

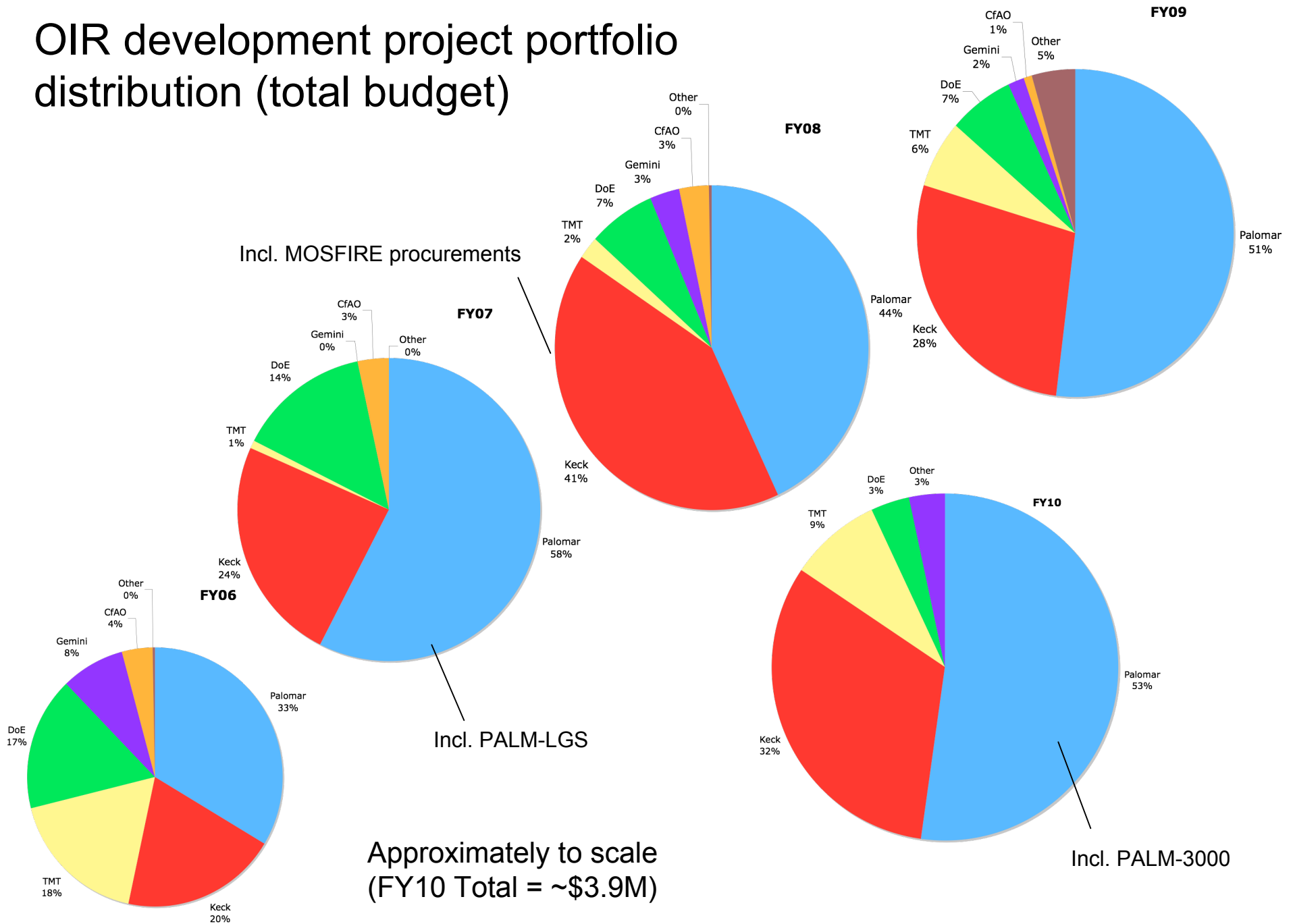
COO Instrument Development



