



U.S. Department
of Transportation

**Federal Aviation
Administration**

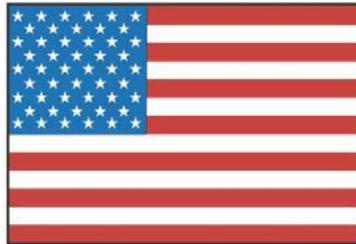
AFS-600

Regulatory Support Division

ADVISORY CIRCULAR

43-16A

AVIATION MAINTENANCE ALERTS



**ALERT
NUMBER
373**



**AUGUST
2009**

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

AVIATION MAINTENANCE ALERTS

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

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

AIRPLANES

Bombardier: CL600-2B19; Crewmember O2 Hose Inspection; ATA (N/A)

(Transport Canada shares this Service Difficulty Alert referencing a fire hazard—well worth a few moments reading.)



Transport
Canada

Transports
Canada

TP 7244

No. N°	AL-2009-05	1/2
Date	2009-07-16	

**SERVICE DIFFICULTY
ALERT**

This Service Difficulty Alert brings to your attention a potential hazard identified by the Service Difficulty Reporting Program. It is a non-mandatory notification and does not preclude issuance of an airworthiness directive.

**BOMBARDIER CL-600-2B19
(Regional Jet Series 100/200/440)
All RJ aircraft with third crewmember oxygen
systems installed**

**INSPECTION OF THIRD CREWMEMBER OXYGEN
HOSE**

While parked at the gate, following the application of ground power, a CL-600-2B19 model CRJ-200 aircraft suffered a fire in the vicinity of the JB1 junction box assembly. The fire was fed by oxygen from a breach of the third crewmember oxygen supply installation, forward of the JB1 junction box. The two crewmembers on board were not injured.

As of the date of this publication, the breach of the oxygen hose has not been determined to be causal in the initial event. The event remains under investigation by Bombardier and the NTSB.

Bombardier has issued Service Information Letter (SIL) CRJ100/200/440-SL-35-005 that provides interim inspection recommendations to insure the integrity of the installation of the third crewmember oxygen flexible hose. Particular attention to this area should be taken when complying with the required zonal inspection of this area.

Transport Canada Civil Aviation strongly recommends operators inspect the third crewmember oxygen flexible hose for damage and security of installation in accordance with Bombardier SIL CRJ100/200/440-SL-35-005. Replace damaged hoses in accordance with Aircraft Maintenance Manual.

**ALERTE AUX
DIFFICULTÉS EN SERVICE**

Cette alerte aux difficultés en service a pour but d'attirer votre attention sur une condition possiblement hasardeuse qui a été révélée par le Programme de rapports de difficultés en service. Elle est une notification facultative et n'exclut pas nécessairement la publication d'une consigne de navigabilité.

**BOMBARDIER CL-600-2B19
(Regional Jet, séries 100/200/440)
tous les avions RJ dotés d'un circuit d'oxygène
pour troisième membre d'équipage**

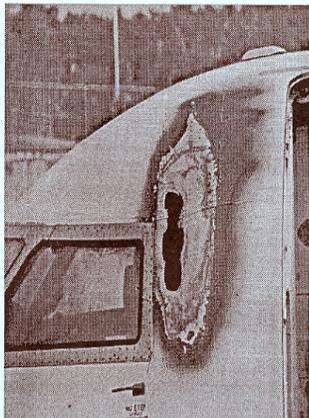
**INSPECTION DU DISPOSITIF D'ALIMENTATION EN
OXYGÈNE DU TROISIÈME MEMBRE D'ÉQUIPAGE**

Alors que le CL-600-2B19 de modèle CRJ-200 était stationné à la porte d'embarquement, un incendie s'est déclaré à côté de la boîte de jonction JB1 après le branchement du groupe de parc. Cet incendie a été alimenté par l'oxygène provenant d'une fuite dans le dispositif d'alimentation en oxygène du troisième membre d'équipage situé en avant de la boîte de jonction JB1. Aucun des deux membres d'équipage présents à bord n'a été blessé.

Au moment de publier le présent document, rien ne dit que la fuite dans le tuyau souple d'oxygène a été à l'origine des événements. Bombardier et le NTSB enquêtent toujours sur cet événement.

Bombardier a publié la lettre d'information en service (SIL) CRJ100/200/440-SL-35-005 qui contient des recommandations provisoires en matière d'inspection visant à garantir l'intégrité du tuyau souple d'alimentation en oxygène du troisième membre d'équipage. Les intéressés devront porter une attention toute particulière à cet endroit au moment de procéder à l'inspection zonale obligatoire de cette partie de l'avion.

Transports Canada, Aviation civile recommande fortement aux exploitants d'inspecter le tuyau souple d'alimentation en oxygène du troisième membre d'équipage afin de vérifier qu'il n'est pas endommagé et qu'il est bien fixé, conformément à SIL CRJ100/200/440-SL-35-005 de Bombardier. Remplacer tout tuyau endommagé conformément au manuel de maintenance de l'avion.



For a change of address, contact the Civil Aviation Communication Centre (AACRC) at Place de Ville, Ottawa, Ontario K1A 0N8, or 1 800 305-2059, or www.tc.gc.ca/civilaviation/communications/centre/address.asp

24-0028 (01-2005)

Pour demander un changement d'adresse, veuillez contacter le Centre des communications de l'Aviation civile (AACRC) à Place de Ville, Ottawa (Ontario) K1A 0N8, ou 1 800 305-2059, ou www.tc.gc.ca/AviationCivile/communications/centre/adresse.asp.



No. N°	AL-2009-05	2/2
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Damaged hoses are requested to be forwarded to Bombardier for examination.

Tout tuyau souple endommagé devra être retourné chez Bombardier pour y être examiné.

For more information contact a Transport Canada Centre; or contact Paul Jones, in Ottawa, by phone 613-952-4431, or e-mail at [CAW WEB Feedback@tc.gc.ca](mailto:CAW_WEB_Feedback@tc.gc.ca).

Pour obtenir davantage de renseignements communiquer avec un Centre de Transports Canada ou avec Paul Jones, Ottawa, par téléphone au 613-952-4431 ou par courriel à [CAW WEB Feedback@tc.gc.ca](mailto:CAW_WEB_Feedback@tc.gc.ca).

Any further defects or occurrences should be reported to Transport Canada via the Web Service Difficulty Reporting System (WSDRS) or via e-mail at [CAW WEB Feedback@tc.gc.ca](mailto:CAW_WEB_Feedback@tc.gc.ca).

Toute autre défectuosité ou tout autre incident devrait être rapporté à Transports Canada par le Système de rapports de difficultés en service (SWRDS) ou par courriel à [CAW WEB Feedback@tc.gc.ca](mailto:CAW_WEB_Feedback@tc.gc.ca).

For Director, National Aircraft Certification

Pour le directeur, certification nationale des aéronefs

Eric Lucas
Acting Chief, Continuing Airworthiness
Chef intérimaire, Maintien de la navigabilité aérienne

Note: For the electronic version of this document, please consult the following Web address:	Nota : La version électronique de ce document se trouve à l'adresse Web suivante :
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www.tc.gc.ca/CivilAviation/certification/menu.htm

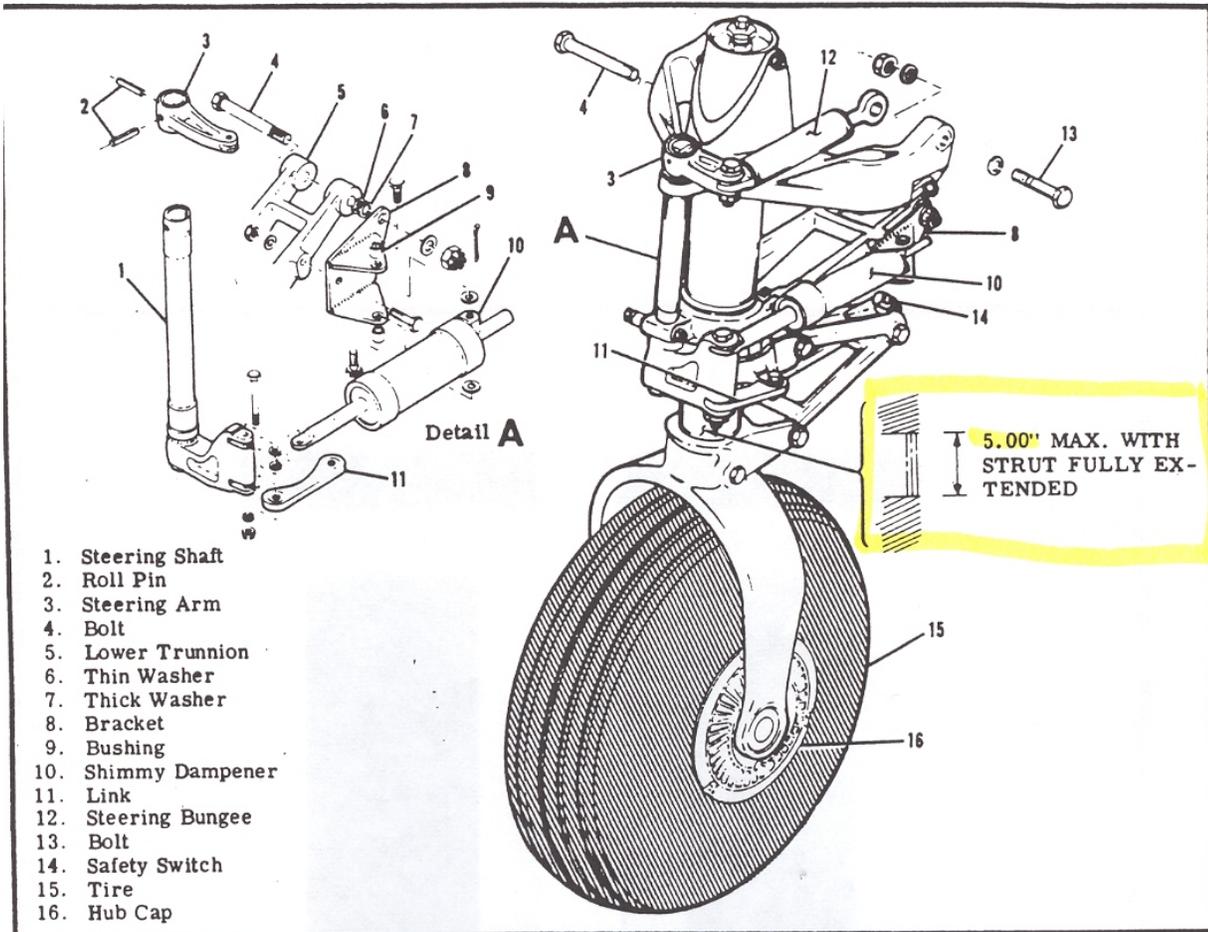
Part Total Time: (N/A)

Cessna: 210; Cracked Nose Gear Torque Link; ATA 3222

An aircraft technician states, "Our repair station has replaced several of these same upper torque links due to finding them bent at inspection (approximately five *have been found*). This is the first one found cracked.

"I believe the probable cause is landing impact with more than the recommended strut extension (5.00 inches max.), according to Cessna Service Manual, figure 5-15. (*This strut extension...*) is adjustable by adding shims (item 15; three maximum) in accordance with the note on figure 5-18." (*The shim P/N is 1243618-2.*)

MODEL P210 SERIES SERVICE MANUAL



MODEL P210 SERIES SERVICE MANUAL

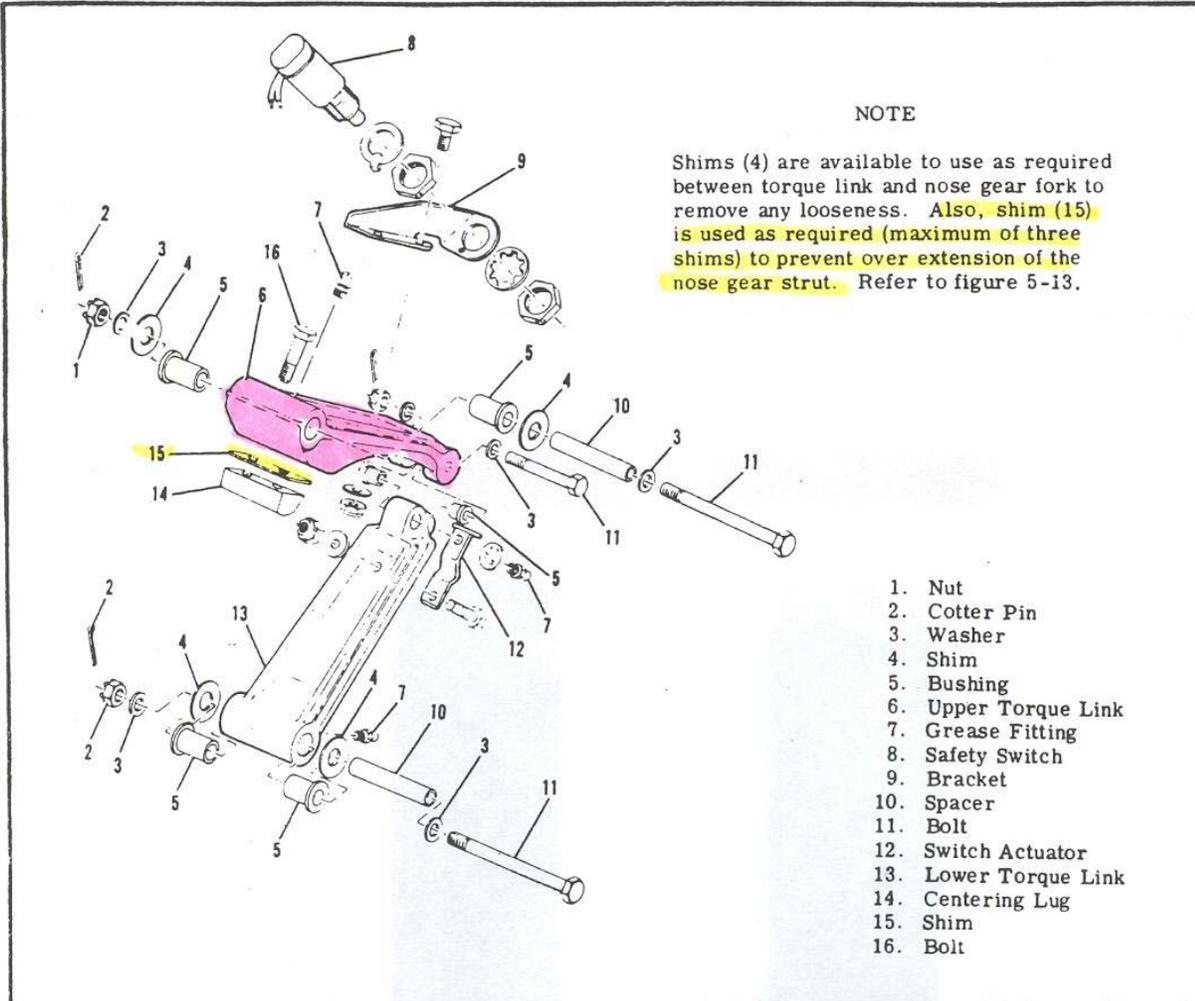


Figure 5-18. Nose Gear Torque Links

(The SDRS database reflects 11 entries for this part number.)

