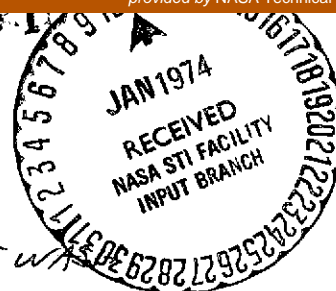


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MONTHLY REPORT

July 1973

BOEING CO. KENT WA

Contract Number: NAS 9-13303

Quantitative Determination of Stratospheric Aerosol Characteristics

The efforts in the first month were generally oriented toward initiation tasks. Significant points were (1) the assignment to John Potter to finish preparing his process to invert the measured intensity from a slant path on a spherical geometry to a vertical distribution of intensity values; (2) the review with a fellow employee of in-house reduction and analysis algorithms previously prepared for other investigations; (3) the review of recent technique advances in aerosol studies as contained in the literature; (4) the initiation of in-house procedures to obtain access to the computers. Contact was also maintained with NASA JSC to monitor the progress of the mission and possible data acquisition opportunities.

The S192 simulation data tapes were received July 26, 1973. Difficulty was encountered in extracting data from the tapes due to their format and lack of accompanying subroutines to read the tapes. Estimates from our software engineering area indicate that one to two weeks would be required to prepare software to read the tapes. This charge of up to fourteen hundred dollars was not anticipated; it is still hoped that some software help may be forthcoming.

In the month of August we anticipate that a data acquisition will be scheduled and that we will be supporting PIMO in the determination of camera settings, sensor use, and geometries. We anticipate that the slant

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(E74-1C341) QUANTITATIVE DETERMINATION OF  
STRATOSPHERIC AEROSOL CHARACTERISTICS  
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Kent, Wash.) 2 p HC \$4.00 CSCL 04A

path geometry inversion will be prepared by and received from John Potter. It will then be programmed and debugged at the Seattle facility. The S192 simulation tapes require software to read them; either we will develop our own subroutines or receive them from NASA JSC. In either case the routines will be implemented and tested on the Boeing computers. The modeling of the Rayleigh component of atmospheric scatterers should be written and ready for testing and integration with other subsystems as they also evolve. The conversion of film densities to radiometric units should also be completed.