

Design and development of a robust ATP subsystem for the Altair UAV-to-Ground Lasercomm 2.5 Gbps Demonstration

Gerardo G. Ortiz, Shinhak Lee, Steve Monacos, Angel Portillo, and Abhijit Biswas
California Institute of Technology, Jet Propulsion Laboratory, NASA
Pasadena, CA

ABSTRACT

The presentation will cover the design and status of the development of the acquisition, tracking and pointing (ATP) subsystem for a 2.5 Gigabit per second (Gbps) Unmanned-Aerial-Vehicle (UAV) to ground free-space optical communications link. The presentation will give an overview of the Lasercomm project from which a description of the acquisition, tracking and pointing subsystem design drivers will be obtained. The requirements of the ATP subsystem will also be presented which are necessary in order to make the communications link. A description and analysis of the components of the ATP Subsystem will be presented to demonstrate that the designed system meets the requirements.

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