Part Total Time: 4,609.2 hours

Diamond: DA42; Unsecured Landing Gear Down-lock Pin; ATA 3210

A mechanic says, "The Circlip that secures the down-lock pin in the mail landing gear legs has been twisting off, rendering this down-lock pin loose enough to fall out when the gear is retracted. This particular aircraft had the aft section of the wheel well damaged due to the pin hanging halfway out...*(it came into contact with the surrounding laminate structure)*. This pin should be secured with something that is permanent, like a cotter pin or safety wire. *(A pilot)* discovered this problem on preflight. Good job!" *(Circlip P/N: DIN471-8-ZP. A parts diagram here might have been particularly helpful...next time?)*

Part Total Time: (unknown)

Hawker: 900XP; Loose Fairing Seal; ATA 5350

"On departure from *(the airport)* ," writes an A&P mechanic, the R/H wing, fuselage-to-fairing seal strip came loose, causing the strip to lift up and beat against the wing fairing, creating a very loud noise (and some vibration) in the cabin. The aircraft returned to *(the airport—landing)* without further incident. The decision was made to ground the company's Hawker fleet for further investigation, and to replace all wing fairing strips with a Hawker Beechcraft representative on site." "Upon removal of the aircraft's wing seal strips, it was noted that the glue had been inconsistently applied and was spotty in some places. All new wing-to-fuselage fairing strips were installed on all company aircraft in accordance with the procedures outlined in the Hawker 800XP and 900XP Maintenance Manuals, sections 57-20-00. This work was carried out under the supervision of a Hawker Beechcraft technical representative on site." *(Wing root fairing seal strip P/N: J3081X9FT.)*

Part Total Time: 133.6 hours

Learjet: 45; Failed Hydraulic Pressure Switch; ATA 2915

An inspector for a repair station writes, "The Cannon plug adapter on the back of the switch deforms under pressure; the o-ring displaces and hydraulic fluid leaks *(past)*. Loss of hydraulic fluid led to complete hydraulic failure. *(The pilots allowed the landing gear to free-fall to the down position.)* Learjet is working to replace this and four similar switches in the aircraft. *(I)* recommend replacing this switch *(P/N 7629001004-001)* with a stronger unit."



(The submitter includes the manufacturer's P/N: 51158, and locates this pressure switch below the hydraulic reservoir. Okay—the background is a bit difficult...but the subject is spot-on, tells the story, and removes any doubts. Thank-you for the photo effort—Ed.)

Part Total Time: (unknown)

POWERPLANTS

ECI Cylinder; AEC 631397; Cracked Cylinder Head; ATA 8530

(The following references a Beech A36 aircraft sporting a Continental IO550 engine.)

"The aircraft owner reported severe vibration," states an unidentified submitter. "After inspection it was found that the spinner bulkhead was severely cracked. Further inspection found the number one cylinder to be cracked all around the circumference of the cylinder diameter. The crack was right at the ninth and tenth cooling fins. This cylinder had a total time of 355 hours since new. Due to its identification markings, AD 2004-8-10 did not apply to this cylinder. However, ECI's Mandatory Service Bulletin 06-2 does identify this cylinder for crack inspection. AD 2004-8-10 should probably include all of the cylinders (*indicated*) in ECI's 06-2 MSB.

"This (*severe vibration*) was reported immediately after takeoff—the pilot returned immediately to the airport and landed uneventfully. When disassembling (*the associated parts*), the cylinder assembly came off in two pieces. The crack was severe, (*moving completely through*) the cylinder walls where the cylinder bore and the combustion chamber meet." (*The SDRS database returns 38 entries for this part number. See the next entry.*)

Part Total Time: 355.0 hours

ECI Cylinder; AEC 631397; Cracked Cylinder Heads (6 ea.) ATA 8530

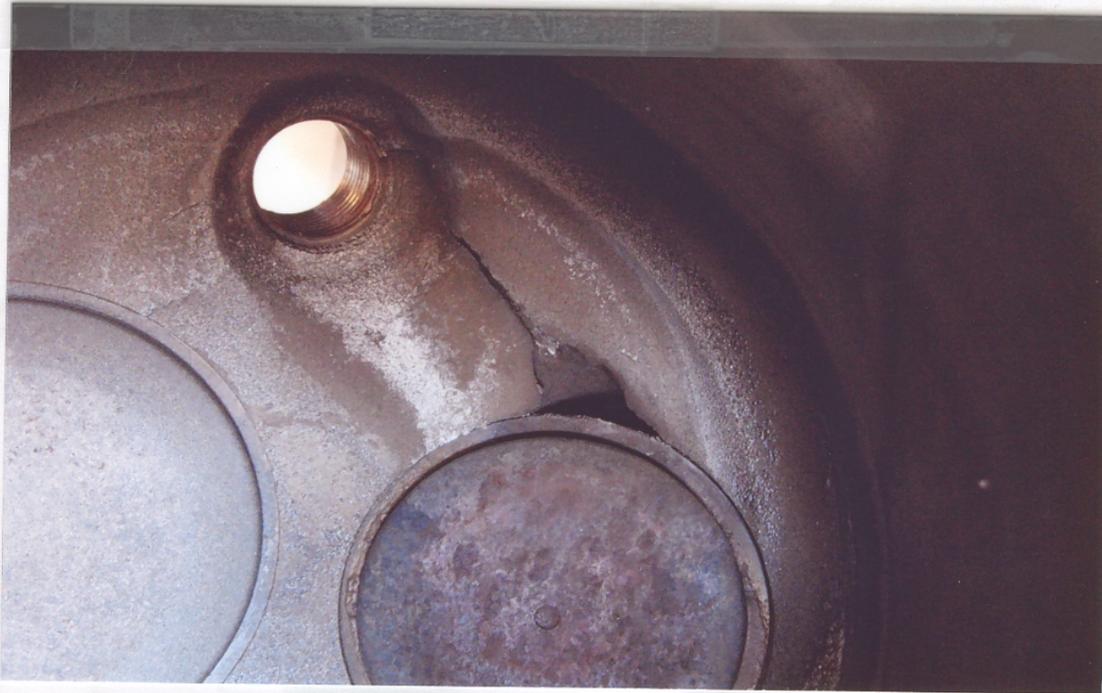
A mechanic for a Cessna 414A describes the following engine defects. "The ECI Titan cylinder head failed in flight and blew out a section of the head and fins. Investigation revealed a 0.50 inch hole had developed from a crack that progressed from the exhaust valve seat to the upper spark plug hole. An additional crack was found on this (*particular*) cylinder, (*moving*) from the upper spark plug hole to the injector boss. After inspection of all cylinders on both engines, five other of the original cylinders installed at overhaul were found cracked. All cracks were either from the injector boss to the upper plug hole or from the exhaust valve to the upper plug hole. Both engines were overhauled at the same time—the cylinders all had the same amount of (*operational*) time.

"No metallurgical analysis was performed and no cause could be determined (*for these defects*). All cylinders were sent back to the manufacturer."

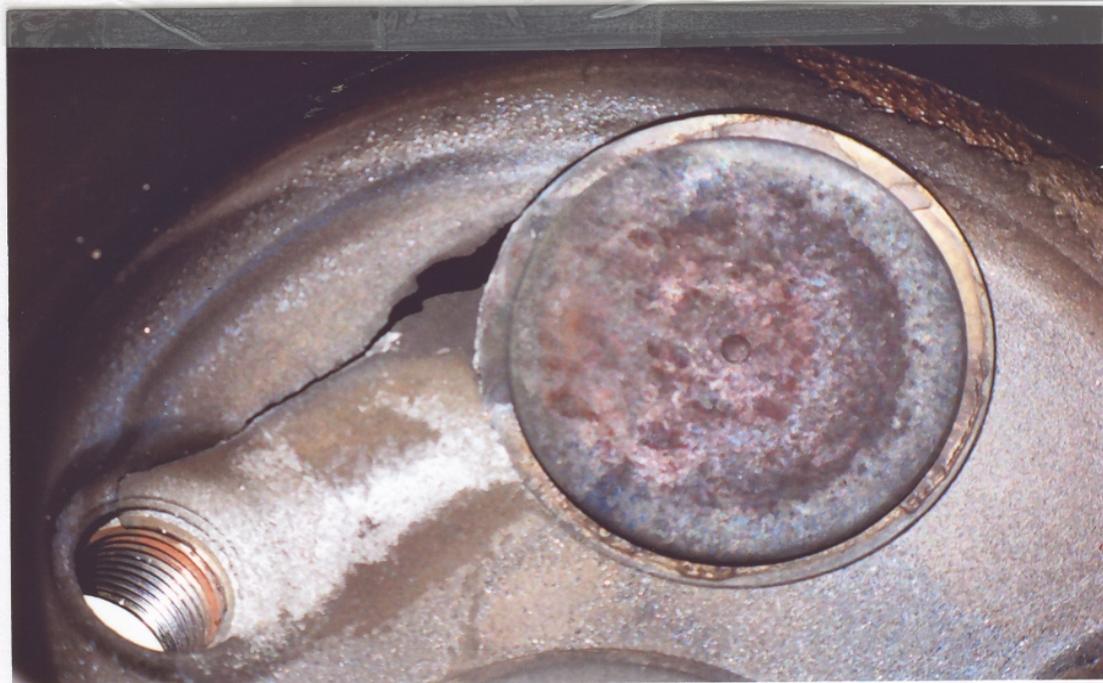


AEC631397 SN.71.2
S/N 25526.22





AEC 631397 SN 71.2
S/N 25526.22



(All six reports include the additional cylinder marks: SN71.2 REV P. These are great pictures—slightly stretched by this editor to fit the page. Note the previous entry for additional information.)

Part(s) Total Time: 1,019.0 hours (each cylinder)

Pratt & Whitney: PW100 Series; Improper Manifold Torque; ATA (N/A)

(The following Service Difficulty Advisory from Transport Canada provides another fire hazard consideration. Again it is time to say "thank-you" to our sister organization for their unceasing effort to share safety information.)



Transport Canada

Transports Canada

TP 7394

No.		1/2
N°	AV-2007-03R1	
Date	2009-05-28	

SERVICE DIFFICULTY ADVISORY

This Service Difficulty Advisory brings to your attention a potential problem identified by the Service Difficulty Reporting Program. It is a non-mandatory notification and does not preclude issuance of an airworthiness directive.

FLEXIBLE FUEL MANIFOLDS PRATT & WHITNEY CANADA PW100 SERIES ENGINES

The PW100 series flexible fuel manifold was introduced to replace the original, rigid fuel manifold configuration. Although both manifold configurations deliver atomized fuel to the combustion chamber in the same manner, the flex manifold does not use the transfer-tube design and is less labor intensive during removal and installation of the engine fuel nozzles.

Since introduction of the flexible manifold, there have been instances of manifold nuts being improperly torqued during installation, resulting in fuel leaks. More seriously, an engine fire resulted in two of the above events. Although the primary and secondary sealing features at each nozzle provide effective sealing, it is essential that the fuel manifold nut be properly torqued to maintain the integrity of the seal.

To ensure that the correct torque procedures are accomplished; Pratt & Whitney Canada (P&WC) has introduced a tool kit (PWC 56616). This kit includes a pre-set torque wrench that provides for easy installation and removal of components. This information can be found in P&WC Service Information Letter (SIL) PW100-098R2.

In order to prevent further fuel leaks and engine fires, Transport Canada Civil Aviation (TCCA) recommends that maintainers, operators and overhaul agencies comply with the aforementioned SIL PW100-098R2 at the earliest opportunity.

AVIS DE DIFFICULTÉS EN SERVICE

Cet avis aux difficultés en service a pour but d'attirer votre attention sur un problème possible qui a été révélé par le Programme de rapports de difficultés en service. Il est une notification facultative et n'exclut pas nécessairement la publication d'une consigne de navigabilité.

TUBULURES FLEXIBLES D'ALIMENTATION EN CARBURANT DE PRATT & WHITNEY CANADA MOTEURS DE LA SÉRIE PW100

La tubulure flexible d'alimentation en carburant de la série PW100 a été mise en service pour remplacer la tubulure rigide d'alimentation en carburant. Bien que les deux tubulures soient en mesure de fournir du carburant atomisé de la même façon à la chambre de combustion, la tubulure flexible n'utilise pas de tube de transfert et elle nécessite moins de travail lors de la dépose et de la repose des injecteurs de carburant du moteur.

