

Service Bulletin

MODEL(S)	MD302
PART NUMBER(S)	6420302-()
DESCRIPTION	SAM [®] Standby Attitude Module
TOPIC	Software Version 1.1.2
PURPOSE	Product and Performance Enhancements
RELEASE DATE	July 1, 2020

APPLICABILITY

This Service Bulletin is applicable to the model MD302 SAM[®] Standby Attitude Module, part number series 6420302-() manufactured by Mid-Continent Instrument Co., Inc. (dba Mid-Continent Instruments and Avionics).

PURPOSE

This service bulletin describes features associated with an update to the product software represented by version 1.1.2.

EFFECTIVITY

MD302 SAM units in the field can be updated to Software Version 1.1.2, but are not required to do so for continued airworthiness. Field updates to software version 1.1.2 are recommended for installations in which the MD302 is also coupled with the MD32 Remote Magnetometer.

Following the release date of the updated software, all MD302 SAM units manufactured by Mid-Continent Instruments and Avionics shall be supplied with Software Version 1.1.2 or later installed.

DESCRIPTION

The following list describes the enhancements, added features, and resolutions incorporated in the Software Version 1.1.2 update.

ENHANCEMENT

1. Activate manual power-off option for the internal battery at all times
Allows the user to manually turn off the unit when on battery power, regardless of airspeed input
2. Improve attitude accuracy during and after combined hover, ground effects and wind conditions

ADDED FEATURES

1. Configuration option added to select automatic power-off behavior ("Auto-Off")
Allows configuration of previous auto-off behavior to OFF. This allows immediate switchover to battery power after loss of aircraft power *and* no airspeed (i.e. hover). Requires manual shut-down after landing to turn off battery.

RESOLUTIONS

1. Improve attitude accuracy when coupled with an MD32 Magnetometer
2. Resolved error with battery storage mode
When battery storage mode is activated, unit now properly recognizes Type 1 battery packs and resolves the erroneous 'unknown battery type' message.

ESTIMATED MANPOWER

Approximately 30 minutes or less to update the unit software.

APPROVALS

This Service Bulletin represents a minor change to the previously approved Technical Standard Order Authorizations. Any changes to software and/or complex hardware have been completed in accordance with approved development and quality processes per the guidelines of RTCA document DO-178B and DO-254, respectively.

WEIGHT AND BALANCE

No change

ELECTRICAL LOAD DATA

No change

CERTIFICATION

This Service Bulletin represents a minor change and thus maintains all aspects of the previously approved Technical Standard Order Authorizations and environmental qualification basis.

OTHER PUBLICATIONS AFFECTED

Mid-Continent Instruments and Avionics Installation Manual and Operating Instructions, part number 9017782, Revision N or later, includes information associated with this Service Bulletin.

ACCOMPLISHMENT INSTRUCTIONS

The unit software can be updated 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[®] 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. 34th Street N.
Wichita, KS 67226

If performing this software update in the field:

Follow the Instructions for Continued Airworthiness (ICA) for Software Updates as provided in the Mid-Continent Instruments and Avionics Installation Manual and Operating Instructions, part number 9017782.