



# SELECTED SERVICE DIFFICULTY REPORTS

1 April 2008 – 31 May 2008

## AIRCRAFT ABOVE 5700KG

### Airbus A320232 Landing gear outboard lockstay actuator hose ruptured. Ref 510006306

RH main landing gear outboard lockstay actuator hydraulic hose failed at upper swivel fitting. Loss of Green system hydraulic fluid.

P/No: 201655147. TSN: 8,471 hours/4,834 cycles. TSO: 8,471 hours/4,834 cycles. (1 similar occurrence)

### Airbus A320232 Trailing edge flap system connector separated. Ref 510006386

Trailing edge flap monitoring system 2 disconnect sensor wiring connector 7502VC had broken wires and disconnected back shell.

P/No: 7502VC. TSN: 1,684 hours/890 cycles.

### Airbus A330203 Cabin cooling system control valve faulty. Ref 510006278

On application of take-off thrust with a packs 'off' take-off, ECAN message 'Engine thrust loss' and 'Abnormal bleed on pack' was displayed. Take-off was rejected at 30kts. Flight crew stated No1 pack did not turn off when selected off. No1 pack flow control and SOV replaced.

### Airbus A330203 Fuel tank FOD. Ref 510006291

During fuelling, the 'overflow light' illuminated with 1500kgs in LH outer tank. When accessing the LH wing outer tank via panel 542AB to change the vent float valve for the problem of fuel spillage into surge tank, a foreign object was found. Personnel/maintenance error.

### Airbus A330303 Fuel storage nut loose. Ref 510006394

Trim tank lateral box dome nuts rotating. Found during trouble-shooting for trim tank vent pipe leaks.

### BAC 146100 Air conditioning odour. Ref 510006292

On arrival at aircraft with APU air 'ON' the smell of oil odour was evident. Inspection for oil contamination iaw AD/BAE146/86 found nil defects.

TSN: 28,544 hours/29,139 cycles. (11 similar occurrences)

### BAC 146100 Flight compartment windshield shattered. Ref 510006390

LH cockpit windshield outer layer shattered. Crew noticed electrical arcing from the lower RH corner before the windshield failed.

P/No: NP1701013. (1 similar occurrence)

### Boeing 717200 Spoiler system out of adjustment. Ref 510006342

Ground spoiler system suspect faulty. Spoilers deployed at approximately 15ft altitude when throttles retarded. Investigation found the nose-gear ground sensing mechanical controls out of adjustment.

### Boeing 717200 Steering unit actuator leaking. Ref 510006128

LH nosewheel steering actuator leaking.

P/No: 39346895501. TSN: 20,445 hours/15,745 cycles.

### Boeing 717200 Wing spar cap corroded. Ref 510006258

RH wing rear spar lower cap at Stn. XRS 168 corroded O/B of No1 flap hinge.

TSN: 14,125 hours/10,671 cycles.

### Boeing 737229 Portable oxygen smoke hood unserviceable. Ref 510006389

During an oven fire in flight, the cabin crew were instructed to operate wearing smoke hoods. One smoke hood was found to have the activation cord/toggle missing and was unable to be used.

P/No: E2818010.

### Boeing 737229 Stabiliser actuator unserviceable. Ref 510006146

Stabiliser trim actuator unserviceable.

P/No: 65130008. TSN: 52,890 hours/4,115 cycles. TSO: 556 hours/241 cycles.

(12 similar occurrences)

### Boeing 737476 Cockpit odour – electrical burning smell. Ref 510006279

Electrical burning smell in cockpit during climb, disappearing during cruise. Flight crew reported that smell was strongest

near overhead P5 panel. Burning smell could not be duplicated during high engine power run. Galley ovens and equipment run without burning smell. Window heat, pitot probes etc run without burning smell. Window heat control unit and engine/wing anti-ice control panel replaced.

### Boeing 737476 Generation system faulty. Ref 510006185

Standby power failure warning during takeoff. Investigation could find no fault, but relays R330 and R37 changed.

### Boeing 737476 Generation system panel faulty. Ref 510006187

Bus protection panel faulty.

P/No: 915F2134. TSN: 54,839 hours. TSO: 5,377 hours. (1 similar occurrence)

### Boeing 737476 Stabiliser trim switch faulty. Ref 510006405

Stabiliser trim switches S132 and S546 faulty.

P/No: 32EN614.

### Boeing 737476 Wing skin cracked. Ref 510006184

Lower wing skin cracked from LH centre tank boost pump cutout. Crack length approximately 38.1mm (1.5in). Further investigation found the point of origin for the crack was the end radius of a corrosion repair.

(2 similar occurrences)

### Boeing 73776N Passenger seat saddle cracked. Ref 510006210

Passenger seat saddles PNo 847367-723 and PNo 847367-725 cracked along welded seams.

(30 similar occurrences)

### Boeing 73776N Spoiler position sensing wiring loom worn. Ref 510006177

Spoiler position sensing wiring chaffing on landing gear support link assembly. Wires W1002-3011B-20 and W1002-3002B-20 found damaged down through the outer cable shield and into the inner conductor. Subsequent damage was also noted on the link assembly. Wiring is clamped off the fire extinguisher line.

(1 similar occurrence)

### Boeing 737708 Tyre FOD. Ref 510006273

On take-off roll passing through 90kts, No 2 main wheel ran over an object on runway and tyre failed - take off rejected. FOD.

P/No: 277A6000206. (3 similar occurrences)

### Boeing 737838 Stabiliser actuator failed. Ref 510006144

Stabiliser trim actuator failed. Trim switch also faulty.

P/No: 6355B000103. (12 similar occurrences)

### Boeing 737838 Trailing edge flap control system bolt loose. Ref 510006429

Flap system pulley bracket assemblies WFA-1 and WFB-1 had pulley attachment bolts not in safety. Threads were partially engaged through the anchor nuts. Investigation also found both pulleys had approximately 6.35mm (0.25in) gap at the aft end of the brackets and 9.525mm (0.375in) at the forward ends of the bracket. Found during incorporation of EI N37-27-59R2.

(1 similar occurrence)

### Boeing 737838 Tyre tread separation. Ref 510006360

RH main landing gear tyre tread separated. Investigation found significant damage to ancillary structure around RH main landing gear. Investigation continuing.

(18 similar occurrences)

### Boeing 7378BK Brake seized. Ref 510006259

No 3 brake seized on taxi for departure.

(5 similar occurrences)

### Boeing 7378FE Rudder feel spring failed. Ref 510006153

Rudder feel and centering unit inner spring failed in several places. Investigation found that the suspected cause of the spring failures was likely a manufacturing discrepancy in the wire used for a specific lot of the PNo 69-57907-3 springs.

P/No: 69579073.

### Boeing 737BBJ APU odour. Ref 510006272

Oil smell detected in cabin. Initial investigation found that the APU was leaking oil at the load compressor via the witness drain. Investigation continuing. Aircraft is RAAF owned.

### Boeing 747 Main landing gear attachment strut failed. Ref 510006277

Main landing gear RH body landing gear side brace sheared. Further inspection found section of side brace missing approx half diameter of brace and about 25mm (1in) wide. A heavier than normal landing had been reported by crew. Foreign registered aircraft.

### Boeing 747338 Battery suspect faulty – smoke/fumes. Ref 510006165

Smoke and fumes from area of main battery. Investigation found excessive heat in battery area. Battery and charger removed for further investigation.

(1 similar occurrence)

### Boeing 747338 Passenger compartment window outer pane shattered. Ref 510006112

Passenger compartment window outer pane shattered into several pieces. Window was located eight from the front on the LH side. Possible impact damage to LH wing. Investigation continuing.

