Chesapeake Bay Baseline Data Acquisition Appendix II: Submerged Aquatic Vegetation Report

Chesapeake Research Consortium, Incorporated

Virginia Institute of Marine Science

University of Maryland, Center for Environmental and Estuarine Studies

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APPENDIX II
Submerged Aquatic Vegetation
Completed Report

Chesapeake Research Consortium, Incorporated
prepared by
Virginia Institute of Marine Science
Center for Environmental and Estuarine Studies,
University of Maryland
CHESAPEAKE BAY BASELINE DATA ACQUISITION

SUBMERGED AQUATIC VEGETATION REPORT

Contract No. 68-01-3994

between

U.S. Environmental Protection Agency

and

Chesapeake Research Consortium, Incorporated

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Chesapeake Research Consortium, Incorporated

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ANNEX I

Directory of Research Activities

Submerged Aquatic Vegetation
The "Directory of Research Activities" contains a listing of researchers who have worked on submerged aquatic vegetation, their affiliations, and their research activities arranged alphabetically by researcher. The names listed include those applicable to the Chesapeake Bay, the Eastern and Gulf coasts and other national and international estuarine areas. Almost 100 individuals and their activities have been identified. The information was compiled from interviews with researchers, the scientific literature, data files and organizations.
ANNEX I

Directory of Research Activities
Submerged Aquatic Vegetation

Altaway, D. H.
State Geological Survey,
University of Kansas

Normal alkanes of five coastal spermatophytes - Gulf of Mexico.

Anderson, M. G.
Delta Waterfowl Research Station,
Portage La Prairie,
Manitoba, Canada

Submerged aquatic vascular plant distribution, production and waterfowl utilization - Canada.

Anderson, R. R.
American University

Primary production and distribution of submerged aquatic vegetation - Chincoteague and Chesapeake Bays, Patuxent River, Maryland.

Back, S. D.
Allegheny College

Plant detritus export from Zostera marina beds - Beaufort, N. C.

Bailey, G. W.
EPA Laboratory,
Athens, Georgia

Herbicide and pesticide runoff from coastal plain soil types.

Barsdate, R. J.
University of Alaska

Lagoon contributions to sediments and water - Bering Sea.

Bean, G. A.
University of Maryland

Lake Venice Disease of Myriophyllum spicatum - Rhode River, Maryland.

Birch, W. R.
James Cook University of North Queensland,
Australia

Tropical marine angiosperms (Zostera) - Queensland.

Blackburn, R. D.
U. S. Department of Agriculture,
Aquatic Weeds Research Laboratory,
Fort Lauderdale, Florida

Physiology and chemical control of aquatic weeds.

Bonnet-Gravier, N.
Station Marine d'Endoume,
Marseille, France

Epiphytes on Phanerogames - N.W. of Madagascar.

Boynton, W.
Chesapeake Bay Laboratory,
University of Maryland

Food chain dynamics and ecosystems modeling of submerged aquatic communities.
Bridges, K. W.  
University of Hawaii

Burrell, D. C.  
University of Alaska

Camp, D. K.  
Florida Department of Natural Resources, St. Petersburg

Chabreck, R. H.  
Office of Biological Services, Department of the Interior

Chapman, V. J.  
University of Auckland, Auckland, New Zealand

Churchill, A. C.  
Cornell University

Clark, L. J.  
Annapolis Field Office, Environmental Protection Agency

Clayton, J. S.  
University of Auckland, Auckland, New Zealand

Corbett, M. K.  
University of Maryland

Correll, D. L.  
Chesapeake Bay Center for Environmental Studies, Smithsonian Institution

Davis, G.  
East Carolina University

Decell, J. L.  
U. S. Army, Waterways Experiment Station, Vicksburg, Mississippi

Den Hartog, C.  
Catholic University, Nijmegen, The Netherlands

Systematic ecology.

Seagrass ecosystem oceanography.

Overgrazing of seagrasses by a regular urchine, *Lytechinus variegatus* - Florida Gulf Coast.

Effects of hurricane Camille on marshes - Mississippi River.

Biology of excessive weed growth in hydro-electric lakes.

Transplanting *Zostera marina* for sediment stabilization.

Nutrients - upper Chesapeake Bay.

Distribution of freshwater aquatic vascular plants.

Viruses of aquatic plants - Chesapeake Bay.

Rural non-point pollution studies including herbicides, sediments, phytoplankton, submerged aquatic vegetation - Rhode and Choptank Rivers, Poplar Islands, Maryland.

Submerged macrophytes - Pamlico River Estuary, N. C.

Aquatic plant management - Florida, Georgia, Texas, Louisiana.

Structure, function and classification in seagrass communities.
Dillon, C. R.
Clemson University

Primary productivity of phytoplankton and macrobenthic plants.

Duncan, W. H.
University of Georgia

Aquatic plants - S. E. United States, Atlantic and Gulf Coasts.

Fauchald, K.
University of Southern California

Surf grass habitat as a nursery for juvenile spiny lobsters - California.

Felger, R.
Environmental Research Laboratory, University of Arizona

Nutritional value of Zostera marina - Gulf of California.

Fenchel, T.
University of Aarhus, Aarhus, Denmark

Aspects of the decomposition of seagrasses.

Fenwick, G. M.
Johns Hopkins University

Survey of submerged aquatic vegetation in Eastern Bay and adjacent tributaries - Chesapeake Bay.

Felmer, D. A.
Washington, D. C. Office, Environmental Protection Agency

Primary productivity - Chesapeake Bay.

Freeman, T. E.
Institute of Food and Agricultural Science, State University of Florida System, Gainesville

Biological control of water weeds with plant pathogens.

Goering, J. J.
University of Alaska

Nitrogen fixation by epiphytes on seagrasses - Redfish Bay, Texas.

Gravier, N. - see Bonnet-Gravier

Zostera marina seasonal cycle of growth and decay - Atlantic Coast of Canada.

Harrison, P. G.
Dalhousie University, Halifax, Nova Scotia

Processed aquatic plants for animal nutrition.

Hartog, C. - see Den Hartog

Hentges, J. F.
Agricultural Experiment Station, State University of Florida System, Gainesville

Processed aquatic plants for animal nutrition.
Higman, D.
Chesapeake Bay Center for Environmental Studies, Smithsonian Institution

Howarth, R. W.
Woods Hole Oceanographic Institution

Iverson, R. L.
Florida State University

Jupp, B. P.
The University, St. Andrews, Scotland

Kant, S.
University of Jammu, India

Kelly, J. A., Jr.
National Marine Fisheries Service Biological Laboratory, St. Petersburg Beach, Florida

Kemp, W. M.
Center for Environmental and Estuarine Studies, Horn Point, University of Maryland

Kerwin, J. A.
New Orleans Office, Bureau of Land Management

Kikuchi, T.
Kyushu University, Amakusa, Kumamoto-ken, Japan

Kirkman, H.
CSIRO, Division of Fisheries, Deception Bay, Queensland, Australia

Klug, M. J.
Michigan State University

Labus, B. C.
Ravensburg - Bavendorf Schuhmacherof, West Germany

Emergent vascular plants in wetlands - Chesapeake Bay.

Structure and function of salt marsh ecosystems, role of vascular plants in estuaries.

Primary productivity studies in seagrass ecosystems.

Limitations of macrophytes (Potamogeton) in a eutrophic lake - Lock Leven, Scotland.

Limnology, ecology of aquatic macrophytes, productivity of inland waters through plankton.

Transplanting and survival of Thalassia testudinum - Florida.

Food chain dynamics and ecosystem modeling of submerged aquatic vegetation.

Distribution and abundance of aquatic vegetation - upper Chesapeake Bay.

Consumer ecology of seagrass beds.

Seagrass communities - Stradbroke Island, Australia.

Decomposition of dissolved and particulate organic detritus in seagrass ecosystems.

Influence of borates and detergents on submerged macrophytes.
Larkum, A. W. D.
Cornell University

Ledoyer, M.
Station Marine d'Endoume,
Marseille, France

Lipkin, Y.
Tel Aviv University,
Tel Aviv, Israel

Lippson, A. J.
Martin Marietta Corporation

Lipschultz, F.
University of Maryland

Lot-Helgueras, A.
Universidad Nacional Autónoma de México, Mexico 20 D.F.,
Mexico

Marsh, G. A.
Florida Atlantic University

Marshall, N.
University of Rhode Island

McMillan, C.
University of Texas

McNabb, C. D.
Michigan State University

McRoy, C. P.
University of Alaska

Menzie, C.
E. G. and G. Company,
Waltham, Massachusetts

Munro, R. E.
Patuxent Research Center,
U. S. Fish and Wildlife Service

Nixon, S. W.
University of Rhode Island

Odum, W. E.
University of Virginia

Seagrass communities - Australia.

Seagrasses - Mediterranean and Madagasscar.

Seagrass vegetation - Israel and Sinai.

Natural resources - Chesapeake Bay, Maryland.

Nitrogen fixation of epibenthic communities associated with seagrasses.

Seagrass ecosystems - Mexico.

Epifauna of Zostera marina - York River, Virginia.

Food transfer through lower trophic levels of the benthic environment - New England Coast.

Environmental tolerances, production ecology and physiology of seagrasses.

Evaluation of herbicides on aquatic plants.

Process succession, nutrients and physiology of seagrasses.

Myriophyllum - Hudson River, New York.

Distribution and abundance of submerged aquatic vegetation - upper Chesapeake Bay.

Metabolism of Zostera marina.

Aquatic plants.
Ogden, J. C.
Fairleigh Dickinson University

Orth, R. J.
Virginia Institute of Marine Science

Parker, P. L.
University of Texas

Peres, J. M.
Station Marine d'Endoume, Marseilles, France

Peverly, J. H.
Cornell University

Phillips, R. C.
Seattle Pacific College

Queen, W. H.
East Carolina University

Rasmussen, E.
University of Copenhagen, Copenhagen, Denmark

Rawls, C. K.
Chesapeake Biological Laboratory, University of Maryland

Reynolds, S. C. P. and J. D.
University of Victoria, Victoria, B. C., Canada

Roddy, L. R.
Southern University A&M College

Sand-Jensen, K.
University of Copenhagen, Copenhagen, Denmark

Shea, G. B.
Consultant, Bothell, Washington

Seagrass food web study - Caribbean.

Submerged aquatic vegetation - Chesapeake Bay, Virginia.

Stable carbon isotope ratios of food webs and biogeochemical cycles in seagrass ecosystems.

Consumer ecology of seagrass beds.

Productivity, management and ecology of aquatic vascular plants.

Phenology, ecology and transplanting of Zostera marina - Puget Sound, Washington.

Ecology of halophytes.

Systematics, ecology and wasting disease of Zostera marina.

Myriophyllum spicatum as a waterfowl food source and its control by herbicides - Chesapeake Bay, Maryland.

Distribution of aquatic angiosperms in saline waters.

Effects on productivity of crayfish in pond habitats.

Growth dynamics in Zostera marina populations - Denmark.

Ultraviolet radiation on salt marsh ecosystems.
Shepard, S. A.
Department of Fisheries and
Fauna Conservation,
Adelaide, Australia

Shirley, R. L.
Agricultural Experiment Station,
State University of Florida
System, Gainesville

Sieburth, J. M.
University of Rhode Island

Southwick, C. H.
Johns Hopkins University

Stevenson, J. C.
Center for Environmental and
Estuarine Studies, Horn Point,
University of Maryland

Steward, K. K.
U. S. Department of Agriculture,
Aquatic Weeds Research Laboratory,
Fort Lauderdale, Florida

Stotts, V. D.
Maryland Department of Natural
Resources, Annapolis

Suchova, H.
Slovak Academy of Science,
Czechooslovakia

Taylor, B. F.
University of Miami, Florida

Thayer, G. W.
National Marine Fisheries Service
Fisheries Laboratory, Beaufort,
N.C.

Thomassin, B. A.
Station Marine d'Endoume,
Marseille, France

Thorhaug, A.
University of Miami, Florida

Surveys of seagrasses - Upper
Spencer Gulf, Australia.

Toxic substances and chemical
composition of water plants.

Fouling on Zostera marina.

Surveys of submered aquatic
vegetation - Chesapeake Bay,
Maryland.

Submerged aquatic vegetation,
including taxonomy, distribution
and abundance, biology, inter-
specific relationships, historical
trends, assessment of environmental
factors and management options.

Aquatic plant management.

Distribution and control of
Myriophyllum spicatum by herbicides -
Chesapeake Bay, Maryland.

Ecology of macrophytic aquatic
communities - Danube River.

Nitrogen fixation in seagrass
communities.

Structural and functional aspects
of a Zostera marina community.

Seagrass epiflora and epifauna -
Tuléar, Madagascar.

Transplantation and the effect of
energy impacts on a semitropical
seagrass community.
Unni, K. S.
Government College,
Chhindwara, India

Uotila, P.
University of Helsinki,
Helsinki, Finland

Wester, H.
National Ecological Services
Laboratory, National Park
Service, Washington, D. C.

Wetzel, R. G.
Michigan State University

Wise, E. S.
Christopher Newport College

Wu, T. L.
Chesapeake Bay Center for
Environmental Studies,
Smithsonian Institution

Wujek, D. E.
Central Michigan University

Young, P. C.
Queensland Fisheries Research
Institute, CSIRO, Deception
Bay, Queensland, Australia

Zieman, J. C., Jr.
University of Virginia

Productivity of aquatic vascular
plants, noxious aquatic vegetation.

Taxonomy, ecology, sociology and
distribution of aquatic plants.

Impact of chlorine on submerged
aquatic vegetation - Potomac River,
Maryland.

Decomposition of dissolved and
particulate organic detritus in
seagrass ecosystems.

Submerged aquatic vegetation; wetlands
ecology - Chesapeake Bay, Virginia.

Herbicide studies - Rhode River,
Maryland.

Taxonomy and ecology of aquatic
vascular plants - Michigan, Denmark,
Austria, Switzerland, Germany.

Seagrass communities - Moreton Bay,
Queensland, Australia.

Origin, thermal effluent stress,
ecology and food web study of
seagrasses - Caribbean and Florida.
ANNEX II
Annotated Bibliography of the Chesapeake Bay
Submerged Aquatic Vegetation
This bibliography contains summaries of research projects that have been done on submerged aquatic vegetation between 1948 and 1977. The bibliography is intended to provide key references for Bay researchers and managers.

Accompanying the bibliography is an index which has been developed to provide a quick reference, listing over 125 subjects. Each subject is followed by a number or series of numbers which refer to specific articles in the bibliography.

The bibliography was abstracted chiefly from a report entitled "Summary of Available Information on Chesapeake Bay Submerged Aquatic Vegetation" with J. Court Stevenson as principal investigator (FWS 14-16-008-1255, September 1977, University of Maryland Center for Environmental and Estuarine Studies and Department of Botany).
ANNEX II

Annotated Bibliography of Chesapeake Bay
Submerged Aquatic Vegetation


The effects of temperature changes due to effluent from the Potomac Electric Power Company's Chalk Point generating plant were studied from June 1963 to June 1966. *Ruppia maritima* was found to have declined around the effluent canal and *Potamogeton perfoliatus* increased in coverage in the same area.


The effects of temperature on respiration and photosynthesis of aquatic plants were studied using a Gilson differential respirometer. An historical review of research and present research by the author is presented.


Hydrophytes are important to the marine environment because of their soil binding roots, foliage which provides food and shelter for marine fauna, etc. In the Chincoteague Bay area, *Zostera marina* (eelgrass) and *Ruppia maritima* (widgeon grass) are the two dominant submerged aquatic species. A two-year study was conducted with emphasis on (1) type and distribution and (2) evaluation of primary production of species. Recommendations are presented for future dredging operations.


A generalized summation of the present knowledge of submerged aquatic plants of the Chesapeake Bay and its tributaries including taxonomy, distribution and abundance, biology, ecosystems and pollution.


Material was collected from June 1962 to January 1963 to determine feasibility of milfoil use as a commercial fertilizer. Specimens were collected at water temperatures from 0.2 to 30.0°C, pH values from 5.8 to 9.5 and salinities from 1.07 to 16.4 ppt. Results indicate low N-P-K values that would not be economically feasible for commercial fertilizers.

From June 1963 to June 1966, a study was made of the upper Patuxent River, Maryland, to determine the distribution of submerged and emergent aquatic vegetation. The boundary between fresh and saline water was found to be 0.3 ppt. Fluctuations over a 24-hour period reflected biological activity and tidal changes.


Maryland supplies 2/3 of the entire U.S. blue crab harvest. The crab industry of Maryland culture including the types, methods of catching and the crab life cycle are briefly discussed.


Eurasian water milfoil declined in 1965 to 1967 in Chesapeake Bay. Detailed mapping of milfoil occurrence was done in Middle, Back and Rhode Rivers in July and September of 1966 and 1967. The decline exceeded 95%, and was associated with Northeast Disease and Lake Venice Disease.


Changes due to large inputs of nutrients and silts, man's influence, epidemics and waterfowl population fluctuations are discussed in relation to submerged aquatic vegetation at the head of the Chesapeake Bay. The biological wave phenomena is also considered.


Samples of healthy and diseased Myriophyllum spicatum were taken from the Rhode River in 1972 to determine the way in which the "Lake Venice Disease" was transmitted and the causal agent. It was shown that the disease was only transmitted under stress from low light intensity and direct inoculation.


Daily temperature and salinity values were averaged for a 20-year period, 1938-1957, and compared with other parts of the Chesapeake Bay. Water temperatures varied from 31° to 0.8°C. Seasonal means are: winter 4.3°, spring 11.9°, summer 25.6° and fall 18.2°. Extreme salinity values are 20.4 and 5.4 ppt. Seasonal means are: winter 14.8, spring 11.4, summer 12.3 and fall 15.7.

A study to determine if 2,4-D used in the control of Eurasian water milfoil is lethal to oysters, crabs, clams and fish. From the data gathered, 2,4-D in attaclay pellets was found to be non-toxic to crabs, toxic in varying degrees to fish and a serious threat to oysters, clams and other bottom organisms.


Waterfowl species identification, population status, distribution, breeding and food habits in North America subsequently defined species inhabitation and food sources of Chesapeake Bay.


Water temperature records from various stations on the Chesapeake were correlated to determine the possibility of a warming trend. Because of insufficient data no definite trend was indicated. The periodic fluctuations seemed to be random.


Since the early 20th century, waterfowl food plants on Back Bay National Wildlife Refuge have been studied. Factors influencing food plant production are salinity, hydrogen ion concentration, dissolved oxygen, water temperature and turbidity.


Series of conclusions and graphically displayed supportive data relevant to the current eutrophication problem in the upper Chesapeake Bay. Phosphorus and nitrogen from the Susquehanna River Basin and the Baltimore metro area are determined as to maximum allowable loadings.

One-year comprehensive nutrient study in the lower Susquehanna River Basin to determine: (1) average and seasonal variations in nitrogen and phosphorus loadings, (2) delineation of point and non-point source nutrient contributions, (3) fate of nutrients in impounded areas and (4) seasonal mass balance of nutrient loadings.


Sampling and measurement of herbicide concentrations, suspended sediments, bottom sediments, suspended sediment load, phytoplankton chlorophyll concentrations, salinity, and submerged, rooted aquatic plant populations was carried out in the estuarine waters of the Rhode River, Choptank River and near the Poplar Islands, Chesapeake Bay. Bottom sediment characteristics were observed. Land use studies were also performed.


Analysis of the effects of Tropical Storm Agnes on the hydrology, geology, water quality, biology and economics of the Chesapeake Bay.


Because of the discharge of untreated or partially treated wastewater in the upper Potomac estuary of Maryland, water quality has become degraded. Studies beginning in 1965 have led to the formulation of a nutrient management program for this area.


Because of the increased population surrounding the Chesapeake Bay, the amount of pollutants entering the bay has increased. Some of the pollutants, such as herbicide run-off, add excessive nutrients. Plant populations, especially sea lettuce, water chestnuts and Eurasian water milfoil, have increased to a menacing level. Mechanical, chemical and biological control methods are discussed.

A detailed atlas of the ecological factors affecting the Chesapeake Bay and the marine organisms living in bay waters.


A thorough report on the soft shell clam industry including dredging techniques, the history and use of the clam in Maryland and the effects of the hydraulic clam dredge on tidewater resources.


The invertebrate macrofauna and epiphytes occurring on Zostera in the lower York River, Virginia, were sampled with the aid of SCUBA for 14 consecutive months. A collecting station was located at each of three different depths within a single eelgrass bed. Growth patterns of Zostera are discussed.


A quantitative description of the species composition, community structure and seasonal changes in the Zostera epifauna in a single eelgrass bed in the lower York River, Virginia.


Eelgrass provides a substrate for a highly diverse epibiotic community. Gastropods are the predominant faunal element. In the York River, Virginia, 10 species of prosobranch gastropods and 13 species of opisthobranch gastropods were found. The structure and species composition were studied.


The Zostera beds in the Chesapeake Bay, York River estuary and Chincoteague Bay, were sampled in March and July to determine the abundance and diversity of the infauna. A total of 117 macroinvertebrate taxa were found and most beds, except at the upper estuary limits, were similar.

In 1970, 117 macroinvertebrate taxa were collected from core samples of Zostera marina from the Chesapeake Bay York River estuary and from Chincoteague Bay. Seasonal differences were noted. The samples taken were compared for faunal dominance, similarity, diversity and composition. The environmental conditions, with emphasis on salinity and sediments were sampled and compared.


Eelgrass beds in the Chesapeake Bay were studied to determine: (1) how eelgrass affects community structure of associated infauna, and (2) responses of infauna communities to different levels of natural and artificially induced disturbances.


The cow nose ray, Rhinoptera bonasus, digs deeply into water bottoms to feed on the hard shelled molluscs. The destruction of Zostera marina beds is attributed to this digging which uproots this ecologically important marine plant.


From 1971-1974 eelgrass, Zostera marina, L. declined 36%. Evidence indicating the loss was drawn from aerial photographs and ground truth reconnaissance. The decline is attributed to the cow nose ray, human disturbance and a rise in water temperature.


Dense seagrass beds, such as Zostera in the Chesapeake Bay, stabilize sediments, promote diverse and abundant benthic fauna and protect fauna from predation from blue crabs.


By adding two commercial fertilizers, Zostera marina was shown to be nutrient limited, competitively exclusive of Ruppia maritima and growth related to sediment nutrient supply.

Experimental Kodak water penetration film and black and white near infrared film were used in studying the submerged aquatic vegetation of the lower Chesapeake Bay. Between 1971 and 1974, there was a 36% reduction in the amount of vegetation.


Two transition zone areas in the South River, Maryland were studied to determine the distribution of aquatic vascular plants. One area was near the mouth of the river and the other area was at the headwaters.


Because of infestations of Eurasian water milfoil in the Chesapeake Bay and its tributaries since 1959, herbicide control with 2,4-D was necessary! Caged blue crabs (Callinectes sapidus), eastern oysters (Crassostrea virginica), soft shell clams (Mya arenaria) and various species were field tested with 2,4-D formulations to determine toxicity levels.


Between the late 1950s and 1964, Eurasian water milfoil increased from a few thousand acres to 200,000 acres. Milfoil grows in a variety of environments and its uses are minimal compared to its negative aspects. The herbicide 2,4-D was found to be effective in controlling milfoil; however, the required dosages could adversely affect the surrounding aquatic life. Because of this danger, smaller applications of 2,4-D plus mowing was recommended.


Waterfowl gizzards representing 18 species of geese and ducks from the Chestertown area, Remington Farms and Colton Point were analyzed to determine the value of Eurasian water milfoil (Myriophyllum spicatum) as a food source. Out of 2,747 gizzards examined, over 78% of all food eaten was plant material.


Due to increased Eurasian water milfoil infestations in the Chesapeake Bay and its estuaries, the Water Pollution Control Commission approved the use of 2,4-D treatments by individual applicants.


Aerial color infrared photographs taken of a freshwater marsh on the Patuxent River in the spring and fall were correlated with field surveys taken at the same time. Color fluctuations indicated different species, growth and vigor of plants and environmental conditions.


A brief outline for the future inventory of Myriophyllum spicatum emphasizing the description of the species and its ecological habitat.


Surveys on the distribution of redhead grass (Potamogeton perfoliatus), Eurasian water milfoil (Myriophyllum spicatum), widgeon grass (Ruppia maritima), horned pondweed (Zannichellia palustris), sago pondweed (Potamogeton pectinatus), and elodea (Elodea canadensis) show irregular declines, disappearances and changes in species dominance from 1966 to 1973.


Herbicides are used in the marine environment to modify plant composition and density for improvement and preservation of the estuarine habitat. Because of the possible effects of the addition of herbicides, they should be screened for the development of control procedures. Their characteristics should be more clearly defined and application rates should be checked.

Due to the rapid infestation of Eurasian water milfoil in Chesapeake Bay, silvex and 2,4-D herbicides have been used for control. Studies were conducted to determine how to apply these herbicides in tidal situations without detrimental effects to other marine life.


Because Eurasian water milfoil has become a national weed problem, more effective tidal dispersal control is necessary. 2,4-D, currently widely used, is effective. Paraquat and particularly diquat are excellent tidal dispersers, but they are less well understood than 2,4-D.


Eurasian water milfoil is an adaptable aquatic plant, growing in both fresh and saline waters. Boat surveys were made to determine the extent of infestation. Control of the plant was tested with 2,4-D.


Although 2,4-D can be used effectively to control the spread of Eurasian water milfoil, the period of application is limited to the last ten days of May and the first week of June in the Chesapeake Bay. Lengthening application period and using water movement for dispersal were considered.

52. Stevenson, J.C. Unpublished. Summary of available information on Chesapeake Bay submerged vegetation. 471 pp.

A comprehensive summation of Chesapeake Bay submerged vegetation including taxonomy, distribution and abundance, biology, inter-specific relationships, historical trends, assessment of environmental factors and management options.

Annual and seasonal variations in the numbers and kinds of waterfowl in 13 major habitat regions of the upper Chesapeake Bay are accounted for from 1953 to 1958. Data from U.S. Bureau of Sport Fisheries and Wildlife aerial waterfowl population counts, observations of breeding, migration, and the gullet and gizzard content analyses of 1,240 specimens defines 15 biogeographic areas.


Comprehensive investigation of Chesapeake Bay resources for baseline data on present status.
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fertilizer
  5.
  see also: benefits of Myriophyllum spicatum.

food plants
  9, 13, 15, 40, 53.
  see also: vegetation. waterfowl.

geology
  3, 9, 15, 18, 19, 24, 25, 30, 34, 35.

growth of vegetation
  15, 23, 43, 52.
  see also: growth of Zostera marina. vegetation.
growth of *Zostera marina*
  3, 26, 33, 35, 52.
  see also: growth of vegetation. *Zostera marina.*

herbicides
  18, 23, 46, 52.
  see also: 2, 4-D. diquat. paraquat. silvex.

horned pondweed
  see: *Zannichellia palustris.*

hornwort
  see: *Ceratophyllum demersum*

hurricanes
  19.

hydrology
  see: water quality.

infauna
  29, 30, 31.
  see also: aquatic fauna.

interspecific relationships
  see: aquatic fauna. epiphyte. waterfowl.

Lake Venice Disease
  8, 10.
  see also: Northeast Disease.

man's influence
  9, 23, 25, 33, 35.
  see also: dredging. herbicides. mowing. pollution. power plants.

mapping
  8, 9, 24, 36, 43, 52.
  see also: distribution. photographs. submerged aquatic vegetation. vegetation.

marsh vegetation
  see: vegetation.

mechanical control
  23, 39.
  see also: control. mowing.

Middle River
  8.

milfoil
  see: *Myriophyllum spicatum.*
mineral composition
    see: fertilizer.

mortality of Myriophyllum spicatum
    8, 9, 10, 45.
    see also: Myriophyllum spicatum.

mortality of Zostera marina
    32, 33.
    see also: Zostera marina.

mowing
    see: control.

muskgrass
    see: Chara.

Myriophyllum spicatum
    24, 44, 52.
    see also: benefits. control. count. distribution. mortality.
              submerged aquatic vegetation.

Nitella
    52.

nitrogen
    5, 16, 17.
    see also: nutrients.

Northeast Disease
    8.
    see also: Lake Venice Disease.

nutrients
    9, 16, 17, 22, 23, 35.
    see also: eutrophication. nitrogen. phosphorus. potassium.

paraquat
    49.
    see also: herbicides.

Patuxent River
    1, 6, 43.

pH
    5, 15.
    see also: physical factors.

phosphorus
    5, 16, 17.
    see also: nutrients.
photographs
   33, 36, 43.

photosynthesis
   see: vegetation.

physical factors
   see: dissolved oxygen. pH. salinity. temperature.

pollution
   4, 9, 22, 23.
   see also: water quality.

Poplar Islands
   18.

*Potamogeton pectinatus*
   24, 45, 52.
   see also: submerged aquatic vegetation.

*Potamogeton perfoliatus*
   1, 24, 45, 52.
   see also: submerged aquatic vegetation.

potassium
   5.
   see also: nutrients.

Potomac River
   22.

power plants
   1.
   see also: water quality.

primary production
   3, 15, 35.
   see also: growth of *Zostera marina*. vegetation.

protection of fauna
   see: benefits of *Zostera marina*.

ray
   see: mortality of *Zostera marina*.

redhead grass
   see: *Potamogeton perfoliatus*.

respiration
   see: vegetation.

review articles
   2, 4, 24, 52, 54.
Rhode River
  8, 10, 18, 45.

*Ruppia maritima*
  1, 3, 24, 35, 45, 52.
  see also: submerged aquatic vegetation.

sago pondweed
  see: *Potamogeton pectinatus*.

salinity
  5, 6, 11, 15, 18, 24, 30
  see also: physical factors.

sea lettuce
  see: *Ulva lactuca*.

sediment
  9, 18, 24, 30, 34.
  see also: geology.

silvex
  47.
  see also: herbicides.

soil binding
  see: erosion control.

Solomons, Maryland
  11.

South River
  37.

stress
  10.
  see also: mortality of *Myriophyllum spicatum*.

submerged aquatic vegetation
  3, 4, 6, 9, 18, 24, 36, 52.

Susquehanna River
  16, 17.

taxonomy
  3, 4, 44, 52.

temperature
  1, 2, 5, 11, 14, 15, 33.
  see also: physical factors.
thermal pollution
   see: temperature.

Tidewater, Maryland
   20.

Tohpyellas
   52.

toxicity
   see: herbicides.

Trapa natans
   23, 24.
   see also: submerged aquatic vegetation.

turbidity
   15, 18, 30, 34.
   see also: geology.

Ulva lactuca
   23.

U. S. Army Corps of Engineers
   54.

Vallisneria americana
   52.
   see also: submerged aquatic vegetation.

vascular plants
   4, 37, 45, 52.
   see also: submerged aquatic vegetation. vegetation.

vegetation
   1, 2, 6, 13, 15, 20, 23, 24, 26, 37, 39, 43, 46, 47, 52.
   see also: aquatic weeds. epiphyte. submerged aquatic vegetation. vegetation. Ulva lactuca.

water chestnut
   see: Trapa natans.

waterfowl
   9, 13, 15, 40, 53.
   see also: interspecific relationships.

water milfoil
   see: Myriophyllum spicatum.

water quality
   1, 4, 6, 18, 19, 22, 23, 37, 52.
   see also: dissolved oxygen. geology. herbicides. man's influence. nutrients. pH. pollution. power plants. salinity. temperature.
waterweed
   see: Elodea canadensis.

weeds
   see: aquatic weeds.

widgeon grass
   see: Ruppia maritima.

wild celery
   see: Vallisneria americana.

York River
   26, 27, 28, 29, 30.

Zannichellia palustris
   24, 45, 52.
   see also: submerged aquatic vegetation.

Zostera marina
   3, 24, 31, 33, 52.
   see also: benefits, growth, mortality, submerged aquatic vegetation.
ANNEX III

Data Files of the Chesapeake Bay

Submerged Aquatic Vegetation
ANNEX III

Part A

Data Files
ENVIRONMENTAL DATA INDEX

THE ENCLOSED LISTING IS A SELECTION OF FILE DESCRIPTIONS FROM THE ENDEX SYSTEM. ITS PURPOSE IS TO GUIDE USERS WITH REQUIREMENTS FOR HISTORICAL ENVIRONMENTAL DATA TO HOLDERS OF THESE DATA.

THIS OUTPUT WAS SELECTED FROM THE ENTIRE FILE BASED ON CERTAIN CRITERIA SPECIFIED BY THE USER. THESE CRITERIA ARE REPEATED BELOW:

EDBD

THE OUTPUT IS IN TWO PARTS. FIRST IS A LISTING OF ALL THE EDBD'S SELECTED, PRINTED IN ID NUMBER ORDER. AT THE BACK OF EACH OUTPUT MAY BE A CROSINDEX, LISTING SUCH THINGS AS WHICH FILE DESCRIPTIONS DESCRIBE DATA COLLECTED ON EACH PLATFORM TYPE, OR WHICH FILE DESCRIPTIONS HAVE DATA IN EACH GRID LOCATOR. THIS SECTION WILL VARY DEPENDING ON THE REQUIREMENTS OF THE USER. THE ID NUMBER IS IN THE UPPER LEFT CORNER OF EACH FILE DESCRIPTION. THE FOLLOWING IS AN EXPLANATION OF FIELDS ON EACH PAGE.

FILE NAME -- TOP CENTER OF PAGE. IDENTIFIED BY DATA HOLDER. ALSO, TIME RANGE OF DATA COLLECTION.

PROJECTS -- LIST OF PROJECTS UNDER WHICH DATA CONTAINED IN FILES MAY HAVE BEEN COLLECTED.

GENERAL GEOGRAPHIC AREA -- BEGINS WITH CONTINENT OR OCEAN IN WHICH DATA WERE COLLECTED AND DESCRIBES SMALLER AND SMALLER AREAS TO GIVE USER A GENERAL AREA OF DATA COLLECTION.

ABSTRACT -- CONTAINS GENERAL INFORMATION ABOUT WHY THE DATA WERE COLLECTED AND WHERE, METHODS OF ANALYSIS AND PERTINENT CONCLUSIONS.

DATA AVAILABILITY -- CONTAINS RESTRICTIONS ON DATA USE, IF BLANK IT MEANS THERE ARE NO KNOWN RESTRICTIONS.

PLATFORM TYPES -- LIST OF TYPES OF PLATFORMS (IF ANY) USED TO COLLECT DATA.

ARCHIVE MEDIA -- MEDIA ON WHICH DATA ARE STORED AND A ROUGH ESTIMATE OF THE SIZE OF THE FILE.

FUNDING -- ORGANIZATION FUNDING THE DATA COLLECTION (IF KNOWN).

INVENTORY -- WHEN DETAILED INFORMATION ON STATION LOCATIONS, COUNTS OF OBSERVATIONS/SAMPLES, ETC. ARE AVAILABLE, IT WILL BE DENOTED HERE.

PUBLICATIONS -- PUBLICATIONS RESULTING FROM THIS DATA SET (LIST IS SOMETIMES CONDENSED).

CONTACT -- NAME, ADDRESS AND PHONE NUMBER OF PERSON TO CONTACT TO OBTAIN FURTHER INFORMATION OR ACTUAL COPIES OF DATA.

GRID LOCATOR -- A SERIES OF NUMBERS USED TO MAKE GEOGRAPHIC RETRIEVAL POSSIBLE ON A COMPUTER. LATITUDE AND LONGITUDE ARE COMBINED INTO A SINGLE NUMBER. THE WORLD METEOROLOGICAL ORGANIZATION (WMO) CODE IS USED TO IDENTIFY AREAS WHERE DATA WERE COLLECTED. THIS MAY BE A 4, 6, 8, OR 10 DIGIT NUMBER DEPENDING ON WHETHER THE DATA HOLDER CHOSE TO IDENTIFY AREAS DOWN TO 10-DEGREE SQUARES OF LATITUDE AND LONGITUDE OR TO 1-DEGREE, 10-MINUTE, OR 1-MINUTE SQUARES. FOR A 4-DIGIT GRID LOCATOR THE NUMBERS ARE AS FOLLOWS:

DIGIT 1 -- QUADRANT OF WORLD: 1=NE, 3=SE, 5=SW, 7=NW.
DIGIT 2 -- TENS DIGIT OF LATITUDE.
DIGITS 3/4 -- HUNDREDS AND TENS DIGITS OF LONGITUDE.

THUS 7408 WOULD BE THE 10-DEGREE SQUARE OF WHICH THE POINT 40N AND 080W IS THE LOWER RIGHT HAND CORNER.

FOR A SIX DIGIT NUMBER, DIGITS 5 AND 6 REPRESENT THE UNITS DIGITS OF LATITUDE AND LONGITUDE. THUS 740825 WOULD IDENTIFY THE 1-DEGREE SQUARE OF 42N AND 085W.

WITH AN 8-DIGIT NUMBER, 74082534 REPRESENTS THE SQUARE AT 42-DEGREES, 30-MINUTES NORTH AND 085-DEGREES, 40-MINUTES WEST, OR 10-MINUTE SQUARE.


QUESTIONS CONCERNING THIS OUTPUT SHOULD BE RELAYED TO THE NODC OCEANOGRAPHIC SERVICES BRANCH (202) 634-7500 OR TO THE DATA INDEX BRANCH (202) 634-7298.
ANNEX III

Part A

Section 1

Surveys and Studies
Section 1 contains 35 files, 29 of which were initiated prior to January 1, 1973. These files are included because they are trend indicators and in some cases represent the only submerged aquatic vegetation study conducted in a particular location.

Each of these files was carefully examined for its data content and given an arbitrary numerical rating based on the following criteria:

"1" - 3 files; specific studies of submerged aquatic vegetation.

"2" - 3 files; general vegetation studies which include submerged aquatic vegetation.

"3" - 5 files; detailed observations of submerged aquatic vegetation found during faunal and bottom studies.

"4" - 8 files; general observations of submerged aquatic vegetation found during faunal studies.

"5" - 4 files; studies of marsh and intertidal areas where submerged aquatic vegetation may be sporadically noted.

"6" - 12 files; areas near the Chesapeake Bay including oceanside Maryland and Virginia, Delaware, and the northern coast of North Carolina.
ANNEX III

Part A

Section 1

"1"

Specific studies of submerged aquatic vegetation.
AQUATIC VEGETATION OF THE RHODE RIVER
DATA COLLECTED: 1966 TO 1973

PROJECTS:
RHODE RIVER ESTUARY STUDY

GENERAL GEOGRAPHIC AREA:
U.S., COASTAL, NORTH ATLANTIC, CHESAPEAKE BAY, MARYLAND, RHODE RIVER, MIDDLE RIVER, BACK RIVER

ABSTRACT:
AQUATIC VEGETATION STUDY OF THE RHODE RIVER ESTUARY-BILOGIC AND ENVIRONMENTAL CONTROL OF EURASIAN MILFOIL. DISTRIBUTION, ABUNDANCE AND SOME STANDING CROP DATA ON: MYRIOPHYLLUM SPICATUM (EURASIAN MILFOIL); POTAMOGETON PERFORIATUS (REDHEADED GRASS); POTAMOGETON PECTINATUS (SAGO PONDWEED); ZANNICHELLIA PALUSTRIS (HORNED PONDWEED); RUPPIA MARITIMA (WIDGEON GRASS); ELODEA CANADENSIS (ELODEA); VALLISINERIA AMERICANA (WILD CELERY). EVIDENCE OBTAINED OF VIRAL INFECTIONS AND SECONDARY BACTERIAL INFECTIONS IN DISEASED MILFOIL.

(QUARTERLY REPORTS FILED FROM 1968-1972 WITH DEPT NATURAL RESOURCES, MD AND BUREAU OF COMMERCIAL FISHERIES)

DATA AVAILABILITY:

PLATFORM TYPES:
SHIP

ARCHIVE MEDIA:
DATA SHEETS

STUDY FROM 1966-1973; 300 STATIONS; OBSERVED WEEKLY IN SUMMER

FUNDING:
PL 88-309 PROJECT, CONTRACT NO 3-56-R-1

PUBLICATIONS:

CONTACT:
C H SOUTHWICK 301-955-3604
JOHNS HOPKINS UNIVERSITY, DEPT OF PATHOBIOLOGY
615 NORTH WOLFE STREET
BALTIMORE MARYLAND USA 21205

GRID LOCATOR (LAT):
730786

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PROJECTS:

GENERAL GEOGRAPHIC AREA:
NORTH ATLANTIC, U.S., CHESAPEAKE BAY, PATUXENT RIVER, COASTAL

ABSTRACT:
DESCRIPTION OF MACROPHYTE DISTRIBUTION AND DENSITY IN THE PATUXENT RIVER, MARYLAND PRESENTED RELATIVE TO WATER CHEMISTRY. DATA INCLUDES PHYSICAL AND CHEMICAL PARAMETERS OF WATER, PLANT SPECIES AND ABUNDANCE, WEIGHTS OF PLANTS, AND COMMUNITY PARAMETERS. INTENT OF STUDY WAS DESCRIPTIVE BASELINE DATA AND EVALUATION OF THERMAL POLLUTION ON MACROPHYTES. A SERIES OF 18 STATIONS WERE SAMPLED THROUGHOUT THE STUDY PERIOD.

(PHD THESIS, R. R. ANDERSON, 1966, DEPARTMENT OF BOTANY)

DATA AVAILABILITY:
UNIVERSITY MICROFILMS

PLATFORM TYPES:
SHIP

ARCHIVE MEDIA:
REPORTS
99 PAGES

FUNDING:
PEPCO - CHAULK POINT POWER STATION

CONTACT:
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MCKELDIN LIBRARY
UNIVERSITY OF MARYLAND
COLLEGE PARK MARYLAND USA 20742

GRID LOCATOR (LAT):
730786

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PROJECTS:

GENERAL GEOGRAPHIC AREA:
NORTH ATLANTIC, U.S., CHESAPEAKE BAY, MARYLAND, SOUTH RIVER, COASTAL

ABSTRACT:
BOTANICAL SURVEY OF VASCULAR PLANTS IN THE SOUTH RIVER, MARYLAND. DATA FILE INCLUDES WATER CHEMISTRY, BOTTOM TYPE, AND PLANTS. DETAILED ANALYSIS OF TRANSITION ZONE. 10 STATIONS SAMPLED WITH SOME 24 HOUR STATION DATA. (MS THESIS, C. C. PHILIPP, 1963)

DATA AVAILABILITY:
INTERLIBRARY LOAN

PLATFORM TYPES:
SHIP

ARCHIVE MEDIA:
REPORTS
55 PAGES

FUNDING:
UNIVERSITY OF MARYLAND

INVENTORY:

PUBLICATIONS:

CONTACT:
LIBRARIAN 301 454 3011
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COLLEGE PARK MARYLAND USA 20742

GRID LOCATOR (LAT):
730786

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1 AUG

PPT 25 OBS SURFACE
BECKMAN MODEL 180

24 HOUR STATION 1 AUG

24 HOUR STATION 1 AUG

6 INCH DEPTH WHITNEY
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ANNEX III

Part A

Section 1

"2"
General vegetation studies which include submerged aquatic vegetation.
PROJECTS:

GENERAL GEOGRAPHIC AREA:
NORTH AMERICA, COASTAL PLAIN, U.S., MARYLAND, QUEEN ANN COUNTY

ABSTRACT:
A STUDY OF VEGETATIVE REHABILITATION OF THREE DISTURBED MARSHES IN QUEEN ANN COUNTY, MARYLAND IS BEING CONDUCTED. ALL SUBMERGENT AND EMERGENT PLANTS TO 3 FOOT WATER DEPTH AT THREE DISTURBED AREAS, AND 52 STATIONS PER DISTURBED AREA ARE BEING STUDIED. SAMPLES ARE TAKEN EARLY AND LATE SUMMER.

DATA AVAILABILITY:

PLATFORM TYPES:
FIXED STATION

ARCHIVE MEDIA:
DATA SHEETS
ONE NOTEBOOK

FUNDING:
MD DEPT OF NATURAL RESOURCES

INVENTORY:

PUBLICATIONS:

CONTACT:
JAMES R. GOLDBERRY, DIRECTOR 301 267 5195
MARYLAND WILDLIFE ADMINISTRATION, DEPARTMENT OF NATURAL RESOURCES
TAWES STATE BUILDING
ANNAPOLIS MARYLAND USA 21401

GRID LOCATOR (LAT):
7307960200

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<td>FIRM OR MUCK AND DEPTH OF MUCK</td>
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**PROJECTS:**

**GENERAL GEOGRAPHIC AREA:**

NORTH AMERICA, COASTAL PLAIN, U.S., MARYLAND, QUEEN ANN COUNTY

**ABSTRACT:**

A SURVEY OF THE MARSH AND CREEK VEGETATION OF QUEEN ANN COUNTY, BAY SIDE OF EASTERN SHORE, MARYLAND IS BEING CONDUCTED. ALL PLANTS FROM THE HIGH MARSH EMERGENT TO AQUATIC SUBMERGENT OF CREEKS FROM HEAD WATER TO MOUTH ARE NOTED. 7 MARSH TRANSECTS WITH 5 STATIONS EACH, AND 14 CREEK TRANSECTS WITH 6 STATIONS EACH ARE MEASURED.

**DATA AVAILABILITY:**

**PLATFORM TYPES:**

FIXED STATION

**ARCHIVE MEDIA:**

DATA SHEETS

ONE NOTEBOOKS

**FUNDING:**

MD DEPT OF NATURAL RESOURCES

**CONTACT:**

JAMES R. GOLDBERRY, DIRECTOR 301 267 5195
MARYLAND WILDLIFE ADMINISTRATION, DEPARTMENT OF NATURAL RESOURCES
TAWES STATE BUILDING
ANNAPOLIS MARYLAND USA 21401

**GRID LOCATOR (LAT):**

7307960200

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<tr>
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PROJECTS:

GENERAL GEOGRAPHIC AREA:
NORTH ATLANTIC, COASTAL, U.S., CHESAPEAKE BAY, MARYLAND SUSQUEHANNA FLATS

ABSTRACT:
EXTENSIVE SURVEY OF VEGETATION PRESENT ON THE SUSQUEHANNA FLATS. DATA FROM 1957 TO PRESENT, INCLUDES DEPTH, SALINITY, SECCHI READING, PLANT SPECIES LISTS, PLANT RELATIVE ABUNDANCE, BENTHIC ANIMAL SPECIES LISTS. DATA BASE FOR WATERFOWL FORAGE AVAILABILITY, SEASONALITY OF VEGETATION.

