

# Airworthiness Directive Schedule

## Aeroplanes

### Cessna 402, 402B and 402C Series

31 May 2018

---

- Notes:**
1. This AD schedule is applicable to Cessna 402, 402B and 402C series aircraft manufactured under FAA Type Certificate No. A7CE.
  2. The Federal Aviation Administration (FAA) is the National Airworthiness Authority (NAA) responsible for the issue of State of Design Airworthiness Directives (ADs) for these aircraft. State of Design ADs can be obtained directly from the FAA web site at [http://rgl.faa.gov/Regulatory\\_and\\_Guidance\\_Library/rgAD.nsf/MainFrame?OpenFrameSet](http://rgl.faa.gov/Regulatory_and_Guidance_Library/rgAD.nsf/MainFrame?OpenFrameSet)
  3. The date above indicates the amendment date of this schedule.
  4. New or amended ADs are shown with an asterisk \*
- 

## Contents

DCA/CESS402/1D	Cancelled – DCA/CESS402/21 refers .....	3
DCA/CESS402/2	Fuel System - Modification.....	3
DCA/CESS402/3A	Wing Tip Fuel Tank Strobe Light Installations - Inspection.....	3
DCA/CESS402/4	Emergency Hatch - Inspection.....	3
DCA/CESS402/5	Main Landing Gear Fork Bolts - Replacement.....	4
DCA/CESS402/6B	Cancelled – DCA/CESS402/24 refers .....	4
DCA/CESS402/7	Trim Control Systems - Inspection.....	4
DCA/CESS402/8	Passenger Seat Installation - Inspection .....	4
DCA/CESS402/9	Flexible Fuel Tanks - Inspection .....	5
DCA/CESS402/10A	Main Landing Gear Scissor Assembly - Modification.....	5
DCA/CESS402/11A	Engine Mount - Inspection .....	5
DCA/CESS402/12	NLG Actuating Rod - Modification.....	7
DCA/CESS402/13A	Passenger Seats - Modification .....	7
DCA/CESS402/14	Auxiliary Fuel Pump Wiring - Modification .....	7
DCA/CESS402/15	MLG Inner Bearing - Inspection .....	8
DCA/CESS402/16A	Fuel Inlet Float Valve - Inspection.....	8
DCA/CESS402/17	Landing Gear, Emergency Extension System - Modification .....	9
DCA/CESS402/18	Fuel, Oil or Hydraulic Hose - Removal.....	9
DCA/CESS402/19	Severe Icing Conditions – AFM Revision.....	9
DCA/CESS402/20	Cancelled – DCA/CESS402/23 refers .....	11
DCA/CESS402/21A	Exhaust System – Inspection.....	11
DCA/CESS402/22A	NLG Actuator Attachment Structure – Inspection .....	11
DCA/CESS402/23	Cancelled – DCA/CESS402/25 refers .....	11
DCA/CESS402/24	Forward, Aft and Auxiliary Wing Spars - Inspection.....	12
DCA/CESS402/25	Forward, Aft and Auxiliary Wing Spars - Inspection.....	13
DCA/CESS402/26	Avionics Bus Circuit Breakers – Inspection .....	14
DCA/CESS402/27	Auxiliary Wing Spar – Inspection .....	15
<b>From 1 October 2012 the Civil Aviation Authority of New Zealand (CAA) will no longer rewrite the text of State of Design ADs. Applicable State of Design ADs will be listed below and can be obtained directly from the National Airworthiness Authority (NAA) web site. The link to the NAA web site is available on the CAA web site at <a href="http://www.caa.govt.nz/airworthiness-directives/states-of-design/">http://www.caa.govt.nz/airworthiness-directives/states-of-design/</a> If additional NZ ADs need to be issued when an unsafe condition is found to exist in an aircraft or aeronautical product in NZ they will be added to the list below.</b> .....		
2012-23-01	Flap System – Inspection.....	17
2014-03-03	Flight Limitations – AFM Amendment, Maintenance Records and Placards .....	17
2015-07-03	Engine Mount Beams – Inspection .....	17

2016-07-24	Cancelled – FAA AD 2016-17-08 refers .....	17
2016-17-08	Elevator Trim Push-pull Rod – Inspection.....	17
2017-10-09	Nacelle Fittings – Inspection.....	17
* 2018-03-03R1	Carry Through Spars – Inspection .....	18

**DCA/CESS402/1D Canceled – DCA/CESS402/21 refers****DCA/CESS402/2 Fuel System - Modification**

- Applicability:** Model 402 S/N 4020001 through 4020322  
Model 402A S/N 402A0001 through 402A0129  
Model 402B S/N 402B0001 through 402B0392
- Requirement:** Comply with Cessna MESL ME 73-5 Supplement No. 1.  
(FAA AD 73-22-01 refers)
- Compliance:** By 28 February 1974

