No. IM.P.193

for Propeller
(X)3A37C(34--) series propellers

Type Certificate Holder
McCauley Propeller Systems

One Cessna Boulevard
PO Box 7704
Wichita, KS 277-7704
USA

For Model: D3A37C3401
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I. General

1. Type / Models

(X)3A37C3401 / D3A37C3401

2. Type Certificate Holder

One Cessna Boulevard, PO Box 7704, Wichita, KS 277-7704, USA

3. Manufacturer

McCauley Propeller Systems

4. Date of Application

D3A37C3401: 30 January 2015

5. EASA Type Certification Date

D3A37C3401: 27 April 2016

II. Certification Basis

1. State of Design Authority Certification Basis

Refer to FAA TCDS no. P00014WI.

2. Reference Date for determining the applicable airworthiness requirements

D3A37C3401: 03 February 2009.

3. EASA Certification Basis

3.1. Airworthiness Standards

D3A37C3401:
CS-P Amendment 1 dated 16 November 2006 as issued by EASA Decision No 2006/09/R except Subpart D (see note 10).

3.2. Special Conditions (SC)

None.

3.3. Equivalent Safety Findings (ESF)

None.

3.4. Deviations

None.
III. Technical Characteristics

1. Type Design Definition

The propeller type design is defined by a propeller assembly drawing including a parts list, hub assembly drawing and blade drawing (or later approved revisions).

D3A37C3401: Propeller Assembly Drawing E-7898, rev 1, dated 26.02.2015
Hub Assembly Drawing D-8047 dated 06.09.2012
Blade Drawing C80MNX dated 15.10.2013

2. Description

The propeller is a three-blade model. The constant speed propeller has no feathering or reversing capability.

A hydraulic cylinder attached to the front of the hub provides the force necessary to maintain and change blade pitch. The pitch change mechanism is contained entirely within the hub. The propeller design is covered by a Propeller Assembly Drawing and associated Parts List, Hub Assembly Drawing and Blade Drawing (see Notes 3).

The hub is milled out of aluminium alloy. The blade material is composite laminate. Optional equipment includes spinner and ice protection.

3. Equipment

Spinner: See Note 7
Governor: See Note 3
Ice Protection: See Note 7

4. Dimensions

Diameter Limits: 200,7 cm to 193,0 cm (see Note 2).

5. Weight

Approx. max. weight complete: 21,3 kg (max. dia.).

6. Hub / Blade Combinations

D3A37C3401 / C80MNF-(X) (see Note 2).

7. Control System

McCauley Hydromechanical Governor (see Note 3).
8. Adaptation to Engine

Denotes S.A.E. ARP 502 Type 1 Flange – 10,16 cm B.C. (see Note 1).

9. Direction of Rotation

Right-Hand (see Note 5).

IV. Operating Limitations

<table>
<thead>
<tr>
<th>Blades (see Note 2)</th>
<th>Maximum Continuous kW</th>
<th>Take Off kW</th>
<th>Diameter Limits (cm) (see Note 2)</th>
<th>Approx. Max Wt. Complete (kg) (Max. Dia.)</th>
<th>Blade Construction</th>
</tr>
</thead>
<tbody>
<tr>
<td>C80MNF-1 to C80MNF-4</td>
<td>261,0 2700</td>
<td>261,0 2700</td>
<td>200,7 to 193,0 (-1 to -4)</td>
<td>21,3 Composite Laminate</td>
<td></td>
</tr>
</tbody>
</table>

**1. Approved Installations**

See Note 10.

**2. Maximum Take Off Power and Speed**

261,0 kW at 2700 min⁻¹.

**3. Maximum Continuous Power and Speed**

261,0 kW at 2700 min⁻¹.

**3. Propeller Pitch Angle**

Component Model Reference: C290D(X)/T(X) (see Note 3).

V. Operating and Service Instructions

<table>
<thead>
<tr>
<th>McCauley Owner/Operator Manual incl. Airworthiness Limitations</th>
<th>MPC27 (*)</th>
</tr>
</thead>
<tbody>
<tr>
<td>McCauley Service Manual</td>
<td>MPC3400 (*)</td>
</tr>
<tr>
<td>McCauley Propeller Blade Overhaul Manual</td>
<td>BOM200 (*)</td>
</tr>
<tr>
<td>McCauley Standard Practices Manual</td>
<td>SPM100 (*)</td>
</tr>
<tr>
<td>Service Bulletins</td>
<td></td>
</tr>
</tbody>
</table>

(*) or later approved revision
VI. Notes

1. **Hub Model Designation:**

   (X) 3 A 37 C 3401 - (X)

   Minor change not affecting interchangeability or eligibility.

