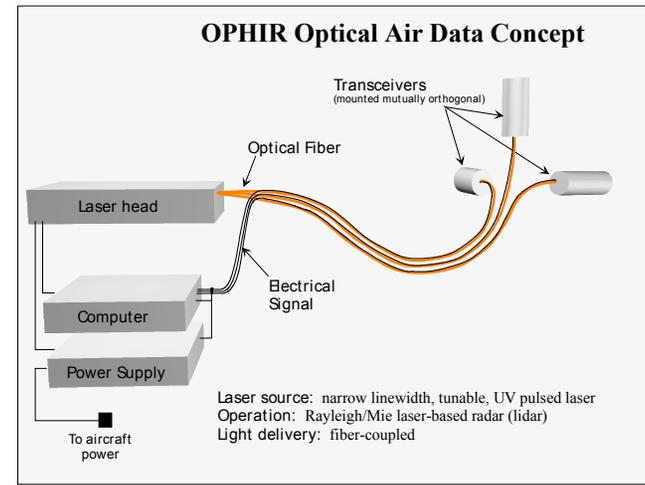


Rayleigh/Mie Lidar for Non-intrusive Measurement of Aircraft Air Data Parameters

PI: Dr. Loren D. Nelson / OPHIR Corporation, Littleton CO
 Proposal No.: 01-A7.03-8908

Description and Objectives

- ❖ Problem – Current aircraft air data probes suffer safety and performance problems
- ❖ Objective – replace all air data probes with a non-intrusive, remote-sensing probes



Approach

- ❖ Laser scattering from air molecules and aerosols – works even when atmosphere is “clean”

Subcontractors/Partners

- ❖ The Boeing Company – Commercial Flight Test
- ❖ BFGoodrich Aerospace – Aircraft Sensors Division

Schedule and Deliverables

- ❖ 3 months – laser trade study
- ❖ 5 months – detailed design complete
- ❖ 6 months – final report

NASA & Commercial Applications

- ❖ NASA – flight test sensors
- ❖ Military – Low Observable aircraft
- ❖ Commercial – Qual. flight test sensors