### Boeing 747438 Cabin cooling system fan faulty. Ref 510006171

Electrical fumes in flight and cabin. Chiller fan noisy. Smell stopped when chiller fan turned off. Investigation found the chiller fan bearing had collapsed. Investigation continuing.

### Boeing 747438 Galley floor drain scupper sealant deteriorated. Ref 510006321

Galley floor drain scupper below the main drain line strainer and G1B water supply line was found to have QPS P88 deteriorated/missing at mating with floor panel cutout and scupper. The scupper drain screen was blocked and the splash guard PNo7FU4030B16M03 damaged/cracked. Puddling was also identified in the forward hold bilge area BS460 LBL5-RBL5. This was deemed to come from the drain scupper located in the ceiling of the forward hold, below G1B at BS530 LBL5, running forward via the ceiling panel to the top of the rear of the E1 and E2 racks at BS 460 (an area that is not contained/protected by the drip shield).

### Boeing 747438 Passenger door FOD. Ref 510006343

Entry door L5 contacted by catering truck causing damage to upper bustle support brackets. During take-off door handle moved causing EICAS message 'Door L5'.

### Boeing 747438 Potable water system pipe leaking. Ref 510006428

Serious water leak from upper deck galley. Investigation found a metal pipe to the galley flexible hose tap was leaking. Investigation also found that the bracket holding the pipe fitting had not been reattached to the wall following a previous investigation for water leakage approximately a week earlier.

### Boeing 747438 Strut inboard mid pivot bolt incorrectly fitted. Ref 510006103

No 4 strut inboard mid pivot bolt incorrectly fitted. Investigation found the bolt fitted with the anti-rotation slot on the diagonal. Correct orientation is with the anti-rotational slot in the vertical position. Found during inspection iaw EI 747-054-0096R2.

### Boeing 767336 Aircraft vibration. Ref 510006099

Severe vibration after take-off. Initial investigation could find no definitive cause. Investigation continuing.

### Boeing 767336 Fuel tank contaminated. Ref 510006113

LH fuel tank contaminated. Tank contained approximately 4-5 litres of an unknown liquid located around the rib corners. Investigation continuing.

### Boeing 767336 Galley drain blocked. Ref 510006380

Forward galley drain blocked. Water damage/ingress into electronic racks E1 and E2. Investigation continuing.

### Boeing 767336 Hydraulic bay access door missing. Ref 510006098

Centre hydraulic bay access door 194BL missing. Door found on runway. Investigation continuing.

P/No: 145T86161Z.

### Boeing 767336 Pneumatic distribution system duct separated. Ref 510006245

Left hand wing bleed duct separated and damaged at wing root area – fumes smelt throughout cabin and flight deck.

**Boeing 767336 Power distribution system relay high temperature. Ref 510006238**

Load shed relay K2092 and wire W1046-60-12 overheated at terminal lug A3. Heatshrink darkened and lug damaged. P/No: HTC7N060.

**Boeing 767338ER Flight compartment window opened. Ref 510006427**

Air noise from First Officer's No 2 window. Window popped open. Investigation continuing. (1 similar occurrence)

**Boeing 767338ER Galley insulation odour. Ref 510006164**

Burning smell in cabin. Investigation could not find any cause for the smell. Suspect smell came from glue/sealant used for recent fitment of LH traymobile.

**Boeing 767338ER Galley wiring damaged. Ref 510006150**

Forward galley stowage box panel fell off and damaged wiring for the bar work deck light located at the rear of compartment 204. Damaged wire caused electrical shocks from forward galley stowage latches. Investigation continuing.

**Bombardier DHC8102 Galley station system sparking. Ref 510006261**

During flight the cabin attendant pushed a metal coffee container to the back of the cupboard on the RHS of the urns and then noticed a bluish spark in the cupboard. Reported it to the captain. The captain then noticed the buffet CB had popped. Galley was removed by engineers and a full wiring inspection was carried out with nil faults found - suspect spark was caused by static electricity.

**Bombardier DHC8102 Starter-generator suspect faulty. Ref 510006395**

No1 starter/generator suspect faulty due to flickering light. Ground investigation could find no faults and the aircraft was released to service with no further problems. P/No: 23088008.

**Bombardier DHC8202 Hydraulic system pressure pipe holed. Ref 510006166**

Loss of hydraulics during taxi. Investigation found No 2 pressure pipe located in the aft equipment bay contained a pin hole. (2 similar occurrences)

**Bombardier DHC8402 Cabin pressurisation failed. Ref 510006358**

Aircraft failed to pressurise. Suspect faulty outflow valve software. Investigation continuing.

**Bombardier DHC8402 Landing gear wiring harness incorrectly manufactured. Ref 510006116**

Nose landing gear harnesses incorrectly manufactured. Investigation found three out of six received harnesses incorrectly wired. Found during inspection iaw DH8-400-SL-32-014A.

**BAC BAE1251000 Nose wheel nut loose. Ref 510006280**

During take-off roll vibration was felt from the nose wheel area. Nose wheels inspected and found the RH nose wheel assembly retaining nut was loose with no apparent torque - nut is retained by retaining plate. Unit last installed in the USA prior to aircraft arrival in Australia. Personnel/maintenance error.

**Embraer ERJ190100 Cargo fire extinguisher bottle discharge nozzles incorrectly fitted. Ref 510006382**

Cargo fire extinguisher bottle discharge nozzles incorrectly installed (inverted). Found during investigation iaw SB 190-26-A007. P/No: 446713. (2 similar occurrences)

**Fokker F27MK50 Pneumatic distribution system sense line missing. Ref 510006198**

Bleed pressure sense line missing. Line had been removed due to corrosion and system blanked off. It was thought that the line was only used to service the wing anti-ice boots during maintenance when engine bleed air was not available. It was found that the sense line also provided vacuum air to the primary outflow valve for operation of that valve. The valve subsequently remained closed and with the APU running and providing bleed air to the aircraft, a pressure differential developed which forced the aircraft door open when the door was unlocked.

**Fokker F28MK0100 Nose landing gear cracked. Ref 510006411**

Nose landing gear contained two cracks located one on either side of the main fitting. Crack dimensions were 3.6mm by 14.5mm (0.144in by 0.573in), and 2.5mm by 7.62mm (0.100in by 0.300in). Following removal of the paint for more detailed inspection, a number of further cracks were found. Investigation continuing. TSN: 24,598 cycles. TSO: 4,636 cycles.

**AIRCRAFT BELOW 5700KG**

**B & B Aviation 7GCBC Elevator cable failed. Ref 510006377**

Elevator cable failed. Suspect faulty material. P/No: 31072. TSN: 2,904 hours. TSO: 2,904 hours.

**Beech 200 Hydraulic power pack faulty. Ref 510006163**

Hydraulic powerpack faulty. Following the failure of the landing gear to extend, it was found that the leads to the powerpack motor were incorrectly fitted in reverse leading to replacement of the motor. The landing gear failed for a second time on 7 April 2008, and the entire powerpack was replaced. Fault finding on both events found that during gear retraction the powerpack continued to operate at end of retraction cycle, tripping the 60amp circuit breaker and removing power from the motor. Hence the gear did not extend upon subsequent down selection. P/No: 10138800519. TSO: 13 hours/22 cycles.

