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## RELEASE NOTES

### **AARC500 Adaptive Aeromagnetic Real-Time Compensator**

#### **Host Firmware Release RMS1878-02-F**

*These release notes contain important information about the new firmware and how it will affect the performance of instruments in which it is installed. The notes include information about enhancements, adaptive changes, and corrections to known problems. Please read this documentation carefully.*

*When a new revision of the user's guide for the product to which this firmware applies, accompanies the firmware release, references to the pertinent sections are shown in square brackets.*

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#### *Compatibility:*

*(D)AARC500 Front End – Requires firmware RMS1877-03-C or later*

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1. The *Record* button on the main window is now protected against accidental activation. The approach used is the same one that has always been used to protect the *Adapt* button: as a minimum, access-level 2 is required to be able to activate the button.  
*[User's Guide, Section 3.3]*
2. A "global" error indicator has been added on the main window of the user interface. The indicator is clearly visible, normally blank, when active bright red.  
The error indicator will go ON in response to either a severe error condition detected by the Host processor (e.g., failure to successfully initialize some hardware, failure to communicate with the Front End, etc.), or when any error/warning condition has been reported by the Front End.  
Once the error indicator comes ON, it will remain ON until the system is re-started.  
The main purpose of the indicator is to provide a similar function to that of the red ERROR LED on the unit's front panel, for a pilot/operator who can not view the unit. Under such conditions, the pilot/operator typically views the user interface on a "remote" screen mounted somewhere within his field of vision. (This could be a screen/monitor connected at J18, or a Windows device controlling the DAARC500 via the Ethernet port.)  
*[User's Guide, Section 3.3]*

3. The new firmware allows systems including the GPS Receiver Option, to record and monitor the *GPS quality indicator* (per NMEA's GGA standard), in addition to GPS time and position information.

The quality indicator can be monitored in real-time, together with GPS time and position, in the *monitor GPS inputs* window.

In order to maintain the size of recorded data packets unchanged, the quality indicator is recorded embedded in the field used to record the altitude. The data exporting software provided by RMS Instruments takes care of separating the two variables.

[User's Guide, Section 3.4.1.1, Tables 2.4b, 3.2b, Appendix H.2]