

COMMISSION

ERNST CLOOS
CHAIRMAN
S. JAMES CAMPBELL
RICHARD W. COOPER
G. VICTOR CUSHWA
JOHN C. GEYER

STATE OF MARYLAND



DIRECTOR

KENNETH N. WEAVER

TELEPHONE: 235-0771
235-1792

MARYLAND GEOLOGICAL SURVEY

LATROBE HALL, THE JOHNS HOPKINS UNIVERSITY
BALTIMORE, MARYLAND 21218

E7.4-10004

CR-135845

"Made available under NASA sponsorship
in the interest of early and wide dis-
semination of Earth Resources Survey
Program information and without liability
for any use made thereof."

November 12, 1973

NASA Manned Spacecraft Center
Earth Observations Division
(Attn: V. M. Dauphin, Mail Code TF)
Houston, Texas 77058

Re: Contract NAS 9-13294

Dear Mr. Dauphin:

The following is our quarterly report that was due September 20, 1973.

A. Overall Status:

The following are areas of effort using EREP flight data:

1. Mined land inventory of Baltimore County
2. Mapping of stripmined areas in Western Maryland
3. Updating topographic maps
4. Inventory of Chesapeake Bay Islands
5. Mapping Coastal features to determine estuarine and Atlantic Coast nearshore bedforms

These objectives are currently being pursued, concurrent with ground truth investigations.

B. Recommendations concerning decisions/actions:

One of our problems is the lack of facilities for map-photo-transfer. This has caused us some concern in keeping up-to-date on compilation and filing of results. This situation will be alleviated upon receipt of a K & E enlarger-reducer-plotter.

C. Expected accomplishments:

We are expected to continue work on the listed objectives during the next quarter.

N74-11145

Unclas
00004

CSCL 08G G3/13

(E74-10004) [GEOLOGICAL SURVEY OF
MARYLAND USING EREP FLIGHT DATA]
Quarterly Report (Maryland Geological
Survey, Baltimore.) 2 p HC \$3.00

D. Discussion of Significant results:

Underflight photography has been used in the Baltimore County mined land inventory to determine areas of disturbed land where surface mining of sand and ground clay, or stone has taken place. Both active and abandoned pits and quarries were located by contrasting color patterns from the natural undisturbed vegetation in infrared photography.

A/C data has been used to update cultural features of Calvert, Caroline, St. Mary's, Somerset, Talbot, and Wicomico Counties.

Islands have been located and catalogued for comparison with older film and map data for erosion data.

Strip mined areas are being mapped to obtain total area disturbed to aid in future mining and reclamation problems.

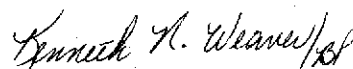
Coastal Estuarine and Atlantic Coast features are being studied to determine nearshore bedforms, sedimentary, and erosional patterns and manmade influence on natural systems.

E. Summary Outlook:

It is hoped that additional EREP photography will enhance the ongoing projects as described. The objectives are of a continuous nature therefore they will not be considered completed until the end of this contract.

F. No Travel Summary

Sincerely yours,



Kenneth N. Weaver
Director

KNW:bp