**Beech 200 Landing gear electric motor faulty. Ref 510006323**

Landing gear hydraulic power pack electric motor faulty. Investigation found the motor rotating in the wrong direction and drawing excessive current. Replacement motor found to be also rotating incorrectly. P/No: M710501. TSO: 57 hours. (1 similar occurrence)

**Beech 200 Pressure bulkhead damaged. Ref 510006322**

Rear pressure bulkhead scratched and scored in area near safety and outflow valve box. Found during investigation iaw AD/Beech200/67. (5 similar occurrences)

**Beech 58 Wing spar cap corroded. Ref 510006236**

RH wing lower spar cap corroded. Depth of corrosion approximately 1.524mm (0.060in) over an area of approximately 25.4mm to 50.8mm (1in to 2in). P/No: 9511002210. TSN: 14,546 hours. (1 similar occurrence)

**Beech D55 Landing gear actuator worn. Ref 510006364**

Landing gear actuator worn beyond limits. Investigation found that the actuator had been filled with what appeared to be wheel-bearing grease, instead of the correct gear oil. P/No: 9581001715. TSO: 2,249 hours.

**Bell 206B3 Emergency flotation connector corroded. Ref 510006205**

Emergency flotation system solenoid valve electrical connector corroded. Found during inspection iaw SI 206-115. P/No: P76.

**Britten Norman BN2A26 Main landing gear torque link separated. Ref 510006180**

LH main landing gear torque links separated. Investigation found that there was no large washer under the bolt head which allowed the bolt to pull the bushing through the upper torque link lug. P/No: AIR114080. (1 similar occurrence)

**Cessna 172RG Aircraft structure corroded. Ref 510006155**

Fuselage corroded in numerous areas. Corrosion located in cabin roof area, forward and aft carry through spars, around wing attachment points and in wing attachment bolts. LH and RH wing lower skins required replacement. TSN: 10,364 hours. (1 similar occurrence)

**Cessna 182B Landing gear outboard support cracked. Ref 510006293**

Main landing gear 'U' bolts PNo 0541153 broken. Further inspection also found that the LH main landing gear outboard support PNo 0541121-1 was cracked. P/No: 05411211. (1 similar occurrence)

**Cessna 210M Main landing gear saddle pad delaminated. Ref 510006318**

Main landing gear soft saddle pad delaminating from saddle. Suspect inadequate bonding material. P/No: 1241630712416308.

**Cessna 310R Landing gear system bolt incorrectly fitted. Ref 510006260**

LH and RH wing main spar webs found chafed from incorrect assembly of bolt PNo NAS464P5A15 attaching the outboard push-pull tube assemblies PNo 5045213-3 to the torque tube assemblies PNo 5045010-24 and PNo 5045010-25. Bolts were found installed with their heads aft causing the ends of the bolts to chafe into the spar web during gear retraction and extension. Factory-installed placards stating 'SEE SERVICE MANUAL FOR BOLT HEAD DIRECTION' were missing from the spar webs in the main landing gear wheel bays adjacent to the torque tubes. P/No: NAS464P5A15. (1 similar occurrence)

**Cessna 401A Elevator cable worn and damaged. Ref 510006301**

Elevator forward cable not routed around bellcrank located behind instrument panel. Found during first inspection following major work on the tail. P/No: 50000086.

**Cessna 402C Hydraulic quantity indicator sight glass split. Ref 510006219**

Hydraulic reservoir sight tube split at lower attachment clamp and ran for the full length of the tube. Leaking fluid resulted in a suspected fire and subsequent emergency landing. No evidence of fire was found. Damage caused during landing. Suspect sight tube reacted with Mil-H-5606 hydraulic fluid. P/No: 511700712. (2 similar occurrences)

**Cessna 404 Hydraulic pipe failed. Ref 510006172**

Metal hydraulic pipe failed. Loss of hydraulic fluid. (1 similar occurrence)

**Cessna 404 Hydraulic pipe failed. Ref 510006266**

After retraction (5-10 seconds) hydraulic flow lights illuminated. Selected gear down, but only two greens illuminated, manual gear blow-down completed satisfactorily and landed OK. Investigation found a hydraulic pipe located in the wing's leading edge had failed at the bend radius. (1 similar occurrence)

**Cessna 404 Main landing gear pivot trunnion pin not properly installed. Ref 510006340**

RH main landing gear separated from aircraft. RH wing and propeller impacted ground. Fuel cell ruptured and fuel leaked onto runway. Aircraft had just completed a major inspection (SID). Investigation found the main pivot trunnion pin was not properly re-installed following extensive SIDs maintenance. P/No: 57411121.

**Cessna 441 Fuselage frame cracked. Ref 510006365 (photo below)**

Fuselage frames cracked. Frames located LH corner of forward door pillar and at Stn 155.76, Stn 235.75, Stn 246.00 and Stn 247.87. TSN: 21,875 hours.



**Cessna 441 Landing gear actuator malfunctioned. Ref 510006284**

Shortly after take off, emergency pressurisation came on. Aircraft returned to airfield where gear was selected down and NLG failed to lock down - emergency gear extension was used. Investigation found that nose gear would not lock down due to actuator internal failure. Investigation continuing - strip report requested. Defect is related to SDR 510006285.  
P/No: 99101393.

**DeHavilland DH82A Fuselage frame front vertical tube broken. Ref 510006127**

LH fuselage frame front vertical tube broken at the lower oil tank frame attachment bolt.  
P/No: H29670. TSO: 1,734 hours.

**Eurocopter AS350B Engine tachometric box faulty. Ref 510006313**

Engine tachometric box faulty.  
P/No: 717755505A. TSN: 4,788 hours.

**Gippsland GA8 Horizontal stabiliser spar splice cracked. Ref 510006305**

Horizontal stabiliser rear spar splice cracked on the forward lower side located around the RH rear stabiliser pivot attachment bracket rear bolt. Found during inspection iaw AD/GA8/3.1.  
TSN: 2,565 hours. (1 similar occurrence)

**Kavanough E120 Support pole socket broken. Ref 510006282**

Balloon nylon support pole socket broken at weld point of the basket's top stainless steel frame.  
TSN: 173 hours. (1 similar occurrence)

**Kawasaki BK117B2 Cargo hook incorrectly rigged. Ref 510006221**

Cargo hook incorrectly rigged. Fire bucket and longline uncommanded release.

**Kawasaki BK117B2 Door actuating rod cracked. Ref 510006207**

LH sliding door departed aircraft during approach. Nil damage found to aircraft structure. Investigation of the recovered door found the LH sliding door actuating rod cracked. Investigation found the crack probably originated due to a pivot pin missing from the latch link and putting excess pressure on the actuating rod cam; this became detached after the retaining circlip spread due to contact with the closed position catch.  
P/No: T6428101. TSN: 6,980 hours.

**Pilatus PC12 Elevator tension spring fractured. Ref 510006309**

Elevator tension spring fractured at hook attached to the bellcrank assembly.  
P/No: 5322112084. TSN: 13,365 hours/17,995 cycles.

**Piper PA24250 Mixture control cable housing separated. Ref 510006424**

Engine mixture control cable housing separated from clamp due to contact with the nose landing gear scissor assembly attachment bolt.  
P/No: 1677500. TSN: 4,471 hours.

**Piper PA31350 Rudder cable incorrectly routed. Ref 510006303**

Rudder cable worn due to being incorrectly routed around rib instead of through lightning hole.

**Piper PA31350 Hydraulic system low quantity. Ref 510006173**

Hydraulic system fluid low. Investigation could find no signs of any leaks. Further investigation found that the oil was lost and not replenished during hose replacement.

**Robinson R22BETA Aircraft fuel filter bowl gasket deteriorated. Ref 510006319**

Fuel filter bowl gasket swollen. Investigation found that the gasket swelled when in contact with fuel.  
P/No: 10536. TSN: 100 hours/4 months.