**DCA/CESS402/3A Wing Tip Fuel Tank Strobe Light Installations - Inspection**

- Applicability:** All model 402 Series with strobe lights fitted in wing tip fuel tank nose caps, except those with Symbolic Displays P/N 30-0005, 30-0199-3 and 701133-1; Whelan Engineering Co. Inc. P/N A430 and Grimes Manufacturing Co. (Grimes) P/N 30-0515-5, 30-1172-1, 30-0531-1 and 30-0467-5 strobe lights
- Requirement:** Comply with FAA AD 76-08-02 R2 (Cessna MESL ME 75-16 refers)  
(FAA AD 76-08-02R2 refers)
- Compliance:** Within the next 100 hours TIS
- Effective Date:** 31 May 1976

*Note: A copy of the reference document may be obtained from the Director*

**DCA/CESS402/4 Emergency Hatch - Inspection**

- Applicability:** All model 402 Series All S/N's
- Requirement:** As a result of an emergency hatch loss in flight, remove cabin interior lining as necessary and check that:
1. Retention clips on each side of hatch are secure, correctly formed and free from cracks.
  2. Locking pins below fuselage frame at lower edge of hatch are fully engaged and wire locking is intact.
- Any discrepancies found are to be rectified before flight.
- Compliance:** Unless already accomplished, within next 50 hours TIS and thereafter at intervals not exceeding 200 hours TIS
- Effective Date:** 28 November 1975

**DCA/CESS402/5 Main Landing Gear Fork Bolts - Replacement****Applicability:** All model 402 Series All S/N's**Requirement:** Comply with Cessna MESL ME 75-23  
(FAA AD 76-13-07 refers)**Compliance:**  
1. Replace bolts P/N 0843518-1 and -2, 0843500-35 and -54, 5243518-1 and -3 at 2000 hours TIS and thereafter at intervals not exceeding 2000 hours TIS, except that bolts having more than 1800 hours TIS shall be replaced within next 200 hours TIS.  
2. Replace bolts P/N 5141052-1 at 5000 hours TIS and thereafter at intervals not exceeding 5000 hours TIS, except that bolts having more than 4800 hours TIS shall be replaced within next 200 hours TIS.**Effective Date:** 18 August 1976**DCA/CESS402/6B Cancelled – DCA/CESS402/24 refers****Effective Date:** 29 September 2005**DCA/CESS402/7 Trim Control Systems - Inspection****Applicability:** All model 402 Series All S/N's**Requirement:** Inspect aileron, elevator, and rudder trim tabs, trim tab actuators and attaching linkages in accordance with Cessna MESL ME 77-34 Supplement No. 1**Compliance:** Not later than next 25 hours TIS, and thereafter at intervals not exceeding 100 hours TIS**Effective Date:** 20 March 1978**DCA/CESS402/8 Passenger Seat Installation - Inspection****Applicability:** Model 402B S/N 402B0301 through 402B1332**Requirement:** Inspect passenger seats for correct installation per Cessna MESL ME 78-17.  
(FAA AD 78-13-05 refers)**Compliance:** Within the next 25 hours TIS**Effective Date:** 21 July 1978

**DCA/CESS402/9 Flexible Fuel Tanks - Inspection**

**Applicability:** All model 402 Series  
with Goodyear BTC-39 series fuel tanks

**Requirement:** Accomplish the following:

1. Visual inspection per Cessna MESL ME 78-7.
2. Detailed inspection and pressure test per Cessna MESL ME 78-7.  
(Goodyear SB FT-77-1 and FAA AD 78-05-06 also refer)

**Compliance:** 1. Within the next 25 hours TIS or 30 days whichever is the sooner.  
2. Within the next 100 hours TIS or 6 months whichever is the sooner and thereafter at intervals not exceeding 12 months.

**Effective Date:** 21 July 1978

**DCA/CESS402/10A Main Landing Gear Scissor Assembly - Modification**

**Applicability:** Model 402 Series S/N 402-0001 through 402C0801

**Requirement:** To preclude possible loss of wheel alignment due to failure of scissor assembly washer allowing migration of connecting bolt, modify per Cessna SIL ME 83-37

**Compliance:** Within the next 100 hours TIS

**Effective Date:** DCA/CESS402/10 - 29 June 1984  
DCA/CESS402/10A - 27 July 1984

**DCA/CESS402/11A Engine Mount - Inspection**

**Applicability:** Model 402C S/N 402C0001 through 402C0808.

**Requirement:** To prevent failure of the engine mount beam caused by fatigue cracks, which could result in engine separation and loss of the aircraft, accomplish the following:-

(a) For aircraft with Cessna Kit SK414-17 incorporated, within the next 1,600 hours TIS (to coincide with the next engine overhaul), incorporate Cessna Kit SK414-19-1, and one of the following, as applicable, per the instructions to Service Kit SK414-19B, Revised: March 4, 1986:

(1) Cessna Kit SK414-19-2: All of the affected Models 402C that are equipped with propeller unfeathering accumulators;

(2) Cessna Kit SK414-19-3: Model 402C S/N 402C0001 through 402C0468;

(3) Cessna Kit SK414-19-5: Model 402C S/N 402C0469 through 402C0808.

