

SUPPLEMENTAL TYPE CERTIFICATE

SA04565CH

INSTRUCTIONS

FOR CONTINUED AIRWORTHINESS

INSTALLATION OF THE

HARTZELL PROPELLERS

MODEL

HC-I3YR-1RF/F7498(B,K)-1

ON

MOONEY INTERNATIONAL CORPRATION

TURBOCHARGED MODEL

M20M AIRCRAFT

LOG OF REVISIONS

Rev.	Rev. Date	Reviewed	Affected Pages	Description of Revision	FAA Accepted
IR	07 Dec, 2021	<i>BWM</i>	All	Initial FAA submittal	

1. INTRODUCTION

This document outlines the compliance with FAR 23.1529 “Instructions for Continued Airworthiness” for Hartzell Propeller model installed on the Mooney turbocharger Aircraft model M20M as listed in Minnis Aviation Installation Instructions M2020-03.

Modification of the Mooney 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	M2020-03	Installation Instruction
Minnis Aviation	M2020-05	Instruction for Continued Airworthiness
Minnis Aviation	M2020-06	FAA approved Airplane Flight Manual Supplement
Hartzell Propeller	115N Rev. 24 or later approved revision (Metal Prop’s)	Operation and Installation Manual
Hartzell Propeller	Service Letter 61-61Y	Propeller TBO
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) Hardcopies can also be obtaining from Hartzell Propeller.

Hartzell Propeller Inc.
One Propeller Place
Piqua, Ohio 45356
Telephone
(937) 778-4200
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(937) 778-4365

2. DESCRIPTION

The modification removes the existing McCauley or current installed constant speed propeller and spinner assembly replacing it with Hartzell Propeller metal propellers HC-I3YR-1RF/F7498(B,K)-1 constant speed propeller.

3. CONTROL, OPERATION INFORMATION / SPECIAL PROCEDURES

The Hartzell propellers are a constant speed, variable pitch propeller, controlled by a governor for constant RPM settings at the pilot's discretion.

Repairs may be made to the propeller as described in Hartzell Propeller Operation & Installation Manual 115N rev. 24 or later approved revision.

4. SERVICING INFORMATION

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

4.1 For Hartzell service literature and revisions, contact:

Hartzell Propeller Inc.
One Propeller Place
Piqua, Ohio 45356

Telephone

(937) 778-4200

Fax (937) 778-4365

4.2 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](mailto:manuals@hartzellprop.com)) or

(Email: manuals@hartzellprop.com).

5. MAINTENANCE INSTRUCTIONS

All required maintenance, inspections, time intervals and procedures are provided in Hartzell Propeller Operation & Installation Manual 115N rev. 24 or later approved revision.

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. 24 or later approved revision.

6. TESTING and TROUBLESHOOTING

Hartzell Propeller Owner's Manual, 115N rev, 24 or later approved revision, contains testing and troubleshooting information located in section 4, pages 4-1 through 4-13.

7. REMOVAL AND REPLACEMENT INFORMATION

The STC propeller should be installed in accordance with STC installation instruction M2020-03 and Hartzell Propeller Operation & Installation Manual 115N Rev. 24 or later approved revision.

6.1 Engine set-up in accordance with Mooney Maintenance Manual for the M20M or other FAA approved set-up instruction.

6.2 Flight test aircraft with the new propeller, all engine parameter should coincide with those of stated in the aircraft approved flight manual and or approved flight manual supplements.

7. DIAGRAMS

Refer to Hartzell Propeller Operation & Installation 115N rev. 24 or later approved revision.

8. LIST OF SPECIAL TOOLS

Refer to Hartzell Illustrated Tool and Equipment Manual 165A Rev. 26 or later approve revision.

9. ADDITIONAL INFORMATION FOR COMMUTER CATEGORY AIRCRAFT

Not Applicable.

10. RECOMMENDED OVERHAUL PERIODS

Recommended Time between Overhaul (TBO) limits for the STC propeller are provided in Hartzell Service Letter HC-SL-61-61Y rev. 14 or later approved revision.

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.

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