**Schweizer 269C Drive belt support strut cracked. Ref 510006217**

Lower drive belt assembly support strut cracked approximately half-way through the tube.  
P/No: 269A54239. TSN: 118 hours.

**Swearingen SA227AC Landing gear steering system potentiometer failed. Ref 510006275**

After landing, and prior to exiting runway, the aircraft veered right uncommanded and departed the runway. Investigation found an end break in the nose wheel monitor potentiometer wiper wire.

**Swearingen SA227DC Wing fuel tank probe wiring worn and damaged. Ref 510006174**

LH wing fuel tank probe shielded wires caught between the clamp supporting the fuel boost pump rigid fuel supply line and wing rib at WS 51.167 causing the plastic coating to be worn through by the shielding.  
P/No: 720S. TSN: 19,183 hours/27,339 cycles.

**Swearingen SA227DC Hydraulic pipe worn and damaged. Ref 510006370**

Rigid hydraulic pressure pipe worn and leaking. Pipe is located in LH engine bay and was rubbing on an engine oil line.  
P/No: 2781032777. TSN: 11,294 hours/11,249 cycles. (17 similar occurrences)

**Swearingen SA227DC Landing gear brake system clamp failed. Ref 510006351**

Aircraft landed with LH main landing gear brakes applied causing tyres to blow. Fragments of the blown tyre caused damage to the LH flap, outboard foreflap and minor damage to the aft end of the LH nacelle fairing. Investigation found that the brake hose 'P' clamp failed during takeoff, causing the brake hose to kink, trapping the brake fluid within the brakes. Heat from the brakes caused the fluid to expand and apply the brakes.  
P/No: MQ21919D68.

**Tecnam P92S Substandard nuts and bolts fitted. Ref 510006388**

Substandard nuts and bolts used in numerous locations. (1 similar occurrence)

**ROTORCRAFT****Eurocopter AS365N Main rotor head frequency adaptor debonded. Ref 510006234**

Main rotor head frequency adaptor (1off4) debonded beyond limits. Another adapter had also debonded but was 1mm (0.039in) below maximum limits.  
P/No: 365A31101923. TSN: 2,409 hours. (1 similar occurrence)

**Eurocopter AS365N Tail rotor blade bushes worn. Ref 510006329**

Suspect tail rotor blade bushes worn causing high frequency vibration. Tail rotor fairing PNo 365A33-3543-00 cracked as a result. Investigation continuing.  
TSN: 206 hours/8 months.

**Kawasaki KH4BELL47G3B Cooling fan blades separated. Ref 510006147**

Engine cooling fan blades (3off) separated. Investigation found the fan failed due to fatigue in multiple areas. Some areas contained corrosion pitting.

**Robinson R22 Engine/transmission coupling drive belt damaged. Ref 510006140**

R22 drive belts damaged. Belts flex open slightly at diagonal joint. Mark on inside of belts in corresponding area. Marks appear to be tool marks from manufacture.  
TSN: 219 hours. (19 similar occurrences)

**Robinson R44 Main rotor head bearing worn. Ref 510006206**

Main rotor hub bearing PNo C648-3 and journal PNo C106-5 badly worn. Main rotor hub scored and fretted.  
P/No: C6483. TSN: 964 hours.

**Robinson R44 Engine/transmission coupling drive belt damaged. Ref 510006326**

Engine to transmission rear drive belt damaged. The forward part of the belt rolled upside down due to the under band tearing.  
P/No: A1903. TSN: 287 hours/11 months. (1 similar occurrence)

**Schweizer 269C Drive belt assembly support strut cracked. Ref 510006217 (photo below)**

Lower drive belt assembly support strut cracked approximately half-way through the tube.  
P/No: 269A54239. TSN: 118 hours.

**Sikorsky S76A Engine starter-generator failed. Ref 510006381**

No 2 engine starter/generator failed. Drive spline failed.  
P/No: 23081043. TSN: 320 hours/23 months. TSO: 254 hours/5 months.

**PISTON ENGINES****Continental IO520F Engine cylinder head cracked. Ref 510006265**

No 3 cylinder ('ECI') head cracked approx. 25 per cent of the circumference located at the seventh fin - found during visual inspection at 50-hourly.  
P/No: AEC631397. TSN: 334 hours. (2 similar occurrences)

**Continental IO520F Magneto faulty. Ref 510006268**

During cruise the engine started surging 100 rpm and continued for a few minutes. Pilot felt surging as well as the engine tachometer indicated a surge. The CSU was replaced due to control linkage wear. Engine ground run carried out, RH magneto intermittently ran rough/dead. RH magneto replaced. Ground runs carried out satisfactory.  
P/No: IO3493505. TSO: 781 hours. (1 similar occurrence)

**Continental IO520L Engine thrust washer incorrect assy. Ref 510006256**

During a scheduled periodic inspection, abnormal oil leaks were found coming from the forward end of the engine sump's gasket. Engine was removed to replace gasket. Upon removal a thrust washer was found at the bottom of the sump. The engine had recently been overhauled. Personnel/maintenance error.  
TSO: 167 hours/8 months.

**Jabiru 2200J Engine crankshaft broken. Ref 510006416**

Crankshaft broken in area located between No 1 and No 2 journals. Further investigation using magnetic particle inspection (MPI) found more areas of imminent failure.  
TSN: 1,158 hours/31 months. TSO: 158 hours/6 months. (1 similar occurrence)

**Jabiru 2200J Engine cylinder barrel cracked. Ref 510006249**

During flight, engine lost power and strong oil smell was evident. Investigation found No 1 cylinder lower front stud broken and base of cylinder barrel cracked along flange approx. 75mm (2.95in). Tappets had been adjusted 17 hours prior, no evidence of piston seizure. Inlet valve pushrod dislodged from tappet adjuster, all tappet lock nuts tight.  
TSN: 864 hours/20 months.

**Jabiru 3300 Engine connecting rod big end bearing failed. Ref 510006136**

No 2 cylinder connecting rod, big-end bearing failed due to lack of lubrication.  
TSN: 2 hours. TSO: 2 hours.

**Lycoming IO360L2A Fuel control servo leaking. Ref 510006237**

Fuel servo leaking. Fuel residue found in venturi. Fuel residue also found on air side of diaphragm.  
P/No: 25765362. TSN: 452 hours. (12 similar occurrences)

**Lycoming IO540AE1A5 Fuel injection servo plug loose. Ref 510006117**

Fuel injection servo plug loose. Found during inspection iaw AD/FSM/31.  
P/No: 383493. TSN: 347 hours. (4 similar occurrences)

**Lycoming IO540K1A5 Engine sudden stoppage. Ref 510006276**

During cruise, engine had an in-flight stoppage. Subsequent attempts to start the engine on the ground were not successful - aircraft had fuel. Investigation continuing. (3 similar occurrences)

**Lycoming O320D2J Engine cylinder separated. Ref 510006320**

Engine cylinder head separated from barrel.  
P/No: TISN41CA. TSN: 1,355 hours. (3 similar occurrences)

**Lycoming O360A1A Carburettor float contaminated. Ref 510006376**

Carburettor float contaminated with fuel. Only one compartment of the float contaminated. Float is of polymer construction and is mandated for removal by Precision Airmotive SB MSA-13.

