

POIAS: PHILOCTETES / OKYRHOE INTEGRATED ASTEROID SURVEYOR



Trojan/Centaur Reconnaissance
New Frontiers 2009

Integrated Product Team
Spring 2010

AERO



SCIENCE OBJECTIVES

- Determine the physical properties of a Trojan asteroid and a Centaur asteroid
- Map the surface of the asteroids with a level of detail sufficient to determine characteristics

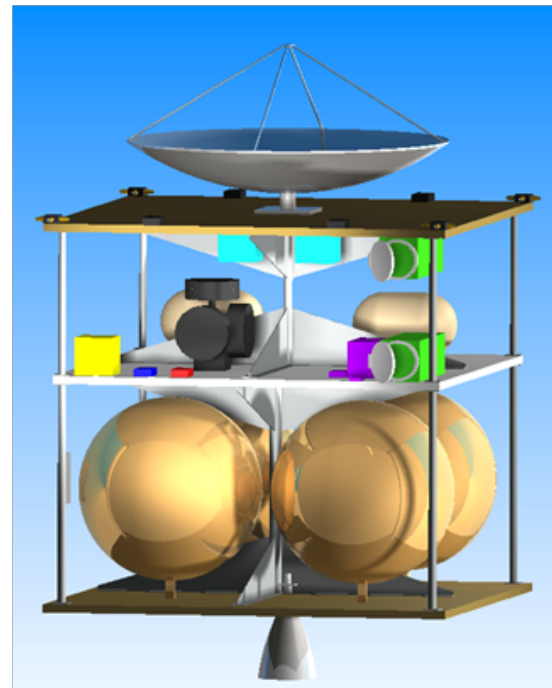
BENEFITS OF THE TCR MISSION

- First attempted close survey of a Trojan asteroid
- First attempted mission to a Centaur asteroid
- Exceeds all science requirements
- Includes an option for a robust SEO
- Large margins and strong risk mitigation

SCIENCE PAYLOAD

- OSIRIS: Narrow/Wide Angle Camera
- ALICE: UV/IR Spectrometers
- HAYABUSA: LIDAR for surface geology
- NLR: Near Laser Rangefinder for surface geology

SCHEMATIC: POIAS BUS



TCR MISSION MANAGEMENT

- Project Manager: Caleb Gooch (UAH)
- Principal Investigator: David Weiss (CofC)
- Systems Engineer: Ian Maddox (UAH)

ENGINEERING TEAM

Propulsion: Shinji Kato **Thermal:** Chris Pittman
Power: Robert Gandy **GN&C:** Steven Trotter
Structure: Matthew Watson **Cost/Risk:** Garrett Williams

SCIENCE DEFINITION

Co- Investigator: Blake Hodges

REPORT ASSEMBLY

Editor: Emily Hampton

MISSION COST

- \$994.9 million FY 09
- \$1.23 billion Real Year Dollars

SCHEDULE

