Laser Ranging – Ground System (1)

• Progress
  – Instrumentation is on order to make final definitive analysis of energy, pulse-width and wavelength of the two LR laser (which are both in lab at the 48 Inch Telescope). Laser installation at SLR2000 has slipped to May.

  – CDR for LRO laser beam expander (to change the beam divergence) is this week.

  – Testing revealed drive problems with radar. Will add 2 weeks to radar completion. Testing with mount and SLR laser will now occur in May. Satellite tracking attempts with LRO laser have slipped to June.

  – Simulation testing of the on-site CPF prediction code for satellites was successful. Visual tracking of satellites using CPF predictions will occur the next night we work. Lunar prediction testing will occur when FDF predictions are available in late May / early June.
Laser Ranging – Ground System (2)

• Progress (cont)
  – Interface checkout of software commanded laser fires via Range-Gate-Generator (RGG) was successfully completed this week. Tests still need to be performed to ensure fire commands put laser event into the LOLA Earth Window.

  – New SLR2000 scheduling software (with LRO added) is nearing completion.

  – First successful test of operational software using schedule to automatically switch from satellites to LRO was completed this week (schedule was manually changed to include LRO).

• Issues & Questions –
  – When can we meet with FDF to discuss Dave Rowlands testing of predictions?

• Risks – none