Depuis la mise en service de la tubulure flexible, il y a eu des cas d'écrous de tubulure mal serrés à l'installation qui ont causé des fuites de carburant. Mais ce qui est plus grave, un incendie de moteur s'est déclaré dans deux des cas mentionnés ci-dessus. Les caractéristiques d'étanchéité primaire et secondaire de chaque injecteur offrent une étanchéité efficace, mais il est essentiel que l'écrou de la tubulure de carburant soit serré au bon couple pour maintenir l'intégrité du joint d'étanchéité.

Pour assurer l'exactitude du serrage au couple, Pratt & Whitney Canada (P&WC) a produit une trousse d'outils (PWC 56616). Cette trousse comprend une clé dynamométrique pré-réglée qui facilite la pose et la dépose des composants. L'information pertinente se trouve dans la Lettre d'information de service (SIL) PW100-098R2 de P&WC.

Pour éviter toute autre fuite de carburant et tout incendie de moteur, l'Aviation civile de Transports Canada (ACTC) recommande que les préposés à la maintenance, les exploitants et les organisations de révision se conforment le plus tôt possible à la SIL PW100-098R2 mentionnée précédemment.

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

Pour demander un changement d'adresse, veuillez contacter le Centre des communications de l'Aviation civile (AARC) à Place de Ville, Ottawa (Ontario) K1A 0N8, ou 1 800 305-2059, ou www.tc.gc.ca/AviationCivile/communications/centre/ adresse.asp.

24-0028 (01-2005)



No. N°	AV-2007-03R1	2/2
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Malfunctions, defects or failures occurring on aeronautical products should be reported to Transport Canada, Continuing Airworthiness, Ottawa, Ontario, via the Service Difficulty Reporting program.

Les défauts, défectuosités ou défaillances affligeant des produits aéronautiques doivent être signalés au Maintien de la navigabilité aérienne de Transports Canada, à Ottawa (Ontario) au moyen du programme de Rapports de difficultés en service.

For further information, please contact a Transport Canada Centre, or contact Mr. Barry Caldwell, Continuing Airworthiness, Ottawa, telephone 613-952-4358 or e-mail barry.caldwell@tc.gc.ca

Pour plus de renseignements, veuillez communiquer avec un Centre de Transports Canada ou contacter M. Barry Caldwell, Maintien de la navigabilité aérienne, à Ottawa, par téléphone au 613-952-4358 ou par courriel à l'adresse barry.caldwell@tc.gc.ca

For Director, National Aircraft Certification

Pour le Directeur, Certification nationale des aéronefs



D. Ferguson
Acting Chief, Continuing Airworthiness
Chef intérimaire, Maintien de la navigabilité aérienne

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www.tc.gc.ca/CivilAviation/certification/menu.htm

Part Total Time: (N/A)

ACCESSORIES

Bendix Magneto: S6RN-1208; Broken Contactor Rivet; ATA 7414

("There can be only one!" Two reports were submitted for this defect—one from the mechanic, a second from a collaborating FAA inspector. Since this second report wound up with the control number, it is the one published here. Not clear is the identity of the photographer—"thanks" for both efforts.)

An FAA inspector states, "A broken contact breaker was found during troubleshooting of an ignition problem on a Bellanca 17-31ATC. The contactor rivet was broken in this Bendix Magneto. This rivet may be insufficient (*referencing size/strength*) to properly hold the contactor in place."



(The above photo combines two of the three submitted pictures. Contact P/N: AB-382584.)

Part Total Time: (unknown)

Champion Oil Filter: CH48110-1; Filter Element Separation; ATA 8550

(The following references a Cessna 152 with a Lycoming O-235 engine. An A&P mechanic provides this report.)

"A (new) filter was installed, the oil changed, (and an engine run-up was performed) as normal. The first flight after (this) oil change the pilot noticed oil pressure dripping and high oil temperature. Unable to correct this condition, the pilot returned to (the landing field) and reported his findings.

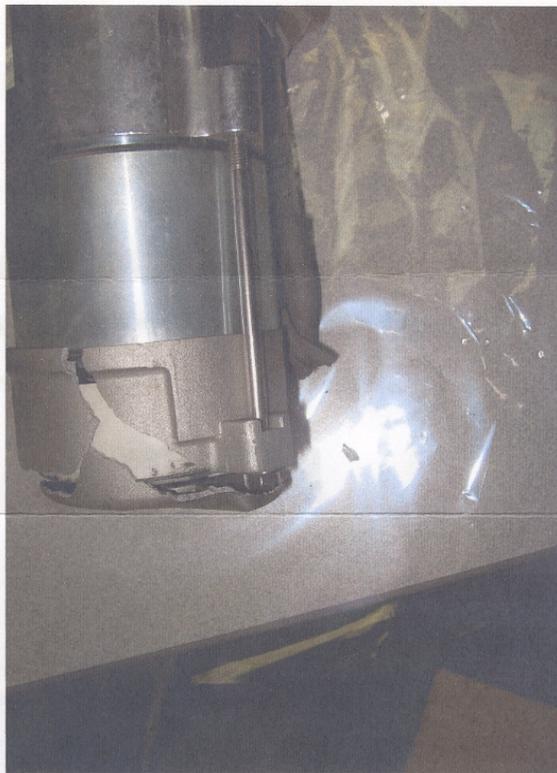
"Investigation found (*oil*) filter element debris under the pressure relief valve, causing low oil pressure. Upon further investigation, a second filter of the same date code was found to have loose debris in the filtered side of the filter element, and the element (*itself*) was bonded only on one end.

"The engine gullies were flushed with air and several pieces of debris were found. A new filter of different date code was installed (*and then*) several ground runs were (*accomplished*). No significant debris was found. A new filter from a different manufacturer was installed and the engine released for flight." (*This oil filter P/N only finds three reports in the SDRS database; drop the last digit and 13 more filters become visible.*)

Part Total Time: 1.0 hours

Sky Tec Starter: 149NL; Shattered End Cap; ATA 8010

A repair station technician says, "The starter end cap shattered. This is the third occurrence that we have seen on the Cessna 172S aircraft."



(This picture evokes a flinch and cringe! It is dramatic. It does make a statement, and your reporting will make a difference. There are 12 of these listed in the SDRS database now—keep filing those reports!)

Part Total Time: 290.6 hours

AIR NOTES

INTERNET SERVICE DIFFICULTY REPORTING (iSDR) WEB SITE

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

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

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

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

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

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

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

The SDRS database contains records dating back to 1974. At the current time, we are receiving approximately 40,000 records per year. Reports may be submitted to the iSDR web site on active data entry form or submitted hardcopy to the 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) 954-5313
SDRS Program Manager e-mail address: 9-AMC-SDR-ProgMgr@faa.gov

IF YOU WANT TO CONTACT US

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

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

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

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

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

AVIATION SERVICE DIFFICULTY REPORTS

The following are abbreviated reports processed for the previous month, which have been entered into the FAA Service Difficulty Reporting (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	Aircraft Make	Engine Make	Component Make	Part Name	Part Condition
Difficulty Date	Aircraft Model	Engine Model	Component Model	Part Number	Part Location
2009FA0000518				SUPPORT	CRACKED
6/3/2009				230461670	FOD SCREEN
DURING A SPOT CHECK OF INVENTORY OF SPARE PARTS. FOUND A CRACK ON AN NEW DRIVE END FRAME FOR A STARTER GENERATOR. SUSPECT THAT THE DAMAGE WAS CAUSED WHEN THE FOD SCREEN WAS RIVETED TO THE SUPPORT ASSY. (TOO MUCH FORCE MAY HAVE BEEN APPLIED).					
2009FA0000563		ALLSN		SHAFT	CRACKED
6/11/2009		250C47B		23038136	POWER TURBINE
THE ENGINE WAS DISASSEMBLED TO FACILATE INSP BECAUSE OF METAL IN THE OIL. UPON VISUAL INSP, A CRACK WAS DISCOVERED ORGINATING AT THE CURVIC COUPLING END OF THE SHAFT. THE CRACK MEASURED APPROX 4.5 INCHES AND EXTENDED APPROX 270 DEGREES AROUND THE SHAFT.					
2009FA0000564		ALLSN		SHAFT	CRACKED
6/11/2009		250C47B		23038136	POWER TURBINE
THE ENGINE WAS DISASSEMBLED BECAUSE OF A REPORTED VIBRATION. A CRACK WAS DISCOVERED THAT ORIGINATED FROM THE CURVIC COUPLING END OF THE SHAFT, MEASURING APPROX 5.5 INCHES AND EXTENDING APPROX 300 DEGREES AROUND THE SHAFT. REPAIR STATIONW/O A105779. ENGINE TOTAL TIME AND CYCLES ARE UNKNOWN.					
2009FA0000517		CONT		IDLER GEAR	CRACKED
5/19/2009		IO520*		204864	GOVERNOR
GEAR PUMP IDLER FAILED NDT/ CRACKED TOOTH. (K)					
ULXR2009061882081	AEROSP	TMECA		DUCT	LEAKING
6/18/2009	AS355*	ARRIEL1D1		70BMO55420	RGB
MODULE 5 INCORPORATED TU332. LUBRICATION DUCT SEALING PROCEDURE CONTAINED IN SB A292 72 0825 (AD 2009-12-51) WAS PERFORMED AT ENGINE TOTAL TIME OF 12631.7. LUBRICATION DUCT BEGAN TO LEAK OIL AT 12699.9. MO5 REMOVED FROM SERVICE. LUBRICATION DUCT TO BE REPLACED WITH A COMPLIANT PART.					
AC2A2009062282113	AGUSTA			WARNING LIGHT	ILLUMINATED
6/22/2009	AB139				
NR 2 SERVO CAS ILLUMINATED IN FLIGHT. EMERGENCY CHECK LIST USED. LANDING GEAR WAS LOWERED NORMALLY IAW THE CHECKLIST AND ACFT LANDED UNEVENTFULLY AS SOON AS PRACTICAL. PROBLEM COULD NOT BE DUPLICATED AND ACFT WAS RETURNED TO SERVICE.					
AC2A2009062382120	AGUSTA			PRESSURE SWITCH	MALFUNCTIONED
6/23/2009	AB139				MLG
NR 2 SERVO CAS ILLUMINATED IN FLIGHT. EMERGENCY CHECK LIST USED. LANDING GEAR WAS LOWERED NORMALLY IAW THE CHECKLIST AND ACFT LANDED UNEVENTFULLY AS SOON AS PRACTICAL. REPLACED NR 2 RT SERVO PRESSURE SWITCH.					

ULXR2009070282294	AGUSTA		SKIN	DEFORMED
7/2/2009	AB139			TAIL BOOM
TAIL ASSY LT AND RT SIDES , SKIN DEFORMATION BETWEEN STA 8700.1 TO 9436.1 AND BETWEEN WL 2176.8 TO 2060.8. SKIN IS BUBBLING OTBD BETWEEN THE 2 HONEYCOMB AREAS OF THE PANEL ON BOTH SIDES OF BOOM.				
ULXR2009070282295	AGUSTA		SKIN	DEFORMED
7/2/2009	AB139			TAIL BOOM
TAIL ASSY LT AND RT SIDES , SKIN DEFORMATION BETWEEN STA 8700.1 TO 9436.1 AND BETWEEN WL 2176.8 TO 2060.8. SKIN IS BUBBLING TBD BETWEEN THE 2 HONEYCOMB AREAS OF THE PANEL ON BOTH SIDES OF BOOM.				
ULXR2009061882082	AGUSTA	PWC	PROBE	INOPERATIVE
6/18/2009	AB139	PT6C67C	506252A	FUEL QTY
FUEL QUANTITY READS ZERO. NO SIGNAL FROM PROBE. REPLACEMENT PROBE FIXED DISCREPANCY.				
ULXR2009062682284	AGUSTA		HOOK	UNSERVICEABLE
6/26/2009	AW139		410A	HOIST
PERFORMED SB 42315-489-01, THE HOOK HAS UNACCEPTABLE IRREGULARITIES AND DISCONTINUITIES. REMOVED HOOK FROM SERVICE.				
ULXR2009062682285	AGUSTA	BFGOODRICH	HOOK	UNSERVICEABLE
6/26/2009	AW139		410A	HOIST
PERFORMED SB 42315-489-01, THE HOOK HAS UNACCEPTABLE IRREGULARITIES AND DISCONTINUITIES. REMOVED HOOK FROM SERVICE.				
2009FA0000516	BEECH		DUCT	FAILED
6/15/2009	400A		12855001111	BLEED SYS
PN 128-550011-11, BLEED AIR DUCT, WIRE BRAIDING FAILED AT BOTH (2) OF THE BELLOWS ASSEMBLIES. DUCT EXPANDED AT BELLOWS PORTION OF DUCT BUT DID NO ADDITIONAL DAMAGE TO ACFT. DEFECT WAS DISCOVERED AT TROUBLESHOOT OF DIFFERENT PROBLEM IN AFT FUSELAGE. AD 2001-03-06 WAS ACCOMPLISHED WITH NO DEFECTS NOTED, 200 HOURS PREVIOUS TO DISCOVERING FAILED DUCT.				
2009FA0000587	BEECH	CONT	LINE	CORRODED
6/27/2009	95C55	IO520*	9632403887	FUEL SYSTEM
ON TAXI OUT, PILOT SMELLED FUEL IN THE COCKPIT AND NON RATED FRONT SEAT PASSENGER SAW STREAM OF FUEL ON RT SIDE RUDDER PEDALS. PILOT RETURNED TO THE HANGAR TO HAVE PROBLEM INVESTIGATED. UPON FURTHER INVESTIGATION FOUND RT SIDE RIGID ALUMINUM FUEL LINE THAT DELIVERS FUEL TO FUEL FLOW INDICATOR LEAKING. LINE WAS LOCATED ON RT SIDE OF ACFT FROM BULKHEAD FITTING TO AN AN JOINT FITTING BEHIND INSTRUMENT PANEL. FOUND LINE WAS CHAFING ON DEFROSTER DUCTING. ALSO THERE WAS EVIDENCE OF CORROSION OF THE LINE IN THE AREA OF THE ABRASION CAUSING A PINHOLE IN THE LINE, LEAKING FUEL INTO THE CABIN. REPLACED LINE AND RETURN ACFT TO SERVICE.				
2009FA0000512	BEECH		CLEVIS	SEPARATED
6/10/2009	A36		3582508714	MLG
THE NOSE GEAR RETRACT PLUNGER BRAZE ASSY CLEVIS SEPARATED FROM (PULLED OUT OF) THE PLUNGER ROD. CLEVIS IS BRAZED INTO THE ROD, EXCEPT IN THIS CASE, DURING THE MFG PROCESS, BRAZE DID NOT FLOW INTO THE AREA BETWEEN THE CLEVIS AND THE ROD. THERE WAS A BEAD OF BRAZE AROUND THE SHOULDER OF THE CLEVIS, SO VISUALLY, THE PART WOULD HAVE APPEARED SERVICEABLE. (SOLO STUDENT) PILOT REPORTED A GRINDING NOISE WHEN THE GEAR WAS EXTENDED. AMAZINGLY, THE NOSE GEAR DID NOT COLLAPSE UPON LANDING.				
2009FA0000520	BEECH		DRAIN	CRACKED
5/31/2009	B200		CCA3400	WING TANK SUMP
CURTIS DRAIN VALVE LEAKING FUEL BECAUSE OF A CRACKED SEAL RETAINER. THIS RESULTED IN A MAJOR				