DATA AVAILABILITY:
PITTMAN-ROBERTSON PROJECT THROUGH BSFWL; MS SUSAN BAILEY AT UNIV FLORIDA IN GAINESVILLE IS ANALYZING DATA

PLATFORM TYPES:
SHIP

ARCHIVE MEDIA:
DATA SHEETS
1.5 CUBIC FEET OF DATA SHEETS

FUNDING:

INVENTORY:

PUBLICATIONS:

CONTACT:
VERNON STOTTS 301-267-5195
MARYLAND DEPARTMENT OF NATURAL RESOURCES
TAWES STATE OFFICE BUILDING
ANNAPOLIS MARYLAND USA 21401

GRID LOCATOR (LAT):
730795 730796

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|                             |            |          |                            |             |           | RANKED AS RARE, OCCASIONAL, COMMON, ABUNDANT PER SPECIES PER DRAG
ANNEX III

Part A

Section 1

"3"

Detailed observations of submerged aquatic vegetation found during faunal and bottom studies.
PROJECTS:

GENERAL GEOGRAPHIC AREA:
NORTH ATLANTIC, COASTAL, U.S., CHESAPEAKE BAY, POTOMAC RIVER

ABSTRACT:
COUNTS AND SPECIES DETERMINATION OF WATERFOWL, REPTILES, MAMMALS, BIRDS, AND BENTHIC PLANTS HAVE BEEN MADE EACH JUNE SINCE 1962 ALONG A 180 MILE STRETCH OF THE POTOMAC RIVER. FISHING ACTIVITY IS ALSO NOTED. (OBSERVATIONS ARE MADE FROM TWO DRIFTING BOATS, TWO OBSERVERS IN EACH BOAT)

DATA AVAILABILITY:
COST OF DUPLICATION

PLATFORM TYPES:
SHIP

ARCHIVE MEDIA:
DATA SHEETS
ONE FILE DRAWER OF DATA SHEETS

FUNDING:

INVENTORY:

PUBLICATIONS:

CONTACT:
VERNON STOTTS  301-267-5195
MARYLAND DEPARTMENT OF NATURAL RESOURCES
TAWES STATE OFFICE BUILDING
ANNAPOLIS MARYLAND USA 21401

GRID LOCATOR (LAT):
730798 730797 730787

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<td>ONE PER YEAR</td>
<td>180 MILES DOWN THE POTOMAC RIVER, ONE NEAR EACH SHORE: STATION RUNS FROM MCCOOL TO GREAT FALLS</td>
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<td>YMD</td>
<td>1</td>
<td>STATIONS</td>
<td>ONE PER YEAR</td>
<td>TALLIED ALL WOOD DUCKS, WATERFOWL AND</td>
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<td>KEY</td>
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<td>OF BIRDS</td>
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<td>SPECIES</td>
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COUNTS AND SPECIES DETERMINATION OF WATERFOWL, REPTILES, MAMMALS, BIRDS, AND BENTHIC PLANTS HAVE BEEN MADE EACH JUNE SINCE 1962 ALONG A 180 MILE STRETCH OF THE POTOMAC RIVER. FISHING ACTIVITY IS ALSO NOTED. (OBSERVATIONS ARE MADE FROM TWO DRIFTING BOATS, TWO OBSERVERS IN EACH BOAT)
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<td>Number of Individuals</td>
<td>1 Stations</td>
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<td>Other Birds that were sighted, tallied all Wood Ducks, Waterfowl and other Birds that were sighted, all that were sighted</td>
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<td>Count of Reptiles</td>
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<td>All that were sighted</td>
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<td>Number of individuals per species</td>
<td>1 Stations</td>
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<td>Count of Benthic Plants</td>
<td>Bottom</td>
<td>Visual</td>
<td>Relative abundance</td>
<td>1 Stations</td>
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<td>Land</td>
<td>Visual</td>
<td>Relative abundance</td>
<td>1 Stations</td>
<td>One per year</td>
<td></td>
<td>Those plants on the banks</td>
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<td>Sport Fisheries Activities</td>
<td>Water</td>
<td>Visual</td>
<td>Number of individuals</td>
<td>1 Stations</td>
<td>One per year</td>
<td></td>
<td>Classified as fishing from boats or from banks</td>
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PROJECTS:
GENERAL GEOGRAPHIC AREA:
U.S., COASTAL, NORTH ATLANTIC, CHESAPEAKE BAY, MARYLAND, PATUXENT RIVER

ABSTRACT:
SUBSTRATE STUDIES IN THE PATUXENT RIVER SINCE 1967. MEASUREMENTS OF BIOMASS, AND SPECIES DETERMINATION AND COUNTS OF PELAGIC ANIMALS AND BENTHIC PLANTS FROM MONTHLY SAMPLING.

DATA AVAILABILITY:
PLATFORM TYPES:
SHIP

ARCHIVE MEDIA:
REPORTS
A REPORT OF 4 PARAMETERS, 2,800 OBSERVATIONS, AT 3 STATIONS.

FUNDING:

INVENTORY:

PUBLICATIONS:
REPORT SENT TO ACADEMY OF NATURAL SCIENCES OF PHILADELPHIA

CONTACT:
DENNIS BURTQN  301-274-3194
BENEDICT ESTUARINE LABORATORY
BENEDICT MARYLAND USA  20612

GRID LOCATOR (LAT):
730786

PARAMETER IDENTIFICATION SECTION:

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PROJECTS:

GENERAL GEOGRAPHIC AREA:
U.S., COASTAL, NORTH ATLANTIC, CHESAPEAKE BAY, MARYLAND, POTOMAC RIVER

ABSTRACT:
SUBSTRATE STUDIES ON THE POTOMAC RIVER SINCE 1968. MEASUREMENTS OF BIOMASS, SPECIES DETERMINATIONS, AND COUNTS OF PELAGIC ANIMALS AND COUNTERS OF BENTHIC PLANTS FROM MONTHLY SAMPLING. (SPURIOUS DATA DUE TO STORMS)

DATA AVAILABILITY:

PLATFORM TYPES:
SHIP

ARCHIVE MEDIA:
REPORTS
A REPORT OF 4 PARAMETERS, 4,400 OBSERVATIONS, AT 4 STATIONS.

FUNDING:

INVENTORY:

PUBLICATIONS:
REPORT TO ACADEMY OF NATURAL SCIENCE OF PHILADELPHIA

CONTACT:
DENNIS BURTON 301-274-3194
BENEDICT ESTUARINE LABORATORY
BENEDICT MARYLAND USA 20612

GRID LOCATOR (LAT):
730787 730786

PARAMETER IDENTIFICATION SECTION:

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**PROJECTS:**

GENERAL GEOGRAPHIC AREA:
U.S., COASTAL, NORTH ATLANTIC, CHESAPEAKE BAY, MARYLAND, CALVERT CLIFFS

**ABSTRACT:**
SUBSTRATE STUDIES IN THE CHESAPEKE BAY, MD. SINCE 1970. MEASUREMENTS OF COUNT, SPECIES DETERMINATION AND BIOMASS OF PELAGIC ANIMALS AND COUNTS OF BENTHIC PLANTS SAMPLED MONTHLY AT 4 STATIONS. (WOODEN 4x6" PANELS SET UP AT FOUR STATIONS, SAMPLED MONTHLY AND QUARTERLY)

**DATA AVAILABILITY:**

PLATFORM TYPES:
SHIP

ARCHIVE MEDIA:
REPORTS
A REPORT OF 4 PARAMETERS, 4800 OBSERVATIONS, AT 4 STATIONS.

**FUNDING:**

INVNETORY:

**PUBLICATIONS:**
REPORT TO ACADEMY OF NATURAL SCIENCE OF PHILADELPHIA

**CONTACT:**
DENNIS BURTON 301-274-3194
BENEDICT ESTUARINE LABORATORY
BENEDICT MARYLAND USA 20612

**GRID LOCATOR (LAT):**
730786

**PARAMETER IDENTIFICATION SECTION:**

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<td>ASH WEIGHT</td>
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DISTRIBUTION AND FOOD HABITS OF SCIAENIDS IN THE YORK RIVER, VIRGINIA
DATA COLLECTED: MARCH 1972 TO MARCH 1974

PROJECTS:
BIOLOGY AND SYSTEMATICS OF NORTHWEST ATLANTIC SCIAENIDS

GENERAL GEOGRAPHIC AREA:
NORTH ATLANTIC, U.S., CHESAPEAKE BAY, YORK RIVER, COASTAL

ABSTRACT:
INTENSIVE FIELD PROGRAM TO DESCRIBE THE DISTRIBUTION AND ABUNDANCE OF SCIAENID FISHES IN THE YORK RIVER, VIRGINIA. SIZE, NUMBERS, WEIGHT, FOOD HABITS DATA COLLECTED ON A MONTHLY SCHEDULE. ECOLOGICAL SELECTION OF HABITAT BY CYNOSCION, LEIOSTOMUS, MICROPOGON, BAIRODELLA, MENTICIRRHUS AND OTHER SCIAENIDS TO BE DESCRIBED.
(PHD RESEARCH UNDER J. A. MUSICK)

DATA AVAILABILITY:
IN THESIS, EXPECTED COMPLETION 1975

PLATFORM TYPES:
SHIP

ARCHIVE MEDIA:
DATA SHEETS
2 CUBIC FEET

FUNDING:
VIMS

INVENTORY:

PUBLICATIONS:

CONTACT:
LABBISH CHAO 804 642 2111
VIRGINIA INSTITUTE OF MARINE SCIENCE
GLOUCESTER POINT VIRGINIA USA 23062

GRID LOCATOR (LAT):
730776

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<td>DEG C</td>
<td>2760 OBS</td>
<td>MONTHLY</td>
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<td>WATER</td>
<td>NON-REVERSING THERMOMETER</td>
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<td>Key</td>
<td>Species per station</td>
<td>2760 OBS</td>
<td>Monthly</td>
<td>Bottom</td>
<td>16 ft Semiballoo Trawl with 1/4 inch cod liner</td>
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<tr>
<td>Count of Demersal Fish</td>
<td>Water</td>
<td>Visual</td>
<td>Number per species per station</td>
<td>2760 OBS</td>
<td>Monthly</td>
<td>Bottom</td>
<td>16 ft Semiballoo Trawl with 1/4 inch cod liner</td>
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<td>Length of Demersal Fish</td>
<td>Water</td>
<td>Total length</td>
<td>MM</td>
<td>10000 OBS</td>
<td>Monthly</td>
<td>Bottom</td>
<td>Up to 25 individuals per species per station per month</td>
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<td>Biomass of Demersal Fish</td>
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<td>Wet weight</td>
<td>KG per species per station</td>
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<td>Monthly</td>
<td>Bottom</td>
<td>Juvenile Sciaenids Seasonally for Young Sciaenids</td>
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<td>Weight of Demersal Fish</td>
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<td>Grams</td>
<td>5000 OBS</td>
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<td>Zostera, Ruppii, Ulva, Agardieilla, Gracillaria Recorded in a Relative Abundance Scale</td>
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<td>Length/Weight Ratio in Demersal Fish</td>
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<td>Equation, slope 25</td>
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<td>Eight species of Sciaenids, relate to functional osteology</td>
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<td>Taxonomic List of Benthic Plants</td>
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ANNEX III

Part A

Section 1

"4"

General observations of submerged aquatic vegetation found during faunal studies.
Benthic Infauna of Eelgrass, Zostera Marina, Beds

Data Collected: March 1970 to July 1970

Received: July 13, 1973

Projects:

General Geographic Area:
U.S., Coastal, North Atlantic, Chesapeake Bay, Chincoteague Bay, Virginia, York River

Abstract:
The infauna of eelgrass beds, Zostera Marina, was sampled and analyzed. In relation to community structure, community structure analysis indices include diversity, equitability, richness, dominance, similarity. Sediment type was related to the density of Zostera.

Data Availability:

Platform Types:
Ship

Archive Media:
Reports
117 macroinvertebrate taxa collected at 6 stations, 110 benthic samples processed

Funding:

Inventory:

Publications:
VIMS Thesis 1971, R J Orth

Contact:
Librarian 703-642-2111
Virginia Institute of Marine Science
Gloucester Point Virginia USA 23062

Grid Locator (LAT):
730776 730775

Parameter Identification Section:

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<td>Map Location</td>
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<td>Time</td>
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<td>Station Time</td>
<td>YMDL</td>
<td>12</td>
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<td>1 meter below</td>
<td>Mean low water</td>
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<td>Salinity</td>
<td>Water</td>
<td>Conductivity</td>
<td>Parts per thousand</td>
<td>12</td>
<td>Obs</td>
<td>Surface, Mid</td>
<td>Depth, Induction</td>
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<td>Count of Benthic</td>
<td>Bottom</td>
<td>Visual</td>
<td>Number of individuals per station per sampling period</td>
<td>110</td>
<td>Obs</td>
<td>Surface, Mid</td>
<td>Depth, Bottom</td>
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<td>10 replicate samples at each station and sampling period, Beckman RS-7A Induction Salinometer</td>
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<td>Species Determination of Benthic Animals</td>
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<td>Key</td>
<td>Number of species per station per sampling period, number of individuals per species</td>
<td>110 OBS</td>
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<td>PLEXIGLASS CORER 9.4 CM DIAM, 0.0069 M SQ, 15 CM LONG 10 REPlicate samples at each station and sampling period, PLEXIGLASS CORER 9.4 CM DIAM, 0.0069 M SQ, 15 CM LONG</td>
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<td>Size Analysis</td>
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<td>Percent composition</td>
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<td>ANALYSIS INCLUDES INDEX OF DOMINANCE, DISPERSION, RICHNESS, EQUITABILITY AND RANK ANALYSIS</td>
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RESIDENT SPECIES OF ESTUARINE FINFISH
DATA COLLECTED: JUNE 1954 TO PRESENT

PROJECTS:

GENERAL GEOGRAPHIC AREA:
NORTH ATLANTIC, COASTAL, U.S., CHESAPEAKE BAY, MARYLAND

ABSTRACT:
LONG-TERM SEINE SURVEY IN MARYLAND TRIBUTARIES TO CHESAPEAKE BAY. MONITORING OF YEAR CLASS STRENGTH, SPECIES COMPOSITION, AND SEASONALITY OF FISHES. CONSISTENT DATA FILE FOR WHOLE PROJECT PERIOD IN POTOMAC, CHOPTANK, NANTICOKE, SUSQUEHANNA, WICOMICO, SASSAFRAS, ELK, NORTHEAST, AND BOHEMIA RIVERS. OTHER RIVERS INCLUDED BUT NOT FOR THE ENTIRE TIME FRAME WERE CHESTER, PATUXENT, MANOKIN, BIG ANNESSEX, POCOMOKE, BLACKWATER, TRANSQUAKING, CHICAMACOMICO, MILES, SOUTH, MAGOTHY, PATAPSCO, BACK, AND MIDDLE RIVERS.

DATA AVAILABILITY:

ARCHIVE MEDIA:
DATA SHEETS
25 3 INCH THICK NOTEBOOKS

FUNDING:

INVENTORY:

CONTACT:
JOSEPH BOONE 301-267-5785
MARYLAND DEPARTMENT OF NATURAL RESOURCES
TAWES STATE OFFICE BUILDING
ANNAPOLIS MARYLAND USA 21401

GRID LOCATOR (LAT):
730785 730787 730795 730796

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THE COMPARATIVE ECOLOGY OF TWO SPECIES OF PIPE FISH IN THE YORK RIVER, VIRGINIA

DATA COLLECTED: APRIL 1971 TO MARCH 1972

RECEIVED: DECEMBER 05, 1973

PROJECTS:

GENERAL GEOGRAPHIC AREA:
NORTH ATLANTIC, U.S., CHESAPEAKE BAY, COASTAL, YORK RIVER

ABSTRACT:
38 TRAWL AND SEINE STATIONS WERE SAMPLED FOR ONE YEAR ALONG THE YORK RIVER, VIRGINIA, TO DETERMINE THE ABUNDANCE, DISTRIBUTION, FOOD HABITS AND SPAWNING ACTIVITY OF TWO SPECIES OF PIPE FISH.

DATA AVAILABILITY:
M A THESIS LINDA PUSHEE MERCER

PLATFORM TYPES:
FIXED STATION; SHIP

ARCHIVE MEDIA:
REPORTS; PUNCHED CARDS; DATA SHEETS
SEVERAL NOTEBOOKS OF DATA SHEETS; ONE FILE BOX OF PUNCHED CARDS; UNPUBLISHED M A THESIS.

FUNDING:
INVENTORY:
PUBLICATIONS:

CONTACT:
LIBRARIAN 804-642-2111
VIRGINIA INSTITUTE OF MARINE SCIENCE
GLOUCESTER POINT VIRGINIA USA 23062

GRID LOCATOR (LAT): 730776

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DISTRIBUTION AND ABUNDANCE OF FISHES IN 4 MARSH TYPES OF THE CHOPTANK RIVER

DATA COLLECTED: JUNE 1971 TO DECEMBER 1972

RECEIVED: JANUARY 01, 1976

PROJECTS:
FISH POPULATIONS AND WETLAND TYPES

GENERAL GEOGRAPHIC AREA:
NORTH ATLANTIC, U.S., CHESAPEAKE BAY, MARYLAND, COASTAL, CHOPTANK RIVER

ABSTRACT:
EXTENSIVE COLLECTION SERIES OF JUVENILE FISHES AND YOUNGER AGE GROUP FISHES UTILIZING VARIOUS MARSH TYPES IN THE CHOPTANK RIVER SYSTEM. LENGTH, WEIGHT, NUMBERS, SPECIES COMPOSITION AND BIOMASS DATA FOR DESCRIPTION OF FISH COMMUNITY. GROWTH DATA FOR ALOSID JUVENILES AND CALCULATED GROWTH DATA FOR WHITE PERCH, YELLOW PERCH, AND PUMPKINSEED SUNFISH. BIOLOGICAL INFORMATION RETRIEVABLE ACROSS ENVIRONMENTAL PARAMETERS FOR ANALYSIS OF DISTRIBUTION AND ASSOCIATIONS WITHIN COMMUNITY (TYPE 7, 12, 16, AND 17 MARSHES BY BSFW DEFINITION)

DATA AVAILABILITY:
COST OF DUPLICATION

PLATFORM TYPES:
SHIP

ARCHIVE MEDIA:
MAGNETIC TAPE DIGITAL; REPORTS
1 REEL MAGNETIC TAPE

FUNDING:
BSFW BOSTON OFFICE DEPARTMENT OF INTERIOR AND MARYLAND DNR

INVENTORY:

PUBLICATIONS:
PROJECT COMPLETION REPORT FOR MARYLAND AFS 7 CONTRACT

CONTACT:
W.R. CARTER 301-267-5361
MARYLAND DEPARTMENT OF NATURAL RESOURCES
TAWES STATE OFFICE BUILDING
ANNAPOLIS MARYLAND USA 21401

GRID LOCATOR (LAT):
730765 730766

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<td>MONTHLY</td>
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<td>Water</td>
<td>Visual</td>
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<td>OBS</td>
<td>MONTHLY</td>
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<td>Number per species, number per species per tow and per hectare</td>
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<td>OBS</td>
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<td>Weight of Demersal Fish</td>
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<td>For each species and for the total population of all species.</td>
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<td>Millimeters, individual and mean length per species per station</td>
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<td>Monthly</td>
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ESTIMATING SPECIES AND COMMUNITIES IN THE FISH POPULATION OF SUSQUEHANNA FLATS
NURSERY AREA
DATA COLLECTED: JUNE 1968 TO NOVEMBER 1969
RECEIVED: JANUARY 01, 1976

PROJECTS:
FISH COMMUNITIES OF SUSQUEHANNA RIVER

GENERAL GEOGRAPHIC AREA:
NORTH ATLANTIC, U.S., CHESAPEAKE BAY, MARYLAND, COASTAL, SUSQUEHANNA FLATS

ABSTRACT:
EXTENSIVE COLLECTIONS OF JUVENILE AND YOUNGER AGE GROUP FISHES UTILIZING THE SUSQUEHANNA FLATS AREA AS A FEEDING GROUND AND NURSERY AREA. LENGTH, WEIGHT, NUMBERS, SPECIES COMPOSITION AND BIOMASS DATA FOR FISH COMMUNITY DESCRIPTION. GROWTH DATA FOR JUVENILE ALEWIFE, BLUEBACK, AND AMERICAN SHAD, SCALE READINGS AND CALCULATED GROWTH FOR WHITE PERCH, YELLOW PERCH, AND PUMPKINSEED SUNFISH. INFORMATION CORRELATED TO AND RETRIEVABLE ACROSS 33 PARAMETERS OR RANGES WITHIN EACH PARAMETER OR COMBINATION.

DATA AVAILABILITY:
COST OF DUPLICATION

PLATFORM TYPES:
SHIP

ARCHIVE MEDIA:
MAGNETIC TAPE DIGITAL; REPORTS
1 MAGNETIC TAPE REEL

FUNDING:
NMFS DEPARTMENT OF COMMERCE, BSFW DEPT INTERIOR, AND MARYLAND DNR

INVENTORY:

PUBLICATIONS:
ANNUAL PROJECT PROGRESS REPORT, MD AFSC 1-2; PROJECT COMPLETION REPORT, MD AFSC 1.

CONTACT:
W.R. CARTER 301-267-5361
MARYLAND DEPARTMENT OF NATURAL RESOURCES
TAWES STATE OFFICE BUILDING
ANNAPOLIS MARYLAND USA 21401

GRID LOCATOR (LAT):
730795 730796

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TALBOT COUNTY, MARYLAND SHELLFISH SURVEY
DATA COLLECTED: JUNE 1963 TO AUGUST 1963

PROJECTS:

GENERAL GEOGRAPHIC AREA:
NORTH ATLANTIC, U.S., CHESAPEAKE BAY, TALBOT COUNTY, MARYLAND

ABSTRACT:
HYDRAULIC DREDGE SURVEY OF SHELLFISH BOTTOM IN TALBOT COUNTY, MARYLAND. ASSESSMENT OF SPECIES, ABUNDANCE, AND SIZE OF BENTHIC ANIMALS WITH EMPHASIS ON SOFT CLAM. POTENTIAL YIELD FIGURES GIVEN.
(CBL REFERENCE NUMBER 63-68)

DATA AVAILABILITY:
WRITTEN REQUEST

PLATFORM TYPES:
SHIP

ARCHIVE MEDIA:
REPORTS
36 PAGE REPORT

FUNDING:
MARYLAND DEPARTMENT OF NATURAL RESOURCES

INVENTORY:

PUBLICATIONS:

CONTACT:
HAYES T. PFITZENMEYER 301 326 4281
CHESAPEAKE BIOLOGICAL LABORATORY
SOLOMONS' MARYLAND USA 20688

GRID LOCATOR (LAT):
730786

PARAMETER IDENTIFICATION SECTION:

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30 SQ FT SAMPLE WITH HYDRAULIC DREDGE
### Parameter Identification Section:

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PROJECTS:

GENERAL GEOGRAPHIC AREA:
NORTH ATLANTIC, U.S., CHESAPEAKE BAY, CHLORA POINT, MARYLAND, CHOPTANK, RIVER

ABSTRACT:
SURVEY OF PRODUCTIVE SHELLFISH BOTTOM IN THE CHOPTANK RIVER. HYDRAULIC DREDGE SAMPLES AT 30 STATIONS IN THE VICINITY OF CHLORA POINT. DATA INCLUDES SPECIES LIST, ABUNDANCE, AND SIZE OF BENTHIC ANIMALS. OTHER OBSERVATIONS ON BOTTOM TYPE AND AQUATIC VEGETATION ARE INCLUDED.
(CBL REFERENCE NUMBER 63-44)

DATA AVAILABILITY:
WRITTEN REQUEST

PLATFORM TYPES:
SHIP

ARCHIVE MEDIA:
REPORTS
4 PAGE TYPED REPORT

FUNDING:
MARYLAND DEPARTMENT OF NATURAL RESOURCES

INVENTORY:

PUBLICATIONS:

CONTACT:
HAYES T. PFITZENMEYER 301 326 4281
CHESAPEAKE BIOLOGICAL LABORATORY
SOLOMONS MARYLAND USA 20688

GRID LOCATOR (LAT):
730786

PARAMETER IDENTIFICATION SECTION:

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DATA COLLECTED: JUNE 1959 TO JUNE 1959
RECEIVED: APRIL 15, 1974

PROJECTS:
GENERAL GEOGRAPHIC AREA:
NORTH ATLANTIC, U.S., CHESAPEAKE BAY, TOLLY POINT TO THOMAS POINT, ANNE ARUNDEL COUNTY, MARYLAND

ABSTRACT:
SURVEY OF PRODUCTIVE SHELLFISH BOTTOM IN ANNE ARUNDEL COUNTY, MARYLAND. HYDRAULIC DREDGE SAMPLES AT 16 STATIONS. DATA ON SHELLFISH ABUNDANCE, SPECIES LIST, AND VEGETATION DISTRIBUTION.

DATA AVAILABILITY:
WRITTEN REQUEST

PLATFORM TYPES:
SHIP

ARCHIVE MEDIA:
REPORTS
2 PAGE TYPED REPORT, CBL REFERENCE NUMBER 59-33

FUNDING:
STATE OF MARYLAND DEPARTMENT OF NATURAL RESOURCES

INVENTORY:

PUBLICATIONS:

CONTACT:
HAYES T. PFITZENMEYER 301 326 4281
CHESAPEAKE BIOLOGICAL LABORATORY
SOLOMANS MARYLAND USA 20688

GRID LOCATOR (LAT):
730786

PARAMETER IDENTIFICATION SECTION:

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ANNEX III

Part A

Section 1

"5"

Studies of marsh and intertidal areas where submerged aquatic vegetation may be sporadically noted.
PROJECTS:

GENERAL GEOGRAPHIC AREA:
NORTH ATLANTIC, U.S., COASTAL, CHESAPEAKE BAY, WARE RIVER, SEVERN RIVER

ABSTRACT:
TWO TIDAL MARSHES ALONG THE SEVERN AND WARE RIVERS, VIRGINIA ARE SAMPLED MONTHLY OVER A TWO YEAR PERIOD TO DETERMINE FAUNAL POPULATION SIZES AND FLORAL PRODUCTIVITY. RESPIRATION RATES ARE MEASURED ON BOTH MACROFAUNA AND BENTHOS. COMPARISONS ARE MADE BETWEEN ONE CONTROL MARSH AND ONE MARSH TREATED WITH OIL.

(AVAILABLE AS VIMS PH D DISSERTATION, JUNE 1975)

DATA AVAILABILITY:

PLATFORM TYPES:
FIXED STATION

ARCHIVE MEDIA:
DATA SHEETS
SIX NOTEBOOKS OF 25 TO 50 DATA SHEETS EACH

FUNDING:
THE VIRGINIA INSTITUTE OF MARINE SCIENCE

INVENTORY:

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<td>TWO TIDAL MARSHES USED FOR SAMPLING</td>
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CONTACT:
CARL HERSHNER 804 642 2111
VIRGINIA INSTITUTE OF MARINE SCIENCE
GLOUCESTER POINT VIRGINIA USA 23062

GRID LOCATOR (LAT):
730776
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<td>Monthly</td>
<td>Quadrat sightings of birds inhabiting G marsh area</td>
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<td>OBS</td>
<td>Monthly</td>
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CLASSIFICATION AND STRUCTURE OF THE TIDAL MARSHES OF THE POROTANK RIVER, VIRGINIA

DATA COLLECTED: JULY 1964 TO NOVEMBER 1964

PROJECTS:

GENERAL GEOGRAPHIC AREA:
U.S., COASTAL, NORTH ATLANTIC, CHESAPEAKE BAY, VIRGINIA, POROTANK RIVER

ABSTRACT:
FLORAL SURVEY AND COMMUNITY STRUCTURE ANALYSIS OF THE TIDAL MARSHES OF THE POROTANK RIVER VA.

DATA AVAILABILITY:

PLATFORM TYPES:

ARCHIVE MEDIA:
REPORTS
63 PAGES

FUNDING:

INVENTORY:

PUBLICATIONS:
VIMS THESIS, 1966, J A KERWIN

CONTACT:
LIBRARIAN 804-642-2111
VIRGINIA INSTITUTE OF MARINE SCIENCE
GLOUCESTER POINT VIRGINIA USA 23062

GRID LOCATOR (LAT):
730776

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RIVER SYSTEM DIVIDED INTO SIX SAMPLING STRATA
SUMMER, 1964
CHECKLIST OF 77 SPECIES WITH SCIENTIFIC AND COMMON NAMES
MARSH PLANTS, RELATIVE FREQUENCY, DENSITY, DOMINANCE AND IMPORTANCE VALUES, E
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<td>PARTS PER THOUSAND</td>
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PROJECTS:

GENERAL GEOGRAPHIC AREA:
NORTH ATLANTIC, U.S., COASTAL, CHESAPEAKE BAY, VIRGINIA COASTAL WETLANDS

ABSTRACT:
UNDER SECTION 62.1-13.4 OF THE WETLANDS ACT, THE VIRGINIA INSTITUTE OF MARINE SCIENCE IS OBLIGATED TO INVENTORY THE TIDAL WETLANDS OF THE COMMONWEALTH OF VIRGINIA. A SERIES OF MARSH INVENTORY REPORTS ARE THEREFORE BEING COMPILED ON A COUNTY BASIS. EACH REPORT LOCATES AND DESCRIBES THE INDIVIDUAL TIDAL MARSHES WITHIN A COASTAL COUNTY. INFORMATION SUCH AS INDIVIDUAL MARSH ACREAGE, MARSH PLANT COMMUNITY PERCENTAGE AND ACREAGE, WATER-MARSH INTERFACE, INTERFACE MARSH AREA RATIO, AND MISCELLANEOUS OBSERVATIONS ARE PRESENTED IN TABULAR FORM. THE REPORTS RESULT FROM FIELD NOTES AND VEGETATION MAPS DRAWN IN THE FIELD AND OBSERVATIONS MADE USING AERIAL PHOTOGRAPHS AND TOPOGRAPHIC MAPS. (ONLY SIX REPORTS COVERING LANCASTER COUNTY, MATHEWS COUNTY, YORK COUNTY AND TOWN OF POQUOSON, NORTHUMBERLAND COUNTY, STAFFORD COUNTY, AND PRINCE WILLIAM COUNTY AVAILABLE AS OF 197408)

DATA AVAILABILITY:

PLATFORM TYPES:
SHIP

ARCHIVE MEDIA:
REPORTS
ONE 100 PAGE REPORT FOR EACH TIDAL COUNTY

FUNDING:
THE STATE OF VIRGINIA; RANN

INVENTORY:

PUBLICATIONS:
SPECIAL REPORT NO. 45 IN APPLIED MARINE SCIENCE AND OCEAN ENGINEERING

CONTACT:
DR. GENE M. SILBERHORN 804 642 2111
VIRGINIA INSTITUTE OF MARINE SCIENCE
GLOUCESTER POINT VIRGINIA USA 23062

GRID LOCATOR (LAT):
730786 730776 730766 730756 730745 730735 730725 730715

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<td>140 OBS</td>
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THE EFFECTS OF THERMAL LOADING BY THE BREMO POWER STATION ON A PIEDMONT SECTION OF THE JAMES RIVER

DATA COLLECTED: JULY 1971 TO JUNE 1973

RECEIVED: JULY 13, 1973

PROJECTS:

GENERAL GEOGRAPHIC AREA:
U.S., COASTAL, NORTH ATLANTIC, CHESAPEAKE BAY, VIRGINIA, JAMES RIVER, BREMO BLUFF TO COLUMBIA

ABSTRACT:
PIEDMONT SECTION OF JAMES RIVER, VIRGINIA STUDIED FOR EFFECTS OF THERMAL LOADING BY POWER STATION-INCLUDES PERIOD OF HURRICANE AGNES. ABIOTIC AND BIOTIC MEASUREMENTS MADE.

DATA AVAILABLE:
WITH APPROVAL REPORTS SENT TO OFFICE OF WATER RESEARCH, VIRGINIA ELECTRIC AND POWER COMPANY

PLATFORM TYPES:
SHIP

ARCHIVE MEDIA:
REPORTS; DATA SHEETS
25 PARAMETERS MEASURED OVER 24 MONTHS

FUNDING:

INVENTORY:

PUBLICATIONS:

CONTACT:
WILLIAM S WOOLCOTT 703-282-9581
VIRGINIA INSTITUTE FOR SCIENTIFIC RESEARCH
RICHMOND VIRGINIA USA 23229

GRID LOCATOR (LAT):
730776 730766

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<td>SAMPLING TIME</td>
<td>YMDHL</td>
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<td>OBS 60 TIMES PER YEAR</td>
<td>SURFACE</td>
<td>TEMPERATURE PROFILES TAKEN 6 TIMES PER YEAR</td>
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<td>WATER</td>
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<td>Feet</td>
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<td>Sub-surface</td>
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<td>Count of Benthic Animals</td>
<td>Bottom</td>
<td>Visual</td>
<td>Number of individuals per sample</td>
<td>151,200 observations</td>
<td>60 times per year</td>
<td>Bottom</td>
<td>108,000 Shore Benthos collected using modified tongs, artificial substrate used to collect 43,200 organisms suspended 1 ft. off bottom</td>
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<td>Species Determination of Benthic Animals</td>
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<td>Key</td>
<td>Number of species per sample, number of individuals per species per sample</td>
<td>151,200 observations</td>
<td>60 times per year</td>
<td>Bottom</td>
<td>108,000 Shore Benthos collected using modified tongs, artificial substrate used to collect 43,200 organisms suspended 1 ft. off bottom</td>
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<td>Count of Demersal Fish</td>
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<td>Visual</td>
<td>Number of individuals per station</td>
<td>540 observations</td>
<td>18 times per year</td>
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<td>Key</td>
<td>Number of species per station, number of individual species per station</td>
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<td>18 times per year</td>
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<td>220V 1-1/2 to 3 AMP Electric Shock. 100 to 250 yards per station</td>
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<td>VISUAL</td>
<td>PERCENTAGE OF SPECIES INGESTED PER FISH SPECIES NUMBER OF SPECIES PER STATION</td>
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<td>18 TIMES PER YEAR</td>
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<td>Species Determination of Benthic Plants</td>
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<td>KEY</td>
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<td>18 TIMES PER YEAR</td>
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<td>Species Determination of Benthic Plants</td>
<td>BOTTOM</td>
<td>KEY</td>
<td>NUMBER OF SPECIES PER SLIDE</td>
<td>180 OBS</td>
<td>6 TIMES PER YEAR</td>
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<td>Count of Benthic Plants</td>
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<td>6 TIMES PER YEAR</td>
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ANNEX III

Part A

Section 1

"6"
Areas near the Chesapeake Bay including oceanside Maryland and Virginia, Delaware, and the northern coast of North Carolina.
PROJECTS:
ASSATEAGUE ECOLOGICAL STUDIES

GENERAL GEOGRAPHIC AREA:
NORTH ATLANTIC, U.S., DELMARVA PENINSULA, CHINCOTEAGUE BAY, SINEPUXENT BAY

ABSTRACT:
DESCRIPTIVE SURVEY OF BENTHIC COMMUNITIES IN CHINCOTEAGUE AND SINEPUXENT BAYS CONDUCTED IN 1969. 139 STATIONS OCCUPIED WITH 3 REPLICATE SAMPLES PER STATION. DEPTH, SEDIMENT TYPE, AND BIOLOGICAL MATERIAL REPORTED FOR EACH STATION. MORE INTENSIVE SAMPLING PERFORMED IN AREAS OF DREDGE BORROW PITS.

(ANALYSES BY KLAUS DROBECK, NRI REFERENCE 446, UNIVERSITY OF MARYLAND)

DATA AVAILABILITY:
WRITTEN REQUEST

PLATFORM TYPES:
SHIP

ARCHIVE MEDIA:
REPORTS
PART 6 OF 300 PAGE REPORT

FUNDING:
NATIONAL PARKS SERVICE CONTRACT NUMBER 14-10-5-950-36

INVENTORY:

CONTACT:
LIBRARIAN 301 326 4281
CHESAPEAKE BIOLOGICAL LABORATORY
SOLOMONS MARYLAND USA 20688

GRID LOCATOR (LAT):
730785

PARAMETER IDENTIFICATION SECTION:

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<th>FREQUENCY</th>
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<td>GRAVIMETRY</td>
<td>PERCENT OF SAMPLE</td>
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MEAN GRAIN SIZE, MEDIAN GRAIN SIZE, SKEWNESS, SORTING COEFFICIENT
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<td>bottom</td>
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<td>Relative abundance scale to rank the dominant species</td>
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<td>millimeters</td>
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<td>Venus mercenaria, size frequency per station, mean length per station distribution and density of clams with other factors of physical and biological nature of habitat</td>
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**PROJECTS:**
ASSATEAGUE ECOLOGICAL STUDIES

**GENERAL GEOGRAPHIC AREA:**
NORTH ATLANTIC, U.S., DELMARVA PENINSULA, CHINCOTEAGUE BAY

**ABSTRACT:**
SURVEY OF BENTHIC VEGETATION IN CHINCOTEAGUE BAY CONDUCTED AS PART OF A STUDY OF ASSATEAGE NATIONAL PARK. DATA INCLUDED IN THIS STUDY ARE SPECIES LISTS, ABUNDANCE, WEIGHT, SIZE, AND GROWTH. OBJECTIVES WERE TO DEFINE THE DISTRIBUTION AND GROWTH OF BENTHIC VEGETATION IN THE AREA. SAMPLES TAKEN FROM MAY THROUGH AUGUST AT 2 WEEK INTERVALS DURING 1969 AND 1970 (WORK BY RICHARD R. ANDERSON, NRI REFERENCE NUMBER 446, UNIVERSITY OF MARYLAND)

**DATA AVAILABILITY:**
WRITTEN REQUEST

**PLATFORM TYPES:**
SHIP

**ARCHIVE MEDIA:**
REPORTS
PART 4 OF 300 PAGE REPORT

**FUNDING:**
NATIONAL PARKS SERVICE CONTRACT NUMBER 14-10-5-950-36

**INVENTORY:**

**CONTACT:**
LIBRARIAN 301 326 4281
CHESAPEAKE BIOLOGICAL LABORATORY
SOLOMONS MARYLAND USA 20688

**GRID LOCATOR (LAT):**
730186

**PARAMETER IDENTIFICATION SECTION:**

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<td>OBS</td>
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<td>BOTTOM</td>
<td>KEY</td>
<td>NUMBER OF SPECIES PER STATION</td>
<td>355</td>
<td>OBS</td>
<td>2 WEEK INTERVALS</td>
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<td>BOTTOM</td>
<td>DIRECT</td>
<td>MM</td>
<td>15000</td>
<td>OBS</td>
<td>2 WEEK INTERVALS</td>
<td>50 PER INTERVAL FOR ZOSTRA AND</td>
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**DATA AMOUNT:**
192 STATIONS
192 OBS
355 OBS
355 OBS
15000 OBS

**LOCATION:**
CHESAPEAKE BIOLOGICAL LABORATORY
SOLOMONS MARYLAND USA 20688

**GRID LOCATOR (LAT):**
730186

**GRID LOCATOR (LON):**
291072

**LATITUDE:**
38

**LONGITUDE:**
73.0186

**MAP:**
YMD Number Per Species

**REMARKS:**
EKMAN GRAB 15 CM
EKMAN GRAB 15 CM

**CONTACT:**
LIBRARIAN 301 326 4281
CHESAPEAKE BIOLOGICAL LABORATORY
SOLOMONS MARYLAND USA 20688
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QUALITATIVE SURVEY OF SUBMERGENT VEGETATION
DATA COLLECTED: JULY 1967 TO AUGUST 1969

PROJECTS:

GENERAL GEOGRAPHIC AREA:
NORTH ATLANTIC, COASTAL, U.S., CHESAPEAKE BAY, EASTERN SHORE, MARYLAND

ABSTRACT:
EXTENSIVE SURVEY OF SUBMERGED ROOTED AQUATIC PLANTS, QUALITATIVE RANKED ABUNDANCE, RELATE TO FORAGE FOR MIGRANT WATERFOWL.
OVER 1000 STATIONS, 1 VISIT, 4 REPLICATES PER STATION. 3 DEPTH STRATA, DATA ON 12 SPECIES OF ROOTED AQUATIC PLANTS PLUS SEVERAL GENERA OF ALGAE.
(State supported predecessor to BSFW study)

DATA AVAILABILITY:
COST OF DUPLICATION

PLATFORM TYPES:
SHIP

ARCHIVE MEDIA:
DATA SHEETS
3 STANDARD FILE CABINET DRAWERS

FUNDING:

INVENTORY:

PUBLICATIONS:

CONTACT:
VERNON STOTTS 301-267 5195
MARYLAND DEPARTMENT OF NATURAL RESOURCES
TAWES STATE OFFICE BUILDING
ANNAPOLIS MARYLAND USA 21401

GRID LOCATOR (LAT):
730775 730785 730786

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ESTUARINE BENTHIC SURVEY
DATA COLLECTED: AUGUST 1959 TO SEPTEMBER 1961
PROJECTS:

GENERAL GEOGRAPHIC AREA:
NORTH ATLANTIC, COASTAL, U.S., CHESAPEAKE BAY

ABSTRACT:
VEGETATIVE SURVEY OF OCEANSIDE EASTERN SHORE MARYLAND AND TRIBUTARIES ANNUAL FALL SURVEY OF WATERFOWL HABITAT. DATA INCLUDES 1959-1961 SEASONS. VEGETATION-VOLUMES AND SPECIES, BENTHIC ANIMALS-COUNTS AND SPECIES LISTS PER STATION (BUREAU OF SPORT FISHERIES AND WILDLIFE AND MARYLAND, REGION IV)

DATA AVAILABILITY:
COST OF DUPLICATION

PLATFORM TYPES:
SHIP

ARCHIVE MEDIA:
DATA SHEETS; REPORTS
3 CUBIC FEET OF DATA SHEETS

FUNDING:
PITTMAN-ROBERTSON ACT, PROJECT W30 R

INVENTORY:

PUBLICATIONS:

CONTACT:
VERNON STOTTS 301-267-5195
MARYLAND DEPARTMENT OF NATURAL RESOURCES
TAWES STATE OFFICE BUILDING
ANNAPOLES MARYLAND USA 21401

GRID LOCATOR (LAT):
730775 730785

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EVALUATION OF CHANNELIZATION EFFECTS ON AQUATIC HABITAT
PROJECTS:
DATA COLLECTED: JULY 1973 TO PRESENT
PAGE 01
RECEIVED: JANUARY 01, 1976
PROJECTS:
GENERAL GEOGRAPHIC AREA:
NORTH ATLANTIC, U.S., CHESAPEAKE BAY, COASTAL, MARYLAND, EASTERN SHORE
ABSTRACT:
EXTENSIVE DATA BASE ON 19 CHANNELIZED STREAMS INCLUDING WATER CHEMISTRY, BENTHOS, AND FISHES. COMPARISONS ACROSS STREAMS BASED UPON TIME SINCE CHANNELIZED. DETERMINATION OF RECOVERY TIME AND SEQUENCE OF BIOTA AND CHEMICAL FACTORS.
DATA AVAILABILITY:
WITH REQUEST AND COST OF DUPLICATION
PLATFORM TYPES:
ARCHIVE MEDIA:
DATA SHEETS
2 STANDARD FILE DRAWERS
FUNDING:
BSFW DINGELL-JOHNSON ACT AND MARYLAND DNR, PROJECT MD F 24 R
INVENTORY:
CONTACT:
W.R. CARTER 301-267-5361
MARYLAND DEPARTMENT OF NATURAL RESOURCES
TAWES STATE OFFICE BUILDING
ANnapolis MARYLAND USA 21401
GRID LOCATOR (LAT):
730785 730786 730796
PARAMETER IDENTIFICATION SECTION:
NAME POSITI0N TIME TEMPERATURE SALINITY DISSOLVED OXYGEN GAS SULFATE PH PHOSPHATE
SPHERE EARTH EARTH WATER WATER WATER WATER WATER WATER WATER
METHOD FIXED POINT STATION TIME THERMISTOR CONDUCTIVITY SPECIFIC ION ELECTRODE COLORIMETRY SPECIFIC ION ELECTRODE COLORIMETRY
UNITS MAP YMDHL DEG C PARTS PER THOUSAND MILLION MILLION PH UNITS MILLION MILLION
DATA AMOUNT 648 STATIONS 648 STATIONS 1296 OBS 1296 OBS 1296 OBS 1296 OBS 1296 OBS
FREQUENCY 2 TIMES PER MONTH 2 TIMES PER MONTH 2 TIMES PER MONTH 2 TIMES PER MONTH 2 TIMES PER MONTH 2 TIMES PER MONTH 2 TIMES PER MONTH
HEIGHT/DEPTH SURFACE AND BOTTOM SURFACE AND BOTTOM SURFACE AND BOTTOM SURFACE AND BOTTOM SURFACE AND BOTTOM SURFACE AND BOTTOM
REMARKS BECKMAN RS-5 BECKMAN RS-5 BECKMAN LAB MODEL HACH KIT TEST HACH KIT TEST HACH KIT TEST
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PROJECTS:

GENERAL GEOGRAPHIC AREA:
NORTH ATLANTIC, COASTAL, U.S., CHESAPEAKE BAY, MARYLAND, OCEAN SIDE

ABSTRACT:
BEACHSEINE AND TRAWL SURVEY OF FISHES OCCURRING IN BAYS ON OCEANSIDE EASTERN SHORE, MARYLAND. HYDRO DATA WITH EACH COLLECTION, SPECIES LISTS, SIZE RANGE, NUMBERS. STANDARD COLLECTION TECHNIQUE APPLIED AND DATA EXPANDED TO AREA ESTIMATES. MAINLY SUMMER DATA, TO BECOME QUARTERLY SURVEY. (SOME DATA APPEARS IN WILLIAM SIPPLE FILE ECOLOGICAL WETLANDS ASSESSMENT)

DATA AVAILABILITY:
COST OF DUPLICATION

PLATFORM TYPES:
SHIP

ARCHIVE MEDIA:
DATA SHEETS
FILED BY YEAR, LOOSE TYPED FIELD SHEETS, SEINE AND TRAWL SAMPLES SEPARATED BY YEAR

FUNDING:
MARYLAND DEPT NATURAL RESOURCES

INVENTORY:
197 SEINE SAMPLES (SITE LESS THAN 3.5' IN DEPTH), 459 TRAWL SAMPLES (SITES GREATER THAN 3.5' IN DEPTH), 5 HOOP TRAP SAMPLES

PUBLICATIONS:
IN HOUSE PUBLICATIONS AVAILABLE BY FISCAL 1977

CONTACT:
JIM CASEY 301-827-8122
WYEMILLS REGIONAL STATION
P O BOX 68
WYEMILLS MARYLAND USA 21679

GRID LOCATOR (LAT):
730775 730785

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<td>Trawl and Seine, Seine is 100 ft x 6 ft x 1/4 inch with 6x6x6 ft bag sample covers 5500 sq ft per tow, trawl 16 foot semiballoon otter trawl with 1/4 inch liner, sample covers 40,000 sq ft</td>
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**All fish data treated by gear type and combined gear: Hermit Crab, Lady Crab, Rock Crab, Penaeid Shrimp, Mantis Shrimp, Grass Shrimp, Crangon, Blue**
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ABSTRACT:
The marsh crab, Sesarma reticulatum (SAY), feeds primarily upon the cordgrass, Spartina alterniflora, during the summer months in Canary Creek marsh (Lewes, Delaware). In so doing, Sesarma is a part of the second, or herbivore, trophic level in the marsh. A study was undertaken to determine the energy utilized by Sesarma in feeding upon Spartina over lunar-monthly periods. Amounts of Spartina ingested and assimilated, in terms of grams dry weight, were found for three groups of crabs. These studies indicate a possible relationship between the quantity (i.e., grams dry weight) and/or quality (i.e., associated with maturity) of Spartina available to the crabs and the amounts ingested and assimilated. These data, in addition to data from respiration measurements, were combined with information from the literature to construct energy budgets, in terms of caloric values, for the three groups. Subsequently, the data were extrapolated to the marsh ecosystem to obtain estimates of energy utilization by the marsh population of Sesarma.

