



Rocket Project

Advisors: Professor Mark Walter & Professor Ken Mease



BACKGROUND

- First liquid propellant rocket at UC Irvine
- Preparing engineers for aerospace industry

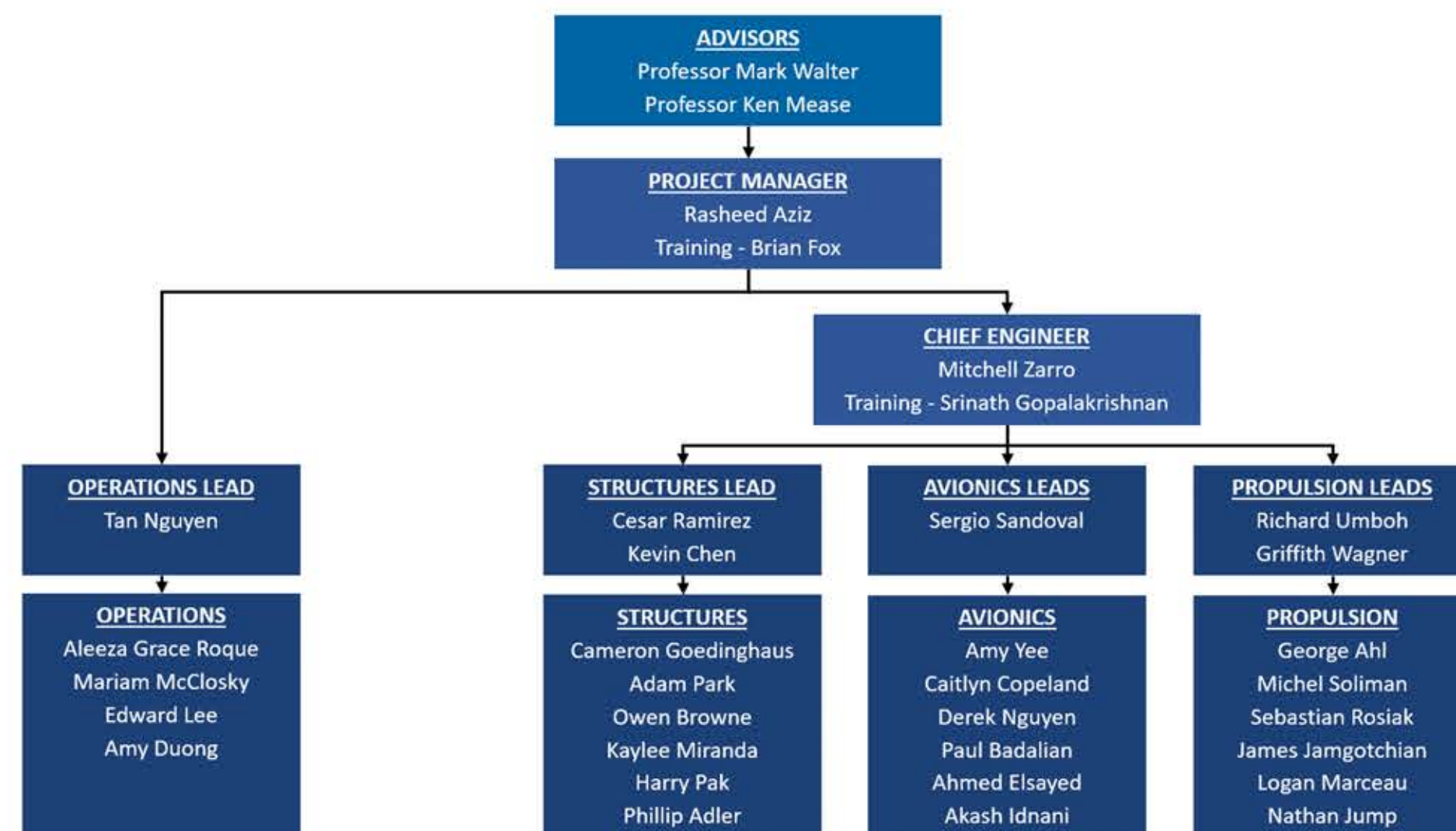
GOALS

- Conduct successful static test fire
- Win the Base 11 Space Challenge by being the first university to launch a liquid fueled rocket to the Karman Line

OBJECTIVES

- Engine Design Thrust: 1300 lbs
- Test Stand with Data Collection System and Safety Features
- Base 11 Rocket Altitude: 100 km
- Dynamic Flight Control System
- Single Stage Liquid Engine Design
- Lightweight Rocket Structure

