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E7.3-11.0.01 CR-133782

<u>PERIOD COVERED:</u> Since the formal approval of contractual papers was finalized late in May, this quarterly report covers the period May through August, 1973.

COORDINATION: SKYLAB OVERPASS AND LOCAL ENVIRONMENTAL AND SPATIAL FEATURES

- 1. Since the readjustment of the significantly reduced budget spread over a longer duration, it was found to be more economical to visit the test tracks rather than subcontract to others.
- 2. Both the Colorado and Oregon test tracks were visited and local parameter information gathered for processing.
- 3. Contour maps for all three test track sites have been ordered from the U. S. Department of the Interior.

IMPULSE RESPONSE: Basic theory for a sampled pulse output in case of specified pulse input assuming the back-scatter phenomenon to be a linear process has been worked. The S-193 nonlinearities have not been analyzed. Basic programs for deriving the impulse response from such data have been initiated but due to lack of test tapes, no trial or dry runs have been possible. Test tapes were again requested and are awaited.

Effects of variations in terrain surface moisture and vegetation/forestation on linearity of terrain impulse response are under study and shall be verified as soon as field data from Skylab is available.

Resolution, both frequency and spatial, are under study as well because of the limited number of samples.

(E73-11001) [SKYLAB OVERPASS AND N73-31306 VERIFICATION OF LOCAL ENVIRONMENTAL AND SPATIAL FEATURES] Quarterly Report, May Aug. 1973 (Houston Univ.) 1 p HC Unclas \$3.00 CSCL 08F G3/13 01001