DATA AVAILABILITY:
Also at University of Delaware, Marine Station Library

PLATFORM TYPES:
Fixed Station

ARCHIVE MEDIA:
Reports
61 Pages

FUNDING:
State of Delaware Department of Natural Resources and Environmental Control

INVENTORY:

CONTACT:
John C. Bryson 302-678-4403
Delaware Department of Natural Resources and Environmental Control
Dover Delaware USA 19901

GRID LOCATOR (LAT):
730795

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ANNUAL ANGIOSPERM PRODUCTION ON A SALT MARSH
DATA COLLECTED: JUNE 1960 TO NOVEMBER 1960

PROJECTS:
GENERAL GEOGRAPHIC AREA:
NORTH AMERICA, U.S., DELAWARE, LEWES, CANARY CREEK MARSH, COASTAL

ABSTRACT:
QUANTITATIVE MEASUREMENTS WERE MADE IN SELECTED AREAS ON THE CANARY CREEK SALT MARSH TO DETERMINE THE QUANTITY OF ANGIOSPERM PLANT MATERIAL PRODUCED DURING THE 1960 GROWING SEASON. THE MARSH WAS FOUND TO PRODUCE 445 GRAMS AT A RATE OF 5.32 GRAMS PER DAY OF DRY WEIGHT PER SQUARE METER.

DATA AVAILABILITY:
PLATFORM TYPES:
FIXED STATION

ARCHIVE MEDIA:
REPORTS
34 PAGES

FUNDING:
UNIVERSITY OF DELAWARE RESEARCH FOUNDATION, INC.

INVENTORY:

PUBLICATIONS:
MARSHA H. MORGAN, 1961 UNPUBLISHED M.S. THESIS

CONTACT:
INTERLIBRARY LOAN 302 738 2236
MORRIS LIBRARY, UNIVERSITY OF DELAWARE
NEWARK DELAWARE USA 19711

GRID LOCATOR (LAT):
7307854170

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PROJECTS:
GENERAL GEOGRAPHIC AREA:
NORTH AMERICA, U.S., DELAWARE, KENT COUNTY, LITTLE CREEK WILDLIFE AREA

ABSTRACT:

DATA AVAILABILITY:
AVAILABLE UPON REQUEST FROM FRANK MURPHY IN THE DEPARTMENT OF ENTOMOLOGY, UNIVERSITY OF DELAWARE

PLATFORM TYPES:
FIXED STATION

ARCHIVE MEDIA:
REPORTS
121 PAGES

FUNDING:
UNIVERSITY OF DELAWARE

INVENTORY:

PUBLICATIONS:

CONTACT:
FRANK MURPHY 302 738 2526
DEPARTMENT OF ENTOMOLOGY
UNIVERSITY OF DELAWARE
NEWARK DELAWARE USA 19711

GRID LOCATOR (LAT):
7307951200

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PROJECTS:

GENERAL GEOGRAPHIC AREA:
NORTH AMERICA, U.S., NORTH CAROLINA, KITTY HAWK BAY

ABSTRACT:
A STUDY OF METABOLISM IN A EURASIAN WATER MILFOIL COMMUNITY. WATER MONITORING INCLUDES DISSOLVED OXYGEN, NITRATE, AMMONIA, NITRITE, AND PHOSPHORUS AT KITTY HAWK BAY, NORTH CAROLINA.

DATA AVAILABILITY:
PLATFORM TYPES:
SHIP

ARCHIVE MEDIA:
REPORTS
THIRTY PAGES

FUNDING:
EAST CAROLINA UNIVERSITY

INVENTORY:

PUBLICATIONS:
HALL, A. 1975. COMMUNITY METABOLISM IN A EURASIAN WATER MILFOIL COMMUNITY. M.S. THESIS

CONTACT:
LIBRARIAN 19 759 6718
EAST CAROLINA UNIVERSITY
DEPARTMENT OF BIOLOGY
GREENVILLE NORTH CAROLINA USA 27834

GRID LOCATOR (LAT): 730766
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**PROJECTS:**

**GENERAL GEOGRAPHIC AREA:**
NORTH AMERICA, U.S., NORTH CAROLINA, CURRITUCK SOUND, ALBEMARLE SOUND

**ABSTRACT:**
A STUDY OF BIOMASS AND POPULATION DENSITY OF A EURASIAN WATER MILFOIL COMMUNITY PRIOR TO AND FOLLOWING 24-D TREATMENT IN CURRITUCK AND ALBEMARLE SOUNDS OF NORTH CAROLINA.

**DATA AVAILABILITY:**

**PLATFORM TYPES:**
SHIP

**ARCHIVE MEDIA:**
REPORTS
THIRTY PAGES

**FUNDING:**
EAST CAROLINA UNIVERSITY

**INVENTORY:**

**PUBLICATIONS:**
GETSINGER, K. 1975. CHANGES IN STRUCTURE AND METABOLISM IN A MYRIOPHYLLUM SPICATUM L. COMMUNITY FOLLOWING 2, 4-D TREATMENT. M.S. THESIS

**CONTACT:**
LIBRARIAN 919 758 6718
EAST CAROLINA UNIVERSITY
DEPARTMENT OF BIOLOGY
GREENVILLE NORTH CAROLINA USA 27834

**GRID LOCATOR (LAT):**
730766

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BIOLOGICAL REPORTS FOR PERMIT APPLICATIONS TO ALTER MARSHLANDS, ESTUARINE BOTTOMS, TIDELANDS, AND STATE-OWNED LAKES OF NORTH CAROLINA

DATA COLLECTED: JANUARY 1970 TO PRESENT

RECEIVED: APRIL 02, 1975

PROJECTS:

GENERAL GEOGRAPHIC AREA:
NORTH AMERICA, U.S., NORTH CAROLINA, COASTAL

ABSTRACT:
BIOLOGICAL REPORTS WHICH DETERMINE EFFECTS OF BUILDING AND DREDGING PROJECTS ON COASTAL MARSH LANDS, ESTUARINE BOTTOMS, TIDELANDS AND STATE-OWNED LAKES OF NORTH CAROLINA. AERIAL PHOTOGRAPHY IS USED TO MONITOR ANY BUILDING OR DREDGING PERMIT VIOLATIONS.

DATA AVAILABILITY:
NO RESTRICTIONS

PLATFORM TYPES:
SHIP; AIRCRAFT

ARCHIVE MEDIA:
REPORTS
ONE 35 PAGE REPORT

FUNDING:

INVENTORY:

PUBLICATIONS:

CONTACT:
JAMES T. BROWN  919 726 7021
NORTH CAROLINA DEPARTMENT OF NATURAL AND ECONOMIC RESOURCES
DIVISION OF COMMERCIAL AND SPORTS FISHERIES P.O. BOX 769
MOOREHEAD CITY NORTH CAROLINA USA 28557

GRID LOCATOR (LAT): 730738 730739 730745 730746 730755 730756 730765

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ANNEX III

Part A

Section 2

Aerial Photographs
Aerial photographs represent the bulk of the existing data files. More than half (75) of the 142 files were initiated prior to January 1, 1973. Of these, only three are pre-1970, including a coastal survey of the United States from 1927 to present, a North Carolina beach erosion study from 1938 to 1971 and a North Carolina coastal survey from 1957 to 1959. All these files are included because they may be useful in detecting historic trends, submerged aquatic vegetation presence and mapping distributions.

A photographic file includes one or more flights or missions which may take from several pictures to several hundred pictures. Most flights originate from NASA's Wallops Island Flight Center, Virginia. Altitudes vary from 250 to 17,500 feet. Most photographs are color (120 files) which give the best characterization of submerged aquatic vegetation. Other files are strictly black and white (6) or infrared (15). Of the two, black and white is better for identifying the subject.

The files are divided as follows:

General - 1 file; coastal survey of the United States.

Delaware - 13 files.

District of Columbia - 22 files; surveys of Dutch Elm Disease, possibly containing valuable information of submerged aquatic vegetation in the upper Potomac River.

Maryland
Shoreline - 10 files; water-land interface including wetlands.

Rivers - 31 files; arranged alphabetically.

Cities - 3 files.

Oceanside - 3 files.

Maryland-Virginia - 15 files; missions flown over both Maryland and Virginia.

North Carolina - 5 files.

Pennsylvania - 1 file.

Virginia
General - 2 files; western shore Chesapeake Bay, Virginia and Virginia wetlands.

Rivers - 18 files; arranged alphabetically.

Bay - 8 files; most concern the area at the head of the Bay.

Oceanside - 10 files.
ANNEX III

Part A

Section 2

"General"
AERIAL PHOTGGRA?HS

0017 67

DATA COLLECTED:

1927 TO PRESENT

FAGE O1
RECEIVED! JANUARY 01, 1976

PROJECTS:
GENER~L GEOGRAPHIC AREA:
NGRTH ATLANTIC OCEAN, NORTH PACIFIC CCEAN, U.S., COASTAL, MAINE, NEW HAMPSHIRE, MASSACHUSETTS, RHODE ISLAND, CONNECTICUT, NEW
Y~RK, NEW JE~SEY, PENNSYLVANIA, DELAWARE, MARYLAND, DISTRICT OF COLUMBIA, VIRGINIA, NORTH CAROLINA, SOUTH CAROLINA, GEORGIA,
FLORIDA, ALABAMA, MISSISSIPPI, LOUISIANA, TEXAS, CALIFORNIA, CREGON, WASHI~GTON, ALAShA, HA~AII
ABSTRACT:
THIS FILE CONTAINS AERIAL PHOTOGRAPHS USED SY THE NATIONAL OCEAN SURVEY IN CONNECTION WITH NAUTICAL AND AERGNAUTICAL CHARTING
PR~GRAMS. PHOTOGRAPHS ARE AVAILABLE FOR ~OST OF THE COASTAL AREAS OF THE U~ITED STATES. AERIAL PHOTOGRAPHS ARE AVAILABLE AS
CONTACT F~INTS, ENLARGEMENTS, FILM POSITIVES, NEGATIVES; SJME COLOR PHOTOGRAPHY IS AVAILABLE FOR SOME REGIONS. SINGLE-LENS
PHJTOGRAPH3 hRE USUALLY TAKEN AT 1:10,000, 1 :20,000, 1:24,000, 1 !30,000 OR 1 :40,000 SCALE. THE SCALES ARE APPROXIMATE DUE TO
SHRI~~AGE DR EXPANSION OF PAPER, UNCERTAINTY IN REPORTED FLIGHT ALTITUDE, TIP AND TILT OF THE AIRCRAFT ANO THE EFFECT OF
GR::::~N:) HE LIEF.
DATA AVATLA~ILITY:
ALL PHOTOGRAPHS AVAILABLE AT COST OF REPRODUCTION. CONTACT PRI~TS $2.00 EACH. ENLARGEMENTS $4.00 TO $8.00. COLOR PHOTOGRAPHS
$7.00 EACH.
PLATFQR;,1 TYPES:
A I RCR.~FT

ARCH I VE f,'.EDI A:
PHOTO PRINTS
ALL PHOTOS AVAILABLE AT COST OF REPRODUCTION. CONTACT PRINTS $3.00 EACH. ENLARGEMENTS $8.00. COLOR PHOTOS $9.00 EACH.
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FUNDING:

j,.;-,

INVENTO~Y:
PUBLICATIONS:

LEA=LET: NATIONAL OCEAN SURVEY - REPRODUCTIONS OF AERIAL PHOTOGRAPHS - AVAILABLE FREE. INDlX OF PHOTOGRAPHY ON 1:250,000 BASE
AVAILABLE AT $0.50 UPON REQUEST.

MA~S

CONTACT:
CHIEF, PHOTO~AP AND IMAGERY INFORMATION SECTION
NATIONAL OCEAN SURVEY
6C01 EXECUTIVE BOULEVARD
ROC.<VILLE
MARYLAND USA 20652

301 496 9t301

GRID LOCATOR ( LAT) :
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720860
731251
741272
711595
721610

74065'7
72. 0795
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741273
71 1594
721529

74064'/
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730738
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73081 0
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721507

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ANNEX III

Part A

Section 2

Delaware
DATA COLLECTED: JULY 1973 TO JULY 1973

PROJECTS:
LANDSAT

GENERAL GEOGRAPHIC AREA:
U.S., COASTAL, NORTH ATLANTIC, DELAWARE BAY

ABSTRACT:
MISSION W21B, FLT 1, JULY 7, 1973, WITH WALLOPS STATION C-54 AIRCRAFT EQUIPPED WITH T-11 AERIAL MAPPING CAMERA AND AN I2S CAMERA SYSTEM IN COOPERATION WITH COLLEGE OF MARINE STUDIES OF UNIV. OF DEL. OBJECTIVE - TO OBTAIN INTERMEDIATE ALTITUDE IMAGERY OF DEL. COASTLINE OF DEL. BAY AND TRANSIENTS OF BAY AT COMANSEY RIVER-BOONBAY HOOK AND AT CAPE MAY-CAPE HENLOPEN. FLIGHT MADE TO COINCIDE WITH ERTS OVERPASS AND IN SUPPORT OF GROUND TRUTH TEAMS TAKING WATER SAMPLES FROM NASA WALLOPS HELICOPTER AND UNIV. OF DEL. POWER BOATS. WEATHER - HAZY, AIR TEMP. 6 DEG. C AT 11,500 FT, MSL WITH WIND OF 14 KNOTS FROM 300 DEG.
(MISSION NO W21B, FLT 1)

DATA AVAILABILITY:

PLATFORM TYPES:
AIRCRAFT

ARCHIVE MEDIA:
PHOTOPRINTS
300 2.7" X 2.7" AND 9" X 9" FRAMES

FUNDING:

INVENTORY:

PUBLICATIONS:

CONTACT:
PAUL ALFONS 804-824-3411
NAVAL AERONAUTICS AND SPACE ADM
CHESAPEAKE BAY ECOLOGICAL PROGRAM OFFICE
WALLOPS ISLAND VIRGINIA USA 23337

GRID LOCATOR (LAT):
730795 730785 730784 730794

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FROM AIRCRAFT
PROJECTS:
LANDSAT

GENERAL GEOGRAPHIC AREA:
U.S., COASTAL, NORTH ATLANTIC, DELAWARE BAY, DELAWARE, NEW CASTLE TO OCEAN CITY

ABSTRACT:
MISSION W160, FLT. 2, WITH WALLOPS STATION C-54 AIRCRAFT EQUIPPED WITH ONE T-11 AERIAL CAMERA ON AUG. 22, 1972, IN COOPERATION WITH COLLEGE OF MARINE SCI., UNIV. OF DEL. ALONG COAST ZONES OF DEL. RIVER AND DEL.-ND. ATLANTIC COASTAL REGIONS. OBJECTIVE - TO USE REMOTELY SENSED FALSE-COLOR IMAGERY TO EVALUATE COASTAL ZONE AQUATIC SPECIES IDENTIFICATION AND DISTRIBUTION IN PREPARATION FOR ERTS OVERPASSES. FLIGHT IN GOOD WEATHER WITH NO OVERCAST, VISIBILITY 10-12 MILES, AIR TEMP. 10 DEG. C AT 11,500 FT., MSL WITH WIND OF 5 KNOTS FROM 310 DEG. (MISSION NO W160, FLT 2)

DATA AVAILABILITY:

PLATFORM TYPES:
AIRCRAFT

ARCHIVE MEDIA:
PHOTOPRINTS
79 9" X 9" FRAMES.

FUNDING:

CONTACT:
P A U L A L F O N S 8 0 4 - 8 2 4 - 3 4 1 1
NATIONAL AERONAUTICS AND SPACE ADM
CHESAPEAKE BAY ECOLOGICAL PROGRAM OFFICE
WALLOPS ISLAND VIRGINIA USA 23337

GRID LOCATOR (LAT):
730795 730785 730784

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<td>6 INCH FOCAL</td>
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**PROJECTS:**

**GENERAL GEOGRAPHIC AREA:**
NORTH AMERICA, U.S., NEW JERSEY, DELAWARE RIVER

**ABSTRACT:**
MISSION W093, FLIGHT01, WAS ACCOMPLISHED ON NOVEMBER 11, 1971, UTILIZING THE WALLOPS FLIGHT CENTER C-54 AIRCRAFT EQUIPPED WITH A T-11 AERIAL MAPPING CAMERA AND AN RS-7 THERMAL INFRARED SCANNER AND A PRT-5 PRECISION RADIATION THERMOMETER. THE FLIGHT WAS MADE IN COOPERATION WITH THE WATERWAYS EXPERIMENT STATION OF THE CORPS OF ENGINEERS AT VICKSBURG, MISSISSIPPI., THE OBJECTIVE OF THE FLIGHT WAS TO DEFINE THE LOCATION AND EXTENT OF THERMAL DISCHARGE PLUMES FROM DEEPWATER, EDDYSTONE, AND BURLINGTON FOSSIL FUEL ELECTRIC GENERATING PLANTS.

**DATA AVAILABILITY:**

**PLATFORM TYPES:**
AIRCRAFT

**ARCHIVE MEDIA:**
PHOTOPRINTS
130 9" X 9" PRINTS

**FUNDING:**
NATIONAL AERONAUTICS AND SPACE ADM

**CONTACT:**
MICHAEL CONGER  804 824 3411
NATIONAL AERONAUTICS AND SPACE ADM
CHESAPEAKE BAY ECOLOGICAL PROGRAM OFFICE
WALLOPS ISLAND VIRGINIA USA 23337

**GRID LOCATOR (LAT):**
74070415 73079555

**PARAMETER IDENTIFICATION SECTION:**

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<td>1 FLIGHT PER LINE</td>
<td>2500 FEET</td>
<td>152 AND FOUR-TENTHS MM FOCAL LENGTH</td>
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PROJECTS:

GENERAL GEOGRAPHIC AREA:
U.S., COASTAL, NORTH ATLANTIC, DELAWARE BAY, DELAWARE RIVER

ABSTRACT:
MISSION W093, FLT. 1, NOV. 11, 1971, WITH WALLOPS STATION C-54 AIRCRAFT EQUIPPED WITH A T-11 AERIAL MAPPING CAMERA, AN RS-7 THERMAL INFRARED SCANNER AND A PRT-5 PRECISION RADIATION THERMOMETER. FLIGHT MADE IN COOPERATION WITH WATERWAYS EXPERIMENT STATION OF CORPS OF ENGINEERS AT VICKSBURG, MISSISSIPPI. OBJECTIVE - TO DEFINE THE LOCATION AND EXTENT OF THERMAL DISCHARGE PLUMES FROM DEEPWATER, EDDYSTONE AND BURLINGTON FOSSIL FUEL ELECTRIC GENERATING PLANTS.

(MISSION NO W093, FLT 1)

DATA AVAILABILITY:

PLATFORM TYPES:
AIRCRAFT

ARCHIVE MEDIA:
PHOTOPRINTS
134 9" X 9" FRAMES AND SCANNER FILM.

FUNDING:

INVENTORY:

PUBLICATIONS:

CONTACT:
PAUL ALFONSI 804-824-3411
NATIONAL AERONAUTICS AND SPACE ADM
CHESAPEAKE BAY ECOLOGICAL PROGRAM OFFICE
WALLOPS ISLAND VIRGINIA USA 23337

GRID LOCATOR (LAT):
730796 740704

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PROJECTS:

GENERAL GEOGRAPHIC AREA:
NORTH AMERICA, U.S., DELAWARE

ABSTRACT:
MISSION W115, FLIGHT 01, WAS ACCOMPLISHED ON MARCH 27, 1972, UTILIZING A WALLOPS FLIGHT CENTER C-54 AIRCRAFT EQUIPPED WITH A T-11 AERIAL MAPPING CAMERA AND A AAD-2 THERMAL IR SCANNER, IN COOPERATION WITH THE U.S. ARMY ENGINEER WATERWAYS EXPERIMENT STATION. THE OBJECTIVE OF THE FLIGHT WAS TO IMAGE TIDAL CHANGES IN THE POSITION, EXTENT, AND INTENSITY OF THERMAL PLUMES EMITTED BY THE DEEPWATER POWER PLANT THROUGHOUT A TIDAL CYCLE. THE IR SCANNER PRINTS DID NOT TAKE.

MISSION W115, FLIGHT 01

DATA AVAILABILITY:

PLATFORM TYPES:
AIRCRAFT

ARCHIVE MEDIA:
PHOTOPRINTS
262 9"x9" PRINTS

FUNDING:
NATIONAL AERONAUTICS AND SPACE ADM

INVENTORY:

CONTACT:
MICHAEL CONGER 804 824 3411
NATIONAL AERONAUTICS AND SPACE ADM
CHESAPEAKE BAY ECOLOGICAL PROGRAM OFFICE
WALLOPS ISLAND VIRGINIA USA 23337

GRID LOCATOR (LAT):
73079655 73079564

PARAMETER IDENTIFICATION SECTION:

PROJECTS:

GENERAL GEOGRAPHIC AREA:
NORTH ATLANTIC, COASTAL, U.S., DELAWARE BAY, DELAWARE BOMBAY HOOK ISLAND

ABSTRACT:
MISSION W029, FLT. 1, OCTOBER 19, 1970, WITH WALLOPS STATION CHARTERED BELL 205 HELICOPTER EQUIPPED WITH A POD OF 4 T-11 AERIAL MAPPING CAMERAS. FLIGHT MADE FOR CHESAPEAKE BAY ECOLOGICAL PROGRAM OFFICE FOR PURPOSE OF OBTAINING BASE LINE REMOTE SENSOR DATA OVER THE BOMBAY HOOK WILDLIFE REFUGE BETWEEN THE SMYRNA RIVER AND LITTLE RIVER ON DELAWARE SHORE OF DELAWARE BAY. FLIGHT IN CLEAR WEATHER, SLIGHT HAZE, AIR TEMP. 0 DEG. C AT 10,000 FT., MSL WITH WIND OF 28 KNOTS FROM 280 DEG. (MISSION NO W029, FLT 1)

DATA AVAILABILITY:
PLATFORM TYPES:
AIRCRAFT

ARCHIVE MEDIA:
PHOTOPRINTS
108 9" X 9" FRAMES

FUNDING:

INVENTORY:

PUBLICATIONS:

CONTACT:
PAUL ALFONSI  804-824-3411
NATIONAL AERONAUTICS AND SPACE ADM
CHESAPEAKE BAY ECOLOGICAL PROGRAM OFFICE
WALLOPS ISLAND  VIRGINIA USA  23337

GRID LOCATOR (LAT):
730795

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BRANDYWINE RIVER POLLUTON STUDY
DATA COLLECTED: JUNE 1973 TO JUNE 1973

RECEIVED: JANUARY 01, 1976

PROJECTS:

GENERAL GEOGRAPHIC AREA:
U.S., COASTAL, NORTH ATLANTIC, DELAWARE BAY, DELAWARE, BRANDYWINE RIVER

ABSTRACT:
MISSION #224, FLT. 1, JUNE 12, 1973, WALLOPS STATION C-54 AIRCRAFT WITH TWO T-11 AERIAL MAPPING CAMERAS IN COOPERATION WITH THE U.S. GEOLOGICAL SURVEY AND CHESTER COUNTY, PENN. HEALTH DEPT. OBJECTIVE - TO PROVIDE SUPPORT TO CHESTER COUNTY HEALTH DEPT. IN LOCATING POSSIBLE SOURCES OF ANIMAL AND/OR HUMAN WASTE MATERIALS IN CHAD'S FORD AREA OF BRANDYWINE RIVER. (MISSION NO W224, FLT 1)

DATA AVAILABILITY:

PLATFORM TYPES:
AIRCRAFT

ARCHIVE MEDIA:
PHOTOPRINTS
72 9" X 9" FRAMES.

FUNDING:

INVENTORY:

PUBLICATIONS:

CONTACT:
PAUL ALFONSI 804-824-3411
NATIONAL AERONAUTICS AND SPACE ADM
CHESAPEAKE BAY ECOLOGICAL PROGRAM OFFICE
WALLOPS ISLAND VIRGINIA USA 23337

GRID LOCATOR (LAT):
730795

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PROJECTS:

GENERAL GEOGRAPHIC AREA:
NORTH ATLANTIC, COASTAL, U.S., DELAWARE BAY, DELAWARE, BRANDYWINE RIVER

ABSTRACT:
MISSION W225, FLT. 1, JULY 5, 1973, WITH WALLOPS STATION HELICOPTER EQUIPPED WITH TWO T-11 AERIAL MAPPING CAMERAS IN COOPERATION WITH CHESTER COUNTY HEALTH DEPT. AND THE U.S. GEOLOGICAL SURVEY. OBJECTIVE - TO OBTAIN LARGE SCALE AERIAL PHOTOGRAPHY OF BRANDYWINE RIVER FROM ITS CONFLUENCE WITH THE DELAWARE RIVER AND INTERSECTION OF PENN. RT. 162 WITH ITS EAST AND WEST BRANCHES. IMAGERY TO BE USED FOR LOCATING POLLUTION OUTFALLS ON RIVER AND FOR LOCATING POSSIBLE DUMPING SITES OF ANIMAL OR HUMAN WASTE. FLIGHT IN SCATTERED CLOUDS, VISIBILITY UP TO 5 MILES, AIR TEMP. 10 DEG. C AT 1250 FT., MSL WITH WIND OF 10 KNOTS FROM 360 DEG.
(MISSION NO W225, FLT 1)

DATA AVAILABILITY:

PLATFORM TYPES: AIRCRAFT

ARCHIVE MEDIA: PHOTOPRINTS
490 9" X 9" FRAMES

FUNDING:

INVENTORY:

PUBLICATIONS:

CONTACT:
PAUL ALFONSI 804-824-3411
NATIONAL AERONAUTICS AND SPACE ADM
CHESAPEAKE BAY ECOLOGICAL PROGRAM OFFICE
WALLOPS ISLAND VIRGINIA USA 23337

GRID LOCATOR (LAT): 730795

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304 OBS AT 152 MM FOCAL
600 FT, 186 LENGTH
OBS AT 1250 FT
PROJECTS:

GENERAL GEOGRAPHIC AREA:
U.S., COASTAL, NORTH ATLANTIC, DELAWARE BAY, NEW JERSEY, REHOBOTH

ABSTRACT:
MISSION W128, FLT. 1, WAS ACCOMPLISHED MAY 26, 1972, WITH WALLOPS STATION C-54 AIRCRAFT EQUIPPED WITH TWO T-11 AERIAL CAMERAS, IN COOPERATION WITH U.S. FISH AND WILDLIFE SERVICE. OBJECTIVE - TO DETERMINE THE FEASIBILITY OF DISTINGUISHING VARIOUS TYPES OF MARSH GRASSES FROM INTERPRETING INFRARED AERIAL FILM. FLIGHT IN CLEAR WEATHER, AIR TEMP. 10 DEG. C AT 4,500 FT., MSL WITH WIND OF 20 KNOTS FROM 040 DEG.

DATA AVAILABILITY:

PLATFORM TYPES:
AIRCRAFT

ARCHIVE MEDIA:
PHOTOPRINTS
237 70MM B/W FRAMES.

FUNDING:

INVENTORY:

CONTACT:
PAUL ALFONSI 804-824-3411
NATIONAL AERONAUTICS AND SPACE ADM
CHESAPEAKE BAY ECOLOGICAL PROGRAM OFFICE
WALLOPS ISLAND VIRGINIA USA 23337

GRID LOCATOR (LAT):
730785

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MISSION W258, FLIGHT 01 WAS ACCOMPLISHED ON 10 DECEMBER, 1974. THE OBJECTIVE OF THE FLIGHT WAS TO STUDY WAVE PATTERNS IN THE INDIAN RIVER INLET AND BETHANY BEACH AREAS OF THE DELAWARE COAST.

DATA AVAILABILITY:

PLATFORM TYPES:
AIRCRAFT

ARCHIVE MEDIA:
PHOTOPRINTS
61 PHOTOPRINTS

FUNDING:
NASA

INVENTORY:

CONTACT:
C. WHITLOCK  804 824 3411
NATIONAL AERONAUTICS AND SPACE ADMINISTRATION
CHESAPEAKE BAY ECOLOGICAL PROGRAM OFFICE
WALLOPS ISLAND VIRGINIA USA 23337

GRID LOCATOR (LAT):
730775

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MISSION W244, FLIGHT 01, WAS ACCOMPLISHED ON OCTOBER 15, 1973, UTILIZING THE WALLOPS FLIGHT CENTER C-54 AIRCRAFT EQUIPPED WITH TWO T-1A AERIAL MAPPING CAMERAS IN COOPERATION WITH THE COLLEGE OF MARINE STUDIES OF THE UNIVERSITY OF DELAWARE. THE OBJECTIVE OF THE FLIGHT WAS TO OBTAIN COLOR AND FALSE COLOR INFRARED PHOTOGRAPHY OF THE DELAWARE WETLANDS SURROUNDING REHOBETH AND INDIAN RIVER BAYS. THIS IMAGERY WILL BE USED IN MAPPING SPECIES, LOCATION AND EXTENT OF WETLAND VEGETATION IN THESE BAY AREAS.

MISSION W244, FLIGHT 01

DATA AVAILABILITY:

PLATFORM TYPES:
AIRCRAFT

ARCHIVE MEDIA:
PHOTOPRINTS
266, 9"X9" PRINTS

FUNDING:
NATIONAL AERONAUTICS AND SPACE ADM

INVENTORY:

CONTACT:
MICHAEL CONGER 804 824 3411
NATIONAL AERONAUTICS AND SPACE ADM
CHESAPEAKE BAY ECOLOGICAL PROGRAM OFFICE
WALLOPS ISLAND VIRGINIA USA 23337

GRID LOCATOR (LAT):
73078551 73078541 73078531

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152 AND FOUR-TENTHS MM FOCAL LENGTH
152 AND FOUR-TENTHS MM FOCAL LENGTH
PROJECTS:

GENERAL GEOGRAPHIC AREA:
U.S., COASTAL, NORTH ATLANTIC, DELAWARE BAY, DELAWARE, REHOBOTH AND INDIAN RIVER

ABSTRACT:
MISSION W160, FLT. 1 WITH WALLOPS STATION C54 AIRCRAFT EQUIPPED WITH ONE T-11 AERIAL CAMERA ON AUG. 22, 1972, IN COOPERATION WITH DEPT. OF INTERIOR, U. S. FISH AND WILDLIFE SERVICE IN REHOBOTH AND INDIAN RIVER, DEL. AREA. OBJECTIVE - TO USE REMOTELY SENSED FALSE-COLOR IMAGERY TO EVALUATE CULTURAL MODIFICATIONS OF TIDAL MARSHLANDS AND DEVELOP ENVIRONMENTAL IMPACT ANALYSIS OF THIS PORTION OF THE DEL. COASTAL ZONE ENVIRONMENT. FLIGHT IN GOOD WEATHER, NO OVERCAST, LIGHT HAZE, AIR TEMP. 18 DEG. C AT 3500 FT., MSL WIND OF 16 KNOTS FROM 310 DEG.

MISSION NO W160, FLT 1

DATA AVAILABILITY:

PLATFORM TYPES:
AIRCRAFT

ARCHIVE MEDIA:
PHOTOPRINTS
91 9" X 9" FRAMES.

FUNDING:

CONTACT:
PAUL ALFONSI 804-824-3411
NATIONAL AERONAUTICS AND SPACE ADM
CHESAPEAKE BAY ECOLOGICAL PROGRAM OFFICE
WALLOPS ISLAND VIRGINIA USA 23337

GRID LOCATOR (LAT):
730785

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From Aircraft
**PROJECTS:**

**GENERAL GEOGRAPHIC AREA:**
NORTH ATLANTIC, COASTAL, U.S., DELAWARE, MARYLAND

**ABSTRACT:**
MISSION W229, FLIGHT 02, WAS ACCOMPLISHED ON AUGUST 17, 1973, UTILIZING THE WALLOPS STATION C54 AIRCRAFT EQUIPPED WITH A T-11 AERIAL MAPPING CAMERA AND A HELIUM NEON LASER IN COOPERATION WITH THE NASA Langley Research Center AND THE College OF Marine Studies AT THE UNIVERSITY OF DELAWARE. THE OBJECTIVE OF THE FLIGHT WAS TO OBTAIN AERIAL PHOTOGRAPHY AND LASER PROFILES OF WAVES APPROACHING INDIAN RIVER BAY, DELAWARE FROM A DISTANCE OF 50 MILES OFF SHORE UP TO THE INDIAN RIVER INLET. (MISSION W229, FLIGHT 02)

**DATA AVAILABILITY:**

**PLATFORM TYPES:**
AIRCRAFT

**ARCHIVE MEDIA:**
PHOTOPRINTS
45, 9"X9" PRINTS

**FUNDING:**

**INVENTORY:**

**PUBLICATIONS:**

**CONTACT:**
MICHAEL CONGER 804 624 3411
NATIONAL AERONAUTICS AND SPACE ADMINISTRATION
CHESAPEAKE BAY ECOLOGICAL PROGRAM OFFICE
WALLOPS ISLAND VIRGINIA USA 23337

**GRID LOCATOR (LAT):**
73078541 73078542 73078543 73078544 73078545 73078520

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ANNEX III

Part A

Section 2

District of Columbia
PROJECTS:

GENERAL GEOGRAPHIC AREA:
NORTH AMERICA, U.S., WASHINGTON, D.C.

ABSTRACT:
MISSION W286, FLIGHT 01, WAS ACCOMPLISHED ON SEPTEMBER 19, 1974, UTILIZING THE WALLOPS FLIGHT STATION C-54 AIRCRAFT EQUIPPED WITH AN I2S "B" MULTISPECTRAL CAMERA AND A T-11 AERIAL MAPPING CAMERA IN COOPERATION WITH THE ECOCLOGICAL SERVICES LABORATORY OF THE NATIONAL CAPITAL PARKS SERVICE. THIS WAS ONE OF A SERIES OF REMOTE SENSING FLIGHTS MADE OVER THE POTOMAC PARK AND TIDAL BASIN IN WASHINGTON, D.C. THE PURPOSE OF THE FLIGHT IS TO COMPILE A PERMANENT RECORD OF THE VARIOUS STAGES THAT ELM TREES GO THROUGH WHEN UNDERGOING DUTCH ELM DISEASE INFESTATION.

MISSION W286, FLIGHT 01

DATA AVAILABILITY:

PLATFORM TYPES:
AIRCRAFT

ARCHIVE MEDIA:
PHOTOPRINTS
296 70MM PRINTS; 152 9"X9" PRINTS

FUNDING:
NATIONAL AERONAUTICS AND SPACE ADM

INVENTORY:

PUBLICATIONS:

CONTACT:
MICHAEL CONGER 804 824 3411
NATIONAL AERONAUTICS AND SPACE ADM
CHESAPEAKE BAY ECOLOGICAL PROGRAM OFFICE
WALLOPS ISLAND VIRGINIA USA 23337

GRID LOCATOR (LAT):
73078750

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PROJECTS:

GENERAL GEOGRAPHIC AREA:
NORTH AMERICA, U.S., WASHINGTON, D.C.

ABSTRACT:
MISSION W285, FLIGHT 01, WAS ACCOMPLISHED ON AUGUST 29, 1974, UTILIZING THE WALLOPS STATION C-54 AIRCRAFT EQUIPPED WITH AN I2S "B" MULTISPECTRAL CAMERA SYSTEM AND A T-11 AERIAL MAPPING CAMERA, IN COOPERATION WITH THE ECOLOGICAL SERVICES LABORATORY OF THE NATIONAL CAPITOL PARKS SERVICE. THIS WAS ONE FLIGHT OF AN ON-GOING REMOTE SENSING PROGRAM DESIGNED TO STUDY THE DETECTION AND EFFECTS OF THE DUTCH ELM DISEASE ON ELM TREES IN THE POTOMAC PARK AREA OF WASHINGTON, D.C. (MISSION W285, FLIGHT 01)

DATA AVAILABILITY:
PLATFORM TYPES:
AIRCRAFT

ARCHIVE MEDIA:
PHOTOPRINTS
316 70MM PRINTS; 82 9"X9" PRINTS

FUNDING:
NATIONAL AERONAUTICS AND SPACE ADM

INVENTORY:

PUBLICATIONS:

CONTACT:
MICHAEL CONGER 804 824 3411
NATIONAL AERONAUTICS AND SPACE ADM
CHESAPEAKE BAY ECOLOGICAL PROGRAM OFFICE
WALLOPS ISLAND VIRGINIA USA 23337

GRID LOCATOR (LAT):
73078750

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PROJECTS:

GENERAL GEOGRAPHIC AREA:
NORTH AMERICA, U.S., WASHINGTON, D.C.

ABSTRACT:
MISSION W284, FLIGHT 01, WAS ACCOMPLISHED ON AUGUST 12, 1974, UTILIZING THE WALLOPS FLIGHT CENTER BELL UH1H HELICOPTER EQUIPPED WITH AN 125 "B" MULTISPECTRAL CAMERA SYSTEM AND THREE T-11 AERIAL MAPPING CAMERAS IN COOPERATION WITH THE ECOLOGICAL SERVICES LABORATORY OF THE CAPITAL PARK SERVICE. THE OBJECTIVE OF THE FLIGHT WAS TO OBTAIN LARGE SCALE IMAGERY OF ELM TREES THAT HAVE BEEN INNOCULATED WITH A DUTCH ELM DISEASE AGENT. THESE IMAGES WILL BE STUDIED WITH PREVIOUS FILM AND LATER PHOTOS IN AN EFFORT TO TRACE THE COURSE OF THE DISEASE BY REMOTE SENSING TECHNIQUES.

DATA AVAILABILITY:
PLATFORM TYPES:
ARCHIVE MEDIA:
FUNDING:
INVENTORY:
PUBLICATIONS:
CONTACT:

GRID LOCATOR (LAT):
73078750

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DUTCH ELM DISEASE STUDY—WASHINGTON, D.C.

DATA COLLECTED: JULY 1974 TO JULY 1974

PROJECTS:

GENERAL GEOGRAPHIC AREA:

NORTH AMERICA, U.S., WASHINGTON, D.C.

ABSTRACT:

(MISSION W283, FLIGHT 01)

DATA AVAILABILITY:

PLATFORM TYPES:

AIRCRAFT

ARCHIVE MEDIA:

PHOTOPRINTS

64 70MM PRINTS; 32 9"X9" PRINTS

FUNDING:

NATIONAL AERONAUTICS AND SPACE ADM

INVENTORY:

PUBLICATIONS:

CONTACT:

MICHAEL CONGER 804 824 3411
NATIONAL AERONAUTICS AND SPACE ADM
CHESAPEAKE BAY ECOLOGICAL PROGRAM OFFICE
WALLOPS ISLAND VIRGINIA USA 23337

GRID LOCATOR (LAT):

73078750

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RECEIVED: MARCH 07, 1977
MISSION W282, FLIGHT 01, WAS ACCOMPLISHED ON JULY 22, 1974, UTILIZING THE WALLOPS FLIGHT CENTER C-54 AIRCRAFT EQUIPPED WITH THREE T-11 AERIAL CAMERAS AND AN I2S "B" MULTISPECTRAL CAMERA SYSTEM. THE OBJECTIVE OF THE FLIGHT WAS TO OBTAIN MULTIBAND PHOTOGRAPHIC IMAGERY OF A GROUP OF AMERICAN ELM TREES ON DANGERFIELD ISLAND THAT HAVE HAD A DUTCH ELM DISEASE INOCULATION.

DATA AVAILABILITY:

PLATFORM TYPES:
AIRCRAFT

ARCHIVE MEDIA:
PHOTOPRINTS
5GB 94MM PRINTS; 387 9"X9" PRINTS

FUNDING:
NATIONAL AERONAUTICS AND SPACE ADM

INVENTORY:

CONTACT:
MICHAEL CONGER 804 824 3411
NATIONAL AERONAUTICS AND SPACE ADM
CHESAPEAKE BAY ECOLOGICAL PROGRAM OFFICE
WALLOPS ISLAND VIRGINIA USA 23337

GRID LOCATOR (LAT):
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PROJECTS:

GENERAL GEOGRAPHIC AREA:
NORTH AMERICA, U.S., WASHINGTON, D.C.

ABSTRACT:
MISSION W281, FLIGHT 01, WAS ACCOMPLISHED ON JULY 12, 1974, UTILIZING THE WALLOPS FLIGHT CENTER C-54 AIRCRAFT EQUIPPED WITH AN 125 "B" MULTISPECTRAL CAMERA AND TWO T-11 AERIAL MAPPING CAMERAS IN COOPERATION WITH THE ECOLOGICAL SERVICES LABORATORY OF THE CAPITOL PARKS SERVICE. THE OBJECTIVE OF THE FLIGHT WAS TO OBTAIN MULTISPECTRAL IMAGERY OF ELM TREES IN WASHINGTON D.C. AND GREAT FALLS, AND POTOMAC RIVER AREAS.

DATA AVAILABILITY:

PLATFORM TYPES:
AIRCRAFT

ARCHIVE MEDIA:
PHOTOPRINTS
577 70MM PRINTS; 342 9"X9" PRINTS

FUNDING:
NATIONAL AERONAUTICS AND SPACE ADM

INVENTORY:

PUBLICATIONS:

CONTACT:
MICHAEL CONGER 804 824 3411
NATIONAL AERONAUTICS AND SPACE ADM
CHESAPEAKE BAY ECOLOGICAL PROGRAM OFFICE
WALLOPS ISLAND VIRGINIA USA 23337

GRID LOCATOR (LAT):
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**PROJECTS:**

**GENERAL GEOGRAPHIC AREA:**

NORTH AMERICA, U.S., WASHINGTON, D.C.

**ABSTRACT:**

MISSION W280, FLIGHT 01, WAS ACCOMPLISHED ON JULY 3, 1974, UTILIZING THE WALLOPS FLIGHT CENTER 424 HELICOPTER EQUIPPED WITH AN 125 "B" CAMERA SYSTEM, AND THREE T-11 AERIAL MAPPING CAMERAS IN COOPERATION WITH THE ECOLOGICAL SERVICES LABORATORY OF THE CAPITOL PARKS SERVICE. THE OBJECTIVE OF THE FLIGHT WAS TO OBTAIN EARLY FOLIAGE IMAGERY OF THE ELM TREES ON DANGERFIELD ISLAND. (MISSION W280, FLIGHT 01)

**DATA AVAILABILITY:**

**PLATFORM TYPES:**

AIRCRAFT

**ARCHIVE MEDIA:**

PHOTOPRINTS

60 70MM PRINTS; 45 9"X9" PRINTS

**FUNDING:**

NATIONAL AERONAUTICS AND SPACE ADM

**INVENTORY:**

**PUBLICATIONS:**

CONTACT:

MICHAEL CONGER 804 824 3411
NATIONAL AERONAUTICS AND SPACE ADM
CHESAPEAKE BAY ECOLOGICAL PROGRAM OFFICE
WALLOPS ISLAND VIRGINIA USA 23337

**GRID LOCATOR (LAT):**

73078750

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**PROJECTS:**

**GENERAL GEOGRAPHIC AREA:**
NORTH AMERICA, U.S., WASHINGTON, D.C.

**ABSTRACT:**
MISSION W277, FLIGHT 01, WAS ACCOMPLISHED ON JUNE 6, 1974, UTILIZING THE WALLEYE FLIGHT CENTER C-54 EQUIPPED WITH AN I26 "B" CAMERA SYSTEM AND A T-11 AERIAL MAPPING CAMERA IN COOPERATION WITH THE ECOLOGICAL SERVICES LABORATORY OF THE CAPITOL PARKS SERVICE. THE OBJECTIVE OF THE FLIGHT WAS TO OBTAIN EARLY FOLIAGE IMAGERY OF ELM TREES ON EAST AND WEST POTOMAC PARK, THEODORE ROOSEVELT ISLAND, AND DANGERFIELD ISLAND.
(MISSION W277, FLIGHT 01)

**DATA AVAILABILITY:**

**PLATFORM TYPES:**
AIRCRAFT

**ARCHIVE MEDIA:**
PHOTOPRINTS
280 7OMM PRINTS; 72 9"X9" PRINTS

**FUNDING:**
NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

**INVENTORY:**

**PUBLICATIONS:**

**CONTACT:**
MICHAEL CONGER 604 824 3411
NATIONAL AERONAUTICS AND SPACE ADMINISTRATION
CHESAPEAKE BAY ECOLOGICAL PROGRAM OFFICE
WALLOPS ISLAND VIRGINIA USA 23337

**GRID LOCATOR (LAT):**
73078750

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PROJECTS:

GENERAL GEOGRAPHIC AREA:
NORTH AMERICA, U.S., WASHINGTON, D.C.

