

# Service Bulletin

<b>MODEL(S)</b>	MD302
<b>PART NUMBER(S)</b>	6420302-( )
<b>DESCRIPTION</b>	SAM <sup>®</sup> Standby Attitude Module
<b>TOPIC</b>	Software Update Version 1.0.2
<b>PURPOSE</b>	External Compatibility Resolution
<b>RELEASE DATE</b>	May 10, 2013

## APPLICABILITY

This Service Bulletin is applicable to the model MD302 SAM<sup>®</sup> Standby Attitude Module, part number 6420302-( ) manufactured by Mid-Continent Instrument Co., Inc. (dba Mid-Continent Instruments and Avionics). These updates are to be performed **ONLY** by authorized personnel per the instructions as listed in this Service Bulletin. Units with this software upgrade are available for sale from the manufacturer.

## PURPOSE

The MD302 SAM Software Version 1.0.2 includes an update that ensures compatibility with the external configuration module.

## EFFECTIVITY: MANDATORY

All MD302 SAM units in the field shall be updated to Software Version 1.0.2. Compliance to this mandate is recommended as soon as reasonably practical and with all attempts to complete the update within 60 days of the release of this Service Bulletin.

Following the release of this Service Bulletin, all MD302 SAM units provided by Mid-Continent Instruments and Avionics shall be supplied with Software Version 1.0.2 or later.

## DESCRIPTION

The following list describes the added features, enhancements and resolutions incorporated in the Software Version 1.0.2 update.

### ADDED FEATURES

No change

**DESCRIPTION***(cont)*ENHANCEMENTS

No change

RESOLUTIONS

1. The unit will now allow changes to the configuration settings after adopting the settings from a configuration module that was previously programmed.

**ESTIMATED MANPOWER**

Approximately 30-60 minutes

**APPROVALS**

None required

**WEIGHT AND BALANCE**

No change

**ELECTRICAL LOAD DATA**

No change

**CERTIFICATION**

This Service Bulletin represents a minor change to the previously approved Technical Standard Order Authorization as well as any Supplemental Type Certification or Type Certifications. Any changes to software and/or complex hardware have been completed in accordance with approved developmental and quality processes per the guidelines of RTCA document DO-178B and DO-254, respectively.

**OTHER PUBLICATIONS AFFECTED**

No change

## ACCOMPLISHMENT INSTRUCTIONS

The action required by this Service Bulletin can be accomplished by returning the unit to Mid-Continent Instruments and Avionics or by performing the instructions as listed in this section.

### **If returning the MD302 SAM<sup>®</sup> unit to Mid-Continent Instruments and Avionics:**

Call the Mid-Continent Instruments and Avionics sales department for a Return Material Authorization (RMA) at 316-630-0101

Return address: Mid-Continent Instruments and Avionics  
9400 E. 34<sup>th</sup> Street N.  
Wichita, KS 67226

### **If performing this update in the field:**

Follow the instructions listed below:

#### **PREPARATION**

1. Prepare software update file.
  - A. Obtain a USB flash drive from Mid-Continent Instruments and Avionics with Software Version 1.0.2 file loaded.
  - OR
  - B. Download Software Version 1.0.2 to the root directory of a standard FAT-formatted USB flash drive from **[www.flySAM.com/software-updates](http://www.flySAM.com/software-updates)**.
2. Ensure that the unit is powered off.
3. Remove the unit from the instrument panel.
  - A. Remove the four mounting screws attaching the bezel of the unit to the panel.
  - B. Pull the unit forward until the end plate is visible.

**NOTE:** This can be done without removing the electrical connector or pneumatic connections if the proper service lengths were applied during installation.
4. Loosen the screw of the USB access cover on the rear of the unit until the USB port is accessible.

#### **PERFORM SERVICE ACTION**

5. Insert the USB flash drive with Software Version 1.0.2 into the USB port.
6. Turn on the unit by pressing and continuing to hold the Control Knob on the faceplate.
7. Continue holding as prompted (up to 10 seconds) until the Pre-Flight Screen appears. Once CONFIGURE MENU is displayed, the unit is in Configuration Mode.
8. Apply external power to the unit. Software updates cannot be performed on battery power.
9. Turn the Control Knob to highlight the UPDATE SOFTWARE option. This option will not be available if external power is not applied.

10. Press the Control Knob to initiate the software load.
11. When the software load is complete, the unit will display SUCCESSFUL UPDATE.
12. Press the Control Knob to reset the unit.  
*If the software update is unsuccessful, an ERROR message will be displayed. Should this occur, remove the USB flash drive, power down the unit and return to Step 5 of the Service Action above. If the error message persists, contact Mid-Continent Instruments and Avionics.*
13. The update process will continue as the screen will read UPDATE STATUS. A six letter RESPONSE code will also be displayed during this step.  
**IMPORTANT: Record the Response Code.** Both the Serial Number and Response Code are REQUIRED during the verification process of this Service Bulletin.
14. Once the Update Status process is complete the unit will display SUCCESSFUL UPDATE.
15. Verify that the Response Code has been recorded and press OK to reset the unit. The Response Code will not be repeated.

### **VERIFICATION**

16. Upon startup, verify the Pre-Flight Screen displays **S/W Version 1.0.2**.
17. To verify completion, you must provide Mid-Continent Instruments and Avionics with the Serial Number and Response Code of the unit. This information can be supplied using the Return Mailer provided with this Service Bulletin or online at **[www.flySAM.com/software-updates](http://www.flySAM.com/software-updates)**.

### **RETURN TO SERVICE**

18. Remove the USB flash drive.
19. Close the USB Access Cover and tighten the screw in place.
20. Re-install the unit into the instrument panel in reverse order as described in Step 3 (above).