FUEL LEAK BECAUSE THE INTERNAL PLUNGER FELL COMPLETELY OUT OF THE VALVE. LEAK RATE WAS ABOUT 2 GALLONS PER MINUTE. HAVE 2 VALVES WHICH ARE DEFECTIVE. SEAL RETAINER NEEDS TO BE MADE OF A THICKER MATERIAL. (K)

2009FA0000526	BEECH	PWA	BEECH	NUT	CRACKED
6/19/2009	C90	PT6A60A		505211516	FLAP ACTUATOR

LT INBD FLAP ACTUATOR NUT (PN 50-521151-6) NUT WAS CRACKED FROM RIVET INTO CHROME. NO RECORD OF OVERHAUL. ALL OIL HAD LEAKED OUT OF ASSY. SERIOUS SAFETY AND FLIGHT ISSUE. NUT WAS LABELED AS CONDEMNED AND REPLACED ON ASSY.

2009FA0000527	BEECH	PWA	BEECH	NUT	CRACKED
6/19/2009	C90	PT6A60A		505212234	FLAP ACTUATOR

RT OTBD FLAP ACTUATOR NUT, PN 50-521223-4, NUT WAS CRACKED FROM RIVET INTO CHROME. NO RECORD OF OVERHAUL. ALL OIL HAD LEAKED OUT OF ASSY. SERIOUS SAFETY AND FLIGHT ISSUE. NUT WAS LABELED AS CONDEMNED AND REPLACED ON ASSY.

2009FA0000626	BEECH	CONT	ROMECH	O-RING	FAILED
7/13/2009	D35	E225*	RD7790	RA3791	FUEL PUMP

FIRST FUEL PUMP FAILURE HAPPENED IN FLIGHT AT 6000 FEET ON APRIL 23, 2009 WHILE ON AN IFR FLIGHT. ENGINE FAILED DUE TO ZERO FUEL PRESSURE. ENGINE WAS RESTARTED USING BACKUP MANUAL HAND PUMP UNTIL LANDING. FUEL PUMP WAS REMOVED AND SENT FOR REPAIR AND RETURNED FOR REINSTALLATION APRIL 27, 2009. THE SECOND FAILURE OCCURRED ON JUNE 18, 2009 (14 HOURS SINCE REPAIR) WHILE LANDING AT SAME AIRPORT. FUEL PUMP WAS REMOVED AND SENT TO DIFFERENT FACILITY FOR REPAIR AND RETURNED FOR REINSTALLATION. ACFT WAS TEST FLOWN AND DETERMINED AIRWORTHY FOR RETURN FLIGHT. CONCLUSION OF FIRST FAILURE WAS ATTRIBUTED TO FAILED O-RING PN: RA3791. THE SAME CONCLUSION WAS DETERMINED ON SECOND FAILURE OF JUNE 18, 2009. THIS ENGINE IS APPROVED FOR OPERATION ON AUTOMOTIVE/AVIATION GASOLINE. BOTH FAILURES OF FUEL PUMP O-RING PN RA3791 FAILED WHILE USING A COMBINATION OF THESE FUELS. IT IS SUSPECTED THAT O-RING MATERIAL OF IS NOT COMPATIBLE WITH ONE OR BOTH OF THESE FUELS.

2009FA0000633	BELL	ALLSN		BLADE	DISLODGED
7/21/2009	206B	250C20		206010200133	MAIN ROTOR

BALANCE WEIGHT CAME LOOSE INSIDE OF MAIN ROTOR BLADE. WEIGHT WAS PROJECTED OUT OF THE OTBD BLADE CAP CAUSING THE TIE DOWN RING AND END CAP TO COME DISLODGED FROM THE ROTOR BLADE.

EGRR2009063082288	BELL			BEARING	DEBONDED
6/30/2009	412EP			412010106101	ROTOR HEAD

PILOT REPORTED SEVERE LATERAL VIBRATION. ACFT LANDED, INSPECTED ROTOR HEAD AND FOUND BEARING COMPLETELY DEBONDED. INSTALLED NEW BRG PN 412-010-106-101 AND APPROVED ACFT FOR RETURNED TO SERVICE.

AC2A2009061182036	BELL			TRANSMISSION	CONTAMINATED
6/11/2009	427				

WHILE IN FLIGHT THE TRANSMISSION CHIP RT CAUTION LIGHT CAME ON. PILOT WAS ON APPROACH TO LAND AT MO916, ACFT HAD JUST BEEN STARTED AND WAS 2 MINUTES INTO THE FLIGHT, APPX SPEED WAS 80 KNOTS AT 400 FT. AFTER LANDING THE ACFT WAS SHUTDOWN AND MX WAS CONTACTED. A SMALL AMOUNT OF PASTE WAS FOUND ON THE RT CHIP PLUG, NO METAL. DRAINED TRANSMISSION AND REPLACED FILTER. PENALTY RAN FOR 1 HOUR, NO FURTHER LIGHTS. RECHECKED RT CHIP PLUG AND FOUND CLEAN. ACFT RELEASED FOR FURTHER FLIGHT.

AC2A2009060782115	BELL			BEARING	WORN
6/7/2009	430				T/R DRIVE SHAFT

DURING AN OVERSPEED INSP ON THE DRIVE TRAIN, WE FOUND THE NR2 HANGER BEARING ON THE TAILROTOR DRIVESHAFT HAD EXCESSIVE RADIAL PLAY. REPLACED THE HANGER BRG.

EE4Y090186	BOEING	FLOOR SUPPORT	CORRODED
7/7/2009	737290C	6546539544	ZONE 200
UPPER FUSELAGE, CARGO CABIN AT BS 660 RBL 50 FLOOR SUPPORT CORRODED.			
EE4Y090185	BOEING	STRINGER	CRACKED
7/1/2009	737290C		ZONE 200
FUSELAGE TAIL CONE BETWEEN BS 1138 AND BS 1142 STR 5A LT, CRACKED.			
EE4Y090178	BOEING	SKIN	SCRATCHED
6/30/2009	737290C	2024T3	BS 227
LWR FUSELAGE AT BS 227.8, RBL 17.5, SKIN SCRATCHED.			
EE4Y090179	BOEING	STRINGER CLIP	CRACKED
6/30/2009	737290C	6935352U13	ZONE 200
UPPER FUSELAGE CARGO CABIN AT BS 747 STR 5R CLIP CRACKED.			
EE4Y090181	BOEING	FRAME	DAMAGED
6/30/2009	737290C	BAC15061744	ZONE 100
LOWER FUSELAGE AT BS 219.8, RBL 17.5 FRAME OTBD CHORD DRILLED.			
EE4Y090163	BOEING	STRINGER	CRACKED
6/30/2009	737290C	BAC1498164	ZONE 200
UPPER FUSELAGE CARGO CABIN AT BS 503, STR 8L, CRACKED.			
2009FA0000611	BOEING	STRUCTURE	CORRODED
7/7/2009	7373L9	147A85408	ZONE 200
OUT OF LIMITS CORROSION ON R2 ENTRY INNER CHORD AT BS 1006-1016, RBL 56, WL 208.1.			
2009FA0000618	BOEING	POWER SUPPLY	FAILED
7/8/2009	7373L9	D71702001	EMERGENCY LIGHT
AFT CABIN EMERGENCY LIGHTING POWER SUPPLY INOP, AFT SECTION LIGHTS WON'T ILLUMINATE.			
2009FA0000616	BOEING	FRAME	CORRODED
7/8/2009	7377L9	146A12186	ZONE 100
OUT OF LIMITS CORROSION ON FUSELAGE FRAME AT BS 847 JUST ABOVE STRINGER 25 LT.			
2009FA0000592	BOEING	FLOOR SUPPORT	CORRODED
6/30/2009	7377L9	147A57053	ZONE 200
OUT OF LIMITS CORROSION ON FLOOR SUPPORT BS 986-1015.			
2009FA0000593	BOEING	FLOOR SUPPORT	CORRODED
6/30/2009	7377L9	147A57051	ZONE 200
OUT OF LIMITS CORROSION ON FLOOR SUPPORT BS 989, LBL 32, WL 208.			
2009FA0000614	BOEING	STRINGER	CRACKED
7/8/2009	7377L9	147A321019	ZONE 200

STRINGER 14 LT CRACKED AT BS 1006.

2009FA0000615	BOEING	STRINGER	CRACKED
7/8/2009	7377L9	147A321027	ZONE 200

STRINGER 16 LT CRACKED AT BS 1006.

2009FA0000559	BOEING	CARGO TRACK	CORRODED
6/23/2009	7377L9	146A75032	ZONE 100

OUT OF LIMITS CORROSION ON TOP SURFACE OF THE AFT PIT RAIL ASSY AT BS 791.5 RBL 3.0

2009FA0000560	BOEING	CARGO TRACK	CORRODED
6/23/2009	7377L9	146A75031	ZONE 100

OUT OF LIMITS CORROSION ON TOP SURFACE OF THE AFT PIT RAIL ASSY AT BS 791.5 LBL 3.0.

2009FA0000547	BOEING	FRAME	CRACKED
6/23/2009	7377L9	143A11212	ZONE 200

FUSELAGE FRAME CRACKED AT A/C ATTACH BRACKET BS 500C STRINGER 9 RT.

2009FA0000567	BOEING	FRAME	CRACKED
6/24/2009	7377L9	146A11331	BS 787 S9R

FUSELAGE FRAME CRACKED AT A/C ATTACH BRACKET BS 787 STRINGER 9 RT.

2009FA0000568	BOEING	FRAME	CRACKED
6/24/2009	7377L9	143A11212	ZONE 200

FUSELAGE FRAME CRACKED AT A/C ATTACH BRACKET AT BS 500A STRINGER 9 LT.

2009FA0000550	BOEING	FRAME	CRACKED
6/23/2009	7377L9	146A11411	ZONE 200

FUSELAGE FRAME CRACKED AT A/C ATTACH BRACKET BS 827 STRINGER 9 RT.

2009FA0000551	BOEING	FRAME	CRACKED
6/23/2009	7377L9	146A11411	ZONE 200

FUSELAGE FRAME CRACKED AT A/C ATTACH BRACKET BS 827 STRINGER 9 LT.

2009FA0000608	BOEING	ATTACH FITTING	CRACKED
7/3/2009	7377L9	144A26147	ZONE 100

BS 727, BULKHEAD VERTICAL BEAM ATTACH CLIP CRACKED WL 204 LBL 40.

2009FA0000582	BOEING	PANEL	CORRODED
6/26/2009	7377L9	453A16002	ZONE 100

OUT OF LIMITS CORROSION ON FWD PIT DECK PANEL AT BS 428-500. PANEL IS LISTED PRIMARY STRUCTURE IAW SRM 51-00-04.

2009FA0000583	BOEING	FLOORBEAM	CORRODED
6/26/2009	7377L9	141A5502	ZONE 200

OUT OF LIMITS CORROSION ON UPPER CHORD OF THE BS 294.5 FLOORBEAM AT RBL 11 AND RBL 14 WL 208.1.

2009FA0000584	BOEING	PANEL	CORRODED
6/26/2009	7377L9	453A16109	ZONE 100

OUT OF LIMITS CORROSION ON FWD PIT CENTER DECK PANEL BS 500- 500D. PANEL IS LISTED STRUCTURE IAW SRM 51-00-04.