(b) For aircraft without Cessna Kit SK414-17 incorporated, within the next 200 hours TIS (to coincide with the next inspection that would have been required by DCA/CESS402/11, which is superseded by this AD), incorporate Cessna Kit SK414-19-1, and one of the following, as applicable, per the instructions to Service Kit SK414-19B, Revised: March 4, 1986:

- (1) Cessna Kit SK414-19-2: All of the affected Model 402C that are equipped with propeller unfeathering accumulators;
  - (2) Cessna Kit SK414-19-4: Model 402C S/N 402C0001 through 402C0468;
  - (3) Cessna Kit SK414-19-5: Model 402C S/N 402C0469 through 402C0808.
- (c) Within 9,600 hours TIS after the modification required by paragraph (a) or (b) of this AD, as applicable, and thereafter at intervals not to exceed 9,600 hours TIS, inspect, using radiographic methods, the engine mount beams for cracks per the ACCOMPLISHMENT INSTRUCTIONS section of Attachment to SB MEB85-3, Revised - August 23, 1985, as referenced in Cessna SB MEB85-3, Revision 2, dated October 23, 1987.
- (1) If any crack is found in the left side (vertical portion) of the left engine beam of either nacelle, prior to further flight, obtain a repair scheme from the manufacturer, and then incorporate this repair scheme.
  - (2) If cracks are found in the top (horizontal portion) of the engine beam and the total length of the cracks is less than 1.75 inches, prior to further flight, stop drill each end of each crack using a 0.098-inch drill bit.
  - (3) If cracks are found in the top (horizontal portion) of the engine beam and the total length of the cracks is equal to or greater than 1.75 inches, but less than 2.75 inches, prior to further flight, obtain a repair scheme from the manufacturer, and then incorporate this repair scheme.
  - (4) If cracks are found in the top (horizontal portion) of the engine beam and the total length of the cracks is equal to or greater than 2.75 inches, prior to further flight, replace the engine beam with a P/N specified in the instructions to Service Kit SK414-19B, Revised: March 4, 1986.
- (d) If parts for any of the engine beam modifications required by paragraphs (a) and (b) of this AD have been ordered from the manufacturer but are not available, accomplish the following per the ACCOMPLISHMENT INSTRUCTIONS section of Attachment to SB MEB85-3, Revised - August 23, 1985, as referenced in SB MEB85-3, Revision 2, dated October 23, 1987:
- (1) For aircraft with Cessna Kit SK414-17 incorporated, within the next 1,600 hours TIS (to coincide with the next engine overhaul); and thereafter at intervals not to exceed 1,600 hours TIS; provided no provision specified in paragraph (e) of this AD occurs, inspect the engine mount beams using radiographic methods.
  - (2) For aircraft without Cessna Kit SK414-17 incorporated, within the next 200 hours TIS (to coincide with next inspection that would have been required by DCA/CESS402/11, which is superseded by this AD); and thereafter at intervals not to exceed 200 hours TIS; provided no provision specified in paragraph (e) of this AD occurs, fluorescent penetrant inspect the engine mount beams.
- (e) If any one of the following occurs during any of the inspections required by paragraph (d) of this AD, prior to further flight, accomplish the specified actions:
- (1) If parts become available, terminate the repetitive inspections specified in paragraph (d) of this AD, incorporate the modification kits as required by paragraph (a) or (b) of this AD, and inspect the engine mount beams as specified in paragraph (c) of this AD;
  - (2) If any crack is found in the left side (vertical portion) of the left engine beam of either nacelle, obtain a repair scheme from the manufacturer, incorporate this repair scheme, and continue the repetitive inspections required by paragraph (d) of this AD;

(3) If cracks are found in the top (horizontal portion) of the engine beam and the total length of the cracks is less than 1.75 inches, stop drill each end of each crack using a 0.098-inch drill bit, and continue the repetitive inspections required by paragraph (d) of this AD;

(4) If cracks are found in the top (horizontal portion) of the engine beam and the total length of the cracks is equal to or greater than 1.75 inches, but less than 2.75 inches, obtain a repair scheme from the manufacturer, incorporate this repair scheme, and continue the repetitive inspections required by paragraph (d) of this AD; or

(5) If cracks are found in the top (horizontal portion) of the engine beam and the total length of the cracks is equal to or greater than 2.75 inches, replace the engine beam with a P/N specified in the instructions to Service Kit SK414-19B, Revised: March 4, 1986, and inspect the engine mount beams as specified in paragraph (c) of this AD. (FAA AD 97-26-16 refers)

**Compliance:** Compliance is required at the times specified within the requirement of this airworthiness directive.

**Effective Date:** DCA/CESS402/11 - 2 December 1988  
DCA/CESS402/11A - 13 February 1998

**DCA/CESS402/12 NLG Actuating Rod - Modification**

**Applicability:** Model 402C S/N 402C0001 through 402C0802

**Requirement:** To preclude possible collapse of NLG, modify per Cessna SIL ME 84-10.  
(FAA AD 84-20-02 refers)

**Compliance:** Within the next 200 hours TIS, unless already accomplished

**Effective Date:** 2 December 1988

**DCA/CESS402/13A Passenger Seats - Modification**

**Applicability:** All model 402 Series fitted with Enviroform seats

**Requirement:** To assure structural integrity of affected seats, modify per Cessna Service Kit SK 421-135A or SK 421-78A as applicable.  
(FAA AD 92-16-18 refers)

