National Aeronautics and Space Administration
Jet Propulsion Laboratory
California Institute of Technology

CGI Status

Report at the 10th Stanford Meeting

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Programmatic Highlights

- **Dr. Margaret (Peg) Frerking joined WFIRST CGI as the Instrument Project Manager. Welcome Peg!**
- **Held Milestone #8 and Milestone #9 TAC reviews on Nov 2. TAC considered Milestone #9 incomplete. A recovery plan to demonstrate simultaneously dynamics rejection and low-contrast is in place, expect to complete by Jan 31, 2017**
- **Held a PIAACMC review with the ExEPO Chief Scientist and Chief Technologists. Agreed to wrap up the PIAACMC effort by Dec 30, 2016 and submit a "white paper".**
  - PIAA team continues as part of the "Segmented Coronagraph Design and Analysis (SCDA) Study", led by ExEPO
- **Submitted FY17 budget with in-guide and over-guide. Received funding for most of the over-guide items, and revised plan to be submitted this week.**
- **Submitted CGI Starshade ready impact and estimate to GSFC**
- **Continues grass-root Phase B/C/D/E planning**

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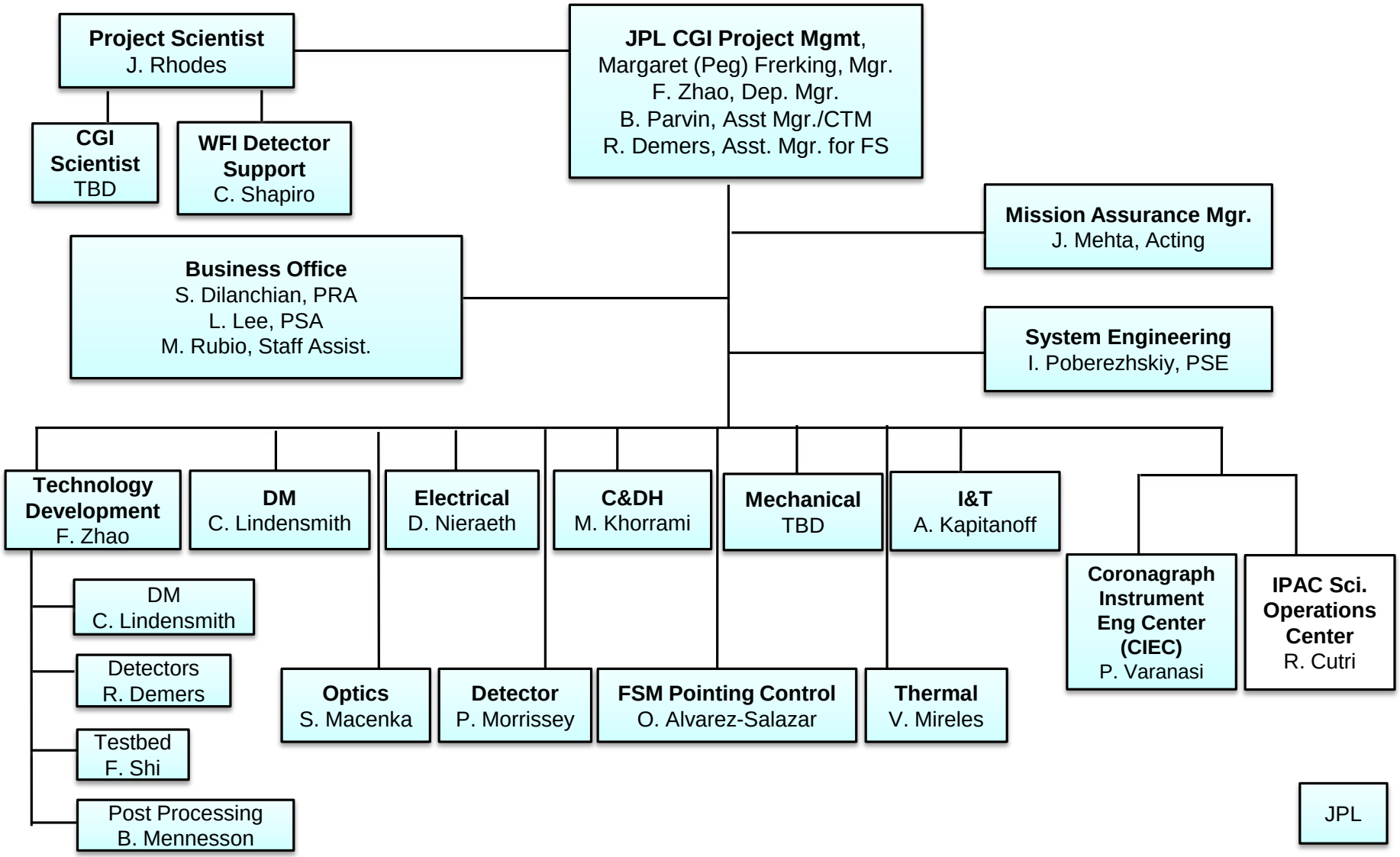
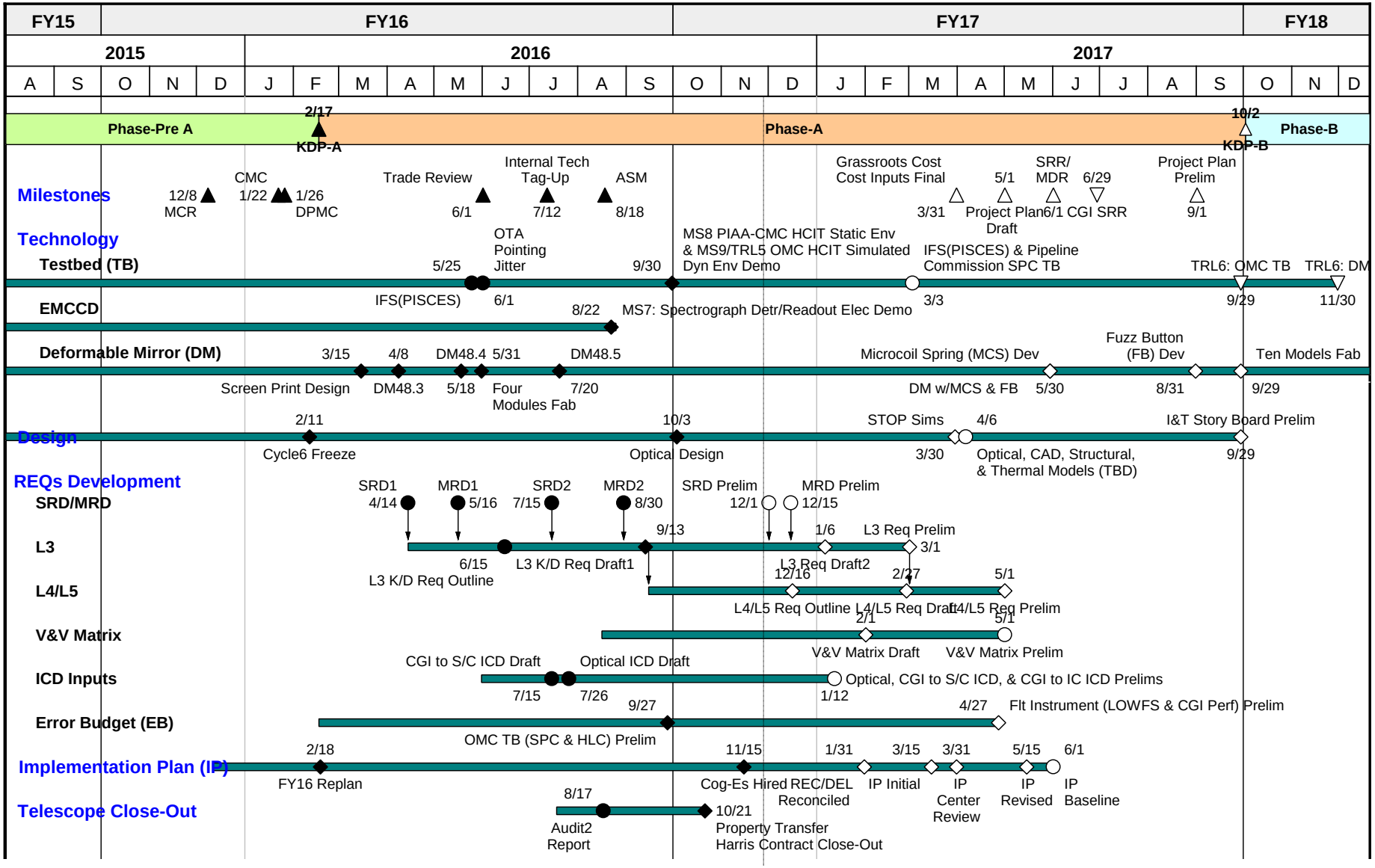
CoronaGraph Instrument (CGI) for WFIRST Organization Chart