ABSTRACT:
MISSION W292, FLIGHT 01 WAS ACCOMPLISHED ON JUNE 19, 1974, UTILIZING THE WALLOPS STATION C-54 AIRCRAFT EQUIPPED WITH A T-11 AERIAL MAPPING CAMERA AND AN 125 "B" MULTILENS MAPPING SYSTEM IN COOPERATION WITH THE ECOLOGICAL SERVICES LABORATORY OF THE CAPITAL PARKS SERVICE. THE OBJECTIVE OF THE FLIGHT WAS TO OBTAIN PHOTOGRAPHIC IMAGERY OF HEALTHY AND INFECTED ELM TREES IN THE EAST AND WEST POTOMAC PARK AREAS OF WASHINGTON, D.C.
(MISSION W292, FLIGHT 01)

DATA AVAILABILITY:

PLATFORM TYPES:
AIRCRAFT

ARCHIVE MEDIA:
PHOTOPRINTS
320 70MM PRINTS, 80 9"X9" PRINTS

FUNDING:
NATIONAL AERONAUTICS AND SPACE ADM

INVENTORY:

PUBLICATIONS:

CONTACT:
MICHAEL CONGER 804 824 3411
NATIONAL AERONAUTICS AND SPACE ADM
CHESAPEAKE BAY ECOLOGICAL PROGRAM OFFICE
WALLOPS ISLAND VIRGINIA USA 23337

GRID LOCATOR (LAT):
73078753

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PROJECTS:

GENERAL GEOGRAPHIC AREA:
U.S., COASTAL, NORTH ATLANTIC, CHESAPEAKE BAY, WASHINGTON, D.C.

ABSTRACT:
MISSION W171, FLT. 1, WITH WALLOPS STATION C-54 AIRCRAFT EQUIPPED WITH ONE T-11 AERIAL CAMERA AND 4 HASSELBLAD CAMERAS ON OCTOBER 3, 1972, AS CONTINUING EFFORTS OF MISSION W166 AND W168 IN COOPERATION WITH DEPT. OF INTERIOR, U. S. PARK SERVICE IN WASHINGTON, D.C. OBJECTIVE - TO COLLECT NATURAL COLOR AND MULTI-CHANNEL BLACK AND WHITE REMOTE IMAGERY TO DEVELOP IMAGE COMPOSITES AND ENHANCEMENT TECHNIQUES TO AID IN DISTINGUISHING EARLY STAGES OF LOSS OF PLANT LEAF VIGOR AS RESULT OF DUTCH ELM INFESTATION. FLIGHT, CLEAR WEATHER, VISIBILITY 10-15 MILES, AIR TEMP. 20 DEG. C AT 1500 FT. MSL WITH WIND OF 12 KNOTS FROM 070 DEG.

DATA AVAILABILITY:
PLATFORM TYPES:
AIRCRAFT

ARCHIVE MEDIA:
PHOTOPRINTS
245 9" X 9" AND 70-MM FRAMES.

FUNDING:

INVENTORY:

PUBLICATIONS:

CONTACT:
PAUL ALFONSI 604-824-3411
NATIONAL AERONAUTICS AND SPACE ADM
CHESAPEAKE BAY ECOLOGICAL PROGRAM OFFICE
WALLOPS ISLAND VIRGINIA USA 23337

GRID LOCATOR (LAT):
730787

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PROJECTS:

GENERAL GEOGRAPHIC AREA:
U.S., COASTAL, NORTH ATLANTIC, CHESAPEAKE BAY, WASHINGTON, D C

ABSTRACT:
MISSION W166, FLT. 1 WITH WALLOPS STATION C-54 AIRCRAFT EQUIPPED WITH ONE T-11 AERIAL CAMERA AND ONE FOUR-CHANNEL I2S CAMERA SYSTEM ON AUG. 23, 1972, IN COOPERATION WITH DEPT. OF INTERIOR, U.S. PARK SERVICE IN WASHINGTON, D.C. AREA AND CALIBRATION RUN OVER CALIBRATION TARGETS AT WALLOPS STATION, VA. OBJECTIVE - TO USE MULTI-CHANNEL BLACK AND WHITE AND FALSE-COLOR REMOTE IMAGERY TO INVESTIGATE DUTCH ELM DISEASE IN VARYING LEVELS OF INFESTATION AND DEVELOP TECHNIQUES FOR EARLY SYMPTOM WARNINGS. FLIGHT IN CLEAR WEATHER, MODERATE HAZE. AIR TEMP. 20 DEG. C AT 1500 FT., MSL WITH WIND OF 5 KNOTS FROM 230 DEG. (MISSION NO W166, FLT 1)

DATA AVAILABILITY:

PLATFORM TYPES:
AIRCRAFT

ARCHIVE MEDIA:
PHOTOPRINTS
42 9" X 9" FRAMES.

FUNDING:

INVENTORY:

CONTACT:
PAUL ALFONSI 804-824-3411
NATIONAL AERONAUTICS AND SPACE ADMINISTRATION CHESAPEAKE BAY ECOLOGICAL PROGRAM OFFICE WALLOPS ISLAND VIRGINIA USA 23337

GRID LOCATOR (LAT):
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<td>41 OBS AT 1500 FT, 1 OBS AT 500 FT</td>
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PROJECTS:

GENERAL GEOGRAPHIC AREA:
U.S., COASTAL, NORTH ATLANTIC, CHESAPEAKE BAY, WASHINGTON, D C

ABSTRACT:
MISSION W236, FLT. 1, AUGUST 8, 1973, WITH WALLOPS STATION C-54 AIRCRAFT EQUIPPED WITH TWO T-11 AERIAL MAPPING CAMERAS, IN COOPERATION WITH ECOLOGICAL SERVICE LAB. OF NATIONAL CAPITAL PARKS SERVICE. ONE OF A SERIES OF FLIGHTS MADE OVER EAST AND WEST POTOMAC PARKS FOR PURPOSE OF RECORDING SPECTRAL DIFFERENCES BETWEEN HEALTHY AND DISEASED ELM TREES THROUGHOUT A COMPLETE GROWTH CYCLE. FLIGHT MADE IN HAZE WEATHER, VISIBILITY 5-7 MILES, AIR TEMP. +24 DEG. C AT 1,500 FT., MSL WITH WIND OF 10 KNOTS FROM 170 DEG. (MISSION NO W236, FLT 1)

DATA AVAILABILITY:

PLATFORM TYPES:
AIRCRAFT

ARCHIVE MEDIA:
PHOTOPRINTS
150 9" X 9" FRAMES.

FUNDING:

INVENTORY:

PUBLICATIONS:

CONTACT:
PAUL ALFONSI 804-824-3411
NATIONAL AERONAUTICS AND SPACE ADM
CHESAPEAKE BAY ECOLOGICAL PROGRAM OFFICE
WALLOPS ISLAND VIRGINIA USA 23337

GRID LOCATOR (LAT):
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<td>152 MM FOCAL LENGTH</td>
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PROJECTS:

GENERAL GEOGRAPHIC AREA:
NORTH ATLANTIC, COASTAL, U.S., CHESAPEAKE BAY, WASHINGTON, D.C.

ABSTRACT:
MISSION W241, FLT. 1. ACCOMPLISHED ON AUG. 23, 1973, WITH WALLOPS STATION C-54 AIRCRAFT EQUIPPED WITH TWO T-11 AERIAL MAPPING CAMERAS IN COOPERATION WITH ECOLOGICAL SERVICES LAB. OF NATIONAL CAPITAL PARKS SERVICE. ONE OF A SERIES OF FLIGHTS TAKEN OVER EAST AND WEST POTOMAC PARK AREAS OF WASHINGTON, D.C. FLIGHTS RECORD INCIDENCE AND SPREAD OF DUTCH ELM DISEASE IN PARK. FLIGHT IN SCATTERED WEATHER CONDITIONS. VISIBILITY 8-10 MILES, AIR TEMP. +18 DEG. C AT 1,500 FT., MSL WITH WIND OF 9 KNOTS FROM 330 DEG.
(MISSION NO W241, FLT 1)

DATA AVAILABILITY:

PLATFORM TYPES:
AIRCRAFT

ARCHIVE MEDIA:
PHOTOPRINTS
122 9" X 9" FRAMES

FUNDING:

INVENTORY:

PUBLICATIONS:

CONTACT:
PAUL ALFONSI 804-824-3411
NATIONAL AERONAUTICS AND SPACE ADM
CHESAPEAKE BAY ECOLOGICAL PROGRAM OFFICE
WALLOPS ISLAND VIRGINIA USA 23337

GRID LOCATOR (LAT):
730787

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DUTCH ELM DISEASE STUDY

DATA COLLECTED: JUNE 1973 TO JUNE 1973

PROJECTS:

GENERAL GEOGRAPHIC AREA:
NORTH ATLANTIC, COASTAL, U.S., CHESAPEAKE BAY, WASHINGTON, D.C.

ABSTRACT:
MISSION W216, FLT. 1, JUNE 4, 1973, WITH WALLOPS STATION C-54 AIRCRAFT EQUIPPED WITH TWO T-11 AERIAL MAPPING CAMERAS IN COOPERATION WITH ECOLOGICAL SERVICES LAB. OF NATIONAL CAPITAL PARK SERVICE. OBJECTIVE - TO OBTAIN NARROW BAND SPECTRAL DATA OF HEALTHY AND DISEASED ELM TREES IN TIDAL BASIN AND WEST POTOMAC PARK AREAS OF WASHINGTON, D.C. FLIGHT IN CLEAR WEATHER WITH MODERATE HAZE, AIR TEMP. +20 DEG. C AT 1500 FT., MSL WITH WIND OF 15 KNOTS FROM 138 DEG. (MISSION NO W216, FLT 1)

DATA AVAILABILITY:

PLATFORM TYPES:
AIRCRAFT

ARCHIVE MEDIA:
PHOTOPRINTS
120 9" X 9" FRAMES

FUNDING:

INVENTORY:

PUBLICATIONS:

CONTACT:
PAUL ALFONSI  804-824-3411
NATIONAL AERONAUTICS AND SPACE ADM
CHESAPEAKE BAY ECOLOGICAL PROGRAM OFFICE
WALLOPS ISLAND VIRGINIA USA 23337

GRID LOCATOR (LAT):
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CONTACT:
PAUL ALFONSI  804-824-3411
NATIONAL AERONAUTICS AND SPACE ADM
CHESAPEAKE BAY ECOLOGICAL PROGRAM OFFICE
WALLOPS ISLAND VIRGINIA USA 23337
PROJECTS:

GENERAL GEOGRAPHIC AREA:
NORTH ATLANTIC, COASTAL, U.S., CHESAPEAKE BAY, WASHINGTON, D.C.

ABSTRACT:
MISSION W219, FLT. 1, JUNE 11, 1973, WITH WALLOPS STATION C-54 AIRCRAFT EQUIPPED WITH TWO T-11 AERIAL MAPPING CAMERAS IN COOPERATION WITH ECOLOGICAL SERVICES LAB. OF NATIONAL CAPITAL PARK SERVICE. OBJECTIVE - TO OBTAIN CONTRASTING IMAGERY, BY USE OF PRE-DETERMINED LENS/FILTER COMBINATIONS, OF HEALTHY VS. DISEASED ELM TREES IN EAST POTOMAC PARK AND WEST POTOMAC PARK AREAS.

MISSION NO W219, FLT 1)

DATA AVAILABILITY:

PLATFORM TYPES:
AIRCRAFT

ARCHIVE MEDIA:
PHOTOPRINTS
110 9" X 9" FRAMES

FUNDING:

INVENTORY:

CONTACT:
PAUL ALFONSI 804-824-3411
NATIONAL AERONAUTICS AND SPACE AGENCY
CHESAPEAKE BAY ECOLOGICAL PROGRAM OFFICE
WALLOPS ISLAND VIRGINIA USA 23337

GRID LOCATOR (LAT): 730787

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DUTCH ELM DISEASE STUDY
DATA COLLECTED: JUNE 1973 TO JUNE 1973
RECEIVED: JANUARY 01, 1976

PROJECTS:

GENERAL GEOGRAPHIC AREA:
NORTH ATLANTIC, COASTAL, U.S., CHESAPEAKE BAY, WASHINGTON, D.C.

ABSTRACT:
MISSION W221, FLT. 1, JULY 6, 1973, WITH WALLOPS STATION C-54 AIRCRAFT EQUIPPED WITH TWO T-11 AERIAL MAPPING CAMERAS IN COOPERATION WITH ECOLOGICAL SERVICES LAB. OF NATIONAL CAPITAL PARK SERVICE. ONE OF A SERIES OF FLIGHTS BEING MADE OVER EAST AND WEST POTOMAC PARK AREAS IN WASHINGTON, D.C. OBJECTIVE - TO ACCENTUATE SPECTRAL DIFFERENCES OF REFLECTED LIGHT FROM THE SICK AND HEALTHY TREES BY USE OF PRE-DETERMINED LENS/FILTER COMBINATIONS. FLIGHT IN CLOUDY WEATHER, VISIBILITY 7-10 MILES, AIR TEMP. 20 DEG. C AT 1500 FT., MSL WITH WIND OF 15 KNOTS FROM 350 DEG. (MISSION NO W221, FLT 1)

DATA AVAILABILITY:
PLATFORM TYPES:
ARCHIVE MEDIA:
PHOTOPRINTS
114 9" X 9" FRAMES

FUNDING:
INVENTORY:

PUBLICATIONS:

CONTACT:
PAUL ALFONSI 804-824-3411
NATIONAL AERONAUTICS AND SPACE ADM
CHESAPEAKE BAY ECOLOGICAL PROGRAM OFFICE
WALLOPS ISLAND VIRGINIA USA 23337

GRID LOCATOR (LAT):
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<td>OBS</td>
<td>1500 FT</td>
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PROJECTS:

GENERAL GEOGRAPHIC AREA:
U.S., COASTAL, NORTH ATLANTIC, WASHINGTON, D.C.

ABSTRACT:
MISSION W207, FLIGHT 1, MAY 10, 1973, WITH WALLOPS STATION C-54 AIRCRAFT EQUIPPED WITH 2 T-11 AERIAL MAPPING CAMERAS IN COOPERATION WITH NATIONAL PARK SERVICE. OBJECTIVE - TO OBTAIN EARLY SPRING IMAGERY OF ELM TREES AROUND TIDAL BASIN AND WEST POTOMAC PARK IN WASHINGTON, D.C. IMAGERY IS TO BE USED IN STUDY OF EARLY IDENTIFICATION OF DUTCH ELM DISEASED TREES USING REMOTE SENSOR DATA IN CONJUNCTION WITH GROUND TRUTH SPECTRAL DATA. WEATHER - CLEAR, VISIBILITY 6 MILES.

MISSION NO W207, FLT 1)

DATA AVAILABILITY:

PLATFORM TYPES:
AIRCRAFT

ARCHIVE MEDIA:
PHOTOPRINTS
100 9" X 9" FRAMES

FUNDING:

INVENTORY:

PUBLICATIONS:

CONTACT:
PAUL ALFONSI 804-824-3411
NATIONAL AERONAUTICS AND SPACE ADM
CHESAPEAKE BAY ECOLOGICAL PROGRAM OFFICE
WALLOPS ISLAND VIRGINIA USA 23337

GRID LOCATOR (LAT):
730797

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**PROJECTS:**

**GENERAL GEOGRAPHIC AREA:**
North Atlantic, Coastal, U.S., Chesapeake Bay, Washington, D.C.

**ABSTRACT:**
Mission W159, Flt. 1, August 16, 1972, with Wallops Station C-54 Aircraft equipped with two T-11 aerial cameras in cooperation with the Dept. of Interior, U.S. Park Service in Washington, D.C. area. Objective - to use specially selected filter-film combinations to identify and inventory diseased Dutch elm trees and attempt to evaluate the toxicity of automotive exhaust fumes on Dutch elm leaf. Flight in clear weather with few scattered clouds, Air Temp. 16 Deg. C at 1500 ft., MSL with wind of 12 knots from 090 Deg. (Mission No W159, Flt 1)

**DATA AVAILABILITY:**

**PLATFORM TYPES:**
AIRCRAFT

**ARCHIVE MEDIA:**
PHOTOPRINTS
104 9" X 9" FRAMES

**GRID LOCATOR (LAT):**
730787

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PROJECTS:

GENERAL GEOGRAPHIC AREA:
U.S., COASTAL, NORTH ATLANTIC, CHESAPEAKE BAY, WASHINGTON, D.C.

ABSTRACT:
MISSION W154, FLI. 1, WITH WALLOPS STATION C-54 AIRCRAFT EQUIPPED WITH TWO T-11 AERIAL CAMERAS ON AUG. 3, 1972, IN COOPERATION WITH NATIONAL CAPITOL PARK SERVICE FOR INVESTIGATIONS OF DR. GARY CLEMANS. OBJECTIVE – TO ASSESS THE QUALITY AND VIGOR OF URBAN VEGETATION, SPECIFICALLY THE ELM TREES INFESTED WITH DUTCH ELM DISEASE. FLIGHT IN GOOD WEATHER, NO OVERCAST, SLIGHT HAZE, AIR TEMP. 22 DEG. AT 2500 FT., MSL WITH WIND OF 10 KNOTS FROM 270 DEG.

DATA AVAILABILITY:

PLATFORM TYPES:
AIRCRAFT

ARCHIVE MEDIA:
PHOTOPRINTS
106 9” X 9” FRAMES.

INVENTORY:

CONTACT:
PAUL ALFONSI 804-824-3411
NATIONAL AERONAUTICS AND SPACE ADM
CHESAPEAKE BAY ECOLOGICAL PROGRAM OFFICE
WALLOPS ISLAND VIRGINIA USA 23337

GRID LOCATOR (LAT):
730787

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PROJECTS:

GENERAL GEOGRAPHIC AREA:
U.S., COASTAL, NORTH ATLANTIC, CHESAPEAKE BAY, WASHINGTON, D.C.

ABSTRACT:
MISSION W168, FLT. 1, WAS ACCOMPLISHED WITH WALLOPS STATION C-54 AIRCRAFT EQUIPPED WITH TWO T-11 AERIAL CAMERAS AS A CONTINUING EFFORT OF MISSION W166 IN COOPERATION WITH THE DEPT. OF INTERIOR, U. S. PARK SERVICE IN WASHINGTON, D. C. AREA AND A CALIBRATION RUN OVER CALIBRATION TARGETS LOCATED AT WALLOPS STATION, VA. OBJECTIVE - TO USE TWO DISTINCTIVE BLACK AND WHITE FILMS, SPECIAL FILTERS, SPECIAL CHEMICAL FILM PROCESSING TO OBTAIN REMOTE IMAGERY THAT WILL PROVIDE MAXIMUM CONTRAST BETWEEN HEALTHY AND DISEASED DUTCH ELM FOLIATION. FLIGHT IN CLEAR WEATHER, SLIGHT HAZE, VISIBILITY UP TO 8 MILES, AIR TEMP. 24 DEG. C AT 1500 FT., MSL WITH WIND OF 10 KNOTS.

DATA AVAILABILITY:
PLATFORM TYPES:
- AIRCRAFT

ARCHIVE MEDIA:
- PHOTOPRINTS
  106 9" X 9" FRAMES.

FUNDING:

INVENTORY:

PUBLICATIONS:

CONTACT:
PAAUL ALFONSI 804-824-3411
NATIONAL AERONAUTICS AND SPACE ADM
CHESAPEAKE BAY ECOLOGICAL PROGRAM OFFICE
WALLOPS ISLAND VIRGINIA USA 23337

GRID LOCATOR (LAT):
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**PROJECTS:**

**GENERAL GEOGRAPHIC AREA:**
NORTH ATLANTIC, COASTAL, U.S., CHESAPEAKE BAY, WASHINGTON, D.C.

**ABSTRACT:**
MISSION W253, FLT. 1, SEPTEMBER 10, 1973, WITH WALLOPS STATION C-54 AIRCRAFT EQUIPPED WITH TWO T-11 AERIAL MAPPING CAMERAS IN COOPERATION WITH THE ECOLOGICAL SERVICES LAB. OF NATIONAL CAPITAL PARKS SERVICE. OBJECTIVE - TO OBTAIN SPECTRAL READINGS IN THE RED AND NEAR INFRARED REGIONS OF ELM TREES AFFLICTED WITH THE DUTCH ELM DISEASE IN THE POTOMAC PARK AREA OF WASHINGTON, D.C. IMAGERY WILL BE STUDIED BY SCIENTISTS OF THE ECOLOGICAL SERVICES LAB. OF THE NATIONAL CAPITAL PARK SERVICE FOR DETERMINING SIGNATURES OF DISEASED TREES.

(MISSION NO W253 FLT 1)

**DATA AVAILABILITY:**

**PLATFORM TYPES:**
AIRCRAFT

**ARCHIVE MEDIA:**
PHOTOPRINTS
126 9" X 9" FRAMES

**FUNDING:**

**INVENTORY:**

**PUBLICATIONS:**

**CONTACT:**
PAUL ALFONSI 804-824-3411
NATIONAL AERONAUTICS AND SPACE ADM
CHESAPEAKE BAY ECOLOGICAL PROGRAM OFFICE
WALLOPS ISLAND VIRGINIA USA 23337

**GRID LOCATOR (LAT):**
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**PROJECTS:**

**GENERAL GEOGRAPHIC AREA:**
U.S., COASTAL, NORTH ATLANTIC, CHESAPEAKE BAY, WASHINGTON, D.C.

**ABSTRACT:**
MISSION W231, FL1.1, JULY 12, 1973, WITH WALLOPS STATION C-54 AIRCRAFT WITH TWO T-11 AERIAL MAPPING CAMERAS IN COOPERATION WITH ECOLOGICAL SERVICES LAB. OF NATIONAL CAPITAL PARK SERVICE. OBJECTIVE - TO OBTAIN AERIAL IMAGERY IN RED AND INFRARED SPECTRAL WAVE BANDS OF DISEASED AND HEALTHY ELM TREES IN POTOMAC PARK-TIDAL BASIN AREA OF WASHINGTON, D.C. BY USE OF SPECIAL FILTERS AND CONTROLLED FILM PROCESSING. TREES EXHIBITING ONLY SUBTLE SIGNS OF DUTCH ELM DISEASE WILL BE MADE APPARENT ON IMAGERY BY CONTRASTING DENSITIES. FLIGHT MADE IN SCATTERED CLOUDS, VISIBILITY UP TO 10 MILES, AIR TEMP. 17 DEG. C AT 1,500 FT., MSL WITH WIND OF 25 KNOTS FROM 350 DEG.
(MISSION NO W231, FLT 1)

**DATA AVAILABILITY:**
MISSION NO W231, FLT 1

**PLATFORM TYPES:**
AIRCRAFT

**ARCHIVE MEDIA:**
PHOTOPRINTS
198 9" X 9" FRAMES.

**CONTACT:**
PAUL ALFONSI 804-824-3411
NATIONAL AERONAUTICS AND SPACE ADM
CHESAPEAKE BAY ECOLOGICAL PROGRAM OFFICE
WALLOPS ISLAND VIRGINIA USA 23337

**GRID LOCATOR (LAT):**
730787

**PARAMETER IDENTIFICATION SECTION:**

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142 OBS AT 1500 FT, 56 OHS AT 4000 FT
ANNEX III
Part A
Section 2

Maryland - "Shoreline"
PROJECTS:
LANDSAT

GENERAL GEOGRAPHIC AREA:
U.S., COASTAL, NORTH ATLANTIC, CHESAPEAKE BAY, MARYLAND, POTOMAC RIVER, LITTLE ASSAWOMAN BAY TO CHINCOTEAGUE BAY

ABSTRACT:
MISSION W214, FLT. 1, MAY 17, 1973, WITH WOLLOPS STATION C-54 AIRCRAFT EQUIPPED WITH T-11 AERIAL MAPPING CAMERA AND 12S CAMERA SYSTEM IN COOPERATION WITH GEOLOGICAL SURVEY BRANCH OF MD. DEPT. OF NATURAL RESOURCES. OBJECTIVE - TO OBTAIN REMOTE SENSING IMAGERY IN WAVE LENGTH BANDS OF THE MULTI-SPECTRAL SCANNER ASGARD THE ERTS SATELLITE. IMAGERY WILL BE USED AS "GROUND TRUTH" FOR INTERPRETING ERTS IMAGERY WITH RESPECT TO GEOLOGIC AND WATER RESOURCES DATA. WEATHER - CLOUDY WITH VISIBILITY 3-5 MILES, AIR TEMP. 2 DEG. C AT 9500 FT., MSL WITH A WIND OF 17 KNOTS FROM 230 DEG. (MISSION NO W214, FLT 1)

DATA AVAILABILITY:

PLATFORM TYPES:
AIRCRAFT

ARCHIVE MEDIA:
PHOTOPRINTS
534 2.7" AND 9" FRAMES.

FUNDING:

INVENTORY:

PUBLICATIONS:

CONTACT:
PAUL ALFONSI 804-824-3411
NATIONAL AERONAUTICS AND SPACE ADM
CHESAPEAKE BAY ECOLOGICAL PROGRAM OFFICE
WALLOPS ISLAND VIRGINIA USA 23337

GRID LOCATOR (LAT):
730796 730786 730787 730785

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100 MM AND 152 MM FOCAL LENGTH
INVESTIGATIONS OF MARYLANDS TIDAL SHORELINES OF THE CHESAPEAKE BAY AND THE
ATLANTIC OCEAN
DATA COLLECTED: OCTOBER 1972 TO OCTOBER 1972
RECEIVED: JANUARY 01, 1976

PROJECTS:

GENERAL GEOGRAPHIC AREA:
U.S., COASTAL, NORTH ATLANTIC, CHESAPEAKE BAY, MARYLAND

ABSTRACT:
MISSION W174, FLIGHT 1, OCTOBER 20, 1972, WITH WALLOPS STATION C-54 AIRCRAFT EQUIPPED WITH CNE T-11 AERIAL CAMERA AND A 125
FOUR-CHANNEL CAMERA IN COOPERATION WITH MD. GEOLOGICAL SURVEY THROUGHOUT A LARGE PORTION OF CHESAPEAKE BAY, MD. REGION.
OBJECTIVE - TO ACQUIRE AIRBORN MULTI-CHANNEL BLACK & WHITE AND FALSE COLOR IMAGERY FOR INVESTIGATION OF MD. TIDAL SHORELINES
TO SUPPORT ERTS INVESTIGATIONS. WEATHER - CLEAR, VISIBILITY 10-12 MILES, AIR TEMP. 10 DEG. C AT 10,500 FT., MSL WITH A WIND OF
35 KNOTS FROM 320 DEG.
(MISSION NO W174, FLT 1)

DATA AVAILABILITY:

PLATFORM TYPES:
AIRCRAFT

ARCHIVE MEDIA:
PHOTO PRINTS
252 9" X 9" FRAMES

FUNDING:

INVENTORY:

PUBLICATIONS:

CONTACT:
PAUL ALFONSI 804-824-3411
NATIONAL AERONAUTICS AND SPACE ADM
CHESAPEAKE BAY ECOLOGICAL PROGRAM OFFICE
WALLOPS ISLAND VIRGINIA USA 23337

GRID LOCATOR (LAT):
730796 730786 730785

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PROJECTS:

GENERAL GEOGRAPHIC AREA:
NORTH AMERICA, U.S., MARYLAND

ABSTRACT:
MISSION 2288, FLIGHT 01, WAS ACCOMPLISHED ON JULY 31, 1974, UTILIZING THE WALLOPS STATION UH-1H HELICOPTER EQUIPPED WITH TWO T-11 AERIAL MAPPING CAMERAS AND AN 12S "B" MULTISPECTRAL CAMERA SYSTEM IN COOPERATION WITH THE SMITHSONIAN INSTITUTE. THE OBJECTIVE OF THE FLIGHT WAS TO PROVIDE REMOTE SENSING IMAGERY IN MULTIPLE WAVELENGTH BANDS AT A VARIETY OF SCALES FOR USE IN DETERMINING THE BEST TECHNIQUES IN MAKING DETAILED WETLAND MAPPING STUDIES. (MISSION 2288, FLIGHT 01)

DATA AVAILABILITY:

PLATFORM TYPES:
AIRCRAFT

ARCHIVE MEDIA:
PHOTO PRINTS
340 70MM PRINTS; 171 9"X9" PRINTS

FUNDING:
NATIONAL AERONAUTICS AND SPACE ADM

INVENTORY:

PUBLICATIONS:

CONTACT:
MICHAEL CONGER 804 824 3411
NATIONAL AERONAUTICS AND SPACE ADM
CHESAPEAKE BAY ECOLOGICAL PROGRAM OFFICE
WALLOPS ISLAND VIRGINIA USA 23337

GRID LOCATOR (LAT):
73078525 73078640
73076525 73076640

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PROJECTS:

GENERAL GEOGRAPHIC AREA: NORTH ATLANTIC, COASTAL, U.S., CHESAPEAKE BAY, MARYLAND

ABSTRACT:
AERIAL PHOTOGRAPH FILE OF ALL LAND AND WATER INTERFACES IN THE STATE OF MARYLAND. USED TO DELINEATE LANDWARD BOUNDARY OF TIDAL WETLANDS. PHOTOGRAMETRIC STANDARDS MET. COLOR AND IR PHOTOS 1 INCH TO 1000 FT SCALE. BLOWUP PRINTS 1 INCH TO 200 FT SCALE. (PHOTOGRAPHS ARE AVAILABLE FOR EXAMINATION IN DNR OFFICES.)

DATA AVAILABILITY:
PHOTOGRAPHS (SCALE 1" = 1000') PURCHASABLE FROM RAYTHEON AUTOMETRIC OPERATION WAYLAND, MASSACHUSETTS AND PHOTOSCIENCE INC. GAITHERSBURG, MARYLAND. PHOTOMAPS AVAILABLE AT DNR (SCALE 1" = 200')

PLATFORM TYPES:
AIRCRAFT

ARCHIVE MEDIA:
PHOTOPRINTS
1 CUBIC YARD

FUNDING:
STATE OF MARYLAND DNR

INVENTORY:

PUBLICATIONS:

CONTACT:
WILLIAM SIPPLE  301-267-5877
MARYLAND DEPARTMENT OF NATURAL RESOURCES
WATER RESOURCES ADMINISTRATION TOWES STATE OFFICE BUILDING
ANNAPOLIS  MARYLAND USA 21401

GRID LOCATOR (LAT):
730785 730787 730795 730798

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PROJECTS:
GENERAL GEOGRAPHIC AREA:
U.S., COASTAL, NORTH ATLANTIC, CHESAPEAKE BAY, MARYLAND, ELKTON WETLANDS, PATUXENT RIVER

ABSTRACT:
MISSION W167, FLT. 1, WITH WALLOPS STATION C-54 AIRCRAFT EQUIPPED WITH TWO T-11 AERIAL CAMERAS ON SEPT. 8, 1972, IN COOPERATION WITH DEPT. OF INTERIOR, U. S. GEOLOGICAL SURVEY (VIRGINIA CARTER, OFFICE OF REMOTE SENSING) IN ELKTON, MD. REGION. OBJECTIVE - TO ACQUIRE NATURAL AND FALSE-COLOR IMAGERY OF FRESH-WATER WETLANDS IN CONJUNCTION WITH FIELD OBSERVATIONS TO SUPPORT ERTS IMAGERY OF SAME AREA. FLIGHT IN CLEAR WEATHER, VISIBILITY 6-8 MILES, AIR TEMP. 10 DEG. C AT 10,000 FT., MSL WITH WIND OF 12 KNOTS FROM 290 DEG. (MISSION NO W167, FLT 1)

DATA AVAILABILITY:
PLATFORM TYPES:
AIRCRAFT
ARCHIVE MEDIA:
PHOTOPRINTS
36 9" X 9" FRAMES.

CONTACT:
PAUL ALFONSI  804-824-3411
NATIONAL AERONAUTICS AND SPACE ADM
CHESAPEAKE BAY ECOLOGICAL PROGRAM OFFICE
WALLOPS ISLAND VIRGINIA USA 23337

GRID LOCATOR (LAT):
730796 730795

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PROJECTS:

GENERAL GEOGRAPHIC AREA:
U.S., COASTAL, NORTH ATLANTIC, CHESAPEAKE BAY, MARYLAND, ELKTON WETLANDS

ABSTRACT:
MISSION W162, FLT. 1 WITH WALLOPS STATION C-54 AIRCRAFT EQUIPPED WITH TWO T-11 AERIAL CAMERAS ON AUG. 25, 1972 IN COOPERATION
WITH MD. DEPT. OF CHESAPEAKE BAY AFFAIRS IN ELK RIVER SECTION. OBJECTIVE - TO USE NATURAL AND FALSE-COLOR IMAGERY FOR
INVESTIGATION OF MARSHLAND AQUATIC COMMUNITIES FOR IDENTIFICATION AND DISTRIBUTION. FLIGHT IN GOOD WEATHER WITH SOME SCATTERED
CLOUDS, EXTREMELY HAZY, AIR TEMP. 10 DEG C AT 9500 FT., MSL WITH WIND OF 10 KNOTS FROM 205 DEG.
(MISSION NO W162, FLT 1)

DATA AVAILABILITY:

PLATFORM TYPES:

ARCHIVE MEDIA:

PHOTOPRINTS
44 9" X 9" FRAMES.

FUNDING:

INVENTORY:

PUBLICATIONS:

CONTACT:

PAUL ALFONSI 804-324-3411
NATIONAL AERONAUTICS AND SPACE ADM
CHESAPEAKE BAY ECOLOGICAL PROGRAM OFFICE
WALLOPS ISLAND VIRGINIA USA 23337

GRID LOCATOR (LAT):
730798

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PROJECTS:

GENERAL GEOGRAPHIC AREA:
U.S., COASTAL, NORTH ATLANTIC, CHESAPEAKE BAY, ELKTON

ABSTRACT:
MISSION W131, FLT. 2 WITH WALLOPS STATION C-54 AIRCRAFT EQUIPPED WITH TWO T-11 AERIAL CAMERAS ON JUNE 3, 1972, IN COOPERATION WITH THE MD. DEPT OF CHESAPEAKE BAY AFFAIRS IN ELKTON, MD. REGION. OBJECTIVE - TO ACQUIRE NATURAL AND FALSE-COLOR REMOTELY SENSED IMAGERY OF WETLAND VEGETATION SPECIES AND MARSHES TO ESTABLISH BASELINE DATA FOR FUTURE EARTH RESOURCES TECHNICAL SATELLITE EXPERIMENTS. FLIGHT IN CLEAR WEATHER, MODERATE HAZE, AIR TEMP. 2 DEG. C AT 10,000 FT. 16 DEG. C AT 2500 FT., MSL WITH WIND OF 15 KNOTS FROM 260 DEG.

DATA AVAILABILITY:

PLATFORM TYPES:
AIRCRAFT

ARCHIVE MEDIA:
PHOTOPRINTS
214 9" X 9" FRAMES.

FUNDING:

INVENTORY:

PUBLICATIONS:

CONTACT:
PAUL ALFONSI 804-824-3411
NATIONAL AERONAUTICS AND SPACE ADM
CHESAPEAKE BAY ECOLOGICAL PROGRAM OFFICE
WALLOPS ISLAND VIRGINIA USA 23337

GRID LOCATOR (LAT):
730796 730795

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<td>214</td>
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112 OBS AT 10000 FT, 102 OBS AT 2500 FT
**PROJECTS:**

GENERAL GEOGRAPHIC AREA:
NORTH AMERICA, U.S., MARYLAND, CECIL COUNTY

**ABSTRACT:**
MISSION W090, FLIGHT01, WAS ACCOMPLISHED ON OCTOBER 15, 1971, UTILIZING THE WALLOPS FLIGHT CENTER C-54 AIRCRAFT EQUIPPED WITH TWO T-11 AERIAL CAMERAS IN COOPERATION WITH THE UNITED STATES GEOLOGICAL SURVEY AND THE MARYLAND DEPARTMENT OF CHESAPEAKE BAY AFFAIRS. THE OBJECTIVE OF THE FLIGHT WAS TO STUDY THE SEASONAL CHANGES OF FRESHWATER AND ESTUARINE MARSHES USING COLOR AND FALSE COLOR INFRARED AERIAL PHOTOGRAPHY.

**DATA AVAILABILITY:**
PLATFORM TYPES:
AIRCRAFT

ARCHIVE MEDIA:
PHOTOPRINTS
246 9" X 9" PRINTS

**FUNDING:**
NATIONAL AERONAUTICS AND SPACE ADM

**CONTACT:**
MICHAEL CONGER 804 824 3411
NATIONAL AERONAUTICS AND SPACE ADM
CHESAPEAKE BAY ECOLOGICAL PROGRAM OFFICE
WALLOPS ISLAND VIRGINIA USA 23337

**GRID LOCATOR (LAT):**
73079555

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BLACKWATER NATIONAL WILDLIFE REFUGE WETLANDS MAPPING STUDY
DATA COLLECTED: SEPTEMBER 1973 TO SEPTEMBER 1973
PROJECTS:
GENERAL GEOGRAPHIC AREA:
NORTH ATLANTIC, COASTAL, U.S., CHESAPEAKE BAY, BLACKWATER WILDLIFE REFUGE

ABSTRACT:
MISSION W238, FLT. 1, ACCOMPLISHED ON SEPT. 24, 1973, WITH WALLOPS STATION C-54 AIRCRAFT EQUIPPED WITH TWO T-11 AERIAL MAPPING CAMERAS IN COOPERATION WITH CHESAPEAKE BAY CENTER FOR ENVIRONMENTAL STUDIES OF SMITHSONIAN INSTITUTE. OBJECTIVE - TO OBTAIN COLOR AND COLOR INFRARED IMAGERY OF BLACKWATER NATIONAL WILDLIFE REFUGE WETLANDS FOR USE IN MAPPING THE WETLAND VEGETATION.

DATA AVAILABILITY:
PLATFORM TYPES:
AIRCRAFT

ARCHIVE MEDIA:
PHOTOPRINTS
160 9" X 9" FRAMES

FUNDING:

INVENTORY:

PUBLICATIONS:

CONTACT:
PAUL ALFONSI 804-824-3411
NATIONAL AERONAUTICS AND SPACE ADM
CHESAPEAKE BAY ECOLOGICAL PROGRAM OFFICE
WALLOPS ISLAND VIRGINIA USA 23337

GRID LOCATOR (LAT):
730786

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BLACKWATER WILDLIFE REFUGE BASE LINE STUDY
DATA COLLECTED: OCTOBER 1970 TO OCTOBER 1970
RECEIVED: JANUARY 01, 1976

PROJECTS:

GENERAL GEOGRAPHIC AREA:
NORTH ATLANTIC, COASTAL, U.S., CHESAPEAKE BAY, MARYLAND, BLACKWATER WILDLIFE REFUGE

ABSTRACT:
MISSION W029, FLT. 2, OCTOBER 19, 1970, WITH WALLOPS STATION CHARTERED BELL 205 HELICOPTER EQUIPPED WITH A POD OF 4 T-11 AERIAL MAPPING CAMERAS. OBJECTIVE - TO OBTAIN BASE LINE REMOTE SENSOR DATA FOR CHESAPEAKE BAY ECOLOGICAL PROGRAM OFFICE OVER THE BLACKWATER WILDLIFE REFUGE LOCATED IN THE CHESAPEAKE BAY WETLANDS AREA SOUTH OF CAMBRIDGE, MD. FLIGHT IN CLEAR WEATHER, SLIGHTLY HAZY, AIR TEMP. 10 DEG. C AT 1000 FT. AND 8 DEG. C FROM 10,000 FT., MSL WITH WIND OF 20 KNOTS FROM 280 DEG.
(MISSION NO W029, FLT 2)

DATA AVAILABILITY:

PLATFORM TYPES:
AIRCRAFT

ARCHIVE MEDIA:
PHOTOPRINTS
132 9" X 9" FRAMES

FUNDING:

INVENTORY:

PUBLICATIONS:

CONTACT:
PAUL ALFONSI 804-824-3411
NATIONAL AERONAUTICS AND SPACE ADM
CHESAPEAKE BAY ECOLOGICAL PROGRAM OFFICE
WALLOPS ISLAND VIRGINIA USA 23337

GRID LOCATOR (LAT):
730786

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<td>6 INCH FOCAL LENGTH 40 OBS AT 10,000 FT</td>
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ANNEX III

Part A

Section 2

Maryland - "Rivers"
DYNAMIC RIVER BASIN CHARACTERISTICS STUDY-SOWBRIDGE RIVER, DELAWARE AND BEAVER DAM RIVER, MARYLAND
DATA COLLECTED: JULY 1973 TO JULY 1973
RECEIVED: JANUARY 01, 1976

PROJECTS:
LANDSAT

GENERAL GEOGRAPHIC AREA:
U.S., COASTAL, NORTH ATLANTIC, CHESAPEAKE BAY, MARYLAND, BEAVER DAM RIVER; DELAWARE BAY, DELAWARE, SOWBRIDGE RIVER

ABSTRACT:
MISSION W237, FLT. 1, JULY 25, 1973, WITH WALLOPS STATION C-54 AIRCRAFT EQUIPPED WITH T-11 AERIAL MAPPING CAMERA AND I2S MULTISPECTRAL CAMERA SYSTEM IN COOPERATION WITH WATER RESOURCES DIV. OF U.S. GEOLOGICAL SURVEY. OBJECTIVE - TO OBTAIN MULTISPECTRAL IMAGERY OF SOWBRIDGE AND BEAVER DAM RIVERS PERIODICALLY FOR USE IN COMPILING A HISTORY OF DRAINAGE BASIN DYNAMICS OF EACH OF THE RIVERS. FLIGHT MADE IN HAZE WEATHER WITH SOME SCATTERED AND BROKEN CLOUDS, AIR TEMP. 14 DEG. C AT 5500 FT., 8 DEG. C AT 9500 FT., MSL WITH WIND OF 10-15 KNOTS FROM 225 DEG.
(MISSION NO W237, FLT 1)

DATA AVAILABILITY:
PLATFORM TYPES:
AIRCRAFT

ARCHIVE MEDIA:
PHOTOPRINTS
75 9" X 9" AND 2.7" X 2.7" FRAMES.

FUNDING:
INVENTORY:
PUBLICATIONS:
CONTACT:
PAUL ALFONSI 804-824-3411
NATIONAL AERONAUTICS AND SPACE ADM
CHESAPEAKE BAY ECOLOGICAL PROGRAM OFFICE
WALLOPS ISLAND VIRGINIA USA 23337

GRID LOCATOR (LAT):
730786 730785

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<td>YMDHML</td>
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<td>PHOTOGRAPH</td>
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<td>COLOR CAMERA</td>
<td>PHOTOGRAPHS</td>
<td>75</td>
<td>OBS</td>
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<td>FROM AIRCRAFT</td>
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MULTISPECTRAL
PROJECTS:
LANDSAT

GENERAL GEOGRAPHIC AREA:
U.S., COASTAL, NORTH ATLANTIC, MARYLAND, EASTON, DELAWARE ELLENDALE

ABSTRACT:
MISSION W206, FLT. 1, MAY 7, 1973, WITH WALLOPS STATION HELICOPTER EQUIPPED WITH T-11 AERIAL MAPPING CAMERA AND I2S CAMERA SYSTEM IN COOPERATION WITH WATER RES. DIV. OF U. S. GEOLOGICAL SURVEY. OBJECTIVE - TO OBTAIN IMAGERY OF EMERGENT LEAF AND PLANT ACTIVITY IN SOWBRIDGE AND BEAVER DAM RIVER BASINS. WEATHER - CLEAR, WITH MOD. HAZE, AIR TEMP. -3 DEG. AT 5500 FT., MSL WITH WIND AT 15 KNOTS FROM 33 DEG.