**Compliance:** Upon installation of any Enviroform seat or within next 100 hours TIS, unless already accomplished.

**Effective Date:** DCA/CESS402/13 - 2 December 1988  
DCA/CESS402/13A - 2 December 1992

**DCA/CESS402/14 Auxiliary Fuel Pump Wiring - Modification**

**Applicability:** All model 402 Series which have been modified per Cessna MEB 88-3

**Requirement:** To overcome unsatisfactory features introduced by Cessna MEB 88-3, modify per Cessna MEB 88-3 Rev. 1.

**Compliance:** Within the next 100 hours TIS unless already accomplished

**Effective Date:** 16 February 1990

**DCA/CESS402/15 MLG Inner Bearing - Inspection**

- Applicability:** Model 402 Series S/N 402-0001 through 402C0125.  
Aircraft fitted with P/N 5141109-1 bearing in each MLG are not affected
- Requirement:** To prevent jamming of the MLG inner and outer barrels, inspect per Cessna MEB 88-7. Rectify defective assemblies before further flight.  
(FAA AD 90-02-13 refers)
- Compliance:** At 1300 hours TTIS or within next 300 hours TIS whichever is the later and thereafter at intervals not exceeding 1000 hours TIS
- Effective Date:** 25 May 1990

**DCA/CESS402/16A Fuel Inlet Float Valve - Inspection**

- Applicability** Model 402C, S/N 402C0001 through 402C1020, and 689.  
*Note: This revision to the AD corrects the model and S/N applicability.*
- Requirement:** To prevent possible loss of engine power caused by failure of a fuel inlet float valve, accomplish the following:-
1. For aircraft fitted with fuel inlet float valve P/N 9910242-1, -4, -5, -6, -7, -8, -205, -206, -207 and -208:
    - (a) Perform the appropriate valve test per paragraph 2 or 3 of Cessna MEB93-10R1. Any valve which fails the tests, must be replaced with a P/N 9910242-11 or -12 valve before further flight.
    - (b) Replace the valve with a P/N 9910242-11 or -12 valve per MEB93-10R1.
  2. For aircraft fitted with fuel inlet float valve P/N 9910242-9 or -10:
    - (a) Perform the appropriate valve test per paragraph 2 or 3 of Cessna MEB93-10R1. Any valve which fails the tests, must be replaced with a P/N 9910242-11 or -12 valve before further flight.
    - (b) Install the K74D retainer kit per MEB93-10R1.  
(FAA AD 95-09-13 refers)
- Compliance:**
1. (a) Test within next 200 hours TIS and thereafter at intervals not to exceed 200 hours TIS until valve replacement per 1(b), then test at intervals not to exceed 600 hours TIS.  
(b) At 1800 hours TTIS or within next 12 months, whichever is the later.
  2. (a) Test within next 200 hours TIS and thereafter at intervals not to exceed 200 hours TIS until valve modification per 2(b), then test at intervals not to exceed 600 hours TIS.  
(b) Within next 12 months.
- Effective Date:** DCA/CESS402/16 - 22 November 1996  
DCA/CESS402/16A - 25 September 1998



**DCA/CESS402/17 Landing Gear, Emergency Extension System - Modification****Applicability:** All model 402C All S/N's**Requirement:** To preclude possible emergency extension system malfunction, embody an end fitting on operating cable which, when inner cable is operated, fully restrains cable outer conduit and positively locates clamp assembly. (Cessna SIL ME81-28 refers)**Compliance:** By 31 January 1997**Effective Date:** 20 December 1996**DCA/CESS402/18 Fuel, Oil or Hydraulic Hose - Removal****Applicability:** All model 402 series, all S/Ns.**Requirement:** To prevent fuel, oil or hydraulic systems failure caused by a collapsed hose, check the aircraft maintenance records for any fuel, oil or hydraulic hose, Cessna P/N S51-10, replaced between March 1995 and 14 March 1997. If any fuel, oil or hydraulic hose, Cessna P/N S51-10, has been replaced between March 1995 and 14 March 1997, accomplish the following:-

Before further flight physically check for a diagonal or spiral external reinforcement wrap per Cessna SB MEB96-10. Replace any P/N S51-10 hose that has a diagonal or spiral pattern external reinforcement wrap with a P/N S51-10 hose that has a criss-cross pattern external wrap per SB MEB96-10.

(FAA AD 97-01-13 refers)

**Compliance:** Within next 60 hours TIS or 60 days, whichever is the sooner.**Effective Date:** 14 March 1997**DCA/CESS402/19 Severe Icing Conditions – AFM Revision****Applicability:** Models 402B and 402C**Requirement:** To minimise the potential hazards associated with operating the aircraft in severe icing conditions (by providing more clearly defined procedures and limitations associated with such conditions), incorporate the following into the Aircraft Flight Manual (AFM):-**1. Limitations Section of the Aircraft Flight Manual****“WARNING**

Severe icing may result from environmental conditions outside of those for which the aircraft is certificated. Flight in freezing rain, freezing drizzle, or mixed icing conditions (supercooled liquid water and ice crystals) may result in ice build-up on protected surfaces exceeding the capability of the ice protection system, or may result in ice forming aft of the protected surfaces. This ice may not be shed using the ice protection systems, and may seriously degrade the performance and controllability of the aircraft.

