Laser Ranging Ground System

Progress

- While on travel to Texas, Tom Zagwodzki measured the wavelength of MLRS laser to be 532.18nm, which makes it very compatible with laser at NGSLR (532.2nm) and the LR flight filter.
- Radar tested successfully with mount observer doing sky watch. One aircraft detection was simultaneously made by both. There were no other airplane overflights that night. Will need at least one more night of testing with an observer to verify radar performance.
- Preliminary satellite schedule (including LRO) has been generated for NGSLR using the FDF provided predictions.
- Ralph indicates that the MOC will pull predictions and schedule from FDF and put it to CDDIS for LR (resolving an issue for us – thanks!).
- We are working on an algorithm to combine all of our schedule information to produce the final global LR schedule. Need station locations for all the S-band sites to do this – Ralph is providing.
- We had a successful night of CPF testing last week of LEO and LAGEOS satellite ranging. Want at least
 one more night to declare complete success.
- Optics have been modified on NGSLR transceiver bench to handle the higher LRO laser power. We
 plan to do ranging to SLR satellites with LRO laser next week as well as doing our first ranging with the
 FDF provided LRO predictions in the operational ranging software.
- One of the operators for NGSLR LR ranging has been selected and we expect to get him onboard in February.
- Issues & Risks
 - None.