2009FA0000585	BOEING	CREASE BEAM	CORRODED
6/26/2009	7377L9	147A85407	ZONE 200
OUT OF LIMITS CORROSION L2 ENTRY CREASE BEAM INNER CHORD BS 967- 1006 LBL 60 WL 208.1.			
2009FA0000565	BOEING	FRAME	CRACKED
6/24/2009	7377L9	143A11131	ZONE 200
FUSELAGE FRAME CRACKED AT A/C ATTACH BRACKET AT BS 440, STRINGER 9 RT.			
2009FA0000602	BOEING	STRINGER CLIP	CRACKED
7/2/2009	7377L9	147A35007	ZONE 200
STRINGER CLIP CRACKED BS 1006 STRINGER 14 LT.			
2009FA0000566	BOEING	FRAME	CRACKED
6/24/2009	7377L9	143A11201	ZONE 200
FUSELAGE FRAME CRACKED AT A/C ATTACH BRACKET AT BS 480 STRINGER 9 RIGHT.			
2009FA0000609	BOEING	STRINGER CLIP	CRACKED
7/3/2009	7377L9	147A350075	BS 1006 S16L
STRINGER CLIP CRACKED BS 1006 STRINGER 16 LT.			
2009FA0000595	BOEING	FLOORBEAM	CORRODED
7/1/2009	7377L9	147A5506	ZONE 200
OUT OF LIMITS CORROSION ON BS 986.5 FLOORBEAM UPPER AND LOWER SURFACES LBL22- RBL44.			
2009FA0000574	BOEING	FRAME	CRACKED
6/25/2009	7377L9	143A11201	ZONE 200
FUSELAGE FRAME CRACKED AT A/C ATTACH BRACKET AT BS 480 STRINGER 9 LT.			
2009FA0000561	BOEING	CARGO TRACK	CORRODED
6/23/2009	7377L9	146A75035	ZONE 100
OUT OF LIMITS CORROSION ON THE TOP SURFACE OF THE AFT PIT RAIL ASSY AT BS 791.5 LBL 8.1.			
2009FA0000562	BOEING	CARGO TRACK	CORRODED
6/23/2009	7377L9	146A75036	ZONE 100
OUT OF LIMITS CORROSION ON THE TOP SURFACE OF THE AFT PIT RAIL ASSY AT BS 791.5 RBL 8.1.			
2009FA0000569	BOEING	FRAME	CRACKED
6/24/2009	7377L9	146A11433	ZONE 200
FUSELAGE FRAME CRACKED AT A/C ATTACH BRACKET AT BS 867 STRINGER 9 LT.			
2009FA0000577	BOEING	SUPPORT	CORRODED
6/25/2009	7377L9	147A57101	ZONE 200
OUT OF LIMITS CORROSION ON LT AFT SHEAR WEB SUPPORT BS 1005, WL 208.1, LBL 36.			
2009FA0000533	BOEING	FRAME	CRACKED
6/21/2009	7377L9	146A11311	ZONE 200
FUSELAGE FRAME CRACKED AT A/C ATTACH BRACKET BS 747 ABOVE STRINGER 9L.			
2009FA0000575	BOEING	FRAME	CRACKED
6/25/2009	7377L9	143A11131	ZONE 200

FUSELAGE FRAME CRACKED AT A/C ATTACH BRACKET AT BS440 STRINGER 9 LT.

2009FA0000576	BOEING	FLOOR PANEL	CORRODED
6/25/2009	7377L9	453A26002	ZONE 100

OUT OF LIMITS CORROSION ON AFT PIT CTR FLOOR PANEL TOP SURFACE. PANEL IS LISTED PRIMARY STRUCTURE IAW SRM 51-00-04.

2009FA0000537	BOEING	FRAME	CRACKED
6/21/2009	7377L9	143A11212	ZONE 200

FUSELAGE FRAME CRACKED AT A/C ATTACH BRACKET BS 500A, STRINGER 9R.

2009FA0000538	BOEING	FRAME	CRACKED
6/21/2009	7377L9	143A11103	ZONE 200

FUSELAGE FRAME CRACKED AT A/C ATTACH BRACKET BS 360 STRINGER 9R.

2009FA0000529	BOEING	INTERCOSTAL	CORRODED
6/21/2009	7377L9	147A56602	BS 960

OUT OF LIMITS CORROSION ON FLOOR SUPPORT AT R2 DOOR THRESHOLD BS 960 WL207 RBL 52.

2009FA0000541	BOEING	FRAME	CRACKED
6/21/2009	7377L9	146A11311	ZONE 200

FRAME CRACKED AT A/C ATTACH BRACKET, BS 747, STRINGER 9R.

2009FA0000542	BOEING	FRAME	CRACKED
6/21/2009	7377L9	146A11111	ZONE 200

FUSELAGE FRAME CRACKED AT A/C ATTACH BRACKET BS 727D, STRINGER 9L.

2009FA0000543	BOEING	FRAME	CRACKED
6/21/2009	7377L9	146A11331	ZONE 200

FUSELAGE FRAME CRACKED AT A/C ATTACH BRACKET, BS787, STRINGER 9L.

2009FA0000539	BOEING	FRAME	CRACKED
6/21/2009	7377L9	146A11021	ZONE 200

FUSELAGE FRAME CRACKED AT A/C ATTACH BRACKET BS 727B STRINGER 9R.

2009FA0000540	BOEING	FRAME	CRACKED
6/21/2009	7377L9	146A11111	BS 727D S9R

FUSELAGE FRAME CRACKED AT A/C ATTACH BRACKET BS 727D STRINGER 9R.

2009FA0000591	BOEING	WEB	CORRODED
6/30/2009	7377L9	147A57123	ZONE 100

OUT OF LIMITS CORROSION ON WEB AT BS 986.5 RBL 32

2009FA0000604	BOEING	FRAME SPLICE	CORRODED
7/2/2009	7377L9	147A11008	ZONE 100

OUT OF LIMITS CORROSION ON FRAME SPLICE BS 986.5 BETWEEN STRINGERS 24 - 25 RT.

2009FA0000530	BOEING	FLOORBEAM	CORRODED
6/21/2009	7377L9	147A56766	ZONE 200

OUT OF LIMITS CORROSION ON FLOOR SUPPORT AT BS 955 WL 207 RBL 29-36.

2009FA0000531	BOEING	FLOORBEAM	CORRODED
6/21/2009	7377L9	147A5504	ZONE 200
OUT OF LIMITS CORROSION ON CABIN FLOORBEAM BS 947.5 WL208.1 LBL 10- RBL 10.			
2009FA0000532	BOEING	FRAME	CRACKED
6/21/2009	7377L9	143A11114	ZONE 200
FUSELAGE FRAME CRACKED AT A/C ATTACH BRACKET BS 400 ABOVE STRINGER 9R.			
2009FA0000534	BOEING	FRAME	CRACKED
6/21/2009	7377L9	143A11103	ZONE 200
FUSELAGE FRAME CRACKED AT A/C ATTACH BRACKET BS 360 STRINGER 9L.			
2009FA0000535	BOEING	FRAME	CRACKED
6/21/2009	7377L9	146A11433	ZONE 200
FUSELAGE FRAME CRACKED AT A/C ATTACH BRACKET, BS 867, STRINGER 9R.			
2009FA0000536	BOEING	FRAME	CRACKED
6/21/2009	7377L9	143A11114	ZONE 200
FUSELAGE FRAME CRACKED AT A/C ATTACH BRACKET BS 400 STRINGER 9L			
2009FA0000603	BOEING	LAMP	BURNED OUT
7/2/2009	7572Q8	1317	EMERGENCY LIGHT
EMERGENCY AISLE LIGHT AT SEAT ROW 3 RIGHT FAILED TO ILLUMINATE.			
2009FA0000629	BOEING	SKIN	DEBONDED
7/16/2009	7572Q8	113N200347	LT WING TE FLAP
DISBOND ON T/E OF LT INBD MAIN FLAP AT FLAP STA 237.88 TO 224.63.			
AALA20090703ORD01	BOEING	IDG	FAILED
7/2/2009	767323		NR 1 ENGINE
ORD - INFLIGHT DFW-LHR. LEFT ENGINE GENERATOR FAILED. EMERGENCY DECLARED, LANDED ORD WITHOUT INCIDENT. AIRCRAFT REMOVED FROM SERVICE. REMOVED AND REPLACED INTEGRATED DRIVE GENERATOR. SYSTEM GROUND CHECK NORMAL OPERATION.			
2009FA0000598	CESSNA	CONTROL CABLE	FRAYED
7/1/2009	172S	0510105360	AILERON
DURING A ROUTINE INSP, THE AILERON CABLE PN-051105-360 WAS FOUND WORN WITH BROKEN STRANDS AT THE PULLEY CLUSTER IN THE CTR CEILING AT FS-65.33.			
2009FA0000528	CESSNA	CONTROL CABLE	WORN
6/19/2009	172S	0510105308	ELEVATOR
DURING AN INSP, THE ELEVATOR CABLE WAS FOUND WORN WHERE IT PASSES THROUGH FS 65.33 AS WELL AS 124.00 (A FAIRLEAD). THE CABLE WAS SHINY AND HAD MANY STRANDS WORN, CABLE (PN 0510105-308).			
2009FA0000524	CESSNA	CONTROL CABLE	FRAYED
6/16/2009	172S	0510105360	AILERONS
DURING AN ANNUAL INSP, MECHANIC FOUND A WORN AILERON CONTROL CABLE PN-0510105-360 AT THE PULLEY			

CLUSTER (PULLEY PN S378-4) IN THE CENTER OVERHEAD CEILING AREA. THE CABLE MUST BE ROTATED SO ACCESS CAN BE GAINED WHERE THE CABLE REST ON THE PULLEY AT THE SIX O'CLOCK POSITION. THE CABLE WEAR IS NOT EASY TO SEE AND A STRONG MAGNIFYING DEVICE MUST BE USED.

2009FA0000523	CESSNA		CONTROL CABLE	FRAYED
6/16/2009	172S		0510105365	AILERONS

DURING AN ANNUAL INSP, MECHANIC FOUND A WORN AILERON CONTROL CABLE PN-0510105-365 AT THE PULLEY CLUSTER (PULLEY PN S378-4) IN THE CTR OVERHEAD CEILING AREA. THE CABLE MUST BE ROTATED SO ACCESS CAN BE GAINED WHERE THE CABLE REST ON THE PULLEY AT THE SIX O'CLOCK POSITION. THE CABLE WEAR IS NOT EASY TO SEE AND A STRONG MAGNIFYING DEVICE MUST BE USED.

2009FA0000522	CESSNA	LYC	CONTROL CABLE	FRAYED
6/16/2009	172S	IO360L2A	0510105364	ZONE 200

DURING AN ANNUAL INSP, MECHANIC FOUND A WORN AILERON CONTROL CABLE, PN-0510105-364, AT THE PULLEY CLUSTER (PULLEY PN S378-4) IN THE CTR OVERHEAD CEILING AREA. CABLE MUST BE ROTATED SO ACCESS CAN BE GAINED WHERE CABLE REST ON THE PULLEY AT THE SIX O'CLOCK POSITION. THE CABLE WEAR IS NOT EASY TO SEE AND A STRONG MAGNIFYING DEVICE MUST BE USED.

2009FA0000610	CESSNA	LYC	STARTER	DAMAGED
7/7/2009	172S	IO360L2A	149NL	ENGINE

ENGINE FAILED TO TURN OVER. FOUND THAT STARTER WAS INOPERATIVE. REMOVED STARTER AND FOUND THAT THE THROUGH BOLTS RUNNING ALONG SIDE OF STARTER, THAT HOLD THE STARTER TOGETHER, WERE BENT. THIS STARTER ONLY HAD 17.2 HOURS SINCE IT WAS REPLACED.

2009FA0000590	CESSNA	LYC	STARTER	INOPERATIVE
6/29/2009	172S	IO360L2A	149NL	

THE ACFT FAILED TO START. UPON INSP, FOUND THE REAR STARTER HSG HAD TWISTED IN RELATION TO THE FRONT HALF OF THE ASSEMBLY. WE'VE SEEN THIS HAPPEN BEFORE AND IT IS POSSIBLE FOR THE POWER WIRE TO BREAK AND SHORT AGAINST THE STARTER HSG IF THE MOTOR HOUSING TWISTS FAR ENOUGH. THIS DID NOT HAPPEN IN THIS CASE BUT THE WIRE DID HAVE TENSION ON IT. CONTACTED THE OPERATOR AND LEARNED THE STARTER WE INSTALLED (S/N FN-160915) HAD FAILED A SHORT TIME LATER AND THAT THEY ALSO HAD ANOTHER ACFT EXPERIENCE THE SAME FAILURE.

2009FA0000617	CESSNA	LYC	STARTER	DAMAGED
7/8/2009	172S	IO360L2A	149NL	ENGINE

STARTER WOULD NOT TURN OVER. INVESTIGATED PROBLEM AND FOUND THAT BACK OF STARTER HAD TWISTED AND CASING HAD CRACKED. THIS HAS BEEN THE THIRD STARTER ON THIS ACFT THAT HAS BEEN REPLACED IN THE LAST 7 HOURS OF OPERATION AND ALL STARTERS HAD SIMILAR DISCREPENCIES TO REAR CASING. HAVE BEEN USING THESE STARTERS FOR A LONG TIME AND HAVE NOT ENCOUNTERED THESE PROBLEMS BEFORE. DO NOT KNOW WHAT IS CAUSING IT.

2009FA0000599	CESSNA	LYC	CONTROL CABLE	FRAYED
7/1/2009	172S	IO360L2A	0510105365	AILERONS

DURING A ROUTINE INSP, AILERON CABLE PN-051105-365 WAS FOUND WORN WITH BROKEN STRANDS AT THE PULLEY CLUSTER IN THE CENTER CEILING AT FS-65.33.

2009FA0000600	CESSNA	LYC	CONTROL CABLE	FRAYED
7/1/2009	172S	IO360L2A	0510105360	AILERONS

DURING A ROUTINE INSP, THE AILERON CABLE PN-051105-360 WAS FOUND WORN WITH BROKEN STRANDS AT THE PULLEY CLUSTER IN THE CENTER CEILING AT FS-65.33.

