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Piqua, OH 45356	Airworthiness, Aviat A-1, A-1A, A-	App: FAA	Rev/Date: A 10FEB2025
	1B, A-1C Aircraft with Hartzell		
	3C1-R430A1/80C01 Propeller		

## INSTRUCTIONS FOR CONTINUED AIRWORTHINESS AVIAT A-1, A-1A, A-1B, A-1C AIRCRAFT WITH HARTZELL 3C1-R430A1/80C01 PROPELLER

**DOCUMENT NO. 61-24170-24-01** 

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## **LOG OF REVISIONS**

REV NO.	PAGES	DESCRIPTION	DATE
N/C	ALL	Initial Release	06DEC2024
Α	ALL	Updated company in header and Section 2	10FEB2025

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Hartzell Propeller LLC
One Propeller Place
Piqua, OH 45356

Title:
Instructions for Continued
Airworthiness, Aviat A-1, A-1A, A-1B, A-1C Aircraft with Hartzell
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#### 1 INTRODUCTION AND APPLICABILITY

This document describes the installation of a Hartzell 3C1-R430A1/80C01 constant speed three-blade propeller with 80 inch diameter utilizing carbon composite blades.

This modification is applicable to the Aviat Aircraft, Inc. A-1, A-1A, A-1B, A-1C-180, and A-1C-200 models, including increased gross weight variants. The applicable engines are Lycoming O-360-C1G, O-360-A1P, and IO-360-A1D6.

This modification is not applicable to A-1B aircraft with the "Engine Option Group Configuration" per Section III.a and III.b of Type Certificate Data Sheet A22NM.

The installation of this propeller requires that 8.50 X 6 (or larger) tires be installed in order to achieve adequate propeller ground clearance. See aircraft Type Certificate Data Sheet A22NM Notes 13 and 14 for tire types that are currently approved that meet this size criteria.

# 2 CONTACT INFORMATION AND CHANGE DISTRIBUTION PROGRAM

Hartzell Propeller LLC will distribute changes to this document and all associated documents via email. It is the responsibility of the operator to ensure the documentation used for continued airworthiness is the most current and applicable document available. It is the responsibility of the installer/maintainer to ensure that a current email address is provided to Hartzell Propeller LLC for any future updates to this document. Requests for updated manuals can be sent to the contact information below.

Hartzell Propeller LLC One Propeller Place Piqua, OH 45356

Phone: 1-800-942-7767

Website: www.hartzellprop.com

Inform the STC holder via the contact information above regarding any service difficulties related to this STC.

Hartzell Propeller LLC
One Propeller Place
Piqua, OH 45356

Discriptions for Continued
Airworthiness, Aviat A-1, A-1A, A-1B, A-1C Aircraft with Hartzell
3C1-R430A1/80C01 Propeller

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#### **3 SPECIFICATIONS**

Propeller: Hartzell 3C1-R430A1/80C01

Maximum Diameter: 80 inches

Minimum Diameter: 80 inches

Low Pitch Blade Angle (measured at 30 inch blade station):

Aircraft equipped with Lycoming O-360-C1G or -A1P engine:  $9.1^{\circ} \pm 0.2^{\circ}$ Aircraft equipped with Lycoming IO-360-A1D6 engine:  $9.5^{\circ} \pm 0.2^{\circ}$ 

High Pitch Blade Angle (measured at 30 inch blade station):  $30.0^{\circ} \pm 1.0^{\circ}$ 

Weight: 46 lbs at FS 4.0

#### 4 SERVICING INFORMATION

Propeller servicing should be accomplished in accordance with Hartzell Owner's Manual 480 and the Aviat Aircraft Instructions for Continued Airworthiness.

#### 5 REMOVAL AND REPLACEMENT

Propeller removal should be accomplished in accordance with the Aviat Aircraft Instructions for Continued Airworthiness and Hartzell Propeller Owner's Manual 480.

Installation Instructions 61-24170-39-01 should also be referenced for weight and balance and placard changes.

When equipped with the Hartzell 3C1-R430A1/80C01 propeller, the tachometer must have the following markings:

Green Arc: 500 to 2700 RPM Red Radial: 2700 RPM

The propeller does not have any additional RPM limitations.

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### **6 AIRWORTHINESS LIMITATIONS**

The Airworthiness Limitations Section is FAA approved and specifies maintenance required under 14 CFR §§ 43.16 and 91.403 of the Federal Aviation Regulations unless an alternative program has been FAA approved.

There are no new (or additional) airworthiness limitations associated with this equipment and/or installation.

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#### 7 REFERENCE DOCUMENTS

The following references must be available to the installer. Contact the associated manufacturer to determine revision status of each document.

- 1. Hartzell Propeller Owner's Manual 480, latest revision
- 2. Document Number 61-24170-39-01, Installation Instructions, Hartzell 3C1-R430A1/80C01 Propeller on Aviat A-1, A-1A, A-1B, A-1C Aircraft, latest revision
- 3. 70192-002, Aviat Aircraft, Inc. Model A-1 and A-1A Instructions for Continued Airworthiness, latest revision
- 4. 70192-004, Aviat Aircraft, Inc. Model A-1B Instructions for Continued Airworthiness, latest approved revision
- 5. 70192-006, Aviat Aircraft, Inc. Model A-1C Instructions for Continued Airworthiness, latest approved revision
- 6. A22NM, Type Certificate Data Sheet, latest approved revision