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RELEASE NOTES

DAARC500 (Gen-2)

DAS & Adaptive Aeromagnetic Real-Time Compensator Host Firmware Release RMS11030-03-C

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 outline functional enhancements, adaptive changes and, if applicable, problem corrections.

Please read this documentation carefully. References to pertinent sections in the product's user's guide are shown in square brackets.

Compatibility:

(D)AARC500 Front End – Requires firmware RMS1877-04-C or later

1. The Post-Flight Compensation (PFC) function now supports On-Board Electronics (OBE) compensation. The last OBE solution obtained is automatically applied when using the PFC function.

[User's Guide: Section 3.10.1]

2. The PFC function will now work with the *current* solution on start-up, even before the Accumulation Matrix (AM) file has been explicitly loaded, or run-mode initiated.

[User's Guide: Section 3.10.1]

- 3. If applied to very short data files, the PFC function could yield slightly inconsistent statistics if run mode had been active prior to running the PFC function. Initial conditions are now established from the initial records in the data file, thus always yielding consistent results.
- 4. A warning will be issued, at a user-define threshold level, for missed TCP/IP data blocks. This is useful to alert operators to, for example, a fault in a spectrometer connected to the system through the Ethernet interface. It should be used in conjunction with real-time numerical and graphical monitoring of various data fields in the spectrometer data packets.

[User's Guide: Section 3.4.9]

5. The system now provides a simple mechanism to return all operating parameters to Factory defaults.

[User's Guide: Section L.3]

- 6. In the event of a serious fault in the fluxgate magnetometer that results in total field values below a certain threshold, measurements are now automatically fixed at a "safe" value to avoid numerically incongruous compensated output.
- 7. The time-axis scaling is now displayed on the real-time graphic screen.

[User's Guide: Section 3.4.5]