2009FA0000513	CESSNA	LYC	LYC	EXHAUST VALVE	STUCK
6/2/2009	182T	IO540AB1A5		LW19001	ENGINE CYLINDER
NR 6 CYLINDER EXHAUST VALVE STUCK DURING TAKEOFF CLIMB. PILOT NOTED A SEVERE VIBRATION WHEN POWER WAS REDUCED AS HE LEVELED OFF. PILOT IMMEDIATELY RETURNED TO THE AIRPORT AND LANDED. VISUAL INSP REVEALED THAT THE NR 6 CYL EXHAUST VALVE HAD STUCK. PUSH ROD AND PUSH ROD TUBE DAMAGED AND CONDEMNED. THE MEASUREMENT FOR THIS EXHAUST VALVE GUIDE CLEARANCE WAS .019 INCH AT THAT TIME. THIS IS WELL WITHIN THE ACCEPTABLE LIMITS FOR THIS ENGINE (.015 INCH TO .030 INCH). THIS CYLINDER HAD THE FOLLOWING MEASUREMENTS SINCE NEW: 200 HRS = .019 INCH, 400 HRS = .0175 INCH, 600 HRS = .018 INCH, 800 HRS = .019 INCH, 1000 HRS = .019 INCH, 1200 HRS = .019 INCH, 1400 HRS = .019 INCH. THIS EXHAUST VALVE EXHIBITED NO TREND OF GETTING WORSE BEFORE IT STUCK.					
2009FA0000514	CESSNA	LYC		EXHAUST VALVE	STUCK
6/12/2009	182T	IO540AB1A5		LW19001	NR 4 CYLINDER
DURING COMPLIANCE OF SB 388C, 3 EXHAUST VALVE GUIDES FAILED TO HAVE SERVICEABLE MEASUREMENTS. NR 4 CYL EXHAUST VALVE STUCK FULLY CLOSED. VALVE MOVEABLE WITH MINIMAL PRESSURE, NO DAMAGE TO OTHER COMPONENTS. NR 6 CYL EXHAUST VALVE GUIDE CLEARANCE MEASURED .0315 INCH (ACCEPTABLE RANGE IS .015 INCH TO .030 INCH). CYL WAS REMOVED, REPAIRED AS NECESSARY, AND THEN REINSTALLED. THIS ENGINE HAS HAD SB 388C PERFORMED ON IT AT THE FOLLOWING TOTAL HOURS, 202.5, 602.7, 802.2, 948.9, 1057.4, 1078.0, 1092.6, 1245.6, 1451.1, 1650.1, AND 1799.9. NR 3 AND NR 4 CYL EXHAUST VALVE GUIDES HAD FAILED TO MEET MINIMUM TOLERANCE AND HAD BEEN REAMED AT LEAST ONCE PREVIOUSLY.					
2009FA0000601	CESSNA	CONT		BRACKET	FATIGUED
5/31/2009	188ACCESSNA	TSIO520T		07122181AGW	ZONE 700
LANDING GEAR BRACKET ASSY FAILED ON TAKEOFF DUE TO METAL FATIGUE, CAUSING ABORTED TAKEOFF, SUBSTANTIAL DAMAGE TO THE ACFT. DATA DERIVED FROM FAA FORM 8020-23 DATED 05/31/09 WITH NTSB ID: WPR09LA281.					
2009FA0000572	CESSNA			CABLE	BROKEN
6/10/2009	210N			505530401	NLG
MFG SERVICE KIT PN SK210-174 CABLE ASSY BROKEN AT THREADED END. (K)					
2009FA0000544	CESSNA		JANITROL	COMBUST CHAMBER	WRONG PART
6/22/2009	310L		B3040	A07D70	HEATER
HEATER (PN 96C62, SN 9660906) RECEIVED FOR OVERHAUL. HEATER WAS PREVIOUSLY OVERHAULED AND HAS THE REPAIR STATION DATA PLATE. UPON INSP, HEATER HAS WRONG COMBUSTION TUBE INSTALLED. WRONG COMBUSTION TUBE REQUIRED COMBUSTION HEAD THAT IS NOT CALLED FOR IN THE 96C62 PARTS LIST. HEATER HAS FAA/PMA (PLASTIC) DIFFERENTIAL AIR PRESSURE SWITCH THAT WAS FOUND BROKEN WHEN RECEIVED. HEATER FAILED PRESSURE DECAY TEST REQUIRED BY AD 2004-21-05.					
2009FA0000545	CESSNA		JANITROL	COMBUST CHAMBER	WRONG PART
6/22/2009	310L		B3040	A07D70	HEATER
HEATER (PN 96C62, SN 9660906) RECEIVED FOR OVERHAUL. HEATER WAS PREVIOUSLY OVERHAULED AND HAS A REPAIR STATION DATA PLATE. UPON INSPECTION, HEATER HAS WRONG COMBUSTION TUBE INSTALLED. WRONG COMBUSTION TUBE REQUIRED COMBUSTION HEAD THAT IS NOT CALLED FOR IN THE 96C62 PARTS LIST. HEATER HAS FAA/PMA (PLASTIC) DIFFERENTIAL AIR PRESSURE SWITCH THAT WAS FOUND BROKEN WHEN RECEIVED. HEATER FAILED PRESSURE DECAY TEST REQUIRED BY AD 2004-21-05.					
2009FA0000579	CESSNA			WHEEL HALF	CRACKED
6/25/2009	402B			16201700	ZONE 700
WHILE REMOVING LT MAIN WHEEL ASSY THE MECHANIC NOTICED THE INNER WHEEL HALF WAS SPLIT (CRACKED) APPROX 4-5 INCHES ON EACH SIDE OF THE VALVE STEM HOLE. THE OUTER WHEEL HALF APPEARED OK UPON INSP BUT AS A PRECAUTION BOTH WHEEL HALVES WERE REPLACED.					

2009FA0000552	CESSNA		MOUNT	CORRODED
6/23/2009	425		59221456	RIGHT
RT LWR OTBD ENGINE MOUNT WING FITTING IS CORRODED- INSTALL SERVICEABLE PART.				
2009FA0000553	CESSNA	CESSNA	COUPLING	DETERIORATED
6/23/2009	425		99104651	AUX FUEL CELL
LT AND RT NACELLE TO WING FUEL COUPLINGS ARE DETERIORATED, INSTALLED NEW COUPLINGS.				
2009FA0000546	CESSNA		SPAR CAP	DAMAGED
6/23/2009	425		592210630	ZONE 600
RT WING FWD SPAR CAP HAS A DOUBLE HOLE UNDER THE INBD ENGINE MOUNT SUPPORT. SUSPECT MIS-DRILLED DURING PRODUCTION. ENGINEERING DISPOSITION OBTAINED FOR REPAIR OF ELONGATED HOLE AREA.				
2009FA0000555	CESSNA		CABLE	FRAYED
6/23/2009	425		500000861CR	LT WING TE FLAP
LT UPPER FLAP CABLE HAS SEVERAL BROKEN STRANDS. INSTALLED NEW CABLE PN 5000008-61CR.				
2009FA0000556	CESSNA		CABLE	FRAYED
6/23/2009	425		500000894CR	RT WING AILERON
RT WING UPPER AILERON CABLE HAS BROKEN STRANDS. INSTALLED NEW CABLE PN 5000008-94CR.				
2009FA0000557	CESSNA		ATTACH FITTING	CORRODED
6/23/2009	425		082255025	ZONE 100
LT LWR FWD WING FITTING IS CORRODED AND HAS OBLONG HOLE - REPLACE FITTING WITH NEW PART.				
2009F00053	CESSNA	WILINT	BRAKE ASSY	DESTROYED
7/12/2009	501	FJ442A		ZONE 700
NORMAL BRAKE PRESSURE APPLIED TO BRAKE AFTER LANDING, ACFT VEERED TO THE RT DUE TO RT BRAKE LOCKING UP. ACFT WOULD NOT MOVE/TAXI UNDER ITS OWN POWER, TUG REQUIRED. ACFT LANDING WEIGHT WAS APPROX 9600 LBS. ACFT WAS AT SLOW TAXI SPEED 3-5 MPH WHEN EVENT OCCURRED.				
2009FA0000586	CESSNA		TRANSPONDER	MALFUNCTIONED
6/26/2009	550		0110049010	INSTRUMENT PANEL
BOTH TRANSPONDERS LOSE ALTITUDE INPUT FOR 1 MINUTE WHEN SWITCHING BETWEEN ADC 1 AND ADC 2. MFG TECH SUPPORT STATED THEY ENGINEERED A 1 MINUTE DELAY IN ALTITUDE REPORTING AFTER RECEIVING A VALID ALTITUDE AND INCORPORATED THE DELAY IN A SOFTWARE REVISION BEFORE THE 2.09 REVISION. THE MFG TECH DID NOT KNOW THE EXACT SOFTWARE REVISION IT WAS INCORPORATED ON.				
2009FA0000596	CESSNA	GARRTT	ACTUATOR	FAILED
7/1/2009	650	TFE731*	99140563	ZONE 300
ON APPROACH TO LANDING GOT A PRIMARY PITCH TRIM FAILURE LIGHT, SWITCHED TO SECONDARY PITCH TRIM NO STAB MOVEMENT. RUN CHECKLIST STILL NO STAB MOVEMENT IN PRIMARY OR SECONDARY MODE. REENGAGED AUTO PILOT PRIMARY PITCH TRIM WORKED FOR A MOMENT THEN FAILED AGAIN. TURNED AUTO PILOT OFF HELD PRIMARY PITCH TRIM IN NOSE UP FOR ABOUT THIRTY SECONDS TILL IT STARTED TO MOVE, TRIMMED ACFT TO LANDING CONFIGURATION. LANDED WITHOUT FUTHER INCIDENT. PERFORMED PRIMARY TRIM ACTUATOR MOTOR BRAKE TORQUE FUNCTIONAL CHECK AND FOUND IT TOOK MORE THAN 25 INCH POUNDS OF TORQUE TO MOVE THE ACTUATOR. 25 INCH LBS IS THE MAXIUM TORQUE IAW MM.				
2009FA0000628	CESSNA		BOLT	BROKEN
7/15/2009	T188C		NAS15288	ZONE 700
DURING LANDING, THE MLG BOLT FAILED. INVESTIGATION INDICATES THE CHAMFERED WASHER MS2002C12 WAS				

INSTALLED INCORRECTLY. BOLT TIME IN SERVICE IS UNKNOWN.

2009FA0000521	CESSNA	CONT	CYLINDER HEAD	CRACKED
3/26/2009	U206G	IO520*	110703	ENGINE

STUDENT PILOT AND INSTRUCTOR HAD TAKEN OFF FROM A SMALL UNTOWERED AIRSTRIP NEAR A LAKE WHEN THE ENGINE BEGAN TO VIBRATE STRONGLY. THEY ELECTED TO RETURN TO AIRSTRIP THEY HAD JUST DEPARTED FROM AND LANDED WITHOUT FURTHER INCIDENT NOTING THAT VIBRATION DECREASED WHEN THEY PULLED BACK ON THE THROTTLE. ONCE ON GROUND, MX PERSONNEL WERE SENT TO INVESTIGATE, THEY DISCOVERED CRACKED HEAD AND CHANGED THE CYL. IN CONSULTATION WITH MFG ABOUT PROBLEM THEY REFERENCED THEIR SB 06-2 WHICH AT FIRST DID NOT SEEM TO APPLY AS ORIGINAL CYL WAS A REBUILT FREEDOM CYL WITH AN ASSY NR OF FRCN71.2 SB 06-2 STATES IN PARA 3 THAT MODELS AFFECTED ARE NEW CYLINDERS WITH ASSY NR AEC631397. ON FURTHER INVESTIGATION WE NOTED THAT IN PARA 4 (E) THE HEAD CASTING NR WAS INDICATED, AND IT WAS THE SAME AS THE ORIGINAL CYL. SB06-2 INDICATES THE FIRST INSP FOR SUCH CRACKS SHOULD BEGIN AT 500 HOURS ITS OUR CYL FAILED AT 267.2 HOURS TIS. WERE NOT INSPECTING OUR CYLINDERS WITH SB AS WITH OUT REMOVING ROCKER BOX COVER IT WOULD NOT HAVE BEEN REASONABLE TO THINK THAT THIS CYLINDER WAS AFFECTED BY THE SB. EVEN IF WE HAD KNOWN THE CASTING WAS AFFECTED THE SB TELLS US TO BEGIN INSP AT 500 HOURS. (K)

QY5R1	DHAV		WINDOW	DEPARTED
6/2/2009	DHC6300		C3FS5152	CABIN DOOR

RT REAR CABIN DOOR WINDOW (PN C3FS515-2) FELL OUT IN FLIGHT. BOTH WINDOW AND SEAL PN C3FS515-3 WERE MISSING WHEN PLANE LANDED. THIS HAPPENED WHEN THE PLANE WAS ON APPROACH TO LAND WITH 40 DEGREES FLAPS AT 80 KNOTS, DAY VFR AT 600 FT AGL. A NEW WINDOW AND SEAL WERE PURCHASED AND INSTALLED WITH NEW PARTS WHICH INCLUDED A P/N C3FS515-5 ONE PIECE SEAL. MECHANIC NOTED WHEN INSTALLING THE NEW PARTS THAT THE WINDOW TRIM WAS MAKING CONTACT WITH THE WINDOW AND CAUSING A SLIGHT OUTWARD PRESSURE THAT MAY HAVE CONTRIBUTED TO PUSHING THE WINDOW OUT. THE MECHANIC TRIMMED BACK THE WINDOW TRIM PIECE TO PREVENT ANY CONTACT. IT IS RECOMMENDED THAT THIS WINDOW BE CHECKED FOR SEAL INTEGRITY AND ANY UPHOLSTERY TRIM BE CHECK FOR CONTACT OR INTERFERENCE WITH THE WINDOW. EXTRA ATTENTION ON PREFLIGHT INSP IS ALSO RECOMMENDED.

