

701147 - MARS O&M IV

Week 26

1. Kent Headley
 - a. test planning w. Knute and Bryan
 - b. reviewing utils related to ZMQ pub/sub and fan control, potentially useful for tank test troubleshooting.

Week 15

1. Kent Headley
 - a. UW APL is shipping the remaining MARS hardware spares, and the team has effectively moved on.

Week 11

1. Kent Headley
 - a. Last week, tested prototype fan control with Ethernet IO module hardware; was able to verify that protocol works.
 - b. Fan control still pending final logic design/implementation, but can demonstrate basic functionality. It's not certain that it will be needed, so deferring completion.

Week 8

1. Kent Headley
 - a. Worked on a fan monitor app, now ~80% complete (developed as personal interest) to enable a secondary fan in the event of primary fan failure (overtemp).

The underlying foundations are of general use: MARS message pub/sub test tools, and a driver library for the ethernet IO modules that control the fans.

It's not certain whether we'll need it, as passive cooling measures are proving very effective; if so, it's in a state that could be completed fairly quickly.
2. George Stern
 - a. Finished verifying another fan and fan controller can be added
 - b. Updated documentation and looked through new solid models we received

Week 7

1. George Stern
 - a. Tried to get a solidworks database working only to discover it wasn't the latest. Thankfully the ME just came through and sent us a pack and go version of her latest.

Week 6

1. Kent Headley
 - a. laying some groundwork for fan monitor software in connection with the MARS node cooling updates. If required, the software would detect overheating in the event of a fan failure and enable a redundant fan. It's not certain we'll need it if passive heat sinks can provide enough
2. George Stern
 - a. Looked at MARS and some cots heatsink options while bugging UW for solid models

Week 5

1. Kent Headley
 - a. Team meeting re system cooling, integration, deployment schedule
 - b. Will defer Mar deployment to address cooling issues: some redundancy in the cooling system is needed, along with additional cooling capacity.
 - c. Potential need for a little software to respond to temperature alarm conditions, e.g. detect failure, enable aux fans.

Week 3

1. Kent Headley
 - a. Worked with Bryan and Knute to install and test the new SSD image.
 - b. Put together a spreadsheet to track various SSDs and disk images used for MARS. It includes a lookup area that provides a printable summary to store with devices (e.g. spares).