Instructions for Continued Airworthiness
McFarlane Aviation Inc. FAA-PMA Part Number MC0713041-1/-1B Cowl Flap Control.
FAA PMA Number: PQ3732CE

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Revisions

<table>
<thead>
<tr>
<th>Revision</th>
<th>Date</th>
<th>Summary</th>
</tr>
</thead>
<tbody>
<tr>
<td>Original</td>
<td>01/12/2012</td>
<td>Original release</td>
</tr>
</tbody>
</table>

List of Effective Pages

<table>
<thead>
<tr>
<th>Page</th>
<th>Rev/Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>All</td>
<td>01/12/2012</td>
</tr>
</tbody>
</table>
INTRODUCTION
This document is intended to provide for the continued airworthiness of McFarlane Aviation, Inc. PMA Cowl Flap Control eligible for installation on early model Cessna model 180 aircraft. The McFarlane Part Number is MC0713041-1 or MC0713041-1B and replaces Cessna Part Number 0713041-1.

This document specifically concerns the installation of this control. For all items not related to the installation of the McFarlane Aviation, Inc. control, refer to the basic airplane model service and parts manuals.

SYSTEM DESCRIPTION
Cessna Model Series 180, 180A, and 180B aircraft employ moveable cowl flaps so as to provide variable engine cooling during operation. Control of these flaps is via a dual push/pull control equipped with a push-to-unlock locking mechanism.

SPECIAL OPERATING INFORMATION
The operation of the cowl flap control system does not change with the installation of the McFarlane control; see applicable Cessna Model Service Manual for the operational control of this system.

PART REMOVAL, REPLACEMENT, AND SERVICE INFORMATION
Use of the McFarlane control has no impact on the current installation instructions found in the relevant Service Manual, D138-13. The following instructions/illustrations are provided to clearly illustrate the various steps needed to replace the control.

1. Un-thread the Panel Nut from the Push Rod Housing. Compress the Push Knob and pull the entire inner assembly out. Remove the Ball Bearing. Caution: Ball Bearing may fall out during disassembly and is easily lost.

2. Route and secure the two conduits. Routes should be as direct as possible. All bends should be made with maximum possible radius. Insert the Push Rod Housing in the back of the Instrument Panel and position the Lock Washer/Jam Nut so that approximately 0.20" - 0.25" of thread extends through the panel.

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3. Insert the Inner Wires into the Push Rod Housing and feed them into the Conduit.  
   **Caution:** Use light pressure only.  *Do not force the wires into the conduit or damage may occur.*  
   Rotate the Push Knob until the flat of the Release Shaft ramp is showing through the hole.  
   Compress the Push Knob and continue to feed the inner assembly into the Push Rod Housing.  
   Re-insert the Ball Bearing just before the hole is no longer visible.  Continue insertion until the Ball Bearing is approximately an inch into the Push Rod Housing.  
   Thread the Panel Nut fully onto the Push Rod Housing and tighten the Jam Nut until secure.  
   **Caution:** Do not over-tighten the Jam Nut or the control will be damaged.  
   Continue to insert the inner assembly until the Knob is against the Panel Nut.

![Diagram of Cowl Flap Control]

4. Install conduit and wire clamping components.  Adjust for proper cowl flap travel and secure clamps.  
   Cycle the control fully twice to verify proper functionality before returning to service.  
   Control must work smoothly throughout the full travel range with the Push Knob depressed.  
   The Control must lock in place when the Push Knob is released.  
   The Cowl Flaps must fully open & close with no slippage at the conduit or wire attachment points.

TROUBLESHOOTING

Refer to the applicable Cessna Model Service Manual for troubleshooting instructions and the applicable Cessna Illustrated Parts Catalog for mating hardware and higher assembly part numbers.  See listing in Data Section below.  For troubleshooting, refer to Figure 12-15 in Manual D138-13.

PLACARDS

None applicable

DATA

All information to support the continued airworthiness of this replacement part is as defined herein and contained in:

- Relevant Cessna Model Service Manuals.
  - 100 series Service Manual D138-13 (1962 and Prior)
- Relevant Cessna Model Illustrated Parts Catalog.
  - 180/182 IPC P259-12 dated 6/1/1967

INSPECTION

Inspection intervals for the Cowl Flap Control and any related system are not affected by the use of the McFarlane PMA control.  Refer to the Cessna Service Manual for inspection instructions.
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RECOMMENDED OVERHAUL PERIODS
No additional overhaul time limitations exist with the use of these parts.

AIRWORTHINESS LIMITATIONS
The Airworthiness Limitations section is FAA approved and specifies maintenance required under Sec. 43.16 and 91.403
of the Federal Aviation Regulations unless an alternative program has been FAA approved. No additional airworthiness
limitations exist.

ASSISTANCE & REVISIONS
ICA revisions shall be made available on the McFarlane website, www.mcfarlaneaviation.com/ICA. For questions or
assistance regarding these Instructions for Continued Airworthiness (ICA), contact McFarlane Aviation, Inc via email or
phone. Email: engineering@mcfarlaneaviation.com Phone: 1-800-544-8594 (within the US) or 1-785-594-2741.