- During flight, severe icing conditions that exceed those for which the aircraft is certificated shall be determined by the following visual cues. If one or more of these visual cues exists, immediately request priority handling from Air Traffic Control to facilitate a route or an altitude change to exit the icing conditions.
- Unusually extensive ice accumulation on the airframe and windshield in areas not normally observed to collect ice.
- Accumulation of ice on the upper surface of the wing aft of the protected area.

- Accumulation of ice on the engine nacelles and propeller spinners farther aft than normally observed.
- Since the autopilot, when installed and operating, may mask tactile cues that indicate adverse changes in handling characteristics, use of the autopilot is prohibited when any of the visual cues specified above exist, or when unusual lateral trim requirements or autopilot trim warnings are encountered while the aircraft is in icing conditions.
- All wing icing inspection lights must be operative prior to flight into known or forecast icing conditions at night. This supersedes any relief provided by the Master Minimum Equipment List (M MEL).”

## 2. Normal Procedures Section of the Aircraft Flight Manual

“THE FOLLOWING WEATHER CONDITIONS MAY BE CONDUCIVE TO SEVERE IN-FLIGHT ICING:

- Visible rain at temperatures below 0 degrees Celsius ambient air temperature.
- Droplets that splash or splatter on impact at temperatures below 0 degrees Celsius ambient air temperature.

PROCEDURES FOR EXITING THE SEVERE ICING ENVIRONMENT:

These procedures are applicable to all flight phases from takeoff to landing. Monitor the ambient air temperature. While severe icing may form at temperatures as cold as -18 degrees Celsius, increased vigilance is warranted at temperatures around freezing with visible moisture present. If the visual cues specified in the Limitations Section of the AFM for identifying severe icing conditions are observed, accomplish the following:

- Immediately request priority handling from Air Traffic Control to facilitate a route or an altitude change to exit the severe icing conditions in order to avoid extended exposure to flight conditions more severe than those for which the aircraft has been certificated.
- Avoid abrupt and excessive manoeuvring that may exacerbate control difficulties.
- Do not engage the autopilot.
- If the autopilot is engaged, hold the control wheel firmly and disengage the autopilot.
- If an unusual roll response or uncommanded roll control movement is observed, reduce the angle-of-attack.
- Do not extend flaps when holding in icing conditions. Operation with flaps extended can result in a reduced wing angle-of-attack, with the possibility of ice forming on the upper surface further aft on the wing than normal, possibly aft of the protected area.
- If the flaps are extended, do not retract them until the airframe is clear of ice.
- Report these weather conditions to Air Traffic Control.”

Note: This may be accomplished by inserting a copy of this AD in the AFM or by incorporating a manufacturer’s flight manual revision that contains the wording per this AD.

## 3. Flight Crew Notification

Operators must ensure that flight crew are aware of the flight manual revision.

(FAA AD 98-04-28 refers)

**Compliance:** By 10 May 1998

**Effective Date:** 10 April 1998

**DCA/CESS402/20 Cancelled – DCA/CESS402/23 refers****Effective Date:** 31 March 2005**DCA/CESS402/21A Exhaust System – Inspection****Applicability:** All model 402, 402A, 402B and 402C.**Requirement:** To detect and correct cracks and corrosion in the exhaust system, which could result in exhaust system failure and a possible uncontrollable in-flight fire, accomplish FAA AD 2000-01-16.

A copy of FAA AD 2000-01-16 will be provided free of charge to aircraft owners and maintenance engineers. A copy may be obtained from:

The Library  
Civil Aviation Authority  
PO Box 31441  
Lower Hutt

Note: Inspection per paragraph (g) of FAA AD 2000-01-16 may be accomplished by a LAME.

**Compliance:** Compliance is required at the times specified within FAA AD 2000-01-16.**Effective Date:** DCA/CESS402/21 - 24 February 2000  
DCA/CESS402/21A - 29 June 2000**DCA/CESS402/22A NLG Actuator Attachment Structure – Inspection****Applicability:** All model 402C aircraft.**Requirement:** To prevent failure of NLG actuator attachment structure, accomplish the following:-

Inspect the attachment lugs, channel sections, support zee sections and the baggage shelf skin for fatigue cracking and associated damage. Without removing NLG actuator, inspect from within nose wheel well with torch and mirror. Also inspect baggage shelf skin from within forward baggage compartment.

Any NLG actuator support structure damage must be repaired before further flight.