P/No: 30802. TSN: 1,542 hours. (3 similar occurrences)

**Lycoming O540F1B5 Carburettor check valve seat damaged. Ref 510006252**

Carburettor P/No. 10-6035-11 was removed from engine due to hard starting and was bench tested. The accelerator pump had very low output. Internal inspection of the carburettor found the pump discharge check valve damaged at seating area. Ineffective sealing allowed air into the system. Manufacturing error.  
P/No: 3491. TSN: 25 hours.

**Lycoming O540J3C5 Engine cylinder piston pin incorrect part. Ref 510006315**

Piston skirts cracked. Investigation found that heavyweight piston pins, PNo LW14077, had been fitted to lightweight pistons, PNo LW13396.  
TSO: 1,414 hours.

## TURBINE ENGINES

**Garrett TFE73120R Engine oil system O-ring damaged. Ref 510006244**

During flight the engine oil pressure started to fluctuate and drop. Engine power was brought back to idle and after a few more minutes, the pressure dropped to 20psi - the crew elected to shut down the engine. After landing, oil was found on the bottom of the cowl and fuselage. Investigation found that the O-ring had been cut by the dip stick bayonet allowing the oil to bypass.  
P/No: S9413117. (1 similar occurrence)

**GE CF680E1 Engine fuel manifold leaking. Ref 510006135**

No 1 engine fuel manifold leaking. Investigation found the manifold worn and holed between No1 and No 2 fuel nozzles, and significant wear damage to the clamp. It was then found that noTeflon tape was in place at the 'P' clamp location. Personnel/maintenance error.

**GE CF680E1 Engine tailpipe fire. Ref 510006374**

No 2 engine tailpipe fire. Investigation found discolourisation of lower wing surface and heat damage to strut and strut panels. Investigation continuing.  
P/No: CF680E1. TSN: 17,261 hours. TSO: 1,960 hours.

**IAE V2527A5 FMU failed. Ref 510006417**

LH engine fuel metering unit (FMU) failed. Investigation found the high pressure shutoff valve (HPSOV) solenoid pins 1 and 2 had resistance out of limits.  
P/No: 8061636. TSN: 13,446 hours/8,864 cycles.

**IAE V2533A5 Thrust reverser control unit locked. Ref 510006235**

No 2 engine thrust reverser hydraulic control unit lockout pin installed in active position preventing thrust reverser activation. When pin was removed, the thrust reverser was serviceable. Investigation continuing.  
P/No: TY154024. TSN: 19,405 hours/7,589 cycles.

**Lycoming ALF502R5 Engine fuel manifold cracked. Ref 510006120**

No 4 engine fire warning. Engine shut down and

extinguisher fired. Engine windmilled for approximately 40 minutes. Investigation found the RH fuel manifold cracked and leaking at weld.

P/No: 216362037. TSO: 406 hours/287 cycles. (3 similar occurrences)

**PWA PT6A41 Engine compressor inlet case oil filter cap stud threads stripped thread. Ref 510006393**

RH engine compressor inlet case oil filter cap hold down stud threads stripped. Loose stud lessened the tension on the cap allowing oil leakage.  
TSN: 5,841 hours/6,598 cycles. TSO: 2,926 hours/3,546 cycles.

**PWA PT6T3B Engine accessory drive housing cracked. Ref 510006413 (photo below)**

No 1 engine leaking from oil transfer tube between accessory gearbox and combining gearbox. The O-rings were replaced but the leak persisted. Further investigation found the regulating valve attachment bolt helicoil had pulled out of the accessory gearbox and the mounting lugs on the opposite side had broken. Misalignment of the oil transfer tube caused wear in the housing bore allowing oil to bypass the O-rings.  
P/No: 3026669. TSN: 17,359 hours. TSO: 3,648 hours.



**PWA PT6T3B Engine oil loss. Ref 510006283**

During cruise, No 2 engine oil pressure warning light began flickering - engine was shut down. Investigation found No 2 engine oil level low, and oil pooled in the exhaust duct area; no external oil leaks found. Engine was removed and sent to the manufacturer for investigation.

**PWA PW123E Engine reduction gear tabwasher cracked. Ref 510006352**

No1 engine reduction gearbox chip detector illuminated. Boroscope inspection found the No 9 bearing retaining nut locking tabwasher dislodged and the retaining nut castellation damaged.  
TSN: 2,084 hours/1,984 cycles.

**PWA PW125B Engine reduction gear gearbox contam-metal. Ref 510006121**

RH engine reduction gearbox chip detector contaminated with a piece of metal. Initial investigation found the metal to be type 4340 steel from the gearbox bearing cage. Boroscope inspection of the No 9 key washer found that two pieces had separated from the keywasher which also contained multiple

cracks. Investigation continuing.

P/No: 3035480. TSO: 21 hours/13 cycles. (2 similar occurrences)

**Rolls Royce BR700715A130 Engine seized. Ref 510006314**

Fan seized during startup. Approximately 150lbs to 200lbs of force freed the fan. A detailed inspection of the engine could find no faults and the engine was released to continue in service.  
P/No: BR715A130.

**Rolls Royce RB211524D4 Engine combustion liner cracked. Ref 510006232**

No 3 engine combustion liner cracked for approximately 50 per cent of circumference with intersecting axial cracks. Found during boroscope inspection. Investigation continuing.  
P/No: RB211524D419. TSN: 78,475 hours. TSO: 12,622 hours. (1 similar occurrence)

**Rolls Royce RB211524H Engine thrust reverser failed. Ref 510006222**

No 2 engine thrust reverser failed to close completely. Investigation found two blocker doors damaged, gas generator cowl fairing damaged, 'A' frame filler fairing damaged, two fairing attachment brackets damaged and several rivets pulled through on the bulkhead forward of the blocker doors. Investigation continuing.  
(5 similar occurrences)

**Turbomeca ARRIEL1C Engine turbine section damaged. Ref 510006125**

RH engine free turbine damaged. Further investigation found significant damage within the engine. Investigation concluded that the damage was caused by the separation of a turbine blade from the second stage gas generator turbine.  
P/No: 0292253350. TSN: 2,043 hours/3,988 cycles. TSO: 2,043 hours/3,988 cycles.

## PROPELLERS

**McCauley 3AF32C512 Propeller pitch control cable failed. Ref 510006230**

LH propeller pitch control cable separated at swaged fitting at propeller governor end.  
P/No: 1023890103. (1 similar occurrence)

**Rotol R4086123F17 Propeller speed pulse probe faulty. Ref 510006200**

No 2 propeller overspeed. Investigation found a faulty propeller speed pulse probe.

**Hartzell HCE2yk Propeller governor rod-end detached from ball joint. Ref 510006264**

Pilot reported LH engine max RPM was low. Investigation found the LH propeller governor control rod-end detached from ball at the governor. Inspection of the ball, socket and clip showed they were worn, allowing the rod-end section to detach from the ball even with the safety clip in place.  
P/No: 5417500.