2009FA0000570	DHAV		WINDOW	MISSING
6/10/2009	DHC6300		C3FS5152	RT CABIN DOOR

TWIN OTTER, RT REAR DOOR WINDOW FELL OUT IN FLIGHT. PN C3FS515-2. BOTH THE WINDOW AND SEAL WERE MISSING WHEN PLANE LANDED. THE SEAL WAS PN C3FS515-3 AND FILLER PN C3FS515-4. MFG NOW SELLS A NEW AND IMPROVED SEAL PN C3FS 515-5. IT IS RECOMMENDED THIS WINDOW IS CHECKED CAREFULLY AT EVERY PREFLIGHT. (K)

2009FA0000622	DOUG	CONT	CRANKSHAFT	SHEARED
6/11/2009	DC3C	C8512F	530196	ENGINE

CRANKSHAFT SHEARED WHILE IN FLIGHT.

DU4R2009374	DOUG		TRACK	CORRODED
6/13/2009	DC982			CARGO BAY

DURING SCHEDULED INSPECTION, FOUND RT FWD TRANSITION TRACK HAD CORROSION FROM FS 1079 TO FS 1155 (AROUND NUT PLATE HOLES, INSIDE TRACK AND STEP DOWN ANGLE ATTACHED TO AFT END OF TRACK).

DU4R2009375	DOUG		TRACK	CORRODED
6/23/2009	DC982			BS 1007-1212

DURING SCHEDULED INSPECTION, FOUND LT FWD TRANSITION TRACK HAD CORROSION FROM FS 1007 TO FS 1212 (AROUND NUT PLATE HOLES, AND AT ATTACH POINTS).

DU4R2009377	DOUG		SKIN	DENTED
6/11/2009	DC982			BS 120 L23L

DURING SCHEDULED INSP, FOUND PREVIOUSLY REPORTED AT FS 120, L-23L OUT OF LIMITS IAW SRM 53-04 FIG.

38, SHT. 13, CONDITION 3, D/X = 2.94 AND .720 INCH FROM INTERNAL STRUCTURE.

DU4R2009378	DOUG		SKIN	DENTED
6/9/2009	DC982			BS 246

DURING SCHEDULED INSP, FOUND PREVIOUSLY REPORTED DENT AT FS 246.5, L-22R - L-23R IS CREASED, OUT OF LIMITS IAW SRM 53-04 FIG. 38, SHT. 13, CONDITION 3.

DU4R2009379	DOUG		SKIN	DENTED
6/25/2009	MD83			BS 674

DURING SCHEDULED INSP, FOUND EXISTING DENT RT FUSELAGE SKIN AT FS 674, L-29R - L-30 TO BE WITHIN 1 INCH OF RIVET CENTER LINE.

DU4R2009380	DOUG		SKIN	DENTED
6/25/2009	MD83			BS 632

DURING SCHEDULED INSP, FOUND EXISTING DENT RT FUSELAGE SKIN AT FS 632, L-28R - L-30 TO BE WITHIN 1 INCH OF RIVET CENTER LINE.

2009FA0000515	EMB	ALLSN	SEAL	FAILED
6/13/2009	EMB145LR	AE3007A		COCKPIT WINDOW

CAPT DV WINDOW BLEW SEAL AT 27,000 FT. EMERGENCY DECLARED AND EMERGENCY DESCENT WAS ESTABLISHED. ACFT WAS ABLE TO MAINTAIN PRESSURE THROUGHOUT DESCENT. ACFT WAS REMOVED FROM SERVICE. MEL 2118 SYS AND RETURNED BACK TO SERVICE.

AMCR200903	GULSTM		PETCOCK	LEAKING
7/20/2009	GULFSTREAMGV		969311	ZONE 900

WHILE CREW WAS READYING THE ACFT FOR DEPARTURE, APU AIR WAS SELECTED ON AND COFFEE MAKER'S WATER FILLER SPIGOT STARTED RUNNING AND OVERFILLING THE COFFEE POT. WATER STARTED RUNNING ONTO FLOOR BEFORE SYS WAS SHUTDOWN. THE SPIGOT HAS A SPRING LOADED PUSHBUTTON WHICH MUST BE PUSHED TO ALLOW WATER TO FLOW. BUTTON WAS AT REST BUT STILL FLOWED WATER AS SOON AS WATER SYS WAS PRESSURIZED. WATER SYS FOR GALLEY HAD TO BE SHUTOFF TO STOP FLOW OF WATER. THIS HAS HAPPENED SEVERAL TIMES IN THE LAST FEW YEARS ON OTHER AIRCRAFT IN WHICH SPIGOT REPLACEMENT CURED THE PROBLEM.

2009FA0000580	HILLER		BLADE	SEPARATED
11/4/2008	UH12E		362093	ROTOR HEAD

DURING CRUISE FLIGHT, 1 OR 2 CONTROL ROTOR BLADE ASSEMBLIES SEPARATED FROM ROTOR HEAD. ROTOR CONTROL BLADE ASSY TUBE BROKE OTBD OF 2 BOLTS ATTACHING IT TO CUFF ASSY. THIS CAUSED A VIOLENT VIBRATION AND MINIMAL CONTROL OF ACFT. LOWERED COLLECTIVE AND TRIED TO MANEUVER HELICOPTER TO A LANDING AREA BETWEEN 2 DRAINAGES. VIBRATION WAS SO VIOLENT THAT WAS UNABLE TO FOCUS ON THE INSTRUMENTS TO VERIFY WHETHER OR NOT WE WERE AUTOROTATING OR TO DETERMINE OUR AIRSPEED. PRIOR TO IMPACT, PULLED FULL COLLECTIVE PITCH. HELICOPTER LANDED ON THE LT SKID AND ROLLED ONTO THE LT SIDE WHERE IT CAME TO REST. LAST INSP WAS COMPLIANCE WITH AD 97-10-16 ON 9/20/08 IAW PARA A ON 9/20/08. 21 HOURS AGO. (K)

2009FA0000581	LEAR	PWA	PUMP	FAILED
6/9/2009	60LEAR	PW305A	86137	HYD SYSTEM

LT HYD PUMP FAILED IN FLIGHT. (K)

2009FA0000632	LET		SUPPORT FITTING	CRACKED
7/21/2009	L23SUPERBLAN			MLG

THIS AIRCRAFT WAS DISCOVERED WITH A CRACKED MLG WELDED SUPPORT FITTING AFTER A HARD LANDING.

2009FA0000589	MOONEY	CONT	STRUCTURE	BROKEN
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6/29/2009 M20 TSIO550G 654327 TURBOCHARGER
EXHAUST TURBO TRANSITION IS BROKEN ABOVE FLANGE THAT MOUNTS TO TURBOCHARGER. INNER WALL OF TRANSITION TUBE IS ALSO MISSING.

[5APR577Y9](#) PILATS PWA BFGOODRICH BRAKE DISC BROKEN
6/22/2009 PC1245 PT6A67B 244755 MLG BRAKE
DURING AN ANNUAL INSP, LT MAIN WHEEL ASSY WAS REMOVED TO REPACK THE WHEEL BEARINGS AND IT WAS DISCOVERED THAT THE OTBD BRAKE DISC ON THE LT BRAKE WAS CRACKED. THE BRAKE ASSY WAS REMOVED AND REPLACED.

[5APR577Y8](#) PILATS PWA MOTOR SHORTED
6/11/2009 PC1247 PT6A67B 9603002104 HYD SYSTEM
ON LANDING, MLG RETRACTION ON CLIMB OUT AFTER TAKEOFF, BUSS TIE BREAKER TRIPPED, MLG WOULD NOT RETRACT. PILOT FOLLOWED APPROPRIATE CHECKLIST, PLACED MLG BACK IN DOWN POSITION AND LANDED UNEVENTFULLY. MX INVESTIGATED THE MALFUNCTION AND REMOVED LT WING TO FUSELAGE UPPER FAIRING TO ACCESS HYD MOTOR. MOTOR REMOVED AND IT WAS DETERMINED THAT THE SHAFT WOULD NOT ROTATE. MOTOR ALSO SHORTED, THERE WAS LESS THAN ONE OHM OF RESISTANCE BETWEEN POSITIVE LEAD AND THE MOTOR CASE. COMPOSITE FAIRING WAS BURNED IN A 70 X 110 MILLIMETER DIAMETER SECTION, FROM EXCESSIVE HEAT GENERATED DUE TO EXCESSIVE CURRENT DRAW THROUGH HYD MOTOR SOFT START RESISTOR. HYD MOTOR WAS REPLACED IAW MM AND FAIRING WAS REPAIRED IAW THE SRM.

[W59R6816](#) PIPER LYC BLADE CRACKED
7/15/2009 PA24400 IO720* V84337 PROPELLER
PROPELLER SUBMITTED FOR INSPECTION IAW AD 97-18-02R1. BLADE SN A70190 FOUND CRACKED APPROX 3 INCH LONG IN V GROOVE OF BLADE SHANK. BLADE SN A70477 FOUND CRACKED USING EDDY CURRENT APPROX .5 INCH LONG IN V GROOVE. BOTH CRACKS ARE IN SUBJECT AREA OF AD. TIME SINCE LAST AD 97-18-02 INSPECTION 89.0 HRS ACCOMPLISHED SEPTEMBER 11, 2005.

[2009FA0000624](#) PIPER LYC WIRE HARNESS BROKEN
6/26/2009 PA28R201 IO360C1C6 ZONE 700
AFTER GEAR EXTENSION, RT MLG DOWN LIGHT FAILED TO LIGHT. PROBLEM FOUND IN WIRING HARNESS AT RT MLG DOWNLOCK SWITCH. WIRE INSIDE THE CASTING AT THE WIRING HARNESS WAS BROKEN.

[2009FA0000625](#) PIPER LYC WIRE HARNESS BROKEN
5/6/2009 PA32R301T TIO540* ZONE 900
AFTER GEAR EXTENSION, LF MLG DOWN LIGHT FAILED TO LIGHT. PROBLEM FOUND IN WIRING HARNESS AT LF MLG DOWNLOCK SWITCH. WIRE INSIDE THE CASING AT THE WIRING HARNESS WAS BROKEN.

[2009FA0000613](#) PIPER LYC MOUNT BROKEN
7/7/2009 PA32R301T TIO540S1AD 38729018 NLG
UPON REMOVAL OF THE ENGINE FOR OVERHAUL, DISCOVERED THAT THE NOSE GEAR DRAG LINK ATTACH POINT WAS BROKEN. DISCOVERED THAT THE LWR RT ENGINE MOUNT MOUNTING BOLT WAS BENT. AFTER RESEARCHING THE LOG BOOKS, FOUND THAT SB 955 PATS I, II, AND III WHERE COMPLIED WITH ON 7 APR 1992. THE ENGINE MOUNT WAS REPAIRED AT 2935 HOURS. THERE IS NOW 5118.5 HOURS ON IT NOW.

[2009FA0000652](#) PIPER BLADE CRACKED
7/24/2009 PA44180 HCC2YR2CEUF LT PROPELLER
DURING ROUTINE INSPECTION A NICK (SUSPECT ROCK OR RUNWAY DEBRIS) WAS FOUND IN THE FACE OF ONE BLADE ON THE LEFT PROP, 3.25" IN FROM THE TIP. AFTER MINOR DRESSING IT WAS DISCOVERED TO HAVE THREE PITS IN THE BOTTOM OF THE NICK. THE THIRD PIT BACK FROM THE LEADING EDGE WAS FOUND TO HAVE A CRACK IN IT. THE CRACK WAS DISCOVERED FROM A DIGITAL PICTURE THAT WAS ENLARGED (PICTURES ATTACHED). EVEN WITH A SMALL MAGNIFYING GLASS AND A STRONG LIGHT THE CRACK DID NOT SHOW UP VERY WELL.

2009FA0000627	PIPER	LYC	STARTER	FAILED
7/14/2009	PA46350P	TIO540AE2A	149NL	

THE STARTER (P/N 149-NL) FAILED TO OPERATE. UPON INSPECTION FOUND THE MOTOR ASSY IS TWISTED ON THE FWD FRAME OF THE STARTER ASSY. THIS IS THE 4TH STARTER REPLACED SINCE APRIL 2009 ON THIS ACFT FOR THE SAME PROBLEM. THERE IS ONLY ONE PILOT FOR THIS AIRPLANE AND VERIFIED HE DOES FOLLOW PROPER STARTING PROCEDURES.

2009FA0000588	PIPER	LYC	STARTER	FAILED
6/29/2009	PA46350P	TIO540AE2A	149NL	

A NEW STARTER WAS INSTALLED AND AFTER JUST A FEW FLIGHTS THE STARTER FAILED TO OPERATE. AFTER REMOVAL OF THE STARTER, FOUND THE REAR HSG OF THE STARTER (WHICH CONTAINS THE MOTOR) HAD TWISTED IN RELATION TO THE FRONT HALF OF THE STARTER. THIS TWISTING ALSO CAUSED THE POWER WIRE TO BREAK AND SHORTED AGAINST THE HOUSING CAUSING BURN MARKS. INSTALLED A NEW STARTER OF THE SAME TYPE AND PN AND IT FAILED AFTER THE NEXT FLIGHT, 1.5 HOURS, STRANDING THE PILOT AT A DIFFERENT AIRPORT. AFTER TALKING TO THE MECHANIC WHO CHANGED THE SECOND STARTER (SN FN-160992), DISCOVERED THE SAME PROBLEM HAD OCCURRED AND THAT THE REAR HSG TWISTED UPON FAILURE.