   Numerals defining specific design and major change affecting eligibility or interchangeability.

   Type of propeller - C, constant speed model.

   McCauley Design Reference Information.

   Denotes S.A.E. ARP 502 Type 1 Flange – 10,16 cm B.C.

   Denotes number of blades

   Indicates dowel location with respect to centerline through blade sockets, viewing hub from mounting face.

   D – 90° and 270° clockwise with No. 1 blade vertical and up.

2. **Blade Model Designation:**

   (X) C 80 MN(X) - 2

   Reduction in inches from basic diameter.

   (As -2, diameter reduced 5,08 cm to 198,12 cm)

   Characteristics of blade design (platform, etc.)

   Suffix (X) indicates blade butt staking dimensions for actuating pin

   Basic design diameter in inches. (Diameter limits are nominal diameters of the assembled propeller. They do not include the + or – 0,32 cm manufacturing tolerance the FAA allows for propellers with basic diameter less than 426,72 cm.

   They also do not include the + or – 0,64 cm the FAA allows for propellers with a basic diameter of 426,72 cm or larger.)

   Denotes type of blade. «C» indicates composite blade construction.

   Minor change not affecting interchangeability or eligibility.
3. **Substantiated pitch control components not included in propeller type design:**

<table>
<thead>
<tr>
<th>Hub Model</th>
<th>Blade Model</th>
<th>Component Description</th>
<th>Component Model Reference</th>
<th>Estimated Weight (kg)</th>
</tr>
</thead>
<tbody>
<tr>
<td>D3A37C3401</td>
<td>C80MNF-(X)</td>
<td>McCauley Hydromechanical Governor</td>
<td>C290D(X)/T(X)</td>
<td>1.27</td>
</tr>
</tbody>
</table>

4. **Feathering and Reversing:** Not applicable.

5. **Left-Hand Models:** Not applicable.

6. **Interchangeable Blades:** Not applicable.

7. **Accessories:** Substantiated accessories not included in propeller type design:

<table>
<thead>
<tr>
<th>Propeller Deicer</th>
<th>Hub Model</th>
<th>Blade Model</th>
<th>Component Description</th>
<th>Part Number</th>
<th>Installation Drawing (reference)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>D3A37C3401</td>
<td>C80MNF-(X)</td>
<td>McCauley Deicer</td>
<td>B-40746-30</td>
<td>E-7898</td>
</tr>
<tr>
<td></td>
<td>D3A37C3401</td>
<td>C80MNF-(X)</td>
<td>McCauley Anti-ice feed shoe</td>
<td>C-40323-81</td>
<td>E-7898</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Propeller Spinner</th>
<th>Hub Model</th>
<th>Blade Model</th>
<th>Component Description</th>
<th>Part Number</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>D3A37C3401</td>
<td>C80MNF-(X)</td>
<td>McCauley Spinner Assembly</td>
<td>E-8049</td>
</tr>
</tbody>
</table>

8. **Shank Fairings:** Not applicable.

9. **Special Limits:** Not applicable (propeller - engine combinations).

10. This propeller has been certificated in accordance with CS-P subpart A,B and C. Compliance with the requirement of subpart D, which is specific to each aircraft installation has not yet been demonstrated.

11. **Special Limits:** Airworthiness limitations, if any, are specified in McCauley Manual MPC-27( ).

12. **Special Notes:** Not applicable.
13. The EASA approved Airworthiness Limitations Section of the Instructions for Continued Airworthiness is published in the applicable Hartzell Manuals, MPC-27( ) chapter 5 "Airworthiness Limitations".

SECTION: ADMINISTRATIVE

I. Acronyms and Abbreviations
None.

II. Type Certificate Holder Record
N/A.

III. Change Record

<table>
<thead>
<tr>
<th>Issue</th>
<th>Date</th>
<th>Changes</th>
<th>TC issue</th>
</tr>
</thead>
<tbody>
<tr>
<td>Issue 01</td>
<td>27 April 2016</td>
<td>Initial Issue</td>
<td>27 April 2016</td>
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