DATA AVAILABILITY:

PLATFORM TYPES:
AIRCRAFT

ARCHIVE MEDIA:
PHOTOPRINTS
66 2.7" X 2.7" AND 9" X 9" FRAMES

FUNDING:

INVENTORY:

PUBLICATIONS:

CONTACT:
PAUL ALFONSI 804-824-3411
NATIONAL AERONAUTICS AND SPACE ADM
CHESAPEAKE BAY ECOLOGICAL PROGRAM OFFICE
WALLOPS ISLAND VIRGINIA USA 23337

GRID LOCATOR (LAT):
730783 730786

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<td>STATIONS</td>
<td>50 OBS AT 5500 FT, 16 OBS AT 9500 FT</td>
<td>100 MM AND 152 MM FOCAL LENGTH</td>
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<td>OBS</td>
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PROJECTS:
LANDSAT

GENERAL GEOGRAPHIC AREA:
U.S., COASTAL, NORTH ATLANTIC, MARYLAND, EASTON, DELAWARE, ELDENALE

ABSTRACT:
MISSION W192, FLIGHT 1, APRIL 9, 1973, WITH WALLOPS STATION C-5A AIRCRAFT EQUIPPED WITH T-11 AERIAL MAPPING CAMERA AND 125 CAMERA SYSTEM IN COOPERATION WITH WATER RESOURCES DIV. OF U.S. GEOLOGICAL SURVEY. OBJECTUAL SCANNER WAVE-LENGTH BANDS OF VEGETATION AND DRAINAGE CHARACTERISTICS OF SOWBRIDGE AND BEAVERDAM RIVER BASINS DURING EARLY SPRING. WEATHER - HAZY WITH LOW AND HIGH SCATTERED CLOUDS, AIR TEMP. 2 DEG. C AT 9500 FT., MSL WITH WIND OF 12 KNOTS FROM 090 DEG. (MISSION NO W192, FLT 1)

DATA AVAILABILITY:

PLATFORM TYPES:
AIRCRAFT

ARCHIVE MEDIA:
PHOTOPRINTS
120 2.7" X 2.7" AND 9" X 9" FRAMES

FUNDING:

INVENTORY:

CONTACT:
PAUL ALFONSI  804-824-3411
NATIONAL AERONAUTICS AND SPACE ADM
CHESAPEAKE BAY ECOLOGICAL PROGRAM OFFICE
WALLOPS ISLAND VIRGINIA USA 23337

GRID LOCATOR (LAT):
730785 730786

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<td>70 OBS AT 5500 FT</td>
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PAGE 01
MISSION W180, FLT. 1, WITH WALLOPS STA. C-54 AIRCRAFT EQUIPPED WITH T-11 AND AN I26 CAMERA SYSTEM ON NOV 16, 1972, IN
COOPERATION WITH THE GEOLOGICAL SURVEY OF THE DEPT OF INTERIOR. THE FLIGHT MADE OVER SOWBRIDGE AND BEVER DAM RIVERS IN DEL.
AND MD. OBJECTIVE - TO EXPOSE ANY DYNAMIC BASIN CHARACTERISTIC CHANGES THAT HAVE TAKEN PLACE SINCE THE LAST PHOTO MISSION OF
OCT. 25, 1972. GOOD WEATHER WITH THIN OVERCAST, VISIBILITY 5-6 MILES. AIR TEMP. 8 DEG C AT 5000 FT. AND 2 DEG C AT 10,000 FT..
MSL WIND OF 20 KNOTS FROM 138 DEG.
MISSION NO W180, FLT 1)

DATA AVAILABILITY:
PLATFORM TYPES:
AIRCRAFT
ARCHIVE MEDIA:
ORIGINAL FILM
204 9 X 9 FRAMES.
FUNDING:
INVENTORY:
PUBLICATIONS:
CONTACT:
PAUL ALFONSI  804-824-3411
NATIONAL AERONAUTICS AND SPACE ADM
CHESAPEAKE BAY ECOLOGICAL PROGRAM OFFICE
WALLOPS ISLAND VIRGINIA USA 23337
GRID LOCATOR (LAT):
730785

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NAME SPHERE METHOD UNITS DATA AMOUNT FREQUENCY HEIGHT/DEPTH REMARKS
PROJECTS:

GENERAL GEOGRAPHIC AREA:
U.S., COASTAL, NORTH ATLANTIC, DELAWARE BAY, DELAWARE, SOWBRIDGE RIVER, CHESAPEAKE BAY, MARYLAND, BEAVER DAM RIVER

ABSTRACT:
MISSION W164, FLT. 1 WITH WALLOPS STATION C-54 AIRCRAFT EQUIPPED WITH T-11 AND I2S CAMERA SYSTEMS ON OCTOBER 26, 1972, IN COOPERATION WITH U.S. GEOLOGICAL SURVEY OF DEPT. OF INTERIOR. FLIGHT MADE OVER SOWBRIDGE AND BEAVER DAM RIVERS IN DEL. AND MD. OBJECTIVE - TO COMPARE A BASE LINE STUDY OF EACH RIVER BASINS FOR USE IN OBSERVING DYNAMIC BASIN CHARACTERISTICS FROM ERTS IMAGERY. FLIGHT IN CLEAR WEATHER, VISIBILITY 7-10 MILES, AIR TEMP. 10 DEG. C AT 5000 FT., MSL WITH WIND OF 5 KNOTS FROM 210 DEG.
(MISSION NO W164, FLT 1)

DATA AVAILABILITY:

PLATFORM TYPES:
AIRCRAFT

ARCHIVE MEDIA:
PHOTO PRINTS
230 9" X 9" FRAMES.

FUNDING:
INVENTORY:

PUBLICATIONS:

CONTACT:
PAUL ALFONSI  804-824-3411
NATIONAL AERONAUTICS AND SPACE ADM
CHESAPEAKE BAY ECOLOGICAL PROGRAM OFFICE
WALLOPS ISLAND VIRGINIA USA 23337

GRID LOCATOR (LAT):
730785

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OB5 AT 10000 FT
PROJECTS:
CHESTER RIVER STUDY

GENERAL GEOGRAPHIC AREA:
U.S., COASTAL, NORTH ATLANTIC, CHESAPEAKE BAY, MARYLAND, CHESTER RIVER

ABSTRACT:
PHOTOGRAPHIC AND VISUAL SURVEY OF SHORELINE EROSION, SHORELINE STRUCTURES AND SHORELINE TYPE ON THE CHESTER RIVER, MARYLAND.

DATA AVAILABILITY:

PLATFORM TYPES:
SHIP

ARCHIVE MEDIA:
PHOTOPRINTS
98 MILES OF SHORELINE CLASSIFIED; APPROX 200 PHOTOGRAPHS

FUNDING:
WESTINGHOUSE, MARYLAND DEPT OF NATURAL RESOURCES

INVENTORY:

PUBLICATIONS:
CHESTER RIVER STUDY, WESTINGHOUSE, VOL 1, 2, 3

CONTACT:
HAROLD PALMER 301-765-1000
WESTINGHOUSE ELECTRIC CORPORATION
OCEAN RESEARCH LABORATORY, BOX 1771
ANNAPOLIS MARYLAND USA 21404

GRID LOCATOR (LAT):
730796

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PROJECTS:

GENERAL GEOGRAPHIC AREA:
U.S., COASTAL, NORTH ATLANTIC, CHESAPEAKE BAY, MARYLAND, ELK RIVER

ABSTRACT:
MISSION W125, FLT. 1, APRIL 28, 1972, WITH WALLOPS STATION C-54 AIRCRAFT WITH TWO T-11 AERIAL CAMERAS IN COOPERATION WITH MD.
DEPT. OF CHESAPEAKE BAY AFFAIRS IN ELK RIVER, MD. AREA. OBJECTIVE - TO UTILIZE AIRBORN NATURAL AND FALSE-COLOR IMAGERY FOR
IDENTIFICATION AND DISTRIBUTION OF MARSHLAND AQUATIC COMMUNITIES IN PREPARATION FOR ERTS OVERPASSES. FLIGHT IN GOOD WEATHER
WITH MODERATE HAZE, AIR TEMP. 6 DEG. C AT 2,500 FT., MSL WITH WIND OF 15 KNOTS FROM 320 DEG.

MISSION NO W125, FLT 1)

DATA AVAILABILITY:

PLATFORM TYPES:
AIRCRAFT

ARCHIVE MEDIA:
PHOTOPRINTS
155 9" X 9" FRAMES.

FUNDING:

INVENTORY:

PUBLICATIONS:

CONTACT:
PAUL ALFONSI 804-824-3411
NATIONAL AERONAUTICS AND SPACE ADM
CHESAPEAKE BAY ECOLOGICAL PROGRAM OFFICE
WALLOPS ISLAND VIRGINIA USA 23337

GRID LOCATOR (LAT):
730796 730795

PARAMETER IDENTIFICATION SECTION:

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PROJECTS:

GENERAL GEOGRAPHIC AREA:
NORTH ATLANTIC, COASTAL, U.S., CHESAPEAKE BAY, MARYLAND, PATUXENT RIVER

ABSTRACT:
MISSION W175, FLT. 1, OCT. 17, 1972, WITH WALLOPS STATION C-54 AIRCRAFT EQUIPPED WITH A T-11 AND AN I2S CAMERA SYSTEM IN COOPERATION WITH NASA'S LANGLEY RES. CTR. AND ENVIRONMENTAL PROTECTION AGENCY. OBJECTIVE - TO IDENTIFY ACCUMULATIONS OF PHYTOPLANKTON AT SALT WEDGE OF POTOMAC RIVER USING AERIAL CAMERAS WITH PRE-DETERMINED FILM/FILTER COMBINATIONS. MISSION A FOLLOW-ON OF MISSION W141. FLIGHT IN CLEAR WEATHER, SOME HAZE, AIR TEMP. 10 DEG.C AT 6500 FT., MSL WITH WIND OF 40 KNOTS FROM 275 DEG. (MISSION NO W175, FLT 1)

DATA AVAILABILITY:
PLATFORM TYPES:
- AIRCRAFT

ARCHIVE MEDIA:
- PHOTOPRINTS
- 189 9" X 9" AND 70-MM FRAMES

FUNDING:

INVENTORY:

PUBLICATIONS:

CONTACT:
PAUL ALFONSI  804-824-3411
NATIONAL AERONAUTICS AND SPACE ADM
CHESAPEAKE BAY ECOLOGICAL PROGRAM OFFICE
WALLOPS ISLAND VIRGINIA USA 23337

GRID LOCATOR (LAT):
730786

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PAGE 01
PROJECTS:

GENERAL GEOGRAPHIC AREA:
NORTH ATLANTIC, COASTAL, U.S., CHESAPEAKE BAY, MARYLAND, PATUXENT RIVER

ABSTRACT:
MISSION W175, FLT. 2, OCT. 17, 1972, WITH WALLOPS STATION C-54 AIRCRAFT EQUIPPED WITH A T-11, AND I2S CAMERA SYSTEM IN
COOPERATION WITH NASA'S LANGLEY RES. CTR. AND ENVIRONMENTAL PROTECTION AGENCY. OBJECTIVE - TO IDENTIFY ACCUMULATIONS OF
PHYTOPLANKTON AT SALT WEDGE OF POTOMAC RIVER USING AERIAL CAMERAS WITH PRE-DETERMINED FILM/FILTER COMBINATIONS. MISSION A
FOLLOW UP OF MISSION W141. FLIGHT IN CLEAR WEATHER, SOME HAZE, AIR TEMP. 11 DEG. C AT 6500 FT., MSL WITH WIND OF 40 KNOTS FROM
275 DEG.
(MISSION NO W175, FLT 2)

DATA AVAILABILITY:

PLATFORM TYPES:
AIRCRAFT

ARCHIVE MEDIA:
PHOTOPRINTS
197 9" X 9" AND 70-MM FRAMES

FUNDING:

CONTACT:
PAUL ALFONSI  804-824-3411
NATIONAL AERONAUTICS AND SPACE ADM
CHESAPEAKE BAY ECOLOGICAL PROGRAM OFFICE
WALLOPS ISLAND VIRGINIA USA  23337

GRID LOCATOR (LAT):
730786

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106 OBS AT 4400 FT, 91 OBS AT 6500 FT
6 INCH FOCAL LENGTH
PROJECTS:

GENERAL GEOGRAPHIC AREA:
U.S., COASTAL, NORTH ATLANTIC, CHESAPEAKE BAY, MARYLAND, PATUXENT RIVER

ABSTRACT:
MISSION W167, FLT. 2, WITH WALLOPS STATION C-54 AIRCRAFT EQUIPPED WITH TWC T-11 AERIAL CAMERAS ON SEPT. 8, 1972, IN COOPERATION WITH THE MD. DEPT. OF CHESAPEAKE BAY AFFAIRS IN ELKTON, MD. AREA. OBJECTIVE - TO OBTAIN NATURAL AND FALSE-COLOR IMAGERY TO INVESTIGATE MARSHLAND ECOLOGY IN ELK RIVER AREA. FLIGHT IN CLEAR WEATHER, VISIBILITY 6-8 MILES, AIR TEMP. 10 DEG. C AT 10,000 FT., MSL WITH WIND OF 12 KNOTS FROM 290 DEG.

DATA AVAILABILITY:

PLATFORM TYPES:
AIRCRAFT

ARCHIVE MEDIA:
PHOTOPRINTS
202 9" X 9" FRAMES.

FUNDING:
INVENTORY:

PUBLICATIONS:

CONTACT:
PAUL ALFONSI 604-824-3411
NATIONAL AERONAUTICS AND SPACE ADM
CHESAPEAKE BAY ECOLOGICAL PROGRAM OFFICE
WALLOPS ISLAND VIRGINIA USA 23337

GRID LOCATOR (LAT):
730786

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PROJECTS:

GENERAL GEOGRAPHIC AREA:
U.S., COASTAL, NORTH ATLANTIC, CHESAPEAKE BAY, MARYLAND, PATUXENT RIVER

ABSTRACT:
MISSION W162, FLT. 2 WITH WALLOPS STATION C-54 AIRCRAFT WITH TWO T-11 AERIAL CAMERAS ON AUG. 25, 1972, IN COOPERATION WITH DEPT. OF INTERIOR, U.S. GEOLOGICAL SURVEY (VIRGINIA CARTER, OFFICE OF REMOTE SENSING) IN PATUXENT RIVER, MD. AREA. OBJECTIVE TO USE AIRBORNE NATURAL AND FALSE-COLOR IMAGERY TO IDENTIFY AND STUDY DISTRIBUTION OF FRESHWATER WETLAND AQUATIC PLANT CANOPIES IN PATUXENT RIVER AREA IN PREPARATION FOR FUTURE ERTS OVERPASSES. FLIGHT IN GOOD WEATHER. NO OVERCAST, VERY HAZY, AIR TEMP. 7 DEG. C AT 9500 FT., MSL WITH WIND OF 10 KNOTS FROM 170 DEG.

DATA AVAILABILITY:

PLATFORM TYPES:
AIRCRAFT

ARCHIVE MEDIA:
PHOTOPRINTS
40 9" X 9" FRAMES.

FUNDING:

INVENTORY:

PUBLICATIONS:

CONTACT:
PAUL ALFONSI 804-824-3411
NATIONAL AERONAUTICS AND SPACE ADM
CHESAPEAKE BAY ECOLOGICAL PROGRAM OFFICE
WALLOPS ISLAND VIRGINIA USA 23337

GRID LOCATOR (LAT):
730786

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PROJECTS:

GENERAL GEOGRAPHIC AREA:
U.S., COASTAL, NORTH ATLANTIC, CHESAPEAKE BAY, MARYLAND, PATUXENT RIVER

ABSTRACT:
MISSION W147, FLT. 2 WITH WALLOPS STATION C-54 AIRCRAFT EQUIPPED WITH TWO T-11 AERIAL CAMERAS ON JULY 10, 1972, IN COOPERATION WITH DEPT. OF INTERIOR, U.S. GEOLOGICAL SURVEY (VA. CARTER OFFICE OF REMOTE SENSING) IN PATUXENT RIVER, MD. REGION. OBJECTIVE - TO ACQUIRE BOTH NATURAL AND FALSE-COLOR AIRBORN IMAGERY FOR INVESTIGATION OF SPECIES TYPE AND DELINATION OF FRESHWATER AQUATIC COMMUNITIES. FLIGHT IN GOOD WEATHER, AIR TEMP. 5 DEG. C AT 10,000 FT. MSL WITH WIND OF 15-20 KNOTS FROM 240 DEG. (MISSION W147, FLT 2)

DATA AVAILABILITY:

PLATFORM TYPES:
AIRCRAFT

ARCHIVE MEDIA:
PHOTOPRINTS
33 9" X 9" FRAMES.

CONTACT:
PAUL ALFONSI 604-824-3411
NATIONAL AERONAUTICS AND SPACE ADM
CHESAPEAKE BAY ECOLOGICAL PROGRAM OFFICE
WALLOPS ISLAND VIRGINIA USA 23337

GRID LOCATOR (LAT):
730786

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PAGE 01
PROJECTS:

GENERAL GEOGRAPHIC AREA:
U.S., COASTAL, NORTH ATLANTIC, CHELSEAKE BAY, MARYLAND, PATUXENT RIVER

ABSTRACT:
MISSION W131, FLT. 1, WITH WALLOPS STATION C-54 AIRCRAFT EQUIPPED WITH TWO T-11 AERIAL CAMERAS ON JUNE 3, 1972, IN COOPERATION WITH DEPT. OF INTERIOR, U.S. GEOLOGICAL SURVEY IN THE PATUXENT RIVER, MD. REGION. OBJECTIVE - TO ACQUIRE NATURAL AND FALSE-COLOR IMAGERY TO INVESTIGATE FRESHWATER WETLAND PLANT CANOPIES IN PREPARATION FOR ERTS INVESTIGATIONS. FLIGHT IN CLEAR WEATHER, MODERATE HAZE, AIR TEMP. 2 DEG. C AT 10,000 FT., 16 DEG. C AT 2500 FT., MSL WITH WIND OF 15 KNOTS FROM 260 DEG. (MISSION W131, FLT 1 )

DATA AVAILABILITY:

PLATFORM TYPES:
AIRCRAFT

ARCHIVE MEDIA:
PHOTOPRINTS
33 9" X 9" FRAMES.

FUNDING:

INVENTORY:

PUBLICATIONS:

CONTACT:
PAUL ALFONSI  804-824-3411
NATIONAL AERONAUTICS AND SPACE ADM
CHESAPEAKE BAY ECOLOGICAL PROGRAM OFFICE
WALLOPS ISLAND VIRGINIA USA 23337

GRID LOCATOR (LAT):
730786

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PROJECTS:

GENERAL GEOGRAPHIC AREA:
NORTH ATLANTIC, U.S., COASTAL, CHESAPEAKE BAY, MARYLAND, PATUXENT RIVER

ABSTRACT:
AN EXPERIMENTAL REMOTE SENSING PROGRAM CONDUCTED FOR THE STATE OF MARYLAND IN SEPTEMBER 1970 RESULTED IN A FILE OF COLOR AND COLOR IR 9X9 PHOTOGRAPHY AT SCALES OF 1 TO 3000, 1 TO 6000, 1 TO 9000 AND 1 TO 12000 OF A 3X10 MILE STRIP OF WETLANDS ON THE PATUXENT RIVER.

DATA AVAILABILITY:

PLATFORM TYPES:
AIRCRAFT

ARCHIVE MEDIA:
PHOTOPRINTS
ONE FOLDER OF 9X9 PHOTOGRAPHS

FUNDING:
STATE OF MARYLAND

INVENTORY:

PUBLICATIONS:

CONTACT:
W.C. COULBOURN, APPLIED TECHNOLOGY 516 575 0574
GRUMMAN ECOSYSTEMS CORPORATION
1111 STEWART AVENUE
BETHPAGE NEW YORK USA 11714

GRID LOCATOR (LAT):
730786

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EARTH SYSTEM IN COOPERATION WITH U. S. GEOLOGICAL SURVEY. OBJECTIVE - TO OBTAIN REMOTE SENSING IMAGERY OF POCOMOKE RIVER AND ADJACENT LOWLAND FOR IDENTIFICATION OF WETLAND VEGETATION ALONG RIVER.

(MISSION NO W208, FLT 2)

DATA AVAILABILITY:

PLATFORM TYPES:
AIRCRAFT

ARCHIVE MEDIA:
PHOTOPRINTS
202 2.7" X 2.7" AND 9" X 9" FRAMES

FUNDING:

INVENTORY:

PUBLICATIONS:

CONTACT:
PAUL ALFONSI 804-824-3411
NATIONAL AERONAUTICS AND SPACE ADM
CHESAPEAKE BAY ECOLOGICAL PROGRAM OFFICE
WALLOPS ISLAND VIRGINIA USA 23337

GRID LOCATOR (LAT): 730775 730785

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PROJECTS:

GENERAL GEOGRAPHIC AREA:
U.S., COASTAL, NORTH ATLANTIC, CHESAPEAKE BAY, MARYLAND, POCOMOKE SOUND AND RIVER

DATA COLLECTED: APRIL 1973 TO APRIL 1973

ABSTRACT:
MISSION W192, FLIGHT 2, APRIL 9, 1973, WITH WALLOPS STATION C-54 AIRCRAFT EQUIPPED WITH T-11 AERIAL MAPPING CAMERA AND AN I2S CAMER A SYSTEM IN COOPERATION WITH MD. DEPT OF CHESAPEAKE BAY AFFAIRS. OBJECTIVE - TO OBTAIN MULTI-BAND IMAGERY OF POCOMOKE RIVER WETLANDS FOR USE IN ANALYZING WETLAND VEGETATION. WEATHER - HAZY WITH LOW AND HIGH BROKEN CLOUDS, AIR TEMP. 2 DEG. C AT 9500 FT., MSL WITH WIND OF 12 KNOTS FROM 090 DEG.
(MISSION NO W192, FLT 2)

DATA AVAILABILITY:
PLATFORM TYPES:
AIRCRAFT

ARCHIVE MEDIA:
PHOTOPRINTS
128 2.7" X 2.7" AND 9" X,9" FRAMES

FUNDING:

INVENTORY:

PUBLICATIONS:

CONTACT:
PAUL ALFONSI 804-824-3411
NATIONAL AERONAUTICS AND SPACE ADM
CHESAPEAKE BAY ECOLOGICAL PROGRAM OFFICE
WALLOPS ISLAND VIRGINIA USA 23337

GRID LOCATOR (LAT):
730775 730785

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001275

RHODE RIVER VEGETATIVE AND DRAINAGE STUDIES
DATA COLLECTED: OCTOBER 1972 TO OCTOBER 1972
PROJECTS:
GENERAL GEOGRAPHIC AREA:
U.S., COASTAL, NORTH ATLANTIC, CHESAPEAKE BAY, MARYLAND, RHODE RIVER WATERSHED

ABSTRACT:
MISSION W170, FLI. 1, ACCOMPLISHED WITH WALLOPS STATION C-54 AIRCRAFT EQUIPPED WITH TWO AERIAL CAMERAS, T-11 AND I2S, ON OCTOBER 11, 1972, IN COOPERATION WITH SMITHSONIAN INSTITUTE. MISSION OVER WETLANDS AREAS OF RHODE RIVER AND TRIBUTARIES. ONE OF A SERIES TAKEN OVER RHODE RIVER FOR PURPOSE OF DEFINING WETLAND VEGETATION SIGNATURES THROUGHOUT YEARLY GROWTH CYCLE. FLIGHT IN CLEAR WEATHER WITH VISIBILITY 10-12 MILES, AIR TEMP. +5 DEG. AT 2500 FT., MSL WITH WIND OF 8 KNOTS FROM 360 DEG. (MISSION NO W170, FLT 1)

DATA AVAILABILITY:
PLATFORM TYPES:
AIRCRAFT

ARCHIVE MEDIA:
PHOTOPRINTS
696 9" X 9" FRAMES

FUNDING:
INVENTORY:

PUBLICATIONS:
CONTACT:
PAUL ALFONSI  804-824-3411
NATIONAL AERONAUTICS AND SPACE ADM
CHESAPEAKE BAY ECOLOGICAL PROGRAM OFFICE
WALLOPS ISLAND VIRGINIA USA 23337

GRID LOCATOR (LAT):
730788

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2500 FT, 120 LENGTH
08S AT 1200 FT, 51 OBS
AT 1000 FT, 105 OBS AT
500 FT
PROJECTS:

GENERAL GEOGRAPHIC AREA:
U.S., COASTAL, NORTH ATLANTIC, CHESAPEAKE BAY, MARYLAND, RHODE RIVER

ABSTRACT:
MISSION W165, FLT. 1 WITH WALLOPS STATION C-54 AIRCRAFT EQUIPPED WITH TWO T-11 AERIAL CAMERAS ON AUG. 30, 1972, IN COOPERATION WITH CHESAPEAKE BAY CENTER FOR ENVIRONMENTAL STUDIES (SMITHSONIAN INSTITUTE) IN RHODE RIVER, MD. REGION. OBJECTIVE - TO ACQUIRE AIRBORNE NATURAL AND FALSE-COLOR IMAGERY FOR INVESTIGATION OF VEGETATION GROWTH AND DRAINAGE PATTERNS WITHIN THE RHODE RIVER WATERSHED. FLIGHT IN GOOD WEATHER, NO OVERCAST, SLIGHT HAZE, AIR TEMP. 23 DEG. C AT 2500 FT., MSL WITH WIND OF 15 KNOTS FROM 285 DEG.
(MISSION NO W165, FLT 1)

DATA AVAILABILITY:

PLATFORM TYPES:
AIRCRAFT

ARCHIVE MEDIA:
PHOTOPRINTS
260 9" X 9" FRAMES.

FUNDING:

INVENTORY:

CONTACT:
PAUL ALFONSI 804-624-3411
NATIONAL AERONAUTICS AND SPACE ADMINISTRATION
CHESAPEAKE BAY ECOLOGICAL PROGRAM OFFICE
WALLOPS ISLAND VIRGINIA USA 23337

GRID LOCATOR (LAT):
730786

PARAMETER IDENTIFICATION SECTION:

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<td>260</td>
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RHODE RIVER VEGETATIVE AND DRAINAGE STUDIES
DATA COLLECTED: AUGUST 1972 TO AUGUST 1972

PROJECTS:

GENERAL GEOGRAPHIC AREA:
U.S., COASTAL, NORTH ATLANTIC, CHESAPEAKE BAY, MARYLAND, RHODE RIVER WATERSHED

ABSTRACT:
MISSION W149, FLI. 1 WITH WALLOPS STATION C-54 AIRCRAFT WITH ONE T-11 AERIAL CAMERA AND H.R.B. SINGER AAD-2 THERMAL SCANNER ON AUG. 10, 1972, IN COOPERATION WITH CHESAPEAKE BAY CTR. FOR ENVIRONMENTAL STUDIES. OBJECTIVE - TO USE FALSE COLOR NEAR INFRARED PHOTOGRAPHY AND PASSIVE INFRARED TO STUDY VEGETATION AND DRAINAGE PATTERNS WITH RHODE RIVER WATERSHED. FLIGHT IN CLEAR WEATHER WITH SLIGHT HAZE, AIR TEMP. 15 DEG. C AT 2500 FT., MSL WITH WIND 45 KNOTS FROM 250 DEG.

(MISSION NO W149, FLT 1)

DATA AVAILABILITY:

PLATFORM TYPES:

ARCHIVE MEDIA:
PHOTOPRINTS
178 9" X 9" FRAMES.

FUNDING:

INVENTORY:

CONTACT:
PAUL ALFONSI 804-824-3411
NATIONAL AERONAUTICS AND SPACE ADM
CHESAPEAKE BAY ECOLOGICAL PROGRAM OFFICE
WALLOPS ISLAND VIRGINIA USA 23337

GRID LOCATOR (LAT):
730786

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OBS AT 3000 FT, 147 OBS AT 2500 FT
PROJECTS:

GENERAL GEOGRAPHIC AREA:
U.S., COASTAL, NORTH ATLANTIC, CHESAPEAKE BAY, MARYLAND, RHODE RIVER

ABSTRACT:
MISSION W146, FLT. 1, JUNE 26, 1972, WITH WALLOPS STATION C-54 AIRCRAFT EQUIPPED WITH TWO T-11 AERIAL CAMERAS, IN COOPERATION WITH CHESAPEAKE BAY CTR. FOR ENVIRONMENTAL STUDIES. OBJECTIVE-TO CORRELATE GROUND TRUTH INFORMATION WITH REMOTE SENSED IMAGERY FOR VEGETATIVE GROWTH CHARACTERISTICS, SOIL CONDITIONS, SURFACE WATER LOCATIONS, AND DRAINAGE PATTERNS. LIGHT OVERCAST AND SLIGHT HAZE, AIR TEMP. 20 DEG. C AT 1500 FT., MSL WITH WIND OF 8 KNOTS FROM 300 DEG.

DATA AVAILABILITY:

PLATFORM TYPES:
AIRCRAFT

ARCHIVE MEDIA:
PHOTOPRINTS
268 9" X 9" FRAMES

FUNDING:

CONTACT:
PAUL ALFONSI  804-824-3411
NATIONAL AERONAUTICS AND SPACE ADM
CHESAPEAKE BAY ECOLOGICAL PROGRAM OFFICE
WALLOPS ISLAND VIRGINIA USA 23337

GRID LOCATOR (LAT):
730796

PARAMETER IDENTIFICATION SECTION:

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PROJECTS:

GENERAL GEOGRAPHIC AREA:
U.S., COASTAL, NORTH ATLANTIC, CHESAPEAKE BAY, MARYLAND, RHODE RIVER

ABSTRACT:
MISSION W126, FLT. 1, MAY 5, 1972, WITH WALLOPS STATION C-54 AIRCRAFT EQUIPPED WITH TWO T-11 AERIAL CAMERAS, IN COOPERATION WITH THE CHESAPEAKE BAY CENTER FOR ENVIRONMENTAL STUDIES OF SMITHSONIAN INSTITUTE. OBJECTIVE - TO OBTAIN SPRING IMAGERY OF MARSH AND BASIN VEGETATION FOR USE IN MAKING SPECTRAL COMPARISONS OF SAME PLANTS THROUGHOUT GROWING SEASON. FLIGHT MADE WITH GOOD VISIBILITY, SCATTERED CLOUD COVERAGE, AIR TEMP. 16 DEG. C AT 2500 FT., 12 DEG. C AT 10,000 FT., MSL WITH WIND OF 15 KNOTS FROM 290 DEG. (MISSION NO W126, FLT 1)

DATA AVAILABILITY:
PLATFORM TYPES:
ARCHIVE MEDIA:
PHOTO PRINTS
229 9" X 9" FRAMES.

FUNDING:

INVENTORY:

PUBLICATIONS:

CONTACT:
PAUL ALFONSI 804-824-3411
NATIONAL AERONAUTICS AND SPACE ADM
CHESAPEAKE BAY ECOLOGICAL PROGRAM OFFICE
WALLOPS ISLAND VIRGINIA USA 23337

GRID LOCATOR (LAT):
730786

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GRID LOCATOR (LONG):
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SHORELINE STUDY, SMITHSONIAN INSTITUTION
DATA COLLECTED: APRIL 1972 TO APRIL 1972

PROJECTS:

GENERAL GEOGRAPHIC AREA:
U.S., COASTAL, NORTH ATLANTIC, CHESAPEAKE BAY, MARYLAND, RHODE RIVER

ABSTRACT:
MISSION W122, FLT. 1, APRIL 21, 1972, WITH WALLOPS STATION C-54 AIRCRAFT EQUIPPED WITH ATT-11 AERIAL CAMERA IN COOPERATION WITH CHESAPEAKE BAY CENTER FOR ENVIRONMENTAL STUDIES OF THE SMITHSONIAN INSTITUTE. OBJECTIVE - TO RECORD VARIATIONS IN LOCATION OF SHORE-LINE OF RHODE RIVER ESTUARY BY USE OF AERIAL PHOTOGRAPHY IN CONJUNCTION WITH GROUND MEASUREMENTS. FLIGHT MADE IN CLOUD-FREE WEATHER WITH MODERATE HAZE, VISIBILITY 5-7 MILES, AIR TEMP. 0 DEG. C AT 5000 FT., MSL WITH WIND OF 10 KNOTS FROM SWE.
(MISSION NO W122, FLT 1)

DATA AVAILABILITY:

PLATFORM TYPES:
AIRCRAFT

ARCHIVE MEDIA:
PHOTOPRINTS
42 9" X 9" FRAMES.

FUNDING:

INVENTORY:

PUBLICATIONS:

CONTACT:
PAUL ALFONSI  804-824-3411
NATIONAL AERONAUTICS AND SPACE ADM
CHESAPEAKE BAY ECOLOGICAL PROGRAM OFFICE
WALLOPS ISLAND VIRGINIA USA 23337

GRID LOCATOR (LAT):
730786

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PROJECTS:

GENERAL GEOGRAPHIC AREA:
U.S., COASTAL, NORTH ATLANTIC, CHESAPEAKE BAY, MARYLAND, RHODE RIVER

ABSTRACT:
MISSION W119, FLT. 1, APRIL 18, 1972, WITH WALLOPS STATION C-54 AIRCRAFT WITH TWO T-11 AERIAL CAMERAS. IN COOPERATION WITH THE CHESAPEAKE BAY CENTER FOR ENVIRONMENTAL STUDIES (CBCES) TO USE VISIBLE AND NEAR INFRARED IMAGERY TO IDENTIFY VEGETATION IN RHODE RIVER WATERSHED. FLIGHT MADE IN CLEAR WEATHER, AIR TEMP. 2 DEG. C AT 12,500 FT., AND 8 DEG. C AT 2500 FT., MSL WITH WIND OF 30 KNOTS FROM 290 DEG.

DATA AVAILABILITY:

PLATFORM TYPES:
AIRCRAFT

ARCHIVE MEDIA:
PHOTOPRINTS
269 9" X 9" FRAMES.

FUNDING:

INVENTORY:

PUBLICATIONS:

CONTACT:
PAUL ALFONSI  804-824-3411
NATIONAL AERONAUTICS AND SPACE ADM
CHESAPEAKE BAY ECOLOGICAL PROGRAM OFFICE
WALLOPS ISLAND VIRGINIA USA 23337

GRID LOCATOR (LAT):
730786

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MISSION #116, FLIGHT 02, WAS ACCOMPLISHED ON MARCH 28, 1972, UTILIZING THE WALLOPS FLIGHT CENTER C-54 AIRCRAFT EQUIPPED WITH ONE T-11 AERIAL CAMERA AND ONE AAD-2 THERMAL IR SCANNER IN COOPERATION WITH THE CHESAPEAKE BAY CENTER FOR ENVIRONMENTAL STUDIES OF THE SMITHSONIAN INSTITUTE. THE OBJECTIVE OF THE FLIGHT WAS TO PROVIDE COMPARATIVE COLOR AND INFRARED IMAGERY OF THE RHODE RIVER WATERSHED.

MISSION W116, FLIGHT 02

DATA AVAILABILITY:

PLATFORM TYPES:
AIRCRAFT

ARCHIVE MEDIA:
PHOTOPRINTS
1:40 9"X9" PRINTS

FUNDING:
NATIONAL AERONAUTICS AND SPACE ADM

INVENTORY:

PUBLICATIONS:

CONTACT:
MICHAEL CONGER  804 824 3411
NATIONAL AERONAUTICS AND SPACE ADM
CHESAPEAKE BAY ECOLOGICAL PROGRAM OFFICE
WALLOPS ISLAND  VIRGINIA  USA  23337

GRID LOCATOR (LAT): 73078655

PARAMETER IDENTIFICATION SECTION:

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DATA COLLECTED: MARCH 1972 TO MARCH 1972
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PROJECTS:
GENERAL GEOGRAPHIC AREA:
NORTH AMERICA, U.S., MARYLAND, RHODE RIVER WATERSHED

ABSTRACT:
MISSION W105, FLIGHT 01, WAS ACCOMPLISHED ON JANUARY 21, 1972 UTILIZING A WALLOPS FLIGHT CENTER C-54 AIRCRAFT EQUIPPED WITH TWO T-11 AERIAL MAPPING CAMERAS IN COOPERATION WITH THE CHESAPEAKE BAY CENTER FOR ENVIRONMENTAL STUDIES OF THE SMITHSONIAN INSTITUTE. THE OBJECTIVE OF THE FLIGHT WAS TO OBTAIN WINTER IMAGERY OF THE RHODE RIVER WATERSHED TO BE USED IN STUDYING EROSIONAL PROCESSES AT WORK WITHIN THE AREA WITHOUT THE INTERFERENCE OF LEAF COVERAGE IN WOODED AREAS. A RUN WAS MADE OVER POPLAR AND COACHES ISLANDS FOR OBTAINING DATA OF EROSIONAL PROCESSES AT WORK ON THE BAYSIDE OF THE ISLANDS.

MISSION, W105, FLIGHT 01

DATA AVAILABILITY:
PLATFORM TYPES:
AIRCRAFT

ARCHIVE MEDIA:
PHOTOPRINTS
184 9"X9" PRINTS

FUNDING:
NATIONAL AERONAUTICS AND SPACE ADM

CONTACT:
MICHAEL CONGER 804 824 3411
NATIONAL AERONAUTICS AND SPACE ADM
CHESAPEAKE BAY ECOLOGICAL PROGRAM OFFICE
WALLOPS ISLAND VIRGINIA USA 23337

GRID LOCATOR (LAT):
73078655

PARAMETER IDENTIFICATION SECTION:
NAME | SPHERE | METHOD | UNITS | DATA AMOUNT | FREQUENCY | HEIGHT/DEPTH | REMARKS
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POSITION | EARTH | FIXED POINT | LONGITUDE AND LATITUDE | 184 | OBS | | |
TIME | EARTH | SAMPLING TIME | YMDHM | 184 | OBS | 1 FLIGHT PER LINE | |
PHOTOGRAPH | EARTH | COLOR CAMERA FROM AIRCRAFT | PRINTS | 184 | OBS | 1 FLIGHT PER LINE | 2500 FEET | 152 AND FOUR-TENTHS MM FOCAL LENGTH
PROJECTS:

GENERAL GEOGRAPHIC AREA:
NORTH AMERICA, U.S., MARYLAND, RHODE RIVER

ABSTRACT:
MISSION W089, FLIGHT01, WAS ACCOMPLISHED ON OCTOBER 7, 1971, UTILIZING A WALLOPS FLIGHT CENTER LEASED HELICOPTER EQUIPPED WITH FOUR T-11 AERIAL MAPPING CAMERAS IN COOPERATION WITH THE CHESAPEAKE BAY CENTER FOR ENVIRONMENTAL STUDIES OF THE SMITHSONIAN INSTITUTE. THE OBJECTIVE OF THE FLIGHT WAS TO OBTAIN AERIAL IMAGERY OF THE RHODE RIVER WATERSHED FOR USE BY SMITHSONIAN INSTITUTE INVESTIGATORS IN COMPILING AN INTEGRATED STUDY OF THE WATERSHED VEGETATION, SOIL, AND SURFACE WATER OVER AN EXTENDED PERIOD OF TIME.

DATA AVAILABILITY:

PLATFORM TYPES:
AIRCRAFT

ARCHIVE MEDIA:
PHOTO PRINTS
172 9" X 9" PRINTS

FUNDING:
NATIONAL AERONAUTICS AND SPACE ADM

INVENTORY:

CONTACT:
MICHAEL CONGER 804 824 3411
NATIONAL AERONAUTICS AND SPACE ADM
CHESAPEAKE BAY ECOLOGICAL PROGRAM OFFICE
WALLOPS ISLAND VIRGINIA USA 23337

GRID LOCATOR (LAT):
73078655

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PROJECTS:

GENERAL GEOGRAPHIC AREA:
NORTH AMERICA, U.S., MARYLAND, RHODES RIVER WATERSHED

ABSTRACT:
MISSION W080, FLIGHT01, WAS ACCOMPLISHED ON AUGUST 23, 1971, UTILIZING A WALLOPS FLIGHT CENTER LEASED HELICOPTER EQUIPPED WITH FOUR T-11 AERIAL MAPPING CAMERAS IN COOPERATION WITH THE CHESAPEAKE BAY CENTER FOR ENVIRONMENTAL STUDIES OF THE SMITHSONIAN INSTITUTE. THE OBJECTIVE OF THE FLIGHT WAS TO OBTAIN LARGE AND SMALL IMAGERY OF THE RHODES RIVER WATERSHED. THE IMAGERY WILL BE USED IN CONJUNCTION WITH EXTENSIVE GROUND TRUTH INFORMATION IN PREPARING A COMPREHENSIVE LAND USE AND ECOSYSTEMS STUDY OF THE WATERSHED.

(MISSION W080, FLIGHT01)

DATA AVAILABILITY:

PLATFORM TYPES:
AIRCRAFT

ARCHIVE MEDIA:
PHOTOPRINTS
327 9" X 9" PRINTS

FUNDING:
NATIONAL AERONAUTICS AND SPACE ADM

CONTACT:
MICHAEL CONGER 804 624 3411
NATIONAL AERONAUTICS AND SPACE ADM
CHESAPEAKE BAY ECOLOGICAL PROGRAM OFFICE
WALLOPS ISLAND VIRGINIA USA 23337

GRID LOCATOR (LAT):
73078855

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PROJECTS:
GENERAL GEOGRAPHIC AREA:
NORTH AMERICA, U.S., MARYLAND, RHODES RIVER WATERSHED

ABSTRACT:
MISSION W073, FLIGHT01, WAS ACCOMPLISHED ON JULY 13, 1971, UTILIZING A WALLOPS FLIGHT CENTER LEASED HELICOPTER EQUIPPED WITH FOUR T-11 AERIAL MAPPING CAMERAS IN COOPERATION WITH THE CHESAPEAKE BAY CENTER FOR ENVIRONMENTAL STUDIES OF THE SMITHSONIAN INSTITUTE. THE OBJECTIVE OF THE FLIGHT WAS TO OBTAIN LARGE SCALE COLOR AND FALSE COLOR INFRARED IMAGERY OF THE RHODE RIVER WATERSHED FOR USE IN STUDYING THE INTERRELATIONSHIPS OF BIOLOGICAL, CULTURAL, AND METEOROLOGICAL FACTORS ON THE WATERSHED OVER AN EXTENDED PERIOD OF TIME.

DATA AVAILABILITY:
PLATFORM TYPES:
AIRCRAFT

ARCHIVE MEDIA:
PHOTOPRINTS
190 9" X 9" PRINTS

FUNDING:
NATIONAL AERONAUTICS AND SPACE ADM

INVENTORY:

PUBLICATIONS:

CONTACT:
MICHAEL CONGER  804 824 3411
NATIONAL AERONAUTICS AND SPACE ADM
CHESAPEAKE BAY ECOLOGICAL PROGRAM OFFICE
WALLOPS ISLAND VIRGINIA USA 23337

GRID LOCATOR (LAT):
73078855

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**PROJECTS:**

**GENERAL GEOGRAPHIC AREA:**
U.S., COASTAL, NORTH ATLANTIC, CHESAPEAKE BAY, VIRGINIA, SOUTH RIVER

**ABSTRACT:**
MISSION W184, FLT. 1, JAN. 12, 1973, WITH WALLOPS STA. C-54 AIRCRAFT EQUIPPED WITH 4 HASSELBLAD CAMERAS IN COOPERATION WITH THE NASA, LANGLEY RES. CTR. AND THE EPA. OBJECTIVE - TO CONTINUE THE STUDY OF IMAGING PLANKTON ACCUMULATIONS AT BORDERS OF THE SALT WEDGE ON ESTUARINE RIVERS USING AERIAL CAMERAS WITH PREDETERMINED FILM/FILTER COMBINATIONS. CLEAR WEATHER, VISIBILITY 10-12 MILES, AIR TEMP. 10 DEG. C AT 1000 FT., MSL WIND OF 25 KNOTS FROM 290 DEG.

**DATA AVAILABILITY:**

**PLATFORM TYPES:**
AIRCRAFT

**ARCHIVE MEDIA:**
ORIGINAL FILM
441 70 MM FRAMES.

**FUNDING:**

**INVENTORY:**

**PUBLICATIONS:**

**CONTACT:**
PAUL ALFONSI 804-824-3411
NATIONAL AERONAUTICS AND SPACE ADM
CHESAPEAKE BAY ECOLOGICAL PROGRAM OFFICE
WALLOPS ISLAND VIRGINIA USA 23337

**GRID LOCATOR (LAT):**
730786

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PROJECTS:

GENERAL GEOGRAPHIC AREA:
NORTH AMERICA, U.S., MARYLAND, SOUTH RIVER AND SEVERN RIVER

ABSTRACT:

DATA AVAILABILITY:

PLATFORM TYPES:
AIRCRAFT

ARCHIVE MEDIA:
PHOTOPRINTS
230. 9"x9" PRINTS

FUNDING:
NATIONAL AERONAUTICS AND SPACE ADM

INVENTORY:

CONTACT:
MICHAEL CONGER 804 824 3411
NATIONAL AERONAUTICS AND SPACE ADM
CHESAPEAKE BAY ECOLOGICAL PROGRAM OFFICE
WALLOPS ISLAND VIRGINIA USA 23337

GRID LOCATOR (LAT):
7307834 730786 730796

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1 FLIGHT PER LINE 700, 800, 1000, 3960, 152 AND FOUR-TENTHS MM 10,000 FEET FOCAL LENGTH
PROJECTS:

GENERAL GEOGRAPHIC AREA:
NORTH ATLANTIC, COASTAL, U.S., CHESAPEAKE BAY, MARYLAND, SUSQUEHANNA RIVER, SASSAFRAS RIVER

DATA COLLECTED: AUGUST 1973 TO AUGUST 1973

ABSTRACT:
MISSION W227, FLT. 2, AUGUST 13, 1973, WITH WALLOPS STATION C-54 AIRCRAFT EQUIPPED WITH TWO T-11 AERIAL MAPPING CAMERAS. OBJECTIVE - TO OBTAIN IMAGERY OF SHOALS AND ISLANDS OFF MOUTH OF SUSQUEHANNA RIVER IN CHESAPEAKE BAY. IMAGERY WILL BE COMPARED WITH IMAGERY TAKEN BEFORE TROPICAL STORM AGNES TO DETERMINE THE EFFECT OF THE STORM ON THESE SHOALS AND ISLANDS. FLIGHT MADE IN SCATTERED TO BROKEN CLOUDS WITH SOME HAZE, AIR TEMP. 5 DEG. C AT 10,500 FT., MSL WITH WIND OF 15 KNOTS FROM 320 DEG.