2009FA0000525	RAYTHN		ACTUATOR	INTERMITTENT
6/17/2009	400ARAYTHEON		45AS61014107	ZONE 500

FLIGHT CREW REPORTED LT ROLL TRIM PANEL INTERMITTENTLY NOT OPERATING. CONFIRMED PILOT SQUAWK, FOUND ACTUATOR INTERMITTENTLY NOT RUNNING WITH EITHER DUAL OR SINGLE SOURCE SELECTED. VERIFIED POWER INPUTS TO ACTUATOR CONNECTOR NORMAL. REPLACED ACTUATOR WITH OVERHAULED ACTUATOR, OPERATIONS NORMAL, NO FAULTS NOTED WITH ROLL TRIM OPERATION. SUSPECT ACTUATOR HAS INTERNAL INTERMITTENT ELECTRICAL CIRCUIT OR COMPONENT FAILURE. FAILED ACTUATOR PN: 45AS61014-107

2009FA0000612	REMOS	ROTAX	BRACKET	CRACKED
7/7/2009	REMOSG3600	ROTAX912JLS	102302	ZONE 700

OPERATOR COMPLAINED THAT THE ACFT WAS VIBRATING WHILE TAXING. MECHANIC DISCOVER THE MAIN LANDING GEAR STRUT BRACKET ASSY WAS CRACKED BETWEEN THE LIGHTNING HOLES.

EVGR20090623	ROBSIN	LYC	CONT	CAM	WORN
6/19/2009	R44RAVENII	IO540AE1A5		10885435	MAGNETO

CUSTOMER REPORTED AN EXCESSIVE MAG DROP (UPWARDS OF 10 PERCENT) AND HARD STARTING. BROUGHT IN LT MAG, IT WAS HARD TO TIME. COULDN'T MAKE THE POINTS TIME, AND THEY WERE SOMEWHAT PITTED, CHANGED THEM. STILL COULDN'T TIME THEM, AS THEY WENT FROM -10 TO +22 FOR POINT OPENING. FOUND THAT THE CAM SCREW HAD COME LOOSE. IT HAPPENED LONG ENOUGH AGO THAT THE KEYWAY ON THE CAM (PN 10-88543-5) HAD WORN ABOUT HALF THROUGH, WHICH WAS WHY THE CAM COULD ROCK ON THE SHAFT AND CHANGE THE TIMING "AT WILL". THIS MAG HAD ONLY 434.2 HOURS SINCE NEW, AND HAD NOT BEEN APART. THE SCREW (PN 10-391213) HAD EVIDENCE OF THE FACTORY LOCTITE, AND DIDN'T LOOK DEFORMED IN ANY WAY. THE TOP OF THE WASHER (PN 10-51354) HAD A FUNNY WEAR PATTERN, BUT IT WASN'T THE SAME AS MOVING AROUND UNDER THE SCREW. NONE OF OUR SHOP PERSONNEL HAS EVER HAD A CAM SCREW COME LOOSE. THE SHAFT LOOKED OKAY, AND THE NEW SCREW TORQUED UP TO 25 IN. LBS. JUST FINE. THE MAGS ARE DUE FOR THE 500 HOUR INSPECTION AT THE NEXT 100 HOUR INSPECTION, AND WE'LL HAVE ANOTHER LOOK AT THEM.

2009FA0000519	SNIAS	TMECA	ELT	FAILED
6/4/2009	AS350B	ARRIEL1B	E01	CABIN

ELT MALFUNCTIONED IN FLIGHT. UPON RETURN TO BASE, WE RESET THE UNIT, PERFORMED A FUNCTION CHECK. WE TOOK THE AIRCRAFT FOR A FLIGHT AND IT FAILED IN FLIGHT AGAIN. WE REJECTED THE UNIT AND INSTALLED A SERVICEABLE UNIT. (K)

2009FA0000607	SNIAS	TMECA	STARFLEX	DEBONDED
7/2/2009	AS350B2	ARRIEL1D1	350A31191701	M/R HEAD

DURING A DAILY INSP, CRACKS NOTED ON MAIN ROTOR STARFLEX IN ADHESIVE BOND FILLET THAT BONDS

BUSHING ONTO STARFLEX ARM. NO INDICATION OF A BOND SEPARATION OR GAP BETWEEN BUSHING & STARFLEX. UTILIZING PROCEDURE FROM MM 62.20.00.601 PARA 7, TEST PERFORMED TO CHECK FOR BOND SEPARATION BETWEEN BUSHING AND STARFLEX ARM. WITH NO MOVEMENT OR DEBONDING NOTED TO BUSHING SLEEVE ASSY WAS THEN REMOVED TO FURTHER INSPECT THE BUSHING. BY GRIPPING BUSHING WITH THE HAND, IT COULD BE ROTATED ABOUT .0625 OF A TURN THUS CONFIRMING A DEBONDED BUSHING WHICH IS CAUSE FOR REPLACEMENT OF STARFLEX ASSY.

2009FA0000621	SNIAS	TMECA	STARFLEX	CHIPPED
7/9/2009	AS350B2	ARRIEL1D1	350A31191701	ROTOR HEAD

DURING A DAILY INSP CRACKS WERE NOTED ON THE MAIN ROTOR STARFLEX IN THE ADHESIVE BOND FILLET THAT BONDS BUSH ONTO STARFLEX ARM AND PIECES OF THE ADHESIVE FILLET WERE MISSING. THERE WAS NO INDICATION OF A BOND SEPARATION OR GAP BETWEEN BUSH AND STARFLEX. UTILIZING PROCEDURE FROM MM IN CHAPTER 62.20.00.601 PARAGRAPH 7A. TEST WAS PERFORMED BY APPLYING ROTOR BRAKE AND FLAPPING THE BLADE AND LEADING AND LAGGING THE BLADE TO CHECK FOR BOND SEPARATION BETWEEN BUSH AND STARFLEX ARM. WITH NO MOVEMENT OR DISBONDING NOTED TO BUSH THE SLEEVE ASSY WAS THEN REMOVED TO FURTHER INSPECT BUSH. BY GRIPPING BUSH WITH HAND IT COULD NOT BE ROTATED WHICH CONFIRMED THE BUSH WAS NOT DISDONDED. BUT IAW MM CHAPTER 62.20.00.601. THERE IS A CAUTION THAT READS PRESENCE OF A GAP EVEN IF NOT ASSOCIATED WITH A DISPLACEMENT OF THE BUSH UNDER LOAD OR IF A GAP IS ONLY LOCATED ON ONE PART OF THE CIRCUMFERENCE SHALL BE CONSIDERED AS A CAUSE FOR REMOVAL. LOCAL LOSS OF THE ADHESIVE JOINT IS INDICATIVE OF A BUSH DISPLACEMENT AND THEREFORE SHALL ALSO BE CONSIDERED AS A CAUSE FOR REMOVAL.

2009FA0000619	SNIAS	TMECA	STARFLEX	DEBONDED
6/29/2009	AS350B2	ARRIEL1D1	350A31191701	M/R HEAD

DURING A DAILY INSP, CRACKS WERE NOTED ON THE MAIN ROTOR STARFLEX IN ADHESIVE BOND FILLET THAT BONDS THE BUSH ONTO STARFLEX ARM. THERE WAS NO INDICATION OF A BOND SEPARATION OR GAP BETWEEN BUSH AND STARFLEX. UTILIZING THE PROCEDURE FROM MM 62.20.00.601 PARAGRAPH 7 A TEST WAS PERFORMED BY APPLYING THE ROTOR BRAKE AND FLAPPING THE BLADE AND LEADING AND LAGGING THE BLADE TO CHECK FOR BOND SEPARATION BETWEEN BUSH AND STARFLEX ARM. WITH NO MOVEMENT OR DISBONDING NOTED. BUSH SLEEVE ASSY WAS THEN REMOVED TO FURTHER INSPECT BUSH. BY GRIPPING THE BUSH WITH THE HAND IT COULD BE ROTATED ABOUT .0625 OF A TURN THUS CONFIRMING A DISBONDED BUSH WHICH IS CAUSE FOR REPLACEMENT OF THE STARFLEX ASSY.

2009FA0000620	SNIAS	TMECA	STARFLEX	DEBONDED
6/29/2009	AS350B2	ARRIEL1D1	350A31191701	MAIN ROTOR

DURING A DAILY INSP, CRACKS WERE NOTED ON MAIN ROTOR STARFLEX IN ADHESIVE BOND FILLET THAT BONDS THE BUSH ONTO THE STARFLEX ARM. THERE WAS NO INDICATION OF A BOND SEPARATION OR GAP BETWEEN THE BUSH AND STARFLEX. UTILIZING THE PROCEDURE FROM MM 62.20.00.601 PARAGRAPH 7A. TEST WAS PERFORMED BY APPLYING THE ROTOR BRAKE AND FLAPPING THE BLADE AND LEADING AND LAGGING BLADE TO CHECK FOR BOND SEPARATION BETWEEN BUSH AND STARFLEX ARM. WITH NO MOVEMENT OR DISBONDING NOTED TO BUSH SLEEVE ASSY WAS THEN REMOVED TO FURTHER INSPECT THE BUSH. BY GRIPPING BUSH WITH THE HAND IT COULD BE ROTATED ABOUT .0625 OF A TURN THUS CONFIRMING A DISBONDED BUSH WHICH IS CAUSE FOR REPLACEMENT OF STARFLEX ASSY.

2009FA0000597	SNIAS	TMECA	STARFLEX	DEBONDED
7/1/2009	AS350B3	ARRIEL2B1	350A31191701	ROTOR HEAD

DURING A DAILY INSP, CRACKS WERE NOTED ON MAIN ROTOR STARFLEX IN THE ADHESIVE BOND FILLET THAT BONDS BUSH ONTO THE STARFLEX ARM. THERE WAS NO INDICATION OF A BOND SEPARATION OR GAP BETWEEN THE BUSH AND STARFLEX. UTILIZING THE PROCEDURE FROM THE MM IN CHAPTER 62.20.00.601 PARAGRAPH 7A, TEST WAS PERFORMED BY APPLYING THE ROTOR BRAKE AND FLAPPING BLADE AND LEADING AND LAGGING BLADE TO CHECK FOR BOND SEPARATION. WITH NO MOVEMENT OF SEPARATION NOTED THE SLEEVE ASSY WAS THEN REMOVED TO FURTHER INSPECT THE BUSH. BY GRIPPING THE BUSH WITH THE HAND IT COULD BE ROTATED ABOUT .0625 OF A TURN THUS CONFIRMING A DISBONDED BUSH WHICH IS CAUSE FOR REPLACEMENT OF THE STARFLEX ASSY.

2009FA0000605	SNIAS	TMECA	STARFLEX	DEBONDED
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6/24/2009 AS350B3 ARRIEL2B1 350A31191701 ROTOR HEAD

DURING A DAILY INSP, CRACKS WERE NOTED ON MAIN ROTOR STARFLEX IN ADHESIVE BOND FILLET THAT BONDS BUSH ONTO STARFLEX ARM. THERE WAS NO INDICATION OF A BOND SEPARATION OR GAP BETWEEN BUSH AND STARFLEX. UTILIZING PROCEDURE FROM MM IN CHAPTER 62.20.00.601 PARAGRAPH 7A. TEST WAS PERFORMED BY APPLYING ROTOR BRAKE, FLAPPING BLADE AND LEADING AND LAGGING THE BLADE TO CHECK FOR BOND SEPARATION BETWEEN BUSH AND STARFLEX ARM. WITH NO MOVEMENT OR DISBONDING NOTED TO BUSH, THE SLEEVE ASSY WAS THEN REMOVED TO FURTHER INSPECT BUSH. BY GRIPPING BUSH WITH THE HAND, IT COULD BE ROTATED ABOUT .0625 OF A TURN THUS CONFIRMING A DISBONDED BUSH WHICH IS CAUSE FOR REPLACEMENT OF THE STARFLEX ASSY.

[2009FA0000606](#) SNIAS TMECA STARFLEX DEBONDED

6/25/2009 AS350B3 ARRIEL2B1 350A31191701 MAIN ROTOR

DURING A DAILY INSP, CRACKS WERE NOTED ON THE MAIN ROTOR STARFLEX IN ADHESIVE BOND FILLET THAT BONDS BUSH ONTO THE STARFLEX ARM. THERE WAS NO INDICATION OF A BOND SEPARATION OR GAP BETWEEN BUSH AND STARFLEX. UTILIZING PROCEDURE FROM THE MM IN CHAPTER 62.20.00.601 PARAGRAPH 7A, TEST WAS PERFORMED BY APPLYING ROTOR BRAKE AND FLAPPING BLADE AND LEADING AND LAGGING BLADE TO CHECK FOR BOND SEPARATION BETWEEN BUSH AND STARFLEX ARM. WITH NO MOVEMENT OR DISBONDING NOTED TO BUSH, SLEEVE ASSY WAS THEN REMOVED TO FURTHER INSPECT BUSH. BY GRIPPING BUSH WITH HAND, IT COULD BE ROTATED ABOUT .0625 OF A TURN THUS CONFIRMING A DISBONDED BUSH WHICH IS CAUSE FOR REPLACEMENT OF THE STARFLEX ASSY.

[2009FA0000623](#) SOCATA PWA SHAFT FRACTURED

7/10/2009 TBM700 PT6A64 310752802 POWER TURBINE

DURING START ATTEMPT, THE POWER SECTION DID NOT ROTATE WHEN THE NG REACHED 13 PERCENT. START WAS ABORTED AND PROPELLER TURNED BY HAND. A NOISE WAS HEARD FROM THE EXHAUST STACK AND DRAGGING/BINDING WAS FELT. POWER SECTION WAS REMOVED AND SENT FOR TROUBLESHOOTING AND REPAIR. DURING REMOVAL OF THE PT WHEELS, IT WAS FOUND THAT THE PT SHAFT FRACTURED AT THE THREADS FOR THE PT WHEEL RETAINING NUT. THIS ALLOWED THE 1ST STAGE PT WHEEL TO SHIFT AND THE BLADE SHROUD SEAL FINS RUB ON THE PT STATOR.
