA. NOT FOUND IN ASSEMBLY MANUFACTURER LIST. REPAIR INFORMATION REQUESTED THROUGH AIRCRAFT MANUFACTURER, PILATUS. 2008FA0000322 PIPER **SOLENOID** SHORTED 5/5/2008 PA28161 701122223 **STARTER** WHEN MASTER SWITCH TURNED ON PROP BEGAN TO ROTATE UNCOMMANDED. TROUBLESHOT TO STUCK STARTER SOLENOID. SOLENOID REPLACED, OPS CHECK GOOD. 2008FA0000318 PIPER LYC **CRANKSHAFT** CRACKED 4/22/2008 PA28181 O360A4M 13B27134 **ENGINE** AC WAS FLYING AT 5000 FT, WHEN ENGINE STARTED TO LOSE POWER AND FAILED. AC LANDED SAFELY IN A FIELD. ENGINE WAS FOUND TO BE LOCKED UP. ENGINE WAS DISASSEMBLED AND COMPONENTS INSPECTED. CRANKSHAFT WAS FOUND TO HAVE CRACK, CAUSING ENGINE TO LOCK UP. PROBABLE CAUSE: UNDERTERMINED AT THIS TIME. (K) CA080303003 PIPER LYC **BEARING FAILED** 2/29/2008 PA31350 TIO540J2BD ALTERNATOR IN CRUISE, THE PILOT NOTICED THE RT ALTERNATOR WARNING LIGHT CAME ON. CHECKED THE BREAKER BUT IT HAD NOT BLOWN. PULLED BREAKER AND LANDED UNEVENTFULLY. MAINTENANCE INSPECTED THE RT ALTERNATOR AND DISCOVERED THAT THE ALTERNATOR BEARING HAD SEIZED AND BROKEN THE BELT. (TC NR 20080303003) CA080402006 **PIPER** LYC **TAPPET** CRACKED 3/28/2008 PA31350 TIO540J2BD 72877 NR 1 CYLINDER WHEN REPLACING NR 1 CYLINDER THE HYDRAULIC TAPPET BODY WAS FOUND CRACKED IN TWO PLACES. (TC NR 20080402006) 2008FA0000317 RAYTHN **PARKERHANFIN BOLT** SHEARED G36 5/6/2008 10320400AN53 **ZONE 700** THE PILOT REPORTED A "POP" AS HE WAS GROUND HANDLING THE AIRCRAFT ON THE RAMP (IN A STRAIGHT DIRECTION USING AN AIRTUG). FURTHER INVESTIGATION REVEALED 1 NUT/BOLT COMBINATION HAD SHEARED ON THE INBOARD WHEEL HALF OF THE RIGHT MAIN LANDING GEAR ASSEMBLY. THE BOLT HAD SUBSEQUENTLY

BACK OUT APPROXIMATELY 1/4 INCH. THIS AIRCRAFT HAS BEEN THROUGH 1 ANNUAL INSPECTION AND HAS NEVER HAD THE WHEEL HALVES DISASSEMBLED. UPON DISCOVERY OF THE SHEARED BOLT, THE LEFT AND RIGHT WHEELS WERE DISASSEMBLED, CLEANED, INSPECTED AND REASSEMBLED WITH NEW BOLTS AND NUTS.

DURING DISASSEMBLY OF THE WHEEL HALF RETAINING BOLTS IT WAS NOTED THAT VERY LITTLE FORCE WAS REQUIRED TO BREAK THE NUTS LOOSE. THE NOSE WHEEL WAS THEN CHECKED FOR PROPER TORQUE AND DETERMINED, WITH THE USE OF A DIAL INDICATOR TORQUE WRENCH, THAT THE INSTALLED TORQUE WAS APPROXIMATELY 40 IN/LBS. THE TORQUE SPECIFICATION FOR THE NOSE WHEEL IS 90 IN/LBS AND THE MAIN WHEELS ARE 150 INCH/LBS.

CA080414003 ROBSIN LYC GEAR WORN

4/10/2008 R44RAVENII IO540AE1A5 STARTER GEN

UPON POST FLIGHT INSPECTION, STARTER TEETH FOUND WORN, REMOVED AND INSTALLED NEW STARTER.