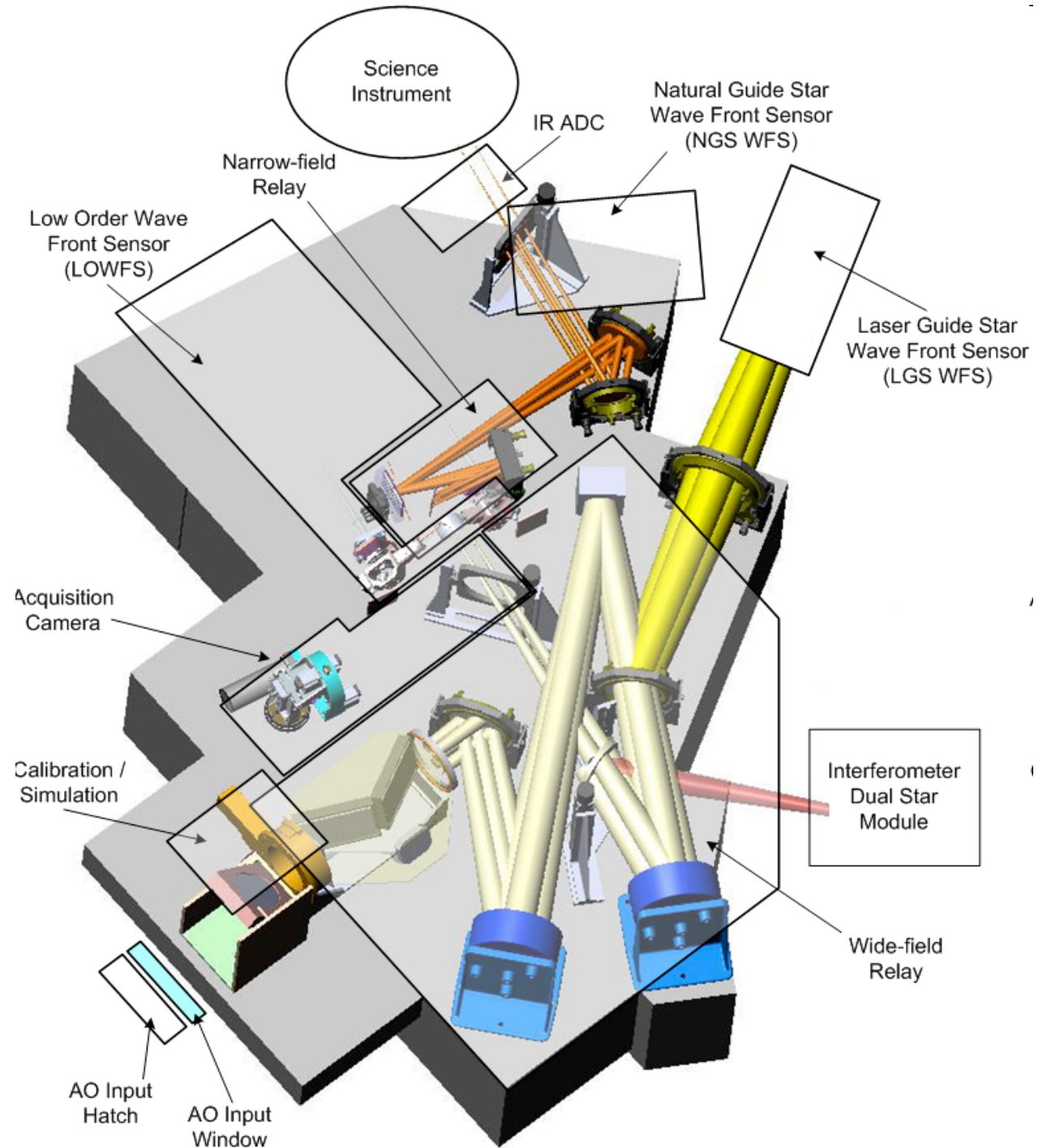
January 27, 2010

R. Dekany

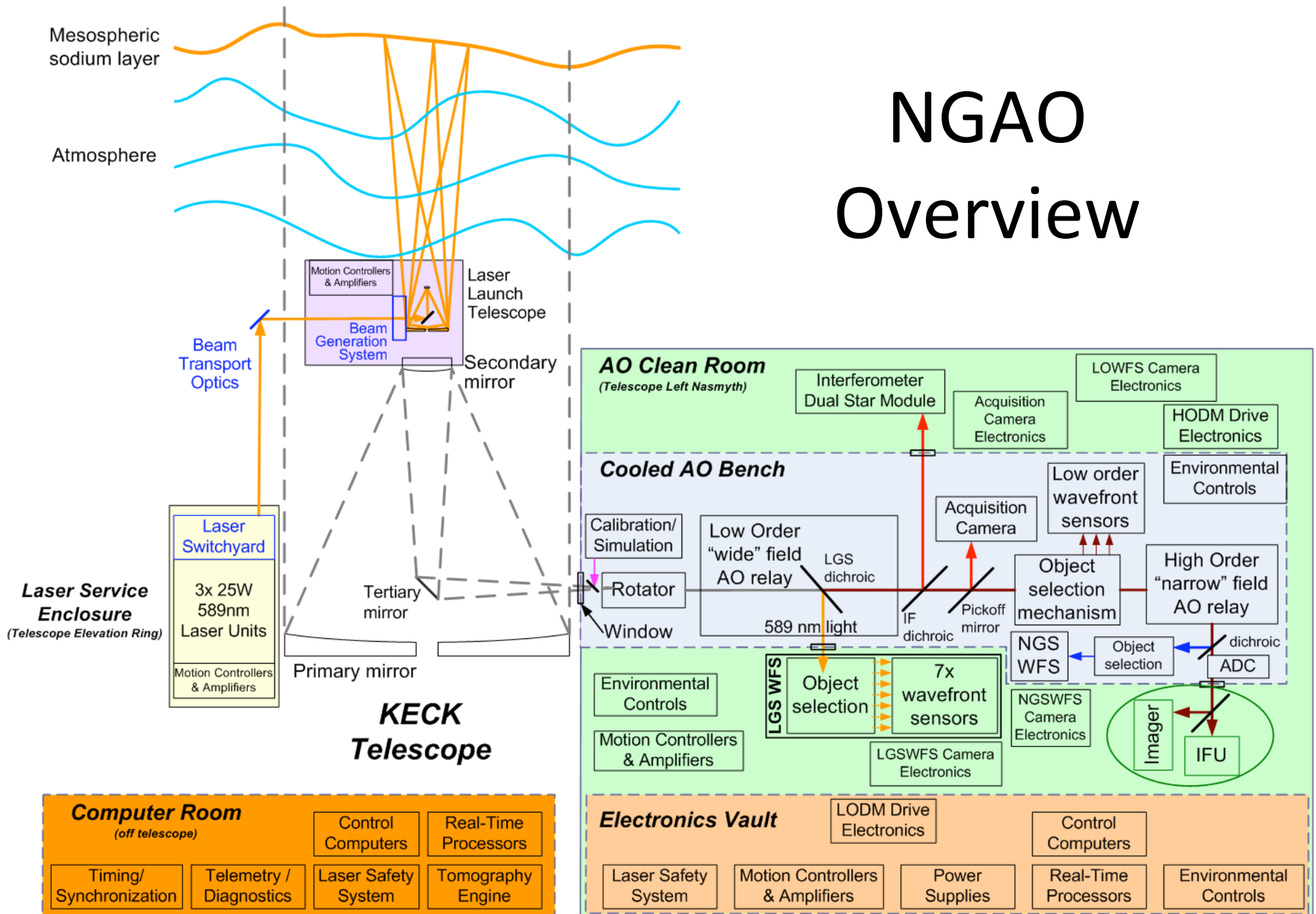
OIR development project portfolio distribution (total budget)