*Note: Occurrence figures based on data received over the past five years.*

## Service Difficulty Reports

### TO REPORT URGENT DEFECTS

CALL: **131 757** FAX: **02 6217 1920**

or contact your local **CASA Airworthiness Inspector** [freepost]  
**Service Difficulty Reports, Reply Paid 2005, CASA, Canberra, ACT 2601**

Online: [www.casa.gov.au/airworth/sdr](http://www.casa.gov.au/airworth/sdr)



Australian Government  
Civil Aviation Safety Authority

[www.casa.gov.au](http://www.casa.gov.au)



# APPROVED AIRWORTHINESS DIRECTIVES

## 3 July 2008

### Aircraft - General

AD/GENERAL/53 - Flight Data Recorder Underwater Locating Device - Installation - CANCELLED  
AD/GENERAL/58 - Voice Recorders - Attachment of Reflective Strips - CANCELLED

### Part 39-105 - Lighter Than Air

There are no amendments to Part 39-105 - Lighter than Air this issue

### Part 39-105 - Rotorcraft

#### Bell Helicopter Textron 205 Series Helicopters

AD/BELL 205/74 - Tail Rotor Blades - 2

#### Bell Helicopter Textron Canada (BHTC) 206 & Agusta Bell 206 Series Helicopters

AD/BELL 206/172 Amdt 1 - Power Turbine RPM Steady State Operation Avoidance

#### Bell Helicopter Textron 212 Series Helicopters

AD/BELL 212/69 - Tail Rotor Blades - 2

#### Bell Helicopter Textron Canada (BHTC) 222 Series Helicopters

AD/BELL 222/31 Amdt 2 - Tail Rotor Blade

#### Bell Helicopter Textron 412 Series Helicopters

AD/BELL 412/55 - Tail Rotor Blades - 2

#### Bell Helicopter Textron Canada (BHTC) 430 Series Helicopters

AD/BELL 430/1 Amdt 4 - Tail Rotor Blade

#### Eurocopter BO 105 Series Helicopters

AD/BO 105/16 Amdt 1 - Tension-Torsion Strap

#### Eurocopter SA 360 and SA 365 (Dauphin) Series Helicopters

AD/DAUPHIN/95 - Main Gearbox Casing - Corrosion

### Part 39-105 - Below 5700 kgs

#### Aerospatiale (Socata) TBM 700 Series Aeroplanes

AD/TBM 700/49 - Emergency Landing Gear By-pass Selector Inspection  
AD/TBM 700/50 - Alternator and Vapour Cycle Cooling System Pulley Drive Assembly

#### Airparts (NZ) Ltd. FU 24 Series Aeroplanes

AD/FU24/66 - Aileron Control Cables

#### Airtractor AT-300, 400 and 500 Series Aeroplanes

AD/AT/22 Amdt 2 - Wing Centreline Splice Joint  
AD/AT/29 - Engine Mount

#### Airtractor 600 Series Aeroplanes

AD/AT 600/4 Amdt 2 - Engine Mount

#### Beechcraft 55, 58 and 95-55 (Baron) Series Aeroplanes

AD/BEECH 55/3 - Rudder Torque Tube - CANCELLED

#### Beechcraft 56TC (Turbo Baron) Series Aeroplanes

AD/BEECH 56/4 - Nacelle Side Brace Ribs - CANCELLED

#### Beechcraft 65 and 70 (Queen Air) Series Aeroplanes

AD/BEECH 65/2 - Fuel System Check Valves - Installation - CANCELLED  
AD/BEECH 65/3 - Nose Landing Gear Attachment Bolts Replacement - CANCELLED  
AD/BEECH 65/4 - Flap Drive Assembly - Replacement - CANCELLED  
AD/BEECH 65/6 - Aft Facing Chair Reclining Stops - Inspection - CANCELLED  
AD/BEECH 65/7 Amdt 1 - Landing Gear Chain and Torque Shaft - Inspection - CANCELLED  
AD/BEECH 65/8 - Control Sub-Panel Shelf - Modification - CANCELLED  
AD/BEECH 65/9 - Automatic Pilot Shutoff Valves - Installation - CANCELLED  
AD/BEECH 65/13 - Starter and Battery Relay Covers - Installation - CANCELLED  
AD/BEECH 65/27 Amdt 1 - Fuel Vent Heater Wiring - CANCELLED  
AD/BEECH 65/29 Amdt 1 - Outer Wing Electrical Wiring - CANCELLED  
AD/BEECH 65/35 Amdt 1 - Port Inner Wing Electrical Wiring - CANCELLED  
AD/BEECH 65/36 Amdt 1 - Exhaust Augmenter Clamps - CANCELLED

AD/BEECH 65/37 - Electrothermal Deice Firewall Connector - Sealing - CANCELLED  
AD/BEECH 65/41 - Fuel System - Placards - CANCELLED  
AD/BEECH 65/44 - Flap Gearbox - Inspection of Gears - CANCELLED  
AD/BEECH 65/52 - Landing Gear Torque Tube - Inspection and Replacement - CANCELLED  
AD/BEECH 65/53 Amdt 1 - Rudder and Elevator Trim Tab Systems - CANCELLED  
AD/BEECH 65/54 Amdt 2 - Aft and Nose Hinged Baggage Door Latching - CANCELLED  
AD/BEECH 65/55 Amdt 1 - Nose Baggage Compartment Door - CANCELLED  
AD/BEECH 65/58 Amdt 3 - Fuel Boost Pumps - CANCELLED  
AD/BEECH 65/59 Amdt 1 - Elevators - CANCELLED  
AD/BEECH 65/60 Amdt 1 - Ansair Passenger Seats - CANCELLED

#### Beechcraft 76 (Duchess) Series Aeroplanes

AD/BEECH 76/1 - Control Bearing Assemblies - CANCELLED  
AD/BEECH 76/2 - Cowl Flap Hinge Assemblies - CANCELLED  
AD/BEECH 76/3 - Elevator Trailing Edge Bond - CANCELLED  
AD/BEECH 76/4 - Fuel Tank Outlet Check Valve and Fuel Selector Valves - CANCELLED  
AD/BEECH 76/6 - Wing Spar Centre Splice Plates - CANCELLED  
AD/BEECH 76/13 - Rudder Torque Lower Hinge Adaptor - CANCELLED  
AD/BEECH 76/14 - Engine Control Rod Safety Washers - CANCELLED  
AD/BEECH 76/15 - Woodward Governor Models L and R 210652 - CANCELLED  
AD/BEECH 76/16 Amdt 1 - MLG Side Brace Overcentre Travel and Limit Switch - CANCELLED  
AD/BEECH 76/17 - Wing Lower and Upper Splice Plate Bolt Installation - CANCELLED

#### Beechcraft 77 (Skipper) Series Aeroplanes

AD/BEECH 77/4 - Elevator Control Arm Bushings - CANCELLED  
AD/BEECH 77/5 - Control Column Installation - CANCELLED  
AD/BEECH 77/8 - Horizontal Stabiliser Attach Bolts - CANCELLED  
AD/BEECH 77/9 - Nose Landing Gear Axle - CANCELLED  
AD/BEECH 77/10 - Nose Landing Gear Attachment Bolts - CANCELLED  
AD/BEECH 77/12 - Engine Mount Assembly and Engine Control Linkage - CANCELLED  
AD/BEECH 77/13 - Engine Control Rod Safety Washers - CANCELLED  
AD/BEECH 77/15 Amdt 1 - Alternator System - CANCELLED

#### Beechcraft 90 and 65-90 (King Air) Series Aeroplanes

AD/BEECH 90/1 - Engine Oil Pressure Gauges - Modification - CANCELLED  
AD/BEECH 90/2 - Firewall Fuel Shut-Off Valve Switches - Modification - CANCELLED  
AD/BEECH 90/3 Amdt 1 - Tail Unit - Inspection - CANCELLED  
AD/BEECH 90/4 Amdt 3 - Landing Gear Actuators - Inspection - CANCELLED  
AD/BEECH 90/5 Amdt 1 - Landing Gear Chain and Torque Shaft - Inspection - CANCELLED  
AD/BEECH 90/6 - Fuel Line - Modification - CANCELLED  
AD/BEECH 90/10 - Standby Compass Deviation Placard - Installation - CANCELLED  
AD/BEECH 90/11 - Generator Operation Placard - Installation - CANCELLED  
AD/BEECH 90/12 - Ammeter Lead Circuit Protection - CANCELLED  
AD/BEECH 90/13 - Fuel Heater System Shield - Modification - CANCELLED  
AD/BEECH 90/17 - Engine Fire Extinguisher System - Modification - CANCELLED  
AD/BEECH 90/18 - Rudder Control System - Inspection - CANCELLED  
AD/BEECH 90/24 - Fuel Vent Heater Wiring - Inspection - CANCELLED  
AD/BEECH 90/26 - Outer Wing Electrical Wiring - Inspection - CANCELLED  
AD/BEECH 90/33 - Magnetic Material Near Compass Flux Valve - Removal - CANCELLED  
AD/BEECH 90/35 - Flap Gearbox - Inspection of Gears - CANCELLED  
AD/BEECH 90/37 - Elevator and Rudder Trim Tab Actuator