TEAM STRUCTURE



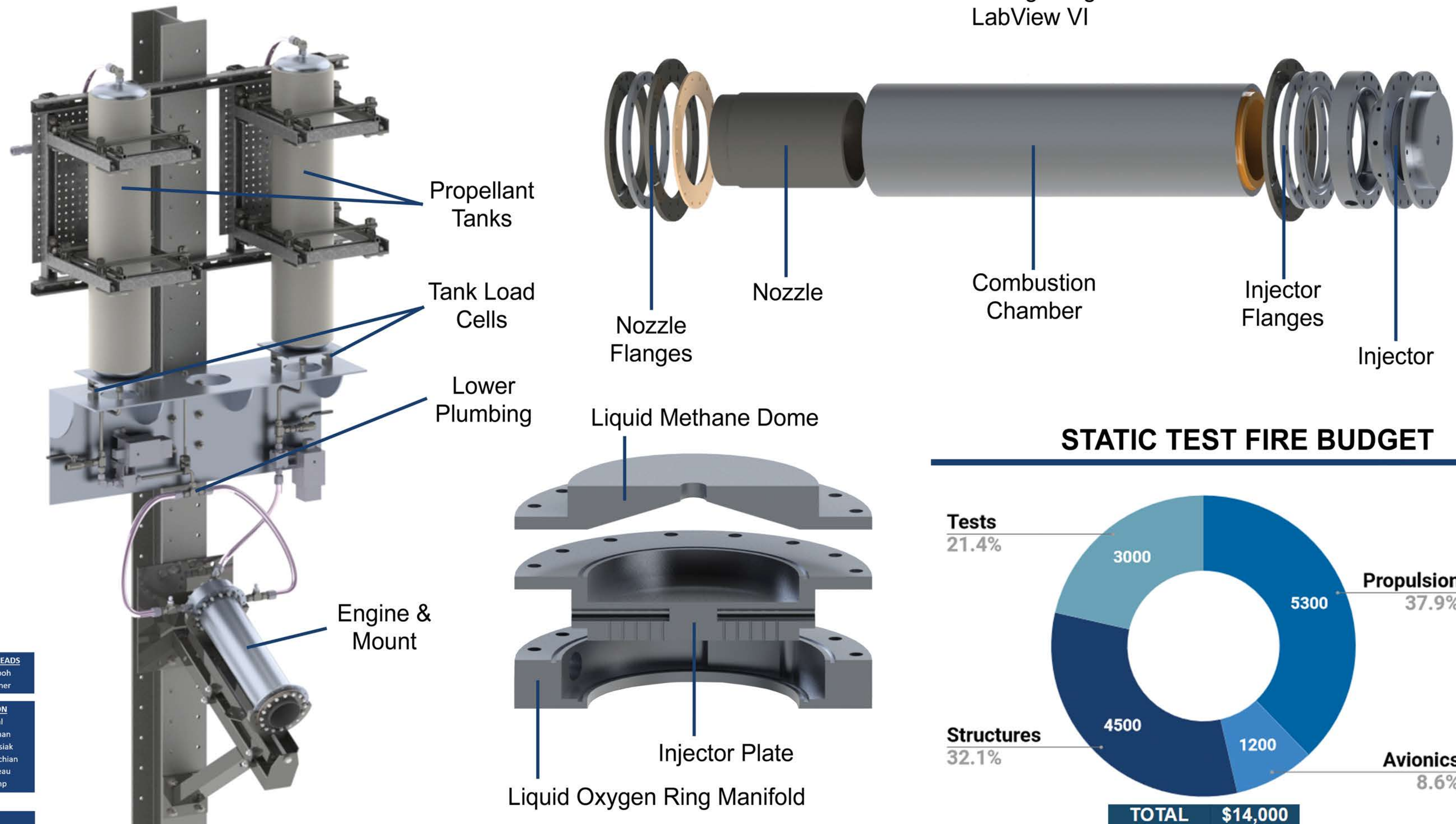
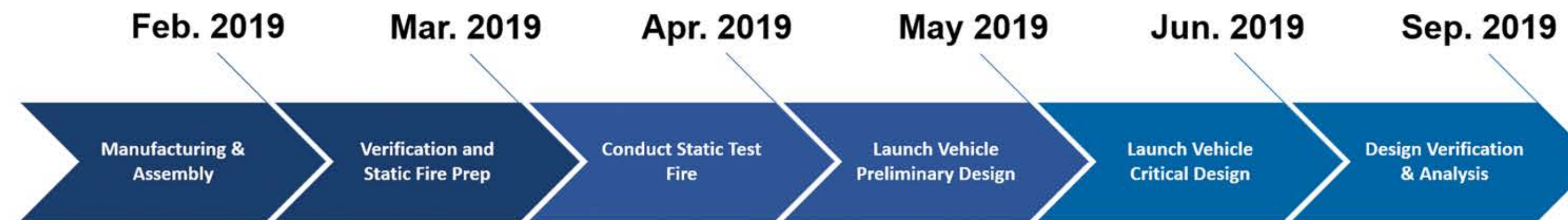
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Chief Engineer - mitchezm@uci.edu

PROGRESS

- Completed test stand, plumbing system, and assembly procedures
- Developing plumbing leak test, system flow test, and cryogenic compatibility test procedures
- Manufacturing engine assembly and retrofitted engine mount
- Integrating sensors and actuators into central LabView VI

TIMELINE



STATIC TEST FIRE BUDGET

