

General Disclaimer

One or more of the Following Statements may affect this Document

- This document has been reproduced from the best copy furnished by the organizational source. It is being released in the interest of making available as much information as possible.
- This document may contain data, which exceeds the sheet parameters. It was furnished in this condition by the organizational source and is the best copy available.
- This document may contain tone-on-tone or color graphs, charts and/or pictures, which have been reproduced in black and white.
- This document is paginated as submitted by the original source.
- Portions of this document are not fully legible due to the historical nature of some of the material. However, it is the best reproduction available from the original submission.

E7.5-10317

CR-142919

MONITORING ESTUARINE CIRCULATION AND OCEAN WASTE DISPERSION
USING AN INTEGRATED SATELLITE-AIRCRAFT-DROGUE APPROACH

"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."

V. Klemas, G. Davis, H. Wang
College of Marine Studies
University of Delaware

June 13, 1975
Report on Significant Results
NASA LANDSAT CONTRACT NAS5-20983
UN 20570

Prepared for
CODDARD SPACE FLIGHT CENTER
GREENBELT, MD 20771

(E75-10317) MONITORING ESTUARINE
CIRCULATION AND OCEAN WASTE DISPERSION USING
AN INTEGRATED SATELLITE-AIRCRAFT-DROGUE
APPROACH (Delaware Univ.) 2 p HC \$3.25

N75-26461

CSSL 13B G3/43

Unclas
00317

SIGNIFICANT RESULTS

The mounting economic pressure to extract oil and other resources from the Continental Shelf and to continue using it for waste disposal is creating a need for cost-effective, synoptic means of determining currents in this area. An integrated satellite-aircraft-drogue approach has been developed which employs remotely tracked expendable drogues together with satellite and aircraft observations of oil slicks, waste plumes and natural tracers, such as suspended sediment. Tests conducted on the Continental Shelf and in Delaware Bay indicate that the system provides a cost-effective means of monitoring current circulation and verifying oil slick and ocean waste dispersion models even under severe environmental conditions.