DATA AVAILABILITY:
PLATFORM TYPES:
AIRCRAFT

ARCHIVE MEDIA:
PHOTOPRINTS
50 9" X 9" FRAMES

FUNDING:

INVENTORY:

PUBLICATIONS:

CONTACT:
PAUL ALFONSI  804-324-3411
NATIONAL AERONAUTICS AND SPACE ADM
CHESAPEAKE BAY ECOLOGICAL PROGRAM OFFICE
WALLOPS ISLAND VIRGINIA USA 23337

GRID LOCATOR (LAT):
750796 730795

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PAGE 01
RECEIVED: JANUARY 01, 1976
ANNEX III

Part A

Section 2

Maryland - "Cities"
PROJECTS:

GENERAL GEOGRAPHIC AREA:
NORTH ATLANTIC, COASTAL, U.S., MARYLAND, BALTIMORE HARBOR

ABSTRACT:
MISSION W081, FLIGHT01, WAS ACCOMPLISHED ON AUGUST 25, 1971, UTILIZING A WALLOPS FLIGHT CENTER CHARTERED HELICOPTER EQUIPPED WITH FOUR T-11 AERIAL MAPPING CAMERAS. THE OBJECTIVE OF THE FLIGHT WAS TO OBTAIN BASE LINE DATA FOR THE CHESAPEAKE BAY ECOLOGICAL PROGRAM OFFICE OF THE BALTIMORE HARBOR AND ITS INDUSTRIAL, COMMERCIAL, AND RESIDENTIAL BORDER AREAS. (MISSION W081, FLIGHT01)

DATA AVAILABILITY:
PLATFORM TYPES:
AIRCRAFT

ARCHIVE MEDIA:
PHOTOPRINTS
90 9” X 9” PRINTS

FUNDING:
NATIONAL AERONAUTICS AND SPACE ADM

INVENTORY:

PUBLICATIONS:

CONTACT:
MICHAEL CONGER 804 824 3411
NATIONAL AERONAUTICS AND SPACE ADM
CHESAPEAKE BAY ECOLOGICAL PROGRAM OFFICE
WALLOPS ISLAND VIRGINIA USA 23337

GRID LOCATOR (LAT):
73079625

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DATA COLLECTED: MARCH 1973 TO MARCH 1973
RECEIVED: JANUARY 01, 1976

PROJECTS:
ERTS

GENERAL GEOGRAPHIC AREA:
NORTH ATLANTIC, COASTAL, U.S., COASTAL, DELAWARE BAY, DELAWARE, MARYLAND, NEWARK, BOWIE-ANNAPOLIS AREA

ABSTRACT:
MISSION W193, FLT. 1, MARCH 16, 1973, WITH WALLOPS STATION C-54 AIRCRAFT EQUIPPED WITH AN I2S AND A T-11 AERIAL MAPPING CAMERA SYSTEM IN COOPERATION WITH MD. DEPT. OF STATE PLANNING. OBJECTIVE - TO OBTAIN LARGE SCALE AERIAL PHOTOGRAPHY FOR LAND USE PLANNING IN THE RAPIDLY DEVELOPING BOWIE-ANNAPOLIS-BALTIMORE AREA, AND THE BALTIMORE-NEWARK CORRIDOR. FLIGHT IN HAZY WEATHER WITH THIN OVERCAST, AIR TEMP. 5 DEG. C AT 9500 FT., MSL WITH WIND OF 30 KNOTS FROM 270 DEG.
(MISSION NO W193, FLT 1)

DATA AVAILABILITY:

PLATFORM TYPES:
AIRCRAFT

ARCHIVE MEDIA:
PHOTOPRINTS
335 2.7" X 2.7" AND 9" X 9" FRAMES

FUNDING:

INVENTORY:

PUBLICATIONS:

CONTACT:
PAUL ALFONSI  804-824-3411
NATIONAL AERONAUTICS AND SPACE ADM
CHESAPEAKE BAY ECOLOGICAL PROGRAM OFFICE
WALLOPS ISLAND VIRGINIA USA 23337

GRID LOCATOR (LAT):
730796 730795

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PROJECTS:
LANDSAT

GENERAL GEOGRAPHIC AREA:
U.S., COASTAL, NORTH ATLANTIC, MARYLAND, CAMBRIDGE

ABSTRACT:
MISSION W186, FLT. 2, FEB. 9, 1973, WITH WALLOPS STATION C-54 AIRCRAFT EQUIPPED WITH T-11 CAMERA AND AN I2S CAMERA SYSTEM IN COOPERATION WITH MD. DEPT. OF STATE PLANNING. FLIGHT COVERED CAMBRIDGE, MD. AND ITS ENVIRONS. OBJECTIVE - TO OBTAIN URBAN DEVELOPMENT AND LAND USE PATTERNS IN AND AROUND CAMBRIDGE. CLEAR WEATHER WITH VISIBILITY 15-20 MILES, AIR TEMP. 10 DEG. C AT 9500 FT., MSL WITH WIND OF 25 KNOTS FROM 350 DEG.

DATA AVAILABILITY:
PLATFORM TYPES:
AIRCRAFT

ARCHIVE MEDIA:
PHOTO PRINTS
38 2.7" x 2.7" AND 9" x 9" FRAMES

FUNDING:

INVENTORY:

PUBLICATIONS:

CONTACT:
PAUL ALFONSI 804-824-3411
NATIONAL AERONAUTICS AND SPACE ADM
CHESAPEAKE BAY ECOLOGICAL PROGRAM OFFICE
WALLOPS ISLAND VIRGINIA USA 23337

GRID LOCATOR (LAT):
730786

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100 MM AND 152 MM FOCAL LENGTH
ANNEX III

Part A

Section 2

Maryland - "Oceanside"
007236

WAVE PROFILE STUDY-MARYLAND
DATA COLLECTED: AUGUST 1973 TO AUGUST 1973

PROJECTS:

GENERAL GEOGRAPHIC AREA:
NORTH ATLANTIC, COASTAL, U.S., MARYLAND

ABSTRACT:
MISSION W229, FLIGHT 01, WAS ACCOMPLISHED ON AUGUST 17, 1973, UTILIZING THE WALLOPS FLIGHT CENTER C-54 AIRCRAFT EQUIPPED WITH A T-11 AERIAL MAPPING CAMERA AND A HELIUM NEON LASER, IN COOPERATION WITH THE NASA LANGLEY RESEARCH CENTER. THE OBJECTIVE OF THE FLIGHT WAS TO MAKE A STUDY OF WAVE ACTION USING AERIAL PHOTOGRAPHY AND LASER PROFILE TAPES.

DATA AVAILABILITY:
PLATFORM TYPES:
AIRCRAFT

ARCHIVE MEDIA:
PHOTOPRINTS
49, 9"X9" PRINTS

FUNDING:
NATIONAL AERONAUTICS AND SPACE ADM

INVENTORY:

PUBLICATIONS:

CONTACT:
MICHAEL CONGER 804 824 3411
NATIONAL AERONAUTICS AND SPACE ADM
CHESAPEAKE BAY ECOLOGICAL PROGRAM OFFICE
WALLOPS ISLAND VIRGINIA USA 23337

GRID LOCATOR (LAT):
7307B50190

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INVESTIGATIONS OF MARYLAND'S TIDAL SHORELINES
DATA COLLECTED: FEBRUARY 1973 TO FEBRUARY 1973

PROJECTS:
ERTS

GENERAL GEOGRAPHIC AREA:
NORTH ATLANTIC, COASTAL, U.S., CHESAPEAKE BAY, MARYLAND, ASSATEAGUE ISLAND TO FENWICK ISLAND

ABSTRACT:
MISSION W188, FLT. 1, FEB. 12, 1973, WITH WALLOPS STATION C-54 AIRCRAFT EQUIPPED WITH A T-11 AND AN 125 CAMERA SYSTEM IN COOPERATION WITH MD. GEOLOGICAL SURVEY. OBJECTIVE - TO CONTINUE MONITORING THE MD. SHORELINES FOR CHANGES IN LAND FORM CONFIGURATION AND UNDERWATER SHIFTS IN SAND BARS AND CHANNELS. IMAGERY WILL ALSO BE USED WHEN POSSIBLE FOR LAND USE, COMMUNITY URBANIZATION, AND ARCHEOLOGICAL STUDIES. FLIGHT IN CLEAR WEATHER, AIR TEMP. 4 DEG. C AT 10,500 FT., MSL WITH WIND OF 28 KNOTS FROM 320 DEG.

(MISSION NO W188, FLT 1)

DATA AVAILABILITY:

PLATFORM TYPES:
AIRCRAFT

ARCHIVE MEDIA:
PHOTOPRINTS
235 2.7" X 2.7" AND 9" X 9" FRAMES

FUNDING:

INVENTORY:

PUBLICATIONS:

CONTACT:
PALL ALFONSI 804-824-3411
NATIONAL AERONAUTICS AND SPACE ADM
CHESAPEAKE BAY ECOLOGICAL PROGRAM OFFICE
WALLOPS ISLAND VIRGINIA USA 23337

GRID LOCATOR (LAT):
730787 730786 730796 730775 730785

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CHINCOTEAGUE BAY OVERFLIGHT
DATA COLLECTED: APRIL 1972 TO APRIL 1972

PROJECTS:

GENERAL GEOGRAPHIC AREA:
U.S., COASTAL, NORTH ATLANTIC, CHESAPEAKE BAY, VIRGINIA, MARYLAND, CHINCOTEAGUE BAY

ABSTRACT:
MISSION W124, FLT. 2, APRIL 27, 1972, OVER CHINCOTEAGUE BAY, WITH WALLOPS STATION C-54 AIRCRAFT EQUIPPED WITH A T-11 AERIAL CAMERA. OBJECTIVE - TO OBTAIN BASE LINE INFORMATION OF WETLANDS AND CULTURAL CHANGES OCCURRING THROUGHOUT THE WINTER MONTHS. FLIGHT IN CLEAR WEATHER, VISIBILITY 7-8 MILES, AIR TEMP. 0 DEG. C AT 7000 FT., MSL WITH WIND OF 15 KNOTS FROM 290 DEG.
(MISSION NO W124, FLT 2)

DATA AVAILABILITY:

PLATFORM TYPES:
AIRCRAFT

ARCHIVE MEDIA:
PHOTOPRINTS
103 9" X 9" FRAMES.

FUNDING:

INVENTORY:

PUBLICATIONS:

CONTACT:
PAUL ALFONSI  804-824-3411
NATIONAL AERONAUTICS AND SPACE ADM
CHESAPEAKE BAY ECOLOGICAL PROGRAM OFFICE
WALLOPS ISLAND VIRGINIA USA 23337

GRID LOCATOR (LAT):
730775 730785

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ANNEX III

Part A

Section 2

Maryland - "Maryland-Virginia"
PROJECTS:

GENERAL GEOGRAPHIC AREA:
NORTH ATLANTIC, COASTAL, U.S., CHESAPEAKE BAY AREA

ABSTRACT:
MISSION W117, FLIGHT 01, WAS ACCOMPLISHED ON APRIL 5, 1972, UTILIZING A WALLOPS FLIGHT CENTER QUEEN AIR AIRCRAFT EQUIPPED WITH FOUR HASSELBLAD CAMERAS, IN COOPERATION WITH NASA'S GODDARD SPACE FLIGHT CENTER. THE OBJECTIVE OF THE FLIGHT WAS TO OBTAIN AERIAL IMAGERY OF A VARIETY OF LAND FORMS FOUND IN THE CHESAPEAKE BAY AREA. IMAGES WERE TAKEN OF BARRIER ISLANDS, INLAND WETLANDS, HEAVILY DISSECTED UPLANDS, AND HEAVILY WOODED LOWLANDS.

DATA AVAILABILITY:

PLATFORM TYPES:
AIRCRAFT

ARCHIVE MEDIA:
PHOTOPRINTS
277 70MM PRINTS

FUNDING:
NATIONAL AERONAUTICS AND SPACE AGENCY

INVENTORY:

PUBLICATIONS:

CONTACT:
MICHAEL CONGER  804 824 3411
NATIONAL AERONAUTICS AND SPACE AGENCY
CHESAPEAKE BAY ECOLOGICAL PROGRAM OFFICE
WALLOPS ISLAND VIRGINIA USA 23337

GRID LOCATOR (LAT): 73078550 73077555 73078503 73078635 73078634 73078754 73078740

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PROJECTS:
GENERAL GEOGRAPHIC AREA:
NORTH ATLANTIC, COASTAL, U.S., POTOMAC RIVER

ABSTRACT:
MISSION W262, FLIGHT 01 WAS ACCOMPLISHED ON 30 JANUARY 1974. THE OBJECTIVE OF THE FLIGHT WAS TO DEVELOP TECHNIQUES FOR DETECTING WATER BORNE CHLOROPHYLL USING AERIAL CAMERAS FOR MULTI-BAND IMAGERY.

DATA AVAILABILITY:
PLATFORM TYPES:
AIRCRAFT

FUNDING:
NASA

CONTACT:
G. GREW 804 824 3411
NATIONAL AERONAUTICS AND SPACE ADMINISTRATION
CHESAPEAKE BAY ECOLOGICAL PROGRAM OFFICE
WALLOPS ISLAND VIRGINIA USA 23337

GRID LOCATOR (LAT):
730786 730787

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PROJECTS:

GENERAL GEOGRAPHIC AREA:
NORTH AMERICA, U.S., MARYLAND, WEST VIRGINIA

ABSTRACT:
MISSION W256, FLIGHT 1 WAS ACCOMPLISHED ON 12 OCTOBER 1973. THE OBJECTIVE OF THE FLIGHT WAS TO OBTAIN MULTISPECTRAL IMAGERY OF RIVER, FOREST AREAS, AND STRIP MINES FOR USE IN MANAGEMENT STUDIES.

DATA AVAILABILITY:
PLATFORM TYPES:
AIRCRAFT

ARCHIVE MEDIA:
PHOTOPRINTS
520 PHOTOPRINTS

FUNDING:
NASA

INVENTORY:
PUBLICATIONS:

CONTACT:
MR. WALTERS 804 824 3411
NATIONAL AERONAUTICS AND SPACE ADMINISTRATION
CHESAPEAKE BAY ECOLOGICAL PROGRAM OFFICE
WALLOPS ISLAND VIRGINIA USA 23337

GRID LOCATOR (LAT):
730797 730798 730799

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MULTI-CHANNEL OCEAN COLOR SENSOR AND HASSELBLAD, POTOMAC RIVER WATER POLLUTION STUDY

DATA COLLECTED: APRIL 1973 TO APRIL 1973

RECEIVED: JANUARY 01, 1976

PROJECTS:

GENERAL GEOGRAPHIC AREA:
U.S., COASTAL, NORTH ATLANTIC, CHESAPEAKE BAY, VIRGINIA, POTOMAC RIVER

ABSTRACT:
MISSION W204, FLIGHT 1, APRIL 13, 1973, UTILIZING THE WALLOPS STATION C-54 AIRCRAFT EQUIPPED WITH FOUR HASSELBLAD CAMERAS AND A MULTI-CHANNEL OCEAN COLOR SENSOR (MOC5) IN COOPERATION WITH NASA S LANGLEY RESEARCH CENTER FOR ENVIRONMENTAL PROTECTION AGENCY. THE OBJECTIVE OF THE FLIGHT WAS TO DIFFERENTIATE POLLUTION FROM NORMAL WATER IN THE POTOMAC RIVERS BY USING FOUR HASSELBLAD CAMERAS EQUIPPED WITH DIFFERING FILM/FILTER COMBINATIONS FOR PRODUCING SPECIFIC SPECTRAL RESPONSES IN CONJUNCTION WITH THE MULTI-CHANNEL OCEAN COLOR SENSOR (MOC5). CLEAR WEATHER, FEW SCATTERED CLOUDS. AIR TEMPERATURE 12 DEG. C AT 10,5000 FT. MSL, WIND OF 20 KNOTS FROM 300 DEG.
(MISSION NO W204, FLT 1)

DATA AVAILABILITY:
MISSION NO W204, FLT 1

PLATFORM TYPES:
AIRCRAFT

ARCHIVE MEDIA:
PHOTOPRINTS
192 70 MM FRAMES

FUNDING:

INVENTORY:

PUBLICATIONS:

CONTACT:
PAUL ALFONSI  804-824-3411
NATIONAL AERONAUTICS AND SPACE ADM
CHESAPEKE BAY ECOLOGICAL PROGRAM OFFICE
WALLOPS ISLAND VIRGINIA USA 23337

GRID LOCATOR (LAT):
730787 730786

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PROJECTS:

GENERAL GEOGRAPHIC AREA:
U.S., COASTAL, NORTH ATLANTIC, CHESAPEAKE BAY, MARYLAND, POTOMAC RIVER

ABSTRACT:
MISSION W141, FLT. 1 WITH WALLOPS STATION C-54 AIRCRAFT EQUIPPED WITH T-11 AND T-25 CAMERA SYSTEM ON OCT. 2, 1972, IN COOPERATION WITH NASA'S LANGLEY RES. CTR. AND ENVIRONMENTAL PROTECTION AGENCY. OBJECTIVE - TO EXPLORE THE FEASIBILITY OF IMAGING PLANKTON ACCUMULATIONS AT THE BORDERS OF THE SALT WEDGE ON ESTUARINE RIVERS USING AERIAL CAMERAS WITH PRE-DETERMINED FILM/FILTER COMBINATIONS. FLIGHT IN CLEAR WEATHER, VISIBILITY 10-15 MILES, AIR TEMP. 65 DEG. F AT 10,000 FT., MSL WITH WIND 18 KNOTS FROM 300 DEG. AT 10,000 FT. AND 12 KNOTS FROM 335 DEG. AT 5000 FT.

MISSION W141, FLT 1

DATA AVAILABILITY:

PLATFORM TYPES:
AIRCRAFT

ARCHIVE MEDIA:
PHOTOPRINTS
400 9" X 9" AND 70-MM FRAMES.

FUNDING:

CONTACT:
PAUL ALFONSI 804-824-3411
NATIONAL AERONAUTICS AND SPACE ADM
CHESAPEAKE BAY ECOLOGICAL PROGRAM OFFICE
WALLOPS ISLAND VIRGINIA USA 23337

GRID LOCATOR (LAT):
730787

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6 INCH FOCAL LENGTH
PROJECTS:

GENERAL GEOGRAPHIC AREA:
NORTH AMERICA, U.S., MARYLAND, POTOMAC AND PATUXENT RIVERS

ABSTRACT:
MISSION W250, FLIGHT 01, WAS ACCOMPLISHED ON OCTOBER 24, 1973, UTILIZING THE WALLOPS FLIGHT CENTER C-54 AIRCRAFT EQUIPPED WITH FOUR HASSELBLAD CAMERAS, AND ONE T-11 AERIAL MAPPING CAMERA IN COOPERATION WITH NASA'S LANGLEY RESEARCH CENTER. THE OBJECTIVE OF THE FLIGHT WAS TO OBTAIN MULTISPECTRAL IMAGERY OF THE POTOMAC AND PATUXENT RIVERS FOR USE IN ANALYZING CHLOROPHYLL CONCENTRATIONS IN PLANKTON PLUMES IN THE REGION OF THE SALT WEDGES ON THE TWO RIVERS.

DATA AVAILABILITY:

PLATFORM TYPES:
AIRCRAFT

ARCHIVE MEDIA:
PHOTOPRINTS
354, 70MM PRINTS, 73, 9"X9" PRINTS

FUNDING:
NATIONAL AERONAUTICS AND SPACE ADM

GRID LOCATOR (LAT):
7307873 73078732 73078750 73078730 73078603 73078644 73078645 73078642

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PROJECTS:

GENERAL GEOGRAPHIC AREA:
U.S., COASTAL, NORTH ATLANTIC, CHESAPEAKE BAY, MARYLAND, POTOMAC RIVER, PATUXENT RIVER

ABSTRACT:
MISSION W119, FLT. 3 ACCOMPLISHED WITH WALLOPS STATION C-54 AIRCRAFT WITH TWO T-11 AERIAL CAMERAS ON APRIL 18, 1972. IN COOPERATION WITH TRI-COUNTY COUNCIL FOR SOUTHERN MARYLAND TO STUDY WATER POLLUTION. FLIGHT MADE IN CLEAR WEATHER, AIR TEMP. 0 DEG. C AT 10,500 FT., MSL WITH WIND OF 30 KNOTS FROM 290 DEG.

DATA AVAILABILITY:
PLATFORM TYPES:
AIRCRAFT

ARCHIVE MEDIA:
PHOTOPRINTS
80 9" X 9" FRAMES.

CONTACT:
PAUL ALFONSI 804-824-3411
NATIONAL AERONAUTICS AND SPACE ADM
CHESAPEAKE BAY ECOLOGICAL PROGRAM OFFICE
WALLOPS ISLAND VIRGINIA USA 23337

GRID LOCATOR (LAT):
730786 730787

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PROJECTS:

GENERAL GEOGRAPHIC AREA:
U.S., COASTAL, NORTH ATLANTIC, CHESAPEAKE BAY, MARYLAND POTOMAC RIVER, SOUTH RIVER, CAMBRIDGE-SECRETARY, PITTSVILLE-SALISBURY, SEVERN RIVER

ABSTRACT:
MISSION W196, FLT. 1, MARCH 19, 1973, WITH WALLOPS STA. C-54 AIRCRAFT EQUIPPED WITH 3 HASSELBLAD CAMERAS AND AAD-2 IR SCANNER IN COOPERATION WITH NASA'S LANGLEY RES. CTR. FOR THE EPA. OBJECTIVE - IMAGE WATER POLLUTION AND POLLUTION OUTFALLS ON POTOMAC, SEVERN AND SOUTH RIVERS. LAND FILLS WERE IMAGED OVER THE MARYLAND TOWNS OF SALISBURY, PITTSVILLE, SECRETARY, AND BLACKWATER. WEATHER OF BROKEN CLOUDS, VISIBILITY UP TO 7 MILES. AIR TEMP. 1 DEG. C AT 1000 FT., MSL WIND OF 30-40 KNOTS FROM 300 DEG. (MISSION NO W196, FLT 1)

DATA AVAILABILITY:

PLATFORM TYPES:
AIRCRAFT

ARCHIVE MEDIA:
ORIGINAL FILM
198 70 MM FRAMES.

CONTACT:
PAUL ALFONSI 804-824-3411
NATIONAL AERONAUTICS AND SPACE ADM
CHESAPEAKE BAY ECOLOGICAL PROGRAM OFFICE
WALLOPS ISLAND VIRGINIA USA 23337

GRID LOCATOR (LAT):
730796 730786 730785

PARAMETER IDENTIFICATION SECTION:

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PAGE 01 001155
RIVER AND RESERVOIR POLLUTION STUDIES

DATA COLLECTED: JULY 1973 TO JULY 1973

PROJECTS:

GENERAL GEOGRAPHIC AREA:
NORTH ATLANTIC, COASTAL, U.S., CHESAPEAKE BAY, MARYLAND, POTOMAC RIVER, YORK-PAMUNKEY-CHICKAHOMINY RIVERS, APPOMATTOX RIVER, ROANOKE RIVER, JOHN KERR RESERVOIR

ABSTRACT:
MISSION W233, FLT. 1, ACCOMPLISHED JULY 13, 1973, WITH WALLOPS STATION C-54 AIRCRAFT EQUIPPED WITH 4 HASSELBLAD CAMERAS AND A T-11 AERIAL MAPPING CAMERA, IN COOPERATION WITH NASA'S LANGLEY RES. CTR. OBJECTIVE - TO OBTAIN MULTI-SPECTRAL IMAGERY OF THE KERR RESERVOIR AND POTOMAC, YORK, AND CHICKAHOMINY RIVERS FOR USE IN WATER POLLUTION STUDIES. FLIGHT IN CLEAR WEATHER WITH VISIBILITY UP TO 6 MILES, AIR TEMP. 12 DEG. C AT 9500 FT., MSL WITH WIND OF 15 KNOTS FROM 215 DEG.

DATA AVAILABILITY:

PLATFORM TYPES:
AIRCRAFT

ARCHIVE MEDIA:
PHOTOPRINTS
560 70 MM AND 9" X 9" FRAMES.

FUNDING:

INVENTORY:

PUBLICATIONS:

CONTACT:
PAUL ALFONSI 804-824-3411
NATIONAL AERONAUTICS AND SPACE ADM
CHESAPEAKE BAY ECOLOGICAL PROGRAM OFFICE
WALLOPS ISLAND VIRGINIA USA 23337

GRID LOCATOR (LAT):
730787 730786 730776 730777 730768

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40 MM AND 152 MM FOCAL LENGTH, MULTI-SPECTRAL
CHLOROPHYLL CONCENTRATION STUDIES OF THE YORK, PAMUNKEY AND POTOMAC RIVERS
DATA COLLECTED: MAY 1973 TO MAY 1973
RECEIVED: JANUARY 01, 1976

PROJECTS:

GENERAL GEOGRAPHIC AREA:
U.S., COASTAL, NORTH ATLANTIC, CHESAPEAKE BAY, VIRGINIA, POTOMAC RIVER, PAMUNKEY RIVER, YORK RIVER

ABSTRACT:
MISSION W215, FLIGHT 1, MAY 4, 1973, WITH WALLOPS STATION C-54 AIRCRAFT EQUIPPED WITH 4 HASSELBLADS AND 1 T-11 AERIAL MAPPING CAMERA IN COOPERATION WITH NASA'S LANGLEY RES. CTR. AND EPA. OBJECTIVE - TO IMAGE CHLOROPHYLL CONCENTRATIONS DUE TO SUBMERGED PHYTOPLANKTON BUILDUP IN YORK, PAMUNKEY AND POTOMAC RIVERS. WEATHER - HEAVY TO BROKEN CLOUDS, VISIBILITY UP TO 6 MILES, AIR TEMP. 3 DEG. C AT 10,500 FT., MSL WITH WIND OF 25 KNOTS FROM 280 DEG.
(MISSION NO W215, FLT 1)

DATA AVAILABILITY:
PLATFORM TYPES:
AIRCRAFT

ARCHIVE MEDIA:
PHOTOPRINTS
140 70 MM AND 9" X 9" FRAMES

FUNDING:

INVENTORY:

PUBLICATIONS:

CONTACT:
PAUL ALFONSI 804-824-3411
NATIONAL AERONAUTICS AND SPACE ADM
CHESAPEAKE BAY ECOLOGICAL PROGRAM OFFICE
WALLOPS ISLAND VIRGINIA USA 23337

GRID LOCATOR (LAT):
730776 730786

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PROJECTS:
LANDSAT

GENERAL GEOGRAPHIC AREA:
U.S., COASTAL, NORTH ATLANTIC, CHESAPEAKE BAY, DELAWARE CANAL, CHOPTANK RIVER, WICOMICO RIVER, RAPPAHANNOCK RIVER, YORK RIVER

ABSTRACT:
MISSION W220, FLT. 1, JUNE 11, 1973, WITH WALLOPS STATION C-54 AIRCRAFT EQUIPPED WITH T-11 AERIAL MAPPING CAMERA AND I2S CAMERA SYSTEM IN COOPERATION WITH WATERWAYS EXPERIMENT STATION OF THE CORPS OF ENGINEERS. OBJECTIVE - TO OBTAIN MULTI-BAND IMAGERY OF THE MAJOR RIVERS EMPTYING INTO CHESAPEAKE BAY. IMAGERY WILL BE USED IN Delineating AREAS OF HIGH PARTICULATE AND SOLUTE CONCENTRATIONS. WEATHER - HAZY WITH A FEW SCATTERED CLOUDS, VISIBILITY UP TO 5 MILES, AIR TEMP. 10 DEG. C AT 10,000 FT., MSL WITH WIND OF 21 KNOTS FROM 320 DEG.

DATA AVAILABILITY:

ARCHIVE MEDIA:
PHOTOPRINTS
266 2.7" X 2.7" AND 9" X 9" FRAMES

CONTACT:
P. ALFONSI 804-824-3411
NATIONAL AERONAUTICS AND SPACE ADM
CHESAPEAKE BAY ECOLOGICAL PROGRAM OFFICE
WALLOPS ISLAND VIRGINIA USA 23337

GRID LOCATOR (LAT):
730795 730786 730785 730776

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PROJECTS:

GENERAL GEOGRAPHIC AREA:
U.S., COASTAL, NORTH ATLANTIC, CHESAPEAKE BAY, DELAWARE CANAL, CHOPTANK RIVER, WICOMICO RIVER, RAPPAHANNOCK RIVER, YORK RIVER

ABSTRACT:
MISSION W203, FLIGHT 1, MAY 16, 1973, WITH WALLOPS STATION C-54 AIRCRAFT EQUIPPED WITH T-11 AERIAL MAPPING CAMERA AND 12S AERIAL CAMERA SYSTEM. FLIGHT MADE FOR U. S. ARMY ENGINEERS WATERWAYS EXPERIMENT STATION AS AN ERTS UNDERFLIGHT MISSION.
OBJECTIVE-TO PROVIDE REMOTE SENSOR IMAGERY OF CHESAPEAKE BAY RIVERS IN SAME SPECTRAL BANDS FROM THE AIRCRAFT'S 12S CAMERA AS THAT OF MULTI-SPECTRAL SCANNER ON ERTS SATELLITE.
(MISSION NO W203, FLT 1)

DATA AVAILABILITY:

PLATFORM TYPES:
AIRCRAFT

ARCHIVE MEDIA:
PHOTOPRINTS
373 2.7" X 2.7" AND 9" X 9" FRAMES

FUNDING:

INVENTORY:

PUBLICATIONS:

CONTACT:
PAUL ALFONSI 804-824-3411
NATIONAL AERONAUTICS AND SPACE ADM
CHESAPEAKE BAY ECOLOGICAL PROGRAM OFFICE
WALLOPS ISLAND VIRGINIA USA 23337

GRID LOCATOR (LAT):
730795 730786 730785 730776

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MOVEMENT OF SUSPENDED PARTICULATE AND SOLUBLE CONCENTRATIONS WITHIN THE
CHESAPEAKE BAY RIVER SYSTEMS
DATA COLLECTED: FEBRUARY 1973 TO FEBRUARY 1973
RECEIVED: JANUARY 01, 1976

PROJECTS:
LANDSAT

GENERAL GEOGRAPHIC AREA:
U.S., COASTAL, NORTH ATLANTIC, CHESAPEAKE BAY, VIRGINIA YORK RIVER, RAPPAHANNOCK RIVER, WICOMICO RIVER, CHOPTANK RIVER, ELK RIVER TO DELAWARE RIVER

ABSTRACT:
MISSION W190, F1. 1, FEB, 28, 1973, WITH WALLOPS STA. C-54 AIRCRAFT EQUIPPED WITH I2S AND T-11 AERIAL MAPPING CAMERA SYSTEMS IN COOPERATION WITH U S ARMY ENGINEER WATERWAYS STA. FLIGHT COVERED PORTIONS OF THE RAPPAHANNOCK, YORK, CHOPTANK, WICOMICO, AND ELK RIVERS AND THE CHESAPEAKE AND DELAWARE CANAL. OBJECTIVE - TO OBTAIN WINTER IMAGERY OF THESE RIVERS FOR MONITORING THE INFLOW OF SUSPENDED PARTICLES AND DIFFERENTI MAGNITUDES OF SOLUTE CONCENTRATIONS.
(MISSION NO W190, FLT 1)

DATA AVAILABILITY:
PLATFORM TYPES:
AIRCRAFT

ARCHIVE MEDIA:
ORIGINAL FILM
74 9 X 9 INCH FRAMES; 169 2.7 X 2.7 INCH FRAMES.

FUNDING:

INVENTORY:

PUBLICATIONS:

CONTACT:
PAUL ALFONSI  804-824-3411
NATIONAL AERONAUTICS AND SPACE ADM
CHESAPEAKE BAY ECOLOGICAL PROGRAM OFFICE
WALLOPS ISLAND VIRGINIA USA 23337

GRID LOCATOR (LAT):
730795 730786 730785 730776 730775

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MOVEMENT OF SUSPENDED PARTICLE AND SOLUTE CONCENTRATIONS WITHIN CHESAPEAKE BAY RIVERS-RAPPAHANNOCK, YORK, CHOPTANK, WICOMOCO, ELK, AND CHESAPEAKE DELAWARE CANAL

DATA COLLECTED: OCTOBER 1972 TO OCTOBER 1972

PROJECTS:

GENERAL GEOGRAPHIC AREA:
U.S., COASTAL, NORTH ATLANTIC, DELAWARE BAY, CHESAPEAKE DELAWARE CANAL, CHESAPEAKE BAY, RAPPAHANNOCK RIVER, YORK RIVER, CHOPTANK RIVER, WICOMOCO RIVER, ELK RIVER, JAMES RIVER

ABSTRACT:
MISSION W172, FLT. 1, WITH WALLOPS STATION C-54 AIRCRAFT EQUIPPED WITH T-11 AND AN I2S CAMERA SYSTEM ON OCTOBER 10, 1972, IN COOPERATION WITH U.S. ARMY ENGINEER WATERWAYS EXPERIMENT STATION (WES), FLIGHT COVERED PORTIONS OF RAPPAHANNOCK, YORK, CHOPTANK, WICOMOCO, AND ELK RIVERS, AND CHESAPEAKE AND DELAWARE CANAL. OBJECTIVE - TO LOCATE AND MONITOR MOVEMENT OF SUSPENDED PARTICLES AND SOLUTE CONCENTRATIONS WITH INFLOW AND TIDAL ACTION. CLEAR WEATHER WITH BLUE SKIES, VISIBILITY 10-15 MILES, AIR TEMP. +7 DEG. AT 9,500 FT. MSL WITH WIND OF 8 KNOTS FROM 360 DEG.

MISSION NO W172, FLT 1

DATA AVAILABILITY:

PLATFORM TYPES:
AIRCRAFT

ARCHIVE MEDIA:
PHOTOPRINTS
386 9" X 9" FRAMES.

FUNDING:

INVENTORY:

PUBLICATIONS:

CONTACT:
PAUL ALFONSI 804-824-3411
NATIONAL AERONAUTICS AND SPACE ADM
CHESAPEAKE BAY ECOLOGICAL PROGRAM OFFICE
WALLOPS ISLAND VIRGINIA USA 23337

GRID LOCATOR (LAT):
730795 730785 730786 730776 730766 730775

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POSITION TIME PHOTOGRAPH
PROJECTS:

GENERAL GEOGRAPHIC AREA:
U.S., COASTAL, NORTH ATLANTIC, CHESAPEAKE BAY, VIRGINIA, MARYLAND, NORTH CAROLINA OUTER BANKS

ABSTRACT:
MISSION W120, FLT. 1, ACCOMPLISHED WITH WALLOPS STATION C-54 AIRCRAFT EQUIPPED WITH TWO T-11 AERIAL CAMERAS ON APRIL 19, 1972, IN COOPERATION WITH U.S. PARK SERVICE AND UNIV. OF VA. OBJECTIVE - TO UTILIZE FALSE COLOR IMAGERY IN ASSESSING LAND AND BIOLOGICAL MODIFICATIONS OF N. C., VA. AND MARYLAND OUTER BANKS.
(MISSION NO W120, FLT 1)

DATA AVAILABILITY:
PLATFORM TYPES:
AIRCRAFT

ARCHIVE MEDIA:
PHOTOPRINTS
339 9" X 9" FRAMES.

FUNDING:
INVENTORY:

PUBLICATIONS:

CONTACT:
PAUL ALFONSI 804-824-3411
NATIONAL AERONAUTICS AND SPACE ADM
CHESAPEAKE BAY ECOLOGICAL PROGRAM OFFICE
WALLOPS ISLAND VIRGINIA USA 23337

GRID LOCATOR (LAT):
730775 730755

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OBS AT 10000 FT
ANNEX III

Part A

Section 2

North Carolina
**PROJECTS:**

GENERAL GEOGRAPHIC AREA:
NORTH AMERICA, COASTAL, U.S., NORTH CAROLINA

**ABSTRACT:**
A large scale survey of wetlands in coastal North Carolina was conducted between 1957 and 1959. Principal study objectives were to locate, classify, and map wetland areas, and to evaluate their development potential for wildlife (especially waterfowl). This data base is utilized by the Permit Section of the N.C. Department of Natural and Economic Resources when projects involve wetland alterations.

**DATA AVAILABILITY:**

**PLATFORM TYPES:**
- AIRCRAFT
- FIXED STATION

**ARCHIVE MEDIA:**
- REPORTS
- 169 PAGE REPORT, DATED APRIL 1962

**FUNDING:**
- FEDERAL AID IN WILDLIFE RESTORATION, PROJECT W-6-R

**CONTACT:**
KENNETH A. WILSON 919 829 7896
NORTH CAROLINA WILDLIFE RESOURCES COMMISSION
RALEIGH NORTH CAROLINA USA 27611

**GRID LOCATOR (LAT):**
730765 730766 730756 730757 730746 730747 730748 730737 730738

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A survey of beach erosion of North Carolina was conducted from 1938 to 1971. Utilizing black and white cameras from airplanes, the rate of erosion was determined by the relationship of the beach to fixed reference points.

DATA AVAILABILITY:

PLATFORM TYPES:
AIRCRAFT

ARCHIVE MEDIA:
REPORTS
ONE 31 PAGE REPORT

FUNDING:
NORTH CAROLINA DIVISION OF WATERWAYS AND SEASHORES

INVENTORY:

PUBLICATIONS:
DATA CONTAINED IN REPORT NUMBER 73-1, A SURVEY OF NORTH CAROLINA BEACH EROSION BY PHOTO METHODS

CONTACT:
H.E. WAHLS  919 737 3326
NORTH CAROLINA STATE UNIVERSITY
THE CENTER FOR MARINE AND COASTAL STUDIES
RALEIGH  NORTH CAROLINA USA  27607

GRID LOCATOR (LAT):
730733 730747 730756 730766

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MISSION W206, FLIGHT 1, APRIL 20, 1973, WITH WALLOPS STATION C-54 AIRCRAFT EQUIPPED WITH 4 HASSELBLAD CAMERAS AND 1 T-11 AERIAL MAPPING CAMERA IN COOPERATION WITH NASA'S LANGUAGE RES. CTR. AND EPA. OBJECTIVE - TO IMAGE CHLOROPHYLL CONCENTRATIONS DUE TO PHYTOPLANKTON IN ALBERMARLE SOUND-CHOWAN RIVER AREA OF N. C.

MISSION NO W206, FLT 1

DATA AVAILABILITY:

PLATFORM TYPES:
AIRCRAFT

ARCHIVE MEDIA:
PHOTOPRINTS
167 70 MM AND 9" X 9" FRAMES

FUNDING:

CONTACT:
PAUL ALFONSI  804-824-3411
NATIONAL AERONAUTICS AND SPACE ADM
CHESAPEAKE BAY ECLOGICAL PROGRAM OFFICE
WALLOPS ISLAND VIRGINIA USA 23337

GRID LOCATOR (LAT):
730766

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6 FLIGHT LINES
PROJECTS:

GENERAL GEOGRAPHIC AREA:
U.S., COASTAL, NORTH ATLANTIC, NORTH CAROLINA OUTER BANKS

ABSTRACT:
MISSION W195, FLIGHT 1, MAY 11, 1973, WITH WALLOPS STATION C-54 AIRCRAFT WITH A T-11 AERIAL MAPPING CAMERA IN COOPERATION WITH UNIV. OF VA. AND U. S. PARK SERVICE. FLIGHT A CONTINUATION OF A PROGRAM OF MISSIONS DESIGNED TO ILLUSTRATE CHANGING CHARACTERISTICS OF BARRIER ISLANDS DUE TO WAVE AND WIND ACTIONS FROM NEAR SHORE CURRENTS AND STORMS.
(MISSION NO W195, FLT 1)

DATA AVAILABILITY:

PLATFORM TYPES:
AIRCRAFT

ARCHIVE MEDIA:
PHOTOPRINTS
254 9" X 9" FRAMES

CONTACT:
PAUL ALFONSI 804-824-3411
NATIONAL AERONAUTICS AND SPACE ADM
CHESAPEAKE BAY ECOLOGICAL PROGRAM OFFICE
WALLOPS ISLAND VIRGINIA USA 23337

GRID LOCATOR (LAT):
730765 730755

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PROJECTS:

GENERAL GEOGRAPHIC AREA:
NORTH ATLANTIC, COASTAL, U.S., NORTH CAROLINA, BARRIER ISLANDS

ABSTRACT:
MISSION W107, FLIGHT 01, WAS ACCOMPLISHED ON FEBRUARY 4, 1972, UTILIZING THE WALLOPS FLIGHT CENTER C-54 AIRCRAFT EQUIPPED WITH ONE T-11 AERIAL MAPPING CAMERA IN COOPERATION WITH THE GEOLOGICAL DEPARTMENT OF THE UNIVERSITY OF VIRGINIA FOR THE U.S. PARK SERVICE. THE OBJECTIVE OF THE FLIGHT WAS TO OBTAIN AERIAL IMAGERY OF THE NORTH CAROLINA BARRIER ISLANDS FOR A CONTINUING STUDY OF LITTORAL CHANGES CAUSED BY TIDAL AND STORM ACTION OVER AN EXTENDED PERIOD OF TIME. (MISSION W107, FLIGHT 01)

DATA AVAILABILITY:

PLATFORM TYPES:
AIRCRAFT

ARCHIVE MEDIA:
PHOTOPRINTS
285 9"X9" PRINTS

FUNDING:

INVENTORY:

PUBLICATIONS:

CONTACT:
MICHAEL CONGER 804 824 3411
NATIONAL AERONAUTICS AND SPACE ADM
CHESAPEAKE BAY ECOLOGICAL PROGRAM OFFICE
WALLOPS ISLAND VIRGINIA USA 23337

GRID LOCATOR (LAT):
73076525 73075555 73075535 73075525 73075610 73074645 73074655

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2500, 5000 & 10,000 FEET 152 AND FOUR-FOCAL LENGTH
ANNEX III

Part A

Section 2

Pennsylvania
PROJECTS:

GENERAL GEOGRAPHIC AREA:
  NORTH AMERICA, U.S., PENNSYLVANIA

ABSTRACT:
MISSION W116, FLIGHT 01, WAS ACCOMPLISHED ON MARCH 28, 1972, UTILIZING THE WALLOPS FLIGHT CENTER C-54 AIRCRAFT EQUIPPED WITH A T-11 AERIAL CAMERA AND AN AAD-2 THERMAL IR SCANNER IN COOPERATION WITH THE U.S. ARMY ENGINEER WATERWAYS EXPERIMENT STATION. THE OBJECTIVE OF THE FLIGHT WAS TO IMAGE THE EXTENT AND INTENSITY OF THERMAL PLUMES EMITTED BY THE EDDYSTONE POWER PLANT AT PHILADELPHIA PENNSYLVANIA. THE IR PRINTS DID NOT TAKE.

(MISSION W116, FLIGHT 01)

DATA AVAILABILITY:

PLATFORM TYPES:
  AIRCRAFT

ARCHIVE MEDIA:
  PHOTOPRINTS
    17 9"X9" PRINTS

FUNDING:

INVENTORY:

PUBLICATIONS:

CONTACT:
  MICHAEL CONGER  804 824 3411
  NATIONAL AERONAUTICS AND SPACE ADM
  CHESAPEAKE BAY ECOLOGICAL PROGRAM OFFICE
  WALLOPS ISLAND VIRGINIA USA 23337

GRID LOCATOR (LAT):
  73079555

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ANNEX III

Part A

Section 2

Virginia - "General"
PROJECTS:
GENERAL GEOGRAPHIC AREA:
NORTH AMERICA, U.S., VIRGINIA

ABSTRACT:
MISSION W290, FLIGHT 01, WAS ACCOMPLISHED ON JUNE 13, 1974, UTILIZING THE WALLOPS FLIGHT CENTER C-54 AIRCRAFT EQUIPPED WITH FOUR HASSELBLAD 70MM CAMERAS AND AN I2S "B" MULTIBAND CAMERA SYSTEM IN COOPERATION WITH THE VIRGINIA INSTITUTE OF MARINE SCIENCE. THE OBJECTIVE OF THE FLIGHT WAS TO STUDY THE DISTRIBUTION OF EEL GRASS ALONG THE WESTERN SHORE OF THE CHESAPEAKE BAY IN THE YORK RIVER, AND FROM MOBJACK BAY TO THE MOUTH OF THE RAPPAHANNOCK RIVER.

DATA AVAILABILITY:

FUNDING:
NATIONAL AERONAUTICS AND SPACE ADM

CONTACT:
MICHAEL CONGER  804 824 3411
NATIONAL AERONAUTICS AND SPACE ADM
CHESAPEAKE BAY ECOLOGICAL PROGRAM OFFICE
WALLOPS ISLAND VIRGINIA USA 23337

GRID LOCATOR (LAT):
73077613 73077635 73077632 73077653

PARAMETER IDENTIFICATION SECTION:

NAME SPHERE METHOD UNITS DATA AMOUNT FREQUENCY HEIGHT/DEPTH REMARKS
POSITION EARTH FIXED POINT LONGITUDE AND LATITUDE 632 OBS 8 FLIGHTS/LINE
TIME EARTH SAMPLING TIME YMDHM 632 OBS 8 FLIGHTS/LINE
PHOTOGRAPH EARTH COLOR CAMERA FROM AIRCRAFT PRINTS 632 OBS 8 FLIGHTS/LINE
PHOTOGRAPH EARTH IR CAMERA FROM AIRCRAFT PRINTS 632 OBS 8 FLIGHTS/LINE
VIRGINIA WETLAND STUDY
DATA COLLECTED: FEBRUARY 1972 TO FEBRUARY 1972

MISSION W106, FLIGHT 02, WAS ACCOMPLISHED ON FEBRUARY 1, 1972, UTILIZING A WALLOPS FLIGHT CENTER C-54 AIRCRAFT EQUIPPED WITH TWO T-11 AERIAL MAPPING CAMERAS IN COOPERATION WITH THE VIRGINIA INSTITUTE OF MARINE SCIENCE. THE OBJECTIVE OF THE FLIGHT WAS TO OBTAIN AERIAL COLOR INFRARED PHOTOGRAPHY OF MARSHES AND WETLANDS DURING THE DORMANT WINTER PERIOD FOR COMPARISON WITH IMAGERY TAKEN DURING THE ACTIVE SEASON.

DATA AVAILABILITY:

PLATFORM TYPES: AIRCRAFT

ARCHIVE MEDIA: PHOTO PRINTS
130 9"x9" PRINTS

FUNDING: NATIONAL AERONAUTICS AND SPACE ADM

INVENTORY:

CONTACT:
MICHAEL CONGER  804 224 3411
NATIONAL AERONAUTICS AND SPACE ADM
CHESAPEAKE BAY ECOLOGICAL PROGRAM OFFICE
WALLOPS ISLAND VIRGINIA USA 23337

GRID LOCATOR (LAT):
73077555 73077634 73077655

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ANNEX III

Part A

Section 2

Virginia - "Rivers"
MISSION W276, FLIGHT 01, WAS ACCOMPLISHED ON MAY 28, 1974, UTILIZING THE WALLOPS FLIGHT CENTER C-54 AIRCRAFT EQUIPPED WITH FOUR HASSELBLAD CAMERAS, A T-11 AERIAL MAPPING CAMERA, AND A MULTICHANNEL OCEAN COLOR SENSOR IN COOPERATION WITH NASA'S/langley research center. THE OBJECTIVE OF THE FLIGHT WAS TO STUDY WATER POLLUTION AS RELATED TO EUTROPHICATION LEVELS IN THE JAMES RIVER FROM HOPewELL TO THE HAMPTON ROADS/CRANEY ISLAND INDUSTRIAL WATERFRONT.