Systems - Inspection - CANCELLED  
AD/BEECH 90/54 - Aft and Nose Hinged Baggage Door Latching - Inspection and Modification - CANCELLED  
AD/BEECH 90/59 - Elevator Control Horn Attachment - Modification - CANCELLED  
AD/BEECH 90/60 - Left Hand Rudder Cable Installation - Inspection - CANCELLED  
AD/BEECH 90/61 - Pilot and Co-Pilot Seatback Pan - Modification - CANCELLED

#### Beechcraft 200 (Super King Air) Series Aeroplanes

AD/BEECH 200/75 - Tail De-icing Pneumatic Supply Tubes

#### Cessna 170, 172, F172, FR172 and 175 Series Aeroplanes

AD/CESSNA 170/83 - Alternate Static Air Source Valve

#### Cessna 180, 182 and Wren 460 Series Aeroplanes

AD/CESSNA 180/2 - Right Wing Rear Spar - CANCELLED  
AD/CESSNA 180/16 - Safety Harness Inertia Reel - CANCELLED  
AD/CESSNA 180/22 - Tail Wheel Steering Bellcrank - CANCELLED  
AD/CESSNA 180/28 Amdt 1 - Aileron Mass Balance Weight Attachment Rivets - CANCELLED  
AD/CESSNA 180/35 - Rear Seat Attachment - CANCELLED  
AD/CESSNA 180/40 Amdt 1 - Main Gear Wheel Assemblies - CANCELLED  
AD/CESSNA 180/50 - Elevator Control Travel - CANCELLED  
AD/CESSNA 180/52 - Nose Gear Drag Strut Attach Fitting - CANCELLED  
AD/CESSNA 180/53 - Steering Bungee Boot - CANCELLED  
AD/CESSNA 180/57 - Fuel Hose - CANCELLED  
AD/CESSNA 180/58 - Fuel Tank Filler Neck - CANCELLED  
AD/CESSNA 180/64 - Nose Gear Tunnel Access Hole Plug Button - CANCELLED  
AD/CESSNA 180/65 - Cylinder Head Temperature Probe - CANCELLED  
AD/CESSNA 180/66 - King KFC 200 Flight Control System - CANCELLED  
AD/CESSNA 180/93 - Alternate Static Air Source Valve

#### Cessna 185 Series Aeroplanes

AD/CESSNA 185/4 - Tail Wheel Assembly - CANCELLED  
AD/CESSNA 185/5 - Inertia Reel - CANCELLED  
AD/CESSNA 185/9 Amdt 1 - Rudder Bellcrank Bracket - CANCELLED  
AD/CESSNA 185/10 - Tail Wheel Steering Bellcrank - CANCELLED  
AD/CESSNA 185/11 - Non-Return Valves in Electric Fuel Pump Bypass Line - CANCELLED  
AD/CESSNA 185/14 Amdt 1 - Carburettor Air Box Shaft - CANCELLED  
AD/CESSNA 185/16 Amdt 1 - Aileron Mass Balance Weight Attachment Rivets - CANCELLED  
AD/CESSNA 185/20 - Main Gear Wheel Assemblies - CANCELLED  
AD/CESSNA 185/23 - Throttle/Mixture Control Cable Attachment - CANCELLED  
AD/CESSNA 185/24 - Fuel and Oil Leaks - CANCELLED  
AD/CESSNA 185/26 - Fuel Line - CANCELLED  
AD/CESSNA 185/27 - Self Locking Nuts - CANCELLED  
AD/CESSNA 185/31 - Fuel Tank Filler Neck - CANCELLED  
AD/CESSNA 185/38 Amdt 1 - Rudder Pedal Torque Tube - CANCELLED  
AD/CESSNA 185/42 - Seat Rail Latch - CANCELLED  
AD/CESSNA 185/49 - Alternate Static Air Source Valve

#### Cessna 205 (210-5) Series Aeroplanes

AD/CESSNA 205/24 - Alternate Static Air Source Valve

#### Cessna 206 Series Aeroplanes

AD/CESSNA 206/65 - Alternate Static Air Source Valve

#### Cessna 207 Series Aeroplanes

AD/CESSNA 207/39 - Alternate Static Air Source Valve

#### Cessna 208 Series Aeroplanes

AD/CESSNA 208/22 - Alternate Static Air Source Valve

#### Cessna 210 Series Aeroplanes

AD/CESSNA 210/74 - Alternate Static Air Source Valve

#### Cessna T303 Series Aeroplanes

AD/CESSNA 303/13 - Alternate Static Air Source Valve

#### Cessna 340 Series Aeroplanes

AD/CESSNA 340/15 - Landing Gear Emergency Handle - Replacement - CANCELLED

AD/CESSNA 340/19 - Upper Inner Cabin Door Handle and Locking Mechanism - Inspection - CANCELLED  
AD/CESSNA 340/23 - Elevator Balance Weight - Inspection - CANCELLED  
AD/CESSNA 340/30 Amdt 1 - Placards and Cabin Fittings - CANCELLED

#### **Diamond DA42 Series Aeroplanes**

AD/DA42/5 - Aileron Bellcrank and Rod Ends

#### **Dornier 228 Series Aeroplanes**

AD/DO 228/14 - Nose Landing Gear Strut Support

#### **Piper PA-20 (Pacer) Series Aeroplanes**

AD/PA-20/12 - Fuselage Structure, Upper Cabin - Inspection - CANCELLED  
AD/PA-20/16 Amdt 1 - Fuselage Door Frame Tube Corrosion - CANCELLED

#### **Piper PA-22 (Tri-Pacer and Colt) Series Aeroplanes**

AD/PA-22/4 - Nose Wheel Mount - Stiffener Brace - CANCELLED  
AD/PA-22/5 - Rivets in Aileron Hinge Bearing Blocks - Inspection - CANCELLED  
AD/PA-22/16 - Tail Brace Clevises - Replacement - CANCELLED  
AD/PA-22/17 - Cabin Heater Box Plate - Modification - CANCELLED  
AD/PA-22/18 - Horizontal Stabiliser Trim Control Screw Mechanism - Stop Installation - CANCELLED  
AD/PA-22/21 - Landing Gear Fairing - Modification - CANCELLED  
AD/PA-22/22 - Rudder Pedals - Modification - CANCELLED  
AD/PA-22/34 - Shimmy Damper - CANCELLED