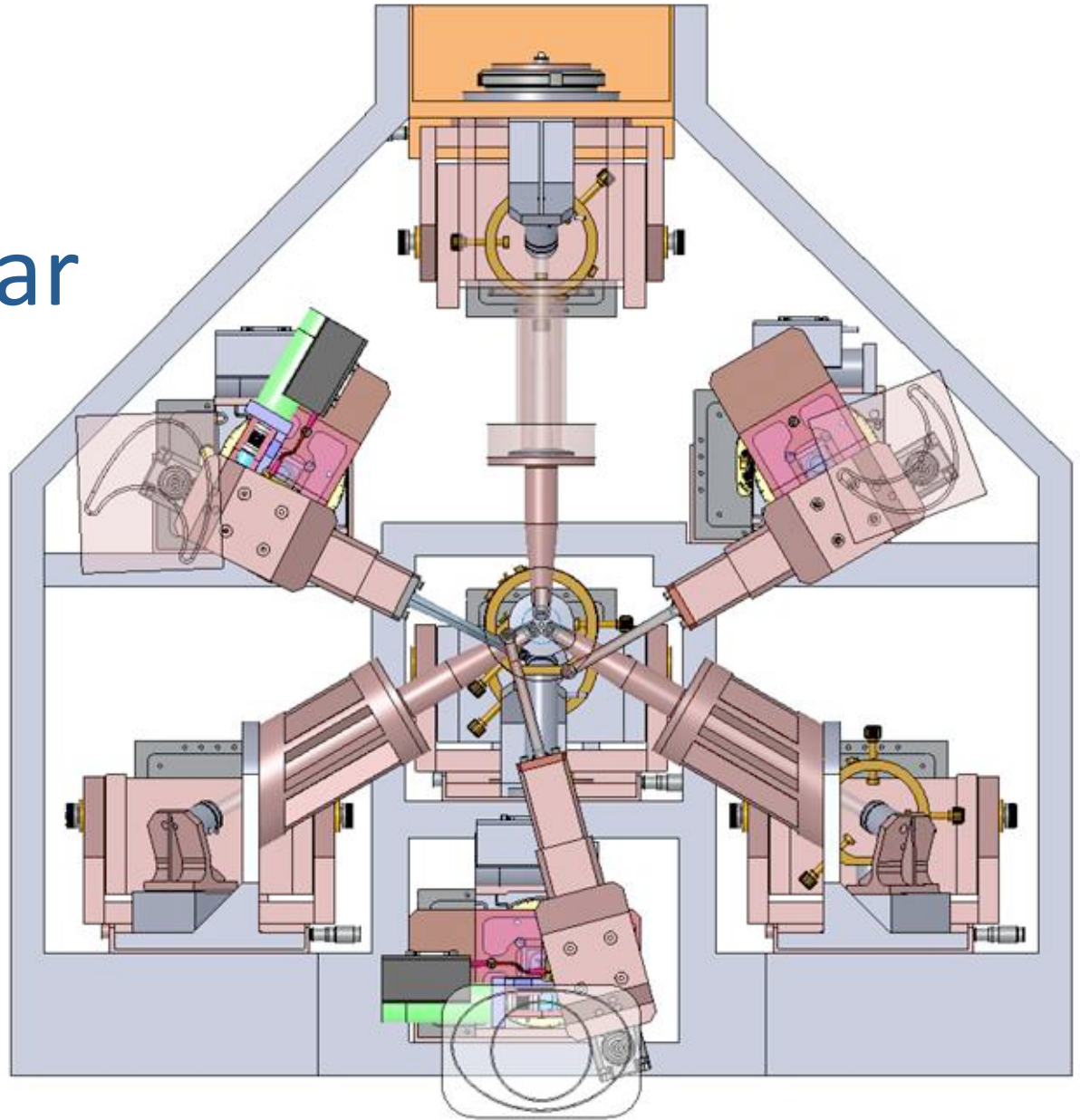
NGAO Nasmyth Optical Bench



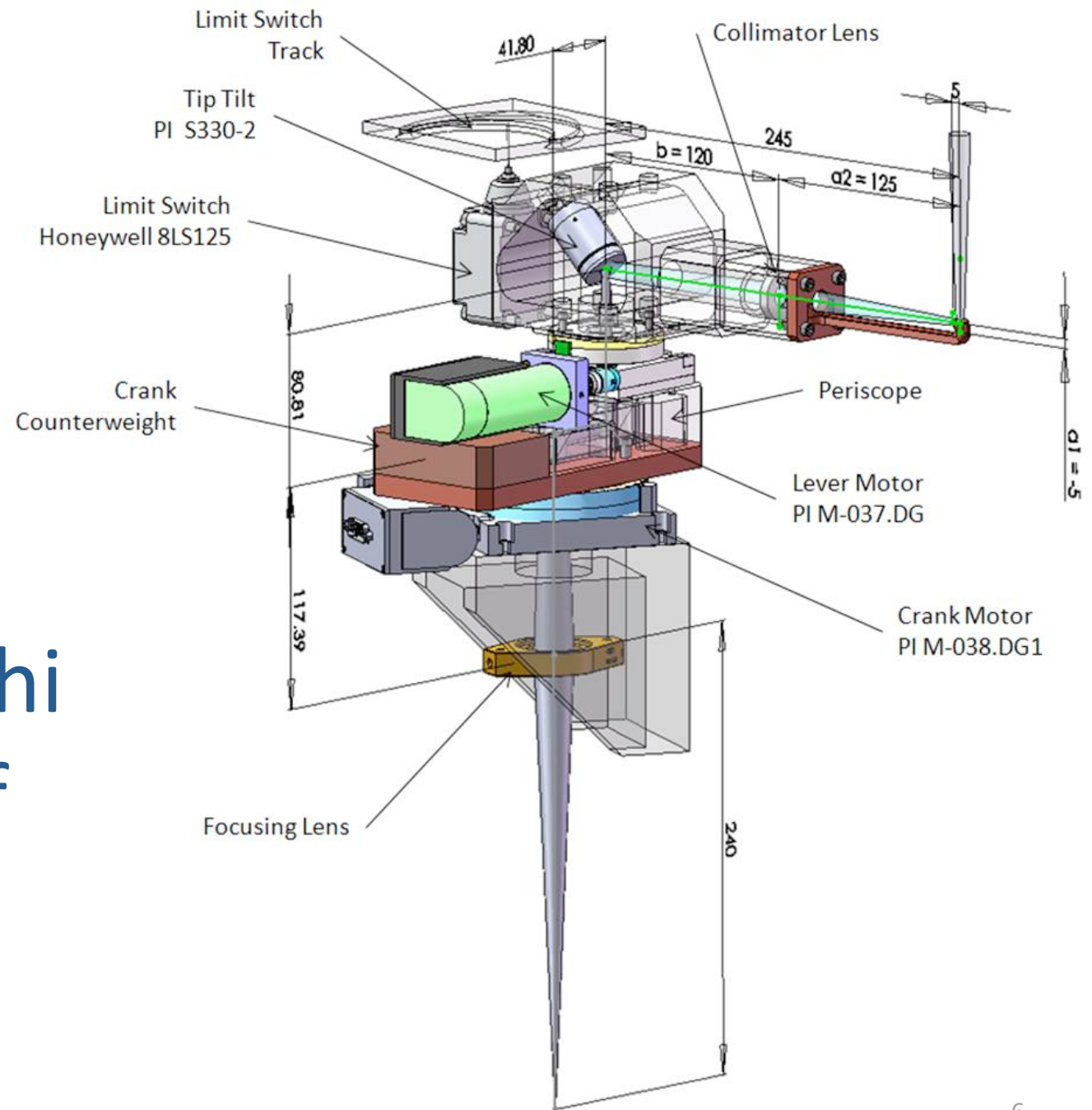
NGAO Overview



NGAO Laser Guide Star Wavefront Sensor



NGAO Theta-Phi Pickoff



NGAO Status

- Preliminary design phase
 - Technical work somewhat behind
 - Digesting Build-to-Cost
 - Many part-time staff
 - Quality of work good
 - Internal series of subsystem reviews positive
 - Requirements / Interfaces still not finalized
 - PDR
 - June 2010
 - Critical project decision point
 - Full \$57M or phased approach?

Replan Dates		NGAO Milestones	Status
2008	May	Preliminary Design phase begins	Complete
2008	November	NFIRAOS Cost Comparison	Complete
2009	March	Build-to-Cost Review	Complete
2009	May	Laser Risk Reduction Contracts Issued	Complete
2009	June	Operations Concept Document Release 1	Complete
2009	July	Requirements PD Release 1	85% compl.
2009	August	Software & Controls Architectures PD complete	SW compl.
2009	August	Optical relay/switchyard PD complete	95% compl.
2009	September	LGS WFS Assembly PD complete	60% compl.
2009	October	RTC Software PD complete	60% compl.
2010	October	Laser Launch Facility PD complete	70% compl.
2009	December	Laser Preliminary Designs complete	
2010	March	LOWFS Assembly PD complete	
2010	March	NGAO IFU SD & Imager PD complete	
2010	April	Preliminary Design Review	