**Compliance:** Within next 100 hours TIS, and thereafter at intervals not to exceed 200 hours TIS.**Effective Date:** DCA/CESS402/22 - 27 September 2001  
DCA/CESS402/22A - 25 October 2001**DCA/CESS402/23 Cancelled – DCA/CESS402/25 refers****Effective Date:** 29 September 2005

**DCA/CESS402/24 Forward, Aft and Auxiliary Wing Spars - Inspection**

**Applicability:** All model 401, 401A, 401B, 402, 402A and 402B aircraft. All S/Ns.

**Requirement:** To prevent wing spar cap failure caused by undetected fatigue cracks in the lower wing spar caps, which could result in the loss of a wing with consequent loss of the aircraft, accomplish the following:

1. For all model 401, 401A, 401B, 402, 402A, and 402B aircraft that do not have Cessna Service Kit SK402-36, SK402-36A, SK402-36B, SK402-36C, SK402-46, or SK402-46A fitted; inspect and modify per Cessna Multi-engine Service Bulletin MEB01-06 and Cessna Service Kit SK402-46A.
2. For all model 401, 401A, 401B, 402, 402A, and 402B aircraft that do have Cessna Service Kit SK402-36, SK402-36A, SK402-36B, SK402-36C, SK402-46, or SK402-46A fitted, inspect area 'A' per Cessna model 401 and 402 Supplemental Inspection Document (SID) 57-10-11, area 'B' per SID 57-10-12, and area 'C' per SID 57-10-12. If cracks are found, repair or replace as required, prior to further flight.

**Note 1:** If cracks are found during any inspection required by this AD, replace the wing or wing spar prior to further flight. Replace with a new or used wing spar where wing or wing spar hours TIS can be positively identified. Do not install used wings spars when you are not able to positively identify total wing or wing spar hours TIS.

**Note 2:** After wing or wing spar replacement, initially inspect at the applicable time per requirement 1 of this AD and repetitively inspect at the time specified per requirement 2 of this AD.

**Note 3:** Report any cracks found, to the CAA within 10 days. Include in the report the aircraft serial number, aircraft TIS, wing spar cap TIS, crack location and size, corrective action taken, and contact name and phone number.

(FAA AD 2005-12-12 refers)

**Compliance:**

1. Within next 100 hours TIS for aircraft with 18000 hours TIS or more.  
Within next 200 hours TIS for aircraft with 12000 to 17999 hours TIS.  
Within next 400 hours TIS for aircraft with 10000 to 11999 hours TIS.  
Within next 800 hours TIS for aircraft with 6500 to 9999 hours TIS.  
Within next 800 hours TIS or upon accumulating 6500 hours TIS, whichever is the later.

**Note 4:** If the aircraft logbook cannot positively show the hours TIS of the wings or wing spars, then inspect and modify within next 100 hours TIS.

**Note 5:** If you choose not to modify the aircraft within 100 hours TIS, then ensure the repetitive inspections per DCA/CESS402/6B or FAA AD 79-10-15 and Cessna MESIL ME 79-16 are maintained as follows:

Inspect areas A and B at intervals not to exceed 1000 hours TIS, and inspect area C at intervals not to exceed 400 hours TIS.

These repetitive inspections can be terminated after the fitment of Cessna Service Kit SK402-46A per Cessna Multi Engine Service Bulletin MEB01-06, IAW part 1 of this AD. Requirement 2 of this AD will then apply.

2. Inspect area 'A' prior to exceeding 15000 hours TTIS, or within next 100 hours TIS, whichever occurs later, and thereafter at intervals not to exceed 5000 hours TIS.

Inspect area 'B' prior to exceeding 7500 hours TTIS or within next 100 hours TIS, whichever occurs later, and thereafter at intervals not to exceed 5000 hours TIS.

Inspect area 'C' prior to exceeding 20000 hours TTIS or within next 100 hours TIS, whichever occurs later, and thereafter at intervals not to exceed 2500 hours TIS.

**Effective Date:** 25 August 2005

#### **DCA/CESS402/25 Forward, Aft and Auxiliary Wing Spars - Inspection**

**Applicability:** Model 402C and 414A aircraft. All S/Ns.

**Requirement:** To prevent wing spar cap failure caused by undetected fatigue cracks in the lower wing spar caps, which could result in the loss of a wing with consequent loss of the aircraft, accomplish the following:

1. For model 414A aircraft, S/Ns 414A0001 through 414A0047 and S/Ns 414A0049 through 414A0200 incorporate Cessna Multi-Engine Service Kit SK402-47B on each wing, per Cessna Multi-Engine Service Bulletin MEB02-5, revision 2, unless Cessna Multi-Engine Service Kit SK402-47 or SK402-47A has already been embodied.
2. For all model 402C aircraft and 414A aircraft, S/Ns 414A0201 through 414A1212, incorporate Service Kit SK402-47B per MEB02-5, unless Cessna Multi-Engine Service Kit SK402-47 or SK402-47A has already been embodied.
3. For model 414A aircraft, S/Ns 414A0001 through 414A0047 and S/Ns 414A0049 through 414A0200, accomplish the following:

Perform both a visual and an eddy current inspection of the aft and auxiliary spars per Cessna SB MEB99-3 for model 402C aircraft, and Cessna Service Bulletin MEB00-7 for model 414A aircraft. If any cracks are found repair or replace as required, prior to further flight.

4. For all model 402C and 414A aircraft, S/Ns 414A0201 through 414A1212:

Perform both a visual and an eddy current inspection of the aft and auxiliary spars per Cessna SB MEB99-3 for model 402C aircraft and Cessna Service Bulletin MEB00-7 for model 414A aircraft. If any cracks are found repair or replace as required, prior to further flight.

**Note 1:** The fitment of Cessna Multi-Engine Service Kits SK402-47 or SK402-47A or SK402-47B terminates the repetitive visual and an eddy current inspection of requirement 3 & 4 of this AD.

