

**91-15-04 MCCAULEY ACCESSORY DIVISION, CESSNA AIRCRAFT COMPANY:
Amendment 39-7067. Docket No. 91-ANE-22.**

Applicability: McCauley Model ()2()34C()-() Series two bladed constant speed propellers with threaded retention hubs, including those with feathering capabilities listed as follows:

Affected Propeller Hub Models

CONSTANT SPEED	FEATHERING
2D34C8-()	D2AF34C30-()
2D34C9-()	2AF34C55-()
2D34C53-()	D2AF34C56-()
B2D34C53-()	D2AF34C61-()
D2A34C58-()	D2AF34C65-()
F2A34C58-()	D2AF34C81-()
2A34C66-()	
E2A34C70-()	
E2A34C73-()	
D2A34C78-()	
D2A34C98-()	

The parentheses used in the above list indicate the presence or absence of an additional letter(s) which vary the basic hub model designation. These letter(s) define minor changes that do not affect interchangeability or eligibility, and therefore, this AD still applies regardless of whether these letters are present or absent on the hub model designation.

The above listed McCauley propeller hubs are found on, but not limited to, the following aircraft certificated in any category:

Beech A23-24, A24, A24R, 58, 58A; 95-55, -A55, -B55,-B55A, -B55B, -C55, -C55A; D55, D55A, E55, E55A.

Bellanca 17-30, 17-30A

Cessna 180, 182H, 185, 185A thru D, A185E, A185F, 188, 188A, 188B, A188, A188A, A188B, 206, P206, P206A thru E, TP206A thru E, TU206A thru G, U206, U206A thru G, 207, T207, 210, 210A thru H, 210J thru L, 210-5, 210-5A, T210F thru H, T210J thru L, 305B, 305E, 310J, E310J, 310K, 310L, 310N, 336, 337, 337A thru F, M337B, T337B thru F.

Fuji FA-200-180

Interceptor (AeroCommander/Meyers) 200A thru C

Mooney M20C, M20D, M20G

Navion A, B, D thru H

Procaer F15/C

Reims F337E, F337F, FT337E, FT337F

Transavia PL-12/T-300

Windecker AC-7

Compliance: Required as indicated, unless previously accomplished.

To prevent possible blade separation, which could result in the loss of the engine and subsequent loss of aircraft control, accomplish the following in accordance with the compliance schedule as indicated:

PRIOR PROPELLER UTILIZATION
(Hours/calendar months)

COMPLIANCE SCHEDULE OF
PROPELLER INSPECTION

given as time-in-service)

AND MODIFICATION

Greater than 900 hours, or 59 calendar months since last overhaul/penetrant inspection or installed new, or prior time-in-service unknown.

Within the next 100 hours, or at the next annual inspection, or within 12 calendar months after the effective date of this AD, whichever occurs first.

Less than or equal to both 900 hours and 59 calendar months since last overhaul/penetrant inspection or installed new.

Prior to the accumulation of 1000 hours or 60 calendar months since last overhaul/penetrant inspection, or installed new, whichever occurs first.

(a) For propellers which have incorporated a hub containing oil with red dye and have been designated at initial production as a hub model number listed in the Appendix to this AD, or prior manufactured propellers whose hubs have been modified to contain oil with a red dye and reidentified as a hub model number listed in the Appendix to this AD, compliance is required only with paragraphs (f) and (h) of this AD.

(b) Perform propeller disassembly in accordance with the procedures specified for the affected hub model number listed in Paragraph 1 on page 4 of McCauley Service Bulletin (SB) 184, dated March 15, 1991.

(c) Penetrant inspect the propeller assembly for cracks in the propeller blade threaded retention area, the hub blade socket threads, the retention nut threads, and the ferrule threads in accordance with the procedures specified for the affected hub model number listed in Paragraph 2 on page 5 of McCauley SB 184, dated March 15, 1991.

(d) Remove from service, prior to further flight, propeller assemblies which exhibit cracks and replace with a serviceable unit, modified in accordance with paragraph (e) of this AD, or with an equivalent initial production propeller which has incorporated a hub with oil containing red dye.

(e) Modify the affected propeller hub assembly to contain oil with a red dye and reidentify in accordance with the procedures specified for the affected hub model number listed in Paragraph 3 on page 6 of McCauley SB 184, dated March 15, 1991.

NOTE: The modification of the propeller hub assembly to contain oil with a red dye provides an "on-condition" (in-service) means of early crack detection to prevent blade separation and also improves lubrication and corrosion protection. The oil will add approximately 2.8 lbs. to the weight of the propeller assembly.