CGI Phase-A Schedule

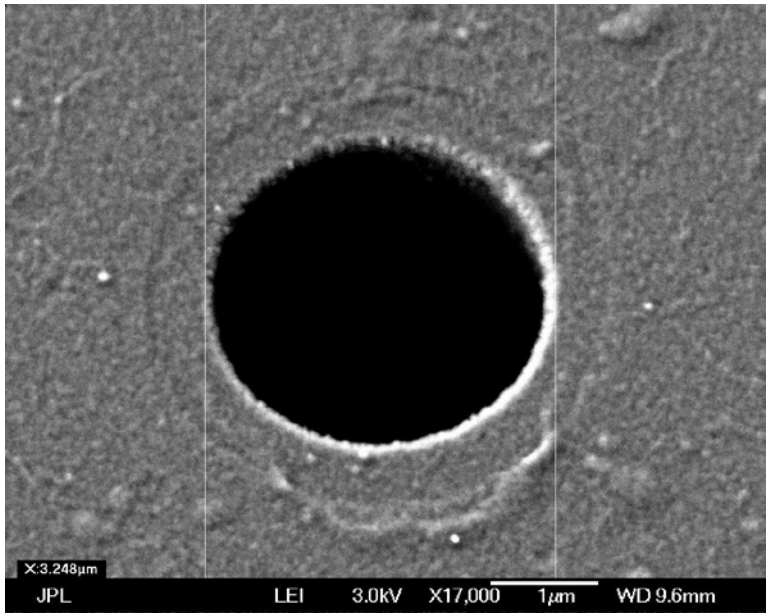
JPL WFIRST CGI Top Level Schedule

11/27/16

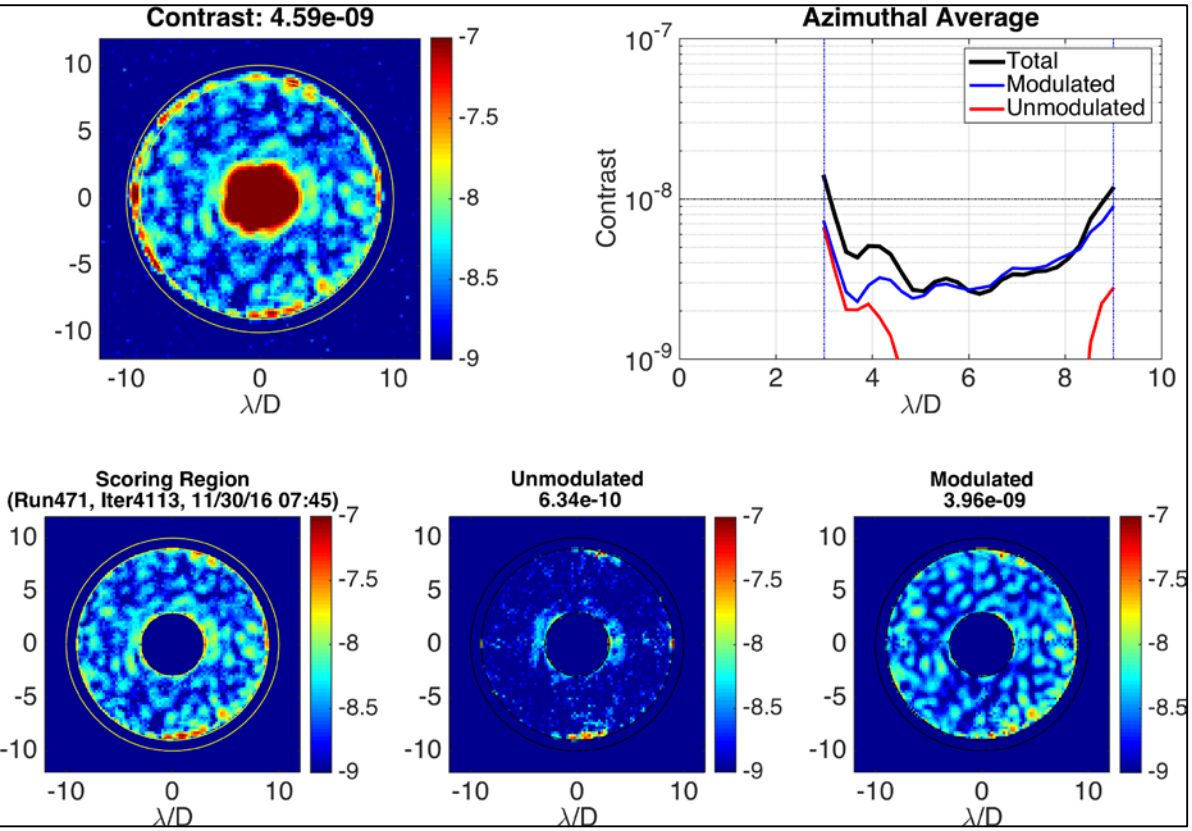


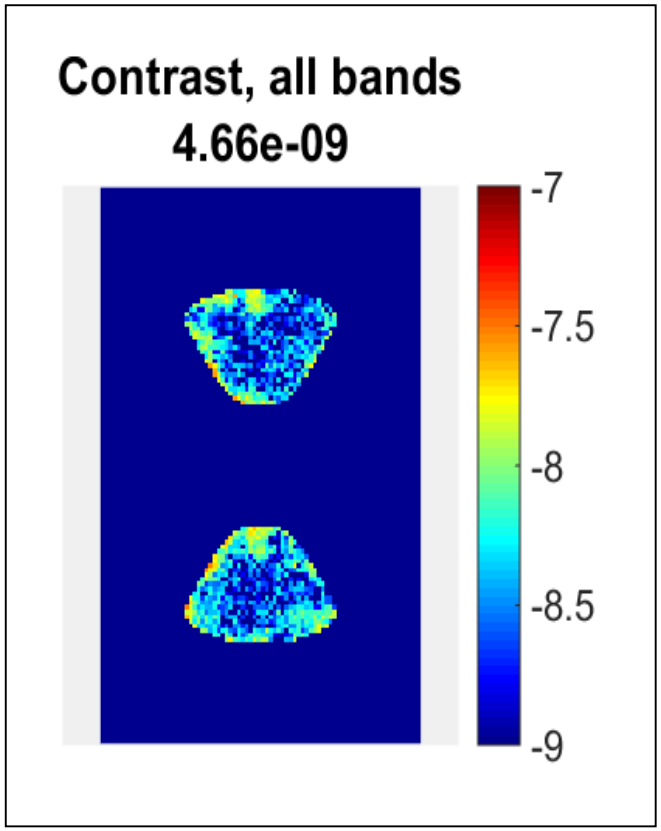
New Pinhole for Testbed Pseudo Star

- **Replaced a pinhole used as testbed pseudo star:**
  - WAS: commercially procured, burnt with a laser in nickel foil, unknown thickness (2-5 um, waveguide effects), irregular shape
  - IS: etched in silicon at MDL, thin , excellent tolerances, modelable
- **MDL pinhole in the pseudo star lead to a dramatic improvement in the incoherent light level (next slide)**



Improvement in Both HLC and SPC





HLC: 4.59E-9

SPC: 4.66E-9