DATA AVAILABILITY:

PLATFORM TYPES:
AIRCRAFT

ARCHIVE MEDIA:
PHOTOPRINTS
284 70MM PRINTS; 71 9"X9" PRINTS

FUNDING:
NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

INVENTORY:

PUBLICATIONS:

CONTACT:
MICHAEL CONGER 804 824 3411
NATIONAL AERONAUTICS AND SPACE ADMINISTRATION
CHESAPEAKE BAY ECOLOGICAL PROGRAM OFFICE
WALLOPS ISLAND VIRGINIA USA 23337

GRID LOCATOR (LAT):
73077733 73077625 73076653 73076643

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PROJECTS:

GENERAL GEOGRAPHIC AREA:
U.S., COASTAL, NORTH ATLANTIC, CHESAPEAKE BAY, VIRGINIA, JAMES RIVER

ABSTRACT:
MISSION W146, FLT. 2, JUNE 26, 1972, WITH WALLOPS STATION C-54 AIRCRAFT EQUIPPED WITH TWO T-11 AERIAL CAMERAS. IN COOPERATION WITH VA. INSTITUTE OF MARINE SCI. OBJECTIVE - TO ACQUIRE BLACK & WHITE AIRBORN IMAGERY TO ASSESS THE FLOODING EFFECTS AND DAMAGE CREATED BY TROPICAL STORM "AGNES" ALONG THE JAMES RIVER. FLIGHT IN GOOD WEATHER, SOME OVERCAST, SLIGHT HAZE, AIR TEMP. 20 DEG. C AT 3000 FT., MSL WITH WIND OF 10 KNOTS FROM 160 DEG., SLIGHT MALFUNCTION IN CAMERA 2 WHICH CAUSED LAG OF FRAMES.

DATA AVAILABILITY:
PLATFORM TYPES:
AIRCRAFT

ARCHIVE MEDIA:
PHOTOPRINTS
280 9" X 9" FRAMES.

FUNDING:
INVENTORY:

PUBLICATIONS:
CONTACT:
PAUL ALFONSI  804-824-3411
NATIONAL AERONAUTICS AND SPACE ADM
CHESAPEAKE BAY ECOLOGICAL PROGRAM OFFICE
WALLOPS ISLAND VIRGINIA USA 23337

GRID LOCATOR (LAT):
730776 730766

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(FLIGHT W146, FLT 2)
REMOTE SENSING: HOG ISLAND THERMAL STUDIES
DATA COLLECTED: JUNE 1972 TO PRESENT
RECEIVED: AUGUST 27, 1973

PROJECTS:
VIMS REMOTE SENSING

GENERAL GEOGRAPHIC AREA:
U.S., COASTAL, NORTH ATLANTIC, CHESAPEAKE BAY, JAMES RIVER

ABSTRACT:
INTERPRETATION AND ANALYSIS OF REMOTE SENSING BY INFRARED SCANNER FLOWN BY NASA, WALLOPS STATION. REPORT CONTAINS WATER SURFACE THERMAL REPRESENTATIONS. GROUND TRUTH DATA OBTAINED IN CONJUNCTION WITH AEC PROJECT AT-(40-1)-4067 AND AEC REPORT NO ORO-4067-4; THERMAL EFFECTS OF THE SURREY NUCLEAR POWER PLANT ON THE JAMES RIVER, VIRGINIA; SPECIAL REPORT NUMBER 33 IN APPLIED MARINE SCIENCE AND OCEAN ENGINEERING.
(MISSION NO W127, FLT 1 AND 2, W137, FLT 1; W144, FLT 1; W157, FLT 1; W197, FLT 1 AND 2; W205, FLT 1)

DATA AVAILABILITY:

PLATFORM TYPES:
AIRCRAFT

ARCHIVE MEDIA:
REPORTS
20 PAGES

FUNDING:

INVENTORY:

PUBLICATIONS:

CONTACT:
HAYDEN GORDON 604-642-2111 X97
VIRGINIA INSTITUTE OF MARINE SCIENCE
GLOUCESTER POINT VIRGINIA USA 23062

GRID LOCATOR (LAT):
730776

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TRANSECT MONITORED SIX TIMES
COLOR ENHANCED PHOTOGRAPHS:
SURFACE THERMAL REPRESENTATION; SUPPORTING
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BLACK AND WHITE AND COLOR PHOTOGRAPHY
PROJECTS:

GENERAL GEOGRAPHIC AREA:
NORTH ATLANTIC, COASTAL, U.S., CHESAPEAKE BAY, VIRGINIA, HOG ISLAND

ABSTRACT:
MISSION W205, FLT. 1, APRIL 17, 1973, WITH WALLOPS STATION C-54 AIRCRAFT EQUIPPED WITH A T-11 AERIAL MAPPING CAMERA AND AN AAD-2 THERMAL INFRARED SCANNER, IN COOPERATION WITH VA. INSTITUTE OF MARINE SCIENCE, OBJECTIVE - TO OBTAIN COLOR AND THERMAL INFRARED IMAGERY OF JAMES RIVER IN THE AREA SURROUNDING THE OUT FALL FROM THE SURRY/HOG ISLAND NUCLEAR POWER PLANT. INFORMATION OBTAINED WILL BE USED FOR STUDYING THE DYNAMICS OF THE HEAT PLUME PRODUCED BY THE POWER PLANT. FLIGHT IN WEATHER WITH THIN OVERCAST AT 5000 FT., VISIBILITY UP TO 70 MILES, AIR TEMP. 20 DEG. C AT 1000 FT., MSL WITH WIND OF 6-10 KNOTS FROM 285 DEG.

DATA AVAILABILITY:

PLATFORM TYPES:
AIRCRAFT

ARCHIVE MEDIA:
PHOTOPRINTS
34 9" X 9" FRAMES AND 1 ROLL SCANNER FILM

FUNDING:

INVENTORY:

CONTACT:
PAUL ALFONSI 804-824-3411
NATIONAL AERONAUTICS AND SPACE ADM
CHESAPEAKE BAY ECOLOGICAL PROGRAM OFFICE
WALLOPS ISLAND VIRGINIA USA 23337

GRID LOCATOR (LAT):
730778

PARAMETER IDENTIFICATION SECTION:

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19 OBS AT 5000 FT, 15 OBS AT 4500 FT, 1 ROLL FILM AT 2000, 1000, 500 FT
152 MM FOCAL LENGTH AAD-2 SCANNER
NUCLEAR POWER PLANT STUDY
DATA COLLECTED: OCTOBER 1972 TO OCTOBER 1972

PROJECTS:

GENERAL GEOGRAPHIC AREA:
U.S., COASTAL, NORTH ATLANTIC, CHESAPEAKE BAY, VIRGINIA, Hog Island

ABSTRACT:
MISSION W138, FLT. 1, OCTOBER 18, 1972, ALONG SHORES OF HOG ISLAND ON JAMES RIVER UTILIZING WALLOPS STATION C-54 AIRCRAFT EQUIPPED WITH AAD-2 THERMAL IR SCANNER. OBJECTIVE - TO DETECT AND IMAGE THERMAL VARIATIONS BETWEEN DISCHARGE PLUMES FROM HOG ISLAND NUCLEAR POWER PLANT AND SURROUNDING WATER IN JAMES RIVER.

DATA AVAILABILITY:
PLATFORM TYPES: AIRCRAFT

ARCHIVE MEDIA:
PHOTOPRINTS
ONE ROLL FILM; 3 FLIGHT LINES; 3 RUNS.

FUNDING:

INVENTORY:

CONTACT:
PAUL ALFONSI 804-624-3411
NATIONAL AERONAUTICS AND SPACE ADM
CHESAPEAKE BAY ECOLOGICAL PROGRAM OFFICE
WALLOPS ISLAND VIRGINIA USA 23337

GRID LOCATOR (LAT): 730776

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1500, 3000, 5000 FT
PROJECTS:

GENERAL GEOGRAPHIC AREA:
U.S., COASTAL, NORTH ATLANTIC, CHESAPEAKE BAY, VIRGINIA, HOG ISLAND

DATA COLLECTED: AUGUST 1972 TO AUGUST 1972

U.S., COASTAL, NORTH ATLANTIC, CHESAPEAKE BAY, VIRGINIA, HOG ISLAND

ABSTRACT:
MISSION W157, FLT. 1, WITH WALLOPS STATION C-54 AIRCRAFT EQUIPPED WITH ONE T-11 AERIAL CAMERA AND ONE H.R.B. SINGER MODEL AAD-2 THERMAL SCANNER ON AUG. 18, 1972, IN COOPERATION WITH THE VA. INSTITUTE OF MARINE SCI. IN HOG ISLAND, JAMES RIVER, VA. REGION. OBJECTIVE - TO UTILIZE BLACK AND WHITE PHOTOGRAPHY AND THERMAL IMAGERY TO INVESTIGATE THERMAL DISCHARGING AND ITS PROGRESSION IN JAMES RIVER ESTUARY. FLIGHT IN VERY POOR WEATHER, SCATTERED TO BROKEN CLOUDS, EXTREMELY HAZY, AIR TEMP. 18 DEG. C AT 5000 FT., MSL WITH WIND OF 4 KNOTS FROM 270 DEG.

DATA AVAILABILITY:

PLATFORM TYPES:
AIRCRAFT

ARCHIVE MEDIA:
PHOTOPRINTS
70 9" X 9" FRAMES.

FUNDING:

INVENTORY:

PUBLICATIONS:

CONTACT:

PAUL ALFONSI  804-824-3411
NATIONAL AERONAUTICS AND SPACE ADM
CHESAPEAKE BAY ECOLOGICAL PROGRAM OFFICE
WALLOPS ISLAND VIRGINIA USA 23337

GRID LOCATOR (LAT):
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PROJECTS:

GENERAL GEOGRAPHIC AREA:
U.S., COASTAL, NORTH ATLANTIC, CHESAPEAKE BAY, VIRGINIA, HOG ISLAND

DATA COLLECTED: JUNE 1972 TO JUNE 1972

ABSTRACT:
MISSION W144, FLT. 1 WITH WALLOPS STATION C-54 AIRCRAFT EQUIPPED WITH AAD-2 AND AN RS-7 THERMAL IR SCANNER ON JUNE 30, 1972, IN COOPERATION WITH THE VA. INSTITUTE OF MARINE SCI. OBJECTIVE - TO OBTAIN BASELINE IMAGERY OF JAMES RIVER IN THE AREA OF THE DISCHARGE FLUME FROM HOG ISLAND NUCLEAR POWER PLANT.

DATA AVAILABILITY:
PLATFORM TYPES:
AIRCRAFT

ARCHIVE MEDIA:
PHOTOPRINTS
ONE ROLL FILM; 7 FLIGHT LINES; 3 RUNS.

CONTACT:
PAUL ALFONSI 804-824-3411
NATIONAL AERONAUTICS AND SPACE ADM
CHESAPEAKE BAY ECOLOGICAL PROGRAM OFFICE
WALLOPS ISLAND VIRGINIA USA 23337

GRID LOCATOR (LAT):
730776

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PROJECTS:

GENERAL GEOGRAPHIC AREA:
U.S., COASTAL, NORTH ATLANTIC, CHESAPEAKE BAY, VIRGINIA, JAMES RIVER

ABSTRACT:
MISSION W124, FLT. 1, APRIL 27, 1972, WITH WALLOPS STATION C-54 AIRCRAFT EQUIPPED WITH T-11 AERIAL MAPPING CAMERA AND AN AAD-2 THERMAL IR SCANNER. OBJECTIVE - TO OBTAIN BASE LINE INFORMATION OF SURFACE CURRENT PATTERNS IN PIG POINT AND HOG ISLAND AREAS OF JAMES RIVER. FLIGHT MADE IN CLEAR WEATHER, VISIBILITY 7-8 MILES, AIR TEMP. 0 DEG. C AT 5000 FT., MSL WITH WIND OF 15 KNOTS FROM 290 DEG.
(MISSION NO W124, FLT 1)

DATA AVAILABILITY:

PLATFORM TYPES:
AIRCRAFT

ARCHIVE MEDIA:
PHOTOPRINTS
69 9" X 9" FRAMES; SCANNER FILM.

FUNDING:

INVENTORY:

PUBLICATIONS:

CONTACT:
P A U L A L F O N S I  804-824-3411
NATIONAL AERONAUTICS AND SPACE ADM
CHESAPEAKE BAY ECOLOGICAL PROGRAM OFFICE
WALLOPS ISLAND VIRGINIA USA 23337

GRID LOCATOR (LAT):
730776 730766

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BASE LINE DATA FLIGHT, HOG ISLAND/PIG POINT, VIRGINIA
DATA COLLECTED: JULY 1971 TO JULY 1971

PROJECTS:

GENERAL GEOGRAPHIC AREA:
NORTH ATLANTIC, COASTAL, U.S., VIRGINIA, HOG ISLAND, PIG POINT

ABSTRACT:
MISSION W075, FLIGHT02, WAS ACCOMPLISHED ON JULY 16, 1971, UTILIZING THE WALLOPS FLIGHT CENTER C-54 AIRCRAFT EQUIPPED WITH FOUR HASSELBLAD CAMERAS AND AN AN/AAD-2 THERMAL IR SCANNER. THE OBJECTIVE OF THE FLIGHT WAS TO ACQUIRE BASELINE THERMAL IR SCANNER AND MULTI-SPECTRAL PHOTOGRAPH DATA OVER THE HOG ISLAND/PIG POINT, VIRGINIA AREA.
(MISSION W075, FLIGHT02)

DATA AVAILABILITY:

PLATFORM TYPES:
AIRCRAFT

ARCHIVE MEDIA:
PHOTOPRINTS
134 9" X 9" PRINTS

FUNDING:
NATIONAL AERONAUTICS AND SPACE ADM

INVENTORY:

PUBLICATIONS:

CONTACT:
MICHAEL CONGER 804 824 3411
NATIONAL AERONAUTICS AND SPACE ADM
CHESAPEAKE BAY ECOLOGICAL PROGRAM OFFICE
WALLOPS ISLAND VIRGINIA USA 23337

GRID LOCATOR (LAT):
73077614 73076633

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BASE LINE DATA FLIGHT HOG ISLAND/PIG POINT, VIRGINIA
DATA COLLECTED: JULY 1971 TO JULY 1971

PROJECTS:
GENERAL GEOGRAPHIC AREA:
NORTH ATLANTIC, COASTAL, U.S., VIRGINIA, HOG ISLAND, PIG POINT

ABSTRACT:
MISSION W075, FLIGHT 03, WAS ACCOMPLISHED ON JULY 21, 1971, UTILIZING THE WALLOPS FLIGHT CENTER C-54 AIRCRAFT EQUIPPED WITH AN AN/AAD-2 THERMAL IR SCANNER AND FOUR HASSELBLAD CAMERAS. THE OBJECTIVE OF THE FLIGHT WAS TO ACQUIRE THERMAL IR SCANNER AND MULTISPECTRAL PHOTOGRAPH DATA OVER HOG ISLAND/PIG POINT, VIRGINIA AREAS OF THE JAMES RIVER. DUE TO AN ELECTRICAL MALFUNCTION, NO IR SCANS WERE TAKEN.

MISSION W075, FLIGHT 03

DATA AVAILABILITY:
PLATFORM TYPES:
AIRCRAFT

ARCHIVE MEDIA:
PHOTOPRINTS
178 9" X 9" PRINTS

FUNDING:
NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

CONTACT:
MICHAEL CONGER 804 824 3411
NATIONAL AERONAUTICS AND SPACE ADMINISTRATION
CHESAPEAKE BAY ECOLOGICAL PROGRAM OFFICE
WALLOPS ISLAND VIRGINIA USA 23337

GRID LOCATOR (LAT):
73077614 73076633

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THERMAL AND WATER POLLUTION STUDIES OF POWER AND INDUSTRIAL PLANTS ON THE JAMES AND YORK RIVERS
DATA COLLECTED: MARCH 1973 TO MARCH 1973
RECEIVED: JANUARY 01, 1976

PROJECTS:

GENERAL GEOGRAPHIC AREA:
U.S., COASTAL, NORTH ATLANTIC, CHESAPEAKE BAY, VIRGINIA, GLOUCESTER POINT, HOG ISLAND

ABSTRACT:
MISSION W197, FLT. 2, MARCH 23, 1973, WITH WALLOPS STA. C-54 EQUIPPED WITH AAD-2 THERMAL IR SCANNER, PRT-5 RADIOMETER, 4 HASSELBLAD CAMERAS. MISSION FOR NASA, LANGLEY RES. CTR AND EPA. OBJECTIVE - OBTAIN PHOTOGRAPHIC AND THERMAL INFRARED IMAGERY OF YORK RIVER BELOW U S HIGHWAY 17 BRIDGE AT YORKTOWN AND JAMES RIVER IN THE VICINITY OF THE THERMAL DISCHARGE FROM THE HOG ISLAND NUCLEAR POWER PLANT. CLEAR WEATHER, VISIBILITY 8-10 MILES. AIR TEMP. 10 DEG.-5 DEG. C AT 3000 FT. MSL WIND 30 KNOTS FROM 350 DEG.
(MISSION NO W197, FLT 2)

DATA AVAILABILITY:

PLATFORM TYPES:
AIRCRAFT

ARCHIVE MEDIA:
ORIGINAL FILM
31 70 MM FRAMES.

FUNDING:

CONTACT:
PAUL ALFONSI  804-824-3411
NATIONAL AERONAUTICS AND SPACE ADM
CHESAPEAKE BAY ECOLOGICAL PROGRAM OFFICE
WALLOPS ISLAND VIRGINIA USA 23337

GRID LOCATOR (LAT):
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CHLOROPHYLL DETECTION STUDY
DATA COLLECTED: FEBRUARY 1974 TO FEBRUARY 1974

PROJECTS:

GENERAL GEOGRAPHIC AREA:
NORTH ATLANTIC, COASTAL, U.S., VIRGINIA, JAMES AND YORK RIVERS

ABSTRACT:
MISSION W264, FLIGHT 1, WAS ACCOMPLISHED ON FEBRUARY 1, 1974. THE OBJECTIVE OF THE FLIGHT WAS TO DETECT THE PRESENCE OF CHLOROPHYLL IN THE JAMES AND YORK RIVERS, VIRGINIA USING COLOR FILM WITH A HAZE FILTER.

DATA AVAILABILITY:

PLATFORM TYPES:
AIRCRAFT

ARCHIVE MEDIA:
PHOTOPRINTS
54 PHOTOPRINTS

FUNDING:
EPA

INVENTORY:

PUBLICATIONS:

CONTACT:
G. GREW  804 824 3411
NATIONAL AERONAUTICS AND SPACE ADMINISTRATION
CHESAPEAKE BAY ECOLOGICAL PROGRAM OFFICE
WALLOPS ISLAND VIRGINIA USA 23337

GRID LOCATOR (LAT):
730776

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PROJECTS:

GENERAL GEOGRAPHIC AREA:
U.S., COASTAL, NORTH ATLANTIC, CHESAPEAKE BAY, VIRGINIA, RAPPAHANNOCK RIVER, HOG ISLAND, YORK RIVER

ABSTRACT:
MISSION W197, FLT. 1, MARCH 23, 1973, UTILIZING THE WALLOPS STATION C-54 AIRCRAFT EQUIPPED WITH AN AAD-2 IR SCANNER, A PRT-5 RADIOMETER AND 4 HASSELBLAD CAMERAS. MISSION FLOWN FOR NASA, LANGLEY RESEARCH CTR. AND ENVIRONMENTAL PROTECTION AGENCY.
OBJECTIVE - OBTAIN PHOTOGRAPHIC AND THERMAL INFRARED IMAGERY OF POWER PLANT AND INDUSTRIAL INSTALLATION PLUMES ON JAMES AND YORK RIVERS AND SEWAGE OUTFALLS ALONG BANKS OF RAPPAHANNOCK ESTUARY. GOOD WEATHER, VISIBILITY UP TO 8 MILES. AIR TEMP. 5 DEG. C AT 10,500 FT. MSL WIND OF 35 KNOTS FROM 350 DEG.

MISSION NO W197, FLT 1

DATA AVAILABILITY:

PLATFORM TYPES:
AIRCRAFT

ARCHIVE MEDIA:
ORIGINAL FILM
312 70 MM FRAMES.

FUNDING:

INVENTORY:

PUBLICATIONS:

CONTACT:
PAUL ALFONSI  804-624-3411
NATIONAL AERONAUTICS AND SPACE ADM
CHESAPEAKE BAY ECOLOGICAL PROGRAM OFFICE
WALLOPS ISLAND VIRGINIA USA 23337

GRID LOCATOR (LAT):
730776 730786 730787

PARAMETER IDENTIFICATION SECTION:

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<td>144 AT 10500 FT, 16 AT 8500 FT, 64 AT 6500 FT, 88 AT 1000 FT</td>
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PROJECTS:

GENERAL GEOGRAPHIC AREA:
U.S., COASTAL, NORTH ATLANTIC, CHESAPEAKE BAY, VIRGINIA, YORK RIVER, POROPATANK BAY

DATA COLLECTED: SEPTEMBER 1972 TO SEPTEMBER 1972

U.S., COASTAL, NORTH ATLANTIC, CHESAPEAKE BAY, VIRGINIA, YORK RIVER, POROPATANK BAY

ABSTRACT:
MISSION W169, FLT. 3, WITH WALLOPS STATION C-54 AIRCRAFT EQUIPPED WITH TWO T-11 AERIAL CAMERAS ON SEPT. 11, 1972, IN COOPERATION WITH VA. INSTITUTE OF MARINE SCI. OF THE YORK RIVER AREA NEAR POROPATANK BAY. OBJECTIVE - TO STUDY ESTUARINE INFLOW AND MARSHLAND CHARACTERISTICS ASSOCIATED WITH BRACKISH WATERS. FLIGHT IN CLEAR WEATHER, FEW SCATTERED CLOUDS, AIR TEMP. 14 DEG. C AT 5000 FT., MSL WITH WIND 12 KNOTS FROM S.E.

DATA AVAILABILITY:

PLATFORM TYPES:
AIRCRAFT

ARCHIVE MEDIA:
PHOTOPRINTS
46 9" X 9" FRAMES.

FUNDING:

INVENTORY:

PUBLICATIONS:

CONTACT:
PAUL ALFONSI 804-824-3411
NATIONAL AERONAUTICS AND SPACE ADMIN
CHESAPEAKE BAY ECOLOGICAL PROGRAM OFFICE
WALLOPS ISLAND VIRGINIA USA 23337

GRID LOCATOR (LAT):
730776

PARAMETER IDENTIFICATION SECTION:

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PROJECTS:

GENERAL GEOGRAPHIC AREA:
NORTH ATLANTIC, COASTAL, U.S., VIRGINIA, CHESAPEAKE BAY

ABSTRACT:
MISSION W259, FLIGHT 01 WAS ACCOMPLISHED ON 12 DECEMBER 1973. THE OBJECTIVE OF THE FLIGHT WAS TO OBTAIN AERIAL IMAGERY IN THE DARK GREEN, RED, AND NEAR INFRARED WAVE LENGTHS FOR USE IN STUDYING WATER POLLUTION IN THE YORK RIVER AND CHESAPEAKE BAY BRIDGE TUNNEL AREAS OF VIRGINIA.
(MISSION NUMBER W259 FLT 1)

DATA AVAILABILITY:

PLATFORM TYPES:
AIRCRAFT

ARCHIVE MEDIA:
PHOTOPRINTS
88 PHOTOPRINTS

FUNDING:
NASA

INVENTORY:

PUBLICATIONS:

CONTACT:
G. CREW 804 824 3411
NATIONAL AERONAUTICS AND SPACE ADMINISTRATION
CHESAPEAKE BAY ECOLOGICAL PROGRAM OFFICE
WALLOPS ISLAND VIRGINIA USA 23337

GRID LOCATOR (LAT):
730776

PARAMETER IDENTIFICATION SECTION:

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PROJECTS:

GENERAL GEOGRAPHIC AREA:
U.S., COASTAL, NORTH ATLANTIC, CHESAPEAKE BAY, VIRGINIA, LYNNHAVEN ROADS

ABSTRACT:
MISSION W209, FLT 1, MAY 18, 1973, WITH WALLOPS STATION C-54 AIRCRAFT EQUIPPED WITH TWO T-11 AERIAL MAPPING CAMERAS, IN COOPERATION WITH OLD DOMINION UNIV. OBJECTIVE - OBTAIN LARGE SCALE IMAGERY OF LYNNHAVEN BAY AREA FOR USE IN MAKING ANALYSIS OF VEGETATIVE DISTRIBUTION USED IN DELINEATING AERIAL EXTENT OF SPECIES. WEATHER - CLOUDY.

DATA AVAILABILITY:
PLATFORM TYPES:
AIRCRAFT

ARCHIVE MEDIA:
PHOTOPRINTS
197 9" X 9" FRAMES

FUNDING:
INVENTORY:

CONTACT:
PAUL ALFONSI  804-824-3411
NATIONAL AERONAUTICS AND SPACE ADM
CHESAPEAKE BAY ECOLOGICAL PROGRAM OFFICE
WALLOPS ISLAND VIRGINIA USA 23337

GRID LOCATOR (LAT): 730765

PARAMETER IDENTIFICATION SECTION:

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PROJECTS:

GENERAL GEOGRAPHIC AREA:
NORTH ATLANTIC, COASTAL, U.S., CHESAPEAKE BAY, VIRGINIA, VIRGINIA BEACH, LYNNHAVEN

DATA COLLECTED: DECEMBER 1970 TO DECEMBER 1970

ABSTRACT:
MISSION W37, FLT. 1, DEC. 7, 1970, WITH WALLOPS STATION CHARTERED HELICOPTER EQUIPPED WITH 4 T-11 AERIAL CAMERAS IN COOPERATION WITH VA. BEACH HEALTH DEPT. OBJECTIVE - TO UTILIZE MULTI-CHANNEL PHOTOGRAPHY TO INVESTIGATE EFFECTS OF SEWAGE DISPOSAL IN ESTUARINE SYSTEMS. FLIGHT IN CLEAR WEATHER, SCATTERED CLOUDS, AIR TEMP. 8 DEG. C AT 4000 FT, MSL WITH WIND OF 25 KNOTS FROM 330 DEG.
(MISSION NO W37, FLT 1)

DATA AVAILABILITY:

PLATFORM TYPES:
AIRCRAFT

ARCHIVE MEDIA:
PHOTOPRINTS
152 9" X 9" FRAMES

FUNDING:

INVENTORY:

CONTACT:

PUBLICATIONS:

GRID LOCATOR (LAT):
730766

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PAGE 01
PROJECTS:

GENERAL GEOGRAPHIC AREA:
U.S., COASTAL, NORTH ATLANTIC, CHESAPEAKE BAY, VIRGINIA, POTOMAC RIVER

DATA COLLECTED: JANUARY 1973 TO JANUARY 1973

ABSTRACT:
MISSION W185, F1. 1, JAN. 26, 1973, WITH WALLOPS STA. C-54 AIRCRAFT EQUIPPED WITH ONE T-11 AND 4 HASSELBLAD CAMERAS IN
COOPERATION WITH NASA, LANGLEY RES. CTR. AND THE EPA. THE OBJECTIVE - INVESTIGATE THE USE OF REMOTE SENSING AS APPLIED TO LAND
FILL AND EUTROPHICATION STUDIES IN THE WOODBRIDGE AND POTOMAC RIVER AREAS. CLEAR WEATHER, VISIBILITY 4-10 MILES, AIR TEMP. 9
DEG. C AT 10,000 FT. AND 14 DEG. C AT 4500 FT., MSL WIND OF 20 KNOTS FROM 300 DEG.
(MISSION NO W185, FLT 1)

DATA AVAILABILITY:

PLATFORM TYPES:
AIRCRAFT

ARCHIVE MEDIA:
ORIGINAL FILM
71 9 X 9 INCH FRAMES: 296 70 MM FRAMES.

FUNDING:

INVENTORY:

PUBLICATIONS:

CONTACT:
PAUL ALFONGI  804-824-3411
NATIONAL AERONAUTICS AND SPACE ADM
CHESAPEAKE BAY ECOLOGICAL PROGRAM OFFICE
WALLOPS ISLAND VIRGINIA USA 23337

GRID LOCATOR (LAT):
730796 730786 730787

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<pre><code>                                  | FROM AIRCRAFT |               |             |             |           | 40 MM AND 152 MM FOCAL LENGTH |
</code></pre>
ANNEX III

Part A

Section 2

Virginia - "Bay"
PROJECTS:

GENERAL GEOGRAPHIC AREA:
NORTH ATLANTIC, COASTAL, U.S., VIRGINIA, CHESAPEAKE BAY

ABSTRACT:
MISSION W257, FLIGHT 1 WAS ACCOMPLISHED ON 17 JULY, 1974. THE OBJECTIVE OF THE FLIGHT WAS TO STUDY WATER POLLUTION DETECTION TECHNIQUES WHICH INCORPORATE ANALYSIS OF MULTISPECTRAL AERIAL PHOTOGRAPHY.

DATA AVAILABILITY:

PLATFORM TYPES:
AIRCRAFT

ARCHIVE MEDIA:
PHOTOPRINTS
355 PHOTOPRINTS

FUNDING:

INVENTORY:

PUBLICATIONS:

CONTACT:
G. GREW  804 824 3411
NATIONAL AERONAUTICS AND SPACE ADMINISTRATION
CHESAPEAKE BAY ECOLOGICAL PROGRAM OFFICE
WALLOPS ISLAND VIRGINIA USA 23337

GRID LOCATOR (LAT):
73076 73077 73078

PARAMETER IDENTIFICATION SECTION:

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EFFECTS OF TROPICAL STORM AGNES ON THE CHESAPEAKE BAY
DATA COLLECTED: JULY 1972 TO AUGUST 1972

PROJECTS:

GENERAL GEOGRAPHIC AREA:
U.S., COASTAL, NORTH ATLANTIC, CHESAPEAKE BAY, VIRGINIA

ABSTRACT:
MISSION W153, FLT. 1, WITH WALLOPS STATION C-54 AIRCRAFT EQUIPPED WITH TWO T-11 AERIAL CAMERAS ON AUG. 1, 1972, IN COOPERATION WITH VA. INSTITUTE OF MARINE SCI. IN TANGIER ISLAND, VA. REGION OF CHESAPEAKE BAY. OBJECTIVE - TO ACQUIRE AIRBORNE NATURAL COLOR AND BLACK & WHITE IMAGERY TO INVESTIGATE SEDIMENTATION IN CHESAPEAKE BAY AS RESULT OF TROPICAL STORM "AGNES". FLIGHT IN FAIR WEATHER, NO OVERCAST, CONSIDERABLE HAZE, AIR TEMP. 10 DEG. C AT 10000 FT., MSL WITH VARIABLE WIND SPEED.

DATA AVAILABILITY:
PLATFORM TYPES:
AIRCRAFT

ARCHIVE MEDIA:
PHOTOPRINTS
92 9" X 9" FRAMES.

FUNDING:
INVENTORY:

PUBLICATIONS:
CONTACT:
PAUL ALFONSI 804-824-3411
NATIONAL AERONAUTICS AND SPACE ADM
CHESAPEAKE BAY ECOLOGICAL PROGRAM OFFICE
WALLOPS ISLAND VIRGINIA USA 23337

GRID LOCATOR (LAT):
730776 730775

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PROJECTS:

GENERAL GEOGRAPHIC AREA:
NORTH ATLANTIC, COASTAL, U.S., VIRGINIA, PIG POINT, CRANEY ISLAND

ABSTRACT:
MISSION W107, FLIGHT 02, WAS ACCOMPLISHED ON FEBRUARY 4, 1976, UTILIZING A WALLOPS FLIGHT CENTER C-54 AIRCRAFT EQUIPPED WITH A T-11 AERIAL MAPPING CAMERA. THE OBJECTIVE OF THE FLIGHT WAS TO OBTAIN BASELINE DATA OF THE TRANSPORTATION OF ESTUARINE SEDIMENTS IN THE VICINITY OF PIG POINT ON THE LOWER JAMES RIVER.
(MISSION W107, FLIGHT 02)

DATA AVAILABILITY:
PLATFORM TYPES:
AIRCRAFT

ARCHIVE MEDIA:
PHOTOPRINTS
31 9"X9" PRINTS

FUNDING:
NATIONAL AERONAUTICS AND SPACE ADM

GRID LOCATOR (LAT):
73076655

PARAMETER IDENTIFICATION SECTION:

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PROJECTS:

GENERAL GEOGRAPHIC AREA:
NORTH ATLANTIC, COASTAL, U.S., VIRGINIA, CHESAPEAKE BAY MOUTH

ABSTRACT:
MISSION W278, FLIGHT 01, WAS ACCOMPLISHED ON DECEMBER 11, 1974, UTILIZING THE WALLOPS FLIGHT CENTER C-54 AIRCRAFT EQUIPPED WITH A T-11 AERIAL MAPPING CAMERA, A THERMAL IR SCANNER, A PRT-5 PRECISION RADIATION THERMOMETER, AND THE MOC (MULTICHANNEL OCEAN COLOR SENSOR) IN COOPERATION WITH NASA'S LANGLEY RESEARCH CENTER. THE OBJECTIVE OF THE FLIGHT WAS TO STUDY WATER POLLUTION AT THE MOUTH OF THE CHESAPEAKE BAY.

DATA AVAILABILITY:

PLATFORM TYPES:
AIRCRAFT

ARCHIVE MEDIA:
PHOTOPRINTS; STRIP CHARTS
304 9"X9" PRINTS; 1 STRIP CHART

FUNDING:
NATIONAL AERONAUTICS AND SPACE ADM

INVENTORY:
PUBLICATIONS:

CONTACT:
MICHAEL CONGER 804 824 3411
NATIONAL AERONAUTICS AND SPACE ADM
CHESAPEAKE BAY ECOLOGICAL PROGRAM OFFICE
WALLOPS ISLAND VIRGINIA USA 23337

GRID LOCATOR (LAT):
730776 730775

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PROJECTS:

GENERAL GEOGRAPHIC AREA:
NORTH ATLANTIC, COASTAL, U.S., VIRGINIA, CHESAPEAKE BAY

ABSTRACT:
MISSION W260, FLIGHT 01 WAS ACCOMPLISHED ON 29 JANUARY 1974. THE OBJECTIVE OF THE MISSION WAS TO STUDY CHLOROPHYLL
CONCENTRATIONS IN THE MOUTH OF THE CHESAPEAKE BAY AREA BETWEEN CAPE HENRY AND CAPE CHARLES, VIRGINIA.
(MISSION NUMBER W260 FLT 1)

DATA AVAILABILITY:

PLATFORM TYPES:
AIRCRAFT

ARCHIVE MEDIA:
PHOTOPRINTS
29 PHOTOPRINTS

FUNDING:
NASA

INVENTORY:
PUBLICATIONS:

CONTACT:
W. BRESSETTE 804 824 3411
NATIONAL AERONAUTICS AND SPACE ADMINISTRATION
CHESAPEAKE BAY ECOLOGICAL PROGRAM OFFICE
WALLOPS ISLAND VIRGINIA USA 23337

GRID LOCATOR (LAT):
730776

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SPECTRAL STUDIES OF THE MOUTH OF THE CHESAPEAKE BAY
PROJECTS:

GENERAL GEOGRAPHIC AREA:
NORTH ATLANTIC, COASTAL, U.S., VIRGINIA

ABSTRACT:

MISSION W201, FLIGHT 01

DATA AVAILABILITY:
PLATFORM TYPES:
AIRCRAFT

ARCHIVE MEDIA:
PHOTO PRINTS
316, 94MM PRINTS; 79, 9"X9" PRINTS

FUNDING:
NATIONAL AERONAUTICS AND SPACE ADM

INVENTORY:
PUBLICATIONS:

CONTACT:
MICHAEL CONGER 804 824 3411
NATIONAL AERONAUTICS AND SPACE ADM
CHESAPEAKE BAY ECOLOGICAL PROGRAM OFFICE
WALLOPS ISLAND VIRGINIA USA 23337

GRID LOCATOR (LAT):
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**PROJECTS:**

**GENERAL GEOGRAPHIC AREA:**
U.S., COASTAL, NORTH ATLANTIC, CHESAPEAKE BAY MOUTH, VIRGINIA

**ABSTRACT:**
MISSION W156, FLT. 1, WITH WALLOPS STATION C-54 AIRCRAFT EQUIPPED WITH TWO T-11 AERIAL CAMERAS ON AUG. 3, 1972, IN COOPERATION WITH VA. INSTITUTE OF MARINE SCI. IN AREA OF MOUTH OF CHESAPEAKE BAY, OBJECTIVE - TO ACQUIRE REMOTELY SENSED IMAGERY IN BLACK AND WHITE AND FALSE-COLOR TO INVESTIGATE DAMAGE CAUSED BY TROPICAL STORM "AGNES". FLIGHT IN GOOD WEATHER WITH FEW SCATTERED CLOUDS AND VERY HAZY. AIR TEMP. 11 DEG C AT 10,000 FT., MSL WITH WIND OF 15 KNOTS FROM 280 DEG. (MISSION NO W156, FLT 1)

**DATA AVAILABILITY:**

**PLATFORM TYPES:**
- AIRCRAFT

**ARCHIVE MEDIA:**
- PHOTOPRINTS
  - 94 9" X 9" FRAMES.

**FUNDING:**

**INVENTORY:**

**PUBLICATIONS:**

**CONTACT:**
- PAUL ALFONSI  804-824-3411
  NATIONAL AERONAUTICS AND SPACE ADM
  CHESAPEAKE BAY ECOLOGICAL PROGRAM OFFICE
  WALLOPS ISLAND  VIRGINIA USA  2337

**GRID LOCATOR (LAT):**
730776 730775 730766

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PROJECTS:

GENERAL GEOGRAPHIC AREA:
NORTH ATLANTIC, COASTAL, U.S., VIRGINIA CHESAPEAKE BAY MOUTH

ABSTRACT:
MISSION W087, FLIGHTO1, WAS ACCOMPLISHED ON SEPTEMBER 16, 1971, UTILIZING A WALLOPS FLIGHT CENTER LEASED HELICOPTER EQUIPPED WITH FOUR T-11 AERIAL MAPPING CAMERAS IN COOPERATION WITH THE VIRGINIA INSTITUTE OF MARINE SCIENCE. THE OBJECTIVE OF THE FLIGHT WAS TO TRACE CURRENTS PASSING FROM THE MOUTH OF THE CHESAPEAKE BAY INTO THE REAR SHORE BARRIER ISLAND CURRENTS AND DETERMINE THE PRESENCE OF EDDIES AND BACK CURRENTS ALONG THE CAPE HENRY SHORELINE. (MISSION W087, FLIGHT01)

DATA AVAILABILITY:

PLATFORM TYPES:
AIRCRAFT

ARCHIVE MEDIA:
PHOTOPRINTS
101 9" X 9" PRINTS

FUNDING:
NATIONAL AERONAUTICS AND SPACE ADM

INVENTORY:

CONTACT:
MICHAEL CONGER  804 824 3411
NATIONAL AERONAUTICS AND SPACE ADM
CHESAPEAKE BAY ECOLOGICAL PROGRAM OFFICE
WALLOPS ISLAND VIRGINIA USA 23337

GRID LOCATOR (LAT):
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ANNEX III

Part A

Section 2

Virginia - "Oceanside"
PROJECTS:

GENERAL GEOGRAPHIC AREA:
NORTH ATLANTIC, COASTAL, U.S., VIRGINIA

ABSTRACT:
MISSION W121, FLIGHT 01, WAS ACCOMPLISHED ON APRIL 20, 1972, UTILIZING A WALLOPS FLIGHT CENTER C-54 AIRCRAFT EQUIPPED WITH TWO T-11 AERIAL MAPPING CAMERAS, IN COOPERATION WITH THE VIRGINIA INSTITUTE OF MARINE SCIENCE. THE OBJECTIVE OF THE FLIGHT WAS TO OBTAIN AERIAL PHOTOGRAPHY OF DYE DISPERSION ALONG THE LOWER COAST OF THE DELMARVA PENINSULA FROM THE CAPE CHARLES LIGHTHOUSE ON SMITH ISLAND PAST THE MOUTH OF THE CHESAPEAKE BAY TO JUST SOUTH OF THE CITY OF VIRGINIA BEACH ON THE LOWER VIRGINIA COAST FOR USE IN A COASTAL CURRENT STUDY.

DATA AVAILABILITY:
PLATFORM TYPES:
AIRCRAFT

ARCHIVE MEDIA:
PHOTOPRINTS
491, 9"X9" PRINTS

FUNDING:
NATIONAL AERONAUTICS AND SPACE ADM

INVENTORY:

PUBLICATIONS:

CONTACT:
MICHAEL CONGER 804 824 3411
NATIONAL AERONAUTICS AND SPACE ADM
CHESAPEAKE BAY ECOLOGICAL PROGRAM OFFICE
WALLOPS ISLAND VIRGINIA USA 23337

GRID LOCATOR (LAT):
730776 730775 730765 730766

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PROJECTS: LAONSAT

GENERAL GEOGRAPHIC AREA:
U.S., COASTAL, NORTH ATLANTIC, NORTH CAROLINA

ABSTRACT:
MISSION W187, Flt. 1, Feb. 13, 1973, with Wallops Sta. C-54 aircraft equipped with 2 T-11 aerial mapping cameras and a K-17 mounted in a 45 deg. attitude for oblique coverage. The mission in cooperation with Coastal Res. Ctr. of Corps of Engin. Objective - to obtain large scale vertical and oblique imagery of storm damage incurred by a winter storm striking across coast between Norfolk and North/South Carolina border. Imagery recorded extensive beach erosion which resulted in serious property damage to piers, houses and motels. Clear weather, good visibility, air temp. 5 deg. C from 6500 ft., MSL wind of 15 knots from 250 deg.

(MISSION NO W187, FLT 1)

DATA AVAILABILITY:

PLATFORM TYPES:
AIRCRAFT

ARCHIVE MEDIA:
ORIGINAL FILM
605 9 X 9 INCH FRAMES.

FUNDING:

INVENTORY:

PUBLICATIONS:

CONTACT:
PAUL ALFONSO 804-824-3411
NATIONAL AERONAUTICS AND SPACE ADM
CHESAPEAKE BAY ECOLOGICAL PROGRAM OFFICE
WALLOPS ISLAND VIRGINIA USA 23337

GRID LOCATOR (LAT):
730765 730745 730746 730736 730737 730727 730728

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152 MM AND 306 MM FOCAL LENGTH
PROJECTS:

GENERAL GEOGRAPHIC AREA:
NORTH ATLANTIC, COASTAL, U.S., VIRGINIA

ABSTRACT:
MISSION W275, FLIGHT 01, WAS ACCOMPLISHED ON MAY 16, 1974, UTILIZING THE WALLOPS FLIGHT CENTER C-54 AIRCRAFT EQUIPPED WITH A T-11 AERIAL MAPPING CAMERA AND A MICROWAVE SENSOR IN COOPERATION WITH THE NAVAL RESEARCH LABORATORY. THE OBJECTIVE OF THE FLIGHT WAS TO STUDY OCEAN WAVE PATTERNS.

DATA AVAILABILITY:

PLATFORM TYPES:
AIRCRAFT

ARCHIVE MEDIA:
PHOTO PRINTS
34 9"X9" PRINTS

FUNDING:
NATIONAL AERONAUTICS AND SPACE ADM

INVENTORY:

PUBLICATIONS:

CONTACT:
MICHAEL CONGER 804 824 3411
NATIONAL AERONAUTICS AND SPACE ADM
CHESAPEAKE BAY ECOLOGICAL PROGRAM OFFICE
WALLOPS ISLAND VIRGINIA USA 23337

GRID LOCATOR (LAT):
73076555

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THE CAMERA FOCAL LENGTH WAS 152 AND FOUR-TENTHS MM THERE WERE NO FLIR DATA IDENTIFICATIONS FOR THE
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MICROWAVE PORTION OF THIS MISSION
PROJECTS:

GENERAL GEOGRAPHIC AREA:
NORTH ATLANTIC, COASTAL, U.S., VIRGINIA

ABSTRACT:
MISSION W268, FLIGHT 01, WAS ACCOMPLISHED ON NOVEMBER 9, 1974 UTILIZING THE WALLOPS STATION C-54 AIRCRAFT EQUIPPED WITH TWO T-11 AERIAL MAPPING CAMERAS, IN COOPERATION WITH NASA'S LANGLEY RESEARCH CENTER. THE OBJECTIVE OF THE FLIGHT WAS TO STUDY WAVE PATTERNS ALONG THE VIRGINIA OUTER BANKS ISLANDS FROM TOM'S CAVE TO LITTLE MACHIPONGO INLET.

MISSION W268, FLIGHT 01

DATA AVAILABILITY:

PLATFORM TYPES:

ARCHIVE MEDIA:

PHOTOPRINTS
120 9"X9" PRINTS

FUNDING:

NATIONAL AERONAUTICS AND SPACE ADM

INVENTORY:

CONTACT:

MICHAEL CONGER 804 824 3411
NATIONAL AERONAUTICS AND SPACE ADM
CHESAPEAKE BAY ECOLOGICAL PROGRAM OFFICE
WALLOPS ISLAND VIRGINIA USA 23337

GRID LOCATOR (LAT):
73077552 730775

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<td>1 FLIGHT PER LINE</td>
<td>1,500 FEET 152 AND FOUR-TENTHS MM FOCAL LENGTH</td>
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<td>1 FLIGHT PER LINE</td>
<td>1,500 FEET 152 AND FOUR-TENTHS MM FOCAL LENGTH</td>
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PROJECTS:

GENERAL GEOGRAPHIC AREA:
NORTH ATLANTIC, COASTAL, U.S., VIRGINIA, TOM'S COVE

ABSTRACT:
MISSION W106, FLIGHT 04, WAS ACCOMPLISHED ON FEBRUARY 1, 1972, UTILIZING THE WALLOPS FLIGHT CENTER C-54 AIRCRAFT EQUIPPED WITH TWO T-11 AERIAL MAPPING CAMERAS IN COOPERATION WITH THE CHINCOTEAGUE NATIONAL WILDLIFE RESERVE OF THE BUREAU OF SPORT FISHERIES AND WILDLIFE. THE OBJECTIVE OF THE FLIGHT WAS TO OBTAIN LARGE SCALE IMAGERY OF THE LAND SURROUNDING TOM'S COVE FOR USE IN STUDYING EROSION AND DEPOSITIONAL FEATURES OF THE TERRAIN IN TOM'S COVE.

