May 2009 ModHopper Firmware changes.

Firmware updates for the ModHopper have a number of substantial changes. Users should be aware of these changes and how these may impact any custom applications that may have been developed. Although great care has been taken to maintain the previous feature set, users should test the firmware update prior to deploying this firmware on production equipment.

The firmware update will be provided at no cost.

Firmware release for version v2.06b
For R9120 and R24120, rev A and C boards.

Overview of changes:
This firmware update includes a number of enhancements intended to support R9120-5 features on the Rev-C hardware platform. A number of minor bug fixes are also included in this update for both Rev-A and Rev-C hardware.

Firmware Changes in v2.06b:

- binary files for beta firmware v2.06b both rev-A and rev-C
- Added route table header to allow radio dipswitch option to clear RF routes.
- Fixed Modbus register range checking on sensor network sample time and pulse mode threshold to allow the ending ranges 100 to 2550 to be accepted.
- Added feature to purge RF routes on RF dipswitch change.
- Added feature to allow RF channel change on software register.
- Added register to report max allowed RF channel. For R9120-5, this is 0-9, and reports 0-6 for all others.
- Fixed a bug with the Force Master mode operation. This bug was introduced around 2008-04-20

Firmware Changes in v2.05b:

- Initial beta release of v2.05b for R9120-5 ModHoppers.
- Added feature to report status of the AES key, if available and if set.
- Fixed a broken Modbus rf/485 handler. (reports where query came from)
- Added feature to allow the user to set a lock register to limit configuration to the RS485 port. This will be useful to lock down security.
- Added Modbus exception to report when writing to key register for units with no aes key in the radio.
- Updated radio print model type procedure to work when debug is not defined.
- Fixed broken Modbus write register feature that clears RF/RS485 stats. Feature worked in v1.17, but was dropped sometime after that.
- Added testing for RF Channel Override and R9120-5 speed set options. (feature incomplete)
- Updated AES key eeprom read/write procedures to handle key setting (rev-c only)
- Updated R9120-5 key option to store hex byte list. Added option to set the radio option correctly to match RF speed setting.
- Added reserve dipswitch boot option to clear R9120 Key and RF Speed option.
- Added a handler to work with Modbus write multiple registers function.
- Added additional diagnostics about ack packets upon entry in history
- Added reboot handler for scheduled reboot.
- Added additional timing options for R9120-5 speed mode (115.2kbps)
- Updated init procedure for R9120-5 radio Updated option for radio to allow all radio channels (Above 6)

- Modified retry time counter to use time of original radio transmission for random counter. This should allow the procedure to generate the same random time based on any packet. Also updated this to a procedure to return the random time, including allowances for long RTT on R9120-5 radio.
- Added code for register to report current modem serial port option.
- Clear TX buffer pointer when transmit is complete. This prevents us from evaluating the bytes to send every time until another packet transmits or the queue job is cleared.
- Updated main procedure to use new FRAM handler function for pref storage.
- Updated rev-c preferences handler to store two copies of the prefs in fram. Rev-a only had eeprom and one copy only. Updated rev-c fram map to hold 256bit key for R9120-5