CA080414004 ROBSIN LYC CLUTCH ACTUATOR MALFUNCTIONED

4/10/2008 R44RAVENII IO540AE1A5 MAIN ROTOR

UPON INSPECTION, CARRIED OUT METHOD 2 AND THE ACTUATOR KEPT RUNNING.

CA080314021 SNIAS TMECA ENGINE MAKING METAL

2/9/2008 AS350B3 ARRIEL2B

ON THE FIRST GROUND RUN OF THE DAY DURING GROUND WARM UP, A NOISE WAS EMITTED FROM THE ENGINE AND IMMEDIATLEY AFTER NOISE WAS HEARD THE ENGINE CHIP LIGHT ILLUMINATED. PILOT SHUT ENGINE DOWN. METAL PARTICLES WERE FOUND ON MOS CHIP PLUG AND SOME ON THE ELECTRIC CHIP PLUG. ENGINE WAS REMOVED AND SENT TO TURBOMECA MONTREAL FOR INSPECTION AND REPAIR. WE WERE LUCKY THIS DID NOT HAPPEN IN THE AIR AS WE WOULD BE LOOKING AT A TOTAL ENGINE FAILURE. (TC NR 20080314021)

CA080406001 SNIAS TMECA LINE BROKEN

3/31/2008 AS350BA ARRIEL1B 0301037950 FUEL CONTROL

TUBE WAS DISCOVERED CRACKED AND SEPARATED FROM FLARE AT P2 TAP END DURING ROUTINE INSPECTION. ORIGINALLY, BLACK DEPOSITS WERE NOTICED AT B-NUT AND WHEN DISASSEMBLED, FOUND COMPLETE FAILURE OF TUBE FROM FLARE END. CLOSE TOLERANCE FIT OF TUBE PROBABLY PROHIBITED ANOMALY FROM BEING NOTICED EARLIER.

<u>CA080403005</u> SWRNGN GARRTT WINDSHIELD CRACKED 3/31/2008 SA226T TPE33110U 2621126905 COCKPIT

IN LEVEL CRUISE AT FLIGHT LEVEL 220 APPROXIMATELY 25 MINUTES AFTER DEPARTURE, THE LEFT HEATED WINDSHIELD SUDDENLY SHATTERED. ATC WAS ADVISED AND DESCENT REQUESTED FOLLOWED BY REQUEST FOR RETURN TO CYWG. AFTER ESTABLISHING THE RETURN COURSE AND LEVELING AT 9000 FEET, THE PASSENGERS WERE BRIEFED AND THE AIRCRAFT PROCEEDED BACK AT REDUCED CRUISE SPEED AND COMPLETED A NORMAL LANDING. UPON WINDOW REMOVAL NO DISCREPANCIES WERE NOTED WITH THE PREVIOUS INSTALLATION, ALL ATTACHING HARDWARE WAS CORRECT.

<u>CA080320003</u> SWRNGN GARRTT FRAME CRACKED
3/12/2008 SA226TC TPE33110UA 2724050083 CARGO DOOR

DURING AN AGING AIRCRAFT INSPECTION A CRACK WAS DETECTED VISUALLY EXTENDING FROM THE LOWER AFT LATCH (POSITION 8). WHEN THE DOOR WAS REMOVED FOR REPAIR FURTHER CRACKS WERE DISCOVERED TO THE ATTACHING STRUCTURE FOR BOTH LOWER LATCHES (POSITIONS 7 AND 8). THIS FAILURE IS BELIEVED TO BE THE RESULT OF FATIGUE, AND IF REMAINED UNDETECTED COULD EVENTUALLY RESULT IN FAILURE OF THE CARGO DOOR. IT SHOULD ALSO BE NOTED THAT AD 98-06-25 REQUIRES AN INSPECTION OF THE LATCHING SYSTEM. (TC NR 20080320003)

CA080404002 SWRNGN GARRTT SHAFT FAILED

3/26/2008 SA226TC TPE33110UA HYD PUMP

DURING A ROUTINE INSPECTION OF THE HYDRAULIC PUMP, THE RETAINING BOLT WHICH HOLDS THE SPLINE DRIVE INTO THE HYDRAULIC PUMP HAD SHEARED.