5. For models 402C and 414A aircraft fitted with Cessna Service Kit SK402-47, SK402-47A, or SK402-47B, inspect per the procedures in Cessna Model 402C and 414A Supplemental Inspection Document (SID), Inspection ID 57-10-16. If any cracks are found repair or replace as required, prior to further flight.

(FAA AD 2005-12-13 refers)

**Note 2:** If cracks are found during any inspection required by this AD replace the wing or wing spar prior to further flight. Replace with a new or used wing spar where wing or wing spar hours TIS can be positively identified. Do not install used wing spars when you are not able to positively identify total wing or wing spar hours TIS.

**Note 3:** If the wings or wing spar were replaced with new or used wings or wing spar, then initially inspect and modify per requirements 1, 2, 3, and 4 of this AD.

**Note 4:** If the wings or wing spars were replaced with new or used wings or wing spars during the life of the aircraft and logbook records cannot positively show the TIS of the wings or wing, then inspect and modify within 400 hours TIS.

**Note 5:** Report any cracks found to the CAA within 10 days after the cracks are found. Include in the report the aircraft serial number, aircraft TIS, wing spar cap TTIS, crack location and size, corrective action taken, and contact name and phone number.

- Compliance:**
1. Within next 800 hours TIS or upon accumulating 9000 hours TTIS, whichever is the later.  
 Within next 800 hours TIS for aircraft with more than 9000 hours TTIS up to 12000 hours TTIS, and within next 400 hours TIS for aircraft with more than 12000 hours TTIS.
  2. Within next 800 hours TIS or upon accumulating 15000 hours TTIS, whichever is the later.  
 Within next 800 hours TIS for aircraft with more than 15000 hours TTIS and up to 20000 hours TTIS, and within next 400 hours TIS for aircraft with more than 20000 hours TTIS.
  3. Inspect upon accumulating 8500 hours TTIS and thereafter at intervals not to exceed 100 hours TIS.
  4. Inspect upon accumulating 15000 hours TTIS and thereafter at intervals not to exceed 100 hours TIS.
  5. Inspect upon accumulating 12500 hours TTIS or within the next 100 hours TIS, whichever occurs later, and thereafter at intervals not to exceed 500 hours TIS.

**Effective Date:** 29 September 2005

#### **DCA/CESS402/26 Avionics Bus Circuit Breakers – Inspection**

**Applicability:** The following aircraft models and S/Ns equipped with avionics bus circuit breaker switches, P/Ns CM3589-50, 593-250-101, 593-250-102, W31-X2M5A-50, or W31-X1000-50:

Model 402 aircraft, S/N 402-0001 through 402-0322, and

Model 402A aircraft, S/N 402A0001 through 402A0129, and

Model 402B aircraft, S/N 402B0001 through 402B0122, 402B0201 through 402B0249, 402B0301 through 402B0455, 402B0501 through 402B0640, 402B0801 through 402B0935, 402B1001 through 402B1100, 402B1201 through 402B1250, and 402B1301 through 402B1384, and

Model 402C aircraft, S/N 689, 402C0001 through 402C0125, 402C0201 through 402C0355, 402C0401 through 402C0528, 402C0601 through 402C0653, 402C0801 through 402C0807, and 402C0808 through 402C1020.

**Requirement:** To prevent failure of the avionics bus circuit breaker switch, which could result in smoke and lead to reduced ability to control the aircraft, inspect the avionics bus circuit breaker switch to determine the P/N and date code, per the procedures in Cessna Multi-engine Service Bulletin MEB05-1 and the applicable maintenance manual.

If the P/N is CM3589-50, 593-250-101, 593-250-102, W31-X2M5A-50, or W31-X1000-50 and the date code is 0434 or later, then no further action is required.

If the P/N is CM3589-50, 593-250-101, 593-250-102, W31-X2M5A-50, or W31-X1000-50 and there is no date code, replace the avionics bus circuit breaker switch with a P/N CM3589-50 that has a date code of 0434 or later, before further flight.

If the P/N is CM3589-50, 593-250-101, 593-250-102, W31-X2M5A-50, or W31-X1000-50, or W31-X1000-50 and the date code is earlier than 0434, the avionics bus circuit breaker switch has a safe life limit of 1000 hours TIS.

The avionics bus circuit breaker switch must be replaced within the 1000 hour time limit with a P/N CM3589-50 that has a date code of 0434 or later.

(FAA AD 2005-20-25 refers)

**Note:** Do not install a P/N CM3589-50, 593-250-101, 593-250-102, W31-X2M5A-50, or W31-X1000-50 that have a date code earlier than 0434 or do not have a date code.

**Compliance:** Within the next 200 hours TIS, or by 1 December 2005, or at the next scheduled inspection, whichever occurs sooner.