(f) If leakage of oil containing red dye is detected in service (whether during flight or while on the ground), determine prior to further flight, the source of leakage in accordance with the procedures specified for the affected hub model number listed in Paragraph 4 on page 7 of McCauley SB 184, dated March 15, 1991. If the inspection reveals a crack, compliance with Paragraph (d) of this AD is required.

(g) The "calendar month" compliance times stated in this AD allow the performance of the required action prior to the last day of the month in which compliance is required.

NOTE: For example, a required inspection and modification 60 months from last overhaul/penetrant inspection that was performed on December 15, 1986, would allow the penetrant inspection and modification to be performed no later than December 31, 1991.

(h) Report in writing any cracks found during inspections accomplished in accordance with paragraphs (c) or (f) of this AD to the Manager, Chicago Aircraft Certification Office, within ten (10) days of the inspection. Information collection requirements contained in this regulation have been approved by the Office of Management and Budget (OMB) under the provisions of the Paperwork Reduction Act of 1980 (P.L. 96-511) and has been assigned OMB Control Number 2120-0056.

(i) Aircraft may be ferried in accordance with the provisions of Federal Aviation Regulations (FAR) 21.197 and 21.199 to a base where the AD can be accomplished.

(j) Upon submission of substantiating data by an owner or operator through an FAA Inspector (maintenance, avionics, or operations, as appropriate) an alternate method of compliance with the requirements of this AD or adjustments to the compliance times specified in this AD may be approved by the Manager, Chicago Aircraft Certification Office, Small Airplane Certification Directorate, Aircraft Certification Service, FAA, 2300 East Devon Avenue, Des Plaines, Illinois 60018.

The disassembly, inspection, and modification shall be done in accordance with the procedures listed in McCauley SB 184, dated March 15, 1991. This incorporation by reference was approved by the Director of the Federal Register in accordance with 5 U.S.C. 552(a) and 1 CFR Part 51. Copies may be obtained from McCauley Accessory Division, The Cessna Aircraft Company, 3535 McCauley Drive, Vandalia, Ohio 45377. Copies may be inspected at the FAA, New England Region, Office of the Assistant Chief Counsel, 12 New England Executive Park, Room 311, Burlington, Massachusetts, or at the Office of the Federal Register, 1100 L Street, NW, Room 8401, Washington, DC.

Airworthiness Directive 91-15-04, Amendment 39-7067, supersedes, AD 77-17-09, Amendment 39-3020, AD 77-20-03, Amendment 39-3044, AD 77-23-01, Amendment 39-3073, AD 77-24-04, Amendment 39-3086, AD 78-20-01, Amendment 39-3304.

This amendment (39-7067, AD 91-15-04) becomes effective on August 7, 1991.

AD 91-15-04

APPENDIX

OIL-FILLED PROPELLER HUB COMPLIANCE INDICATOR TABLE

Propeller Hub Model +	Compliance Indicator	Propeller Hub Model +	Compliance Indicator
2D34C8	2D34C8-()P and/or oil-fill plug in side of hub	F2A34C58	F2A34C58-()0 and/or oil-fill plug in side of hub
2D34C9	2D34C9-()P and/or oil-fill plug in side of hub	D2AF34C61	D2AF34C61-()0 and/or oil-fil plug in side of hub
D2AF34C30	D2AF34C30-()P and/or oil-fill plug in side of hub	D2AF34C65	D2AF34C65-()0 and/or oil-fil plug in side of hub

B2D34C53	B2D34C53-()0 and/or oil-fill plug in side of hub	2A34C66	2A34C66-()P and/or oil-fill plug in side of hub
2D34C53	2D34C53-()0 and/or oil-fill plug in side of hub	E2A34C70	E2A34C70-()P and/or oil-fill plug in side of hub
2AF34C55	2AF34C55-()0 and/or oil-fill plug in side of hub	E2A34C73	E2A34C73-()P and/or oil-fill plug in side of hub
D2AF34C56	D2AF34C56-()0 and/or oil-fill plug in side of hub	D2A34C78	D2A34C78-()P and/or oil-fill plug in side of hub
D2A34C58	D2A34C58-()0 and/or oil-fill plug in side of hub	D2AF34C81	D2AF34C81-()0 and/or oil-fil plug in side of hub
		D2A34C98	D2A34C98-()0 and/or oil-fill plug in side of hub

+ Propeller models are listed in numerical sequence following the letter C in the model designation.