<u>CA080415005</u> SWRNGN GARRTT WINDSHIELD CRACKED
4/12/2008 SA226TC TPE33110UA 2719442004 COCKPIT

DURING THE RETURN LEG TO MAIN BASE THE AIRCRAFT EXPERIENCED A RT HEATED WINDSHIELD CRACK IN A SPIDER WEB FASHION. THE AIRCRAFT DESCENDED THE CABIN DIFF WAS LOWERED AND AIRSPEED REDUCED. UPON WINDOW REMOVAL NO DISCREPANCIES WERE NOTED WITH THE PREVIOUS INSTALLATION, ALL ATTACHING HARDWARE WAS CORRECT.

CA080319007	SWRNGN	GARRTT	SWITCH	INTERMITTENT
3/6/2008	SA227AC	TPE331*	EN516	LT MLG

ON APPROACH, THE CREW NOTICED THAT THE LT GEAR HAD NO "GREEN" SAFE LIGHT. FLY BY WAS CARRIED OUT CONFIRMED GEAR DOWN. AIRCRAFT LANDED WITHOUT INCIDENT. SWITCH WAS FOUND STICKY. SWITCH REPLACED AND AIRCRAFT RETURNED TO SERVICE. (TC NR 20080319007)

CA080228011	SWRNGN	GARRTT	BELLCRANK	MISSING	
2/27/2008	SA227AC	TPE3311	2752003042	NLG	

DURING MAINTENANCE GEAR RETRACTION A "CLICKING" NOISE WAS HEARD FROM THE NOSE GEAR WHEELWELL. THE ROLLER BEARING ON THE RT NOSE GEAR BELLCRANK WAS BROKEN AND ONLY THE INNER RACE REMAINED ON THE BOLT. THE BELLCRANK WAS REPLACED, GEARSWINGS CARRIED OUT AND AIRCRAFT RETURNED TO SERVICE (TC NR 20080228011)

CA080228012	SWRNGN	GARRTT	FRCHLD	PIN	DAMAGED
2/20/2008	SA227AC	TPF3311		MS171536	RH TOROUE KNEE

PIVOT PIN FOR RT MAIN GEAR TORQUE KNEE WAS PROTRUDING FROM THE TORQUE KNEE. SPRING PIN REMOVED AND INSPECTED. NO DAMAGE FOUND. NEW SPRING PIN INSTALLED. NO FURTHER PROBLEMS SINCE REPLACEMENT OF SPRING PIN (TC NR 20080228012)

CA080403003	SWRNGN	GARRTT	TUBE	CRACKED
3/31/2008	SA227AC	TPE33111U	8945682	ENGINE

DURING TAKEOFF, THE CREW NOTED THE LT ENGINE WAS A LITTLE LOW ON POWER. DECIDED TO RETURN TO THE AIRPORT AS THE FUEL FLOW INDICATION FOR THAT ENGINE WAS ERRATIC. THE LANDING WAS UNEVENTFUL. ONCE ON THE GROUND THE AIRCRAFT WAS INSPECTED BY MAINTENANCE AND THEY DETERMINED THE LINE FROM THE FUEL FLOW TRANSMITTER TO THE FUEL FLOW DIVIDER HAD SPLIT AT A BEND RADIUS IN THE TUBE CAUSING A SOMEWHAT LARGE FUEL LEAK. THE LEAK WAS ENOUGH TO AFFECT ENGINE PERFORMANCE. THE LINE WAS FOUND TO BE INSTALLED CORRECTLY WITH NO EXISTING DAMAGE TO THE LINE OR AREA OF THE SPLIT. THE AGE OF THE LINE COULD NOT BE ACCURATELY DETERMINED BUT IT WAS IN VERY GOOD CONDITION AND THE PART NUMBER WAS CORRECT FOR THE ENGINE INSTALLATION. THE LINE WAS REPLACED AND THE AIRCRAFT RETURNED TO SERVICE WITH NO FURTHER ENGINE PERFORMANCE PROBLEMS.

4/8/2008 Z242L AEIO360A1B6 Z4243130000 TE FLAPS	CA080415004	ZLIN	LYC	CONTROL CABLE	FRAYED
	4/8/2008	Z242L	AEIO360A1B6	Z4243130000	TE FLAPS

FLAP CENTER CABLE WAS FOUND FRAYED DURING REGULARLY SCHEDULED MAINTENANCE.

END OF REPORTS