**Effective Date:** 1 December 2005

#### **DCA/CESS402/27 Auxiliary Wing Spar – Inspection**

**Applicability:** Model 401 aircraft, S/N 655 and 401-0001 through to 401-0322  
 Model 401A aircraft, S/N 655 and 401A0001 through to 401A0132  
 Model 401B aircraft, S/N 401B0001 through to 401B0221  
 Model 402 aircraft, S/N 402-0001 through to 402-0322  
 Model 402A aircraft, S/N 402A0001 through to 402A0129  
 Model 402B aircraft, S/N 402B0001 through to 402B0122, 402B0201 through to 402B0249, 402B0301 through to 402B0455, 402B0501 through to 402B0640, 402B0801 through to 402B0935, 402B1001 through to 402B1100, 402B1201 through to 402B1250 and 402B1301 through to 402B1384.

**Requirement:** To prevent failure of the wing auxiliary spar web which could result in collapse of the landing gear and loss of aircraft control with a normal landing, accomplish the following:

1. Inspect the auxiliary wing spar for cracks in the area where the main landing gear trunnion is mounted.

If any cracks are found that are 0.5 inch or more long, replace affected parts before further flight.

If any cracks are found that are less than 0.5 inch long accomplish requirement 2 of this AD.

2. For cracks that are less than 0.5 inch long:

Inspect the auxiliary wing spar for crack length in the area where the main landing gear trunnion is mounted.

If any cracks are found that are 0.5 inch or more long, replace affected parts before further flight.

**Note 1:** Accomplish the requirements of this AD per the instructions in Cessna Service Bulletin MEB08-8, dated 23 December 2008. This SB provides detailed instructions for the measurement, inspection and replacement of cracked parts, including how deal with two or more cracks in the same hole.

**Note 2:** If any defects are found as a result of accomplishing this AD, report the results to Cessna within 10 days after the inspection on the form in the SB and also report findings to the CAA on a CA005D defect report form.

**Note 3:** Further AD action is likely once the aircraft manufacturer has reviewed the reported findings.

(FAA AD 2009-04-04 refers)

**Compliance:**

1. Within the next 10 hours TIS and thereafter after every hard landing.
2. Within the next 50 hours TIS after compliance with requirements 1 of this AD, and thereafter at intervals not to exceed 50 hours TIS until cracked parts are replaced.

Replace cracked parts within 200 hours TIS after the original crack is found or within 12 months, whichever occurs sooner.

**Effective Date:** 4 March 2009



From 1 October 2012 the Civil Aviation Authority of New Zealand (CAA) will no longer rewrite the text of State of Design ADs. Applicable State of Design ADs will be listed below and can be obtained directly from the National Airworthiness Authority (NAA) web site. The link to the NAA web site is available on the CAA web site at

<http://www.caa.govt.nz/airworthiness-directives/states-of-design/>

If additional NZ ADs need to be issued when an unsafe condition is found to exist in an aircraft or aeronautical product in NZ they will be added to the list below.

- 2012-23-01 Flap System – Inspection**
- Applicability:** Cessna 402C aircraft, all S/N embodied with Supplemental Type Certificate (STC) SA927NW and  
Cessna model 414A aircraft, all S/N embodied with STC SA892NW.
- Effective Date:** 26 December 2012
- 2014-03-03 Flight Limitations – AFM Amendment, Maintenance Records and Placards**
- Applicability:** Cessna 310, 320, 340, 401, 402, 411, 414, and 421 aircraft identified in Cessna Aircraft Company Service Bulletin MEB97-4, dated 24 March 1997, or later approved revision.
- Effective Date:** 7 April 2014
- 2015-07-03 Engine Mount Beams – Inspection**
- Applicability:** Cessna 402C aircraft, S/N 402C0001 through to 402C1020.  
Cessna 414A aircraft, S/N 414A0001 through to 414A1212.
- Effective Date:** 24 April 2015
- 2016-07-24 Cancelled – FAA AD 2016-17-08 refers**
- Effective Date:** 12 September 2016
- 2016-17-08 Elevator Trim Push-pull Rod – Inspection**
- Applicability:** Cessna 310 through to 310R, E310H, E310J, T310P through to T310R, 310J-1, 320 through to 320F, 320-1, 335, 340, 340A, 401 through to 401B, 402 through to 402C, 411, 411A, 414, 414A, and 421 through to 421C aircraft.
- Effective Date:** 12 September 2016
- 2017-10-09 Nacelle Fittings – Inspection**
- Applicability:** Cessna 402C aircraft, S/N 402C0001 through to 402C1020 embodied with:
1. Cessna Multi-Engine Service Kit SK402-47, "Lower Front Wing Spar Cap Inspection/Modification," original issue, revision A, or revision B; or
  2. Nacelle fittings P/Ns 5292029-9, 5292029-10, 5292029-11, 5292029-12, 5292029-21, 5292029-22, 5292029-23, or 5292029-24.
- Note:** Nacelle fittings with P/Ns 5292029-9, 5292029-10, 5292029-11, 5292029-12, 5292029-21, 5292029-22, 5292029-23, or 5292029-24 are fitted with the embodiment of Cessna Multi-Engine Service Kit SK402-47.
- Effective Date:** 29 June 2017

**\* 2018-03-03R1                      Carry Through Spars – Inspection**

**Applicability:** Refer to the applicability section of FAA AD 2018-03-03R1.

**Effective Date:** FAA AD 2018-03-03 - 28 February 2018  
FAA AD 2018-03-03R1 - 31 May 2018