

**Minnis Aviation LLC**  
100 Chamber Drive  
Chillicothe, OH 45601

M2011-9  
Revision: IR  
Date: 10/25/11

**STC**  
**SA03024CH**

**INSTRUCTIONS**  
**FOR CONTINUED AIRWORTHINESS**  
**MOONEY AIRCRAFT M20R, M20S &**  
**M20TN**  
**INSTALLATION OF HARTZELL**  
**PROPELLER**  
**PHC-J3YF-1RF/F7498( )**

FAA ACCEPTED: Dec. 07, 2011

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## INSTRUCTIONS FOR CONTINUED AIRWORTHINESS

### LOG OF REVISIONS

| Revision Number | Revision Date | Reviewed   | Affected Pages | Description of Revision | FAA Accepted |
|-----------------|---------------|------------|----------------|-------------------------|--------------|
| IR              | 10/25/11      | <i>BWM</i> | 5              | Initial Issue.          | 12/07/11     |
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#### 1. INTRODUCTION

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# Minnis Aviation LLC

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This document outlines the compliance with FAR 23.1529 "Instructions for Continued Airworthiness" for Minnis Aviation LLC Hartzell Propeller model PHC-J3YF-1RF/F7498 ( ) installed on the Mooney Aircraft M20R, S & TN.

Modification of the Mooney Aircraft Model M20R, S & TN aircraft with this Supplemental Type Certificate obligates the aircraft operator to include the maintenance information provided by this document in the Operator's Aircraft Maintenance Manual and the Operator's Aircraft Scheduled Maintenance Program.

## Referenced Documents:

| Author              | Document Number   | Document Title                                 |
|---------------------|-------------------|--|
| Minnis Aviation LLC | M2011-8           | FAA approved Airplane Flight Manual Supplement |
| Minnis Aviation LLC | M2011-3           | Installation Instruction                       |
| Minnis Aviation LLC | M2011-9           | Instruction For Continued Airworthiness        |
| Hartzell Propeller  | 115N              | Operation and Installation Manual              |
| Hartzell Propeller  | Service Letter 61 | Service Letter                                 |
| Hartzell Propeller  | See Note          | Service Letters                                |

**Note:** Owner and operators of Hartzell Propeller should contact the Hartzell Propeller dealer, distributor or authorized Hartzell Propeller Service Shop to obtain the latest information pertaining to Hartzell products.

The list of valid Hartzell Propeller manuals, service bulletins, AD's and their latest revision can be downloaded from the homepage of Hartzell Propeller ([http://www.hartzellprop.com/product\\_support/index\\_support.htm](http://www.hartzellprop.com/product_support/index_support.htm)) Hardcopies can also be obtaining from Hartzell Propeller or contact Minnis Aviation LLC for latest service information

Hartzell Propeller Inc.  
One Propeller Place  
Piqua, Ohio 45356

**Telephone**  
(937) 778-4200

**Fax**  
(937) 778-4365

Minnis Aviation, LLC  
209 River Laurel Way  
Woodstock, GA 30188

**Telephone**  
(678) 494-0797

## 2. DESCRIPTION

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The modification removes the existing McCauley or Hartzell 2 & 3 bladed metal constant speed propeller and spinner assembly replacing it with Hartzell propeller PHC-J3YF-1RF/F7498( ) constant speed propeller and spinner A-2295-10 (P). The governor will be retained and adjusted for the approved engine RPM's.

### **3. CONTROL, OPERATION INFORMATION / SPECIAL PROCEDURES**

The Hartzell PHC-J3YF-1RF/F7498( ) propeller is a constant speed, variable pitch propeller, controlled by a governor for constant RPM settings at the pilot's discretion. The propeller diameter is 76 ". Repairs may be made to the propeller as described in Hartzell Propeller Operation & Installation Manual 115N.

### **4. SERVICING INFORMATION**

Hartzell Propeller publications contain the information necessary to operate, maintain, and perform scheduled maintenance.

Hartzell Propeller Inc.  
One Propeller Place  
Piqua, Ohio 45356

or

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The list of valid Hartzell Propeller manuals, service bulletins, AD's and their latest revision can be downloaded from the homepage of Hartzell Propeller Telephone: (937) 778-4299 Fax: (937) 778-4391 ([www.manuals@hartzellprop.com](http://www.manuals@hartzellprop.com)) or (Email: [manuals@hartzellprop.com](mailto:manuals@hartzellprop.com)).

### **5. MAINTENANCE INSTRUCTIONS**

All required maintenance, inspections, time intervals and procedures are provided in Hartzell Propeller Operation & Installation Manual 115N, rev. 16 dated Oct. 2009 (or later rev.) provided with each propeller.

Field repair of small nicks and scratches may be performed by qualified personnel in accordance with FAA AC 43-13-1( ) as well as procedures specified in Hartzell Propeller Operation & Installation Manual 115N, rev. 16 dated Oct. 2009 (or later rev.) provided with each propeller.

### **6. REMOVAL AND REPLACEMENT INFORMATION**

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The STC propeller should be installed in accordance with STC installation instruction M2011-3 and Hartzell Propeller Operation & Installation Manual 115N, rev. 16 dated Oct. 2009 (or later rev.) provided with the STC and propeller.

Engine set-up in accordance with TCM Service Instruction SID97-3C  
Flight test aircraft with the new propeller, all engine parameter should coincide with those of M2011-8 Flight Manual Supplement.

## **7. DIAGRAMS**

Refer to Hartzell Propeller Operation & Installation Manual 115N, rev. 16 dated Oct. 2009 (or later rev.)

## **8. LIST OF SPECIAL TOOLS**

Refer to Hartzell Propeller Operation & Installation Manual 115N, rev. 16 dated Oct.. 2009 (or later rev.)

## **9. ADDITIONAL INFORMATION FOR COMMUTER CATEGORY AIRCRAFT**

Not Applicable.

## **10. RECOMMENDED OVERHAUL PERIODS**

Recommended Time Between Overhaul (TBO) limits for the STC propeller are also provided in Hartzell Service Letter 61.

## **11. Airworthiness Limitations**

NOTE: The Airworthiness Limitations section is FAA approved and specifies maintenance required under Parts 43.16 and 91.403 of the Federal Aviation Regulations unless an alternative program has been FAA approved.

There are no mandatory replacement times for any components.

## **12. REVISIONS**

Any Revisions to this document will be logged in the Log of Revisions sheet and a copy of the revised document should be distributed as required.

**END**