#### **Piper PA-23 (Apache and Aztec) Series Aeroplanes**

AD/PA-23/1 - Flap Spar and Stabiliser Spar - Reinforcement - CANCELLED  
AD/PA-23/3 - Main Landing Gear Forgings and Wheels - Replacement - CANCELLED  
AD/PA-23/5 - Main Landing Gear Attachment Points - Modification - CANCELLED  
AD/PA-23/14 - Rudder Trim Tab Control Rod - Inspection - CANCELLED  
AD/PA-23/19 - Elevator Control Tube Bellcrank Attachment - Modification - CANCELLED  
AD/PA-23/20 - Stabilator Tab Horn - Modification - CANCELLED  
AD/PA-23/23 - Rudder Tab Horn Bolt - Replacement - CANCELLED  
AD/PA-23/24 - Stabilator Tab Horn - Inspection - CANCELLED  
AD/PA-23/27 - Wing Flaps - Inspection and Modification - CANCELLED  
AD/PA-23/31 Amdt 1 - Rudder Trim Tab Control Rod - Inspection  
AD/PA-23/32 Amdt 2 - Cabin Door Latch - Modification - CANCELLED

#### **Piper PA-28 Series Aeroplanes**

AD/PA-28/2 - Rudder & Stabilator Control Cables, Installation of Fairleads - Modification & Inspection - CANCELLED  
AD/PA-28/8 - Rudder Trim Installation - CANCELLED  
AD/PA-28/10 - Centre Safety Belt Attachment - Inspection - CANCELLED  
AD/PA-28/18 - Wing Rear Spar Attachment Bolts - Inspection - CANCELLED

AD/PA-28/24 - Control Wheel Retaining Pin - Modification - CANCELLED  
AD/PA-28/30 - Engine Mount Tubes - Inspection - CANCELLED  
AD/PA-28/31 - Seat Frame - Modification - CANCELLED  
AD/PA-28/36 - Stabilator Hinge Attaching Bolts - Inspection - CANCELLED  
AD/PA-28/39 - Stabilator - Inspection and Drilling of Drain Holes - CANCELLED  
AD/PA-28/43 - Rudder Bar Assembly - Inspection and Modification - CANCELLED  
AD/PA-28/44 - Rear Seat Belt Attachment - Modification - CANCELLED  
AD/PA-28/45 - Gross Weight - Reduction - CANCELLED  
AD/PA-28/46 - Wing Reinforcement - Modification - CANCELLED  
AD/PA-28/48 - Outer Wing Spar - Inspection - CANCELLED  
AD/PA-28/49 - Air Conditioning System - Modification - CANCELLED  
AD/PA-28/51 - Aileron Centring Cable - Inspection - CANCELLED  
AD/PA-28/55 - Fuel Valve - Replacement - CANCELLED  
AD/PA-28/67 - Electric Pitch Trim Switch - Modification - CANCELLED  
AD/PA-28/69 - Engine Cowling - Drain Hole Provision - CANCELLED  
AD/PA-28/71 - Nose Landing Gear Down Lock - Modification or Replacement - CANCELLED  
AD/PA-28/73 - Hose Assembly - Inspection and Modification - CANCELLED  
AD/PA-28/74 - Fuel and Vapour Return Lines - Modification - CANCELLED  
AD/PA-28/81 - Fuel Filter Drain Valve - Replacement - CANCELLED  
AD/PA-28/82 - Rudder Torque Tube Attachment Fitting and Hardware - Inspection - CANCELLED  
AD/PA-28/85 - Battery Strap Installation - CANCELLED  
AD/PA-28/87 - Stabilator Attach Fitting Corrosion - CANCELLED  
AD/PA-28/88 Amdt 3 - Aft Centre of Gravity Restriction - CANCELLED

#### **Rockwell (N American) & Autair (Noorduyn)**

#### **AT-6, BC-1A, SNJ, T-6G, Harvard, & AT-16 Series Aeroplanes**

AD/AT-6/2 - Horizontal Stabiliser Rear Spar Connector Fittings

#### **Part 39-105 - Above 5700 kgs**

#### **Airbus Industrie A319, A320 and A321 Series Aeroplanes**

AD/A320/224 - Hydraulic Power - Ram Air Turbine Georotor Pump

#### **Airbus Industrie A330 Series Aeroplanes**

AD/A330/76 Amdt 2 - Electrical Power/APU Generator Inspection

#### **Airtractor 800 Series Aeroplanes**

AD/AT 800/9 Amdt 2 - Engine Mount

#### **Beechcraft 300 Series Aeroplanes**

AD/BEECH 300/22 - Tail De-icing Pneumatic Supply Tubes

#### **Boeing 727 Series Aeroplanes**

AD/B727/101 Amdt 2 - Rear Pressure Bulkhead Web

#### **Boeing 737 Series Aeroplanes**

AD/B737/327 - SSI Damage Tolerance Rating  
AD/B737/328 - Flight Deck Windows No.2, No.4, and No.5  
AD/B737/329 - Airworthiness Limitations and Inspections - Fuel Systems  
AD/B737/330 - Boost Pump control Relay Ground Block Corrosion  
AD/B737/331 - Airworthiness Limitations and Inspections - Fuel Systems

#### **Boeing 747 Series Aeroplanes**

AD/B747/377 - Fuselage Exterior Skin at Station 488  
AD/B747/378 - Airworthiness Limitations and Inspections - Fuel Systems  
AD/B747/379 - Airworthiness Limitations & Inspections - Fuel Tank Systems

#### **Boeing 767 Series Aeroplanes**

AD/B767/242 - Airworthiness Limitations and Inspections - Fuel Systems

#### **Bombardier (Canadair) CL-600 (Challenger) Series Aeroplanes**

AD/CL-600/99 - Fuel Tank Climb Vent Loop  
AD/CL-600/100 - Fuel Tube Coupling - Electrical Bonding

#### **Bombardier (Boeing Canada/De Havilland) DHC-8 Series Aeroplanes**

AD/DHC-8/141 Amdt 1 - Elevator Centering Torsion Springs

#### **British Aerospace BAe 146 Series Aeroplanes**

AD/BAe 146/116 Amdt 1 - Fuselage Door Frames

#### **Dornier 328 Series Aeroplanes**

AD/DO 328/71 - Wing Lower Inner Panel

#### **Embraer ERJ-190 Series Aeroplanes**

AD/ERJ-190/10 - Ram Air Turbine Deployment  
AD/ERJ-190/11 - Hydraulic Tube Clamps in the Fuel Tanks  
AD/ERJ-190/12 - Hydraulic Shutoff Valves  
AD/ERJ-190/13 - Cargo Doors

#### **Fokker F100 (F28 Mk 100) Series Aeroplanes**

AD/F100/21 Amdt 1 - Reverse Thrust Control Maximum Detent  
AD/F100/73 Amdt 1 - Wing-to-Fuselage Fairings  
AD/F100/88 - Engine Controls - Reverse Thrust Control Normal Maximum (Second) Detent

#### **Part 39-106 - Piston Engines**

#### **Rotax Piston Engines**

AD/ROTAX/22 Amdt 1 - Camshaft Hydraulic Tappet Wear

#### **SMA Piston Engines**

AD/SMA/4 - Air Inlet Manifold Hose Clamps

#### **Part 39-106 - Turbine Engines**

#### **Turbomeca Turbine Engines - Arriel Series**

AD/ARRIEL/29 - Low Fuel Pressure Switch

#### **Part 39-107 Equipment**

#### **Fuel Supply and Metering Equipment**

AD/FSM/31 Amdt 1 - Precision Airmotive Fuel Injection Servo Plugs

#### **Parachute Equipment**

AD/PARA/18 - VIGIL Parachute Automatic Activation Device

#### **Seats and Berths**

AD/SEATS/29 - Sigma Passenger Seat Inspection

#### **Turbochargers**

AD/TURBO/2 - Kelly Aerospace Turbochargers