

LASER COMMUNICATIONS ACQUISITION & TRACKING FLIGHT TESTS

**J. L. Abernathy, E.S. Clarke III, D.W. Dreiseward, J.A. Maynard
McDonnell Douglas Astronautics Company**



ABSTRACT

A 1 Gbps laser communications system has been installed in a C-135 aircraft, and acquisition and tracking tests have been successfully completed with a ground station at the White Sands Missile Range. A description of the test site, the installation of the equipment in the aircraft, and the ground test equipment will be discussed. The laser communications system acquisition and tracking will be explained, and system test data presented.