DATA AVAILABILITY:
PLATFORM TYPES:
AIRCRAFT

ARCHIVE MEDIA:
PHOTO PRINTS
28 9"X9" PRINTS

FUNDING:
NATIONAL AERONAUTICS AND SPACE ADM

INVENTORY:
PUBLICATIONS:

CONTACT:
MICHAEL CONGER 804 824 3411
NATIONAL AERONAUTICS AND SPACE ADM
CHESAPEAKE BAY ECOLOGICAL PROGRAM OFFICE
WALLOPS ISLAND VIRGINIA USA 23337

GRID LOCATOR (LAT):
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|            |          | FROM AIRCRAFT   |                |             |           |              | 5000 FEET 152 AND FOUR-
|            |          |                 |                |             |           |              | TENTHS MM FOCAL LENGTH |
PROJECTS:

GENERAL GEOGRAPHIC AREA:
U.S., COASTAL, NORTH ATLANTIC, CHESAPEAKE BAY, VIRGINIA, ASSATEAGUE ISLAND, TOM'S COVE

DATA COLLECTED: APRIL 1972 TO APRIL 1972

ABSTRACT:
MISSION W123, FLT. 2, APRIL 24, 1972, WITH WALLOPS STATION C-54 AIRCRAFT EQUIPPED WITH TWO T-11 AERIAL CAMERAS IN COOPERATION WITH CHINCOTEAGUE NATIONAL WILDLIFE REFUGE ON THE "TOM'S COVE" SECTION OF ASSATEAGUE ISLAND, VA. OBJECTIVE - TO OBTAIN NATURAL AND FALSE-COLOR REMOTELY SENSED IMAGERY TO ASSESS THE ENVIRONMENTAL IMPACT OF A NEWLY DEVELOPED NATURE TRAIL. FLIGHT MADE IN CLEAR WEATHER, SOME HAZE, VISIBILITY 4-5 MILES, AIR TEMP. 18 DEG. C AT 3000 FT., MSL WITH WIND OF 6 KNOTS FROM 295 DEG.

DATA AVAILABILITY:

PLATFORM TYPES:
AIRCRAFT

ARCHIVE MEDIA:
PHOTOPRINTS
12 9" X 9" FRAMES.

FUNDING:

INVENTORY:

PUBLICATIONS:

CONTACT:
PAUL ALFONSI  804-824-3411
NATIONAL AERONAUTICS AND SPACE ADM
CHESAPEAKE BAY ECOLOGICAL PROGRAM OFFICE
WALLOPS ISLAND VIRGINIA USA 23337

GRID LOCATOR (LAT):
730775

PARAMETER IDENTIFICATION SECTION:

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<td>12</td>
<td>OBS</td>
<td>3000 FT</td>
<td>6 INCH FOCAL LENGTH</td>
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CHINCOTEAGUE NATIONAL WILDLIFE REFUGE BASE LINE STUDY
DATA COLLECTED: OCTOBER 1970 TO OCTOBER 1970

PROJECTS:

GENERAL GEOGRAPHIC AREA:
NORTH ATLANTIC, COASTAL, U.S., CHESAPEAKE BAY, VIRGINIA, CHINCOTEAGUE

ABSTRACT:
MISSION W029, FLT. 3, OCTOBER 19, 1970, WALLOPS STATION CHARTERED BELL 205 HELICOPTER EQUIPPED WITH A POD OF T-11 AERIAL MAPPING CAMERAS. OBJECTIVE - TO OBTAIN REMOTE SENSOR BASE LINE DATA OF ACTIVE WILDLIFE AREAS IN CHINCOTEAGUE - TOM'S COVE - ASSETEAGUE AREA. FLIGHT MADE FOR THE CHESAPEAKE BAY ECOLOGICAL PROGRAM OFFICE. FLIGHT IN CLEAR WEATHER, AIR TEMP. +8 DEG. -C AT 1000 FT., MSL WITH WIND OF 20 KNOTS FROM 280 DEG. (MISSION NO W029, FLT 3)

DATA AVAILABILITY:
PLATFORM TYPES:
AIRCRAFT

ARCHIVE MEDIA:
PHOTOPRINTS
256 9" X 9" FRAMES

FUNDING:
INVENTORY:
PUBLICATIONS:
CONTACT:
PAUL ALFONSI 804-824-3411
NATIONAL AERONAUTICS AND SPACE ADM
CHESAPEAKE BAY ECOLOGICAL PROGRAM OFFICE
WALLOPS ISLAND VIRGINIA USA 23337

GRID LOCATOR (LAT): 730775

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<td>PHOTOGRAPHS</td>
<td>54 OBS AT 5000 FT, 202 OBS LENGTH</td>
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PROJECTS:

GENERAL GEOGRAPHIC AREA:
NORTH ATLANTIC, COASTAL, U.S., VIRGINIA, MARYLAND, ASSATEAGUE ISLAND

ABSTRACT:
MISSION W107, FLIGHT 03, WAS ACCOMPLISHED ON FEBRUARY 4, 1972, UTILIZING THE WALLOPS FLIGHT CENTER C-54 AIRCRAFT EQUIPPED WITH A T-11 AERIAL MAPPING CAMERA IN COOPERATION WITH THE GEOLOGY DEPARTMENT OF THE UNIVERSITY OF VIRGINIA FOR THE U.S. PARK SERVICE. THE OBJECTIVE OF THE FLIGHT WAS TO OBTAIN WINTER IMAGERY OF ASSATEAGUE ISLAND FOR DETERMINING LITTORAL EROSIONAL CHANGES BROUGHT ABOUT BY LATE FALL AND EARLY WINTER STORMS.

MISSION W107, FLIGHT 03

DATA AVAILABILITY:
PLATFORM TYPES:
AIRCRAFT
ARCHIVE MEDIA:
PHOTOPRINTS
67 9"X9" PRINTS

FUNDING:
NATIONAL AERONAUTICS AND SPACE ADM

GRID LOCATOR (LAT):
73077554 73078541

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BASE LINE DATA OF THE WALLOPS ISLAND LITTORAL REGIME
DATA COLLECTED: APRIL 1973 TO APRIL 1973

PROJECTS:
GENERAL GEOGRAPHIC AREA:
U.S., COASTAL, NORTH ATLANTIC, CHESAPEAKE BAY, VIRGINIA, WALLOPS ISLAND

ABSTRACT:
MISSION W198, FLIGHT 2, APRIL 6, 1973, UTILIZING THE WALLOPS STATION C-54 AIRCRAFT EQUIPPED WITH A T-11 AERIAL MAPPING CAMERA AND A THERMAL IR SCANNER FOR THE CHESAPEAKE BAY ECOLOGICAL PROGRAM OFFICE. THE OBJECTIVE OF THE FLIGHT WAS TO OBTAIN UPDATED BASE LINE INFORMATION OF BEACH CONDITIONS ON WALLOPS ISLAND. CLEAR WEATHER, VISIBILITY FROM 10-20 MILES, AIR TEMPERATURE WAS 8 DEG. C AT 5000 FT. MSL, WIND OF 20 KNOTS FROM 280 DEG. (MISSION NO W198, FLT 2)

DATA AVAILABILITY:
PLATFORM TYPES:
AIRCRAFT

ARCHIVE MEDIA:
ORIGINAL FILM
16 9 X 9 INCH FRAMES

FUNDING:

INVENTORY:

PUBLICATIONS:

CONTACT:
PAUL ALFONSI 804-824-3411
NATIONAL AERONAUTICS AND SPACE ADM
CHESAPEAKE BAY ECOLOGICAL PROGRAM OFFICE
WALLOPS ISLAND VIRGINIA USA 23337

GRID LOCATOR (LAT): 730775

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<td>18</td>
<td>OBS</td>
<td>5000 FT</td>
<td>152 MM FOCAL</td>
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PROJECTS:

GENERAL GEOGRAPHIC AREA:
NORTH ATLANTIC, COASTAL, U.S., CHESAPEAKE BAY, VIRGINIA WALLOPS ISLAND

ABSTRACT:
MISSION W029, FLT. 4, OCTOBER 19, 1970, WITH WALLOPS STATION CHARTERED BELL 205 HELICOPTER EQUIPPED WITH A POD OF 4 T-11 AERIAL MAPPING CAMERAS. OBJECTIVE - TO OBTAIN BASE LINE REMOTE SENSOR DATA FOR THE CHESAPEAKE BAY ECOLOGICAL PROGRAM OFFICE OF THE STATUS OF THE LITTORAL REGIME OF WALLOPS ISLAND. FLIGHT IN CLEAR WEATHER, MODERATE HAZE, AIR TEMP. -4 DEG. C AT 10,000 FT., MSL WITH WIND OF 20 KNOTS FROM 280 DEG.

DATA AVAILABILITY:
PLATFORM TYPES:
AIRCRAFT

ARCHIVE MEDIA:
PHOTOPRINTS
28 9" X 9" FRAMES

FUNDING:

INVENTORY:

CONTACT:
PAUL ALFONSI  804-824-3411
NATIONAL AERONAUTICS AND SPACE ADM
CHESAPEAKE BAY ECOLOGICAL PROGRAM OFFICE
WALLOPS ISLAND VIRGINIA USA 23337

GRID LOCATOR (LAT):
730775

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ANNEX III

Part A

Section 3

New Files
Section 3 contains 17 new files identified in interviews with Bay researchers. These files are arranged by the same criterion as those in Section 1. The first ten files contain surveys of general submerged aquatic vegetation as well as surveys and studies of specific genera. The next five files range from three general flora surveys to infauna and epifauna of eelgrass, and ground photographs of wetlands areas. The last two files cover Back Bay National Wildlife Refuge and Currituck Sound, North Carolina.
ANNEX III

Part A

Section 3

"1"
Specific studies of submerged aquatic vegetation.
DATA COLLECTED:

PROJECTS:
CHESAPEAKE BAY VEGETATION SURVEY

GENERAL GEOGRAPHIC AREA:
NORTH ATLANTIC OCEAN, U.S., COASTAL, CHESAPEAKE BAY

ABSTRACT:
THIS IS AN ONGOING PROJECT THAT BEGAN IN JULY 1971 TO RECORD THE DISTRIBUTION AND ABUNDANCE OF SUBMERGED AQUATIC VEGETATION IN THE UPPER CHESAPEAKE BAY. ALL MARYLAND TRIBUTARIES INCLUDING THE POTOMAC RIVER ARE SURVEYED BETWEEN JULY AND SEPTEMBER OF EACH YEAR. EACH STATION IS MONITORED ONCE DURING THESE MONTHS. THE RAW DATA IS STORED ON MAGNETIC TAPE BUT OUTPUT FROM SUMMARIZATION PROGRAMS ARE AVAILABLE FOR EACH YEAR. THESE OUTPUTS SUMMARIZE THE DATA BY RIVER SYSTEM.

DATA AVAILABILITY:

PLATFORM TYPES:

ARCHIVE MEDIA:

FUNDING:

INVENTORY:

PUBLICATIONS:

CONTACT:
ROBERT MUNRO
PATUXENT WILDLIFE RESEARCH CENTER
U.S. FISH AND WILDLIFE SERVICE
LAUREL, MARYLAND  20811

GRID LOCATOR:
DATA COLLECTED:

PROJECTS:
INVESTIGATION ON GROWTH DYNAMICS AND CHARACTERISTICS OF EELGRASS

GENERAL GEOGRAPHIC AREA:
NORTH ATLANTIC OCEAN, U.S., COASTAL, CHESAPEAKE BAY, VIRGINIA, MOBJACK BAY, HUNGARS CREEK

ABSTRACT:
FOUR REPPLICATE SAMPLES EACH ARE TAKEN EVERY MONTH AT A STATION IN MOBJACK BAY AND ONE IN HUNGARS CREEK, VIRGINIA. THE PROJECT BEGAN IN FEBRUARY 1976. THE OBJECTIVE OF THIS ONGOING MONITORING PROGRAM IS TO DETERMINE THE GROWTH DYNAMICS AND CHARACTERISTICS OF EELGRASS.

DATA AVAILABILITY:

PLATFORM TYPES:

ARCHIVE MEDIA:

FUNDING:

INVENTORY:

PUBLICATIONS:

CONTACT:
DR. ROBERT J. ORTH
VIRGINIA INSTITUTE OF MARINE SCIENCE
GLOUCESTER POINT, VIRGINIA 23062

GRID LOCATOR:
PROJECTS:
REMOTE SENSING OF SUBMERGED AQUATIC VEGETATION

GENERAL GEOGRAPHIC AREA:
NORTH ATLANTIC OCEAN, U.S., COASTAL, CHESAPEAKE BAY, VIRGINIA

ABSTRACT:
MISSIONS ARE FLOWS BY VIRGINIA INSTITUTE OF MARINE SCIENCE PERSONNEL USING AN INSTITUTE LIGHT AIRCRAFT EQUIPPED WITH A MOUNTED HASSELBLAD 500 EL/M CAMERA (50 MM F/4 DISTAGON LENS) AT ALTITUDES VARYING FROM 5000 TO 8000 FEET. THE PROJECT BEGAN IN APRIL 1974. THE OBJECTIVE OF THIS ONGOING MONITORING PROGRAM IS TO STUDY THE DISTRIBUTION OF SUBMERGED AQUATIC VEGETATION IN THE LOWER CHESAPEAKE BAY.

DATA AVAILABILITY:
PLATFORM TYPES:

ARCHIVE MEDIA:

FUNDING:

INVENTORY:

PUBLICATIONS:

CONTACT:
DR. ROBERT J. ORTH
VIRGINIA INSTITUTE OF MARINE SCIENCE
GLOUCESTER POINT, VIRGINIA  23062

GRID LOCATOR:
DATA COLLECTED:

PROJECTS:
REMOTE SENSING OF VIRGINIA'S SHORELINE

GENERAL GEOGRAPHIC AREA:
NORTH ATLANTIC OCEAN, U.S., COASTAL, VIRGINIA

ABSTRACT:
MISSIONS ARE FLOWN BY VIRGINIA INSTITUTE OF MARINE SCIENCE PERSONNEL USING LOW ALTITUDE, OBLIQUE ANGLE PHOTOGRAPHY. OVER 14,000 COLOR SLIDES SERVE AS A DATA SOURCE FOR SHORELINE SITUATION REPORTS. THE AREA COVERED IS ALL OF VIRGINIA'S SHORELINE, BOTH OCEANSIDE AND CHESAPEAKE BAY. THE STUDY BEGAN IN 1972 AND IS STILL ACTIVE. EACH AREA IS PHOTOGRAPHED ONLY ONCE.

DATA AVAILABILITY:

PLATFORM TYPES:

ARCHIVE MEDIA:

FUNDING:

INVENTORY:

PUBLICATIONS:

CONTACT:
DR. ROBERT BYRNE
VIRGINIA INSTITUTE OF MARINE SCIENCE
GLOUCESTER POINT, VIRGINIA 23062

GRID LOCATOR:
DATA COLLECTED:

PROJECTS:
Eurasian Water Milfoil Survey of Chesapeake Bay

GENERAL GEOGRAPHIC AREA:
North Atlantic Ocean, U.S., Coastal, Chesapeake Bay, Maryland

ABSTRACT:
Surveys were done from 1961 to 1968 by personnel of Chesapeake Biological Laboratory. The 1961 survey was comprehensive, but from 1962 to 1968 surveys of different river systems were taken sporadically whenever time permitted and personnel were available. Areas covered include from St. Patrick's Creek on the Potomac River, up the Western Shore, across the head of the Bay and along the Eastern Shore to and including the Sassafras River. Included in some of the data are water temperature, Secchi disc depths, data availability, salinity, tidal stage, wind direction and speed, pH, dissolved oxygen, dissolved carbon dioxide gas, bottom type, vegetation species present and their relative abundance. Distribution maps are present for each area when Eurasian Water Milfoil was present. All data is on file by river system.

ARCHIVE MEDIA:

FUNDING:

INVENTORY:

PUBLICATIONS:

CONTACT:
DIRECTOR
Chesapeake Biological Laboratory
Solomons, Maryland 20688

GRID LOCATOR:
DATA COLLECTED:

PROJECTS:
THE ECOLOGY AND DISEASE OF EURASIAN WATER MILFOIL IN THE CHESAPEAKE BAY

GENERAL GEOGRAPHIC AREA:
NORTH ATLANTIC OCEAN, U.S., COASTAL, CHESAPEAKE BAY, MARYLAND, RHODE RIVER, MIDDLE RIVER, BACK RIVER

ABSTRACT:
THIS INVESTIGATION BEGAN IN 1966 IN THE RHODE RIVER, MIDDLE RIVER AND BACK RIVER AND CONTINUED THROUGH 1969. THE WORK INVOLVED DISTRIBUTIONAL SURVEYS OF EURASIAN WATER MILFOIL ABUNDANCE IN RELATION TO NATIVE AQUATIC PLANTS, INVESTIGATION OF EURASIAN WATER MILFOIL DISEASE AND STUDIES ON WATER QUALITY CONDITIONS RELATIVE TO MILFOIL GROWTH.

DATA AVAILABILITY:

PLATFORM TYPES:

ARCHIVE MEDIA:

FUNDING:

INVENTORY:

PUBLICATIONS:

CONTACT:
LIBRARIAN
JOHNS HOPKINS UNIVERSITY
BALTIMORE, MARYLAND 21205

GRID LOCATOR:
DATA COLLECTED:
MECHANICAL CONTROL OF EURASIAN WATER MILFOIL IN MARYLAND WITH AND WITHOUT 2,4-D APPLICATIONS

GENERAL GEOGRAPHIC AREA:
NORTH ATLANTIC OCEAN, U.S., COASTAL, CHESAPEAKE BAY, MARYLAND, POTOMAC RIVER, GUNPOWDER RIVER

ABSTRACT:

DATA AVAILABILITY:

PLATFORM TYPES:

ARCHIVE MEDIA:

FUNDING:

INVENTORY:

PUBLICATIONS:

CONTACT:
CHARLES RAWLS
CHESAPEAKE BIOLOGICAL LABORATORY
SOLOMONS, MARYLAND  20688

GRID LOCATOR:
DATA COLLECTED:

PROJECTS:
TEMPERATURE AND ROOTED AQUATIC PLANTS

GENERAL GEOGRAPHIC AREA:
NORTH ATLANTIC OCEAN, U.S., COASTAL, CHESAPEAKE BAY, MARYLAND, PATUXENT RIVER

ABSTRACT:
IN RELATION TO THE DISAPPEARANCE OF A RUPPIA MARITIMA POPULATION NEAR THE EFFLUENT OF AN ELECTRICAL GENERATING STATION ON THE PATUXENT RIVER, MARYLAND, A BROAD STUDY OF TEMPERATURE EFFECTS ON RESPIRATION AND PHOTOSYNTHESIS OF AQUATIC PLANTS WAS MADE FROM 1963 TO 1964. THE SPECIFIC AREA STUDIED ON THE PATUXENT WAS FROM TEAGUE POINT TO HUNTING CREEK. A GILSON DIFFERENTIAL RESPIROMETER WAS USED TO INVESTIGATE RESPIRATORY VARIATION IN LEAVES OF POTAMOGETON PERPOLIATUS AT 25, 30, 35, 40, AND 45°C. THIS SPECIES GROWS WITH RUPPIA MARITIMA AND PLANT MATERIAL WAS READILY AVAILABLE. PLANTS GROWING IN HEATED AND NON-HEATED WATER WERE COMPARED.

PLATFORM TYPES:

ARCHIVE MEDIA:

FUNDING:

INVENTORY:

PUBLICATIONS:

CONTACT:
DR. RICHARD R. ANDERSON
AMERICAN UNIVERSITY
WASHINGTON, D.C. 20016

GRID LOCATOR:
ABSTRACT:

THE MINERAL COMPOSITION OF EURASIAN WATER MILFOIL, *MYRIOPHYLLUM SPICATUM* L., IN MARYLAND WAS INVESTIGATED TO DETERMINE THE FEASIBILITY OF ITS USE AS A SUPPLEMENT OR SUBSTITUTE FOR COMMERCIAL FERTILIZER. FROM JUNE 1962 TO JANUARY 1963, SAMPLES WERE COLLECTED AND ANALYZED FROM ONE FRESHWATER AND FOUR ESTUARINE HABITATS.
DATA COLLECTED:

PROJECTS:
The mineral content of *Myriophyllum spicatum* L. in relation to its aquatic environment

GENERAL GEOGRAPHIC AREA:
North Atlantic Ocean, U.S., Coastal, Chesapeake Bay, Maryland

ABSTRACT:
The mineral composition of *Myriophyllum spicatum* L. and its aquatic environment were investigated to determine the relationship between ionic contents in the plant and in the water. Systematic samplings were made in twin ponds near Beltsville, Maryland, on three sites in the Wicomico River in Tall Timbers Cove, an inlet of the Potomac River from June to October 1962.

DATA AVAILABILITY:

PLATFORM TYPES:

ARCHIVE MEDIA:

FUNDING:

INVENTORY:

PUBLICATIONS:

CONTACT:
Dr. Richard R. Anderson
American University
Washington, D.C. 20016

GRID LOCATOR:
ANNEX III

Part A

Section 3

"2"

General vegetation studies which include submerged aquatic vegetation.
PROJECTS:
DISTRIBUTION OF SUBMERGED AQUATIC VEGETATION IN TIDAL MIDDLESEX COUNTY

GENERAL GEOGRAPHIC AREA:
NORTH ATLANTIC OCEAN, U.S., COASTAL, VIRGINIA, RAPPAHANNOCK RIVER, PIANKATANK RIVER

ABSTRACT:
OBSERVATIONS OF SUBMERGED AQUATIC VEGETATION WERE RECORDED AS ADDITIONAL INFORMATION DURING A WETLANDS SURVEY CONDUCTED BY VIRGINIA INSTITUTE OF MARINE SCIENCE PERSONNEL DURING THE PERIOD OF MARCH THROUGH JULY 1977. MOST OF THE OBSERVATIONS WERE MADE IN VERY TURBID WATERS WHEN THE PLANTS FOULED THE BOAT MOTOR'S PROPELLER. THE INFORMATION IS CONTAINED IN THE COMMENTS SECTION OF THE TIDAL MARSH INVENTORY LISTED IN THE PUBLICATION BLOCK. MORE INVENTORIES OF VIRGINIA TIDAL AREAS WILL BE CONDUCTED IN SUMMER 1978 AND WILL RECORD OBSERVATIONS OF SUBMERGED AQUATIC VEGETATION.

DATA AVAILABILITY:

PLATFORM TYPES:

ARCHIVE MEDIA:

FUNDING:

INVENTORY:

PUBLICATIONS:

CONTACT:
LIBRARIAN
VIRGINIA INSTITUTE OF MARINE SCIENCE
GLOUCESTER POINT, VIRGINIA 23062

GRID LOCATOR:
ANNEX III

Part A

Section 3

"3"
Detailed observations of submerged aquatic vegetation found during faunal and bottom studies.
DATA COLLECTED:

PROJECTS:
SURVEY OF FLORA OF VIRGINIA BEACH, ACCOMACK AND NORTHAMPTON COUNTIES

GENERAL GEOGRAPHIC AREA:
NORTH AMERICA, U.S., VIRGINIA, COASTAL, VIRGINIA BEACH, ACCOMACK COUNTY, NORTHAMPTON COUNTY

ABSTRACT:

DATA AVAILABILITY:

PLATFORM TYPES:

ARCHIVE MEDIA:

FUNDING:

INVENTORY:

PUBLICATIONS:

CONTACT:
DR. E. SPENCER WISE
CHRISTOPHER NEWPORT COLLEGE
NEWPORT NEWS, VIRGINIA 23606

GRID LOCATOR:
DATA COLLECTED:

PROJECTS:
A FLORA OF WORCESTER COUNTY, MARYLAND

GENERAL GEOGRAPHIC AREA:
NORTH AMERICA, U.S., MARYLAND, WORCESTER COUNTY

ABSTRACT:
THIS STUDY IS THE PIONEER WORK FOR DESCRIBING THE FLORA OF WORCESTER COUNTY, MARYLAND. IT WAS CONDUCTED FROM FALL 1930 TO FALL 1932.

DATA AVAILABILITY:

PLATFORM TYPES:

ARCHIVE MEDIA:

FUNDING:

INVENTORY:

PUBLICATIONS:

CONTACT:
LIBRARIAN
CATHOLIC UNIVERSITY
WASHINGTON, D. C. 20064

GRID LOCATOR:
ANNEX III

Part A

Section 3

"4"

General observations of submerged aquatic vegetation found during faunal studies.
PROJECTS:
ROLE OF DISTURBANCE IN AN EELGRASS COMMUNITY

GENERAL GEOGRAPHIC AREA:
NORTH ATLANTIC OCEAN, U.S., COASTAL, CHESAPEAKE BAY, VIRGINIA, YORK RIVER, SANDY POINT

ABSTRACT:
SIX STATIONS IN AN EELGRASS BED AT SANDY POINT ON THE YORK RIVER WERE SAMPLED IN JULY 1972 FOR BIOMASS OF BENTHIC PLANTS, SPECIES DETERMINATION OF BENTHIC ANIMALS AND SEDIMENT SIZE ANALYSIS. TWO YEARS LATER THE SAME EELGRASS BED HAD BEEN DEVASTATED BY PREDATOR FEEDING BY THE COWNOSE RAY LEAVING ONLY PATCHES OF EELGRASS. SEVENTEEN DIFFERENT SIZE PATCHES WERE SAMPLED AGAIN FOR SPECIES DETERMINATION. VARIOUS FORMS OF STRESS WERE ADMINISTERED TO THE EELGRASS INFAUNA AND EPIFAUNA AND RESULTS WERE OBSERVED.

DATA AVAILABILITY:

PLATFORM TYPES:

ARCHIVE MEDIA:

FUNDING:

INVENTORY:

PUBLICATIONS:

CONTACT:
DR. ROBERT J. ORTH
VIRGINIA INSTITUTE OF MARINE SCIENCE
GLOUCESTER POINT, VIRGINIA 23062

GRID LOCATOR:
DATA COLLECTED:

PROJECTS:
PHOTOGRAPHS AND SLIDES OF THE CHESAPEAKE BAY AND ITS TRIBUTARIES

GENERAL GEOGRAPHIC AREA:
NORTH ATLANTIC OCEAN, U.S., COASTAL, CHESAPEAKE BAY

ABSTRACT:
PHOTOGRAPHS HAVE BEEN TAKEN FROM APPROXIMATELY 1924 TO 1978 AS A HOBBY. THERE ARE 20,000 TO 30,000 BLACK AND WHITE NEGATIVES AND KODACHROME SLIDES REPRESENTING NUMEROUS SUBJECTS AND COVERING ALL OF NORTH AMERICA. FRANCIS UHLER'S MAIN INTERESTS HOWEVER HAVE BEEN WATERFOWL FOOD HABITS AND EVALUATION OF WATERFOWL SITES. APPROXIMATELY 500-1000 PHOTOGRAPHS RELATE TO THE CHESAPEAKE BAY. THE PHOTOGRAPHS ARE ARRANGED BY DATE AND ARE INDEXED BY SUBJECT MATTER FROM 1924-1934. FROM 1934 TO PRESENT THEY ARE NOT INDEXED AND REMAIN IN THEIR ORIGINAL STORAGE BOXES BY DATE. NUMEROUS NOTEBOOKS OF FIELD OBSERVATIONS ACCOMPANY THE SLIDES FROM 1924 TO PRESENT.

DATA AVAILABILITY:

PLATFORM TYPES:

ARCHIVE MEDIA:

FUNDING:

INVENTORY:

PUBLICATIONS:

CONTACT:
FRANCIS UHLER
P. O. BOX 65
BOWIE, MARYLAND 20715

GRID LOCATOR:
ANNEX III

Part A

Section 3

"6"
Areas near the Chesapeake Bay including oceanside Maryland and Virginia, Delaware, and the northern coast of North Carolina.
AN INVESTIGATION OF CERTAIN WATERFOWL PLANTS AND A BOTANICAL SURVEY OF BACK BAY NATIONAL WILDLIFE REFUGE, VIRGINIA BEACH, VIRGINIA

GENERAL GEOGRAPHIC AREA:
NORTH ATLANTIC OCEAN, U.S., COASTAL, VIRGINIA, BACK BAY NATIONAL WILDLIFE REFUGE

ABSTRACT:
DATA COLLECTED:

PROJECTS:
- DISTRIBUTION OF SUBMERGED HYDROPHYTES IN CURRITUCK SOUND

GENERAL GEOGRAPHIC AREA:
- NORTH ATLANTIC OCEAN, U.S., COASTAL, NORTH CAROLINA, CURRITUCK SOUND

ABSTRACT:
- ROOTED SUBMERGENT FLORA OF CURRITUCK SOUND, NORTH CAROLINA DESCRIBED WITH RESPECT TO SALINITY, SUBSTRATE TEXTURE, DEPTH, pH AND TURBIDITY. TEN TRANSECTS WERE MADE PERPENDICULAR TO SHORELINE ACROSS SOUND TO OPPOSITE SHORELINE - MAY TO AUGUST 1975.

DATA AVAILABILITY:

PLATFORM TYPES:

ARCHIVE MEDIA:

FUNDING:

INVENTORY:

PUBLICATIONS:

CONTACT:
- LIBRARIAN
- OLD DOMINION UNIVERSITY
- NORFOLK, VIRGINIA 23508

GRID LOCATOR:
ANNEX III

Part B

Index to the Data Files of Chesapeake Bay -
Listed by Key Word

Submerged Aquatic Vegetation
This index is a listing of the data files of Sections 1 and 2 by key word. The data files initiated after January 1, 1973 are italicized.

Most of the files are referenced by more than one key word, and more than half (16) of the 28 key words failed to yield relevant data files.
ANNEX III

Part B

Index to the Data Files of Chesapeake Bay-
Listed by Key Word
Submerged Aquatic Vegetation

beta activity in benthic plants (bottom)
none.

biological condition of benthic plants (bottom)
none.

biomass of benthic plants (bottom)
  6, 8, 51, 60, 80.

canopy cover of benthic plants (bottom)
none.

community structure analysis (bottom)
  8, 11, 31.

community structure analysis (water)
  54.

count of benthic plants (bottom)
  6, 8, 13, 15, 17, 19, 21, 23, 25, 29, 33, 57, 60, 62, 66, 69, 76,
  78, 80, 81.

developmental stage of benthic plants (bottom)
none.

diversity index (bottom)
none.

flowering (bottom)
none.

gamma activity in benthic plants (bottom)
none.

growth studies of benthic plants (bottom)
  75.

height of benthic plants (bottom)
none.
length of benthic plants (bottom)
60.

meristic measurements of benthic plants (bottom)
none.

morphometric measurement of benthic plants (bottom)
none.

mortality of benthic plants (bottom)
none.

photograph (bottom)
none.

photograph (earth) (from aircraft)

sample of benthic plants (bottom)
none.

sex determination of benthic plants (bottom)
none.

sightings of benthic plants (bottom)
none.

species determination of benthic plants (bottom)
6, 8, 11, 13, 16, 17, 29, 33, 36, 49, 56, 57, 60, 62, 64, 73, 76, 78, 80, 81.

taxonomic list of benthic plants (bottom)
27, 45, 47.

volume determination of benthic plants (bottom)
64.

volume/weight ratios of benthic plants (bottom)
none.

weight of benthic plants (bottom)
38, 41, 60, 66.

yield of benthic plants (bottom)
75.
ANNEX IV

Monitoring Programs of the Chesapeake Bay

Submerged Aquatic Vegetation
The 12 monitoring programs identified for submerged aquatic vegetation in the Chesapeake Bay form two categories, as follows:

Continuous monitoring programs presently active in the Chesapeake Bay - 11 files.

Continuous monitoring programs initiated after January 1967 and have operated five (5) years or longer, but are presently not operational - 1 file.

No continuous monitoring programs that were initiated prior to January, 1967 and have operated ten (10) years or longer, but are presently not operational, were found.
MONITORING PROJECTS:
   SPOILED WETLANDS RECOVERY STUDY

GENERAL GEOGRAPHIC AREA:
   NORTH ATLANTIC OCEAN, U.S., COASTAL, CHESAPEAKE BAY, MARYLAND, QUEEN ANN COUNTY

ABSTRACT:
   A STUDY OF VEGETATIVE REHABITATION OF THREE DISTURBED MARSHES IN QUEEN ANN COUNTY, MARYLAND IS BEING CONDUCTED. THIS ONGOING MONITORING PROJECT INCLUDES ALL SUBMERGENT AND EMERGENT PLANTS TO 3 FOOT WATER DEPTH AT THREE DISTURBED AREAS, WITH 52 STATIONS PER DISTURBED AREA. SAMPLES ARE TAKEN IN EARLY AND LATE SUMMER.

DATA AVAILABILITY:

PLATFORM TYPE:

ARCHIVE MEDIA:

3

FUNDING:

INVENTORY:

PUBLICATIONS:

CONTACT:
   DIRECTOR
   MARYLAND DEPARTMENT OF NATURAL RESOURCES
   ANNAPOLIS, MARYLAND 21401

GRID LOCATOR:
DATA COLLECTED: OCTOBER 1957 TO PRESENT

MONITORING PROJECTS:
SUSQUEHANNA FLATS VEGETATION SURVEY

GENERAL GEOGRAPHIC AREA:
NORTH ATLANTIC OCEAN, U.S., COASTAL, CHESAPEAKE BAY, MARYLAND, SUSQUEHANNA FLATS

ABSTRACT:
THIS MONITORING SURVEY OF VEGETATION PRESENT ON THE SUSQUEHANNA FLATS STARTED IN 1957 AND IS ONGOING. IT INCLUDES DEPTH, SALINITY, SECCHI READINGS, PLANT SPECIES LISTS, PLANT RELATIVE ABUNDANCE, BENTHIC ANIMAL SPECIES LISTS, WATERFOWL FORAGE AVAILABILITY, AND SEASONALITY OF VEGETATION.

DATA AVAILABILITY:

PLATFORM TYPE:

ARCHIVE MEDIA:

FUNDING:

INVENTORY:

PUBLICATIONS:

CONTACT:
VERNON STOTTS
MARYLAND DEPARTMENT OF NATURAL RESOURCES
ANNAPOLIS, MARYLAND 21401

GRID LOCATOR:
DATA COLLECTED: JUNE 1962 TO PRESENT

MONITORING PROJECTS:
WOOD DUCK FLOAT CENSUS

GENERAL GEOGRAPHIC AREA:
NORTH ATLANTIC OCEAN, U.S., COASTAL, CHESAPEAKE BAY, POTOMAC RIVER

ABSTRACT:
THIS MONITORING PROJECT INCLUDES COUNTS AND SPECIES DETERMINATION OF WATERFOWL, REPTILES, MAMMALS, BIRDS, AND BENTHIC PLANTS. SAMPLES HAVE BEEN MADE EACH JUNE SINCE 1962 ALONG A 180 MILE STRETCH OF THE POTOMAC RIVER. FISHING ACTIVITY IS ALSO NOTED. OBSERVATIONS ARE MADE FROM TWO DRIFTING BOATS WITH TWO OBSERVERS IN EACH BOAT.

DATA AVAILABILITY:

PLATFORM TYPE:

ARCHIVE MEDIA:

FUNDING:

INVENTORY:

PUBLICATIONS:

CONTACT:
VERNON STOTTS
MARYLAND DEPARTMENT OF NATURAL RESOURCES
ANNAPOLIS, MARYLAND 21401

GRID LOCATOR:
MONITORING PROJECTS:
SUBSTRATE STUDIES IN THE PATUXENT RIVER

GENERAL GEOGRAPHIC AREA:
NORTH ATLANTIC OCEAN, U.S., COASTAL, CHESAPEAKE BAY, MARYLAND, PATUXENT RIVER

ABSTRACT:
SUBSTRATE STUDIES HAVE BEEN DONE IN THE PATUXENT RIVER SINCE 1967. MEASUREMENTS INCLUDE BIOMASS, SPECIES DETERMINATIONS AND COUNTS OF PELAGIC ANIMALS AND COUNTS OF BENTHIC PLANTS FROM MONTHLY SAMPLING.

DATA AVAILABILITY:

PLATFORM TYPE:

ARCHIVE MEDIA:

FUNDING:

INVENTORY:

PUBLICATIONS:

CONTACT:
DIRECTOR
BENEDICT ESTUARINE LABORATORY
BENEDICT, MARYLAND 20612

GRID LOCATOR:
MONITORING PROJECTS:
SUBSTRATE STUDIES IN THE CHESAPEAKE BAY

GENERAL GEOGRAPHIC AREA:
NORTH ATLANTIC OCEAN, U.S., COASTAL, CHESAPEAKE BAY, CALVERT CLIFFS

ABSTRACT:
SUBSTRATE STUDIES HAVE BEEN DONE IN THE CHESAPEAKE BAY, MARYLAND SINCE 1970. MEASUREMENTS INCLUDE BIOMASS, SPECIES DETERMINATION AND COUNT OF PELAGIC ANIMALS AND COUNTS OF BENTHIC PLANTS SAMPLED MONTHLY AT 4 STATIONS. (WOODEN 4x6' PANELS SET UP AT FOUR STATIONS. SAMPLED MONTHLY AND QUARTERLY.)

DATA AVAILABILITY:

PLATFORM TYPE:

ARCHIVE MEDIA:

FUNDING:

INVENTORY:

PUBLICATIONS:

CONTACT:
DIRECTOR
BENEDICT ESTUARINE LABORATORY
BENEDICT, MARYLAND 20612

GRID LOCATOR:
DATA COLLECTED: JUNE 1954 TO PRESENT

MONITORING PROJECTS:
RESIDENT SPECIES OF ESTUARINE FINFISH

GENERAL GEOGRAPHIC AREA:
NORTH ATLANTIC OCEAN, U.S., COASTAL, CHESAPEAKE BAY, MARYLAND

ABSTRACT:
LONG TERM SEINE SURVEY IN MARYLAND TRIBUTARIES TO CHESAPEAKE BAY. MONITORING OF YEAR CLASS STRENGTH, SPECIES
COMPOSITION, AND SEASONALITY OF FISHES. CONSISTENT DATA FILE FOR WHOLE PROJECT PERIOD IN POTOMAC, CHOPTANK,
NANTICOKE, SUSQUEHANNA, WICOMICO, SASSAFRAS, ELK, NORTHEAST, AND BOHEMIA RIVERS. OTHER RIVERS INCLUDED BUT NOT
FOR THE ENTIRE TIME FRAME WERE CHESTER, PATUXENT, MANOKIN, BIG ANNEMESSEX, POCOMOKE, BLACKWATER, TRANSQUAKING,
CHICAMACOMICO, MILES, SOUTH, MAGOTHY, PATAPSCO, BACK, AND MIDDLE RIVERS.

DATA AVAILABILITY:

PLATFORM TYPE:

ARCHIVE MEDIA:

FUNDING:

INVENTORY:

PUBLICATIONS:

CONTACT:
DIRECTOR
MARYLAND DEPARTMENT OF NATURAL RESOURCES
 ANNAPOLIS, MARYLAND 21401

GRID LOCATOR:
DATA COLLECTED: JUNE 1971 TO PRESENT

MONITORING PROJECTS:
MARINE FINFISH AND SHELLFISH SURVEY

GENERAL GEOGRAPHIC AREA:
NORTH ATLANTIC OCEAN, U.S., COASTAL, CHESAPEAKE BAY, MARYLAND, OCEAN SIDE

ABSTRACT:
MONITORING OF FISHES WITH BEACH SEINE AND TRAWL OCCURS IN BAYS ON THE OCEAN SIDE OF THE EASTERN SHORE OF MARYLAND. DATA COLLECTIONS INCLUDE SPECIES LISTS, SIZE RANGE, NUMBERS AND HYDRO DATA. DATA IS EXPANDED TO AREA ESTIMATES. MAINLY SUMMER DATA, TO BECOME QUARTERLY SURVEY. (SOME DATA APPEARS IN WILLIAM SIPPLE FILE ON ECOLOGICAL WETLANDS ASSESSMENT.)

DATA AVAILABILITY:

PLATFORM TYPE:

ARCHIVE MEDIA:

FUNDING:

INVENTORY:

PUBLICATIONS:

CONTACT:
DIRECTOR
MARYLAND DEPARTMENT OF NATURAL RESOURCES
WYEMILLS REGIONAL STATION
WYEMILLS, MARYLAND 21679

GRID LOCATOR:
DATA COLLECTED: 1970 TO PRESENT

MONITORING PROJECTS:
RADIOACTIVITY STUDIES OF SEDIMENTS AT CALVERT CLIFFS

GENERAL GEOGRAPHIC AREA:
NORTH ATLANTIC OCEAN, U.S., COASTAL, CHESAPEAKE BAY, MARYLAND, CALVERT CLIFFS

ABSTRACT:

DATA AVAILABILITY:

PLATFORM TYPE:

ARCHIVE MEDIA:

FUNDING:

INVENTORY:

PUBLICATIONS:

CONTACT:
BALTIMORE GAS AND ELECTRIC COMPANY

GRID LOCATOR:
DATA COLLECTED: JULY 1971 TO PRESENT

MONITORING PROJECTS:
  CHESAPEAKE BAY AQUATIC VEGETATION SURVEY

GENERAL GEOGRAPHIC AREA:
  NORTH ATLANTIC OCEAN, U.S., COASTAL, CHESAPEAKE BAY, MARYLAND

ABSTRACT:
THIS ONGOING MONITORING PROGRAM BEGAN IN JULY 1971 TO RECORD THE DISTRIBUTION AND ABUNDANCE OF SUBMERGED AQUATIC VEGETATION IN THE UPPER CHESAPEAKE BAY. ALL MARYLAND TRIBUTARIES INCLUDING THE POTOMAC RIVER ARE SURVEYED BETWEEN JULY AND SEPTEMBER OF EACH YEAR. EACH STATION IS MONITORED ONCE DURING THESE MONTHS. THE RAW DATA IS STORED ON MAGNETIC TAPE AND SUMMARIZATION OUTPUTS ARE AVAILABLE FOR EACH YEAR. THIS DATA IS SUMMARIZED BY RIVER SYSTEM.

DATA AVAILABILITY:

PLATFORM TYPE:

ARCHIVE MEDIA:

FUNDING:

INVENTORY:

PUBLICATIONS:

CONTACT:
  ROBERT MUNRO
  PATUXENT WILDLIFE RESEARCH CENTER
  U.S. FISH AND WILDLIFE SERVICE
  LAUREL, MARYLAND 20811

GRID LOCATOR:
MONITORING PROJECTS:
REMOTE SENSING OF SUBMERGED AQUATIC VEGETATION

GENERAL GEOGRAPHIC AREA:
NORTH ATLANTIC OCEAN, U.S., COASTAL, CHESAPEAKE BAY, VIRGINIA

ABSTRACT:
MISSIONS ARE FLOWN BY VIRGINIA INSTITUTE OF MARINE SCIENCE PERSONNEL USING AN INSTITUTE LIGHT AIRCRAFT EQUIPPED WITH A MOUNTED HASSELBLAD 500 EL/M CAMERA (50 MM F/4 DISTAGON LENS) AT ALTITUDES VARYING FROM 5000 TO 8000 FEET. THE PROJECT BEGAN IN APRIL 1974. THE OBJECTIVE OF THIS ONGOING MONITORING PROGRAM IS TO STUDY THE DISTRIBUTION OF SUBMERGED AQUATIC VEGETATION IN THE LOWER CHESAPEAKE BAY.

DATA AVAILABILITY:

PLATFORM TYPE:

ARCHIVE MEDIA:

FUNDING:

INVENTORY:

PUBLICATIONS:

CONTACT:
DR. ROBERT J. ORTH
VIRGINIA INSTITUTE OF MARINE SCIENCE
GLOUCESTER POINT, VIRGINIA 23062

GRID LOCATOR:
DATA COLLECTED: FEBRUARY 1976 TO PRESENT

MONITORING PROJECTS:
INVESTIGATION ON GROWTH DYNAMICS AND CHARACTERISTICS OF EELGRASS

GENERAL GEOGRAPHIC AREA:
NORTH ATLANTIC OCEAN, U.S., COASTAL, CHESAPEAKE BAY, VIRGINIA, MOBJACK BAY, HUNGARS CREEK

ABSTRACT:
FOUR REPLICATE SAMPLES EACH ARE TAKEN EVERY MONTH AT A STATION IN MOBJACK BAY AND ONE IN HUNGARS CREEK, VIRGINIA. THE PROJECT BEGAN IN FEBRUARY 1976. THE OBJECT OF THIS ONGOING MONITORING PROGRAM IS TO DETERMINE THE GROWTH DYNAMICS AND CHARACTERISTICS OF EELGRASS.

DATA AVAILABILITY:

PLATFORM TYPE:

ARCHIVE MEDIA:

FUNDING:

INVENTORY:

PUBLICATIONS:

CONTACT:
DR. ROBERT J. ORTH
VIRGINIA INSTITUTE OF MARINE SCIENCE
GLouceSTER POINT, VIRGINIA 23062

GRID LOCATOR:
DATA COLLECTED: 1968 TO 1975

MONITORING PROJECTS:
SUBSTRATE STUDIES ON THE POTOMAC RIVER

GENERAL GEOGRAPHIC AREA:
NORTH ATLANTIC OCEAN, U.S., COASTAL, CHESAPEAKE BAY, MARYLAND, POTOMAC RIVER

ABSTRACT:
SUBSTRATE STUDIES HAVE BEEN DONE ON THE POTOMAC RIVER SINCE 1968. MEASUREMENTS INCLUDE BIOMASS, SPECIES DETERMINATIONS AND COUNTS OF PELAGIC ANIMALS AND COUNTS OF BENTHIC PLANTS FROM MONTHLY SAMPLING. (SPURIOUS DATA DUE TO STORMS.)

DATA AVAILABILITY:

PLATFORM TYPE:

ARCHIVE MEDIA:

FUNDING:

INVENTORY:

PUBLICATIONS:

CONTACT:
DIRECTOR
BENEDICT ESTUARINE LABORATORY
BENEDICT, MARYLAND 20612

GRID LOCATOR: